Thursday, February 25, 2010

REQUEST NUMBER: 10-2089

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Valerie Davis

General Engineering Laboratories, Inc., Charleston, SC.

2040 Savage Rd

Charleston, SC 29407

These Samples are on:

LANL Request Number:10-2089

Per Agreement Number:126310011

Project Cost Code: MR3A05529E00

Please analyse the enclosed samples according to the schedule indicated:

SHIP DATE: 2/25/2010

TURNAROUND/REPORT DUE: 3/27/2010

TURNAROUND REQ'D: 30 Days

RAD SCREENING: Yes, Below Background

LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:

Signature:

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8082	1	RE15-10-8404	R	2/22/2010	
	SW-846:8260B	1	RE15-10-8393	R	2/22/2010	
		1	RE15-10-8394	R	2/22/2010	
		1	RE15-10-8395	R	2/22/2010	
		1	RE15-10-8396	R	2/22/2010	
		1	RE15-10-8397	R	2/22/2010	
		1	RE15-10-8398	R	2/22/2010	
		1	RE15-10-8399	R	2/22/2010	
		1	RE15-10-8404	R	2/22/2010	

Thursday, February 25, 2010

REQUEST NUMBER: 10-2089

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8270C	1	RE15-10-8393	R	2/22/2010	
		1	RE15-10-8394	R	2/22/2010	
		1	RE15-10-8395	R	2/22/2010	
		1	RE15-10-8396	R	2/22/2010	
		1	RE15-10-8397	R	2/22/2010	
		1	RE15-10-8398	R	2/22/2010	
		1	RE15-10-8399	R	2/22/2010	
		1	RE15-10-8404	R	2/22/2010	
	SW-846:8321A_MOD	1	RE15-10-8393	R	2/22/2010	
		1	RE15-10-8394	R	2/22/2010	
		1	RE15-10-8395	R	2/22/2010	
		1	RE15-10-8396	R	2/22/2010	
		1	RE15-10-8397	R	2/22/2010	
		1	RE15-10-8398	R	2/22/2010	
		1	RE15-10-8399	R	2/22/2010	
		1	RE15-10-8404	R	2/22/2010	

Final Page of REQUEST NUMBER 10-2089

Thursday, February 25, 2010

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-2089

REQUEST NUMBER: 10-2089

LOS ALAMOS

NATIONAL LABORATORY

ATTN: Valerie Davis

General Engineering Laboratories, Inc., Charleston, SC.

2040 Savage Rd

Charleston, SC 29407

TURNAROUND/REPORT DUE: 3/27/2010

TURNAROUND REQ'D: 30

LAB REQUEST COMMENTS:

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE15-10-8404	1	AMBER GLASS	8082+8270+NMED-EXP	Ice	R
RE15-10-8404	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE15-10-8396	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE15-10-8396	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE15-10-8393	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE15-10-8393	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE15-10-8395	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE15-10-8395	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE15-10-8398	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE15-10-8398	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE15-10-8394	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE15-10-8394	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE15-10-8399	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE15-10-8399	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE15-10-8397	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE15-10-8397	1	AMBER GLASS	8270C+NMED Exp	Ice	R

Relinquished By:		Date	Time	Received By:		Date	Time
		2/25/10	1400				
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: 2508 **EVENT NAME:** 4th Qtr. FY09 - SWMU 15-009(h) - Threemile Canyon

SAMPLE ID: RE15-10-8393 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		02/22/2010	MEDIA:	QBT3	ok
TIME COLLECTED (HH:MM)		0902	SUB-MEDIA:	TUFF 1	2
PRS ID:	15-009(h)	ok	SAMPLE TECH CODE:	NA	ok
LOCATION ID:	15-610858	↓	FIELD QC TYPE:	NA	↓
LOCATION TYPE:	GENERIC	↓	FIELD PREP:	NA	↓
TOP DEPTH:	0	6.6	SAMPLE USAGE:	INV	↓
BOTTOM DEPTH:	0	8.1	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: Gray weathered tuff

SAMPLE COMMENTS: NA

LOCATION DESC: 9h-5 2nd depth

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha 35 dpm
Beta/Gamma 2530 dpm

PID ~~Ambient Reading~~ ppm 72m 2/22/10

COLLECTED BY (PRINT) TLMcFarland

REVIEWED BY (PRINT) Daniel Byers

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) TLMcFarland	2/22/10	(Printed Name) Sherri Sherwood	2/22/10
(Signature) Tracy McFarland	1327	(Signature) Sherri Sherwood	1327
RELINQUISHED BY	Date/Time	RECEIVED BY	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2508 **EVENT NAME:** 4th Qtr. FY09 - SWMU 15-009(h) - Threemile Canyon

SAMPLE ID: RE15-10-8394 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		02/22/2010	MEDIA:	OBT3	Alth
TIME COLLECTED (HH:MM)		955	SUB-MEDIA:	TUFF 1	NA
PRS ID:	15-009(h)	ok	SAMPLE TECH CODE:	HA	ok
LOCATION ID:	15-610859	↓	FIELD QC TYPE:	NA	↓
LOCATION TYPE:	GENERIC	↓	FIELD PREP:	NA	↓
TOP DEPTH:	0	4.8	SAMPLE USAGE:	INV	↓
BOTTOM DEPTH:	0	6.0	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 and gray weathered tuff

SAMPLE COMMENTS: NA

LOCATION DESC: 9h-7 leachfield

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha = 23 dpm
Beta/Gamma = 2250 dpm

PID ~~Ambient / Bonding~~ = ppm TJM 2/22/10

COLLECTED BY (PRINT) TLMcFarland

REVIEWED BY (PRINT) Daniel Byers

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) TLMcFarland	2/22/10 1327	(Printed Name) Sherri Sherwood	2/22/10 1327
(Signature) Tracy McFarland		(Signature) Sherri Sherwood	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2508 EVENT NAME: 4th Qtr. FY09 - SWMU 15-009(h) - Threemile Canyon

SAMPLE ID: RE15-10-8395 WORK ORDER:

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		02/22/2010	MEDIA:	OBT3	ok
TIME COLLECTED (HH:MM)		1032	SUB-MEDIA:	TUFF 1	↓
PRS ID:	15-009(h)	ok	SAMPLE TECH CODE:	HA	ok
LOCATION ID:	15-610859	↓	FIELD QC TYPE:	NA	↓
LOCATION TYPE:	GENERIC	↓	FIELD PREP:	NA	↓
TOP DEPTH:	0	6.0	SAMPLE USAGE:	INV	↓
BOTTOM DEPTH:	0	7.1	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: Waitsel gray tuff

SAMPLE COMMENTS: NA

LOCATION DESC: 9h-7 leachfield

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha = 6 dpm
Beta/Gamma = 2330 dpm

PID ~~Ambient Reading~~ = ppm — TJM 2/22/10

COLLECTED BY (PRINT) TLMcFarland

REVIEWED BY (PRINT) Daniel Byers

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) TLMcFarland	2/22/10 1327	(Printed Name) Sherri Sherwood	2/22/10 1327
(Signature) Tracy Z		(Signature) Sherri Sherwood	
RELINQUISHED BY	Date/Time		

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2508 **EVENT NAME:** 4th Qtr. FY09 - SWMU 15-009(h) - Threemile Canyon

SAMPLE ID: RE15-10-8396 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		02/22/2010	MEDIA:	OBT3	TLM 2/22/10 ~~AIR~~ FILL
TIME COLLECTED (HH:MM)		1059	SUB-MEDIA:	TUFF I	NA
PRS ID:	15-009(h)	ok	SAMPLE TECH CODE:	HA	ok
LOCATION ID:	15-610860	↓	FIELD QC TYPE:	NA	↓
LOCATION TYPE:	GENERIC	↓	FIELD PREP:	NA	↓
TOP DEPTH:	0	4.8	SAMPLE USAGE:	INV	↓
BOTTOM DEPTH:	0	7.0	SCREEN/PORT DESC:		NA
FIELD MATRIX:	B	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 silt and cobbles

FD: RE15-10-8404

SAMPLE COMMENTS:

NA

LOCATION DESC: 9h-8, leachfield

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha = 41 dpm
Beta/Gamma = 2270 dpm

PID ~~Ambient~~ = ppm TLM 2/22/10

COLLECTED BY (PRINT) TLMcFarland

REVIEWED BY (PRINT) Daniel Byars

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) TLMcFarland	2/22/10	(Printed Name) Sherri Sherwood	2/22/10
(Signature) Tracy Z	1327	(Signature) Sherri Sherwood	1327

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2508 **EVENT NAME:** 4th Qtr. FY09 - SWMU 15-009(h) - Threemile Canyon

SAMPLE ID: RE15-10-8397 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		02/22/2010	MEDIA:	QBT3	FILL
TIME COLLECTED (HH:MM)		1121	SUB-MEDIA:	TUFF 1	NA
PRS ID:	15-009(h)	ok	SAMPLE TECH CODE:	HA	ok
LOCATION ID:	15-610860	↓	FIELD QC TYPE:	NA	↓
LOCATION TYPE:	GENERIC	↓	FIELD PREP:	NA	↓
TOP DEPTH:	0	7.0	SAMPLE USAGE:	INV	↓
BOTTOM DEPTH:	0	7.5	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 with cobbles

SAMPLE COMMENTS: NA

LOCATION DESC: 9h-8 leachfield

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha < 35 dpm
Beta/Gamma < 1964 dpm

PID ~~Ambient Reading~~ = ppm 7.3m 2/22/10

COLLECTED BY (PRINT) TLMcFarland

REVIEWED BY (PRINT) Daniel Byers

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) TLMcFarland	2/22/10	(Printed Name)	2/22/10
(Signature) Tracy Tait	1327	(Signature)	1327
RELINQUISHED BY	Date/Time	RECEIVED BY	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2508 EVENT NAME: 4th Qtr. FY09 - SWMU 15-009(h) - Threemile Canyon

SAMPLE ID: RE15-10-8398 WORK ORDER:

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		02/22/2010	MEDIA:	QBT3	FILL
TIME COLLECTED (HH:MM)		1136	SUB-MEDIA:	TUFF 1	NA
PRS ID:	15-0090h)	ok	SAMPLE TECH CODE:	HA	ok
LOCATION ID:	15-610861	↓	FIELD QC TYPE:	NA	↓
LOCATION TYPE:	GENERIC	↓	FIELD PREP:	NA	↓
TOP DEPTH:	0	4.8	SAMPLE USAGE:	INV	↓
BOTTOM DEPTH:	0	72m ~~6.4~~ 6.1	SCREEN/PORT DESC:		NA
FIELD MATRIX:	R	2/22/10 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 silt and sand

SAMPLE COMMENTS: NA

LOCATION DESC: 9h-6, leachfield location moved 2 ft W of stake

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha ≤ 47 dpm
Beta/Gamma ≤ 2190 dpm

PID ~~Ambient Reading~~ 72m 2/22/10 = ppm

COLLECTED BY (PRINT) TLMcFarland

REVIEWED BY (PRINT) Daniel Byers

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) TLMcFarland	2/22/10	(Printed Name) Sherri Sherwood	2/22/10
(Signature) Tracy McF	1327	(Signature) Sherri Sherwood	1327
RELINQUISHED BY			

SAMPLE ID: RE15-10-8404 ...TION LOG/FIELD CHAIN OF CUSTODY

EVENT NAME: 4th Qtr. FY09 - SWMU 15-009(h) - Threemile Canyon

WORK ORDER:

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		02/22/2010	MEDIA:	QRT3	FILL
TIME COLLECTED (HH:MM)		10 59	SUB-MEDIA:	TUFF 1	NA
PRS ID:		ok	SAMPLE TECH CODE:	HA	ok
LOCATION ID:	15-009(h)	15-610860	FIELD QC TYPE:	ED	↓
LOCATION TYPE:	UNK	ok	FIELD PREP:	NA	
TOP DEPTH:	GENERIC	4.8	SAMPLE USAGE:	QC	
BOTTOM DEPTH:	0	7.0	SCREEN/PORT DESC:		
FIELD MATRIX:	0	5	EXCAVATED: YES / (NO) / NA		NA
COMPOSITE TYPE:	R				

BOREHOLE: YES / (NO) / NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / (NO) / NA

BOREHOLE DECLINATION: NA BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Normal	~~8082+~~8270+NMED-EXP	500 ML AMBER GLASS	Ice	Y	
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		AM241+GS+ISOPU+ISOU	1 LITER POLY	Ice	Y	
1		113	500 ML POLY	None	Y	
1		Perchlorate+CN+N03+pH	500 ML POLY	Ice	Y	
		RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	Ice	Y	
		METALS+U-GEL	125 ML POLY	None	Y	
				Ice	Y	
					Y	

...LE DESC: QC Sample of RE15-10-8396

...E COMMENTS: Brown silt and cobbles

NA

...N DESC: 9h-8 leachfield

...EENING/MEASUREMENT RESULTS:

Alpha < 41 dpm

Beta/Gamma < 227 dpm

...Y (PRINT) ...arland

PID ~~Ambient Reading~~ = ppm TJM 2/22/10

...D BY ...L McFarland

REVIEWED BY (PRINT) Daniel Byers

	Date/Time		
...Y	2/22/10 1327	RECEIVED BY (Printed Name) (Signature)	
	Date/Time	RECEIVED BY	Date/Time 2/22/10 1327

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2508 **EVENT NAME:** 4th Qtr. FY09 - SWMU 15-009(h) - Threemile Canyon

SAMPLE ID: RE15-10-8399 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		02/22/2010	MEDIA:	OBT3	FILL
TIME COLLECTED (HH:MM)		1215	SUB-MEDIA:	TUFF 1	NA
PRS ID:	15-009(h)	ok	SAMPLE TECH CODE:	HA	ok
LOCATION ID:	15-610861	↓	FIELD QC TYPE:	NA	↓
LOCATION TYPE:	GENERIC	↓	FIELD PREP:	NA	↓
TOP DEPTH:	0	6.1	SAMPLE USAGE:	INV	↓
BOTTOM DEPTH:	0	7.0	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 silt with gray tuff

FR: RE15-10-8407

SAMPLE COMMENTS: NA

LOCATION DESC: 9n-6 leachfield

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha 35 dpm
Beta/Gamma 2310 dpm

PID ~~Ambient Reading~~ = ppm TLM 2/22/10

COLLECTED BY (PRINT) TLMcFarlane

REVIEWED BY (PRINT) Daniel Byers

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) TLM cFarlane	2/22/10	(Printed Name)	2/22/10
(Signature) Tracy McFarlane	1327	(Signature)	1327
RELINQUISHED BY	Date/Time	RECEIVED BY	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2508 **EVENT NAME:** 4th Qtr. FY09 - SWMU 15-009(h) - Threemile Canyon

SAMPLE ID: RE15-10-8407 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		02/22/2010	MEDIA:	NA	ok
TIME COLLECTED (HH:MM)		1255	SUB-MEDIA:	OTHER	
PRS ID:	15-009(h)	ok	SAMPLE TECH CODE:	DC	
LOCATION ID:	UNK	15-610861	FIELD QC TYPE:	ER	
LOCATION TYPE:	GENERIC	ok	FIELD PREP:	UF	
TOP DEPTH:	0		SAMPLE USAGE:	QC	
BOTTOM DEPTH:	0		SCREEN/PORT DESC:		NA
FIELD MATRIX:	W		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA 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	↓	TCN	500 ML POLY	Sodium Hydroxide	Y	

SAMPLE DESC: QC Sample of RE15-10-8399

SAMPLE COMMENTS: Rinsate

LOCATION DESC:

FIELD SCREENING/MEASUREMENT RESULTS:

TZM 2/22/10

~~Alpha = _____ dpm~~

~~Beta/Gamma = _____ dpm~~

COLLECTED BY (PRINT) TLMcFarland

REVIEWED BY (PRINT) Derek Byers

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) TLMcFarland (Signature) Tracy Zea	2/22/10 1327	(Printed Name) (Signature)	2/22/10 1327
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):

RE15-10-8393
8394
8395
8396
8397
8398
8399
8404

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

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

RE15-10-8407

Reason:

Print Last Name McFarland Signature [signature] Date 2/22/10

AMERICAN RADIATION SERVICES, INC.

133 State Road 4, White Rock, NM 87544

505-672-2770 FAX 505-672-9534

ARS Sample Delivery Group:	ARS2-10-00068	Request or PO Number:	
Client Sample ID:	RE15-10-8393	ARS Sample ID:	ARS2-10-00068-001
Sample Collection Date:	02/22/10 09:02	Date Received:	02/22/10 00:00
Sample Matrix:	Soil/Solid	Report Date:	02/24/10 13:11

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	29.49	27.75	37.46	27.99		pCi/g	EPA 900.0M	2/24/2010	ME	N/A
GROSS BETA	43.66	15.82	18.42	16.70		pCi/g	EPA 900.0M	2/24/2010	ME	N/A
NA-22	-0.05	50.89	0.16	50.89		pCi/g	EPA 901.1M	2/24/2010	ME	N/A
K-40	5.33	8.07	3.51	8.07		pCi/g	EPA 901.1M	2/24/2010	ME	N/A
CO-60	0.00	0.00	0.17	0.00		pCi/g	EPA 901.1M	2/24/2010	ME	N/A
CS-134	0.04	0.09	0.19	0.09		pCi/g	EPA 901.1M	2/24/2010	ME	N/A
CS-137	0.06	0.12	0.10	0.12		pCi/g	EPA 901.1M	2/24/2010	ME	N/A
EU-152	0.06	0.12	0.44	0.12		pCi/g	EPA 901.1M	2/24/2010	ME	N/A
PB-212	1.16	0.59	0.22	0.59		pCi/g	EPA 901.1M	2/24/2010	ME	N/A
RA-228	0.00	190.03	0.43	190.03		pCi/g	EPA 901.1M	2/24/2010	ME	N/A
U-235	0.53	0.63	0.66	0.64		pCi/g	EPA 901.1M	2/24/2010	ME	N/A
U-238	8.19	4.36	1.53	4.75		pCi/g	EPA 901.1M	2/24/2010	ME	N/A
AM-241	-0.01	-0.19	0.10	-0.19		pCi/g	EPA 901.1M	2/24/2010	ME	N/A

NOTES: % Moisture: 1.39

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

AMERICAN RADIATION SERVICES, INC.

133 State Road 4, White Rock, NM 87544

505-672-2770 FAX 505-672-9534

ARS Sample Delivery Group:	ARS2-10-00068	Request or PO Number:	
Client Sample ID:	RE15-10-8394	ARS Sample ID:	ARS2-10-00068-002
Sample Collection Date:	02/22/10 09:55	Date Received:	02/22/10 00:00
Sample Matrix:	Soil/Solid	Report Date:	02/24/10 13:11

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	28.23	25.82	34.06	26.05		pCi/g	EPA 900.0M	2/24/2010	ME	N/A
GROSS BETA	39.88	15.24	17.92	15.99		pCi/g	EPA 900.0M	2/24/2010	ME	N/A
NA-22	-0.04	39.06	0.12	39.06		pCi/g	EPA 901.1M	2/24/2010	ME	N/A
K-40	29.46	9.82	1.35	9.88		pCi/g	EPA 901.1M	2/24/2010	ME	N/A
CO-60	0.00	0.00	0.13	0.00		pCi/g	EPA 901.1M	2/24/2010	ME	N/A
CS-134	0.10	0.10	0.09	0.10		pCi/g	EPA 901.1M	2/24/2010	ME	N/A
CS-137	0.09	0.13	0.08	0.13		pCi/g	EPA 901.1M	2/24/2010	ME	N/A
EU-152	-0.53	162.35	0.36	162.35		pCi/g	EPA 901.1M	2/24/2010	ME	N/A
PB-212	1.32	0.48	0.12	0.48		pCi/g	EPA 901.1M	2/24/2010	ME	N/A
RA-228	2.18	1.32	0.33	1.32		pCi/g	EPA 901.1M	2/24/2010	ME	N/A
U-235	0.96	0.81	0.49	0.81		pCi/g	EPA 901.1M	2/24/2010	ME	N/A
U-238	2.99	3.67	1.61	3.73		pCi/g	EPA 901.1M	2/24/2010	ME	N/A
AM-241	-0.01	-0.21	0.10	-0.21		pCi/g	EPA 901.1M	2/24/2010	ME	N/A

NOTES: % Moisture: 1.03

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

AMERICAN RADIATION SERVICES, INC.

133 State Road 4, White Rock, NM 87544

505-672-2770 FAX 505-672-9534

ARS Sample Delivery Group:	ARS2-10-00068	Request or PO Number:	
Client Sample ID:	RE15-10-8395	ARS Sample ID:	ARS2-10-00068-003
Sample Collection Date:	02/22/10 10:32	Date Received:	02/22/10 00:00
Sample Matrix:	Soil/Solid	Report Date:	02/24/10 13:11

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	22.09	23.39	32.75	23.55		pCi/g	EPA 900.0M	2/24/2010	ME	N/A
GROSS BETA	43.67	16.12	18.31	16.98		pCi/g	EPA 900.0M	2/24/2010	ME	N/A
NA-22	0.05	0.18	0.15	0.18		pCi/g	EPA 901.1M	2/24/2010	ME	N/A
K-40	36.27	11.93	1.61	11.97		pCi/g	EPA 901.1M	2/24/2010	ME	N/A
CO-60	0.00	0.00	0.16	0.00		pCi/g	EPA 901.1M	2/24/2010	ME	N/A
CS-134	0.16	0.22	0.13	0.22		pCi/g	EPA 901.1M	2/24/2010	ME	N/A
CS-137	0.00	0.00	0.09	0.00		pCi/g	EPA 901.1M	2/24/2010	ME	N/A
EU-152	0.13	0.28	0.41	0.28		pCi/g	EPA 901.1M	2/24/2010	ME	N/A
PB-212	1.14	0.58	0.22	0.58		pCi/g	EPA 901.1M	2/24/2010	ME	N/A
RA-228	0.18	0.42	0.39	0.42		pCi/g	EPA 901.1M	2/24/2010	ME	N/A
U-235	-0.68	236.11	0.53	236.11		pCi/g	EPA 901.1M	2/24/2010	ME	N/A
U-238	4.95	3.71	1.50	3.68		pCi/g	EPA 901.1M	2/24/2010	ME	N/A
AM-241	-0.03	-0.27	0.11	-0.27		pCi/g	EPA 901.1M	2/24/2010	ME	N/A

NOTES: % Moisture: 0.69

Quality Assurance Review

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LELAP Certificate# 30658 NELAP Certificate # E87558

AMERICAN RADIATION SERVICES, INC.

133 State Road 4, White Rock, NM 87544

505-672-2770 FAX 505-672-9534

ARS Sample Delivery Group:	ARS2-10-00068	Request or PO Number:	
Client Sample ID:	RE15-10-8396	ARS Sample ID:	ARS2-10-00068-004
Sample Collection Date:	02/22/10 10:59	Date Received:	02/22/10 00:00
Sample Matrix:	Soil/Solid	Report Date:	02/24/10 13:11

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	23.51	24.07	33.91	24.25		pCi/g	EPA 900.0M	2/24/2010	ME	N/A
GROSS BETA	44.87	15.68	17.73	16.61		pCi/g	EPA 900.0M	2/24/2010	ME	N/A
NA-22	-0.04	42.97	0.14	42.97		pCi/g	EPA 901.1M	2/24/2010	ME	N/A
K-40	2.70	6.97	2.96	6.97		pCi/g	EPA 901.1M	2/24/2010	ME	N/A
CO-60	0.00	0.00	0.14	0.00		pCi/g	EPA 901.1M	2/24/2010	ME	N/A
CS-134	0.28	0.26	0.10	0.26		pCi/g	EPA 901.1M	2/24/2010	ME	N/A
CS-137	0.00	0.00	0.08	0.00		pCi/g	EPA 901.1M	2/24/2010	ME	N/A
EU-152	-0.58	166.35	0.37	166.35		pCi/g	EPA 901.1M	2/24/2010	ME	N/A
PB-212	1.54	0.61	0.21	0.62		pCi/g	EPA 901.1M	2/24/2010	ME	N/A
RA-228	1.53	1.16	0.36	1.16		pCi/g	EPA 901.1M	2/24/2010	ME	N/A
U-235	0.75	0.63	0.59	0.63		pCi/g	EPA 901.1M	2/24/2010	ME	N/A
U-238	8.35	3.75	1.32	4.21		pCi/g	EPA 901.1M	2/24/2010	ME	N/A
AM-241	0.11	0.20	0.10	0.20		pCi/g	EPA 901.1M	2/24/2010	ME	N/A

NOTES: % Moisture: 1.19

Quality Assurance Review

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LELAP Certificate# 30658 NELAP Certificate # E87558

AMERICAN RADIATION SERVICES, INC.

133 State Road 4, White Rock, NM 87544

505-672-2770 FAX 505-672-9534

ARS Sample Delivery Group:	ARS2-10-00068	Request or PO Number:	
Client Sample ID:	RE15-10-8397	ARS Sample ID:	ARS2-10-00068-005
Sample Collection Date:	02/22/10 11:21	Date Received:	02/22/10 00:00
Sample Matrix:	Soil/Solid	Report Date:	02/24/10 13:11

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	24.49	26.01	37.46	26.19		pCi/g	EPA 900.0M	2/24/2010	ME	N/A
GROSS BETA	61.16	17.48	18.42	19.01		pCi/g	EPA 900.0M	2/24/2010	ME	N/A
NA-22	-0.04	40.42	0.13	40.42		pCi/g	EPA 901.1M	2/24/2010	ME	N/A
K-40	18.63	7.94	1.39	7.96		pCi/g	EPA 901.1M	2/24/2010	ME	N/A
CO-60	0.00	0.00	0.13	0.00		pCi/g	EPA 901.1M	2/24/2010	ME	N/A
CS-134	0.01	0.02	0.11	0.02		pCi/g	EPA 901.1M	2/24/2010	ME	N/A
CS-137	0.00	0.00	0.08	0.00		pCi/g	EPA 901.1M	2/24/2010	ME	N/A
EU-152	0.25	0.42	0.35	0.42		pCi/g	EPA 901.1M	2/24/2010	ME	N/A
PB-212	1.01	0.45	0.14	0.45		pCi/g	EPA 901.1M	2/24/2010	ME	N/A
RA-228	1.14	0.72	0.37	0.72		pCi/g	EPA 901.1M	2/24/2010	ME	N/A
U-235	1.13	1.16	0.51	1.16		pCi/g	EPA 901.1M	2/24/2010	ME	N/A
U-238	5.87	3.68	1.43	3.92		pCi/g	EPA 901.1M	2/24/2010	ME	N/A
AM-241	0.01	0.12	0.08	0.12		pCi/g	EPA 901.1M	2/24/2010	ME	N/A

NOTES: % Moisture: 1.26

Matthew L. 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

AMERICAN RADIATION SERVICES, INC.

133 State Road 4, White Rock, NM 87544

505-672-2770 FAX 505-672-9534

ARS Sample Delivery Group:	ARS2-10-00068	Request or PO Number:	
Client Sample ID:	RE15-10-8398	ARS Sample ID:	ARS2-10-00068-006
Sample Collection Date:	02/22/10 11:36	Date Received:	02/22/10 00:00
Sample Matrix:	Soil/Solid	Report Date:	02/24/10 13:11

Analysis Description	Analysis Results	Analysis Error +/- 2 σ	MDC	TPU	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
GROSS ALPHA	23.61	24.18	34.06	24.36		pCi/g	EPA 900.0M	2/24/2010	ME	N/A
GROSS BETA	44.25	15.66	17.92	16.57		pCi/g	EPA 900.0M	2/24/2010	ME	N/A
NA-22	-0.04	42.78	0.14	42.78		pCi/g	EPA 901.1M	2/24/2010	ME	N/A
K-40	19.71	8.41	1.47	8.42		pCi/g	EPA 901.1M	2/24/2010	ME	N/A
CO-60	0.00	0.00	0.14	0.00		pCi/g	EPA 901.1M	2/24/2010	ME	N/A
CS-134	0.33	0.43	0.13	0.43		pCi/g	EPA 901.1M	2/24/2010	ME	N/A
CS-137	0.05	0.10	0.08	0.10		pCi/g	EPA 901.1M	2/24/2010	ME	N/A
EU-152	-0.58	165.58	0.37	165.58		pCi/g	EPA 901.1M	2/24/2010	ME	N/A
PB-212	0.98	0.45	0.14	0.46		pCi/g	EPA 901.1M	2/24/2010	ME	N/A
RA-228	3.13	1.15	0.36	1.15		pCi/g	EPA 901.1M	2/24/2010	ME	N/A
U-235	0.96	1.12	0.61	1.13		pCi/g	EPA 901.1M	2/24/2010	ME	N/A
U-238	5.07	3.85	1.60	4.02		pCi/g	EPA 901.1M	2/24/2010	ME	N/A
AM-241	0.16	0.25	0.12	0.25		pCi/g	EPA 901.1M	2/24/2010	ME	N/A

NOTES: % Moisture: 1.44

Matthew L. 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

AMERICAN RADIATION SERVICES, INC.

133 State Road 4, White Rock, NM 87544

505-672-2770 FAX 505-672-9534

ARS Sample Delivery Group:	ARS2-10-00068	Request or PO Number:	
Client Sample ID:	RE15-10-8399	ARS Sample ID:	ARS2-10-00068-007
Sample Collection Date:	02/22/10 12:05	Date Received:	02/22/10 00:00
Sample Matrix:	Soil/Solid	Report Date:	02/24/10 13:11

Analysis Description	Analysis Results	Analysis Error +/- 2 σ	MDC	TPU	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
GROSS ALPHA	46.24	31.55	32.75	32.05		pCi/g	EPA 900.0M	2/24/2010	ME	N/A
GROSS BETA	45.99	16.87	18.31	17.79		pCi/g	EPA 900.0M	2/24/2010	ME	N/A
NA-22	0.13	0.24	0.14	0.24		pCi/g	EPA 901.1M	2/24/2010	ME	N/A
K-40	34.15	11.23	1.52	11.27		pCi/g	EPA 901.1M	2/24/2010	ME	N/A
CO-60	0.00	0.00	0.15	0.00		pCi/g	EPA 901.1M	2/24/2010	ME	N/A
CS-134	0.10	0.12	0.10	0.12		pCi/g	EPA 901.1M	2/24/2010	ME	N/A
CS-137	0.51	0.33	0.08	0.33		pCi/g	EPA 901.1M	2/24/2010	ME	N/A
EU-152	0.01	0.03	0.38	0.03		pCi/g	EPA 901.1M	2/24/2010	ME	N/A
PB-212	1.18	0.52	0.17	0.53		pCi/g	EPA 901.1M	2/24/2010	ME	N/A
RA-228	1.32	0.66	0.37	0.66		pCi/g	EPA 901.1M	2/24/2010	ME	N/A
U-235	0.25	0.34	0.59	0.34		pCi/g	EPA 901.1M	2/24/2010	ME	N/A
U-238	3.45	3.61	1.69	3.70		pCi/g	EPA 901.1M	2/24/2010	ME	N/A
AM-241	-0.02	-0.18	0.09	-0.18		pCi/g	EPA 901.1M	2/24/2010	ME	N/A

NOTES: % Moisture: 1.00

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

AMERICAN RADIATION SERVICES, INC.

133 State Road 4, White Rock, NM 87544

505-672-2770 FAX 505-672-9534

ARS Sample Delivery Group:	ARS2-10-00068	Request or PO Number:	
Client Sample ID:	RE15-10-8404	ARS Sample ID:	ARS2-10-00068-008
Sample Collection Date:	02/22/10 10:59	Date Received:	02/22/10 00:00
Sample Matrix:	Soil/Solid	Report Date:	02/24/10 13:11

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	32.69	27.24	33.91	27.53		pCi/g	EPA 900.0M	2/24/2010	ME	N/A
GROSS BETA	50.98	16.47	17.73	17.61		pCi/g	EPA 900.0M	2/24/2010	ME	N/A
NA-22	-0.04	41.26	0.13	41.26		pCi/g	EPA 901.1M	2/24/2010	ME	N/A
K-40	0.00	898.14	2.01	898.14		pCi/g	EPA 901.1M	2/24/2010	ME	N/A
CO-60	0.08	0.17	0.14	0.17		pCi/g	EPA 901.1M	2/24/2010	ME	N/A
CS-134	0.24	0.21	0.14	0.22		pCi/g	EPA 901.1M	2/24/2010	ME	N/A
CS-137	0.19	0.19	0.08	0.19		pCi/g	EPA 901.1M	2/24/2010	ME	N/A
EU-152	0.32	0.34	0.36	0.34		pCi/g	EPA 901.1M	2/24/2010	ME	N/A
PB-212	1.04	0.51	0.19	0.52		pCi/g	EPA 901.1M	2/24/2010	ME	N/A
RA-228	1.13	0.87	0.35	0.87		pCi/g	EPA 901.1M	2/24/2010	ME	N/A
U-235	1.38	0.89	0.43	0.89		pCi/g	EPA 901.1M	2/24/2010	ME	N/A
U-238	3.15	2.90	1.38	2.99		pCi/g	EPA 901.1M	2/24/2010	ME	N/A
AM-241	0.21	0.25	0.11	0.25		pCi/g	EPA 901.1M	2/24/2010	ME	N/A

NOTES: % Moisture: 1.11

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

Los Alamos NATIONAL LABORATORY EST. 1943

Section I.

REQUEST NUMBER: 10-2089 VALIDATION DATE: 4/25/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

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

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

- ☐ TPH-GRO
- ☐ TPH-DRO
- ☐ GENERAL CHEMISTRY
- ☐ HIGH EXPLOSIVES
- ☐ METALS
- ☐ RADIOCHEMISTRY
- ☐ DIOXIN FURANS
- ☐ PCB CONGENERS
- ☐ LCMSMS HIGH EXPLOSIVES
- ☐ LCMSMS PERCHLORATES
- ☐ ORGANOCHLORINE PESTICIDES/POLYCHLORINATED BIPHENYLS
- ☒ OTHER (DESCRIBE): VOCs

Section II. Completeness Check

YES	NO	N/A	(CHECK ONE)	YES	NO	N/A	(CHECK ONE)
☒	☐	☐	1. CHAIN-OF-CUSTODY FORM(S)	☒	☐	☐	6. RAW/BSS DATA
☒	☐	☐	2. CASE NARRATIVE	☒	☐	☐	7. QUALITY CONTROL FORMS
☒	☐	☐	3. SAMPLE RESULT FORMS	☒	☐	☐	8. QUANTITATION REPORTS
☒	☐	☐	4. SAMPLE CHROMATOGRAMS	☒	☐	☐	9. TICS FORMS
☐	☐	☒	5. STANDARD CHROMATOGRAMS	☐	☐	☒	10. TICS MASS SPECTRA

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

1. The ICV and/or CCVs %Ds were >20% for dichlorodifluoromethane, chloromethane, acetone and trichlorotrifluoroethane. The acetone results for samples RE15-10-8398 and -8394 were detects and, thus, were qualified J,V7c. All the other associated sample results were NDs and, thus, were qualified UJ,V7c.
2. It should be noted that the MS/MSD %Rs were not within the laboratory's QC limits for 4-methyl-2-pentanone and 2-hexanone. However, MS/MSD analyses are not required for this method and, thus, no sample data were qualified.

Reviewed by: Mary Donivan Level: I Date: 04/26/10

VALIDATOR'S SIGNATURE: Eric T. Mink DATE: 4/25/10

VOLATILE ORGANIC COMPOUND (VOC) ANALYTICAL DATA VALIDATION CHECKLIST

5114-2

Volatile Organic Compound (VOC) Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY EST. 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	1. The holding time was >1 and ≤2 times the applicable holding time requirement.	UJ, V9	J-, V9
☐	☒	☐	2. The holding time was >2 times the applicable holding time requirement.	R, V9a	J-, V9a
☐	☐	☒	3. The instrument performance sample did not pass method acceptance criteria.	R, V16	R, V16
☐	☐	☒	4. Samples were analyzed outside specific method tune time criteria.	N/A	J, V16b
☐	☐	☒	5. The required instrument performance sample information is missing. Contact the SMO or external laboratory for information.	R, V16c	R, V16c
☐	☒	☐	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
☐	☒	☐	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
☐	☒	☐	8. The affected analytes were analyzed with an RRF of <0.05 in the initial calibration and/or CCV.	R, V7b	J, V7b
☒	☐	☐	9. The Initial Calibration Verification (ICV) and/or Continuing Calibration Verification (CCV) were recovered outside the method-specific limits.	UJ, V7c	J, V7c
☐	☒	☐	10. The ICV and/or CCV were not analyzed at the appropriate method frequency.	UJ, V7d	J, V7d
☐	☒	☐	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

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Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	12. The sample result is ≤5X (10X for common organic laboratory contaminants) the concentration of the related analyte in the method blank.	U, V4	N/A
☐	☒	☐	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
☐	☐	☒	14. The sample result is ≤5X the concentration of the related analyte in the trip blank, rinsate blank, and/or equipment blank.	U, V4d	N/A
☐	☒	☐	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
☐	☒	☐	16. The IS retention time has shifted by more than 30 seconds.	UJ, V0	J, V0
☐	☐	☒	17. Analyte is positively confirmed but outside the IS retention time window; however, spectral matches must be provided.	N/A	J, V0a
☐	☒	☐	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
☐	☐	☒	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
☐	☐	☒	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

Los Alamos NATIONAL LABORATORY EST 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☐	☒	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
☐	☐	☒	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
☐	☒	☐	23. The surrogate is <10%R. Follow the external laboratory limits located within the associated data package.	R, V3	J-, V3
☐	☒	☐	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
☐	☒	☐	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
☐	☒	☐	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
☐	☒	☐	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
☐	☒	☐	28. The LCS percent recovery was <10%. Follow the external laboratory limits located within the associated data package.	R, V12	J-, V12
☐	☒	☐	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
☐	☒	☐	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

Los Alamos NATIONAL LABORATORY EST. 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	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
☐	☒	☐	32. The affected analyte is considered not detected because mass spectrum did not meet specifications.	N/A	U, V8
☐	☒	☐	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
☐	☒	☐	34. Duplicate, dilution, or reanalysis.	UJ, V88	J, V88
☐	☐	☒	35. The affected analytes have elevated detection limits and may not meet project DQOs because the sample was diluted without any target analytees identified due to matrix interference. Qualify as Reject if the analytical laboratory cannot provide proof for matrix interference.	UJ, R, V15	R, V15
☒	☐	☐	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
☐	☒	☐	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:	10-2089	**Date Collected:**	02/22/2010 12:00	**Matrix:**	R
Lab Sample ID:	248102001	**Date Received:**	02/26/2010 08:45	**%Moisture:**	9.4
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE15-10-8404	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	961336	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	03/05/2010 02:39	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	03/04/2010 17:40	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	030410V4\4A437.D	**Column:**	DB-624		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
75-71-8	Dichlorodifluoromethane	U	1.10	ug/kg	0.375	1.10	UJ,V7c
74-87-3	Chloromethane	U	1.10	ug/kg	0.331	1.10	UJ,V7c
75-01-4	Vinyl chloride	U	1.10	ug/kg	0.331	1.10	
74-83-9	Bromomethane	U	1.10	ug/kg	0.331	1.10	
75-00-3	Chloroethane	U	1.10	ug/kg	0.331	1.10	
75-69-4	Trichlorofluoromethane	U	1.10	ug/kg	0.331	1.10	
67-64-1	Acetone	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	0.364	1.10	
71-55-6	1,1,1-Trichloroethane	U	1.10	ug/kg	0.331	1.10	
563-58-6	1,1-Dichloropropene	U	1.10	ug/kg	0.331	1.10	
56-23-5	Carbon tetrachloride	U	1.10	ug/kg	0.331	1.10	
107-06-2	1,2-Dichloroethane	U	1.10	ug/kg	0.331	1.10	
71-43-2	Benzene	U	1.10	ug/kg	0.331	1.10	
79-01-6	Trichloroethylene	U	1.10	ug/kg	0.364	1.10	
78-87-5	1,2-Dichloropropane	U	1.10	ug/kg	0.331	1.10	
75-27-4	Bromodichloromethane	U	1.10	ug/kg	0.331	1.10	
74-95-3	Dibromomethane	U	1.10	ug/kg	0.331	1.10	
108-10-1	4-Methyl-2-pentanone	U	5.52	ug/kg	1.38	5.52	
10061-01-5	cis-1,3-Dichloropropylene	U	1.10	ug/kg	0.331	1.10	
108-88-3	Toluene	U	1.10	ug/kg	0.331	1.10	
10061-02-6	trans-1,3-Dichloropropylene	U	1.10	ug/kg	0.331	1.10	
79-00-5	1,1,2-Trichloroethane	U	1.10	ug/kg	0.331	1.10	
591-78-6	2-Hexanone	U	5.52	ug/kg	1.66	5.52	
142-28-9	1,3-Dichloropropane	U	1.10	ug/kg	0.331	1.10	
127-18-4	Tetrachloroethylene	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	

ETM
4/25/10

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-2089**	**Date Collected:**	**02/22/2010 12:00**	**Matrix:**	**R**
Lab Sample ID:	**248102001**	**Date Received:**	**02/26/2010 08:45**	**%Moisture:**	**9.4**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE15-10-8404**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**961336**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**03/05/2010 02:39**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**03/04/2010 17:40**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**030410V4\4A437.D**	**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	U	2.21	ug/kg	0.331	2.21	
95-47-6	o-Xylene	U	1.10	ug/kg	0.331	1.10	
100-42-5	Styrene	U	1.10	ug/kg	0.331	1.10	
75-25-2	Bromoform	U	1.10	ug/kg	0.331	1.10	
79-34-5	1,1,2,2-Tetrachloroethane	U	1.10	ug/kg	0.331	1.10	
96-18-4	1,2,3-Trichloropropane	U	1.10	ug/kg	0.331	1.10	
108-86-1	Bromobenzene	U	1.10	ug/kg	0.331	1.10	
103-65-1	n-Propylbenzene	U	1.10	ug/kg	0.331	1.10	
95-49-8	2-Chlorotoluene	U	1.10	ug/kg	0.331	1.10	
98-82-8	Isopropylbenzene	U	1.10	ug/kg	0.331	1.10	
108-67-8	1,3,5-Trimethylbenzene	U	1.10	ug/kg	0.331	1.10	
106-43-4	4-Chlorotoluene	U	1.10	ug/kg	0.331	1.10	
98-06-6	tert-Butylbenzene	U	1.10	ug/kg	0.331	1.10	
95-63-6	1,2,4-Trimethylbenzene	U	1.10	ug/kg	0.331	1.10	
135-98-8	sec-Butylbenzene	U	1.10	ug/kg	0.331	1.10	
99-87-6	4-Isopropyltoluene	U	1.10	ug/kg	0.331	1.10	
541-73-1	1,3-Dichlorobenzene	U	1.10	ug/kg	0.331	1.10	
106-46-7	1,4-Dichlorobenzene	U	1.10	ug/kg	0.331	1.10	
104-51-8	n-Butylbenzene	U	1.10	ug/kg	0.331	1.10	
96-12-8	1,2-Dibromo-3-chloropropane	U	1.10	ug/kg	0.331	1.10	
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.52	ug/kg	1.77	5.52	UJ,V7c
630-20-6	1,1,1,2-Tetrachloroethane	U	1.10	ug/kg	0.331	1.10	
95-50-1	1,2-Dichlorobenzene	U	1.10	ug/kg	0.331	1.10	

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Flt	Qual
	unknown hydrocarbon	4.48	6.56	ug/kg	0	J
	unknown siloxane	16.79	8.58	ug/kg	0	J

ETM
4/25/10

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-2089	**Date Collected:**	02/22/2010 12:00	**Matrix:**	R
Lab Sample ID:	248102002	**Date Received:**	02/26/2010 08:45	**%Moisture:**	8.7
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE15-10-8396	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	961336	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	03/05/2010 03:06	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	03/04/2010 17:43	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	030410V4\4A438.D	**Column:**	DB-624		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
75-71-8	Dichlorodifluoromethane	U	1.10	ug/kg	0.372	1.10	UJ,V7c
74-87-3	Chloromethane	U	1.10	ug/kg	0.329	1.10	UJ,V7c
75-01-4	Vinyl chloride	U	1.10	ug/kg	0.329	1.10	
74-83-9	Bromomethane	U	1.10	ug/kg	0.329	1.10	
75-00-3	Chloroethane	U	1.10	ug/kg	0.329	1.10	
75-69-4	Trichlorofluoromethane	U	1.10	ug/kg	0.329	1.10	
67-64-1	Acetone	U	5.48	ug/kg	1.82	5.48	UJ,V7c
75-35-4	1,1-Dichloroethylene	U	1.10	ug/kg	0.329	1.10	
74-88-4	Iodomethane	U	5.48	ug/kg	1.75	5.48	
75-09-2	Methylene chloride	U	5.48	ug/kg	2.19	5.48	
75-15-0	Carbon disulfide	U	5.48	ug/kg	1.37	5.48	
156-60-5	trans-1,2-Dichloroethylene	U	1.10	ug/kg	0.329	1.10	
75-34-3	1,1-Dichloroethane	U	1.10	ug/kg	0.329	1.10	
78-93-3	2-Butanone	U	5.48	ug/kg	1.64	5.48	
156-59-2	cis-1,2-Dichloroethylene	U	1.10	ug/kg	0.329	1.10	
594-20-7	2,2-Dichloropropane	U	1.10	ug/kg	0.329	1.10	
67-66-3	Chloroform	U	1.10	ug/kg	0.329	1.10	
74-97-5	Bromochloromethane	U	1.10	ug/kg	0.361	1.10	
71-55-6	1,1,1-Trichloroethane	U	1.10	ug/kg	0.329	1.10	
563-58-6	1,1-Dichloropropene	U	1.10	ug/kg	0.329	1.10	
56-23-5	Carbon tetrachloride	U	1.10	ug/kg	0.329	1.10	
107-06-2	1,2-Dichloroethane	U	1.10	ug/kg	0.329	1.10	
71-43-2	Benzene	U	1.10	ug/kg	0.329	1.10	
79-01-6	Trichloroethylene	U	1.10	ug/kg	0.361	1.10	
78-87-5	1,2-Dichloropropane	U	1.10	ug/kg	0.329	1.10	
75-27-4	Bromodichloromethane	U	1.10	ug/kg	0.329	1.10	
74-95-3	Dibromomethane	U	1.10	ug/kg	0.329	1.10	
108-10-1	4-Methyl-2-pentanone	U	5.48	ug/kg	1.37	5.48	
10061-01-5	cis-1,3-Dichloropropylene	U	1.10	ug/kg	0.329	1.10	
108-88-3	Toluene	U	1.10	ug/kg	0.329	1.10	
10061-02-6	trans-1,3-Dichloropropylene	U	1.10	ug/kg	0.329	1.10	
79-00-5	1,1,2-Trichloroethane	U	1.10	ug/kg	0.329	1.10	
591-78-6	2-Hexanone	U	5.48	ug/kg	1.64	5.48	
142-28-9	1,3-Dichloropropane	U	1.10	ug/kg	0.329	1.10	
127-18-4	Tetrachloroethylene	U	1.10	ug/kg	0.329	1.10	
124-48-1	Dibromochloromethane	U	1.10	ug/kg	0.329	1.10	
106-93-4	1,2-Dibromoethane	U	1.10	ug/kg	0.329	1.10	
108-90-7	Chlorobenzene	U	1.10	ug/kg	0.329	1.10	

ETM
4/25/10

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-2089	**Date Collected:**	02/22/2010 12:00	**Matrix:**	R
Lab Sample ID:	248102002	**Date Received:**	02/26/2010 08:45	**%Moisture:**	8.7
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE15-10-8396	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	961336	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	03/05/2010 03:06	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	03/04/2010 17:43	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	030410V4\4A438.D	**Column:**	DB-624		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
100-41-4	Ethylbenzene	U	1.10	ug/kg	0.329	1.10	
179601-23-1	m,p-Xylenes	U	2.19	ug/kg	0.329	2.19	
95-47-6	o-Xylene	U	1.10	ug/kg	0.329	1.10	
100-42-5	Styrene	U	1.10	ug/kg	0.329	1.10	
75-25-2	Bromoform	U	1.10	ug/kg	0.329	1.10	
79-34-5	1,1,2,2-Tetrachloroethane	U	1.10	ug/kg	0.329	1.10	
96-18-4	1,2,3-Trichloropropane	U	1.10	ug/kg	0.329	1.10	
108-86-1	Bromobenzene	U	1.10	ug/kg	0.329	1.10	
103-65-1	n-Propylbenzene	U	1.10	ug/kg	0.329	1.10	
95-49-8	2-Chlorotoluene	U	1.10	ug/kg	0.329	1.10	
98-82-8	Isopropylbenzene	U	1.10	ug/kg	0.329	1.10	
108-67-8	1,3,5-Trimethylbenzene	U	1.10	ug/kg	0.329	1.10	
106-43-4	4-Chlorotoluene	U	1.10	ug/kg	0.329	1.10	
98-06-6	tert-Butylbenzene	U	1.10	ug/kg	0.329	1.10	
95-63-6	1,2,4-Trimethylbenzene	U	1.10	ug/kg	0.329	1.10	
135-98-8	sec-Butylbenzene	U	1.10	ug/kg	0.329	1.10	
99-87-6	4-Isopropyltoluene	U	1.10	ug/kg	0.329	1.10	
541-73-1	1,3-Dichlorobenzene	U	1.10	ug/kg	0.329	1.10	
106-46-7	1,4-Dichlorobenzene	U	1.10	ug/kg	0.329	1.10	
104-51-8	n-Butylbenzene	U	1.10	ug/kg	0.329	1.10	
96-12-8	1,2-Dibromo-3-chloropropane	U	1.10	ug/kg	0.329	1.10	
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.48	ug/kg	1.75	5.48	UJ,V7c
630-20-6	1,1,1,2-Tetrachloroethane	U	1.10	ug/kg	0.329	1.10	
95-50-1	1,2-Dichlorobenzene	U	1.10	ug/kg	0.329	1.10	

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	unknown hydrocarbon	4.48	9.5	ug/kg	0	J
	unknown siloxane	16.79	14.2	ug/kg	0	J

ETM
4/25/10

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-2089**	**Date Collected:**	**02/22/2010 12:00**	**Matrix:**	**R**
Lab Sample ID:	**248102003**	**Date Received:**	**02/26/2010 08:45**	**%Moisture:**	**20.1**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE15-10-8393**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**961336**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**03/05/2010 03:33**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**03/04/2010 17:44**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**030410V4\4A439.D**	**Column:**	**DB-624**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
75-71-8	Dichlorodifluoromethane	U	1.25	ug/kg	0.426	1.25	UJ,V7c
74-87-3	Chloromethane	U	1.25	ug/kg	0.376	1.25	UJ,V7c
75-01-4	Vinyl chloride	U	1.25	ug/kg	0.376	1.25	
74-83-9	Bromomethane	U	1.25	ug/kg	0.376	1.25	
75-00-3	Chloroethane	U	1.25	ug/kg	0.376	1.25	
75-69-4	Trichlorofluoromethane	U	1.25	ug/kg	0.376	1.25	
67-64-1	Acetone	U	6.26	ug/kg	2.08	6.26	UJ,V7c
75-35-4	1,1-Dichloroethylene	U	1.25	ug/kg	0.376	1.25	
74-88-4	Iodomethane	U	6.26	ug/kg	2.00	6.26	
75-09-2	Methylene chloride	U	6.26	ug/kg	2.50	6.26	
75-15-0	Carbon disulfide	U	6.26	ug/kg	1.57	6.26	
156-60-5	trans-1,2-Dichloroethylene	U	1.25	ug/kg	0.376	1.25	
75-34-3	1,1-Dichloroethane	U	1.25	ug/kg	0.376	1.25	
78-93-3	2-Butanone	U	6.26	ug/kg	1.88	6.26	
156-59-2	cis-1,2-Dichloroethylene	U	1.25	ug/kg	0.376	1.25	
594-20-7	2,2-Dichloropropane	U	1.25	ug/kg	0.376	1.25	
67-66-3	Chloroform	U	1.25	ug/kg	0.376	1.25	
74-97-5	Bromochloromethane	U	1.25	ug/kg	0.413	1.25	
71-55-6	1,1,1-Trichloroethane	U	1.25	ug/kg	0.376	1.25	
563-58-6	1,1-Dichloropropene	U	1.25	ug/kg	0.376	1.25	
56-23-5	Carbon tetrachloride	U	1.25	ug/kg	0.376	1.25	
107-06-2	1,2-Dichloroethane	U	1.25	ug/kg	0.376	1.25	
71-43-2	Benzene	U	1.25	ug/kg	0.376	1.25	
79-01-6	Trichloroethylene	U	1.25	ug/kg	0.413	1.25	
78-87-5	1,2-Dichloropropane	U	1.25	ug/kg	0.376	1.25	
75-27-4	Bromodichloromethane	U	1.25	ug/kg	0.376	1.25	
74-95-3	Dibromomethane	U	1.25	ug/kg	0.376	1.25	
108-10-1	4-Methyl-2-pentanone	U	6.26	ug/kg	1.57	6.26	
10061-01-5	cis-1,3-Dichloropropylene	U	1.25	ug/kg	0.376	1.25	
108-88-3	Toluene	U	1.25	ug/kg	0.376	1.25	
10061-02-6	trans-1,3-Dichloropropylene	U	1.25	ug/kg	0.376	1.25	
79-00-5	1,1,2-Trichloroethane	U	1.25	ug/kg	0.376	1.25	
591-78-6	2-Hexanone	U	6.26	ug/kg	1.88	6.26	
142-28-9	1,3-Dichloropropane	U	1.25	ug/kg	0.376	1.25	
127-18-4	Tetrachloroethylene	U	1.25	ug/kg	0.376	1.25	
124-48-1	Dibromochloromethane	U	1.25	ug/kg	0.376	1.25	
106-93-4	1,2-Dibromoethane	U	1.25	ug/kg	0.376	1.25	
108-90-7	Chlorobenzene	U	1.25	ug/kg	0.376	1.25	

ETM
4/25/10

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-2089	Date Collected:	02/22/2010 12:00	Matrix:	R
Lab Sample ID:	248102003	Date Received:	02/26/2010 08:45	%Moisture:	20.1
		Client:	LANL010	Project:	LANL01004
Client ID:	RE15-10-8393	Method:	SW846 8260B	SOP Ref:	GL-OA-E-038
Batch ID:	961336	Inst:	VOA4.I	Dilution:	1
Run Date:	03/05/2010 03:33	Analyst:	ACJ	Purge Vol:	5 mL
Prep Date:	03/04/2010 17:44	Aliquot:	5 g	Final Volume:	5 mL
Data File:	030410V4\4A439.D	Column:	DB-624		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
100-41-4	Ethylbenzene	U	1.25	ug/kg	0.376	1.25	
179601-23-1	m,p-Xylenes	U	2.50	ug/kg	0.376	2.50	
95-47-6	o-Xylene	U	1.25	ug/kg	0.376	1.25	
100-42-5	Styrene	U	1.25	ug/kg	0.376	1.25	
75-25-2	Bromoform	U	1.25	ug/kg	0.376	1.25	
79-34-5	1,1,2,2-Tetrachloroethane	U	1.25	ug/kg	0.376	1.25	
96-18-4	1,2,3-Trichloropropane	U	1.25	ug/kg	0.376	1.25	
108-86-1	Bromobenzene	U	1.25	ug/kg	0.376	1.25	
103-65-1	n-Propylbenzene	U	1.25	ug/kg	0.376	1.25	
95-49-8	2-Chlorotoluene	U	1.25	ug/kg	0.376	1.25	
98-82-8	Isopropylbenzene	U	1.25	ug/kg	0.376	1.25	
108-67-8	1,3,5-Trimethylbenzene	U	1.25	ug/kg	0.376	1.25	
106-43-4	4-Chlorotoluene	U	1.25	ug/kg	0.376	1.25	
98-06-6	tert-Butylbenzene	U	1.25	ug/kg	0.376	1.25	
95-63-6	1,2,4-Trimethylbenzene	U	1.25	ug/kg	0.376	1.25	
135-98-8	sec-Butylbenzene	U	1.25	ug/kg	0.376	1.25	
99-87-6	4-Isopropyltoluene	U	1.25	ug/kg	0.376	1.25	
541-73-1	1,3-Dichlorobenzene	U	1.25	ug/kg	0.376	1.25	
106-46-7	1,4-Dichlorobenzene	U	1.25	ug/kg	0.376	1.25	
104-51-8	n-Butylbenzene	U	1.25	ug/kg	0.376	1.25	
96-12-8	1,2-Dibromo-3-chloropropane	U	1.25	ug/kg	0.376	1.25	
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	6.26	ug/kg	2.00	6.26	UJ,V7c
630-20-6	1,1,1,2-Tetrachloroethane	U	1.25	ug/kg	0.376	1.25	
95-50-1	1,2-Dichlorobenzene	U	1.25	ug/kg	0.376	1.25	

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	unknown hydrocarbon	4.48	7.24	ug/kg	0	J
	unknown siloxane	16.79	12.1	ug/kg	0	J

ETM
4/25/10

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-2089**	**Date Collected:**	**02/22/2010 12:00**	**Matrix:**	**R**
Lab Sample ID:	**248102004**	**Date Received:**	**02/26/2010 08:45**	**%Moisture:**	**4.4**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE15-10-8395**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**961336**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**03/05/2010 04:01**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**03/04/2010 17:45**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**030410V4\4A440.D**	**Column:**	**DB-624**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
75-71-8	Dichlorodifluoromethane	U	1.05	ug/kg	0.356	1.05	UJ,V7c
74-87-3	Chloromethane	U	1.05	ug/kg	0.314	1.05	UJ,V7c
75-01-4	Vinyl chloride	U	1.05	ug/kg	0.314	1.05	
74-83-9	Bromomethane	U	1.05	ug/kg	0.314	1.05	
75-00-3	Chloroethane	U	1.05	ug/kg	0.314	1.05	
75-69-4	Trichlorofluoromethane	U	1.05	ug/kg	0.314	1.05	
67-64-1	Acetone	U	5.23	ug/kg	1.74	5.23	UJ,V7c
75-35-4	1,1-Dichloroethylene	U	1.05	ug/kg	0.314	1.05	
74-88-4	Iodomethane	U	5.23	ug/kg	1.67	5.23	
75-09-2	Methylene chloride	U	5.23	ug/kg	2.09	5.23	
75-15-0	Carbon disulfide	U	5.23	ug/kg	1.31	5.23	
156-60-5	trans-1,2-Dichloroethylene	U	1.05	ug/kg	0.314	1.05	
75-34-3	1,1-Dichloroethane	U	1.05	ug/kg	0.314	1.05	
78-93-3	2-Butanone	U	5.23	ug/kg	1.57	5.23	
156-59-2	cis-1,2-Dichloroethylene	U	1.05	ug/kg	0.314	1.05	
594-20-7	2,2-Dichloropropane	U	1.05	ug/kg	0.314	1.05	
67-66-3	Chloroform	U	1.05	ug/kg	0.314	1.05	
74-97-5	Bromochloromethane	U	1.05	ug/kg	0.345	1.05	
71-55-6	1,1,1-Trichloroethane	U	1.05	ug/kg	0.314	1.05	
563-58-6	1,1-Dichloropropene	U	1.05	ug/kg	0.314	1.05	
56-23-5	Carbon tetrachloride	U	1.05	ug/kg	0.314	1.05	
107-06-2	1,2-Dichloroethane	U	1.05	ug/kg	0.314	1.05	
71-43-2	Benzene	U	1.05	ug/kg	0.314	1.05	
79-01-6	Trichloroethylene	U	1.05	ug/kg	0.345	1.05	
78-87-5	1,2-Dichloropropane	U	1.05	ug/kg	0.314	1.05	
75-27-4	Bromodichloromethane	U	1.05	ug/kg	0.314	1.05	
74-95-3	Dibromomethane	U	1.05	ug/kg	0.314	1.05	
108-10-1	4-Methyl-2-pentanone	U	5.23	ug/kg	1.31	5.23	
10061-01-5	cis-1,3-Dichloropropylene	U	1.05	ug/kg	0.314	1.05	
108-88-3	Toluene	U	1.05	ug/kg	0.314	1.05	
10061-02-6	trans-1,3-Dichloropropylene	U	1.05	ug/kg	0.314	1.05	
79-00-5	1,1,2-Trichloroethane	U	1.05	ug/kg	0.314	1.05	
591-78-6	2-Hexanone	U	5.23	ug/kg	1.57	5.23	
142-28-9	1,3-Dichloropropane	U	1.05	ug/kg	0.314	1.05	
127-18-4	Tetrachloroethylene	U	1.05	ug/kg	0.314	1.05	
124-48-1	Dibromochloromethane	U	1.05	ug/kg	0.314	1.05	
106-93-4	1,2-Dibromoethane	U	1.05	ug/kg	0.314	1.05	
108-90-7	Chlorobenzene	U	1.05	ug/kg	0.314	1.05	

ETM
4/25/10

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-2089**	**Date Collected:**	**02/22/2010 12:00**	**Matrix:**	**R**
Lab Sample ID:	**248102004**	**Date Received:**	**02/26/2010 08:45**	**%Moisture:**	**4.4**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE15-10-8395**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**961336**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**03/05/2010 04:01**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**03/04/2010 17:45**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**030410V4\4A440.D**	**Column:**	**DB-624**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
100-41-4	Ethylbenzene	U	1.05	ug/kg	0.314	1.05	
179601-23-1	m,p-Xylenes	U	2.09	ug/kg	0.314	2.09	
95-47-6	o-Xylene	U	1.05	ug/kg	0.314	1.05	
100-42-5	Styrene	U	1.05	ug/kg	0.314	1.05	
75-25-2	Bromoform	U	1.05	ug/kg	0.314	1.05	
79-34-5	1,1,2,2-Tetrachloroethane	U	1.05	ug/kg	0.314	1.05	
96-18-4	1,2,3-Trichloropropane	U	1.05	ug/kg	0.314	1.05	
108-86-1	Bromobenzene	U	1.05	ug/kg	0.314	1.05	
103-65-1	n-Propylbenzene	U	1.05	ug/kg	0.314	1.05	
95-49-8	2-Chlorotoluene	U	1.05	ug/kg	0.314	1.05	
98-82-8	Isopropylbenzene	U	1.05	ug/kg	0.314	1.05	
108-67-8	1,3,5-Trimethylbenzene	U	1.05	ug/kg	0.314	1.05	
106-43-4	4-Chlorotoluene	U	1.05	ug/kg	0.314	1.05	
98-06-6	tert-Butylbenzene	U	1.05	ug/kg	0.314	1.05	
95-63-6	1,2,4-Trimethylbenzene	U	1.05	ug/kg	0.314	1.05	
135-98-8	sec-Butylbenzene	U	1.05	ug/kg	0.314	1.05	
99-87-6	4-Isopropyltoluene	U	1.05	ug/kg	0.314	1.05	
541-73-1	1,3-Dichlorobenzene	U	1.05	ug/kg	0.314	1.05	
106-46-7	1,4-Dichlorobenzene	U	1.05	ug/kg	0.314	1.05	
104-51-8	n-Butylbenzene	U	1.05	ug/kg	0.314	1.05	
96-12-8	1,2-Dibromo-3-chloropropane	U	1.05	ug/kg	0.314	1.05	
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.23	ug/kg	1.67	5.23	UJ,V7c
630-20-6	1,1,1,2-Tetrachloroethane	U	1.05	ug/kg	0.314	1.05	
95-50-1	1,2-Dichlorobenzene	U	1.05	ug/kg	0.314	1.05	

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Flt	Qual
	unknown hydrocarbon	15.01	24.6	ug/kg	0	J
	unknown siloxane	16.79	24.6	ug/kg	0	J

ETM
4/25/10

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-2089**	**Date Collected:**	**02/22/2010 12:00**	**Matrix:**	**R**
Lab Sample ID:	**248102005**	**Date Received:**	**02/26/2010 08:45**	**%Moisture:**	**12.8**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE15-10-8398**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**961336**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**03/05/2010 04:28**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**03/04/2010 17:46**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**030410V4\4A441.D**	**Column:**	**DB-624**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
75-71-8	Dichlorodifluoromethane	U	1.15	ug/kg	0.390	1.15	UJ,V7c
74-87-3	Chloromethane	U	1.15	ug/kg	0.344	1.15	UJ,V7c
75-01-4	Vinyl chloride	U	1.15	ug/kg	0.344	1.15	
74-83-9	Bromomethane	U	1.15	ug/kg	0.344	1.15	
75-00-3	Chloroethane	U	1.15	ug/kg	0.344	1.15	
75-69-4	Trichlorofluoromethane	U	1.15	ug/kg	0.344	1.15	
67-64-1	Acetone		7.19	ug/kg	1.90	5.74	J,V7c
75-35-4	1,1-Dichloroethylene	U	1.15	ug/kg	0.344	1.15	
74-88-4	Iodomethane	U	5.74	ug/kg	1.84	5.74	
75-09-2	Methylene chloride	U	5.74	ug/kg	2.29	5.74	
75-15-0	Carbon disulfide	U	5.74	ug/kg	1.43	5.74	
156-60-5	trans-1,2-Dichloroethylene	U	1.15	ug/kg	0.344	1.15	
75-34-3	1,1-Dichloroethane	U	1.15	ug/kg	0.344	1.15	
78-93-3	2-Butanone	U	5.74	ug/kg	1.72	5.74	
156-59-2	cis-1,2-Dichloroethylene	U	1.15	ug/kg	0.344	1.15	
594-20-7	2,2-Dichloropropane	U	1.15	ug/kg	0.344	1.15	
67-66-3	Chloroform	U	1.15	ug/kg	0.344	1.15	
74-97-5	Bromochloromethane	U	1.15	ug/kg	0.379	1.15	
71-55-6	1,1,1-Trichloroethane	U	1.15	ug/kg	0.344	1.15	
563-58-6	1,1-Dichloropropene	U	1.15	ug/kg	0.344	1.15	
56-23-5	Carbon tetrachloride	U	1.15	ug/kg	0.344	1.15	
107-06-2	1,2-Dichloroethane	U	1.15	ug/kg	0.344	1.15	
71-43-2	Benzene	U	1.15	ug/kg	0.344	1.15	
79-01-6	Trichloroethylene	U	1.15	ug/kg	0.379	1.15	
78-87-5	1,2-Dichloropropane	U	1.15	ug/kg	0.344	1.15	
75-27-4	Bromodichloromethane	U	1.15	ug/kg	0.344	1.15	
74-95-3	Dibromomethane	U	1.15	ug/kg	0.344	1.15	
108-10-1	4-Methyl-2-pentanone	U	5.74	ug/kg	1.43	5.74	
10061-01-5	cis-1,3-Dichloropropylene	U	1.15	ug/kg	0.344	1.15	
108-88-3	Toluene	U	1.15	ug/kg	0.344	1.15	
10061-02-6	trans-1,3-Dichloropropylene	U	1.15	ug/kg	0.344	1.15	
79-00-5	1,1,2-Trichloroethane	U	1.15	ug/kg	0.344	1.15	
591-78-6	2-Hexanone	U	5.74	ug/kg	1.72	5.74	
142-28-9	1,3-Dichloropropane	U	1.15	ug/kg	0.344	1.15	
127-18-4	Tetrachloroethylene	U	1.15	ug/kg	0.344	1.15	
124-48-1	Dibromochloromethane	U	1.15	ug/kg	0.344	1.15	
106-93-4	1,2-Dibromoethane	U	1.15	ug/kg	0.344	1.15	
108-90-7	Chlorobenzene	U	1.15	ug/kg	0.344	1.15	

ETM
4/25/10

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-2089	**Date Collected:**	02/22/2010 12:00	**Matrix:**	R
Lab Sample ID:	248102005	**Date Received:**	02/26/2010 08:45	**%Moisture:**	12.8
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE15-10-8398	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	961336	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	03/05/2010 04:28	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	03/04/2010 17:46	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	030410V4\4A441.D	**Column:**	DB-624		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
100-41-4	Ethylbenzene	U	1.15	ug/kg	0.344	1.15	
179601-23-1	m,p-Xylenes	U	2.29	ug/kg	0.344	2.29	
95-47-6	o-Xylene	U	1.15	ug/kg	0.344	1.15	
100-42-5	Styrene	U	1.15	ug/kg	0.344	1.15	
75-25-2	Bromoform	U	1.15	ug/kg	0.344	1.15	
79-34-5	1,1,2,2-Tetrachloroethane	U	1.15	ug/kg	0.344	1.15	
96-18-4	1,2,3-Trichloropropane	U	1.15	ug/kg	0.344	1.15	
108-86-1	Bromobenzene	U	1.15	ug/kg	0.344	1.15	
103-65-1	n-Propylbenzene	U	1.15	ug/kg	0.344	1.15	
95-49-8	2-Chlorotoluene	U	1.15	ug/kg	0.344	1.15	
98-82-8	Isopropylbenzene	U	1.15	ug/kg	0.344	1.15	
108-67-8	1,3,5-Trimethylbenzene	U	1.15	ug/kg	0.344	1.15	
106-43-4	4-Chlorotoluene	U	1.15	ug/kg	0.344	1.15	
98-06-6	tert-Butylbenzene	U	1.15	ug/kg	0.344	1.15	
95-63-6	1,2,4-Trimethylbenzene	U	1.15	ug/kg	0.344	1.15	
135-98-8	sec-Butylbenzene	U	1.15	ug/kg	0.344	1.15	
99-87-6	4-Isopropyltoluene	U	1.15	ug/kg	0.344	1.15	
541-73-1	1,3-Dichlorobenzene	U	1.15	ug/kg	0.344	1.15	
106-46-7	1,4-Dichlorobenzene	U	1.15	ug/kg	0.344	1.15	
104-51-8	n-Butylbenzene	U	1.15	ug/kg	0.344	1.15	
96-12-8	1,2-Dibromo-3-chloropropane	U	1.15	ug/kg	0.344	1.15	
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.74	ug/kg	1.84	5.74	UJ,V7c
630-20-6	1,1,1,2-Tetrachloroethane	U	1.15	ug/kg	0.344	1.15	
95-50-1	1,2-Dichlorobenzene	U	1.15	ug/kg	0.344	1.15	

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Flt	Qual
	unknown hydrocarbon	4.47	10.2	ug/kg	0	J
	unknown siloxane	16.79	12.6	ug/kg	0	J

ETM
4/25/10

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-2089	**Date Collected:**	02/22/2010 12:00	**Matrix:**	R
Lab Sample ID:	248102006	**Date Received:**	02/26/2010 08:45	**%Moisture:**	10.3
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE15-10-8394	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	961336	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	03/05/2010 04:55	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	03/04/2010 17:47	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	030410V4\4A442.D	**Column:**	DB-624		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
75-71-8	Dichlorodifluoromethane	U	1.12	ug/kg	0.379	1.12	UJ,V7c
74-87-3	Chloromethane	U	1.12	ug/kg	0.335	1.12	UJ,V7c
75-01-4	Vinyl chloride	U	1.12	ug/kg	0.335	1.12	
74-83-9	Bromomethane	U	1.12	ug/kg	0.335	1.12	
75-00-3	Chloroethane	U	1.12	ug/kg	0.335	1.12	
75-69-4	Trichlorofluoromethane	U	1.12	ug/kg	0.335	1.12	
67-64-1	Acetone		9.19	ug/kg	1.85	5.58	J,V7c
75-35-4	1,1-Dichloroethylene	U	1.12	ug/kg	0.335	1.12	
74-88-4	Iodomethane	U	5.58	ug/kg	1.78	5.58	
75-09-2	Methylene chloride	U	5.58	ug/kg	2.23	5.58	
75-15-0	Carbon disulfide	U	5.58	ug/kg	1.39	5.58	
156-60-5	trans-1,2-Dichloroethylene	U	1.12	ug/kg	0.335	1.12	
75-34-3	1,1-Dichloroethane	U	1.12	ug/kg	0.335	1.12	
78-93-3	2-Butanone	U	5.58	ug/kg	1.67	5.58	
156-59-2	cis-1,2-Dichloroethylene	U	1.12	ug/kg	0.335	1.12	
594-20-7	2,2-Dichloropropane	U	1.12	ug/kg	0.335	1.12	
67-66-3	Chloroform	U	1.12	ug/kg	0.335	1.12	
74-97-5	Bromochloromethane	U	1.12	ug/kg	0.368	1.12	
71-55-6	1,1,1-Trichloroethane	U	1.12	ug/kg	0.335	1.12	
563-58-6	1,1-Dichloropropene	U	1.12	ug/kg	0.335	1.12	
56-23-5	Carbon tetrachloride	U	1.12	ug/kg	0.335	1.12	
107-06-2	1,2-Dichloroethane	U	1.12	ug/kg	0.335	1.12	
71-43-2	Benzene	U	1.12	ug/kg	0.335	1.12	
79-01-6	Trichloroethylene	U	1.12	ug/kg	0.368	1.12	
78-87-5	1,2-Dichloropropane	U	1.12	ug/kg	0.335	1.12	
75-27-4	Bromodichloromethane	U	1.12	ug/kg	0.335	1.12	
74-95-3	Dibromomethane	U	1.12	ug/kg	0.335	1.12	
108-10-1	4-Methyl-2-pentanone	U	5.58	ug/kg	1.39	5.58	
10061-01-5	cis-1,3-Dichloropropylene	U	1.12	ug/kg	0.335	1.12	
108-88-3	Toluene	U	1.12	ug/kg	0.335	1.12	
10061-02-6	trans-1,3-Dichloropropylene	U	1.12	ug/kg	0.335	1.12	
79-00-5	1,1,2-Trichloroethane	U	1.12	ug/kg	0.335	1.12	
591-78-6	2-Hexanone	J	2.01	ug/kg	1.67	5.58	
142-28-9	1,3-Dichloropropane	U	1.12	ug/kg	0.335	1.12	
127-18-4	Tetrachloroethylene	U	1.12	ug/kg	0.335	1.12	
124-48-1	Dibromochloromethane	U	1.12	ug/kg	0.335	1.12	
106-93-4	1,2-Dibromoethane	U	1.12	ug/kg	0.335	1.12	
108-90-7	Chlorobenzene	U	1.12	ug/kg	0.335	1.12	

ETM
4/25/10

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-2089	**Date Collected:**	02/22/2010 12:00	**Matrix:**	R
Lab Sample ID:	248102006	**Date Received:**	02/26/2010 08:45	**%Moisture:**	10.3
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE15-10-8394	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	961336	**Inst:**	VOA4.I	**Dilution:**	1
Run Date:	03/05/2010 04:55	**Analyst:**	ACJ	**Purge Vol:**	5 mL
Prep Date:	03/04/2010 17:47	**Aliquot:**	5 g	**Final Volume:**	5 mL
Data File:	030410V4\4A442.D	**Column:**	DB-624		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
100-41-4	Ethylbenzene	U	1.12	ug/kg	0.335	1.12	
179601-23-1	m,p-Xylenes	U	2.23	ug/kg	0.335	2.23	
95-47-6	o-Xylene	U	1.12	ug/kg	0.335	1.12	
100-42-5	Styrene	U	1.12	ug/kg	0.335	1.12	
75-25-2	Bromoform	U	1.12	ug/kg	0.335	1.12	
79-34-5	1,1,2,2-Tetrachloroethane	U	1.12	ug/kg	0.335	1.12	
96-18-4	1,2,3-Trichloropropane	U	1.12	ug/kg	0.335	1.12	
108-86-1	Bromobenzene	U	1.12	ug/kg	0.335	1.12	
103-65-1	n-Propylbenzene	U	1.12	ug/kg	0.335	1.12	
95-49-8	2-Chlorotoluene	U	1.12	ug/kg	0.335	1.12	
98-82-8	Isopropylbenzene	U	1.12	ug/kg	0.335	1.12	
108-67-8	1,3,5-Trimethylbenzene	U	1.12	ug/kg	0.335	1.12	
106-43-4	4-Chlorotoluene	U	1.12	ug/kg	0.335	1.12	
98-06-6	tert-Butylbenzene	U	1.12	ug/kg	0.335	1.12	
95-63-6	1,2,4-Trimethylbenzene	U	1.12	ug/kg	0.335	1.12	
135-98-8	sec-Butylbenzene	U	1.12	ug/kg	0.335	1.12	
99-87-6	4-Isopropyltoluene	U	1.12	ug/kg	0.335	1.12	
541-73-1	1,3-Dichlorobenzene	U	1.12	ug/kg	0.335	1.12	
106-46-7	1,4-Dichlorobenzene	U	1.12	ug/kg	0.335	1.12	
104-51-8	n-Butylbenzene	U	1.12	ug/kg	0.335	1.12	
96-12-8	1,2-Dibromo-3-chloropropane	U	1.12	ug/kg	0.335	1.12	
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.58	ug/kg	1.78	5.58	UJ,V7c
630-20-6	1,1,1,2-Tetrachloroethane	U	1.12	ug/kg	0.335	1.12	
95-50-1	1,2-Dichlorobenzene	U	1.12	ug/kg	0.335	1.12	

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	unknown hydrocarbon	4.48	7.46	ug/kg	0	J
	unknown siloxane	16.79	12.4	ug/kg	0	J

ETM
4/25/10

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-2089**	**Date Collected:**	**02/22/2010 12:00**	**Matrix:**	**R**
Lab Sample ID:	**248102007**	**Date Received:**	**02/26/2010 08:45**	**%Moisture:**	**11.7**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE15-10-8399**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**961336**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**03/05/2010 05:23**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**03/04/2010 17:48**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**030410V4\4A443.D**	**Column:**	**DB-624**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
75-71-8	Dichlorodifluoromethane	U	1.13	ug/kg	0.385	1.13	UJ,V7c
74-87-3	Chloromethane	U	1.13	ug/kg	0.340	1.13	UJ,V7c
75-01-4	Vinyl chloride	U	1.13	ug/kg	0.340	1.13	
74-83-9	Bromomethane	U	1.13	ug/kg	0.340	1.13	
75-00-3	Chloroethane	U	1.13	ug/kg	0.340	1.13	
75-69-4	Trichlorofluoromethane	U	1.13	ug/kg	0.340	1.13	
67-64-1	Acetone	U	5.66	ug/kg	1.88	5.66	UJ,V7c
75-35-4	1,1-Dichloroethylene	U	1.13	ug/kg	0.340	1.13	
74-88-4	Iodomethane	U	5.66	ug/kg	1.81	5.66	
75-09-2	Methylene chloride	U	5.66	ug/kg	2.26	5.66	
75-15-0	Carbon disulfide	U	5.66	ug/kg	1.42	5.66	
156-60-5	trans-1,2-Dichloroethylene	U	1.13	ug/kg	0.340	1.13	
75-34-3	1,1-Dichloroethane	U	1.13	ug/kg	0.340	1.13	
78-93-3	2-Butanone	U	5.66	ug/kg	1.70	5.66	
156-59-2	cis-1,2-Dichloroethylene	U	1.13	ug/kg	0.340	1.13	
594-20-7	2,2-Dichloropropane	U	1.13	ug/kg	0.340	1.13	
67-66-3	Chloroform	U	1.13	ug/kg	0.340	1.13	
74-97-5	Bromochloromethane	U	1.13	ug/kg	0.374	1.13	
71-55-6	1,1,1-Trichloroethane	U	1.13	ug/kg	0.340	1.13	
563-58-6	1,1-Dichloropropene	U	1.13	ug/kg	0.340	1.13	
56-23-5	Carbon tetrachloride	U	1.13	ug/kg	0.340	1.13	
107-06-2	1,2-Dichloroethane	U	1.13	ug/kg	0.340	1.13	
71-43-2	Benzene	U	1.13	ug/kg	0.340	1.13	
79-01-6	Trichloroethylene	U	1.13	ug/kg	0.374	1.13	
78-87-5	1,2-Dichloropropane	U	1.13	ug/kg	0.340	1.13	
75-27-4	Bromodichloromethane	U	1.13	ug/kg	0.340	1.13	
74-95-3	Dibromomethane	U	1.13	ug/kg	0.340	1.13	
108-10-1	4-Methyl-2-pentanone	U	5.66	ug/kg	1.42	5.66	
10061-01-5	cis-1,3-Dichloropropylene	U	1.13	ug/kg	0.340	1.13	
108-88-3	Toluene	U	1.13	ug/kg	0.340	1.13	
10061-02-6	trans-1,3-Dichloropropylene	U	1.13	ug/kg	0.340	1.13	
79-00-5	1,1,2-Trichloroethane	U	1.13	ug/kg	0.340	1.13	
591-78-6	2-Hexanone	U	5.66	ug/kg	1.70	5.66	
142-28-9	1,3-Dichloropropane	U	1.13	ug/kg	0.340	1.13	
127-18-4	Tetrachloroethylene	U	1.13	ug/kg	0.340	1.13	
124-48-1	Dibromochloromethane	U	1.13	ug/kg	0.340	1.13	
106-93-4	1,2-Dibromoethane	U	1.13	ug/kg	0.340	1.13	
108-90-7	Chlorobenzene	U	1.13	ug/kg	0.340	1.13	

ETM
4/25/10

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-2089**	**Date Collected:**	**02/22/2010 12:00**	**Matrix:**	**R**
Lab Sample ID:	**248102007**	**Date Received:**	**02/26/2010 08:45**	**%Moisture:**	**11.7**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE15-10-8399**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**961336**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**03/05/2010 05:23**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**03/04/2010 17:48**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**030410V4\4A443.D**	**Column:**	**DB-624**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
100-41-4	Ethylbenzene		1.17	ug/kg	0.340	1.13	
179601-23-1	m,p-Xylenes	U	2.26	ug/kg	0.340	2.26	
95-47-6	o-Xylene	U	1.13	ug/kg	0.340	1.13	
100-42-5	Styrene	U	1.13	ug/kg	0.340	1.13	
75-25-2	Bromoform	U	1.13	ug/kg	0.340	1.13	
79-34-5	1,1,2,2-Tetrachloroethane	U	1.13	ug/kg	0.340	1.13	
96-18-4	1,2,3-Trichloropropane	U	1.13	ug/kg	0.340	1.13	
108-86-1	Bromobenzene	U	1.13	ug/kg	0.340	1.13	
103-65-1	n-Propylbenzene	U	1.13	ug/kg	0.340	1.13	
95-49-8	2-Chlorotoluene	U	1.13	ug/kg	0.340	1.13	
98-82-8	Isopropylbenzene	U	1.13	ug/kg	0.340	1.13	
108-67-8	1,3,5-Trimethylbenzene	U	1.13	ug/kg	0.340	1.13	
106-43-4	4-Chlorotoluene	U	1.13	ug/kg	0.340	1.13	
98-06-6	tert-Butylbenzene	U	1.13	ug/kg	0.340	1.13	
95-63-6	1,2,4-Trimethylbenzene	U	1.13	ug/kg	0.340	1.13	
135-98-8	sec-Butylbenzene	U	1.13	ug/kg	0.340	1.13	
99-87-6	4-Isopropyltoluene	U	1.13	ug/kg	0.340	1.13	
541-73-1	1,3-Dichlorobenzene	U	1.13	ug/kg	0.340	1.13	
106-46-7	1,4-Dichlorobenzene	U	1.13	ug/kg	0.340	1.13	
104-51-8	n-Butylbenzene	U	1.13	ug/kg	0.340	1.13	
96-12-8	1,2-Dibromo-3-chloropropane	U	1.13	ug/kg	0.340	1.13	
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.66	ug/kg	1.81	5.66	UJ,V7c
630-20-6	1,1,1,2-Tetrachloroethane	U	1.13	ug/kg	0.340	1.13	
95-50-1	1,2-Dichlorobenzene	U	1.13	ug/kg	0.340	1.13	

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated Units	Fit	Qual
	unknown siloxane	16.79	ug/kg	0	J

ETM
4/25/10

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-2089**	**Date Collected:**	**02/22/2010 12:00**	**Matrix:**	**R**
Lab Sample ID:	**248102008**	**Date Received:**	**02/26/2010 08:45**	**%Moisture:**	**6.1**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE15-10-8397**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**961336**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**03/05/2010 05:50**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**03/04/2010 17:49**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**030410V4\4A444.D**	**Column:**	**DB-624**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
75-71-8	Dichlorodifluoromethane	U	1.07	ug/kg	0.362	1.07	UJ,V7c
74-87-3	Chloromethane	U	1.07	ug/kg	0.320	1.07	UJ,V7c
75-01-4	Vinyl chloride	U	1.07	ug/kg	0.320	1.07	
74-83-9	Bromomethane	U	1.07	ug/kg	0.320	1.07	
75-00-3	Chloroethane	U	1.07	ug/kg	0.320	1.07	
75-69-4	Trichlorofluoromethane	U	1.07	ug/kg	0.320	1.07	
67-64-1	Acetone	U	5.33	ug/kg	1.77	5.33	UJ,V7c
75-35-4	1,1-Dichloroethylene	U	1.07	ug/kg	0.320	1.07	
74-88-4	Iodomethane	U	5.33	ug/kg	1.70	5.33	
75-09-2	Methylene chloride	U	5.33	ug/kg	2.13	5.33	
75-15-0	Carbon disulfide	U	5.33	ug/kg	1.33	5.33	
156-60-5	trans-1,2-Dichloroethylene	U	1.07	ug/kg	0.320	1.07	
75-34-3	1,1-Dichloroethane	U	1.07	ug/kg	0.320	1.07	
78-93-3	2-Butanone	U	5.33	ug/kg	1.60	5.33	
156-59-2	cis-1,2-Dichloroethylene	U	1.07	ug/kg	0.320	1.07	
594-20-7	2,2-Dichloropropane	U	1.07	ug/kg	0.320	1.07	
67-66-3	Chloroform	U	1.07	ug/kg	0.320	1.07	
74-97-5	Bromochloromethane	U	1.07	ug/kg	0.352	1.07	
71-55-6	1,1,1-Trichloroethane	U	1.07	ug/kg	0.320	1.07	
563-58-6	1,1-Dichloropropene	U	1.07	ug/kg	0.320	1.07	
56-23-5	Carbon tetrachloride	U	1.07	ug/kg	0.320	1.07	
107-06-2	1,2-Dichloroethane	U	1.07	ug/kg	0.320	1.07	
71-43-2	Benzene	U	1.07	ug/kg	0.320	1.07	
79-01-6	Trichloroethylene	U	1.07	ug/kg	0.352	1.07	
78-87-5	1,2-Dichloropropane	U	1.07	ug/kg	0.320	1.07	
75-27-4	Bromodichloromethane	U	1.07	ug/kg	0.320	1.07	
74-95-3	Dibromomethane	U	1.07	ug/kg	0.320	1.07	
108-10-1	4-Methyl-2-pentanone	U	5.33	ug/kg	1.33	5.33	
10061-01-5	cis-1,3-Dichloropropylene	U	1.07	ug/kg	0.320	1.07	
108-88-3	Toluene	U	1.07	ug/kg	0.320	1.07	
10061-02-6	trans-1,3-Dichloropropylene	U	1.07	ug/kg	0.320	1.07	
79-00-5	1,1,2-Trichloroethane	U	1.07	ug/kg	0.320	1.07	
591-78-6	2-Hexanone	U	5.33	ug/kg	1.60	5.33	
142-28-9	1,3-Dichloropropane	U	1.07	ug/kg	0.320	1.07	
127-18-4	Tetrachloroethylene	U	1.07	ug/kg	0.320	1.07	
124-48-1	Dibromochloromethane	U	1.07	ug/kg	0.320	1.07	
106-93-4	1,2-Dibromoethane	U	1.07	ug/kg	0.320	1.07	
108-90-7	Chlorobenzene	U	1.07	ug/kg	0.320	1.07	

ETM
4/25/10

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-2089**	**Date Collected:**	**02/22/2010 12:00**	**Matrix:**	**R**
Lab Sample ID:	**248102008**	**Date Received:**	**02/26/2010 08:45**	**%Moisture:**	**6.1**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE15-10-8397**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**961336**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**03/05/2010 05:50**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**03/04/2010 17:49**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**030410V4\4A444.D**	**Column:**	**DB-624**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
100-41-4	Ethylbenzene	U	1.07	ug/kg	0.320	1.07	
179601-23-1	m,p-Xylenes	U	2.13	ug/kg	0.320	2.13	
95-47-6	o-Xylene	U	1.07	ug/kg	0.320	1.07	
100-42-5	Styrene	U	1.07	ug/kg	0.320	1.07	
75-25-2	Bromoform	U	1.07	ug/kg	0.320	1.07	
79-34-5	1,1,2,2-Tetrachloroethane	U	1.07	ug/kg	0.320	1.07	
96-18-4	1,2,3-Trichloropropane	U	1.07	ug/kg	0.320	1.07	
108-86-1	Bromobenzene	U	1.07	ug/kg	0.320	1.07	
103-65-1	n-Propylbenzene	U	1.07	ug/kg	0.320	1.07	
95-49-8	2-Chlorotoluene	U	1.07	ug/kg	0.320	1.07	
98-82-8	Isopropylbenzene	U	1.07	ug/kg	0.320	1.07	
108-67-8	1,3,5-Trimethylbenzene	U	1.07	ug/kg	0.320	1.07	
106-43-4	4-Chlorotoluene	U	1.07	ug/kg	0.320	1.07	
98-06-6	tert-Butylbenzene	U	1.07	ug/kg	0.320	1.07	
95-63-6	1,2,4-Trimethylbenzene	U	1.07	ug/kg	0.320	1.07	
135-98-8	sec-Butylbenzene	U	1.07	ug/kg	0.320	1.07	
99-87-6	4-Isopropyltoluene	U	1.07	ug/kg	0.320	1.07	
541-73-1	1,3-Dichlorobenzene	U	1.07	ug/kg	0.320	1.07	
106-46-7	1,4-Dichlorobenzene	U	1.07	ug/kg	0.320	1.07	
104-51-8	n-Butylbenzene	U	1.07	ug/kg	0.320	1.07	
96-12-8	1,2-Dibromo-3-chloropropane	U	1.07	ug/kg	0.320	1.07	
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.33	ug/kg	1.70	5.33	UJ,V7c
630-20-6	1,1,1,2-Tetrachloroethane	U	1.07	ug/kg	0.320	1.07	
95-50-1	1,2-Dichlorobenzene	U	1.07	ug/kg	0.320	1.07	

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Flt	Qual
	unknown hydrocarbon	4.47	5.45	ug/kg	0	J
	unknown siloxane	16.79	9.83	ug/kg	0	J

ETM
4/25/10

DATA VALIDATION COVER SHEET

5115-1

Data Validation Cover Sheet

Records Use only

Los Alamos NATIONAL LABORATORY EST. 1943

Section I.

REQUEST NUMBER: 10-2089 VALIDATION DATE: 4/25/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

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

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

- ☐ TPH-GRO
- ☐ TPH-DRO
- ☐ GENERAL CHEMISTRY
- ☐ HIGH EXPLOSIVES
- ☐ METALS
- ☐ RADIOCHEMISTRY
- ☐ DIOXIN FURANS
- ☐ PCB CONGENERS
- ☐ LCMSMS HIGH EXPLOSIVES
- ☐ LCMSMS PERCHLORATES
- ☐ ORGANOCHLORINE PESTICIDES/POLYCHLORINATED BIPHENYLS
- ☒ OTHER (DESCRIBE): SVOCs

Section II. Completeness Check

YES	NO	N/A	(CHECK ONE)	YES	NO	N/A	(CHECK ONE)
☒	☐	☐	1. CHAIN-OF-CUSTODY FORM(S)	☒	☐	☐	6. RAW/BSS DATA
☒	☐	☐	2. CASE NARRATIVE	☒	☐	☐	7. QUALITY CONTROL FORMS
☒	☐	☐	3. SAMPLE RESULT FORMS	☒	☐	☐	8. QUANTITATION REPORTS
☒	☐	☐	4. SAMPLE CHROMATOGRAMS	☒	☐	☐	9. TICS FORMS
☐	☐	☒	5. STANDARD CHROMATOGRAMS	☒	☐	☐	10. TICS MASS SPECTRA

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

1. The ICV and/or CCV %Ds were >20% for pyridine; 2-methyl-4,6-dinitrophenol; hexachlorocyclopentadiene; p-nitrotoluene and 3,3'-dichlorobenzidine. The associated sample results were NDs and, thus, were qualified UJ,SV7c.
2. It should be noted that a few MS/MSD %Rs and RPDs were not within the laboratory's QC limits. 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: Mary Donivan Level: I Date: 04/26/10

VALIDATOR'S SIGNATURE: Eric T. Mink DATE: 4/25/10

SEMIVOLATILE ORGANIC COMPOUND (SVOC) ANALYTICAL DATA VALIDATION CHECKLIST

5115-2

Semivolatile Organic Compound (SVOC) Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY EST 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	1. The holding time was >1 and ≤2 times the applicable holding time requirement.	UJ, SV9	J-, SV9
☐	☒	☐	2. The holding time was >2 times the applicable holding time requirement.	R, SV9a	J-, SV9a
☐	☒	☐	3. The affected analytes are regarded as rejected because the analytical holding time was exceeded.	R, SV9b	R, SV9b
☐	☐	☒	4. The instrument performance sample did not pass method acceptance criteria.	R, SV16	R, SV16
☐	☐	☒	5. Samples were analyzed outside specific method tune time criteria.	N/A	J, SV16b
☐	☐	☒	6. The required instrument performance sample information is missing. Contact the SMO or external laboratory for information.	R, SV16c	R, SV16c
☐	☒	☐	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
☐	☒	☐	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
☐	☒	☐	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
☒	☐	☐	10. The Initial Calibration Verification (ICV) and/or CCV were recovered outside the method-specific limits.	UJ, SV7c	J, SV7c
☐	☒	☐	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 Los Alamos NATIONAL LABORATORY EST 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	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
☐	☒	☐	13. The sample result is ≤5X (10X for common organic laboratory contaminates) the concentration of the related analyte in the method blank.	U, SV4	J, V4a
☐	☒	☐	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 contaminates).	N/A	J, SV4a
☐	☐	☒	15. The sample result is ≤5X the concentration of the related analyte in the trip blank, rinsate blank, or equipment blank.	UJ, SV4d	N/A
☐	☒	☐	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
☐	☒	☐	17. The IS retention time has shifted by more than 30 seconds.	UJ, SV0	J, SV0
☐	☐	☒	18. Analyte is positively confirmed but outside the IS retention time window; however, spectral matches must be provided.	N/A	J, SV0a
☐	☒	☐	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
☐	☐	☒	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

Los Alamos NATIONAL LABORATORY EST. 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☐	☒	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
☐	☐	☒	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
☐	☐	☒	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
☐	☒	☐	24. The surrogate is <10%R. Follow the external laboratory limits located within the associated data package.	R, SV3	J-, SV3
☐	☒	☐	25. The surrogate is < the Lower Acceptance Level (LAL) but ≥10%R. Follow the external laboratory limits located within the associated data package.	UJ, SV3a	J-, SV3a
☐	☒	☐	26. The surrogate %R value is > the UAL. Follow the external laboratory limits located within the associated data package.	N/A	J+, SV3b
☐	☒	☐	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
☐	☒	☐	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
☐	☒	☐	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

Los Alamos NATIONAL LABORATORY EST 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	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
☐	☒	☐	31. The LCS percent recovery was > the UAL. Follow the external laboratory limits located within the associated data package.	N/A	J+, SV12b
☐	☒	☐	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
☐	☐	☒	33. The affected analyte is considered not detected because mass spectrum did not meet specifications.	N/A	U, SV8
☐	☐	☒	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
☐	☒	☐	35. Duplicate, dilution, or reanalysis.	UJ, SV88	J, SV88
☐	☐	☒	36. The affected analytes have elevated detection limits and may not meet project DQOs because the sample was diluted without any target analytees identified due to matrix interference. Qualify as Reject if the analytical laboratory cannot provide proof for matrix interference.	UJ, R, SV15	R, SV15
☒	☐	☐	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
☐	☒	☐	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:	**10-2089**	**Date Collected:**	**02/22/2010 12:00**	**Matrix:**	**R**
Lab Sample ID:	**248102003**	**Date Received:**	**02/26/2010 08:45**	**%Moisture:**	**20.1**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE15-10-8393**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**959979**	**Inst:**	**MSD8.I**	**Dilution:**	**1**
Run Date:	**03/17/2010 11:01**	**Analyst:**	**NAG1**	**Inj. Vol:**	**.5 uL**
Prep Date:	**03/02/2010 23:08**	**Aliquot:**	**30.1 g**	**Final Volume:**	**1 mL**
Data File:	**s8c1706.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	416	ug/kg	83.2	416	
108-95-2	Phenol	U	416	ug/kg	83.2	416	
95-57-8	2-Chlorophenol	U	416	ug/kg	83.2	416	
106-46-7	1,4-Dichlorobenzene	U	416	ug/kg	83.2	416	
621-64-7	N-Nitrosodipropylamine	U	416	ug/kg	83.2	416	
59-50-7	4-Chloro-3-methylphenol	U	416	ug/kg	83.2	416	
83-32-9	Acenaphthene	U	41.6	ug/kg	13.7	41.6	
121-14-2	2,4-Dinitrotoluene	U	416	ug/kg	41.6	416	
100-02-7	4-Nitrophenol	U	416	ug/kg	137	416	
87-86-5	Pentachlorophenol	U	416	ug/kg	104	416	
129-00-0	Pyrene	U	41.6	ug/kg	12.5	41.6	
110-86-1	Pyridine	U	416	ug/kg	83.2	416	UJ,SV7c
62-53-3	Aniline	U	416	ug/kg	125	416	
111-44-4	bis(2-Chloroethyl) ether	U	416	ug/kg	83.2	416	
541-73-1	1,3-Dichlorobenzene	U	416	ug/kg	83.2	416	
100-51-6	Benzyl alcohol	U	416	ug/kg	125	416	
95-50-1	1,2-Dichlorobenzene	U	416	ug/kg	83.2	416	
108-60-1	bis(2-Chloroisopropyl)ether	U	416	ug/kg	83.2	416	
95-48-7	o-Cresol	U	416	ug/kg	83.2	416	
65794-96-9	m,p-Cresols	U	416	ug/kg	125	416	
67-72-1	Hexachloroethane	U	416	ug/kg	83.2	416	
98-95-3	Nitrobenzene	U	416	ug/kg	83.2	416	
78-59-1	Isophorone	U	416	ug/kg	83.2	416	
88-75-5	2-Nitrophenol	U	416	ug/kg	83.2	416	
105-67-9	2,4-Dimethylphenol	U	416	ug/kg	146	416	
111-91-1	bis(2-Chloroethoxy)methane	U	416	ug/kg	83.2	416	
120-83-2	2,4-Dichlorophenol	U	416	ug/kg	83.2	416	
65-85-0	Benzoic acid	U	832	ug/kg	208	832	
91-20-3	Naphthalene	U	41.6	ug/kg	12.5	41.6	
106-47-8	4-Chloroaniline	U	416	ug/kg	83.2	416	
87-68-3	Hexachlorobutadiene	U	416	ug/kg	83.2	416	
91-57-6	2-Methylnaphthalene	U	41.6	ug/kg	8.32	41.6	
77-47-4	Hexachlorocyclopentadiene	U	416	ug/kg	83.2	416	UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	416	ug/kg	83.2	416	
95-95-4	2,4,5-Trichlorophenol	U	416	ug/kg	83.2	416	
91-58-7	2-Chloronaphthalene	U	41.6	ug/kg	13.7	41.6	
88-74-4	2-Nitroaniline *o-Nitroaniline*	U	416	ug/kg	83.2	416	
99-09-2	3-Nitroaniline	U	416	ug/kg	83.2	416	

ETM
4/25/10

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-2089	**Date Collected:**	02/22/2010 12:00	**Matrix:**	R
Lab Sample ID:	248102003	**Date Received:**	02/26/2010 08:45	**%Moisture:**	20.1
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE15-10-8393	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	959979	**Inst:**	MSD8.I	**Dilution:**	1
Run Date:	03/17/2010 11:01	**Analyst:**	NAG1	**Inj. Vol:**	.5 uL
Prep Date:	03/02/2010 23:08	**Aliquot:**	30.1 g	**Final Volume:**	1 mL
Data File:	s8c1706.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
	m-Nitroaniline						
131-11-3	Dimethylphthalate	U	416	ug/kg	83.2	416	
606-20-2	2,6-Dinitrotoluene	U	416	ug/kg	41.6	416	
208-96-8	Acenaphthylene	U	41.6	ug/kg	12.5	41.6	
51-28-5	2,4-Dinitrophenol	U	832	ug/kg	158	832	
132-64-9	Dibenzofuran	U	416	ug/kg	83.2	416	
84-66-2	Diethylphthalate	U	416	ug/kg	83.2	416	
86-73-7	Fluorene	U	41.6	ug/kg	12.5	41.6	
7005-72-3	4-Chlorophenylphenylether	U	416	ug/kg	83.2	416	
534-52-1	2-Methyl-4,6-dinitrophenol	U	416	ug/kg	83.2	416	UJ,SV7c
100-01-6	4-Nitroaniline	U	416	ug/kg	125	416	UJ,SV7c
	p-Nitroaniline						
122-39-4	Diphenylamine	U	416	ug/kg	83.2	416	
122-66-7	Azobenzene	U	416	ug/kg	83.2	416	
	1,2-Diphenylhydrazine						
101-55-3	4-Bromophenylphenylether	U	416	ug/kg	83.2	416	
118-74-1	Hexachlorobenzene	U	416	ug/kg	83.2	416	
85-01-8	Phenanthrene	U	41.6	ug/kg	12.5	41.6	
120-12-7	Anthracene	U	41.6	ug/kg	8.32	41.6	
84-74-2	Di-n-butylphthalate	U	416	ug/kg	83.2	416	
206-44-0	Fluoranthene	U	41.6	ug/kg	12.5	41.6	
85-68-7	Butylbenzylphthalate	U	416	ug/kg	83.2	416	
56-55-3	Benzo(a)anthracene	U	41.6	ug/kg	12.5	41.6	
91-94-1	3,3'-Dichlorobenzidine	U	416	ug/kg	125	416	UJ,SV7c
218-01-9	Chrysene	U	41.6	ug/kg	12.5	41.6	
117-81-7	bis(2-Ethylhexyl)phthalate	U	416	ug/kg	83.2	416	
117-84-0	Di-n-octylphthalate	U	416	ug/kg	83.2	416	
205-99-2	Benzo(b)fluoranthene	U	41.6	ug/kg	12.5	41.6	
207-08-9	Benzo(k)fluoranthene	U	41.6	ug/kg	12.5	41.6	
50-32-8	Benzo(a)pyrene	U	41.6	ug/kg	12.5	41.6	
193-39-5	Indeno(1,2,3-cd)pyrene	U	41.6	ug/kg	12.5	41.6	
53-70-3	Dibenzo(a,h)anthracene	U	41.6	ug/kg	12.5	41.6	
191-24-2	Benzo(ghi)perylene	U	41.6	ug/kg	12.5	41.6	
120-82-1	1,2,4-Trichlorobenzene	U	416	ug/kg	83.2	416	

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	3.08	251	ug/kg		JA

ETM
4/25/10

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-2089	**Date Collected:**	02/22/2010 12:00	**Matrix:**	R
Lab Sample ID:	248102006	**Date Received:**	02/26/2010 08:45	**%Moisture:**	10.3
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE15-10-8394	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	959979	**Inst:**	MSD8.I	**Dilution:**	1
Run Date:	03/17/2010 12:30	**Analyst:**	NAG1	**Inj. Vol:**	.5 uL
Prep Date:	03/02/2010 23:08	**Aliquot:**	30.12 g	**Final Volume:**	1 mL
Data File:	s8c1709.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
62-75-9	N-Methyl-N-nitrosomethylamine	U	370	ug/kg	74.1	370	
108-95-2	Phenol	U	370	ug/kg	74.1	370	
95-57-8	2-Chlorophenol	U	370	ug/kg	74.1	370	
106-46-7	1,4-Dichlorobenzene	U	370	ug/kg	74.1	370	
621-64-7	N-Nitrosodipropylamine	U	370	ug/kg	74.1	370	
59-50-7	4-Chloro-3-methylphenol	U	370	ug/kg	74.1	370	
83-32-9	Acenaphthene	U	37.0	ug/kg	12.2	37.0	
121-14-2	2,4-Dinitrotoluene	U	370	ug/kg	37.0	370	
100-02-7	4-Nitrophenol	U	370	ug/kg	122	370	
87-86-5	Pentachlorophenol	U	370	ug/kg	92.6	370	
129-00-0	Pyrene	U	37.0	ug/kg	11.1	37.0	
110-86-1	Pyridine	U	370	ug/kg	74.1	370	UJ,SV7c
62-53-3	Aniline	U	370	ug/kg	111	370	
111-44-4	bis(2-Chloroethyl) ether	U	370	ug/kg	74.1	370	
541-73-1	1,3-Dichlorobenzene	U	370	ug/kg	74.1	370	
100-51-6	Benzyl alcohol	U	370	ug/kg	111	370	
95-50-1	1,2-Dichlorobenzene	U	370	ug/kg	74.1	370	
108-60-1	bis(2-Chloroisopropyl)ether	U	370	ug/kg	74.1	370	
95-48-7	o-Cresol	U	370	ug/kg	74.1	370	
65794-96-9	m,p-Cresols	U	370	ug/kg	111	370	
67-72-1	Hexachloroethane	U	370	ug/kg	74.1	370	
98-95-3	Nitrobenzene	U	370	ug/kg	74.1	370	
78-59-1	Isophorone	U	370	ug/kg	74.1	370	
88-75-5	2-Nitrophenol	U	370	ug/kg	74.1	370	
105-67-9	2,4-Dimethylphenol	U	370	ug/kg	130	370	
111-91-1	bis(2-Chloroethoxy)methane	U	370	ug/kg	74.1	370	
120-83-2	2,4-Dichlorophenol	U	370	ug/kg	74.1	370	
65-85-0	Benzoic acid	U	741	ug/kg	185	741	
91-20-3	Naphthalene	U	37.0	ug/kg	11.1	37.0	
106-47-8	4-Chloroaniline	U	370	ug/kg	74.1	370	
87-68-3	Hexachlorobutadiene	U	370	ug/kg	74.1	370	
91-57-6	2-Methylnaphthalene	U	37.0	ug/kg	7.41	37.0	
77-47-4	Hexachlorocyclopentadiene	U	370	ug/kg	74.1	370	UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	370	ug/kg	74.1	370	
95-95-4	2,4,5-Trichlorophenol	U	370	ug/kg	74.1	370	
91-58-7	2-Chloronaphthalene	U	37.0	ug/kg	12.2	37.0	
88-74-4	2-Nitroaniline *o-Nitroaniline*	U	370	ug/kg	74.1	370	
99-09-2	3-Nitroaniline	U	370	ug/kg	74.1	370	

ETM
4/25/10

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-2089	Date Collected:	02/22/2010 12:00	Matrix:	R
Lab Sample ID:	248102006	Date Received:	02/26/2010 08:45	%Moisture:	10.3
		Client:	LANL010	Project:	LANL01004
Client ID:	RE15-10-8394	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	959979	Inst:	MSD8.I	Dilution:	1
Run Date:	03/17/2010 12:30	Analyst:	NAG1	Inj. Vol:	.5 uL
Prep Date:	03/02/2010 23:08	Aliquot:	30.12 g	Final Volume:	1 mL
Data File:	s8c1709.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
	m-Nitroaniline						
131-11-3	Dimethylphthalate	U	370	ug/kg	74.1	370	
606-20-2	2,6-Dinitrotoluene	U	370	ug/kg	37.0	370	
208-96-8	Acenaphthylene	U	37.0	ug/kg	11.1	37.0	
51-28-5	2,4-Dinitrophenol	U	741	ug/kg	141	741	
132-64-9	Dibenzofuran	U	370	ug/kg	74.1	370	
84-66-2	Diethylphthalate	U	370	ug/kg	74.1	370	
86-73-7	Fluorene	U	37.0	ug/kg	11.1	37.0	
7005-72-3	4-Chlorophenylphenylether	U	370	ug/kg	74.1	370	
534-52-1	2-Methyl-4,6-dinitrophenol	U	370	ug/kg	74.1	370	UJ,SV7c
100-01-6	4-Nitroaniline	U	370	ug/kg	111	370	UJ,SV7c
	p-Nitroaniline						
122-39-4	Diphenylamine	U	370	ug/kg	74.1	370	
122-66-7	Azobenzene	U	370	ug/kg	74.1	370	
	1,2-Diphenylhydrazine						
101-55-3	4-Bromophenylphenylether	U	370	ug/kg	74.1	370	
118-74-1	Hexachlorobenzene	U	370	ug/kg	74.1	370	
85-01-8	Phenanthrene	U	37.0	ug/kg	11.1	37.0	
120-12-7	Anthracene	U	37.0	ug/kg	7.41	37.0	
84-74-2	Di-n-butylphthalate	U	370	ug/kg	74.1	370	
206-44-0	Fluoranthene	U	37.0	ug/kg	11.1	37.0	
85-68-7	Butylbenzylphthalate	U	370	ug/kg	74.1	370	
56-55-3	Benzo(a)anthracene	U	37.0	ug/kg	11.1	37.0	
91-94-1	3,3'-Dichlorobenzidine	U	370	ug/kg	111	370	UJ,SV7c
218-01-9	Chrysene	U	37.0	ug/kg	11.1	37.0	
117-81-7	bis(2-Ethylhexyl)phthalate	U	370	ug/kg	74.1	370	
117-84-0	Di-n-octylphthalate	U	370	ug/kg	74.1	370	
205-99-2	Benzo(b)fluoranthene	U	37.0	ug/kg	11.1	37.0	
207-08-9	Benzo(k)fluoranthene	U	37.0	ug/kg	11.1	37.0	
50-32-8	Benzo(a)pyrene	U	37.0	ug/kg	11.1	37.0	
193-39-5	Indeno(1,2,3-cd)pyrene	U	37.0	ug/kg	11.1	37.0	
53-70-3	Dibenzo(a,h)anthracene	U	37.0	ug/kg	11.1	37.0	
191-24-2	Benzo(ghi)perylene	U	37.0	ug/kg	11.1	37.0	
120-82-1	1,2,4-Trichlorobenzene	U	370	ug/kg	74.1	370	

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Flt	Qual
	Unknown Aldol Condensate	3.08	210	ug/kg		JA
5131-66-8	2-Propanol, 1-butoxy-	3.83	3640	ug/kg	90	NJ

ETM
4/25/10

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-2089	**Date Collected:**	02/22/2010 12:00	**Matrix:**	R
Lab Sample ID:	248102004	**Date Received:**	02/26/2010 08:45	**%Moisture:**	4.4
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE15-10-8395	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	959979	**Inst:**	MSD8.I	**Dilution:**	1
Run Date:	03/17/2010 11:31	**Analyst:**	NAG1	**Inj. Vol:**	.5 uL
Prep Date:	03/02/2010 23:08	**Aliquot:**	30.18 g	**Final Volume:**	1 mL
Data File:	s8c1707.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	347	ug/kg	69.3	347	
108-95-2	Phenol	U	347	ug/kg	69.3	347	
95-57-8	2-Chlorophenol	U	347	ug/kg	69.3	347	
106-46-7	1,4-Dichlorobenzene	U	347	ug/kg	69.3	347	
621-64-7	N-Nitrosodipropylamine	U	347	ug/kg	69.3	347	
59-50-7	4-Chloro-3-methylphenol	U	347	ug/kg	69.3	347	
83-32-9	Acenaphthene	U	34.7	ug/kg	11.4	34.7	
121-14-2	2,4-Dinitrotoluene	U	347	ug/kg	34.7	347	
100-02-7	4-Nitrophenol	U	347	ug/kg	114	347	
87-86-5	Pentachlorophenol	U	347	ug/kg	86.7	347	
129-00-0	Pyrene	U	34.7	ug/kg	10.4	34.7	
110-86-1	Pyridine	U	347	ug/kg	69.3	347	UJ,SV7c
62-53-3	Aniline	U	347	ug/kg	104	347	
111-44-4	bis(2-Chloroethyl) ether	U	347	ug/kg	69.3	347	
541-73-1	1,3-Dichlorobenzene	U	347	ug/kg	69.3	347	
100-51-6	Benzyl alcohol	U	347	ug/kg	104	347	
95-50-1	1,2-Dichlorobenzene	U	347	ug/kg	69.3	347	
108-60-1	bis(2-Chloroisopropyl)ether	U	347	ug/kg	69.3	347	
95-48-7	o-Cresol	U	347	ug/kg	69.3	347	
65794-96-9	m,p-Cresols	U	347	ug/kg	104	347	
67-72-1	Hexachloroethane	U	347	ug/kg	69.3	347	
98-95-3	Nitrobenzene	U	347	ug/kg	69.3	347	
78-59-1	Isophorone	U	347	ug/kg	69.3	347	
88-75-5	2-Nitrophenol	U	347	ug/kg	69.3	347	
105-67-9	2,4-Dimethylphenol	U	347	ug/kg	121	347	
111-91-1	bis(2-Chloroethoxy)methane	U	347	ug/kg	69.3	347	
120-83-2	2,4-Dichlorophenol	U	347	ug/kg	69.3	347	
65-85-0	Benzoic acid	U	693	ug/kg	173	693	
91-20-3	Naphthalene	U	34.7	ug/kg	10.4	34.7	
106-47-8	4-Chloroaniline	U	347	ug/kg	69.3	347	
87-68-3	Hexachlorobutadiene	U	347	ug/kg	69.3	347	
91-57-6	2-Methylnaphthalene	U	34.7	ug/kg	6.93	34.7	
77-47-4	Hexachlorocyclopentadiene	U	347	ug/kg	69.3	347	UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	347	ug/kg	69.3	347	
95-95-4	2,4,5-Trichlorophenol	U	347	ug/kg	69.3	347	
91-58-7	2-Chloronaphthalene	U	34.7	ug/kg	11.4	34.7	
88-74-4	2-Nitroaniline	U	347	ug/kg	69.3	347	
99-09-2	*o-Nitroaniline* 3-Nitroaniline	U	347	ug/kg	69.3	347	

ETM
4/25/10

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-2089	**Date Collected:**	02/22/2010 12:00	**Matrix:**	R
Lab Sample ID:	248102004	**Date Received:**	02/26/2010 08:45	**%Moisture:**	4.4
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE15-10-8395	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	959979	**Inst:**	MSD8.I	**Dilution:**	1
Run Date:	03/17/2010 11:31	**Analyst:**	NAG1	**Inj. Vol:**	.5 uL
Prep Date:	03/02/2010 23:08	**Aliquot:**	30.18 g	**Final Volume:**	1 mL
Data File:	s8c1707.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
	m-Nitroaniline						
131-11-3	Dimethylphthalate	U	347	ug/kg	69.3	347	
606-20-2	2,6-Dinitrotoluene	U	347	ug/kg	34.7	347	
208-96-8	Acenaphthylene	U	34.7	ug/kg	10.4	34.7	
51-28-5	2,4-Dinitrophenol	U	693	ug/kg	132	693	
132-64-9	Dibenzofuran	U	347	ug/kg	69.3	347	
84-66-2	Diethylphthalate	U	347	ug/kg	69.3	347	
86-73-7	Fluorene	U	34.7	ug/kg	10.4	34.7	
7005-72-3	4-Chlorophenylphenylether	U	347	ug/kg	69.3	347	
534-52-1	2-Methyl-4,6-dinitrophenol	U	347	ug/kg	69.3	347	UJ,SV7c
100-01-6	4-Nitroaniline	U	347	ug/kg	104	347	UJ,SV7c
	p-Nitroaniline						
122-39-4	Diphenylamine	U	347	ug/kg	69.3	347	
122-66-7	Azobenzene	U	347	ug/kg	69.3	347	
	1,2-Diphenylhydrazine						
101-55-3	4-Bromophenylphenylether	U	347	ug/kg	69.3	347	
118-74-1	Hexachlorobenzene	U	347	ug/kg	69.3	347	
85-01-8	Phenanthrene	U	34.7	ug/kg	10.4	34.7	
120-12-7	Anthracene	U	34.7	ug/kg	6.93	34.7	
84-74-2	Di-n-butylphthalate	U	347	ug/kg	69.3	347	
206-44-0	Fluoranthene	U	34.7	ug/kg	10.4	34.7	
85-68-7	Butylbenzylphthalate	U	347	ug/kg	69.3	347	
56-55-3	Benzo(a)anthracene	U	34.7	ug/kg	10.4	34.7	
91-94-1	3,3'-Dichlorobenzidine	U	347	ug/kg	104	347	UJ,SV7c
218-01-9	Chrysene	U	34.7	ug/kg	10.4	34.7	
117-81-7	bis(2-Ethylhexyl)phthalate	U	347	ug/kg	69.3	347	
117-84-0	Di-n-octylphthalate	U	347	ug/kg	69.3	347	
205-99-2	Benzo(b)fluoranthene	U	34.7	ug/kg	10.4	34.7	
207-08-9	Benzo(k)fluoranthene	U	34.7	ug/kg	10.4	34.7	
50-32-8	Benzo(a)pyrene	U	34.7	ug/kg	10.4	34.7	
193-39-5	Indeno(1,2,3-cd)pyrene	U	34.7	ug/kg	10.4	34.7	
53-70-3	Dibenzo(a,h)anthracene	U	34.7	ug/kg	10.4	34.7	
191-24-2	Benzo(ghi)perylene	U	34.7	ug/kg	10.4	34.7	
120-82-1	1,2,4-Trichlorobenzene	U	347	ug/kg	69.3	347	

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Flt	Qual
	Unknown Aldol Condensate	3.08	215	ug/kg		JA
5131-66-8	2-Propanol, 1-butoxy-	3.82	1140	ug/kg	90	NJ

ETM
4/25/10

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-2089	**Date Collected:**	02/22/2010 12:00	**Matrix:**	R
Lab Sample ID:	248102002	**Date Received:**	02/26/2010 08:45	**%Moisture:**	8.7
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE15-10-8396	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	959979	**Inst:**	MSD8.I	**Dilution:**	1
Run Date:	03/17/2010 18:21	**Analyst:**	NAG1	**Inj. Vol:**	.5 uL
Prep Date:	03/02/2010 23:08	**Aliquot:**	30.05 g	**Final Volume:**	1 mL
Data File:	s8c1721.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	364	ug/kg	72.9	364	
108-95-2	Phenol	U	364	ug/kg	72.9	364	
95-57-8	2-Chlorophenol	U	364	ug/kg	72.9	364	
106-46-7	1,4-Dichlorobenzene	U	364	ug/kg	72.9	364	
621-64-7	N-Nitrosodipropylamine	U	364	ug/kg	72.9	364	
59-50-7	4-Chloro-3-methylphenol	U	364	ug/kg	72.9	364	
83-32-9	Acenaphthene	U	36.4	ug/kg	12.0	36.4	
121-14-2	2,4-Dinitrotoluene	U	364	ug/kg	36.4	364	
100-02-7	4-Nitrophenol	U	364	ug/kg	120	364	
87-86-5	Pentachlorophenol	U	364	ug/kg	91.1	364	
129-00-0	Pyrene	U	36.4	ug/kg	10.9	36.4	
110-86-1	Pyridine	U	364	ug/kg	72.9	364	UJ,SV7c
62-53-3	Aniline	U	364	ug/kg	109	364	
111-44-4	bis(2-Chloroethyl) ether	U	364	ug/kg	72.9	364	
541-73-1	1,3-Dichlorobenzene	U	364	ug/kg	72.9	364	
100-51-6	Benzyl alcohol	U	364	ug/kg	109	364	
95-50-1	1,2-Dichlorobenzene	U	364	ug/kg	72.9	364	
108-60-1	bis(2-Chloroisopropyl)ether	U	364	ug/kg	72.9	364	
95-48-7	o-Cresol	U	364	ug/kg	72.9	364	
65794-96-9	m,p-Cresols	U	364	ug/kg	109	364	
67-72-1	Hexachloroethane	U	364	ug/kg	72.9	364	
98-95-3	Nitrobenzene	U	364	ug/kg	72.9	364	
78-59-1	Isophorone	U	364	ug/kg	72.9	364	
88-75-5	2-Nitrophenol	U	364	ug/kg	72.9	364	
105-67-9	2,4-Dimethylphenol	U	364	ug/kg	128	364	
111-91-1	bis(2-Chloroethoxy)methane	U	364	ug/kg	72.9	364	
120-83-2	2,4-Dichlorophenol	U	364	ug/kg	72.9	364	
65-85-0	Benzoic acid	U	729	ug/kg	182	729	
91-20-3	Naphthalene	U	36.4	ug/kg	10.9	36.4	
106-47-8	4-Chloroaniline	U	364	ug/kg	72.9	364	
87-68-3	Hexachlorobutadiene	U	364	ug/kg	72.9	364	
91-57-6	2-Methylnaphthalene	U	36.4	ug/kg	7.29	36.4	
77-47-4	Hexachlorocyclopentadiene	U	364	ug/kg	72.9	364	UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	364	ug/kg	72.9	364	
95-95-4	2,4,5-Trichlorophenol	U	364	ug/kg	72.9	364	
91-58-7	2-Chloronaphthalene	U	36.4	ug/kg	12.0	36.4	
88-74-4	2-Nitroaniline	U	364	ug/kg	72.9	364	
99-09-2	*o-Nitroaniline* 3-Nitroaniline	U	364	ug/kg	72.9	364	

ETM
4/25/10

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-2089	Date Collected:	02/22/2010 12:00	Matrix:	R
Lab Sample ID:	248102002	Date Received:	02/26/2010 08:45	%Moisture:	8.7
		Client:	LANL010	Project:	LANL01004
Client ID:	RE15-10-8396	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	959979	Inst:	MSD8.I	Dilution:	1
Run Date:	03/17/2010 18:21	Analyst:	NAG1	Inj. Vol:	.5 uL
Prep Date:	03/02/2010 23:08	Aliquot:	30.05 g	Final Volume:	1 mL
Data File:	s8c1721.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
	m-Nitroaniline						
131-11-3	Dimethylphthalate	U	364	ug/kg	72.9	364	
606-20-2	2,6-Dinitrotoluene	U	364	ug/kg	36.4	364	
208-96-8	Acenaphthylene	U	36.4	ug/kg	10.9	36.4	
51-28-5	2,4-Dinitrophenol	U	729	ug/kg	138	729	
132-64-9	Dibenzofuran	U	364	ug/kg	72.9	364	
84-66-2	Diethylphthalate	U	364	ug/kg	72.9	364	
86-73-7	Fluorene	U	36.4	ug/kg	10.9	36.4	
7005-72-3	4-Chlorophenylphenylether	U	364	ug/kg	72.9	364	
534-52-1	2-Methyl-4,6-dinitrophenol	U	364	ug/kg	72.9	364	UJ,SV7c
100-01-6	4-Nitroaniline	U	364	ug/kg	109	364	UJ,SV7c
	p-Nitroaniline						
122-39-4	Diphenylamine	U	364	ug/kg	72.9	364	
122-66-7	Azobenzene	U	364	ug/kg	72.9	364	
	1,2-Diphenylhydrazine						
101-55-3	4-Bromophenylphenylether	U	364	ug/kg	72.9	364	
118-74-1	Hexachlorobenzene	U	364	ug/kg	72.9	364	
85-01-8	Phenanthrene	U	36.4	ug/kg	10.9	36.4	
120-12-7	Anthracene	U	36.4	ug/kg	7.29	36.4	
84-74-2	Di-n-butylphthalate	U	364	ug/kg	72.9	364	
206-44-0	Fluoranthene	U	36.4	ug/kg	10.9	36.4	
85-68-7	Butylbenzylphthalate	U	364	ug/kg	72.9	364	
56-55-3	Benzo(a)anthracene	U	36.4	ug/kg	10.9	36.4	
91-94-1	3,3'-Dichlorobenzidine	U	364	ug/kg	109	364	UJ,SV7c
218-01-9	Chrysene	U	36.4	ug/kg	10.9	36.4	
117-81-7	bis(2-Ethylhexyl)phthalate	U	364	ug/kg	72.9	364	
117-84-0	Di-n-octylphthalate	U	364	ug/kg	72.9	364	
205-99-2	Benzo(b)fluoranthene	U	36.4	ug/kg	10.9	36.4	
207-08-9	Benzo(k)fluoranthene	U	36.4	ug/kg	10.9	36.4	
50-32-8	Benzo(a)pyrene	U	36.4	ug/kg	10.9	36.4	
193-39-5	Indeno(1,2,3-cd)pyrene	U	36.4	ug/kg	10.9	36.4	
53-70-3	Dibenzo(a,h)anthracene	U	36.4	ug/kg	10.9	36.4	
191-24-2	Benzo(ghi)perylene	U	36.4	ug/kg	10.9	36.4	
120-82-1	1,2,4-Trichlorobenzene	U	364	ug/kg	72.9	364	

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Flt	Qual
	Unknown	1.9	205	ug/kg		J
	Unknown Aldol Condensate	3.08	258	ug/kg		JA

ETM
4/25/10

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-2089	Date Collected:	02/22/2010 12:00	Matrix:	R
Lab Sample ID:	248102008	Date Received:	02/26/2010 08:45	%Moisture:	6.1
		Client:	LANL010	Project:	LANL01004
Client ID:	RE15-10-8397	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	959979	Inst:	MSD8.I	Dilution:	1
Run Date:	03/17/2010 18:51	Analyst:	NAG1	Inj. Vol:	.5 uL
Prep Date:	03/02/2010 23:08	Aliquot:	30.04 g	Final Volume:	1 mL
Data File:	s8c1722.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	355	ug/kg	70.9	355	
108-95-2	Phenol	U	355	ug/kg	70.9	355	
95-57-8	2-Chlorophenol	U	355	ug/kg	70.9	355	
106-46-7	1,4-Dichlorobenzene	U	355	ug/kg	70.9	355	
621-64-7	N-Nitrosodipropylamine	U	355	ug/kg	70.9	355	
59-50-7	4-Chloro-3-methylphenol	U	355	ug/kg	70.9	355	
83-32-9	Acenaphthene	U	35.5	ug/kg	11.7	35.5	
121-14-2	2,4-Dinitrotoluene	U	355	ug/kg	35.5	355	
100-02-7	4-Nitrophenol	U	355	ug/kg	117	355	
87-86-5	Pentachlorophenol	U	355	ug/kg	88.7	355	
129-00-0	Pyrene	U	35.5	ug/kg	10.6	35.5	
110-86-1	Pyridine	U	355	ug/kg	70.9	355	UJ,SV7c
62-53-3	Aniline	U	355	ug/kg	106	355	
111-44-4	bis(2-Chloroethyl) ether	U	355	ug/kg	70.9	355	
541-73-1	1,3-Dichlorobenzene	U	355	ug/kg	70.9	355	
100-51-6	Benzyl alcohol	U	355	ug/kg	106	355	
95-50-1	1,2-Dichlorobenzene	U	355	ug/kg	70.9	355	
108-60-1	bis(2-Chloroisopropyl)ether	U	355	ug/kg	70.9	355	
95-48-7	o-Cresol	U	355	ug/kg	70.9	355	
65794-96-9	m,p-Cresols	U	355	ug/kg	106	355	
67-72-1	Hexachloroethane	U	355	ug/kg	70.9	355	
98-95-3	Nitrobenzene	U	355	ug/kg	70.9	355	
78-59-1	Isophorone	U	355	ug/kg	70.9	355	
88-75-5	2-Nitrophenol	U	355	ug/kg	70.9	355	
105-67-9	2,4-Dimethylphenol	U	355	ug/kg	124	355	
111-91-1	bis(2-Chloroethoxy)methane	U	355	ug/kg	70.9	355	
120-83-2	2,4-Dichlorophenol	U	355	ug/kg	70.9	355	
65-85-0	Benzoic acid	U	709	ug/kg	177	709	
91-20-3	Naphthalene	U	35.5	ug/kg	10.6	35.5	
106-47-8	4-Chloroaniline	U	355	ug/kg	70.9	355	
87-68-3	Hexachlorobutadiene	U	355	ug/kg	70.9	355	
91-57-6	2-Methylnaphthalene	U	35.5	ug/kg	7.09	35.5	
77-47-4	Hexachlorocyclopentadiene	U	355	ug/kg	70.9	355	UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	355	ug/kg	70.9	355	
95-95-4	2,4,5-Trichlorophenol	U	355	ug/kg	70.9	355	
91-58-7	2-Chloronaphthalene	U	35.5	ug/kg	11.7	35.5	
88-74-4	2-Nitroaniline	U	355	ug/kg	70.9	355	
	o-Nitroaniline						
99-09-2	3-Nitroaniline	U	355	ug/kg	70.9	355	

ETM
4/25/10

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-2089	**Date Collected:**	02/22/2010 12:00	**Matrix:**	R
Lab Sample ID:	248102008	**Date Received:**	02/26/2010 08:45	**%Moisture:**	6.1
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE15-10-8397	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	959979	**Inst:**	MSD8.I	**Dilution:**	1
Run Date:	03/17/2010 18:51	**Analyst:**	NAG1	**Inj. Vol:**	.5 uL
Prep Date:	03/02/2010 23:08	**Aliquot:**	30.04 g	**Final Volume:**	1 mL
Data File:	s8c1722.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
	m-Nitroaniline						
131-11-3	Dimethylphthalate	U	355	ug/kg	70.9	355	
606-20-2	2,6-Dinitrotoluene	U	355	ug/kg	35.5	355	
208-96-8	Acenaphthylene	U	35.5	ug/kg	10.6	35.5	
51-28-5	2,4-Dinitrophenol	U	709	ug/kg	135	709	
132-64-9	Dibenzofuran	U	355	ug/kg	70.9	355	
84-66-2	Diethylphthalate	U	355	ug/kg	70.9	355	
86-73-7	Fluorene	U	35.5	ug/kg	10.6	35.5	
7005-72-3	4-Chlorophenylphenylether	U	355	ug/kg	70.9	355	
534-52-1	2-Methyl-4,6-dinitrophenol	U	355	ug/kg	70.9	355	UJ,SV7c
100-01-6	4-Nitroaniline	U	355	ug/kg	106	355	UJ,SV7c
	p-Nitroaniline						
122-39-4	Diphenylamine	U	355	ug/kg	70.9	355	
122-66-7	Azobenzene	U	355	ug/kg	70.9	355	
	1,2-Diphenylhydrazine						
101-55-3	4-Bromophenylphenylether	U	355	ug/kg	70.9	355	
118-74-1	Hexachlorobenzene	U	355	ug/kg	70.9	355	
85-01-8	Phenanthrene	U	35.5	ug/kg	10.6	35.5	
120-12-7	Anthracene	U	35.5	ug/kg	7.09	35.5	
84-74-2	Di-n-butylphthalate	U	355	ug/kg	70.9	355	
206-44-0	Fluoranthene	U	35.5	ug/kg	10.6	35.5	
85-68-7	Butylbenzylphthalate	U	355	ug/kg	70.9	355	
56-55-3	Benzo(a)anthracene	U	35.5	ug/kg	10.6	35.5	
91-94-1	3,3'-Dichlorobenzidine	U	355	ug/kg	106	355	UJ,SV7c
218-01-9	Chrysene	U	35.5	ug/kg	10.6	35.5	
117-81-7	bis(2-Ethylhexyl)phthalate	U	355	ug/kg	70.9	355	
117-84-0	Di-n-octylphthalate	U	355	ug/kg	70.9	355	
205-99-2	Benzo(b)fluoranthene	U	35.5	ug/kg	10.6	35.5	
207-08-9	Benzo(k)fluoranthene	U	35.5	ug/kg	10.6	35.5	
50-32-8	Benzo(a)pyrene	U	35.5	ug/kg	10.6	35.5	
193-39-5	Indeno(1,2,3-cd)pyrene	U	35.5	ug/kg	10.6	35.5	
53-70-3	Dibenzo(a,h)anthracene	U	35.5	ug/kg	10.6	35.5	
191-24-2	Benzo(ghi)perylene	U	35.5	ug/kg	10.6	35.5	
120-82-1	1,2,4-Trichlorobenzene	U	355	ug/kg	70.9	355	

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	3.08	202	ug/kg		JA

ETM
4/25/10

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-2089	Date Collected:	02/22/2010 12:00	Matrix:	R
Lab Sample ID:	248102005	Date Received:	02/26/2010 08:45	%Moisture:	12.8
		Client:	LANL010	Project:	LANL01004
Client ID:	RE15-10-8398	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	959979	Inst:	MSD8.I	Dilution:	1
Run Date:	03/17/2010 12:00	Analyst:	NAG1	Inj. Vol:	.5 uL
Prep Date:	03/02/2010 23:08	Aliquot:	30.11 g	Final Volume:	1 mL
Data File:	s8c1708.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	381	ug/kg	76.2	381	
108-95-2	Phenol	U	381	ug/kg	76.2	381	
95-57-8	2-Chlorophenol	U	381	ug/kg	76.2	381	
106-46-7	1,4-Dichlorobenzene	U	381	ug/kg	76.2	381	
621-64-7	N-Nitrosodipropylamine	U	381	ug/kg	76.2	381	
59-50-7	4-Chloro-3-methylphenol	U	381	ug/kg	76.2	381	
83-32-9	Acenaphthene	U	38.1	ug/kg	12.6	38.1	
121-14-2	2,4-Dinitrotoluene	U	381	ug/kg	38.1	381	
100-02-7	4-Nitrophenol	U	381	ug/kg	126	381	
87-86-5	Pentachlorophenol	U	381	ug/kg	95.3	381	
129-00-0	Pyrene	U	38.1	ug/kg	11.4	38.1	
110-86-1	Pyridine	U	381	ug/kg	76.2	381	UJ,SV7c
62-53-3	Aniline	U	381	ug/kg	114	381	
111-44-4	bis(2-Chloroethyl) ether	U	381	ug/kg	76.2	381	
541-73-1	1,3-Dichlorobenzene	U	381	ug/kg	76.2	381	
100-51-6	Benzyl alcohol	U	381	ug/kg	114	381	
95-50-1	1,2-Dichlorobenzene	U	381	ug/kg	76.2	381	
108-60-1	bis(2-Chloroisopropyl)ether	U	381	ug/kg	76.2	381	
95-48-7	o-Cresol	U	381	ug/kg	76.2	381	
65794-96-9	m,p-Cresols	U	381	ug/kg	114	381	
67-72-1	Hexachloroethane	U	381	ug/kg	76.2	381	
98-95-3	Nitrobenzene	U	381	ug/kg	76.2	381	
78-59-1	Isophorone	U	381	ug/kg	76.2	381	
88-75-5	2-Nitrophenol	U	381	ug/kg	76.2	381	
105-67-9	2,4-Dimethylphenol	U	381	ug/kg	133	381	
111-91-1	bis(2-Chloroethoxy)methane	U	381	ug/kg	76.2	381	
120-83-2	2,4-Dichlorophenol	U	381	ug/kg	76.2	381	
65-85-0	Benzoic acid	U	762	ug/kg	191	762	
91-20-3	Naphthalene	U	38.1	ug/kg	11.4	38.1	
106-47-8	4-Chloroaniline	U	381	ug/kg	76.2	381	
87-68-3	Hexachlorobutadiene	U	381	ug/kg	76.2	381	
91-57-6	2-Methylnaphthalene	U	38.1	ug/kg	7.62	38.1	
77-47-4	Hexachlorocyclopentadiene	U	381	ug/kg	76.2	381	UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	381	ug/kg	76.2	381	
95-95-4	2,4,5-Trichlorophenol	U	381	ug/kg	76.2	381	
91-58-7	2-Chloronaphthalene	U	38.1	ug/kg	12.6	38.1	
88-74-4	2-Nitroaniline	U	381	ug/kg	76.2	381	
99-09-2	*o-Nitroaniline* 3-Nitroaniline	U	381	ug/kg	76.2	381	

ETM
4/25/10

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-2089	Date Collected:	02/22/2010 12:00	Matrix:	R
Lab Sample ID:	248102005	Date Received:	02/26/2010 08:45	%Moisture:	12.8
		Client:	LANL010	Project:	LANL01004
Client ID:	RE15-10-8398	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	959979	Inst:	MSD8.I	Dilution:	1
Run Date:	03/17/2010 12:00	Analyst:	NAG1	Inj. Vol:	.5 uL
Prep Date:	03/02/2010 23:08	Aliquot:	30.11 g	Final Volume:	1 mL
Data File:	s8c1708.d	Column:	J&W DB-5MS	Level:	LOW

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

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Flt	Qual
	Unknown Aldol Condensate	3.08	205	ug/kg		JA
77-53-2	Cedrol	8.29	690	ug/kg	91	NJ

ETM
4/25/10

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-2089	Date Collected:	02/22/2010 12:00	Matrix:	R
Lab Sample ID:	248102005	Date Received:	02/26/2010 08:45	%Moisture:	12.8
		Client:	LANL010	Project:	LANL01004
Client ID:	RE15-10-8398	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	959979	Inst:	MSD8.I	Dilution:	1
Run Date:	03/17/2010 12:00	Analyst:	NAG1	Inj. Vol:	.5 uL
Prep Date:	03/02/2010 23:08	Aliquot:	30.11 g	Final Volume:	1 mL
Data File:	s8c1708.d	Column:	J&W DB-5MS	Level:	LOW

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

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	11.36	164	ug/kg		J
511-15-9	2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa	11.39	495	ug/kg	98	NJ
	Unknown	11.51	227	ug/kg		J

ETM
4/25/10

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-2089	Date Collected:	02/22/2010 12:00	Matrix:	R
Lab Sample ID:	248102007	Date Received:	02/26/2010 08:45	%Moisture:	11.7
		Client:	LANL010	Project:	LANL01004
Client ID:	RE15-10-8399	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	959979	Inst:	MSD8.I	Dilution:	1
Run Date:	03/17/2010 12:59	Analyst:	NAG1	Inj. Vol:	.5 uL
Prep Date:	03/02/2010 23:08	Aliquot:	30.14 g	Final Volume:	1 mL
Data File:	s8c1710.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	376	ug/kg	75.1	376	
108-95-2	Phenol	U	376	ug/kg	75.1	376	
95-57-8	2-Chlorophenol	U	376	ug/kg	75.1	376	
106-46-7	1,4-Dichlorobenzene	U	376	ug/kg	75.1	376	
621-64-7	N-Nitrosodipropylamine	U	376	ug/kg	75.1	376	
59-50-7	4-Chloro-3-methylphenol	U	376	ug/kg	75.1	376	
83-32-9	Acenaphthene	U	37.6	ug/kg	12.4	37.6	
121-14-2	2,4-Dinitrotoluene	U	376	ug/kg	37.6	376	
100-02-7	4-Nitrophenol	U	376	ug/kg	124	376	
87-86-5	Pentachlorophenol	U	376	ug/kg	93.9	376	
129-00-0	Pyrene	U	37.6	ug/kg	11.3	37.6	
110-86-1	Pyridine	U	376	ug/kg	75.1	376	UJ,SV7c
62-53-3	Aniline	U	376	ug/kg	113	376	
111-44-4	bis(2-Chloroethyl) ether	U	376	ug/kg	75.1	376	
541-73-1	1,3-Dichlorobenzene	U	376	ug/kg	75.1	376	
100-51-6	Benzyl alcohol	U	376	ug/kg	113	376	
95-50-1	1,2-Dichlorobenzene	U	376	ug/kg	75.1	376	
108-60-1	bis(2-Chloroisopropyl)ether	U	376	ug/kg	75.1	376	
95-48-7	o-Cresol	U	376	ug/kg	75.1	376	
65794-96-9	m,p-Cresols	U	376	ug/kg	113	376	
67-72-1	Hexachloroethane	U	376	ug/kg	75.1	376	
98-95-3	Nitrobenzene	U	376	ug/kg	75.1	376	
78-59-1	Isophorone	U	376	ug/kg	75.1	376	
88-75-5	2-Nitrophenol	U	376	ug/kg	75.1	376	
105-67-9	2,4-Dimethylphenol	U	376	ug/kg	131	376	
111-91-1	bis(2-Chloroethoxy)methane	U	376	ug/kg	75.1	376	
120-83-2	2,4-Dichlorophenol	U	376	ug/kg	75.1	376	
65-85-0	Benzoic acid	U	751	ug/kg	188	751	
91-20-3	Naphthalene	U	37.6	ug/kg	11.3	37.6	
106-47-8	4-Chloroaniline	U	376	ug/kg	75.1	376	
87-68-3	Hexachlorobutadiene	U	376	ug/kg	75.1	376	
91-57-6	2-Methylnaphthalene	U	37.6	ug/kg	7.51	37.6	
77-47-4	Hexachlorocyclopentadiene	U	376	ug/kg	75.1	376	UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	376	ug/kg	75.1	376	
95-95-4	2,4,5-Trichlorophenol	U	376	ug/kg	75.1	376	
91-58-7	2-Chloronaphthalene	U	37.6	ug/kg	12.4	37.6	
88-74-4	2-Nitroaniline	U	376	ug/kg	75.1	376	
99-09-2	*o-Nitroaniline* 3-Nitroaniline	U	376	ug/kg	75.1	376	

ETM
4/25/10

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-2089	**Date Collected:**	02/22/2010 12:00	**Matrix:**	R
Lab Sample ID:	248102007	**Date Received:**	02/26/2010 08:45	**%Moisture:**	11.7
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE15-10-8399	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	959979	**Inst:**	MSD8.I	**Dilution:**	1
Run Date:	03/17/2010 12:59	**Analyst:**	NAG1	**Inj. Vol:**	.5 uL
Prep Date:	03/02/2010 23:08	**Aliquot:**	30.14 g	**Final Volume:**	1 mL
Data File:	s8c1710.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
	m-Nitroaniline						
131-11-3	Dimethylphthalate	U	376	ug/kg	75.1	376	
606-20-2	2,6-Dinitrotoluene	U	376	ug/kg	37.6	376	
208-96-8	Acenaphthylene	U	37.6	ug/kg	11.3	37.6	
51-28-5	2,4-Dinitrophenol	U	751	ug/kg	143	751	
132-64-9	Dibenzofuran	U	376	ug/kg	75.1	376	
84-66-2	Diethylphthalate	U	376	ug/kg	75.1	376	
86-73-7	Fluorene	U	37.6	ug/kg	11.3	37.6	
7005-72-3	4-Chlorophenylphenylether	U	376	ug/kg	75.1	376	
534-52-1	2-Methyl-4,6-dinitrophenol	U	376	ug/kg	75.1	376	UJ,SV7c
100-01-6	4-Nitroaniline	U	376	ug/kg	113	376	UJ,SV7c
	p-Nitroaniline						
122-39-4	Diphenylamine	U	376	ug/kg	75.1	376	
122-66-7	Azobenzene	U	376	ug/kg	75.1	376	
	1,2-Diphenylhydrazine						
101-55-3	4-Bromophenylphenylether	U	376	ug/kg	75.1	376	
118-74-1	Hexachlorobenzene	U	376	ug/kg	75.1	376	
85-01-8	Phenanthrene	U	37.6	ug/kg	11.3	37.6	
120-12-7	Anthracene	U	37.6	ug/kg	7.51	37.6	
84-74-2	Di-n-butylphthalate	U	376	ug/kg	75.1	376	
206-44-0	Fluoranthene	U	37.6	ug/kg	11.3	37.6	
85-68-7	Butylbenzylphthalate	U	376	ug/kg	75.1	376	
56-55-3	Benzo(a)anthracene	U	37.6	ug/kg	11.3	37.6	
91-94-1	3,3'-Dichlorobenzidine	U	376	ug/kg	113	376	UJ,SV7c
218-01-9	Chrysene	U	37.6	ug/kg	11.3	37.6	
117-81-7	bis(2-Ethylhexyl)phthalate	U	376	ug/kg	75.1	376	
117-84-0	Di-n-octylphthalate	U	376	ug/kg	75.1	376	
205-99-2	Benzo(b)fluoranthene	U	37.6	ug/kg	11.3	37.6	
207-08-9	Benzo(k)fluoranthene	U	37.6	ug/kg	11.3	37.6	
50-32-8	Benzo(a)pyrene	U	37.6	ug/kg	11.3	37.6	
193-39-5	Indeno(1,2,3-cd)pyrene	U	37.6	ug/kg	11.3	37.6	
53-70-3	Dibenzo(a,h)anthracene	U	37.6	ug/kg	11.3	37.6	
191-24-2	Benzo(ghi)perylene	U	37.6	ug/kg	11.3	37.6	
120-82-1	1,2,4-Trichlorobenzene	U	376	ug/kg	75.1	376	

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Flt	Qual
	Unknown Aldol Condensate	3.08	274	ug/kg		JA
475-20-7	1,4-Methanoazulene, decahydro-4,8,8-trim	7.17	283	ug/kg	99	NJ

ETM
4/25/10

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-2089	**Date Collected:**	02/22/2010 12:00	**Matrix:**	R
Lab Sample ID:	248102007	**Date Received:**	02/26/2010 08:45	**%Moisture:**	11.7
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE15-10-8399	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	959979	**Inst:**	MSD8.I	**Dilution:**	1
Run Date:	03/17/2010 12:59	**Analyst:**	NAG1	**Inj. Vol:**	.5 uL
Prep Date:	03/02/2010 23:08	**Aliquot:**	30.14 g	**Final Volume:**	1 mL
Data File:	s8c1710.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
77-53-2	Cedrol	8.29	278	ug/kg	94	NJ

ETM
4/25/10

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-2089**	**Date Collected:**	**02/22/2010 12:00**	**Matrix:**	**R**
Lab Sample ID:	**248102001**	**Date Received:**	**02/26/2010 08:45**	**%Moisture:**	**9.4**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE15-10-8404**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**959979**	**Inst:**	**MSD8.I**	**Dilution:**	**1**
Run Date:	**03/17/2010 17:51**	**Analyst:**	**NAG1**	**Inj. Vol:**	**.5 uL**
Prep Date:	**03/02/2010 23:08**	**Aliquot:**	**30.13 g**	**Final Volume:**	**1 mL**
Data File:	**s8c1720.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	367	ug/kg	73.3	367	
108-95-2	Phenol	U	367	ug/kg	73.3	367	
95-57-8	2-Chlorophenol	U	367	ug/kg	73.3	367	
106-46-7	1,4-Dichlorobenzene	U	367	ug/kg	73.3	367	
621-64-7	N-Nitrosodipropylamine	U	367	ug/kg	73.3	367	
59-50-7	4-Chloro-3-methylphenol	U	367	ug/kg	73.3	367	
83-32-9	Acenaphthene	U	36.7	ug/kg	12.1	36.7	
121-14-2	2,4-Dinitrotoluene	U	367	ug/kg	36.7	367	
100-02-7	4-Nitrophenol	U	367	ug/kg	121	367	
87-86-5	Pentachlorophenol	U	367	ug/kg	91.6	367	
129-00-0	Pyrene	U	36.7	ug/kg	11.0	36.7	
110-86-1	Pyridine	U	367	ug/kg	73.3	367	UJ,SV7c
62-53-3	Aniline	U	367	ug/kg	110	367	
111-44-4	bis(2-Chloroethyl) ether	U	367	ug/kg	73.3	367	
541-73-1	1,3-Dichlorobenzene	U	367	ug/kg	73.3	367	
100-51-6	Benzyl alcohol	U	367	ug/kg	110	367	
95-50-1	1,2-Dichlorobenzene	U	367	ug/kg	73.3	367	
108-60-1	bis(2-Chloroisopropyl)ether	U	367	ug/kg	73.3	367	
95-48-7	o-Cresol	U	367	ug/kg	73.3	367	
65794-96-9	m,p-Cresols	U	367	ug/kg	110	367	
67-72-1	Hexachloroethane	U	367	ug/kg	73.3	367	
98-95-3	Nitrobenzene	U	367	ug/kg	73.3	367	
78-59-1	Isophorone	U	367	ug/kg	73.3	367	
88-75-5	2-Nitrophenol	U	367	ug/kg	73.3	367	
105-67-9	2,4-Dimethylphenol	U	367	ug/kg	128	367	
111-91-1	bis(2-Chloroethoxy)methane	U	367	ug/kg	73.3	367	
120-83-2	2,4-Dichlorophenol	U	367	ug/kg	73.3	367	
65-85-0	Benzoic acid	U	733	ug/kg	183	733	
91-20-3	Naphthalene	U	36.7	ug/kg	11.0	36.7	
106-47-8	4-Chloroaniline	U	367	ug/kg	73.3	367	
87-68-3	Hexachlorobutadiene	U	367	ug/kg	73.3	367	
91-57-6	2-Methylnaphthalene	U	36.7	ug/kg	7.33	36.7	
77-47-4	Hexachlorocyclopentadiene	U	367	ug/kg	73.3	367	UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	367	ug/kg	73.3	367	
95-95-4	2,4,5-Trichlorophenol	U	367	ug/kg	73.3	367	
91-58-7	2-Chloronaphthalene	U	36.7	ug/kg	12.1	36.7	
88-74-4	2-Nitroaniline	U	367	ug/kg	73.3	367	
99-09-2	*o-Nitroaniline* 3-Nitroaniline	U	367	ug/kg	73.3	367	

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4/25/10

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-2089	**Date Collected:**	02/22/2010 12:00	**Matrix:**	R
Lab Sample ID:	248102001	**Date Received:**	02/26/2010 08:45	**%Moisture:**	9.4
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE15-10-8404	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	959979	**Inst:**	MSD8.I	**Dilution:**	1
Run Date:	03/17/2010 17:51	**Analyst:**	NAG1	**Inj. Vol:**	.5 uL
Prep Date:	03/02/2010 23:08	**Aliquot:**	30.13 g	**Final Volume:**	1 mL
Data File:	s8c1720.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
	m-Nitroaniline						
131-11-3	Dimethylphthalate	U	367	ug/kg	73.3	367	
606-20-2	2,6-Dinitrotoluene	U	367	ug/kg	36.7	367	
208-96-8	Acenaphthylene	U	36.7	ug/kg	11.0	36.7	
51-28-5	2,4-Dinitrophenol	U	733	ug/kg	139	733	
132-64-9	Dibenzofuran	U	367	ug/kg	73.3	367	
84-66-2	Diethylphthalate	U	367	ug/kg	73.3	367	
86-73-7	Fluorene	U	36.7	ug/kg	11.0	36.7	
7005-72-3	4-Chlorophenylphenylether	U	367	ug/kg	73.3	367	
534-52-1	2-Methyl-4,6-dinitrophenol	U	367	ug/kg	73.3	367	UJ,SV7c
100-01-6	4-Nitroaniline	U	367	ug/kg	110	367	UJ,SV7c
	p-Nitroaniline						
122-39-4	Diphenylamine	U	367	ug/kg	73.3	367	
122-66-7	Azobenzene	U	367	ug/kg	73.3	367	
	1,2-Diphenylhydrazine						
101-55-3	4-Bromophenylphenylether	U	367	ug/kg	73.3	367	
118-74-1	Hexachlorobenzene	U	367	ug/kg	73.3	367	
85-01-8	Phenanthrene	U	36.7	ug/kg	11.0	36.7	
120-12-7	Anthracene	U	36.7	ug/kg	7.33	36.7	
84-74-2	Di-n-butylphthalate	U	367	ug/kg	73.3	367	
206-44-0	Fluoranthene	U	36.7	ug/kg	11.0	36.7	
85-68-7	Butylbenzylphthalate	U	367	ug/kg	73.3	367	
56-55-3	Benzo(a)anthracene	U	36.7	ug/kg	11.0	36.7	
91-94-1	3,3'-Dichlorobenzidine	U	367	ug/kg	110	367	UJ,SV7c
218-01-9	Chrysene	U	36.7	ug/kg	11.0	36.7	
117-81-7	bis(2-Ethylhexyl)phthalate	U	367	ug/kg	73.3	367	
117-84-0	Di-n-octylphthalate	U	367	ug/kg	73.3	367	
205-99-2	Benzo(b)fluoranthene	U	36.7	ug/kg	11.0	36.7	
207-08-9	Benzo(k)fluoranthene	U	36.7	ug/kg	11.0	36.7	
50-32-8	Benzo(a)pyrene	U	36.7	ug/kg	11.0	36.7	
193-39-5	Indeno(1,2,3-cd)pyrene	U	36.7	ug/kg	11.0	36.7	
53-70-3	Dibenzo(a,h)anthracene	U	36.7	ug/kg	11.0	36.7	
191-24-2	Benzo(ghi)perylene	U	36.7	ug/kg	11.0	36.7	
120-82-1	1,2,4-Trichlorobenzene	U	367	ug/kg	73.3	367	

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Flt	Qual
	Unknown Aldol Condensate	3.08	233	ug/kg		JA
	Unknown	16.24	176	ug/kg		J

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4/25/10

DATA VALIDATION COVER SHEET

5122-1

Data Validation Cover Sheet

Records Use only

Los Alamos NATIONAL LABORATORY EST. 1943

Section I.

REQUEST NUMBER: 10-2089 VALIDATION DATE: 4/25/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

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

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

- ☐ TPH-GRO
- ☐ TPH-DRO
- ☐ GENERAL CHEMISTRY
- ☐ HIGH EXPLOSIVES
- ☐ METALS
- ☐ RADIOCHEMISTRY
- ☐ DIOXIN FURANS
- ☐ PCB CONGENERS
- ☒ LCMSMS HIGH EXPLOSIVES
- ☐ LCMSMS PERCHLORATES
- ☐ ORGANOCHLORINE PESTICIDES/POLYCHLORINATED BIPHENYLS
- ☐ OTHER (DESCRIBE):

Section II. Completeness Check

YES	NO	N/A	(CHECK ONE)	YES	NO	N/A	(CHECK ONE)
☒	☐	☐	1. CHAIN-OF-CUSTODY FORM(S)	☒	☐	☐	6. RAW/BSS DATA
☒	☐	☐	2. CASE NARRATIVE	☒	☐	☐	7. QUALITY CONTROL FORMS
☒	☐	☐	3. SAMPLE RESULT FORMS	☒	☐	☐	8. QUANTITATION REPORTS
☒	☐	☐	4. SAMPLE CHROMATOGRAMS	☐	☐	☒	9. TICS FORMS
☐	☐	☒	5. STANDARD CHROMATOGRAMS	☐	☐	☒	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. All the samples were analyzed >1X but ≤2X the method specific HT for the primary analyses. The associated sample results were NDs and, thus, were qualified UJ,HE9.
2. The ICAL RRF was <0.05 but ≥0.01 for p-nitrotoluene. The associated sample results were NDs and, thus, were qualified UJ,HE7b.
3. The ICV and/or CCV %Ds were >20% but ≤40% with a negative bias for m-nitrotoluene; 3,5-dinitroaniline; TATB and tris(o-cresyl)phosphate. The associated sample results were NDs and, thus, were qualified UJ,HE7c. The ICV and/or CCV %Ds were >20% with a positive bias for RDX; 2,4,6-trinitrotoluene and PETN. The associated sample results were NDs and, thus, were not qualified.
4. The LCS %R was < the laboratory's LAL but ≥10% for tetryl. The associated sample results were NDs and, thus, were qualified UJ,HE12a.
5. The MSD %Rs were < the laboratory's LAL but ≥10% for 2-amino-4,6-dinitrotoluene and m-nitrotoluene. The associated sample results were NDs and, thus, were qualified UJ,HE12e.
6. 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. No sample data were qualified.
7. 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: Mary Donivan Level: I Date: 04/26/10

DATA VALIDATION COVER SHEET

5122-1 **Data Validation Cover Sheet**	Records Use only Los Alamos NATIONAL LABORATORY EST. 1943

VALIDATOR'S SIGNATURE: Eric T. Mik DATE: 4/25/10

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

Los Alamos NATIONAL LABORATORY EST. 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	1. The IS retention time has shifted by more than 30 seconds.	R, UJ, HE0	J, HE0
☐	☒	☐	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
☐	☐	☒	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
☐	☐	☒	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
☐	☐	☒	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
☐	☐	☒	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
☐	☒	☐	7. The surrogate is <10%R. Follow the external laboratory limits.	R, HE3	J-, HE3
☐	☒	☐	8. The surrogate is < the Lower Acceptance Limit but ≥10% recovery. Follow the external laboratory limits.	UJ, HE3a	J-, HE3a
☐	☒	☐	9. The surrogate %R value is > the Upper Acceptance Limit. Follow the external laboratory limits.	N/A	J+, HE3b
☐	☐	☒	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 Los Alamos NATIONAL LABORATORY EST 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	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
☐	☒	☐	12. The sample result is ≤5 times the concentration of the related analyte in the method blank.	U, HE4	N/A
☐	☒	☐	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
☐	☐	☒	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
☐	☒	☐	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
☐	☒	☐	16. The absence of sample carry-over must be determined and verified.	N/A	R, N, HE4f
☐	☒	☐	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
☐	☒	☐	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
☒	☐	☐	19. The affected analytes were analyzed with a RRF of <0.05 in the initial calibration and/or CCV.	UJ, R, HE7b	J, HE7b
☒	☐	☐	20. The ICV and/or CCV were recovered outside the method limits.	UJ, R, HE7c	J, HE7c
☐	☒	☐	21. The ICV and/or CCV were not analyzed at the appropriate method frequency.	UJ, R, HE7d	J, HE7d
☐	☒	☐	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 Los Alamos NATIONAL LABORATORY EST. 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	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
☒	☐	☐	24. The holding time was >1 and ≤2 times the applicable holding time requirement.	UJ, HE9	J-, HE9
☐	☒	☐	25. The holding time was >2 times the applicable holding time requirement.	R, HE9a	J-, HE9a
☐	☒	☐	26. The LCS percent recovery was <10%. Follow the external laboratory limits.	R, HE12	J-, HE12
☒	☐	☐	27. The LCS percent recovery was < the Lower Acceptance Limit but >10%. Follow the external laboratory limits.	UJ, HE12a	J-, HE12a
☐	☒	☐	28. The LCS percent recovery was > the Upper Acceptance Limit. Follow the external laboratory limits.	N/A	J+, HE12b
☐	☒	☐	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
☐	☒	☐	30. The MS/MSD percent recovery was <10%.	R, HE12d	R, HE12d
☒	☐	☐	31. The MS/MSD percent recovery was >10% but <70%.	UJ, HE12e	J, HE12e
☐	☒	☐	32. The MS/MSD percent recover was >70%.	N/A	J+, HE12f
☐	☒	☐	33. The MS/MSD relative percent difference was >30%.	UJ, HE12g	J, HE12g
☐	☐	☒	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
☐	☐	☒	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 Los Alamos NATIONAL LABORATORY EST. 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☐	☒	36. The Contract Required Detection Limit Check Standard (CRI) sample did not pass method acceptance criteria.	UJ, R, HE16	J, HE16
☐	☐	☒	37. The required CRI sample information is missing. Contact the SMO or external laboratory for information.	R, HE16c	R, HE16c
☐	☒	☐	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
☐	☒	☐	39. Duplicate, dilution, or reanalysis.	UJ, HE88	J, HE88

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1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8404

Lab Code: GEL

GEL Job No (SDG) 10-2089

Matrix: SOIL

GEL Sample ID: 248102001

Sample Amount 2

Moisture: 9.4

Amount Units g

Date Received: 26-FEB-10

Extraction Type Sonication

Extraction Batch ID: 958599

Concentrated Extract Volume (mL) 10

Date Extracted: 04-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0412115a

Date Analyzed: 14-APR-10 23:43

Units: ug/kg

Cas No.	Compound		Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	UJ,HE9	500	HU
121-14-2	2,4-Dinitrotoluene		500	HU
121-82-4	RDX		500	HU
19406-51-0	4-Amino-2,6-dinitrotoluene		500	HU
2691-41-0	HMX		500	HU
35572-78-2	2-Amino-4,6-dinitrotoluene		500	HU
479-45-8	Tetryl		500	HU
606-20-2	2,6-Dinitrotoluene		500	HU
78-11-5	PETN		1000	HU
88-72-2	o-Nitrotoluene		500	HU
98-95-3	Nitrobenzene		500	HU
99-08-1	m-Nitrotoluene		500	HU
99-35-4	1,3,5-Trinitrobenzene		500	HU
99-65-0	m-Dinitrobenzene		500	HU
99-99-0	p-Nitrotoluene		500	HU

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Sample Amoun}} \times \text{Dilution Factor}$$

ETM
4/25/10

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1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8404

Lab Code: GEL

GEL Job No (SDG) 10-2089

Matrix: SOIL

GEL Sample ID: 248102001

Sample Amount 2

Moisture: 9.4

Amount Units g

Date Received: 26-FEB-10

Extraction Type Sonication

Extraction Batch ID: 958599

Concentrated Extract Volume (mL) 10

Date Extracted: 04-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS04020076.wiff

Date Analyzed: 03-APR-10 10:05

Units: ug/kg

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

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Sample Amoun}} \times \text{Dilution Factor}$$

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4/25/10

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1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8396

Lab Code: GEL

GEL Job No (SDG) 10-2089

Matrix: SOIL

GEL Sample ID: 248102002

Sample Amount 2

Moisture: 8.7

Amount Units g

Date Received: 26-FEB-10

Extraction Type Sonication

Extraction Batch ID: 958599

Concentrated Extract Volume (mL) 10

Date Extracted: 04-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0412118a

Date Analyzed: 15-APR-10 01:12

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene UJ,HE9	500	HU
121-14-2	2,4-Dinitrotoluene	500	HU
121-82-4	RDX	500	HU
19406-51-0	4-Amino-2,6-dinitrotoluene	500	HU
2691-41-0	HMX	500	HU
35572-78-2	2-Amino-4,6-dinitrotoluene	500	HU
479-45-8	Tetryl	500	HU
606-20-2	2,6-Dinitrotoluene	500	HU
78-11-5	PETN	1000	HU
88-72-2	o-Nitrotoluene	500	HU
98-95-3	Nitrobenzene	500	HU
99-08-1	m-Nitrotoluene	500	HU
99-35-4	1,3,5-Trinitrobenzene	500	HU
99-65-0	m-Dinitrobenzene	500	HU
99-99-0	p-Nitrotoluene	500	HU

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Sample Amoun}} \times \text{Dilution Factor}$$

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1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8396

Lab Code: GEL

GEL Job No (SDG) 10-2089

Matrix: SOIL

GEL Sample ID: 248102002

Sample Amount 2

Moisture: 8.7

Amount Units g

Date Received: 26-FEB-10

Extraction Type Sonication

Extraction Batch ID: 958599

Concentrated Extract Volume (mL) 10

Date Extracted: 04-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS04020079.wiff

Date Analyzed: 03-APR-10 10:53

Units: ug/kg

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

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Sample Amoun}} \times \text{Dilution Factor}$$

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1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8393

Lab Code: GEL

GEL Job No (SDG) 10-2089

Matrix: SOIL

GEL Sample ID: 248102003

Sample Amount 2

Moisture: 20.1

Amount Units g

Date Received: 26-FEB-10

Extraction Type Sonication

Extraction Batch ID: 958599

Concentrated Extract Volume (mL) 10

Date Extracted: 04-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0412119a

Date Analyzed: 15-APR-10 01:41

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene UJ,HE9	500	HU
121-14-2	2,4-Dinitrotoluene	500	HU
121-82-4	RDX	500	HU
19406-51-0	4-Amino-2,6-dinitrotoluene	500	HU
2691-41-0	HMX	500	HU
35572-78-2	2-Amino-4,6-dinitrotoluene	500	HU
479-45-8	Tetryl	500	HU
606-20-2	2,6-Dinitrotoluene	500	HU
78-11-5	PETN	1000	HU
88-72-2	o-Nitrotoluene	500	HU
98-95-3	Nitrobenzene	500	HU
99-08-1	m-Nitrotoluene	500	HU
99-35-4	1,3,5-Trinitrobenzene	500	HU
99-65-0	m-Dinitrobenzene	500	HU
99-99-0	p-Nitrotoluene	500	HU

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Sample Amoun}} \times \text{Dilution Factor}$$

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1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8393

Lab Code: GEL

GEL Job No (SDG) 10-2089

Matrix: SOIL

GEL Sample ID: 248102003

Sample Amount 2

Moisture: 20.1

Amount Units g

Date Received: 26-FEB-10

Extraction Type Sonication

Extraction Batch ID: 958599

Concentrated Extract Volume (mL) 10

Date Extracted: 04-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS04020080.wiff

Date Analyzed: 03-APR-10 11:08

Units: ug/kg

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

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Sample Amoun}} \times \text{Dilution Factor}$$

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1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8395

Lab Code: GEL

GEL Job No (SDG) 10-2089

Matrix: SOIL

GEL Sample ID: 248102004

Sample Amount 2

Moisture: 4.4

Amount Units g

Date Received: 26-FEB-10

Extraction Type Sonication

Extraction Batch ID: 958599

Concentrated Extract Volume (mL) 10

Date Extracted: 04-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0412120a

Date Analyzed: 15-APR-10 02:11

Units: ug/kg

Cas No.	Compound		Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	UJ,HE9	500	HU
121-14-2	2,4-Dinitrotoluene		500	HU
121-82-4	RDX		500	HU
19406-51-0	4-Amino-2,6-dinitrotoluene		500	HU
2691-41-0	HMX		500	HU
35572-78-2	2-Amino-4,6-dinitrotoluene		500	HU
479-45-8	Tetryl		500	HU
606-20-2	2,6-Dinitrotoluene		500	HU
78-11-5	PETN		1000	HU
88-72-2	o-Nitrotoluene		500	HU
98-95-3	Nitrobenzene		500	HU
99-08-1	m-Nitrotoluene		500	HU
99-35-4	1,3,5-Trinitrobenzene		500	HU
99-65-0	m-Dinitrobenzene		500	HU
99-99-0	p-Nitrotoluene		500	HU

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Sample Amoun}} \times \text{Dilution Factor}$$

ETM
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1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8395

Lab Code: GEL

GEL Job No (SDG) 10-2089

Matrix: SOIL

GEL Sample ID: 248102004

Sample Amount 2

Moisture: 4.4

Amount Units g

Date Received: 26-FEB-10

Extraction Type Sonication

Extraction Batch ID: 958599

Concentrated Extract Volume (mL) 10

Date Extracted: 04-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS04020081.wiff

Date Analyzed: 03-APR-10 11:24

Units: ug/kg

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

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Sample Amoun}} \times \text{Dilution Factor}$$

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1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8398

Lab Code: GEL

GEL Job No (SDG) 10-2089

Matrix: SOIL

GEL Sample ID: 248102005

Sample Amount 2

Moisture: 12.8

Amount Units g

Date Received: 26-FEB-10

Extraction Type Sonication

Extraction Batch ID: 958599

Concentrated Extract Volume (mL) 10

Date Extracted: 04-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0412121a

Date Analyzed: 15-APR-10 02:40

Units: ug/kg

Cas No.	Compound		Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	UJ,HE9	500	HU
121-14-2	2,4-Dinitrotoluene		500	HU
121-82-4	RDX		500	HU
19406-51-0	4-Amino-2,6-dinitrotoluene		500	HU
2691-41-0	HMX		500	HU
35572-78-2	2-Amino-4,6-dinitrotoluene		500	HU
479-45-8	Tetryl		500	HU
606-20-2	2,6-Dinitrotoluene		500	HU
78-11-5	PETN		1000	HU
88-72-2	o-Nitrotoluene		500	HU
98-95-3	Nitrobenzene		500	HU
99-08-1	m-Nitrotoluene		500	HU
99-35-4	1,3,5-Trinitrobenzene		500	HU
99-65-0	m-Dinitrobenzene		500	HU
99-99-0	p-Nitrotoluene		500	HU

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Sample Amoun}} \times \text{Dilution Factor}$$

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1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8398

Lab Code: GEL

GEL Job No (SDG) 10-2089

Matrix: SOIL

GEL Sample ID: 248102005

Sample Amount 2

Moisture: 12.8

Amount Units g

Date Received: 26-FEB-10

Extraction Type Sonication

Extraction Batch ID: 958599

Concentrated Extract Volume (mL) 10

Date Extracted: 04-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS04020082.wiff

Date Analyzed: 03-APR-10 11:40

Units: ug/kg

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

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Sample Amoun}} \times \text{Dilution Factor}$$

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1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8394

Lab Code: GEL

GEL Job No (SDG) 10-2089

Matrix: SOIL

GEL Sample ID: 248102006

Sample Amount 2

Moisture: 10.3

Amount Units g

Date Received: 26-FEB-10

Extraction Type Sonication

Extraction Batch ID: 958599

Concentrated Extract Volume (mL) 10

Date Extracted: 04-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0412122a

Date Analyzed: 15-APR-10 03:10

Units: ug/kg

Cas No.	Compound		Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	UJ,HE9	500	HU
121-14-2	2,4-Dinitrotoluene		500	HU
121-82-4	RDX		500	HU
19406-51-0	4-Amino-2,6-dinitrotoluene		500	HU
2691-41-0	HMX		500	HU
35572-78-2	2-Amino-4,6-dinitrotoluene		500	HU
479-45-8	Tetryl		500	HU
606-20-2	2,6-Dinitrotoluene		500	HU
78-11-5	PETN		1000	HU
88-72-2	o-Nitrotoluene		500	HU
98-95-3	Nitrobenzene		500	HU
99-08-1	m-Nitrotoluene		500	HU
99-35-4	1,3,5-Trinitrobenzene		500	HU
99-65-0	m-Dinitrobenzene		500	HU
99-99-0	p-Nitrotoluene		500	HU

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Sample Amoun}} \times \text{Dilution Factor}$$

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1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8394

Lab Code: GEL

GEL Job No (SDG) 10-2089

Matrix: SOIL

GEL Sample ID: 248102006

Sample Amount 2

Moisture: 10.3

Amount Units g

Date Received: 26-FEB-10

Extraction Type Sonication

Extraction Batch ID: 958599

Concentrated Extract Volume (mL) 10

Date Extracted: 04-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS04020083.wiff

Date Analyzed: 03-APR-10 11:55

Units: ug/kg

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

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Sample Amoun}} \times \text{Dilution Factor}$$

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1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8399

Lab Code: GEL

GEL Job No (SDG) 10-2089

Matrix: SOIL

GEL Sample ID: 248102007

Sample Amount 2

Moisture: 11.7

Amount Units g

Date Received: 26-FEB-10

Extraction Type Sonication

Extraction Batch ID: 958599

Concentrated Extract Volume (mL) 10

Date Extracted: 04-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0412126a

Date Analyzed: 15-APR-10 05:08

Units: ug/kg

Cas No.	Compound		Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	UJ,HE9	500	HU
121-14-2	2,4-Dinitrotoluene		500	HU
121-82-4	RDX		500	HU
19406-51-0	4-Amino-2,6-dinitrotoluene		500	HU
2691-41-0	HMX		500	HU
35572-78-2	2-Amino-4,6-dinitrotoluene		500	HU
479-45-8	Tetryl		500	HU
606-20-2	2,6-Dinitrotoluene		500	HU
78-11-5	PETN		1000	HU
88-72-2	o-Nitrotoluene		500	HU
98-95-3	Nitrobenzene		500	HU
99-08-1	m-Nitrotoluene		500	HU
99-35-4	1,3,5-Trinitrobenzene		500	HU
99-65-0	m-Dinitrobenzene		500	HU
99-99-0	p-Nitrotoluene		500	HU

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Sample Amoun}} \times \text{Dilution Factor}$$

ETM
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1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8399

Lab Code: GEL

GEL Job No (SDG) 10-2089

Matrix: SOIL

GEL Sample ID: 248102007

Sample Amount 2

Moisture: 11.7

Amount Units g

Date Received: 26-FEB-10

Extraction Type Sonication

Extraction Batch ID: 958599

Concentrated Extract Volume (mL) 10

Date Extracted: 04-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS04020087.wiff

Date Analyzed: 03-APR-10 12:58

Units: ug/kg

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

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Sample Amoun}} \times \text{Dilution Factor}$$

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1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8397

Lab Code: GEL

GEL Job No (SDG) 10-2089

Matrix: SOIL

GEL Sample ID: 248102008

Sample Amount 2

Moisture: 6.1

Amount Units g

Date Received: 26-FEB-10

Extraction Type Sonication

Extraction Batch ID: 958599

Concentrated Extract Volume (mL) 10

Date Extracted: 04-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0412127a

Date Analyzed: 15-APR-10 05:37

Units: ug/kg

Cas No.	Compound		Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	UJ,HE9	500	HU
121-14-2	2,4-Dinitrotoluene		500	HU
121-82-4	RDX		500	HU
19406-51-0	4-Amino-2,6-dinitrotoluene		500	HU
2691-41-0	HMX		500	HU
35572-78-2	2-Amino-4,6-dinitrotoluene		500	HU
479-45-8	Tetryl		500	HU
606-20-2	2,6-Dinitrotoluene		500	HU
78-11-5	PETN		1000	HU
88-72-2	o-Nitrotoluene		500	HU
98-95-3	Nitrobenzene		500	HU
99-08-1	m-Nitrotoluene		500	HU
99-35-4	1,3,5-Trinitrobenzene		500	HU
99-65-0	m-Dinitrobenzene		500	HU
99-99-0	p-Nitrotoluene		500	HU

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Sample Amoun}} \times \text{Dilution Factor}$$

ETM
4/25/10

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1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8397

Lab Code: GEL

GEL Job No (SDG) 10-2089

Matrix: SOIL

GEL Sample ID: 248102008

Sample Amount 2

Moisture: 6.1

Amount Units g

Date Received: 26-FEB-10

Extraction Type Sonication

Extraction Batch ID: 958599

Concentrated Extract Volume (mL) 10

Date Extracted: 04-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS04020088.wiff

Date Analyzed: 03-APR-10 13:14

Units: ug/kg

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

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Sample Amoun}} \times \text{Dilution Factor}$$

ETM
4/25/10

DATA VALIDATION COVER SHEET

5116-1

Data Validation Cover Sheet

Records Use only

Los Alamos NATIONAL LABORATORY EST. 1943

Section I.

REQUEST NUMBER: 10-2089 VALIDATION DATE: 4/25/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

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

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

- ☐ TPH-GRO
- ☐ TPH-DRO
- ☐ GENERAL CHEMISTRY
- ☐ HIGH EXPLOSIVES
- ☐ METALS
- ☐ RADIOCHEMISTRY
- ☐ DIOXIN FURANS
- ☐ PCB CONGENERS
- ☐ LCMSMS HIGH EXPLOSIVES
- ☐ LCMSMS PERCHLORATES
- ☒ ORGANOCHLORINE PESTICIDES/POLYCHLORINATED BIPHENYLS
- ☐ OTHER (DESCRIBE): PCBs

Section II. Completeness Check

YES	NO	N/A	(CHECK ONE)	YES	NO	N/A	(CHECK ONE)
☒	☐	☐	1. CHAIN-OF-CUSTODY FORM(S)	☒	☐	☐	6. RAW/BSS DATA
☒	☐	☐	2. CASE NARRATIVE	☒	☐	☐	7. QUALITY CONTROL FORMS
☒	☐	☐	3. SAMPLE RESULT FORMS	☒	☐	☐	8. QUANTITATION REPORTS
☒	☐	☐	4. SAMPLE CHROMATOGRAMS	☐	☐	☒	9. TICS FORMS
☐	☐	☒	5. STANDARD CHROMATOGRAMS	☐	☐	☒	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. Aroclor-1242 was detected in the MB. The associated sample result was an ND and, thus, was not qualified.
2. It should be noted that the MS/MSD %Rs and RPDs were outside the laboratory's acceptance limits for aroclor-1016 and aroclor-1260. It should also 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: Mary Donivan Level: I Date: 04/26/10

VALIDATOR'S SIGNATURE: Eric T. Mink DATE: 4/25/10

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

5116-2

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

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Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	1. The holding time was >1 and ≤2 times the applicable holding time requirement.	UJ, P9	J-, P9
☐	☒	☐	2. The holding time was >2 times the applicable holding time requirement.	R, P9	J-, P9a
☐	☒	☐	3. The affected analytes are regarded as rejected because the analytical holding time was exceeded.	R, P9b	R, P9b
☐	☒	☐	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
☐	☒	☐	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
☐	☒	☐	6. The Initial Calibration Verification (ICV) and/or Continuing Calibration Verification (CCV) were recovered outside the method-specific limits.	UJ, P7c	J, P7c
☐	☒	☐	7. The ICV and/or CCV were not analyzed at the appropriate method frequency.	UJ, P7d	J, P7d
☐	☐	☒	8. The multicomponent standard was not analyzed within 72 hours of the initial analysis.	R, P7e	J, P7e
☐	☒	☐	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
☐	☐	☒	10. The breakdown criteria have been exceeded. This can cause low bias in reported results. If compound is detected, qualify J-. If compound is not present, but breakdown products are present, qualify R. If no compounds or breakdown products are present, qualify UJ (4,4' DDT and Endrin).	UJ, R, P13	J-, P13

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

5116-2

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

Records Use only

Los Alamos NATIONAL LABORATORY EST 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☐	☒	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
☐	☐	☒	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
☒	☐	☐	13. The sample result is ≤5X the concentration of the related analyte in the method blank.	U, P4	N/A
☐	☒	☐	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
☐	☐	☒	15. The sample result is ≤5X the concentration of the related analyte in the instrument blank and continuing calibration blank.	UJ, P4b	N/A
☐	☐	☒	16. The sample result is ≤5X the concentration of the related analyte in the trip blank, rinsate blank, or equipment blank.	UJ, P4d	N/A
☐	☒	☐	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
☐	☒	☐	18. The analyte RT shifted by more than 0.05 minutes from the mid-level standard of the initial calibration.	R, P0	J, P0
☐	☒	☐	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
☐	☒	☐	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

Los Alamos NATIONAL LABORATORY EST 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	21. The surrogate is < the Lower Acceptance Level (LAL) but ≥10%R. Follow the external laboratory limits located within the associated data package.	UJ, P3a	J-, P3a
☐	☒	☐	22. The surrogate %R value is > the UAL. Follow the external laboratory limits located within the associated data package.	N/A	J+, P3b
☐	☒	☐	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
☐	☒	☐	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
☐	☒	☐	25. The LCS percent recovery was <10%. Follow the external laboratory limits located within the associated data package.	R, P12	J-, P12
☐	☒	☐	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
☐	☒	☐	27. The LCS percent recovery was > the UAL. Follow the external laboratory limits located within the associated data package.	N/A	J+, P12b
☐	☒	☐	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
☐	☐	☒	29. The analyte was not confirmed on a second dissimilar column.	N/A	R, P8
☐	☐	☒	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
☐	☒	☐	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 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☐	☒	32. The affected analytes have elevated detection limits and may not meet project DQOs because the sample was diluted without any target analytees identified due to matrix interference. Qualify as Reject if the analytical laboratory cannot provide proof for matrix interference.	UJ, R, P15	R, P15
☒	☐	☐	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
☐	☒	☐	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:	10–2089	**Date Collected:**	02/22/2010 12:00	**Matrix:**	R
Lab Sample ID:	248102001	**Date Received:**	02/26/2010 08:45	**%Moisture:**	9.4
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE15–10–8404	**Method:**	SW846 8082	**SOP Ref:**	GL–OA–E–040
Batch ID:	961902	**Inst:**	ECD1A.I	**Dilution:**	5
Run Date:	03/08/2010 17:00	**Analyst:**	YS1	**Inj. Vol:**	1 uL
Prep Date:	03/07/2010 11:43	**Aliquot:**	30.16 g	**Final Volume:**	1 mL
Data File:	058f5801.d	**Column:**	1 CLP1	**Level:**	LOW
	058b5801.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	18.3	ug/kg	6.10	18.3	1
11104–28–2	Aroclor–1221	U	18.3	ug/kg	6.10	18.3	1
11141–16–5	Aroclor–1232	U	18.3	ug/kg	6.10	18.3	1
53469–21–9	Aroclor–1242	U	18.3	ug/kg	6.10	18.3	1
12672–29–6	Aroclor–1248	U	18.3	ug/kg	6.10	18.3	1
11097–69–1	Aroclor–1254	U	18.3	ug/kg	6.10	18.3	1
11096–82–5	Aroclor–1260	U	18.3	ug/kg	6.10	18.3	1

ETM
4/25/10

Thursday, February 25, 2010

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-2089

REQUEST NUMBER: 10-2089

LOS ALAMOS

NATIONAL LABORATORY

ATTN: Valerie Davis

TURNAROUND/REPORT DUE: 3/27/2010

TURNAROUND REQ'D: 30

General Engineering Laboratories, Inc., Charleston, SC.

2040 Savage Rd

Charleston, SC 29407

LAB REQUEST COMMENTS: 248102 248102.01

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE15-10-8404	1	AMBER GLASS	8082+8270+NMED-EXP	Ice	R
RE15-10-8404	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE15-10-8396	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE15-10-8396	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE15-10-8393	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE15-10-8393	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE15-10-8395	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE15-10-8395	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE15-10-8398	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE15-10-8398	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE15-10-8394	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE15-10-8394	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE15-10-8399	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE15-10-8399	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE15-10-8397	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE15-10-8397	1	AMBER GLASS	8270C+NMED Exp	Ice	R

Relinquished By:		Date	Time	Received By:		Date	Time
[illegible]	[illegible]	2/25/10	1400	Greg Tyler	Greg Tyler	2-26-10	0845
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		

Thursday, February 25, 2010

REQUEST NUMBER: 10-2089

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Valerie Davis
General Engineering Laboratories, Inc., Charleston, SC.
2040 Savage Rd
Charleston, SC 29407

These Samples are on:
LANL Request Number:10-2089
Per Agreement Number:126310011
Project Cost Code: MR3A05529E00

Please analyse the enclosed samples
according to the schedule indicated:

SHIP DATE: 2/25/2010
TURNAROUND/REPORT DUE: 3/27/2010
TURNAROUND REQ'D: 30 Days

RAD SCREENING: Yes, Below Background
LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:
Signature:

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8082	1	RE15-10-8404	R	2/22/2010	
	SW-846:8260B	1	RE15-10-8393	R	2/22/2010	
		1	RE15-10-8394	R	2/22/2010	
		1	RE15-10-8395	R	2/22/2010	
		1	RE15-10-8396	R	2/22/2010	
		1	RE15-10-8397	R	2/22/2010	
		1	RE15-10-8398	R	2/22/2010	
		1	RE15-10-8399	R	2/22/2010	
		1	RE15-10-8404	R	2/22/2010	

Thursday, February 25, 2010

REQUEST NUMBER: 10-2089

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8270C	1	RE15-10-8393	R	2/22/2010	
		1	RE15-10-8394	R	2/22/2010	
		1	RE15-10-8395	R	2/22/2010	
		1	RE15-10-8396	R	2/22/2010	
		1	RE15-10-8397	R	2/22/2010	
		1	RE15-10-8398	R	2/22/2010	
		1	RE15-10-8399	R	2/22/2010	
		1	RE15-10-8404	R	2/22/2010	
	SW-846:8321A_MOD	1	RE15-10-8393	R	2/22/2010	
		1	RE15-10-8394	R	2/22/2010	
		1	RE15-10-8395	R	2/22/2010	
		1	RE15-10-8396	R	2/22/2010	
		1	RE15-10-8397	R	2/22/2010	
		1	RE15-10-8398	R	2/22/2010	
		1	RE15-10-8399	R	2/22/2010	
		1	RE15-10-8404	R	2/22/2010	

Final Page of REQUEST NUMBER 10-2089

GEL Laboratories LLC

a member of The GEL Group INC

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

P 843.556.8171 F 843.766.1178

www.gel.com

March 04, 2010

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: 248102
SDG: 10-2089

Dear Ms. Valdez:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the following analytical results for the sample(s) we received on February 26, 2010, and analyzed for Explosives by LCMSMS, GC Semivolatile PCB, GC/MS Semivolatile and GC/MS Volatile. This original data report has been prepared and reviewed in accordance with GEL's standard operating procedures.

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

Sincerely,

Valerie Davis

Valerie Davis
Project Manager

Purchase Order: 72733-001-09
Chain of Custody: 10-2089
Enclosures

Los Alamos National Laboratory (72733-001-09)
LANL ER Project
Work Order #: 248102
SDG: 10-2089

TABLE OF CONTENTS

Case Narrative.....1

Chain of Custody and Supporting Documentation..... 4

Data Review Qualifier Flag Definition Sheet..... 15

GC/MS Volatile Analysis.....17
- Case Narrative..... 18
- Sample Data Summary.....23
- Quality Control Summary.....40
- Sample Data..... 56
- Standards.....145
- Quality Control Data.....182
- Miscellaneous..... 217

GC/MS Semivolatile Analysis.....222
- Sample Data Summary.....229
- QC Summary..... 248
- Sample Data..... 267
- Standard Data.....347
- QC Data..... 400
- Miscellaneous Data.....429

LC/MS/MS Explosives Analysis.....444
- Sample Data Summary.....451
- Quality Control Summary.....468
- Sample Data..... 591
- Standards Data..... 648
- Quality Control Data.....833
- Miscellaneous Data.....862

GC Semivolatile PCB Analysis.....874

Sample Data Summary.....881
Quality Control Summary.....883
Sample Data.....889
Standards Data.....895
Quality Control Data.....984
Miscellaneous Data.....1003

Case Narrative

Case Narrative for
Los Alamos National Laboratory (72733-001-09)
LANL ER Project
Workorder #: 248102
SDG # : 10-2089

March 04, 2010

Laboratory Identification:

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

Summary

Sample receipt The samples arrived at GEL Laboratories LLC, Charleston, South Carolina on February 26, 2010 for analysis. The samples were prepared/analyzed within the required holding time. Shipping container temperatures were checked, documented, and within specifications. The samples were screened according to GEL Standard Operating Procedure. The samples were delivered with proper chain of custody documentation and signatures. All sample containers arrived without any visible signs of tampering or breakage. Containers were checked for pH, where appropriate, and matched the preservative as documented on the accompanying chain of custody. Shipping container temperature was within specification (0 - 6C).

Sample Identification The laboratory received the following samples:

Laboratory ID	Client ID
248102001	RE15-10-8404
248102002	RE15-10-8396
248102003	RE15-10-8393
248102004	RE15-10-8395
248102005	RE15-10-8398
248102006	RE15-10-8394
248102007	RE15-10-8399
248102008	RE15-10-8397

Case Narrative

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

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

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

Valerie Davis

Valerie Davis
Project Manager

List of current GEL Certifications as of 04 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

Thursday, February 25, 2010

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-2089

REQUEST NUMBER: 10-2089

LOS ALAMOS

NATIONAL LABORATORY

ATTN: Valerie Davis

General Engineering Laboratories, Inc., Charleston, SC.

2040 Savage Rd

Charleston, SC 29407

TURNAROUND/REPORT DUE: 3/27/2010

TURNAROUND REQ'D: 30

LAB REQUEST COMMENTS: 248102 248102

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE15-10-8404	1	AMBER GLASS	8082+8270+NMED-EXP	Ice	R
RE15-10-8404	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE15-10-8396	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE15-10-8396	1	AMBER GLASS	8270C+NMED Exp	Ice	R
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RE15-10-8398	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE15-10-8398	1	AMBER GLASS	8270C+NMED Exp	Ice	R
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RE15-10-8399	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE15-10-8397	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE15-10-8397	1	AMBER GLASS	8270C+NMED Exp	Ice	R

Relinquished By:		Date	Time	Received By:		Date	Time
		2/25/10	1400	Greg Tyler	Greg Tyler	2-26-10	0845
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

Thursday, February 25, 2010

REQUEST NUMBER: 10-2089

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Valerie Davis

General Engineering Laboratories, Inc., Charleston, SC.

2040 Savage Rd

Charleston, SC 29407

These Samples are on:

LANL Request Number:10-2089

Per Agreement Number:126310011

Project Cost Code: MR3A05529E00

Please analyse the enclosed samples according to the schedule indicated:

SHIP DATE: 2/25/2010

TURNAROUND/REPORT DUE: 3/27/2010

TURNAROUND REQ'D: 30 Days

RAD SCREENING: Yes, Below Background

LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:

Signature:

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8082	1	RE15-10-8404	R	2/22/2010	
	SW-846:8260B	1	RE15-10-8393	R	2/22/2010	
		1	RE15-10-8394	R	2/22/2010	
		1	RE15-10-8395	R	2/22/2010	
		1	RE15-10-8396	R	2/22/2010	
		1	RE15-10-8397	R	2/22/2010	
		1	RE15-10-8398	R	2/22/2010	
		1	RE15-10-8399	R	2/22/2010	
		1	RE15-10-8404	R	2/22/2010	

Thursday, February 25, 2010

REQUEST NUMBER: 10-2089

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8270C	1	RE15-10-8393	R	2/22/2010	
		1	RE15-10-8394	R	2/22/2010	
		1	RE15-10-8395	R	2/22/2010	
		1	RE15-10-8396	R	2/22/2010	
		1	RE15-10-8397	R	2/22/2010	
		1	RE15-10-8398	R	2/22/2010	
		1	RE15-10-8399	R	2/22/2010	
		1	RE15-10-8404	R	2/22/2010	
	SW-846:8321A_MOD	1	RE15-10-8393	R	2/22/2010	
		1	RE15-10-8394	R	2/22/2010	
		1	RE15-10-8395	R	2/22/2010	
		1	RE15-10-8396	R	2/22/2010	
		1	RE15-10-8397	R	2/22/2010	
		1	RE15-10-8398	R	2/22/2010	
		1	RE15-10-8399	R	2/22/2010	
		1	RE15-10-8404	R	2/22/2010	

Final Page of REQUEST NUMBER 10-2089

GEL Laboratories LLC

SAMPLE RECEIPT & REVIEW FORM

Client: LANL	**SDG/ARCOC/Work Order: 10-2089**
Received By: Greg Tyler	**Date Received: 2/26/10**

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 **1-3,6C** **11-14,17**
3	Chain of custody documents included with shipment?	X			
4	Sample containers intact and sealed?	X			Circle Applicable: seals broken damaged container leaking container other (describe)
5	Samples requiring chemical preservation at proper pH?		X		Sample ID's, containers affected and observed pH:
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 2341 1C	**7209 7850 2319 2C**	**7209 7850 2352 12C**
7209 7850 2320 1C	**7209 7850 2422 3C**	**7209 7850 2271 13C**
7209 7850 2396 2C	**7209 7850 2385 3C**	**7209 7850 2466 13C**
7209 7850 2374 2C	**7209 7850 2444 6C**	**7209 7850 2282 14C**
7209 7850 2330 2C	**7209 7850 2400 6C**	**7209 7850 2293 17C**
7209 7850 2455 2C	**7209 7850 2477 6C**	
7209 7850 2308 2C	**7209 7850 2433 6C**	
7209 7850 2411 2C	**7209 7850 2260 11C**	

PM (or PMA) review: Initials MS Date 3/1/10

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: 25FEB10
ACTWGT: 57.0 LB MAN
CAD: 0014176/CAFE2450

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843) 556-8171
REF: 6B010AMR3A022DXL00

1c

FedEx Express

1 of 2
TRK# 0201 7209 7850 2341
FRI - 26FEB A1
PRIORITY OVERNIGHT
MASTER
XX CHSA
29407
SC-US
CHS

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: 25FEB10
ACTWGT: 48.0 LB MAN
CAD: 0014176/CAFE2450

BILL SENDER

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1 of 2
TRK# 0201 7209 7850 2320
FRI - 26FEB A1
PRIORITY OVERNIGHT
MASTER
XX CHSA
29407
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CHS

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: 25FEB10
ACTWGT: 58.0 LB MAN
CAD: 0014176/CAFE2450

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CHARLESTON SC 29407
(843) 556-8171
REF: 6B010AARDW01EA1S00

2c

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MPS# 0263 7209 7850 2396
Mstr# 7209 7850 2385 0201
FRI - 26FEB A1
PRIORITY OVERNIGHT
XX CHSA
29407
SC-US

JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

ACTWGT: 48.0 LB MAN
CAD: 0014176/CAFE2450

BILL SENDER

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GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843) 556-8171
REF: 6B010AMR3A0532VA00

2c

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TRK# 0201 7209 7850 2374
FRI - 26FEB A1
PRIORITY OVERNIGHT
XX CHSA
29407
SC-US
CHS

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: 25FEB10
ACTWGT: 49.0 LB MAN
CAD: 0014176/CAFE2450

BILL SENDER

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GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843) 556-8171
REF: 6B010AMR1A015AGWM0

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2 of 2

FRI - 26FEB A1
FRI - 26 FEB A1
PRIORITY OVERNIGHT

TRK# 0201 7209 7850 2330

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Emp# 133998 25FEB10 SAFA

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: 25FEB10
ACTWGT: 50.0 LB MAN
CAD: 0014176/CAFE2450

BILL SENDER

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GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843) 556-8171
REF: 6B010AMR3A05529E00

2C

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1 of 3

FRI - 26FEB A1
PRIORITY OVERNIGHT

TRK# 0201 7209 7850 2455

MASTER

29407
SC-US
CHS

XX CHSA

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

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 25FEB10
ACTWGT: 52.0 LB MAN
CAD: 0014176/CAFE2450

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843) 556-8171
REF: 6B010AMR1A015AGWM0

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FedEx Express

1 of 2

FRI - 26FEB A1
PRIORITY OVERNIGHT

TRK# 0201 7209 7850 2308

MASTER

29407
SC-US
CHS

XX CHSA

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

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 25FEB10
ACTWGT: 60.0 LB MAN
CAD: 0014176/CAFE2450

BILL SENDER

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GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843) 556-8171
REF: 6B010AMR3A05529E00

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FedEx Express

2 of 2

FRI - 26FEB A1
PRIORITY OVERNIGHT

MPS# 0263 7209 7850 2411
Mstr# 7209 7850 2400 0201

29407
SC-US
CHS

XX CHSA

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

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 25FEB10
ACTWGT: 53.0 LB MAN
CAD: 0014176/CAFE2450

BILL SENDER

VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843) 556-8171
REF: 6B010AMR1A015AGWM0

2C

FedEx Express

2 of 2
MPS# 0263 7209 7850 2319
Matr# 7209 7850 2308 0201

FRI - 26FEB A1
PRIORITY OVERNIGHT

29407
SC-US
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XX CHSA

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

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 25FEB10
ACTWGT: 52.0 LB MAN
CAD: 0014176/CAFE2450

BILL SENDER

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GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843) 556-8171
REF: 6B010AARDW01EA1S00

3C

FedEx Express

1 of 2
FedEx
TRK# 0201 7209 7850 2385

FRI - 26FEB
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PRIORITY OVERNIGHT

29407

XX CHSA

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

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 25FEB10
ACTWGT: 50.0 LB MAN
CAD: 0014176/CAFE2450

BILL SENDER

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2040 SAVAGE RD

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REF: 6B010AMR3A05529E00

3C

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1 of 2
TRK# 0201 7209 7850 2422
MASTER

FRI - 26FEB A1
PRIORITY OVERNIGHT

29407
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ORIGIN ID: SAFA (505) 665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 25FEB10
ACTWGT: 63.0 LB MAN
CAD: 0014176/CAFE2450

BILL SENDER

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2040 SAVAGE RD

CHARLESTON SC 29407
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REF: 6B010AMR3A05529E00

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TRK# 0201 7209 7850 2444

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PRIORITY OVERNIGHT

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SC-US
CHS

XX CHSA

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

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 25FEB10
ACTWGT: 54.0 LB MAN
CAD: 0014176/CAFE2450

BILL SENDER

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2040 SAVAGE RD

CHARLESTON SC 29407
(843) 556-8171
REF: 6B010AMR3A05529E00

6°

FedEx Express

1 of 2
TRK# 0201 7209 7850 2400
MASTER

FRI - 26FEB A1
PRIORITY OVERNIGHT

XX CHSA

29407
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ORIGIN ID: SAFA (505) 665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

ACTWGT: 53.0 LB MAN
CAD: 0014176/CAFE2450

BILL SENDER

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GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843) 556-8171
REF: 6B010AMR3A05529E00

6°

FedEx Express

2 of 2
MPS# 0263 7209 7850 2433
Mstr# 7209 7850 2422 0201

FRI - 26FEB A1
PRIORITY OVERNIGHT

XX CHSA

29407
SC-US
CHS

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: 25FEB10
ACTWGT: 45.0 LB MAN
CAD: 0014176/CAFE2450

BILL SENDER

TO VALERIE DAVIS
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2040 SAVAGE RD

CHARLESTON SC 29407
(843) 556-8171
REF: 6B010AMR3A05529E00

6°

FedEx Express

3 of 3
MPS# 0263 7209 7850 2477
Mstr# 7209 7850 2455 0201

FRI - 26FEB A1
PRIORITY OVERNIGHT

XX CHSA

29407
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CHS

ORIGIN ID: [illegible]
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

ACTWGT: [illegible] LB MAN
CAD: 0014176/CAFE2450

BILL SENDER

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2040 SAVAGE RD

CHARLESTON SC 29407
(843) 556-8171
REF: 6B010AMR2A0515BYDO

11C

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2 of 3
MPS# 0263 7209 7850 2260
Mstr# 7209 7850 2250 0201

FRI - 26FEB A1
PRIORITY OVERNIGHT

XX CHSA

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CHS

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: 25FEB10
ACTWGT: 59.0 LB MAN
CAD: 0014176/CAFE2450

BILL SENDER

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2040 SAVAGE RD

CHARLESTON SC 29407
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REF: 6B010AMR3A022DXL00

12

FedEx Express

2 of 2
MPS# 0263 7209 7850 2352
Mstr# 7209 7850 2341 0201

FRI - 26FEB A1
PRIORITY OVERNIGHT

XX CHSA

29407
SC-US
CHS

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TA00 BLDG 1237 DPU 03

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UNITED STATES US

CAD: 0014176/CAFE2450

BILL SENDER

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2040 SAVAGE RD

CHARLESTON SC 29407
(843) 556-8171
REF: 6B010AMR2A0515BYD0

14

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1 of 2
TRK# 0201 7209 7850 2282
MASTER

FRI - 26FEB A1
PRIORITY OVERNIGHT

XX CHSA

29407
SC-US
CHS

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: 25FEB10
ACTWGT: 60.0 LB MAN
CAD: 0014176/CAFE2450

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843) 556-8171
REF: 6B010AMR2A0515BYD0

13

FedEx Express

3 of 3
MPS# 0263 7209 7850 2271
Mstr# 7209 7850 2250 0201

FRI - 26FEB A1
PRIORITY OVERNIGHT

XX CHSA

29407
SC-US
CHS

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: 25FEB10
ACTWGT: 36.0 LB MAN
CAD: 0014176/CAFE2450

BILL SENDER

TO VALERIE DAVIS
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2040 SAVAGE RD

CHARLESTON SC 29407
(843) 556-8171
REF: 6B010AMR3A05529E00

13

FedEx Express

2 of 3
MPS# 0263 7209 7850 2466
Mstr# 7209 7850 2455 0201

FRI - 26FEB A1
PRIORITY OVERNIGHT

XX CHSA

29407
SC-US
CHS

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: 25FEB10
ACTWGT: 40.0 LB MAN
CAD: 0014176/CAFE2450

BILL SENDER

TO VALERIE DAVIS
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2040 SAVAGE RD

CHARLESTON SC 29407
(843) 556-9171
REF: 6B010AMR2A0515BYDO

17°

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2 of 2

MPS# 0263 7209 7850 2293

Mstr# 7209 7850 2282 0201

FRI - 26FEB A1
PRIORITY OVERNIGHT

29407
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CHS

XX CHSA

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 10-2089

Method/Analysis Information

Procedure:	Volatile Organic Compounds (VOC) by Gas Chromatograph/Mass Spectrometer
Analytical Method:	SW846 8260B
Prep Method:	SW846 5030
Analytical Batch Number:	961336
Prep Batch Number:	961334

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
248102001	RE15-10-8404
248102002	RE15-10-8396
248102003	RE15-10-8393
248102004	RE15-10-8395
248102005	RE15-10-8398
248102006	RE15-10-8394
248102007	RE15-10-8399
248102008	RE15-10-8397
1202062144	Method Blank (MB)
1202062052	Laboratory Control Sample (LCS)
1202062053	Laboratory Control Sample (LCS)
1202062048	248102001(RE15-10-8404) Post Spike (PS)
1202062049	248102001(RE15-10-8404) 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.
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-038 REV# 14.

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

Calibration Information

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

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

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

Initial Calibration

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

Continuing Calibration Verification Requirements

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

Quality Control (QC) Information

Method Blank (MB) Statement

The MB analyzed with this SDG met the acceptance criteria.

Surrogate Recoveries

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

Laboratory Control Sample (LCS) Recovery

The LCS spike recoveries met the acceptance limits.

QC Sample Designation

Sample 248102001 (RE15-10-8404) was designated for spike analysis in this SDG.

Matrix Spike (PS) Recovery Statement

The spike recoveries were not all within the acceptance limits. See DER# 805017.

Matrix Spike Duplicate (PSD) Recovery Statement

The spike duplicate recoveries were not all within the acceptance limits. See DER# 805017.

Relative Percent Difference (RPD) Statement

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

Internal Standard (ISTD) Acceptance

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

Technical Information

Holding Time Specifications

GEL assigns holding times based on the associated methodology, which assigns the date and time from sample collection or sample receipt. Those holding times expressed in hours are calculated in the

ALPHALIMS system. Those holding times expressed as days expire at midnight on the day of expiration. All samples in this SDG met the specified holding time.

Sample Preservation and Integrity
All samples met the sample preservation and integrity requirements.

Sample Dilutions
The samples in this SDG did not require dilutions.

Sample Re-extraction/Re-analysis
Re-analyses were not required for samples in this SDG.

Miscellaneous Information

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

Data Exception (DER) Documentation
The following DER was generated for this SDG: 805017

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

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

Additional Comments
Additional comments were not required for this SDG.

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

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

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

Certification Statement
Where the analytical method has been performed under NELAP certification, the analysis has met all 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: 10-2089 GEL Work Order: 248102

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: Stacy Calloway **Name: Stacy Calloway**

Date: 24 MAR 2010 **Title: Data Validator**

Sample Data Summary

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-2089**	**Date Collected:**	**02/22/2010 12:00**	**Matrix:**	**R**
Lab Sample ID:	**248102001**	**Date Received:**	**02/26/2010 08:45**	**%Moisture:**	**9.4**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE15-10-8404**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**961336**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**03/05/2010 02:39**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**03/04/2010 17:40**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**030410V4\4A437.D**	**Column:**	**DB-624**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.10	ug/kg	0.375	1.10
74-87-3	Chloromethane	U	1.10	ug/kg	0.331	1.10
75-01-4	Vinyl chloride	U	1.10	ug/kg	0.331	1.10
74-83-9	Bromomethane	U	1.10	ug/kg	0.331	1.10
75-00-3	Chloroethane	U	1.10	ug/kg	0.331	1.10
75-69-4	Trichlorofluoromethane	U	1.10	ug/kg	0.331	1.10
67-64-1	Acetone	U	5.52	ug/kg	1.83	5.52
75-35-4	1,1-Dichloroethylene	U	1.10	ug/kg	0.331	1.10
74-88-4	Iodomethane	U	5.52	ug/kg	1.77	5.52
75-09-2	Methylene chloride	U	5.52	ug/kg	2.21	5.52
75-15-0	Carbon disulfide	U	5.52	ug/kg	1.38	5.52
156-60-5	trans-1,2-Dichloroethylene	U	1.10	ug/kg	0.331	1.10
75-34-3	1,1-Dichloroethane	U	1.10	ug/kg	0.331	1.10
78-93-3	2-Butanone	U	5.52	ug/kg	1.66	5.52
156-59-2	cis-1,2-Dichloroethylene	U	1.10	ug/kg	0.331	1.10
594-20-7	2,2-Dichloropropane	U	1.10	ug/kg	0.331	1.10
67-66-3	Chloroform	U	1.10	ug/kg	0.331	1.10
74-97-5	Bromochloromethane	U	1.10	ug/kg	0.364	1.10
71-55-6	1,1,1-Trichloroethane	U	1.10	ug/kg	0.331	1.10
563-58-6	1,1-Dichloropropene	U	1.10	ug/kg	0.331	1.10
56-23-5	Carbon tetrachloride	U	1.10	ug/kg	0.331	1.10
107-06-2	1,2-Dichloroethane	U	1.10	ug/kg	0.331	1.10
71-43-2	Benzene	U	1.10	ug/kg	0.331	1.10
79-01-6	Trichloroethylene	U	1.10	ug/kg	0.364	1.10
78-87-5	1,2-Dichloropropane	U	1.10	ug/kg	0.331	1.10
75-27-4	Bromodichloromethane	U	1.10	ug/kg	0.331	1.10
74-95-3	Dibromomethane	U	1.10	ug/kg	0.331	1.10
108-10-1	4-Methyl-2-pentanone	U	5.52	ug/kg	1.38	5.52
10061-01-5	cis-1,3-Dichloropropylene	U	1.10	ug/kg	0.331	1.10
108-88-3	Toluene	U	1.10	ug/kg	0.331	1.10
10061-02-6	trans-1,3-Dichloropropylene	U	1.10	ug/kg	0.331	1.10
79-00-5	1,1,2-Trichloroethane	U	1.10	ug/kg	0.331	1.10
591-78-6	2-Hexanone	U	5.52	ug/kg	1.66	5.52
142-28-9	1,3-Dichloropropane	U	1.10	ug/kg	0.331	1.10
127-18-4	Tetrachloroethylene	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:	**10-2089**	**Date Collected:**	**02/22/2010 12:00**	**Matrix:**	**R**
Lab Sample ID:	**248102001**	**Date Received:**	**02/26/2010 08:45**	**%Moisture:**	**9.4**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE15-10-8404**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**961336**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**03/05/2010 02:39**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**03/04/2010 17:40**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**030410V4\4A437.D**	**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	U	2.21	ug/kg	0.331	2.21
95-47-6	o-Xylene	U	1.10	ug/kg	0.331	1.10
100-42-5	Styrene	U	1.10	ug/kg	0.331	1.10
75-25-2	Bromoform	U	1.10	ug/kg	0.331	1.10
79-34-5	1,1,2,2-Tetrachloroethane	U	1.10	ug/kg	0.331	1.10
96-18-4	1,2,3-Trichloropropane	U	1.10	ug/kg	0.331	1.10
108-86-1	Bromobenzene	U	1.10	ug/kg	0.331	1.10
103-65-1	n-Propylbenzene	U	1.10	ug/kg	0.331	1.10
95-49-8	2-Chlorotoluene	U	1.10	ug/kg	0.331	1.10
98-82-8	Isopropylbenzene	U	1.10	ug/kg	0.331	1.10
108-67-8	1,3,5-Trimethylbenzene	U	1.10	ug/kg	0.331	1.10
106-43-4	4-Chlorotoluene	U	1.10	ug/kg	0.331	1.10
98-06-6	tert-Butylbenzene	U	1.10	ug/kg	0.331	1.10
95-63-6	1,2,4-Trimethylbenzene	U	1.10	ug/kg	0.331	1.10
135-98-8	sec-Butylbenzene	U	1.10	ug/kg	0.331	1.10
99-87-6	4-Isopropyltoluene	U	1.10	ug/kg	0.331	1.10
541-73-1	1,3-Dichlorobenzene	U	1.10	ug/kg	0.331	1.10
106-46-7	1,4-Dichlorobenzene	U	1.10	ug/kg	0.331	1.10
104-51-8	n-Butylbenzene	U	1.10	ug/kg	0.331	1.10
96-12-8	1,2-Dibromo-3-chloropropane	U	1.10	ug/kg	0.331	1.10
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	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
	unknown hydrocarbon	4.48	6.56	ug/kg	0	J
	unknown siloxane	16.79	8.58	ug/kg	0	J

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-2089**	**Date Collected:**	**02/22/2010 12:00**	**Matrix:**	**R**
Lab Sample ID:	**248102002**	**Date Received:**	**02/26/2010 08:45**	**%Moisture:**	**8.7**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE15-10-8396**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**961336**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**03/05/2010 03:06**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**03/04/2010 17:43**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**030410V4\4A438.D**	**Column:**	**DB-624**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.10	ug/kg	0.372	1.10
74-87-3	Chloromethane	U	1.10	ug/kg	0.329	1.10
75-01-4	Vinyl chloride	U	1.10	ug/kg	0.329	1.10
74-83-9	Bromomethane	U	1.10	ug/kg	0.329	1.10
75-00-3	Chloroethane	U	1.10	ug/kg	0.329	1.10
75-69-4	Trichlorofluoromethane	U	1.10	ug/kg	0.329	1.10
67-64-1	Acetone	U	5.48	ug/kg	1.82	5.48
75-35-4	1,1-Dichloroethylene	U	1.10	ug/kg	0.329	1.10
74-88-4	Iodomethane	U	5.48	ug/kg	1.75	5.48
75-09-2	Methylene chloride	U	5.48	ug/kg	2.19	5.48
75-15-0	Carbon disulfide	U	5.48	ug/kg	1.37	5.48
156-60-5	trans-1,2-Dichloroethylene	U	1.10	ug/kg	0.329	1.10
75-34-3	1,1-Dichloroethane	U	1.10	ug/kg	0.329	1.10
78-93-3	2-Butanone	U	5.48	ug/kg	1.64	5.48
156-59-2	cis-1,2-Dichloroethylene	U	1.10	ug/kg	0.329	1.10
594-20-7	2,2-Dichloropropane	U	1.10	ug/kg	0.329	1.10
67-66-3	Chloroform	U	1.10	ug/kg	0.329	1.10
74-97-5	Bromochloromethane	U	1.10	ug/kg	0.361	1.10
71-55-6	1,1,1-Trichloroethane	U	1.10	ug/kg	0.329	1.10
563-58-6	1,1-Dichloropropene	U	1.10	ug/kg	0.329	1.10
56-23-5	Carbon tetrachloride	U	1.10	ug/kg	0.329	1.10
107-06-2	1,2-Dichloroethane	U	1.10	ug/kg	0.329	1.10
71-43-2	Benzene	U	1.10	ug/kg	0.329	1.10
79-01-6	Trichloroethylene	U	1.10	ug/kg	0.361	1.10
78-87-5	1,2-Dichloropropane	U	1.10	ug/kg	0.329	1.10
75-27-4	Bromodichloromethane	U	1.10	ug/kg	0.329	1.10
74-95-3	Dibromomethane	U	1.10	ug/kg	0.329	1.10
108-10-1	4-Methyl-2-pentanone	U	5.48	ug/kg	1.37	5.48
10061-01-5	cis-1,3-Dichloropropylene	U	1.10	ug/kg	0.329	1.10
108-88-3	Toluene	U	1.10	ug/kg	0.329	1.10
10061-02-6	trans-1,3-Dichloropropylene	U	1.10	ug/kg	0.329	1.10
79-00-5	1,1,2-Trichloroethane	U	1.10	ug/kg	0.329	1.10
591-78-6	2-Hexanone	U	5.48	ug/kg	1.64	5.48
142-28-9	1,3-Dichloropropane	U	1.10	ug/kg	0.329	1.10
127-18-4	Tetrachloroethylene	U	1.10	ug/kg	0.329	1.10
124-48-1	Dibromochloromethane	U	1.10	ug/kg	0.329	1.10
106-93-4	1,2-Dibromoethane	U	1.10	ug/kg	0.329	1.10
108-90-7	Chlorobenzene	U	1.10	ug/kg	0.329	1.10

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-2089**	**Date Collected:**	**02/22/2010 12:00**	**Matrix:**	**R**
Lab Sample ID:	**248102002**	**Date Received:**	**02/26/2010 08:45**	**%Moisture:**	**8.7**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE15-10-8396**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**961336**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**03/05/2010 03:06**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**03/04/2010 17:43**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**030410V4\4A438.D**	**Column:**	**DB-624**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.10	ug/kg	0.329	1.10
179601-23-1	m,p-Xylenes	U	2.19	ug/kg	0.329	2.19
95-47-6	o-Xylene	U	1.10	ug/kg	0.329	1.10
100-42-5	Styrene	U	1.10	ug/kg	0.329	1.10
75-25-2	Bromoform	U	1.10	ug/kg	0.329	1.10
79-34-5	1,1,2,2-Tetrachloroethane	U	1.10	ug/kg	0.329	1.10
96-18-4	1,2,3-Trichloropropane	U	1.10	ug/kg	0.329	1.10
108-86-1	Bromobenzene	U	1.10	ug/kg	0.329	1.10
103-65-1	n-Propylbenzene	U	1.10	ug/kg	0.329	1.10
95-49-8	2-Chlorotoluene	U	1.10	ug/kg	0.329	1.10
98-82-8	Isopropylbenzene	U	1.10	ug/kg	0.329	1.10
108-67-8	1,3,5-Trimethylbenzene	U	1.10	ug/kg	0.329	1.10
106-43-4	4-Chlorotoluene	U	1.10	ug/kg	0.329	1.10
98-06-6	tert-Butylbenzene	U	1.10	ug/kg	0.329	1.10
95-63-6	1,2,4-Trimethylbenzene	U	1.10	ug/kg	0.329	1.10
135-98-8	sec-Butylbenzene	U	1.10	ug/kg	0.329	1.10
99-87-6	4-Isopropyltoluene	U	1.10	ug/kg	0.329	1.10
541-73-1	1,3-Dichlorobenzene	U	1.10	ug/kg	0.329	1.10
106-46-7	1,4-Dichlorobenzene	U	1.10	ug/kg	0.329	1.10
104-51-8	n-Butylbenzene	U	1.10	ug/kg	0.329	1.10
96-12-8	1,2-Dibromo-3-chloropropane	U	1.10	ug/kg	0.329	1.10
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.48	ug/kg	1.75	5.48
630-20-6	1,1,1,2-Tetrachloroethane	U	1.10	ug/kg	0.329	1.10
95-50-1	1,2-Dichlorobenzene	U	1.10	ug/kg	0.329	1.10

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	unknown hydrocarbon	4.48	9.5	ug/kg	0	J
	unknown siloxane	16.79	14.2	ug/kg	0	J

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-2089**	**Date Collected:**	**02/22/2010 12:00**	**Matrix:**	**R**
Lab Sample ID:	**248102003**	**Date Received:**	**02/26/2010 08:45**	**%Moisture:**	**20.1**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE15-10-8393**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**961336**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**03/05/2010 03:33**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**03/04/2010 17:44**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**030410V4\4A439.D**	**Column:**	**DB-624**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.25	ug/kg	0.426	1.25
74-87-3	Chloromethane	U	1.25	ug/kg	0.376	1.25
75-01-4	Vinyl chloride	U	1.25	ug/kg	0.376	1.25
74-83-9	Bromomethane	U	1.25	ug/kg	0.376	1.25
75-00-3	Chloroethane	U	1.25	ug/kg	0.376	1.25
75-69-4	Trichlorofluoromethane	U	1.25	ug/kg	0.376	1.25
67-64-1	Acetone	U	6.26	ug/kg	2.08	6.26
75-35-4	1,1-Dichloroethylene	U	1.25	ug/kg	0.376	1.25
74-88-4	Iodomethane	U	6.26	ug/kg	2.00	6.26
75-09-2	Methylene chloride	U	6.26	ug/kg	2.50	6.26
75-15-0	Carbon disulfide	U	6.26	ug/kg	1.57	6.26
156-60-5	trans-1,2-Dichloroethylene	U	1.25	ug/kg	0.376	1.25
75-34-3	1,1-Dichloroethane	U	1.25	ug/kg	0.376	1.25
78-93-3	2-Butanone	U	6.26	ug/kg	1.88	6.26
156-59-2	cis-1,2-Dichloroethylene	U	1.25	ug/kg	0.376	1.25
594-20-7	2,2-Dichloropropane	U	1.25	ug/kg	0.376	1.25
67-66-3	Chloroform	U	1.25	ug/kg	0.376	1.25
74-97-5	Bromochloromethane	U	1.25	ug/kg	0.413	1.25
71-55-6	1,1,1-Trichloroethane	U	1.25	ug/kg	0.376	1.25
563-58-6	1,1-Dichloropropene	U	1.25	ug/kg	0.376	1.25
56-23-5	Carbon tetrachloride	U	1.25	ug/kg	0.376	1.25
107-06-2	1,2-Dichloroethane	U	1.25	ug/kg	0.376	1.25
71-43-2	Benzene	U	1.25	ug/kg	0.376	1.25
79-01-6	Trichloroethylene	U	1.25	ug/kg	0.413	1.25
78-87-5	1,2-Dichloropropane	U	1.25	ug/kg	0.376	1.25
75-27-4	Bromodichloromethane	U	1.25	ug/kg	0.376	1.25
74-95-3	Dibromomethane	U	1.25	ug/kg	0.376	1.25
108-10-1	4-Methyl-2-pentanone	U	6.26	ug/kg	1.57	6.26
10061-01-5	cis-1,3-Dichloropropylene	U	1.25	ug/kg	0.376	1.25
108-88-3	Toluene	U	1.25	ug/kg	0.376	1.25
10061-02-6	trans-1,3-Dichloropropylene	U	1.25	ug/kg	0.376	1.25
79-00-5	1,1,2-Trichloroethane	U	1.25	ug/kg	0.376	1.25
591-78-6	2-Hexanone	U	6.26	ug/kg	1.88	6.26
142-28-9	1,3-Dichloropropane	U	1.25	ug/kg	0.376	1.25
127-18-4	Tetrachloroethylene	U	1.25	ug/kg	0.376	1.25
124-48-1	Dibromochloromethane	U	1.25	ug/kg	0.376	1.25
106-93-4	1,2-Dibromoethane	U	1.25	ug/kg	0.376	1.25
108-90-7	Chlorobenzene	U	1.25	ug/kg	0.376	1.25

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-2089**	**Date Collected:**	**02/22/2010 12:00**	**Matrix:**	**R**
Lab Sample ID:	**248102003**	**Date Received:**	**02/26/2010 08:45**	**%Moisture:**	**20.1**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE15-10-8393**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**961336**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**03/05/2010 03:33**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**03/04/2010 17:44**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**030410V4\4A439.D**	**Column:**	**DB-624**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.25	ug/kg	0.376	1.25
179601-23-1	m,p-Xylenes	U	2.50	ug/kg	0.376	2.50
95-47-6	o-Xylene	U	1.25	ug/kg	0.376	1.25
100-42-5	Styrene	U	1.25	ug/kg	0.376	1.25
75-25-2	Bromoform	U	1.25	ug/kg	0.376	1.25
79-34-5	1,1,2,2-Tetrachloroethane	U	1.25	ug/kg	0.376	1.25
96-18-4	1,2,3-Trichloropropane	U	1.25	ug/kg	0.376	1.25
108-86-1	Bromobenzene	U	1.25	ug/kg	0.376	1.25
103-65-1	n-Propylbenzene	U	1.25	ug/kg	0.376	1.25
95-49-8	2-Chlorotoluene	U	1.25	ug/kg	0.376	1.25
98-82-8	Isopropylbenzene	U	1.25	ug/kg	0.376	1.25
108-67-8	1,3,5-Trimethylbenzene	U	1.25	ug/kg	0.376	1.25
106-43-4	4-Chlorotoluene	U	1.25	ug/kg	0.376	1.25
98-06-6	tert-Butylbenzene	U	1.25	ug/kg	0.376	1.25
95-63-6	1,2,4-Trimethylbenzene	U	1.25	ug/kg	0.376	1.25
135-98-8	sec-Butylbenzene	U	1.25	ug/kg	0.376	1.25
99-87-6	4-Isopropyltoluene	U	1.25	ug/kg	0.376	1.25
541-73-1	1,3-Dichlorobenzene	U	1.25	ug/kg	0.376	1.25
106-46-7	1,4-Dichlorobenzene	U	1.25	ug/kg	0.376	1.25
104-51-8	n-Butylbenzene	U	1.25	ug/kg	0.376	1.25
96-12-8	1,2-Dibromo-3-chloropropane	U	1.25	ug/kg	0.376	1.25
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	6.26	ug/kg	2.00	6.26
630-20-6	1,1,1,2-Tetrachloroethane	U	1.25	ug/kg	0.376	1.25
95-50-1	1,2-Dichlorobenzene	U	1.25	ug/kg	0.376	1.25

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	unknown hydrocarbon	4.48	7.24	ug/kg	0	J
	unknown siloxane	16.79	12.1	ug/kg	0	J

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-2089**	**Date Collected:**	**02/22/2010 12:00**	**Matrix:**	**R**
Lab Sample ID:	**248102004**	**Date Received:**	**02/26/2010 08:45**	**%Moisture:**	**4.4**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE15-10-8395**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**961336**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**03/05/2010 04:01**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**03/04/2010 17:45**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**030410V4\4A440.D**	**Column:**	**DB-624**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.05	ug/kg	0.356	1.05
74-87-3	Chloromethane	U	1.05	ug/kg	0.314	1.05
75-01-4	Vinyl chloride	U	1.05	ug/kg	0.314	1.05
74-83-9	Bromomethane	U	1.05	ug/kg	0.314	1.05
75-00-3	Chloroethane	U	1.05	ug/kg	0.314	1.05
75-69-4	Trichlorofluoromethane	U	1.05	ug/kg	0.314	1.05
67-64-1	Acetone	U	5.23	ug/kg	1.74	5.23
75-35-4	1,1-Dichloroethylene	U	1.05	ug/kg	0.314	1.05
74-88-4	Iodomethane	U	5.23	ug/kg	1.67	5.23
75-09-2	Methylene chloride	U	5.23	ug/kg	2.09	5.23
75-15-0	Carbon disulfide	U	5.23	ug/kg	1.31	5.23
156-60-5	trans-1,2-Dichloroethylene	U	1.05	ug/kg	0.314	1.05
75-34-3	1,1-Dichloroethane	U	1.05	ug/kg	0.314	1.05
78-93-3	2-Butanone	U	5.23	ug/kg	1.57	5.23
156-59-2	cis-1,2-Dichloroethylene	U	1.05	ug/kg	0.314	1.05
594-20-7	2,2-Dichloropropane	U	1.05	ug/kg	0.314	1.05
67-66-3	Chloroform	U	1.05	ug/kg	0.314	1.05
74-97-5	Bromochloromethane	U	1.05	ug/kg	0.345	1.05
71-55-6	1,1,1-Trichloroethane	U	1.05	ug/kg	0.314	1.05
563-58-6	1,1-Dichloropropene	U	1.05	ug/kg	0.314	1.05
56-23-5	Carbon tetrachloride	U	1.05	ug/kg	0.314	1.05
107-06-2	1,2-Dichloroethane	U	1.05	ug/kg	0.314	1.05
71-43-2	Benzene	U	1.05	ug/kg	0.314	1.05
79-01-6	Trichloroethylene	U	1.05	ug/kg	0.345	1.05
78-87-5	1,2-Dichloropropane	U	1.05	ug/kg	0.314	1.05
75-27-4	Bromodichloromethane	U	1.05	ug/kg	0.314	1.05
74-95-3	Dibromomethane	U	1.05	ug/kg	0.314	1.05
108-10-1	4-Methyl-2-pentanone	U	5.23	ug/kg	1.31	5.23
10061-01-5	cis-1,3-Dichloropropylene	U	1.05	ug/kg	0.314	1.05
108-88-3	Toluene	U	1.05	ug/kg	0.314	1.05
10061-02-6	trans-1,3-Dichloropropylene	U	1.05	ug/kg	0.314	1.05
79-00-5	1,1,2-Trichloroethane	U	1.05	ug/kg	0.314	1.05
591-78-6	2-Hexanone	U	5.23	ug/kg	1.57	5.23
142-28-9	1,3-Dichloropropane	U	1.05	ug/kg	0.314	1.05
127-18-4	Tetrachloroethylene	U	1.05	ug/kg	0.314	1.05
124-48-1	Dibromochloromethane	U	1.05	ug/kg	0.314	1.05
106-93-4	1,2-Dibromoethane	U	1.05	ug/kg	0.314	1.05
108-90-7	Chlorobenzene	U	1.05	ug/kg	0.314	1.05

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-2089**	**Date Collected:**	**02/22/2010 12:00**	**Matrix:**	**R**
Lab Sample ID:	**248102004**	**Date Received:**	**02/26/2010 08:45**	**%Moisture:**	**4.4**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE15-10-8395**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**961336**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**03/05/2010 04:01**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**03/04/2010 17:45**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**030410V4\4A440.D**	**Column:**	**DB-624**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.05	ug/kg	0.314	1.05
179601-23-1	m,p-Xylenes	U	2.09	ug/kg	0.314	2.09
95-47-6	o-Xylene	U	1.05	ug/kg	0.314	1.05
100-42-5	Styrene	U	1.05	ug/kg	0.314	1.05
75-25-2	Bromoform	U	1.05	ug/kg	0.314	1.05
79-34-5	1,1,2,2-Tetrachloroethane	U	1.05	ug/kg	0.314	1.05
96-18-4	1,2,3-Trichloropropane	U	1.05	ug/kg	0.314	1.05
108-86-1	Bromobenzene	U	1.05	ug/kg	0.314	1.05
103-65-1	n-Propylbenzene	U	1.05	ug/kg	0.314	1.05
95-49-8	2-Chlorotoluene	U	1.05	ug/kg	0.314	1.05
98-82-8	Isopropylbenzene	U	1.05	ug/kg	0.314	1.05
108-67-8	1,3,5-Trimethylbenzene	U	1.05	ug/kg	0.314	1.05
106-43-4	4-Chlorotoluene	U	1.05	ug/kg	0.314	1.05
98-06-6	tert-Butylbenzene	U	1.05	ug/kg	0.314	1.05
95-63-6	1,2,4-Trimethylbenzene	U	1.05	ug/kg	0.314	1.05
135-98-8	sec-Butylbenzene	U	1.05	ug/kg	0.314	1.05
99-87-6	4-Isopropyltoluene	U	1.05	ug/kg	0.314	1.05
541-73-1	1,3-Dichlorobenzene	U	1.05	ug/kg	0.314	1.05
106-46-7	1,4-Dichlorobenzene	U	1.05	ug/kg	0.314	1.05
104-51-8	n-Butylbenzene	U	1.05	ug/kg	0.314	1.05
96-12-8	1,2-Dibromo-3-chloropropane	U	1.05	ug/kg	0.314	1.05
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.23	ug/kg	1.67	5.23
630-20-6	1,1,1,2-Tetrachloroethane	U	1.05	ug/kg	0.314	1.05
95-50-1	1,2-Dichlorobenzene	U	1.05	ug/kg	0.314	1.05

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	unknown hydrocarbon	15.01	24.6	ug/kg	0	J
	unknown siloxane	16.79	24.6	ug/kg	0	J

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-2089**	**Date Collected:**	**02/22/2010 12:00**	**Matrix:**	**R**
Lab Sample ID:	**248102005**	**Date Received:**	**02/26/2010 08:45**	**%Moisture:**	**12.8**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE15-10-8398**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**961336**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**03/05/2010 04:28**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**03/04/2010 17:46**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**030410V4\4A441.D**	**Column:**	**DB-624**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.15	ug/kg	0.390	1.15
74-87-3	Chloromethane	U	1.15	ug/kg	0.344	1.15
75-01-4	Vinyl chloride	U	1.15	ug/kg	0.344	1.15
74-83-9	Bromomethane	U	1.15	ug/kg	0.344	1.15
75-00-3	Chloroethane	U	1.15	ug/kg	0.344	1.15
75-69-4	Trichlorofluoromethane	U	1.15	ug/kg	0.344	1.15
67-64-1	Acetone		7.19	ug/kg	1.90	5.74
75-35-4	1,1-Dichloroethylene	U	1.15	ug/kg	0.344	1.15
74-88-4	Iodomethane	U	5.74	ug/kg	1.84	5.74
75-09-2	Methylene chloride	U	5.74	ug/kg	2.29	5.74
75-15-0	Carbon disulfide	U	5.74	ug/kg	1.43	5.74
156-60-5	trans-1,2-Dichloroethylene	U	1.15	ug/kg	0.344	1.15
75-34-3	1,1-Dichloroethane	U	1.15	ug/kg	0.344	1.15
78-93-3	2-Butanone	U	5.74	ug/kg	1.72	5.74
156-59-2	cis-1,2-Dichloroethylene	U	1.15	ug/kg	0.344	1.15
594-20-7	2,2-Dichloropropane	U	1.15	ug/kg	0.344	1.15
67-66-3	Chloroform	U	1.15	ug/kg	0.344	1.15
74-97-5	Bromochloromethane	U	1.15	ug/kg	0.379	1.15
71-55-6	1,1,1-Trichloroethane	U	1.15	ug/kg	0.344	1.15
563-58-6	1,1-Dichloropropene	U	1.15	ug/kg	0.344	1.15
56-23-5	Carbon tetrachloride	U	1.15	ug/kg	0.344	1.15
107-06-2	1,2-Dichloroethane	U	1.15	ug/kg	0.344	1.15
71-43-2	Benzene	U	1.15	ug/kg	0.344	1.15
79-01-6	Trichloroethylene	U	1.15	ug/kg	0.379	1.15
78-87-5	1,2-Dichloropropane	U	1.15	ug/kg	0.344	1.15
75-27-4	Bromodichloromethane	U	1.15	ug/kg	0.344	1.15
74-95-3	Dibromomethane	U	1.15	ug/kg	0.344	1.15
108-10-1	4-Methyl-2-pentanone	U	5.74	ug/kg	1.43	5.74
10061-01-5	cis-1,3-Dichloropropylene	U	1.15	ug/kg	0.344	1.15
108-88-3	Toluene	U	1.15	ug/kg	0.344	1.15
10061-02-6	trans-1,3-Dichloropropylene	U	1.15	ug/kg	0.344	1.15
79-00-5	1,1,2-Trichloroethane	U	1.15	ug/kg	0.344	1.15
591-78-6	2-Hexanone	U	5.74	ug/kg	1.72	5.74
142-28-9	1,3-Dichloropropane	U	1.15	ug/kg	0.344	1.15
127-18-4	Tetrachloroethylene	U	1.15	ug/kg	0.344	1.15
124-48-1	Dibromochloromethane	U	1.15	ug/kg	0.344	1.15
106-93-4	1,2-Dibromoethane	U	1.15	ug/kg	0.344	1.15
108-90-7	Chlorobenzene	U	1.15	ug/kg	0.344	1.15

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-2089**	**Date Collected:**	**02/22/2010 12:00**	**Matrix:**	**R**
Lab Sample ID:	**248102005**	**Date Received:**	**02/26/2010 08:45**	**%Moisture:**	**12.8**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE15-10-8398**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**961336**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**03/05/2010 04:28**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**03/04/2010 17:46**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**030410V4\4A441.D**	**Column:**	**DB-624**		

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

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	unknown hydrocarbon	4.47	10.2	ug/kg	0	J
	unknown siloxane	16.79	12.6	ug/kg	0	J

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-2089**	**Date Collected:**	**02/22/2010 12:00**	**Matrix:**	**R**
Lab Sample ID:	**248102006**	**Date Received:**	**02/26/2010 08:45**	**%Moisture:**	**10.3**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE15-10-8394**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**961336**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**03/05/2010 04:55**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**03/04/2010 17:47**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**030410V4\4A442.D**	**Column:**	**DB-624**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.12	ug/kg	0.379	1.12
74-87-3	Chloromethane	U	1.12	ug/kg	0.335	1.12
75-01-4	Vinyl chloride	U	1.12	ug/kg	0.335	1.12
74-83-9	Bromomethane	U	1.12	ug/kg	0.335	1.12
75-00-3	Chloroethane	U	1.12	ug/kg	0.335	1.12
75-69-4	Trichlorofluoromethane	U	1.12	ug/kg	0.335	1.12
67-64-1	Acetone		9.19	ug/kg	1.85	5.58
75-35-4	1,1-Dichloroethylene	U	1.12	ug/kg	0.335	1.12
74-88-4	Iodomethane	U	5.58	ug/kg	1.78	5.58
75-09-2	Methylene chloride	U	5.58	ug/kg	2.23	5.58
75-15-0	Carbon disulfide	U	5.58	ug/kg	1.39	5.58
156-60-5	trans-1,2-Dichloroethylene	U	1.12	ug/kg	0.335	1.12
75-34-3	1,1-Dichloroethane	U	1.12	ug/kg	0.335	1.12
78-93-3	2-Butanone	U	5.58	ug/kg	1.67	5.58
156-59-2	cis-1,2-Dichloroethylene	U	1.12	ug/kg	0.335	1.12
594-20-7	2,2-Dichloropropane	U	1.12	ug/kg	0.335	1.12
67-66-3	Chloroform	U	1.12	ug/kg	0.335	1.12
74-97-5	Bromochloromethane	U	1.12	ug/kg	0.368	1.12
71-55-6	1,1,1-Trichloroethane	U	1.12	ug/kg	0.335	1.12
563-58-6	1,1-Dichloropropene	U	1.12	ug/kg	0.335	1.12
56-23-5	Carbon tetrachloride	U	1.12	ug/kg	0.335	1.12
107-06-2	1,2-Dichloroethane	U	1.12	ug/kg	0.335	1.12
71-43-2	Benzene	U	1.12	ug/kg	0.335	1.12
79-01-6	Trichloroethylene	U	1.12	ug/kg	0.368	1.12
78-87-5	1,2-Dichloropropane	U	1.12	ug/kg	0.335	1.12
75-27-4	Bromodichloromethane	U	1.12	ug/kg	0.335	1.12
74-95-3	Dibromomethane	U	1.12	ug/kg	0.335	1.12
108-10-1	4-Methyl-2-pentanone	U	5.58	ug/kg	1.39	5.58
10061-01-5	cis-1,3-Dichloropropylene	U	1.12	ug/kg	0.335	1.12
108-88-3	Toluene	U	1.12	ug/kg	0.335	1.12
10061-02-6	trans-1,3-Dichloropropylene	U	1.12	ug/kg	0.335	1.12
79-00-5	1,1,2-Trichloroethane	U	1.12	ug/kg	0.335	1.12
591-78-6	2-Hexanone	J	2.01	ug/kg	1.67	5.58
142-28-9	1,3-Dichloropropane	U	1.12	ug/kg	0.335	1.12
127-18-4	Tetrachloroethylene	U	1.12	ug/kg	0.335	1.12
124-48-1	Dibromochloromethane	U	1.12	ug/kg	0.335	1.12
106-93-4	1,2-Dibromoethane	U	1.12	ug/kg	0.335	1.12
108-90-7	Chlorobenzene	U	1.12	ug/kg	0.335	1.12

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-2089**	**Date Collected:**	**02/22/2010 12:00**	**Matrix:**	**R**
Lab Sample ID:	**248102006**	**Date Received:**	**02/26/2010 08:45**	**%Moisture:**	**10.3**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE15-10-8394**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**961336**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**03/05/2010 04:55**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**03/04/2010 17:47**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**030410V4\4A442.D**	**Column:**	**DB-624**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.12	ug/kg	0.335	1.12
179601-23-1	m,p-Xylenes	U	2.23	ug/kg	0.335	2.23
95-47-6	o-Xylene	U	1.12	ug/kg	0.335	1.12
100-42-5	Styrene	U	1.12	ug/kg	0.335	1.12
75-25-2	Bromoform	U	1.12	ug/kg	0.335	1.12
79-34-5	1,1,2,2-Tetrachloroethane	U	1.12	ug/kg	0.335	1.12
96-18-4	1,2,3-Trichloropropane	U	1.12	ug/kg	0.335	1.12
108-86-1	Bromobenzene	U	1.12	ug/kg	0.335	1.12
103-65-1	n-Propylbenzene	U	1.12	ug/kg	0.335	1.12
95-49-8	2-Chlorotoluene	U	1.12	ug/kg	0.335	1.12
98-82-8	Isopropylbenzene	U	1.12	ug/kg	0.335	1.12
108-67-8	1,3,5-Trimethylbenzene	U	1.12	ug/kg	0.335	1.12
106-43-4	4-Chlorotoluene	U	1.12	ug/kg	0.335	1.12
98-06-6	tert-Butylbenzene	U	1.12	ug/kg	0.335	1.12
95-63-6	1,2,4-Trimethylbenzene	U	1.12	ug/kg	0.335	1.12
135-98-8	sec-Butylbenzene	U	1.12	ug/kg	0.335	1.12
99-87-6	4-Isopropyltoluene	U	1.12	ug/kg	0.335	1.12
541-73-1	1,3-Dichlorobenzene	U	1.12	ug/kg	0.335	1.12
106-46-7	1,4-Dichlorobenzene	U	1.12	ug/kg	0.335	1.12
104-51-8	n-Butylbenzene	U	1.12	ug/kg	0.335	1.12
96-12-8	1,2-Dibromo-3-chloropropane	U	1.12	ug/kg	0.335	1.12
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.58	ug/kg	1.78	5.58
630-20-6	1,1,1,2-Tetrachloroethane	U	1.12	ug/kg	0.335	1.12
95-50-1	1,2-Dichlorobenzene	U	1.12	ug/kg	0.335	1.12

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	unknown hydrocarbon	4.48	7.46	ug/kg	0	J
	unknown siloxane	16.79	12.4	ug/kg	0	J

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-2089**	**Date Collected:**	**02/22/2010 12:00**	**Matrix:**	**R**
Lab Sample ID:	**248102007**	**Date Received:**	**02/26/2010 08:45**	**%Moisture:**	**11.7**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE15-10-8399**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**961336**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**03/05/2010 05:23**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**03/04/2010 17:48**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**030410V4\4A443.D**	**Column:**	**DB-624**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.13	ug/kg	0.385	1.13
74-87-3	Chloromethane	U	1.13	ug/kg	0.340	1.13
75-01-4	Vinyl chloride	U	1.13	ug/kg	0.340	1.13
74-83-9	Bromomethane	U	1.13	ug/kg	0.340	1.13
75-00-3	Chloroethane	U	1.13	ug/kg	0.340	1.13
75-69-4	Trichlorofluoromethane	U	1.13	ug/kg	0.340	1.13
67-64-1	Acetone	U	5.66	ug/kg	1.88	5.66
75-35-4	1,1-Dichloroethylene	U	1.13	ug/kg	0.340	1.13
74-88-4	Iodomethane	U	5.66	ug/kg	1.81	5.66
75-09-2	Methylene chloride	U	5.66	ug/kg	2.26	5.66
75-15-0	Carbon disulfide	U	5.66	ug/kg	1.42	5.66
156-60-5	trans-1,2-Dichloroethylene	U	1.13	ug/kg	0.340	1.13
75-34-3	1,1-Dichloroethane	U	1.13	ug/kg	0.340	1.13
78-93-3	2-Butanone	U	5.66	ug/kg	1.70	5.66
156-59-2	cis-1,2-Dichloroethylene	U	1.13	ug/kg	0.340	1.13
594-20-7	2,2-Dichloropropane	U	1.13	ug/kg	0.340	1.13
67-66-3	Chloroform	U	1.13	ug/kg	0.340	1.13
74-97-5	Bromochloromethane	U	1.13	ug/kg	0.374	1.13
71-55-6	1,1,1-Trichloroethane	U	1.13	ug/kg	0.340	1.13
563-58-6	1,1-Dichloropropene	U	1.13	ug/kg	0.340	1.13
56-23-5	Carbon tetrachloride	U	1.13	ug/kg	0.340	1.13
107-06-2	1,2-Dichloroethane	U	1.13	ug/kg	0.340	1.13
71-43-2	Benzene	U	1.13	ug/kg	0.340	1.13
79-01-6	Trichloroethylene	U	1.13	ug/kg	0.374	1.13
78-87-5	1,2-Dichloropropane	U	1.13	ug/kg	0.340	1.13
75-27-4	Bromodichloromethane	U	1.13	ug/kg	0.340	1.13
74-95-3	Dibromomethane	U	1.13	ug/kg	0.340	1.13
108-10-1	4-Methyl-2-pentanone	U	5.66	ug/kg	1.42	5.66
10061-01-5	cis-1,3-Dichloropropylene	U	1.13	ug/kg	0.340	1.13
108-88-3	Toluene	U	1.13	ug/kg	0.340	1.13
10061-02-6	trans-1,3-Dichloropropylene	U	1.13	ug/kg	0.340	1.13
79-00-5	1,1,2-Trichloroethane	U	1.13	ug/kg	0.340	1.13
591-78-6	2-Hexanone	U	5.66	ug/kg	1.70	5.66
142-28-9	1,3-Dichloropropane	U	1.13	ug/kg	0.340	1.13
127-18-4	Tetrachloroethylene	U	1.13	ug/kg	0.340	1.13
124-48-1	Dibromochloromethane	U	1.13	ug/kg	0.340	1.13
106-93-4	1,2-Dibromoethane	U	1.13	ug/kg	0.340	1.13
108-90-7	Chlorobenzene	U	1.13	ug/kg	0.340	1.13

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-2089**	**Date Collected:**	**02/22/2010 12:00**	**Matrix:**	**R**
Lab Sample ID:	**248102007**	**Date Received:**	**02/26/2010 08:45**	**%Moisture:**	**11.7**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE15-10-8399**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**961336**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**03/05/2010 05:23**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**03/04/2010 17:48**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**030410V4\4A443.D**	**Column:**	**DB-624**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene		1.17	ug/kg	0.340	1.13
179601-23-1	m,p-Xylenes	U	2.26	ug/kg	0.340	2.26
95-47-6	o-Xylene	U	1.13	ug/kg	0.340	1.13
100-42-5	Styrene	U	1.13	ug/kg	0.340	1.13
75-25-2	Bromoform	U	1.13	ug/kg	0.340	1.13
79-34-5	1,1,2,2-Tetrachloroethane	U	1.13	ug/kg	0.340	1.13
96-18-4	1,2,3-Trichloropropane	U	1.13	ug/kg	0.340	1.13
108-86-1	Bromobenzene	U	1.13	ug/kg	0.340	1.13
103-65-1	n-Propylbenzene	U	1.13	ug/kg	0.340	1.13
95-49-8	2-Chlorotoluene	U	1.13	ug/kg	0.340	1.13
98-82-8	Isopropylbenzene	U	1.13	ug/kg	0.340	1.13
108-67-8	1,3,5-Trimethylbenzene	U	1.13	ug/kg	0.340	1.13
106-43-4	4-Chlorotoluene	U	1.13	ug/kg	0.340	1.13
98-06-6	tert-Butylbenzene	U	1.13	ug/kg	0.340	1.13
95-63-6	1,2,4-Trimethylbenzene	U	1.13	ug/kg	0.340	1.13
135-98-8	sec-Butylbenzene	U	1.13	ug/kg	0.340	1.13
99-87-6	4-Isopropyltoluene	U	1.13	ug/kg	0.340	1.13
541-73-1	1,3-Dichlorobenzene	U	1.13	ug/kg	0.340	1.13
106-46-7	1,4-Dichlorobenzene	U	1.13	ug/kg	0.340	1.13
104-51-8	n-Butylbenzene	U	1.13	ug/kg	0.340	1.13
96-12-8	1,2-Dibromo-3-chloropropane	U	1.13	ug/kg	0.340	1.13
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.66	ug/kg	1.81	5.66
630-20-6	1,1,1,2-Tetrachloroethane	U	1.13	ug/kg	0.340	1.13
95-50-1	1,2-Dichlorobenzene	U	1.13	ug/kg	0.340	1.13

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated Units	Fit	Qual
	unknown siloxane	16.79	ug/kg	0	J

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-2089**	**Date Collected:**	**02/22/2010 12:00**	**Matrix:**	**R**
Lab Sample ID:	**248102008**	**Date Received:**	**02/26/2010 08:45**	**%Moisture:**	**6.1**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE15-10-8397**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**961336**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**03/05/2010 05:50**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**03/04/2010 17:49**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**030410V4\4A444.D**	**Column:**	**DB-624**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.07	ug/kg	0.362	1.07
74-87-3	Chloromethane	U	1.07	ug/kg	0.320	1.07
75-01-4	Vinyl chloride	U	1.07	ug/kg	0.320	1.07
74-83-9	Bromomethane	U	1.07	ug/kg	0.320	1.07
75-00-3	Chloroethane	U	1.07	ug/kg	0.320	1.07
75-69-4	Trichlorofluoromethane	U	1.07	ug/kg	0.320	1.07
67-64-1	Acetone	U	5.33	ug/kg	1.77	5.33
75-35-4	1,1-Dichloroethylene	U	1.07	ug/kg	0.320	1.07
74-88-4	Iodomethane	U	5.33	ug/kg	1.70	5.33
75-09-2	Methylene chloride	U	5.33	ug/kg	2.13	5.33
75-15-0	Carbon disulfide	U	5.33	ug/kg	1.33	5.33
156-60-5	trans-1,2-Dichloroethylene	U	1.07	ug/kg	0.320	1.07
75-34-3	1,1-Dichloroethane	U	1.07	ug/kg	0.320	1.07
78-93-3	2-Butanone	U	5.33	ug/kg	1.60	5.33
156-59-2	cis-1,2-Dichloroethylene	U	1.07	ug/kg	0.320	1.07
594-20-7	2,2-Dichloropropane	U	1.07	ug/kg	0.320	1.07
67-66-3	Chloroform	U	1.07	ug/kg	0.320	1.07
74-97-5	Bromochloromethane	U	1.07	ug/kg	0.352	1.07
71-55-6	1,1,1-Trichloroethane	U	1.07	ug/kg	0.320	1.07
563-58-6	1,I-Dichloropropene	U	1.07	ug/kg	0.320	1.07
56-23-5	Carbon tetrachloride	U	1.07	ug/kg	0.320	1.07
107-06-2	1,2-Dichloroethane	U	1.07	ug/kg	0.320	1.07
71-43-2	Benzene	U	1.07	ug/kg	0.320	1.07
79-01-6	Trichloroethylene	U	1.07	ug/kg	0.352	1.07
78-87-5	1,2-Dichloropropane	U	1.07	ug/kg	0.320	1.07
75-27-4	Bromodichloromethane	U	1.07	ug/kg	0.320	1.07
74-95-3	Dibromomethane	U	1.07	ug/kg	0.320	1.07
108-10-1	4-Methyl-2-pentanone	U	5.33	ug/kg	1.33	5.33
10061-01-5	cis-1,3-Dichloropropylene	U	1.07	ug/kg	0.320	1.07
108-88-3	Toluene	U	1.07	ug/kg	0.320	1.07
10061-02-6	trans-1,3-Dichloropropylene	U	1.07	ug/kg	0.320	1.07
79-00-5	1,1,2-Trichloroethane	U	1.07	ug/kg	0.320	1.07
591-78-6	2-Hexanone	U	5.33	ug/kg	1.60	5.33
142-28-9	1,3-Dichloropropane	U	1.07	ug/kg	0.320	1.07
127-18-4	Tetrachloroethylene	U	1.07	ug/kg	0.320	1.07
124-48-1	Dibromochloromethane	U	1.07	ug/kg	0.320	1.07
106-93-4	1,2-Dibromoethane	U	1.07	ug/kg	0.320	1.07
108-90-7	Chlorobenzene	U	1.07	ug/kg	0.320	1.07

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-2089**	**Date Collected:**	**02/22/2010 12:00**	**Matrix:**	**R**
Lab Sample ID:	**248102008**	**Date Received:**	**02/26/2010 08:45**	**%Moisture:**	**6.1**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE15-10-8397**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**961336**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**03/05/2010 05:50**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**03/04/2010 17:49**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**030410V4\4A444.D**	**Column:**	**DB-624**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.07	ug/kg	0.320	1.07
179601-23-1	m,p-Xylenes	U	2.13	ug/kg	0.320	2.13
95-47-6	o-Xylene	U	1.07	ug/kg	0.320	1.07
100-42-5	Styrene	U	1.07	ug/kg	0.320	1.07
75-25-2	Bromoform	U	1.07	ug/kg	0.320	1.07
79-34-5	1,1,2,2-Tetrachloroethane	U	1.07	ug/kg	0.320	1.07
96-18-4	1,2,3-Trichloropropane	U	1.07	ug/kg	0.320	1.07
108-86-1	Bromobenzene	U	1.07	ug/kg	0.320	1.07
103-65-1	n-Propylbenzene	U	1.07	ug/kg	0.320	1.07
95-49-8	2-Chlorotoluene	U	1.07	ug/kg	0.320	1.07
98-82-8	Isopropylbenzene	U	1.07	ug/kg	0.320	1.07
108-67-8	1,3,5-Trimethylbenzene	U	1.07	ug/kg	0.320	1.07
106-43-4	4-Chlorotoluene	U	1.07	ug/kg	0.320	1.07
98-06-6	tert-Butylbenzene	U	1.07	ug/kg	0.320	1.07
95-63-6	1,2,4-Trimethylbenzene	U	1.07	ug/kg	0.320	1.07
135-98-8	sec-Butylbenzene	U	1.07	ug/kg	0.320	1.07
99-87-6	4-Isopropyltoluene	U	1.07	ug/kg	0.320	1.07
541-73-1	1,3-Dichlorobenzene	U	1.07	ug/kg	0.320	1.07
106-46-7	1,4-Dichlorobenzene	U	1.07	ug/kg	0.320	1.07
104-51-8	n-Butylbenzene	U	1.07	ug/kg	0.320	1.07
96-12-8	1,2-Dibromo-3-chloropropane	U	1.07	ug/kg	0.320	1.07
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.33	ug/kg	1.70	5.33
630-20-6	1,1,1,2-Tetrachloroethane	U	1.07	ug/kg	0.320	1.07
95-50-1	1,2-Dichlorobenzene	U	1.07	ug/kg	0.320	1.07

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	unknown hydrocarbon	4.47	5.45	ug/kg	0	J
	unknown siloxane	16.79	9.83	ug/kg	0	J

Quality Control Summary

Volatile

Surrogate Recovery Report

SDG Number: 10-2089

Matrix Type: SOLID

Sample ID	Client ID	DCED4 %REC	TOL %REC	BFB %REC
1202062052	LCS for batch 961334	93	94	104
1202062053	LCS for batch 961334	94	94	108
1202062144	MB for batch 961334	96	97	114
248102001	RE15-10-8404	94	99	119
248102002	RE15-10-8396	95	96	122
248102003	RE15-10-8393	96	96	119
248102004	RE15-10-8395	97	99	116
248102005	RE15-10-8398	97	96	121
248102006	RE15-10-8394	94	97	122
248102007	RE15-10-8399	97	97	118
248102008	RE15-10-8397	98	96	122
1202062048	RE15-10-8404PS	92	94	108
1202062049	RE15-10-8404PSD	90	94	110

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

Quality Control Summary
Spike Recovery Report

SDG Number: 10-2089
Client ID: RE15-10-8404PS
Lab Sample ID: 1202062048
Instrument: VOA4.I
Analyst: ACJ
Purge Vol: 5 mL

Sample Type: Post Spike
Matrix: R
%Moisture: 9.4
Analysis Date: 03/05/2010 06:17
Prep Batch ID: 961334
Batch ID: 961336
Dilution: 1

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	26.5	53	39-148
74-87-3	PS	Chloromethane	50.0	0.00	U	39.1	78	42-131
75-01-4	PS	Vinyl chloride	50.0	0.00	U	40.1	80	50-127
74-83-9	PS	Bromomethane	50.0	0.00	U	40.2	80	26-135
75-00-3	PS	Chloroethane	50.0	0.00	U	39.5	79	54-128
75-69-4	PS	Trichlorofluoromethane	50.0	0.00	U	40.5	81	55-138
67-64-1	PS	Acetone	250	0.00	U	149	60	20-144
75-35-4	PS	1,1-Dichloroethylene	50.0	0.00	U	40.7	81	55-128
74-88-4	PS	Iodomethane	250	0.00	U	168	67	47-132
75-09-2	PS	Methylene chloride	50.0	0.00	U	37.3	75	56-123
75-15-0	PS	Carbon disulfide	250	0.00	U	212	85	53-133
156-60-5	PS	trans-1,2-Dichloroethylene	50.0	0.00	U	41.3	83	57-119
75-34-3	PS	1,1-Dichloroethane	50.0	0.00	U	42.5	85	62-125
78-93-3	PS	2-Butanone	250	0.00	U	155	62	30-150
156-59-2	PS	cis-1,2-Dichloroethylene	50.0	0.00	U	42.5	85	60-124
594-20-7	PS	2,2-Dichloropropane	50.0	0.00	U	36.8	74	56-129
67-66-3	PS	Chloroform	50.0	0.00	U	42.1	84	62-120
74-97-5	PS	Bromochloromethane	50.0	0.00	U	39.7	79	51-135
71-55-6	PS	1,1,1-Trichloroethane	50.0	0.00	U	39.8	80	58-129
563-58-6	PS	1,1-Dichloropropene	50.0	0.00	U	40.6	81	59-126
56-23-5	PS	Carbon tetrachloride	50.0	0.00	U	39.1	78	55-132
107-06-2	PS	1,2-Dichloroethane	50.0	0.00	U	42.5	85	54-121

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-2089
Client ID: RE15-10-8404PS
Lab Sample ID: 1202062048
Instrument: VOA4.I
Analyst: ACJ
Purge Vol: 5 mL

Sample Type: Post Spike
Matrix: R
%Moisture: 9.4
Analysis Date: 03/05/2010 06:17
Prep Batch ID: 961334
Batch ID: 961336
Dilution: 1

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	41.1	82	58-120
79-01-6	PS	Trichloroethylene	50.0	0.00	U	42.8	86	54-130
78-87-5	PS	1,2-Dichloropropane	50.0	0.00	U	43.1	86	59-121
75-27-4	PS	Bromodichloromethane	50.0	0.00	U	42.7	85	57-130
74-95-3	PS	Dibromomethane	50.0	0.00	U	41.7	83	57-124
108-10-1	PS	4-Methyl-2-pentanone	250	0.00	U	62.1	25 *	40-137
10061-01-5	PS	cis-1,3-Dichloropropylene	50.0	0.00	U	33.6	67	50-131
108-88-3	PS	Toluene	50.0	0.00	U	40.2	80	54-119
10061-02-6	PS	trans-1,3-Dichloropropylene	50.0	0.00	U	37.2	74	47-133
79-00-5	PS	1,1,2-Trichloroethane	50.0	0.00	U	43.2	86	60-130
591-78-6	PS	2-Hexanone	250	0.00	U	53.2	21 *	30-139
142-28-9	PS	1,3-Dichloropropane	50.0	0.00	U	42.1	84	59-125
127-18-4	PS	Tetrachloroethylene	50.0	0.00	U	37.5	75	50-126
124-48-1	PS	Dibromochloromethane	50.0	0.00	U	40.3	81	54-131
106-93-4	PS	1,2-Dibromoethane	50.0	0.00	U	40.3	81	55-127
108-90-7	PS	Chlorobenzene	50.0	0.00	U	39.9	80	50-130
100-41-4	PS	Ethylbenzene	50.0	0.00	U	39.5	79	50-121
179601-23-1	PS	m,p-Xylenes	100	0.00	U	81.6	82	47-125
95-47-6	PS	o-Xylene	50.0	0.00	U	42.3	85	51-127
100-42-5	PS	Styrene	50.0	0.00	U	40.9	82	41-136
75-25-2	PS	Bromoform	50.0	0.00	U	41.5	83	48-143
79-34-5	PS	1,1,2,2-Tetrachloroethane	50.0	0.00	U	41.0	82	52-129

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-2089
Client ID: RE15-10-8404PS
Lab Sample ID: 1202062048
Instrument: VOA4.I
Analyst: ACJ
Purge Vol: 5 mL

Sample Type: Post Spike
Matrix: R
%Moisture: 9.4
Analysis Date: 03/05/2010 06:17
Prep Batch ID: 961334
Batch ID: 961336

Dilution: 1

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	42.5	85	56-139
108-86-1	PS	Bromobenzene	50.0	0.00	U	40.1	80	54-125
103-65-1	PS	n-Propylbenzene	50.0	0.00	U	38.4	77	46-127
95-49-8	PS	2-Chlorotoluene	50.0	0.00	U	42.1	84	47-130
98-82-8	PS	Isopropylbenzene	50.0	0.00	U	38.8	78	42-126
108-67-8	PS	1,3,5-Trimethylbenzene	50.0	0.00	U	42.6	85	44-132
106-43-4	PS	4-Chlorotoluene	50.0	0.00	U	40.5	81	46-127
98-06-6	PS	tert-Butylbenzene	50.0	0.00	U	41.6	83	48-136
95-63-6	PS	1,2,4-Trimethylbenzene	50.0	0.00	U	41.8	84	42-132
135-98-8	PS	sec-Butylbenzene	50.0	0.00	U	38.3	77	47-130
99-87-6	PS	4-Isopropyltoluene	50.0	0.00	U	38.7	77	36-142
541-73-1	PS	1,3-Dichlorobenzene	50.0	0.00	U	38.6	77	41-130
106-46-7	PS	1,4-Dichlorobenzene	50.0	0.00	U	37.5	75	41-126
104-51-8	PS	n-Butylbenzene	50.0	0.00	U	39.4	79	37-136
96-12-8	PS	1,2-Dibromo-3-chloropropane	50.0	0.00	U	39.6	79	42-143
630-20-6	PS	1,1,1,2-Tetrachloroethane	50.0	0.00	U	41.4	83	58-127
95-50-1	PS	1,2-Dichlorobenzene	50.0	0.00	U	38.7	77	42-128

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-2089
Client ID: RE15-10-8404PSD
Lab Sample ID: 1202062049
Instrument: VOA4.I
Analyst: ACJ
Purge Vol: 5 mL

Sample Type: Post Spike Duplicate
Matrix: R
%Moisture: 9.4
Analysis Date: 03/05/2010 06:45
Prep Batch ID: 961334
Batch ID: 961336
Dilution: 1

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
75-71-8	PSD	Dichlorodifluoromethane	50.0	0.00	U	26.1	52	39-148	1	0-19
74-87-3	PSD	Chloromethane	50.0	0.00	U	36.6	73	42-131	7	0-23
75-01-4	PSD	Vinyl chloride	50.0	0.00	U	39.6	79	50-127	1	0-23
74-83-9	PSD	Bromomethane	50.0	0.00	U	39.2	78	26-135	3	0-22
75-00-3	PSD	Chloroethane	50.0	0.00	U	39.9	80	54-128	1	0-25
75-69-4	PSD	Trichlorofluoromethane	50.0	0.00	U	40.2	80	55-138	1	0-21
67-64-1	PSD	Acetone	250	0.00	U	140	56	20-144	6	0-22
75-35-4	PSD	1,1-Dichloroethylene	50.0	0.00	U	40.3	81	55-128	1	0-20
74-88-4	PSD	Iodomethane	250	0.00	U	173	69	47-132	3	0-20
75-09-2	PSD	Methylene chloride	50.0	0.00	U	36.9	74	56-123	1	0-20
75-15-0	PSD	Carbon disulfide	250	0.00	U	206	82	53-133	3	0-22
156-60-5	PSD	trans-1,2-Dichloroethylene	50.0	0.00	U	41.1	82	57-119	0	0-20
75-34-3	PSD	1,1-Dichloroethane	50.0	0.00	U	42.3	85	62-125	0	0-20
78-93-3	PSD	2-Butanone	250	0.00	U	143	57	30-150	8	0-21
156-59-2	PSD	cis-1,2-Dichloroethylene	50.0	0.00	U	41.2	82	60-124	3	0-20
594-20-7	PSD	2,2-Dichloropropane	50.0	0.00	U	36.4	73	56-129	1	0-20
67-66-3	PSD	Chloroform	50.0	0.00	U	40.8	82	62-120	3	0-25
74-97-5	PSD	Bromochloromethane	50.0	0.00	U	39.6	79	51-135	0	0-20
71-55-6	PSD	1,1,1-Trichloroethane	50.0	0.00	U	40.0	80	58-129	0	0-20
563-58-6	PSD	1,1-Dichloropropene	50.0	0.00	U	40.3	81	59-126	1	0-20
56-23-5	PSD	Carbon tetrachloride	50.0	0.00	U	39.5	79	55-132	1	0-20
107-06-2	PSD	1,2-Dichloroethane	50.0	0.00	U	41.3	83	54-121	3	0-20

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-2089
Client ID: RE15-10-8404PSD
Lab Sample ID: 1202062049
Instrument: VOA4.I
Analyst: ACJ
Purge Vol: 5 mL

Sample Type: Post Spike Duplicate
Matrix: R
%Moisture: 9.4
Analysis Date: 03/05/2010 06:45
Prep Batch ID: 961334
Batch ID: 961336
Dilution: 1

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	40.3	81	58-120	2	0-20
79-01-6	PSD	Trichloroethylene	50.0	0.00	U	43.2	86	54-130	1	0-23
78-87-5	PSD	1,2-Dichloropropane	50.0	0.00	U	42.2	84	59-121	2	0-20
75-27-4	PSD	Bromodichloromethane	50.0	0.00	U	41.8	84	57-130	2	0-20
74-95-3	PSD	Dibromomethane	50.0	0.00	U	40.3	81	57-124	3	0-20
108-10-1	PSD	4-Methyl-2-pentanone	250	0.00	U	68.0	27 *	40-137	9	0-25
10061-01-5	PSD	cis-1,3-Dichloropropylene	50.0	0.00	U	33.7	67	50-131	0	0-20
108-88-3	PSD	Toluene	50.0	0.00	U	40.5	81	54-119	1	0-23
10061-02-6	PSD	trans-1,3-Dichloropropylene	50.0	0.00	U	37.2	74	47-133	0	0-24
79-00-5	PSD	1,1,2-Trichloroethane	50.0	0.00	U	42.9	86	60-130	1	0-20
591-78-6	PSD	2-Hexanone	250	0.00	U	53.5	21 *	30-139	1	0-21
142-28-9	PSD	1,3-Dichloropropane	50.0	0.00	U	41.4	83	59-125	2	0-20
127-18-4	PSD	Tetrachloroethylene	50.0	0.00	U	38.8	78	50-126	3	0-20
124-48-1	PSD	Dibromochloromethane	50.0	0.00	U	40.9	82	54-131	1	0-23
106-93-4	PSD	1,2-Dibromoethane	50.0	0.00	U	41.2	82	55-127	2	0-23
108-90-7	PSD	Chlorobenzene	50.0	0.00	U	40.3	81	50-130	1	0-24
100-41-4	PSD	Ethylbenzene	50.0	0.00	U	41.7	83	50-121	5	0-24
179601-23-1	PSD	m,p-Xylenes	100	0.00	U	82.8	83	47-125	1	0-25
95-47-6	PSD	o-Xylene	50.0	0.00	U	42.9	86	51-127	1	0-24
100-42-5	PSD	Styrene	50.0	0.00	U	41.9	84	41-136	2	0-24
75-25-2	PSD	Bromoform	50.0	0.00	U	42.6	85	48-143	3	0-20
79-34-5	PSD	1,1,2,2-Tetrachloroethane	50.0	0.00	U	39.9	80	52-129	3	0-20

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-2089
Client ID: RE15-10-8404PSD
Lab Sample ID: 1202062049
Instrument: VOA4.I
Analyst: ACJ
Purge Vol: 5 mL

Sample Type: Post Spike Duplicate
Matrix: R
%Moisture: 9.4
Analysis Date: 03/05/2010 06:45
Prep Batch ID: 961334
Batch ID: 961336
Dilution: 1

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	41.2	82	56-139	3	0-34
108-86-1	PSD	Bromobenzene	50.0	0.00	U	40.9	82	54-125	2	0-22
103-65-1	PSD	n-Propylbenzene	50.0	0.00	U	38.9	78	46-127	1	0-25
95-49-8	PSD	2-Chlorotoluene	50.0	0.00	U	43.5	87	47-130	3	0-24
98-82-8	PSD	Isopropylbenzene	50.0	0.00	U	39.7	79	42-126	2	0-22
108-67-8	PSD	1,3,5-Trimethylbenzene	50.0	0.00	U	43.9	88	44-132	3	0-25
106-43-4	PSD	4-Chlorotoluene	50.0	0.00	U	41.6	83	46-127	3	0-26
98-06-6	PSD	tert-Butylbenzene	50.0	0.00	U	43.1	86	48-136	4	0-24
95-63-6	PSD	1,2,4-Trimethylbenzene	50.0	0.00	U	42.2	84	42-132	1	0-26
135-98-8	PSD	sec-Butylbenzene	50.0	0.00	U	38.2	76	47-130	0	0-27
99-87-6	PSD	4-Isopropyltoluene	50.0	0.00	U	39.6	79	36-142	3	0-27
541-73-1	PSD	1,3-Dichlorobenzene	50.0	0.00	U	39.3	79	41-130	2	0-25
106-46-7	PSD	1,4-Dichlorobenzene	50.0	0.00	U	38.4	77	41-126	2	0-25
104-51-8	PSD	n-Butylbenzene	50.0	0.00	U	40.1	80	37-136	2	0-29
96-12-8	PSD	1,2-Dibromo-3-chloropropane	50.0	0.00	U	38.6	77	42-143	2	0-21
630-20-6	PSD	1,1,1,2-Tetrachloroethane	50.0	0.00	U	43.2	86	58-127	4	0-20
95-50-1	PSD	1,2-Dichlorobenzene	50.0	0.00	U	39.2	78	42-128	1	0-24

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-2089
Client ID: LCS for batch 961334
Lab Sample ID: 1202062052
Instrument: VOA4.I
Analyst: ACJ
Purge Vol: 5 mL

Sample Type: Laboratory Control Sample
Matrix: SOIL
Analysis Date: 03/04/2010 23:27
Dilution: 1
Prep Batch ID: 961334
Batch ID: 961336

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	30.7	61	52-151
74-87-3	LCS	Chloromethane	50.0	0.0	39.0	78	56-130
75-01-4	LCS	Vinyl chloride	50.0	0.0	42.7	85	66-130
74-83-9	LCS	Bromomethane	50.0	0.0	45.4	91	70-126
75-00-3	LCS	Chloroethane	50.0	0.0	43.7	87	67-129
75-69-4	LCS	Trichlorofluoromethane	50.0	0.0	45.2	90	73-143
67-64-1	LCS	Acetone	250	0.0	227	91	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	210	84	72-125
75-09-2	LCS	Methylene chloride	50.0	0.0	39.0	78	64-121
75-15-0	LCS	Carbon disulfide	250	0.0	236	95	70-133
156-60-5	LCS	trans-1,2-Dichloroethylene	50.0	0.0	45.1	90	73-120
75-34-3	LCS	1,1-Dichloroethane	50.0	0.0	45.8	92	73-120
78-93-3	LCS	2-Butanone	250	0.0	232	93	32-145
156-59-2	LCS	cis-1,2-Dichloroethylene	50.0	0.0	45.2	90	74-124
594-20-7	LCS	2,2-Dichloropropane	50.0	0.0	42.5	85	73-134
67-66-3	LCS	Chloroform	50.0	0.0	44.9	90	74-120
74-97-5	LCS	Bromochloromethane	50.0	0.0	43.9	88	73-122
71-55-6	LCS	1,1,1-Trichloroethane	50.0	0.0	44.6	89	74-132
563-58-6	LCS	1,1-Dichloropropene	50.0	0.0	45.7	91	79-128
56-23-5	LCS	Carbon tetrachloride	50.0	0.0	44.6	89	75-135
107-06-2	LCS	1,2-Dichloroethane	50.0	0.0	45.3	91	65-120

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-2089
Client ID: LCS for batch 961334
Lab Sample ID: 1202062052
Instrument: VOA4.I
Analyst: ACJ
Purge Vol: 5 mL

Sample Type: Laboratory Control Sample
Matrix: SOIL
Analysis Date: 03/04/2010 23:27
Prep Batch ID: 961334
Batch ID: 961336
Dilution: 1

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	43.9	88	74-120
79-01-6	LCS	Trichloroethylene	50.0	0.0	45.3	91	77-124
78-87-5	LCS	1,2-Dichloropropane	50.0	0.0	45.4	91	73-120
75-27-4	LCS	Bromodichloromethane	50.0	0.0	46.2	92	75-128
74-95-3	LCS	Dibromomethane	50.0	0.0	44.5	89	75-120
108-10-1	LCS	4-Methyl-2-pentanone	250	0.0	238	95	63-133
10061-01-5	LCS	cis-1,3-Dichloropropylene	50.0	0.0	44.8	90	78-127
108-88-3	LCS	Toluene	50.0	0.0	43.1	86	74-120
10061-02-6	LCS	trans-1,3-Dichloropropylene	50.0	0.0	45.7	91	70-125
79-00-5	LCS	1,1,2-Trichloroethane	50.0	0.0	46.3	93	75-120
591-78-6	LCS	2-Hexanone	250	0.0	230	92	40-153
142-28-9	LCS	1,3-Dichloropropane	50.0	0.0	45.7	91	73-120
127-18-4	LCS	Tetrachloroethylene	50.0	0.0	42.7	85	72-126
124-48-1	LCS	Dibromochloromethane	50.0	0.0	45.4	91	74-126
106-93-4	LCS	1,2-Dibromoethane	50.0	0.0	45.1	90	79-120
108-90-7	LCS	Chlorobenzene	50.0	0.0	42.8	86	76-120
100-41-4	LCS	Ethylbenzene	50.0	0.0	43.1	86	74-120
179601-23-1	LCS	m,p-Xylenes	100	0.0	86.9	87	76-120
95-47-6	LCS	o-Xylene	50.0	0.0	43.9	88	76-122
100-42-5	LCS	Styrene	50.0	0.0	45.4	91	75-125
75-25-2	LCS	Bromoform	50.0	0.0	46.2	92	68-135
79-34-5	LCS	1,1,2,2-Tetrachloroethane	50.0	0.0	43.6	87	72-122

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-2089
Client ID: LCS for batch 961334
Lab Sample ID: 1202062052
Instrument: VOA4.I
Analyst: ACJ
Purge Vol: 5 mL

Sample Type: Laboratory Control Sample
Matrix: SOIL
Analysis Date: 03/04/2010 23:27
Dilution: 1
Prep Batch ID: 961334
Batch ID: 961336

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	43.6	87	72-129
108-86-1	LCS	Bromobenzene	50.0	0.0	42.7	85	74-120
103-65-1	LCS	n-Propylbenzene	50.0	0.0	43.4	87	70-120
95-49-8	LCS	2-Chlorotoluene	50.0	0.0	43.3	87	70-120
98-82-8	LCS	Isopropylbenzene	50.0	0.0	42.7	85	60-121
108-67-8	LCS	1,3,5-Trimethylbenzene	50.0	0.0	43.5	87	71-121
106-43-4	LCS	4-Chlorotoluene	50.0	0.0	42.2	84	71-120
98-06-6	LCS	tert-Butylbenzene	50.0	0.0	42.3	85	75-123
95-63-6	LCS	1,2,4-Trimethylbenzene	50.0	0.0	43.0	86	73-120
135-98-8	LCS	sec-Butylbenzene	50.0	0.0	42.9	86	74-123
99-87-6	LCS	4-Isopropyltoluene	50.0	0.0	43.4	87	76-127
541-73-1	LCS	1,3-Dichlorobenzene	50.0	0.0	41.7	83	75-120
106-46-7	LCS	1,4-Dichlorobenzene	50.0	0.0	41.6	83	73-120
104-51-8	LCS	n-Butylbenzene	50.0	0.0	43.1	86	73-128
96-12-8	LCS	1,2-Dibromo-3-chloropropane	50.0	0.0	45.6	91	69-136
630-20-6	LCS	1,1,1,2-Tetrachloroethane	50.0	0.0	44.3	89	75-124
95-50-1	LCS	1,2-Dichlorobenzene	50.0	0.0	41.9	84	75-120

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-2089
Client ID: LCS for batch 961334
Lab Sample ID: 1202062053
Instrument: VOA4.I
Analyst: ACJ
Purge Vol: 5 mL

Sample Type: Laboratory Control Sample
Matrix: SOIL
Analysis Date: 03/05/2010 00:22
Dilution: 1
Prep Batch ID: 961334
Batch ID: 961336

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	188	75	67-140

Method Blank Summary

SDG Number:	10-2089	Client:	LANL010	Matrix:	SOIL
Client ID:	MB for batch 961334	Instrument ID:	VOA4.I	Data File:	030410V4\4A433BL.D
Lab Sample ID:	1202062144	Prep Date:	03/04/2010 22:00	Analyzed:	03/05/10 00:50
Column:	DB-624				

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

	Client Sample ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
01	LCS for batch 961334	1202062052	030410V4\4A430LL.D	03/04/10	2327
02	LCS for batch 961334	1202062053	030410V4\4A432SL.D	03/05/10	0022
03	RE15-10-8404	248102001	030410V4\4A437.D	03/05/10	0239
04	RE15-10-8396	248102002	030410V4\4A438.D	03/05/10	0306
05	RE15-10-8393	248102003	030410V4\4A439.D	03/05/10	0333
06	RE15-10-8395	248102004	030410V4\4A440.D	03/05/10	0401
07	RE15-10-8398	248102005	030410V4\4A441.D	03/05/10	0428
08	RE15-10-8394	248102006	030410V4\4A442.D	03/05/10	0455
09	RE15-10-8399	248102007	030410V4\4A443.D	03/05/10	0523
10	RE15-10-8397	248102008	030410V4\4A444.D	03/05/10	0550
11	RE15-10-8404PS	1202062048	030410V4\4A445.D	03/05/10	0617
12	RE15-10-8404PSD	1202062049	030410V4\4A446.D	03/05/10	0645

Instrument Performance Check

BFB

Lab Name GEL Laboratories LLC **Client SDG:** 10-2089

Instrument ID: VOA4.I **Injection Date/Time:** 01-MAR-10 19:08

Column Description: DB-624 **Lab File ID** 030110V4\4A101.D

m/e	Ion Abundance Criteria	% Relative Abundance
50	15.0 - 40.0% of mass 95	19.1
75	30.0 - 60.0% of mass 95	49.8
95	Base Peak, 100% Relative Abundance	100
96	5.0 - 9.0% of mass 95	7
173	Less than 2.0% of mass 174	0.5
174	50.0 - 100.0% of mass 95	82.3
175	5.0 -9.0% of mass 174	7
176	95.0 - 101.0% of mass 174	95.5
177	5.0 - 9.0% of mass 176	6.7

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

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
ICALMIX[A]	W4VM100301-01	030110V4\4A103.D	01-MAR-10 20:03
ICALMIX[A]	W4VM100301-02	030110V4\4A104.D	01-MAR-10 20:30
ICALMIX[A]	W4VM100301-04	030110V4\4A106.D	01-MAR-10 21:26
ICALMIX[A]	W4VM100301-05	030110V4\4A107.D	01-MAR-10 21:54
ICALMIX[A]	W4VM100301-06	030110V4\4A108.D	01-MAR-10 22:21
ICALMIX[A]	W4VM100301-08	030110V4\4A110.D	01-MAR-10 23:16
ICALMIX[A]	W4VM100301-09	030110V4\4A111.D	01-MAR-10 23:44
ICALMIX[B]	W4VM100301-10	030110V4\4A113.D	02-MAR-10 00:39
ICALMIX[B]	W4VM100301-11	030110V4\4A114.D	02-MAR-10 01:06
ICALMIX[B]	W4VM100301-12	030110V4\4A115.D	02-MAR-10 01:34
ICALMIX[B]	W4VM100301-13	030110V4\4A116.D	02-MAR-10 02:01
ICALMIX[B]	W4VM100301-14	030110V4\4A117.D	02-MAR-10 02:28
ICALMIX[B]	W4VM100301-15	030110V4\4A118.D	02-MAR-10 02:56
ICALMIX[B]	W4VM100301-16	030110V4\4A119.D	02-MAR-10 03:23
ICVMIX[A]01	W4VM100301-18	030110V4\4A122.D	02-MAR-10 04:45
ICVMIX[B]02	W4VM100301-19	030110V4\4A123.D	02-MAR-10 05:13

Instrument Performance Check

BFB

Lab Name GEL Laboratories LLC **Client SDG:** 10-2089

Instrument ID: VOA4.I **Injection Date/Time:** 04-MAR-10 22:05

Column Description: DB-624 **Lab File ID** 030410V4\4A427.D

m/e	Ion Abundance Criteria	% Relative Abundance
50	15.0 - 40.0% of mass 95	22.1
75	30.0 - 60.0% of mass 95	53.3
95	Base Peak, 100% Relative Abundance	100
96	5.0 - 9.0% of mass 95	6.9
173	Less than 2.0% of mass 174	0.6
174	50.0 - 100.0% of mass 95	79
175	5.0 -9.0% of mass 174	6.9
176	95.0 - 101.0% of mass 174	97.6
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]02	W4VM100304-05	030410V4\4A428.D	04-MAR-10 22:33
BLK01LCS	1202062052	030410V4\4A430LL.D	04-MAR-10 23:27
CCVMIX[B]03	W4VM100304-08	030410V4\4A431.D	04-MAR-10 23:55
BLK01SLCS	1202062053	030410V4\4A432SL.D	05-MAR-10 00:22
BLK01	1202062144	030410V4\4A433BL.D	05-MAR-10 00:50
RE15-10-8404	248102001	030410V4\4A437.D	05-MAR-10 02:39
RE15-10-8396	248102002	030410V4\4A438.D	05-MAR-10 03:06
RE15-10-8393	248102003	030410V4\4A439.D	05-MAR-10 03:33
RE15-10-8395	248102004	030410V4\4A440.D	05-MAR-10 04:01
RE15-10-8398	248102005	030410V4\4A441.D	05-MAR-10 04:28
RE15-10-8394	248102006	030410V4\4A442.D	05-MAR-10 04:55
RE15-10-8399	248102007	030410V4\4A443.D	05-MAR-10 05:23
RE15-10-8397	248102008	030410V4\4A444.D	05-MAR-10 05:50
RE15-10-8404MS	1202062048	030410V4\4A445.D	05-MAR-10 06:17
RE15-10-8404MSD	1202062049	030410V4\4A446.D	05-MAR-10 06:45

Internal Standard
Area and RT Summary

Lab Name : GEL Laboratories LLC

Instrument: VOA4.I

GC Column: DB-624

Client SDG: 10-2089

STD Analysis Time: 04-MAR-10 22:33

Data File: C:\msdchem\1\DATA\030410V4\4A428.D

	Fluorobenzene			Chlorobenzene-d5			1,4-Dichlorobenzene-d4		
	Area	#	RT #	Area	#	RT #	Area	#	RT #
12 Hour STD	1154774		10.6	985740		13.8	692103		16.2
Upper Limit	2309548		11.1	1971480		14.3	1384206		16.7
Lower Limit	577387		10.1	492870		13.3	346052		15.7
Sample ID									
BLK01LCS	1279619		10.6	1067536		13.8	721537		16.2
BLK01SLCS	1301658		10.6	1074238		13.8	695756		16.2
BLK01	1214864		10.6	981534		13.8	582150		16.2
RE15-10-8404	1104941		10.6	859676		13.8	468144		16.2
RE15-10-8396	1007311		10.6	813808		13.8	442393		16.2
RE15-10-8393	1014468		10.6	830920		13.8	471707		16.2
RE15-10-8395	955368		10.6	771549		13.8	447146		16.2
RE15-10-8398	1021912		10.6	830080		13.8	448556		16.2
RE15-10-8394	1010612		10.6	816483		13.8	460628		16.2
RE15-10-8399	1038221		10.6	836606		13.8	476610		16.2
RE15-10-8397	1007475		10.6	808964		13.8	443046		16.2
RE15-10-8404MS	1077178		10.6	899665		13.8	593146		16.2
RE15-10-8404MSD	1165584		10.6	950240		13.8	611627		16.2

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area

RT Upper Limit = + 0.50 minutes of internal standard RT
RT Lower Limit = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Value outside of QC Limits

Sample Data

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-2089**	**Date Collected:**	**02/22/2010 12:00**	**Matrix:**	**R**
Lab Sample ID:	**248102001**	**Date Received:**	**02/26/2010 08:45**	**%Moisture:**	**9.4**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE15-10-8404**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**961336**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**03/05/2010 02:39**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**03/04/2010 17:40**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**030410V4\4A437.D**	**Column:**	**DB-624**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.10	ug/kg	0.375	1.10
74-87-3	Chloromethane	U	1.10	ug/kg	0.331	1.10
75-01-4	Vinyl chloride	U	1.10	ug/kg	0.331	1.10
74-83-9	Bromomethane	U	1.10	ug/kg	0.331	1.10
75-00-3	Chloroethane	U	1.10	ug/kg	0.331	1.10
75-69-4	Trichlorofluoromethane	U	1.10	ug/kg	0.331	1.10
67-64-1	Acetone	U	5.52	ug/kg	1.83	5.52
75-35-4	1,1-Dichloroethylene	U	1.10	ug/kg	0.331	1.10
74-88-4	Iodomethane	U	5.52	ug/kg	1.77	5.52
75-09-2	Methylene chloride	U	5.52	ug/kg	2.21	5.52
75-15-0	Carbon disulfide	U	5.52	ug/kg	1.38	5.52
156-60-5	trans-1,2-Dichloroethylene	U	1.10	ug/kg	0.331	1.10
75-34-3	1,1-Dichloroethane	U	1.10	ug/kg	0.331	1.10
78-93-3	2-Butanone	U	5.52	ug/kg	1.66	5.52
156-59-2	cis-1,2-Dichloroethylene	U	1.10	ug/kg	0.331	1.10
594-20-7	2,2-Dichloropropane	U	1.10	ug/kg	0.331	1.10
67-66-3	Chloroform	U	1.10	ug/kg	0.331	1.10
74-97-5	Bromochloromethane	U	1.10	ug/kg	0.364	1.10
71-55-6	1,1,1-Trichloroethane	U	1.10	ug/kg	0.331	1.10
563-58-6	1,1-Dichloropropene	U	1.10	ug/kg	0.331	1.10
56-23-5	Carbon tetrachloride	U	1.10	ug/kg	0.331	1.10
107-06-2	1,2-Dichloroethane	U	1.10	ug/kg	0.331	1.10
71-43-2	Benzene	U	1.10	ug/kg	0.331	1.10
79-01-6	Trichloroethylene	U	1.10	ug/kg	0.364	1.10
78-87-5	1,2-Dichloropropane	U	1.10	ug/kg	0.331	1.10
75-27-4	Bromodichloromethane	U	1.10	ug/kg	0.331	1.10
74-95-3	Dibromomethane	U	1.10	ug/kg	0.331	1.10
108-10-1	4-Methyl-2-pentanone	U	5.52	ug/kg	1.38	5.52
10061-01-5	cis-1,3-Dichloropropylene	U	1.10	ug/kg	0.331	1.10
108-88-3	Toluene	U	1.10	ug/kg	0.331	1.10
10061-02-6	trans-1,3-Dichloropropylene	U	1.10	ug/kg	0.331	1.10
79-00-5	1,1,2-Trichloroethane	U	1.10	ug/kg	0.331	1.10
591-78-6	2-Hexanone	U	5.52	ug/kg	1.66	5.52
142-28-9	1,3-Dichloropropane	U	1.10	ug/kg	0.331	1.10
127-18-4	Tetrachloroethylene	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:	**10-2089**	**Date Collected:**	**02/22/2010 12:00**	**Matrix:**	**R**
Lab Sample ID:	**248102001**	**Date Received:**	**02/26/2010 08:45**	**%Moisture:**	**9.4**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE15-10-8404**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**961336**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**03/05/2010 02:39**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**03/04/2010 17:40**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**030410V4\4A437.D**	**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	U	2.21	ug/kg	0.331	2.21
95-47-6	o-Xylene	U	1.10	ug/kg	0.331	1.10
100-42-5	Styrene	U	1.10	ug/kg	0.331	1.10
75-25-2	Bromoform	U	1.10	ug/kg	0.331	1.10
79-34-5	1,1,2,2-Tetrachloroethane	U	1.10	ug/kg	0.331	1.10
96-18-4	1,2,3-Trichloropropane	U	1.10	ug/kg	0.331	1.10
108-86-1	Bromobenzene	U	1.10	ug/kg	0.331	1.10
103-65-1	n-Propylbenzene	U	1.10	ug/kg	0.331	1.10
95-49-8	2-Chlorotoluene	U	1.10	ug/kg	0.331	1.10
98-82-8	Isopropylbenzene	U	1.10	ug/kg	0.331	1.10
108-67-8	1,3,5-Trimethylbenzene	U	1.10	ug/kg	0.331	1.10
106-43-4	4-Chlorotoluene	U	1.10	ug/kg	0.331	1.10
98-06-6	tert-Butylbenzene	U	1.10	ug/kg	0.331	1.10
95-63-6	1,2,4-Trimethylbenzene	U	1.10	ug/kg	0.331	1.10
135-98-8	sec-Butylbenzene	U	1.10	ug/kg	0.331	1.10
99-87-6	4-Isopropyltoluene	U	1.10	ug/kg	0.331	1.10
541-73-1	1,3-Dichlorobenzene	U	1.10	ug/kg	0.331	1.10
106-46-7	I,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-Trifluoroetha *Trichlorotrifluoroethane*	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
	unknown hydrocarbon	4.48	6.56	ug/kg	0	J
	unknown siloxane	16.79	8.58	ug/kg	0	J

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030410V4\
Data File : 4A437.D
Acq On : 5 Mar 2010 2:39 am
Operator : ACJ
InstName : VOA4
Sample : |248102001|961336|1|VOAF|1|VOA8260BS|
Misc : LANL 5G N/A SOIL
ALS Vial : 37 Sample Multiplier: 1

Quant Time: Mar 11 18:38:26 2010
Quant Method : C:\msdchem\1\DATA\030110V4\VOA4-8260-030110.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 02 15:03:40 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	Dev(Min)
Internal Standards								
1) Fluorobenzene	10.619	10.620	1.000	96	1105267	50.00	ug/L	0.00
41) Chlorobenzene-d5	13.771	13.771	1.000	117	859676	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	16.179	16.180	1.000	152	468060	50.00	ug/L	0.00
82) B Fluorobenzene	10.619	10.619	1.000	96	1104941	50.00	ug/L	0.00
103) B Chlorobenzene-d5	13.771	13.771	1.000	117	859676	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	16.179	16.179	1.000	152	468144	50.00	ug/L	0.00
System Monitoring Compounds								Dev(Min)
29) 1,2-Dichloroethane-d4	10.259	10.260	0.966	65	215980	47.24	ug/L	0.00
Spiked Amount 50.000	Range 66 - 134		Recovery = 94.48%					
43) Toluene-d8	12.253	12.247	0.890	98	789889	49.53	ug/L	0.00
Spiked Amount 50.000	Range 71 - 128		Recovery = 99.06%					
61) Bromofluorobenzene	14.953	14.954	0.924	95	546230	59.65	ug/L	0.00
Spiked Amount 50.000	Range 65 - 130		Recovery = 119.30%					

Target Compounds	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	QValue
2) Dichlorodifluoromethane	0.000	4.911	0.000		0	N.D.		
3) Chloromethane	0.000	5.291	0.000		0	N.D.		
4) Vinyl chloride	0.000	5.521	0.000		0	N.D.		
5) Bromomethane	0.000	6.137	0.000		0	N.D.		
6) Chloroethane	0.000	6.295	0.000		0	N.D.		
7) Trichlorofluoromethane	0.000	6.669	0.000		0	N.D.		
8) Ethyl ether	6.991	6.998	0.658	59	522	N.D.		
9) Acetone	7.369	7.352	0.694	43	5121	N.D.		
10) 1,1-Dichloroethylene	0.000	7.389	0.000		0	N.D.		
11) Iodomethane	7.619	7.663	0.718	142	222	N.D.		
12) Acetonitrile	7.717	7.699	0.727	41	396	N.D.		
13) Methyl acetate	7.839	7.748	0.738	43	116	N.D.		
14) Carbon disulfide	7.760	7.773	0.731	76	1999	N.D.		
15) Methylene chloride	7.936	7.931	0.747	84	9881	N.D.		
16) tert-Butyl methyl ether	0.000	8.242	0.000		0	N.D.		
17) trans-1,2-Dichloroethy...	0.000	8.285	0.000		0	N.D.		
18) Vinyl acetate	8.711	8.705	0.820	43	148	N.D.		
19) 1,1-Dichloroethane	0.000	8.760	0.000		0	N.D.		
20) 2-Butanone	9.326	9.327	0.878	43	1221	N.D.		
21) cis-1,2-Dichloroethylene	0.000	9.388	0.000		0	N.D.		
22) 2,2-Dichloropropane	0.000	9.419	0.000		0	N.D.		
23) Bromochloromethane	0.000	9.656	0.000		0	N.D.		
24) Chloroform	9.686	9.687	0.912	83	130	N.D.		
25) 1,1,1-Trichloroethane	0.000	9.979	0.000		0	N.D.		
26) Cyclohexane	0.000	10.083	0.000		0	N.D.		
27) 1,1-Dichloropropene	0.000	10.132	0.000		0	N.D.		
28) Carbon tetrachloride	0.000	10.175	0.000		0	N.D.		
30) 1,2-Dichloroethane	0.000	10.339	0.000		0	N.D.		
31) Benzene	10.393	10.370	0.979	78	932	N.D.		
32) Cyclohexene	10.613	10.492	0.999	67	389	N.D.		
33) n-Butyl alcohol	10.686	10.693	1.006	56	375	N.D.		
34) Trichloroethylene	0.000	11.004	0.000		0	N.D.		
35) 1,2-Dichloropropane	0.000	11.241	0.000		0	N.D.		
36) Methylcyclohexane	11.265	11.260	1.061	83	103	N.D.		
37) Dibromomethane	0.000	11.376	0.000		0	N.D.		
38) Bromodichloromethane	0.000	11.485	0.000		0	N.D.		
39) 2-Chloroethylvinyl ether	0.000	11.699	0.000		0	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030410V4\
Data File : 4A437.D
Acq On : 5 Mar 2010 2:39 am
Operator : ACJ
InstName : VOA4
Sample : |248102001|961336|1|VOAF|1|VOA8260BS|
Misc : LANL 5G N/A SOIL
ALS Vial : 37 Sample Multiplier: 1

Quant Time: Mar 11 18:38:26 2010
Quant Method : C:\msdchem\1\DATA\030110V4\VOA4-8260-030110.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 02 15:03:40 2010
Response via : Initial Calibration
Integrator: RTE

	Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
40)	cis-1,3-Dichloropropylene	0.000	11.930	0.000		0	N.D.	
42)	4-Methyl-2-pentanone	0.000	12.016	0.000		0	N.D.	
44)	Toluene	12.326	12.320	0.895	91	2624	N.D.	
45)	trans-1,3-Dichloroprop...	12.466	12.461	0.905	75	478	N.D.	
46)	1,1,2-Trichloroethane	0.000	12.680	0.000		0	N.D.	
47)	2-Hexanone	12.856	12.857	0.934	43	479	N.D.	
48)	1,3-Dichloropropane	0.000	12.875	0.000		0	N.D.	
49)	Tetrachloroethylene	12.923	12.918	0.938	164	234	N.D.	
50)	Dibromochloromethane	0.000	13.144	0.000		0	N.D.	
51)	1,2-Dibromoethane	0.000	13.320	0.000		0	N.D.	
52)	Chlorobenzene	13.801	13.802	1.002	112	664	N.D.	
53)	1,1,1,2-Tetrachloroethane	0.000	13.851	0.000		0	N.D.	
54)	Ethylbenzene	13.862	13.863	1.007	91	1906	N.D.	
55)	m,p-Xylenes	13.966	13.973	1.014	106	2135	N.D.	
56)	o-Xylene	14.398	14.399	1.046	106	752	N.D.	
57)	Styrene	14.398	14.399	1.046	104	1003	N.D.	
59)	Bromoform	14.661	14.655	0.906	173	434	N.D.	
60)	Isopropylbenzene	14.764	14.759	0.913	105	972	N.D.	
62)	1,1,2,2-Tetrachloroethane	0.000	15.015	0.000		0	N.D.	
63)	1,2,3-Trichloropropane	0.000	15.107	0.000		0	N.D.	
64)	Bromobenzene	0.000	15.168	0.000		0	N.D.	
65)	n-Propylbenzene	15.185	15.180	0.939	91	1166	N.D.	
66)	1,3,5-Trimethylbenzene	15.331	15.332	0.948	105	1226	N.D.	
67)	2-Chlorotoluene	15.331	15.332	0.948	126	100	N.D.	
68)	4-Chlorotoluene	15.429	15.430	0.954	91	987	N.D.	
69)	tert-Butylbenzene	0.000	15.704	0.000		0	N.D.	
70)	1,2,4-Trimethylbenzene	15.740	15.741	0.973	105	5101	N.D.	
71)	sec-Butylbenzene	15.935	15.930	0.985	105	696	N.D.	
72)	4-Isopropyltoluene	16.044	16.051	0.992	119	988	N.D.	
73)	1,3-Dichlorobenzene	16.130	16.119	0.997	146	316	N.D.	
74)	1,4-Dichlorobenzene	16.209	16.204	1.002	146	666	N.D.	
75)	n-Butylbenzene	16.502	16.503	1.020	91	887	N.D.	
76)	1,2-Dichlorobenzene	16.648	16.643	1.029	146	301	N.D.	
77)	1,2-Dibromo-3-chloropr...	0.000	17.527	0.000		0	N.D.	
78)	1,2,4-Trichlorobenzene	18.623	18.630	1.151	180	186	N.D.	
79)	Hexachlorobutadiene	0.000	18.819	0.000		0	N.D.	
80)	Naphthalene	19.026	19.026	1.176	128	3897	N.D.	
81)	1,2,3-Trichlorobenzene	0.000	19.386	0.000		0	N.D.	
83)	Chlorotrifluoroethylene	0.000	4.826	0.000		0	N.D.	
84)	2-Chloro-1,1,1-trifluo...	0.000	5.657	0.000		0	N.D.	
85)	Acrolein	0.000	7.180	0.000		0m	N.D.	d
86)	Trichlorotrifluoroethane	0.000	7.369	0.000		0	N.D.	
87)	Isopropyl Alcohol	0.000	7.430	0.000		0	N.D.	
88)	Allyl chloride	7.802	7.796	0.735	41	166	N.D.	
89)	tert-Butyl Alcohol	7.930	7.924	0.747	59	468	N.D.	
90)	Acrylonitrile	0.000	8.174	0.000		0	N.D.	
91)	Isopropyl ether	0.000	8.741	0.000		0	N.D.	
92)	2-Chloro-1,3-butadiene	0.000	8.869	0.000		0	N.D.	
93)	Ethyl tert-butyl ether	0.000	9.143	0.000		0	N.D.	
94)	Ethyl acetate	9.326	9.338	0.878	43	1221	N.D.	
95)	Propionitrile	0.000	9.393	0.000		0	N.D.	
96)	Methacrylonitrile	9.595	9.576	0.904	41	100	N.D.	
97)	Tetrahydrofuran	9.723	9.710	0.916	42	1707	N.D.	
98)	Isobutyl alcohol	10.094	10.009	0.951	41	454	N.D.	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030410V4\
Data File : 4A437.D
Acq On : 5 Mar 2010 2:39 am
Operator : ACJ
InstName : VOA4
Sample : |248102001|961336|1|VOAF|1|VOA8260BS|
Misc : LANL 5G N/A SOIL
ALS Vial : 37 Sample Multiplier: 1

Quant Time: Mar 11 18:38:26 2010
Quant Method : C:\msdchem\1\DATA\030110V4\VOA4-8260-030110.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 02 15:03:40 2010
Response via : Initial Calibration
Integrator: RTE

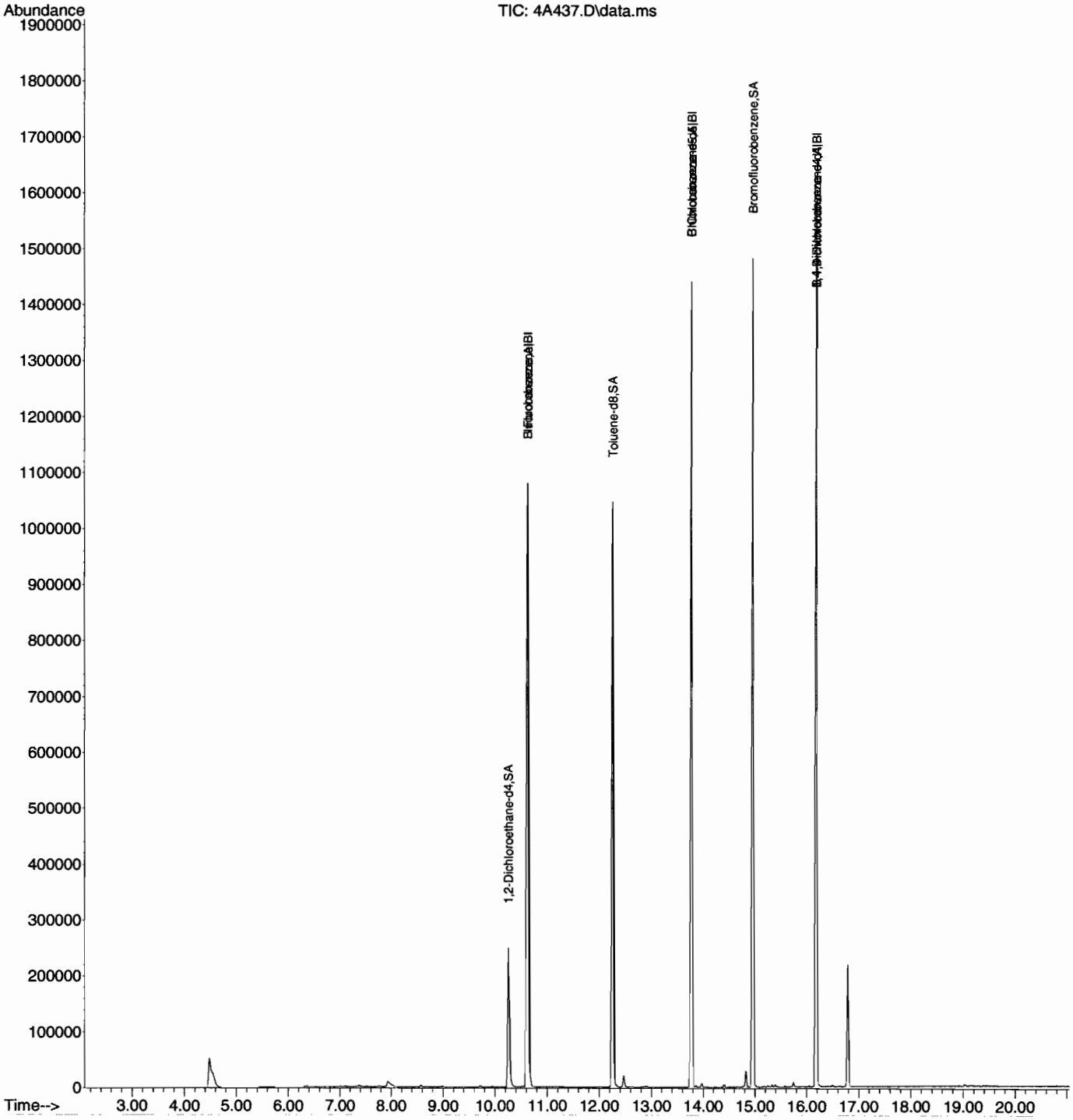
	Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
99)	Methyl tert-amyl ether	0.000	10.387	0.000		0	N.D.	
100)	Methyl methacrylate	0.000	11.204	0.000		0	N.D.	
101)	1,4-Dioxane	0.000	11.326	0.000		0	N.D.	
102)	2-Nitropropane	0.000	11.673	0.000		0	N.D.	
104)	Ethyl methacrylate	12.478	12.466	0.906	69	229	N.D.	
106)	1-Chlorohexane	0.000	13.661	0.000		0m	N.D.	d
107)	cis-1,4-Dichloro-2-butene	0.000	14.783	0.000		0	N.D.	
108)	Cyclohexanone	14.911	14.904	0.922	42	181	N.D.	
109)	trans-1,4-Dichloro-2-b...	0.000	15.063	0.000		0	N.D.	
110)	Pentachloroethane	0.000	15.770	0.000		0	N.D.	
111)	Benzyl chloride	16.319	16.319	1.009	91	583	N.D.	
112)	bis(2-Chloroisopropyl)...	16.709	16.721	1.033	45	180	N.D.	

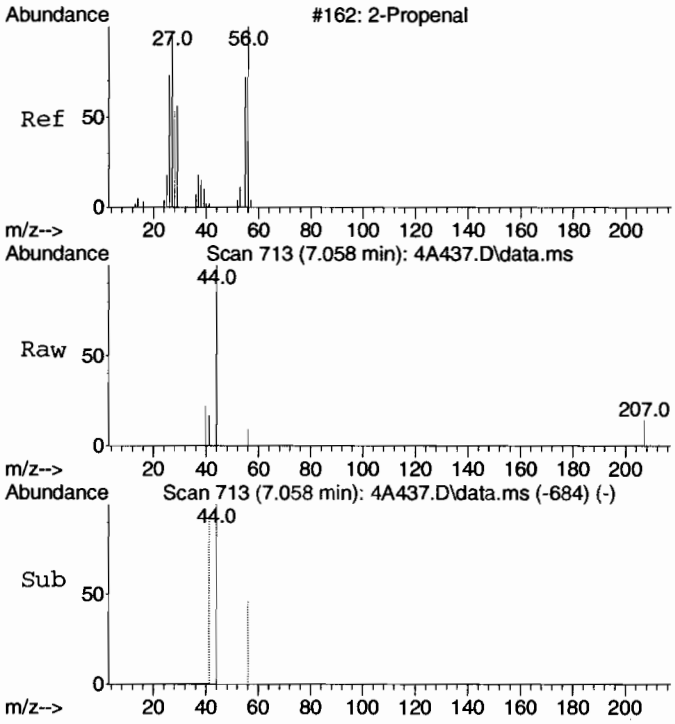
(#) = qualifier out of range (m) = manual integration (+) = signals summed
(E) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030410V4\
Data File : 4A437.D
Acq On : 5 Mar 2010 2:39 am
Operator : ACJ
InstName : VOA4
Sample : |248102001|961336|1|VOAF|1|VOA8260BS|
Misc : LANL 5G N/A SOIL
ALS Vial : 37 Sample Multiplier: 1

Quant Time: Mar 11 18:38:26 2010
Quant Method : C:\msdchem\1\DATA\030110V4\VOA4-8260-030110.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 02 15:03:40 2010
Response via : Initial Calibration
Integrator: RTE

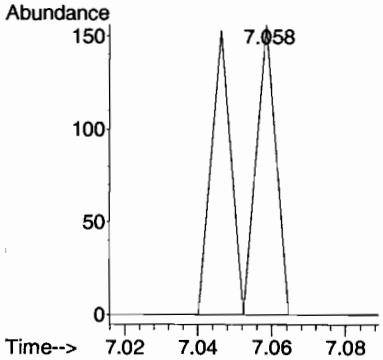


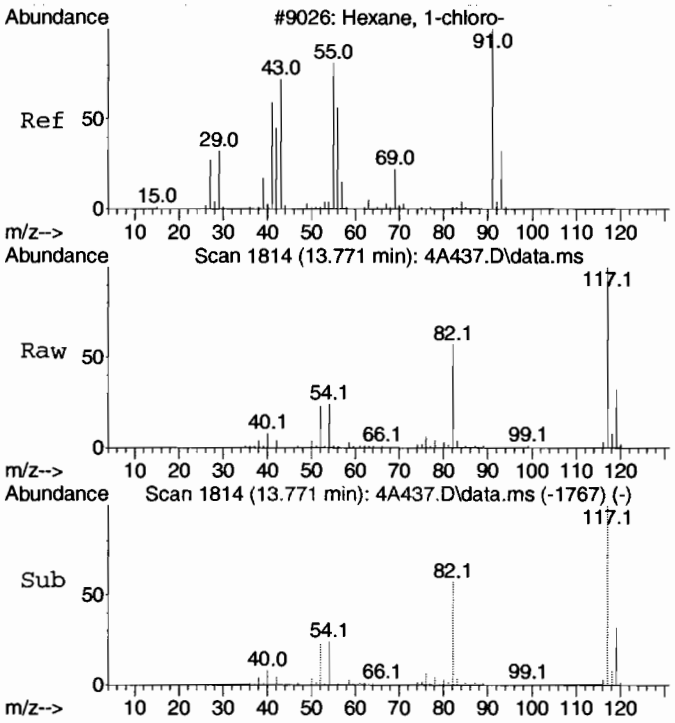


#85 BEFORE analyst DELETION
Acrolein
Concen: 13.45 ug/L
RT: 7.058 min Scan# 713
Delta R.T. -0.122 min
Lab File: 4A437.D
Acq: 5 Mar 2010 2:39 am

Tgt Ion: 56 Resp: 113

Ion	Ratio	Lower	Upper
56	100		
55	115.9	41.4	101.4#

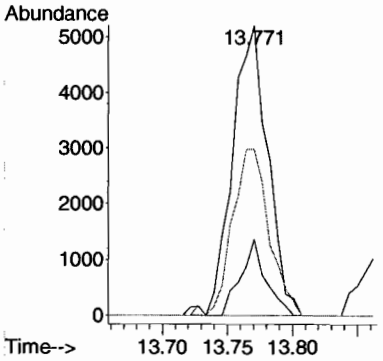




#106 BEFORE analyst DELETION
1-Chlorohexane
Concen: 1.82 ug/L
RT: 13.771 min Scan# 1814
Delta R.T. 0.110 min
Lab File: 4A437.D
Acq: 5 Mar 2010 2:39 am

Tgt Ion: 55 Resp: 9809

Ion	Ratio	Lower	Upper
55	100		
91	18.5	112.1	172.1#
56	59.4	28.5	88.5



Library Search Compound Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030410V4\
Data File : 4A437.D
Acq On : 5 Mar 2010 2:39 am
Operator : ACJ
Sample : |248102001|961336|1|VOAF|1|VOA8260BS|
Misc : LANL 5G N/A SOIL
ALS Vial : 37 Sample Multiplier: 1

Quant Method : C:\msdchem\1\DATA\030110V4\VOA4-8260-030110.M
Quant Title : Volatile Organics 8260B SubList :

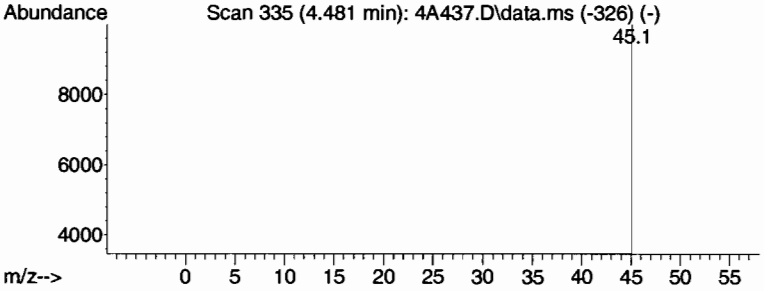
TIC Library : C:\Database\NIST05.L
TIC Integration Parameters: default.P

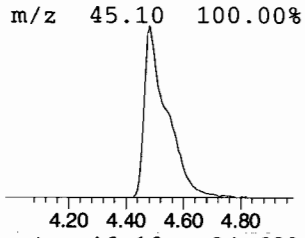
****

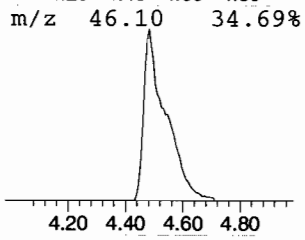
Peak Number 1 unknown hydrocarbon Concentration Rank 2

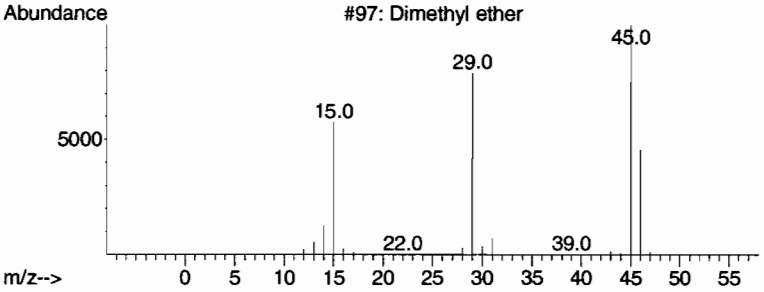
R.T.	EstConc	Area	Relative to ISTD	R.T.
4.481	5.94 ug/L	286715	Fluorobenzene	10.619

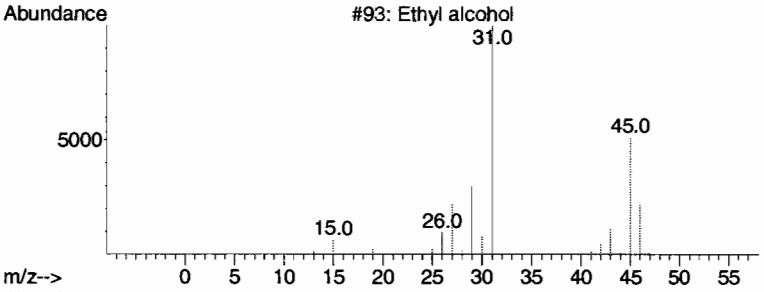
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Dimethyl ether	46	C2H6O	000115-10-6	5
2	Ethyl alcohol	46	C2H6O	000064-17-5	4
3	Ethyl alcohol	46	C2H6O	000064-17-5	4
4	Ethyl alcohol	46	C2H6O	000064-17-5	4
5	Dimethyl ether	46	C2H6O	000115-10-6	2

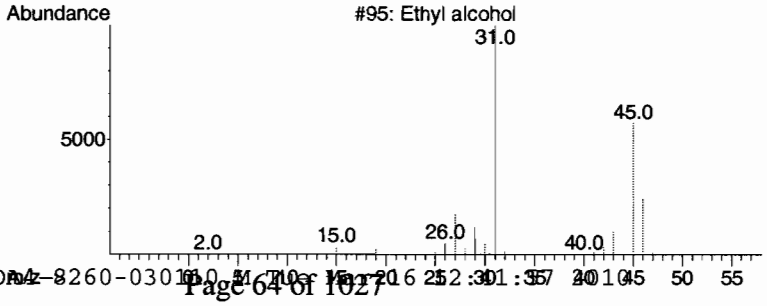












Library Search Compound Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030410V4\
Data File : 4A437.D
Acq On : 5 Mar 2010 2:39 am
Operator : ACJ
Sample : |248102001|961336|1|VOAF|1|VOA8260BS|
Misc : LANL 5G N/A SOIL
ALS Vial : 37 Sample Multiplier: 1

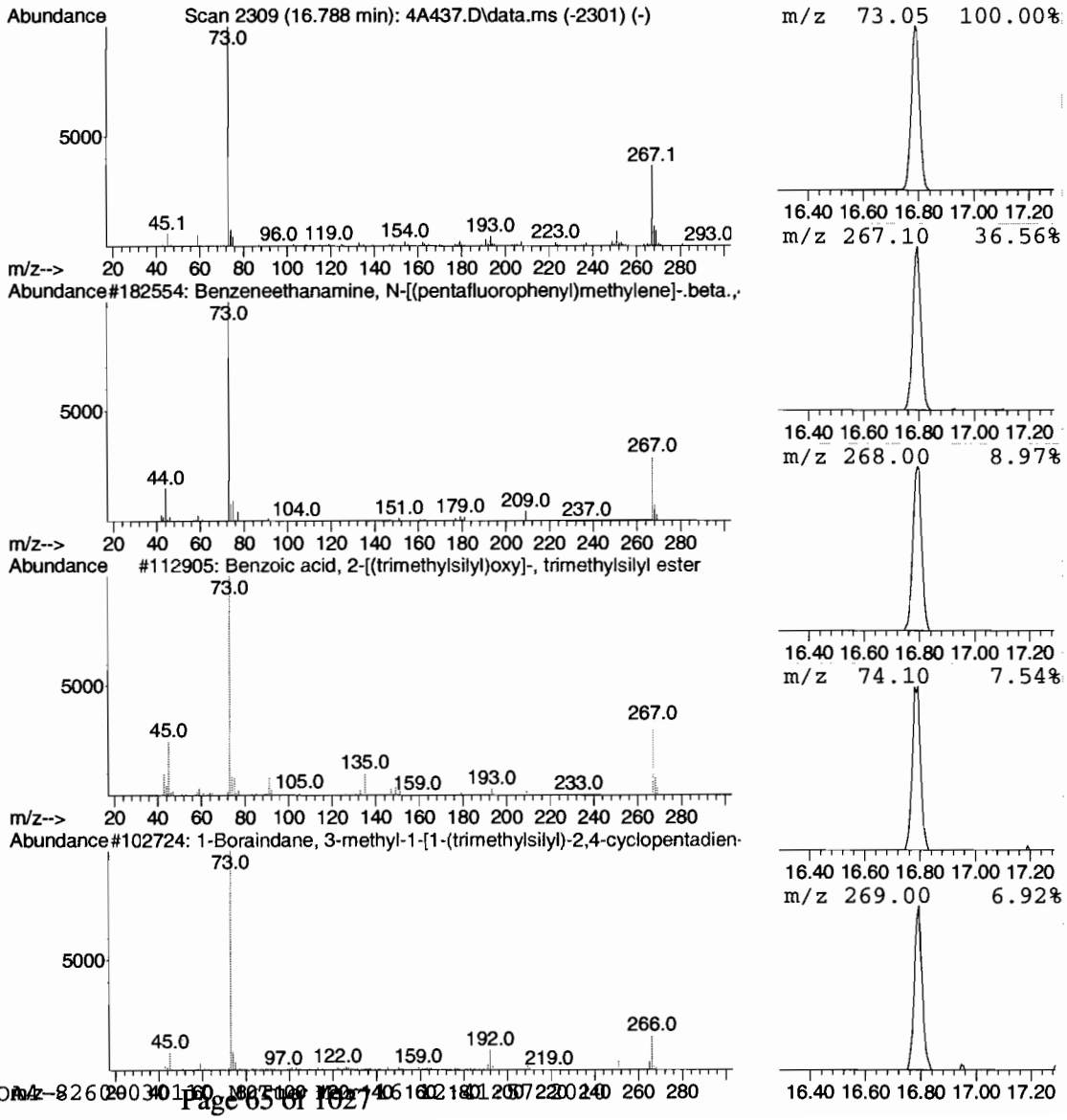
Quant Method : C:\msdchem\1\DATA\030110V4\VOA4-8260-030110.M
Quant Title : Volatile Organics 8260B SubList :

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

****
Peak Number 2 unknown siloxane Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
16.788	7.77 ug/L	459272	B 1,4-Dichlorobenzene-d4	16.179

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzeneethanamine, N-[(pentafluo...	475	C21H26F5NO2Si2	055429-85-1	40
2	Benzoic acid, 2-[(trimethylsilyl...	282	C13H22O3Si2	003789-85-3	38
3	1-Boraindane, 3-methyl-1-[1-(tri...	266	C17H23BSi	190316-36-0	12
4	Benzeneacetic acid, 3-methoxy-4-...	268	C13H20O4Si	015964-84-8	12
5	2-(O-Trimethylsilyloxyphenyl)-1-...	282	C14H26O2Si2	1000079-07-9	10



Tentatively Identified Compound (LSC) summary
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030410V4\
Data File : 4A437.D
Acq On : 5 Mar 2010 2:39 am
Operator : ACJ
Sample : |248102001|961336|1|VOAF|1|VOA8260BS|
Misc : LANL 5G N/A SOIL
ALS Vial : 37 Sample Multiplier: 1

Quant Method : C:\msdchem\1\DATA\030110V4\VOA4-8260-030110.M
Quant Tit1e : Vo1ati1e Organics 8260B SubList :

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

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard--- #	RT	Resp	Conc
unknown hydroca...	4.481	5.9	ug/L	286715	1	10.619	2414720	50.0
unknown siloxane	16.788	7.8	ug/L	459272	6	16.179	2956010	50.0

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-2089**	**Date Collected:**	**02/22/2010 12:00**	**Matrix:**	**R**
Lab Sample ID:	**248102002**	**Date Received:**	**02/26/2010 08:45**	**%Moisture:**	**8.7**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE15-10-8396**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**961336**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**03/05/2010 03:06**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**03/04/2010 17:43**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**030410V4\4A438.D**	**Column:**	**DB-624**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.10	ug/kg	0.372	1.10
74-87-3	Chloromethane	U	1.10	ug/kg	0.329	1.10
75-01-4	Vinyl chloride	U	1.10	ug/kg	0.329	1.10
74-83-9	Bromomethane	U	1.10	ug/kg	0.329	1.10
75-00-3	Chloroethane	U	1.10	ug/kg	0.329	1.10
75-69-4	Trichlorofluoromethane	U	1.10	ug/kg	0.329	1.10
67-64-1	Acetone	U	5.48	ug/kg	1.82	5.48
75-35-4	1,1-Dichloroethylene	U	1.10	ug/kg	0.329	1.10
74-88-4	Iodomethane	U	5.48	ug/kg	1.75	5.48
75-09-2	Methylene chloride	U	5.48	ug/kg	2.19	5.48
75-15-0	Carbon disulfide	U	5.48	ug/kg	1.37	5.48
156-60-5	trans-1,2-Dichloroethylene	U	1.10	ug/kg	0.329	1.10
75-34-3	1,1-Dichloroethane	U	1.10	ug/kg	0.329	1.10
78-93-3	2-Butanone	U	5.48	ug/kg	1.64	5.48
156-59-2	cis-1,2-Dichloroethylene	U	1.10	ug/kg	0.329	1.10
594-20-7	2,2-Dichloropropane	U	1.10	ug/kg	0.329	1.10
67-66-3	Chloroform	U	1.10	ug/kg	0.329	1.10
74-97-5	Bromochloromethane	U	1.10	ug/kg	0.361	1.10
71-55-6	1,1,1-Trichloroethane	U	1.10	ug/kg	0.329	1.10
563-58-6	1,1-Dichloropropene	U	1.10	ug/kg	0.329	1.10
56-23-5	Carbon tetrachloride	U	1.10	ug/kg	0.329	1.10
107-06-2	1,2-Dichloroethane	U	1.10	ug/kg	0.329	1.10
71-43-2	Benzene	U	1.10	ug/kg	0.329	1.10
79-01-6	Trichloroethylene	U	1.10	ug/kg	0.361	1.10
78-87-5	1,2-Dichloropropane	U	1.10	ug/kg	0.329	1.10
75-27-4	Bromodichloromethane	U	1.10	ug/kg	0.329	1.10
74-95-3	Dibromomethane	U	1.10	ug/kg	0.329	1.10
108-10-1	4-Methyl-2-pentanone	U	5.48	ug/kg	1.37	5.48
10061-01-5	cis-1,3-Dichloropropylene	U	1.10	ug/kg	0.329	1.10
108-88-3	Toluene	U	1.10	ug/kg	0.329	1.10
10061-02-6	trans-1,3-Dichloropropylene	U	1.10	ug/kg	0.329	1.10
79-00-5	1,1,2-Trichloroethane	U	1.10	ug/kg	0.329	1.10
591-78-6	2-Hexanone	U	5.48	ug/kg	1.64	5.48
142-28-9	1,3-Dichloropropane	U	1.10	ug/kg	0.329	1.10
127-18-4	Tetrachloroethylene	U	1.10	ug/kg	0.329	1.10
124-48-1	Dibromochloromethane	U	1.10	ug/kg	0.329	1.10
106-93-4	1,2-Dibromoethane	U	1.10	ug/kg	0.329	1.10
108-90-7	Chlorobenzene	U	1.10	ug/kg	0.329	1.10

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-2089**	**Date Collected:**	**02/22/2010 12:00**	**Matrix:**	**R**
Lab Sample ID:	**248102002**	**Date Received:**	**02/26/2010 08:45**	**%Moisture:**	**8.7**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE15-10-8396**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**961336**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**03/05/2010 03:06**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**03/04/2010 17:43**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**030410V4\4A438.D**	**Column:**	**DB-624**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.10	ug/kg	0.329	1.10
179601-23-1	m,p-Xylenes	U	2.19	ug/kg	0.329	2.19
95-47-6	o-Xylene	U	1.10	ug/kg	0.329	1.10
100-42-5	Styrene	U	1.10	ug/kg	0.329	1.10
75-25-2	Bromoform	U	1.10	ug/kg	0.329	1.10
79-34-5	1,1,2,2-Tetrachloroethane	U	1.10	ug/kg	0.329	1.10
96-18-4	1,2,3-Trichloropropane	U	1.10	ug/kg	0.329	1.10
108-86-1	Bromobenzene	U	1.10	ug/kg	0.329	1.10
103-65-1	n-Propylbenzene	U	1.10	ug/kg	0.329	1.10
95-49-8	2-Chlorotoluene	U	1.10	ug/kg	0.329	1.10
98-82-8	Isopropylbenzene	U	1.10	ug/kg	0.329	1.10
108-67-8	1,3,5-Trimethylbenzene	U	1.10	ug/kg	0.329	1.10
106-43-4	4-Chlorotoluene	U	1.10	ug/kg	0.329	1.10
98-06-6	tert-Butylbenzene	U	1.10	ug/kg	0.329	1.10
95-63-6	1,2,4-Trimethylbenzene	U	1.10	ug/kg	0.329	1.10
135-98-8	sec-Butylbenzene	U	1.10	ug/kg	0.329	1.10
99-87-6	4-Isopropyltoluene	U	1.10	ug/kg	0.329	1.10
541-73-1	1,3-Dichlorobenzene	U	1.10	ug/kg	0.329	1.10
106-46-7	1,4-Dichlorobenzene	U	1.10	ug/kg	0.329	1.10
104-51-8	n-Butylbenzene	U	1.10	ug/kg	0.329	1.10
96-12-8	1,2-Dibromo-3-chloropropane	U	1.10	ug/kg	0.329	1.10
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.48	ug/kg	1.75	5.48
630-20-6	1,1,1,2-Tetrachloroethane	U	1.10	ug/kg	0.329	1.10
95-50-1	1,2-Dichlorobenzene	U	1.10	ug/kg	0.329	1.10

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	unknown hydrocarbon	4.48	9.5	ug/kg	0	J
	unknown siloxane	16.79	14.2	ug/kg	0	J

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030410V4\
Data File : 4A438.D
Acq On : 5 Mar 2010 3:06 am
Operator : ACJ
InstName : VOA4
Sample : |248102002|961336|1|VOAF|1|VOA8260BS|
Misc : LANL 5G N/A SOIL
ALS Vial : 38 Sample Multiplier: 1

Quant Time: Mar 11 18:39:14 2010
Quant Method : C:\msdchem\1\DATA\030110V4\VOA4-8260-030110.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 02 15:03:40 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	Dev(Min)
Internal Standards								
1) Fluorobenzene	10.619	10.620	1.000	96	1007487	50.00	ug/L	0.00
41) Chlorobenzene-d5	13.771	13.771	1.000	117	810487	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	16.179	16.180	1.000	152	442438	50.00	ug/L	0.00
82) B Fluorobenzene	10.619	10.619	1.000	96	1007311	50.00	ug/L	0.00
103) B Chlorobenzene-d5	13.771	13.771	1.000	117	813808	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	16.179	16.179	1.000	152	442393	50.00	ug/L	0.00
System Monitoring Compounds								Dev(Min)
29) 1,2-Dichloroethane-d4	10.259	10.260	0.966	65	198198	47.55	ug/L	0.00
Spiked Amount 50.000	Range 66 - 134		Recovery = 95.10%					
43) Toluene-d8	12.253	12.247	0.890	98	723673	48.13	ug/L	0.00
Spiked Amount 50.000	Range 71 - 128		Recovery = 96.26%					
61) Bromofluorobenzene	14.953	14.954	0.924	95	526765	60.85	ug/L	0.00
Spiked Amount 50.000	Range 65 - 130		Recovery = 121.70%					

Target Compounds	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	QValue
2) Dichlorodifluoromethane	0.000	4.911	0.000		0	N.D.		
3) Chloromethane	0.000	5.291	0.000		0	N.D.		
4) Vinyl chloride	0.000	5.521	0.000		0	N.D.		
5) Bromomethane	0.000	6.137	0.000		0	N.D.		
6) Chloroethane	0.000	6.295	0.000		0	N.D.		
7) Trichlorofluoromethane	0.000	6.669	0.000		0	N.D.		
8) Ethyl ether	7.004	6.998	0.660	59	384	N.D.		
9) Acetone	7.357	7.352	0.693	43	4672	N.D.		
10) 1,1-Dichloroethylene	0.000	7.389	0.000		0	N.D.		
11) Iodomethane	7.613	7.663	0.717	142	120	N.D.		
12) Acetonitrile	7.668	7.699	0.722	41	147	N.D.		
13) Methyl acetate	7.912	7.748	0.745	43	195	N.D.		
14) Carbon disulfide	7.760	7.773	0.731	76	1740	N.D.		
15) Methylene chloride	7.936	7.931	0.747	84	9132	N.D.		
16) tert-Butyl methyl ether	0.000	8.242	0.000		0	N.D.		
17) trans-1,2-Dichloroethy...	0.000	8.285	0.000		0	N.D.		
18) Vinyl acetate	8.625	8.705	0.812	43	134	N.D.		
19) 1,1-Dichloroethane	0.000	8.760	0.000		0	N.D.		
20) 2-Butanone	9.345	9.327	0.880	43	1544	N.D.		
21) cis-1,2-Dichloroethylene	0.000	9.388	0.000		0	N.D.		
22) 2,2-Dichloropropane	0.000	9.419	0.000		0	N.D.		
23) Bromochloromethane	0.000	9.656	0.000		0	N.D.		
24) Chloroform	9.686	9.687	0.912	83	220	N.D.		
25) 1,1,1-Trichloroethane	0.000	9.979	0.000		0	N.D.		
26) Cyclohexane	0.000	10.083	0.000		0	N.D.		
27) 1,1-Dichloropropene	10.143	10.132	0.955	75	132	N.D.		
28) Carbon tetrachloride	0.000	10.175	0.000		0	N.D.		
30) 1,2-Dichloroethane	10.277	10.339	0.968	62	180	N.D.		
31) Benzene	10.363	10.370	0.976	78	679	N.D.		
32) Cyclohexene	10.607	10.492	0.999	67	326	N.D.		
33) n-Butyl alcohol	0.000	10.693	0.000		0m	N.D.	d	
34) Trichloroethylene	0.000	11.004	0.000		0	N.D.		
35) 1,2-Dichloropropane	11.235	11.241	1.058	63	131	N.D.		
36) Methylcyclohexane	0.000	11.260	0.000		0	N.D.		
37) Dibromomethane	0.000	11.376	0.000		0	N.D.		
38) Bromodichloromethane	0.000	11.485	0.000		0	N.D.		
39) 2-Chloroethylvinyl ether	0.000	11.699	0.000		0	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030410V4\
Data File : 4A438.D
Acq On : 5 Mar 2010 3:06 am
Operator : ACJ
InstName : VOA4
Sample : |248102002|961336|1|VOAF|1|VOA8260BS|
Misc : LANL 5G N/A SOIL
ALS Vial : 38 Sample Multiplier: 1

Quant Time: Mar 11 18:39:14 2010
Quant Method : C:\msdchem\1\DATA\030110V4\VOA4-8260-030110.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 02 15:03:40 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
40) cis-1,3-Dichloropropylene	0.000	11.930	0.000		0	N.D.	
42) 4-Methyl-2-pentanone	0.000	12.016	0.000		0	N.D.	
44) Toluene	12.326	12.320	0.895	91	2249	N.D.	
45) trans-1,3-Dichloroprop...	12.478	12.461	0.906	75	619	N.D.	
46) 1,1,2-Trichloroethane	0.000	12.680	0.000		0	N.D.	
47) 2-Hexanone	12.874	12.857	0.935	43	415	N.D.	
48) 1,3-Dichloropropane	0.000	12.875	0.000		0	N.D.	
49) Tetrachloroethylene	12.911	12.918	0.938	164	213	N.D.	
50) Dibromochloromethane	0.000	13.144	0.000		0	N.D.	
51) 1,2-Dibromoethane	13.295	13.320	0.965	107	915	N.D.	
52) Chlorobenzene	13.807	13.802	1.003	112	566	N.D.	
53) 1,1,1,2-Tetrachloroethane	0.000	13.851	0.000		0m	N.D.	d
54) Ethylbenzene	0.000	13.863	0.000		0	N.D.	
55) m,p-Xylenes	14.045	13.973	1.020	106	113	N.D.	
56) o-Xylene	14.417	14.399	1.047	106	949	N.D.	
57) Styrene	14.405	14.399	1.046	104	1266	N.D.	
59) Bromoform	0.000	14.655	0.000		0	N.D.	
60) Isopropylbenzene	14.764	14.759	0.913	105	954	N.D.	
62) 1,1,2,2-Tetrachloroethane	0.000	15.015	0.000		0	N.D.	
63) 1,2,3-Trichloropropane	0.000	15.107	0.000		0	N.D.	
64) Bromobenzene	0.000	15.168	0.000		0	N.D.	
65) n-Propylbenzene	15.179	15.180	0.938	91	1486	N.D.	
66) 1,3,5-Trimethylbenzene	15.325	15.332	0.947	105	1676	N.D.	
67) 2-Chlorotoluene	15.325	15.332	0.947	126	168	N.D.	
68) 4-Chlorotoluene	15.392	15.430	0.951	91	549	N.D.	
69) tert-Butylbenzene	0.000	15.704	0.000		0	N.D.	
70) 1,2,4-Trimethylbenzene	15.740	15.741	0.973	105	4006	N.D.	
71) sec-Butylbenzene	15.941	15.930	0.985	105	678	N.D.	
72) 4-Isopropyltoluene	16.057	16.051	0.992	119	1045	N.D.	
73) 1,3-Dichlorobenzene	16.112	16.119	0.996	146	135	N.D.	
74) 1,4-Dichlorobenzene	16.209	16.204	1.002	146	683	N.D.	
75) n-Butylbenzene	16.496	16.503	1.020	91	804	N.D.	
76) 1,2-Dichlorobenzene	16.648	16.643	1.029	146	365	N.D.	
77) 1,2-Dibromo-3-chloropr...	0.000	17.527	0.000		0	N.D.	
78) 1,2,4-Trichlorobenzene	18.636	18.630	1.152	180	353	N.D.	
79) Hexachlorobutadiene	0.000	18.819	0.000		0	N.D.	
80) Naphthalene	19.044	19.026	1.177	128	3555	N.D.	
81) 1,2,3-Trichlorobenzene	19.385	19.386	1.198	180	207	N.D.	
83) Chlorotrifluoroethylene	0.000	4.826	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000	5.657	0.000		0	N.D.	
85) Acrolein	0.000	7.180	0.000		0	N.D.	
86) Trichlorotrifluoroethane	0.000	7.369	0.000		0	N.D.	
87) Isopropyl Alcohol	7.522	7.430	0.708	45	201	N.D.	
88) Allyl chloride	7.790	7.796	0.734	41	276	N.D.	
89) tert-Butyl Alcohol	7.930	7.924	0.747	59	233	N.D.	
90) Acrylonitrile	0.000	8.174	0.000		0	N.D.	
91) Isopropyl ether	0.000	8.741	0.000		0	N.D.	
92) 2-Chloro-1,3-butadiene	0.000	8.869	0.000		0	N.D.	
93) Ethyl tert-butyl ether	0.000	9.143	0.000		0	N.D.	
94) Ethyl acetate	9.345	9.338	0.880	43	1544	N.D.	
95) Propionitrile	0.000	9.393	0.000		0	N.D.	
96) Methacrylonitrile	9.613	9.576	0.905	41	117	N.D.	
97) Tetrahydrofuran	9.710	9.710	0.914	42	1477	N.D.	
98) Isobutyl alcohol	10.015	10.009	0.943	41	195	N.D.	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030410V4\
Data File : 4A438.D
Acq On : 5 Mar 2010 3:06 am
Operator : ACJ
InstName : VOA4
Sample : |248102002|961336|1|VOAF|1|VOA8260BS|
Misc : LANL 5G N/A SOIL
ALS Vial : 38 Sample Multiplier: 1

Quant Time: Mar 11 18:39:14 2010
Quant Method : C:\msdchem\1\DATA\030110V4\VOA4-8260-030110.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 02 15:03:40 2010
Response via : Initial Calibration
Integrator: RTE

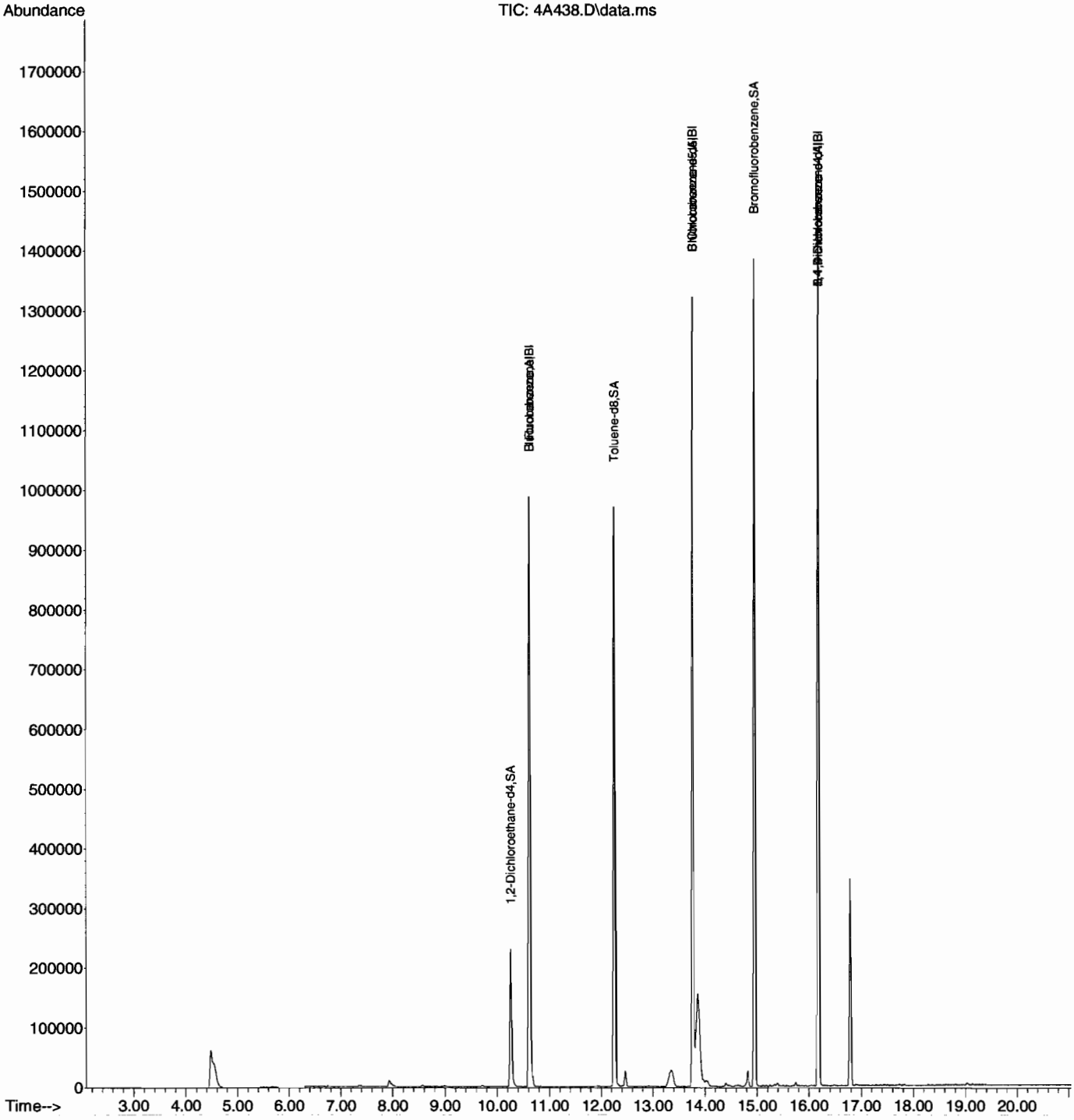
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
99) Methyl tert-amyl ether	0.000	10.387	0.000		0	N.D.	
100) Methyl methacrylate	0.000	11.204	0.000		0	N.D.	
101) 1,4-Dioxane	0.000	11.326	0.000		0	N.D.	
102) 2-Nitropropane	11.728	11.673	1.104	43	128	N.D.	
104) Ethyl methacrylate	12.460	12.466	0.905	69	248	N.D.	
106) 1-Chlorohexane	13.624	13.661	0.842	55	128	N.D.	
107) cis-1,4-Dichloro-2-butene	14.783	14.783	0.914	53	315	N.D.	
108) Cyclohexanone	14.819	14.904	0.916	42	103	N.D.	
109) trans-1,4-Dichloro-2-b...	0.000	15.063	0.000		0	N.D.	
110) Pentachloroethane	0.000	15.770	0.000		0	N.D.	
111) Benzyl chloride	16.319	16.319	1.009	91	301	N.D.	
112) bis(2-Chloroisopropyl)...	0.000	16.721	0.000		0m	N.D.	d

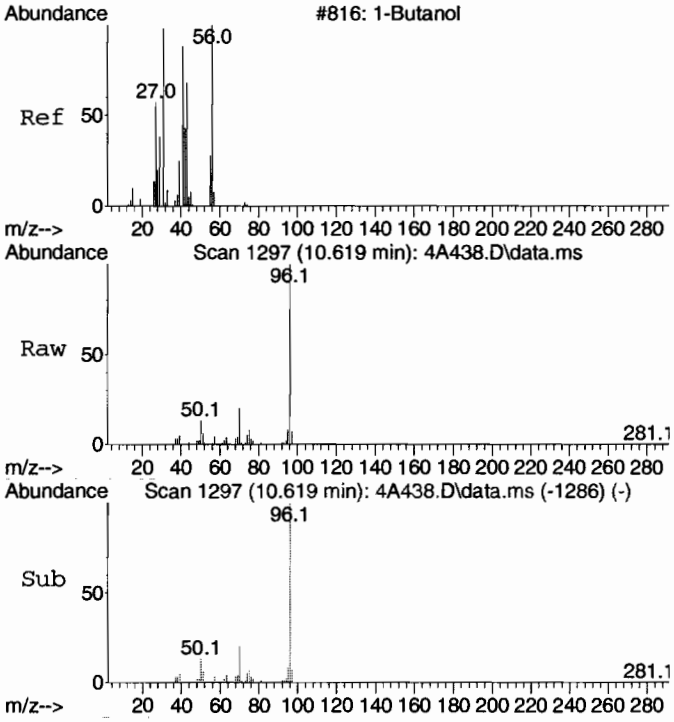
(#) = qualifier out of range (m) = manual integration (+) = signals summed
(E) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030410V4\
Data File : 4A438.D
Acq On : 5 Mar 2010 3:06 am
Operator : ACJ
InstName : VOA4
Sample : |248102002|961336|1|VOAF|1|VOA8260BS|
Misc : LANL 5G N/A SOIL
ALS Vial : 38 Sample Multiplier: 1

Quant Time: Mar 11 18:39:14 2010
Quant Method : C:\msdchem\1\DATA\030110V4\VOA4-8260-030110.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 02 15:03:40 2010
Response via : Initial Calibration
Integrator: RTE

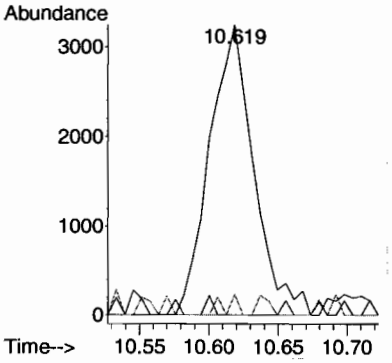


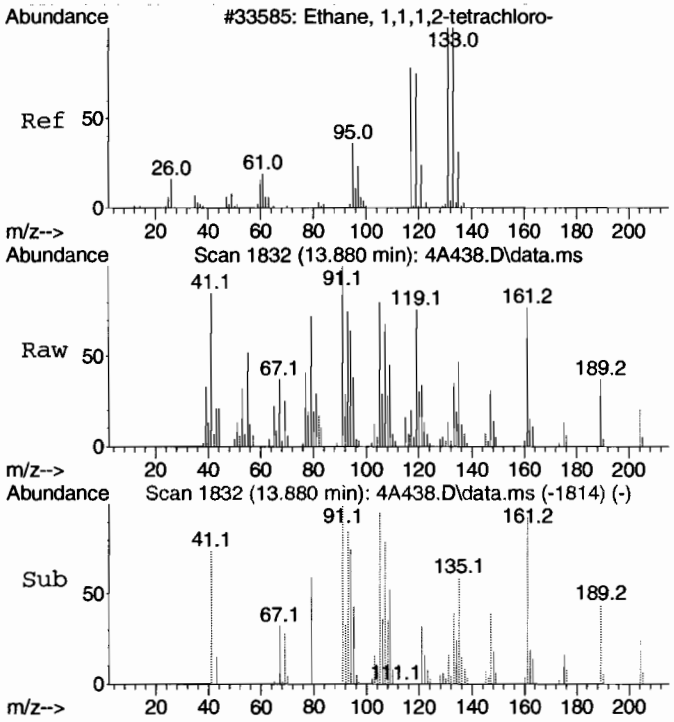


#33 BEFORE analyst DELETION
n-Butyl alcohol
Concen: 27.09 ug/L
RT: 10.619 min Scan# 1297
Delta R.T. -0.074 min
Lab File: 4A438.D
Acq: 5 Mar 2010 3:06 am

Tgt Ion: 56 Resp: 7182

Ion	Ratio	Lower	Upper
56	100		
41	0.0	44.5	104.5#
43	1.9	28.5	88.5#

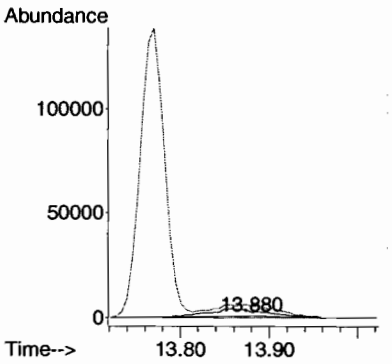


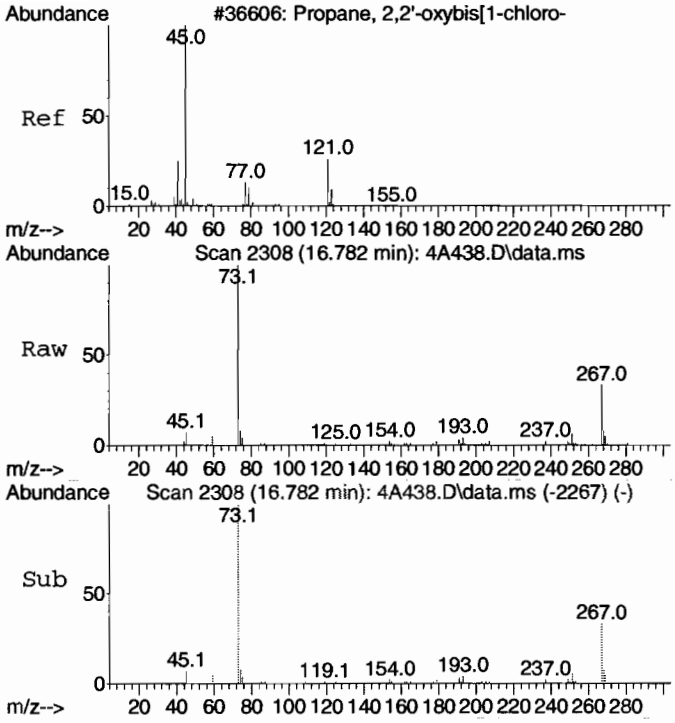


#53 BEFORE analyst DELETION
1,1,1,2-Tetrachloroethane
Concen: 0.65 ug/L
RT: 13.880 min Scan# 1832
Delta R.T. 0.030 min
Lab File: 4A438.D
Acq: 5 Mar 2010 3:06 am

Tgt Ion:131 Resp: 4488

Ion	Ratio	Lower	Upper
131	100		
133	0.0	65.0	125.0#
119	0.0	33.9	93.9#

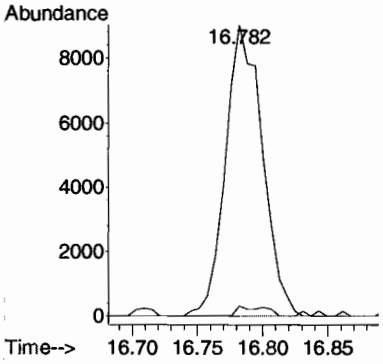




#112 BEFORE analyst DELETION
bis(2-Chloroisopropyl)ether
Concen: 5.00 ug/L
RT: 16.782 min Scan# 2308
Delta R.T. 0.061 min
Lab File: 4A438.D
Acq: 5 Mar 2010 3:06 am

Tgt Ion: 45 Resp: 17647

Ion	Ratio	Lower	Upper
45	100		
121	2.6	0.0	56.0



Library Search Compound Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030410V4\
Data File : 4A438.D
Acq On : 5 Mar 2010 3:06 am
Operator : ACJ
Sample : |248102002|961336|1|VOAF|1|VOA8260BS|
Misc : LANL 5G N/A SOIL
ALS Vial : 38 Sample Multiplier: 1

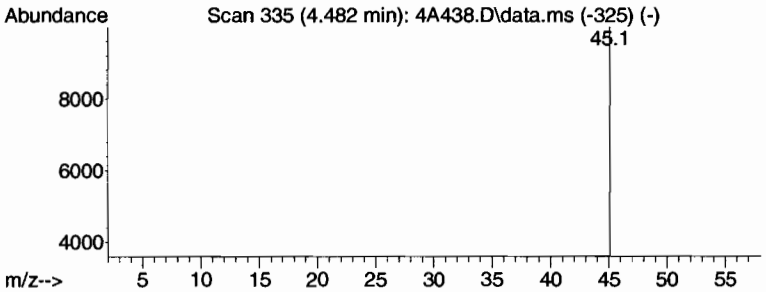
Quant Method : C:\msdchem\1\DATA\030110V4\VOA4-8260-030110.M
Quant Title : Volatile Organics 8260B SubList :

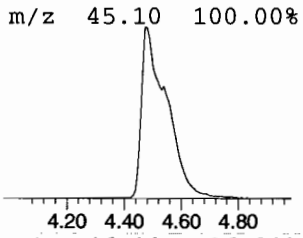
TIC Library : C:\Database\NIST05.L
TIC Integration Parameters: default.P

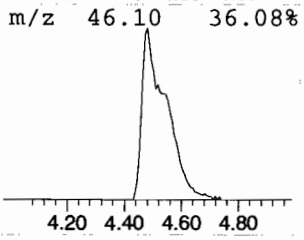
****
Peak Number 1 unknown hydrocarbon Concentration Rank 2

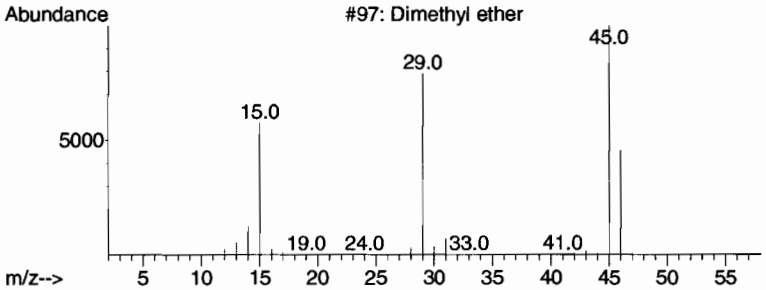
R.T.	EstConc	Area	Relative to ISTD	R.T.
4.482	8.67 ug/L	384927	Fluorobenzene	10.619

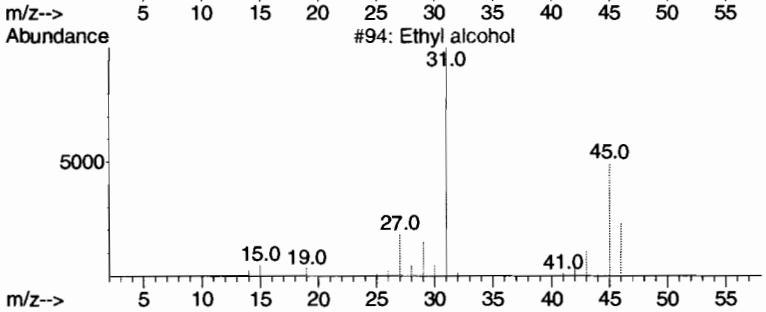
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Dimethyl ether	46	C2H6O	000115-10-6	5
2	Ethyl alcohol	46	C2H6O	000064-17-5	4
3	Ethyl alcohol	46	C2H6O	000064-17-5	4
4	Ethyl alcohol	46	C2H6O	000064-17-5	4
5	Dimethyl ether	46	C2H6O	000115-10-6	2

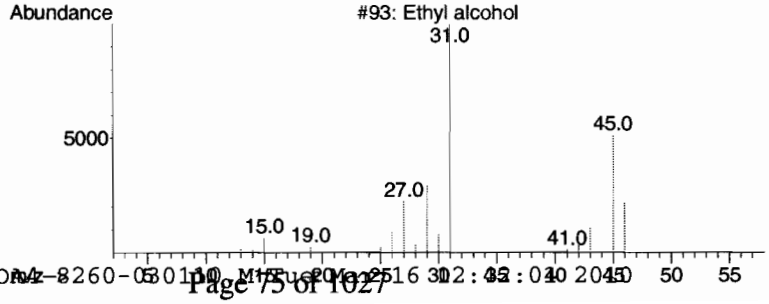












Library Search Compound Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030410V4\
Data File : 4A438.D
Acq On : 5 Mar 2010 3:06 am
Operator : ACJ
Sample : |248102002|961336|1|VOAF|1|VOA8260BS|
Misc : LANL 5G N/A SOIL
ALS Vial : 38 Sample Multiplier: 1

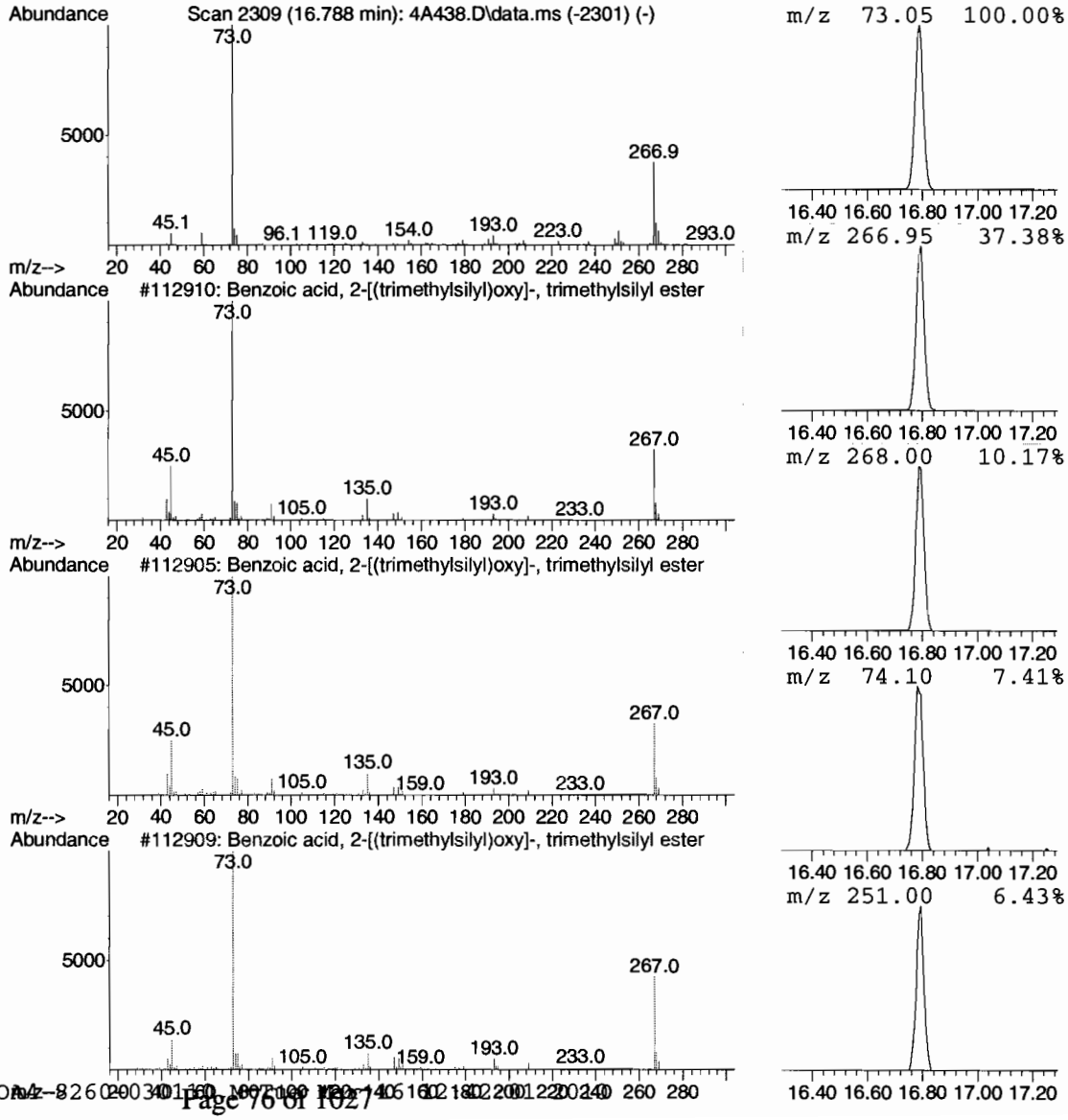
Quant Method : C:\msdchem\1\DATA\030110V4\VOA4-8260-030110.M
Quant Title : Volatile Organics 8260B SubList :

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

****
Peak Number 2 unknown siloxane Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
16.788	12.94 ug/L	729615	B 1,4-Dichlorobenzene-d4	16.179

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzoic acid, 2-[(trimethylsilyl...	282	C13H22O3Si2	003789-85-3	45
2	Benzoic acid, 2-[(trimethylsilyl...	282	C13H22O3Si2	003789-85-3	38
3	Benzoic acid, 2-[(trimethylsilyl...	282	C13H22O3Si2	003789-85-3	38
4	Benzeneethanamine, N-[(pentafluo...	475	C21H26F5NO2Si2	055429-85-1	36
5	Tetrasiloxane, 1,1,3,3,5,5,7,7-o...	282	C8H26O3Si4	001000-05-1	9



Tentatively Identified Compound (LSC) summary
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030410V4\
Data File : 4A438.D
Acq On : 5 Mar 2010 3:06 am
Operator : ACJ
Sample : |248102002|961336|1|VOAF|1|VOA8260BS|
Misc : LANL 5G N/A SOIL
ALS Vial : 38 Sample Multiplier: 1

Quant Method : C:\msdchem\1\DATA\030110V4\VOA4-8260-030110.M
Quant Title : Volatile Organics 8260B SubList :

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

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard--- #	RT	Resp	Conc
unknown hydroca...	4.482	8.7	ug/L	384927	1	10.619	2220770	50.0
unknown siloxane	16.788	12.9	ug/L	729615	6	16.179	2819950	50.0

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-2089**	**Date Collected:**	**02/22/2010 12:00**	**Matrix:**	**R**
Lab Sample ID:	**248102003**	**Date Received:**	**02/26/2010 08:45**	**%Moisture:**	**20.1**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE15-10-8393**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**961336**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**03/05/2010 03:33**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**03/04/2010 17:44**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**030410V4\4A439.D**	**Column:**	**DB-624**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.25	ug/kg	0.426	1.25
74-87-3	Chloromethane	U	1.25	ug/kg	0.376	1.25
75-01-4	Vinyl chloride	U	1.25	ug/kg	0.376	1.25
74-83-9	Bromomethane	U	1.25	ug/kg	0.376	1.25
75-00-3	Chloroethane	U	1.25	ug/kg	0.376	1.25
75-69-4	Trichlorofluoromethane	U	1.25	ug/kg	0.376	1.25
67-64-1	Acetone	U	6.26	ug/kg	2.08	6.26
75-35-4	1,1-Dichloroethylene	U	1.25	ug/kg	0.376	1.25
74-88-4	Iodomethane	U	6.26	ug/kg	2.00	6.26
75-09-2	Methylene chloride	U	6.26	ug/kg	2.50	6.26
75-15-0	Carbon disulfide	U	6.26	ug/kg	1.57	6.26
156-60-5	trans-1,2-Dichloroethylene	U	1.25	ug/kg	0.376	1.25
75-34-3	1,1-Dichloroethane	U	1.25	ug/kg	0.376	1.25
78-93-3	2-Butanone	U	6.26	ug/kg	1.88	6.26
156-59-2	cis-1,2-Dichloroethylene	U	1.25	ug/kg	0.376	1.25
594-20-7	2,2-Dichloropropane	U	1.25	ug/kg	0.376	1.25
67-66-3	Chloroform	U	1.25	ug/kg	0.376	1.25
74-97-5	Bromochloromethane	U	1.25	ug/kg	0.413	1.25
71-55-6	1,1,1-Trichloroethane	U	1.25	ug/kg	0.376	1.25
563-58-6	1,1-Dichloropropene	U	1.25	ug/kg	0.376	1.25
56-23-5	Carbon tetrachloride	U	1.25	ug/kg	0.376	1.25
107-06-2	1,2-Dichloroethane	U	1.25	ug/kg	0.376	1.25
71-43-2	Benzene	U	1.25	ug/kg	0.376	1.25
79-01-6	Trichloroethylene	U	1.25	ug/kg	0.413	1.25
78-87-5	1,2-Dichloropropane	U	1.25	ug/kg	0.376	1.25
75-27-4	Bromodichloromethane	U	1.25	ug/kg	0.376	1.25
74-95-3	Dibromomethane	U	1.25	ug/kg	0.376	1.25
108-10-1	4-Methyl-2-pentanone	U	6.26	ug/kg	1.57	6.26
10061-01-5	cis-1,3-Dichloropropylene	U	1.25	ug/kg	0.376	1.25
108-88-3	Toluene	U	1.25	ug/kg	0.376	1.25
10061-02-6	trans-1,3-Dichloropropylene	U	1.25	ug/kg	0.376	1.25
79-00-5	1,1,2-Trichloroethane	U	1.25	ug/kg	0.376	1.25
591-78-6	2-Hexanone	U	6.26	ug/kg	1.88	6.26
142-28-9	1,3-Dichloropropane	U	1.25	ug/kg	0.376	1.25
127-18-4	Tetrachloroethylene	U	1.25	ug/kg	0.376	1.25
124-48-1	Dibromochloromethane	U	1.25	ug/kg	0.376	1.25
106-93-4	1,2-Dibromoethane	U	1.25	ug/kg	0.376	1.25
108-90-7	Chlorobenzene	U	1.25	ug/kg	0.376	1.25

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-2089**	**Date Collected:**	**02/22/2010 12:00**	**Matrix:**	**R**
Lab Sample ID:	**248102003**	**Date Received:**	**02/26/2010 08:45**	**%Moisture:**	**20.1**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE15-10-8393**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**961336**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**03/05/2010 03:33**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**03/04/2010 17:44**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**030410V4\4A439.D**	**Column:**	**DB-624**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.25	ug/kg	0.376	1.25
179601-23-1	m,p-Xylenes	U	2.50	ug/kg	0.376	2.50
95-47-6	o-Xylene	U	1.25	ug/kg	0.376	1.25
100-42-5	Styrene	U	1.25	ug/kg	0.376	1.25
75-25-2	Bromoform	U	1.25	ug/kg	0.376	1.25
79-34-5	1,1,2,2-Tetrachloroethane	U	1.25	ug/kg	0.376	1.25
96-18-4	1,2,3-Trichloropropane	U	1.25	ug/kg	0.376	1.25
108-86-1	Bromobenzene	U	1.25	ug/kg	0.376	1.25
103-65-1	n-Propylbenzene	U	1.25	ug/kg	0.376	1.25
95-49-8	2-Chlorotoluene	U	1.25	ug/kg	0.376	1.25
98-82-8	Isopropylbenzene	U	1.25	ug/kg	0.376	1.25
108-67-8	1,3,5-Trimethylbenzene	U	1.25	ug/kg	0.376	1.25
106-43-4	4-Chlorotoluene	U	1.25	ug/kg	0.376	1.25
98-06-6	tert-Butylbenzene	U	1.25	ug/kg	0.376	1.25
95-63-6	1,2,4-Trimethylbenzene	U	1.25	ug/kg	0.376	1.25
135-98-8	sec-Butylbenzene	U	1.25	ug/kg	0.376	1.25
99-87-6	4-Isopropyltoluene	U	1.25	ug/kg	0.376	1.25
541-73-1	1,3-Dichlorobenzene	U	1.25	ug/kg	0.376	1.25
106-46-7	1,4-Dichlorobenzene	U	1.25	ug/kg	0.376	1.25
104-51-8	n-Butylbenzene	U	1.25	ug/kg	0.376	1.25
96-12-8	1,2-Dibromo-3-chloropropane	U	1.25	ug/kg	0.376	1.25
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	6.26	ug/kg	2.00	6.26
630-20-6	1,1,1,2-Tetrachloroethane	U	1.25	ug/kg	0.376	1.25
95-50-1	1,2-Dichlorobenzene	U	1.25	ug/kg	0.376	1.25

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	unknown hydrocarbon	4.48	7.24	ug/kg	0	J
	unknown siloxane	16.79	12.1	ug/kg	0	J

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030410V4\
Data File : 4A439.D
Acq On : 5 Mar 2010 3:33 am
Operator : ACJ
InstName : VOA4
Sample : |248102003|961336|1|VOAF|1|VOA8260BS|
Misc : LANL 5G N/A SOIL
ALS Vial : 39 Sample Multiplier: 1

Quant Time: Mar 11 18:40:48 2010
Quant Method : C:\msdchem\1\DATA\030110V4\VOA4-8260-030110.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 02 15:03:40 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	Dev(Min)
Internal Standards								
1) Fluorobenzene	10.619	10.620	1.000	96	1014908	50.00	ug/L	0.00
41) Chlorobenzene-d5	13.770	13.771	1.000	117	828549	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	16.179	16.180	1.000	152	471693	50.00	ug/L	0.00
82) B Fluorobenzene	10.619	10.619	1.000	96	1014468	50.00	ug/L	0.00
103) B Chlorobenzene-d5	13.770	13.771	1.000	117	830920	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	16.179	16.179	1.000	152	471707	50.00	ug/L	0.00
System Monitoring Compounds								Dev(Min)
29) 1,2-Dichloroethane-d4	10.259	10.260	0.966	65	202535	48.24	ug/L	0.00
Spiked Amount 50.000	Range 66 - 134		Recovery = 96.48%					
43) Toluene-d8	12.246	12.247	0.889	98	741155	48.22	ug/L	0.00
Spiked Amount 50.000	Range 71 - 128		Recovery = 96.44%					
61) Bromofluorobenzene	14.953	14.954	0.924	95	547172	59.29	ug/L	0.00
Spiked Amount 50.000	Range 65 - 130		Recovery = 118.58%					

Target Compounds	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	QValue
2) Dichlorodifluoromethane	0.000	4.911	0.000		0	N.D.		
3) Chloromethane	5.435	5.291	0.512	50	125	N.D.		
4) Vinyl chloride	0.000	5.521	0.000		0	N.D.		
5) Bromomethane	0.000	6.137	0.000		0	N.D.		
6) Chloroethane	0.000	6.295	0.000		0	N.D.		
7) Trichlorofluoromethane	0.000	6.669	0.000		0	N.D.		
8) Ethyl ether	7.003	6.998	0.660	59	605	N.D.		
9) Acetone	7.369	7.352	0.694	43	3590	N.D.		
10) 1,1-Dichloroethylene	0.000	7.389	0.000		0	N.D.		
11) Iodomethane	0.000	7.663	0.000		0	N.D.		
12) Acetonitrile	7.711	7.699	0.726	41	1191	N.D.		
13) Methyl acetate	7.766	7.748	0.731	43	114	N.D.		
14) Carbon disulfide	7.772	7.773	0.732	76	1790	N.D.		
15) Methylene chloride	7.936	7.931	0.747	84	9977	N.D.		
16) tert-Butyl methyl ether	0.000	8.242	0.000		0	N.D.		
17) trans-1,2-Dichloroethy...	0.000	8.285	0.000		0	N.D.		
18) Vinyl acetate	8.698	8.705	0.819	43	176	N.D.		
19) 1,1-Dichloroethane	0.000	8.760	0.000		0	N.D.		
20) 2-Butanone	9.332	9.327	0.879	43	425	N.D.		
21) cis-1,2-Dichloroethylene	0.000	9.388	0.000		0	N.D.		
22) 2,2-Dichloropropane	0.000	9.419	0.000		0	N.D.		
23) Bromochloromethane	0.000	9.656	0.000		0	N.D.		
24) Chloroform	9.698	9.687	0.913	83	192	N.D.		
25) 1,1,1-Trichloroethane	0.000	9.979	0.000		0	N.D.		
26) Cyclohexane	0.000	10.083	0.000		0	N.D.		
27) 1,1-Dichloropropene	0.000	10.132	0.000		0	N.D.		
28) Carbon tetrachloride	0.000	10.175	0.000		0	N.D.		
30) 1,2-Dichloroethane	0.000	10.339	0.000		0	N.D.		
31) Benzene	10.369	10.370	0.976	78	486	N.D.		
32) Cyclohexene	10.619	10.492	1.000	67	463	N.D.		
33) n-Butyl alcohol	10.692	10.693	1.007	56	218	N.D.		
34) Trichloroethylene	0.000	11.004	0.000		0	N.D.		
35) 1,2-Dichloropropane	0.000	11.241	0.000		0	N.D.		
36) Methylcyclohexane	0.000	11.260	0.000		0	N.D.		
37) Dibromomethane	0.000	11.376	0.000		0	N.D.		
38) Bromodichloromethane	0.000	11.485	0.000		0	N.D.		
39) 2-Chloroethylvinyl ether	0.000	11.699	0.000		0	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030410V4\
Data File : 4A439.D
Acq On : 5 Mar 2010 3:33 am
Operator : ACJ
InstName : VOA4
Sample : |248102003|961336|1|VOAF|1|VOA8260BS|
Misc : LANL 5G N/A SOIL
ALS Vial : 39 Sample Multiplier: 1

Quant Time: Mar 11 18:40:48 2010
Quant Method : C:\msdchem\1\DATA\030110V4\VOA4-8260-030110.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 02 15:03:40 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
40) cis-1,3-Dichloropropylene	0.000	11.930	0.000		0	N.D.	
42) 4-Methyl-2-pentanone	0.000	12.016	0.000		0	N.D.	
44) Toluene	12.326	12.320	0.895	91	1722	N.D.	
45) trans-1,3-Dichloroprop...	12.454	12.461	0.904	75	487	N.D.	
46) 1,1,2-Trichloroethane	0.000	12.680	0.000		0	N.D.	
47) 2-Hexanone	12.862	12.857	0.934	43	182	N.D.	
48) 1,3-Dichloropropane	0.000	12.875	0.000		0	N.D.	
49) Tetrachloroethylene	0.000	12.918	0.000		0	N.D.	
50) Dibromochloromethane	0.000	13.144	0.000		0	N.D.	
51) 1,2-Dibromoethane	13.289	13.320	0.965	107	194	N.D.	
52) Chlorobenzene	13.795	13.802	1.002	112	412	N.D.	
53) 1,1,1,2-Tetrachloroethane	13.819	13.851	1.004	131	547	N.D.	
54) Ethylbenzene	0.000	13.863	0.000		0m	N.D.	d
55) m,p-Xylenes	13.959	13.973	1.014	106	1187	N.D.	
56) o-Xylene	14.404	14.399	1.046	106	419	N.D.	
57) Styrene	14.398	14.399	1.046	104	646	N.D.	
59) Bromoform	0.000	14.655	0.000		0	N.D.	
60) Isopropylbenzene	14.758	14.759	0.912	105	785	N.D.	
62) 1,1,2,2-Tetrachloroethane	0.000	15.015	0.000		0	N.D.	
63) 1,2,3-Trichloropropane	0.000	15.107	0.000		0	N.D.	
64) Bromobenzene	0.000	15.168	0.000		0	N.D.	
65) n-Propylbenzene	15.191	15.180	0.939	91	1242	N.D.	
66) 1,3,5-Trimethylbenzene	15.331	15.332	0.948	105	634	N.D.	
67) 2-Chlorotoluene	0.000	15.332	0.000		0	N.D.	
68) 4-Chlorotoluene	15.435	15.430	0.954	91	541	N.D.	
69) tert-Butylbenzene	0.000	15.704	0.000		0	N.D.	
70) 1,2,4-Trimethylbenzene	15.733	15.741	0.972	105	1439	N.D.	
71) sec-Butylbenzene	15.929	15.930	0.985	105	640	N.D.	
72) 4-Isopropyltoluene	16.057	16.051	0.992	119	381	N.D.	
73) 1,3-Dichlorobenzene	16.118	16.119	0.996	146	417	N.D.	
74) 1,4-Dichlorobenzene	16.197	16.204	1.001	146	559	N.D.	
75) n-Butylbenzene	16.514	16.503	1.021	91	271	N.D.	
76) 1,2-Dichlorobenzene	16.636	16.643	1.028	146	256	N.D.	
77) 1,2-Dibromo-3-chloropr...	0.000	17.527	0.000		0	N.D.	
78) 1,2,4-Trichlorobenzene	18.623	18.630	1.151	180	207	N.D.	
79) Hexachlorobutadiene	0.000	18.819	0.000		0	N.D.	
80) Naphthalene	19.032	19.026	1.176	128	3855	N.D.	
81) 1,2,3-Trichlorobenzene	0.000	19.386	0.000		0	N.D.	
83) Chlorotrifluoroethylene	0.000	4.826	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000	5.657	0.000		0	N.D.	
85) Acrolein	0.000	7.180	0.000		0m	N.D.	d
86) Trichlorotrifluoroethane	0.000	7.369	0.000		0	N.D.	
87) Isopropyl Alcohol	0.000	7.430	0.000		0	N.D.	
88) Allyl chloride	7.790	7.796	0.734	41	161	N.D.	
89) tert-Butyl Alcohol	7.967	7.924	0.750	59	135	N.D.	
90) Acrylonitrile	0.000	8.174	0.000		0	N.D.	
91) Isopropyl ether	0.000	8.741	0.000		0	N.D.	
92) 2-Chloro-1,3-butadiene	0.000	8.869	0.000		0	N.D.	
93) Ethyl tert-butyl ether	0.000	9.143	0.000		0	N.D.	
94) Ethyl acetate	9.332	9.338	0.879	43	425	N.D.	
95) Propionitrile	0.000	9.393	0.000		0	N.D.	
96) Methacrylonitrile	9.570	9.576	0.901	41	220	N.D.	
97) Tetrahydrofuran	9.704	9.710	0.914	42	2201	N.D.	
98) Isobutyl alcohol	10.027	10.009	0.944	41	143	N.D.	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030410V4\
Data File : 4A439.D
Acq On : 5 Mar 2010 3:33 am
Operator : ACJ
InstName : VOA4
Sample : |248102003|961336|1|VOAF|1|VOA8260BS|
Misc : LANL 5G N/A SOIL
ALS Vial : 39 Sample Multiplier: 1

Quant Time: Mar 11 18:40:48 2010
Quant Method : C:\msdchem\1\DATA\030110V4\VOA4-8260-030110.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 02 15:03:40 2010
Response via : Initial Calibration
Integrator: RTE

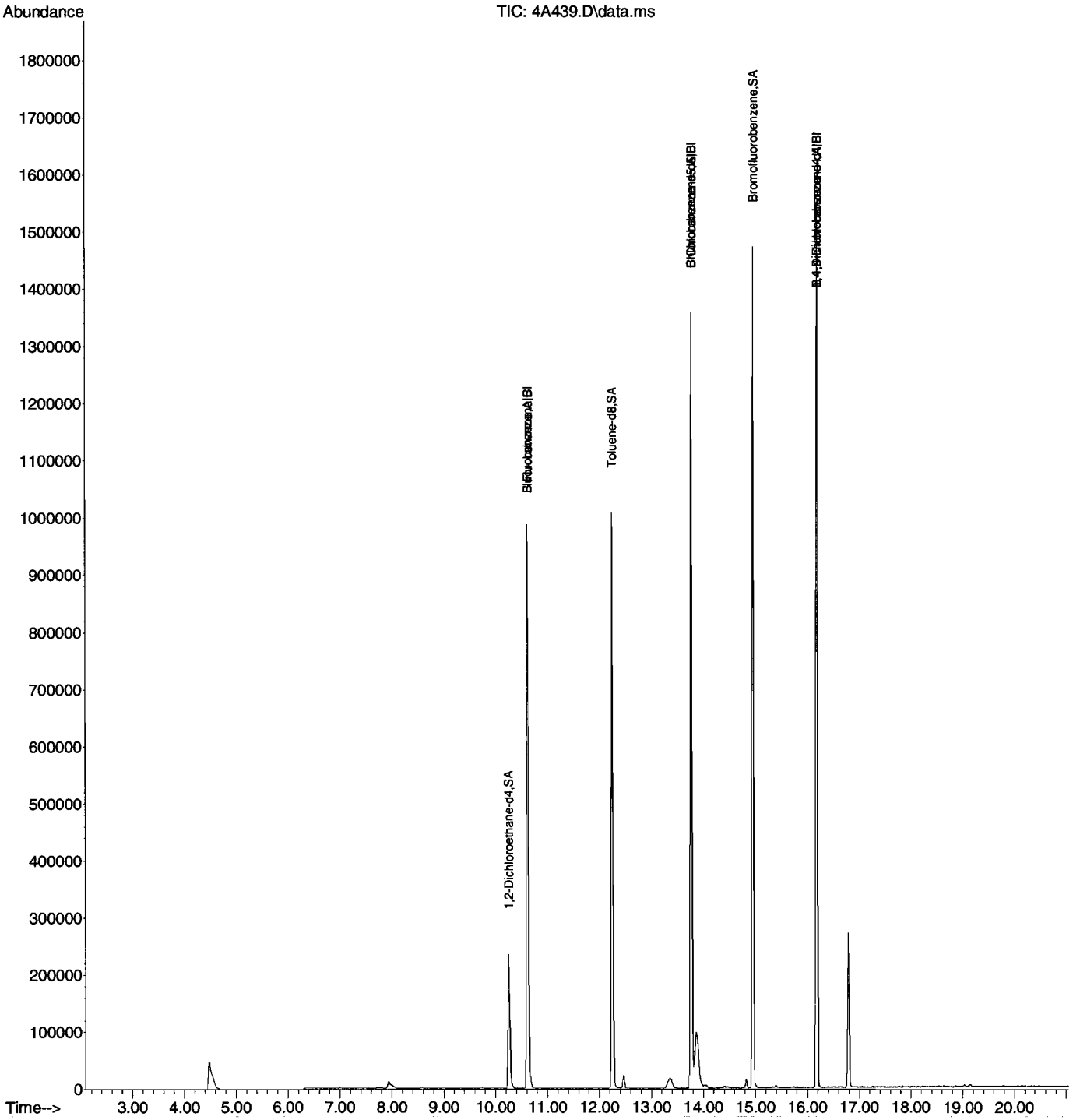
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
99) Methyl tert-amyl ether	0.000	10.387	0.000		0	N.D.	
100) Methyl methacrylate	0.000	11.204	0.000		0	N.D.	
101) 1,4-Dioxane	0.000	11.326	0.000		0	N.D.	
102) 2-Nitropropane	11.740	11.673	1.106	43	230	N.D.	
104) Ethyl methacrylate	12.380	12.466	0.899	69	139	N.D.	
106) 1-Chlorohexane	0.000	13.661	0.000		0m	N.D.	d
107) cis-1,4-Dichloro-2-butene	0.000	14.783	0.000		0	N.D.	
108) Cyclohexanone	14.923	14.904	0.922	42	182	N.D.	
109) trans-1,4-Dichloro-2-b...	0.000	15.063	0.000		0	N.D.	
110) Pentachloroethane	0.000	15.770	0.000		0	N.D.	
111) Benzyl chloride	16.300	16.319	1.008	91	129	N.D.	
112) bis(2-Chloroisopropyl)...	0.000	16.721	0.000		0m	N.D.	d

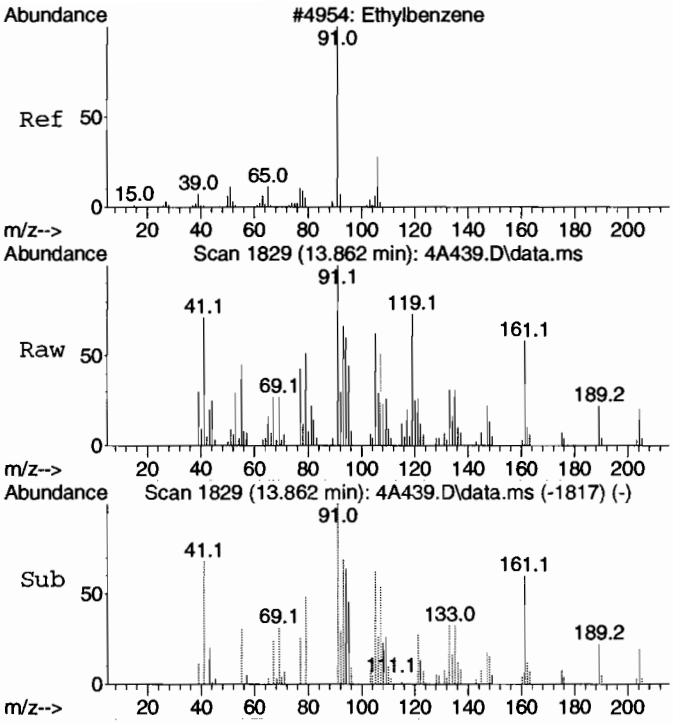
(#) = qualifier out of range (m) = manual integration (+) = signals summed
(E) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030410V4\
Data File : 4A439.D
Acq On : 5 Mar 2010 3:33 am
Operator : ACJ
InstName : VOA4
Sample : |248102003|961336|1|VOAF|1|VOA8260BS|
Misc : LANL 5G N/A SOIL
ALS Vial : 39 Sample Multiplier: 1

Quant Time: Mar 11 18:40:48 2010
Quant Method : C:\msdchem\1\DATA\030110V4\VOA4-8260-030110.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 02 15:03:40 2010
Response via : Initial Calibration
Integrator: RTE

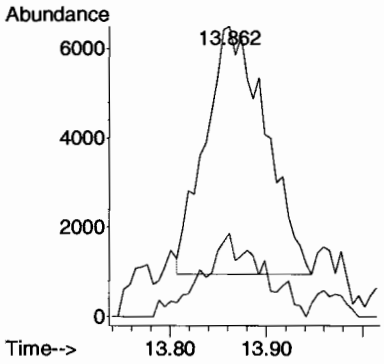


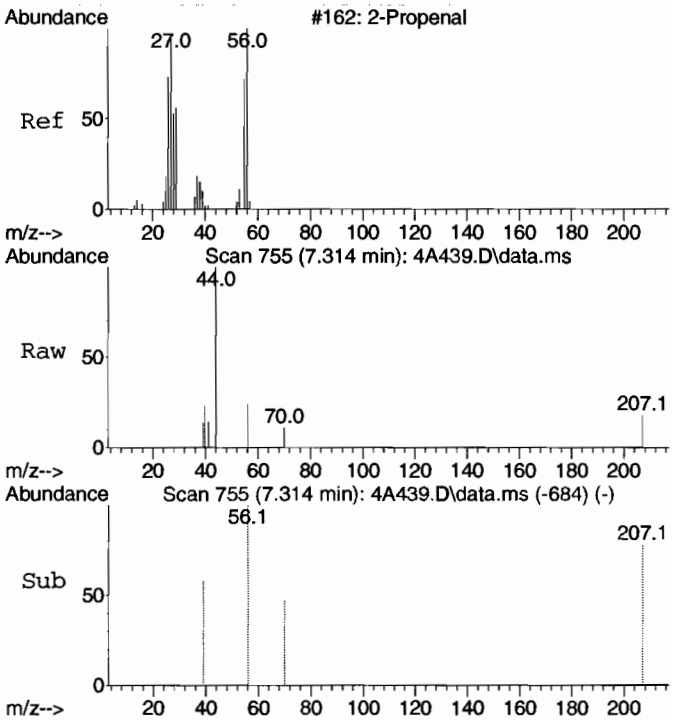


#54 BEFORE analyst DELETION
Ethylbenzene
Concen: 0.74 ug/L
RT: 13.862 min Scan# 1829
Delta R.T. -0.001 min
Lab File: 4A439.D
Acq: 5 Mar 2010 3:33 am

Tgt Ion: 91 Resp: 24045

Ion	Ratio	Lower	Upper
91	100		
106	0.0	2.8	62.8#

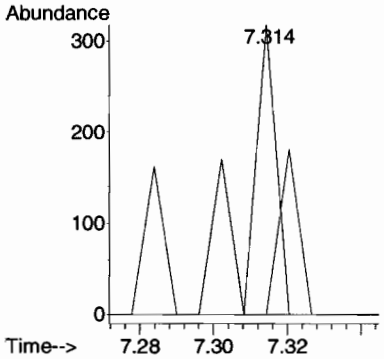


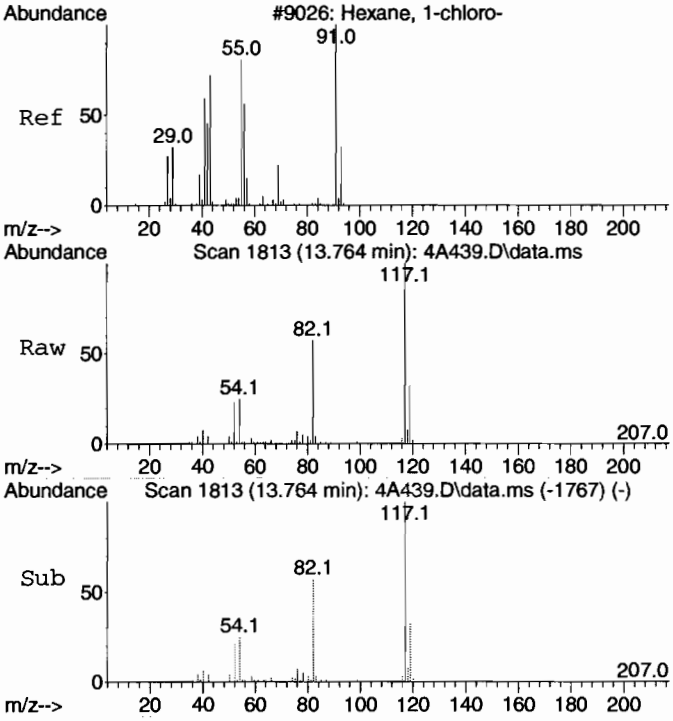


#85 BEFORE analyst DELETION
Acrolein
Concen: 13.53 ug/L
RT: 7.314 min Scan# 755
Delta R.T. 0.134 min
Lab File: 4A439.D
Acq: 5 Mar 2010 3:33 am

Tgt Ion: 56 Resp: 179

Ion	Ratio	Lower	Upper
56	100		
55	0.0	41.4	101.4#

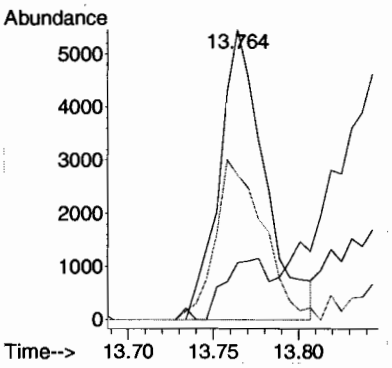


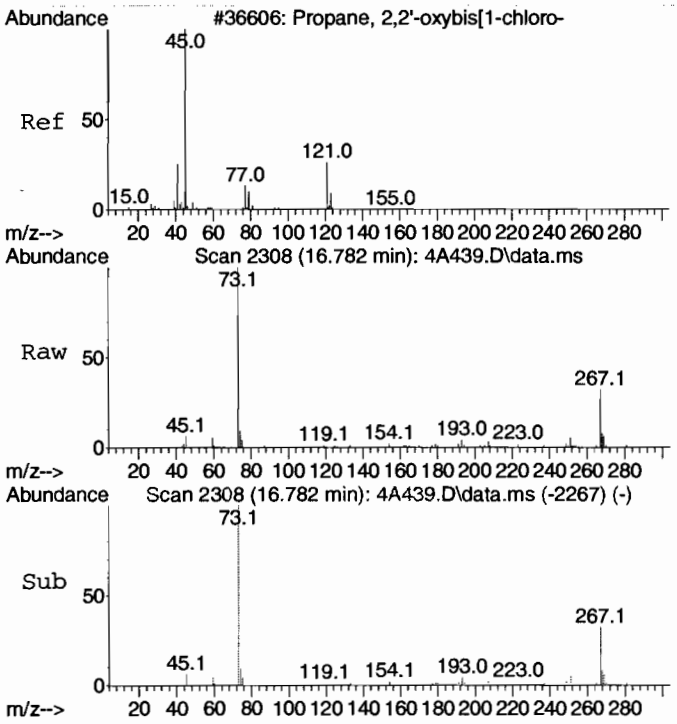


#106 BEFORE analyst DELETION
1-Chlorohexane
Concen: 1.85 ug/L
RT: 13.764 min Scan# 1813
Delta R.T. 0.104 min
Lab File: 4A439.D
Acq: 5 Mar 2010 3:33 am

Tgt Ion: 55 Resp: 10070

Ion	Ratio	Lower	Upper
55	100		
91	23.3	112.1	172.1#
56	58.6	28.5	88.5

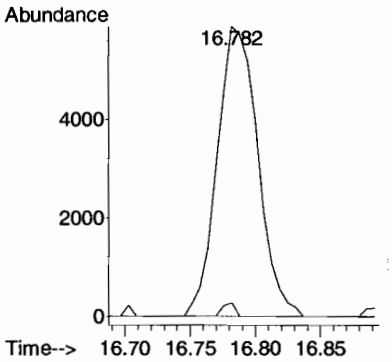




#112 BEFORE analyst DELETION
bis(2-Chloroisopropyl)ether
Concen: 3.37 ug/L
RT: 16.782 min Scan# 2308
Delta R.T. 0.061 min
Lab File: 4A439.D
Acq: 5 Mar 2010 3:33 am

Tgt Ion: 45 Resp: 12680

Ion	Ratio	Lower	Upper
45	100		
121	1.4	0.0	56.0



Library Search Compound Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030410V4\
Data File : 4A439.D
Acq On : 5 Mar 2010 3:33 am
Operator : ACJ
Sample : |248102003|961336|1|VOAF|1|VOA8260BS|
Misc : LANL 5G N/A SOIL
ALS Vial : 39 Sample Multiplier: 1

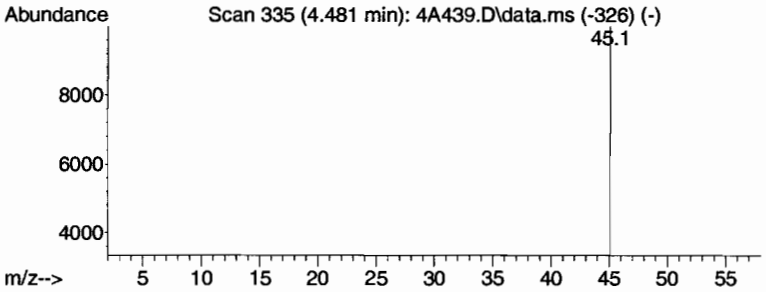
Quant Method : C:\msdchem\1\DATA\030110V4\VOA4-8260-030110.M
Quant Title : Volatile Organics 8260B SubList :

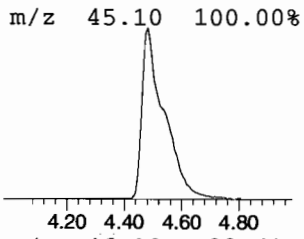
TIC Library : C:\Database\NIST05.L
TIC Integration Parameters: default.P

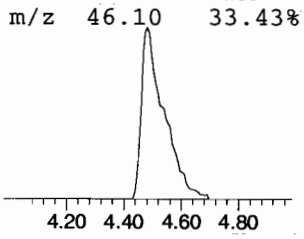
****
Peak Number 1 unknown hydrocarbon Concentration Rank 2

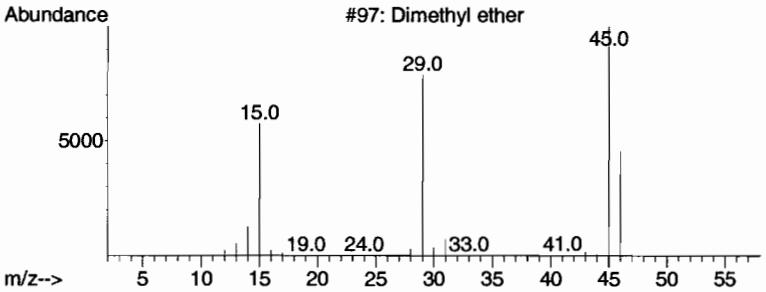
R.T.	EstConc	Area	Relative to ISTD	R.T.
4.481	5.78 ug/L	259200	Fluorobenzene	10.619

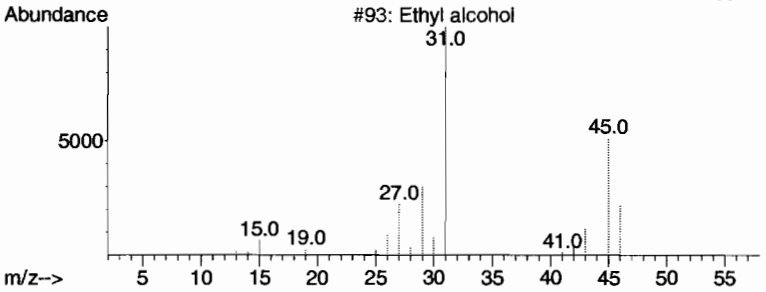
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Dimethyl ether	46	C2H6O	000115-10-6	5
2	Ethyl alcohol	46	C2H6O	000064-17-5	4
3	Ethyl alcohol	46	C2H6O	000064-17-5	4
4	Ethyl alcohol	46	C2H6O	000064-17-5	4
5	Formic acid	46	CH2O2	000064-18-6	2

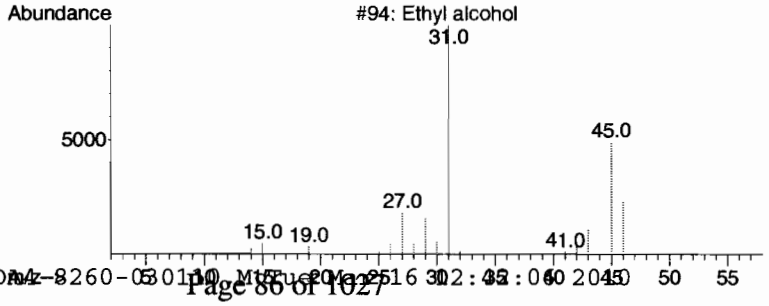












Library Search Compound Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030410V4\
Data File : 4A439.D
Acq On : 5 Mar 2010 3:33 am
Operator : ACJ
Sample : |248102003|961336|1|VOAF|1|VOA8260BS|
Misc : LANL 5G N/A SOIL
ALS Vial : 39 Sample Multiplier: 1

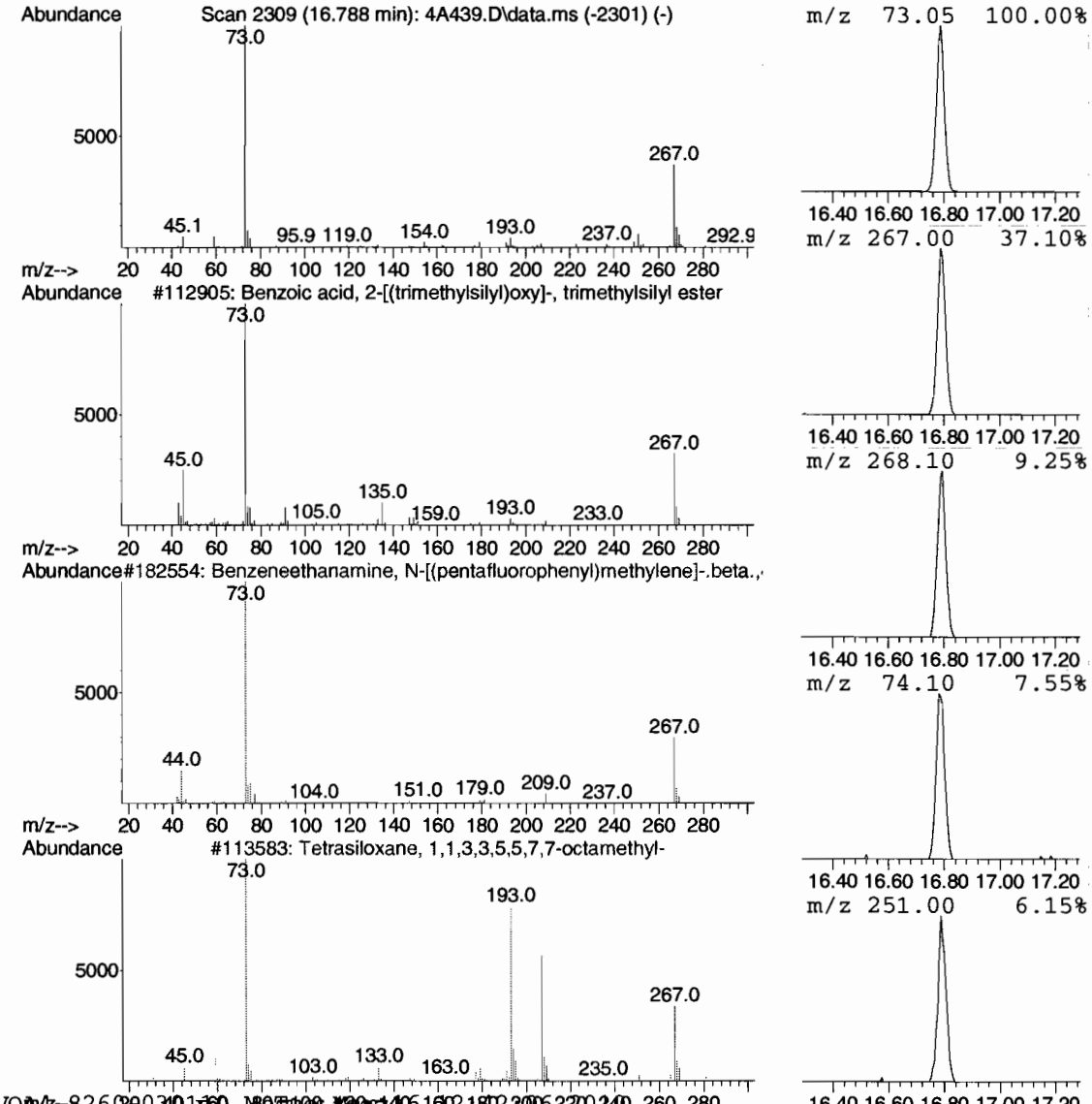
Quant Method : C:\msdchem\1\DATA\030110V4\VOA4-8260-030110.M
Quant Title : Volatile Organics 8260B SubList :

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

****
Peak Number 2 unknown siloxane Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
16.788	9.65 ug/L	570072	B 1,4-Dichlorobenzene-d4	16.179

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzoic acid, 2-[(trimethylsilyl...	282	C13H22O3Si2	003789-85-3	50
2	Benzeneethanamine, N-[(pentafluo...	475	C21H26F5NO2Si2	055429-85-1	45
3	Tetrasiloxane, 1,1,3,3,5,5,7,7-o...	282	C8H26O3Si4	001000-05-1	16
4	Cyclopropene, 3,3-diphenyl-1-tri...	264	C18H20Si	173595-34-1	10
5	Benzeneacetic acid, 3-methoxy-4-...	268	C13H20O4Si	015964-84-8	9



Tentatively Identified Compound (LSC) summary
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030410V4\
Data File : 4A439.D
Acq On : 5 Mar 2010 3:33 am
Operator : ACJ
Sample : |248102003|961336|1|VOAF|1|VOA8260BS|
Misc : LANL 5G N/A SOIL
ALS Vial : 39 Sample Multiplier: 1

Quant Method : C:\msdchem\1\DATA\030110V4\VOA4-8260-030110.M
Quant Title : Volatile Organics 8260B SubList :

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

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard--- #	RT	Resp	Conc
unknown hydroca...	4.481	5.8	ug/L	259200	1	10.619	2242190	50.0
unknown siloxane	16.788	9.7	ug/L	570072	6	16.179	2954940	50.0

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-2089**	**Date Collected:**	**02/22/2010 12:00**	**Matrix:**	**R**
Lab Sample ID:	**248102004**	**Date Received:**	**02/26/2010 08:45**	**%Moisture:**	**4.4**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE15-10-8395**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**961336**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**03/05/2010 04:01**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**03/04/2010 17:45**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**030410V4\4A440.D**	**Column:**	**DB-624**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.05	ug/kg	0.356	1.05
74-87-3	Chloromethane	U	1.05	ug/kg	0.314	1.05
75-01-4	Vinyl chloride	U	1.05	ug/kg	0.314	1.05
74-83-9	Bromomethane	U	1.05	ug/kg	0.314	1.05
75-00-3	Chloroethane	U	1.05	ug/kg	0.314	1.05
75-69-4	Trichlorofluoromethane	U	1.05	ug/kg	0.314	1.05
67-64-1	Acetone	U	5.23	ug/kg	1.74	5.23
75-35-4	1,1-Dichloroethylene	U	1.05	ug/kg	0.314	1.05
74-88-4	Iodomethane	U	5.23	ug/kg	1.67	5.23
75-09-2	Methylene chloride	U	5.23	ug/kg	2.09	5.23
75-15-0	Carbon disulfide	U	5.23	ug/kg	1.31	5.23
156-60-5	trans-1,2-Dichloroethylene	U	1.05	ug/kg	0.314	1.05
75-34-3	1,1-Dichloroethane	U	1.05	ug/kg	0.314	1.05
78-93-3	2-Butanone	U	5.23	ug/kg	1.57	5.23
156-59-2	cis-1,2-Dichloroethylene	U	1.05	ug/kg	0.314	1.05
594-20-7	2,2-Dichloropropane	U	1.05	ug/kg	0.314	1.05
67-66-3	Chloroform	U	1.05	ug/kg	0.314	1.05
74-97-5	Bromochloromethane	U	1.05	ug/kg	0.345	1.05
71-55-6	1,1,1-Trichloroethane	U	1.05	ug/kg	0.314	1.05
563-58-6	1,1-Dichloropropene	U	1.05	ug/kg	0.314	1.05
56-23-5	Carbon tetrachloride	U	1.05	ug/kg	0.314	1.05
107-06-2	1,2-Dichloroethane	U	1.05	ug/kg	0.314	1.05
71-43-2	Benzene	U	1.05	ug/kg	0.314	1.05
79-01-6	Trichloroethylene	U	1.05	ug/kg	0.345	1.05
78-87-5	1,2-Dichloropropane	U	1.05	ug/kg	0.314	1.05
75-27-4	Bromodichloromethane	U	1.05	ug/kg	0.314	1.05
74-95-3	Dibromomethane	U	1.05	ug/kg	0.314	1.05
108-10-1	4-Methyl-2-pentanone	U	5.23	ug/kg	1.31	5.23
10061-01-5	cis-1,3-Dichloropropylene	U	1.05	ug/kg	0.314	1.05
108-88-3	Toluene	U	1.05	ug/kg	0.314	1.05
10061-02-6	trans-1,3-Dichloropropylene	U	1.05	ug/kg	0.314	1.05
79-00-5	1,1,2-Trichloroethane	U	1.05	ug/kg	0.314	1.05
591-78-6	2-Hexanone	U	5.23	ug/kg	1.57	5.23
142-28-9	1,3-Dichloropropane	U	1.05	ug/kg	0.314	1.05
127-18-4	Tetrachloroethylene	U	1.05	ug/kg	0.314	1.05
124-48-1	Dibromochloromethane	U	1.05	ug/kg	0.314	1.05
106-93-4	1,2-Dibromoethane	U	1.05	ug/kg	0.314	1.05
108-90-7	Chlorobenzene	U	1.05	ug/kg	0.314	1.05

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-2089**	**Date Collected:**	**02/22/2010 12:00**	**Matrix:**	**R**
Lab Sample ID:	**248102004**	**Date Received:**	**02/26/2010 08:45**	**%Moisture:**	**4.4**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE15-10-8395**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**961336**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**03/05/2010 04:01**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**03/04/2010 17:45**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**030410V4\4A440.D**	**Column:**	**DB-624**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.05	ug/kg	0.314	1.05
179601-23-1	m,p-Xylenes	U	2.09	ug/kg	0.314	2.09
95-47-6	o-Xylene	U	1.05	ug/kg	0.314	1.05
100-42-5	Styrene	U	1.05	ug/kg	0.314	1.05
75-25-2	Bromoform	U	1.05	ug/kg	0.314	1.05
79-34-5	1,1,2,2-Tetrachloroethane	U	1.05	ug/kg	0.314	1.05
96-18-4	1,2,3-Trichloropropane	U	1.05	ug/kg	0.314	1.05
108-86-1	Bromobenzene	U	1.05	ug/kg	0.314	1.05
103-65-1	n-Propylbenzene	U	1.05	ug/kg	0.314	1.05
95-49-8	2-Chlorotoluene	U	1.05	ug/kg	0.314	1.05
98-82-8	Isopropylbenzene	U	1.05	ug/kg	0.314	1.05
108-67-8	1,3,5-Trimethylbenzene	U	1.05	ug/kg	0.314	1.05
106-43-4	4-Chlorotoluene	U	1.05	ug/kg	0.314	1.05
98-06-6	tert-Butylbenzene	U	1.05	ug/kg	0.314	1.05
95-63-6	1,2,4-Trimethylbenzene	U	1.05	ug/kg	0.314	1.05
135-98-8	sec-Butylbenzene	U	1.05	ug/kg	0.314	1.05
99-87-6	4-Isopropyltoluene	U	1.05	ug/kg	0.314	1.05
541-73-1	1,3-Dichlorobenzene	U	1.05	ug/kg	0.314	1.05
106-46-7	1,4-Dichlorobenzene	U	1.05	ug/kg	0.314	1.05
104-51-8	n-Butylbenzene	U	1.05	ug/kg	0.314	1.05
96-12-8	1,2-Dibromo-3-chloropropane	U	1.05	ug/kg	0.314	1.05
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.23	ug/kg	1.67	5.23
630-20-6	1,1,1,2-Tetrachloroethane	U	1.05	ug/kg	0.314	1.05
95-50-1	1,2-Dichlorobenzene	U	1.05	ug/kg	0.314	1.05

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	unknown hydrocarbon	15.01	24.6	ug/kg	0	J
	unknown siloxane	16.79	24.6	ug/kg	0	J

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030410V4\
Data File : 4A440.D
Acq On : 5 Mar 2010 4:01 am
Operator : ACJ
InstName : VOA4
Sample : |248102004|961336|1|VOAF|1|VOA8260BS|
Misc : LANL 5G N/A SOIL
ALS Vial : 40 Sample Multiplier: 1

Quant Time: Mar 11 18:41:34 2010
Quant Method : C:\msdchem\1\DATA\030110V4\VOA4-8260-030110.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 02 15:03:40 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	Dev(Min)
Internal Standards								
1) Fluorobenzene	10.613	10.620	1.000	96	955500	50.00	ug/L	0.00
41) Chlorobenzene-d5	13.770	13.771	1.000	117	771549	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	16.179	16.180	1.000	152	447134	50.00	ug/L	0.00
82) B Fluorobenzene	10.613	10.619	1.000	96	955368	50.00	ug/L	0.00
103) B Chlorobenzene-d5	13.770	13.771	1.000	117	771549	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	16.179	16.179	1.000	152	447146	50.00	ug/L	0.00
System Monitoring Compounds								Dev(Min)
29) 1,2-Dichloroethane-d4	10.259	10.260	0.967	65	192295	48.65	ug/L	0.00
Spiked Amount 50.000	Range 66 - 134		Recovery = 97.30%					
43) Toluene-d8	12.246	12.247	0.889	98	708397	49.50	ug/L	0.00
Spiked Amount 50.000	Range 71 - 128		Recovery = 99.00%					
61) Bromofluorobenzene	14.947	14.954	0.924	95	506302	57.87	ug/L	0.00
Spiked Amount 50.000	Range 65 - 130		Recovery = 115.74%					

Target Compounds	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	QValue
2) Dichlorodifluoromethane	0.000	4.911	0.000		0	N.D.		
3) Chloromethane	5.292	5.291	0.499	50	229	N.D.		
4) Vinyl chloride	0.000	5.521	0.000		0	N.D.		
5) Bromomethane	0.000	6.137	0.000		0	N.D.		
6) Chloroethane	0.000	6.295	0.000		0	N.D.		
7) Trichlorofluoromethane	0.000	6.669	0.000		0	N.D.		
8) Ethyl ether	6.997	6.998	0.659	59	171	N.D.		
9) Acetone	7.369	7.352	0.694	43	9446	N.D.		
10) 1,1-Dichloroethylene	0.000	7.389	0.000		0	N.D.		
11) Iodomethane	0.000	7.663	0.000		0	N.D.		
12) Acetonitrile	7.692	7.699	0.725	41	275	N.D.		
13) Methyl acetate	7.747	7.748	0.730	43	267	N.D.		
14) Carbon disulfide	7.778	7.773	0.733	76	2136	N.D.		
15) Methylene chloride	7.924	7.931	0.747	84	8490	N.D.		
16) tert-Butyl methyl ether	0.000	8.242	0.000		0	N.D.		
17) trans-1,2-Dichloroethy...	0.000	8.285	0.000		0	N.D.		
18) Vinyl acetate	8.704	8.705	0.820	43	188	N.D.		
19) 1,1-Dichloroethane	0.000	8.760	0.000		0	N.D.		
20) 2-Butanone	9.345	9.327	0.881	43	1052	N.D.		
21) cis-1,2-Dichloroethylene	0.000	9.388	0.000		0	N.D.		
22) 2,2-Dichloropropane	0.000	9.419	0.000		0	N.D.		
23) Bromochloromethane	0.000	9.656	0.000		0	N.D.		
24) Chloroform	9.680	9.687	0.912	83	150	N.D.		
25) 1,1,1-Trichloroethane	0.000	9.979	0.000		0	N.D.		
26) Cyclohexane	0.000	10.083	0.000		0	N.D.		
27) 1,1-Dichloropropene	0.000	10.132	0.000		0	N.D.		
28) Carbon tetrachloride	0.000	10.175	0.000		0	N.D.		
30) 1,2-Dichloroethane	0.000	10.339	0.000		0	N.D.		
31) Benzene	10.369	10.370	0.977	78	655	N.D.		
32) Cyclohexene	10.613	10.492	1.000	67	296	N.D.		
33) n-Butyl alcohol	10.692	10.693	1.007	56	455	N.D.		
34) Trichloroethylene	0.000	11.004	0.000		0	N.D.		
35) 1,2-Dichloropropane	0.000	11.241	0.000		0	N.D.		
36) Methylcyclohexane	0.000	11.260	0.000		0	N.D.		
37) Dibromomethane	0.000	11.376	0.000		0	N.D.		
38) Bromodichloromethane	0.000	11.485	0.000		0	N.D.		
39) 2-Chloroethylvinyl ether	0.000	11.699	0.000		0	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030410V4\
Data File : 4A440.D
Acq On : 5 Mar 2010 4:01 am
Operator : ACJ
InstName : VOA4
Sample : |248102004|961336|1|VOAF|1|VOA8260BS|
Misc : LANL 5G N/A SOIL
ALS Vial : 40 Sample Multiplier: 1

Quant Time: Mar 11 18:41:34 2010
Quant Method : C:\msdchem\1\DATA\030110V4\VOA4-8260-030110.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 02 15:03:40 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
40) cis-1,3-Dichloropropylene	0.000	11.930	0.000		0	N.D.	
42) 4-Methyl-2-pentanone	0.000	12.016	0.000		0	N.D.	
44) Toluene	12.326	12.320	0.895	91	1176	N.D.	
45) trans-1,3-Dichloroprop...	12.460	12.461	0.905	75	667	N.D.	
46) 1,1,2-Trichloroethane	0.000	12.680	0.000		0	N.D.	
47) 2-Hexanone	12.856	12.857	0.934	43	9315	N.D.	
48) 1,3-Dichloropropane	0.000	12.875	0.000		0	N.D.	
49) Tetrachloroethylene	0.000	12.918	0.000		0	N.D.	
50) Dibromochloromethane	0.000	13.144	0.000		0	N.D.	
51) 1,2-Dibromoethane	0.000	13.320	0.000		0	N.D.	
52) Chlorobenzene	13.801	13.802	1.002	112	305	N.D.	
53) 1,1,1,2-Tetrachloroethane	0.000	13.851	0.000		0	N.D.	
54) Ethylbenzene	13.850	13.863	1.006	91	1452	N.D.	
55) m,p-Xylenes	13.972	13.973	1.015	106	1035	N.D.	
56) o-Xylene	14.398	14.399	1.046	106	364	N.D.	
57) Styrene	14.392	14.399	1.045	104	547	N.D.	
59) Bromoform	0.000	14.655	0.000		0	N.D.	
60) Isopropylbenzene	14.752	14.759	0.912	105	617	N.D.	
62) 1,1,2,2-Tetrachloroethane	15.002	15.015	0.927	83	491	N.D.	
63) 1,2,3-Trichloropropane	0.000	15.107	0.000		0	N.D.	
64) Bromobenzene	0.000	15.168	0.000		0	N.D.	
65) n-Propylbenzene	15.179	15.180	0.938	91	1309	N.D.	
66) 1,3,5-Trimethylbenzene	15.331	15.332	0.948	105	1053	N.D.	
67) 2-Chlorotoluene	15.423	15.332	0.953	126	202	N.D.	
68) 4-Chlorotoluene	15.435	15.430	0.954	91	791	N.D.	
69) tert-Butylbenzene	0.000	15.704	0.000		0	N.D.	
70) 1,2,4-Trimethylbenzene	15.733	15.741	0.972	105	2452	N.D.	
71) sec-Butylbenzene	15.922	15.930	0.984	105	753	N.D.	
72) 4-Isopropyltoluene	16.051	16.051	0.992	119	701	N.D.	
73) 1,3-Dichlorobenzene	16.105	16.119	0.995	146	241	N.D.	
74) 1,4-Dichlorobenzene	16.197	16.204	1.001	146	469	N.D.	
75) n-Butylbenzene	16.502	16.503	1.020	91	714	N.D.	
76) 1,2-Dichlorobenzene	16.636	16.643	1.028	146	234	N.D.	
77) 1,2-Dibromo-3-chloropr...	0.000	17.527	0.000		0	N.D.	
78) 1,2,4-Trichlorobenzene	0.000	18.630	0.000		0	N.D.	
79) Hexachlorobutadiene	0.000	18.819	0.000		0	N.D.	
80) Naphthalene	19.019	19.026	1.176	128	4921	N.D.	
81) 1,2,3-Trichlorobenzene	0.000	19.386	0.000		0	N.D.	
83) Chlorotrifluoroethylene	0.000	4.826	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000	5.657	0.000		0	N.D.	
85) Acrolein	0.000	7.180	0.000		0	N.D.	
86) Trichlorotrifluoroethane	0.000	7.369	0.000		0	N.D.	
87) Isopropyl Alcohol	7.442	7.430	0.701	45	1594	N.D.	
88) Allyl chloride	7.857	7.796	0.740	41	213	N.D.	
89) tert-Butyl Alcohol	7.930	7.924	0.747	59	236	N.D.	
90) Acrylonitrile	0.000	8.174	0.000		0	N.D.	
91) Isopropyl ether	0.000	8.741	0.000		0	N.D.	
92) 2-Chloro-1,3-butadiene	0.000	8.869	0.000		0	N.D.	
93) Ethyl tert-butyl ether	0.000	9.143	0.000		0	N.D.	
94) Ethyl acetate	9.345	9.338	0.881	43	1052	N.D.	
95) Propionitrile	0.000	9.393	0.000		0	N.D.	
96) Methacrylonitrile	9.558	9.576	0.901	41	166	N.D.	
97) Tetrahydrofuran	9.716	9.710	0.916	42	1321	N.D.	
98) Isobutyl alcohol	10.009	10.009	0.943	41	169	N.D.	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030410V4\
Data File : 4A440.D
Acq On : 5 Mar 2010 4:01 am
Operator : ACJ
InstName : VOA4
Sample : |248102004|961336|1|VOAF|1|VOA8260BS|
Misc : LANL 5G N/A SOIL
ALS Vial : 40 Sample Multiplier: 1

Quant Time: Mar 11 18:41:34 2010
Quant Method : C:\msdchem\1\DATA\030110V4\VOA4-8260-030110.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 02 15:03:40 2010
Response via : Initial Calibration
Integrator: RTE

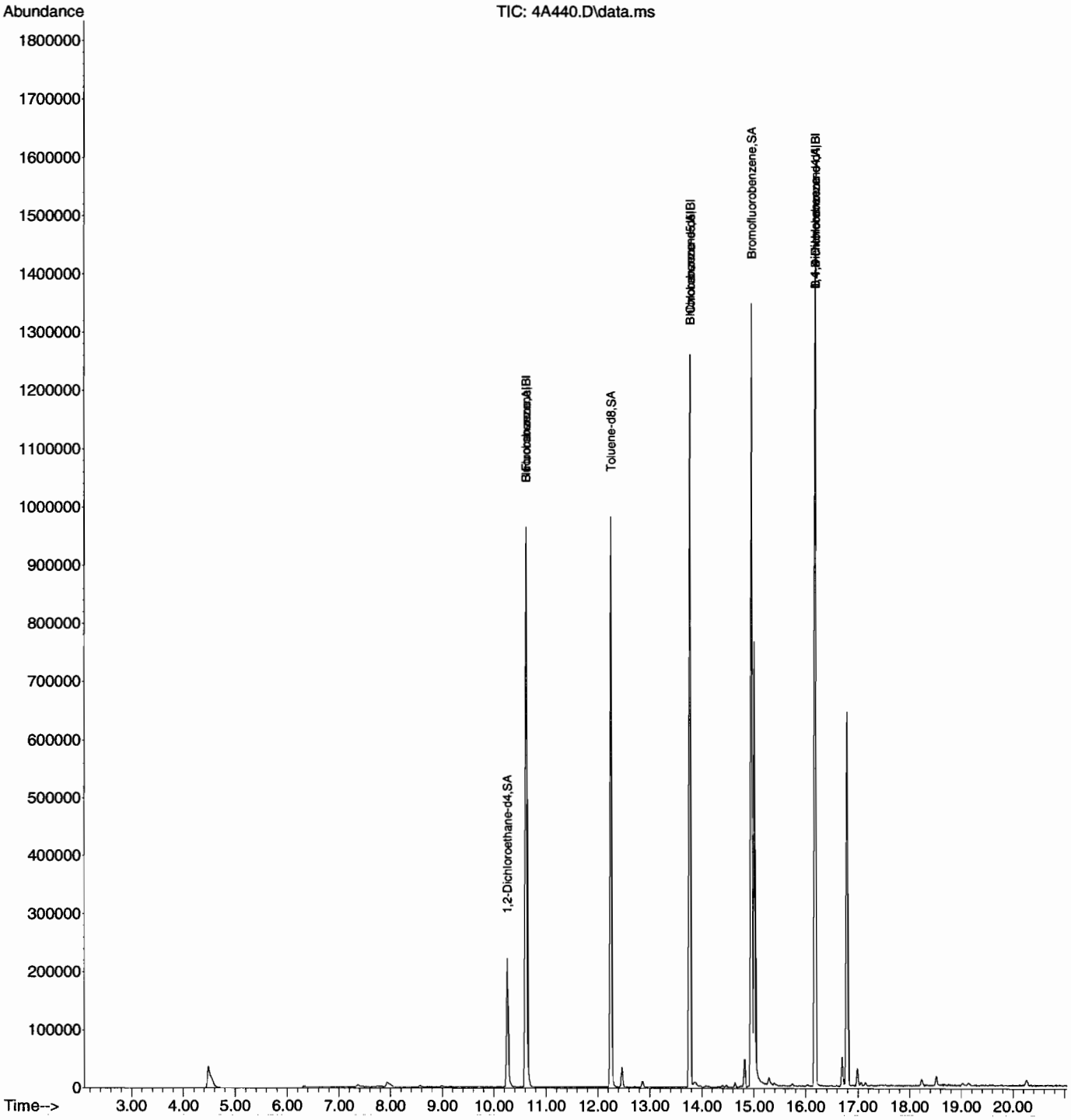
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
99) Methyl tert-amyl ether	0.000	10.387	0.000		0	N.D.	
100) Methyl methacrylate	0.000	11.204	0.000		0	N.D.	
101) 1,4-Dioxane	0.000	11.326	0.000		0	N.D.	
102) 2-Nitropropane	11.710	11.673	1.103	43	190	N.D.	
104) Ethyl methacrylate	0.000	12.466	0.000		0	N.D.	
106) 1-Chlorohexane	0.000	13.661	0.000		0m	N.D.	d
107) cis-1,4-Dichloro-2-butene	14.642	14.783	0.905	53	323	N.D.	
108) Cyclohexanone	14.898	14.904	0.921	42	112	N.D.	
109) trans-1,4-Dichloro-2-b...	0.000	15.063	0.000		0m	N.D.	d
110) Pentachloroethane	0.000	15.770	0.000		0	N.D.	
111) Benzyl chloride	16.313	16.319	1.008	91	381	N.D.	
112) bis(2-Chloroisopropyl)...	0.000	16.721	0.000		0m	N.D.	d

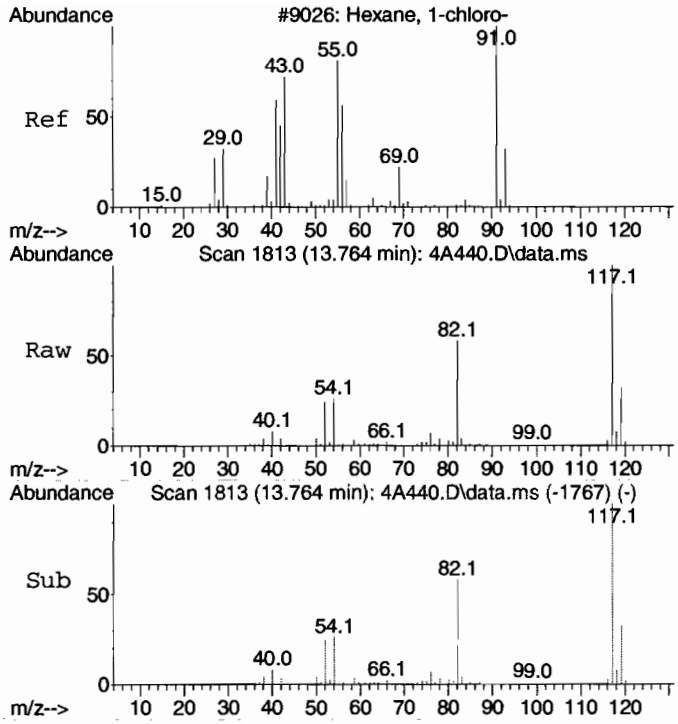
(#) = qualifier out of range (m) = manual integration (+) = signals summed
(E) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030410V4\
Data File : 4A440.D
Acq On : 5 Mar 2010 4:01 am
Operator : ACJ
InstName : VOA4
Sample : |248102004|961336|1|VOAF|1|VOA8260BS|
Misc : LANL 5G N/A SOIL
ALS Vial : 40 Sample Multiplier: 1

Quant Time: Mar 11 18:41:34 2010
Quant Method : C:\msdchem\1\DATA\030110V4\VOA4-8260-030110.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 02 15:03:40 2010
Response via : Initial Calibration
Integrator: RTE

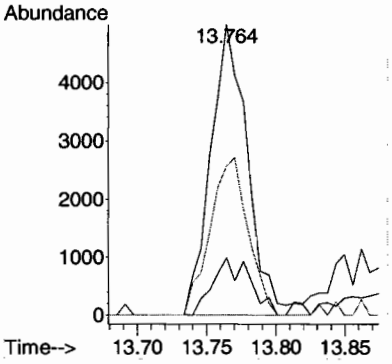


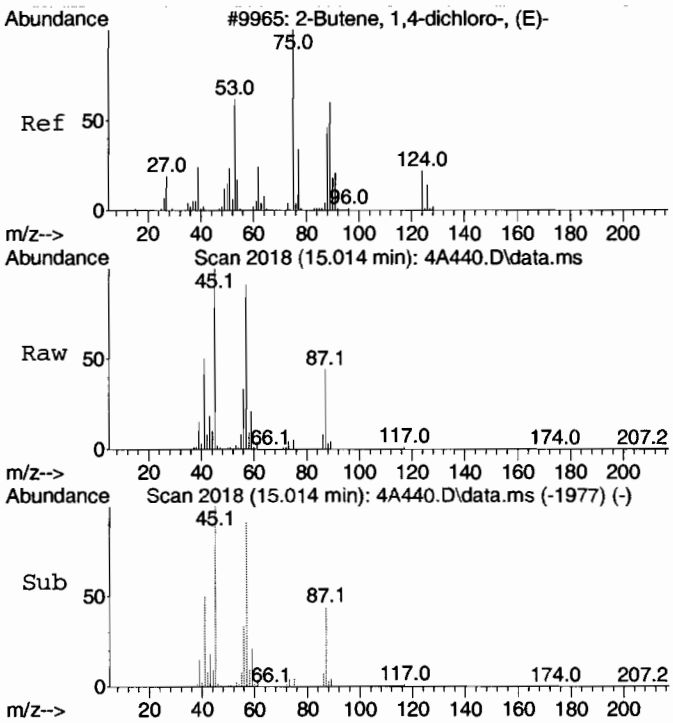


#106 BEFORE analyst DELETION
1-Chlorohexane
Concen: 1.80 ug/L
RT: 13.764 min Scan# 1813
Delta R.T. 0.104 min
Lab File: 4A440.D
Acq: 5 Mar 2010 4:01 am

Tgt Ion: 55 Resp: 9256

Ion	Ratio	Lower	Upper
55	100		
91	19.7	112.1	172.1#
56	55.6	28.5	88.5

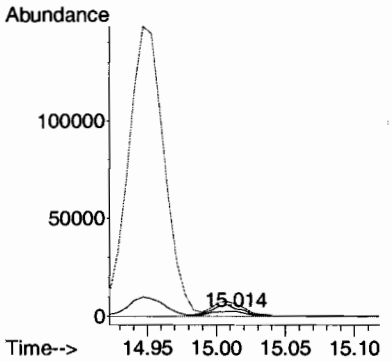


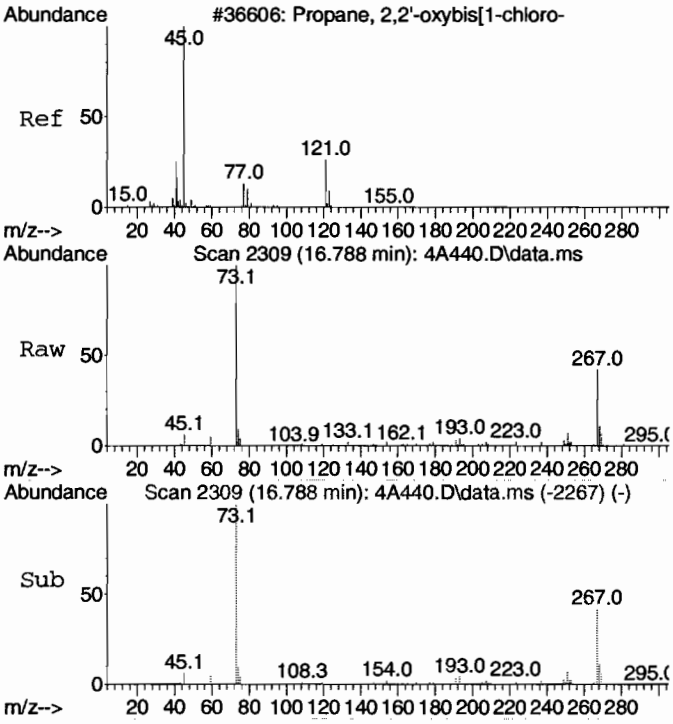


#109 BEFORE analyst DELETION
trans-1,4-Dichloro-2-butene
Concen: 2.28 ug/L
RT: 15.014 min Scan# 2018
Delta R.T. -0.049 min
Lab File: 4A440.D
Acq: 5 Mar 2010 4:01 am

Tgt Ion: 53 Resp: 5077

Ion	Ratio	Lower	Upper
53	100		
88	180.5	26.3	86.3#
75	0.0	101.1	161.1#

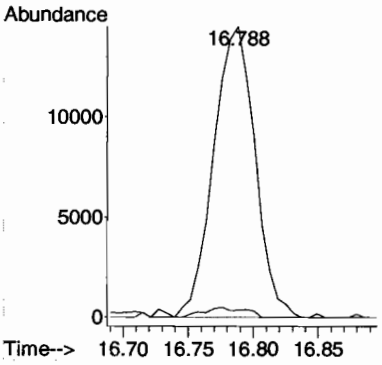




#112 BEFORE analyst DELETION
bis(2-Chloroisopropyl)ether
Concen: 8.99 ug/L
RT: 16.788 min Scan# 2309
Delta R.T. 0.067 min
Lab File: 4A440.D
Acq: 5 Mar 2010 4:01 am

Tgt Ion: 45 Resp: 32050

Ion	Ratio	Lower	Upper
45	100		
121	3.5	0.0	56.0



Library Search Compound Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030410V4\
Data File : 4A440.D
Acq On : 5 Mar 2010 4:01 am
Operator : ACJ
Sample : |248102004|961336|1|VOAF|1|VOA8260BS|
Misc : LANL 5G N/A SOIL
ALS Vial : 40 Sample Multiplier: 1

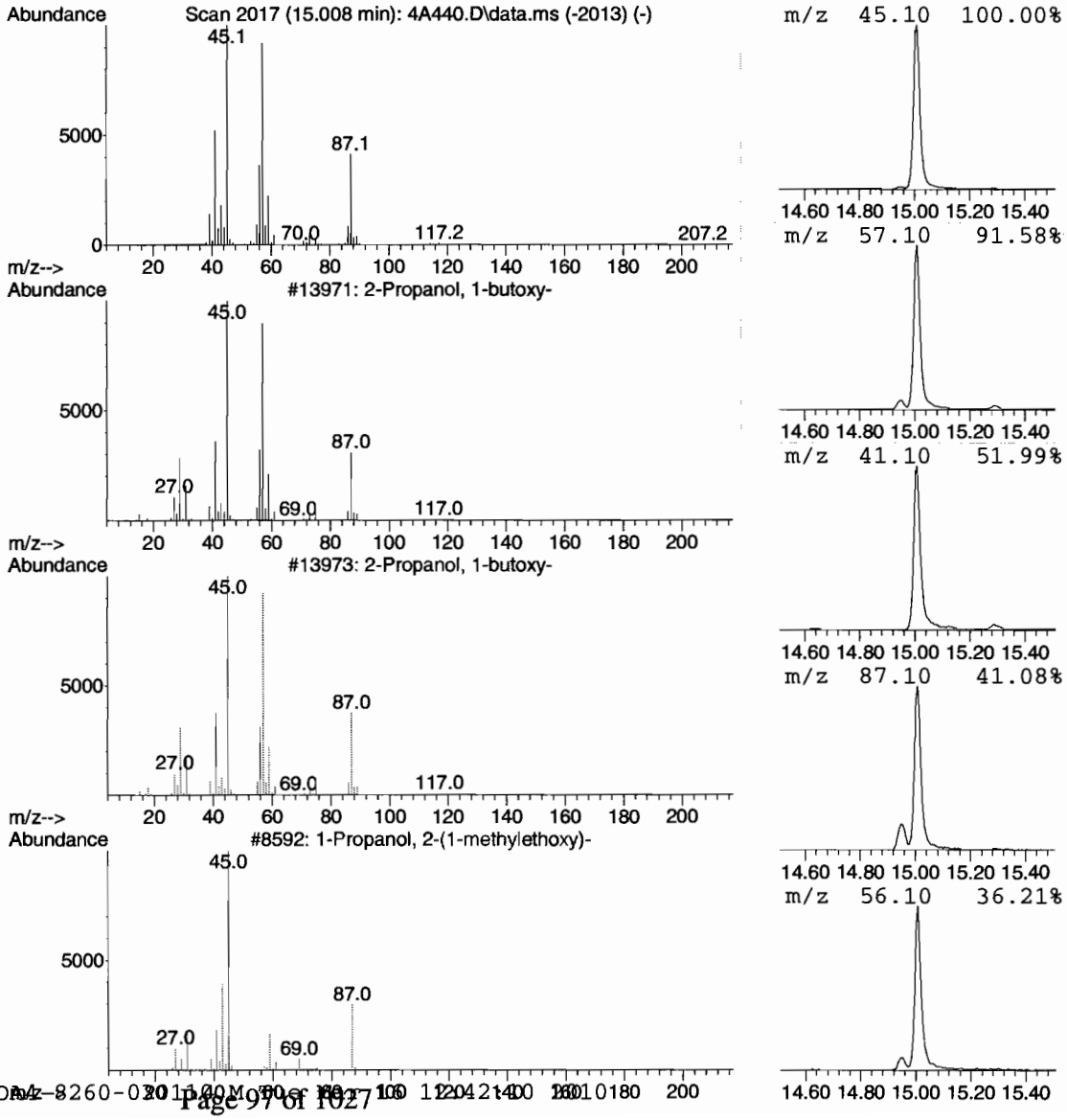
Quant Method : C:\msdchem\1\DATA\030110V4\VOA4-8260-030110.M
Quant Title : Volatile Organics 8260B SubList :

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

****
Peak Number 1 unknown hydrocarbon Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
15.008	23.55 ug/L	1355380	1,4-Dichlorobenzene-d4	16.179

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Propanol, 1-butoxy-	132	C7H16O2	005131-66-8	90
2	2-Propanol, 1-butoxy-	132	C7H16O2	005131-66-8	90
3	1-Propanol, 2-(1-methylethoxy)-	118	C6H14O2	003944-37-4	59
4	3,3-Dimethylbutane-2-ol	102	C6H14O	000464-07-3	53
5	4-Heptanol, 3,5-dimethyl-	144	C9H20O	019549-79-2	53



Library Search Compound Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030410V4\
Data File : 4A440.D
Acq On : 5 Mar 2010 4:01 am
Operator : ACJ
Sample : |248102004|961336|1|VOAF|1|VOA8260BS|
Misc : LANL 5G N/A SOIL
ALS Vial : 40 Sample Multiplier: 1

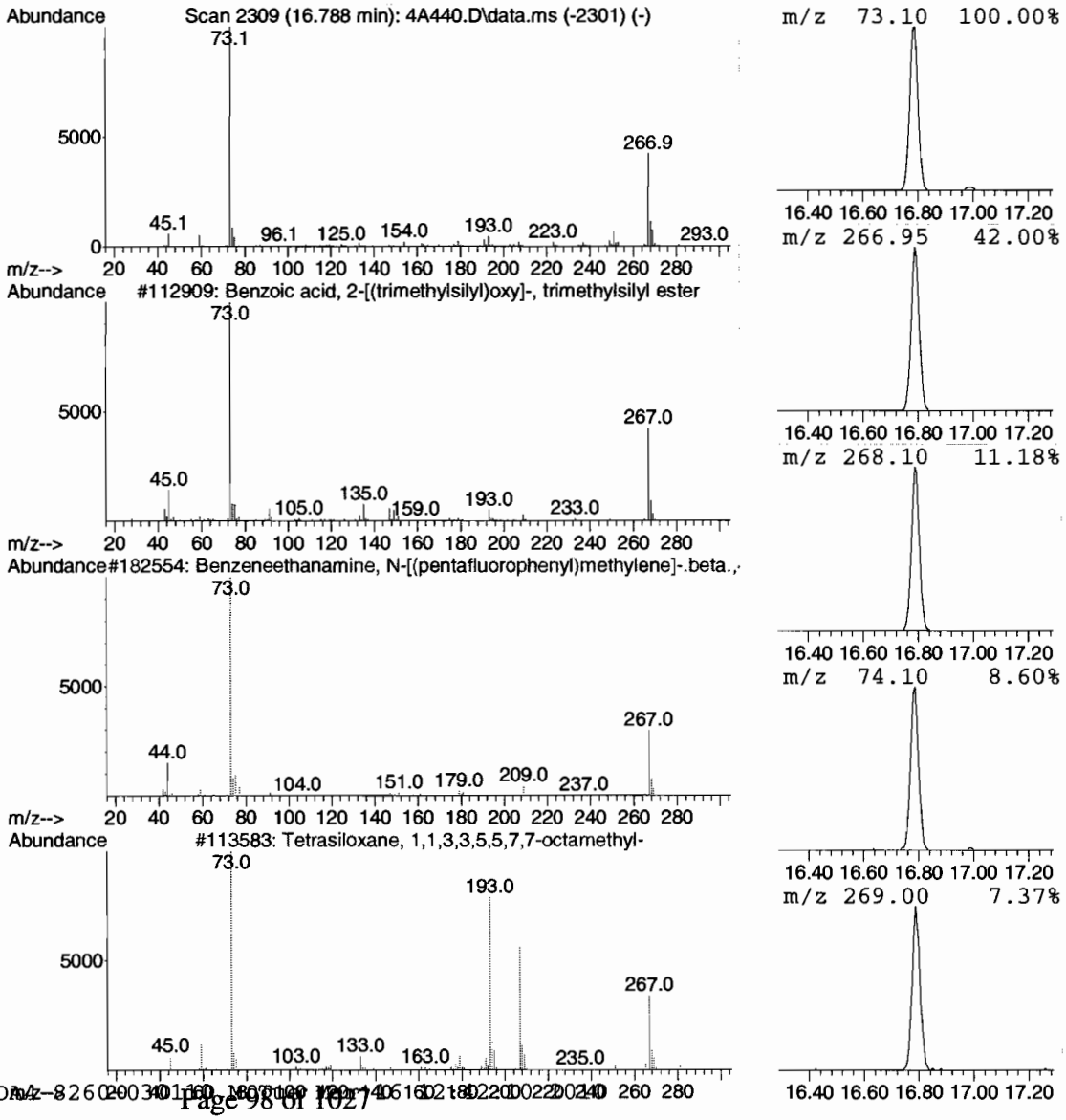
Quant Method : C:\msdchem\1\DATA\030110V4\VOA4-8260-030110.M
Quant Title : Volatile Organics 8260B SubList :

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

****
Peak Number 2 unknown siloxane Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
16.788	23.48 ug/L	1351180	B 1,4-Dichlorobenzene-d4	16.179

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzoic acid, 2-[(trimethylsilyl...	282	C13H22O3Si2	003789-85-3	39
2	Benzeneethanamine, N-[(pentafluo...	475	C21H26F5NO2Si2	055429-85-1	37
3	Tetrasiloxane, 1,1,3,3,5,5,7,7-o...	282	C8H26O3Si4	001000-05-1	27
4	1-Boraindane, 3-methyl-1-[1-(tri...	266	C17H23BSi	190316-36-0	22
5	Benzeneacetic acid, 3-methoxy-4-...	268	C13H20O4Si	015964-84-8	9



Tentatively Identified Compound (LSC) summary
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030410V4\
Data File : 4A440.D
Acq On : 5 Mar 2010 4:01 am
Operator : ACJ
Sample : |248102004|961336|1|VOAF|1|VOA8260BS|
Misc : LANL 5G N/A SOIL
ALS Vial : 40 Sample Multiplier: 1

Quant Method : C:\msdchem\1\DATA\030110V4\VOA4-8260-030110.M
Quant Title : Volatile Organics 8260B SubList :

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

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard--- #	RT	Resp	Conc
unknown hydroca...	15.008	23.6	ug/L	1355380	5	16.179	2877480	50.0
unknown siloxane	16.788	23.5	ug/L	1351180	6	16.179	2877480	50.0

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-2089**	**Date Collected:**	**02/22/2010 12:00**	**Matrix:**	**R**
Lab Sample ID:	**248102005**	**Date Received:**	**02/26/2010 08:45**	**%Moisture:**	**12.8**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE15-10-8398**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**961336**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**03/05/2010 04:28**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**03/04/2010 17:46**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**030410V4\4A441.D**	**Column:**	**DB-624**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.15	ug/kg	0.390	1.15
74-87-3	Chloromethane	U	1.15	ug/kg	0.344	1.15
75-01-4	Vinyl chloride	U	1.15	ug/kg	0.344	1.15
74-83-9	Bromomethane	U	1.15	ug/kg	0.344	1.15
75-00-3	Chloroethane	U	1.15	ug/kg	0.344	1.15
75-69-4	Trichlorofluoromethane	U	1.15	ug/kg	0.344	1.15
67-64-1	Acetone		7.19	ug/kg	1.90	5.74
75-35-4	1,1-Dichloroethylene	U	1.15	ug/kg	0.344	1.15
74-88-4	Iodomethane	U	5.74	ug/kg	1.84	5.74
75-09-2	Methylene chloride	U	5.74	ug/kg	2.29	5.74
75-15-0	Carbon disulfide	U	5.74	ug/kg	1.43	5.74
156-60-5	trans-1,2-Dichloroethylene	U	1.15	ug/kg	0.344	1.15
75-34-3	1,1-Dichloroethane	U	1.15	ug/kg	0.344	1.15
78-93-3	2-Butanone	U	5.74	ug/kg	1.72	5.74
156-59-2	cis-1,2-Dichloroethylene	U	1.15	ug/kg	0.344	1.15
594-20-7	2,2-Dichloropropane	U	1.15	ug/kg	0.344	1.15
67-66-3	Chloroform	U	1.15	ug/kg	0.344	1.15
74-97-5	Bromochloromethane	U	1.15	ug/kg	0.379	1.15
71-55-6	1,1,1-Trichloroethane	U	1.15	ug/kg	0.344	1.15
563-58-6	1,1-Dichloropropene	U	1.15	ug/kg	0.344	1.15
56-23-5	Carbon tetrachloride	U	1.15	ug/kg	0.344	1.15
107-06-2	1,2-Dichloroethane	U	1.15	ug/kg	0.344	1.15
71-43-2	Benzene	U	1.15	ug/kg	0.344	1.15
79-01-6	Trichloroethylene	U	1.15	ug/kg	0.379	1.15
78-87-5	1,2-Dichloropropane	U	1.15	ug/kg	0.344	1.15
75-27-4	Bromodichloromethane	U	1.15	ug/kg	0.344	1.15
74-95-3	Dibromomethane	U	1.15	ug/kg	0.344	1.15
108-10-1	4-Methyl-2-pentanone	U	5.74	ug/kg	1.43	5.74
10061-01-5	cis-1,3-Dichloropropylene	U	1.15	ug/kg	0.344	1.15
108-88-3	Toluene	U	1.15	ug/kg	0.344	1.15
10061-02-6	trans-1,3-Dichloropropylene	U	1.15	ug/kg	0.344	1.15
79-00-5	1,1,2-Trichloroethane	U	1.15	ug/kg	0.344	1.15
591-78-6	2-Hexanone	U	5.74	ug/kg	1.72	5.74
142-28-9	1,3-Dichloropropane	U	1.15	ug/kg	0.344	1.15
127-18-4	Tetrachloroethylene	U	1.15	ug/kg	0.344	1.15
124-48-1	Dibromochloromethane	U	1.15	ug/kg	0.344	1.15
106-93-4	1,2-Dibromoethane	U	1.15	ug/kg	0.344	1.15
108-90-7	Chlorobenzene	U	1.15	ug/kg	0.344	1.15

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-2089**	**Date Collected:**	**02/22/2010 12:00**	**Matrix:**	**R**
Lab Sample ID:	**248102005**	**Date Received:**	**02/26/2010 08:45**	**%Moisture:**	**12.8**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE15-10-8398**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**961336**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**03/05/2010 04:28**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**03/04/2010 17:46**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**030410V4\4A441.D**	**Column:**	**DB-624**		

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

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	unknown hydrocarbon	4.47	10.2	ug/kg	0	J
	unknown siloxane	16.79	12.6	ug/kg	0	J

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030410V4\
Data File : 4A441.D
Acq On : 5 Mar 2010 4:28 am
Operator : ACJ
InstName : VOA4
Sample : |248102005|961336|1|VOAF|1|VOA8260BS|
Misc : LANL 5G N/A SOIL
ALS Vial : 41 Sample Multiplier: 1

Quant Time: Mar 11 18:45:53 2010
Quant Method : C:\msdchem\1\DATA\030110V4\VOA4-8260-030110.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 02 15:03:40 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	Dev(Min)
Internal Standards								
1) Fluorobenzene	10.613	10.620	1.000	96	1022207	50.00	ug/L	0.00
41) Chlorobenzene-d5	13.765	13.771	1.000	117	828569	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	16.179	16.180	1.000	152	448543	50.00	ug/L	0.00
82) B Fluorobenzene	10.613	10.619	1.000	96	1021912	50.00	ug/L	0.00
103) B Chlorobenzene-d5	13.765	13.771	1.000	117	830080	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	16.179	16.179	1.000	152	448556	50.00	ug/L	0.00
System Monitoring Compounds								Dev(Min)
29) 1,2-Dichloroethane-d4	10.259	10.260	0.967	65	205102	48.50	ug/L	0.00
Spiked Amount 50.000	Range 66 - 134		Recovery = 97.00%					
43) Toluene-d8	12.246	12.247	0.890	98	740426	48.17	ug/L	0.00
Spiked Amount 50.000	Range 71 - 128		Recovery = 96.34%					
61) Bromofluorobenzene	14.947	14.954	0.924	95	532390	60.67	ug/L	0.00
Spiked Amount 50.000	Range 65 - 130		Recovery = 121.34%					

Target Compounds	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	QValue
2) Dichlorodifluoromethane	0.000	4.911	0.000		0	N.D.		
3) Chloromethane	0.000	5.291	0.000		0	N.D.		
4) Vinyl chloride	0.000	5.521	0.000		0	N.D.		
5) Bromomethane	0.000	6.137	0.000		0	N.D.		
6) Chloroethane	0.000	6.295	0.000		0	N.D.		
7) Trichlorofluoromethane	0.000	6.669	0.000		0	N.D.		
8) Ethyl ether	0.000	6.998	0.000		0	N.D.		
9) Acetone	7.351	7.352	0.693	43	40421	6.27	ug/L	89
10) 1,1-Dichloroethylene	0.000	7.389	0.000		0	N.D.		
11) Iodomethane	0.000	7.663	0.000		0	N.D.		
12) Acetonitrile	7.717	7.699	0.727	41	806	N.D.		
13) Methyl acetate	7.747	7.748	0.730	43	258	N.D.		
14) Carbon disulfide	7.760	7.773	0.731	76	2127	N.D.		
15) Methylene chloride	7.936	7.931	0.748	84	11364	N.D.		
16) tert-Butyl methyl ether	0.000	8.242	0.000		0	N.D.		
17) trans-1,2-Dichloroethy...	0.000	8.285	0.000		0	N.D.		
18) Vinyl acetate	8.680	8.705	0.818	43	326	N.D.		
19) 1,1-Dichloroethane	0.000	8.760	0.000		0	N.D.		
20) 2-Butanone	9.326	9.327	0.879	43	9833	N.D.		
21) cis-1,2-Dichloroethylene	0.000	9.388	0.000		0	N.D.		
22) 2,2-Dichloropropane	0.000	9.419	0.000		0	N.D.		
23) Bromochloromethane	0.000	9.656	0.000		0	N.D.		
24) Chloroform	9.692	9.687	0.913	83	506	N.D.		
25) 1,1,1-Trichloroethane	0.000	9.979	0.000		0	N.D.		
26) Cyclohexane	0.000	10.083	0.000		0	N.D.		
27) 1,1-Dichloropropene	0.000	10.132	0.000		0	N.D.		
28) Carbon tetrachloride	0.000	10.175	0.000		0	N.D.		
30) 1,2-Dichloroethane	0.000	10.339	0.000		0	N.D.		
31) Benzene	10.369	10.370	0.977	78	1648	N.D.		
32) Cyclohexene	10.613	10.492	1.000	67	294	N.D.		
33) n-Butyl alcohol	10.692	10.693	1.007	56	166	N.D.		
34) Trichloroethylene	0.000	11.004	0.000		0	N.D.		
35) 1,2-Dichloropropane	0.000	11.241	0.000		0	N.D.		
36) Methylcyclohexane	11.265	11.260	1.061	83	131	N.D.		
37) Dibromomethane	0.000	11.376	0.000		0	N.D.		
38) Bromodichloromethane	0.000	11.485	0.000		0	N.D.		
39) 2-Chloroethylvinyl ether	0.000	11.699	0.000		0	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030410V4\
Data File : 4A441.D
Acq On : 5 Mar 2010 4:28 am
Operator : ACJ
InstName : VOA4
Sample : |248102005|961336|1|VOAF|1|VOA8260BS|
Misc : LANL 5G N/A SOIL
ALS Vial : 41 Sample Multiplier: 1

Quant Time: Mar 11 18:45:53 2010
Quant Method : C:\msdchem\1\DATA\030110V4\VOA4-8260-030110.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 02 15:03:40 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
40) cis-1,3-Dichloropropylene	0.000	11.930	0.000		0	N.D.	
42) 4-Methyl-2-pentanone	0.000	12.016	0.000		0	N.D.	
44) Toluene	12.314	12.320	0.895	91	2952	N.D.	
45) trans-1,3-Dichloroprop...	12.460	12.461	0.905	75	722	N.D.	
46) 1,1,2-Trichloroethane	0.000	12.680	0.000		0	N.D.	
47) 2-Hexanone	12.862	12.857	0.934	43	1324	N.D.	
48) 1,3-Dichloropropane	0.000	12.875	0.000		0	N.D.	
49) Tetrachloroethylene	12.917	12.918	0.938	164	124	N.D.	
50) Dibromochloromethane	0.000	13.144	0.000		0	N.D.	
51) 1,2-Dibromoethane	0.000	13.320	0.000		0	N.D.	
52) Chlorobenzene	13.795	13.802	1.002	112	476	N.D.	
53) 1,1,1,2-Tetrachloroethane	13.868	13.851	1.008	131	1613	N.D.	
54) Ethylbenzene	0.000	13.863	0.000		0m	N.D.	d
55) m,p-Xylenes	13.966	13.973	1.015	106	2144	N.D.	
56) o-Xylene	14.399	14.399	1.046	106	1142	N.D.	
57) Styrene	14.399	14.399	1.046	104	1200	N.D.	
59) Bromoform	0.000	14.655	0.000		0	N.D.	
60) Isopropylbenzene	14.758	14.759	0.912	105	663	N.D.	
62) 1,1,2,2-Tetrachloroethane	0.000	15.015	0.000		0	N.D.	
63) 1,2,3-Trichloropropane	0.000	15.107	0.000		0	N.D.	
64) Bromobenzene	0.000	15.168	0.000		0	N.D.	
65) n-Propylbenzene	15.185	15.180	0.939	91	1648	N.D.	
66) 1,3,5-Trimethylbenzene	0.000	15.332	0.000		0	N.D.	
67) 2-Chlorotoluene	0.000	15.332	0.000		0	N.D.	
68) 4-Chlorotoluene	15.411	15.430	0.953	91	150	N.D.	
69) tert-Butylbenzene	0.000	15.704	0.000		0	N.D.	
70) 1,2,4-Trimethylbenzene	15.740	15.741	0.973	105	4364	N.D.	
71) sec-Butylbenzene	15.923	15.930	0.984	105	604	N.D.	
72) 4-Isopropyltoluene	16.051	16.051	0.992	119	974	N.D.	
73) 1,3-Dichlorobenzene	16.118	16.119	0.996	146	159	N.D.	
74) 1,4-Dichlorobenzene	16.203	16.204	1.002	146	627	N.D.	
75) n-Butylbenzene	16.496	16.503	1.020	91	717	N.D.	
76) 1,2-Dichlorobenzene	16.642	16.643	1.029	146	393	N.D.	
77) 1,2-Dibromo-3-chloropr...	0.000	17.527	0.000		0	N.D.	
78) 1,2,4-Trichlorobenzene	0.000	18.630	0.000		0	N.D.	
79) Hexachlorobutadiene	0.000	18.819	0.000		0	N.D.	
80) Naphthalene	19.032	19.026	1.176	128	3261	N.D.	
81) 1,2,3-Trichlorobenzene	19.385	19.386	1.198	180	127	N.D.	
83) Chlorotrifluoroethylene	0.000	4.826	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000	5.657	0.000		0	N.D.	
85) Acrolein	0.000	7.180	0.000		0m	N.D.	d
86) Trichlorotrifluoroethane	0.000	7.369	0.000		0	N.D.	
87) Isopropyl Alcohol	7.418	7.430	0.699	45	1123	N.D.	
88) Allyl chloride	7.790	7.796	0.734	41	457	N.D.	
89) tert-Butyl Alcohol	7.936	7.924	0.748	59	843	N.D.	
90) Acrylonitrile	8.369	8.174	0.789	53	314	N.D.	
91) Isopropyl ether	0.000	8.741	0.000		0	N.D.	
92) 2-Chloro-1,3-butadiene	0.000	8.869	0.000		0	N.D.	
93) Ethyl tert-butyl ether	0.000	9.143	0.000		0	N.D.	
94) Ethyl acetate	0.000	9.338	0.000		0m	N.D.	d
95) Propionitrile	0.000	9.393	0.000		0	N.D.	
96) Methacrylonitrile	9.564	9.576	0.901	41	311	N.D.	
97) Tetrahydrofuran	9.716	9.710	0.916	42	2185	N.D.	
98) Isobutyl alcohol	9.997	10.009	0.942	41	463	N.D.	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030410V4\
Data File : 4A441.D
Acq On : 5 Mar 2010 4:28 am
Operator : ACJ
InstName : VOA4
Sample : |248102005|961336|1|VOAF|1|VOA8260BS|
Misc : LANL 5G N/A SOIL
ALS Vial : 41 Sample Multiplier: 1

Quant Time: Mar 11 18:45:53 2010
Quant Method : C:\msdchem\1\DATA\030110V4\VOA4-8260-030110.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 02 15:03:40 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
99) Methyl tert-amyl ether	0.000	10.387	0.000		0	N.D.	
100) Methyl methacrylate	0.000	11.204	0.000		0	N.D.	
101) 1,4-Dioxane	0.000	11.326	0.000		0	N.D.	
102) 2-Nitropropane	11.612	11.673	1.094	43	104	N.D.	
104) Ethyl methacrylate	12.515	12.466	0.909	69	101	N.D.	
106) 1-Chlorohexane	0.000	13.661	0.000		0m	N.D.	d
107) cis-1,4-Dichloro-2-butene	0.000	14.783	0.000		0	N.D.	
108) Cyclohexanone	15.014	14.904	0.928	42	888	N.D.	
109) trans-1,4-Dichloro-2-b...	0.000	15.063	0.000		0	N.D.	
110) Pentachloroethane	0.000	15.770	0.000		0	N.D.	
111) Benzyl chloride	16.301	16.319	1.008	91	207	N.D.	
112) bis(2-Chloroisopropyl)...	0.000	16.721	0.000		0m	N.D.	d

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

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030410V4\
Data File : 4A441.D
Acq On : 5 Mar 2010 4:28 am
Operator : ACJ
InstName : VOA4
Sample : |248102005|961336|1|VOAF|1|VOA8260BS|
Misc : LANL 5G N/A SOIL
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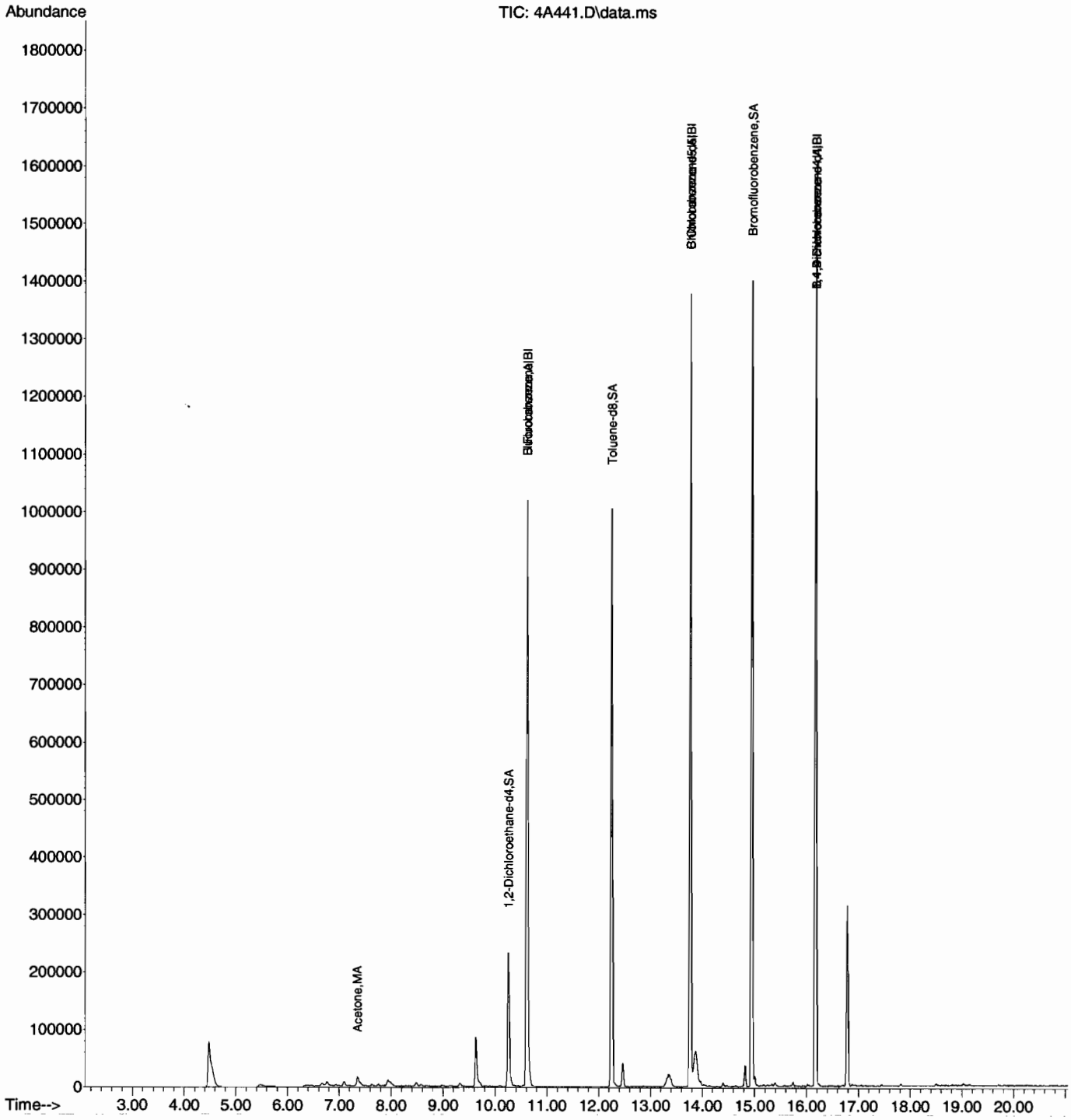
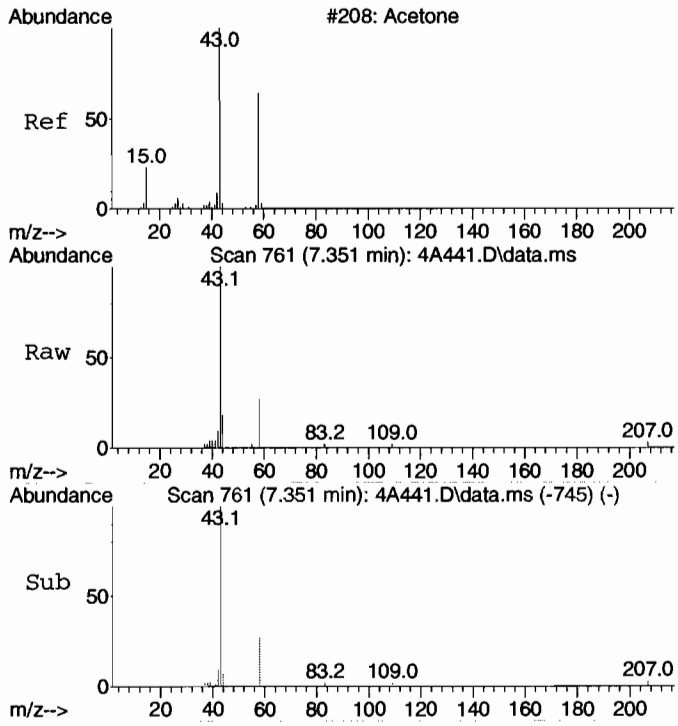
Quant Time: Mar 11 18:45:53 2010
Quant Method : C:\msdchem\1\DATA\030110V4\VOA4-8260-030110.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 02 15:03:40 2010
Response via : Initial Calibration
Integrator: RTE

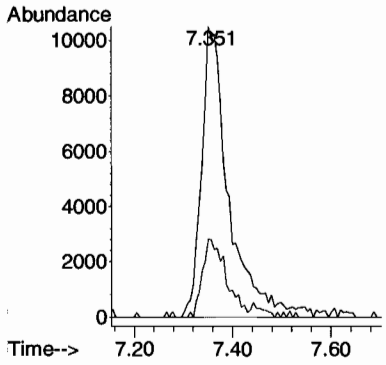


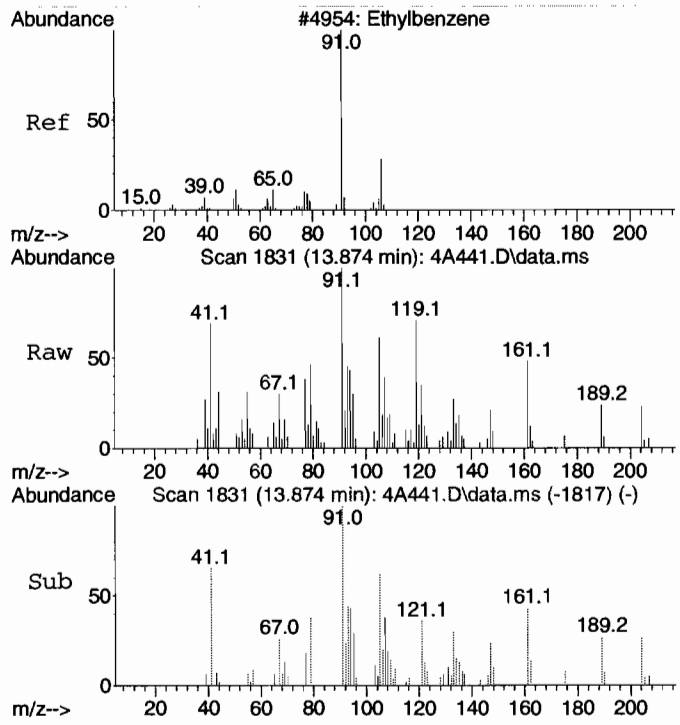


#9
Acetone
Concen: 6.27 ug/L
RT: 7.351 min Scan# 761
Delta R.T. -0.001 min
Lab File: 4A441.D
Acq: 5 Mar 2010 4:28 am

Tgt Ion: 43 Resp: 40421

Ion	Ratio	Lower	Upper
43	100		
58	23.3	0.0	59.0

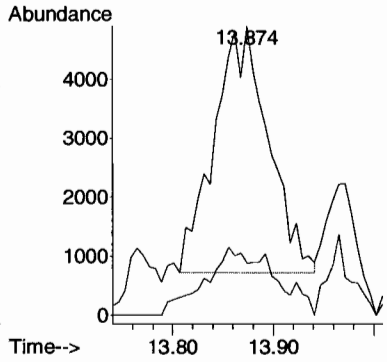


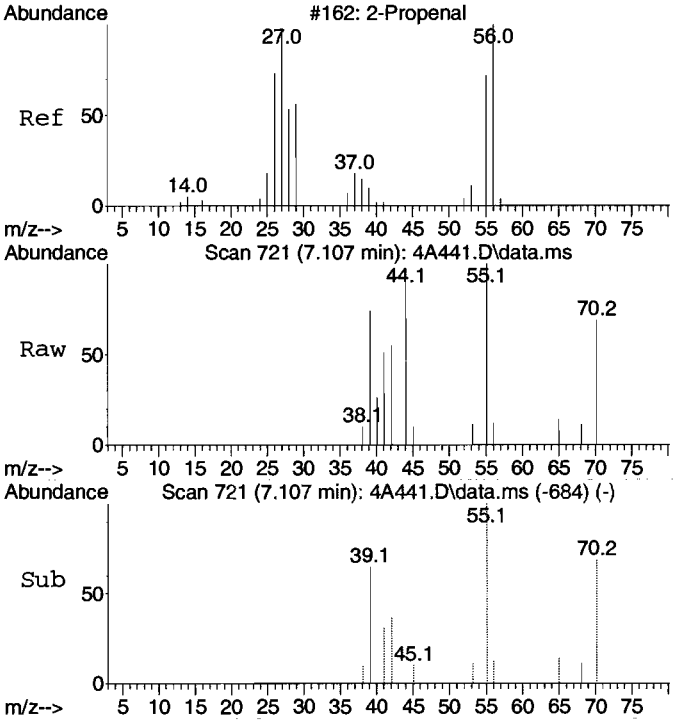


#54 BEFORE analyst DELETION
Ethylbenzene
Concen: 0.48 ug/L
RT: 13.874 min Scan# 1831
Delta R.T. 0.011 min
Lab File: 4A441.D
Acq: 5 Mar 2010 4:28 am

Tgt Ion: 91 Resp: 15620

Ion	Ratio	Lower	Upper
91	100		
106	0.0	2.8	62.8#

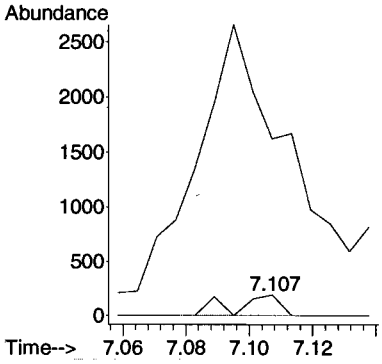


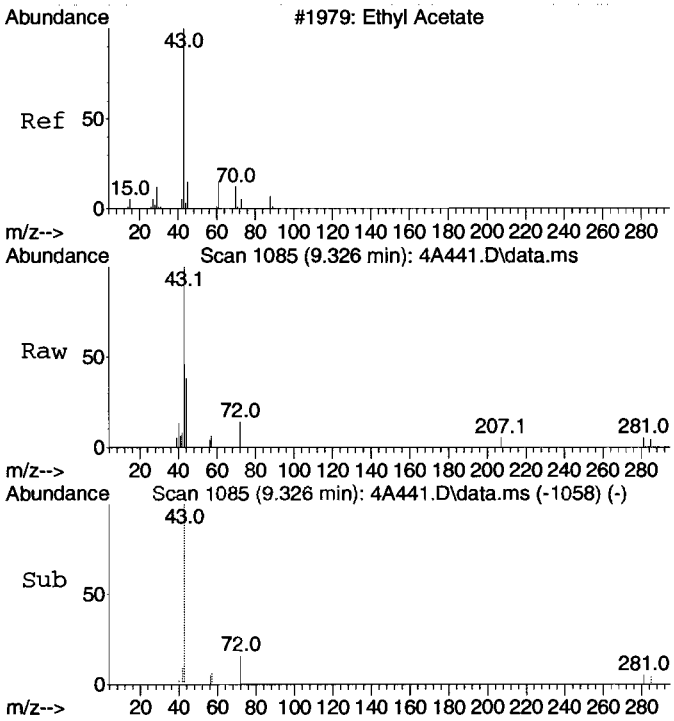


#85 BEFORE analyst DELETION
Acrolein
Concen: 13.54 ug/L
RT: 7.107 min Scan# 721
Delta R.T. -0.073 min
Lab File: 4A441.D
Acq: 5 Mar 2010 4:28 am

Tgt Ion: 56 Resp: 188

Ion	Ratio	Lower	Upper
56	100		
55	3500.5	41.4	101.4#

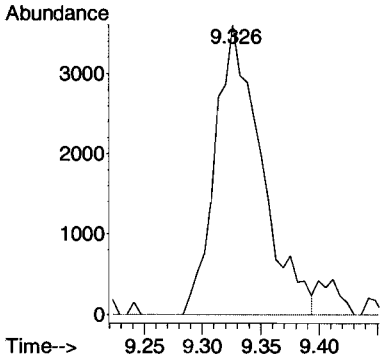


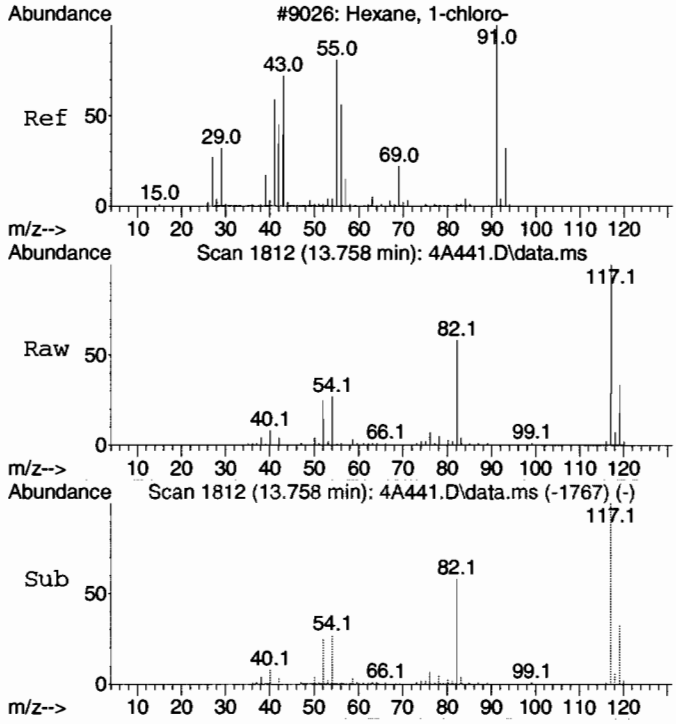


#94 BEFORE analyst DELETION
Ethyl acetate
Concen: 1.39 ug/L
RT: 9.326 min Scan# 1085
Delta R.T. -0.012 min
Lab File: 4A441.D
Acq: 5 Mar 2010 4:28 am

Tgt Ion: 43 Resp: 9833

Ion	Ratio	Lower	Upper
43	100		
61	0.0	0.0	44.1
70	0.0	0.0	41.0

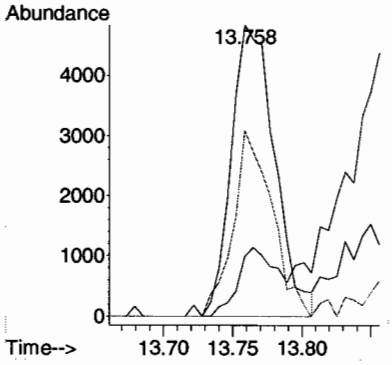


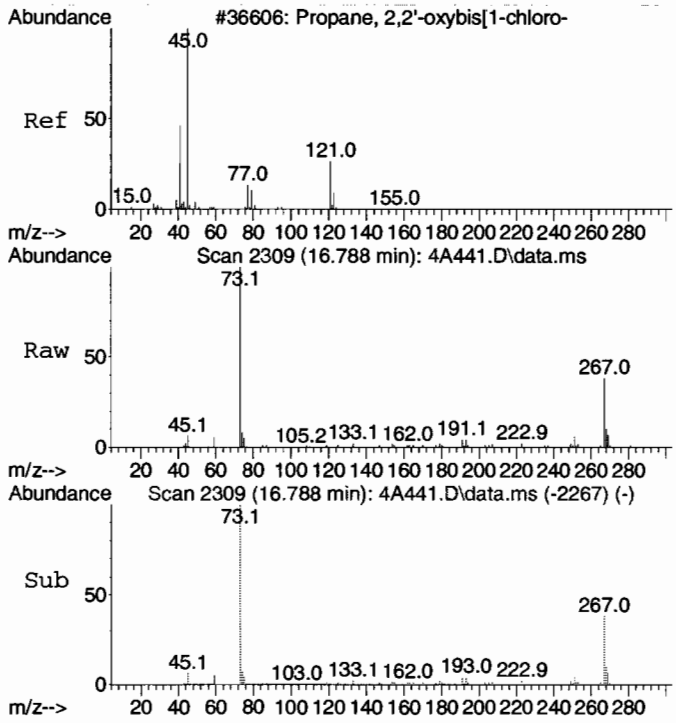


#106 BEFORE analyst DELETION
1-Chlorohexane
Concen: 2.04 ug/L
RT: 13.758 min Scan# 1812
Delta R.T. 0.098 min
Lab File: 4A441.D
Acq: 5 Mar 2010 4:28 am

Tgt Ion: 55 Resp: 10535

Ion	Ratio	Lower	Upper
55	100		
91	21.2	112.1	172.1#
56	56.8	28.5	88.5

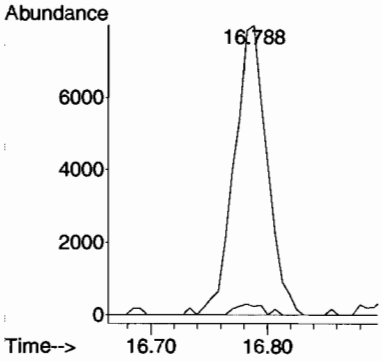




#112 BEFORE analyst DELETION
bis(2-Chloroisopropyl)ether
Concen: 4.36 ug/L
RT: 16.788 min Scan# 2309
Delta R.T. 0.067 min
Lab File: 4A441.D
Acq: 5 Mar 2010 4:28 am

Tgt Ion: 45 Resp: 15615

Ion	Ratio	Lower	Upper
45	100		
121	3.2	0.0	56.0



Library Search Compound Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030410V4\
Data File : 4A441.D
Acq On : 5 Mar 2010 4:28 am
Operator : ACJ
Sample : |248102005|961336|1|VOAF|1|VOA8260BS|
Misc : LANL 5G N/A SOIL
ALS Vial : 41 Sample Multiplier: 1

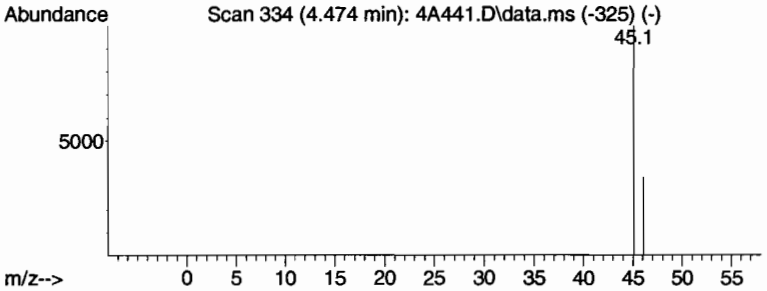
Quant Method : C:\msdchem\1\DATA\030110V4\VOA4-8260-030110.M
Quant Title : Volatile Organics 8260B SubList :

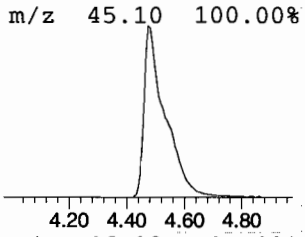
TIC Library : C:\Database\NIST05.L
TIC Integration Parameters: default.P

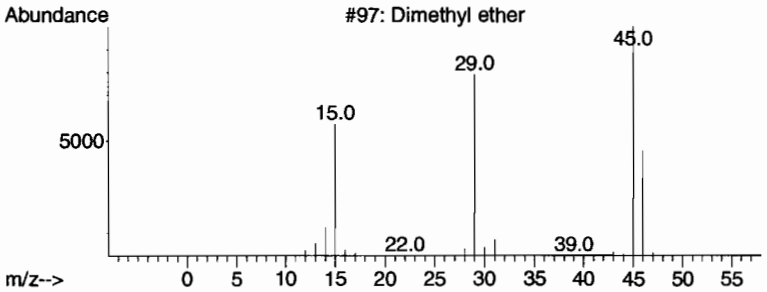
****
Peak Number 1 unknown hydrocarbon Concentration Rank 2

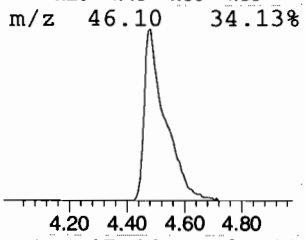
R.T.	EstConc	Area	Relative to ISTD	R.T.
4.474	8.88 ug/L	398351	Fluorobenzene	10.613

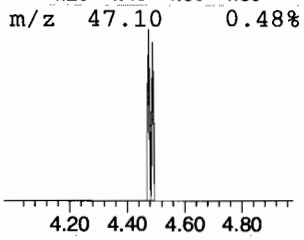
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Dimethyl ether	46	C2H6O	000115-10-6	5
2	Ethyl alcohol	46	C2H6O	000064-17-5	4
3	Ethyl alcohol	46	C2H6O	000064-17-5	4
4	Ethyl alcohol	46	C2H6O	000064-17-5	4
5	Formic acid	46	CH2O2	000064-18-6	3

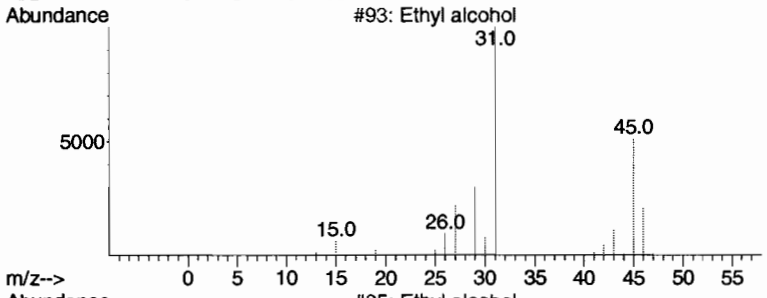


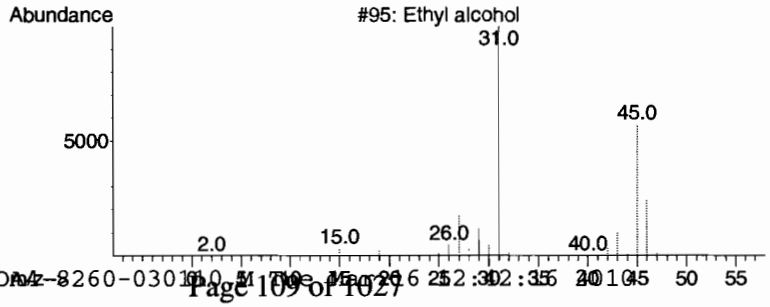












Library Search Compound Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030410V4\
Data File : 4A441.D
Acq On : 5 Mar 2010 4:28 am
Operator : ACJ
Sample : |248102005|961336|1|VOAF|1|VOA8260BS|
Misc : LANL 5G N/A SOIL
ALS Vial : 41 Sample Multiplier: 1

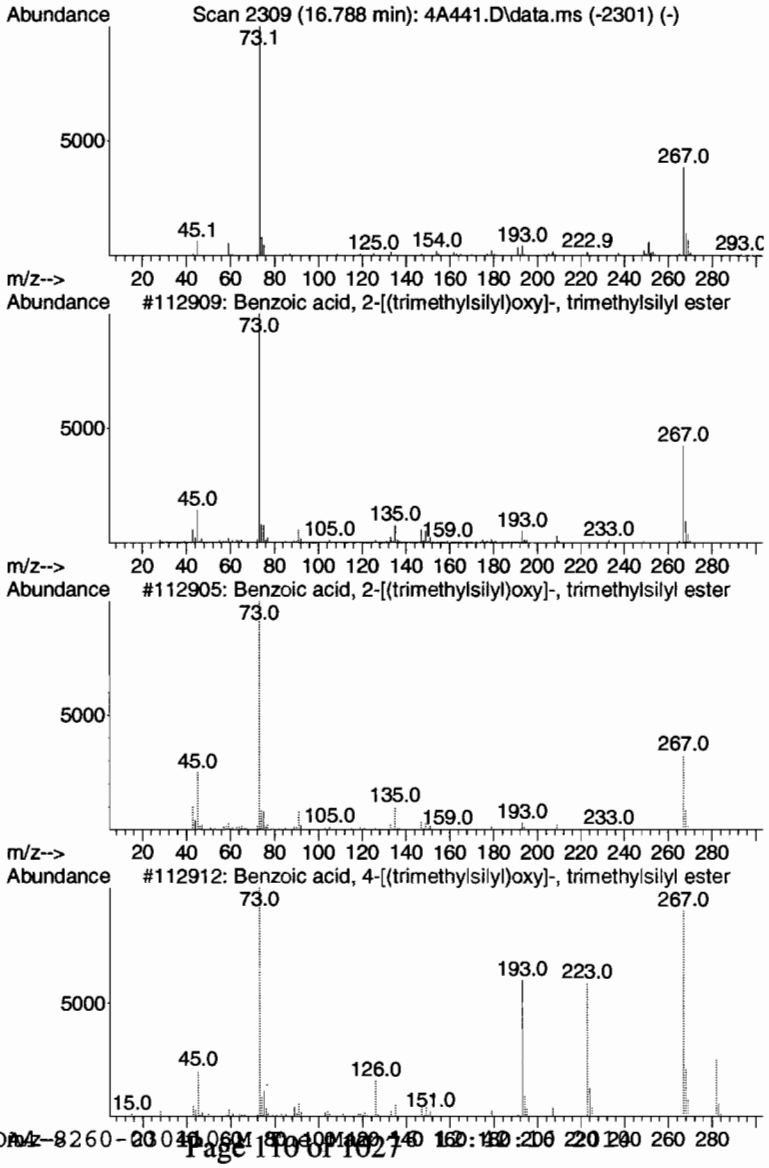
Quant Method : C:\msdchem\1\DATA\030110V4\VOA4-8260-030110.M
Quant Title : Volatile Organics 8260B SubList :

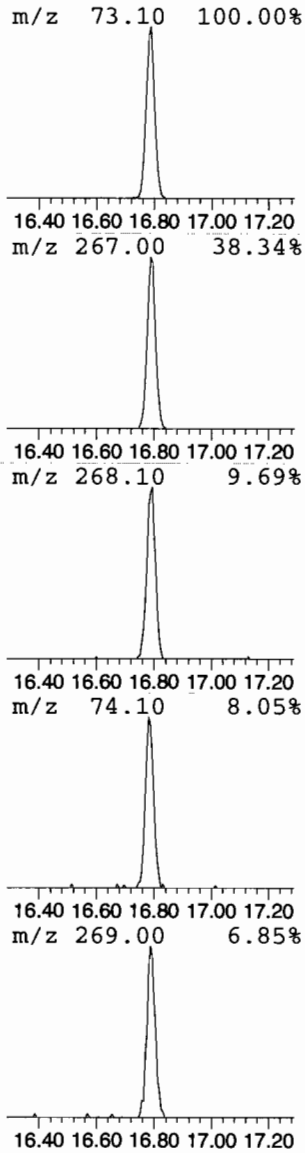
TIC Library : C:\Database\NIST05.L
TIC Integration Parameters: default.P

****
Peak Number 2 unknown siloxane Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
16.788	10.98 ug/L	629603	B 1,4-Dichlorobenzene-d4	16.179

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzoic acid, 2-[(trimethylsilyl...	282	C13H22O3Si2	003789-85-3	39
2	Benzoic acid, 2-[(trimethylsilyl...	282	C13H22O3Si2	003789-85-3	39
3	Benzoic acid, 4-[(trimethylsilyl...	282	C13H22O3Si2	002078-13-9	38
4	1-Boraindane, 3-methyl-1-[1-(tri...	266	C17H23BSi	190316-36-0	12
5	Benzeneacetic acid, 3-methoxy-4-...	268	C13H20O4Si	015964-84-8	12





Tentatively Identified Compound (LSC) summary
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030410V4\
Data File : 4A441.D
Acq On : 5 Mar 2010 4:28 am
Operator : ACJ
Sample : |248102005|961336|1|VOAF|1|VOA8260BS|
Misc : LANL 5G N/A SOIL
ALS Vial : 41 Sample Multiplier: 1

Quant Method : C:\msdchem\1\DATA\030110V4\VOA4-8260-030110.M
Quant Title : Volatile Organics 8260B SubList :

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

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard--- #	RT	Resp	Conc
unknown hydroca...	4.474	8.9	ug/L	398351	1	10.613	2243770	50.0
unknown siloxane	16.788	11.0	ug/L	629603	6	16.179	2867600	50.0

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-2089**	**Date Collected:**	**02/22/2010 12:00**	**Matrix:**	**R**
Lab Sample ID:	**248102006**	**Date Received:**	**02/26/2010 08:45**	**%Moisture:**	**10.3**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE15-10-8394**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**961336**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**03/05/2010 04:55**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**03/04/2010 17:47**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**030410V4\4A442.D**	**Column:**	**DB-624**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.12	ug/kg	0.379	1.12
74-87-3	Chloromethane	U	1.12	ug/kg	0.335	1.12
75-01-4	Vinyl chloride	U	1.12	ug/kg	0.335	1.12
74-83-9	Bromomethane	U	1.12	ug/kg	0.335	1.12
75-00-3	Chloroethane	U	1.12	ug/kg	0.335	1.12
75-69-4	Trichlorofluoromethane	U	1.12	ug/kg	0.335	1.12
67-64-1	Acetone		9.19	ug/kg	1.85	5.58
75-35-4	1,1-Dichloroethylene	U	1.12	ug/kg	0.335	1.12
74-88-4	Iodomethane	U	5.58	ug/kg	1.78	5.58
75-09-2	Methylene chloride	U	5.58	ug/kg	2.23	5.58
75-15-0	Carbon disulfide	U	5.58	ug/kg	1.39	5.58
156-60-5	trans-1,2-Dichloroethylene	U	1.12	ug/kg	0.335	1.12
75-34-3	1,1-Dichloroethane	U	1.12	ug/kg	0.335	1.12
78-93-3	2-Butanone	U	5.58	ug/kg	1.67	5.58
156-59-2	cis-1,2-Dichloroethylene	U	1.12	ug/kg	0.335	1.12
594-20-7	2,2-Dichloropropane	U	1.12	ug/kg	0.335	1.12
67-66-3	Chloroform	U	1.12	ug/kg	0.335	1.12
74-97-5	Bromochloromethane	U	1.12	ug/kg	0.368	1.12
71-55-6	1,1,1-Trichloroethane	U	1.12	ug/kg	0.335	1.12
563-58-6	1,1-Dichloropropene	U	1.12	ug/kg	0.335	1.12
56-23-5	Carbon tetrachloride	U	1.12	ug/kg	0.335	1.12
107-06-2	1,2-Dichloroethane	U	1.12	ug/kg	0.335	1.12
71-43-2	Benzene	U	1.12	ug/kg	0.335	1.12
79-01-6	Trichloroethylene	U	1.12	ug/kg	0.368	1.12
78-87-5	1,2-Dichloropropane	U	1.12	ug/kg	0.335	1.12
75-27-4	Bromodichloromethane	U	1.12	ug/kg	0.335	1.12
74-95-3	Dibromomethane	U	1.12	ug/kg	0.335	1.12
108-10-1	4-Methyl-2-pentanone	U	5.58	ug/kg	1.39	5.58
10061-01-5	cis-1,3-Dichloropropylene	U	1.12	ug/kg	0.335	1.12
108-88-3	Toluene	U	1.12	ug/kg	0.335	1.12
10061-02-6	trans-1,3-Dichloropropylene	U	1.12	ug/kg	0.335	1.12
79-00-5	1,1,2-Trichloroethane	U	1.12	ug/kg	0.335	1.12
591-78-6	2-Hexanone	J	2.01	ug/kg	1.67	5.58
142-28-9	1,3-Dichloropropane	U	1.12	ug/kg	0.335	1.12
127-18-4	Tetrachloroethylene	U	1.12	ug/kg	0.335	1.12
124-48-1	Dibromochloromethane	U	1.12	ug/kg	0.335	1.12
106-93-4	1,2-Dibromoethane	U	1.12	ug/kg	0.335	1.12
108-90-7	Chlorobenzene	U	1.12	ug/kg	0.335	1.12

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-2089**	**Date Collected:**	**02/22/2010 12:00**	**Matrix:**	**R**
Lab Sample ID:	**248102006**	**Date Received:**	**02/26/2010 08:45**	**%Moisture:**	**10.3**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE15-10-8394**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**961336**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**03/05/2010 04:55**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**03/04/2010 17:47**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**030410V4\4A442.D**	**Column:**	**DB-624**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.12	ug/kg	0.335	1.12
179601-23-1	m,p-Xylenes	U	2.23	ug/kg	0.335	2.23
95-47-6	o-Xylene	U	1.12	ug/kg	0.335	1.12
100-42-5	Styrene	U	1.12	ug/kg	0.335	1.12
75-25-2	Bromoform	U	1.12	ug/kg	0.335	1.12
79-34-5	1,1,2,2-Tetrachloroethane	U	1.12	ug/kg	0.335	1.12
96-18-4	1,2,3-Trichloropropane	U	1.12	ug/kg	0.335	1.12
108-86-1	Bromobenzene	U	1.12	ug/kg	0.335	1.12
103-65-1	n-Propylbenzene	U	1.12	ug/kg	0.335	1.12
95-49-8	2-Chlorotoluene	U	1.12	ug/kg	0.335	1.12
98-82-8	Isopropylbenzene	U	1.12	ug/kg	0.335	1.12
108-67-8	1,3,5-Trimethylbenzene	U	1.12	ug/kg	0.335	1.12
106-43-4	4-Chlorotoluene	U	1.12	ug/kg	0.335	1.12
98-06-6	tert-Butylbenzene	U	1.12	ug/kg	0.335	1.12
95-63-6	1,2,4-Trimethylbenzene	U	1.12	ug/kg	0.335	1.12
135-98-8	sec-Butylbenzene	U	1.12	ug/kg	0.335	1.12
99-87-6	4-Isopropyltoluene	U	1.12	ug/kg	0.335	1.12
541-73-1	1,3-Dichlorobenzene	U	1.12	ug/kg	0.335	1.12
106-46-7	1,4-Dichlorobenzene	U	1.12	ug/kg	0.335	1.12
104-51-8	n-Butylbenzene	U	1.12	ug/kg	0.335	1.12
96-12-8	1,2-Dibromo-3-chloropropane	U	1.12	ug/kg	0.335	1.12
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.58	ug/kg	1.78	5.58
630-20-6	1,1,1,2-Tetrachloroethane	U	1.12	ug/kg	0.335	1.12
95-50-1	1,2-Dichlorobenzene	U	1.12	ug/kg	0.335	1.12

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	unknown hydrocarbon	4.48	7.46	ug/kg	0	J
	unknown siloxane	16.79	12.4	ug/kg	0	J

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030410V4\
Data File : 4A442.D
Acq On : 5 Mar 2010 4:55 am
Operator : ACJ
InstName : VOA4
Sample : |248102006|961336|1|VOAF|D|VOA8260BS|
Misc : LANL 5G N/A SOIL
ALS Vial : 42 Sample Multiplier: 1

Quant Time: Mar 16 17:38:08 2010
Quant Method : C:\msdchem\1\DATA\030110V4\VOA4-8260-030110.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 02 15:03:40 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	Dev(Min)
Internal Standards								
1) Fluorobenzene	10.613	10.620	1.000	96	1010862	50.00	ug/L	0.00
41) Chlorobenzene-d5	13.764	13.771	1.000	117	816483	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	16.173	16.180	1.000	152	460615	50.00	ug/L	0.00
82) B Fluorobenzene	10.613	10.619	1.000	96	1010612	50.00	ug/L	0.00
103) B Chlorobenzene-d5	13.764	13.771	1.000	117	816483	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	16.173	16.179	1.000	152	460628	50.00	ug/L	0.00
System Monitoring Compounds								Dev(Min)
29) 1,2-Dichloroethane-d4	10.259	10.260	0.967	65	196530	47.00	ug/L	0.00
Spiked Amount 50.000	Range 66 - 134		Recovery = 94.00%					
43) Toluene-d8	12.246	12.247	0.890	98	732269	48.35	ug/L	0.00
Spiked Amount 50.000	Range 71 - 128		Recovery = 96.70%					
61) Bromofluorobenzene	14.947	14.954	0.924	95	550135	61.04	ug/L	0.00
Spiked Amount 50.000	Range 65 - 130		Recovery = 122.08%					

Target Compounds	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	QValue
2) Dichlorodifluoromethane	0.000	4.911	0.000		0	N.D.		
3) Chloromethane	0.000	5.291	0.000		0	N.D.		
4) Vinyl chloride	0.000	5.521	0.000		0	N.D.		
5) Bromomethane	0.000	6.137	0.000		0	N.D.		
6) Chloroethane	0.000	6.295	0.000		0	N.D.		
7) Trichlorofluoromethane	0.000	6.669	0.000		0	N.D.		
8) Ethyl ether	0.000	6.998	0.000		0	N.D.		
9) Acetone	7.363	7.352	0.694	43	52480	8.24	ug/L	93
10) 1,1-Dichloroethylene	0.000	7.389	0.000		0	N.D.		
11) Iodomethane	0.000	7.663	0.000		0	N.D.		
12) Acetonitrile	7.668	7.699	0.723	41	371	N.D.		
13) Methyl acetate	7.729	7.748	0.728	43	219	N.D.		
14) Carbon disulfide	7.778	7.773	0.733	76	2381	N.D.		
15) Methylene chloride	7.942	7.931	0.748	84	9281	N.D.		
16) tert-Butyl methyl ether	0.000	8.242	0.000		0	N.D.		
17) trans-1,2-Dichloroethy...	0.000	8.285	0.000		0	N.D.		
18) Vinyl acetate	8.723	8.705	0.822	43	104	N.D.		
19) 1,1-Dichloroethane	0.000	8.760	0.000		0	N.D.		
20) 2-Butanone	9.326	9.327	0.879	43	5975	N.D.		
21) cis-1,2-Dichloroethylene	0.000	9.388	0.000		0	N.D.		
22) 2,2-Dichloropropane	0.000	9.419	0.000		0	N.D.		
23) Bromochloromethane	0.000	9.656	0.000		0	N.D.		
24) Chloroform	9.674	9.687	0.912	83	186	N.D.		
25) 1,1,1-Trichloroethane	0.000	9.979	0.000		0	N.D.		
26) Cyclohexane	0.000	10.083	0.000		0	N.D.		
27) 1,1-Dichloropropene	0.000	10.132	0.000		0	N.D.		
28) Carbon tetrachloride	0.000	10.175	0.000		0	N.D.		
30) 1,2-Dichloroethane	0.000	10.339	0.000		0	N.D.		
31) Benzene	10.363	10.370	0.976	78	1311	N.D.		
32) Cyclohexene	10.613	10.492	1.000	67	201	N.D.		
33) n-Butyl alcohol	10.686	10.693	1.007	56	372	N.D.		
34) Trichloroethylene	0.000	11.004	0.000		0	N.D.		
35) 1,2-Dichloropropane	0.000	11.241	0.000		0	N.D.		
36) Methylcyclohexane	0.000	11.260	0.000		0	N.D.		
37) Dibromomethane	0.000	11.376	0.000		0	N.D.		
38) Bromodichloromethane	0.000	11.485	0.000		0	N.D.		
39) 2-Chloroethylvinyl ether	0.000	11.699	0.000		0	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030410V4\
Data File : 4A442.D
Acq On : 5 Mar 2010 4:55 am
Operator : ACJ
InstName : VOA4
Sample : |248102006|961336|1|VOAF|D|VOA8260BS|
Misc : LANL 5G N/A SOIL
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Quant Time: Mar 16 17:38:08 2010
Quant Method : C:\msdchem\1\DATA\030110V4\VOA4-8260-030110.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 02 15:03:40 2010
Response via : Initial Calibration
Integrator: RTE

	Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
40)	cis-1,3-Dichloropropylene	0.000	11.930	0.000		0	N.D.		
42)	4-Methyl-2-pentanone	0.000	12.016	0.000		0	N.D.		
44)	Toluene	12.320	12.320	0.895	91	3135	N.D.		
45)	trans-1,3-Dichloroprop...	12.429	12.461	0.903	75	137	N.D.		
46)	1,1,2-Trichloroethane	0.000	12.680	0.000		0	N.D.		
47)	2-Hexanone	12.862	12.857	0.934	43	14831	1.80	ug/L	87
48)	1,3-Dichloropropane	0.000	12.875	0.000		0	N.D.		
49)	Tetrachloroethylene	12.917	12.918	0.938	164	161	N.D.		
50)	Dibromochloromethane	0.000	13.144	0.000		0	N.D.		
51)	1,2-Dibromoethane	0.000	13.320	0.000		0m	N.D.	d	
52)	Chlorobenzene	13.783	13.802	1.001	112	192	N.D.		
53)	1,1,1,2-Tetrachloroethane	14.014	13.851	1.018	131	431	N.D.		
54)	Ethylbenzene	0.000	13.863	0.000		0	N.D.		
55)	m,p-Xylenes	0.000	13.973	0.000		0	N.D.		
56)	o-Xylene	14.398	14.399	1.046	106	1325	N.D.		
57)	Styrene	14.392	14.399	1.046	104	973	N.D.		
59)	Bromoform	14.648	14.655	0.906	173	128	N.D.		
60)	Isopropylbenzene	14.758	14.759	0.913	105	873	N.D.		
62)	1,1,2,2-Tetrachloroethane	0.000	15.015	0.000		0	N.D.		
63)	1,2,3-Trichloropropane	0.000	15.107	0.000		0	N.D.		
64)	Bromobenzene	0.000	15.168	0.000		0	N.D.		
65)	n-Propylbenzene	15.173	15.180	0.938	91	2352	N.D.		
66)	1,3,5-Trimethylbenzene	0.000	15.332	0.000		0	N.D.		
67)	2-Chlorotoluene	0.000	15.332	0.000		0	N.D.		
68)	4-Chlorotoluene	15.374	15.430	0.951	91	724	N.D.		
69)	tert-Butylbenzene	15.697	15.704	0.971	134	162	N.D.		
70)	1,2,4-Trimethylbenzene	15.746	15.741	0.974	105	3590	N.D.		
71)	sec-Butylbenzene	15.929	15.930	0.985	105	663	N.D.		
72)	4-Isopropyltoluene	16.057	16.051	0.993	119	870	N.D.		
73)	1,3-Dichlorobenzene	16.124	16.119	0.997	146	240	N.D.		
74)	1,4-Dichlorobenzene	16.197	16.204	1.002	146	686	N.D.		
75)	n-Butylbenzene	16.496	16.503	1.020	91	862	N.D.		
76)	1,2-Dichlorobenzene	16.648	16.643	1.029	146	174	N.D.		
77)	1,2-Dibromo-3-chloropr...	0.000	17.527	0.000		0	N.D.		
78)	1,2,4-Trichlorobenzene	0.000	18.630	0.000		0	N.D.		
79)	Hexachlorobutadiene	0.000	18.819	0.000		0	N.D.		
80)	Naphthalene	19.020	19.026	1.176	128	3556	N.D.		
81)	1,2,3-Trichlorobenzene	19.373	19.386	1.198	180	128	N.D.		
83)	Chlorotrifluoroethylene	0.000	4.826	0.000		0	N.D.		
84)	2-Chloro-1,1,1-trifluo...	0.000	5.657	0.000		0	N.D.		
85)	Acrolein	0.000	7.180	0.000		0m	N.D.	d	
86)	Trichlorotrifluoroethane	0.000	7.369	0.000		0	N.D.		
87)	Isopropyl Alcohol	7.430	7.430	0.700	45	1367	N.D.		
88)	Allyl chloride	7.881	7.796	0.743	41	291	N.D.		
89)	tert-Butyl Alcohol	7.906	7.924	0.745	59	137	N.D.		
90)	Acrylonitrile	8.284	8.174	0.781	53	100	N.D.		
91)	Isopropyl ether	0.000	8.741	0.000		0	N.D.		
92)	2-Chloro-1,3-butadiene	0.000	8.869	0.000		0	N.D.		
93)	Ethyl tert-butyl ether	0.000	9.143	0.000		0	N.D.		
94)	Ethyl acetate	9.326	9.338	0.879	43	5975	N.D.		
95)	Propionitrile	0.000	9.393	0.000		0	N.D.		
96)	Methacrylonitrile	9.588	9.576	0.903	41	159	N.D.		
97)	Tetrahydrofuran	9.716	9.710	0.916	42	1796	N.D.		
98)	Isobutyl alcohol	10.027	10.009	0.945	41	279	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030410V4\
Data File : 4A442.D
Acq On : 5 Mar 2010 4:55 am
Operator : ACJ
InstName : VOA4
Sample : |248102006|961336|1|VOAF|D|VOA8260BS|
Misc : LANL 5G N/A SOIL
ALS Vial : 42 Sample Multiplier: 1

Quant Time: Mar 16 17:38:08 2010
Quant Method : C:\msdchem\1\DATA\030110V4\VOA4-8260-030110.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 02 15:03:40 2010
Response via : Initial Calibration
Integrator: RTE

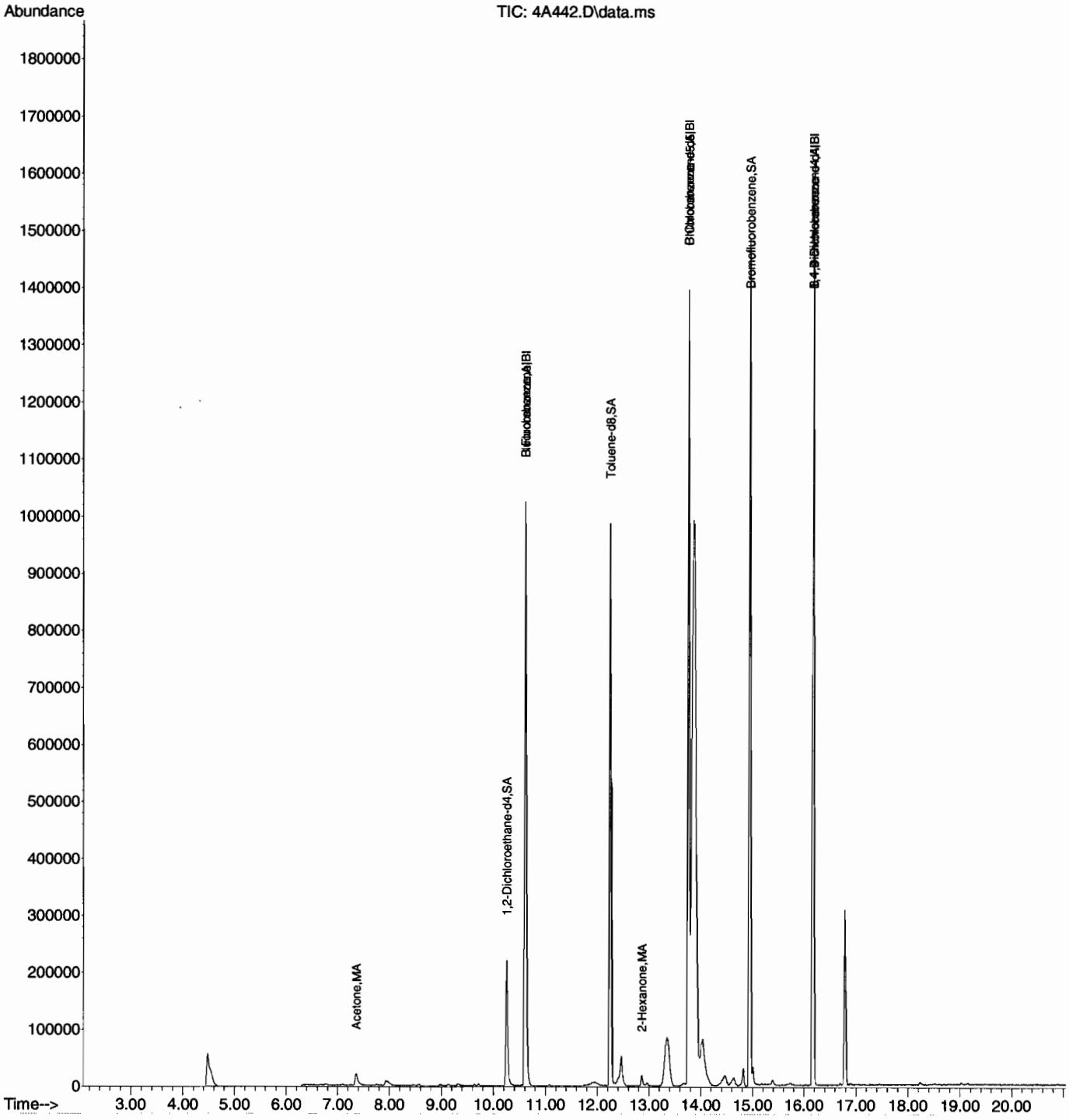
	Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
99)	Methyl tert-amyl ether	0.000	10.387	0.000		0	N.D.	
100)	Methyl methacrylate	11.149	11.204	1.051	69	127	N.D.	
101)	1,4-Dioxane	0.000	11.326	0.000		0	N.D.	
102)	2-Nitropropane	11.539	11.673	1.087	43	133	N.D.	
104)	Ethyl methacrylate	12.411	12.466	0.902	69	617	N.D.	
106)	1-Chlorohexane	0.000	13.661	0.000		0m	N.D.	d
107)	cis-1,4-Dichloro-2-butene	14.783	14.783	0.914	53	282	N.D.	
108)	Cyclohexanone	15.002	14.904	0.928	42	1855	N.D.	
109)	trans-1,4-Dichloro-2-b...	0.000	15.063	0.000		0	N.D.	
110)	Pentachloroethane	0.000	15.770	0.000		0	N.D.	
111)	Benzyl chloride	16.307	16.319	1.008	91	448	N.D.	
112)	bis(2-Chloroisopropyl)...	0.000	16.721	0.000		0m	N.D.	d

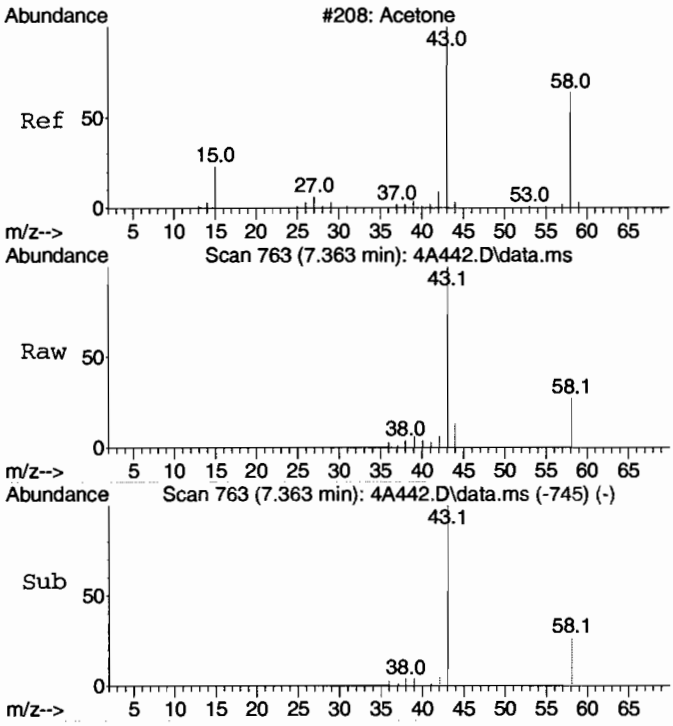
(#) = qualifier out of range (m) = manual integration (+) = signals summed
(E) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030410V4\
Data File : 4A442.D
Acq On : 5 Mar 2010 4:55 am
Operator : ACJ
InstName : VOA4
Sample : |248102006|961336|1|VOAF|D|VOA8260BS|
Misc : LANL 5G N/A SOIL
ALS Vial : 42 Sample Multiplier: 1

Quant Time: Mar 16 17:38:08 2010
Quant Method : C:\msdchem\1\DATA\030110V4\VOA4-8260-030110.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 02 15:03:40 2010
Response via : Initial Calibration
Integrator: RTE

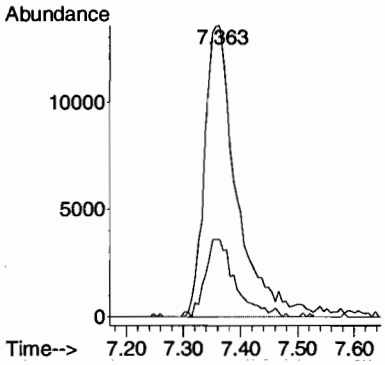


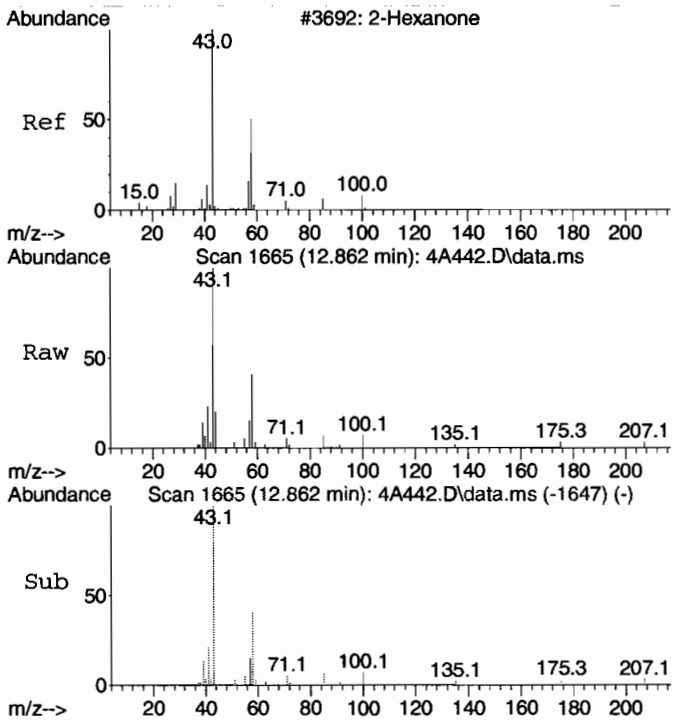


#9
Acetone
Concen: 8.24 ug/L
RT: 7.363 min Scan# 763
Delta R.T. 0.011 min
Lab File: 4A442.D
Acq: 5 Mar 2010 4:55 am

Tgt Ion: 43 Resp: 52480

Ion	Ratio	Lower	Upper
43	100		
58	25.1	0.0	59.0

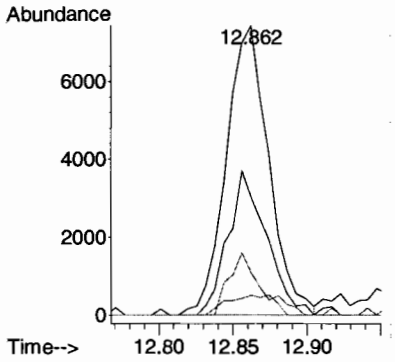


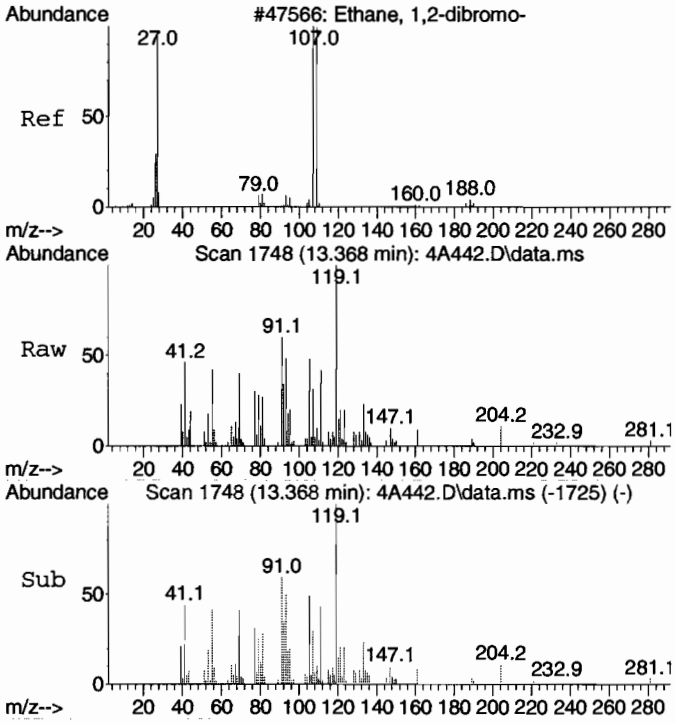


#47
2-Hexanone
Concen: 1.80 ug/L
RT: 12.862 min Scan# 1665
Delta R.T. 0.005 min
Lab File: 4A442.D
Acq: 5 Mar 2010 4:55 am

Tgt Ion: 43 Resp: 14831

Ion	Ratio	Lower	Upper
43	100		
58	45.1	26.1	86.1
57	16.4	0.0	49.0
100	7.7	0.0	42.1

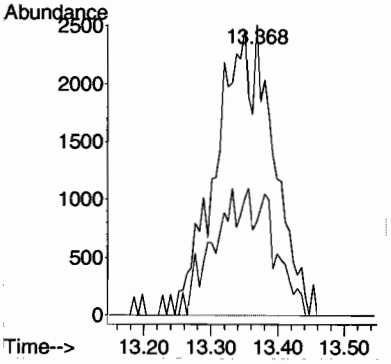


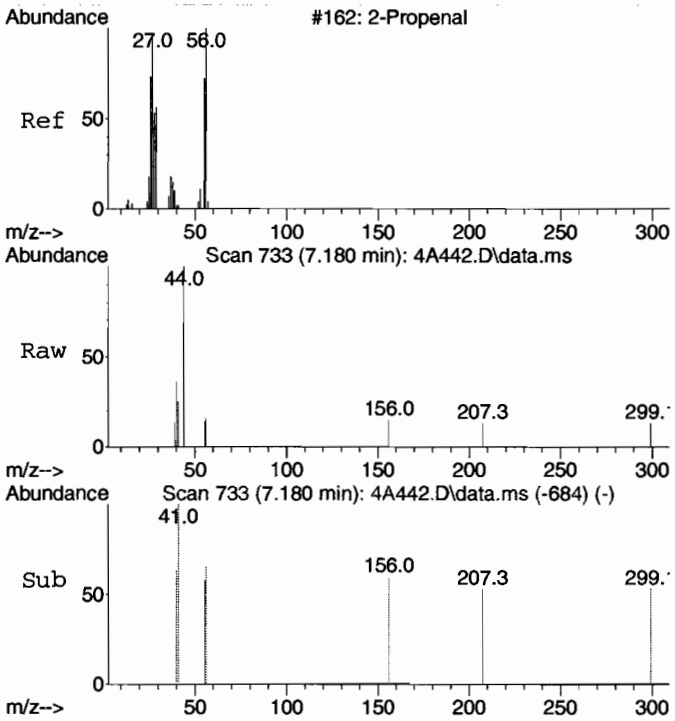


#51 BEFORE analyst DELETION
1,2-Dibromoethane
Concen: 2.32 ug/L
RT: 13.368 min Scan# 1748
Delta R.T. 0.048 min
Lab File: 4A442.D
Acq: 5 Mar 2010 4:55 am

Tgt Ion:107 Resp: 14554

Ion	Ratio	Lower	Upper
107	100		
109	0.0	64.5	124.5#

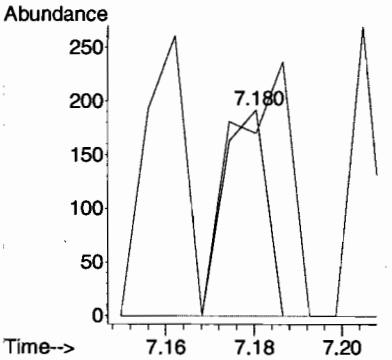


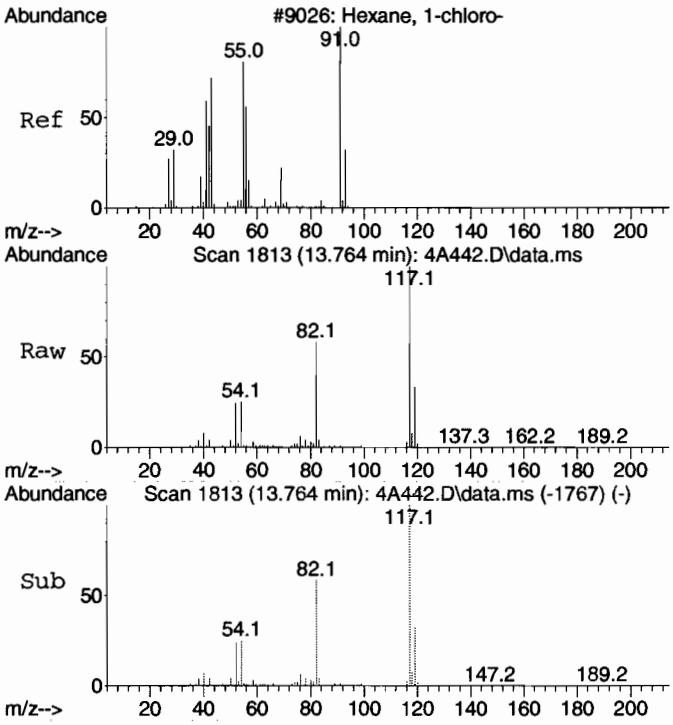


#85 BEFORE analyst DELETION
Acrolein
Concen: 13.48 ug/L
RT: 7.180 min Scan# 733
Delta R.T. 0.000 min
Lab File: 4A442.D
Acq: 5 Mar 2010 4:55 am

Tgt Ion: 56 Resp: 130

Ion	Ratio	Lower	Upper
56	100		
55	127.7	41.4	101.4#

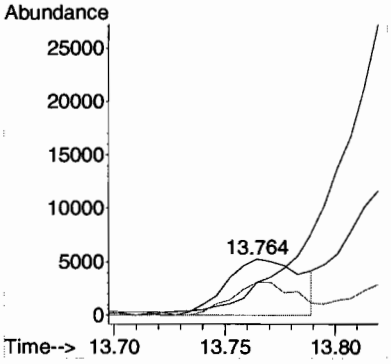


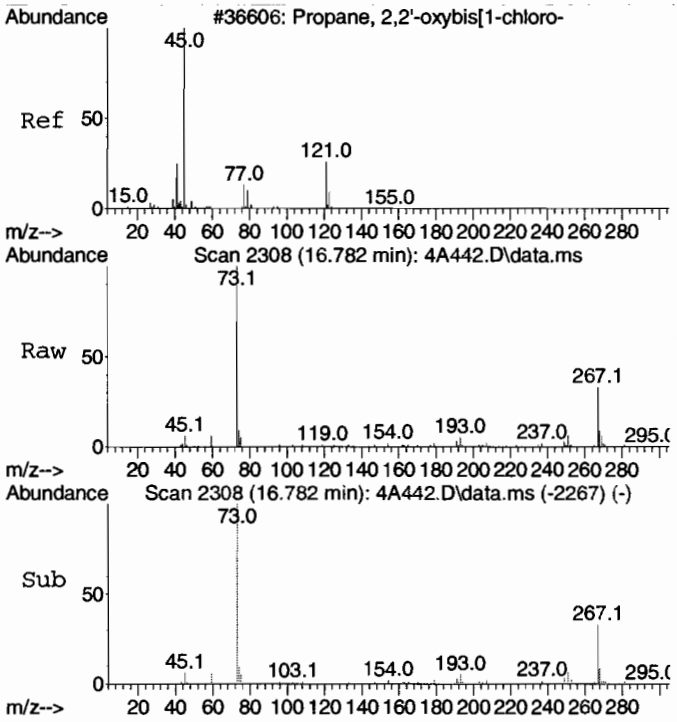


#106 BEFORE analyst DELETION
1-Chlorohexane
Concen: 2.37 ug/L
RT: 13.764 min Scan# 1813
Delta R.T. 0.104 min
Lab File: 4A442.D
Acq: 5 Mar 2010 4:55 am

Tgt Ion: 55 Resp: 12590

Ion	Ratio	Lower	Upper
55	100		
91	0.0	112.1	172.1#
56	52.4	28.5	88.5

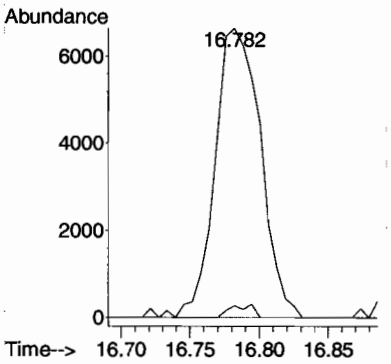




#112 BEFORE analyst DELETION
bis(2-Chloroisopropyl)ether
Concen: 4.10 ug/L
RT: 16.782 min Scan# 2308
Delta R.T. 0.061 min
Lab File: 4A442.D
Acq: 5 Mar 2010 4:55 am

Tgt Ion: 45 Resp: 15073

Ion	Ratio	Lower	Upper
45	100		
121	2.2	0.0	56.0



Library Search Compound Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030410V4\
Data File : 4A442.D
Acq On : 5 Mar 2010 4:55 am
Operator : ACJ
Sample : |248102006|961336|1|VOAF|D|VOA8260BS|
Misc : LANL 5G N/A SOIL
ALS Vial : 42 Sample Multiplier: 1

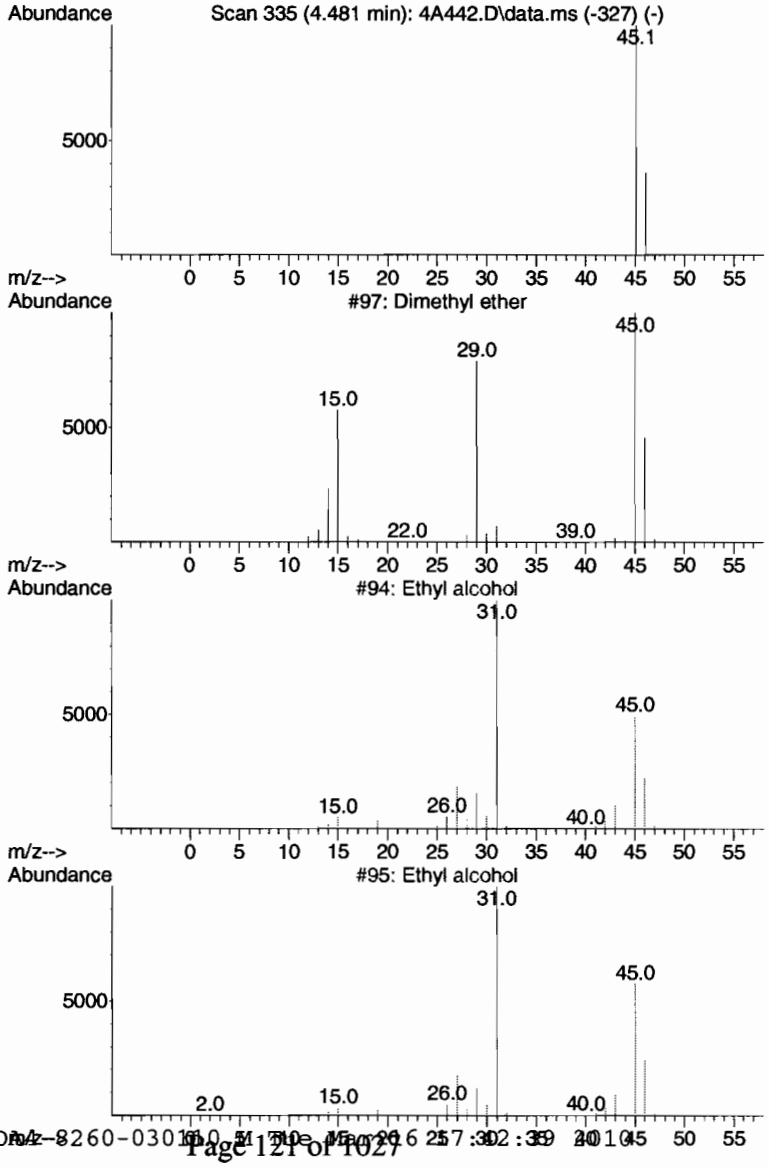
Quant Method : C:\msdchem\1\DATA\030110V4\VOA4-8260-030110.M
Quant Title : Volatile Organics 8260B SubList :

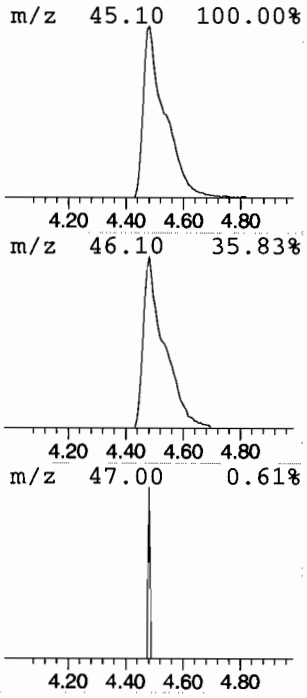
TIC Library : C:\Database\NIST05.L
TIC Integration Parameters: default.P

****
Peak Number 1 unknown hydrocarbon Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.481	6.69 ug/L	297000	Fluorobenzene	10.613

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Dimethyl ether	46	C2H6O	000115-10-6	5
2	Ethyl alcohol	46	C2H6O	000064-17-5	4
3	Ethyl alcohol	46	C2H6O	000064-17-5	4
4	Ethyl alcohol	46	C2H6O	000064-17-5	4
5	Formic acid	46	CH2O2	000064-18-6	4





Library Search Compound Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030410V4\
Data File : 4A442.D
Acq On : 5 Mar 2010 4:55 am
Operator : ACJ
Sample : |248102006|961336|1|VOAF|D|VOA8260BS|
Misc : LANL 5G N/A SOIL
ALS Vial : 42 Sample Multiplier: 1

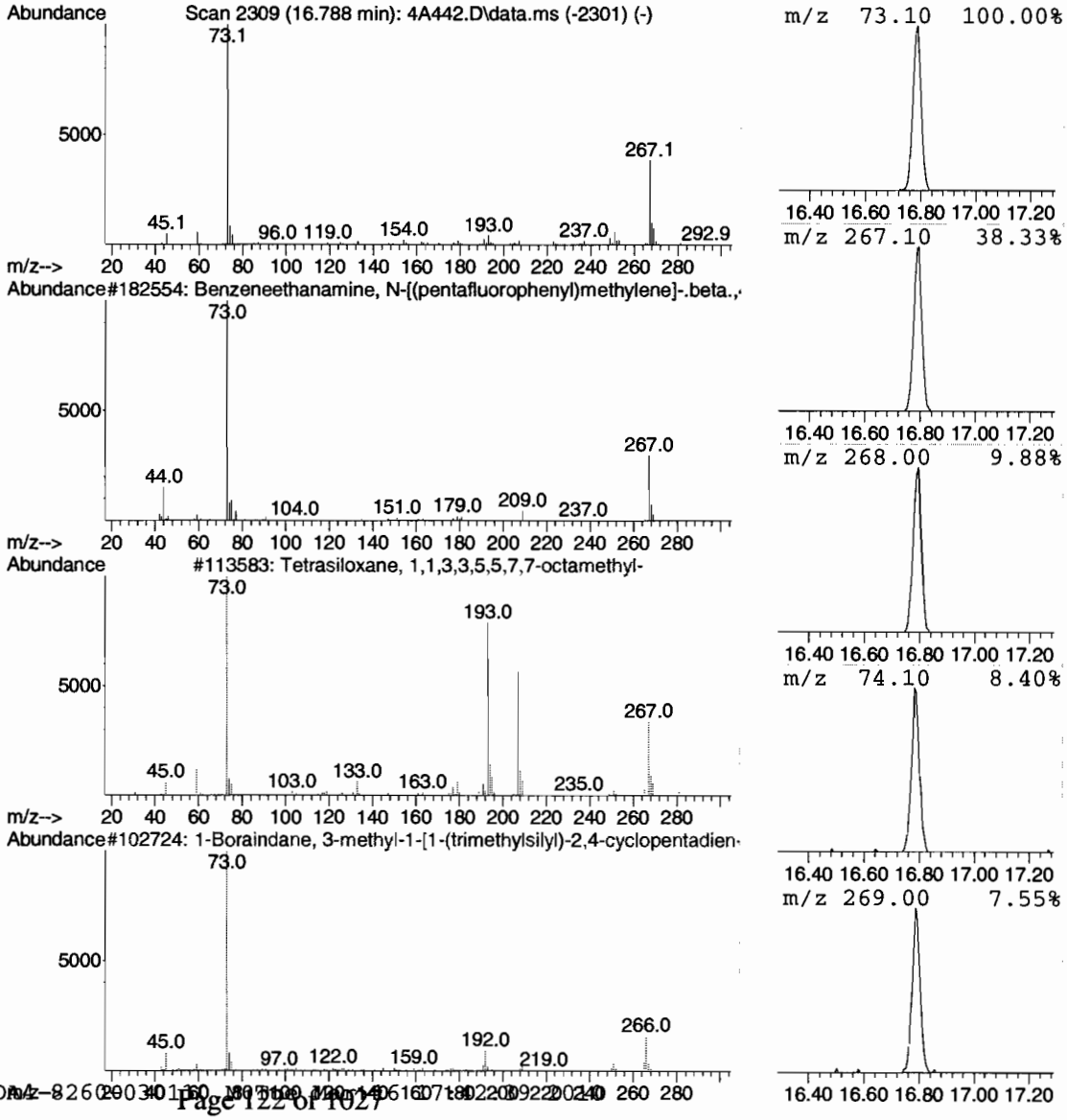
Quant Method : C:\msdchem\1\DATA\030110V4\VOA4-8260-030110.M
Quant Title : Volatile Organics 8260B SubList :

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

****
Peak Number 2 unknown siloxane Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
16.788	11.12 ug/L	652838	B 1,4-Dichlorobenzene-d4	16.172

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzeneethanamine, N-[(pentafluo...	475	C21H26F5NO2Si2	055429-85-1	45
2	Tetrasiloxane, 1,1,3,3,5,5,7,7-o...	282	C8H26O3Si4	001000-05-1	22
3	1-Boraindane, 3-methyl-1-[1-(tri...	266	C17H23BSi	190316-36-0	10
4	Benzeneacetic acid, 3-methoxy-4-...	268	C13H20O4Si	015964-84-8	9
5	11H-Dibenzo[b,e][1,4]diazepin-11...	267	C16H17N3O	013450-73-2	9



Tentatively Identified Compound (LSC) summary
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030410V4\
Data File : 4A442.D
Acq On : 5 Mar 2010 4:55 am
Operator : ACJ
Sample : |248102006|961336|1|VOAF|D|VOA8260BS|
Misc : LANL 5G N/A SOIL
ALS Vial : 42 Sample Multiplier: 1

Quant Method : C:\msdchem\1\DATA\030110V4\VOA4-8260-030110.M
Quant Title : Volatile Organics 8260B SubList :

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

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard--- #	RT	Resp	Conc
unknown hydroca...	4.481	6.7	ug/L	297000	1	10.613	2218720	50.0
unknown siloxane	16.788	11.1	ug/L	652838	6	16.172	2935010	50.0

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-2089**	**Date Collected:**	**02/22/2010 12:00**	**Matrix:**	**R**
Lab Sample ID:	**248102007**	**Date Received:**	**02/26/2010 08:45**	**%Moisture:**	**11.7**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE15-10-8399**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**961336**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**03/05/2010 05:23**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**03/04/2010 17:48**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**030410V4\4A443.D**	**Column:**	**DB-624**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.13	ug/kg	0.385	1.13
74-87-3	Chloromethane	U	1.13	ug/kg	0.340	1.13
75-01-4	Vinyl chloride	U	1.13	ug/kg	0.340	1.13
74-83-9	Bromomethane	U	1.13	ug/kg	0.340	1.13
75-00-3	Chloroethane	U	1.13	ug/kg	0.340	1.13
75-69-4	Trichlorofluoromethane	U	1.13	ug/kg	0.340	1.13
67-64-1	Acetone	U	5.66	ug/kg	1.88	5.66
75-35-4	1,1-Dichloroethylene	U	1.13	ug/kg	0.340	1.13
74-88-4	Iodomethane	U	5.66	ug/kg	1.81	5.66
75-09-2	Methylene chloride	U	5.66	ug/kg	2.26	5.66
75-15-0	Carbon disulfide	U	5.66	ug/kg	1.42	5.66
156-60-5	trans-1,2-Dichloroethylene	U	1.13	ug/kg	0.340	1.13
75-34-3	1,1-Dichloroethane	U	1.13	ug/kg	0.340	1.13
78-93-3	2-Butanone	U	5.66	ug/kg	1.70	5.66
156-59-2	cis-1,2-Dichloroethylene	U	1.13	ug/kg	0.340	1.13
594-20-7	2,2-Dichloropropane	U	1.13	ug/kg	0.340	1.13
67-66-3	Chloroform	U	1.13	ug/kg	0.340	1.13
74-97-5	Bromochloromethane	U	1.13	ug/kg	0.374	1.13
71-55-6	1,1,1-Trichloroethane	U	1.13	ug/kg	0.340	1.13
563-58-6	1,1-Dichloropropene	U	1.13	ug/kg	0.340	1.13
56-23-5	Carbon tetrachloride	U	1.13	ug/kg	0.340	1.13
107-06-2	1,2-Dichloroethane	U	1.13	ug/kg	0.340	1.13
71-43-2	Benzene	U	1.13	ug/kg	0.340	1.13
79-01-6	Trichloroethylene	U	1.13	ug/kg	0.374	1.13
78-87-5	1,2-Dichloropropane	U	1.13	ug/kg	0.340	1.13
75-27-4	Bromodichloromethane	U	1.13	ug/kg	0.340	1.13
74-95-3	Dibromomethane	U	1.13	ug/kg	0.340	1.13
108-10-1	4-Methyl-2-pentanone	U	5.66	ug/kg	1.42	5.66
10061-01-5	cis-1,3-Dichloropropylene	U	1.13	ug/kg	0.340	1.13
108-88-3	Toluene	U	1.13	ug/kg	0.340	1.13
10061-02-6	trans-1,3-Dichloropropylene	U	1.13	ug/kg	0.340	1.13
79-00-5	1,1,2-Trichloroethane	U	1.13	ug/kg	0.340	1.13
591-78-6	2-Hexanone	U	5.66	ug/kg	1.70	5.66
142-28-9	1,3-Dichloropropane	U	1.13	ug/kg	0.340	1.13
127-18-4	Tetrachloroethylene	U	1.13	ug/kg	0.340	1.13
124-48-1	Dibromochloromethane	U	1.13	ug/kg	0.340	1.13
106-93-4	1,2-Dibromoethane	U	1.13	ug/kg	0.340	1.13
108-90-7	Chlorobenzene	U	1.13	ug/kg	0.340	1.13

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-2089**	**Date Collected:**	**02/22/2010 12:00**	**Matrix:**	**R**
Lab Sample ID:	**248102007**	**Date Received:**	**02/26/2010 08:45**	**%Moisture:**	**11.7**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE15-10-8399**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**961336**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**03/05/2010 05:23**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**03/04/2010 17:48**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**030410V4\4A443.D**	**Column:**	**DB-624**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene		1.17	ug/kg	0.340	1.13
179601-23-1	m,p-Xylenes	U	2.26	ug/kg	0.340	2.26
95-47-6	o-Xylene	U	1.13	ug/kg	0.340	1.13
100-42-5	Styrene	U	1.13	ug/kg	0.340	1.13
75-25-2	Bromoform	U	1.13	ug/kg	0.340	1.13
79-34-5	1,1,2,2-Tetrachloroethane	U	1.13	ug/kg	0.340	1.13
96-18-4	1,2,3-Trichloropropane	U	1.13	ug/kg	0.340	1.13
108-86-1	Bromobenzene	U	1.13	ug/kg	0.340	1.13
103-65-1	n-Propylbenzene	U	1.13	ug/kg	0.340	1.13
95-49-8	2-Chlorotoluene	U	1.13	ug/kg	0.340	1.13
98-82-8	Isopropylbenzene	U	1.13	ug/kg	0.340	1.13
108-67-8	1,3,5-Trimethylbenzene	U	1.13	ug/kg	0.340	1.13
106-43-4	4-Chlorotoluene	U	1.13	ug/kg	0.340	1.13
98-06-6	tert-Butylbenzene	U	1.13	ug/kg	0.340	1.13
95-63-6	1,2,4-Trimethylbenzene	U	1.13	ug/kg	0.340	1.13
135-98-8	sec-Butylbenzene	U	1.13	ug/kg	0.340	1.13
99-87-6	4-Isopropyltoluene	U	1.13	ug/kg	0.340	1.13
541-73-1	1,3-Dichlorobenzene	U	1.13	ug/kg	0.340	1.13
106-46-7	1,4-Dichlorobenzene	U	1.13	ug/kg	0.340	1.13
104-51-8	n-Butylbenzene	U	1.13	ug/kg	0.340	1.13
96-12-8	1,2-Dibromo-3-chloropropane	U	1.13	ug/kg	0.340	1.13
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.66	ug/kg	1.81	5.66
630-20-6	1,1,1,2-Tetrachloroethane	U	1.13	ug/kg	0.340	1.13
95-50-1	1,2-Dichlorobenzene	U	1.13	ug/kg	0.340	1.13

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated Units	Fit	Qual
	unknown siloxane	16.79	ug/kg	0	J

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030410V4\
Data File : 4A443.D
Acq On : 5 Mar 2010 5:23 am
Operator : ACJ
InstName : VOA4
Sample : |248102007|961336|1|VOAF|D|VOA8260BS|
Misc : LANL 5G N/A SOIL
ALS Vial : 43 Sample Multiplier: 1

Quant Time: Mar 16 17:43:02 2010
Quant Method : C:\msdchem\1\DATA\030110V4\VOA4-8260-030110.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 02 15:03:40 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	Dev(Min)
Internal Standards								
1) Fluorobenzene	10.613	10.620	1.000	96	1038320	50.00	ug/L	0.00
41) Chlorobenzene-d5	13.764	13.771	1.000	117	836606	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	16.179	16.180	1.000	152	476587	50.00	ug/L	0.00
82) B Fluorobenzene	10.613	10.619	1.000	96	1038221	50.00	ug/L	0.00
103) B Chlorobenzene-d5	13.764	13.771	1.000	117	836606	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	16.179	16.179	1.000	152	476610	50.00	ug/L	0.00
System Monitoring Compounds								Dev(Min)
29) 1,2-Dichloroethane-d4	10.259	10.260	0.967	65	208989	48.65	ug/L	0.00
Spiked Amount 50.000	Range 66 - 134		Recovery = 97.30%					
43) Toluene-d8	12.246	12.247	0.890	98	755738	48.70	ug/L	0.00
Spiked Amount 50.000	Range 71 - 128		Recovery = 97.40%					
61) Bromofluorobenzene	14.947	14.954	0.924	95	551686	59.17	ug/L	0.00
Spiked Amount 50.000	Range 65 - 130		Recovery = 118.34%					

Target Compounds	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	QValue
2) Dichlorodifluoromethane	0.000	4.911	0.000		0	N.D.		
3) Chloromethane	0.000	5.291	0.000		0	N.D.		
4) Vinyl chloride	0.000	5.521	0.000		0	N.D.		
5) Bromomethane	0.000	6.137	0.000		0	N.D.		
6) Chloroethane	0.000	6.295	0.000		0	N.D.		
7) Trichlorofluoromethane	0.000	6.669	0.000		0	N.D.		
8) Ethyl ether	6.997	6.998	0.659	59	150	N.D.		
9) Acetone	7.363	7.352	0.694	43	5819	N.D.		
10) 1,1-Dichloroethylene	0.000	7.389	0.000		0	N.D.		
11) Iodomethane	0.000	7.663	0.000		0	N.D.		
12) Acetonitrile	7.680	7.699	0.724	41	318	N.D.		
13) Methyl acetate	7.766	7.748	0.732	43	221	N.D.		
14) Carbon disulfide	7.741	7.773	0.729	76	993	N.D.		
15) Methylene chloride	7.942	7.931	0.748	84	4036	N.D.		
16) tert-Butyl methyl ether	8.247	8.242	0.777	73	224	N.D.		
17) trans-1,2-Dichloroethy...	0.000	8.285	0.000		0	N.D.		
18) Vinyl acetate	8.747	8.705	0.824	43	187	N.D.		
19) 1,1-Dichloroethane	0.000	8.760	0.000		0	N.D.		
20) 2-Butanone	9.338	9.327	0.880	43	2178	N.D.		
21) cis-1,2-Dichloroethylene	0.000	9.388	0.000		0	N.D.		
22) 2,2-Dichloropropane	0.000	9.419	0.000		0	N.D.		
23) Bromochloromethane	0.000	9.656	0.000		0	N.D.		
24) Chloroform	0.000	9.687	0.000		0	N.D.		
25) 1,1,1-Trichloroethane	0.000	9.979	0.000		0	N.D.		
26) Cyclohexane	0.000	10.083	0.000		0	N.D.		
27) 1,1-Dichloropropene	0.000	10.132	0.000		0	N.D.		
28) Carbon tetrachloride	0.000	10.175	0.000		0	N.D.		
30) 1,2-Dichloroethane	0.000	10.339	0.000		0	N.D.		
31) Benzene	10.363	10.370	0.976	78	221	N.D.		
32) Cyclohexene	10.613	10.492	1.000	67	419	N.D.		
33) n-Butyl alcohol	10.613	10.693	1.000	56	6935	N.D.		
34) Trichloroethylene	0.000	11.004	0.000		0	N.D.		
35) 1,2-Dichloropropane	0.000	11.241	0.000		0	N.D.		
36) Methylcyclohexane	11.259	11.260	1.061	83	123	N.D.		
37) Dibromomethane	0.000	11.376	0.000		0	N.D.		
38) Bromodichloromethane	0.000	11.485	0.000		0	N.D.		
39) 2-Chloroethylvinyl ether	0.000	11.699	0.000		0	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030410V4\
Data File : 4A443.D
Acq On : 5 Mar 2010 5:23 am
Operator : ACJ
InstName : VOA4
Sample : |248102007|961336|1|VOAF|D|VOA8260BS|
Misc : LANL 5G N/A SOIL
ALS Vial : 43 Sample Multiplier: 1

Quant Time: Mar 16 17:43:02 2010
Quant Method : C:\msdchem\1\DATA\030110V4\VOA4-8260-030110.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 02 15:03:40 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
40) cis-1,3-Dichloropropylene	0.000	11.930	0.000		0	N.D.		
42) 4-Methyl-2-pentanone	0.000	12.016	0.000		0	N.D.		
44) Toluene	12.320	12.320	0.895	91	1794	N.D.		
45) trans-1,3-Dichloroprop...	12.460	12.461	0.905	75	1080	N.D.		
46) 1,1,2-Trichloroethane	0.000	12.680	0.000		0	N.D.		
47) 2-Hexanone	12.868	12.857	0.935	43	453	N.D.		
48) 1,3-Dichloropropane	12.880	12.875	0.936	76	133	N.D.		
49) Tetrachloroethylene	0.000	12.918	0.000		0	N.D.		
50) Dibromochloromethane	0.000	13.144	0.000		0	N.D.		
51) 1,2-Dibromoethane	0.000	13.320	0.000		0m	N.D.	d	
52) Chlorobenzene	13.789	13.802	1.002	112	263	N.D.		
53) 1,1,1,2-Tetrachloroethane	13.795	13.851	1.002	131	106	N.D.		
54) Ethylbenzene	13.856	13.863	1.007	91	33662	1.03	ug/L #	42
55) m,p-Xylenes	0.000	13.973	0.000		0	N.D.		
56) o-Xylene	14.405	14.399	1.047	106	600	N.D.		
57) Styrene	14.398	14.399	1.046	104	739	N.D.		
59) Bromoform	0.000	14.655	0.000		0	N.D.		
60) Isopropylbenzene	14.746	14.759	0.911	105	793	N.D.		
62) 1,1,2,2-Tetrachloroethane	0.000	15.015	0.000		0	N.D.		
63) 1,2,3-Trichloropropane	0.000	15.107	0.000		0	N.D.		
64) Bromobenzene	0.000	15.168	0.000		0	N.D.		
65) n-Propylbenzene	15.185	15.180	0.939	91	1237	N.D.		
66) 1,3,5-Trimethylbenzene	15.331	15.332	0.948	105	1155	N.D.		
67) 2-Chlorotoluene	0.000	15.332	0.000		0	N.D.		
68) 4-Chlorotoluene	15.490	15.430	0.957	91	120	N.D.		
69) tert-Butylbenzene	0.000	15.704	0.000		0	N.D.		
70) 1,2,4-Trimethylbenzene	15.740	15.741	0.973	105	2782	N.D.		
71) sec-Butylbenzene	15.922	15.930	0.984	105	192	N.D.		
72) 4-Isopropyltoluene	16.051	16.051	0.992	119	523	N.D.		
73) 1,3-Dichlorobenzene	16.105	16.119	0.995	146	257	N.D.		
74) 1,4-Dichlorobenzene	16.203	16.204	1.002	146	565	N.D.		
75) n-Butylbenzene	16.502	16.503	1.020	91	602	N.D.		
76) 1,2-Dichlorobenzene	16.788	16.643	1.038	146	224	N.D.		
77) 1,2-Dibromo-3-chloropr...	0.000	17.527	0.000		0	N.D.		
78) 1,2,4-Trichlorobenzene	0.000	18.630	0.000		0	N.D.		
79) Hexachlorobutadiene	0.000	18.819	0.000		0	N.D.		
80) Naphthalene	19.026	19.026	1.176	128	3478	N.D.		
81) 1,2,3-Trichlorobenzene	0.000	19.386	0.000		0	N.D.		
83) Chlorotrifluoroethylene	0.000	4.826	0.000		0	N.D.		
84) 2-Chloro-1,1,1-trifluo...	0.000	5.657	0.000		0	N.D.		
85) Acrolein	0.000	7.180	0.000		0	N.D.		
86) Trichlorotrifluoroethane	0.000	7.369	0.000		0	N.D.		
87) Isopropyl Alcohol	0.000	7.430	0.000		0	N.D.		
88) Allyl chloride	7.839	7.796	0.739	41	225	N.D.		
89) tert-Butyl Alcohol	7.912	7.924	0.746	59	683	N.D.		
90) Acrylonitrile	8.308	8.174	0.783	53	102	N.D.		
91) Isopropyl ether	0.000	8.741	0.000		0	N.D.		
92) 2-Chloro-1,3-butadiene	0.000	8.869	0.000		0	N.D.		
93) Ethyl tert-butyl ether	0.000	9.143	0.000		0	N.D.		
94) Ethyl acetate	9.338	9.338	0.880	43	2178	N.D.		
95) Propionitrile	0.000	9.393	0.000		0	N.D.		
96) Methacrylonitrile	0.000	9.576	0.000		0	N.D.		
97) Tetrahydrofuran	9.716	9.710	0.916	42	2637	N.D.		
98) Isobutyl alcohol	10.064	10.009	0.948	41	190	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030410V4\
Data File : 4A443.D
Acq On : 5 Mar 2010 5:23 am
Operator : ACJ
InstName : VOA4
Sample : |248102007|961336|1|VOAF|D|VOA8260BS|
Misc : LANL 5G N/A SOIL
ALS Vial : 43 Sample Multiplier: 1

Quant Time: Mar 16 17:43:02 2010
Quant Method : C:\msdchem\1\DATA\030110V4\VOA4-8260-030110.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 02 15:03:40 2010
Response via : Initial Calibration
Integrator: RTE

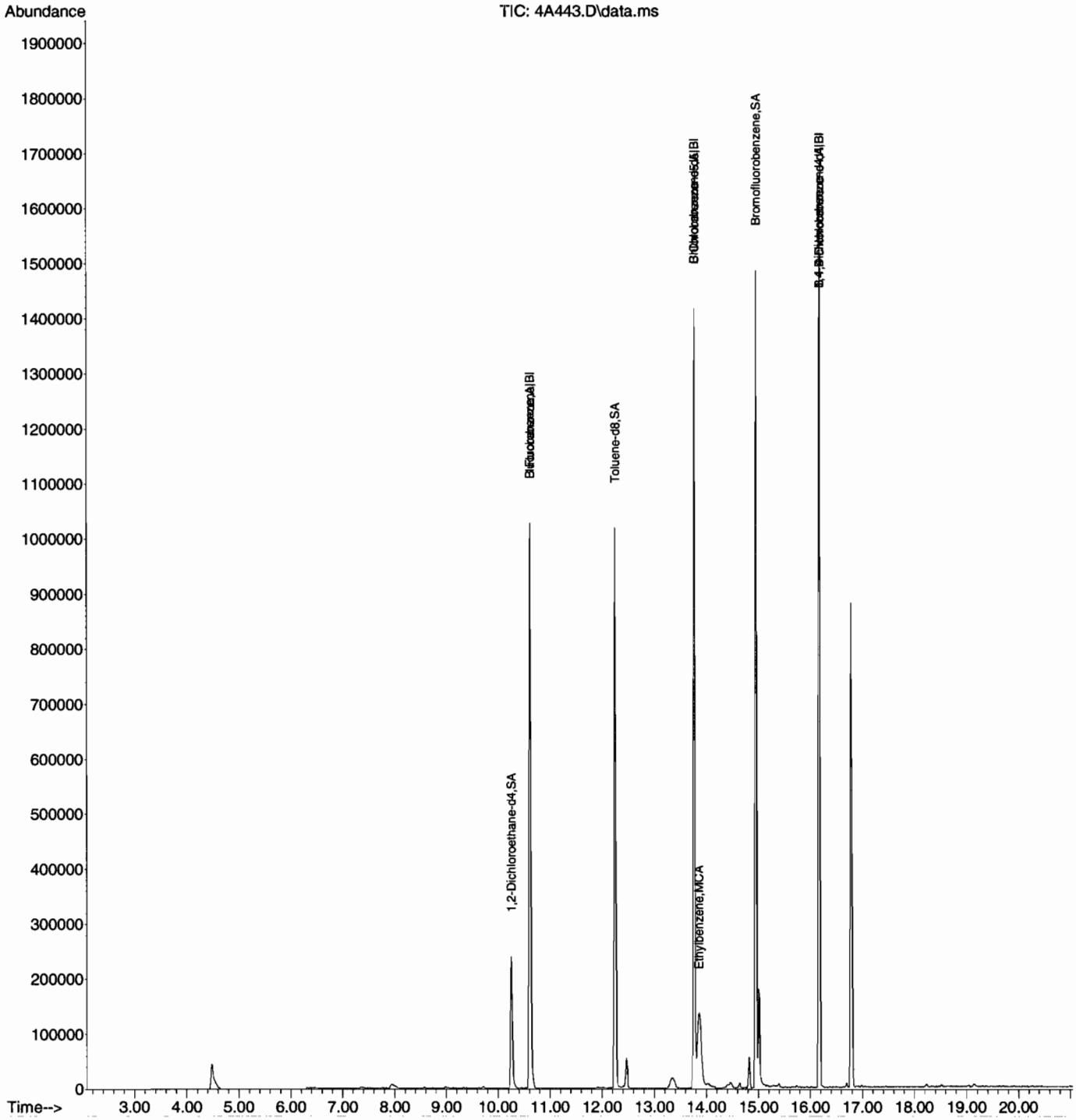
	Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
99)	Methyl tert-amyl ether	0.000	10.387	0.000		0	N.D.	
100)	Methyl methacrylate	0.000	11.204	0.000		0	N.D.	
101)	1,4-Dioxane	0.000	11.326	0.000		0	N.D.	
102)	2-Nitropropane	11.686	11.673	1.101	43	192	N.D.	
104)	Ethyl methacrylate	0.000	12.466	0.000		0	N.D.	
106)	1-Chlorohexane	0.000	13.661	0.000		0m	N.D.	d
107)	cis-1,4-Dichloro-2-butene	14.636	14.783	0.905	53	556	N.D.	
108)	Cyclohexanone	14.892	14.904	0.920	42	134	N.D.	
109)	trans-1,4-Dichloro-2-b...	15.014	15.063	0.928	53	1421	N.D.	
110)	Pentachloroethane	0.000	15.770	0.000		0	N.D.	
111)	Benzyl chloride	16.172	16.319	1.000	91	1814	N.D.	
112)	bis(2-Chloroisopropyl)...	0.000	16.721	0.000		0m	N.D.	d

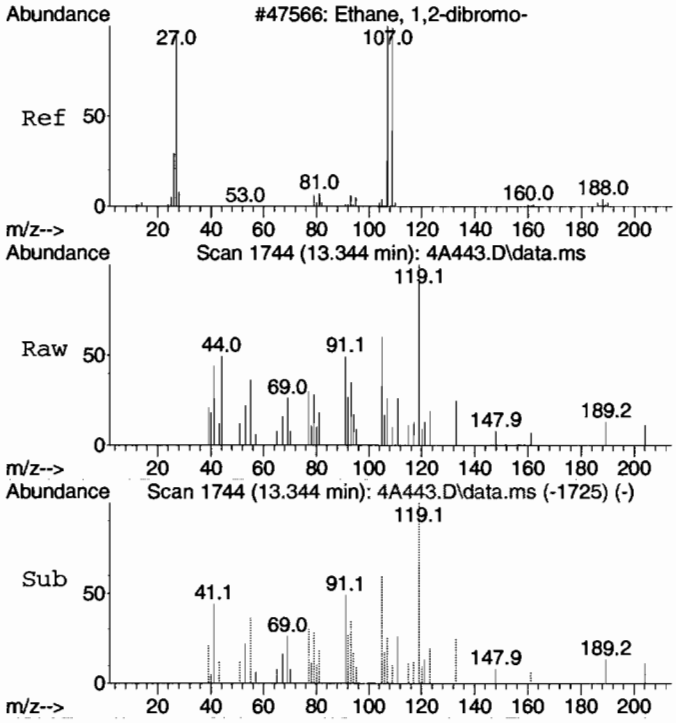
(#) = qualifier out of range (m) = manual integration (+) = signals summed
(E) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030410V4\
Data File : 4A443.D
Acq On : 5 Mar 2010 5:23 am
Operator : ACJ
InstName : VOA4
Sample : |248102007|961336|1|VOAF|D|VOA8260BS|
Misc : LANL 5G N/A SOIL
ALS Vial : 43 Sample Multiplier: 1

Quant Time: Mar 16 17:43:02 2010
Quant Method : C:\msdchem\1\DATA\030110V4\VOA4-8260-030110.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 02 15:03:40 2010
Response via : Initial Calibration
Integrator: RTE

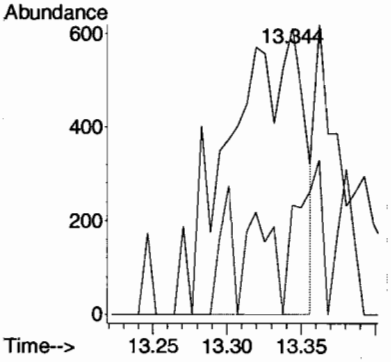


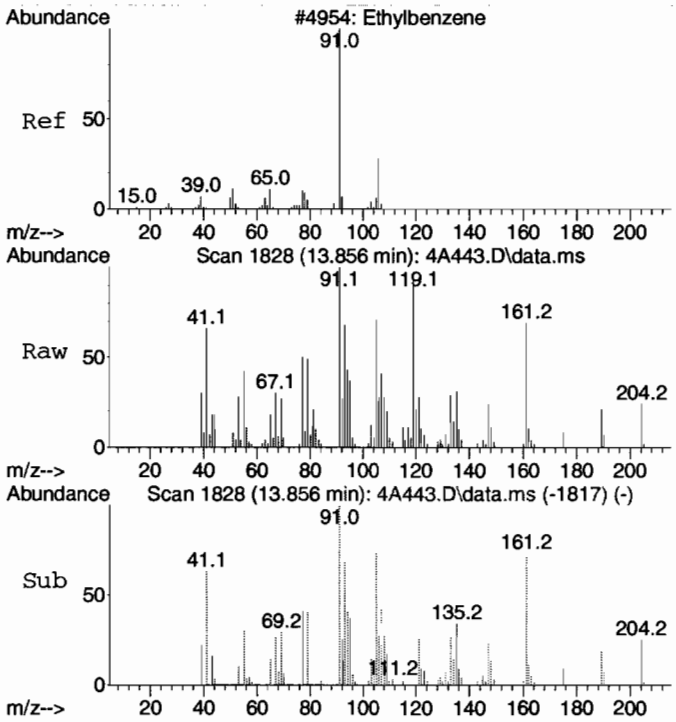


#51 BEFORE analyst DELETION
1,2-Dibromoethane
Concen: 0.33 ug/L
RT: 13.344 min Scan# 1744
Delta R.T. 0.023 min
Lab File: 4A443.D
Acq: 5 Mar 2010 5:23 am

Tgt Ion:107 Resp: 2127

Ion	Ratio	Lower	Upper
107	100		
109	7.5	64.5	124.5#

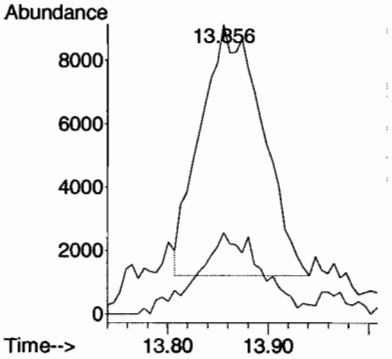


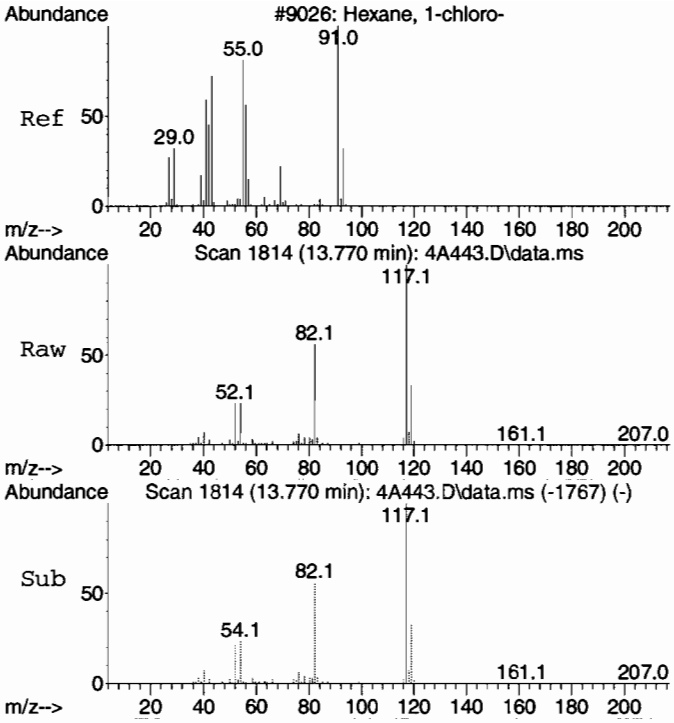


#54
Ethylbenzene
Concen: 1.03 ug/L
RT: 13.856 min Scan# 1828
Delta R.T. -0.007 min
Lab File: 4A443.D
Acq: 5 Mar 2010 5:23 am

Tgt Ion: 91 Resp: 33662

Ion	Ratio	Lower	Upper
91	100		
106	0.0	2.8	62.8#

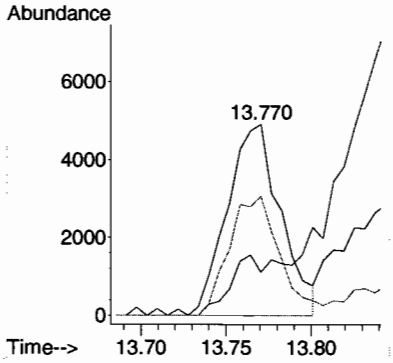


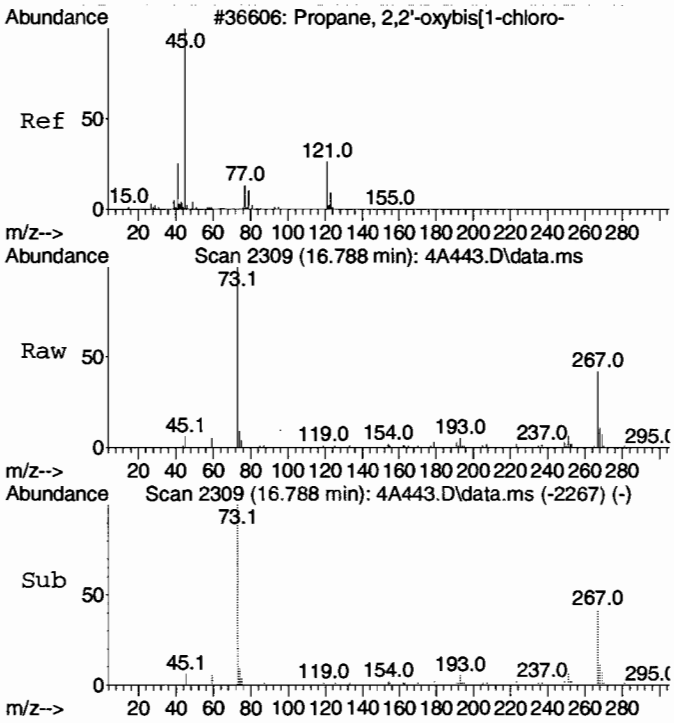


#106 BEFORE analyst DELETION
1-Chlorohexane
Concen: 1.94 ug/L
RT: 13.770 min Scan# 1814
Delta R.T. 0.110 min
Lab File: 4A443.D
Acq: 5 Mar 2010 5:23 am

Tgt Ion: 55 Resp: 10646

Ion	Ratio	Lower	Upper
55	100		
91	32.4	112.1	172.1#
56	59.3	28.5	88.5

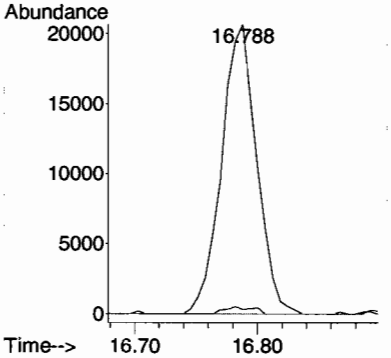




#112 BEFORE analyst DELETION
bis(2-Chloroisopropyl)ether
Concen: 10.74 ug/L
RT: 16.788 min Scan# 2309
Delta R.T. 0.067 min
Lab File: 4A443.D
Acq: 5 Mar 2010 5:23 am

Tgt Ion: 45 Resp: 40845

Ion	Ratio	Lower	Upper
45	100		
121	2.0	0.0	56.0



Library Search Compound Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030410V4\
Data File : 4A443.D
Acq On : 5 Mar 2010 5:23 am
Operator : ACJ
Sample : |248102007|961336|1|VOAF|1|VOA8260BS|
Misc : LANL 5G N/A SOIL
ALS Vial : 43 Sample Multiplier: 1

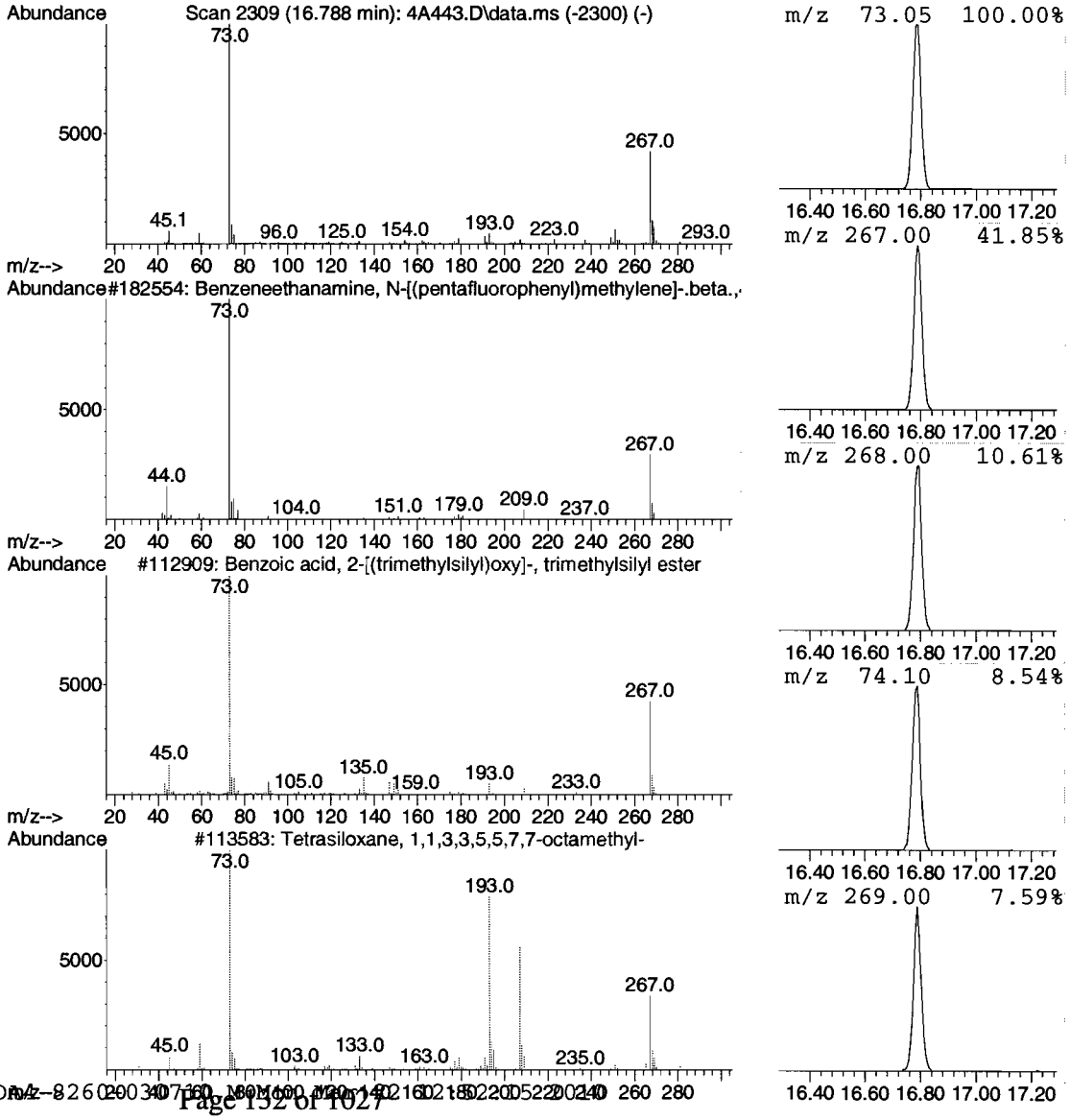
Quant Method : C:\msdchem\1\DATA\030110V4\VOA4-8260-030110.M
Quant Title : Volatile Organics 8260B SubList :

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

****
Peak Number 1 unknown siloxane Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
16.788	29.84 ug/L	1802320	B 1,4-Dichlorobenzene-d4	16.179

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzeneethanamine, N-[(pentafluo...	475	C21H26F5NO2Si2	055429-85-1	50
2	Benzoic acid, 2-[(trimethylsilyl...	282	C13H22O3Si2	003789-85-3	39
3	Tetrasiloxane, 1,1,3,3,5,5,7,7-o...	282	C8H26O3Si4	001000-05-1	16
4	1-Boraindane, 3-methyl-1-[1-(tri...	266	C17H23BSi	190316-36-0	10
5	11H-Dibenzo[b,e][1,4]diazepin-11...	267	C16H17N3O	013450-73-2	9



Tentatively Identified Compound (LSC) summary
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030410V4\
Data File : 4A443.D
Acq On : 5 Mar 2010 5:23 am
Operator : ACJ
Sample : |248102007|961336|1|VOAF|1|VOA8260BS|
Misc : LANL 5G N/A SOIL
ALS Vial : 43 Sample Multiplier: 1

Quant Method : C:\msdchem\1\DATA\030110V4\VOA4-8260-030110.M
Quant Title : Volatile Organics 8260B SubList :

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

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard--- #	RT	Resp	Conc
unknown siloxane	16.788	29.8	ug/L	1802320	6	16.179	3019600	50.0

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-2089**	**Date Collected:**	**02/22/2010 12:00**	**Matrix:**	**R**
Lab Sample ID:	**248102008**	**Date Received:**	**02/26/2010 08:45**	**%Moisture:**	**6.1**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE15-10-8397**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**961336**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**03/05/2010 05:50**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**03/04/2010 17:49**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**030410V4\4A444.D**	**Column:**	**DB-624**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.07	ug/kg	0.362	1.07
74-87-3	Chloromethane	U	1.07	ug/kg	0.320	1.07
75-01-4	Vinyl chloride	U	1.07	ug/kg	0.320	1.07
74-83-9	Bromomethane	U	1.07	ug/kg	0.320	1.07
75-00-3	Chloroethane	U	1.07	ug/kg	0.320	1.07
75-69-4	Trichlorofluoromethane	U	1.07	ug/kg	0.320	1.07
67-64-1	Acetone	U	5.33	ug/kg	1.77	5.33
75-35-4	1,1-Dichloroethylene	U	1.07	ug/kg	0.320	1.07
74-88-4	Iodomethane	U	5.33	ug/kg	1.70	5.33
75-09-2	Methylene chloride	U	5.33	ug/kg	2.13	5.33
75-15-0	Carbon disulfide	U	5.33	ug/kg	1.33	5.33
156-60-5	trans-1,2-Dichloroethylene	U	1.07	ug/kg	0.320	1.07
75-34-3	1,1-Dichloroethane	U	1.07	ug/kg	0.320	1.07
78-93-3	2-Butanone	U	5.33	ug/kg	1.60	5.33
156-59-2	cis-1,2-Dichloroethylene	U	1.07	ug/kg	0.320	1.07
594-20-7	2,2-Dichloropropane	U	1.07	ug/kg	0.320	1.07
67-66-3	Chloroform	U	1.07	ug/kg	0.320	1.07
74-97-5	Bromochloromethane	U	1.07	ug/kg	0.352	1.07
71-55-6	1,1,1-Trichloroethane	U	1.07	ug/kg	0.320	1.07
563-58-6	1,1-Dichloropropene	U	1.07	ug/kg	0.320	1.07
56-23-5	Carbon tetrachloride	U	1.07	ug/kg	0.320	1.07
107-06-2	1,2-Dichloroethane	U	1.07	ug/kg	0.320	1.07
71-43-2	Benzene	U	1.07	ug/kg	0.320	1.07
79-01-6	Trichloroethylene	U	1.07	ug/kg	0.352	1.07
78-87-5	1,2-Dichloropropane	U	1.07	ug/kg	0.320	1.07
75-27-4	Bromodichloromethane	U	1.07	ug/kg	0.320	1.07
74-95-3	Dibromomethane	U	1.07	ug/kg	0.320	1.07
108-10-1	4-Methyl-2-pentanone	U	5.33	ug/kg	1.33	5.33
10061-01-5	cis-1,3-Dichloropropylene	U	1.07	ug/kg	0.320	1.07
108-88-3	Toluene	U	1.07	ug/kg	0.320	1.07
10061-02-6	trans-1,3-Dichloropropylene	U	1.07	ug/kg	0.320	1.07
79-00-5	1,1,2-Trichloroethane	U	1.07	ug/kg	0.320	1.07
591-78-6	2-Hexanone	U	5.33	ug/kg	1.60	5.33
142-28-9	1,3-Dichloropropane	U	1.07	ug/kg	0.320	1.07
127-18-4	Tetrachloroethylene	U	1.07	ug/kg	0.320	1.07
124-48-1	Dibromochloromethane	U	1.07	ug/kg	0.320	1.07
106-93-4	1,2-Dibromoethane	U	1.07	ug/kg	0.320	1.07
108-90-7	Chlorobenzene	U	1.07	ug/kg	0.320	1.07

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-2089**	**Date Collected:**	**02/22/2010 12:00**	**Matrix:**	**R**
Lab Sample ID:	**248102008**	**Date Received:**	**02/26/2010 08:45**	**%Moisture:**	**6.1**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE15-10-8397**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**961336**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**03/05/2010 05:50**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**03/04/2010 17:49**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**030410V4\4A444.D**	**Column:**	**DB-624**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.07	ug/kg	0.320	1.07
179601-23-1	m,p-Xylenes	U	2.13	ug/kg	0.320	2.13
95-47-6	o-Xylene	U	1.07	ug/kg	0.320	1.07
100-42-5	Styrene	U	1.07	ug/kg	0.320	1.07
75-25-2	Bromoform	U	1.07	ug/kg	0.320	1.07
79-34-5	1,1,2,2-Tetrachloroethane	U	1.07	ug/kg	0.320	1.07
96-18-4	1,2,3-Trichloropropane	U	1.07	ug/kg	0.320	1.07
108-86-1	Bromobenzene	U	1.07	ug/kg	0.320	1.07
103-65-1	n-Propylbenzene	U	1.07	ug/kg	0.320	1.07
95-49-8	2-Chlorotoluene	U	1.07	ug/kg	0.320	1.07
98-82-8	Isopropylbenzene	U	1.07	ug/kg	0.320	1.07
108-67-8	1,3,5-Trimethylbenzene	U	1.07	ug/kg	0.320	1.07
106-43-4	4-Chlorotoluene	U	1.07	ug/kg	0.320	1.07
98-06-6	tert-Butylbenzene	U	1.07	ug/kg	0.320	1.07
95-63-6	1,2,4-Trimethylbenzene	U	1.07	ug/kg	0.320	1.07
135-98-8	sec-Butylbenzene	U	1.07	ug/kg	0.320	1.07
99-87-6	4-Isopropyltoluene	U	1.07	ug/kg	0.320	1.07
541-73-1	1,3-Dichlorobenzene	U	1.07	ug/kg	0.320	1.07
106-46-7	1,4-Dichlorobenzene	U	1.07	ug/kg	0.320	1.07
104-51-8	n-Butylbenzene	U	1.07	ug/kg	0.320	1.07
96-12-8	1,2-Dibromo-3-chloropropane	U	1.07	ug/kg	0.320	1.07
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.33	ug/kg	1.70	5.33
630-20-6	1,1,1,2-Tetrachloroethane	U	1.07	ug/kg	0.320	1.07
95-50-1	1,2-Dichlorobenzene	U	1.07	ug/kg	0.320	1.07

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	unknown hydrocarbon	4.47	5.45	ug/kg	0	J
	unknown siloxane	16.79	9.83	ug/kg	0	J

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030410V4\
Data File : 4A444.D
Acq On : 5 Mar 2010 5:50 am
Operator : ACJ
InstName : VOA4
Sample : |248102008|961336|1|VOAF|1|VOA8260BS|
Misc : LANL 5G N/A SOIL
ALS Vial : 44 Sample Multiplier: 1

Quant Time: Mar 11 18:47:18 2010
Quant Method : C:\msdchem\1\DATA\030110V4\VOA4-8260-030110.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 02 15:03:40 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	Dev(Min)
Internal Standards								
1) Fluorobenzene	10.614	10.620	1.000	96	1007827	50.00	ug/L	0.00
41) Chlorobenzene-d5	13.765	13.771	1.000	117	808964	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	16.173	16.180	1.000	152	443033	50.00	ug/L	0.00
82) B Fluorobenzene	10.614	10.619	1.000	96	1007475	50.00	ug/L	0.00
103) B Chlorobenzene-d5	13.765	13.771	1.000	117	808964	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	16.173	16.179	1.000	152	443046	50.00	ug/L	0.00
System Monitoring Compounds								Dev(Min)
29) 1,2-Dichloroethane-d4	10.254	10.260	0.966	65	203370	48.78	ug/L	0.00
Spiked Amount 50.000	Range 66 - 134		Recovery = 97.56%					
43) Toluene-d8	12.247	12.247	0.890	98	719921	47.97	ug/L	0.00
Spiked Amount 50.000	Range 71 - 128		Recovery = 95.94%					
61) Bromofluorobenzene	14.948	14.954	0.924	95	527186	60.82	ug/L	0.00
Spiked Amount 50.000	Range 65 - 130		Recovery = 121.64%					

Target Compounds	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	QValue
2) Dichlorodifluoromethane	0.000	4.911	0.000		0	N.D.		
3) Chloromethane	5.284	5.291	0.498	50	108	N.D.		
4) Vinyl chloride	0.000	5.521	0.000		0	N.D.		
5) Bromomethane	0.000	6.137	0.000		0	N.D.		
6) Chloroethane	0.000	6.295	0.000		0	N.D.		
7) Trichlorofluoromethane	0.000	6.669	0.000		0	N.D.		
8) Ethyl ether	6.998	6.998	0.659	59	285	N.D.		
9) Acetone	7.364	7.352	0.694	43	3376	N.D.		
10) 1,1-Dichloroethylene	0.000	7.389	0.000		0	N.D.		
11) Iodomethane	0.000	7.663	0.000		0	N.D.		
12) Acetonitrile	7.687	7.699	0.724	41	155	N.D.		
13) Methyl acetate	7.907	7.748	0.745	43	228	N.D.		
14) Carbon disulfide	7.754	7.773	0.731	76	1454	N.D.		
15) Methylene chloride	7.949	7.931	0.749	84	9298	N.D.		
16) tert-Butyl methyl ether	0.000	8.242	0.000		0	N.D.		
17) trans-1,2-Dichloroethy...	0.000	8.285	0.000		0	N.D.		
18) Vinyl acetate	0.000	8.705	0.000		0	N.D.		
19) 1,1-Dichloroethane	0.000	8.760	0.000		0	N.D.		
20) 2-Butanone	9.333	9.327	0.879	43	1110	N.D.		
21) cis-1,2-Dichloroethylene	0.000	9.388	0.000		0	N.D.		
22) 2,2-Dichloropropane	0.000	9.419	0.000		0	N.D.		
23) Bromochloromethane	0.000	9.656	0.000		0	N.D.		
24) Chloroform	0.000	9.687	0.000		0	N.D.		
25) 1,1,1-Trichloroethane	0.000	9.979	0.000		0	N.D.		
26) Cyclohexane	0.000	10.083	0.000		0	N.D.		
27) 1,1-Dichloropropene	0.000	10.132	0.000		0	N.D.		
28) Carbon tetrachloride	0.000	10.175	0.000		0	N.D.		
30) 1,2-Dichloroethane	0.000	10.339	0.000		0	N.D.		
31) Benzene	10.376	10.370	0.978	78	693	N.D.		
32) Cyclohexene	10.607	10.492	0.999	67	222	N.D.		
33) n-Butyl alcohol	0.000	10.693	0.000		0m	N.D.	d	
34) Trichloroethylene	0.000	11.004	0.000		0	N.D.		
35) 1,2-Dichloropropane	0.000	11.241	0.000		0	N.D.		
36) Methylcyclohexane	0.000	11.260	0.000		0	N.D.		
37) Dibromomethane	0.000	11.376	0.000		0	N.D.		
38) Bromodichloromethane	0.000	11.485	0.000		0	N.D.		
39) 2-Chloroethylvinyl ether	0.000	11.699	0.000		0	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030410V4\
Data File : 4A444.D
Acq On : 5 Mar 2010 5:50 am
Operator : ACJ
InstName : VOA4
Sample : |248102008|961336|1|VOAF|1|VOA8260BS|
Misc : LANL 5G N/A SOIL
ALS Vial : 44 Sample Multiplier: 1

Quant Time: Mar 11 18:47:18 2010
Quant Method : C:\msdchem\1\DATA\030110V4\VOA4-8260-030110.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 02 15:03:40 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
40) cis-1,3-Dichloropropylene	0.000	11.930	0.000		0	N.D.	
42) 4-Methyl-2-pentanone	0.000	12.016	0.000		0	N.D.	
44) Toluene	12.314	12.320	0.895	91	2505	N.D.	
45) trans-1,3-Dichloroprop...	12.467	12.461	0.906	75	615	N.D.	
46) 1,1,2-Trichloroethane	0.000	12.680	0.000		0	N.D.	
47) 2-Hexanone	12.845	12.857	0.933	43	295	N.D.	
48) 1,3-Dichloropropane	0.000	12.875	0.000		0	N.D.	
49) Tetrachloroethylene	0.000	12.918	0.000		0	N.D.	
50) Dibromochloromethane	0.000	13.144	0.000		0	N.D.	
51) 1,2-Dibromoethane	13.326	13.320	0.968	107	155	N.D.	
52) Chlorobenzene	0.000	13.802	0.000		0	N.D.	
53) 1,1,1,2-Tetrachloroethane	13.826	13.851	1.004	131	235	N.D.	
54) Ethylbenzene	0.000	13.863	0.000		0m	N.D.	d
55) m,p-Xylenes	0.000	13.973	0.000		0	N.D.	
56) o-Xylene	14.393	14.399	1.046	106	949	N.D.	
57) Styrene	14.399	14.399	1.046	104	628	N.D.	
59) Bromoform	14.649	14.655	0.906	173	188	N.D.	
60) Isopropylbenzene	14.765	14.759	0.913	105	885	N.D.	
62) 1,1,2,2-Tetrachloroethane	0.000	15.015	0.000		0	N.D.	
63) 1,2,3-Trichloropropane	0.000	15.107	0.000		0	N.D.	
64) Bromobenzene	0.000	15.168	0.000		0	N.D.	
65) n-Propylbenzene	15.192	15.180	0.939	91	777	N.D.	
66) 1,3,5-Trimethylbenzene	15.326	15.332	0.948	105	1184	N.D.	
67) 2-Chlorotoluene	0.000	15.332	0.000		0	N.D.	
68) 4-Chlorotoluene	15.430	15.430	0.954	91	654	N.D.	
69) tert-Butylbenzene	0.000	15.704	0.000		0	N.D.	
70) 1,2,4-Trimethylbenzene	15.741	15.741	0.973	105	3098	N.D.	
71) sec-Butylbenzene	15.923	15.930	0.985	105	187	N.D.	
72) 4-Isopropyltoluene	16.045	16.051	0.992	119	914	N.D.	
73) 1,3-Dichlorobenzene	16.125	16.119	0.997	146	132	N.D.	
74) 1,4-Dichlorobenzene	16.204	16.204	1.002	146	389	N.D.	
75) n-Butylbenzene	16.497	16.503	1.020	91	157	N.D.	
76) 1,2-Dichlorobenzene	16.643	16.643	1.029	146	207	N.D.	
77) 1,2-Dibromo-3-chloropr...	0.000	17.527	0.000		0	N.D.	
78) 1,2,4-Trichlorobenzene	0.000	18.630	0.000		0	N.D.	
79) Hexachlorobutadiene	0.000	18.819	0.000		0	N.D.	
80) Naphthalene	19.020	19.026	1.176	128	2729	N.D.	
81) 1,2,3-Trichlorobenzene	0.000	19.386	0.000		0	N.D.	
83) Chlorotrifluoroethylene	0.000	4.826	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000	5.657	0.000		0	N.D.	
85) Acrolein	0.000	7.180	0.000		0	N.D.	
86) Trichlorotrifluoroethane	0.000	7.369	0.000		0	N.D.	
87) Isopropyl Alcohol	7.535	7.430	0.710	45	120	N.D.	
88) Allyl chloride	7.827	7.796	0.737	41	370	N.D.	
89) tert-Butyl Alcohol	7.931	7.924	0.747	59	245	N.D.	
90) Acrylonitrile	0.000	8.174	0.000		0	N.D.	
91) Isopropyl ether	0.000	8.741	0.000		0	N.D.	
92) 2-Chloro-1,3-butadiene	0.000	8.869	0.000		0	N.D.	
93) Ethyl tert-butyl ether	0.000	9.143	0.000		0	N.D.	
94) Ethyl acetate	9.333	9.338	0.879	43	1110	N.D.	
95) Propionitrile	0.000	9.393	0.000		0	N.D.	
96) Methacrylonitrile	9.571	9.576	0.902	41	139	N.D.	
97) Tetrahydrofuran	9.723	9.710	0.916	42	1688	N.D.	
98) Isobutyl alcohol	10.175	10.009	0.959	41	119	N.D.	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030410V4\
Data File : 4A444.D
Acq On : 5 Mar 2010 5:50 am
Operator : ACJ
InstName : VOA4
Sample : |248102008|961336|1|VOAF|1|VOA8260BS|
Misc : LANL 5G N/A SOIL
ALS Vial : 44 Sample Multiplier: 1

Quant Time: Mar 11 18:47:18 2010
Quant Method : C:\msdchem\1\DATA\030110V4\VOA4-8260-030110.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 02 15:03:40 2010
Response via : Initial Calibration
Integrator: RTE

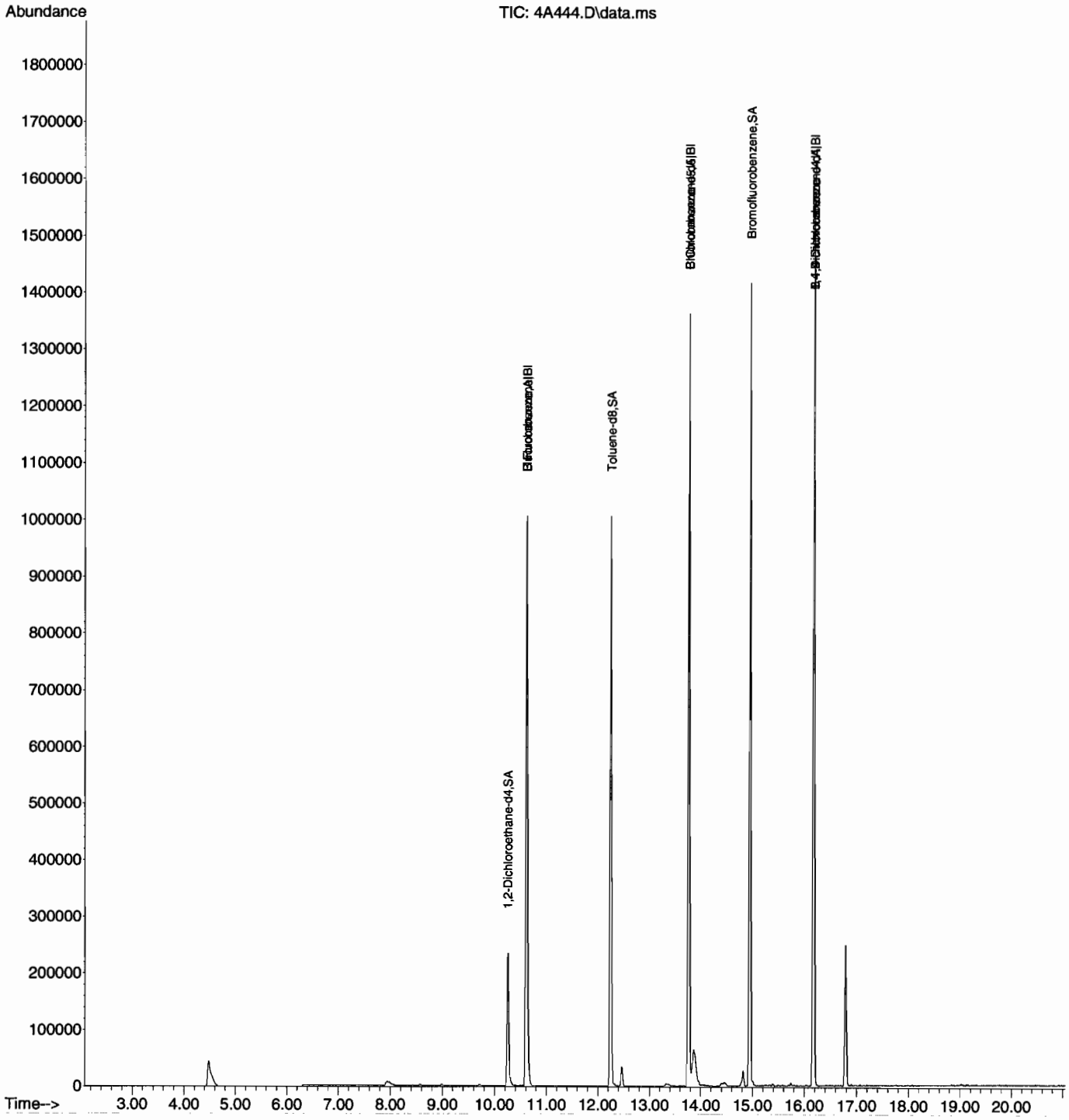
	Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
99)	Methyl tert-amyl ether	0.000	10.387	0.000		0	N.D.	
100)	Methyl methacrylate	0.000	11.204	0.000		0	N.D.	
101)	1,4-Dioxane	0.000	11.326	0.000		0	N.D.	
102)	2-Nitropropane	11.680	11.673	1.101	43	176	N.D.	
104)	Ethyl methacrylate	0.000	12.466	0.000		0	N.D.	
106)	1-Chlorohexane	0.000	13.661	0.000		0m	N.D.	d
107)	cis-1,4-Dichloro-2-butene	14.790	14.783	0.914	53	282	N.D.	
108)	Cyclohexanone	15.009	14.904	0.928	42	217	N.D.	
109)	trans-1,4-Dichloro-2-b...	0.000	15.063	0.000		0	N.D.	
110)	Pentachloroethane	0.000	15.770	0.000		0	N.D.	
111)	Benzyl chloride	16.173	16.319	1.000	91	1636	N.D.	
112)	bis(2-Chloroisopropy1)...	16.698	16.721	1.032	45	119	N.D.	

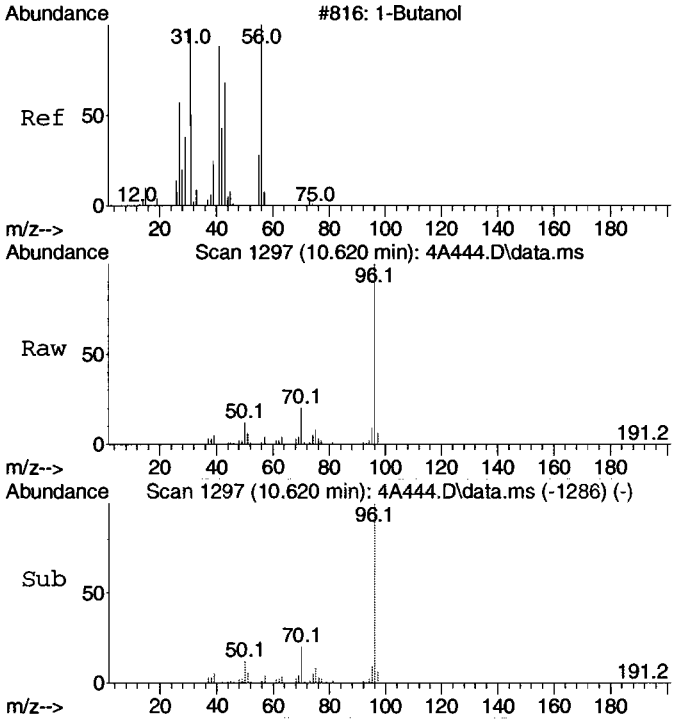
(#) = qualifier out of range (m) = manual integration (+) = signals summed
(E) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030410V4\
Data File : 4A444.D
Acq On : 5 Mar 2010 5:50 am
Operator : ACJ
InstName : VOA4
Sample : |248102008|961336|1|VOAF|1|VOA8260BS|
Misc : LANL 5G N/A SOIL
ALS Vial : 44 Sample Multiplier: 1

Quant Time: Mar 11 18:47:18 2010
Quant Method : C:\msdchem\1\DATA\030110V4\VOA4-8260-030110.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 02 15:03:40 2010
Response via : Initial Calibration
Integrator: RTE

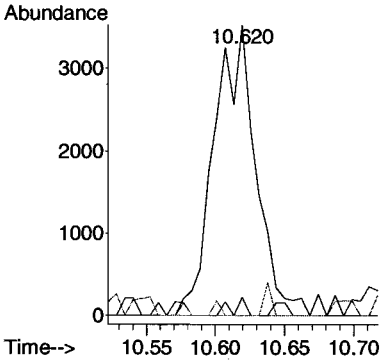


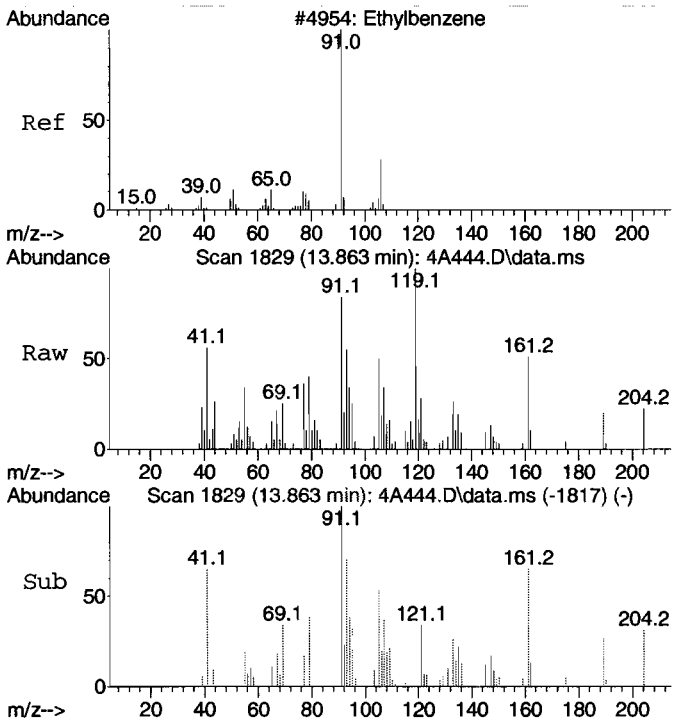


#33 BEFORE analyst DELETION
n-Butyl alcohol
Concen: 27.88 ug/L
RT: 10.620 min Scan# 1297
Delta R.T. -0.073 min
Lab File: 4A444.D
Acq: 5 Mar 2010 5:50 am

Tgt Ion: 56 Resp: 7393

Ion	Ratio	Lower	Upper
56	100		
41	1.6	44.5	104.5#
43	0.0	28.5	88.5#

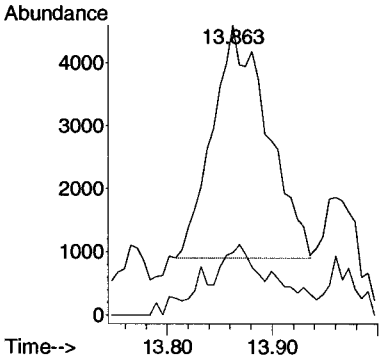


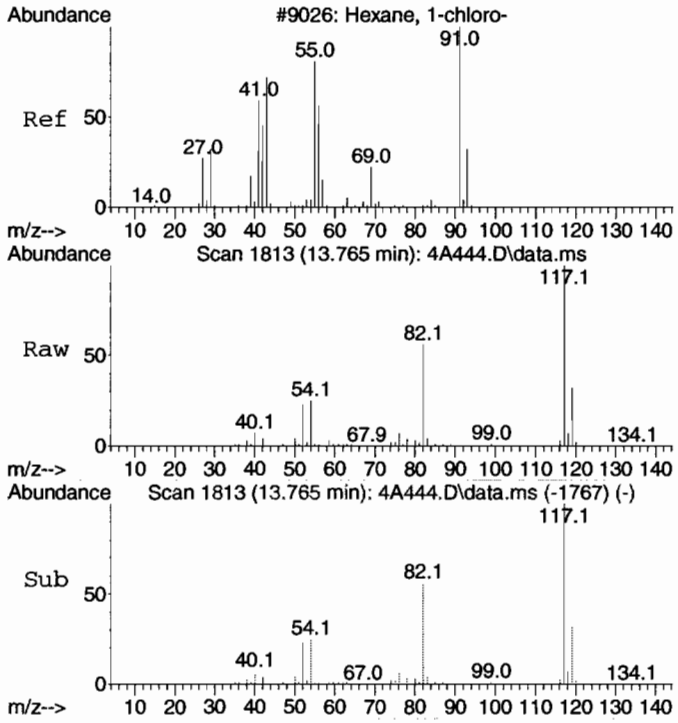


#54 BEFORE analyst DELETION
Ethylbenzene
Concen: 0.42 ug/L
RT: 13.863 min Scan# 1829
Delta R.T. 0.000 min
Lab File: 4A444.D
Acq: 5 Mar 2010 5:50 am

Tgt Ion: 91 Resp: 13432

Ion	Ratio	Lower	Upper
91	100		
106	0.0	2.8	62.8#

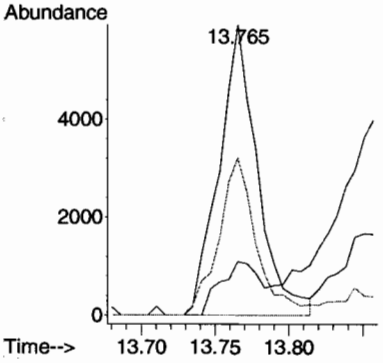




#106 BEFORE analyst DELETION
1-Chlorohexane
Concen: 2.10 ug/L
RT: 13.765 min Scan# 1813
Delta R.T. 0.105 min
Lab File: 4A444.D
Acq: 5 Mar 2010 5:50 am

Tgt Ion: 55 Resp: 10720

Ion	Ratio	Lower	Upper
55	100		
91	21.0	112.1	172.1#
56	54.1	28.5	88.5



Library Search Compound Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030410V4\
Data File : 4A444.D
Acq On : 5 Mar 2010 5:50 am
Operator : ACJ
Sample : |248102008|961336|1|VOAF|1|VOA8260BS|
Misc : LANL 5G N/A SOIL
ALS Vial : 44 Sample Multiplier: 1

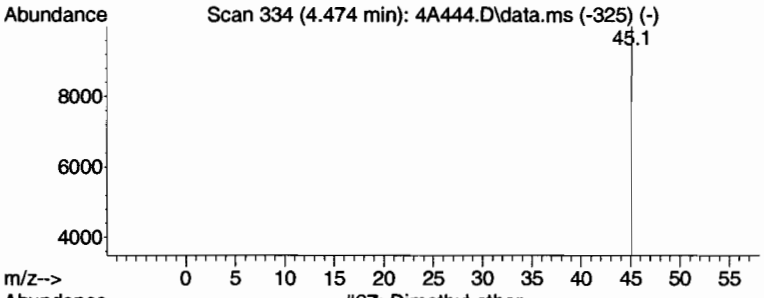
Quant Method : C:\msdchem\1\DATA\030110V4\VOA4-8260-030110.M
Quant Title : Volatile Organics 8260B SubList :

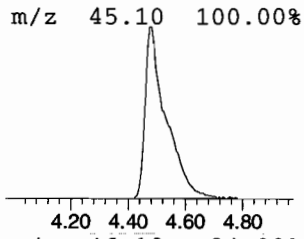
TIC Library : C:\Database\NIST05.L
TIC Integration Parameters: default.P

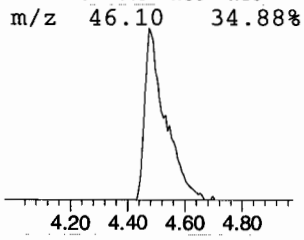
****
Peak Number 1 unknown hydrocarbon Concentration Rank 2

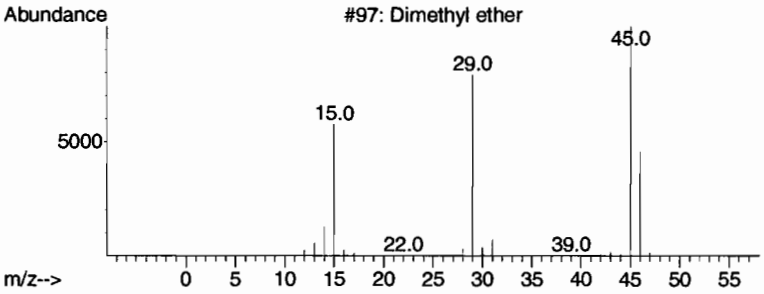
R.T.	EstConc	Area	Relative to ISTD	R.T.
4.474	5.12 ug/L	227177	Fluorobenzene	10.614

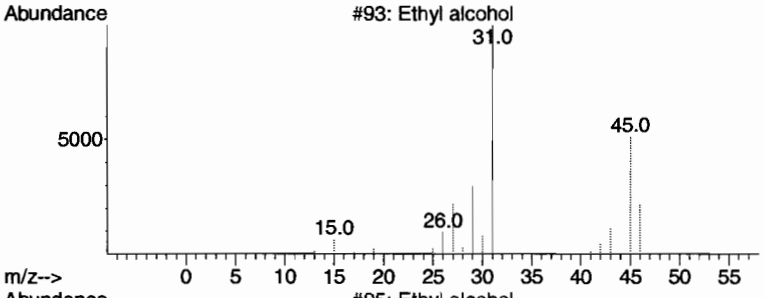
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Dimethyl ether	46	C2H6O	000115-10-6	5
2	Ethyl alcohol	46	C2H6O	000064-17-5	4
3	Ethyl alcohol	46	C2H6O	000064-17-5	4
4	Ethyl alcohol	46	C2H6O	000064-17-5	4
5	Dimethyl ether	46	C2H6O	000115-10-6	2

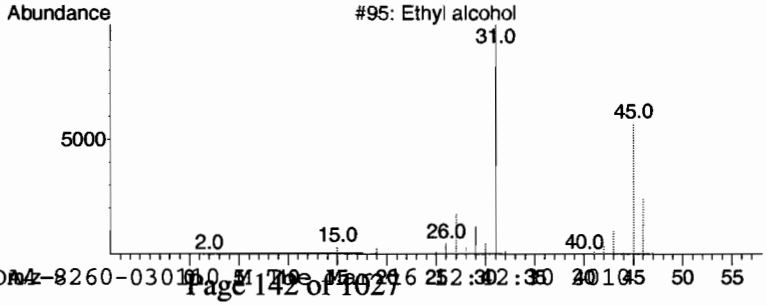












Library Search Compound Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030410V4\
Data File : 4A444.D
Acq On : 5 Mar 2010 5:50 am
Operator : ACJ
Sample : |248102008|961336|1|VOAF|1|VOA8260BS|
Misc : LANL 5G N/A SOIL
ALS Vial : 44 Sample Multiplier: 1

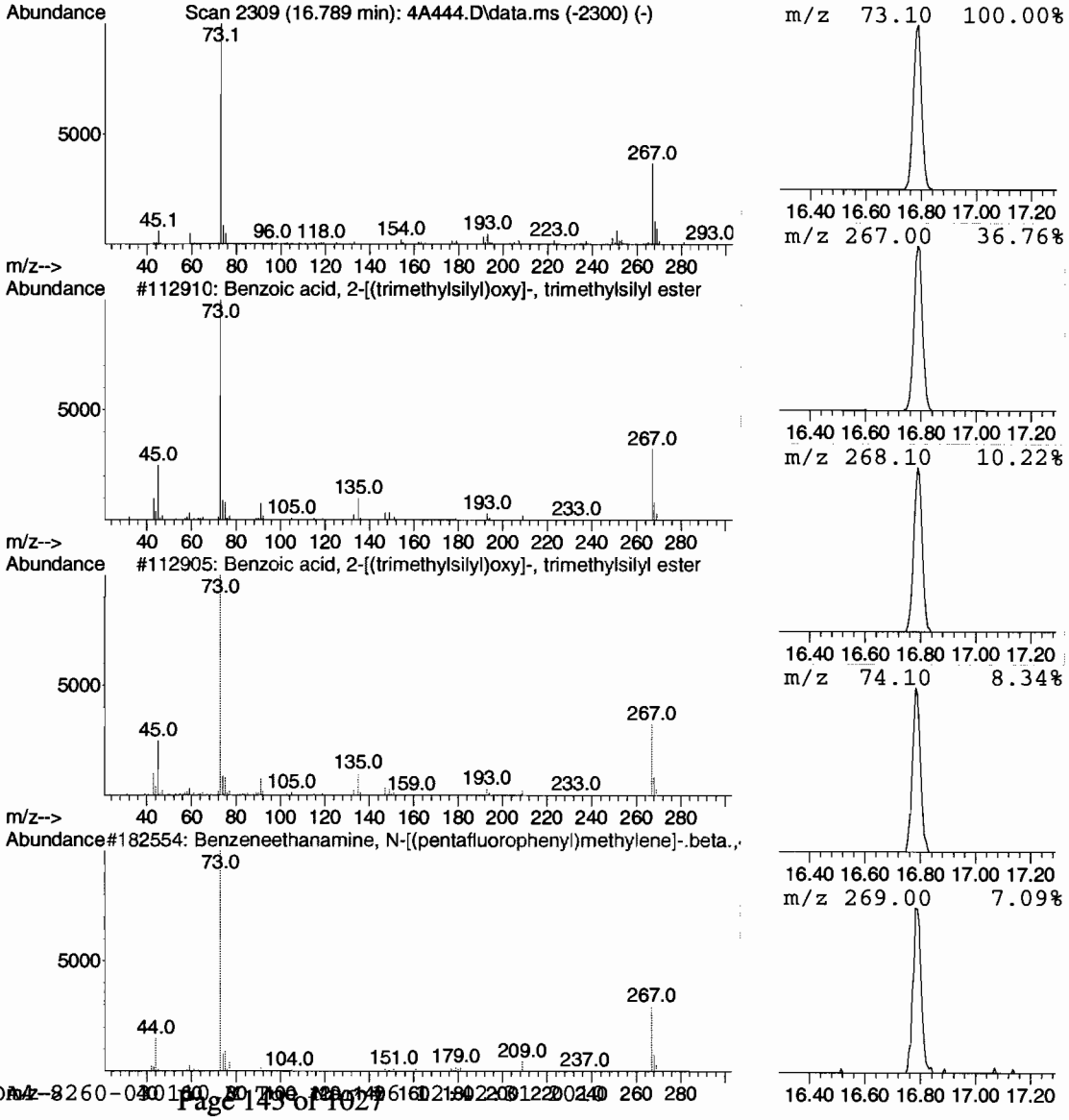
Quant Method : C:\msdchem\1\DATA\030110V4\VOA4-8260-030110.M
Quant Title : Volatile Organics 8260B SubList :

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

****
Peak Number 2 unknown siloxane Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
16.789	9.23 ug/L	525777	B 1,4-Dichlorobenzene-d4	16.173

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzoic acid, 2-[(trimethylsilyl...	282	C13H22O3Si2	003789-85-3	45
2	Benzoic acid, 2-[(trimethylsilyl...	282	C13H22O3Si2	003789-85-3	45
3	Benzeneethanamine, N-[(pentafluo...	475	C21H26F5NO2Si2	055429-85-1	42
4	Benzoic acid, 2-[(trimethylsilyl...	282	C13H22O3Si2	003789-85-3	38
5	Benzoic acid, 4-[(trimethylsilyl...	282	C13H22O3Si2	002078-13-9	33



Tentatively Identified Compound (LSC) summary
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030410V4\
Data File : 4A444.D
Acq On : 5 Mar 2010 5:50 am
Operator : ACJ
Sample : |248102008|961336|1|VOAF|1|VOA8260BS|
Misc : LANL 5G N/A SOIL
ALS Vial : 44 Sample Multiplier: 1

Quant Method : C:\msdchem\1\DATA\030110V4\VOA4-8260-030110.M
Quant Title : Volatile Organics 8260B SubList :

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

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard--- #	RT	Resp	Conc
unknown hydroca...	4.474	5.1	ug/L	227177	1	10.614	2217170	50.0
unknown siloxane	16.789	9.2	ug/L	525777	6	16.173	2847800	50.0

Standards

EPA 524.2/Low level SW846 8260B and Regular level 8260B and EPA 624
Calibration Standard Concentration Levels

	Level 1	Level 1a	Level 2	Level 3	Level 4 #	Level 5	Level 6	Level 7 !	Level 7a
Fluorobenzene (IS)									
1,2-Dichloroethane-d4(surr)		0.5	1	2	5	10	20	50	100
Dichlorodifluoromethane		0.5	1	2	5	10	20	50	100
Chloromethane		0.5	1	2	5	10	20	50	100
Vinyl chloride		0.5	1	2	5	10	20	50	100
Bromomethane		0.5	1	2	5	10	20	50	100
Chloroethane		0.5	1	2	5	10	20	50	100
Trichlorofluoromethane		0.5	1	2	5	10	20	50	100
1,1-Dichloroethene		0.5	1	2	5	10	20	50	100
Acetone	1	2.5	5	10	25	50	100	250	500
Iodomethane	1	2.5	5	10	25	50	100	250	500
Carbon disulfide	1	2.5	5	10	25	50	100	250	500
Methylene chloride		0.5	1	2	5	10	20	50	100
trans-1,2-Dichloroethene		0.5	1	2	5	10	20	50	100
1,1-Dichloroethane		0.5	1	2	5	10	20	50	100
Ethyl ether		0.5	1	2	5	10	20	50	100
Vinyl acetate	1	2.5	5	10	25	50	100	250	500
cis-1,2-Dichloroethene		0.5	1	2	5	10	20	50	100
1,2-Dichloroethene (total)		1	2	4	10	20	40	100	200
Cyclohexene		0.5	1	2	5	10	20	50	100
2-Chloroethylvinyl ether			5	10	25	50	100	250	500
2,2-Dichloropropane		0.5	1	2	5	10	20	50	100
2-Butanone	1	2.5	5	10	25	50	100	250	500
Bromochloromethane		0.5	1	2	5	10	20	50	100
Chloroform		0.5	1	2	5	10	20	50	100
1,1,1-Trichloroethane		0.5	1	2	5	10	20	50	100
1,1-Dichloropropene		0.5	1	2	5	10	20	50	100
Carbon tetrachloride		0.5	1	2	5	10	20	50	100
Benzene		0.5	1	2	5	10	20	50	100
1,2-Dichloroethane		0.5	1	2	5	10	20	50	100
Trichloroethene		0.5	1	2	5	10	20	50	100
1,2-Dichloropropane		0.5	1	2	5	10	20	50	100
Dibromomethane		0.5	1	2	5	10	20	50	100
Bromodichloromethane		0.5	1	2	5	10	20	50	100
cis-1,3-Dichloropropene		0.5	1	2	5	10	20	50	100
tert-Butylmethylether		0.5	1	2	5	10	20	50	100
Ethyl Ether			1	2	5	10	20	50	100
Acetonitrile			25	50	125	250	500	1250	2500
Methyl acetate			5	10	25	50	100	250	500
Cyclohexane			1	2	5	10	20	50	100
Methylcyclohexane			1	2	5	10	20	50	100
n-Butyl alcohol			50	100	250	500	1000	2500	5000
2-Nitropropane			5	10	25	50	100	250	500
Ethyl acetate			5	10	25	50	100	250	500
Acrolein			5	10	25	50	100	250	500
Trichlorotrifluoroethane			5	10	25	50	100	250	500
Allyl chloride			5	10	25	50	100	250	500
Acrylonitrile			5	10	25	50	100	250	500
1,4-Dioxane			50	100	250	500	1000	2500	5000
Isobutyl alcohol			50	100	250	500	1000	2500	5000
Methacrylonitrile			5	10	25	50	100	250	500
Propionitrile			5	10	25	50	100	250	500
Methyl methacrylate			5	10	25	50	100	250	500
Chlorotrifluoroethylene			5	10	25	50	100	250	500
2-Chloro-1,1,1-trifluoroethane			5	10	25	50	100	250	500

tert-Butyl alcohol			50	100	250	500	1000	2500	5000
Isopropyl ether			1	2	5	10	20	50	100
Ethyl tert-butyl ether			1	2	5	10	20	50	100
Isopropyl alcohol			50	100	250	500	1000	2500	5000
Methyl tert-amyl ether			1	2	5	10	20	50	100
1-Chlorohexane			1	2	5	10	20	50	100
2-Chloro-1,3-butadiene(chloroprene)			1	2	5	10	20	50	100
Chlorobenzene-d5 (IS)									
Toluene-d8 (surr)		0.5	1	2	5	10	20	50	100
4-Methyl-2-pentanone	1	2.5	5	10	25	50	100	250	500
Toluene		0.5	1	2	5	10	20	50	100
trans-1,3-Dichloropropene		0.5	1	2	5	10	20	50	100
1,1,2-Trichloroethane		0.5	1	2	5	10	20	50	100
Tetrachloroethene		0.5	1	2	5	10	20	50	100
1,3-Dichloropropane		0.5	1	2	5	10	20	50	100
2-Hexanone	1	2.5	5	10	25	50	20	250	500
Dibromochloromethane		0.5	1	2	5	10	20	50	100
1,2-Dibromoethane		0.5	1	2	5	10	20	50	100
Chlorobenzene		0.5	1	2	5	10	20	50	100
1,1,1,2-Tetrachloroethane		0.5	1	2	5	10	20	50	100
Ethylbenzene		0.5	1	2	5	10	20	50	100
m,p-Xylene		1	2	4	10	20	20	100	200
o-Xylene		0.5	1	2	5	10	20	50	100
Xylenes (total)		1.5	3	6	15	30	60	150	300
Stryene		0.5	1	2	5	10	20	50	100
Cyclohexanone			50	100	250	500	1000	2500	5000
Ethyl methacrylate			5	10	25	50	100	250	500
1,4-Dichlorobenzene-d4 (IS)									
Bromofluorobenzene (surr)		0.5	1	2	5	10	20	50	100
Bromoform		0.5	1	2	5	10	20	50	100
Isopropylbenzene		0.5	1	2	5	10	20	50	100
1,1,2,2-Tetrachloroethane		0.5	1	2	5	10	20	50	100
Bromobenzene		0.5	1	2	5	10	20	50	100
1,2,3-Trichloropropane		0.5	1	2	5	10	20	50	100
n-Propylbenzene		0.5	1	2	5	10	20	50	100
2-Chlorotoluene		0.5	1	2	5	10	20	50	100
1,3,5-Trimethylbenzene		0.5	1	2	5	10	20	50	100
4-Chlorotoluene		0.5	1	2	5	10	20	50	100
1,2,4-Trimethylbenzene		0.5	1	2	5	10	20	50	100
sec-Butylbenzene		0.5	1	2	5	10	20	50	100
1,3-Dichlorobenzene		0.5	1	2	5	10	20	50	100
tert-Butylbenzene		0.5	1	2	5	10	20	50	100
Isopropyltoluene		0.5	1	2	5	10	20	50	100
1,4-Dichlorobenzene		0.5	1	2	5	10	20	50	100
n-Butylbenzene		0.5	1	2	5	10	20	50	100
1,2-Dichlorobenzene		0.5	1	2	5	10	20	50	100
1,2-Dibromo-3-chloropropa		0.5	1	2	5	10	20	50	100
1,2,4-Trichlorobenzene		0.5	1	2	5	10	20	50	100
Hexachlorobutadiene		0.5	1	2	5	10	20	50	100
Naphthalene		0.5	1	2	5	10	20	50	100
1,2,3-Trichlorobenzene		0.5	1	2	5	10	20	50	100
cis-1,4-Dichloro-2-butene			5	10	25	50	100	250	500
trans-1,4-Dichloro-2-butene			5	10	25	50	100	250	500
Tetrahydrofuran			5	10	25	50	100	250	500
Pentachloroethane			5	10	25	50	100	250	500
Benzyl chloride			5	10	25	50	100	250	500
bis(2-Chloro-isopropyl)ether			5	10	25	50	100	250	500

Method	PQL	Concentration range
EPA 524.2	Level 1a	Levels 1a -> 7a
SW 846 8260B low level	Level 1a	Levels 1-> 7a
EPA 624	Level 2	Levels 2-> 7a
SW846 8260B	Level 2	Levels 2-> 7a

#: Indicates calibration verification concentration level used for low level analysis

!: Indicates calibration verification concentration level used for regular level analysis

Calibration History Report VOA4
GEL Laboratories, LLC

Method File : C:\msdchem\1\DATA\030110V4\VOA4-8260-030110.M
Last Update : Tue Mar 02 15:03:40 2010
Integrator : (RTE Integrator) Response via : Initial Calibration

Cal Lvl:8 Amt:-1 Last Updated with: C:\msdchem\1\DATA\030110V4\4A103.D

Injection Date	Mix	Calibration File
1 Mar 2010 8:03 pm	A	C:\msdchem\1\DATA\030110V4\4A103.D

Cal Lvl:1 Amt:1 Last Updated with: C:\msdchem\1\DATA\030110V4\4A104.D

Injection Date	Mix	Calibration File
1 Mar 2010 8:30 pm	A	C:\msdchem\1\DATA\030110V4\4A104.D
2 Mar 2010 12:39 am	B	C:\msdchem\1\DATA\030110V4\4A113.D

Cal Lvl:2 Amt:2 Last Updated with: C:\msdchem\1\DATA\030110V4\4A114.D

Injection Date	Mix	Calibration File
1 Mar 2010 9:26 pm	A	C:\msdchem\1\DATA\030110V4\4A106.D
2 Mar 2010 1:06 am	B	C:\msdchem\1\DATA\030110V4\4A114.D

Cal Lvl:3 Amt:5 Last Updated with: C:\msdchem\1\DATA\030110V4\4A115.D

Injection Date	Mix	Calibration File
1 Mar 2010 9:54 pm	A	C:\msdchem\1\DATA\030110V4\4A107.D
2 Mar 2010 1:34 am	B	C:\msdchem\1\DATA\030110V4\4A115.D

Cal Lvl:4 Amt:10 Last Updated with: C:\msdchem\1\DATA\030110V4\4A116.D

Injection Date	Mix	Calibration File
1 Mar 2010 10:21 pm	A	C:\msdchem\1\DATA\030110V4\4A108.D
2 Mar 2010 2:01 am	B	C:\msdchem\1\DATA\030110V4\4A116.D

Cal Lvl:5 Amt:-1 Last Updated with: C:\msdchem\1\DATA\030110V4\4A117.D

Injection Date	Mix	Calibration File
1 Mar 2010 10:49 pm	A	C:\msdchem\1\DATA\030110V4\4A109.D
2 Mar 2010 2:28 am	B	C:\msdchem\1\DATA\030110V4\4A117.D

Cal Lvl:6 Amt:50 Last Updated with: C:\msdchem\1\DATA\030110V4\4A118.D

Injection Date	Mix	Calibration File
1 Mar 2010 11:16 pm	A	C:\msdchem\1\DATA\030110V4\4A110.D
2 Mar 2010 2:56 am	B	C:\msdchem\1\DATA\030110V4\4A118.D

Cal Lvl:7 Amt:100 Last Updated with: C:\msdchem\1\DATA\030110V4\4A119.D

Injection Date	Mix	Calibration File
1 Mar 2010 11:44 pm	A	C:\msdchem\1\DATA\030110V4\4A111.D
2 Mar 2010 3:23 am	B	C:\msdchem\1\DATA\030110V4\4A119.D

VOA4-8260-030110.M Fri Mar 19 17:32:07 2010

Response Factor Report VOA4
GEL Laboratories, LLC

Method File : C:\msdchem\1\DATA\030110V4\VOA4-8260-030110.M
Last Update : Tue Mar 02 15:03:40 2010
Integrator : (RTE Integrator) Response via : Initial Calibration

For Linear Calibration: y = concentration ratio, x = response ratio. y = b + m1(x) + m2(xE2)

Compound b | m1 | m2	8 6	1 7	2	3	4	5	Avg	Curve	Exp	%RSD/r^2
2)MA Dichlorodifluoromethane		0.3094751	0.3280031	0.3612408	0.3086181					
	0.2908561	0.3031216					0.3169	AVRG		7.8338
3)MPA Chloromethane		0.5729365	0.5257676	0.5300317	0.5087671					
	0.4893066	0.4852403					0.5187	AVRG		6.2189
4)MCA Vinyl chloride		0.5556015	0.5350749	0.5133625	0.5104256					
	0.4896654	0.4800115					0.5140	AVRG		5.4579
5)MA Bromomethane		0.2891901	0.3068545	0.2985733	0.3159442					
	0.3113689	0.3122806					0.3057	AVRG		3.2877
6)MA Chloroethane		0.2722809	0.2615291	0.2661486	0.2656411					
	0.2619117	0.2612404					0.2648	AVRG		1.6040
7)MA Trichlorofluoromethane		0.5030491	0.5264847	0.5272128	0.5275867					
	0.5258166	0.5349635					0.5242	AVRG		2.0751
8)MA Ethyl ether		0.2415341	0.2378465	0.2480119	0.2617549					
	0.2548761	0.2540043					0.2497	AVRG		3.5854
9)MA Acetone		0.3705916	0.3197349	0.3077369	0.3139688					
	0.3032708	0.2752399					0.3151	AVRG		9.9201
10)MCA 1,1-Dichloroethylene		0.5794751	0.5416569	0.6102438	0.6071555					
	0.5519492	0.6065546					0.5828	AVRG		5.1849
11)MA Iodomethane		0.5734048	0.5471266	0.6082113	0.6470482					
	0.5910160	0.6450650					0.6020	AVRG		6.5914
12)MA Acetonitrile		0.0504308	0.0513643	0.0552385	0.0552876					
	0.0510683	0.0504136					0.0523	AVRG		4.4436
13)MA Methyl acetate		0.2702859	0.2639834	0.2673019	0.2855392					
	0.2611160	0.2577124					0.2677	AVRG		3.6682
14)MA Carbon disulfide		0.9801140	0.9486797	1.1622919	1.1922855					
	1.0876449	1.1334287					1.0841	AVRG		9.1704
15)MA Methylene chloride			0.5413222	0.4788783	0.4500774					
	0.3791125	0.4118045					0.4522	AVRG		13.8235
16)MA tert-Butyl methyl ether		0.9693907	0.9709886	0.9531098	1.0246243					
	0.9092717	0.9481439					0.9626	AVRG		3.9165

Response Factor Report VOA4
GEL Laboratories, LLC

Method File : C:\msdchem\1\DATA\030110V4\VOA4-8260-030110.M
Last Update : Tue Mar 02 15:03:40 2010
Integrator : (RTE Integrator) Response via : Initial Calibration

For Linear Calibration: y = concentration ratio, x = response ratio. y = b + m1(x) + m2(xE2)

Compound b | m1 | m2	8 6	1 7	2	3	4	5	Avg	Curve	Exp	%RSD/r^2
17)MA trans-1,2-Dichloroethyle		0.4568833	0.4331088	0.4667206	0.4691201					
	0.4278390	0.4394880					0.4489	AVRG		3.9499
18)MA Vinyl acetate		0.6003014	0.6013608	0.6048363	0.5853654					
	0.5871409	0.5211594					0.5834	AVRG		5.3988
19)MPA 1,1-Dichloroethane		0.5785324	0.5298634	0.5778642	0.5939291					
	0.5386702	0.5580868					0.5628	AVRG		4.4474
20)MA 2-Butanone		0.3516691	0.3325229	0.3247048	0.3275315					
	0.3481286	0.2989724					0.3306	AVRG		5.7383
21)MA cis-1,2-Dichloroethylene		0.5066074	0.4842512	0.5084067	0.5131511					
	0.4630022	0.4767585					0.4920	AVRG		4.1285
22)MA 2,2-Dichloropropane		0.3345652	0.2947900	0.3049192	0.3192840					
	0.2817542	0.2754918					0.3018	AVRG		7.4565
23)MA Bromochloromethane		0.1665375	0.1772055	0.1857821	0.1886328					
	0.1690604	0.1826083					0.1783	AVRG		5.0552
24)MCA Chloroform		0.6050823	0.6010229	0.5945464	0.6059334					
	0.5562893	0.5831481					0.5910	AVRG		3.2112
25)MA 1,1,1-Trichloroethane		0.4648209	0.4513728	0.4789040	0.4849944					
	0.4386245	0.4451256					0.4606	AVRG		4.0677
26)MA Cyclohexane		0.5588252	0.5202214	0.5216520	0.5277387					
	0.4630114	0.4789281					0.5117	AVRG		6.8224
27)MA 1,1-Dichloropropene		0.4624488	0.4115936	0.4524134	0.4394794					
	0.4060724	0.4217200					0.4323	AVRG		5.2686
28)MA Carbon tetrachloride		0.4498581	0.4242158	0.4397280	0.4587258					
	0.4179535	0.4380206					0.4381	AVRG		3.4843
29)SA 1,2-Dichloroethane-d4		0.2043679	0.2090512	0.2098656	0.2123324					
	0.2034892	0.2019789					0.2068	AVRG		1.9954
30)MA 1,2-Dichloroethane		0.5074893	0.4854465	0.4863183	0.4981336					
	0.4503800	0.4655985					0.4822	AVRG		4.3588
31)MA Benzene		1.3318439	1.2441519	1.3096329	1.3356057					
	1.2030885	1.2240879					1.2747	AVRG		4.5497

Response Factor Report VOA4
GEL Laboratories, LLC

Method File : C:\msdchem\1\DATA\030110V4\VOA4-8260-030110.M
Last Update : Tue Mar 02 15:03:40 2010
Integrator : (RTE Integrator) Response via : Initial Calibration

For Linear Calibration: y = concentration ratio, x = response ratio. y = b + m1(x) + m2(xE2)

Compound b | m1 | m2	8 6	1 7	2	3	4	5	Avg	Curve	Exp	%RSD/r^2
32)MA Cyclohexene		0.6395393	0.5860420	0.6494392	0.6392113					
	0.6007305	0.6137152					0.6214	AVRG		4.0511
33)MA n-Butyl alcohol	0.0152149	0.0108964	0.0112719	0.0124979	0.0135854					
	0.0142691	0.0143615					0.0132	AVRG		12.4909
34)MA Trichloroethylene		0.3437801	0.3200982	0.3470815	0.3477155					
	0.3248326	0.3388240					0.3371	AVRG		3.5091
35)MCA 1,2-Dichloropropane		0.3333792	0.3186002	0.3302578	0.3490766					
	0.3141259	0.3337969					0.3299	AVRG		3.7660
36)MA Methylcyclohexane		0.5498840	0.5176396	0.5554798	0.5485111					
	0.5032676	0.5212290					0.5327	AVRG		4.0167
37)MA Dibromomethane		0.2116389	0.2197578	0.2208584	0.2244713					
	0.2076497	0.2218045					0.2177	AVRG		3.0098
38)MA Bromodichloromethane		0.4181989	0.4146854	0.4276733	0.4597959					
	0.4357536	0.4678536					0.4373	AVRG		5.0211
39)MA 2-Chloroethylvinyl ether		0.1693963	0.1682743	0.2063950	0.1768768					
	0.1882166	0.1873501					0.1828	AVRG		7.8632
40)MA cis-1,3-Dichloropropylen		0.4961760	0.4860043	0.5009409	0.5342986					
	0.5042918	0.5407149					0.5104	AVRG		4.3053
42)MA 4-Methyl-2-pentanone		0.1812431	0.1913755	0.1812924	0.1814015					
	0.1874330	0.1710181					0.1823	AVRG		3.7921
43)SA Toluene-d8		0.9571065	0.9493994	0.9489777	0.9189842					
	0.9087348	0.8817669					0.9275	AVRG		3.1741
44)MCA Toluene		1.8581648	1.6886550	1.7535024	1.6503380					
	1.5066037	1.4729560					1.6550	AVRG		8.8511
45)MA trans-1,3-Dichloropropyl		0.5744260	0.5816789	0.5737143	0.5981879					
	0.5688252	0.5899924					0.5811	AVRG		1.9180
46)MA 1,1,2-Trichloroethane		0.2905339	0.3038670	0.3013148	0.3068866					
	0.2863925	0.2982854					0.2979	AVRG		2.6640
47)MA 2-Hexanone		0.5036428	0.5363755	0.5159977	0.5061352					
	0.5382292	0.4346162					0.5058	AVRG		7.4823

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For Linear Calibration: y = concentration ratio, x = response ratio. y = b + m1(x) + m2(xE2)

Compound b | m1 | m2	8 6	1 7	2	3	4	5	Avg	Curve	Exp	%RSD/r^2
48)MA 1,3-Dichloropropane	0.5849931	0.6286995 0.6121944	0.6273240	0.6290113	0.6310176		0.6189	AVRG		2.9002
49)MA Tetrachloroethylene	0.3132361	0.3642776 0.3223346	0.3253014	0.3419562	0.3310143		0.3330	AVRG		5.4152
50)MA Dibromochloromethane	0.4309932	0.4089868 0.4648053	0.4098351	0.4043078	0.4264329		0.4242	AVRG		5.3060
51)MA 1,2-Dibromoethane	0.3774139	0.3814705 0.3926663	0.3843430	0.3784487	0.3896992		0.3840	AVRG		1.5981
52)MPA Chlorobenzene	1.0469242	1.1723073 1.0892324	1.1582322	1.1598989	1.1365570		1.1272	AVRG		4.3535
53)MA 1,1,1,2-Tetrachloroethan	0.4215505	0.4198035 0.4667464	0.4188438	0.4138090	0.4265661		0.4279	AVRG		4.5525
54)MCA Ethylbenzene	1.8396323	2.0840260 1.8349551	2.0164027	2.0203991	1.9648385		1.9600	AVRG		5.2209
55)MA m,p-Xylenes	0.7500114	0.7968904 0.7838288	0.7843637	0.7812839	0.7687025		0.7775	AVRG		2.0822
56)MA o-Xylene	0.8014504	0.7644591 0.8757789	0.7952265	0.8048390	0.7930166		0.8058	AVRG		4.6105
57)MA Styrene	1.3579431	1.2443810 1.4472582	1.2117404	1.2744438	1.3143277		1.3083	AVRG		6.5184
59)MPA Bromoform	0.4801735	0.3902477 0.5461896	0.4141142	0.4242333	0.4566677		0.4519	AVRG		12.4017
60)MA Isopropylbenzene	2.8963725	3.3175209 2.9600744	3.3494916	3.3243159	3.1363524		3.1640	AVRG		6.2838
61)SA Bromofluorobenzene	0.9564305	0.9826198 0.9856607	1.0053785	0.9728582	0.9665938		0.9783	AVRG		1.7414
62)MPA 1,1,2,2-Tetrachloroethan	0.8567728	0.9195561 0.8818222	0.9683729	0.9026073	0.9198707		0.9082	AVRG		4.1952
63)MA 1,2,3-Trichloropropane	0.2288957	0.2432967 0.2413168	0.2801066	0.2441238	0.2472761		0.2475	AVRG		6.9435

Response Factor Report VOA4
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Integrator : (RTE Integrator) Response via : Initial Calibration

For Linear Calibration: y = concentration ratio, x = response ratio. y = b + m1(x) + m2(xE2)

Compound b | m1 | m2	8 6	1 7	2	3	4	5	Avg	Curve	Exp	%RSD/r^2
64)MA Bromobenzene		0.8647386	0.8752875	0.8519557	0.8635659					
	0.8331826	0.9351452					0.8706	AVRG		3.9852
65)MA n-Propylbenzene		4.0498435	4.1369496	4.0588436	3.8552049					
	3.5743302	3.5017307					3.8628	AVRG		6.9678
66)MA 1,3,5-Trimethylbenzene		2.8354956	3.0146701	2.9763206	2.9065436					
	2.7813114	2.8437041					2.8930	AVRG		3.0971
67)MA 2-Chlorotoluene		0.8688915	0.8524719	0.8724659	0.8294085					
	0.8241385	0.9261661					0.8623	AVRG		4.2959
68)MA 4-Chlorotoluene		2.4844031	2.5612741	2.5152706	2.3978939					
	2.2460486	2.2714761					2.4127	AVRG		5.4253
69)MA tert-Butylbenzene		0.6320613	0.6437287	0.6497004	0.6155296					
	0.5991326	0.6650760					0.6342	AVRG		3.7759
70)MA 1,2,4-Trimethylbenzene		2.8841431	3.0892537	3.0875822	3.0143936					
	2.8235529	2.8025765					2.9503	AVRG		4.4071
71)MA sec-Butylbenzene		4.0143071	4.0846347	4.1051946	3.9152029					
	3.6420766	3.5181276					3.8799	AVRG		6.3072
72)MA 4-Isopropyltoluene		3.0338824	3.2694698	3.3123587	3.1719621					
	3.0102983	2.9278625					3.1210	AVRG		4.9307
73)MA 1,3-Dichlorobenzene		1.7733193	1.7685299	1.7969645	1.7342003					
	1.6369787	1.6738737					1.7306	AVRG		3.6236
74)MA 1,4-Dichlorobenzene		1.7771756	1.9012008	1.8477494	1.7442019					
	1.6703842	1.6822429					1.7705	AVRG		5.1518
75)MA n-Butylbenzene		2.9574109	3.0426503	3.2663712	3.0010450					
	2.8332954	2.6704491					2.9619	AVRG		6.7905
76)MA 1,2-Dichlorobenzene		1.6923391	1.8190827	1.7229194	1.6964463					
	1.5724597	1.6033986					1.6844	AVRG		5.2380
77)MA 1,2-Dibromo-3-chloroprop		0.1427388	0.1601043	0.1552744	0.1568820					
	0.1724465	0.1820974					0.1616	AVRG		8.5663
78)MA 1,2,4-Trichlorobenzene		0.8213712	0.8237018	0.8975434	0.8897582					
	0.8820654	0.8549721					0.8616	AVRG		3.8851

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For Linear Calibration: y = concentration ratio, x = response ratio. y = b + m1(x) + m2(xE2)

Compound b | m1 | m2	8 6	1 7	2	3	4	5	Avg	Curve	Exp	%RSD/r^2
79)MA Hexachlorobutadiene	0.5423204	0.5620564 0.5524787	0.5490636	0.6013384	0.5418709		0.5582	AVRG		4.0146
80)MA Naphthalene	2.0444053	2.3970157 1.9772015	2.2199511	2.0905527	2.1315508		2.1434	AVRG		6.9367
81)MA 1,2,3-Trichlorobenzene	0.7056849	0.7105499 0.7041686	0.7076489	0.7426567	0.7348618		0.7176	AVRG		2.3293
83)B Chlorotrifluoroethylene	0.1651545	0.1928176 0.1795403	0.1589189	0.1461446	0.1735227	0.2114385	0.1754	AVRG		12.4398
84)B 2-Chloro-1,1,1-trifluoro	0.5904177	0.5721523 0.5501506	0.5400354	0.5501283	0.5962120	0.5535334	0.5647	AVRG		3.8712
85)B Acrolein -0.0135 | 0.0505 | 0.00	321964	6504 773364	9876	23934	49064	109086		LINR		0.9943
86)B Trichlorotrifluoroethane	0.1023600	0.1461689 0.1060014	0.1221725	0.1222409	0.1237840	0.1087334	0.1188	AVRG		12.5463
87)B Isopropyl Alcohol	0.0315174	0.0309507 0.0328078	0.0289400	0.0295944	0.0321518	0.0309392	0.0310	AVRG		4.3869
88)B Allyl chloride	0.4247044	0.4410914 0.3890080	0.4144177	0.4329829	0.4237283	0.4390746	0.4236	AVRG		4.2184
89)B tert-Butyl Alcohol	0.0499952	0.0493194 0.0515867	0.0465802	0.0486116	0.0516194	0.0492098	0.0496	AVRG		3.5428
90)B Acrylonitrile	0.1226476	0.1354744 0.1210012	0.1169982	0.1192240	0.1172877	0.1199926	0.1218	AVRG		5.2104
91)B Isopropyl ether	1.0893456	1.0359445 1.0610693	1.0095069	1.0621565	1.1182501	1.0699375	1.0637	AVRG		3.2990
92)B 2-Chloro-1,3-butadiene	0.4396326	0.4432562 0.3923863	0.4025100	0.4251441	0.4110593	0.4255095	0.4199	AVRG		4.4883
93)B Ethyl tert-butyl ether	1.0232943	0.9724237 1.0210297	0.9454935	0.9877587	1.0437350	1.0062867	1.0000	AVRG		3.3710
94)B Ethyl acetate	0.3335166	0.4207751 0.3226695	0.3344995	0.3419534	0.3318285	0.3437715	0.3470	AVRG		9.5860

Response Factor Report VOA4
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Integrator : (RTE Integrator) Response via : Initial Calibration

For Linear Calibration: y = concentration ratio, x = response ratio. y = b + m1(x) + m2(xE2)

Compound b | m1 | m2	8 6	1 7	2	3	4	5	Avg	Curve	Exp	%RSD/r^2
95)B Propionitrile	0.0516971	0.0579700 0.0529726	0.0471239	0.0497289	0.0512108	0.0510792	0.0517	AVRG		6.4357
96)B Methacrylonitrile	0.2106405	0.2375600 0.2040929	0.1961336	0.2113702	0.2065848	0.2121764	0.2112	AVRG		6.0965
97)B Tetrahydrofuran	0.1086713	0.1362498 0.1103988	0.1128471	0.1112702	0.1073795	0.1101952	0.1139	AVRG		8.8074
98)B Isobutyl alcohol	0.0170587	0.0152586 0.0160889	0.0143983	0.0161756	0.0155977	0.0159383	0.0158	AVRG		5.2524
99)B Methyl tert-amyl ether	0.9699206	0.9092583 0.9951498	0.9103189	0.9127399	0.9686898	0.9431764	0.9442	AVRG		3.6732
100)B Methyl methacrylate	0.2372493	0.2366812 0.2371432	0.2151339	0.2261493	0.2218900	0.2322491	0.2295	AVRG		3.7866
101)B 1,4-Dioxane	0.0045308	0.0045376 0.0043816	0.0041314	0.0041319	0.0042340	0.0043051	0.0043	AVRG	#	3.9414
102)B 2-Nitropropane	0.1188684	0.1281983 0.1221423	0.0945526	0.1031010	0.1109235	0.1179372	0.1137	AVRG		10.2389
104)B Ethyl methacrylate	0.5410113	0.5301747 0.4985569	0.4853177	0.5128271	0.5124319	0.5436019	0.5177	AVRG		4.1999
106)B 1-Chlorohexane	0.6049091	0.5706431 0.4412334	0.5950303	0.5938594	0.6226543	0.6078436	0.5766	AVRG		10.7135
107)B cis-1,4-Dichloro-2-buten	0.2753507	0.2562164 0.2528613	0.2433071	0.2543648	0.2476176	0.2715778	0.2573	AVRG		4.6219
108)B Cyclohexanone		0.0319960	0.0244636	0.0253938	0.0259780	0.0283148	0.0272	AVRG		11.0914
109)B trans-1,4-Dichloro-2-but	0.2676538	0.2448200 0.2425929	0.2333204	0.2463157	0.2452294	0.2638413	0.2491	AVRG		4.8999
110)B Pentachloroethane	0.2405564	0.2773251 0.2477113	0.2448282	0.2417607	0.3144067	0.3343024	0.2716	AVRG		14.2132
111)B Benzyl chloride	1.3187502	1.2135141 1.0882205	1.1462821	1.2503052	1.2578961	1.3440856	1.2313	AVRG		7.3732

Response Factor Report VOA4
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For Linear Calibration: y = concentration ratio, x = response ratio. y = b + m1(x) + m2(xE2)

Compound b | m1 | m2	8 6	1 7	2	3	4	5	Avg	Curve	Exp	%RSD/r^2
12)B bis(2-Chloroisopropyl)et		0.4102831	0.3581670	0.3914475	0.3940309	0.4206244				
	0.4143469	0.4031629					0.3989	AVRG		5.2157

#) = Out of Range

Continuing Calibration Summary

Client SDG: 10-2089

Instrument ID: VOA4.I **Injection Dat** 02-MAR-10 04:45

Data File: 030110V4\4A122.D **Init. Cal. Date(s)** 01-MAR-10 20:03 - 02-MAR-10 03:2

Lab Sample ID W4VM100301-18 **Quant Type** ISTD **Method:** 030110V4\VOA4-8260-030110.M

	Compound	AVERF / Amount	RF CCV	Nominal CCV	Min RF	RF Q	%D / %Drift	Max	Drift Q	Curve Type	
S	1,2-Dichloroethane-d4	0.2068	0.20039		.01		-3.09961	30		Averaged	
S	Toluene-d8	0.9275	0.92786		.01		0.03881	30		Averaged	
S	Bromofluorobenzene	0.9783	0.9522		.01		-2.66789	30		Averaged	
	Dichlorodifluoromethane	0.3169	0.20881		.01		-34.10855	30	*	Averaged	
	Chloromethane	0.5187	0.39141		.1		-24.5402	30		Averaged	spcc
	Vinyl chloride	0.514	0.435		.01		-15.36965	20		Averaged	ccc
	Bromomethane	0.3057	0.27503		.01		-10.03271	30		Averaged	
	Chloroethane	0.2648	0.23859		.01		-9.89804	30		Averaged	
	Trichlorofluoromethane	0.5242	0.48534		.01		-7.4132	30		Averaged	
	Ethyl ether	0.2497	0.23194		.01		-7.11254	30		Averaged	
	Acetone	0.3151	0.2404		.01		-23.70676	40		Averaged	
	1,1-Dichloroethylene	0.5828	0.49891		.01		-14.3943	20		Averaged	ccc
	Iodomethane	0.602	0.55263		.01		-8.201	30		Averaged	
	Acetonitrile	0.0523	0.0479		.01		-8.413	30		Averaged	
	Methyl acetate	0.2677	0.23983		.01		-10.41091	40		Averaged	
	Carbon disulfide	1.0841	1.0305		.01		-4.94419	30		Averaged	
	Methylene chloride	0.4522	0.36418		.01		-19.46484	30		Averaged	
	tert-Butyl methyl ether	0.9626	0.86175		.01		-10.47683	30		Averaged	
	trans-1,2-Dichloroethylene	0.4489	0.40435		.01		-9.92426	30		Averaged	
	Vinyl acetate	0.5834	0.47195		.01		-19.10353	40		Averaged	
	1,1-Dichloroethane	0.5628	0.522		.1		-7.24947	30		Averaged	spcc
	2-Butanone	0.3306	0.2659		.01		-19.57048	40		Averaged	
	cis-1,2-Dichloroethylene	0.492	0.45017		.01		-8.50203	30		Averaged	
	2,2-Dichloropropane	0.3018	0.26297		.01		-12.86614	30		Averaged	
	Bromochloromethane	0.1783	0.16596		.01		-6.92092	30		Averaged	
	Chloroform	0.591	0.55389		.01		-6.27919	20		Averaged	ccc
	1,1,1-Trichloroethane	0.4606	0.42347		.01		-8.06122	30		Averaged	
	Cyclohexane	0.5117	0.44897		.01		-12.25914	30		Averaged	
	1,1-Dichloropropene	0.4323	0.39451		.01		-8.74161	30		Averaged	
	Carbon tetrachloride	0.4381	0.40412		.01		-7.75622	30		Averaged	
	1,2-Dichloroethane	0.4822	0.43255		.01		-10.29656	30		Averaged	
	Benzene	1.2747	1.16072		.01		-8.94171	30		Averaged	
	Cyclohexene	0.6214	0.55044		.01		-11.41938	30		Averaged	
	n-Butyl alcohol	0.0132	0.01316		.01		-0.30303	40		Averaged	
	Trichloroethylene	0.3371	0.32002		.01		-5.06675	30		Averaged	
	1,2-Dichloropropane	0.3299	0.31032		.01		-5.93513	20		Averaged	ccc
	Methylcyclohexane	0.5327	0.47592		.01		-10.65891	30		Averaged	

Continuing Calibration Summary

Instrument ID: VOA4.I **Injection Dat** 02-MAR-10 04:45

Data File: 030110V4\4A122.D **Init. Cal. Date(s)** 01-MAR-10 20:03 02-MAR-10 03:2

Lab Sample ID W4VM100301-18 **Quant Type** ISTD **Method:** 030110V4\VOA4-8260-030110.M

Compound	AVERF / Amount	RF CCV	Nominal CCV	Min RF	RF Q	%D / %Drift	Max	Drift Q	Curve Type	
Dibromomethane	0.2177	0.19691		.01		-9.54984	30		Averaged	
Bromodichloromethane	0.4373	0.42638		.01		-2.49714	30		Averaged	
2-Chloroethylvinyl ether	0.1828	0.18686		.01		2.22101	30		Averaged	
cis-1,3-Dichloropropylene	0.5104	0.48153		.01		-5.65635	30		Averaged	
4-Methyl-2-pentanone	0.1823	0.16376		.01		-10.17005	40		Averaged	
Toluene	1.655	1.48911		.01		-10.02356	20		Averaged	ccc
trans-1,3-Dichloropropylene	0.5811	0.55064		.01		-5.24178	30		Averaged	
1,1,2-Trichloroethane	0.2979	0.28433		.01		-4.55522	30		Averaged	
2-Hexanone	0.5058	0.41646		.01		-17.66311	40		Averaged	
1,3-Dichloropropane	0.6189	0.57199		.01		-7.57958	30		Averaged	
Tetrachloroethylene	0.333	0.30484		.01		-8.45646	30		Averaged	
Dibromochloromethane	0.4242	0.4208		.01		-0.80151	30		Averaged	
1,2-Dibromoethane	0.384	0.36883		.01		-3.95052	30		Averaged	
Chlorobenzene	1.1272	1.05319		.3		-6.56583	30		Averaged	spcc
1,1,1,2-Tetrachloroethane	0.4279	0.41668		.01		-2.62211	30		Averaged	
Ethylbenzene	1.96	1.801		.01		-8.11224	20		Averaged	ccc
m,p-Xylenes	0.7775	0.73062		.01		-6.02958	30		Averaged	
o-Xylene	0.8058	0.78154		.01		-3.01067	30		Averaged	
Styrene	1.3083	1.32658		.01		1.39723	30		Averaged	
Bromoform	0.4519	0.44567		.1		-1.37862	30		Averaged	spcc
Isopropylbenzene	3.164	2.79156		.01		-11.77118	30		Averaged	
1,1,2,2-Tetrachloroethane	0.9082	0.79153		.3		-12.84629	30		Averaged	spcc
1,2,3-Trichloropropane	0.2475	0.2197		.01		-11.23232	30		Averaged	
Bromobenzene	0.8706	0.81417		.01		-6.48174	30		Averaged	
n-Propylbenzene	3.8628	3.45672		.01		-10.51258	30		Averaged	
2-Chlorotoluene	0.8623	0.8077		.01		-6.3319	30		Averaged	
1,3,5-Trimethylbenzene	2.893	2.69152		.01		-6.9644	30		Averaged	
4-Chlorotoluene	2.4127	2.1839		.01		-9.48315	30		Averaged	
tert-Butylbenzene	0.6342	0.587		.01		-7.44245	30		Averaged	
1,2,4-Trimethylbenzene	2.9503	2.72034		.01		-7.79446	30		Averaged	
sec-Butylbenzene	3.8799	3.52828		.01		-9.0626	30		Averaged	
4-Isopropyltoluene	3.121	2.92624		.01		-6.24031	30		Averaged	
1,3-Dichlorobenzene	1.7306	1.604		.01		-7.31538	30		Averaged	
1,4-Dichlorobenzene	1.7705	1.63632		.01		-7.57865	30		Averaged	
n-Butylbenzene	2.9619	2.76611		.01		-6.61028	30		Averaged	
1,2-Dichlorobenzene	1.6844	1.58047		.01		-6.17015	30		Averaged	
1,2-Dibromo-3-chloropropane	0.1616	0.16175		.01		0.09282	30		Averaged	

Continuing Calibration Summary

Instrument ID: VOA4.I **Injection Dat** 02-MAR-10 04:45

Data File: 030110V4\4A122.D **Init. Cal. Date(s)** 01-MAR-10 20:03 02-MAR-10 03:2

Lab Sample ID W4VM100301-18 **Quant Type** ISTD **Method:** 030110V4\VOA4-8260-030110.M

Compound	AVERF / Amount	RF CCV	Nominal CCV	Min RF	RF Q	%D / %Drift	Max	Drift Q	Curve Type
1,2,4-Trichlorobenzene	0.8616	0.84001		.01		-2.5058	30		Averaged
Hexachlorobutadiene	0.5582	0.5327		.01		-4.56826	30		Averaged
Naphthalene	2.1434	1.99062		.01		-7.12793	30		Averaged
1,2,3-Trichlorobenzene	0.7176	0.70968		.01		-1.10368	30		Averaged

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030110V4\
Data File : 4A122.D
Acq On : 2 Mar 2010 4:45 am
Operator : ACJ
InstName : VOA4
Sample : |W4VM100301-18|ICV|1|VOAF|1|
Misc : ICV 5ML - MIX[A] 0220-01B+0301-01
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Mar 02 15:05:11 2010
Quant Method : C:\msdchem\1\DATA\030110V4\VOA4-8260-030110.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 02 15:03:40 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	Dev(Min)
Internal Standards								
1) Fluorobenzene	10.619	10.620	1.000	96	1540174	50.00	ug/L	0.00
41) Chlorobenzene-d5	13.771	13.771	1.000	117	1292531	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	16.179	16.180	1.000	152	911427	50.00	ug/L	0.00
82) B Fluorobenzene	10.619	10.619	1.000	96	1539787	50.00	ug/L	0.00
103) B Chlorobenzene-d5	13.771	13.771	1.000	117	1292531	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	16.179	16.179	1.000	152	913350	50.00	ug/L	0.00
System Monitoring Compounds								Dev(Min)
29) 1,2-Dichloroethane-d4	10.259	10.260	0.966	65	308637	48.44	ug/L	0.00
43) Toluene-d8	12.253	12.247	0.890	98	1199290	50.02	ug/L	0.00
61) Bromofluorobenzene	14.953	14.954	0.924	95	867862	48.67	ug/L	0.00

Target Compounds	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	QValue
2) Dichlorodifluoromethane	4.904	4.911	0.462	85	321604	32.95	ug/L	100
3) Chloromethane	5.292	5.291	0.498	50	602837	37.73	ug/L	99
4) Vinyl chloride	5.521	5.521	0.520	62	669968	42.31	ug/L	100
5) Bromomethane	6.130	6.137	0.577	94	423599	44.98	ug/L	99
6) Chloroethane	6.295	6.295	0.593	64	367464	45.05	ug/L	100
7) Trichlorofluoromethane	6.668	6.669	0.628	101	747504	46.29	ug/L	100
8) Ethyl ether	6.997	6.998	0.659	59	357225	46.45	ug/L	98
9) Acetone	7.357	7.352	0.693	43	1851300	190.74	ug/L	100
10) 1,1-Dichloroethylene	7.394	7.389	0.696	61	768401	42.80	ug/L	100
11) Iodomethane	7.662	7.663	0.722	142	4255710	229.50	ug/L	100
12) Acetonitrile	7.699	7.699	0.725	41	1844276	1144.77	ug/L	99
13) Methyl acetate	7.753	7.748	0.730	43	1846931	224.01	ug/L	99
14) Carbon disulfide	7.772	7.773	0.732	76	7935717	237.64	ug/L	100
15) Methylene chloride	7.936	7.931	0.747	84	560901	40.26	ug/L	100
16) tert-Butyl methyl ether	8.241	8.242	0.776	73	1327244	44.76	ug/L	99
17) trans-1,2-Dichloroethy...	8.284	8.285	0.780	61	622773	45.04	ug/L	100
18) Vinyl acetate	8.711	8.705	0.820	43	3634425	202.25	ug/L	99
19) 1,1-Dichloroethane	8.759	8.760	0.825	63	803966	46.37	ug/L	100
20) 2-Butanone	9.326	9.327	0.878	43	2047670	201.08	ug/L	99
21) cis-1,2-Dichloroethylene	9.387	9.388	0.884	61	693341	45.75	ug/L	100
22) 2,2-Dichloropropane	9.418	9.419	0.887	77	405016	43.57	ug/L	98
23) Bromochloromethane	9.656	9.656	0.909	128	255613	46.54	ug/L	98
24) Chloroform	9.692	9.687	0.913	83	853090	46.86	ug/L	98
25) 1,1,1-Trichloroethane	9.979	9.979	0.940	97	652222	45.97	ug/L	100
26) Cyclohexane	10.082	10.083	0.949	56	691497	43.87	ug/L	99
27) 1,1-Dichloropropene	10.137	10.132	0.955	75	607607	45.63	ug/L #	79
28) Carbon tetrachloride	10.174	10.175	0.958	117	622408	46.12	ug/L	100
30) 1,2-Dichloroethane	10.338	10.339	0.974	62	666203	44.85	ug/L	99
31) Benzene	10.375	10.370	0.977	78	1787715	45.53	ug/L	100
32) Cyclohexene	10.497	10.492	0.989	67	847777	44.29	ug/L	98
33) n-Butyl alcohol	10.692	10.693	1.007	56	2026999	5001.56	ug/L	100
34) Trichloroethylene	11.009	11.004	1.037	95	492892	47.47	ug/L	99
35) 1,2-Dichloropropane	11.241	11.241	1.059	63	477950	47.04	ug/L	100
36) Methylcyclohexane	11.265	11.260	1.061	83	733004	44.67	ug/L	99
37) Dibromomethane	11.375	11.376	1.071	93	303275	45.23	ug/L	100
38) Bromodichloromethane	11.484	11.485	1.082	83	656694	48.75	ug/L	100
39) 2-Chloroethylvinyl ether	11.698	11.699	1.102	63	1438998	255.62	ug/L	100
40) cis-1,3-Dichloropropylene	11.929	11.930	1.123	75	741641	47.17	ug/L	100
42) 4-Methyl-2-pentanone	12.021	12.016	0.873	58	1058321	224.58	ug/L	98
44) Toluene	12.326	12.320	0.895	91	1924727	44.99	ug/L	99

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030110V4\
Data File : 4A122.D
Acq On : 2 Mar 2010 4:45 am
Operator : ACJ
InstName : VOA4
Sample : |W4VM100301-18|ICV|1|VOAF|1|
Misc : ICV 5ML - MIX[A] 0220-01B+0301-01
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Mar 02 15:05:11 2010
Quant Method : C:\msdchem\1\DATA\030110V4\VOA4-8260-030110.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 02 15:03:40 2010
Response via : Initial Calibration
Integrator: RTE

	Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
45)	trans-1,3-Dichloroprop...	12.466	12.461	0.905	75	711716	47.38	ug/L	99
46)	1,1,2-Trichloroethane	12.685	12.680	0.921	83	367506	47.73	ug/L	100
47)	2-Hexanone	12.856	12.857	0.934	43	2691452	205.83	ug/L	98
48)	1,3-Dichloropropane	12.874	12.875	0.935	76	739318	46.21	ug/L	89
49)	Tetrachloroethylene	12.923	12.918	0.938	164	394013	45.77	ug/L	99
50)	Dibromochloromethane	13.149	13.144	0.955	129	543899	49.60	ug/L	100
51)	1,2-Dibromoethane	13.319	13.320	0.967	107	476721	48.02	ug/L	100
52)	Chlorobenzene	13.801	13.802	1.002	112	1361279	46.72	ug/L	100
53)	1,1,1,2-Tetrachloroethane	13.850	13.851	1.006	131	538577	48.69	ug/L	99
54)	Ethylbenzene	13.862	13.863	1.007	91	2327846	45.94	ug/L	100
55)	m,p-Xylenes	13.972	13.973	1.015	106	1888702	93.97	ug/L	100
56)	o-Xylene	14.405	14.399	1.046	106	1010170	48.50	ug/L	98
57)	Styrene	14.405	14.399	1.046	104	1714651	50.70	ug/L	100
59)	Bromoform	14.661	14.655	0.906	173	406192	49.31	ug/L	99
60)	Isopropylbenzene	14.758	14.759	0.912	105	2544300	44.11	ug/L	100
62)	1,1,2,2-Tetrachloroethane	15.020	15.015	0.928	83	721422	43.58	ug/L	99
63)	1,2,3-Trichloropropane	15.112	15.107	0.934	110	200239	44.38	ug/L	97
64)	Bromobenzene	15.167	15.168	0.937	156	742061	46.76	ug/L	99
65)	n-Propylbenzene	15.185	15.180	0.939	91	3150549	44.74	ug/L	99
66)	1,3,5-Trimethylbenzene	15.331	15.332	0.948	105	2453122	46.52	ug/L	100
67)	2-Chlorotoluene	15.331	15.332	0.948	126	736161	46.84	ug/L	99
68)	4-Chlorotoluene	15.429	15.430	0.954	91	1990465	45.26	ug/L	100
69)	tert-Butylbenzene	15.703	15.704	0.971	134	535011	46.28	ug/L	99
70)	1,2,4-Trimethylbenzene	15.746	15.741	0.973	105	2479390	46.10	ug/L	99
71)	sec-Butylbenzene	15.935	15.930	0.985	105	3215773	45.47	ug/L	100
72)	4-Isopropyltoluene	16.051	16.051	0.992	119	2667056	46.88	ug/L	100
73)	1,3-Dichlorobenzene	16.124	16.119	0.997	146	1461933	46.34	ug/L	100
74)	1,4-Dichlorobenzene	16.209	16.204	1.002	146	1491390	46.21	ug/L	99
75)	n-Butylbenzene	16.508	16.503	1.020	91	2521109	46.70	ug/L	100
76)	1,2-Dichlorobenzene	16.642	16.643	1.029	146	1440483	46.91	ug/L	100
77)	1,2-Dibromo-3-chloropr...	17.532	17.527	1.084	157	147425	50.05	ug/L	100
78)	1,2,4-Trichlorobenzene	18.635	18.630	1.152	180	765605	48.75	ug/L	99
79)	Hexachlorobutadiene	18.818	18.819	1.163	225	485516	47.72	ug/L	100
80)	Naphthalene	19.032	19.026	1.176	128	1814309	46.44	ug/L	99
81)	1,2,3-Trichlorobenzene	19.385	19.386	1.198	180	646822	49.45	ug/L	99
83)	Chlorotrifluoroethylene	0.000	4.826	0.000		0	N.D.		
84)	2-Chloro-1,1,1-trifluo...	0.000	5.657	0.000		0	N.D.		
85)	Acrolein	7.241	7.180	0.682		0m	N.D.	d	
86)	Trichlorotrifluoroethane	0.000	7.369	0.000		0	N.D.		
87)	Isopropyl Alcohol	7.351	7.430	0.692		0m	N.D.	d	
88)	Allyl chloride	7.699	7.796	0.725		0m	N.D.	d	
89)	tert-Butyl Alcohol	0.000	7.924	0.000		0	N.D.		
90)	Acrylonitrile	8.241	8.174	0.776		0m	N.D.	d	
91)	Isopropyl ether	8.711	8.741	0.820		0m	N.D.	d	
92)	2-Chloro-1,3-butadiene	8.875	8.869	0.836		0m	N.D.	d	
93)	Ethyl tert-butyl ether	9.131	9.143	0.860		0m	N.D.	d	
94)	Ethyl acetate	9.326	9.338	0.878		0m	N.D.	d	
95)	Propionitrile	9.442	9.393	0.889		0m	N.D.	d	
96)	Methacrylonitrile	0.000	9.576	0.000		0	N.D.		
97)	Tetrahydrofuran	9.716	9.710	0.915		0m	N.D.	d	
98)	Isobutyl alcohol	9.997	10.009	0.941		0m	N.D.	d	
99)	Methyl tert-amyl ether	10.375	10.387	0.977		0m	N.D.	d	
100)	Methyl methacrylate	11.167	11.204	1.052		0m	N.D.	d	
101)	1,4-Dioxane	11.344	11.326	1.068		0m	N.D.	d	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030110V4\
Data File : 4A122.D
Acq On : 2 Mar 2010 4:45 am
Operator : ACJ
InstName : VOA4
Sample : |W4VM100301-18|ICV|1|VOAF|1|
Misc : ICV 5ML - MIX[A] 0220-01B+0301-01
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Mar 02 15:05:11 2010
Quant Method : C:\msdchem\1\DATA\030110V4\VOA4-8260-030110.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 02 15:03:40 2010
Response via : Initial Calibration
Integrator: RTE

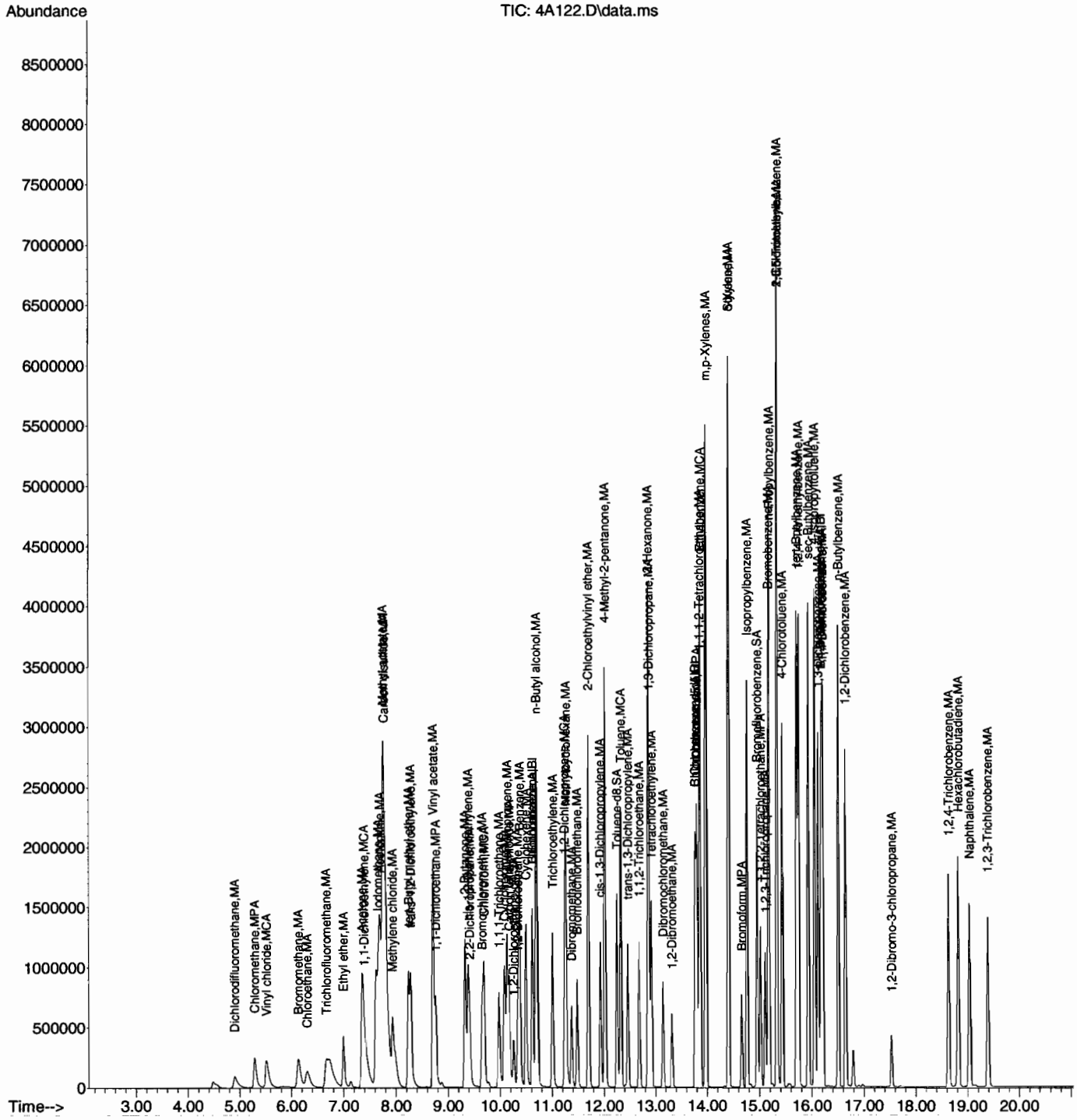
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
102) 2-Nitropropane	11.698	11.673	1.102		0m	N.D.	d
104) Ethyl methacrylate	12.466	12.466	0.905		0m	N.D.	d
106) 1-Chlorohexane	13.667	13.661	0.845		0m	N.D.	d
107) cis-1,4-Dichloro-2-butene	14.764	14.783	0.913		0m	N.D.	d
108) Cyclohexanone	14.911	14.904	0.922		0m	N.D.	d
109) trans-1,4-Dichloro-2-b...	15.069	15.063	0.931		0m	N.D.	d
110) Pentachloroethane	15.770	15.770	0.975		0m	N.D.	d
111) Benzyl chloride	16.313	16.319	1.008		0m	N.D.	d
112) bis(2-Chloroisopropyl)...	16.721	16.721	1.034		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\030110V4\
Data File : 4A122.D
Acq On : 2 Mar 2010 4:45 am
Operator : ACJ
InstName : VOA4
Sample : |W4VM100301-18|ICV|1|VOAF|1|
Misc : ICV 5ML - MIX[A] 0220-01B+0301-01
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Mar 02 15:05:11 2010
Quant Method : C:\msdchem\1\DATA\030110V4\VOA4-8260-030110.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 02 15:03:40 2010
Response via : Initial Calibration
Integrator: RTE



Continuing Calibration Summary

Client SDG: 10-2089

Instrument ID: VOA4.I **Injection Dat** 02-MAR-10 05:13

Data File: 030110V4\4A123.D **Init. Cal. Date(s)** 01-MAR-10 20:03 - 02-MAR-10 03:2

Lab Sample ID W4VM100301-19 **Quant Type** ISTD **Method:** 030110V4\VOA4-8260-030110.M

	Compound	AVERF / Amount	RF CCV	Nominal CCV	Min RF	RF Q	%D / %Drift	Max	Drift Q	Curve Type
S	1,2-Dichloroethane-d4	0.2068	0.19926		.01		-3.64603	30		Averaged
S	Toluene-d8	0.9275	0.92876		.01		0.13585	30		Averaged
S	Bromofluorobenzene	0.9783	0.99852		.01		2.06685	30		Averaged
	Chlorotrifluoroethylene	0.1754	0.18522		.01		5.59863	30		Averaged
	2-Chloro-1,1,1-trifluoroethane	0.5647	0.54723		.01		-3.09368	30		Averaged
	Acrolein	250	210.71	250			-15.716	30		Linear
	Trichlorotrifluoroethane	0.1188	0.11301		.01		-4.87374	30		Averaged
	Isopropyl Alcohol	0.031	0.02807		.01		-9.45161	40		Averaged
	Allyl chloride	0.4236	0.39588		.01		-6.54391	30		Averaged
	tert-Butyl Alcohol	0.0496	0.04432		.01		-10.64516	40		Averaged
	Acrylonitrile	0.1218	0.10925		.01		-10.30378	30		Averaged
	Isopropyl ether	1.0637	1.00324		.01		-5.68393	30		Averaged
	2-Chloro-1,3-butadiene	0.4199	0.43689		.01		4.0462	30		Averaged
	Ethyl tert-butyl ether	1	0.94464		.01		-5.536	30		Averaged
	Ethyl acetate	0.347	0.27896		.01		-19.60807	40		Averaged
	Propionitrile	0.0517	0.04585		.01		-11.31528	30		Averaged
	Methacrylonitrile	0.2112	0.18555		.01		-12.14489	30		Averaged
	Tetrahydrofuran	0.1139	0.09806		.01		-13.90694	30		Averaged
	Isobutyl alcohol	0.0158	0.01386		.01		-12.27848	40		Averaged
	Methyl tert-amyl ether	0.9442	0.9056		.01		-4.08812	30		Averaged
	Methyl methacrylate	0.2295	0.20869		.01		-9.06754	30		Averaged
	1,4-Dioxane	0.0043	0.00376		.01		-12.55814	40		Averaged
	2-Nitropropane	0.1137	0.10782		.01		-5.1715	30		Averaged
	Ethyl methacrylate	0.5177	0.48191		.01		-6.91327	30		Averaged
	1-Chlorohexane	0.5766	0.55415		.01		-3.89351	30		Averaged
	cis-1,4-Dichloro-2-butene	0.2573	0.25096		.01		-2.46405	30		Averaged
	Cyclohexanone	0.0272	0.05136		.01		88.82353	40	*	Averaged
	trans-1,4-Dichloro-2-butene	0.2491	0.23734		.01		-4.721	30		Averaged
	Pentachloroethane	0.2716	0.16088		.01		-40.76583	30	*	Averaged
	Benzyl chloride	1.2313	1.05586		.01		-14.24836	30		Averaged
	bis(2-Chloroisopropyl)ether	0.3989	0.35372		.01		-11.32615	30		Averaged

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030110V4\
Data File : 4A123.D
Acq On : 2 Mar 2010 5:13 am
Operator : ACJ
InstName : VOA4
Sample : |W4VM100301-19|ICV|1|VOAF|1|
Misc : ICV 5ML - MIX[B] 0215-08A+0125-08E
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Mar 02 15:05:20 2010
Quant Method : C:\msdchem\1\DATA\030110V4\VOA4-8260-030110.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 02 15:03:40 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
Internal Standards								Dev(Min)
1) Fluorobenzene	10.619	10.620	1.000	96	1591342	50.00	ug/L	0.00
41) Chlorobenzene-d5	13.771	13.771	1.000	117	1313113	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	16.179	16.180	1.000	152	848630	50.00	ug/L	0.00
82) B Fluorobenzene	10.619	10.619	1.000	96	1590834	50.00	ug/L	0.00
103) B Chlorobenzene-d5	13.771	13.771	1.000	117	1313113	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	16.179	16.179	1.000	152	848653	50.00	ug/L	0.00
System Monitoring Compounds								Dev(Min)
29) 1,2-Dichloroethane-d4	10.259	10.260	0.966	65	317090	48.17	ug/L	0.00
43) Toluene-d8	12.253	12.247	0.890	98	1219563	50.07	ug/L	0.00
61) Bromofluorobenzene	14.953	14.954	0.924	95	847377	51.04	ug/L	0.00

Target Compounds	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	QValue
2) Dichlorodifluoromethane	4.818	4.911	0.454		0m	N.D.	d	
3) Chloromethane	5.292	5.291	0.498		0m	N.D.	d	
4) Vinyl chloride	5.521	5.521	0.520		0m	N.D.	d	
5) Bromomethane	6.130	6.137	0.577		0m	N.D.	d	
6) Chloroethane	6.321	6.295	0.595		0m	N.D.	d	
7) Trichlorofluoromethane	6.680	6.669	0.629		0m	N.D.	d	
8) Ethyl ether	6.991	6.998	0.658		0m	N.D.	d	
9) Acetone	7.430	7.352	0.700		0m	N.D.	d	
10) 1,1-Dichloroethylene	7.375	7.389	0.695		0m	N.D.	d	
11) Iodomethane	7.619	7.663	0.718		0m	N.D.	d	
12) Acetonitrile	7.692	7.699	0.724		0m	N.D.	d	
13) Methyl acetate	7.753	7.748	0.730		0m	N.D.	d	
14) Carbon disulfide	7.802	7.773	0.735		0m	N.D.	d	
15) Methylene chloride	7.942	7.931	0.748		0m	N.D.	d	
16) tert-Butyl methyl ether	8.247	8.242	0.777		0m	N.D.	d	
17) trans-1,2-Dichloroethy...	8.284	8.285	0.780		0m	N.D.	d	
18) Vinyl acetate	8.741	8.705	0.823		0m	N.D.	d	
19) 1,1-Dichloroethane	8.759	8.760	0.825		0m	N.D.	d	
20) 2-Butanone	9.338	9.327	0.879		0m	N.D.	d	
21) cis-1,2-Dichloroethylene	9.338	9.388	0.879		0m	N.D.	d	
22) 2,2-Dichloropropane	9.558	9.419	0.900		0m	N.D.	d	
23) Bromochloromethane	9.655	9.656	0.909		0m	N.D.	d	
24) Chloroform	9.692	9.687	0.913		0m	N.D.	d	
25) 1,1,1-Trichloroethane	9.979	9.979	0.940		0m	N.D.	d	
26) Cyclohexane	10.009	10.083	0.943		0m	N.D.	d	
27) 1,1-Dichloropropene	10.125	10.132	0.953		0m	N.D.	d	
28) Carbon tetrachloride	10.174	10.175	0.958		0m	N.D.	d	
30) 1,2-Dichloroethane	10.357	10.339	0.975		0m	N.D.	d	
31) Benzene	10.375	10.370	0.977		0m	N.D.	d	
32) Cyclohexene	10.497	10.492	0.989		0m	N.D.	d	
33) n-Butyl alcohol	10.686	10.693	1.006		0m	N.D.	d	
34) Trichloroethylene	11.003	11.004	1.036		0m	N.D.	d	
35) 1,2-Dichloropropane	11.247	11.241	1.059		0m	N.D.	d	
36) Methylcyclohexane	11.210	11.260	1.056		0m	N.D.	d	
37) Dibromomethane	11.369	11.376	1.071		0m	N.D.	d	
38) Bromodichloromethane	11.478	11.485	1.081		0m	N.D.	d	
39) 2-Chloroethylvinyl ether	11.692	11.699	1.101		0m	N.D.	d	
40) cis-1,3-Dichloropropylene	11.935	11.930	1.124		0m	N.D.	d	
42) 4-Methyl-2-pentanone	12.015	12.016	0.872		0m	N.D.	d	
44) Toluene	12.326	12.320	0.895		0m	N.D.	d	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030110V4\
Data File : 4A123.D
Acq On : 2 Mar 2010 5:13 am
Operator : ACJ
InstName : VOA4
Sample : |W4VM100301-19|ICV|1|VOAF|1|
Misc : ICV 5ML - MIX[B] 0215-08A+0125-08E
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Mar 02 15:05:20 2010
Quant Method : C:\msdchem\1\DATA\030110V4\VOA4-8260-030110.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 02 15:03:40 2010
Response via : Initial Calibration
Integrator: RTE

	Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units		
45)	trans-1,3-Dichloroprop...	12.460	12.461	0.905		0m	N.D.	d		
46)	1,1,2-Trichloroethane	12.685	12.680	0.921		0m	N.D.	d		
47)	2-Hexanone	12.862	12.857	0.934		0m	N.D.	d		
48)	1,3-Dichloropropane	12.880	12.875	0.935		0m	N.D.	d		
49)	Tetrachloroethylene	12.923	12.918	0.938		0m	N.D.	d		
50)	Dibromochloromethane	13.136	13.144	0.954		0m	N.D.	d		
51)	1,2-Dibromoethane	13.313	13.320	0.967		0m	N.D.	d		
52)	Chlorobenzene	13.801	13.802	1.002		0m	N.D.	d		
53)	1,1,1,2-Tetrachloroethane	13.850	13.851	1.006		0m	N.D.	d		
54)	Ethylbenzene	13.862	13.863	1.007		0m	N.D.	d		
55)	m,p-Xylenes	13.972	13.973	1.015		0m	N.D.	d		
56)	o-Xylene	14.405	14.399	1.046		0m	N.D.	d		
57)	Styrene	14.405	14.399	1.046		0m	N.D.	d		
59)	Bromoform	14.654	14.655	0.906		0m	N.D.	d		
60)	Isopropylbenzene	14.764	14.759	0.913		0m	N.D.	d		
62)	1,1,2,2-Tetrachloroethane	15.008	15.015	0.928		0m	N.D.	d		
63)	1,2,3-Trichloropropane	15.112	15.107	0.934		0m	N.D.	d		
64)	Bromobenzene	15.167	15.168	0.937		0m	N.D.	d		
65)	n-Propylbenzene	15.185	15.180	0.939		0m	N.D.	d		
66)	1,3,5-Trimethylbenzene	15.331	15.332	0.948		0m	N.D.	d		
67)	2-Chlorotoluene	15.331	15.332	0.948		0m	N.D.	d		
68)	4-Chlorotoluene	15.435	15.430	0.954		0m	N.D.	d		
69)	tert-Butylbenzene	15.703	15.704	0.971		0m	N.D.	d		
70)	1,2,4-Trimethylbenzene	15.740	15.741	0.973		0m	N.D.	d		
71)	sec-Butylbenzene	15.935	15.930	0.985		0m	N.D.	d		
72)	4-Isopropyltoluene	16.057	16.051	0.992		0m	N.D.	d		
73)	1,3-Dichlorobenzene	16.118	16.119	0.996		0m	N.D.	d		
74)	1,4-Dichlorobenzene	16.209	16.204	1.002		0m	N.D.	d		
75)	n-Butylbenzene	16.502	16.503	1.020		0m	N.D.	d		
76)	1,2-Dichlorobenzene	16.648	16.643	1.029		0m	N.D.	d		
77)	1,2-Dibromo-3-chloropr...	17.532	17.527	1.084		0m	N.D.	d		
78)	1,2,4-Trichlorobenzene	18.635	18.630	1.152		0m	N.D.	d		
79)	Hexachlorobutadiene	18.812	18.819	1.163		0m	N.D.	d		
80)	Naphthalene	19.038	19.026	1.177		0m	N.D.	d		
81)	1,2,3-Trichlorobenzene	19.385	19.386	1.198		0m	N.D.	d		
83)	Chlorotrifluoroethylene	4.826	4.826	0.454	116	883966	158.43	ug/L		100
84)	2-Chloro-1,1,1-trifluo...	5.657	5.657	0.533	118	2611674	145.37	ug/L	#	99
85)	Acrolein	7.180	7.180	0.676	56	317143	210.71	ug/L		100
86)	Trichlorotrifluoroethane	7.363	7.369	0.693	85	898867	237.85	ug/L		98
87)	Isopropyl Alcohol	7.436	7.430	0.700	45	2232769	2264.77	ug/L		99
88)	Allyl chloride	7.802	7.796	0.735	41	3148934	233.66	ug/L		99
89)	tert-Butyl Alcohol	7.930	7.924	0.747	59	3525465	2235.77	ug/L	#	100
90)	Acrylonitrile	8.174	8.174	0.770	53	869015	224.24	ug/L		99
91)	Isopropyl ether	8.741	8.741	0.823	45	1595996	47.16	ug/L		100
92)	2-Chloro-1,3-butadiene	8.869	8.869	0.835	53	695018	52.02	ug/L		100
93)	Ethyl tert-butyl ether	9.143	9.143	0.861	59	1502758	47.23	ug/L		99
94)	Ethyl acetate	9.338	9.338	0.879	43	2218913	200.98	ug/L		100
95)	Propionitrile	9.393	9.393	0.885	54	364674	221.77	ug/L		100
96)	Methacrylonitrile	9.576	9.576	0.902	41	1475866	219.61	ug/L		99
97)	Tetrahydrofuran	9.716	9.710	0.915	42	780014	215.32	ug/L		99
98)	Isobutyl alcohol	10.009	10.009	0.943	41	1102186	2194.18	ug/L		100
99)	Methyl tert-amyl ether	10.387	10.387	0.978	73	1440665	47.96	ug/L		99
100)	Methyl methacrylate	11.210	11.204	1.056	69	1659968	227.33	ug/L		99
101)	1,4-Dioxane	11.332	11.326	1.067	88	299443	2177.71	ug/L		99

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030110V4\
Data File : 4A123.D
Acq On : 2 Mar 2010 5:13 am
Operator : ACJ
InstName : VOA4
Sample : |W4VM100301-19|ICV|1|VOAF|1|
Misc : ICV 5ML - MIX[B] 0215-08A+0125-08E
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Mar 02 15:05:20 2010
Quant Method : C:\msdchem\1\DATA\030110V4\VOA4-8260-030110.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 02 15:03:40 2010
Response via : Initial Calibration
Integrator: RTE

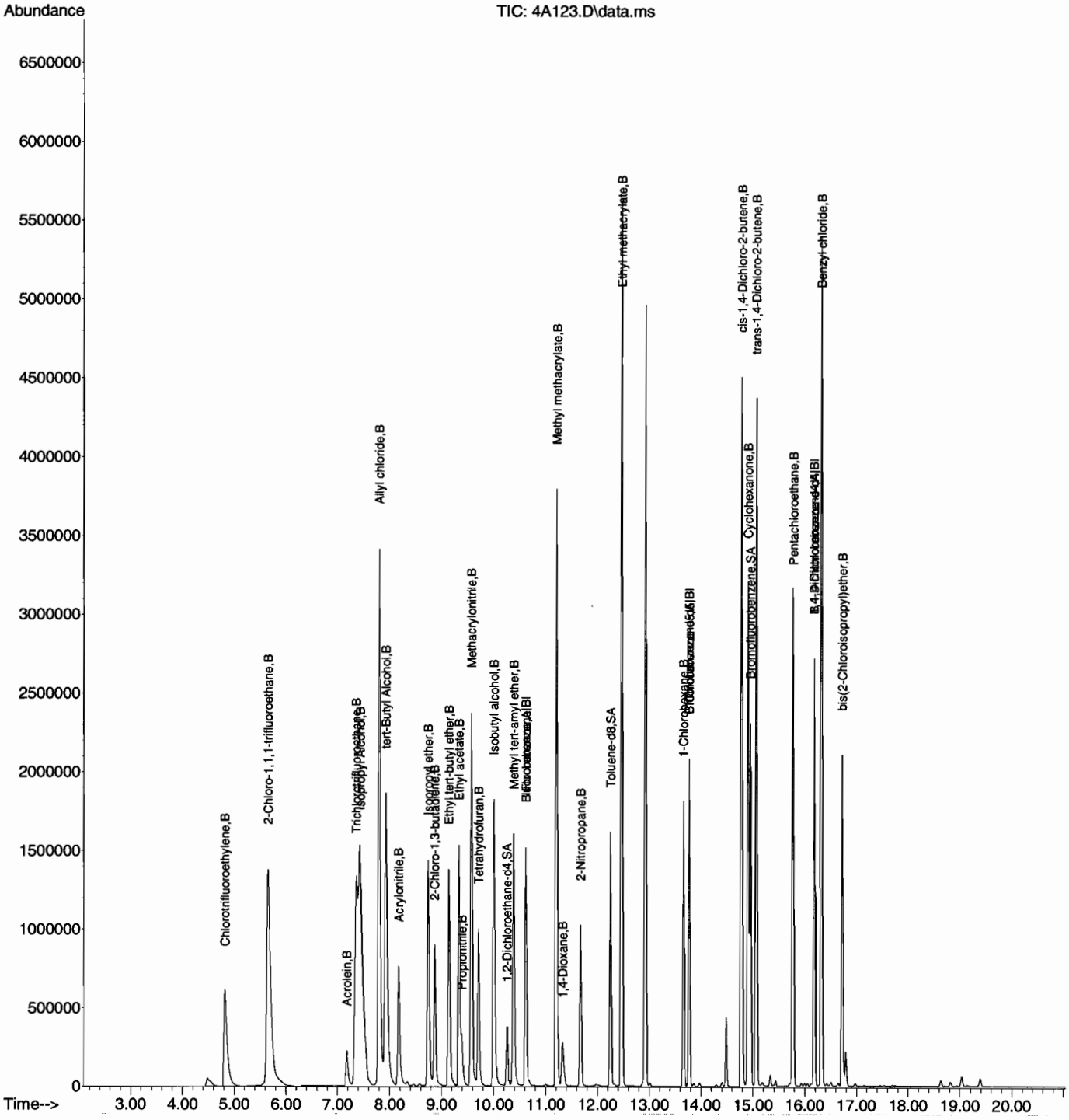
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units		
102) 2-Nitropropane	11.673	11.673	1.099	43	857630	237.13	ug/L	99	
104) Ethyl methacrylate	12.466	12.466	0.905	69	3164038	232.72	ug/L	100	
106) 1-Chlorohexane	13.661	13.661	0.844	55	470278	48.05	ug/L	97	
107) cis-1,4-Dichloro-2-butene	14.782	14.783	0.914	53	1064876	243.81	ug/L	99	
108) Cyclohexanone	14.904	14.904	0.921	42	1089625	2357.66	ug/L	98	E
109) trans-1,4-Dichloro-2-b...	15.063	15.063	0.931	53	1007110	238.19	ug/L	99	
110) Pentachloroethane	15.776	15.770	0.975	167	682676	148.11	ug/L	100	
111) Benzyl chloride	16.319	16.319	1.009	91	4480303	214.38	ug/L	99	
112) bis(2-Chloroisopropyl)...	16.721	16.721	1.034	45	1500940	221.71	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\030110V4\
Data File : 4A123.D
Acq On : 2 Mar 2010 5:13 am
Operator : ACJ
InstName : VOA4
Sample : |W4VM100301-19|ICV|1|VOAF|1|
Misc : ICV 5ML - MIX[B] 0215-08A+0125-08E
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Mar 02 15:05:20 2010
Quant Method : C:\msdchem\1\DATA\030110V4\VOA4-8260-030110.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 02 15:03:40 2010
Response via : Initial Calibration
Integrator: RTE



Continuing Calibration Summary

Client SDG: 10-2089

Instrument ID: VOA4.I **Injection Dat** 04-MAR-10 22:33

Data File: 030410V4\4A428.D **Init. Cal. Date(s)** 01-MAR-10 20:03 - 02-MAR-10 03:2

Lab Sample ID W4VM100304-05 **Quant Type** ISTD **Method:** 030110V4\VOA4-8260-030110.M

	Compound	AVERF / Amount	RF CCV	Nominal CCV	Min RF	RF Q	%D / %Drift	Max	Drift Q	Curve Type	
S	1,2-Dichloroethane-d4	0.2068	0.19274		.01		-6.79884	30		Averaged	
S	Toluene-d8	0.9275	0.88008		.01		-5.11267	30		Averaged	
S	Bromofluorobenzene	0.9783	1.01487		.01		3.73812	30		Averaged	
	Dichlorodifluoromethane	0.3169	0.28623		.01		-9.67813	30		Averaged	
	Chloromethane	0.5187	0.54968		.1		5.97262	30		Averaged	spcc
	Vinyl chloride	0.514	0.54302		.01		5.64591	20		Averaged	ccc
	Bromomethane	0.3057	0.33813		.01		10.60844	30		Averaged	
	Chloroethane	0.2648	0.28121		.01		6.19713	30		Averaged	
	Trichlorofluoromethane	0.5242	0.5462		.01		4.19687	30		Averaged	
	Ethyl ether	0.2497	0.26139		.01		4.68162	30		Averaged	
	Acetone	0.3151	0.33486		.01		6.27103	40		Averaged	
	1,1-Dichloroethylene	0.5828	0.58248		.01		-0.05491	20		Averaged	ccc
	Iodomethane	0.602	0.56763		.01		-5.7093	30		Averaged	
	Acetonitrile	0.0523	0.05646		.01		7.95411	30		Averaged	
	Methyl acetate	0.2677	0.29192		.01		9.04744	40		Averaged	
	Carbon disulfide	1.0841	1.10755		.01		2.16308	30		Averaged	
	Methylene chloride	0.4522	0.39022		.01		-13.70632	30		Averaged	
	tert-Butyl methyl ether	0.9626	0.89667		.01		-6.84916	30		Averaged	
	trans-1,2-Dichloroethylene	0.4489	0.4478		.01		-0.24504	30		Averaged	
	Vinyl acetate	0.5834	0.56081		.01		-3.87213	40		Averaged	
	1,1-Dichloroethane	0.5628	0.56958		.1		1.20469	30		Averaged	spcc
	2-Butanone	0.3306	0.36421		.01		10.16636	40		Averaged	
	cis-1,2-Dichloroethylene	0.492	0.49337		.01		0.27846	30		Averaged	
	2,2-Dichloropropane	0.3018	0.28413		.01		-5.85487	30		Averaged	
	Bromochloromethane	0.1783	0.16927		.01		-5.0645	30		Averaged	
	Chloroform	0.591	0.58473		.01		-1.06091	20		Averaged	ccc
	1,1,1-Trichloroethane	0.4606	0.4444		.01		-3.51715	30		Averaged	
	Cyclohexane	0.5117	0.47792		.01		-6.60152	30		Averaged	
	1,1-Dichloropropene	0.4323	0.41874		.01		-3.13671	30		Averaged	
	Carbon tetrachloride	0.4381	0.41509		.01		-5.25223	30		Averaged	
	1,2-Dichloroethane	0.4822	0.48248		.01		0.05807	30		Averaged	
	Benzene	1.2747	1.22538		.01		-3.86915	30		Averaged	
	Cyclohexene	0.6214	0.6057		.01		-2.52655	30		Averaged	
	n-Butyl alcohol	0.0132	0.0155		.01		17.42424	40		Averaged	
	Trichloroethylene	0.3371	0.33639		.01		-0.21062	30		Averaged	
	1,2-Dichloropropane	0.3299	0.3345		.01		1.39436	20		Averaged	ccc
	Methylcyclohexane	0.5327	0.50271		.01		-5.62981	30		Averaged	

Continuing Calibration Summary

Instrument ID: VOA4.I **Injection Dat** 04-MAR-10 22:33

Data File: 030410V4\4A428.D **Init. Cal. Date(s)** 01-MAR-10 20:03 02-MAR-10 03:2

Lab Sample ID W4VM100304-05 **Quant Type** ISTD **Method:** 030110V4\VOA4-8260-030110.M

Compound	AVERF / Amount	RF CCV	Nominal CCV	Min RF	RF Q	%D / %Drift	Max	Drift Q	Curve Type	
Dibromomethane	0.2177	0.21588		.01		-0.83601	30		Averaged	
Bromodichloromethane	0.4373	0.45594		.01		4.26252	30		Averaged	
2-Chloroethylvinyl ether	0.1828	0.18715		.01		2.37965	30		Averaged	
cis-1,3-Dichloropropylene	0.5104	0.52444		.01		2.75078	30		Averaged	
4-Methyl-2-pentanone	0.1823	0.19547		.01		7.22436	40		Averaged	
Toluene	1.655	1.57266		.01		-4.97523	20		Averaged	ccc
trans-1,3-Dichloropropylene	0.5811	0.59629		.01		2.61401	30		Averaged	
1,1,2-Trichloroethane	0.2979	0.30909		.01		3.75629	30		Averaged	
2-Hexanone	0.5058	0.58184		.01		15.03361	40		Averaged	
1,3-Dichloropropane	0.6189	0.63035		.01		1.85006	30		Averaged	
Tetrachloroethylene	0.333	0.30757		.01		-7.63664	30		Averaged	
Dibromochloromethane	0.4242	0.43799		.01		3.25083	30		Averaged	
1,2-Dibromoethane	0.384	0.38375		.01		-0.0651	30		Averaged	
Chlorobenzene	1.1272	1.09392		.3		-2.95245	30		Averaged	spcc
1,1,1,2-Tetrachloroethane	0.4279	0.43187		.01		0.92779	30		Averaged	
Ethylbenzene	1.96	1.9675		.01		0.38265	20		Averaged	ccc
m,p-Xylenes	0.7775	0.78833		.01		1.39293	30		Averaged	
o-Xylene	0.8058	0.84543		.01		4.91809	30		Averaged	
Styrene	1.3083	1.43384		.01		9.59566	30		Averaged	
Bromoform	0.4519	0.47001		.1		4.00752	30		Averaged	spcc
Isopropylbenzene	3.164	3.09925		.01		-2.04646	30		Averaged	
1,1,2,2-Tetrachloroethane	0.9082	0.90676		.3		-0.15856	30		Averaged	spcc
1,2,3-Trichloropropane	0.2475	0.23665		.01		-4.38384	30		Averaged	
Bromobenzene	0.8706	0.85507		.01		-1.78383	30		Averaged	
n-Propylbenzene	3.8628	3.90706		.01		1.1458	30		Averaged	
2-Chlorotoluene	0.8623	0.87789		.01		1.80796	30		Averaged	
1,3,5-Trimethylbenzene	2.893	3.02729		.01		4.64189	30		Averaged	
4-Chlorotoluene	2.4127	2.41166		.01		-0.04311	30		Averaged	
tert-Butylbenzene	0.6342	0.63838		.01		0.6591	30		Averaged	
1,2,4-Trimethylbenzene	2.9503	3.04614		.01		3.24848	30		Averaged	
sec-Butylbenzene	3.8799	3.97838		.01		2.53821	30		Averaged	
4-Isopropyltoluene	3.121	3.24243		.01		3.89074	30		Averaged	
1,3-Dichlorobenzene	1.7306	1.71006		.01		-1.18687	30		Averaged	
1,4-Dichlorobenzene	1.7705	1.75682		.01		-0.77266	30		Averaged	
n-Butylbenzene	2.9619	3.11438		.01		5.14805	30		Averaged	
1,2-Dichlorobenzene	1.6844	1.6688		.01		-0.92615	30		Averaged	
1,2-Dibromo-3-chloropropane	0.1616	0.1648		.01		1.9802	30		Averaged	

Continuing Calibration Summary

Instrument ID: VOA4.I **Injection Dat** 04-MAR-10 22:33

Data File: 030410V4\4A428.D **Init. Cal. Date(s)** 01-MAR-10 20:03 02-MAR-10 03:2

Lab Sample ID W4VM100304-05 **Quant Type** ISTD **Method:** 030110V4\VOA4-8260-030110.M

Compound	AVERF / Amount	RF CCV	Nominal CCV	Min RF	RF Q	%D / %Drift	Max	Drift Q	Curve Type
1,2,4-Trichlorobenzene	0.8616	0.83858		.01		-2.67177	30		Averaged
Hexachlorobutadiene	0.5582	0.54382		.01		-2.57614	30		Averaged
Naphthalene	2.1434	1.97215		.01		-7.98964	30		Averaged
1,2,3-Trichlorobenzene	0.7176	0.67761		.01		-5.57274	30		Averaged

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030410V4\
Data File : 4A428.D
Acq On : 4 Mar 2010 10:33 pm
Operator : ACJ
InstName : VOA4
Sample : |W4VM100304-05|CCV|1|VOAF|1|
Misc : GEL 5ML - MIX[A] 0106-07D+0222-07A
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Mar 05 10:49:45 2010
Quant Method : C:\msdchem\1\DATA\030110V4\VOA4-8260-030110.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 02 15:03:40 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
Internal Standards								Dev(Min)
1) Fluorobenzene	10.613	10.620	1.000	96	1155307	50.00	ug/L	0.00
41) Chlorobenzene-d5	13.771	13.771	1.000	117	985740	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	16.179	16.180	1.000	152	691766	50.00	ug/L	0.00
82) B Fluorobenzene	10.613	10.619	1.000	96	1154774	50.00	ug/L	0.00
103) B Chlorobenzene-d5	13.771	13.771	1.000	117	985740	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	16.179	16.179	1.000	152	692103	50.00	ug/L	0.00
System Monitoring Compounds								Dev(Min)
29) 1,2-Dichloroethane-d4	10.259	10.260	0.967	65	222678	46.59	ug/L	0.00
43) Toluene-d8	12.253	12.247	0.890	98	867531	47.44	ug/L	0.00
61) Bromofluorobenzene	14.953	14.954	0.924	95	702050	51.87	ug/L	0.00

Target Compounds	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	QValue
2) Dichlorodifluoromethane	4.904	4.911	0.462	85	330688	45.16	ug/L	99
3) Chloromethane	5.292	5.291	0.499	50	635051	52.99	ug/L	100
4) Vinyl chloride	5.521	5.521	0.520	62	627357	52.82	ug/L	100
5) Bromomethane	6.130	6.137	0.578	94	390639	55.30	ug/L	100
6) Chloroethane	6.295	6.295	0.593	64	324887	53.10	ug/L	98
7) Trichlorofluoromethane	6.662	6.669	0.628	101	631030	52.10	ug/L	99
8) Ethyl ether	6.997	6.998	0.659	59	301986	52.35	ug/L	97
9) Acetone	7.351	7.352	0.693	43	1934334	265.69	ug/L	97
10) 1,1-Dichloroethylene	7.394	7.389	0.697	61	672944	49.97	ug/L	97
11) Iodomethane	7.656	7.663	0.721	142	3278939	235.74	ug/L	97
12) Acetonitrile	7.699	7.699	0.725	41	1630645	1349.35	ug/L	99
13) Methyl acetate	7.747	7.748	0.730	43	1686307	272.67	ug/L	97
14) Carbon disulfide	7.772	7.773	0.732	76	6397786	255.41	ug/L	99
15) Methylene chloride	7.936	7.931	0.748	84	450821	43.14	ug/L	94
16) tert-Butyl methyl ether	8.235	8.242	0.776	73	1035924	46.58	ug/L	99
17) trans-1,2-Dichloroethy...	8.278	8.285	0.780	61	517351	49.88	ug/L	97
18) Vinyl acetate	8.704	8.705	0.820	43	3239543	240.34	ug/L	97
19) 1,1-Dichloroethane	8.753	8.760	0.825	63	658039	50.60	ug/L	99
20) 2-Butanone	9.326	9.327	0.879	43	2103893	275.43	ug/L	96
21) cis-1,2-Dichloroethylene	9.387	9.388	0.885	61	569990	50.14	ug/L	96
22) 2,2-Dichloropropane	9.418	9.419	0.887	77	328257	47.07	ug/L	91
23) Bromochloromethane	9.656	9.656	0.910	128	195554	47.47	ug/L	92
24) Chloroform	9.686	9.687	0.913	83	675545	49.47	ug/L	99
25) 1,1,1-Trichloroethane	9.979	9.979	0.940	97	513423	48.24	ug/L	98
26) Cyclohexane	10.082	10.083	0.950	56	552145	46.70	ug/L	98
27) 1,1-Dichloropropene	10.131	10.132	0.955	75	483769	48.43	ug/L	96
28) Carbon tetrachloride	10.174	10.175	0.959	117	479554	47.38	ug/L	99
30) 1,2-Dichloroethane	10.338	10.339	0.974	62	557412	50.03	ug/L	100
31) Benzene	10.369	10.370	0.977	78	1415690	48.06	ug/L	99
32) Cyclohexene	10.491	10.492	0.989	67	699766	48.73	ug/L	96
33) n-Butyl alcohol	10.686	10.693	1.007	56	1790624	5890.18	ug/L	95
34) Trichloroethylene	11.003	11.004	1.037	95	388636	49.90	ug/L	99
35) 1,2-Dichloropropane	11.241	11.241	1.059	63	386452	50.70	ug/L	99
36) Methylcyclohexane	11.259	11.260	1.061	83	580781	47.19	ug/L	96
37) Dibromomethane	11.375	11.376	1.072	93	249409	49.58	ug/L	94
38) Bromodichloromethane	11.484	11.485	1.082	83	526751	52.13	ug/L	99
39) 2-Chloroethylvinyl ether	11.698	11.699	1.102	63	1081093	256.02	ug/L	98
40) cis-1,3-Dichloropropylene	11.929	11.930	1.124	75	605894	51.38	ug/L	95
42) 4-Methyl-2-pentanone	12.015	12.016	0.872	58	963393	268.06	ug/L	92
44) Toluene	12.326	12.320	0.895	91	1550231	47.51	ug/L	99

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030410V4\
Data File : 4A428.D
Acq On : 4 Mar 2010 10:33 pm
Operator : ACJ
InstName : VOA4
Sample : |W4VM100304-05|CCV|1|VOAF|1|
Misc : GEL 5ML - MIX[A] 0106-07D+0222-07A
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Mar 05 10:49:45 2010
Quant Method : C:\msdchem\1\DATA\030110V4\VOA4-8260-030110.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 02 15:03:40 2010
Response via : Initial Calibration
Integrator: RTE

	Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
45)	trans-1,3-Dichloroprop...	12.460	12.461	0.905	75	587782	51.30	ug/L	95
46)	1,1,2-Trichloroethane	12.685	12.680	0.921	83	304682	51.88	ug/L	97
47)	2-Hexanone	12.856	12.857	0.934	43	2867699	287.56	ug/L	96
48)	1,3-Dichloropropane	12.874	12.875	0.935	76	621364	50.93	ug/L	96
49)	Tetrachloroethylene	12.917	12.918	0.938	164	303181	46.18	ug/L	96
50)	Dibromochloromethane	13.143	13.144	0.954	129	431748	51.62	ug/L	100
51)	1,2-Dibromoethane	13.319	13.320	0.967	107	378277	49.97	ug/L	100
52)	Chlorobenzene	13.801	13.802	1.002	112	1078322	48.52	ug/L	99
53)	1,1,1,2-Tetrachloroethane	13.850	13.851	1.006	131	425708	50.47	ug/L	98
54)	Ethylbenzene	13.862	13.863	1.007	91	1939443	50.19	ug/L	98
55)	m,p-Xylenes	13.972	13.973	1.015	106	1554167	101.39	ug/L	97
56)	o-Xylene	14.405	14.399	1.046	106	833379	52.46	ug/L	96
57)	Styrene	14.405	14.399	1.046	104	1413394	54.80	ug/L	98
59)	Bromoform	14.655	14.655	0.906	173	325140	52.00	ug/L	100
60)	Isopropylbenzene	14.758	14.759	0.912	105	2143959	48.98	ug/L	100
62)	1,1,2,2-Tetrachloroethane	15.014	15.015	0.928	83	627266	49.92	ug/L	99
63)	1,2,3-Trichloropropane	15.106	15.107	0.934	110	163706	47.81	ug/L	96
64)	Bromobenzene	15.167	15.168	0.937	156	591508	49.11	ug/L	95
65)	n-Propylbenzene	15.179	15.180	0.938	91	2702773	50.57	ug/L	98
66)	1,3,5-Trimethylbenzene	15.331	15.332	0.948	105	2094179	52.32	ug/L	98
67)	2-Chlorotoluene	15.331	15.332	0.948	126	607293	50.91	ug/L	94
68)	4-Chlorotoluene	15.429	15.430	0.954	91	1668306	49.98	ug/L	99
69)	tert-Butylbenzene	15.703	15.704	0.971	134	441607	50.33	ug/L	96
70)	1,2,4-Trimethylbenzene	15.740	15.741	0.973	105	2107217	51.63	ug/L	99
71)	sec-Butylbenzene	15.929	15.930	0.985	105	2752111	51.27	ug/L	99
72)	4-Isopropyltoluene	16.051	16.051	0.992	119	2243002	51.95	ug/L	99
73)	1,3-Dichlorobenzene	16.118	16.119	0.996	146	1182959	49.41	ug/L	99
74)	1,4-Dichlorobenzene	16.203	16.204	1.002	146	1215308	49.61	ug/L	99
75)	n-Butylbenzene	16.502	16.503	1.020	91	2154424	52.57	ug/L	98
76)	1,2-Dichlorobenzene	16.642	16.643	1.029	146	1154417	49.54	ug/L	100
77)	1,2-Dibromo-3-chloropr...	17.526	17.527	1.083	157	114003	50.99	ug/L	96
78)	1,2,4-Trichlorobenzene	18.629	18.630	1.151	180	580103	48.67	ug/L	100
79)	Hexachlorobutadiene	18.818	18.819	1.163	225	376199	48.71	ug/L	99
80)	Naphthalene	19.032	19.026	1.176	128	1364263	46.00	ug/L	100
81)	1,2,3-Trichlorobenzene	19.385	19.386	1.198	180	468748	47.21	ug/L	99
83)	Chlorotrifluoroethylene	0.000	4.826	0.000		0	N.D.		
84)	2-Chloro-1,1,1-trifluo...	0.000	5.657	0.000		0	N.D.		
85)	Acrolein	7.180	7.180	0.677		0m	N.D.	d	
86)	Trichlorotrifluoroethane	7.339	7.369	0.692		0m	N.D.	d	
87)	Isopropyl Alcohol	7.345	7.430	0.692		0m	N.D.	d	
88)	Allyl chloride	7.699	7.796	0.725		0m	N.D.	d	
89)	tert-Butyl Alcohol	0.000	7.924	0.000		0	N.D.		
90)	Acrylonitrile	8.229	8.174	0.775		0m	N.D.	d	
91)	Isopropyl ether	8.704	8.741	0.820		0m	N.D.	d	
92)	2-Chloro-1,3-butadiene	8.875	8.869	0.836		0m	N.D.	d	
93)	Ethyl tert-butyl ether	0.000	9.143	0.000		0	N.D.		
94)	Ethyl acetate	9.326	9.338	0.879		0m	N.D.	d	
95)	Propionitrile	9.320	9.393	0.878		0m	N.D.	d	
96)	Methacrylonitrile	0.000	9.576	0.000		0	N.D.		
97)	Tetrahydrofuran	9.704	9.710	0.914		0m	N.D.	d	
98)	Isobutyl alcohol	9.954	10.009	0.938		0m	N.D.	d	
99)	Methyl tert-amyl ether	10.369	10.387	0.977		0m	N.D.	d	
100)	Methyl methacrylate	11.259	11.204	1.061		0m	N.D.	d	
101)	1,4-Dioxane	11.332	11.326	1.068		0m	N.D.	d	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030410V4\
Data File : 4A428.D
Acq On : 4 Mar 2010 10:33 pm
Operator : ACJ
InstName : VOA4
Sample : |W4VM100304-05|CCV|1|VOAF|1|
Misc : GEL 5ML - MIX[A] 0106-07D+0222-07A
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Mar 05 10:49:45 2010
Quant Method : C:\msdchem\1\DATA\030110V4\VOA4-8260-030110.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 02 15:03:40 2010
Response via : Initial Calibration
Integrator: RTE

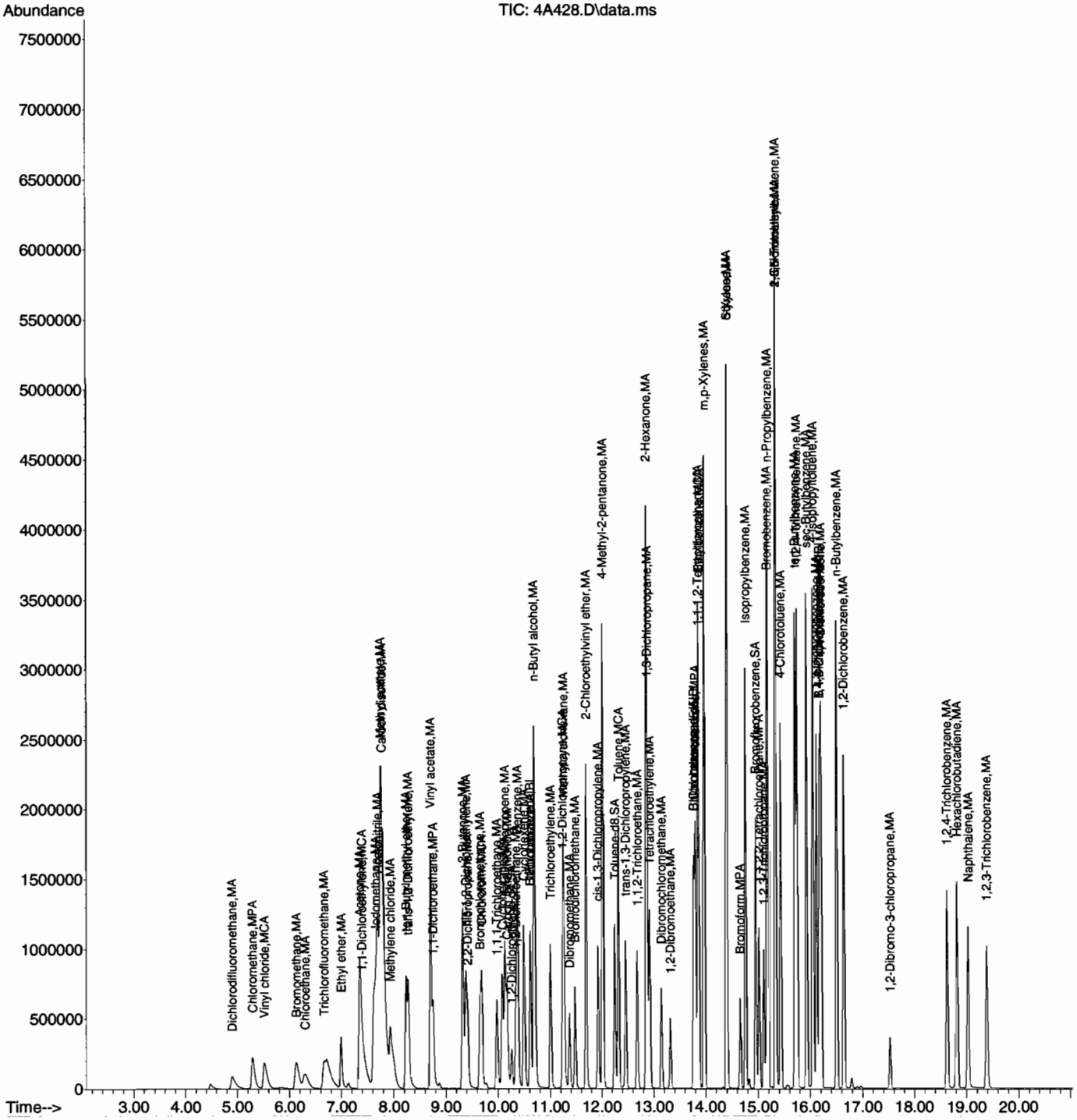
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
102) 2-Nitropropane	11.698	11.673	1.102		0m	N.D.	d
104) Ethyl methacrylate	12.466	12.466	0.905		0m	N.D.	d
106) 1-Chlorohexane	13.649	13.661	0.844		0m	N.D.	d
107) cis-1,4-Dichloro-2-butene	14.758	14.783	0.912		0m	N.D.	d
108) Cyclohexanone	14.911	14.904	0.922		0m	N.D.	d
109) trans-1,4-Dichloro-2-b...	15.057	15.063	0.931		0m	N.D.	d
110) Pentachloroethane	15.770	15.770	0.975		0m	N.D.	d
111) Benzyl chloride	16.307	16.319	1.008		0m	N.D.	d
112) bis(2-Chloroisopropyl)...	16.709	16.721	1.033		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\030410V4\
Data File : 4A428.D
Acq On : 4 Mar 2010 10:33 pm
Operator : ACJ
InstName : VOA4
Sample : |W4VM100304-05|CCV|1|VOAF|1|
Misc : GEL 5ML - MIX[A] 0106-07D+0222-07A
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Mar 05 10:49:45 2010
Quant Method : C:\msdchem\1\DATA\030110V4\VOA4-8260-030110.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 02 15:03:40 2010
Response via : Initial Calibration
Integrator: RTE



Continuing Calibration Summary

Client SDG: 10-2089

Instrument ID: VOA4.1 **Injection Dat** 04-MAR-10 23:55

Data File: 030410V4\4A431.D **Init. Cal. Date(s)** 01-MAR-10 20:03 - 02-MAR-10 03:2

Lab Sample ID W4VM100304-08 **Quant Type** ISTD **Method:** 030110V4\VOA4-8260-030110.M

	Compound	AVERF / Amount	RF CCV	Nominal CCV	Min RF	RF Q	%D / %Drift	Max	Drift Q	Curve Type
S	1,2-Dichloroethane-d4	0.2068	0.18778		.01		-9.19729	30		Averaged
S	Toluene-d8	0.9275	0.89359		.01		-3.65606	30		Averaged
S	Bromofluorobenzene	0.9783	1.06696		.01		9.06266	30		Averaged
	Acrolein	250	197.76	250			-20.896	30		Linear
	Trichlorotrifluoroethane	0.1188	0.09204		.01		-22.52525	30		Averaged
	Allyl chloride	0.4236	0.37654		.01		-11.10954	30		Averaged
	Acrylonitrile	0.1218	0.10082		.01		-17.22496	30		Averaged
	2-Chloro-1,3-butadiene	0.4199	0.40097		.01		-4.50822	30		Averaged
	Ethyl acetate	0.347	0.26674		.01		-23.12968	40		Averaged
	Propionitrile	0.0517	0.04252		.01		-17.75629	30		Averaged
	Methacrylonitrile	0.2112	0.17627		.01		-16.53883	30		Averaged
	Tetrahydrofuran	0.1139	0.0906		.01		-20.45654	30		Averaged
	Isobutyl alcohol	0.0158	0.01333		.01		-15.63291	40		Averaged
	Methyl methacrylate	0.2295	0.18989		.01		-17.25926	30		Averaged
	1,4-Dioxane	0.0043	0.00331		.01		-23.02326	40		Averaged
	2-Nitropropane	0.1137	0.1023		.01		-10.02639	30		Averaged
	Ethyl methacrylate	0.5177	0.44291		.01		-14.44659	30		Averaged
	cis-1,4-Dichloro-2-butene	0.2573	0.25107		.01		-2.4213	30		Averaged
	Cyclohexanone	0.0272	0.05424		.01		99.41176	40	*	Averaged
	trans-1,4-Dichloro-2-butene	0.2491	0.24113		.01		-3.19952	30		Averaged
	Pentachloroethane	0.2716	0.24062		.01		-11.40648	30		Averaged
	Benzyl chloride	1.2313	1.19725		.01		-2.76537	30		Averaged
	bis(2-Chloroisopropyl)ether	0.3989	0.342		.01		-14.26423	30		Averaged

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030410V4\
Data File : 4A431.D
Acq On : 4 Mar 2010 11:55 pm
Operator : ACJ
InstName : VOA4
Sample : |W4VM100304-08|CCV|1|VOAF|1|VOA8260BL|
Misc : GEL 5ML - MIX[B] 0215-08A
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Mar 05 10:56:00 2010
Quant Method : C:\msdchem\1\DATA\030110V4\VOA4-8260-030110.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 02 15:03:40 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
Internal Standards								Dev(Min)
1) Fluorobenzene	10.613	10.620	1.000	96	1246544	50.00	ug/L	0.00
41) Chlorobenzene-d5	13.771	13.771	1.000	117	1027652	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	16.179	16.180	1.000	152	643521	50.00	ug/L	0.00
82) B Fluorobenzene	10.613	10.619	1.000	96	1246214	50.00	ug/L	0.00
103) B Chlorobenzene-d5	13.771	13.771	1.000	117	1027762	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	16.179	16.179	1.000	152	643498	50.00	ug/L	0.00
System Monitoring Compounds								Dev(Min)
29) 1,2-Dichloroethane-d4	10.259	10.260	0.967	65	234070	45.39	ug/L	0.00
43) Toluene-d8	12.253	12.247	0.890	98	918302	48.17	ug/L	0.00
61) Bromofluorobenzene	14.953	14.954	0.924	95	686614	54.53	ug/L	0.00

Target Compounds	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	QValue
2) Dichlorodifluoromethane	0.000	4.911	0.000		0	N.D.		
3) Chloromethane	5.313	5.291	0.501		0m	N.D.	d	
4) Vinyl chloride	5.535	5.521	0.522		0m	N.D.	d	
5) Bromomethane	6.109	6.137	0.576		0m	N.D.	d	
6) Chloroethane	0.000	6.295	0.000		0	N.D.		
7) Trichlorofluoromethane	6.644	6.669	0.626		0m	N.D.	d	
8) Ethyl ether	6.998	6.998	0.659		0m	N.D.	d	
9) Acetone	7.351	7.352	0.693		0m	N.D.	d	
10) 1,1-Dichloroethylene	7.339	7.389	0.692		0m	N.D.	d	
11) Iodomethane	7.674	7.663	0.723		0m	N.D.	d	
12) Acetonitrile	7.692	7.699	0.725		0m	N.D.	d	
13) Methyl acetate	7.747	7.748	0.730		0m	N.D.	d	
14) Carbon disulfide	7.796	7.773	0.735		0m	N.D.	d	
15) Methylene chloride	7.936	7.931	0.748		0m	N.D.	d	
16) tert-Butyl methyl ether	8.235	8.242	0.776		0m	N.D.	d	
17) trans-1,2-Dichloroethy...	8.284	8.285	0.781		0m	N.D.	d	
18) Vinyl acetate	8.704	8.705	0.820		0m	N.D.	d	
19) 1,1-Dichloroethane	8.759	8.760	0.825		0m	N.D.	d	
20) 2-Butanone	9.339	9.327	0.880		0m	N.D.	d	
21) cis-1,2-Dichloroethylene	9.339	9.388	0.880		0m	N.D.	d	
22) 2,2-Dichloropropane	9.424	9.419	0.888		0m	N.D.	d	
23) Bromochloromethane	9.662	9.656	0.910		0m	N.D.	d	
24) Chloroform	9.686	9.687	0.913		0m	N.D.	d	
25) 1,1,1-Trichloroethane	9.973	9.979	0.940		0m	N.D.	d	
26) Cyclohexane	10.003	10.083	0.943		0m	N.D.	d	
27) 1,1-Dichloropropene	10.131	10.132	0.955		0m	N.D.	d	
28) Carbon tetrachloride	10.168	10.175	0.958		0m	N.D.	d	
30) 1,2-Dichloroethane	10.344	10.339	0.975		0m	N.D.	d	
31) Benzene	10.369	10.370	0.977		0m	N.D.	d	
32) Cyclohexene	10.491	10.492	0.989		0m	N.D.	d	
33) n-Butyl alcohol	10.692	10.693	1.007		0m	N.D.	d	
34) Trichloroethylene	11.003	11.004	1.037		0m	N.D.	d	
35) 1,2-Dichloropropane	11.241	11.241	1.059		0m	N.D.	d	
36) Methylcyclohexane	11.204	11.260	1.056		0m	N.D.	d	
37) Dibromomethane	11.381	11.376	1.072		0m	N.D.	d	
38) Bromodichloromethane	11.484	11.485	1.082		0m	N.D.	d	
39) 2-Chloroethylvinyl ether	11.692	11.699	1.102		0m	N.D.	d	
40) cis-1,3-Dichloropropylene	11.929	11.930	1.124		0m	N.D.	d	
42) 4-Methyl-2-pentanone	12.021	12.016	0.873		0m	N.D.	d	
44) Toluene	12.326	12.320	0.895		0m	N.D.	d	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030410V4\
Data File : 4A431.D
Acq On : 4 Mar 2010 11:55 pm
Operator : ACJ
InstName : VOA4
Sample : |W4VM100304-08|CCV|1|VOAF|1|VOA8260BL|
Misc : GEL 5ML - MIX[B] 0215-08A
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Mar 05 10:56:00 2010
Quant Method : C:\msdchem\1\DATA\030110V4\VOA4-8260-030110.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 02 15:03:40 2010
Response via : Initial Calibration
Integrator: RTE

	Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
45)	trans-1,3-Dichloroprop...	12.460	12.461	0.905		0m	N.D.	d	
46)	1,1,2-Trichloroethane	12.679	12.680	0.921		0m	N.D.	d	
47)	2-Hexanone	12.856	12.857	0.934		0m	N.D.	d	
48)	1,3-Dichloropropane	12.874	12.875	0.935		0m	N.D.	d	
49)	Tetrachloroethylene	12.917	12.918	0.938		0m	N.D.	d	
50)	Dibromochloromethane	13.143	13.144	0.954		0m	N.D.	d	
51)	1,2-Dibromoethane	13.313	13.320	0.967		0m	N.D.	d	
52)	Chlorobenzene	13.801	13.802	1.002		0m	N.D.	d	
53)	1,1,1,2-Tetrachloroethane	13.850	13.851	1.006		0m	N.D.	d	
54)	Ethylbenzene	13.862	13.863	1.007		0m	N.D.	d	
55)	m,p-Xylenes	13.966	13.973	1.014		0m	N.D.	d	
56)	o-Xylene	14.399	14.399	1.046		0m	N.D.	d	
57)	Styrene	14.399	14.399	1.046		0m	N.D.	d	
59)	Bromoform	14.661	14.655	0.906		0m	N.D.	d	
60)	Isopropylbenzene	14.758	14.759	0.912		0m	N.D.	d	
62)	1,1,2,2-Tetrachloroethane	15.020	15.015	0.928		0m	N.D.	d	
63)	1,2,3-Trichloropropane	15.106	15.107	0.934		0m	N.D.	d	
64)	Bromobenzene	15.161	15.168	0.937		0m	N.D.	d	
65)	n-Propylbenzene	15.179	15.180	0.938		0m	N.D.	d	
66)	1,3,5-Trimethylbenzene	15.325	15.332	0.947		0m	N.D.	d	
67)	2-Chlorotoluene	15.331	15.332	0.948		0m	N.D.	d	
68)	4-Chlorotoluene	15.429	15.430	0.954		0m	N.D.	d	
69)	tert-Butylbenzene	15.691	15.704	0.970		0m	N.D.	d	
70)	1,2,4-Trimethylbenzene	15.746	15.741	0.973		0m	N.D.	d	
71)	sec-Butylbenzene	15.935	15.930	0.985		0m	N.D.	d	
72)	4-Isopropyltoluene	16.051	16.051	0.992		0m	N.D.	d	
73)	1,3-Dichlorobenzene	16.124	16.119	0.997		0m	N.D.	d	
74)	1,4-Dichlorobenzene	16.209	16.204	1.002		0m	N.D.	d	
75)	n-Butylbenzene	16.502	16.503	1.020		0m	N.D.	d	
76)	1,2-Dichlorobenzene	16.642	16.643	1.029		0m	N.D.	d	
77)	1,2-Dibromo-3-chloropr...	17.532	17.527	1.084		0m	N.D.	d	
78)	1,2,4-Trichlorobenzene	18.623	18.630	1.151		0m	N.D.	d	
79)	Hexachlorobutadiene	18.824	18.819	1.164		0m	N.D.	d	
80)	Naphthalene	19.032	19.026	1.176		0m	N.D.	d	
81)	1,2,3-Trichlorobenzene	19.385	19.386	1.198		0m	N.D.	d	
83)	Chlorotrifluoroethylene	0.000	4.826	0.000		0	N.D.		
84)	2-Chloro-1,1,1-trifluo...	5.664	5.657	0.534	118	115	N.D.		
85)	Acrolein	7.180	7.180	0.677	56	232142	197.76	ug/L	99
86)	Trichlorotrifluoroethane	7.357	7.369	0.693	85	573507	193.72	ug/L	97
87)	Isopropyl Alcohol	0.000	7.430	0.000		0m	N.D.	d	
88)	Allyl chloride	7.796	7.796	0.735	41	2346259	222.24	ug/L	98
89)	tert-Butyl Alcohol	7.930	7.924	0.747	59	2369	N.D.		
90)	Acrylonitrile	8.174	8.174	0.770	53	628220	206.93	ug/L	99
91)	Isopropyl ether	8.729	8.741	0.822	45	489	N.D.		
92)	2-Chloro-1,3-butadiene	8.869	8.869	0.836	53	499694	47.74	ug/L	98
93)	Ethyl tert-butyl ether	9.143	9.143	0.862	59	826	N.D.		
94)	Ethyl acetate	9.339	9.338	0.880	43	1662056	192.17	ug/L	98
95)	Propionitrile	9.387	9.393	0.885	54	264951	205.68	ug/L	99
96)	Methacrylonitrile	9.576	9.576	0.902	41	1098328	208.63	ug/L	100
97)	Tetrahydrofuran	9.710	9.710	0.915	42	564556	198.94	ug/L	99
98)	Isobutyl alcohol	10.003	10.009	0.943	41	830390	2110.24	ug/L	99
99)	Methyl tert-amyl ether	10.363	10.387	0.976	73	313	N.D.		
100)	Methyl methacrylate	11.204	11.204	1.056	69	1183217	206.85	ug/L	95
101)	1,4-Dioxane	11.332	11.326	1.068	88	205979	1912.23	ug/L	100

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030410V4\
Data File : 4A431.D
Acq On : 4 Mar 2010 11:55 pm
Operator : ACJ
InstName : VOA4
Sample : |W4VM100304-08|CCV|1|VOAF|1|VOA8260BL|
Misc : GEL 5ML - MIX[B] 0215-08A
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Mar 05 10:56:00 2010
Quant Method : C:\msdchem\1\DATA\030110V4\VOA4-8260-030110.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 02 15:03:40 2010
Response via : Initial Calibration
Integrator: RTE

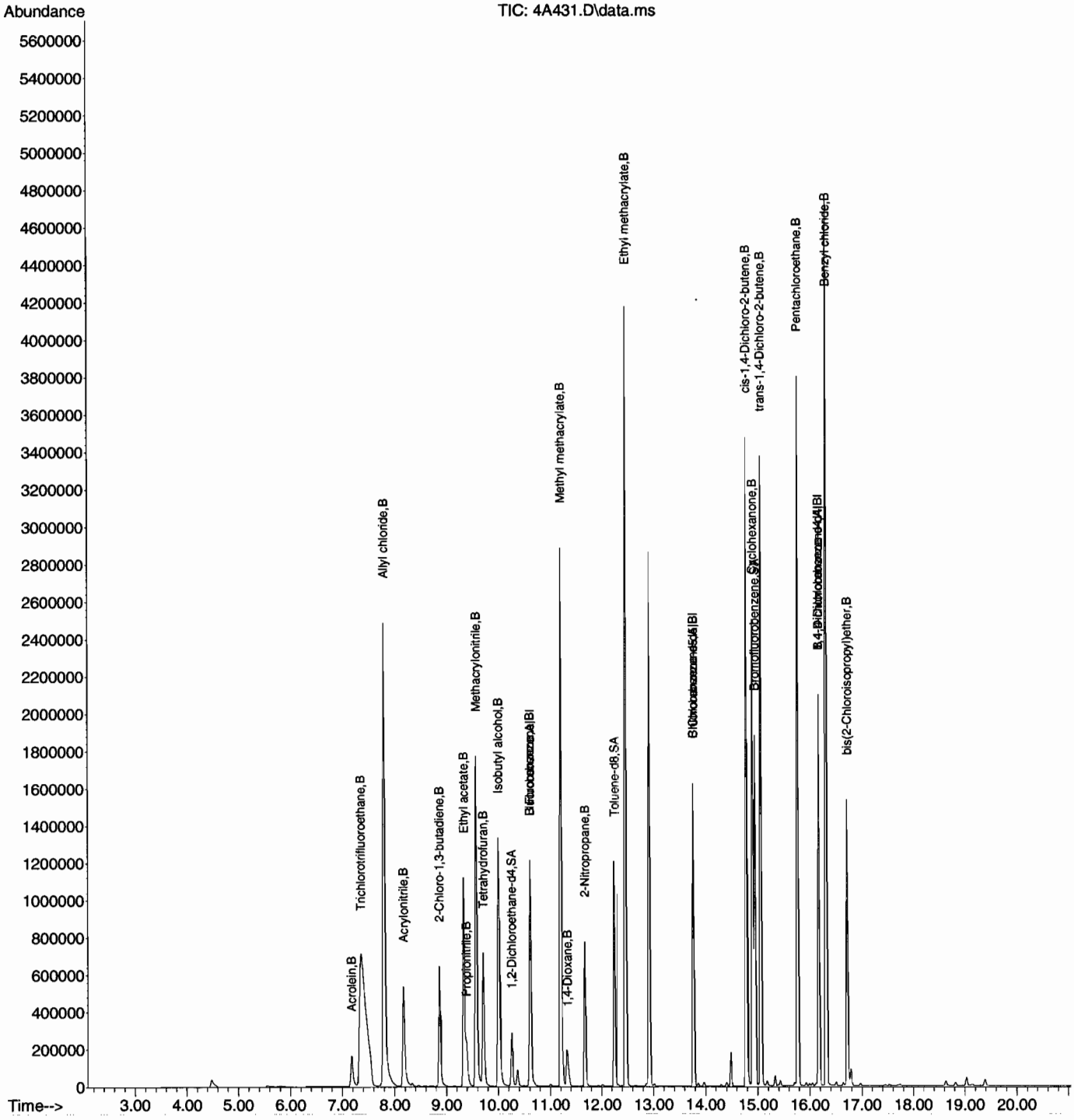
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units		
102) 2-Nitropropane	11.673	11.673	1.100	43	637462	224.99	ug/L	99	
104) Ethyl methacrylate	12.466	12.466	0.905	69	2276045	213.88	ug/L	96	
106) 1-Chlorohexane	13.655	13.661	0.844	55	397	N.D.			
107) cis-1,4-Dichloro-2-butene	14.783	14.783	0.914	53	807826	243.92	ug/L	96	
108) Cyclohexanone	14.905	14.904	0.921	42	872592	2489.99	ug/L	95	E
109) trans-1,4-Dichloro-2-b...	15.063	15.063	0.931	53	775832	241.99	ug/L	96	
110) Pentachloroethane	15.770	15.770	0.975	167	774208	221.52	ug/L	98	
111) Benzyl chloride	16.319	16.319	1.009	91	3852141	243.09	ug/L	98	
112) bis(2-Chloroisopropyl)...	16.721	16.721	1.034	45	1100379	214.36	ug/L	98	

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

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030410V4\
Data File : 4A431.D
Acq On : 4 Mar 2010 11:55 pm
Operator : ACJ
InstName : VOA4
Sample : |W4VM100304-08|CCV|1|VOAF|1|VOA8260BL|
Misc : GEL 5ML - MIX[B] 0215-08A
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Mar 05 10:56:00 2010
Quant Method : C:\msdchem\1\DATA\030110V4\VOA4-8260-030110.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 02 15:03:40 2010
Response via : Initial Calibration
Integrator: RTE



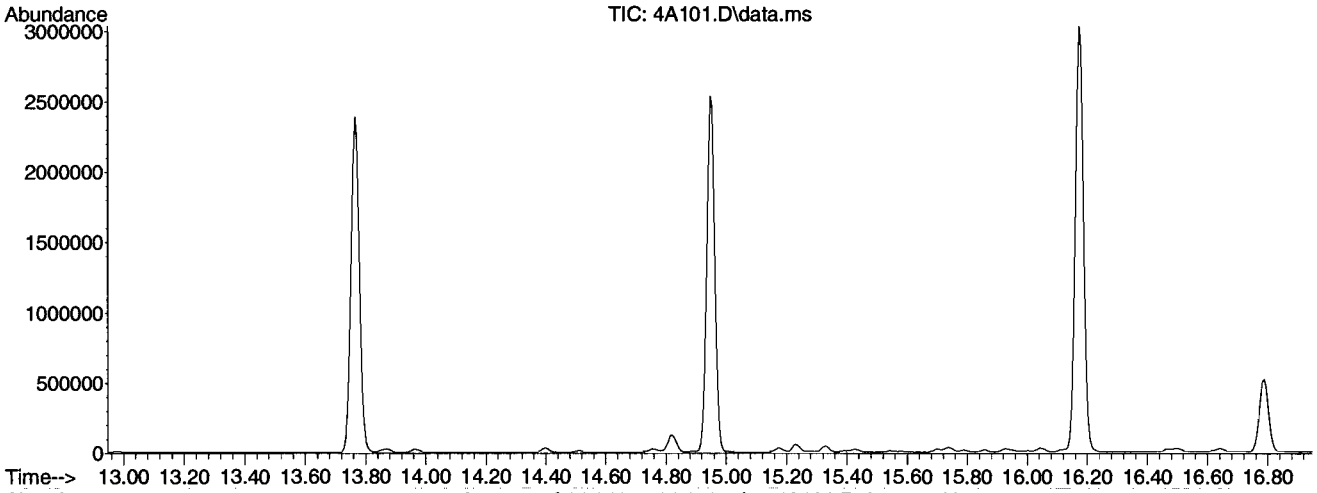
Quality Control Data

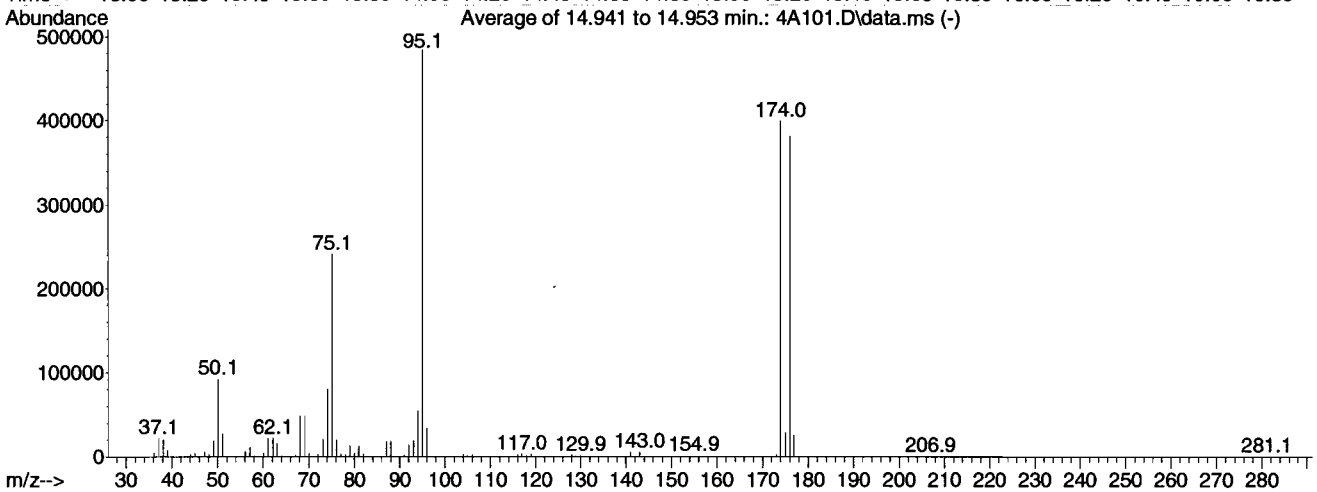
Tune Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030110V4\
Data File : 4A101.D
Acq On : 1 Mar 2010 7:08 pm
Operator : ACJ
Sample : |UVM091216-10|BFB1|1|VOAF|1|
Misc : GEL 5ML N/A
ALS Vial : 1 Sample Multiplier: 1

Integration File: ron.P

Method : C:\msdchem\1\DATA\030110V4\VOA4-8260-030110.M
Title : Volatile Organics 8260B SubList :
Last Update : Tue Mar 02 15:03:40 2010





AutoFind: Scans 2006, 2007, 2008; Background Corrected with Scan 1996

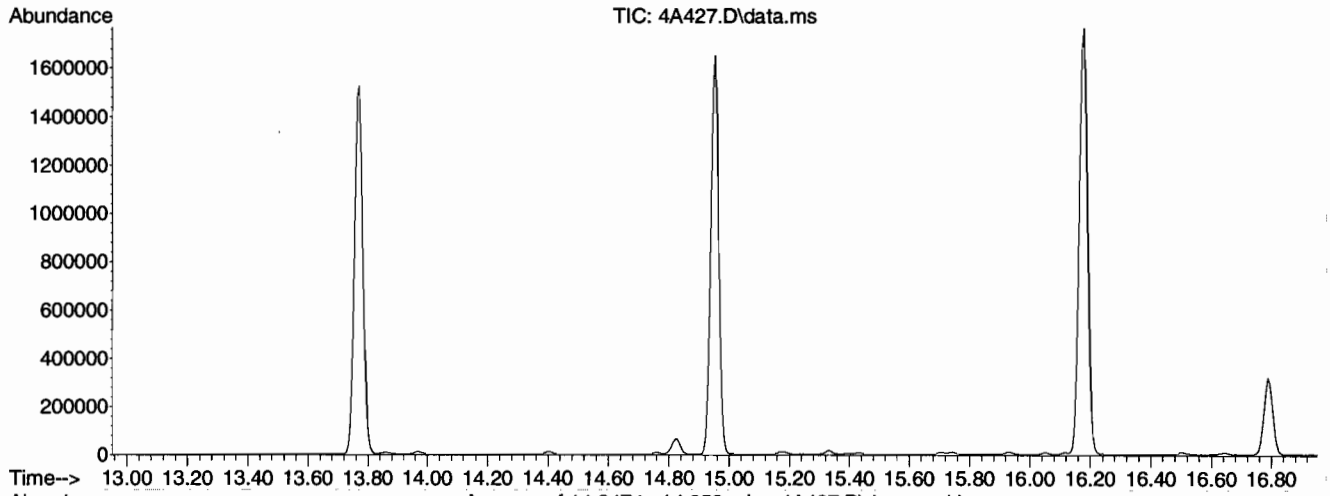
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	19.1	92460	PASS
75	95	30	60	49.8	241152	PASS
95	95	100	100	100.0	484629	PASS
96	95	5	9	7.0	33893	PASS
173	174	0.00	2	0.5	1986	PASS
174	95	50	100	82.3	398848	PASS
175	174	5	9	7.0	27931	PASS
176	174	95	101	95.5	381035	PASS
177	176	5	9	6.7	25547	PASS

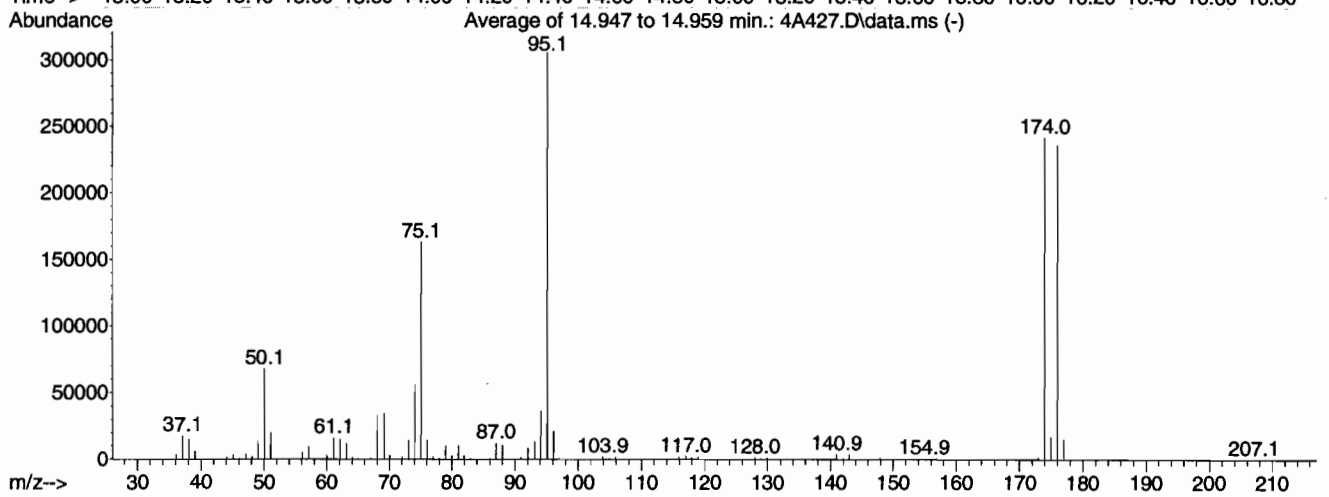
Tune Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030410V4\
Data File : 4A427.D
Acq On : 4 Mar 2010 10:05 pm
Operator : ACJ
Sample : |UVM091216-10|BFB|1|VOAF|1|
Misc : GEL 5ML N/A
ALS Vial : 27 Sample Multiplier: 1

Integration File: ron.P

Method : C:\msdchem\1\DATA\030210V4\Methods\VOA4-8260-030110.M
Title : Volatile Organics 8260B SubList :
Last Update : Tue Mar 02 15:03:40 2010





AutoFind: Scans 2007, 2008, 2009; Background Corrected with Scan 1997

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	22.1	67560	PASS
75	95	30	60	53.3	163157	PASS
95	95	100	100	100.0	305899	PASS
96	95	5	9	6.9	21157	PASS
173	174	0.00	2	0.6	1457	PASS
174	95	50	100	79.0	241664	PASS
175	174	5	9	6.9	16701	PASS
176	174	95	101	97.6	235797	PASS
177	176	5	9	6.3	14905	PASS

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-2089**			**Matrix:**	**SOIL**
Lab Sample ID:	**1202062144**				
Client Sample:	**QC for batch 961334**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**MB for batch 961334**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**961336**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**03/05/2010 00:50**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**03/04/2010 22:00**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**030410V4\4A433BL.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:	**10-2089**			**Matrix:**	**SOIL**
Lab Sample ID:	**1202062144**				
Client Sample:	**QC for batch 961334**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**MB for batch 961334**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**961336**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**03/05/2010 00:50**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**03/04/2010 22:00**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**030410V4\4A433BL.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-Trifluoroetha *Trichlorotrifluoroethane*	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
	unknown siloxane	16.79	10.2	ug/kg	0	J

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030410V4\
Data File : 4A433BL.D
Acq On : 5 Mar 2010 12:50 am
Operator : ACJ
InstName : VOA4
Sample : |1202062144|961336|1|VOAF|1|VOA8260BS|
Misc : GEL 5G - SOIL
ALS Vial : 33 Sample Multiplier: 1

Quant Time: Mar 05 11:57:58 2010
Quant Method : C:\msdchem\1\DATA\030110V4\VOA4-8260-030110.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 02 15:03:40 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	Dev(Min)
Internal Standards								
1) Fluorobenzene	10.619	10.620	1.000	96	1215381	50.00	ug/L	0.00
41) Chlorobenzene-d5	13.770	13.771	1.000	117	981513	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	16.179	16.180	1.000	152	582186	50.00	ug/L	0.00
82) B Fluorobenzene	10.619	10.619	1.000	96	1214864	50.00	ug/L	0.00
103) B Chlorobenzene-d5	13.770	13.771	1.000	117	981534	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	16.179	16.179	1.000	152	582150	50.00	ug/L	0.00
System Monitoring Compounds								Dev(Min)
29) 1,2-Dichloroethane-d4	10.259	10.260	0.966	65	241580	48.05	ug/L	0.00
Spiked Amount 50.000	Range 66 - 134		Recovery = 96.10%					
43) Toluene-d8	12.252	12.247	0.890	98	880361	48.35	ug/L	0.00
Spiked Amount 50.000	Range 71 - 128		Recovery = 96.70%					
61) Bromofluorobenzene	14.953	14.954	0.924	95	649698	57.04	ug/L	0.00
Spiked Amount 50.000	Range 65 - 130		Recovery = 114.08%					

Target Compounds	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	QValue
2) Dichlorodifluoromethane	0.000	4.911	0.000		0	N.D.		
3) Chloromethane	5.284	5.291	0.498	50	369	N.D.		
4) Vinyl chloride	5.507	5.521	0.519	62	114	N.D.		
5) Bromomethane	0.000	6.137	0.000		0	N.D.		
6) Chloroethane	0.000	6.295	0.000		0	N.D.		
7) Trichlorofluoromethane	0.000	6.669	0.000		0	N.D.		
8) Ethyl ether	0.000	6.998	0.000		0	N.D.		
9) Acetone	7.363	7.352	0.693	43	4520	N.D.		
10) 1,1-Dichloroethylene	0.000	7.389	0.000		0	N.D.		
11) Iodomethane	7.656	7.663	0.721	142	121	N.D.		
12) Acetonitrile	7.924	7.699	0.746	41	553	N.D.		
13) Methyl acetate	7.747	7.748	0.730	43	756	N.D.		
14) Carbon disulfide	7.766	7.773	0.731	76	3019	N.D.		
15) Methylene chloride	7.936	7.931	0.747	84	8322	N.D.		
16) tert-Butyl methyl ether	0.000	8.242	0.000		0	N.D.		
17) trans-1,2-Dichloroethy...	0.000	8.285	0.000		0	N.D.		
18) Vinyl acetate	8.698	8.705	0.819	43	805	N.D.		
19) 1,1-Dichloroethane	0.000	8.760	0.000		0	N.D.		
20) 2-Butanone	9.338	9.327	0.879	43	2788	N.D.		
21) cis-1,2-Dichloroethylene	9.332	9.388	0.879	61	158	N.D.		
22) 2,2-Dichloropropane	0.000	9.419	0.000		0	N.D.		
23) Bromochloromethane	0.000	9.656	0.000		0	N.D.		
24) Chloroform	9.686	9.687	0.912	83	241	N.D.		
25) 1,1,1-Trichloroethane	0.000	9.979	0.000		0	N.D.		
26) Cyclohexane	10.076	10.083	0.949	56	196	N.D.		
27) 1,1-Dichloropropene	0.000	10.132	0.000		0	N.D.		
28) Carbon tetrachloride	0.000	10.175	0.000		0	N.D.		
30) 1,2-Dichloroethane	0.000	10.339	0.000		0	N.D.		
31) Benzene	10.369	10.370	0.976	78	934	N.D.		
32) Cyclohexene	10.485	10.492	0.987	67	140	N.D.		
33) n-Butyl alcohol	10.667	10.693	1.005	56	236	N.D.		
34) Trichloroethylene	0.000	11.004	0.000		0	N.D.		
35) 1,2-Dichloropropane	11.253	11.241	1.060	63	158	N.D.		
36) Methylcyclohexane	0.000	11.260	0.000		0	N.D.		
37) Dibromomethane	0.000	11.376	0.000		0	N.D.		
38) Bromodichloromethane	0.000	11.485	0.000		0	N.D.		
39) 2-Chloroethylvinyl ether	0.000	11.699	0.000		0	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030410V4\
Data File : 4A433BL.D
Acq On : 5 Mar 2010 12:50 am
Operator : ACJ
InstName : VOA4
Sample : |1202062144|961336|1|VOAF|1|VOA8260BS|
Misc : GEL 5G - SOIL
ALS Vial : 33 Sample Multiplier: 1

Quant Time: Mar 05 11:57:58 2010
Quant Method : C:\msdchem\1\DATA\030110V4\VOA4-8260-030110.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 02 15:03:40 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
40) cis-1,3-Dichloropropylene	11.923	11.930	1.123	75	175	N.D.	
42) 4-Methyl-2-pentanone	0.000	12.016	0.000		0	N.D.	
44) Toluene	12.320	12.320	0.895	91	2258	N.D.	
45) trans-1,3-Dichloroprop...	12.460	12.461	0.905	75	942	N.D.	
46) 1,1,2-Trichloroethane	0.000	12.680	0.000		0	N.D.	
47) 2-Hexanone	12.856	12.857	0.934	43	1593	N.D.	
48) 1,3-Dichloropropane	12.868	12.875	0.934	76	230	N.D.	
49) Tetrachloroethylene	12.929	12.918	0.939	164	1357	N.D.	
50) Dibromochloromethane	0.000	13.144	0.000		0	N.D.	
51) 1,2-Dibromoethane	0.000	13.320	0.000		0	N.D.	
52) Chlorobenzene	13.801	13.802	1.002	112	1061	N.D.	
53) 1,1,1,2-Tetrachloroethane	13.844	13.851	1.005	131	161	N.D.	
54) Ethylbenzene	13.862	13.863	1.007	91	2254	N.D.	
55) m,p-Xylenes	13.978	13.973	1.015	106	1516	N.D.	
56) o-Xylene	14.405	14.399	1.046	106	548	N.D.	
57) Styrene	14.411	14.399	1.046	104	1299	N.D.	
59) Bromoform	0.000	14.655	0.000		0	N.D.	
60) Isopropylbenzene	14.758	14.759	0.912	105	1768	N.D.	
62) 1,1,2,2-Tetrachloroethane	15.026	15.015	0.929	83	152	N.D.	
63) 1,2,3-Trichloropropane	0.000	15.107	0.000		0	N.D.	
64) Bromobenzene	15.160	15.168	0.937	156	286	N.D.	
65) n-Propylbenzene	15.185	15.180	0.939	91	2811	N.D.	
66) 1,3,5-Trimethylbenzene	15.343	15.332	0.948	105	1910	N.D.	
67) 2-Chlorotoluene	15.331	15.332	0.948	126	653	N.D.	
68) 4-Chlorotoluene	15.429	15.430	0.954	91	1917	N.D.	
69) tert-Butylbenzene	15.697	15.704	0.970	134	201	N.D.	
70) 1,2,4-Trimethylbenzene	15.746	15.741	0.973	105	1507	N.D.	
71) sec-Butylbenzene	15.929	15.930	0.985	105	1771	N.D.	
72) 4-Isopropyltoluene	16.057	16.051	0.992	119	1480	N.D.	
73) 1,3-Dichlorobenzene	16.118	16.119	0.996	146	1260	N.D.	
74) 1,4-Dichlorobenzene	16.215	16.204	1.002	146	1720	N.D.	
75) n-Butylbenzene	16.502	16.503	1.020	91	1858	N.D.	
76) 1,2-Dichlorobenzene	16.648	16.643	1.029	146	1240	N.D.	
77) 1,2-Dibromo-3-chloropr...	0.000	17.527	0.000		0	N.D.	
78) 1,2,4-Trichlorobenzene	18.629	18.630	1.151	180	938	N.D.	
79) Hexachlorobutadiene	18.824	18.819	1.164	225	319	N.D.	
80) Naphthalene	19.032	19.026	1.176	128	7379	N.D.	
81) 1,2,3-Trichlorobenzene	19.379	19.386	1.198	180	1295	N.D.	
83) Chlorotrifluoroethylene	0.000	4.826	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000	5.657	0.000		0	N.D.	
85) Acrolein	0.000	7.180	0.000		0m	N.D.	d
86) Trichlorotrifluoroethane	0.000	7.369	0.000		0	N.D.	
87) Isopropyl Alcohol	7.424	7.430	0.699	45	163	N.D.	
88) Allyl chloride	7.790	7.796	0.734	41	2737	N.D.	
89) tert-Butyl Alcohol	7.918	7.924	0.746	59	411	N.D.	
90) Acrylonitrile	8.186	8.174	0.771	53	1145	N.D.	
91) Isopropyl ether	0.000	8.741	0.000		0	N.D.	
92) 2-Chloro-1,3-butadiene	8.857	8.869	0.834	53	360	N.D.	
93) Ethyl tert-butyl ether	0.000	9.143	0.000		0	N.D.	
94) Ethyl acetate	9.338	9.338	0.879	43	2788	N.D.	
95) Propionitrile	9.387	9.393	0.884	54	695	N.D.	
96) Methacrylonitrile	9.576	9.576	0.902	41	1979	N.D.	
97) Tetrahydrofuran	9.716	9.710	0.915	42	1848	N.D.	
98) Isobutyl alcohol	10.009	10.009	0.943	41	2833	N.D.	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030410V4\
Data File : 4A433BL.D
Acq On : 5 Mar 2010 12:50 am
Operator : ACJ
InstName : VOA4
Sample : |1202062144|961336|1|VOAF|1|VOA8260BS|
Misc : GEL 5G - SOIL
ALS Vial : 33 Sample Multiplier: 1

Quant Time: Mar 05 11:57:58 2010
Quant Method : C:\msdchem\1\DATA\030110V4\VOA4-8260-030110.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 02 15:03:40 2010
Response via : Initial Calibration
Integrator: RTE

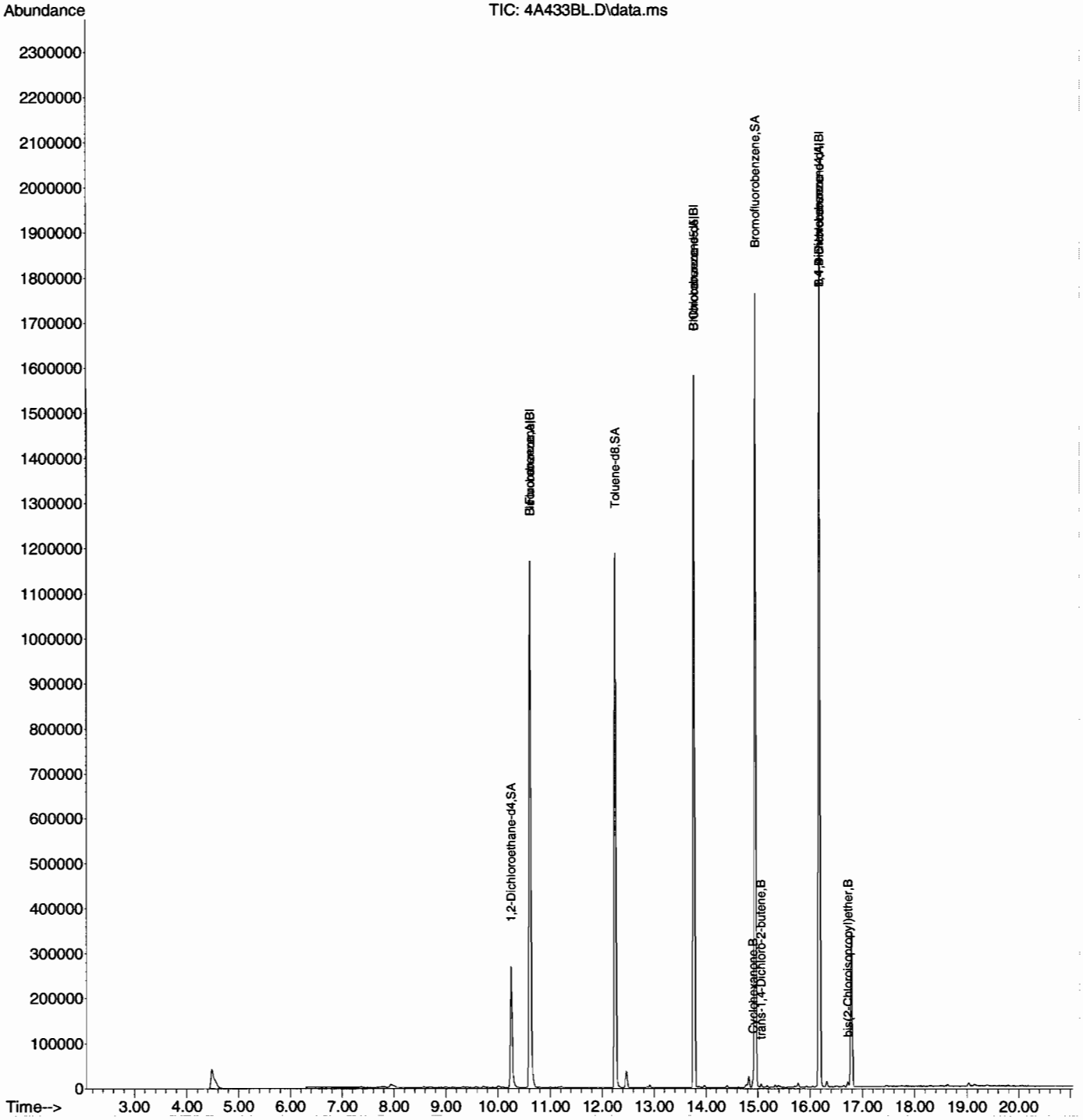
	Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
99)	Methyl tert-amyl ether	0.000	10.387	0.000		0	N.D.		
100)	Methyl methacrylate	11.216	11.204	1.056	69	1430	N.D.		
101)	1,4-Dioxane	11.326	11.326	1.067	88	753	N.D.		
102)	2-Nitropropane	11.667	11.673	1.099	43	844	N.D.		
104)	Ethyl methacrylate	12.466	12.466	0.905	69	2433	N.D.		
106)	1-Chlorohexane	0.000	13.661	0.000		0m	N.D.	d	
107)	cis-1,4-Dichloro-2-butene	14.776	14.783	0.913	53	1593	N.D.		
108)	Cyclohexanone	14.911	14.904	0.922	42	6524	20.58	ug/L	88
109)	trans-1,4-Dichloro-2-b...	15.063	15.063	0.931	53	2067	0.71	ug/L	82
110)	Pentachloroethane	15.776	15.770	0.975	167	1323	N.D.		
111)	Benzyl chloride	16.319	16.319	1.009	91	10847	N.D.		
112)	bis(2-Chloroisopropyl)...	16.721	16.721	1.034	45	7529	1.62	ug/L	91

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

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030410V4\
Data File : 4A433BL.D
Acq On : 5 Mar 2010 12:50 am
Operator : ACJ
InstName : VOA4
Sample : |1202062144|961336|1|VOAF|1|VOA8260BS|
Misc : GEL 5G - SOIL
ALS Vial : 33 Sample Multiplier: 1

Quant Time: Mar 05 11:57:58 2010
Quant Method : C:\msdchem\1\DATA\030110V4\VOA4-8260-030110.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 02 15:03:40 2010
Response via : Initial Calibration
Integrator: RTE



Library Search Compound Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030410V4\
Data File : 4A433BL.D
Acq On : 5 Mar 2010 12:50 am
Operator : ACJ
Sample : |1202062144|961336|1|VOAF|1|VOA8260BS|
Misc : GEL 5G - SOIL
ALS Vial : 33 Sample Multiplier: 1

Quant Method : C:\msdchem\1\DATA\030110V4\VOA4-8260-030110.M
Quant Title : Volatile Organics 8260B SubList :

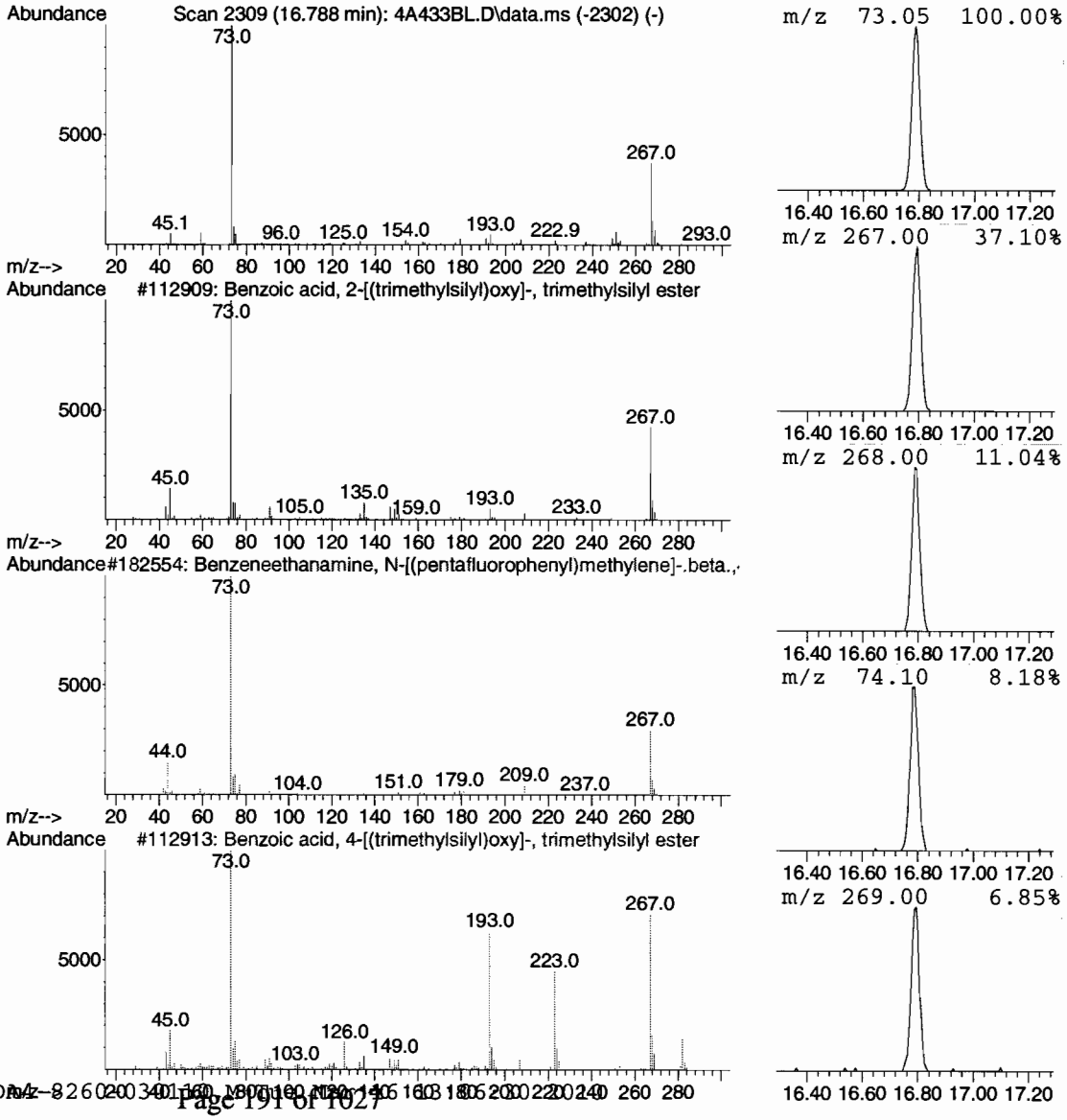
TIC Library : C:\Database\NIST05.L
TIC Integration Parameters: default.P

****

Peak Number 1 unknown siloxane Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
16.788	10.15 ug/L	729829	B 1,4-Dichlorobenzene-d4	16.179

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzoic acid, 2-[(trimethylsilyl...	282	C13H22O3Si2	003789-85-3	38
2	Benzeneethanamine, N-[(pentafluo...	475	C21H26F5NO2Si2	055429-85-1	38
3	Benzoic acid, 4-[(trimethylsilyl...	282	C13H22O3Si2	002078-13-9	38
4	Benzoic acid, 4-[(trimethylsilyl...	282	C13H22O3Si2	002078-13-9	25
5	1-Boraindane, 3-methyl-1-[1-(tri...	266	C17H23BSi	190316-36-0	17



Tentatively Identified Compound (LSC) summary
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030410V4\
Data File : 4A433BL.D
Acq On : 5 Mar 2010 12:50 am
Operator : ACJ
Sample : |1202062144|961336|1|VOAF|1|VOA8260BS|
Misc : GEL 5G - SOIL
ALS Vial : 33 Sample Multiplier: 1

Quant Method : C:\msdchem\1\DATA\030110V4\VOA4-8260-030110.M
Quant Title : Volatile Organics 8260B SubList :

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

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard--- #	RT	Resp	Conc
unknown siloxane	16.788	10.2	ug/L	729829	6	16.179	3594390	50.0

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-2089**			**Matrix:**	**SOIL**
Lab Sample ID:	**1202062052**				
Client Sample:	**QC for batch 961334**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**LCS for batch 961334**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**961336**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**03/04/2010 23:27**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**03/04/2010 21:30**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**030410V4\4A430LL.D**	**Column:**	**DB-624**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane		30.7	ug/kg	0.340	1.00
74-87-3	Chloromethane		39.0	ug/kg	0.300	1.00
75-01-4	Vinyl chloride		42.7	ug/kg	0.300	1.00
74-83-9	Bromomethane		45.4	ug/kg	0.300	1.00
75-00-3	Chloroethane		43.7	ug/kg	0.300	1.00
75-69-4	Trichlorofluoromethane		45.2	ug/kg	0.300	1.00
67-64-1	Acetone		227	ug/kg	1.66	5.00
75-35-4	1,1-Dichloroethylene		42.9	ug/kg	0.300	1.00
74-88-4	Iodomethane		210	ug/kg	1.60	5.00
75-09-2	Methylene chloride		39.0	ug/kg	2.00	5.00
75-15-0	Carbon disulfide		236	ug/kg	1.25	5.00
156-60-5	trans-1,2-Dichloroethylene		45.1	ug/kg	0.300	1.00
75-34-3	1,1-Dichloroethane		45.8	ug/kg	0.300	1.00
78-93-3	2-Butanone		232	ug/kg	1.50	5.00
156-59-2	cis-1,2-Dichloroethylene		45.2	ug/kg	0.300	1.00
594-20-7	2,2-Dichloropropane		42.5	ug/kg	0.300	1.00
67-66-3	Chloroform		44.9	ug/kg	0.300	1.00
74-97-5	Bromochloromethane		43.9	ug/kg	0.330	1.00
71-55-6	1,1,1-Trichloroethane		44.6	ug/kg	0.300	1.00
563-58-6	1,1-Dichloropropene		45.7	ug/kg	0.300	1.00
56-23-5	Carbon tetrachloride		44.6	ug/kg	0.300	1.00
107-06-2	1,2-Dichloroethane		45.3	ug/kg	0.300	1.00
71-43-2	Benzene		43.9	ug/kg	0.300	1.00
79-01-6	Trichloroethylene		45.3	ug/kg	0.330	1.00
78-87-5	1,2-Dichloropropane		45.4	ug/kg	0.300	1.00
75-27-4	Bromodichloromethane		46.2	ug/kg	0.300	1.00
74-95-3	Dibromomethane		44.5	ug/kg	0.300	1.00
108-10-1	4-Methyl-2-pentanone		238	ug/kg	1.25	5.00
10061-01-5	cis-1,3-Dichloropropylene		44.8	ug/kg	0.300	1.00
108-88-3	Toluene		43.1	ug/kg	0.300	1.00
10061-02-6	trans-1,3-Dichloropropylene		45.7	ug/kg	0.300	1.00
79-00-5	1,1,2-Trichloroethane		46.3	ug/kg	0.300	1.00
591-78-6	2-Hexanone		230	ug/kg	1.50	5.00
142-28-9	1,3-Dichloropropane		45.7	ug/kg	0.300	1.00
127-18-4	Tetrachloroethylene		42.7	ug/kg	0.300	1.00
124-48-1	Dibromochloromethane		45.4	ug/kg	0.300	1.00
106-93-4	1,2-Dibromoethane		45.1	ug/kg	0.300	1.00
108-90-7	Chlorobenzene		42.8	ug/kg	0.300	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-2089**			**Matrix:**	**SOIL**
Lab Sample ID:	**1202062052**				
Client Sample:	**QC for batch 961334**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**LCS for batch 961334**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**961336**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**03/04/2010 23:27**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**03/04/2010 21:30**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**030410V4\4A430LL.D**	**Column:**	**DB-624**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene		43.1	ug/kg	0.300	1.00
179601-23-1	m,p-Xylenes		86.9	ug/kg	0.300	2.00
95-47-6	o-Xylene		43.9	ug/kg	0.300	1.00
100-42-5	Styrene		45.4	ug/kg	0.300	1.00
75-25-2	Bromoform		46.2	ug/kg	0.300	1.00
79-34-5	1,1,2,2-Tetrachloroethane		43.6	ug/kg	0.300	1.00
96-18-4	1,2,3-Trichloropropane		43.6	ug/kg	0.300	1.00
108-86-1	Bromobenzene		42.7	ug/kg	0.300	1.00
103-65-1	n-Propylbenzene		43.4	ug/kg	0.300	1.00
95-49-8	2-Chlorotoluene		43.3	ug/kg	0.300	1.00
98-82-8	Isopropylbenzene		42.7	ug/kg	0.300	1.00
108-67-8	1,3,5-Trimethylbenzene		43.5	ug/kg	0.300	1.00
106-43-4	4-Chlorotoluene		42.2	ug/kg	0.300	1.00
98-06-6	tert-Butylbenzene		42.3	ug/kg	0.300	1.00
95-63-6	1,2,4-Trimethylbenzene		43.0	ug/kg	0.300	1.00
135-98-8	sec-Butylbenzene		42.9	ug/kg	0.300	1.00
99-87-6	4-Isopropyltoluene		43.4	ug/kg	0.300	1.00
541-73-1	1,3-Dichlorobenzene		41.7	ug/kg	0.300	1.00
106-46-7	1,4-Dichlorobenzene		41.6	ug/kg	0.300	1.00
104-51-8	n-Butylbenzene		43.1	ug/kg	0.300	1.00
96-12-8	1,2-Dibromo-3-chloropropane		45.6	ug/kg	0.300	1.00
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.00	ug/kg	1.60	5.00
630-20-6	1,1,1,2-Tetrachloroethane		44.3	ug/kg	0.300	1.00
95-50-1	1,2-Dichlorobenzene		41.9	ug/kg	0.300	1.00

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030410V4\
Data File : 4A430LL.D
Acq On : 4 Mar 2010 11:27 pm
Operator : ACJ
InstName : VOA4
Sample : |1202062052|961336|1|VOAF|1|VOA8260BS|
Misc : GEL 5G - SOIL MIX[A] 0220-01C+0304-01
ALS Vial : 30 Sample Multiplier: 1

Quant Time: Mar 05 11:54:44 2010
Quant Method : C:\msdchem\1\DATA\030110V4\VOA4-8260-030110.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 02 15:03:40 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	Dev(Min)
Internal Standards								
1) Fluorobenzene	10.613	10.620	1.000	96	1279908	50.00	ug/L	0.00
41) Chlorobenzene-d5	13.771	13.771	1.000	117	1067536	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	16.179	16.180	1.000	152	721422	50.00	ug/L	0.00
82) B Fluorobenzene	10.613	10.619	1.000	96	1279619	50.00	ug/L	0.00
103) B Chlorobenzene-d5	13.771	13.771	1.000	117	1067536	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	16.179	16.179	1.000	152	721537	50.00	ug/L	0.00
System Monitoring Compounds								Dev(Min)
29) 1,2-Dichloroethane-d4	10.259	10.260	0.967	65	246730	46.60	ug/L	0.00
Spiked Amount 50.000	Range 66 - 134		Recovery = 93.20%					
43) Toluene-d8	12.253	12.247	0.890	98	930812	47.00	ug/L	0.00
Spiked Amount 50.000	Range 71 - 128		Recovery = 94.00%					
61) Bromofluorobenzene	14.953	14.954	0.924	95	734684	52.05	ug/L	0.00
Spiked Amount 50.000	Range 65 - 130		Recovery = 104.10%					

Target Compounds	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	QValue
2) Dichlorodifluoromethane	4.904	4.911	0.462	85	249114	30.71	ug/L	100
3) Chloromethane	5.292	5.291	0.499	50	518342	39.04	ug/L	100
4) Vinyl chloride	5.521	5.521	0.520	62	561471	42.67	ug/L	100
5) Bromomethane	6.130	6.137	0.578	94	355252	45.40	ug/L	99
6) Chloroethane	6.295	6.295	0.593	64	296399	43.73	ug/L	99
7) Trichlorofluoromethane	6.662	6.669	0.628	101	606286	45.18	ug/L	99
8) Ethyl ether	6.998	6.998	0.659	59	295337	46.21	ug/L	99
9) Acetone	7.351	7.352	0.693	43	1831357	227.05	ug/L	97
10) 1,1-Dichloroethylene	7.388	7.389	0.696	61	640214	42.91	ug/L	97
11) Iodomethane	7.656	7.663	0.721	142	3228597	209.52	ug/L	99
12) Acetonitrile	7.699	7.699	0.725	41	1625289	1213.99	ug/L	99
13) Methyl acetate	7.747	7.748	0.730	43	1671833	244.01	ug/L	98
14) Carbon disulfide	7.772	7.773	0.732	76	6559818	236.39	ug/L	100
15) Methylene chloride	7.936	7.931	0.748	84	451291	38.98	ug/L	97
16) tert-Butyl methyl ether	8.235	8.242	0.776	73	1065108	43.23	ug/L	98
17) trans-1,2-Dichloroethy...	8.278	8.285	0.780	61	517735	45.06	ug/L	98
18) Vinyl acetate	8.705	8.705	0.820	43	3336758	223.45	ug/L	98
19) 1,1-Dichloroethane	8.753	8.760	0.825	63	660087	45.82	ug/L	100
20) 2-Butanone	9.326	9.327	0.879	43	1965392	232.25	ug/L	97
21) cis-1,2-Dichloroethylene	9.387	9.388	0.885	61	568872	45.17	ug/L	97
22) 2,2-Dichloropropane	9.418	9.419	0.887	77	327914	42.45	ug/L	94
23) Bromochloromethane	9.656	9.656	0.910	128	200241	43.87	ug/L	96
24) Chloroform	9.686	9.687	0.913	83	678766	44.87	ug/L	99
25) 1,1,1-Trichloroethane	9.979	9.979	0.940	97	525953	44.60	ug/L	97
26) Cyclohexane	10.076	10.083	0.949	56	569765	43.50	ug/L	99
27) 1,1-Dichloropropene	10.131	10.132	0.955	75	505564	45.69	ug/L	97
28) Carbon tetrachloride	10.174	10.175	0.959	117	500071	44.59	ug/L	100
30) 1,2-Dichloroethane	10.338	10.339	0.974	62	559410	45.32	ug/L	99
31) Benzene	10.369	10.370	0.977	78	1432931	43.91	ug/L	99
32) Cyclohexene	10.491	10.492	0.989	67	702811	44.18	ug/L	97
33) n-Butyl alcohol	10.686	10.693	1.007	56	1769547	5254.18	ug/L	97
34) Trichloroethylene	11.003	11.004	1.037	95	390912	45.31	ug/L	99
35) 1,2-Dichloropropane	11.241	11.241	1.059	63	383122	45.37	ug/L	100
36) Methylcyclohexane	11.259	11.260	1.061	83	603436	44.26	ug/L	97
37) Dibromomethane	11.375	11.376	1.072	93	247759	44.46	ug/L	96
38) Bromodichloromethane	11.484	11.485	1.082	83	516626	46.15	ug/L	99
39) 2-Chloroethylvinyl ether	11.698	11.699	1.102	63	1075938	229.99	ug/L	99

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030410V4\
Data File : 4A430LL.D
Acq On : 4 Mar 2010 11:27 pm
Operator : ACJ
InstName : VOA4
Sample : |1202062052|961336|1|VOAF|1|VOA8260BS|
Misc : GEL 5G - SOIL MIX[A] 0220-01C+0304-01
ALS Vial : 30 Sample Multiplier: 1

Quant Time: Mar 05 11:54:44 2010
Quant Method : C:\msdchem\1\DATA\030110V4\VOA4-8260-030110.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 02 15:03:40 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
40) cis-1,3-Dichloropropylene	11.930	11.930	1.124	75	585088	44.78	ug/L	97
42) 4-Methyl-2-pentanone	12.015	12.016	0.873	58	927180	238.22	ug/L	94
44) Toluene	12.320	12.320	0.895	91	1521664	43.06	ug/L	99
45) trans-1,3-Dichloroprop...	12.460	12.461	0.905	75	566491	45.66	ug/L	97
46) 1,1,2-Trichloroethane	12.679	12.680	0.921	83	294610	46.32	ug/L	98
47) 2-Hexanone	12.856	12.857	0.934	43	2488813	230.45	ug/L	96
48) 1,3-Dichloropropane	12.874	12.875	0.935	76	603583	45.68	ug/L	96
49) Tetrachloroethylene	12.917	12.918	0.938	164	303545	42.69	ug/L	97
50) Dibromochloromethane	13.143	13.144	0.954	129	411035	45.38	ug/L	99
51) 1,2-Dibromoethane	13.313	13.320	0.967	107	370014	45.13	ug/L	100
52) Chlorobenzene	13.801	13.802	1.002	112	1030924	42.84	ug/L	99
53) 1,1,1,2-Tetrachloroethane	13.850	13.851	1.006	131	404629	44.29	ug/L	99
54) Ethylbenzene	13.862	13.863	1.007	91	1804076	43.11	ug/L	98
55) m,p-Xylenes	13.972	13.973	1.015	106	1442293	86.88	ug/L	96
56) o-Xylene	14.405	14.399	1.046	106	755232	43.90	ug/L	96
57) Styrene	14.399	14.399	1.046	104	1268002	45.39	ug/L	98
59) Bromoform	14.655	14.655	0.906	173	301356	46.21	ug/L	99
60) Isopropylbenzene	14.758	14.759	0.912	105	1948339	42.68	ug/L	99
62) 1,1,2,2-Tetrachloroethane	15.014	15.015	0.928	83	571859	43.64	ug/L	100
63) 1,2,3-Trichloropropane	15.106	15.107	0.934	110	155650	43.59	ug/L	96
64) Bromobenzene	15.167	15.168	0.937	156	536671	42.72	ug/L	96
65) n-Propylbenzene	15.179	15.180	0.938	91	2417242	43.37	ug/L	98
66) 1,3,5-Trimethylbenzene	15.331	15.332	0.948	105	1817180	43.53	ug/L	99
67) 2-Chlorotoluene	15.331	15.332	0.948	126	538287	43.27	ug/L	95
68) 4-Chlorotoluene	15.429	15.430	0.954	91	1470252	42.23	ug/L	99
69) tert-Butylbenzene	15.703	15.704	0.971	134	386680	42.26	ug/L	95
70) 1,2,4-Trimethylbenzene	15.740	15.741	0.973	105	1828476	42.95	ug/L	99
71) sec-Butylbenzene	15.929	15.930	0.985	105	2398557	42.85	ug/L	98
72) 4-Isopropyltoluene	16.051	16.051	0.992	119	1954375	43.40	ug/L	99
73) 1,3-Dichlorobenzene	16.118	16.119	0.996	146	1040834	41.68	ug/L	100
74) 1,4-Dichlorobenzene	16.203	16.204	1.002	146	1061545	41.56	ug/L	99
75) n-Butylbenzene	16.502	16.503	1.020	91	1842818	43.12	ug/L	99
76) 1,2-Dichlorobenzene	16.642	16.643	1.029	146	1019251	41.94	ug/L	100
77) 1,2-Dibromo-3-chloropr...	17.526	17.527	1.083	157	106191	45.55	ug/L	99
78) 1,2,4-Trichlorobenzene	18.629	18.630	1.151	180	504079	40.55	ug/L	99
79) Hexachlorobutadiene	18.818	18.819	1.163	225	296336	36.79	ug/L	98
80) Naphthalene	19.032	19.026	1.176	128	1230872	39.80	ug/L	100
81) 1,2,3-Trichlorobenzene	19.385	19.386	1.198	180	414685	40.05	ug/L	99
83) Chlorotrifluoroethylene	0.000	4.826	0.000		0	N.D.		
84) 2-Chloro-1,1,1-trifluo...	0.000	5.657	0.000		0	N.D.		
85) Acrolein	7.168	7.180	0.675		0m	N.D.	d	
86) Trichlorotrifluoroethane	7.363	7.369	0.694		0m	N.D.	d	
87) Isopropyl Alcohol	7.357	7.430	0.693		0m	N.D.	d	
88) Allyl chloride	7.699	7.796	0.725		0m	N.D.	d	
89) tert-Butyl Alcohol	0.000	7.924	0.000		0	N.D.		
90) Acrylonitrile	8.235	8.174	0.776		0m	N.D.	d	
91) Isopropyl ether	8.705	8.741	0.820		0m	N.D.	d	
92) 2-Chloro-1,3-butadiene	8.869	8.869	0.836		0m	N.D.	d	
93) Ethyl tert-butyl ether	9.143	9.143	0.862		0m	N.D.	d	
94) Ethyl acetate	9.326	9.338	0.879		0m	N.D.	d	
95) Propionitrile	9.326	9.393	0.879		0m	N.D.	d	
96) Methacrylonitrile	0.000	9.576	0.000		0	N.D.		
97) Tetrahydrofuran	9.686	9.710	0.913		0m	N.D.	d	
98) Isobutyl alcohol	10.009	10.009	0.943		0m	N.D.	d	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030410V4\
Data File : 4A430LL.D
Acq On : 4 Mar 2010 11:27 pm
Operator : ACJ
InstName : VOA4
Sample : |1202062052|961336|1|VOAF|1|VOA8260BS|
Misc : GEL 5G - SOIL MIX[A] 0220-01C+0304-01
ALS Vial : 30 Sample Multiplier: 1

Quant Time: Mar 05 11:54:44 2010
Quant Method : C:\msdchem\1\DATA\030110V4\VOA4-8260-030110.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 02 15:03:40 2010
Response via : Initial Calibration
Integrator: RTE

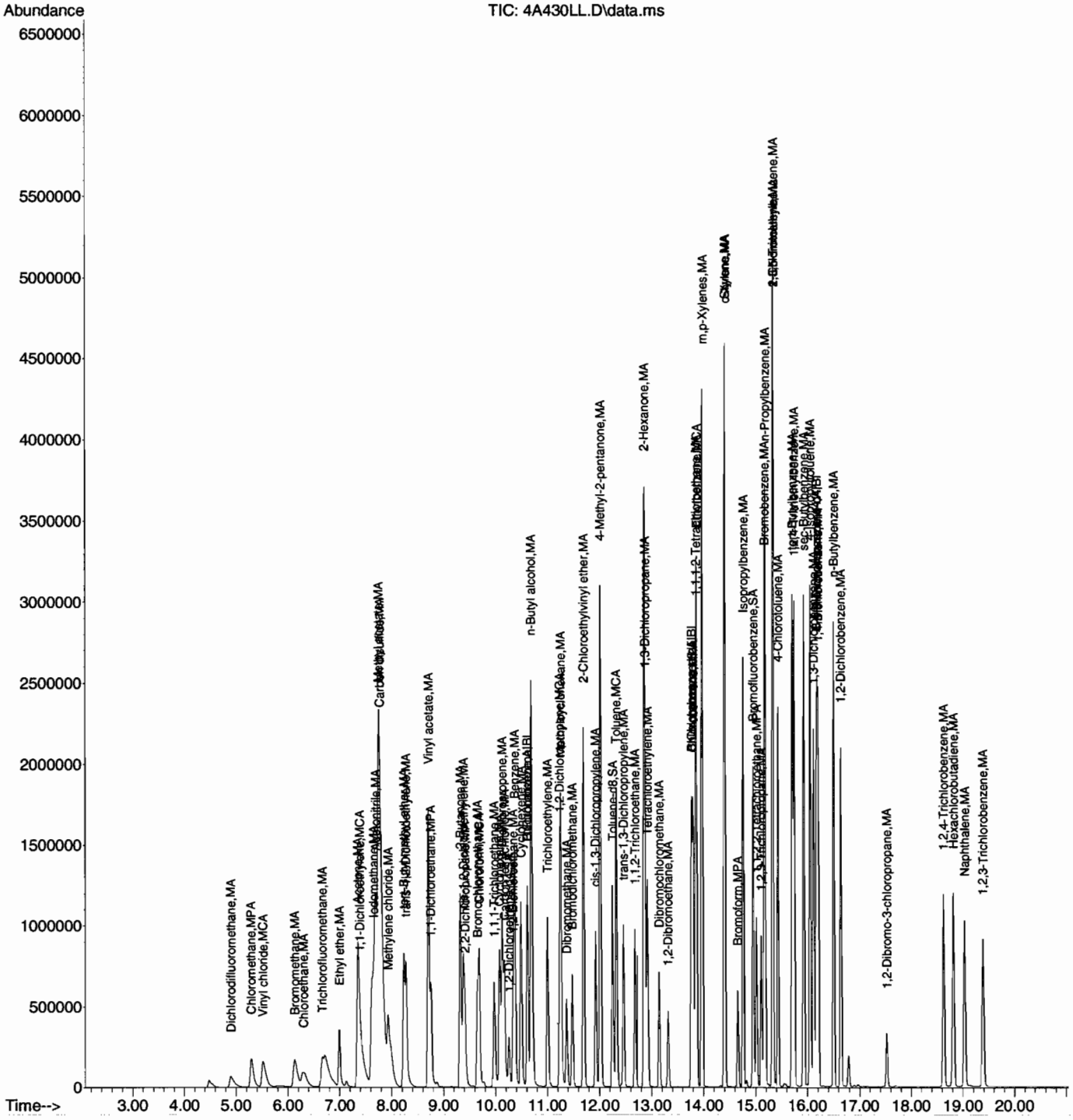
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
99) Methyl tert-amyl ether	10.369	10.387	0.977		0m	N.D.	d
100) Methyl methacrylate	11.259	11.204	1.061		0m	N.D.	d
101) 1,4-Dioxane	11.375	11.326	1.072		0m	N.D.	d
102) 2-Nitropropane	11.698	11.673	1.102		0m	N.D.	d
104) Ethyl methacrylate	12.466	12.466	0.905		0m	N.D.	d
106) 1-Chlorohexane	13.606	13.661	0.841		0m	N.D.	d
107) cis-1,4-Dichloro-2-butene	14.758	14.783	0.912		0m	N.D.	d
108) Cyclohexanone	14.886	14.904	0.920		0m	N.D.	d
109) trans-1,4-Dichloro-2-b...	15.069	15.063	0.931		0m	N.D.	d
110) Pentachloroethane	15.770	15.770	0.975		0m	N.D.	d
111) Benzyl chloride	16.325	16.319	1.009		0m	N.D.	d
112) bis(2-Chloroisopropyl)...	16.788	16.721	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\030410V4\
Data File : 4A430LL.D
Acq On : 4 Mar 2010 11:27 pm
Operator : ACJ
InstName : VOA4
Sample : |1202062052|961336|1|VOAF|1|VOA8260BS|
Misc : GEL 5G - SOIL MIX[A] 0220-01C+0304-01
ALS Vial : 30 Sample Multiplier: 1

Quant Time: Mar 05 11:54:44 2010
Quant Method : C:\msdchem\1\DATA\030110V4\VOA4-8260-030110.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 02 15:03:40 2010
Response via : Initial Calibration
Integrator: RTE



Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-2089**			**Matrix:**	**SOIL**
Lab Sample ID:	**1202062053**				
Client Sample:	**QC for batch 961334**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**LCS for batch 961334**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**961336**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**03/05/2010 00:22**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**03/04/2010 21:45**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**030410V4\4A432SL.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:	**10-2089**			**Matrix:**	**SOIL**
Lab Sample ID:	**1202062053**				
Client Sample:	**QC for batch 961334**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**LCS for batch 961334**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**961336**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**03/05/2010 00:22**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**03/04/2010 21:45**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**030410V4\4A432SL.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-Trifluoroetha *Trichlorotrifluoroethane*		188	ug/kg	1.60	5.00
630-20-6	1,1,1,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
95-50-1	1,2-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030410V4\
Data File : 4A432SL.D
Acq On : 5 Mar 2010 12:22 am
Operator : ACJ
InstName : VOA4
Sample : |1202062053|961336|1|VOAF|1|VOA8260BS|
Misc : GEL 5G - SOIL MIX[B] 0215-08A
ALS Vial : 32 Sample Multiplier: 1

Quant Time: Mar 05 11:57:04 2010
Quant Method : C:\msdchem\1\DATA\030110V4\VOA4-8260-030110.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 02 15:03:40 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	Dev(Min)
Internal Standards								
1) Fluorobenzene	10.619	10.620	1.000	96	1301866	50.00	ug/L	0.00
41) Chlorobenzene-d5	13.770	13.771	1.000	117	1074238	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	16.179	16.180	1.000	152	695737	50.00	ug/L	0.00
82) B Fluorobenzene	10.619	10.619	1.000	96	1301658	50.00	ug/L	0.00
103) B Chlorobenzene-d5	13.770	13.771	1.000	117	1074238	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	16.179	16.179	1.000	152	695756	50.00	ug/L	0.00
System Monitoring Compounds								Dev(Min)
29) 1,2-Dichloroethane-d4	10.259	10.260	0.966	65	252741	46.93	ug/L	0.00
Spiked Amount 50.000	Range 66 - 134		Recovery = 93.86%					
43) Toluene-d8	12.252	12.247	0.890	98	936670	47.01	ug/L	0.00
Spiked Amount 50.000	Range 71 - 128		Recovery = 94.02%					
61) Bromofluorobenzene	14.953	14.954	0.924	95	738283	54.24	ug/L	0.00
Spiked Amount 50.000	Range 65 - 130		Recovery = 108.48%					

Target Compounds	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	QValue
2) Dichlorodifluoromethane	0.000	4.911	0.000		0	N.D.		
3) Chloromethane	5.292	5.291	0.498		0m	N.D.	d	
4) Vinyl chloride	5.521	5.521	0.520		0m	N.D.	d	
5) Bromomethane	0.000	6.137	0.000		0	N.D.		
6) Chloroethane	0.000	6.295	0.000		0	N.D.		
7) Trichlorofluoromethane	0.000	6.669	0.000		0	N.D.		
8) Ethyl ether	6.997	6.998	0.659		0m	N.D.	d	
9) Acetone	7.351	7.352	0.692		0m	N.D.	d	
10) 1,1-Dichloroethylene	7.339	7.389	0.691		0m	N.D.	d	
11) Iodomethane	7.625	7.663	0.718		0m	N.D.	d	
12) Acetonitrile	7.796	7.699	0.734		0m	N.D.	d	
13) Methyl acetate	7.747	7.748	0.730		0m	N.D.	d	
14) Carbon disulfide	7.796	7.773	0.734		0m	N.D.	d	
15) Methylene chloride	7.948	7.931	0.749		0m	N.D.	d	
16) tert-Butyl methyl ether	8.235	8.242	0.776		0m	N.D.	d	
17) trans-1,2-Dichloroethy...	8.290	8.285	0.781		0m	N.D.	d	
18) Vinyl acetate	8.710	8.705	0.820		0m	N.D.	d	
19) 1,1-Dichloroethane	8.741	8.760	0.823		0m	N.D.	d	
20) 2-Butanone	9.338	9.327	0.879		0m	N.D.	d	
21) cis-1,2-Dichloroethylene	9.338	9.388	0.879		0m	N.D.	d	
22) 2,2-Dichloropropane	9.418	9.419	0.887		0m	N.D.	d	
23) Bromochloromethane	9.668	9.656	0.910		0m	N.D.	d	
24) Chloroform	9.680	9.687	0.912		0m	N.D.	d	
25) 1,1,1-Trichloroethane	9.985	9.979	0.940		0m	N.D.	d	
26) Cyclohexane	10.009	10.083	0.943		0m	N.D.	d	
27) 1,1-Dichloropropene	10.125	10.132	0.953		0m	N.D.	d	
28) Carbon tetrachloride	10.180	10.175	0.959		0m	N.D.	d	
30) 1,2-Dichloroethane	10.344	10.339	0.974		0m	N.D.	d	
31) Benzene	10.369	10.370	0.976		0m	N.D.	d	
32) Cyclohexene	10.497	10.492	0.989		0m	N.D.	d	
33) n-Butyl alcohol	10.674	10.693	1.005		0m	N.D.	d	
34) Trichloroethylene	10.991	11.004	1.035		0m	N.D.	d	
35) 1,2-Dichloropropane	11.253	11.241	1.060		0m	N.D.	d	
36) Methylcyclohexane	11.210	11.260	1.056		0m	N.D.	d	
37) Dibromomethane	11.368	11.376	1.071		0m	N.D.	d	
38) Bromodichloromethane	11.484	11.485	1.082		0m	N.D.	d	
39) 2-Chloroethylvinyl ether	11.704	11.699	1.102		0m	N.D.	d	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030410V4\
Data File : 4A432SL.D
Acq On : 5 Mar 2010 12:22 am
Operator : ACJ
InstName : VOA4
Sample : |1202062053|961336|1|VOAF|1|VOA8260BS|
Misc : GEL 5G - SOIL MIX[B] 0215-08A
ALS Vial : 32 Sample Multiplier: 1

Quant Time: Mar 05 11:57:04 2010
Quant Method : C:\msdchem\1\DATA\030110V4\VOA4-8260-030110.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 02 15:03:40 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
40) cis-1,3-Dichloropropylene	11.923	11.930	1.123		0m	N.D.	d	
42) 4-Methyl-2-pentanone	12.015	12.016	0.872		0m	N.D.	d	
44) Toluene	12.326	12.320	0.895		0m	N.D.	d	
45) trans-1,3-Dichloroprop...	12.466	12.461	0.905		0m	N.D.	d	
46) 1,1,2-Trichloroethane	12.679	12.680	0.921		0m	N.D.	d	
47) 2-Hexanone	12.862	12.857	0.934		0m	N.D.	d	
48) 1,3-Dichloropropane	12.868	12.875	0.934		0m	N.D.	d	
49) Tetrachloroethylene	12.917	12.918	0.938		0m	N.D.	d	
50) Dibromochloromethane	13.149	13.144	0.955		0m	N.D.	d	
51) 1,2-Dibromoethane	13.325	13.320	0.968		0m	N.D.	d	
52) Chlorobenzene	13.801	13.802	1.002		0m	N.D.	d	
53) 1,1,1,2-Tetrachloroethane	13.844	13.851	1.005		0m	N.D.	d	
54) Ethylbenzene	13.862	13.863	1.007		0m	N.D.	d	
55) m,p-Xylenes	13.972	13.973	1.015		0m	N.D.	d	
56) o-Xylene	14.405	14.399	1.046		0m	N.D.	d	
57) Styrene	14.405	14.399	1.046		0m	N.D.	d	
59) Bromoform	14.661	14.655	0.906		0m	N.D.	d	
60) Isopropylbenzene	14.758	14.759	0.912		0m	N.D.	d	
62) 1,1,2,2-Tetrachloroethane	15.014	15.015	0.928		0m	N.D.	d	
63) 1,2,3-Trichloropropane	15.118	15.107	0.934		0m	N.D.	d	
64) Bromobenzene	15.167	15.168	0.937		0m	N.D.	d	
65) n-Propylbenzene	15.179	15.180	0.938		0m	N.D.	d	
66) 1,3,5-Trimethylbenzene	15.331	15.332	0.948		0m	N.D.	d	
67) 2-Chlorotoluene	15.331	15.332	0.948		0m	N.D.	d	
68) 4-Chlorotoluene	15.429	15.430	0.954		0m	N.D.	d	
69) tert-Butylbenzene	15.709	15.704	0.971		0m	N.D.	d	
70) 1,2,4-Trimethylbenzene	15.746	15.741	0.973		0m	N.D.	d	
71) sec-Butylbenzene	15.929	15.930	0.985		0m	N.D.	d	
72) 4-Isopropyltoluene	16.051	16.051	0.992		0m	N.D.	d	
73) 1,3-Dichlorobenzene	16.111	16.119	0.996		0m	N.D.	d	
74) 1,4-Dichlorobenzene	16.203	16.204	1.002		0m	N.D.	d	
75) n-Butylbenzene	16.502	16.503	1.020		0m	N.D.	d	
76) 1,2-Dichlorobenzene	16.648	16.643	1.029		0m	N.D.	d	
77) 1,2-Dibromo-3-chloropr...	17.538	17.527	1.084		0m	N.D.	d	
78) 1,2,4-Trichlorobenzene	18.635	18.630	1.152		0m	N.D.	d	
79) Hexachlorobutadiene	18.818	18.819	1.163		0m	N.D.	d	
80) Naphthalene	19.038	19.026	1.177		0m	N.D.	d	
81) 1,2,3-Trichlorobenzene	19.391	19.386	1.199		0m	N.D.	d	
83) Chlorotrifluoroethylene	0.000	4.826	0.000		0	N.D.		
84) 2-Chloro-1,1,1-trifluo...	5.650	5.657	0.532	118	111	N.D.		
85) Acrolein	7.180	7.180	0.676	56	256851	208.70	ug/L	100
86) Trichlorotrifluoroethane	7.363	7.369	0.693	85	580540	187.74	ug/L	98
87) Isopropyl Alcohol	0.000	7.430	0.000		0m	N.D.	d	
88) Allyl chloride	7.796	7.796	0.734	41	2414266	218.94	ug/L	98
89) tert-Butyl Alcohol	7.918	7.924	0.746	59	2779	N.D.		
90) Acrylonitrile	8.174	8.174	0.770	53	699737	220.67	ug/L	99
91) Isopropyl ether	8.759	8.741	0.825	45	1060	N.D.		
92) 2-Chloro-1,3-butadiene	8.869	8.869	0.835	53	518668	47.44	ug/L	98
93) Ethyl tert-butyl ether	9.137	9.143	0.860	59	364	N.D.		
94) Ethyl acetate	9.338	9.338	0.879	43	1867398	206.72	ug/L	99
95) Propionitrile	9.393	9.393	0.885	54	298398	221.78	ug/L	99
96) Methacrylonitrile	9.576	9.576	0.902	41	1232657	224.17	ug/L	100
97) Tetrahydrofuran	9.710	9.710	0.914	42	663512	223.85	ug/L	99
98) Isobutyl alcohol	10.003	10.009	0.942	41	1000430	2434.07	ug/L	98

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030410V4\
Data File : 4A432SL.D
Acq On : 5 Mar 2010 12:22 am
Operator : ACJ
InstName : VOA4
Sample : |1202062053|961336|1|VOAF|1|VOA8260BS|
Misc : GEL 5G - SOIL MIX[B] 0215-08A
ALS Vial : 32 Sample Multiplier: 1

Quant Time: Mar 05 11:57:04 2010
Quant Method : C:\msdchem\1\DATA\030110V4\VOA4-8260-030110.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 02 15:03:40 2010
Response via : Initial Calibration
Integrator: RTE

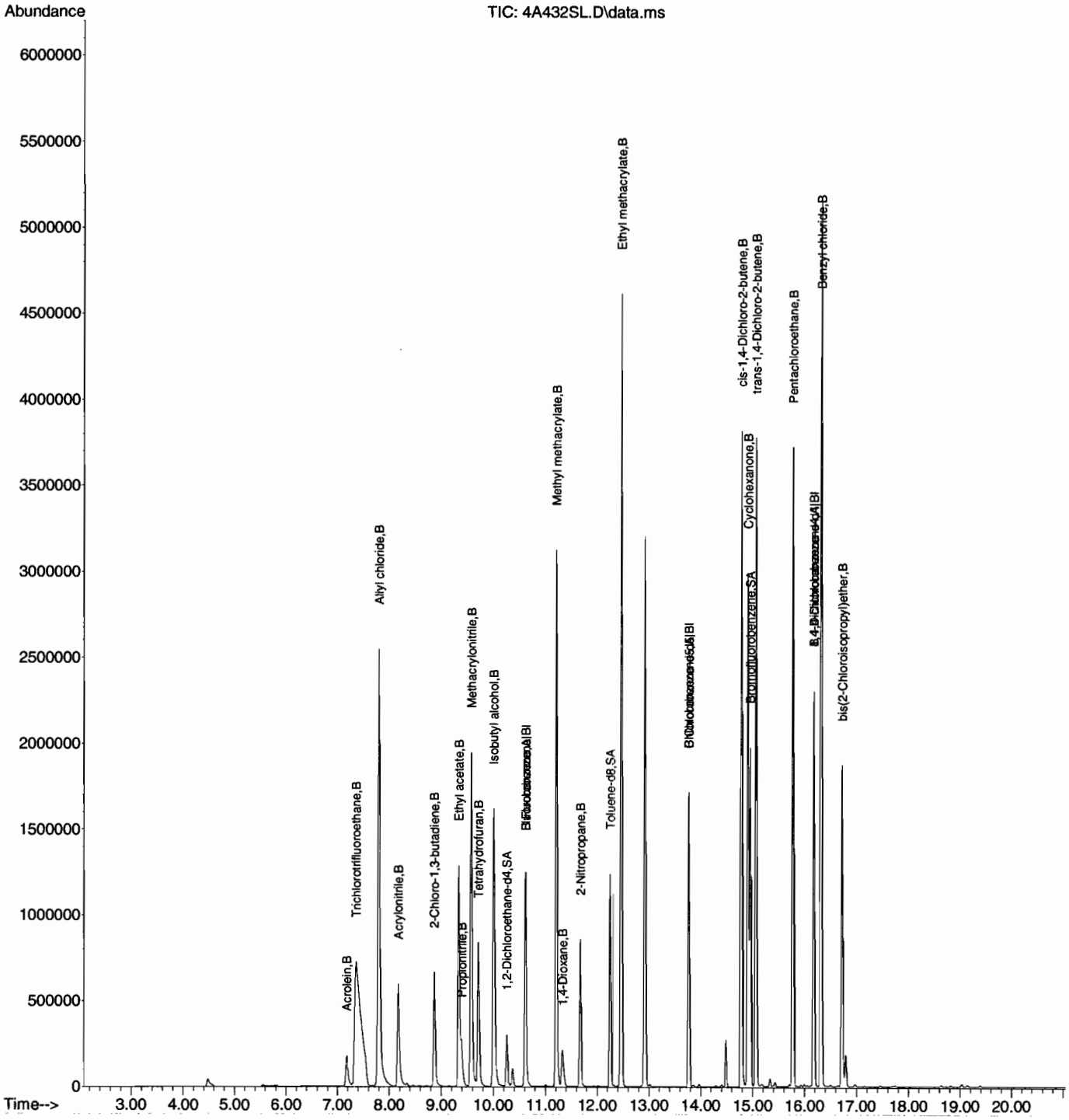
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units		
99) Methyl tert-amyl ether	10.375	10.387	0.977	73	1657	N.D.			
100) Methyl methacrylate	11.204	11.204	1.055	69	1324904	221.76	ug/L	96	
101) 1,4-Dioxane	11.332	11.326	1.067	88	231449	2057.16	ug/L	98	
102) 2-Nitropropane	11.673	11.673	1.099	43	724207	244.72	ug/L	99	
104) Ethyl methacrylate	12.460	12.466	0.905	69	2530227	227.48	ug/L	96	
106) 1-Chlorohexane	13.673	13.661	0.845	55	473	N.D.			
107) cis-1,4-Dichloro-2-butene	14.782	14.783	0.914	53	900243	251.41	ug/L	97	
108) Cyclohexanone	14.904	14.904	0.921	42	1015879	2681.14	ug/L	96	E
109) trans-1,4-Dichloro-2-b...	15.063	15.063	0.931	53	866832	250.07	ug/L	98	
110) Pentachloroethane	15.770	15.770	0.975	167	739912	195.81	ug/L	97	
111) Benzyl chloride	16.319	16.319	1.009	91	4214951	246.01	ug/L	98	
112) bis(2-Chloroisopropyl)...	16.721	16.721	1.034	45	1341090	241.63	ug/L	98	

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

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030410V4\
Data File : 4A432SL.D
Acq On : 5 Mar 2010 12:22 am
Operator : ACJ
InstName : VOA4
Sample : |1202062053|961336|1|VOAF|1|VOA8260BS|
Misc : GEL 5G - SOIL MIX[B] 0215-08A
ALS Vial : 32 Sample Multiplier: 1

Quant Time: Mar 05 11:57:04 2010
Quant Method : C:\msdchem\1\DATA\030110V4\VOA4-8260-030110.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 02 15:03:40 2010
Response via : Initial Calibration
Integrator: RTE



Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-2089**	**Date Collected:**	**02/22/2010 12:00**	**Matrix:**	**R**
Lab Sample ID:	**1202062048**	**Date Received:**	**02/26/2010 08:45**	**%Moisture:**	**9.4**
Client Sample:	**QC for batch 961334**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**RE15-10-8404PS**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**961336**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**03/05/2010 06:17**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**03/04/2010 17:41**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**030410V4\4A445.D**	**Column:**	**DB-624**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane		29.2	ug/kg	0.375	1.10
74-87-3	Chloromethane		43.2	ug/kg	0.331	1.10
75-01-4	Vinyl chloride		44.3	ug/kg	0.331	1.10
74-83-9	Bromomethane		44.4	ug/kg	0.331	1.10
75-00-3	Chloroethane		43.6	ug/kg	0.331	1.10
75-69-4	Trichlorofluoromethane		44.7	ug/kg	0.331	1.10
67-64-1	Acetone		165	ug/kg	1.83	5.52
75-35-4	1,1-Dichloroethylene		45.0	ug/kg	0.331	1.10
74-88-4	Iodomethane		186	ug/kg	1.77	5.52
75-09-2	Methylene chloride		41.2	ug/kg	2.21	5.52
75-15-0	Carbon disulfide		235	ug/kg	1.38	5.52
156-60-5	trans-1,2-Dichloroethylene		45.6	ug/kg	0.331	1.10
75-34-3	1,1-Dichloroethane		46.9	ug/kg	0.331	1.10
78-93-3	2-Butanone		171	ug/kg	1.66	5.52
156-59-2	cis-1,2-Dichloroethylene		47.0	ug/kg	0.331	1.10
594-20-7	2,2-Dichloropropane		40.6	ug/kg	0.331	1.10
67-66-3	Chloroform		46.5	ug/kg	0.331	1.10
74-97-5	Bromochloromethane		43.9	ug/kg	0.364	1.10
71-55-6	1,1,1-Trichloroethane		44.0	ug/kg	0.331	1.10
563-58-6	1,1-Dichloropropene		44.8	ug/kg	0.331	1.10
56-23-5	Carbon tetrachloride		43.2	ug/kg	0.331	1.10
107-06-2	1,2-Dichloroethane		47.0	ug/kg	0.331	1.10
71-43-2	Benzene		45.4	ug/kg	0.331	1.10
79-01-6	Trichloroethylene		47.2	ug/kg	0.364	1.10
78-87-5	1,2-Dichloropropane		47.6	ug/kg	0.331	1.10
75-27-4	Bromodichloromethane		47.1	ug/kg	0.331	1.10
74-95-3	Dibromomethane		46.0	ug/kg	0.331	1.10
108-10-1	4-Methyl-2-pentanone		68.6	ug/kg	1.38	5.52
10061-01-5	cis-1,3-Dichloropropylene		37.1	ug/kg	0.331	1.10
108-88-3	Toluene		44.3	ug/kg	0.331	1.10
10061-02-6	trans-1,3-Dichloropropylene		41.1	ug/kg	0.331	1.10
79-00-5	1,1,2-Trichloroethane		47.7	ug/kg	0.331	1.10
591-78-6	2-Hexanone		58.7	ug/kg	1.66	5.52
142-28-9	1,3-Dichloropropane		46.5	ug/kg	0.331	1.10
127-18-4	Tetrachloroethylene		41.4	ug/kg	0.331	1.10
124-48-1	Dibromochloromethane		44.5	ug/kg	0.331	1.10
106-93-4	1,2-Dibromoethane		44.5	ug/kg	0.331	1.10
108-90-7	Chlorobenzene		44.1	ug/kg	0.331	1.10

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-2089**	**Date Collected:**	**02/22/2010 12:00**	**Matrix:**	**R**
Lab Sample ID:	**1202062048**	**Date Received:**	**02/26/2010 08:45**	**%Moisture:**	**9.4**
Client Sample:	**QC for batch 961334**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**RE15-10-8404PS**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**961336**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**03/05/2010 06:17**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**03/04/2010 17:41**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**030410V4\4A445.D**	**Column:**	**DB-624**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene		43.6	ug/kg	0.331	1.10
179601-23-1	m,p-Xylenes		90.1	ug/kg	0.331	2.21
95-47-6	o-Xylene		46.8	ug/kg	0.331	1.10
100-42-5	Styrene		45.2	ug/kg	0.331	1.10
75-25-2	Bromoform		45.8	ug/kg	0.331	1.10
79-34-5	1,1,2,2-Tetrachloroethane		45.2	ug/kg	0.331	1.10
96-18-4	1,2,3-Trichloropropane		46.9	ug/kg	0.331	1.10
108-86-1	Bromobenzene		44.2	ug/kg	0.331	1.10
103-65-1	n-Propylbenzene		42.4	ug/kg	0.331	1.10
95-49-8	2-Chlorotoluene		46.5	ug/kg	0.331	1.10
98-82-8	Isopropylbenzene		42.8	ug/kg	0.331	1.10
108-67-8	1,3,5-Trimethylbenzene		47.0	ug/kg	0.331	1.10
106-43-4	4-Chlorotoluene		44.7	ug/kg	0.331	1.10
98-06-6	tert-Butylbenzene		45.9	ug/kg	0.331	1.10
95-63-6	1,2,4-Trimethylbenzene		46.1	ug/kg	0.331	1.10
135-98-8	sec-Butylbenzene		42.3	ug/kg	0.331	1.10
99-87-6	4-Isopropyltoluene		42.7	ug/kg	0.331	1.10
541-73-1	1,3-Dichlorobenzene		42.6	ug/kg	0.331	1.10
106-46-7	1,4-Dichlorobenzene		41.4	ug/kg	0.331	1.10
104-51-8	n-Butylbenzene		43.5	ug/kg	0.331	1.10
96-12-8	1,2-Dibromo-3-chloropropane		43.7	ug/kg	0.331	1.10
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.52	ug/kg	1.77	5.52
630-20-6	1,1,1,2-Tetrachloroethane		45.7	ug/kg	0.331	1.10
95-50-1	1,2-Dichlorobenzene		42.7	ug/kg	0.331	1.10

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030410V4\
Data File : 4A445.D
Acq On : 5 Mar 2010 6:17 am
Operator : ACJ
InstName : VOA4
Sample : |1202062048|961336|1|VOAF|1|VOA8260BS|
Misc : LANL 5G N/A SOIL MIX[A] MS 248102001
ALS Vial : 45 Sample Multiplier: 1

Quant Time: Mar 05 11:59:30 2010
Quant Method : C:\msdchem\1\DATA\030110V4\VOA4-8260-030110.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 02 15:03:40 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	Dev(Min)
Internal Standards								
1) Fluorobenzene	10.614	10.620	1.000	96	1077325	50.00	ug/L	0.00
41) Chlorobenzene-d5	13.765	13.771	1.000	117	899665	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	16.174	16.180	1.000	152	592990	50.00	ug/L	0.00
82) B Fluorobenzene	10.614	10.619	1.000	96	1077178	50.00	ug/L	0.00
103) B Chlorobenzene-d5	13.765	13.771	1.000	117	899665	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	16.174	16.179	1.000	152	593146	50.00	ug/L	0.00
System Monitoring Compounds								Dev(Min)
29) 1,2-Dichloroethane-d4	10.260	10.260	0.967	65	204720	45.93	ug/L	0.00
Spiked Amount 50.000	Range 66 - 134		Recovery = 91.86%					
43) Toluene-d8	12.248	12.247	0.890	98	780676	46.78	ug/L	0.00
Spiked Amount 50.000	Range 71 - 128		Recovery = 93.56%					
61) Bromofluorobenzene	14.948	14.954	0.924	95	624714	53.85	ug/L	0.00
Spiked Amount 50.000	Range 65 - 130		Recovery = 107.70%					

Target Compounds	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	QValue
2) Dichlorodifluoromethane	4.904	4.911	0.462	85	180592	26.45	ug/L	100
3) Chloromethane	5.292	5.291	0.499	50	437170	39.12	ug/L	99
4) Vinyl chloride	5.514	5.521	0.520	62	444319	40.12	ug/L	100
5) Bromomethane	6.130	6.137	0.578	94	264711	40.19	ug/L	100
6) Chloroethane	6.288	6.295	0.592	64	225070	39.45	ug/L	99
7) Trichlorofluoromethane	6.657	6.669	0.627	101	456941	40.46	ug/L	100
8) Ethyl ether	6.992	6.998	0.659	59	225286	41.88	ug/L	96
9) Acetone	7.352	7.352	0.693	43	1012636	149.16	ug/L	96
10) 1,1-Dichloroethylene	7.389	7.389	0.696	61	511265	40.71	ug/L	95
11) Iodomethane	7.663	7.663	0.722	142	2182553	168.27	ug/L	97
12) Acetonitrile	7.694	7.699	0.725	41	1321222	1172.45	ug/L	99
13) Methyl acetate	7.742	7.748	0.729	43	533307	92.47	ug/L	95
14) Carbon disulfide	7.773	7.773	0.732	76	4960837	212.38	ug/L	99
15) Methylene chloride	7.937	7.931	0.748	84	363191	37.27	ug/L	92
16) tert-Butyl methyl ether	8.236	8.242	0.776	73	819318	39.50	ug/L	99
17) trans-1,2-Dichloroethy...	8.279	8.285	0.780	61	399161	41.27	ug/L	98
18) Vinyl acetate	8.779	8.705	0.827	43	1341	N.D.		
19) 1,1-Dichloroethane	8.754	8.760	0.825	63	515401	42.50	ug/L	99
20) 2-Butanone	9.321	9.327	0.878	43	1102734	154.81	ug/L	95
21) cis-1,2-Dichloroethylene	9.382	9.388	0.884	61	450919	42.53	ug/L	95
22) 2,2-Dichloropropane	9.413	9.419	0.887	77	239208	36.79	ug/L	89
23) Bromochloromethane	9.657	9.656	0.910	128	152671	39.74	ug/L	90
24) Chloroform	9.687	9.687	0.913	83	536255	42.11	ug/L	97
25) 1,1,1-Trichloroethane	9.974	9.979	0.940	97	395100	39.81	ug/L	97
26) Cyclohexane	10.077	10.083	0.949	56	430467	39.04	ug/L	97
27) 1,1-Dichloropropene	10.132	10.132	0.955	75	377962	40.58	ug/L #	77
28) Carbon tetrachloride	10.169	10.175	0.958	117	369455	39.14	ug/L	100
30) 1,2-Dichloroethane	10.339	10.339	0.974	62	441923	42.53	ug/L	100
31) Benzene	10.370	10.370	0.977	78	1129123	41.11	ug/L	98
32) Cyclohexene	10.492	10.492	0.989	67	536346	40.06	ug/L	97
33) n-Butyl alcohol	10.687	10.693	1.007	56	382447	1349.11	ug/L	91
34) Trichloroethylene	10.998	11.004	1.036	95	310611	42.77	ug/L	99
35) 1,2-Dichloropropane	11.242	11.241	1.059	63	306547	43.13	ug/L	99
36) Methylcyclohexane	11.260	11.260	1.061	83	443849	38.67	ug/L	96
37) Dibromomethane	11.370	11.376	1.071	93	195574	41.69	ug/L	94
38) Bromodichloromethane	11.479	11.485	1.082	83	402131	42.68	ug/L	99
39) 2-Chloroethylvinyl ether	11.693	11.699	1.102	63	2479	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030410V4\
Data File : 4A445.D
Acq On : 5 Mar 2010 6:17 am
Operator : ACJ
InstName : VOA4
Sample : |1202062048|961336|1|VOAF|1|VOA8260BS|
Misc : LANL 5G N/A SOIL MIX[A] MS 248102001
ALS Vial : 45 Sample Multiplier: 1

Quant Time: Mar 05 11:59:30 2010
Quant Method : C:\msdchem\1\DATA\030110V4\VOA4-8260-030110.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 02 15:03:40 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
40) cis-1,3-Dichloropropylene	11.924	11.930	1.123	75	369920	33.64	ug/L	95
42) 4-Methyl-2-pentanone	12.016	12.016	0.873	58	203620	62.08	ug/L	85
44) Toluene	12.321	12.320	0.895	91	1195760	40.15	ug/L	98
45) trans-1,3-Dichloroprop...	12.461	12.461	0.905	75	389383	37.24	ug/L	95
46) 1,1,2-Trichloroethane	12.680	12.680	0.921	83	231631	43.22	ug/L	99
47) 2-Hexanone	12.857	12.857	0.934	43	484073	53.19	ug/L	91
48) 1,3-Dichloropropane	12.875	12.875	0.935	76	468889	42.11	ug/L #	63
49) Tetrachloroethylene	12.918	12.918	0.938	164	224689	37.50	ug/L	96
50) Dibromochloromethane	13.144	13.144	0.955	129	307832	40.33	ug/L	99
51) 1,2-Dibromoethane	13.314	13.320	0.967	107	278707	40.34	ug/L	100
52) Chlorobenzene	13.802	13.802	1.003	112	810074	39.94	ug/L	98
53) 1,1,1,2-Tetrachloroethane	13.851	13.851	1.006	131	318330	41.35	ug/L	97
54) Ethylbenzene	13.857	13.863	1.007	91	1393488	39.51	ug/L	98
55) m,p-Xylenes	13.967	13.973	1.015	106	1141941	81.63	ug/L	95
56) o-Xylene	14.400	14.399	1.046	106	613908	42.34	ug/L	93
57) Styrene	14.400	14.399	1.046	104	963163	40.91	ug/L	96
59) Bromoform	14.656	14.655	0.906	173	222144	41.45	ug/L	100
60) Isopropylbenzene	14.753	14.759	0.912	105	1455313	38.78	ug/L	99
62) 1,1,2,2-Tetrachloroethane	15.015	15.015	0.928	83	441326	40.97	ug/L	98
63) 1,2,3-Trichloropropane	15.101	15.107	0.934	110	124665	42.47	ug/L	96
64) Bromobenzene	15.162	15.168	0.937	156	413539	40.05	ug/L	95
65) n-Propylbenzene	15.180	15.180	0.939	91	1760458	38.43	ug/L	96
66) 1,3,5-Trimethylbenzene	15.326	15.332	0.948	105	1460323	42.56	ug/L	97
67) 2-Chlorotoluene	15.326	15.332	0.948	126	430811	42.13	ug/L	93
68) 4-Chlorotoluene	15.430	15.430	0.954	91	1158773	40.50	ug/L	98
69) tert-Butylbenzene	15.704	15.704	0.971	134	312669	41.57	ug/L	95
70) 1,2,4-Trimethylbenzene	15.741	15.741	0.973	105	1461540	41.77	ug/L	99
71) sec-Butylbenzene	15.930	15.930	0.985	105	1760816	38.27	ug/L	98
72) 4-Isopropyltoluene	16.052	16.051	0.992	119	1430576	38.65	ug/L	98
73) 1,3-Dichlorobenzene	16.119	16.119	0.997	146	792564	38.61	ug/L	99
74) 1,4-Dichlorobenzene	16.204	16.204	1.002	146	787469	37.50	ug/L	100
75) n-Butylbenzene	16.503	16.503	1.020	91	1382502	39.36	ug/L	98
76) 1,2-Dichlorobenzene	16.637	16.643	1.029	146	773109	38.70	ug/L	99
77) 1,2-Dibromo-3-chloropr...	17.521	17.527	1.083	157	75910	39.61	ug/L	94
78) 1,2,4-Trichlorobenzene	18.624	18.630	1.152	180	299271	29.29	ug/L	100
79) Hexachlorobutadiene	18.813	18.819	1.163	225	209528	31.65	ug/L	99
80) Naphthalene	19.027	19.026	1.176	128	752684	29.61	ug/L	100
81) 1,2,3-Trichlorobenzene	19.386	19.386	1.199	180	247193	29.05	ug/L	99
83) Chlorotrifluoroethylene	0.000	4.826	0.000		0	N.D.		
84) 2-Chloro-1,1,1-trifluo...	0.000	5.657	0.000		0	N.D.		
85) Acrolein	7.236	7.180	0.682		0m	N.D.	d	
86) Trichlorotrifluoroethane	7.456	7.369	0.702		0m	N.D.	d	
87) Isopropyl Alcohol	7.346	7.430	0.692		0m	N.D.	d	
88) Allyl chloride	7.694	7.796	0.725		0m	N.D.	d	
89) tert-Butyl Alcohol	0.000	7.924	0.000		0	N.D.		
90) Acrylonitrile	8.163	8.174	0.769		0m	N.D.	d	
91) Isopropyl ether	8.736	8.741	0.823		0m	N.D.	d	
92) 2-Chloro-1,3-butadiene	8.864	8.869	0.835		0m	N.D.	d	
93) Ethyl tert-butyl ether	9.151	9.143	0.862		0m	N.D.	d	
94) Ethyl acetate	9.321	9.338	0.878		0m	N.D.	d	
95) Propionitrile	9.321	9.393	0.878		0m	N.D.	d	
96) Methacrylonitrile	9.626	9.576	0.907		0m	N.D.	d	
97) Tetrahydrofuran	9.675	9.710	0.912		0m	N.D.	d	
98) Isobutyl alcohol	10.004	10.009	0.943		0m	N.D.	d	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030410V4\
Data File : 4A445.D
Acq On : 5 Mar 2010 6:17 am
Operator : ACJ
InstName : VOA4
Sample : |1202062048|961336|1|VOAF|1|VOA8260BS|
Misc : LANL 5G N/A SOIL MIX[A] MS 248102001
ALS Vial : 45 Sample Multiplier: 1

Quant Time: Mar 05 11:59:30 2010
Quant Method : C:\msdchem\1\DATA\030110V4\VOA4-8260-030110.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 02 15:03:40 2010
Response via : Initial Calibration
Integrator: RTE

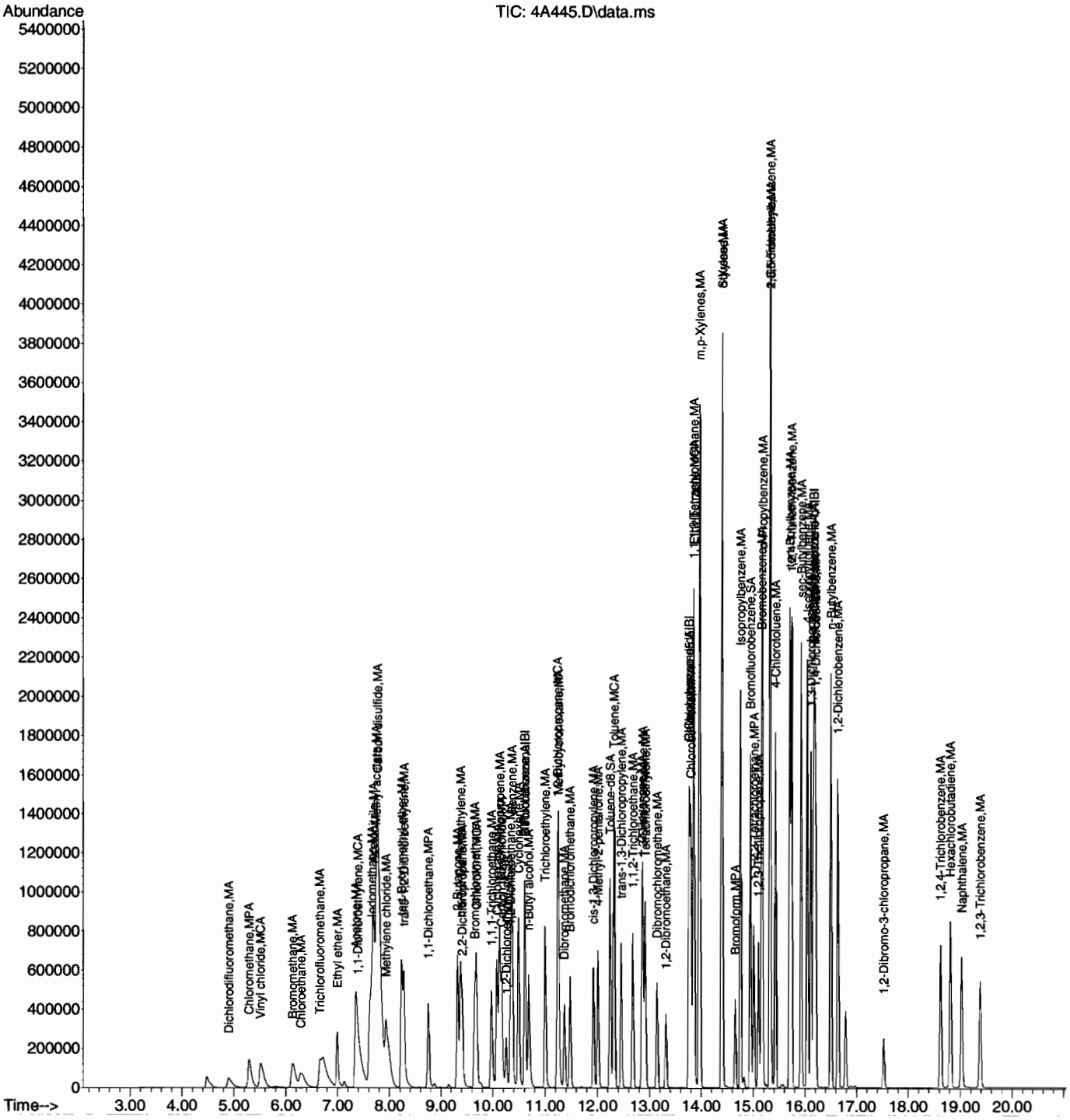
	Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
99)	Methyl tert-amyl ether	10.370	10.387	0.977		0m	N.D.	d
100)	Methyl methacrylate	11.260	11.204	1.061		0m	N.D.	d
101)	1,4-Dioxane	11.376	11.326	1.072		0m	N.D.	d
102)	2-Nitropropane	11.638	11.673	1.096		0m	N.D.	d
104)	Ethyl methacrylate	12.467	12.466	0.906		0m	N.D.	d
106)	1-Chlorohexane	13.765	13.661	0.851		0m	N.D.	d
107)	cis-1,4-Dichloro-2-butene	14.753	14.783	0.912		0m	N.D.	d
108)	Cyclohexanone	14.887	14.904	0.920		0m	N.D.	d
109)	trans-1,4-Dichloro-2-b...	15.070	15.063	0.932		0m	N.D.	d
110)	Pentachloroethane	15.765	15.770	0.975		0m	N.D.	d
111)	Benzyl chloride	16.308	16.319	1.008		0m	N.D.	d
112)	bis(2-Chloroisopropyl)...	16.783	16.721	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\030410V4\
Data File : 4A445.D
Acq On : 5 Mar 2010 6:17 am
Operator : ACJ
InstName : VOA4
Sample : |1202062048|961336|1|VOAF|1|VOA8260BS|
Misc : LANL 5G N/A SOIL MIX[A] MS 248102001
ALS Vial : 45 Sample Multiplier: 1

Quant Time: Mar 05 11:59:30 2010
Quant Method : C:\msdchem\1\DATA\030110V4\VOA4-8260-030110.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 02 15:03:40 2010
Response via : Initial Calibration
Integrator: RTE



Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-2089**	**Date Collected:**	**02/22/2010 12:00**	**Matrix:**	**R**
Lab Sample ID:	**1202062049**	**Date Received:**	**02/26/2010 08:45**	**%Moisture:**	**9.4**
Client Sample:	**QC for batch 961334**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**RE15-10-8404PSD**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**961336**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**03/05/2010 06:45**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**03/04/2010 17:42**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**030410V4\4A446.D**	**Column:**	**DB-624**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane		28.9	ug/kg	0.375	1.10
74-87-3	Chloromethane		40.4	ug/kg	0.331	1.10
75-01-4	Vinyl chloride		43.8	ug/kg	0.331	1.10
74-83-9	Bromomethane		43.3	ug/kg	0.331	1.10
75-00-3	Chloroethane		44.1	ug/kg	0.331	1.10
75-69-4	Trichlorofluoromethane		44.3	ug/kg	0.331	1.10
67-64-1	Acetone		155	ug/kg	1.83	5.52
75-35-4	1,1-Dichloroethylene		44.5	ug/kg	0.331	1.10
74-88-4	Iodomethane		191	ug/kg	1.77	5.52
75-09-2	Methylene chloride		40.7	ug/kg	2.21	5.52
75-15-0	Carbon disulfide		227	ug/kg	1.38	5.52
156-60-5	trans-1,2-Dichloroethylene		45.4	ug/kg	0.331	1.10
75-34-3	1,1-Dichloroethane		46.7	ug/kg	0.331	1.10
78-93-3	2-Butanone		158	ug/kg	1.66	5.52
156-59-2	cis-1,2-Dichloroethylene		45.5	ug/kg	0.331	1.10
594-20-7	2,2-Dichloropropane		40.2	ug/kg	0.331	1.10
67-66-3	Chloroform		45.1	ug/kg	0.331	1.10
74-97-5	Bromochloromethane		43.8	ug/kg	0.364	1.10
71-55-6	1,1,1-Trichloroethane		44.2	ug/kg	0.331	1.10
563-58-6	1,1-Dichloropropene		44.5	ug/kg	0.331	1.10
56-23-5	Carbon tetrachloride		43.6	ug/kg	0.331	1.10
107-06-2	1,2-Dichloroethane		45.6	ug/kg	0.331	1.10
71-43-2	Benzene		44.5	ug/kg	0.331	1.10
79-01-6	Trichloroethylene		47.7	ug/kg	0.364	1.10
78-87-5	1,2-Dichloropropane		46.6	ug/kg	0.331	1.10
75-27-4	Bromodichloromethane		46.2	ug/kg	0.331	1.10
74-95-3	Dibromomethane		44.5	ug/kg	0.331	1.10
108-10-1	4-Methyl-2-pentanone		75.1	ug/kg	1.38	5.52
10061-01-5	cis-1,3-Dichloropropylene		37.2	ug/kg	0.331	1.10
108-88-3	Toluene		44.7	ug/kg	0.331	1.10
10061-02-6	trans-1,3-Dichloropropylene		41.1	ug/kg	0.331	1.10
79-00-5	1,1,2-Trichloroethane		47.4	ug/kg	0.331	1.10
591-78-6	2-Hexanone		59.1	ug/kg	1.66	5.52
142-28-9	1,3-Dichloropropane		45.7	ug/kg	0.331	1.10
127-18-4	Tetrachloroethylene		42.8	ug/kg	0.331	1.10
124-48-1	Dibromochloromethane		45.1	ug/kg	0.331	1.10
106-93-4	1,2-Dibromoethane		45.5	ug/kg	0.331	1.10
108-90-7	Chlorobenzene		44.5	ug/kg	0.331	1.10

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-2089**	**Date Collected:**	**02/22/2010 12:00**	**Matrix:**	**R**
Lab Sample ID:	**1202062049**	**Date Received:**	**02/26/2010 08:45**	**%Moisture:**	**9.4**
Client Sample:	**QC for batch 961334**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**RE15-10-8404PSD**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**961336**	**Inst:**	**VOA4.I**	**Dilution:**	**1**
Run Date:	**03/05/2010 06:45**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**
Prep Date:	**03/04/2010 17:42**	**Aliquot:**	**5 g**	**Final Volume:**	**5 mL**
Data File:	**030410V4\4A446.D**	**Column:**	**DB-624**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene		46.0	ug/kg	0.331	1.10
179601-23-1	m,p-Xylenes		91.5	ug/kg	0.331	2.21
95-47-6	o-Xylene		47.4	ug/kg	0.331	1.10
100-42-5	Styrene		46.3	ug/kg	0.331	1.10
75-25-2	Bromoform		47.1	ug/kg	0.331	1.10
79-34-5	1,1,2,2-Tetrachloroethane		44.1	ug/kg	0.331	1.10
96-18-4	1,2,3-Trichloropropane		45.5	ug/kg	0.331	1.10
108-86-1	Bromobenzene		45.2	ug/kg	0.331	1.10
103-65-1	n-Propylbenzene		42.9	ug/kg	0.331	1.10
95-49-8	2-Chlorotoluene		48.0	ug/kg	0.331	1.10
98-82-8	Isopropylbenzene		43.8	ug/kg	0.331	1.10
108-67-8	1,3,5-Trimethylbenzene		48.5	ug/kg	0.331	1.10
106-43-4	4-Chlorotoluene		45.9	ug/kg	0.331	1.10
98-06-6	tert-Butylbenzene		47.6	ug/kg	0.331	1.10
95-63-6	1,2,4-Trimethylbenzene		46.6	ug/kg	0.331	1.10
135-98-8	sec-Butylbenzene		42.2	ug/kg	0.331	1.10
99-87-6	4-Isopropyltoluene		43.8	ug/kg	0.331	1.10
541-73-1	1,3-Dichlorobenzene		43.4	ug/kg	0.331	1.10
106-46-7	1,4-Dichlorobenzene		42.4	ug/kg	0.331	1.10
104-51-8	n-Butylbenzene		44.3	ug/kg	0.331	1.10
96-12-8	1,2-Dibromo-3-chloropropane		42.7	ug/kg	0.331	1.10
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane*	U	5.52	ug/kg	1.77	5.52
630-20-6	1,1,1,2-Tetrachloroethane		47.7	ug/kg	0.331	1.10
95-50-1	1,2-Dichlorobenzene		43.3	ug/kg	0.331	1.10

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030410V4\
Data File : 4A446.D
Acq On : 5 Mar 2010 6:45 am
Operator : ACJ
InstName : VOA4
Sample : |1202062049|961336|1|VOAF|1|VOA8260BS|
Misc : LANL 5G N/A SOIL MIX[A] MSD 248102001
ALS Vial : 46 Sample Multiplier: 1

Quant Time: Mar 05 11:59:32 2010
Quant Method : C:\msdchem\1\DATA\030110V4\VOA4-8260-030110.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 02 15:03:40 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
Internal Standards								Dev(Min)
1) Fluorobenzene	10.613	10.620	1.000	96	1165500	50.00	ug/L	0.00
41) Chlorobenzene-d5	13.764	13.771	1.000	117	950240	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	16.173	16.180	1.000	152	611523	50.00	ug/L	0.00
82) B Fluorobenzene	10.613	10.619	1.000	96	1165584	50.00	ug/L	0.00
103) B Chlorobenzene-d5	13.764	13.771	1.000	117	950240	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	16.173	16.179	1.000	152	611627	50.00	ug/L	0.00
System Monitoring Compounds								Dev(Min)
29) 1,2-Dichloroethane-d4	10.259	10.260	0.967	65	216519	44.91	ug/L	0.00
Spiked Amount 50.000	Range 66 - 134		Recovery = 89.82%					
43) Toluene-d8	12.246	12.247	0.890	98	824035	46.75	ug/L	0.00
Spiked Amount 50.000	Range 71 - 128		Recovery = 93.50%					
61) Bromofluorobenzene	14.947	14.954	0.924	95	658432	55.03	ug/L	0.00
Spiked Amount 50.000	Range 65 - 130		Recovery = 110.06%					

Target Compounds	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	QValue
2) Dichlorodifluoromethane	4.897	4.911	0.461	85	193093	26.14	ug/L	100
3) Chloromethane	5.292	5.291	0.499	50	442560	36.60	ug/L	100
4) Vinyl chloride	5.521	5.521	0.520	62	474729	39.62	ug/L	100
5) Bromomethane	6.130	6.137	0.578	94	279194	39.18	ug/L	100
6) Chloroethane	6.295	6.295	0.593	64	246359	39.91	ug/L	98
7) Trichlorofluoromethane	6.662	6.669	0.628	101	490577	40.15	ug/L	99
8) Ethyl ether	6.991	6.998	0.659	59	235275	40.43	ug/L	95
9) Acetone	7.351	7.352	0.693	43	1028890	140.08	ug/L	97
10) 1,1-Dichloroethylene	7.394	7.389	0.697	61	547161	40.27	ug/L	96
11) Iodomethane	7.656	7.663	0.721	142	2432002	173.32	ug/L	98
12) Acetonitrile	7.699	7.699	0.725	41	1282418	1051.92	ug/L	99
13) Methyl acetate	7.741	7.748	0.729	43	548040	87.84	ug/L	97
14) Carbon disulfide	7.778	7.773	0.733	76	5195984	205.62	ug/L	99
15) Methylene chloride	7.930	7.931	0.747	84	388834	36.89	ug/L	94
16) tert-Butyl methyl ether	8.235	8.242	0.776	73	863805	38.50	ug/L	99
17) trans-1,2-Dichloroethy...	8.278	8.285	0.780	61	430192	41.12	ug/L	97
18) Vinyl acetate	8.735	8.705	0.823	43	1207	N.D.		
19) 1,1-Dichloroethane	8.753	8.760	0.825	63	554792	42.29	ug/L	100
20) 2-Butanone	9.320	9.327	0.878	43	1103156	143.16	ug/L	96
21) cis-1,2-Dichloroethylene	9.381	9.388	0.884	61	472800	41.22	ug/L	97
22) 2,2-Dichloropropane	9.412	9.419	0.887	77	255951	36.38	ug/L	92
23) Bromochloromethane	9.656	9.656	0.910	128	164722	39.63	ug/L	92
24) Chloroform	9.686	9.687	0.913	83	562624	40.84	ug/L	99
25) 1,1,1-Trichloroethane	9.973	9.979	0.940	97	429406	39.99	ug/L	97
26) Cyclohexane	10.076	10.083	0.949	56	458528	38.44	ug/L	85
27) 1,1-Dichloropropene	10.131	10.132	0.955	75	406413	40.33	ug/L #	78
28) Carbon tetrachloride	10.174	10.175	0.959	117	402987	39.46	ug/L	99
30) 1,2-Dichloroethane	10.338	10.339	0.974	62	464520	41.32	ug/L	99
31) Benzene	10.369	10.370	0.977	78	1196970	40.28	ug/L	98
32) Cyclohexene	10.491	10.492	0.989	67	578995	39.97	ug/L	98
33) n-Butyl alcohol	10.686	10.693	1.007	56	488899	1594.15	ug/L	92
34) Trichloroethylene	11.003	11.004	1.037	95	339498	43.21	ug/L	98
35) 1,2-Dichloropropane	11.241	11.241	1.059	63	324396	42.19	ug/L	99
36) Methylcyclohexane	11.259	11.260	1.061	83	479516	38.62	ug/L	97
37) Dibromomethane	11.369	11.376	1.071	93	204350	40.27	ug/L	95
38) Bromodichloromethane	11.478	11.485	1.082	83	426178	41.81	ug/L	100
39) 2-Chloroethylvinyl ether	11.704	11.699	1.103	63	2475	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030410V4\
Data File : 4A446.D
Acq On : 5 Mar 2010 6:45 am
Operator : ACJ
InstName : VOA4
Sample : |1202062049|961336|1|VOAF|1|VOA8260BS|
Misc : LANL 5G N/A SOIL MIX[A] MSD 248102001
ALS Vial : 46 Sample Multiplier: 1

Quant Time: Mar 05 11:59:32 2010
Quant Method : C:\msdchem\1\DATA\030110V4\VOA4-8260-030110.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 02 15:03:40 2010
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
40) cis-1,3-Dichloropropylene	11.929	11.930	1.124	75	400807	33.69	ug/L	96
42) 4-Methyl-2-pentanone	12.015	12.016	0.873	58	235570	68.00	ug/L #	84
44) Toluene	12.320	12.320	0.895	91	1273879	40.50	ug/L	99
45) trans-1,3-Dichloroprop...	12.460	12.461	0.905	75	410987	37.21	ug/L	94
46) 1,1,2-Trichloroethane	12.679	12.680	0.921	83	242872	42.90	ug/L	98
47) 2-Hexanone	12.856	12.857	0.934	43	514717	53.54	ug/L	92
48) 1,3-Dichloropropane	12.874	12.875	0.935	76	487014	41.41	ug/L #	62
49) Tetrachloroethylene	12.917	12.918	0.938	164	245335	38.76	ug/L	97
50) Dibromochloromethane	13.143	13.144	0.955	129	329504	40.87	ug/L	100
51) 1,2-Dibromoethane	13.313	13.320	0.967	107	300551	41.18	ug/L	100
52) Chlorobenzene	13.801	13.802	1.003	112	863066	40.29	ug/L	98
53) 1,1,1,2-Tetrachloroethane	13.850	13.851	1.006	131	351605	43.24	ug/L	87
54) Ethylbenzene	13.862	13.863	1.007	91	1551805	41.66	ug/L	98
55) m,p-Xylenes	13.966	13.973	1.015	106	1223842	82.82	ug/L	96
56) o-Xylene	14.399	14.399	1.046	106	657353	42.93	ug/L	95
57) Styrene	14.399	14.399	1.046	104	1041820	41.90	ug/L	98
59) Bromoform	14.655	14.655	0.906	173	235534	42.61	ug/L	99
60) Isopropylbenzene	14.758	14.759	0.913	105	1535609	39.68	ug/L	99
62) 1,1,2,2-Tetrachloroethane	15.014	15.015	0.928	83	443354	39.92	ug/L	100
63) 1,2,3-Trichloropropane	15.106	15.107	0.934	110	124823	41.24	ug/L	96
64) Bromobenzene	15.167	15.168	0.938	156	435700	40.92	ug/L	95
65) n-Propylbenzene	15.179	15.180	0.939	91	1835433	38.85	ug/L	97
66) 1,3,5-Trimethylbenzene	15.331	15.332	0.948	105	1553278	43.90	ug/L	98
67) 2-Chlorotoluene	15.331	15.332	0.948	126	458444	43.47	ug/L	93
68) 4-Chlorotoluene	15.429	15.430	0.954	91	1227579	41.60	ug/L	99
69) tert-Butylbenzene	15.703	15.704	0.971	134	333997	43.06	ug/L	96
70) 1,2,4-Trimethylbenzene	15.740	15.741	0.973	105	1523686	42.23	ug/L	87
71) sec-Butylbenzene	15.929	15.930	0.985	105	1811829	38.18	ug/L	98
72) 4-Isopropyltoluene	16.051	16.051	0.992	119	1512674	39.63	ug/L	98
73) 1,3-Dichlorobenzene	16.118	16.119	0.997	146	831509	39.28	ug/L	99
74) 1,4-Dichlorobenzene	16.203	16.204	1.002	146	832366	38.44	ug/L	100
75) n-Butylbenzene	16.502	16.503	1.020	91	1453023	40.11	ug/L	97
76) 1,2-Dichlorobenzene	16.642	16.643	1.029	146	807408	39.19	ug/L	100
77) 1,2-Dibromo-3-chloropr...	17.526	17.527	1.084	157	76366	38.64	ug/L	96
78) 1,2,4-Trichlorobenzene	18.629	18.630	1.152	180	316368	30.02	ug/L	100
79) Hexachlorobutadiene	18.812	18.819	1.163	225	219667	32.18	ug/L	98
80) Naphthalene	19.026	19.026	1.176	128	764498	29.16	ug/L	100
81) 1,2,3-Trichlorobenzene	19.385	19.386	1.199	180	259948	29.62	ug/L	99
83) Chlorotrifluoroethylene	0.000	4.826	0.000		0	N.D.		
84) 2-Chloro-1,1,1-trifluo...	0.000	5.657	0.000		0	N.D.		
85) Acrolein	7.180	7.180	0.677		0m	N.D.	d	
86) Trichlorotrifluoroethane	7.375	7.369	0.695		0m	N.D.	d	
87) Isopropyl Alcohol	7.345	7.430	0.692		0m	N.D.	d	
88) Allyl chloride	7.699	7.796	0.725		0m	N.D.	d	
89) tert-Butyl Alcohol	7.918	7.924	0.746		0m	N.D.	d	
90) Acrylonitrile	8.235	8.174	0.776		0m	N.D.	d	
91) Isopropyl ether	8.729	8.741	0.822		0m	N.D.	d	
92) 2-Chloro-1,3-butadiene	8.869	8.869	0.836		0m	N.D.	d	
93) Ethyl tert-butyl ether	9.137	9.143	0.861		0m	N.D.	d	
94) Ethyl acetate	9.320	9.338	0.878		0m	N.D.	d	
95) Propionitrile	9.320	9.393	0.878		0m	N.D.	d	
96) Methacrylonitrile	0.000	9.576	0.000		0	N.D.		
97) Tetrahydrofuran	9.686	9.710	0.913		0m	N.D.	d	
98) Isobutyl alcohol	10.009	10.009	0.943		0m	N.D.	d	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\030410V4\
Data File : 4A446.D
Acq On : 5 Mar 2010 6:45 am
Operator : ACJ
InstName : VOA4
Sample : |1202062049|961336|1|VOAF|1|VOA8260BS|
Misc : LANL 5G N/A SOIL MIX[A] MSD 248102001
ALS Vial : 46 Sample Multiplier: 1

Quant Time: Mar 05 11:59:32 2010
Quant Method : C:\msdchem\1\DATA\030110V4\VOA4-8260-030110.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 02 15:03:40 2010
Response via : Initial Calibration
Integrator: RTE

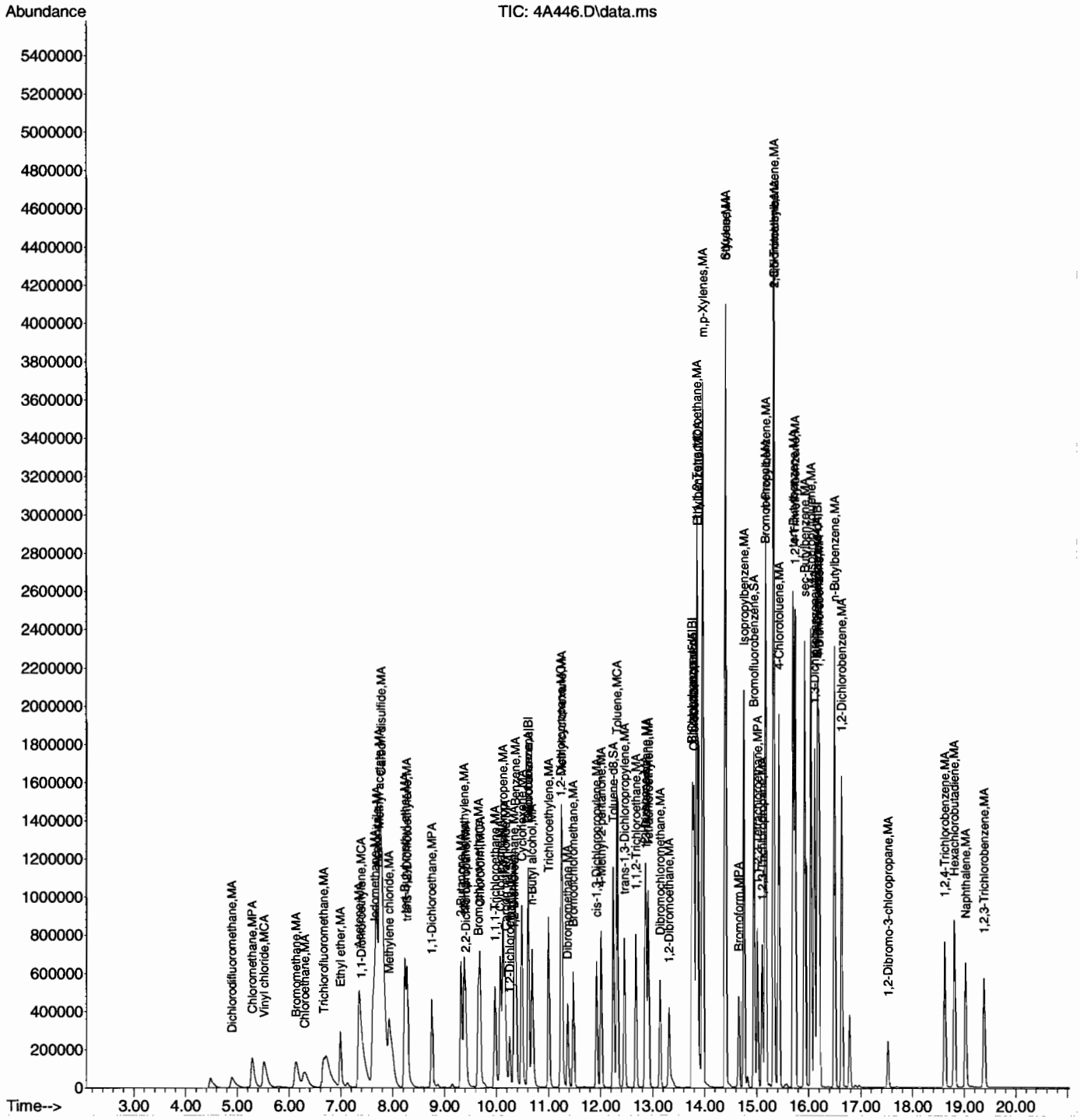
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
99) Methyl tert-amyl ether	10.375	10.387	0.978		0m	N.D.	d
100) Methyl methacrylate	11.259	11.204	1.061		0m	N.D.	d
101) 1,4-Dioxane	11.363	11.326	1.071		0m	N.D.	d
102) 2-Nitropropane	11.698	11.673	1.102		0m	N.D.	d
104) Ethyl methacrylate	12.460	12.466	0.905		0m	N.D.	d
106) 1-Chlorohexane	13.630	13.661	0.843		0m	N.D.	d
107) cis-1,4-Dichloro-2-butene	14.758	14.783	0.913		0m	N.D.	d
108) Cyclohexanone	14.917	14.904	0.922		0m	N.D.	d
109) trans-1,4-Dichloro-2-b...	15.057	15.063	0.931		0m	N.D.	d
110) Pentachloroethane	15.776	15.770	0.975		0m	N.D.	d
111) Benzyl chloride	16.313	16.319	1.009		0m	N.D.	d
112) bis(2-Chloroisopropyl)...	16.782	16.721	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\030410V4\
Data File : 4A446.D
Acq On : 5 Mar 2010 6:45 am
Operator : ACJ
InstName : VOA4
Sample : |1202062049|961336|1|VOAF|1|VOA8260BS|
Misc : LANL 5G N/A SOIL MIX[A] MSD 248102001
ALS Vial : 46 Sample Multiplier: 1

Quant Time: Mar 05 11:59:32 2010
Quant Method : C:\msdchem\1\DATA\030110V4\VOA4-8260-030110.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Tue Mar 02 15:03:40 2010
Response via : Initial Calibration
Integrator: RTE



Miscellaneous

Prep Logbook

Volatile Organic Compounds (VOC) by Gas Chromatograph/Mass Spectrometer

Batch ID: **961334** Verified by: _____

Analyst: Amy Jamison
Method: SW846 5030
Lab SOP: GL-OA-E-038 REV# 14
Instrument: Sartorius Balance B-001

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
1202062050 LCS	04-MAR-2010 10:00:00	Soil	5	5	1	
1202062051 LCS	04-MAR-2010 10:15:00	Soil	5	5	1	
1202062047 MB	04-MAR-2010 10:30:00	Soil	5	5	1	
248114001	04-MAR-2010 17:13:00	Misc Solid	5	5	1	
248114002	04-MAR-2010 17:14:00	Soil	5	5	1	
248114003	04-MAR-2010 17:15:00	Soil	5	5	1	
248114004	04-MAR-2010 17:16:00	Soil	5	5	1	
248114005	04-MAR-2010 17:17:00	Soil	5	5	1	
248114006	04-MAR-2010 17:18:00	Soil	5	5	1	
248114007	04-MAR-2010 17:19:00	Soil	5	5	1	
248114008	04-MAR-2010 17:20:00	Soil	5	5	1	
248102001	04-MAR-2010 17:40:00	Soil	5	5	1	
1202062048 PS (248102001)	04-MAR-2010 17:41:00	Soil	5	5	1	
1202062049 PSD (248102001)	04-MAR-2010 17:42:00	Soil	5	5	1	
248102002	04-MAR-2010 17:43:00	Soil	5	5	1	
248102003	04-MAR-2010 17:44:00	Soil	5	5	1	
248102004	04-MAR-2010 17:45:00	Soil	5	5	1	
248102005	04-MAR-2010 17:46:00	Soil	5	5	1	
248102006	04-MAR-2010 17:47:00	Soil	5	5	1	
248102007	04-MAR-2010 17:48:00	Soil	5	5	1	
248102008	04-MAR-2010 17:49:00	Soil	5	5	1	
1202062052 LCS	04-MAR-2010 21:30:00	Soil	5	5	1	
1202062053 LCS	04-MAR-2010 21:45:00	Soil	5	5	1	
1202062144 MB	04-MAR-2010 22:00:00	Soil	5	5	1	

Reagent/Solvent Lot ID	Description	Amount

Comments:

GEL Laboratories, LLC
Revision:11/22/04

ORGANIC RUN LOG - INSTRUMENT ID#VOA4

Date: 3/1/2010 Method 8260B/624 Operator: ACJ

REVIEWED BY: _____
DATE: _____

HARDWARE CONFIGURATION & METHOD CONDITIONS SUMMARY No# 1

Daily Instrument Readings:
Multiplier Voltage: 1671

CALIBRATION & CC INFORMATION:

Initial Calibration Date: 3/1/2010

(See pg. 63 for ICAL Std. Sci. Ids)

NaHSO4 lot # N/A

Cl test lot # _____

Sequence Number: 030110V4

Daily Standard Volume Added for Purge (ul)

Solution ID#		Blk/ Smpl	CCV	MS/ LCS	BFB
CCV					
IS	UVM100114-01	1	1	1	
SS	UVM091216-10	1	1	1	
LCS/MS					
BFB	UVM091216-10				1
SHORT					
DHEC					

Purge Amount

5	Water Purge Vol:
N/A	Soil Purge Wt.
N/A	Mid level ext. MeOH Vol:
N/A	ul
N/A	Methanol Lot #
x	Heated Purge

Analysis Date	Time	Data File	Lab Sample ID	Client	Batch #	Wt.(g) or Vol(ml/ul)	Dil. Factor	pH	AS Slot #	Matrix w or s	Analyst	Cl test (Y/N)	Acceptable (O/X)	Comments
1 Mar 2010	19:08	4A101.D	UVM091216-10	GEL	BFB	1UL	1	N/A	1	W	ACJ	N/A	O	
1 Mar 2010	19:35	4A102.D	120256-----	GEL	BLANK	5ML	1	N/A	2	w	ACJ	N/A	X	
1 Mar 2010	20:03	4A103.D	W4VM100301-01	GEL	ICAL	5+5UL	1	N/A	3	w	ACJ	N/A	O	UVM100126-01C+UVM100222-01A
1 Mar 2010	20:30	4A104.D	W4VM100301-02	GEL	ICAL	5+5UL	1	N/A	4	w	ACJ	N/A	O	UVM100126-02C+UVM100222-02A
1 Mar 2010	20:58	4A105.D	W4VM100301-03	GEL	ICAL	5+5UL	1	N/A	5	w	ACJ	N/A	X	UVM100126-02C+UVM100222-02A
1 Mar 2010	21:26	4A106.D	W4VM100301-04	GEL	ICAL	5+5UL	1	N/A	6	w	ACJ	N/A	O	UVM100126-03C+UVM100222-03A
1 Mar 2010	21:54	4A107.D	W4VM100301-05	GEL	ICAL	5+5UL	1	N/A	7	w	ACJ	N/A	O	UVM100126-04C+UVM100222-04A
1 Mar 2010	22:21	4A108.D	W4VM100301-06	GEL	ICAL	5+5UL	1	N/A	8	w	ACJ	N/A	O	UVM100126-05C+UVM100222-05A
1 Mar 2010	22:49	4A109.D	W4VM100301-07	GEL	ICAL	5+5UL	1	N/A	9	w	ACJ	N/A	X	UVM100126-06C+UVM100222-06A
1 Mar 2010	23:16	4A110.D	W4VM100301-08	GEL	ICAL	2.5+5UL	1	N/A	10	w	ACJ	N/A	O	UVM100126-07C+UVM100222-07A
1 Mar 2010	23:44	4A111.D	W4VM100301-09	GEL	ICAL	5+5UL	1	N/A	11	w	ACJ	N/A	O	UVM100126-08C+UVM100222-08A
2 Mar 2010	00:12	4A112.D	120256-----	GEL	BLANK	5ML	1	N/A	12	w	ACJ	N/A	X	
2 Mar 2010	00:39	4A113.D	W4VM100301-10	GEL	ICAL	5+5UL	1	N/A	13	w	ACJ	N/A	O	UVM100215-01+UVM100227-01A
2 Mar 2010	01:06	4A114.D	W4VM100301-11	GEL	ICAL	5+5UL	1	N/A	14	w	ACJ	N/A	O	UVM100215-02+UVM100227-02A
2 Mar 2010	01:34	4A115.D	W4VM100301-12	GEL	ICAL	5+5UL	1	N/A	15	w	ACJ	N/A	O	UVM100215-03+UVM100227-03A
2 Mar 2010	02:01	4A116.D	W4VM100301-13	GEL	ICAL	5+5UL	1	N/A	16	w	ACJ	N/A	O	UVM100215-04+UVM100227-04A
2 Mar 2010	02:28	4A117.D	W4VM100301-14	GEL	ICAL	5+5UL	1	N/A	17	w	ACJ	N/A	O	UVM100215-05+UVM100227-05A
2 Mar 2010	02:56	4A118.D	W4VM100301-15	GEL	ICAL	5+5UL	1	N/A	18	w	ACJ	N/A	O	UVM100215-06+UVM100227-06A
2 Mar 2010	03:23	4A119.D	W4VM100301-16	GEL	ICAL	5+5UL	1	N/A	19	w	ACJ	N/A	O	UVM100215-07+UVM100227-07A
2 Mar 2010	03:50	4A120.D	120256-----	GEL	BLANK	5ML	1	N/A	20	w	ACJ	N/A	X	
2 Mar 2010	04:18	4A121.D	W4VM100301-17	GEL	ICV	5+5UL	1	N/A	21	w	ACJ	N/A	X	UVM100126-02E+IVM100301-01
2 Mar 2010	04:45	4A122.D	W4VM100301-18	GEL	ICV	5+5UL	1	N/A	22	w	ACJ	N/A	O	UVM100220-01B+IVM100301-01
2 Mar 2010	05:13	4A123.D	W4VM100301-19	GEL	ICV	5+5UL	1	N/A	23	w	ACJ	N/A	O	UVM100215-08A+UVM100125-08E
2 Mar 2010	05:41	4A124.D	120256-----	GEL	BLANK	5ML	1	N/A	24	w	ACJ	N/A	X	
2 Mar 2010	06:08	4A125.D	W4VM100301-20	GEL	TEST	5UL	1	N/A	25	w	ACJ	N/A	X	UVM100106-07C/UVM100222-07A

GEL Laboratories, LLC
Revision:11/22/04

ORGANIC RUN LOG - INSTRUMENT ID#VOA4

Date: 3/4/2010 Method 8260B/624 Operator: ACJ

REVIEWED BY: _____
DATE: _____

HARDWARE CONFIGURATION & METHOD CONDITIONS SUMMARY No# 1

Daily Instrument Readings:
Multiplier Voltage: 1671

CALIBRATION & CC INFORMATION:

Initial Calibration Date: 3/1/2010

(See pg. 63 for ICAL Std. Sci. Ids)

NaHSO4 lot # N/A

Cl test lot # 81710

Sequence Number: 030410V4PM

Daily Standard Solution ID#		Volume Added for Purge (ul) Blk/ Smpl	CCV	MS/ LCS	BFB
CCV	W4VM100304-05		5+5		
IS	UVM100114-01	1	1	1	
SS	UVM091216-10	1	1	1	
LCS/MS	W4VM100304-07			5+5	
BFB	UVM091216-10				1
SHORT	W4VM100304-08/09		5	5	
DHEC	N/A			5	

Purge Amount	
5	Water Purge Vol:
5G	Soil Purge Wt.
N/A	Mid level ext. MeOH Vol:
N/A	ul
N/A	Methanol Lot #
x	Heated Purge

Analysis Date Time	Data File	Lab Sample ID	Client	Batch #	Wt.(g) or Vol(ml/ul)	Dil. Factor	pH	AS Slot #	Matrix w or s	Analyst	Cl test (Y/N)	Acceptable (O/X)	Comments
4 Mar 2010 22:05	4A427.D	UVM091216-10	GEL	BFB2	5ML	1	N/A	27	W	ACJ	N/A	O	
4 Mar 2010 22:33	4A428.D	W4VM100304-05	GEL	CCV	5ML	1	N/A	28	W	ACJ	N/A	O	UVM100106-07D+UVM100222-07A
4 Mar 2010 23:00	4A429.D	W4VM100304-06	GEL	LCS	5ML	1	N/A	29	W	ACJ	N/A	O	UVM100220-01C+IVM100304-01
4 Mar 2010 23:27	4A430.D	W4VM100304-07	GEL	LCS	5G	1	N/A	30	S	ACJ	N/A	O	UVM100220-01C+IVM100304-01
4 Mar 2010 23:55	4A431.D	W4VM100304-08	GEL	CCV	5ML	1	N/A	31	W	ACJ	N/A	O	UVM100215-08A
5 Mar 2010 00:22	4A432.D	W4VM100304-09	GEL	LCS	5G	1	N/A	32	S	ACJ	N/A	O	UVM100215-08A
5 Mar 2010 00:50	4A433.D	12020-----	GEL	BLANK	5G	1	N/A	33	S	ACJ	N/A	O	
5 Mar 2010 01:17	4A434.D	12020-----	GEL	BLANK	5ML	1	N/A	34	W	ACJ	N/A	O	
5 Mar 2010 01:44	4A435.D	248114007	LANL	961336	5G	1	N/A	35	S	ACJ	N/A	O	
5 Mar 2010 02:12	4A436.D	248114008	LANL	961336	5G	1	N/A	36	S	ACJ	N/A	O	
5 Mar 2010 02:39	4A437.D	248102001	LANL	961336	5G	1	N/A	37	S	ACJ	N/A	O	
5 Mar 2010 03:06	4A438.D	248102002	LANL	961336	5G	1	N/A	38	S	ACJ	N/A	O	
5 Mar 2010 03:33	4A439.D	248102003	LANL	961336	5G	1	N/A	39	S	ACJ	N/A	O	
5 Mar 2010 04:01	4A440.D	248102004	LANL	961336	5G	1	N/A	40	S	ACJ	N/A	O	
5 Mar 2010 04:28	4A441.D	248102005	LANL	961336	5G	1	N/A	41	S	ACJ	N/A	O	
5 Mar 2010 04:55	4A442.D	248102006	LANL	961336	5G	1	N/A	42	S	ACJ	N/A	O	
5 Mar 2010 05:23	4A443.D	248102007	LANL	961336	5G	1	N/A	43	S	ACJ	N/A	O	
5 Mar 2010 05:50	4A444.D	248102008	LANL	961336	5G	1	N/A	44	S	ACJ	N/A	O	
5 Mar 2010 06:17	4A445.D	1202062048	LANL	961336	5G	1	N/A	45	S	ACJ	N/A	O	MS 248102001
5 Mar 2010 06:45	4A446.D	1202062049	LANL	961336	5G	1	N/A	46	S	ACJ	N/A	O	MSD 248102001

DATA EXCEPTION REPORT

Mo.Day Yr.	Division:	Quality Criteria:	Type:
16-MAR-10	Industrial	Specifications	Process
Instrument Type:	**Test / Method:**	**Matrix Type:**	**Client Code:**
VOA GC/MS	SW846 8260B	Solid	LANL
Batch ID:	**Sample Numbers:**		
961336	See Below		

Potentially affected work order(s)(SDG): 248102(10-2089),248114(10-2092)

Application Issues:

Failed Recovery for MS/PS

Failed Recovery for MSD/PSD

Specification and Requirements Exception Description:	DER Disposition:
1. QC samples 1202062048MS and 1202062049MSD were below the spike recovery acceptance limits for 2-Hexanone and 4-Methyl-2-Pentanone.	1. Narrate and report data. The MS/MSD recover in a similar manner and pass RPD.

Originator's Name:

Amy Jamison 16-MAR-10

Data Validator/Group Leader:

Sarah Kozlik 19-MAR-10

GC/MS Semivolatile Analysis

Semi-Volatile Case Narrative
Los Alamos National Laboratory (LANL)
SDG 10-2089

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:	959979
Prep Batch Number:	959978

Sample Analysis

The following samples were analyzed using the analytical protocol as established in SW846 8270C:

Sample ID	Client ID
248102001	RE15-10-8404
248102002	RE15-10-8396
248102003	RE15-10-8393
248102004	RE15-10-8395
248102005	RE15-10-8398
248102006	RE15-10-8394
248102007	RE15-10-8399
248102008	RE15-10-8397
1202059027	Method Blank (MB)
1202059028	Laboratory Control Sample (LCS)
1202059029	248114002(RE36-10-8448) Matrix Spike (MS)
1202059030	248114002(RE36-10-8448) Matrix Spike Duplicate (MSD)

The samples in this SDG were analyzed on a "dry weight" basis.

Preparation/Analytical Method Verification

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-OA-E-009 REV# 23.

Raw data reports are processed and reviewed by the analyst using the Target software package. False positives have been removed from the Target quantitation reports per standard operating procedures (SOP) section 18.2.

Calibration Information

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

Due to software limitations, the Calibration Summary Form 6 may not indicate all the calibration files comprising the initial calibration. A complete list of the initial calibration data files are shown in the Calibration History report located in the Standard Data section of the data package. Please note that the second level of the initial calibration (5 mg/L) is only used for n-Nitrosodipropylamine. The various calibration mixes may not be calibrated using all of the calibration levels. In addition, not all of the mixes are calibrated using the same levels.

Diphenylamine has now superseded N-Nitroso-diphenylamine as a CCC on Quantitation Reports, Initial Calibration Reports, Calibration Check Standard Reports, etc. Previous versions of EPA Method 8270 (prior to 8270C) listed N-Nitroso-diphenylamine as a CCC. However, as stated in EPA Method 8270C, Revision 3, December, 1996, Section 1.4.5, "N-Nitroso-diphenylamine decomposes in the gas chromatographic inlet and cannot be separated from Diphenylamine." Studies of these two compounds at GEL, both independent of each other and together, show that they not only co-elute, but also have similar mass spectra. N-Nitroso-diphenylamine and Diphenylamine will be reported as Diphenylamine on all reports and forms. 2,4-Toluene diisocyanate rapidly hydrolyzes in water (half-life less than 30 minutes). Therefore, recoveries of this compound from aqueous matrices should not be expected. In addition, in solid matrices, 2,4-Toluene diisocynate often reacts with alcohols and amines to produce urethane and ureas and consequently cannot usually coexist in a solution containing these materials. 2,4-Toluene diisocyanate is reported as an estimated value.

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

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

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

Quality Control (QC) Information

Method Blank (MB) Statement
The MB analyzed with this SDG met the acceptance criteria.

Surrogate Recoveries
All the surrogate recoveries were within the established acceptance criteria for this SDG.

Laboratory Control Sample (LCS) Recovery
The LCS spike recoveries met the acceptance limits.

QC Sample Designation
Sample 248114002 (RE36-10-8448) not associated with this SDG, 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 and MSD failed recovery for 4-Nitrophenol and Benzyl alcohol. Please see the spike recovery report for the specific failures. As the MS and MSD displayed similar recoveries, the failures were attributed to sample matrix interference and the data have been reported.

Matrix Spike Duplicate (MSD) Recovery Statement
The MS and MSD failed recovery for 4-Nitrophenol and Benzyl alcohol. Please see the spike recovery report for the specific failures. As the MS and MSD displayed similar recoveries, the failures were attributed to sample matrix interference and the data have been reported.

MS/MSD Relative Percent Difference (RPD) Statement
The relative percent differences (RPD) were not within the acceptance limits. Please see the spike recovery report for the specific failures. The failures were attributed to sample matrix interference and the data have been reported.

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
A DER was not required for the samples reported with this SDG.

Manual Integrations
Manual integrations were not required for samples reported with this SDG.

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
MSD8.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: [signature] **Date:** 3-25-10

Roadmap for LANL 10-2089 SVOA

This roadmap was analyzed by nat00999 on 03-18-2010, 08:36.
This roadmap was packaged by CHA01131 on 03-22-2010, 21:32.

Sample

exclude	manual	datafile	smpid	injdate	injtime	sublist	clientid	dilution	batchid	comment
☐	N	/chem/MSD8.i/s031710.b/s8c1706.d	248102003	17-MAR-2010	11:01	10-2089.sub	RE15-10-8393	1	959979	
☐	N	/chem/MSD8.i/s031710.b/s8c1707.d	248102004	17-MAR-2010	11:31	10-2089.sub	RE15-10-8395	1	959979	
☐	N	/chem/MSD8.i/s031710.b/s8c1708.d	248102005	17-MAR-2010	12:00	10-2089.sub	RE15-10-8398	1	959979	
☐	N	/chem/MSD8.i/s031710.b/s8c1709.d	248102006	17-MAR-2010	12:30	10-2089.sub	RE15-10-8394	1	959979	
☐	N	/chem/MSD8.i/s031710.b/s8c1710.d	248102007	17-MAR-2010	12:59	10-2089.sub	RE15-10-8399	1	959979	
☐	N	/chem/MSD8.i/s031710.b/s8c1720.d	248102001	17-MAR-2010	17:51	10-2089.sub	RE15-10-8404	1	959979	
☐	N	/chem/MSD8.i/s031710.b/s8c1721.d	248102002	17-MAR-2010	18:21	10-2089.sub	RE15-10-8396	1	959979	
☐	N	/chem/MSD8.i/s031710.b/s8c1722.d	248102008	17-MAR-2010	18:51	10-2089.sub	RE15-10-8397	1	959979	

QC Sample

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	batchid	comment
☐	N	/chem/MSD8.i/s031710.b/s8c1704.d	1202059027	mb	17-MAR-2010	10:04	10-2089.sub	SBLK01	1	959979	
☐	N	/chem/MSD8.i/s031710.b/s8c1705.d	1202059028	lcs	17-MAR-2010	10:33	10-2089.sub	SBLK01LCS	1	959979	

Sample Data Summary

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-2089**	**Date Collected:**	**02/22/2010 12:00**	**Matrix:**	**R**
Lab Sample ID:	**248102003**	**Date Received:**	**02/26/2010 08:45**	**%Moisture:**	**20.1**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE15-10-8393**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**959979**	**Inst:**	**MSD8.I**	**Dilution:**	**1**
Run Date:	**03/17/2010 11:01**	**Analyst:**	**NAG1**	**Inj. Vol:**	**.5 uL**
Prep Date:	**03/02/2010 23:08**	**Aliquot:**	**30.1 g**	**Final Volume:**	**1 mL**
Data File:	**s8c1706.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	416	ug/kg	83.2	416
108-95-2	Phenol	U	416	ug/kg	83.2	416
95-57-8	2-Chlorophenol	U	416	ug/kg	83.2	416
106-46-7	1,4-Dichlorobenzene	U	416	ug/kg	83.2	416
621-64-7	N-Nitrosodipropylamine	U	416	ug/kg	83.2	416
59-50-7	4-Chloro-3-methylphenol	U	416	ug/kg	83.2	416
83-32-9	Acenaphthene	U	41.6	ug/kg	13.7	41.6
121-14-2	2,4-Dinitrotoluene	U	416	ug/kg	41.6	416
100-02-7	4-Nitrophenol	U	416	ug/kg	137	416
87-86-5	Pentachlorophenol	U	416	ug/kg	104	416
129-00-0	Pyrene	U	41.6	ug/kg	12.5	41.6
110-86-1	Pyridine	U	416	ug/kg	83.2	416
62-53-3	Aniline	U	416	ug/kg	125	416
111-44-4	bis(2-Chloroethyl) ether	U	416	ug/kg	83.2	416
541-73-1	1,3-Dichlorobenzene	U	416	ug/kg	83.2	416
100-51-6	Benzyl alcohol	U	416	ug/kg	125	416
95-50-1	1,2-Dichlorobenzene	U	416	ug/kg	83.2	416
108-60-1	bis(2-Chloroisopropyl)ether	U	416	ug/kg	83.2	416
95-48-7	o-Cresol	U	416	ug/kg	83.2	416
65794-96-9	m,p-Cresols	U	416	ug/kg	125	416
67-72-1	Hexachloroethane	U	416	ug/kg	83.2	416
98-95-3	Nitrobenzene	U	416	ug/kg	83.2	416
78-59-1	Isophorone	U	416	ug/kg	83.2	416
88-75-5	2-Nitrophenol	U	416	ug/kg	83.2	416
105-67-9	2,4-Dimethylphenol	U	416	ug/kg	146	416
111-91-1	bis(2-Chloroethoxy)methane	U	416	ug/kg	83.2	416
120-83-2	2,4-Dichlorophenol	U	416	ug/kg	83.2	416
65-85-0	Benzoic acid	U	832	ug/kg	208	832
91-20-3	Naphthalene	U	41.6	ug/kg	12.5	41.6
106-47-8	4-Chloroaniline	U	416	ug/kg	83.2	416
87-68-3	Hexachlorobutadiene	U	416	ug/kg	83.2	416
91-57-6	2-Methylnaphthalene	U	41.6	ug/kg	8.32	41.6
77-47-4	Hexachlorocyclopentadiene	U	416	ug/kg	83.2	416
88-06-2	2,4,6-Trichlorophenol	U	416	ug/kg	83.2	416
95-95-4	2,4,5-Trichlorophenol	U	416	ug/kg	83.2	416
91-58-7	2-Chloronaphthalene	U	41.6	ug/kg	13.7	41.6
88-74-4	2-Nitroaniline *o-Nitroaniline*	U	416	ug/kg	83.2	416
99-09-2	3-Nitroaniline	U	416	ug/kg	83.2	416

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-2089**	**Date Collected:**	**02/22/2010 12:00**	**Matrix:**	**R**
Lab Sample ID:	**248102003**	**Date Received:**	**02/26/2010 08:45**	**%Moisture:**	**20.1**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE15-10-8393**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**959979**	**Inst:**	**MSD8.I**	**Dilution:**	**1**
Run Date:	**03/17/2010 11:01**	**Analyst:**	**NAG1**	**Inj. Vol:**	**.5 uL**
Prep Date:	**03/02/2010 23:08**	**Aliquot:**	**30.1 g**	**Final Volume:**	**1 mL**
Data File:	**s8c1706.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	416	ug/kg	83.2	416
606-20-2	2,6-Dinitrotoluene	U	416	ug/kg	41.6	416
208-96-8	Acenaphthylene	U	41.6	ug/kg	12.5	41.6
51-28-5	2,4-Dinitrophenol	U	832	ug/kg	158	832
132-64-9	Dibenzofuran	U	416	ug/kg	83.2	416
84-66-2	Diethylphthalate	U	416	ug/kg	83.2	416
86-73-7	Fluorene	U	41.6	ug/kg	12.5	41.6
7005-72-3	4-Chlorophenylphenylether	U	416	ug/kg	83.2	416
534-52-1	2-Methyl-4,6-dinitrophenol	U	416	ug/kg	83.2	416
100-01-6	4-Nitroaniline	U	416	ug/kg	125	416
	p-Nitroaniline					
122-39-4	Diphenylamine	U	416	ug/kg	83.2	416
122-66-7	Azobenzene	U	416	ug/kg	83.2	416
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	416	ug/kg	83.2	416
118-74-1	Hexachlorobenzene	U	416	ug/kg	83.2	416
85-01-8	Phenanthrene	U	41.6	ug/kg	12.5	41.6
120-12-7	Anthracene	U	41.6	ug/kg	8.32	41.6
84-74-2	Di-n-butylphthalate	U	416	ug/kg	83.2	416
206-44-0	Fluoranthene	U	41.6	ug/kg	12.5	41.6
85-68-7	Butylbenzylphthalate	U	416	ug/kg	83.2	416
56-55-3	Benzo(a)anthracene	U	41.6	ug/kg	12.5	41.6
91-94-1	3,3'-Dichlorobenzidine	U	416	ug/kg	125	416
218-01-9	Chrysene	U	41.6	ug/kg	12.5	41.6
117-81-7	bis(2-Ethylhexyl)phthalate	U	416	ug/kg	83.2	416
117-84-0	Di-n-octylphthalate	U	416	ug/kg	83.2	416
205-99-2	Benzo(b)fluoranthene	U	41.6	ug/kg	12.5	41.6
207-08-9	Benzo(k)fluoranthene	U	41.6	ug/kg	12.5	41.6
50-32-8	Benzo(a)pyrene	U	41.6	ug/kg	12.5	41.6
193-39-5	Indeno(1,2,3-cd)pyrene	U	41.6	ug/kg	12.5	41.6
53-70-3	Dibenzo(a,h)anthracene	U	41.6	ug/kg	12.5	41.6
191-24-2	Benzo(ghi)perylene	U	41.6	ug/kg	12.5	41.6
120-82-1	1,2,4-Trichlorobenzene	U	416	ug/kg	83.2	416

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	3.08	251	ug/kg		JA

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-2089	**Date Collected:**	02/22/2010 12:00	**Matrix:**	R
Lab Sample ID:	248102006	**Date Received:**	02/26/2010 08:45	**%Moisture:**	10.3
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE15-10-8394	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	959979	**Inst:**	MSD8.I	**Dilution:**	1
Run Date:	03/17/2010 12:30	**Analyst:**	NAG1	**Inj. Vol:**	.5 uL
Prep Date:	03/02/2010 23:08	**Aliquot:**	30.12 g	**Final Volume:**	1 mL
Data File:	s8c1709.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	370	ug/kg	74.1	370
108-95-2	Phenol	U	370	ug/kg	74.1	370
95-57-8	2-Chlorophenol	U	370	ug/kg	74.1	370
106-46-7	1,4-Dichlorobenzene	U	370	ug/kg	74.1	370
621-64-7	N-Nitrosodipropylamine	U	370	ug/kg	74.1	370
59-50-7	4-Chloro-3-methylphenol	U	370	ug/kg	74.1	370
83-32-9	Acenaphthene	U	37.0	ug/kg	12.2	37.0
121-14-2	2,4-Dinitrotoluene	U	370	ug/kg	37.0	370
100-02-7	4-Nitrophenol	U	370	ug/kg	122	370
87-86-5	Pentachlorophenol	U	370	ug/kg	92.6	370
129-00-0	Pyrene	U	37.0	ug/kg	11.1	37.0
110-86-1	Pyridine	U	370	ug/kg	74.1	370
62-53-3	Aniline	U	370	ug/kg	111	370
111-44-4	bis(2-Chloroethyl) ether	U	370	ug/kg	74.1	370
541-73-1	1,3-Dichlorobenzene	U	370	ug/kg	74.1	370
100-51-6	Benzyl alcohol	U	370	ug/kg	111	370
95-50-1	1,2-Dichlorobenzene	U	370	ug/kg	74.1	370
108-60-1	bis(2-Chloroisopropyl)ether	U	370	ug/kg	74.1	370
95-48-7	o-Cresol	U	370	ug/kg	74.1	370
65794-96-9	m,p-Cresols	U	370	ug/kg	111	370
67-72-1	Hexachloroethane	U	370	ug/kg	74.1	370
98-95-3	Nitrobenzene	U	370	ug/kg	74.1	370
78-59-1	Isophorone	U	370	ug/kg	74.1	370
88-75-5	2-Nitrophenol	U	370	ug/kg	74.1	370
105-67-9	2,4-Dimethylphenol	U	370	ug/kg	130	370
111-91-1	bis(2-Chloroethoxy)methane	U	370	ug/kg	74.1	370
120-83-2	2,4-Dichlorophenol	U	370	ug/kg	74.1	370
65-85-0	Benzoic acid	U	741	ug/kg	185	741
91-20-3	Naphthalene	U	37.0	ug/kg	11.1	37.0
106-47-8	4-Chloroaniline	U	370	ug/kg	74.1	370
87-68-3	Hexachlorobutadiene	U	370	ug/kg	74.1	370
91-57-6	2-Methylnaphthalene	U	37.0	ug/kg	7.41	37.0
77-47-4	Hexachlorocyclopentadiene	U	370	ug/kg	74.1	370
88-06-2	2,4,6-Trichlorophenol	U	370	ug/kg	74.1	370
95-95-4	2,4,5-Trichlorophenol	U	370	ug/kg	74.1	370
91-58-7	2-Chloronaphthalene	U	37.0	ug/kg	12.2	37.0
88-74-4	2-Nitroaniline *o-Nitroaniline*	U	370	ug/kg	74.1	370
99-09-2	3-Nitroaniline	U	370	ug/kg	74.1	370

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-2089	**Date Collected:**	02/22/2010 12:00	**Matrix:**	R
Lab Sample ID:	248102006	**Date Received:**	02/26/2010 08:45	**%Moisture:**	10.3
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE15-10-8394	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	959979	**Inst:**	MSD8.I	**Dilution:**	1
Run Date:	03/17/2010 12:30	**Analyst:**	NAG1	**Inj. Vol:**	.5 uL
Prep Date:	03/02/2010 23:08	**Aliquot:**	30.12 g	**Final Volume:**	1 mL
Data File:	s8c1709.d	**Column:**	J&W DB-5MS	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	370	ug/kg	74.1	370
606-20-2	2,6-Dinitrotoluene	U	370	ug/kg	37.0	370
208-96-8	Acenaphthylene	U	37.0	ug/kg	11.1	37.0
51-28-5	2,4-Dinitrophenol	U	741	ug/kg	141	741
132-64-9	Dibenzofuran	U	370	ug/kg	74.1	370
84-66-2	Diethylphthalate	U	370	ug/kg	74.1	370
86-73-7	Fluorene	U	37.0	ug/kg	11.1	37.0
7005-72-3	4-Chlorophenylphenylether	U	370	ug/kg	74.1	370
534-52-1	2-Methyl-4,6-dinitrophenol	U	370	ug/kg	74.1	370
100-01-6	4-Nitroaniline	U	370	ug/kg	111	370
	p-Nitroaniline					
122-39-4	Diphenylamine	U	370	ug/kg	74.1	370
122-66-7	Azobenzene	U	370	ug/kg	74.1	370
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	370	ug/kg	74.1	370
118-74-1	Hexachlorobenzene	U	370	ug/kg	74.1	370
85-01-8	Phenanthrene	U	37.0	ug/kg	11.1	37.0
120-12-7	Anthracene	U	37.0	ug/kg	7.41	37.0
84-74-2	Di-n-butylphthalate	U	370	ug/kg	74.1	370
206-44-0	Fluoranthene	U	37.0	ug/kg	11.1	37.0
85-68-7	Butylbenzylphthalate	U	370	ug/kg	74.1	370
56-55-3	Benzo(a)anthracene	U	37.0	ug/kg	11.1	37.0
91-94-1	3,3'-Dichlorobenzidine	U	370	ug/kg	111	370
218-01-9	Chrysene	U	37.0	ug/kg	11.1	37.0
117-81-7	bis(2-Ethylhexyl)phthalate	U	370	ug/kg	74.1	370
117-84-0	Di-n-octylphthalate	U	370	ug/kg	74.1	370
205-99-2	Benzo(b)fluoranthene	U	37.0	ug/kg	11.1	37.0
207-08-9	Benzo(k)fluoranthene	U	37.0	ug/kg	11.1	37.0
50-32-8	Benzo(a)pyrene	U	37.0	ug/kg	11.1	37.0
193-39-5	Indeno(1,2,3-cd)pyrene	U	37.0	ug/kg	11.1	37.0
53-70-3	Dibenzo(a,h)anthracene	U	37.0	ug/kg	11.1	37.0
191-24-2	Benzo(ghi)perylene	U	37.0	ug/kg	11.1	37.0
120-82-1	1,2,4-Trichlorobenzene	U	370	ug/kg	74.1	370

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	3.08	210	ug/kg		JA
5131-66-8	2-Propanol, 1-butoxy-	3.83	3640	ug/kg	90	NJ

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-2089	Date Collected:	02/22/2010 12:00	Matrix:	R
Lab Sample ID:	248102004	Date Received:	02/26/2010 08:45	%Moisture:	4.4
		Client:	LANL010	Project:	LANL01004
Client ID:	RE15-10-8395	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	959979	Inst:	MSD8.I	Dilution:	1
Run Date:	03/17/2010 11:31	Analyst:	NAG1	Inj. Vol:	.5 uL
Prep Date:	03/02/2010 23:08	Aliquot:	30.18 g	Final Volume:	1 mL
Data File:	s8c1707.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	347	ug/kg	69.3	347
108-95-2	Phenol	U	347	ug/kg	69.3	347
95-57-8	2-Chlorophenol	U	347	ug/kg	69.3	347
106-46-7	1,4-Dichlorobenzene	U	347	ug/kg	69.3	347
621-64-7	N-Nitrosodipropylamine	U	347	ug/kg	69.3	347
59-50-7	4-Chloro-3-methylphenol	U	347	ug/kg	69.3	347
83-32-9	Acenaphthene	U	34.7	ug/kg	11.4	34.7
121-14-2	2,4-Dinitrotoluene	U	347	ug/kg	34.7	347
100-02-7	4-Nitrophenol	U	347	ug/kg	114	347
87-86-5	Pentachlorophenol	U	347	ug/kg	86.7	347
129-00-0	Pyrene	U	34.7	ug/kg	10.4	34.7
110-86-1	Pyridine	U	347	ug/kg	69.3	347
62-53-3	Aniline	U	347	ug/kg	104	347
111-44-4	bis(2-Chloroethyl) ether	U	347	ug/kg	69.3	347
541-73-1	1,3-Dichlorobenzene	U	347	ug/kg	69.3	347
100-51-6	Benzyl alcohol	U	347	ug/kg	104	347
95-50-1	1,2-Dichlorobenzene	U	347	ug/kg	69.3	347
108-60-1	bis(2-Chloroisopropyl)ether	U	347	ug/kg	69.3	347
95-48-7	o-Cresol	U	347	ug/kg	69.3	347
65794-96-9	m,p-Cresols	U	347	ug/kg	104	347
67-72-1	Hexachloroethane	U	347	ug/kg	69.3	347
98-95-3	Nitrobenzene	U	347	ug/kg	69.3	347
78-59-1	Isophorone	U	347	ug/kg	69.3	347
88-75-5	2-Nitrophenol	U	347	ug/kg	69.3	347
105-67-9	2,4-Dimethylphenol	U	347	ug/kg	121	347
111-91-1	bis(2-Chloroethoxy)methane	U	347	ug/kg	69.3	347
120-83-2	2,4-Dichlorophenol	U	347	ug/kg	69.3	347
65-85-0	Benzoic acid	U	693	ug/kg	173	693
91-20-3	Naphthalene	U	34.7	ug/kg	10.4	34.7
106-47-8	4-Chloroaniline	U	347	ug/kg	69.3	347
87-68-3	Hexachlorobutadiene	U	347	ug/kg	69.3	347
91-57-6	2-Methylnaphthalene	U	34.7	ug/kg	6.93	34.7
77-47-4	Hexachlorocyclopentadiene	U	347	ug/kg	69.3	347
88-06-2	2,4,6-Trichlorophenol	U	347	ug/kg	69.3	347
95-95-4	2,4,5-Trichlorophenol	U	347	ug/kg	69.3	347
91-58-7	2-Chloronaphthalene	U	34.7	ug/kg	11.4	34.7
88-74-4	2-Nitroaniline	U	347	ug/kg	69.3	347
99-09-2	*o-Nitroaniline* 3-Nitroaniline	U	347	ug/kg	69.3	347

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-2089	Date Collected:	02/22/2010 12:00	Matrix:	R
Lab Sample ID:	248102004	Date Received:	02/26/2010 08:45	%Moisture:	4.4
		Client:	LANL010	Project:	LANL01004
Client ID:	RE15-10-8395	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	959979	Inst:	MSD8.I	Dilution:	1
Run Date:	03/17/2010 11:31	Analyst:	NAG1	Inj. Vol:	.5 uL
Prep Date:	03/02/2010 23:08	Aliquot:	30.18 g	Final Volume:	1 mL
Data File:	s8c1707.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	347	ug/kg	69.3	347
606-20-2	2,6-Dinitrotoluene	U	347	ug/kg	34.7	347
208-96-8	Acenaphthylene	U	34.7	ug/kg	10.4	34.7
51-28-5	2,4-Dinitrophenol	U	693	ug/kg	132	693
132-64-9	Dibenzofuran	U	347	ug/kg	69.3	347
84-66-2	Diethylphthalate	U	347	ug/kg	69.3	347
86-73-7	Fluorene	U	34.7	ug/kg	10.4	34.7
7005-72-3	4-Chlorophenylphenylether	U	347	ug/kg	69.3	347
534-52-1	2-Methyl-4,6-dinitrophenol	U	347	ug/kg	69.3	347
100-01-6	4-Nitroaniline	U	347	ug/kg	104	347
	p-Nitroaniline					
122-39-4	Diphenylamine	U	347	ug/kg	69.3	347
122-66-7	Azobenzene	U	347	ug/kg	69.3	347
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	347	ug/kg	69.3	347
118-74-1	Hexachlorobenzene	U	347	ug/kg	69.3	347
85-01-8	Phenanthrene	U	34.7	ug/kg	10.4	34.7
120-12-7	Anthracene	U	34.7	ug/kg	6.93	34.7
84-74-2	Di-n-butylphthalate	U	347	ug/kg	69.3	347
206-44-0	Fluoranthene	U	34.7	ug/kg	10.4	34.7
85-68-7	Butylbenzylphthalate	U	347	ug/kg	69.3	347
56-55-3	Benzo(a)anthracene	U	34.7	ug/kg	10.4	34.7
91-94-1	3,3'-Dichlorobenzidine	U	347	ug/kg	104	347
218-01-9	Chrysene	U	34.7	ug/kg	10.4	34.7
117-81-7	bis(2-Ethylhexyl)phthalate	U	347	ug/kg	69.3	347
117-84-0	Di-n-octylphthalate	U	347	ug/kg	69.3	347
205-99-2	Benzo(b)fluoranthene	U	34.7	ug/kg	10.4	34.7
207-08-9	Benzo(k)fluoranthene	U	34.7	ug/kg	10.4	34.7
50-32-8	Benzo(a)pyrene	U	34.7	ug/kg	10.4	34.7
193-39-5	Indeno(1,2,3-cd)pyrene	U	34.7	ug/kg	10.4	34.7
53-70-3	Dibenzo(a,h)anthracene	U	34.7	ug/kg	10.4	34.7
191-24-2	Benzo(ghi)perylene	U	34.7	ug/kg	10.4	34.7
120-82-1	1,2,4-Trichlorobenzene	U	347	ug/kg	69.3	347

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	3.08	215	ug/kg		JA
5131-66-8	2-Propanol, 1-butoxy-	3.82	1140	ug/kg	90	NJ

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-2089**	**Date Collected:**	**02/22/2010 12:00**	**Matrix:**	**R**
Lab Sample ID:	**248102002**	**Date Received:**	**02/26/2010 08:45**	**%Moisture:**	**8.7**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE15-10-8396**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**959979**	**Inst:**	**MSD8.I**	**Dilution:**	**1**
Run Date:	**03/17/2010 18:21**	**Analyst:**	**NAG1**	**Inj. Vol:**	**.5 uL**
Prep Date:	**03/02/2010 23:08**	**Aliquot:**	**30.05 g**	**Final Volume:**	**1 mL**
Data File:	**s8c1721.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	364	ug/kg	72.9	364
108-95-2	Phenol	U	364	ug/kg	72.9	364
95-57-8	2-Chlorophenol	U	364	ug/kg	72.9	364
106-46-7	1,4-Dichlorobenzene	U	364	ug/kg	72.9	364
621-64-7	N-Nitrosodipropylamine	U	364	ug/kg	72.9	364
59-50-7	4-Chloro-3-methylphenol	U	364	ug/kg	72.9	364
83-32-9	Acenaphthene	U	36.4	ug/kg	12.0	36.4
121-14-2	2,4-Dinitrotoluene	U	364	ug/kg	36.4	364
100-02-7	4-Nitrophenol	U	364	ug/kg	120	364
87-86-5	Pentachlorophenol	U	364	ug/kg	91.1	364
129-00-0	Pyrene	U	36.4	ug/kg	10.9	36.4
110-86-1	Pyridine	U	364	ug/kg	72.9	364
62-53-3	Aniline	U	364	ug/kg	109	364
111-44-4	bis(2-Chloroethyl) ether	U	364	ug/kg	72.9	364
541-73-1	1,3-Dichlorobenzene	U	364	ug/kg	72.9	364
100-51-6	Benzyl alcohol	U	364	ug/kg	109	364
95-50-1	1,2-Dichlorobenzene	U	364	ug/kg	72.9	364
108-60-1	bis(2-Chloroisopropyl)ether	U	364	ug/kg	72.9	364
95-48-7	o-Cresol	U	364	ug/kg	72.9	364
65794-96-9	m,p-Cresols	U	364	ug/kg	109	364
67-72-1	Hexachloroethane	U	364	ug/kg	72.9	364
98-95-3	Nitrobenzene	U	364	ug/kg	72.9	364
78-59-1	Isophorone	U	364	ug/kg	72.9	364
88-75-5	2-Nitrophenol	U	364	ug/kg	72.9	364
105-67-9	2,4-Dimethylphenol	U	364	ug/kg	128	364
111-91-1	bis(2-Chloroethoxy)methane	U	364	ug/kg	72.9	364
120-83-2	2,4-Dichlorophenol	U	364	ug/kg	72.9	364
65-85-0	Benzoic acid	U	729	ug/kg	182	729
91-20-3	Naphthalene	U	36.4	ug/kg	10.9	36.4
106-47-8	4-Chloroaniline	U	364	ug/kg	72.9	364
87-68-3	Hexachlorobutadiene	U	364	ug/kg	72.9	364
91-57-6	2-Methylnaphthalene	U	36.4	ug/kg	7.29	36.4
77-47-4	Hexachlorocyclopentadiene	U	364	ug/kg	72.9	364
88-06-2	2,4,6-Trichlorophenol	U	364	ug/kg	72.9	364
95-95-4	2,4,5-Trichlorophenol	U	364	ug/kg	72.9	364
91-58-7	2-Chloronaphthalene	U	36.4	ug/kg	12.0	36.4
88-74-4	2-Nitroaniline *o-Nitroaniline*	U	364	ug/kg	72.9	364
99-09-2	3-Nitroaniline	U	364	ug/kg	72.9	364

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-2089**	**Date Collected:**	**02/22/2010 12:00**	**Matrix:**	**R**
Lab Sample ID:	**248102002**	**Date Received:**	**02/26/2010 08:45**	**%Moisture:**	**8.7**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE15-10-8396**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**959979**	**Inst:**	**MSD8.I**	**Dilution:**	**1**
Run Date:	**03/17/2010 18:21**	**Analyst:**	**NAG1**	**Inj. Vol:**	**.5 uL**
Prep Date:	**03/02/2010 23:08**	**Aliquot:**	**30.05 g**	**Final Volume:**	**1 mL**
Data File:	**s8c1721.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	364	ug/kg	72.9	364
606-20-2	2,6-Dinitrotoluene	U	364	ug/kg	36.4	364
208-96-8	Acenaphthylene	U	36.4	ug/kg	10.9	36.4
51-28-5	2,4-Dinitrophenol	U	729	ug/kg	138	729
132-64-9	Dibenzofuran	U	364	ug/kg	72.9	364
84-66-2	Diethylphthalate	U	364	ug/kg	72.9	364
86-73-7	Fluorene	U	36.4	ug/kg	10.9	36.4
7005-72-3	4-Chlorophenylphenylether	U	364	ug/kg	72.9	364
534-52-1	2-Methyl-4,6-dinitrophenol	U	364	ug/kg	72.9	364
100-01-6	4-Nitroaniline	U	364	ug/kg	109	364
	p-Nitroaniline					
122-39-4	Diphenylamine	U	364	ug/kg	72.9	364
122-66-7	Azobenzene	U	364	ug/kg	72.9	364
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	364	ug/kg	72.9	364
118-74-1	Hexachlorobenzene	U	364	ug/kg	72.9	364
85-01-8	Phenanthrene	U	36.4	ug/kg	10.9	36.4
120-12-7	Anthracene	U	36.4	ug/kg	7.29	36.4
84-74-2	Di-n-butylphthalate	U	364	ug/kg	72.9	364
206-44-0	Fluoranthene	U	36.4	ug/kg	10.9	36.4
85-68-7	Butylbenzylphthalate	U	364	ug/kg	72.9	364
56-55-3	Benzo(a)anthracene	U	36.4	ug/kg	10.9	36.4
91-94-1	3,3'-Dichlorobenzidine	U	364	ug/kg	109	364
218-01-9	Chrysene	U	36.4	ug/kg	10.9	36.4
117-81-7	bis(2-Ethylhexyl)phthalate	U	364	ug/kg	72.9	364
117-84-0	Di-n-octylphthalate	U	364	ug/kg	72.9	364
205-99-2	Benzo(b)fluoranthene	U	36.4	ug/kg	10.9	36.4
207-08-9	Benzo(k)fluoranthene	U	36.4	ug/kg	10.9	36.4
50-32-8	Benzo(a)pyrene	U	36.4	ug/kg	10.9	36.4
193-39-5	Indeno(1,2,3-cd)pyrene	U	36.4	ug/kg	10.9	36.4
53-70-3	Dibenzo(a,h)anthracene	U	36.4	ug/kg	10.9	36.4
191-24-2	Benzo(ghi)perylene	U	36.4	ug/kg	10.9	36.4
120-82-1	1,2,4-Trichlorobenzene	U	364	ug/kg	72.9	364

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	1.9	205	ug/kg		J
	Unknown Aldol Condensate	3.08	258	ug/kg		JA

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-2089**	**Date Collected:**	**02/22/2010 12:00**	**Matrix:**	**R**
Lab Sample ID:	**248102008**	**Date Received:**	**02/26/2010 08:45**	**%Moisture:**	**6.1**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE15-10-8397**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**959979**	**Inst:**	**MSD8.I**	**Dilution:**	**1**
Run Date:	**03/17/2010 18:51**	**Analyst:**	**NAG1**	**Inj. Vol:**	**.5 uL**
Prep Date:	**03/02/2010 23:08**	**Aliquot:**	**30.04 g**	**Final Volume:**	**1 mL**
Data File:	**s8c1722.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	355	ug/kg	70.9	355
108-95-2	Phenol	U	355	ug/kg	70.9	355
95-57-8	2-Chlorophenol	U	355	ug/kg	70.9	355
106-46-7	1,4-Dichlorobenzene	U	355	ug/kg	70.9	355
621-64-7	N-Nitrosodipropylamine	U	355	ug/kg	70.9	355
59-50-7	4-Chloro-3-methylphenol	U	355	ug/kg	70.9	355
83-32-9	Acenaphthene	U	35.5	ug/kg	11.7	35.5
121-14-2	2,4-Dinitrotoluene	U	355	ug/kg	35.5	355
100-02-7	4-Nitrophenol	U	355	ug/kg	117	355
87-86-5	Pentachlorophenol	U	355	ug/kg	88.7	355
129-00-0	Pyrene	U	35.5	ug/kg	10.6	35.5
110-86-1	Pyridine	U	355	ug/kg	70.9	355
62-53-3	Aniline	U	355	ug/kg	106	355
111-44-4	bis(2-Chloroethyl) ether	U	355	ug/kg	70.9	355
541-73-1	1,3-Dichlorobenzene	U	355	ug/kg	70.9	355
100-51-6	Benzyl alcohol	U	355	ug/kg	106	355
95-50-1	1,2-Dichlorobenzene	U	355	ug/kg	70.9	355
108-60-1	bis(2-Chloroisopropyl)ether	U	355	ug/kg	70.9	355
95-48-7	o-Cresol	U	355	ug/kg	70.9	355
65794-96-9	m,p-Cresols	U	355	ug/kg	106	355
67-72-1	Hexachloroethane	U	355	ug/kg	70.9	355
98-95-3	Nitrobenzene	U	355	ug/kg	70.9	355
78-59-1	Isophorone	U	355	ug/kg	70.9	355
88-75-5	2-Nitrophenol	U	355	ug/kg	70.9	355
105-67-9	2,4-Dimethylphenol	U	355	ug/kg	124	355
111-91-1	bis(2-Chloroethoxy)methane	U	355	ug/kg	70.9	355
120-83-2	2,4-Dichlorophenol	U	355	ug/kg	70.9	355
65-85-0	Benzoic acid	U	709	ug/kg	177	709
91-20-3	Naphthalene	U	35.5	ug/kg	10.6	35.5
106-47-8	4-Chloroaniline	U	355	ug/kg	70.9	355
87-68-3	Hexachlorobutadiene	U	355	ug/kg	70.9	355
91-57-6	2-Methylnaphthalene	U	35.5	ug/kg	7.09	35.5
77-47-4	Hexachlorocyclopentadiene	U	355	ug/kg	70.9	355
88-06-2	2,4,6-Trichlorophenol	U	355	ug/kg	70.9	355
95-95-4	2,4,5-Trichlorophenol	U	355	ug/kg	70.9	355
91-58-7	2-Chloronaphthalene	U	35.5	ug/kg	11.7	35.5
88-74-4	2-Nitroaniline *o-Nitroaniline*	U	355	ug/kg	70.9	355
99-09-2	3-Nitroaniline	U	355	ug/kg	70.9	355

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-2089**	**Date Collected:**	**02/22/2010 12:00**	**Matrix:**	**R**
Lab Sample ID:	**248102008**	**Date Received:**	**02/26/2010 08:45**	**%Moisture:**	**6.1**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE15-10-8397**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**959979**	**Inst:**	**MSD8.I**	**Dilution:**	**1**
Run Date:	**03/17/2010 18:51**	**Analyst:**	**NAG1**	**Inj. Vol:**	**.5 uL**
Prep Date:	**03/02/2010 23:08**	**Aliquot:**	**30.04 g**	**Final Volume:**	**1 mL**
Data File:	**s8c1722.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	355	ug/kg	70.9	355
606-20-2	2,6-Dinitrotoluene	U	355	ug/kg	35.5	355
208-96-8	Acenaphthylene	U	35.5	ug/kg	10.6	35.5
51-28-5	2,4-Dinitrophenol	U	709	ug/kg	135	709
132-64-9	Dibenzofuran	U	355	ug/kg	70.9	355
84-66-2	Diethylphthalate	U	355	ug/kg	70.9	355
86-73-7	Fluorene	U	35.5	ug/kg	10.6	35.5
7005-72-3	4-Chlorophenylphenylether	U	355	ug/kg	70.9	355
534-52-1	2-Methyl-4,6-dinitrophenol	U	355	ug/kg	70.9	355
100-01-6	4-Nitroaniline	U	355	ug/kg	106	355
	p-Nitroaniline					
122-39-4	Diphenylamine	U	355	ug/kg	70.9	355
122-66-7	Azobenzene	U	355	ug/kg	70.9	355
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	355	ug/kg	70.9	355
118-74-1	Hexachlorobenzene	U	355	ug/kg	70.9	355
85-01-8	Phenanthrene	U	35.5	ug/kg	10.6	35.5
120-12-7	Anthracene	U	35.5	ug/kg	7.09	35.5
84-74-2	Di-n-butylphthalate	U	355	ug/kg	70.9	355
206-44-0	Fluoranthene	U	35.5	ug/kg	10.6	35.5
85-68-7	Butylbenzylphthalate	U	355	ug/kg	70.9	355
56-55-3	Benzo(a)anthracene	U	35.5	ug/kg	10.6	35.5
91-94-1	3,3'-Dichlorobenzidine	U	355	ug/kg	106	355
218-01-9	Chrysene	U	35.5	ug/kg	10.6	35.5
117-81-7	bis(2-Ethylhexyl)phthalate	U	355	ug/kg	70.9	355
117-84-0	Di-n-octylphthalate	U	355	ug/kg	70.9	355
205-99-2	Benzo(b)fluoranthene	U	35.5	ug/kg	10.6	35.5
207-08-9	Benzo(k)fluoranthene	U	35.5	ug/kg	10.6	35.5
50-32-8	Benzo(a)pyrene	U	35.5	ug/kg	10.6	35.5
193-39-5	Indeno(1,2,3-cd)pyrene	U	35.5	ug/kg	10.6	35.5
53-70-3	Dibenzo(a,h)anthracene	U	35.5	ug/kg	10.6	35.5
191-24-2	Benzo(ghi)perylene	U	35.5	ug/kg	10.6	35.5
120-82-1	1,2,4-Trichlorobenzene	U	355	ug/kg	70.9	355

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	3.08	202	ug/kg		JA

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-2089**	**Date Collected:**	**02/22/2010 12:00**	**Matrix:**	**R**
Lab Sample ID:	**248102005**	**Date Received:**	**02/26/2010 08:45**	**%Moisture:**	**12.8**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE15-10-8398**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**959979**	**Inst:**	**MSD8.I**	**Dilution:**	**1**
Run Date:	**03/17/2010 12:00**	**Analyst:**	**NAG1**	**Inj. Vol:**	**.5 uL**
Prep Date:	**03/02/2010 23:08**	**Aliquot:**	**30.11 g**	**Final Volume:**	**1 mL**
Data File:	**s8c1708.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	381	ug/kg	76.2	381
108-95-2	Phenol	U	381	ug/kg	76.2	381
95-57-8	2-Chlorophenol	U	381	ug/kg	76.2	381
106-46-7	1,4-Dichlorobenzene	U	381	ug/kg	76.2	381
621-64-7	N-Nitrosodipropylamine	U	381	ug/kg	76.2	381
59-50-7	4-Chloro-3-methylphenol	U	381	ug/kg	76.2	381
83-32-9	Acenaphthene	U	38.1	ug/kg	12.6	38.1
121-14-2	2,4-Dinitrotoluene	U	381	ug/kg	38.1	381
100-02-7	4-Nitrophenol	U	381	ug/kg	126	381
87-86-5	Pentachlorophenol	U	381	ug/kg	95.3	381
129-00-0	Pyrene	U	38.1	ug/kg	11.4	38.1
110-86-1	Pyridine	U	381	ug/kg	76.2	381
62-53-3	Aniline	U	381	ug/kg	114	381
111-44-4	bis(2-Chloroethyl) ether	U	381	ug/kg	76.2	381
541-73-1	1,3-Dichlorobenzene	U	381	ug/kg	76.2	381
100-51-6	Benzyl alcohol	U	381	ug/kg	114	381
95-50-1	1,2-Dichlorobenzene	U	381	ug/kg	76.2	381
108-60-1	bis(2-Chloroisopropyl)ether	U	381	ug/kg	76.2	381
95-48-7	o-Cresol	U	381	ug/kg	76.2	381
65794-96-9	m,p-Cresols	U	381	ug/kg	114	381
67-72-1	Hexachloroethane	U	381	ug/kg	76.2	381
98-95-3	Nitrobenzene	U	381	ug/kg	76.2	381
78-59-1	Isophorone	U	381	ug/kg	76.2	381
88-75-5	2-Nitrophenol	U	381	ug/kg	76.2	381
105-67-9	2,4-Dimethylphenol	U	381	ug/kg	133	381
111-91-1	bis(2-Chloroethoxy)methane	U	381	ug/kg	76.2	381
120-83-2	2,4-Dichlorophenol	U	381	ug/kg	76.2	381
65-85-0	Benzoic acid	U	762	ug/kg	191	762
91-20-3	Naphthalene	U	38.1	ug/kg	11.4	38.1
106-47-8	4-Chloroaniline	U	381	ug/kg	76.2	381
87-68-3	Hexachlorobutadiene	U	381	ug/kg	76.2	381
91-57-6	2-Methylnaphthalene	U	38.1	ug/kg	7.62	38.1
77-47-4	Hexachlorocyclopentadiene	U	381	ug/kg	76.2	381
88-06-2	2,4,6-Trichlorophenol	U	381	ug/kg	76.2	381
95-95-4	2,4,5-Trichlorophenol	U	381	ug/kg	76.2	381
91-58-7	2-Chloronaphthalene	U	38.1	ug/kg	12.6	38.1
88-74-4	2-Nitroaniline *o-Nitroaniline*	U	381	ug/kg	76.2	381
99-09-2	3-Nitroaniline	U	381	ug/kg	76.2	381

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-2089**	**Date Collected:**	**02/22/2010 12:00**	**Matrix:**	**R**
Lab Sample ID:	**248102005**	**Date Received:**	**02/26/2010 08:45**	**%Moisture:**	**12.8**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE15-10-8398**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**959979**	**Inst:**	**MSD8.I**	**Dilution:**	**1**
Run Date:	**03/17/2010 12:00**	**Analyst:**	**NAG1**	**Inj. Vol:**	**.5 uL**
Prep Date:	**03/02/2010 23:08**	**Aliquot:**	**30.11 g**	**Final Volume:**	**1 mL**
Data File:	**s8c1708.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

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

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	3.08	205	ug/kg		JA
77-53-2	Cedrol	8.29	690	ug/kg	91	NJ

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-2089**	**Date Collected:**	**02/22/2010 12:00**	**Matrix:**	**R**
Lab Sample ID:	**248102005**	**Date Received:**	**02/26/2010 08:45**	**%Moisture:**	**12.8**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE15-10-8398**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**959979**	**Inst:**	**MSD8.I**	**Dilution:**	**1**
Run Date:	**03/17/2010 12:00**	**Analyst:**	**NAG1**	**Inj. Vol:**	**.5 uL**
Prep Date:	**03/02/2010 23:08**	**Aliquot:**	**30.11 g**	**Final Volume:**	**1 mL**
Data File:	**s8c1708.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

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

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	11.36	164	ug/kg		J
511-15-9	2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa	11.39	495	ug/kg	98	NJ
	Unknown	11.51	227	ug/kg		J

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-2089**	**Date Collected:**	**02/22/2010 12:00**	**Matrix:**	**R**
Lab Sample ID:	**248102007**	**Date Received:**	**02/26/2010 08:45**	**%Moisture:**	**11.7**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE15-10-8399**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**959979**	**Inst:**	**MSD8.I**	**Dilution:**	**1**
Run Date:	**03/17/2010 12:59**	**Analyst:**	**NAG1**	**Inj. Vol:**	**.5 uL**
Prep Date:	**03/02/2010 23:08**	**Aliquot:**	**30.14 g**	**Final Volume:**	**1 mL**
Data File:	**s8c1710.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	376	ug/kg	75.1	376
108-95-2	Phenol	U	376	ug/kg	75.1	376
95-57-8	2-Chlorophenol	U	376	ug/kg	75.1	376
106-46-7	1,4-Dichlorobenzene	U	376	ug/kg	75.1	376
621-64-7	N-Nitrosodipropylamine	U	376	ug/kg	75.1	376
59-50-7	4-Chloro-3-methylphenol	U	376	ug/kg	75.1	376
83-32-9	Acenaphthene	U	37.6	ug/kg	12.4	37.6
121-14-2	2,4-Dinitrotoluene	U	376	ug/kg	37.6	376
100-02-7	4-Nitrophenol	U	376	ug/kg	124	376
87-86-5	Pentachlorophenol	U	376	ug/kg	93.9	376
129-00-0	Pyrene	U	37.6	ug/kg	11.3	37.6
110-86-1	Pyridine	U	376	ug/kg	75.1	376
62-53-3	Aniline	U	376	ug/kg	113	376
111-44-4	bis(2-Chloroethyl) ether	U	376	ug/kg	75.1	376
541-73-1	1,3-Dichlorobenzene	U	376	ug/kg	75.1	376
100-51-6	Benzyl alcohol	U	376	ug/kg	113	376
95-50-1	1,2-Dichlorobenzene	U	376	ug/kg	75.1	376
108-60-1	bis(2-Chloroisopropyl)ether	U	376	ug/kg	75.1	376
95-48-7	o-Cresol	U	376	ug/kg	75.1	376
65794-96-9	m,p-Cresols	U	376	ug/kg	113	376
67-72-1	Hexachloroethane	U	376	ug/kg	75.1	376
98-95-3	Nitrobenzene	U	376	ug/kg	75.1	376
78-59-1	Isophorone	U	376	ug/kg	75.1	376
88-75-5	2-Nitrophenol	U	376	ug/kg	75.1	376
105-67-9	2,4-Dimethylphenol	U	376	ug/kg	131	376
111-91-1	bis(2-Chloroethoxy)methane	U	376	ug/kg	75.1	376
120-83-2	2,4-Dichlorophenol	U	376	ug/kg	75.1	376
65-85-0	Benzoic acid	U	751	ug/kg	188	751
91-20-3	Naphthalene	U	37.6	ug/kg	11.3	37.6
106-47-8	4-Chloroaniline	U	376	ug/kg	75.1	376
87-68-3	Hexachlorobutadiene	U	376	ug/kg	75.1	376
91-57-6	2-Methylnaphthalene	U	37.6	ug/kg	7.51	37.6
77-47-4	Hexachlorocyclopentadiene	U	376	ug/kg	75.1	376
88-06-2	2,4,6-Trichlorophenol	U	376	ug/kg	75.1	376
95-95-4	2,4,5-Trichlorophenol	U	376	ug/kg	75.1	376
91-58-7	2-Chloronaphthalene	U	37.6	ug/kg	12.4	37.6
88-74-4	2-Nitroaniline *o-Nitroaniline*	U	376	ug/kg	75.1	376
99-09-2	3-Nitroaniline	U	376	ug/kg	75.1	376

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-2089	Date Collected:	02/22/2010 12:00	Matrix:	R
Lab Sample ID:	248102007	Date Received:	02/26/2010 08:45	%Moisture:	11.7
		Client:	LANL010	Project:	LANL01004
Client ID:	RE15-10-8399	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	959979	Inst:	MSD8.I	Dilution:	1
Run Date:	03/17/2010 12:59	Analyst:	NAG1	Inj. Vol:	.5 uL
Prep Date:	03/02/2010 23:08	Aliquot:	30.14 g	Final Volume:	1 mL
Data File:	s8c1710.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	376	ug/kg	75.1	376
606-20-2	2,6-Dinitrotoluene	U	376	ug/kg	37.6	376
208-96-8	Acenaphthylene	U	37.6	ug/kg	11.3	37.6
51-28-5	2,4-Dinitrophenol	U	751	ug/kg	143	751
132-64-9	Dibenzofuran	U	376	ug/kg	75.1	376
84-66-2	Diethylphthalate	U	376	ug/kg	75.1	376
86-73-7	Fluorene	U	37.6	ug/kg	11.3	37.6
7005-72-3	4-Chlorophenylphenylether	U	376	ug/kg	75.1	376
534-52-1	2-Methyl-4,6-dinitrophenol	U	376	ug/kg	75.1	376
100-01-6	4-Nitroaniline	U	376	ug/kg	113	376
	p-Nitroaniline					
122-39-4	Diphenylamine	U	376	ug/kg	75.1	376
122-66-7	Azobenzene	U	376	ug/kg	75.1	376
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	376	ug/kg	75.1	376
118-74-1	Hexachlorobenzene	U	376	ug/kg	75.1	376
85-01-8	Phenanthrene	U	37.6	ug/kg	11.3	37.6
120-12-7	Anthracene	U	37.6	ug/kg	7.51	37.6
84-74-2	Di-n-butylphthalate	U	376	ug/kg	75.1	376
206-44-0	Fluoranthene	U	37.6	ug/kg	11.3	37.6
85-68-7	Butylbenzylphthalate	U	376	ug/kg	75.1	376
56-55-3	Benzo(a)anthracene	U	37.6	ug/kg	11.3	37.6
91-94-1	3,3'-Dichlorobenzidine	U	376	ug/kg	113	376
218-01-9	Chrysene	U	37.6	ug/kg	11.3	37.6
117-81-7	bis(2-Ethylhexyl)phthalate	U	376	ug/kg	75.1	376
117-84-0	Di-n-octylphthalate	U	376	ug/kg	75.1	376
205-99-2	Benzo(b)fluoranthene	U	37.6	ug/kg	11.3	37.6
207-08-9	Benzo(k)fluoranthene	U	37.6	ug/kg	11.3	37.6
50-32-8	Benzo(a)pyrene	U	37.6	ug/kg	11.3	37.6
193-39-5	Indeno(1,2,3-cd)pyrene	U	37.6	ug/kg	11.3	37.6
53-70-3	Dibenzo(a,h)anthracene	U	37.6	ug/kg	11.3	37.6
191-24-2	Benzo(ghi)perylene	U	37.6	ug/kg	11.3	37.6
120-82-1	1,2,4-Trichlorobenzene	U	376	ug/kg	75.1	376

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	3.08	274	ug/kg		JA
475-20-7	1,4-Methanoazulene, decahydro-4,8,8-trim	7.17	283	ug/kg	99	NJ

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-2089**	**Date Collected:**	**02/22/2010 12:00**	**Matrix:**	**R**
Lab Sample ID:	**248102007**	**Date Received:**	**02/26/2010 08:45**	**%Moisture:**	**11.7**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE15-10-8399**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**959979**	**Inst:**	**MSD8.I**	**Dilution:**	**1**
Run Date:	**03/17/2010 12:59**	**Analyst:**	**NAG1**	**Inj. Vol:**	**.5 uL**
Prep Date:	**03/02/2010 23:08**	**Aliquot:**	**30.14 g**	**Final Volume:**	**1 mL**
Data File:	**s8c1710.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
77-53-2	Cedrol	8.29	278	ug/kg	94	NJ

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-2089**	**Date Collected:**	**02/22/2010 12:00**	**Matrix:**	**R**
Lab Sample ID:	**248102001**	**Date Received:**	**02/26/2010 08:45**	**%Moisture:**	**9.4**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE15-10-8404**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**959979**	**Inst:**	**MSD8.I**	**Dilution:**	**1**
Run Date:	**03/17/2010 17:51**	**Analyst:**	**NAG1**	**Inj. Vol:**	**.5 uL**
Prep Date:	**03/02/2010 23:08**	**Aliquot:**	**30.13 g**	**Final Volume:**	**1 mL**
Data File:	**s8c1720.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	367	ug/kg	73.3	367
108-95-2	Phenol	U	367	ug/kg	73.3	367
95-57-8	2-Chlorophenol	U	367	ug/kg	73.3	367
106-46-7	1,4-Dichlorobenzene	U	367	ug/kg	73.3	367
621-64-7	N-Nitrosodipropylamine	U	367	ug/kg	73.3	367
59-50-7	4-Chloro-3-methylphenol	U	367	ug/kg	73.3	367
83-32-9	Acenaphthene	U	36.7	ug/kg	12.1	36.7
121-14-2	2,4-Dinitrotoluene	U	367	ug/kg	36.7	367
100-02-7	4-Nitrophenol	U	367	ug/kg	121	367
87-86-5	Pentachlorophenol	U	367	ug/kg	91.6	367
129-00-0	Pyrene	U	36.7	ug/kg	11.0	36.7
110-86-1	Pyridine	U	367	ug/kg	73.3	367
62-53-3	Aniline	U	367	ug/kg	110	367
111-44-4	bis(2-Chloroethyl) ether	U	367	ug/kg	73.3	367
541-73-1	1,3-Dichlorobenzene	U	367	ug/kg	73.3	367
100-51-6	Benzyl alcohol	U	367	ug/kg	110	367
95-50-1	1,2-Dichlorobenzene	U	367	ug/kg	73.3	367
108-60-1	bis(2-Chloroisopropyl)ether	U	367	ug/kg	73.3	367
95-48-7	o-Cresol	U	367	ug/kg	73.3	367
65794-96-9	m,p-Cresols	U	367	ug/kg	110	367
67-72-1	Hexachloroethane	U	367	ug/kg	73.3	367
98-95-3	Nitrobenzene	U	367	ug/kg	73.3	367
78-59-1	Isophorone	U	367	ug/kg	73.3	367
88-75-5	2-Nitrophenol	U	367	ug/kg	73.3	367
105-67-9	2,4-Dimethylphenol	U	367	ug/kg	128	367
111-91-1	bis(2-Chloroethoxy)methane	U	367	ug/kg	73.3	367
120-83-2	2,4-Dichlorophenol	U	367	ug/kg	73.3	367
65-85-0	Benzoic acid	U	733	ug/kg	183	733
91-20-3	Naphthalene	U	36.7	ug/kg	11.0	36.7
106-47-8	4-Chloroaniline	U	367	ug/kg	73.3	367
87-68-3	Hexachlorobutadiene	U	367	ug/kg	73.3	367
91-57-6	2-Methylnaphthalene	U	36.7	ug/kg	7.33	36.7
77-47-4	Hexachlorocyclopentadiene	U	367	ug/kg	73.3	367
88-06-2	2,4,6-Trichlorophenol	U	367	ug/kg	73.3	367
95-95-4	2,4,5-Trichlorophenol	U	367	ug/kg	73.3	367
91-58-7	2-Chloronaphthalene	U	36.7	ug/kg	12.1	36.7
88-74-4	2-Nitroaniline *o-Nitroaniline*	U	367	ug/kg	73.3	367
99-09-2	3-Nitroaniline	U	367	ug/kg	73.3	367

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-2089**	**Date Collected:**	**02/22/2010 12:00**	**Matrix:**	**R**
Lab Sample ID:	**248102001**	**Date Received:**	**02/26/2010 08:45**	**%Moisture:**	**9.4**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE15-10-8404**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**959979**	**Inst:**	**MSD8.I**	**Dilution:**	**1**
Run Date:	**03/17/2010 17:51**	**Analyst:**	**NAG1**	**Inj. Vol:**	**.5 uL**
Prep Date:	**03/02/2010 23:08**	**Aliquot:**	**30.13 g**	**Final Volume:**	**1 mL**
Data File:	**s8c1720.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	367	ug/kg	73.3	367
606-20-2	2,6-Dinitrotoluene	U	367	ug/kg	36.7	367
208-96-8	Acenaphthylene	U	36.7	ug/kg	11.0	36.7
51-28-5	2,4-Dinitrophenol	U	733	ug/kg	139	733
132-64-9	Dibenzofuran	U	367	ug/kg	73.3	367
84-66-2	Diethylphthalate	U	367	ug/kg	73.3	367
86-73-7	Fluorene	U	36.7	ug/kg	11.0	36.7
7005-72-3	4-Chlorophenylphenylether	U	367	ug/kg	73.3	367
534-52-1	2-Methyl-4,6-dinitrophenol	U	367	ug/kg	73.3	367
100-01-6	4-Nitroaniline	U	367	ug/kg	110	367
	p-Nitroaniline					
122-39-4	Diphenylamine	U	367	ug/kg	73.3	367
122-66-7	Azobenzene	U	367	ug/kg	73.3	367
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	367	ug/kg	73.3	367
118-74-1	Hexachlorobenzene	U	367	ug/kg	73.3	367
85-01-8	Phenanthrene	U	36.7	ug/kg	11.0	36.7
120-12-7	Anthracene	U	36.7	ug/kg	7.33	36.7
84-74-2	Di-n-butylphthalate	U	367	ug/kg	73.3	367
206-44-0	Fluoranthene	U	36.7	ug/kg	11.0	36.7
85-68-7	Butylbenzylphthalate	U	367	ug/kg	73.3	367
56-55-3	Benzo(a)anthracene	U	36.7	ug/kg	11.0	36.7
91-94-1	3,3'-Dichlorobenzidine	U	367	ug/kg	110	367
218-01-9	Chrysene	U	36.7	ug/kg	11.0	36.7
117-81-7	bis(2-Ethylhexyl)phthalate	U	367	ug/kg	73.3	367
117-84-0	Di-n-octylphthalate	U	367	ug/kg	73.3	367
205-99-2	Benzo(b)fluoranthene	U	36.7	ug/kg	11.0	36.7
207-08-9	Benzo(k)fluoranthene	U	36.7	ug/kg	11.0	36.7
50-32-8	Benzo(a)pyrene	U	36.7	ug/kg	11.0	36.7
193-39-5	Indeno(1,2,3-cd)pyrene	U	36.7	ug/kg	11.0	36.7
53-70-3	Dibenzo(a,h)anthracene	U	36.7	ug/kg	11.0	36.7
191-24-2	Benzo(ghi)perylene	U	36.7	ug/kg	11.0	36.7
120-82-1	1,2,4-Trichlorobenzene	U	367	ug/kg	73.3	367

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	3.08	233	ug/kg		JA
	Unknown	16.24	176	ug/kg		J

QC Summary

Semi-Volatile

Surrogate Recovery Report

SDG Number: 10-2089

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
1202059027	MB for batch 959978	79	76	75	67	64	78
1202059028	LCS for batch 959978	78	77	73	65	68	75
248102003	RE15-10-8393	67	63	65	58	52	70
248102004	RE15-10-8395	66	65	64	57	46	73
248102005	RE15-10-8398	55	54	53	48	43	62
248102006	RE15-10-8394	62	62	59	53	48	69
248102007	RE15-10-8399	74	74	72	65	64	91
248102001	RE15-10-8404	69	61	68	62	53	85
248102002	RE15-10-8396	75	70	74	66	53	89
248102008	RE15-10-8397	65	57	65	57	50	77

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

SDG Number: 10-2089
Client ID: LCS for batch 959978
Lab Sample ID: 1202059028
Instrument: MSD8.I
Analyst: NAG1
Inj. Vol: .5 uL

Sample Type: Laboratory Control Sample
Matrix: SOIL
Analysis Date: 03/17/2010 10:33
Dilution: 1
Prep Batch ID 959978
Batch ID: 959979

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	1120	67	22-114
108-95-2	LCS	Phenol	1670	0.0	1330	80	39-104
95-57-8	LCS	2-Chlorophenol	1670	0.0	1300	78	40-107
106-46-7	LCS	1,4-Dichlorobenzene	1670	0.0	1140	69	33-108
621-64-7	LCS	N-Nitrosodipropylamine	1670	0.0	1320	79	34-113
59-50-7	LCS	4-Chloro-3-methylphenol	1670	0.0	1150	69	42-114
83-32-9	LCS	Acenaphthene	1670	0.0	1070	64	40-105
121-14-2	LCS	2,4-Dinitrotoluene	1670	0.0	1210	73	49-112
100-02-7	LCS	4-Nitrophenol	1670	0.0	1080	65	24-113
87-86-5	LCS	Pentachlorophenol	1670	0.0	1220	73	27-116
129-00-0	LCS	Pyrene	1670	0.0	1040	63	42-113
110-86-1	LCS	Pyridine	1670	0.0	1290	77	8-125
62-53-3	LCS	Aniline	1670	0.0	853	51	18-126
111-44-4	LCS	bis(2-Chloroethyl) ether	1670	0.0	1260	76	32-103
541-73-1	LCS	1,3-Dichlorobenzene	1670	0.0	1150	69	32-108
100-51-6	LCS	Benzyl alcohol	1670	0.0	764	46	27-108
95-50-1	LCS	1,2-Dichlorobenzene	1670	0.0	1170	70	35-111
108-60-1	LCS	bis(2-Chloroisopropyl)ether	1670	0.0	1250	75	28-117
95-48-7	LCS	o-Cresol	1670	0.0	1210	73	39-111
65794-96-9	LCS	m,p-Cresols	1670	0.0	1430	86	45-121
67-72-1	LCS	Hexachloroethane	1670	0.0	1130	68	30-109
98-95-3	LCS	Nitrobenzene	1670	0.0	1270	76	33-116

Semi-Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-2089
Client ID: LCS for batch 959978
Lab Sample ID: 1202059028
Instrument: MSD8.I
Analyst: NAG1
Inj. Vol: .5 uL

Sample Type: Laboratory Control Sample
Matrix: SOIL
Analysis Date: 03/17/2010 10:33
Dilution: 1
Prep Batch ID: 959978
Batch ID: 959979

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	1270	76	35-113
88-75-5	LCS	2-Nitrophenol	1670	0.0	1290	78	31-117
105-67-9	LCS	2,4-Dimethylphenol	1670	0.0	1110	67	32-112
111-91-1	LCS	bis(2-Chloroethoxy)methane	1670	0.0	1300	78	34-110
120-83-2	LCS	2,4-Dichlorophenol	1670	0.0	1230	74	34-116
65-85-0	LCS	Benzoic acid	3330	0.0	2400	72	22-138
91-20-3	LCS	Naphthalene	1670	0.0	1220	73	35-103
106-47-8	LCS	4-Chloroaniline	1670	0.0	907	54	20-118
87-68-3	LCS	Hexachlorobutadiene	1670	0.0	1070	64	31-117
91-57-6	LCS	2-Methylnaphthalene	1670	0.0	1250	75	38-115
77-47-4	LCS	Hexachlorocyclopentadiene	1670	0.0	939	56	22-140
88-06-2	LCS	2,4,6-Trichlorophenol	1670	0.0	1160	70	40-110
95-95-4	LCS	2,4,5-Trichlorophenol	1670	0.0	1090	65	43-113
91-58-7	LCS	2-Chloronaphthalene	1670	0.0	1160	69	37-111
88-74-4	LCS	2-Nitroaniline *o-Nitroaniline*	1670	0.0	1240	74	41-113
99-09-2	LCS	3-Nitroaniline *m-Nitroaniline*	1670	0.0	1130	68	34-125
131-11-3	LCS	Dimethylphthalate	1670	0.0	1280	77	48-122
606-20-2	LCS	2,6-Dinitrotoluene	1670	0.0	1220	73	47-107
208-96-8	LCS	Acenaphthylene	1670	0.0	1150	69	44-110
51-28-5	LCS	2,4-Dinitrophenol	1670	0.0	1360	81	18-127
132-64-9	LCS	Dibenzofuran	1670	0.0	1150	69	49-115
84-66-2	LCS	Diethylphthalate	1670	0.0	1250	75	51-126

Semi-Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-2089
Client ID: LCS for batch 959978
Lab Sample ID: 1202059028
Instrument: MSD8.I
Analyst: NAG1
Inj. Vol: .5 uL

Sample Type: Laboratory Control Sample
Matrix: SOIL
Analysis Date: 03/17/2010 10:33
Dilution: 1
Prep Batch ID: 959978
Batch ID: 959979

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	1100	66	43-109
7005-72-3	LCS	4-Chlorophenylphenylether	1670	0.0	1110	67	45-115
534-52-1	LCS	2-Methyl-4,6-dinitrophenol	1670	0.0	1350	81	32-117
100-01-6	LCS	4-Nitroaniline *p-Nitroaniline*	1670	0.0	1390	84	33-148
122-39-4	LCS	Diphenylamine	1670	0.0	1400	84	46-114
122-66-7	LCS	Azobenzene *1,2-Diphenylhydrazine*	1670	0.0	1420	85	38-123
101-55-3	LCS	4-Bromophenylphenylether	1670	0.0	1210	73	40-119
118-74-1	LCS	Hexachlorobenzene	1670	0.0	1160	70	43-111
85-01-8	LCS	Phenanthrene	1670	0.0	1190	71	46-107
120-12-7	LCS	Anthracene	1670	0.0	1120	67	46-110
84-74-2	LCS	Di-n-butylphthalate	1670	0.0	1520	91	52-132
206-44-0	LCS	Fluoranthene	1670	0.0	1150	69	51-115
85-68-7	LCS	Butylbenzylphthalate	1670	0.0	1470	88	47-137
56-55-3	LCS	Benzo(a)anthracene	1670	0.0	1130	68	50-108
91-94-1	LCS	3,3'-Dichlorobenzidine	1670	0.0	1010	61	36-103
218-01-9	LCS	Chrysene	1670	0.0	1190	71	48-111
117-81-7	LCS	bis(2-Ethylhexyl)phthalate	1670	0.0	1630	98	48-139
117-84-0	LCS	Di-n-octylphthalate	1670	0.0	1400	84	42-141
205-99-2	LCS	Benzo(b)fluoranthene	1670	0.0	1130	68	49-114
207-08-9	LCS	Benzo(k)fluoranthene	1670	0.0	1160	69	50-116
50-32-8	LCS	Benzo(a)pyrene	1670	0.0	1230	74	54-114
193-39-5	LCS	Indeno(1,2,3-cd)pyrene	1670	0.0	1520	91	53-120

Semi-Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-2089
Sample Type: Laboratory Control Sample
Client ID: LCS for batch 959978
Matrix: SOIL
Lab Sample ID: 1202059028
Instrument: MSD8.I
Analysis Date: 03/17/2010 10:33
Dilution: 1
Analyst: NAG1
Prep Batch ID: 959978
Inj. Vol: .5 uL
Batch ID: 959979

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	1600	96	53-121
191-24-2	LCS	Benzo(ghi)perylene	1670	0.0	1480	89	50-121
120-82-1	LCS	1,2,4-Trichlorobenzene	1670	0.0	1130	68	32-114

Semi-Volatile

Quality Control Summary

Spike Recovery Report

SDG Number: 10-2089
Client ID: RE36-10-8448MS
Lab Sample ID: 1202059029
Instrument: MSD8.I
Analyst: NAG1
Inj. Vol: .5 uL

Sample Type: Matrix Spike
Matrix: R
%Moisture: 2.7
Analysis Date: 03/17/2010 13:56
Prep Batch ID: 959978
Batch ID: 959979
Dilution: 1

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	1710	0.00	U	1190	70	27-98
108-95-2	MS	Phenol	1710	0.00	U	1430	83	33-94
95-57-8	MS	2-Chlorophenol	1710	0.00	U	1390	81	29-96
106-46-7	MS	1,4-Dichlorobenzene	1710	0.00	U	1220	71	27-96
621-64-7	MS	N-Nitrosodipropylamine	1710	0.00	U	1440	84	29-102
59-50-7	MS	4-Chloro-3-methylphenol	1710	0.00	U	1190	70	29-110
83-32-9	MS	Acenaphthene	1710	0.00	U	1140	67	17-109
121-14-2	MS	2,4-Dinitrotoluene	1710	0.00	U	1350	79	33-107
100-02-7	MS	4-Nitrophenol	1710	0.00	U	145	8 *	15-110
87-86-5	MS	Pentachlorophenol	1710	0.00	U	936	55	23-110
129-00-0	MS	Pyrene	1710	0.00	U	1150	67	24-118
110-86-1	MS	Pyridine	1710	0.00	U	907	53	25-102
62-53-3	MS	Aniline	1710	0.00	U	805	47	18-109
111-44-4	MS	bis(2-Chloroethyl) ether	1710	0.00	U	1360	79	29-96
541-73-1	MS	1,3-Dichlorobenzene	1710	0.00	U	1230	72	26-97
100-51-6	MS	Benzyl alcohol	1710	0.00	U	107	6 *	19-112
95-50-1	MS	1,2-Dichlorobenzene	1710	0.00	U	1250	73	30-97
108-60-1	MS	bis(2-Chloroisopropyl)ether	1710	0.00	U	1370	80	28-103
95-48-7	MS	o-Cresol	1710	0.00	U	1290	76	32-107
65794-96-9	MS	m,p-Cresols	1710	0.00	U	1430	84	33-115
67-72-1	MS	Hexachloroethane	1710	0.00	U	1230	72	25-100
98-95-3	MS	Nitrobenzene	1710	0.00	U	1340	79	27-106

Semi-Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-2089
Client ID: RE36-10-8448MS
Lab Sample ID: 1202059029
Instrument: MSD8.I
Analyst: NAG1
Inj. Vol: .5 uL

Sample Type: Matrix Spike
Matrix: R
%Moisture: 2.7
Analysis Date: 03/17/2010 13:56
Prep Batch ID: 959978
Batch ID: 959979
Dilution: 1

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits
78-59-1	MS	Isophorone	1710	0.00	U	1370	80	29-104
88-75-5	MS	2-Nitrophenol	1710	0.00	U	1370	80	26-102
105-67-9	MS	2,4-Dimethylphenol	1710	0.00	U	1100	65	22-104
111-91-1	MS	bis(2-Chloroethoxy)methane	1710	0.00	U	1390	81	27-101
120-83-2	MS	2,4-Dichlorophenol	1710	0.00	U	1330	78	26-103
65-85-0	MS	Benzoic acid	3420	0.00	U	1570	46	13-131
91-20-3	MS	Naphthalene	1710	0.00	U	1290	76	23-103
106-47-8	MS	4-Chloroaniline	1710	0.00	U	961	56	26-103
87-68-3	MS	Hexachlorobutadiene	1710	0.00	U	1130	66	28-101
91-57-6	MS	2-Methylnaphthalene	1710	0.00	U	1330	78	27-106
77-47-4	MS	Hexachlorocyclopentadiene	1710	0.00	U	931	54	24-117
88-06-2	MS	2,4,6-Trichlorophenol	1710	0.00	U	1130	66	26-105
95-95-4	MS	2,4,5-Trichlorophenol	1710	0.00	U	1180	69	30-110
91-58-7	MS	2-Chloronaphthalene	1710	0.00	U	1230	72	28-102
88-74-4	MS	2-Nitroaniline *o-Nitroaniline*	1710	0.00	U	1350	79	33-106
99-09-2	MS	3-Nitroaniline *m-Nitroaniline*	1710	0.00	U	1250	73	33-116
131-11-3	MS	Dimethylphthalate	1710	0.00	U	1400	82	38-113
606-20-2	MS	2,6-Dinitrotoluene	1710	0.00	U	1340	79	29-107
208-96-8	MS	Acenaphthylene	1710	0.00	U	1240	73	25-108
51-28-5	MS	2,4-Dinitrophenol	1710	0.00	U	1050	61	14-102
132-64-9	MS	Dibenzofuran	1710	0.00	U	1260	74	35-112
84-66-2	MS	Diethylphthalate	1710	0.00	U	1400	82	36-122

Semi-Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-2089
Client ID: RE36-10-8448MS
Lab Sample ID: 1202059029
Instrument: MSD8.I
Analyst: NAG1
Inj. Vol: .5 uL

Sample Type: Matrix Spike
Matrix: R
%Moisture: 2.7
Analysis Date: 03/17/2010 13:56
Prep Batch ID: 959978
Batch ID: 959979
Dilution: 1

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits
86-73-7	MS	Fluorene	1710	0.00	U	1220	72	33-105
7005-72-3	MS	4-Chlorophenylphenylether	1710	0.00	U	1230	72	30-110
534-52-1	MS	2-Methyl-4,6-dinitrophenol	1710	0.00	U	1290	75	26-97
100-01-6	MS	4-Nitroaniline *p-Nitroaniline*	1710	0.00	U	1540	90	28-135
122-39-4	MS	Diphenylamine	1710	0.00	U	1570	92	33-109
122-66-7	MS	Azobenzene *1,2-Diphenylhydrazine*	1710	0.00	U	1540	90	31-113
101-55-3	MS	4-Bromophenylphenylether	1710	0.00	U	1320	77	31-109
118-74-1	MS	Hexachlorobenzene	1710	0.00	U	1270	75	37-99
85-01-8	MS	Phenanthrene	1710	0.00	U	1340	78	29-109
120-12-7	MS	Anthracene	1710	0.00	U	1270	75	19-118
84-74-2	MS	Di-n-butylphthalate	1710	0.00	U	1660	97	39-123
206-44-0	MS	Fluoranthene	1710	0.00	U	1320	77	33-114
85-68-7	MS	Butylbenzylphthalate	1710	0.00	U	1610	94	35-131
56-55-3	MS	Benzo(a)anthracene	1710	0.00	U	1260	74	30-111
91-94-1	MS	3,3'-Dichlorobenzidine	1710	0.00	U	1130	66	30-124
218-01-9	MS	Chrysene	1710	0.00	U	1340	78	32-108
117-81-7	MS	bis(2-Ethylhexyl)phthalate	1710	0.00	U	1730	101	37-129
117-84-0	MS	Di-n-octylphthalate	1710	0.00	U	1570	92	31-143
205-99-2	MS	Benzo(b)fluoranthene	1710	0.00	U	1260	74	29-118
207-08-9	MS	Benzo(k)fluoranthene	1710	0.00	U	1290	76	32-118
50-32-8	MS	Benzo(a)pyrene	1710	0.00	U	1370	80	33-115
193-39-5	MS	Indeno(1,2,3-cd)pyrene	1710	0.00	U	1520	89	29-114

Semi-Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-2089
Client ID: RE36-10-8448MS
Lab Sample ID: 1202059029
Instrument: MSD8.I
Analyst: NAG1
Inj. Vol: .5 uL

Sample Type: Matrix Spike
Matrix: R
%Moisture: 2.7
Analysis Date: 03/17/2010 13:56
Prep Batch ID: 959978
Batch ID: 959979
Dilution: 1

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	1710	0.00	U	1820	106	27-119
191-24-2	MS	Benzo(ghi)perylene	1710	0.00	U	1660	97	28-112
120-82-1	MS	1,2,4-Trichlorobenzene	1710	0.00	U	1200	70	28-99

Semi-Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-2089
Client ID: RE36-10-8448MSD
Lab Sample ID: 1202059030
Instrument: MSD8.I
Analyst: NAG1
Inj. Vol: .5 uL

Sample Type: Matrix Spike Duplicate
Matrix: R
%Moisture: 2.7
Analysis Date: 03/17/2010 14:26
Prep Batch ID: 959978
Batch ID: 959979
Dilution: 1

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	1700	0.00	U	1080	64	27-98	9	0-30
108-95-2	MSD Phenol	1700	0.00	U	1270	75	33-94	12	0-30
95-57-8	MSD 2-Chlorophenol	1700	0.00	U	1270	75	29-96	9	0-30
106-46-7	MSD 1,4-Dichlorobenzene	1700	0.00	U	1130	66	27-96	7	0-30
621-64-7	MSD N-Nitrosodipropylamine	1700	0.00	U	1310	77	29-102	10	0-30
59-50-7	MSD 4-Chloro-3-methylphenol	1700	0.00	U	1150	67	29-110	4	0-30
83-32-9	MSD Acenaphthene	1700	0.00	U	1070	63	17-109	6	0-30
121-14-2	MSD 2,4-Dinitrotoluene	1700	0.00	U	1270	75	33-107	6	0-30
100-02-7	MSD 4-Nitrophenol	1700	0.00	U	0.00	0 *	15-110	200 *	0-30
87-86-5	MSD Pentachlorophenol	1700	0.00	U	674	40	23-110	33 *	0-30
129-00-0	MSD Pyrene	1700	0.00	U	1070	63	24-118	7	0-30
110-86-1	MSD Pyridine	1700	0.00	U	866	51	25-102	5	0-30
62-53-3	MSD Aniline	1700	0.00	U	865	51	18-109	7	0-30
111-44-4	MSD bis(2-Chloroethyl) ether	1700	0.00	U	1250	74	29-96	8	0-30
541-73-1	MSD 1,3-Dichlorobenzene	1700	0.00	U	1140	67	26-97	7	0-30
100-51-6	MSD Benzyl alcohol	1700	0.00	U	0.00	0 *	19-112	200 *	0-30
95-50-1	MSD 1,2-Dichlorobenzene	1700	0.00	U	1150	68	30-97	8	0-30
108-60-1	MSD bis(2-Chloroisopropyl)ether	1700	0.00	U	1280	75	28-103	7	0-30
95-48-7	MSD o-Cresol	1700	0.00	U	1160	68	32-107	11	0-30
65794-96-9	MSD m,p-Cresols	1700	0.00	U	1390	82	33-115	3	0-30
67-72-1	MSD Hexachloroethane	1700	0.00	U	1140	67	25-100	8	0-30
98-95-3	MSD Nitrobenzene	1700	0.00	U	1270	75	27-106	5	0-30

Semi-Volatile
Quality Control Summary
Spike Recovery Report

SDG Number: 10-2089
Client ID: RE36-10-8448MSD
Lab Sample ID: 1202059030
Instrument: MSD8.I
Analyst: NAG1
Inj. Vol: .5 uL

Sample Type: Matrix Spike Duplicate
Matrix: R
%Moisture: 2.7
Analysis Date: 03/17/2010 14:26
Prep Batch ID: 959978
Batch ID: 959979
Dilution: 1

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	1700	0.00	U	1290	76	29-104	6	0-30
88-75-5	MSD 2-Nitrophenol	1700	0.00	U	1300	77	26-102	5	0-30
105-67-9	MSD 2,4-Dimethylphenol	1700	0.00	U	841	49	22-104	27	0-30
111-91-1	MSD bis(2-Chloroethoxy)methane	1700	0.00	U	1310	77	27-101	6	0-30
120-83-2	MSD 2,4-Dichlorophenol	1700	0.00	U	1230	72	26-103	8	0-30
65-85-0	MSD Benzoic acid	3410	0.00	U	1780	52	13-131	13	0-30
91-20-3	MSD Naphthalene	1700	0.00	U	1210	71	23-103	7	0-30
106-47-8	MSD 4-Chloroaniline	1700	0.00	U	968	57	26-103	1	0-30
87-68-3	MSD Hexachlorobutadiene	1700	0.00	U	1050	62	28-101	7	0-30
91-57-6	MSD 2-Methylnaphthalene	1700	0.00	U	1240	73	27-106	7	0-30
77-47-4	MSD Hexachlorocyclopentadiene	1700	0.00	U	981	58	24-117	5	0-30
88-06-2	MSD 2,4,6-Trichlorophenol	1700	0.00	U	962	56	26-105	16	0-30
95-95-4	MSD 2,4,5-Trichlorophenol	1700	0.00	U	1120	66	30-110	5	0-30
91-58-7	MSD 2-Chloronaphthalene	1700	0.00	U	1140	67	28-102	7	0-30
88-74-4	MSD 2-Nitroaniline *o-Nitroaniline*	1700	0.00	U	1290	76	33-106	5	0-30
99-09-2	MSD 3-Nitroaniline *m-Nitroaniline*	1700	0.00	U	1180	69	33-116	6	0-30
131-11-3	MSD Dimethylphthalate	1700	0.00	U	1310	77	38-113	7	0-30
606-20-2	MSD 2,6-Dinitrotoluene	1700	0.00	U	1270	74	29-107	6	0-30
208-96-8	MSD Acenaphthylene	1700	0.00	U	1160	68	25-108	6	0-30
51-28-5	MSD 2,4-Dinitrophenol	1700	0.00	U	1110	65	14-102	6	0-30
132-64-9	MSD Dibenzofuran	1700	0.00	U	1170	69	35-112	7	0-30
84-66-2	MSD Diethylphthalate	1700	0.00	U	1300	76	36-122	7	0-30

Semi-Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-2089
Client ID: RE36-10-8448MSD
Lab Sample ID: 1202059030
Instrument: MSD8.I
Analyst: NAG1
Inj. Vol: .5 uL

Sample Type: Matrix Spike Duplicate
Matrix: R
%Moisture: 2.7
Analysis Date: 03/17/2010 14:26
Prep Batch ID: 959978
Batch ID: 959979
Dilution: 1

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	1700	0.00	U	1130	66	33-105	8	0-30
7005-72-3	MSD 4-Chlorophenylphenylether	1700	0.00	U	1140	67	30-110	7	0-30
534-52-1	MSD 2-Methyl-4,6-dinitrophenol	1700	0.00	U	1230	72	26-97	4	0-30
100-01-6	MSD 4-Nitroaniline *p-Nitroaniline*	1700	0.00	U	1440	84	28-135	7	0-30
122-39-4	MSD Diphenylamine	1700	0.00	U	1420	83	33-109	10	0-30
122-66-7	MSD Azobenzene *1,2-Diphenylhydrazine*	1700	0.00	U	1420	83	31-113	9	0-30
101-55-3	MSD 4-Bromophenylphenylether	1700	0.00	U	1220	72	31-109	8	0-30
118-74-1	MSD Hexachlorobenzene	1700	0.00	U	1170	69	37-99	8	0-30
85-01-8	MSD Phenanthrene	1700	0.00	U	1220	72	29-109	9	0-30
120-12-7	MSD Anthracene	1700	0.00	U	1180	69	19-118	8	0-30
84-74-2	MSD Di-n-butylphthalate	1700	0.00	U	1540	91	39-123	7	0-30
206-44-0	MSD Fluoranthene	1700	0.00	U	1220	71	33-114	8	0-30
85-68-7	MSD Butylbenzylphthalate	1700	0.00	U	1490	87	35-131	8	0-30
56-55-3	MSD Benzo(a)anthracene	1700	0.00	U	1170	69	30-111	7	0-30
91-94-1	MSD 3,3'-Dichlorobenzidine	1700	0.00	U	1010	59	30-124	11	0-30
218-01-9	MSD Chrysene	1700	0.00	U	1220	72	32-108	9	0-30
117-81-7	MSD bis(2-Ethylhexyl)phthalate	1700	0.00	U	1640	96	37-129	5	0-30
117-84-0	MSD Di-n-octylphthalate	1700	0.00	U	1410	83	31-143	11	0-30
205-99-2	MSD Benzo(b)fluoranthene	1700	0.00	U	1140	67	29-118	11	0-30
207-08-9	MSD Benzo(k)fluoranthene	1700	0.00	U	1190	70	32-118	8	0-30
50-32-8	MSD Benzo(a)pyrene	1700	0.00	U	1270	75	33-115	7	0-30
193-39-5	MSD Indeno(1,2,3-cd)pyrene	1700	0.00	U	1680	99	29-114	10	0-30

Semi-Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 10-2089
Client ID: RE36-10-8448MSD
Lab Sample ID: 1202059030
Instrument: MSD8.I
Analyst: NAG1
Inj. Vol: .5 uL

Sample Type: Matrix Spike Duplicate
Matrix: R
%Moisture: 2.7
Analysis Date: 03/17/2010 14:26
Prep Batch ID: 959978
Batch ID: 959979
Dilution: 1

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	1700	0.00	U	1800	106	27-119	1	0-30
191-24-2	MSD	Benzo(ghi)perylene	1700	0.00	U	1670	98	28-112	0	0-30
120-82-1	MSD	1,2,4-Trichlorobenzene	1700	0.00	U	1130	66	28-99	6	0-30

Method Blank Summary

SDG Number:	10-2089	Client:	LANL010	Matrix:	SOIL
Client ID:	MB for batch 959978	Instrument ID:	MSD8.I	Data File:	s8c1704-1.d
Lab Sample ID:	1202059027	Prep Date:	03/02/2010 23:08	Analyzed:	03/17/10 10:04
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 959978	1202059028	s8c1705-1.d	03/17/10	1033
02	RE15-10-8393	248102003	s8c1706.d	03/17/10	1101
03	RE15-10-8395	248102004	s8c1707.d	03/17/10	1131
04	RE15-10-8398	248102005	s8c1708.d	03/17/10	1200
05	RE15-10-8394	248102006	s8c1709.d	03/17/10	1230
06	RE15-10-8399	248102007	s8c1710.d	03/17/10	1259
09	RE15-10-8404	248102001	s8c1720.d	03/17/10	1751
10	RE15-10-8396	248102002	s8c1721.d	03/17/10	1821
11	RE15-10-8397	248102008	s8c1722.d	03/17/10	1851

Instrument Performance Check

DFTPP

Lab Name GEL Laboratories LLC **Client SDG:** 10-2089

Instrument ID: MSD8.I **Injection Date/Time:** 17-MAR-10 08:47

Column Description: J & W DB-5MS **Lab File ID** /chem/MSD8.i/s031710.b/s8c1701.d

m/e	Ion Abundance Criteria	% Relative Abundance
198	Base Peak, 100% Relative Abundance	100
51	30 - 60% of mass 198	38.8
68	Less than 2% of mass 69	0
69	Mass 69 Relative Abundance	39.7
70	Less than 2% of mass 69	0.5
127	40 - 60% of mass 198	50.2
197	0 - 1% of mass 198	0
199	5 - 9% of mass 198	6.7
275	10 - 30% of mass 198	26.8
365	Greater than 1% of mass 198	2.8
441	Present, but less than mass 443	84.6
442	Greater than 40% of mass 198	69.5
443	17 - 23% of mass 442	19.3

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

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
MEGACVS	WBN100309-05.3	s8c1702.d	17-MAR-10 09:03
AP12CVS	WBN100312-03.2	s8c1703.d	17-MAR-10 09:34
SBLK01	1202059027	s8c1704-1.d	17-MAR-10 10:04
SBLK01LCS	1202059028	s8c1705-1.d	17-MAR-10 10:33
RE15-10-8393	248102003	s8c1706.d	17-MAR-10 11:01
RE15-10-8395	248102004	s8c1707.d	17-MAR-10 11:31
RE15-10-8398	248102005	s8c1708.d	17-MAR-10 12:00
RE15-10-8394	248102006	s8c1709.d	17-MAR-10 12:30
RE15-10-8399	248102007	s8c1710.d	17-MAR-10 12:59
RE15-10-8404	248102001	s8c1720.d	17-MAR-10 17:51
RE15-10-8396	248102002	s8c1721.d	17-MAR-10 18:21
RE15-10-8397	248102008	s8c1722.d	17-MAR-10 18:51

Instrument Performance Check

DFTPP

Lab Name GEL Laboratories LLC **Client SDG:** 10-2089

Instrument ID: MSD8.I **Injection Date/Time:** 20-FEB-10 12:04

Column Description: J & W DB-5MS **Lab File ID** /chem/MSD8.i/s022010.b/s8b2001.d

m/e	Ion Abundance Criteria	% Relative Abundance
198	Base Peak, 100% Relative Abundance	100
51	30 - 60% of mass 198	41.9
68	Less than 2% of mass 69	1.9
69	Mass 69 Relative Abundance	40.3
70	Less than 2% of mass 69	0.6
127	40 - 60% of mass 198	49.9
197	0 - 1% of mass 198	0
199	5 - 9% of mass 198	6.8
275	10 - 30% of mass 198	24.3
365	Greater than 1% of mass 198	2.6
441	Present, but less than mass 443	76.5
442	Greater than 40% of mass 198	61.7
443	17 - 23% of mass 442	19.3

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

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
MEGAICAL	WBN100215-08	s8b2003.d	20-FEB-10 12:55
MEGAICAL	WBN100215-07	s8b2004.d	20-FEB-10 13:30
MEGAICAL	WBN100215-06	s8b2005.d	20-FEB-10 14:05
MEGAICAL	WBN100215-05.1	s8b2006.d	20-FEB-10 14:40
MEGAICAL	WBN100215-04	s8b2007.d	20-FEB-10 15:14
MEGAICAL	WBN100215-03	s8b2008.d	20-FEB-10 15:50
MEGAICAL	WBN100215-02	s8b2009.d	20-FEB-10 16:25
MEGAICAL	WBN100215-01	s8b2010.d	20-FEB-10 16:59
MEGAICV	WBN100215-05.1	s8b2012.d	20-FEB-10 18:09

Instrument Performance Check

DFTPP

Lab Name GEL Laboratories LLC **Client SDG:** 10-2089

Instrument ID: MSD8.I **Injection Date/Time:** 21-FEB-10 08:35

Column Description: J & W DB-5MS **Lab File ID** /chem/MSD8.i/s022010.b/s8b2013.d

m/e	Ion Abundance Criteria	% Relative Abundance
198	Base Peak, 100% Relative Abundance	100
51	30 - 60% of mass 198	40.5
68	Less than 2% of mass 69	1.8
69	Mass 69 Relative Abundance	38.9
70	Less than 2% of mass 69	0.6
127	40 - 60% of mass 198	48.8
197	0 - 1% of mass 198	0
199	5 - 9% of mass 198	6.8
275	10 - 30% of mass 198	25.3
365	Greater than 1% of mass 198	2.8
441	Present, but less than mass 443	76.6
442	Greater than 40% of mass 198	61.7
443	17 - 23% of mass 442	19.7

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
APICAL	WBN100218-01	s8b2015.d	21-FEB-10 09:21
APICAL	WBN100218-02	s8b2016.d	21-FEB-10 09:52
APICAL	WBN100218-03.1	s8b2017.d	21-FEB-10 10:23
APICAL	WBN100218-04	s8b2018.d	21-FEB-10 10:54
APICAL	WBN100218-05	s8b2019.d	21-FEB-10 11:26
APICAL	WBN100218-06	s8b2020.d	21-FEB-10 11:59
APICAL	WBN100218-07	s8b2021.d	21-FEB-10 12:30
APICV	WBN100218-08.1	s8b2035.d	21-FEB-10 19:53

Internal Standard
Area and RT Summary

Lab Name : GEL Laboratories LLC

Client SDG: 10-2089

Instrument: MSD8.I

STD Analysis Time: 17-MAR-10 09:03

GC Column: J&W DB-5MS

Data File: s8c1702.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	631013		4.45	2533240		5.72	1472232		7.57	2413856		9.17	2026104		12.1	1434831		14.2
Upper Limit	1262026		4.95	5066480		6.22	2944464		8.07	4827712		9.67	4052208		12.6	2869662		14.7
Lower Limit	315507		3.95	1266620		5.22	736116		7.07	1206928		8.67	1013052		11.6	717416		13.7
Sample ID																		
BLK01	664249		4.45	2583868		5.71	1473861		7.56	2566219		9.16	2366378		12.1	1878319		14.2
BLK01LCS	632433		4.45	2452491		5.72	1406213		7.57	2367185		9.17	2173530		12.1	1675623		14.2
RE15-10-8393	658840		4.45	2529673		5.71	1446375		7.56	2420542		9.16	2057954		12.1	1708142		14.2
RE15-10-8395	616496		4.45	2375768		5.71	1347577		7.57	2187876		9.16	1800092		12.1	1479519		14.2
RE15-10-8398	641088		4.45	2465315		5.71	1397459		7.57	2290391		9.16	1852980		12.1	1482012		14.2
RE15-10-8394	665100		4.45	2565887		5.71	1459213		7.57	2427022		9.16	2003709		12.1	1614840		14.2
RE15-10-8399	655792		4.45	2505548		5.71	1448609		7.56	2397321		9.16	1869560		12.1	1444816		14.2
RE15-10-8404	679445		4.45	2658981		5.71	1537430		7.56	2595301		9.16	2071438		12.1	1342166		14.2
RE15-10-8396	707118		4.45	2739593		5.71	1578568		7.57	2650899		9.16	2151497		12.1	1393531		14.2
RE15-10-8397	696704		4.45	2686141		5.71	1562729		7.57	2652937		9.16	2164164		12.1	1337745		14.2

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area

RT Upper Limit = + 0.50 minutes of internal standard RT
RT Lower Limit = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Value outside of QC Limits

Sample Data

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-2089**	**Date Collected:**	**02/22/2010 12:00**	**Matrix:**	**R**
Lab Sample ID:	**248102003**	**Date Received:**	**02/26/2010 08:45**	**%Moisture:**	**20.1**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE15-10-8393**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**959979**	**Inst:**	**MSD8.I**	**Dilution:**	**1**
Run Date:	**03/17/2010 11:01**	**Analyst:**	**NAG1**	**Inj. Vol:**	**.5 uL**
Prep Date:	**03/02/2010 23:08**	**Aliquot:**	**30.1 g**	**Final Volume:**	**1 mL**
Data File:	**s8c1706.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	416	ug/kg	83.2	416
108-95-2	Phenol	U	416	ug/kg	83.2	416
95-57-8	2-Chlorophenol	U	416	ug/kg	83.2	416
106-46-7	1,4-Dichlorobenzene	U	416	ug/kg	83.2	416
621-64-7	N-Nitrosodipropylamine	U	416	ug/kg	83.2	416
59-50-7	4-Chloro-3-methylphenol	U	416	ug/kg	83.2	416
83-32-9	Acenaphthene	U	41.6	ug/kg	13.7	41.6
121-14-2	2,4-Dinitrotoluene	U	416	ug/kg	41.6	416
100-02-7	4-Nitrophenol	U	416	ug/kg	137	416
87-86-5	Pentachlorophenol	U	416	ug/kg	104	416
129-00-0	Pyrene	U	41.6	ug/kg	12.5	41.6
110-86-1	Pyridine	U	416	ug/kg	83.2	416
62-53-3	Aniline	U	416	ug/kg	125	416
111-44-4	bis(2-Chloroethyl) ether	U	416	ug/kg	83.2	416
541-73-1	1,3-Dichlorobenzene	U	416	ug/kg	83.2	416
100-51-6	Benzyl alcohol	U	416	ug/kg	125	416
95-50-1	1,2-Dichlorobenzene	U	416	ug/kg	83.2	416
108-60-1	bis(2-Chloroisopropyl)ether	U	416	ug/kg	83.2	416
95-48-7	o-Cresol	U	416	ug/kg	83.2	416
65794-96-9	m,p-Cresols	U	416	ug/kg	125	416
67-72-1	Hexachloroethane	U	416	ug/kg	83.2	416
98-95-3	Nitrobenzene	U	416	ug/kg	83.2	416
78-59-1	Isophorone	U	416	ug/kg	83.2	416
88-75-5	2-Nitrophenol	U	416	ug/kg	83.2	416
105-67-9	2,4-Dimethylphenol	U	416	ug/kg	146	416
111-91-1	bis(2-Chloroethoxy)methane	U	416	ug/kg	83.2	416
120-83-2	2,4-Dichlorophenol	U	416	ug/kg	83.2	416
65-85-0	Benzoic acid	U	832	ug/kg	208	832
91-20-3	Naphthalene	U	41.6	ug/kg	12.5	41.6
106-47-8	4-Chloroaniline	U	416	ug/kg	83.2	416
87-68-3	Hexachlorobutadiene	U	416	ug/kg	83.2	416
91-57-6	2-Methylnaphthalene	U	41.6	ug/kg	8.32	41.6
77-47-4	Hexachlorocyclopentadiene	U	416	ug/kg	83.2	416
88-06-2	2,4,6-Trichlorophenol	U	416	ug/kg	83.2	416
95-95-4	2,4,5-Trichlorophenol	U	416	ug/kg	83.2	416
91-58-7	2-Chloronaphthalene	U	41.6	ug/kg	13.7	41.6
88-74-4	2-Nitroaniline *o-Nitroaniline*	U	416	ug/kg	83.2	416
99-09-2	3-Nitroaniline	U	416	ug/kg	83.2	416

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-2089**	**Date Collected:**	**02/22/2010 12:00**	**Matrix:**	**R**
Lab Sample ID:	**248102003**	**Date Received:**	**02/26/2010 08:45**	**%Moisture:**	**20.1**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE15-10-8393**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**959979**	**Inst:**	**MSD8.I**	**Dilution:**	**1**
Run Date:	**03/17/2010 11:01**	**Analyst:**	**NAG1**	**Inj. Vol:**	**.5 uL**
Prep Date:	**03/02/2010 23:08**	**Aliquot:**	**30.1 g**	**Final Volume:**	**1 mL**
Data File:	**s8c1706.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	416	ug/kg	83.2	416
606-20-2	2,6-Dinitrotoluene	U	416	ug/kg	41.6	416
208-96-8	Acenaphthylene	U	41.6	ug/kg	12.5	41.6
51-28-5	2,4-Dinitrophenol	U	832	ug/kg	158	832
132-64-9	Dibenzofuran	U	416	ug/kg	83.2	416
84-66-2	Diethylphthalate	U	416	ug/kg	83.2	416
86-73-7	Fluorene	U	41.6	ug/kg	12.5	41.6
7005-72-3	4-Chlorophenylphenylether	U	416	ug/kg	83.2	416
534-52-1	2-Methyl-4,6-dinitrophenol	U	416	ug/kg	83.2	416
100-01-6	4-Nitroaniline	U	416	ug/kg	125	416
	p-Nitroaniline					
122-39-4	Diphenylamine	U	416	ug/kg	83.2	416
122-66-7	Azobenzene	U	416	ug/kg	83.2	416
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	416	ug/kg	83.2	416
118-74-1	Hexachlorobenzene	U	416	ug/kg	83.2	416
85-01-8	Phenanthrene	U	41.6	ug/kg	12.5	41.6
120-12-7	Anthracene	U	41.6	ug/kg	8.32	41.6
84-74-2	Di-n-butylphthalate	U	416	ug/kg	83.2	416
206-44-0	Fluoranthene	U	41.6	ug/kg	12.5	41.6
85-68-7	Butylbenzylphthalate	U	416	ug/kg	83.2	416
56-55-3	Benzo(a)anthracene	U	41.6	ug/kg	12.5	41.6
91-94-1	3,3'-Dichlorobenzidine	U	416	ug/kg	125	416
218-01-9	Chrysene	U	41.6	ug/kg	12.5	41.6
117-81-7	bis(2-Ethylhexyl)phthalate	U	416	ug/kg	83.2	416
117-84-0	Di-n-octylphthalate	U	416	ug/kg	83.2	416
205-99-2	Benzo(b)fluoranthene	U	41.6	ug/kg	12.5	41.6
207-08-9	Benzo(k)fluoranthene	U	41.6	ug/kg	12.5	41.6
50-32-8	Benzo(a)pyrene	U	41.6	ug/kg	12.5	41.6
193-39-5	Indeno(1,2,3-cd)pyrene	U	41.6	ug/kg	12.5	41.6
53-70-3	Dibenzo(a,h)anthracene	U	41.6	ug/kg	12.5	41.6
191-24-2	Benzo(ghi)perylene	U	41.6	ug/kg	12.5	41.6
120-82-1	1,2,4-Trichlorobenzene	U	416	ug/kg	83.2	416

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	3.08	251	ug/kg		JA

GEL Laboratories LLC

Data file : /chem/MSD8.i/s031710.b/s8c1706.d
Lab Smp Id: 248102003 Client Smp ID: RE15-10-8393
Inj Date : 17-MAR-2010 11:01
Operator : nagl Inst ID: MSD8.i
Smp Info : |248102003|959979|1|SVM|1|LANL
Misc Info : |MSD8270_S|WBN100310-01
Comment : Column: J & W DB-5MS, 25m x 0.20 mm x 0.33 micron film
Method : /chem/MSD8.i/s031710.b/MSD8-8270AQA-022010.m
Meth Date : 17-Mar-2010 13:57 nat00999 Quant Type: ISTD
Cal Date : 21-FEB-2010 23:15 Cal File: s8b2042.d
Als bottle: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-2089.sub
Target Version: 3.50
Processing Host: hpclpl

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.10000	weight of sample
M	20.14460	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	4.454	4.454	(1.000)	658840	40.0000	
* 29 Naphthalene-d8	136	5.711	5.716	(1.000)	2529673	40.0000	
* 46 Acenaphthene-d10	164	7.563	7.573	(1.000)	1446375	40.0000	
* 67 Phenanthrene-d10	188	9.163	9.168	(1.000)	2420542	40.0000	
* 91 Chrysene-d12	240	12.063	12.073	(1.000)	2057954	40.0000	
* 98 Perylene-d12	264	14.168	14.173	(1.000)	1708142	40.0000	
$ 3 2-Fluorophenol	112	3.311	3.306	(0.743)	1049448	67.4699	2810
$ 5 Phenol-d5	99	4.073	4.077	(0.914)	1214892	62.6298	2600
$ 20 Nitrobenzene-d5	82	4.978	4.987	(0.872)	587369	32.6633	1360
$ 39 2-Fluorobiphenyl	172	6.835	6.839	(0.904)	1237489	29.0669	1210
$ 60 2,4,6-Tribromophenol	329	8.406	8.416	(1.111)	247216	51.7060	2150
$ 81 p-Terphenyl-d14	244	10.878	10.878	(0.902)	1300770	35.1078	1460

ION RATIO REPORT

SV REPORT

Data file: s8c1706.d
Report Date: 03/17/2010 14:00
Lab. ID: 248102003 SampleType: SAMPLE
Injection Date: 17-MAR-2010 11:01
Operator: nagl Instrument: MSD8.i
Sample Info: |248102003|959979|1|SVM|1|LANL
Miscellaneous Info: |MSD8270_S|WBN100310-01
Comment:
Method used: /chem/MSD8.i/s031710.b/MSD8-8270AQA-022010.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-2089
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
4 Aniline		CAS#: 62-53-3				
66	59608	4.07	4.15	80-120	100	(T)
93	139	4.19	4.15	219-279	0	(Q)
17 N-Nitrosodipropylamine				CAS#: 621-64-7		
70	80210	4.98	4.83	80-120	100	(T)
42	44763	4.98	4.83	30- 90	56	(T)
30 Naphthalene			CAS#: 91-20-3			
128	438	5.73	5.74	80-120	100	( )
129	259	5.71	5.74	0- 41	59	(Q)
127	0	0.00	5.74	0- 43	0	(T)
44 2,6-Dinitrotoluene				CAS#: 606-20-2		
165	187340	7.56	7.34	80-120	100	(T)
63	2546	7.56	7.34	30- 90	1	(QT)
50 2,4-Dinitrotoluene				CAS#: 121-14-2		
165	187340	7.56	7.77	80-120	100	(T)
89	2223	7.56	7.77	43-103	1	(QT)
63	2546	7.56	7.77	26- 86	1	(QT)
53 Fluorene			CAS#: 86-73-7			
166	17072	8.41	8.16	80-120	100	(T)
165	17142	8.41	8.16	63-123	100	(T)
167	5498	8.41	8.16	0- 43	32	(T)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
55 2-Methyl-4,6-dinitrophenol				CAS#: 534-52-1		
198	766	8.41	8.21	80-120	100	(T)
105	1631	8.41	8.21	12- 72	213	(QT)
51	1628	8.41	8.21	21- 81	212	(QT)
92 Chrysene			CAS#: 218-01-9			
228	271	12.09	12.11	80-120	100	( )
229	1106	12.06	12.11	0- 49	407	(Q)
226	506	12.06	12.11	0- 59	186	(Q)
94 Di-n-octylphthalate				CAS#: 117-84-0		
149	267	13.02	12.95	80-120	100	(T)
43	266	13.06	12.95	0- 40	100	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD8.i/s031710.b/s8c1706.d
Lab Smp Id: 248102003 Client Smp ID: RE15-10-8393
Inj Date : 17-MAR-2010 11:01
Operator : nag1 Inst ID: MSD8.i
Smp Info : |248102003|959979|1|SVM|1|LANL
Misc Info : |MSD8270_S|WBN100310-01
Comment : Column: J & W DB-5MS, 25m x 0.20 mm x 0.33 micron film
Method : /chem/MSD8.i/s031710.b/MSD8-8270AQA-022010.m
Meth Date : 17-Mar-2010 13:57 nat00999 Quant Type: ISTD
Cal Date : 21-FEB-2010 23:15 Cal File: s8b2042.d
Als bottle: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-2089.sub
Target Version: 3.50
Processing Host: hpclp1

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.10000	weight of sample
M	20.14460	% moisture

Cpnd Variable Local Compound Variable

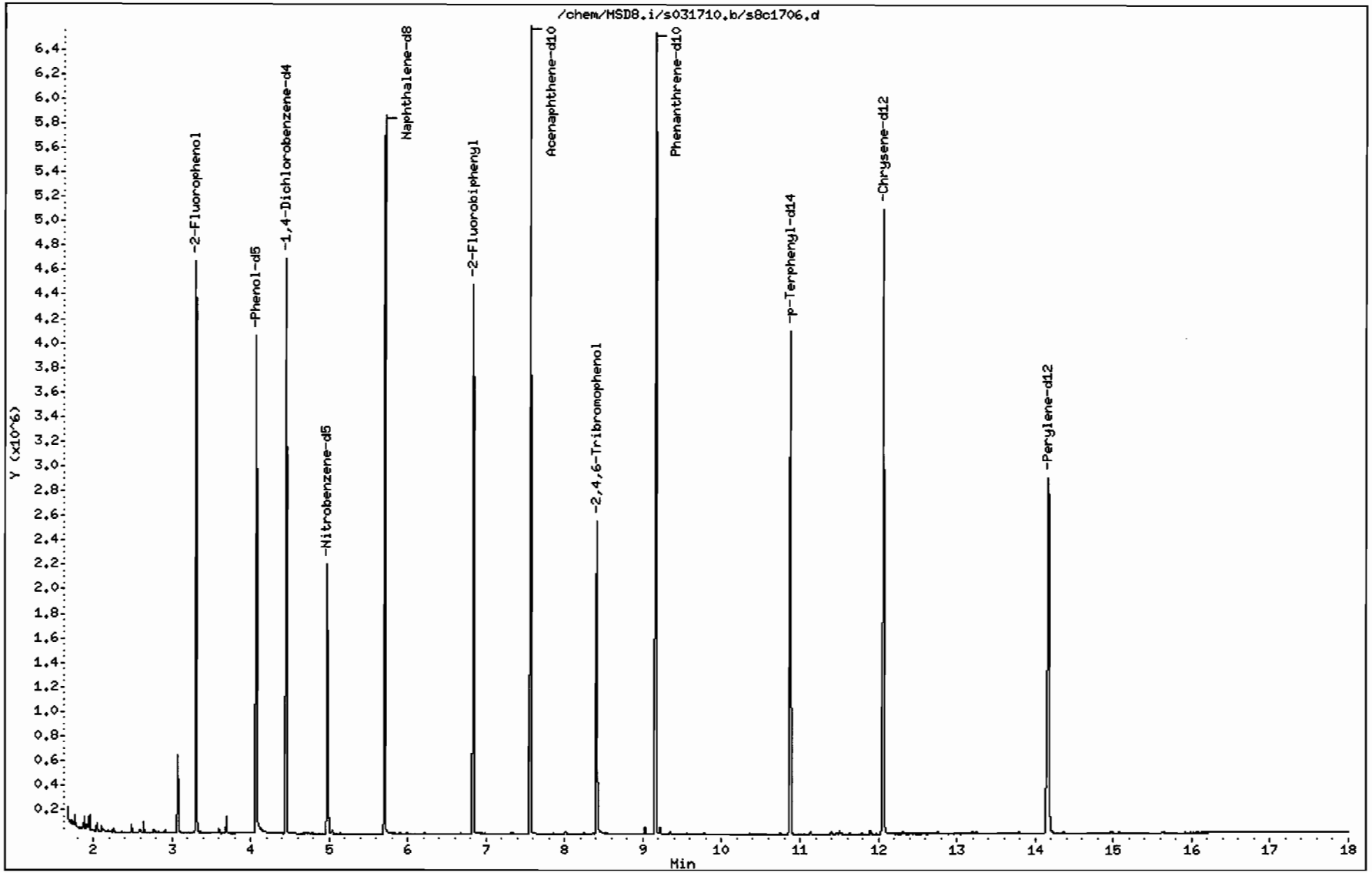
ISTD	RT	AREA	AMOUNT
* 10 1,4-Dichlorobenzene-d4	4.454	3807481	40.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown Aldol Condensate					CAS #:		
3.077	573967	6.02988427	251	0		0	10

Data File: /chem/MSD8.i/s031710.b/s8c1706.d
Date : 17-MAR-2010 11:01
Client ID: RE15-10-8393
Sample Info: 1248102003|959979|1|SVMI1|LANL
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Instrument: MSD8.i

Operator: nag1
Column diameter: 0.20



Data File: /chem/MSD8.i/s031710.b/s8c1706.d

Date : 17-MAR-2010 11:01

Client ID: RE15-10-8393

Instrument: MSD8.i

Sample Info: |2481020031959979|1|SVM|1|LANL

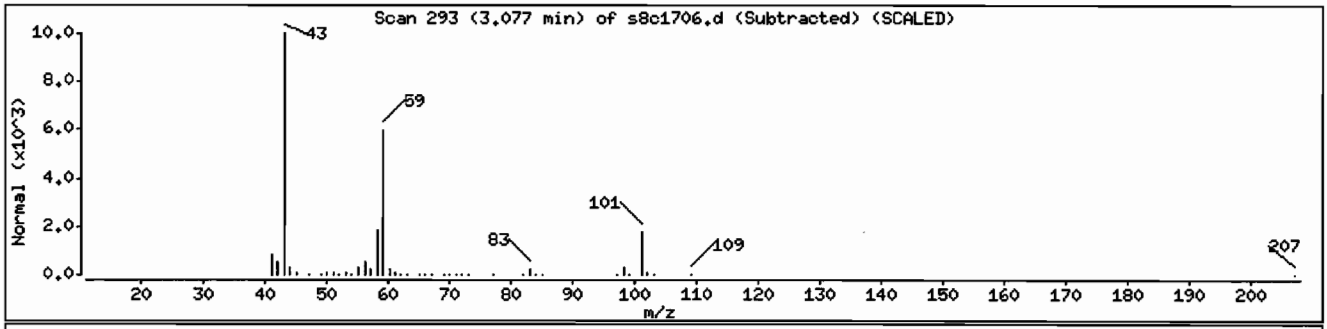
Volume Injected (uL): 0.5

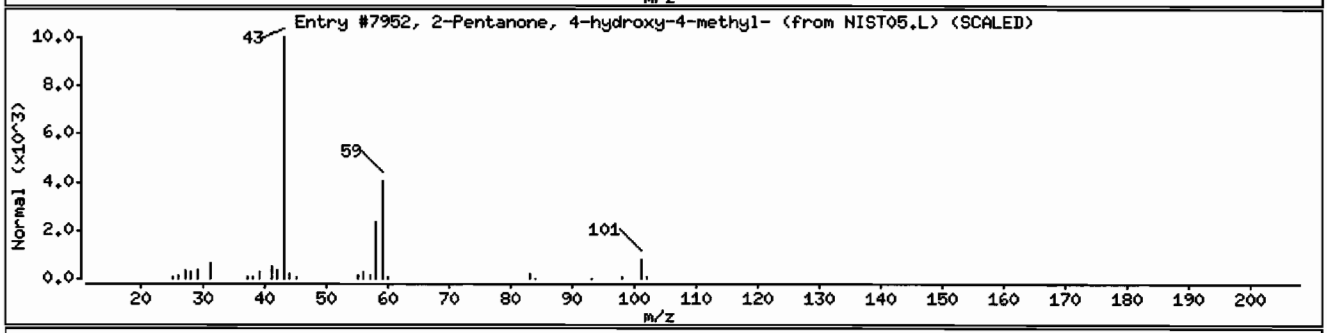
Operator: nag1

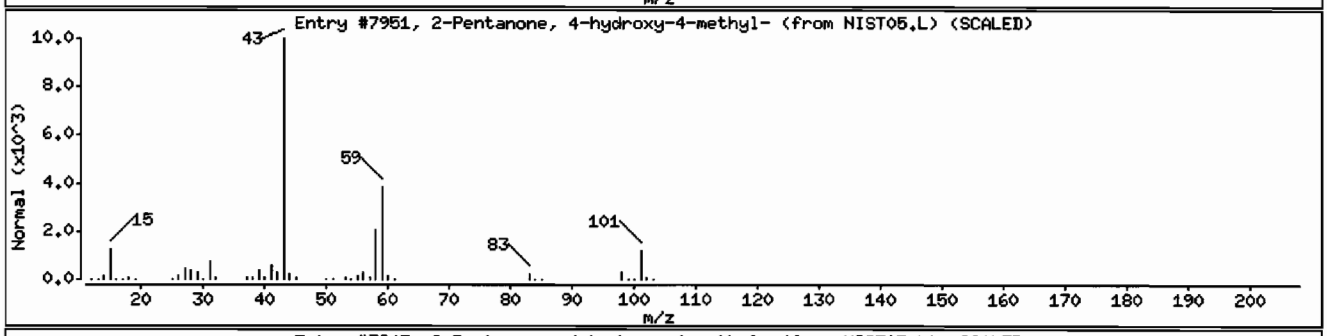
Column phase: J&W DB-5MS

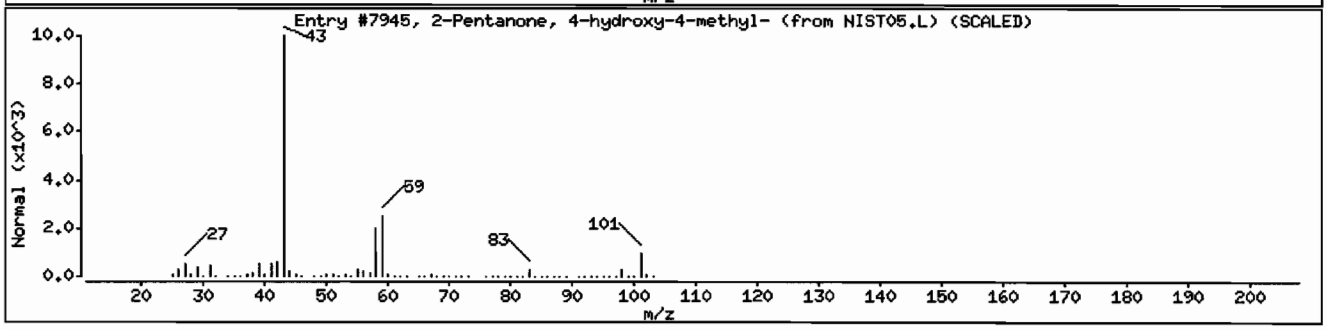
Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	64	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	59	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7945	50	C6H12O2	116









Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-2089**	**Date Collected:**	**02/22/2010 12:00**	**Matrix:**	**R**
Lab Sample ID:	**248102006**	**Date Received:**	**02/26/2010 08:45**	**%Moisture:**	**10.3**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE15-10-8394**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**959979**	**Inst:**	**MSD8.I**	**Dilution:**	**1**
Run Date:	**03/17/2010 12:30**	**Analyst:**	**NAG1**	**Inj. Vol:**	**.5 uL**
Prep Date:	**03/02/2010 23:08**	**Aliquot:**	**30.12 g**	**Final Volume:**	**1 mL**
Data File:	**s8c1709.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	370	ug/kg	74.1	370
108-95-2	Phenol	U	370	ug/kg	74.1	370
95-57-8	2-Chlorophenol	U	370	ug/kg	74.1	370
106-46-7	1,4-Dichlorobenzene	U	370	ug/kg	74.1	370
621-64-7	N-Nitrosodipropylamine	U	370	ug/kg	74.1	370
59-50-7	4-Chloro-3-methylphenol	U	370	ug/kg	74.1	370
83-32-9	Acenaphthene	U	37.0	ug/kg	12.2	37.0
121-14-2	2,4-Dinitrotoluene	U	370	ug/kg	37.0	370
100-02-7	4-Nitrophenol	U	370	ug/kg	122	370
87-86-5	Pentachlorophenol	U	370	ug/kg	92.6	370
129-00-0	Pyrene	U	37.0	ug/kg	11.1	37.0
110-86-1	Pyridine	U	370	ug/kg	74.1	370
62-53-3	Aniline	U	370	ug/kg	111	370
111-44-4	bis(2-Chloroethyl) ether	U	370	ug/kg	74.1	370
541-73-1	1,3-Dichlorobenzene	U	370	ug/kg	74.1	370
100-51-6	Benzyl alcohol	U	370	ug/kg	111	370
95-50-1	1,2-Dichlorobenzene	U	370	ug/kg	74.1	370
108-60-1	bis(2-Chloroisopropyl)ether	U	370	ug/kg	74.1	370
95-48-7	o-Cresol	U	370	ug/kg	74.1	370
65794-96-9	m,p-Cresols	U	370	ug/kg	111	370
67-72-1	Hexachloroethane	U	370	ug/kg	74.1	370
98-95-3	Nitrobenzene	U	370	ug/kg	74.1	370
78-59-1	Isophorone	U	370	ug/kg	74.1	370
88-75-5	2-Nitrophenol	U	370	ug/kg	74.1	370
105-67-9	2,4-Dimethylphenol	U	370	ug/kg	130	370
111-91-1	bis(2-Chloroethoxy)methane	U	370	ug/kg	74.1	370
120-83-2	2,4-Dichlorophenol	U	370	ug/kg	74.1	370
65-85-0	Benzoic acid	U	741	ug/kg	185	741
91-20-3	Naphthalene	U	37.0	ug/kg	11.1	37.0
106-47-8	4-Chloroaniline	U	370	ug/kg	74.1	370
87-68-3	Hexachlorobutadiene	U	370	ug/kg	74.1	370
91-57-6	2-Methylnaphthalene	U	37.0	ug/kg	7.41	37.0
77-47-4	Hexachlorocyclopentadiene	U	370	ug/kg	74.1	370
88-06-2	2,4,6-Trichlorophenol	U	370	ug/kg	74.1	370
95-95-4	2,4,5-Trichlorophenol	U	370	ug/kg	74.1	370
91-58-7	2-Chloronaphthalene	U	37.0	ug/kg	12.2	37.0
88-74-4	2-Nitroaniline *o-Nitroaniline*	U	370	ug/kg	74.1	370
99-09-2	3-Nitroaniline	U	370	ug/kg	74.1	370

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-2089**	**Date Collected:**	**02/22/2010 12:00**	**Matrix:**	**R**
Lab Sample ID:	**248102006**	**Date Received:**	**02/26/2010 08:45**	**%Moisture:**	**10.3**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE15-10-8394**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**959979**	**Inst:**	**MSD8.I**	**Dilution:**	**1**
Run Date:	**03/17/2010 12:30**	**Analyst:**	**NAG1**	**Inj. Vol:**	**.5 uL**
Prep Date:	**03/02/2010 23:08**	**Aliquot:**	**30.12 g**	**Final Volume:**	**1 mL**
Data File:	**s8c1709.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	370	ug/kg	74.1	370
606-20-2	2,6-Dinitrotoluene	U	370	ug/kg	37.0	370
208-96-8	Acenaphthylene	U	37.0	ug/kg	11.1	37.0
51-28-5	2,4-Dinitrophenol	U	741	ug/kg	141	741
132-64-9	Dibenzofuran	U	370	ug/kg	74.1	370
84-66-2	Diethylphthalate	U	370	ug/kg	74.1	370
86-73-7	Fluorene	U	37.0	ug/kg	11.1	37.0
7005-72-3	4-Chlorophenylphenylether	U	370	ug/kg	74.1	370
534-52-1	2-Methyl-4,6-dinitrophenol	U	370	ug/kg	74.1	370
100-01-6	4-Nitroaniline	U	370	ug/kg	111	370
	p-Nitroaniline					
122-39-4	Diphenylamine	U	370	ug/kg	74.1	370
122-66-7	Azobenzene	U	370	ug/kg	74.1	370
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	370	ug/kg	74.1	370
118-74-1	Hexachlorobenzene	U	370	ug/kg	74.1	370
85-01-8	Phenanthrene	U	37.0	ug/kg	11.1	37.0
120-12-7	Anthracene	U	37.0	ug/kg	7.41	37.0
84-74-2	Di-n-butylphthalate	U	370	ug/kg	74.1	370
206-44-0	Fluoranthene	U	37.0	ug/kg	11.1	37.0
85-68-7	Butylbenzylphthalate	U	370	ug/kg	74.1	370
56-55-3	Benzo(a)anthracene	U	37.0	ug/kg	11.1	37.0
91-94-1	3,3'-Dichlorobenzidine	U	370	ug/kg	111	370
218-01-9	Chrysene	U	37.0	ug/kg	11.1	37.0
117-81-7	bis(2-Ethylhexyl)phthalate	U	370	ug/kg	74.1	370
117-84-0	Di-n-octylphthalate	U	370	ug/kg	74.1	370
205-99-2	Benzo(b)fluoranthene	U	37.0	ug/kg	11.1	37.0
207-08-9	Benzo(k)fluoranthene	U	37.0	ug/kg	11.1	37.0
50-32-8	Benzo(a)pyrene	U	37.0	ug/kg	11.1	37.0
193-39-5	Indeno(1,2,3-cd)pyrene	U	37.0	ug/kg	11.1	37.0
53-70-3	Dibenzo(a,h)anthracene	U	37.0	ug/kg	11.1	37.0
191-24-2	Benzo(ghi)perylene	U	37.0	ug/kg	11.1	37.0
120-82-1	1,2,4-Trichlorobenzene	U	370	ug/kg	74.1	370

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	3.08	210	ug/kg		JA
5131-66-8	2-Propanol, 1-butoxy-	3.83	3640	ug/kg	90	NJ

GEL Laboratories LLC

Data file : /chem/MSD8.i/s031710.b/s8c1709.d
Lab Smp Id: 248102006 Client Smp ID: RE15-10-8394
Inj Date : 17-MAR-2010 12:30
Operator : nag1 Inst ID: MSD8.i
Smp Info : |248102006|959979|1|SVM|1|LANL
Misc Info : |MSD8270_S|WBN100310-01
Comment : Column: J & W DB-5MS, 25m x 0.20 mm x 0.33 micron film
Method : /chem/MSD8.i/s031710.b/MSD8-8270AQA-022010.m
Meth Date : 17-Mar-2010 13:57 nat00999 Quant Type: ISTD
Cal Date : 21-FEB-2010 23:15 Cal File: s8b2042.d
Als bottle: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-2089.sub
Target Version: 3.50
Processing Host: hpclp1

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.12000	weight of sample
M	10.34080	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	4.454	4.454	(1.000)	665100	40.0000	
* 29 Naphthalene-d8	136	5.711	5.716	(1.000)	2565887	40.0000	
* 46 Acenaphthene-d10	164	7.568	7.573	(1.000)	1459213	40.0000	
* 67 Phenanthrene-d10	188	9.163	9.168	(1.000)	2427022	40.0000	
* 91 Chrysene-d12	240	12.063	12.073	(1.000)	2003709	40.0000	
* 98 Perylene-d12	264	14.168	14.173	(1.000)	1614840	40.0000	
$ 3 2-Fluorophenol	112	3.311	3.306	(0.743)	973827	62.0189	2300
$ 5 Phenol-d5	99	4.073	4.077	(0.914)	1213997	61.9946	2300
$ 20 Nitrobenzene-d5	82	4.977	4.987	(0.872)	536853	29.4328	1090
$ 39 2-Fluorobiphenyl	172	6.835	6.839	(0.903)	1139437	26.5283	982
$ 60 2,4,6-Tribromophenol	329	8.406	8.416	(1.111)	229564	47.5916	1760
$ 81 p-Terphenyl-d14	244	10.877	10.878	(0.902)	1252400	34.7174	1280

ION RATIO REPORT

SV REPORT

Data file: s8c1709.d
Report Date: 03/17/2010 14:03
Lab. ID: 248102006 SampleType: SAMPLE
Injection Date: 17-MAR-2010 12:30
Operator: nagl Instrument: MSD8.i
Sample Info: |248102006|959979|1|SVM|1|LANL
Miscellaneous Info: |MSD8270_S|WBN100310-01
Comment:
Method used: /chem/MSD8.i/s031710.b/MSD8-8270AQA-022010.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-2089
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
17 N-Nitrosodipropylamine				CAS#: 621-64-7		
70	74068	4.98	4.83	80-120	100	(T)
42	40695	4.98	4.83	30- 90	55	(T)
30 Naphthalene				CAS#: 91-20-3		
128	145	5.73	5.74	80-120	100	( )
129	272	5.71	5.74	0- 41	188	(Q)
127	0	0.00	5.74	0- 43	0	(T)
44 2,6-Dinitrotoluene				CAS#: 606-20-2		
165	188047	7.56	7.34	80-120	100	(T)
63	2765	7.56	7.34	30- 90	1	(QT)
50 2,4-Dinitrotoluene				CAS#: 121-14-2		
165	188047	7.56	7.77	80-120	100	(T)
89	2569	7.57	7.77	43-103	1	(QT)
63	2765	7.56	7.77	26- 86	1	(QT)
55 2-Methyl-4,6-dinitrophenol				CAS#: 534-52-1		
198	661	8.41	8.21	80-120	100	(T)
105	1937	8.40	8.21	12- 72	293	(QT)
51	1399	8.41	8.21	21- 81	211	(QT)
92 Chrysene				CAS#: 218-01-9		
228	179	12.09	12.11	80-120	100	( )
229	902	12.09	12.11	0- 49	502	(Q)
226	263	12.06	12.11	0- 59	146	(Q)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
94	Di-n-octylphthalate			CAS#: 117-84-0		
149	252	12.95	12.95	80-120	100	( )
43	265	13.01	12.95	0- 40	105	(Q)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD8.i/s031710.b/s8c1709.d
Lab Smp Id: 248102006 Client Smp ID: RE15-10-8394
Inj Date : 17-MAR-2010 12:30
Operator : nagl Inst ID: MSD8.i
Smp Info : |248102006|959979|1|SVM|1|LANL
Misc Info : |MSD8270_S|WBN100310-01
Comment : Column: J & W DB-5MS, 25m x 0.20 mm x 0.33 micron film
Method : /chem/MSD8.i/s031710.b/MSD8-8270AQA-022010.m
Meth Date : 17-Mar-2010 13:57 nat00999 Quant Type: ISTD
Cal Date : 21-FEB-2010 23:15 Cal File: s8b2042.d
Als bottle: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-2089.sub
Target Version: 3.50
Processing Host: hpclp1

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.12000	weight of sample
M	10.34080	% moisture

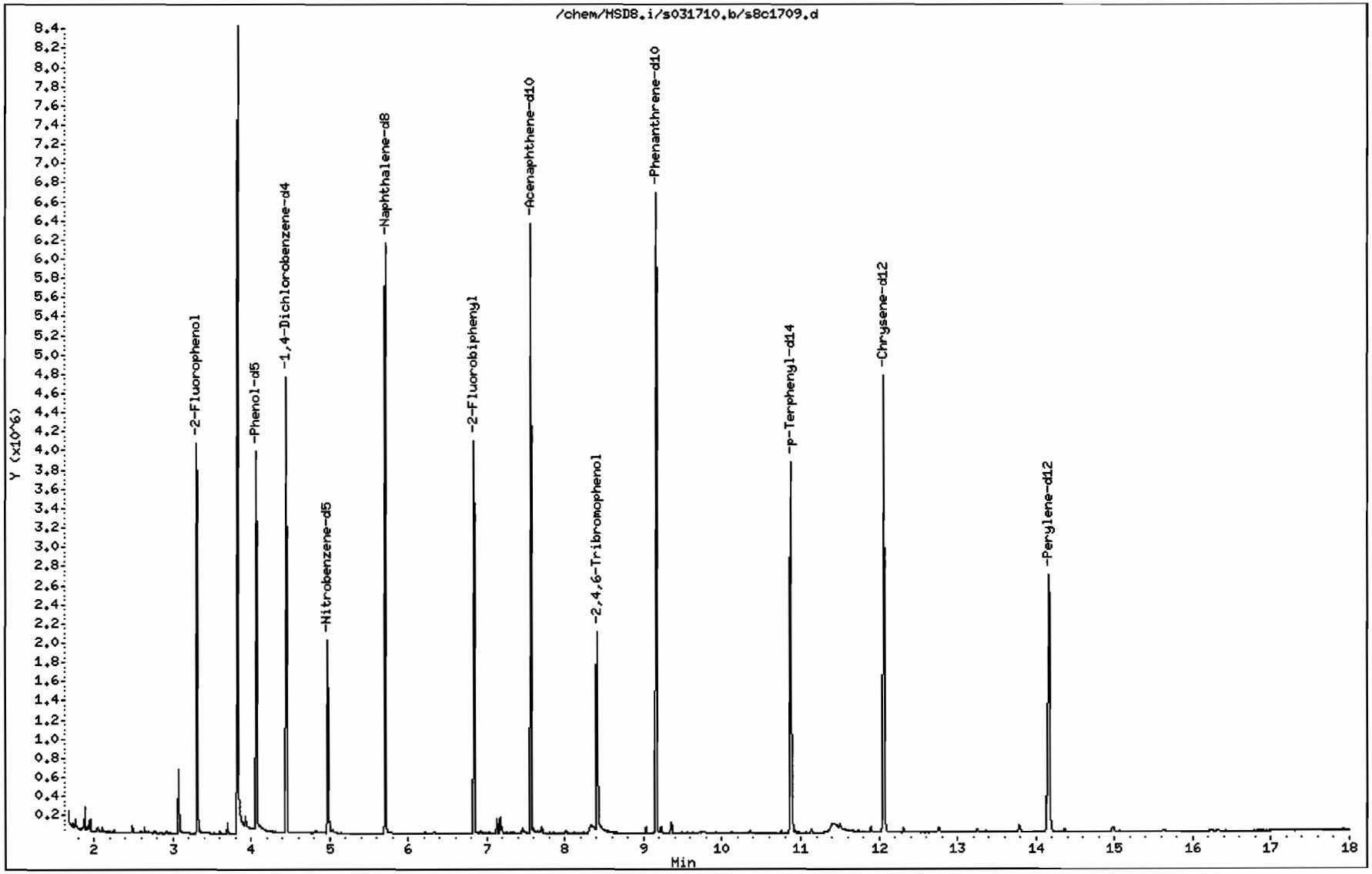
Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 10 1,4-Dichlorobenzene-d4	4.454	3833813	40.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown Aldol Condensate					CAS #:		
3.077	542278	5.65784071	210	0		0	10
2-Propanol, 1-butoxy-					CAS #: 5131-66-8		
3.835	9413914	98.2198470	3640	90	NIST05.L	13973	10

Data File: /chem/MSD8.i/s031710.b/s8c1709.d
Date : 17-MAR-2010 12:30
Client ID: RE15-10-8394
Sample Info: |248102006|959979|1|SVH|1|LANL
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Instrument: MSD8.i
Operator: nag1
Column diameter: 0.20



Data File: /chem/MSD8.i/s031710.b/s8c1709.d

Date : 17-MAR-2010 12:30

Client ID: RE15-10-8394

Instrument: MSD8.i

Sample Info: |2481020061959979|1|SVMI1|LANL

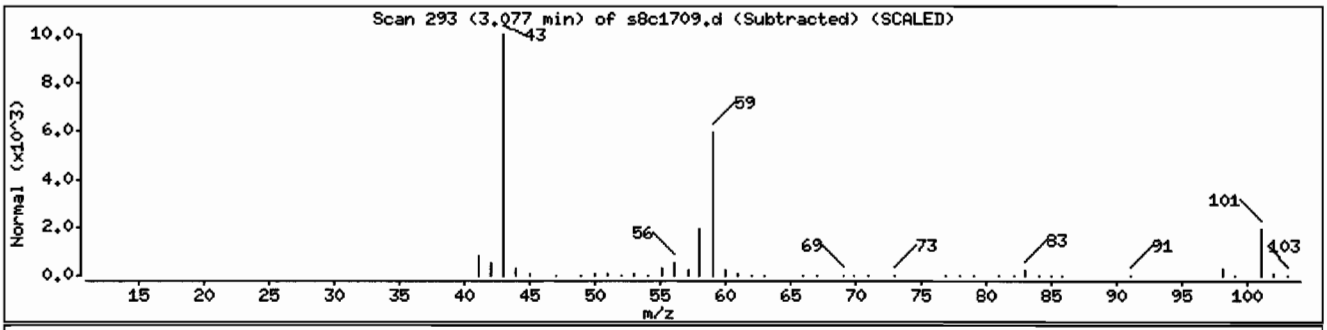
Volume Injected (uL): 0.5

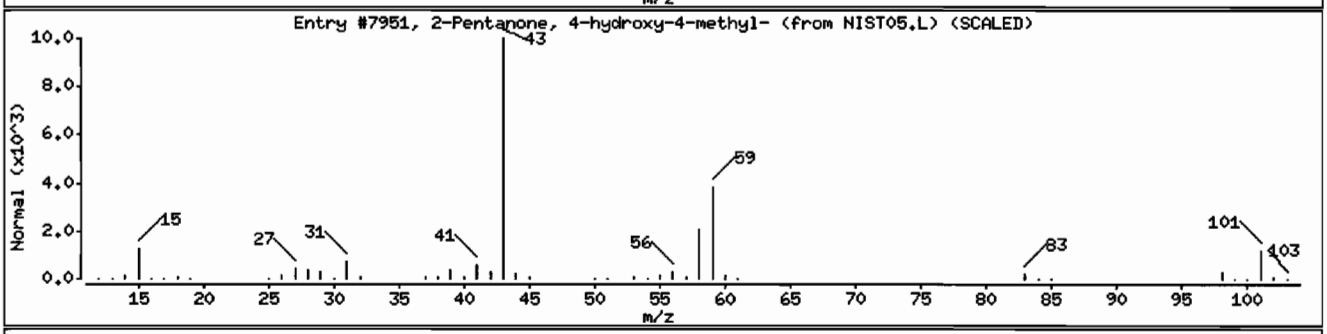
Operator: nag1

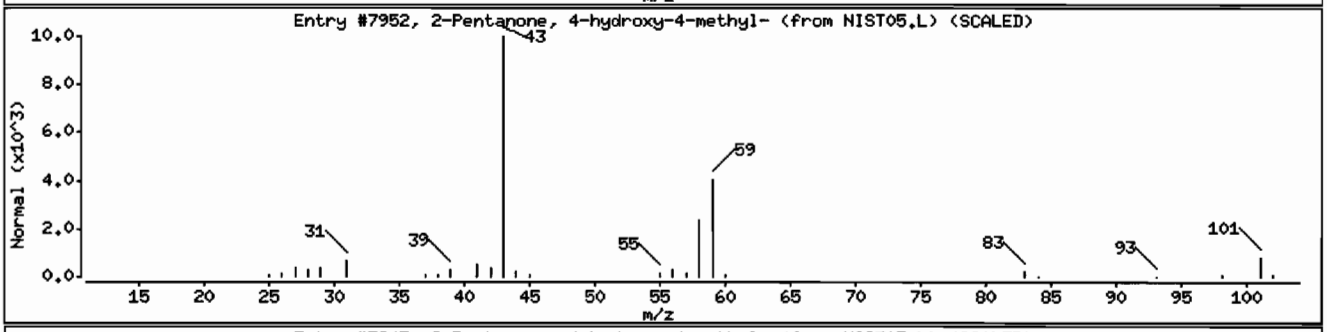
Column phase: J&W DB-5MS

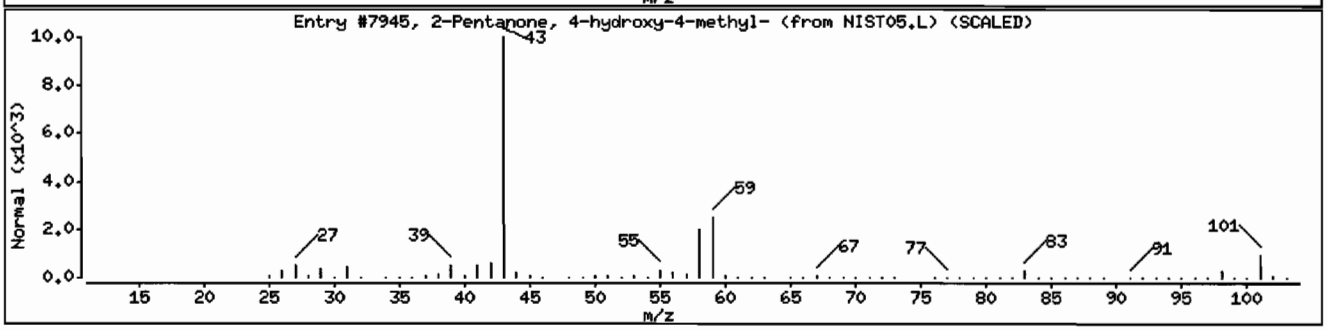
Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	59	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	40	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7945	40	C6H12O2	116









Data File: /chem/MSD8.i/s031710.b/s8c1709.d

Date : 17-MAR-2010 12:30

Client ID: RE15-10-8394

Instrument: MSD8.i

Sample Info: |2481020061959979|1|SVH|1|LANL

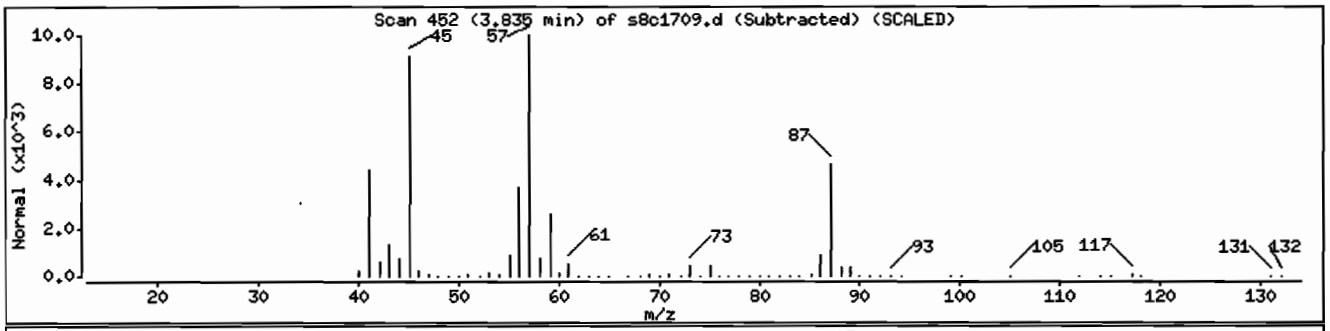
Volume Injected (uL): 0.5

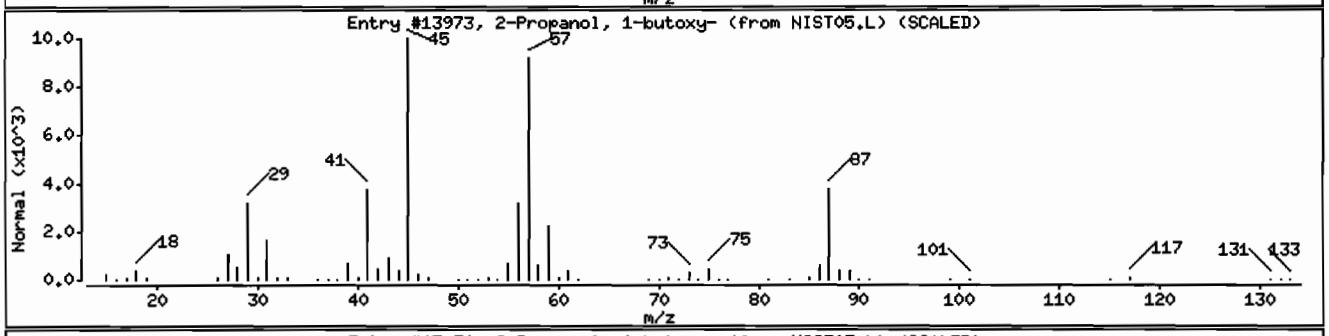
Operator: nag1

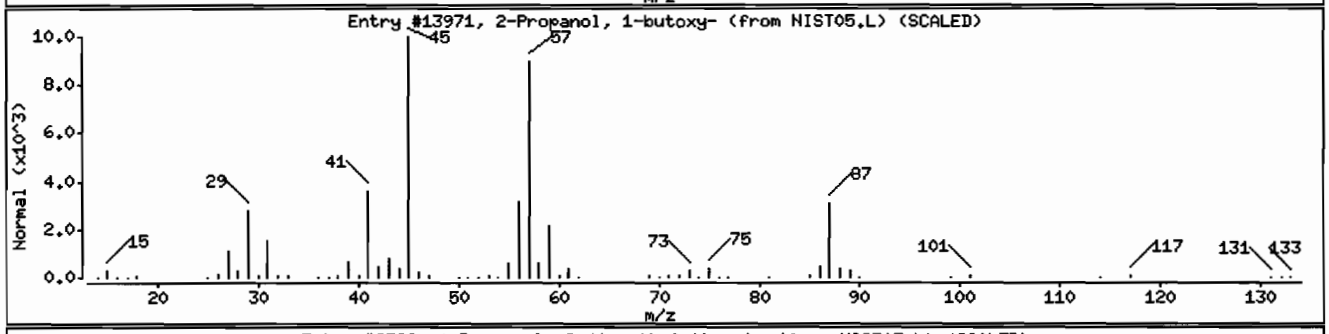
Column phase: J&W DB-5MS

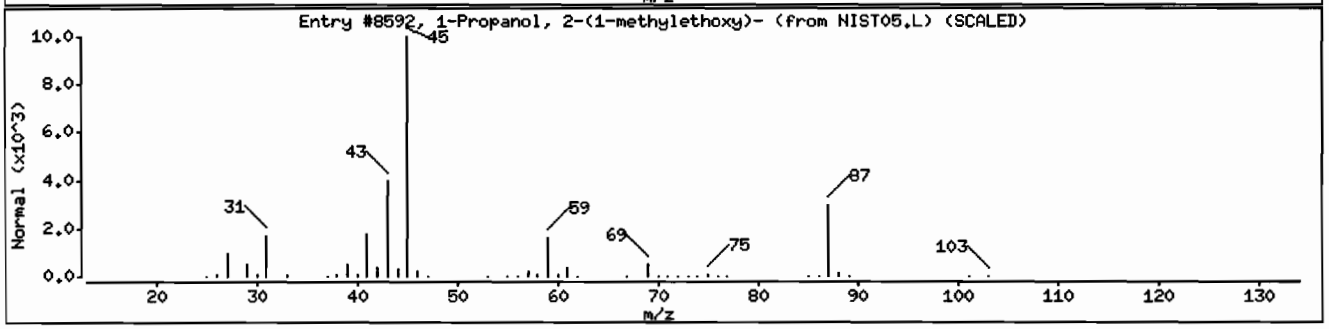
Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
2-Propanol, 1-butoxy-	5131-66-8	NIST05.L	13973	90	C7H16O2	132
2-Propanol, 1-butoxy-	5131-66-8	NIST05.L	13971	72	C7H16O2	132
1-Propanol, 2-(1-methylethoxy)-	3944-37-4	NIST05.L	8592	53	C6H14O2	118









Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-2089	Date Collected:	02/22/2010 12:00	Matrix:	R
Lab Sample ID:	248102004	Date Received:	02/26/2010 08:45	%Moisture:	4.4
		Client:	LANL010	Project:	LANL01004
Client ID:	RE15-10-8395	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	959979	Inst:	MSD8.I	Dilution:	1
Run Date:	03/17/2010 11:31	Analyst:	NAG1	Inj. Vol:	.5 uL
Prep Date:	03/02/2010 23:08	Aliquot:	30.18 g	Final Volume:	1 mL
Data File:	s8c1707.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	347	ug/kg	69.3	347
108-95-2	Phenol	U	347	ug/kg	69.3	347
95-57-8	2-Chlorophenol	U	347	ug/kg	69.3	347
106-46-7	1,4-Dichlorobenzene	U	347	ug/kg	69.3	347
621-64-7	N-Nitrosodipropylamine	U	347	ug/kg	69.3	347
59-50-7	4-Chloro-3-methylphenol	U	347	ug/kg	69.3	347
83-32-9	Acenaphthene	U	34.7	ug/kg	11.4	34.7
121-14-2	2,4-Dinitrotoluene	U	347	ug/kg	34.7	347
100-02-7	4-Nitrophenol	U	347	ug/kg	114	347
87-86-5	Pentachlorophenol	U	347	ug/kg	86.7	347
129-00-0	Pyrene	U	34.7	ug/kg	10.4	34.7
110-86-1	Pyridine	U	347	ug/kg	69.3	347
62-53-3	Aniline	U	347	ug/kg	104	347
111-44-4	bis(2-Chloroethyl) ether	U	347	ug/kg	69.3	347
541-73-1	1,3-Dichlorobenzene	U	347	ug/kg	69.3	347
100-51-6	Benzyl alcohol	U	347	ug/kg	104	347
95-50-1	1,2-Dichlorobenzene	U	347	ug/kg	69.3	347
108-60-1	bis(2-Chloroisopropyl)ether	U	347	ug/kg	69.3	347
95-48-7	o-Cresol	U	347	ug/kg	69.3	347
65794-96-9	m,p-Cresols	U	347	ug/kg	104	347
67-72-1	Hexachloroethane	U	347	ug/kg	69.3	347
98-95-3	Nitrobenzene	U	347	ug/kg	69.3	347
78-59-1	Isophorone	U	347	ug/kg	69.3	347
88-75-5	2-Nitrophenol	U	347	ug/kg	69.3	347
105-67-9	2,4-Dimethylphenol	U	347	ug/kg	121	347
111-91-1	bis(2-Chloroethoxy)methane	U	347	ug/kg	69.3	347
120-83-2	2,4-Dichlorophenol	U	347	ug/kg	69.3	347
65-85-0	Benzoic acid	U	693	ug/kg	173	693
91-20-3	Naphthalene	U	34.7	ug/kg	10.4	34.7
106-47-8	4-Chloroaniline	U	347	ug/kg	69.3	347
87-68-3	Hexachlorobutadiene	U	347	ug/kg	69.3	347
91-57-6	2-Methylnaphthalene	U	34.7	ug/kg	6.93	34.7
77-47-4	Hexachlorocyclopentadiene	U	347	ug/kg	69.3	347
88-06-2	2,4,6-Trichlorophenol	U	347	ug/kg	69.3	347
95-95-4	2,4,5-Trichlorophenol	U	347	ug/kg	69.3	347
91-58-7	2-Chloronaphthalene	U	34.7	ug/kg	11.4	34.7
88-74-4	2-Nitroaniline	U	347	ug/kg	69.3	347
99-09-2	*o-Nitroaniline* 3-Nitroaniline	U	347	ug/kg	69.3	347

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-2089**	**Date Collected:**	**02/22/2010 12:00**	**Matrix:**	**R**
Lab Sample ID:	**248102004**	**Date Received:**	**02/26/2010 08:45**	**%Moisture:**	**4.4**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE15-10-8395**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**959979**	**Inst:**	**MSD8.I**	**Dilution:**	**1**
Run Date:	**03/17/2010 11:31**	**Analyst:**	**NAG1**	**Inj. Vol:**	**.5 uL**
Prep Date:	**03/02/2010 23:08**	**Aliquot:**	**30.18 g**	**Final Volume:**	**1 mL**
Data File:	**s8c1707.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	347	ug/kg	69.3	347
606-20-2	2,6-Dinitrotoluene	U	347	ug/kg	34.7	347
208-96-8	Acenaphthylene	U	34.7	ug/kg	10.4	34.7
51-28-5	2,4-Dinitrophenol	U	693	ug/kg	132	693
132-64-9	Dibenzofuran	U	347	ug/kg	69.3	347
84-66-2	Diethylphthalate	U	347	ug/kg	69.3	347
86-73-7	Fluorene	U	34.7	ug/kg	10.4	34.7
7005-72-3	4-Chlorophenylphenylether	U	347	ug/kg	69.3	347
534-52-1	2-Methyl-4,6-dinitrophenol	U	347	ug/kg	69.3	347
100-01-6	4-Nitroaniline	U	347	ug/kg	104	347
	p-Nitroaniline					
122-39-4	Diphenylamine	U	347	ug/kg	69.3	347
122-66-7	Azobenzene	U	347	ug/kg	69.3	347
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	347	ug/kg	69.3	347
118-74-1	Hexachlorobenzene	U	347	ug/kg	69.3	347
85-01-8	Phenanthrene	U	34.7	ug/kg	10.4	34.7
120-12-7	Anthracene	U	34.7	ug/kg	6.93	34.7
84-74-2	Di-n-butylphthalate	U	347	ug/kg	69.3	347
206-44-0	Fluoranthene	U	34.7	ug/kg	10.4	34.7
85-68-7	Butylbenzylphthalate	U	347	ug/kg	69.3	347
56-55-3	Benzo(a)anthracene	U	34.7	ug/kg	10.4	34.7
91-94-1	3,3'-Dichlorobenzidine	U	347	ug/kg	104	347
218-01-9	Chrysene	U	34.7	ug/kg	10.4	34.7
117-81-7	bis(2-Ethylhexyl)phthalate	U	347	ug/kg	69.3	347
117-84-0	Di-n-octylphthalate	U	347	ug/kg	69.3	347
205-99-2	Benzo(b)fluoranthene	U	34.7	ug/kg	10.4	34.7
207-08-9	Benzo(k)fluoranthene	U	34.7	ug/kg	10.4	34.7
50-32-8	Benzo(a)pyrene	U	34.7	ug/kg	10.4	34.7
193-39-5	Indeno(1,2,3-cd)pyrene	U	34.7	ug/kg	10.4	34.7
53-70-3	Dibenzo(a,h)anthracene	U	34.7	ug/kg	10.4	34.7
191-24-2	Benzo(ghi)perylene	U	34.7	ug/kg	10.4	34.7
120-82-1	1,2,4-Trichlorobenzene	U	347	ug/kg	69.3	347

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	3.08	215	ug/kg		JA
5131-66-8	2-Propanol, 1-butoxy-	3.82	1140	ug/kg	90	NJ

GEL Laboratories LLC

Data file : /chem/MSD8.i/s031710.b/s8c1707.d
Lab Smp Id: 248102004 Client Smp ID: RE15-10-8395
Inj Date : 17-MAR-2010 11:31
Operator : nag1 Inst ID: MSD8.i
Smp Info : |248102004|959979|1|SVM|1|LANL
Misc Info : |MSD8270_S|WBN100310-01
Comment : Column: J & W DB-5MS, 25m x 0.20 mm x 0.33 micron film
Method : /chem/MSD8.i/s031710.b/MSD8-8270AQA-022010.m
Meth Date : 17-Mar-2010 13:57 nat00999 Quant Type: ISTD
Cal Date : 21-FEB-2010 23:15 Cal File: s8b2042.d
Als bottle: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-2089.sub
Target Version: 3.50
Processing Host: hpclp1

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.18000	weight of sample
M	4.40590	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	4.454	4.454	(1.000)	616496	40.0000	
* 29 Naphthalene-d8	136	5.711	5.716	(1.000)	2375768	40.0000	
* 46 Acenaphthene-d10	164	7.568	7.573	(1.000)	1347577	40.0000	
* 67 Phenanthrene-d10	188	9.163	9.168	(1.000)	2187876	40.0000	
* 91 Chrysene-d12	240	12.063	12.073	(1.000)	1800092	40.0000	
* 98 Perylene-d12	264	14.168	14.173	(1.000)	1479519	40.0000	
$ 3 2-Fluorophenol	112	3.311	3.306	(0.743)	961114	66.0349	2290
$ 5 Phenol-d5	99	4.073	4.077	(0.914)	1179188	64.9645	2250
$ 20 Nitrobenzene-d5	82	4.977	4.987	(0.872)	542554	32.1257	1110
$ 39 2-Fluorobiphenyl	172	6.835	6.839	(0.903)	1138875	28.7118	995
$ 60 2,4,6-Tribromophenol	329	8.411	8.416	(1.111)	206851	46.4354	1610
$ 81 p-Terphenyl-d14	244	10.873	10.878	(0.901)	1187653	36.6466	1270

ION RATIO REPORT

SV REPORT

Data file: s8c1707.d
Report Date: 03/17/2010 14:01
Lab. ID: 248102004 SampleType: SAMPLE
Injection Date: 17-MAR-2010 11:31
Operator: nag1 Instrument: MSD8.i
Sample Info: |248102004|959979|1|SVM|1|LANL
Miscellaneous Info: |MSD8270_S|WBN100310-01
Comment:
Method used: /chem/MSD8.i/s031710.b/MSD8-8270AQA-022010.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-2089
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
17 N-Nitrosodipropylamine				CAS#: 621-64-7		
70	73473	4.98	4.83	80-120	100	(T)
42	40973	4.98	4.83	30- 90	56	(T)
30 Naphthalene			CAS#: 91-20-3			
128	341	5.73	5.74	80-120	100	( )
129	173	5.71	5.74	0- 41	51	(Q)
127	0	0.00	5.74	0- 43	0	(T)
44 2,6-Dinitrotoluene			CAS#: 606-20-2			
165	174129	7.56	7.34	80-120	100	(T)
63	2464	7.56	7.34	30- 90	1	(QT)
50 2,4-Dinitrotoluene			CAS#: 121-14-2			
165	174129	7.56	7.77	80-120	100	(T)
89	2159	7.57	7.77	43-103	1	(QT)
63	2464	7.56	7.77	26- 86	1	(QT)
53 Fluorene			CAS#: 86-73-7			
166	13911	8.41	8.16	80-120	100	(T)
165	13217	8.41	8.16	63-123	95	(T)
167	4676	8.41	8.16	0- 43	34	(T)
55 2-Methyl-4,6-dinitrophenol				CAS#: 534-52-1		
198	729	8.41	8.21	80-120	100	(T)
105	1704	8.41	8.21	12- 72	234	(QT)
51	1669	8.41	8.21	21- 81	229	(QT)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
92 Chrysene			CAS#: 218-01-9			
228	4460	12.06	12.11	80-120	100	( )
229	1165	12.06	12.11	0- 49	26	( )
226	418	12.06	12.11	0- 59	9	( )
94 Di-n-octylphthalate				CAS#: 117-84-0		
149	704	12.94	12.95	80-120	100	( )
43	262	12.92	12.95	0- 40	37	( )

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD8.i/s031710.b/s8c1707.d
Lab Smp Id: 248102004 Client Smp ID: RE15-10-8395
Inj Date : 17-MAR-2010 11:31
Operator : nag1 Inst ID: MSD8.i
Smp Info : |248102004|959979|1|SVM|1|LANL
Misc Info : |MSD8270_S|WBN100310-01
Comment : Column: J & W DB-5MS, 25m x 0.20 mm x 0.33 micron film
Method : /chem/MSD8.i/s031710.b/MSD8-8270AQA-022010.m
Meth Date : 17-Mar-2010 13:57 nat00999 Quant Type: ISTD
Cal Date : 21-FEB-2010 23:15 Cal File: s8b2042.d
Als bottle: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-2089.sub
Target Version: 3.50
Processing Host: hpclp1

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.18000	weight of sample
M	4.40590	% moisture

Cpnd Variable Local Compound Variable

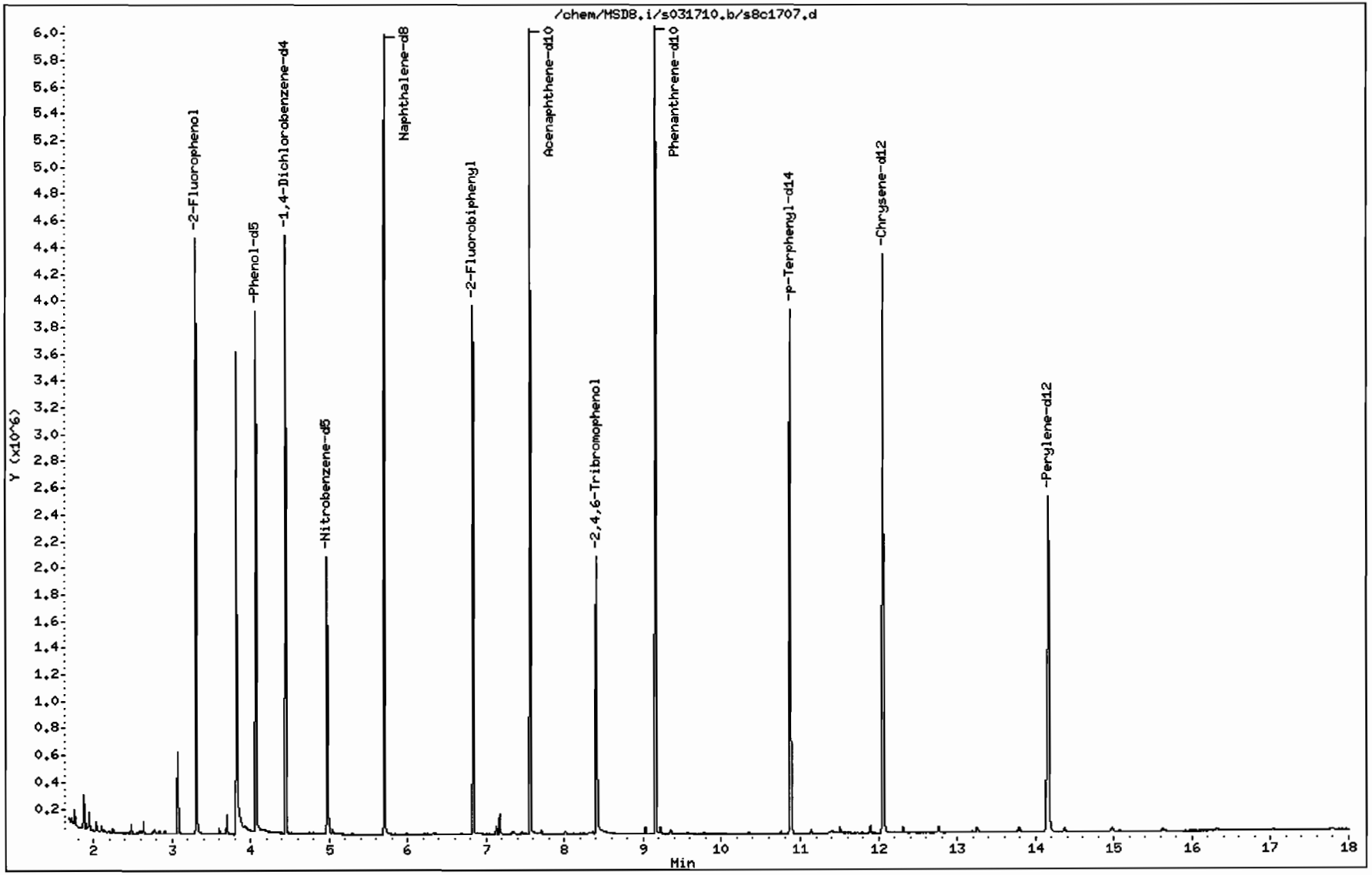
ISTD	RT	AREA	AMOUNT
* 10 1,4-Dichlorobenzene-d4	4.454	3588617	40.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown Aldol Condensate					CAS #:		
3.077	556141	6.19894047	215	0		0	10
2-Propanol, 1-butoxy-					CAS #: 5131-66-8		
3.825	2960743	33.0014881	1140	90	NIST05.L	13973	10

Data File: /chem/MSD8.i/s031710.b/s8c1707.d
Date : 17-MAR-2010 11:31
Client ID: RE15-10-8395
Sample Info: |2481020041959979|1|SVM|1|LANL
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Instrument: MSD8.i

Operator: nag1
Column diameter: 0.20



Data File: /chem/MSD8.i/s031710.b/s8c1707.d

Date : 17-MAR-2010 11:31

Client ID: RE15-10-8395

Instrument: MSD8.i

Sample Info: |248102004|959979|1|SVM|1|LANL

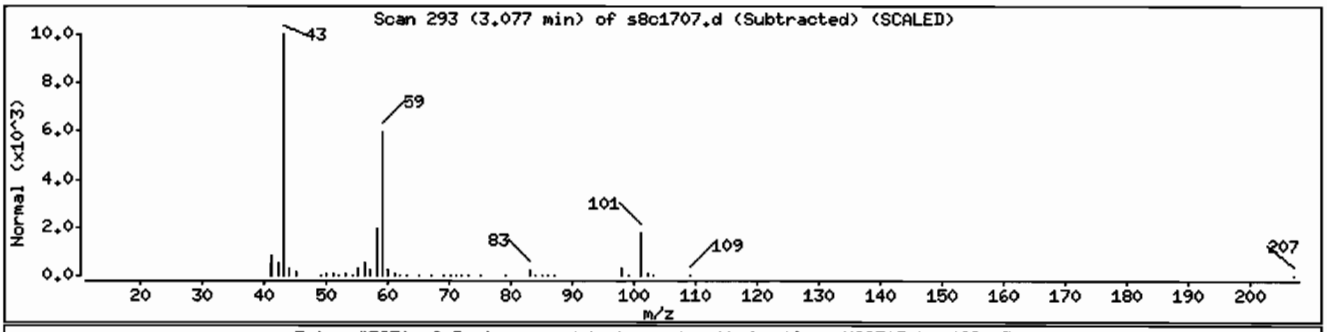
Volume Injected (uL): 0.5

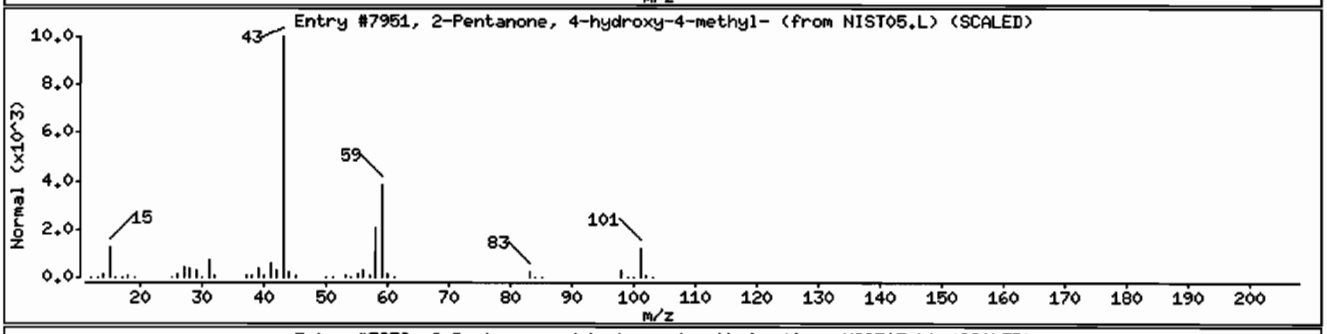
Operator: nag1

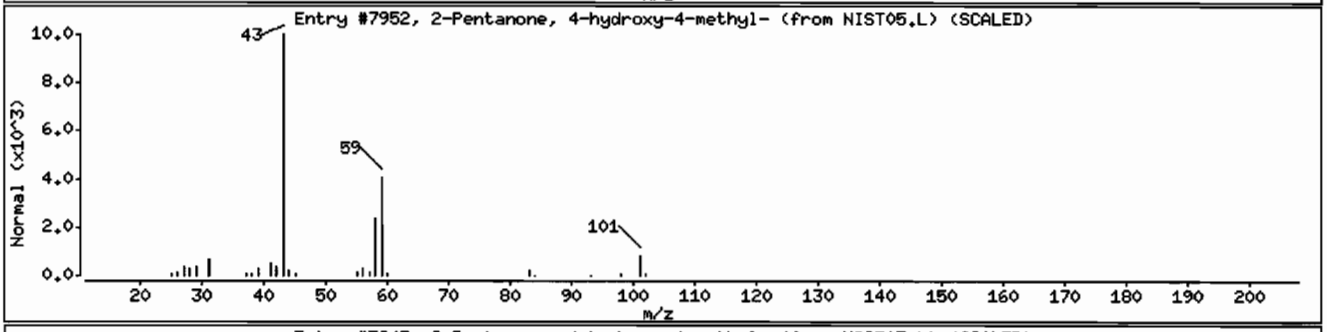
Column phase: J&W DB-5MS

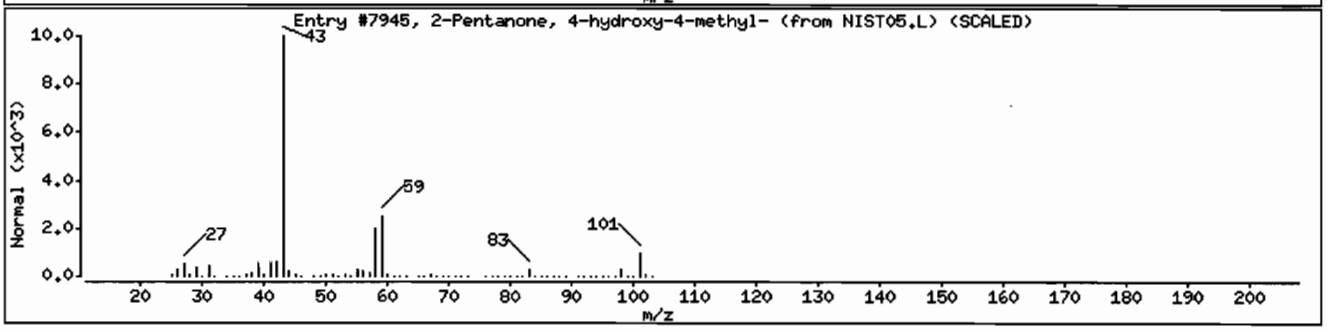
Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	59	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	45	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7945	40	C6H12O2	116









Data File: /chem/MSD8.i/s031710.b/s8c1707.d

Date : 17-MAR-2010 11:31

Client ID: RE15-10-8395

Instrument: MSD8.i

Sample Info: |2481020041959979|1|SVM|1|LANL

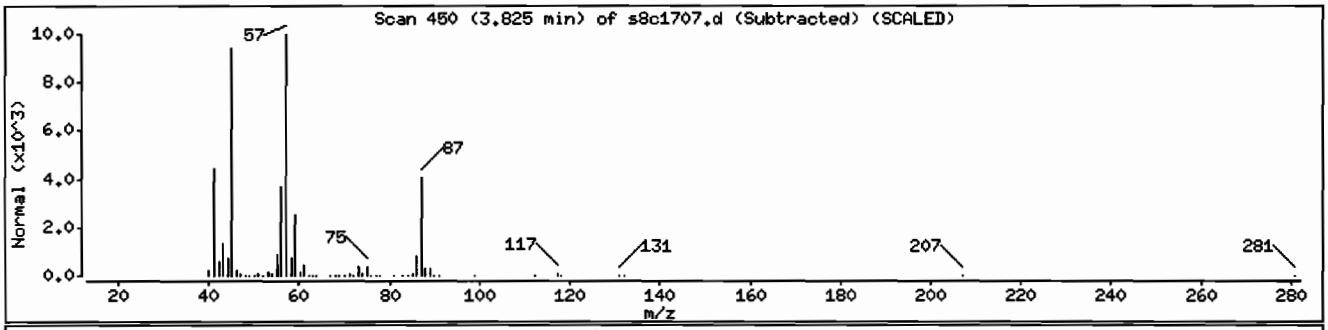
Volume Injected (uL): 0.5

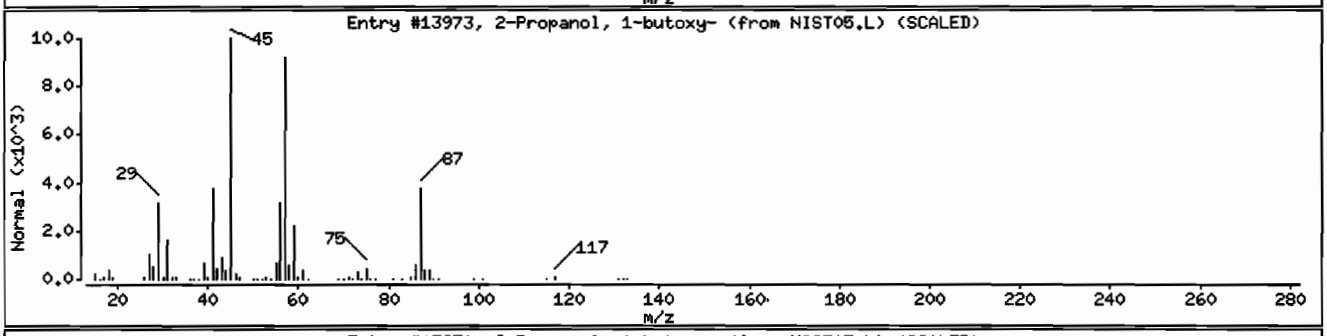
Operator: nag1

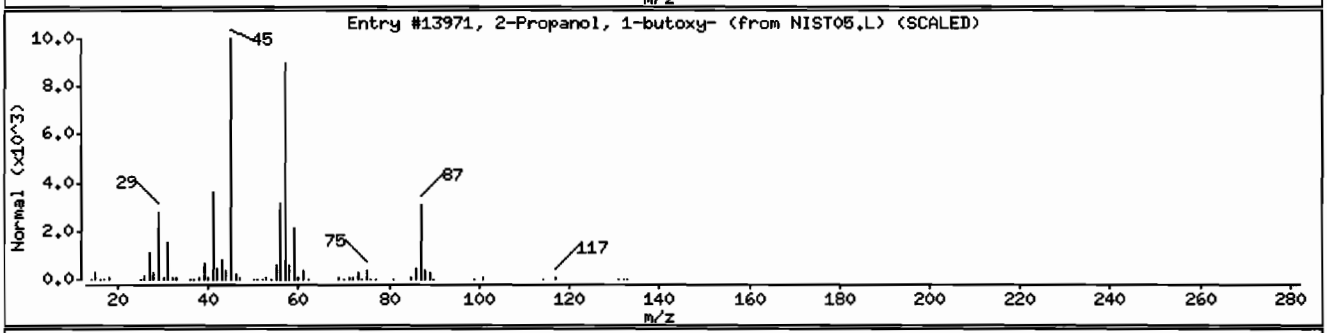
Column phase: J&W DB-5MS

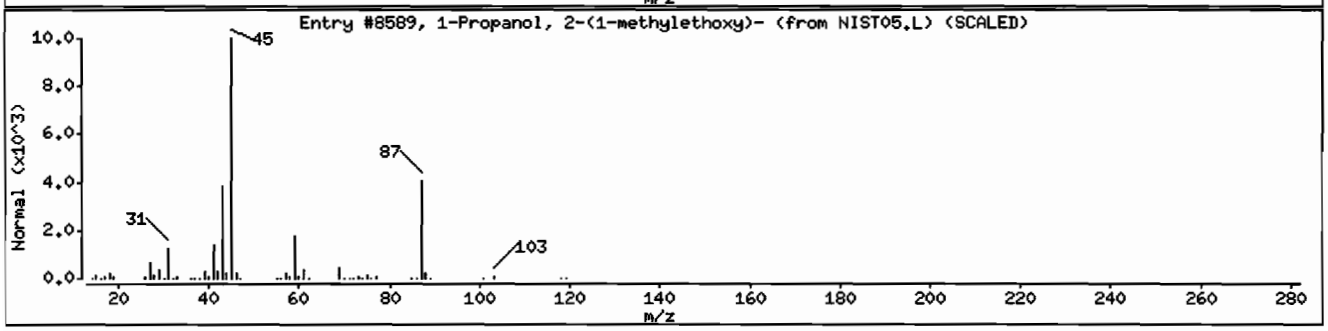
Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
2-Propanol, 1-butoxy-	5131-66-8	NIST05.L	13973	90	C7H16O2	132
2-Propanol, 1-butoxy-	5131-66-8	NIST05.L	13971	90	C7H16O2	132
1-Propanol, 2-(1-methylethoxy)-	3944-37-4	NIST05.L	8589	59	C6H14O2	118









Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-2089	Date Collected:	02/22/2010 12:00	Matrix:	R
Lab Sample ID:	248102002	Date Received:	02/26/2010 08:45	%Moisture:	8.7
		Client:	LANL010	Project:	LANL01004
Client ID:	RE15-10-8396	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	959979	Inst:	MSD8.I	Dilution:	1
Run Date:	03/17/2010 18:21	Analyst:	NAG1	Inj. Vol:	.5 uL
Prep Date:	03/02/2010 23:08	Aliquot:	30.05 g	Final Volume:	1 mL
Data File:	s8c1721.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	364	ug/kg	72.9	364
108-95-2	Phenol	U	364	ug/kg	72.9	364
95-57-8	2-Chlorophenol	U	364	ug/kg	72.9	364
106-46-7	1,4-Dichlorobenzene	U	364	ug/kg	72.9	364
621-64-7	N-Nitrosodipropylamine	U	364	ug/kg	72.9	364
59-50-7	4-Chloro-3-methylphenol	U	364	ug/kg	72.9	364
83-32-9	Acenaphthene	U	36.4	ug/kg	12.0	36.4
121-14-2	2,4-Dinitrotoluene	U	364	ug/kg	36.4	364
100-02-7	4-Nitrophenol	U	364	ug/kg	120	364
87-86-5	Pentachlorophenol	U	364	ug/kg	91.1	364
129-00-0	Pyrene	U	36.4	ug/kg	10.9	36.4
110-86-1	Pyridine	U	364	ug/kg	72.9	364
62-53-3	Aniline	U	364	ug/kg	109	364
111-44-4	bis(2-Chloroethyl) ether	U	364	ug/kg	72.9	364
541-73-1	1,3-Dichlorobenzene	U	364	ug/kg	72.9	364
100-51-6	Benzyl alcohol	U	364	ug/kg	109	364
95-50-1	1,2-Dichlorobenzene	U	364	ug/kg	72.9	364
108-60-1	bis(2-Chloroisopropyl)ether	U	364	ug/kg	72.9	364
95-48-7	o-Cresol	U	364	ug/kg	72.9	364
65794-96-9	m,p-Cresols	U	364	ug/kg	109	364
67-72-1	Hexachloroethane	U	364	ug/kg	72.9	364
98-95-3	Nitrobenzene	U	364	ug/kg	72.9	364
78-59-1	Isophorone	U	364	ug/kg	72.9	364
88-75-5	2-Nitrophenol	U	364	ug/kg	72.9	364
105-67-9	2,4-Dimethylphenol	U	364	ug/kg	128	364
111-91-1	bis(2-Chloroethoxy)methane	U	364	ug/kg	72.9	364
120-83-2	2,4-Dichlorophenol	U	364	ug/kg	72.9	364
65-85-0	Benzoic acid	U	729	ug/kg	182	729
91-20-3	Naphthalene	U	36.4	ug/kg	10.9	36.4
106-47-8	4-Chloroaniline	U	364	ug/kg	72.9	364
87-68-3	Hexachlorobutadiene	U	364	ug/kg	72.9	364
91-57-6	2-Methylnaphthalene	U	36.4	ug/kg	7.29	36.4
77-47-4	Hexachlorocyclopentadiene	U	364	ug/kg	72.9	364
88-06-2	2,4,6-Trichlorophenol	U	364	ug/kg	72.9	364
95-95-4	2,4,5-Trichlorophenol	U	364	ug/kg	72.9	364
91-58-7	2-Chloronaphthalene	U	36.4	ug/kg	12.0	36.4
88-74-4	2-Nitroaniline	U	364	ug/kg	72.9	364
99-09-2	*o-Nitroaniline* 3-Nitroaniline	U	364	ug/kg	72.9	364

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-2089**	**Date Collected:**	**02/22/2010 12:00**	**Matrix:**	**R**
Lab Sample ID:	**248102002**	**Date Received:**	**02/26/2010 08:45**	**%Moisture:**	**8.7**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE15-10-8396**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**959979**	**Inst:**	**MSD8.I**	**Dilution:**	**1**
Run Date:	**03/17/2010 18:21**	**Analyst:**	**NAG1**	**Inj. Vol:**	**.5 uL**
Prep Date:	**03/02/2010 23:08**	**Aliquot:**	**30.05 g**	**Final Volume:**	**1 mL**
Data File:	**s8c1721.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	364	ug/kg	72.9	364
606-20-2	2,6-Dinitrotoluene	U	364	ug/kg	36.4	364
208-96-8	Acenaphthylene	U	36.4	ug/kg	10.9	36.4
51-28-5	2,4-Dinitrophenol	U	729	ug/kg	138	729
132-64-9	Dibenzofuran	U	364	ug/kg	72.9	364
84-66-2	Diethylphthalate	U	364	ug/kg	72.9	364
86-73-7	Fluorene	U	36.4	ug/kg	10.9	36.4
7005-72-3	4-Chlorophenylphenylether	U	364	ug/kg	72.9	364
534-52-1	2-Methyl-4,6-dinitrophenol	U	364	ug/kg	72.9	364
100-01-6	4-Nitroaniline	U	364	ug/kg	109	364
	p-Nitroaniline					
122-39-4	Diphenylamine	U	364	ug/kg	72.9	364
122-66-7	Azobenzene	U	364	ug/kg	72.9	364
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	364	ug/kg	72.9	364
118-74-1	Hexachlorobenzene	U	364	ug/kg	72.9	364
85-01-8	Phenanthrene	U	36.4	ug/kg	10.9	36.4
120-12-7	Anthracene	U	36.4	ug/kg	7.29	36.4
84-74-2	Di-n-butylphthalate	U	364	ug/kg	72.9	364
206-44-0	Fluoranthene	U	36.4	ug/kg	10.9	36.4
85-68-7	Butylbenzylphthalate	U	364	ug/kg	72.9	364
56-55-3	Benzo(a)anthracene	U	36.4	ug/kg	10.9	36.4
91-94-1	3,3'-Dichlorobenzidine	U	364	ug/kg	109	364
218-01-9	Chrysene	U	36.4	ug/kg	10.9	36.4
117-81-7	bis(2-Ethylhexyl)phthalate	U	364	ug/kg	72.9	364
117-84-0	Di-n-octylphthalate	U	364	ug/kg	72.9	364
205-99-2	Benzo(b)fluoranthene	U	36.4	ug/kg	10.9	36.4
207-08-9	Benzo(k)fluoranthene	U	36.4	ug/kg	10.9	36.4
50-32-8	Benzo(a)pyrene	U	36.4	ug/kg	10.9	36.4
193-39-5	Indeno(1,2,3-cd)pyrene	U	36.4	ug/kg	10.9	36.4
53-70-3	Dibenzo(a,h)anthracene	U	36.4	ug/kg	10.9	36.4
191-24-2	Benzo(ghi)perylene	U	36.4	ug/kg	10.9	36.4
120-82-1	1,2,4-Trichlorobenzene	U	364	ug/kg	72.9	364

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	1.9	205	ug/kg		J
	Unknown Aldol Condensate	3.08	258	ug/kg		JA

GEL Laboratories LLC

Data file : /chem/MSD8.i/s031710.b/s8c1721.d
Lab Smp Id: 248102002 Client Smp ID: RE15-10-8396
Inj Date : 17-MAR-2010 18:21
Operator : nag1 Inst ID: MSD8.i
Smp Info : |248102002|959979|1|SVM|1|LANL
Misc Info : |MSD8270_S|WBN100310-01
Comment : Column: J & W DB-5MS, 25m x 0.20 mm x 0.33 micron film
Method : /chem/MSD8.i/s031710.b/MSD8-8270AQA-022010.m
Meth Date : 17-Mar-2010 13:57 nat00999 Quant Type: ISTD
Cal Date : 21-FEB-2010 23:15 Cal File: s8b2042.d
Als bottle: 21
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-2089.sub
Target Version: 3.50
Processing Host: hpclp1

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.05000	weight of sample
M	8.69140	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	4.454	4.454	(1.000)	707118	40.0000	
* 29 Naphthalene-d8	136	5.711	5.716	(1.000)	2739593	40.0000	
* 46 Acenaphthene-d10	164	7.568	7.573	(1.000)	1578568	40.0000	
* 67 Phenanthrene-d10	188	9.163	9.168	(1.000)	2650899	40.0000	
* 91 Chrysene-d12	240	12.068	12.073	(1.000)	2151497	40.0000	
* 98 Perylene-d12	264	14.168	14.173	(1.000)	1393531	40.0000	
$ 3 2-Fluorophenol	112	3.316	3.306	(0.744)	1249834	74.8669	2730
$ 5 Phenol-d5	99	4.073	4.077	(0.914)	1450369	69.6642	2540
$ 20 Nitrobenzene-d5	82	4.977	4.987	(0.872)	722066	37.0769	1350
$ 39 2-Fluorobiphenyl	172	6.835	6.839	(0.903)	1543737	33.2237	1210
$ 60 2,4,6-Tribromophenol	329	8.411	8.416	(1.111)	277094	53.1017	1940
$ 81 p-Terphenyl-d14	244	10.878	10.878	(0.901)	1716462	44.3131	1620

ION RATIO REPORT

SV REPORT

Data file: s8c1721.d
Report Date: 03/18/2010 07:06
Lab. ID: 248102002 SampleType: SAMPLE
Injection Date: 17-MAR-2010 18:21
Operator: nagl Instrument: MSD8.i
Sample Info: |248102002|959979|1|SVM|1|LANL
Miscellaneous Info: |MSD8270_S|WBN100310-01
Comment:
Method used: /chem/MSD8.i/s031710.b/MSD8-8270AQA-022010.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-2089
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
4 Aniline		CAS#: 62-53-3				
66	69241	4.07	4.15	80-120	100	(T)
93	162	4.13	4.15	219-279	0	(Q)
17 N-Nitrosodipropylamine				CAS#: 621-64-7		
70	98197	4.98	4.83	80-120	100	(T)
42	54396	4.98	4.83	30- 90	55	(T)
30 Naphthalene			CAS#: 91-20-3			
128	690	5.73	5.74	80-120	100	( )
129	251	5.71	5.74	0- 41	36	( )
127	0	0.00	5.74	0- 43	0	(T)
34 2-Methylnaphthalene				CAS#: 91-57-6		
142	338	6.45	6.46	80-120	100	( )
141	347	6.45	6.46	57-117	102	( )
44 2,6-Dinitrotoluene				CAS#: 606-20-2		
165	204024	7.57	7.34	80-120	100	(T)
63	2855	7.57	7.34	30- 90	1	(QT)
50 2,4-Dinitrotoluene				CAS#: 121-14-2		
165	204024	7.57	7.77	80-120	100	(T)
89	2695	7.56	7.77	43-103	1	(QT)
63	2855	7.57	7.77	26- 86	1	(QT)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
55 2-Methyl-4,6-dinitrophenol				CAS#: 534-52-1		
198	854	8.41	8.21	80-120	100	(T)
105	1783	8.41	8.21	12- 72	209	(QT)
51	1762	8.41	8.21	21- 81	206	(QT)
92 Chrysene			CAS#: 218-01-9			
228	227	12.09	12.11	80-120	100	( )
229	1439	12.07	12.11	0- 49	632	(Q)
226	435	12.07	12.11	0- 59	191	(Q)
94 Di-n-octylphthalate			CAS#: 117-84-0			
149	275	12.97	12.95	80-120	100	( )
43	388	12.95	12.95	0- 40	141	(Q)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD8.i/s031710.b/s8c1721.d
Lab Smp Id: 248102002 Client Smp ID: RE15-10-8396
Inj Date : 17-MAR-2010 18:21
Operator : nag1 Inst ID: MSD8.i
Smp Info : |248102002|959979|1|SVM|1|LANL
Misc Info : |MSD8270_S|WBN100310-01
Comment : Column: J & W DB-5MS, 25m x 0.20 mm x 0.33 micron film
Method : /chem/MSD8.i/s031710.b/MSD8-8270AQA-022010.m
Meth Date : 17-Mar-2010 13:57 nat00999 Quant Type: ISTD
Cal Date : 21-FEB-2010 23:15 Cal File: s8b2042.d
Als bottle: 21
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-2089.sub
Target Version: 3.50
Processing Host: hpclp1

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.05000	weight of sample
M	8.69140	% moisture

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 10 1,4-Dichlorobenzene-d4	4.454	4125122	40.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
1.896	579721	5.62137165	205	0		0	10
Unknown Aldol Condensate				CAS #:			
3.082	730966	7.08794824	258	0		0	10

Data File: /chem/MSD8.i/s031710.b/s8c1721.d

Page 1

Date : 17-MAR-2010 18:21

Client ID: RE15-10-8396

Instrument: MSD8.i

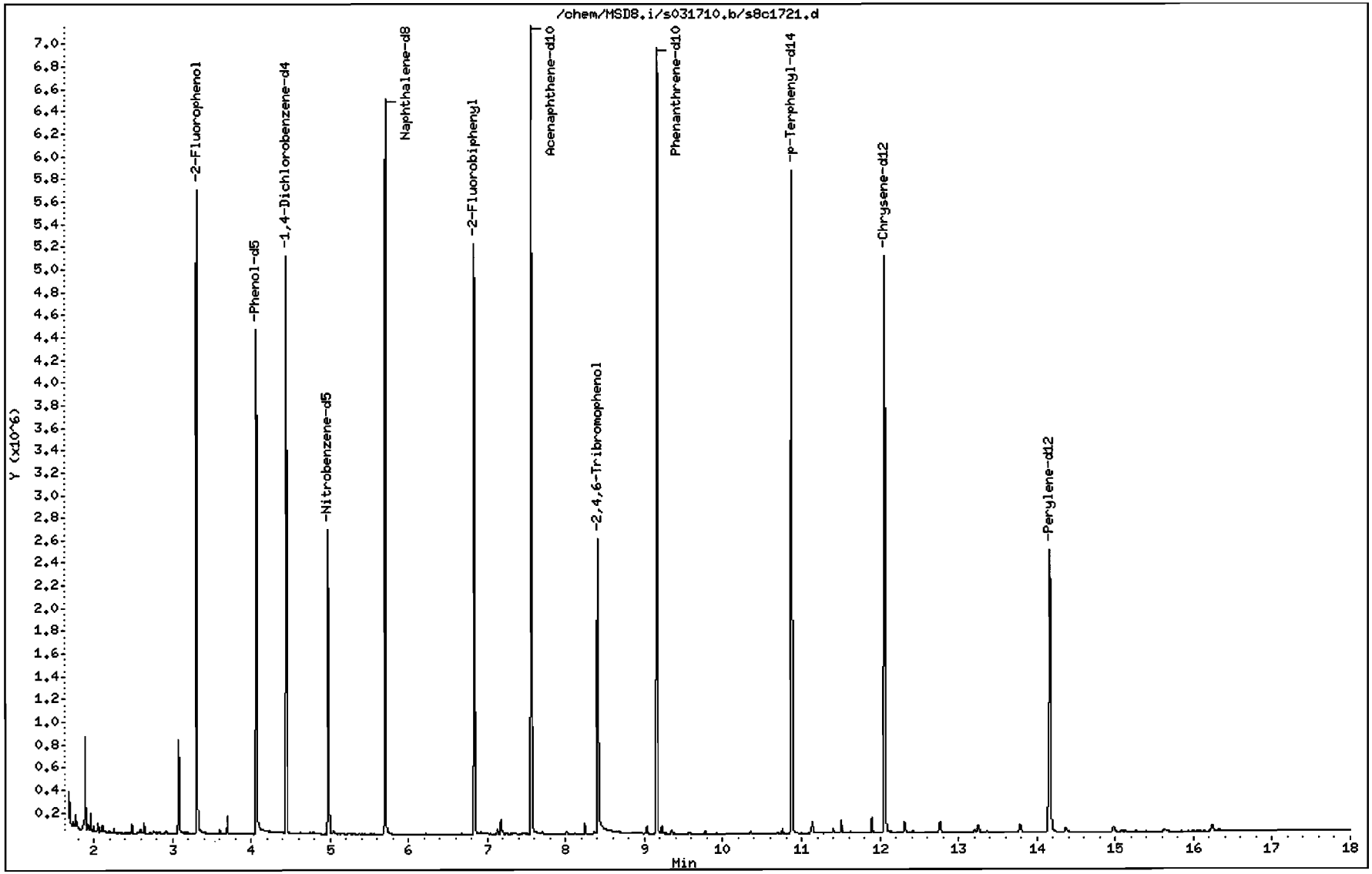
Sample Info: |248102002|959979|1|SVMI1|LANL

Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20



Data File: /chem/MSD8.i/s031710.b/s8c1721.d

Date : 17-MAR-2010 18:21

Client ID: RE15-10-8396

Instrument: MSD8.i

Sample Info: |2481020021959979|1|SVM|1|LANL

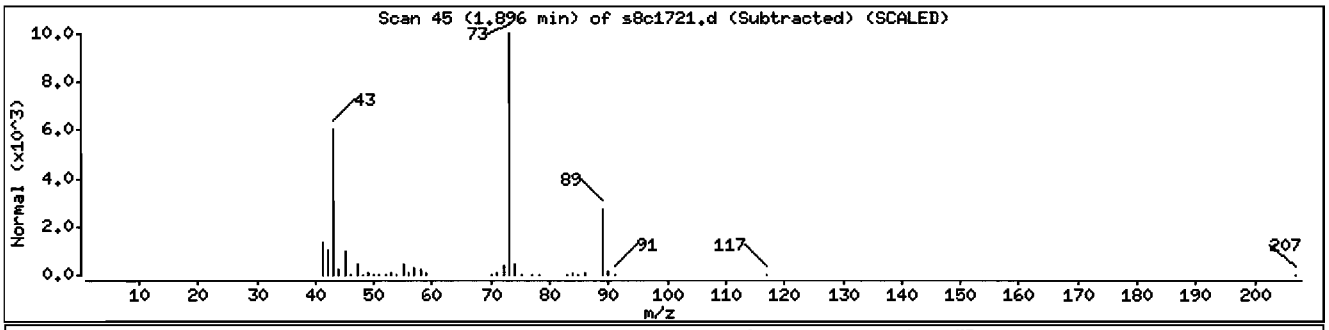
Volume Injected (uL): 0.5

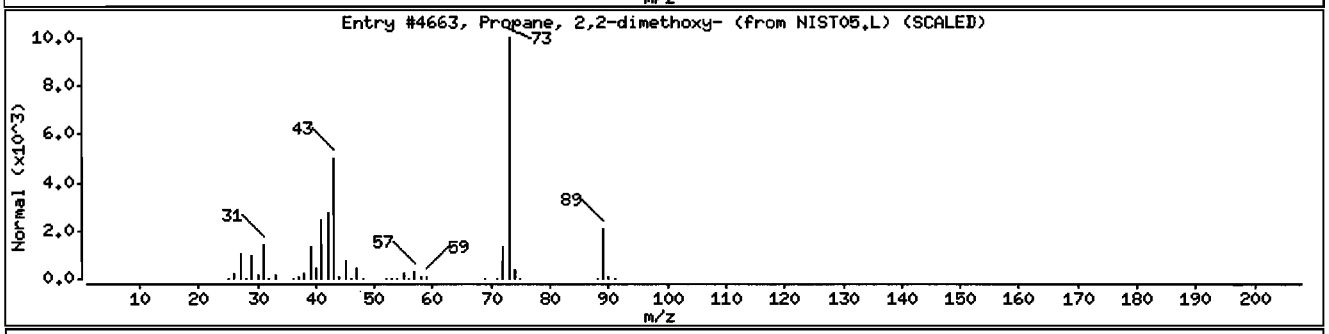
Operator: nag1

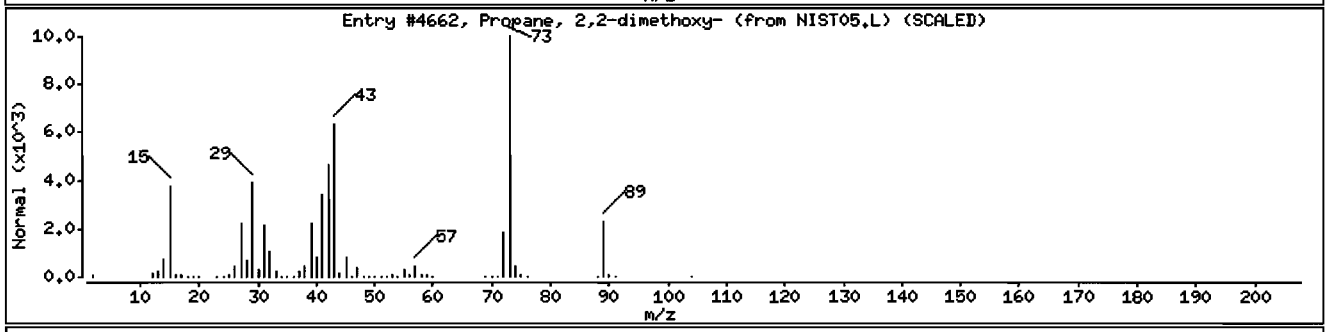
Column phase: J&W DB-5MS

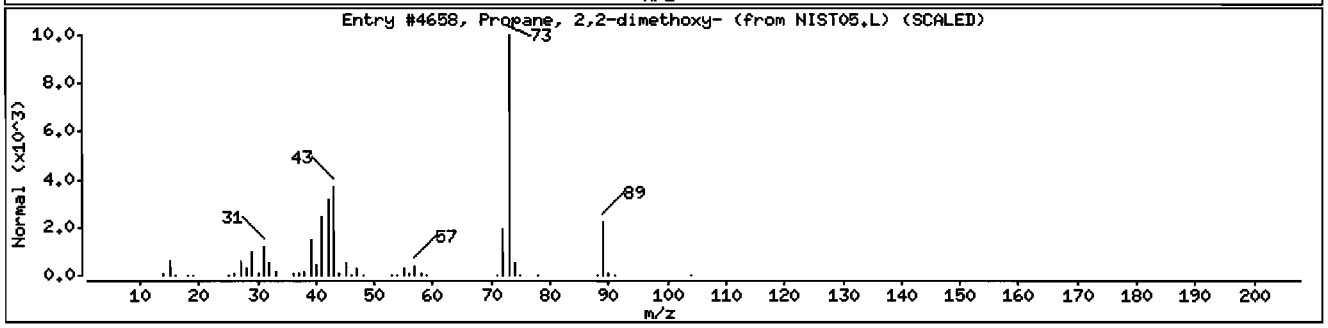
Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Propane, 2,2-dimethoxy-	77-76-9	NIST05.L	4663	45	C5H12O2	104
Propane, 2,2-dimethoxy-	77-76-9	NIST05.L	4662	42	C5H12O2	104
Propane, 2,2-dimethoxy-	77-76-9	NIST05.L	4658	36	C5H12O2	104









Data File: /chem/MSD8.i/s031710.b/s8c1721.d

Date : 17-MAR-2010 18:21

Client ID: RE15-10-8396

Instrument: MSD8.i

Sample Info: 1248102002195997911SVMI1ILANL

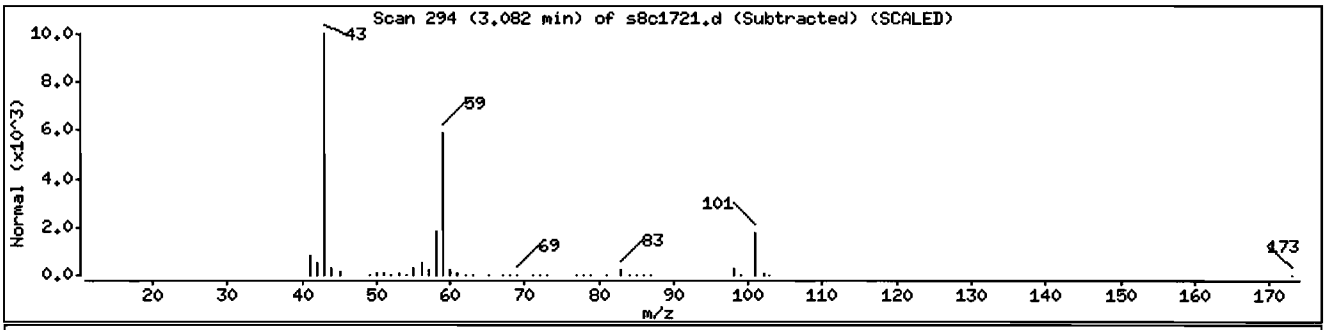
Volume Injected (uL): 0.5

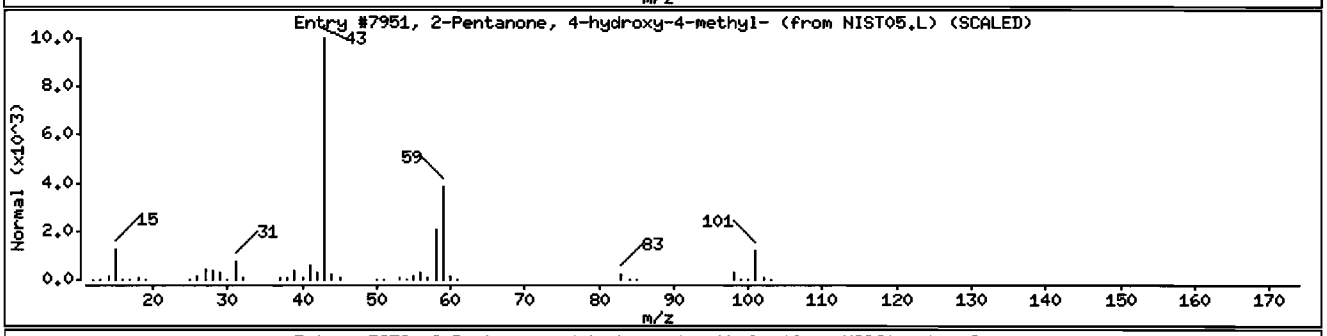
Operator: nag1

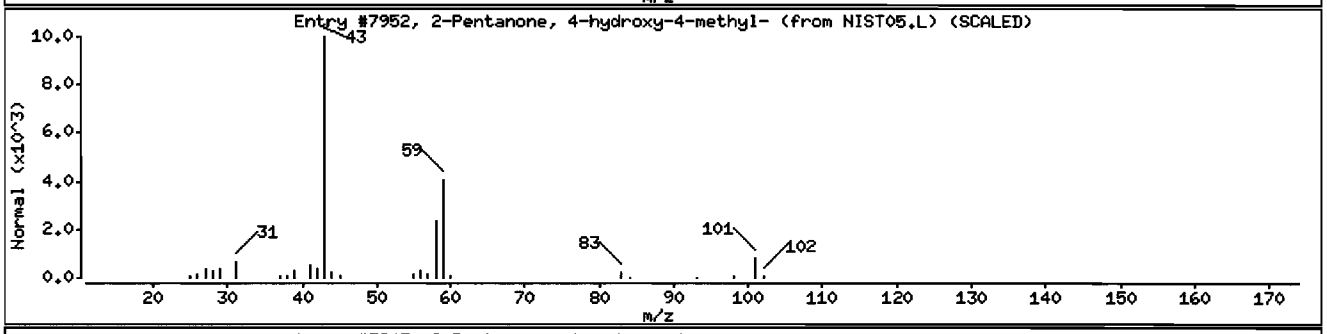
Column phase: J&W DB-5MS

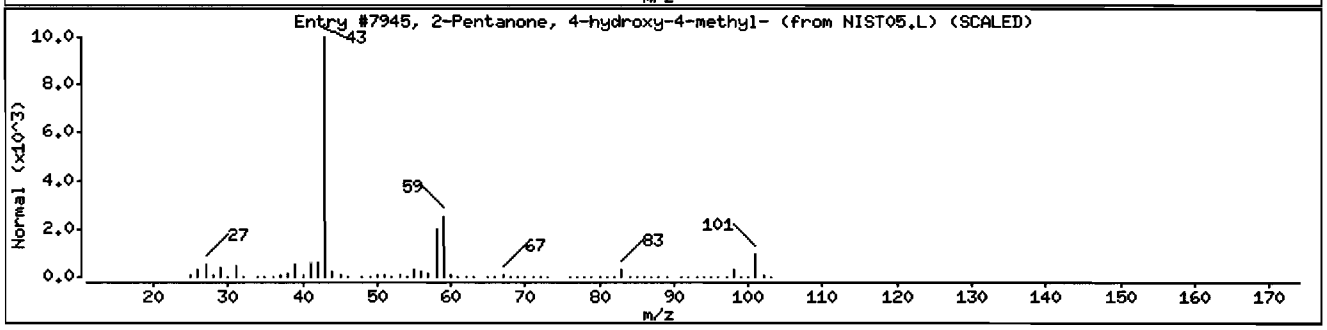
Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	59	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	50	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7945	40	C6H12O2	116









Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-2089**	**Date Collected:**	**02/22/2010 12:00**	**Matrix:**	**R**
Lab Sample ID:	**248102008**	**Date Received:**	**02/26/2010 08:45**	**%Moisture:**	**6.1**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE15-10-8397**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**959979**	**Inst:**	**MSD8.I**	**Dilution:**	**1**
Run Date:	**03/17/2010 18:51**	**Analyst:**	**NAG1**	**Inj. Vol:**	**.5 uL**
Prep Date:	**03/02/2010 23:08**	**Aliquot:**	**30.04 g**	**Final Volume:**	**1 mL**
Data File:	**s8c1722.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	355	ug/kg	70.9	355
108-95-2	Phenol	U	355	ug/kg	70.9	355
95-57-8	2-Chlorophenol	U	355	ug/kg	70.9	355
106-46-7	1,4-Dichlorobenzene	U	355	ug/kg	70.9	355
621-64-7	N-Nitrosodipropylamine	U	355	ug/kg	70.9	355
59-50-7	4-Chloro-3-methylphenol	U	355	ug/kg	70.9	355
83-32-9	Acenaphthene	U	35.5	ug/kg	11.7	35.5
121-14-2	2,4-Dinitrotoluene	U	355	ug/kg	35.5	355
100-02-7	4-Nitrophenol	U	355	ug/kg	117	355
87-86-5	Pentachlorophenol	U	355	ug/kg	88.7	355
129-00-0	Pyrene	U	35.5	ug/kg	10.6	35.5
110-86-1	Pyridine	U	355	ug/kg	70.9	355
62-53-3	Aniline	U	355	ug/kg	106	355
111-44-4	bis(2-Chloroethyl) ether	U	355	ug/kg	70.9	355
541-73-1	1,3-Dichlorobenzene	U	355	ug/kg	70.9	355
100-51-6	Benzyl alcohol	U	355	ug/kg	106	355
95-50-1	1,2-Dichlorobenzene	U	355	ug/kg	70.9	355
108-60-1	bis(2-Chloroisopropyl)ether	U	355	ug/kg	70.9	355
95-48-7	o-Cresol	U	355	ug/kg	70.9	355
65794-96-9	m,p-Cresols	U	355	ug/kg	106	355
67-72-1	Hexachloroethane	U	355	ug/kg	70.9	355
98-95-3	Nitrobenzene	U	355	ug/kg	70.9	355
78-59-1	Isophorone	U	355	ug/kg	70.9	355
88-75-5	2-Nitrophenol	U	355	ug/kg	70.9	355
105-67-9	2,4-Dimethylphenol	U	355	ug/kg	124	355
111-91-1	bis(2-Chloroethoxy)methane	U	355	ug/kg	70.9	355
120-83-2	2,4-Dichlorophenol	U	355	ug/kg	70.9	355
65-85-0	Benzoic acid	U	709	ug/kg	177	709
91-20-3	Naphthalene	U	35.5	ug/kg	10.6	35.5
106-47-8	4-Chloroaniline	U	355	ug/kg	70.9	355
87-68-3	Hexachlorobutadiene	U	355	ug/kg	70.9	355
91-57-6	2-Methylnaphthalene	U	35.5	ug/kg	7.09	35.5
77-47-4	Hexachlorocyclopentadiene	U	355	ug/kg	70.9	355
88-06-2	2,4,6-Trichlorophenol	U	355	ug/kg	70.9	355
95-95-4	2,4,5-Trichlorophenol	U	355	ug/kg	70.9	355
91-58-7	2-Chloronaphthalene	U	35.5	ug/kg	11.7	35.5
88-74-4	2-Nitroaniline	U	355	ug/kg	70.9	355
	o-Nitroaniline					
99-09-2	3-Nitroaniline	U	355	ug/kg	70.9	355

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-2089**	**Date Collected:**	**02/22/2010 12:00**	**Matrix:**	**R**
Lab Sample ID:	**248102008**	**Date Received:**	**02/26/2010 08:45**	**%Moisture:**	**6.1**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE15-10-8397**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**959979**	**Inst:**	**MSD8.I**	**Dilution:**	**1**
Run Date:	**03/17/2010 18:51**	**Analyst:**	**NAG1**	**Inj. Vol:**	**.5 uL**
Prep Date:	**03/02/2010 23:08**	**Aliquot:**	**30.04 g**	**Final Volume:**	**1 mL**
Data File:	**s8c1722.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	355	ug/kg	70.9	355
606-20-2	2,6-Dinitrotoluene	U	355	ug/kg	35.5	355
208-96-8	Acenaphthylene	U	35.5	ug/kg	10.6	35.5
51-28-5	2,4-Dinitrophenol	U	709	ug/kg	135	709
132-64-9	Dibenzofuran	U	355	ug/kg	70.9	355
84-66-2	Diethylphthalate	U	355	ug/kg	70.9	355
86-73-7	Fluorene	U	35.5	ug/kg	10.6	35.5
7005-72-3	4-Chlorophenylphenylether	U	355	ug/kg	70.9	355
534-52-1	2-Methyl-4,6-dinitrophenol	U	355	ug/kg	70.9	355
100-01-6	4-Nitroaniline	U	355	ug/kg	106	355
	p-Nitroaniline					
122-39-4	Diphenylamine	U	355	ug/kg	70.9	355
122-66-7	Azobenzene	U	355	ug/kg	70.9	355
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	355	ug/kg	70.9	355
118-74-1	Hexachlorobenzene	U	355	ug/kg	70.9	355
85-01-8	Phenanthrene	U	35.5	ug/kg	10.6	35.5
120-12-7	Anthracene	U	35.5	ug/kg	7.09	35.5
84-74-2	Di-n-butylphthalate	U	355	ug/kg	70.9	355
206-44-0	Fluoranthene	U	35.5	ug/kg	10.6	35.5
85-68-7	Butylbenzylphthalate	U	355	ug/kg	70.9	355
56-55-3	Benzo(a)anthracene	U	35.5	ug/kg	10.6	35.5
91-94-1	3,3'-Dichlorobenzidine	U	355	ug/kg	106	355
218-01-9	Chrysene	U	35.5	ug/kg	10.6	35.5
117-81-7	bis(2-Ethylhexyl)phthalate	U	355	ug/kg	70.9	355
117-84-0	Di-n-octylphthalate	U	355	ug/kg	70.9	355
205-99-2	Benzo(b)fluoranthene	U	35.5	ug/kg	10.6	35.5
207-08-9	Benzo(k)fluoranthene	U	35.5	ug/kg	10.6	35.5
50-32-8	Benzo(a)pyrene	U	35.5	ug/kg	10.6	35.5
193-39-5	Indeno(1,2,3-cd)pyrene	U	35.5	ug/kg	10.6	35.5
53-70-3	Dibenzo(a,h)anthracene	U	35.5	ug/kg	10.6	35.5
191-24-2	Benzo(ghi)perylene	U	35.5	ug/kg	10.6	35.5
120-82-1	1,2,4-Trichlorobenzene	U	355	ug/kg	70.9	355

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	3.08	202	ug/kg		JA

GEL Laboratories LLC

Data file : /chem/MSD8.i/s031710.b/s8c1722.d
Lab Smp Id: 248102008 Client Smp ID: RE15-10-8397
Inj Date : 17-MAR-2010 18:51
Operator : nag1 Inst ID: MSD8.i
Smp Info : |248102008|959979|1|SVM|1|LANL
Misc Info : |MSD8270_S|WBN100310-01
Comment : Column: J & W DB-5MS, 25m x 0.20 mm x 0.33 micron film
Method : /chem/MSD8.i/s031710.b/MSD8-8270AQA-022010.m
Meth Date : 17-Mar-2010 13:57 nat00999 Quant Type: ISTD
Cal Date : 21-FEB-2010 23:15 Cal File: s8b2042.d
Als bottle: 22
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-2089.sub
Target Version: 3.50
Processing Host: hpclpl

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.04000	weight of sample
M	6.12980	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	4.454	4.454	(1.000)	696704	40.0000	
* 29 Naphthalene-d8	136	5.711	5.716	(1.000)	2686141	40.0000	
* 46 Acenaphthene-d10	164	7.568	7.573	(1.000)	1562729	40.0000	
* 67 Phenanthrene-d10	188	9.163	9.168	(1.000)	2652937	40.0000	
* 91 Chrysene-d12	240	12.068	12.073	(1.000)	2164164	40.0000	
* 98 Perylene-d12	264	14.168	14.173	(1.000)	1337745	40.0000	
$ 3 2-Fluorophenol	112	3.316	3.306	(0.744)	1063807	64.6761	2290
$ 5 Phenol-d5	99	4.073	4.077	(0.914)	1174714	57.2673	2030
$ 20 Nitrobenzene-d5	82	4.978	4.987	(0.872)	622863	32.6195	1160
$ 39 2-Fluorobiphenyl	172	6.835	6.839	(0.903)	1311582	28.5134	1010
$ 60 2,4,6-Tribromophenol	329	8.411	8.416	(1.111)	259766	50.2856	1780
$ 81 p-Terphenyl-d14	244	10.878	10.878	(0.901)	1491582	38.2821	1360

ION RATIO REPORT

SV REPORT

Data file: s8c1722.d
Report Date: 03/18/2010 07:07
Lab. ID: 248102008 SampleType: SAMPLE
Injection Date: 17-MAR-2010 18:51
Operator: nag1 Instrument: MSD8.i
Sample Info: |248102008|959979|1|SVM|1|LANL
Miscellaneous Info: |MSD8270_S|WBN100310-01
Comment:
Method used: /chem/MSD8.i/s031710.b/MSD8-8270AQA-022010.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-2089
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
4 Aniline		CAS#: 62-53-3				
66	55287	4.07	4.15	80-120	100	(T)
93	282	4.13	4.15	219-279	1	(Q)
17 N-Nitrosodipropylamine				CAS#: 621-64-7		
70	85532	4.98	4.83	80-120	100	(T)
42	46835	4.98	4.83	30- 90	55	(T)
30 Naphthalene			CAS#: 91-20-3			
128	282	5.73	5.74	80-120	100	( )
129	253	5.71	5.74	0- 41	90	(Q)
127	0	0.00	5.74	0- 43	0	(T)
44 2,6-Dinitrotoluene				CAS#: 606-20-2		
165	201310	7.57	7.34	80-120	100	(T)
63	3067	7.56	7.34	30- 90	2	(QT)
50 2,4-Dinitrotoluene				CAS#: 121-14-2		
165	201310	7.57	7.77	80-120	100	(T)
89	2698	7.56	7.77	43-103	1	(QT)
63	3067	7.56	7.77	26- 86	2	(QT)
53 Fluorene			CAS#: 86-73-7			
166	17634	8.41	8.16	80-120	100	(T)
165	17518	8.41	8.16	63-123	99	(T)
167	5778	8.41	8.16	0- 43	33	(T)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
55 2-Methyl-4,6-dinitrophenol				CAS#: 534-52-1		
198	778	8.41	8.21	80-120	100	(T)
105	1447	8.41	8.21	12- 72	186	(QT)
51	1524	8.41	8.21	21- 81	196	(QT)
92 Chrysene			CAS#: 218-01-9			
228	6537	12.07	12.11	80-120	100	( )
229	1640	12.07	12.11	0- 49	25	( )
226	901	12.06	12.11	0- 59	14	( )
94 Di-n-octylphthalate				CAS#: 117-84-0		
149	302	12.95	12.95	80-120	100	( )
43	316	12.96	12.95	0- 40	105	(Q)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD8.i/s031710.b/s8c1722.d
Lab Smp Id: 248102008 Client Smp ID: RE15-10-8397
Inj Date : 17-MAR-2010 18:51
Operator : nag1 Inst ID: MSD8.i
Smp Info : |248102008|959979|1|SVM|1|LANL
Misc Info : |MSD8270_S|WBN100310-01
Comment : Column: J & W DB-5MS, 25m x 0.20 mm x 0.33 micron film
Method : /chem/MSD8.i/s031710.b/MSD8-8270AQA-022010.m
Meth Date : 17-Mar-2010 13:57 nat00999 Quant Type: ISTD
Cal Date : 21-FEB-2010 23:15 Cal File: s8b2042.d
Als bottle: 22
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-2089.sub
Target Version: 3.50
Processing Host: hpclp1

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.04000	weight of sample
M	6.12980	% moisture

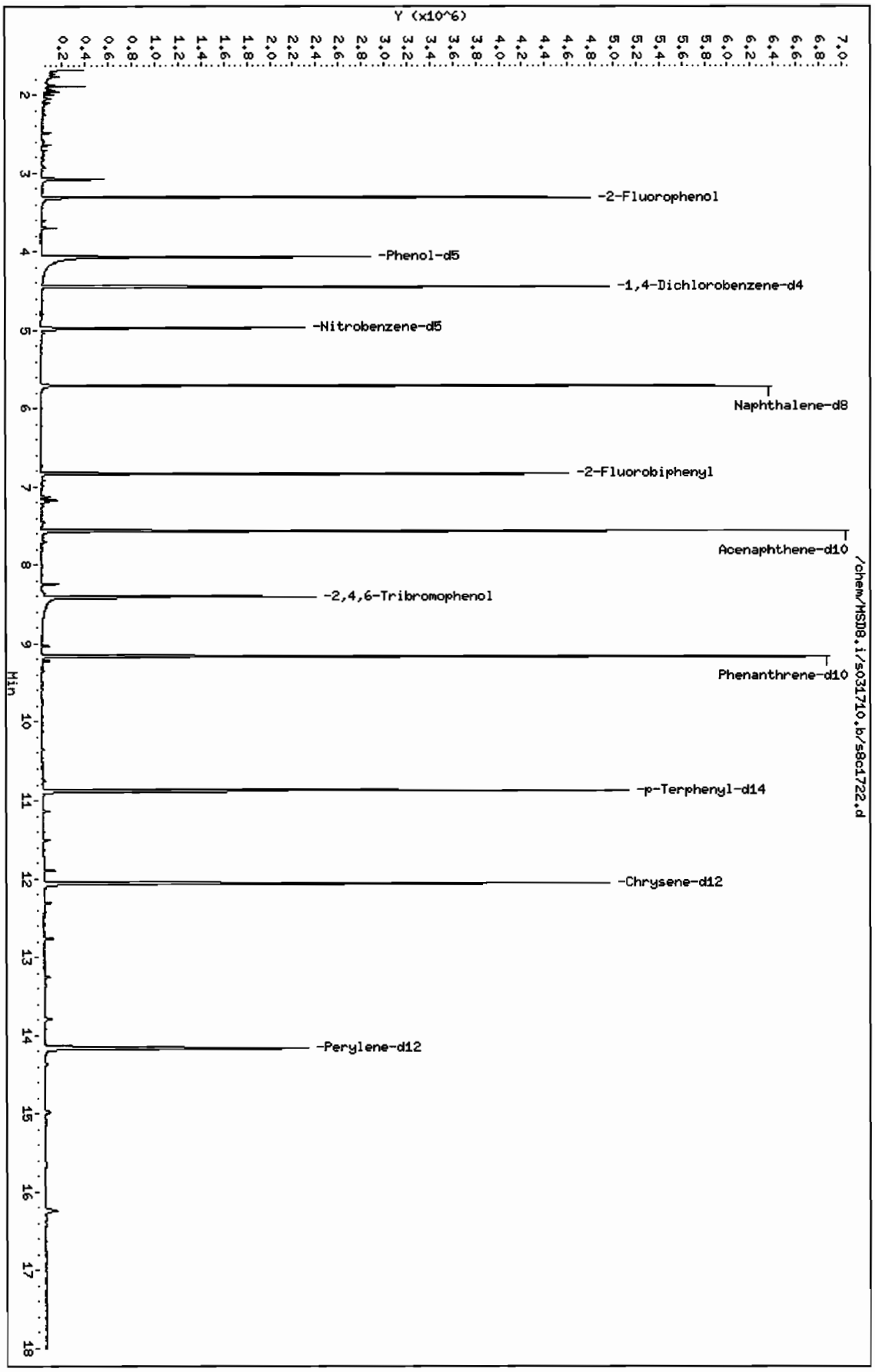
Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 10 1,4-Dichlorobenzene-d4	4.454	4045096	40.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown Aldol Condensate					CAS #:		
3.082	575397	5.68982052	202	0		0	10

Data File: /chem/MSD8.i/s031710.b/s8c1722.d
Date : 17-MAR-2010 18:51
Client ID: RE15-10-8397
Sample Info: 1248102008|959979|1|SVM11|LANL
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Instrument: MSD8.i
Operator: nag1
Column diameter: 0.20



Page 1

Data File: /chem/MSD8.i/s031710.b/s8c1722.d

Date : 17-MAR-2010 18:51

Client ID: RE15-10-8397

Instrument: MSD8.i

Sample Info: |2481020081959979|1|SVMI1|LANL

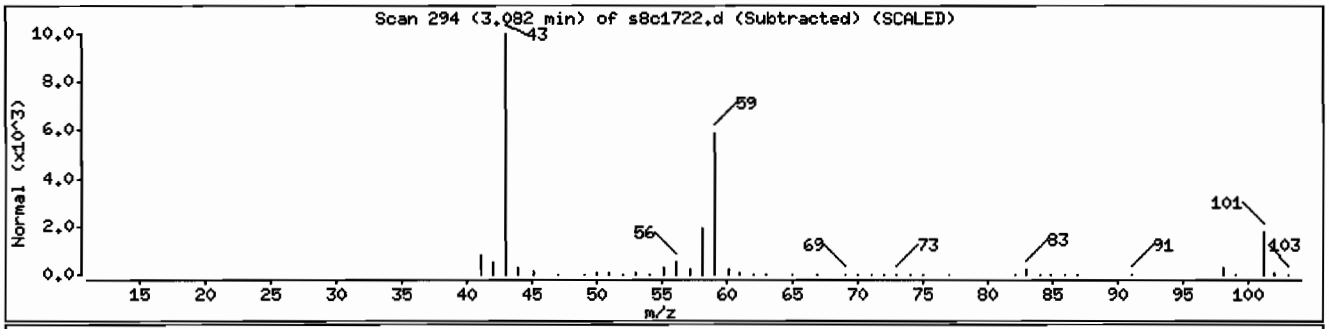
Volume Injected (uL): 0.5

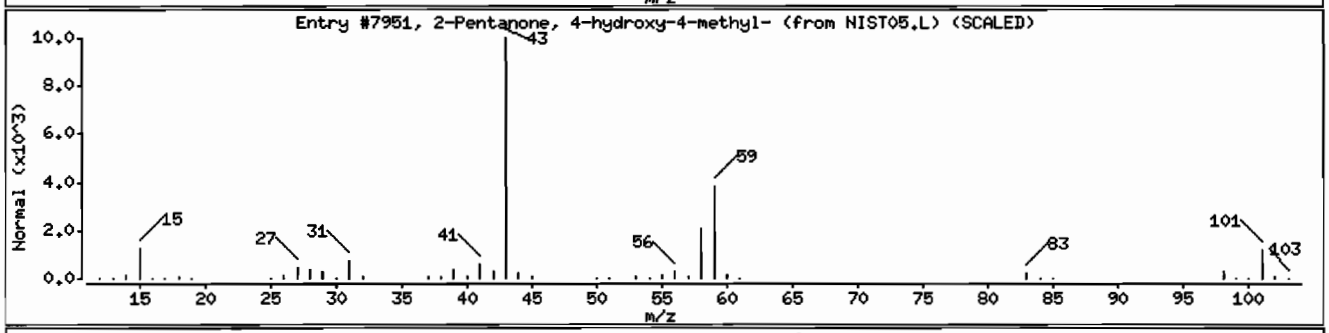
Operator: nag1

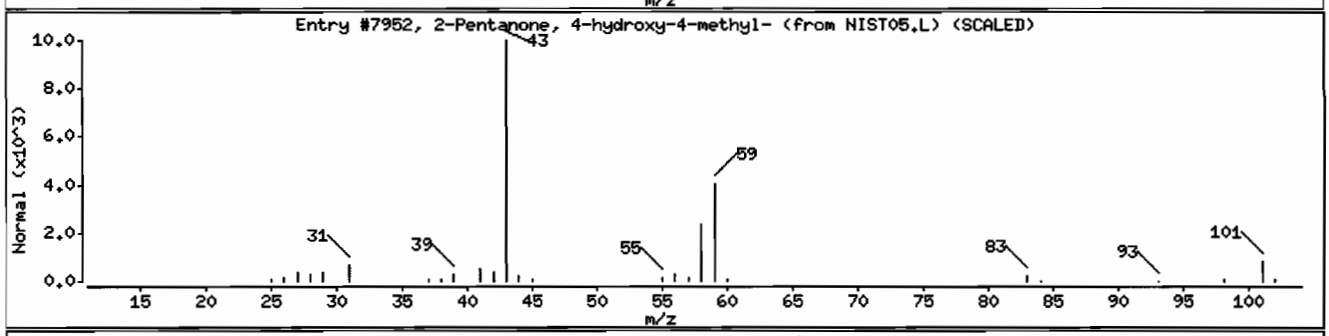
Column phase: J&W DB-5MS

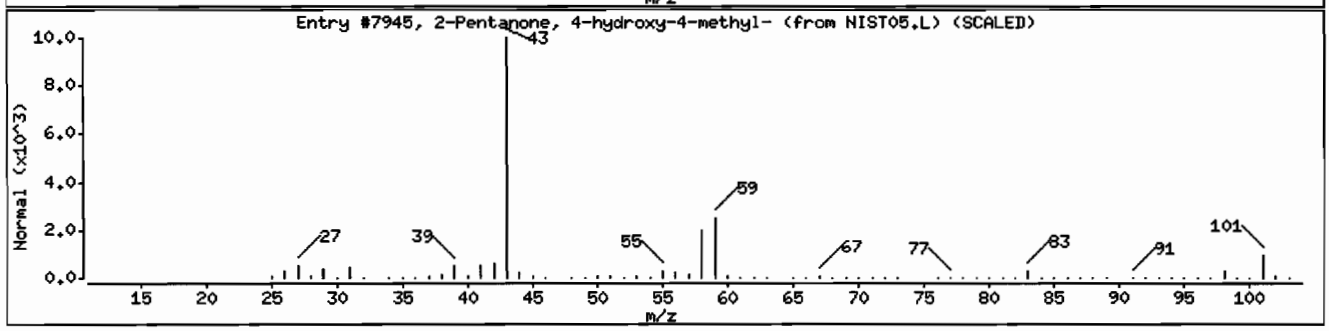
Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	59	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	50	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7945	42	C6H12O2	116









Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-2089**	**Date Collected:**	**02/22/2010 12:00**	**Matrix:**	**R**
Lab Sample ID:	**248102005**	**Date Received:**	**02/26/2010 08:45**	**%Moisture:**	**12.8**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE15-10-8398**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**959979**	**Inst:**	**MSD8.I**	**Dilution:**	**1**
Run Date:	**03/17/2010 12:00**	**Analyst:**	**NAG1**	**Inj. Vol:**	**.5 uL**
Prep Date:	**03/02/2010 23:08**	**Aliquot:**	**30.11 g**	**Final Volume:**	**1 mL**
Data File:	**s8c1708.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	381	ug/kg	76.2	381
108-95-2	Phenol	U	381	ug/kg	76.2	381
95-57-8	2-Chlorophenol	U	381	ug/kg	76.2	381
106-46-7	1,4-Dichlorobenzene	U	381	ug/kg	76.2	381
621-64-7	N-Nitrosodipropylamine	U	381	ug/kg	76.2	381
59-50-7	4-Chloro-3-methylphenol	U	381	ug/kg	76.2	381
83-32-9	Acenaphthene	U	38.1	ug/kg	12.6	38.1
121-14-2	2,4-Dinitrotoluene	U	381	ug/kg	38.1	381
100-02-7	4-Nitrophenol	U	381	ug/kg	126	381
87-86-5	Pentachlorophenol	U	381	ug/kg	95.3	381
129-00-0	Pyrene	U	38.1	ug/kg	11.4	38.1
110-86-1	Pyridine	U	381	ug/kg	76.2	381
62-53-3	Aniline	U	381	ug/kg	114	381
111-44-4	bis(2-Chloroethyl) ether	U	381	ug/kg	76.2	381
541-73-1	1,3-Dichlorobenzene	U	381	ug/kg	76.2	381
100-51-6	Benzyl alcohol	U	381	ug/kg	114	381
95-50-1	1,2-Dichlorobenzene	U	381	ug/kg	76.2	381
108-60-1	bis(2-Chloroisopropyl)ether	U	381	ug/kg	76.2	381
95-48-7	o-Cresol	U	381	ug/kg	76.2	381
65794-96-9	m,p-Cresols	U	381	ug/kg	114	381
67-72-1	Hexachloroethane	U	381	ug/kg	76.2	381
98-95-3	Nitrobenzene	U	381	ug/kg	76.2	381
78-59-1	Isophorone	U	381	ug/kg	76.2	381
88-75-5	2-Nitrophenol	U	381	ug/kg	76.2	381
105-67-9	2,4-Dimethylphenol	U	381	ug/kg	133	381
111-91-1	bis(2-Chloroethoxy)methane	U	381	ug/kg	76.2	381
120-83-2	2,4-Dichlorophenol	U	381	ug/kg	76.2	381
65-85-0	Benzoic acid	U	762	ug/kg	191	762
91-20-3	Naphthalene	U	38.1	ug/kg	11.4	38.1
106-47-8	4-Chloroaniline	U	381	ug/kg	76.2	381
87-68-3	Hexachlorobutadiene	U	381	ug/kg	76.2	381
91-57-6	2-Methylnaphthalene	U	38.1	ug/kg	7.62	38.1
77-47-4	Hexachlorocyclopentadiene	U	381	ug/kg	76.2	381
88-06-2	2,4,6-Trichlorophenol	U	381	ug/kg	76.2	381
95-95-4	2,4,5-Trichlorophenol	U	381	ug/kg	76.2	381
91-58-7	2-Chloronaphthalene	U	38.1	ug/kg	12.6	38.1
88-74-4	2-Nitroaniline *o-Nitroaniline*	U	381	ug/kg	76.2	381
99-09-2	3-Nitroaniline	U	381	ug/kg	76.2	381

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-2089**	**Date Collected:**	**02/22/2010 12:00**	**Matrix:**	**R**
Lab Sample ID:	**248102005**	**Date Received:**	**02/26/2010 08:45**	**%Moisture:**	**12.8**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE15-10-8398**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**959979**	**Inst:**	**MSD8.I**	**Dilution:**	**1**
Run Date:	**03/17/2010 12:00**	**Analyst:**	**NAG1**	**Inj. Vol:**	**.5 uL**
Prep Date:	**03/02/2010 23:08**	**Aliquot:**	**30.11 g**	**Final Volume:**	**1 mL**
Data File:	**s8c1708.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

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

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	3.08	205	ug/kg		JA
77-53-2	Cedrol	8.29	690	ug/kg	91	NJ

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-2089	**Date Collected:**	02/22/2010 12:00	**Matrix:**	R
Lab Sample ID:	248102005	**Date Received:**	02/26/2010 08:45	**%Moisture:**	12.8
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE15-10-8398	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	959979	**Inst:**	MSD8.I	**Dilution:**	1
Run Date:	03/17/2010 12:00	**Analyst:**	NAG1	**Inj. Vol:**	.5 uL
Prep Date:	03/02/2010 23:08	**Aliquot:**	30.11 g	**Final Volume:**	1 mL
Data File:	s8c1708.d	**Column:**	J&W DB-5MS	**Level:**	LOW

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

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	11.36	164	ug/kg		J
511-15-9	2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa	11.39	495	ug/kg	98	NJ
	Unknown	11.51	227	ug/kg		J

GEL Laboratories LLC

Data file : /chem/MSD8.i/s031710.b/s8c1708.d
Lab Smp Id: 248102005 Client Smp ID: RE15-10-8398
Inj Date : 17-MAR-2010 12:00
Operator : nag1 Inst ID: MSD8.i
Smp Info : |248102005|959979|1|SVM|1|LANL
Misc Info : |MSD8270_S|WBN100310-01
Comment : Column: J & W DB-5MS, 25m x 0.20 mm x 0.33 micron film
Method : /chem/MSD8.i/s031710.b/MSD8-8270AQA-022010.m
Meth Date : 17-Mar-2010 13:57 nat00999 Quant Type: ISTD
Cal Date : 21-FEB-2010 23:15 Cal File: s8b2042.d
Als bottle: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-2089.sub
Target Version: 3.50
Processing Host: hpclp1

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.11000	weight of sample
M	12.84520	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	4.453	4.454	(1.000)	641088	40.0000	
* 29 Naphthalene-d8	136	5.711	5.716	(1.000)	2465315	40.0000	
* 46 Acenaphthene-d10	164	7.568	7.573	(1.000)	1397459	40.0000	
* 67 Phenanthrene-d10	188	9.163	9.168	(1.000)	2290391	40.0000	
* 91 Chrysene-d12	240	12.063	12.073	(1.000)	1852980	40.0000	
* 98 Perylene-d12	264	14.168	14.173	(1.000)	1482012	40.0000	
$ 3 2-Fluorophenol	112	3.311	3.306	(0.743)	831694	54.9509	2090
$ 5 Phenol-d5	99	4.072	4.077	(0.914)	1023710	54.2354	2070
$ 20 Nitrobenzene-d5	82	4.977	4.987	(0.872)	467069	26.6515	1020
$ 39 2-Fluorobiphenyl	172	6.834	6.839	(0.903)	980799	23.8440	909
$ 60 2,4,6-Tribromophenol	329	8.411	8.416	(1.111)	198943	43.0660	1640
$ 81 p-Terphenyl-d14	244	10.877	10.878	(0.902)	1026649	30.7745	1170

ION RATIO REPORT

SV REPORT

Data file: s8c1708.d
Report Date: 03/17/2010 14:01
Lab. ID: 248102005 SampleType: SAMPLE
Injection Date: 17-MAR-2010 12:00
Operator: nag1 Instrument: MSD8.i
Sample Info: |248102005|959979|1|SVM|1|LANL
Miscellaneous Info: |MSD8270_S|WBN100310-01
Comment:
Method used: /chem/MSD8.i/s031710.b/MSD8-8270AQA-022010.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-2089
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
4 Aniline		CAS#: 62-53-3				
66	48102	4.07	4.15	80-120	100	(T)
93	124	4.12	4.15	219-279	0	(Q)
17 N-Nitrosodipropylamine				CAS#: 621-64-7		
70	64359	4.98	4.83	80-120	100	(T)
42	35361	4.98	4.83	30- 90	55	(T)
30 Naphthalene			CAS#: 91-20-3			
128	151	5.73	5.74	80-120	100	( )
129	192	5.71	5.74	0- 41	127	(Q)
127	0	0.00	5.74	0- 43	0	(T)
40 2-Chloronaphthalene				CAS#: 91-58-7		
162	167	6.99	6.97	80-120	100	( )
164	341	7.02	6.97	3- 63	204	(Q)
127	213	7.12	6.97	6- 66	127	(QT)
42 o-Nitroaniline			CAS#: 88-74-4			
65	23223	7.17	7.08	80-120	100	(T)
92	28731	7.17	7.08	34- 94	124	(QT)
138	1871	7.17	7.08	78-138	8	(QT)
44 2,6-Dinitrotoluene				CAS#: 606-20-2		
165	181177	7.56	7.34	80-120	100	(T)
63	4483	7.56	7.34	30- 90	2	(QT)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
47 Acenaphthene			CAS#: 83-32-9			
154	14381	7.58	7.61	80-120	100	( )
153	13026	7.58	7.61	77-137	91	( )
152	12005	7.58	7.61	20- 80	83	(Q)
50 2,4-Dinitrotoluene			CAS#: 121-14-2			
165	181177	7.56	7.77	80-120	100	(T)
89	2947	7.57	7.77	43-103	2	(QT)
63	4483	7.56	7.77	26- 86	2	(QT)
55 2-Methyl-4,6-dinitrophenol			CAS#: 534-52-1			
198	609	8.41	8.21	80-120	100	(T)
105	3241	8.41	8.21	12- 72	532	(QT)
51	1654	8.41	8.21	21- 81	272	(QT)
92 Chrysene			CAS#: 218-01-9			
228	4609	12.06	12.11	80-120	100	( )
229	1342	12.06	12.11	0- 49	29	( )
226	387	12.06	12.11	0- 59	8	( )
94 Di-n-octylphthalate			CAS#: 117-84-0			
149	264	12.94	12.95	80-120	100	( )
43	325	13.04	12.95	0- 40	123	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD8.i/s031710.b/s8c1708.d
Lab Smp Id: 248102005 Client Smp ID: RE15-10-8398
Inj Date : 17-MAR-2010 12:00
Operator : nag1 Inst ID: MSD8.i
Smp Info : |248102005|959979|1|SVM|1|LANL
Misc Info : |MSD8270_S|WBN100310-01
Comment : Column: J & W DB-5MS, 25m x 0.20 mm x 0.33 micron film
Method : /chem/MSD8.i/s031710.b/MSD8-8270AQA-022010.m
Meth Date : 17-Mar-2010 13:57 nat00999 Quant Type: ISTD
Cal Date : 21-FEB-2010 23:15 Cal File: s8b2042.d
Als bottle: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-2089.sub
Target Version: 3.50
Processing Host: hpclp1

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.11000	weight of sample
M	12.84520	% moisture

Cpnd Variable Local Compound Variable

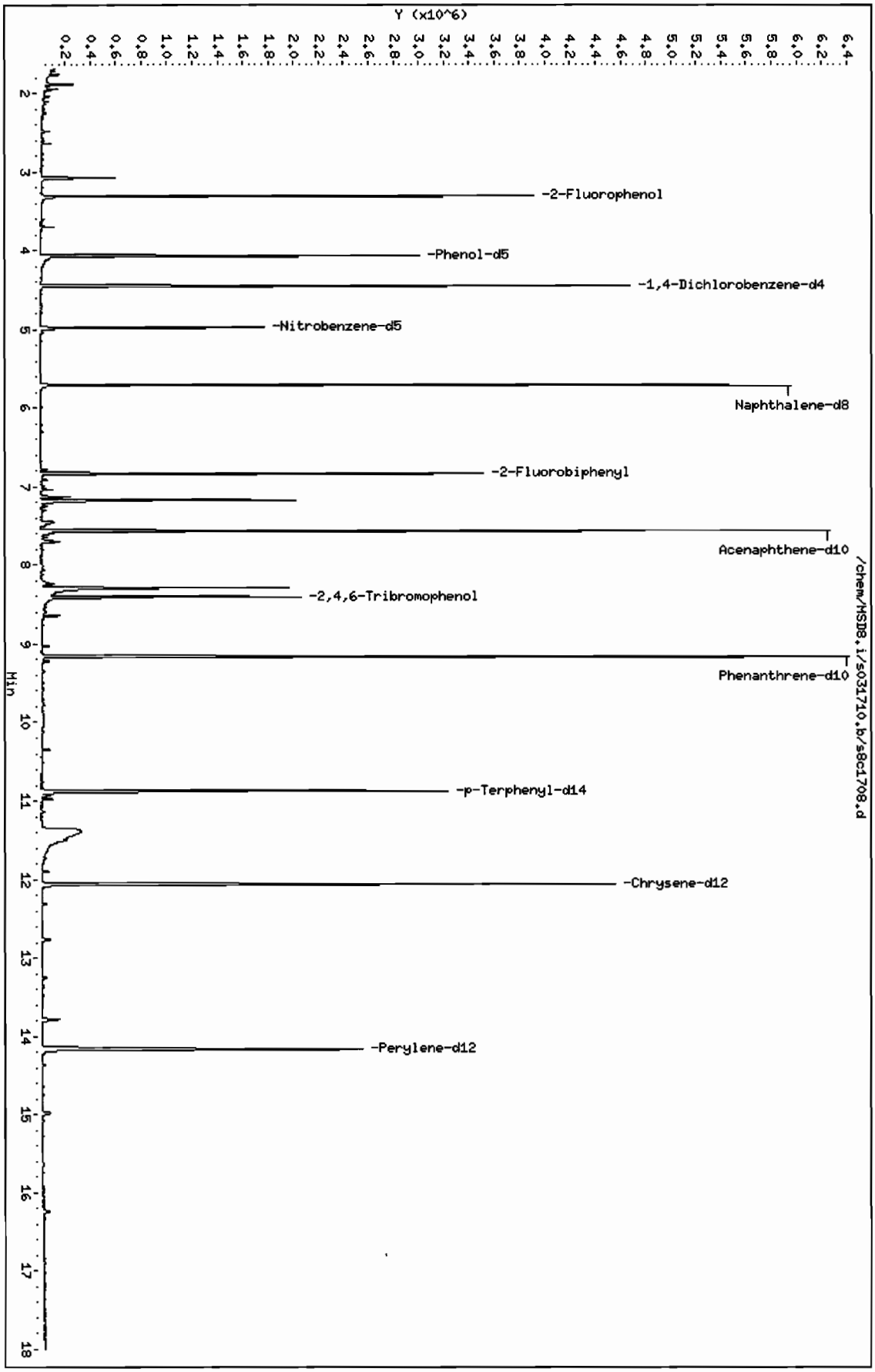
ISTD	RT	AREA	AMOUNT
* 10 1,4-Dichlorobenzene-d4	4.453	3720583	40.000
* 46 Acenaphthene-d10	7.568	5967061	40.000
* 91 Chrysene-d12	12.063	5028891	40.000

CONCENTRATIONS					QUANT		
RT	AREA	ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #

RT	AREA	CONCENTRATIONS ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	QUANT LIBRARY	LIB ENTRY	CPND #
Unknown Aldol Condensate					CAS #:		
3.077	500016	5.37567442	205	0		0	10
Cedrol					CAS #: 77-53-2		
8.292	2699441	18.0956137	690	91	NIST05.L	72887	46
Unknown					CAS #:		
11.363	540539	4.29946635	164	0		0	91
2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa					CAS #: 511-15-9		
11.392	1634584	13.0015497	495	98	NIST05.L	116239	91
Unknown					CAS #:		
11.506	748831	5.95623365	227	0		0	91

Data File: /chem/MSD8.i/s031710.b/s8c1708.d
Date : 17-MAR-2010 12:00
Client ID: RE15-10-8398
Sample Info: 1248102005195997911|SVM11|LANL
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Instrument: MSD8.i
Operator: nag1
Column diameter: 0.20



Page 1

Data File: /chem/MSD8.i/s031710.b/s8c1708.d

Date : 17-MAR-2010 12:00

Client ID: RE15-10-8398

Instrument: MSD8.i

Sample Info: |2481020051959979|1|SVMI1|LANL

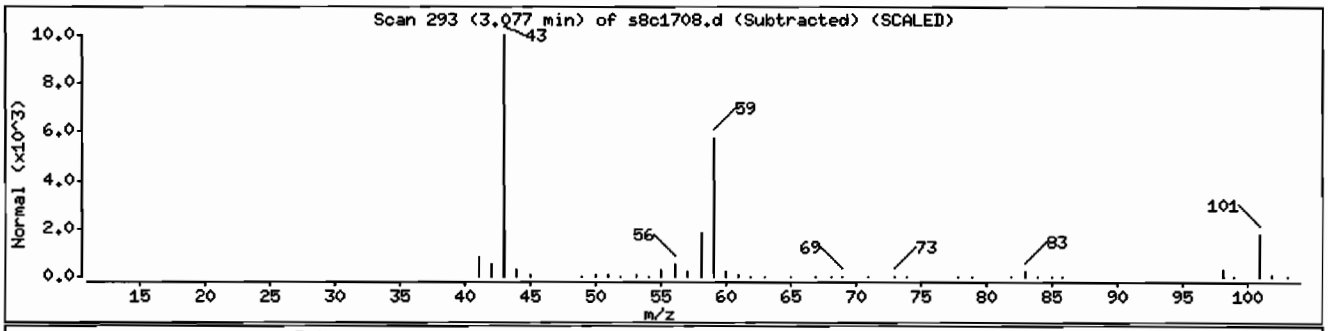
Volume Injected (uL): 0.5

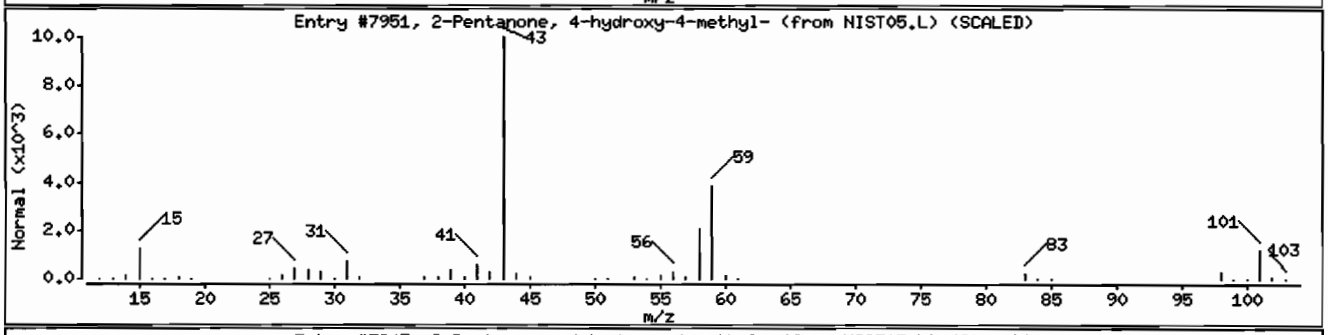
Operator: nag1

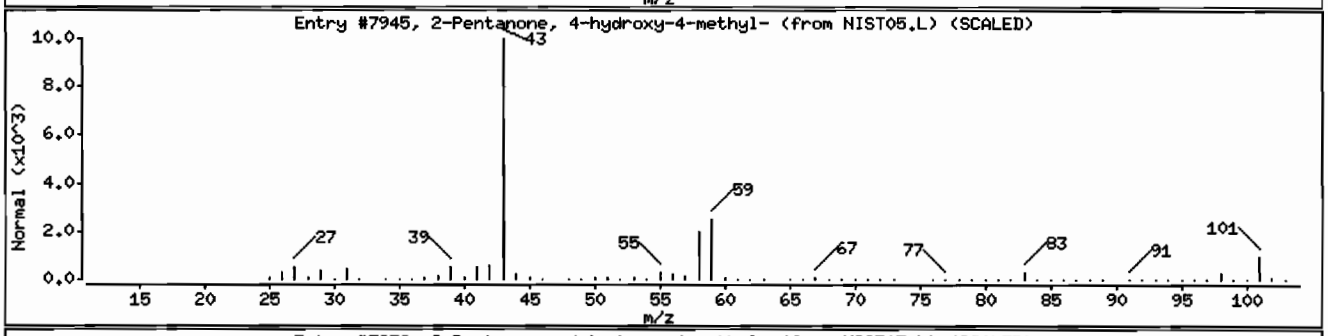
Column phase: J&W DB-5MS

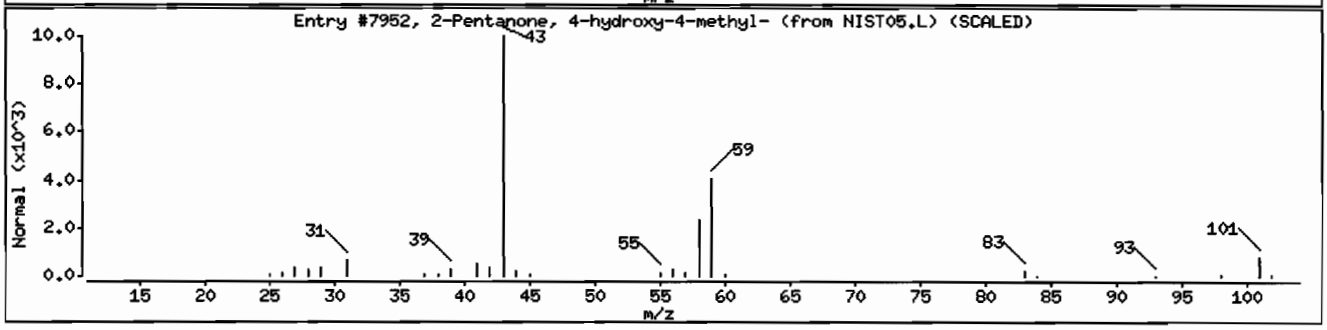
Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	59	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7945	53	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	45	C6H12O2	116









Data File: /chem/MSD8.i/s031710.b/s8c1708.d

Date : 17-MAR-2010 12:00

Client ID: RE15-10-8398

Instrument: MSD8.i

Sample Info: 12481020051959979|1|SVM|1|LANL

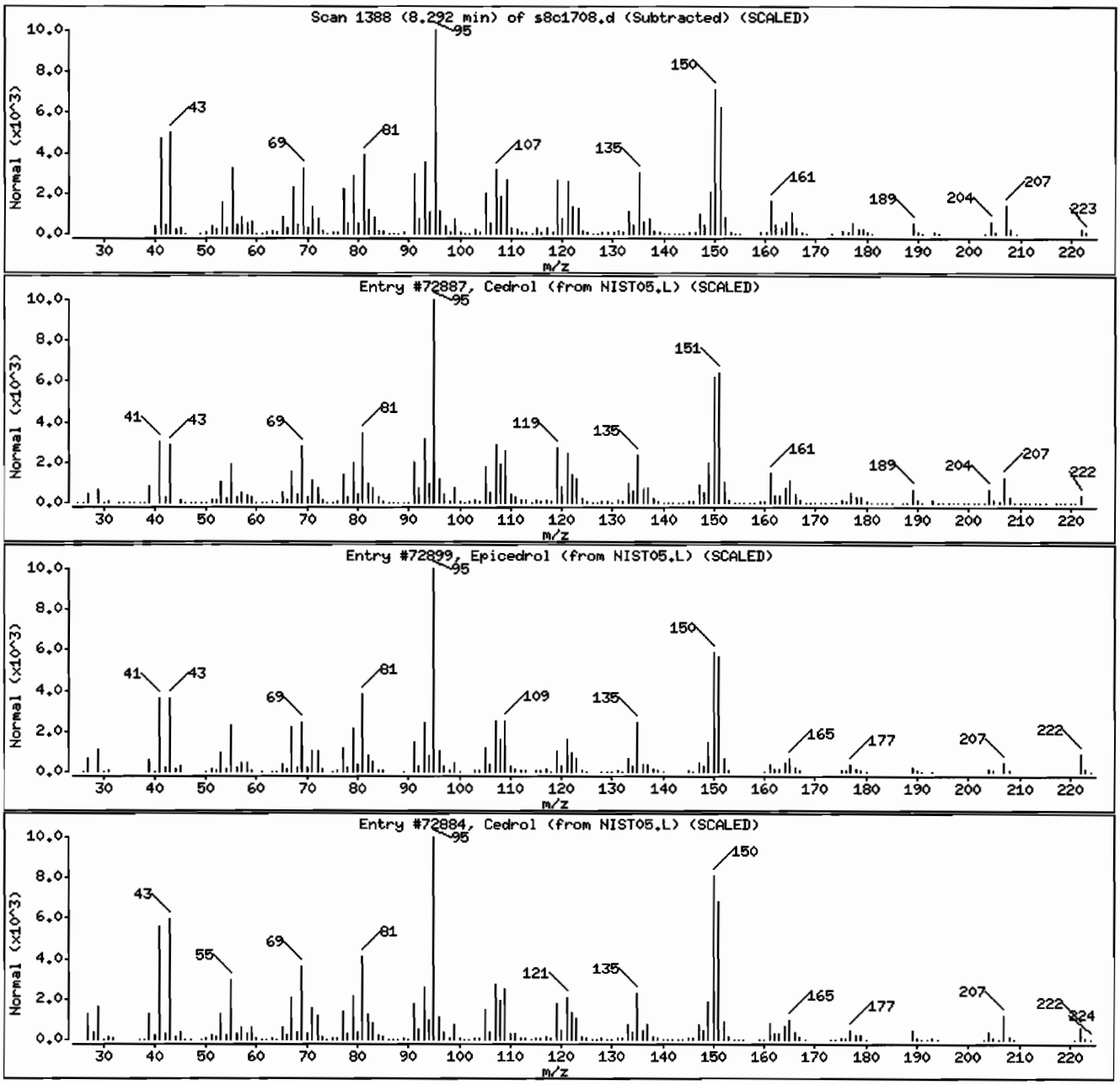
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Cedrol	77-53-2	NIST05.L	72887	91	C15H26O	222
Epicedrol	1000156-22-8	NIST05.L	72899	90	C15H26O	222
Cedrol	77-53-2	NIST05.L	72884	90	C15H26O	222



Data File: /chem/MSD8.i/s031710.b/s8c1708.d

Date : 17-MAR-2010 12:00

Client ID: RE15-10-8398

Instrument: MSD8.i

Sample Info: 1248102005|959979|1|SVM|1|LANL

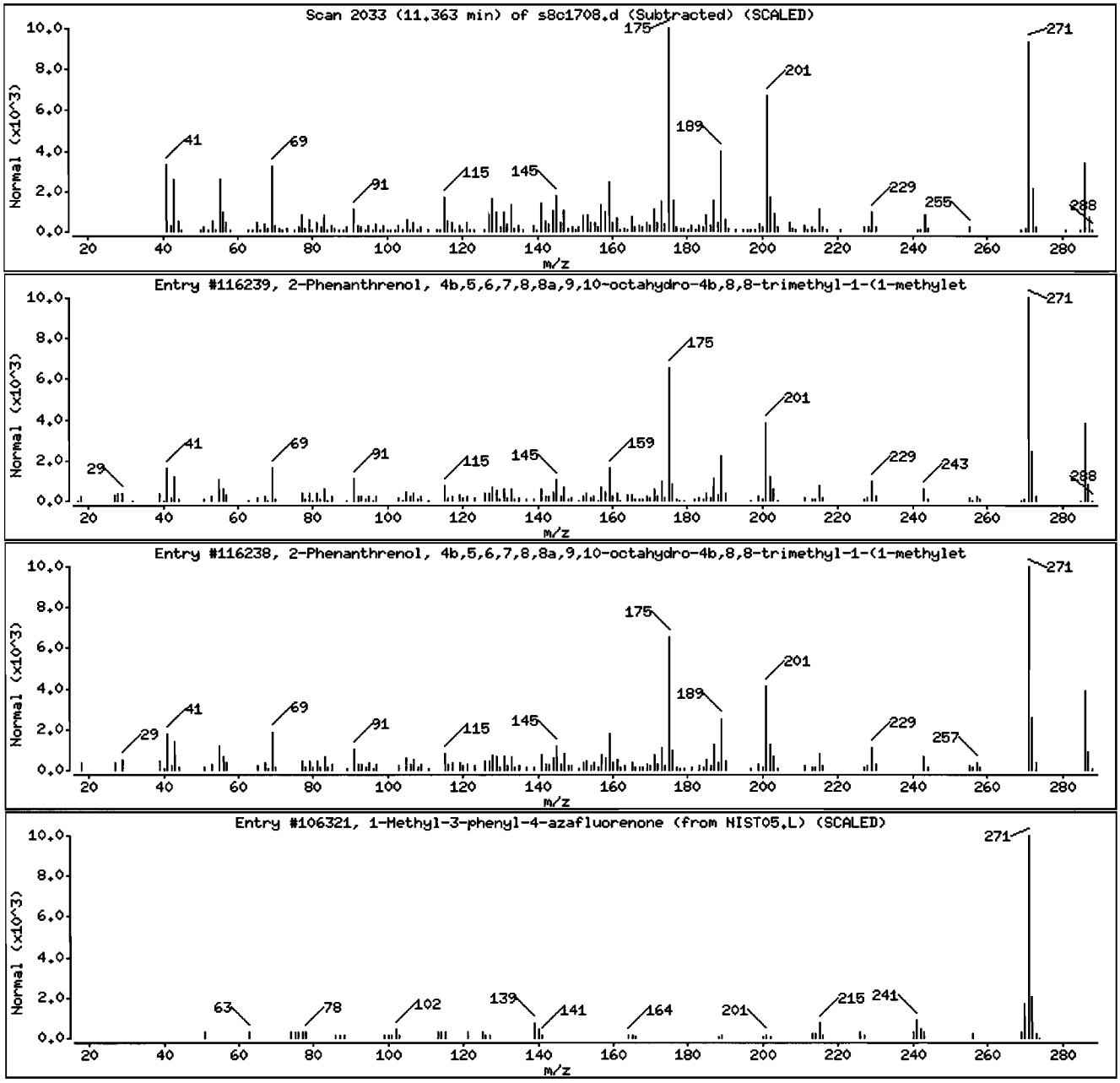
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa	511-15-9	NIST05.L	116239	96	C20H30O	286
2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa	511-15-9	NIST05.L	116238	95	C20H30O	286
1-Methyl-3-phenyl-4-azafluorenone	69751-55-9	NIST05.L	106321	22	C19H13NO	271



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Date : 17-MAR-2010 12:00

Client ID: RE15-10-8398

Instrument: MSD8.i

Sample Info: |2481020051959979|1|SVM|1|LANL

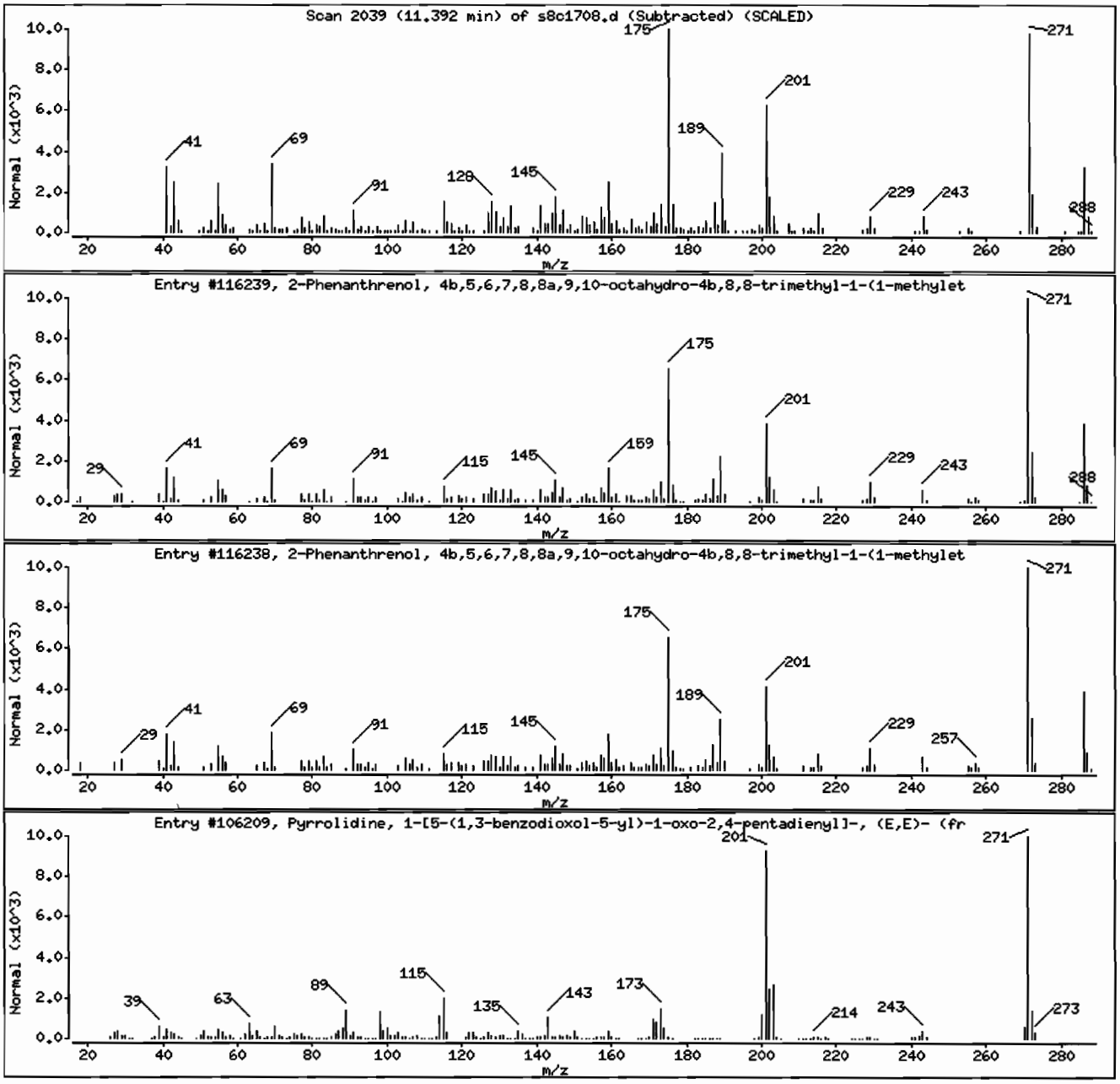
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa	511-15-9	NIST05.L	116239	98	C20H30O	286
2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa	511-15-9	NIST05.L	116238	96	C20H30O	286
Pyrrolidine, 1-[5-(1,3-benzodioxol-5-yl)	25924-78-1	NIST05.L	106209	46	C16H17NO3	271



Data File: /chem/MSD8.i/s031710.b/s8c1708.d

Date : 17-MAR-2010 12:00

Client ID: RE15-10-8398

Instrument: MSD8.i

Sample Info: 1248102005|959979|1|SVH|1|LANL

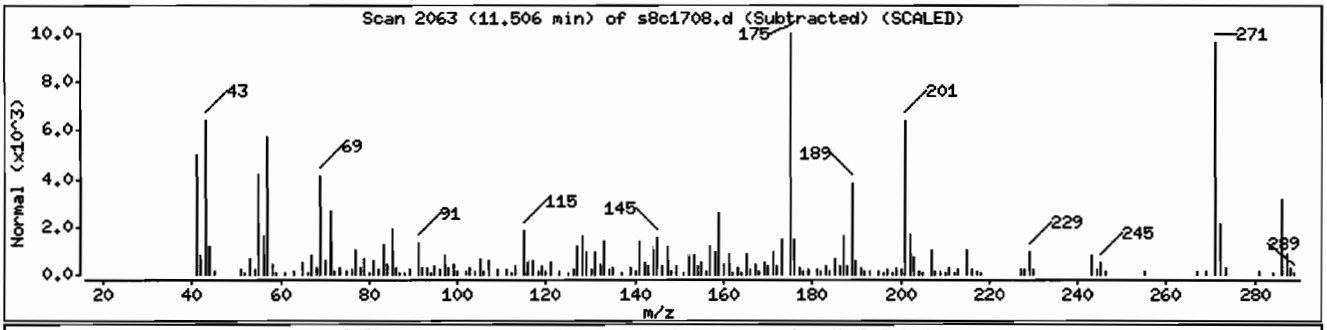
Volume Injected (uL): 0.5

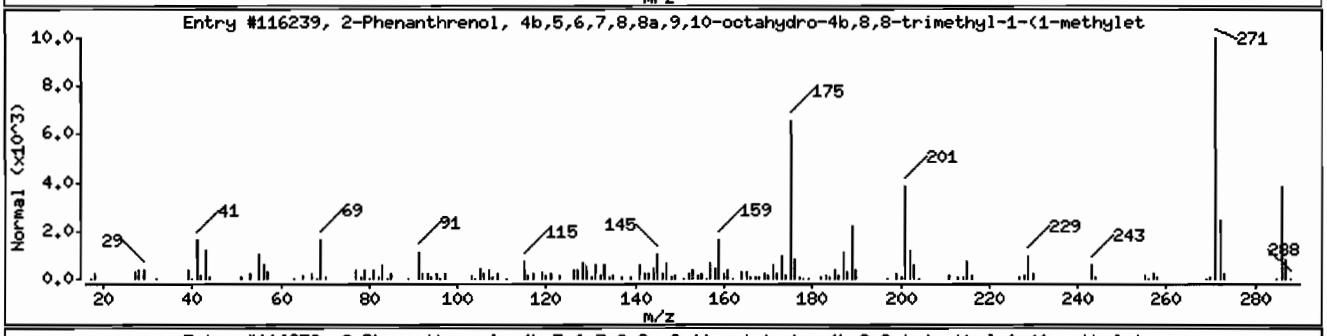
Operator: nag1

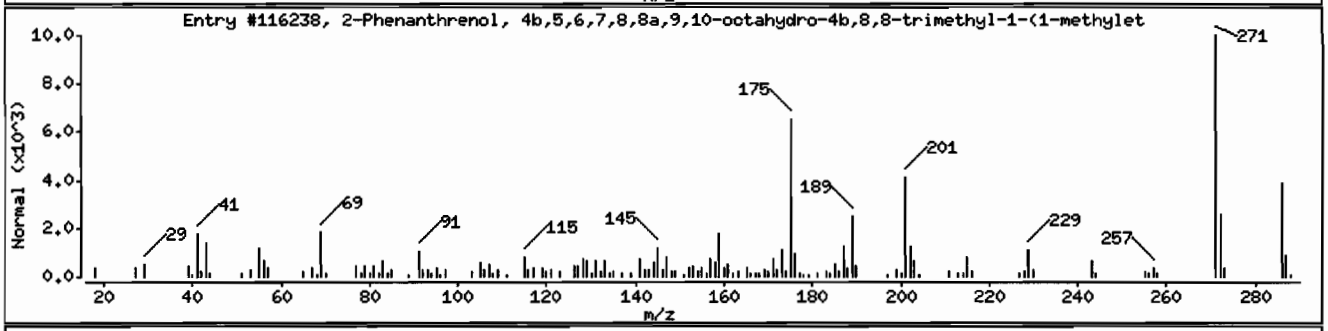
Column phase: J&W DB-5MS

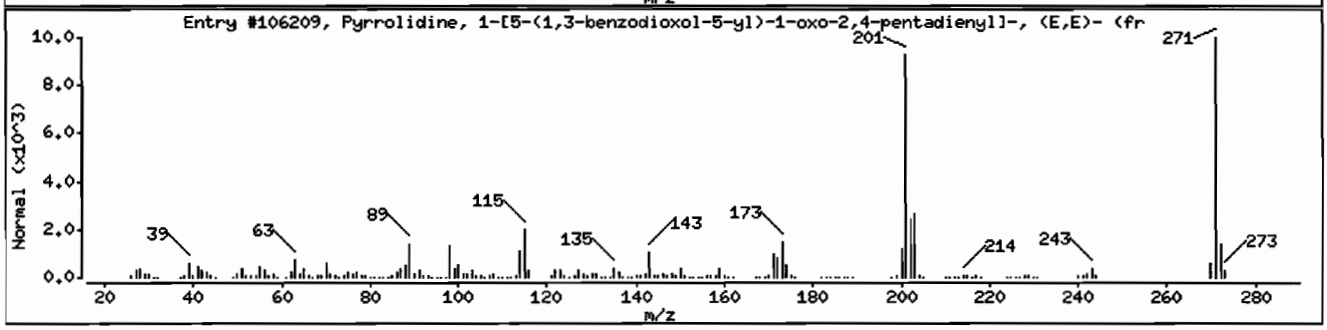
Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa	511-15-9	NIST05.L	116239	96	C20H30O	286
2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa	511-15-9	NIST05.L	116238	95	C20H30O	286
Pyrrolidine, 1-[5-(1,3-benzodioxol-5-yl)	25924-78-1	NIST05.L	106209	27	C16H17NO3	271









Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-2089**	**Date Collected:**	**02/22/2010 12:00**	**Matrix:**	**R**
Lab Sample ID:	**248102007**	**Date Received:**	**02/26/2010 08:45**	**%Moisture:**	**11.7**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE15-10-8399**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**959979**	**Inst:**	**MSD8.I**	**Dilution:**	**1**
Run Date:	**03/17/2010 12:59**	**Analyst:**	**NAG1**	**Inj. Vol:**	**.5 uL**
Prep Date:	**03/02/2010 23:08**	**Aliquot:**	**30.14 g**	**Final Volume:**	**1 mL**
Data File:	**s8c1710.d**	**Columu:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	376	ug/kg	75.1	376
108-95-2	Phenol	U	376	ug/kg	75.1	376
95-57-8	2-Chlorophenol	U	376	ug/kg	75.1	376
106-46-7	1,4-Dichlorobenzene	U	376	ug/kg	75.1	376
621-64-7	N-Nitrosodipropylamine	U	376	ug/kg	75.1	376
59-50-7	4-Chloro-3-methylphenol	U	376	ug/kg	75.1	376
83-32-9	Acenaphthene	U	37.6	ug/kg	12.4	37.6
121-14-2	2,4-Dinitrotoluene	U	376	ug/kg	37.6	376
100-02-7	4-Nitrophenol	U	376	ug/kg	124	376
87-86-5	Pentachlorophenol	U	376	ug/kg	93.9	376
129-00-0	Pyrene	U	37.6	ug/kg	11.3	37.6
110-86-1	Pyridine	U	376	ug/kg	75.1	376
62-53-3	Aniline	U	376	ug/kg	113	376
111-44-4	bis(2-Chloroethyl) ether	U	376	ug/kg	75.1	376
541-73-1	1,3-Dichlorobenzene	U	376	ug/kg	75.1	376
100-51-6	Benzyl alcohol	U	376	ug/kg	113	376
95-50-1	1,2-Dichlorobenzene	U	376	ug/kg	75.1	376
108-60-1	bis(2-Chloroisopropyl)ether	U	376	ug/kg	75.1	376
95-48-7	o-Cresol	U	376	ug/kg	75.1	376
65794-96-9	m,p-Cresols	U	376	ug/kg	113	376
67-72-1	Hexachloroethane	U	376	ug/kg	75.1	376
98-95-3	Nitrobenzene	U	376	ug/kg	75.1	376
78-59-1	Isophorone	U	376	ug/kg	75.1	376
88-75-5	2-Nitrophenol	U	376	ug/kg	75.1	376
105-67-9	2,4-Dimethylphenol	U	376	ug/kg	131	376
111-91-1	bis(2-Chloroethoxy)methane	U	376	ug/kg	75.1	376
120-83-2	2,4-Dichlorophenol	U	376	ug/kg	75.1	376
65-85-0	Benzoic acid	U	751	ug/kg	188	751
91-20-3	Naphthalene	U	37.6	ug/kg	11.3	37.6
106-47-8	4-Chloroaniline	U	376	ug/kg	75.1	376
87-68-3	Hexachlorobutadiene	U	376	ug/kg	75.1	376
91-57-6	2-Methylnaphthalene	U	37.6	ug/kg	7.51	37.6
77-47-4	Hexachlorocyclopentadiene	U	376	ug/kg	75.1	376
88-06-2	2,4,6-Trichlorophenol	U	376	ug/kg	75.1	376
95-95-4	2,4,5-Trichlorophenol	U	376	ug/kg	75.1	376
91-58-7	2-Chloronaphthalene	U	37.6	ug/kg	12.4	37.6
88-74-4	2-Nitroaniline *o-Nitroaniline*	U	376	ug/kg	75.1	376
99-09-2	3-Nitroaniline	U	376	ug/kg	75.1	376

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-2089**	**Date Collected:**	**02/22/2010 12:00**	**Matrix:**	**R**
Lab Sample ID:	**248102007**	**Date Received:**	**02/26/2010 08:45**	**%Moisture:**	**11.7**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE15-10-8399**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**959979**	**Inst:**	**MSD8.I**	**Dilution:**	**1**
Run Date:	**03/17/2010 12:59**	**Analyst:**	**NAG1**	**Inj. Vol:**	**.5 uL**
Prep Date:	**03/02/2010 23:08**	**Aliquot:**	**30.14 g**	**Final Volume:**	**1 mL**
Data File:	**s8c1710.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	376	ug/kg	75.1	376
606-20-2	2,6-Dinitrotoluene	U	376	ug/kg	37.6	376
208-96-8	Acenaphthylene	U	37.6	ug/kg	11.3	37.6
51-28-5	2,4-Dinitrophenol	U	751	ug/kg	143	751
132-64-9	Dibenzofuran	U	376	ug/kg	75.1	376
84-66-2	Diethylphthalate	U	376	ug/kg	75.1	376
86-73-7	Fluorene	U	37.6	ug/kg	11.3	37.6
7005-72-3	4-Chlorophenylphenylether	U	376	ug/kg	75.1	376
534-52-1	2-Methyl-4,6-dinitrophenol	U	376	ug/kg	75.1	376
100-01-6	4-Nitroaniline	U	376	ug/kg	113	376
	p-Nitroaniline					
122-39-4	Diphenylamine	U	376	ug/kg	75.1	376
122-66-7	Azobenzene	U	376	ug/kg	75.1	376
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	376	ug/kg	75.1	376
118-74-1	Hexachlorobenzene	U	376	ug/kg	75.1	376
85-01-8	Phenanthrene	U	37.6	ug/kg	11.3	37.6
120-12-7	Anthracene	U	37.6	ug/kg	7.51	37.6
84-74-2	Di-n-butylphthalate	U	376	ug/kg	75.1	376
206-44-0	Fluoranthene	U	37.6	ug/kg	11.3	37.6
85-68-7	Butylbenzylphthalate	U	376	ug/kg	75.1	376
56-55-3	Benzo(a)anthracene	U	37.6	ug/kg	11.3	37.6
91-94-1	3,3'-Dichlorobenzidine	U	376	ug/kg	113	376
218-01-9	Chrysene	U	37.6	ug/kg	11.3	37.6
117-81-7	bis(2-Ethylhexyl)phthalate	U	376	ug/kg	75.1	376
117-84-0	Di-n-octylphthalate	U	376	ug/kg	75.1	376
205-99-2	Benzo(b)fluoranthene	U	37.6	ug/kg	11.3	37.6
207-08-9	Benzo(k)fluoranthene	U	37.6	ug/kg	11.3	37.6
50-32-8	Benzo(a)pyrene	U	37.6	ug/kg	11.3	37.6
193-39-5	Indeno(1,2,3-cd)pyrene	U	37.6	ug/kg	11.3	37.6
53-70-3	Dibenzo(a,h)anthracene	U	37.6	ug/kg	11.3	37.6
191-24-2	Benzo(ghi)perylene	U	37.6	ug/kg	11.3	37.6
120-82-1	1,2,4-Trichlorobenzene	U	376	ug/kg	75.1	376

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	3.08	274	ug/kg		JA
475-20-7	1,4-Methanoazulene, decahydro-4,8,8-trim	7.17	283	ug/kg	99	NJ

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-2089**	**Date Collected:**	**02/22/2010 12:00**	**Matrix:**	**R**
Lab Sample ID:	**248102007**	**Date Received:**	**02/26/2010 08:45**	**%Moisture:**	**11.7**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE15-10-8399**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**959979**	**Inst:**	**MSD8.I**	**Dilntion:**	**1**
Run Date:	**03/17/2010 12:59**	**Analyst:**	**NAG1**	**Inj. Vol:**	**.5 uL**
Prep Date:	**03/02/2010 23:08**	**Aliquot:**	**30.14 g**	**Final Volume:**	**1 mL**
Data File:	**s8c1710.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
77-53-2	Cedrol	8.29	278	ug/kg	94	NJ

GEL Laboratories LLC

Data file : /chem/MSD8.i/s031710.b/s8c1710.d
Lab Smp Id: 248102007 Client Smp ID: RE15-10-8399
Inj Date : 17-MAR-2010 12:59
Operator : nagl Inst ID: MSD8.i
Smp Info : |248102007|959979|1|SVM|1|LANL
Misc Info : |MSD8270_S|WBN100310-01
Comment : Column: J & W DB-5MS, 25m x 0.20 mm x 0.33 micron film
Method : /chem/MSD8.i/s031710.b/MSD8-8270AQA-022010.m
Meth Date : 17-Mar-2010 13:57 nat00999 Quant Type: ISTD
Cal Date : 21-FEB-2010 23:15 Cal File: s8b2042.d
Als bottle: 10
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-2089.sub
Target Version: 3.50
Processing Host: hpclp1

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.14000	weight of sample
M	11.67390	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	4.454	4.454	(1.000)	655792	40.0000	
* 29 Naphthalene-d8	136	5.711	5.716	(1.000)	2505548	40.0000	
* 46 Acenaphthene-d10	164	7.563	7.573	(1.000)	1448609	40.0000	
* 67 Phenanthrene-d10	188	9.163	9.168	(1.000)	2397321	40.0000	
* 91 Chrysene-d12	240	12.063	12.073	(1.000)	1869560	40.0000	
* 98 Perylene-d12	264	14.168	14.173	(1.000)	1444816	40.0000	
$ 3 2-Fluorophenol	112	3.315	3.306	(0.744)	1141645	73.7385	2770
$ 5 Phenol-d5	99	4.073	4.077	(0.914)	1434299	74.2842	2790
$ 20 Nitrobenzene-d5	82	4.977	4.987	(0.872)	643573	36.1333	1360
$ 39 2-Fluorobiphenyl	172	6.835	6.839	(0.904)	1376107	32.2729	1210
$ 60 2,4,6-Tribromophenol	329	8.411	8.416	(1.112)	307165	64.1454	2410
$ 81 p-Terphenyl-d14	244	10.877	10.878	(0.902)	1535895	45.6311	1710

ION RATIO REPORT

SV REPORT

Data file: s8c1710.d
Report Date: 03/17/2010 14:03
Lab. ID: 248102007 SampleType: SAMPLE
Injection Date: 17-MAR-2010 12:59
Operator: nagl Instrument: MSD8.i
Sample Info: |248102007|959979|1|SVM|1|LANL
Miscellaneous Info: |MSD8270_S|WBN100310-01
Comment:
Method used: /chem/MSD8.i/s031710.b/MSD8-8270AQA-022010.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-2089
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
4 Aniline		CAS#: 62-53-3				
66	70379	4.07	4.15	80-120	100	(T)
93	177	3.98	4.15	219-279	0	(QT)
17 N-Nitrosodipropylamine				CAS#: 621-64-7		
70	87928	4.98	4.83	80-120	100	(T)
42	48825	4.98	4.83	30- 90	56	(T)
30 Naphthalene			CAS#: 91-20-3			
128	284	5.73	5.74	80-120	100	( )
129	195	5.71	5.74	0- 41	69	(Q)
127	0	0.00	5.74	0- 43	0	(T)
40 2-Chloronaphthalene				CAS#: 91-58-7		
162	1188	7.03	6.97	80-120	100	( )
164	661	7.17	6.97	3- 63	56	(T)
127	285	7.13	6.97	6- 66	24	(T)
44 2,6-Dinitrotoluene				CAS#: 606-20-2		
165	187407	7.56	7.34	80-120	100	(T)
63	3102	7.56	7.34	30- 90	2	(QT)
50 2,4-Dinitrotoluene				CAS#: 121-14-2		
165	187407	7.56	7.77	80-120	100	(T)
89	2504	7.56	7.77	43-103	1	(QT)
63	3102	7.56	7.77	26- 86	2	(QT)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
53 Fluorene			CAS#: 86-73-7			
166	20605	8.41	8.16	80-120	100	(T)
165	21342	8.41	8.16	63-123	104	(T)
167	7007	8.41	8.16	0- 43	34	(T)
55 2-Methyl-4,6-dinitrophenol			CAS#: 534-52-1			
198	935	8.41	8.21	80-120	100	(T)
105	4630	8.41	8.21	12- 72	495	(QT)
51	1958	8.41	8.21	21- 81	209	(QT)
92 Chrysene			CAS#: 218-01-9			
228	4654	12.06	12.11	80-120	100	( )
229	1250	12.07	12.11	0- 49	27	( )
226	441	12.07	12.11	0- 59	9	( )
94 Di-n-octylphthalate			CAS#: 117-84-0			
149	370	12.94	12.95	80-120	100	( )
43	310	12.87	12.95	0- 40	84	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD8.i/s031710.b/s8c1710.d
Lab Smp Id: 248102007 Client Smp ID: RE15-10-8399
Inj Date : 17-MAR-2010 12:59
Operator : nag1 Inst ID: MSD8.i
Smp Info : |248102007|959979|1|SVM|1|LANL
Misc Info : |MSD8270_S|WBN100310-01
Comment : Column: J & W DB-5MS, 25m x 0.20 mm x 0.33 micron film
Method : /chem/MSD8.i/s031710.b/MSD8-8270AQA-022010.m
Meth Date : 17-Mar-2010 13:57 nat00999 Quant Type: ISTD
Cal Date : 21-FEB-2010 23:15 Cal File: s8b2042.d
Als bottle: 10
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-2089.sub
Target Version: 3.50
Processing Host: hpclp1

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.14000	weight of sample
M	11.67390	% moisture

Cpnd Variable Local Compound Variable

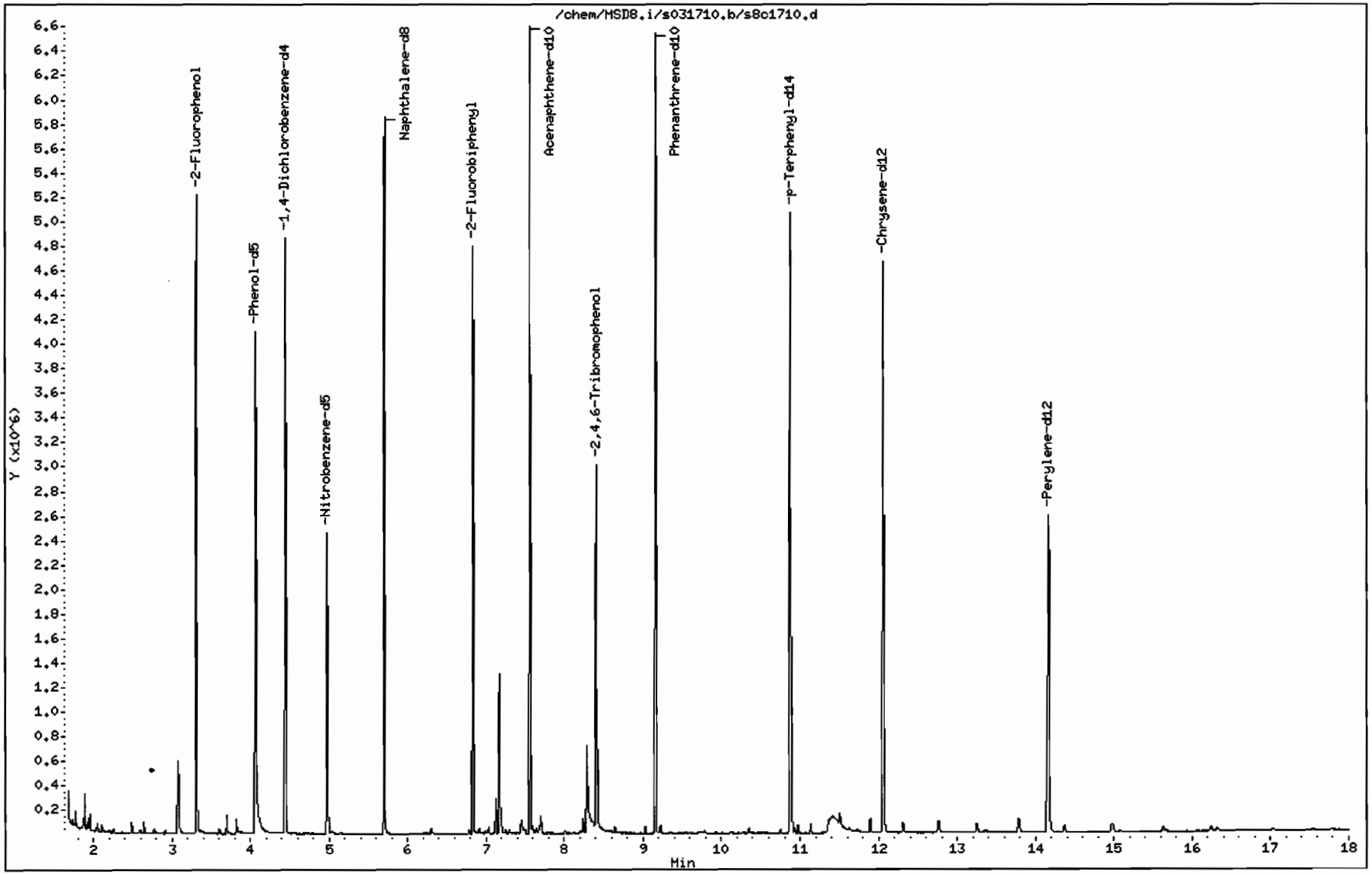
ISTD	RT	AREA	AMOUNT
* 10 1,4-Dichlorobenzene-d4	4.454	3792485	40.000
* 46 Acenaphthene-d10	7.563	6115981	40.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown Aldol Condensate					CAS #:		
3.082	692555	7.30449341	274	0		0	10

RT	AREA	CONCENTRATIONS ON-COL(ng/ul)	FINAL(ug/Kg)	QUANT QUAL	LIBRARY	LIB ENTRY	CPND #
1,4-Methanoazulene, decahydro-4,8,8-trim				CAS #: 475-20-7			
7.173	1150589	7.52512877	283	99	NIST05.L	60024	46
Cedrol				CAS #: 77-53-2			
8.292	1133533	7.41358280	278	94	NIST05.L	72887	46

Data File: /chem/MSD8.i/s031710.b/s8c1710.d
Date : 17-MAR-2010 12:59
Client ID: RE15-10-8399
Sample Info: |2481020071959979|1|SVMI1|LANL
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Instrument: MSD8.i
Operator: nag1
Column diameter: 0.20



Data File: /chem/MSD8.i/s031710.b/s8c1710.d

Date : 17-MAR-2010 12:59

Client ID: RE15-10-8399

Instrument: MSD8.i

Sample Info: |2481020071959979|1|SVM|1|LANL

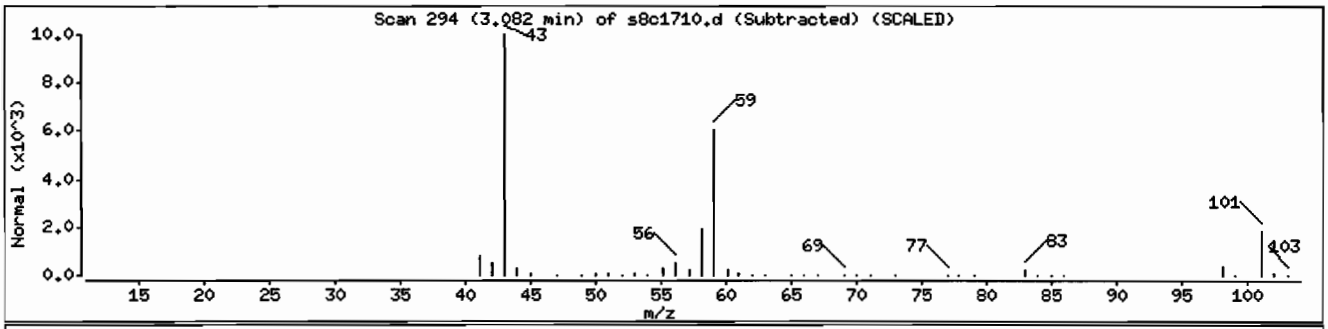
Volume Injected (uL): 0.5

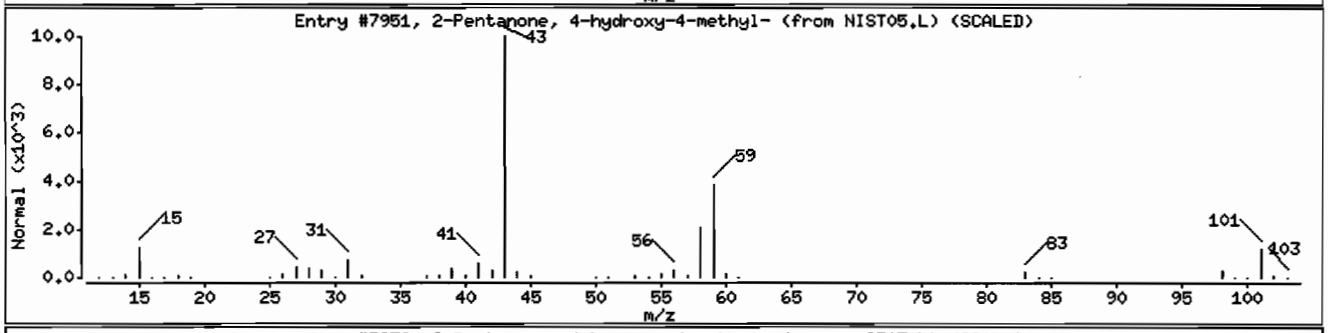
Operator: nagl

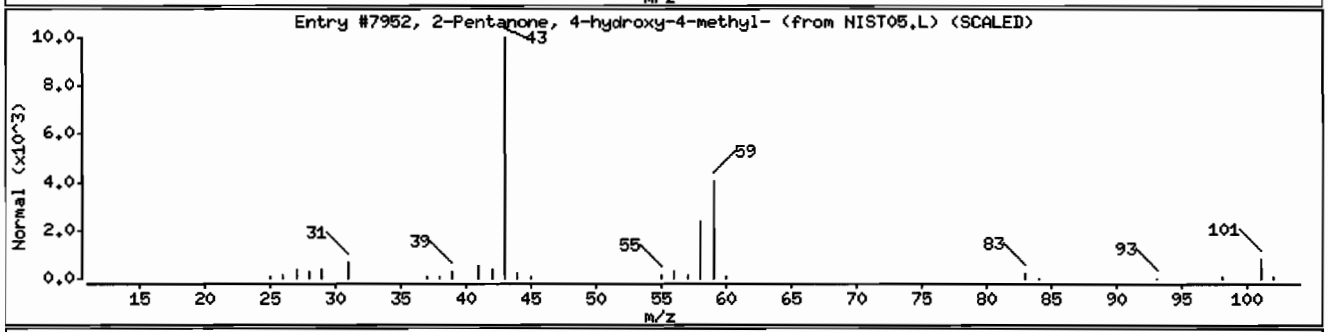
Column phase: J&W DB-5MS

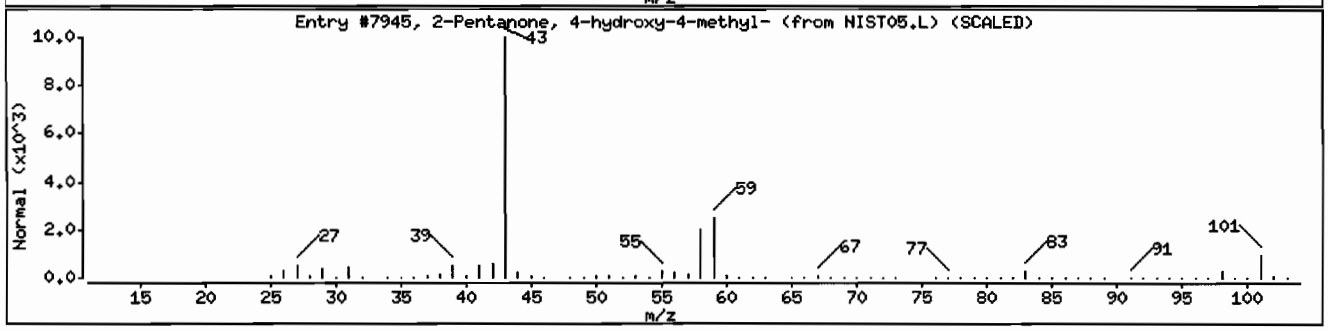
Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	59	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	50	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7945	40	C6H12O2	116









Data File: /chem/MSD8.i/s031710.b/s8c1710.d

Date : 17-MAR-2010 12:59

Client ID: RE15-10-8399

Instrument: MSD8.i

Sample Info: |2481020071959979|1|SVM|1|LANL

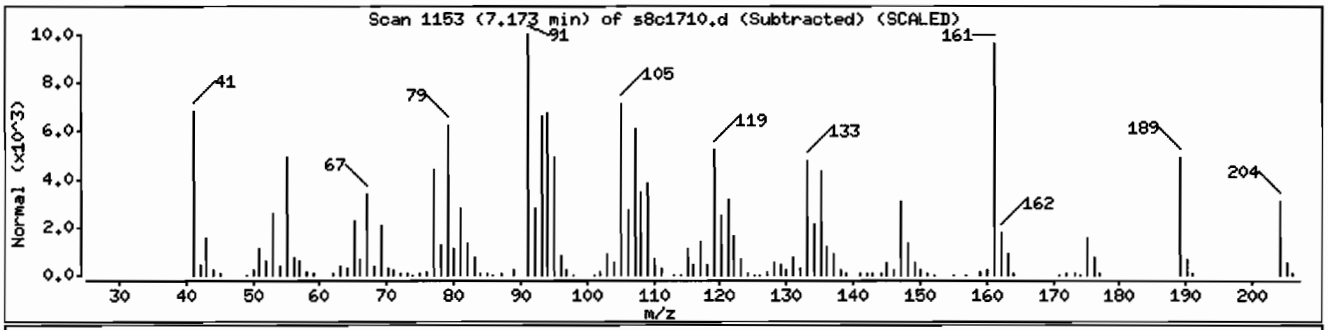
Volume Injected (uL): 0.5

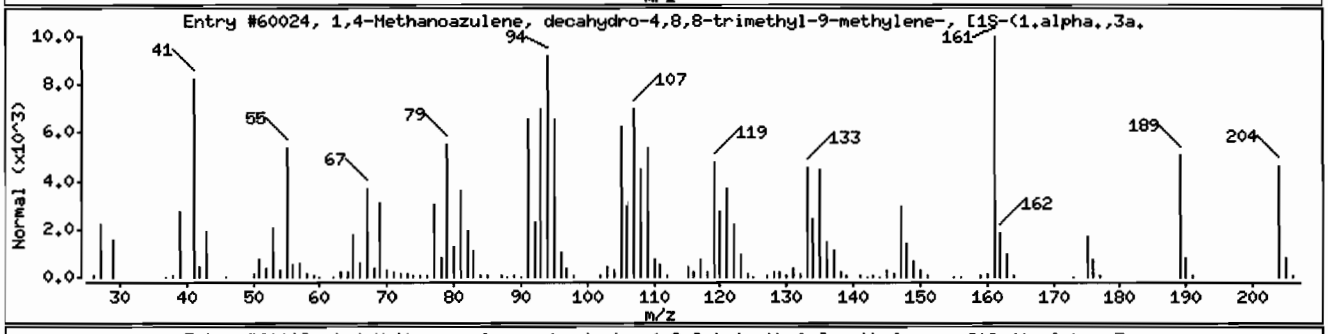
Operator: nag1

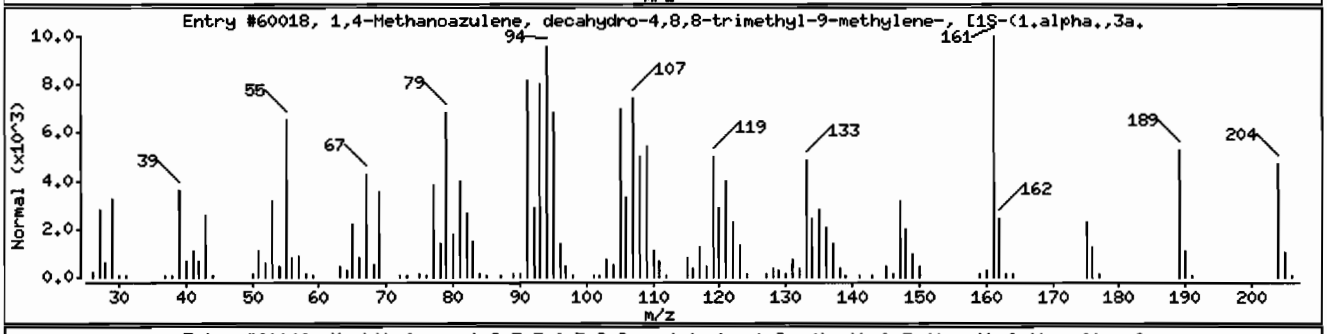
Column phase: J&W DB-5MS

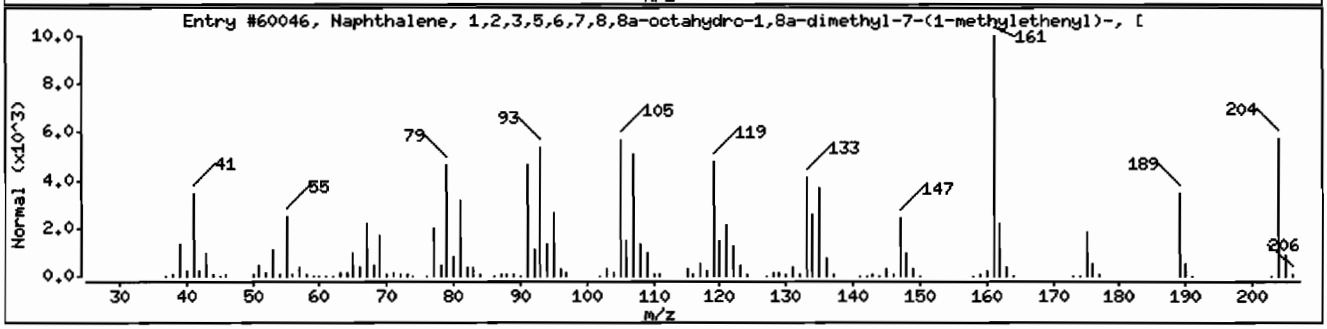
Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1,4-Methanoazulene, decahydro-4,8,8-trim	475-20-7	NIST05.L	60024	99	C15H24	204
1,4-Methanoazulene, decahydro-4,8,8-trim	475-20-7	NIST05.L	60018	97	C15H24	204
Naphthalene, 1,2,3,5,6,7,8,8a-octahydro-	4630-07-3	NIST05.L	60046	96	C15H24	204









Data File: /chem/MSD8.i/s031710.b/s8c1710.d

Date : 17-MAR-2010 12:59

Client ID: RE15-10-8399

Instrument: MSD8.i

Sample Info: 1248102007|959979|1|SVMI1|LANL

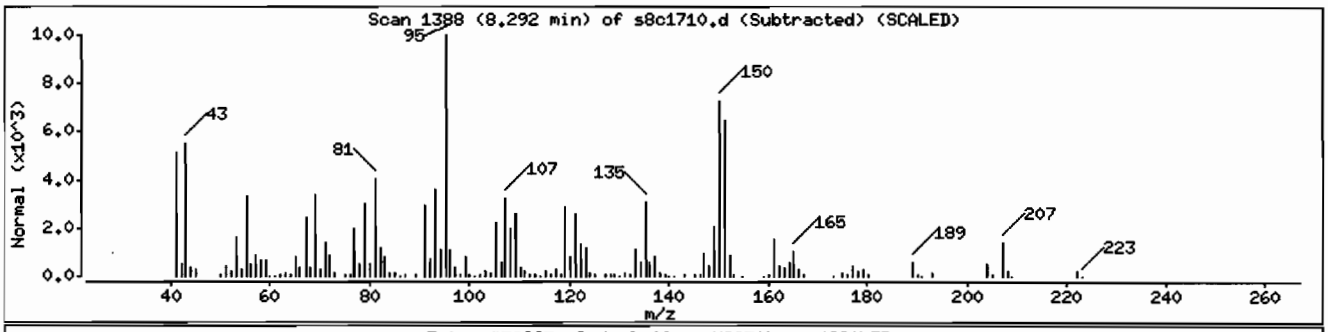
Volume Injected (uL): 0.5

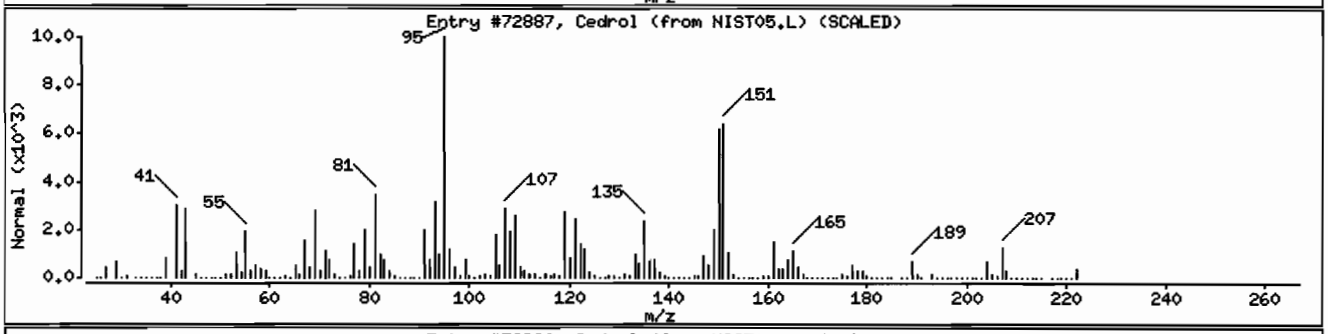
Operator: nag1

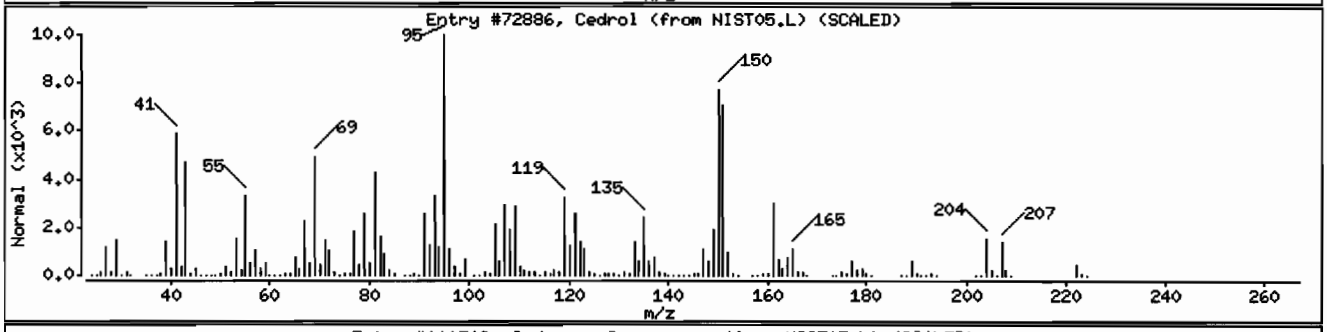
Column phase: J&W DB-5MS

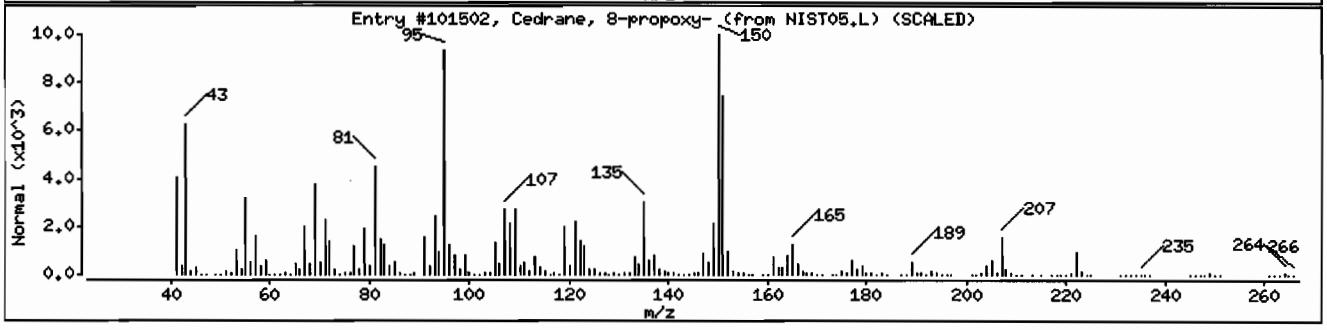
Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Cedrol	77-53-2	NIST05.L	72887	94	C15H26O	222
Cedrol	77-53-2	NIST05.L	72886	93	C15H26O	222
Cedrane, 8-propoxy-	19870-75-8	NIST05.L	101502	91	C18H32O	264









Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-2089	**Date Collected:**	02/22/2010 12:00	**Matrix:**	R
Lab Sample ID:	248102001	**Date Received:**	02/26/2010 08:45	**%Moisture:**	9.4
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE15-10-8404	**Method:**	SW846 8270C	**SOP Ref:**	GL-OA-E-009
Batch ID:	959979	**Inst:**	MSD8.I	**Dilution:**	1
Run Date:	03/17/2010 17:51	**Analyst:**	NAG1	**Inj. Vol:**	.5 uL
Prep Date:	03/02/2010 23:08	**Aliquot:**	30.13 g	**Final Volume:**	1 mL
Data File:	s8c1720.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	367	ug/kg	73.3	367
108-95-2	Phenol	U	367	ug/kg	73.3	367
95-57-8	2-Chlorophenol	U	367	ug/kg	73.3	367
106-46-7	1,4-Dichlorobenzene	U	367	ug/kg	73.3	367
621-64-7	N-Nitrosodipropylamine	U	367	ug/kg	73.3	367
59-50-7	4-Chloro-3-methylphenol	U	367	ug/kg	73.3	367
83-32-9	Acenaphthene	U	36.7	ug/kg	12.1	36.7
121-14-2	2,4-Dinitrotoluene	U	367	ug/kg	36.7	367
100-02-7	4-Nitrophenol	U	367	ug/kg	121	367
87-86-5	Pentachlorophenol	U	367	ug/kg	91.6	367
129-00-0	Pyrene	U	36.7	ug/kg	11.0	36.7
110-86-1	Pyridine	U	367	ug/kg	73.3	367
62-53-3	Aniline	U	367	ug/kg	110	367
111-44-4	bis(2-Chloroethyl) ether	U	367	ug/kg	73.3	367
541-73-1	1,3-Dichlorobenzene	U	367	ug/kg	73.3	367
100-51-6	Benzyl alcohol	U	367	ug/kg	110	367
95-50-1	1,2-Dichlorobenzene	U	367	ug/kg	73.3	367
108-60-1	bis(2-Chloroisopropyl)ether	U	367	ug/kg	73.3	367
95-48-7	o-Cresol	U	367	ug/kg	73.3	367
65794-96-9	m,p-Cresols	U	367	ug/kg	110	367
67-72-1	Hexachloroethane	U	367	ug/kg	73.3	367
98-95-3	Nitrobenzene	U	367	ug/kg	73.3	367
78-59-1	Isophorone	U	367	ug/kg	73.3	367
88-75-5	2-Nitrophenol	U	367	ug/kg	73.3	367
105-67-9	2,4-Dimethylphenol	U	367	ug/kg	128	367
111-91-1	bis(2-Chloroethoxy)methane	U	367	ug/kg	73.3	367
120-83-2	2,4-Dichlorophenol	U	367	ug/kg	73.3	367
65-85-0	Benzoic acid	U	733	ug/kg	183	733
91-20-3	Naphthalene	U	36.7	ug/kg	11.0	36.7
106-47-8	4-Chloroaniline	U	367	ug/kg	73.3	367
87-68-3	Hexachlorobutadiene	U	367	ug/kg	73.3	367
91-57-6	2-Methylnaphthalene	U	36.7	ug/kg	7.33	36.7
77-47-4	Hexachlorocyclopentadiene	U	367	ug/kg	73.3	367
88-06-2	2,4,6-Trichlorophenol	U	367	ug/kg	73.3	367
95-95-4	2,4,5-Trichlorophenol	U	367	ug/kg	73.3	367
91-58-7	2-Chloronaphthalene	U	36.7	ug/kg	12.1	36.7
88-74-4	2-Nitroaniline *o-Nitroaniline*	U	367	ug/kg	73.3	367
99-09-2	3-Nitroaniline	U	367	ug/kg	73.3	367

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-2089**	**Date Collected:**	**02/22/2010 12:00**	**Matrix:**	**R**
Lab Sample ID:	**248102001**	**Date Received:**	**02/26/2010 08:45**	**%Moisture:**	**9.4**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE15-10-8404**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**959979**	**Inst:**	**MSD8.I**	**Dilution:**	**1**
Run Date:	**03/17/2010 17:51**	**Analyst:**	**NAG1**	**Inj. Vol:**	**.5 uL**
Prep Date:	**03/02/2010 23:08**	**Aliquot:**	**30.13 g**	**Final Volume:**	**1 mL**
Data File:	**s8c1720.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate	U	367	ug/kg	73.3	367
606-20-2	2,6-Dinitrotoluene	U	367	ug/kg	36.7	367
208-96-8	Acenaphthylene	U	36.7	ug/kg	11.0	36.7
51-28-5	2,4-Dinitrophenol	U	733	ug/kg	139	733
132-64-9	Dibenzofuran	U	367	ug/kg	73.3	367
84-66-2	Diethylphthalate	U	367	ug/kg	73.3	367
86-73-7	Fluorene	U	36.7	ug/kg	11.0	36.7
7005-72-3	4-Chlorophenylphenylether	U	367	ug/kg	73.3	367
534-52-1	2-Methyl-4,6-dinitrophenol	U	367	ug/kg	73.3	367
100-01-6	4-Nitroaniline	U	367	ug/kg	110	367
	p-Nitroaniline					
122-39-4	Diphenylamine	U	367	ug/kg	73.3	367
122-66-7	Azobenzene	U	367	ug/kg	73.3	367
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	367	ug/kg	73.3	367
118-74-1	Hexachlorobenzene	U	367	ug/kg	73.3	367
85-01-8	Phenanthrene	U	36.7	ug/kg	11.0	36.7
120-12-7	Anthracene	U	36.7	ug/kg	7.33	36.7
84-74-2	Di-n-butylphthalate	U	367	ug/kg	73.3	367
206-44-0	Fluoranthene	U	36.7	ug/kg	11.0	36.7
85-68-7	Butylbenzylphthalate	U	367	ug/kg	73.3	367
56-55-3	Benzo(a)anthracene	U	36.7	ug/kg	11.0	36.7
91-94-1	3,3'-Dichlorobenzidine	U	367	ug/kg	110	367
218-01-9	Chrysene	U	36.7	ug/kg	11.0	36.7
117-81-7	bis(2-Ethylhexyl)phthalate	U	367	ug/kg	73.3	367
117-84-0	Di-n-octylphthalate	U	367	ug/kg	73.3	367
205-99-2	Benzo(b)fluoranthene	U	36.7	ug/kg	11.0	36.7
207-08-9	Benzo(k)fluoranthene	U	36.7	ug/kg	11.0	36.7
50-32-8	Benzo(a)pyrene	U	36.7	ug/kg	11.0	36.7
193-39-5	Indeno(1,2,3-cd)pyrene	U	36.7	ug/kg	11.0	36.7
53-70-3	Dibenzo(a,h)anthracene	U	36.7	ug/kg	11.0	36.7
191-24-2	Benzo(ghi)perylene	U	36.7	ug/kg	11.0	36.7
120-82-1	1,2,4-Trichlorobenzene	U	367	ug/kg	73.3	367

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	3.08	233	ug/kg		JA
	Unknown	16.24	176	ug/kg		J

GEL Laboratories LLC

Data file : /chem/MSD8.i/s031710.b/s8c1720.d
Lab Smp Id: 248102001 Client Smp ID: RE15-10-8404
Inj Date : 17-MAR-2010 17:51
Operator : nag1 Inst ID: MSD8.i
Smp Info : |248102001|959979|1|SVM|1|LANL
Misc Info : |MSD8270_S|WBN100310-01
Comment : Column: J & W DB-5MS, 25m x 0.20 mm x 0.33 micron film
Method : /chem/MSD8.i/s031710.b/MSD8-8270AQA-022010.m
Meth Date : 17-Mar-2010 13:57 nat00999 Quant Type: ISTD
Cal Date : 21-FEB-2010 23:15 Cal File: s8b2042.d
Als bottle: 20
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-2089.sub
Target Version: 3.50
Processing Host: hpclp1

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.13000	weight of sample
M	9.44350	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	4.454	4.454	(1.000)	679445	40.0000	
* 29 Naphthalene-d8	136	5.711	5.716	(1.000)	2658981	40.0000	
* 46 Acenaphthene-d10	164	7.563	7.573	(1.000)	1537430	40.0000	
* 67 Phenanthrene-d10	188	9.163	9.168	(1.000)	2595301	40.0000	
* 91 Chrysene-d12	240	12.068	12.073	(1.000)	2071438	40.0000	
* 98 Perylene-d12	264	14.168	14.173	(1.000)	1342166	40.0000	
$ 3 2-Fluorophenol	112	3.315	3.306	(0.744)	1100401	68.6003	2510
$ 5 Phenol-d5	99	4.073	4.077	(0.914)	1213025	60.6371	2220
$ 20 Nitrobenzene-d5	82	4.977	4.987	(0.872)	646967	34.2279	1250
$ 39 2-Fluorobiphenyl	172	6.835	6.839	(0.904)	1409981	31.1570	1140
$ 60 2,4,6-Tribromophenol	329	8.411	8.416	(1.112)	270410	53.2074	1950
$ 81 p-Terphenyl-d14	244	10.877	10.878	(0.901)	1588020	42.5817	1560

ION RATIO REPORT

SV REPORT

Data file: s8c1720.d
Report Date: 03/18/2010 07:06
Lab. ID: 248102001 SampleType: SAMPLE
Injection Date: 17-MAR-2010 17:51
Operator: nagl Instrument: MSD8.i
Sample Info: |248102001|959979|1|SVM|1|LANL
Miscellaneous Info: |MSD8270_S|WBN100310-01
Comment:
Method used: /chem/MSD8.i/s031710.b/MSD8-8270AQA-022010.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 10-2089
Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
4 Aniline		CAS#: 62-53-3				
66	54583	4.07	4.15	80-120	100	(T)
93	480	4.13	4.15	219-279	1	(Q)
17 N-Nitrosodipropylamine				CAS#: 621-64-7		
70	88497	4.98	4.83	80-120	100	(T)
42	48519	4.98	4.83	30- 90	55	(T)
30 Naphthalene			CAS#: 91-20-3			
128	481	5.73	5.74	80-120	100	( )
129	281	5.71	5.74	0- 41	58	(Q)
127	0	0.00	5.74	0- 43	0	(T)
34 2-Methylnaphthalene				CAS#: 91-57-6		
142	169	6.45	6.46	80-120	100	( )
141	107	6.45	6.46	57-117	63	( )
40 2-Chloronaphthalene				CAS#: 91-58-7		
162	146	6.97	6.97	80-120	100	( )
164	294	7.17	6.97	3- 63	201	(QT)
127	4914	6.83	6.97	6- 66	3354	(QT)
44 2,6-Dinitrotoluene				CAS#: 606-20-2		
165	196953	7.56	7.34	80-120	100	(T)
63	3194	7.57	7.34	30- 90	2	(QT)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
50 2,4-Dinitrotoluene			CAS#: 121-14-2			
165	196953	7.56	7.77	80-120	100	(T)
89	2633	7.56	7.77	43-103	1	(QT)
63	3194	7.57	7.77	26- 86	2	(QT)
53 Fluorene			CAS#: 86-73-7			
166	17292	8.41	8.16	80-120	100	(T)
165	18115	8.41	8.16	63-123	105	(T)
167	5821	8.41	8.16	0- 43	34	(T)
55 2-Methyl-4,6-dinitrophenol			CAS#: 534-52-1			
198	745	8.41	8.21	80-120	100	(T)
105	2182	8.41	8.21	12- 72	293	(QT)
51	1594	8.41	8.21	21- 81	214	(QT)
68 Phenanthrene			CAS#: 85-01-8			
178	752	9.19	9.19	80-120	100	( )
179	1551	9.17	9.19	0- 45	206	(Q)
176	107	9.18	9.19	0- 49	14	( )
92 Chrysene			CAS#: 218-01-9			
228	318	12.10	12.11	80-120	100	( )
229	556	12.09	12.11	0- 49	175	(Q)
226	551	12.07	12.11	0- 59	173	(Q)
94 Di-n-octylphthalate			CAS#: 117-84-0			
149	522	13.01	12.95	80-120	100	( )
43	901	13.06	12.95	0- 40	173	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD8.i/s031710.b/s8c1720.d
Lab Smp Id: 248102001 Client Smp ID: RE15-10-8404
Inj Date : 17-MAR-2010 17:51
Operator : nag1 Inst ID: MSD8.i
Smp Info : |248102001|959979|1|SVM|1|LANL
Misc Info : |MSD8270_S|WBN100310-01
Comment : Column: J & W DB-5MS, 25m x 0.20 mm x 0.33 micron film
Method : /chem/MSD8.i/s031710.b/MSD8-8270AQA-022010.m
Meth Date : 17-Mar-2010 13:57 nat00999 Quant Type: ISTD
Cal Date : 21-FEB-2010 23:15 Cal File: s8b2042.d
Als bottle: 20
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-2089.sub
Target Version: 3.50
Processing Host: hpclp1

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.13000	weight of sample
M	9.44350	% moisture

Cpnd Variable Local Compound Variable

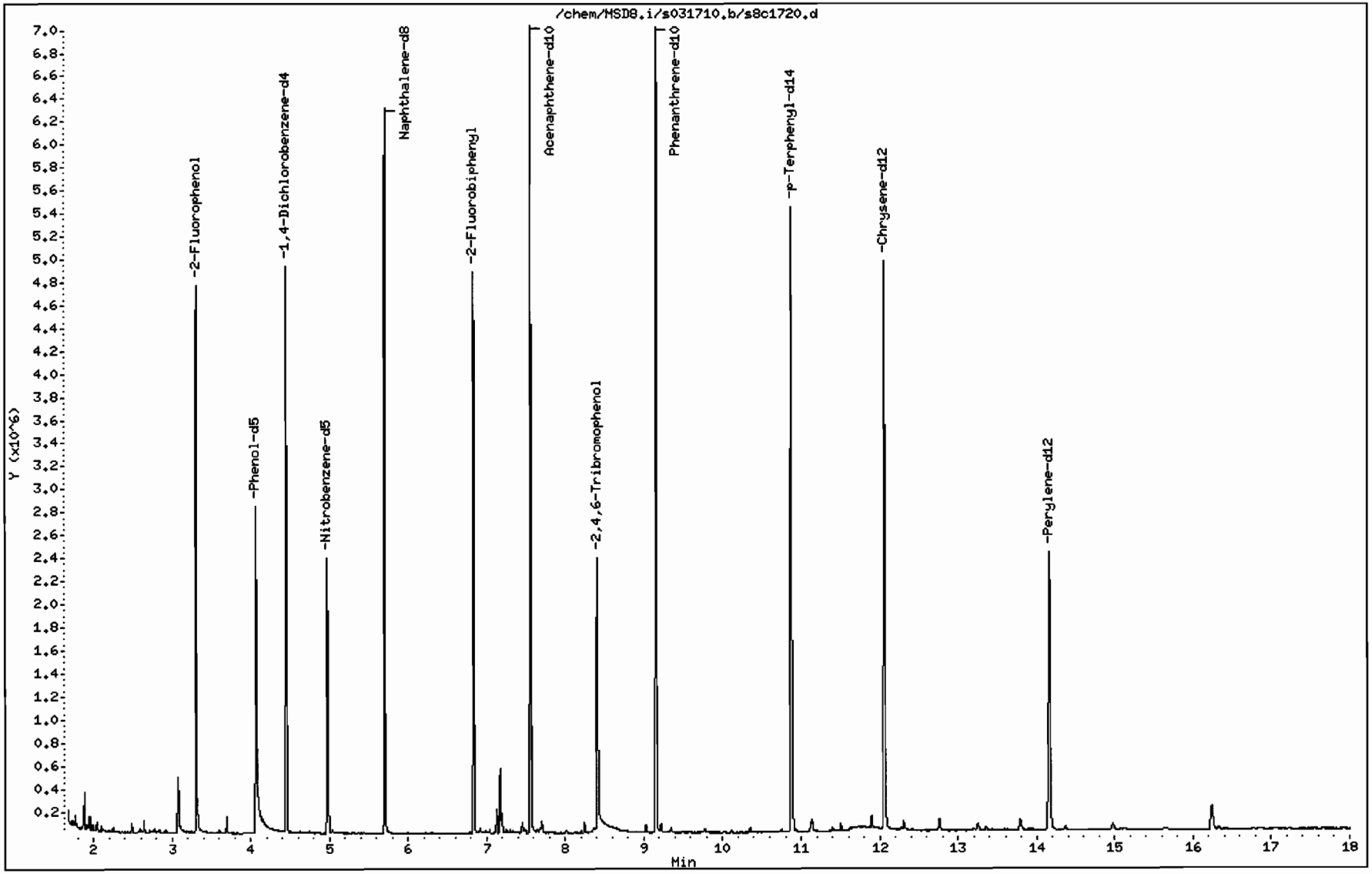
ISTD	RT	AREA	AMOUNT
* 10 1,4-Dichlorobenzene-d4	4.454	3937569	40.000
* 98 Perylene-d12	14.168	3871712	40.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown Aldol Condensate					CAS #:		
3.082	625734	6.35654812	233	0		0	10

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
====	====	==========	==========	====	=======	=========	======
Unknown					CAS #:		
16.239	463992	4.79366258	176	0		0	98

Data File: /chem/MSD8.i/s031710.b/s8c1720.d
Date : 17-MAR-2010 17:51
Client ID: RE15-10-8404
Sample Info: |248102001|959979|1|SVMI1|LANL
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Instrument: MSD8.i
Operator: nag1
Column diameter: 0.20



Data File: /chem/MSD8.i/s031710.b/s8c1720.d

Date : 17-MAR-2010 17:51

Client ID: RE15-10-8404

Instrument: MSD8.i

Sample Info: |248102001|959979|1|SVM|1|LANL

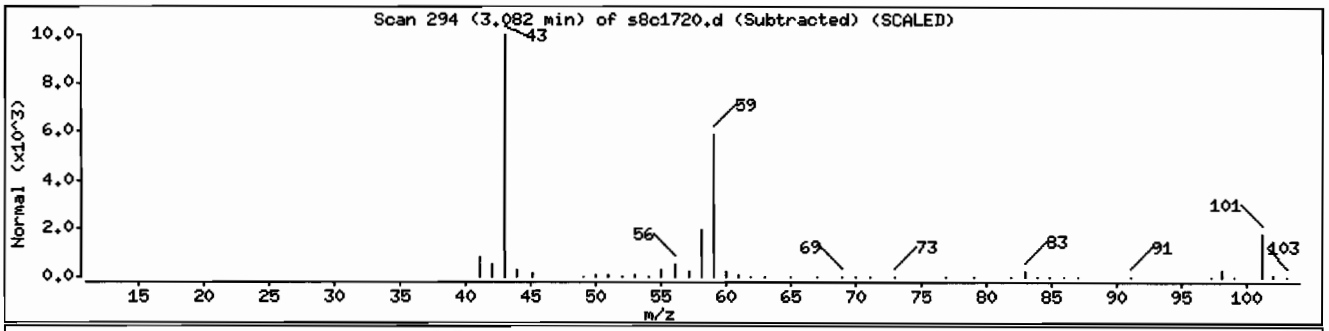
Volume Injected (uL): 0.5

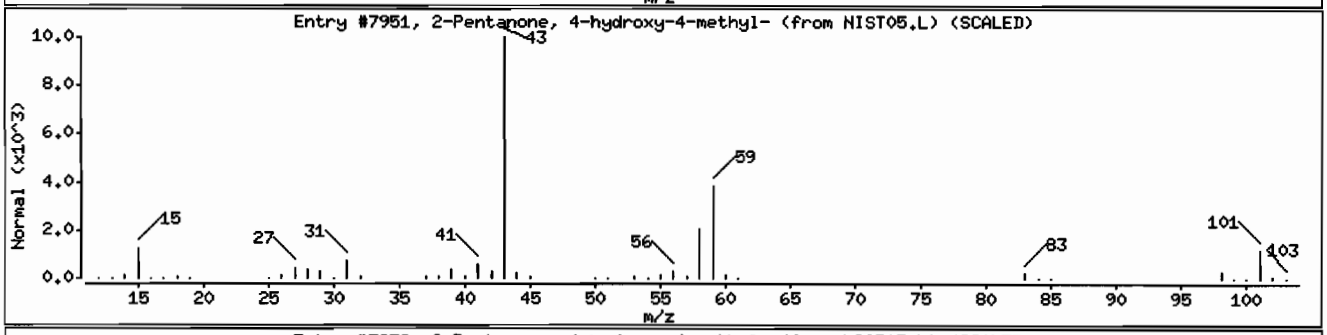
Operator: nag1

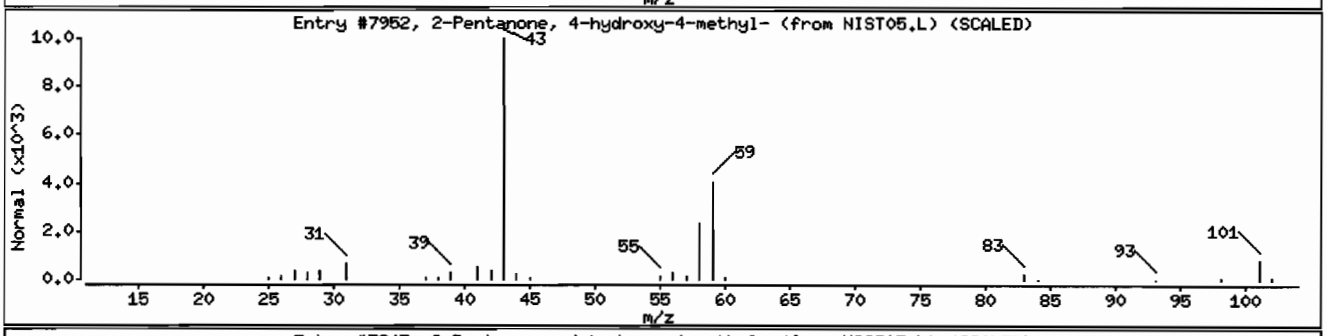
Column phase: J&W DB-5MS

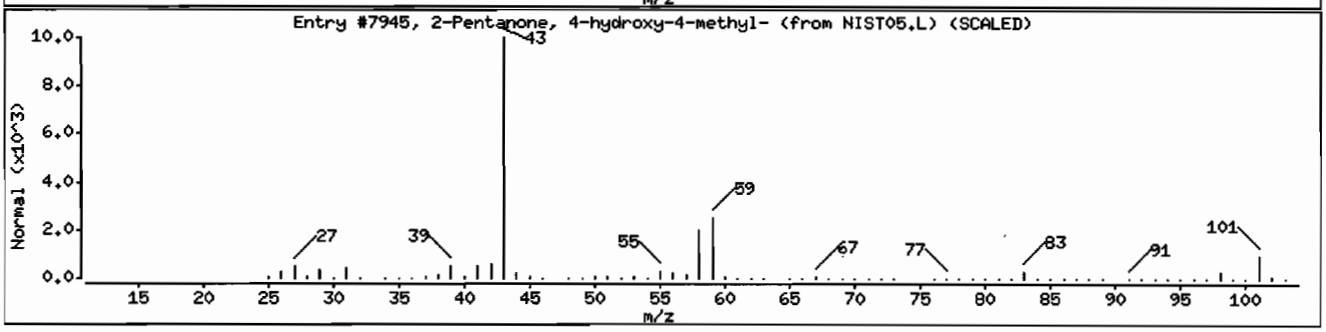
Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	59	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	50	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7945	42	C6H12O2	116









Data File: /chem/MSD8.i/s031710.b/s8c1720.d

Date : 17-MAR-2010 17:51

Client ID: RE15-10-8404

Instrument: MSD8.i

Sample Info: |248102001|959979|1|SVM|1|LANL

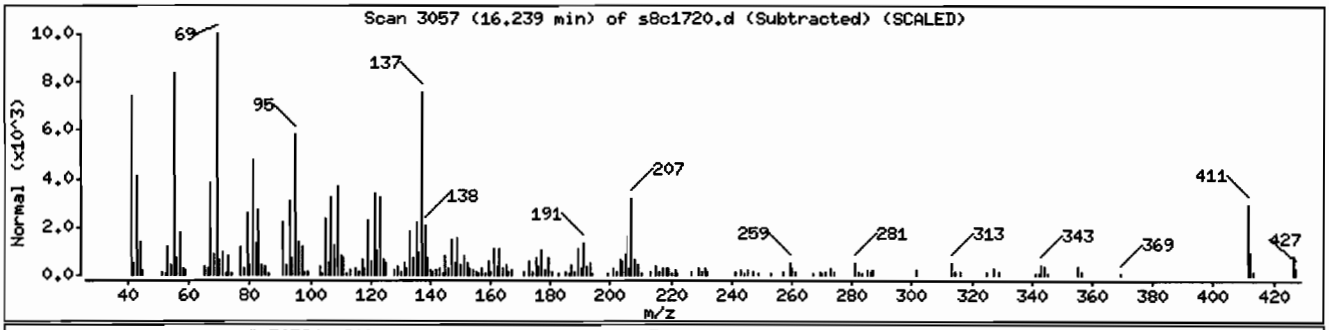
Volume Injected (uL): 0.5

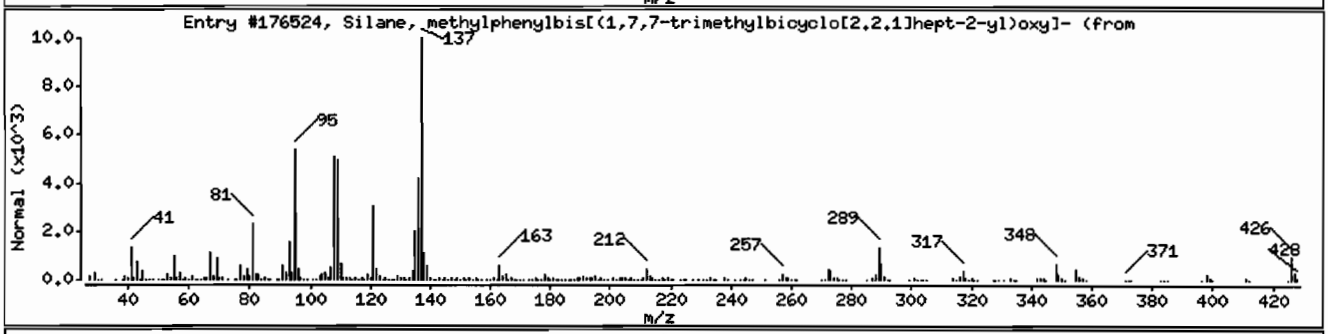
Operator: nag1

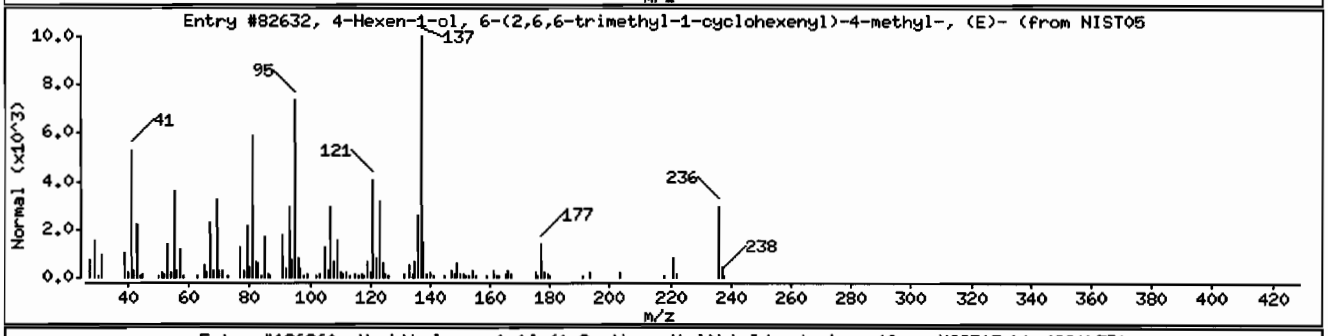
Column phase: J&W DB-5MS

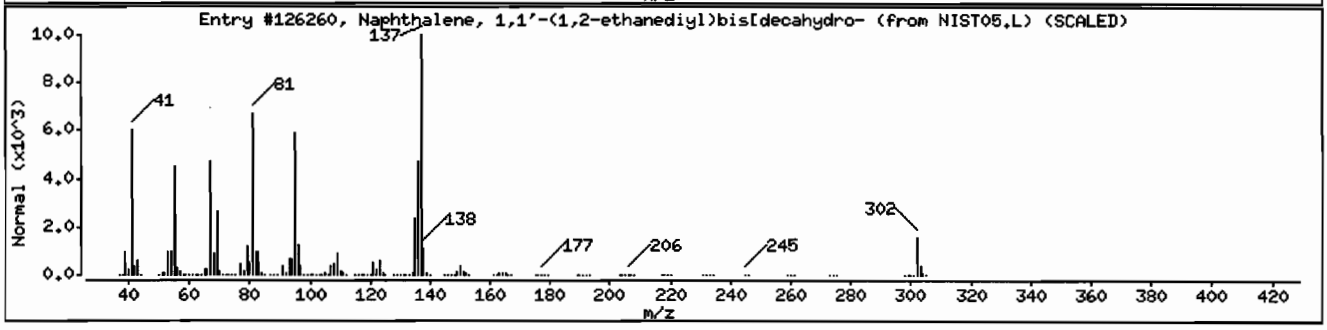
Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Silane, methylphenylbis[(1,7,7-trimethyl	74806-99-8	NIST05.L	176524	38	C27H42O2Si	426
4-Hexen-1-ol, 6-(2,6,6-trimethyl-1-cyclo	1000221-57-6	NIST05.L	82632	35	C16H28O	236
Naphthalene, 1,1'-(1,2-ethanediyl)bis[de	54934-69-9	NIST05.L	126260	35	C22H38	302









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 phenyether		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'-Dichlorobenzidene		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-Dimethhylphenethylamine		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,j)acridine		10	20	40	50	80	100	120
Dibenzo(a,i)pyrene		10	20	40	50	80	100	120
Dibenzo(a,l)pyrene		10	20	40	50	80	100	120
7H-Dibenzo(c,g)carbazole		10	20	40	50	80	10	120

All values are mg/L without the prep factor.
# Indicates the calibration verification concentration level used
* Usual calibration levels using SCAN methodology
** This analyte included in this level at special client request.
(0210/Full list)

Report Date: 18-Mar-2010 08:17

Calibration History

Method : /chem/MSD8.i/s031710.b/MSD8-8270AQA-022010.m
Start Cal Date: 20-FEB-2010 12:55
End Cal Date : 22-FEB-2010 01:19

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 1.00000		
20-FEB-2010 12:55	MEGAIICARE	/chem/MSD8.i/s022010.b/s8b2003.d
Cal Level: 2 , Cal Amount: 10.00000		
21-FEB-2010 22:13	NEV	/chem/MSD8.i/s022010.b/s8b2040.d
21-FEB-2010 16:44	HEX	/chem/MSD8.i/s022010.b/s8b2029.d
21-FEB-2010 13:02	PEST	/chem/MSD8.i/s022010.b/s8b2022.d
21-FEB-2010 09:21	AP12	/chem/MSD8.i/s022010.b/s8b2015.d
20-FEB-2010 13:30	MEGAIICARE	/chem/MSD8.i/s022010.b/s8b2004.d
Cal Level: 3 , Cal Amount: 20.00000		
21-FEB-2010 22:45	NEV	/chem/MSD8.i/s022010.b/s8b2041.d
21-FEB-2010 17:16	HEX	/chem/MSD8.i/s022010.b/s8b2030.d
21-FEB-2010 13:33	PEST	/chem/MSD8.i/s022010.b/s8b2023.d
21-FEB-2010 09:52	AP12	/chem/MSD8.i/s022010.b/s8b2016.d
20-FEB-2010 14:05	MEGAIICARE	/chem/MSD8.i/s022010.b/s8b2005.d
Cal Level: 4 , Cal Amount: 40.00000		
21-FEB-2010 23:15	NEV	/chem/MSD8.i/s022010.b/s8b2042.d
21-FEB-2010 17:48	HEX	/chem/MSD8.i/s022010.b/s8b2031.d
21-FEB-2010 14:05	PEST	/chem/MSD8.i/s022010.b/s8b2024.d
21-FEB-2010 10:23	AP12	/chem/MSD8.i/s022010.b/s8b2017.d
20-FEB-2010 14:40	MEGAIICARE	/chem/MSD8.i/s022010.b/s8b2006.d
Cal Level: 5 , Cal Amount: 50.00000		
21-FEB-2010 23:46	NEV	/chem/MSD8.i/s022010.b/s8b2043.d
21-FEB-2010 18:19	HEX	/chem/MSD8.i/s022010.b/s8b2032.d
21-FEB-2010 14:37	PEST	/chem/MSD8.i/s022010.b/s8b2025.d
21-FEB-2010 10:54	AP12	/chem/MSD8.i/s022010.b/s8b2018.d
20-FEB-2010 15:14	MEGAIICARE	/chem/MSD8.i/s022010.b/s8b2007.d
Cal Level: 6 , Cal Amount: 80.00000		
22-FEB-2010 00:17	NEV	/chem/MSD8.i/s022010.b/s8b2044.d
21-FEB-2010 18:51	HEX	/chem/MSD8.i/s022010.b/s8b2033.d
21-FEB-2010 15:09	PEST	/chem/MSD8.i/s022010.b/s8b2026.d
21-FEB-2010 11:26	AP12	/chem/MSD8.i/s022010.b/s8b2019.d
20-FEB-2010 15:50	MEGAIICARE	/chem/MSD8.i/s022010.b/s8b2008.d
Cal Level: 7 , Cal Amount: 100.00000		

22-FEB-2010 00:48	NEV	/chem/MSD8.i/s022010.b/s8b2045.d
21-FEB-2010 19:22	HEX	/chem/MSD8.i/s022010.b/s8b2034.d
21-FEB-2010 15:40	PEST	/chem/MSD8.i/s022010.b/s8b2027.d
21-FEB-2010 11:59	AP12	/chem/MSD8.i/s022010.b/s8b2020.d
20-FEB-2010 16:25	MEGAIICARE	/chem/MSD8.i/s022010.b/s8b2009.d

Cal Level: 8 , Cal Amount: 120.00000

22-FEB-2010 01:19	NEV	/chem/MSD8.i/s022010.b/s8b2046.d
21-FEB-2010 16:12	PEST	/chem/MSD8.i/s022010.b/s8b2028.d
21-FEB-2010 12:30	AP12	/chem/MSD8.i/s022010.b/s8b2021.d
20-FEB-2010 16:59	MEGAIICARE	/chem/MSD8.i/s022010.b/s8b2010.d

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 4

Ccal Level: 4 , Ccal Amount: 40.0

17-MAR-2010 09:03	MEGAIICARE	/chem/MSD8.i/s031710.b/s8c1702.d

Ccal Level: 4 , Ccal Amount: 40.0

17-MAR-2010 09:34	AP12	/chem/MSD8.i/s031710.b/s8c1703.d

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 20-FEB-2010 12:55
End Cal Date : 22-FEB-2010 01:19
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/MSD8.i/s031710.b/MSD8-8270AQA-022010.m
Cal Date : 17-Mar-2010 13:57 nat00999

Calibration File Names:
Level 1: /chem/MSD8.i/s022010.b/s8b2003.d
Level 2: /chem/MSD8.i/s022010.b/s8b2040.d
Level 3: /chem/MSD8.i/s022010.b/s8b2041.d
Level 4: /chem/MSD8.i/s022010.b/s8b2042.d
Level 5: /chem/MSD8.i/s022010.b/s8b2043.d
Level 6: /chem/MSD8.i/s022010.b/s8b2044.d
Level 7: /chem/MSD8.i/s022010.b/s8b2045.d
Level 8: /chem/MSD8.i/s022010.b/s8b2046.d

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
1 N-Methyl-N-nitrosomethylamine	+++++	0.61951	0.63665	0.62571	0.60931	0.60758					
	0.57992	0.58593					AVRG		0.60923		3.37337
2 Pyridine	+++++	0.89446	0.93458	0.90790	0.87786	0.88941					
	0.87607	0.87582					AVRG		0.89373		2.40541
4 Aniline	+++++	0.55291	0.56486	0.55215	0.55460	0.55759					
	0.54402	0.56183					AVRG		0.55542		1.23562
209 Benzaldehyde	+++++	0.88461	0.93065	0.82979	0.84335	0.81229					
	0.82905	0.77335					AVRG		0.84330		6.04219
6 Phenol	+++++	1.21439	1.26753	1.22620	1.19992	1.19696					
	1.19022	1.21801					AVRG		1.21617		2.13674

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 20-FEB-2010 12:55
End Cal Date : 22-FEB-2010 01:19
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/MSD8.i/s031710.b/MSD8-8270AQA-022010.m
Cal Date : 17-Mar-2010 13:57 nat00999

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
7 bis(2-Chloroethyl) ether	++++++	0.86875	0.87510	0.84552	0.82182	0.81301					
	0.79428	0.80161					AVRG		0.83144		3.86597
8 2-Chlorophenol	++++++	1.03978	1.08408	1.07215	1.04534	1.05301					
	1.03335	1.06466					AVRG		1.05605		1.73871
203 n-Decane	++++++	1.27851	1.24822	1.15740	1.07516	1.00264					
	0.94466	0.91988					AVRG		1.08949		13.14312
9 1,3-Dichlorobenzene	++++++	1.28111	1.28796	1.25869	1.21836	1.23373					
	1.22581	1.26112					AVRG		1.25240		2.16688
11 1,4-Dichlorobenzene	++++++	1.29450	1.32850	1.27510	1.26337	1.28372					
	1.27786	1.32204					AVRG		1.29215		1.89951
12 Benzyl alcohol	++++++	0.63823	0.66891	0.66923	0.65483	0.66997					
	0.65441	0.66840					AVRG		0.66057		1.81681
13 1,2-Dichlorobenzene	++++++	1.23246	1.24228	1.20302	1.17789	1.18128					
	1.16994	1.20670					AVRG		1.20194		2.30652
14 bis(2-Chloroisopropyl)ether	++++++	1.75891	1.77869	1.68785	1.62858	1.56724					
	1.49862	1.49146					AVRG		1.63019		7.19167
15 o-Cresol	++++++	0.83685	0.86246	0.86097	0.83301	0.83522					
	0.83135	0.85253					AVRG		0.84463		1.60879

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 20-FEB-2010 12:55
End Cal Date : 22-FEB-2010 01:19
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/MSD8.i/s031710.b/MSD8-8270AQA-022010.m
Cal Date : 17-Mar-2010 13:57 nat00999

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
16 Acetophenone	+++++	1.22382	1.29124	1.18127	1.20711	1.16108					
	1.20314	1.15394					AVRG		1.20309		3.85004
17 N-Nitrosodipropylamine	+++++	0.77291	0.78775	0.78533	0.78242	0.77484					
	0.76559	0.77632					AVRG		0.77788		0.99721
18 m,p-Cresols	+++++	1.04493	1.08669	1.06836	1.05918	1.07181					
	1.06572	1.08557					AVRG		1.06890		1.36774
19 Hexachloroethane	+++++	0.48582	0.49574	0.48975	0.48187	0.48407					
	0.48126	0.49008					AVRG		0.48694		1.06899
21 Nitrobenzene	+++++	0.29364	0.29812	0.29008	0.28855	0.29311					
	0.29496	0.29467					AVRG		0.29331		1.08619
22 Isophorone	+++++	0.54198	0.54074	0.53290	0.53134	0.54066					
	0.54707	0.54526					AVRG		0.53999		1.09041
23 2-Nitrophenol	+++++	0.13002	0.13039	0.13172	0.13404	0.13721					
	0.13936	0.13958					AVRG		0.13462		3.05487
24 2,4-Dimethylphenol	+++++	0.23868	0.23567	0.23285	0.23796	0.24044					
	0.24421	0.24544					AVRG		0.23932		1.86969
25 bis(2-Chloroethoxy)methane	+++++	0.31326	0.30893	0.29561	0.29347	0.29853					
	0.30400	0.30594					AVRG		0.30282		2.39356

GEL Laboratories LLC

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End Cal Date : 22-FEB-2010 01:19
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/MSD8.i/s031710.b/MSD8-8270AQA-022010.m
Cal Date : 17-Mar-2010 13:57 nat00999

Compound	1 Level 1 100 Level 7	10 Level 2 120 Level 8	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
26 2,4-Dichlorophenol	+++++	0.20745	0.21497	0.21364	0.21276	0.21836					
	0.22351	0.22510					AVRG		0.21654		2.87770
27 Benzoic acid	+++++	+++++	83893	215984	333227	600127					
	779305	996763					LINR	0.37420	0.17210		0.99460
28 1,2,4-Trichlorobenzene	+++++	0.30108	0.29237	0.28234	0.27990	0.28748					
	0.29534	0.29975					AVRG		0.29118		2.83696
30 Naphthalene	59622	408591	879341	1743176	2453204	3915424					
	4829589	5952102					LINR	0.05011	0.91806		0.99772
204 alpha-Terpineol	+++++	0.23619	0.23584	0.22166	0.22004	0.21591					
	0.21504	0.21341					AVRG		0.22259		4.31595
31 4-Chloroaniline	+++++	0.27947	0.29236	0.29508	0.28109	0.28200					
	0.28493	0.28604					AVRG		0.28585		2.05307
189 Caprolactam	+++++	0.05934	0.06750	0.06559	0.06739	0.06727					
	0.07008	0.06871					AVRG		0.06655		5.20909
32 Hexachlorobutadiene	+++++	0.18359	0.18107	0.17811	0.17478	0.18060					
	0.18360	0.18593					AVRG		0.18110		2.07689
33 4-Chloro-3-methylphenol	+++++	0.22447	0.23171	0.23125	0.22996	0.23628					
	0.24180	0.24455					AVRG		0.23429		3.00125

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Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
34 2-Methylnaphthalene	38110	275963	600338	1198438	1651350	2574886					
	3185761	3911554					LINR	0.03268	0.60114		0.99853
35 1-Methylnaphthalene	38576	271665	594641	1175844	1616234	2506814					
	3139153	3823750					LINR	0.03094	0.58835		0.99835
36 Hexachlorocyclopentadiene	+++++	0.21877	0.25138	0.24756	0.25311	0.24824					
	0.25115	0.26766					AVRG		0.24827		5.90114
208 1,1'-Biphenyl	+++++	1.22247	1.29127	1.17987	1.19898	1.18070					
	1.25475	1.22731					AVRG		1.22219		3.32526
205 2,3-Dichloroaniline	+++++	0.51270	0.51480	0.49871	0.51091	0.53248					
	0.55128	0.57535					AVRG		0.52803		5.10658
37 2,4,6-Trichlorophenol	+++++	0.27914	0.29104	0.28876	0.29978	0.31571					
	0.33385	0.34903					AVRG		0.30819		8.34550
38 2,4,5-Trichlorophenol	+++++	0.29440	0.32076	0.31947	0.31565	0.33788					
	0.34169	0.35990					AVRG		0.32711		6.48907
40 2-Chloronaphthalene	36449	268251	582975	1155795	1582228	2469755					
	3039631	3702903					LINR	0.03655	1.02665		0.99760
42 o-Nitroaniline	+++++	0.25572	0.26998	0.26946	0.27364	0.27783					
	0.28197	0.28884					AVRG		0.27392		3.85593

GEL Laboratories LLC

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41 m-Nitroaniline	+++++	0.18519	0.21448	0.21492	0.21737	0.20957					
	0.20505	0.21482					AVRG		0.20877		5.36018
43 Dimethylphthalate	+++++	1.12648	1.14453	1.10613	1.09173	1.11237					
	1.12375	1.14118					AVRG		1.12088		1.68894
44 2,6-Dinitrotoluene	+++++	0.25896	0.26346	0.25342	0.24949	0.24696					
	0.24733	0.25426					AVRG		0.25341		2.42391
45 Acenaphthylene	2.18976	1.59988	1.58469	1.52835	1.53064	1.56415					
	1.60612	1.68189					AVRG		1.66068		13.20366
47 Acenaphthene	1.41358	1.00028	0.99778	0.98187	0.99926	1.00432					
	1.02939	1.07707					AVRG		1.06294		13.61052
48 2,4-Dinitrophenol	+++++	+++++	38021	93310	146622	245403					
	320377	412311					LINR	0.35935	0.12672		0.99075
49 Dibenzofuran	+++++	1.40644	1.40820	1.32867	1.33815	1.36798					
	1.41726	1.49580					AVRG		1.39464		4.06888
50 2,4-Dinitrotoluene	+++++	0.31049	0.32653	0.32098	0.31786	0.31902					
	0.33142	0.34814					AVRG		0.32492		3.75316
51 Diethylphthalate	+++++	1.16273	1.19006	1.14803	1.15696	1.15712					
	1.18165	1.21522					AVRG		1.17311		2.02529

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	100 Level 7	120 Level 8									
52 4-Nitrophenol	++++++	0.10359	0.13187	0.13545	0.14163	0.14151					
	0.14797	0.15374					AVRG		0.13654		11.90490
53 Fluorene	1.69412	1.18564	1.18324	1.16123	1.18593	1.26226					
	1.29401	1.36155					AVRG		1.29100		13.69804
54 4-Chlorophenylphenylether	++++++	0.59987	0.60491	0.58500	0.59564	0.63651					
	0.64896	0.68125					AVRG		0.62173		5.60755
220 Hydroquinone	++++++	++++++	++++++	++++++	++++++	++++++					
	++++++	++++++					AVRG		0.000e+00		0.000e+00 <-
55 2-Methyl-4,6-dinitrophenol	++++++	26409	78471	169233	248477	398816					
	489102	612903					LINR	0.16815	0.09594		0.99736
56 p-Nitroaniline	++++++	0.13756	0.16571	0.18963	0.20209	0.19373					
	0.19726	0.20537					AVRG		0.18448		13.23346
133 Diphenylamine	++++++	0.48702	0.48634	0.48646	0.49672	0.51765					
	0.52558	0.53844					AVRG		0.50546		4.26163
58 1,2-Diphenylhydrazine	++++++	0.58322	0.59673	0.58464	0.59299	0.60280					
	0.59206	0.60379					AVRG		0.59375		1.35599
59 Tributylphosphate	++++++	0.85316	0.98848	0.99919	0.98562	0.99554					
	0.98996	1.00565					AVRG		0.97394		5.51372

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	100 Level 7	120 Level 8									
61 4-Bromophenylphenylether	+++++	0.18589	0.18897	0.18392	0.18630	0.19322					
	0.19629	0.20338					AVRG		0.19114		3.62682
63 Hexachlorobenzene	+++++	0.19642	0.19554	0.19003	0.19110	0.20055					
	0.20365	0.21337					AVRG		0.19866		4.06498
207 Atrazine	+++++	0.03758	0.04062	0.03420	0.03665	0.03302					
	0.03441	0.03072					AVRG		0.03531		9.21662
65 Pentachlorophenol	+++++	0.06388	0.08247	0.08843	0.09083	0.09630					
	0.09718	0.10035					AVRG		0.08849		14.02887
206 n-Octadecane	+++++	0.41912	0.42264	0.40756	0.40012	0.39129					
	0.37111	0.36735					AVRG		0.39703		5.48958
68 Phenanthrene	65568	486199	1015060	2006630	2809008	4284140					
	5370346	6608324					LINR	0.04915	0.98874		0.99753
69 Anthracene	1.26726	0.89621	0.90633	0.88074	0.91241	0.94159					
	0.95537	1.00675					AVRG		0.97083		13.00076
72 Di-n-butylphthalate	+++++	0.94663	0.99271	0.99656	1.01616	1.04338					
	1.04405	1.06383					AVRG		1.01476		3.93061
76 Fluoranthene	1.27400	0.97604	0.96078	0.93382	0.96161	0.98359					
	1.01627	1.03676					AVRG		1.01786		10.65772

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	100 Level 7	120 Level 8									
77 Benzidine	+++++	114948	240488	575469	576881	1632421					
	1879386	2370017					LINR	0.20503	0.37744		0.99275
79 Pyrene	1.59200	1.13341	1.18323	1.21007	1.19482	1.23234					
	1.21785	1.22742					AVRG		1.24889		11.38418
85 Butylbenzylphthalate	+++++	0.37478	0.43005	0.45705	0.44937	0.45125					
	0.44474	0.44980					AVRG		0.43672		6.54417
89 Benzo(a)anthracene	1.38070	0.96707	0.98220	0.96802	0.98013	1.02003					
	1.04657	1.07617					AVRG		1.05261		13.14311
90 3,3'-Dichlorobenzidine	+++++	0.19682	0.23362	0.24165	0.24177	0.26523					
	0.27999	0.27551					AVRG		0.24780		11.62921
92 Chrysene	56779	460630	913811	1690536	2342194	3398164					
	4593832	5526812					LINR	0.00950	0.92743		0.99892
93 bis(2-Ethylhexyl)phthalate	0.56666	0.53374	0.59392	0.62267	0.62324	0.64211					
	0.64575	0.66128					AVRG		0.61117		7.10990
94 Di-n-octylphthalate	+++++	368592	834860	1605441	2216889	3330642					
	4377445	+++++					LINR	0.13246	1.42322		0.99630
95 Benzo(b)fluoranthene	1.19103	0.97573	1.06659	1.08748	1.13194	1.14428					
	1.17803	1.29729					AVRG		1.13405		8.41332

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	100 Level 7	120 Level 8									
96 Benzo(k)fluoranthene	1.26573	1.00893	1.07939	1.10364	1.13551	1.12361					
	1.19513	1.20870					AVRG		1.14008		7.11278
97 Benzo(a)pyrene	0.91365	0.85418	0.92377	0.94122	0.96804	0.99011					
	1.01342	1.04734					AVRG		0.95647		6.41651
99 Indeno(1,2,3-cd)pyrene	0.79917	0.81532	0.80541	0.77792	0.75613	0.85605					
	0.74498	0.78923					AVRG		0.79303		4.41296
100 Dibenzo(a,h)anthracene	0.61288	0.61866	0.60233	0.58469	0.57198	0.65233					
	0.63604	0.62414					AVRG		0.61288		4.28662
101 Benzo(ghi)perylene	0.75516	0.69322	0.66528	0.62680	0.59234	0.66873					
	0.64840	0.59909					AVRG		0.65613		8.07863
102 1,4-Dioxane	+++++	0.35084	0.36273	0.32344	0.32306	0.29885					
	0.30758	0.29584					AVRG		0.32319		7.90081
103 Methyl methacrylate	+++++	0.17778	0.18944	0.16410	0.16994	0.15571					
	0.16230	0.15788					AVRG		0.16817		7.11952
104 Ethyl methacrylate	+++++	0.70693	0.75062	0.67894	0.68905	0.63812					
	0.66413	0.62961					AVRG		0.67963		6.10805
105 2-Picoline	+++++	1.12830	1.19020	1.07957	1.10232	1.04185					
	1.07041	1.03794					AVRG		1.09294		4.88732

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	100 Level 7	120 Level 8									
106 N-Nitrosomethylethylamine	+++++	0.44779	0.46529	0.43489	0.44140	0.42410					
	0.44409	0.42146					AVRG		0.43986		3.39928
107 Methyl methanesulfonate	+++++	0.52524	0.54520	0.49099	0.48678	0.48343					
	0.49978	0.46508					AVRG		0.49950		5.43906
108 N-Nitrosodiethylamine	+++++	0.46217	0.49395	0.44813	0.46428	0.44274					
	0.45963	0.43541					AVRG		0.45804		4.17302
109 Ethyl Methanesulfonate	+++++	0.62189	0.65375	0.60074	0.60188	0.58949					
	0.61342	0.58197					AVRG		0.60902		3.91897
110 Pentachloroethane	+++++	0.32386	0.34717	0.31621	0.32412	0.30740					
	0.32132	0.30635					AVRG		0.32092		4.26755
111 N-Nitrosopyrrolidine	+++++	0.47922	0.51794	0.48306	0.49257	0.48446					
	0.49612	0.48073					AVRG		0.49059		2.76402
113 N-Nitrosomorpholine	+++++	0.68559	0.71997	0.66306	0.66815	0.64403					
	0.65152	0.61465					AVRG		0.66385		4.99866
114 o-Toluidine	+++++	1.63357	1.73837	1.58287	1.64173	1.56389					
	1.62224	1.57015					AVRG		1.62183		3.70471
115 N-Nitrosopiperidine	+++++	0.12360	0.13377	0.12334	0.12644	0.11963					
	0.12371	0.12009					AVRG		0.12437		3.81963

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	100 Level 7	120 Level 8									
116 a,a-Dimethylphenethylamine	+++++	0.64589	0.73902	0.73378	0.77250	0.75528					
	0.78780	0.76698					AVRG		0.74304		6.29693
117 Triethylphosphorothioate	+++++	0.12776	0.13008	0.12715	0.12802	0.12765					
	0.12726	0.13005					AVRG		0.12828		0.97777
118 2,6-Dichlorophenol	+++++	0.19213	0.20693	0.19910	0.19955	0.20082					
	0.20928	0.20299					AVRG		0.20154		2.79228
119 Hexachloropropene	+++++	0.11005	0.12087	0.12529	0.11800	0.12775					
	0.13255	0.13069					AVRG		0.12360		6.37831
120 p-Phenylenediamine	+++++	0.20097	0.22012	0.20890	0.19933	0.19552					
	0.18199	0.16903					AVRG		0.19655		8.57847
121 N-Nitrosodi-n-butylamine	+++++	0.22009	0.23358	0.22059	0.22594	0.19498					
	0.19691	0.18916					AVRG		0.21161		8.26915
122 Safrole	+++++	0.19404	0.20590	0.18988	0.19335	0.18710					
	0.19409	0.18904					AVRG		0.19334		3.19019
123 1,2,4,5-Tetrachlorobenzene	+++++	0.48179	0.50127	0.46416	0.46968	0.45641					
	0.48299	0.47441					AVRG		0.47582		3.07832
124 Isosafrole	+++++	0.31959	0.34105	0.31534	0.32095	0.31245					
	0.32391	0.31581					AVRG		0.32130		2.96333

GEL Laboratories LLC

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	100 Level 7	120 Level 8									
125 1,4-Naphthoquinone	+++++	0.32816	0.34621	0.30613	0.30795	0.25958					
	0.23046	+++++					AVRG		0.29641		14.64421
126 m-Dinitrobenzene	+++++	0.15594	0.16628	0.16332	0.16381	0.16032					
	0.16004	+++++					AVRG		0.16162		2.24564
127 Pentachlorobenzene	+++++	0.43767	0.45121	0.42030	0.42682	0.42210					
	0.44346	0.43799					AVRG		0.43422		2.65150
128 1-Naphthylamine	+++++	0.82239	0.86814	0.82529	0.81386	0.84167					
	0.87214	0.85263					AVRG		0.84230		2.72431
129 2-Naphthylamine	+++++	0.87494	0.84477	0.88369	0.86051	0.89209					
	0.94061	0.91680					AVRG		0.88763		3.68720
130 2,3,4,6-Tetrachlorophenol	+++++	0.25022	0.26956	0.27043	0.27312	0.28194					
	0.29224	0.30421					AVRG		0.27739		6.29089
131 5-Nitro-o-toluidine	+++++	0.21312	0.24508	0.24080	0.23259	0.24890					
	0.25619	0.25185					AVRG		0.24122		6.04443
132 Thionazin	+++++	0.13437	0.14473	0.14728	0.14423	0.14621					
	0.14438	0.14610					AVRG		0.14390		3.02307
134 Sulfotepp	+++++	0.07479	0.07643	0.07811	0.08209	0.08186					
	0.08119	0.08666					AVRG		0.08016		5.01325

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Target Version : 3.50
Integrator : HP RTE
Method file : /chem/MSD8.i/s031710.b/MSD8-8270AQA-022010.m
Cal Date : 17-Mar-2010 13:57 nat00999

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
135 Phorate	+++++	0.29874	0.30476	0.30486	0.31798	0.30102					
	0.29242	0.29307					AVRG		0.30183		2.88237
136 1,3,5-Trinitrobenzene	+++++	0.07415	0.09175	0.09919	0.09673	0.10189					
	0.10131	0.09994					AVRG		0.09499		10.32629
137 Phenacetin	+++++	0.18206	0.20988	0.21406	0.21650	0.22859					
	0.23865	0.22853					AVRG		0.21690		8.45110
138 Diallate	+++++	0.20463	0.21020	0.19892	0.21153	0.19343					
	0.20258	0.19294					AVRG		0.20203		3.67352
139 Dimethoate	+++++	0.14043	0.15915	0.16697	0.17200	0.17406					
	0.16740	0.16949					AVRG		0.16422		7.00813
140 4-Aminobiphenyl	+++++	0.43217	0.48080	0.49774	0.49087	0.54937					
	0.58751	0.58243					AVRG		0.51727		11.12235
141 Pentachloronitrobenzene	+++++	0.07756	0.08234	0.07796	0.08272	0.07781					
	0.08047	0.07668					AVRG		0.07936		3.09424
142 Pronamide	+++++	0.24165	0.25727	0.24493	0.25850	0.24762					
	0.26196	0.25418					AVRG		0.25230		3.02507
143 Dinoseb	+++++	36739	110780	253153	360839	582168					
	749359	959224					LINR	0.21574	0.15018		0.99408

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INITIAL CALIBRATION DATA

Start Cal Date : 20-FEB-2010 12:55
End Cal Date : 22-FEB-2010 01:19
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/MSD8.i/s031710.b/MSD8-8270AQA-022010.m
Cal Date : 17-Mar-2010 13:57 nat00999

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
144 Disulfoton	+++++	0.26489	0.24948	0.24076	0.24841	0.23789					
	0.22925	0.23314					AVRG		0.24340		4.93796
145 Methyl parathion	+++++	0.12612	0.15136	0.15938	0.16288	0.16711					
	0.16709	0.17055					AVRG		0.15779		9.71146
146 4-Nitroquinoline-1-oxide	+++++	0.02056	0.02288	0.01846	0.01666	0.01679					
	+++++	+++++					AVRG		0.01907		13.89367
147 Methapyrilene	+++++	0.29694	0.32659	0.28898	0.30536	0.28186					
	0.28225	0.26103					AVRG		0.29186		7.08529
148 Isodrin	+++++	0.10688	0.11119	0.10398	0.11043	0.10326					
	0.10901	0.10550					AVRG		0.10718		2.91403
149 Aramite	+++++	0.03161	0.03603	0.03415	0.03476	0.03379					
	0.03486	0.03195					AVRG		0.03388		4.71492
150 Kepone	+++++	0.07589	0.08420	0.07666	0.07796	0.07644					
	0.07875	0.07575					AVRG		0.07795		3.80313
151 p-(Dimethylamino)azobenzene	+++++	0.22465	0.25205	0.24804	0.27799	0.25995					
	0.27510	0.26877					AVRG		0.25808		7.17705
152 Chlorobenzilate	+++++	0.22654	0.24955	0.24660	0.29801	0.25875					
	0.28069	0.27880					AVRG		0.26271		9.30544

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INITIAL CALIBRATION DATA

Start Cal Date : 20-FEB-2010 12:55
End Cal Date : 22-FEB-2010 01:19
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/MSD8.i/s031710.b/MSD8-8270AQA-022010.m
Cal Date : 17-Mar-2010 13:57 nat00999

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
153 3,3'-Dimethylbenzidine	+++++	0.37150	0.43396	0.42299	0.44074	0.48724					
	0.52259	0.50844					AVRG		0.45535		11.72591
154 Famphur	+++++	0.29682	0.32000	0.33232	0.36789	0.37506					
	0.36897	0.38152					AVRG		0.34894		9.31134
155 2-Acetylaminofluorene	+++++	77941	174270	466888	454874	1169522					
	1402952	1690573					LINR	0.16495	0.26994		0.99689
157 7,12Dimethylbenz(a)anthracene	+++++	0.44428	0.50077	0.50095	0.52555	0.52043					
	0.56747	0.57419					AVRG		0.51909		8.50027
158 3-Methylcholanthrene	+++++	0.31873	0.35613	0.36783	0.37459	0.37965					
	0.39268	0.38502					AVRG		0.36780		6.70304
26 Phthalic anhydride	+++++	35664	121861	249075	381828	594958					
	723533	893615					LINR	0.12971	0.14328		0.99917
173 Carbazole	0.89649	0.61077	0.58409	0.64323	0.66829	0.69364					
	0.71352	0.73688					AVRG		0.69337		13.94742
174 Hexachlorophene	+++++	935628	3163522	4273678	5413416	6917749					
	7386241	+++++					LINR	6.19705	0.07687		0.99449
179 Dibenzo(a,e)pyrene	+++++	0.28462	0.26044	0.26698	0.22397	0.28475					
	0.27252	0.23457					AVRG		0.26112		9.06299

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INITIAL CALIBRATION DATA

Start Cal Date : 20-FEB-2010 12:55
End Cal Date : 22-FEB-2010 01:19
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/MSD8.i/s031710.b/MSD8-8270AQA-022010.m
Cal Date : 17-Mar-2010 13:57 nat00999

Compound	1 Level 1 100 Level 7	10 Level 2 120 Level 8	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2	
185 (2,3-Dibromopropyl)phosphate	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-
184 p-Benzoquinone	+++++	13412	38094	103028	141046	214307						
	265584	310038					LINR	0.07963	0.20135		0.99786	
191 Parathion	+++++	0.04141	0.04946	0.05375	0.05525	0.05615						
	0.05609	0.05831					AVRG		0.05291		10.91556	
192 Methoxychlor	+++++	0.47370	0.56446	0.59238	0.57838	0.60702						
	0.60937	0.59064					AVRG		0.57371		8.15235	
210 m-Toluidine	+++++	1.23929	1.38356	1.46111	1.48802	1.58621						
	1.58280	1.66243					AVRG		1.48620		9.61503	
211 p-Toluidine	+++++	1.14906	1.18370	1.16691	1.19548	1.08736						
	1.10329	1.09804					AVRG		1.14055		3.86703	
212 Cis Diallate	+++++	0.20120	0.20767	0.19674	0.21346	0.19409						
	0.19989	0.19195					AVRG		0.20071		3.79541	
213 Trans Diallate	+++++	0.24074	0.24730	0.23402	0.24886	0.22756						
	0.23833	0.22699					AVRG		0.23769		3.67352	
214 1,4-Dinitrobenzene	+++++	0.14712	0.16526	0.16942	0.17547	0.17667						
	0.18015	0.18546					AVRG		0.17136		7.34157	

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INITIAL CALIBRATION DATA

Start Cal Date : 20-FEB-2010 12:55
End Cal Date : 22-FEB-2010 01:19
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/MSD8.i/s031710.b/MSD8-8270AQA-022010.m
Cal Date : 17-Mar-2010 13:57 nat00999

Compound	1 Level 1 100 Level 7	10 Level 2 120 Level 8	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
215 2-Ethoxyethanol	+++++	0.58676	0.60203	0.59483	0.55565	0.57374					
	0.55822	0.54494					AVRG		0.57374		3.77318
216 Methylenebis(2-chloroaniline)	+++++	36455	87285	192808	305235	476431					
	647915	779120					LINR	0.18581	0.13997		0.99822
229 2,2'-Dichlorobenzil	+++++	0.53014	0.54882	0.57218	0.56813	0.55363					
	0.63091	0.61172					AVRG		0.57365		6.23315
230 4-Chlorothioanisole	+++++	0.23127	0.22998	0.24707	0.25459	0.25234					
	0.25390	0.26275					AVRG		0.24741		4.99827
231 4-Chlorothiophenol	+++++	69510	156101	409410	538100	905821					
	1130595	1540522					LINR	0.15090	0.21447		0.99884
232 bis(p-Chlorophenyl)sulfone	+++++	0.32332	0.32274	0.32522	0.32041	0.30818					
	0.34792	0.33496					AVRG		0.32611		3.81298
233 bis(p-Chlorophenyl)disulfide	+++++	0.11382	0.11054	0.12051	0.11929	0.11551					
	0.12978	0.12394					AVRG		0.11906		5.46007
234 Diphenyl disulfide	+++++	0.19202	0.19186	0.19737	0.19958	0.19288					
	0.20205	0.19917					AVRG		0.19642		2.10807
235 Diphenyl sulfide	+++++	0.76604	0.75916	0.77559	0.80138	0.79306					
	0.81579	0.83897					AVRG		0.79285		3.59622

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INITIAL CALIBRATION DATA

Start Cal Date : 20-FEB-2010 12:55
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Target Version : 3.50
Integrator : HP RTE
Method file : /chem/MSD8.i/s031710.b/MSD8-8270AQA-022010.m
Cal Date : 17-Mar-2010 13:57 nat00999

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
236 Phenyl sulfone	+++++	0.34800	0.34646	0.34913	0.35609	0.34394					
	0.35788	0.36394					AVRG		0.35221		2.05193
237 Hydroxymethyl phthalimide	+++++	0.11562	0.12919	0.11505	0.10331	0.08699					
	0.09932	0.08725					AVRG		0.10525		14.88762
238 Phthalic acid	+++++	20021	61221	192852	247836	445405					
	592112	841517					LINR	0.27721	0.11935		0.99378
239 Thiophenol	+++++	0.72136	0.86680	1.01677	1.07339	1.08115					
	1.06962	1.11441					AVRG		0.99193		14.55784
240 bis(Chloromethyl)ether	+++++	0.73330	0.72927	0.75420	0.77531	0.76257					
	0.72897	0.73156					AVRG		0.74502		2.53135
241 Octachlorostyrene	+++++	0.06930	0.06943	0.07008	0.07083	0.07166					
	0.07686	0.07691					AVRG		0.07215		4.62127
M 222 Trichlorophenols	+++++	0.28677	0.30590	0.30411	0.30771	0.32680					
	0.33777	0.35446					AVRG		0.31765		7.28968
M 223 Tetrachlorophenols	+++++	0.25022	0.26956	0.27043	0.27312	0.28194					
	0.29224	0.30421					AVRG		0.27739		6.29089
M 224 Benzo(b,k)fluoranthene	1.22838	0.99233	1.07299	1.09556	1.13372	1.13395					
	1.18658	1.25299					AVRG		1.13706		7.50876

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INITIAL CALIBRATION DATA

Start Cal Date : 20-FEB-2010 12:55
End Cal Date : 22-FEB-2010 01:19
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/MSD8.i/s031710.b/MSD8-8270AQA-022010.m
Cal Date : 17-Mar-2010 13:57 nat00999

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2	
	100 Level 7	120 Level 8										
M 225 TTO Sum Semivolatiles	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-
$ 3 2-Fluorophenol	+++++	0.92659	0.96919	0.96650	0.94036	0.93281						
	0.93098	0.94400					AVRG		0.94435		1.80921	
$ 5 Phenol-d5	+++++	1.15492	1.20808	1.18961	1.17093	1.17303						
	1.15725	1.19013					AVRG		1.17771		1.63471	
$ 187 2-Chlorophenol-d4	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-
$ 188 1,2-Dichlorobenzene-d4	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-
$ 20 Nitrobenzene-d5	+++++	0.28463	0.28610	0.28272	0.27867	0.28386						
	0.28710	0.28733					AVRG		0.28435		1.06265	
$ 39 2-Fluorobiphenyl	+++++	1.17351	1.17042	1.12460	1.11619	1.18499						
	1.20400	1.26805					AVRG		1.17740		4.32813	
$ 60 2,4,6-Tribromophenol	+++++	0.12711	0.13347	0.12836	0.12619	0.12779						
	0.13893	0.14371					AVRG		0.13223		5.12665	
$ 81 p-Terphenyl-d14	+++++	0.67083	0.69230	0.71233	0.71339	0.73658						
	0.74530	0.77029					AVRG		0.72015		4.65100	

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 20-FEB-2010 12:55
End Cal Date : 22-FEB-2010 01:19
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/MSD8.i/s031710.b/MSD8-8270AQA-022010.m
Cal Date : 17-Mar-2010 13:57 nat00999

Curve	Formula	Units
Averaged	Amt = Rsp/ml	Response
Linear	Amt = b + Rsp/ml	Response

Data File: /chem/MSD8.i/s022010.b/s8b2012.d
Report Date: 23-Feb-2010 13:25

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD8.i
Lab File ID: s8b2012.d
Analysis Type:
Lab Sample ID: WBN100215-05.1 Quant Type: ISTD
Method: /chem/MSD8.i/s022010.b/MSD8-8270AQA-022010.m

Injection Date: 20-FEB-2010 18:09
Init. Cal. Date(s): 20-FEB-2010 22-FEB-2010
Init. Cal. Times: 12:55 01:19

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
$ 3 2-Fluorophenol	0.94435	0.91252	0.91252	0.000	-3.36963	60.00000	Averaged
$ 5 Phenol-d5	1.17771	1.11967	1.11967	0.000	-4.92793	60.00000	Averaged
$ 20 Nitrobenzene-d5	0.28435	0.28445	0.28445	0.000	0.03513	60.00000	Averaged
$ 39 2-Fluorobiphenyl	1.17740	1.10971	1.10971	0.000	-5.74835	60.00000	Averaged
$ 60 2,4,6-Tribromophenol	0.13223	0.12031	0.12031	0.000	-9.01194	60.00000	Averaged
$ 81 p-Terphenyl-d14	0.72015	0.73651	0.73651	0.000	2.27163	60.00000	Averaged
1 N-Methyl-N-nitrosomethylami	0.60923	0.57218	0.57218	0.000	-6.08077	60.00000	Averaged
2 Pyridine	0.89373	0.67690	0.67690	0.000	-24.26051	60.00000	Averaged
4 Aniline	0.55542	0.50332	0.50332	0.000	-9.38073	60.00000	Averaged
6 Phenol	1.21617	1.17309	1.17309	0.001	-3.54259	20.00000	Averaged ccc
7 bis(2-Chloroethyl) ether	0.83144	0.74294	0.74294	0.000	-10.64430	60.00000	Averaged
8 2-Chlorophenol	1.05605	1.02399	1.02399	0.000	-3.03618	60.00000	Averaged
203 n-Decane	1.08949	1.10768	1.10768	0.000	1.66910	60.00000	Averaged
9 1,3-Dichlorobenzene	1.25240	1.20785	1.20785	0.000	-3.55721	60.00000	Averaged
11 1,4-Dichlorobenzene	1.29215	1.21176	1.21176	0.001	-6.22171	20.00000	Averaged ccc
13 1,2-Dichlorobenzene	1.20194	1.13600	1.13600	0.000	-5.48562	60.00000	Averaged
14 bis(2-Chloroisopropyl)ether	1.63019	1.56683	1.56683	0.000	-3.88699	60.00000	Averaged
12 Benzyl alcohol	0.66057	0.64188	0.64188	0.000	-2.82972	60.00000	Averaged
15 o-Cresol	0.84463	0.81254	0.81254	0.000	-3.79849	60.00000	Averaged
18 m,p-Cresols	1.06890	1.06346	1.06346	0.000	-0.50838	60.00000	Averaged
17 N-Nitrosodipropylamine	0.77788	0.74120	0.74120	0.050	-4.71529	60.00000	Averaged spcc
19 Hexachloroethane	0.48694	0.45665	0.45665	0.000	-6.22059	60.00000	Averaged
21 Nitrobenzene	0.29331	0.27681	0.27681	0.000	-5.62390	60.00000	Averaged
22 Isophorone	0.53999	0.49377	0.49377	0.000	-8.55934	60.00000	Averaged
23 2-Nitrophenol	0.13462	0.13301	0.13301	0.001	-1.19474	20.00000	Averaged ccc
24 2,4-Dimethylphenol	0.23932	0.22527	0.22527	0.000	-5.87154	60.00000	Averaged
25 bis(2-Chloroethoxy)methane	0.30282	0.26637	0.26637	0.000	-12.03559	60.00000	Averaged
26 2,4-Dichlorophenol	0.21654	0.20901	0.20901	0.001	-3.47894	20.00000	Averaged ccc
27 Benzoic acid	41.94960	40.00000	0.11609	0.000	4.87400	60.00000	Linear
28 1,2,4-Trichlorobenzene	0.29118	0.26506	0.26506	0.000	-8.96931	60.00000	Averaged
30 Naphthalene	35.39177	40.00000	0.76629	0.000	-11.52057	60.00000	Linear
204 alpha-Terpineol	0.22259	0.20059	0.20059	0.000	-9.88109	60.00000	Averaged
31 4-Chloroaniline	0.28585	0.27423	0.27423	0.000	-4.06642	60.00000	Averaged
32 Hexachlorobutadiene	0.18110	0.17017	0.17017	0.001	-6.03393	20.00000	Averaged ccc
33 4-Chloro-3-methylphenol	0.23429	0.22644	0.22644	0.001	-3.34816	20.00000	Averaged ccc
34 2-Methylnaphthalene	37.56535	40.00000	0.54491	0.000	-6.08662	60.00000	Linear

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD8.i Injection Date: 20-FEB-2010 18:09
Lab File ID: s8b2012.d Init. Cal. Date(s): 20-FEB-2010 22-FEB-2010
Analysis Type: Init. Cal. Times: 12:55 01:19
Lab Sample ID: WBN100215-05.1 Quant Type: ISTD
Method: /chem/MSD8.i/s022010.b/MSD8-8270AQA-022010.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
35 1-Methylnaphthalene	36.14060	40.00000	0.51338	0.000	-9.64851	60.00000	Linear
36 Hexachlorocyclopentadiene	0.24827	0.20951	0.20951	0.050	-15.61096	60.00000	Averaged spcc
205 2,3-Dichloroaniline	0.52803	0.47281	0.47281	0.000	-10.45916	60.00000	Averaged
37 2,4,6-Trichlorophenol	0.30819	0.28652	0.28652	0.001	-7.02903	20.00000	Averaged ccc
38 2,4,5-Trichlorophenol	0.32711	0.32121	0.32121	0.000	-1.80308	60.00000	Averaged
40 2-Chloronaphthalene	36.94398	40.00000	0.91069	0.000	-7.64006	60.00000	Linear
42 o-Nitroaniline	0.27392	0.25926	0.25926	0.000	-5.35118	60.00000	Averaged
41 m-Nitroaniline	0.20877	0.20131	0.20131	0.000	-3.57417	60.00000	Averaged
43 Dimethylphthalate	1.12088	1.03748	1.03748	0.000	-7.44016	60.00000	Averaged
44 2,6-Dinitrotoluene	0.25341	0.23417	0.23417	0.000	-7.59187	60.00000	Averaged
50 2,4-Dinitrotoluene	0.32492	0.29882	0.29882	0.000	-8.03184	60.00000	Averaged
45 Acenaphthylene	1.66068	1.47808	1.47808	0.000	-10.99555	60.00000	Averaged
47 Acenaphthene	1.06294	0.89925	0.89925	0.001	-15.39975	20.00000	Averaged ccc
48 2,4-Dinitrophenol	42.02206	40.00000	0.08759	0.050	5.05516	60.00000	Linear spcc
49 Dibenzofuran	1.39464	1.27908	1.27908	0.000	-8.28625	60.00000	Averaged
51 Diethylphthalate	1.17311	1.07200	1.07200	0.000	-8.61955	60.00000	Averaged
52 4-Nitrophenol	0.13654	0.14391	0.14391	0.050	5.40043	60.00000	Averaged spcc
53 Fluorene	1.29100	1.07540	1.07540	0.000	-16.69989	60.00000	Averaged
54 4-Chlorophenylphenylether	0.62173	0.54162	0.54162	0.000	-12.88500	60.00000	Averaged
55 2-Methyl-4,6-dinitrophenol	48.66926	40.00000	0.10060	0.000	21.67316	60.00000	Linear
56 p-Nitroaniline	0.18448	0.18495	0.18495	0.000	0.25453	60.00000	Averaged
133 Diphenylamine	0.50546	0.46520	0.46520	0.001	-7.96469	20.00000	Averaged ccc
58 1,2-Diphenylhydrazine	0.59375	0.56532	0.56532	0.000	-4.78833	60.00000	Averaged
61 4-Bromophenylphenylether	0.19114	0.16319	0.16319	0.000	-14.62019	60.00000	Averaged
63 Hexachlorobenzene	0.19866	0.17428	0.17428	0.000	-12.27477	60.00000	Averaged
65 Pentachlorophenol	0.08849	0.08776	0.08776	0.001	-0.83218	20.00000	Averaged ccc
206 n-Octadecane	0.39703	0.39262	0.39262	0.000	-1.10928	60.00000	Averaged
68 Phenanthrene	35.36562	40.00000	0.82559	0.000	-11.58594	60.00000	Linear
69 Anthracene	0.97083	0.82497	0.82497	0.000	-15.02413	60.00000	Averaged
72 Di-n-butylphthalate	1.01476	0.94515	0.94515	0.000	-6.85986	60.00000	Averaged
76 Fluoranthene	1.01786	0.89285	0.89285	0.001	-12.28130	20.00000	Averaged ccc
79 Pyrene	1.24889	1.05447	1.05447	0.000	-15.56774	60.00000	Averaged
85 Butylbenzylphthalate	0.43672	0.42071	0.42071	0.000	-3.66508	60.00000	Averaged
89 Benzo(a)anthracene	1.05261	0.90191	0.90191	0.000	-14.31645	60.00000	Averaged
92 Chrysene	36.32073	40.00000	0.83331	0.000	-9.19818	60.00000	Linear
93 bis(2-Ethylhexyl)phthalate	0.61117	0.58944	0.58944	0.000	-3.55520	60.00000	Averaged

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD8.i
Lab File ID: s8b2012.d
Analysis Type:
Lab Sample ID: WBN100215-05.1 Quant Type: ISTD
Method: /chem/MSD8.i/s022010.b/MSD8-8270AQA-022010.m

Injection Date: 20-FEB-2010 18:09
Init. Cal. Date(s): 20-FEB-2010 22-FEB-2010
Init. Cal. Times: 12:55 01:19

	COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
	94 Di-n-octylphthalate	39.76021	40.00000	1.22616	0.001	-0.59948	20.00000	Linear	ccc
	95 Benzo(b)fluoranthene	1.13405	1.05298	1.05298	0.000	-7.14838	60.00000	Averaged	
	96 Benzo(k)fluoranthene	1.14008	1.04465	1.04465	0.000	-8.37069	60.00000	Averaged	
	97 Benzo(a)pyrene	0.95647	0.89169	0.89169	0.001	-6.77277	20.00000	Averaged	ccc
	99 Indeno(1,2,3-cd)pyrene	0.79303	0.69287	0.69287	0.000	-12.62907	60.00000	Averaged	
	100 Dibenzo(a,h)anthracene	0.61288	0.52486	0.52486	0.000	-14.36175	60.00000	Averaged	
	101 Benzo(ghi)perylene	0.65613	0.54043	0.54043	0.000	-17.63270	60.00000	Averaged	
	126 m-Dinitrobenzene	0.16162	0.15617	0.15617	0.000	-3.37054	60.00000	Averaged	
	130 2,3,4,6-Tetrachlorophenol	0.27739	0.25140	0.25140	0.000	-9.36867	60.00000	Averaged	
	143 Dinoseb	39.33235	40.00000	0.11528	0.000	-1.66914	60.00000	Linear	
	173 Carbazole	0.69337	0.64707	0.64707	0.000	-6.67637	60.00000	Averaged	
	184 p-Benzoquinone	26.23116	40.00000	0.11601	0.000	-34.42209	60.00000	Linear	
	192 Methoxychlor	0.57371	0.53574	0.53574	0.000	-6.61792	60.00000	Averaged	
	211 p-Toluidine	1.14055	0.88750	0.88750	0.000	-22.18641	60.00000	Averaged	
	210 m-Toluidine	1.48620	1.44197	1.44197	0.000	-2.97629	60.00000	Averaged	
	26 Phthalic anhydride	53.94737	40.00000	0.17465	0.000	34.86844	60.00000	Linear	
	179 Dibenzo(a,e)pyrene	0.26112	0.15069	0.15069	0.000	-42.29332	60.00000	Averaged	
	214 1,4-Dinitrobenzene	0.17136	0.17062	0.17062	0.000	-0.43576	60.00000	Averaged	
	215 2-Ethoxyethanol	0.57374	0.58779	0.58779	0.000	2.44852	60.00000	Averaged	
	216 Methylenebis(2-chloroanilin	41.74874	40.00000	0.12008	0.000	4.37185	60.00000	Linear	
M	222 Trichlorophenols	0.31765	0.30387	0.30387	0.000	-4.33823	60.00000	Averaged	
M	223 Tetrachlorophenols	0.27739	0.25140	0.25140	0.000	-9.36867	60.00000	Averaged	
M	224 Benzo(b,k)fluoranthene	1.13706	1.04881	1.04881	0.000	-7.76116	60.00000	Averaged	

GEL Laboratories LLC

Data file : /chem/MSD8.i/s022010.b/s8b2012.d
Lab Smp Id: WBN100215-05.1 Client Smp ID: MEGAICV
Inj Date : 20-FEB-2010 18:09
Operator : nagl Inst ID: MSD8.i
Smp Info : |WBN100215-05.1|40 PPM|1|SVM|1|MEGAICV
Misc Info : |MSD8270|WBN100217-01
Comment : Column: J & W DB-5MS, 25m x 0.20 mm x 0.33 micron film
Method : /chem/MSD8.i/s022010.b/MSD8-8270AQA-022010.m
Meth Date : 23-Feb-2010 13:25 nat00999 Quant Type: ISTD
Cal Date : 22-FEB-2010 01:19 Cal File: s8b2046.d
Als bottle: 11 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: MEGAIICARE.sub
Target Version: 3.50
Processing Host: hpclp1

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
* 10 1,4-Dichlorobenzene-d4	152	4.530	4.530	(1.000)	613599	40.0000	
* 29 Naphthalene-d8	136	5.797	5.797	(1.000)	2473544	40.0000	
* 46 Acenaphthene-d10	164	7.663	7.663	(1.000)	1402775	40.0000	
* 67 Phenanthrene-d10	188	9.263	9.263	(1.000)	2635307	40.0000	
* 91 Chrysene-d12	240	12.197	12.197	(1.000)	2302220	40.0000	
* 98 Perylene-d12	264	14.354	14.354	(1.000)	1521193	40.0000	
$ 3 2-Fluorophenol	112	3.368	3.368	(0.743)	559924	40.0000	38.6
$ 5 Phenol-d5	99	4.149	4.149	(0.916)	687028	40.0000	38.0
$ 20 Nitrobenzene-d5	82	5.063	5.063	(0.873)	703589	40.0000	40.0
$ 39 2-Fluorobiphenyl	172	6.925	6.925	(0.904)	1556680	40.0000	37.7
$ 60 2,4,6-Tribromophenol	329	8.506	8.506	(1.110)	168767	40.0000	36.4
$ 81 p-Terphenyl-d14	244	10.978	10.978	(0.900)	1695598	40.0000	40.9
1 N-Methyl-N-nitrosomethylamine	74	2.382	2.382	(0.526)	351092	40.0000	37.6
2 Pyridine	79	2.420	2.420	(0.534)	415348	40.0000	30.3
4 Aniline	66	4.220	4.220	(0.932)	308837	40.0000	36.2
6 Phenol	94	4.163	4.163	(0.919)	719807	40.0000	38.6(Q)
7 bis(2-Chloroethyl) ether	63	4.263	4.263	(0.941)	455867	40.0000	35.7
8 2-Chlorophenol	128	4.335	4.335	(0.957)	628318	40.0000	38.8
203 n-Decane	43	4.354	4.354	(0.961)	679671	40.0000	40.7
9 1,3-Dichlorobenzene	146	4.477	4.477	(0.988)	741134	40.0000	38.6
11 1,4-Dichlorobenzene	146	4.549	4.549	(1.004)	743535	40.0000	37.5
13 1,2-Dichlorobenzene	146	4.692	4.692	(1.036)	697051	40.0000	37.8
14 bis(2-Chloroisopropyl)ether	45	4.768	4.768	(1.053)	961403	40.0000	38.4
12 Benzyl alcohol	108	4.644	4.644	(1.025)	393855	40.0000	38.9(H)
15 o-Cresol	107	4.735	4.735	(1.045)	498576	40.0000	38.5
18 m,p-Cresols	107	4.887	4.887	(1.079)	652539	40.0000	39.8

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
17 N-Nitrosodipropylamine	70	4.906	4.906	(1.083)	454801	40.0000	38.1
19 Hexachloroethane	117	5.025	5.025	(1.109)	280201	40.0000	37.5
21 Nitrobenzene	77	5.082	5.082	(0.877)	684707	40.0000	37.8
22 Isophorone	82	5.320	5.320	(0.918)	1221372	40.0000	36.6
23 2-Nitrophenol	139	5.397	5.397	(0.931)	329005	40.0000	39.5
24 2,4-Dimethylphenol	122	5.420	5.420	(0.935)	557217	40.0000	37.6
25 bis(2-Chloroethoxy)methane	93	5.525	5.525	(0.953)	658886	40.0000	35.2
26 2,4-Dichlorophenol	162	5.644	5.644	(0.974)	516992	40.0000	38.6
27 Benzoic acid	105	5.539	5.539	(0.956)	287142	40.0000	41.9
28 1,2,4-Trichlorobenzene	180	5.735	5.735	(0.989)	655648	40.0000	36.4
30 Naphthalene	128	5.820	5.820	(1.004)	1895442	40.0000	35.4
204 alpha-Terpineol	59	5.816	5.816	(1.003)	496172	40.0000	36.0
31 4-Chloroaniline	127	5.863	5.863	(1.012)	678318	40.0000	38.4
32 Hexachlorobutadiene	225	5.939	5.939	(1.025)	420920	40.0000	37.6
33 4-Chloro-3-methylphenol	107	6.354	6.354	(1.096)	560118	40.0000	38.7
34 2-Methylnaphthalene	142	6.539	6.539	(1.128)	1347856	40.0000	37.6
35 1-Methylnaphthalene	142	6.649	6.649	(1.147)	1269859	40.0000	36.1
36 Hexachlorocyclopentadiene	237	6.706	6.706	(0.875)	293896	40.0000	33.8
205 2,3-Dichloroaniline	161	6.835	6.835	(0.892)	663240	40.0000	35.8
37 2,4,6-Trichlorophenol	196	6.835	6.835	(0.892)	401928	40.0000	37.2
38 2,4,5-Trichlorophenol	196	6.873	6.873	(0.897)	450584	40.0000	39.3
40 2-Chloronaphthalene	162	7.063	7.063	(0.922)	1277487	40.0000	36.9
42 o-Nitroaniline	65	7.163	7.163	(0.935)	363688	40.0000	37.8
41 m-Nitroaniline	138	7.606	7.606	(0.993)	282391	40.0000	38.6
43 Dimethylphthalate	163	7.363	7.363	(0.961)	1455357	40.0000	37.0
44 2,6-Dinitrotoluene	165	7.425	7.425	(0.969)	328490	40.0000	37.0
50 2,4-Dinitrotoluene	165	7.854	7.854	(1.025)	419181	40.0000	36.8
45 Acenaphthylene	152	7.511	7.511	(0.980)	2073418	40.0000	35.6
47 Acenaphthene	154	7.697	7.697	(1.004)	1261448	40.0000	33.8
48 2,4-Dinitrophenol	184	7.711	7.711	(1.006)	122866	40.0000	42.0
49 Dibenzofuran	168	7.878	7.878	(1.028)	1794261	40.0000	36.7
51 Diethylphthalate	149	8.111	8.111	(1.058)	1503769	40.0000	36.6
52 4-Nitrophenol	139	7.768	7.768	(1.014)	201873	40.0000	42.2
53 Fluorene	166	8.249	8.249	(1.076)	1508548	40.0000	33.3
54 4-Chlorophenylphenylether	204	8.239	8.239	(1.075)	759775	40.0000	34.8
55 2-Methyl-4,6-dinitrophenol	198	8.297	8.297	(0.896)	265115	40.0000	48.7
56 p-Nitroaniline	138	8.263	8.263	(1.078)	259438	40.0000	40.1
133 Diphenylamine	169	8.368	8.368	(0.903)	1225948	40.0000	36.8
58 1,2-Diphenylhydrazine	77	8.416	8.416	(0.908)	1489780	40.0000	38.1
61 4-Bromophenylphenylether	248	8.768	8.768	(0.947)	430063	40.0000	34.2
63 Hexachlorobenzene	284	8.839	8.839	(0.954)	459277	40.0000	35.1
65 Pentachlorophenol	266	9.049	9.049	(0.977)	231262	40.0000	39.7
206 n-Octadecane	57	9.125	9.125	(0.985)	1034683	40.0000	39.6
68 Phenanthrene	178	9.292	9.292	(1.003)	2175678	40.0000	35.4
69 Anthracene	178	9.344	9.344	(1.009)	2174061	40.0000	34.0
72 Di-n-butylphthalate	149	9.873	9.873	(1.066)	2490757	40.0000	37.2
76 Fluoranthene	202	10.573	10.573	(1.141)	2352940	40.0000	35.1

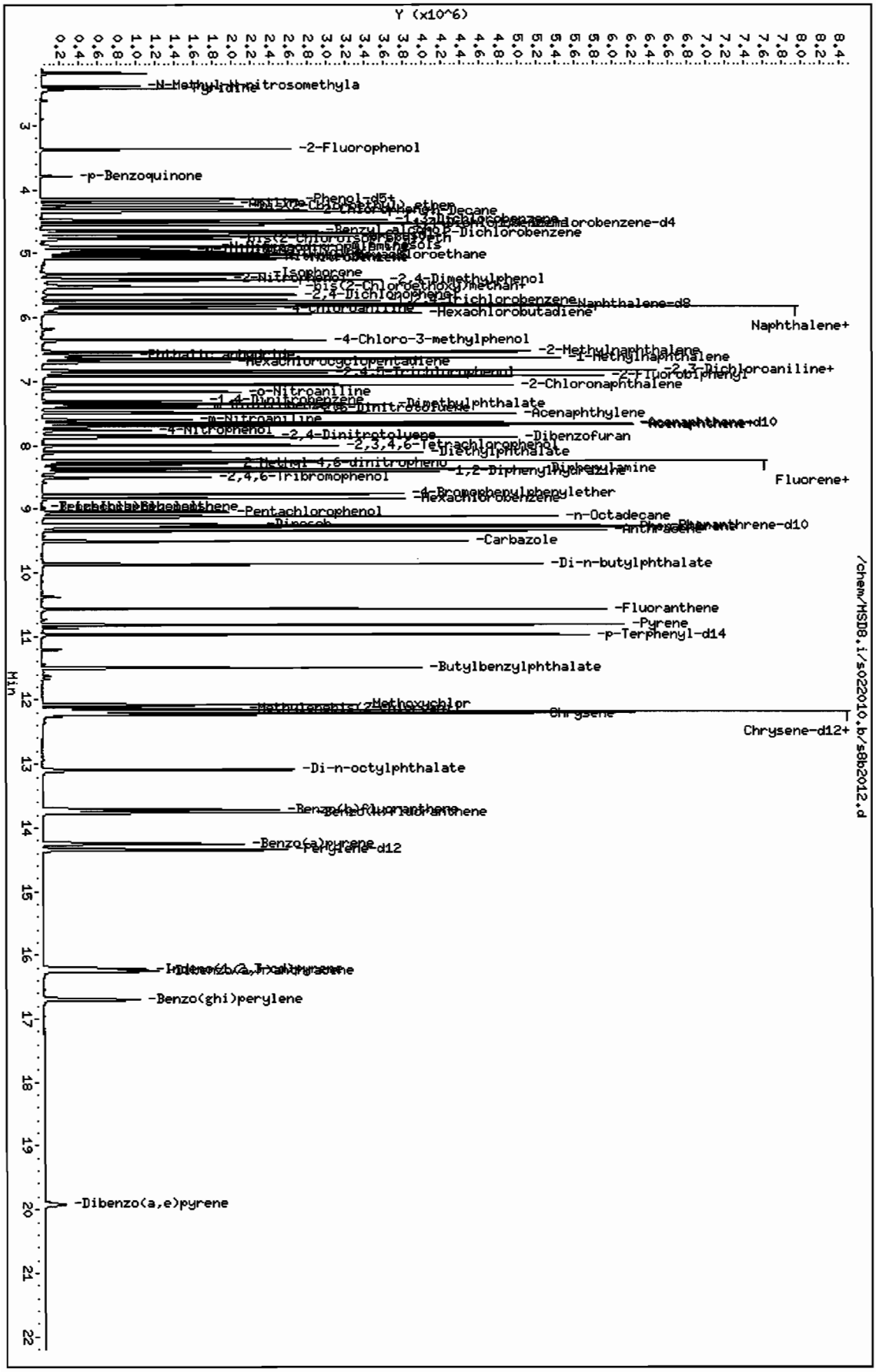
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
79 Pyrene	202	10.820	10.820	(0.887)	2427617	40.0000	33.8
85 Butylbenzylphthalate	149	11.497	11.497	(0.943)	968576	40.0000	38.5
89 Benzo(a)anthracene	228	12.178	12.178	(0.998)	2076405	40.0000	34.3
92 Chrysene	228	12.230	12.230	(1.003)	1918472	40.0000	36.3
93 bis(2-Ethylhexyl)phthalate	149	12.182	12.182	(0.999)	1357026	40.0000	38.6
94 Di-n-octylphthalate	149	13.097	13.097	(0.912)	1865222	40.0000	39.8
95 Benzo(b)fluoranthene	252	13.720	13.720	(0.956)	1601785	40.0000	37.1(H)
96 Benzo(k)fluoranthene	252	13.768	13.768	(0.959)	1589110	40.0000	36.6
97 Benzo(a)pyrene	252	14.254	14.254	(0.993)	1356428	40.0000	37.3
99 Indeno(1,2,3-cd)pyrene	276	16.220	16.220	(1.130)	1053996	40.0000	34.9
100 Dibenzo(a,h)anthracene	278	16.254	16.254	(1.132)	798414	40.0000	34.2
101 Benzo(ghi)perylene	276	16.701	16.701	(1.164)	822104	40.0000	32.9
126 m-Dinitrobenzene	168	7.392	7.392	(0.965)	219071	40.0000	38.6
130 2,3,4,6-Tetrachlorophenol	232	8.001	8.001	(1.044)	352660	40.0000	36.2
143 Dinoseb	211	9.239	9.239	(0.997)	303786	40.0000	39.3
173 Carbazole	167	9.511	9.511	(1.027)	1705240	40.0000	37.3
184 p-Benzoquinone	54	3.787	3.787	(0.836)	71181	40.0000	26.2
192 Methoxychlor	227	12.078	12.078	(0.990)	1233392	40.0000	37.4
211 p-Toluidine	106	4.949	4.949	(1.093)	544571	40.0000	31.1
210 m-Toluidine	106	4.982	4.982	(1.100)	884790	40.0000	38.8
26 Phthalic anhydride	104	6.597	6.597	(1.138)	432011	40.0000	53.9
179 Dibenzo(a,e)pyrene	302	19.925	19.925	(1.388)	229221	40.0000	23.1
214 1,4-Dinitrobenzene	75	7.311	7.311	(0.954)	239338	40.0000	39.8
215 2-Ethoxyethanol	59	2.177	2.177	(0.481)	360665	40.0000	41.0
216 Methylenebis(2-chloroaniline)	231	12.135	12.135	(0.995)	276453	40.0000	41.7(Q)
M 222 Trichlorophenols	196				852512	80.0000	76.5
M 223 Tetrachlorophenols	232				352660	40.0000	36.2
M 224 Benzo(b,k)fluoranthene	252				3190895	80.0000	73.8

QC Flag Legend

Q - Qualifier signal failed the ratio test.
H - Operator selected an alternate compound hit.

Data File: /chem/MSD8.i/s022010.b/s8b2012.d
Date : 20-FEB-2010 18:09
Client ID: MEGAICV
Sample Info: IWBN100215-05.1|40 PPM|1|SVMI1|MEGAICV
Column phase: J&W DB-5MS

Instrument: MSD8.i
Operator: nagl
Column diameter: 0.20



Data File: /chem/MSD8.i/s022010.b/s8b2035.d
Report Date: 23-Feb-2010 13:31

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD8.i
Lab File ID: s8b2035.d
Analysis Type:
Lab Sample ID: WBN100218-08.1 Quant Type: ISTD
Method: /chem/MSD8.i/s022010.b/MSD8-8270AQA-022010.m

Injection Date: 21-FEB-2010 19:53
Init. Cal. Date(s): 20-FEB-2010 22-FEB-2010
Init. Cal. Times: 12:55 01:19

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
209 Benzaldehyde	0.84330	0.69688	0.69688	0.000	-17.36320	60.00000	Averaged
16 Acetophenone	1.20309	1.14109	1.14109	0.000	-5.15283	60.00000	Averaged
189 Caprolactam	0.06655	0.06831	0.06831	0.000	2.63428	60.00000	Averaged
208 1,1'-Biphenyl	1.22219	1.19703	1.19703	0.000	-2.05853	60.00000	Averaged
207 Atrazine	0.03531	0.03806	0.03806	0.000	7.78782	60.00000	Averaged
77 Benzidine	41.98033	40.00000	0.31874	0.000	4.95082	60.00000	Linear
90 3,3'-Dichlorobenzidine	0.24780	0.27320	0.27320	0.000	10.24947	60.00000	Averaged
102 1,4-Dioxane	0.32319	0.37708	0.37708	0.000	16.67521	60.00000	Averaged
103 Methyl methacrylate	0.16817	0.19675	0.19675	0.000	16.99914	60.00000	Averaged
104 Ethyl methacrylate	0.67963	0.79943	0.79943	0.000	17.62812	60.00000	Averaged
105 2-Picoline	1.09294	1.07981	1.07981	0.000	-1.20157	60.00000	Averaged
106 N-Nitrosomethylethylamine	0.43986	0.46246	0.46246	0.000	5.13741	60.00000	Averaged
107 Methyl methanesulfonate	0.49950	0.54492	0.54492	0.000	9.09235	60.00000	Averaged
108 N-Nitrosodiethylamine	0.45804	0.47767	0.47767	0.000	4.28449	60.00000	Averaged
109 Ethyl Methanesulfonate	0.60902	0.73730	0.73730	0.000	21.06290	60.00000	Averaged
110 Pentachloroethane	0.32092	0.43327	0.43327	0.000	35.01075	60.00000	Averaged
111 N-Nitrosopyrrolidine	0.49059	0.49284	0.49284	0.000	0.45905	60.00000	Averaged
113 N-Nitrosomorpholine	0.66385	0.70342	0.70342	0.000	5.95974	60.00000	Averaged
114 o-Toluidine	1.62183	1.64404	1.64404	0.000	1.36960	60.00000	Averaged
115 N-Nitrosopiperidine	0.12437	0.12589	0.12589	0.000	1.22448	60.00000	Averaged
116 a,a-Dimethylphenethylamine	0.74304	0.77809	0.77809	0.000	4.71795	60.00000	Averaged
118 2,6-Dichlorophenol	0.20154	0.20467	0.20467	0.000	1.55320	60.00000	Averaged
119 Hexachloropropene	0.12360	0.18944	0.18944	0.000	53.26602	60.00000	Averaged
120 p-Phenylenediamine	0.19655	0.20159	0.20159	0.000	2.56438	60.00000	Averaged
121 N-Nitrosodi-n-butylamine	0.21161	0.22736	0.22736	0.000	7.44405	60.00000	Averaged
122 Safrole	0.19334	0.21416	0.21416	0.000	10.76780	60.00000	Averaged
123 1,2,4,5-Tetrachlorobenzene	0.47582	0.48716	0.48716	0.000	2.38273	60.00000	Averaged
124 Isosafrole	0.32130	0.41354	0.41354	0.000	28.70739	60.00000	Averaged
125 1,4-Naphthoquinone	0.29641	0.29356	0.29356	0.000	-0.96298	60.00000	Averaged
127 Pentachlorobenzene	0.43422	0.41984	0.41984	0.000	-3.31212	60.00000	Averaged
128 1-Naphthylamine	0.84230	0.87716	0.87716	0.000	4.13822	60.00000	Averaged
129 2-Naphthylamine	0.88763	0.93442	0.93442	0.000	5.27090	60.00000	Averaged
131 5-Nitro-o-toluidine	0.24122	0.24992	0.24992	0.000	3.60687	60.00000	Averaged
136 1,3,5-Trinitrobenzene	0.09499	0.13160	0.13160	0.000	38.54101	60.00000	Averaged
137 Phenacetin	0.21690	0.22945	0.22945	0.000	5.79020	60.00000	Averaged
138 Diallate	0.20203	0.19101	0.19101	0.000	-5.45490	60.00000	Averaged

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD8.i Injection Date: 21-FEB-2010 19:53
Lab File ID: s8b2035.d Init. Cal. Date(s): 20-FEB-2010 22-FEB-2010
Analysis Type: Init. Cal. Times: 12:55 01:19
Lab Sample ID: WBN100218-08.1 Quant Type: ISTD
Method: /chem/MSD8.i/s022010.b/MSD8-8270AQA-022010.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
212 Cis Diallate	0.20071	0.25770	0.25770	0.000	28.39010	60.00000	Averaged
213 Trans Diallate	0.23769	0.22472	0.22472	0.000	-5.45490	60.00000	Averaged
140 4-Aminobiphenyl	0.51727	0.55152	0.55152	0.000	6.62074	60.00000	Averaged
141 Pentachloronitrobenzene	0.07936	0.08310	0.08310	0.000	4.70392	60.00000	Averaged
142 Pronamide	0.25230	0.26699	0.26699	0.000	5.82308	60.00000	Averaged
146 4-Nitroquinoline-1-oxide	0.01907	0.01438	0.01438	0.000	-24.58503	60.00000	Averaged
147 Methapyrilene	0.29186	0.32275	0.32275	0.000	10.58368	60.00000	Averaged
148 Isodrin	0.10718	0.09605	0.09605	0.000	-10.38226	60.00000	Averaged
149 Aramite	0.03388	0.03359	0.03359	0.000	-0.86154	60.00000	Averaged
150 Kepone	0.07795	0.07692	0.07692	0.000	-1.31942	60.00000	Averaged
151 p-(Dimethylamino)azobenzene	0.25808	0.27705	0.27705	0.000	7.35059	60.00000	Averaged
152 Chlorobenzilate	0.26271	0.28217	0.28217	0.000	7.40895	60.00000	Averaged
153 3,3'-Dimethylbenzidine	0.45535	0.49139	0.49139	0.000	7.91309	60.00000	Averaged
155 2-Acetylaminofluorene	42.39036	40.00000	0.24154	0.000	5.97589	60.00000	Linear
157 7,12Dimethylbenz(a)anthrace	0.51909	0.49026	0.49026	0.000	-5.55329	60.00000	Averaged
158 3-Methylcholanthrene	0.36780	0.40291	0.40291	0.000	9.54489	60.00000	Averaged

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Data file : /chem/MSD8.i/s022010.b/s8b2035.d
Lab Smp Id: WBN100218-08.1 Client Smp ID: APICV
Inj Date : 21-FEB-2010 19:53
Operator : nagl Inst ID: MSD8.i
Smp Info : |WBN100218-08.1|40 PPM|1|SVM|1|APICV
Misc Info : |MSD8270|WBN100217-01
Comment : Column: J & W DB-5MS, 25m x 0.20 mm x 0.33 micron film
Method : /chem/MSD8.i/s022010.b/MSD8-8270AQA-022010.m
Meth Date : 23-Feb-2010 13:31 nat00999 Quant Type: ISTD
Cal Date : 22-FEB-2010 00:48 Cal File: s8b2045.d
Als bottle: 23 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AP12.sub
Target Version: 3.50
Processing Host: hpclp1

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
* 10 1,4-Dichlorobenzene-d4	152	4.530	4.530	(1.000)	649861	40.0000	
* 29 Naphthalene-d8	136	5.796	5.796	(1.000)	2469894	40.0000	
* 46 Acenaphthene-d10	164	7.658	7.658	(1.000)	1465298	40.0000	
* 67 Phenanthrene-d10	188	9.263	9.263	(1.000)	2747481	40.0000	
* 91 Chrysene-d12	240	12.192	12.192	(1.000)	2214467	40.0000	
* 98 Perylene-d12	264	14.349	14.349	(1.000)	1648118	40.0000	
209 Benzaldehyde	77	4.125	4.125	(0.911)	452872	40.0000	33.0
16 Acetophenone	105	4.906	4.906	(1.083)	741552	40.0000	37.9
189 Caprolactam	113	6.225	6.225	(1.074)	168712	40.0000	41.0(H)
208 1,1'-Biphenyl	154	7.034	7.034	(0.919)	1754011	40.0000	39.2
207 Atrazine	173	8.939	8.939	(0.965)	104582	40.0000	43.1
77 Benzidine	184	10.706	10.706	(0.878)	705844	40.0000	42.0
90 3,3'-Dichlorobenzidine	252	12.130	12.130	(0.995)	604986	40.0000	44.1
102 1,4-Dioxane	88	2.177	2.177	(0.481)	245052	40.0000	46.7
103 Methyl methacrylate	100	2.177	2.177	(0.481)	127862	40.0000	46.8
104 Ethyl methacrylate	69	2.692	2.692	(0.594)	519520	40.0000	47.0
105 2-Picoline	93	2.939	2.939	(0.649)	701726	40.0000	39.5
106 N-Nitrosomethylethylamine	88	3.011	3.011	(0.665)	300533	40.0000	42.0
107 Methyl methanesulfonate	80	3.239	3.239	(0.715)	354120	40.0000	43.6
108 N-Nitrosodiethylamine	102	3.568	3.568	(0.788)	310419	40.0000	41.7
109 Ethyl Methanesulfonate	79	3.806	3.806	(0.840)	479140	40.0000	48.4
110 Pentachloroethane	167	4.268	4.268	(0.942)	281568	40.0000	54.0
111 N-Nitrosopyrrolidine	100	4.887	4.887	(1.079)	320276	40.0000	40.2(Q)
113 N-Nitrosomorpholine	56	4.925	4.925	(1.087)	457122	40.0000	42.4
114 o-Toluidine	106	4.944	4.944	(1.091)	1068400	40.0000	40.5
115 N-Nitrosopiperidine	114	5.230	5.230	(0.902)	310940	40.0000	40.5

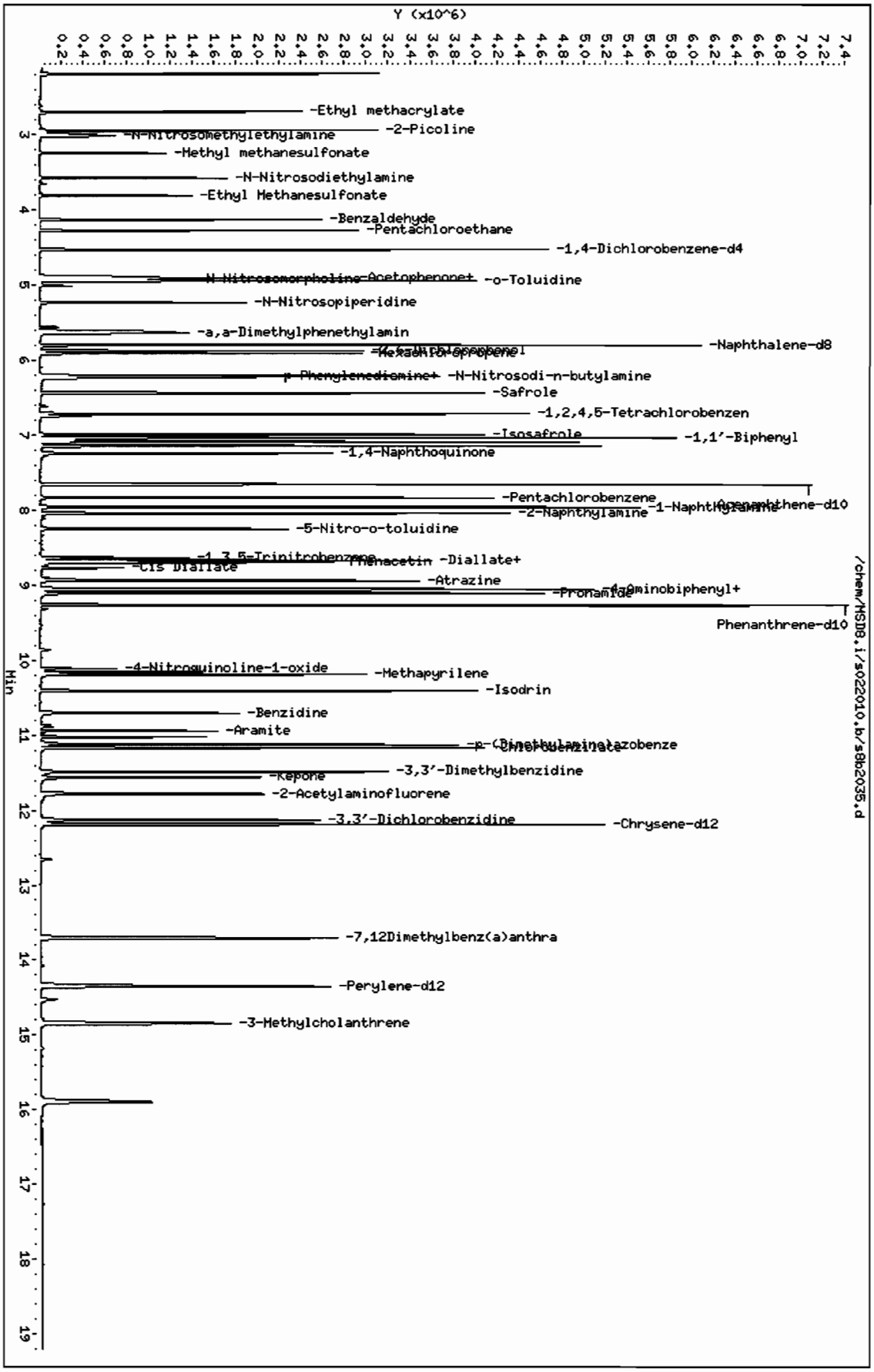
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
116 a,a-Dimethylphenethylamine	58	5.630	5.630	(0.971)	1921805	40.0000	41.9
118 2,6-Dichlorophenol	162	5.872	5.872	(1.013)	505519	40.0000	40.6
119 Hexachloropropene	213	5.906	5.906	(1.019)	467897	40.0000	61.3
120 p-Phenylenediamine	108	6.230	6.230	(1.075)	497912	40.0000	41.0
121 N-Nitrosodi-n-butylamine	84	6.211	6.211	(1.071)	561557	40.0000	43.0
122 Safrole	162	6.439	6.439	(1.111)	528955	40.0000	44.3
123 1,2,4,5-Tetrachlorobenzene	216	6.715	6.715	(0.877)	713829	40.0000	41.0
124 Isosafrole	162	6.992	6.992	(0.913)	605957	40.0000	51.5
125 1,4-Naphthoquinone	158	7.244	7.244	(0.946)	430153	40.0000	39.6
127 Pentachlorobenzene	250	7.830	7.830	(1.022)	615188	40.0000	38.7
128 1-Naphthylamine	143	7.958	7.958	(1.039)	1285298	40.0000	41.6
129 2-Naphthylamine	143	8.044	8.044	(1.050)	1369199	40.0000	42.1
131 5-Nitro-o-toluidine	152	8.249	8.249	(1.077)	366207	40.0000	41.4
136 1,3,5-Trinitrobenzene	75	8.634	8.634	(0.932)	361581	40.0000	55.4
137 Phenacetin	108	8.701	8.701	(0.939)	630422	40.0000	42.3(Q)
138 Diallate	86	8.673	8.673	(0.936)	524804	40.0000	37.8
212 Cis Diallate	86	8.768	8.768	(0.947)	106203	6.00000	7.7
213 Trans Diallate	86	8.673	8.673	(0.936)	524804	34.0000	32.1
140 4-Aminobiphenyl	169	9.049	9.049	(0.977)	1515283	40.0000	42.6
141 Pentachloronitrobenzene	237	9.063	9.063	(0.978)	228304	40.0000	41.9(Q)
142 Pronamide	173	9.106	9.106	(0.983)	733556	40.0000	42.3
146 4-Nitroquinoline-1-oxide	101	10.111	10.111	(1.091)	39509	40.0000	30.2
147 Methapyrilene	58	10.192	10.192	(1.100)	886744	40.0000	44.2
148 Isodrin	193	10.411	10.411	(1.124)	263898	40.0000	35.8
149 Aramite	185	10.944	10.944	(1.181)	92281	40.0000	39.6
150 Kepone	272	11.563	11.563	(1.248)	211334	40.0000	39.5
151 p-(Dimethylamino)azobenzene	120	11.125	11.125	(0.912)	613518	40.0000	42.9
152 Chlorobenzilate	251	11.173	11.173	(0.916)	624855	40.0000	43.0
153 3,3'-Dimethylbenzidine	212	11.487	11.487	(0.942)	1088156	40.0000	43.2
155 2-Acetylaminofluorene	181	11.782	11.782	(0.966)	534890	40.0000	42.4
157 7,12Dimethylbenz(a)anthracene	256	13.706	13.706	(0.955)	808013	40.0000	37.8
158 3-Methylcholanthrene	268	14.849	14.849	(1.035)	664045	40.0000	43.8(Q)

QC Flag Legend

Q - Qualifier signal failed the ratio test.
H - Operator selected an alternate compound hit.

Data File: /chem/MSD8.i/s022010.b/s8b2035.d
Date : 21-FEB-2010 19:53
Client ID: APICV
Sample Info: IWBN100218-08.1|40 PPM|1|SVM|1|APICV
Column phase: J&W DB-5MS

Instrument: MSD8.i
Operator: nagl
Column diameter: 0.20



Page 1

Data File: /chem/MSD8.i/s031710.b/s8c1702.d
Report Date: 17-Mar-2010 13:57

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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD8.i
Lab File ID: s8c1702.d
Analysis Type:
Lab Sample ID: WBN100309-05.3
Method: /chem/MSD8.i/s031710.b/MSD8-8270AQA-022010.m

Injection Date: 17-MAR-2010 09:03
Init. Cal. Date(s): 20-FEB-2010 22-FEB-2010
Init. Cal. Times: 12:55 01:19
Quant Type: ISTD

	COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
$	3 2-Fluorophenol	0.94435	0.92194	0.92194	0.000	-2.37293	60.00000	Averaged
$	5 Phenol-d5	1.17771	1.19364	1.19364	0.000	1.35334	60.00000	Averaged
$	20 Nitrobenzene-d5	0.28435	0.27267	0.27267	0.000	-4.10545	60.00000	Averaged
$	39 2-Fluorobiphenyl	1.17740	1.06014	1.06014	0.000	-9.95855	60.00000	Averaged
$	60 2,4,6-Tribromophenol	0.13223	0.11071	0.11071	0.000	-16.27478	60.00000	Averaged
$	81 p-Terphenyl-d14	0.72015	0.64823	0.64823	0.000	-9.98682	60.00000	Averaged
	1 N-Methyl-N-nitrosomethylami	0.60923	0.60764	0.60764	0.000	-0.26103	60.00000	Averaged
	2 Pyridine	0.89373	0.85223	0.85223	0.000	-4.64341	60.00000	Averaged
	4 Aniline	0.55542	0.52361	0.52361	0.000	-5.72854	60.00000	Averaged
	6 Phenol	1.21617	1.21533	1.21533	0.001	-0.06930	20.00000	Averaged ccc
	7 bis(2-Chloroethyl) ether	0.83144	0.83718	0.83718	0.000	0.69020	60.00000	Averaged
	8 2-Chlorophenol	1.05605	1.03337	1.03337	0.000	-2.14761	60.00000	Averaged
	203 n-Decane	1.08949	1.05165	1.05165	0.000	-3.47401	60.00000	Averaged
	9 1,3-Dichlorobenzene	1.25240	1.19968	1.19968	0.000	-4.20906	60.00000	Averaged
	11 1,4-Dichlorobenzene	1.29215	1.24405	1.24405	0.001	-3.72303	20.00000	Averaged ccc
	13 1,2-Dichlorobenzene	1.20194	1.15125	1.15125	0.000	-4.21701	60.00000	Averaged
	14 bis(2-Chloroisopropyl)ether	1.63019	1.52603	1.52603	0.000	-6.38980	60.00000	Averaged
	12 Benzyl alcohol	0.66057	0.53473	0.53473	0.000	-19.05072	60.00000	Averaged
	15 o-Cresol	0.84463	0.79566	0.79566	0.000	-5.79778	60.00000	Averaged
	18 m,p-Cresols	1.06890	0.99513	0.99513	0.000	-6.90081	60.00000	Averaged
	17 N-Nitrosodipropylamine	0.77788	0.78182	0.78182	0.050	0.50677	60.00000	Averaged spcc
	19 Hexachloroethane	0.48694	0.46532	0.46532	0.000	-4.44140	60.00000	Averaged
	21 Nitrobenzene	0.29331	0.27908	0.27908	0.000	-4.85078	60.00000	Averaged
	22 Isophorone	0.53999	0.53410	0.53410	0.000	-1.09197	60.00000	Averaged
	23 2-Nitrophenol	0.13462	0.13398	0.13398	0.001	-0.47400	20.00000	Averaged ccc
	24 2,4-Dimethylphenol	0.23932	0.22250	0.22250	0.000	-7.02826	60.00000	Averaged
	25 bis(2-Chloroethoxy)methane	0.30282	0.31147	0.31147	0.000	2.85810	60.00000	Averaged
	26 2,4-Dichlorophenol	0.21654	0.20609	0.20609	0.001	-4.82539	20.00000	Averaged ccc
	27 Benzoic acid	33.98635	40.00000	0.08182	0.000	-15.03413	60.00000	Linear
	28 1,2,4-Trichlorobenzene	0.29118	0.26094	0.26094	0.000	-10.38659	60.00000	Averaged
	30 Naphthalene	38.55168	40.00000	0.83881	0.000	-3.62079	60.00000	Linear
	204 alpha-Terpineol	0.22259	0.23719	0.23719	0.000	6.56344	60.00000	Averaged
	31 4-Chloroaniline	0.28585	0.27101	0.27101	0.000	-5.19154	60.00000	Averaged
	32 Hexachlorobutadiene	0.18110	0.15170	0.15170	0.001	-16.23238	20.00000	Averaged ccc
	33 4-Chloro-3-methylphenol	0.23429	0.21168	0.21168	0.001	-9.65167	20.00000	Averaged ccc
	34 2-Methylnaphthalene	37.47912	40.00000	0.54361	0.000	-6.30220	60.00000	Linear

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD8.i Injection Date: 17-MAR-2010 09:03
Lab File ID: s8c1702.d Init. Cal. Date(s): 20-FEB-2010 22-FEB-2010
Analysis Type: Init. Cal. Times: 12:55 01:19
Lab Sample ID: WBN100309-05.3 Quant Type: ISTD
Method: /chem/MSD8.i/s031710.b/MSD8-8270AQA-022010.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
35 1-Methylnaphthalene	38.34044	40.00000	0.54573	0.000	-4.14889	60.00000	Linear
36 Hexachlorocyclopentadiene	0.24827	0.15489	0.15489	0.050	-37.61162	60.00000	Averaged spcc
205 2,3-Dichloroaniline	0.52803	0.49280	0.49280	0.000	-6.67349	60.00000	Averaged
37 2,4,6-Trichlorophenol	0.30819	0.27228	0.27228	0.001	-11.64994	20.00000	Averaged ccc
38 2,4,5-Trichlorophenol	0.32711	0.26716	0.26716	0.000	-18.32591	60.00000	Averaged
40 2-Chloronaphthalene	35.88565	40.00000	0.88352	0.000	-10.28588	60.00000	Linear
42 o-Nitroaniline	0.27392	0.25593	0.25593	0.000	-6.56837	60.00000	Averaged
41 m-Nitroaniline	0.20877	0.17701	0.17701	0.000	-15.21115	60.00000	Averaged
43 Dimethylphthalate	1.12088	1.04347	1.04347	0.000	-6.90589	60.00000	Averaged
44 2,6-Dinitrotoluene	0.25341	0.23798	0.23798	0.000	-6.08973	60.00000	Averaged
50 2,4-Dinitrotoluene	0.32492	0.29206	0.29206	0.000	-10.11383	60.00000	Averaged
45 Acenaphthylene	1.66068	1.44939	1.44939	0.000	-12.72364	60.00000	Averaged
47 Acenaphthene	1.06294	0.90884	0.90884	0.001	-14.49786	20.00000	Averaged ccc
48 2,4-Dinitrophenol	34.05580	40.00000	0.06235	0.050	-14.86049	60.00000	Linear spcc
49 Dibenzofuran	1.39464	1.23401	1.23401	0.000	-11.51778	60.00000	Averaged
51 Diethylphthalate	1.17311	1.07999	1.07999	0.000	-7.93833	60.00000	Averaged
52 4-Nitrophenol	0.13654	0.11689	0.11689	0.050	-14.38960	60.00000	Averaged spcc
53 Fluorene	1.29100	1.09856	1.09856	0.000	-14.90604	60.00000	Averaged
54 4-Chlorophenylphenylether	0.62173	0.51787	0.51787	0.000	-16.70508	60.00000	Averaged
55 2-Methyl-4,6-dinitrophenol	36.55683	40.00000	0.07155	0.000	-8.60793	60.00000	Linear
56 p-Nitroaniline	0.18448	0.13189	0.13189	0.000	-28.50392	60.00000	Averaged
133 Diphenylamine	0.50546	0.48972	0.48972	0.001	-3.11419	20.00000	Averaged ccc
58 1,2-Diphenylhydrazine	0.59375	0.60285	0.60285	0.000	1.53400	60.00000	Averaged
61 4-Bromophenylphenylether	0.19114	0.18172	0.18172	0.000	-4.92831	60.00000	Averaged
63 Hexachlorobenzene	0.19866	0.18482	0.18482	0.000	-6.96723	60.00000	Averaged
65 Pentachlorophenol	0.08849	0.07666	0.07666	0.001	-13.36670	20.00000	Averaged ccc
206 n-Octadecane	0.39703	0.46591	0.46591	0.000	17.35054	60.00000	Averaged
68 Phenanthrene	36.68910	40.00000	0.85830	0.000	-8.27726	60.00000	Linear
69 Anthracene	0.97083	0.85409	0.85409	0.000	-12.02504	60.00000	Averaged
72 Di-n-butylphthalate	1.01476	1.10221	1.10221	0.000	8.61786	60.00000	Averaged
76 Fluoranthene	1.01786	0.85931	0.85931	0.001	-15.57687	20.00000	Averaged ccc
79 Pyrene	1.24889	1.08176	1.08176	0.000	-13.38236	60.00000	Averaged
85 Butylbenzylphthalate	0.43672	0.47814	0.47814	0.000	9.48372	60.00000	Averaged
89 Benzo(a)anthracene	1.05261	0.89438	0.89438	0.000	-15.03254	60.00000	Averaged
92 Chrysene	36.25815	40.00000	0.83186	0.000	-9.35462	60.00000	Linear
93 bis(2-Ethylhexyl)phthalate	0.61117	0.73595	0.73595	0.000	20.41602	60.00000	Averaged

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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD8.i Injection Date: 17-MAR-2010 09:03
Lab File ID: s8c1702.d Init. Cal. Date(s): 20-FEB-2010 22-FEB-2010
Analysis Type: Init. Cal. Times: 12:55 01:19
Lab Sample ID: WBN100309-05.3 Quant Type: ISTD
Method: /chem/MSD8.i/s031710.b/MSD8-8270AQA-022010.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
94 Di-n-octylphthalate	45.25404	40.00000	1.42163	0.001	13.13510	20.00000	Linear	ccc
95 Benzo(b)fluoranthene	1.13405	1.01605	1.01605	0.000	-10.40476	60.00000	Averaged	
96 Benzo(k)fluoranthene	1.14008	1.02574	1.02574	0.000	-10.02883	60.00000	Averaged	
97 Benzo(a)pyrene	0.95647	0.88115	0.88115	0.001	-7.87488	20.00000	Averaged	ccc
99 Indeno(1,2,3-cd)pyrene	0.79303	0.78255	0.78255	0.000	-1.32116	60.00000	Averaged	
100 Dibenzo(a,h)anthracene	0.61288	0.62570	0.62570	0.000	2.09199	60.00000	Averaged	
101 Benzo(ghi)perylene	0.65613	0.63015	0.63015	0.000	-3.95852	60.00000	Averaged	
126 m-Dinitrobenzene	0.16162	0.15102	0.15102	0.000	-6.55922	60.00000	Averaged	
130 2,3,4,6-Tetrachlorophenol	0.27739	0.22448	0.22448	0.000	-19.07249	60.00000	Averaged	
143 Dinoseb	37.57408	40.00000	0.10867	0.000	-6.06479	60.00000	Linear	
173 Carbazole	0.69337	0.48382	0.48382	0.000	-30.22145	60.00000	Averaged	
184 p-Benzoquinone	13.47614	40.00000	0.05180	0.000	-66.30965	60.00000	Linear	<-
192 Methoxychlor	0.57371	0.58666	0.58666	0.000	2.25735	60.00000	Averaged	
211 p-Toluidine	1.14055	1.04030	1.04030	0.000	-8.78975	60.00000	Averaged	
210 m-Toluidine	1.48620	1.30808	1.30808	0.000	-11.98517	60.00000	Averaged	
26 Phthalic anhydride	25.08974	40.00000	0.07129	0.000	-37.27564	60.00000	Linear	
179 Dibenzo(a,e)pyrene	0.26112	0.23574	0.23574	0.000	-9.72049	60.00000	Averaged	
214 1,4-Dinitrobenzene	0.17136	0.15463	0.15463	0.000	-9.76699	60.00000	Averaged	
215 2-Ethoxyethanol	0.57374	0.57032	0.57032	0.000	-0.59502	60.00000	Averaged	
216 Methylenebis(2-chloroanilin	21.75705	40.00000	0.05013	0.000	-45.60736	60.00000	Linear	
M 222 Trichlorophenols	0.31765	0.26972	0.26972	0.000	-15.08734	60.00000	Averaged	
M 223 Tetrachlorophenols	0.27739	0.22448	0.22448	0.000	-19.07249	60.00000	Averaged	
M 224 Benzo(b,k)fluoranthene	1.13706	1.02090	1.02090	0.000	-10.21629	60.00000	Averaged	

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Data file : /chem/MSD8.i/s031710.b/s8c1702.d
Lab Smp Id: WBN100309-05.3 Client Smp ID: MEGACVS
Inj Date : 17-MAR-2010 09:03
Operator : nagl Inst ID: MSD8.i
Smp Info : |WBN100309-05.3|CCV|1|SVM|1|MEGACVS
Misc Info : |MSD8270|WBN100310-01
Comment : Column: J & W DB-5MS, 25m x 0.20 mm x 0.33 micron film
Method : /chem/MSD8.i/s031710.b/MSD8-8270AQA-022010.m
Meth Date : 17-Mar-2010 13:57 nat00999 Quant Type: ISTD
Cal Date : 21-FEB-2010 23:15 Cal File: s8b2042.d
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: MEGAIICARE.sub
Target Version: 3.50
Processing Host: hpclp1

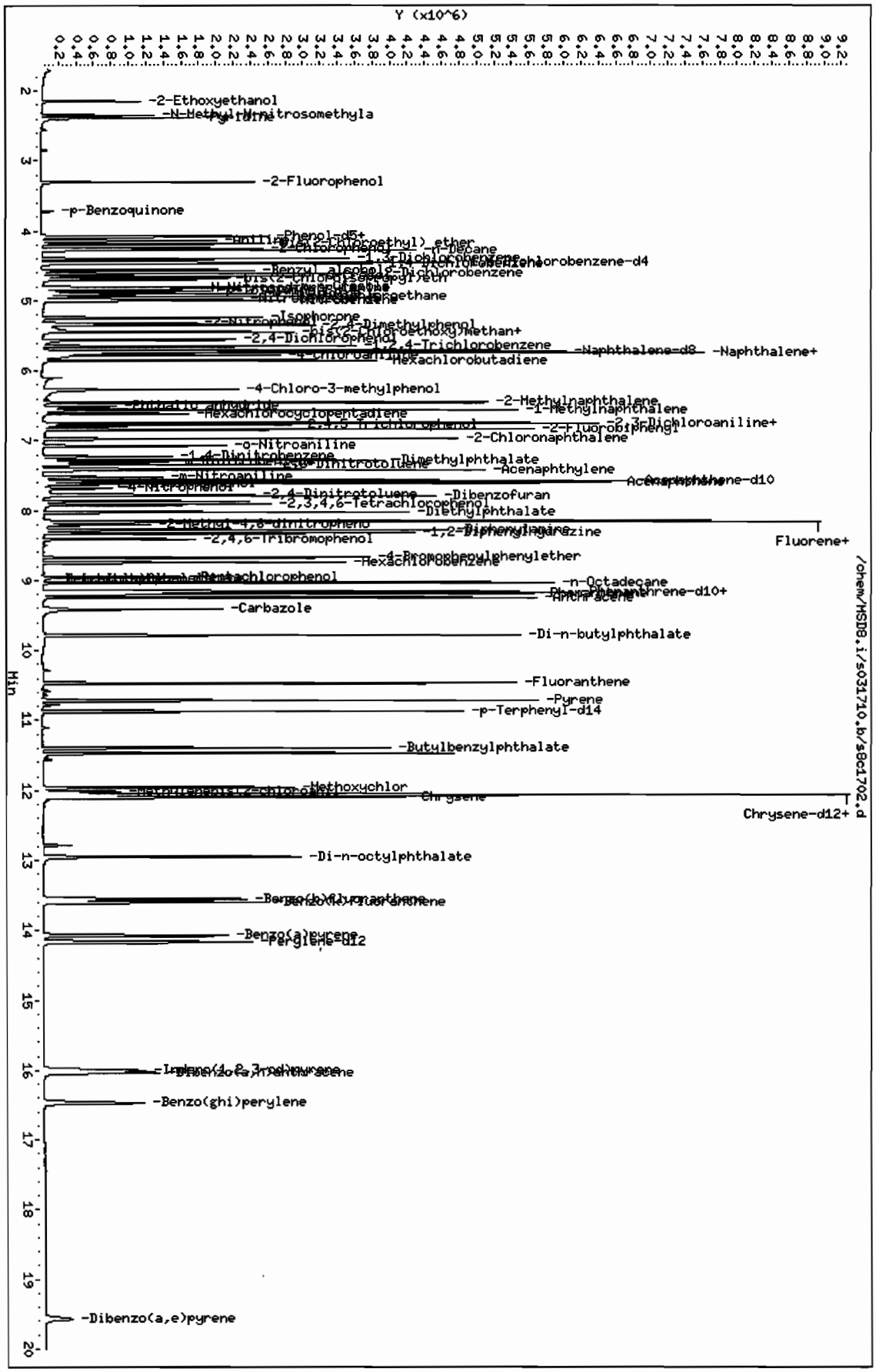
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
* 10 1,4-Dichlorobenzene-d4	152	4.454	4.454	(1.000)	631013	40.0000	
* 29 Naphthalene-d8	136	5.716	5.716	(1.000)	2533240	40.0000	
* 46 Acenaphthene-d10	164	7.573	7.573	(1.000)	1472232	40.0000	
* 67 Phenanthrene-d10	188	9.168	9.168	(1.000)	2413856	40.0000	
* 91 Chrysene-d12	240	12.073	12.073	(1.000)	2026104	40.0000	
* 98 Perylene-d12	264	14.173	14.173	(1.000)	1434831	40.0000	
$ 3 2-Fluorophenol	112	3.306	3.306	(0.742)	581754	40.0000	39.0
$ 5 Phenol-d5	99	4.077	4.077	(0.916)	753205	40.0000	40.5
$ 20 Nitrobenzene-d5	82	4.987	4.987	(0.873)	690744	40.0000	38.4
$ 39 2-Fluorobiphenyl	172	6.839	6.839	(0.903)	1560778	40.0000	36.0
$ 60 2,4,6-Tribromophenol	329	8.416	8.416	(1.111)	162985	40.0000	33.5
$ 81 p-Terphenyl-d14	244	10.878	10.878	(0.901)	1313375	40.0000	36.0
1 N-Methyl-N-nitrosomethylamine	74	2.349	2.349	(0.527)	383429	40.0000	39.9
2 Pyridine	79	2.382	2.382	(0.535)	537767	40.0000	38.1
4 Aniline	66	4.149	4.149	(0.932)	330402	40.0000	37.7
6 Phenol	94	4.087	4.087	(0.918)	766890	40.0000	40.0
7 bis(2-Chloroethyl) ether	63	4.192	4.192	(0.941)	528271	40.0000	40.3
8 2-Chlorophenol	128	4.254	4.254	(0.955)	652071	40.0000	39.1
203 n-Decane	43	4.277	4.277	(0.960)	663602	40.0000	38.6
9 1,3-Dichlorobenzene	146	4.401	4.401	(0.988)	757016	40.0000	38.3
11 1,4-Dichlorobenzene	146	4.473	4.473	(1.004)	785010	40.0000	38.5
13 1,2-Dichlorobenzene	146	4.616	4.616	(1.036)	726455	40.0000	38.3
14 bis(2-Chloroisopropyl)ether	45	4.697	4.697	(1.055)	962942	40.0000	37.4
12 Benzyl alcohol	108	4.568	4.568	(1.026)	337419	40.0000	32.4
15 o-Cresol	107	4.658	4.658	(1.046)	502070	40.0000	37.7
18 m,p-Cresols	107	4.816	4.816	(1.081)	627942	40.0000	37.2

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
17 N-Nitrosodipropylamine	70	4.835	4.835	(1.086)	493341	40.0000	40.2
19 Hexachloroethane	117	4.944	4.944	(1.110)	293620	40.0000	38.2
21 Nitrobenzene	77	5.006	5.006	(0.876)	706976	40.0000	38.0
22 Isophorone	82	5.239	5.239	(0.917)	1352997	40.0000	39.6
23 2-Nitrophenol	139	5.320	5.320	(0.931)	339403	40.0000	39.8
24 2,4-Dimethylphenol	122	5.344	5.344	(0.935)	563652	40.0000	37.2
25 bis(2-Chloroethoxy)methane	93	5.444	5.444	(0.952)	789039	40.0000	41.1
26 2,4-Dichlorophenol	162	5.558	5.558	(0.972)	522083	40.0000	38.1
27 Benzoic acid	105	5.439	5.439	(0.952)	207280	40.0000	34.0
28 1,2,4-Trichlorobenzene	180	5.649	5.649	(0.988)	661017	40.0000	35.8
30 Naphthalene	128	5.739	5.739	(1.004)	2124908	40.0000	38.6
204 alpha-Terpineol	59	5.735	5.735	(1.003)	600871	40.0000	42.6
31 4-Chloroaniline	127	5.782	5.782	(1.012)	686541	40.0000	37.9
32 Hexachlorobutadiene	225	5.854	5.854	(1.024)	384292	40.0000	33.5
33 4-Chloro-3-methylphenol	107	6.268	6.268	(1.097)	536224	40.0000	36.1
34 2-Methylnaphthalene	142	6.458	6.458	(1.130)	1377102	40.0000	37.5
35 1-Methylnaphthalene	142	6.563	6.563	(1.148)	1382473	40.0000	38.3
36 Hexachlorocyclopentadiene	237	6.616	6.616	(0.874)	228034	40.0000	25.0
205 2,3-Dichloroaniline	161	6.749	6.749	(0.891)	725509	40.0000	37.3
37 2,4,6-Trichlorophenol	196	6.749	6.749	(0.891)	400863	40.0000	35.3
38 2,4,5-Trichlorophenol	196	6.782	6.782	(0.896)	393324	40.0000	32.7
40 2-Chloronaphthalene	162	6.973	6.973	(0.921)	1300750	40.0000	35.9
42 o-Nitroaniline	65	7.077	7.077	(0.935)	376787	40.0000	37.4
41 m-Nitroaniline	138	7.520	7.520	(0.993)	260606	40.0000	33.9
43 Dimethylphthalate	163	7.278	7.278	(0.961)	1536234	40.0000	37.2
44 2,6-Dinitrotoluene	165	7.339	7.339	(0.969)	350359	40.0000	37.6
50 2,4-Dinitrotoluene	165	7.773	7.773	(1.026)	429977	40.0000	36.0
45 Acenaphthylene	152	7.420	7.420	(0.980)	2133831	40.0000	34.9
47 Acenaphthene	154	7.606	7.606	(1.004)	1338021	40.0000	34.2
48 2,4-Dinitrophenol	184	7.630	7.630	(1.008)	91795	40.0000	34.0
49 Dibenzofuran	168	7.787	7.787	(1.028)	1816751	40.0000	35.4
51 Diethylphthalate	149	8.025	8.025	(1.060)	1589992	40.0000	36.8
52 4-Nitrophenol	139	7.682	7.682	(1.014)	172088	40.0000	34.2
53 Fluorene	166	8.158	8.158	(1.077)	1617337	40.0000	34.0
54 4-Chlorophenylphenylether	204	8.154	8.154	(1.077)	762428	40.0000	33.3
55 2-Methyl-4,6-dinitrophenol	198	8.206	8.206	(0.895)	172710	40.0000	36.6
56 p-Nitroaniline	138	8.168	8.168	(1.079)	194178	40.0000	28.6
133 Diphenylamine	169	8.278	8.278	(0.903)	1182110	40.0000	38.8
58 1,2-Diphenylhydrazine	77	8.325	8.325	(0.908)	1455203	40.0000	40.6
61 4-Bromophenylphenylether	248	8.678	8.678	(0.946)	438640	40.0000	38.0
63 Hexachlorobenzene	284	8.749	8.749	(0.954)	446135	40.0000	37.2
65 Pentachlorophenol	266	8.954	8.954	(0.977)	185054	40.0000	34.6
206 n-Octadecane	57	9.035	9.035	(0.985)	1124649	40.0000	46.9
68 Phenanthrene	178	9.192	9.192	(1.003)	2071818	40.0000	36.7
69 Anthracene	178	9.249	9.249	(1.009)	2061652	40.0000	35.2
72 Di-n-butylphthalate	149	9.782	9.782	(1.067)	2660577	40.0000	43.4
76 Fluoranthene	202	10.473	10.473	(1.142)	2074246	40.0000	33.8

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
79 Pyrene	202	10.720	10.720	(0.888)	2191760	40.0000	34.6
85 Butylbenzylphthalate	149	11.397	11.397	(0.944)	968756	40.0000	43.8
89 Benzo(a)anthracene	228	12.059	12.059	(0.999)	1812100	40.0000	34.0
92 Chrysene	228	12.106	12.106	(1.003)	1685441	40.0000	36.2
93 bis(2-Ethylhexyl)phthalate	149	12.063	12.063	(0.999)	1491106	40.0000	48.2
94 Di-n-octylphthalate	149	12.954	12.954	(0.914)	2039799	40.0000	45.2
95 Benzo(b)fluoranthene	252	13.559	13.559	(0.957)	1457861	40.0000	35.8
96 Benzo(k)fluoranthene	252	13.601	13.601	(0.960)	1471768	40.0000	36.0
97 Benzo(a)pyrene	252	14.078	14.078	(0.993)	1264295	40.0000	36.8
99 Indeno(1,2,3-cd)pyrene	276	16.001	16.001	(1.129)	1122826	40.0000	39.5
100 Dibenzo(a,h)anthracene	278	16.040	16.040	(1.132)	897777	40.0000	40.8
101 Benzo(ghi)perylene	276	16.478	16.478	(1.163)	904164	40.0000	38.4
126 m-Dinitrobenzene	168	7.311	7.311	(0.965)	222331	40.0000	37.4
130 2,3,4,6-Tetrachlorophenol	232	7.916	7.916	(1.045)	330493	40.0000	32.4
143 Dinoseb	211	9.149	9.149	(0.998)	262323	40.0000	37.6
173 Carbazole	167	9.416	9.416	(1.027)	1167874	40.0000	27.9
184 p-Benzoquinone	54	3.720	3.720	(0.835)	32687	40.0000	13.5
192 Methoxychlor	227	11.959	11.959	(0.991)	1188631	40.0000	40.9
211 p-Toluidine	106	4.873	4.873	(1.094)	656442	40.0000	36.5
210 m-Toluidine	106	4.906	4.906	(1.102)	825414	40.0000	35.2
26 Phthalic anhydride	104	6.511	6.511	(1.139)	180584	40.0000	25.1
179 Dibenzo(a,e)pyrene	302	19.568	19.568	(1.381)	338247	40.0000	36.1
214 1,4-Dinitrobenzene	75	7.230	7.230	(0.955)	227647	40.0000	36.1
215 2-Ethoxyethanol	59	2.149	2.149	(0.482)	359882	40.0000	39.8
216 Methylenebis(2-chloroaniline)	231	12.020	12.020	(0.996)	101560	40.0000	21.8
M 222 Trichlorophenols	196				794187	80.0000	67.9
M 223 Tetrachlorophenols	232				330493	40.0000	32.4
M 224 Benzo(b,k)fluoranthene	252				2929629	80.0000	71.8

Data File: /chem/MSD8.i/s031710.b/s8c1702.d
Date : 17-MAR-2010 09:03
Client ID: MEGACVS
Sample Info: IWBN100309-05,3|CCV|1|SVM|1|MEGACVS
Column phase: J&W DB-5MS

Instrument: MSD8.i
Operator: nag1
Column diameter: 0.20



Page 1

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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD8.i Injection Date: 17-MAR-2010 09:34
Lab File ID: s8c1703.d Init. Cal. Date(s): 20-FEB-2010 22-FEB-2010
Analysis Type: Init. Cal. Times: 12:55 01:19
Lab Sample ID: WBN100312-03.2 Quant Type: ISTD
Method: /chem/MSD8.i/s031710.b/MSD8-8270AQA-022010.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
209 Benzaldehyde	0.84330	0.80489	0.80489	0.000	-4.55450	60.00000	Averaged
16 Acetophenone	1.20309	1.09714	1.09714	0.000	-8.80628	60.00000	Averaged
189 Caprolactam	0.06655	0.06194	0.06194	0.000	-6.93548	60.00000	Averaged
208 1,1'-Biphenyl	1.22219	1.12413	1.12413	0.000	-8.02367	60.00000	Averaged
207 Atrazine	0.03531	0.04140	0.04140	0.000	17.23910	60.00000	Averaged
77 Benzidine	15.64401	40.00000	0.07023	0.000	-60.88997	60.00000	Linear <-
90 3,3'-Dichlorobenzidine	0.24780	0.17403	0.17403	0.000	-29.76845	60.00000	Averaged
102 1,4-Dioxane	0.32319	0.31845	0.31845	0.000	-1.46556	60.00000	Averaged
103 Methyl methacrylate	0.16817	0.17590	0.17590	0.000	4.59789	60.00000	Averaged
104 Ethyl methacrylate	0.67963	0.67394	0.67394	0.000	-0.83613	60.00000	Averaged
105 2-Picoline	1.09294	1.11943	1.11943	0.000	2.42312	60.00000	Averaged
106 N-Nitrosomethylethylamine	0.43986	0.43366	0.43366	0.000	-1.40945	60.00000	Averaged
107 Methyl methanesulfonate	0.49950	0.40851	0.40851	0.000	-18.21627	60.00000	Averaged
108 N-Nitrosodiethylamine	0.45804	0.45728	0.45728	0.000	-0.16690	60.00000	Averaged
109 Ethyl Methanesulfonate	0.60902	0.54907	0.54907	0.000	-9.84295	60.00000	Averaged
110 Pentachloroethane	0.32092	0.29581	0.29581	0.000	-7.82317	60.00000	Averaged
111 N-Nitrosopyrrolidine	0.49059	0.47037	0.47037	0.000	-4.12039	60.00000	Averaged
113 N-Nitrosomorpholine	0.66385	0.62366	0.62366	0.000	-6.05483	60.00000	Averaged
114 o-Toluidine	1.62183	1.53326	1.53326	0.000	-5.46126	60.00000	Averaged
115 N-Nitrosopiperidine	0.12437	0.11792	0.11792	0.000	-5.18539	60.00000	Averaged
116 a,a-Dimethylphenethylamine	0.74304	0.73293	0.73293	0.000	-1.36030	60.00000	Averaged
118 2,6-Dichlorophenol	0.20154	0.18912	0.18912	0.000	-6.16108	60.00000	Averaged
119 Hexachloropropene	0.12360	0.07047	0.07047	0.000	-42.98519	60.00000	Averaged
120 p-Phenylenediamine	0.19655	0.16551	0.16551	0.000	-15.79263	60.00000	Averaged
121 N-Nitrosodi-n-butylamine	0.21161	0.21189	0.21189	0.000	0.13269	60.00000	Averaged
122 Safrole	0.19334	0.17773	0.17773	0.000	-8.07513	60.00000	Averaged
123 1,2,4,5-Tetrachlorobenzene	0.47582	0.41627	0.41627	0.000	-12.51426	60.00000	Averaged
124 Isosafrole	0.32130	0.28758	0.28758	0.000	-10.49667	60.00000	Averaged
125 1,4-Naphthoquinone	0.29641	0.29627	0.29627	0.000	-0.04967	60.00000	Averaged
127 Pentachlorobenzene	0.43422	0.35482	0.35482	0.000	-18.28569	60.00000	Averaged
128 1-Naphthylamine	0.84230	0.72732	0.72732	0.000	-13.65092	60.00000	Averaged
129 2-Naphthylamine	0.88763	0.71537	0.71537	0.000	-19.40648	60.00000	Averaged
131 5-Nitro-o-toluidine	0.24122	0.18733	0.18733	0.000	-22.34183	60.00000	Averaged
136 1,3,5-Trinitrobenzene	0.09499	0.08180	0.08180	0.000	-13.88473	60.00000	Averaged
137 Phenacetin	0.21690	0.19626	0.19626	0.000	-9.51583	60.00000	Averaged
138 Diallate	0.20203	0.25646	0.25646	0.000	26.94097	60.00000	Averaged

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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD8.i Injection Date: 17-MAR-2010 09:34
Lab File ID: s8c1703.d Init. Cal. Date(s): 20-FEB-2010 22-FEB-2010
Analysis Type: Init. Cal. Times: 12:55 01:19
Lab Sample ID: WBN100312-03.2 Quant Type: ISTD
Method: /chem/MSD8.i/s031710.b/MSD8-8270AQA-022010.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
212 Cis Diallate	0.20071	0.24757	0.24757	0.000	23.34400	60.00000	Averaged
213 Trans Diallate	0.23769	0.30172	0.30172	0.000	26.94097	60.00000	Averaged
140 4-Aminobiphenyl	0.51727	0.42877	0.42877	0.000	-17.10907	60.00000	Averaged
141 Pentachloronitrobenzene	0.07936	0.07461	0.07461	0.000	-5.98454	60.00000	Averaged
142 Pronamide	0.25230	0.27994	0.27994	0.000	10.95373	60.00000	Averaged
146 4-Nitroquinoline-1-oxide	0.01907	0.01442	0.01442	0.000	-24.35015	60.00000	Averaged
147 Methapyrilene	0.29186	0.40442	0.40442	0.000	38.56786	60.00000	Averaged
148 Isodrin	0.10718	0.11370	0.11370	0.000	6.08179	60.00000	Averaged
149 Aramite	0.03388	0.02890	0.02890	0.000	-14.69866	60.00000	Averaged
150 Kepone	0.07795	0.06976	0.06976	0.000	-10.50420	60.00000	Averaged
151 p-(Dimethylamino)azobenzene	0.25808	0.31837	0.31837	0.000	23.36122	60.00000	Averaged
152 Chlorobenzilate	0.26271	0.37866	0.37866	0.000	44.13782	60.00000	Averaged
153 3,3'-Dimethylbenzidine	0.45535	0.31327	0.31327	0.000	-31.20208	60.00000	Averaged
155 2-Acetylaminofluorene	35.32710	40.00000	0.19388	0.000	-11.68225	60.00000	Linear
157 7,12Dimethylbenz(a)anthrace	0.51909	0.50733	0.50733	0.000	-2.26620	60.00000	Averaged
158 3-Methylcholanthrene	0.36780	0.37001	0.37001	0.000	0.59930	60.00000	Averaged

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Data file : /chem/MSD8.i/s031710.b/s8c1703.d
Lab Smp Id: WBN100312-03.2 Client Smp ID: AP12CVS
Inj Date : 17-MAR-2010 09:34
Operator : nag1 Inst ID: MSD8.i
Smp Info : |WBN100312-03.2|CCV|1|SVM|1|AP12CVS
Misc Info : |MSD8270|WBN100310-01
Comment : Column: J & W DB-5MS, 25m x 0.20 mm x 0.33 micron film
Method : /chem/MSD8.i/s031710.b/MSD8-8270AQA-022010.m
Meth Date : 17-Mar-2010 13:56 nat00999 Quant Type: ISTD
Cal Date : 21-FEB-2010 23:15 Cal File: s8b2042.d
Als bottle: 3 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AP12.sub
Target Version: 3.50
Processing Host: hpc1p1

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
* 10 1,4-Dichlorobenzene-d4	152	4.454	4.454	(1.000)	631877	40.0000	
* 29 Naphthalene-d8	136	5.711	5.711	(1.000)	2391008	40.0000	
* 46 Acenaphthene-d10	164	7.568	7.568	(1.000)	1361254	40.0000	
* 67 Phenanthrene-d10	188	9.168	9.168	(1.000)	1986916	40.0000	
* 91 Chrysene-d12	240	12.059	12.059	(1.000)	1078088	40.0000	
* 98 Perylene-d12	264	14.159	14.159	(1.000)	732561	40.0000	
209 Benzaldehyde	77	4.054	4.054	(0.910)	508592	40.0000	38.2
16 Acetophenone	105	4.830	4.830	(1.084)	693257	40.0000	36.5
189 Caprolactam	113	6.139	6.139	(1.075)	148095	40.0000	37.2
208 1,1'-Biphenyl	154	6.949	6.949	(0.918)	1530224	40.0000	36.8
207 Atrazine	173	8.849	8.849	(0.965)	82263	40.0000	46.9
77 Benzidine	184	10.611	10.611	(0.880)	75715	40.0000	15.6
90 3,3'-Dichlorobenzidine	252	12.006	12.006	(0.996)	187623	40.0000	28.1
102 1,4-Dioxane	88	2.149	2.149	(0.482)	201224	40.0000	39.4
103 Methyl methacrylate	100	2.149	2.149	(0.482)	111146	40.0000	41.8
104 Ethyl methacrylate	69	2.644	2.644	(0.594)	425850	40.0000	39.7
105 2-Picoline	93	2.887	2.887	(0.648)	707339	40.0000	41.0
106 N-Nitrosomethylethylamine	88	2.954	2.954	(0.663)	274020	40.0000	39.4
107 Methyl methanesulfonate	80	3.177	3.177	(0.713)	258128	40.0000	32.7
108 N-Nitrosodiethylamine	102	3.501	3.501	(0.786)	288945	40.0000	39.9
109 Ethyl Methanesulfonate	79	3.739	3.739	(0.840)	346947	40.0000	36.1
110 Pentachloroethane	167	4.197	4.197	(0.942)	186917	40.0000	36.9
111 N-Nitrosopyrrolidine	100	4.811	4.811	(1.080)	297217	40.0000	38.4(Q)
113 N-Nitrosomorpholine	56	4.844	4.844	(1.088)	394074	40.0000	37.6
114 o-Toluidine	106	4.863	4.863	(1.092)	968831	40.0000	37.8
115 N-Nitrosopiperidine	114	5.149	5.149	(0.902)	281948	40.0000	37.9

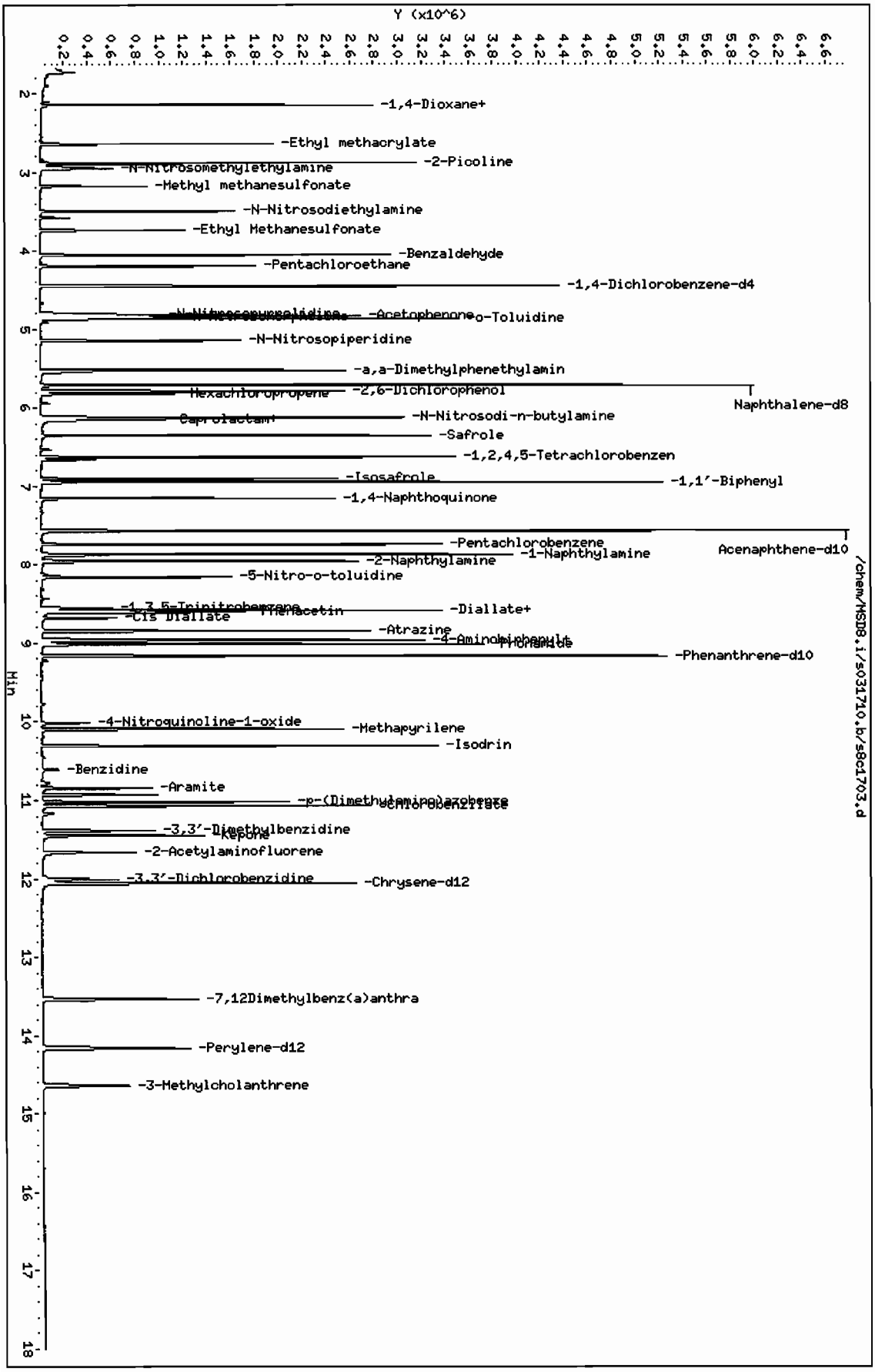
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
116 a,a-Dimethylphenethylamine	58	5.520	5.520	(0.967)	1752438	40.0000	39.4
118 2,6-Dichlorophenol	162	5.787	5.787	(1.013)	452199	40.0000	37.5
119 Hexachloropropene	213	5.820	5.820	(1.019)	168498	40.0000	22.8
120 p-Phenylenediamine	108	6.149	6.149	(1.077)	395739	40.0000	33.7
121 N-Nitrosodi-n-butylamine	84	6.125	6.125	(1.073)	506629	40.0000	40.0
122 Safrole	162	6.354	6.354	(1.113)	424953	40.0000	36.8
123 1,2,4,5-Tetrachlorobenzene	216	6.630	6.630	(0.876)	566654	40.0000	35.0
124 Isosafrole	162	6.906	6.906	(0.913)	391463	40.0000	35.8
125 1,4-Naphthoquinone	158	7.158	7.158	(0.946)	403295	40.0000	40.0
127 Pentachlorobenzene	250	7.739	7.739	(1.023)	483000	40.0000	32.7
128 1-Naphthylamine	143	7.868	7.868	(1.040)	990067	40.0000	34.5
129 2-Naphthylamine	143	7.954	7.954	(1.051)	973804	40.0000	32.2
131 5-Nitro-o-toluidine	152	8.158	8.158	(1.078)	254999	40.0000	31.1
136 1,3,5-Trinitrobenzene	75	8.554	8.554	(0.933)	162537	40.0000	34.4
137 Phenacetin	108	8.606	8.606	(0.939)	389945	40.0000	36.2(Q)
138 Diallate	86	8.582	8.582	(0.936)	509571	40.0000	50.8
212 Cis Diallate	86	8.678	8.678	(0.946)	73785	6.00000	7.4
213 Trans Diallate	86	8.582	8.582	(0.936)	509571	34.0000	43.2
140 4-Aminobiphenyl	169	8.958	8.958	(0.977)	851930	40.0000	33.2
141 Pentachloronitrobenzene	237	8.968	8.968	(0.978)	148250	40.0000	37.6(Q)
142 Pronamide	173	9.016	9.016	(0.983)	556211	40.0000	44.4
146 4-Nitroquinoline-1-oxide	101	10.011	10.011	(1.092)	28661	40.0000	30.2
147 Methapyrilene	58	10.092	10.092	(1.101)	803553	40.0000	55.4
148 Isodrin	193	10.306	10.306	(1.124)	225906	40.0000	42.4
149 Aramite	185	10.849	10.849	(1.183)	57421	40.0000	34.1
150 Kepone	272	11.449	11.449	(1.249)	138607	40.0000	35.8
151 p-(Dimethylamino)azobenzene	120	11.025	11.025	(0.914)	343231	40.0000	49.3
152 Chlorobenzilate	251	11.073	11.073	(0.918)	408227	40.0000	57.6
153 3,3'-Dimethylbenzidine	212	11.382	11.382	(0.944)	337736	40.0000	27.5
155 2-Acetylaminofluorene	181	11.663	11.663	(0.967)	209017	40.0000	35.3
157 7,12Dimethylbenz(a)anthracene	256	13.535	13.535	(0.956)	371648	40.0000	39.1
158 3-Methylcholanthrene	268	14.644	14.644	(1.034)	271054	40.0000	40.2(Q)

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: /chem/MSD8.i/s031710.b/s8c1703.d
Date : 17-MAR-2010 09:34
Client ID: AP12CVS
Sample Info: IWBN100312-03.2|CCV|1|SVM|1|AP12CVS
Column phase: J&W DB-5MS

Instrument: MSD8.i
Operator: nagl
Column diameter: 0.20



Page 1

QC Data

Data File: /chem/MSD8.i/s022010.b/s8b2001.d

Date : 20-FEB-2010 12:04

Client ID: DFTPP

Instrument: MSD8.i

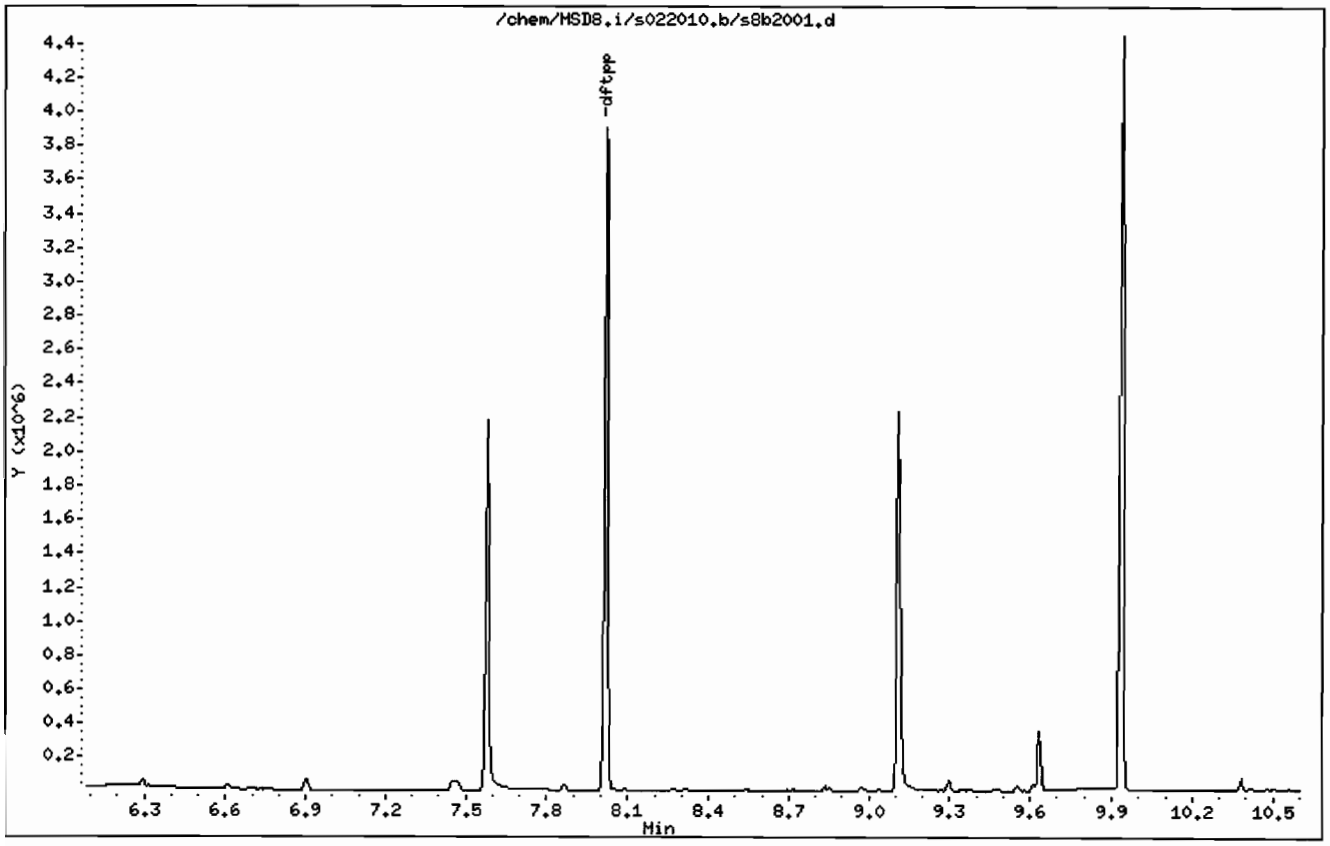
Sample Info: |WBN100207-01|50 PPM|1|SVMF|1|DFTPP

Volume Injected (uL): 1.0

Operator: nag1

Column phase: J & W DB-5MS

Column diameter: 0.20



Data File: /chem/MSD8.i/s022010.b/s8b2001.d

Date : 20-FEB-2010 12:04

Client ID: DFTPP

Instrument: MSD8.i

Sample Info: |WBN100207-01|50 PPM|1|SVMF|1|DFTPP

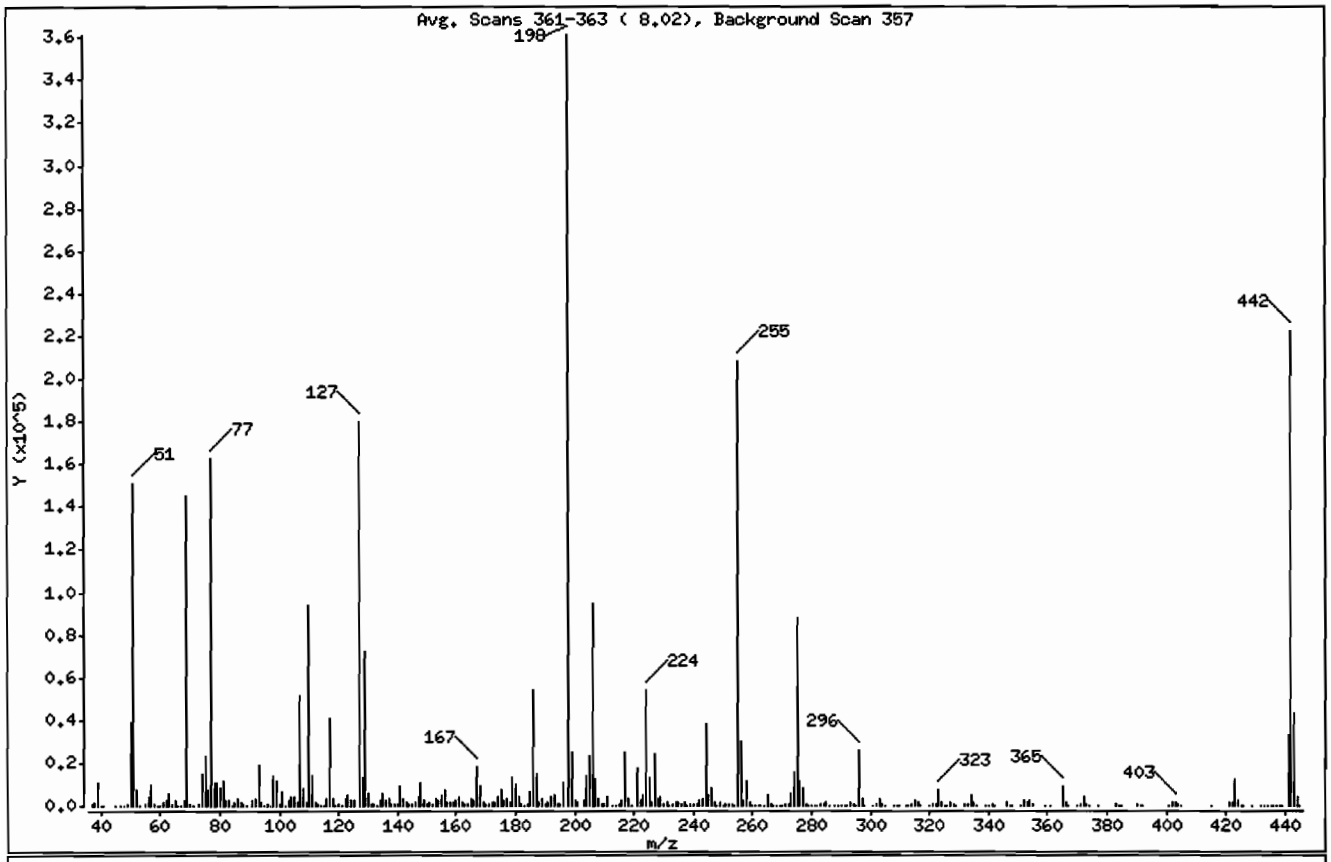
Volume Injected (uL): 1.0

Operator: nag1

Column phase: J & W DB-5MS

Column diameter: 0.20

1 dftpp



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	30.00 - 60.00% of mass 198	41.91
68	Less than 2.00% of mass 69	0.76 (1.89)
69	Mass 69 relative abundance	40.27
70	Less than 2.00% of mass 69	0.22 (0.56)
127	40.00 - 60.00% of mass 198	49.86
197	Less than 1.00% of mass 198	0.00
199	5.00 - 9.00% of mass 198	6.79
275	10.00 - 30.00% of mass 198	24.30
365	Greater than 1.00% of mass 198	2.63
441	Present, but less than mass 443	9.09
442	Greater than 40.00% of mass 198	61.67
443	17.00 - 23.00% of mass 442	11.88 (19.27)

Data File: /chem/MSD8.i/s022010.b/s8b2001.d

Date : 20-FEB-2010 12:04

Client ID: DFTPP

Instrument: MSD8.i

Sample Info: |WBN100207-01|50 PPM|1|SVMF|1|DFTPP

Volume Injected (uL): 1.0

Operator: nag1

Column phase: J & W DB-5MS

Column diameter: 0.20

Data File: s8b2001.d
Spectrum: Avg. Scans 361-363 (8.02), Background Scan 357
Location of Maximum: 198.00
Number of points: 333

m/z	Y	m/z	Y	m/z	Y	m/z	Y
37.00	636	129.00	72112	216.00	2111	304.00	793
38.00	1805	130.00	6198	217.00	25088	305.00	96
39.00	10515	131.00	1179	218.00	3223	308.00	368
40.00	135	132.00	719	219.00	274	309.00	231
41.00	281	133.00	246	221.00	17016	310.00	352
45.00	296	134.00	2094	222.00	2240	312.00	71
47.00	79	135.00	5474	223.00	5388	313.00	267
48.00	100	136.00	2273	224.00	53856	314.00	1186
49.00	1097	137.00	2986	225.00	13496	315.00	2886
50.00	38736	138.00	704	226.00	1520	316.00	1494
51.00	151296	139.00	433	227.00	24000	317.00	272
52.00	7819	140.00	888	228.00	3311	320.00	103
53.00	348	141.00	9408	229.00	4563	321.00	882
55.00	755	142.00	3186	230.00	691	322.00	424
56.00	4473	143.00	1904	231.00	1920	323.00	7824
57.00	10066	144.00	664	232.00	303	324.00	1477
58.00	547	145.00	475	233.00	448	325.00	190
59.00	111	146.00	1633	234.00	1560	326.00	188
60.00	164	147.00	4413	235.00	1679	327.00	1444
61.00	1759	148.00	10596	236.00	1024	328.00	743
62.00	2153	149.00	2303	237.00	1900	329.00	97
63.00	6125	150.00	612	238.00	252	332.00	590
64.00	883	151.00	1360	239.00	942	333.00	759
65.00	2765	152.00	728	240.00	677	334.00	5028
66.00	317	153.00	2923	241.00	1231	335.00	1370
67.00	157	154.00	2190	242.00	2711	336.00	167
68.00	2746	155.00	5079	243.00	3008	339.00	122
69.00	145408	156.00	7633	244.00	38520	340.00	144
70.00	809	157.00	1609	245.00	5292	341.00	1027
71.00	66	158.00	1859	246.00	8553	342.00	229
73.00	1006	159.00	1245	247.00	1526	346.00	1715
74.00	14753	160.00	2882	248.00	404	347.00	313
75.00	23536	161.00	4229	249.00	1334	348.00	34
76.00	7856	162.00	1249	250.00	237	351.00	95
77.00	162688	163.00	420	251.00	454	352.00	2254

Data File: /chem/MSD8.i/s022010.b/s8b2001.d

Date : 20-FEB-2010 12:04

Client ID: DFTPP

Instrument: MSD8.i

Sample Info: IWBN100207-01|50 PPM|1|SVMF|1|DFTPP

Volume Injected (uL): 1.0

Operator: nag1

Column phase: J & W DB-5MS

Column diameter: 0.20

Data File: s8b2001.d
Spectrum: Avg. Scans 361-363 (8.02), Background Scan 357
Location of Maximum: 198.00
Number of points: 333

m/z	Y	m/z	Y	m/z	Y	m/z	Y
78.00	11164	164.00	482	252.00	526	353.00	1685
79.00	11063	165.00	3411	253.00	1014	354.00	2374
80.00	8318	166.00	2886	254.00	246	355.00	442
81.00	11755	167.00	18128	255.00	208576	359.00	131
82.00	2698	168.00	8989	256.00	29864	361.00	41
83.00	2563	169.00	1693	257.00	2335	365.00	9500
84.00	292	170.00	689	258.00	11889	366.00	1267
85.00	2016	171.00	811	259.00	1946	367.00	41
86.00	3161	172.00	1827	260.00	327	370.00	143
87.00	1709	173.00	1985	261.00	323	371.00	544
88.00	611	174.00	3761	262.00	91	372.00	4073
89.00	242	175.00	7387	263.00	105	373.00	967
91.00	2732	176.00	2369	264.00	245	374.00	36
92.00	2924	177.00	3691	265.00	4904	377.00	41
93.00	18696	178.00	1264	266.00	660	383.00	924
94.00	1352	179.00	13514	267.00	81	384.00	271
95.00	383	180.00	9564	268.00	48	385.00	83
96.00	815	181.00	4172	269.00	46	390.00	495
97.00	300	182.00	737	270.00	217	391.00	390
98.00	14288	183.00	389	271.00	458	392.00	149
99.00	11396	184.00	1158	272.00	683	401.00	249
100.00	988	185.00	6644	273.00	6165	402.00	1263
101.00	6504	186.00	53976	274.00	16175	403.00	1933
102.00	385	187.00	15120	275.00	87720	404.00	757
103.00	2407	188.00	1626	276.00	11586	405.00	99
104.00	4126	189.00	3449	277.00	8344	415.00	104
105.00	3848	190.00	678	278.00	1175	421.00	1862
106.00	1319	191.00	1548	279.00	270	422.00	1706
107.00	51688	192.00	4531	280.00	40	423.00	12077
108.00	8074	193.00	4921	281.00	26	424.00	2784
109.00	1707	194.00	960	282.00	153	425.00	353
110.00	94192	195.00	585	283.00	954	426.00	35
111.00	14368	196.00	10955	284.00	633	429.00	49
112.00	1773	198.00	361024	285.00	1386	432.00	53
113.00	552	199.00	24520	286.00	247	433.00	99

Data File: /chem/MSD8.i/s022010.b/s8b2001.d

Date : 20-FEB-2010 12:04

Client ID: DFTPP

Instrument: MSD8.i

Sample Info: IWBN100207-01|50 PPM|1|SVMF|1|DFTPP

Volume Injected (uL): 1.0

Operator: nag1

Column phase: J & W DB-5MS

Column diameter: 0.20

Data File: s8b2001.d
Spectrum: Avg. Scans 361-363 (8.02), Background Scan 357
Location of Maximum: 198.00
Number of points: 333

m/z	Y	m/z	Y	m/z	Y	m/z	Y
114.00	137	200.00	2077	288.00	81	434.00	73
115.00	242	201.00	1683	289.00	256	435.00	109
116.00	2914	203.00	2421	290.00	281	436.00	130
117.00	40800	204.00	13892	291.00	185	437.00	215
118.00	3050	205.00	22864	292.00	403	438.00	351
119.00	350	206.00	94712	293.00	1882	439.00	245
120.00	773	207.00	12092	294.00	526	441.00	32832
121.00	290	208.00	3333	295.00	44	442.00	222592
122.00	3559	209.00	1153	296.00	25992	443.00	42896
123.00	5240	210.00	891	297.00	3524	444.00	3896
124.00	2349	211.00	3877	298.00	302	445.00	219
125.00	2177	213.00	294	301.00	317		
127.00	179968	214.00	128	302.00	514		
128.00	13270	215.00	1136	303.00	3030		

Data File: /chem/MSD8.i/s022010.b/s8b2013.d

Date : 21-FEB-2010 08:35

Client ID: DFTPP

Instrument: MSD8.i

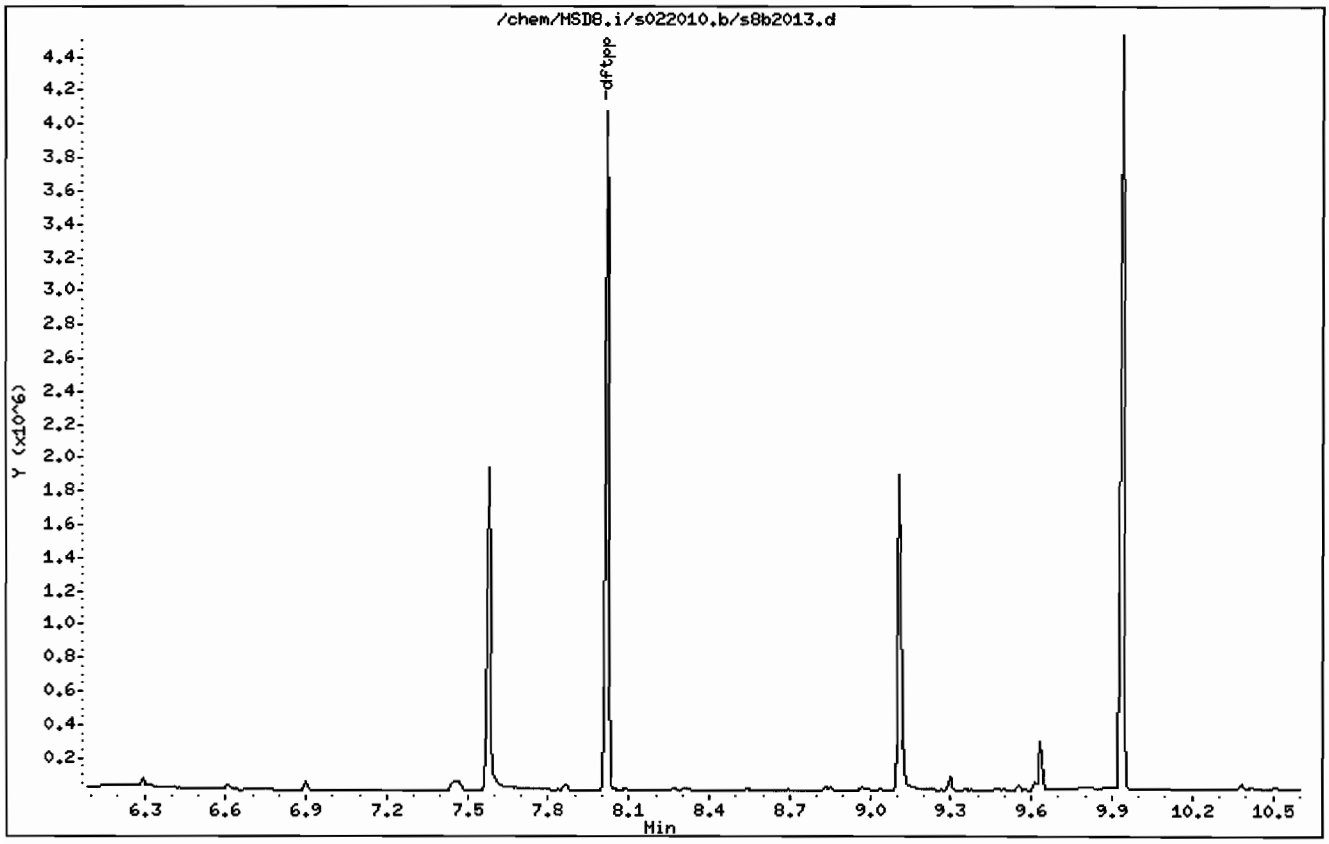
Sample Info: |WBN100207-01|50 PPM|1|SVMF|1|DFTPP

Volume Injected (uL): 1.0

Operator: nag1

Column phase: J & W DB-5MS

Column diameter: 0.20



Data File: /chem/MSD8.i/s022010.b/s8b2013.d

Date : 21-FEB-2010 08:35

Client ID: DFTPP

Instrument: MSD8.i

Sample Info: |WBN100207-01|50 PPM|1|SVMF|1|DFTPP

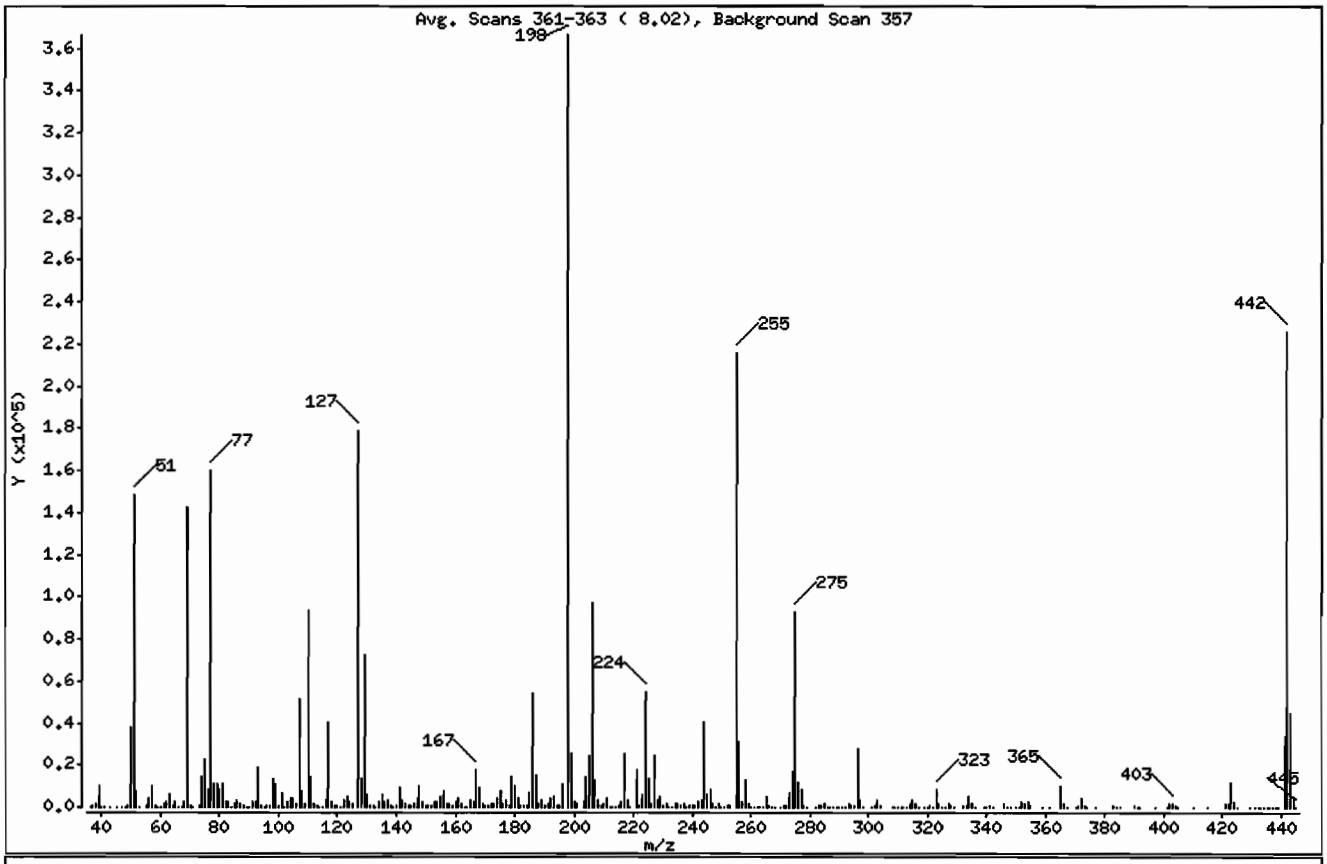
Volume Injected (uL): 1.0

Operator: nag1

Column phase: J & W DB-5MS

Column diameter: 0.20

1 dftpp



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	30.00 - 60.00% of mass 198	40.53
68	Less than 2.00% of mass 69	0.71 (1.84)
69	Mass 69 relative abundance	38.91
70	Less than 2.00% of mass 69	0.22 (0.56)
127	40.00 - 60.00% of mass 198	48.75
197	Less than 1.00% of mass 198	0.00
199	5.00 - 9.00% of mass 198	6.82
275	10.00 - 30.00% of mass 198	25.27
365	Greater than 1.00% of mass 198	2.78
441	Present, but less than mass 443	9.31
442	Greater than 40.00% of mass 198	61.67
443	17.00 - 23.00% of mass 442	12.15 (19.71)

Data File: /chem/MSD8.i/s022010.b/s8b2013.d

Date : 21-FEB-2010 08:35

Client ID: DFTPP | Instrument: MSD8.i

Sample Info: |WBN100207-01|50 PPM|1|SVMF|1|DFTPP

Volume Injected (uL): 1.0 | Operator: nagi

Column phase: J & W DB-5MS | Column diameter: 0.20

Data File: s8b2013.d
Spectrum: Avg. Scans 361-363 (8.02), Background Scan 357
Location of Maximum: 198.00
Number of points: 338

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	56	127.00	178624	214.00	46	309.00	256
37.00	622	128.00	13701	215.00	1055	310.00	391
38.00	1670	129.00	72120	216.00	2351	311.00	40
39.00	10227	130.00	6084	217.00	25672	312.00	66
40.00	276	131.00	1249	218.00	3337	313.00	215
41.00	148	132.00	676	219.00	394	314.00	1282
43.00	81	133.00	345	221.00	17360	315.00	2979
45.00	175	134.00	2137	222.00	784	316.00	1571
47.00	75	135.00	5764	223.00	5854	317.00	345
48.00	135	136.00	2291	224.00	54384	319.00	39
49.00	1152	137.00	3163	225.00	13504	320.00	89
50.00	38328	138.00	613	226.00	1516	321.00	844
51.00	148480	139.00	305	227.00	24384	322.00	237
52.00	7983	140.00	874	228.00	3450	323.00	8074
53.00	379	141.00	9200	229.00	5126	324.00	1548
55.00	654	142.00	3293	230.00	654	325.00	173
56.00	4225	143.00	2051	231.00	1887	326.00	144
57.00	9800	144.00	620	232.00	354	327.00	1551
58.00	460	145.00	527	233.00	399	328.00	753
59.00	146	146.00	1802	234.00	1541	329.00	186
60.00	207	147.00	4607	235.00	1773	332.00	625
61.00	1930	148.00	10337	236.00	1054	333.00	892
62.00	2234	149.00	2168	237.00	1872	334.00	4922
63.00	5775	150.00	592	238.00	323	335.00	1472
64.00	828	151.00	1245	239.00	1019	336.00	124
65.00	2791	152.00	804	240.00	727	339.00	168
66.00	273	153.00	2889	241.00	1258	340.00	43
67.00	294	154.00	2254	242.00	2657	341.00	971
68.00	2618	155.00	4976	243.00	3024	342.00	281
69.00	142528	156.00	7917	244.00	40320	346.00	1742
70.00	801	157.00	1591	245.00	5613	347.00	411
71.00	110	158.00	1797	246.00	8746	348.00	42
73.00	982	159.00	1200	247.00	1601	350.00	100
74.00	14686	160.00	2833	248.00	402	351.00	114
75.00	23056	161.00	3964	249.00	1347	352.00	2446

Data File: /chem/MSD8.i/s022010.b/s8b2013.d

Date : 21-FEB-2010 08:35

Client ID: DFTPP | Instrument: MSD8.i

Sample Info: |WBN100207-01|50 PPM|1|SVMF|1|DFTPP

Volume Injected (uL): 1.0 | Operator: nag1

Column phase: J & W DB-5MS | Column diameter: 0.20

Data File: s8b2013.d
Spectrum: Avg. Scans 361-363 (8.02), Background Scan 357
Location of Maximum: 198.00
Number of points: 338

m/z	Y	m/z	Y	m/z	Y	m/z	Y
76.00	8112	162.00	1292	250.00	297	353.00	1664
77.00	159808	163.00	370	251.00	407	354.00	2324
78.00	10752	164.00	418	252.00	537	355.00	613
79.00	10806	165.00	3457	253.00	973	359.00	188
80.00	8432	166.00	2678	255.00	216000	361.00	35
81.00	11175	167.00	17744	256.00	30888	365.00	10172
82.00	2848	168.00	9666	257.00	2348	366.00	1571
83.00	2358	169.00	1555	258.00	12794	367.00	123
84.00	380	170.00	598	259.00	1933	370.00	198
85.00	1937	171.00	742	260.00	364	371.00	652
86.00	3300	172.00	1586	261.00	405	372.00	4000
87.00	1567	173.00	2096	262.00	34	373.00	950
88.00	607	174.00	3829	263.00	99	374.00	88
89.00	261	175.00	7675	264.00	325	377.00	56
90.00	99	176.00	2028	265.00	5206	383.00	1037
91.00	2533	177.00	3616	266.00	733	384.00	350
92.00	2877	178.00	1241	267.00	130	385.00	59
93.00	18624	179.00	14050	268.00	1	390.00	434
94.00	1132	180.00	10302	270.00	314	391.00	386
95.00	384	181.00	4359	271.00	454	392.00	247
96.00	852	182.00	801	272.00	611	397.00	36
97.00	507	183.00	425	273.00	6575	401.00	218
98.00	13725	184.00	1104	274.00	16896	402.00	1420
99.00	11316	185.00	7010	275.00	92592	403.00	2003
100.00	984	186.00	53560	276.00	12112	404.00	730
101.00	6416	187.00	15376	277.00	8831	405.00	147
102.00	398	188.00	1621	278.00	1259	410.00	36
103.00	2271	189.00	3344	279.00	291	415.00	89
104.00	4172	190.00	507	282.00	228	421.00	1948
105.00	3955	191.00	1461	283.00	887	422.00	1783
106.00	1360	192.00	4556	284.00	657	423.00	12054
107.00	51416	193.00	5226	285.00	1565	424.00	2758
108.00	7732	194.00	1074	286.00	264	425.00	311
109.00	1415	195.00	648	287.00	35	429.00	89
110.00	93200	196.00	11299	288.00	114	431.00	91

Data File: /chem/MSD8.i/s022010.b/s8b2013.d

Date : 21-FEB-2010 08:35

Client ID: DFTPP

Instrument: MSD8.i

Sample Info: |WBN100207-01|50 PPM|1|SVHF|1|DFTPP

Volume Injected (uL): 1.0

Operator: nag1

Column phase: J & W DB-5MS

Column diameter: 0.20

Data File: s8b2013.d
Spectrum: Avg. Scans 361-363 (8.02), Background Scan 357
Location of Maximum: 198.00
Number of points: 338

m/z	Y	m/z	Y	m/z	Y	m/z	Y
111.00	14005	198.00	366464	289.00	359	432.00	75
112.00	1777	199.00	25008	290.00	221	433.00	42
113.00	565	200.00	2149	291.00	192	434.00	133
114.00	156	201.00	1762	292.00	407	435.00	174
115.00	309	203.00	2677	293.00	1828	436.00	69
116.00	2977	204.00	14145	294.00	475	437.00	142
117.00	40696	205.00	24104	295.00	609	438.00	145
118.00	2826	206.00	97072	296.00	27600	439.00	257
119.00	441	207.00	12482	297.00	3606	441.00	34104
120.00	684	208.00	3467	298.00	227	442.00	225984
121.00	249	209.00	1206	301.00	394	443.00	44536
122.00	3382	210.00	1778	302.00	459	444.00	4167
123.00	5335	211.00	3877	303.00	3092	445.00	202
124.00	2445	212.00	196	304.00	889		
125.00	2106	213.00	321	308.00	309		

Data File: /chem/MSD8.i/s031710.b/s8c1701.d

Date : 17-MAR-2010 08:47

Client ID: DFTPP

Instrument: MSD8.i

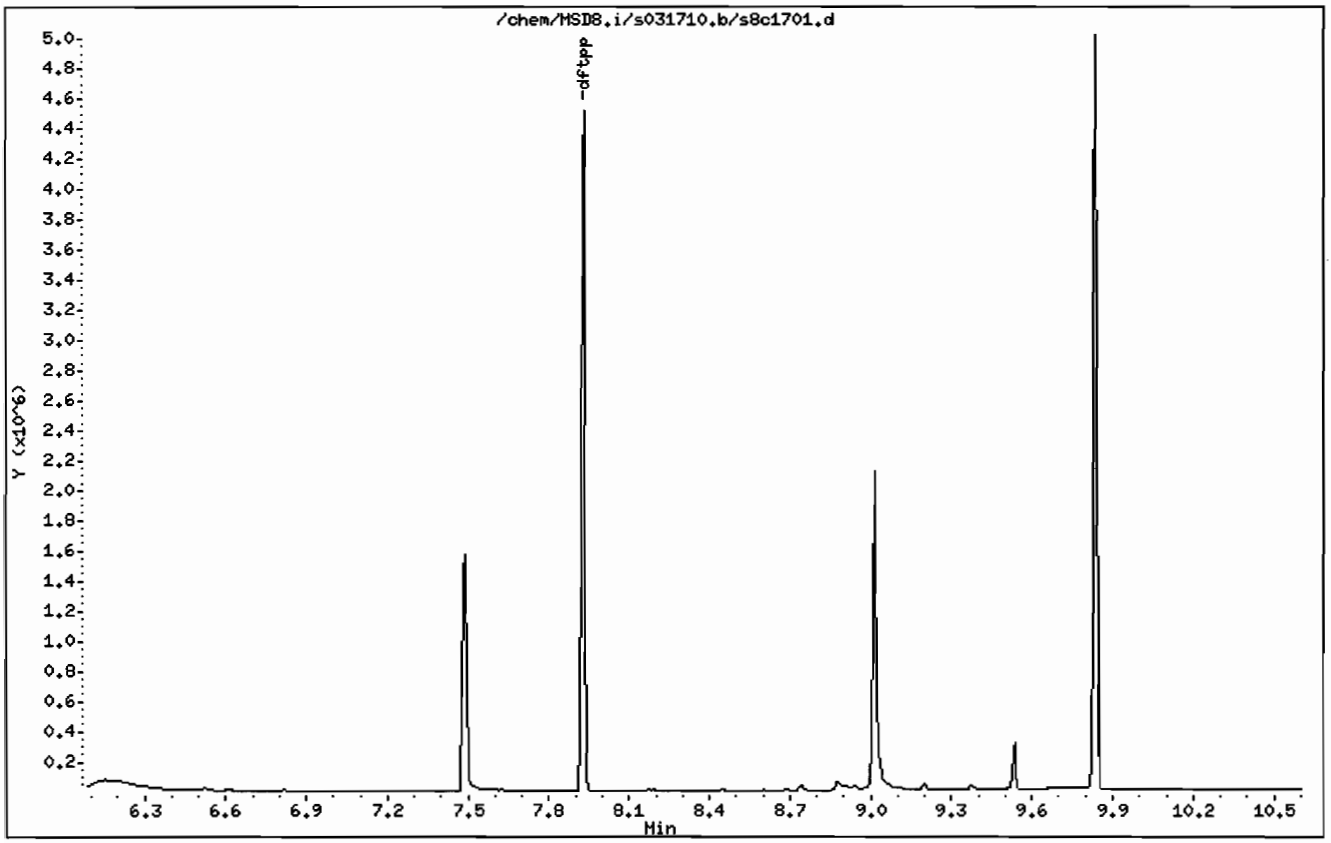
Sample Info: |WBN100306-01.2|DFTPP|1|SVM|1|DFTPP

Volume Injected (uL): 1.0

Operator: nag1

Column phase: J & W DB-5MS

Column diameter: 0.20



Data File: /chem/MSD8.i/s031710.b/s8c1701.d

Date : 17-MAR-2010 08:47

Client ID: DFTPP

Instrument: MSD8.i

Sample Info: |WBN100306-01.2|DFTPP|1|SVHI1|DFTPP

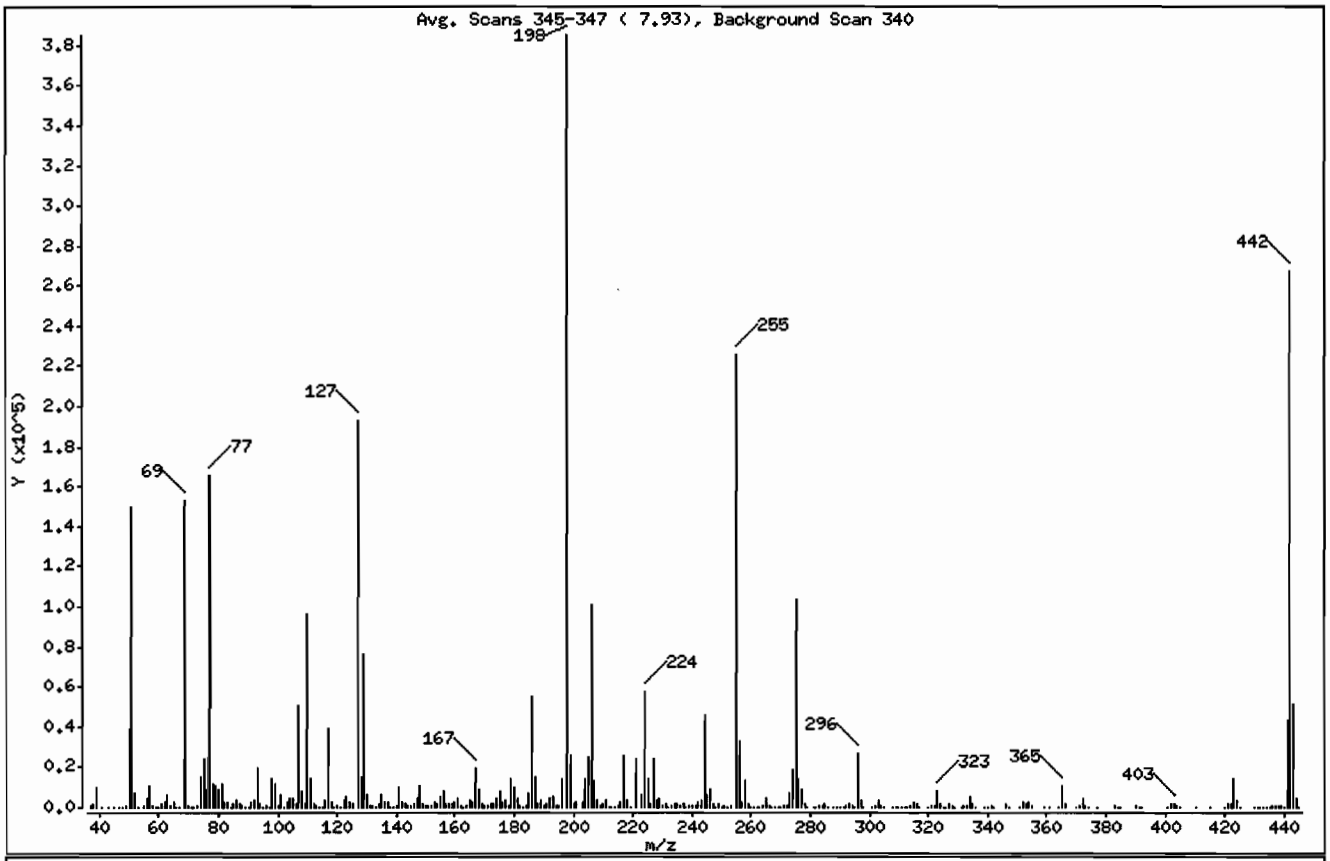
Volume Injected (uL): 1.0

Operator: nag1

Column phase: J & W DB-5MS

Column diameter: 0.20

1 dftpp



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	30.00 - 60.00% of mass 198	38.82
68	Less than 2.00% of mass 69	0.00 (0.00)
69	Mass 69 relative abundance	39.68
70	Less than 2.00% of mass 69	0.20 (0.50)
127	40.00 - 60.00% of mass 198	50.19
197	Less than 1.00% of mass 198	0.00
199	5.00 - 9.00% of mass 198	6.67
275	10.00 - 30.00% of mass 198	26.80
365	Greater than 1.00% of mass 198	2.80
441	Present, but less than mass 443	11.37
442	Greater than 40.00% of mass 198	69.53
443	17.00 - 23.00% of mass 442	13.44 (19.33)

Data File: /chem/MSD8.i/s031710.b/s8c1701.d

Date : 17-MAR-2010 08:47

Client ID: DFTPP | Instrument: MSD8.i

Sample Info: IWBN100306-01.2|DFTPP|1|SVM|1|DFTPP

Volume Injected (uL): 1.0 | Operator: nagi

Column phase: J & W DB-5MS | Column diameter: 0.20

Data File: s8c1701.d
Spectrum: Avg. Scans 345-347 (7.93), Background Scan 340
Location of Maximum: 198.00
Number of points: 336

m/z	Y	m/z	Y	m/z	Y	m/z	Y
37.00	684	129.00	75712	216.00	2235	310.00	357
38.00	1755	130.00	6264	217.00	25816	311.00	34
39.00	9767	131.00	1168	218.00	3242	312.00	115
41.00	389	132.00	705	219.00	382	313.00	271
43.00	49	133.00	282	221.00	24080	314.00	1223
45.00	260	134.00	2051	223.00	5935	315.00	2795
47.00	37	135.00	5839	224.00	57696	316.00	1554
48.00	118	136.00	2596	225.00	14439	317.00	233
49.00	1272	137.00	2999	226.00	1721	320.00	105
50.00	38888	138.00	365	227.00	23704	321.00	935
51.00	149504	139.00	344	228.00	3262	322.00	524
52.00	7502	140.00	907	229.00	4813	323.00	8326
53.00	390	141.00	9842	230.00	670	324.00	1537
55.00	610	142.00	2923	231.00	1977	325.00	99
56.00	4853	143.00	2015	232.00	397	326.00	187
57.00	10967	144.00	513	233.00	467	327.00	1413
58.00	479	145.00	465	234.00	1554	328.00	784
59.00	129	146.00	1642	235.00	1739	329.00	107
60.00	145	147.00	4730	236.00	1048	331.00	40
61.00	2131	148.00	10701	237.00	1785	332.00	590
62.00	2260	149.00	2150	238.00	305	333.00	804
63.00	6067	150.00	663	239.00	832	334.00	5483
64.00	897	151.00	1255	240.00	661	335.00	1554
65.00	3077	152.00	455	241.00	1278	336.00	202
66.00	226	153.00	3091	242.00	3087	339.00	103
67.00	158	154.00	2191	243.00	3470	340.00	70
69.00	152768	155.00	5403	244.00	46200	341.00	1054
70.00	761	156.00	7906	245.00	5953	342.00	271
71.00	132	157.00	1622	246.00	8553	346.00	1860
72.00	98	158.00	1761	247.00	1911	347.00	342
73.00	1287	159.00	1465	248.00	406	351.00	176
74.00	15122	160.00	2803	249.00	1539	352.00	2560
75.00	24056	161.00	4182	250.00	386	353.00	1775
76.00	8644	162.00	1321	251.00	484	354.00	2455
77.00	165760	163.00	393	252.00	413	355.00	548

Data File: /chem/MSD8.i/s031710.b/s8c1701.d

Date : 17-MAR-2010 08:47

Client ID: DFTPP | Instrument: MSD8.i

Sample Info: |WBN100306-01.2|DFTPP|1|SVH|1|DFTPP

Volume Injected (uL): 1.0 | Operator: nag1

Column phase: J & W DB-5MS | Column diameter: 0.20

Data File: s8c1701.d
Spectrum: Avg. Scans 345-347 (7.93), Background Scan 340
Location of Maximum: 198.00
Number of points: 336

m/z	Y	m/z	Y	m/z	Y	m/z	Y
78.00	11181	164.00	561	253.00	1243	359.00	209
79.00	10858	165.00	3685	255.00	225536	361.00	37
80.00	8655	166.00	2859	256.00	32320	364.00	35
81.00	11665	167.00	19824	257.00	2574	365.00	10770
82.00	2881	168.00	9247	258.00	12892	366.00	1605
83.00	2782	169.00	1518	259.00	1951	370.00	227
84.00	334	170.00	565	260.00	391	371.00	674
85.00	2100	171.00	802	261.00	387	372.00	4205
86.00	3484	172.00	1685	262.00	70	373.00	1221
87.00	1539	173.00	2148	263.00	132	374.00	46
88.00	676	174.00	4205	264.00	516	377.00	108
89.00	294	175.00	7661	265.00	4814	383.00	1180
90.00	115	176.00	2500	266.00	705	384.00	225
91.00	2789	177.00	3700	267.00	118	385.00	87
92.00	3287	178.00	1295	268.00	44	390.00	481
93.00	19120	179.00	14043	269.00	34	391.00	363
94.00	1376	180.00	9440	270.00	249	392.00	262
95.00	369	181.00	4370	271.00	580	401.00	278
96.00	1007	182.00	770	272.00	657	402.00	1510
97.00	80	183.00	373	273.00	7250	403.00	2184
98.00	14281	184.00	1137	274.00	18184	404.00	804
99.00	11277	185.00	6671	275.00	103216	405.00	95
100.00	1104	186.00	55264	276.00	13722	410.00	64
101.00	6497	187.00	14955	277.00	8716	415.00	37
102.00	384	188.00	1673	278.00	1407	420.00	35
103.00	2366	189.00	3117	279.00	369	421.00	2174
104.00	4491	190.00	614	281.00	180	422.00	2190
105.00	4205	191.00	1509	282.00	325	423.00	14024
106.00	1503	192.00	4373	283.00	999	424.00	3105
107.00	50040	193.00	5140	284.00	649	425.00	345
108.00	7893	194.00	1073	285.00	1453	430.00	43
109.00	1801	195.00	737	286.00	283	431.00	99
110.00	96816	196.00	13968	288.00	110	432.00	50
111.00	14417	198.00	385088	289.00	377	433.00	121
112.00	1753	199.00	25680	290.00	374	434.00	205

Data File: /chem/MSD8.i/s031710.b/s8c1701.d

Date : 17-MAR-2010 08:47

Client ID: DFTPP | Instrument: MSD8.i

Sample Info: |WBN100306-01.2|DFTPP|1|SVM|1|DFTPP

Volume Injected (uL): 1.0 | Operator: nag1

Column phase: J & W DB-5MS | Column diameter: 0.20

Data File: s8c1701.d
Spectrum: Avg. Scans 345-347 (7.93), Background Scan 340
Location of Maximum: 198.00
Number of points: 336

m/z	Y	m/z	Y	m/z	Y	m/z	Y
113.00	552	200.00	2202	291.00	164	435.00	88
114.00	228	201.00	2253	292.00	448	436.00	443
115.00	242	203.00	2786	293.00	1813	437.00	491
116.00	3142	204.00	14394	294.00	528	438.00	597
117.00	39208	205.00	24512	295.00	114	439.00	636
118.00	2928	206.00	100504	296.00	26392	440.00	196
119.00	343	207.00	13183	297.00	3696	441.00	43784
120.00	759	208.00	3343	298.00	258	442.00	267712
121.00	280	209.00	1141	301.00	417	443.00	51768
122.00	3492	210.00	1743	302.00	492	444.00	4853
123.00	5682	211.00	3949	303.00	3311	445.00	236
124.00	2350	212.00	84	304.00	1056		
125.00	2209	213.00	389	305.00	102		
127.00	193216	214.00	105	308.00	434		
128.00	14814	215.00	1130	309.00	302		

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-2089**			**Matrix:**	**SOIL**
Lab Sample ID:	**1202059027**				
Client Sample:	**QC for batch 959978**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**MB for batch 959978**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**959979**	**Inst:**	**MSD8.I**	**Dilution:**	**1**
Run Date:	**03/17/2010 10:04**	**Analyst:**	**NAG1**	**Inj. Vol:**	**.5 uL**
Prep Date:	**03/02/2010 23:08**	**Aliquot:**	**30 g**	**Final Volume:**	**1 mL**
Data File:	**s8c1704-1.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	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
	o-Nitroaniline					
99-09-2	3-Nitroaniline	U	333	ug/kg	66.7	333

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-2089**			**Matrix:**	**SOIL**
Lab Sample ID:	**1202059027**				
Client Sample:	**QC for batch 959978**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**MB for batch 959978**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**959979**	**Inst:**	**MSD8.I**	**Dilution:**	**1**
Run Date:	**03/17/2010 10:04**	**Analyst:**	**NAG1**	**Inj. Vol:**	**.5 uL**
Prep Date:	**03/02/2010 23:08**	**Aliquot:**	**30 g**	**Final Volume:**	**1 mL**
Data File:	**s8c1704-1.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-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
	p-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
77-76-9	Propane, 2,2-dimethoxy-	1.9	4450	ug/kg	50	NJ
	Unknown Aldol Condensate	3.08	240	ug/kg		JA

GEL Laboratories LLC

Data file : /chem/MSD8.i/s031710.b/s8c1704.d
Lab Smp Id: 1202059027 Client Smp ID: SBLK01
Inj Date : 17-MAR-2010 10:04
Operator : nag1 Inst ID: MSD8.i
Smp Info : |1202059027|959979|1|SVM|1|SBLK01
Misc Info : |MSD8270_S|WBN100310-01
Comment : Column: J & W DB-5MS, 25m x 0.20 mm x 0.33 micron film
Method : /chem/MSD8.i/s031710.b/MSD8-8270AQA-022010.m
Meth Date : 17-Mar-2010 13:57 nat00999 Quant Type: ISTD
Cal Date : 21-FEB-2010 23:15 Cal File: s8b2042.d
Als bottle: 4 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-2089.sub
Target Version: 3.50
Processing Host: hpclp1

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.00000	weight of sample
M	0.00000	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	4.454	4.454	(1.000)	664249	40.0000	
* 29 Naphthalene-d8	136	5.711	5.716	(1.000)	2583868	40.0000	
* 46 Acenaphthene-d10	164	7.563	7.573	(1.000)	1473861	40.0000	
* 67 Phenanthrene-d10	188	9.163	9.168	(1.000)	2566219	40.0000	
* 91 Chrysene-d12	240	12.068	12.073	(1.000)	2366378	40.0000	
* 98 Perylene-d12	264	14.173	14.173	(1.000)	1878319	40.0000	
$ 3 2-Fluorophenol	112	3.316	3.306	(0.744)	1232469	78.5913	2620
$ 5 Phenol-d5	99	4.073	4.077	(0.914)	1492731	76.3262	2540
$ 20 Nitrobenzene-d5	82	4.977	4.987	(0.872)	691474	37.6460	1250
$ 39 2-Fluorobiphenyl	172	6.835	6.839	(0.904)	1450128	33.4262	1110
$ 60 2,4,6-Tribromophenol	329	8.411	8.416	(1.112)	313054	64.2551	2140
$ 81 p-Terphenyl-d14	244	10.877	10.878	(0.901)	1668162	39.1555	1300

GEL Laboratories LLC

Data file : /chem/MSD8.i/s031710.b/s8c1704.d
Lab Smp Id: 1202059027 Client Smp ID: SBLK01
Inj Date : 17-MAR-2010 10:04
Operator : nagl Inst ID: MSD8.i
Smp Info : |1202059027|959979|1|SVM|1|SBLK01
Misc Info : |MSD8270_S|WBN100310-01
Comment : Column: J & W DB-5MS, 25m x 0.20 mm x 0.33 micron film
Method : /chem/MSD8.i/s031710.b/MSD8-8270AQA-022010.m
Meth Date : 17-Mar-2010 13:57 nat00999 Quant Type: ISTD
Cal Date : 21-FEB-2010 23:15 Cal File: s8b2042.d
Als bottle: 4 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-2089.sub
Target Version: 3.50
Processing Host: hpclp1

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.00000	weight of sample
M	0.00000	% moisture

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 10 1,4-Dichlorobenzene-d4	4.454	3844507	40.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Propane, 2,2-dimethoxy-					CAS #: 77-76-9		
1.896	12821935	133.405228	4450	50	NIST05.L	4658	10
Unknown Aldol Condensate					CAS #:		
3.082	690852	7.18793922	240	0		0	10

Data File: /chem/MSD8.i/s031710.b/s8c1704.d

Page 1

Date : 17-MAR-2010 10:04

Client ID: SBLK01

Instrument: MSD8.i

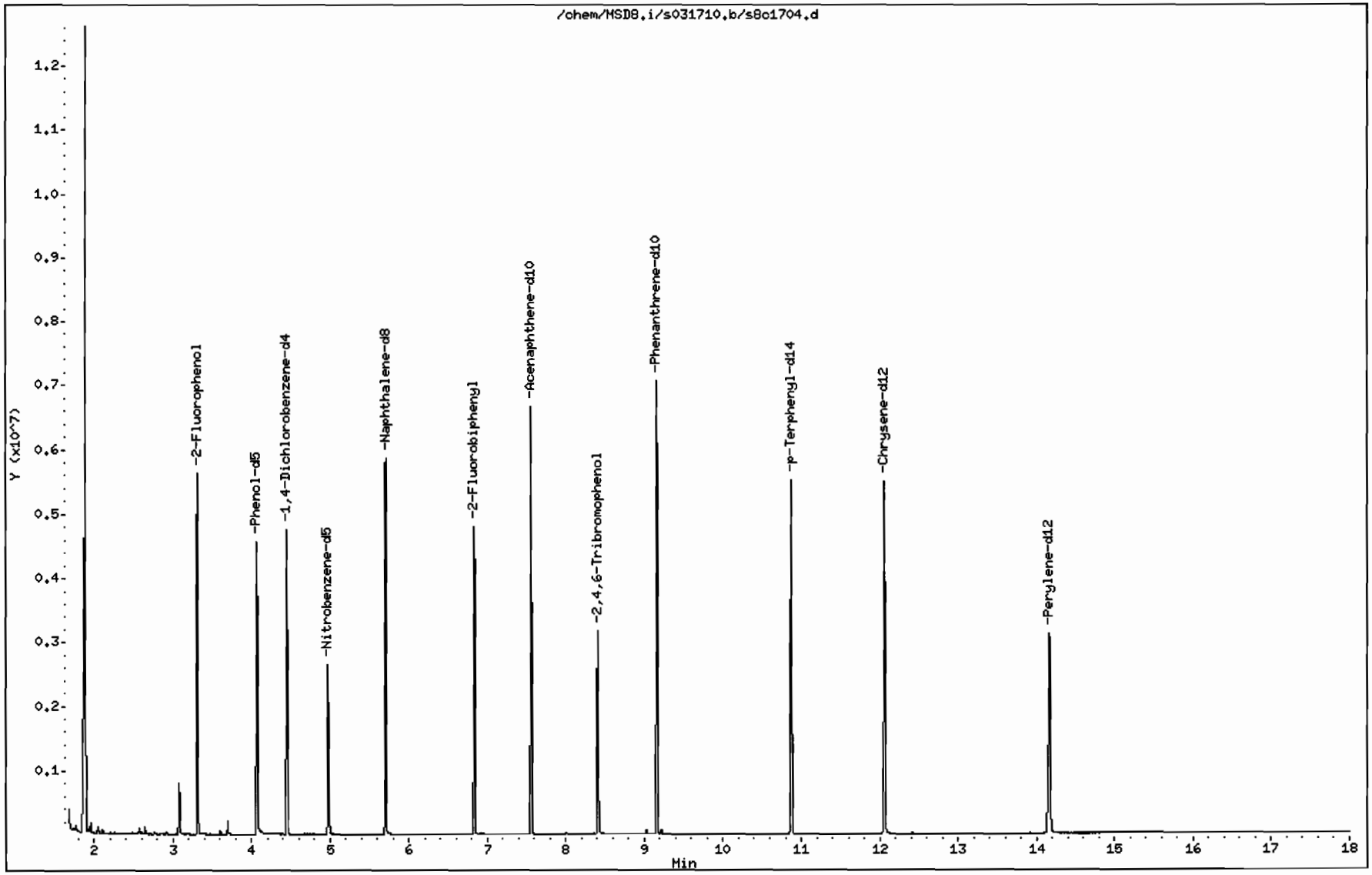
Sample Info: |1202059027|959979|1|SVMI1|SBLK01

Volume Injected (uL): 0.5

Operator: nagl

Column phase: J&W DB-5MS

Column diameter: 0.20



Data File: /chem/MSD8.i/s031710.b/s8c1704.d

Date : 17-MAR-2010 10:04

Client ID: SBLK01

Instrument: MSD8.i

Sample Info: 1120205902719599791 1|SVH|1|SBLK01

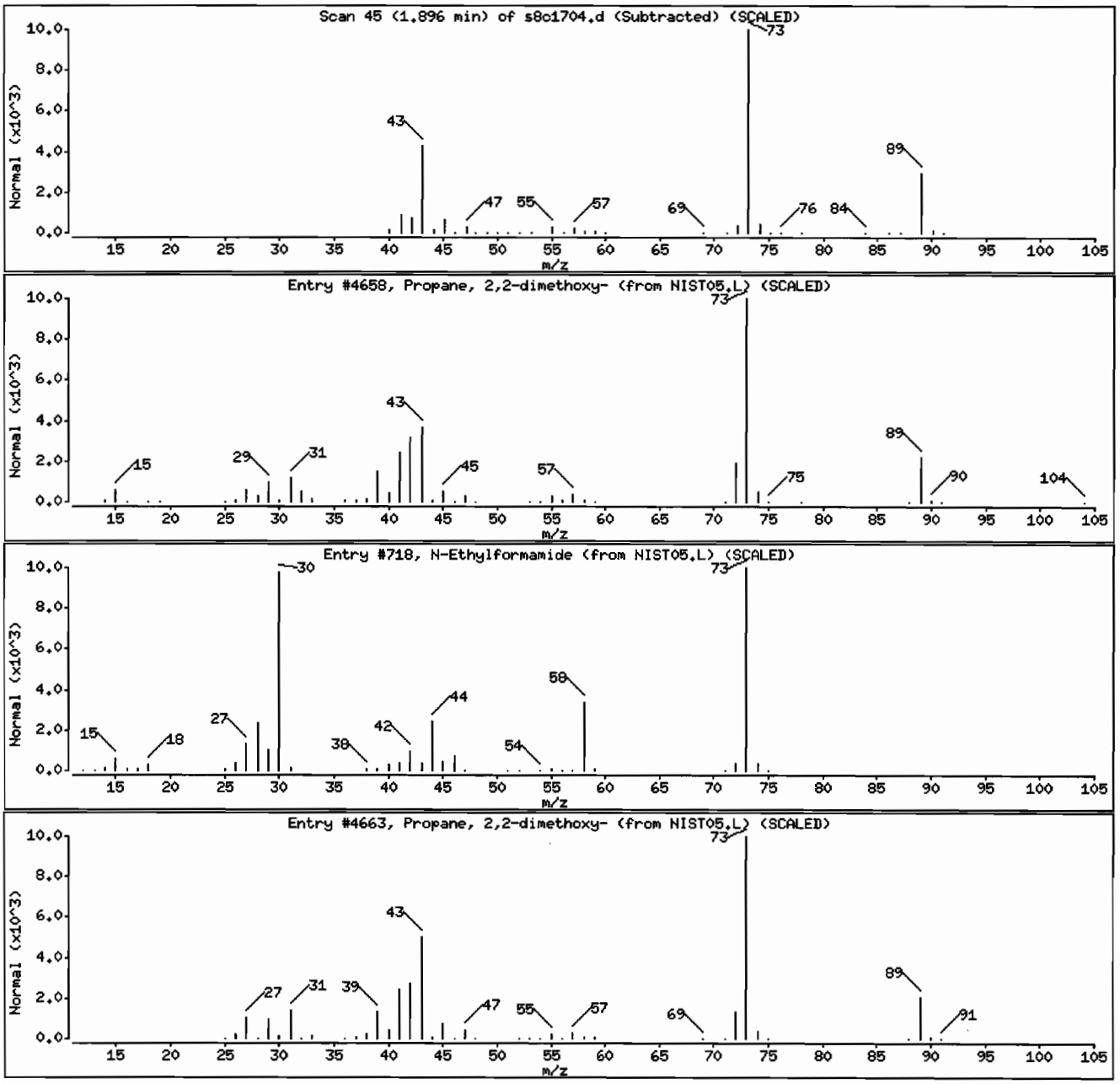
Volume Injected (uL): 0.5

Operator: nag1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Propane, 2,2-dimethoxy-	77-76-9	NIST05.L	4658	50	C5H12O2	104
N-Ethylformamide	627-45-2	NIST05.L	718	37	C3H7NO	73
Propane, 2,2-dimethoxy-	77-76-9	NIST05.L	4663	33	C5H12O2	104



Data File: /chem/MSD8.i/s031710.b/s8c1704.d

Date : 17-MAR-2010 10:04

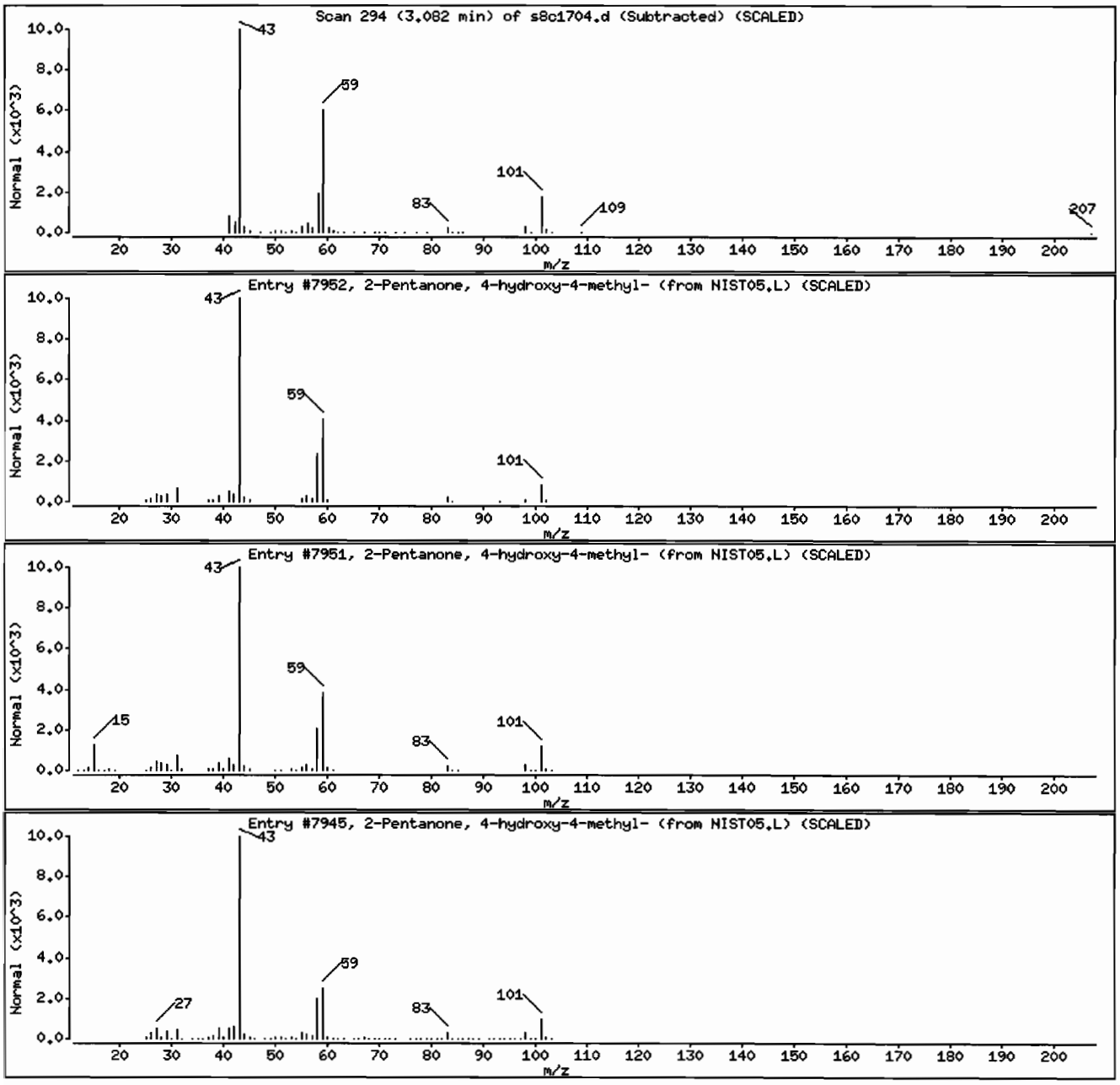
Client ID: SBLK01 Instrument: MSD8.i

Sample Info: |1202059027|959979|1|SVM|1|SBLK01

Volume Injected (uL): 0.5 Operator: nag1

Column phase: J&W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	59	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	59	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7945	42	C6H12O2	116



Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**10-2089**			**Matrix:**	**SOIL**
Lab Sample ID:	**1202059028**				
Client Sample:	**QC for batch 959978**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**LCS for batch 959978**	**Method:**	**SW846 8270C**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**959979**	**Inst:**	**MSD8.I**	**Dilution:**	**1**
Run Date:	**03/17/2010 10:33**	**Analyst:**	**NAG1**	**Inj. Vol:**	**.5 uL**
Prep Date:	**03/02/2010 23:08**	**Aliquot:**	**30 g**	**Final Volume:**	**1 mL**
Data File:	**s8c1705-1.d**	**Column:**	**J&W DB-5MS**	**Level:**	**LOW**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine		1120	ug/kg	66.7	333
108-95-2	Phenol		1330	ug/kg	66.7	333
95-57-8	2-Chlorophenol		1300	ug/kg	66.7	333
106-46-7	1,4-Dichlorobenzene		1140	ug/kg	66.7	333
621-64-7	N-Nitrosodipropylamine		1320	ug/kg	66.7	333
59-50-7	4-Chloro-3-methylphenol		1150	ug/kg	66.7	333
83-32-9	Acenaphthene		1070	ug/kg	11.0	33.3
121-14-2	2,4-Dinitrotoluene		1210	ug/kg	33.3	333
100-02-7	4-Nitrophenol		1080	ug/kg	110	333
87-86-5	Pentachlorophenol		1220	ug/kg	83.3	333
129-00-0	Pyrene		1040	ug/kg	10.0	33.3
110-86-1	Pyridine		1290	ug/kg	66.7	333
62-53-3	Aniline		853	ug/kg	100	333
111-44-4	bis(2-Chloroethyl) ether		1260	ug/kg	66.7	333
541-73-1	1,3-Dichlorobenzene		1150	ug/kg	66.7	333
100-51-6	Benzyl alcohol		764	ug/kg	100	333
95-50-1	1,2-Dichlorobenzene		1170	ug/kg	66.7	333
108-60-1	bis(2-Chloroisopropyl)ether		1250	ug/kg	66.7	333
95-48-7	o-Cresol		1210	ug/kg	66.7	333
65794-96-9	m,p-Cresols		1430	ug/kg	100	333
67-72-1	Hexachloroethane		1130	ug/kg	66.7	333
98-95-3	Nitrobenzene		1270	ug/kg	66.7	333
78-59-1	Isophorone		1270	ug/kg	66.7	333
88-75-5	2-Nitrophenol		1290	ug/kg	66.7	333
105-67-9	2,4-Dimethylphenol		1110	ug/kg	117	333
111-91-1	bis(2-Chloroethoxy)methane		1300	ug/kg	66.7	333
120-83-2	2,4-Dichlorophenol		1230	ug/kg	66.7	333
65-85-0	Benzoic acid		2400	ug/kg	167	667
91-20-3	Naphthalene		1220	ug/kg	10.0	33.3
106-47-8	4-Chloroaniline		907	ug/kg	66.7	333
87-68-3	Hexachlorobutadiene		1070	ug/kg	66.7	333
91-57-6	2-Methylnaphthalene		1250	ug/kg	6.67	33.3
77-47-4	Hexachlorocyclopentadiene		939	ug/kg	66.7	333
88-06-2	2,4,6-Trichlorophenol		1160	ug/kg	66.7	333
95-95-4	2,4,5-Trichlorophenol		1090	ug/kg	66.7	333
91-58-7	2-Chloronaphthalene		1160	ug/kg	11.0	33.3
88-74-4	2-Nitroaniline		1240	ug/kg	66.7	333
	o-Nitroaniline					
99-09-2	3-Nitroaniline		1130	ug/kg	66.7	333

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	10-2089			Matrix:	SOIL
Lab Sample ID:	1202059028				
Client Sample:	QC for batch 959978	Client:	LANL010	Project:	QC
Client ID:	LCS for batch 959978	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	959979	Inst:	MSD8.I	Dilution:	1
Run Date:	03/17/2010 10:33	Analyst:	NAG1	Inj. Vol:	.5 uL
Prep Date:	03/02/2010 23:08	Aliquot:	30 g	Final Volume:	1 mL
Data File:	s8c1705-1.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	m-Nitroaniline					
131-11-3	Dimethylphthalate		1280	ug/kg	66.7	333
606-20-2	2,6-Dinitrotoluene		1220	ug/kg	33.3	333
208-96-8	Acenaphthylene		1150	ug/kg	10.0	33.3
51-28-5	2,4-Dinitrophenol		1360	ug/kg	127	667
132-64-9	Dibenzofuran		1150	ug/kg	66.7	333
84-66-2	Diethylphthalate		1250	ug/kg	66.7	333
86-73-7	Fluorene		1100	ug/kg	10.0	33.3
7005-72-3	4-Chlorophenylphenylether		1110	ug/kg	66.7	333
534-52-1	2-Methyl-4,6-dinitrophenol		1350	ug/kg	66.7	333
100-01-6	4-Nitroaniline		1390	ug/kg	100	333
	p-Nitroaniline					
122-39-4	Diphenylamine		1400	ug/kg	66.7	333
122-66-7	Azobenzene		1420	ug/kg	66.7	333
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether		1210	ug/kg	66.7	333
118-74-1	Hexachlorobenzene		1160	ug/kg	66.7	333
85-01-8	Phenanthrene		1190	ug/kg	10.0	33.3
120-12-7	Anthracene		1120	ug/kg	6.67	33.3
84-74-2	Di-n-butylphthalate		1520	ug/kg	66.7	333
206-44-0	Fluoranthene		1150	ug/kg	10.0	33.3
85-68-7	Butylbenzylphthalate		1470	ug/kg	66.7	333
56-55-3	Benzo(a)anthracene		1130	ug/kg	10.0	33.3
91-94-1	3,3'-Dichlorobenzidine		1010	ug/kg	100	333
218-01-9	Chrysene		1190	ug/kg	10.0	33.3
117-81-7	bis(2-Ethylhexyl)phthalate		1630	ug/kg	66.7	333
117-84-0	Di-n-octylphthalate		1400	ug/kg	66.7	333
205-99-2	Benzo(b)fluoranthene		1130	ug/kg	10.0	33.3
207-08-9	Benzo(k)fluoranthene		1160	ug/kg	10.0	33.3
50-32-8	Benzo(a)pyrene		1230	ug/kg	10.0	33.3
193-39-5	Indeno(1,2,3-cd)pyrene		1520	ug/kg	10.0	33.3
53-70-3	Dibenzo(a,h)anthracene		1600	ug/kg	10.0	33.3
191-24-2	Benzo(ghi)perylene		1480	ug/kg	10.0	33.3
120-82-1	1,2,4-Trichlorobenzene		1130	ug/kg	66.7	333

GEL Laboratories LLC

Data file : /chem/MSD8.i/s031710.b/s8c1705.d
Lab Smp Id: 1202059028 Client Smp ID: SBLK01LCS
Inj Date : 17-MAR-2010 10:33
Operator : nag1 Inst ID: MSD8.i
Smp Info : |1202059028|959979|1|SVM|1|SBLK01LCS
Misc Info : |MSD8270_S|WBN100310-01
Comment : Column: J & W DB-5MS, 25m x 0.20 mm x 0.33 micron film
Method : /chem/MSD8.i/s031710.b/MSD8-8270AQA-022010.m
Meth Date : 17-Mar-2010 13:57 nat00999 Quant Type: ISTD
Cal Date : 21-FEB-2010 23:15 Cal File: s8b2042.d
Als bottle: 5 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-2089.sub
Target Version: 3.50
Processing Host: hpclp1

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.00000	weight of sample
M	0.00000	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	4.454	4.454	(1.000)	632433	40.0000	
* 29 Naphthalene-d8	136	5.715	5.716	(1.000)	2452491	40.0000	
* 46 Acenaphthene-d10	164	7.568	7.573	(1.000)	1406213	40.0000	
* 67 Phenanthrene-d10	188	9.168	9.168	(1.000)	2367185	40.0000	
* 91 Chrysene-d12	240	12.073	12.073	(1.000)	2173530	40.0000	
* 98 Perylene-d12	264	14.178	14.173	(1.000)	1675623	40.0000	
$ 3 2-Fluorophenol	112	3.315	3.306	(0.744)	1159720	77.6726	2590
$ 5 Phenol-d5	99	4.077	4.077	(0.916)	1436738	77.1589	2570
$ 20 Nitrobenzene-d5	82	4.982	4.987	(0.872)	638948	36.6498	1220
$ 39 2-Fluorobiphenyl	172	6.839	6.839	(0.904)	1352098	32.6659	1090
$ 60 2,4,6-Tribromophenol	329	8.416	8.416	(1.112)	314876	67.7382	2260
$ 81 p-Terphenyl-d14	244	10.877	10.878	(0.901)	1458952	37.2833	1240

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
6 Phenol	94	4.092	4.087	(0.919)	768657	39.9744	1330
8 2-Chlorophenol	128	4.258	4.254	(0.956)	649302	38.8872	1300
11 1,4-Dichlorobenzene	146	4.468	4.473	(1.003)	701054	34.3149	1140
17 N-Nitrosodipropylamine	70	4.830	4.835	(1.084)	485223	39.4524	1320(Q)
28 1,2,4-Trichlorobenzene	180	5.649	5.649	(0.988)	607820	34.0459	1130
33 4-Chloro-3-methylphenol	107	6.282	6.268	(1.099)	493663	34.3663	1140
47 Acenaphthene	154	7.606	7.606	(1.005)	1201325	32.1484	1070
50 2,4-Dinitrotoluene	165	7.768	7.773	(1.026)	415406	36.3668	1210
52 4-Nitrophenol	139	7.687	7.682	(1.016)	155957	32.4912	1080
65 Pentachlorophenol	266	8.958	8.954	(0.977)	192065	36.6753	1220
79 Pyrene	202	10.720	10.720	(0.888)	2123081	31.2850	1040
2 Pyridine	79	2.411	2.382	(0.541)	547356	38.7356	1290
4 Aniline	66	4.144	4.149	(0.930)	224638	25.5802	853
7 bis(2-Chloroethyl) ether	63	4.192	4.192	(0.941)	496963	37.8040	1260
9 1,3-Dichlorobenzene	146	4.401	4.401	(0.988)	685741	34.6309	1150
12 Benzyl alcohol	108	4.568	4.568	(1.026)	239294	22.9118	764
13 1,2-Dichlorobenzene	146	4.615	4.616	(1.036)	669695	35.2404	1170
14 bis(2-Chloroisopropyl)ether	45	4.692	4.697	(1.053)	969068	37.5977	1250
15 o-Cresol	107	4.658	4.658	(1.046)	485975	36.3910	1210
18 m,p-Cresols	107	4.811	4.816	(1.080)	726482	42.9868	1430
19 Hexachloroethane	117	4.944	4.944	(1.110)	261747	33.9977	1130
21 Nitrobenzene	77	5.001	5.006	(0.875)	687469	38.2281	1270
22 Isophorone	82	5.239	5.239	(0.917)	1264900	38.2050	1270
23 2-Nitrophenol	139	5.315	5.320	(0.930)	320646	38.8486	1290
24 2,4-Dimethylphenol	122	5.339	5.344	(0.934)	490316	33.4153	1110
25 bis(2-Chloroethoxy)methane	93	5.444	5.444	(0.952)	722639	38.9216	1300
26 2,4-Dichlorophenol	162	5.563	5.558	(0.973)	490596	36.9517	1230
27 Benzoic acid	105	5.477	5.439	(0.958)	600817	71.9089	2400(Q)
30 Naphthalene	128	5.735	5.739	(1.003)	1946805	36.5909	1220
31 4-Chloroaniline	127	5.782	5.782	(1.012)	476672	27.1975	906
32 Hexachlorobutadiene	225	5.854	5.854	(1.024)	355998	32.0620	1070
34 2-Methylnaphthalene	142	6.454	6.458	(1.129)	1329263	37.3721	1240
36 Hexachlorocyclopentadiene	237	6.615	6.616	(0.874)	245916	28.1758	939
37 2,4,6-Trichlorophenol	196	6.749	6.749	(0.892)	376853	34.7831	1160
38 2,4,5-Trichlorophenol	196	6.792	6.782	(0.897)	374672	32.5814	1090
40 2-Chloronaphthalene	162	6.973	6.973	(0.921)	1198149	34.6590	1160
42 o-Nitroaniline	65	7.077	7.077	(0.935)	357525	37.1270	1240
41 m-Nitroaniline	138	7.516	7.520	(0.993)	248876	33.9096	1130
43 Dimethylphthalate	163	7.273	7.278	(0.961)	1509118	38.2977	1280
44 2,6-Dinitrotoluene	165	7.339	7.339	(0.970)	326343	36.6319	1220
45 Acenaphthylene	152	7.415	7.420	(0.980)	2018830	34.5797	1150
48 2,4-Dinitrophenol	184	7.625	7.630	(1.008)	117423	40.7327	1360
49 Dibenzofuran	168	7.787	7.787	(1.029)	1684590	34.3590	1140
51 Diethylphthalate	149	8.025	8.025	(1.060)	1550474	37.5953	1250
53 Fluorene	166	8.158	8.158	(1.078)	1493999	32.9180	1100
54 4-Chlorophenylphenylether	204	8.149	8.154	(1.077)	728277	33.3197	1110
55 2-Methyl-4,6-dinitrophenol	198	8.206	8.206	(0.895)	191994	40.5414	1350

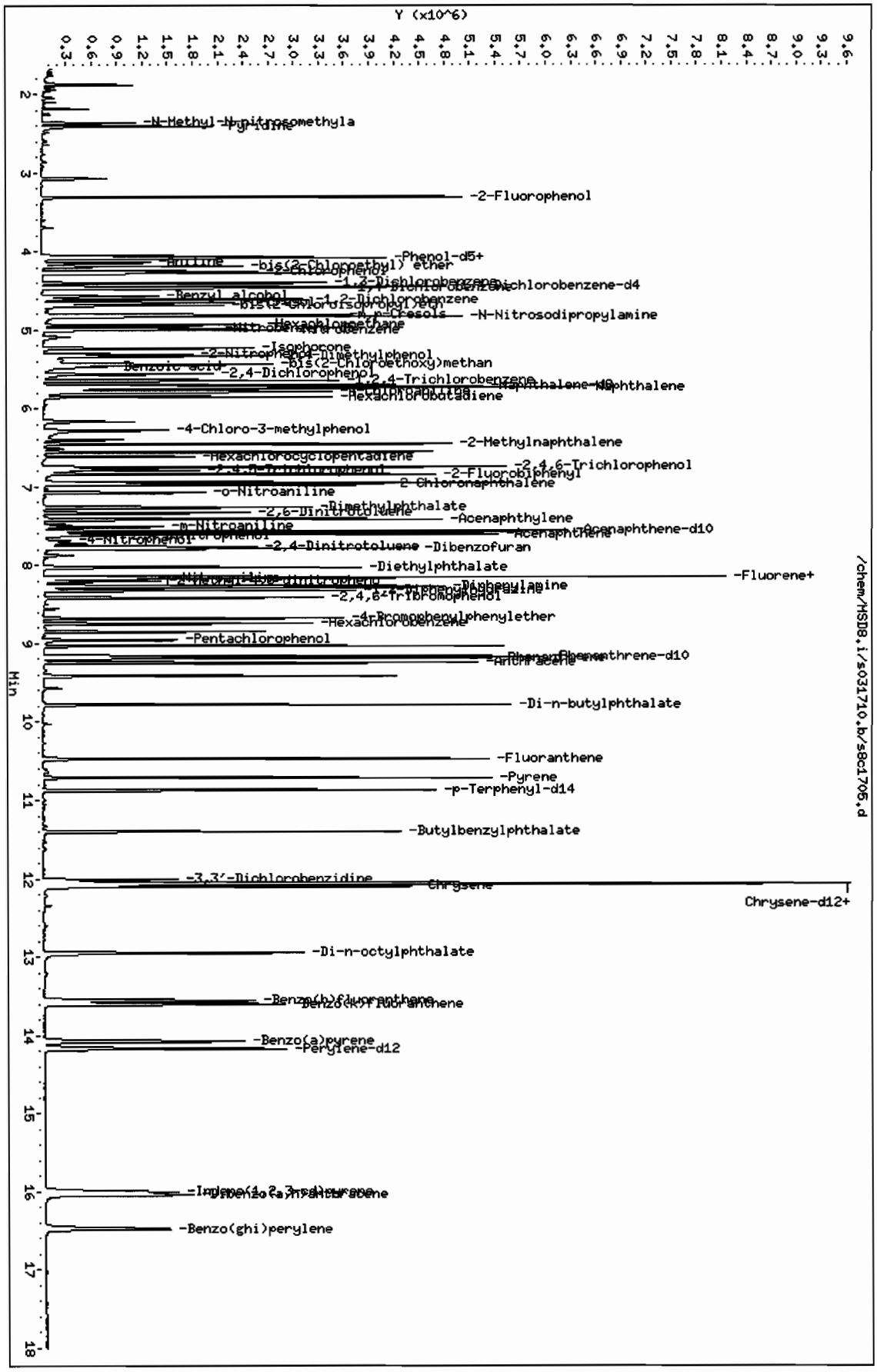
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
56	p-Nitroaniline	138	8.177	8.168	(1.081)	271091	41.8006	1390
133	Diphenylamine	169	8.277	8.278	(0.903)	1258155	42.0606	1400
58	1,2-Diphenylhydrazine	77	8.325	8.325	(0.908)	1493943	42.5168	1420
61	4-Bromophenylphenylether	248	8.677	8.678	(0.946)	410475	36.2885	1210
63	Hexachlorobenzene	284	8.749	8.749	(0.954)	409807	34.8569	1160
68	Phenanthrene	178	9.192	9.192	(1.003)	1975523	35.7280	1190
69	Anthracene	178	9.249	9.249	(1.009)	1924638	33.4990	1120
72	Di-n-butylphthalate	149	9.782	9.782	(1.067)	2733083	45.5111	1520
76	Fluoranthene	202	10.473	10.473	(1.142)	2083844	34.5944	1150
85	Butylbenzylphthalate	149	11.396	11.397	(0.944)	1046918	44.1168	1470
89	Benzo(a)anthracene	228	12.054	12.059	(0.998)	1938685	33.8949	1130
90	3,3'-Dichlorobenzidine	252	12.016	12.006	(0.995)	408620	30.3469	1010
92	Chrysene	228	12.106	12.106	(1.003)	1780059	35.7021	1190
93	bis(2-Ethylhexyl)phthalate	149	12.063	12.063	(0.999)	1622389	48.8525	1630
94	Di-n-octylphthalate	149	12.954	12.954	(0.914)	2193386	42.0885	1400
95	Benzo(b)fluoranthene	252	13.558	13.559	(0.956)	1616235	34.0218	1130
96	Benzo(k)fluoranthene	252	13.606	13.601	(0.960)	1656600	34.6869	1160
97	Benzo(a)pyrene	252	14.078	14.078	(0.993)	1473895	36.7858	1230
99	Indeno(1,2,3-cd)pyrene	276	16.006	16.001	(1.129)	1512572	45.5315	1520
100	Dibenzo(a,h)anthracene	278	16.039	16.040	(1.131)	1233570	48.0476	1600
101	Benzo(ghi)perylene	276	16.482	16.478	(1.163)	1216989	44.2775	1480
1	N-Methyl-N-nitrosomethylamine	74	2.373	2.349	(0.533)	323737	33.6090	1120

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: /chem/MSD8.i/s031710.b/s8c1705.d
Date : 17-MAR-2010 10:33
Client ID: SBLK01LCS
Sample Info: 1120059028|959979|1|SVH|1|SBLK01LCS
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Instrument: MSD8.i
Operator: nag1
Column diameter: 0.20



Page 1

Miscellaneous Data

Prep Logbook

Extraction of Semivolatile and Nonvolatile Organic Compounds from Soil, Sludge, and Other Miscellaneous Solid Samples

Batch ID: 959978 **Verified by:** _____

Analyst: Alberto Velasco

Method: SW846 3550B

Lab SOP: GL-OA-E-010 REV# 18

Instrument: Semi-Volatiles Manual

Sample ID	Run Date	Aliquot (g)	Prepped Aliquot (mL)	Prepped Factor (mL/g)
1202059027 MB	02-MAR-2010 23:08:00	30	1	0.03333
1202059028 LCS	02-MAR-2010 23:08:00	30	1	0.03333
248102001	02-MAR-2010 23:08:00	30.13	1	0.03319
248102002	02-MAR-2010 23:08:00	30.05	1	0.03328
248102003	02-MAR-2010 23:08:00	30.1	1	0.03322
248102004	02-MAR-2010 23:08:00	30.18	1	0.03313
248102005	02-MAR-2010 23:08:00	30.11	1	0.03321
248102006	02-MAR-2010 23:08:00	30.12	1	0.0332
248102007	02-MAR-2010 23:08:00	30.14	1	0.03318
248102008	02-MAR-2010 23:08:00	30.04	1	0.03329
248114002	02-MAR-2010 23:08:00	30.13	1	0.03319
1202059029 MS (248114002)	02-MAR-2010 23:08:00	30.07	1	0.03326
1202059030 MSD (248114002)	02-MAR-2010 23:08:00	30.17	1	0.03315
248114003	02-MAR-2010 23:08:00	30.18	1	0.03313
248114004	02-MAR-2010 23:08:00	30.04	1	0.03329
248114005	02-MAR-2010 23:08:00	30.14	1	0.03318
248114006	02-MAR-2010 23:08:00	30.1	1	0.03322
248114007	02-MAR-2010 23:08:00	30.09	1	0.03323
248114008	02-MAR-2010 23:08:00	30.13	1	0.03319

Type	Sample Id	Description	Serial Number	Spike Amt	Units
LCS	1202059028	BNA LCS w/o Benzidine 50ppm	UE100222-14	1	mL
LCS	1202059028	BENZIDINE LCS	UE100222-22	1	mL
MS	1202059029	BNA LCS w/o Benzidine 50ppm	UE100222-14	1	mL
MS	1202059029	BENZIDINE LCS	UE100222-22	1	mL
MSD	1202059030	BNA LCS w/o Benzidine 50ppm	UE100222-14	1	mL
MSD	1202059030	BENZIDINE LCS	UE100222-22	1	mL
SURR	All	BNA for all Surrogate	UE100301-10	1	mL
REGNT	All	Methylene Chloride	100301-D	150	mL
REGNT	All	Acetone	1273823-B1	150	mL
SOURC	All	SODIUM SULFATE	1274910	30	g

Comments:

Verified By: AAW

Final Solvent: CH2Cl2

GEL ORGANIC RUN LOG INSTRUMENT ID: MSD8

DATE: 03/17/2010 METHOD:See raw data OPERATOR:NAG REVIEWED BY:_____ DATE:_____

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1 SOLVENT LOT 1266705-D
Multiplier Voltage: 1176mv Extr. Injection Volume: 0.5, 1.0 ul
DFTPP Solution ID: WBN100306-01.2 Internal Std ID: WBN100310-01
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/MSD8.i/s031710.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
s8c1701.d	WBN100306-01.2	nagl	17-MAR-2010 08:47	DFTPP	s031710	1.0	DFTPP	
s8c1702.d	WBN100309-05.3	nagl	17-MAR-2010 09:03	CCV	s031710	1.0	MEGACVS	631013
s8c1703.d	WBN100312-03.2	nagl	17-MAR-2010 09:34	CCV	s031710	1.0	AP12CVS	
s8c1704-1.d	1202059027	nagl	17-MAR-2010 10:04	959979	10-2092	1.0	SBLK01	
s8c1704.d	1202059027	nagl	17-MAR-2010 10:04	959979	10-2089	1.0	SBLK01	
s8c1705-1.d	1202059028	nagl	17-MAR-2010 10:33	959979	10-2092	1.0	SBLK01LCS	
s8c1705.d	1202059028	nagl	17-MAR-2010 10:33	959979	10-2089	1.0	SBLK01LCS	
s8c1706.d	248102003	nagl	17-MAR-2010 11:01	959979	10-2089	1.0	LANL	
s8c1707.d	248102004	nagl	17-MAR-2010 11:31	959979	10-2089	1.0	LANL	
s8c1708.d	248102005	nagl	17-MAR-2010 12:00	959979	10-2089	1.0	LANL	
s8c1709.d	248102006	nagl	17-MAR-2010 12:30	959979	10-2089	1.0	LANL	
s8c1710.d	248102007	nagl	17-MAR-2010 12:59	959979	10-2089	1.0	LANL	
s8c1711.d	248114002	nagl	17-MAR-2010 13:27	959979	10-2092	1.0	LANL	
s8c1712.d	1202059029	nagl	17-MAR-2010 13:56	959979	10-2092	1.0	MS	failed spike
s8c1713.d	1202059030	nagl	17-MAR-2010 14:26	959979	10-2092	1.0	MSD	failed spike/C33 manual
s8c1714.d	248114003	nagl	17-MAR-2010 14:54	959979	10-2092	1.0	LANL	
s8c1715.d	248114004	nagl	17-MAR-2010 15:24	959979	10-2092	1.0	LANL	
s8c1716.d	248114005	nagl	17-MAR-2010 15:54	959979	10-2092	1.0	LANL	
s8c1717.d	248114006	nagl	17-MAR-2010 16:23	959979	10-2092	1.0	LANL	

s8c1718.d	248114007	nag1	17-MAR-2010 16:52	959979	10-2092		1.0	LANL	
s8c1719.d	248114008	nag1	17-MAR-2010 17:21	959979	10-2092		1.0	LANL	
s8c1720.d	248102001	nag1	17-MAR-2010 17:51	959979	10-2089		1.0	LANL	
s8c1721.d	248102002	nag1	17-MAR-2010 18:21	959979	10-2089		1.0	LANL	
s8c1722.d	248102008	nag1	17-MAR-2010 18:51	959979	10-2089		1.0	LANL	

Instrument Batch: /chem/MSD8.i/s031710.b Page: 1

GEL ORGANIC RUN LOG INSTRUMENT ID: MSD8

DATE: 02/20/2010 METHOD:See raw data OPERATOR:NAG REVIEWED BY:_____ DATE:_____

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1 SOLVENT LOT 1239699-D
Multiplier Voltage: 1094mv Extr. Injection Volume: 0.5, 1.0 ul
DFTPP Solution ID: WBN100207-01 Internal Std ID: WBN100217-01
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/MSD8.i/s022010.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
s8b2001-D.d	WBN100207-01	nagl	20-FEB-2010 12:04	50 PPM	s022010	1.0	DFTPP	
s8b2001.d	WBN100207-01	nagl	20-FEB-2010 12:04	50 PPM	s022010	1.0	DFTPP	
s8b2002.d	inst blk	nagl	20-FEB-2010 12:21	--------	s022010	1.0	INST BLK	
s8b2003.d	WBN100215-08	nagl	20-FEB-2010 12:55	1 PPM	s022010	1.0	MEGAICAL	Naphthalene/1-Methylnaphthalene failed SC
s8b2004-linear.d	WBN100215-07	nagl	20-FEB-2010 13:30	10 PPM	s022010	1.0	MEGAICAL	
s8b2004.d	WBN100215-07	nagl	20-FEB-2010 13:30	10 PPM	s022010	1.0	MEGAICAL	
s8b2005-linear.d	WBN100215-06	nagl	20-FEB-2010 14:05	20 PPM	s022010	1.0	MEGAICAL	
s8b2005.d	WBN100215-06	nagl	20-FEB-2010 14:05	20 PPM	s022010	1.0	MEGAICAL	
s8b2006.d	WBN100215-05.1	nagl	20-FEB-2010 14:40	40 PPM	s022010	1.0	MEGAICAL	
s8b2007.d	WBN100215-04	nagl	20-FEB-2010 15:14	50 PPM	s022010	1.0	MEGAICAL	
s8b2008.d	WBN100215-03	nagl	20-FEB-2010 15:50	80 PPM	s022010	1.0	MEGAICAL	
s8b2009.d	WBN100215-02	nagl	20-FEB-2010 16:25	100 PPM	s022010	1.0	MEGAICAL	
s8b2010.d	WBN100215-01	nagl	20-FEB-2010 16:59	120 PPM	s022010	1.0	MEGAICAL	
s8b2011.d	inst blk	nagl	20-FEB-2010 17:34	--------	s022010	1.0	INST BLK	
s8b2012-D.d	WBN100215-05.1	nagl	20-FEB-2010 18:09	40 PPM	s022010	1.0	MEAGICV	8270D
s8b2012.d	WBN100215-05.1	nagl	20-FEB-2010 18:09	40 PPM	s022010	1.0	MEGAICV	
s8b2013-D.d	WBN100207-01	nagl	21-FEB-2010 08:35	50 PPM	s022010	1.0	DFTPP	
s8b2013.d	WBN100207-01	nagl	21-FEB-2010 08:35	50 PPM	s022010	1.0	DFTPP	
s8b2014.d	inst blk	nagl	21-FEB-2010 08:51	--------	s022010	1.0	INST BLK	

s8b2015.d	WBN100218-01	nag1	21-FEB-2010 09:21	10 PPM	s022010	1.0	APICAL	
s8b2016.d	WBN100218-02	nag1	21-FEB-2010 09:52	20 PPM	s022010	1.0	APICAL	
s8b2017.d	WBN100218-03.1	nag1	21-FEB-2010 10:23	40 PPM	s022010	1.0	APICAL	
s8b2018.d	WBN100218-04	nag1	21-FEB-2010 10:54	50 PPM	s022010	1.0	APICAL	
s8b2019.d	WBN100218-05	nag1	21-FEB-2010 11:26	80 PPM	s022010	1.0	APICAL	
s8b2020.d	WBN100218-06	nag1	21-FEB-2010 11:59	100 PPM	s022010	1.0	APICAL	
s8b2021.d	WBN100218-07	nag1	21-FEB-2010 12:30	120 PPM	s022010	1.0	APICAL	
s8b2022.d	WBN100205-25	nag1	21-FEB-2010 13:02	10 PPM	s022010	1.0	PESTICAL	
s8b2023.d	WBN100205-24	nag1	21-FEB-2010 13:33	20 PPM	s022010	1.0	PESTICAL	
s8b2024.d	WBN100205-23.1	nag1	21-FEB-2010 14:05	40 PPM	s022010	1.0	PESTICAL	
s8b2025.d	WBN100205-22	nag1	21-FEB-2010 14:37	50 PPM	s022010	1.0	PESTICAL	
s8b2026.d	WBN100205-21	nag1	21-FEB-2010 15:09	80 PPM	s022010	1.0	PESTICAL	
s8b2027.d	WBN100205-20	nag1	21-FEB-2010 15:40	100 PPM	s022010	1.0	PESTICAL	
s8b2028.d	WBN100205-19	nag1	21-FEB-2010 16:12	120 PPM	s022010	1.0	PESTICAL	
s8b2029-linear.d	WBN100120-16	nag1	21-FEB-2010 16:44	500 PPM	s022010	1.0	HEXICAL	
s8b2029.d	WBN100120-16	nag1	21-FEB-2010 16:44	500 PPM	s022010	1.0	HEXICAL	
s8b2030.d	WBN100120-15	nag1	21-FEB-2010 17:16	1000 PPM	s022010	1.0	HEXICAL	
s8b2031.d	WBN100120-14	nag1	21-FEB-2010 17:48	1250 PPM	s022010	1.0	HEXICAL	
s8b2032.d	WBN100120-13	nag1	21-FEB-2010 18:19	1500 PPM	s022010	1.0	HEXICAL	
s8b2033.d	WBN100120-12	nag1	21-FEB-2010 18:51	1750 PPM	s022010	1.0	HEXICAL	
s8b2034.d	UBN090828-02.10	nag1	21-FEB-2010 19:22	2000 PPM	s022010	1.0	HEXICAL	
s8b2035-D.d	WBN100218-08.1	nag1	21-FEB-2010 19:53	40 PPM	s022010	1.0	APICV	8270D
s8b2035.d	WBN100218-08.1	nag1	21-FEB-2010 19:53	40 PPM	s022010	1.0	APICV	
s8b2036-D.d	WBN100205-26.1	nag1	21-FEB-2010 20:25	40 PPM	s022010	1.0	PESTICV	8270D
s8b2036.d	WBN100205-26.1	nag1	21-FEB-2010 20:25	40 PPM	s022010	1.0	PESTICV	
s8b2037.d	WBN091016-10.1	nag1	21-FEB-2010 20:55	1250 PPM	s022010	1.0	HEXICV	DUSE
s8b2038-D.d	WBN100207-01	nag1	21-FEB-2010 21:26	50 PPM	s022010	1.0	DFTPP	

s8b2038.d	WBN100207-01	nag1	21-FEB-2010 21:26	50 PPM	s022010		1.0	DFTPP	
s8b2039.d	inst blk	nag1	21-FEB-2010 21:43	--------	s022010		1.0	INST BLK	
s8b2040.d	WBN100127-01	nag1	21-FEB-2010 22:13	10 PPM	s022010		1.0	NEVICAL	
s8b2041.d	WBN100127-02	nag1	21-FEB-2010 22:45	20 PPM	s022010		1.0	NEVICAL	
s8b2042.d	WBN100127-03	nag1	21-FEB-2010 23:15	40 PPM	s022010		1.0	NEVICAL	
s8b2043.d	WBN100127-04	nag1	21-FEB-2010 23:46	50 PPM	s022010		1.0	NEVICAL	
s8b2044.d	WBN100127-05	nag1	22-FEB-2010 00:17	80 PPM	s022010		1.0	NEVICAL	
s8b2045.d	WBN100127-06	nag1	22-FEB-2010 00:48	100 PPM	s022010		1.0	NEVICAL	
s8b2046.d	WBN100127-07	nag1	22-FEB-2010 01:19	120 PPM	s022010		1.0	NEVICAL	
s8b2047-D.d	WBN100103-10.2	nag1	22-FEB-2010 08:59	1250 PPM	s022010		1.0	HEXICV	8270D
s8b2047.d	WBN100103-10.2	nag1	22-FEB-2010 08:59	1250 PPM	s022010		1.0	HEXICV	

(s10HInstrument Batch: /chem/MSD8.i/s022010.b Page: 2

GEL Laboratories LLC

Data file : /chem/MSD8.i/s031710.b/s8c1712.d
Lab Smp Id: 1202059029 Client Smp ID: RE36-10-8448MS
Inj Date : 17-MAR-2010 13:56
Operator : nagl Inst ID: MSD8.i
Smp Info : |1202059029|959979|1|SVM|1|MS
Misc Info : |MSD8270_S|WBN100310-01
Comment : Column: J & W DB-5MS, 25m x 0.20 mm x 0.33 micron film
Method : /chem/MSD8.i/s031710.b/MSD8-8270AQA-022010.m
Meth Date : 17-Mar-2010 13:57 nat00999 Quant Type: ISTD
Cal Date : 21-FEB-2010 23:15 Cal File: s8b2042.d
Als bottle: 12 QC Sample: MS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-2092.sub
Target Version: 3.50
Processing Host: hpclp1

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.07000	weight of sample
M	2.66260	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	4.453	4.454	(1.000)	656482	40.0000	
* 29 Naphthalene-d8	136	5.715	5.716	(1.000)	2601637	40.0000	
* 46 Acenaphthene-d10	164	7.568	7.573	(1.000)	1523085	40.0000	
* 67 Phenanthrene-d10	188	9.168	9.168	(1.000)	2603973	40.0000	
* 91 Chrysene-d12	240	12.073	12.073	(1.000)	2503627	40.0000	
* 98 Perylene-d12	264	14.177	14.173	(1.000)	1879372	40.0000	
$ 3 2-Fluorophenol	112	3.315	3.306	(0.744)	1204006	77.6846	2650
$ 5 Phenol-d5	99	4.082	4.077	(0.917)	1530119	79.1636	2700
$ 20 Nitrobenzene-d5	82	4.982	4.987	(0.872)	694041	37.5277	1280
$ 39 2-Fluorobiphenyl	172	6.839	6.839	(0.904)	1499235	33.4413	1140
$ 60 2,4,6-Tribromophenol	329	8.415	8.416	(1.112)	286642	56.9325	1940
$ 81 p-Terphenyl-d14	244	10.877	10.878	(0.901)	1751562	38.8593	1330

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
6 Phenol	94	4.092	4.087	(0.919)	832859	41.7266	1420
8 2-Chlorophenol	128	4.258	4.254	(0.956)	702933	40.5570	1380
11 1,4-Dichlorobenzene	146	4.473	4.473	(1.004)	755759	35.6374	1220
17 N-Nitrosodipropylamine	70	4.830	4.835	(1.084)	537241	42.0816	1440(Q)
28 1,2,4-Trichlorobenzene	180	5.649	5.649	(0.988)	663863	35.0533	1200
33 4-Chloro-3-methylphenol	107	6.287	6.268	(1.100)	532493	34.9444	1190
47 Acenaphthene	154	7.606	7.606	(1.005)	1351877	33.4013	1140
50 2,4-Dinitrotoluene	165	7.768	7.773	(1.026)	488939	39.5198	1350
52 4-Nitrophenol	139	7.701	7.682	(1.018)	22067	4.24455	145(aR)
65 Pentachlorophenol	266	8.958	8.954	(0.977)	157845	27.4001	936
79 Pyrene	202	10.720	10.720	(0.888)	2621786	33.5400	1140
2 Pyridine	79	2.415	2.382	(0.542)	389558	26.5585	907
4 Aniline	66	4.144	4.149	(0.930)	214653	23.5478	804
7 bis(2-Chloroethyl) ether	63	4.192	4.192	(0.941)	542250	39.7380	1360
9 1,3-Dichlorobenzene	146	4.401	4.401	(0.988)	740346	36.0188	1230
12 Benzyl alcohol	108	4.587	4.568	(1.030)	33841	3.12149	107(aR)
13 1,2-Dichlorobenzene	146	4.615	4.616	(1.036)	720278	36.5137	1250
14 bis(2-Chloroisopropyl)ether	45	4.692	4.697	(1.053)	1074200	40.1498	1370
15 o-Cresol	107	4.663	4.658	(1.047)	524359	37.8269	1290
18 m,p-Cresols	107	4.811	4.816	(1.080)	734041	41.8429	1430
19 Hexachloroethane	117	4.944	4.944	(1.110)	287382	35.9600	1230
21 Nitrobenzene	77	5.001	5.006	(0.875)	750547	39.3431	1340
22 Isophorone	82	5.239	5.239	(0.917)	1409015	40.1181	1370
23 2-Nitrophenol	139	5.315	5.320	(0.930)	350595	40.0420	1370
24 2,4-Dimethylphenol	122	5.344	5.344	(0.935)	502424	32.2775	1100
25 bis(2-Chloroethoxy)methane	93	5.444	5.444	(0.952)	802085	40.7240	1390
26 2,4-Dichlorophenol	162	5.568	5.558	(0.974)	546561	38.8070	1320
27 Benzoic acid	105	5.449	5.439	(0.953)	348026	46.0605	1570
30 Naphthalene	128	5.734	5.739	(1.003)	2140931	37.8592	1290
31 4-Chloroaniline	127	5.782	5.782	(1.012)	522735	28.1159	960
32 Hexachlorobutadiene	225	5.854	5.854	(1.024)	388746	33.0043	1130
34 2-Methylnaphthalene	142	6.454	6.458	(1.129)	1468699	38.8709	1330
36 Hexachlorocyclopentadiene	237	6.615	6.616	(0.874)	257580	27.2476	931
37 2,4,6-Trichlorophenol	196	6.749	6.749	(0.892)	388966	33.1463	1130
38 2,4,5-Trichlorophenol	196	6.792	6.782	(0.897)	428794	34.4266	1180
40 2-Chloronaphthalene	162	6.977	6.973	(0.922)	1345767	35.8879	1230
42 o-Nitroaniline	65	7.077	7.077	(0.935)	412923	39.5894	1350
41 m-Nitroaniline	138	7.520	7.520	(0.994)	291756	36.7017	1250
43 Dimethylphthalate	163	7.273	7.278	(0.961)	1753268	41.0795	1400
44 2,6-Dinitrotoluene	165	7.339	7.339	(0.970)	378780	39.2554	1340
45 Acenaphthylene	152	7.420	7.420	(0.980)	2299961	36.3722	1240
48 2,4-Dinitrophenol	184	7.630	7.630	(1.008)	78285	30.5987	1040
49 Dibenzofuran	168	7.787	7.787	(1.029)	1957243	36.8568	1260
51 Diethylphthalate	149	8.025	8.025	(1.060)	1825482	40.8671	1400
53 Fluorene	166	8.158	8.158	(1.078)	1757735	35.7572	1220
54 4-Chlorophenylphenylether	204	8.154	8.154	(1.077)	850019	35.9055	1230
55 2-Methyl-4,6-dinitrophenol	198	8.211	8.206	(0.896)	193084	37.6410	1290

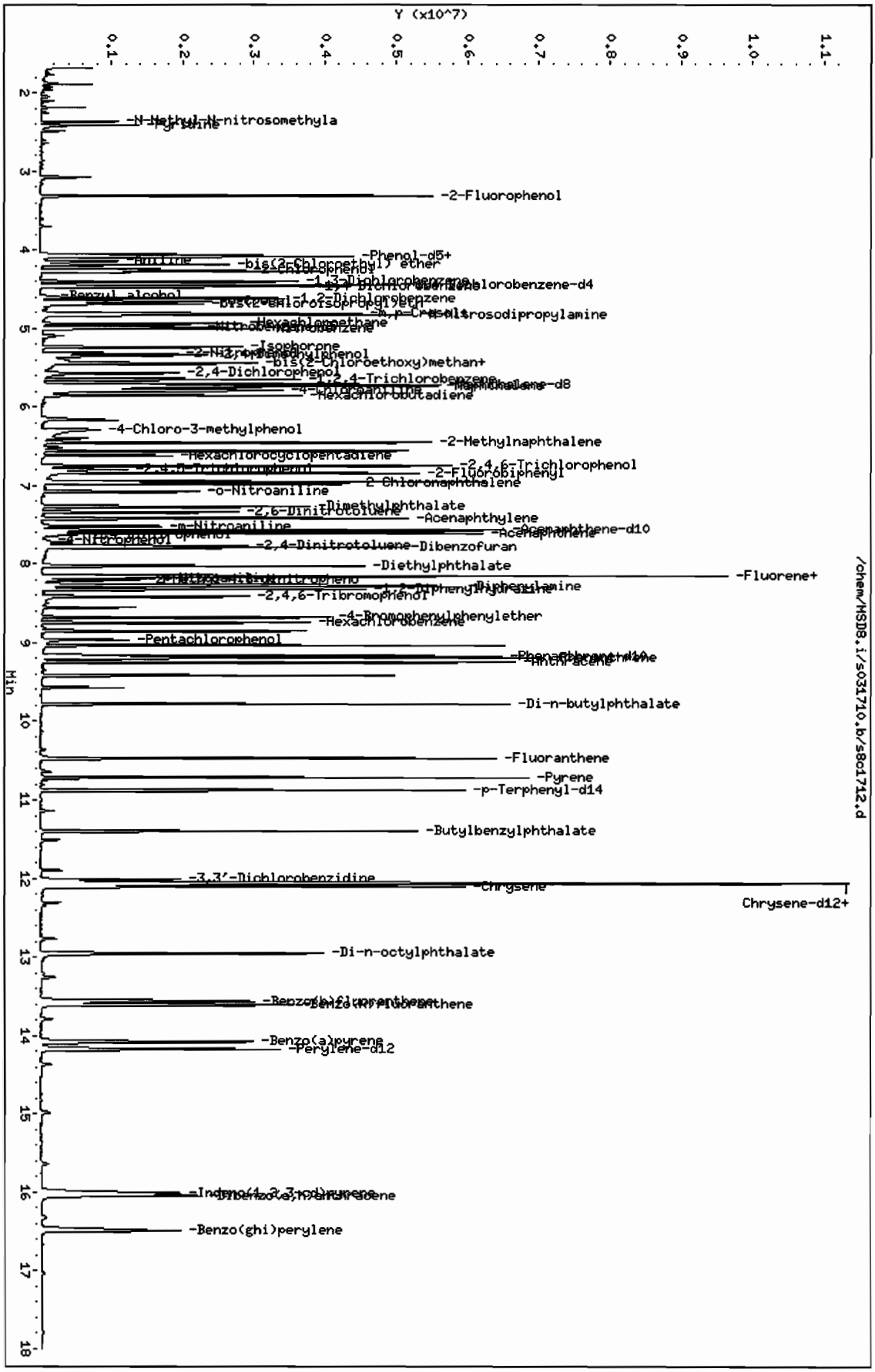
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
56 p-Nitroaniline	138	8.177	8.168	(1.081)	317227	45.1611	1540
133 Diphenylamine	169	8.282	8.278	(0.903)	1508809	45.8534	1570
58 1,2-Diphenylhydrazine	77	8.325	8.325	(0.908)	1747420	45.2085	1540
61 4-Bromophenylphenylether	248	8.677	8.678	(0.946)	479920	38.5697	1320
63 Hexachlorobenzene	284	8.749	8.749	(0.954)	481997	37.2691	1270
68 Phenanthrene	178	9.196	9.192	(1.003)	2391550	39.1213	1340
69 Anthracene	178	9.249	9.249	(1.009)	2358198	37.3129	1270
72 Di-n-butylphthalate	149	9.782	9.782	(1.067)	3208087	48.5631	1660
76 Fluoranthene	202	10.473	10.473	(1.142)	2554866	38.5571	1320
85 Butylbenzylphthalate	149	11.401	11.397	(0.944)	1290488	47.2108	1610
89 Benzo(a)anthracene	228	12.058	12.059	(0.999)	2424710	36.8029	1260
90 3,3'-Dichlorobenzidine	252	12.015	12.006	(0.995)	511403	32.9727	1130
92 Chrysene	228	12.106	12.106	(1.003)	2248299	39.1114	1340
93 bis(2-Ethylhexyl)phthalate	149	12.068	12.063	(1.000)	1940545	50.7284	1730
94 Di-n-octylphthalate	149	12.954	12.954	(0.914)	2720001	45.9753	1570
95 Benzo(b)fluoranthene	252	13.563	13.559	(0.957)	1969871	36.9704	1260
96 Benzo(k)fluoranthene	252	13.611	13.601	(0.960)	2029905	37.8955	1290
97 Benzo(a)pyrene	252	14.082	14.078	(0.993)	1800667	40.0692	1370
99 Indeno(1,2,3-cd)pyrene	276	16.011	16.001	(1.129)	1659046	44.5264	1520
100 Dibenzo(a,h)anthracene	278	16.049	16.040	(1.132)	1531810	53.1956	1820
101 Benzo(ghi)perylene	276	16.492	16.478	(1.163)	1498379	48.6050	1660
1 N-Methyl-N-nitrosomethylamine	74	2.373	2.349	(0.533)	348197	34.8241	1190

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.

Data File: /chem/MSD8.i/s031710.b/s8c1712.d
Date : 17-MAR-2010 13:56
Client ID: RE36-10-B448MS
Sample Info: I120206902919599791ISVMI1IMS
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Instrument: MSD8.i
Operator: nag1
Column diameter: 0.20



GEL Laboratories LLC

Data file : /chem/MSD8.i/s031710.b/s8c1713.d
Lab Smp Id: 1202059030 Client Smp ID: RE36-10-8448MSD
Inj Date : 17-MAR-2010 14:26
Operator : nagl Inst ID: MSD8.i
Smp Info : |1202059030|959979|1|SVM|1|MSD
Misc Info : |MSD8270_S|WBN100310-01
Comment : Column: J & W DB-5MS, 25m x 0.20 mm x 0.33 micron film
Method : /chem/MSD8.i/s031710.b/MSD8-8270AQA-022010.m
Meth Date : 17-Mar-2010 13:57 nat00999 Quant Type: ISTD
Cal Date : 21-FEB-2010 23:15 Cal File: s8b2042.d
Als bottle: 13 QC Sample: MSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-2092.sub
Target Version: 3.50
Processing Host: hpclp1

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.17000	weight of sample
M	2.66260	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	4.454	4.454	(1.000)	598883	40.0000	
* 29 Naphthalene-d8	136	5.711	5.716	(1.000)	2320564	40.0000	
* 46 Acenaphthene-d10	164	7.568	7.573	(1.000)	1353629	40.0000	
* 67 Phenanthrene-d10	188	9.168	9.168	(1.000)	2328155	40.0000	
* 91 Chrysene-d12	240	12.073	12.073	(1.000)	2241236	40.0000	
* 98 Perylene-d12	264	14.178	14.173	(1.000)	1760848	40.0000	
$ 3 2-Fluorophenol	112	3.311	3.306	(0.743)	912992	64.5735	2200
$ 5 Phenol-d5	99	4.077	4.077	(0.916)	1131510	64.1711	2180
$ 20 Nitrobenzene-d5	82	4.982	4.987	(0.872)	543424	32.9426	1120
$ 39 2-Fluorobiphenyl	172	6.839	6.839	(0.904)	1126648	28.2765	963
$ 60 2,4,6-Tribromophenol	329	8.416	8.416	(1.112)	182554	40.7978	1390
$ 81 p-Terphenyl-d14	244	10.877	10.878	(0.901)	1297303	32.1509	1090

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
6 Phenol	94	4.092	4.087	(0.919)	679268	37.3047	1270
8 2-Chlorophenol	128	4.254	4.254	(0.955)	590698	37.3593	1270
11 1,4-Dichlorobenzene	146	4.468	4.473	(1.003)	642316	33.2011	1130
17 N-Nitrosodipropylamine	70	4.825	4.835	(1.083)	446660	38.3514	1300(Q)
28 1,2,4-Trichlorobenzene	180	5.649	5.649	(0.989)	559596	33.1267	1130
33 4-Chloro-3-methylphenol	107	6.296	6.268	(1.103)	457310	33.6455	1140(MH)
47 Acenaphthene	154	7.601	7.606	(1.004)	1133644	31.5157	1070
50 2,4-Dinitrotoluene	165	7.768	7.773	(1.026)	411653	37.4382	1270
65 Pentachlorophenol	266	8.958	8.954	(0.977)	101963	19.7965	674
79 Pyrene	202	10.720	10.720	(0.888)	2192710	31.3349	1070
2 Pyridine	79	2.411	2.382	(0.541)	340123	25.4184	866
4 Aniline	66	4.144	4.149	(0.930)	211183	25.3953	865
7 bis(2-Chloroethyl) ether	63	4.187	4.192	(0.940)	458688	36.8472	1250
9 1,3-Dichlorobenzene	146	4.401	4.401	(0.988)	630051	33.6009	1140
13 1,2-Dichlorobenzene	146	4.611	4.616	(1.035)	608285	33.8021	1150
14 bis(2-Chloroisopropyl)ether	45	4.692	4.697	(1.053)	916484	37.5495	1280
15 o-Cresol	107	4.658	4.658	(1.046)	429037	33.9272	1160
18 m,p-Cresols	107	4.806	4.816	(1.079)	653942	40.8622	1390
19 Hexachloroethane	117	4.944	4.944	(1.110)	243380	33.3830	1140
21 Nitrobenzene	77	5.001	5.006	(0.876)	635929	37.3725	1270
22 Isophorone	82	5.235	5.239	(0.917)	1189152	37.9590	1290
23 2-Nitrophenol	139	5.316	5.320	(0.931)	298750	38.2535	1300
24 2,4-Dimethylphenol	122	5.344	5.344	(0.936)	343069	24.7095	841
25 bis(2-Chloroethoxy)methane	93	5.444	5.444	(0.953)	673915	38.3608	1310
26 2,4-Dichlorophenol	162	5.568	5.558	(0.975)	453016	36.0610	1230
27 Benzoic acid	105	5.444	5.439	(0.953)	373360	52.3639	1780
30 Naphthalene	128	5.735	5.739	(1.004)	1779361	35.4133	1200
31 4-Chloroaniline	127	5.777	5.782	(1.012)	471395	28.4255	968
32 Hexachlorobutadiene	225	5.854	5.854	(1.025)	324918	30.9265	1050
34 2-Methylnaphthalene	142	6.454	6.458	(1.130)	1228290	36.5272	1240
36 Hexachlorocyclopentadiene	237	6.616	6.616	(0.874)	242037	28.8086	981
37 2,4,6-Trichlorophenol	196	6.749	6.749	(0.892)	294493	28.2373	962
38 2,4,5-Trichlorophenol	196	6.796	6.782	(0.898)	363505	32.8383	1120
40 2-Chloronaphthalene	162	6.973	6.973	(0.921)	1116962	33.6118	1140
42 o-Nitroaniline	65	7.077	7.077	(0.935)	350452	37.8062	1290
41 m-Nitroaniline	138	7.516	7.520	(0.993)	243792	34.5073	1180
43 Dimethylphthalate	163	7.268	7.278	(0.960)	1455413	38.3696	1310
44 2,6-Dinitrotoluene	165	7.339	7.339	(0.970)	318713	37.1652	1260
45 Acenaphthylene	152	7.416	7.420	(0.980)	1922612	34.2109	1160
48 2,4-Dinitrophenol	184	7.625	7.630	(1.008)	78178	32.6049	1110
49 Dibenzofuran	168	7.787	7.787	(1.029)	1621182	34.3502	1170
51 Diethylphthalate	149	8.025	8.025	(1.060)	1517019	38.2130	1300
53 Fluorene	166	8.154	8.158	(1.077)	1447651	33.1359	1130
54 4-Chlorophenylphenylether	204	8.149	8.154	(1.077)	704921	33.5040	1140
55 2-Methyl-4,6-dinitrophenol	198	8.206	8.206	(0.895)	164244	36.1388	1230
56 p-Nitroaniline	138	8.173	8.168	(1.080)	263098	42.1441	1440
133 Diphenylamine	169	8.277	8.278	(0.903)	1226132	41.6772	1420

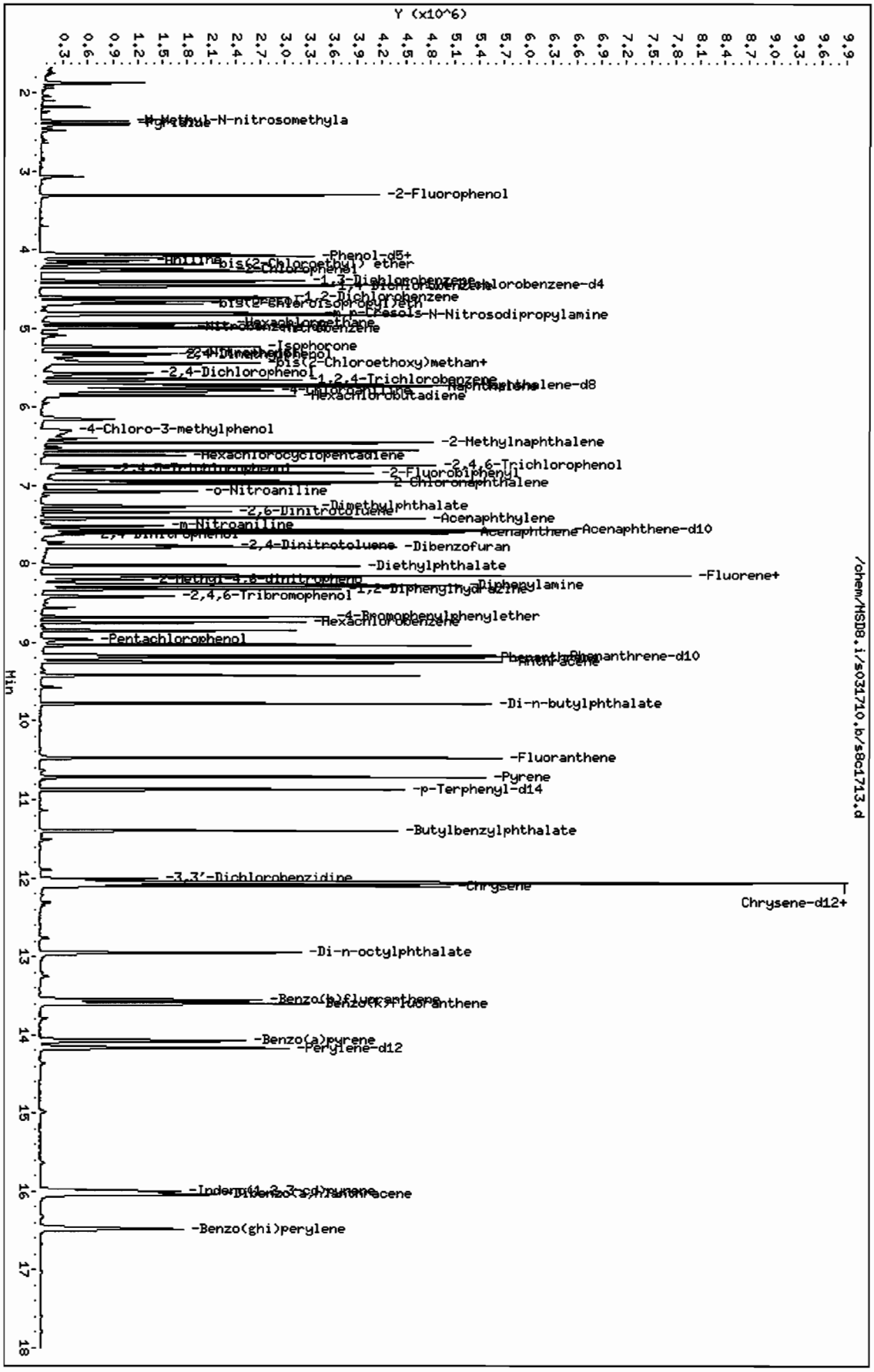
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/Kg)
58 1,2-Diphenylhydrazine	77	8.320	8.325	(0.908)	1439121	41.6433	1420
61 4-Bromophenylphenylether	248	8.677	8.678	(0.946)	398753	35.8432	1220
63 Hexachlorobenzene	284	8.744	8.749	(0.954)	397607	34.3861	1170
68 Phenanthrene	178	9.192	9.192	(1.003)	1954352	35.9261	1220
69 Anthracene	178	9.249	9.249	(1.009)	1957028	34.6338	1180
72 Di-n-butylphthalate	149	9.782	9.782	(1.067)	2674494	45.2821	1540
76 Fluoranthene	202	10.473	10.473	(1.142)	2113896	35.6816	1220
85 Butylbenzylphthalate	149	11.397	11.397	(0.944)	1069688	43.7146	1490
89 Benzo(a)anthracene	228	12.058	12.059	(0.999)	2025108	34.3362	1170
90 3,3'-Dichlorobenzidine	252	12.016	12.006	(0.995)	412050	29.6772	1010
92 Chrysene	228	12.106	12.106	(1.003)	1848929	35.9604	1220
93 bis(2-Ethylhexyl)phthalate	149	12.063	12.063	(0.999)	1651569	48.2288	1640
94 Di-n-octylphthalate	149	12.954	12.954	(0.914)	2267885	41.4969	1410
95 Benzo(b)fluoranthene	252	13.558	13.559	(0.956)	1665579	33.3636	1140
96 Benzo(k)fluoranthene	252	13.606	13.601	(0.960)	1754635	34.9615	1190
97 Benzo(a)pyrene	252	14.082	14.078	(0.993)	1574819	37.4024	1270
99 Indeno(1,2,3-cd)pyrene	276	16.011	16.001	(1.129)	1724112	49.3874	1680
100 Dibenzo(a,h)anthracene	278	16.044	16.040	(1.132)	1426097	52.8581	1800
101 Benzo(ghi)perylene	276	16.487	16.478	(1.163)	1414949	48.9882	1670
1 N-Methyl-N-nitrosomethylamine	74	2.368	2.349	(0.532)	290493	31.8472	1080

QC Flag Legend

Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Data File: /chem/MSD8.i/s031710.b/s8c1713.d
Date : 17-MAR-2010 14:26
Client ID: RE36-10-8448MSD
Sample Info: 1120059030195997911|SVM11|MSD
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Instrument: MSD8.i
Operator: nagl
Column diameter: 0.20



Page 1

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LC/MS/MS EXPLOSIVES ANALYSIS

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LC/MS/MS Case Narrative
Los Alamos National Laboratory (LANL)
SDG 10-2089

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:	958603
Prep Batch Number:	958599

Sample Analysis

The following samples were analyzed using the analytical protocol as established in SW846 8321A Modified:

Sample ID	Client ID
248102001	RE15-10-8404
248102002	RE15-10-8396
248102003	RE15-10-8393
248102004	RE15-10-8395
248102005	RE15-10-8398
248102006	RE15-10-8394
248102007	RE15-10-8399
248102008	RE15-10-8397
1202055877	Method Blank (MB)
1202055878	Laboratory Control Sample (LCS)
1202055879	248102001(RE15-10-8404) Matrix Spike (MS)
1202055880	248102001(RE15-10-8404) 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.

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Calibration Verification Standard Requirements
All associated calibration verification standard(s) (ICV or CCV) for this analysis met the acceptance criteria.

Calibration Blank Requirements
All initial or continuing calibration blanks (ICB or CCB) bracketing the analyses associated with this batch for this analysis were within acceptance criteria. Due to software limitations, the CCBs and/or the ICBs may have a concentration for target analytes in the Found column. These values should be zero.

CRI Requirements
All low level calibration verification (CRI) requirements for this analysis were met by all bracketing CRI standards and may be based off the grand mean average percent recovery of all target analytes.

Quality Control (QC) Information

Method Blank (MB) Statement
The MB(s) analyzed with this SDG for this analysis met the acceptance criteria.

Surrogate Recoveries
All the surrogate recoveries were within the established acceptance criteria in this SDG in this analytical batch for this analysis.

Laboratory Control Sample (LCS) Recovery
The LCS recovered Tetryl at 38.7%. The recovery limits are 51-112%. Since both the MS and MSD met acceptance limits for Tetryl, the data are reported. Please see data exception report 817810.

QC Sample Designation
Sample 248102001 (RE15-10-8404) 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 2-Amino-4,6-dinitrotoluene at 84.4%. The limits are 85-137%. The MSD recovered 3-Nitrotoluene at 64.2%. The limits are 70-120%. The LCS passed recovery for both of these analytes. The data are reported. Please see data exception report 817810.

MS/MSD Relative Percent Difference (RPD) Statement
The RPD(s) between the MS and MSD met the acceptance limits.

Internal Standard (ISTD) Acceptance
Sample 248102003 (RE15-10-8393) failed ISTD acceptance criteria. It was re-analyzed and confirmed the failure. The initial analysis data are reported. The confirmation raw data are located in the Miscellaneous Section. Please see data exception report 817810.

Since similar recoveries were obtained among sample 248102001 (RE15-10-8404) and the associated matrix spikes 1202055879 (RE15-10-8404MS) and 1202055880 (RE15-10-8404MSD), the noted exceptions are attributed to sample matrix interference. Sample re-analysis was not required and the data are reported. Please see data exception report 817810.

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Technical Information

Holding Time Specifications
Samples and QC 248102001(RE15-10-8404), 248102002(RE15-10-8396), 248102003(RE15-10-8393), 248102004(RE15-10-8395), 248102005(RE15-10-8398), 248102006(RE15-10-8394), 248102007(RE15-10-8399), 248102008(RE15-10-8397), 248114002, 248114003, 248114004, 248114005, 248114006, 248114007, 248114008, 1202055879(RE15-10-8404MS) and 1202055880(RE15-10-8404MSD) were analyzed out of holding for the Primary analyte analysis. The analytical holding times for the samples in this batch were exceeded due to limitations of instrument capacity. However, these samples were analyzed within two times the analytical holding time of the method. The client was notified of this situation and is in agreement to receive these qualified data. The data are reported. Please see data exception report 817810. 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
Sample 1202055878 (LCS) failed ISTD acceptance criteria. It was re-analyzed and passed acceptance criteria. The re-analysis is reported.

Sample 248102003 (RE15-10-8393) failed ISTD acceptance criteria. It was re-analyzed and confirmed the failure. The initial analysis data are reported. The confirmation raw data are located in the Miscellaneous Section. Please see data exception report 817810.

Since similar recoveries were obtained among sample 248102001 (RE15-10-8404) and the associated matrix spikes 1202055879 (RE15-10-8404MS) and 1202055880 (RE15-10-8404MSD), the noted exceptions are attributed to sample matrix interference. Sample re-analysis was not required and the data are reported. Please see data exception report 817810.

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.

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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 248102001 (RE15-10-8404) was chosen for matrix spike and matrix spike duplicate analysis.

Matrix Spike (MS) Recovery Statement
The MS spike recoveries were within the established acceptance limits.

Matrix Spike Duplicate (MSD) Recovery Statement
The MSD spike recoveries were within the established acceptance limits.

MS/MSD Relative Percent Difference (RPD) Statement
The RPD(s) between the MS and MSD met the acceptance limits.

Internal Standard (ISTD) Acceptance
The internal standards were not added to the secondary analyte extracts.

Technical Information

Holding Time Specifications
All samples in this SDG in this analytical batch for this analysis 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.

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Miscellaneous Information

Data Exception (DER) Documentation
Data exception report 817810 was generated for this SDG.

The LCS recovered Tetryl at 38.7%. The recovery limits are 51-112%. Since both the MS and MSD met acceptance limits for Tetryl, the data are reported.

The MSD recovered 2-Amino-4,6-dinitrotoluene at 84.4%. The limits are 85-137%. The MSD recovered 3-Nitrotoluene at 64.2%. The limits are 70-120%. The LCS passed recovery for both of these analytes. The data are reported.

Sample 248102003 (RE15-10-8393) failed ISTD acceptance criteria. It was re-analyzed and confirmed the failure. The initial analysis data are reported. The confirmation raw data are located in the Miscellaneous Section.

Since similar recoveries were obtained among sample 248102001 (RE15-10-8404) and the associated matrix spikes 1202055879 (RE15-10-8404MS) and 1202055880 (RE15-10-8404MSD), the noted exceptions are attributed to sample matrix interference. Sample re-analysis was not required and the data are reported.

Samples and QC 248102001(RE15-10-8404), 248102002(RE15-10-8396), 248102003(RE15-10-8393), 248102004(RE15-10-8395), 248102005(RE15-10-8398), 248102006(RE15-10-8394), 248102007(RE15-10-8399), 248102008(RE15-10-8397), 248114002, 248114003, 248114004, 248114005, 248114006, 248114007, 248114008, 1202055879(RE15-10-8404MS) and 1202055880(RE15-10-8404MSD) were analyzed out of holding for the Primary analyte analysis. The analytical holding times for the samples in this batch were exceeded due to limitations of instrument capacity. However, these samples were analyzed within two times the analytical holding time of the method. The client was notified of this situation and is in agreement to receive these qualified data. 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.

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System Configuration

The laboratory utilizes a Waters LC 2795 liquid chromatography instrument for primary analyte analysis. It is coupled with either a Micromass Quattro Micro Mass Spectrometer/ Mass Spectrometer, or a Micromass Quattro Ultima Mass Spectrometer/ Mass Spectrometer. Each being designated as LCMSMS #1, and LCMSMS #2, respectively. It is fitted with an APCI (Atmospheric Pressure chemical Ionization) probe that is operated in the negative ionization mode for the primary analyte analysis. The laboratory also utilizes an Agilent 1100 liquid chromatography instrument for either primary or secondary analyte analysis. It is coupled with a Applied Biosystems 4000 Mass Spectrometer/ Mass Spectrometer, designated as either LCMSMS #3 or LCMSMS #4. It is fitted with a APCI (Atmospheric Pressure chemical Ionization) probe that is operated in the negative ionization mode for both the primary and secondary analyte analysis.

Chromatographic Columns

The detection of the primary analyte nitroaromatic and nitramines is accomplished through analysis on the following reversed phase column:

Phenomenex: Ultracarb 5u ODS (20), 250 x 4.60 mm ID.

The detection of the secondary analytes is accomplished through analysis on the following reversed phase column:

YMC: J'sphere ODS-H80, 150 x 4.6mm I.D.

Certification Statement

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

Review Validation:

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

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

Reviewer: Herbert M. Mauk **Date:** 04/16/10

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SAMPLE DATA SUMMARY

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High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8404

Lab Code: GEL

GEL Job No (SDG) 10-2089

Matrix: SOIL

GEL Sample ID: 248102001

Sample Amount 2

Moisture: 9.4

Amount Units g

Date Received: 26-FEB-10

Extraction Type Sonication

Extraction Batch ID: 958599

Concentrated Extract Volume (mL) 10

Date Extracted: 04-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0412115a

Date Analyzed: 14-APR-10 23:43

Units: ug/kg

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

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Sample Amoun}} \times \text{Dilution Factor}$$

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High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8404

Lab Code: GEL

GEL Job No (SDG) 10-2089

Matrix: SOIL

GEL Sample ID: 248102001

Sample Amount 2

Moisture: 9.4

Amount Units g

Date Received: 26-FEB-10

Extraction Type Sonication

Extraction Batch ID: 958599

Concentrated Extract Volume (mL) 10

Date Extracted: 04-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS04020076.wiff

Date Analyzed: 03-APR-10 10:05

Units: ug/kg

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

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Sample Amoun}} \times \text{Dilution Factor}$$

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1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8396

Lab Code: GEI

GEL Job No (SDG) 10-2089

Matrix: SOIL

GEL Sample ID: 248102002

Sample Amount 2

Moisture: 8.7

Amount Units g

Date Received: 26-FEB-10

Extraction Type Sonication

Extraction Batch ID: 958599

Concentrated Extract Volume (mL) 10

Date Extracted: 04-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0412118a

Date Analyzed: 15-APR-10 01:12

Units: ug/kg

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

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Sample Amoun}} \times \text{Dilution Factor}$$

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High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8396

Lab Code: GEL

GEL Job No (SDG) 10-2089

Matrix: SOIL

GEL Sample ID: 248102002

Sample Amount 2

Moisture: 8.7

Amount Units g

Date Received: 26-FEB-10

Extraction Type Sonication

Extraction Batch ID: 958599

Concentrated Extract Volume (mL) 10

Date Extracted: 04-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS04020079.wiff

Date Analyzed: 03-APR-10 10:53

Units: ug/kg

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

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Sample Amoun}} \times \text{Dilution Factor}$$

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1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8393

Lab Code: GEL

GEL Job No (SDG) 10-2089

Matrix: SOIL

GEL Sample ID: 248102003

Sample Amount 2

Moisture: 20.1

Amount Units g

Date Received: 26-FEB-10

Extraction Type Sonication

Extraction Batch ID: 958599

Concentrated Extract Volume (mL) 10

Date Extracted: 04-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0412119a

Date Analyzed: 15-APR-10 01:41

Units: ug/kg

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

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Sample Amoun}} \times \text{Dilution Factor}$$

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1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8393

Lab Code: GEL

GEL Job No (SDG) 10-2089

Matrix: SOIL

GEL Sample ID: 248102003

Sample Amount 2

Moisture: 20.1

Amount Units g

Date Received: 26-FEB-10

Extraction Type Sonication

Extraction Batch ID: 958599

Concentrated Extract Volume (mL) 10

Date Extracted: 04-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS04020080.wiff

Date Analyzed: 03-APR-10 11:08

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 =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Sample Amoun}} \times \text{Dilution Factor}$$

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High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8395

Lab Code: GEL

GEL Job No (SDG) 10-2089

Matrix: SOIL

GEL Sample ID: 248102004

Sample Amount 2

Moisture: 4.4

Amount Units g

Date Received: 26-FEB-10

Extraction Type Sonication

Extraction Batch ID: 958599

Concentrated Extract Volume (mL) 10

Date Extracted: 04-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0412120a

Date Analyzed: 15-APR-10 02:11

Units: ug/kg

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

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Sample Amoun}} \times \text{Dilution Factor}$$

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High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8395

Lab Code: GEI

GEL Job No (SDG) 10-2089

Matrix: SOIL

GEL Sample ID: 248102004

Sample Amount 2

Moisture: 4.4

Amount Units g

Date Received: 26-FEB-10

Extraction Type Sonication

Extraction Batch ID: 958599

Concentrated Extract Volume (mL) 10

Date Extracted: 04-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS04020081.wiff

Date Analyzed: 03-APR-10 11:24

Units: ug/kg

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

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Sample Amoun}} \times \text{Dilution Factor}$$

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High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8398

Lab Code: GEL

GEL Job No (SDG) 10-2089

Matrix: SOIL

GEL Sample ID: 248102005

Sample Amount 2

Moisture: 12.8

Amount Units g

Date Received: 26-FEB-10

Extraction Type Sonication

Extraction Batch ID: 958599

Concentrated Extract Volume (mL) 10

Date Extracted: 04-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0412121a

Date Analyzed: 15-APR-10 02:40

Units: ug/kg

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

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Sample Amoun}} \times \text{Dilution Factor}$$

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1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8398

Lab Code: GEL

GEL Job No (SDG) 10-2089

Matrix: SOIL

GEL Sample ID: 248102005

Sample Amount 2

Moisture: 12.8

Amount Units g

Date Received: 26-FEB-10

Extraction Type Sonication

Extraction Batch ID: 958599

Concentrated Extract Volume (mL) 10

Date Extracted: 04-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS04020082.wiff

Date Analyzed: 03-APR-10 11:40

Units: ug/kg

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

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Sample Amoun}} \times \text{Dilution Factor}$$

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1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8394

Lab Code: GEL

GEL Job No (SDG) 10-2089

Matrix: SOIL

GEL Sample ID: 248102006

Sample Amount 2

Moisture: 10.3

Amount Units g

Date Received: 26-FEB-10

Extraction Type Sonication

Extraction Batch ID: 958599

Concentrated Extract Volume (mL) 10

Date Extracted: 04-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0412122a

Date Analyzed: 15-APR-10 03:10

Units: ug/kg

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

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Sample Amoun}} \times \text{Dilution Factor}$$

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High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8394

Lab Code: GEL

GEL Job No (SDG) 10-2089

Matrix: SOIL

GEL Sample ID: 248102006

Sample Amount 2

Moisture: 10.3

Amount Units g

Date Received: 26-FEB-10

Extraction Type Sonication

Extraction Batch ID: 958599

Concentrated Extract Volume (mL) 10

Date Extracted: 04-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS04020083.wiff

Date Analyzed: 03-APR-10 11:55

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 =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Sample Amoun}} \times \text{Dilution Factor}$$

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1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8399

Lab Code: GEI

GEL Job No (SDG) 10-2089

Matrix: SOIL

GEL Sample ID: 248102007

Sample Amount 2

Moisture: 11.7

Amount Units g

Date Received: 26-FEB-10

Extraction Type Sonication

Extraction Batch ID: 958599

Concentrated Extract Volume (mL) 10

Date Extracted: 04-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0412126a

Date Analyzed: 15-APR-10 05:08

Units: ug/kg

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

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Sample Amoun}} \times \text{Dilution Factor}$$

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1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8399

Lab Code: GEL

GEL Job No (SDG) 10-2089

Matrix: SOIL

GEL Sample ID: 248102007

Sample Amount 2

Moisture: 11.7

Amount Units g

Date Received: 26-FEB-10

Extraction Type Sonication

Extraction Batch ID: 958599

Concentrated Extract Volume (mL) 10

Date Extracted: 04-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS04020087.wiff

Date Analyzed: 03-APR-10 12:58

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 =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Sample Amoun}} \times \text{Dilution Factor}$$

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1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8397

Lab Code: GEL

GEL Job No (SDG) 10-2089

Matrix: SOIL

GEL Sample ID: 248102008

Sample Amount 2

Moisture: 6.1

Amount Units g

Date Received: 26-FEB-10

Extraction Type Sonication

Extraction Batch ID: 958599

Concentrated Extract Volume (mL) 10

Date Extracted: 04-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0412127a

Date Analyzed: 15-APR-10 05:37

Units: ug/kg

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

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Sample Amoun}} \times \text{Dilution Factor}$$

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1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8397

Lab Code: GEL

GEL Job No (SDG) 10-2089

Matrix: SOIL

GEL Sample ID: 248102008

Sample Amount 2

Moisture: 6.1

Amount Units g

Date Received: 26-FEB-10

Extraction Type Sonication

Extraction Batch ID: 958599

Concentrated Extract Volume (mL) 10

Date Extracted: 04-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS04020088.wiff

Date Analyzed: 03-APR-10 13:14

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 =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Sample Amoun}} \times \text{Dilution Factor}$$

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QUALITY CONTROL SUMMARY

PROPRIETARY INFORMATION-No unauthorized reproduction without written permission from GEL.

2

High Explosives Surrogate Recovery Summary

Lab Name: GEL Laboratories LLC **GEL Job No (SDG):** 10–2089

Lab Code: GEL **HPLC Column:** Phenomenex Ultracarb 5u ODS(20)

Lab Sample ID	Client Sample ID	DNT	QC Limits	Flg
248102001	RE15–10–8404	111	70 – 144	
248102001	RE15–10–8404	99.2	70 – 144	
248102002	RE15–10–8396	109	70 – 144	
248102002	RE15–10–8396	99.2	70 – 144	
248102003	RE15–10–8393	104	70 – 144	
248102003	RE15–10–8393	91.6	70 – 144	
248102004	RE15–10–8395	104	70 – 144	
248102004	RE15–10–8395	99.2	70 – 144	
248102005	RE15–10–8398	106	70 – 144	
248102005	RE15–10–8398	102	70 – 144	
248102006	RE15–10–8394	105	70 – 144	
248102006	RE15–10–8394	100	70 – 144	
248102007	RE15–10–8399	104	70 – 144	
248102007	RE15–10–8399	101	70 – 144	
248102008	RE15–10–8397	107	70 – 144	
248102008	RE15–10–8397	98	70 – 144	
1202055877	MB for batch 958599	99.3	70 – 144	
1202055877	MB for batch 958599	99.6	70 – 144	
1202055878	LCS for batch 958599	98.7	70 – 144	
1202055878	LCS for batch 958599	90	70 – 144	
1202055879	RE15–10–8404(248102001MS)	101	70 – 144	
1202055879	RE15–10–8404(248102001MS)	93.6	70 – 144	
1202055880	RE15–10–8404(248102001MSD)	85.8	70 – 144	
1202055880	RE15–10–8404(248102001MSD)	99.2	70 – 144	

DNT = 3,4–Dinitrotoluene

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3B
High Explosives LCS/LCS Duplicate Summary

Lab Name: GEL Laboratories LLC

Client ID: LCS

Lab Code: GEL

GEL Job No (SDG) 10–2089

Extract Batch Code: 958599

Date Extracted: 04–MAR–10

GEL LCS ID: 1202055878

GEL LCSDUP ID:

Analysis Date/Time: 15–APR–10 11:32

DUP Analysis Date/Time:

Reporting Units: ug/kg

QC Type: LCS/LCSD

Compound	Spike Added	LCS Conc	LCS Rec	#	LCSD Conc	LCSD Rec	#	RPD	#	RPD	Recovery Limits
o–Nitrotoluene	5000	4480	89.6								72 – 119
2–Amino–4,6–dinitrotoluene	5000	4970	99.5								90 – 130
HMX	5000	4990	99.9								58 – 138
PETN	5000	5790	116								64 – 137
m–Nitrotoluene	5000	4400	88								73 – 118
m–Dinitrobenzene	5000	4770	95.4								83 – 122
Tetryl	5000	1940	38.7	*							51 – 112
RDX	5000	5710	114								81 – 137
Nitrobenzene	5000	4710	94.1								71 – 122
4–Amino–2,6–dinitrotoluene	5000	4730	94.6								84 – 130
2,6–Dinitrotoluene	5000	4770	95.5								89 – 120
1,3,5–Trinitrobenzene	5000	4210	84.3								69 – 126
2,4,6–Trinitrotoluene	5000	5030	101								73 – 149
2,4–Dinitrotoluene	5000	5280	106								87 – 137
p–Nitrotoluene	5000	4880	97.5								67 – 131

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

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3B
High Explosives LCS/LCS Duplicate Summary

Lab Name: GEL Laboratories LLC

Client ID: LCS

Lab Code: GEL

GEL Job No (SDG) 10–2089

Extract Batch Code: 958599

Date Extracted: 04–MAR–10

GEL LCS ID: 1202055878

GEL LCSDUP ID:

Analysis Date/Time: 03–APR–10 09:50

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	4850	97								52 – 114
2,6–Diamino–4–nitrotoluene	5000	5140	103								64 – 122
3,5–Dinitroaniline	5000	4800	96								70 – 127
TATB	5000	6360	127								28 – 162
tris(o–cresyl) phosphate	5000	5010	100								84 – 119

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

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3

High Explosives MS/MSD Summary

Lab Name: GEL Laboratories LLC

Client ID: RE15-10-8404

Lab Code: GEL

GEL Job No (SDG) 10-2089

Extract Batch Code: 958599

Date Extracted: 04-MAR-10

GEL Spike ID: 1202055879

GEL SpikeDup ID: 1202055880

Analysis Date/Time: 15-APR-10 00:13

MSD Analysis Date/Time:

Reporting Units: ug/kg

QC Type: MS/MSD

Compound	Spike Added	Sample Conc	MS Conc	MS Rec	#	MSD Conc	MSD Rec	#	RPD	#	RPD Limit	Rec Limits
m-Dinitrobenzene	5000	0	4660	93.2		4990	99.8		6.81		30	85 – 118
2,4-Dinitrotoluene	5000	0	4510	90.3		4480	89.7		.699		30	86 – 135
2-Amino-4,6-dinitrotoluene	5000	0	5020	100		4220	84.4	*	17.3		30	85 – 137
HMX	5000	0	4340	86.8		4530	90.6		4.28		30	51 – 144
Tetryl	5000	0	2930	58.7		2510	50.1		15.7		30	36 – 124
RDX	5000	0	3900	78		4830	96.6		21.2		30	59 – 152
PETN	5000	0	4240	84.7		3720	74.5		12.9		30	60 – 140
Nitrobenzene	5000	0	4240	84.7		4490	89.8		5.86		30	70 – 122
4-Amino-2,6-dinitrotoluene	5000	0	4580	91.7		3940	78.9		15		30	72 – 143
2,6-Dinitrotoluene	5000	0	4730	94.6		4960	99.2		4.75		30	90 – 118
2,4,6-Trinitrotoluene	5000	0	4700	94		3950	79		17.4		30	76 – 144
m-Nitrotoluene	5000	0	4080	81.6		3210	64.2	*	24		30	70 – 120
o-Nitrotoluene	5000	0	3930	78.6		3540	70.8		10.4		30	69 – 123
1,3,5-Trinitrobenzene	5000	0	3640	72.7		4790	95.7		27.3		30	50 – 140
p-Nitrotoluene	5000	0	4290	85.7		3490	69.8		20.4		30	65 – 133

#Column to be used to flag recovery and RPD values with an asterisk

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3

High Explosives MS/MSD Summary

Lab Name: GEL Laboratories LLC

Client ID: RE15-10-8404

Lab Code: GEL

GEL Job No (SDG) 10-2089

Extract Batch Code: 958599

Date Extracted: 04-MAR-10

GEL Spike ID: 1202055879

GEL SpikeDup ID: 1202055880

Analysis Date/Time: 03-APR-10 10:21

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	5360	107	5050	101	5.96	26	34 - 135
2,6-Diamino-4-nitrotoluene	5000	0	5150	103	5760	115	11.2	30	55 - 130
TATB	5000	0	5530	111	5250	105	5.2	30	29 - 155
tris(o-cresyl) phosphate	5000	35.4	5090	101	5150	102	1.17	30	72 - 127
3,5-Dinitroaniline	5000	0	4860	97.2	4990	99.8	2.64	30	73 - 129

#Column to be used to flag recovery and RPD values with an asterisk

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4

Explosives Initial Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10–2089

Lab Code: GEL

Lab Sample ID: XIBLK01

Analysis Date: 12–APR–10 15:40

GEL Data File: EXP0412001a

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	440.355
2,4,6–Trinitrotoluene	0	0
2,4–Dinitrotoluene	0	0
2,6–Dinitrotoluene	0	0
2,6–Dinitrotoluene–d3	500	475.584
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

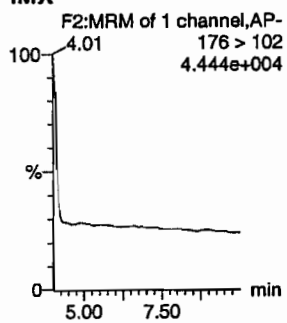
Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA.qld, Time: Tue Apr 13 11:12:22 2010

Method: C:\MASSLYNX\New_Exp.PRO\MethDB\041210expa.mdb, Time: Tue Apr 13 09:03:30 2010
Calibration: Untitled, Time: Tue Apr 13 11:12:22 2010

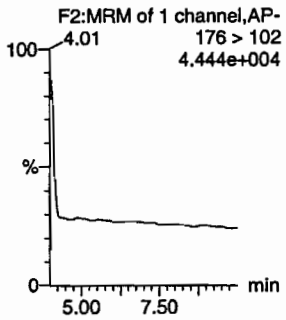
Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0412001a
Date: 12-Apr-2010
Time: 15:40:40
ID: XIBLK01
Vial: 1:1,A

MMT 4/13/10

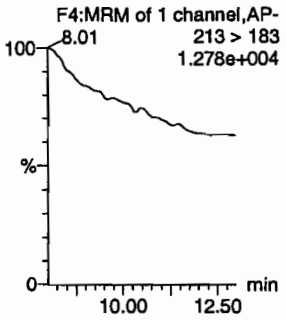
HMX



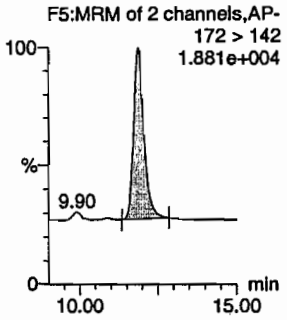
RDX



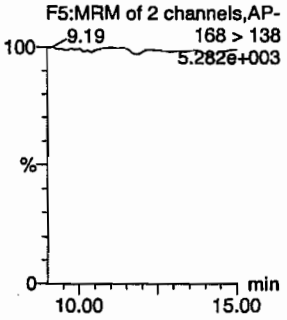
135-Trinitrobenzene



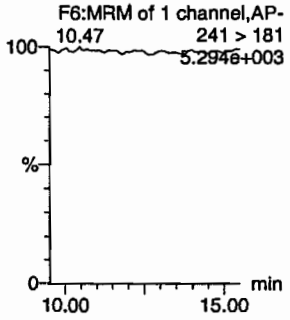
13-Dinitrobenzene-d4



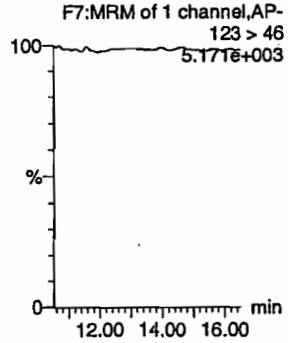
13-Dinitrobenzene



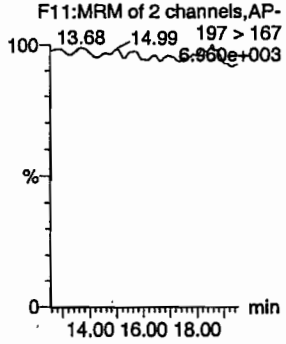
Tetryl



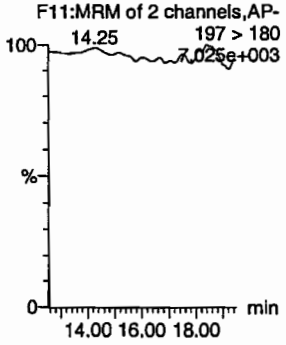
Nitrobenzene



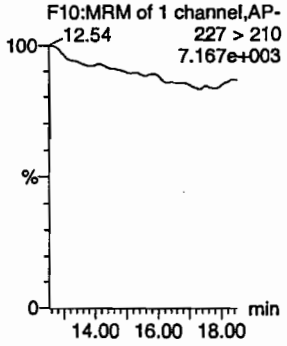
4-Amino-26-dinitrotoluene



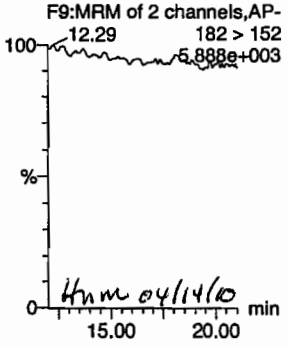
2-Amino-46-dinitrotoluene



246-Trinitrotoluene

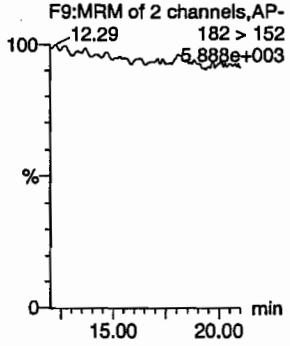


34-dinitrotoluene



Hnm 04/14/10

26-dinitrotoluene



GEL SOP GL-OA-E-056, Method 8321A-Modified / MM = Manual Modification

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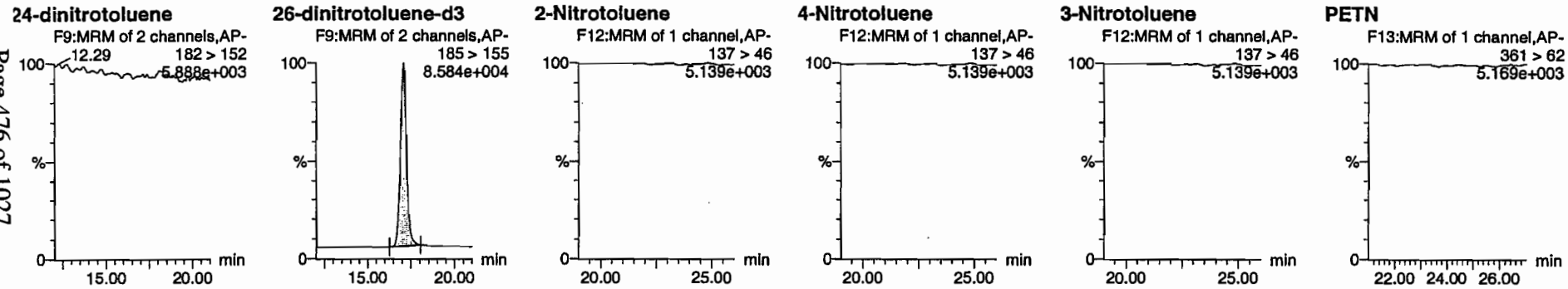
Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA.qld, Time: Tue Apr 13 11:12:22 2010



ID	Name	Trace	RT	Area	IS Area	Abs Resp	Response	Flags	Mod Date	Mod Time	mg/mL	%Rec	%Dev	S/N
XIBLK01	HMX	176 > 102			5178.896									
XIBLK01	RDX	176 > 102			5178.896									
XIBLK01	135-Trinitrobenzene	213 > 183			5178.896									
XIBLK01	13-Dinitrobenzene-d4	172 > 142	11.87	5178.896		5178.896	5178.896	bb			440.3551	88.1	-11.9	715.5
XIBLK01	13-Dinitrobenzene	168 > 138			5178.896									
XIBLK01	Tetryl	241 > 181			5178.896									
XIBLK01	Nitrobenzene	123 > 46			5178.896									
XIBLK01	4-Amino-26-dinitrotoluene	197 > 167			33274.848									
XIBLK01	2-Amino-46-dinitrotoluene	197 > 180			33274.848									
XIBLK01	246-Trinitrotoluene	227 > 210			33274.848									
XIBLK01	34-dinitrotoluene	182 > 152			33274.848									
XIBLK01	26-dinitrotoluene	182 > 152			33274.848									
XIBLK01	24-dinitrotoluene	182 > 152			33274.848									
XIBLK01	26-dinitrotoluene-d3	185 > 155	17.06	33274.848		33274.848	33274.848	bb			475.5835	95.1	-4.9	2809.6
XIBLK01	2-Nitrotoluene	137 > 46			33274.848									
XIBLK01	4-Nitrotoluene	137 > 46			33274.848									
XIBLK01	3-Nitrotoluene	137 > 46			33274.848									
XIBLK01	PETN	361 > 62			33274.848									

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4

Explosives Initial Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10–2089

Lab Code: GEL

Lab Sample ID: XIBLK01

Analysis Date: 12–APR–10 16:10

GEL Data File: EXP0412002a

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4–Dinitrotoluene	0	0
1,3,5–Trinitrobenzene	0	0
1,3–Dinitrobenzene–d4	500	473.054
2,4,6–Trinitrotoluene	0	0
2,4–Dinitrotoluene	0	0
2,6–Dinitrotoluene	0	0
2,6–Dinitrotoluene–d3	500	498.176
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

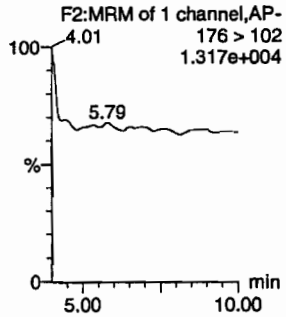
Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA.qld, Time: Tue Apr 13 11:12:22 2010

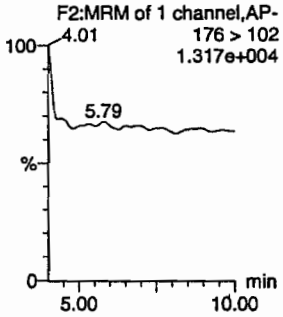
Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0412002a
Date: 12-Apr-2010
Time: 16:10:12
ID: XIBLK01
Vial: 1:1,A

MMT 4/13/10

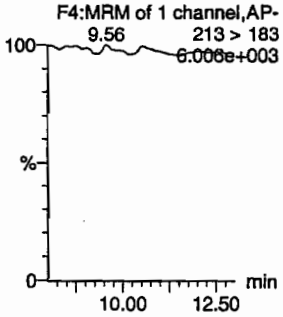
HMX
F2:MRM of 1 channel,AP-
176 > 102
4.01
1.317e+004
5.79



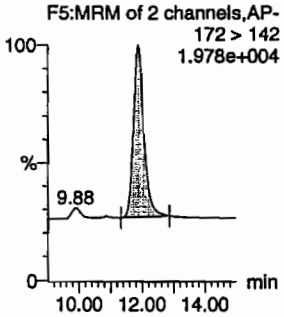
RDX
F2:MRM of 1 channel,AP-
176 > 102
4.01
1.317e+004
5.79



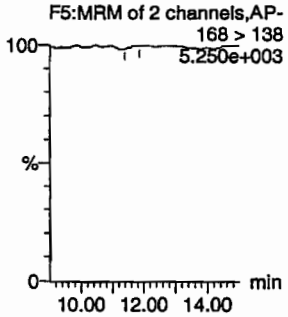
135-Trinitrobenzene
F4:MRM of 1 channel,AP-
213 > 183
9.56
6.006e+003



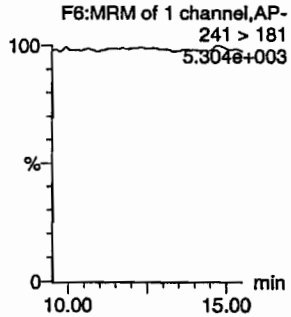
13-Dinitrobenzene-d4
F5:MRM of 2 channels,AP-
172 > 142
1.978e+004
9.88



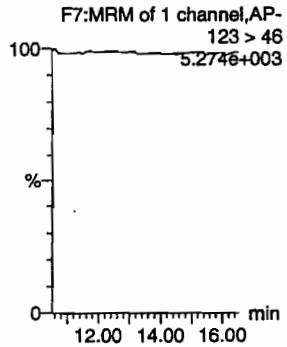
13-Dinitrobenzene
F5:MRM of 2 channels,AP-
168 > 138
5.250e+003



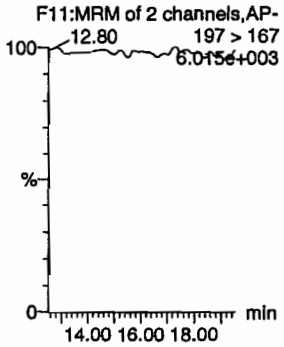
Tetryl
F6:MRM of 1 channel,AP-
241 > 181
5.304e+003



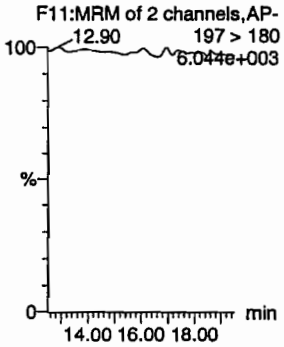
Nitrobenzene
F7:MRM of 1 channel,AP-
123 > 46
5.274e+003



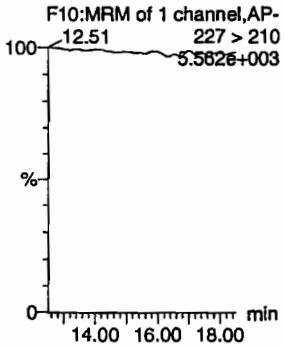
4-Amino-26-dinitrotoluene
F11:MRM of 2 channels,AP-
197 > 167
12.80
6.015e+003



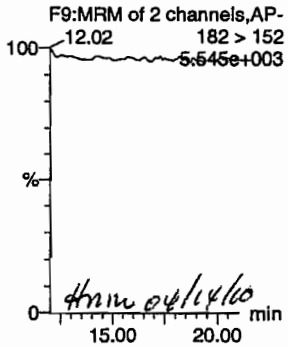
2-Amino-46-dinitrotoluene
F11:MRM of 2 channels,AP-
197 > 180
12.90
6.044e+003



246-Trinitrotoluene
F10:MRM of 1 channel,AP-
227 > 210
12.51
5.562e+003

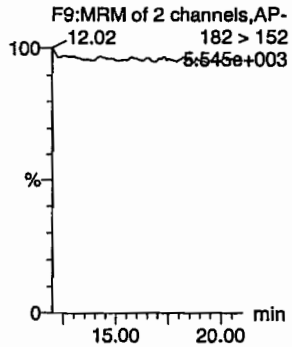


34-dinitrotoluene
F9:MRM of 2 channels,AP-
182 > 152
12.02
5.545e+003



Hmm 04/14/10

26-dinitrotoluene
F9:MRM of 2 channels,AP-
182 > 152
12.02
5.545e+003



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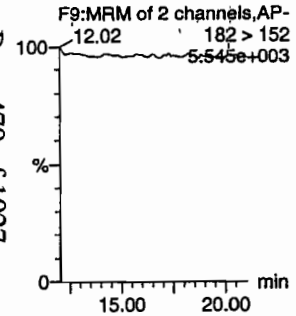
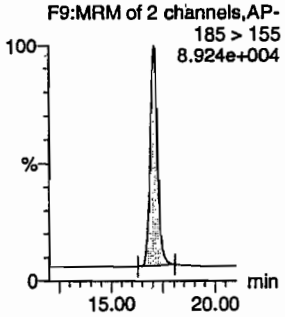
Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA.qld, Time: Tue Apr 13 11:12:22 2010

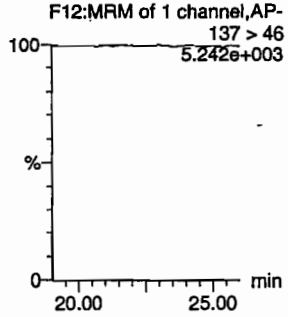
24-dinitrotoluene



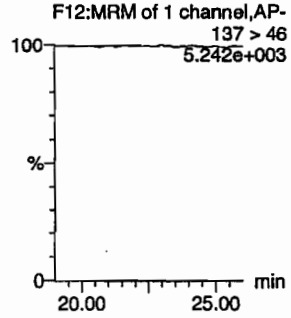
26-dinitrotoluene-d3



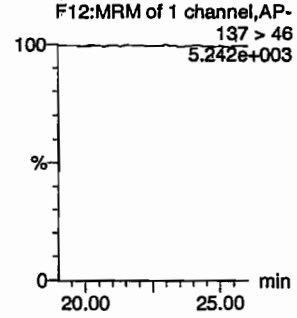
2-Nitrotoluene



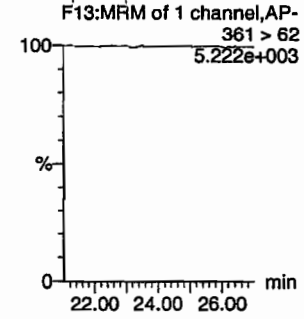
4-Nitrotoluene



3-Nitrotoluene



PETN



ID	Name	Trace	RT	Area	IS Area	Abs Resp	Response	Flags	Mod Date	Mod Time	ng/mL	%Rec	%Dev	S/N
XIBLK01	HMX	176 > 102			5563.454									
XIBLK01	RDX	176 > 102			5563.454									
XIBLK01	135-Trinitrobenzene	213 > 183			5563.454									
XIBLK01	13-Dinitrobenzene-d4	172 > 142	11.87	5563.454		5563.454	5563.454	bb			473.0536	94.6	-5.4	108.0
XIBLK01	13-Dinitrobenzene	168 > 138			5563.454			MM-	13-Apr-10	10:59:24				
XIBLK01	Tetryl	241 > 181			5563.454									
XIBLK01	Nitrobenzene	123 > 46			5563.454									
XIBLK01	4-Amino-26-dinitrotoluene	197 > 167			34855.578									
XIBLK01	2-Amino-46-dinitrotoluene	197 > 180			34855.578									
XIBLK01	246-Trinitrotoluene	227 > 210			34855.578									
XIBLK01	34-dinitrotoluene	182 > 152			34855.578									
XIBLK01	26-dinitrotoluene	182 > 152			34855.578									
XIBLK01	24-dinitrotoluene	182 > 152			34855.578									
XIBLK01	26-dinitrotoluene-d3	185 > 155	17.05	34855.578		34855.578	34855.578	bb			498.1763	99.6	-0.4	2742.7
XIBLK01	2-Nitrotoluene	137 > 46			34855.578									
XIBLK01	4-Nitrotoluene	137 > 46			34855.578									
XIBLK01	3-Nitrotoluene	137 > 46			34855.578									
XIBLK01	PETN	361 > 62			34855.578									

GEL SOP GL-OA-E-056, Method 8321A-Modified / MM = Manual Modification

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4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10–2089

Lab Code: GEL

Lab Sample ID: XIBLK02

Analysis Date: 12–APR–10 19:36

GEL Data File: EXP0412009a

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	566.025
2,4,6–Trinitrotoluene	0	0
2,4–Dinitrotoluene	0	0
2,6–Dinitrotoluene	0	0
2,6–Dinitrotoluene–d3	500	597.817
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

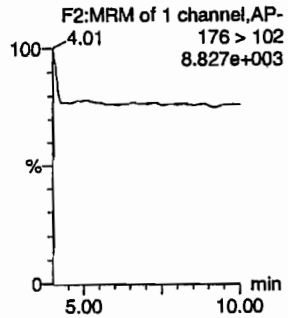
Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA.qld, Time: Tue Apr 13 11:12:22 2010

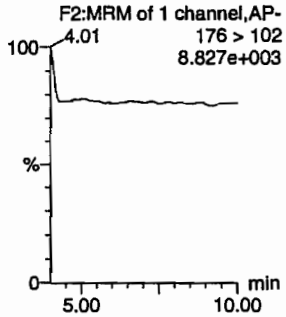
Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0412009a
Date: 12-Apr-2010
Time: 19:36:32
ID: XIBLK02
Vial: 1:1,A

MMT 4/13/10

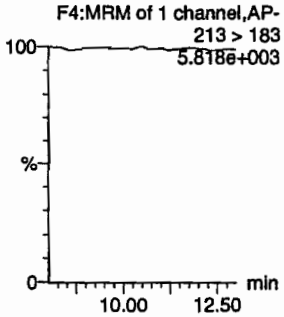
HMX
F2:MRM of 1 channel,AP-
4.01 176 > 102
8.827e+003



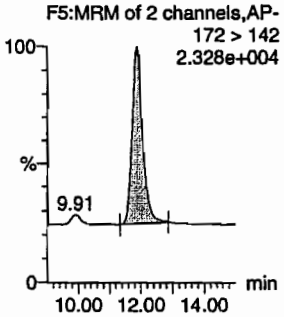
RDX
F2:MRM of 1 channel,AP-
4.01 176 > 102
8.827e+003



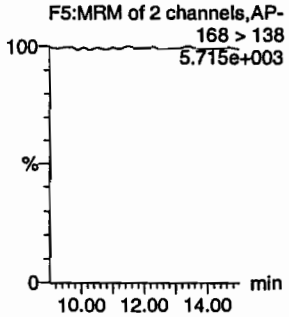
135-Trinitrobenzene
F4:MRM of 1 channel,AP-
213 > 183
5.818e+003



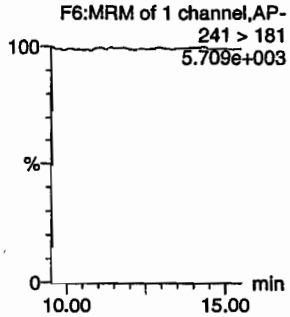
13-Dinitrobenzene-d4
F5:MRM of 2 channels,AP-
172 > 142
2.328e+004



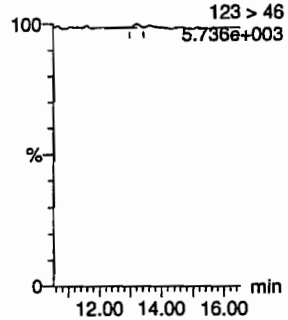
13-Dinitrobenzene
F5:MRM of 2 channels,AP-
168 > 138
5.715e+003



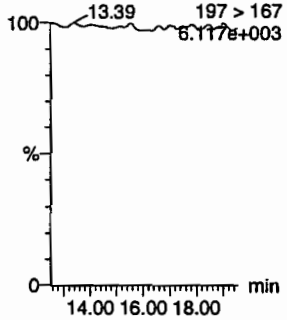
Tetryl
F6:MRM of 1 channel,AP-
241 > 181
5.709e+003



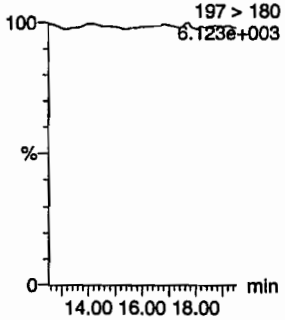
Nitrobenzene
F7:MRM of 1 channel,AP-
123 > 46
5.736e+003



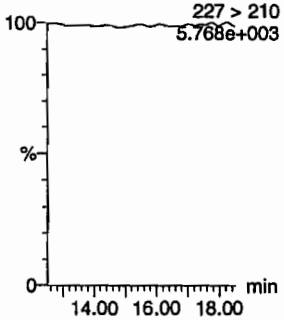
4-Amino-26-dinitrotoluene
F11:MRM of 2 channels,AP-
13.39 197 > 167
6.117e+003



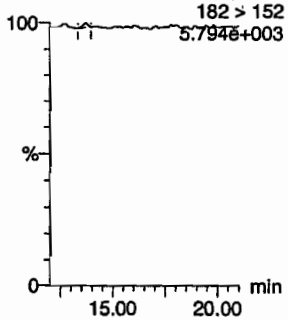
2-Amino-46-dinitrotoluene
F11:MRM of 2 channels,AP-
197 > 180
6.123e+003



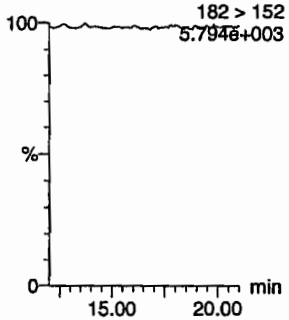
246-Trinitrotoluene
F10:MRM of 1 channel,AP-
227 > 210
5.768e+003



34-dinitrotoluene
F9:MRM of 2 channels,AP-
182 > 152
5.794e+003



26-dinitrotoluene
F9:MRM of 2 channels,AP-
182 > 152
5.794e+003



Hmm 04/14/10

EL SOP GL-OA-E-056, Method 8321A-Modified / MM = Manual Modification

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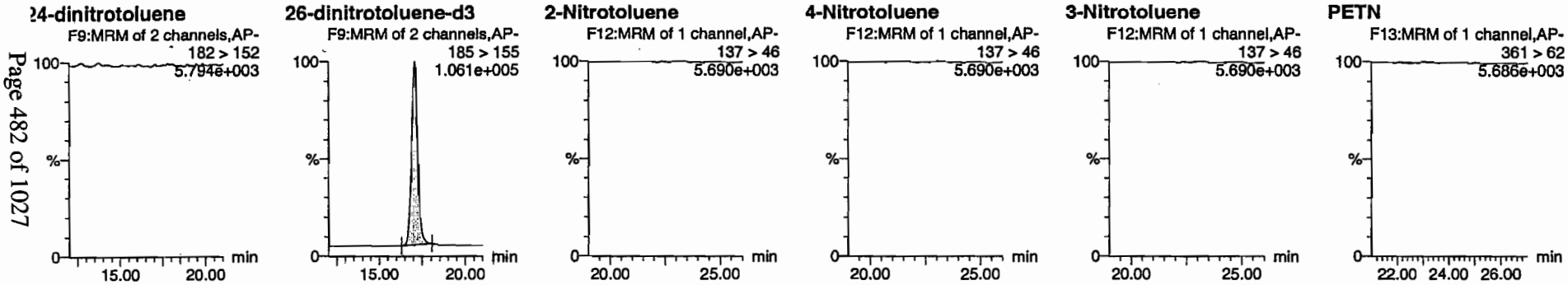
Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA.qld, Time: Tue Apr 13 11:12:22 2010



D	Name	Trace	RT	Area	IS Area	Abs Resp	Rel Response	Flags	Mod Date	Mod Time	ng/mL	%Rec	%Dev	S/N
IBLK02	HMX	176 > 102			6656.868									
IBLK02	RDX	176 > 102			6656.868									
IBLK02	135-Trinitrobenzene	213 > 183			6656.868									
IBLK02	13-Dinitrobenzene-d4	172 > 142	11.87	6656.868		6656.868	6656.868	bb			566.0252	113.2	13.2	258.0
IBLK02	13-Dinitrobenzene	168 > 138			6656.868									
IBLK02	Tetryl	241 > 181			6656.868									
IBLK02	Nitrobenzene	123 > 46			6656.868			MM-	13-Apr-10	11:00:12				
IBLK02	4-Amino-26-dinitrotoluene	197 > 167			41827.098									
IBLK02	2-Amino-46-dinitrotoluene	197 > 180			41827.098									
IBLK02	246-Trinitrotoluene	227 > 210			41827.098									
IBLK02	34-dinitrotoluene	182 > 152			41827.098			MM-	13-Apr-10	11:04:01				
IBLK02	26-dinitrotoluene	182 > 152			41827.098									
IBLK02	24-dinitrotoluene	182 > 152			41827.098									
IBLK02	26-dinitrotoluene-d3	185 > 155	17.05	41827.098		41827.098	41827.098	bb			597.8173	119.6	19.6	1486.5
IBLK02	2-Nitrotoluene	137 > 46			41827.098									
IBLK02	4-Nitrotoluene	137 > 46			41827.098									
IBLK02	3-Nitrotoluene	137 > 46			41827.098									
IBLK02	PETN	361 > 62			41827.098									

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4A
Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10–2089

Lab Code: GEL

Lab Sample ID: XIBLK03

Analysis Date: 12–APR–10 20:35

GEL Data File: EXP0412011a

Instrument ID: LCMSMS

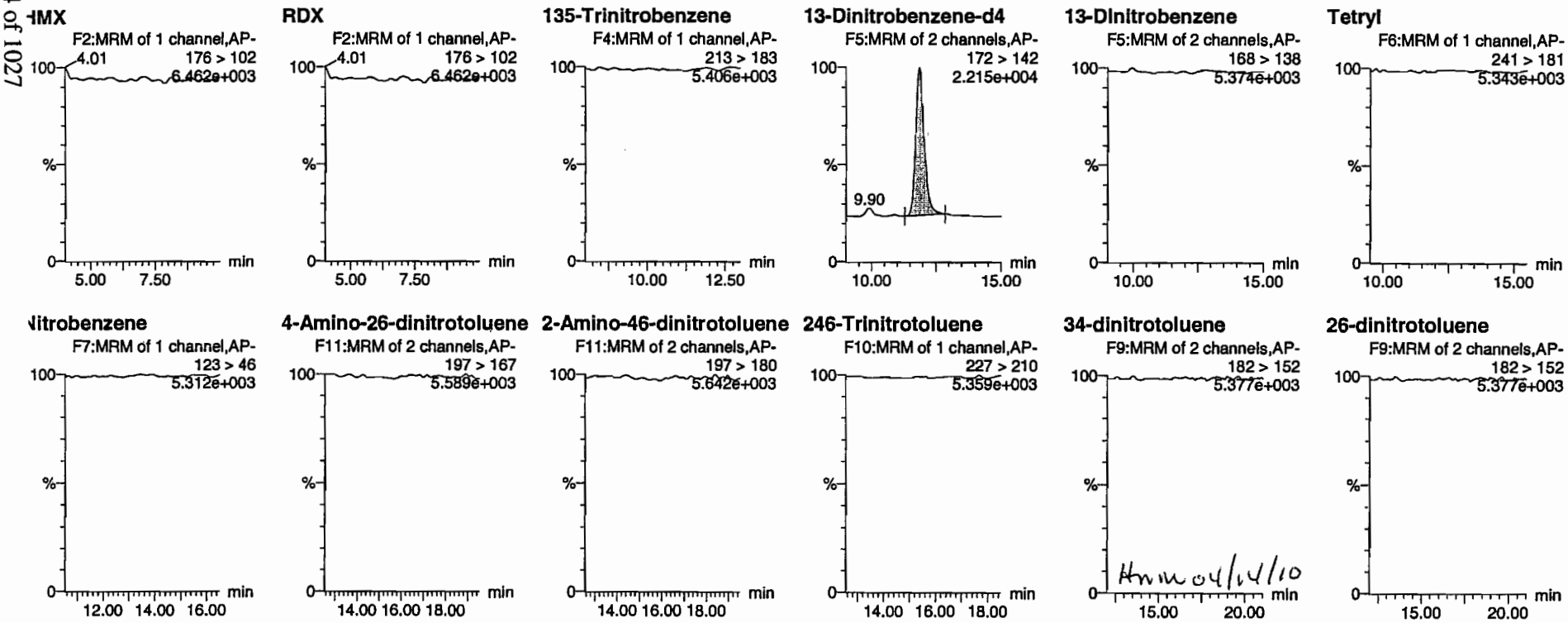
Column: Phenomenex Ultracarb 5u ODS(20)

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	547.706
2,4,6–Trinitrotoluene	0	0
2,4–Dinitrotoluene	0	0
2,6–Dinitrotoluene	0	0
2,6–Dinitrotoluene–d3	500	578.822
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

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA.qld, Time: Tue Apr 13 11:12:22 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0412011a
Date: 12-Apr-2010
Time: 20:35:28
ID: XIBLK03
Vial: 1:1,A

MMT 9/13/10



Hmm 04/14/10

GEL SOP GL-OA-E-056, Method 8321A-Modified / MM = Manual Modification

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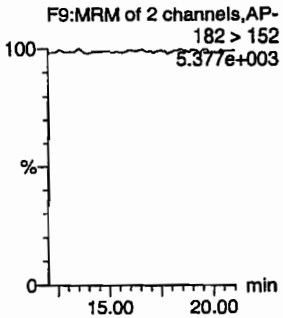
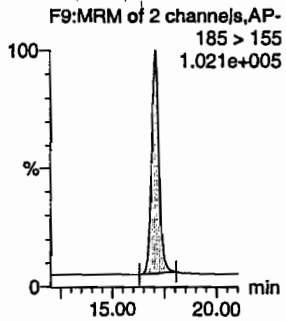
Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA.qld, Time: Tue Apr 13 11:12:22 2010

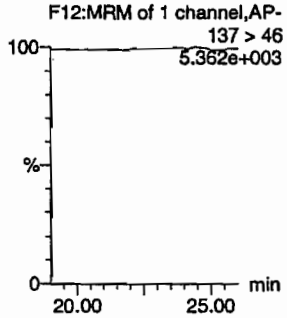
24-dinitrotoluene



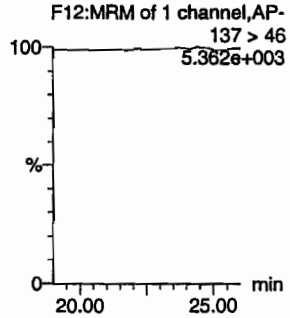
26-dinitrotoluene-d3



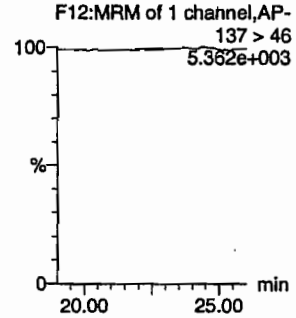
2-Nitrotoluene



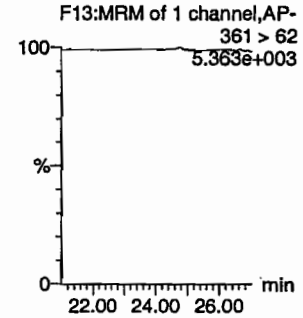
4-Nitrotoluene



3-Nitrotoluene



PETN



ID	Name	Trace	RT	Area	IS Area	Abs Resp	Response	Flags	Mod Date	Mod Time	ng/mL	%Rec	%Dev	S/N
XIBLK03	HMX	176 > 102			6441.423									
XIBLK03	RDX	176 > 102			6441.423									
XIBLK03	135-Trinitrobenzene	213 > 183			6441.423									
XIBLK03	13-Dinitrobenzene-d4	172 > 142	11.87	6441.423		6441.423	6441.423	bb			547.7062	109.5	9.5	345.7
XIBLK03	13-Dinitrobenzene	168 > 138			6441.423									
XIBLK03	Tetryl	241 > 181			6441.423									
XIBLK03	Nitrobenzene	123 > 46			6441.423									
XIBLK03	4-Amino-26-dinitrotoluene	197 > 167			40498.094									
XIBLK03	2-Amino-46-dinitrotoluene	197 > 180			40498.094									
XIBLK03	246-Trinitrotoluene	227 > 210			40498.094									
XIBLK03	34-dinitrotoluene	182 > 152			40498.094									
XIBLK03	26-dinitrotoluene	182 > 152			40498.094									
XIBLK03	24-dinitrotoluene	182 > 152			40498.094									
XIBLK03	26-dinitrotoluene-d3	185 > 155	17.06	40498.094		40498.094	40498.094	bb			578.8224	115.8	15.8	2241.2
XIBLK03	2-Nitrotoluene	137 > 46			40498.094									
XIBLK03	4-Nitrotoluene	137 > 46			40498.094									
XIBLK03	3-Nitrotoluene	137 > 46			40498.094									
XIBLK03	PETN	361 > 62			40498.094									

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4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10–2089

Lab Code: GEL

Lab Sample ID: XIBLK04

Analysis Date: 13–APR–10 02:58

GEL Data File: EXP0412024a

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

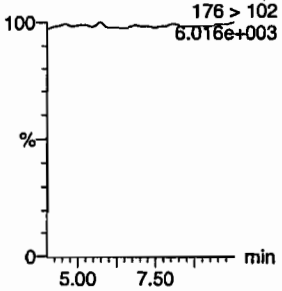
Compound	True	Found (ug/L)
3,4–Dinitrotoluene	0	0
1,3,5–Trinitrobenzene	0	0
1,3–Dinitrobenzene–d4	500	493.141
2,4,6–Trinitrotoluene	0	0
2,4–Dinitrotoluene	0	0
2,6–Dinitrotoluene	0	0
2,6–Dinitrotoluene–d3	500	499.061
2–Amino–4,6–dinitrotoluene	0	0
4–Amino–2,6–dinitrotoluene	0	0
HMX	0	0
Nitrobenzene	0	0
PETN	0	0
RDX	0	0
Tetryl	0	0
m–Dinitrobenzene	0	0
m–Nitrotoluene	0	0
o–Nitrotoluene	0	0
p–Nitrotoluene	0	0

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA.qld, Time: Tue Apr 13 11:12:22 2010

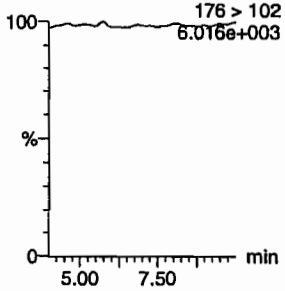
Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0412024a
Date: 13-Apr-2010
Time: 02:58:51
ID: XIBLK04
Vial: 1:1,A

MAT 4/13/10

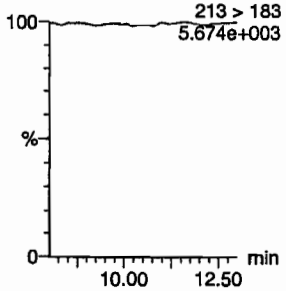
HMX
F2:MRM of 1 channel,AP-
176 > 102
6.016e+003



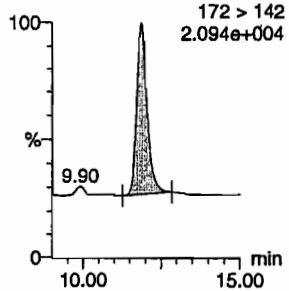
RDX
F2:MRM of 1 channel,AP-
176 > 102
6.016e+003



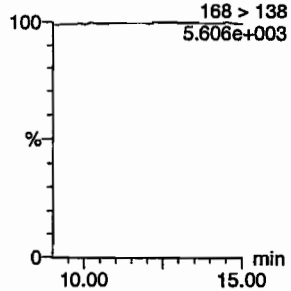
135-Trinitrobenzene
F4:MRM of 1 channel,AP-
213 > 183
5.674e+003



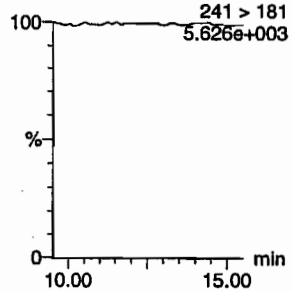
13-Dinitrobenzene-d4
F5:MRM of 2 channels,AP-
172 > 142
2.094e+004



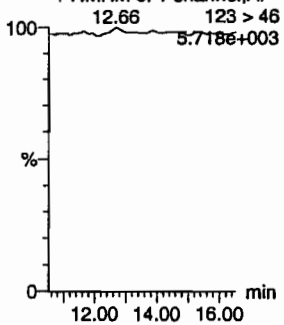
13-Dinitrobenzene
F5:MRM of 2 channels,AP-
168 > 138
5.606e+003



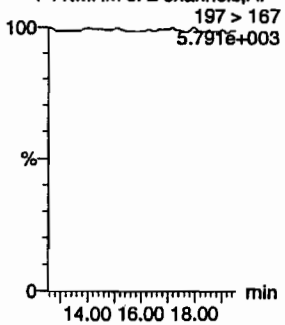
Tetryl
F6:MRM of 1 channel,AP-
241 > 181
5.626e+003



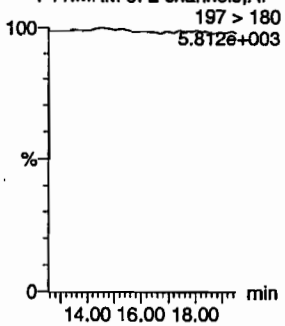
Nitrobenzene
F7:MRM of 1 channel,AP-
12.66
123 > 46
5.718e+003



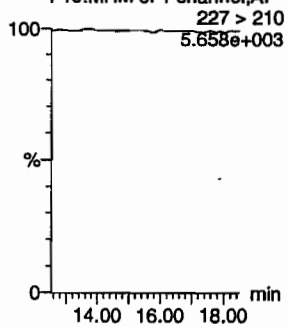
4-Amino-26-dinitrotoluene
F11:MRM of 2 channels,AP-
197 > 167
5.791e+003



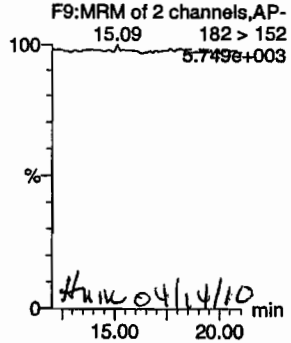
2-Amino-46-dinitrotoluene
F11:MRM of 2 channels,AP-
197 > 180
5.812e+003



246-Trinitrotoluene
F10:MRM of 1 channel,AP-
227 > 210
5.658e+003

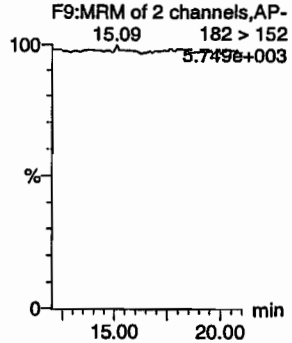


34-dinitrotoluene
F9:MRM of 2 channels,AP-
15.09
182 > 152
5.749e+003



HMK 04/14/10

26-dinitrotoluene
F9:MRM of 2 channels,AP-
15.09
182 > 152
5.749e+003



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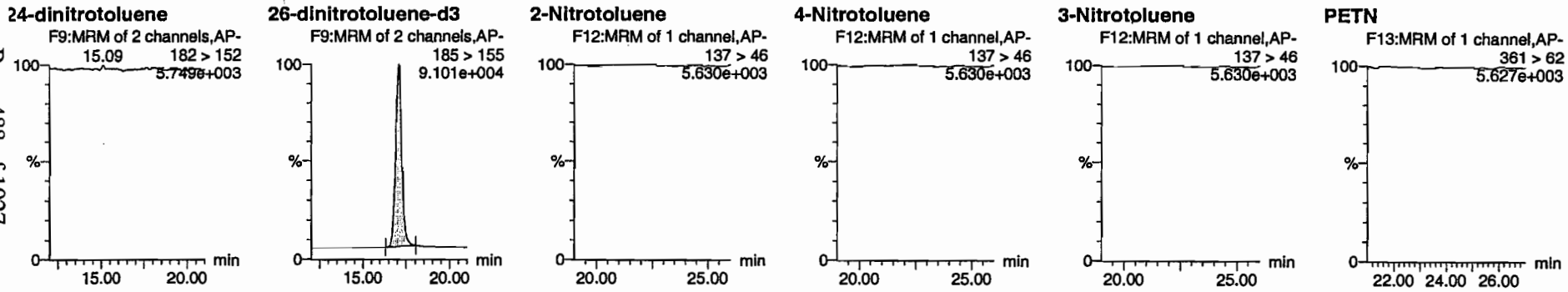
Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA.qld, Time: Tue Apr 13 11:12:22 2010



ID	Name	Trace	RT	Area	IS Area	Abs Resp	Response	Flags	Mod Date	Mod Time	ng/mL	%Rec	%Dev	S/N
XIBLK04	HMX	176 > 102			5799.697									
XIBLK04	RDX	176 > 102			5799.697									
XIBLK04	135-Trinitrobenzene	213 > 183			5799.697									
XIBLK04	13-Dinitrobenzene-d4	172 > 142	11.86	5799.697		5799.697	5799.697	bb			493.1410	98.6	-1.4	818.6
XIBLK04	13-Dinitrobenzene	168 > 138			5799.697									
XIBLK04	Tetryl	241 > 181			5799.697									
XIBLK04	Nitrobenzene	123 > 46			5799.697									
XIBLK04	4-Amino-26-dinitrotoluene	197 > 167			34917.508									
XIBLK04	2-Amino-46-dinitrotoluene	197 > 180			34917.508									
XIBLK04	246-Trinitrotoluene	227 > 210			34917.508									
XIBLK04	34-dinitrotoluene	182 > 152			34917.508									
XIBLK04	26-dinitrotoluene	182 > 152			34917.508									
XIBLK04	24-dinitrotoluene	182 > 152			34917.508									
XIBLK04	26-dinitrotoluene-d3	185 > 155	17.06	34917.508		34917.508	34917.508	bb			499.0614	99.8	-0.2	4328.2
XIBLK04	2-Nitrotoluene	137 > 46			34917.508									
XIBLK04	4-Nitrotoluene	137 > 46			34917.508									
XIBLK04	3-Nitrotoluene	137 > 46			34917.508									
XIBLK04	PETN	361 > 62			34917.508									

GEL SOP GL-OA-E-056, Method 8321A-Modified / MM = Manual Modification

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4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10–2089

Lab Code: GEL

Lab Sample ID: XIBLK05

Analysis Date: 13–APR–10 09:22

GEL Data File: EXP0412037a

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
o–Nitrotoluene	0	0
p–Nitrotoluene	0	0
3,4–Dinitrotoluene	0	0
1,3,5–Trinitrobenzene	0	0
1,3–Dinitrobenzene–d4	500	510.743
2,4,6–Trinitrotoluene	0	0
2,4–Dinitrotoluene	0	0
2,6–Dinitrotoluene	0	0
2,6–Dinitrotoluene–d3	500	501.204
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

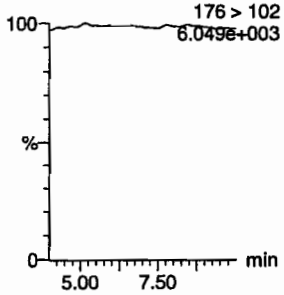
Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA.qld, Time: Tue Apr 13 11:12:22 2010

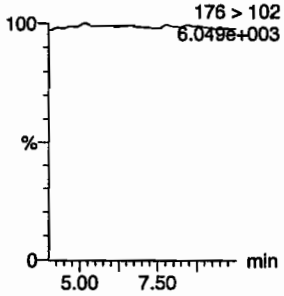
Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0412037a
Date: 13-Apr-2010
Time: 09:22:18
ID: XIBLK05
Vial: 1:1,A

MMT 4/13/10

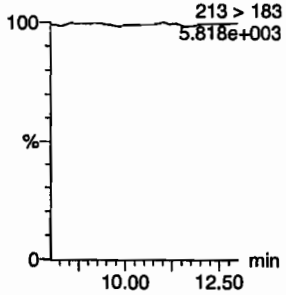
HMX
F2:MRM of 1 channel,AP-
176 > 102
6.049e+003



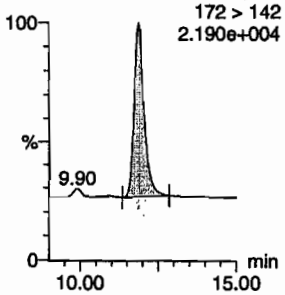
RDX
F2:MRM of 1 channel,AP-
176 > 102
6.049e+003



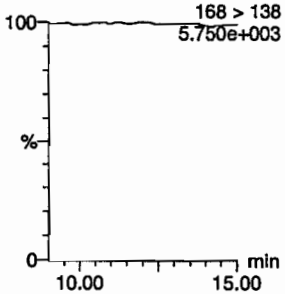
135-Trinitrobenzene
F4:MRM of 1 channel,AP-
213 > 183
5.818e+003



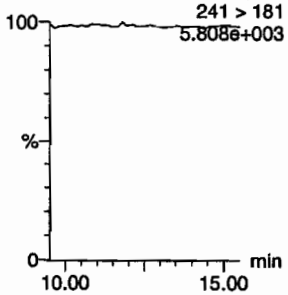
13-Dinitrobenzene-d4
F5:MRM of 2 channels,AP-
172 > 142
2.190e+004



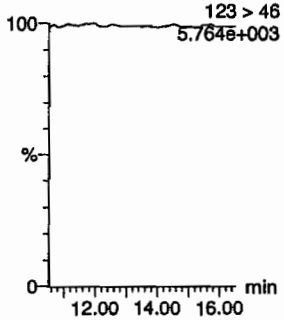
13-Dinitrobenzene
F5:MRM of 2 channels,AP-
168 > 138
5.750e+003



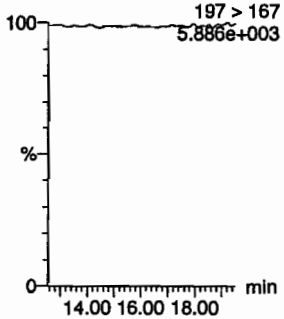
Tetryl
F6:MRM of 1 channel,AP-
241 > 181
5.808e+003



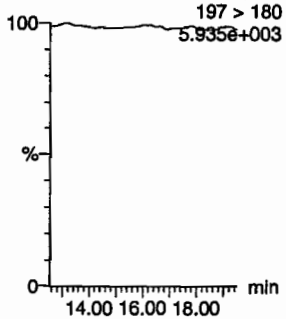
Nitrobenzene
F7:MRM of 1 channel,AP-
123 > 46
5.764e+003



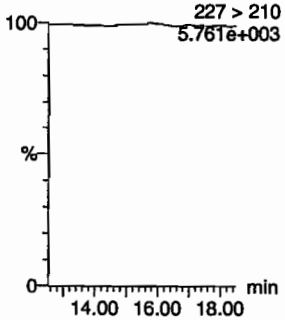
4-Amino-26-dinitrotoluene
F11:MRM of 2 channels,AP-
197 > 167
5.886e+003



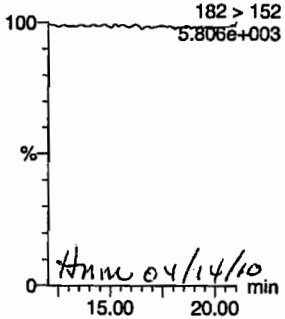
2-Amino-46-dinitrotoluene
F11:MRM of 2 channels,AP-
197 > 180
5.935e+003



246-Trinitrotoluene
F10:MRM of 1 channel,AP-
227 > 210
5.761e+003

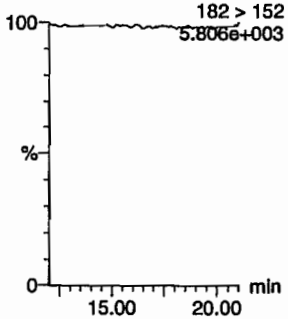


34-dinitrotoluene
F9:MRM of 2 channels,AP-
182 > 152
5.806e+003



HMM 04/14/10

26-dinitrotoluene
F9:MRM of 2 channels,AP-
182 > 152
5.806e+003



EL SOP GL-OA-E-056, Method 8321A-Modified / MM = Manual Modification

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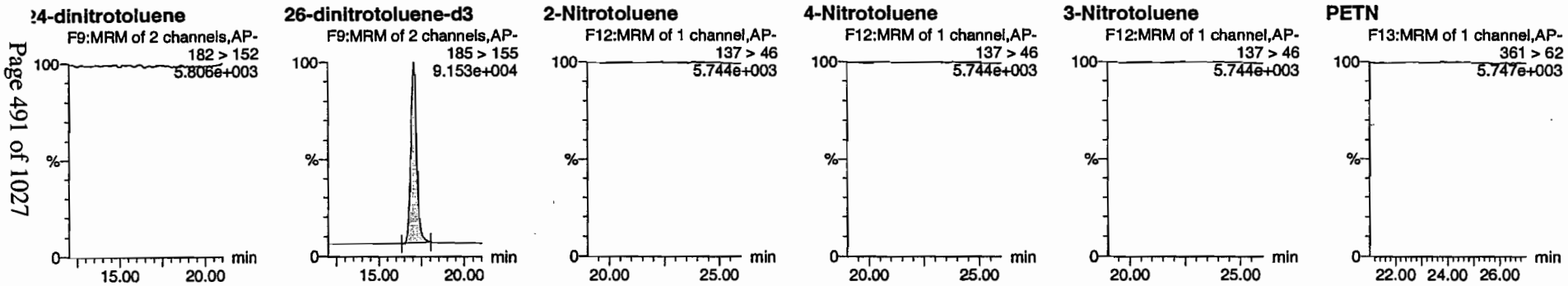
Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA.qld, Time: Tue Apr 13 11:12:22 2010



D	Name	Trace	RT	Area	IS Area	Abs Resp	Response	Flags	Mod Date	Mod Time	ng/mL	%Rec	%Dev	S/N
IBLK05	HMX	176 > 102			6006.704									
IBLK05	RDX	176 > 102			6006.704									
IBLK05	135-Trinitrobenzene	213 > 183			6006.704									
IBLK05	13-Dinitrobenzene-d4	172 > 142	11.87	6006.704		6006.704	6006.704	bb			510.7425	102.1	2.1	513.6
IBLK05	13-Dinitrobenzene	168 > 138			6006.704									
IBLK05	Tetryl	241 > 181			6006.704									
IBLK05	Nitrobenzene	123 > 46			6006.704									
IBLK05	4-Amino-26-dinitrotoluene	197 > 167			35067.418									
IBLK05	2-Amino-46-dinitrotoluene	197 > 180			35067.418									
IBLK05	246-Trinitrotoluene	227 > 210			35067.418									
IBLK05	34-dinitrotoluene	182 > 152			35067.418									
IBLK05	26-dinitrotoluene	182 > 152			35067.418									
IBLK05	24-dinitrotoluene	182 > 152			35067.418									
IBLK05	26-dinitrotoluene-d3	185 > 155	17.06	35067.418		35067.418	35067.418	bb			501.2040	100.2	0.2	3209.3
IBLK05	2-Nitrotoluene	137 > 46			35067.418									
IBLK05	4-Nitrotoluene	137 > 46			35067.418									
IBLK05	3-Nitrotoluene	137 > 46			35067.418									
IBLK05	PETN	361 > 62			35067.418									

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4A
Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC
GEL Job No(SDG): 10–2089
Lab Code: GEL
Lab Sample ID: XIBLK06
Analysis Date: 13–APR–10 11:20
GEL Data File: EXP0412041a
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	648.08
2,4,6–Trinitrotoluene	0	0
2,4–Dinitrotoluene	0	0
2,6–Dinitrotoluene	0	0
2,6–Dinitrotoluene–d3	500	519.054
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

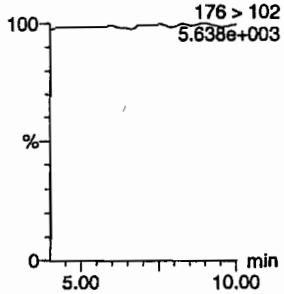
Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA1.qld, Time: Wed Apr 14 09:16:31 2010

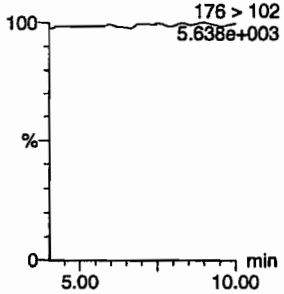
Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0412041a
Date: 13-Apr-2010
Time: 11:20:19
ID: XIBLK06
Vial: 1:1,A

LMT 4/14/10

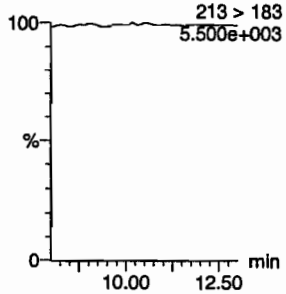
HMX
F2:MRM of 1 channel,AP-
176 > 102
5.638e+003



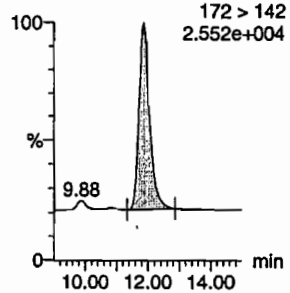
RDX
F2:MRM of 1 channel,AP-
176 > 102
5.638e+003



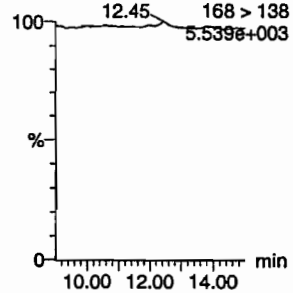
135-Trinitrobenzene
F4:MRM of 1 channel,AP-
213 > 183
5.500e+003



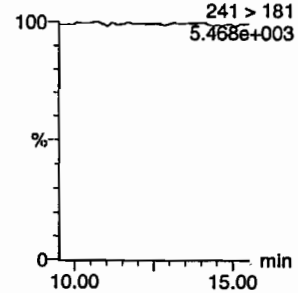
13-Dinitrobenzene-d4
F5:MRM of 2 channels,AP-
172 > 142
2.552e+004



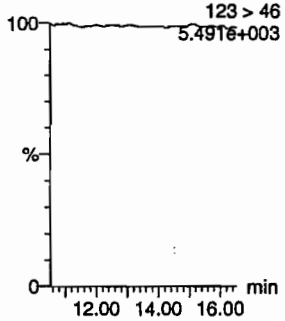
13-Dinitrobenzene
F5:MRM of 2 channels,AP-
12.45
168 > 138
5.539e+003



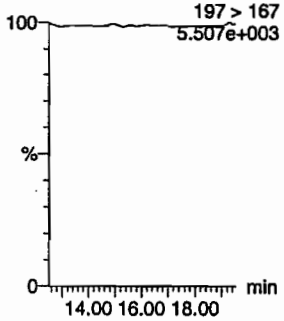
Tetryl
F6:MRM of 1 channel,AP-
241 > 181
5.468e+003



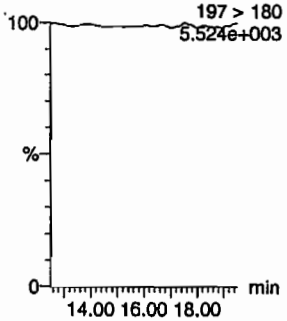
Nitrobenzene
F7:MRM of 1 channel,AP-
123 > 46
5.491e+003



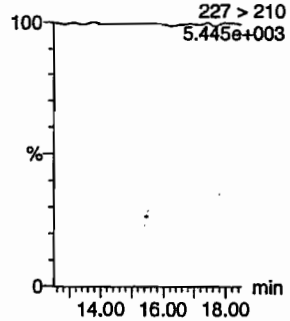
4-Amino-26-dinitrotoluene
F11:MRM of 2 channels,AP-
197 > 167
5.507e+003



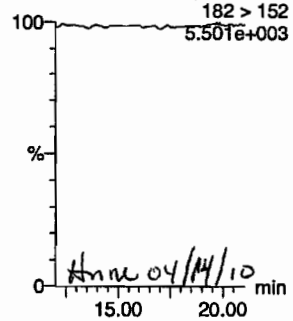
2-Amino-46-dinitrotoluene
F11:MRM of 2 channels,AP-
197 > 180
5.524e+003



246-Trinitrotoluene
F10:MRM of 1 channel,AP-
227 > 210
5.445e+003

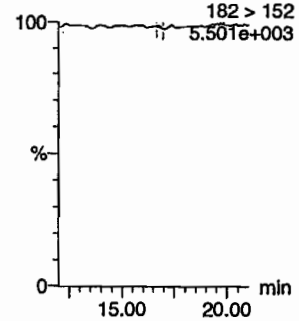


34-dinitrotoluene
F9:MRM of 2 channels,AP-
182 > 152
5.501e+003



Hmm 04/14/10

26-dinitrotoluene
F9:MRM of 2 channels,AP-
182 > 152
5.501e+003



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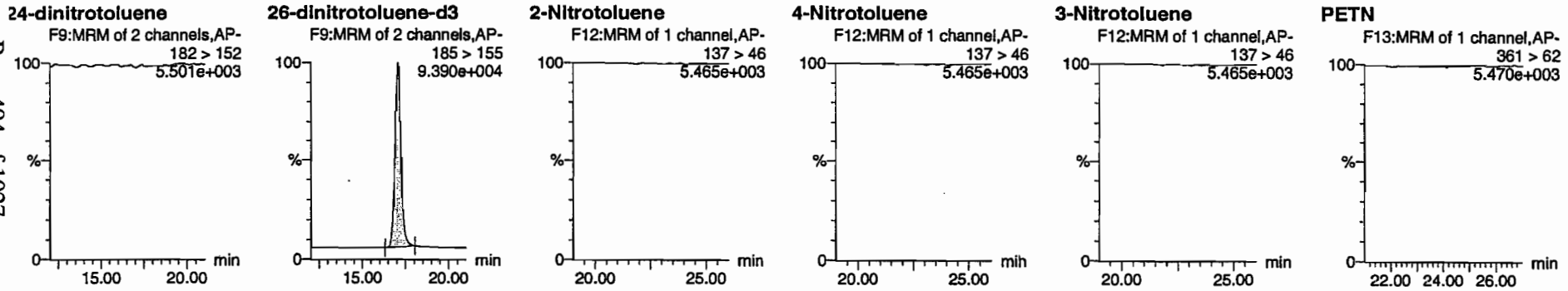
Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA1.qld, Time: Wed Apr 14 09:16:31 2010



ID	Name	Trace	RT	Area	IS Area	Abs Resp	Response	Flags	Mod Date	Mod Time	ng/ml	%Rec	%Dev	S/N
XIBLK06	HMX	176 > 102			7621.890									
XIBLK06	RDX	176 > 102			7621.890									
XIBLK06	135-Trinitrobenzene	213 > 183			7621.890									
XIBLK06	13-Dinitrobenzene-d4	172 > 142	11.87	7621.890		7621.890	7621.890	bb			648.0798	129.6	29.6	880.4
XIBLK06	13-Dinitrobenzene	168 > 138			7621.890									
XIBLK06	Tetryl	241 > 181			7621.890									
XIBLK06	Nitrobenzene	123 > 46			7621.890									
XIBLK06	4-Amino-26-dinitrotoluene	197 > 167			36316.328									
XIBLK06	2-Amino-46-dinitrotoluene	197 > 180			36316.328									
XIBLK06	246-Trinitrotoluene	227 > 210			36316.328									
XIBLK06	34-dinitrotoluene	182 > 152			36316.328									
XIBLK06	26-dinitrotoluene	182 > 152			36316.328			MM-	14-Apr-10	09:11:01				
XIBLK06	24-dinitrotoluene	182 > 152			36316.328									
XIBLK06	26-dinitrotoluene-d3	185 > 155	17.05	36316.328		36316.328	36316.328	bb			519.0541	103.8	3.8	1500.7
XIBLK06	2-Nitrotoluene	137 > 46			36316.328									
XIBLK06	4-Nitrotoluene	137 > 46			36316.328									
XIBLK06	3-Nitrotoluene	137 > 46			36316.328									
XIBLK06	PETN	361 > 62			36316.328									

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4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10–2089

Lab Code: GEL

Lab Sample ID: XIBLK07

Analysis Date: 13–APR–10 15:46

GEL Data File: EXP0412050a

Instrument ID: LCMSMS

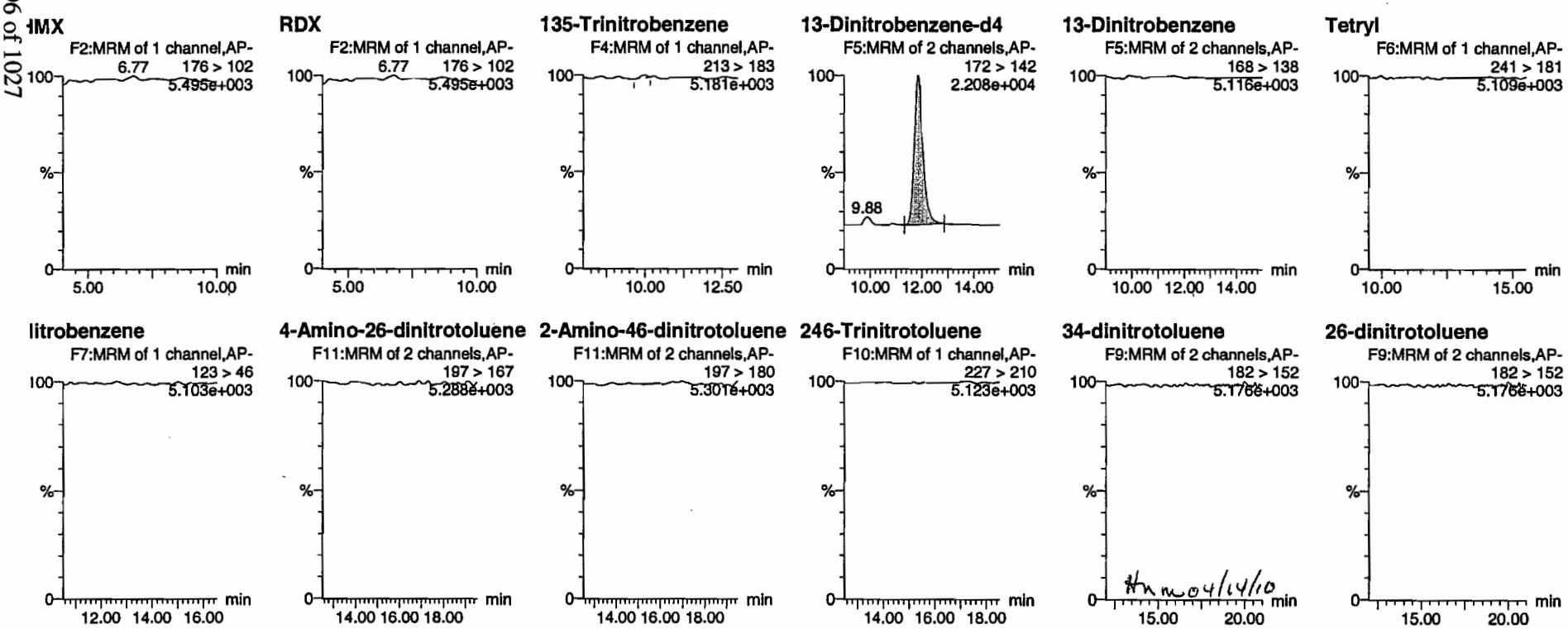
Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
m–Nitrotoluene	0	0
o–Nitrotoluene	0	0
p–Nitrotoluene	0	0
3,4–Dinitrotoluene	0	0
1,3,5–Trinitrobenzene	0	0
1,3–Dinitrobenzene–d4	500	555.622
2,4,6–Trinitrotoluene	0	0
2,4–Dinitrotoluene	0	0
2,6–Dinitrotoluene	0	0
2,6–Dinitrotoluene–d3	500	595.796
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

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA1.qld, Time: Wed Apr 14 09:16:31 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0412050a
Date: 13-Apr-2010
Time: 15:46:11
ID: XIBLK07
Vial: 1:1,A

MM 4/14/10



HM 04/14/10

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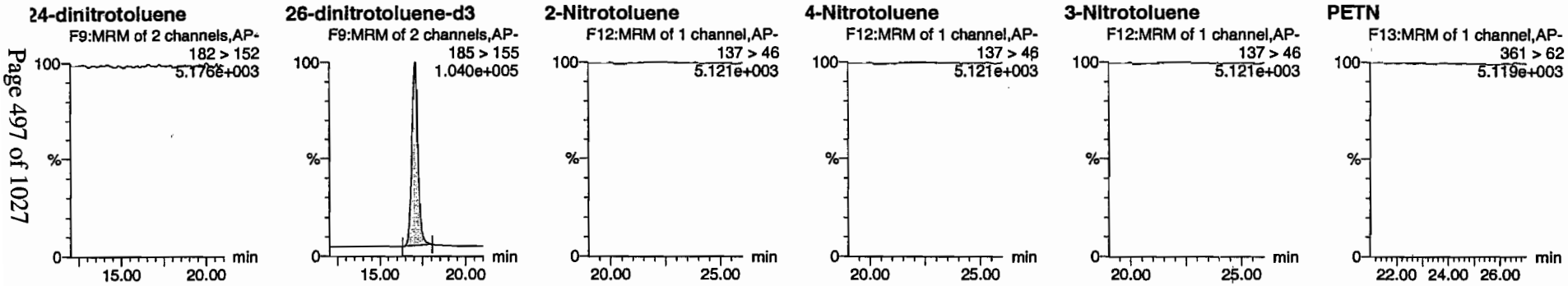
Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA1.qld, Time: Wed Apr 14 09:16:31 2010



D	Name	Trace	RT	Area	IS Area	Abs Resp	Response	Flags	Mod Date	Mod Time	ng/mL	%Rec	%Dev	S/N
KIBLK07	HMX	176 > 102			6534.515									
KIBLK07	RDX	176 > 102			6534.515									
KIBLK07	135-Trinitrobenzene	213 > 183			6534.515			MM-	14-Apr-10	09:05:01				
KIBLK07	13-Dinitrobenzene-d4	172 > 142	11.87	6534.515		6534.515	6534.515	bb			555.6217	111.1	11.1	831.9
KIBLK07	13-Dinitrobenzene	168 > 138			6534.515									
KIBLK07	Tetryl	241 > 181			6534.515									
KIBLK07	Nitrobenzene	123 > 46			6534.515									
KIBLK07	4-Amino-26-dinitrotoluene	197 > 167			41685.668									
KIBLK07	2-Amino-46-dinitrotoluene	197 > 180			41685.668									
KIBLK07	246-Trinitrotoluene	227 > 210			41685.668									
KIBLK07	34-dinitrotoluene	182 > 152			41685.668									
KIBLK07	26-dinitrotoluene	182 > 152			41685.668									
KIBLK07	24-dinitrotoluene	182 > 152			41685.668									
KIBLK07	26-dinitrotoluene-d3	185 > 155	17.05	41685.668		41685.668	41685.668	bb			595.7959	119.2	19.2	3775.0
KIBLK07	2-Nitrotoluene	137 > 46			41685.668									
KIBLK07	4-Nitrotoluene	137 > 46			41685.668									
KIBLK07	3-Nitrotoluene	137 > 46			41685.668									
KIBLK07	PETN	361 > 62			41685.668									

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4A
Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10–2089

Lab Code: GEL

Lab Sample ID: XIBLK08

Analysis Date: 13–APR–10 21:10

GEL Data File: EXP0412061a

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

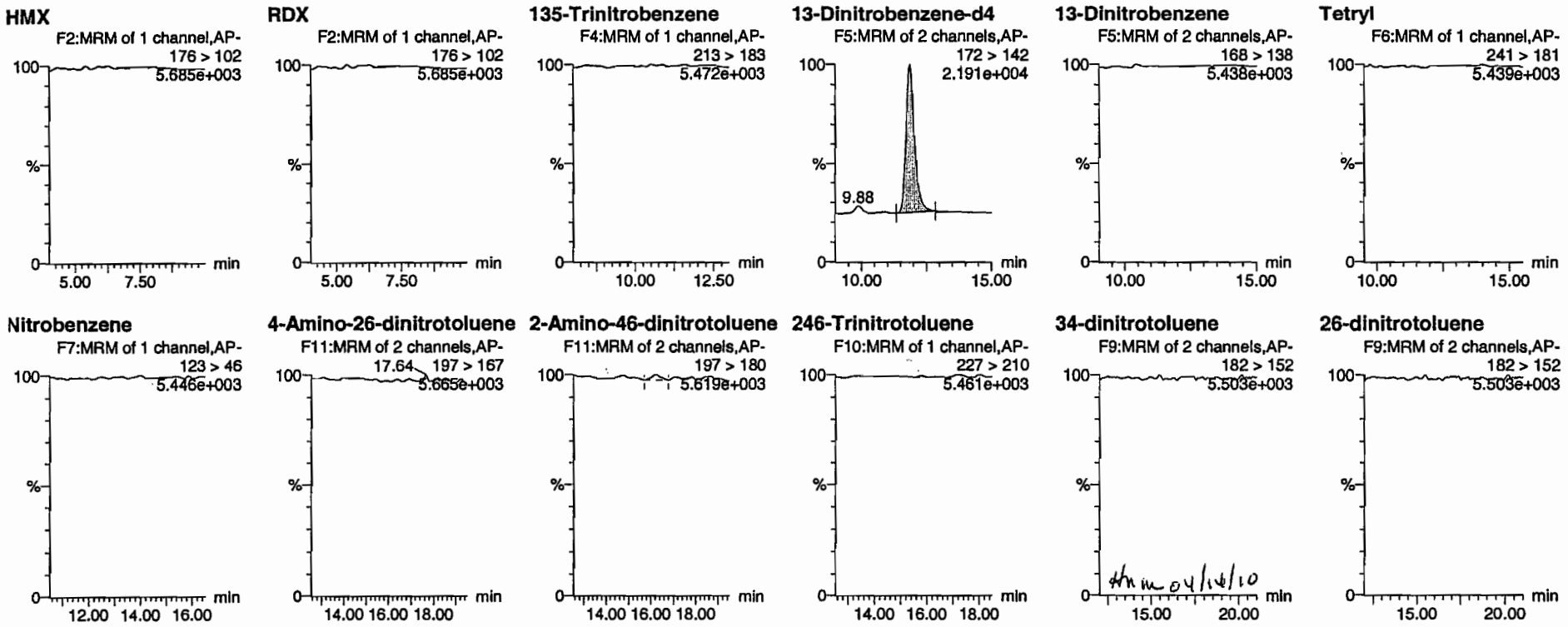
Compound	True	Found (ug/L)
3,4–Dinitrotoluene	0	0
1,3,5–Trinitrobenzene	0	0
1,3–Dinitrobenzene–d4	500	531.786
2,4,6–Trinitrotoluene	0	0
2,4–Dinitrotoluene	0	0
2,6–Dinitrotoluene	0	0
2,6–Dinitrotoluene–d3	500	563.322
2–Amino–4,6–dinitrotoluene	0	0
4–Amino–2,6–dinitrotoluene	0	0
HMX	0	0
Nitrobenzene	0	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\041210expA1.qld, Time: Wed Apr 14 09:16:31 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0412061a
Date: 13-Apr-2010
Time: 21:10:49
ID: XIBLK08
Vial: 1:1,A

MMP 9/14/10



HM 04/14/10

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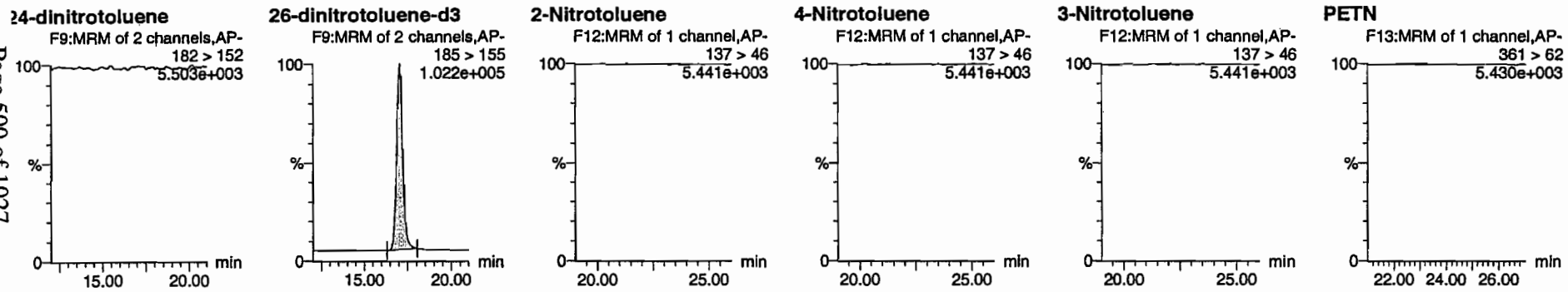
Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA1.qld, Time: Wed Apr 14 09:16:31 2010



D	Name	Trace	RT	Area	IS Area	Abs Resp	Response	Flags	Mod Date	Mod Time	ng/mL	%Rec	%Dev	S/N
KIBLK08	HMX	176 > 102			6254.194									
KIBLK08	RDX	176 > 102			6254.194									
KIBLK08	135-Trinitrobenzene	213 > 183			6254.194									
KIBLK08	13-Dinitrobenzene-d4	172 > 142	11.87	6254.194		6254.194	6254.194	bb			531.7863	106.4	6.4	504.3
KIBLK08	13-Dinitrobenzene	168 > 138			6254.194									
KIBLK08	Tetryl	241 > 181			6254.194									
KIBLK08	Nitrobenzene	123 > 46			6254.194									
KIBLK08	4-Amino-26-dinitrotoluene	197 > 167			39413.598									
KIBLK08	2-Amino-46-dinitrotoluene	197 > 180			39413.598			MM-	14-Apr-10	09:02:14				
KIBLK08	246-Trinitrotoluene	227 > 210			39413.598									
KIBLK08	34-dinitrotoluene	182 > 152			39413.598									
KIBLK08	26-dinitrotoluene	182 > 152			39413.598									
KIBLK08	24-dinitrotoluene	182 > 152			39413.598									
KIBLK08	26-dinitrotoluene-d3	185 > 155	17.04	39413.598		39413.598	39413.598	bb			563.3221	112.7	12.7	3089.3
KIBLK08	2-Nitrotoluene	137 > 46			39413.598									
KIBLK08	4-Nitrotoluene	137 > 46			39413.598									
KIBLK08	3-Nitrotoluene	137 > 46			39413.598									
KIBLK08	PETN	361 > 62			39413.598									

EL SOP GL-OA-E-056, Method 8321A-Modified / MM = Manual Modification

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4A
Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10–2089

Lab Code: GEL

Lab Sample ID: XIBLK09

Analysis Date: 14–APR–10 03:34

GEL Data File: EXP0412074a

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
2–Amino–4,6–dinitrotoluene	0	0
4–Amino–2,6–dinitrotoluene	0	0
HMX	0	0
Nitrobenzene	0	0
PETN	0	0
RDX	0	0
Tetryl	0	0
m–Dinitrobenzene	0	0
m–Nitrotoluene	0	0
o–Nitrotoluene	0	0
p–Nitrotoluene	0	0
3,4–Dinitrotoluene	0	0
1,3,5–Trinitrobenzene	0	0
1,3–Dinitrobenzene–d4	500	496.797
2,4,6–Trinitrotoluene	0	0
2,4–Dinitrotoluene	0	0
2,6–Dinitrotoluene	0	0
2,6–Dinitrotoluene–d3	500	587.81

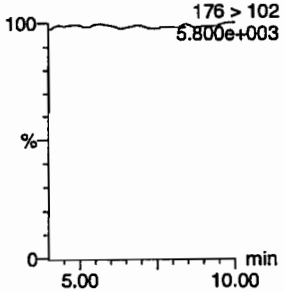
Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA1.qld, Time: Wed Apr 14 09:16:31 2010

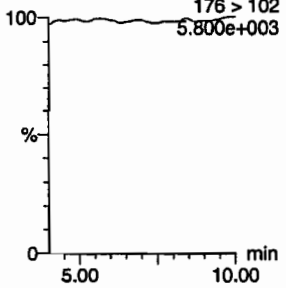
Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0412074a
Date: 14-Apr-2010
Time: 03:34:13
ID: XIBLK09
Vial: 1:1,A

MMT 4/14/10

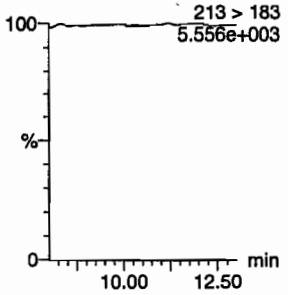
HMX
F2:MRM of 1 channel,AP-
176 > 102
5.800e+003



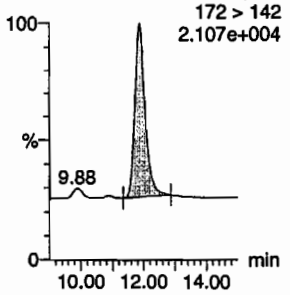
RDX
F2:MRM of 1 channel,AP-
176 > 102
5.800e+003



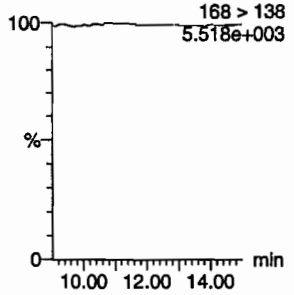
135-Trinitrobenzene
F4:MRM of 1 channel,AP-
213 > 183
5.556e+003



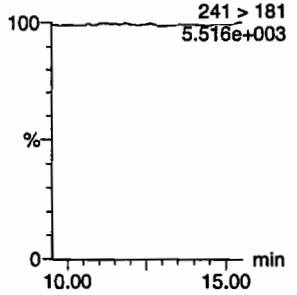
13-Dinitrobenzene-d4
F5:MRM of 2 channels,AP-
172 > 142
2.107e+004



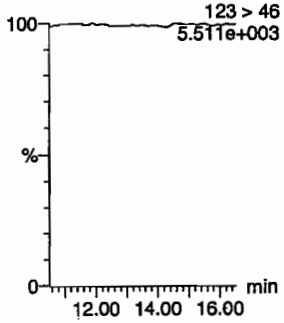
13-Dinitrobenzene
F5:MRM of 2 channels,AP-
168 > 138
5.518e+003



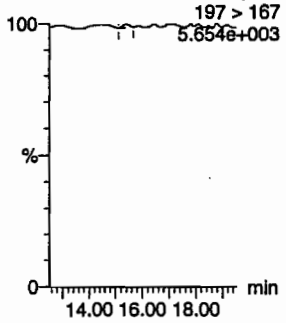
Tetryl
F6:MRM of 1 channel,AP-
241 > 181
5.516e+003



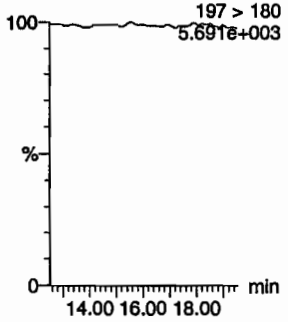
Nitrobenzene
F7:MRM of 1 channel,AP-
123 > 46
5.511e+003



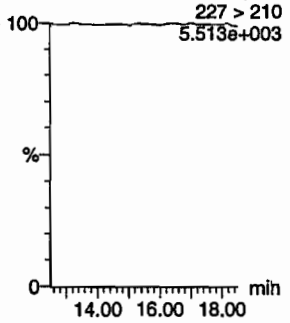
4-Amino-26-dinitrotoluene
F11:MRM of 2 channels,AP-
197 > 167
5.654e+003



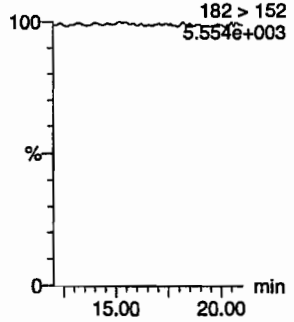
2-Amino-46-dinitrotoluene
F11:MRM of 2 channels,AP-
197 > 180
5.691e+003



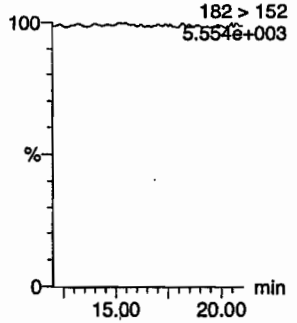
246-Trinitrotoluene
F10:MRM of 1 channel,AP-
227 > 210
5.513e+003



34-dinitrotoluene
F9:MRM of 2 channels,AP-
182 > 152
5.554e+003



26-dinitrotoluene
F9:MRM of 2 channels,AP-
182 > 152
5.554e+003



HMM 04/14/10

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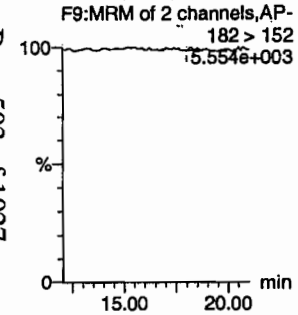
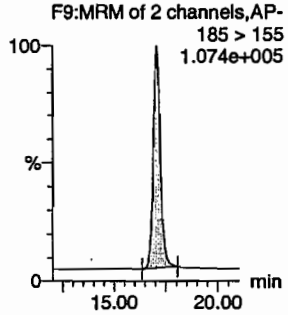
Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA1.qld, Time: Wed Apr 14 09:16:31 2010

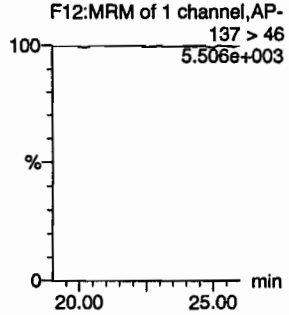
24-dinitrotoluene



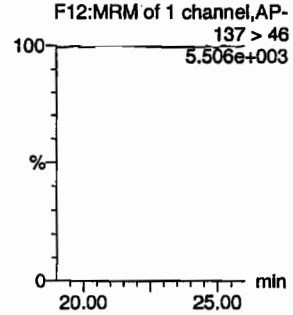
26-dinitrotoluene-d3



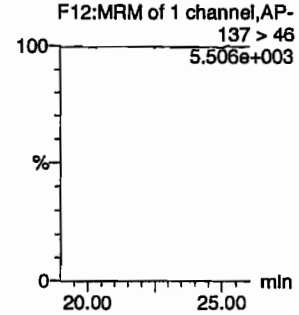
2-Nitrotoluene



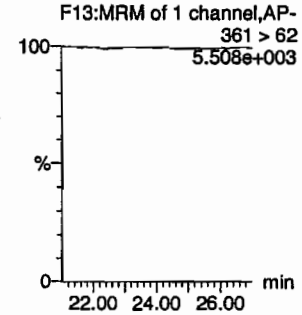
4-Nitrotoluene



3-Nitrotoluene



PETN



ID	Name	Trace	RT	Area	IS Area	Abs Resp	Response	Flags	Mod Date	Mod Time	ng/mL	%Rec	%Dev	S/N
XIBLK09	HMX	176 > 102			5842.696									
XIBLK09	RDX	176 > 102			5842.696									
XIBLK09	135-Trinitrobenzene	213 > 183			5842.696									
XIBLK09	13-Dinitrobenzene-d4	172 > 142	11.87	5842.696		5842.696	5842.696	bb			496.7972	99.4	-0.6	724.2
XIBLK09	13-Dinitrobenzene	168 > 138			5842.696									
XIBLK09	Tetryl	241 > 181			5842.696									
XIBLK09	Nitrobenzene	123 > 46			5842.696									
XIBLK09	4-Amino-26-dinitrotoluene	197 > 167			41126.906			MM-	14-Apr-10	09:09:05				
XIBLK09	2-Amino-46-dinitrotoluene	197 > 180			41126.906									
XIBLK09	246-Trinitrotoluene	227 > 210			41126.906									
XIBLK09	34-dinitrotoluene	182 > 152			41126.906									
XIBLK09	26-dinitrotoluene	182 > 152			41126.906									
XIBLK09	24-dinitrotoluene	182 > 152			41126.906			MM-	14-Apr-10	09:13:30				
XIBLK09	26-dinitrotoluene-d3	185 > 155	17.05	41126.906		41126.906	41126.906	bb			587.8097	117.6	17.6	1849.8
XIBLK09	2-Nitrotoluene	137 > 46			41126.906									
XIBLK09	4-Nitrotoluene	137 > 46			41126.906									
XIBLK09	3-Nitrotoluene	137 > 46			41126.906									
XIBLK09	PETN	361 > 62			41126.906									

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4A
Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC
GEL Job No(SDG): 10–2089
Lab Code: GEL
Lab Sample ID: XIBLK10
Analysis Date: 14–APR–10 07:30
GEL Data File: EXP0412082a
Instrument ID: LCMSMS
Column: Phenomenex Ultracarb 5u ODS(20)

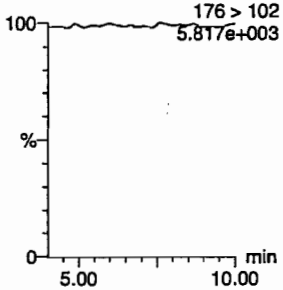
Compound	True	Found (ug/L)
3,4–Dinitrotoluene	0	0
1,3,5–Trinitrobenzene	0	0
1,3–Dinitrobenzene–d4	500	517.729
2,4,6–Trinitrotoluene	0	0
2,4–Dinitrotoluene	0	0
2,6–Dinitrotoluene	0	0
2,6–Dinitrotoluene–d3	500	520.204
2–Amino–4,6–dinitrotoluene	0	0
4–Amino–2,6–dinitrotoluene	0	0
HMX	0	0
Nitrobenzene	0	0
PETN	0	0
RDX	0	0
Tetryl	0	0
m–Dinitrobenzene	0	0
m–Nitrotoluene	0	0
o–Nitrotoluene	0	0
p–Nitrotoluene	0	0

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA2.qld, Time: Thu Apr 15 14:49:38 2010

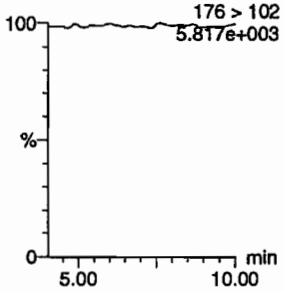
Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0412082a
Date: 14-Apr-2010
Time: 07:30:08
ID: XIBLK10
Vial: 1:1,F

MMT 4/15/10

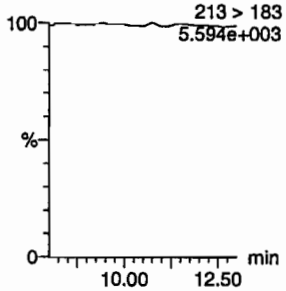
HMX
F2:MRM of 1 channel,AP-
176 > 102
5.817e+003



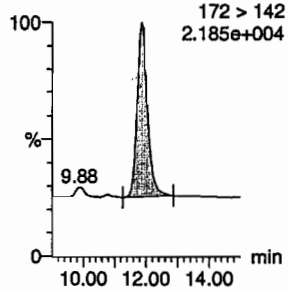
RDX
F2:MRM of 1 channel,AP-
176 > 102
5.817e+003



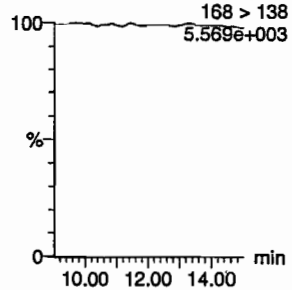
135-Trinitrobenzene
F4:MRM of 1 channel,AP-
213 > 183
5.594e+003



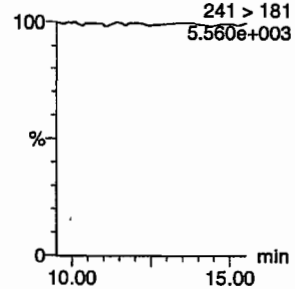
13-Dinitrobenzene-d4
F5:MRM of 2 channels,AP-
172 > 142
2.185e+004



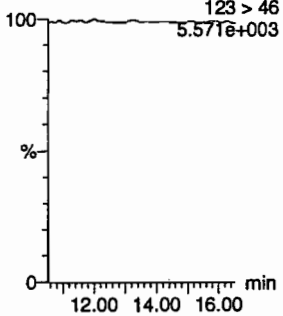
13-Dinitrobenzene
F5:MRM of 2 channels,AP-
168 > 138
5.569e+003



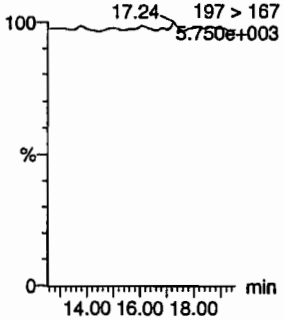
Tetryl
F6:MRM of 1 channel,AP-
241 > 181
5.560e+003



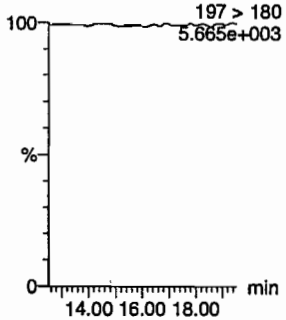
Nitrobenzene
F7:MRM of 1 channel,AP-
123 > 46
5.571e+003



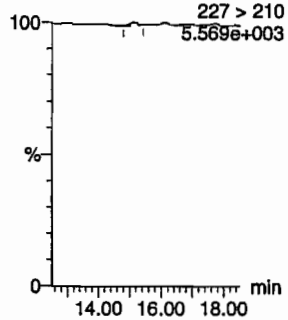
4-Amino-26-dinitrotoluene
F11:MRM of 2 channels,AP-
17.24
197 > 167
5.750e+003



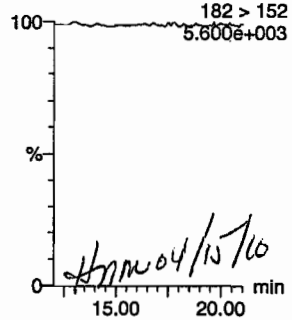
2-Amino-46-dinitrotoluene
F11:MRM of 2 channels,AP-
197 > 180
5.665e+003



246-Trinitrotoluene
F10:MRM of 1 channel,AP-
227 > 210
5.569e+003

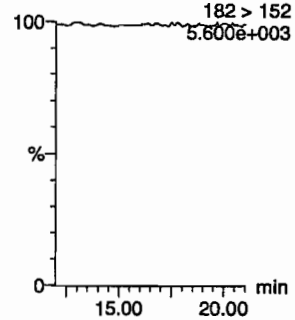


34-dinitrotoluene
F9:MRM of 2 channels,AP-
182 > 152
5.600e+003



HMM 04/15/10

26-dinitrotoluene
F9:MRM of 2 channels,AP-
182 > 152
5.600e+003



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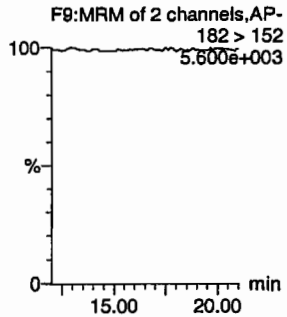
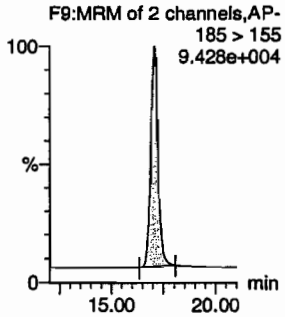
Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA2.qld, Time: Thu Apr 15 14:49:38 2010

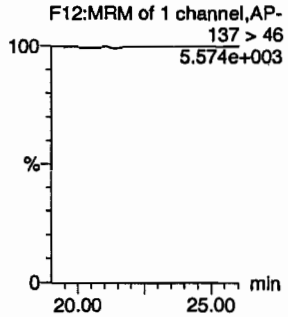
24-dinitrotoluene



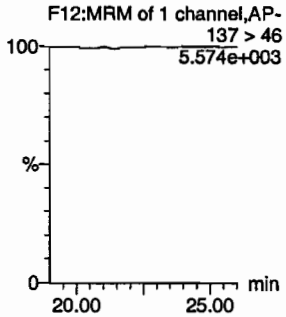
26-dinitrotoluene-d3



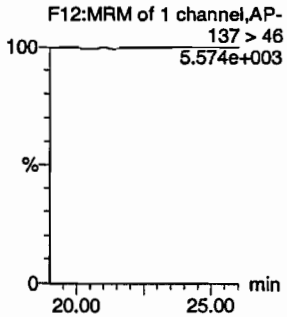
2-Nitrotoluene



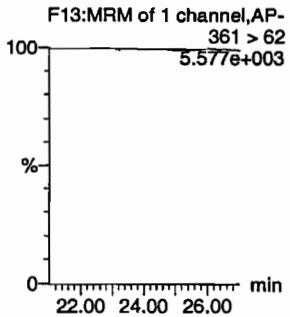
4-Nitrotoluene



3-Nitrotoluene



PETN



ID	Name	Trace	RT	Area	IS Area	Abs.Resp	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N
XIBLK10	HMX	176 > 102			6088.874									
XIBLK10	RDX	176 > 102			6088.874									
XIBLK10	135-Trinitrobenzene	213 > 183			6088.874									
XIBLK10	13-Dinitrobenzene-d4	172 > 142	11.87	6088.874		6088.874	6088.874	bb			517.7294	103.5	3.5	584.3
XIBLK10	13-Dinitrobenzene	168 > 138			6088.874									
XIBLK10	Tetryl	241 > 181			6088.874									
XIBLK10	Nitrobenzene	123 > 46			6088.874									
XIBLK10	4-Amino-26-dinitrotoluene	197 > 167			36396.813									
XIBLK10	2-Amino-46-dinitrotoluene	197 > 180			36396.813									
XIBLK10	246-Trinitrotoluene	227 > 210			36396.813			MM-	15-Apr-10	14:36:35				
XIBLK10	34-dinitrotoluene	182 > 152			36396.813									
XIBLK10	26-dinitrotoluene	182 > 152			36396.813									
XIBLK10	24-dinitrotoluene	182 > 152			36396.813									
XIBLK10	26-dinitrotoluene-d3	185 > 155	17.05	36396.813		36396.813	36396.813	bb			520.2045	104.0	4.0	2265.8
XIBLK10	2-Nitrotoluene	137 > 46			36396.813									
XIBLK10	4-Nitrotoluene	137 > 46			36396.813									
XIBLK10	3-Nitrotoluene	137 > 46			36396.813									
XIBLK10	PETN	361 > 62			36396.813									

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4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10–2089

Lab Code: GEL

Lab Sample ID: XIBLK11

Analysis Date: 14–APR–10 08:58

GEL Data File: EXP0412085a

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

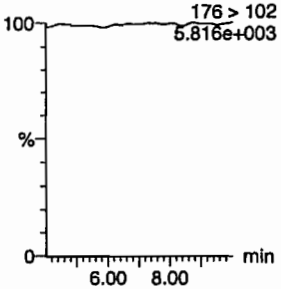
Compound	True	Found (ug/L)
Tetryl	0	0
m–Dinitrobenzene	0	0
m–Nitrotoluene	0	0
o–Nitrotoluene	0	0
p–Nitrotoluene	0	0
3,4–Dinitrotoluene	0	0
1,3,5–Trinitrobenzene	0	0
1,3–Dinitrobenzene–d4	500	553.174
2,4,6–Trinitrotoluene	0	0
2,4–Dinitrotoluene	0	0
2,6–Dinitrotoluene	0	0
2,6–Dinitrotoluene–d3	500	549.729
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

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA2.qld, Time: Thu Apr 15 14:49:38 2010

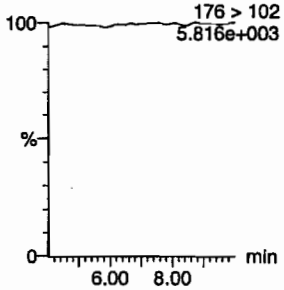
Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0412085a
Date: 14-Apr-2010
Time: 08:58:45
ID: XIBLK11
Vial: 1:1,F

HMM 4/15/10

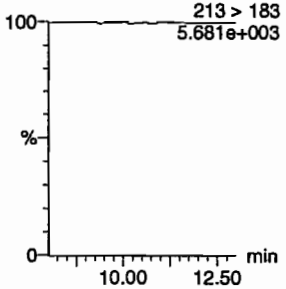
HMX
F2:MRM of 1 channel,AP-
176 > 102
5.816e+003



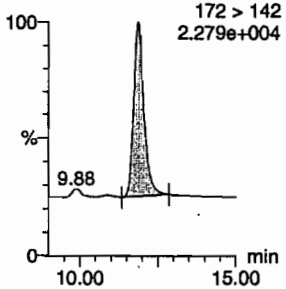
RDX
F2:MRM of 1 channel,AP-
176 > 102
5.816e+003



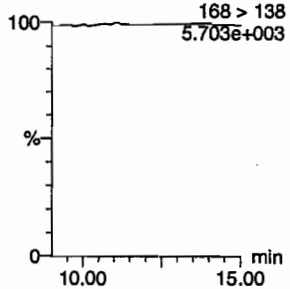
135-Trinitrobenzene
F4:MRM of 1 channel,AP-
213 > 183
5.681e+003



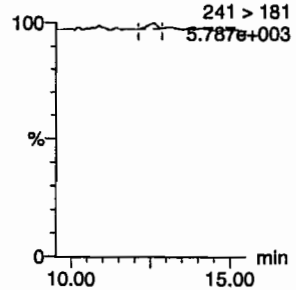
13-Dinitrobenzene-d4
F5:MRM of 2 channels,AP-
172 > 142
2.279e+004



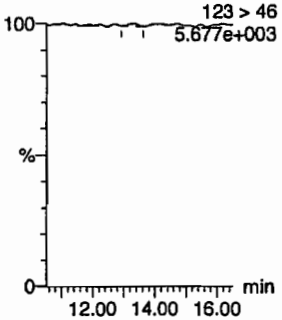
13-Dinitrobenzene
F5:MRM of 2 channels,AP-
168 > 138
5.703e+003



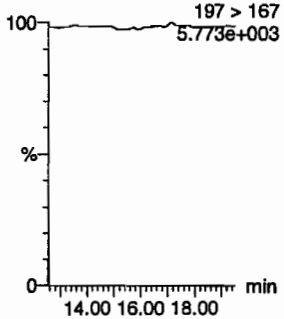
Tetryl
F6:MRM of 1 channel,AP-
241 > 181
5.787e+003



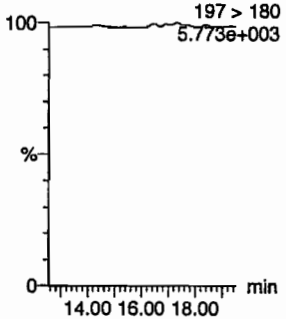
Nitrobenzene
F7:MRM of 1 channel,AP-
123 > 46
5.677e+003



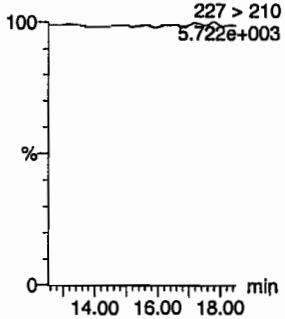
4-Amino-26-dinitrotoluene
F11:MRM of 2 channels,AP-
197 > 167
5.773e+003



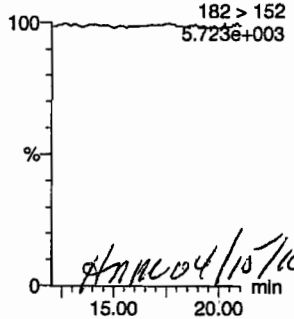
2-Amino-46-dinitrotoluene
F11:MRM of 2 channels,AP-
197 > 180
5.773e+003



246-Trinitrotoluene
F10:MRM of 1 channel,AP-
227 > 210
5.722e+003

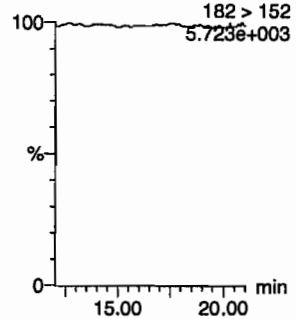


34-dinitrotoluene
F9:MRM of 2 channels,AP-
182 > 152
5.723e+003



HMM 04/15/10

26-dinitrotoluene
F9:MRM of 2 channels,AP-
182 > 152
5.723e+003



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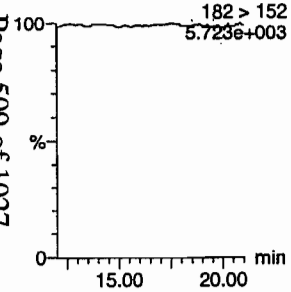
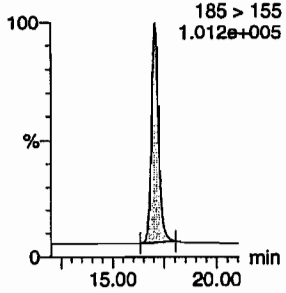
Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA2.qld, Time: Thu Apr 15 14:49:38 2010

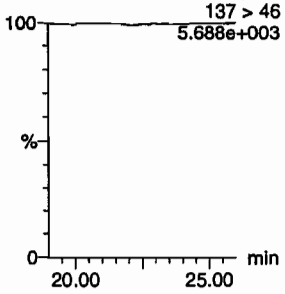
24-dinitrotoluene
F9:MRM of 2 channels,AP-
182 > 152
5.723e+003



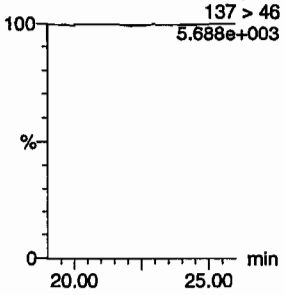
26-dinitrotoluene-d3
F9:MRM of 2 channels,AP-
185 > 155
1.012e+005



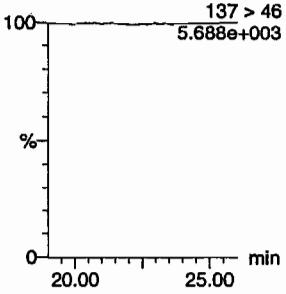
2-Nitrotoluene
F12:MRM of 1 channel,AP-
137 > 46
5.688e+003



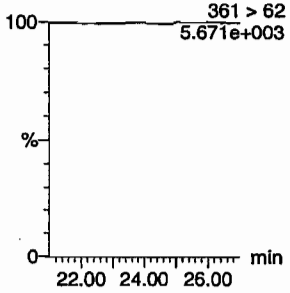
4-Nitrotoluene
F12:MRM of 1 channel,AP-
137 > 46
5.688e+003



3-Nitrotoluene
F12:MRM of 1 channel,AP-
137 > 46
5.688e+003



PETN
F13:MRM of 1 channel,AP-
361 > 62
5.671e+003



D	Name	Trace	RT	Area	IS Area	Abs Resp	Response	Flags	Mod Date	Mod Time	ng/mL	%Rec	%Dev	S/N
CIBLK11	HMX	176 > 102			6505.727									
CIBLK11	RDX	176 > 102			6505.727									
CIBLK11	135-Trinitrobenzene	213 > 183			6505.727									
CIBLK11	13-Dinitrobenzene-d4	172 > 142	11.87	6505.727		6505.727	6505.727	bb			553.1738	110.6	10.6	555.0
CIBLK11	13-Dinitrobenzene	168 > 138			6505.727									
CIBLK11	Tetryl	241 > 181			6505.727			MM-	15-Apr-10	14:30:27				
CIBLK11	Nitrobenzene	123 > 46			6505.727			MM-	15-Apr-10	14:30:41				
CIBLK11	4-Amino-26-dinitrotoluene	197 > 167			38462.531									
CIBLK11	2-Amino-46-dinitrotoluene	197 > 180			38462.531									
CIBLK11	246-Trinitrotoluene	227 > 210			38462.531									
CIBLK11	34-dinitrotoluene	182 > 152			38462.531									
CIBLK11	26-dinitrotoluene	182 > 152			38462.531									
CIBLK11	24-dinitrotoluene	182 > 152			38462.531									
CIBLK11	26-dinitrotoluene-d3	185 > 155	17.06	38462.531		38462.531	38462.531	bb			549.7289	109.9	9.9	2944.0
CIBLK11	2-Nitrotoluene	137 > 46			38462.531									
CIBLK11	4-Nitrotoluene	137 > 46			38462.531									
CIBLK11	3-Nitrotoluene	137 > 46			38462.531									
CIBLK11	PETN	361 > 62			38462.531									

GEL SOP GL-OA-E-056, Method 8321A-Modified / MM = Manual Modification

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4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10–2089

Lab Code: GEL

Lab Sample ID: XIBLK12

Analysis Date: 14–APR–10 09:57

GEL Data File: EXP0412087a

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

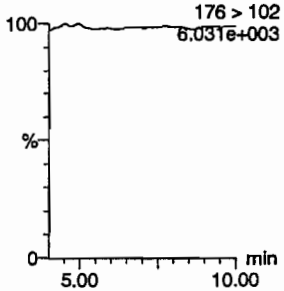
Compound	True	Found (ug/L)
3,4–Dinitrotoluene	0	0
1,3,5–Trinitrobenzene	0	0
1,3–Dinitrobenzene–d4	500	561.908
2,4,6–Trinitrotoluene	0	0
2,4–Dinitrotoluene	0	0
2,6–Dinitrotoluene	0	0
2,6–Dinitrotoluene–d3	500	512.757
2–Amino–4,6–dinitrotoluene	0	0
4–Amino–2,6–dinitrotoluene	0	0
HMX	0	0
Nitrobenzene	0	0
PETN	0	0
RDX	0	0
Tetryl	0	0
m–Dinitrobenzene	0	0
m–Nitrotoluene	0	0
o–Nitrotoluene	0	0
p–Nitrotoluene	0	0

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA2.qld, Time: Thu Apr 15 14:49:38 2010

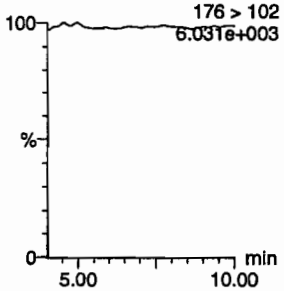
Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0412087a
Date: 14-Apr-2010
Time: 09:57:47
ID: XIBLK12
Vial: 1:1,A

MMT 4/15/10

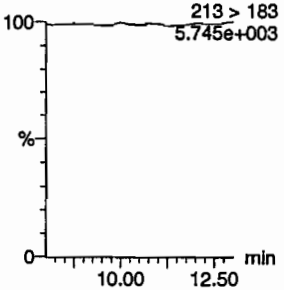
HMX
F2:MRM of 1 channel,AP-
176 > 102
6.031e+003



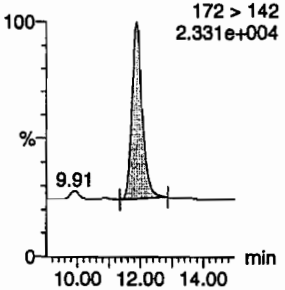
RDX
F2:MRM of 1 channel,AP-
176 > 102
6.031e+003



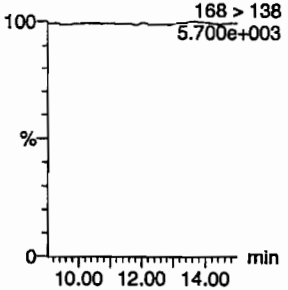
135-Trinitrobenzene
F4:MRM of 1 channel,AP-
213 > 183
5.745e+003



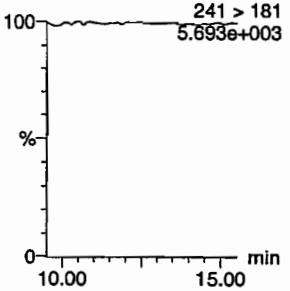
13-Dinitrobenzene-d4
F5:MRM of 2 channels,AP-
172 > 142
2.331e+004



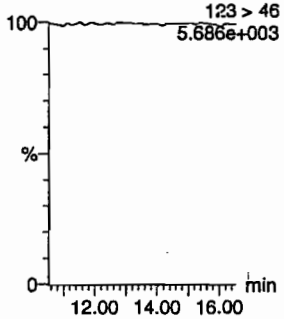
13-Dinitrobenzene
F5:MRM of 2 channels,AP-
168 > 138
5.700e+003



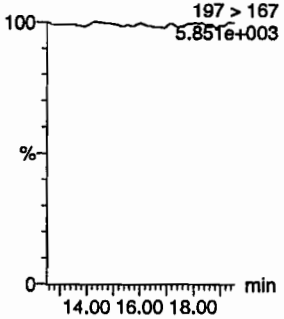
Tetryl
F6:MRM of 1 channel,AP-
241 > 181
5.693e+003



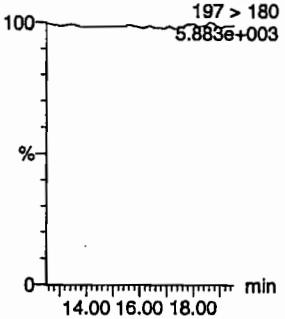
Nitrobenzene
F7:MRM of 1 channel,AP-
123 > 46
5.686e+003



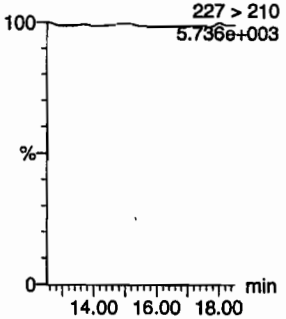
4-Amino-26-dinitrotoluene
F11:MRM of 2 channels,AP-
197 > 167
5.851e+003



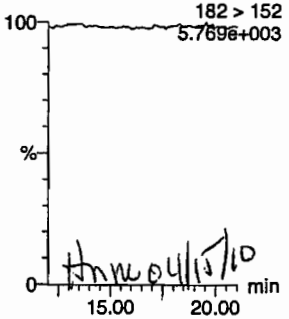
2-Amino-46-dinitrotoluene
F11:MRM of 2 channels,AP-
197 > 180
5.883e+003



246-Trinitrotoluene
F10:MRM of 1 channel,AP-
227 > 210
5.736e+003

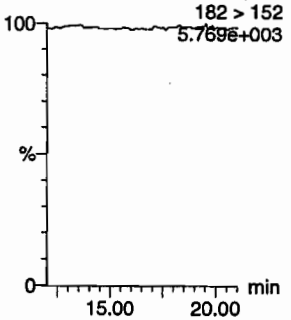


34-dinitrotoluene
F9:MRM of 2 channels,AP-
182 > 152
5.769e+003



HMW 04/15/10

26-dinitrotoluene
F9:MRM of 2 channels,AP-
182 > 152
5.769e+003



GEL SOP GL-OA-E-056, Method 8321A-Modified / MM = Manual Modification

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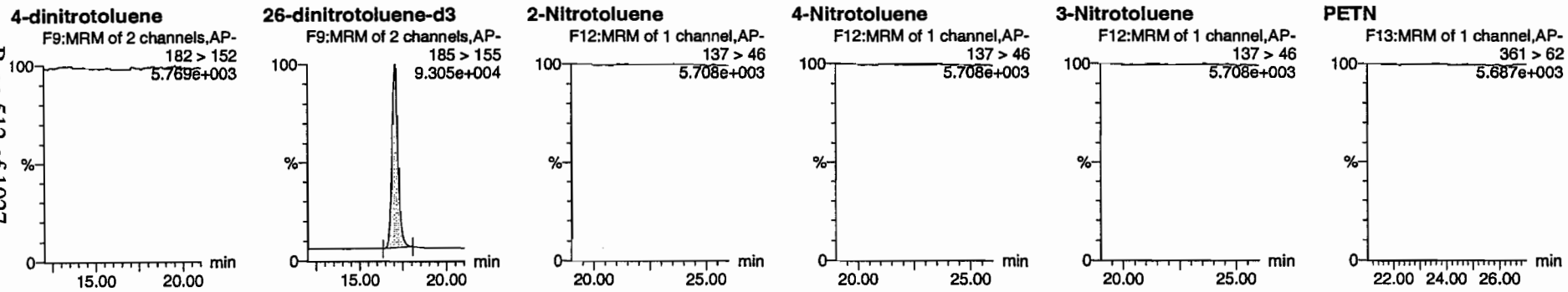
Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA2.qld, Time: Thu Apr 15 14:49:38 2010



D	Name	Trace	RT	Area	IS Area	Abs.Resp	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N
IBLK12	HMX	176 > 102			6608.449									
IBLK12	RDX	176 > 102			6608.449									
IBLK12	135-Trinitrobenzene	213 > 183			6608.449									
IBLK12	13-Dinitrobenzene-d4	172 > 142	11.87	6608.449		6608.449	6608.449	bb			561.9082	112.4	12.4	663.6
IBLK12	13-Dinitrobenzene	168 > 138			6608.449									
IBLK12	Tetryl	241 > 181			6608.449									
IBLK12	Nitrobenzene	123 > 46			6608.449									
IBLK12	4-Amino-26-dinitrotoluene	197 > 167			35875.754									
IBLK12	2-Amino-46-dinitrotoluene	197 > 180			35875.754									
IBLK12	246-Trinitrotoluene	227 > 210			35875.754									
IBLK12	34-dinitrotoluene	182 > 152			35875.754									
IBLK12	26-dinitrotoluene	182 > 152			35875.754									
IBLK12	24-dinitrotoluene	182 > 152			35875.754									
IBLK12	26-dinitrotoluene-d3	185 > 155	17.05	35875.754		35875.754	35875.754	bb			512.7572	102.6	2.6	1347.0
IBLK12	2-Nitrotoluene	137 > 46			35875.754									
IBLK12	4-Nitrotoluene	137 > 46			35875.754									
IBLK12	3-Nitrotoluene	137 > 46			35875.754									
IBLK12	PETN	361 > 62			35875.754									

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4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10–2089

Lab Code: GEL

Lab Sample ID: XIBLK13

Analysis Date: 14–APR–10 11:55

GEL Data File: EXP0412091a

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

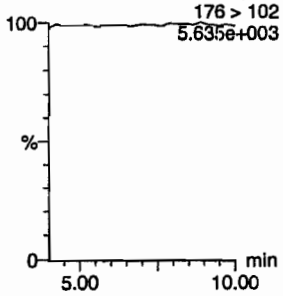
Compound	True	Found (ug/L)
3,4–Dinitrotoluene	0	0
1,3,5–Trinitrobenzene	0	0
1,3–Dinitrobenzene–d4	500	597.515
2,4,6–Trinitrotoluene	0	0
2,4–Dinitrotoluene	0	0
2,6–Dinitrotoluene	0	0
2,6–Dinitrotoluene–d3	500	554.34
2–Amino–4,6–dinitrotoluene	0	0
4–Amino–2,6–dinitrotoluene	0	0
HMX	0	0
Nitrobenzene	0	0
PETN	0	0
RDX	0	0
Tetryl	0	0
m–Dinitrobenzene	0	0
m–Nitrotoluene	0	0
o–Nitrotoluene	0	0
p–Nitrotoluene	0	0

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA2.qld, Time: Thu Apr 15 14:49:38 2010

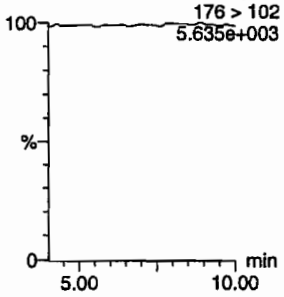
Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0412091a
Date: 14-Apr-2010
Time: 11:55:46
ID: XIBLK13
Vial: 1:1,F

MM 4/15/10

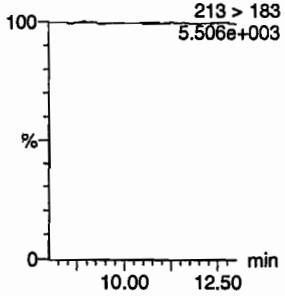
HMX
F2:MRM of 1 channel,AP-
176 > 102
5.635e+003



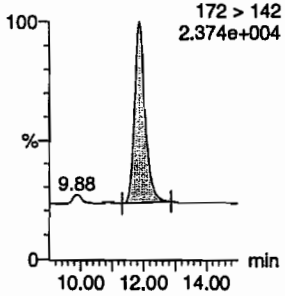
RDX
F2:MRM of 1 channel,AP-
176 > 102
5.635e+003



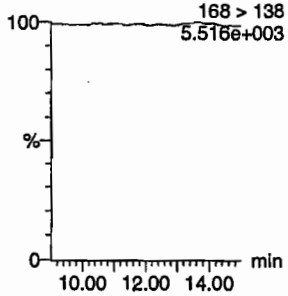
135-Trinitrobenzene
F4:MRM of 1 channel,AP-
213 > 183
5.506e+003



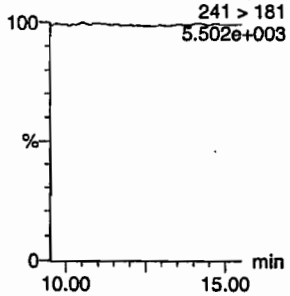
13-Dinitrobenzene-d4
F5:MRM of 2 channels,AP-
172 > 142
2.374e+004



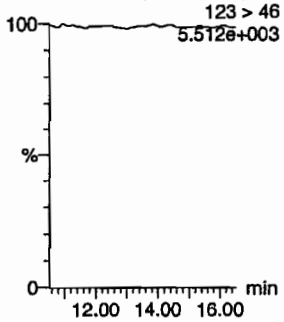
13-Dinitrobenzene
F5:MRM of 2 channels,AP-
168 > 138
5.516e+003



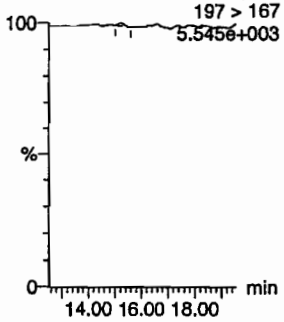
Tetryl
F6:MRM of 1 channel,AP-
241 > 181
5.502e+003



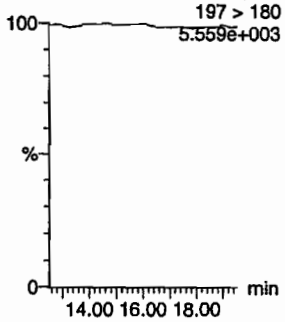
Nitrobenzene
F7:MRM of 1 channel,AP-
123 > 46
5.512e+003



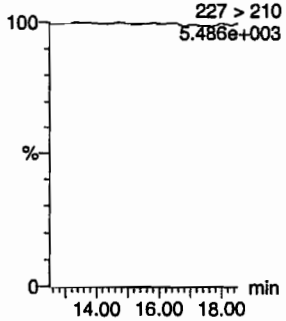
4-Amino-26-dinitrotoluene
F11:MRM of 2 channels,AP-
197 > 167
5.545e+003



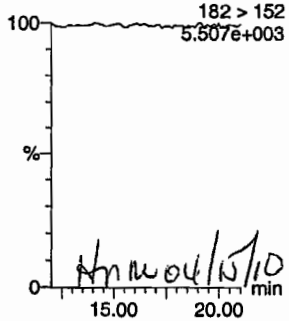
2-Amino-46-dinitrotoluene
F11:MRM of 2 channels,AP-
197 > 180
5.559e+003



246-Trinitrotoluene
F10:MRM of 1 channel,AP-
227 > 210
5.486e+003

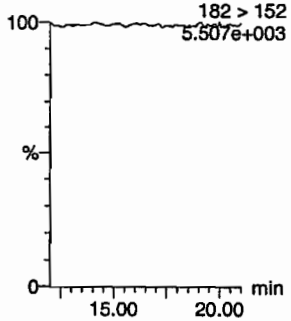


34-dinitrotoluene
F9:MRM of 2 channels,AP-
182 > 152
5.507e+003



MM 04/15/10

26-dinitrotoluene
F9:MRM of 2 channels,AP-
182 > 152
5.507e+003



GEL SOP GL-OA-E-056, Method 8321A-Modified / MM = Manual Modification

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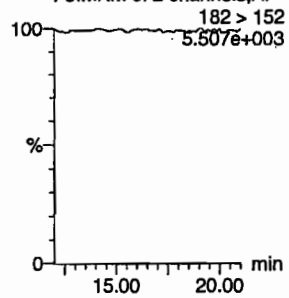
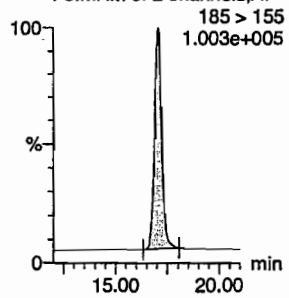
Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA2.qld, Time: Thu Apr 15 14:49:38 2010

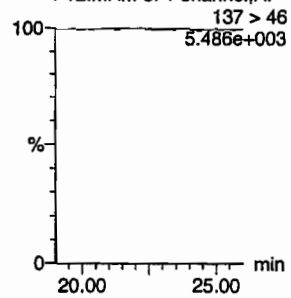
24-dinitrotoluene



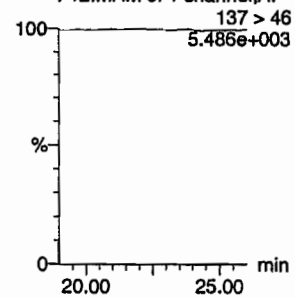
26-dinitrotoluene-d3



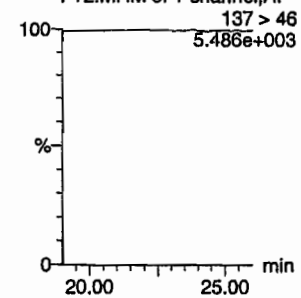
2-Nitrotoluene



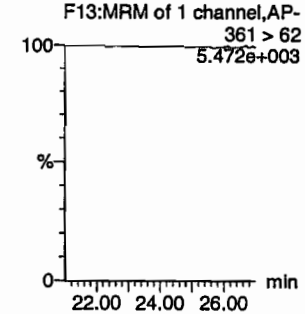
4-Nitrotoluene



3-Nitrotoluene



PETN



ID	Name	Trace	RT	Area	IS Area	Abs:Resp	Response	Flags	Mod Date	Mod Time	ng/mL	%Rec	%Dev	S/N
XIBLK13	HMX	176 > 102			7027.215									
XIBLK13	RDX	176 > 102			7027.215									
XIBLK13	135-Trinitrobenzene	213 > 183			7027.215									
XIBLK13	13-Dinitrobenzene-d4	172 > 142	11.87	7027.215		7027.215	7027.215	bb			597.5153	119.5	19.5	1130.1
XIBLK13	13-Dinitrobenzene	168 > 138			7027.215									
XIBLK13	Tetryl	241 > 181			7027.215									
XIBLK13	Nitrobenzene	123 > 46			7027.215									
XIBLK13	4-Amino-26-dinitrotoluene	197 > 167			38785.121			MM-	15-Apr-10	14:33:07				
XIBLK13	2-Amino-46-dinitrotoluene	197 > 180			38785.121									
XIBLK13	246-Trinitrotoluene	227 > 210			38785.121									
XIBLK13	34-dinitrotoluene	182 > 152			38785.121									
XIBLK13	26-dinitrotoluene	182 > 152			38785.121									
XIBLK13	24-dinitrotoluene	182 > 152			38785.121									
XIBLK13	26-dinitrotoluene-d3	185 > 155	17.05	38785.121		38785.121	38785.121	bb			554.3396	110.9	10.9	2744.7
XIBLK13	2-Nitrotoluene	137 > 46			38785.121									
XIBLK13	4-Nitrotoluene	137 > 46			38785.121									
XIBLK13	3-Nitrotoluene	137 > 46			38785.121									
XIBLK13	PETN	361 > 62			38785.121									

GEL SOP GL-OA-E-056, Method 8321A-Modified / MM = Manual Modification

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4A
Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC
GEL Job No(SDG): 10–2089
Lab Code: GEL
Lab Sample ID: XIBLK14
Analysis Date: 14–APR–10 15:22
GEL Data File: EXP0412098a
Instrument ID: LCMSMS
Column: Phenomenex Ultracarb 5u ODS(20)

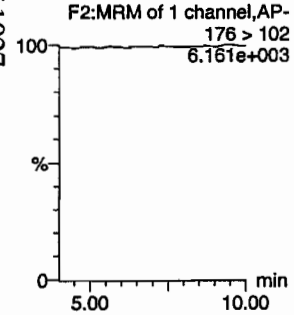
Compound	True	Found (ug/L)
2–Amino–4,6–dinitrotoluene	0	0
4–Amino–2,6–dinitrotoluene	0	0
HMX	0	0
Nitrobenzene	0	0
PETN	0	0
RDX	0	0
Tetryl	0	0
m–Dinitrobenzene	0	0
m–Nitrotoluene	0	0
o–Nitrotoluene	0	0
p–Nitrotoluene	0	0
3,4–Dinitrotoluene	0	0
1,3,5–Trinitrobenzene	0	0
1,3–Dinitrobenzene–d4	500	482.542
2,4,6–Trinitrotoluene	0	0
2,4–Dinitrotoluene	0	0
2,6–Dinitrotoluene	0	0
2,6–Dinitrotoluene–d3	500	530.198

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA2.qld, Time: Thu Apr 15 14:49:38 2010

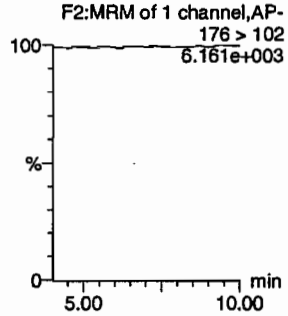
Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0412098a
Date: 14-Apr-2010
Time: 15:22:16
ID: XIBLK14
Vial: 1:1,F

MMT 4/15/10

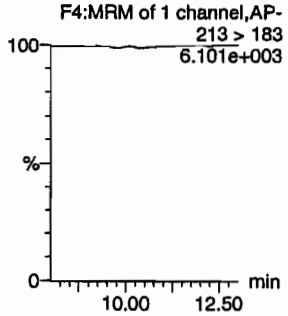
HMX



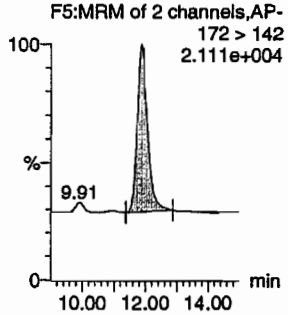
RDX



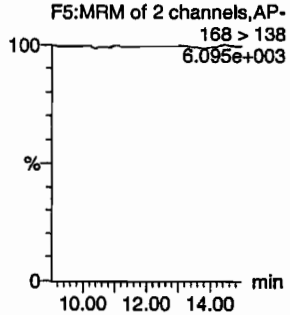
135-Trinitrobenzene



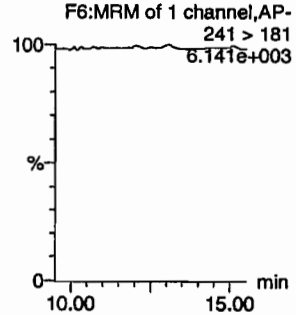
13-Dinitrobenzene-d4



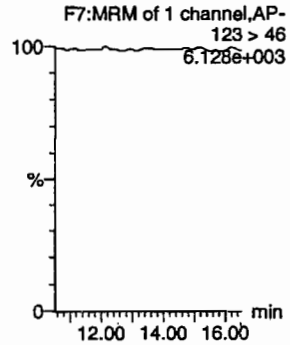
13-Dinitrobenzene



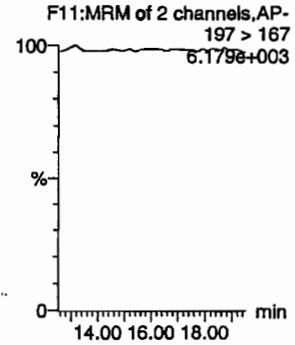
Tetryl



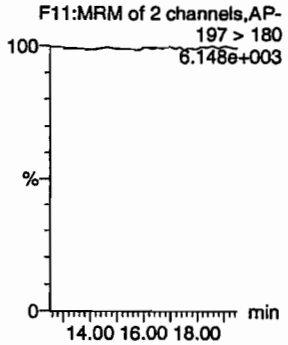
Nitrobenzene



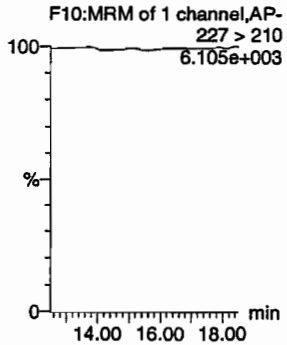
4-Amino-26-dinitrotoluene



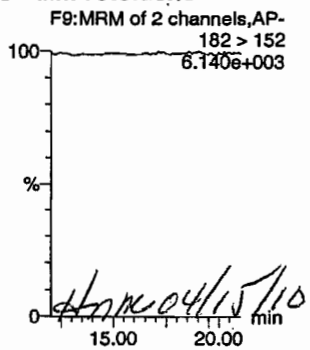
2-Amino-46-dinitrotoluene



246-Trinitrotoluene

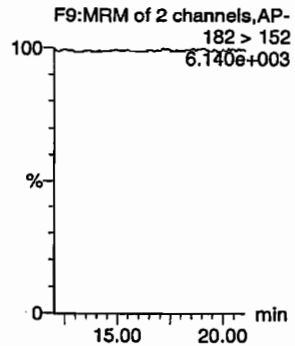


34-dinitrotoluene



HMK 04/15/10

26-dinitrotoluene



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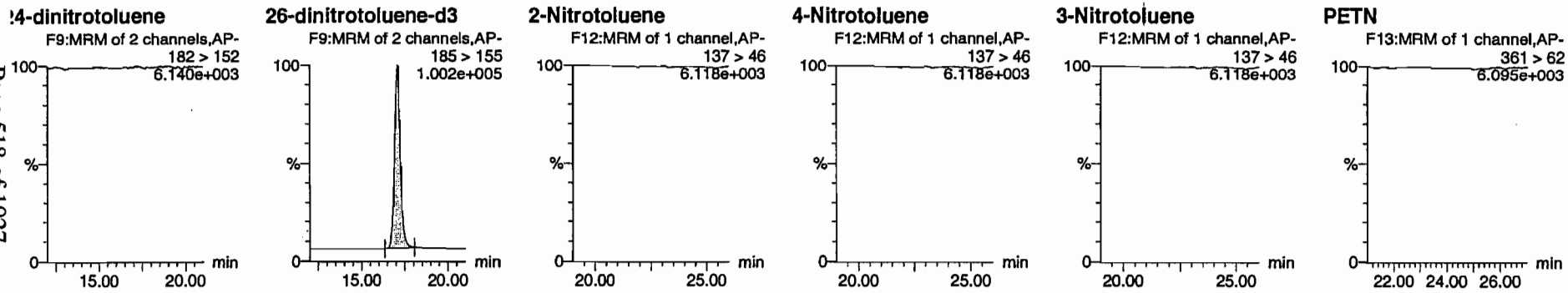
Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA2.qld, Time: Thu Apr 15 14:49:38 2010



D	Name	Trace	RT	Area	IS Area	Abs Resp	Response	Flags	Mod Date	Mod Time	ng/mL	%Rec	%Dev	S/N
KIBLK14	HMX	176 > 102			5675.048									
KIBLK14	RDX	176 > 102			5675.048									
KIBLK14	135-Trinitrobenzene	213 > 183			5675.048									
KIBLK14	13-Dinitrobenzene-d4	172 > 142	11.87	5675.048		5675.048	5675.048	bb			482.5423	96.5	-3.5	195.2
KIBLK14	13-Dinitrobenzene	168 > 138			5675.048									
KIBLK14	Tetryl	241 > 181			5675.048									
KIBLK14	Nitrobenzene	123 > 46			5675.048									
KIBLK14	4-Amino-26-dinitrotoluene	197 > 167			37096.008									
KIBLK14	2-Amino-46-dinitrotoluene	197 > 180			37096.008									
KIBLK14	246-Trinitrotoluene	227 > 210			37096.008									
KIBLK14	34-dinitrotoluene	182 > 152			37096.008									
KIBLK14	26-dinitrotoluene	182 > 152			37096.008									
KIBLK14	24-dinitrotoluene	182 > 152			37096.008									
KIBLK14	26-dinitrotoluene-d3	185 > 155	17.07	37096.008		37096.008	37096.008	bb			530.1978	106.0	6.0	2912.1
KIBLK14	2-Nitrotoluene	137 > 46			37096.008									
KIBLK14	4-Nitrotoluene	137 > 46			37096.008									
KIBLK14	3-Nitrotoluene	137 > 46			37096.008									
KIBLK14	PETN	361 > 62			37096.008									

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4A
Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC
GEL Job No(SDG): 10–2089
Lab Code: GEL
Lab Sample ID: XIBLK15
Analysis Date: 14–APR–10 16:21
GEL Data File: EXP0412100a
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	528.222
2,4,6–Trinitrotoluene	0	0
2,4–Dinitrotoluene	0	0
2,6–Dinitrotoluene	0	0
2,6–Dinitrotoluene–d3	500	547.698
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

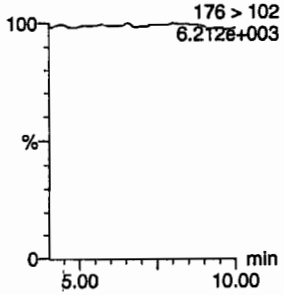
Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA2.qld, Time: Thu Apr 15 14:49:38 2010

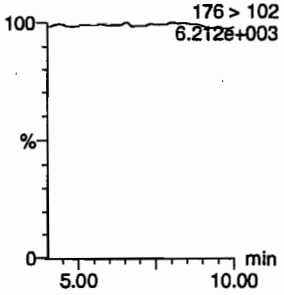
Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0412100a
Date: 14-Apr-2010
Time: 16:21:17
ID: XIBLK15
Vial: 1:1,A

MATT 4/15/10

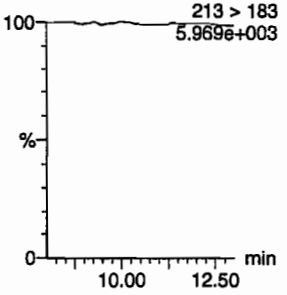
HMX
F2:MRM of 1 channel,AP-
176 > 102
6.212e+003



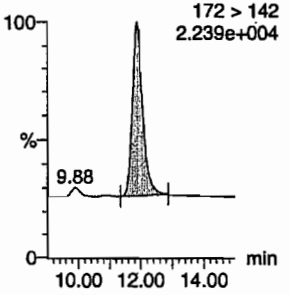
RDX
F2:MRM of 1 channel,AP-
176 > 102
6.212e+003



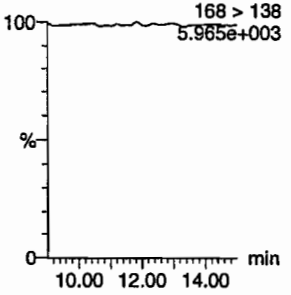
135-Trinitrobenzene
F4:MRM of 1 channel,AP-
213 > 183
5.969e+003



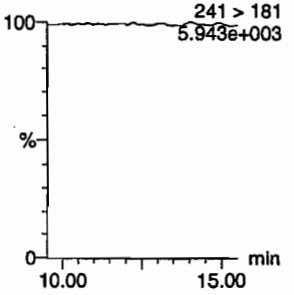
13-Dinitrobenzene-d4
F5:MRM of 2 channels,AP-
172 > 142
2.239e+004



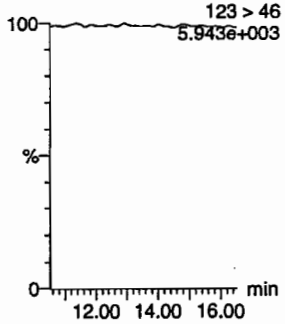
13-Dinitrobenzene
F5:MRM of 2 channels,AP-
168 > 138
5.965e+003



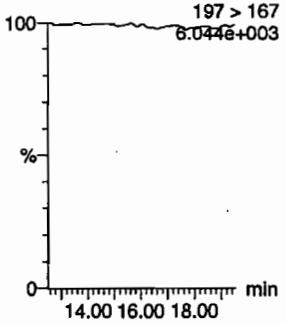
Tetryl
F6:MRM of 1 channel,AP-
241 > 181
5.943e+003



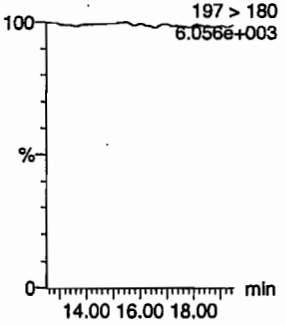
Nitrobenzene
F7:MRM of 1 channel,AP-
123 > 46
5.943e+003



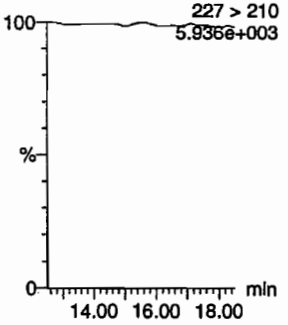
4-Amino-26-dinitrotoluene
F11:MRM of 2 channels,AP-
197 > 167
6.044e+003



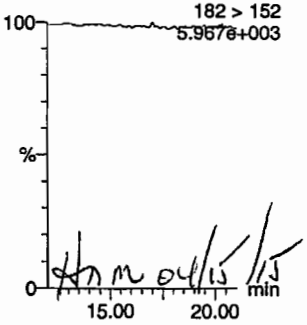
2-Amino-46-dinitrotoluene
F11:MRM of 2 channels,AP-
197 > 180
6.056e+003



246-Trinitrotoluene
F10:MRM of 1 channel,AP-
227 > 210
5.936e+003

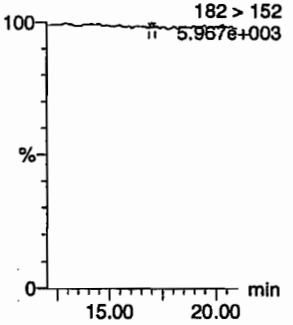


34-dinitrotoluene
F9:MRM of 2 channels,AP-
182 > 152
5.967e+003



HM 04/15/15

26-dinitrotoluene
F9:MRM of 2 channels,AP-
182 > 152
5.967e+003



GEL SOP GL-OA-E-056, Method 8321A-Modified / MM = Manual Modification

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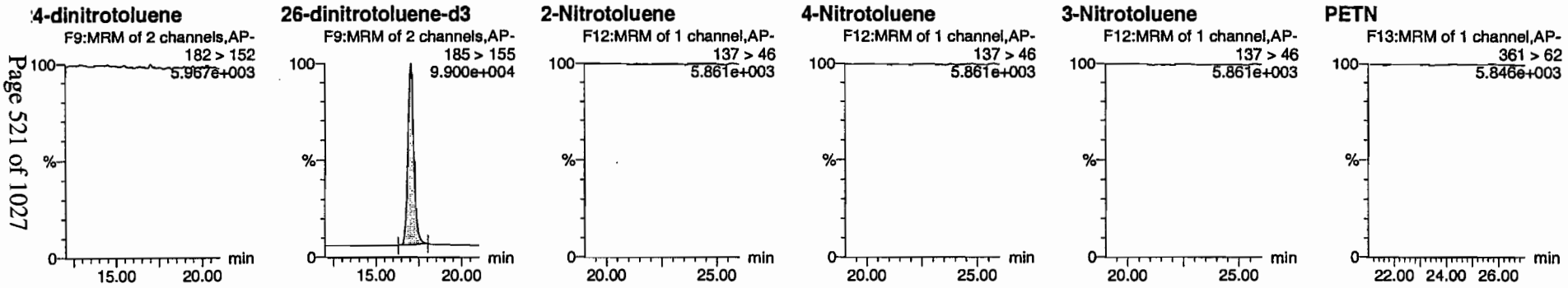
Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA2.qld, Time: Thu Apr 15 14:49:38 2010



D	Name	Trace	RT	Area	IS Area	Abs.Resp	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N
CIBLK15	HMX	176 > 102			6212.279									
CIBLK15	RDX	176 > 102			6212.279									
CIBLK15	135-Trinitrobenzene	213 > 183			6212.279									
CIBLK15	13-Dinitrobenzene-d4	172 > 142	11.87	6212.279		6212.279	6212.279	bb			528.2223	105.6	5.6	749.9
CIBLK15	13-Dinitrobenzene	168 > 138			6212.279									
CIBLK15	Tetryl	241 > 181			6212.279									
CIBLK15	Nitrobenzene	123 > 46			6212.279									
CIBLK15	4-Amino-26-dinitrotoluene	197 > 167			38320.402									
CIBLK15	2-Amino-46-dinitrotoluene	197 > 180			38320.402									
CIBLK15	246-Trinitrotoluene	227 > 210			38320.402									
CIBLK15	34-dinitrotoluene	182 > 152			38320.402									
CIBLK15	26-dinitrotoluene	182 > 152			38320.402			MM-	15-Apr-10	14:39:30				
CIBLK15	24-dinitrotoluene	182 > 152			38320.402									
CIBLK15	26-dinitrotoluene-d3	185 > 155	17.07	38320.402		38320.402	38320.402	bb			547.6975	109.5	9.5	3902.9
CIBLK15	2-Nitrotoluene	137 > 46			38320.402									
CIBLK15	4-Nitrotoluene	137 > 46			38320.402									
CIBLK15	3-Nitrotoluene	137 > 46			38320.402									
CIBLK15	PETN	361 > 62			38320.402									

GEL SOP GL-OA-E-056, Method 8321A-Modified / MM = Manual Modification

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4A
Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10–2089

Lab Code: GEL

Lab Sample ID: XIBLK16

Analysis Date: 14–APR–10 21:45

GEL Data File: EXP0412111a

Instrument ID: LCMSMS

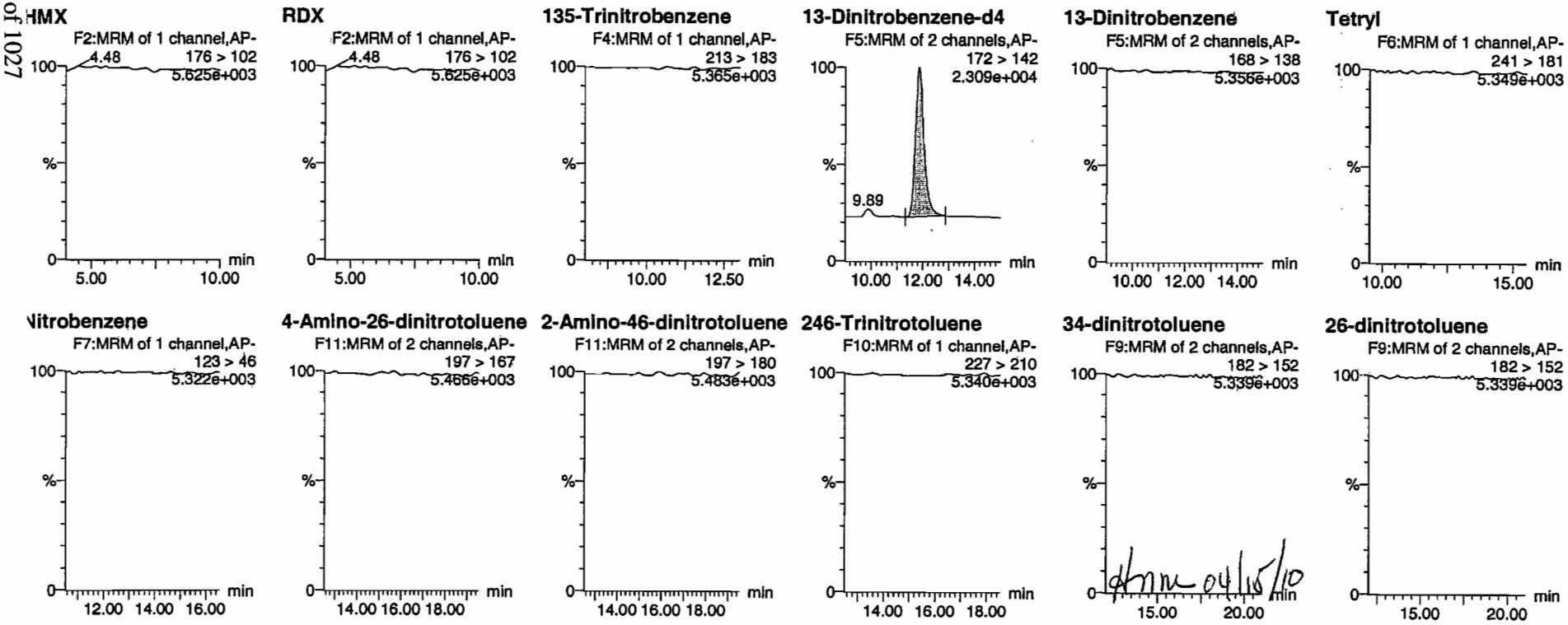
Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4–Dinitrotoluene	0	0
1,3,5–Trinitrobenzene	0	0
1,3–Dinitrobenzene–d4	500	578.061
2,4,6–Trinitrotoluene	0	0
2,4–Dinitrotoluene	0	0
2,6–Dinitrotoluene	0	0
2,6–Dinitrotoluene–d3	500	585.843
2–Amino–4,6–dinitrotoluene	0	0
4–Amino–2,6–dinitrotoluene	0	0
HMX	0	0
Nitrobenzene	0	0
PETN	0	0
RDX	0	0
Tetryl	0	0
m–Dinitrobenzene	0	0
m–Nitrotoluene	0	0
o–Nitrotoluene	0	0
p–Nitrotoluene	0	0

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA2.qld, Time: Thu Apr 15 14:49:38 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0412111a
Date: 14-Apr-2010
Time: 21:45:50
ID: XIBLK16
Vial: 1:1,A

MAP 4/15/10



dmm 04/15/10

GEL SOP GL-OA-E-056, Method 8321A-Modified / MM = Manual Modification

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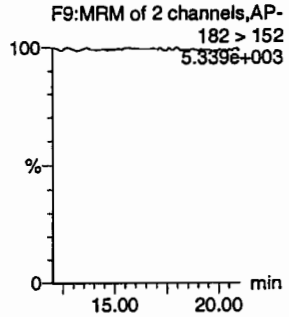
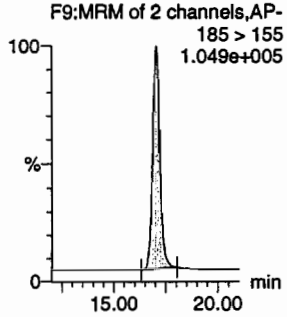
Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA2.qld, Time: Thu Apr 15 14:49:38 2010

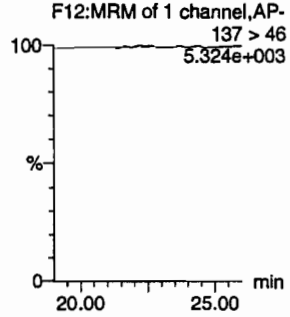
24-dinitrotoluene



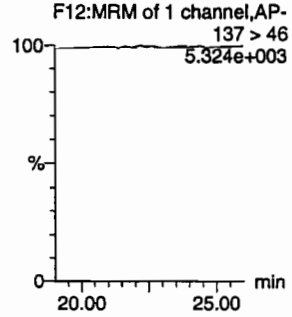
26-dinitrotoluene-d3



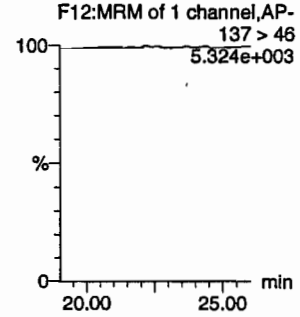
2-Nitrotoluene



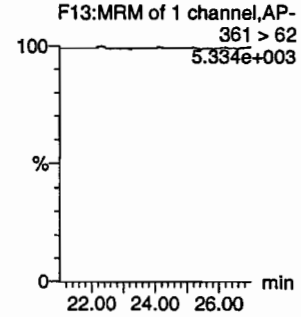
4-Nitrotoluene



3-Nitrotoluene



PETN



ID	Name	Trace	RT	Area	IS Area	Abs Resp	Response	Flags	Mod Date	Mod Time	ng/mL	%Rec	%Dev	S/N
XIBLK16	HMX	176 > 102			6798.419									
XIBLK16	RDX	176 > 102			6798.419									
XIBLK16	135-Trinitrobenzene	213 > 183			6798.419									
XIBLK16	13-Dinitrobenzene-d4	172 > 142	11.87	6798.419		6798.419	6798.419	bb			578.0611	115.6	15.6	426.8
XIBLK16	13-Dinitrobenzene	168 > 138			6798.419									
XIBLK16	Tetryl	241 > 181			6798.419									
XIBLK16	Nitrobenzene	123 > 46			6798.419									
XIBLK16	4-Amino-26-dinitrotoluene	197 > 167			40989.270									
XIBLK16	2-Amino-46-dinitrotoluene	197 > 180			40989.270									
XIBLK16	246-Trinitrotoluene	227 > 210			40989.270									
XIBLK16	34-dinitrotoluene	182 > 152			40989.270									
XIBLK16	26-dinitrotoluene	182 > 152			40989.270									
XIBLK16	24-dinitrotoluene	182 > 152			40989.270									
XIBLK16	26-dinitrotoluene-d3	185 > 155	17.05	40989.270		40989.270	40989.270	bb			585.8426	117.2	17.2	1633.6
XIBLK16	2-Nitrotoluene	137 > 46			40989.270									
XIBLK16	4-Nitrotoluene	137 > 46			40989.270									
XIBLK16	3-Nitrotoluene	137 > 46			40989.270									
XIBLK16	PETN	361 > 62			40989.270									

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4A
Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC
GEL Job No(SDG): 10–2089
Lab Code: GEL
Lab Sample ID: XIBLK17
Analysis Date: 15–APR–10 04:09
GEL Data File: EXP0412124a
Instrument ID: LCMSMS
Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
1,3–Dinitrobenzene–d4	500	558.188
2,4,6–Trinitrotoluene	0	0
2,4–Dinitrotoluene	0	0
2,6–Dinitrotoluene	0	0
2,6–Dinitrotoluene–d3	500	556.693
2–Amino–4,6–dinitrotoluene	0	0
4–Amino–2,6–dinitrotoluene	0	0
HMX	0	0
Nitrobenzene	0	0
PETN	0	0
RDX	0	0
Tetryl	0	0
m–Dinitrobenzene	0	0
m–Nitrotoluene	0	0
o–Nitrotoluene	0	0
p–Nitrotoluene	0	0
3,4–Dinitrotoluene	0	0
1,3,5–Trinitrobenzene	0	0

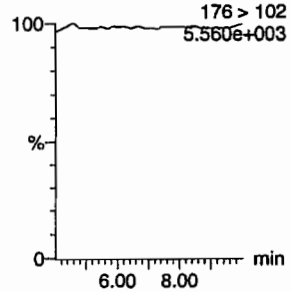
Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA2.qld, Time: Thu Apr 15 14:49:38 2010

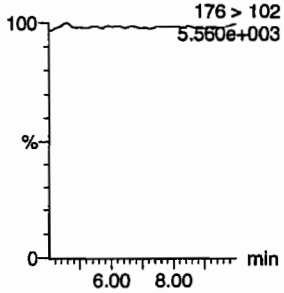
Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0412124a
Date: 15-Apr-2010
Time: 04:09:26
ID: XIBLK17
Vial: 1:1,A

MHT 4/15/10

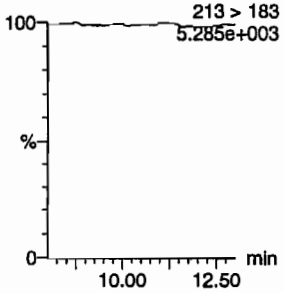
HMX
F2:MRM of 1 channel,AP-
176 > 102
5.560e+003



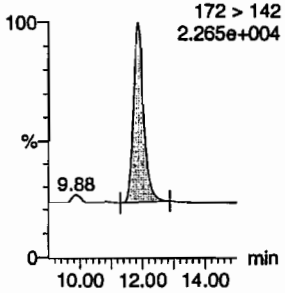
RDX
F2:MRM of 1 channel,AP-
176 > 102
5.560e+003



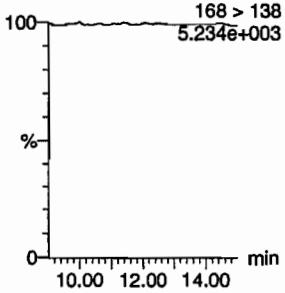
135-Trinitrobenzene
F4:MRM of 1 channel,AP-
213 > 183
5.285e+003



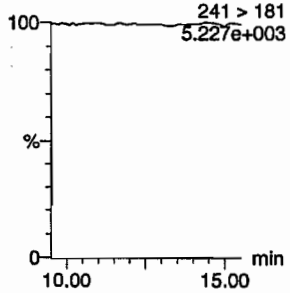
13-Dinitrobenzene-d4
F5:MRM of 2 channels,AP-
172 > 142
2.265e+004



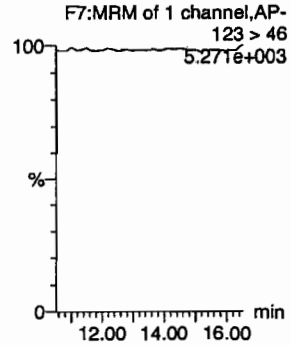
13-Dinitrobenzene
F5:MRM of 2 channels,AP-
168 > 138
5.234e+003



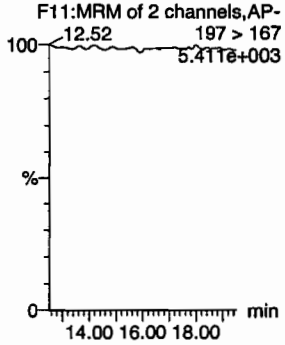
Tetryl
F6:MRM of 1 channel,AP-
241 > 181
5.227e+003



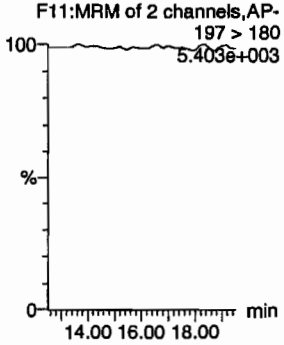
Nitrobenzene
F7:MRM of 1 channel,AP-
123 > 46
5.271e+003



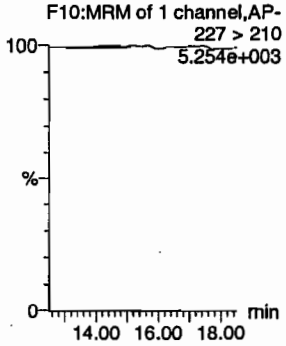
4-Amino-26-dinitrotoluene
F11:MRM of 2 channels,AP-
12.52 197 > 167
5.411e+003



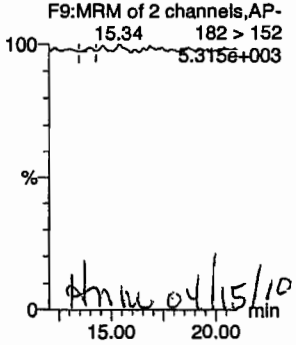
2-Amino-46-dinitrotoluene
F11:MRM of 2 channels,AP-
197 > 180
5.403e+003



246-Trinitrotoluene
F10:MRM of 1 channel,AP-
227 > 210
5.254e+003

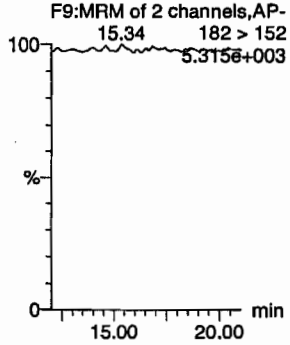


34-dinitrotoluene
F9:MRM of 2 channels,AP-
15.34 182 > 152
5.315e+003



Hmw 04/15/10

26-dinitrotoluene
F9:MRM of 2 channels,AP-
15.34 182 > 152
5.315e+003



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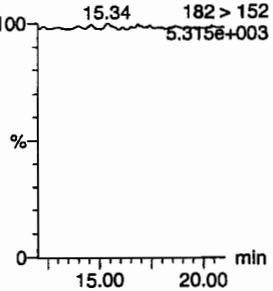
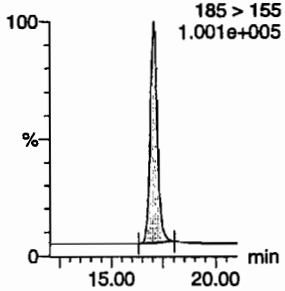
Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA2.qld, Time: Thu Apr 15 14:49:38 2010

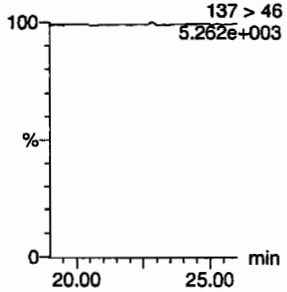
24-dinitrotoluene
F9:MRM of 2 channels,AP-
15.34 182 > 152
5.315e+003



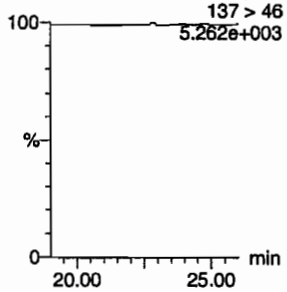
26-dinitrotoluene-d3
F9:MRM of 2 channels,AP-
185 > 155
1.001e+005



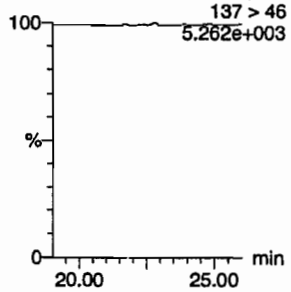
2-Nitrotoluene
F12:MRM of 1 channel,AP-
137 > 46
5.262e+003



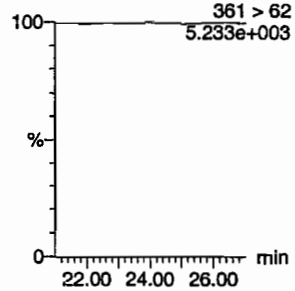
4-Nitrotoluene
F12:MRM of 1 channel,AP-
137 > 46
5.262e+003



3-Nitrotoluene
F12:MRM of 1 channel,AP-
137 > 46
5.262e+003



PETN
F13:MRM of 1 channel,AP-
361 > 62
5.233e+003



ID	Name	Trace	RT	Area	IS Area	Abs Resp	Response	Flags	Mod Date	Mod Time	ng/ml	%Rec	%Dev	S/N
XIBLK17	HMX	176 > 102			6564.699									
XIBLK17	RDX	176 > 102			6564.699									
XIBLK17	135-Trinitrobenzene	213 > 183			6564.699									
XIBLK17	13-Dinitrobenzene-d4	172 > 142	11.87	6564.699		6564.699	6564.699	bb			558.1882	111.6	11.6	601.1
XIBLK17	13-Dinitrobenzene	168 > 138			6564.699									
XIBLK17	Tetryl	241 > 181			6564.699									
XIBLK17	Nitrobenzene	123 > 46			6564.699									
XIBLK17	4-Amino-26-dinitrotoluene	197 > 167			38949.785									
XIBLK17	2-Amino-46-dinitrotoluene	197 > 180			38949.785									
XIBLK17	246-Trinitrotoluene	227 > 210			38949.785									
XIBLK17	34-dinitrotoluene	182 > 152			38949.785			MM-	15-Apr-10	14:37:19				
XIBLK17	26-dinitrotoluene	182 > 152			38949.785									
XIBLK17	24-dinitrotoluene	182 > 152			38949.785									
XIBLK17	26-dinitrotoluene-d3	185 > 155	17.05	38949.785		38949.785	38949.785	bb			556.6931	111.3	11.3	2195.8
XIBLK17	2-Nitrotoluene	137 > 46			38949.785									
XIBLK17	4-Nitrotoluene	137 > 46			38949.785									
XIBLK17	3-Nitrotoluene	137 > 46			38949.785									
XIBLK17	PETN	361 > 62			38949.785									

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4A
Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10–2089

Lab Code: GEL

Lab Sample ID: XIBLK18

Analysis Date: 15–APR–10 10:03

GEL Data File: EXP0412136a

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	541.68
2,4,6–Trinitrotoluene	0	0
2,4–Dinitrotoluene	0	0
2,6–Dinitrotoluene	0	0
2,6–Dinitrotoluene–d3	500	563.838
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

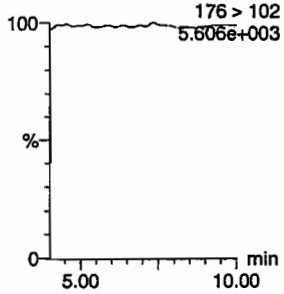
Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA2.qld, Time: Thu Apr 15 14:49:38 2010

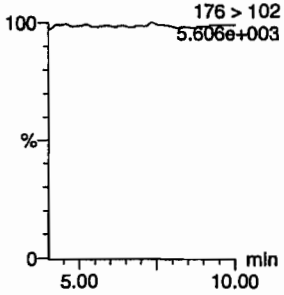
Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0412136a
Date: 15-Apr-2010
Time: 10:03:32
ID: XIBLK18
Vial: 1:1,A

MM 4/15/10

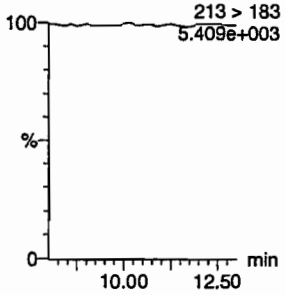
HMX
F2:MRM of 1 channel,AP-
176 > 102
5.606e+003



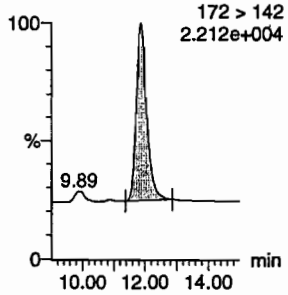
RDX
F2:MRM of 1 channel,AP-
176 > 102
5.606e+003



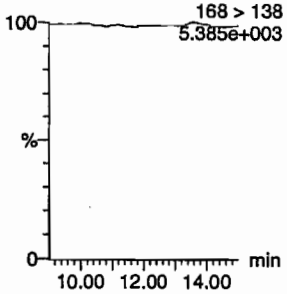
135-Trinitrobenzene
F4:MRM of 1 channel,AP-
213 > 183
5.409e+003



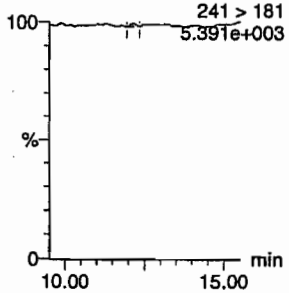
13-Dinitrobenzene-d4
F5:MRM of 2 channels,AP-
172 > 142
2.212e+004



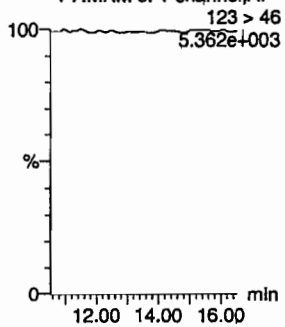
13-Dinitrobenzene
F5:MRM of 2 channels,AP-
168 > 138
5.385e+003



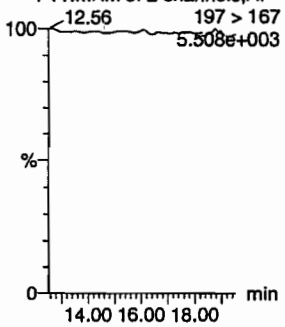
Tetryl
F6:MRM of 1 channel,AP-
241 > 181
5.391e+003



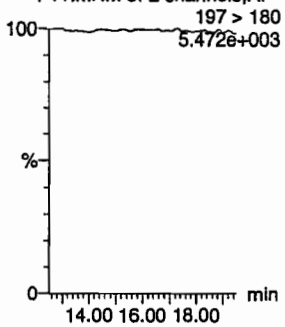
Nitrobenzene
F7:MRM of 1 channel,AP-
123 > 46
5.362e+003



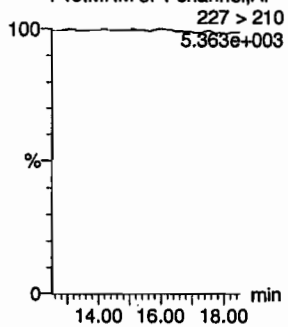
4-Amino-26-dinitrotoluene
F11:MRM of 2 channels,AP-
12.56
197 > 167
5.508e+003



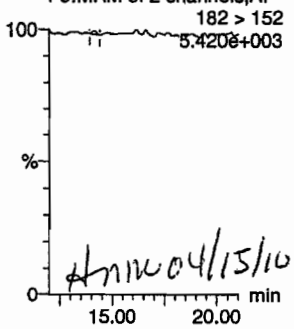
2-Amino-46-dinitrotoluene
F11:MRM of 2 channels,AP-
197 > 180
5.472e+003



246-Trinitrotoluene
F10:MRM of 1 channel,AP-
227 > 210
5.363e+003

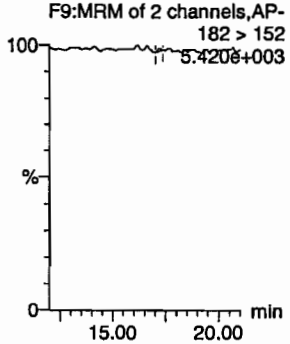


34-dinitrotoluene
F9:MRM of 2 channels,AP-
182 > 152
5.420e+003



HMW 04/15/10

26-dinitrotoluene
F9:MRM of 2 channels,AP-
182 > 152
5.420e+003



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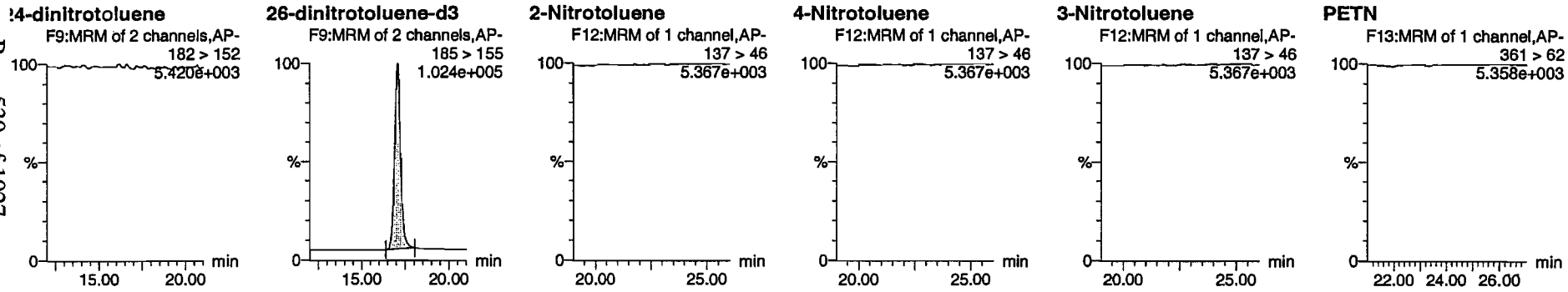
Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA2.qld, Time: Thu Apr 15 14:49:38 2010



D	Name	Trace	RT	Area	IS Area	Abs Resp	Response	Flags	Mod Date	Mod Time	ng/mL	%Rec	%Dev	S/N
XIBLK18	HMX	176 > 102			6370.553									
XIBLK18	RDX	176 > 102			6370.553									
XIBLK18	135-Trinitrobenzene	213 > 183			6370.553									
XIBLK18	13-Dinitrobenzene-d4	172 > 142	11.87	6370.553		6370.553	6370.553	bb			541.6802	108.3	8.3	394.6
XIBLK18	13-Dinitrobenzene	168 > 138			6370.553									
XIBLK18	Tetryl	241 > 181			6370.553			MM-	15-Apr-10	14:30:04				
XIBLK18	Nitrobenzene	123 > 46			6370.553									
XIBLK18	4-Amino-26-dinitrotoluene	197 > 167			39449.699									
XIBLK18	2-Amino-46-dinitrotoluene	197 > 180			39449.699									
XIBLK18	246-Trinitrotoluene	227 > 210			39449.699									
XIBLK18	34-dinitrotoluene	182 > 152			39449.699			MM-	15-Apr-10	14:37:12				
XIBLK18	26-dinitrotoluene	182 > 152			39449.699			MM-	15-Apr-10	14:41:23				
XIBLK18	24-dinitrotoluene	182 > 152			39449.699									
XIBLK18	26-dinitrotoluene-d3	185 > 155	17.07	39449.699		39449.699	39449.699	bb			563.8381	112.8	12.8	740.6
XIBLK18	2-Nitrotoluene	137 > 46			39449.699									
XIBLK18	4-Nitrotoluene	137 > 46			39449.699									
XIBLK18	3-Nitrotoluene	137 > 46			39449.699									
XIBLK18	PETN	361 > 62			39449.699									

GEL SOP GL-OA-E-056, Method 8321A-Modified / MM = Manual Modification

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4A
Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10–2089

Lab Code: GEL

Lab Sample ID: XIBLK19

Analysis Date: 15–APR–10 13:00

GEL Data File: EXP0412142a

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
m–Nitrotoluene	0	0
o–Nitrotoluene	0	0
p–Nitrotoluene	0	0
3,4–Dinitrotoluene	0	0
1,3,5–Trinitrobenzene	0	0
1,3–Dinitrobenzene–d4	500	473.748
2,4,6–Trinitrotoluene	0	0
2,4–Dinitrotoluene	0	0
2,6–Dinitrotoluene	0	0
2,6–Dinitrotoluene–d3	500	449.474
2–Amino–4,6–dinitrotoluene	0	0
4–Amino–2,6–dinitrotoluene	0	0
HMX	0	0
Nitrobenzene	0	0
PETN	0	0
RDX	0	0
Tetryl	0	0
m–Dinitrobenzene	0	0

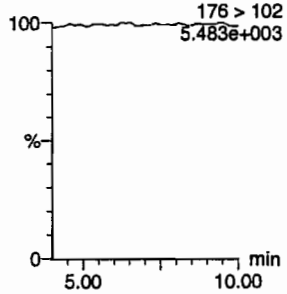
Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA2.qld, Time: Thu Apr 15 14:49:38 2010

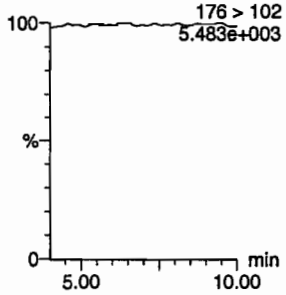
Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0412142a
Date: 15-Apr-2010
Time: 13:00:42
ID: XIBLK19
Vial: 1:1,A

HMT 4/15/10

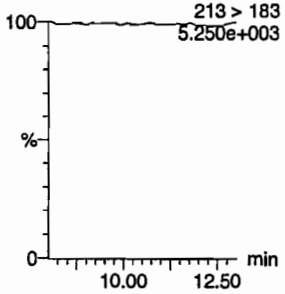
HMX
F2:MRM of 1 channel,AP-
176 > 102
5.483e+003



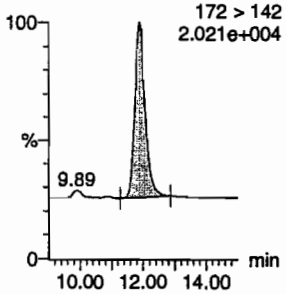
RDX
F2:MRM of 1 channel,AP-
176 > 102
5.483e+003



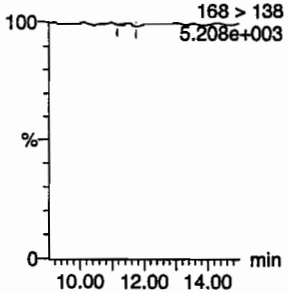
135-Trinitrobenzene
F4:MRM of 1 channel,AP-
213 > 183
5.250e+003



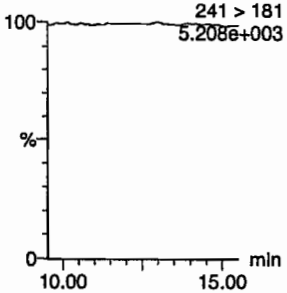
13-Dinitrobenzene-d4
F5:MRM of 2 channels,AP-
172 > 142
2.021e+004



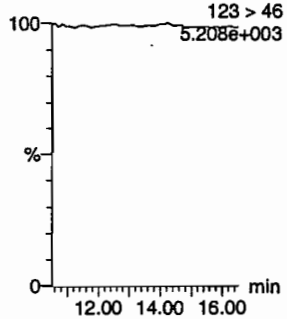
13-Dinitrobenzene
F5:MRM of 2 channels,AP-
168 > 138
5.208e+003



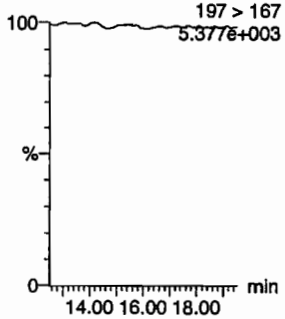
Tetryl
F6:MRM of 1 channel,AP-
241 > 181
5.208e+003



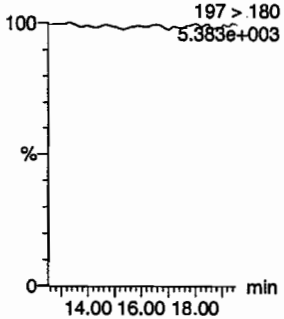
Nitrobenzene
F7:MRM of 1 channel,AP-
123 > 46
5.208e+003



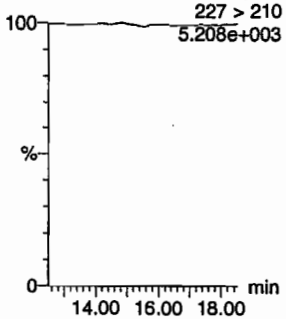
4-Amino-26-dinitrotoluene
F11:MRM of 2 channels,AP-
197 > 167
5.377e+003



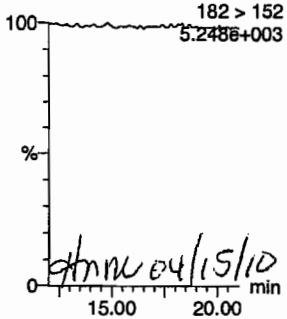
2-Amino-46-dinitrotoluene
F11:MRM of 2 channels,AP-
197 > 180
5.383e+003



246-Trinitrotoluene
F10:MRM of 1 channel,AP-
227 > 210
5.208e+003

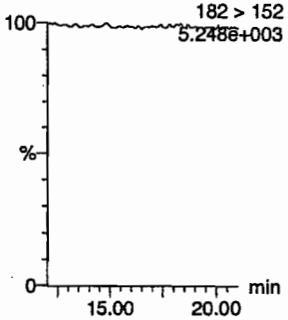


34-dinitrotoluene
F9:MRM of 2 channels,AP-
182 > 152
5.248e+003



dmm 04/15/10

26-dinitrotoluene
F9:MRM of 2 channels,AP-
182 > 152
5.248e+003



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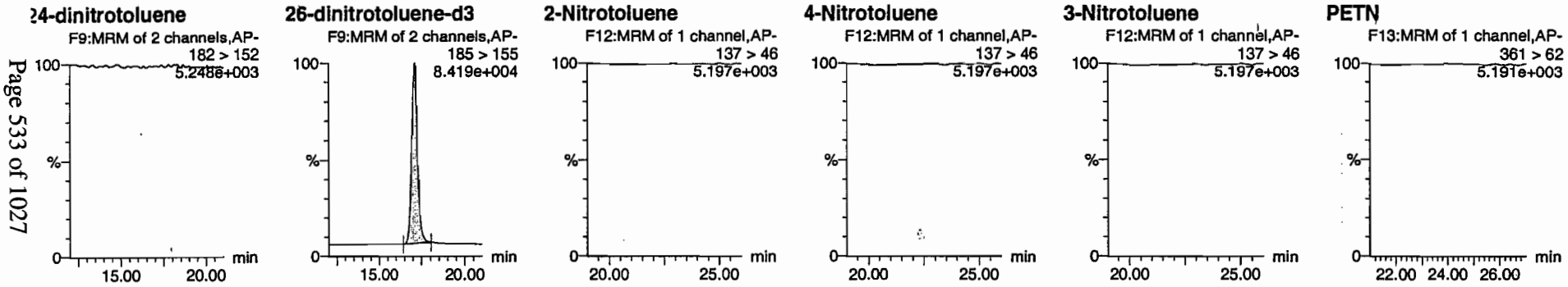
Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA2.qld, Time: Thu Apr 15 14:49:38 2010



ID	Name	Trace	RT	Area	IS Area	Abs Resp	Response	Flags	Mod Date	Mod Time	ng/mL	%Rec	%Dev	S/N
XIBLK19	HMX	176 > 102			5571.618									
XIBLK19	RDX	176 > 102			5571.618									
XIBLK19	135-Trinitrobenzene	213 > 183			5571.618									
XIBLK19	13-Dinitrobenzene-d4	172 > 142	11.87	5571.618		5571.618	5571.618	bb			473.7477	94.7	-5.3	487.2
XIBLK19	13-Dinitrobenzene	168 > 138			5571.618			MM-	15-Apr-10	14:29:53				
XIBLK19	Tetryl	241 > 181			5571.618									
XIBLK19	Nitrobenzene	123 > 46			5571.618									
XIBLK19	4-Amino-26-dinitrotoluene	197 > 167			31448.088									
XIBLK19	2-Amino-46-dinitrotoluene	197 > 180			31448.088									
XIBLK19	246-Trinitrotoluene	227 > 210			31448.088									
XIBLK19	34-dinitrotoluene	182 > 152			31448.088									
XIBLK19	26-dinitrotoluene	182 > 152			31448.088									
XIBLK19	24-dinitrotoluene	182 > 152			31448.088									
XIBLK19	26-dinitrotoluene-d3	185 > 155	17.09	31448.088		31448.088	31448.088	bb			449.4744	89.9	-10.1	2097.2
XIBLK19	2-Nitrotoluene	137 > 46			31448.088									
XIBLK19	4-Nitrotoluene	137 > 46			31448.088									
XIBLK19	3-Nitrotoluene	137 > 46			31448.088									
XIBLK19	PETN	361 > 62			31448.088									

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Explosives Initial Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10–2089

Lab Code: GEL

Lab Sample ID: XIBLK01

Analysis Date: 02–APR–10 14:27

GEL Data File: EXS04020001.wiff

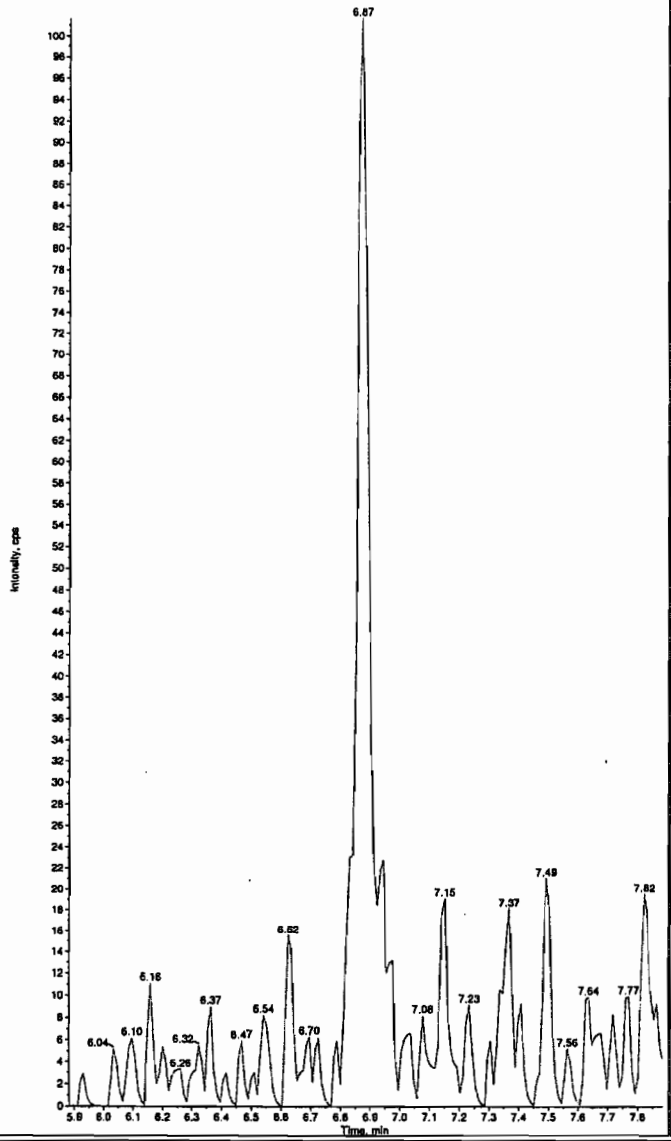
Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
tris(o–cresyl) phosphate	0	6.15
TATB	0	0
3,5–Dinitroaniline	0	0
2,4–Diamino–6–nitrotoluene	0	0
2,6–Diamino–4–nitrotoluene	0	0
3,4–Dinitrotoluene	0	0

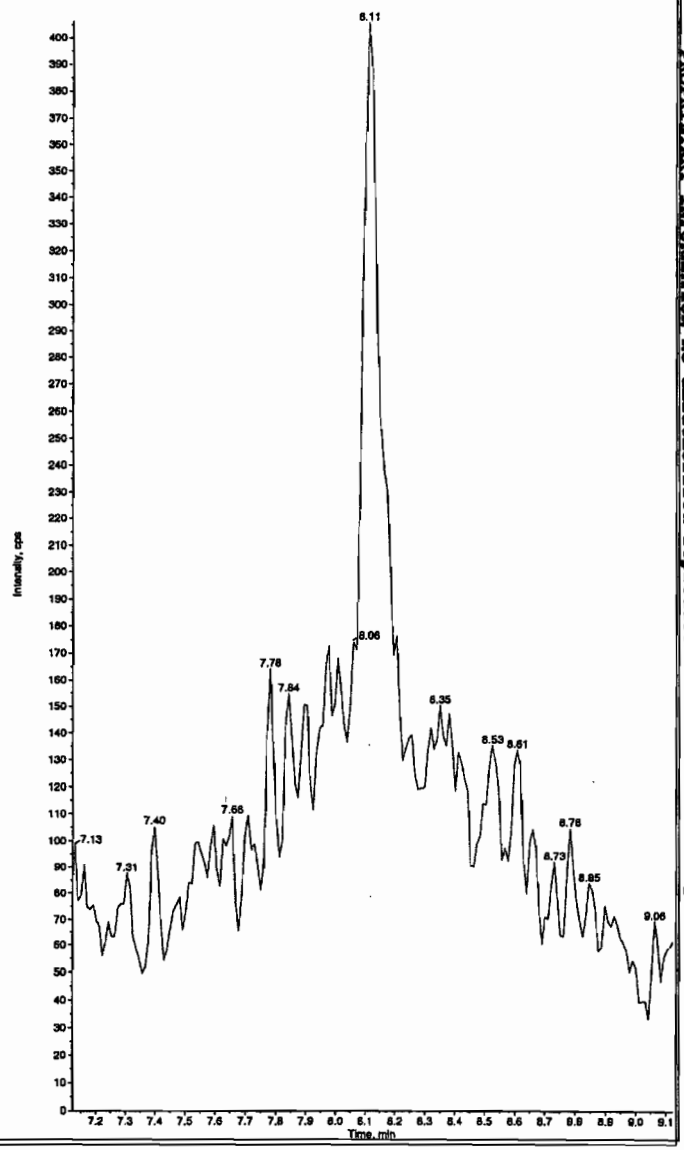
LCR 4/7/10

ample Name: "XIBLK01" Sample ID: "]1]LER" File: "EXS04020001.wiff"
eak Name: "TATB" Mass(es): "257.2/204.9 amu"
omment: "LCMSEXP_B" Annotation: ""
ple Index: 1
ple Type: Unknown
centration: N/A
culated Conc: 0.00 ng/mL
. Date: 4/2/2010
. Time: 2:27:35 PM
ified: No



Sample Name: "XIBLK01" Sample ID: "]1]LER" File: "EXS04020001.wiff"
Peak Name: "35-Dinitroaniline" Mass(es): "182.0/46.0 amu"
Comment: "LCMSEXP_B" Annotation: ""
Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 4/2/2010
Acq. Time: 2:27:35 PM

Modified: No



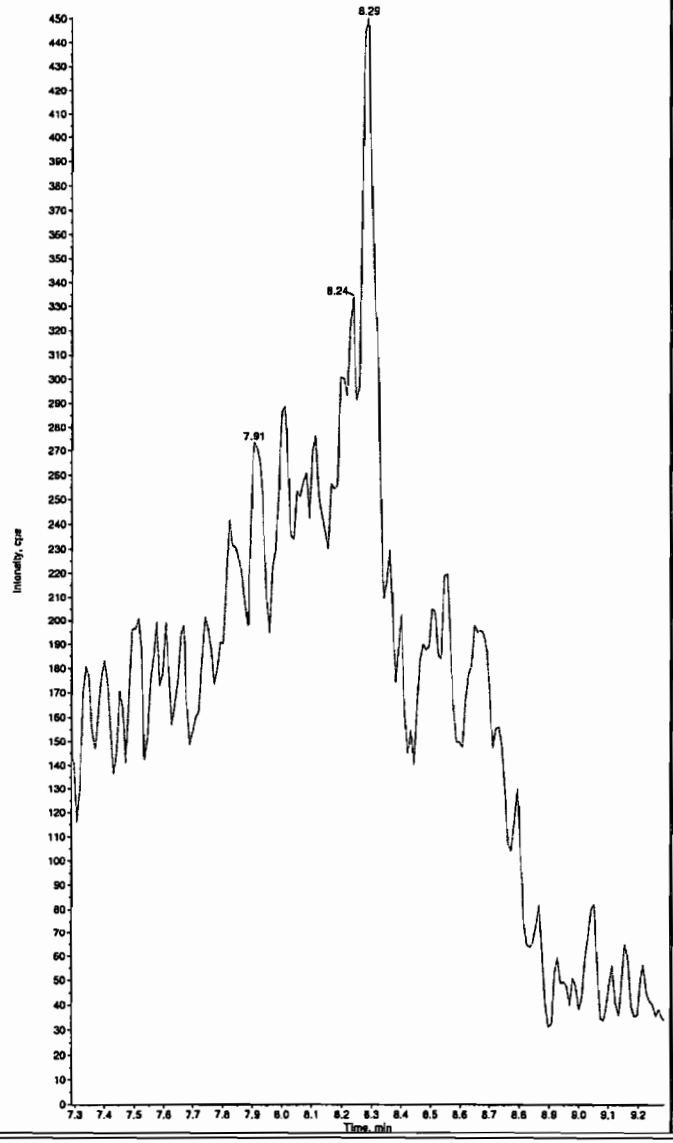
Hm 04/08/10

EL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

PROPRIETARY INFORMATION-No unauthorized reproduction without written permission from GEL.

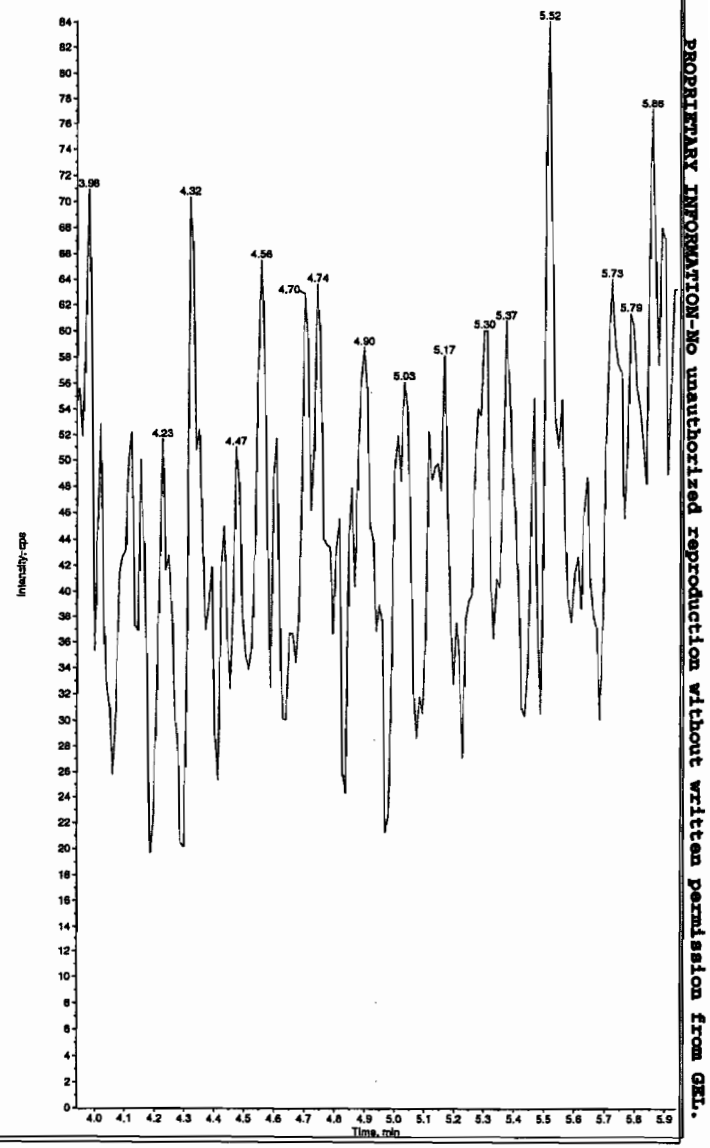
ample Name: "XIBLK01" Sample ID: "|1|LER" File: "EXS04020001.wiff"
eak Name: "34-Dinitrotoluene" Mass(es): "182.1/151.9 amu"
Comment: "LCMSEXP_B" Annotation: **
ple Index: 1
ple Type: Unknown
centration: N/A
culated Conc: 0.00 ng/mL
. Date: 4/2/2010
. Time: 2:27:35 PM

ified: No



Sample Name: "XIBLK01" Sample ID: "|1|LER" File: "EXS04020001.wiff"
Peak Name: "26-Diamino-4-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: 4/2/2010
Acq. Time: 2:27:35 PM

Modified: No



EL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

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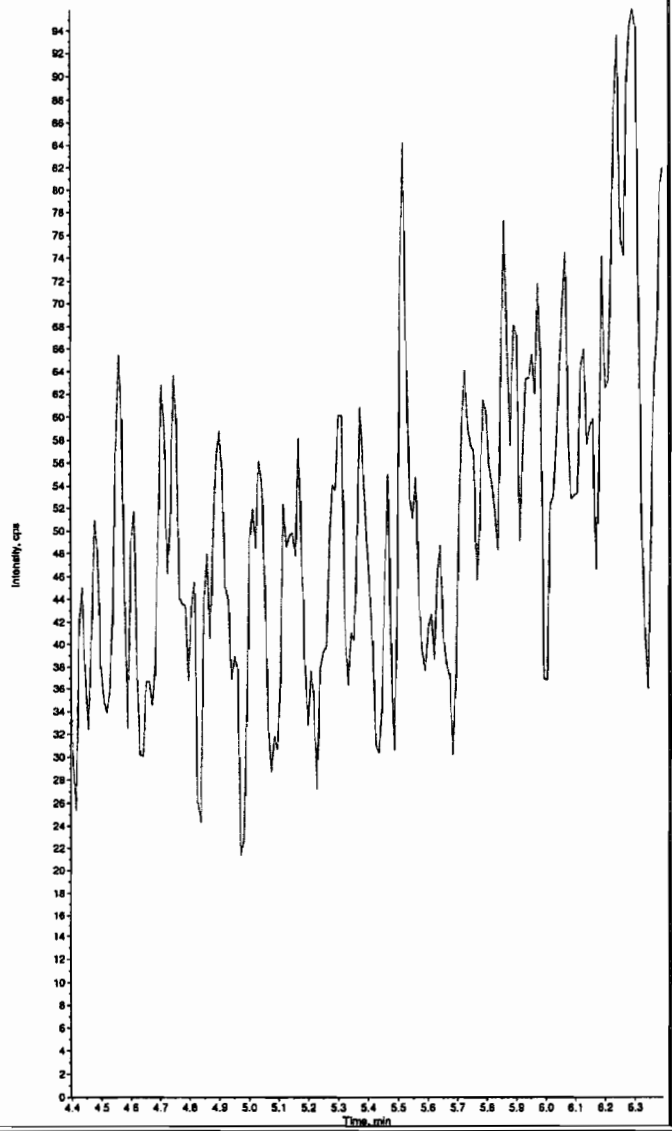
PROPRIETARY INFORMATION-No unauthorized reproduction without written permission from GEL.

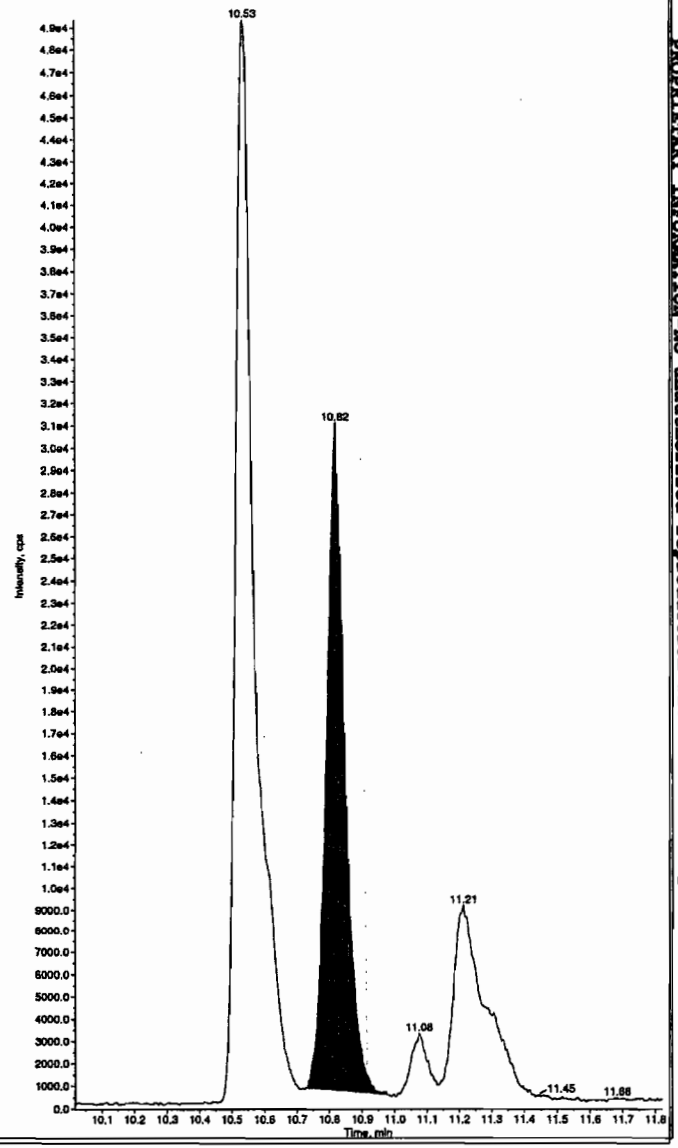
ample Name: "XIBLK01" Sample ID: "[1]LER" File: "EXS04020001.wiff"
eak Name: "24-Diamino-6-nitrotoluene" Mass(es): "166.0/46.0 amu"
omment: "LCMSEXP_B" Annotation: ""
ple Index: 1
ple Type: Unknown
centration: N/A
culated Conc: 0.00 ng/mL
. Date: 4/2/2010
. Time: 2:27:35 PM

ified: No



Sample Name: "XIBLK01" Sample ID: "[1]LER" File: "EXS04020001.wiff"
Peak Name: "tris(o-cresyl) phosphate" Mass(es): "369.1/91.0 amu"
Comment: "LCMSEXP_B" Annotation: ""

Sample Index:	1	
Sample Type:	Unknown	
Concentration:	N/A	
Calculated Conc:	6.15	ng/mL
Acq. Date:	4/2/2010	
Acq. Time:	2:27:35 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:	10.8	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	10.8	min
Area:	1.22e+005	counts
Height:	30302.999	cps
Start Time:	10.7	min
End Time:	11.0	min



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Explosives Initial Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10–2089

Lab Code: GEL

Lab Sample ID: XIBLK01

Analysis Date: 02–APR–10 14:43

GEL Data File: EXS04020002.wiff

Instrument ID: LCMSMS

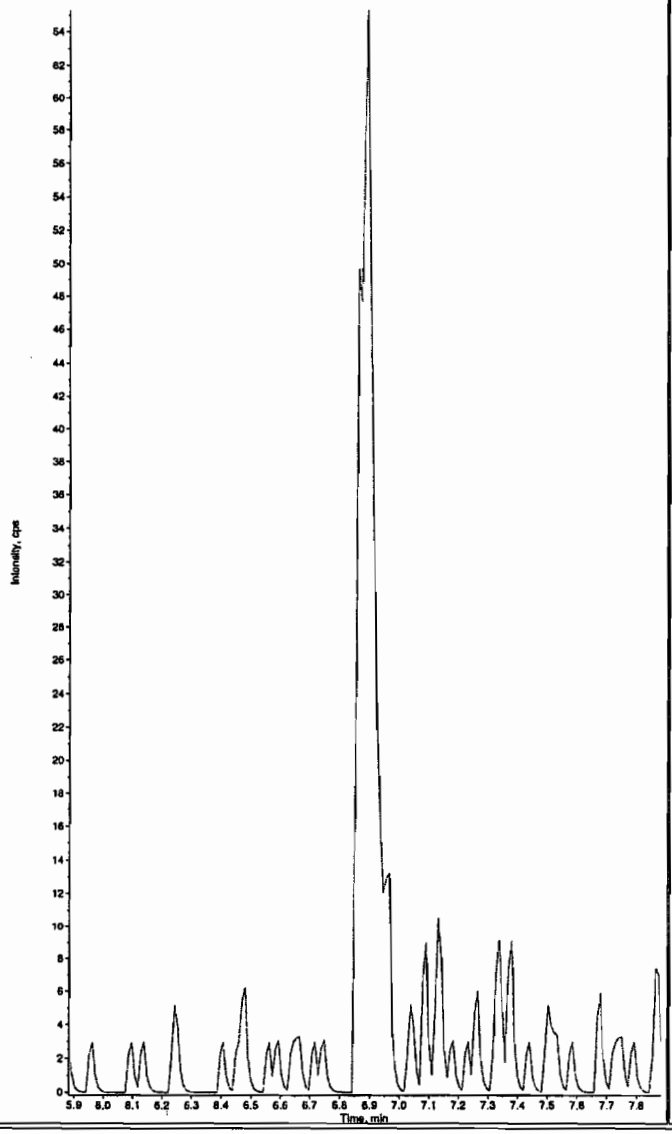
Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4–Dinitrotoluene	0	0
tris(o–cresyl) phosphate	0	5.11
TATB	0	0
3,5–Dinitroaniline	0	0
2,4–Diamino–6–nitrotoluene	0	0
2,6–Diamino–4–nitrotoluene	0	0

LCM 4/7/10

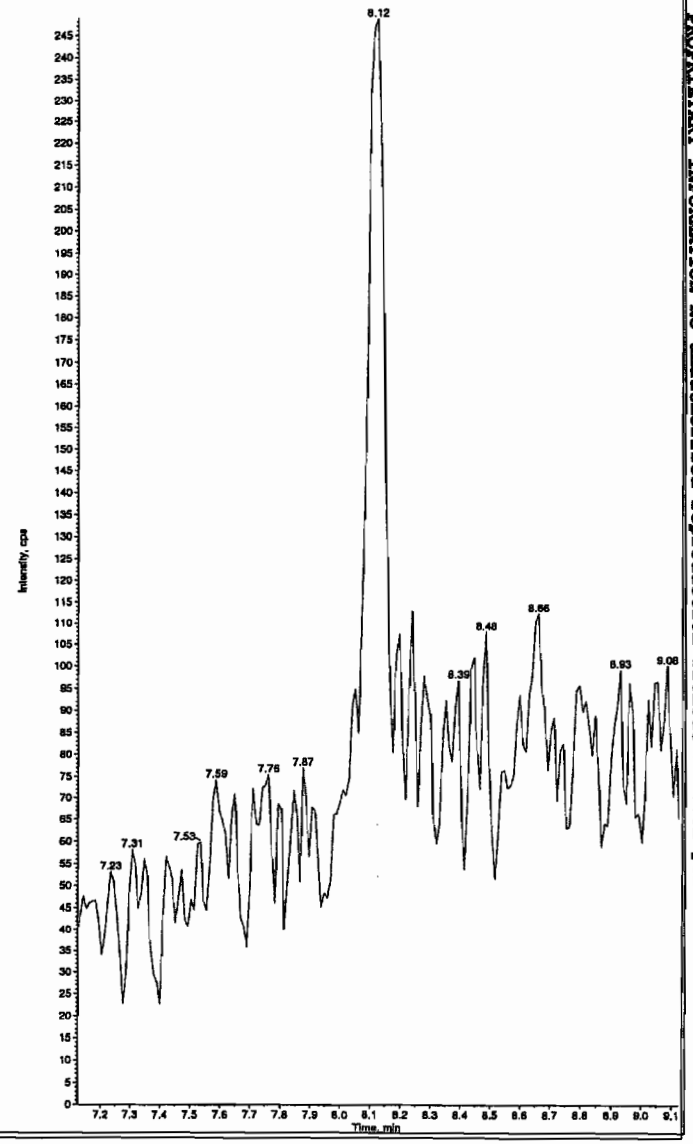
ample Name: "XIBLK01" Sample ID: "|1|LER" File: "EXS04020002.wiff"
eak Name: "TATB" Mass(es): "257.2/204.9 amu"
omment: "LCMSEXP_B" Annotation: ""
ple Index: 1
ple Type: Unknown
centration: N/A
culated Conc: 0.00 ng/mL
. Date: 4/2/2010
. Time: 2:43:23 PM

ified: No



Sample Name: "XIBLK01" Sample ID: "|1|LER" File: "EXS04020002.wiff"
Peak Name: "35-Dinitroaniline" Mass(es): "182.0/46.0 amu"
Comment: "LCMSEXP_B" Annotation: ""
Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 4/2/2010
Acq. Time: 2:43:23 PM

Modified: No



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:L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

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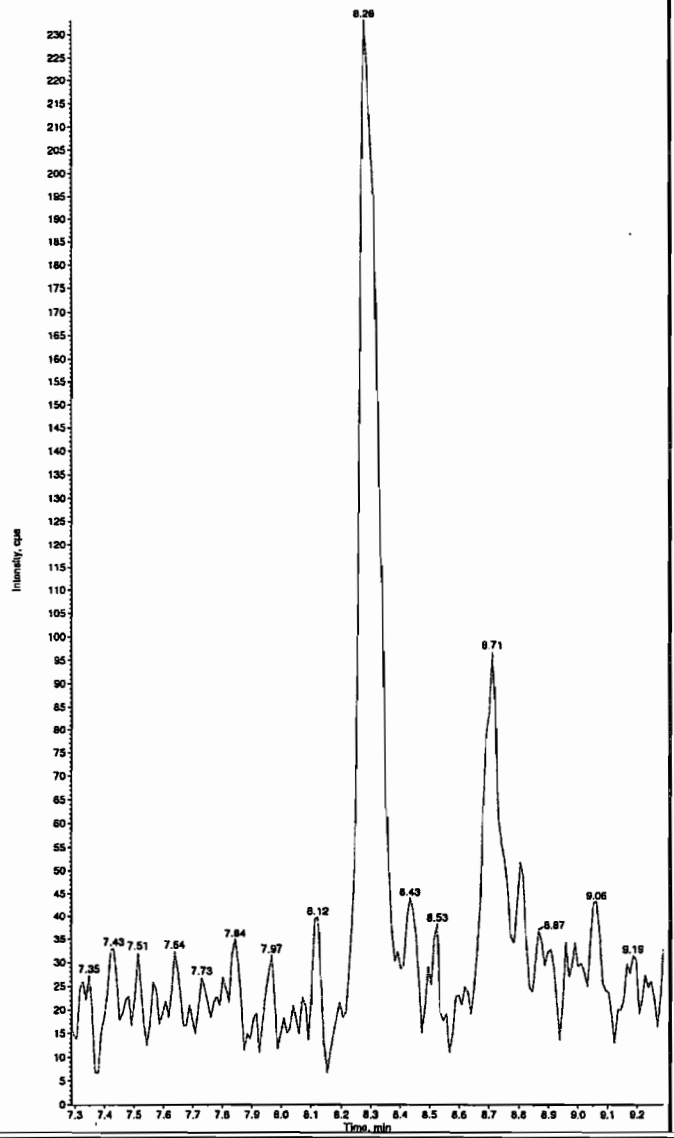
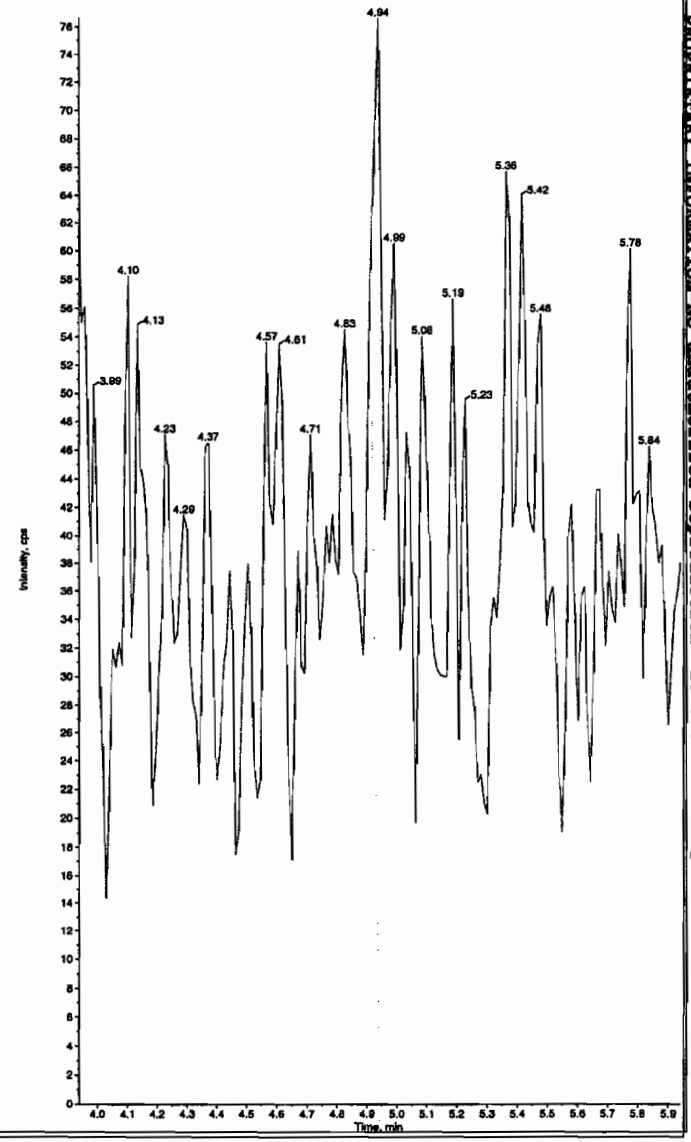
Sample Name: "XIBLK01" Sample ID: "|1|LER" File: "EXS04020002.wiff"
Peak Name: "34-Dinitrotoluene" Mass(es): "182.1/151.9 amu"
Comment: "LCMSEXP_B" Annotation: ""

Sample Index:	1
Sample Type:	Unknown
Concentration:	N/A
Calculated Conc:	0.00 ng/mL
Acq. Date:	4/2/2010
Acq. Time:	3:43:23 PM
Modified:	No



Sample Name: "XIBLK01" Sample ID: "|1|LER" File: "EXS04020002.wiff"
Peak Name: "26-Diamino-4-nitrotoluene" Mass(es): "166.0/45.0 amu"
Comment: "LCMSEXP_B" Annotation: ""

Sample Index:	1
Sample Type:	Unknown
Concentration:	N/A
Calculated Conc:	0.00 ng/mL
Acq. Date:	4/2/2010
Acq. Time:	2:43:23 PM
Modified:	No



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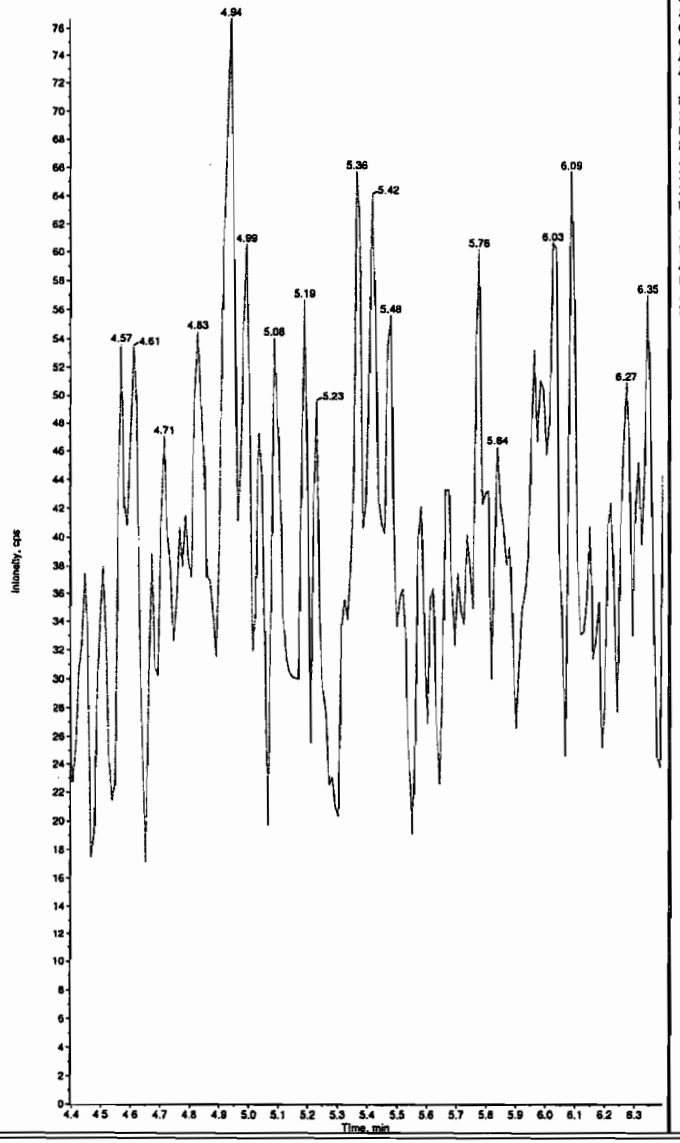
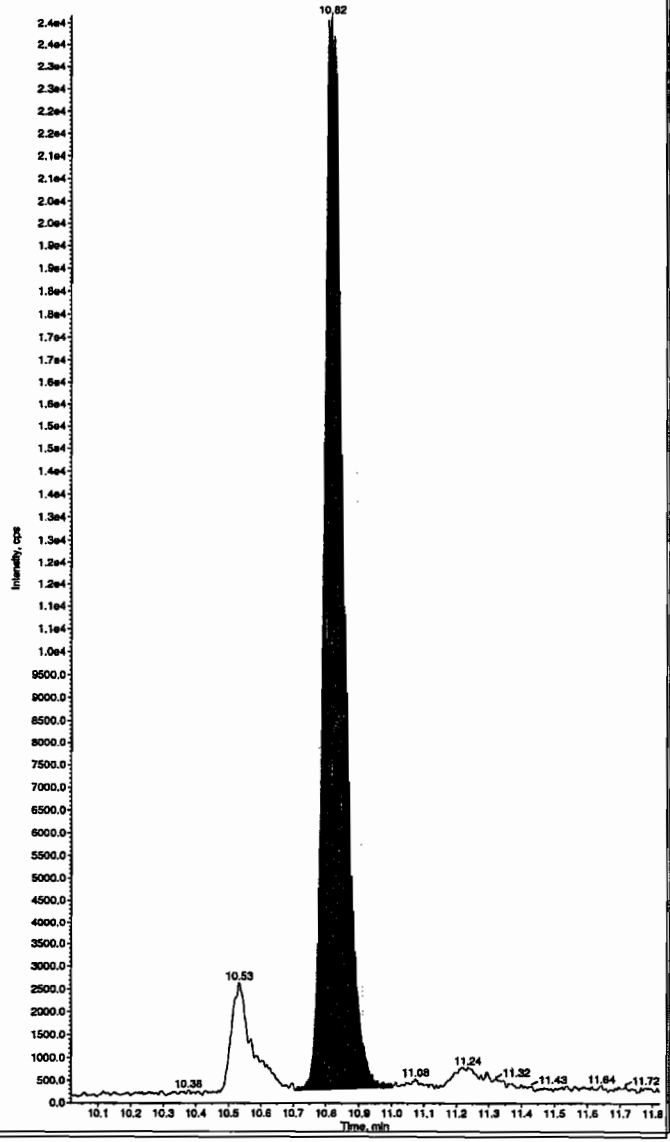
Sample Name: "XIBLK01" Sample ID: "|1|LER" File: "EXS04020002.wiff"
Peak Name: "24-Diamino-6-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_B" Annotation: ""

Sample Index:	1	
Sample Type:	Unknown	
Concentration:	N/A	
Calculated Conc:	0.00	ng/mL
Acq. Date:	4/2/2010	
Acq. Time:	2:43:23 PM	
Modified:	No	



Sample Name: "XIBLK01" Sample ID: "|1|LER" File: "EXS04020002.wiff"
Peak Name: "tris(o-cresyl) phosphate" Mass(es): "369.1/91.0 amu"
Comment: "LCMSEXP_B" Annotation: ""

Sample Index:	1	
Sample Type:	Unknown	
Concentration:	N/A	
Calculated Conc:	5.11	ng/mL
Acq. Date:	4/2/2010	
Acq. Time:	2:43:23 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:	10.8	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	10.8	min
Area:	1.02e+005	counts
Height:	23868.347	cps
Start Time:	10.7	min
End Time:	11.0	min



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4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10–2089

Lab Code: GEL

Lab Sample ID: XIBLK02

Analysis Date: 02–APR–10 16:49

GEL Data File: EXS04020010.wiff

Instrument ID: LCMSMS

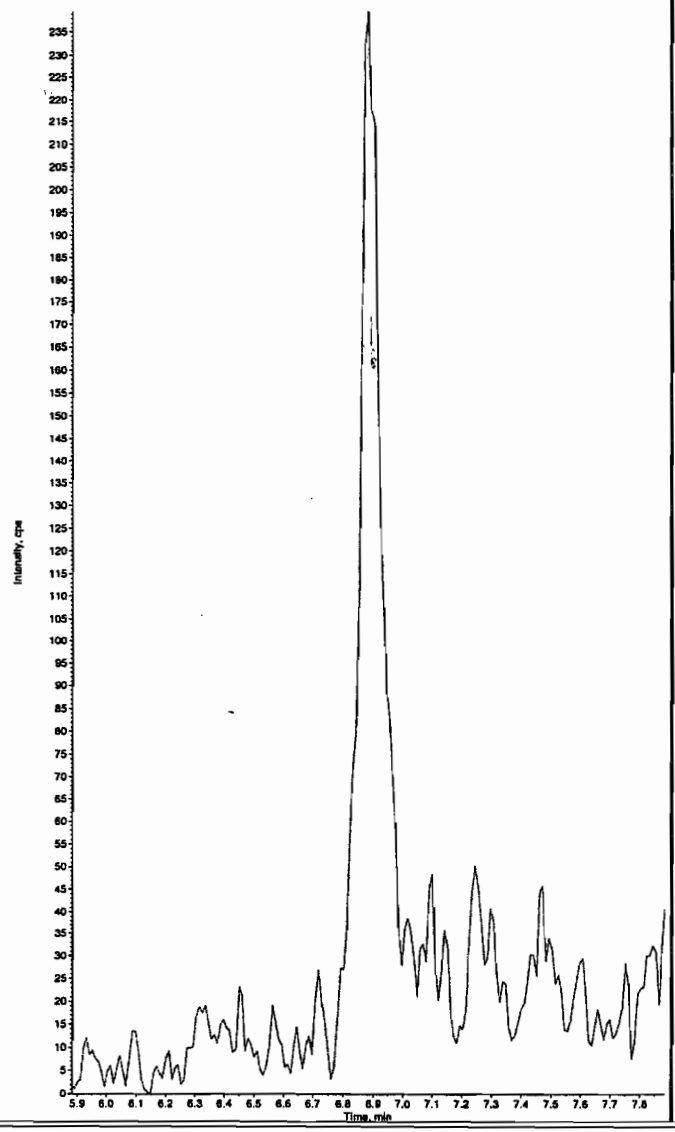
Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4–Dinitrotoluene	0	0
tris(o–cresyl) phosphate	0	15.2
TATB	0	0
3,5–Dinitroaniline	0	0
2,4–Diamino–6–nitrotoluene	0	0
2,6–Diamino–4–nitrotoluene	0	0

Lan 4/7/10

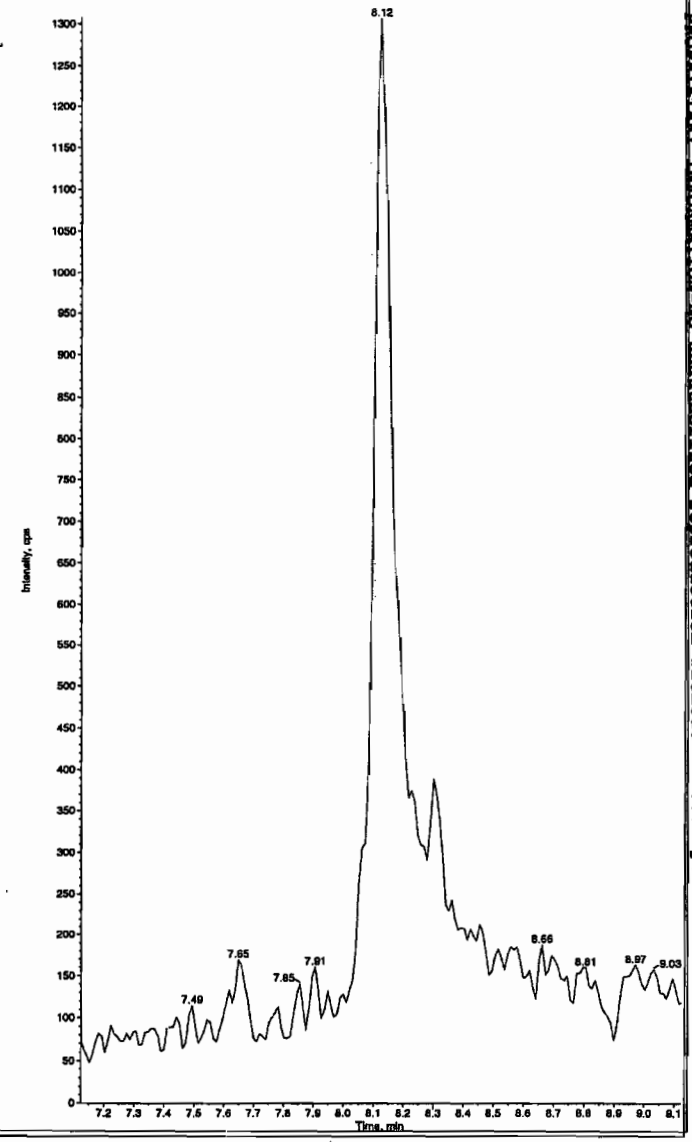
Sample Name: "XIBLK02" Sample ID: "|1|LER" File: "EXS04020010.wiff"
Peak Name: "TATB" Mass(es): "257.2/204.9 amu"
Comment: "LCMSEXP_B" Annotation: ""
mple Index: 1
mple Type: Unknown
ncentration: N/A
lculated Conc: 0.00 ng/mL
q. Date: 4/2/2010
q. Time: 4:49:01 PM

ified: No



Sample Name: "XIBLK02" Sample ID: "|1|LER" File: "EXS04020010.wiff"
Peak Name: "35-Dinitroaniline" Mass(es): "182.0/46.0 amu"
Comment: "LCMSEXP_B" Annotation: ""
Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 4/2/2010
Acq. Time: 4:49:01 PM

Modified: No



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EL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

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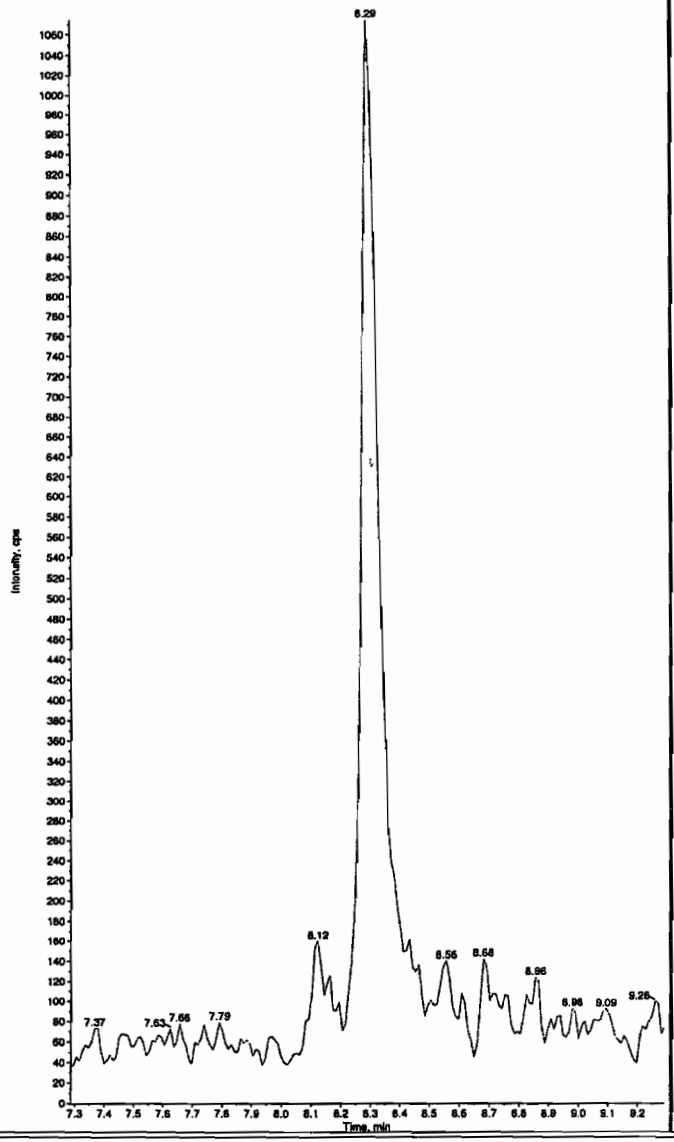
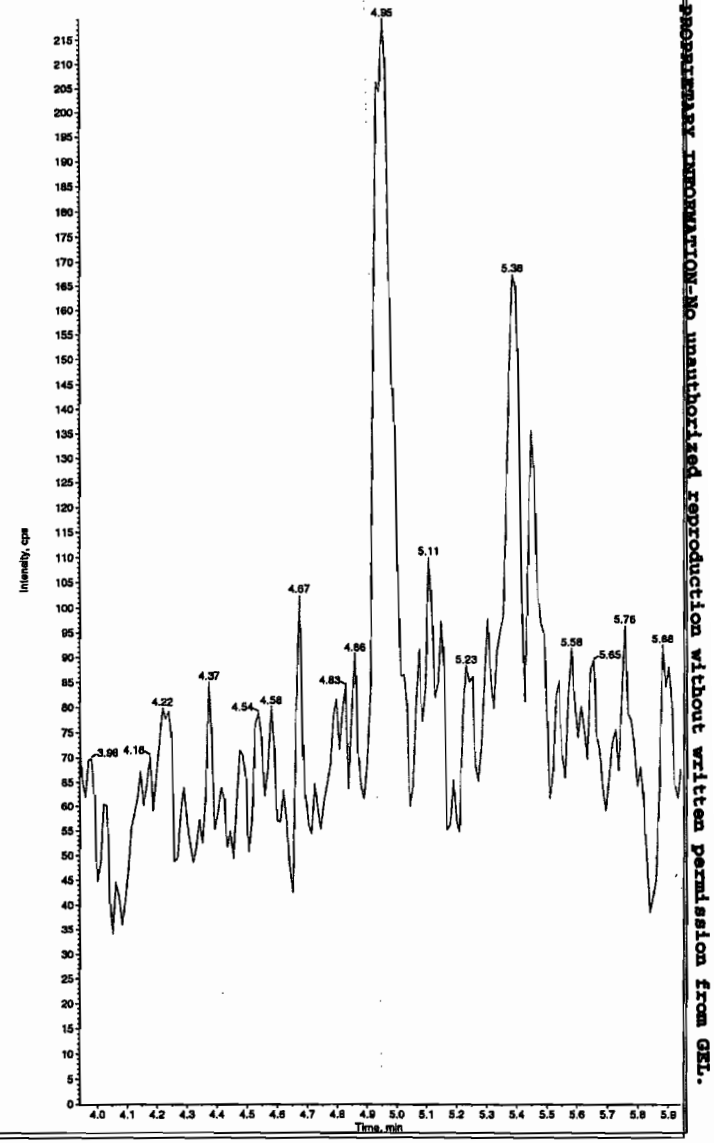
Sample Name: "X|BLK02" Sample ID: "|1|LER" File: "EXS04020010.wiff"
Peak Name: "34-Dinitrotoluene" Mass(es): "182.1/151.9 amu"
Comment: "LCMSEXP_B" Annotation: ""

mple Index:	1
mple Type:	Unknown
ncentration:	N/A
lculated Conc:	0.00 ng/mL
q. Date:	4/2/2010
q. Time:	4:49:01 PM
ified:	No



Sample Name: "X|BLK02" Sample ID: "|1|LER" File: "EXS04020010.wiff"
Peak Name: "26-Diamino-4-nitrotoluene" Mass(es): "166.0/45.0 amu"
Comment: "LCMSEXP_B" Annotation: ""

Sample Index:	1
Sample Type:	Unknown
Concentration:	N/A
Calculated Conc:	0.00 ng/mL
Acq. Date:	4/2/2010
Acq. Time:	4:49:01 PM
Modified:	No

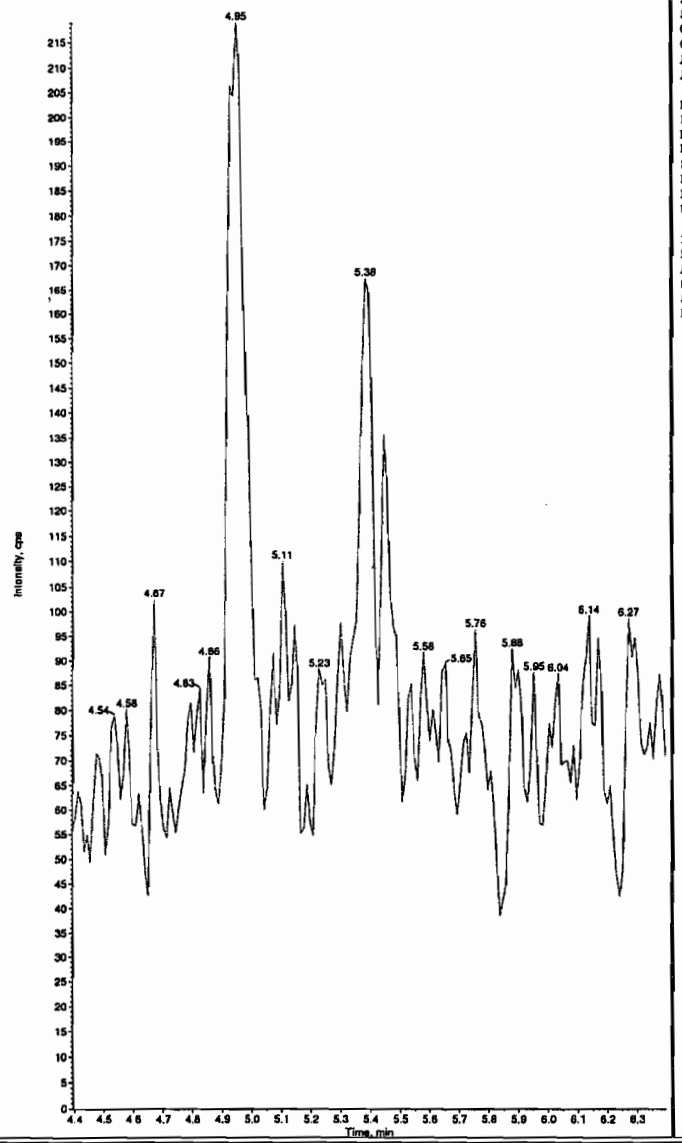


:L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

Sample Name: "XIBLK02" Sample ID: "|1|LER" File: "EXS04020010.wiff"
Peak Name: "24-Diamino-6-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_B" Annotation: ""

mple Index: 1
mple Type: Unknown
ncentration: N/A
lculated Conc: 0.00 ng/mL
q. Date: 4/2/2010
q. Time: 4:49:01 PM

dified: No

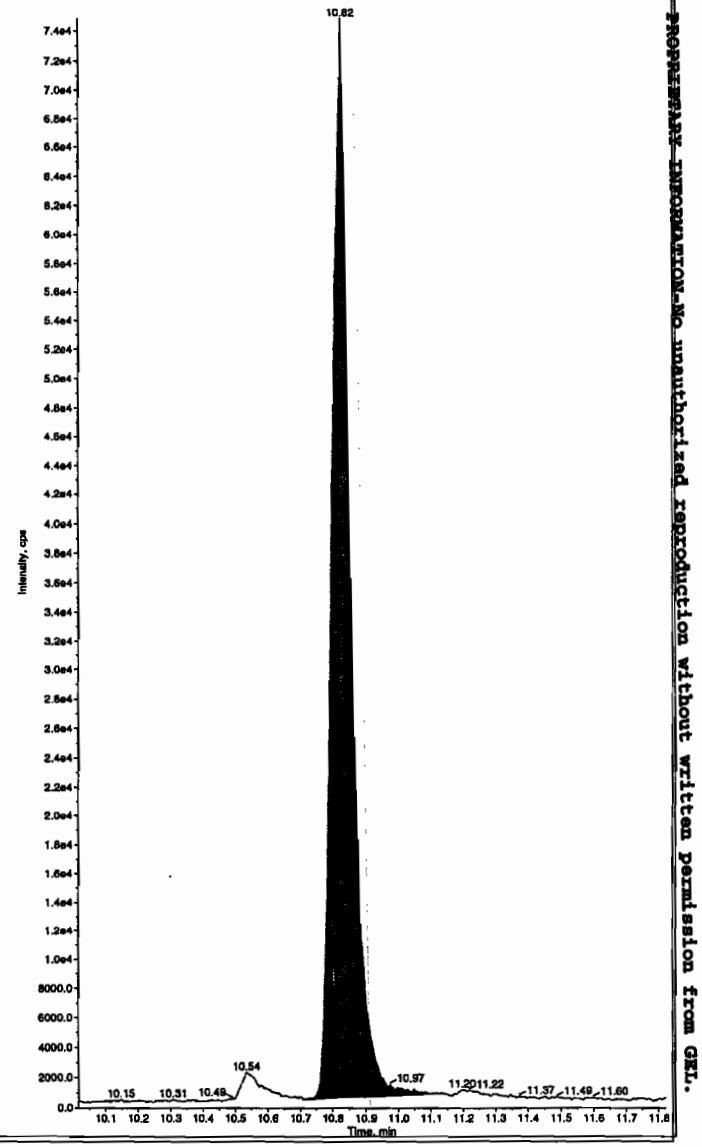


Sample Name: "XIBLK02" Sample ID: "|1|LER" File: "EXS04020010.wiff"
Peak Name: "tris(o-cresyl) phosphate" Mass(es): "369.1/91.0 amu"
Comment: "LCMSEXP_B" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 15.2 ng/mL
Acq. Date: 4/2/2010
Acq. Time: 4:49:01 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: 10.8 min
Use Relative RT: No

Int. Type: Valley
Retention Time: 10.8 min
Area: 3.01e+005 counts
Height: 74163.284 cps
Start Time: 10.7 min
End Time: 11.1 min



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4A
Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10–2089

Lab Code: GEL

Lab Sample ID: XIBLK03

Analysis Date: 02–APR–10 17:20

GEL Data File: EXS04020012.wiff

Instrument ID: LCMSMS

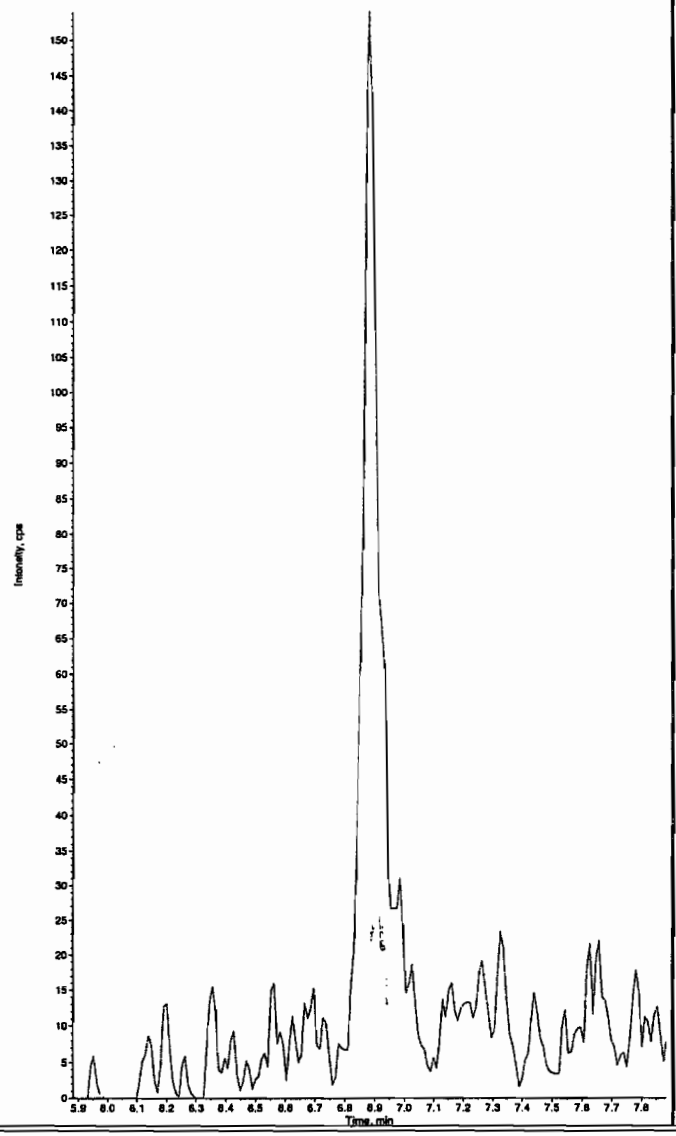
Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4–Dinitrotoluene	0	0
tris(o–cresyl) phosphate	0	9.82
TATB	0	0
3,5–Dinitroaniline	0	0
2,4–Diamino–6–nitrotoluene	0	0
2,6–Diamino–4–nitrotoluene	0	0

Dan 4/7/10

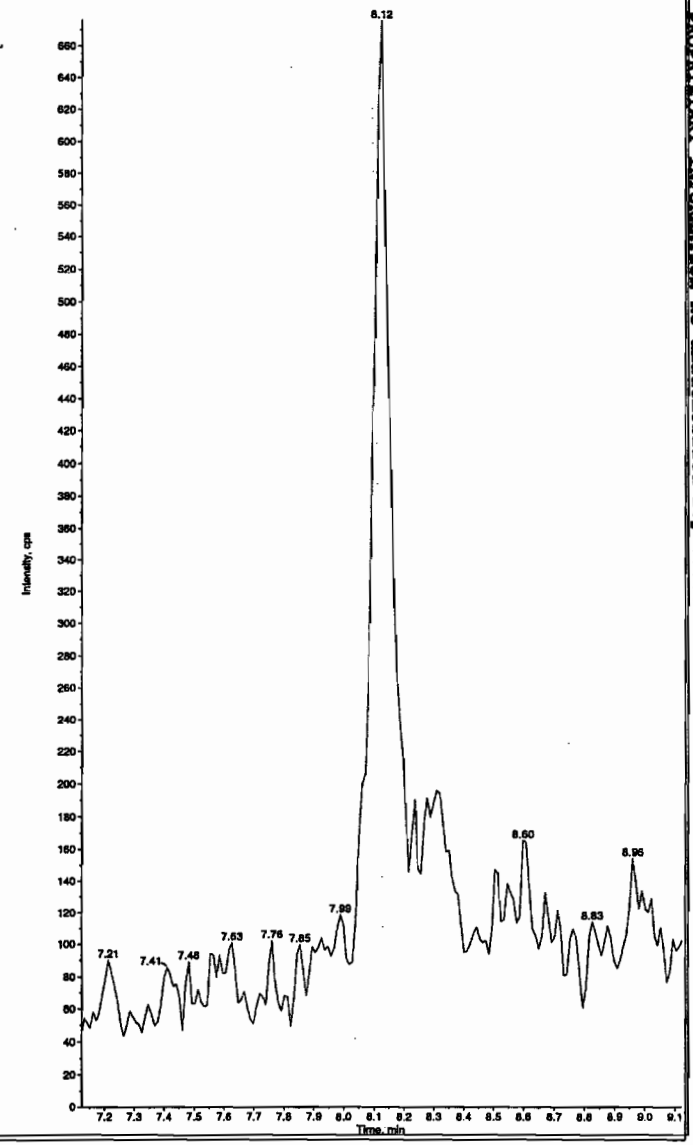
Sample Name: "XIBLK03" Sample ID: "|1|LER" File: "EXS04020012.wiff"
Peak Name: "TATB" Mass(es): "257.2/204.9 amu"
Comment: "LCMSEXP_B" Annotation: ""
ple Index: 1
ple Type: Unknown
centration: N/A
culated Conc: 0.00 ng/mL
. Date: 4/2/2010
. Time: 5:20:26 PM

ified: No



Sample Name: "XIBLK03" Sample ID: "|1|LER" File: "EXS04020012.wiff"
Peak Name: "35-Dinitroaniline" Mass(es): "182.0/46.0 amu"
Comment: "LCMSEXP_B" Annotation: ""
Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 4/2/2010
Acq. Time: 5:20:26 PM

Modified: No



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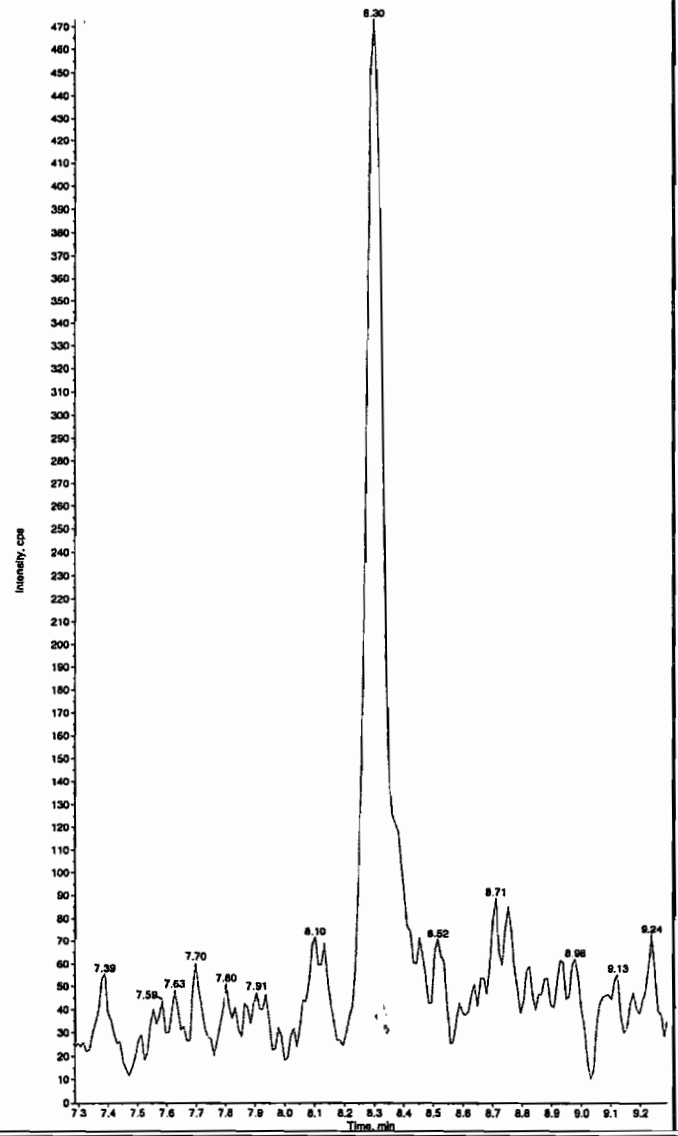
:L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

PROPRIETARY INFORMATION-No unauthorized reproduction without written permission from GEL.

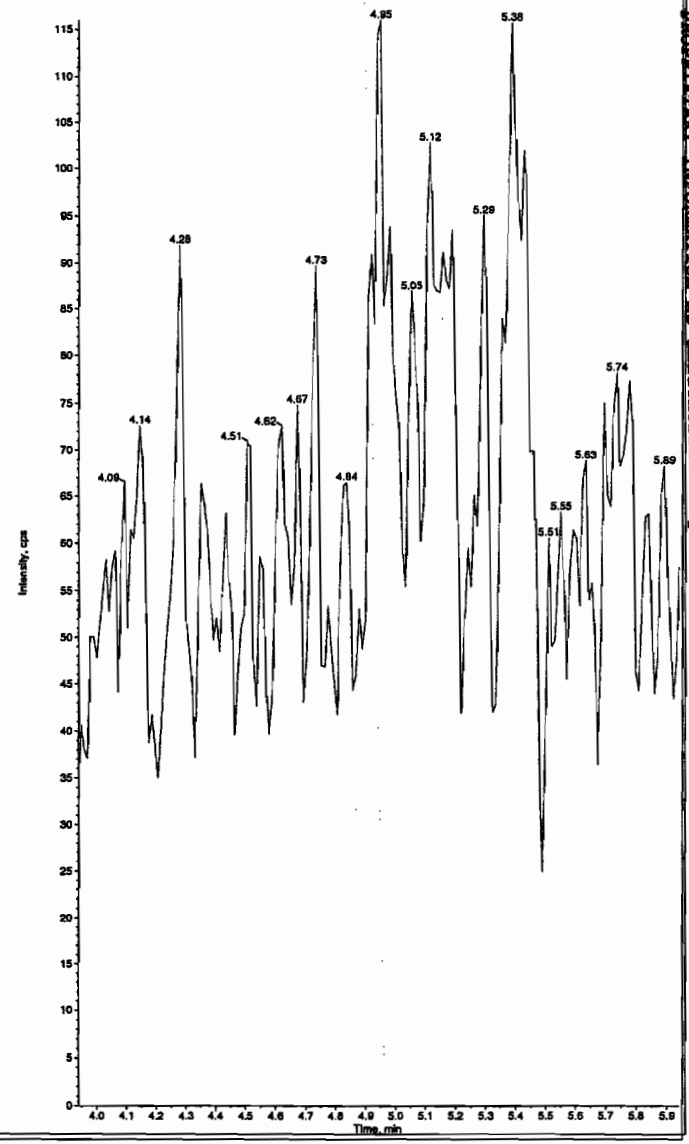
Sample Name: "XIBLK03" Sample ID: "|1|LER" File: "EXS04020012.wiff"
Peak Name: "34-Dinitrotoluene" Mass(es): "182.1/151.9 amu"
Comment: "LCMSEXP_B" Annotation: ""
mple Index: 1
mple Type: Unknown
ncentration: N/A
lculated Conc: 0.00 ng/mL
q. Date: 4/2/2010
q. Time: 5:20:26 PM

ified: No



Sample Name: "XIBLK03" Sample ID: "|1|LER" File: "EXS04020012.wiff"
Peak Name: "26-Diamino-4-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: 4/2/2010
Acq. Time: 5:20:26 PM

Modified: No

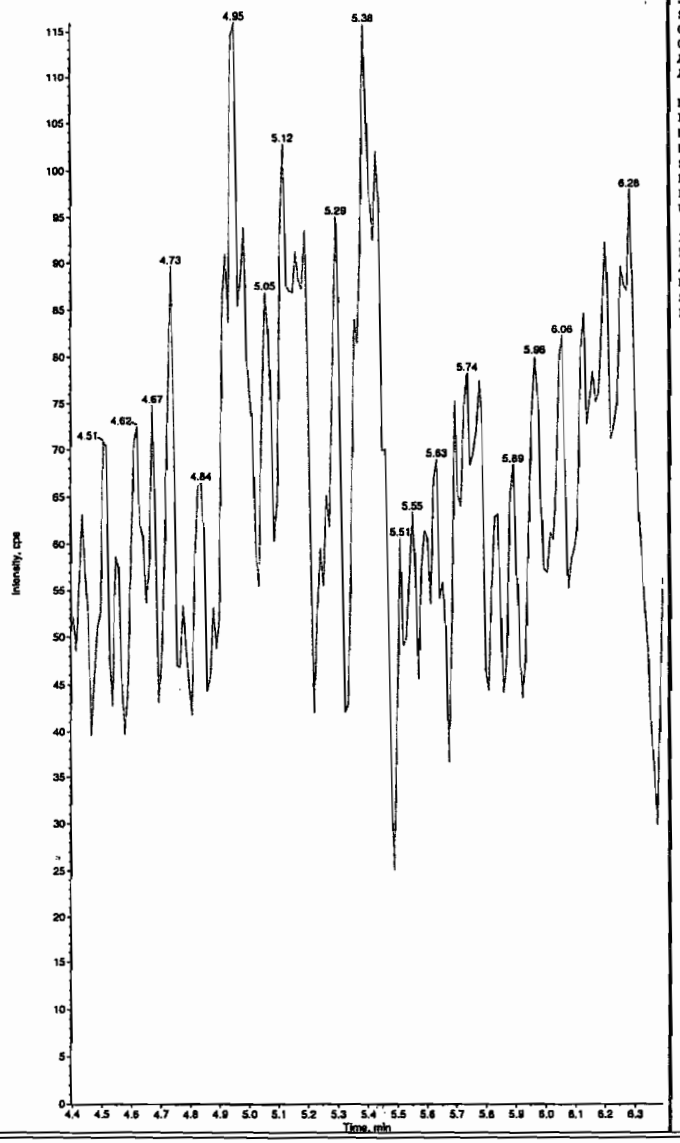


PROPRIETARY INFORMATION-No unauthorized reproduction without written permission from GEL.

Sample Name: "XIBLK03" Sample ID: "[1]LER" File: "EXS04020012.wiff"
Peak Name: "24-Diamino-6-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_B" Annotation: ""

mple Index: 1
mple Type: Unknown
ncentration: N/A
lculated Conc: 0.00 ng/mL
q. Date: 4/2/2010
q. Time: 5:20:26 PM

ified: No

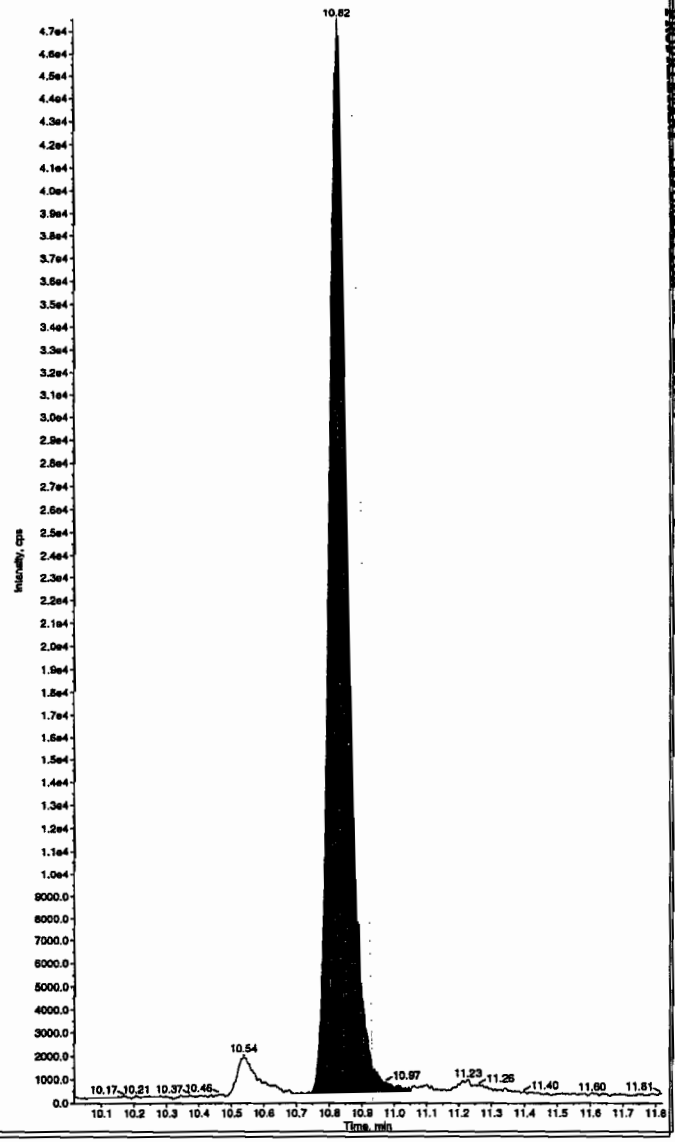


Sample Name: "XIBLK03" Sample ID: "[1]LER" File: "EXS04020012.wiff"
Peak Name: "tris(o-cresyl) phosphate" Mass(es): "369.1/91.0 amu"
Comment: "LCMSEXP_B" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 9.82 ng/mL
Acq. Date: 4/2/2010
Acq. Time: 5:20:26 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: 10.8 min
Use Relative RT: No

Int. Type: Valley
Retention Time: 10.8 min
Area: 1.95e+005 counts
Height: 47141.685 cps
Start Time: 10.7 min
End Time: 11.1 min



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4A
Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10–2089

Lab Code: GEL

Lab Sample ID: XIBLK04

Analysis Date: 02–APR–10 20:44

GEL Data File: EXS04020025.wiff

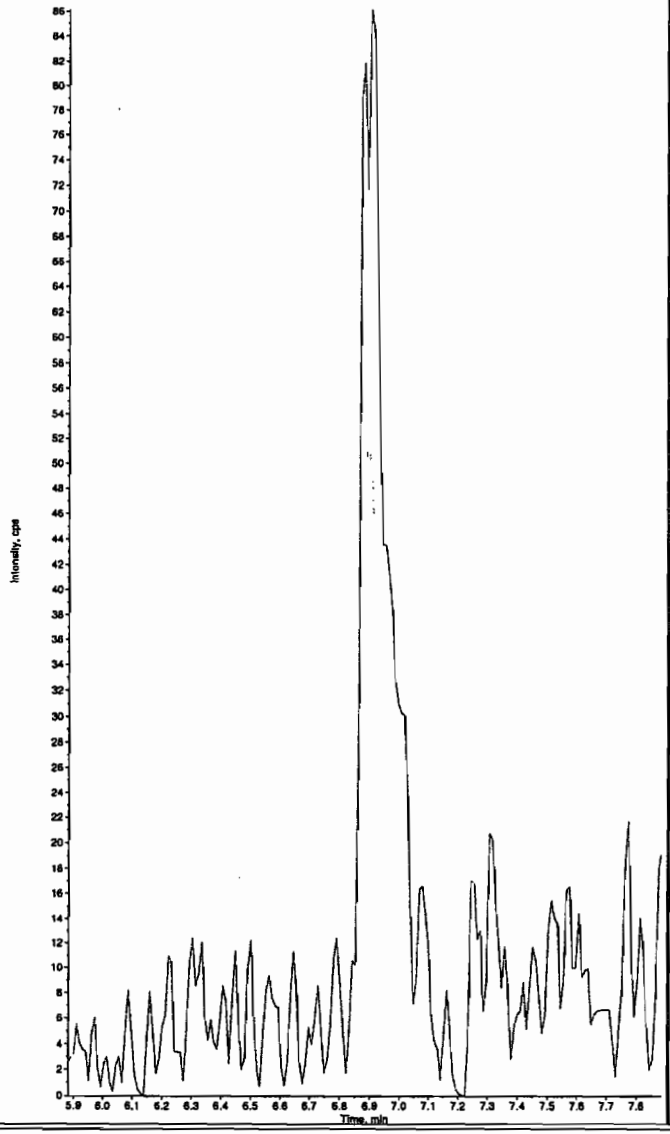
Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4–Dinitrotoluene	0	0
tris(o–cresyl) phosphate	0	8.36
TATB	0	0
3,5–Dinitroaniline	0	0
2,4–Diamino–6–nitrotoluene	0	0
2,6–Diamino–4–nitrotoluene	0	0

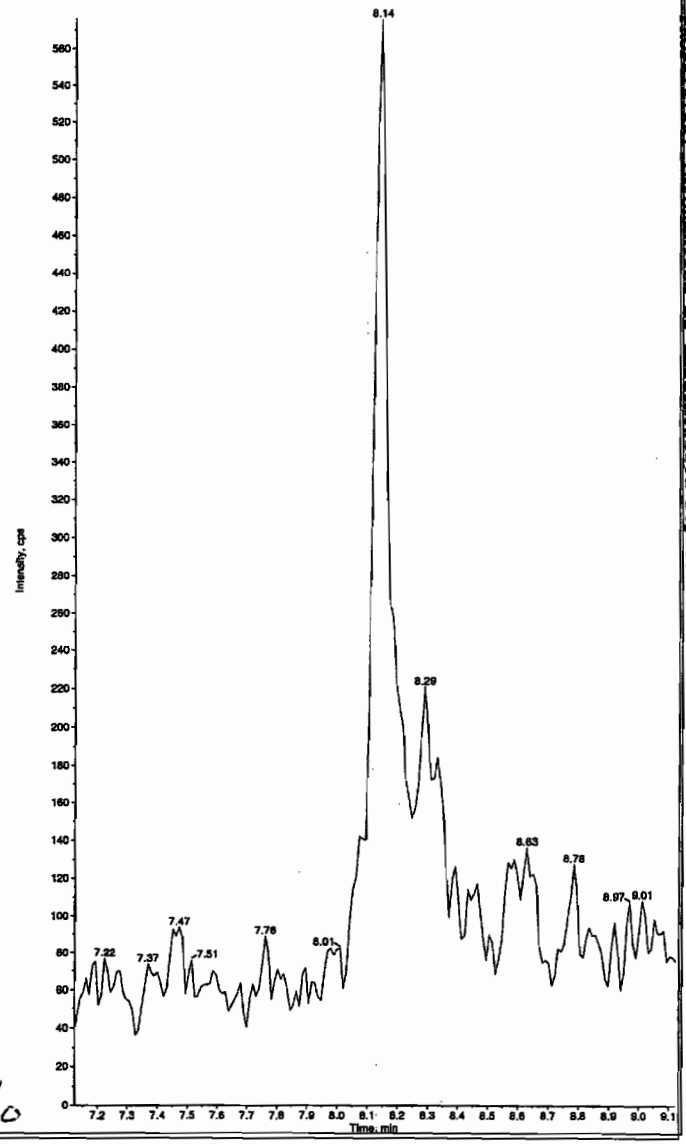
Kar 4/7/10

Sample Name: "XIBLK04" Sample ID: "[1]LER" File: "EXS04020025.wiff"
Peak Name: "TATB" Mass(es): "257.2/204.9 amu"
Comment: "LCMSEXP_B" Annotation: ""
ple Index: 1
ple Type: Unknown
centration: N/A
lculated Conc: 0.00 ng/mL
. Date: 4/2/2010
. Time: 8:44:33 PM
lified: No



Sample Name: "XIBLK04" Sample ID: "[1]LER" File: "EXS04020025.wiff"
Peak Name: "35-Dinitroaniline" Mass(es): "182.0/46.0 amu"
Comment: "LCMSEXP_B" Annotation: ""
Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 4/2/2010
Acq. Time: 8:44:33 PM

Modified: No



HMM 04/08/10

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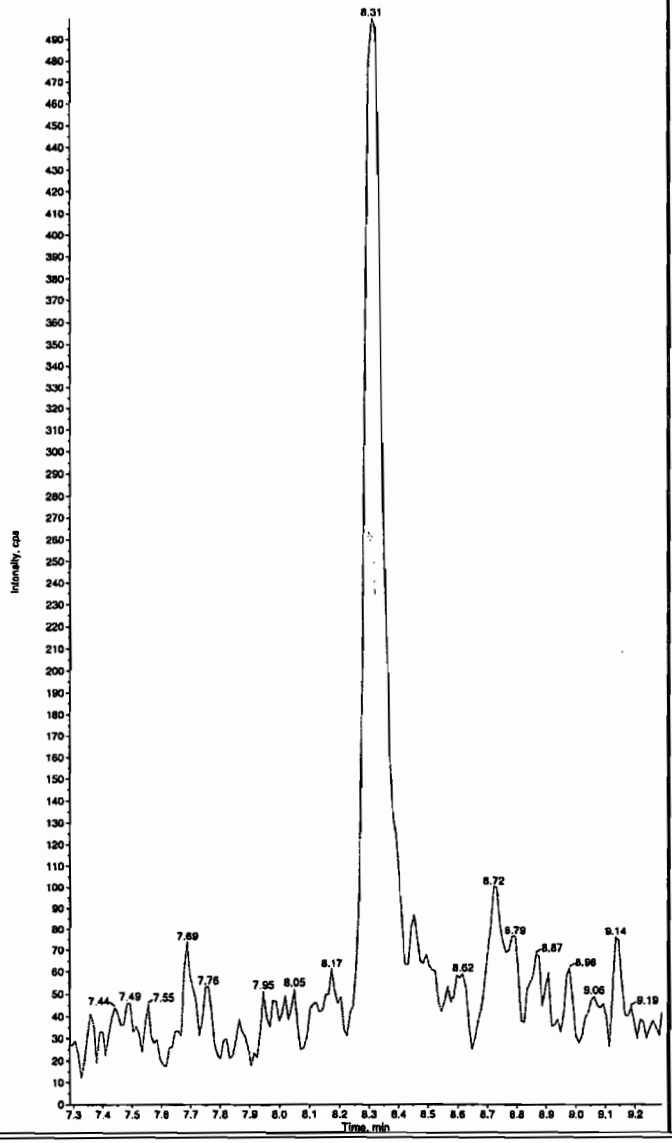
Sample Name: "XIBLK04" Sample ID: "[1]LER" File: "EXS04020025.wiff"
Peak Name: "34-Dinitrotoluene" Mass(es): "182.1/151.9 amu"
Comment: "LCMSEXP_B" Annotation: ""

mple Index: 1
mple Type: Unknown
ncentration: N/A
lculated Conc: 0.00 ng/mL
q. Date: 4/2/2010
q. Time: 8:44:33 PM

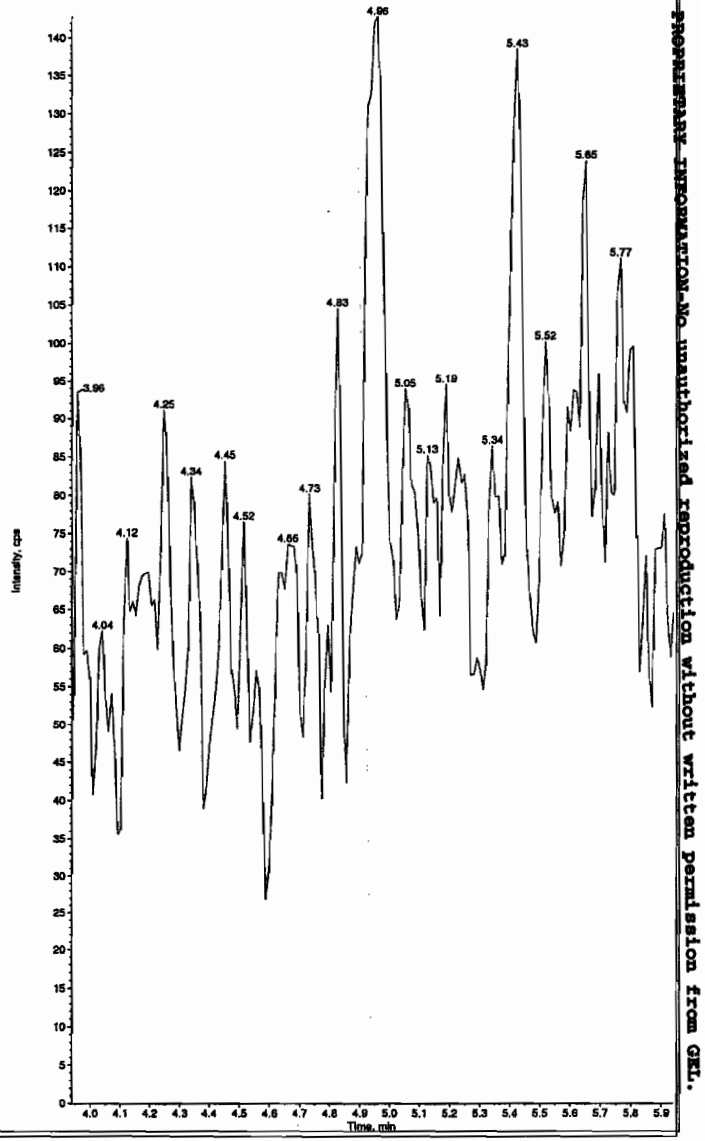
dified: No



Sample Name: "XIBLK04" Sample ID: "[1]LER" File: "EXS04020025.wiff"
Peak Name: "26-Diamino-4-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: 4/2/2010
Acq. Time: 8:44:33 PM

Modified: No



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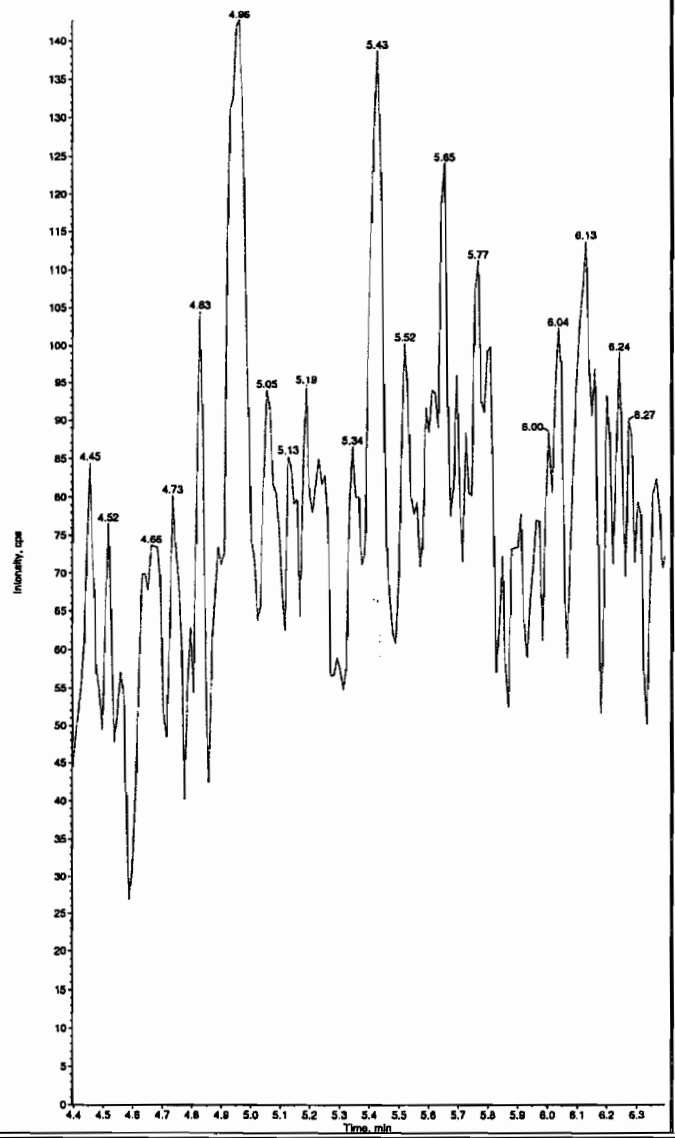
PROPRIETARY INFORMATION-No unauthorized reproduction without written permission from GEL.

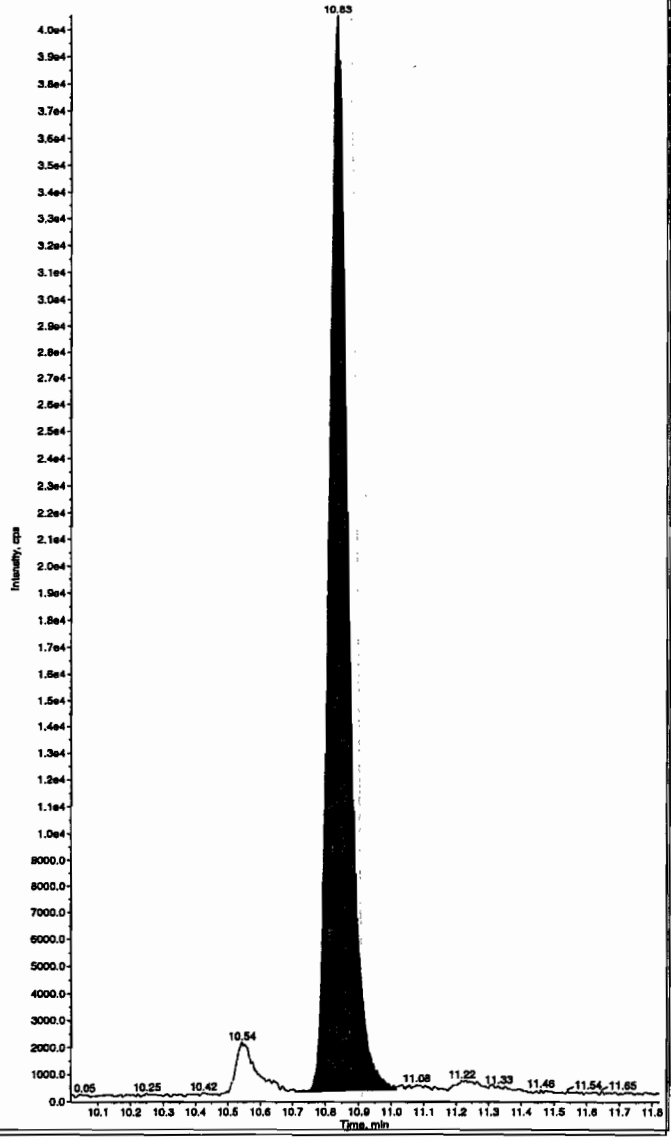
Sample Name: "XIBLK04" Sample ID: "|1|LER" File: "EXS04020025.wiff"
Peak Name: "24-Diamino-6-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_B" Annotation: ""

Sample Index:	1
Sample Type:	Unknown
Concentration:	N/A
Calculated Conc:	0.00 ng/mL
Acq. Date:	4/2/2010
Acq. Time:	8:44:33 PM
Modified:	No



Sample Name: "XIBLK04" Sample ID: "|1|LER" File: "EXS04020025.wiff"
Peak Name: "tris(o-cresyl) phosphate" Mass(es): "369.1/91.0 amu"
Comment: "LCMSEXP_B" Annotation: ""

Sample Index:	1
Sample Type:	Unknown
Concentration:	N/A
Calculated Conc:	8.36 ng/mL
Acq. Date:	4/2/2010
Acq. Time:	8:44:33 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:	10.8 min
Use Relative RT:	No
Int. Type:	Valley
Retention Time:	10.8 min
Area:	1.66e+005 counts
Height:	40190.308 cps
Start Time:	10.7 min
End Time:	11.0 min



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4A
Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10–2089

Lab Code: GEL

Lab Sample ID: XIBLK05

Analysis Date: 03–APR–10 00:08

GEL Data File: EXS04020038.wiff

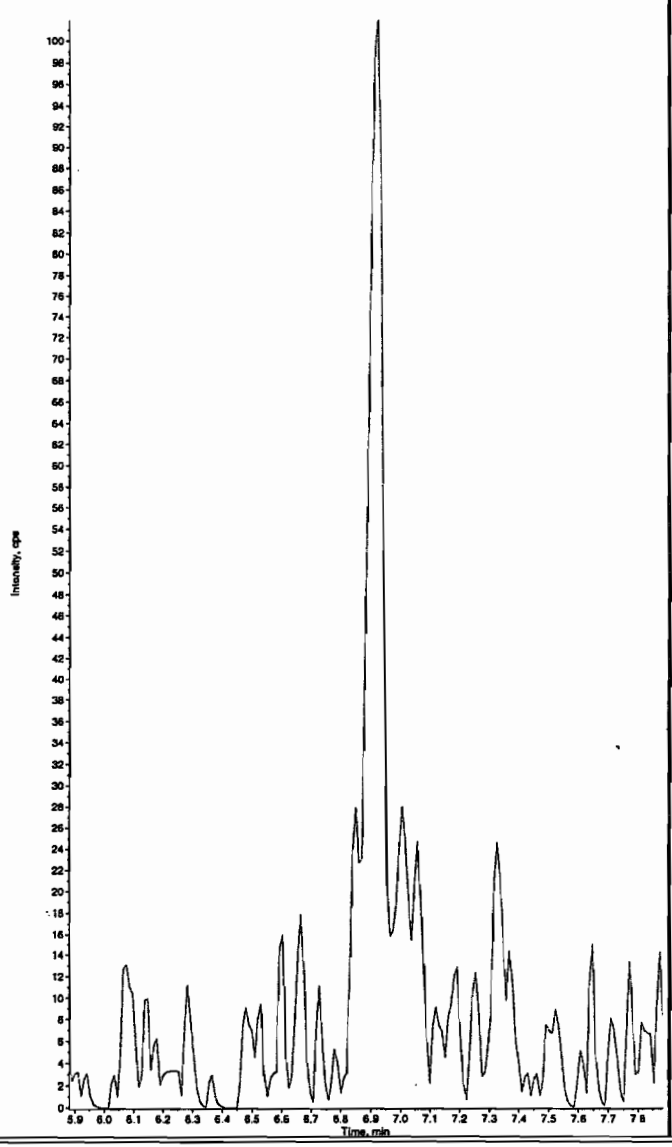
Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4–Dinitrotoluene	0	0
tris(o–cresyl) phosphate	0	8.58
TATB	0	0
3,5–Dinitroaniline	0	0
2,4–Diamino–6–nitrotoluene	0	0
2,6–Diamino–4–nitrotoluene	0	0

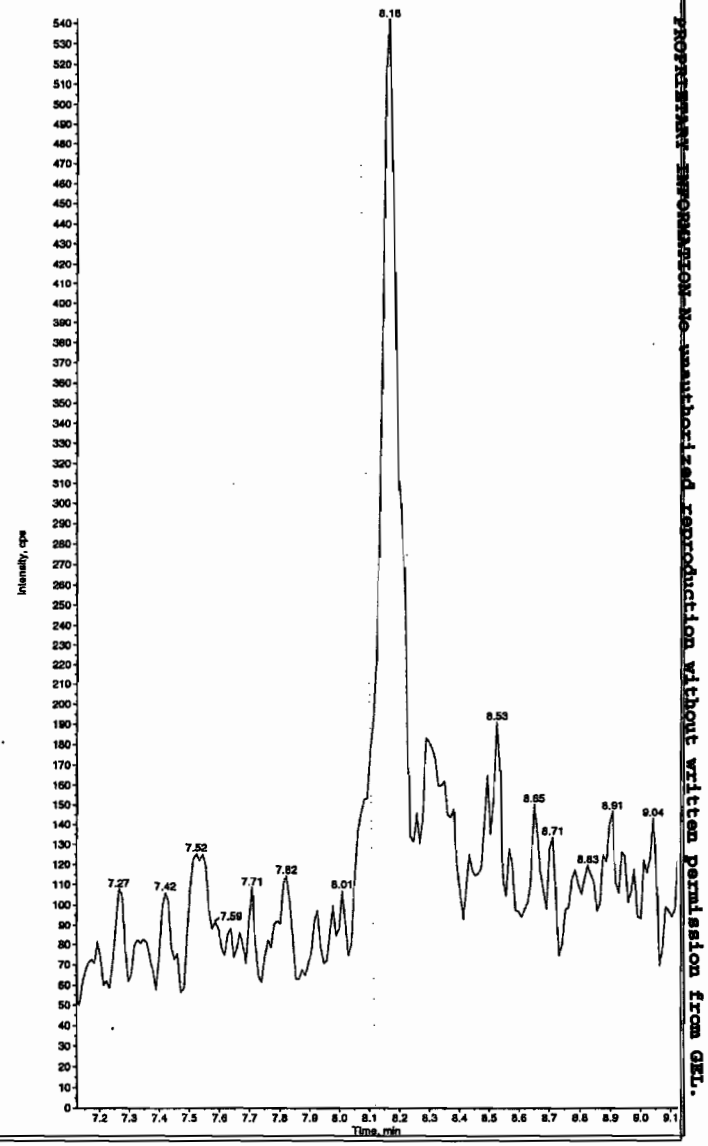
Scan 4/7/10

Sample Name: "XIBLK05" Sample ID: "[1]LER" File: "EXS04020038.wiff"
Peak Name: "TATB" Mass(es): "257.2/204.9 amu"
Comment: "LCMSEXP_B" Annotation: ""
ample Index: 1
ample Type: Unknown
ncentration: N/A
lculated Conc: 0.00 ng/mL
q. Date: 4/3/2010
q. Time: 12:08:48 AM
dified: No



Sample Name: "XIBLK05" Sample ID: "[1]LER" File: "EXS04020038.wiff"
Peak Name: "35-Dinitroaniline" Mass(es): "182.0/46.0 amu"
Comment: "LCMSEXP_B" Annotation: ""
Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 4/3/2010
Acq. Time: 12:08:48 AM

Modified: No



HMC 04/08/10

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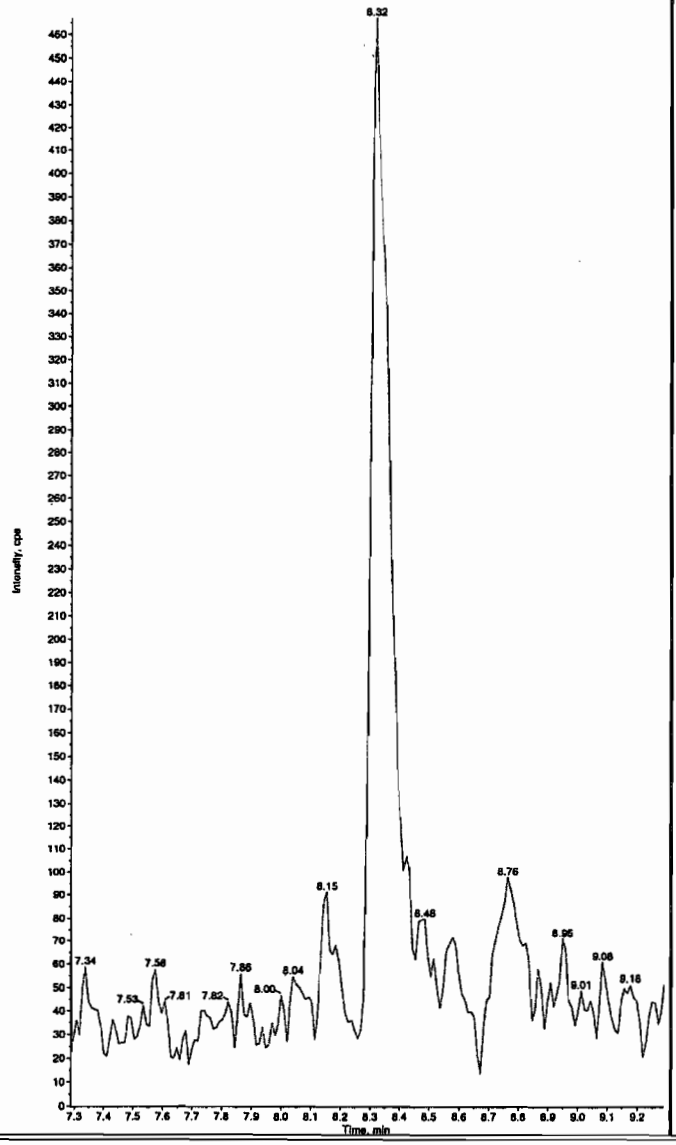
PROPRIETARY INFORMATION-No unauthorized reproduction without written permission from GEL.

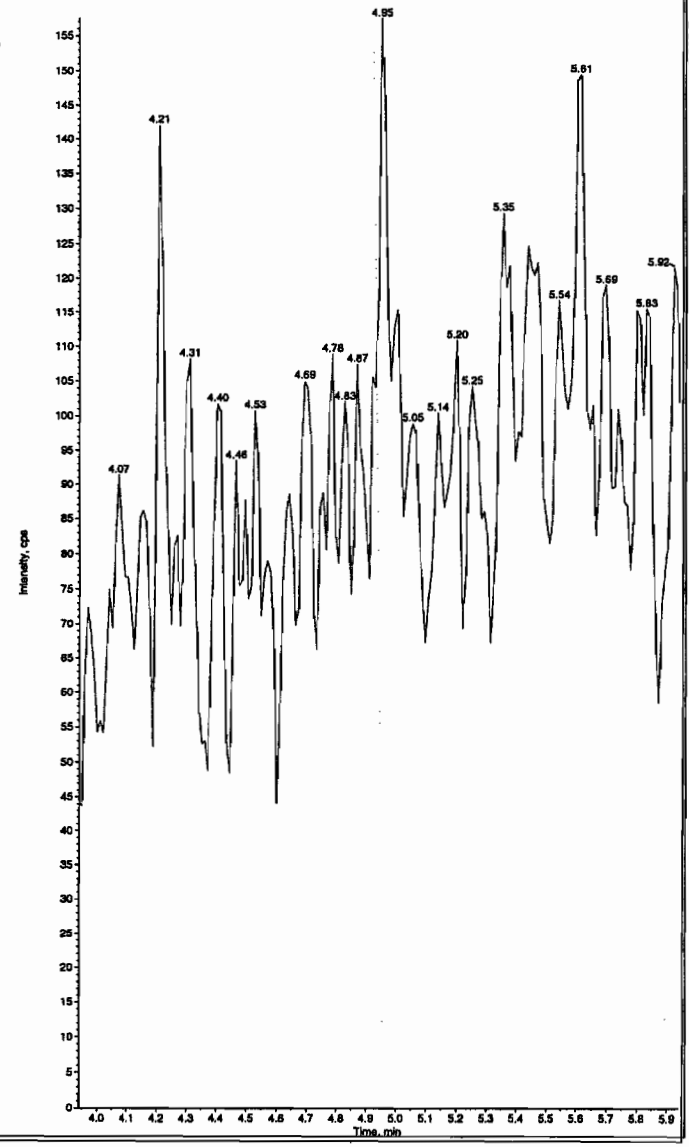
ample Name: "XIBLK05" Sample ID: "|1|LER" File: "EXS04020038.wiff"
eak Name: "34-Dinitrotoluene" Mass(es): "182.1/151.9 amu"
omment: "LCMSEXP_B" Annotation: ""
ple Index: 1
ple Type: Unknown
centration: N/A
culated Conc: 0.00 ng/mL
. Date: 4/3/2010
. Time: 12:08:48 AM

ified: No



Sample Name: "XIBLK05" Sample ID: "|1|LER" File: "EXS04020038.wiff"
Peak Name: "26-Diamino-4-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: 4/3/2010
Acq. Time: 12:08:48 AM

Modified: No

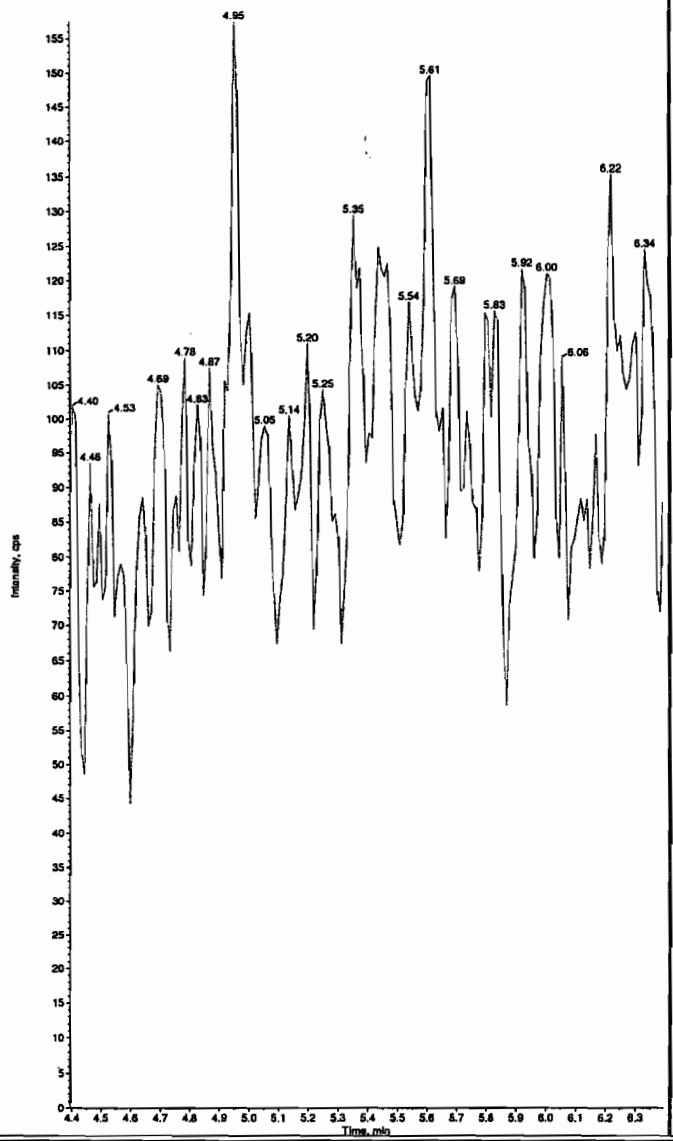


L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

PROPRIETARY INFORMATION-No unauthorized reproduction without written permission from GEL.

ample Name: "XIBLK05" Sample ID: "[1]LER" File: "EXS04020038.wiff"
eak Name: "24-Diamino-6-nitrotoluene" Mass(es): "166.0/46.0 amu"
omment: "LCMSEXP_B" Annotation: ""
ple Index: 1
ple Type: Unknown
centration: N/A
culated Conc: 0.00 ng/mL
. Date: 4/3/2010
. Time: 12:08:48 AM

ified: No

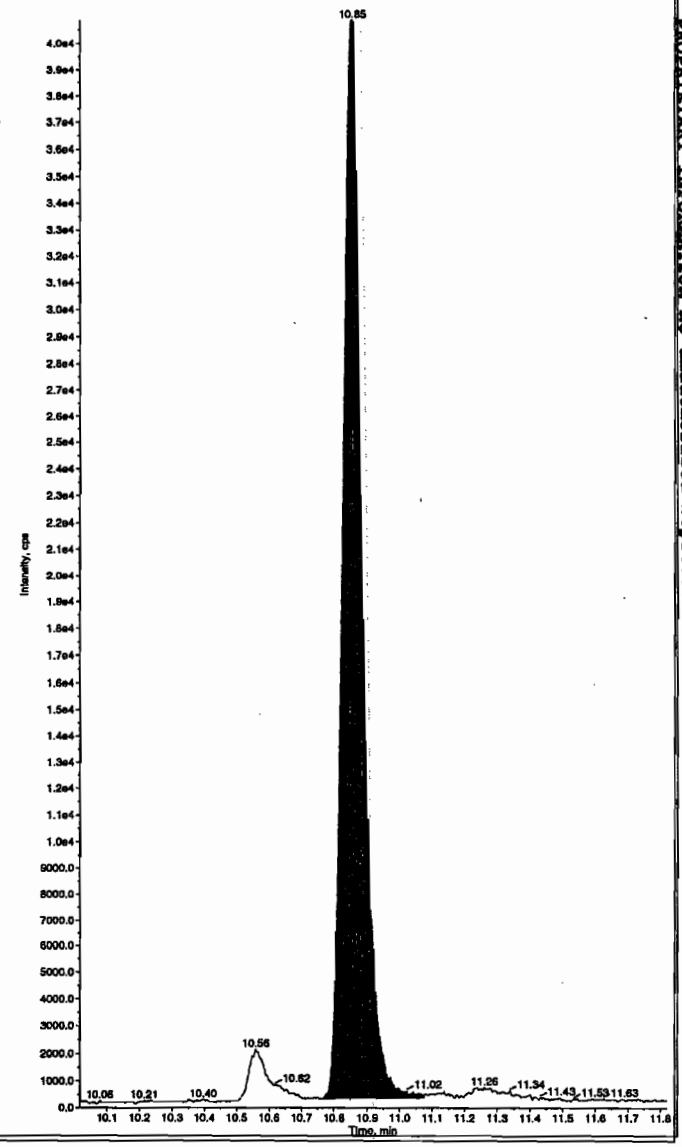


Sample Name: "XIBLK05" Sample ID: "[1]LER" File: "EXS04020038.wiff"
Peak Name: "tris(o-cresyl) phosphate" Mass(es): "369.1/91.0 amu"
Comment: "LCMSEXP_B" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 8.58 ng/mL
Acq. Date: 4/3/2010
Acq. Time: 12:08:48 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: 10.8 min
Use Relative RT: No

Int. Type: Valley
Retention Time: 10.9 min
Area: 1.70e+005 counts
Height: 40525.276 cps
Start Time: 10.8 min
End Time: 11.1 min



:L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

PROPRIETARY INFORMATION-No unauthorized reproduction without written permission from GEL.

4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10–2089

Lab Code: GEL

Lab Sample ID: XIBLK06

Analysis Date: 03–APR–10 00:55

GEL Data File: EXS04020041.wiff

Instrument ID: LCMSMS

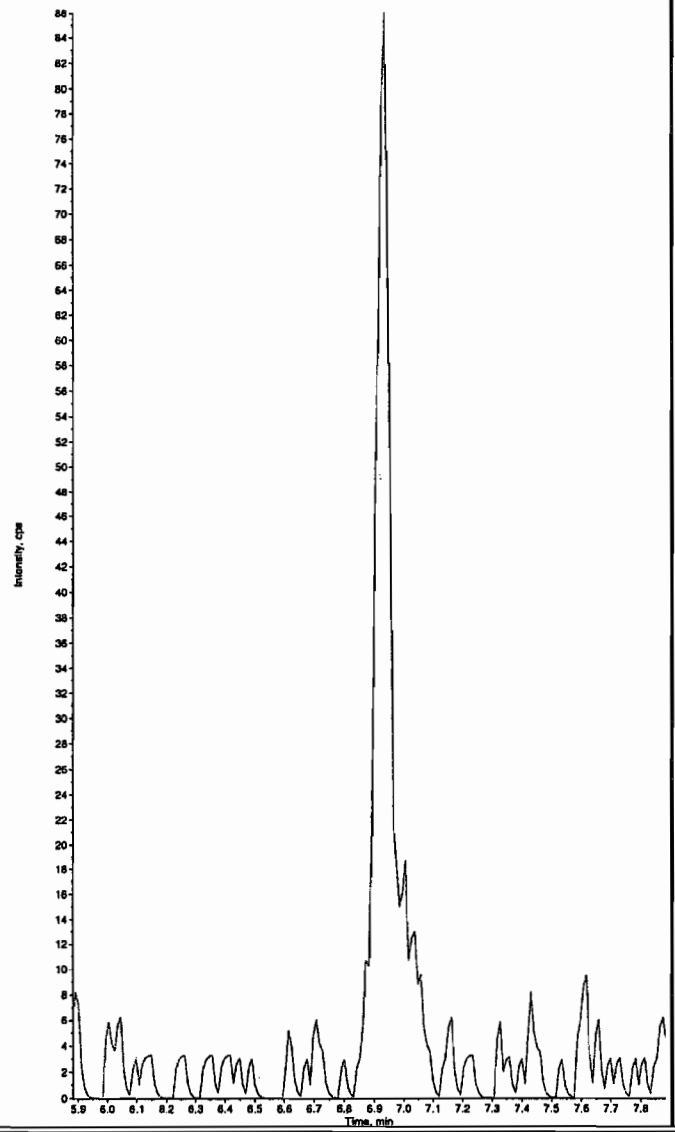
Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4–Dinitrotoluene	0	0
tris(o–cresyl) phosphate	0	6.58
TATB	0	0
3,5–Dinitroaniline	0	0
2,4–Diamino–6–nitrotoluene	0	0
2,6–Diamino–4–nitrotoluene	0	0

Lar 4/7/10

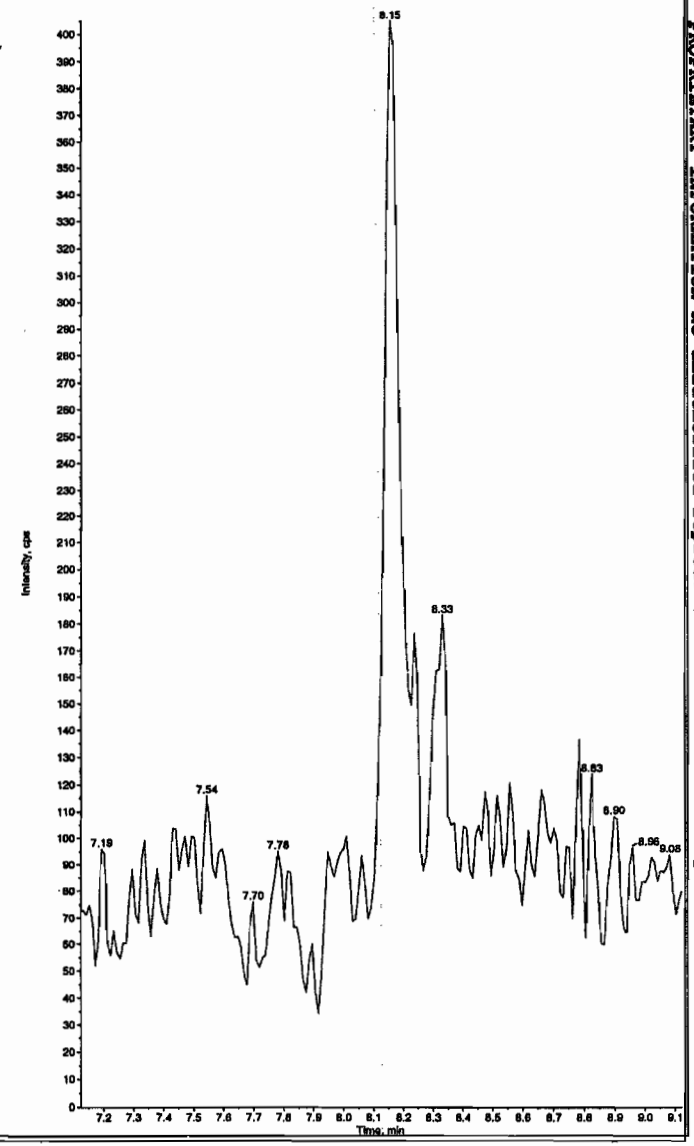
ample Name: "XIBLK06" Sample ID: "[1]LER" File: "EXS04020041.wiff"
eak Name: "TATB" Mass(es): "257.2/204.9 amu"
omment: "LCMSEXP_B" Annotation: ""
ple Index: 1
ple Type: Unknown
centration: N/A
culated Conc: 0.00 ng/mL
. Date: 4/3/2010
. Time: 12:55:56 AM

ified: No



Sample Name: "XIBLK06" Sample ID: "[1]LER" File: "EXS04020041.wiff"
Peak Name: "35-Dinitroaniline" Mass(es): "182.0/46.0 amu"
Comment: "LCMSEXP_B" Annotation: ""
Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 4/3/2010
Acq. Time: 12:55:56 AM

Modified: No



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EL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

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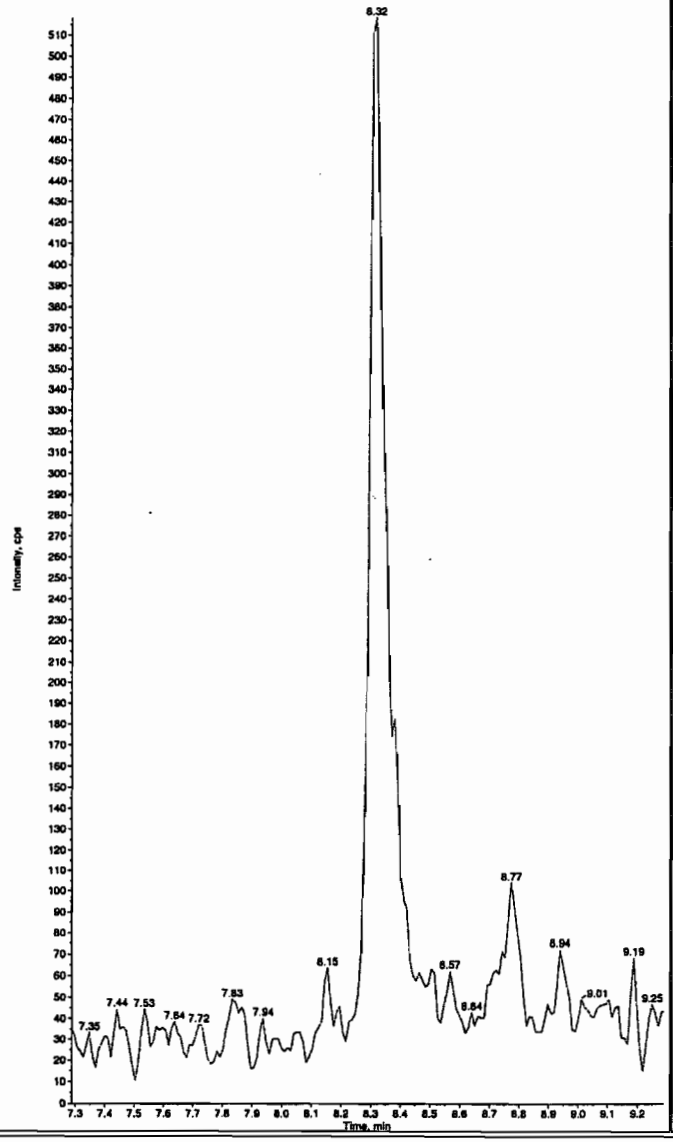
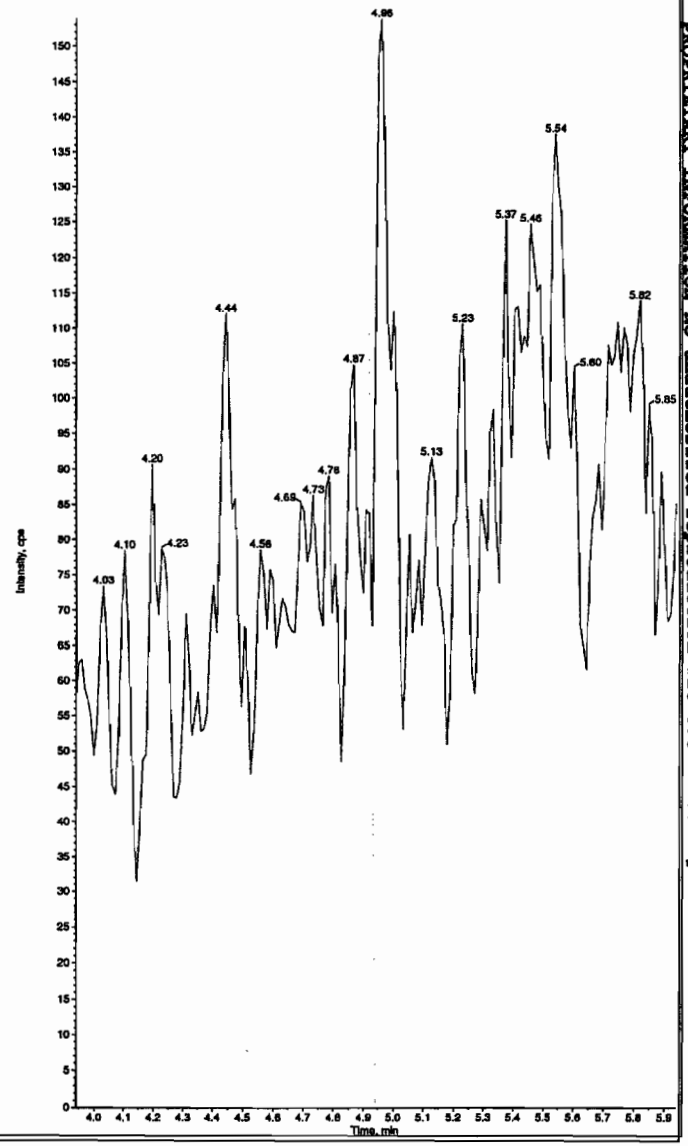
Sample Name: "XIBLK06" Sample ID: "|1|LER" File: "EXS04020041.wiff"
Peak Name: "34-Dinitrotoluene" Mass(es): "182.1/151.9 amu"
Comment: "LCMSEXP_B" Annotation: ""
Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 4/3/2010
Acq. Time: 12:55:56 AM

Modified: No



Sample Name: "XIBLK06" Sample ID: "|1|LER" File: "EXS04020041.wiff"
Peak Name: "26-Diamino-4-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: 4/3/2010
Acq. Time: 12:55:56 AM

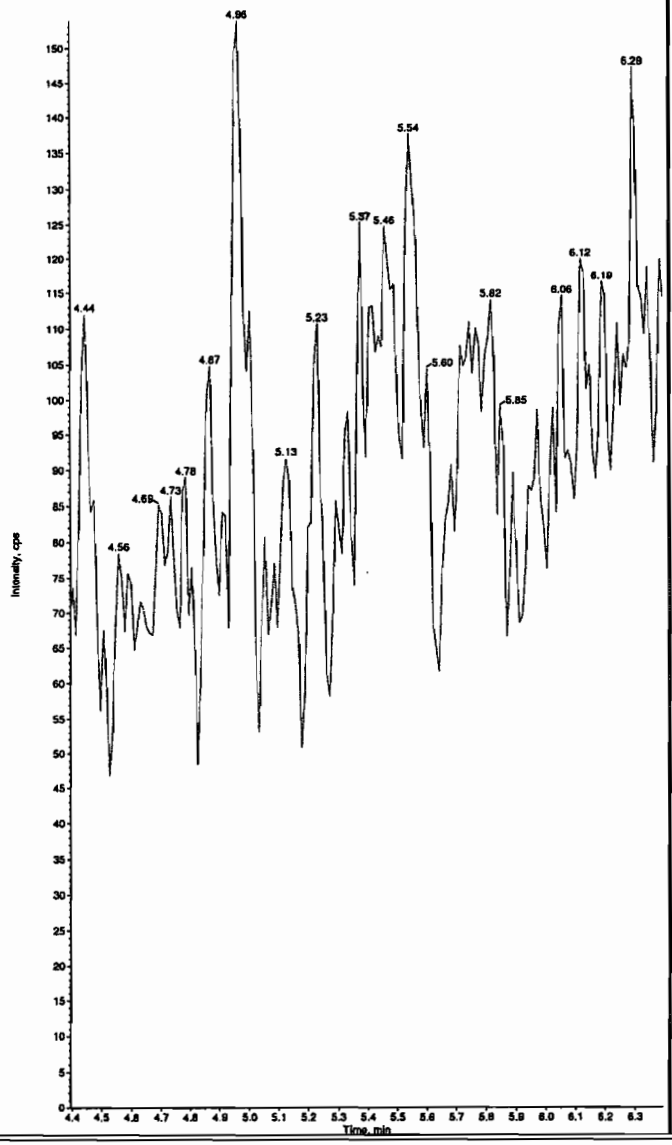
Modified: No



EL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

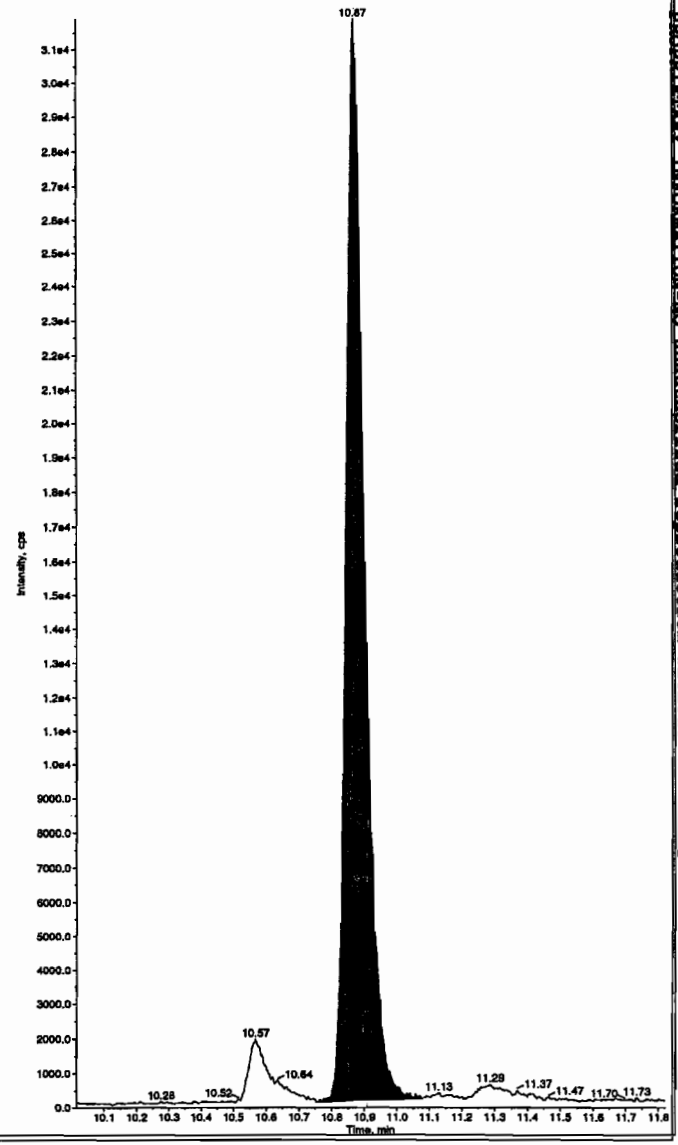
Sample Name: "XIBLK06" Sample ID: "[1]LER" File: "EXS04020041.wiff"
Peak Name: "24-Diamino-6-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_B" Annotation: ""

Sample Index:	1
Sample Type:	Unknown
Concentration:	N/A
Calculated Conc:	0.00 ng/mL
Acq. Date:	4/3/2010
Acq. Time:	12:55:56 AM
Modified:	No



Sample Name: "XIBLK06" Sample ID: "[1]LER" File: "EXS04020041.wiff"
Peak Name: "tris(o-cresyl) phosphate" Mass(es): "369.1/91.0 amu"
Comment: "LCMSEXP_B" Annotation: ""

Sample Index:	1
Sample Type:	Unknown
Concentration:	N/A
Calculated Conc:	6.58 ng/mL
Acq. Date:	4/3/2010
Acq. Time:	12:55:56 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:	10.8 min
Use Relative RT:	No
Int. Type:	Valley
Retention Time:	10.9 min
Area:	1.31e+005 counts
Height:	31708.757 cps
Start Time:	10.8 min
End Time:	11.1 min



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4A
Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10–2089

Lab Code: GEL

Lab Sample ID: XIBLK07

Analysis Date: 03–APR–10 03:33

GEL Data File: EXS04020051.wiff

Instrument ID: LCMSMS

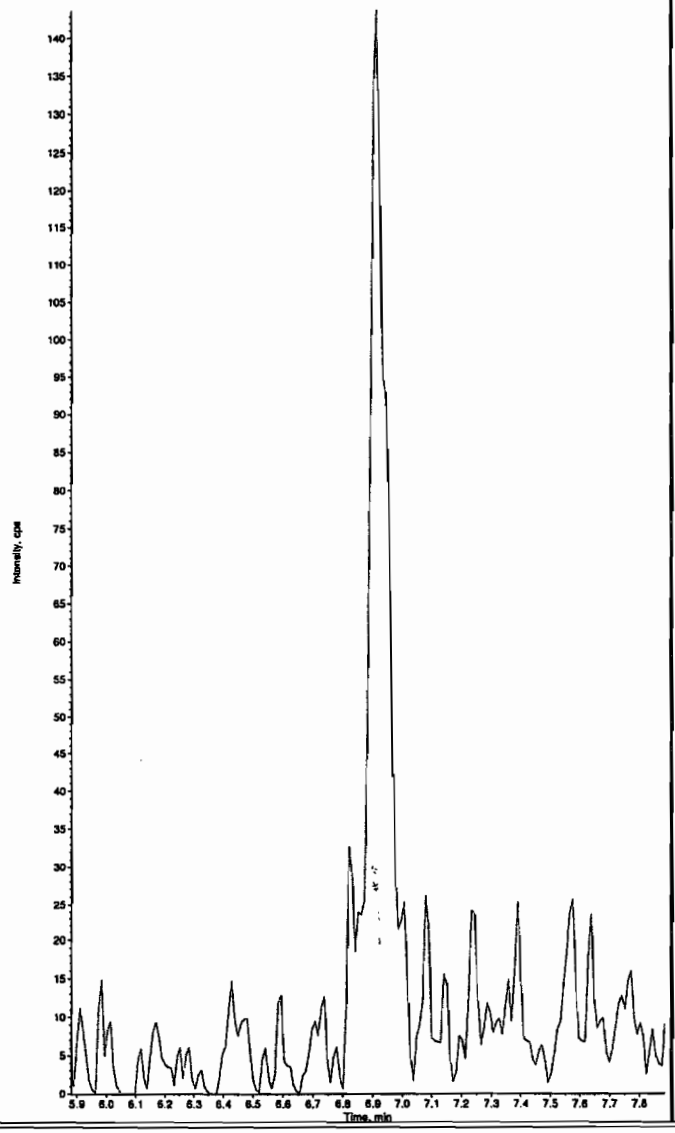
Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4–Dinitrotoluene	0	0
tris(o–cresyl) phosphate	0	9.09
TATB	0	0
3,5–Dinitroaniline	0	0
2,4–Diamino–6–nitrotoluene	0	0
2,6–Diamino–4–nitrotoluene	0	0

LCLR 4/7/10

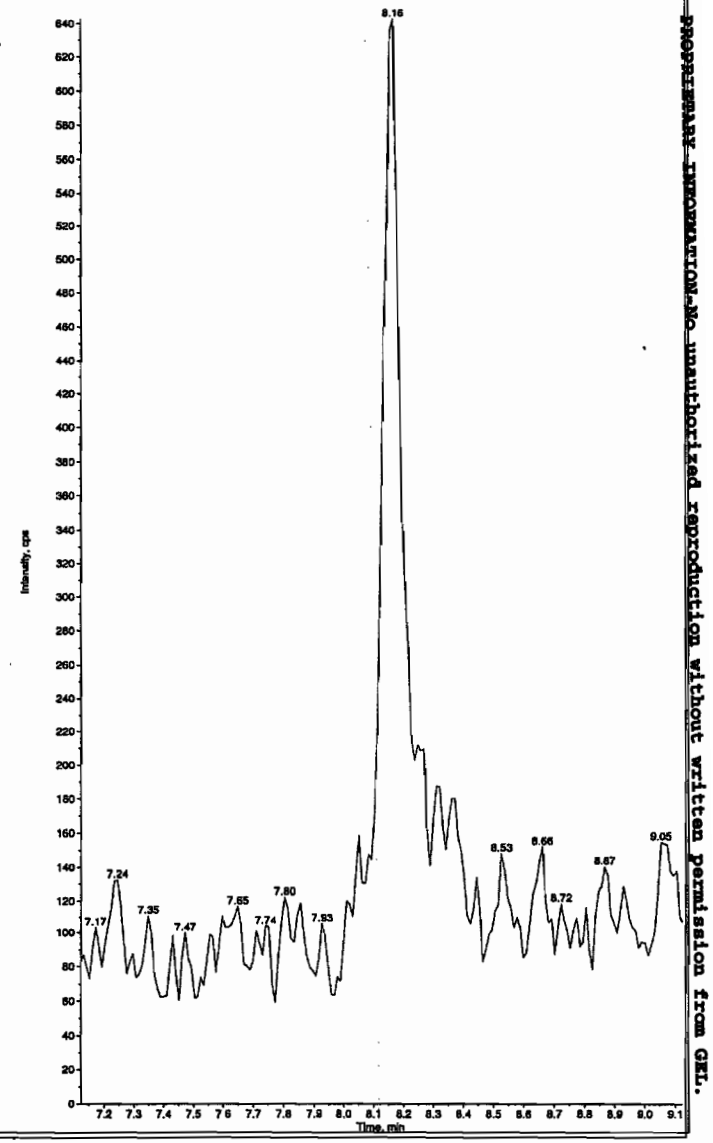
Sample Name: "XIBLK07" Sample ID: "|1|LER" File: "EXS04020051.wiff"
Peak Name: "TATB" Mass(es): "257.2/204.9 amu"
Comment: "LCMSEXP_B" Annotation: ""
mple Index: 1
mple Type: Unknown
ncentration: N/A
lculated Conc: 0.00 ng/mL
q. Date: 4/3/2010
q. Time: 3:33:05 AM

dified: No



Sample Name: "XIBLK07" Sample ID: "|1|LER" File: "EXS04020051.wiff"
Peak Name: "35-Dinitroaniline" Mass(es): "182.0/46.0 amu"
Comment: "LCMSEXP_B" Annotation: ""
Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 4/3/2010
Acq. Time: 3:33:05 AM

Modified: No



HLM 04/08/10

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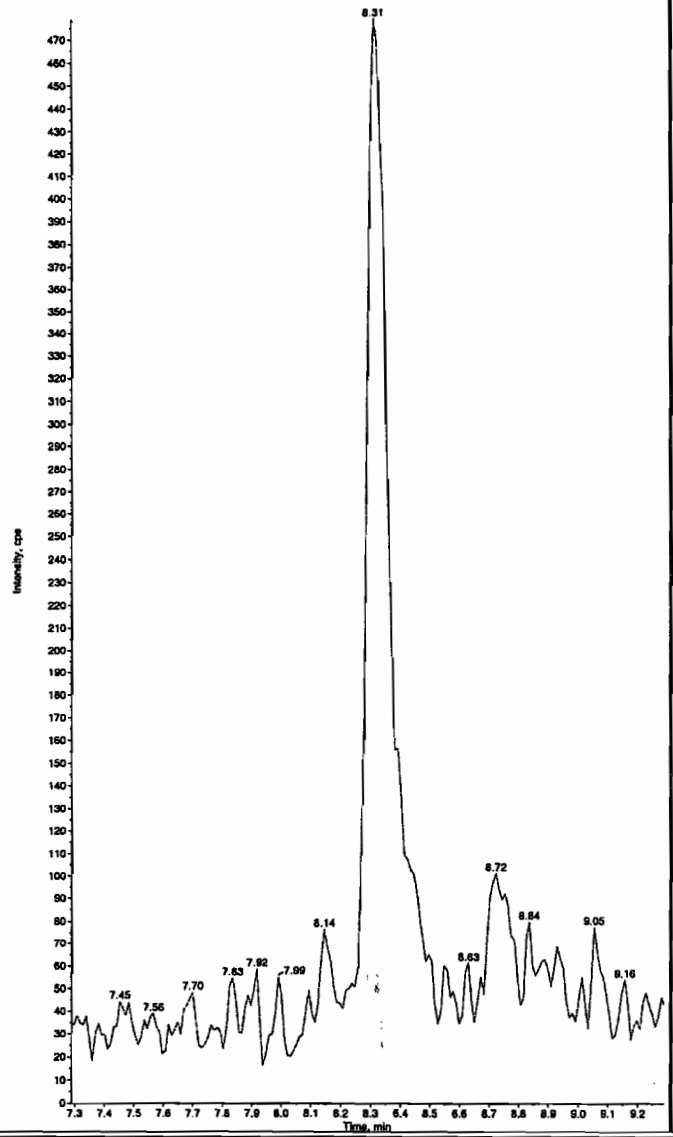
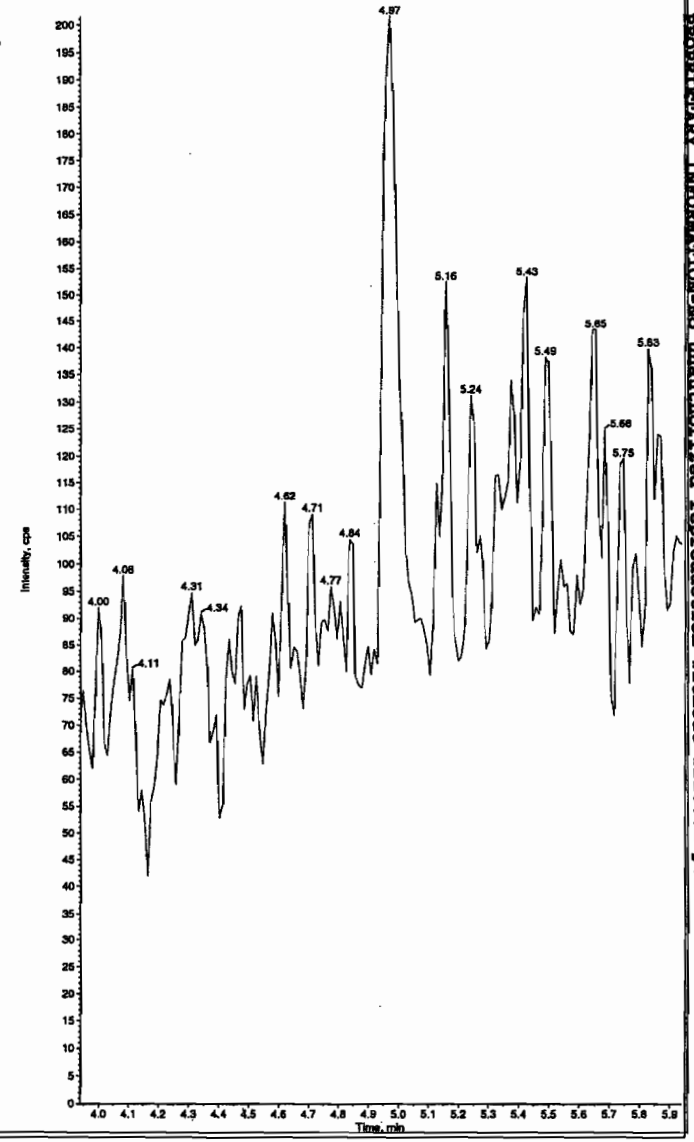
Sample Name: "XIBLK07" Sample ID: "[1]LER" File: "EXS04020051.wiff"
Peak Name: "34-Dinitrotoluene" Mass(es): "182.1/151.9 amu"
Comment: "LCMSEXP_B" Annotation: ""
mple Index: 1
mple Type: Unknown
ncentration: N/A
lculated Conc: 0.00 ng/mL
q. Date: 4/3/2010
q. Time: 3:33:05 AM

dified: No



Sample Name: "XIBLK07" Sample ID: "[1]LER" File: "EXS04020051.wiff"
Peak Name: "26-Diamino-4-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: 4/3/2010
Acq. Time: 3:33:05 AM

Modified: No



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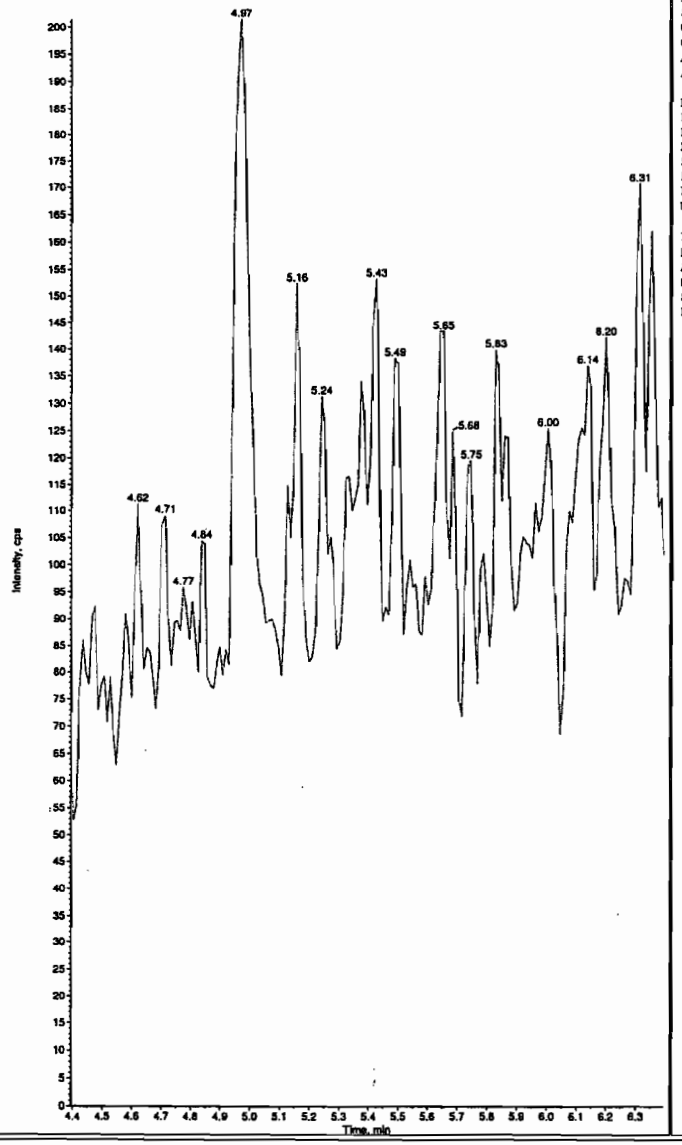
PROPRIETARY INFORMATION-No unauthorized reproduction without written permission from GEL.

Sample Name: "XIBLK07" Sample ID: "[1]LER" File: "EXS04020051.wiff"
Peak Name: "24-Diamino-6-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_8" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 4/3/2010
Acq. Time: 3:33:05 AM

Modified: No

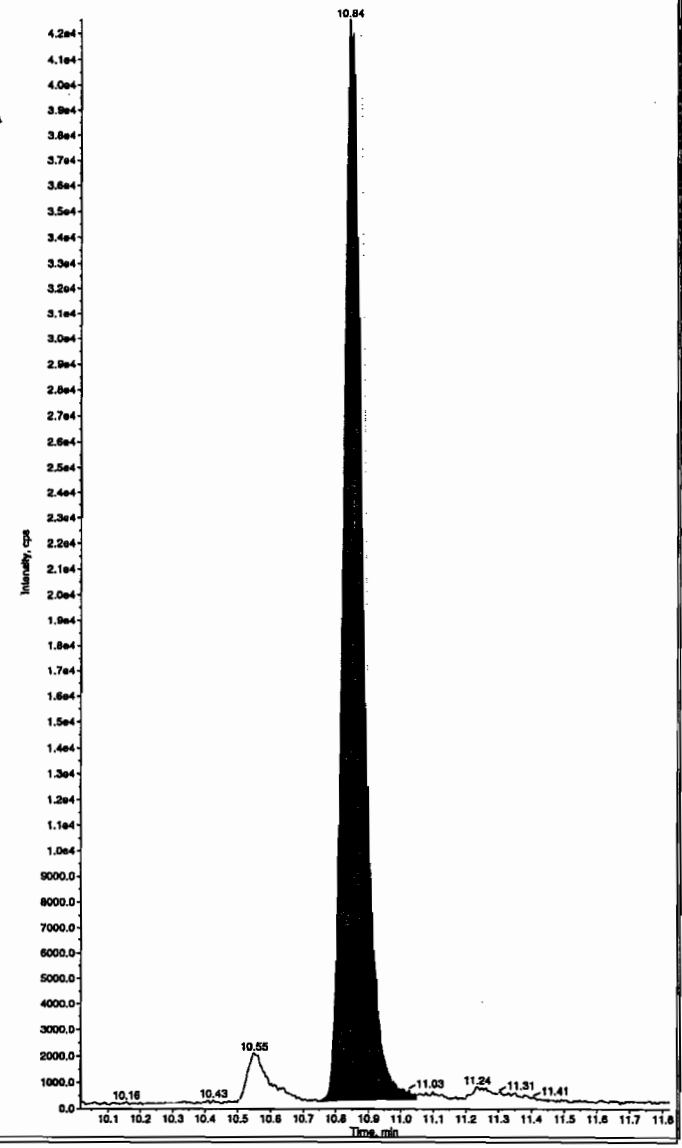


Sample Name: "XIBLK07" Sample ID: "[1]LER" File: "EXS04020051.wiff"
Peak Name: "tris(o-cresyl) phosphate" Mass(es): "369.1/91.0 amu"
Comment: "LCMSEXP_8" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 9.09 ng/mL
Acq. Date: 4/3/2010
Acq. Time: 3:33:05 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: 10.8 min
Use Relative RT: No

Int. Type: Valley
Retention Time: 10.8 min
Area: 1.80e+005 counts
Height: 42241.398 cps
Start Time: 10.8 min
End Time: 11.0 min



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4A
Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10–2089

Lab Code: GEL

Lab Sample ID: XIBLK08

Analysis Date: 03–APR–10 06:57

GEL Data File: EXS04020064.wiff

Instrument ID: LCMSMS

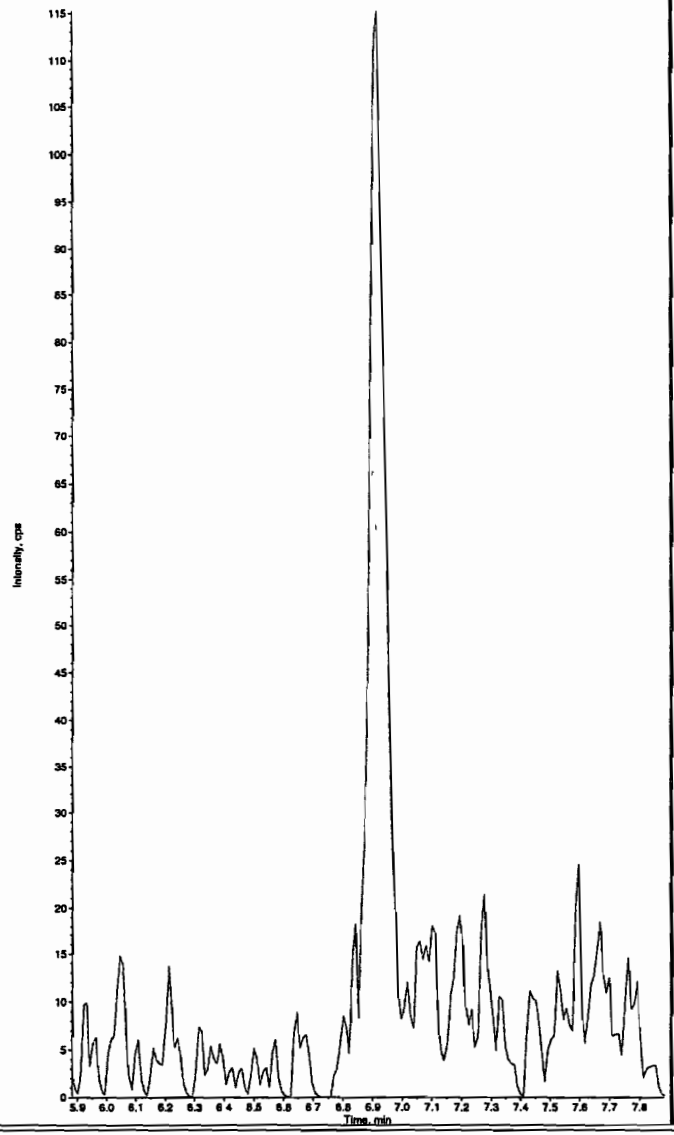
Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4–Dinitrotoluene	0	0
tris(o–cresyl) phosphate	0	8.71
TATB	0	0
3,5–Dinitroaniline	0	0
2,4–Diamino–6–nitrotoluene	0	0
2,6–Diamino–4–nitrotoluene	0	0

Scan 4/7/10

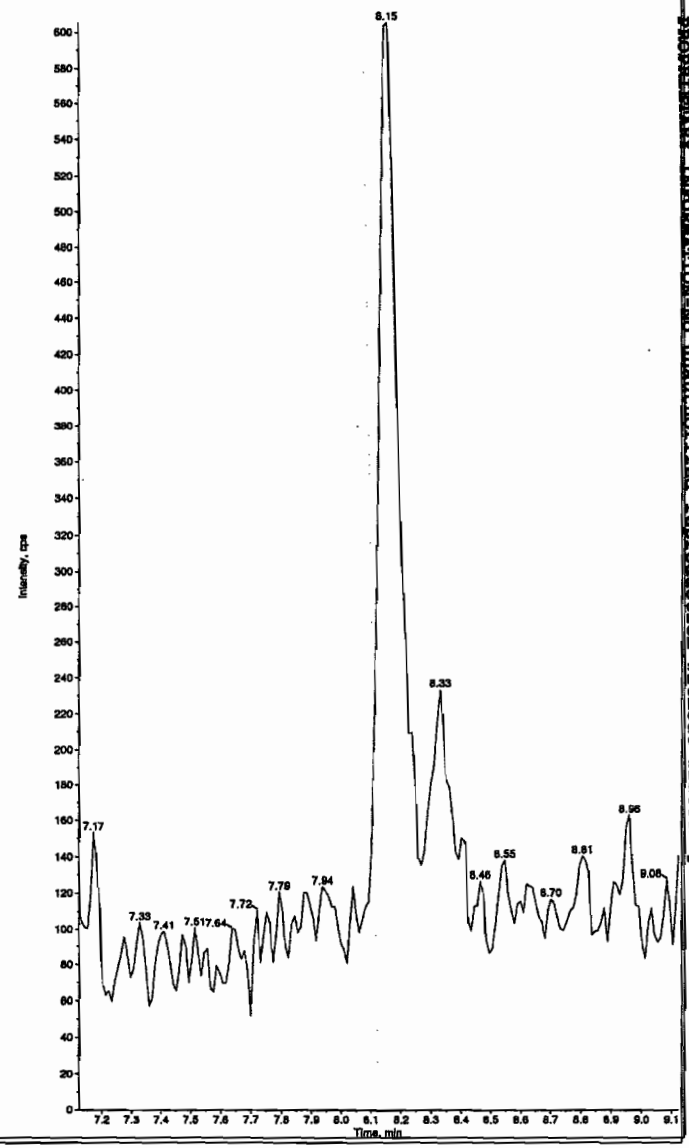
Sample Name: "XIBLK08" Sample ID: "[1]LER" File: "EXS04020064.wiff"
Peak Name: "TATB" Mass(es): "257.2/204.9 amu"
Comment: "LCMSEXP_B" Annotation: ""
mple Index: 1
mple Type: Unknown
ncentration: N/A
lculated Conc: 0.00 ng/mL
q. Date: 4/3/2010
q. Time: 6:57:23 AM

dified: No



Sample Name: "XIBLK08" Sample ID: "[1]LER" File: "EXS04020064.wiff"
Peak Name: "35-Dinitroaniline" Mass(es): "182.0/46.0 amu"
Comment: "LCMSEXP_B" Annotation: ""
Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 4/3/2010
Acq. Time: 6:57:23 AM

Modified: No



4/7/10 04/08/10

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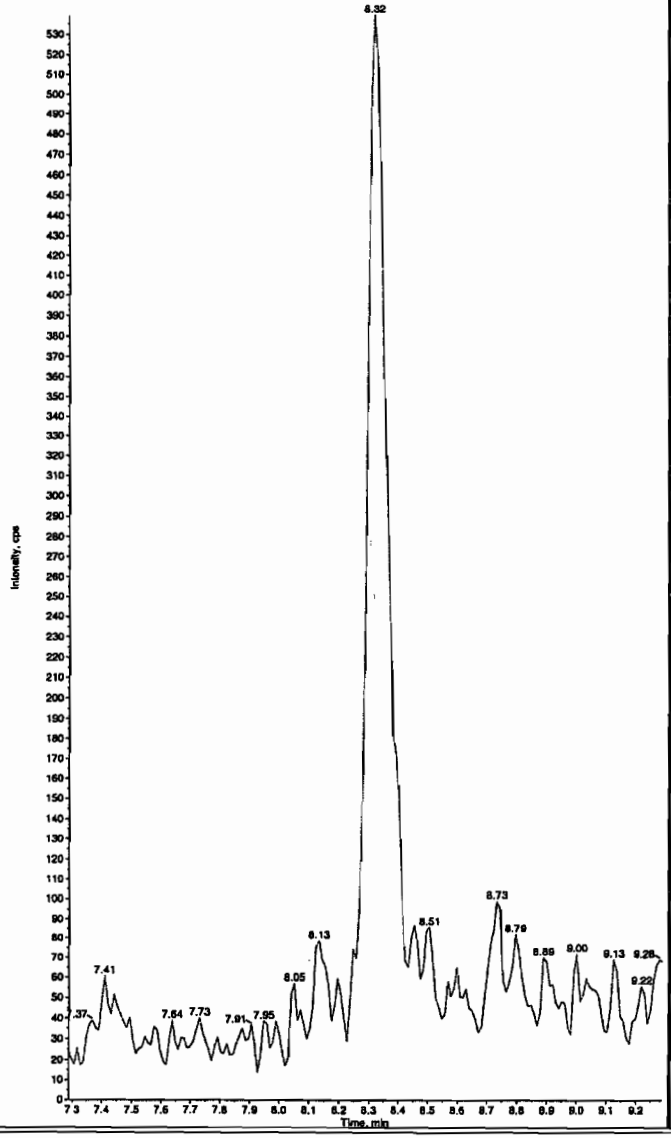
Sample Name: "XIBLK06" Sample ID: "[1]LER" File: "EXS04020064.wiff"
Peak Name: "34-Dinitrotoluene" Mass(es): "182.1/151.9 amu"
Comment: "LCMSEXP_B" Annotation: ""

mple Index: 1
mple Type: Unknown
ncentration: N/A
lculated Conc: 0.00 ng/mL
q. Date: 4/3/2010
q. Time: 6:57:23 AM

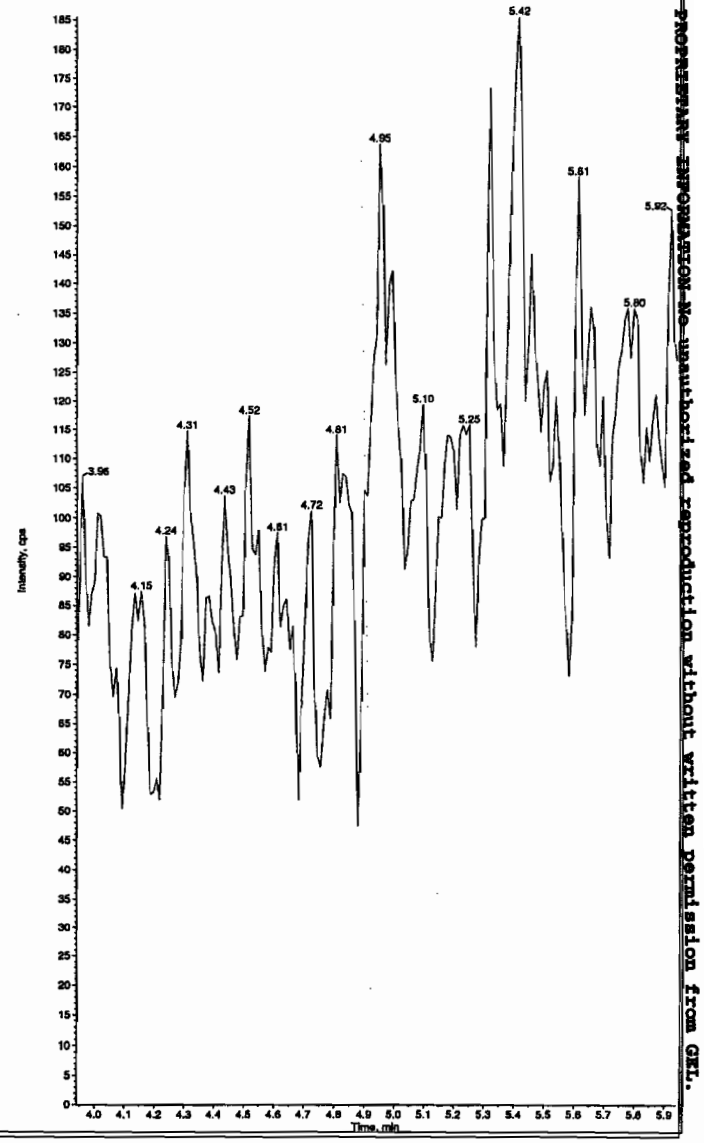
dified: No



Sample Name: "XIBLK06" Sample ID: "[1]LER" File: "EXS04020064.wiff"
Peak Name: "26-Diamino-4-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: 4/3/2010
Acq. Time: 6:57:23 AM

Modified: No



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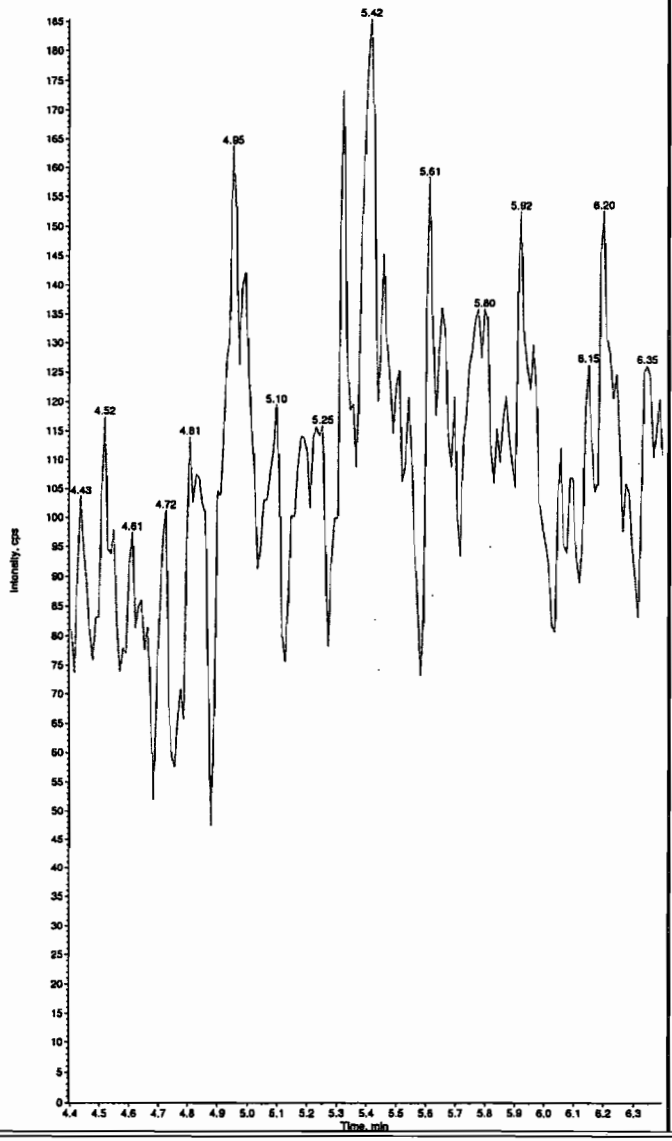
PROPRIETARY INFORMATION-No unauthorized reproduction without written permission from GEL.

ample Name: "XIBLK08" Sample ID: "[1]LER" File: "EXS04020064.wiff"
eak Name: "24-Diamino-6-nitrotoluene" Mass(es): "166.0/46.0 amu"
omment: "LCMSEXP_B" Annotation: ""
ple Index: 1
ple Type: Unknown
centration: N/A
culated Conc: 0.00 ng/mL
. Date: 4/3/2010
. Time: 6:57:23 AM

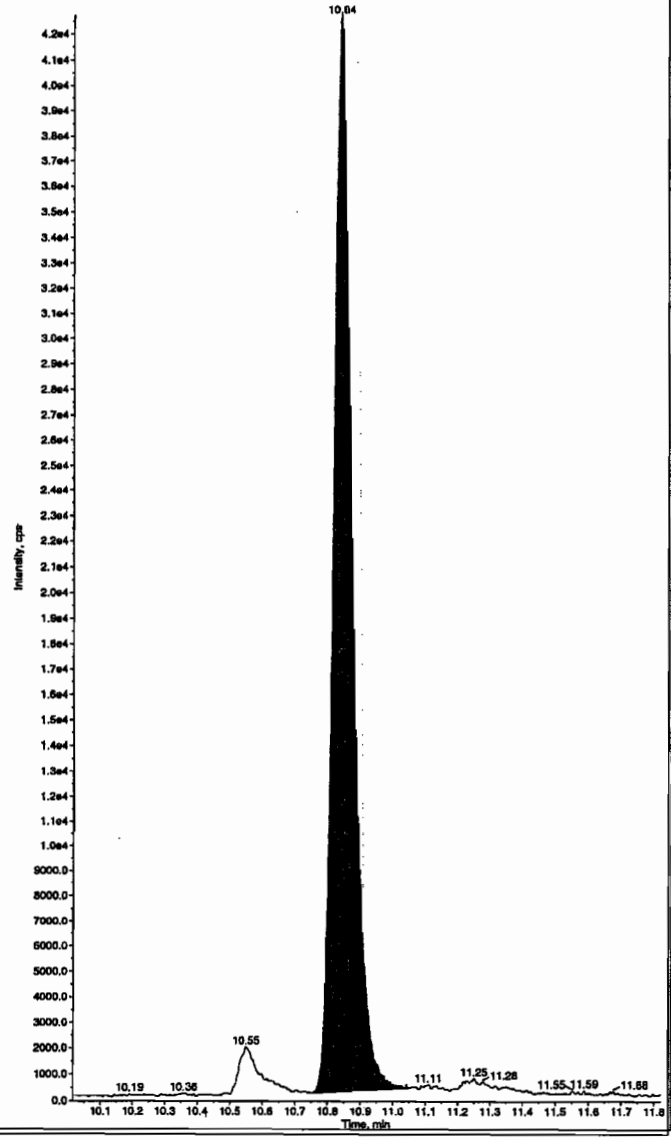
ified: No



Sample Name: "XIBLK08" Sample ID: "[1]LER" File: "EXS04020064.wiff"
Peak Name: "tris(o-cresyl) phosphate" Mass(es): "369.1/91.0 amu"
Comment: "LCMSEXP_B" Annotation: ""
Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 8.71 ng/mL
Acq. Date: 4/3/2010
Acq. Time: 6:57:23 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: 10.8 min
Use Relative RT: No

Int. Type: Valley
Retention Time: 10.8 min
Area: 1.73e+005 counts
Height: 42386.845 cps
Start Time: 10.8 min
End Time: 11.0 min



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4A
Explosives Continuing Calibration Blank

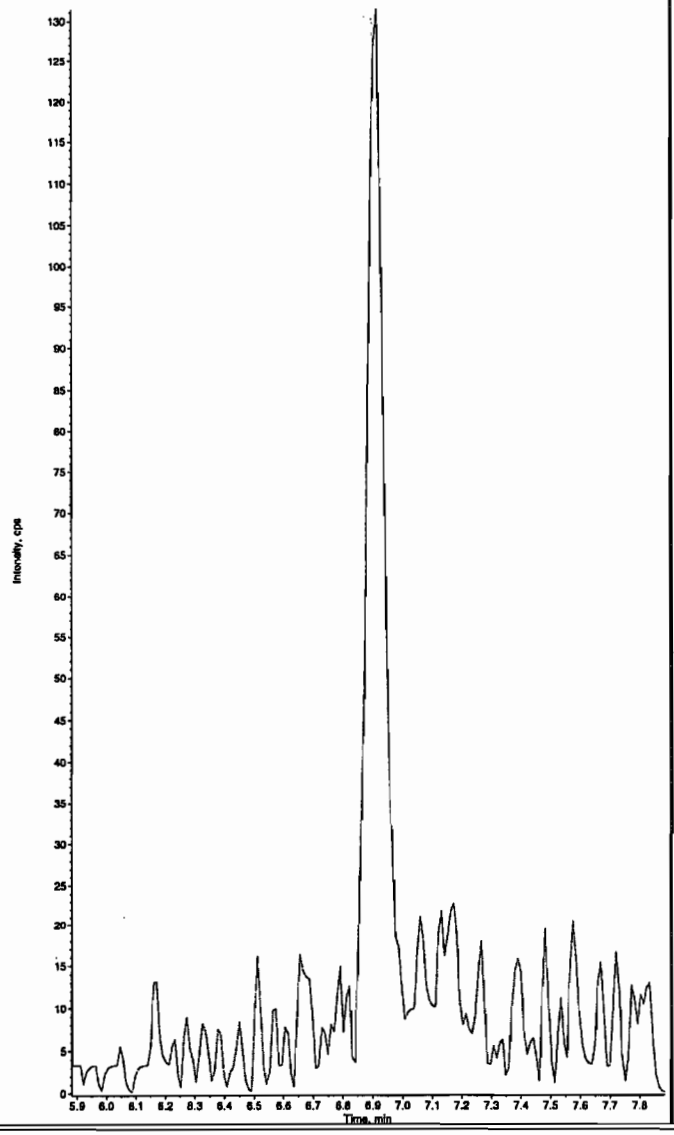
Lab Name: GEL Laboratories LLC
GEL Job No(SDG): 10–2089
Lab Code: GEL
Lab Sample ID: XIBLK09
Analysis Date: 03–APR–10 09:03
GEL Data File: EXS04020072.wiff
Instrument ID: LCMSMS
Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4–Dinitrotoluene	0	0
tris(o–cresyl) phosphate	0	9.45
TATB	0	0
3,5–Dinitroaniline	0	0
2,4–Diamino–6–nitrotoluene	0	0
2,6–Diamino–4–nitrotoluene	0	0

Dan 4/7/10

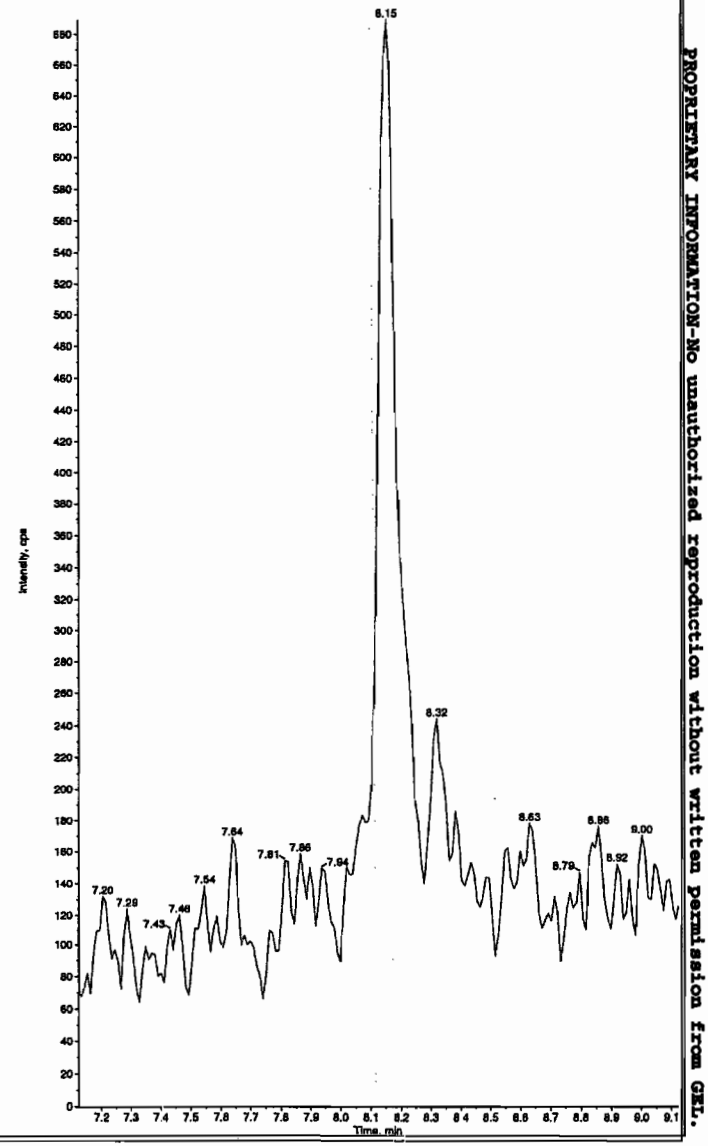
ample Name: "XIBLK09" Sample ID: "[1]LER" File: "EXS04020072.wiff"
eak Name: "TATB" Mass(es): "257.2/204.9 amu"
omment: "LCMSEXP_B" Annotation: ""
ple Index: 1
ple Type: Unknown
centration: N/A
culated Conc: 0.00 ng/mL
. Date: 4/3/2010
. Time: 9:03:06 AM

ified: No



Sample Name: "XIBLK09" Sample ID: "[1]LER" File: "EXS04020072.wiff"
Peak Name: "35-Dinitroaniline" Mass(es): "182.0/46.0 amu"
Comment: "LCMSEXP_B" Annotation: ""
Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 4/3/2010
Acq. Time: 9:03:06 AM

Modified: No



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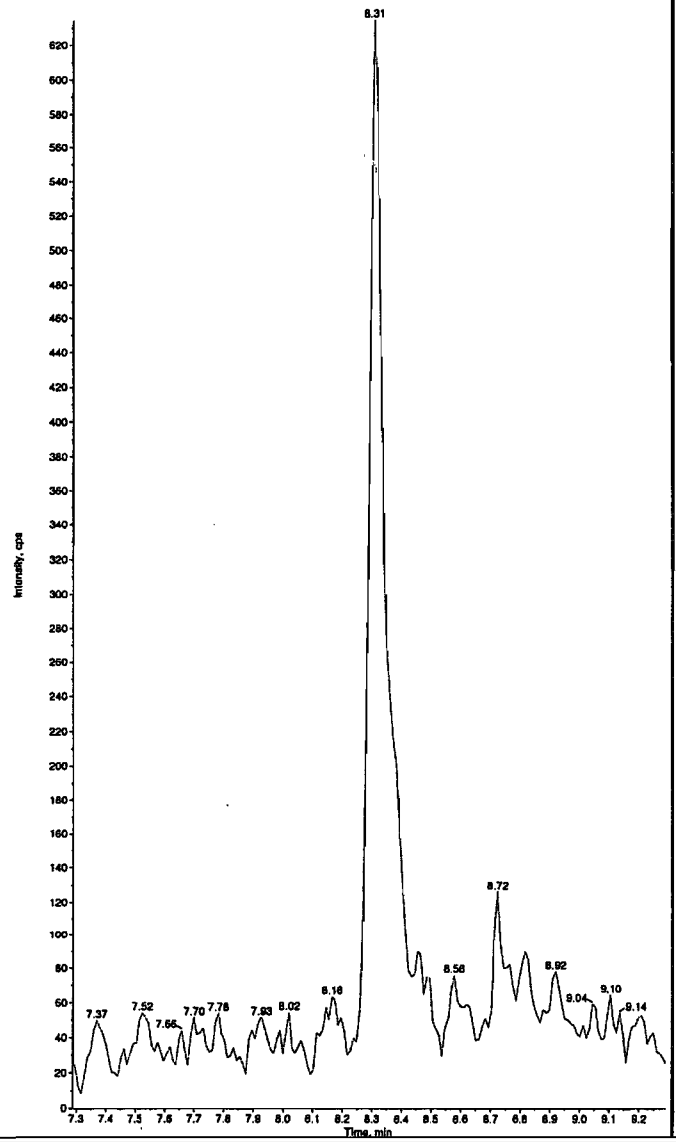
EL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

PROPRIETARY INFORMATION-No unauthorized reproduction without written permission from GEL.

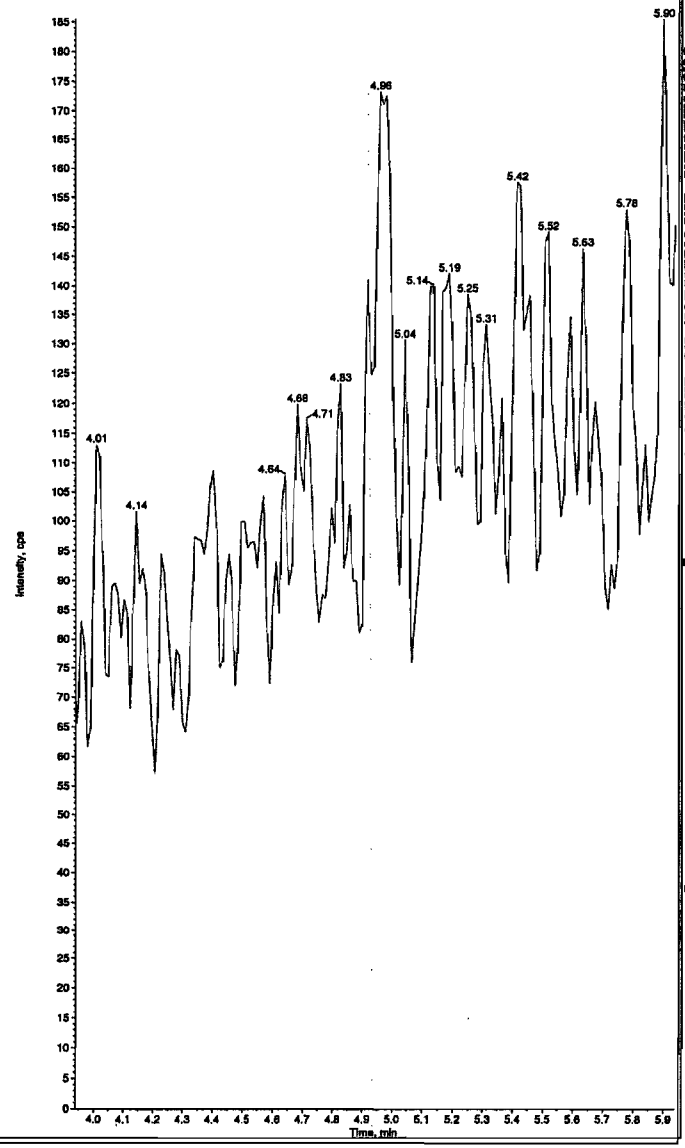
PROPRIETARY INFORMATION-No unauthorized reproduction without written permission from GEL.

ample Name: "XIBLK09" Sample ID: "|1|LER" File: "EXS04020072.wiff"
eak Name: "34-Dinitrotoluene" Mass(es): "182.1/151.9 amu"
omment: "LCMSEXP_B" Annotation: ""
ple Index: 1
ple Type: Unknown
centration: N/A
culated Conc: 0.00 ng/mL
. Date: 4/3/2010
. Time: 9:03:06 AM
ified: No



Sample Name: "XIBLK09" Sample ID: "|1|LER" File: "EXS04020072.wiff"
Peak Name: "26-Diamino-4-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: 4/3/2010
Acq. Time: 9:03:06 AM

Modified: No

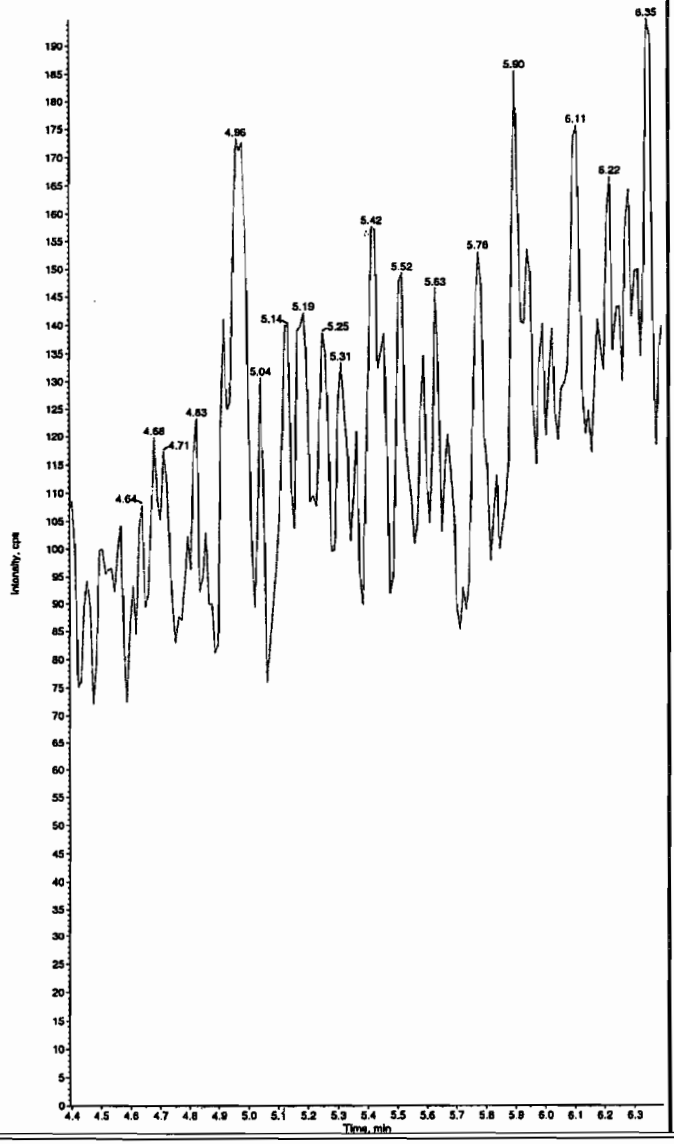


EL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

PROPRIETARY INFORMATION-No unauthorized reproduction without written permission from GEL.

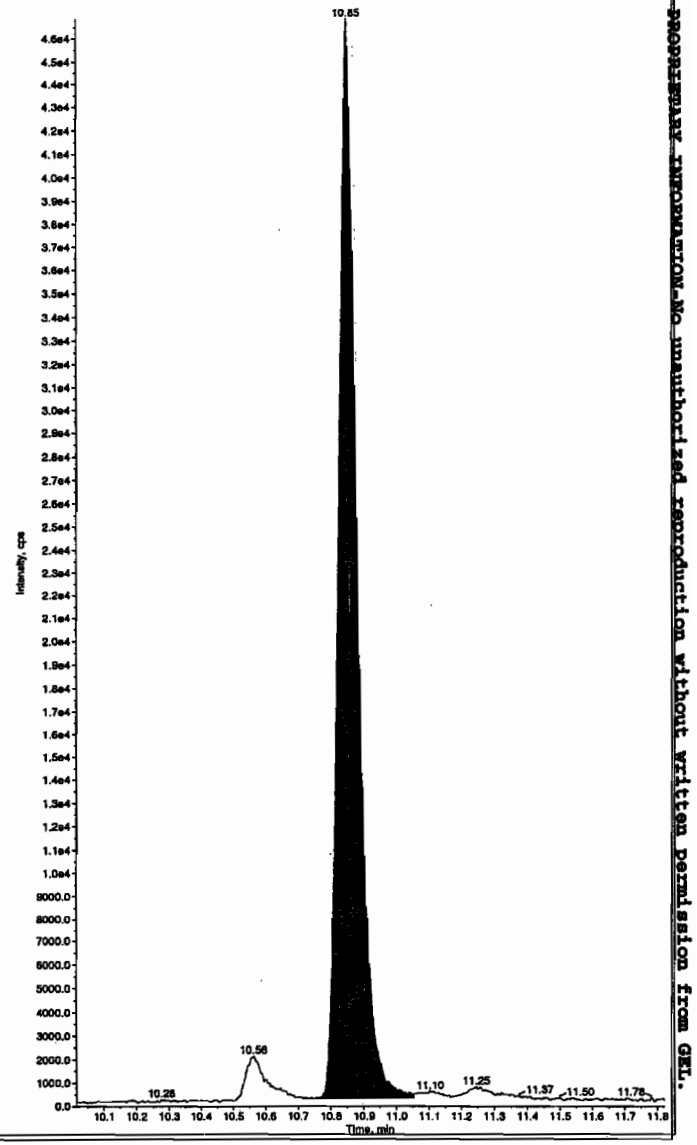
Sample Name: "XIBLK09" Sample ID: "[1]LER" File: "EXS04020072.wiff"
Peak Name: "24-Diamino-6-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_B" Annotation: ""

ample Index:	1
ample Type:	Unknown
ncentration:	N/A
lculated Conc:	0.00 ng/mL
q. Date:	4/3/2010
q. Time:	9:03:06 AM
dified:	No



Sample Name: "XIBLK09" Sample ID: "[1]LER" File: "EXS04020072.wiff"
Peak Name: "tris(o-cresyl) phosphate" Mass(es): "369.1/91.0 amu"
Comment: "LCMSEXP_B" Annotation: ""

Sample Index:	1
Sample Type:	Unknown
Concentration:	N/A
Calculated Conc:	9.45 ng/mL
Acq. Date:	4/3/2010
Acq. Time:	9:03:06 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:	10.8 min
Use Relative RT:	No
Int. Type:	Valley
Retention Time:	10.8 min
Area:	1.87e+005 counts
Height:	46567.600 cps
Start Time:	10.7 min
End Time:	11.1 min



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4A
Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC
GEL Job No(SDG): 10–2089
Lab Code: GEL
Lab Sample ID: XIBLK09
Analysis Date: 03–APR–10 12:27
GEL Data File: EXS04020085.wiff
Instrument ID: LCMSMS
Column: Phenomenex Ultracarb 5u ODS(20)

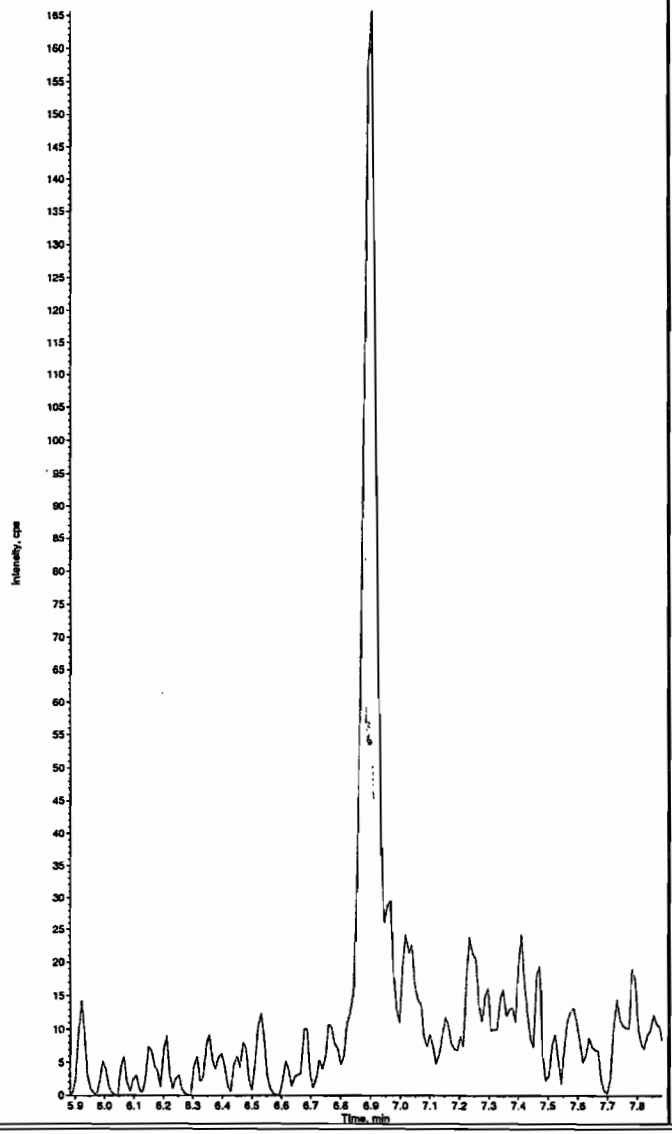
Compound	True	Found (ug/L)
3,4–Dinitrotoluene	0	0
tris(o–cresyl) phosphate	0	8.65
TATB	0	0
3,5–Dinitroaniline	0	0
2,4–Diamino–6–nitrotoluene	0	0
2,6–Diamino–4–nitrotoluene	0	0

LCW 4/7/10

Sample Name: "XIBLK09" Sample ID: "|1|LER" File: "EXS04020085.wiff"
Peak Name: "TATB" Mass(as): "257.2/204.9 amu"
Comment: "LCMSEXP_B" Annotation: ""

mple Index: 1
mple Type: Unknown
ncentration: N/A
lculated Conc: 0.00 ng/mL
q. Date: 4/3/2010
q. Time: 12:27:11 PM

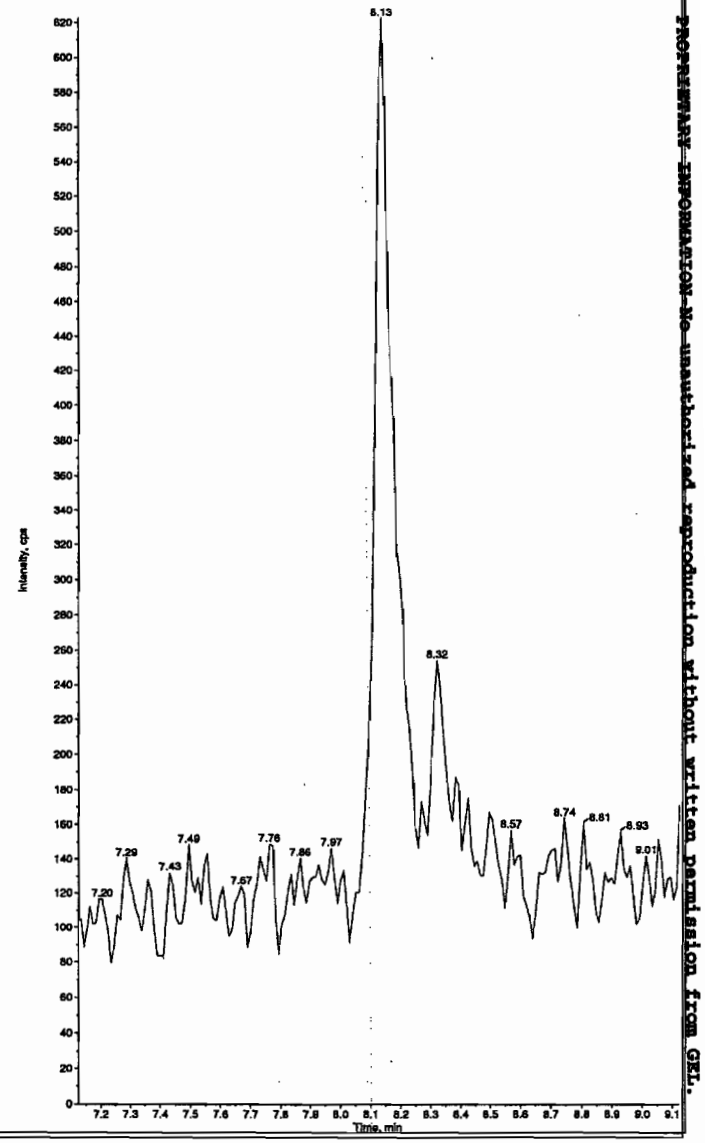
dified: No



Sample Name: "XIBLK09" Sample ID: "|1|LER" File: "EXS04020085.wiff"
Peak Name: "35-Dinitroaniline" Mass(es): "182.0/46.0 amu"
Comment: "LCMSEXP_B" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 4/3/2010
Acq. Time: 12:27:11 PM

Modified: No

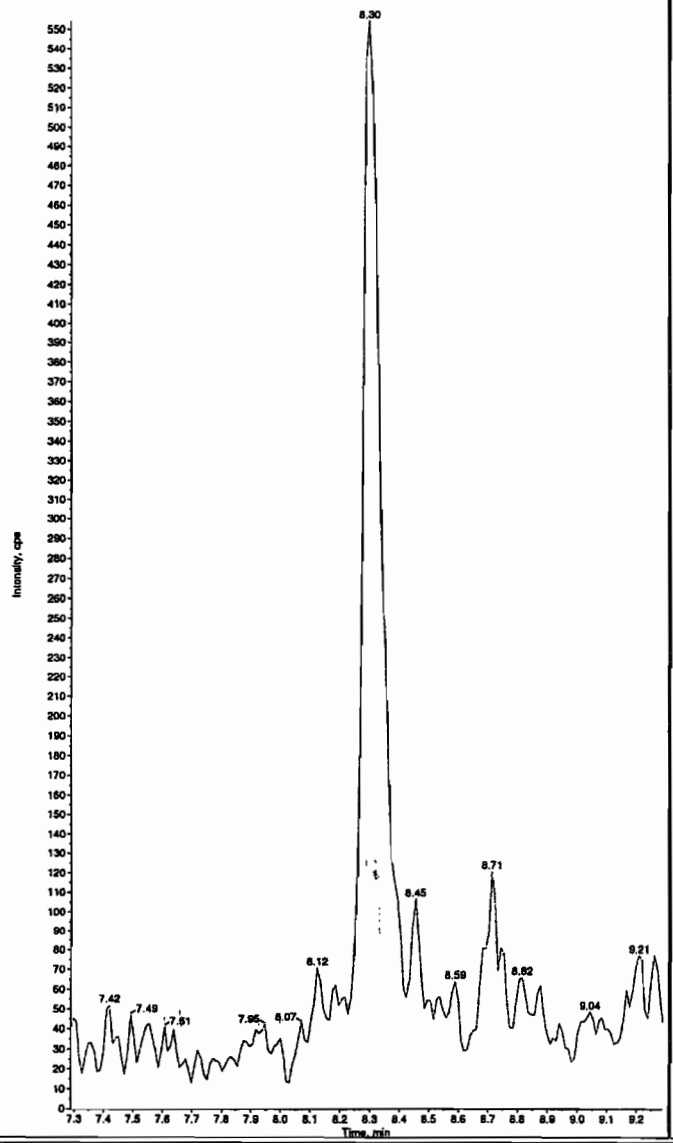


HMM 04/08/10

PROPRIETARY INFORMATION-No unauthorized reproduction without written permission from GEL.

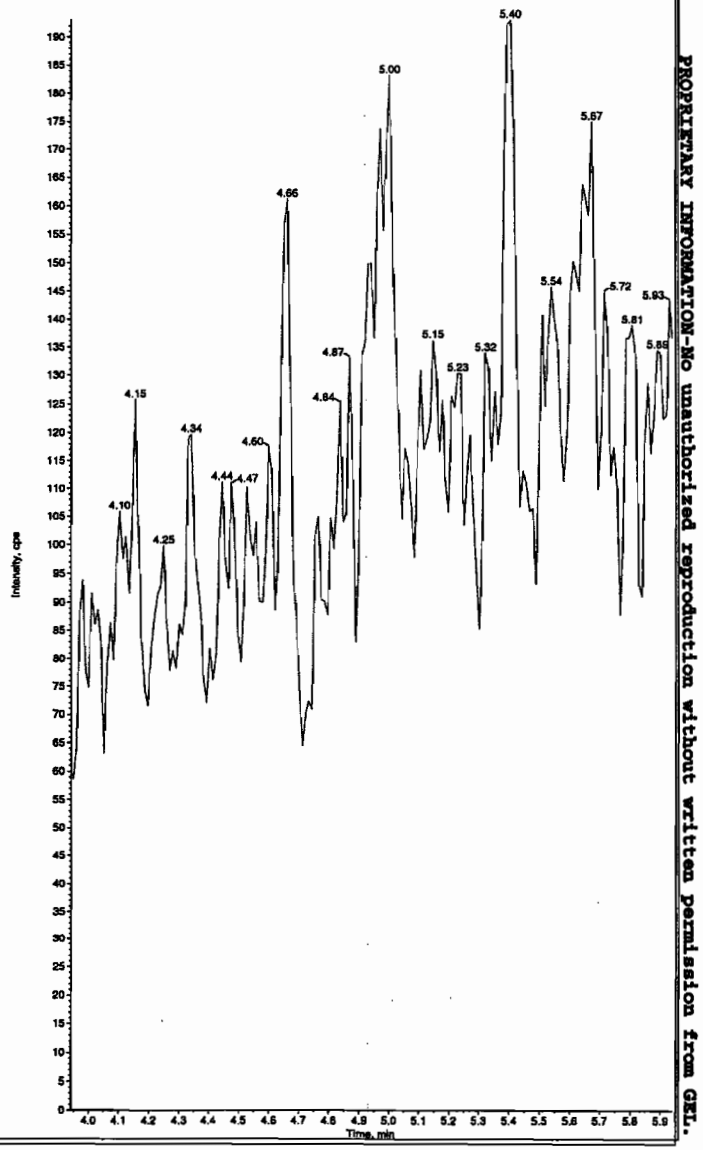
ample Name: "XIBLK09" Sample ID: "[1]LER" File: "EXS04020085.wiff"
eak Name: "34-Dinitrotoluene" Mass(es): "182.1/151.9 amu"
omment: "LCMSEXP_8" Annotation: ""
ple Index: 1
ple Type: Unknown
centration: N/A
culated Conc: 0.00 ng/mL
. Date: 4/3/2010
. Time: 12:27:11 PM

ified: No



Sample Name: "XIBLK09" Sample ID: "[1]LER" File: "EXS04020085.wiff"
Peak Name: "26-Diamino-4-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_8" Annotation: ""
Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 4/3/2010
Acq. Time: 12:27:11 PM

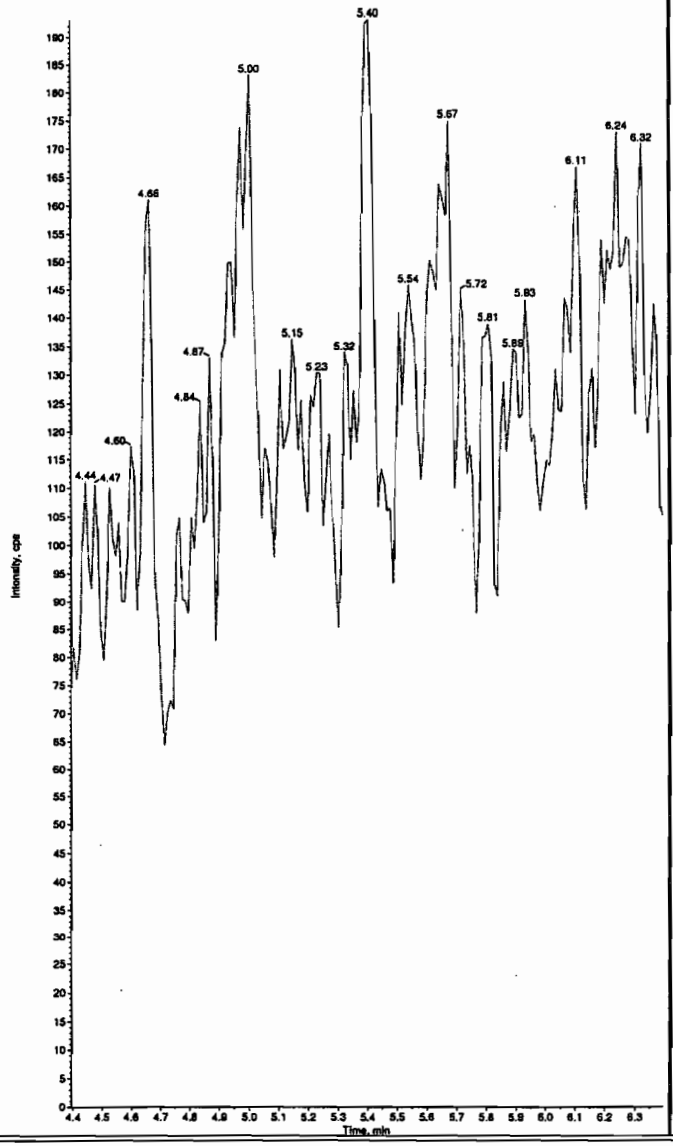
Modified: No



PROPRIETARY INFORMATION-No unauthorized reproduction without written permission from GEL.

ample Name: "XIBLK09" Sample ID: "|1|LER" File: "EXS04020085.wiff"
eak Name: "24-Diamino-6-nitrotoluene" Mass(es): "166.0/46.0 amu"
omment: "LCMSEXP_B" Annotation: ""
ple Index: 1
ple Type: Unknown
centration: N/A
culated Conc: 0.00 ng/mL
. Date: 4/3/2010
. Time: 12:27:11 PM

ified: No

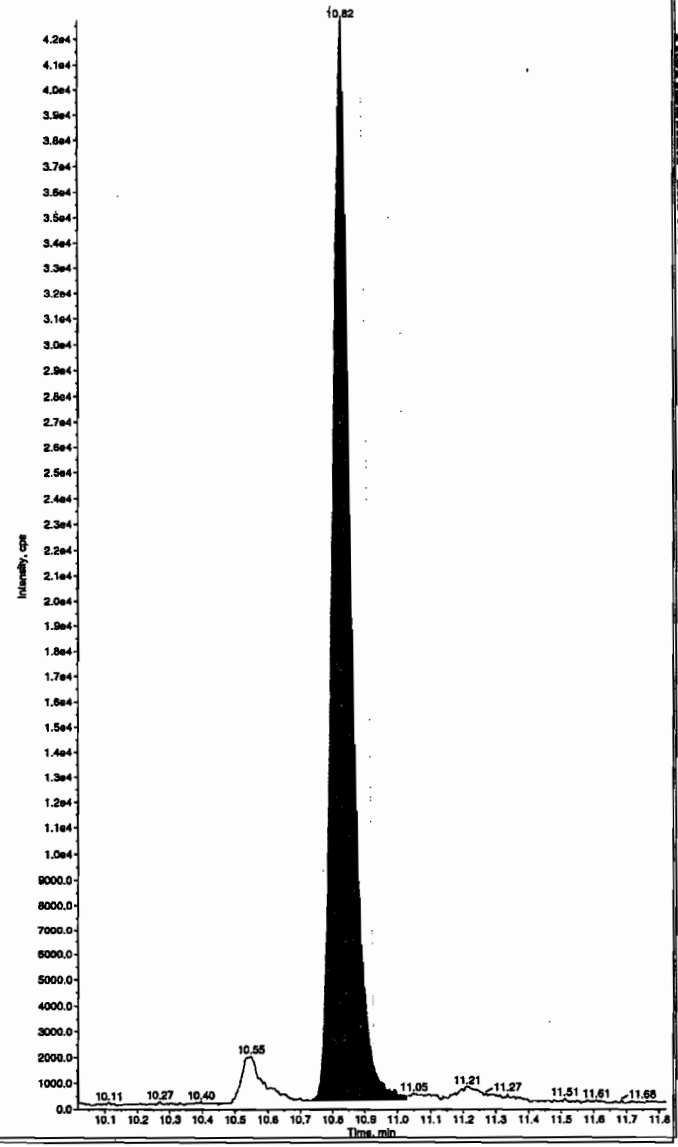


Sample Name: "XIBLK09" Sample ID: "|1|LER" File: "EXS04020085.wiff"
Peak Name: "tris(o-cresyl) phosphate" Mass(es): "369.1/91.0 amu"
Comment: "LCMSEXP_B" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 8.65 ng/mL
Acq. Date: 4/3/2010
Acq. Time: 12:27:11 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: 10.8 min
Use Relative RT: No

Int. Type: Valley
Retention Time: 10.8 min
Area: 1.72e+005 counts
Height: 42441.692 cps
Start Time: 10.7 min
End Time: 11.0 min



L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

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4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10–2089

Lab Code: GEL

Lab Sample ID: XIBLK10

Analysis Date: 03–APR–10 15:35

GEL Data File: EXS04020097.wiff

Instrument ID: LCMSMS

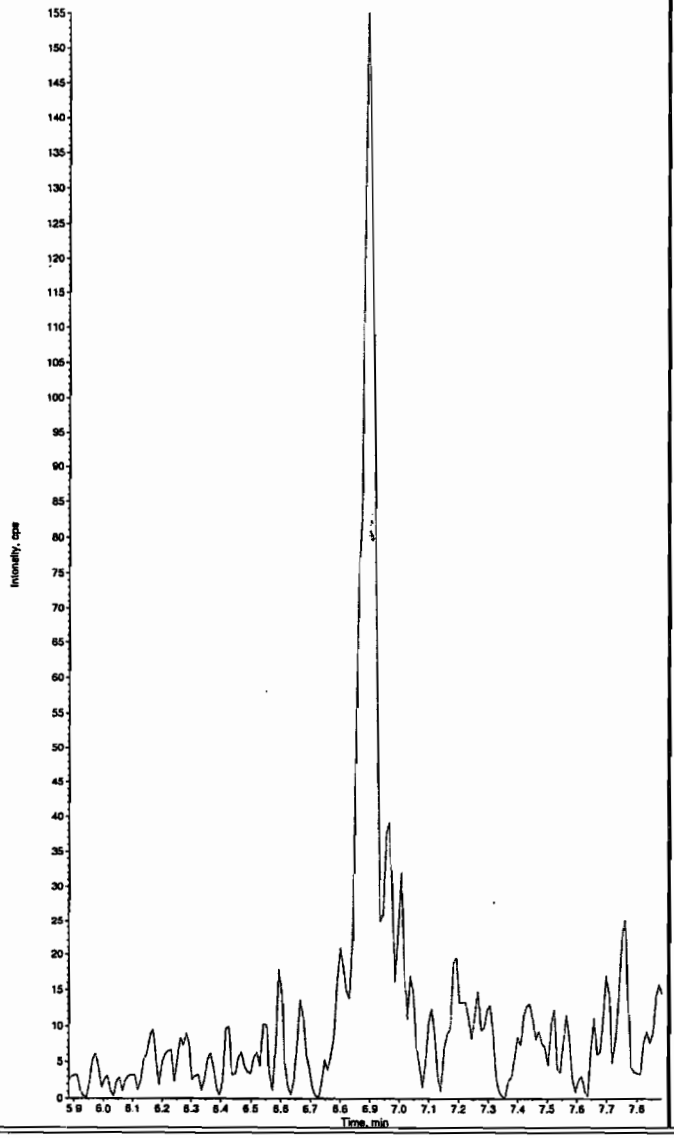
Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4–Dinitrotoluene	0	0
tris(o–cresyl) phosphate	0	8.61
TATB	0	0
3,5–Dinitroaniline	0	0
2,4–Diamino–6–nitrotoluene	0	0
2,6–Diamino–4–nitrotoluene	0	0

Lar 4/7/10

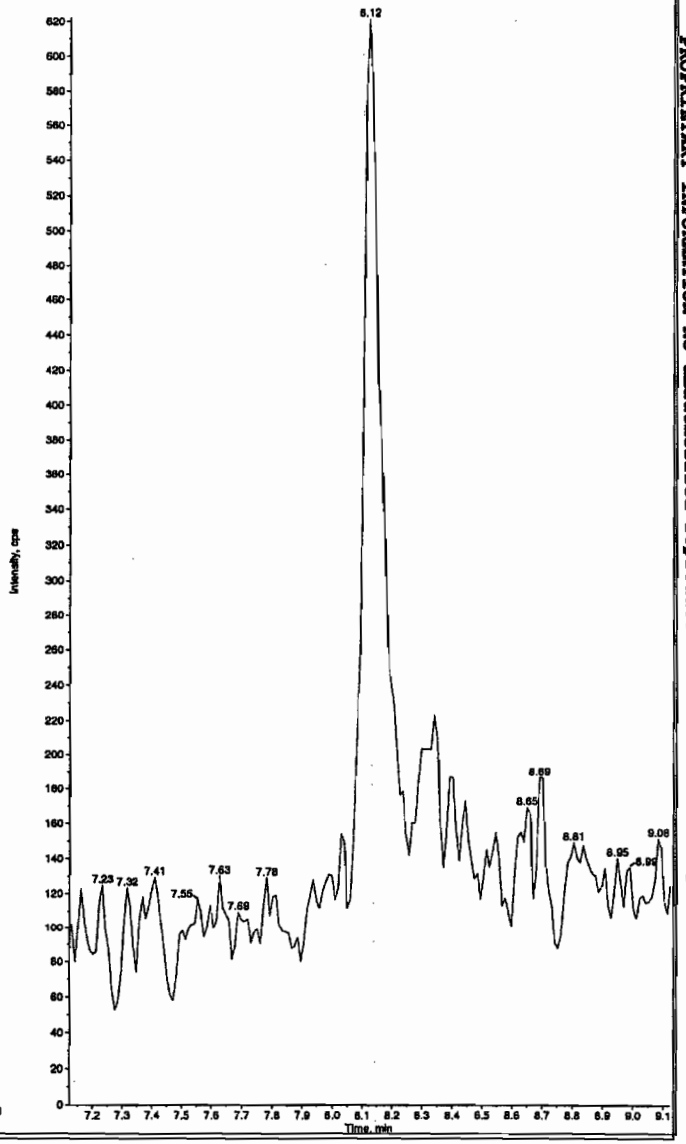
ample Name: "XIBLK10" Sample ID: "[1]LER" File: "EXS04020097.wiff"
eak Name: "TATB" Mass(es): "257.2/204.9 amu"
omment: "LCMSEXP_B" Annotation: ""
ple Index: 1
ple Type: Unknown
centration: N/A
culated Conc: 0.00 ng/mL
. Date: 4/3/2010
. Time: 3:35:38 PM

ified: No



Sample Name: "XIBLK10" Sample ID: "[1]LER" File: "EXS04020097.wiff"
Peak Name: "35-Dinitroaniline" Mass(es): "182.0/46.0 amu"
Comment: "LCMSEXP_B" Annotation: ""
Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 4/3/2010
Acq. Time: 3:35:38 PM

Modified: No



HMM 04/08/10

L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

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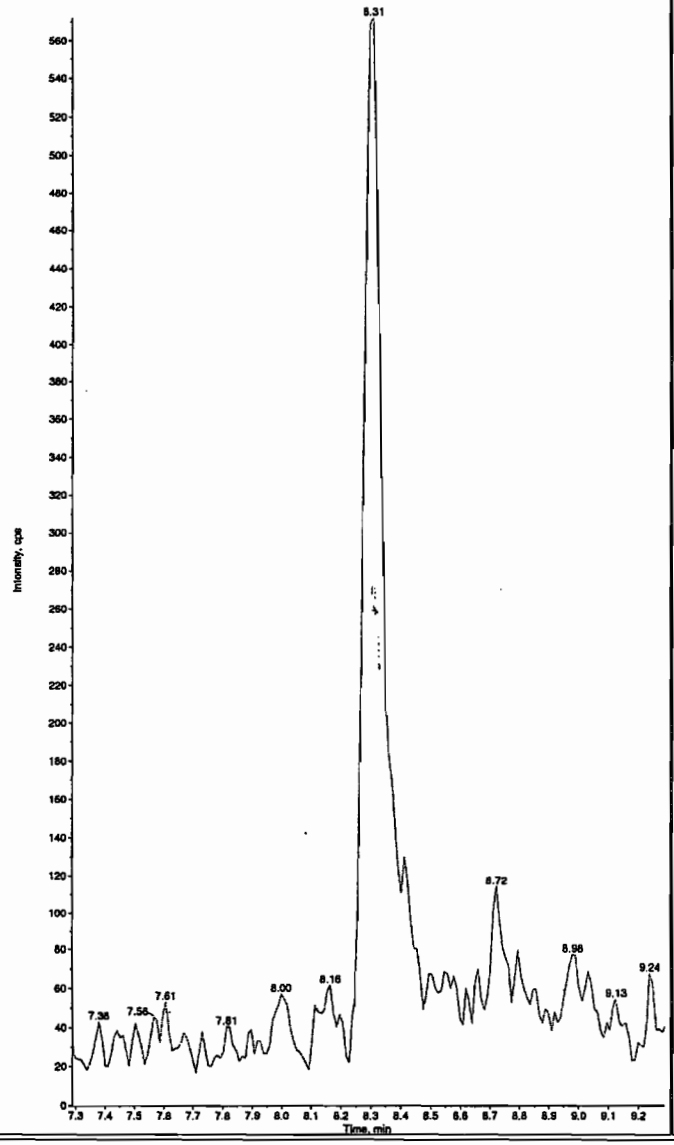
PROPRIETARY INFORMATION-No unauthorized reproduction without written permission from GEL.

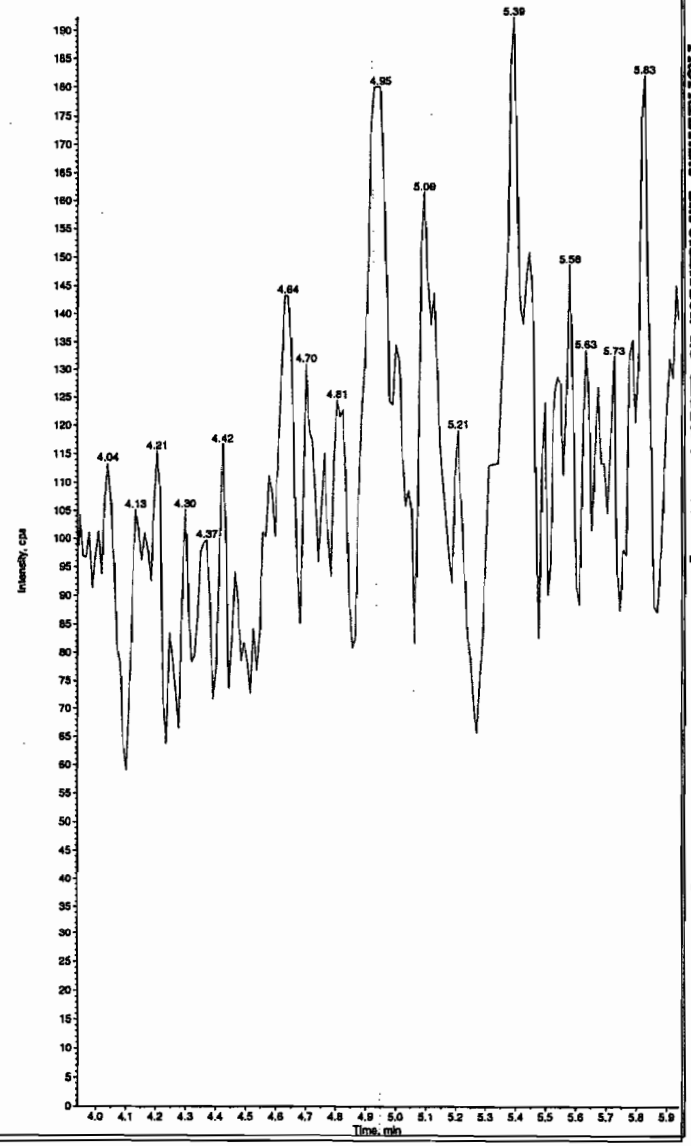
ample Name: "XIBLK10" Sample ID: "[1]LER" File: "EXS04020097.wiff"
eak Name: "34-Dinitrotoluene" Mass(es): "182.1/151.9 amu"
omment: "LCMSEXP_B" Annotation: ""
ple Index: 1
ple Type: Unknown
centration: N/A
culated Conc: 0.00 ng/mL
. Date: 4/3/2010
. Time: 3:35:38 PM

ified: No



Sample Name: "XIBLK10" Sample ID: "[1]LER" File: "EXS04020097.wiff"
Peak Name: "26-Diamino-4-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: 4/3/2010
Acq. Time: 3:35:38 PM

Modified: No



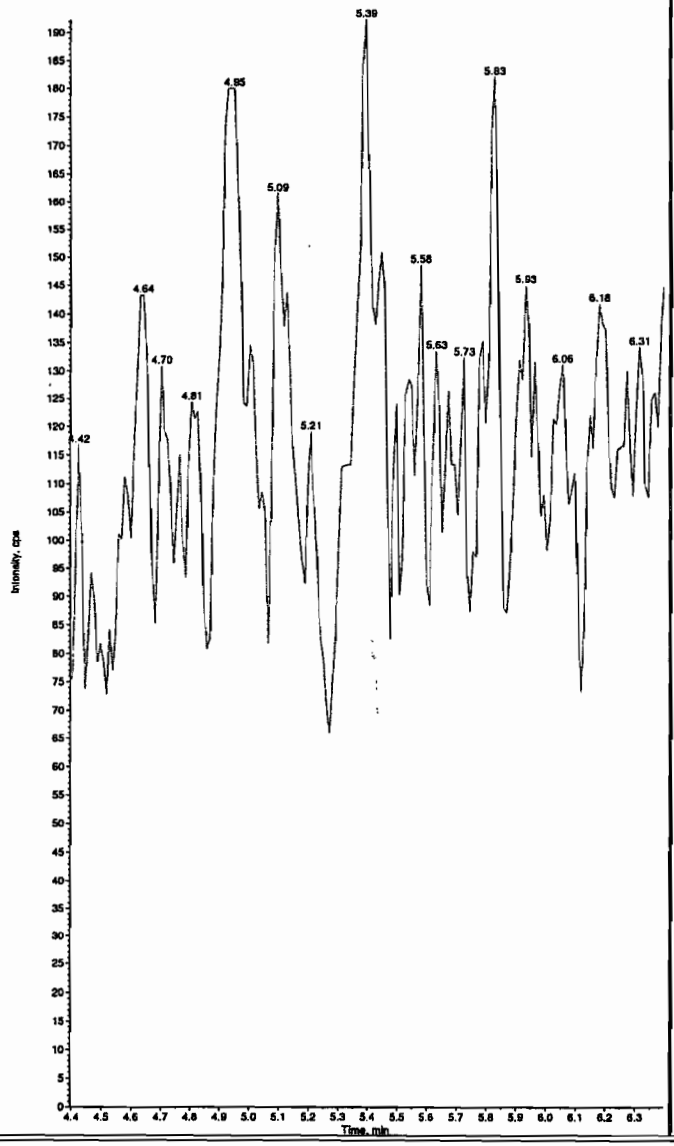
:L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

PROPRIETARY INFORMATION-No unauthorized reproduction without written permission from GEL.

ample Name: "XIBLK10" Sample ID: "[1]LER" File: "EXS04020097.wiff"
eak Name: "24-Diamino-6-nitrotoluene" Mass(es): "166.0/46.0 amu"
omment: "LCMSEXP_B" Annotation: ""

```
ple Index:        1
ple Type:      Unknown
centration:      N/A
culated Conc:    0.00     ng/mL
. Date:        4/3/2010
. Time:        3:35:38 PM

ified:            No
```

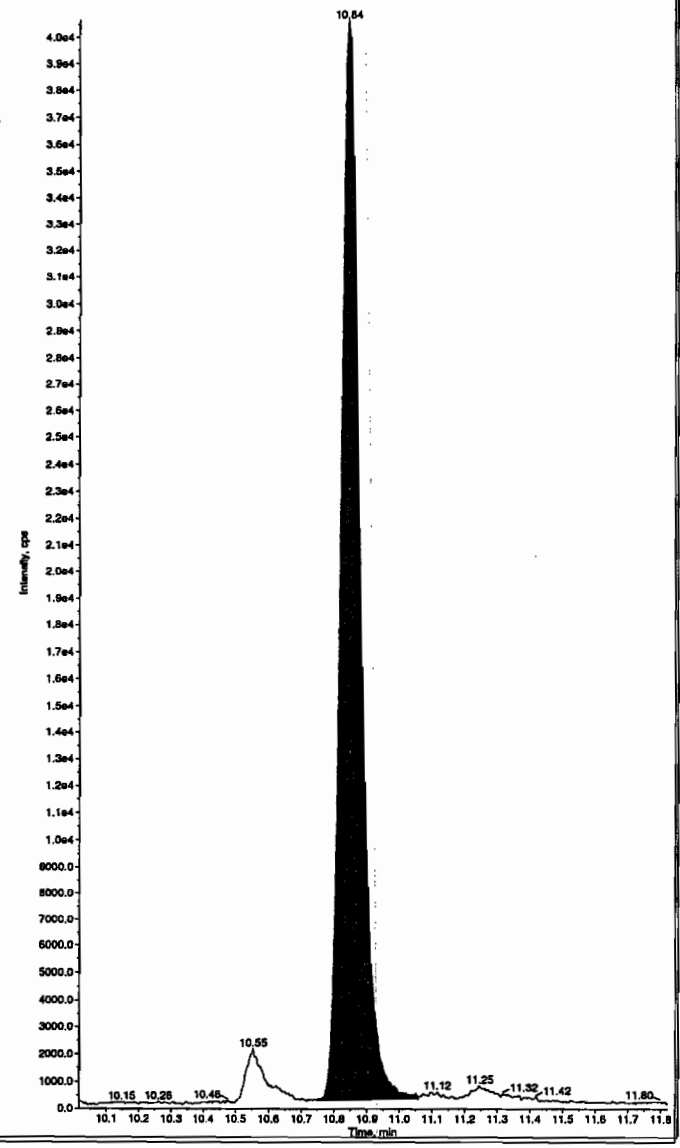


Sample Name: "XIBLK10" Sample ID: "[1]LER" File: "EXS04020097.wiff"
Peak Name: "tris(o-cresyl) phosphate" Mass(es): "369.1/91.0 amu"
Comment: "LCMSEXP_B" Annotation: ""

```
Sample Index:        1
Sample Type:      Unknown
Concentration:      N/A
Calculated Conc:    8.61     ng/mL
Acq. Date:        4/3/2010
Acq. Time:        3:35:38 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:       10.8     min
Use Relative RT:    No

Int. Type:        Valley
Retention Time:    10.8     min
Area:        1.71e+005    counts
Height:        40355.057  cps
Start Time:        10.7     min
End Time:          11.1     min
```



L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

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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

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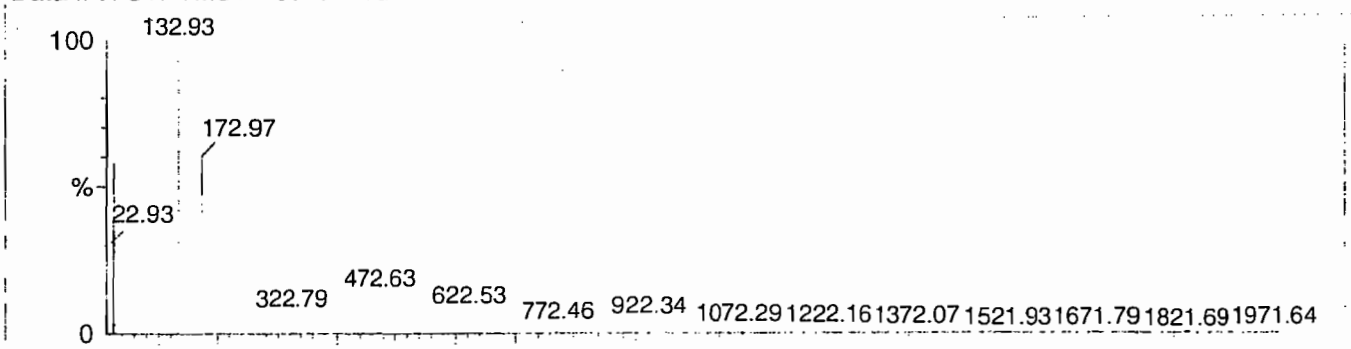
Calibration Report - MS1 Static

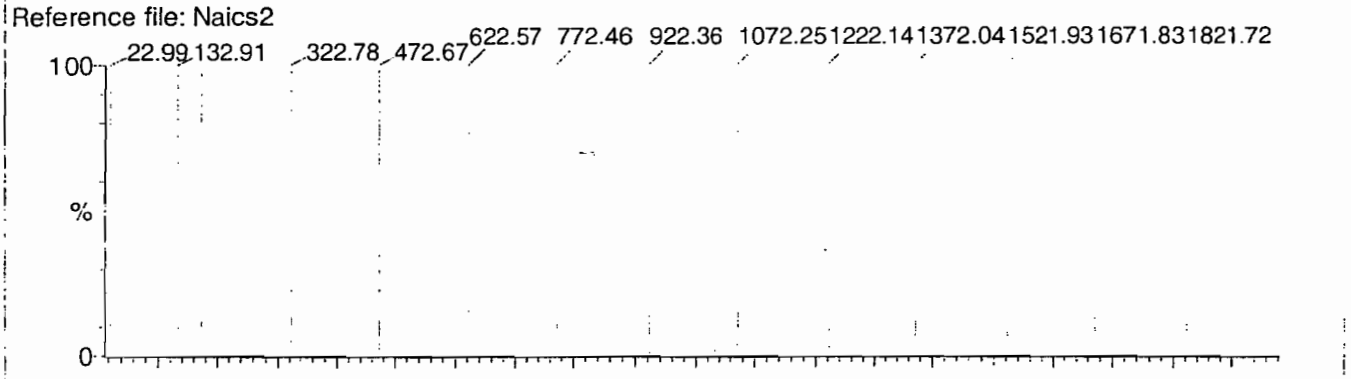
Printed: Fri Aug 25 10:50:01 2006

Data file: STATMS1 - Calibrated

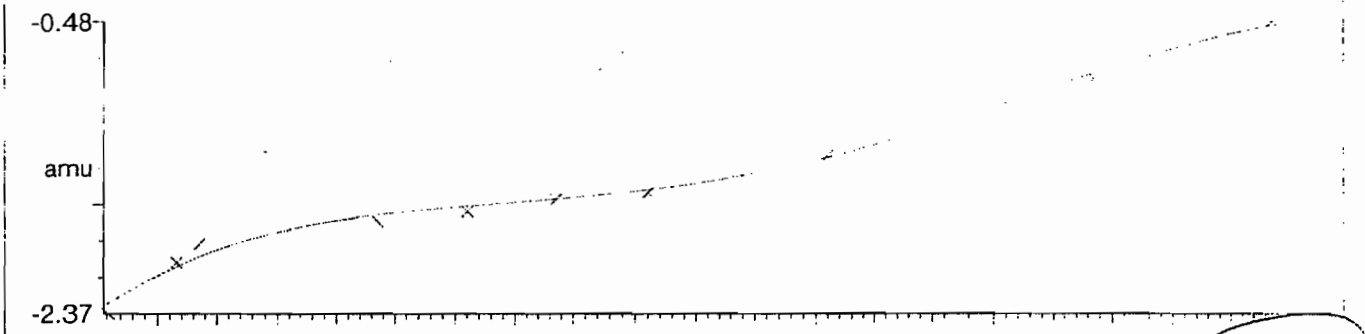
15 matches of 15 tested references



Reference file: Naics2



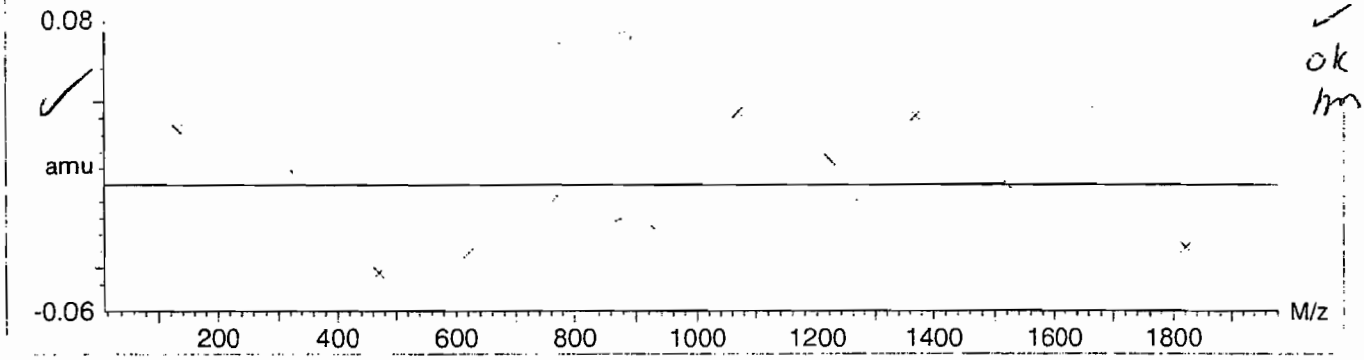
Mass difference (Raw - Ref mass)



Residuals

Mean residual = -1.673470e-9 ± 0.036953

ok
m



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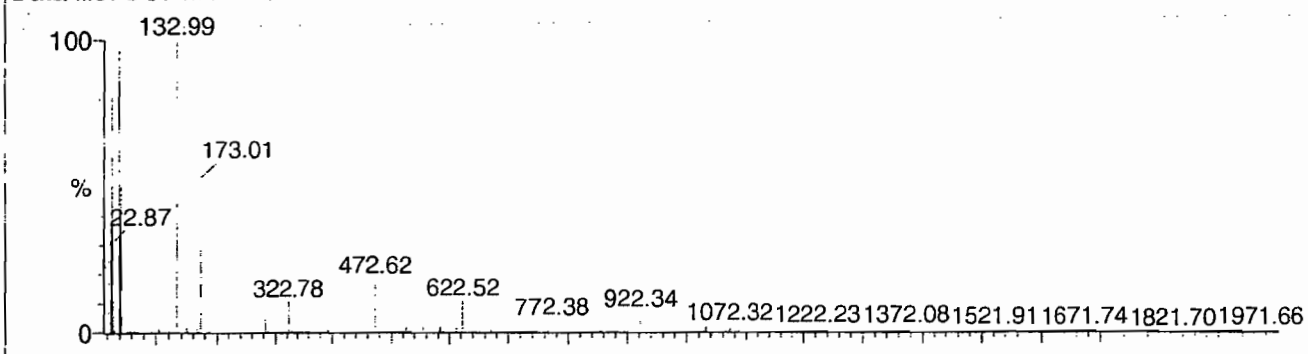
Calibration Report - MS1 Scanning

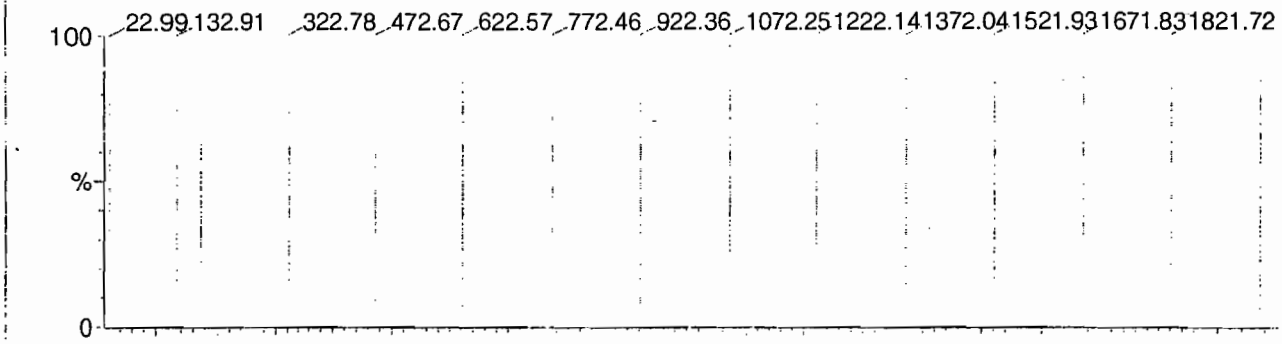
Printed: Fri Aug 25 10:51:06 2006

Data file: SCNMS1 - Calibrated

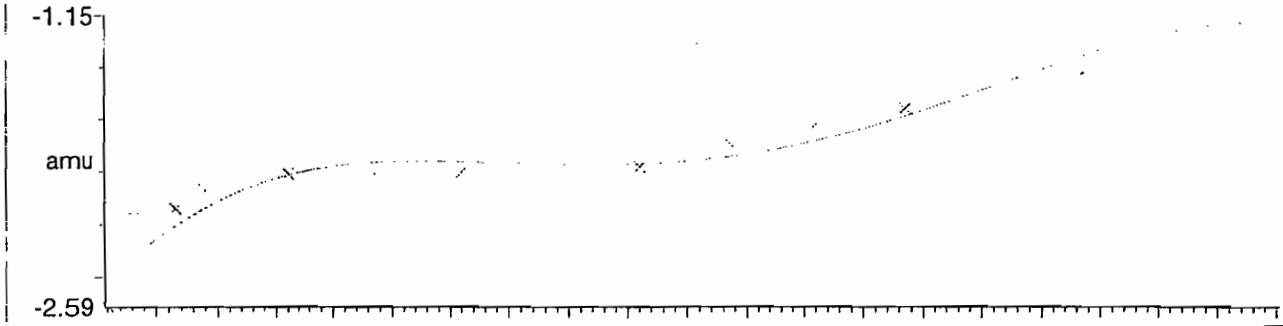
15 matches of 15 tested references



Reference file: Naics2



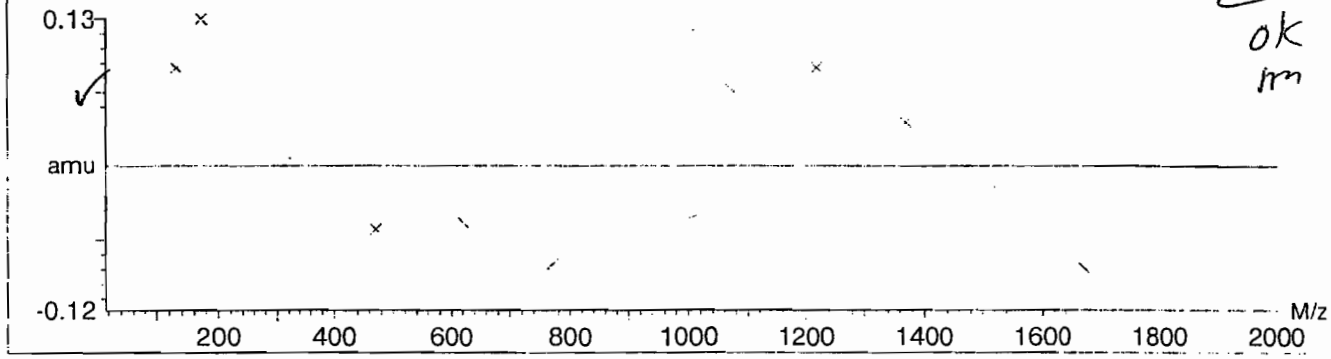
Mass difference (Raw - Ref mass)



Residuals

Mean residual = -5.432715e-9 ± 0.069858

ok
m



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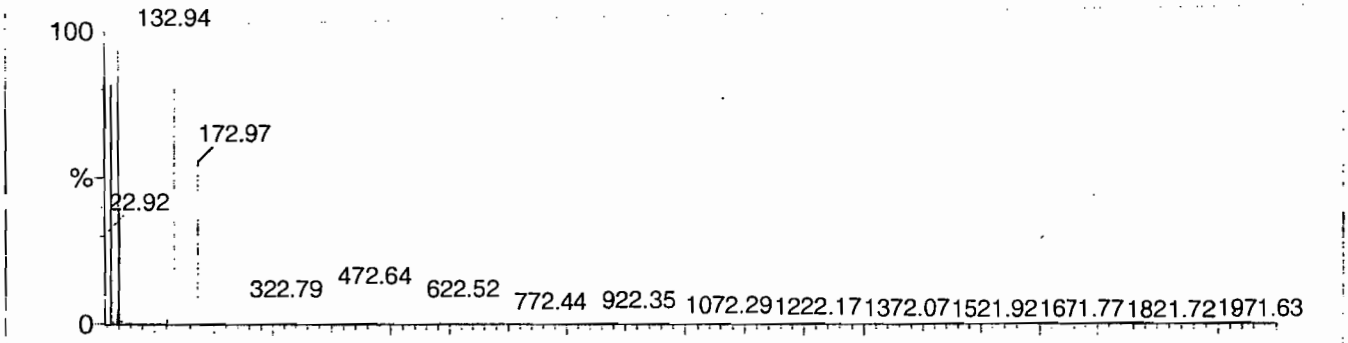
Calibration Report - MS1 Scan Speed Compensation

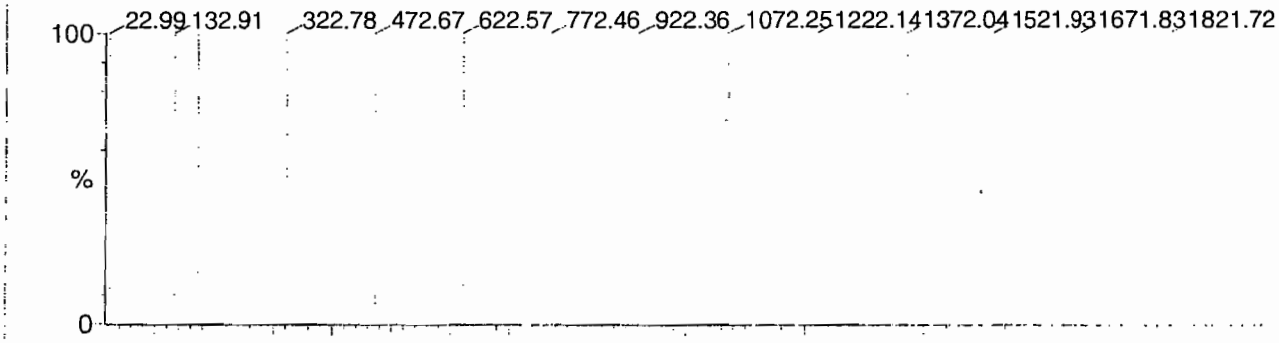
Printed: Fri Aug 25 10:52:01 2006

Data file: FASTMS1 - Calibrated

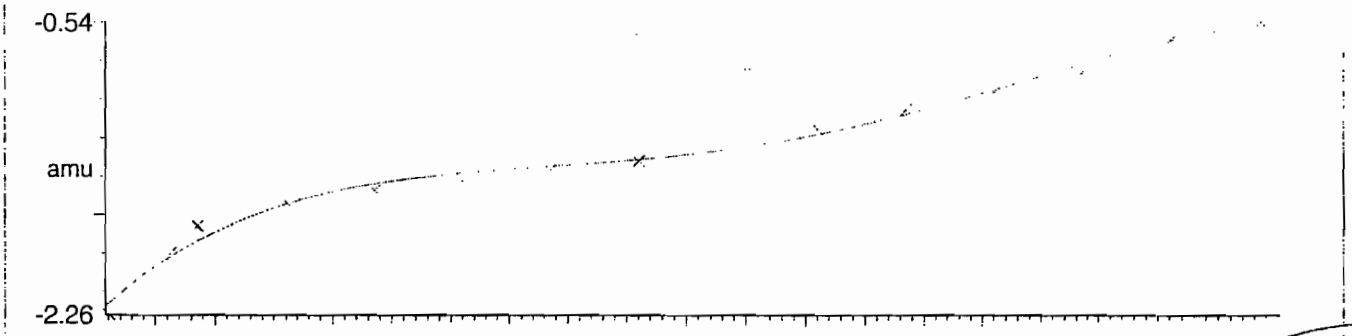
15 matches of 15 tested references



Reference file: Naics2

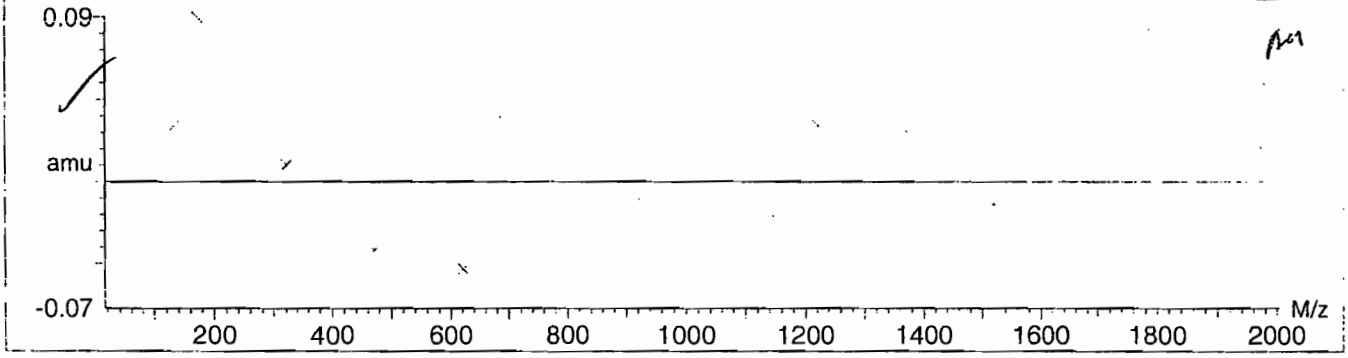


Mass difference (Raw - Ref mass)



Residuals

Mean residual = 3.486639e-9 ± 0.040487



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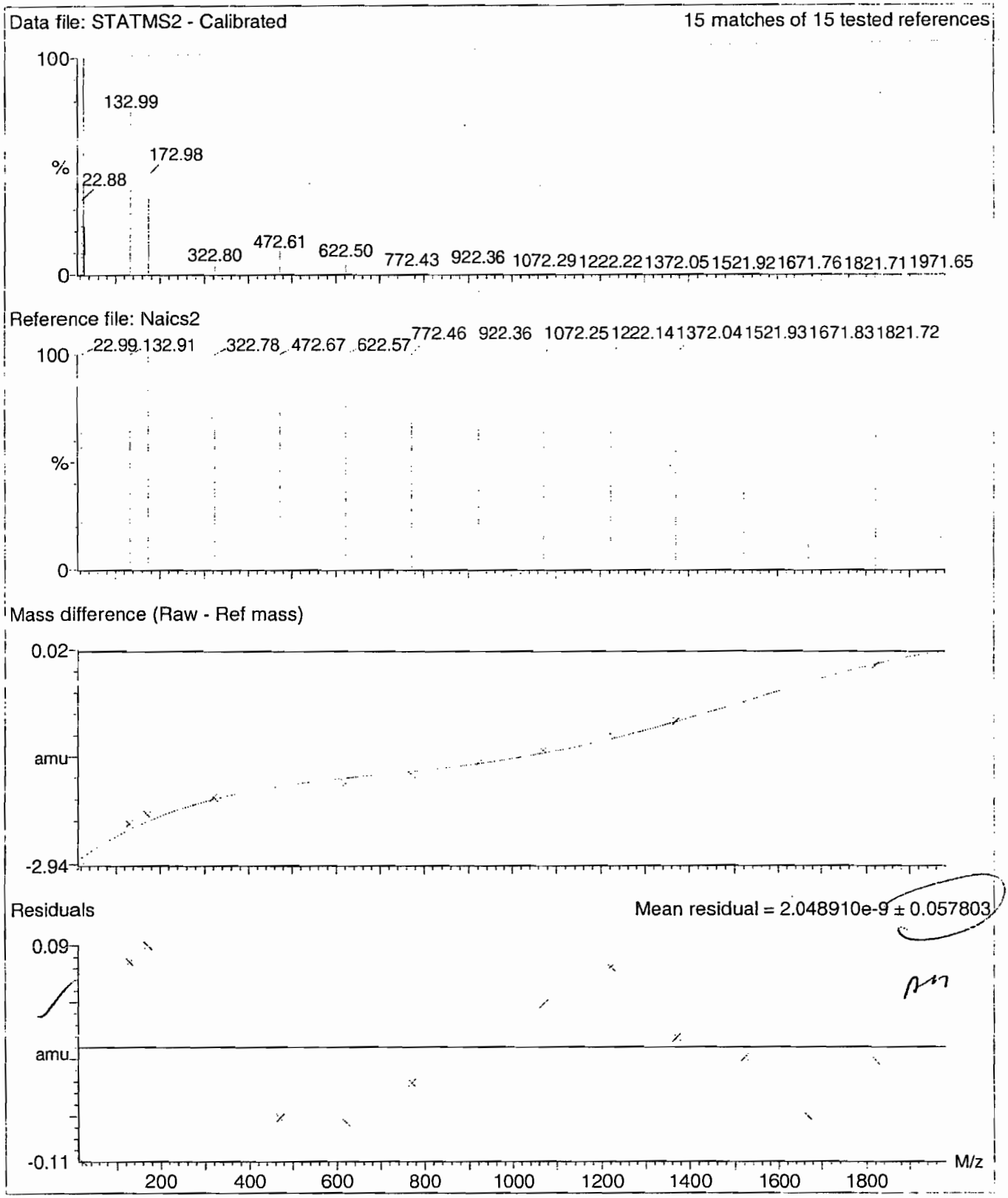
Calibration Report - MS2 Static

Printed: Fri Aug 25 10:52:54 2006



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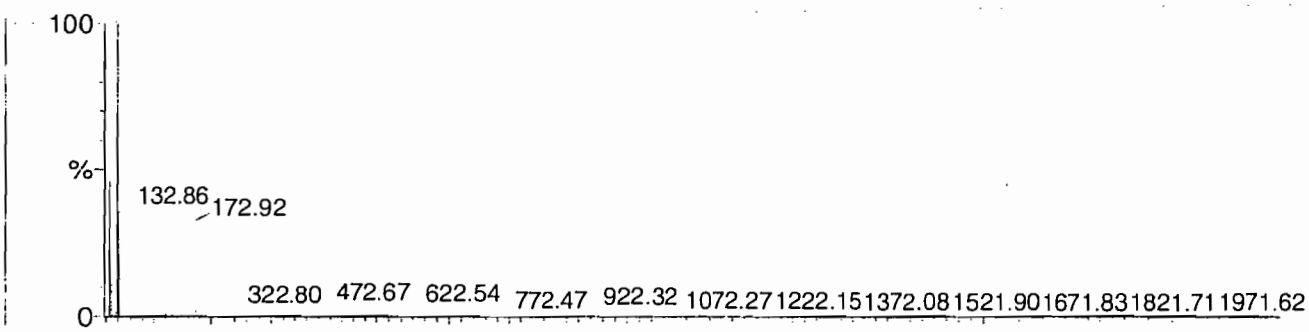
Calibration Report - MS2 Scanning

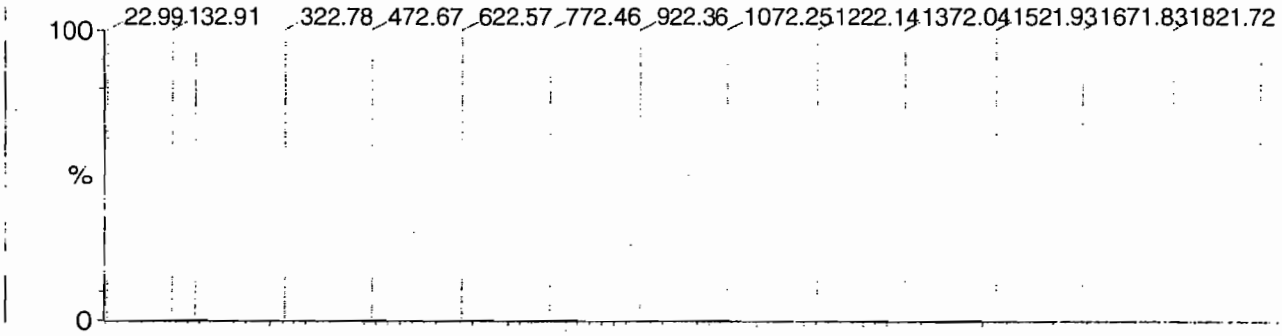
Printed: Fri Aug 25 10:54:00 2006

Data file: SCNMS2 - Calibrated

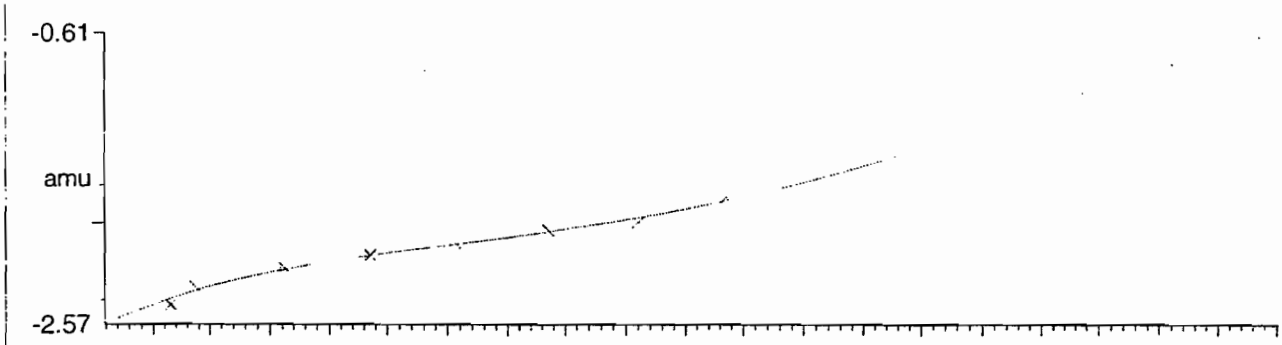
14 matches of 15 tested references



Reference file: Naics2

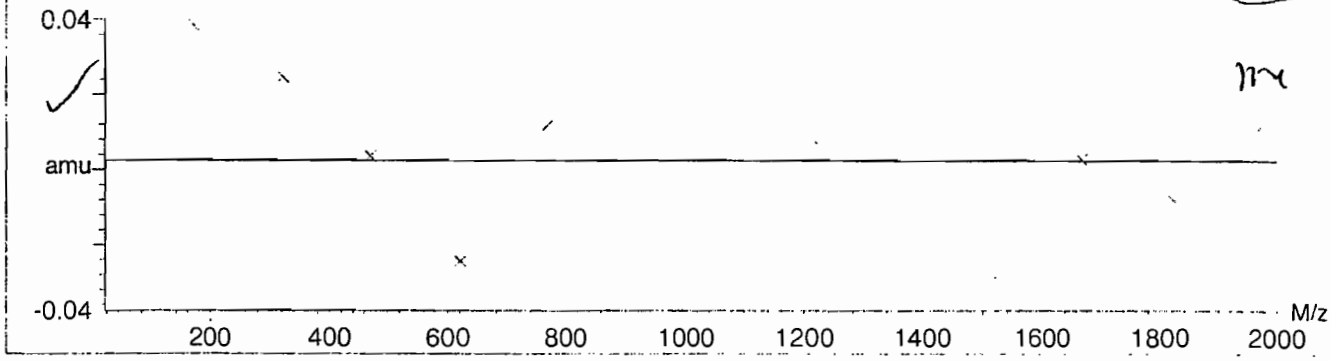


Mass difference (Raw - Ref mass)



Residuals

Mean residual = -2.623502e-9 ± 0.025622



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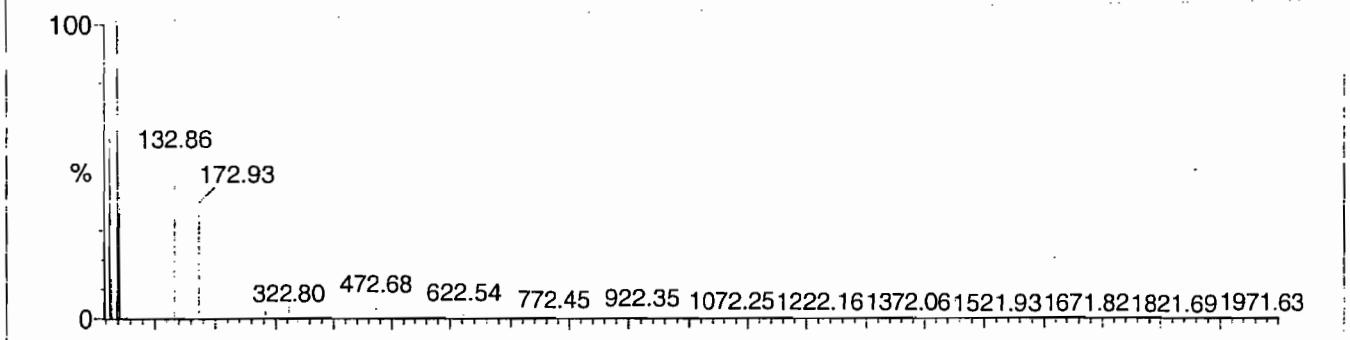
Calibration Report - MS2 Scan Speed Compensation

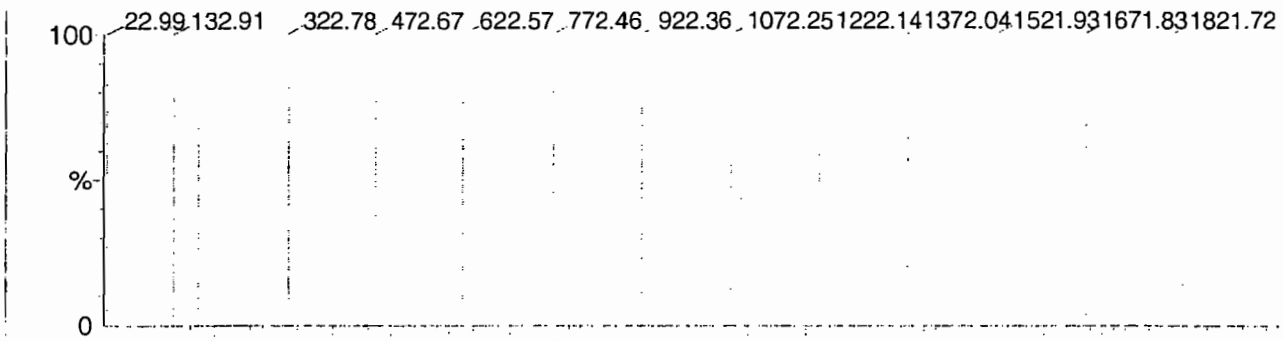
Printed: Fri Aug 25 10:54:54 2006

Data file: FASTMS2 - Calibrated

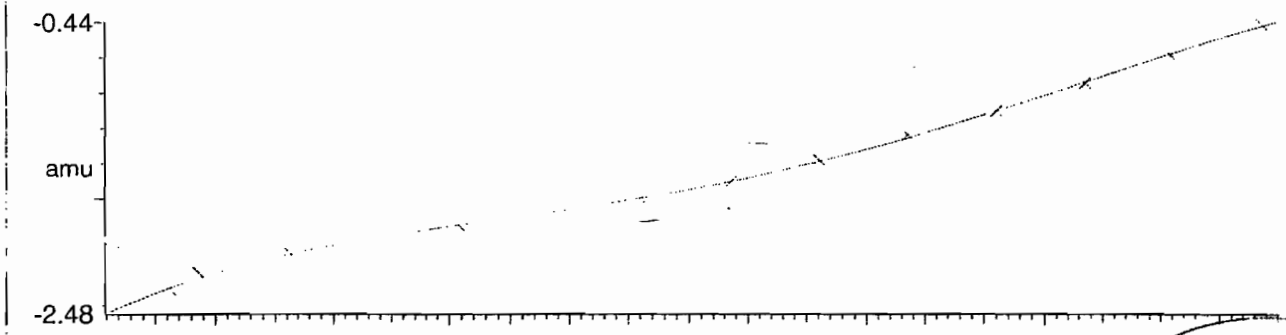
14 matches of 15 tested references



Reference file: Naics2



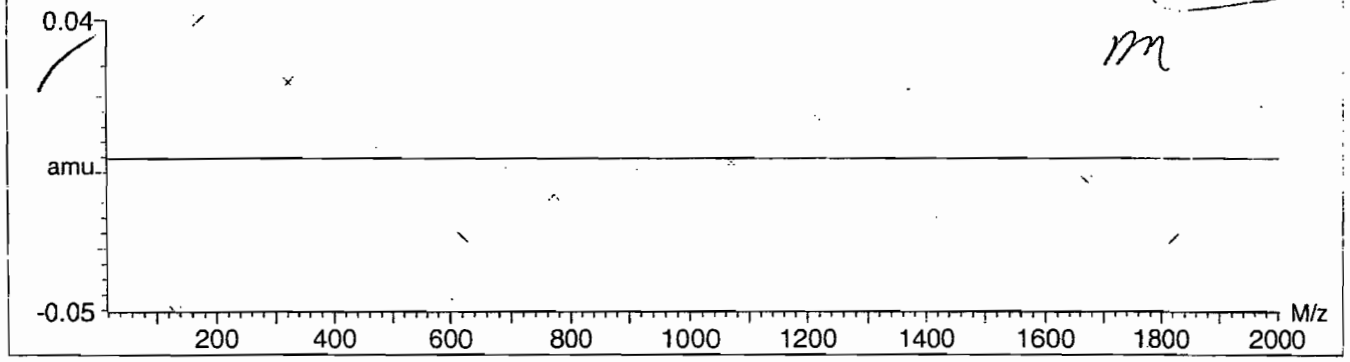
Mass difference (Raw - Ref mass)



Residuals

Mean residual = -6.785350e-9 ± 0.023134

m



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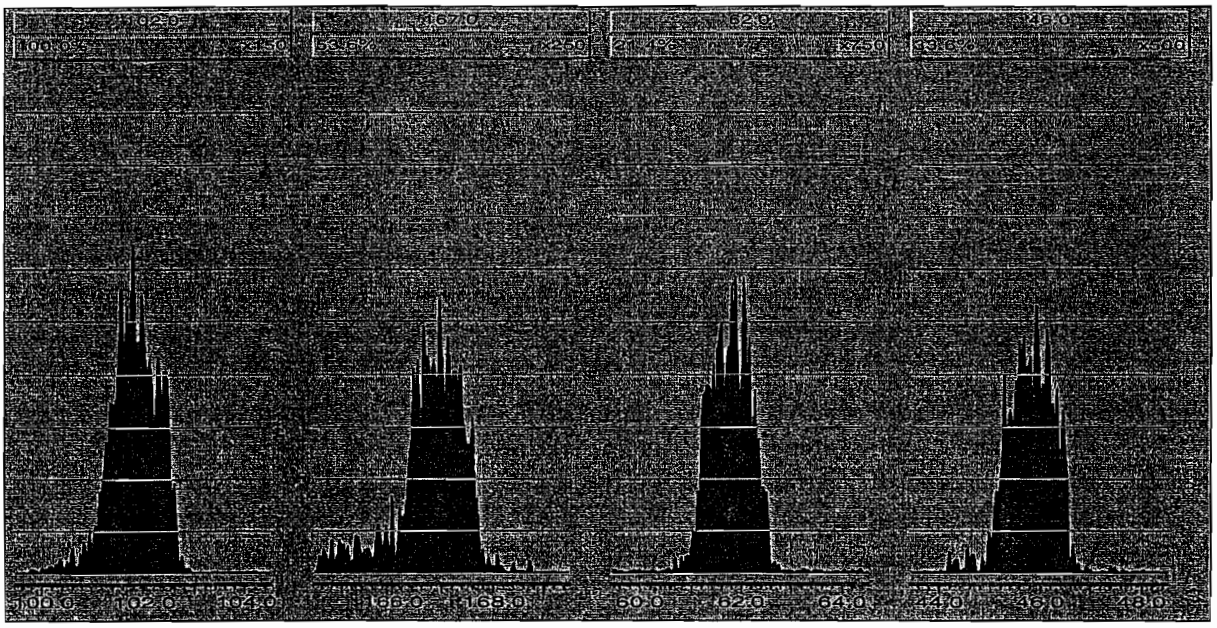
Quattro Micro Tune Parameters

Parameter File: C:\MASSLYNX\NEW_EXP.PRO\ACQUDB\explosives04.IPR

Printed : Mon Apr 12 14:40:37 2010



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High Explosives Internal Standard Summary

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10–2089

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) #
			5880.363	11.868	34983.183	17.054
Upper Limit			7644.4719	12.368	45478.1379	17.554
Lower Limit			4116.2541	11.368	24488.2281	16.554
MB for batch 958599	14–apr–10 22:44	EXP0412113a	6876.35	11.868	43123.2	17.047
RE15–10–8404	14–apr–10 23:43	EXP0412115a	8436.09 *	11.868	44473	17.048
RE15–10–8404(248102001MS)	15–apr–10 00:13	EXP0412116a	9578.61 *	11.947	56204.7 *	17.136
RE15–10–8404(248102001MSD)	15–apr–10 00:42	EXP0412117a	8568.9 *	11.869	59193.7 *	17.048
RE15–10–8396	15–apr–10 01:12	EXP0412118a	7303.66	11.868	41877.1	17.048
RE15–10–8393	15–apr–10 01:41	EXP0412119a	7736.61 *	11.868	42423.4	17.048
RE15–10–8395	15–apr–10 02:11	EXP0412120a	7180.58	11.868	42605.9	17.048
RE15–10–8398	15–apr–10 02:40	EXP0412121a	6945.26	11.869	40914.1	17.048
RE15–10–8394	15–apr–10 03:10	EXP0412122a	7029.53	11.868	41473.2	17.051
RE15–10–8399	15–apr–10 05:08	EXP0412126a	7034.64	11.869	41962.3	17.067
RE15–10–8397	15–apr–10 05:37	EXP0412127a	6717.9	11.872	40105.6	17.048
LCS for batch 958599	15–apr–10 11:32	EXP0412139a	7028.35	11.896	41635	17.112

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

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SAMPLE
DATA

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1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8404

Lab Code: GEL

GEL Job No (SDG) 10-2089

Matrix: SOIL

GEL Sample ID: 248102001

Sample Amount 2

Moisture: 9.4

Amount Units g

Date Received: 26-FEB-10

Extraction Type Sonication

Extraction Batch ID: 958599

Concentrated Extract Volume (mL) 10

Date Extracted: 04-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0412115a

Date Analyzed: 14-APR-10 23:43

Units: ug/kg

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

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Sample Amoun}} \times \text{Dilution Factor}$$

Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

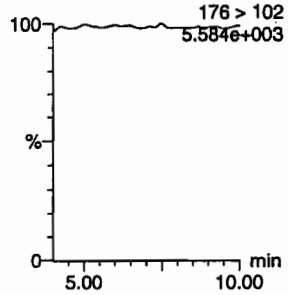
Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA2.qld, Time: Thu Apr 15 14:49:38 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0412115a
Date: 14-Apr-2010
Time: 23:43:55
ID: 248102001 | LANL | 958603 | Soil | 2 |
Vial: 3:5,C

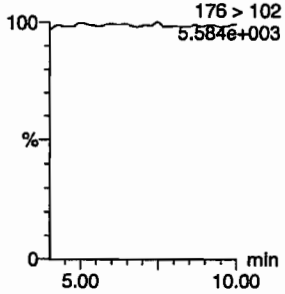
MAP 4/15/10

#2841
XC: EXP0412116a

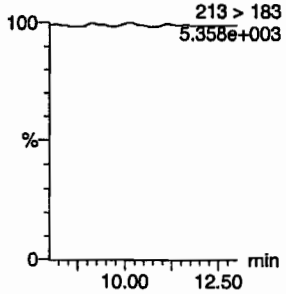
HMX
F2:MRM of 1 channel,AP-
176 > 102
5.584e+003



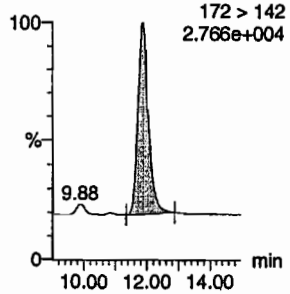
RDX
F2:MRM of 1 channel,AP-
176 > 102
5.584e+003



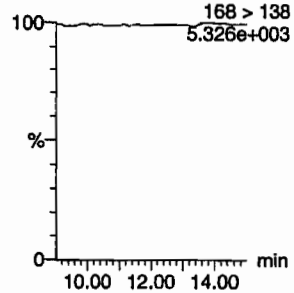
135-Trinitrobenzene
F4:MRM of 1 channel,AP-
213 > 183
5.358e+003



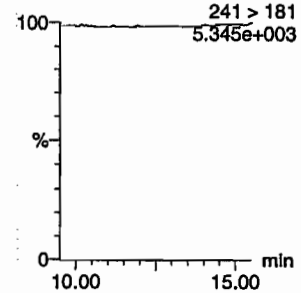
13-Dinitrobenzene-d4
F5:MRM of 2 channels,AP-
172 > 142
2.766e+004



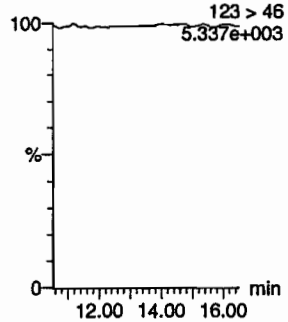
13-Dinitrobenzene
F5:MRM of 2 channels,AP-
168 > 138
5.326e+003



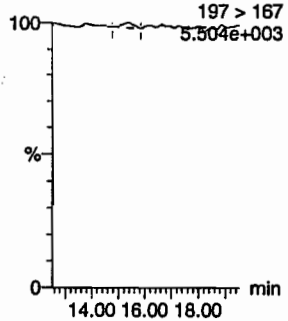
Tetryl
F6:MRM of 1 channel,AP-
241 > 181
5.345e+003



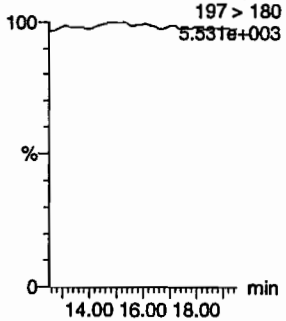
Nitrobenzene
F7:MRM of 1 channel,AP-
123 > 46
5.337e+003



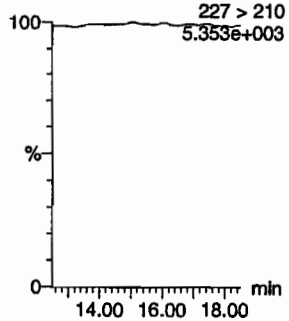
4-Amino-26-dinitrotoluene
F11:MRM of 2 channels,AP-
197 > 167
5.504e+003



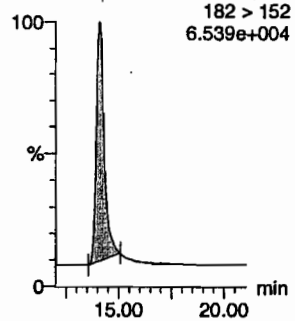
2-Amino-46-dinitrotoluene
F11:MRM of 2 channels,AP-
197 > 180
5.531e+003



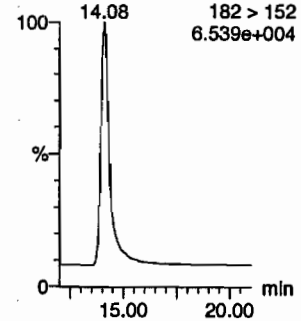
246-Trinitrotoluene
F10:MRM of 1 channel,AP-
227 > 210
5.353e+003



34-dinitrotoluene
F9:MRM of 2 channels,AP-
182 > 152
6.539e+004



26-dinitrotoluene
F9:MRM of 2 channels,AP-
14.08
182 > 152
6.539e+004



HMM 04/15/10

GEL SOP GL-OA-E-056, Method 8321A-Modified / MM = Manual Modification

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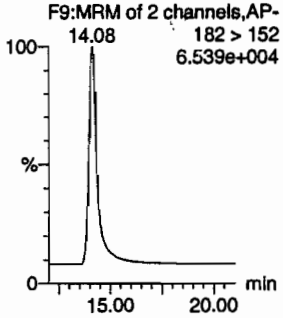
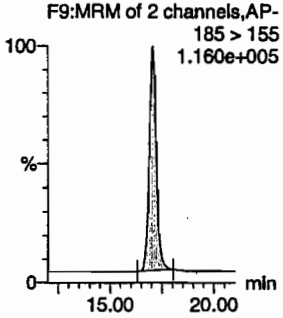
Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA2.qld, Time: Thu Apr 15 14:49:38 2010

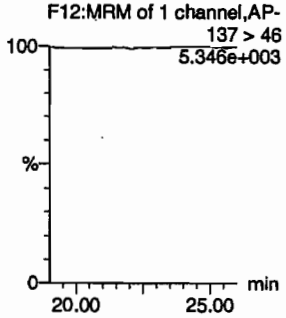
24-dinitrotoluene



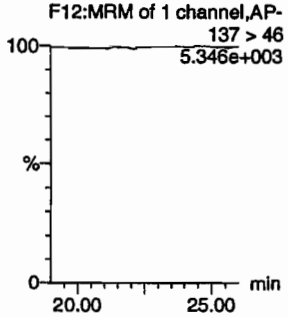
26-dinitrotoluene-d3



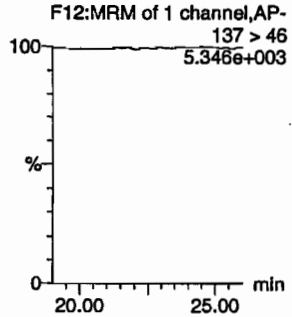
2-Nitrotoluene



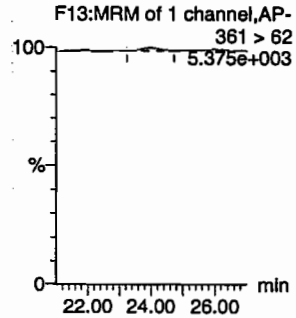
4-Nitrotoluene



3-Nitrotoluene



PETN



ID	Name	Trace	RT	Area	IS Area	Abs Resp	Response	Flags	Mod Date	Mod Time	ng/mL	%Rec	%Dev	S/N
248102001	HMX	176 > 102			8436.092									
248102001	RDX	176 > 102			8436.092									
248102001	135-Trinitrobenzene	213 > 183			8436.092									
248102001	13-Dinitrobenzene-d4	172 > 142	11.87	8436.092		8436.092	8436.092	bb			717.3104	143.5	43.5	362.2
248102001	13-Dinitrobenzene	168 > 138			8436.092									
248102001	Tetryl	241 > 181			8436.092									
248102001	Nitrobenzene	123 > 46			8436.092									
248102001	4-Amino-26-dinitrotoluene	197 > 167			44473.031			MM-	15-Apr-10	14:34:10				
248102001	2-Amino-46-dinitrotoluene	197 > 180			44473.031									
248102001	246-Trinitrotoluene	227 > 210			44473.031									
248102001	34-dinitrotoluene	182 > 152	14.08	25504.973	44473.031	25504.973	286.747	bb			278.0902	111.2	11.2	836.3
248102001	26-dinitrotoluene	182 > 152			44473.031									
248102001	24-dinitrotoluene	182 > 152			44473.031									
248102001	26-dinitrotoluene-d3	185 > 155	17.05	44473.031		44473.031	44473.031	bb			635.6345	127.1	27.1	3062.1
248102001	2-Nitrotoluene	137 > 46			44473.031									
248102001	4-Nitrotoluene	137 > 46			44473.031									
248102001	3-Nitrotoluene	137 > 46			44473.031									
248102001	PETN	361 > 62			44473.031			MM-	15-Apr-10	14:49:38				

GEL SOP GL-OA-E-056, Method 8321A-Modified / MM = Manual Modification

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1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8404

Lab Code: GEL

GEL Job No (SDG) 10-2089

Matrix: SOIL

GEL Sample ID: 248102001

Sample Amount 2

Moisture: 9.4

Amount Units g

Date Received: 26-FEB-10

Extraction Type Sonication

Extraction Batch ID: 958599

Concentrated Extract Volume (mL) 10

Date Extracted: 04-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS04020076.wiff

Date Analyzed: 03-APR-10 10:05

Units: ug/kg

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

*Concentration =

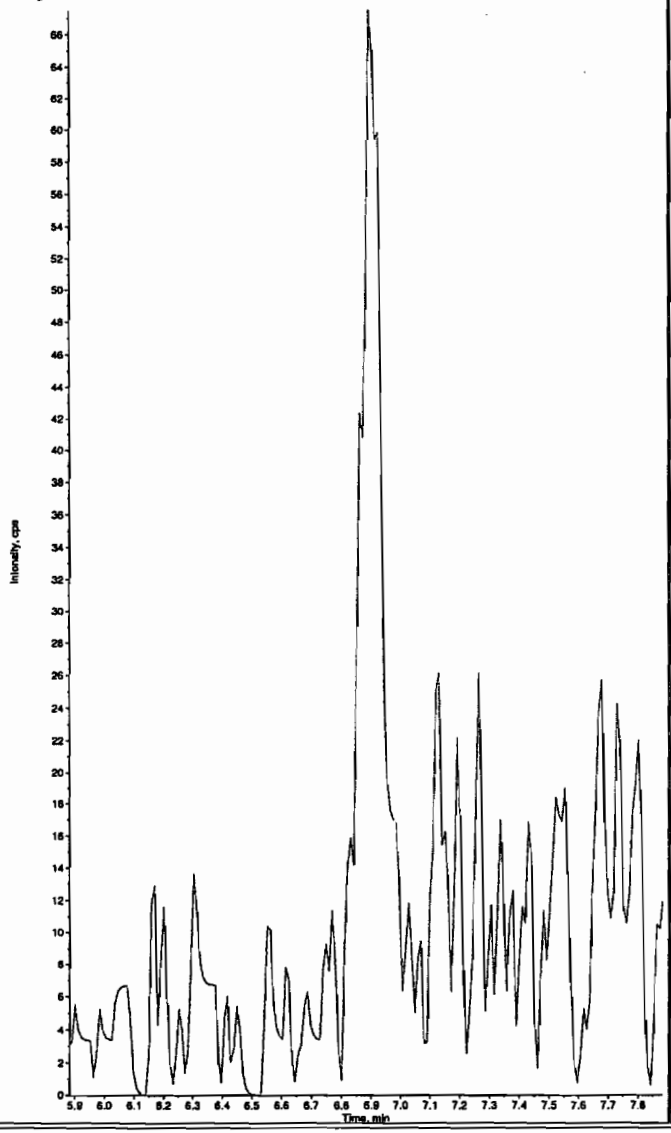
$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Sample Amoun}} \times \text{Dilution Factor}$$

LER 4/7/10

Sample Name: "248102001" Sample ID: "958603|2|LER" File: "EXS04020076.wiff"
Peak Name: "TATB" Mass(es): "257.2/204.9 amu"
Comment: "LCX83212S" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 4/3/2010
Acq. Time: 10:05:55 AM

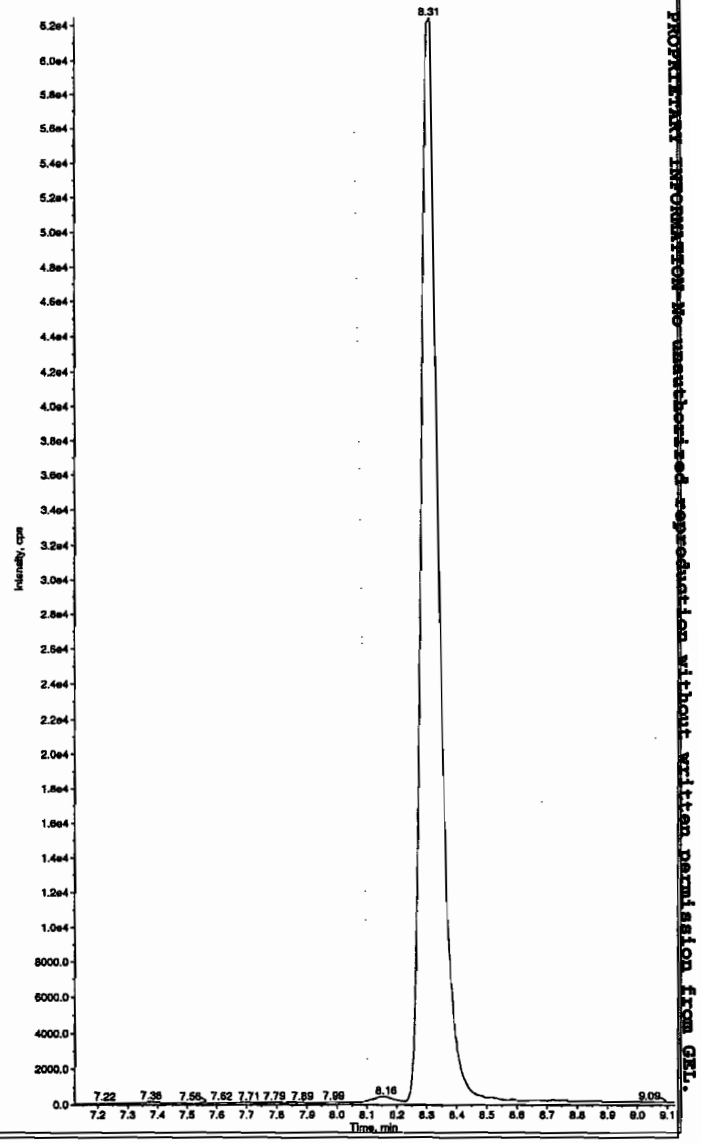
Modified: No



Sample Name: "248102001" Sample ID: "958603|2|LER" File: "EXS04020076.wiff"
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: 4/3/2010
Acq. Time: 10:05:55 AM

Modified: No

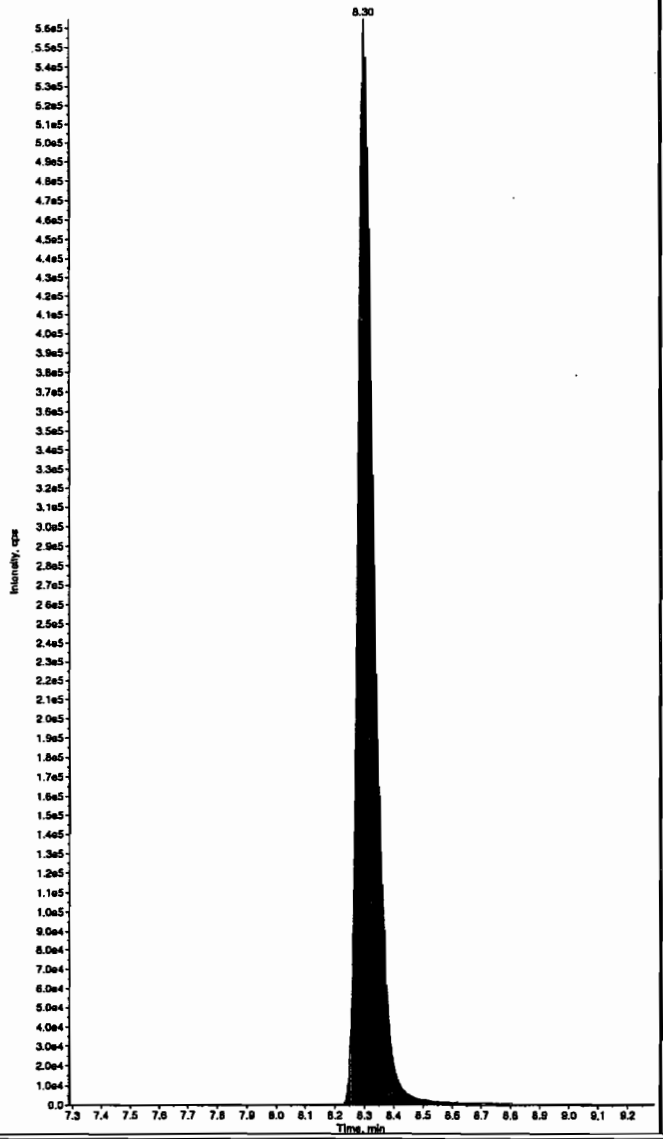


HMM 04/08/10

PROPRIETARY INFORMATION No unauthorized reproduction without written permission from GEL.

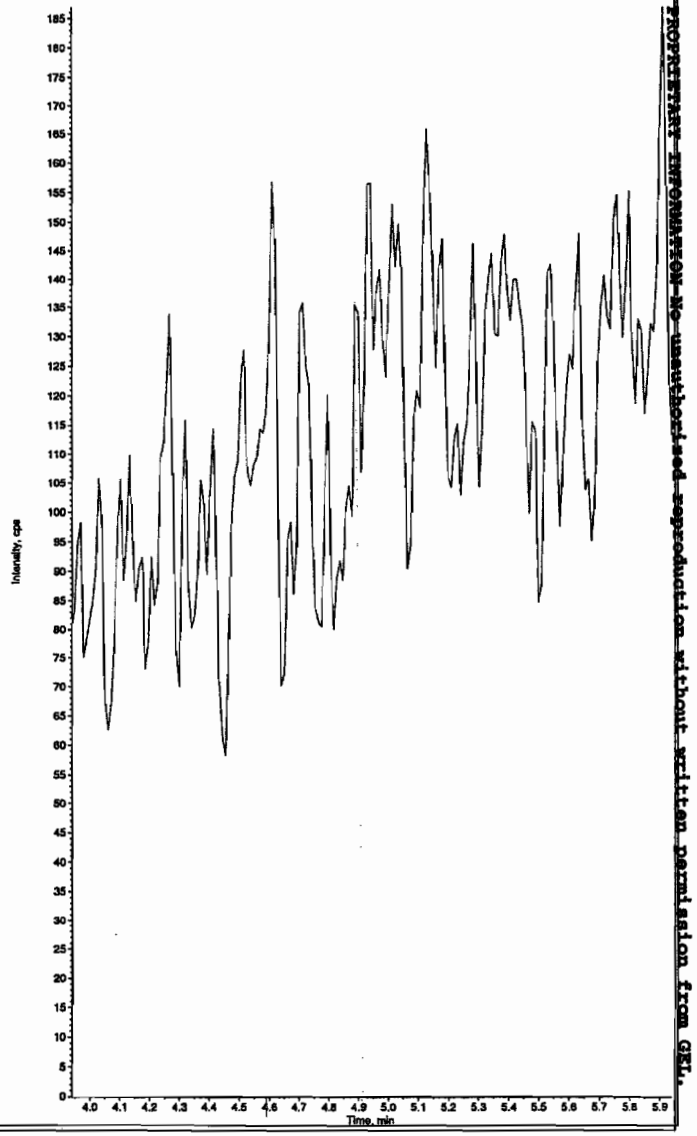
Sample Name: "248102001" Sample ID: "958603|2|LER" File: "EXS04020076.wiff"
Peak Name: "34-Dinitrotoluene" Mass(es): "182.1/151.9 amu"
Comment: "LCX83212S" Annotation: ""

mple Index:	1
mple Type:	Unknown
ncentration:	N/A
lculated Conc:	248. ng/mL
q. Date:	4/3/2010
q. Time:	10:05:55 AM
dified:	No
oc. Algorithm:	IntelliQuan - IQA
n. Peak Height:	1460.00 cps
n. Peak Width:	0.00 sec
oothing Width:	3 points
Window:	15.0 sec
pected RT:	8.29 min
e Relative RT:	No
t. Type:	Valley
tention Time:	8.30 min
ea:	2.31e+006 counts
ight:	564658.752 cps
art Time:	8.19 min
d Time:	8.65 min



Sample Name: "248102001" Sample ID: "958603|2|LER" File: "EXS04020076.wiff"
Peak Name: "26-Diamino-4-nitrotoluene" Mass(es): "166.0/45.0 amu"
Comment: "LCX83212S" Annotation: ""

Sample Index:	1
Sample Type:	Unknown
Concentration:	N/A
Calculated Conc:	0.00 ng/mL
Acq. Date:	4/3/2010
Acq. Time:	10:05:55 AM
Modified:	No



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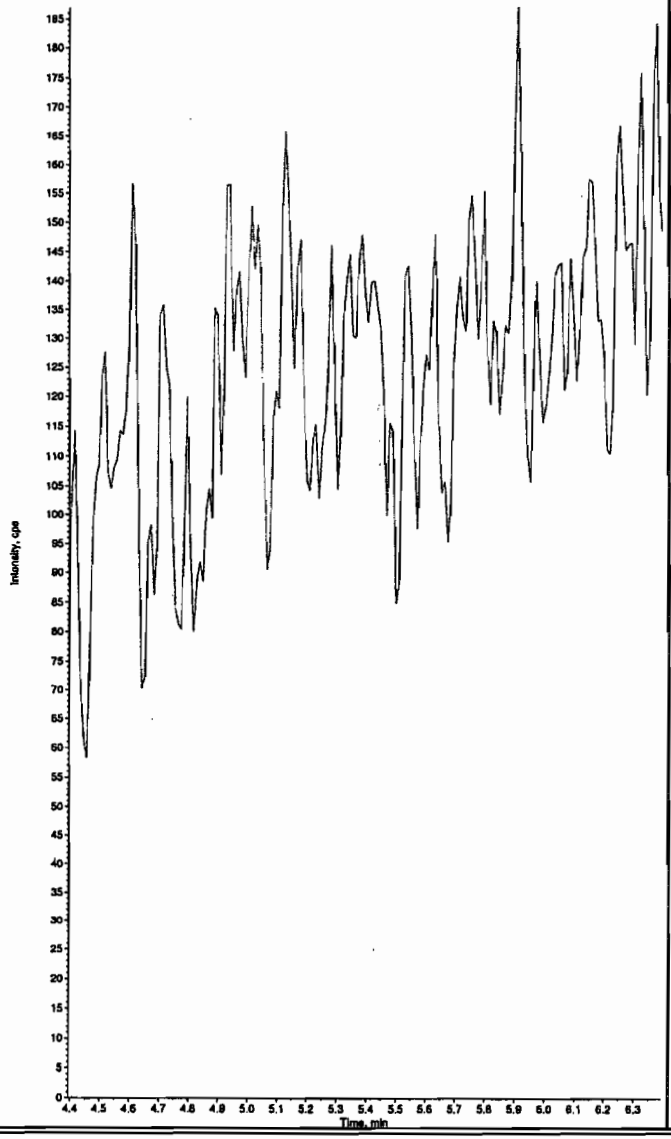
PROPRIETARY INFORMATION-No unauthorized reproduction without written permission from GEL.

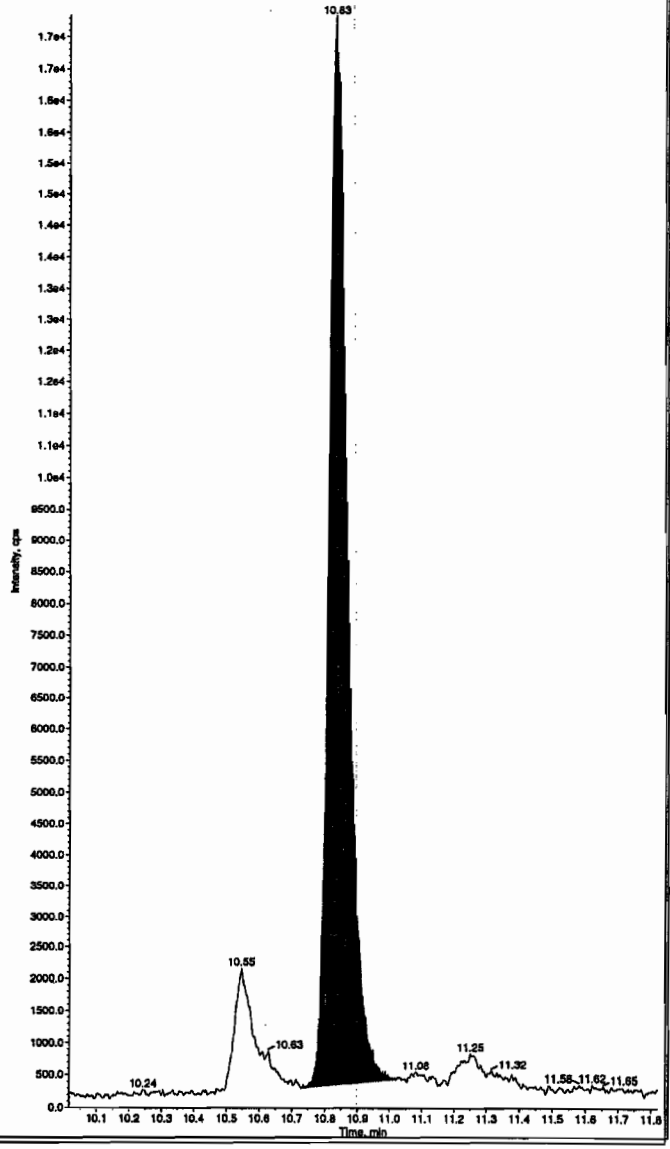
ample Name: "248102001" Sample ID: "958603|2|LER" File: "EXS04020076.wiff"
eak Name: "24-Diamino-6-nitrotoluene" Mass(es): "166.0/46.0 amu"
omment: "LCX83212S" Annotation: ""
ple Index: 1
ple Type: Unknown
centration: N/A
culated Conc: 0.00 ng/mL
. Date: 4/3/2010
. Time: 10:05:55 AM
ified: No



Sample Name: "248102001" Sample ID: "958603|2|LER" File: "EXS04020076.wiff"
Peak Name: "tris(o-cresyl) phosphate" Mass(es): "369.1/91.0 amu"
Comment: "LCX83212S" Annotation: ""
Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 3.54 ng/mL
Acq. Date: 4/3/2010
Acq. Time: 10:05:55 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: 10.8 min
Use Relative RT: No

Int. Type: Valley
Retention Time: 10.8 min
Area: 7.05e+004 counts
Height: 16989.569 cps
Start Time: 10.7 min
End Time: 11.0 min



EL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

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1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8396

Lab Code: GEL

GEL Job No (SDG) 10-2089

Matrix: SOIL

GEL Sample ID: 248102002

Sample Amount 2

Moisture: 8.7

Amount Units g

Date Received: 26-FEB-10

Extraction Type Sonication

Extraction Batch ID: 958599

Concentrated Extract Volume (mL) 10

Date Extracted: 04-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0412118a

Date Analyzed: 15-APR-10 01:12

Units: ug/kg

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

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Sample Amoun}} \times \text{Dilution Factor}$$

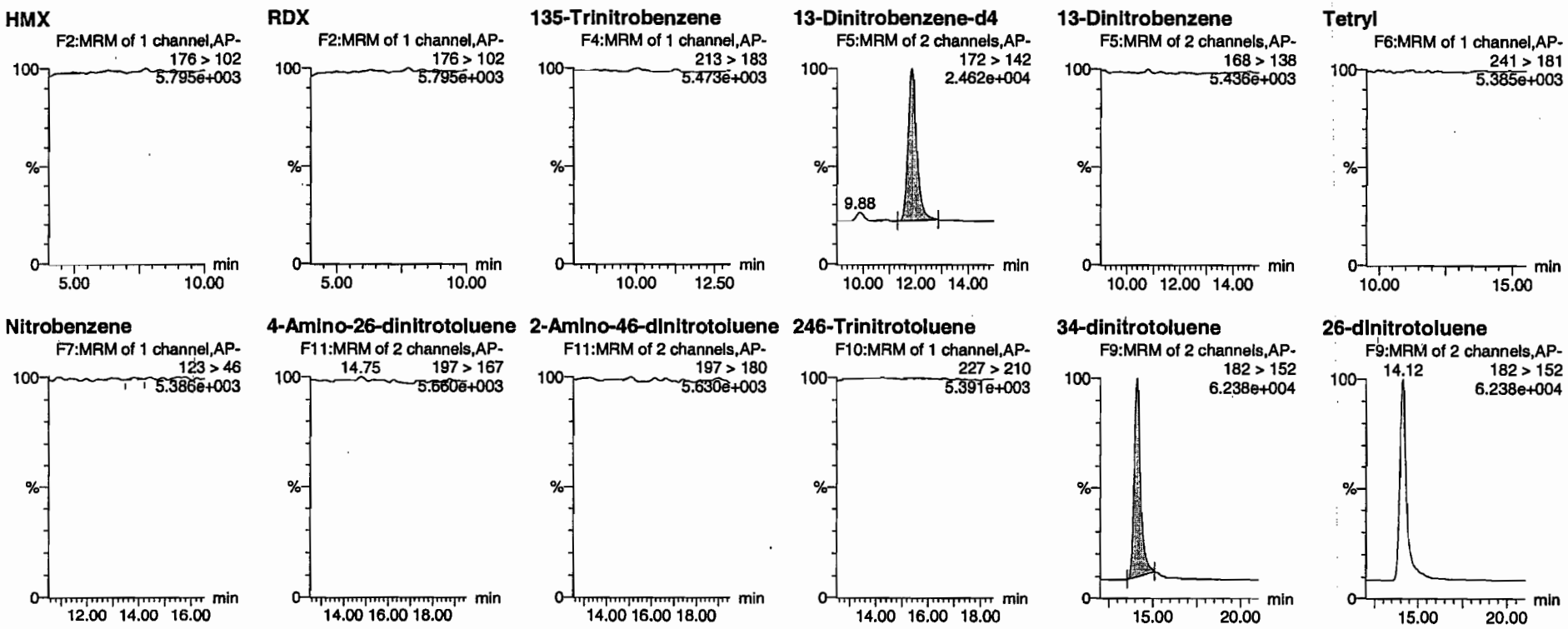
Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA2.qld, Time: Thu Apr 15 14:49:38 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0412118a
Date: 15-Apr-2010
Time: 01:12:23
ID: 248102002
Vial: 3:5,F

LANL/958603/Soil/21

MAP 4/15/10



HMK 04/15/10

GEL SOP GL-OA-E-056, Method 8321A-Modified / MM = Manual Modification

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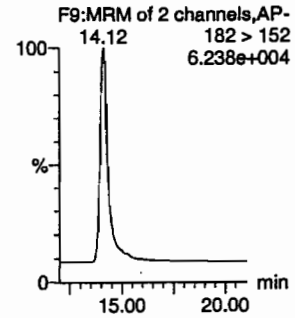
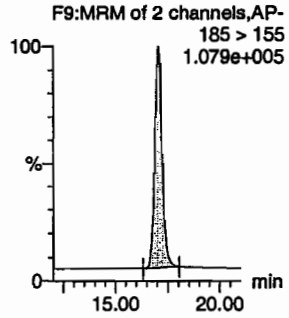
Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA2.qld, Time: Thu Apr 15 14:49:38 2010

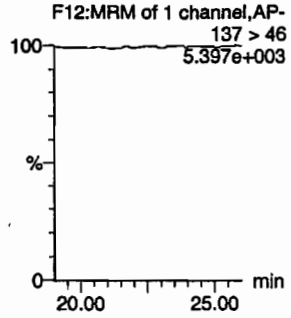
24-dinitrotoluene



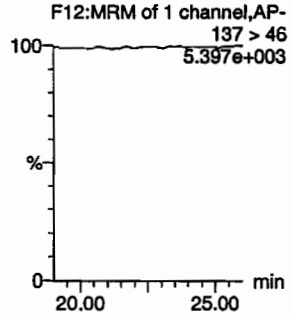
26-dinitrotoluene-d3



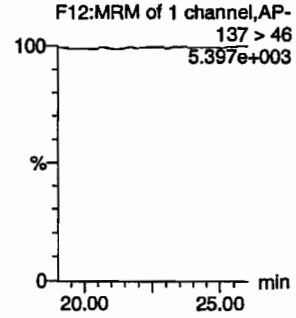
2-Nitrotoluene



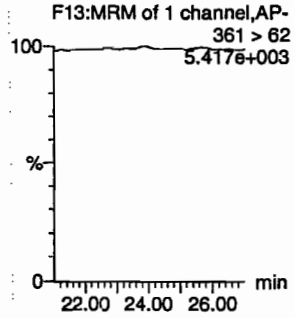
4-Nitrotoluene



3-Nitrotoluene



PETN



ID	Name	Trace	RT	Area	IS Area	Abs Resp	Response	Flags	Mod Date	Mod Time	ng/mL	%Rec	%Dev	S/N
248102002	HMX	176 > 102			7303.663									
248102002	RDX	176 > 102			7303.663									
248102002	135-Trinitrobenzene	213 > 183			7303.663									
248102002	13-Dinitrobenzene-d4	172 > 142	11.87	7303.663		7303.663	7303.663	bb			621.0214	124.2	24.2	523.6
248102002	13-Dinitrobenzene	168 > 138			7303.663									
248102002	Tetryl	241 > 181			7303.663									
248102002	Nitrobenzene	123 > 46			7303.663			MM-	15-Apr-10	14:31:03				
248102002	4-Amino-26-dinitrotoluene	197 > 167			41877.074									
248102002	2-Amino-46-dinitrotoluene	197 > 180			41877.074									
248102002	246-Trinitrotoluene	227 > 210			41877.074									
248102002	34-dinitrotoluene	182 > 152	14.12	23448.420	41877.074	23448.420	279.967	bb			271.5156	108.6	8.6	1813.6
248102002	26-dinitrotoluene	182 > 152			41877.074									
248102002	24-dinitrotoluene	182 > 152			41877.074									
248102002	26-dinitrotoluene-d3	185 > 155	17.05	41877.074		41877.074	41877.074	bb			598.5316	119.7	19.7	3876.8
248102002	2-Nitrotoluene	137 > 46			41877.074									
248102002	4-Nitrotoluene	137 > 46			41877.074									
248102002	3-Nitrotoluene	137 > 46			41877.074									
248102002	PETN	361 > 62			41877.074									

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1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8396

Lab Code: GEL

GEL Job No (SDG) 10-2089

Matrix: SOIL

GEL Sample ID: 248102002

Sample Amount 2

Moisture: 8.7

Amount Units g

Date Received: 26-FEB-10

Extraction Type Sonication

Extraction Batch ID: 958599

Concentrated Extract Volume (mL) 10

Date Extracted: 04-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS04020079.wiff

Date Analyzed: 03-APR-10 10:53

Units: ug/kg

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

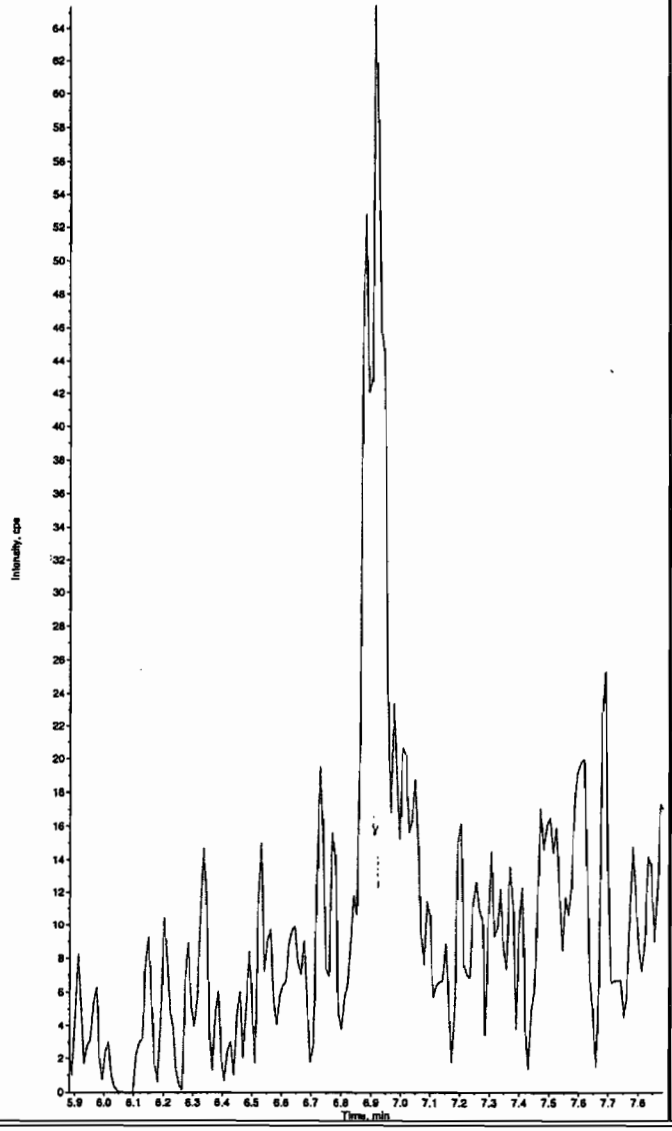
*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Sample Amoun}} \times \text{Dilution Factor}$$

Lan 4/7/10

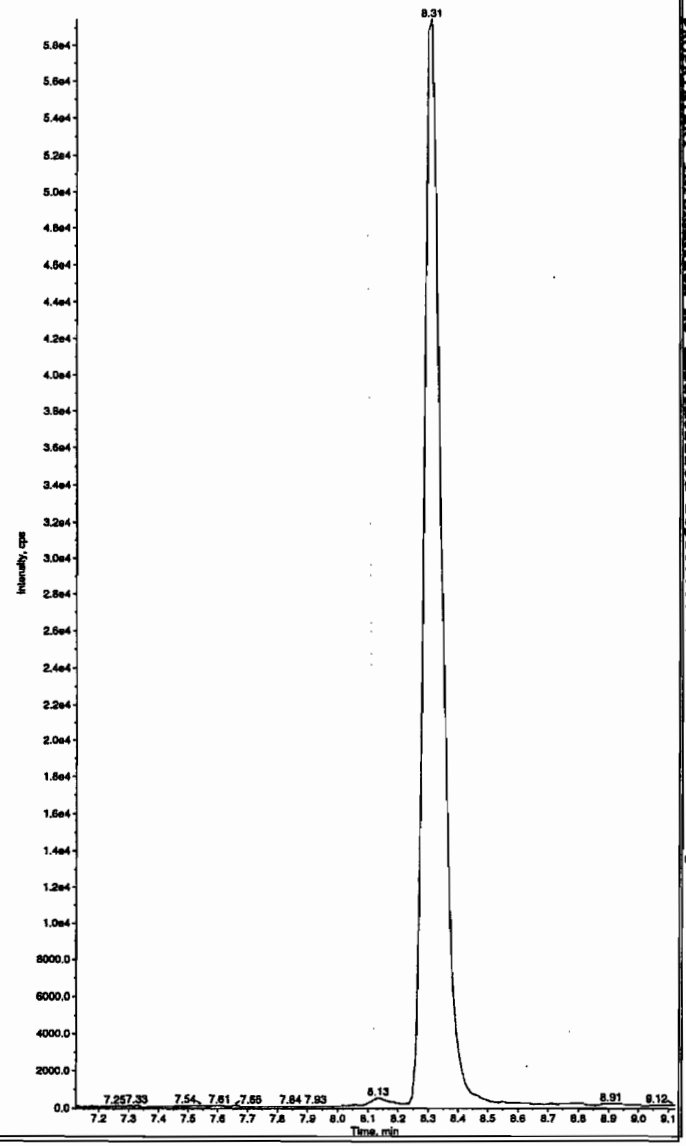
Sample Name: "248102002" Sample ID: "958603|2|LER" File: "EXS04020079.wiff"
Peak Name: "TATB" Mass(es): "257.2/204.9 amu"
Comment: "LCX83212S" Annotation: ""
Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 4/3/2010
Acq. Time: 10:53:01 AM

Modified: No



Sample Name: "248102002" Sample ID: "958603|2|LER" File: "EXS04020079.wiff"
Peak Name: "35-Dinitroaniline" Mass(as): "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: 4/3/2010
Acq. Time: 10:53:01 AM

Modified: No



AMM 04/08/10

EL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

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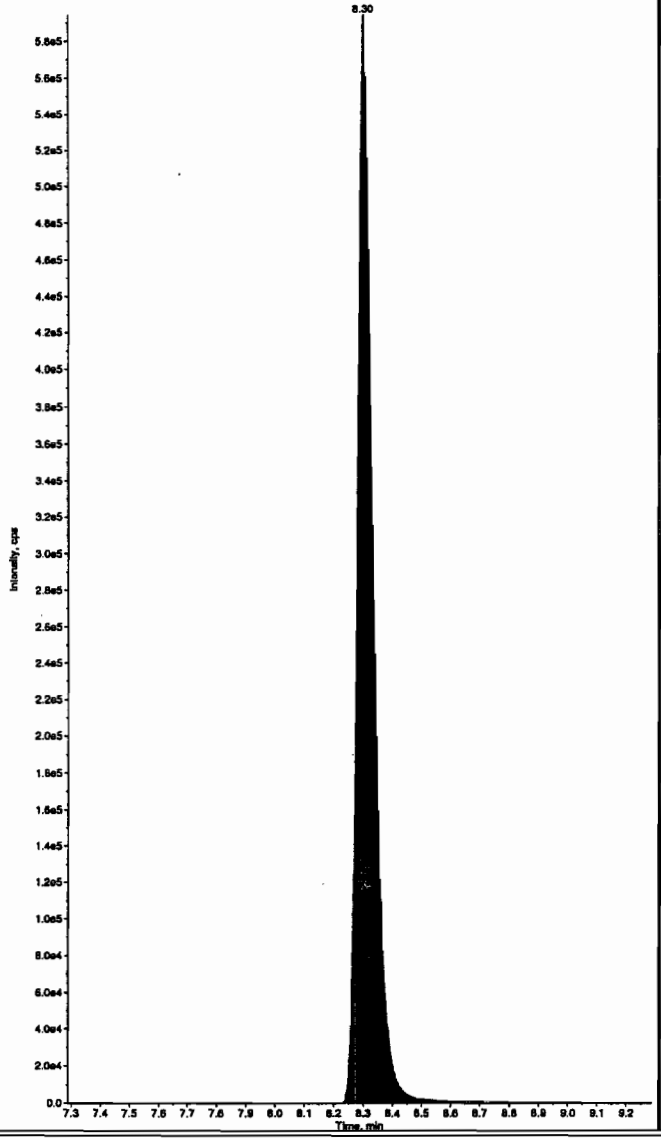
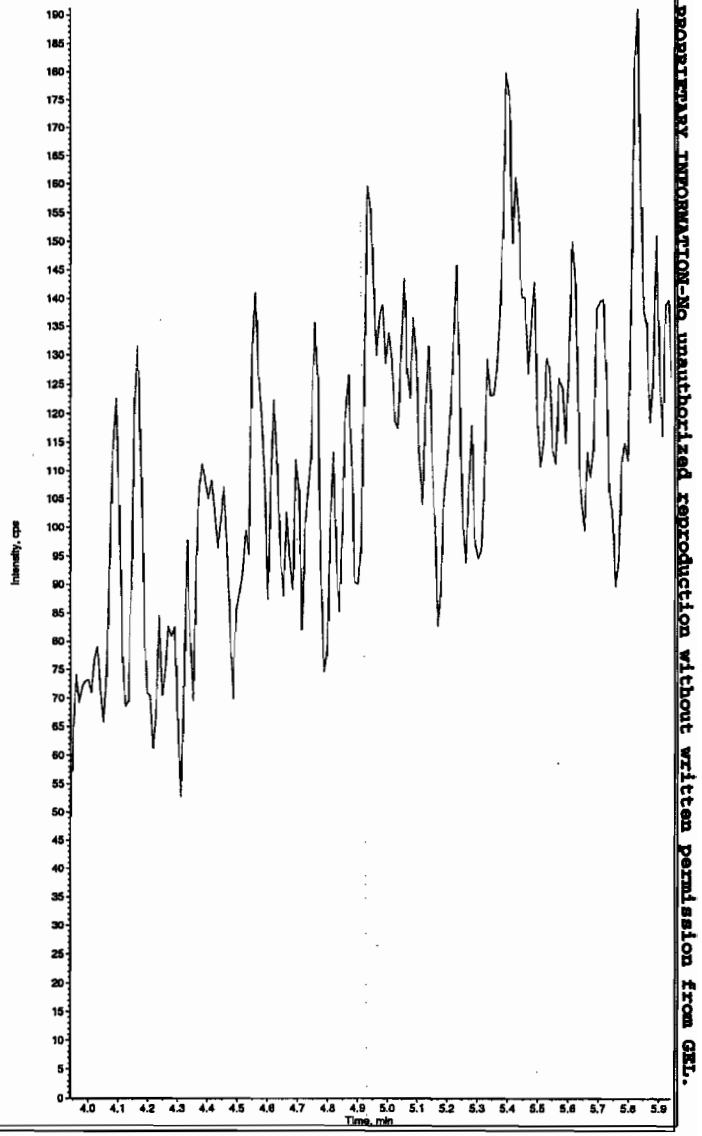
Sample Name: "248102002" Sample ID: "958603|2|LER" File: "EXS04020079.wiff"
Peak Name: "34-Dinitrotoluene" Mass(es): "182.1/151.9 amu"
Comment: "LCX83212S" Annotation: ""

Sample Index:	1
Sample Type:	Unknown
Concentration:	N/A
Calculated Conc:	248. ng/mL
Acq. Date:	4/3/2010
Acq. Time:	10:53:01 AM
Modified:	No
Quan. Algorithm:	IntelliQuan - IQA
Min. Peak Height:	1460.00 cps
Min. Peak Width:	0.00 sec
Smoothing Width:	3 points
Window:	15.0 sec
Expected RT:	8.29 min
Use Relative RT:	No
Peak Type:	Valley
Retention Time:	8.30 min
Area:	2.31e+006 counts
Height:	594083.862 cps
Start Time:	8.21 min
End Time:	8.65 min



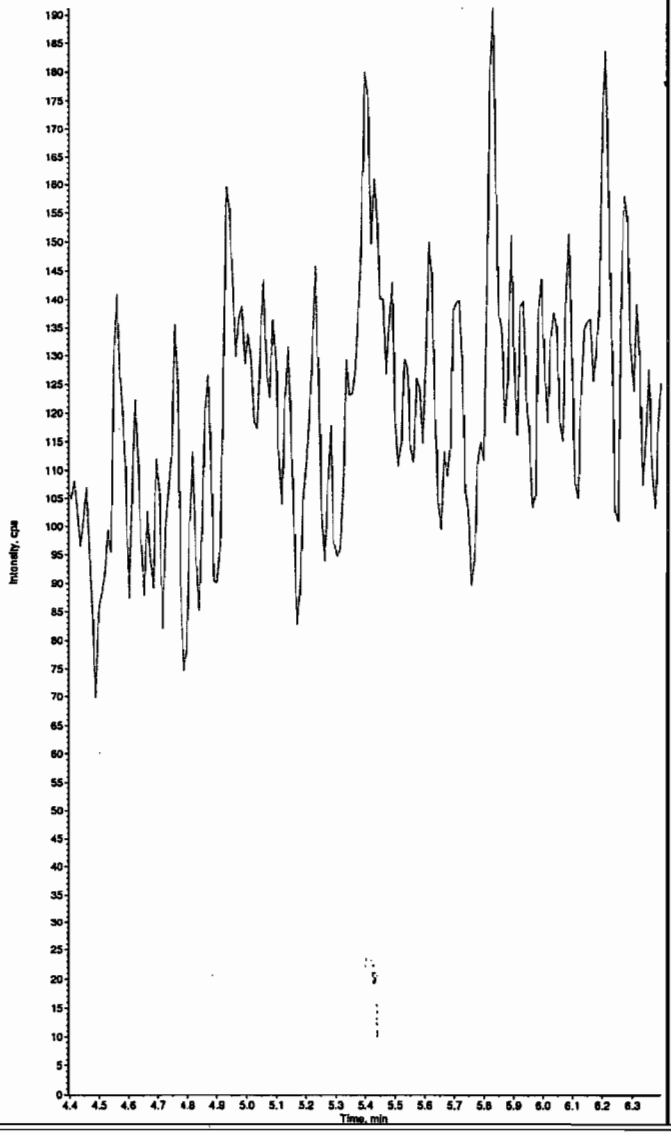
Sample Name: "248102002" Sample ID: "958603|2|LER" File: "EXS04020079.wiff"
Peak Name: "26-Diamino-4-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCX83212S" Annotation: ""

Sample Index:	1
Sample Type:	Unknown
Concentration:	N/A
Calculated Conc:	0.00 ng/mL
Acq. Date:	4/3/2010
Acq. Time:	10:53:01 AM
Modified:	No



ample Name: "248102002" Sample ID: "958603|2|LER" File: "EXS04020079.wiff"
eak Name: "24-Diamino-6-nitrotoluene" Mass(es): "166.0/45.0 amu"
omment: "LCX83212S" Annotation: ""
ple Index: 1
ple Type: Unknown
centration: N/A
culated Conc: 0.00 ng/mL
. Date: 4/3/2010
. Time: 10:53:01 AM

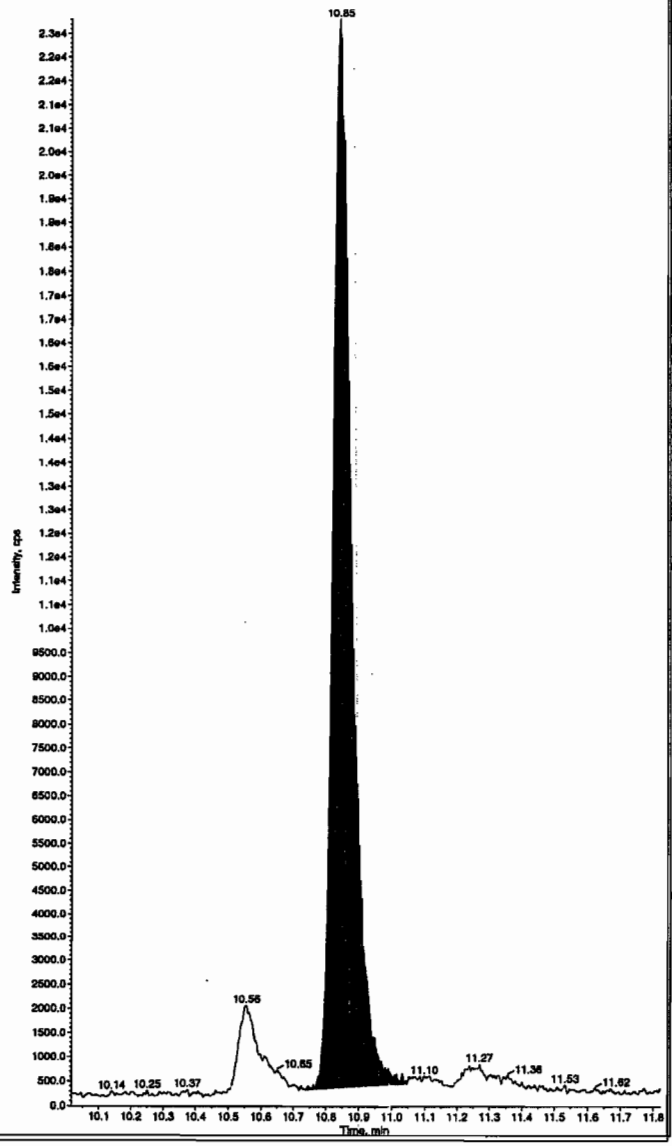
ified: No



Sample Name: "248102002" Sample ID: "958603|2|LER" File: "EXS04020079.wiff"
Peak Name: "tris(o-cresyl) phosphate" Mass(es): "369.1/91.0 amu"
Comment: "LCX83212S" Annotation: ""
Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 4.71 ng/mL
Acq. Date: 4/3/2010
Acq. Time: 10:53:01 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: 10.8 min
Use Relative RT: No

Int. Type: Valley
Retention Time: 10.8 min
Area: 9.37e+004 counts
Height: 22442.266 cps
Start Time: 10.7 min
End Time: 11.0 min



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1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8393

Lab Code: GEL

GEL Job No (SDG) 10-2089

Matrix: SOIL

GEL Sample ID: 248102003

Sample Amount 2

Moisture: 20.1

Amount Units g

Date Received: 26-FEB-10

Extraction Type Sonication

Extraction Batch ID: 958599

Concentrated Extract Volume (mL) 10

Date Extracted: 04-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0412119a

Date Analyzed: 15-APR-10 01:41

Units: ug/kg

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

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Sample Amoun}} \times \text{Dilution Factor}$$

Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA2.qld, Time: Thu Apr 15 14:49:38 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0412119a
Date: 15-Apr-2010
Time: 01:41:51
ID: 248102003 | LANC | 958603 | Solid | 2 |
Vial: 3:6,A

MAT 4/15/10

A28 41

XC: EXP0412140a

HMX
F2:MRM of 1 channel,AP- 176 > 102 5.629e+003

RDX
F2:MRM of 1 channel,AP- 176 > 102 5.629e+003

135-Trinitrobenzene
F4:MRM of 1 channel,AP- 213 > 183 5.380e+003

13-Dinitrobenzene-d4
F5:MRM of 2 channels,AP- 172 > 142 2.597e+004
9.88

13-Dinitrobenzene
F5:MRM of 2 channels,AP- 168 > 138 5.346e+003

Tetryl
F6:MRM of 1 channel,AP- 241 > 181 5.352e+003

Nitrobenzene
F7:MRM of 1 channel,AP- 123 > 46 5.336e+003

4-Amino-26-dinitrotoluene
F11:MRM of 2 channels,AP- 197 > 167 5.460e+003

2-Amino-46-dinitrotoluene
F11:MRM of 2 channels,AP- 197 > 180 5.507e+003

246-Trinitrotoluene
F10:MRM of 1 channel,AP- 227 > 210 5.351e+003

34-dinitrotoluene
F9:MRM of 2 channels,AP- 182 > 152 5.933e+004

26-dinitrotoluene
F9:MRM of 2 channels,AP- 14.08 182 > 152 5.933e+004

HMM 04/15/10

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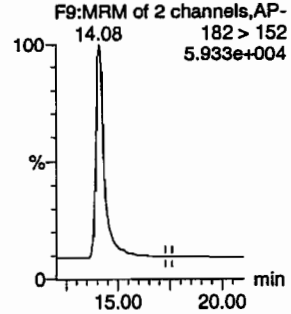
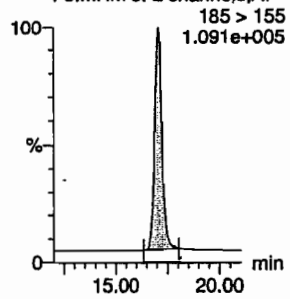
Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA2.qld, Time: Thu Apr 15 14:49:38 2010

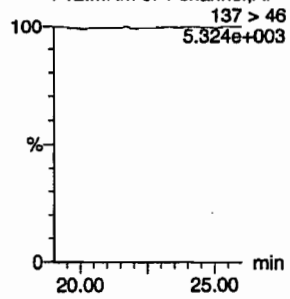
24-dinitrotoluene



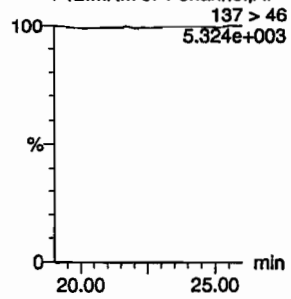
26-dinitrotoluene-d3



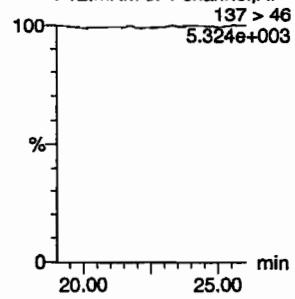
2-Nitrotoluene



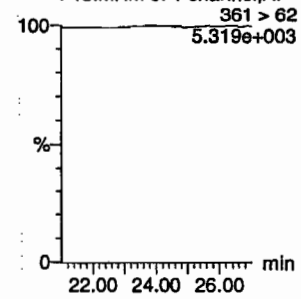
4-Nitrotoluene



3-Nitrotoluene



PETN



ID	Name	Trace	RT	Area	IS Area	Abs Resp	Response	Flags	Mod Date	Mod Time	ng/mL	%Rec	%Dev	S/N
248102003	HMX	176 > 102			7736.612									
248102003	RDX	176 > 102			7736.612									
248102003	135-Trinitrobenzene	213 > 183			7736.612									
248102003	13-Dinitrobenzene-d4	172 > 142	11.87	7736.612		7736.612	7736.612	bb			657.8345	131.6	31.6	516.3
248102003	13-Dinitrobenzene	168 > 138			7736.612									
248102003	Tetryl	241 > 181			7736.612									
248102003	Nitrobenzene	123 > 46			7736.612									
248102003	4-Amino-26-dinitrotoluene	197 > 167			42423.387									
248102003	2-Amino-46-dinitrotoluene	197 > 180			42423.387									
248102003	246-Trinitrotoluene	227 > 210			42423.387									
248102003	34-dinitrotoluene	182 > 152	14.08	22675.414	42423.387	22675.414	267.251	bb			259.1835	103.7	3.7	1266.5
248102003	26-dinitrotoluene	182 > 152			42423.387									
248102003	24-dinitrotoluene	182 > 152			42423.387			MM-	15-Apr-10	14:44:37				
248102003	26-dinitrotoluene-d3	185 > 155	17.05	42423.387		42423.387	42423.387	bb			606.3398	121.3	21.3	3549.0
248102003	2-Nitrotoluene	137 > 46			42423.387									
248102003	4-Nitrotoluene	137 > 46			42423.387									
248102003	3-Nitrotoluene	137 > 46			42423.387									
248102003	PETN	361 > 62			42423.387									

GEL SOP GL-OA-E-056, Method 8321A-Modified / MM = Manual Modification

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1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8393

Lab Code: GEL

GEL Job No (SDG) 10-2089

Matrix: SOIL

GEL Sample ID: 248102003

Sample Amount 2

Moisture: 20.1

Amount Units g

Date Received: 26-FEB-10

Extraction Type Sonication

Extraction Batch ID: 958599

Concentrated Extract Volume (mL) 10

Date Extracted: 04-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS04020080.wiff

Date Analyzed: 03-APR-10 11:08

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

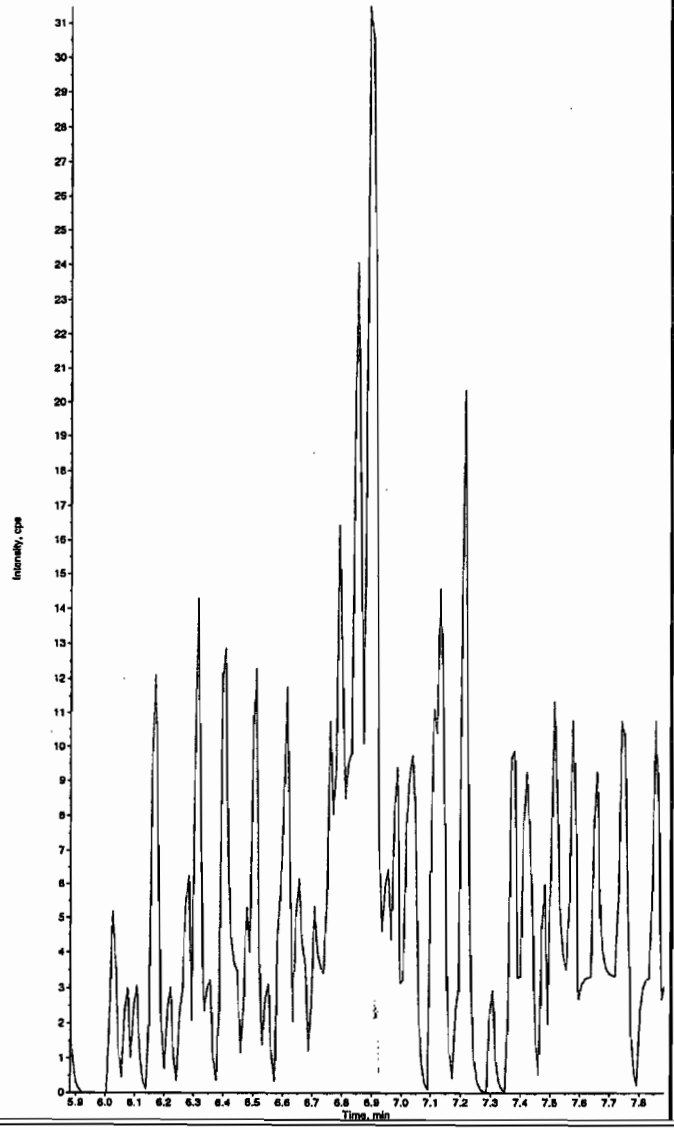
*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Sample Amoun}} \times \text{Dilution Factor}$$

Lan 4/7/10

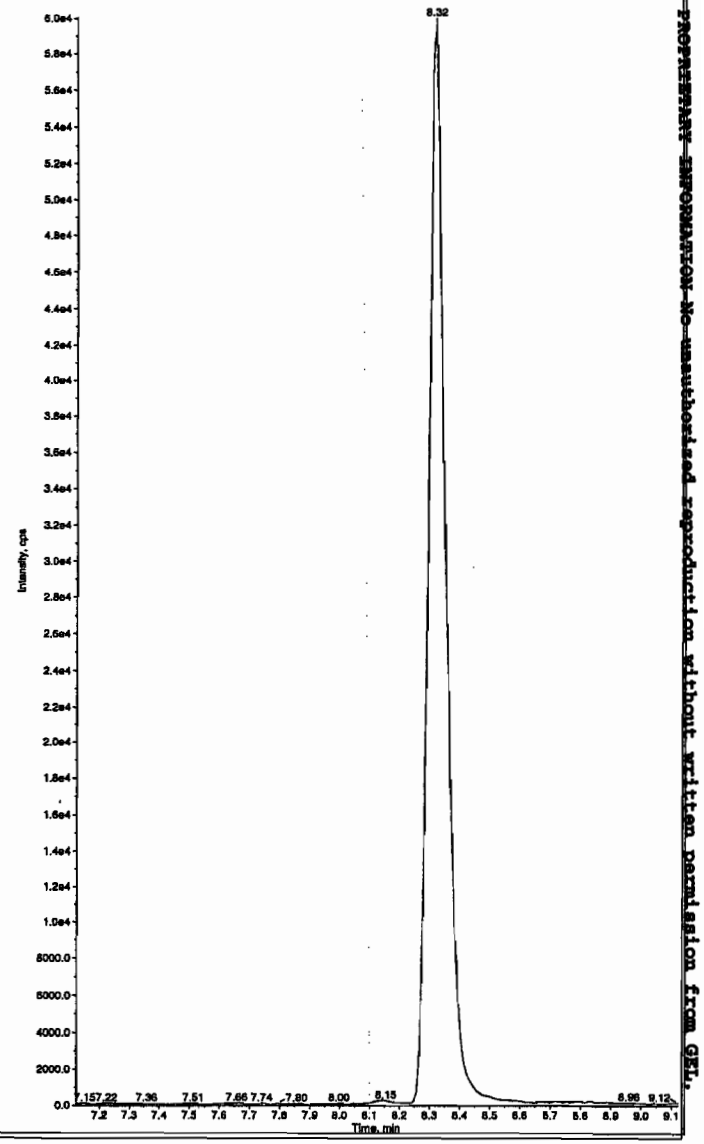
Sample Name: "248102003" Sample ID: "958603|2|LER" File: "EXS04020080.wiff"
Peak Name: "TATB" Mass(es): "257.2/204.9 amu"
Comment: "LCX83212S" Annotation: ""
mple Index: 1
mple Type: Unknown
ncentration: N/A
lculated Conc: 0.00 ng/mL
q. Date: 4/3/2010
q. Time: 11:08:44 AM

dified: No



Sample Name: "248102003" Sample ID: "958603|2|LER" File: "EXS04020080.wiff"
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: 4/3/2010
Acq. Time: 11:08:44 AM

Modified: No



Hmm 04/08/10

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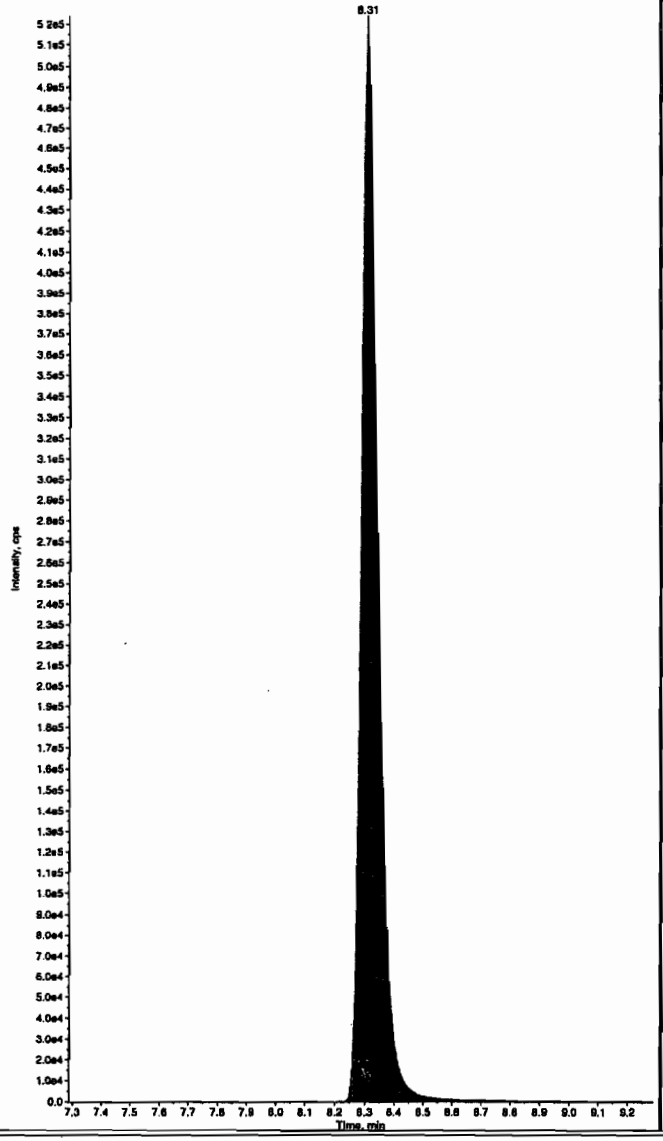
Sample Name: "248102003" Sample ID: "958603|2|LER" File: "EXS04020080.wiff"
Peak Name: "34-Dinitrotoluene" Mass(es): "182.1/151.9 amu"
Comment: "LCX83212S" Annotation: ""

mple Index: 1
mple Type: Unknown
ncentration: N/A
lculated Conc: 229. ng/mL
q. Date: 4/3/2010
q. Time: 11:08:44 AM

dified: No
oc. Algorithm: IntelliQuan - IQA
n. Peak Height: 1460.00 cps
n. Peak Width: 0.00 sec
oothing Width: 3 points
Window: 15.0 sec
pected RT: 8.29 min
e Relative RT: No

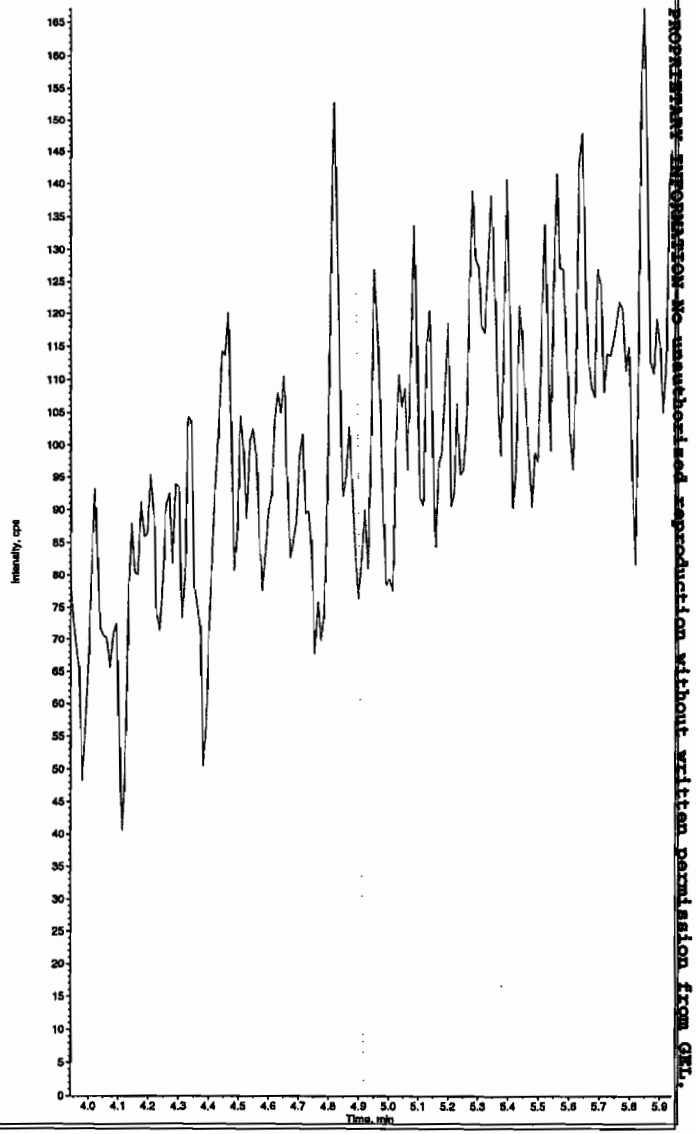
t. Type: Valley
tention Time: 8.31 min
ea: 2.14e+006 counts
ight: 523967.041 cps
art Time: 8.22 min
d Time: 8.71 min



Sample Name: "248102003" Sample ID: "958603|2|LER" File: "EXS04020080.wiff"
Peak Name: "26-Diamino-4-nitrotoluene" 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: 4/3/2010
Acq. Time: 11:08:44 AM

Modified: No



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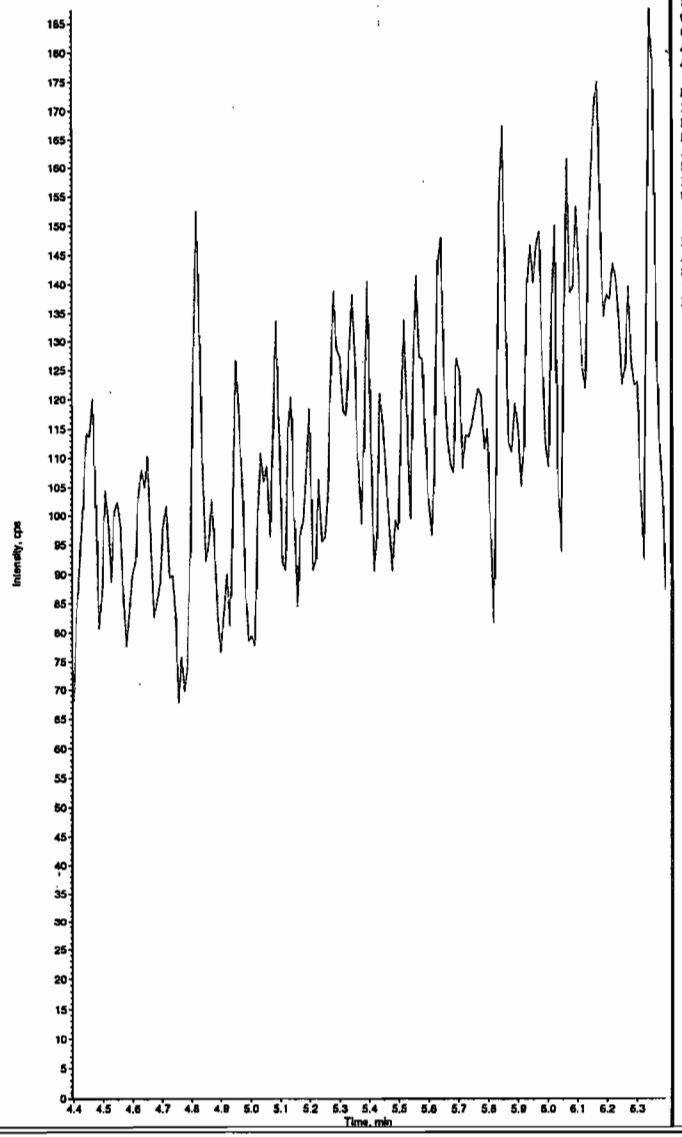
ample Name: "248102003" Sample ID: "958603|2|LER" File: "EXS04020080.wiff"
eak Name: "24-Diamino-6-nitrotoluene" Mass(es): "166.0/46.0 amu"
omment: "LCX83212S" Annotation: ""
ple Index: 1
ple Type: Unknown
centration: N/A
culated Conc: 0.00 ng/mL
. Date: 4/3/2010
. Time: 11:08:44 AM

ified: No

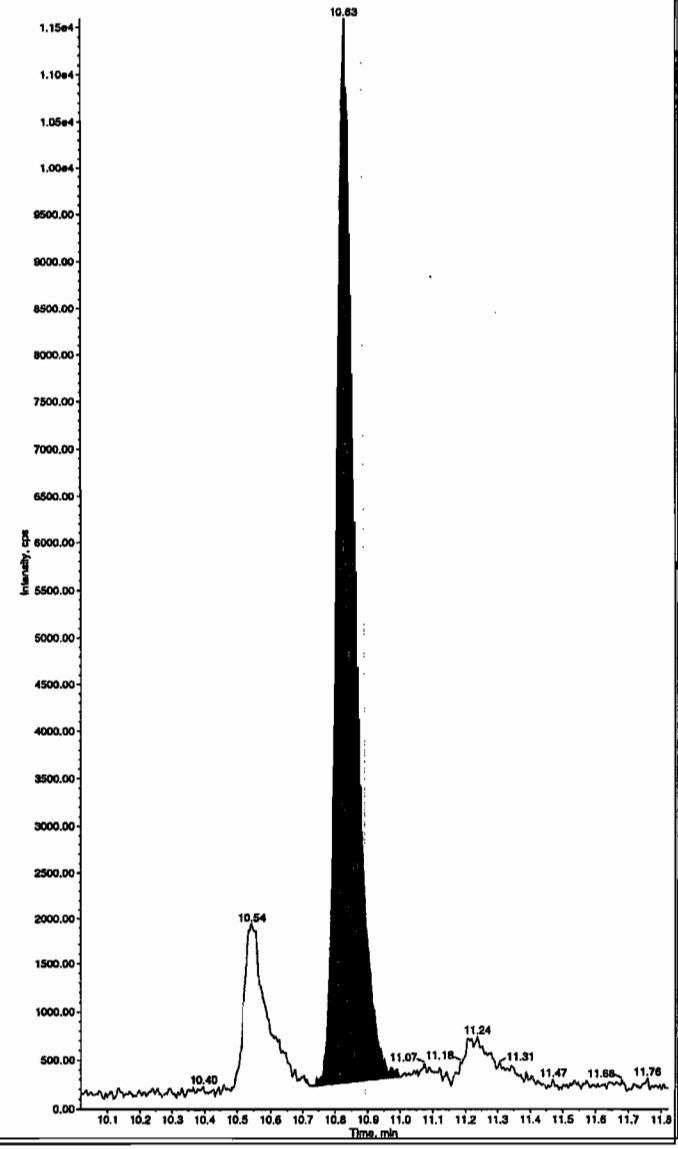


Sample Name: "248102003" Sample ID: "958603|2|LER" File: "EXS04020080.wiff"
Peak Name: "tris(o-cresyl) phosphate" Mass(es): "369.1/91.0 amu"
Comment: "LCX83212S" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 2.30 ng/mL
Acq. Date: 4/3/2010
Acq. Time: 11:08:44 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: 10.8 min
Use Relative RT: No

Int. Type: Valley
Retention Time: 10.8 min
Area: 4.59e+004 counts
Height: 11330.117 cps
Start Time: 10.7 min
End Time: 11.0 min



EL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

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1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8395

Lab Code: GEL

GEL Job No (SDG) 10-2089

Matrix: SOIL

GEL Sample ID: 248102004

Sample Amount 2

Moisture: 4.4

Amount Units g

Date Received: 26-FEB-10

Extraction Type Sonication

Extraction Batch ID: 958599

Concentrated Extract Volume (mL) 10

Date Extracted: 04-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0412120a

Date Analyzed: 15-APR-10 02:11

Units: ug/kg

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

*Concentration =

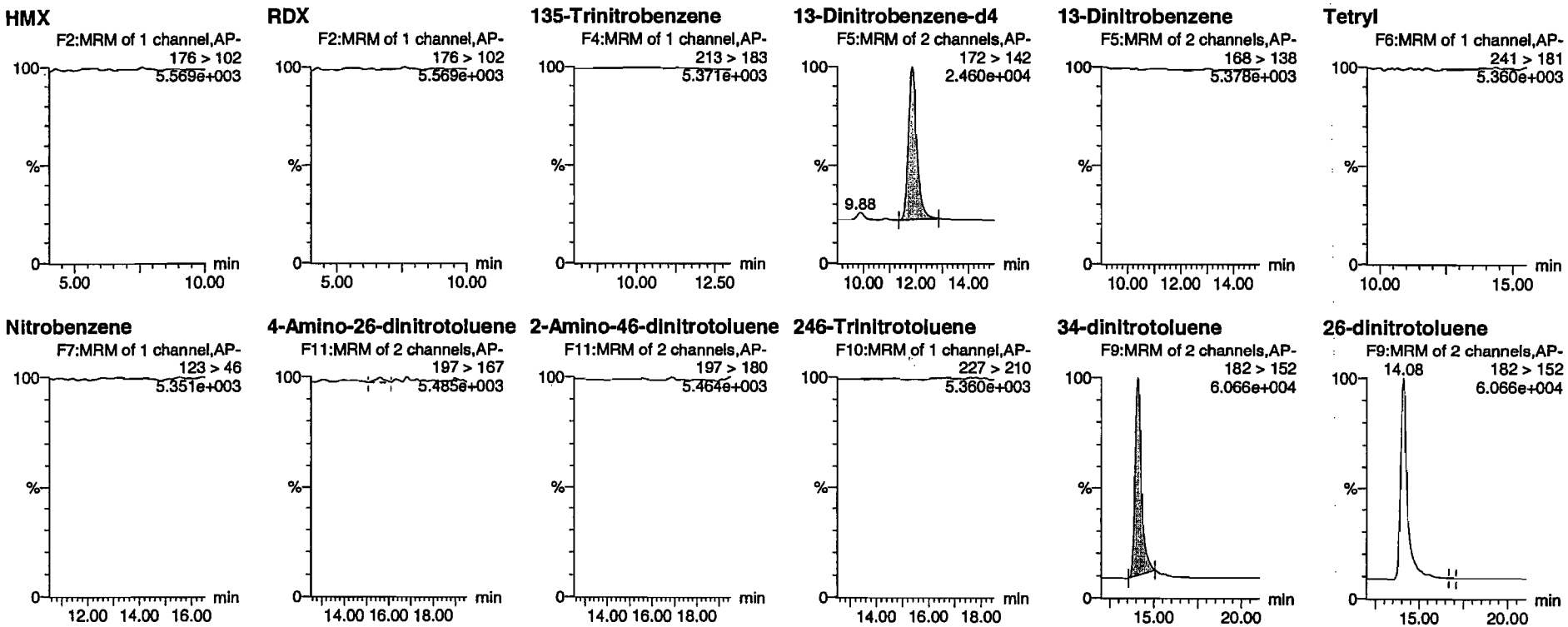
$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Sample Amoun}} \times \text{Dilution Factor}$$

Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA2.qld, Time: Thu Apr 15 14:49:38 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0412120a
Date: 15-Apr-2010
Time: 02:11:22
ID: 248102004 | LAW | 958603 | Soil | 2 |
Vial: 3:6,B

MM 4/15/10



HMM 04/15/10

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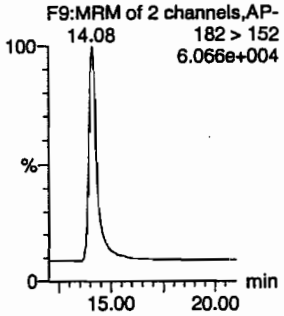
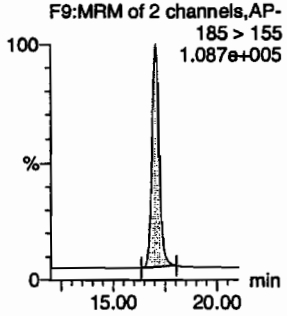
Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA2.qld, Time: Thu Apr 15 14:49:38 2010

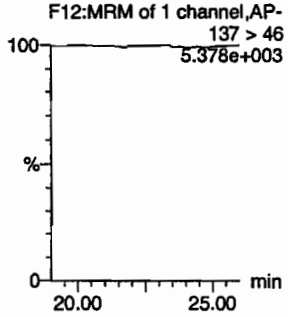
24-dinitrotoluene



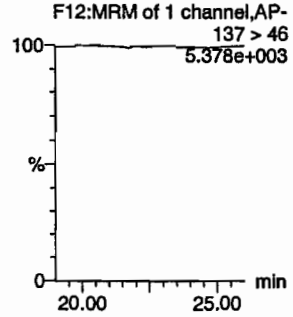
26-dinitrotoluene-d3



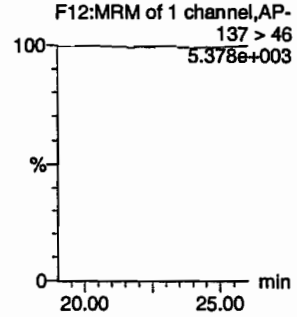
2-Nitrotoluene



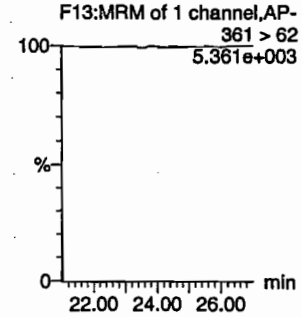
4-Nitrotoluene



3-Nitrotoluene



PETN



ID	Name	Trace	RT	Area	IS Area	Abs Resp	%Response	Flags	Mod Date	Mod Time	ng/mL	%Rec	%Dev	S/N
248102004	HMX	176 > 102			7180.576									
248102004	RDX	176 > 102			7180.576									
248102004	135-Trinitrobenzene	213 > 183			7180.576									
248102004	13-Dinitrobenzene-d4	172 > 142	11.87	7180.576		7180.576	7180.576	bb			610.5554	122.1	22.1	845.9
248102004	13-Dinitrobenzene	168 > 138			7180.576									
248102004	Tetryl	241 > 181			7180.576									
248102004	Nitrobenzene	123 > 46			7180.576									
248102004	4-Amino-26-dinitrotoluene	197 > 167			42605.949			MM-	15-Apr-10	14:34:42				
248102004	2-Amino-46-dinitrotoluene	197 > 180			42605.949									
248102004	246-Trinitrotoluene	227 > 210			42605.949									
248102004	34-dinitrotoluene	182 > 152	14.08	22764.229	42605.949	22764.229	267.148	bb			259.0838	103.6	3.6	975.5
248102004	26-dinitrotoluene	182 > 152			42605.949			MM-	15-Apr-10	14:40:49				
248102004	24-dinitrotoluene	182 > 152			42605.949									
248102004	26-dinitrotoluene-d3	185 > 155	17.05	42605.949		42605.949	42605.949	bb			608.9491	121.8	21.8	3596.6
248102004	2-Nitrotoluene	137 > 46			42605.949									
248102004	4-Nitrotoluene	137 > 46			42605.949									
248102004	3-Nitrotoluene	137 > 46			42605.949									
248102004	PETN	361 > 62			42605.949									

GEL SOP GL-OA-E-056, Method 8321A-Modified / MM = Manual Modification

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1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8395

Lab Code: GEI

GEL Job No (SDG) 10-2089

Matrix: SOIL

GEL Sample ID: 248102004

Sample Amount 2

Moisture: 4.4

Amount Units g

Date Received: 26-FEB-10

Extraction Type Sonication

Extraction Batch ID: 958599

Concentrated Extract Volume (mL) 10

Date Extracted: 04-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS04020081.wiff

Date Analyzed: 03-APR-10 11:24

Units: ug/kg

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

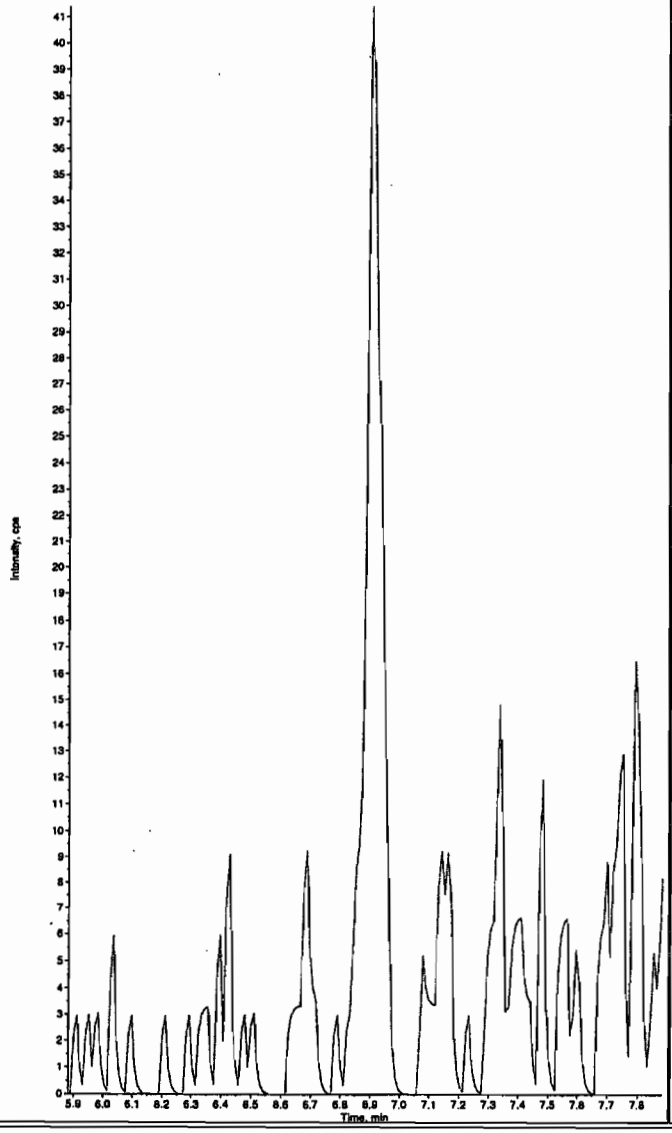
*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Sample Amoun}} \times \text{Dilution Factor}$$

Lan 4/7/10

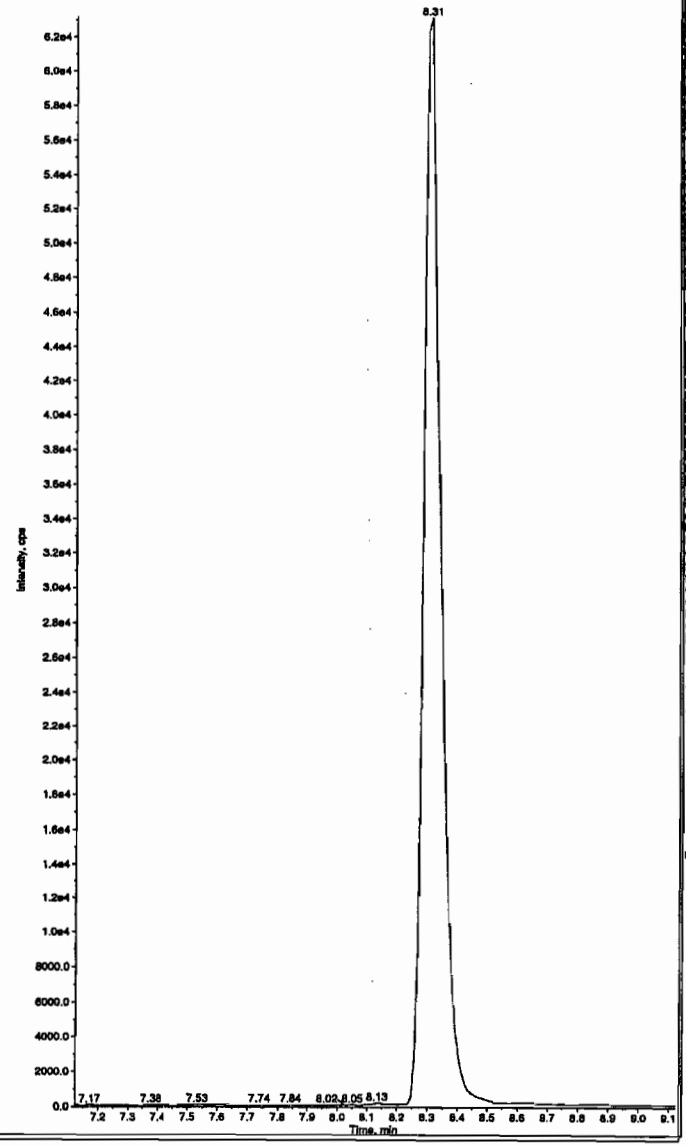
Sample Name: "248102004" Sample ID: "958603|2|LER" File: "EXS04020081.wiff"
Peak Name: "TATB" Mass(es): "257.2/204.9 amu"
Comment: "LCX83212S" Annotation: ""
ple Index: 1
ple Type: Unknown
centration: N/A
lculated Conc: 0.00 ng/mL
. Date: 4/3/2010
. Time: 11:24:27 AM

lified: No



Sample Name: "248102004" Sample ID: "958603|2|LER" File: "EXS04020081.wiff"
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: 4/3/2010
Acq. Time: 11:24:27 AM

Modified: No



HMM 04/08/10

EL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

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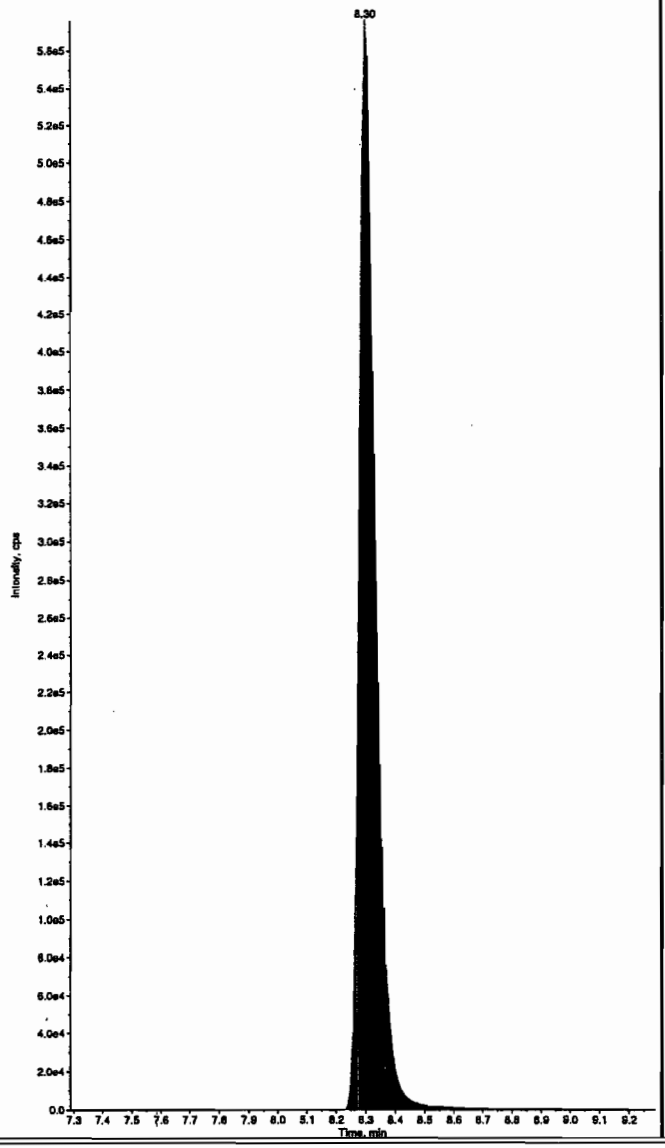
Sample Name: "248102004" Sample ID: "958603|2|LER" File: "EXS04020081.wiff"
Peak Name: "34-Dinitrotoluene" Mass(es): "182.1/151.9 amu"
Comment: "LCX83212S" Annotation: ""

mple Index: 1
mple Type: Unknown
ncentration: N/A
lculated Conc: 248. ng/mL
q. Date: 4/3/2010
q. Time: 11:24:27 AM

dified: No
oc. Algorithm: IntelliQuan - IQA
n. Peak Height: 1460.00 cps
n. Peak Width: 0.00 sec
oothing Width: 3 points
Window: 15.0 sec
pected RT: 8.29 min
e Relative RT: No

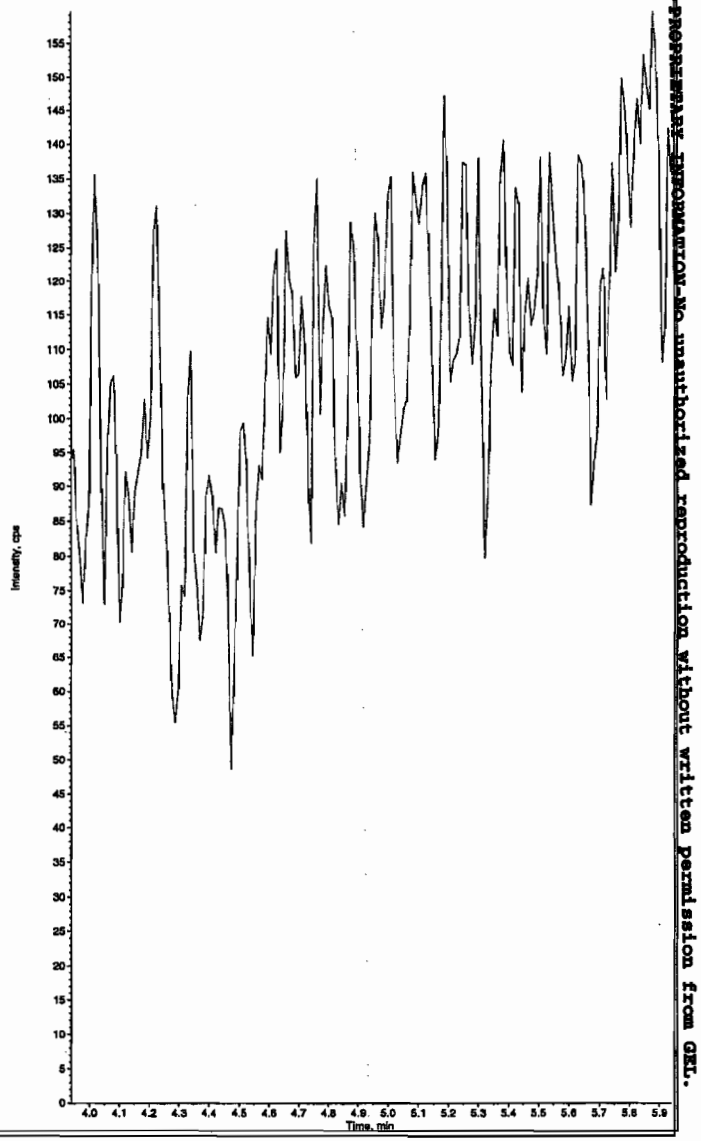
t. Type: Valley
tention Time: 8.30 min
ea: 2.31e+006 counts
ight: 576166.443 cps
rt Time: 8.21 min
i Time: 8.81 min



Sample Name: "248102004" Sample ID: "958603|2|LER" File: "EXS04020081.wiff"
Peak Name: "26-Diamino-4-nitrotoluene" 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: 4/3/2010
Acq. Time: 11:24:27 AM

Modified: No



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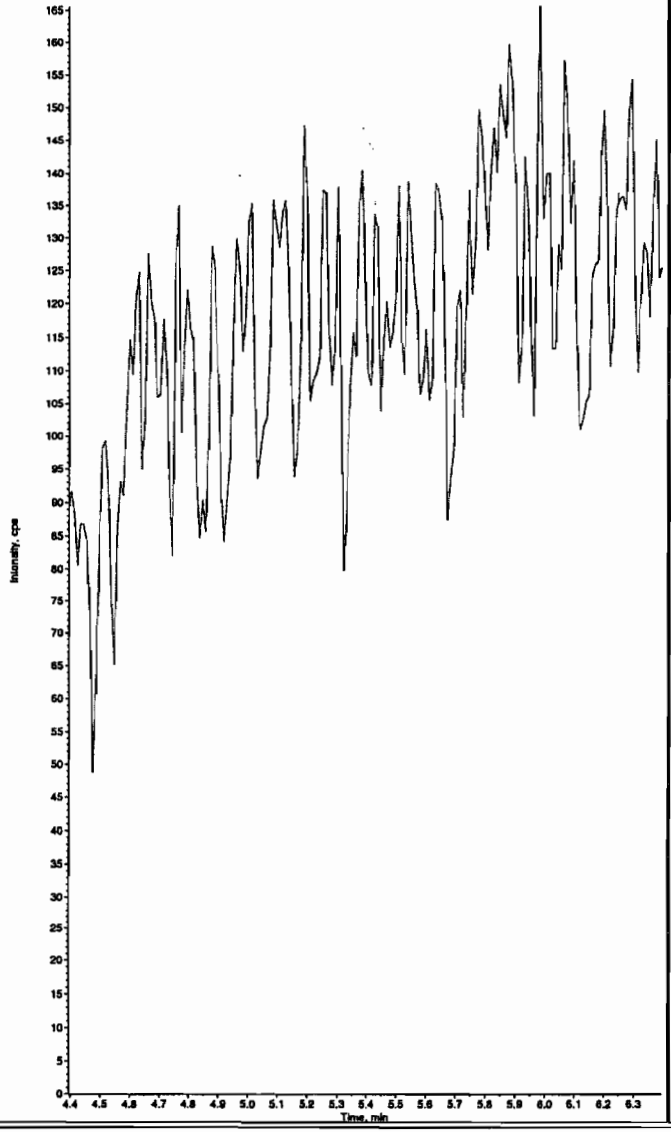
ample Name: "248102004" Sample ID: "958603|2|LER" File: "EXS04020081.wiff"
eak Name: "24-Diamino-6-nitrotoluene" Mass(es): "166.0/46.0 amu"
omment: "LCX83212S" Annotation: ""
ple Index: 1
ple Type: Unknown
centration: N/A
culated Conc: 0.00 ng/mL
. Date: 4/3/2010
. Time: 11:24:27 AM

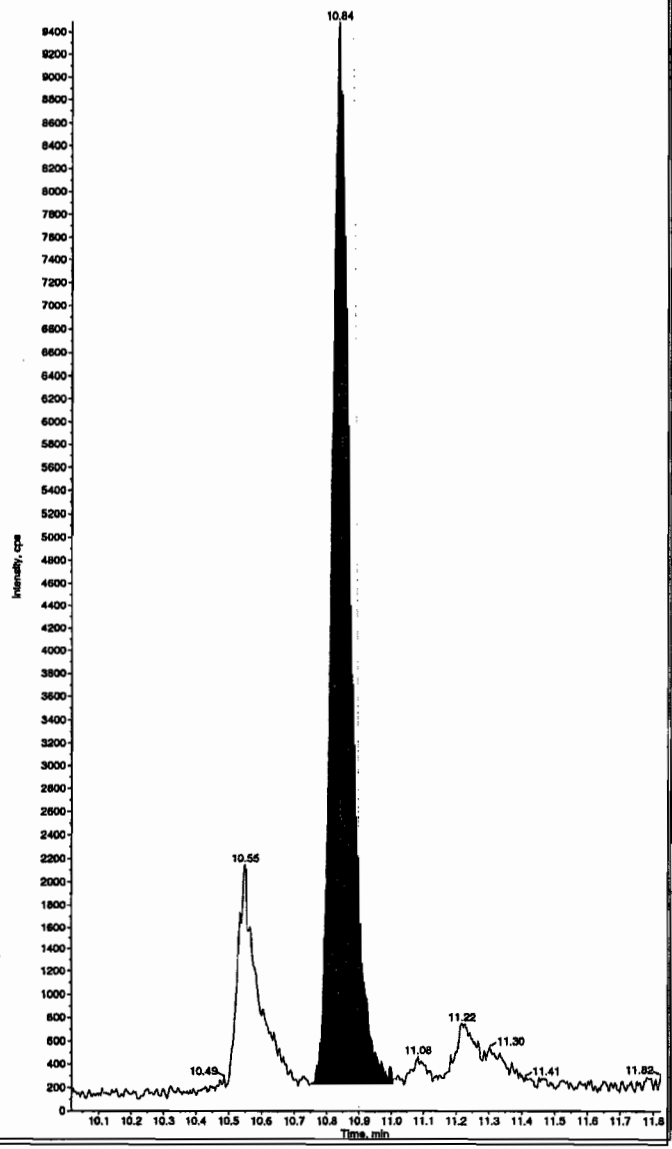
ified: No



Sample Name: "248102004" Sample ID: "958603|2|LER" File: "EXS04020081.wiff"
Peak Name: "tris(o-cresyl) phosphate" Mass(es): "369.1/91.0 amu"
Comment: "LCX83212S" Annotation: ""
Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 1.89 ng/mL
Acq. Date: 4/3/2010
Acq. Time: 11:24:27 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: 10.8 min
Use Relative RT: No

Int. Type: Valley
Retention Time: 10.8 min
Area: 3.79e+004 counts
Height: 9254.128 cps
Start Time: 10.8 min
End Time: 11.0 min



EL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

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1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8398

Lab Code: GEL

GEL Job No (SDG) 10-2089

Matrix: SOIL

GEL Sample ID: 248102005

Sample Amount 2

Moisture: 12.8

Amount Units g

Date Received: 26-FEB-10

Extraction Type Sonication

Extraction Batch ID: 958599

Concentrated Extract Volume (mL) 10

Date Extracted: 04-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0412121a

Date Analyzed: 15-APR-10 02:40

Units: ug/kg

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

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Sample Amoun}} \times \text{Dilution Factor}$$

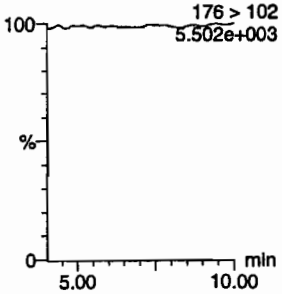
Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA2.qld, Time: Thu Apr 15 14:49:38 2010

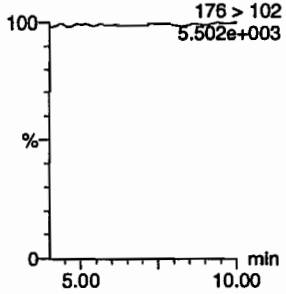
Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0412121a
Date: 15-Apr-2010
Time: 02:40:53
ID: 248102005 | LANL | 958603 | Soils | 2 |
Vial: 3:6,C

MH 4/15/10

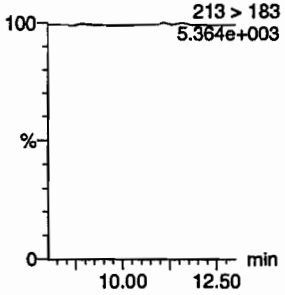
HMX
F2:MRM of 1 channel,AP- 176 > 102
5.502e+003



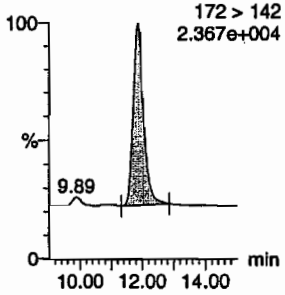
RDX
F2:MRM of 1 channel,AP- 176 > 102
5.502e+003



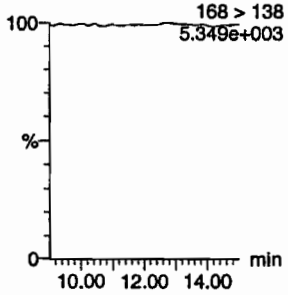
135-Trinitrobenzene
F4:MRM of 1 channel,AP- 213 > 183
5.364e+003



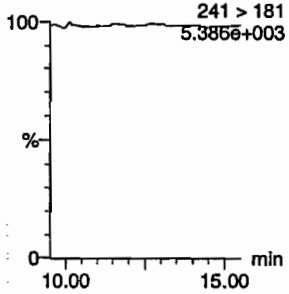
13-Dinitrobenzene-d4
F5:MRM of 2 channels,AP- 172 > 142
2.367e+004



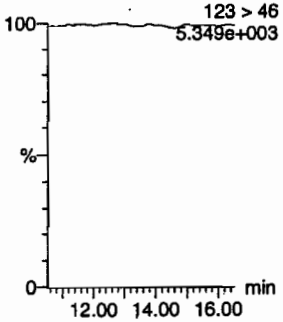
13-Dinitrobenzene
F5:MRM of 2 channels,AP- 168 > 138
5.349e+003



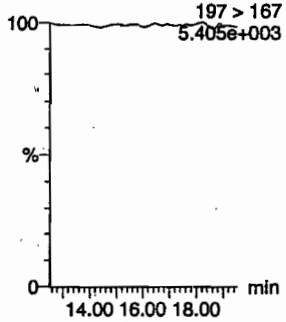
Tetryl
F6:MRM of 1 channel,AP- 241 > 181
5.386e+003



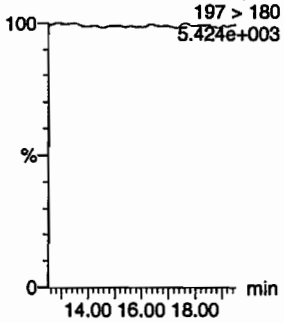
Nitrobenzene
F7:MRM of 1 channel,AP- 123 > 46
5.349e+003



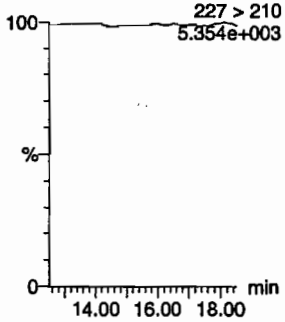
4-Amino-26-dinitrotoluene
F11:MRM of 2 channels,AP- 197 > 167
5.405e+003



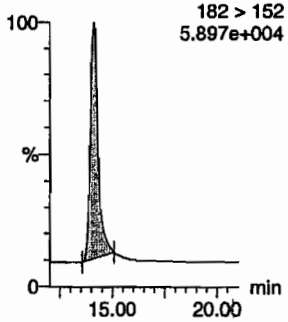
2-Amino-46-dinitrotoluene
F11:MRM of 2 channels,AP- 197 > 180
5.424e+003



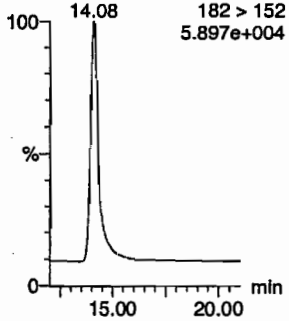
246-Trinitrotoluene
F10:MRM of 1 channel,AP- 227 > 210
5.354e+003



34-dinitrotoluene
F9:MRM of 2 channels,AP- 182 > 152
5.897e+004



26-dinitrotoluene
F9:MRM of 2 channels,AP- 182 > 152
14.08
5.897e+004



HMM 04/15/10

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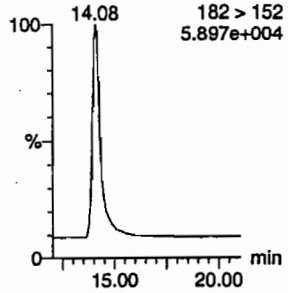
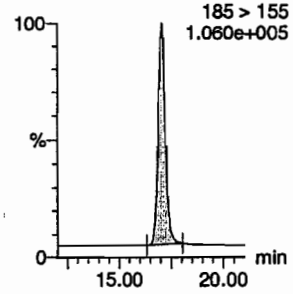
Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA2.qld, Time: Thu Apr 15 14:49:38 2010

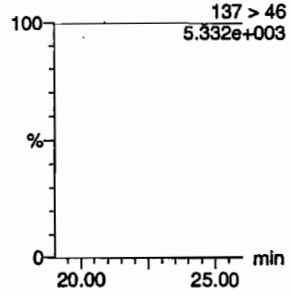
24-dinitrotoluene



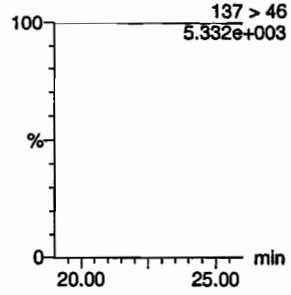
26-dinitrotoluene-d3



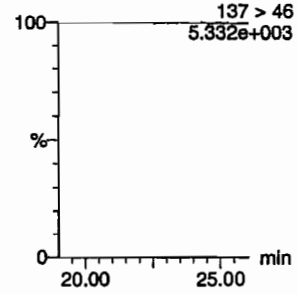
2-Nitrotoluene



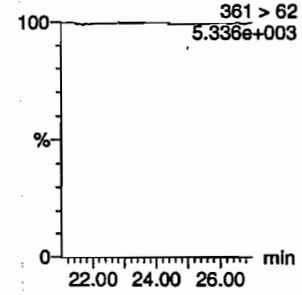
4-Nitrotoluene



3-Nitrotoluene



PETN



ID	Name	Trace	RT	Area	IS Area	Abs Resp	Response	Flags	Mod Date	Mod Time	ng/mL	%Rec	%Dev	S/N
248102005	HMX	176 > 102			6945.256									
248102005	RDX	176 > 102			6945.256									
248102005	135-Trinitrobenzene	213 > 183			6945.256									
248102005	13-Dinitrobenzene-d4	172 > 142	11.87	6945.256		6945.256	6945.256	bb			590.5465	118.1	18.1	466.8
248102005	13-Dinitrobenzene	168 > 138			6945.256									
248102005	Tetryl	241 > 181			6945.256									
248102005	Nitrobenzene	123 > 46			6945.256									
248102005	4-Amino-26-dinitrotoluene	197 > 167			40914.082									
248102005	2-Amino-46-dinitrotoluene	197 > 180			40914.082									
248102005	246-Trinitrotoluene	227 > 210			40914.082									
248102005	34-dinitrotoluene	182 > 152	14.08	22370.328	40914.082	22370.328	273.382	bb			265.1289	106.1	6.1	856.3
248102005	26-dinitrotoluene	182 > 152			40914.082									
248102005	24-dinitrotoluene	182 > 152			40914.082									
248102005	26-dinitrotoluene-d3	185 > 155	17.05	40914.082		40914.082	40914.082	bb			584.7679	117.0	17.0	2030.8
248102005	2-Nitrotoluene	137 > 46			40914.082									
248102005	4-Nitrotoluene	137 > 46			40914.082									
248102005	3-Nitrotoluene	137 > 46			40914.082									
248102005	PETN	361 > 62			40914.082									

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1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8398

Lab Code: GEL

GEL Job No (SDG) 10-2089

Matrix: SOIL

GEL Sample ID: 248102005

Sample Amount 2

Moisture: 12.8

Amount Units g

Date Received: 26-FEB-10

Extraction Type Sonication

Extraction Batch ID: 958599

Concentrated Extract Volume (mL) 10

Date Extracted: 04-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS04020082.wiff

Date Analyzed: 03-APR-10 11:40

Units: ug/kg

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

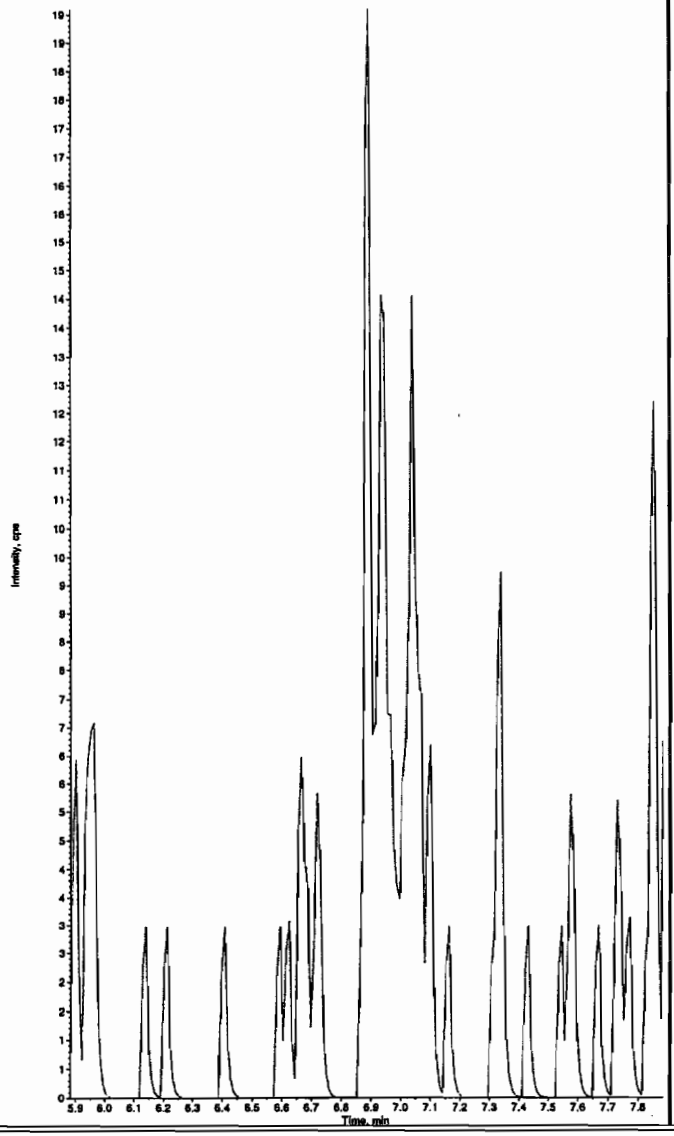
*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Sample Amoun}} \times \text{Dilution Factor}$$

Kar 4/7/10

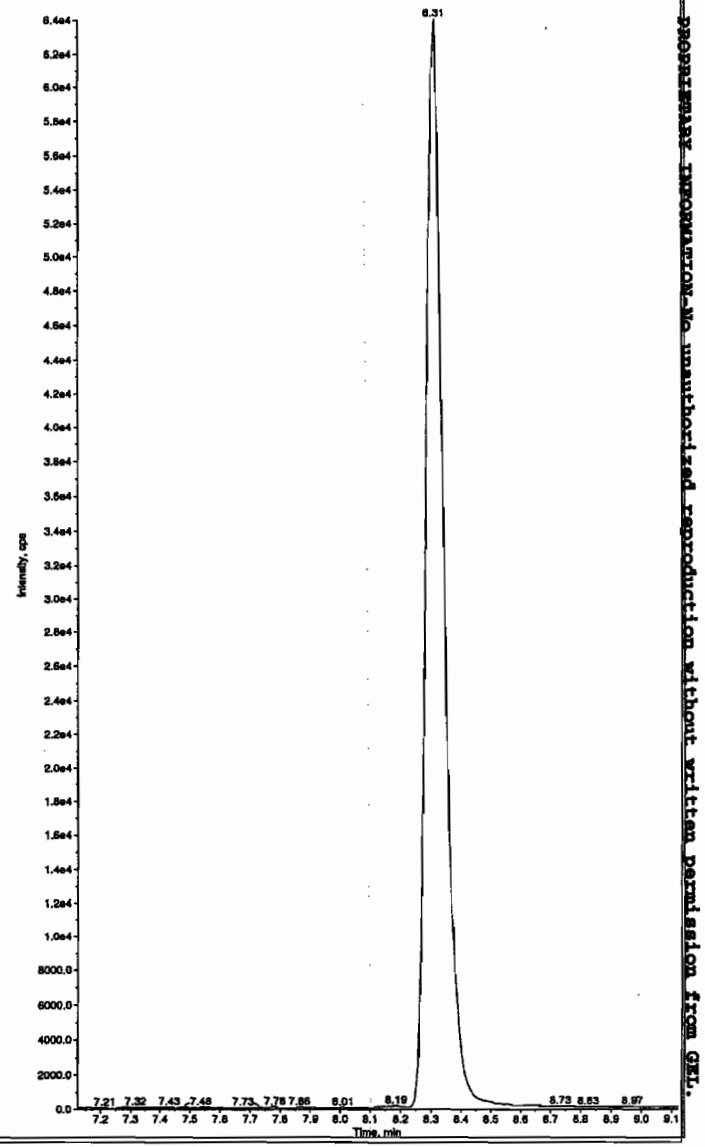
Sample Name: "248102005" Sample ID: "958603|2|LER" File: "EXS04020082.wiff"
Peak Name: "TATB" Mass(es): "257.2/204.9 amu"
Comment: "LCX83212S" Annotation: ""
mple Index: 1
mple Type: Unknown
ncentration: N/A
lculated Conc: 0.00 ng/mL
q. Date: 4/3/2010
q. Time: 11:40:08 AM

dified: No



Sample Name: "248102005" Sample ID: "958603|2|LER" File: "EXS04020082.wiff"
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: 4/3/2010
Acq. Time: 11:40:08 AM

Modified: No



Thm 04/08/10

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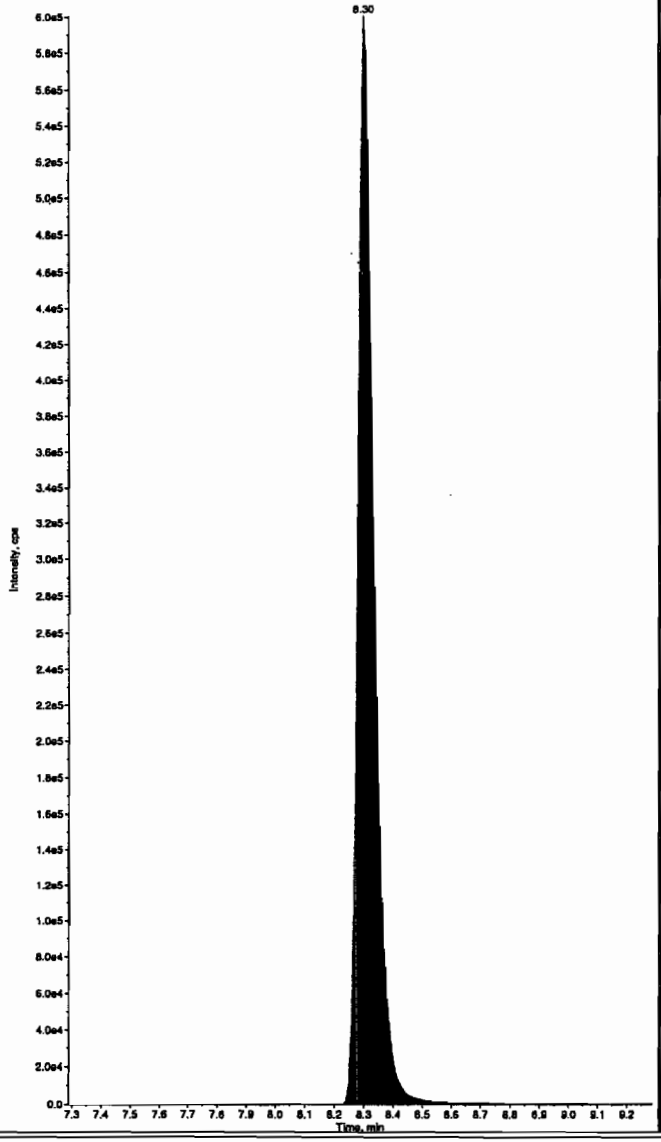
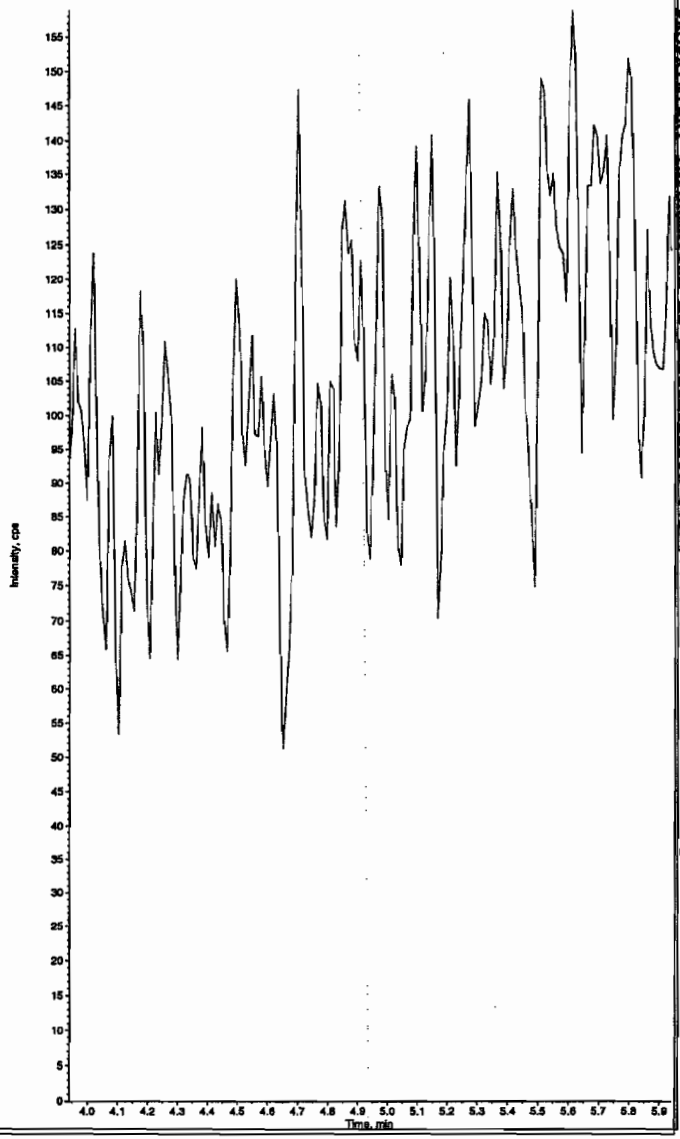
Sample Name: "248102005" Sample ID: "958603|2|LER" File: "EXS04020082.wiff"
Peak Name: "34-Dinitrotoluene" Mass(es): "182.1/151.9 amu"
Comment: "LCX83212S" Annotation: ""

ple Index:	1
ple Type:	Unknown
centration:	N/A
culated Conc:	255. ng/mL
. Date:	4/3/2010
. Time:	11:40:08 AM
ified:	No
c. Algorithm:	IntelliQuan - IQA
. Peak Height:	1460.00 cps
. Peak Width:	0.00 sec
othing Width:	3 points
Window:	15.0 sec
ected RT:	8.29 min
Relative RT:	No
. Type:	Valley
ention Time:	8.30 min
a:	2.38e+006 counts
ght:	600602.356 cps
rt Time:	8.15 min
Time:	8.81 min



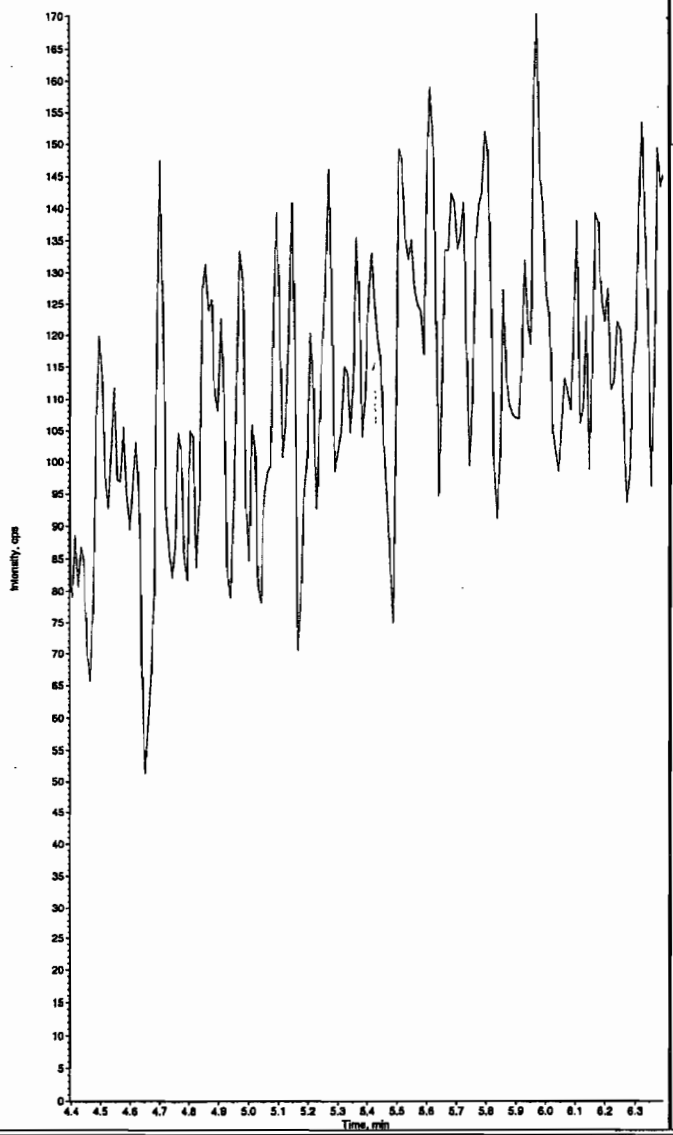
Sample Name: "248102005" Sample ID: "958603|2|LER" File: "EXS04020082.wiff"
Peak Name: "26-Diamino-4-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCX83212S" Annotation: ""

Sample Index:	1
Sample Type:	Unknown
Concentration:	N/A
Calculated Conc:	0.00 ng/mL
Acq. Date:	4/3/2010
Acq. Time:	11:40:08 AM
Modified:	No



ample Name: "248102005" Sample ID: "958603|2|LER" File: "EXS04020082.wiff"
eak Name: "24-Diamino-6-nitrotoluene" Mass(es): "166.0/46.0 amu"
omment: "LCX83212S" Annotation: ""
ple Index: 1
ple Type: Unknown
centration: N/A
culated Conc: 0.00 ng/mL
. Date: 4/3/2010
. Time: 11:40:08 AM

ified: No



Sample Name: "248102005" Sample ID: "958603|2|LER" File: "EXS04020082.wiff"
Peak Name: "tris(o-cresyl) phosphate" Mass(es): "369.1/91.0 amu"
Comment: "LCX83212S" Annotation: ""
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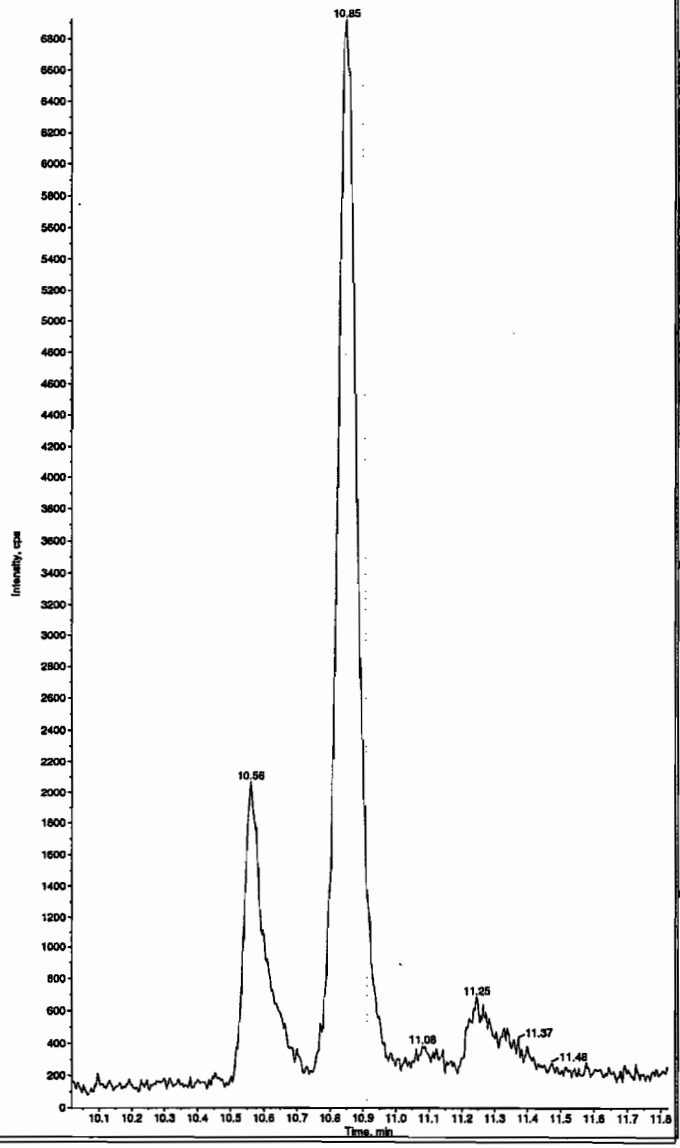
Modified: No



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1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8394

Lab Code: GEL

GEL Job No (SDG) 10-2089

Matrix: SOIL

GEL Sample ID: 248102006

Sample Amount 2

Moisture: 10.3

Amount Units g

Date Received: 26-FEB-10

Extraction Type Sonication

Extraction Batch ID: 958599

Concentrated Extract Volume (mL) 10

Date Extracted: 04-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0412122a

Date Analyzed: 15-APR-10 03:10

Units: ug/kg

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

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Sample Amoun}} \times \text{Dilution Factor}$$

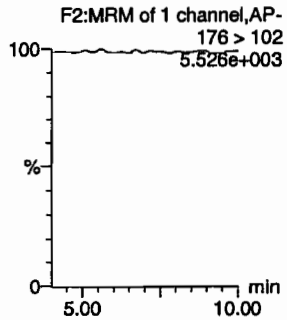
Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA2.qld, Time: Thu Apr 15 14:49:38 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0412122a
Date: 15-Apr-2010
Time: 03:10:23
ID: 248102006
Vial: 3:6,D

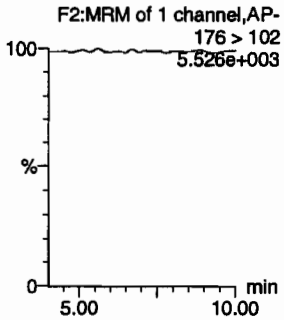
| LANL | 958603 | Solids | 2 |

MHT 4/15/10

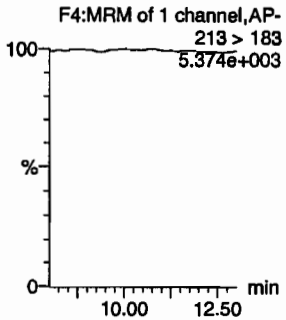
HMX



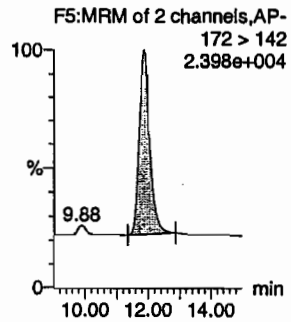
RDX



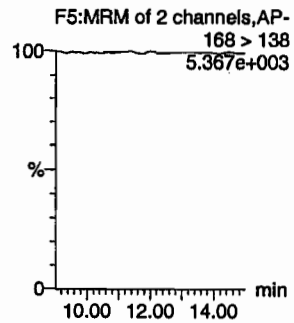
135-Trinitrobenzene



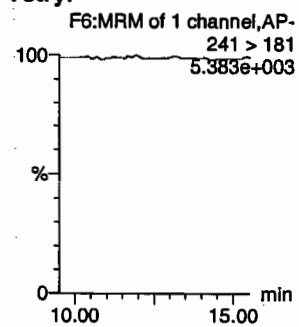
13-Dinitrobenzene-d4



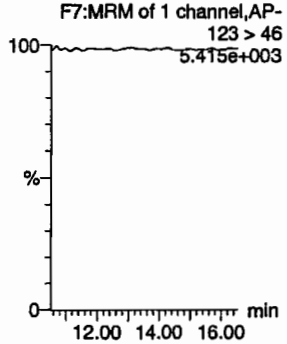
13-Dinitrobenzene



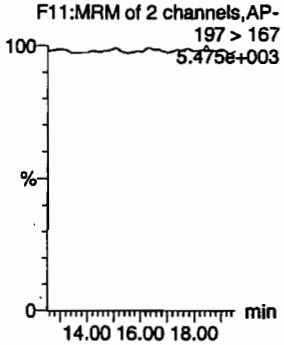
Tetryl



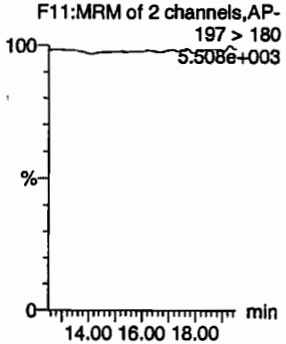
Nitrobenzene



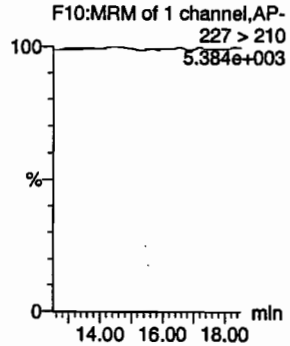
4-Amino-26-dinitrotoluene



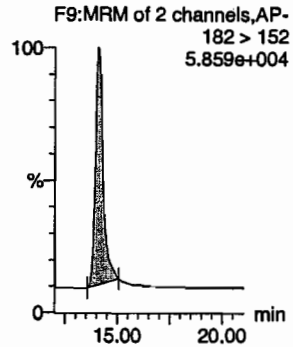
2-Amino-46-dinitrotoluene



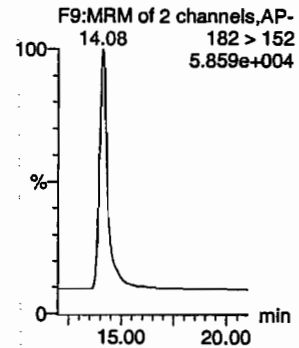
246-Trinitrotoluene



34-dinitrotoluene



26-dinitrotoluene



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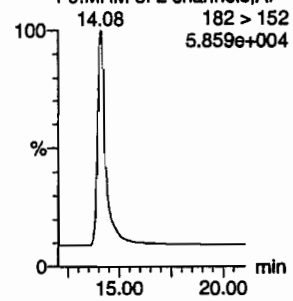
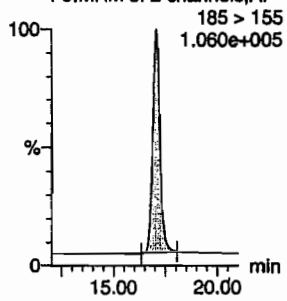
Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA2.qld, Time: Thu Apr 15 14:49:38 2010

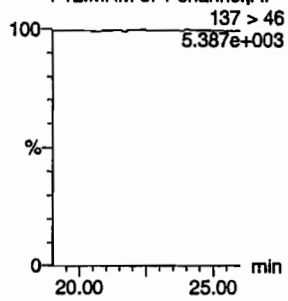
24-dinitrotoluene



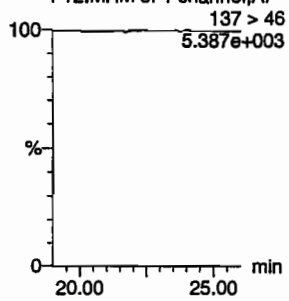
26-dinitrotoluene-d3



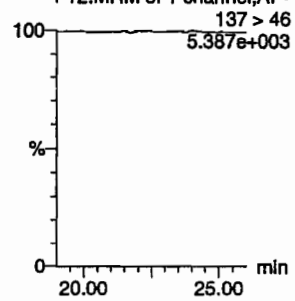
2-Nitrotoluene



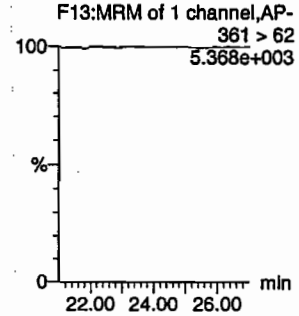
4-Nitrotoluene



3-Nitrotoluene



PETN



ID	Name	Trace	RT	Area	IS Area	Abs Resp	Response	Flags	Mod Date	Mod Time	ng/mL	%Rec	%Dev	S/N
248102006	HMX	176 > 102			7029.526									
248102006	RDX	176 > 102			7029.526									
248102006	135-Trinitrobenzene	213 > 183			7029.526									
248102006	13-Dinitrobenzene-d4	172 > 142	11.87	7029.526		7029.526	7029.526	bb			597.7118	119.5	19.5	2201.4
248102006	13-Dinitrobenzene	168 > 138			7029.526									
248102006	Tetryl	241 > 181			7029.526									
248102006	Nitrobenzene	123 > 46			7029.526									
248102006	4-Amino-26-dinitrotoluene	197 > 167			41473.207									
248102006	2-Amino-46-dinitrotoluene	197 > 180			41473.207									
248102006	246-Trinitrotoluene	227 > 210			41473.207									
248102006	34-dinitrotoluene	182 > 152	14.08	22491.883	41473.207	22491.883	271.162	bb			262.9757	105.2	5.2	853.6
248102006	26-dinitrotoluene	182 > 152			41473.207									
248102006	24-dinitrotoluene	182 > 152			41473.207									
248102006	26-dinitrotoluene-d3	185 > 155	17.05	41473.207		41473.207	41473.207	bb			592.7593	118.6	18.6	3250.1
248102006	2-Nitrotoluene	137 > 46			41473.207									
248102006	4-Nitrotoluene	137 > 46			41473.207									
248102006	3-Nitrotoluene	137 > 46			41473.207									
248102006	PETN	361 > 62			41473.207									

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High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8394

Lab Code: GEL

GEL Job No (SDG) 10-2089

Matrix: SOIL

GEL Sample ID: 248102006

Sample Amount 2

Moisture: 10.3

Amount Units g

Date Received: 26-FEB-10

Extraction Type Sonication

Extraction Batch ID: 958599

Concentrated Extract Volume (mL) 10

Date Extracted: 04-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS04020083.wiff

Date Analyzed: 03-APR-10 11:55

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

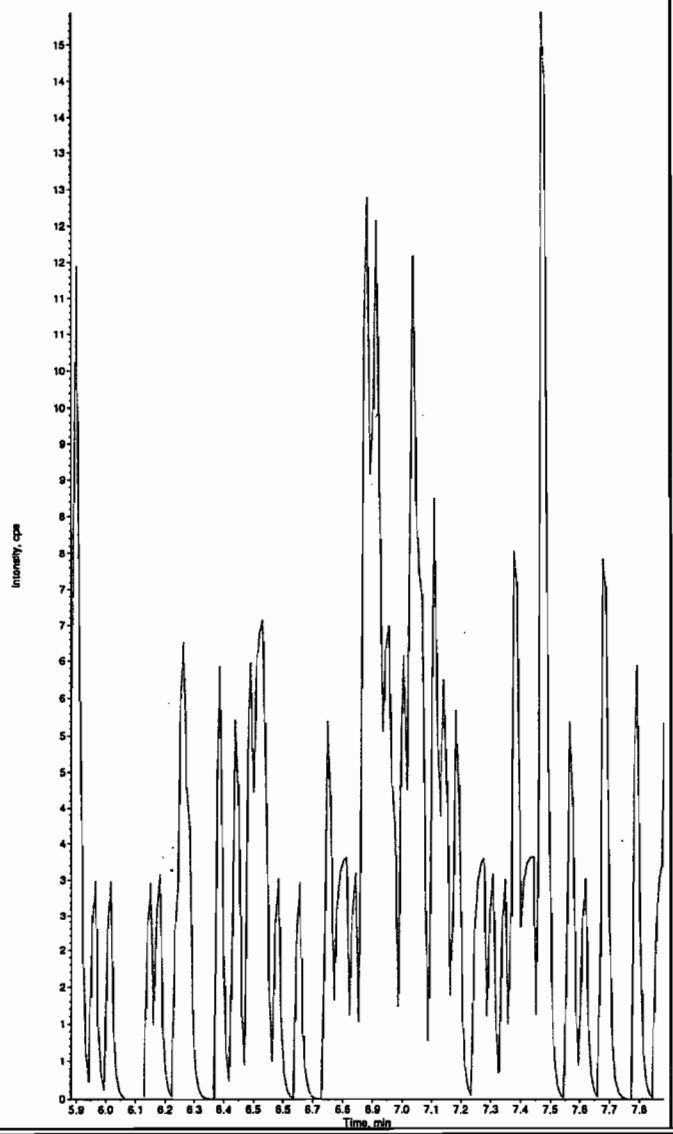
*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Sample Amoun}} \times \text{Dilution Factor}$$

Scan 4/7/10

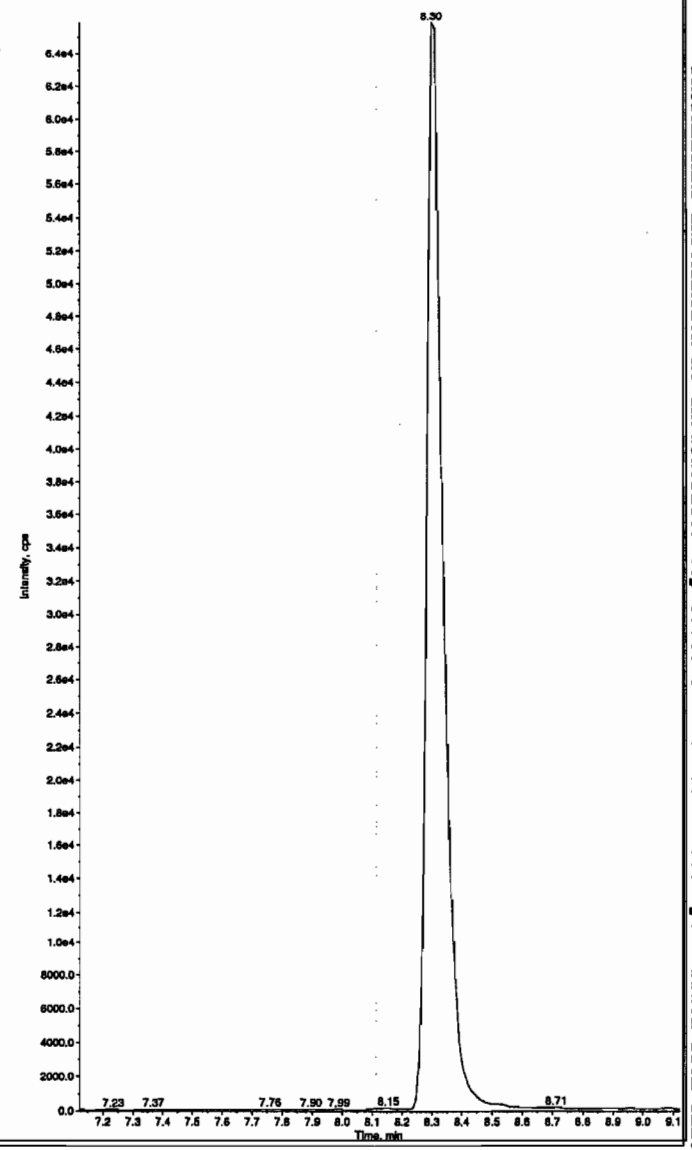
mple Name: "248102006" Sample ID: "958603|2|LER" File: "EXS04020083.wiff"
ak Name: "TATB" Mass(es): "257.2/204.9 amu"
mment: "LCX83212S" Annotation: ""
ple Index: 1
ple Type: Unknown
centration: N/A
culated Conc: 0.00 ng/mL
. Date: 4/3/2010
. Time: 11:55:49 AM

.fied: No



Sample Name: "248102006" Sample ID: "958603|2|LER" File: "EXS04020083.wiff"
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: 4/3/2010
Acq. Time: 11:55:49 AM

Modified: No



HMM 04/08/10

EL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

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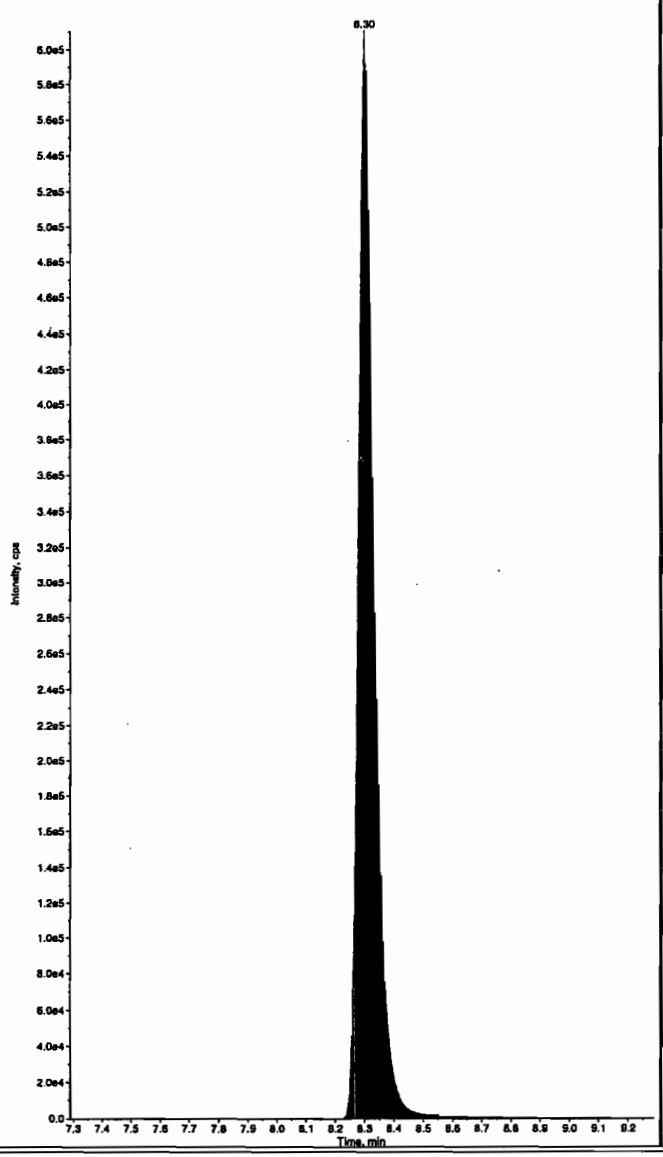
PROPRIETARY INFORMATION-No unauthorized reproduction without written permission from GEL.

Sample Name: "248102006" Sample ID: "958603|2|LER" File: "EXS04020083.wiff"
Peak Name: "34-Dinitrotoluene" Mass(es): "182.1/151.9 amu"
Comment: "LCX83212S" Annotation: ""

mple Index: 1
mple Type: Unknown
ncentration: N/A
lculated Conc: 250. ng/mL
q. Date: 4/3/2010
q. Time: 11:55:49 AM

dified: No
oc. Algorithm: IntelliQuan - IQA
n. Peak Height: 1460.00 cps
n. Peak Width: 0.00 sec
oothing Width: 3 points
Window: 15.0 sec
pected RT: 8.29 min
Relative RT: No

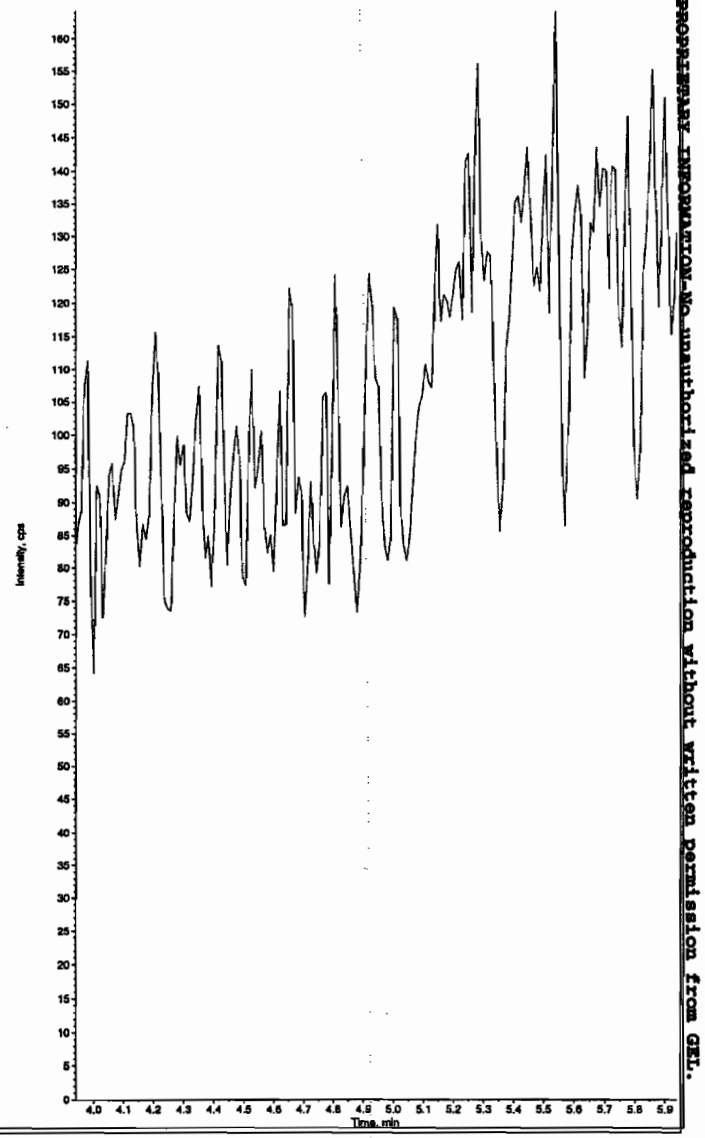
:. Type: Valley
tention Time: 8.30 min
a: 2.33e+006 counts
ight: 610594.666 cps
rt Time: 8.17 min
Time: 8.84 min



Sample Name: "248102006" Sample ID: "958603|2|LER" File: "EXS04020083.wiff"
Peak Name: "26-Diamino-4-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCX83212S" Annotation: ""

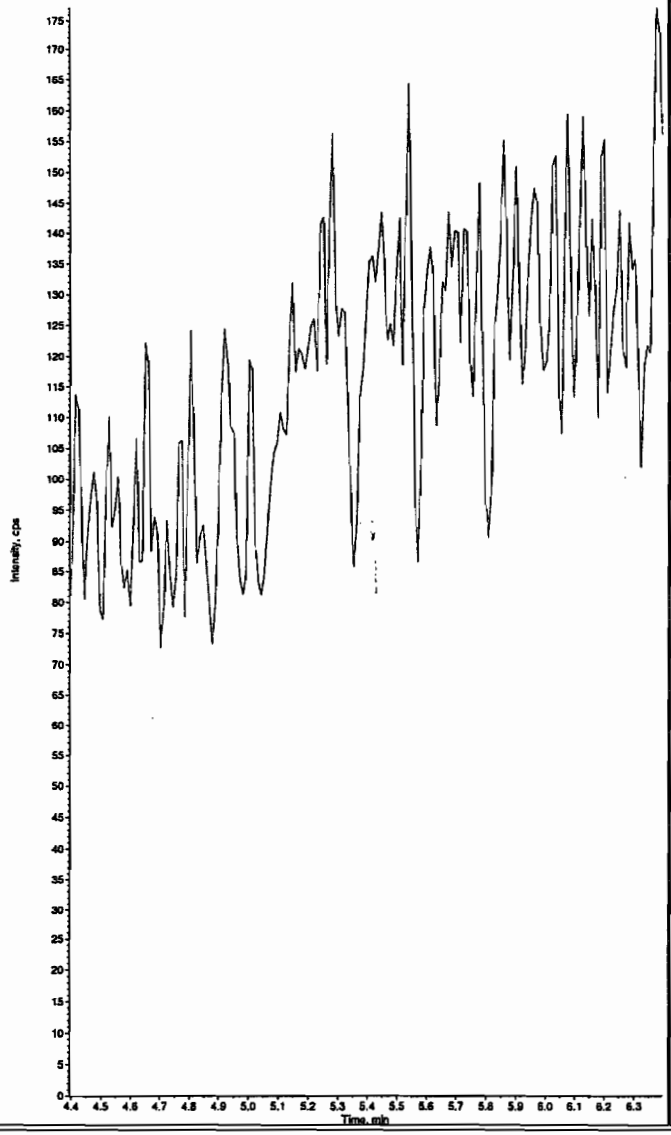
Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 4/3/2010
Acq. Time: 11:55:49 AM

Modified: No



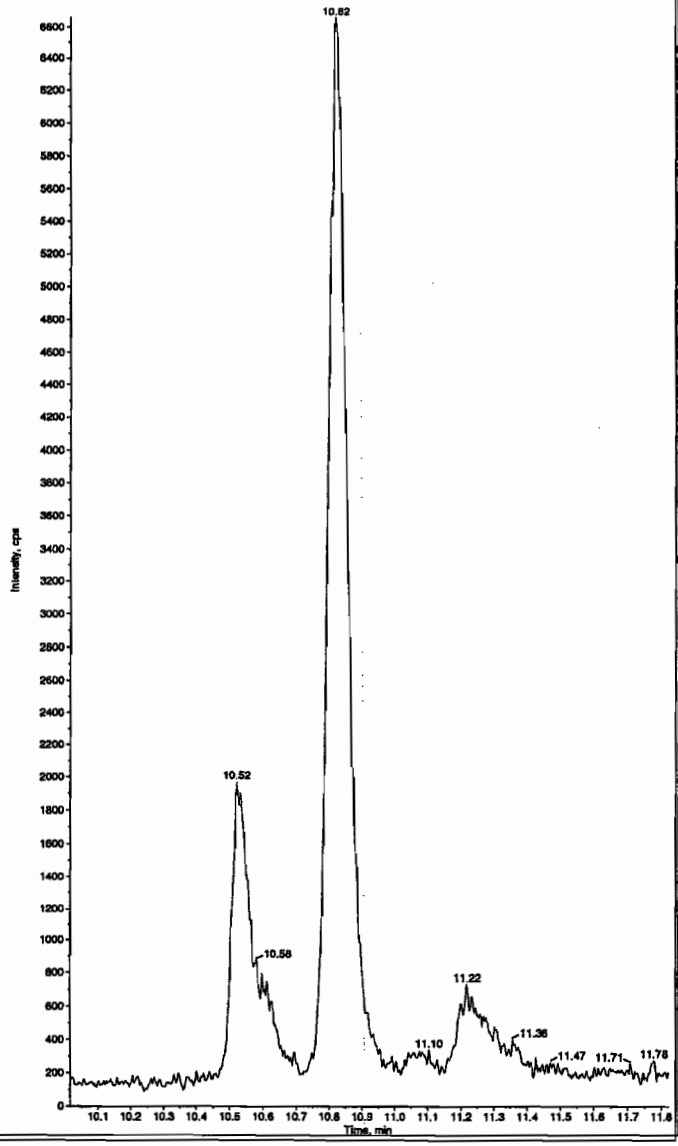
Sample Name: "248102006" Sample ID: "958603|2|LER" File: "EXS04020083.wiff"
Peak Name: "24-Diamino-6-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCX83212S" Annotation: ""
Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 4/3/2010
Acq. Time: 11:55:49 AM

Modified: No



Sample Name: "248102006" Sample ID: "958603|2|LER" File: "EXS04020083.wiff"
Peak Name: "tris(o-cresyl) phosphate" Mass(es): "369.1/91.0 amu"
Comment: "LCX83212S" Annotation: ""
Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 4/3/2010
Acq. Time: 11:55:49 AM

Modified: No



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1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8399

Lab Code: GEL

GEL Job No (SDG) 10-2089

Matrix: SOIL

GEL Sample ID: 248102007

Sample Amount 2

Moisture: 11.7

Amount Units g

Date Received: 26-FEB-10

Extraction Type Sonication

Extraction Batch ID: 958599

Concentrated Extract Volume (mL) 10

Date Extracted: 04-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0412126a

Date Analyzed: 15-APR-10 05:08

Units: ug/kg

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

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Sample Amoun}} \times \text{Dilution Factor}$$

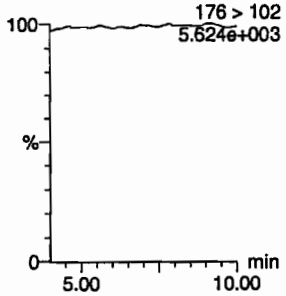
Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA2.qld, Time: Thu Apr 15 14:49:38 2010

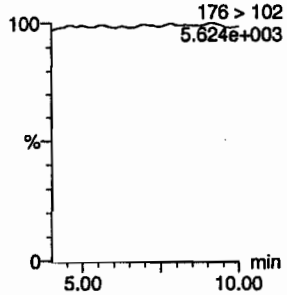
Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0412126a
Date: 15-Apr-2010
Time: 05:08:23
ID: 248102007 | LANL | 958603 | Solids | 2 |
Vial: 3:6,E

4/15/10

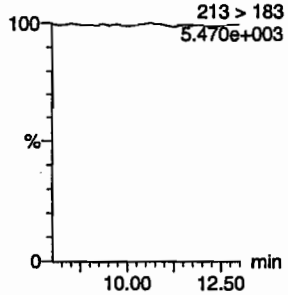
HMX
F2:MRM of 1 channel,AP-
176 > 102
5.624e+003



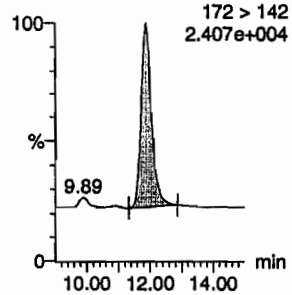
RDX
F2:MRM of 1 channel,AP-
176 > 102
5.624e+003



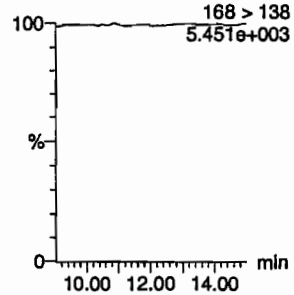
135-Trinitrobenzene
F4:MRM of 1 channel,AP-
213 > 183
5.470e+003



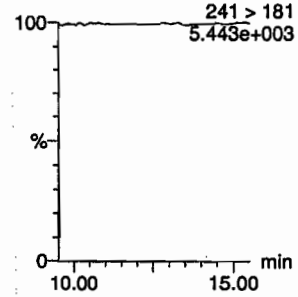
13-Dinitrobenzene-d4
F5:MRM of 2 channels,AP-
172 > 142
2.407e+004



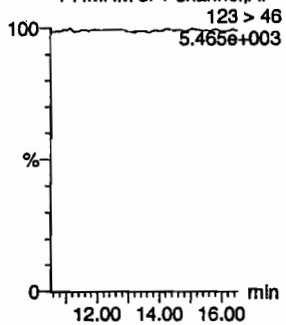
13-Dinitrobenzene
F5:MRM of 2 channels,AP-
168 > 138
5.451e+003



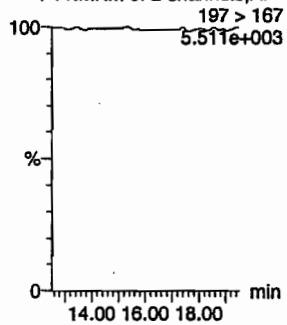
Tetryl
F6:MRM of 1 channel,AP-
241 > 181
5.443e+003



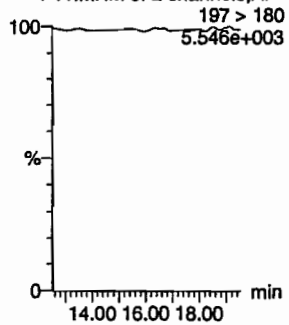
Nitrobenzene
F7:MRM of 1 channel,AP-
123 > 46
5.465e+003



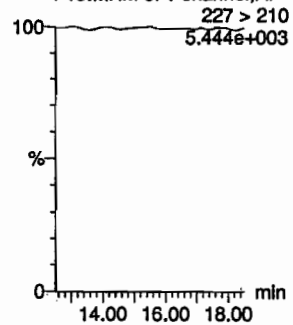
4-Amino-26-dinitrotoluene
F11:MRM of 2 channels,AP-
197 > 167
5.511e+003



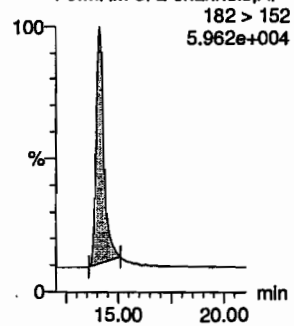
2-Amino-46-dinitrotoluene
F11:MRM of 2 channels,AP-
197 > 180
5.546e+003



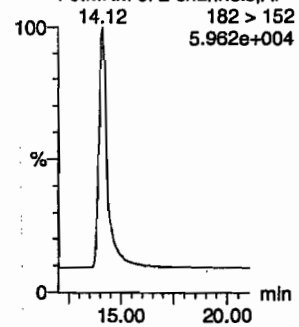
246-Trinitrotoluene
F10:MRM of 1 channel,AP-
227 > 210
5.444e+003



34-dinitrotoluene
F9:MRM of 2 channels,AP-
182 > 152
5.962e+004



26-dinitrotoluene
F9:MRM of 2 channels,AP-
14.12
182 > 152
5.962e+004



04/15/10

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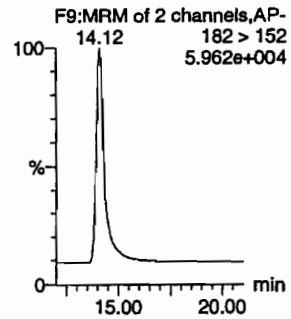
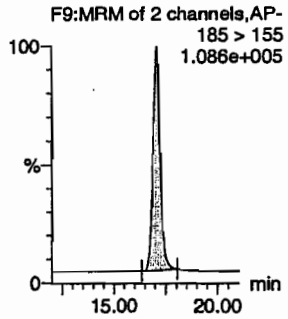
Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA2.qld, Time: Thu Apr 15 14:49:38 2010

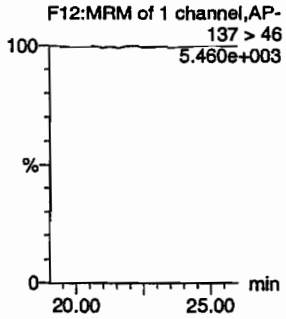
24-dinitrotoluene



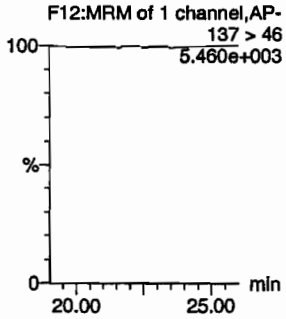
26-dinitrotoluene-d3



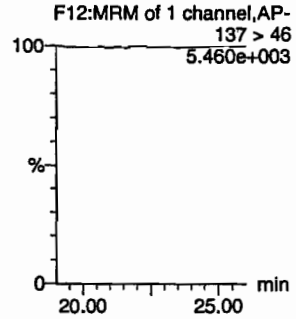
2-Nitrotoluene



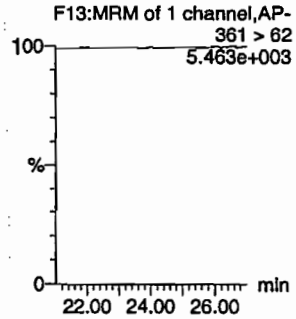
4-Nitrotoluene



3-Nitrotoluene



PETN



ID	Name	Trace	RT	Area	IS Area	Abs Resp	Response	Flags	Mod Date	Mod Time	ng/mL	%Rec	%Dev	S/N
248102007	HMX	176 > 102			7034.641									
248102007	RDX	176 > 102			7034.641									
248102007	135-Trinitrobenzene	213 > 183			7034.641									
248102007	13-Dinitrobenzene-d4	172 > 142	11.87	7034.641		7034.641	7034.641	bb			598.1467	119.6	19.6	334.8
248102007	13-Dinitrobenzene	168 > 138			7034.641									
248102007	Tetryl	241 > 181			7034.641									
248102007	Nitrobenzene	123 > 46			7034.641									
248102007	4-Amino-26-dinitrotoluene	197 > 167			41962.316									
248102007	2-Amino-46-dinitrotoluene	197 > 180			41962.316									
248102007	246-Trinitrotoluene	227 > 210			41962.316									
248102007	34-dinitrotoluene	182 > 152	14.12	22597.982	41962.316	22597.982	269.265	bb			261.1366	104.5	4.5	964.8
248102007	26-dinitrotoluene	182 > 152			41962.316									
248102007	24-dinitrotoluene	182 > 152			41962.316									
248102007	26-dinitrotoluene-d3	185 > 155	17.07	41962.316		41962.316	41962.316	bb			599.7499	119.9	19.9	2766.3
248102007	2-Nitrotoluene	137 > 46			41962.316									
248102007	4-Nitrotoluene	137 > 46			41962.316									
248102007	3-Nitrotoluene	137 > 46			41962.316									
248102007	PETN	361 > 62			41962.316									

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High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8399

Lab Code: GEL

GEL Job No (SDG) 10-2089

Matrix: SOIL

GEL Sample ID: 248102007

Sample Amount 2

Moisture: 11.7

Amount Units g

Date Received: 26-FEB-10

Extraction Type Sonication

Extraction Batch ID: 958599

Concentrated Extract Volume (mL) 10

Date Extracted: 04-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS04020087.wiff

Date Analyzed: 03-APR-10 12:58

Units: ug/kg

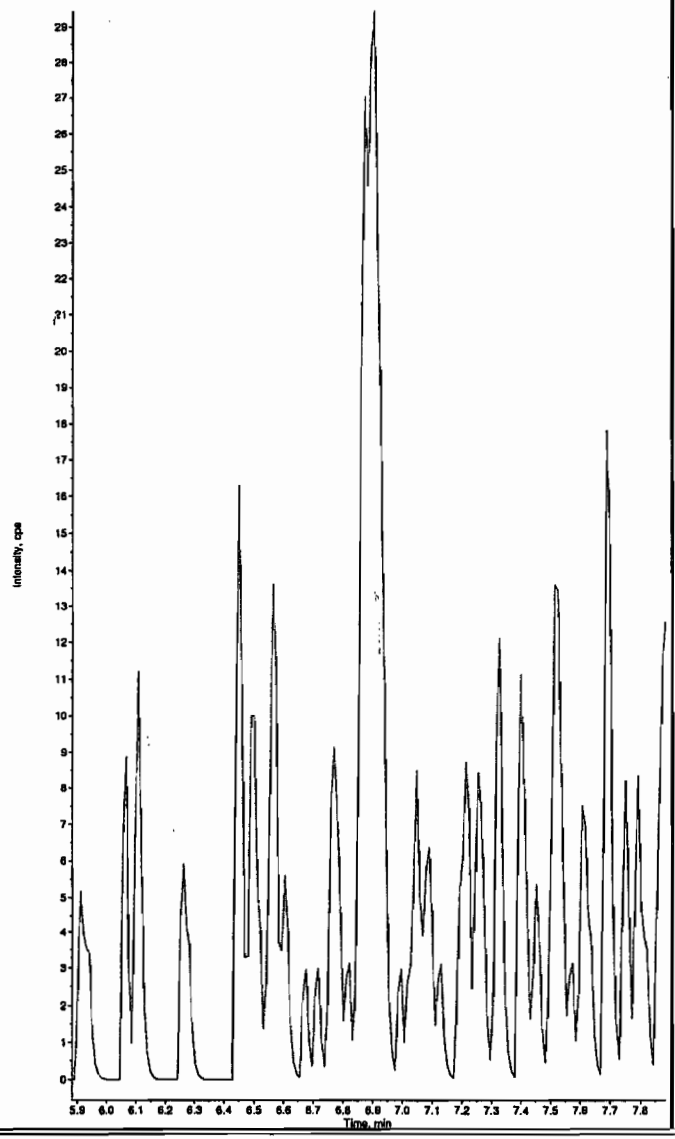
Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	1000	U
59229-75-3	2,6-Diamino-4-nitrotoluene	2000	U
618-87-1	3,5-Dinitroaniline	1000	U
6629-29-4	2,4-Diamino-6-nitrotoluene	2000	U
78-30-8	tris(o-cresyl) phosphate	1000	U

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Sample Amoun}} \times \text{Dilution Factor}$$

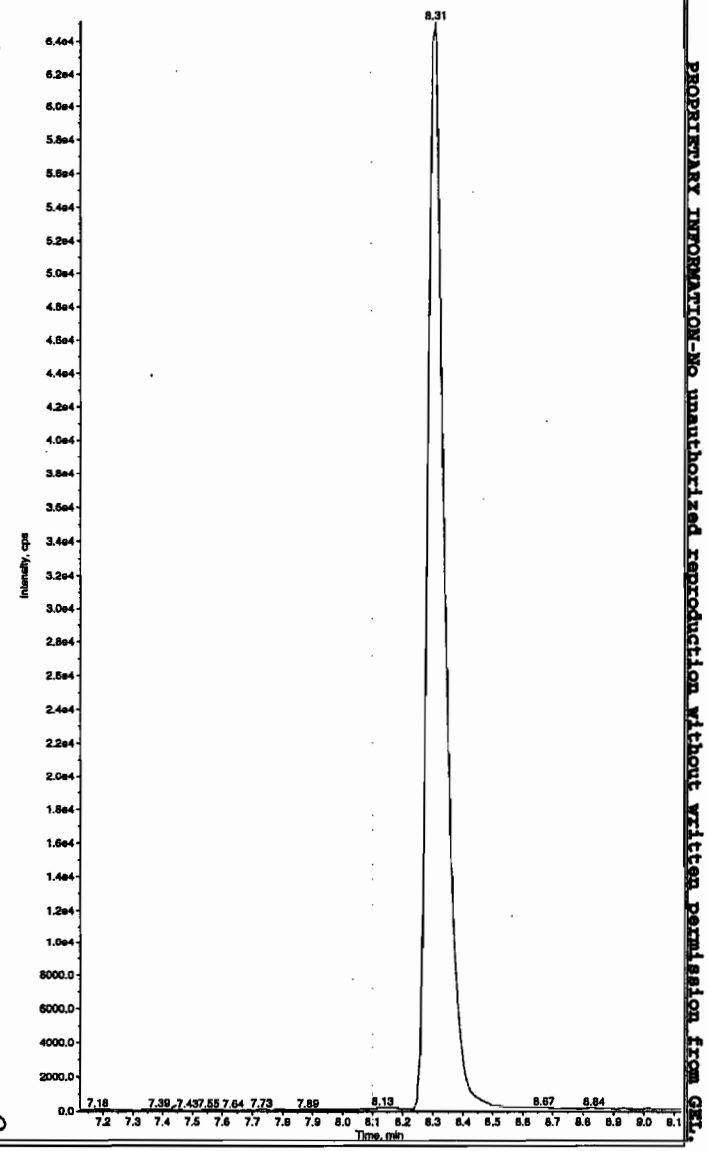
Lan 4/7/10

ample Name: "248102007" Sample ID: "958603|2|LER" File: "EXS04020087.wiff"
eak Name: "TATB" Mass(es): "257.2/204.9 amu"
omment: "LCX83212S" Annotation: ""
ple Index: 1
ple Type: Unknown
ncentration: N/A
culated Conc: 0.00 ng/mL
. Date: 4/3/2010
. Time: 12:58:37 PM
lified: No



Sample Name: "248102007" Sample ID: "958603|2|LER" File: "EXS04020087.wiff"
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: 4/3/2010
Acq. Time: 12:58:37 PM

Modified: No



Hmm 04/08/10

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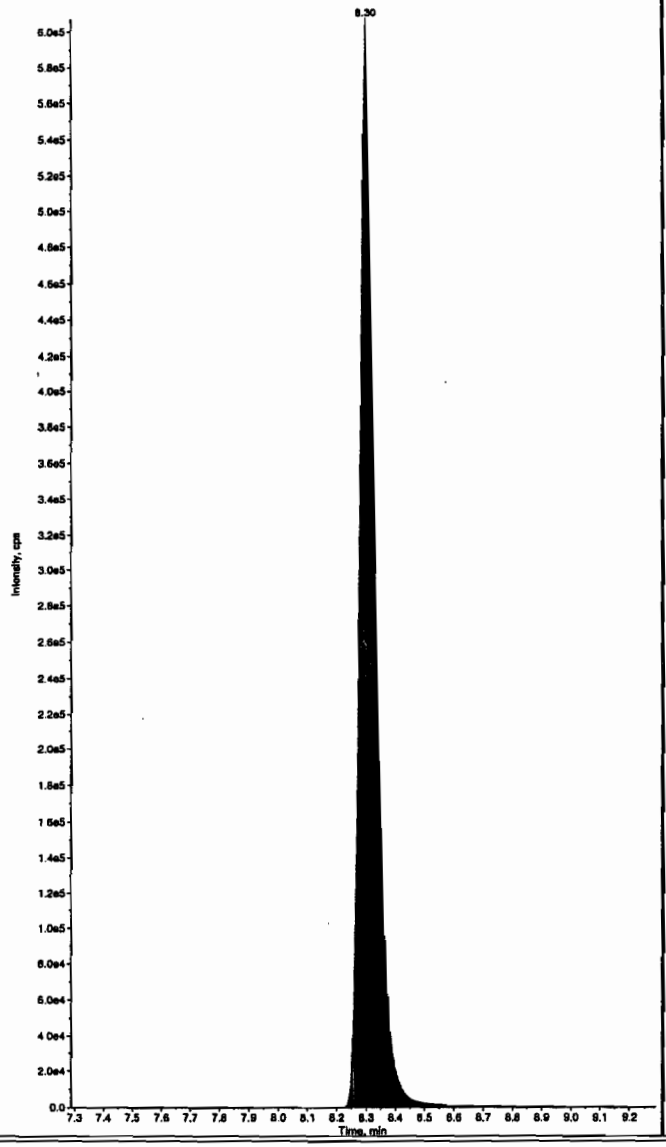
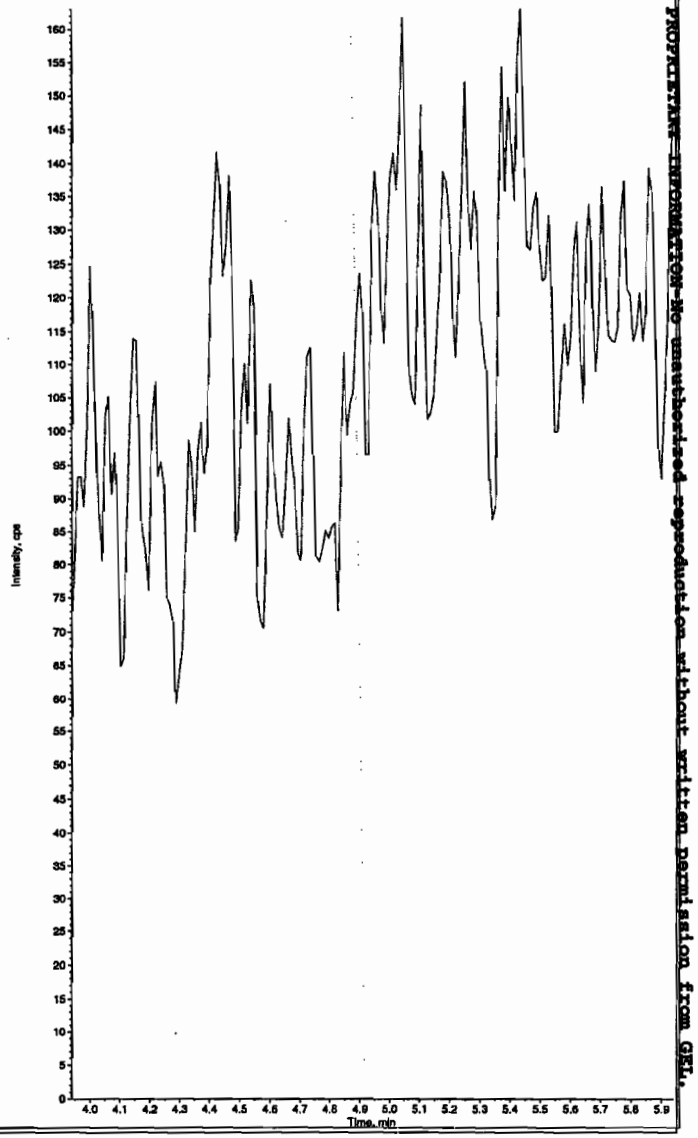
Sample Name: "248102007" Sample ID: "958603|2|LER" File: "EXS04020087.wiff"
Peak Name: "34-Dinitrotoluene" Mass(es): "182.1/151.9 amu"
Comment: "LCX83212S" Annotation: ""

```
ample Index:        1
ample Type:      Unknown
oncentration:      N/A
alculated Conc:    252.     ng/mL
cq. Date:        4/3/2010
cq. Time:        12:58:37 PM

odified:            No
oc. Algorithm: IntelliQuan - IQA
n. Peak Height:1460.00    cps
n. Peak Width:     0.00    sec
oothing Width:  3         points
' Window:         15.0     sec
pected RT:         8.29    min
e Relative RT:     No

t. Type:         Valley
tention Time:      8.30    min
ea:          2.35e+006    counts
ight:         607447.205   cps
art Time:          8.21    min
d Time:            8.77    min
```



Sample Name: "248102007" Sample ID: "958603|2|LER" File: "EXS04020087.wiff"
Peak Name: "26-Diamino-4-nitrotoluene" 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:        4/3/2010
Acq. Time:        12:58:37 PM

Modified:            No
```



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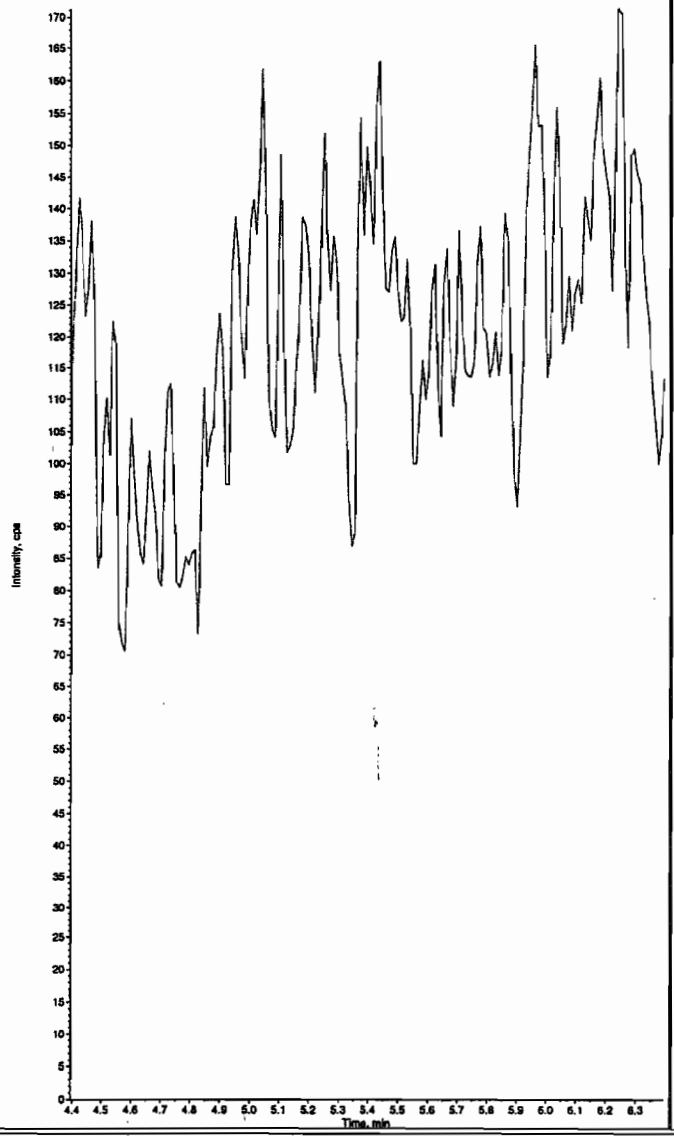
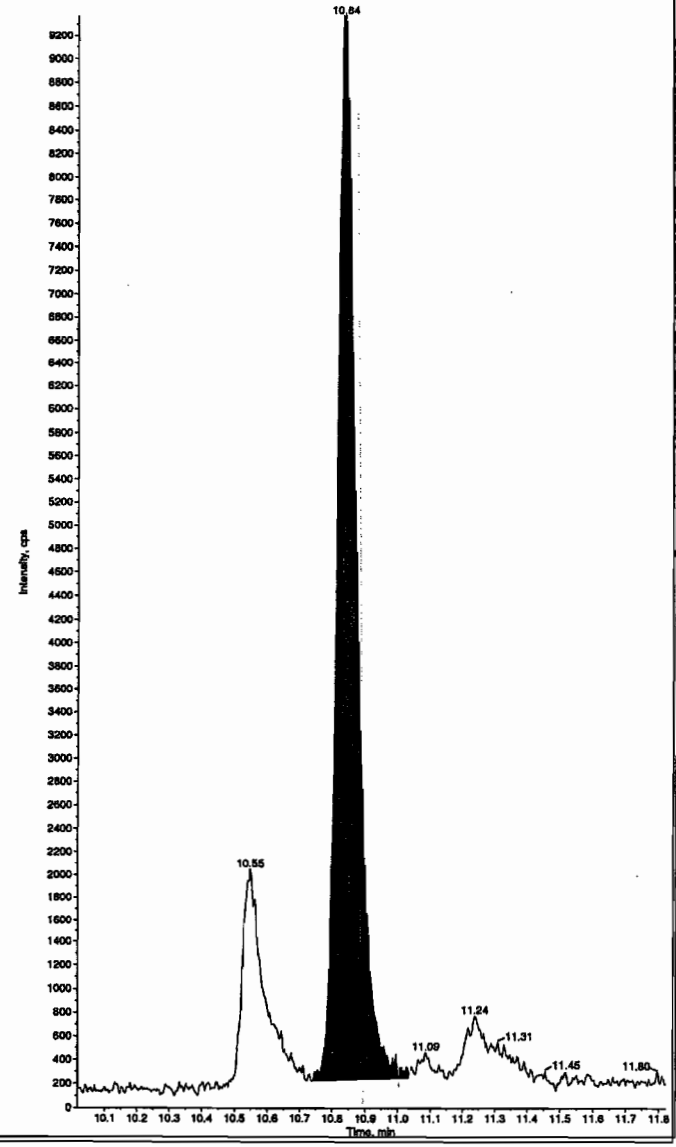
Sample Name: "248102007" Sample ID: "958603|2|LER" File: "EXS04020087.wiff"
Peak Name: "24-Diamino-6-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCX83212S" Annotation: ""

ple Index:	1
ple Type:	Unknown
ncentration:	N/A
lculated Conc:	0.00 ng/mL
. Date:	4/3/2010
. Time:	12:58:37 PM
ified:	No



Sample Name: "248102007" Sample ID: "958603|2|LER" File: "EXS04020087.wiff"
Peak Name: "tris(o-cresyl) phosphate" Mass(es): "369.1/91.0 amu"
Comment: "LCX83212S" Annotation: ""

Sample Index:	1
Sample Type:	Unknown
Concentration:	N/A
Calculated Conc:	1.95 ng/mL
Acq. Date:	4/3/2010
Acq. Time:	12:58:37 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:	10.8 min
Use Relative RT:	No
Int. Type:	Valley
Retention Time:	10.8 min
Area:	3.91e+004 counts
Height:	9132.220 cps
Start Time:	10.7 min
End Time:	11.0 min



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1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8397

Lab Code: GEL

GEL Job No (SDG) 10-2089

Matrix: SOIL

GEL Sample ID: 248102008

Sample Amount 2

Moisture: 6.1

Amount Units g

Date Received: 26-FEB-10

Extraction Type Sonication

Extraction Batch ID: 958599

Concentrated Extract Volume (mL) 10

Date Extracted: 04-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0412127a

Date Analyzed: 15-APR-10 05:37

Units: ug/kg

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

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Sample Amoun}} \times \text{Dilution Factor}$$

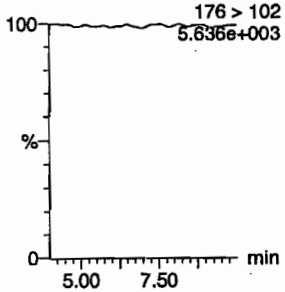
Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA2.qld, Time: Thu Apr 15 14:49:38 2010

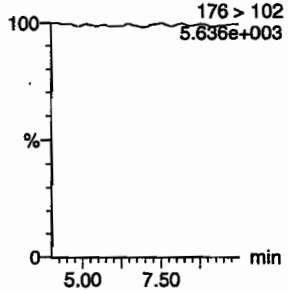
Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0412127a
Date: 15-Apr-2010
Time: 05:37:58
ID: 248102008 | LANC | 958603 | Solid | 2 |
Vial: 3:6,F

MM 4/15/10

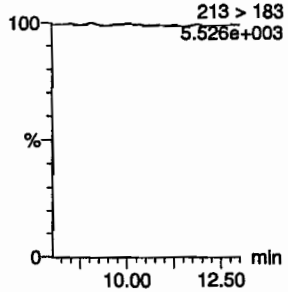
HMX
F2:MRM of 1 channel,AP-
176 > 102
5.636e+003



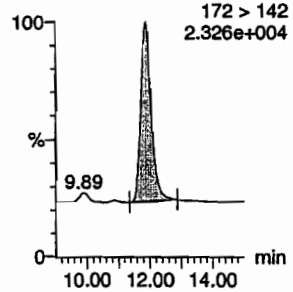
RDX
F2:MRM of 1 channel,AP-
176 > 102
5.636e+003



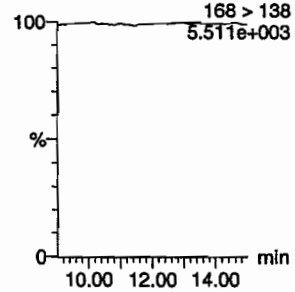
135-Trinitrobenzene
F4:MRM of 1 channel,AP-
213 > 183
5.526e+003



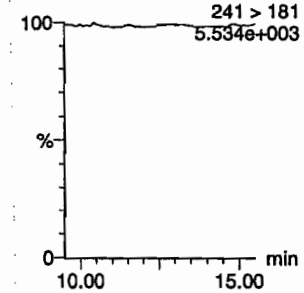
13-Dinitrobenzene-d4
F5:MRM of 2 channels,AP-
172 > 142
2.326e+004



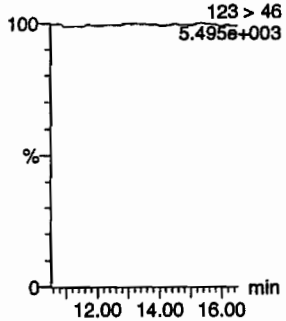
13-Dinitrobenzene
F5:MRM of 2 channels,AP-
168 > 138
5.511e+003



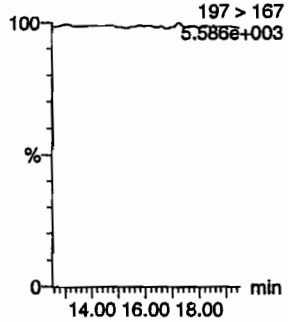
Tetryl
F6:MRM of 1 channel,AP-
241 > 181
5.534e+003



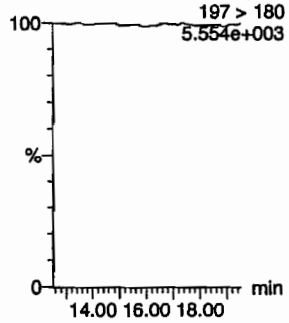
Nitrobenzene
F7:MRM of 1 channel,AP-
123 > 46
5.495e+003



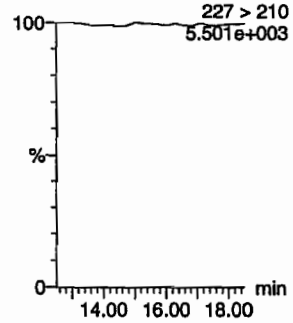
4-Amino-26-dinitrotoluene
F11:MRM of 2 channels,AP-
197 > 167
5.586e+003



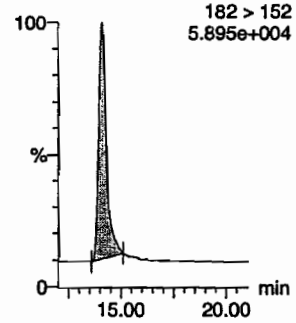
2-Amino-46-dinitrotoluene
F11:MRM of 2 channels,AP-
197 > 180
5.554e+003



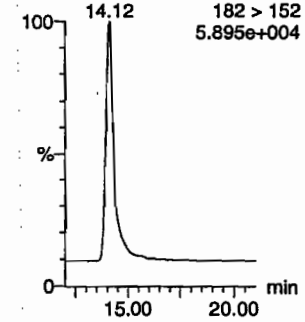
246-Trinitrotoluene
F10:MRM of 1 channel,AP-
227 > 210
5.501e+003



34-dinitrotoluene
F9:MRM of 2 channels,AP-
182 > 152
5.895e+004



26-dinitrotoluene
F9:MRM of 2 channels,AP-
14.12
182 > 152
5.895e+004



HMW 04/15/10

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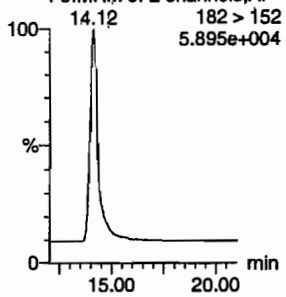
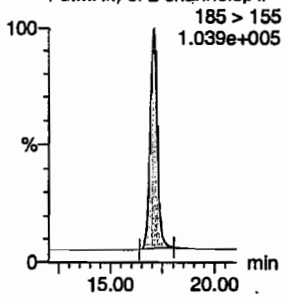
Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA2.qld, Time: Thu Apr 15 14:49:38 2010

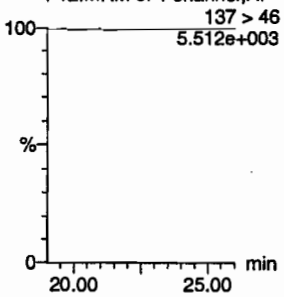
24-dinitrotoluene



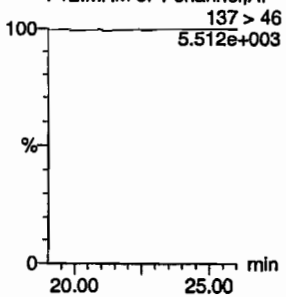
26-dinitrotoluene-d3



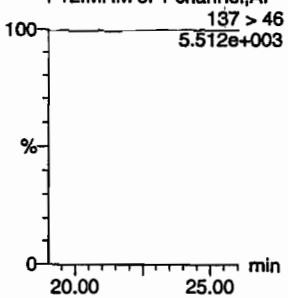
2-Nitrotoluene



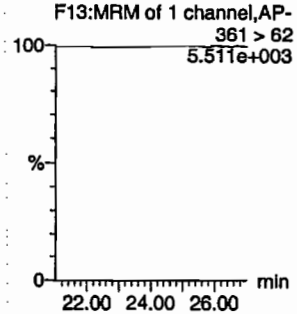
4-Nitrotoluene



3-Nitrotoluene



PETN



ID	Name	Trace	RT	Area	IS Area	Abs Resp	Response	Flags	Mod Date	Mod Time	ng/mL	%Rec	%Dev	S/N
248102008	HMX	176 > 102			6717.903									
248102008	RDX	176 > 102			6717.903									
248102008	135-Trinitrobenzene	213 > 183			6717.903									
248102008	13-Dinitrobenzene-d4	172 > 142	11.87	6717.903		6717.903	6717.903	bb			571.2149	114.2	14.2	608.4
248102008	13-Dinitrobenzene	168 > 138			6717.903									
248102008	Tetryl	241 > 181			6717.903									
248102008	Nitrobenzene	123 > 46			6717.903									
248102008	4-Amino-26-dinitrotoluene	197 > 167			40105.637									
248102008	2-Amino-46-dinitrotoluene	197 > 180			40105.637									
248102008	246-Trinitrotoluene	227 > 210			40105.637									
248102008	34-dinitrotoluene	182 > 152	14.12	22197.533	40105.637	22197.533	276.738	bb			268.3841	107.4	7.4	792.5
248102008	26-dinitrotoluene	182 > 152			40105.637									
248102008	24-dinitrotoluene	182 > 152			40105.637									
248102008	26-dinitrotoluene-d3	185 > 155	17.05	40105.637		40105.637	40105.637	bb			573.2132	114.6	14.6	3130.9
248102008	2-Nitrotoluene	137 > 46			40105.637									
248102008	4-Nitrotoluene	137 > 46			40105.637									
248102008	3-Nitrotoluene	137 > 46			40105.637									
248102008	PETN	361 > 62			40105.637									

GEL SOP GL-OA-E-056, Method 8321A-Modified / MM = Manual Modification

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1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8397

Lab Code: GEL

GEL Job No (SDG) 10-2089

Matrix: SOIL

GEL Sample ID: 248102008

Sample Amount 2

Moisture: 6.1

Amount Units g

Date Received: 26-FEB-10

Extraction Type Sonication

Extraction Batch ID: 958599

Concentrated Extract Volume (mL) 10

Date Extracted: 04-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS04020088.wiff

Date Analyzed: 03-APR-10 13:14

Units: ug/kg

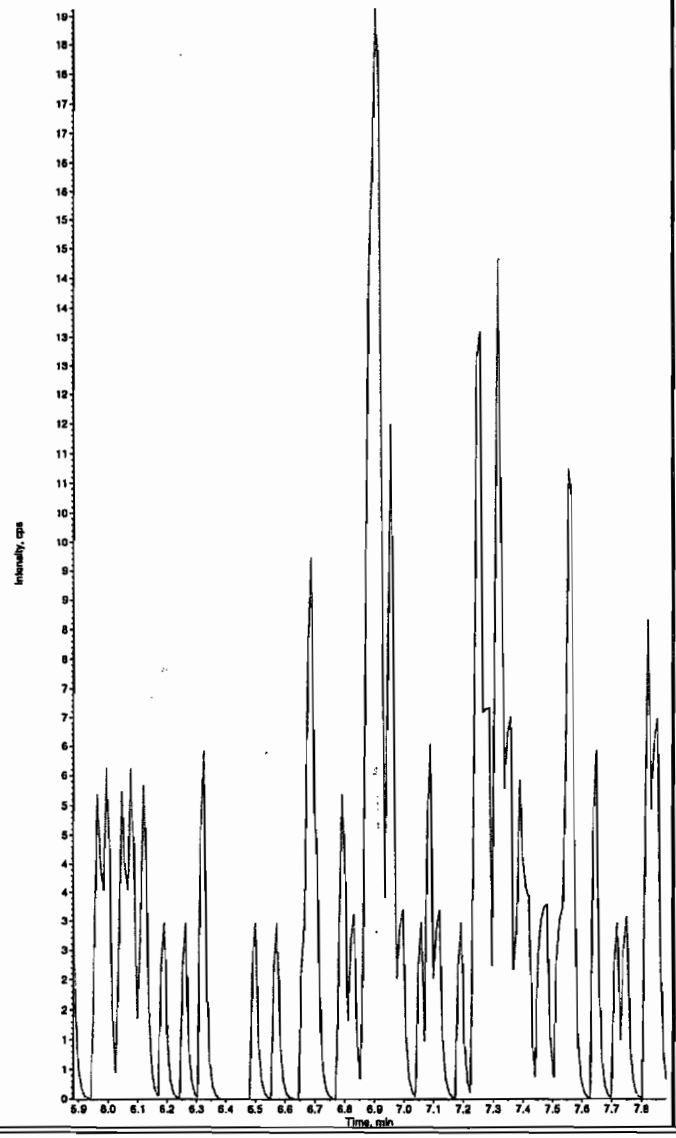
Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	1000	U
59229-75-3	2,6-Diamino-4-nitrotoluene	2000	U
618-87-1	3,5-Dinitroaniline	1000	U
6629-29-4	2,4-Diamino-6-nitrotoluene	2000	U
78-30-8	tris(o-cresyl) phosphate	1000	U

*Concentration =

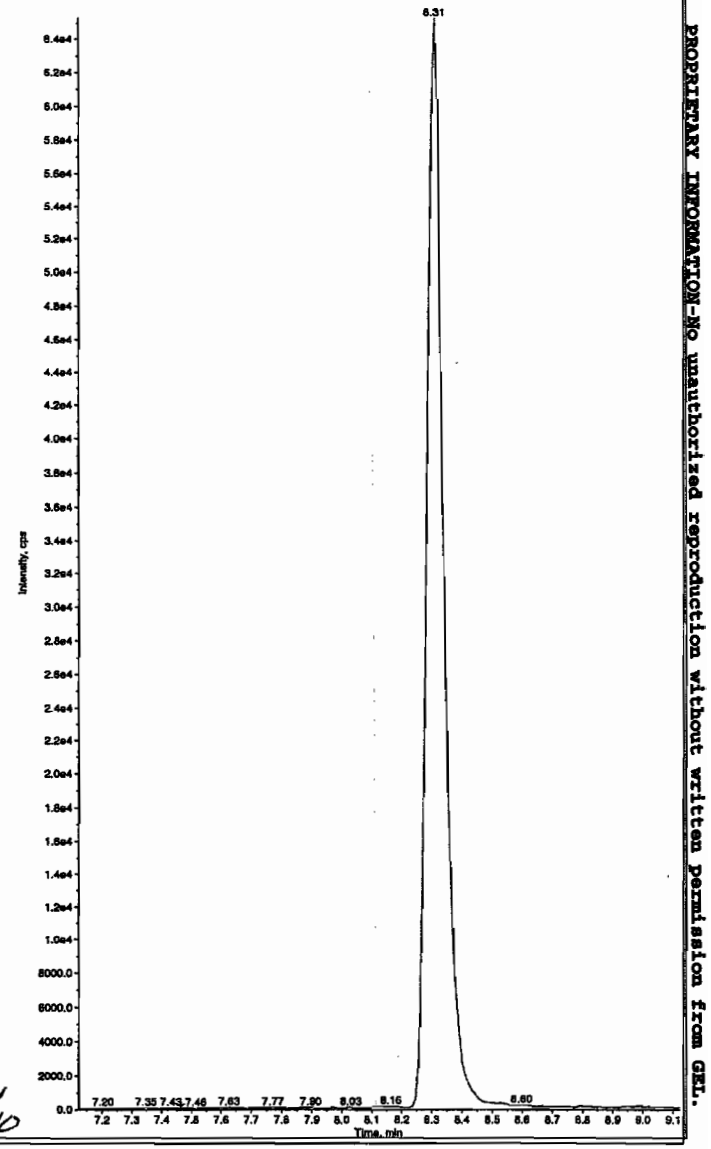
$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Sample Amoun}} \times \text{Dilution Factor}$$

LCR 4/7/10

ample Name: "248102008" Sample ID: "958603|2|LER" File: "EXS04020088.wiff"
eak Name: "TATB" Mass(es): "257.2/204.9 amu"
omment: "LCX83212S" Annotation: ""
ple Index: 1
ple Type: Unknown
centration: N/A
culated Conc: 0.00 ng/mL
. Date: 4/3/2010
. Time: 1:14:18 PM
ified: No



Sample Name: "248102008" Sample ID: "958603|2|LER" File: "EXS04020088.wiff"
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: 4/3/2010
Acq. Time: 1:14:18 PM
Modified: No



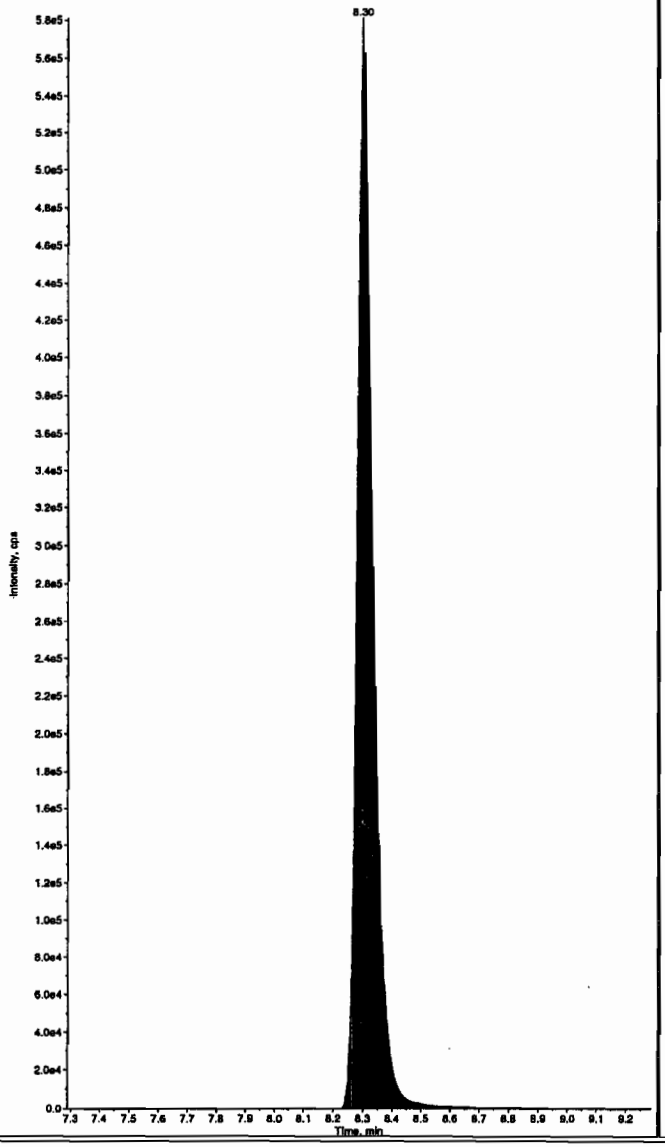
HMM 04/08/10

PROPRIETARY INFORMATION-No unauthorized reproduction without written permission from GEL.

ample Name: "248102008" Sample ID: "958603|2|LER" File: "EXS04020088.wiff"
eak Name: "34-Dinitrotoluene" Mass(es): "182.1/151.9 amu"
omment: "LCX83212S" Annotation: ""
ple Index: 1
ple Type: Unknown
ncentration: N/A
culated Conc: 245. ng/mL
. Date: 4/3/2010
. Time: 1:14:18 PM

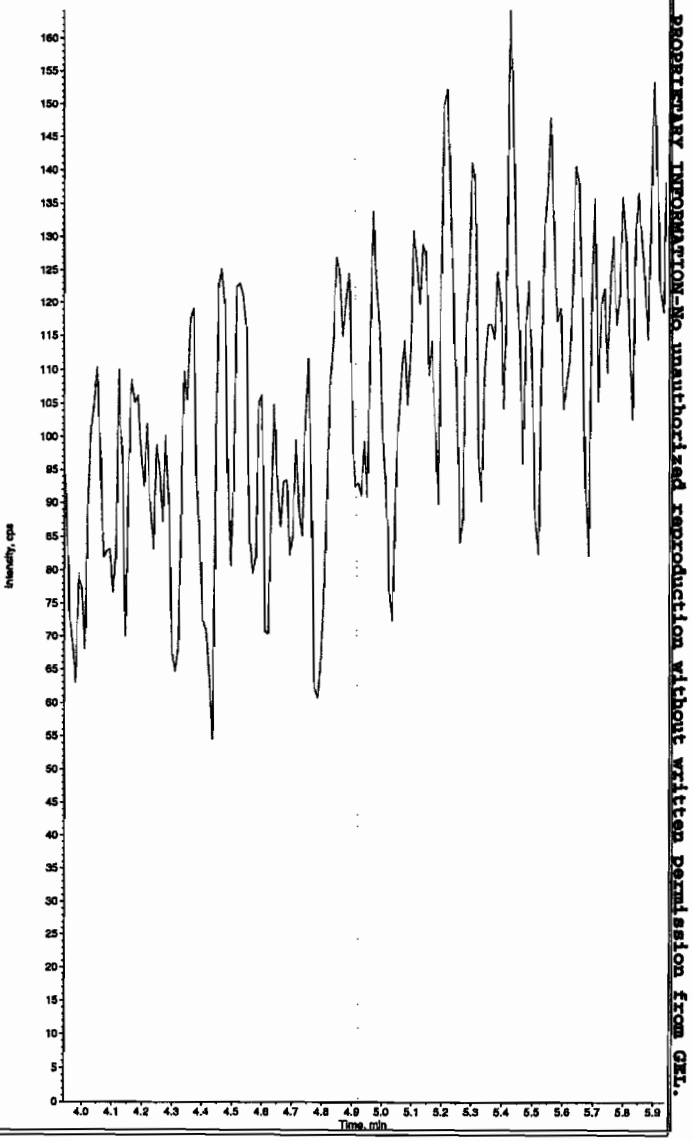
ified: No
c. Algorithm: IntelliQuan - IOA
. Peak Height: 1460.00 cps
. Peak Width: 0.00 sec
othing Width: 3 points
Window: 15.0 sec
ected RT: 8.29 min
Relative RT: No

. Type: Valley
ention Time: 8.30 min
a: 2.28e+006 counts
ght: 581010.132 cps
rt Time: 8.19 min
. Time: 8.78 min



Sample Name: "248102008" Sample ID: "958603|2|LER" File: "EXS04020088.wiff"
Peak Name: "26-Diamino-4-nitrotoluene" 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: 4/3/2010
Acq. Time: 1:14:18 PM

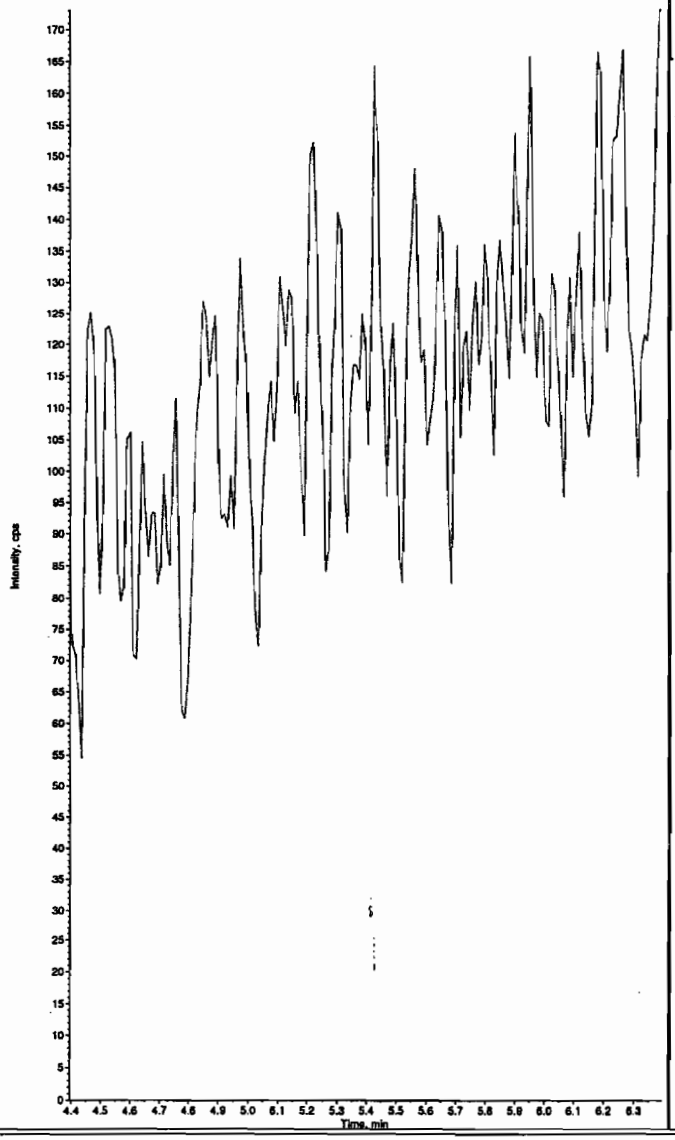
Modified: No



PROPRIETARY INFORMATION-No unauthorized reproduction without written permission from GEL.

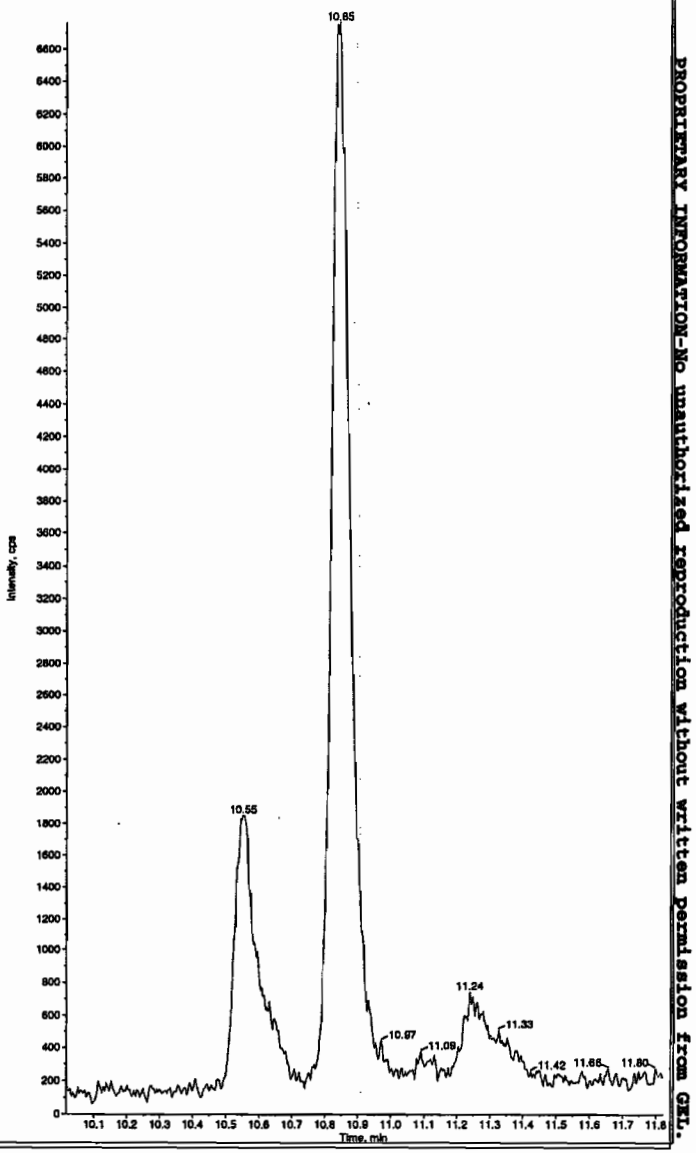
ample Name: "248102008" Sample ID: "958603|2|LER" File: "EXS04020088.wiff"
eak Name: "24-Diamino-6-nitrotoluene" Mass(es): "166.0/46.0 amu"
omment: "LCX83212S" Annotation: ""
uple Index: 1
uple Type: Unknown
centration: N/A
culated Conc: 0.00 ng/mL
. Date: 4/3/2010
. Time: 1:14:18 PM

ified: No



Sample Name: "248102008" Sample ID: "958603|2|LER" File: "EXS04020088.wiff"
Peak Name: "tris(o-cresyl) phosphate" Mass(es): "369.1/91.0 amu"
Comment: "LCX83212S" Annotation: ""
Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 4/3/2010
Acq. Time: 1:14:18 PM

Modified: No



EL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

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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
MNX	25	50	200	400	800	1000	na	600
TNX	25	50	200	400	800	1000	na	600
1,3,5-Trinitrobenzene	25	50	200	400	800	1000	na	600
1,3-Dinitrobenzene	25	50	200	400	800	1000	na	600
Nitrobenzene	25	50	200	400	800	1000	na	600
Tetryl	25	50	200	400	800	1000	na	600
Nitroglycerin	50	100	200	400	800	1000	na	600
2,4,6-Trinitrotoluene	25	50	200	400	800	1000	na	600
2-Amino-4,6-dinitrotoluene	25	50	200	400	800	1000	na	600
4-Amino-2,6-dinitrotoluene	25	50	200	400	800	1000	na	600
2,4-Dinitrotoluene	25	50	200	400	800	1000	na	600
2,6-Dinitrotoluene	25	50	200	400	800	1000	na	600
2-Nitrotoluene	25	50	200	400	800	1000	na	600
4-Nitrotoluene	25	50	200	400	800	1000	an	600
3-Nitrotoluene	25	50	200	400	800	1000	na	600
PETN	25	50	200	400	800	1000	na	600
Picric Acid	200	400	1600	3200	6400	8000	na	4800
3,4-Dinitrotoluene (Surrogate)	25	50	125	250	375	500	1000	250
Secondary Analytes								
2,4-Diamino-6-nitrotoluene	50	100	250	500	750	1000	2000	500
2,6-Diamino-4-nitrotoluene	50	100	250	500	750	1000	2000	500
3,5-Dinitroaniline	50	100	250	500	750	1000	2000	500
TATB	50	100	250	500	750	1000	2000	500
tris(o-Cresyl)phosphate	50	100	250	500	750	1000	2000	500

All values are ug/L without the prep factor

Calibration Levels 8321A-Modified-EXPL.xls (08/09A)

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Explosives Initial Calibration

Form 6

Lab Name: GEL Laboratories LLC

GEL Job No: 10-2089

Lab Code: GEL

Run Date: 02-APR-10,12-APR-10

LCMSMS Instrument ID: LCMSMS

Method: 8321A Modified

HPLC Column: Phenomenex Ultracarb 5 ODS(20)

Calibration Type: Average RF

Calibration Level:	1	2	3	4	5	6	Ave RF	RSD	Q
Data File:	EXP0412003a	EXP0412004a	EXP0412005a	EXP0412006a	EXP0412007a	EXP0412008a			
Parmname									
1,3,5-Trinitrobenzene	4.711	4.33	4.184	4.118	4.135	4.46	4.323	5.342	
1,3-Dinitrobenzene-d4	11.467	12.345	11.86	12.536	12.341	10.015	11.761	7.996	
2,4,6-Trinitrotoluene	.41	.394	.427	.449	.461	.469	0.435	6.752	
2,4-Dinitrotoluene	.262	.241	.266	.256	.262	.279	0.261	4.785	
2,6-Dinitrotoluene	1.228	1.123	1.137	1.19	1.203	1.22	1.184	3.683	
2,6-Dinitrotoluene-d3	63.991	74.817	73.595	74.921	70.943	61.531	69.966	8.311	
2-Amino-4,6-dinitrotoluene	.484	.481	.503	.515	.535	.556	0.512	5.686	
3,4-Dinitrotoluene	1.117	.974	.984	1.041	1.027	1.044	1.031	4.983	
4-Amino-2,6-dinitrotoluene	.361	.326	.32	.335	.34	.344	0.338	4.22	
HMX	3.896	4.064	4.283	4.375	4.325	4.489	4.239	5.149	
Nitrobenzene	.565	.604	.633	.662	.625	.674	0.627	6.339	
RDX	2.18	2.427	3.051	3.081	3.073	3.36	2.862	15.868	
Tetryl	1.226	1.243	1.421	1.278	1.24	1.37	1.296	6.198	
m-Dinitrobenzene	1.304	1.349	1.33	1.336	1.312	1.391	1.337	2.342	
m-Nitrotoluene	.055	.071	.054	.053	.061	.056	0.058	11.551	
o-Nitrotoluene	.105	.086	.078	.084	.079	.088	0.087	11.254	
p-Nitrotoluene	.042	.041	.038	.043	.042	.044	0.042	5.194	

Q column used to flag RSD values outside of Limit (>20%)
* Values outside of QC Limit

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Explosives Initial Calibration

Form 6

Lab Name: GEL Laboratories LLC

GEL Job No: 10-2089

Lab Code: GEL

Run Date: 02-APR-10,12-APR-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:	EXP0412003a	EXP0412004a	EXP0412005a	EXP0412006a	EXP0412007a	EXP0412008a					
Parmname:											
PETN	2009.76	4470.27	14910.6	28870.8	46927.1	49397.1	1.007	-.00022	9.637	.9994	

Quadradic 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

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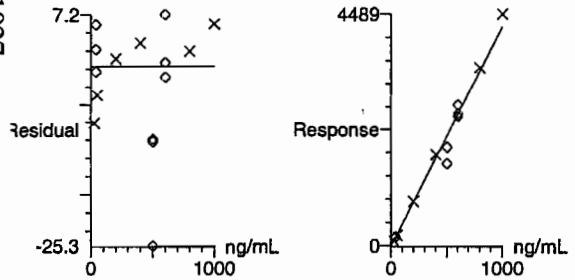
Quantify Calibration Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA.qld, Time: Tue Apr 13 11:12:22 2010

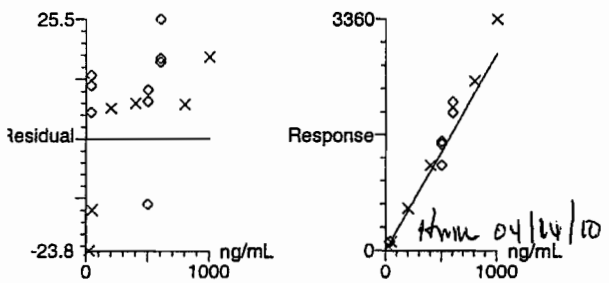
Method: C:\MASSLYNX\New_Exp.PRO\MethDB\041210expa.mdb, Time: Tue Apr 13 09:03:30 2010
Calibration: Untitled, Time: Tue Apr 13 11:12:22 2010

Compound name: HMX
Response Factor: 4.23867
IRF SD: 0.218263, % Relative SD: 5.14933
Response type: Internal Std (Ref 4), Area * (IS Conc. / IS Area)
Curve type: RF



MMT
4/13/10

Compound name: RDX
Response Factor: 2.8622
IRF SD: 0.454164, % Relative SD: 15.8676
Response type: Internal Std (Ref 4), Area * (IS Conc. / IS Area)
Curve type: RF



HMM 04/14/10

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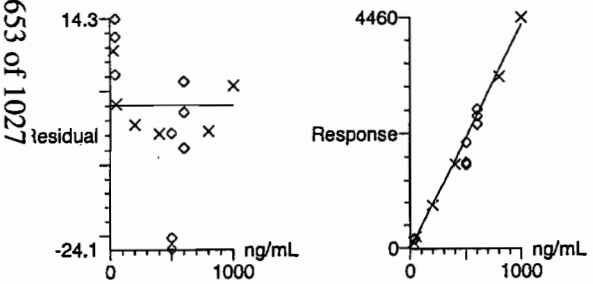
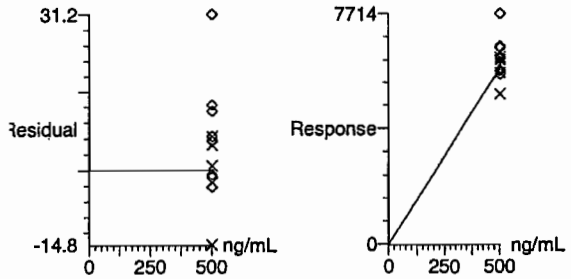
ataset: C:\MASSLYNX\New_Exp.PRO\041210expA.qld, Time: Tue Apr 13 11:12:22 2010

ompound name: 135-Trinitrobenzene
esponse Factor: 4.32298
RF SD: 0.230915, % Relative SD: 5.34157
esponse type: Internal Std (Ref 4), Area * (IS Conc. / IS Area)
urve type: RF



ompound name: 13-Dinitrobenzene-d4
esponse Factor: 11.7607
RF SD: 0.940441, % Relative SD: 7.99645
esponse type: External Std, Area
urve type: RF



EL SOP GL-OA-E-056, Method 8321A-Modified / MM = Manual Modification

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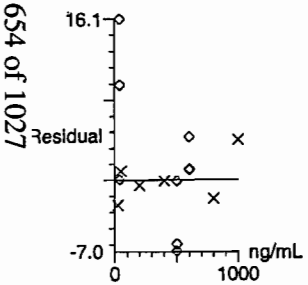
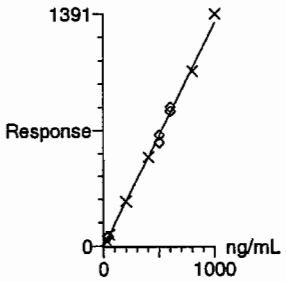
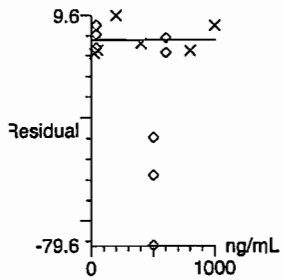
Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA.qld, Time: Tue Apr 13 11:12:22 2010

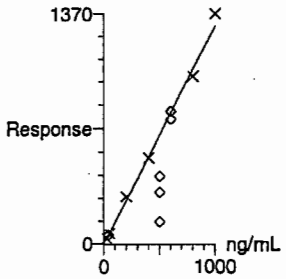
Compound name: 13-Dinitrobenzene
Response Factor: 1.33707
RRF SD: 0.0313205, % Relative SD: 2.34247
Response type: Internal Std (Ref 4), Area * (IS Conc. / IS Area)
Curve type: RF





Compound name: Tetryl
Response Factor: 1.29627
RRF SD: 0.0803478, % Relative SD: 6.19837
Response type: Internal Std (Ref 4), Area * (IS Conc. / IS Area)
Curve type: RF





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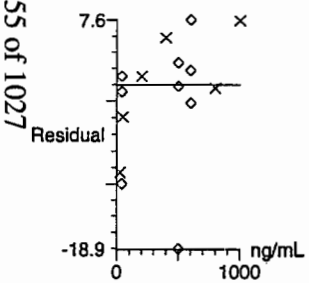
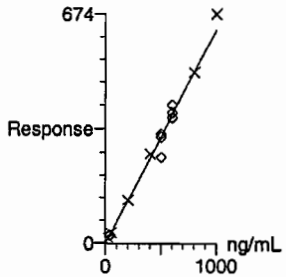
Quantify Calibration Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

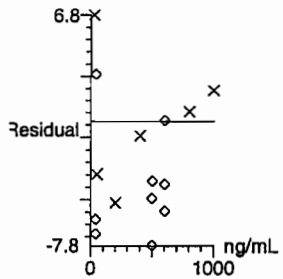
Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA.qld, Time: Tue Apr 13 11:12:22 2010

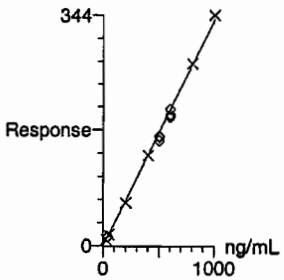
Compound name: Nitrobenzene
Response Factor: 0.627297
RRF SD: 0.0397666, % Relative SD: 6.33936
Response type: Internal Std (Ref 4), Area * (IS Conc. / IS Area)
Curve type: RF





Compound name: 4-Amino-26-dinitrotoluene
Response Factor: 0.337763
RRF SD: 0.014254, % Relative SD: 4.22013
Response type: Internal Std (Ref 14), Area * (IS Conc. / IS Area)
Curve type: RF





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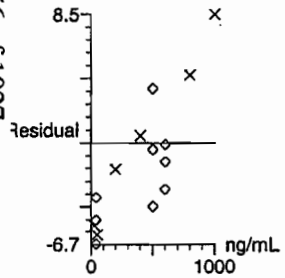
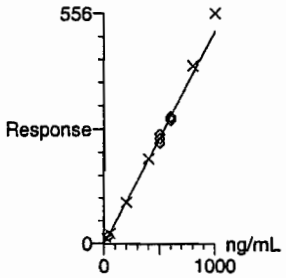
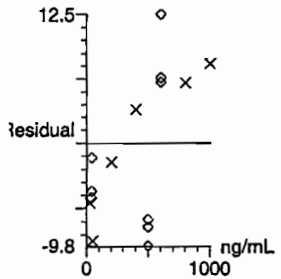
Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA.qld, Time: Tue Apr 13 11:12:22 2010

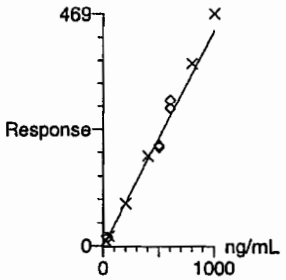
Compound name: 2-Amino-46-dinitrotoluene
Response Factor: 0.512197
RRF SD: 0.0291218, % Relative SD: 5.68567
Response type: Internal Std (Ref 14), Area * (IS Conc. / IS Area)
Curve type: RF





Compound name: 246-Trinitrotoluene
Response Factor: 0.435033
RRF SD: 0.0293746, % Relative SD: 6.75226
Response type: Internal Std (Ref 14), Area * (IS Conc. / IS Area)
Curve type: RF





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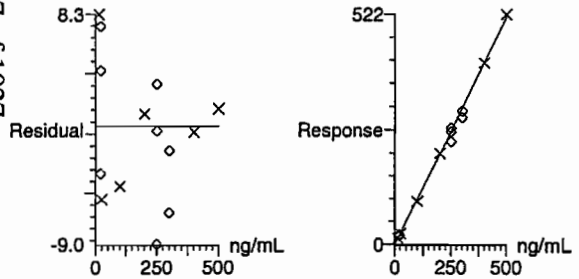
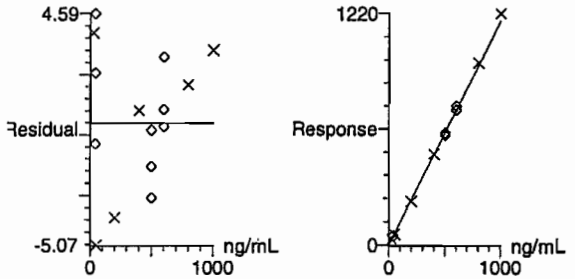
Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA.qld, Time: Tue Apr 13 11:12:22 2010

Compound name: 34-dinitrotoluene
Response Factor: 1.03113
RRF SD: 0.0513762, % Relative SD: 4.98253
Response type: Internal Std (Ref 14), Area * (IS Conc. / IS Area)
Curve type: RF



Compound name: 26-dinitrotoluene
Response Factor: 1.18354
RRF SD: 0.0435946, % Relative SD: 3.68342
Response type: Internal Std (Ref 14), Area * (IS Conc. / IS Area)
Curve type: RF



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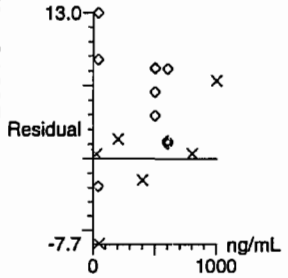
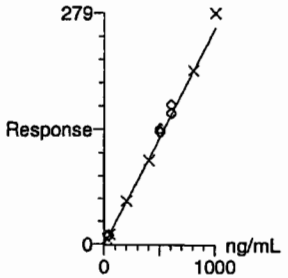
Quantify Calibration Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

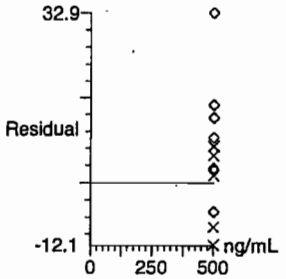
Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA.qld, Time: Tue Apr 13 11:12:22 2010

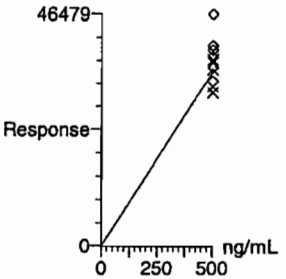
Compound name: 24-dinitrotoluene
Response Factor: 0.261004
RRF SD: 0.0124888, % Relative SD: 4.7849
Response type: Internal Std (Ref 14), Area * (IS Conc. / IS Area)
Curve type: RF





Compound name: 26-dinitrotoluene-d3
Response Factor: 69.9664
RRF SD: 5.81467, % Relative SD: 8.31066
Response type: External Std, Area
Curve type: RF





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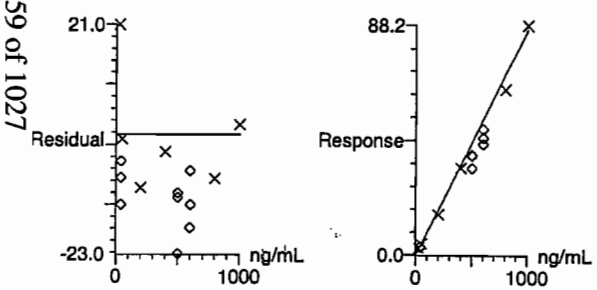
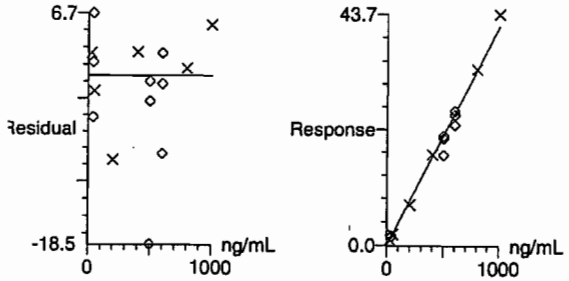
Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA.qld, Time: Tue Apr 13 11:12:22 2010

Compound name: 2-Nitrotoluene
Response Factor: 0.0865882
RRF SD: 0.00974436, % Relative SD: 11.2537
Response type: Internal Std (Ref 14), Area * (IS Conc. / IS Area)
Curve type: RF



Compound name: 4-Nitrotoluene
Response Factor: 0.0414794
RRF SD: 0.00215463, % Relative SD: 5.19445
Response type: Internal Std (Ref 14), Area * (IS Conc. / IS Area)
Curve type: RF



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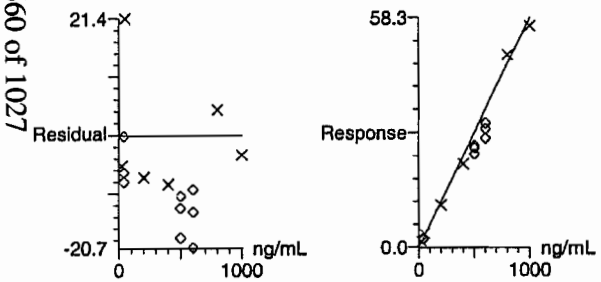
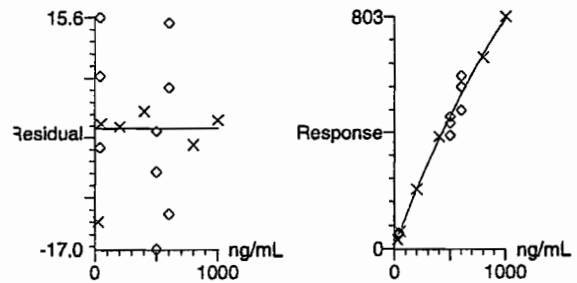
Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA.qld, Time: Tue Apr 13 11:12:22 2010

Compound name: 3-Nitrotoluene
Response Factor: 0.058302
RRF SD: 0.00673426, % Relative SD: 11.5507
Response type: Internal Std (Ref 14), Area * (IS Conc. / IS Area)
Curve type: RF



Compound name: PETN
Coefficient of Determination: 0.999447
Calibration curve: -0.000220026 * x^2 + 1.0065 * x + 9.6373
Response type: Internal Std (Ref 14), Area * (IS Conc. / IS Area)
Curve type: 2nd Order, Origin: Exclude, Weighting: Null, Axis trans: None



Page 660 of 1027

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7

Explosives Initial Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10–2089

Lab Code: GEL

GEL Sample ID: WXXICV

GEL Data File EXP0412010a

Analysis Date: 12–APR–10 20:06

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
2,6–Dinitrotoluene	600	599.148	100	
2,6–Dinitrotoluene–d3	500	574.331	115	
2–Amino–4,6–dinitrotoluene	600	592.511	99	
3,4–Dinitrotoluene	300	280.228	93	
4–Amino–2,6–dinitrotoluene	600	600.345	100	
HMX	600	642.971	107	
Nitrobenzene	600	610.074	102	
PETN	600	527.609	88	
RDX	600	753.124	126	*
Tetryl	600	604.19	101	
m–Dinitrobenzene	600	606.979	101	
m–Nitrotoluene	600	475.553	79	*
o–Nitrotoluene	600	492.414	82	
p–Nitrotoluene	600	547.628	91	
1,3,5–Trinitrobenzene	600	593.013	99	
1,3–Dinitrobenzene–d4	500	528.009	106	
2,4,6–Trinitrotoluene	600	674.734	112	
2,4–Dinitrotoluene	600	608.204	101	

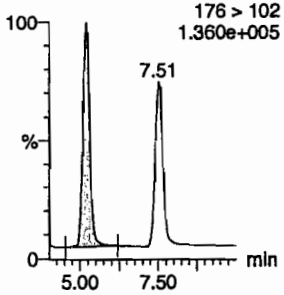
Recovery Limits:
3,4–Dinitrotoluene (Surrogate),TATB, tris(o–cresyl)phosphate, 3,5–Dinitroaniline, 2,6–Diamino–4–nitrotoluene , 2,4–Diamino–6–nitrotoluene 70–130%
OtherTarget Analytes 80–120%
Column used to flag Recovery outside of Limits
* Value outside of Recovery Limits

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA.qld, Time: Tue Apr 13 11:12:22 2010

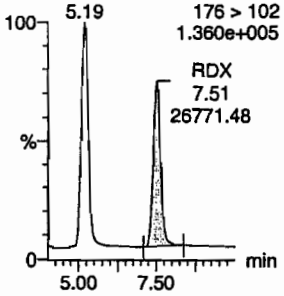
Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0412010a
Date: 12-Apr-2010
Time: 20:06:00
ID: WXX100412-07ICV
Vial: 1:1,B

MM 4/13/10

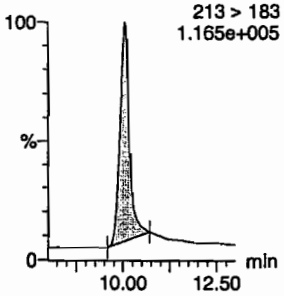
HMX
F2:MRM of 1 channel,AP-
176 > 102
1.360e+005



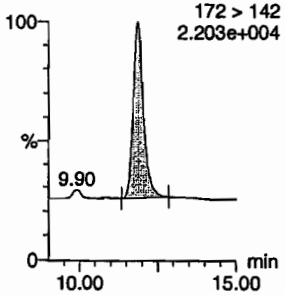
RDX
F2:MRM of 1 channel,AP-
176 > 102
1.360e+005



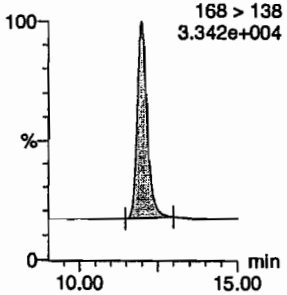
135-Trinitrobenzene
F4:MRM of 1 channel,AP-
213 > 183
1.165e+005



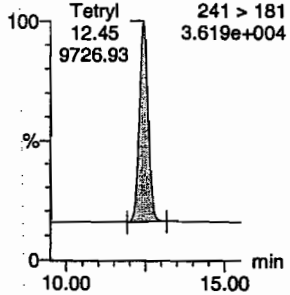
13-Dinitrobenzene-d4
F5:MRM of 2 channels,AP-
172 > 142
2.203e+004



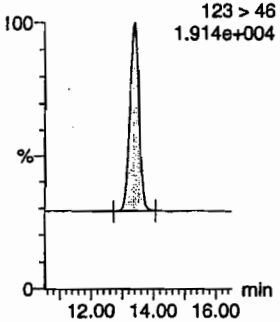
13-Dinitrobenzene
F5:MRM of 2 channels,AP-
168 > 138
3.342e+004



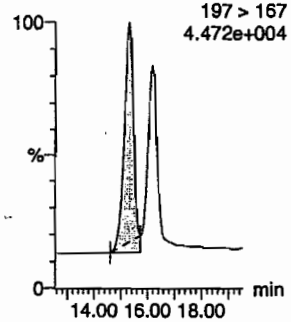
Tetryl
F6:MRM of 1 channel,AP-
241 > 181
3.619e+004



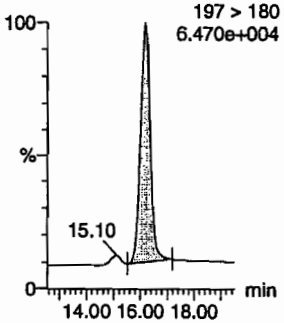
litrobenzene
F7:MRM of 1 channel,AP-
123 > 46
1.914e+004



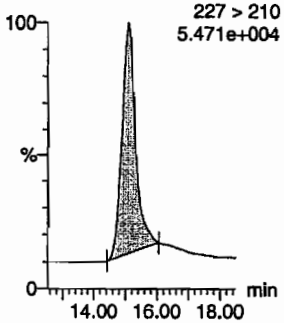
4-Amino-26-dinitrotoluene
F11:MRM of 2 channels,AP-
197 > 167
4.472e+004



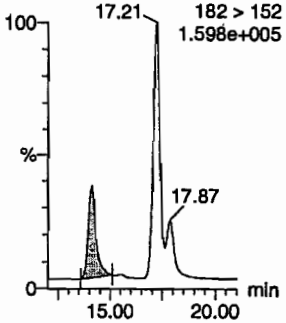
2-Amino-46-dinitrotoluene
F11:MRM of 2 channels,AP-
197 > 180
6.470e+004



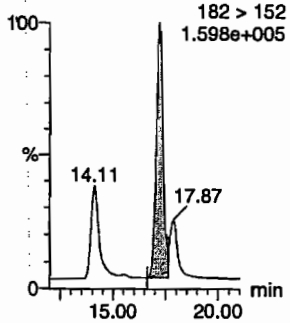
246-Trinitrotoluene
F10:MRM of 1 channel,AP-
227 > 210
5.471e+004



34-dinitrotoluene
F9:MRM of 2 channels,AP-
182 > 152
1.598e+005



26-dinitrotoluene
F9:MRM of 2 channels,AP-
182 > 152
1.598e+005



tm 04/14/10

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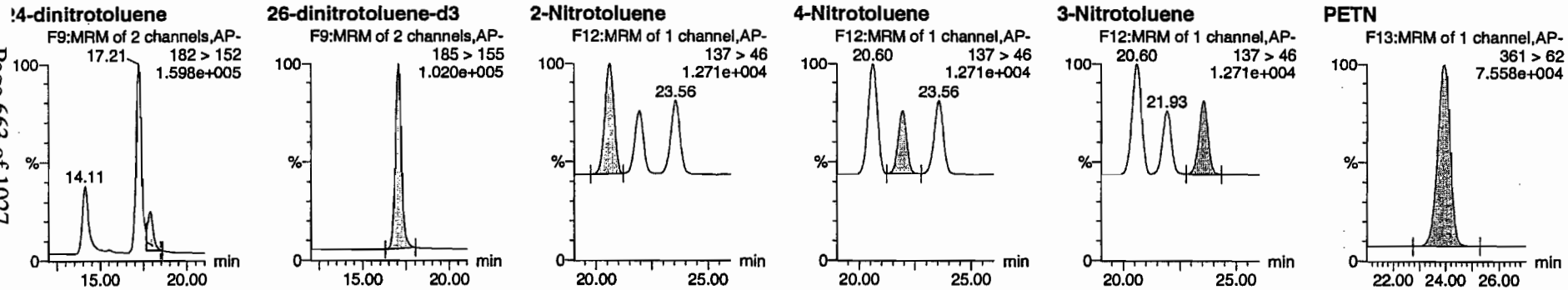
Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA.qld, Time: Tue Apr 13 11:12:22 2010



D	Name	Trace	RT	Area	IS Area	Abs Resp	Response	Flags	Mod Date	Mod Time	ng/mL	%Rec	%Dev	S/N
VXX100412-07ICV	HMX	176 > 102	5.19	33847.480	6209.775	33847.480	2725.339	bb			642.9709	107.2	7.2	3326.4
VXX100412-07ICV	RDX	176 > 102	7.51	26771.480	6209.775	26771.480	2155.592	bb			753.1238	125.5	25.5	2433.7
VXX100412-07ICV	135-Trinitrobenzene	213 > 183	10.03	31838.539	6209.775	31838.539	2563.582	bb			593.0128	98.8	-1.2	1379.9
VXX100412-07ICV	13-Dinitrobenzene-d4	172 > 142	11.86	6209.775		6209.775	6209.775	bb			528.0094	105.6	5.6	836.0
VXX100412-07ICV	13-Dinitrobenzene	168 > 138	11.97	10079.378	6209.775	10079.378	811.574	bb			606.9793	101.2	1.2	1025.2
VXX100412-07ICV	Tetryl	241 > 181	12.45	9726.927	6209.775	9726.927	783.195	bb			604.1896	100.7	0.7	1063.3
VXX100412-07ICV	Nitrobenzene	123 > 46	13.39	4752.931	6209.775	4752.931	382.698	bb			610.0743	101.7	1.7	361.4
VXX100412-07ICV	4-Amino-26-dinitrotoluene	197 > 167	15.31	16296.482	40183.859	16296.482	202.774	MM	13-Apr-10	11:01:46	600.3448	100.1	0.1	397.8
VXX100412-07ICV	2-Amino-46-dinitrotoluene	197 > 180	16.18	24390.191	40183.859	24390.191	303.482	bb			592.5107	98.8	-1.2	968.8
VXX100412-07ICV	246-Trinitrotoluene	227 > 210	15.09	23590.451	40183.859	23590.451	293.531	bb			674.7339	112.5	12.5	1164.7
VXX100412-07ICV	34-dinitrotoluene	182 > 152	14.11	23222.357	40183.859	23222.357	288.951	bb			280.2284	93.4	-6.6	253.4
VXX100412-07ICV	26-dinitrotoluene	182 > 152	17.21	56989.934	40183.859	56989.934	709.115	MM	13-Apr-10	11:06:55	599.1482	99.9	-0.1	713.0
VXX100412-07ICV	24-dinitrotoluene	182 > 152	17.87	12757.857	40183.859	12757.857	158.744	MM	13-Apr-10	11:09:56	608.2038	101.4	1.4	150.4
VXX100412-07ICV	26-dinitrotoluene-d3	185 > 155	17.06	40183.859		40183.859	40183.859	bb			574.3312	114.9	14.9	5693.5
VXX100412-07ICV	2-Nitrotoluene	137 > 46	20.60	3426.659	40183.859	3426.659	42.637	bb			492.4141	82.1	-17.9	1017.5
VXX100412-07ICV	4-Nitrotoluene	137 > 46	21.93	1825.573	40183.859	1825.573	22.715	bb			547.6276	91.3	-8.7	574.9
VXX100412-07ICV	3-Nitrotoluene	137 > 46	23.56	2228.251	40183.859	2228.251	27.726	bb			475.5529	79.3	-20.7	669.8
VXX100412-07ICV	PETN	361 > 62	23.94	38530.590	40183.859	38530.590	479.429	bb			527.6090	87.9	-12.1	6724.3

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GRAND MEAN AVERAGE

Vendor: Restek
Date of Analysis: 04/12/10
Time of Injection: 2006
Standard Number: WXX100412-07ICV
Data File: EXP0412010a

HMX		107.2
RDX		125.5
135-TNB		98.8
13-DNB		101.2
Tetryl		100.7
Nitrobenzene		101.7
4A-26-DNT		100.1
2A-46-DNT		98.8
246-TNT		112.5
34-DNT(surr)		93.4
26-DNT		99.9
24-DNT		101.4
2-NT		82.1
4-NT		91.3
3-NT		79.3
PETN		87.9
Total		1581.8
Average		98.9

HMW 04/14/10

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 LLC

GEL Job No: 10-2089

Lab Code: GEL

Run Date: 02-APR-10,12-APR-10

LCMSMS Instrument ID: LCMSMS4

Method: 8321A Modified

HPLC Column: YMC J-Sphere ODS-H8O

Calibration Type: 2nd Order

Calibration Level:	19	20	21	22	23	24	25	X	X^2	Intercept	COD	Q
Data File:	EXS04020003.wifl	EXS04020004.wifl	EXS04020005.wifl	EXS04020006.wifl	EXS04020007.wifl	EXS04020008.wifl	EXS04020009.wifl					
Parmname:												
2,4-Diamino-6-nitrotoluene	102000	235000	556000	1080000	1640000	2020000	3990000	18400	2140	-.081	.9996	
2,6-Diamino-4-nitrotoluene	129000	295000	745000	1310000	2160000	2570000	5070000	18300	2770	-.123	.999	
3,4-Dinitrotoluene	207000	454000	1070000	2160000	3310000	4330000	7770000	-78100	10200	-2.4	.9982	
3,5-Dinitroaniline	333000	721000	1760000	3170000	4920000	7090000	11400000	-139000	7790	-.996	.998	
TATB	36100	75900	193000	398000	607000	835000	1640000	-10900	836	-.004	.9999	
tris(o-cresyl) phosphate	1010000	1970000	4790000	8970000	13500000	16800000	28100000	412	19800	-2.89	.9999	

Quadradic 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

PROPRIETARY INFORMATION-No unauthorized reproduction without written permission from GEL.

Peak Name: TATB
No Internal Standard
Q1/Q3 Masses: 257.20/204.90 amu

Fit	Quadratic	Weighting	None	Iterate No
a0	-1.09e+004			
a1	836			
a2	-0.00409			

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	-1.39e+005			
a1	7.79e+003			
a2	-0.996			

Correlation coefficient 0.9980
Use Area

Peak Name: 34-Dinitrotoluene
No Internal Standard
Q1/Q3 Masses: 182.08/151.90 amu

Fit	Quadratic	Weighting	None	Iterate No
a0	-7.81e+004			
a1	1.02e+004			
a2	-2.4			

Correlation coefficient 0.9982
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	1.83e+004			
a1	2.77e+003			
a2	-0.123			

Correlation coefficient 0.9990
Use Area

Dan 4/7/10

Hnm 04/08/10

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Peak Name: 24-Diamino-6-nitrotoluene
No Internal Standard
Q1/Q3 Masses: 165.97/46.00 amu

Fit	Quadratic	Weighting	None	Iterate No
a0	1.84e+004			
a1	2.14e+003			
a2	-0.081			

Correlation coefficient 0.9996
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	412			
a1	1.98e+004			
a2	-2.89			

Correlation coefficient 0.9999
Use Area

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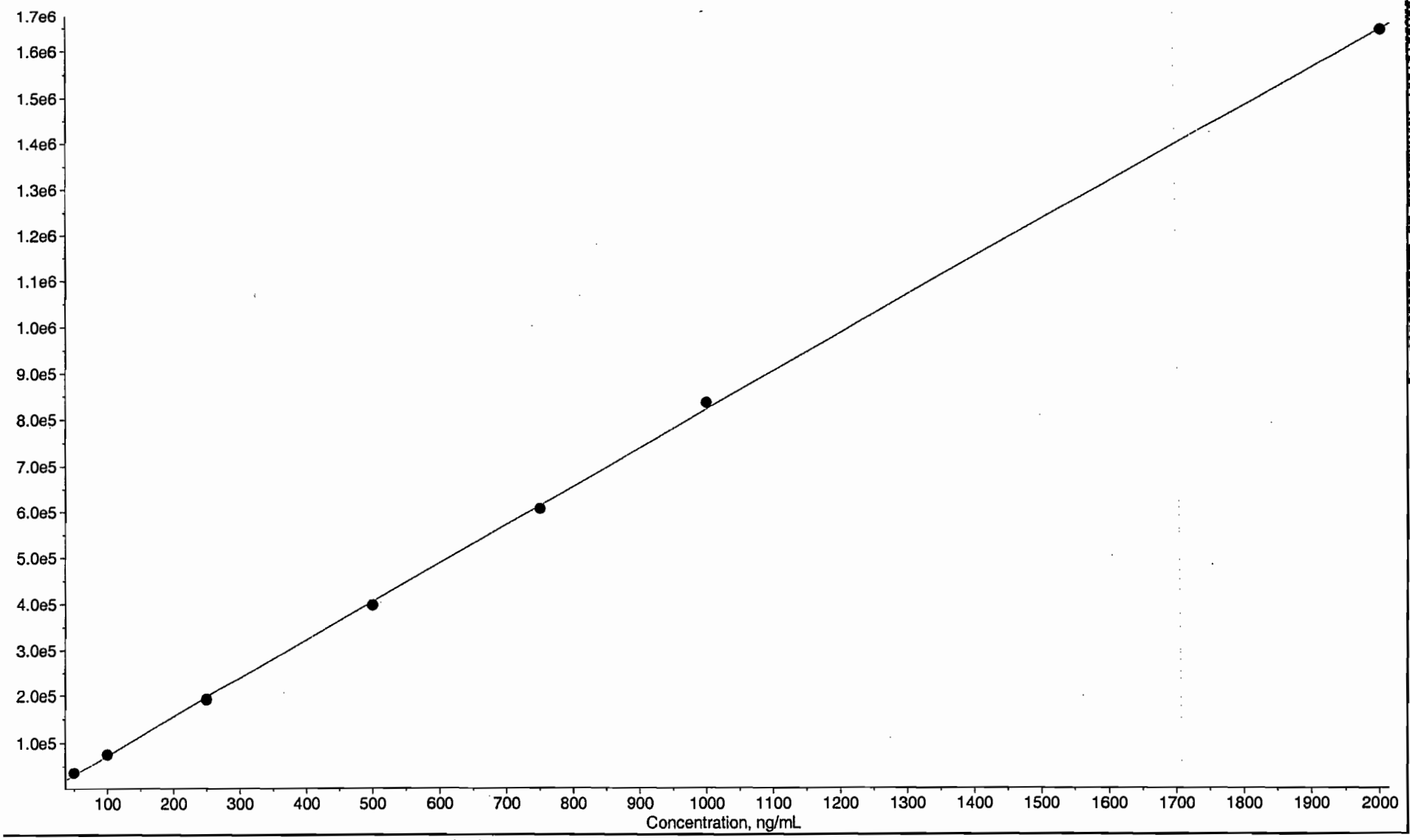
040210.rdb (TATB): "Quadratic" Regression ("No" weighting): y = -0.00409 x^2 + 836 x + -1.09e+004 (r = 0.9999)



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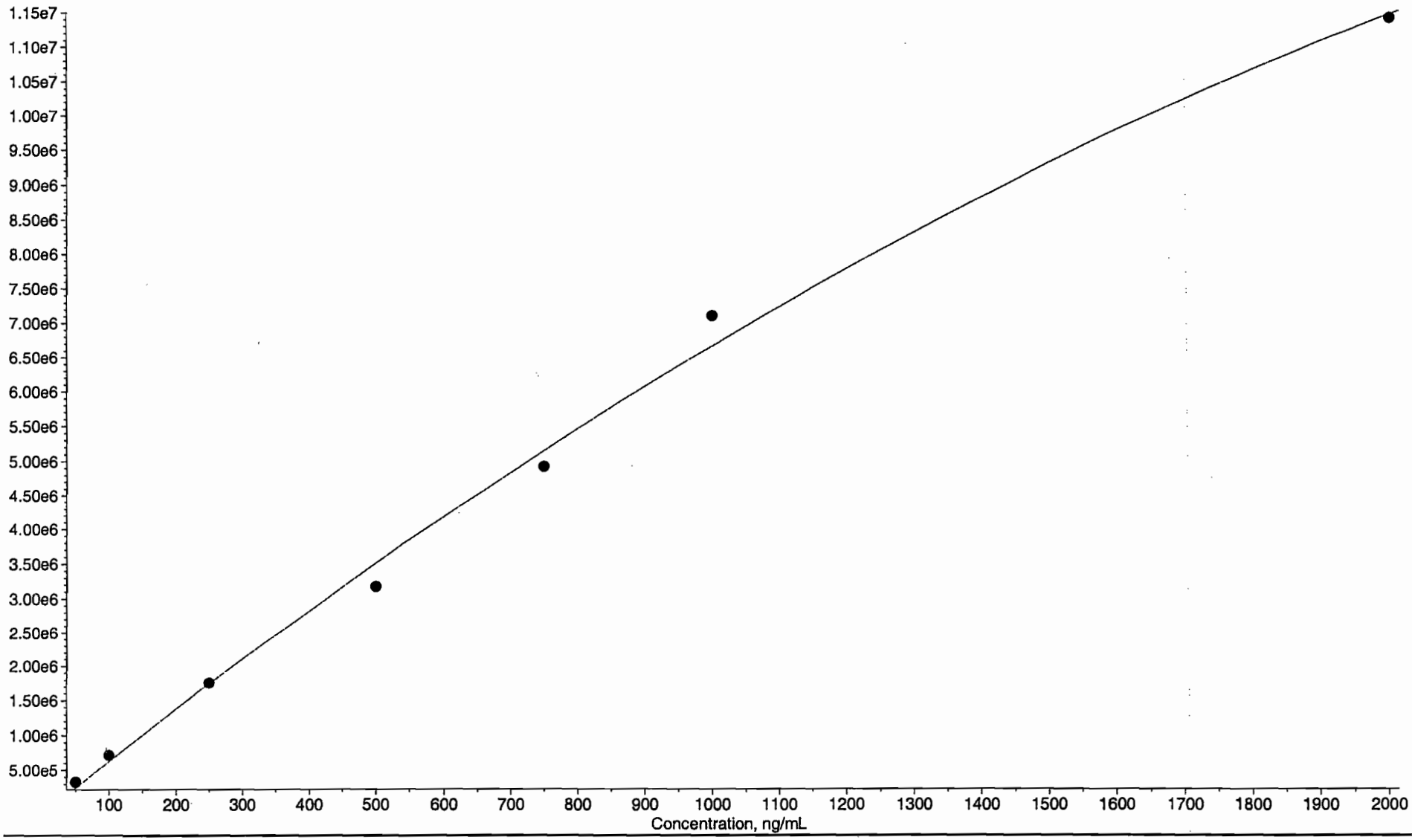
PROPRIETARY INFORMATION-No unauthorized reproduction without written permission from GEL.

040210.rdb (35-Dinitroaniline): "Quadratic" Regression ("No" weighting): y = -0.996 x^2 + 7.79e+003 x + -1.39e+005 (r = 0.9980)



EL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

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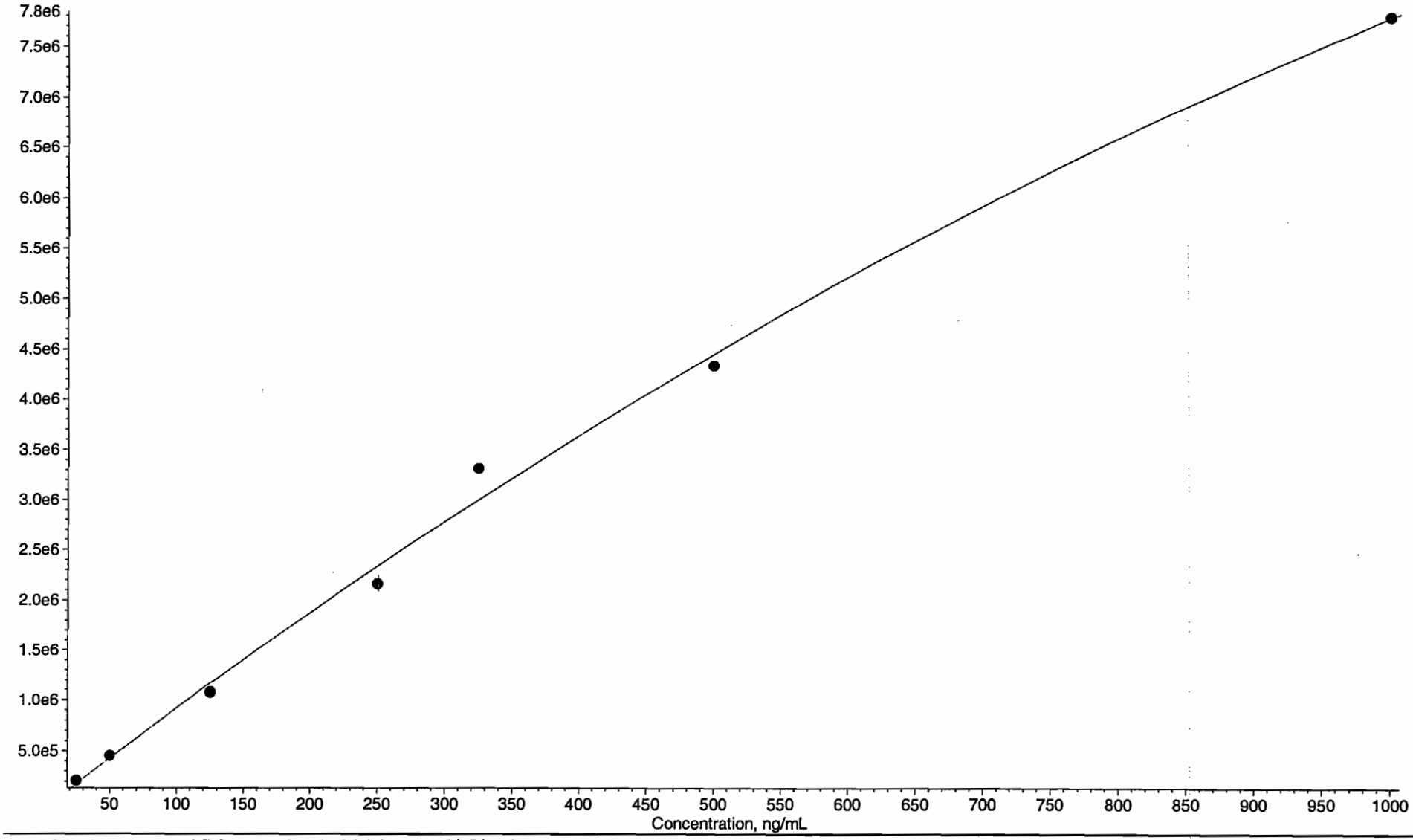
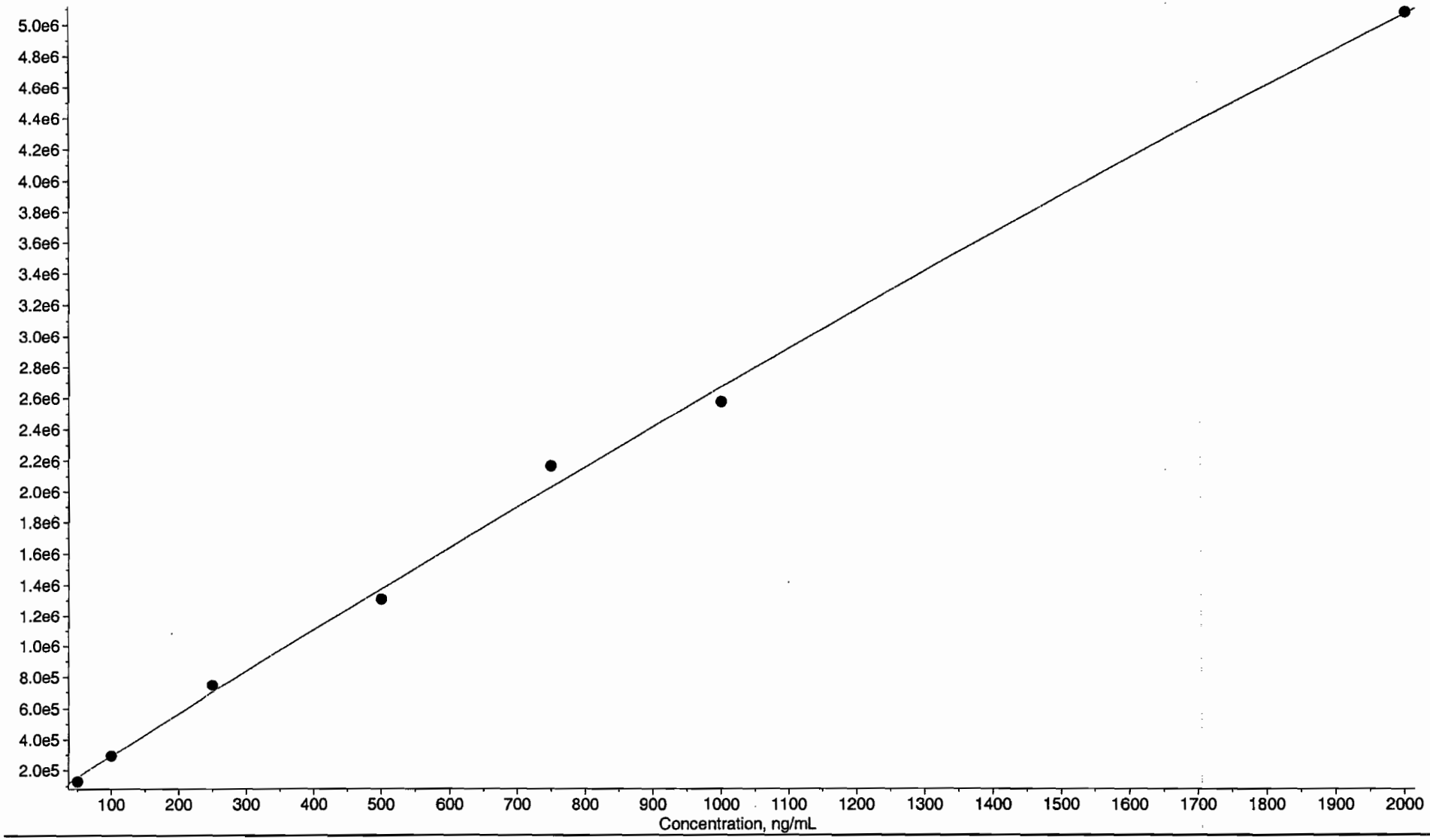
040210.rdb (34-Dinitrotoluene): "Quadratic" Regression ("No" weighting): y = -2.4 x^2 + 1.02e+004 x + -7.81e+004 (r = 0.9982)



040210.rdb (26-Diamino-4-nitrotoluene): "Quadratic" Regression ("No" weighting): y = -0.123 x^2 + 2.77e+003 x + 1.83e+004 (r = 0.9990)



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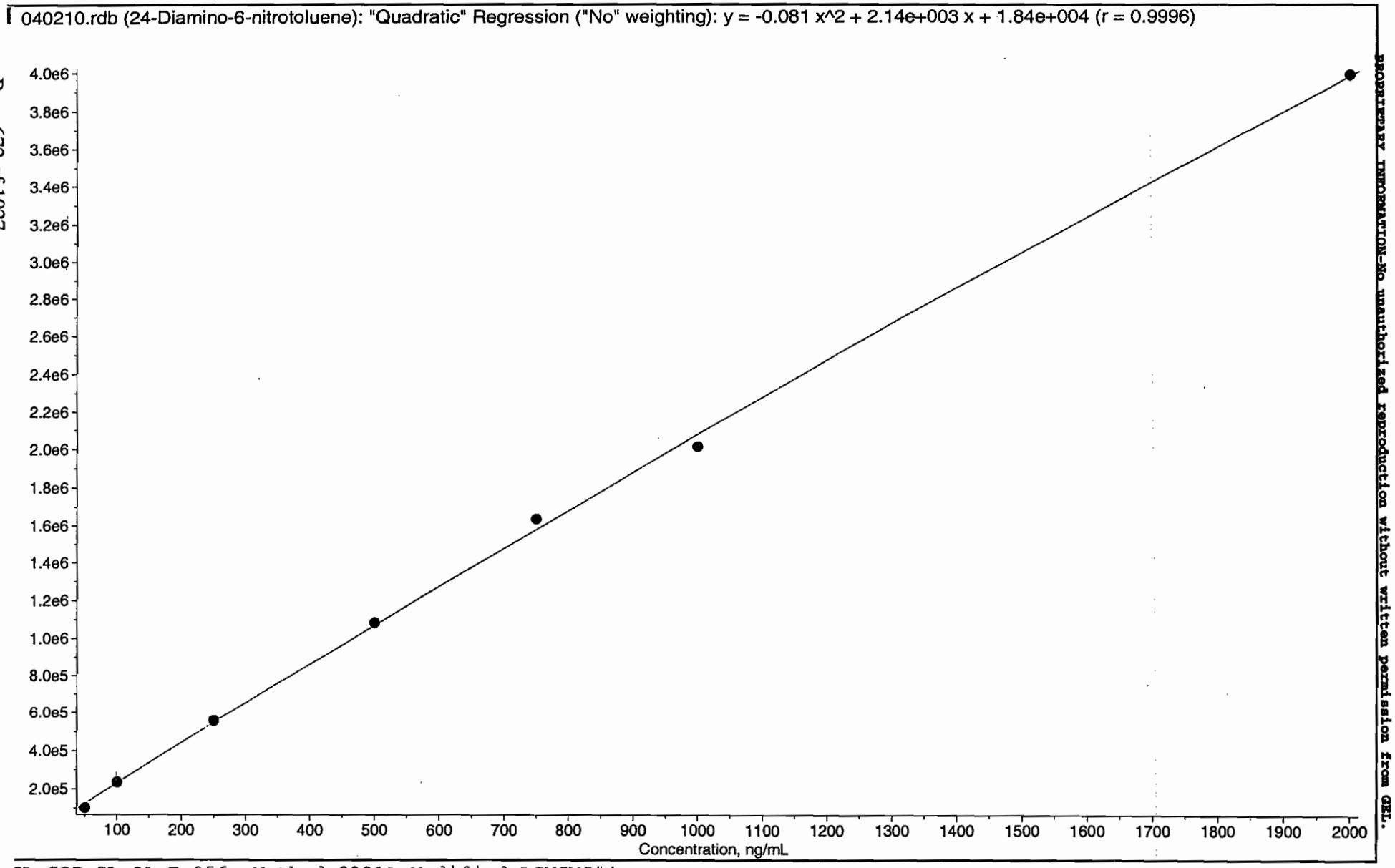
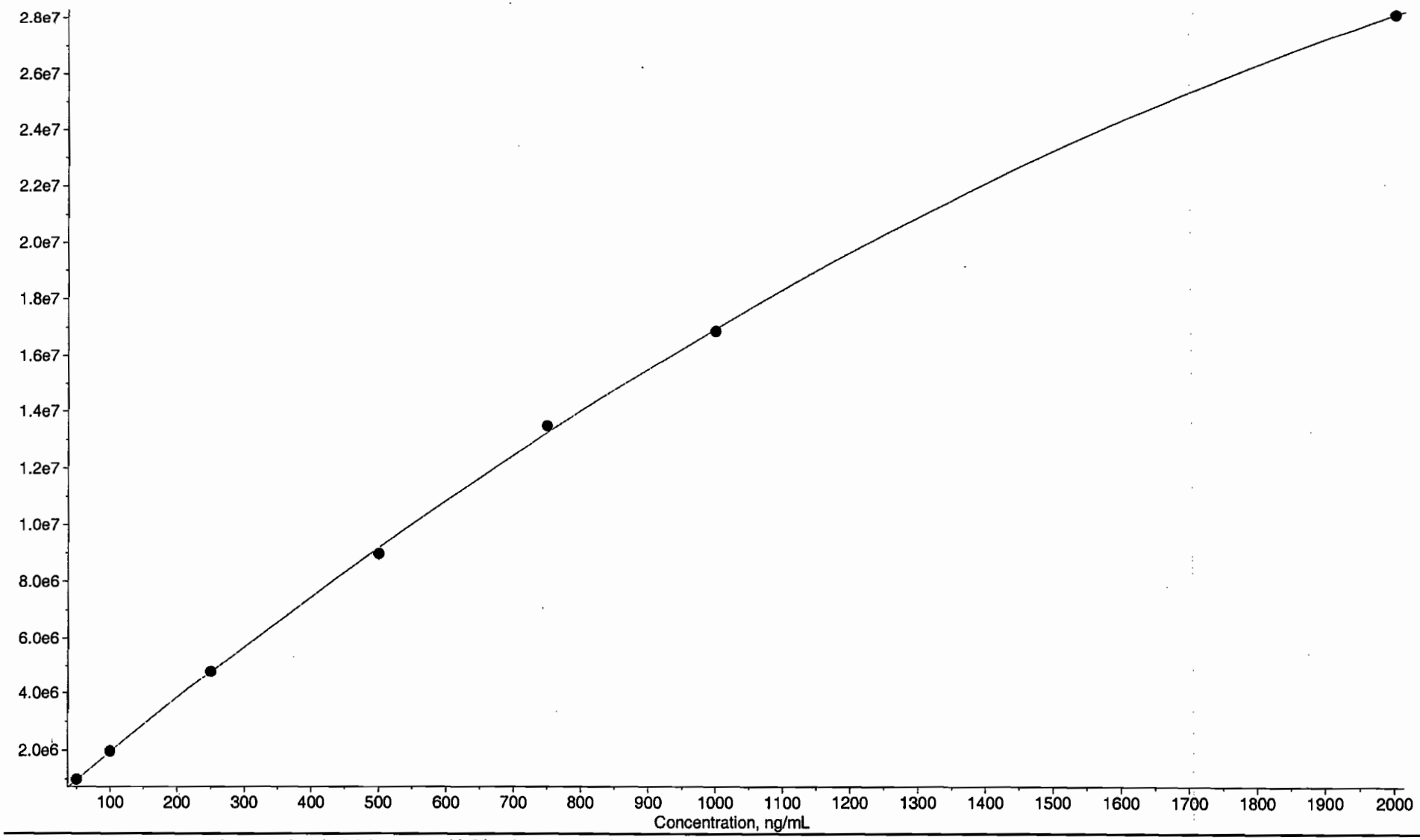


PROPRIETARY INFORMATION-No unauthorized reproduction without written permission from GEL.

040210.rdb (tris(o-cresyl) phosphate): "Quadratic" Regression ("No" weighting): y = -2.89 x^2 + 1.98e+004 x + 412 (r = 0.9999)



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7

Explosives Initial Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10–2089

Lab Code: GEL

GEL Sample ID: WXXICV

GEL Data File EXS04020011.wiff

Analysis Date: 02–APR–10 17:04

LCMSMS ID: 1358

Column ID: JSphere ODS–H80

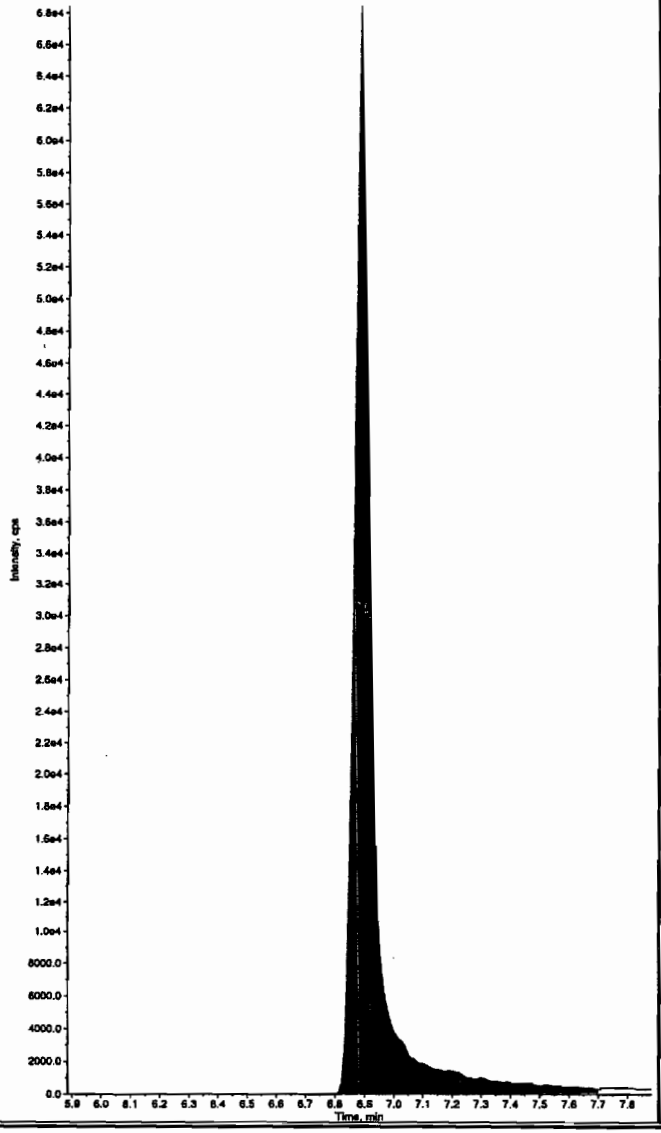
Compound	True	Found	Recovery	Q
2,4–Diamino–6–nitrotoluene	500	411	82	
2,6–Diamino–4–nitrotoluene	500	399	80	
3,4–Dinitrotoluene	250	176	70	
3,5–Dinitroaniline	500	393	79	
TATB	500	386	77	
tris(o–cresyl) phosphate	500	397	79	

Recovery Limits:
3,4–Dinitrotoluene (Surrogate),TATB, tris(o–cresyl)phosphate, 3,5–Dinitroaniline, 2,6–Diamino–4–nitrotoluene ,
2,4–Diamino–6–nitrotoluene 70–130%
OtherTarget Analytes 80–120%
Column used to flag Recovery outside of Limits
* Value outside of Recovery Limits

Before Lab 4/7/10

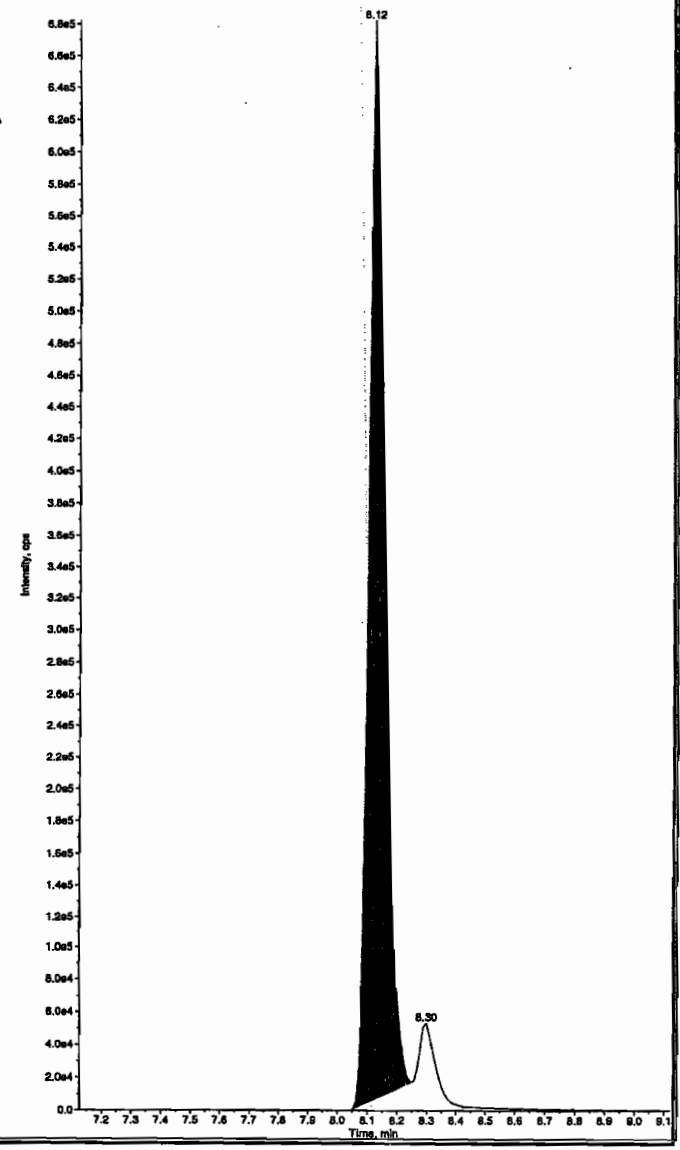
Sample Name: "WXX100402-26ICV" Sample ID: "[1]LER" File: "EXS04020011.wiff"
Peak Name: "TATB" Mass(es): "257.2/204.9 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1	
Sample Type:	QC	
Concentration:	500.	ng/mL
Calculated Conc:	386.	ng/mL
Acq. Date:	4/2/2010	
Acq. Time:	5:04:44 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:	6.88	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	6.88	min
Area:	3.12e+005	counts
Height:	68446.808	cps
Start Time:	6.79	min
End Time:	7.70	min



Sample Name: "WXX100402-26ICV" Sample ID: "[1]LER" File: "EXS04020011.wiff"
Peak Name: "35-Dinitroaniline" Mass(es): "182.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1	
Sample Type:	QC	
Concentration:	500.	ng/mL
Calculated Conc:	380.	ng/mL
Acq. Date:	4/2/2010	
Acq. Time:	5:04:44 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:	8.12	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	8.12	min
Area:	2.68e+006	counts
Height:	675462.158	cps
Start Time:	8.05	min
End Time:	8.25	min



HMM 04/08/10

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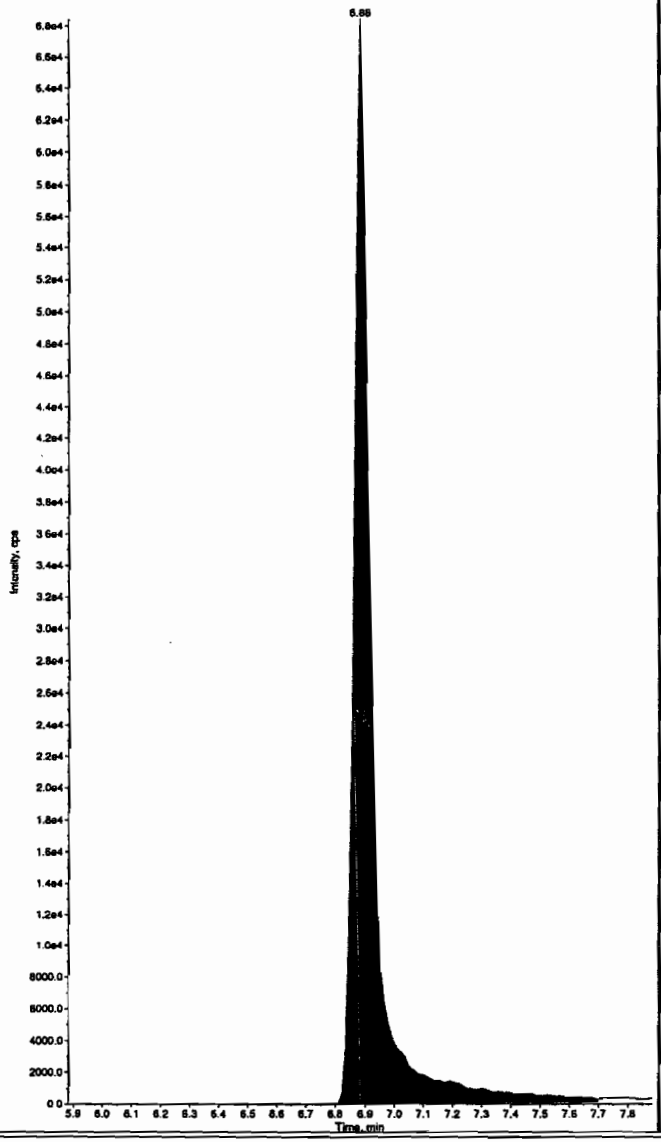
after Scan 4/7/10

Sample Name: "WXX100402-26ICV" Sample ID: "[1]LER" File: "EXS04020011.wiff"
Peak Name: "TATB" Mass(es): "257.2/204.9 amu"
Comment: "LCMSEXP_C" Annotation: ""

mple Index: 1
mple Type: QC
ncentration: 500. ng/mL
lculated Conc: 386. ng/mL
q. Date: 4/2/2010
q. Time: 5:04:44 PM

dified: No
oc. Algorithm: IntelliQuan - IQA
n. Peak Height: 2500.00 cps
n. Peak Width: 0.00 sec
oothing Width: 3 points
Window: 30.0 sec
pected RT: 6.88 min
e Relative RT: No

:. Type: Valley
tention Time: 6.88 min
ea: 3.12e+005 counts
ight: 68446.808 cps
irt Time: 6.79 min
d Time: 7.70 min

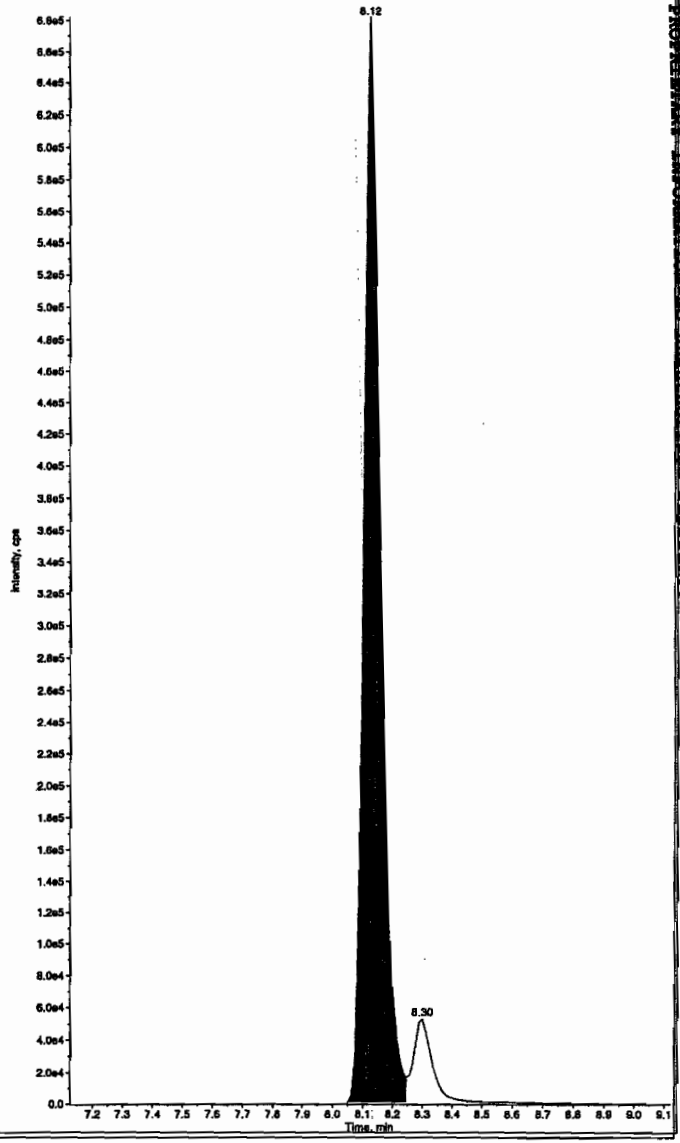


Sample Name: "WXX100402-26ICV" Sample ID: "[1]LER" File: "EXS04020011.wiff"
Peak Name: "35-Dinitroaniline" Mass(es): "182.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index: 1
Sample Type: QC
Concentration: 500. ng/mL
Calculated Conc: 393. ng/mL
Acq. Date: 4/2/2010
Acq. Time: 5:04:44 PM

Modified: Yes
RT Window: 15.0 sec
Expected RT: 8.12 min
Use Relative RT: No

Int. Type: Manual
Retention Time: 8.12 min
Area: 2.77e+006 counts
Height: 682686.250 cps
Start Time: 8.05 min
End Time: 8.25 min



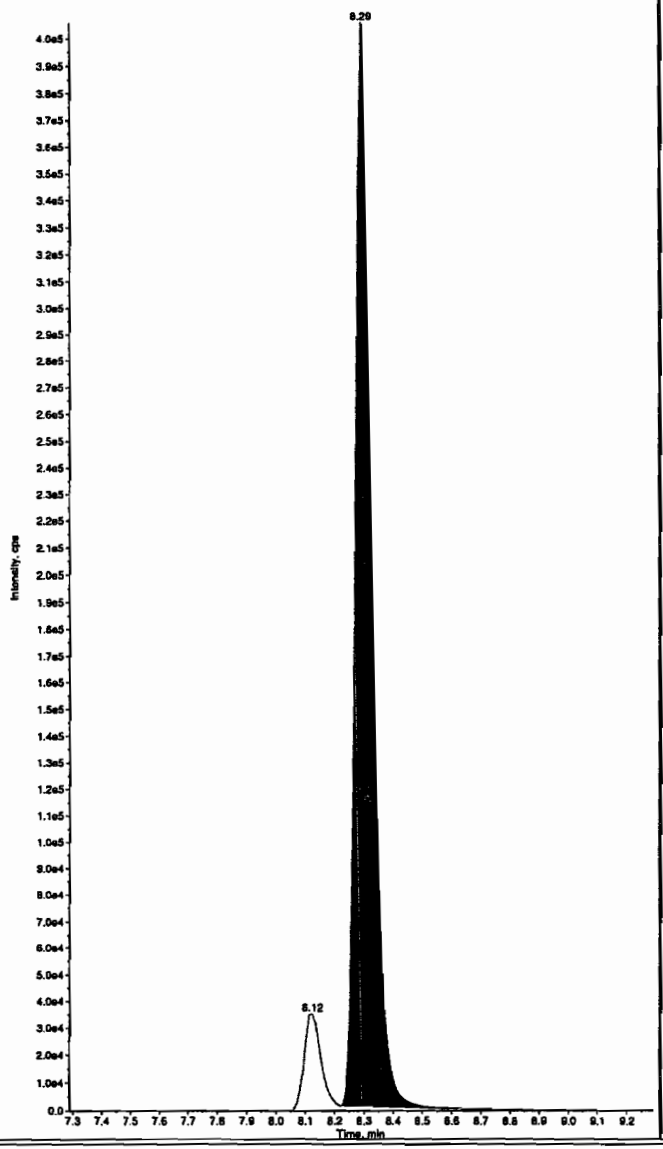
PROPRIETARY INFORMATION-No unauthorized reproduction without written permission from GEL.

Sample Name: "WXX100402-26ICV" Sample ID: "[1]LER" File: "EXS04020011.wiff"
Peak Name: "34-Dinitrotoluene" Mass(es): "182.1/151.9 amu"
Comment: "LCMSEXP_C" Annotation: ""

mple Index: 1
mple Type: QC
ncentration: 250. ng/mL
lculated Conc: 176. ng/mL
q. Date: 4/2/2010
q. Time: 5:04:44 PM

dified: No
oc. Algorithm: IntelliQuan - IQA
n. Peak Height: 1460.00 cps
n. Peak Width: 0.00 sec
oothing Width: 3 points
Window: 15.0 sec
pected RT: 8.29 min
Relative RT: No

:. Type: Valley
:ention Time: 8.29 min
a: 1.65e+006 counts
ght: 404530.518 cps
rt Time: 8.22 min
Time: 8.61 min

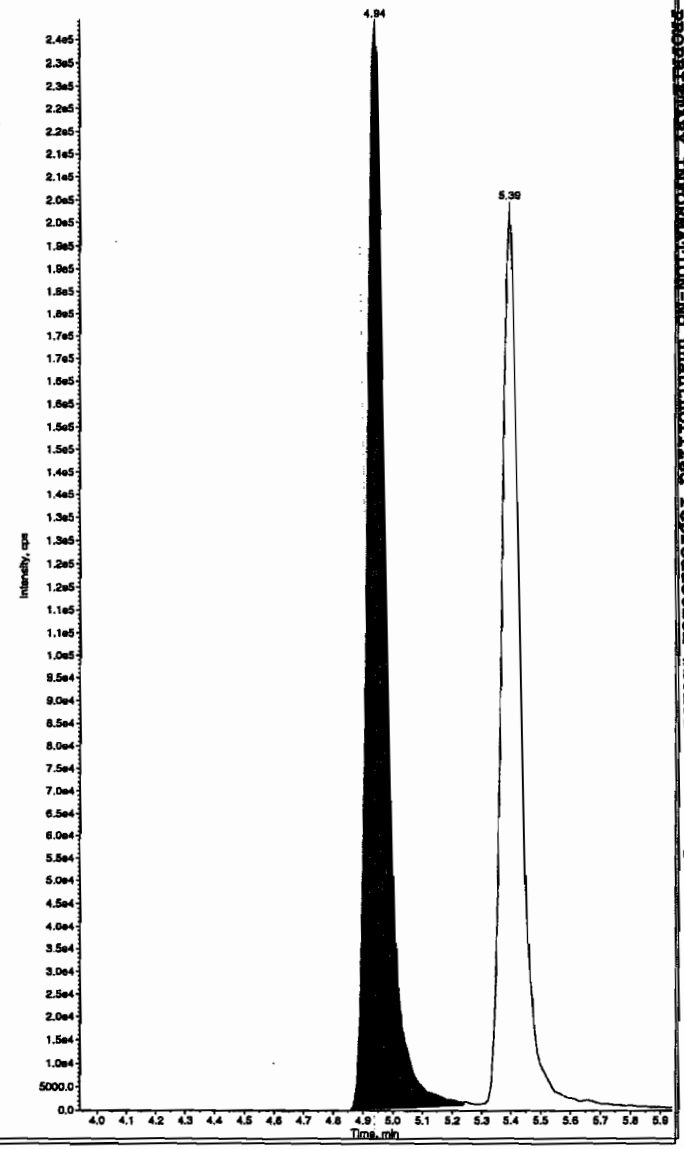


Sample Name: "WXX100402-26ICV" Sample ID: "[1]LER" File: "EXS04020011.wiff"
Peak Name: "26-Diamino-4-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index: 1
Sample Type: QC
Concentration: 500. ng/mL
Calculated Conc: 399. ng/mL
Acq. Date: 4/2/2010
Acq. Time: 5:04:44 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: 4.94 min
Use Relative RT: No

Int. Type: Valley
Retention Time: 4.94 min
Area: 1.10e+006 counts
Height: 239002.914 cps
Start Time: 4.85 min
End Time: 5.24 min



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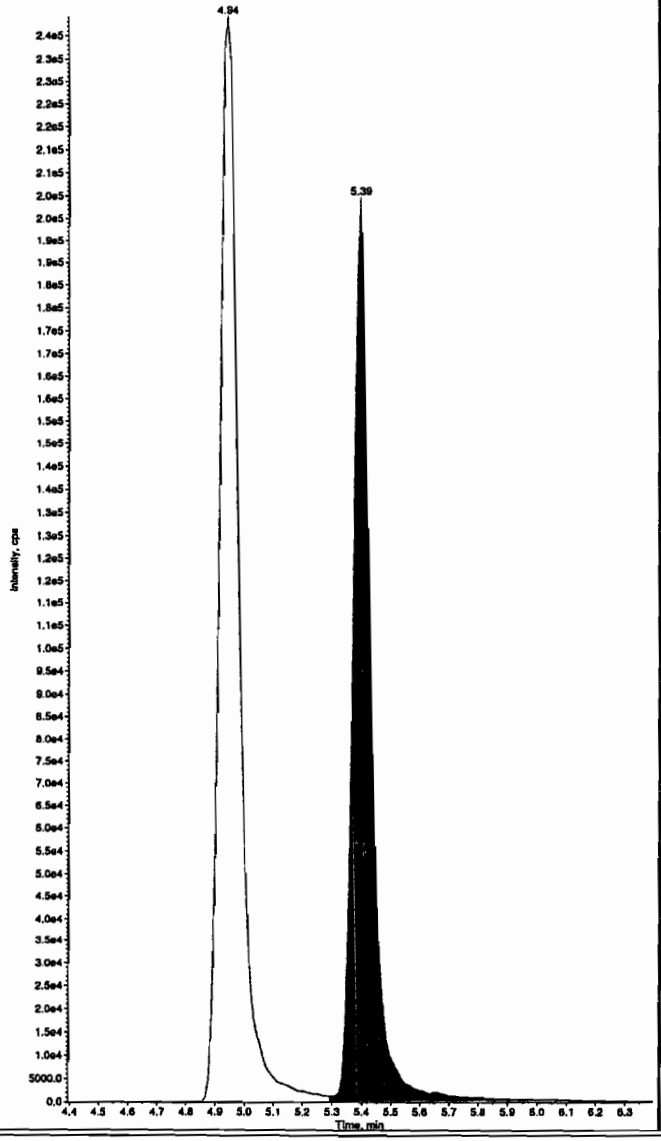
Sample Name: "WXX100402-26ICV" Sample ID: "|1|LER" File: "EXS04020011.wiff"
Peak Name: "24-Diamino-6-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

```
ample Index:        1
ample Type:          QC
oncentration:      500.    ng/mL
alculated Conc:    411.    ng/mL
cq. Date:       4/2/2010
cq. Time:       5:04:44 PM

odified:            No
oc. Algorithm: IntelliQuan - IQA
n. Peak Height: 350.00   cps
n. Peak Width:    0.00   sec
oothing Width:  3       points
 Window:         30.0    sec
pected RT:        5.39   min
e Relative RT:    No

t. Type:         Valley
tention Time:     5.39   min
ea:          8.85e+005   counts
ight:         199246.704  cps
art Time:         5.29   min
d Time:           6.00   min
```

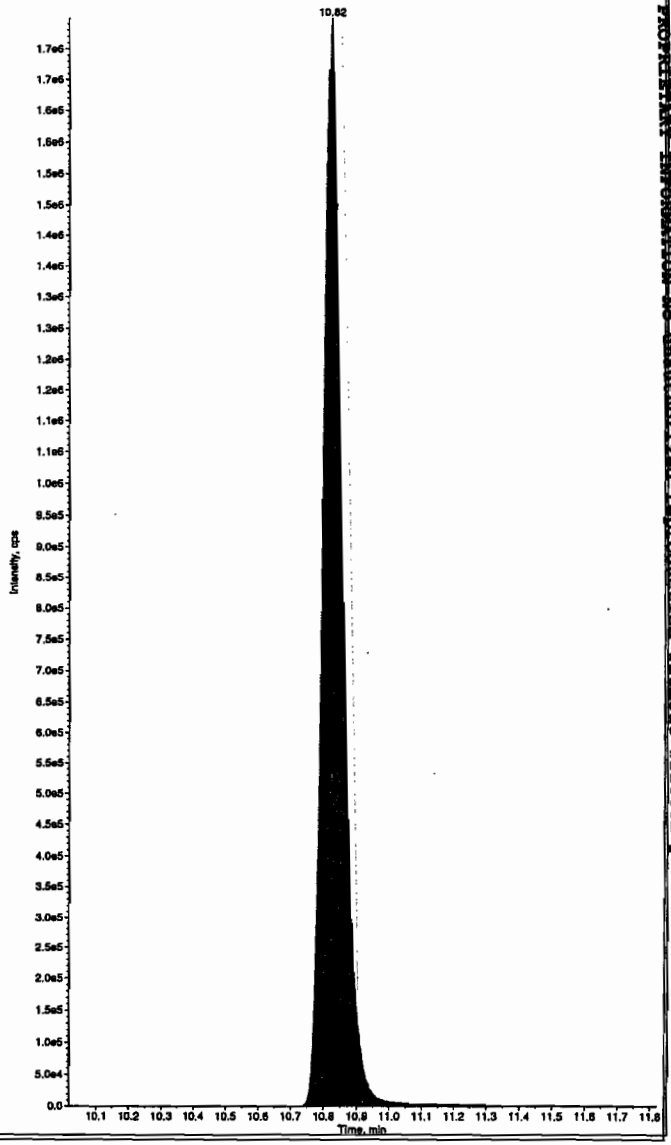


Sample Name: "WXX100402-26ICV" Sample ID: "|1|LER" File: "EXS04020011.wiff"
Peak Name: "tris(o-cresyl) phosphate" Mass(es): "369.1/91.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

```
Sample Index:        1
Sample Type:          QC
Concentration:      500.    ng/mL
Calculated Conc:    397.    ng/mL
Acq. Date:       4/2/2010
Acq. Time:       5:04:44 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:       10.8    min
Use Relative RT:    No

Int. Type:         Valley
Retention Time:    10.8    min
Area:        7.40e+006   counts
Height:      1748183.228  cps
Start Time:        10.7    min
End Time:          11.1    min
```



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7B
Explosives CRI Standard

Lab Name: GEL Laboratories LLC **GEL Job No (SDG):** 10–2089

Lab Code: GEL **GEL Sample ID:** WXXCRI

GEL Data File EXP0412012a **Analysis Date:** 12–APR–10 21:04

LCMSMS ID: 903 **Column ID:** Phenomenex Ultracarb 5u ODS(20)

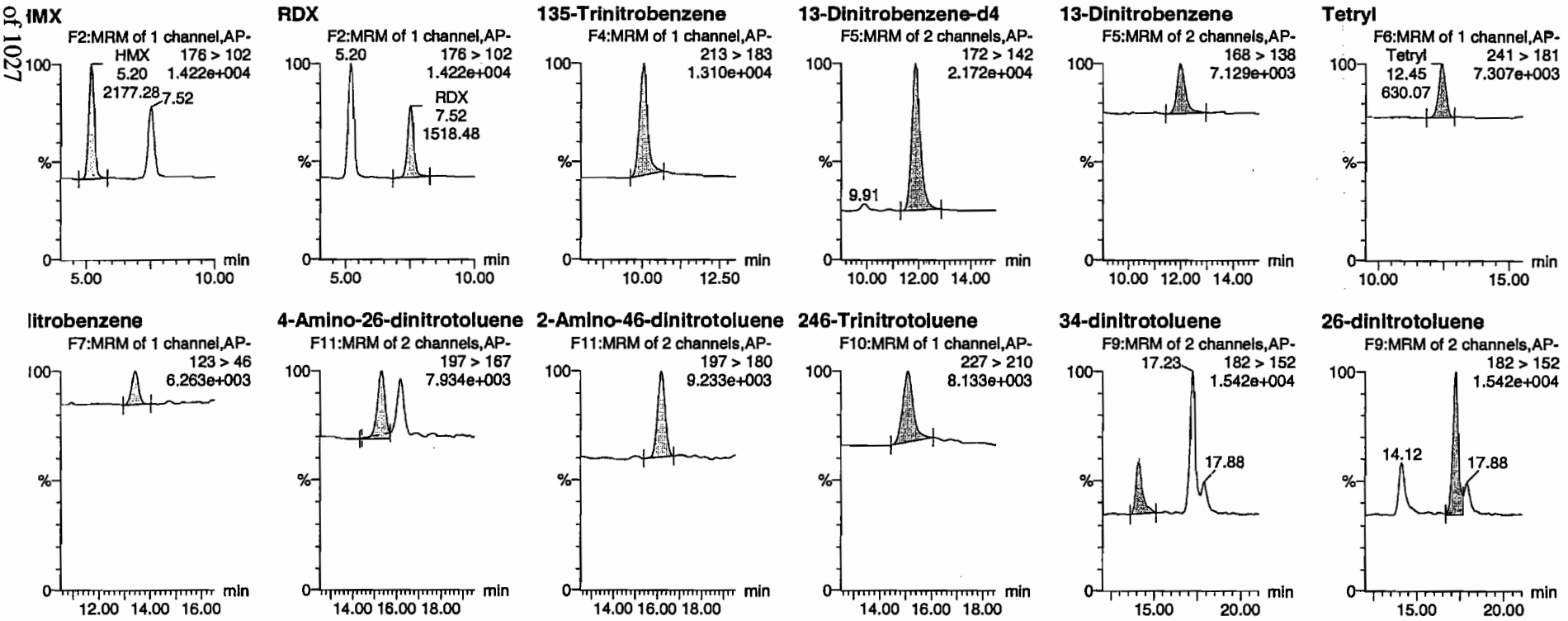
Compound	True	Found	Recovery	Q
1,3,5–Trinitrobenzene	40	42.014	105	
1,3–Dinitrobenzene–d4	500	533.484	107	
2,4,6–Trinitrotoluene	40	37.92	95	
2,4–Dinitrotoluene	40	39.009	98	
2,6–Dinitrotoluene	40	41.835	105	
2,6–Dinitrotoluene–d3	500	543.299	109	
2–Amino–4,6–dinitrotoluene	40	37.957	95	
3,4–Dinitrotoluene	20	20.822	104	
4–Amino–2,6–dinitrotoluene	40	41.22	103	
HMX	40	40.936	102	
Nitrobenzene	40	40.412	101	
PETN	40	38.904	97	
RDX	40	42.279	106	
Tetryl	40	38.735	97	
m–Dinitrobenzene	40	40.013	100	
m–Nitrotoluene	40	37.251	93	
o–Nitrotoluene	40	34.615	87	
p–Nitrotoluene	40	40.573	101	

Recovery Limits:
3,4–Dinitrotoluene (Surrogate),TATB, tris(o–cresyl)phosphate, 3,5–Dinitroaniline, 2,6–Diamino–4–nitrotoluene , 2,4–Diamino–6–nitrotoluene 50–150%
OtherTarget Analytes 70–130%
Column used to flag Recovery outside of Limits
* Value outside of Recovery Limits

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA.qld, Time: Tue Apr 13 11:12:22 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0412012a
Date: 12-Apr-2010
Time: 21:04:58
ID: WXX100412-08CRI
Vial: 1:1,C

MMP 4/13/10



Hmm 04/14/10

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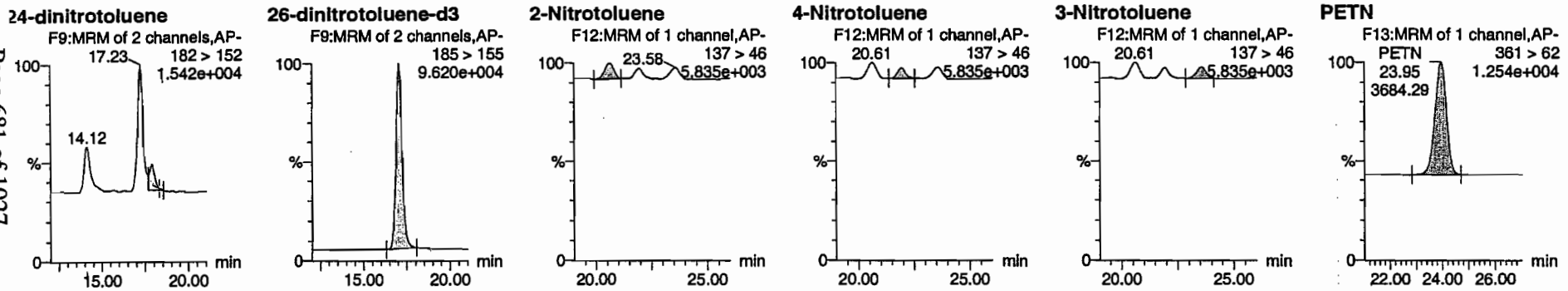
Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA.qld, Time: Tue Apr 13 11:12:22 2010



ID	Name	Trace	RT	Area	IS Area	Abs Resp	Response	Flags	Mod Date	Mod Time	ng/mL	%Rec	%Dev	S/N
WXX100412-08CRI	HMX	176 > 102	5.20	2177.283	6274.155	2177.283	173.512	bb			40.9355	102.3	2.3	314.4
WXX100412-08CRI	RDX	176 > 102	7.52	1518.477	6274.155	1518.477	121.010	bb			42.2788	105.7	5.7	197.0
WXX100412-08CRI	135-Trinitrobenzene	213 > 183	10.05	2279.088	6274.155	2279.088	181.625	bb			42.0139	105.0	5.0	180.1
WXX100412-08CRI	13-Dinitrobenzene-d4	172 > 142	11.87	6274.155		6274.155	6274.155	bb			533.4836	106.7	6.7	322.2
WXX100412-08CRI	13-Dinitrobenzene	168 > 138	11.97	671.328	6274.155	671.328	53.499	bb			40.0125	100.0	0.0	50.5
WXX100412-08CRI	Tetryl	241 > 181	12.45	630.065	6274.155	630.065	50.211	bb			38.7350	96.8	-3.2	54.0
WXX100412-08CRI	Nitrobenzene	123 > 46	13.41	318.106	6274.155	318.106	25.351	bb			40.4123	101.0	1.0	29.3
WXX100412-08CRI	4-Amino-26-dinitrotoluene	197 > 167	15.32	1058.459	38012.648	1058.459	13.922	MM	13-Apr-10	11:01:55	41.2197	103.0	3.0	59.2
WXX100412-08CRI	2-Amino-46-dinitrotoluene	197 > 180	16.16	1478.048	38012.648	1478.048	19.442	bb			37.9571	94.9	-5.1	88.4
WXX100412-08CRI	246-Trinitrotoluene	227 > 210	15.10	1254.134	38012.648	1254.134	16.496	bb			37.9196	94.8	-5.2	135.3
WXX100412-08CRI	34-dinitrotoluene	182 > 152	14.12	1632.265	38012.648	1632.265	21.470	bb			20.8219	104.1	4.1	82.1
WXX100412-08CRI	26-dinitrotoluene	182 > 152	17.23	3764.256	38012.648	3764.256	49.513	MM	13-Apr-10	11:07:00	41.8349	104.6	4.6	228.6
WXX100412-08CRI	24-dinitrotoluene	182 > 152	17.88	774.045	38012.648	774.045	10.181	MM	13-Apr-10	11:10:08	39.0087	97.5	-2.5	47.6
WXX100412-08CRI	26-dinitrotoluene-d3	185 > 155	17.05	38012.648		38012.648	38012.648	bb			543.2989	108.7	8.7	2463.8
WXX100412-08CRI	2-Nitrotoluene	137 > 46	20.61	227.869	38012.648	227.869	2.997	bb			34.6153	86.5	-13.5	59.0
WXX100412-08CRI	4-Nitrotoluene	137 > 46	21.95	127.946	38012.648	127.946	1.683	bb			40.5729	101.4	1.4	37.2
WXX100412-08CRI	3-Nitrotoluene	137 > 46	23.58	165.114	38012.648	165.114	2.172	bb			37.2514	93.1	-6.9	41.7
WXX100412-08CRI	PETN	361 > 62	23.95	3684.286	38012.648	3684.286	48.461	bb			38.9040	97.3	-2.7	585.0

✓

EL SOP GL-OA-E-056, Method 8321A-Modified / MM = Manual Modification

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GRAND MEAN AVERAGE

Vendor:	UltraScientific
Date of Analysis	04/12/10
Time of Injection	2104
Standard Number	WXX100412-08CRI
Data File	EXP0412012a

HMX	102.3
RDX	105.7
135-TNB	105.0
13-DNB	100.0
Tetryl	96.8
Nitrobenzene	101.0
4A-26-DNT	103.0
2A-46-DNT	94.9
246-TNT	94.8
34-DNT(surr)	104.1
26-DNT	104.6
24-DNT	97.5
2-NT	86.5
4-NT	101.4
3-NT	93.1
PETN	97.3
Total	1588.0
Average	99.3

HMT 4/13/10

HMM 04/14/10

ICV Limits 85-115%
CRI Limits 70-130%
CCV Limits 85-115%
No single analyte > +/- 60%

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7A
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10–2089

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0412023a

Analysis Date: 13–APR–10 02:29

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5–Trinitrobenzene	600	557.713	93	
1,3–Dinitrobenzene–d4	500	483.478	97	
2,4,6–Trinitrotoluene	600	638.191	106	
2,4–Dinitrotoluene	600	647.757	108	
2,6–Dinitrotoluene	600	603.464	101	
2,6–Dinitrotoluene–d3	500	472.429	94	
2–Amino–4,6–dinitrotoluene	600	581.719	97	
3,4–Dinitrotoluene	300	294.567	98	
4–Amino–2,6–dinitrotoluene	600	565.953	94	
HMX	600	591.074	99	
Nitrobenzene	600	587.411	98	
PETN	600	688.871	115	
RDX	600	698.421	116	
Tetryl	600	569.67	95	
m–Dinitrobenzene	600	606.197	101	
m–Nitrotoluene	600	540.313	90	
o–Nitrotoluene	600	558.159	93	
p–Nitrotoluene	600	614.491	102	

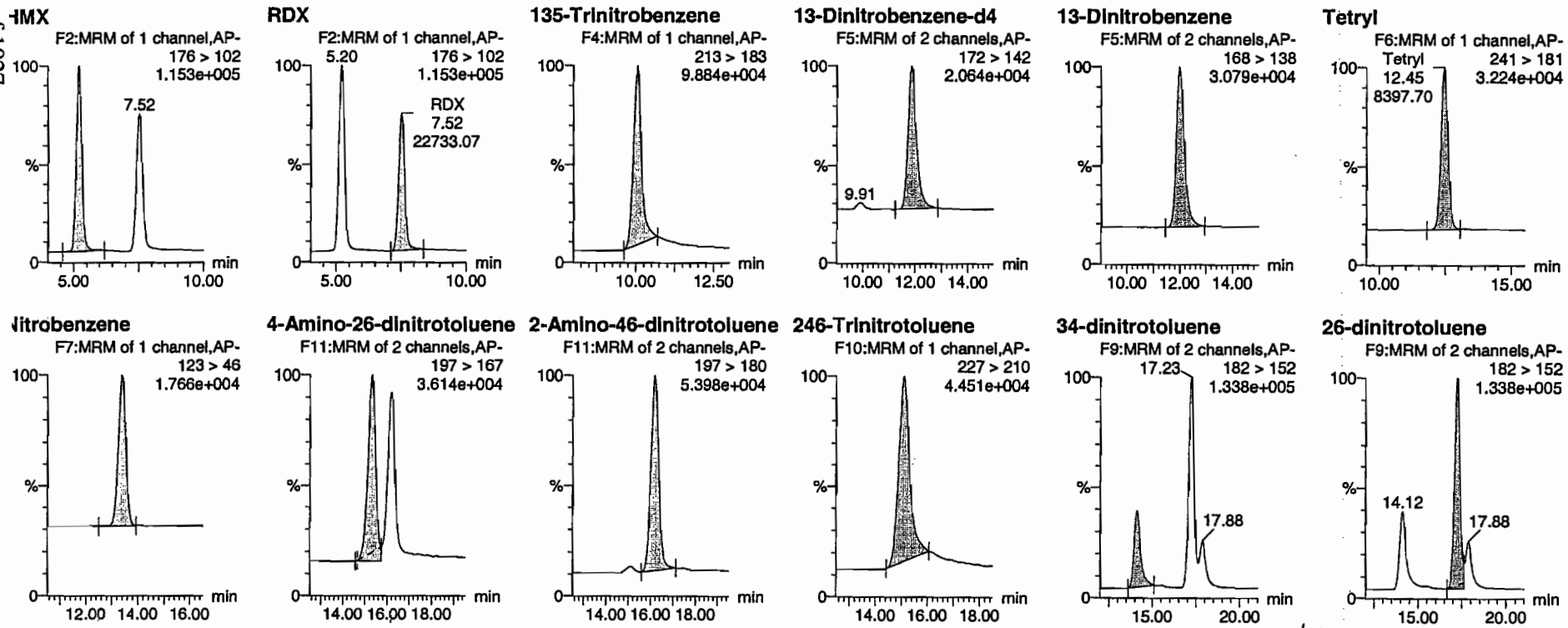
Recovery Limits:
3,4–Dinitrotoluene (Surrogate),TATB, tris(o–cresyl)phosphate, 3,5–Dinitroaniline, 2,6–Diamino–4–nitrotoluene , 2,4–Diamino–6–nitrotoluene 70–130%
OtherTarget Analytes 80–120%
Column used to flag Recovery outside of Limits
* Value outside of Recovery Limits

Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA.qld, Time: Tue Apr 13 11:12:22 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0412023a
Date: 13-Apr-2010
Time: 02:29:16
ID: WXX100412-07CCV
Vial: 1:1,B

MMT 4/13/10



HMW 04/14/10

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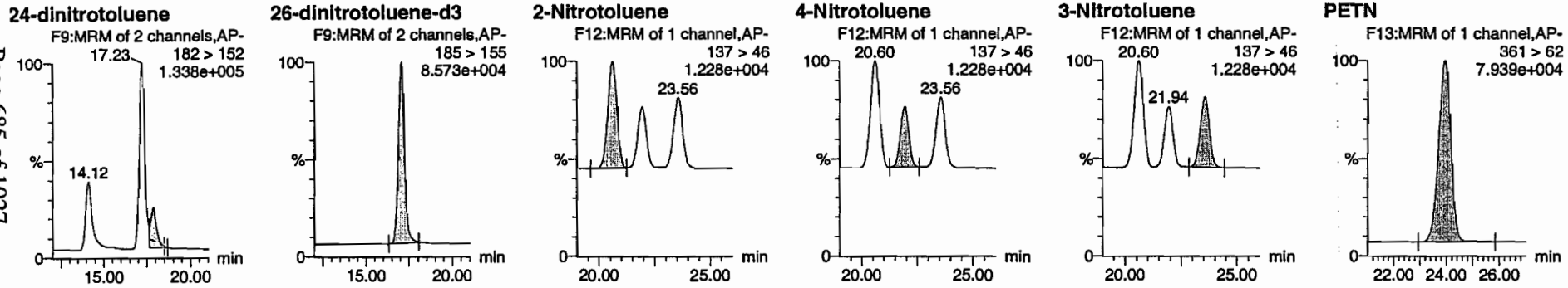
Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA.qld, Time: Tue Apr 13 11:12:22 2010



ID	Name	Trace	RT	Area	IS Area	Abs.Resp	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N
WXX100412-07CCV	HMX	176 > 102	5.20	28491.268	5686.049	28491.268	2505.366	bb			591.0742	98.5	-1.5	2424.2
WXX100412-07CCV	RDX	176 > 102	7.52	22733.072	5686.049	22733.072	1999.022	bb			698.4212	116.4	16.4	1800.1
WXX100412-07CCV	135-Trinitrobenzene	213 > 183	10.05	27417.908	5686.049	27417.908	2410.981	bb			557.7127	93.0	-7.0	985.8
WXX100412-07CCV	13-Dinitrobenzene-d4	172 > 142	11.87	5686.049		5686.049	5686.049	bb			483.4777	96.7	-3.3	419.8
WXX100412-07CCV	13-Dinitrobenzene	168 > 138	11.97	9217.395	5686.049	9217.395	810.527	bb			606.1968	101.0	1.0	1027.7
WXX100412-07CCV	Tetryl	241 > 181	12.45	8397.697	5686.049	8397.697	738.447	bd			569.6696	94.9	-5.1	1109.4
WXX100412-07CCV	Nitrobenzene	123 > 46	13.37	4190.401	5686.049	4190.401	368.481	bd			587.4110	97.9	-2.1	482.0
WXX100412-07CCV	4-Amino-26-dinitrotoluene	197 > 167	15.32	12637.104	33054.137	12637.104	191.158	MM	13-Apr-10	11:02:49	565.9529	94.3	-5.7	550.6
WXX100412-07CCV	2-Amino-46-dinitrotoluene	197 > 180	16.16	19697.299	33054.137	19697.299	297.955	bb			581.7193	97.0	-3.0	507.4
WXX100412-07CCV	246-Trinitrotoluene	227 > 210	15.10	18353.908	33054.137	18353.908	277.634	bb			638.1909	106.4	6.4	574.4
WXX100412-07CCV	34-dinitrotoluene	182 > 152	14.12	20079.451	33054.137	20079.451	303.736	bb			294.5666	98.2	-1.8	472.2
WXX100412-07CCV	26-dinitrotoluene	182 > 152	17.23	47216.063	33054.137	47216.063	714.223	MM	13-Apr-10	11:07:54	603.4644	100.6	0.6	1300.6
WXX100412-07CCV	24-dinitrotoluene	182 > 152	17.88	11176.726	33054.137	11176.726	169.067	MM	13-Apr-10	11:10:49	647.7566	108.0	8.0	280.1
WXX100412-07CCV	26-dinitrotoluene-d3	185 > 155	17.05	33054.137		33054.137	33054.137	bb			472.4290	94.5	-5.5	2808.6
WXX100412-07CCV	2-Nitrotoluene	137 > 46	20.60	3195.010	33054.137	3195.010	48.330	bb			558.1587	93.0	-7.0	343.3
WXX100412-07CCV	4-Nitrotoluene	137 > 46	21.94	1685.013	33054.137	1685.013	25.489	bb			614.4905	102.4	2.4	193.2
WXX100412-07CCV	3-Nitrotoluene	137 > 46	23.56	2082.501	33054.137	2082.501	31.501	bb			540.3134	90.1	-9.9	224.9
WXX100412-07CCV	PETN	361 > 62	23.94	39570.852	33054.137	39570.852	598.576	bb			688.8709	114.8	14.8	6418.5

GEL SOP GL-OA-E-056, Method 8321A-Modified / MM = Manual Modification

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GRAND MEAN AVERAGE

Vendor: Restek
Date of Analysis: 04/13/10
Time of Injection: 0229
Standard Number: WXX100412-07CCV
Data File: EXP0412023a

HMX		98.5
RDX		116.4
135-TNB		93.0
13-DNB		101.0
Tetryl		94.9
Nitrobenzene		97.9
4A-26-DNT		94.3
2A-46-DNT		97.0
246-TNT		106.4
34-DNT(surr)		98.2
26-DNT		100.6
24-DNT		108.0
2-NT		93.0
4-NT		102.4
3-NT		90.1
PETN		114.8
Total		1606.5
Average		100.4

MAT 4/13/10

4/14/10

ICV Limits 85-115%
CRI Limits 70-130%
CCV Limits 85-115%
No single analyte > +/- 60%

PROPRIETARY INFORMATION-No unauthorized reproduction without written permission from GEL.

7B
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10–2089

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0412025a

Analysis Date: 13–APR–10 03:28

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

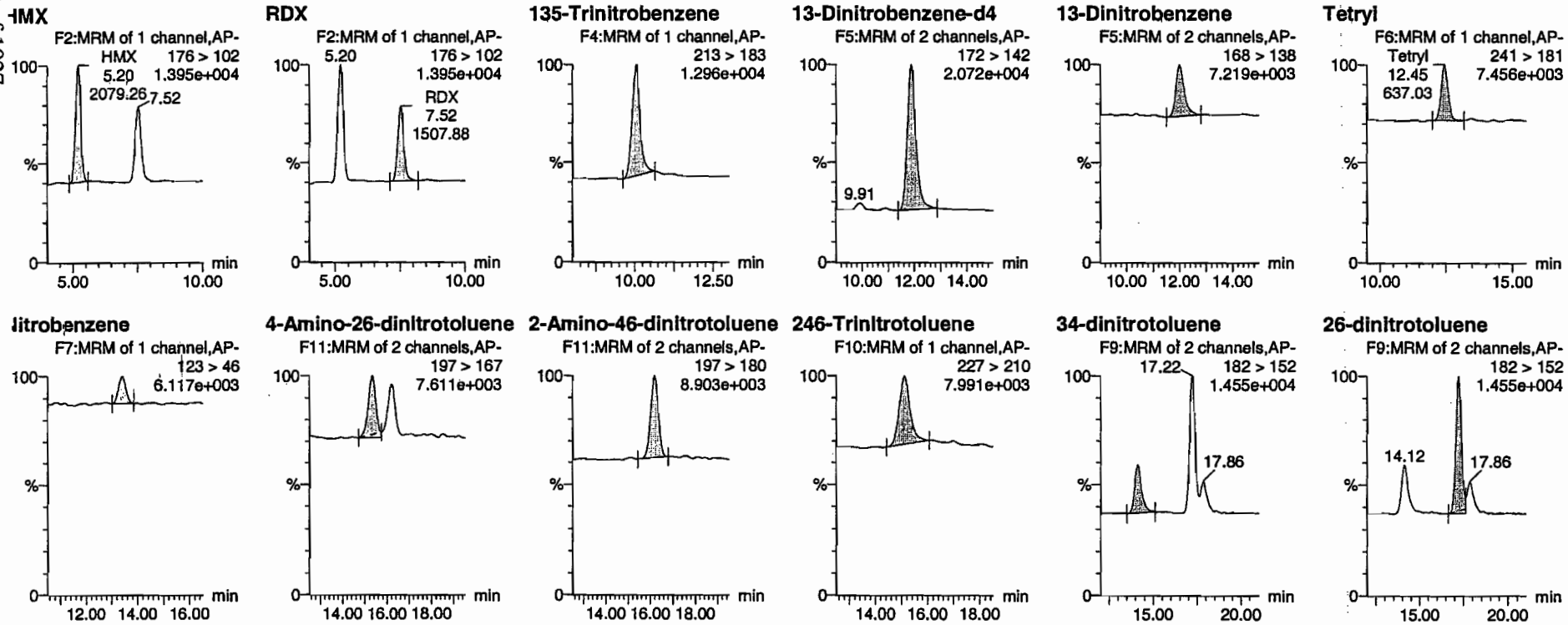
Compound	True	Found	Recovery	Q
3,4–Dinitrotoluene	20	19.281	96	
4–Amino–2,6–dinitrotoluene	40	37.529	94	
HMX	40	42.31	106	
Nitrobenzene	40	35.496	89	
PETN	40	42.974	107	
RDX	40	45.439	114	
Tetryl	40	42.386	106	
m–Dinitrobenzene	40	46.427	116	
m–Nitrotoluene	40	39.933	100	
o–Nitrotoluene	40	37.946	95	
p–Nitrotoluene	40	42.692	107	
1,3,5–Trinitrobenzene	40	44.517	111	
1,3–Dinitrobenzene–d4	500	492.919	99	
2,4,6–Trinitrotoluene	40	39.436	99	
2,4–Dinitrotoluene	40	43.525	109	
2,6–Dinitrotoluene	40	39.656	99	
2,6–Dinitrotoluene–d3	500	514.01	103	
2–Amino–4,6–dinitrotoluene	40	37.309	93	

Recovery Limits:
3,4–Dinitrotoluene (Surrogate),TATB, tris(o–cresyl)phosphate, 3,5–Dinitroaniline, 2,6–Diamino–4–nitrotoluene , 2,4–Diamino–6–nitrotoluene 50–150%
OtherTarget Analytes 70–130%
Column used to flag Recovery outside of Limits
* Value outside of Recovery Limits

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA.qld, Time: Tue Apr 13 11:12:22 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0412025a
Date: 13-Apr-2010
Time: 03:28:21
ID: WXX100412-08CRI
Vial: 1:1,C

MMP 4/13/10



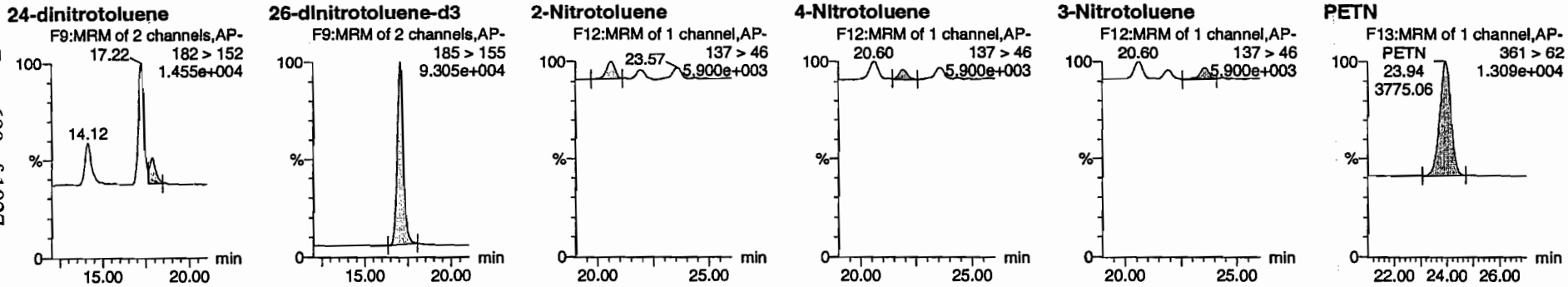
Hnm 04/14/10

EL SOP GL-OA-E-056, Method 8321A-Modified / MM = Manual Modification

PROPRIETARY INFORMATION-No unauthorized reproduction without written permission from GEL.

Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA.qld, Time: Tue Apr 13 11:12:22 2010



ID	Name	Trace	RT	Area	IS Area	Abs Resp	Response	Flags	Mod Date	Mod Time	ng/mL	%Rec	%Dev	S/N
WXX100412-08CRI	HMX	176 > 102	5.20	2079.264	5797.090	2079.264	179.337	bb			42.3097	105.8	5.8	348.3
WXX100412-08CRI	RDX	176 > 102	7.52	1507.880	5797.090	1507.880	130.055	bb			45.4388	113.6	13.6	225.5
WXX100412-08CRI	135-Trinitrobenzene	213 > 183	10.05	2231.265	5797.090	2231.265	192.447	bb			44.5172	111.3	11.3	130.5
WXX100412-08CRI	13-Dinitrobenzene-d4	172 > 142	11.87	5797.090		5797.090	5797.090	bb			492.9193	98.6	-1.4	771.9
WXX100412-08CRI	13-Dinitrobenzene	168 > 138	11.97	719.725	5797.090	719.725	62.076	bb			46.4272	116.1	16.1	67.2
WXX100412-08CRI	Tetryl	241 > 181	12.45	637.032	5797.090	637.032	54.944	bb			42.3862	106.0	6.0	45.1
WXX100412-08CRI	Nitrobenzene	123 > 46	13.41	258.161	5797.090	258.161	22.266	bb			35.4959	88.7	-11.3	32.0
WXX100412-08CRI	4-Amino-26-dinitrotoluene	197 > 167	15.32	911.734	35963.441	911.734	12.676	MM	13-Apr-10	11:02:58	37.5289	93.8	-6.2	44.8
WXX100412-08CRI	2-Amino-46-dinitrotoluene	197 > 180	16.19	1374.488	35963.441	1374.488	19.110	bb			37.3089	93.3	-6.7	102.4
WXX100412-08CRI	246-Trinitrotoluene	227 > 210	15.10	1233.959	35963.441	1233.959	17.156	bb			39.4355	98.6	-1.4	52.3
WXX100412-08CRI	34-dinitrotoluene	182 > 152	14.12	1430.000	35963.441	1430.000	19.881	bb			19.2811	96.4	-3.6	68.9
WXX100412-08CRI	26-dinitrotoluene	182 > 152	17.22	3375.872	35963.441	3375.872	46.935	MM	13-Apr-10	11:08:02	39.6563	99.1	-0.9	198.4
WXX100412-08CRI	24-dinitrotoluene	182 > 152	17.86	817.109	35963.441	817.109	11.360	MM	13-Apr-10	11:10:56	43.5253	108.8	8.8	43.1
WXX100412-08CRI	26-dinitrotoluene-d3	185 > 155	17.05	35963.441		35963.441	35963.441	bb			514.0105	102.8	2.8	1763.8
WXX100412-08CRI	2-Nitrotoluene	137 > 46	20.60	236.329	35963.441	236.329	3.286	bb			37.9461	94.9	-5.1	26.8
WXX100412-08CRI	4-Nitrotoluene	137 > 46	21.92	127.371	35963.441	127.371	1.771	bb			42.6921	106.7	6.7	14.4
WXX100412-08CRI	3-Nitrotoluene	137 > 46	23.57	167.459	35963.441	167.459	2.328	bb			39.9332	99.8	-0.2	17.3
WXX100412-08CRI	PETN	361 > 62	23.94	3775.057	35963.441	3775.057	52.485	bb			42.9742	107.4	7.4	1684.5

EL SOP GL-OA-E-056, Method 8321A-Modified / MM = Manual Modification

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GRAND MEAN AVERAGE

Vendor:	UltraScientific
Date of Analysis	04/13/10
Time of Injection	0328
Standard Number	WXX100412-08CRI
Data File	EXP0412025a

HMX	105.8
RDX	113.6
135-TNB	111.3
13-DNB	116.1
Tetryl	106.0
Nitrobenzene	88.7
4A-26-DNT	93.8
2A-46-DNT	93.3
246-TNT	98.6
34-DNT(surr)	96.4
26-DNT	99.1
24-DNT	108.8
2-NT	94.9
4-NT	106.7
3-NT	99.8
PETN	107.4
Total	1640.3
Average	102.5

LMT 4/13/10

HMC 04/14/10

ICV Limits 85-115%
CRI Limits 70-130%
CCV Limits 85-115%
No single analyte > +/- 60%

PROPRIETARY INFORMATION-No unauthorized reproduction without written permission from GEL.

7A
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10–2089

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0412036a

Analysis Date: 13–APR–10 08:52

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
3,4–Dinitrotoluene	300	294.405	98	
4–Amino–2,6–dinitrotoluene	600	576.117	96	
HMX	600	602.928	100	
Nitrobenzene	600	645.578	108	
PETN	600	634.783	106	
RDX	600	702.566	117	
Tetryl	600	604.875	101	
m–Dinitrobenzene	600	626.308	104	
m–Nitrotoluene	600	515.069	86	
o–Nitrotoluene	600	519.467	87	
p–Nitrotoluene	600	594.454	99	
1,3,5–Trinitrobenzene	600	622.986	104	
1,3–Dinitrobenzene–d4	500	495.434	99	
2,4,6–Trinitrotoluene	600	635.68	106	
2,4–Dinitrotoluene	600	609.665	102	
2,6–Dinitrotoluene	600	616.741	103	
2,6–Dinitrotoluene–d3	500	514.162	103	
2–Amino–4,6–dinitrotoluene	600	599.331	100	

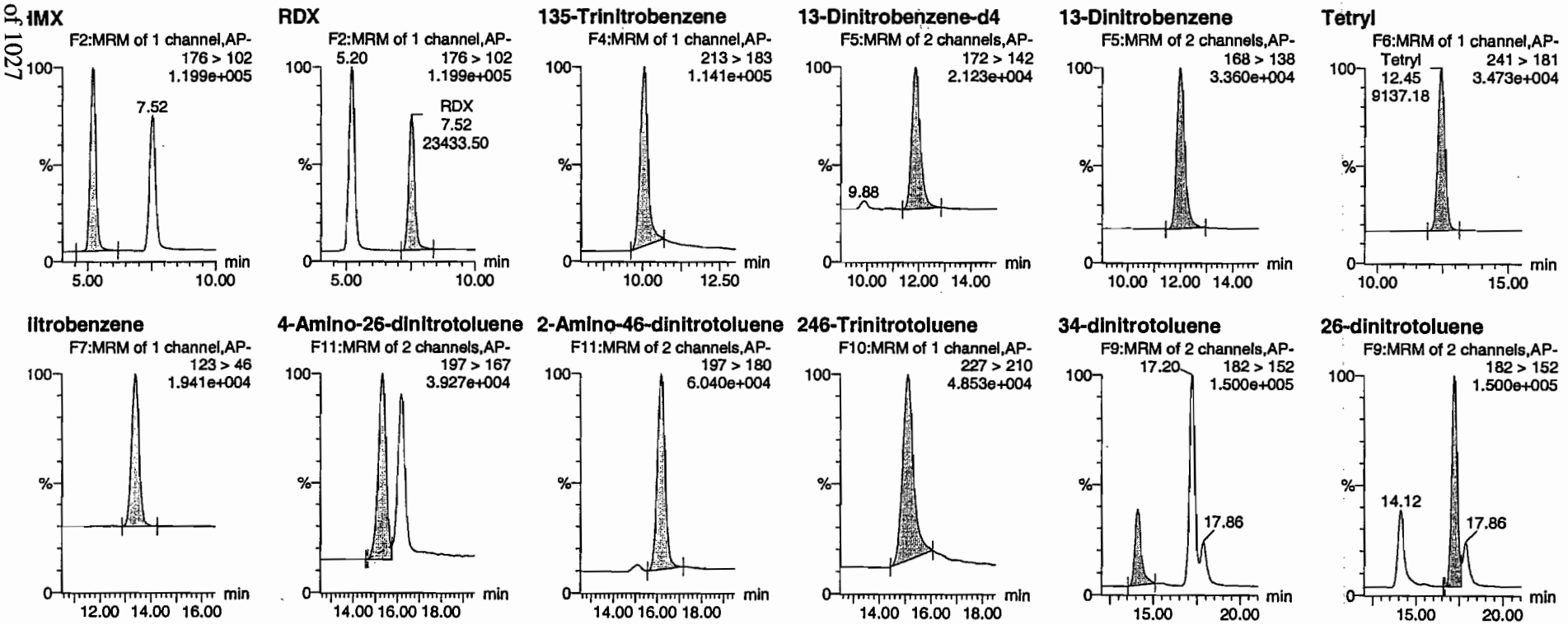
Recovery Limits:
3,4–Dinitrotoluene (Surrogate),TATB, tris(o–cresyl)phosphate, 3,5–Dinitroaniline, 2,6–Diamino–4–nitrotoluene , 2,4–Diamino–6–nitrotoluene 70–130%
OtherTarget Analytes 80–120%
Column used to flag Recovery outside of Limits
* Value outside of Recovery Limits

Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA.qld, Time: Tue Apr 13 11:12:22 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0412036a
Date: 13-Apr-2010
Time: 08:52:42
ID: WXX100408-07CCV
Vial: 1:1,B

MAP 4/13/10



Hmm 04/14/10

GEL SOP GL-OA-E-056, Method 8321A-Modified / MM = Manual Modification

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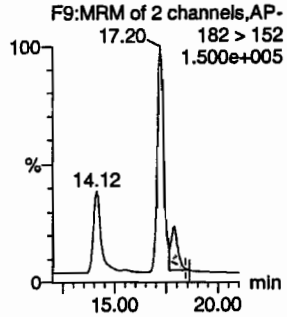
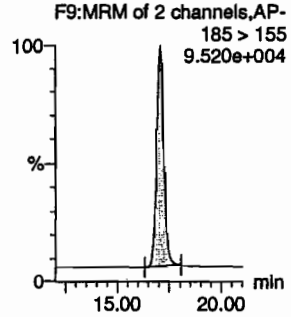
Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA.qld, Time: Tue Apr 13 11:12:22 2010

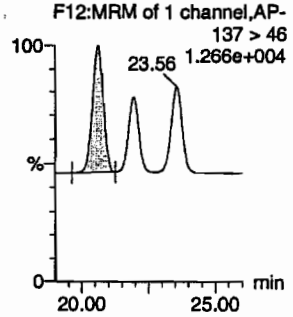
24-dinitrotoluene



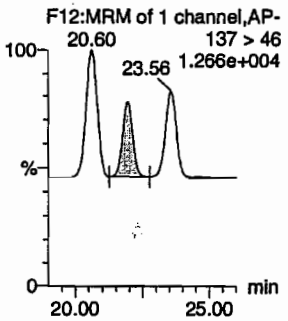
26-dinitrotoluene-d3



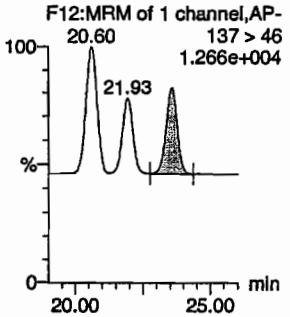
2-Nitrotoluene



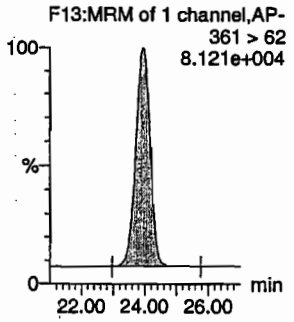
4-Nitrotoluene



3-Nitrotoluene



PETN



ID	Name	Trace	RT	Area	IS Area	Abs Resp	Response	Flags	Mod Date	Mod Time	ng/mL	%Rec	%Dev	S/N
WXX100408-07CCV	HMX	176 > 102	5.20	29781.385	5826.664	29781.385	2555.612	bb			602.9284	100.5	0.5	621.5
WXX100408-07CCV	RDX	176 > 102	7.52	23433.498	5826.664	23433.498	2010.885	bb			702.5658	117.1	17.1	454.8
WXX100408-07CCV	135-Trinitrobenzene	213 > 183	10.05	31384.221	5826.664	31384.221	2693.155	bb			622.9859	103.8	3.8	1221.3
WXX100408-07CCV	13-Dinitrobenzene-d4	172 > 142	11.87	5826.664		5826.664	5826.664	bb			495.4340	99.1	-0.9	856.5
WXX100408-07CCV	13-Dinitrobenzene	168 > 138	11.97	9758.702	5826.664	9758.702	837.418	bb			626.3082	104.4	4.4	1223.2
WXX100408-07CCV	Tetryl	241 > 181	12.45	9137.179	5826.664	9137.179	784.083	bb			604.8749	100.8	0.8	997.4
WXX100408-07CCV	Nitrobenzene	123 > 46	13.37	4719.232	5826.664	4719.232	404.969	bb			645.5776	107.6	7.6	430.6
WXX100408-07CCV	4-Amino-26-dinitrotoluene	197 > 167	15.29	14000.422	35974.031	14000.422	194.591	MM	13-Apr-10	11:03:12	576.1169	96.0	-4.0	564.0
WXX100408-07CCV	2-Amino-46-dinitrotoluene	197 > 180	16.16	22086.311	35974.031	22086.311	306.976	bb			599.3310	99.9	-0.1	644.5
WXX100408-07CCV	246-Trinitrotoluene	227 > 210	15.10	19896.646	35974.031	19896.646	276.542	bb			635.6802	105.9	5.9	463.0
WXX100408-07CCV	34-dinitrotoluene	182 > 152	14.12	21841.178	35974.031	21841.178	303.569	bb			294.4045	98.1	-1.9	603.2
WXX100408-07CCV	26-dinitrotoluene	182 > 152	17.20	52517.492	35974.031	52517.492	729.936	MM	13-Apr-10	11:08:37	616.7407	102.8	2.8	1677.9
WXX100408-07CCV	24-dinitrotoluene	182 > 152	17.86	11448.733	35974.031	11448.733	159.125	MM	13-Apr-10	11:11:06	609.6651	101.6	1.6	331.4
WXX100408-07CCV	26-dinitrotoluene-d3	185 > 155	17.05	35974.031		35974.031	35974.031	bb			514.1618	102.8	2.8	2057.8
WXX100408-07CCV	2-Nitrotoluene	137 > 46	20.60	3236.203	35974.031	3236.203	44.980	bb			519.4669	86.6	-13.4	654.9
WXX100408-07CCV	4-Nitrotoluene	137 > 46	21.93	1774.065	35974.031	1774.065	24.658	bb			594.4539	99.1	-0.9	382.8
WXX100408-07CCV	3-Nitrotoluene	137 > 46	23.56	2160.571	35974.031	2160.571	30.030	bb			515.0694	85.8	-14.2	438.3
WXX100408-07CCV	PETN	361 > 62	23.94	40282.918	35974.031	40282.918	559.889	bb			634.7825	105.8	5.8	10168.9

GEL SOP GL-OA-E-056, Method 8321A-Modified / MM = Manual Modification

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GRAND MEAN AVERAGE

Vendor: Restek
Date of Analysis: 04/13/10
Time of Injection: 0852
Standard Number: WXX100412-07CCV
Data File: EXP0412036a

HMX	100.5
RDX	117.1
135-TNB	103.8
13-DNB	104.4
Tetryl	100.8
Nitrobenzene	107.6
4A-26-DNT	96.0
2A-46-DNT	99.9
246-TNT	105.9
34-DNT(surr)	98.1
26-DNT	102.8
24-DNT	101.6
2-NT	86.6
4-NT	99.1
3-NT	85.8
PETN	105.8
Total	1615.8
Average	101.0

MFP 4/13/10

HMM 04/14/10

ICV Limits 85-115%
CRI Limits 70-130%
CCV Limits 85-115%
No single analyte > +/- 60%

PROPRIETARY INFORMATION-No unauthorized reproduction without written permission from GEL.

7B
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10–2089

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0412038a

Analysis Date: 13–APR–10 09:51

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

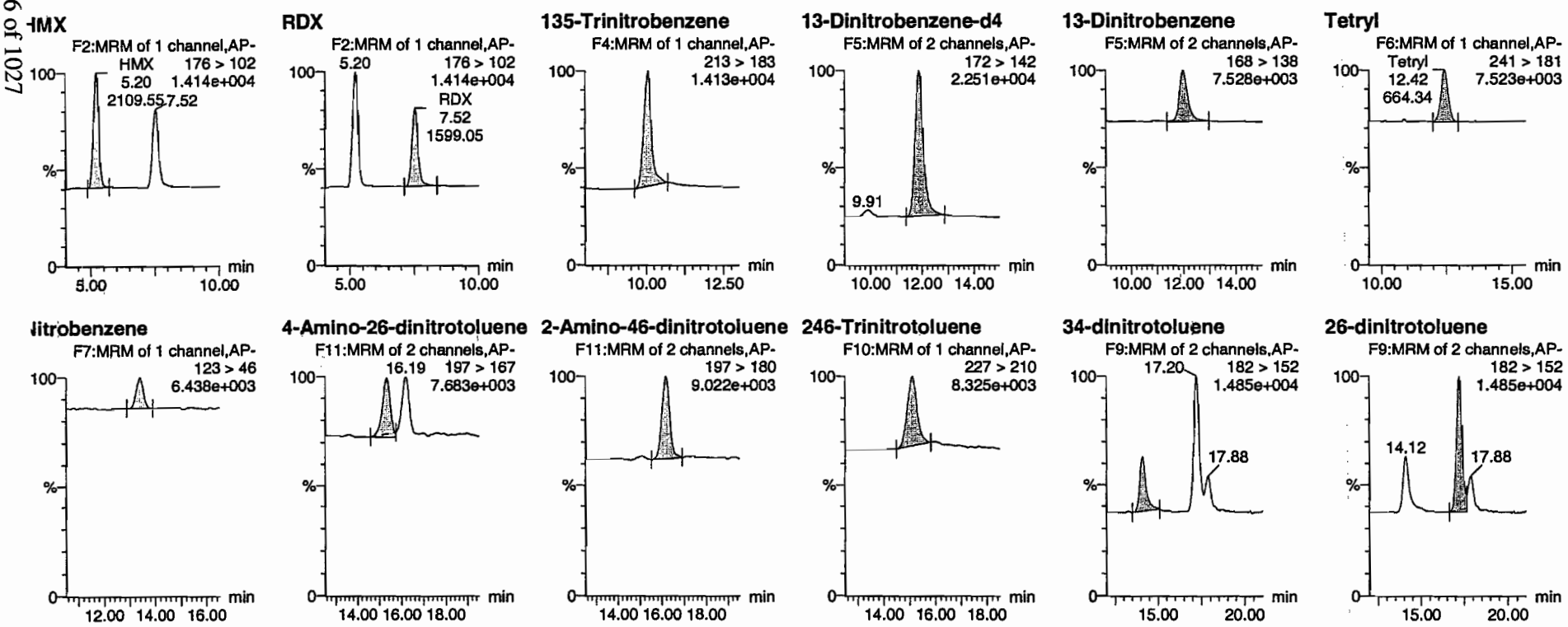
Compound	True	Found	Recovery	Q
1,3,5–Trinitrobenzene	40	45.739	114	
1,3–Dinitrobenzene–d4	500	533	107	
2,4,6–Trinitrotoluene	40	38.169	95	
2,4–Dinitrotoluene	40	45.21	113	
2,6–Dinitrotoluene	40	40.851	102	
2,6–Dinitrotoluene–d3	500	511.74	102	
2–Amino–4,6–dinitrotoluene	40	38.558	96	
3,4–Dinitrotoluene	20	21.488	107	
4–Amino–2,6–dinitrotoluene	40	37.158	93	
HMX	40	39.698	99	
Nitrobenzene	40	39.676	99	
PETN	40	46.251	116	
RDX	40	44.563	111	
Tetryl	40	40.879	102	
m–Dinitrobenzene	40	43.824	110	
m–Nitrotoluene	40	36.581	91	
o–Nitrotoluene	40	36.682	92	
p–Nitrotoluene	40	38.153	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%
OtherTarget Analytes 70–130%
Column used to flag Recovery outside of Limits
* Value outside of Recovery Limits

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA.qld, Time: Tue Apr 13 11:12:22 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0412038a
Date: 13-Apr-2010
Time: 09:51:47
ID: WXX100408-08CRI
Vial: 1:1,C

MAT 4/13/10



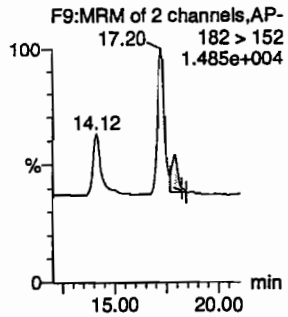
Hmm 04/14/10

PROPRIETARY INFORMATION-No unauthorized reproduction without written permission from GEL.

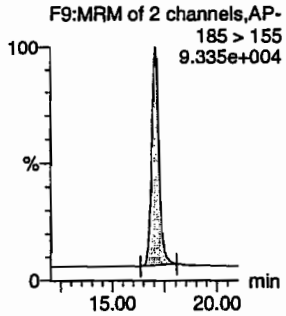
Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA.qld, Time: Tue Apr 13 11:12:22 2010

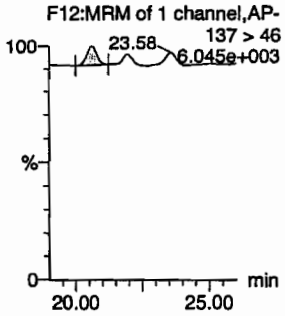
24-dinitrotoluene



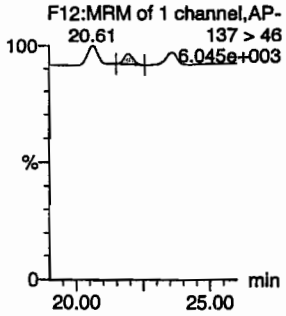
26-dinitrotoluene-d3



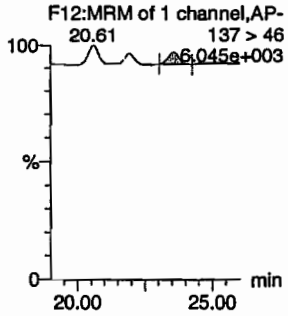
2-Nitrotoluene



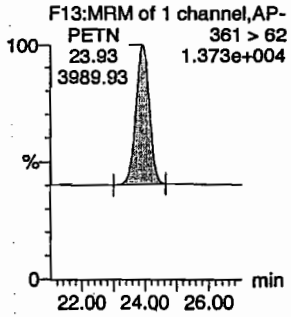
4-Nitrotoluene



3-Nitrotoluene



PETN



ID	Name	Trace	RT	Area	IS Area	Abs Resp	Response	Flags	Mod Date	Mod Time	ng/mL	%Rec	%Dev	S/N
WXX100408-08CRI	HMX	176 > 102	5.20	2109.553	6268.472	2109.553	168.267	bb			39.6981	99.2	-0.8	344.7
WXX100408-08CRI	RDX	176 > 102	7.52	1599.046	6268.472	1599.046	127.547	bb			44.5625	111.4	11.4	232.6
WXX100408-08CRI	135-Trinitrobenzene	213 > 183	10.05	2478.890	6268.472	2478.890	197.727	bb			45.7385	114.3	14.3	445.4
WXX100408-08CRI	13-Dinitrobenzene-d4	172 > 142	11.87	6268.472		6268.472	6268.472	bb			533.0004	106.6	6.6	316.8
WXX100408-08CRI	13-Dinitrobenzene	168 > 138	11.97	734.612	6268.472	734.612	58.596	bb			43.8240	109.6	9.6	56.6
WXX100408-08CRI	Tetryl	241 > 181	12.42	664.339	6268.472	664.339	52.991	bb			40.8791	102.2	2.2	77.0
WXX100408-08CRI	Nitrobenzene	123 > 46	13.37	312.027	6268.472	312.027	24.889	bb			39.6760	99.2	-0.8	26.2
WXX100408-08CRI	4-Amino-26-dinitrotoluene	197 > 167	15.32	898.733	35804.613	898.733	12.551	MM	13-Apr-10	11:03:18	37.1578	92.9	-7.1	46.5
WXX100408-08CRI	2-Amino-46-dinitrotoluene	197 > 180	16.16	1414.235	35804.613	1414.235	19.749	bb			38.5581	96.4	-3.6	64.1
WXX100408-08CRI	246-Trinitrotoluene	227 > 210	15.10	1189.063	35804.613	1189.063	16.605	bb			38.1693	95.4	-4.6	105.0
WXX100408-08CRI	34-dinitrotoluene	182 > 152	14.12	1586.630	35804.613	1586.630	22.157	bb			21.4879	107.4	7.4	45.9
WXX100408-08CRI	26-dinitrotoluene	182 > 152	17.20	3462.203	35804.613	3462.203	48.349	MM	13-Apr-10	11:08:46	40.8509	102.1	2.1	112.8
WXX100408-08CRI	24-dinitrotoluene	182 > 152	17.88	844.986	35804.613	844.986	11.800	MM	13-Apr-10	11:11:14	45.2099	113.0	13.0	28.2
WXX100408-08CRI	26-dinitrotoluene-d3	185 > 155	17.05	35804.613		35804.613	35804.613	bb			511.7404	102.3	2.3	2742.4
WXX100408-08CRI	2-Nitrotoluene	137 > 46	20.61	227.450	35804.613	227.450	3.176	bb			36.6824	91.7	-8.3	42.8
WXX100408-08CRI	4-Nitrotoluene	137 > 46	21.94	113.326	35804.613	113.326	1.583	bb			38.1530	95.4	-4.6	23.5
WXX100408-08CRI	3-Nitrotoluene	137 > 46	23.58	152.725	35804.613	152.725	2.133	bb			36.5812	91.5	-8.5	27.1
WXX100408-08CRI	PETN	361 > 62	23.93	3989.934	35804.613	3989.934	55.718	bb			46.2507	115.6	15.6	239.5

GEL SOP GL-OA-E-056, Method 8321A-Modified / MM = Manual Modification

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GRAND MEAN AVERAGE

Vendor:	UltraScientific
Date of Analysis	04/13/10
Time of Injection	0951
Standard Number	WXX100412-08CRI
Data File	EXP0412038a

HMX	99.2
RDX	111.4
135-TNB	114.3
13-DNB	109.6
Tetryl	102.2
Nitrobenzene	99.2
4A-26-DNT	92.9
2A-46-DNT	96.4
246-TNT	95.4
34-DNT(surr)	107.4
26-DNT	102.1
24-DNT	113.0
2-NT	91.7
4-NT	95.4
3-NT	91.5
PETN	115.6
Total	1637.3
Average	102.3

MJT 4/13/10

HMK 04/14/10

ICV Limits 85-115%
CRI Limits 70-130%
CCV Limits 85-115%
No single analyte > +/- 60%

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7A
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10–2089

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0412049a

Analysis Date: 13–APR–10 15:16

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
p–Nitrotoluene	600	663.98	111	
1,3,5–Trinitrobenzene	600	571.573	95	
1,3–Dinitrobenzene–d4	500	506.928	101	
2,4,6–Trinitrotoluene	600	673.095	112	
2,4–Dinitrotoluene	600	690.861	115	
2,6–Dinitrotoluene	600	617.582	103	
2,6–Dinitrotoluene–d3	500	498.886	100	
2–Amino–4,6–dinitrotoluene	600	607.095	101	
3,4–Dinitrotoluene	300	303.099	101	
4–Amino–2,6–dinitrotoluene	600	604.473	101	
HMX	600	617.414	103	
Nitrobenzene	600	582.952	97	
PETN	600	664.135	111	
RDX	600	727.871	121	*
Tetryl	600	602.021	100	
m–Dinitrobenzene	600	604.378	101	
m–Nitrotoluene	600	551.203	92	
o–Nitrotoluene	600	525.761	88	

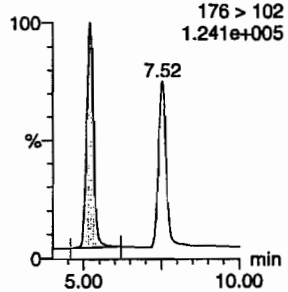
Recovery Limits:
3,4–Dinitrotoluene (Surrogate),TATB, tris(o–cresyl)phosphate, 3,5–Dinitroaniline, 2,6–Diamino–4–nitrotoluene , 2,4–Diamino–6–nitrotoluene 70–130%
OtherTarget Analytes 80–120%
Column used to flag Recovery outside of Limits
* Value outside of Recovery Limits

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA1.qld, Time: Wed Apr 14 09:16:31 2010

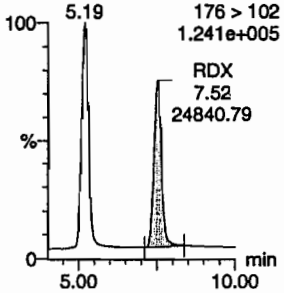
Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0412049a
Date: 13-Apr-2010
Time: 15:16:35
ID: WXX100412-07CCV
Vial: 1:1,B

MAP 4/14/10

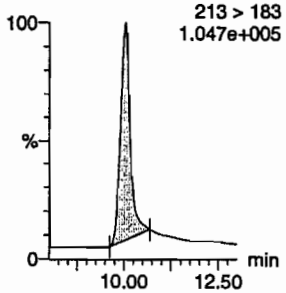
HMX
F2:MRM of 1 channel,AP-
176 > 102
1.241e+005



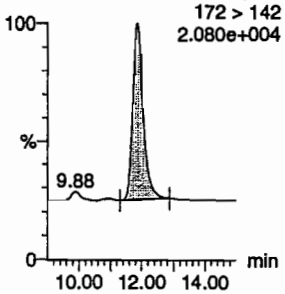
RDX
F2:MRM of 1 channel,AP-
176 > 102
1.241e+005



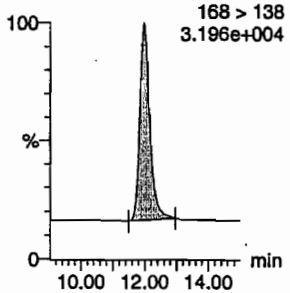
135-Trinitrobenzene
F4:MRM of 1 channel,AP-
213 > 183
1.047e+005



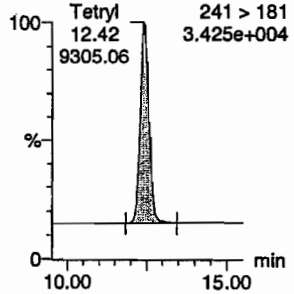
13-Dinitrobenzene-d4
F5:MRM of 2 channels,AP-
172 > 142
2.080e+004



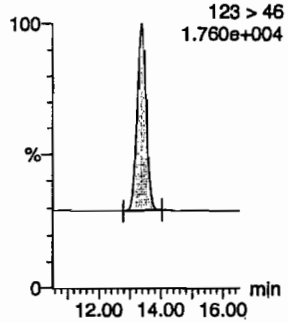
13-Dinitrobenzene
F5:MRM of 2 channels,AP-
168 > 138
3.196e+004



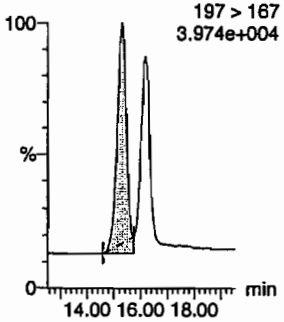
Tetryl
F6:MRM of 1 channel,AP-
241 > 181
3.425e+004



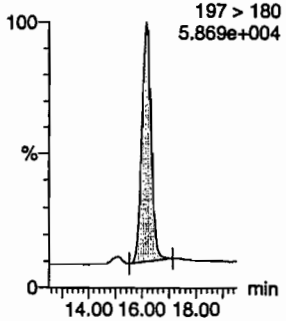
Nitrobenzene
F7:MRM of 1 channel,AP-
123 > 46
1.760e+004



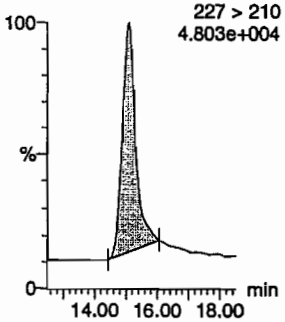
4-Amino-26-dinitrotoluene
F11:MRM of 2 channels,AP-
197 > 167
3.974e+004



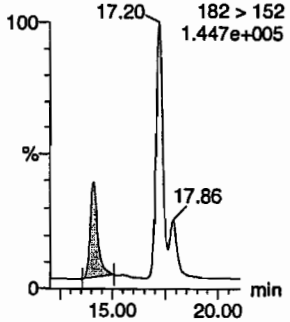
2-Amino-46-dinitrotoluene
F11:MRM of 2 channels,AP-
197 > 180
5.869e+004



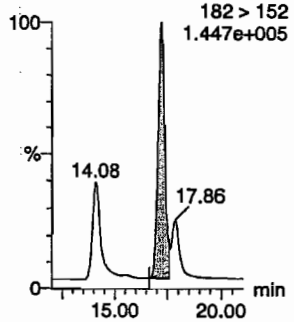
246-Trinitrotoluene
F10:MRM of 1 channel,AP-
227 > 210
4.803e+004



34-dinitrotoluene
F9:MRM of 2 channels,AP-
182 > 152
1.447e+005



26-dinitrotoluene
F9:MRM of 2 channels,AP-
182 > 152
1.447e+005



Anne 04/14/10

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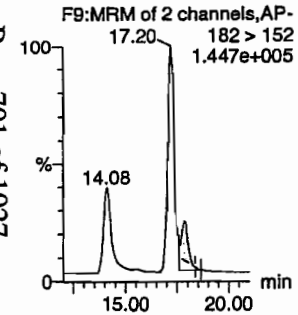
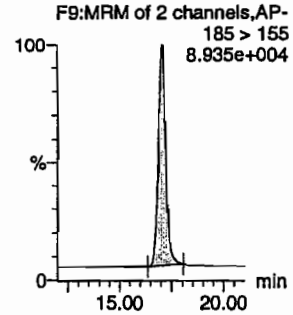
Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA1.qld, Time: Wed Apr 14 09:16:31 2010

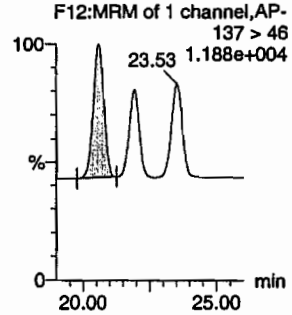
24-dinitrotoluene



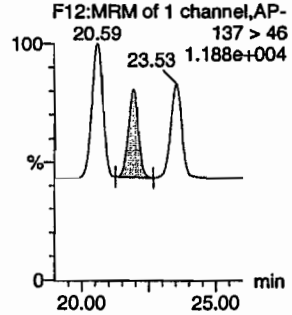
26-dinitrotoluene-d3



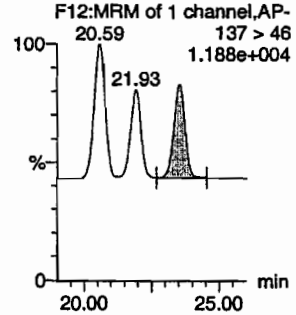
2-Nitrotoluene



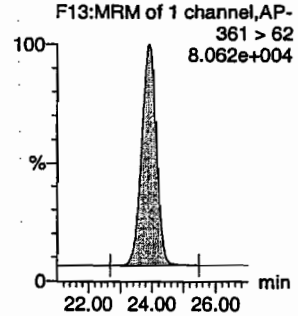
4-Nitrotoluene



3-Nitrotoluene



PETN



ID	Name	Trace	RT	Area	IS Area	Abs Resp	Response	Flags	Mod Date	Mod Time	ng/mL	%Rec	%Dev	S/N
WXX100412-07CCV	HMX	176 > 102	5.19	31204.445	5961.844	31204.445	2617.013	bb			617.4143	102.9	2.9	5202.5
WXX100412-07CCV	RDX	176 > 102	7.52	24840.789	5961.844	24840.789	2083.314	bb			727.8714	121.3	21.3	3835.8
WXX100412-07CCV	135-Trinitrobenzene	213 > 183	10.05	29462.223	5961.844	29462.223	2470.899	bb			571.5730	95.3	-4.7	761.1
WXX100412-07CCV	13-Dinitrobenzene-d4	172 > 142	11.84	5961.844		5961.844	5961.844	bb			506.9282	101.4	1.4	721.9
WXX100412-07CCV	13-Dinitrobenzene	168 > 138	11.97	9635.484	5961.844	9635.484	808.096	bb			604.3784	100.7	0.7	772.5
WXX100412-07CCV	Tetryl	241 > 181	12.42	9305.055	5961.844	9305.055	780.384	bb			602.0212	100.3	0.3	1125.5
WXX100412-07CCV	Nitrobenzene	123 > 46	13.37	4360.299	5961.844	4360.299	365.684	bb			582.9519	97.2	-2.8	615.4
WXX100412-07CCV	4-Amino-26-dinitrotoluene	197 > 167	15.28	14253.106	34905.266	14253.106	204.168	MM	14-Apr-10	09:10:21	604.4733	100.7	0.7	347.8
WXX100412-07CCV	2-Amino-46-dinitrotoluene	197 > 180	16.16	21707.760	34905.266	21707.760	310.953	bb			607.0951	101.2	1.2	960.5
WXX100412-07CCV	246-Trinitrotoluene	227 > 210	15.10	20441.820	34905.266	20441.820	292.819	bb			673.0952	112.2	12.2	677.4
WXX100412-07CCV	34-dinitrotoluene	182 > 152	14.08	21818.158	34905.266	21818.158	312.534	bb			303.0991	101.0	1.0	485.6
WXX100412-07CCV	26-dinitrotoluene	182 > 152	17.20	51026.781	34905.266	51026.781	730.932	MM	14-Apr-10	09:11:45	617.5825	102.9	2.9	1319.3
WXX100412-07CCV	24-dinitrotoluene	182 > 152	17.86	12588.055	34905.266	12588.055	180.317	MM	14-Apr-10	09:15:38	690.8611	115.1	15.1	286.1
WXX100412-07CCV	26-dinitrotoluene-d3	185 > 155	17.05	34905.266		34905.266	34905.266	bb			498.8864	99.8	-0.2	2214.7
WXX100412-07CCV	2-Nitrotoluene	137 > 46	20.59	3178.106	34905.266	3178.106	45.525	bb			525.7614	87.6	-12.4	666.3
WXX100412-07CCV	4-Nitrotoluene	137 > 46	21.93	1922.686	34905.266	1922.686	27.541	bb			663.9803	110.7	10.7	437.1
WXX100412-07CCV	3-Nitrotoluene	137 > 46	23.53	2243.447	34905.266	2243.447	32.136	bb			551.2025	91.9	-8.1	464.9
WXX100412-07CCV	PETN	361 > 62	23.92	40562.969	34905.266	40562.969	581.044	bb			664.1354	110.7	10.7	10315.8

GEL SOP GL-OA-E-056, Method 8321A-Modified / MM = Manual Modification

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GRAND MEAN AVERAGE

Vendor: Restek
Date of Analysis: 04/13/10
Time of Injection: 1516
Standard Number: WXX100412-07CCV
Data File: EXP0412049a

HMX	102.9
RDX	121.3
135-TNB	95.3
13-DNB	100.7
Tetryl	100.3
Nitrobenzene	97.2
4A-26-DNT	100.7
2A-46-DNT	101.2
246-TNT	112.2
34-DNT(surr)	101.0
26-DNT	102.9
24-DNT	115.1
2-NT	87.6
4-NT	110.7
3-NT	91.9
PETN	110.7
Total	1651.7
Average	103.2

MTT 4/14/10

Hmm 04/14/10

ICV Limits 85-115%
CRI Limits 70-130%
CCV Limits 85-115%
No single analyte > +/- 60%

PROPRIETARY INFORMATION-No unauthorized reproduction without written permission from GEL.

7B
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10–2089

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0412051a

Analysis Date: 13–APR–10 16:15

LCMSMS ID: 903

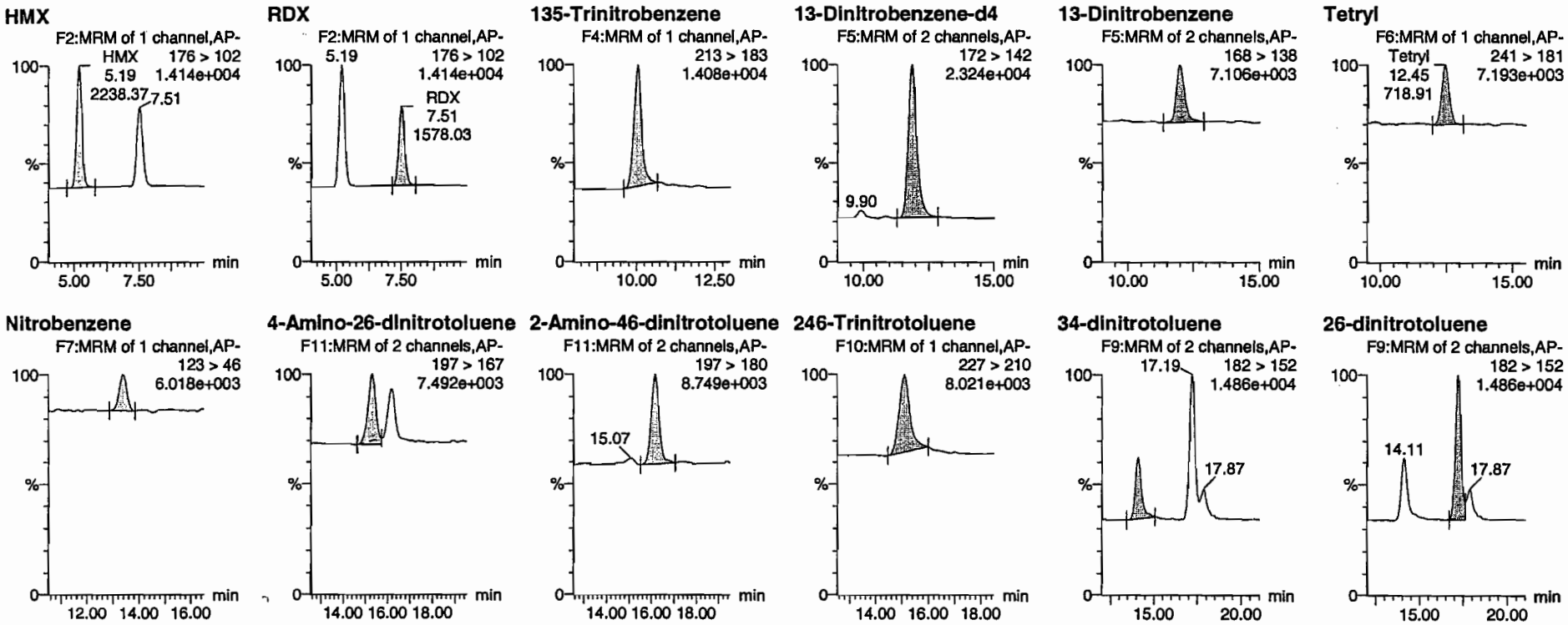
Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5–Trinitrobenzene	40	43.445	109	
1,3–Dinitrobenzene–d4	500	578.682	116	
2,4,6–Trinitrotoluene	40	41.977	105	
2,4–Dinitrotoluene	40	41.352	103	
2,6–Dinitrotoluene	40	41.013	103	
2,6–Dinitrotoluene–d3	500	540.214	108	
2–Amino–4,6–dinitrotoluene	40	38.681	97	
3,4–Dinitrotoluene	20	22.076	110	
4–Amino–2,6–dinitrotoluene	40	40.59	101	
HMX	40	38.797	97	
Nitrobenzene	40	39.951	100	
PETN	40	48.006	120	
RDX	40	40.505	101	
Tetryl	40	40.745	102	
m–Dinitrobenzene	40	41.507	104	
m–Nitrotoluene	40	38.882	97	
o–Nitrotoluene	40	38.71	97	
p–Nitrotoluene	40	41.261	103	

Recovery Limits:
3,4–Dinitrotoluene (Surrogate),TATB, tris(o–cresyl)phosphate, 3,5–Dinitroaniline, 2,6–Diamino–4–nitrotoluene , 2,4–Diamino–6–nitrotoluene 50–150%
OtherTarget Analytes 70–130%
Column used to flag Recovery outside of Limits
* Value outside of Recovery Limits

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA1.qld, Time: Wed Apr 14 09:16:31 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0412051a
Date: 13-Apr-2010
Time: 16:15:40
ID: WXX100412-08CRI
Vial: 1:1,C



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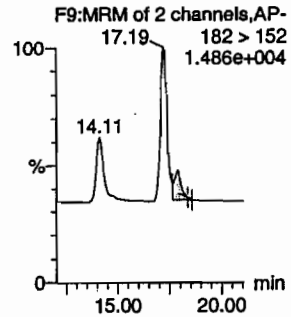
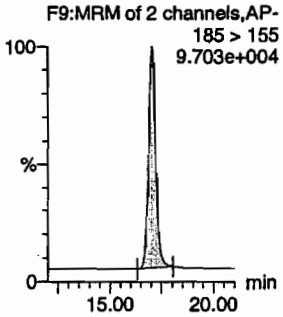
Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA1.qld, Time: Wed Apr 14 09:16:31 2010

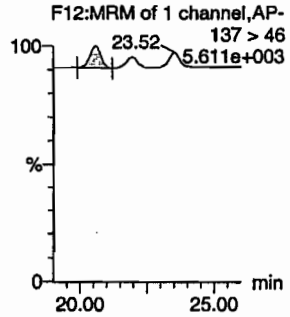
24-dinitrotoluene



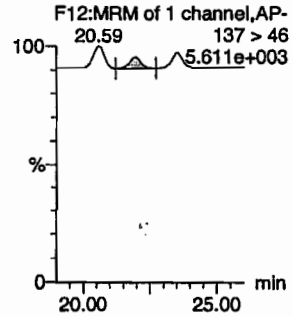
26-dinitrotoluene-d3



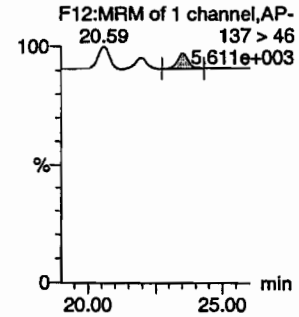
2-Nitrotoluene



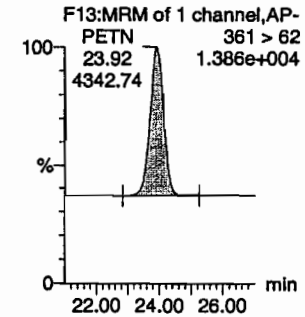
4-Nitrotoluene



3-Nitrotoluene



PETN



ID	Name	Trace	RT	Area	IS Area	Abs Resp	Response	Flags	Mod Date	Mod Time	ng/mL	%Rec	%Dev	S/N
WXX100412-08CRI	HMX	176 > 102	5.19	2238.372	6805.720	2238.372	164.448	bb			38.7971	97.0	-3.0	208.5
WXX100412-08CRI	RDX	176 > 102	7.51	1578.030	6805.720	1578.030	115.934	bb			40.5052	101.3	1.3	135.6
WXX100412-08CRI	135-Trinitrobenzene	213 > 183	10.03	2556.376	6805.720	2556.376	187.811	bb			43.4448	108.6	8.6	179.0
WXX100412-08CRI	13-Dinitrobenzene-d4	172 > 142	11.87	6805.720		6805.720	6805.720	bb			578.6819	115.7	15.7	507.4
WXX100412-08CRI	13-Dinitrobenzene	168 > 138	11.97	755.409	6805.720	755.409	55.498	bb			41.5073	103.8	3.8	74.5
WXX100412-08CRI	Tetryl	241 > 181	12.45	718.910	6805.720	718.910	52.817	bb			40.7450	101.9	1.9	73.1
WXX100412-08CRI	Nitrobenzene	123 > 46	13.35	341.116	6805.720	341.116	25.061	bb			39.9508	99.9	-0.1	27.5
WXX100412-08CRI	4-Amino-26-dinitrotoluene	197 > 167	15.27	1036.367	37796.773	1036.367	13.710	MM	14-Apr-10	09:10:14	40.5898	101.5	1.5	59.1
WXX100412-08CRI	2-Amino-46-dinitrotoluene	197 > 180	16.15	1497.691	37796.773	1497.691	19.812	bb			38.6812	96.7	-3.3	67.3
WXX100412-08CRI	246-Trinitrotoluene	227 > 210	15.09	1380.441	37796.773	1380.441	18.261	bb			41.9770	104.9	4.9	85.1
WXX100412-08CRI	34-dinitrotoluene	182 > 152	14.11	1720.770	37796.773	1720.770	22.763	bb			22.0763	110.4	10.4	91.2
WXX100412-08CRI	26-dinitrotoluene	182 > 152	17.19	3669.359	37796.773	3669.359	48.541	MM	14-Apr-10	09:11:53	41.0132	102.5	2.5	216.3
WXX100412-08CRI	24-dinitrotoluene	182 > 152	17.87	815.884	37796.773	815.884	10.793	MM	14-Apr-10	09:15:28	41.3520	103.4	3.4	43.1
WXX100412-08CRI	26-dinitrotoluene-d3	185 > 155	17.04	37796.773		37796.773	37796.773	bb			540.2135	108.0	8.0	1682.3
WXX100412-08CRI	2-Nitrotoluene	137 > 46	20.59	253.376	37796.773	253.376	3.352	bb			38.7099	96.8	-3.2	70.2
WXX100412-08CRI	4-Nitrotoluene	137 > 46	21.96	129.377	37796.773	129.377	1.711	bb			41.2610	103.2	3.2	35.2
WXX100412-08CRI	3-Nitrotoluene	137 > 46	23.52	171.362	37796.773	171.362	2.267	bb			38.8818	97.2	-2.8	48.1
WXX100412-08CRI	PETN	361 > 62	23.92	4342.742	37796.773	4342.742	57.449	bb			48.0061	120.0	20.0	1612.5

GEL SOP GL-OA-E-056, Method 8321A-Modified / MM = Manual Modification

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GRAND MEAN AVERAGE

Vendor:	UltraScientific
Date of Analysis	04/13/10
Time of Injection	1615
Standard Number	WXX100412-08CRI
Data File	EXP0412051a

HMX	97.0
RDX	101.3
135-TNB	108.6
13-DNB	103.8
Tetryl	101.9
Nitrobenzene	99.9
4A-26-DNT	101.5
2A-46-DNT	96.7
246-TNT	104.9
34-DNT(surr)	110.4
26-DNT	102.5
24-DNT	103.4
2-NT	96.8
4-NT	103.2
3-NT	97.2
PETN	120.0
Total	1649.1
Average	103.1

MJT 4/14/10

HMM 04/14/10

ICV Limits 85-115%
CRI Limits 70-130%
CCV Limits 85-115%
No single analyte > +/- 60%

PROPRIETARY INFORMATION-No unauthorized reproduction without written permission from GEL.

7A
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10–2089

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0412060a

Analysis Date: 13–APR–10 20:41

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

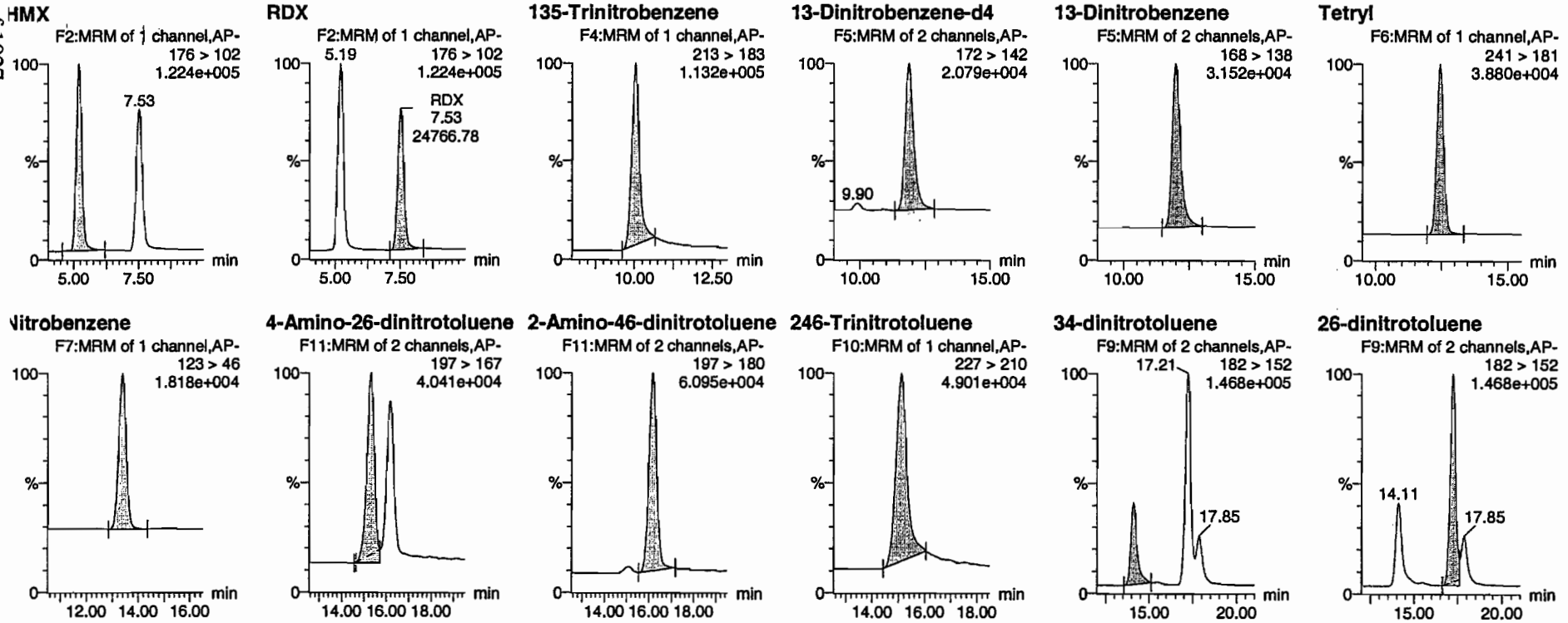
Compound	True	Found	Recovery	Q
1,3,5–Trinitrobenzene	600	599.334	100	
1,3–Dinitrobenzene–d4	500	499.969	100	
2,4,6–Trinitrotoluene	600	660.453	110	
2,4–Dinitrotoluene	600	684.197	114	
2,6–Dinitrotoluene	600	612.271	102	
2,6–Dinitrotoluene–d3	500	510.451	102	
2–Amino–4,6–dinitrotoluene	600	614.276	102	
3,4–Dinitrotoluene	300	313.494	104	
4–Amino–2,6–dinitrotoluene	600	595.541	99	
HMX	600	611.301	102	
Nitrobenzene	600	608.894	101	
PETN	600	646.401	108	
RDX	600	735.804	123	*
Tetryl	600	668.888	111	
m–Dinitrobenzene	600	610.208	102	
m–Nitrotoluene	600	514.808	86	
o–Nitrotoluene	600	527.178	88	
p–Nitrotoluene	600	571.151	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%
OtherTarget Analytes 80–120%
Column used to flag Recovery outside of Limits
* Value outside of Recovery Limits

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA1.qld, Time: Wed Apr 14 09:16:31 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0412060a
Date: 13-Apr-2010
Time: 20:41:14
ID: WXX100412-07CCV
Vial: 1:1,B

MAT 4/14/10



Hnine 04/14/10

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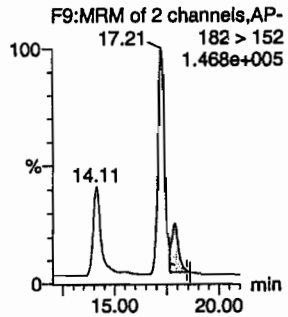
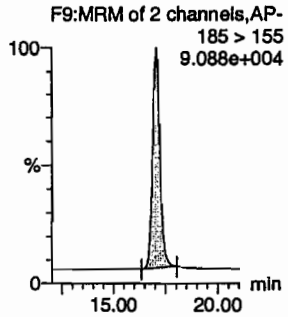
Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA1.qld, Time: Wed Apr 14 09:16:31 2010

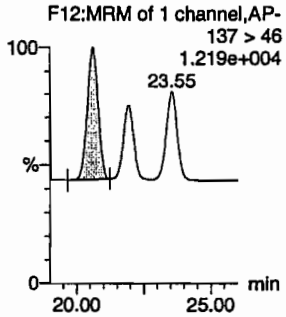
24-dinitrotoluene



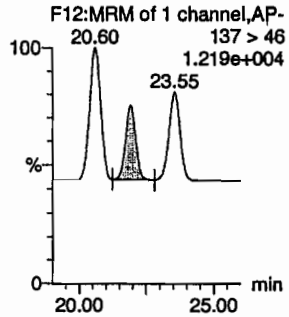
26-dinitrotoluene-d3



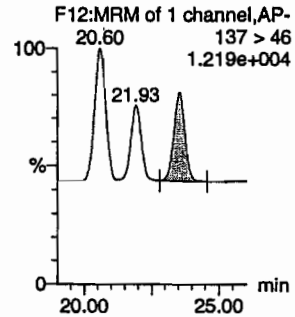
2-Nitrotoluene



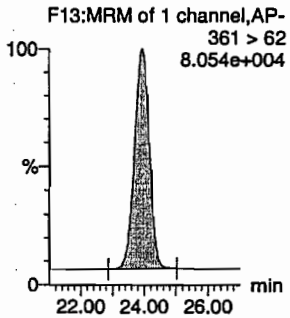
4-Nitrotoluene



3-Nitrotoluene



PETN



ID	Name	Trace	RT	Area	IS Area	Abs Resp	Response	Flags	Mod Date	Mod Time	ng/mL	%Rec	%Dev	S/N
WXX100412-07CCV	HMX	176 > 102	5.19	30471.305	5879.997	30471.305	2591.099	bb			611.3005	101.9	1.9	4888.6
WXX100412-07CCV	RDX	176 > 102	7.53	24766.781	5879.997	24766.781	2106.020	bb			735.8043	122.6	22.6	3663.0
WXX100412-07CCV	135-Trinitrobenzene	213 > 183	10.03	30469.059	5879.997	30469.059	2590.908	bb			599.3338	99.9	-0.1	527.0
WXX100412-07CCV	13-Dinitrobenzene-d4	172 > 142	11.86	5879.997		5879.997	5879.997	bb			499.9688	100.0	-0.0	312.1
WXX100412-07CCV	13-Dinitrobenzene	168 > 138	11.97	9594.861	5879.997	9594.861	815.890	bb			610.2076	101.7	1.7	589.3
WXX100412-07CCV	Tetryl	241 > 181	12.45	10196.647	5879.997	10196.647	867.062	bb			668.8885	111.5	11.5	797.0
WXX100412-07CCV	Nitrobenzene	123 > 46	13.39	4491.814	5879.997	4491.814	381.957	bb			608.8941	101.5	1.5	423.9
WXX100412-07CCV	4-Amino-26-dinitrotoluene	197 > 167	15.31	14368.022	35714.422	14368.022	201.152	MM	14-Apr-10	09:10:06	595.5413	99.3	-0.7	278.9
WXX100412-07CCV	2-Amino-46-dinitrotoluene	197 > 180	16.18	22473.705	35714.422	22473.705	314.631	bb			614.2762	102.4	2.4	791.6
WXX100412-07CCV	246-Trinitrotoluene	227 > 210	15.09	20522.861	35714.422	20522.861	287.319	bb			660.4534	110.1	10.1	1440.2
WXX100412-07CCV	34-dinitrotoluene	182 > 152	14.11	23089.531	35714.422	23089.531	323.252	bb			313.4938	104.5	4.5	574.1
WXX100412-07CCV	26-dinitrotoluene	182 > 152	17.21	51760.656	35714.422	51760.656	724.646	MM	14-Apr-10	09:12:05	612.2713	102.0	2.0	1480.7
WXX100412-07CCV	24-dinitrotoluene	182 > 152	17.85	12755.632	35714.422	12755.632	178.578	MM	14-Apr-10	09:15:11	684.1974	114.0	14.0	325.1
WXX100412-07CCV	26-dinitrotoluene-d3	185 > 155	17.04	35714.422		35714.422	35714.422	bb			510.4514	102.1	2.1	1565.0
WXX100412-07CCV	2-Nitrotoluene	137 > 46	20.60	3260.543	35714.422	3260.543	45.647	bb			527.1784	87.9	-12.1	489.2
WXX100412-07CCV	4-Nitrotoluene	137 > 46	21.93	1692.219	35714.422	1692.219	23.691	bb			571.1507	95.2	-4.8	274.5
WXX100412-07CCV	3-Nitrotoluene	137 > 46	23.55	2143.889	35714.422	2143.889	30.014	bb			514.8077	85.8	-14.2	326.3
WXX100412-07CCV	PETN	361 > 62	23.93	40593.559	35714.422	40593.559	568.308	bb			646.4009	107.7	7.7	8856.6

✓

iEL SOP GL-OA-E-056, Method 8321A-Modified / MM = Manual Modification

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PROPRIETARY INFORMATION-No unauthorized reproduction without written permission from GEL.

GRAND MEAN AVERAGE

Vendor: Restek
Date of Analysis: 04/13/10
Time of Injection: 2041
Standard Number: WXX100412-07CCV
Data File: EXP0412060a

HMX	101.9
RDX	122.6
135-TNB	99.9
13-DNB	101.7
Tetryl	111.5
Nitrobenzene	101.5
4A-26-DNT	99.3
2A-46-DNT	102.4
246-TNT	110.1
34-DNT(surr)	104.5
26-DNT	102.0
24-DNT	114.0
2-NT	87.9
4-NT	95.2
3-NT	85.8
PETN	107.7
Total	1648.0
Average	103.0

MAT 4/14/10

HMM 04/14/10

ICV Limits 85-115%
CRI Limits 70-130%
CCV Limits 85-115%
No single analyte > +/- 60%

PROPRIETARY INFORMATION-No unauthorized reproduction without written permission from GEL.

7B
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10–2089

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0412062a

Analysis Date: 13–APR–10 21:40

LCMSMS ID: 903

Column ID Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
Nitrobenzene	40	43.255	108	
PETN	40	44.881	112	
RDX	40	44.011	110	
Tetryl	40	38.121	95	
m–Dinitrobenzene	40	42.827	107	
m–Nitrotoluene	40	31.848	80	
o–Nitrotoluene	40	44.099	110	
p–Nitrotoluene	40	40.569	101	
1,3,5–Trinitrobenzene	40	44.068	110	
1,3–Dinitrobenzene–d4	500	557.026	111	
2,4,6–Trinitrotoluene	40	47.263	118	
2,4–Dinitrotoluene	40	43.24	108	
2,6–Dinitrotoluene	40	42.432	106	
2,6–Dinitrotoluene–d3	500	543.492	109	
2–Amino–4,6–dinitrotoluene	40	41.373	103	
3,4–Dinitrotoluene	20	20.458	102	
4–Amino–2,6–dinitrotoluene	40	42.964	107	
HMX	40	45.559	114	

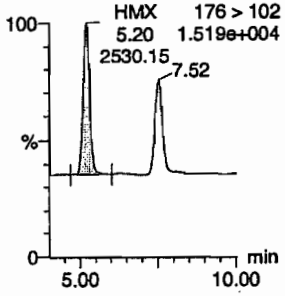
Recovery Limits:
3,4–Dinitrotoluene (Surrogate),TATB, tris(o–cresyl)phosphate, 3,5–Dinitroaniline, 2,6–Diamino–4–nitrotoluene , 2,4–Diamino–6–nitrotoluene 50–150%
OtherTarget Analytes 70–130%
Column used to flag Recovery outside of Limits
* Value outside of Recovery Limits

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA1.qld, Time: Wed Apr 14 09:16:31 2010

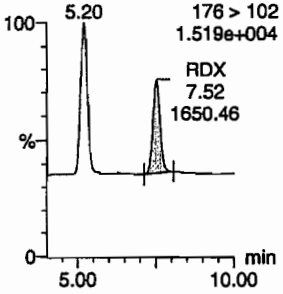
Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0412062a
Date: 13-Apr-2010
Time: 21:40:18
ID: WXX100412-08CRI
Vial: 1:1,C

MATT 4/14/10

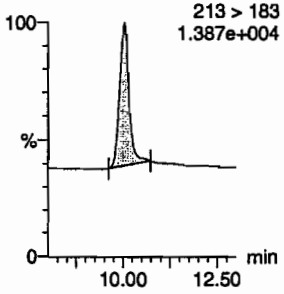
HMX
F2:MRM of 1 channel,AP-
HMX 176 > 102
5.20 1.519e+004
2530.15
7.52



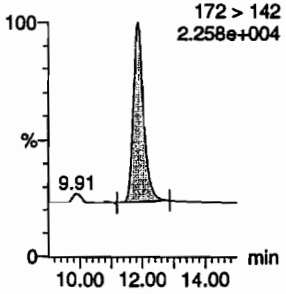
RDX
F2:MRM of 1 channel,AP-
5.20 176 > 102
1.519e+004
RDX
7.52
1650.46



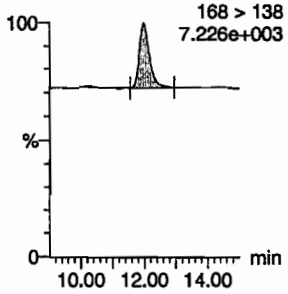
135-Trinitrobenzene
F4:MRM of 1 channel,AP-
213 > 183
1.387e+004



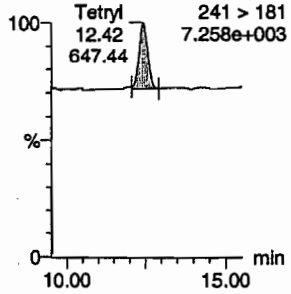
13-Dinitrobenzene-d4
F5:MRM of 2 channels,AP-
172 > 142
2.258e+004



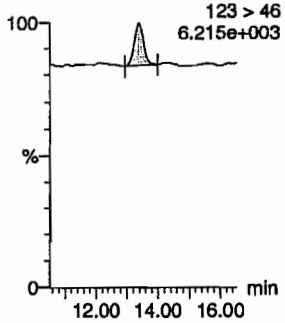
13-Dinitrobenzene
F5:MRM of 2 channels,AP-
168 > 138
7.226e+003



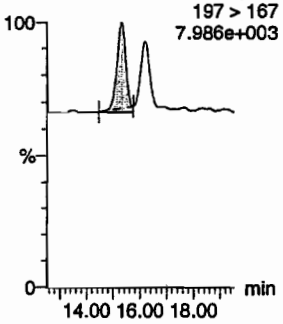
Tetryl
F6:MRM of 1 channel,AP-
Tetryl 241 > 181
12.42 7.258e+003
647.44



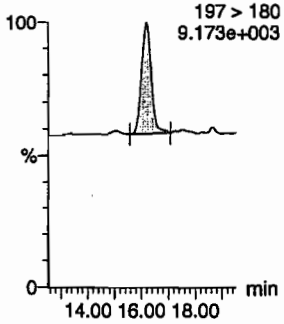
Nitrobenzene
F7:MRM of 1 channel,AP-
123 > 46
6.215e+003



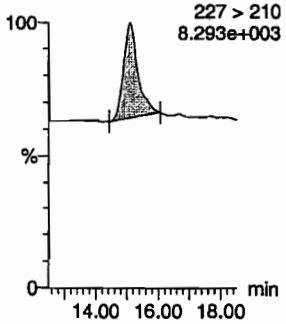
4-Amino-26-dinitrotoluene
F11:MRM of 2 channels,AP-
197 > 167
7.986e+003



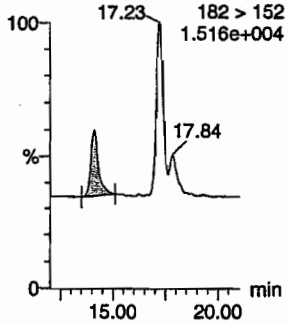
2-Amino-46-dinitrotoluene
F11:MRM of 2 channels,AP-
197 > 180
9.173e+003



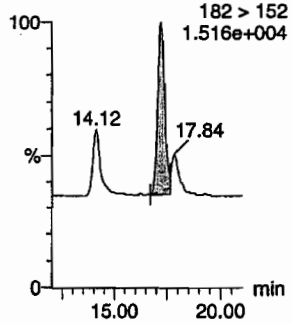
246-Trinitrotoluene
F10:MRM of 1 channel,AP-
227 > 210
8.293e+003



34-dinitrotoluene
F9:MRM of 2 channels,AP-
17.23 182 > 152
1.516e+004
17.84



26-dinitrotoluene
F9:MRM of 2 channels,AP-
182 > 152
1.516e+004
14.12
17.84



HMM 04/14/10

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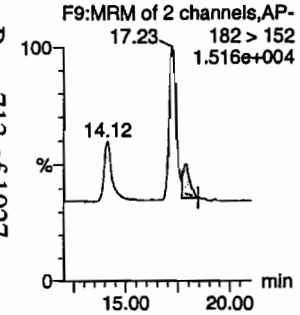
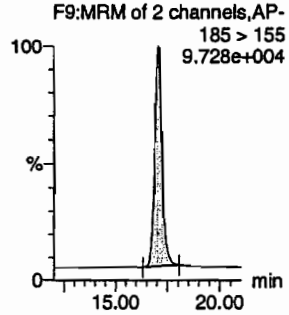
Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA1.qld, Time: Wed Apr 14 09:16:31 2010

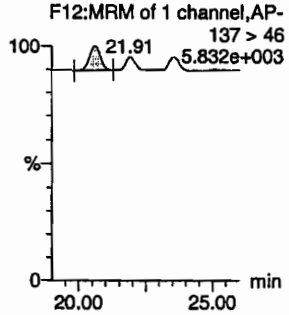
24-dinitrotoluene



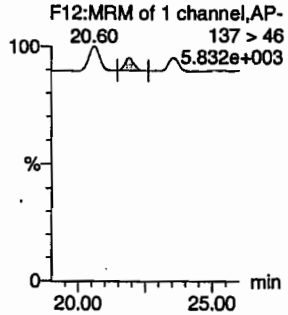
26-dinitrotoluene-d3



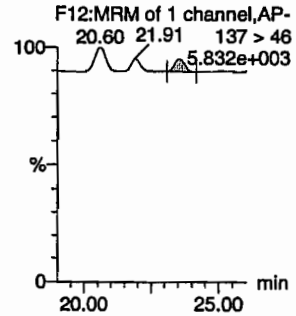
2-Nitrotoluene



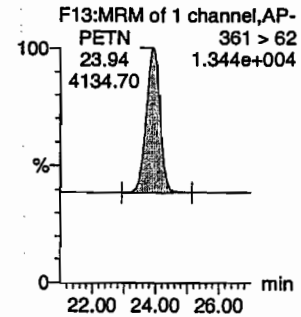
4-Nitrotoluene



3-Nitrotoluene



PETN



ID	Name	Trace	RT	Area	IS Area	Abs Resp	Response	Flags	Mod Date	Mod Time	ng/mL	%Rec	%Dev	S/N
WXX100412-08CRI	HMX	176 > 102	5.20	2530.148	6551.026	2530.148	193.111	bb			45.5593	113.9	13.9	260.0
WXX100412-08CRI	RDX	176 > 102	7.52	1650.456	6551.026	1650.456	125.969	bb			44.0113	110.0	10.0	158.1
WXX100412-08CRI	135-Trinitrobenzene	213 > 183	10.05	2495.999	6551.026	2495.999	190.504	bb			44.0679	110.2	10.2	102.3
WXX100412-08CRI	13-Dinitrobenzene-d4	172 > 142	11.87	6551.026		6551.026	6551.026	bb			557.0256	111.4	11.4	567.3
WXX100412-08CRI	13-Dinitrobenzene	168 > 138	11.97	750.260	6551.026	750.260	57.263	bb			42.8271	107.1	7.1	65.8
WXX100412-08CRI	Tetryl	241 > 181	12.42	647.438	6551.026	647.438	49.415	db			38.1208	95.3	-4.7	95.8
WXX100412-08CRI	Nitrobenzene	123 > 46	13.37	355.510	6551.026	355.510	27.134	bb			43.2553	108.1	8.1	41.0
WXX100412-08CRI	4-Amino-26-dinitrotoluene	197 > 167	15.28	1103.634	38026.156	1103.634	14.512	MM	14-Apr-10	09:09:52	42.9637	107.4	7.4	52.5
WXX100412-08CRI	2-Amino-46-dinitrotoluene	197 > 180	16.16	1611.644	38026.156	1611.644	21.191	bb			41.3732	103.4	3.4	158.1
WXX100412-08CRI	246-Trinitrotoluene	227 > 210	15.10	1563.702	38026.156	1563.702	20.561	bb			47.2628	118.2	18.2	169.3
WXX100412-08CRI	34-dinitrotoluene	182 > 152	14.12	1604.344	38026.156	1604.344	21.095	bb			20.4584	102.3	2.3	75.6
WXX100412-08CRI	26-dinitrotoluene	182 > 152	17.23	3819.371	38026.156	3819.371	50.220	MM	14-Apr-10	09:12:11	42.4324	106.1	6.1	195.8
WXX100412-08CRI	24-dinitrotoluene	182 > 152	17.84	858.314	38026.156	858.314	11.286	MM	14-Apr-10	09:14:59	43.2401	108.1	8.1	43.5
WXX100412-08CRI	26-dinitrotoluene-d3	185 > 155	17.05	38026.156		38026.156	38026.156	bb			543.4920	108.7	8.7	2125.4
WXX100412-08CRI	2-Nitrotoluene	137 > 46	20.60	290.400	38026.156	290.400	3.818	bb			44.0987	110.2	10.2	85.6
WXX100412-08CRI	4-Nitrotoluene	137 > 46	21.91	127.979	38026.156	127.979	1.683	bb			40.5690	101.4	1.4	45.5
WXX100412-08CRI	3-Nitrotoluene	137 > 46	23.55	141.213	38026.156	141.213	1.857	bb			31.8477	79.6	-20.4	45.1
WXX100412-08CRI	PETN	361 > 62	23.94	4134.703	38026.156	4134.703	54.367	bb			44.8806	112.2	12.2	1420.3

GEL SOP GL-OA-E-056, Method 8321A-Modified / MM = Manual Modification

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GRAND MEAN AVERAGE

Vendor:	UltraScientific
Date of Analysis	04/13/10
Time of Injection	2140
Standard Number	WXX100412-08CRI
Data File	EXP0412062a

HMX	113.9
RDX	110.0
135-TNB	100.2
13-DNB	107.1
Tetryl	95.3
Nitrobenzene	108.1
4A-26-DNT	107.4
2A-46-DNT	103.4
246-TNT	118.2
34-DNT(surr)	102.3
26-DNT	106.1
24-DNT	108.1
2-NT	110.2
4-NT	101.4
3-NT	79.6
PETN	112.2
Total	1683.5
Average	105.2

MMT 4/14/10

HMM 04/14/10

ICV Limits 85-115%
CRI Limits 70-130%
CCV Limits 85-115%

No single analyte > +/- 60%

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7A
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10–2089

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0412073a

Analysis Date: 14–APR–10 03:04

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
HMX	600	509.641	85	
Nitrobenzene	600	538.682	90	
PETN	600	487.21	81	
RDX	600	549.332	92	
Tetryl	600	547.985	91	
m–Dinitrobenzene	600	597.924	100	
m–Nitrotoluene	600	459.65	77	*
o–Nitrotoluene	600	486.57	81	
p–Nitrotoluene	600	543.675	91	
1,3,5–Trinitrobenzene	600	472.089	79	*
1,3–Dinitrobenzene–d4	500	626.494	125	*
2,4,6–Trinitrotoluene	600	708.507	118	
2,4–Dinitrotoluene	600	663.973	111	
2,6–Dinitrotoluene	600	597.091	100	
2,6–Dinitrotoluene–d3	500	580.114	116	
2–Amino–4,6–dinitrotoluene	600	639.825	107	
3,4–Dinitrotoluene	300	311.029	104	
4–Amino–2,6–dinitrotoluene	600	618.565	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%
OtherTarget Analytes 80–120%
Column used to flag Recovery outside of Limits
* Value outside of Recovery Limits

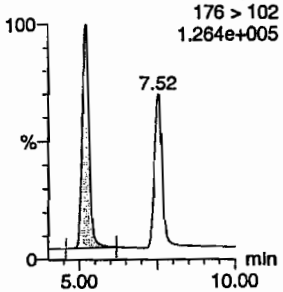
Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA1.qld, Time: Wed Apr 14 09:16:31 2010

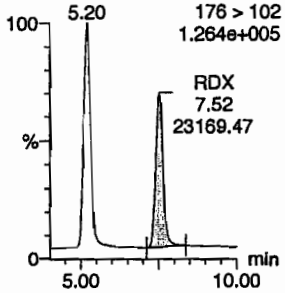
Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0412073a
Date: 14-Apr-2010
Time: 03:04:45
ID: WXX100412-07CCV
Vial: 1:1,B

MMT 4/14/10

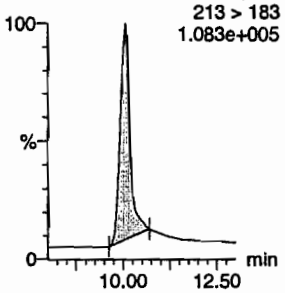
HMX
F2:MRM of 1 channel,AP-
176 > 102
1.264e+005



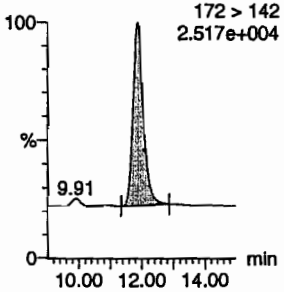
RDX
F2:MRM of 1 channel,AP-
176 > 102
1.264e+005



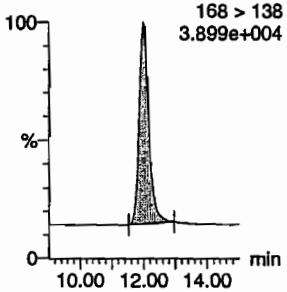
135-Trinitrobenzene
F4:MRM of 1 channel,AP-
213 > 183
1.083e+005



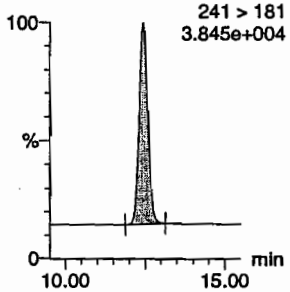
13-Dinitrobenzene-d4
F5:MRM of 2 channels,AP-
172 > 142
2.517e+004



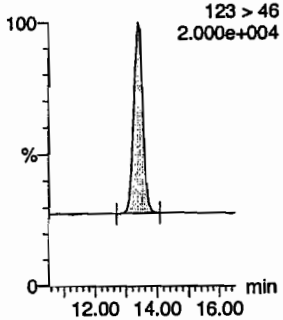
13-Dinitrobenzene
F5:MRM of 2 channels,AP-
168 > 138
3.899e+004



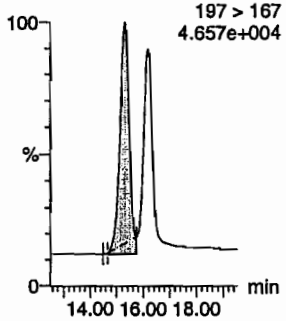
Tetryl
F6:MRM of 1 channel,AP-
241 > 181
3.845e+004



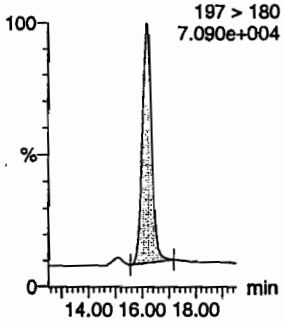
Nitrobenzene
F7:MRM of 1 channel,AP-
123 > 46
2.000e+004



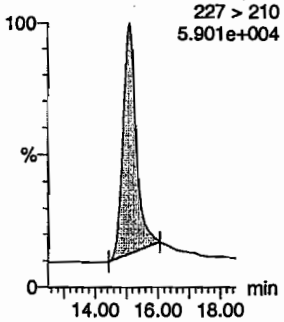
4-Amino-26-dinitrotoluene
F11:MRM of 2 channels,AP-
197 > 167
4.657e+004



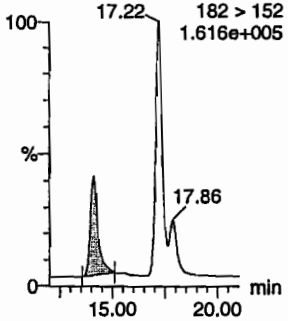
2-Amino-46-dinitrotoluene
F11:MRM of 2 channels,AP-
197 > 180
7.090e+004



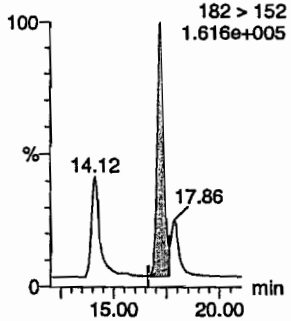
246-Trinitrotoluene
F10:MRM of 1 channel,AP-
227 > 210
5.901e+004



34-dinitrotoluene
F9:MRM of 2 channels,AP-
182 > 152
1.616e+005



26-dinitrotoluene
F9:MRM of 2 channels,AP-
182 > 152
1.616e+005



HMW 04/14/10

EL SOP GL-OA-E-056, Method 8321A-Modified / MM = Manual Modification

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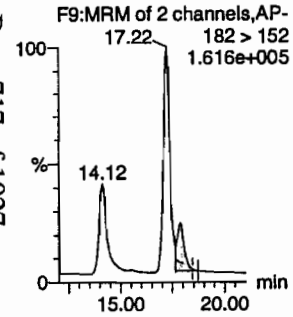
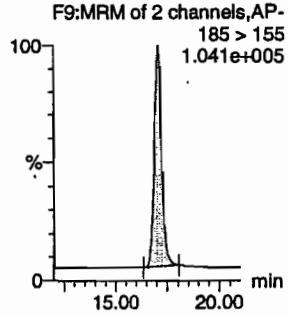
Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA1.qld, Time: Wed Apr 14 09:16:31 2010

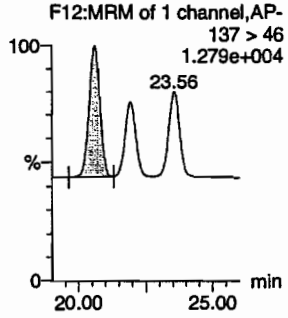
24-dinitrotoluene



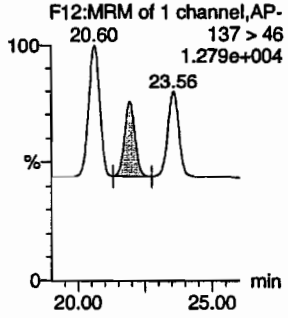
26-dinitrotoluene-d3



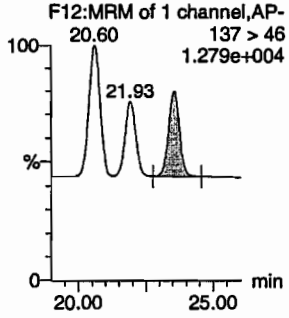
2-Nitrotoluene



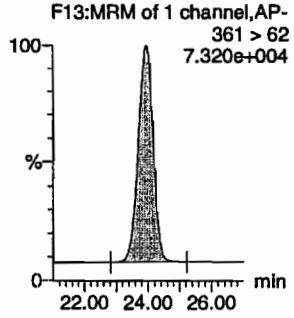
4-Nitrotoluene



3-Nitrotoluene



PETN



ID	Name	Trace	RT	Area	IS Area	Abs Resp	Response	Flags	Mod Date	Mod Time	ng/mL	%Rec	%Dev	S/N
WXX100412-07CCV	HMX	176 > 102	5.20	31832.770	7368.023	31832.770	2160.198	bb			509.6409	84.9	-15.1	1916.2
WXX100412-07CCV	RDX	176 > 102	7.52	23169.469	7368.023	23169.469	1572.299	bb			549.3321	91.6	-8.4	1306.0
WXX100412-07CCV	135-Trinitrobenzene	213 > 183	10.05	30073.756	7368.023	30073.756	2040.829	bb			472.0886	78.7	-21.3	986.1
WXX100412-07CCV	13-Dinitrobenzene-d4	172 > 142	11.87	7368.023		7368.023	7368.023	bb			626.4938	125.3	25.3	1409.6
WXX100412-07CCV	13-Dinitrobenzene	168 > 138	11.97	11780.970	7368.023	11780.970	799.466	bb			597.9242	99.7	-0.3	1288.9
WXX100412-07CCV	Tetryl	241 > 181	12.45	10467.578	7368.023	10467.578	710.338	bb			547.9850	91.3	-8.7	772.4
WXX100412-07CCV	Nitrobenzene	123 > 46	13.37	4979.505	7368.023	4979.505	337.913	bb			538.6818	89.8	-10.2	292.9
WXX100412-07CCV	4-Amino-26-dinitrotoluene	197 > 167	15.32	16960.145	40588.496	16960.145	208.928	MM	14-Apr-10	09:09:15	618.5647	103.1	3.1	633.7
WXX100412-07CCV	2-Amino-46-dinitrotoluene	197 > 180	16.16	26603.059	40588.496	26603.059	327.717	bb			639.8251	106.6	6.6	986.9
WXX100412-07CCV	246-Trinitrotoluene	227 > 210	15.10	25020.701	40588.496	25020.701	308.224	bb			708.5074	118.1	18.1	796.5
WXX100412-07CCV	34-dinitrotoluene	182 > 152	14.12	26034.324	40588.496	26034.324	320.711	bb			311.0290	103.7	3.7	890.6
WXX100412-07CCV	26-dinitrotoluene	182 > 152	17.22	57366.180	40588.496	57366.180	706.680	MM	14-Apr-10	09:13:05	597.0912	99.5	-0.5	2275.1
WXX100412-07CCV	24-dinitrotoluene	182 > 152	17.86	14067.942	40588.496	14067.942	173.300	MM	14-Apr-10	09:13:38	663.9733	110.7	10.7	492.2
WXX100412-07CCV	26-dinitrotoluene-d3	185 > 155	17.05	40588.496		40588.496	40588.496	bb			580.1145	116.0	16.0	2359.9
WXX100412-07CCV	2-Nitrotoluene	137 > 46	20.60	3420.089	40588.496	3420.089	42.131	bb			486.5704	81.1	-18.9	455.8
WXX100412-07CCV	4-Nitrotoluene	137 > 46	21.93	1830.648	40588.496	1830.648	22.551	bb			543.6754	90.6	-9.4	255.7
WXX100412-07CCV	3-Nitrotoluene	137 > 46	23.56	2175.422	40588.496	2175.422	26.799	bb			459.6496	76.6	-23.4	292.3
WXX100412-07CCV	PETN	361 > 62	23.94	36350.066	40588.496	36350.066	447.788	bb			487.2104	81.2	-18.8	8314.8

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PROPRIETARY INFORMATION-No unauthorized reproduction without written permission from GEL.

GRAND MEAN AVERAGE

Vendor: Restek
Date of Analysis: 04/14/10
Time of Injection: 0304
Standard Number: WXX100412-07CCV
Data File: EXP0412073a

HMX	84.9
RDX	91.6
135-TNB	78.7
13-DNB	99.7
Tetryl	91.3
Nitrobenzene	89.8
4A-26-DNT	103.1
2A-46-DNT	106.6
246-TNT	118.1
34-DNT(surr)	103.7
26-DNT	99.5
24-DNT	110.7
2-NT	81.1
4-NT	90.6
3-NT	76.6
PETN	81.2
Total	1507.2
Average	94.2

MMT 4/14/10

HMM 04/14/10

ICV Limits 85-115%
CRI Limits 70-130%
CCV Limits 85-115%
No single analyte > +/- 60%

PROPRIETARY INFORMATION-No unauthorized reproduction without written permission from GEL.

7B
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10–2089

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0412075a

Analysis Date: 14–APR–10 04:03

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5–Trinitrobenzene	40	45.32	113	
1,3–Dinitrobenzene–d4	500	496.282	99	
2,4,6–Trinitrotoluene	40	44.024	110	
2,4–Dinitrotoluene	40	41.479	104	
2,6–Dinitrotoluene	40	42.183	105	
2,6–Dinitrotoluene–d3	500	507.877	102	
2–Amino–4,6–dinitrotoluene	40	34.458	86	
3,4–Dinitrotoluene	20	20.138	101	
4–Amino–2,6–dinitrotoluene	40	39.725	99	
HMX	40	43.75	109	
Nitrobenzene	40	38.532	96	
PETN	40	44.475	111	
RDX	40	45.796	114	
Tetryl	40	45.012	113	
m–Dinitrobenzene	40	43.704	109	
m–Nitrotoluene	40	41.256	103	
o–Nitrotoluene	40	41.975	105	
p–Nitrotoluene	40	32.405	81	

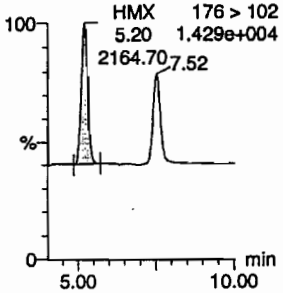
Recovery Limits:
3,4–Dinitrotoluene (Surrogate),TATB, tris(o–cresyl)phosphate, 3,5–Dinitroaniline, 2,6–Diamino–4–nitrotoluene ,
2,4–Diamino–6–nitrotoluene 50–150%
OtherTarget Analytes 70–130%
Column used to flag Recovery outside of Limits
* Value outside of Recovery Limits

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA1.qld, Time: Wed Apr 14 09:16:31 2010

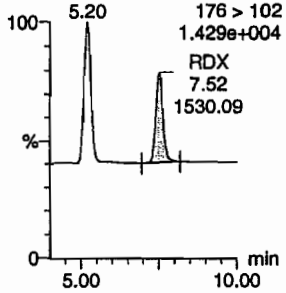
Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0412075a
Date: 14-Apr-2010
Time: 04:03:43
ID: WXX100412-08CRI
Vial: 1:1,C

MATT 4/14/10

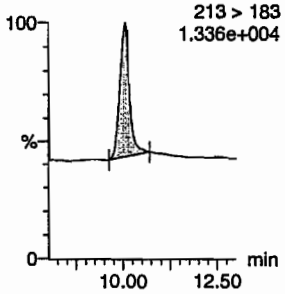
HMX
F2:MRM of 1 channel,AP-
HMX 176 > 102
5.20 1.429e+004
2164.70 7.52



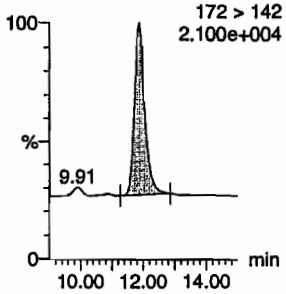
RDX
F2:MRM of 1 channel,AP-
5.20 176 > 102
1.429e+004
RDX
7.52
1530.09



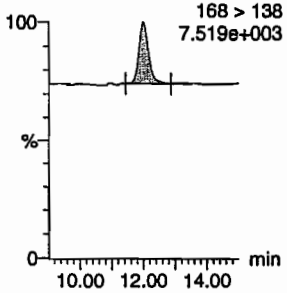
135-Trinitrobenzene
F4:MRM of 1 channel,AP-
213 > 183
1.336e+004



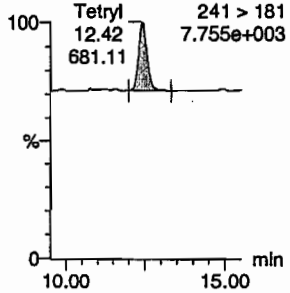
13-Dinitrobenzene-d4
F5:MRM of 2 channels,AP-
172 > 142
2.100e+004



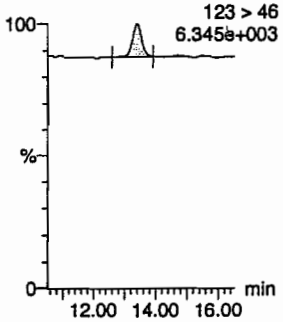
13-Dinitrobenzene
F5:MRM of 2 channels,AP-
168 > 138
7.519e+003



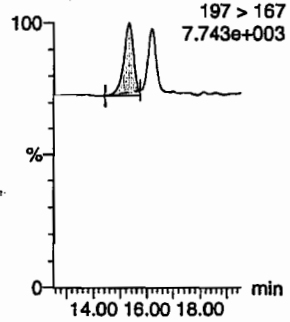
Tetryl
F6:MRM of 1 channel,AP-
Tetryl 241 > 181
12.42 7.755e+003
681.11



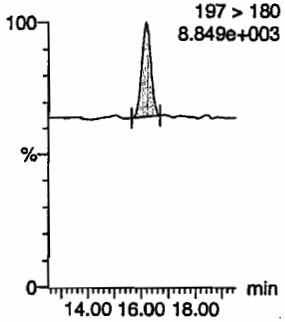
Nitrobenzene
F7:MRM of 1 channel,AP-
123 > 46
6.345e+003



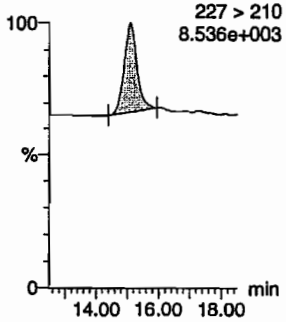
4-Amino-26-dinitrotoluene
F11:MRM of 2 channels,AP-
197 > 167
7.743e+003



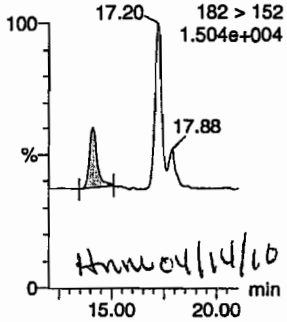
2-Amino-46-dinitrotoluene
F11:MRM of 2 channels,AP-
197 > 180
8.849e+003



246-Trinitrotoluene
F10:MRM of 1 channel,AP-
227 > 210
8.536e+003

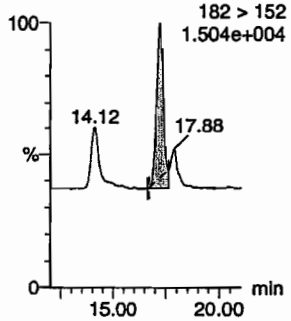


34-dinitrotoluene
F9:MRM of 2 channels,AP-
17.20 182 > 152
1.504e+004
17.88



Hmm 04/14/10

26-dinitrotoluene
F9:MRM of 2 channels,AP-
182 > 152
1.504e+004
14.12
17.88



GEL SOP GL-OA-E-056, Method 8321A-Modified / MM = Manual Modification

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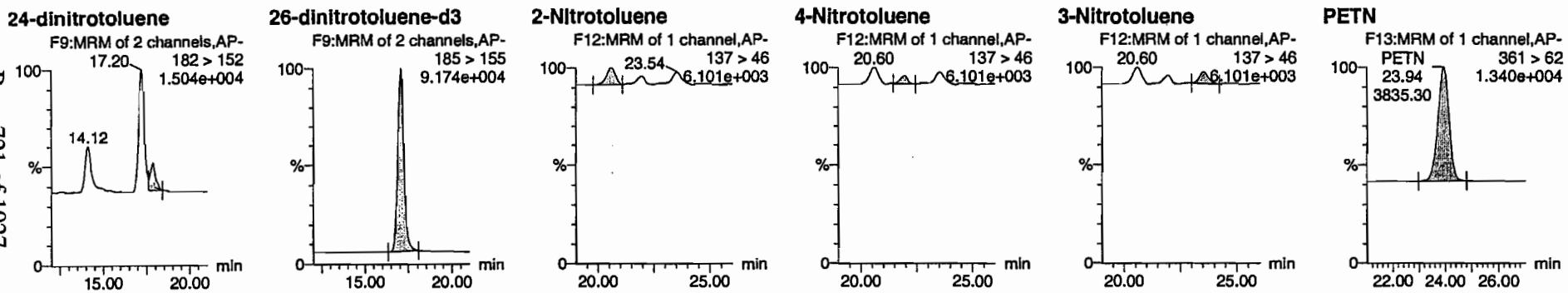
Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA1.qld, Time: Wed Apr 14 09:16:31 2010



ID	Name	Trace	RT	Area	IS Area	Abs Resp	Response	Flags	Mod Date	Mod Time	ng/mL	%Rec	%Dev	S/N
WXX100412-08CRI	HMX	176 > 102	5.20	2164.698	5836.638	2164.698	185.440	bb			43.7497	109.4	9.4	227.3
WXX100412-08CRI	RDX	176 > 102	7.52	1530.086	5836.638	1530.086	131.076	bb			45.7955	114.5	14.5	146.7
WXX100412-08CRI	135-Trinitrobenzene	213 > 183	10.05	2287.016	5836.638	2287.016	195.919	bb			45.3204	113.3	13.3	203.2
WXX100412-08CRI	13-Dinitrobenzene-d4	172 > 142	11.87	5836.638		5836.638	5836.638	bb			496.2820	99.3	-0.7	961.4
WXX100412-08CRI	13-Dinitrobenzene	168 > 138	11.97	682.124	5836.638	682.124	58.435	bb			43.7035	109.3	9.3	83.6
WXX100412-08CRI	Tetryl	241 > 181	12.42	681.107	5836.638	681.107	58.348	bb			45.0118	112.5	12.5	100.8
WXX100412-08CRI	Nitrobenzene	123 > 46	13.37	282.153	5836.638	282.153	24.171	bb			38.5318	96.3	-3.7	23.5
WXX100412-08CRI	4-Amino-26-dinitrotoluene	197 > 167	15.32	953.577	35534.277	953.577	13.418	MM	14-Apr-10	09:09:02	39.7253	99.3	-0.7	57.5
WXX100412-08CRI	2-Amino-46-dinitrotoluene	197 > 180	16.16	1254.325	35534.277	1254.325	17.650	bb			34.4584	86.1	-13.9	90.0
WXX100412-08CRI	246-Trinitrotoluene	227 > 210	15.10	1361.084	35534.277	1361.084	19.152	bb			44.0236	110.1	10.1	47.0
WXX100412-08CRI	34-dinitrotoluene	182 > 152	14.12	1475.733	35534.277	1475.733	20.765	bb			20.1381	100.7	0.7	71.1
WXX100412-08CRI	26-dinitrotoluene	182 > 152	17.20	3548.120	35534.277	3548.120	49.925	MM	14-Apr-10	09:13:15	42.1831	105.5	5.5	195.5
WXX100412-08CRI	24-dinitrotoluene	182 > 152	17.88	769.393	35534.277	769.393	10.826	MM	14-Apr-10	09:13:26	41.4786	103.7	3.7	43.1
WXX100412-08CRI	26-dinitrotoluene-d3	185 > 155	17.05	35534.277		35534.277	35534.277	bb			507.8766	101.6	1.6	2476.2
WXX100412-08CRI	2-Nitrotoluene	137 > 46	20.60	258.301	35534.277	258.301	3.635	bb			41.9749	104.9	4.9	51.8
WXX100412-08CRI	4-Nitrotoluene	137 > 46	21.97	95.525	35534.277	95.525	1.344	bb			32.4046	81.0	-19.0	24.9
WXX100412-08CRI	3-Nitrotoluene	137 > 46	23.54	170.943	35534.277	170.943	2.405	bb			41.2563	103.1	3.1	35.7
WXX100412-08CRI	PETN	361 > 62	23.94	3835.305	35534.277	3835.305	53.966	bb			44.4749	111.2	11.2	290.1

GEL SOP GL-OA-E-056, Method 8321A-Modified / MM = Manual Modification

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PROPRIETARY INFORMATION-No unauthorized reproduction without written permission from GEL.

GRAND MEAN AVERAGE

Vendor:	UltraScientific
Date of Analysis	04/14/10
Time of Injection	0403
Standard Number	WXX100412-08CRI
Data File	EXP0412075a

HMX	109.4
RDX	114.5
135-TNB	113.3
13-DNB	109.3
Tetryl	112.5
Nitrobenzene	96.3
4A-26-DNT	99.3
2A-46-DNT	86.1
246-TNT	110.1
34-DNT(surr)	100.7
26-DNT	105.5
24-DNT	103.7
2-NT	104.9
4-NT	81.0
3-NT	103.1
PETN	111.2
Total	1660.9
Average	103.8

MTP 4/14/10

HMK 04/14/10

ICV Limits 85-115%
CRI Limits 70-130%
CCV Limits 85-115%
No single analyte > +/- 60%

PROPRIETARY INFORMATION-No unauthorized reproduction without written permission from GEL.

7A
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10–2089

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0412086a

Analysis Date: 14–APR–10 09:28

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5–Trinitrobenzene	600	640.11	107	
1,3–Dinitrobenzene–d4	500	503.847	101	
2,4,6–Trinitrotoluene	600	719.661	120	
2,4–Dinitrotoluene	600	682.456	114	
2,6–Dinitrotoluene	600	634.981	106	
2,6–Dinitrotoluene–d3	500	526.626	105	
2–Amino–4,6–dinitrotoluene	600	583.91	97	
3,4–Dinitrotoluene	300	338.999	113	
4–Amino–2,6–dinitrotoluene	600	625.449	104	
HMX	600	728.534	121	*
Nitrobenzene	600	648.848	108	
PETN	600	598.437	100	
RDX	600	758.439	126	*
Tetryl	600	659.961	110	
m–Dinitrobenzene	600	630.18	105	
m–Nitrotoluene	600	494.168	82	
o–Nitrotoluene	600	509.293	85	
p–Nitrotoluene	600	568.664	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%
OtherTarget Analytes 80–120%
Column used to flag Recovery outside of Limits
* Value outside of Recovery Limits

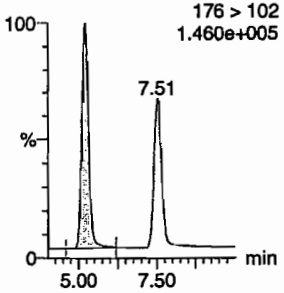
Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA2.qld, Time: Thu Apr 15 14:49:38 2010

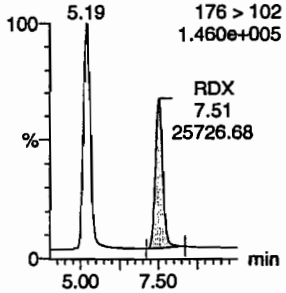
Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0412086a
Date: 14-Apr-2010
Time: 09:28:18
ID: WXX100412-07CCV
Vial: 1:1,B

MMP 4/15/10

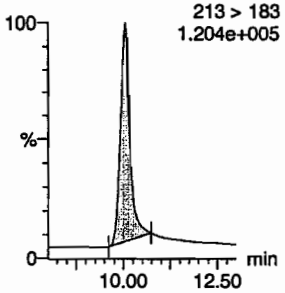
HMX
F2:MRM of 1 channel,AP-
176 > 102
1.460e+005



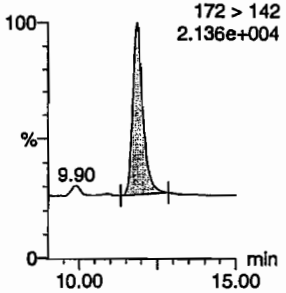
RDX
F2:MRM of 1 channel,AP-
176 > 102
1.460e+005



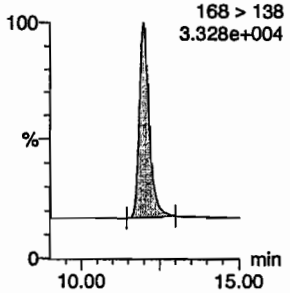
135-Trinitrobenzene
F4:MRM of 1 channel,AP-
213 > 183
1.204e+005



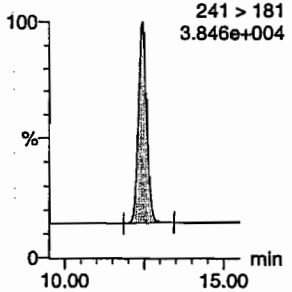
13-Dinitrobenzene-d4
F5:MRM of 2 channels,AP-
172 > 142
2.136e+004



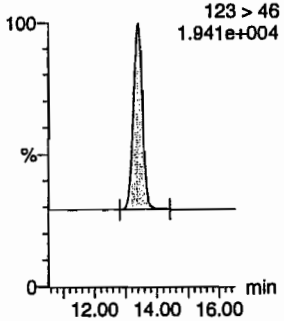
13-Dinitrobenzene
F5:MRM of 2 channels,AP-
168 > 138
3.328e+004



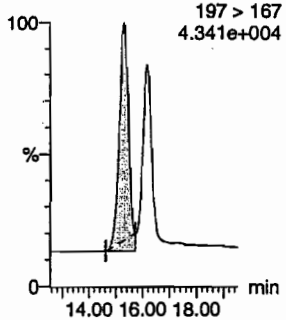
Tetryl
F6:MRM of 1 channel,AP-
241 > 181
3.846e+004



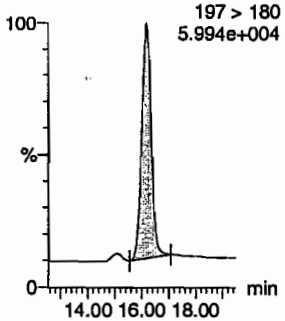
Nitrobenzene
F7:MRM of 1 channel,AP-
123 > 46
1.941e+004



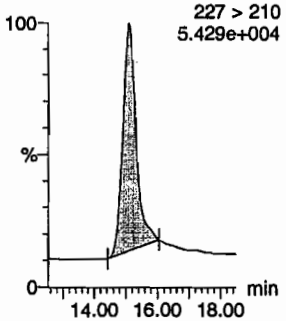
4-Amino-26-dinitrotoluene
F11:MRM of 2 channels,AP-
197 > 167
4.341e+004



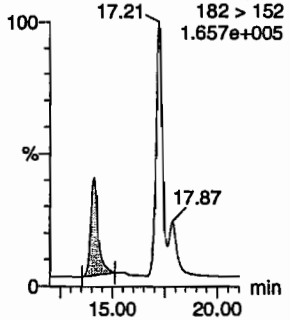
2-Amino-46-dinitrotoluene
F11:MRM of 2 channels,AP-
197 > 180
5.994e+004



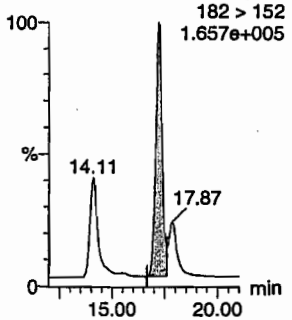
246-Trinitrotoluene
F10:MRM of 1 channel,AP-
227 > 210
5.429e+004



34-dinitrotoluene
F9:MRM of 2 channels,AP-
182 > 152
1.657e+005



26-dinitrotoluene
F9:MRM of 2 channels,AP-
182 > 152
1.657e+005



Hmm 04/15/10

GEL SOP GL-OA-E-056, Method 8321A-Modified / MM = Manual Modification

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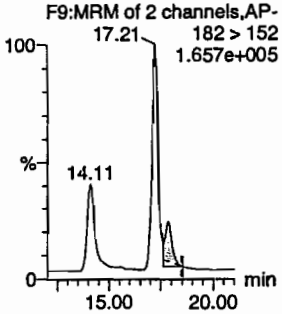
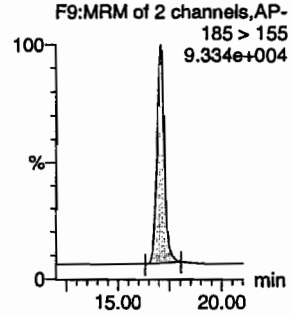
Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA2.qld, Time: Thu Apr 15 14:49:38 2010

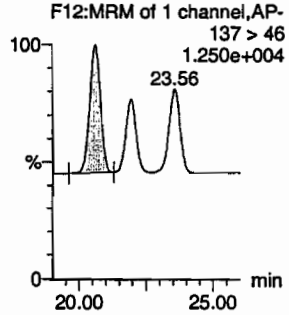
24-dinitrotoluene



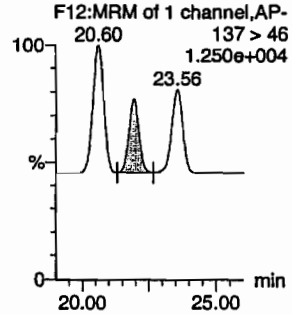
26-dinitrotoluene-d3



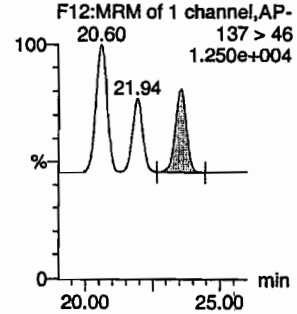
2-Nitrotoluene



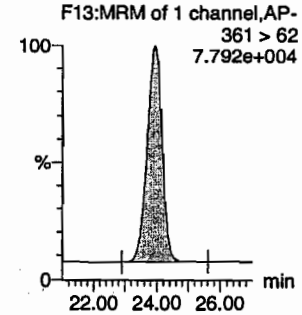
4-Nitrotoluene



3-Nitrotoluene



PETN



ID	Name	Trace	RT	Area	IS Area	Abs Resp	Response	Flags	Mod Date	Mod Time	ng/mL	%Rec	%Dev	S/N
WXX100412-07CCV	HMX	176 > 102	5.19	36596.680	5925.609	36596.680	3088.010	bb			728.5335	121.4	21.4	5141.8
WXX100412-07CCV	RDX	176 > 102	7.51	25726.684	5925.609	25726.684	2170.805	bb			758.4390	126.4	26.4	3364.9
WXX100412-07CCV	135-Trinitrobenzene	213 > 183	10.05	32794.504	5925.609	32794.504	2767.184	bb			640.1104	106.7	6.7	351.3
WXX100412-07CCV	13-Dinitrobenzene-d4	172 > 142	11.87	5925.609		5925.609	5925.609	bb			503.8471	100.8	0.8	575.0
WXX100412-07CCV	13-Dinitrobenzene	168 > 138	11.97	9985.775	5925.609	9985.775	842.595	bb			630.1803	105.0	5.0	1402.5
WXX100412-07CCV	Tetryl	241 > 181	12.45	10138.589	5925.609	10138.589	855.489	bb			659.9605	110.0	10.0	994.9
WXX100412-07CCV	Nitrobenzene	123 > 46	13.39	4823.688	5925.609	4823.688	407.020	bb			648.8485	108.1	8.1	584.8
WXX100412-07CCV	4-Amino-26-dinitrotoluene	197 > 167	15.31	15567.705	36846.086	15567.705	211.253	MM	15-Apr-10	14:32:43	625.4488	104.2	4.2	264.7
WXX100412-07CCV	2-Amino-46-dinitrotoluene	197 > 180	16.18	22039.658	36846.086	22039.658	299.077	bb			583.9103	97.3	-2.7	285.8
WXX100412-07CCV	246-Trinitrotoluene	227 > 210	15.09	23071.260	36846.086	23071.260	313.076	bb			719.6608	119.9	19.9	213.5
WXX100412-07CCV	34-dinitrotoluene	182 > 152	14.11	25759.158	36846.086	25759.158	349.551	bb			338.9985	113.0	13.0	733.1
WXX100412-07CCV	26-dinitrotoluene	182 > 152	17.21	55381.418	36846.086	55381.418	751.524	MM	15-Apr-10	14:38:53	634.9806	105.8	5.8	1901.5
WXX100412-07CCV	24-dinitrotoluene	182 > 152	17.87	13126.327	36846.086	13126.327	178.124	MM	15-Apr-10	14:47:19	682.4564	113.7	13.7	382.3
WXX100412-07CCV	26-dinitrotoluene-d3	185 > 155	17.06	36846.086		36846.086	36846.086	bb			526.6258	105.3	5.3	2600.7
WXX100412-07CCV	2-Nitrotoluene	137 > 46	20.60	3249.737	36846.086	3249.737	44.099	bb			509.2935	84.9	-15.1	1231.5
WXX100412-07CCV	4-Nitrotoluene	137 > 46	21.94	1738.239	36846.086	1738.239	23.588	bb			568.6642	94.8	-5.2	705.7
WXX100412-07CCV	3-Nitrotoluene	137 > 46	23.56	2123.145	36846.086	2123.145	28.811	bb			494.1680	82.4	-17.6	802.7
WXX100412-07CCV	PETN	361 > 62	23.94	39290.367	36846.086	39290.367	533.169	bb			598.4368	99.7	-0.3	10176.7

✓

GEL SOP GL-OA-E-056, Method 8321A-Modified / MM = Manual Modification

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PROPRIETARY INFORMATION-No unauthorized reproduction without written permission from GEL.

GRAND MEAN AVERAGE

Vendor: Restek
Date of Analysis: 04/14/10
Time of Injection: 0928
Standard Number: WXX100412-07CCV
Data File: EXP0412086a

HMX	121.4
RDX	126.4
135-TNB	106.7
13-DNB	105.0
Tetryl	110.0
Nitrobenzene	108.1
4A-26-DNT	104.2
2A-46-DNT	97.3
246-TNT	119.9
34-DNT(surr)	113.0
26-DNT	105.8
24-DNT	113.7
2-NT	84.9
4-NT	94.8
3-NT	82.4
PETN	99.7
Total	1693.3
Average	105.8

MAP 4/15/10

HMC 04/15/10

ICV Limits 85-115%
CRI Limits 70-130%
CCV Limits 85-115%
No single analyte > +/- 60%

PROPRIETARY INFORMATION-No unauthorized reproduction without written permission from GEL.

7B
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10–2089

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0412088a

Analysis Date: 14–APR–10 10:27

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

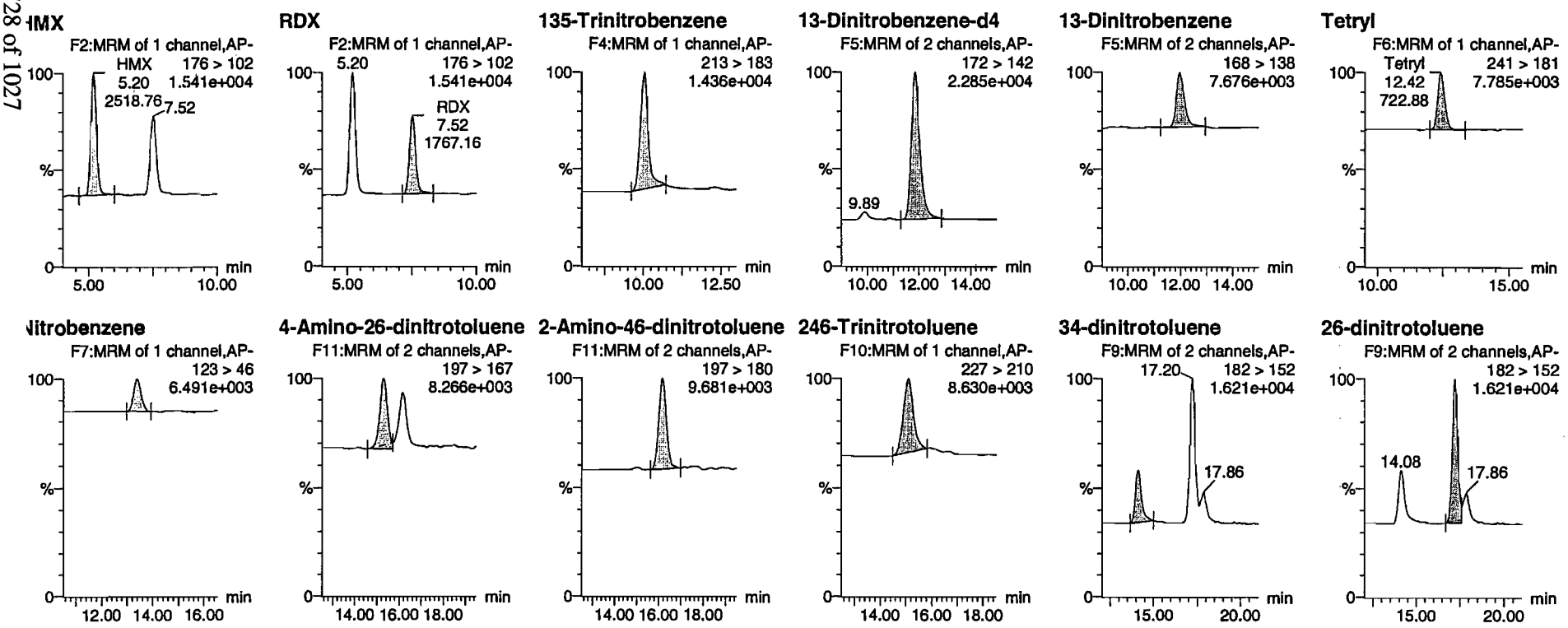
Compound	True	Found	Recovery	Q
2,4–Dinitrotoluene	40	44.534	111	
2,6–Dinitrotoluene	40	41.071	103	
2,6–Dinitrotoluene–d3	500	564.12	113	
2–Amino–4,6–dinitrotoluene	40	40.361	101	
3,4–Dinitrotoluene	20	19.605	98	
4–Amino–2,6–dinitrotoluene	40	41.914	105	
HMX	40	44.962	112	
Nitrobenzene	40	41.366	103	
PETN	40	43.945	110	
RDX	40	46.716	117	
Tetryl	40	42.195	105	
m–Dinitrobenzene	40	43.864	110	
m–Nitrotoluene	40	39.461	99	
o–Nitrotoluene	40	36.318	91	
p–Nitrotoluene	40	34.986	87	
1,3,5–Trinitrobenzene	40	45.309	113	
1,3–Dinitrobenzene–d4	500	561.881	112	
2,4,6–Trinitrotoluene	40	39.504	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%
OtherTarget Analytes 70–130%
Column used to flag Recovery outside of Limits
* Value outside of Recovery Limits

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA2.qld, Time: Thu Apr 15 14:49:38 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0412088a
Date: 14-Apr-2010
Time: 10:27:15
ID: WXX100412-08CRI
Vial: 1:1,C

MAP 4/15/10

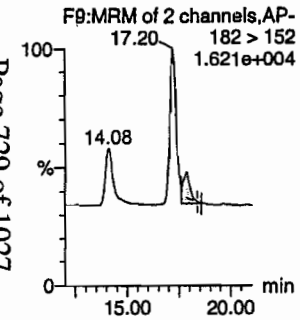


Shine 04/15/10

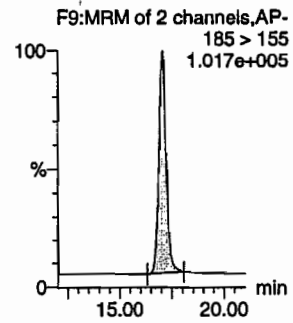
PROPRIETARY INFORMATION-No unauthorized reproduction without written permission from GEL.

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA2.qld, Time: Thu Apr 15 14:49:38 2010

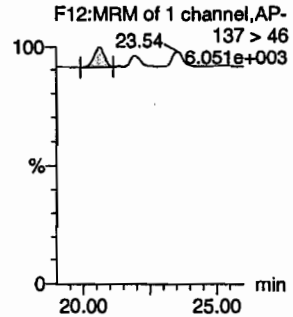
24-dinitrotoluene



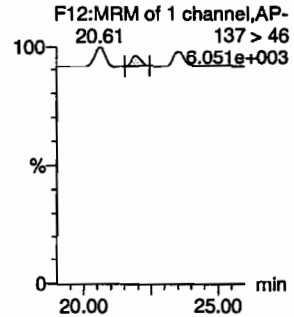
26-dinitrotoluene-d3



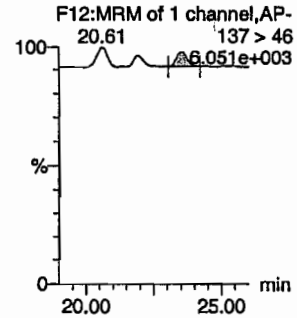
2-Nitrotoluene



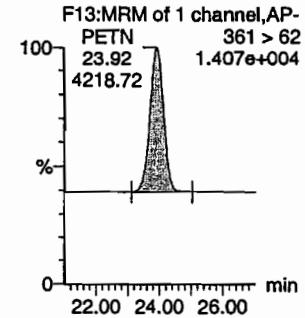
4-Nitrotoluene



3-Nitrotoluene



PETN



ID	Name	Trace	RT	Area	IS Area	Abs Resp	Response	Flags	Mod Date	Mod Time	ng/mL	%Rec	%Dev	S/N
WXX100412-08CRI	HMX	176 > 102	5.20	2518.764	6608.135	2518.764	190.581	bb			44.9624	112.4	12.4	168.1
WXX100412-08CRI	RDX	176 > 102	7.52	1767.162	6608.135	1767.162	133.711	bb			46.7162	116.8	16.8	107.7
WXX100412-08CRI	135-Trinitrobenzene	213 > 183	10.05	2588.661	6608.135	2588.661	195.869	bb			45.3089	113.3	13.3	259.5
WXX100412-08CRI	13-Dinitrobenzene-d4	172 > 142	11.87	6608.135		6608.135	6608.135	bb			561.8815	112.4	12.4	525.5
WXX100412-08CRI	13-Dinitrobenzene	168 > 138	11.97	775.124	6608.135	775.124	58.649	bb			43.8640	109.7	9.7	102.3
WXX100412-08CRI	Tetryl	241 > 181	12.42	722.880	6608.135	722.880	54.696	bb			42.1950	105.5	5.5	76.9
WXX100412-08CRI	Nitrobenzene	123 > 46	13.37	342.945	6608.135	342.945	25.949	bb			41.3659	103.4	3.4	36.3
WXX100412-08CRI	4-Amino-26-dinitrotoluene	197 > 167	15.29	1117.541	39469.445	1117.541	14.157	MM	15-Apr-10	14:32:49	41.9142	104.8	4.8	44.4
WXX100412-08CRI	2-Amino-46-dinitrotoluene	197 > 180	16.16	1631.894	39469.445	1631.894	20.673	bb			40.3612	100.9	0.9	143.7
WXX100412-08CRI	246-Trinitrotoluene	227 > 210	15.10	1356.600	39469.445	1356.600	17.185	bb			39.5038	98.8	-1.2	106.5
WXX100412-08CRI	34-dinitrotoluene	182 > 152	14.08	1595.757	39469.445	1595.757	20.215	bb			19.6048	98.0	-2.0	27.8
WXX100412-08CRI	26-dinitrotoluene	182 > 152	17.20	3837.149	39469.445	3837.149	48.609	MM	15-Apr-10	14:39:01	41.0710	102.7	2.7	77.6
WXX100412-08CRI	24-dinitrotoluene	182 > 152	17.86	917.556	39469.445	917.556	11.624	MM	15-Apr-10	14:46:47	44.5343	111.3	11.3	16.1
WXX100412-08CRI	26-dinitrotoluene-d3	185 > 155	17.05	39469.445		39469.445	39469.445	bb			564.1203	112.8	12.8	3837.3
WXX100412-08CRI	2-Nitrotoluene	137 > 46	20.61	248.237	39469.445	248.237	3.145	bb			36.3176	90.8	-9.2	34.5
WXX100412-08CRI	4-Nitrotoluene	137 > 46	21.93	114.557	39469.445	114.557	1.451	bb			34.9863	87.5	-12.5	18.2
WXX100412-08CRI	3-Nitrotoluene	137 > 46	23.54	181.611	39469.445	181.611	2.301	bb			39.4609	98.7	-1.3	25.6
WXX100412-08CRI	PETN	361 > 62	23.92	4218.715	39469.445	4218.715	53.443	bb			43.9446	109.9	9.9	1434.9

GEL SOP GL-OA-E-056, Method 8321A-Modified / MM = Manual Modification

PROPRIETARY INFORMATION-No unauthorized reproduction without written permission from GEL.

PROPRIETARY INFORMATION-No unauthorized reproduction without written permission from GEL.

GRAND MEAN AVERAGE

Vendor:	UltraScientific
Date of Analysis	04/14/10
Time of Injection	1027
Standard Number	WXX100412-08CRI
Data File	EXP0412088a

HMX	112.4
RDX	116.8
135-TNB	113.3
13-DNB	109.7
Tetryl	105.5
Nitrobenzene	103.4
4A-26-DNT	104.8
2A-46-DNT	100.9
246-TNT	98.8
34-DNT(surr)	98.0
26-DNT	102.7
24-DNT	111.3
2-NT	90.8
4-NT	87.5
3-NT	98.7
PETN	109.9
Total	1664.5
Average	104.0

HMP 4/19/10

Hmm 04/15/10

ICV Limits 85-115%
CRI Limits 70-130%
CCV Limits 85-115%
No single analyte > +/- 60%

PROPRIETARY INFORMATION-No unauthorized reproduction without written permission from GEL.

7A
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10–2089

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0412099a

Analysis Date: 14–APR–10 15:51

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

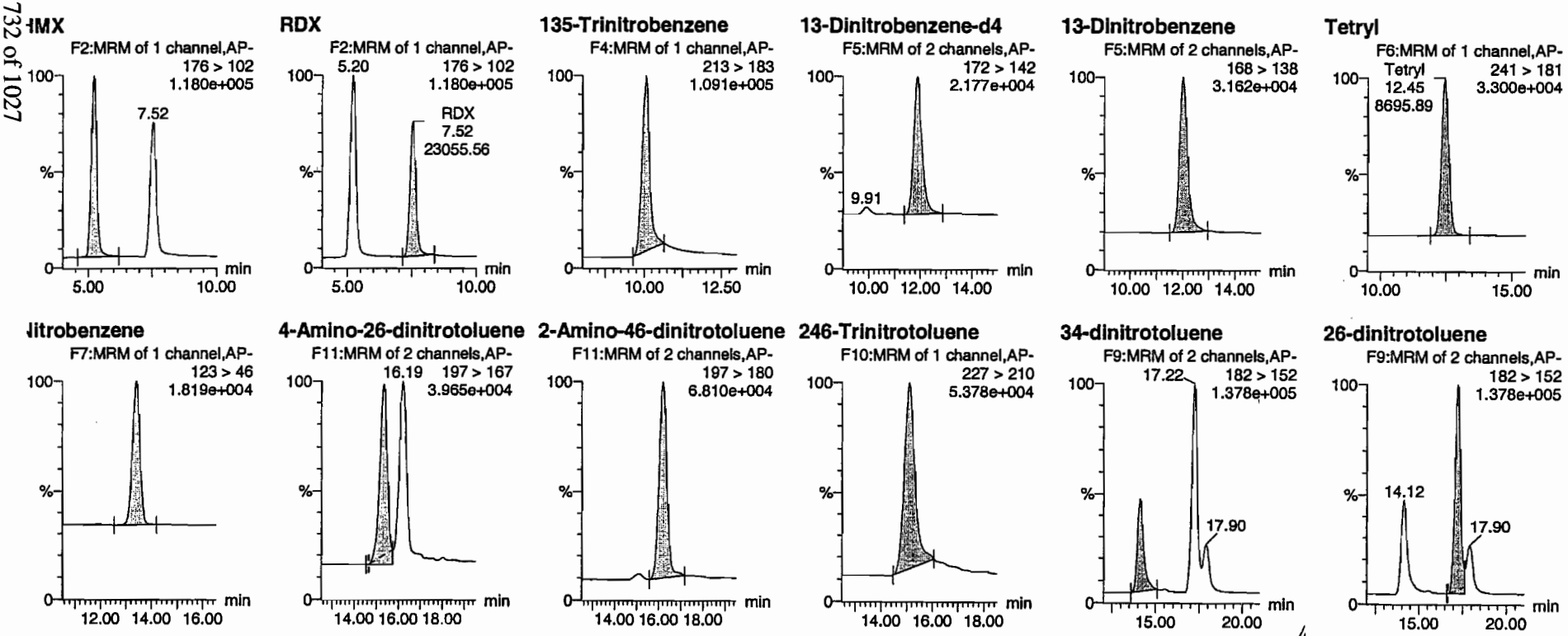
Compound	True	Found	Recovery	Q
1,3–Dinitrobenzene–d4	500	491.595	98	
2,4,6–Trinitrotoluene	600	674.619	112	
2,4–Dinitrotoluene	600	626.903	104	
2,6–Dinitrotoluene	600	553.103	92	
2,6–Dinitrotoluene–d3	500	536.906	107	
2–Amino–4,6–dinitrotoluene	600	667.633	111	
3,4–Dinitrotoluene	300	312.147	104	
4–Amino–2,6–dinitrotoluene	600	540.22	90	
HMX	600	594.344	99	
Nitrobenzene	600	585.337	98	
PETN	600	591.137	99	
RDX	600	696.633	116	
Tetryl	600	580.157	97	
m–Dinitrobenzene	600	589.943	98	
m–Nitrotoluene	600	455.366	76	*
o–Nitrotoluene	600	473.586	79	*
p–Nitrotoluene	600	537.354	90	
1,3,5–Trinitrobenzene	600	587.126	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%
OtherTarget Analytes 80–120%
Column used to flag Recovery outside of Limits
* Value outside of Recovery Limits

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA2.qld, Time: Thu Apr 15 14:49:38 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0412099a
Date: 14-Apr-2010
Time: 15:51:48
ID: WXX100412-07CCV
Vial: 1:1,B

MM 4/15/10



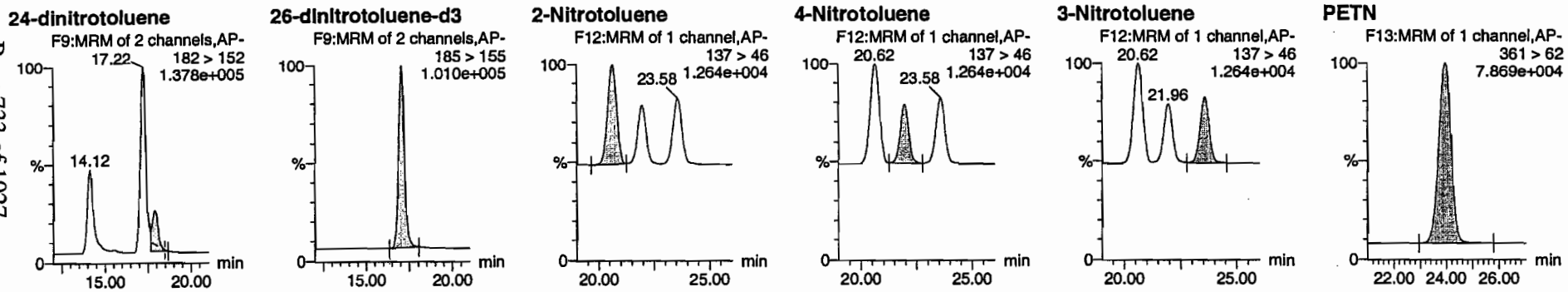
THM 04/15/10

GEL SOP GL-OA-E-056, Method 8321A-Modified / MM = Manual Modification

PROPRIETARY INFORMATION-No unauthorized reproduction without written permission from GEL.

Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA2.qld, Time: Thu Apr 15 14:49:38 2010



ID	Name	Trace	RT	Area	IS Area	Abs.Resp	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N
WXX100412-07CCV	HMX	176 > 102	5.20	29129.906	5781.517	29129.906	2519.227	bb			594.3443	99.1	-0.9	3427.6
WXX100412-07CCV	RDX	176 > 102	7.52	23055.561	5781.517	23055.561	1993.902	bb			696.6325	116.1	16.1	2523.6
WXX100412-07CCV	135-Trinitrobenzene	213 > 183	10.05	29348.527	5781.517	29348.527	2538.134	bb			587.1260	97.9	-2.1	1074.2
WXX100412-07CCV	13-Dinitrobenzene-d4	172 > 142	11.87	5781.517		5781.517	5781.517	bb			491.5952	98.3	-1.7	444.6
WXX100412-07CCV	13-Dinitrobenzene	168 > 138	12.00	9120.854	5781.517	9120.854	788.794	bb			589.9426	98.3	-1.7	565.8
WXX100412-07CCV	Tetryl	241 > 181	12.45	8695.887	5781.517	8695.887	752.042	bb			580.1570	96.7	-3.3	395.8
WXX100412-07CCV	Nitrobenzene	123 > 46	13.41	4245.711	5781.517	4245.711	367.180	bb			585.3366	97.6	-2.4	461.0
WXX100412-07CCV	4-Amino-26-dinitrotoluene	197 > 167	15.32	13708.783	37565.328	13708.783	182.466	MM	15-Apr-10	14:33:18	540.2195	90.0	-10.0	331.8
WXX100412-07CCV	2-Amino-46-dinitrotoluene	197 > 180	16.19	25691.676	37565.328	25691.676	341.960	bb			667.6332	111.3	11.3	921.1
WXX100412-07CCV	246-Trinitrotoluene	227 > 210	15.10	22049.445	37565.328	22049.445	293.481	bb			674.6187	112.4	12.4	708.4
WXX100412-07CCV	34-dinitrotoluene	182 > 152	14.12	24181.838	37565.328	24181.838	321.864	bb			312.1473	104.0	4.0	291.1
WXX100412-07CCV	26-dinitrotoluene	182 > 152	17.22	49181.945	37565.328	49181.945	654.619	MM	15-Apr-10	14:39:26	553.1033	92.2	-7.8	650.3
WXX100412-07CCV	24-dinitrotoluene	182 > 152	17.90	12293.182	37565.328	12293.182	163.624	MM	15-Apr-10	14:46:34	626.9027	104.5	4.5	142.2
WXX100412-07CCV	26-dinitrotoluene-d3	185 > 155	17.05	37565.328		37565.328	37565.328	bb			536.9056	107.4	7.4	2208.7
WXX100412-07CCV	2-Nitrotoluene	137 > 46	20.62	3080.883	37565.328	3080.883	41.007	bb			473.5865	78.9	-21.1	632.2
WXX100412-07CCV	4-Nitrotoluene	137 > 46	21.96	1674.595	37565.328	1674.595	22.289	bb			537.3538	89.6	-10.4	366.5
WXX100412-07CCV	3-Nitrotoluene	137 > 46	23.58	1994.627	37565.328	1994.627	26.549	bb			455.3662	75.9	-24.1	410.8
WXX100412-07CCV	PETN	361 > 62	23.95	39648.863	37565.328	39648.863	527.732	bb			591.1370	98.5	-1.5	6825.7

GEL SOP GL-OA-E-056, Method 8321A-Modified / MM = Manual Modification

PROPRIETARY INFORMATION-No unauthorized reproduction without written permission from GEL.

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GRAND MEAN AVERAGE

Vendor: Restek
Date of Analysis: 04/14/10
Time of Injection: 1551
Standard Number: WXX100412-07CCV
Data File: EXP0412099a

HMX	99.1
RDX	116.1
135-TNB	97.9
13-DNB	98.3
Tetryl	96.7
Nitrobenzene	97.6
4A-26-DNT	90.0
2A-46-DNT	111.3
246-TNT	112.4
34-DNT(surr)	104.0
26-DNT	92.2
24-DNT	104.5
2-NT	78.9
4-NT	89.6
3-NT	75.9
PETN	98.5
Total	1563.0
Average	97.7

MPP 4/15/10

Hmc 04/15/10

ICV Limits 85-115%
CRI Limits 70-130%
CCV Limits 85-115%
No single analyte > +/- 60%

PROPRIETARY INFORMATION-No unauthorized reproduction without written permission from GEL.

7B
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10–2089

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0412101a

Analysis Date: 14–APR–10 16:50

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

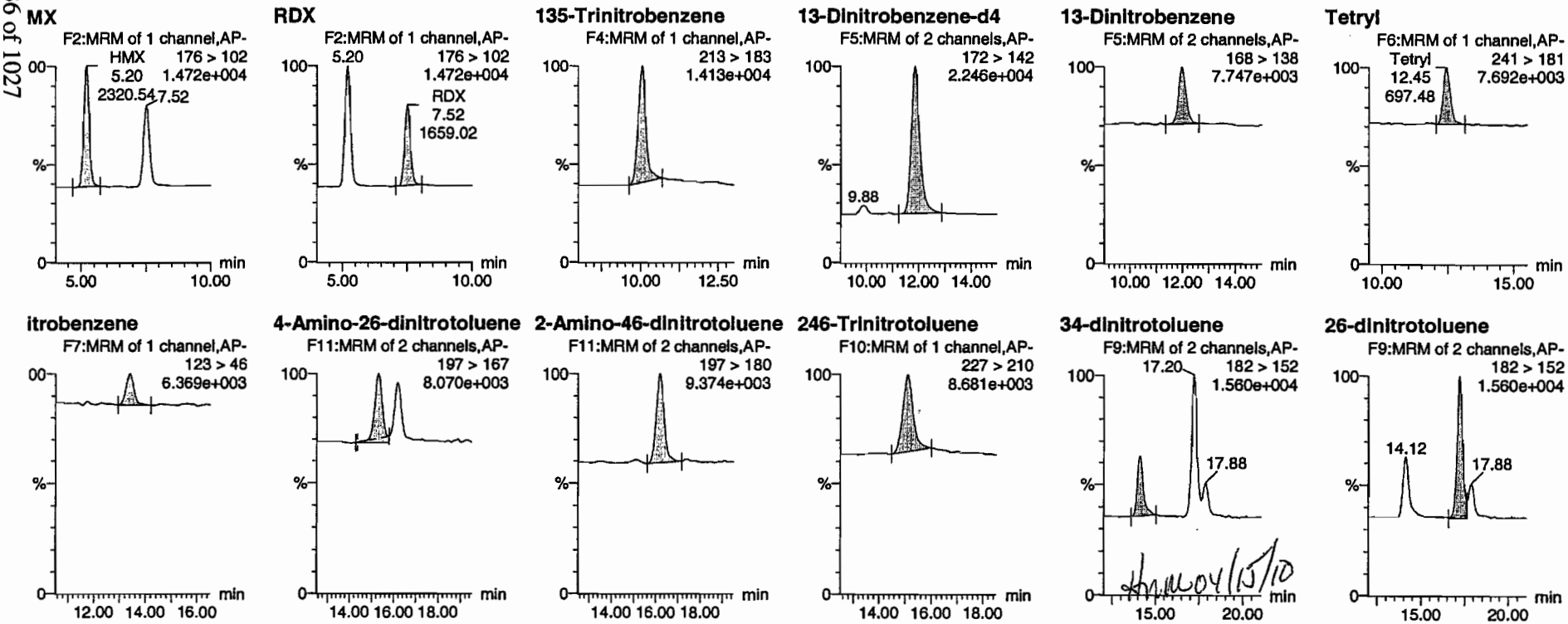
Compound	True	Found	Recovery	Q
m–Dinitrobenzene	40	42.925	107	
m–Nitrotoluene	40	44.02	110	
o–Nitrotoluene	40	38.263	96	
p–Nitrotoluene	40	43.808	110	
1,3,5–Trinitrobenzene	40	44.986	112	
1,3–Dinitrobenzene–d4	500	543.053	109	
2,4,6–Trinitrotoluene	40	43.225	108	
2,4–Dinitrotoluene	40	42.315	106	
2,6–Dinitrotoluene	40	41.752	104	
2,6–Dinitrotoluene–d3	500	539.814	108	
2–Amino–4,6–dinitrotoluene	40	41.883	105	
3,4–Dinitrotoluene	20	22.167	111	
4–Amino–2,6–dinitrotoluene	40	43.721	109	
HMX	40	42.86	107	
Nitrobenzene	40	41.08	103	
PETN	40	51.56	129	
RDX	40	45.378	113	
Tetryl	40	42.124	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%
OtherTarget Analytes 70–130%
Column used to flag Recovery outside of Limits
* Value outside of Recovery Limits

PROPRIETARY INFORMATION-No unauthorized reproduction without written permission from GEL.

ame: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0412101a
ate: 14-Apr-2010
ime: 16:50:52
): WXX100412-08CR
ial: 1:1,C

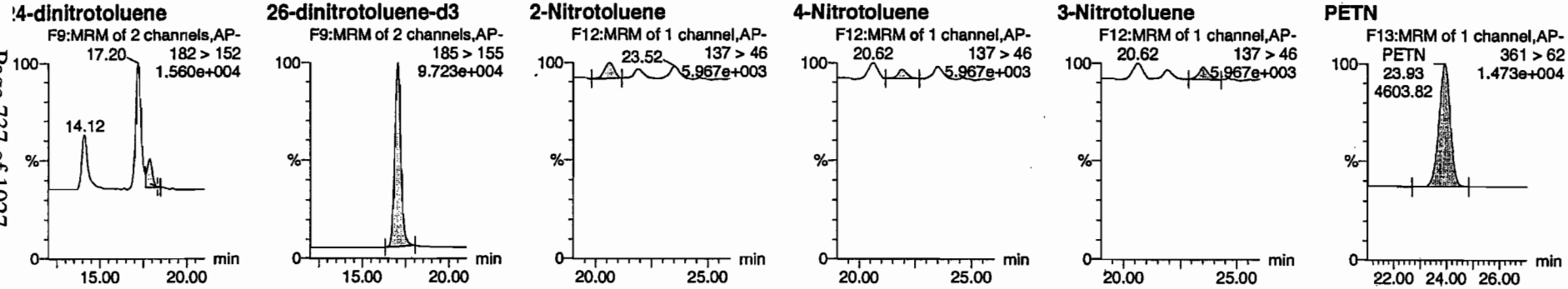
MM 4/15/10



HMM 04/15/10

Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA2.qld, Time: Thu Apr 15 14:49:38 2010



ID	Name	Trace	RT	Area	IS Area	Abs Resp	Response	Flags	Mod Date	Mod Time	ng/mL	%Rec	%Dev	S/N
WXX100412-08CRI	HMX	176 > 102	5.20	2320.539	6386.701	2320.539	181.670	bb			42.8601	107.2	7.2	262.8
WXX100412-08CRI	RDX	176 > 102	7.52	1659.023	6386.701	1659.023	129.881	bb			45.3780	113.4	13.4	175.9
WXX100412-08CRI	135-Trinitrobenzene	213 > 183	10.05	2484.099	6386.701	2484.099	194.474	bb			44.9862	112.5	12.5	388.0
WXX100412-08CRI	13-Dinitrobenzene-d4	172 > 142	11.87	6386.701		6386.701	6386.701	bb			543.0532	108.6	8.6	950.1
WXX100412-08CRI	13-Dinitrobenzene	168 > 138	11.97	733.119	6386.701	733.119	57.394	bb			42.9254	107.3	7.3	81.3
WXX100412-08CRI	Tetryl	241 > 181	12.45	697.482	6386.701	697.482	54.604	bb			42.1240	105.3	5.3	76.5
WXX100412-08CRI	Nitrobenzene	123 > 46	13.37	329.159	6386.701	329.159	25.769	bb			41.0796	102.7	2.7	40.2
WXX100412-08CRI	4-Amino-26-dinitrotoluene	197 > 167	15.29	1115.476	37768.832	1115.476	14.767	MM	15-Apr-10	14:33:30	43.7205	109.3	9.3	61.9
WXX100412-08CRI	2-Amino-46-dinitrotoluene	197 > 180	16.19	1620.452	37768.832	1620.452	21.452	bb			41.8828	104.7	4.7	197.1
WXX100412-08CRI	246-Trinitrotoluene	227 > 210	15.10	1420.421	37768.832	1420.421	18.804	bb			43.2246	108.1	8.1	88.1
WXX100412-08CRI	34-dinitrotoluene	182 > 152	14.12	1726.544	37768.832	1726.544	22.857	bb			22.1667	110.8	10.8	80.9
WXX100412-08CRI	26-dinitrotoluene	182 > 152	17.20	3732.682	37768.832	3732.682	49.415	MM	15-Apr-10	14:39:39	41.7518	104.4	4.4	193.1
WXX100412-08CRI	24-dinitrotoluene	182 > 152	17.88	834.260	37768.832	834.260	11.044	MM	15-Apr-10	14:46:19	42.3147	105.8	5.8	43.0
WXX100412-08CRI	26-dinitrotoluene-d3	185 > 155	17.05	37768.832		37768.832	37768.832	bb			539.8142	108.0	8.0	2120.5
WXX100412-08CRI	2-Nitrotoluene	137 > 46	20.62	250.264	37768.832	250.264	3.313	bb			38.2627	95.7	-4.3	37.0
WXX100412-08CRI	4-Nitrotoluene	137 > 46	21.91	137.262	37768.832	137.262	1.817	bb			43.8081	109.5	9.5	21.5
WXX100412-08CRI	3-Nitrotoluene	137 > 46	23.52	193.866	37768.832	193.866	2.566	bb			44.0204	110.1	10.1	29.9
WXX100412-08CRI	PETN	361 > 62	23.93	4603.820	37768.832	4603.820	60.947	bb			51.5596	128.9	28.9	1430.7

GEL SOP GL-OA-E-056, Method 8321A-Modified / MM = Manual Modification

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PROPRIETARY INFORMATION-No unauthorized reproduction without written permission from GEL.

GRAND MEAN AVERAGE

Vendor:	UltraScientific
Date of Analysis	04/14/10
Time of Injection	1650
Standard Number	WXX100412-08CRI
Data File	EXP0412101a

HMX	107.2
RDX	113.4
135-TNB	112.5
13-DNB	107.3
Tetryl	105.3
Nitrobenzene	102.7
4A-26-DNT	109.3
2A-46-DNT	104.7
246-TNT	108.1
34-DNT(surr)	110.8
26-DNT	104.4
24-DNT	105.8
2-NT	95.7
4-NT	109.5
3-NT	110.1
PETN	128.9
Total	1735.7
Average	108.5

ICV Limits 85-115%
CRI Limits 70-130%
CCV Limits 85-115%
No single analyte > +/- 60%

PROPRIETARY INFORMATION-No unauthorized reproduction without written permission from GEL.

7A
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10–2089

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0412110a

Analysis Date: 14–APR–10 21:16

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

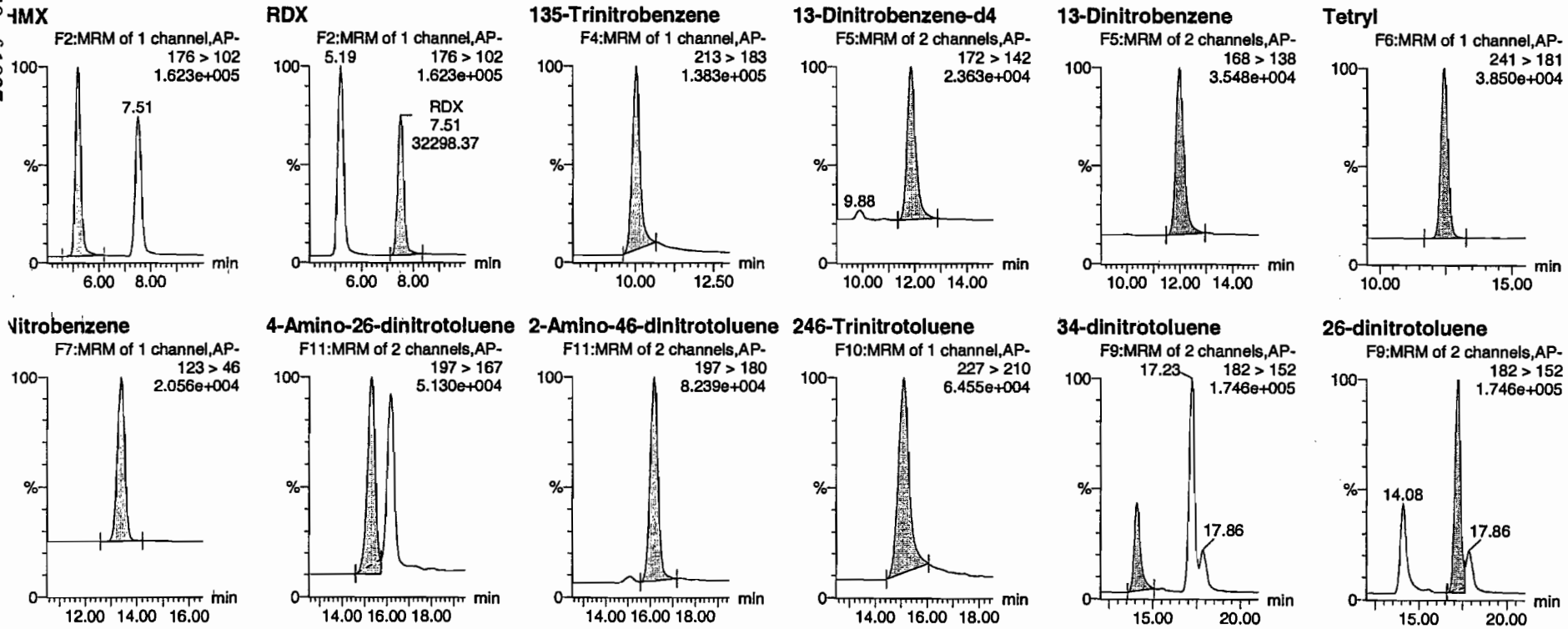
Compound	True	Found	Recovery	Q
PETN	600	560.884	93	
RDX	600	812.713	135	*
Tetryl	600	586.004	98	
m–Dinitrobenzene	600	583.764	97	
m–Nitrotoluene	600	456.606	76	*
o–Nitrotoluene	600	533.736	89	
p–Nitrotoluene	600	563.245	94	
1,3,5–Trinitrobenzene	600	622.706	104	
1,3–Dinitrobenzene–d4	500	590.309	118	
2,4,6–Trinitrotoluene	600	734.878	122	*
2,4–Dinitrotoluene	600	625.592	104	
2,6–Dinitrotoluene	600	616.066	103	
2,6–Dinitrotoluene–d3	500	623.79	125	*
2–Amino–4,6–dinitrotoluene	600	702.949	117	
3,4–Dinitrotoluene	300	328.505	110	
4–Amino–2,6–dinitrotoluene	600	656.808	109	
HMX	600	703.603	117	
Nitrobenzene	600	604.039	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%
OtherTarget Analytes 80–120%
Column used to flag Recovery outside of Limits
* Value outside of Recovery Limits

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA2.qld, Time: Thu Apr 15 14:49:38 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0412110a
Date: 14-Apr-2010
Time: 21:16:17
ID: WXX100412-07CCV
Vial: 1:1,B

MAT 4/15/10

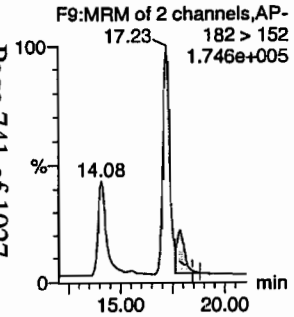


HMW 04/15/10

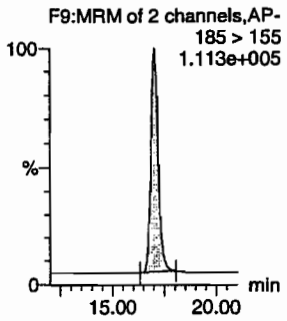
PROPRIETARY INFORMATION-No unauthorized reproduction without written permission from GEL.

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA2.qld, Time: Thu Apr 15 14:49:38 2010

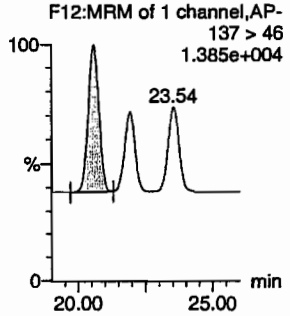
24-dinitrotoluene



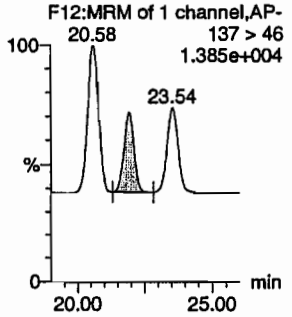
26-dinitrotoluene-d3



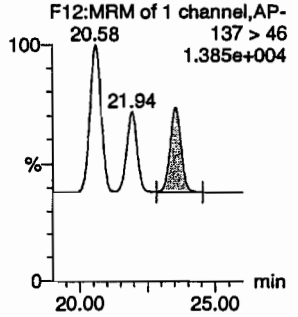
2-Nitrotoluene



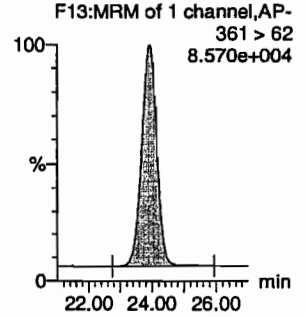
4-Nitrotoluene



3-Nitrotoluene



PETN



ID	Name	Trace	RT	Area	IS Area	Abs Resp	Response	Flags	Mod Date	Mod Time	ng/mL	%Rec	%Dev	S/N
WXX100412-07CCV	HMX	176 > 102	5.19	41409.535	6942.459	41409.535	2982.339	bb			703.6033	117.3	17.3	8996.4
WXX100412-07CCV	RDX	176 > 102	7.51	32298.371	6942.459	32298.371	2326.148	bb			812.7129	135.5	35.5	6607.2
WXX100412-07CCV	135-Trinitrobenzene	213 > 183	10.04	37377.461	6942.459	37377.461	2691.947	bb			622.7063	103.8	3.8	2663.3
WXX100412-07CCV	13-Dinitrobenzene-d4	172 > 142	11.84	6942.459		6942.459	6942.459	bb			590.3086	118.1	18.1	545.1
WXX100412-07CCV	13-Dinitrobenzene	168 > 138	11.97	10837.637	6942.459	10837.637	780.533	bb			583.7640	97.3	-2.7	452.4
WXX100412-07CCV	Tetryl	241 > 181	12.45	10547.282	6942.459	10547.282	759.621	bb			586.0041	97.7	-2.3	739.6
WXX100412-07CCV	Nitrobenzene	123 > 46	13.37	5261.153	6942.459	5261.153	378.911	bb			604.0386	100.7	0.7	377.3
WXX100412-07CCV	4-Amino-26-dinitrotoluene	197 > 167	15.29	19364.578	43644.344	19364.578	221.845	MM	15-Apr-10	14:33:43	656.8083	109.5	9.5	721.6
WXX100412-07CCV	2-Amino-46-dinitrotoluene	197 > 180	16.16	31428.164	43644.344	31428.164	360.049	bb			702.9488	117.2	17.2	2126.6
WXX100412-07CCV	246-Trinitrotoluene	227 > 210	15.10	27905.869	43644.344	27905.869	319.696	bb			734.8784	122.5	22.5	1188.2
WXX100412-07CCV	34-dinitrotoluene	182 > 152	14.08	29567.379	43644.344	29567.379	338.731	bb			328.5053	109.5	9.5	608.2
WXX100412-07CCV	26-dinitrotoluene	182 > 152	17.23	63645.477	43644.344	63645.477	729.138	MM	15-Apr-10	14:39:56	616.0661	102.7	2.7	1469.8
WXX100412-07CCV	24-dinitrotoluene	182 > 152	17.86	14252.675	43644.344	14252.675	163.282	MM	15-Apr-10	14:46:00	625.5924	104.3	4.3	283.7
WXX100412-07CCV	26-dinitrotoluene-d3	185 > 155	17.05	43644.344		43644.344	43644.344	bb			623.7904	124.8	24.8	2498.6
WXX100412-07CCV	2-Nitrotoluene	137 > 46	20.58	4034.070	43644.344	4034.070	46.215	bb			533.7363	89.0	-11.0	242.6
WXX100412-07CCV	4-Nitrotoluene	137 > 46	21.94	2039.331	43644.344	2039.331	23.363	bb			563.2452	93.9	-6.1	130.8
WXX100412-07CCV	3-Nitrotoluene	137 > 46	23.54	2323.716	43644.344	2323.716	26.621	bb			456.6058	76.1	-23.9	139.2
WXX100412-07CCV	PETN	361 > 62	23.92	44076.492	43644.344	44076.492	504.951	bb			560.8840	93.5	-6.5	10425.8

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PROPRIETARY INFORMATION-No unauthorized reproduction without written permission from GEL.

GRAND MEAN AVERAGE

Vendor: Restek
Date of Analysis: 04/14/10
Time of Injection: 2116
Standard Number: WXX100412-07CCV
Data File: EXP0412110a

HMX	117.3
RDX	135.5
135-TNB	103.8
13-DNB	97.3
Tetryl	97.7
Nitrobenzene	100.7
4A-26-DNT	109.5
2A-46-DNT	117.2
246-TNT	122.5
34-DNT(surr)	109.5
26-DNT	102.7
24-DNT	104.3
2-NT	89.0
4-NT	93.9
3-NT	76.1
PETN	93.5
Total	1670.5
Average	104.4

HMM 04/15/10

ICV Limits 85-115%
CRI Limits 70-130%
CCV Limits 85-115%
No single analyte > +/- 60%

PROPRIETARY INFORMATION-No unauthorized reproduction without written permission from GEL.

7B
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10–2089

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0412112a

Analysis Date: 14–APR–10 22:15

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5–Trinitrobenzene	40	50.545	126	
1,3–Dinitrobenzene–d4	500	569.204	114	
2,4,6–Trinitrotoluene	40	41.909	105	
2,4–Dinitrotoluene	40	39.806	100	
2,6–Dinitrotoluene	40	41.957	105	
2,6–Dinitrotoluene–d3	500	594.929	119	
2–Amino–4,6–dinitrotoluene	40	38.529	96	
3,4–Dinitrotoluene	20	23.661	118	
4–Amino–2,6–dinitrotoluene	40	40.463	101	
HMX	40	53.023	133	*
Nitrobenzene	40	40.392	101	
PETN	40	47.454	119	
RDX	40	44.101	110	
Tetryl	40	46.996	117	
m–Dinitrobenzene	40	43.619	109	
m–Nitrotoluene	40	40.451	101	
o–Nitrotoluene	40	32.28	81	
p–Nitrotoluene	40	35.73	89	

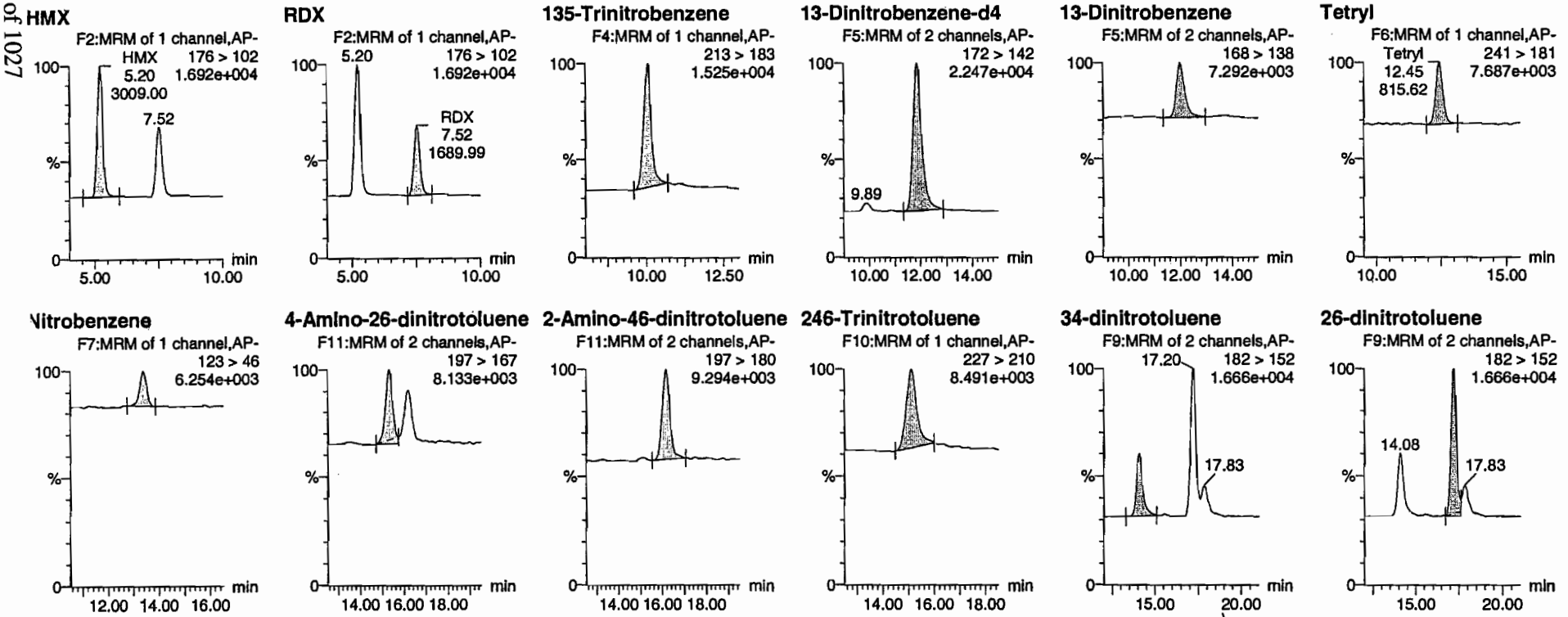
Recovery Limits:
3,4–Dinitrotoluene (Surrogate),TATB, tris(o–cresyl)phosphate, 3,5–Dinitroaniline, 2,6–Diamino–4–nitrotoluene , 2,4–Diamino–6–nitrotoluene 50–150%
OtherTarget Analytes 70–130%
Column used to flag Recovery outside of Limits
* Value outside of Recovery Limits

Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA2.qld, Time: Thu Apr 15 14:49:38 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0412112a
Date: 14-Apr-2010
Time: 22:15:20
ID: WXX100412-08CRI
Vial: 1:1,C

MHT 4/15/10



Hnm 04/15/10

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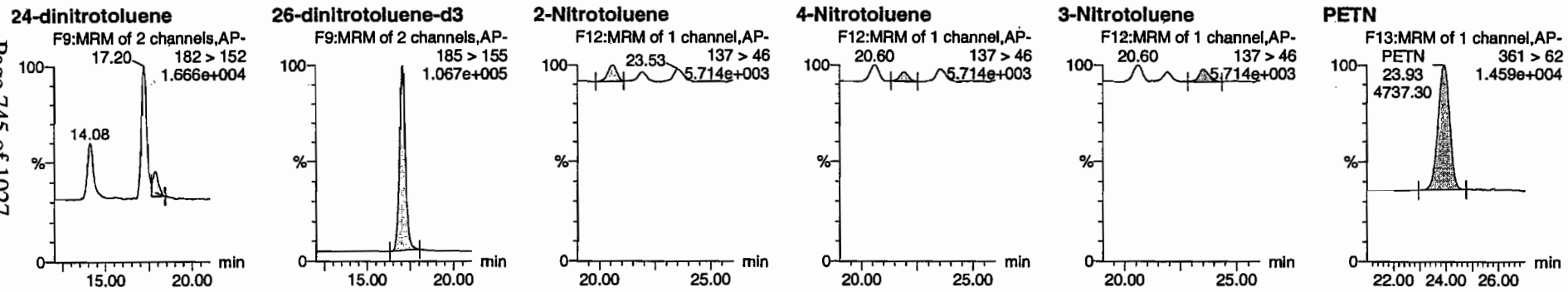
Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA2.qld, Time: Thu Apr 15 14:49:38 2010



ID	Name	Trace	RT	Area	IS Area	Abs Resp	Response	Flags	Mod Date	Mod Time	ng/mL	%Rec	%Dev	S/N
WXX100412-08CRI	HMX	176 > 102	5.20	3008.998	6694.257	3008.998	224.745	bb			53.0225	132.6	32.6	341.7
WXX100412-08CRI	RDX	176 > 102	7.52	1689.986	6694.257	1689.986	126.227	bb			44.1012	110.3	10.3	179.6
WXX100412-08CRI	135-Trinitrobenzene	213 > 183	10.06	2925.460	6694.257	2925.460	218.505	bb			50.5450	126.4	26.4	401.0
WXX100412-08CRI	13-Dinitrobenzene-d4	172 > 142	11.87	6694.257		6694.257	6694.257	bb			569.2043	113.8	13.8	934.1
WXX100412-08CRI	13-Dinitrobenzene	168 > 138	11.97	780.833	6694.257	780.833	58.321	bb			43.6186	109.0	9.0	42.5
WXX100412-08CRI	Tetryl	241 > 181	12.45	815.616	6694.257	815.616	60.919	bb			46.9956	117.5	17.5	56.1
WXX100412-08CRI	Nitrobenzene	123 > 46	13.37	339.236	6694.257	339.236	25.338	bb			40.3921	101.0	1.0	33.7
WXX100412-08CRI	4-Amino-26-dinitrotoluene	197 > 167	15.29	1137.767	41625.012	1137.767	13.667	MM	15-Apr-10	14:33:52	40.4629	101.2	1.2	61.9
WXX100412-08CRI	2-Amino-46-dinitrotoluene	197 > 180	16.16	1642.879	41625.012	1642.879	19.734	bb			38.5287	96.3	-3.7	88.8
WXX100412-08CRI	246-Trinitrotoluene	227 > 210	15.11	1517.791	41625.012	1517.791	18.232	bb			41.9088	104.8	4.8	83.3
WXX100412-08CRI	34-dinitrotoluene	182 > 152	14.08	2031.087	41625.012	2031.087	24.397	bb			23.6609	118.3	18.3	72.8
WXX100412-08CRI	26-dinitrotoluene	182 > 152	17.20	4134.027	41625.012	4134.027	49.658	MM	15-Apr-10	14:40:05	41.9572	104.9	4.9	174.5
WXX100412-08CRI	24-dinitrotoluene	182 > 152	17.83	864.924	41625.012	864.924	10.389	MM	15-Apr-10	14:45:45	39.8058	99.5	-0.5	32.4
WXX100412-08CRI	26-dinitrotoluene-d3	185 > 155	17.07	41625.012		41625.012	41625.012	bb			594.9290	119.0	19.0	2267.7
WXX100412-08CRI	2-Nitrotoluene	137 > 46	20.60	232.688	41625.012	232.688	2.795	bb			32.2798	80.7	-19.3	85.6
WXX100412-08CRI	4-Nitrotoluene	137 > 46	21.93	123.380	41625.012	123.380	1.482	bb			35.7296	89.3	-10.7	47.2
WXX100412-08CRI	3-Nitrotoluene	137 > 46	23.53	196.334	41625.012	196.334	2.358	bb			40.4508	101.1	1.1	65.1
WXX100412-08CRI	PETN	361 > 62	23.93	4737.299	41625.012	4737.299	56.904	bb			47.4540	118.6	18.6	2105.4

GEL SOP GL-OA-E-056, Method 8321A-Modified / MM = Manual Modification

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GRAND MEAN AVERAGE

Vendor:	UltraScientific
Date of Analysis	04/14/10
Time of Injection	2215
Standard Number	WXX100412-08CRI
Data File	EXP0412112a

HMX	132.6
RDX	110.3
135-TNB	126.4
13-DNB	109.0
Tetryl	117.5
Nitrobenzene	101.0
4A-26-DNT	101.2
2A-46-DNT	96.3
246-TNT	104.8
34-DNT(surr)	118.3
26-DNT	104.9
24-DNT	99.5
2-NT	80.7
4-NT	89.3
3-NT	101.1
PETN	118.6
Total	1711.5
Average	107.0

MTT 4/15/10

HMC 04/15/10

ICV Limits 85-115%
CRI Limits 70-130%
CCV Limits 85-115%
No single analyte > +/- 60%

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7A
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC **GEL Job No (SDG):** 10–2089

Lab Code: GEL **GEL Sample ID:** WXXCCV

GEL Data File EXP0412123a **Analysis Date:** 15–APR–10 03:39

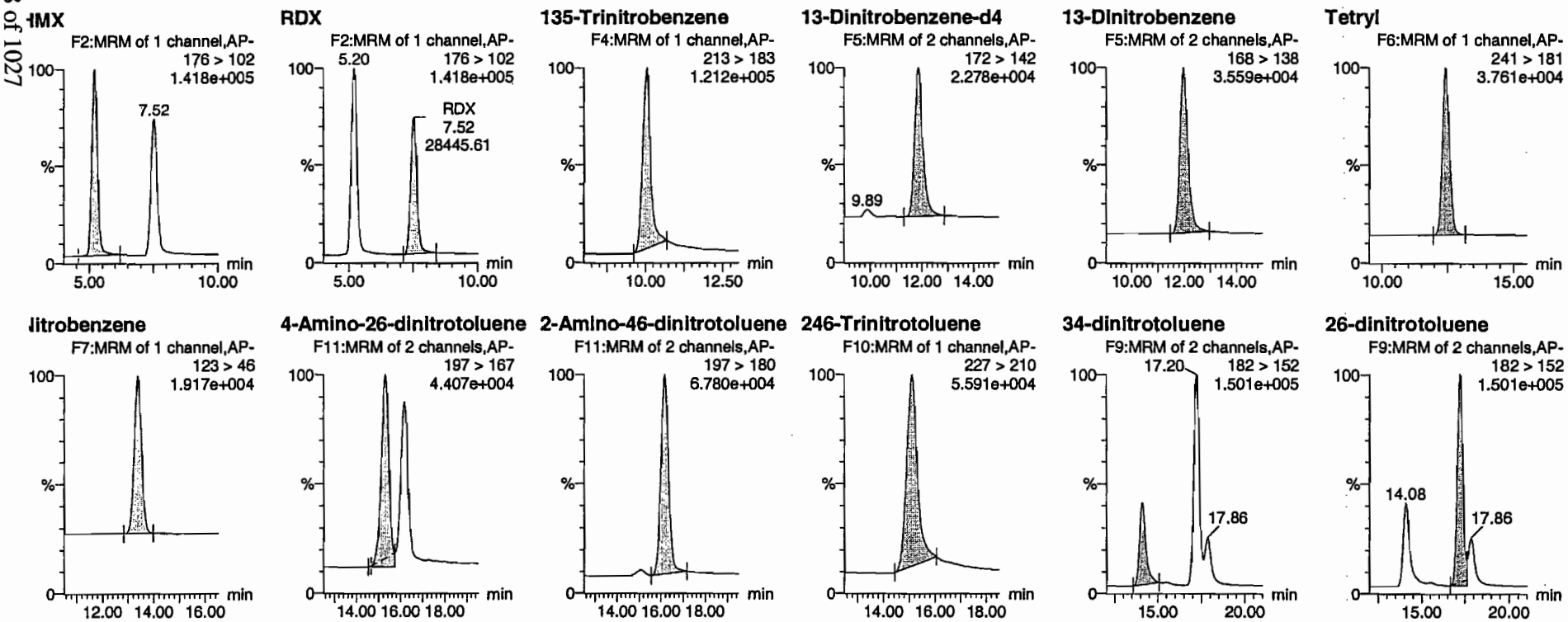
LCMSMS ID: 903 **Column ID:** Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5–Trinitrobenzene	600	608.031	101	
1,3–Dinitrobenzene–d4	500	550.38	110	
2,4,6–Trinitrotoluene	600	708.613	118	
2,4–Dinitrotoluene	600	665.37	111	
2,6–Dinitrotoluene	600	586.777	98	
2,6–Dinitrotoluene–d3	500	551.957	110	
2–Amino–4,6–dinitrotoluene	600	641.691	107	
3,4–Dinitrotoluene	300	300.233	100	
4–Amino–2,6–dinitrotoluene	600	616.042	103	
HMX	600	655.933	109	
Nitrobenzene	600	586.609	98	
PETN	600	677.162	113	
RDX	600	767.694	128	*
Tetryl	600	610.361	102	
m–Dinitrobenzene	600	620.601	103	
m–Nitrotoluene	600	525.023	88	
o–Nitrotoluene	600	538.018	90	
p–Nitrotoluene	600	583.964	97	

Recovery Limits:
3,4–Dinitrotoluene (Surrogate),TATB, tris(o–cresyl)phosphate, 3,5–Dinitroaniline, 2,6–Diamino–4–nitrotoluene , 2,4–Diamino–6–nitrotoluene 70–130%
OtherTarget Analytes 80–120%
Column used to flag Recovery outside of Limits
* Value outside of Recovery Limits

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA2.qld, Time: Thu Apr 15 14:49:38 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0412123a
Date: 15-Apr-2010
Time: 03:39:53
ID: WXX100412-07CCV
Vial: 1:1,B



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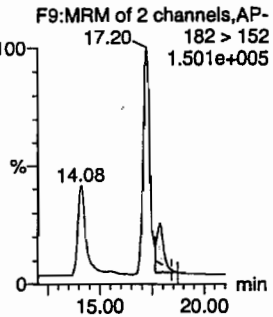
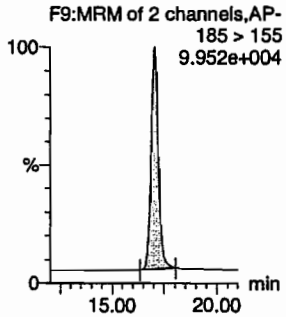
Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA2.qld, Time: Thu Apr 15 14:49:38 2010

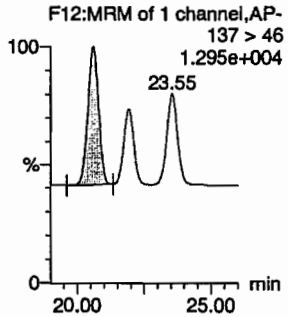
24-dinitrotoluene



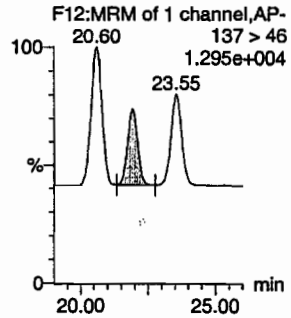
26-dinitrotoluene-d3



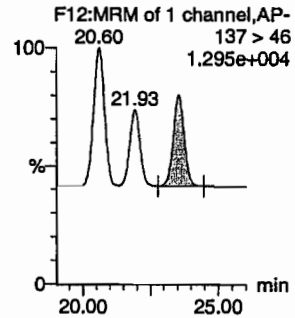
2-Nitrotoluene



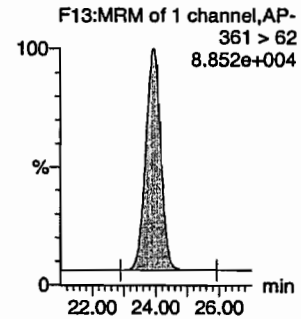
4-Nitrotoluene



3-Nitrotoluene



PETN



D	Name	Trace	RT	Area	IS Area	Abs.Resp	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N
WXX100412-07CCV	HMX	176 > 102	5.20	35992.820	6472.872	35992.820	2780.282	bb			655.9333	109.3	9.3	3380.9
WXX100412-07CCV	RDX	176 > 102	7.52	28445.609	6472.872	28445.609	2197.294	bb			767.6939	127.9	27.9	2474.7
WXX100412-07CCV	135-Trinitrobenzene	213 > 183	10.06	34027.965	6472.872	34027.965	2628.506	bb			608.0311	101.3	1.3	3034.3
WXX100412-07CCV	13-Dinitrobenzene-d4	172 > 142	11.87	6472.872		6472.872	6472.872	bb			550.3802	110.1	10.1	356.3
WXX100412-07CCV	13-Dinitrobenzene	168 > 138	11.97	10742.213	6472.872	10742.213	829.787	bb			620.6014	103.4	3.4	296.8
WXX100412-07CCV	Tetryl	241 > 181	12.42	10242.596	6472.872	10242.596	791.194	bb			610.3605	101.7	1.7	1573.3
WXX100412-07CCV	Nitrobenzene	123 > 46	13.37	4763.748	6472.872	4763.748	367.978	bb			586.6092	97.8	-2.2	548.2
WXX100412-07CCV	4-Amino-26-dinitrotoluene	197 > 167	15.29	16071.117	38618.398	16071.117	208.076	MM	15-Apr-10	14:34:50	616.0421	102.7	2.7	468.5
WXX100412-07CCV	2-Amino-46-dinitrotoluene	197 > 180	16.16	25385.605	38618.398	25385.605	328.672	bb			641.6909	106.9	6.9	1303.9
WXX100412-07CCV	246-Trinitrotoluene	227 > 210	15.11	23809.799	38618.398	23809.799	308.270	bb			708.6134	118.1	18.1	277.7
WXX100412-07CCV	34-dinitrotoluene	182 > 152	14.08	23910.871	38618.398	23910.871	309.579	bb			300.2332	100.1	0.1	640.0
WXX100412-07CCV	26-dinitrotoluene	182 > 152	17.20	53638.844	38618.398	53638.844	694.473	MM	15-Apr-10	14:40:58	586.7767	97.8	-2.2	1649.4
WXX100412-07CCV	24-dinitrotoluene	182 > 152	17.86	13413.259	38618.398	13413.259	173.664	MM	15-Apr-10	14:44:33	665.3698	110.9	10.9	364.2
WXX100412-07CCV	26-dinitrotoluene-d3	185 > 155	17.05	38618.398		38618.398	38618.398	bb			551.9567	110.4	10.4	2701.3
WXX100412-07CCV	2-Nitrotoluene	137 > 46	20.60	3598.152	38618.398	3598.152	46.586	bb			538.0176	89.7	-10.3	539.8
WXX100412-07CCV	4-Nitrotoluene	137 > 46	21.93	1870.867	38618.398	1870.867	24.222	bb			583.9645	97.3	-2.7	298.8
WXX100412-07CCV	3-Nitrotoluene	137 > 46	23.55	2364.213	38618.398	2364.213	30.610	bb			525.0234	87.5	-12.5	359.4
WXX100412-07CCV	PETN	361 > 62	23.93	45593.688	38618.398	45593.688	590.310	bb			677.1618	112.9	12.9	12434.1

GEL SOP GL-OA-E-056, Method 8321A-Modified / MM = Manual Modification

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PROPRIETARY INFORMATION-No unauthorized reproduction without written permission from GEL.

GRAND MEAN AVERAGE

Vendor: Restek
Date of Analysis: 04/15/10
Time of Injection: 0339
Standard Number: WXX100412-07CCV
Data File: EXP0412123a

HMX	109.3
RDX	127.9
135-TNB	101.3
13-DNB	103.4
Tetryl	101.7
Nitrobenzene	97.8
4A-26-DNT	102.7
2A-46-DNT	106.9
246-TNT	118.1
34-DNT(surr)	100.1
26-DNT	97.8
24-DNT	110.9
2-NT	89.7
4-NT	97.3
3-NT	87.5
PETN	112.9
Total	1665.3
Average	104.1

MTP 4/15/10

04/15/10

ICV Limits 85-115%
CRI Limits 70-130%
CCV Limits 85-115%
No single analyte > +/- 60%

PROPRIETARY INFORMATION-No unauthorized reproduction without written permission from GEL.

7B
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10–2089

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0412125a

Analysis Date: 15–APR–10 04:38

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
2–Amino–4,6–dinitrotoluene	40	39.776	99	
3,4–Dinitrotoluene	20	20.678	103	
4–Amino–2,6–dinitrotoluene	40	39.446	99	
HMX	40	48.201	121	
Nitrobenzene	40	40.808	102	
PETN	40	53.641	134	*
RDX	40	49.515	124	
Tetryl	40	39.748	99	
m–Dinitrobenzene	40	40.378	101	
m–Nitrotoluene	40	41.837	105	
o–Nitrotoluene	40	40.859	102	
p–Nitrotoluene	40	46.373	116	
1,3,5–Trinitrobenzene	40	43.213	108	
1,3–Dinitrobenzene–d4	500	564.409	113	
2,4,6–Trinitrotoluene	40	45.284	113	
2,4–Dinitrotoluene	40	46.283	116	
2,6–Dinitrotoluene	40	40.418	101	
2,6–Dinitrotoluene–d3	500	573.452	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%
OtherTarget Analytes 70–130%
Column used to flag Recovery outside of Limits
* Value outside of Recovery Limits

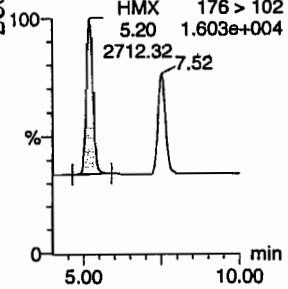
Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA2.qld, Time: Thu Apr 15 14:49:38 2010

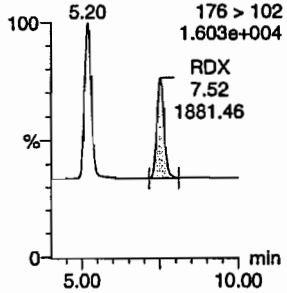
Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0412125a
Date: 15-Apr-2010
Time: 04:38:55
ID: WXX100412-08CRI
Vial: 1:1,C

HMX 4/15/10

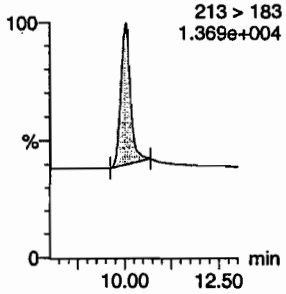
HMX
F2:MRM of 1 channel,AP-
HMX 176 > 102
5.20 1.603e+004
2712.32 7.52



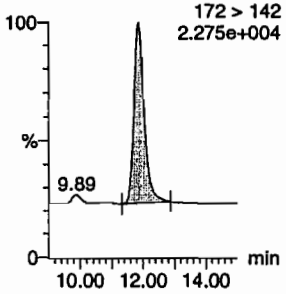
RDX
F2:MRM of 1 channel,AP-
5.20 176 > 102
1.603e+004
RDX
7.52
1881.46



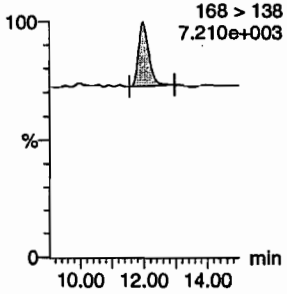
135-Trinitrobenzene
F4:MRM of 1 channel,AP-
213 > 183
1.369e+004



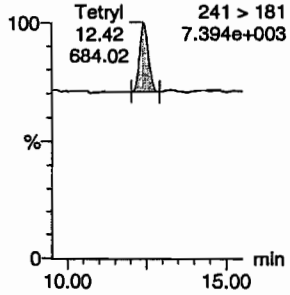
13-Dinitrobenzene-d4
F5:MRM of 2 channels,AP-
172 > 142
2.275e+004



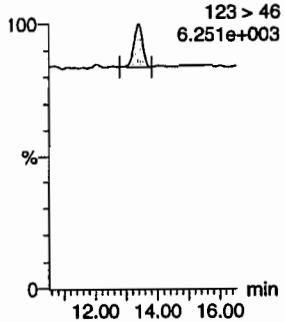
13-Dinitrobenzene
F5:MRM of 2 channels,AP-
168 > 138
7.210e+003



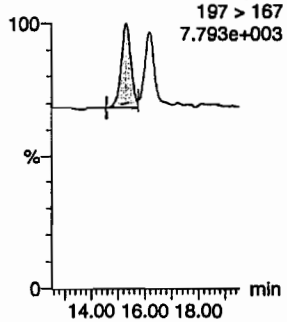
Tetryl
F6:MRM of 1 channel,AP-
Tetryl 241 > 181
12.42 7.394e+003
684.02



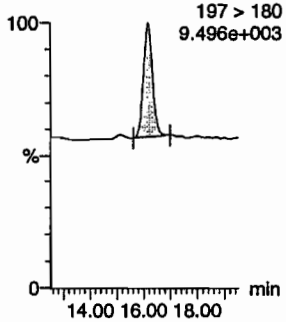
Nitrobenzene
F7:MRM of 1 channel,AP-
123 > 46
6.251e+003



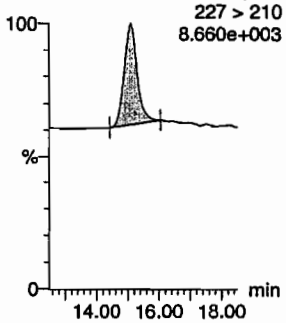
4-Amino-26-dinitrotoluene
F11:MRM of 2 channels,AP-
197 > 167
7.793e+003



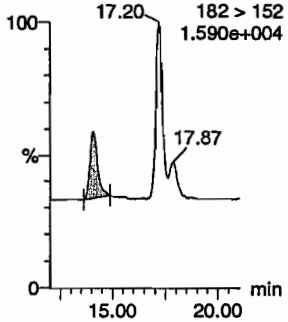
2-Amino-46-dinitrotoluene
F11:MRM of 2 channels,AP-
197 > 180
9.496e+003



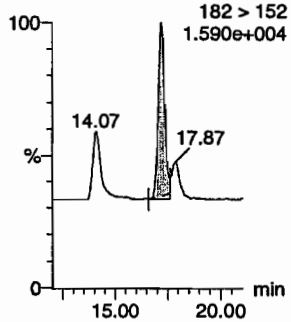
246-Trinitrotoluene
F10:MRM of 1 channel,AP-
227 > 210
8.660e+003



34-dinitrotoluene
F9:MRM of 2 channels,AP-
17.20 182 > 152
1.590e+004
17.87



26-dinitrotoluene
F9:MRM of 2 channels,AP-
182 > 152
1.590e+004
14.07
17.87



HMM 04/15/10

GEL SOP GL-OA-E-056, Method 8321A-Modified / MM = Manual Modification

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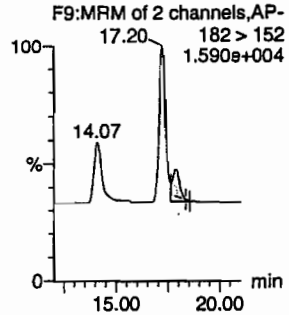
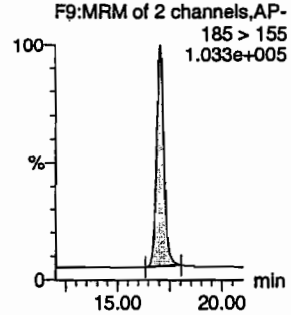
Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA2.qld, Time: Thu Apr 15 14:49:38 2010

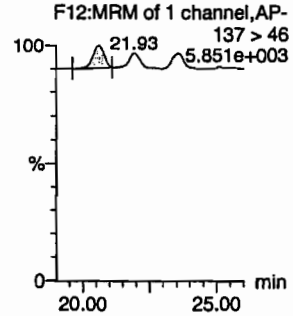
24-dinitrotoluene



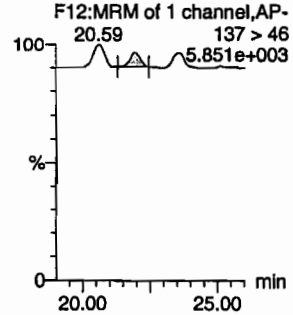
26-dinitrotoluene-d3



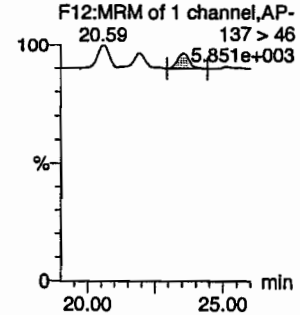
2-Nitrotoluene



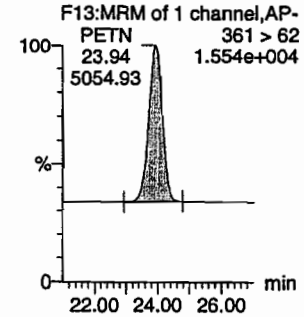
4-Nitrotoluene



3-Nitrotoluene



PETN



ID	Name	Trace	RT	Area	IS Area	Abs Resp	Response	Flags	Mod Date	Mod Time	ng/mL	%Rec	%Dev	S/N
WXX100412-08CRI	HMX	176 > 102	5.20	2712.320	6637.863	2712.320	204.307	bb			48.2007	120.5	20.5	522.9
WXX100412-08CRI	RDX	176 > 102	7.52	1881.459	6637.863	1881.459	141.722	bb			49.5149	123.8	23.8	334.7
WXX100412-08CRI	135-Trinitrobenzene	213 > 183	10.06	2480.006	6637.863	2480.006	186.808	bb			43.2127	108.0	8.0	276.9
WXX100412-08CRI	13-Dinitrobenzene-d4	172 > 142	11.87	6637.863		6637.863	6637.863	bb			564.4092	112.9	12.9	521.3
WXX100412-08CRI	13-Dinitrobenzene	168 > 138	11.97	716.740	6637.863	716.740	53.989	bb			40.3784	100.9	0.9	73.2
WXX100412-08CRI	Tetryl	241 > 181	12.42	684.017	6637.863	684.017	51.524	bb			39.7477	99.4	-0.6	81.6
WXX100412-08CRI	Nitrobenzene	123 > 46	13.40	339.842	6637.863	339.842	25.599	bb			40.8080	102.0	2.0	40.0
WXX100412-08CRI	4-Amino-26-dinitrotoluene	197 > 167	15.31	1069.130	40122.352	1069.130	13.323	MM	15-Apr-10	14:35:03	39.4460	98.6	-1.4	34.8
WXX100412-08CRI	2-Amino-46-dinitrotoluene	197 > 180	16.15	1634.844	40122.352	1634.844	20.373	bb			39.7761	99.4	-0.6	97.1
WXX100412-08CRI	246-Trinitrotoluene	227 > 210	15.10	1580.818	40122.352	1580.818	19.700	bb			45.2839	113.2	13.2	112.4
WXX100412-08CRI	34-dinitrotoluene	182 > 152	14.07	1710.958	40122.352	1710.958	21.322	bb			20.6781	103.4	3.4	45.5
WXX100412-08CRI	26-dinitrotoluene	182 > 152	17.20	3838.616	40122.352	3838.616	47.836	MM	15-Apr-10	14:41:07	40.4181	101.0	1.0	119.0
WXX100412-08CRI	24-dinitrotoluene	182 > 152	17.87	969.351	40122.352	969.351	12.080	MM	15-Apr-10	14:44:22	46.2826	115.7	15.7	24.8
WXX100412-08CRI	26-dinitrotoluene-d3	185 > 155	17.04	40122.352		40122.352	40122.352	bb			573.4521	114.7	14.7	3832.5
WXX100412-08CRI	2-Nitrotoluene	137 > 46	20.59	283.899	40122.352	283.899	3.538	bb			40.8591	102.1	2.1	47.0
WXX100412-08CRI	4-Nitrotoluene	137 > 46	21.93	154.352	40122.352	154.352	1.924	bb			46.3728	115.9	15.9	28.5
WXX100412-08CRI	3-Nitrotoluene	137 > 46	23.57	195.733	40122.352	195.733	2.439	bb			41.8373	104.6	4.6	30.6
WXX100412-08CRI	PETN	361 > 62	23.94	5054.932	40122.352	5054.932	62.994	bb			53.6409	134.1	34.1	237.2

GEL SOP GL-OA-E-056, Method 8321A-Modified / MM = Manual Modification

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GRAND MEAN AVERAGE

Vendor:	UltraScientific
Date of Analysis	04/15/10
Time of Injection	0438
Standard Number	WXX100412-08CRI
Data File	EXP0412125a

HMX	120.5
RDX	123.8
135-TNB	108.0
13-DNB	100.9
Tetryl	99.4
Nitrobenzene	102.0
4A-26-DNT	98.6
2A-46-DNT	99.4
246-TNT	113.2
34-DNT(surr)	103.4
26-DNT	101.0
24-DNT	115.7
2-NT	102.1
4-NT	115.9
3-NT	104.6
PETN	134.1
Total	1742.6
Average	108.9

ICV Limits 85-115%
CRI Limits 70-130%
CCV Limits 85-115%
No single analyte > +/- 60%

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7A
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10–2089

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0412135a

Analysis Date: 15–APR–10 09:33

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
2,4–Dinitrotoluene	600	646.864	108	
2,6–Dinitrotoluene	600	604.45	101	
2,6–Dinitrotoluene–d3	500	525.317	105	
2–Amino–4,6–dinitrotoluene	600	629.05	105	
3,4–Dinitrotoluene	300	298.104	99	
4–Amino–2,6–dinitrotoluene	600	610.274	102	
HMX	600	685.286	114	
Nitrobenzene	600	598.926	100	
PETN	600	756.299	126	*
RDX	600	771.167	129	*
Tetryl	600	580.474	97	
m–Dinitrobenzene	600	616.334	103	
m–Nitrotoluene	600	526.908	88	
o–Nitrotoluene	600	559.377	93	
p–Nitrotoluene	600	606.103	101	
1,3,5–Trinitrobenzene	600	616.486	103	
1,3–Dinitrobenzene–d4	500	520.494	104	
2,4,6–Trinitrotoluene	600	719.64	120	

Recovery Limits:
3,4–Dinitrotoluene (Surrogate),TATB, tris(o–cresyl)phosphate, 3,5–Dinitroaniline, 2,6–Diamino–4–nitrotoluene , 2,4–Diamino–6–nitrotoluene 70–130%
OtherTarget Analytes 80–120%
Column used to flag Recovery outside of Limits
* Value outside of Recovery Limits

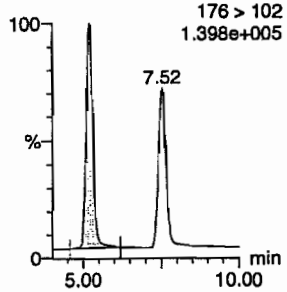
Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA2.qld, Time: Thu Apr 15 14:49:38 2010

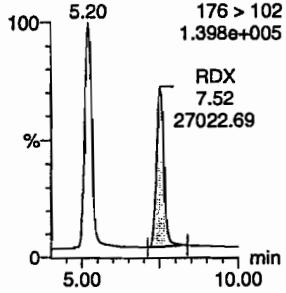
Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0412135a
Date: 15-Apr-2010
Time: 09:33:59
ID: WXX100412-07CCV
Vial: 1:1,B

MTT 4/15/10

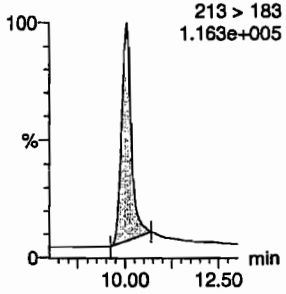
HMX
F2:MRM of 1 channel,AP-
176 > 102
1.398e+005



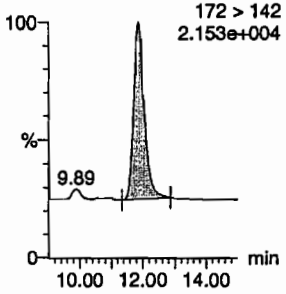
RDX
F2:MRM of 1 channel,AP-
5.20
176 > 102
1.398e+005



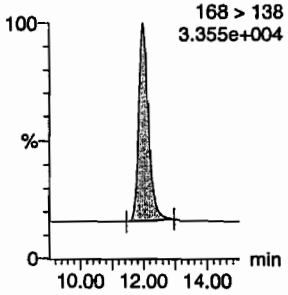
135-Trinitrobenzene
F4:MRM of 1 channel,AP-
213 > 183
1.163e+005



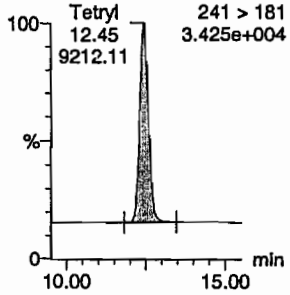
13-Dinitrobenzene-d4
F5:MRM of 2 channels,AP-
172 > 142
2.153e+004



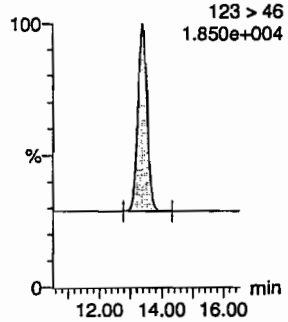
13-Dinitrobenzene
F5:MRM of 2 channels,AP-
168 > 138
3.355e+004



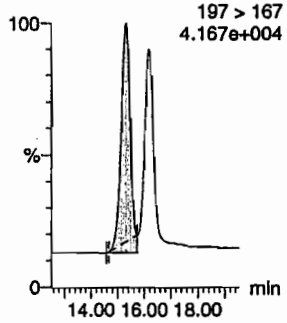
Tetryl
F6:MRM of 1 channel,AP-
Tetryl
12.45
9212.11
241 > 181
3.425e+004



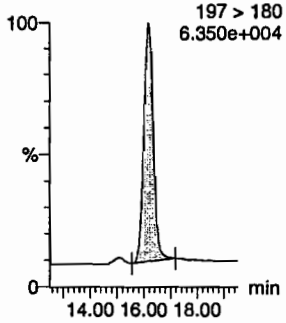
Nitrobenzene
F7:MRM of 1 channel,AP-
123 > 46
1.850e+004



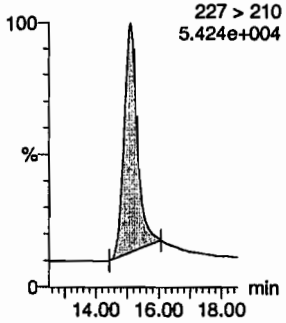
4-Amino-26-dinitrotoluene
F11:MRM of 2 channels,AP-
197 > 167
4.167e+004



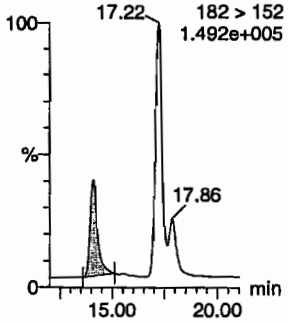
2-Amino-46-dinitrotoluene
F11:MRM of 2 channels,AP-
197 > 180
6.350e+004



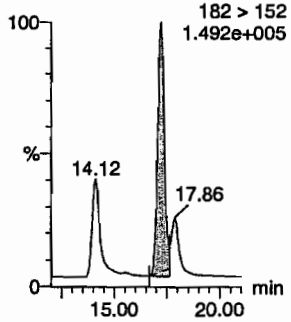
246-Trinitrotoluene
F10:MRM of 1 channel,AP-
227 > 210
5.424e+004



34-dinitrotoluene
F9:MRM of 2 channels,AP-
17.22
182 > 152
1.492e+005



26-dinitrotoluene
F9:MRM of 2 channels,AP-
182 > 152
1.492e+005



dm 04/15/10

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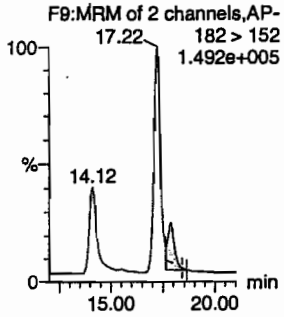
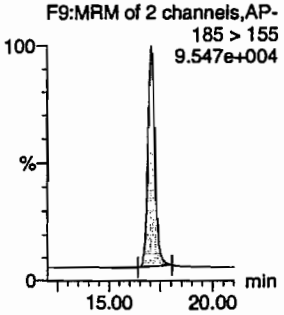
Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA2.qld, Time: Thu Apr 15 14:49:38 2010

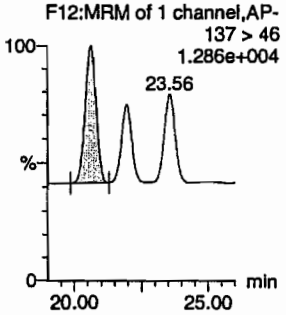
24-dinitrotoluene



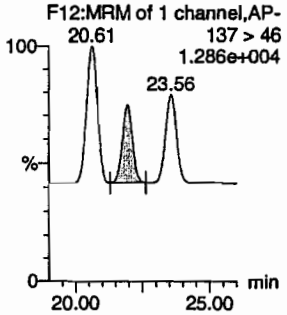
26-dinitrotoluene-d3



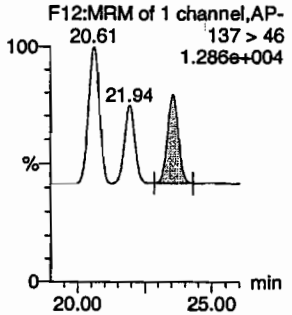
2-Nitrotoluene



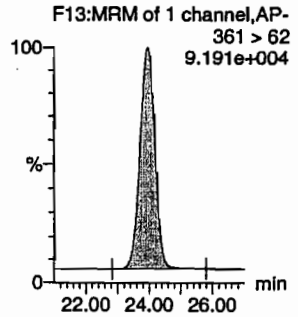
4-Nitrotoluene



3-Nitrotoluene



PETN



ID	Name	Trace	RT	Area	IS Area	Abs.Resp	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N
WXX100412-07CCV	HMX	176 > 102	5.20	35561.566	6121.390	35561.566	2904.697	bb			685.2857	114.2	14.2	2306.0
WXX100412-07CCV	RDX	176 > 102	7.52	27022.688	6121.390	27022.688	2207.235	bb			771.1669	128.5	28.5	1629.3
WXX100412-07CCV	135-Trinitrobenzene	213 > 183	10.05	32627.703	6121.390	32627.703	2665.057	bb			616.4861	102.7	2.7	662.1
WXX100412-07CCV	13-Dinitrobenzene-d4	172 > 142	11.87	6121.390		6121.390	6121.390	bb			520.4942	104.1	4.1	470.8
WXX100412-07CCV	13-Dinitrobenzene	168 > 138	11.97	10089.047	6121.390	10089.047	824.081	bb			616.3340	102.7	2.7	789.1
WXX100412-07CCV	Tetryl	241 > 181	12.45	9212.110	6121.390	9212.110	752.452	bb			580.4736	96.7	-3.3	1211.9
WXX100412-07CCV	Nitrobenzene	123 > 46	13.37	4599.666	6121.390	4599.666	375.704	bb			598.9262	99.8	-0.2	515.2
WXX100412-07CCV	4-Amino-26-dinitrotoluene	197 > 167	15.32	15152.262	36754.547	15152.262	206.128	MM	15-Apr-10	14:35:19	610.2741	101.7	1.7	565.2
WXX100412-07CCV	2-Amino-46-dinitrotoluene	197 > 180	16.16	23684.473	36754.547	23684.473	322.198	bb			629.0502	104.8	4.8	1009.4
WXX100412-07CCV	246-Trinitrotoluene	227 > 210	15.11	23013.285	36754.547	23013.285	313.067	bb			719.6402	119.9	19.9	2356.1
WXX100412-07CCV	34-dinitrotoluene	182 > 152	14.12	22595.447	36754.547	22595.447	307.383	bb			298.1037	99.4	-0.6	643.9
WXX100412-07CCV	26-dinitrotoluene	182 > 152	17.22	52587.668	36754.547	52587.668	715.390	MM	15-Apr-10	14:41:19	604.4503	100.7	0.7	1707.0
WXX100412-07CCV	24-dinitrotoluene	182 > 152	17.86	12410.844	36754.547	12410.844	168.834	MM	15-Apr-10	14:44:09	646.8644	107.8	7.8	367.8
WXX100412-07CCV	26-dinitrotoluene-d3	185 > 155	17.05	36754.547		36754.547	36754.547	bb			525.3174	105.1	5.1	1487.8
WXX100412-07CCV	2-Nitrotoluene	137 > 46	20.61	3560.446	36754.547	3560.446	48.435	bb			559.3770	93.2	-6.8	220.2
WXX100412-07CCV	4-Nitrotoluene	137 > 46	21.94	1848.077	36754.547	1848.077	25.141	bb			606.1034	101.0	1.0	123.0
WXX100412-07CCV	3-Nitrotoluene	137 > 46	23.56	2258.185	36754.547	2258.185	30.720	bb			526.9080	87.8	-12.2	140.5
WXX100412-07CCV	PETN	361 > 62	23.95	47413.527	36754.547	47413.527	645.002	bb			756.2985	126.0	26.0	11220.6

GEL SOP GL-OA-E-056, Method 8321A-Modified / MM = Manual Modification

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GRAND MEAN AVERAGE

Vendor: Restek
Date of Analysis: 04/15/10
Time of Injection: 0933
Standard Number: WXX100412-07CCV
Data File: EXP0412135a

HMX		114.2
RDX		128.5
135-TNB		102.7
13-DNB		102.7
Tetryl		96.7
Nitrobenzene		99.8
4A-26-DNT		101.7
2A-46-DNT		104.8
246-TNT		119.9
34-DNT(surr)		99.4
26-DNT		100.7
24-DNT		107.8
2-NT		93.2
4-NT		101.0
3-NT		87.8
PETN		126.0
Total		1686.9
Average		105.4

HMM 04/15/10

ICV Limits 85-115%
CRI Limits 70-130%
CCV Limits 85-115%
No single analyte > +/- 60%

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7B
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10–2089

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0412137a

Analysis Date: 15–APR–10 10:33

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
p–Nitrotoluene	40	40.289	101	
1,3,5–Trinitrobenzene	40	44.831	112	
1,3–Dinitrobenzene–d4	500	564.306	113	
2,4,6–Trinitrotoluene	40	45.122	113	
2,4–Dinitrotoluene	40	42.425	106	
2,6–Dinitrotoluene	40	41.26	103	
2,6–Dinitrotoluene–d3	500	570.792	114	
2–Amino–4,6–dinitrotoluene	40	41.382	103	
3,4–Dinitrotoluene	20	22.164	111	
4–Amino–2,6–dinitrotoluene	40	38.604	97	
HMX	40	48.451	121	
Nitrobenzene	40	42.762	107	
PETN	40	54.612	137	*
RDX	40	48.712	122	
Tetryl	40	36.564	91	
m–Dinitrobenzene	40	41.195	103	
m–Nitrotoluene	40	32.225	81	
o–Nitrotoluene	40	41.864	105	

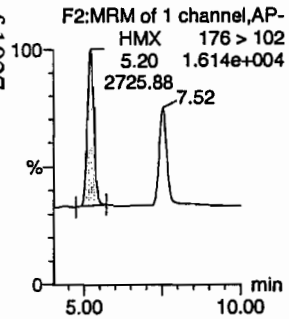
Recovery Limits:
3,4–Dinitrotoluene (Surrogate),TATB, tris(o–cresyl)phosphate, 3,5–Dinitroaniline, 2,6–Diamino–4–nitrotoluene , 2,4–Diamino–6–nitrotoluene 50–150%
OtherTarget Analytes 70–130%
Column used to flag Recovery outside of Limits
* Value outside of Recovery Limits

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA2.qld, Time: Thu Apr 15 14:49:38 2010

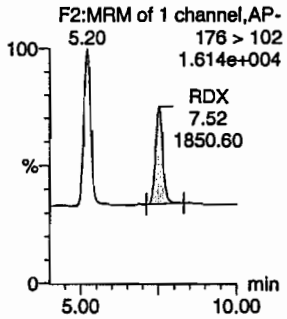
Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0412137a
Date: 15-Apr-2010
Time: 10:33:01
ID: WXX100412-08CRI
Vial: 1:1,C

MMP 4/15/10

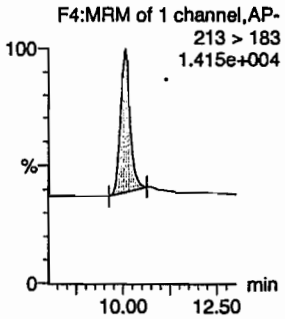
HMX



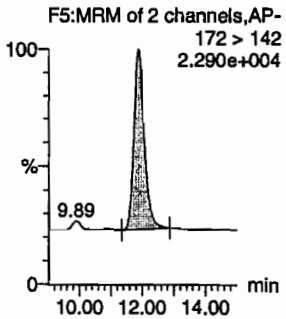
RDX



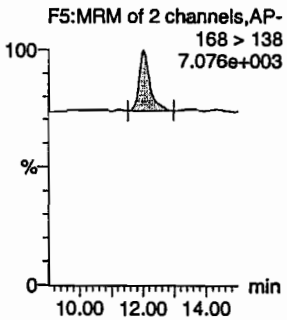
135-Trinitrobenzene



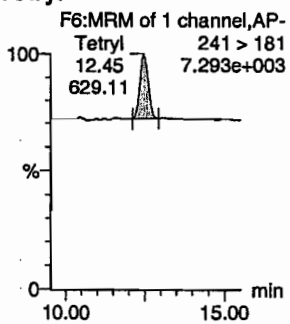
13-Dinitrobenzene-d4



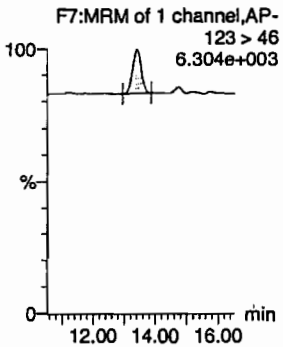
13-Dinitrobenzene



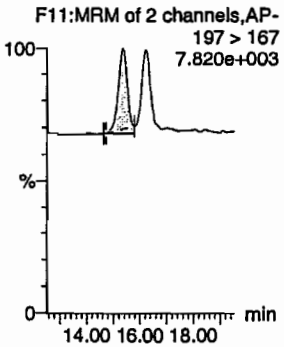
Tetryl



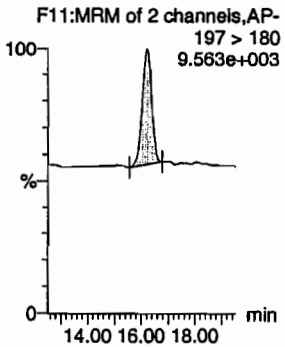
Nitrobenzene



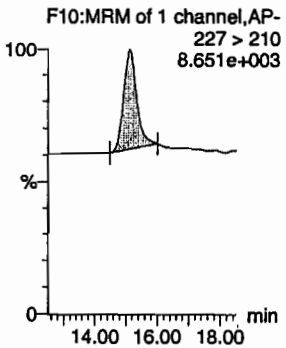
4-Amino-26-dinitrotoluene



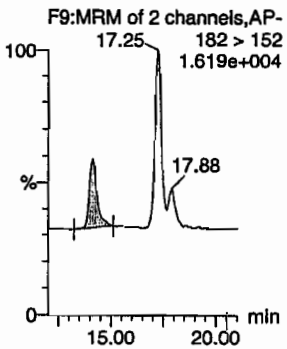
2-Amino-46-dinitrotoluene



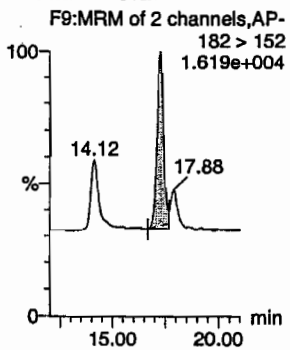
246-Trinitrotoluene



34-dinitrotoluene



26-dinitrotoluene



AMM 04/15/10

GEL SOP GL-OA-E-056, Method 8321A-Modified / MM = Manual Modification

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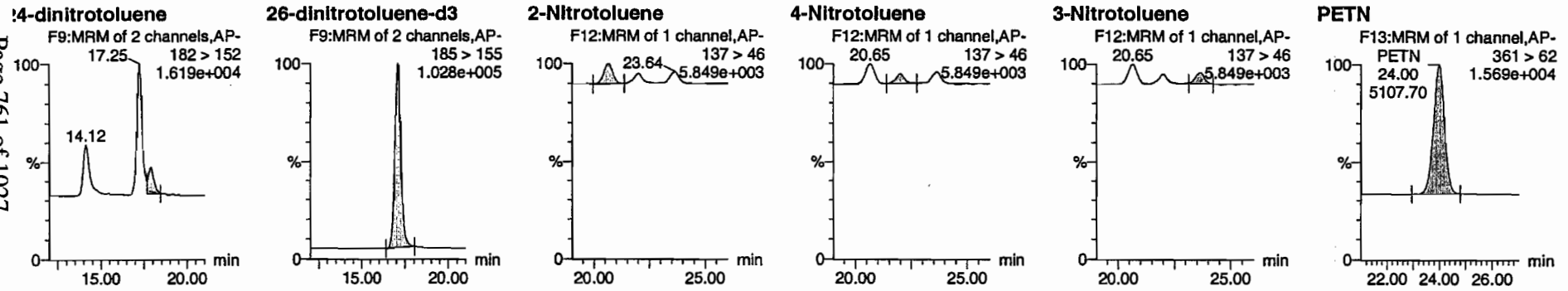
Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA2.qld, Time: Thu Apr 15 14:49:38 2010



D	Name	Trace	RT	Area	IS Area	Abs Resp	Response	Flags	Mod Date	Mod Time	ng/mL	%Rec	%Dev	S/N
NXX100412-08CRI	HMX	176 > 102	5.20	2725.878	6636.648	2725.878	205.366	bb			48.4505	121.1	21.1	288.6
NXX100412-08CRI	RDX	176 > 102	7.52	1850.595	6636.648	1850.595	139.422	bb			48.7116	121.8	21.8	177.2
NXX100412-08CRI	135-Trinitrobenzene	213 > 183	10.05	2572.424	6636.648	2572.424	193.804	bb			44.8312	112.1	12.1	55.1
NXX100412-08CRI	13-Dinitrobenzene-d4	172 > 142	11.87	6636.648		6636.648	6636.648	bb			564.3059	112.9	12.9	507.2
NXX100412-08CRI	13-Dinitrobenzene	168 > 138	12.00	731.096	6636.648	731.096	55.080	bb			41.1947	103.0	3.0	42.3
NXX100412-08CRI	Tetryl	241 > 181	12.45	629.112	6636.648	629.112	47.397	bb			36.5639	91.4	-8.6	67.4
NXX100412-08CRI	Nitrobenzene	123 > 46	13.37	356.051	6636.648	356.051	26.825	bb			42.7622	106.9	6.9	29.8
NXX100412-08CRI	4-Amino-26-dinitrotoluene	197 > 167	15.32	1041.444	39936.227	1041.444	13.039	MM	15-Apr-10	14:35:28	38.6036	96.5	-3.5	61.7
NXX100412-08CRI	2-Amino-46-dinitrotoluene	197 > 180	16.19	1692.963	39936.227	1692.963	21.196	bb			41.3822	103.5	3.5	83.9
NXX100412-08CRI	246-Trinitrotoluene	227 > 210	15.11	1567.852	39936.227	1567.852	19.629	bb			45.1217	112.8	12.8	116.8
NXX100412-08CRI	34-dinitrotoluene	182 > 152	14.12	1825.399	39936.227	1825.399	22.854	bb			22.1640	110.8	10.8	60.4
NXX100412-08CRI	26-dinitrotoluene	182 > 152	17.25	3900.405	39936.227	3900.405	48.833	MM	15-Apr-10	14:41:32	41.2601	103.2	3.2	155.3
NXX100412-08CRI	24-dinitrotoluene	182 > 152	17.88	884.425	39936.227	884.425	11.073	MM	15-Apr-10	14:43:59	42.4245	106.1	6.1	32.8
NXX100412-08CRI	26-dinitrotoluene-d3	185 > 155	17.09	39936.227		39936.227	39936.227	bb			570.7919	114.2	14.2	3666.8
NXX100412-08CRI	2-Nitrotoluene	137 > 46	20.65	289.533	39936.227	289.533	3.625	bb			41.8642	104.7	4.7	22.9
NXX100412-08CRI	4-Nitrotoluene	137 > 46	22.00	133.481	39936.227	133.481	1.671	bb			40.2893	100.7	0.7	10.8
NXX100412-08CRI	3-Nitrotoluene	137 > 46	23.64	150.063	39936.227	150.063	1.879	bb			32.2250	80.6	-19.4	12.6
NXX100412-08CRI	PETN	361 > 62	24.00	5107.696	39936.227	5107.696	63.948	bb			54.6119	136.5	36.5	1627.1

GEL SOP GL-OA-E-056, Method 8321A-Modified / MM = Manual Modification

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GRAND MEAN AVERAGE

Vendor:	UltraScientific
Date of Analysis	04/15/10
Time of Injection	1033
Standard Number	WXX100412-08CRI
Data File	EXP0412137a

HMX	121.1
RDX	121.8
135-TNB	112.1
13-DNB	103.0
Tetryl	91.4
Nitrobenzene	106.9
4A-26-DNT	96.5
2A-46-DNT	103.5
246-TNT	112.8
34-DNT(surr)	110.8
26-DNT	103.2
24-DNT	106.1
2-NT	104.7
4-NT	100.7
3-NT	80.6
PETN	136.5
Total	1711.7
Average	107.0

ICV Limits 85-115%
CRI Limits 70-130%
CCV Limits 85-115%
No single analyte > +/- 60%

PROPRIETARY INFORMATION-No unauthorized reproduction without written permission from GEL.

7A
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10–2089

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0412141a

Analysis Date: 15–APR–10 12:31

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

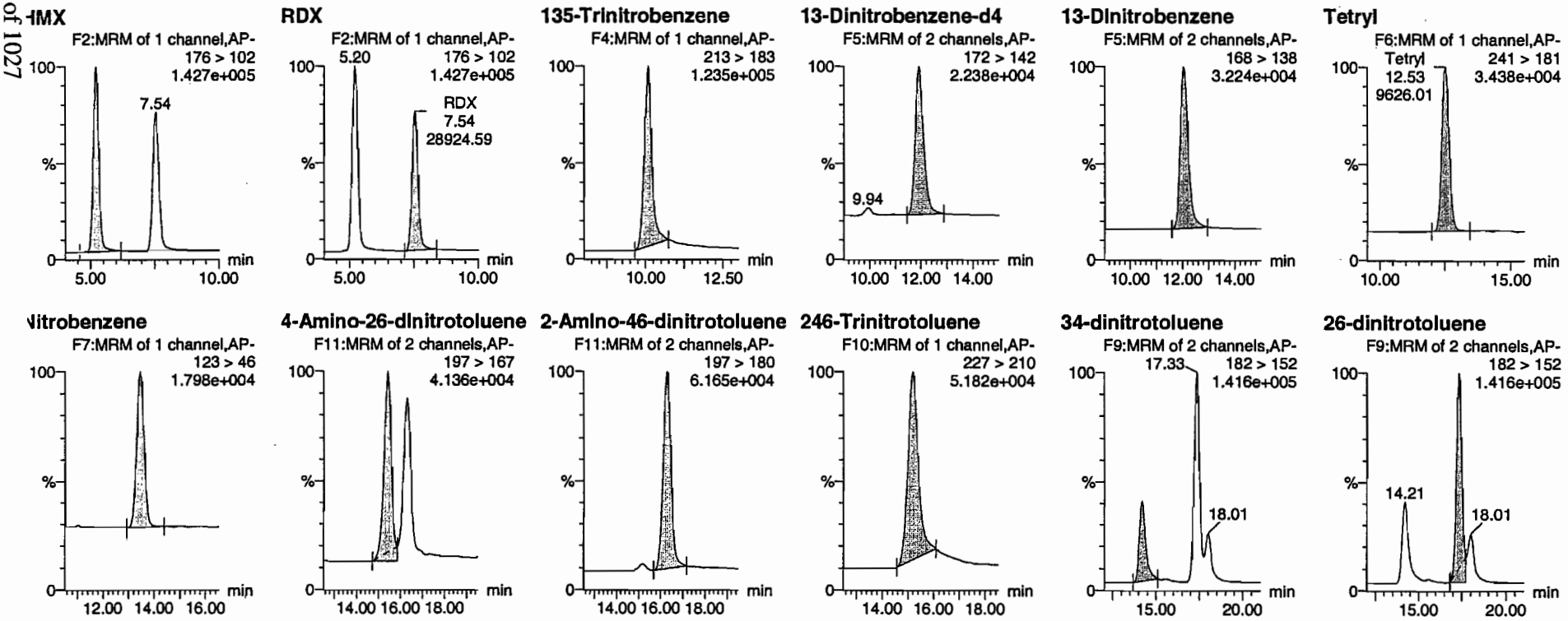
Compound	True	Found	Recovery	Q
Tetryl	600	575.56	96	
m–Dinitrobenzene	600	568.157	95	
m–Nitrotoluene	600	472.105	79	*
o–Nitrotoluene	600	520.007	87	
p–Nitrotoluene	600	554.035	92	
1,3,5–Trinitrobenzene	600	600.513	100	
1,3–Dinitrobenzene–d4	500	548.523	110	
2,4,6–Trinitrotoluene	600	671.418	112	
2,4–Dinitrotoluene	600	681.875	114	
2,6–Dinitrotoluene	600	582.15	97	
2,6–Dinitrotoluene–d3	500	517.845	104	
2–Amino–4,6–dinitrotoluene	600	620.832	103	
3,4–Dinitrotoluene	300	295.616	99	
4–Amino–2,6–dinitrotoluene	600	603.436	101	
HMX	600	656.436	109	
Nitrobenzene	600	554.89	92	
PETN	600	656.88	109	
RDX	600	783.263	131	*

Recovery Limits:
3,4–Dinitrotoluene (Surrogate),TATB, tris(o–cresyl)phosphate, 3,5–Dinitroaniline, 2,6–Diamino–4–nitrotoluene , 2,4–Diamino–6–nitrotoluene 70–130%
OtherTarget Analytes 80–120%
Column used to flag Recovery outside of Limits
* Value outside of Recovery Limits

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA2.qld, Time: Thu Apr 15 14:49:38 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0412141a
Date: 15-Apr-2010
Time: 12:31:08
ID: WXX100415-07CCV
Vial: 1:1,B

MMP 4/15/10



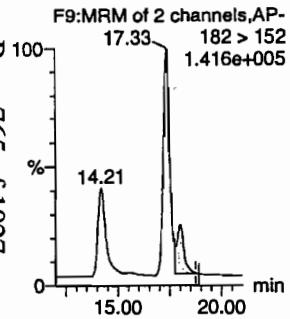
MMP 04/15/10

PROPRIETARY INFORMATION-No unauthorized reproduction without written permission from GEL.

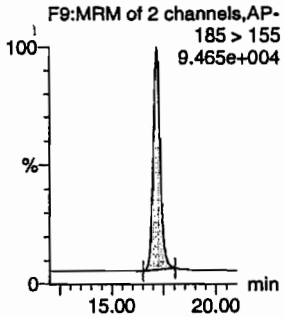
Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA2.qld, Time: Thu Apr 15 14:49:38 2010

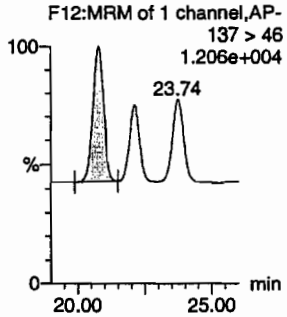
24-dinitrotoluene



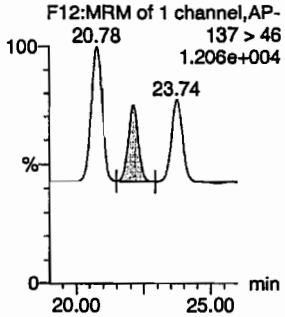
26-dinitrotoluene-d3



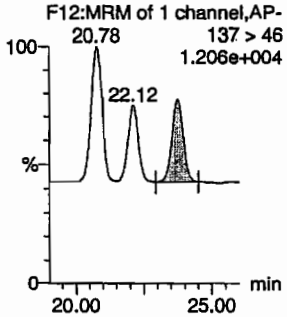
2-Nitrotoluene



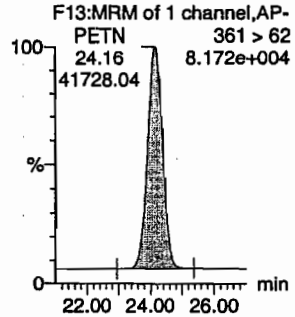
4-Nitrotoluene



3-Nitrotoluene



PETN



ID	Name	Trace	RT	Area	IS Area	Abs Resp	Response	Flags	Mod Date	Mod Time	ng/mL	%Rec	%Dev	S/N
WXX100415-07CCV	HMX	176 > 102	5.20	35898.910	6451.035	35898.910	2782.415	bb			656.4365	109.4	9.4	1457.7
WXX100415-07CCV	RDX	176 > 102	7.54	28924.590	6451.035	28924.590	2241.857	bb			783.2631	130.5	30.5	1091.6
WXX100415-07CCV	135-Trinitrobenzene	213 > 183	10.09	33493.820	6451.035	33493.820	2596.004	bb			600.5126	100.1	0.1	1417.2
WXX100415-07CCV	13-Dinitrobenzene-d4	172 > 142	11.92	6451.035		6451.035	6451.035	bb			548.5235	109.7	9.7	687.7
WXX100415-07CCV	13-Dinitrobenzene	168 > 138	12.03	9801.255	6451.035	9801.255	759.665	bb			568.1569	94.7	-5.3	438.9
WXX100415-07CCV	Tetryl	241 > 181	12.53	9626.014	6451.035	9626.014	746.083	bb			575.5599	95.9	-4.1	792.1
WXX100415-07CCV	Nitrobenzene	123 > 46	13.45	4490.959	6451.035	4490.959	348.081	bb			554.8898	92.5	-7.5	326.7
WXX100415-07CCV	4-Amino-26-dinitrotoluene	197 > 167	15.42	14769.355	36231.711	14769.355	203.818	MM	15-Apr-10	14:35:48	603.4360	100.6	0.6	699.4
WXX100415-07CCV	2-Amino-46-dinitrotoluene	197 > 180	16.29	23042.521	36231.711	23042.521	317.988	bb			620.8316	103.5	3.5	736.0
WXX100415-07CCV	246-Trinitrotoluene	227 > 210	15.21	21165.775	36231.711	21165.775	292.089	bb			671.4184	111.9	11.9	704.0
WXX100415-07CCV	34-dinitrotoluene	182 > 152	14.21	22088.133	36231.711	22088.133	304.818	bb			295.6158	98.5	-1.5	821.5
WXX100415-07CCV	26-dinitrotoluene	182 > 152	17.33	49927.031	36231.711	49927.031	688.996	MM	15-Apr-10	14:41:53	582.1496	97.0	-3.0	2142.4
WXX100415-07CCV	24-dinitrotoluene	182 > 152	18.01	12896.455	36231.711	12896.455	177.972	MM	15-Apr-10	14:43:42	681.8746	113.6	13.6	478.9
WXX100415-07CCV	26-dinitrotoluene-d3	185 > 155	17.18	36231.711		36231.711	36231.711	bb			517.8448	103.6	3.6	326.2
WXX100415-07CCV	2-Nitrotoluene	137 > 46	20.78	3262.771	36231.711	3262.771	45.026	bb			520.0068	86.7	-13.3	993.1
WXX100415-07CCV	4-Nitrotoluene	137 > 46	22.12	1665.285	36231.711	1665.285	22.981	bb			554.0354	92.3	-7.7	557.5
WXX100415-07CCV	3-Nitrotoluene	137 > 46	23.74	1994.534	36231.711	1994.534	27.525	bb			472.1054	78.7	-21.3	602.2
WXX100415-07CCV	PETN	361 > 62	24.16	41728.039	36231.711	41728.039	575.850	bb			656.8797	109.5	9.5	12781.9

GEL SOP GL-OA-E-056, Method 8321A-Modified / MM = Manual Modification

PROPRIETARY INFORMATION-No unauthorized reproduction without written permission from GEL.

PROPRIETARY INFORMATION-No unauthorized reproduction without written permission from GEL.

GRAND MEAN AVERAGE

Vendor: Restek
Date of Analysis: 04/15/10
Time of Injection: 1231
Standard Number: WXX100415-07CCV
Data File: EXP0412141a

HMX	109.4
RDX	130.5
135-TNB	100.1
13-DNB	94.7
Tetryl	95.9
Nitrobenzene	92.5
4A-26-DNT	100.6
2A-46-DNT	103.5
246-TNT	111.9
34-DNT(surr)	98.5
26-DNT	97.0
24-DNT	113.6
2-NT	86.7
4-NT	92.3
3-NT	78.7
PETN	109.5
Total	1615.4
Average	101.0

MAT 4/15/10

HMM 04/15/10

ICV Limits 85-115%
CRI Limits 70-130%
CCV Limits 85-115%
No single analyte > +/- 60%

PROPRIETARY INFORMATION-No unauthorized reproduction without written permission from GEL.

7B
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10–2089

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0412143a

Analysis Date: 15–APR–10 13:30

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5–Trinitrobenzene	40	45.257	113	
1,3–Dinitrobenzene–d4	500	536.662	107	
2,4,6–Trinitrotoluene	40	45.682	114	
2,4–Dinitrotoluene	40	45.008	113	
2,6–Dinitrotoluene	40	38.476	96	
2,6–Dinitrotoluene–d3	500	533.5	107	
2–Amino–4,6–dinitrotoluene	40	39.37	98	
3,4–Dinitrotoluene	20	20.83	104	
4–Amino–2,6–dinitrotoluene	40	42.325	106	
HMX	40	47.44	119	
Nitrobenzene	40	39.473	99	
PETN	40	51.284	128	
RDX	40	48.05	120	
Tetryl	40	51.38	128	
m–Dinitrobenzene	40	39.893	100	
m–Nitrotoluene	40	33.98	85	
o–Nitrotoluene	40	30.284	76	
p–Nitrotoluene	40	44.578	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%
OtherTarget Analytes 70–130%
Column used to flag Recovery outside of Limits
* Value outside of Recovery Limits

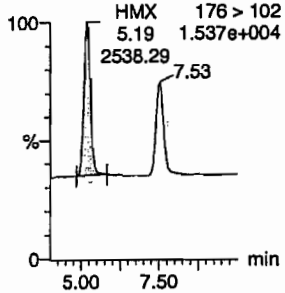
Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA2.qld, Time: Thu Apr 15 14:49:38 2010

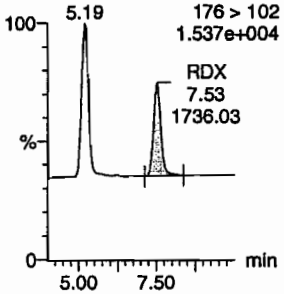
Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0412143a
Date: 15-Apr-2010
Time: 13:30:11
ID: WXX100415-08CRI
Vial: 1:1,C

MAP 4/15/10

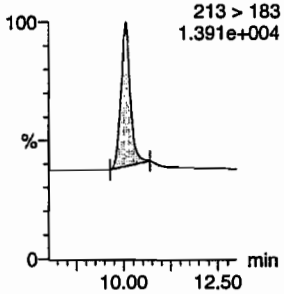
HMX
F2:MRM of 1 channel,AP-
HMX 176 > 102
5.19 1.537e+004
2538.29
7.53



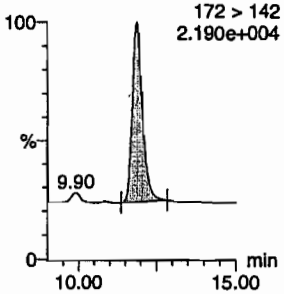
RDX
F2:MRM of 1 channel,AP-
5.19 176 > 102
1.537e+004
RDX
7.53
1736.03



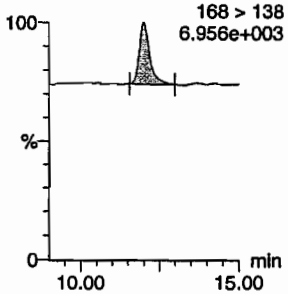
135-Trinitrobenzene
F4:MRM of 1 channel,AP-
213 > 183
1.391e+004



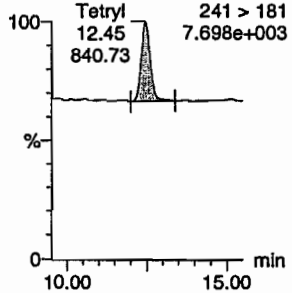
13-Dinitrobenzene-d4
F5:MRM of 2 channels,AP-
172 > 142
2.190e+004



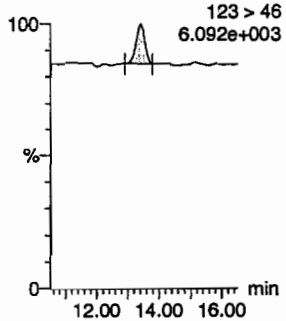
13-Dinitrobenzene
F5:MRM of 2 channels,AP-
168 > 138
6.956e+003



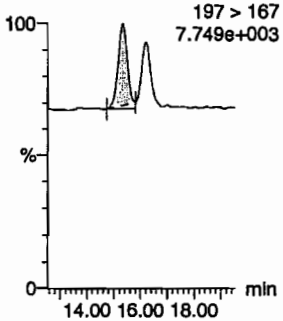
Tetryl
F6:MRM of 1 channel,AP-
Tetryl 241 > 181
12.45 7.698e+003
840.73



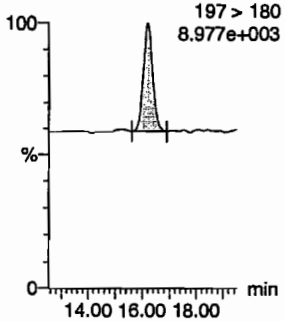
Nitrobenzene
F7:MRM of 1 channel,AP-
123 > 46
6.092e+003



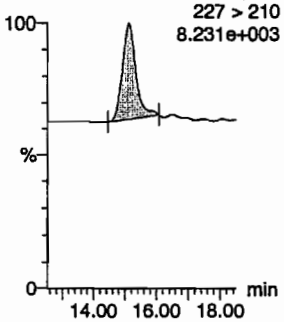
4-Amino-26-dinitrotoluene
F11:MRM of 2 channels,AP-
197 > 167
7.749e+003



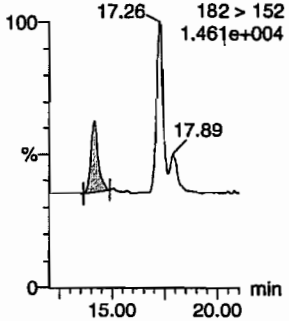
2-Amino-46-dinitrotoluene
F11:MRM of 2 channels,AP-
197 > 180
8.977e+003



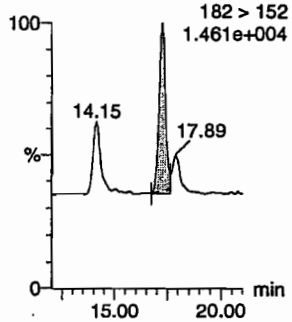
246-Trinitrotoluene
F10:MRM of 1 channel,AP-
227 > 210
8.231e+003



34-dinitrotoluene
F9:MRM of 2 channels,AP-
182 > 152
1.461e+004
17.26
17.89



26-dinitrotoluene
F9:MRM of 2 channels,AP-
182 > 152
1.461e+004
14.15
17.89



KMM 04/15/10

GEL SOP GL-OA-E-056, Method 8321A-Modified / MM = Manual Modification

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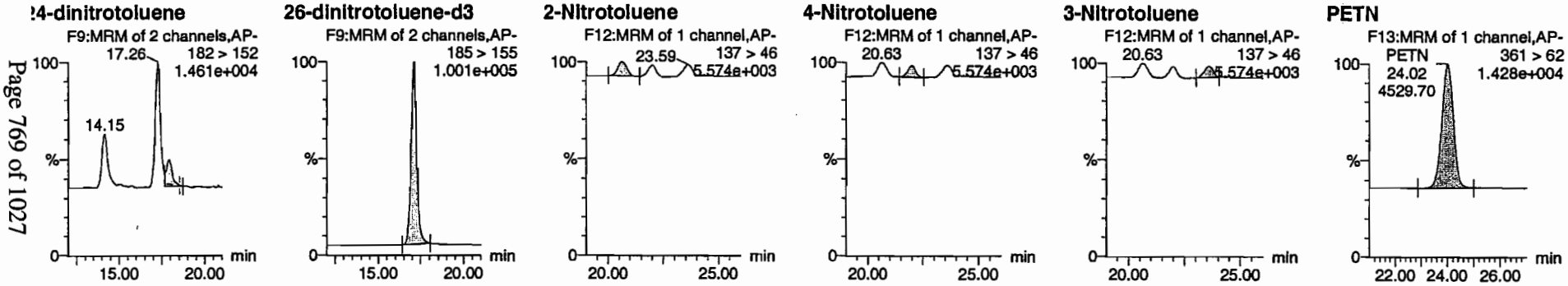

ID	Name	Trace	RT	Area	IS Area	Abs.Resp	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N
WXX100415-08CRI	HMX	176 > 102	5.19	2538.290	6311.535	2538.290	201.083	bb			47.4403	118.6	18.6	411.3
WXX100415-08CRI	RDX	176 > 102	7.53	1736.029	6311.535	1736.029	137.528	bb			48.0498	120.1	20.1	251.2
WXX100415-08CRI	135-Trinitrobenzene	213 > 183	10.05	2469.656	6311.535	2469.656	195.646	bb			45.2573	113.1	13.1	582.8
WXX100415-08CRI	13-Dinitrobenzene-d4	172 > 142	11.87	6311.535		6311.535	6311.535	bb			536.6619	107.3	7.3	648.0
WXX100415-08CRI	13-Dinitrobenzene	168 > 138	12.00	673.316	6311.535	673.316	53.340	bb			39.8933	99.7	-0.3	35.1
WXX100415-08CRI	Tetryl	241 > 181	12.45	840.732	6311.535	840.732	66.603	bb			51.3802	128.5	28.5	89.9
WXX100415-08CRI	Nitrobenzene	123 > 46	13.39	312.562	6311.535	312.562	24.761	bb			39.4728	98.7	-1.3	43.0
WXX100415-08CRI	4-Amino-26-dinitrotoluene	197 > 167	15.34	1067.238	37327.039	1067.238	14.296	MM	15-Apr-10	14:35:55	42.3249	105.8	5.8	69.5
WXX100415-08CRI	2-Amino-46-dinitrotoluene	197 > 180	16.21	1505.416	37327.039	1505.416	20.165	bb			39.3700	98.4	-1.6	69.8
WXX100415-08CRI	246-Trinitrotoluene	227 > 210	15.13	1483.628	37327.039	1483.628	19.873	bb			45.6824	114.2	14.2	83.4
WXX100415-08CRI	34-dinitrotoluene	182 > 152	14.15	1603.458	37327.039	1603.458	21.479	bb			20.8301	104.2	4.2	64.6
WXX100415-08CRI	26-dinitrotoluene	182 > 152	17.26	3399.561	37327.039	3399.561	45.538	MM	15-Apr-10	14:42:01	38.4757	96.2	-3.8	154.2
WXX100415-08CRI	24-dinitrotoluene	182 > 152	17.89	876.982	37327.039	876.982	11.747	MM	15-Apr-10	14:43:32	45.0080	112.5	12.5	33.6
WXX100415-08CRI	26-dinitrotoluene-d3	185 > 155	17.08	37327.039		37327.039	37327.039	bb			533.4998	106.7	6.7	3239.6
WXX100415-08CRI	2-Nitrotoluene	137 > 46	20.63	195.758	37327.039	195.758	2.622	bb			30.2836	75.7	-24.3	24.5
WXX100415-08CRI	4-Nitrotoluene	137 > 46	22.00	138.041	37327.039	138.041	1.849	bb			44.5782	111.4	11.4	19.9
WXX100415-08CRI	3-Nitrotoluene	137 > 46	23.59	147.899	37327.039	147.899	1.981	bb			33.9804	85.0	-15.0	19.3
WXX100415-08CRI	PETN	361 > 62	24.02	4529.698	37327.039	4529.698	60.676	bb			51.2837	128.2	28.2	1485.1

GEL SOP GL-OA-E-056, Method 8321A-Modified / MM = Manual Modification

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PROPRIETARY INFORMATION-No unauthorized reproduction without written permission from GEL.

GRAND MEAN AVERAGE

Vendor:	UltraScientific
Date of Analysis	04/15/10
Time of Injection	1330
Standard Number	WXX100415-08CRI
Data File	EXP0412143a

HMX	118.6
RDX	120.1
135-TNB	113.1
13-DNB	99.7
Tetryl	128.5
Nitrobenzene	98.7
4A-26-DNT	105.8
2A-46-DNT	98.4
246-TNT	114.2
34-DNT(surr)	104.2
26-DNT	96.2
24-DNT	112.5
2-NT	75.7
4-NT	111.4
3-NT	85.0
PETN	128.2
Total	1710.3
Average	106.9

MJT 4/15/10

HMK 04/15/10

ICV Limits 85-115%
CRI Limits 70-130%
CCV Limits 85-115%
No single analyte > +/- 60%

PROPRIETARY INFORMATION-No unauthorized reproduction without written permission from GEL.

7B
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10–2089

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXS04020013.wiff

Analysis Date: 02–APR–10 17:36

LCMSMS ID: 1358

Column ID: JSphere ODS–H80

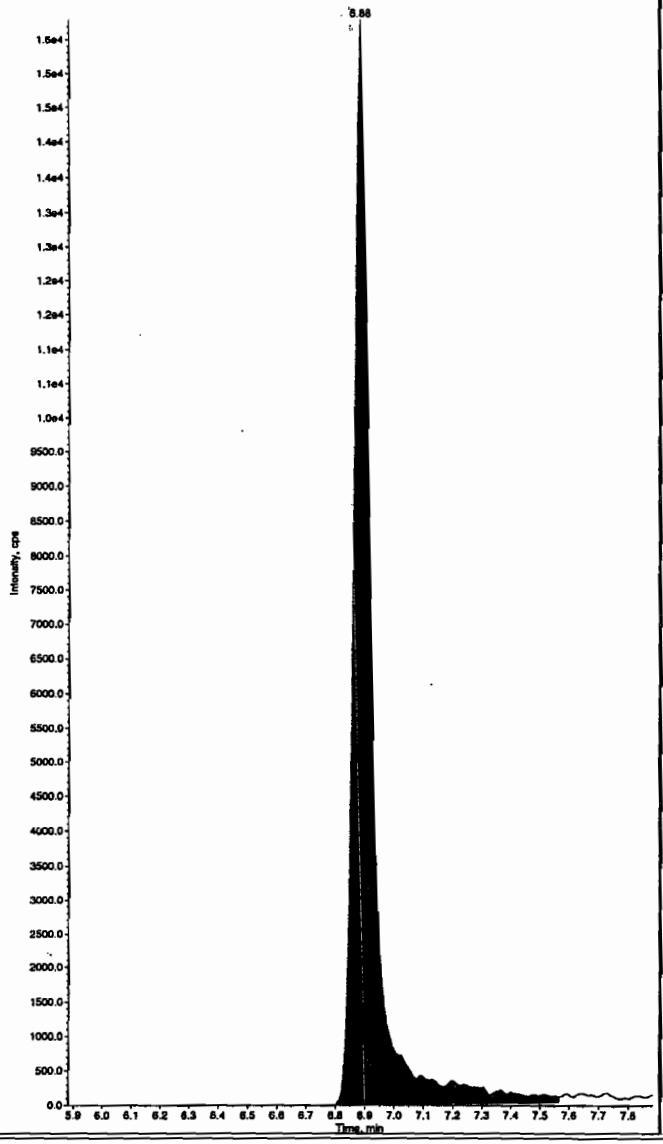
Compound	True	Found	Recovery	Q
2,4–Diamino–6–nitrotoluene	100	98.5	99	
2,6–Diamino–4–nitrotoluene	100	94.4	94	
3,4–Dinitrotoluene	50	49.1	98	
3,5–Dinitroaniline	100	114	114	
TATB	100	101	101	
tris(o–cresyl) phosphate	100	107	107	

Recovery Limits:
3,4–Dinitrotoluene (Surrogate),TATB, tris(o–cresyl)phosphate, 3,5–Dinitroaniline, 2,6–Diamino–4–nitrotoluene , 2,4–Diamino–6–nitrotoluene 50–150%
OtherTarget Analytes 70–130%
Column used to flag Recovery outside of Limits
* Value outside of Recovery Limits

Lan 4/7/10

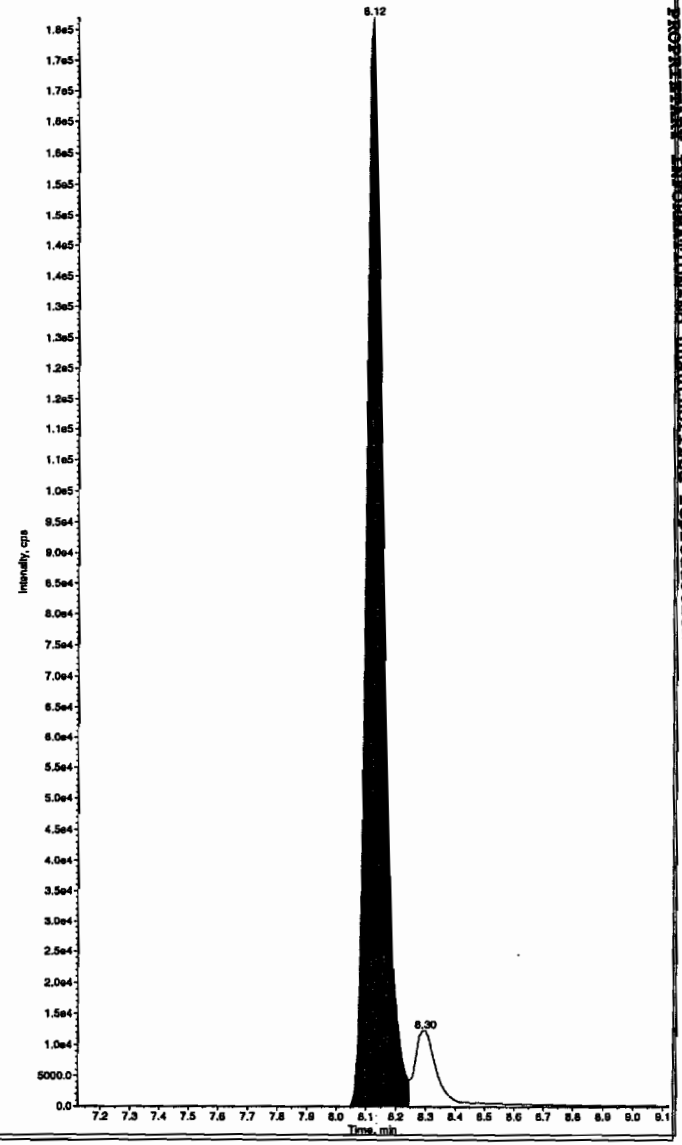
Sample Name: "WXX100402-27CRI" Sample ID: "[1]LER" File: "EXS04020013.wiff"
Peak Name: "TATB" Mass(es): "257.2/204.9 amu"
Comment: "LCMSEXP_C" Annotation: ""

mple Index:	1	
mple Type:	QC	
ncentration:	100.	ng/mL
lculated Conc:	101.	ng/mL
q. Date:	4/2/2010	
q. Time:	5:36:09 PM	
dified:	No	
oc. Algorithm:	IntelliQuan - IQA	
n. Peak Height:	2500.00	cps
n. Peak Width:	0.00	sec
oothing Width:	3	points
Window:	30.0	sec
pected RT:	6.88	min
e Relative RT:	No	
t. Type:	Valley	
tention Time:	6.88	min
ea:	7.38e+004	counts
ight:	15790.483	cps
art Time:	6.77	min
d Time:	7.56	min



Sample Name: "WXX100402-27CRI" Sample ID: "[1]LER" File: "EXS04020013.wiff"
Peak Name: "35-Dinitroaniline" Mass(es): "182.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1	
Sample Type:	QC	
Concentration:	100.	ng/mL
Calculated Conc:	114.	ng/mL
Acq. Date:	4/2/2010	
Acq. Time:	5:36:09 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:	8.12	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	8.12	min
Area:	7.34e+005	counts
Height:	176935.532	cps
Start Time:	7.99	min
End Time:	8.25	min



HZ 4/08/10

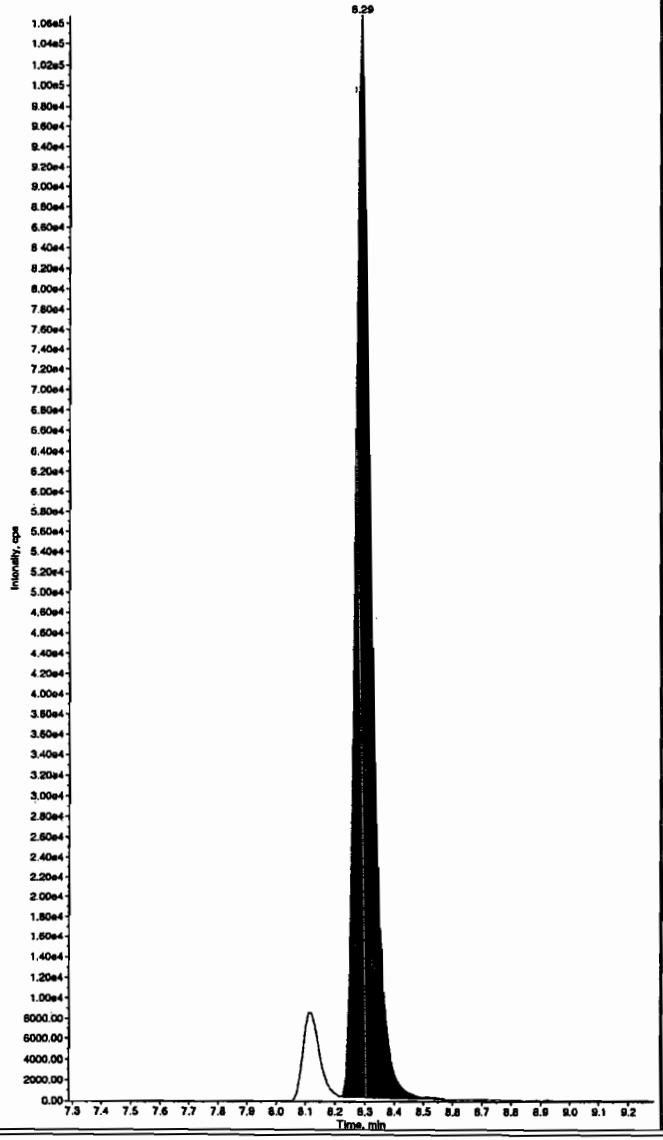
L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

PROPRIETARY INFORMATION-No unauthorized reproduction without written permission from GEL.

PROPRIETARY INFORMATION-No unauthorized reproduction without written permission from GEL.

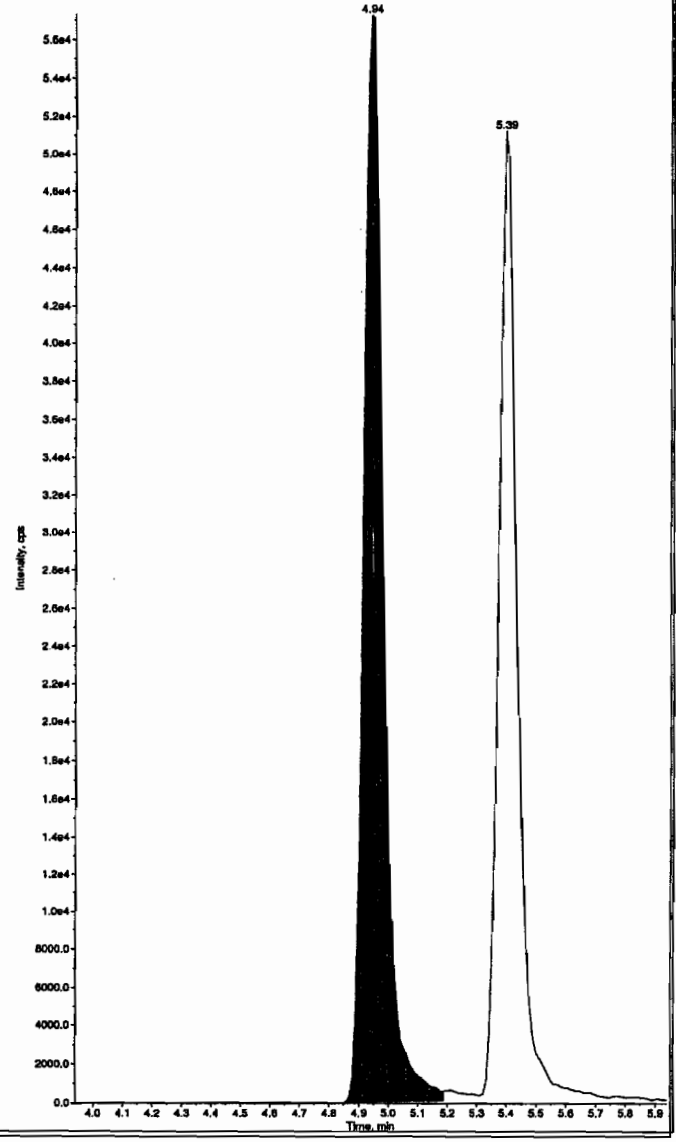
Sample Name: "WXX100402-27CRI" Sample ID: "|1|LER" File: "EXS04020013.wiff"
Peak Name: "34-Dinitrotoluene" Mass(es): "182.1/151.9 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1	
Sample Type:	QC	
Concentration:	50.0	ng/mL
Calculated Conc:	49.1	ng/mL
Acq. Date:	4/2/2010	
Acq. Time:	5:16:09 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:	8.29	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	8.29	min
Area:	4.18e+005	counts
Height:	106383.186	cps
Start Time:	8.22	min
End Time:	8.60	min



Sample Name: "WXX100402-27CRI" Sample ID: "|1|LER" File: "EXS04020013.wiff"
Peak Name: "2,6-Diamino-4-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

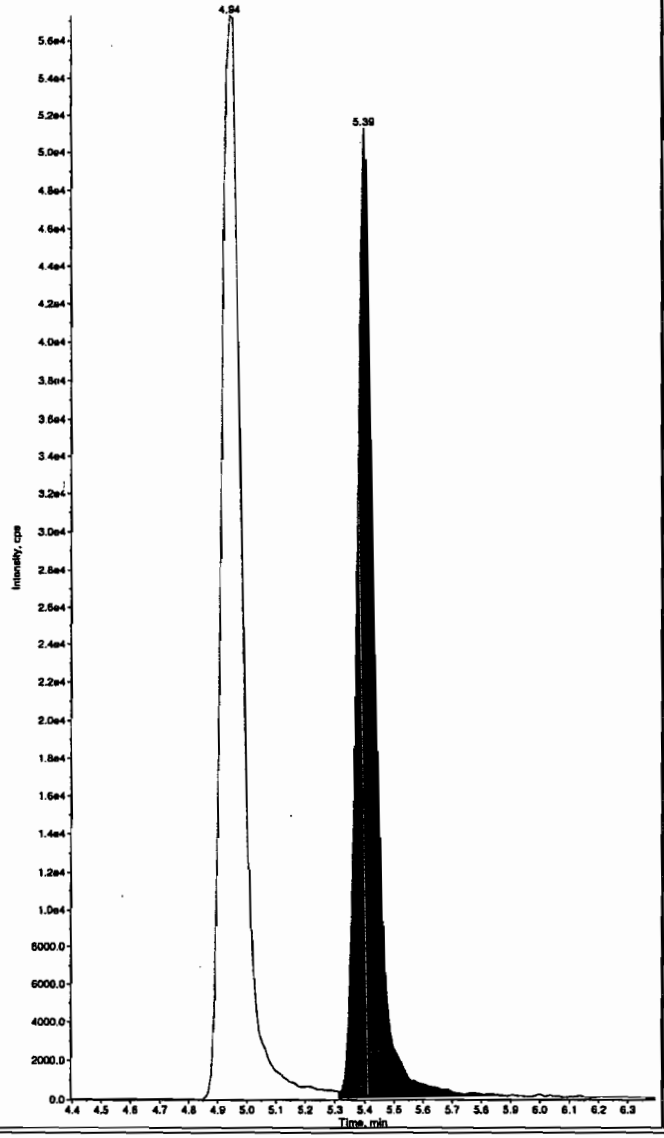
Sample Index:	1	
Sample Type:	QC	
Concentration:	100.	ng/mL
Calculated Conc:	94.4	ng/mL
Acq. Date:	4/2/2010	
Acq. Time:	5:36:09 PM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - IQA	
Min. Peak Height:	450.00	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	3	points
RT Window:	30.0	sec
Expected RT:	4.94	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	4.94	min
Area:	2.79e+005	counts
Height:	57247.868	cps
Start Time:	4.84	min
End Time:	5.19	min



PROPRIETARY INFORMATION-No unauthorized reproduction without written permission from GEL.

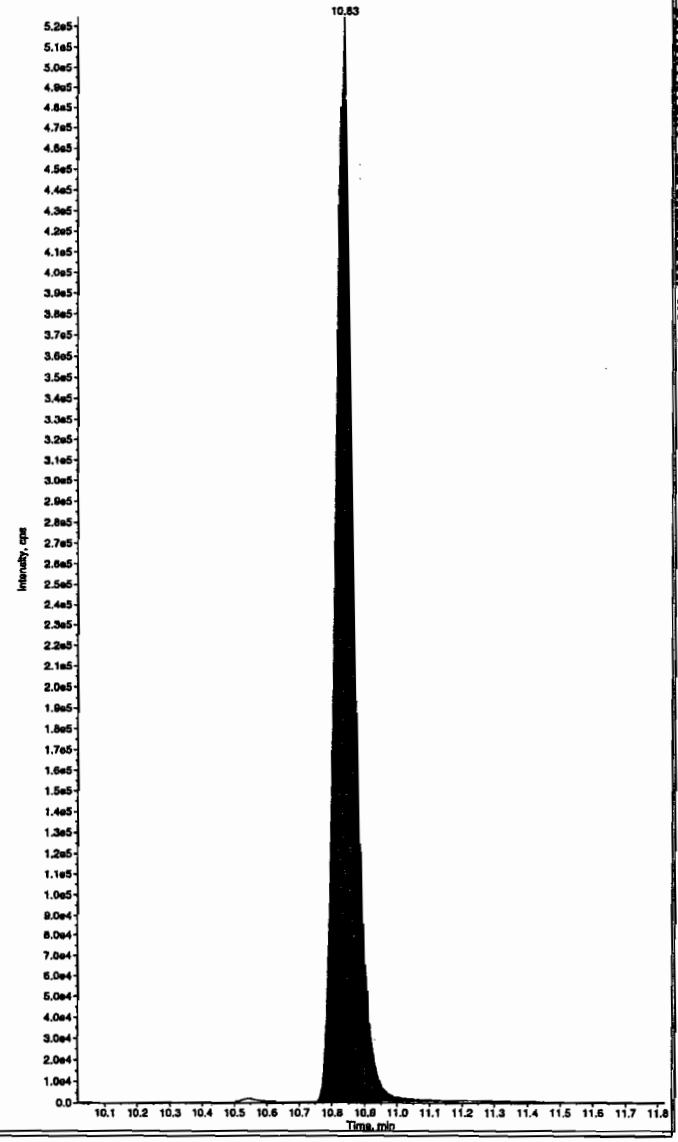
Sample Name: "WXX100402-27CRI" Sample ID: "[1]LER" File: "EXS04020013.wiff"
Peak Name: "24-Diamino-6-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

ple Index:	1	
ple Type:	QC	
centration:	100.	ng/mL
culated Conc:	98.5	ng/mL
. Date:	4/2/2010	
. Time:	5:36:09 PM	
ified:	No	
c. Algorithm:	IntelliQuan - IQA	
. Peak Height:	350.00	cps
. Peak Width:	0.00	sec
othing Width:	3	points
Window:	30.0	sec
ected RT:	5.39	min
Relative RT:	No	
. Type:	Valley	
ention Time:	5.39	min
a:	2.29e+005	counts
ght:	51150.158	cps
rt Time:	5.31	min
Time:	5.89	min



Sample Name: "WXX100402-27CRI" Sample ID: "[1]LER" File: "EXS04020013.wiff"
Peak Name: "tris(o-cresyl) phosphate" Mass(es): "369.1/91.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1	
Sample Type:	QC	
Concentration:	100.	ng/mL
Calculated Conc:	107.	ng/mL
Acq. Date:	4/2/2010	
Acq. Time:	5:36:09 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:	10.8	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	10.8	min
Area:	2.09e+006	counts
Height:	523975.159	cps
Start Time:	10.7	min
End Time:	11.2	min



L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

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7A
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10–2089

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXS04020024.wiff

Analysis Date: 02–APR–10 20:28

LCMSMS ID: 1358

Column ID: JSphere ODS–H80

Compound	True	Found	Recovery	Q
2,4–Diamino–6–nitrotoluene	500	577	115	
2,6–Diamino–4–nitrotoluene	500	536	107	
3,4–Dinitrotoluene	250	228	91	
3,5–Dinitroaniline	500	507	101	
TATB	500	483	97	
tris(o–cresyl) phosphate	500	504	101	

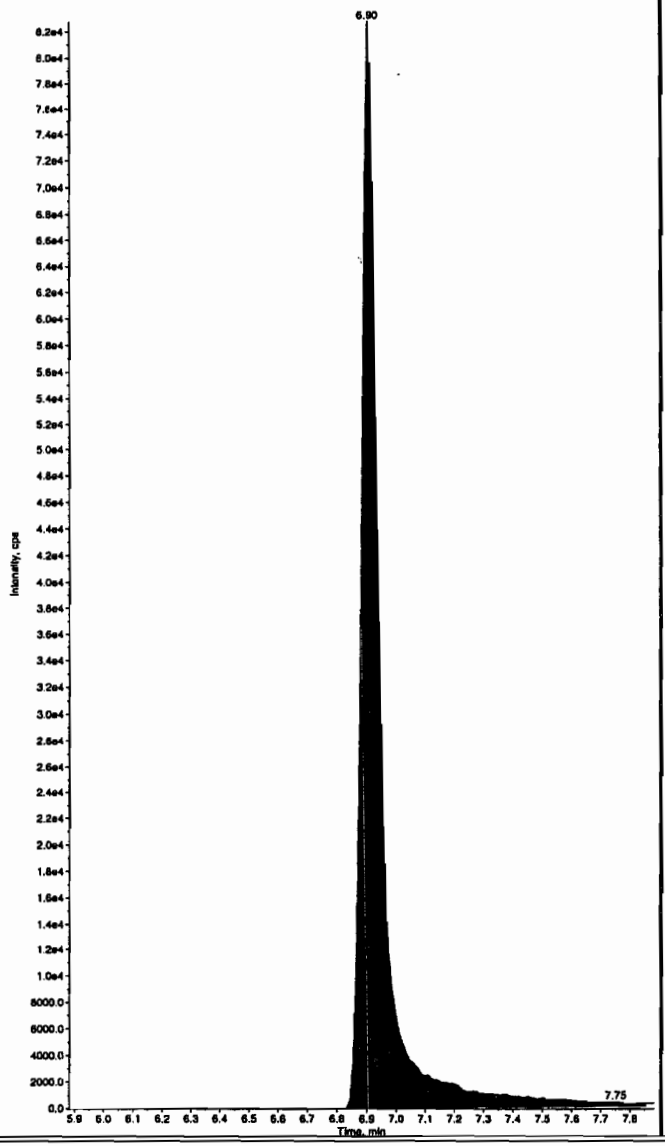
Recovery Limits:
3,4–Dinitrotoluene (Surrogate),TATB, tris(o–cresyl)phosphate, 3,5–Dinitroaniline, 2,6–Diamino–4–nitrotoluene ,
2,4–Diamino–6–nitrotoluene 70–130%
OtherTarget Analytes 80–120%
Column used to flag Recovery outside of Limits
* Value outside of Recovery Limits

Kar 4/7/10

ample Name: "WXX100402-26CCV" Sample ID: "|1|LER" File: "EXS04020024.wiff"
eak Name: "TATB" Mass(es): "257.2/204.9 amu"
omment: "LCMSEXP_C" Annotation: ""
uple Index: 1
uple Type: QC
centration: 500. ng/mL
culated Conc: 483. ng/mL
. Date: 4/2/2010
. Time: 8:28:51 PM

ified: No
c. Algorithm: IntelliQuan - IQA
. Peak Height: 2500.00 cps
. Peak Width: 0.00 sec
othing Width: 3 points
Window: 30.0 sec
ected RT: 6.88 min
Relative RT: No

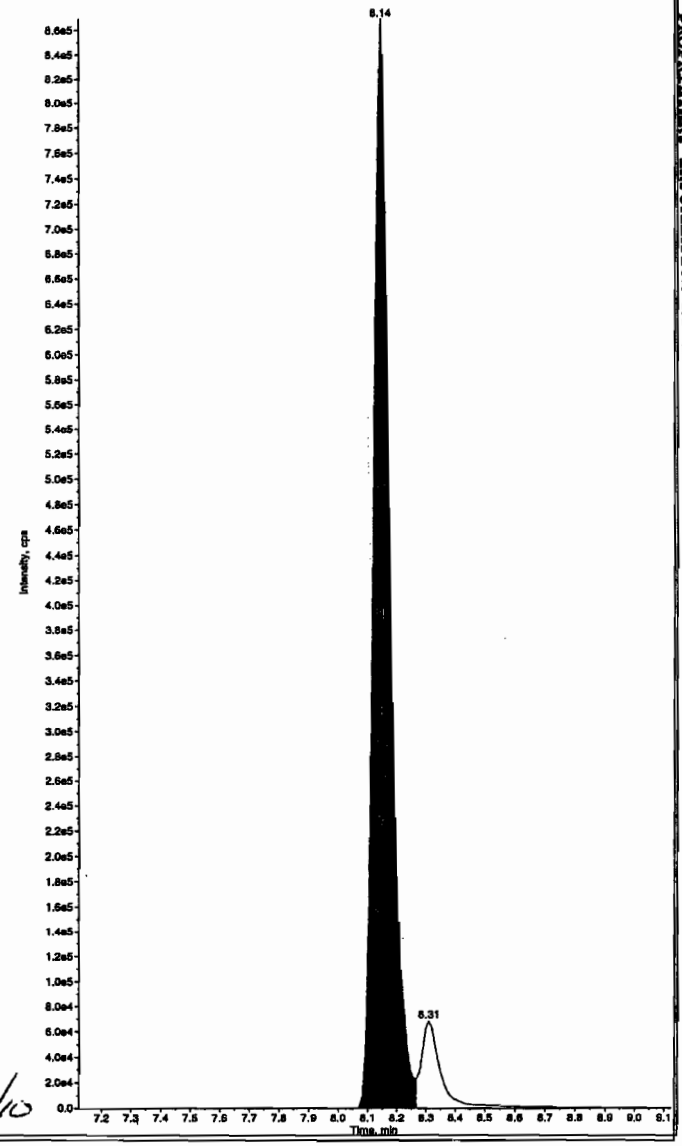
. Type: Valley
ention Time: 6.90 min
a: 3.92e+005 counts
ght: 82769.058 cps
rt Time: 6.81 min
Time: 7.85 min



Sample Name: "WXX100402-26CCV" Sample ID: "|1|LER" File: "EXS04020024.wiff"
Peak Name: "35-Dinitroaniline" Mass(es): "182.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: ""
Sample Index: 1
Sample Type: QC
Concentration: 500. ng/mL
Calculated Conc: 507. ng/mL
Acq. Date: 4/2/2010
Acq. Time: 8:28:51 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: 8.12 min
Use Relative RT: No

Int. Type: Valley
Retention Time: 8.14 min
Area: 3.56e+006 counts
Height: 869104.980 cps
Start Time: 8.05 min
End Time: 8.27 min



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L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

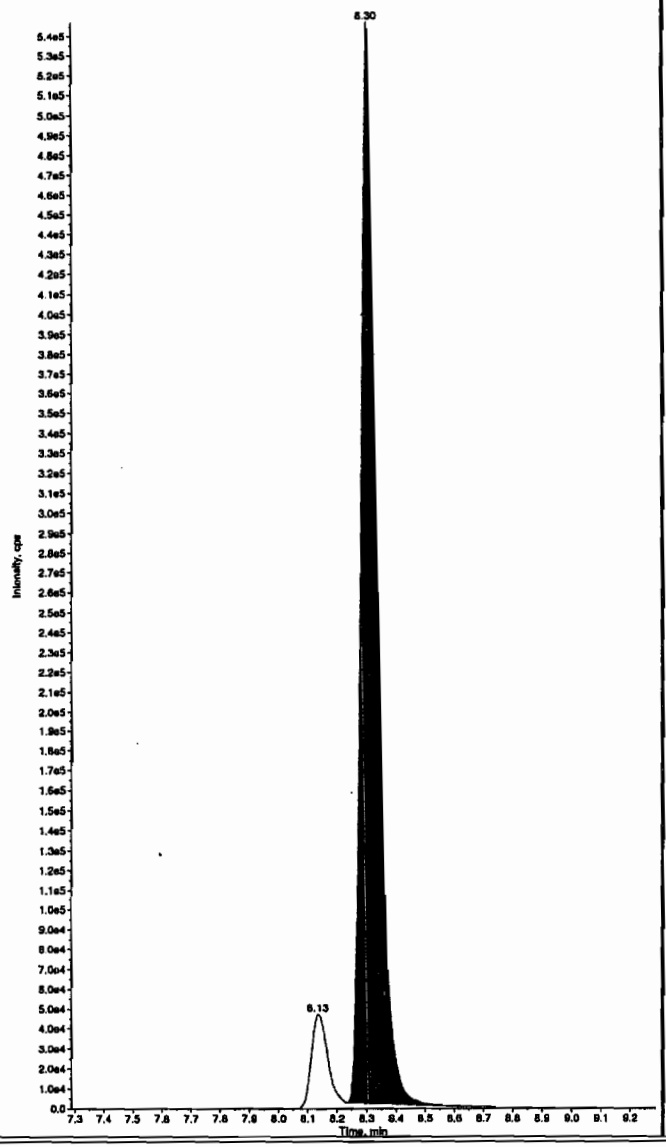
PROPRIETARY INFORMATION-No unauthorized reproduction without written permission from GEL.

ample Name: "WXX100402-26CCV" Sample ID: "[1]LER" File: "EXS04020024.wiff"
eak Name: "34-Dinitrotoluene" Mass(es): "182.1/151.9 amu"
omment: "LCMSEXP_C" Arinotation: ""

```
ple Index:          1
ple Type:           QC
centration:       250.     ng/mL
culated Conc:     228.     ng/mL
. Date:        4/2/2010
. Time:        8:28:51 PM

ified:             No
c. Algorithm: IntelliQuan - IQA
. Peak Height:1460.00    cps
. Peak Width:     0.00   sec
othing Width:  3        points
Window:          15.0    sec
ected RT:         8.29   min
 Relative RT:     No

. Type:          Valley
ention Time:      8.30   min
a:          2.13e+006    counts
ght:          545266.663  cps
rt Time:          8.24   min
 Time:            8.63   min
```

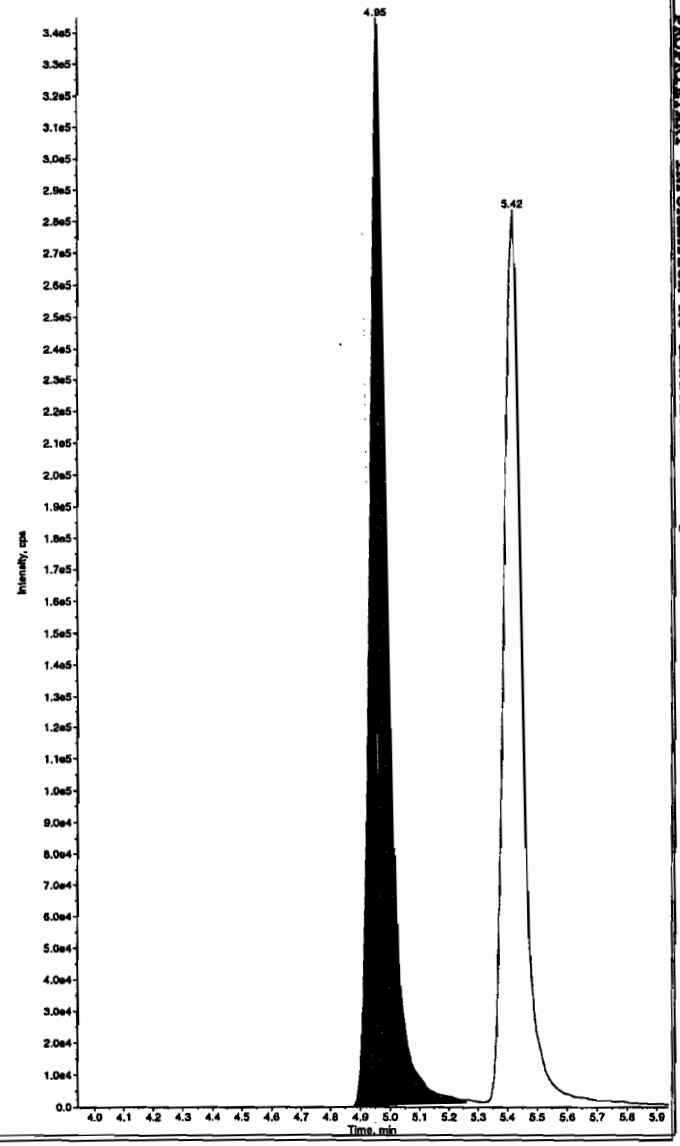


Sample Name: "WXX100402-26CCV" Sample ID: "[1]LER" File: "EXS04020024.wiff"
Peak Name: "26-Diamino-4-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

```
Sample Index:          1
Sample Type:           QC
Concentration:       500.     ng/mL
Calculated Conc:     536.     ng/mL
Acq. Date:        4/2/2010
Acq. Time:        8:28:51 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:        4.94    min
Use Relative RT:    No

Int. Type:         Valley
Retention Time:     4.95    min
Area:          1.47e+006    counts
Height:        344525.604   cps
Start Time:         4.87    min
End Time:           5.26    min
```



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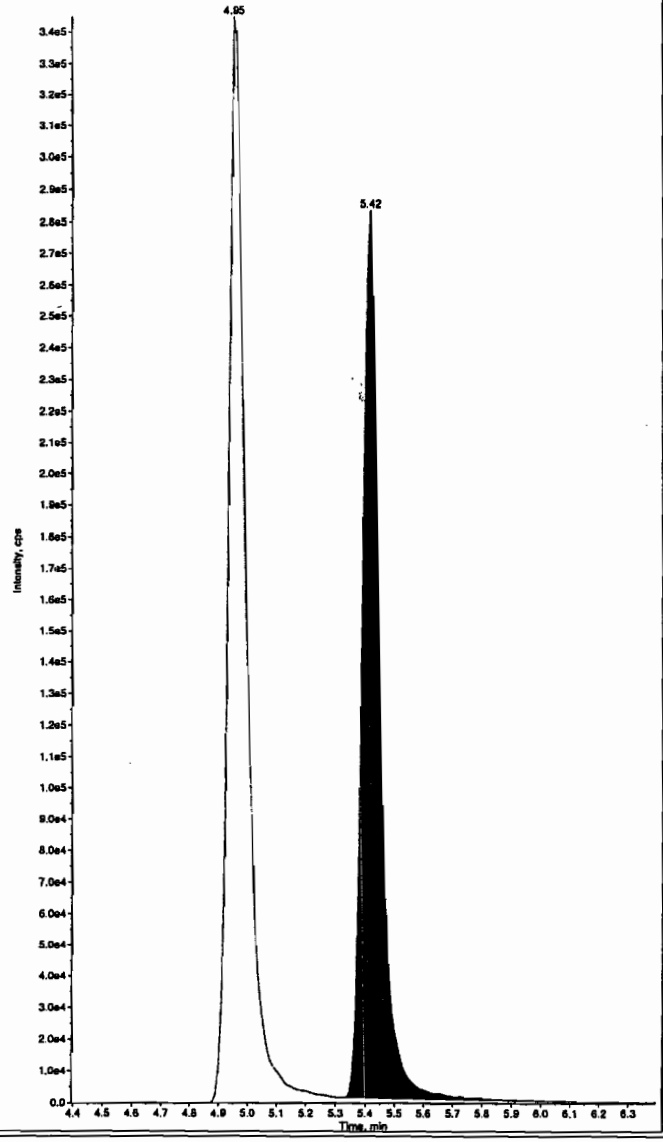
Sample Name: "WXX100402-26CCV" Sample ID: "]1|LER" File: "EXS04020024.wiff"
Peak Name: "24-Diamino-6-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

mple Index: 1
mple Type: QC
ncentration: 500. ng/mL
lculated Conc: 577. ng/mL
q. Date: 4/2/2010
q. Time: 8:28:51 PM

dified: No
oc. Algorithm: IntelliQuan - IQA
n. Peak Height: 350.00 cps
n. Peak Width: 0.00 sec
oothing Width: 3 points
Window: 30.0 sec
pected RT: 5.39 min
e Relative RT: No

:. Type: Valley
:ention Time: 5.42 min
ea: 1.23e+006 counts
ght: 281876.617 cps
rt Time: 5.33 min
1 Time: 6.05 min

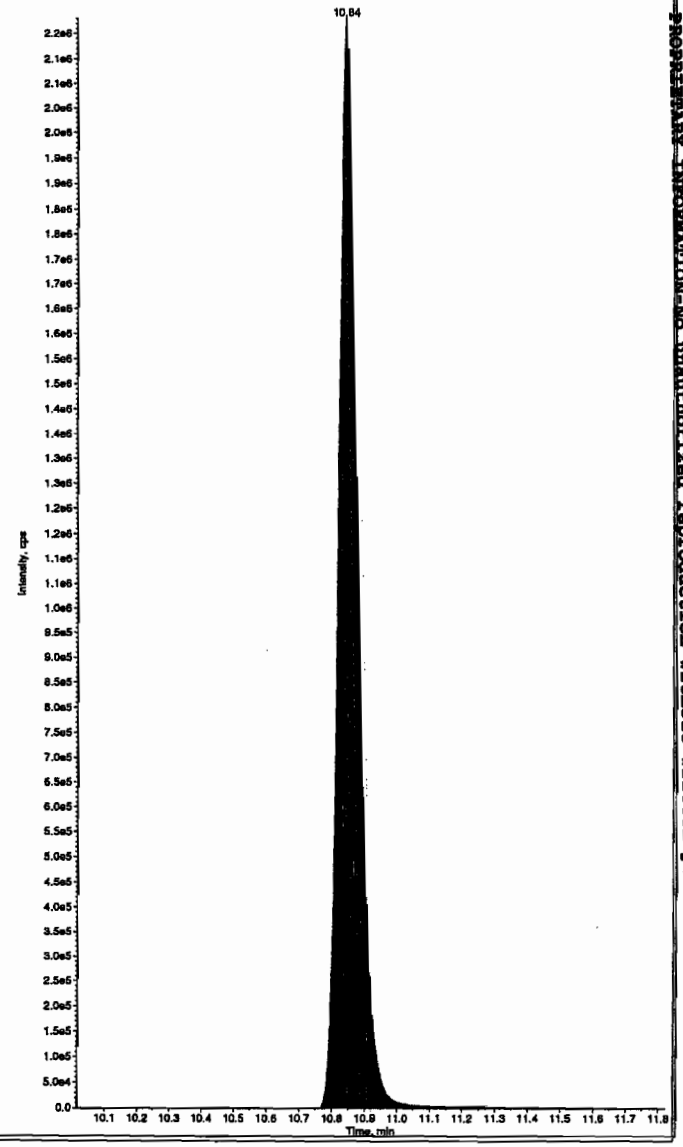


Sample Name: "WXX100402-26CCV" Sample ID: "]1|LER" File: "EXS04020024.wiff"
Peak Name: "tris(o-cresyl) phosphate" Mass(es): "369.1/91.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index: 1
Sample Type: QC
Concentration: 500. ng/mL
Calculated Conc: 504. ng/mL
Acq. Date: 4/2/2010
Acq. Time: 8:28:51 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: 10.8 min
Use Relative RT: No

Int. Type: Valley
Retention Time: 10.8 min
Area: 9.24e+006 counts
Height: 2179881.348 cps
Start Time: 10.7 min
End Time: 11.2 min



:L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

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7B
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10–2089

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXS04020026.wiff

Analysis Date: 02–APR–10 21:00

LCMSMS ID: 1358

Column ID: JSphere ODS–H80

Compound	True	Found	Recovery	Q
2,4–Diamino–6–nitrotoluene	100	111	111	
2,6–Diamino–4–nitrotoluene	100	104	104	
3,4–Dinitrotoluene	50	51.9	104	
3,5–Dinitroaniline	100	115	115	
TATB	100	97.1	97	
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%
OtherTarget Analytes 70–130%
Column used to flag Recovery outside of Limits
* Value outside of Recovery Limits

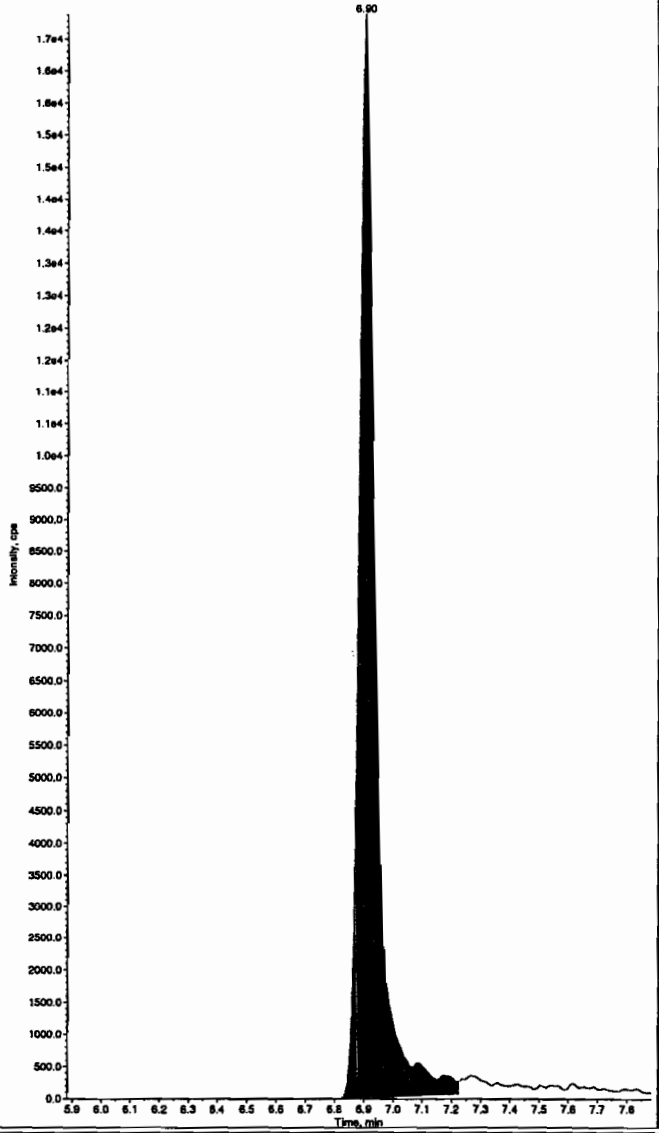
Lau 4/7/10

Sample Name: "WXX100402-27CRI" Sample ID: "[1]LER" File: "EXS04020026.wiff"
Peak Name: "TATB" Mass(es): "257.2/204.9 amu"
Comment: "LCMSEXP_C" Annotation: ""

```
mple Index:        1
mple Type:          QC
ncentration:       100.     ng/mL
lculated Conc:     97.1     ng/mL
q. Date:        4/2/2010
q. Time:        9:00:16 PM

dified:            No
oc. Algorithm: IntelliQuan - IQA
n. Peak Height:2500.00    cps
n. Peak Width:     0.00    sec
oothing Width:  3        points
 Window:          30.0    sec
pected RT:         6.88    min
 Relative RT:      No

:. Type:         Valley
ention Time:       6.90    min
a:          7.02e+004    counts
ght:          16884.968   cps
rt Time:           6.79    min
 Time:             7.22    min
```

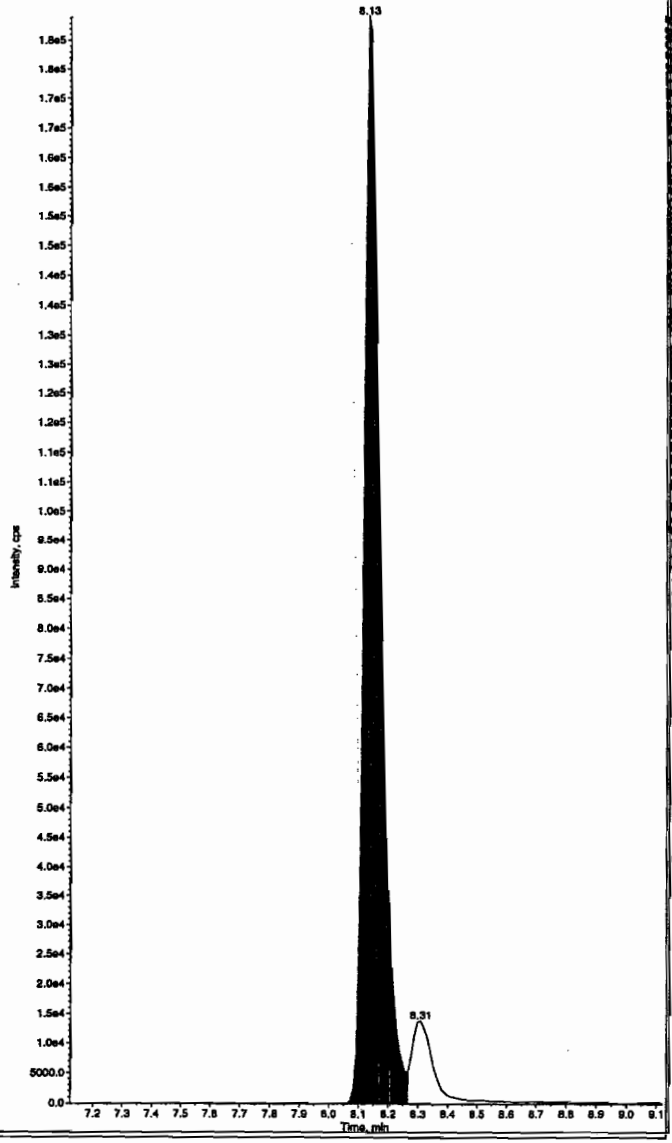


Sample Name: "WXX100402-27CRI" Sample ID: "[1]LER" File: "EXS04020026.wiff"
Peak Name: "35-Dinitroaniline" Mass(es): "182.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

```
Sample Index:        1
Sample Type:          QC
Concentration:       100.     ng/mL
Calculated Conc:     115.     ng/mL
Acq. Date:        4/2/2010
Acq. Time:        9:00:16 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:         8.12    min
Use Relative RT:     No

Int. Type:         Valley
Retention Time:      8.13    min
Area:          7.43e+005    counts
Height:        184155.640   cps
Start Time:          8.05    min
End Time:            8.27    min
```



HMM 04/08/10

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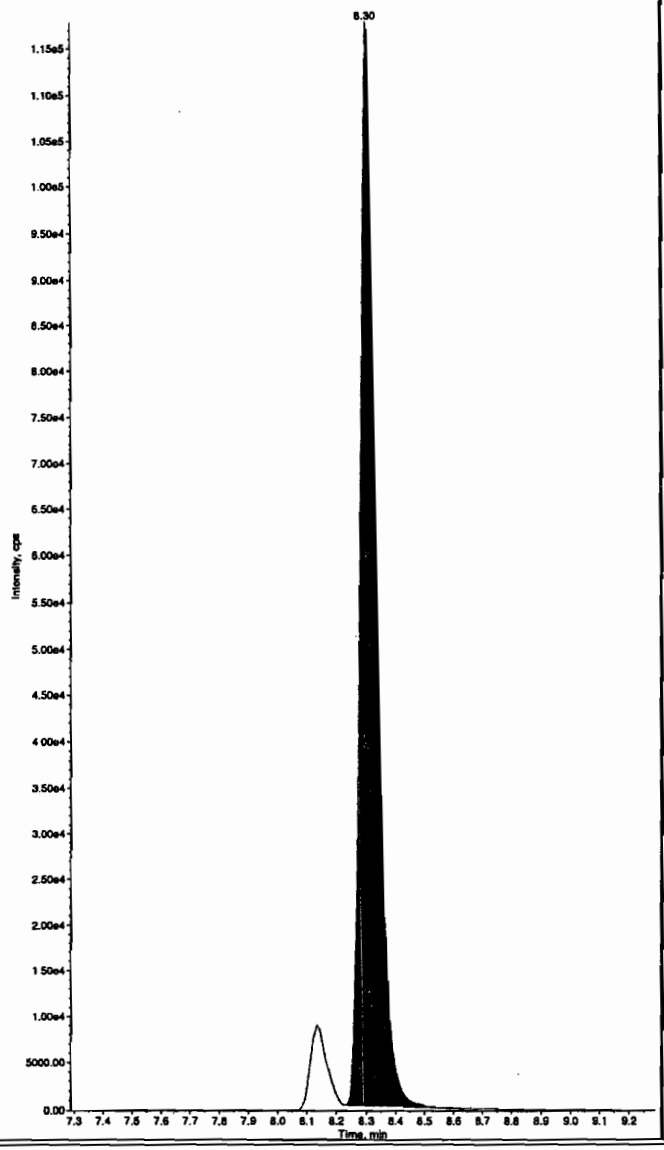
Sample Name: "WXX100402-27CRI" Sample ID: "|1|LER" File: "EXS04020026.wiff"
Peak Name: "34-Dinitrotoluene" Mass(es): "182.1/151.9 amu"
Comment: "LCMSEXP_C" Annotation: ""

mple Index: 1
mple Type: QC
ncentration: 50.0 ng/mL
lculated Conc: 51.9 ng/mL
q. Date: 4/2/2010
q. Time: 9:00:16 PM

dified: No
oc. Algorithm: IntelliQuan - IQA
n. Peak Height: 1460.00 cps
n. Peak Width: 0.00 sec
oothing Width: 3 points
Window: 15.0 sec
pected RT: 8.29 min
Relative RT: No

.. Type: Valley
tention Time: 8.30 min
ea: 4.47e+005 counts
ght: 117379.852 cps
rt Time: 8.23 min
Time: 8.64 min

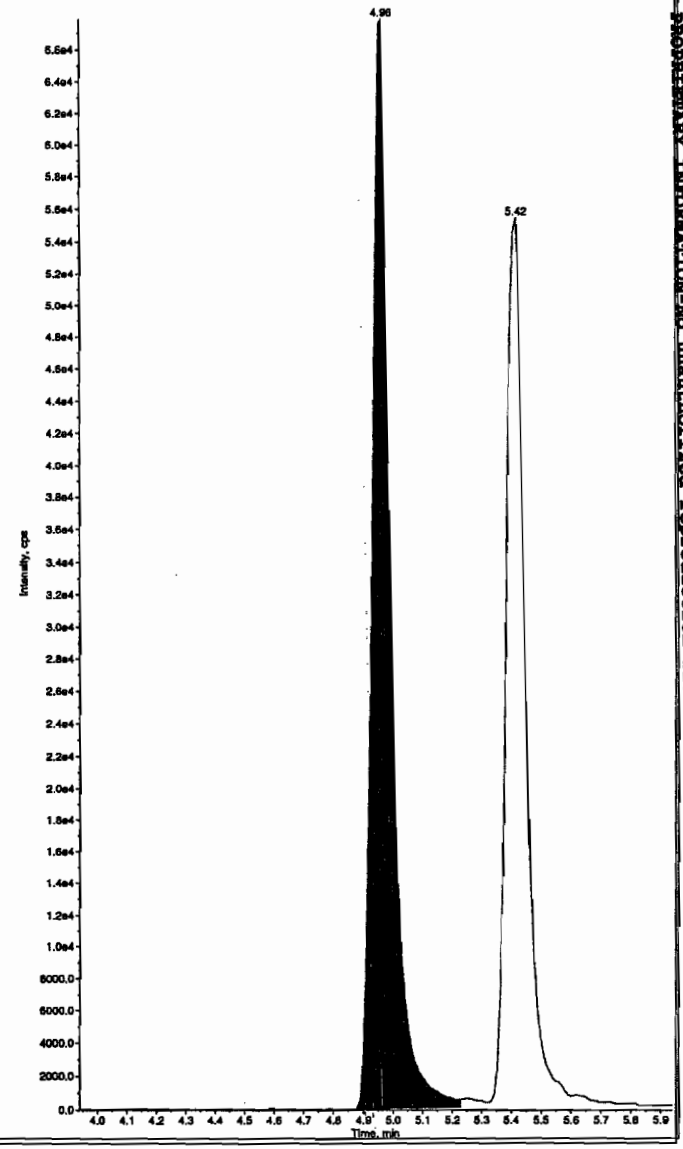


Sample Name: "WXX100402-27CRI" Sample ID: "|1|LER" File: "EXS04020026.wiff"
Peak Name: "26-Diamino-4-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index: 1
Sample Type: QC
Concentration: 100. ng/mL
Calculated Conc: 104. ng/mL
Acq. Date: 4/2/2010
Acq. Time: 9:00:16 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: 4.94 min
Use Relative RT: No

Int. Type: Valley
Retention Time: 4.96 min
Area: 3.04e+005 counts
Height: 67833.138 cps
Start Time: 4.86 min
End Time: 5.23 min



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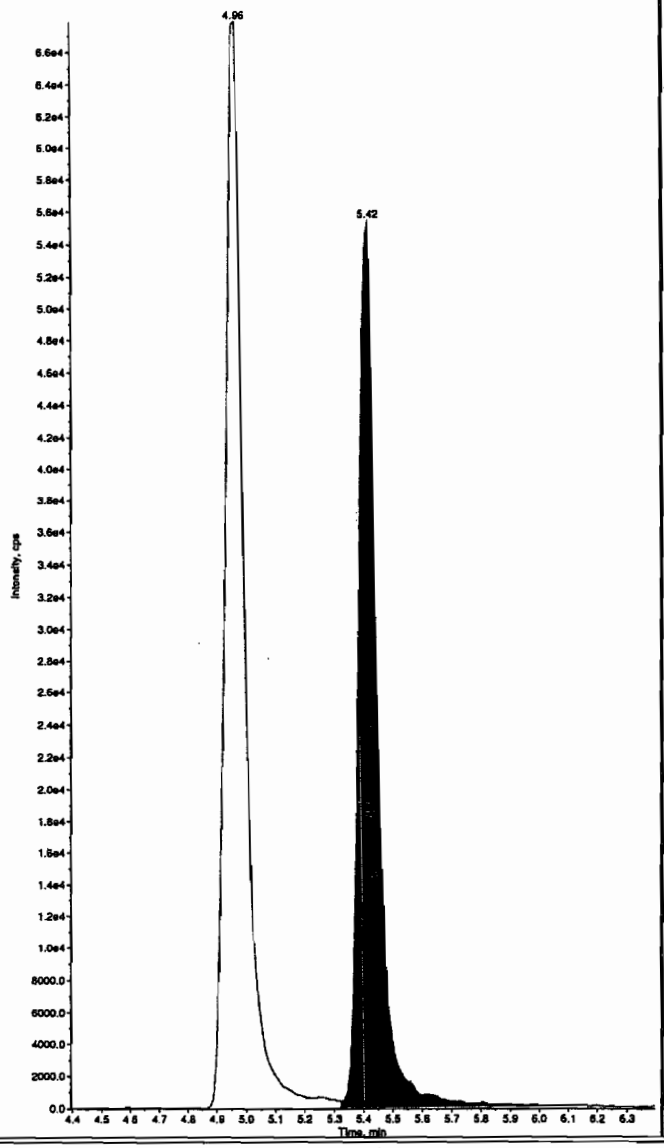
PROPRIETARY INFORMATION-No unauthorized reproduction without written permission from GEL.

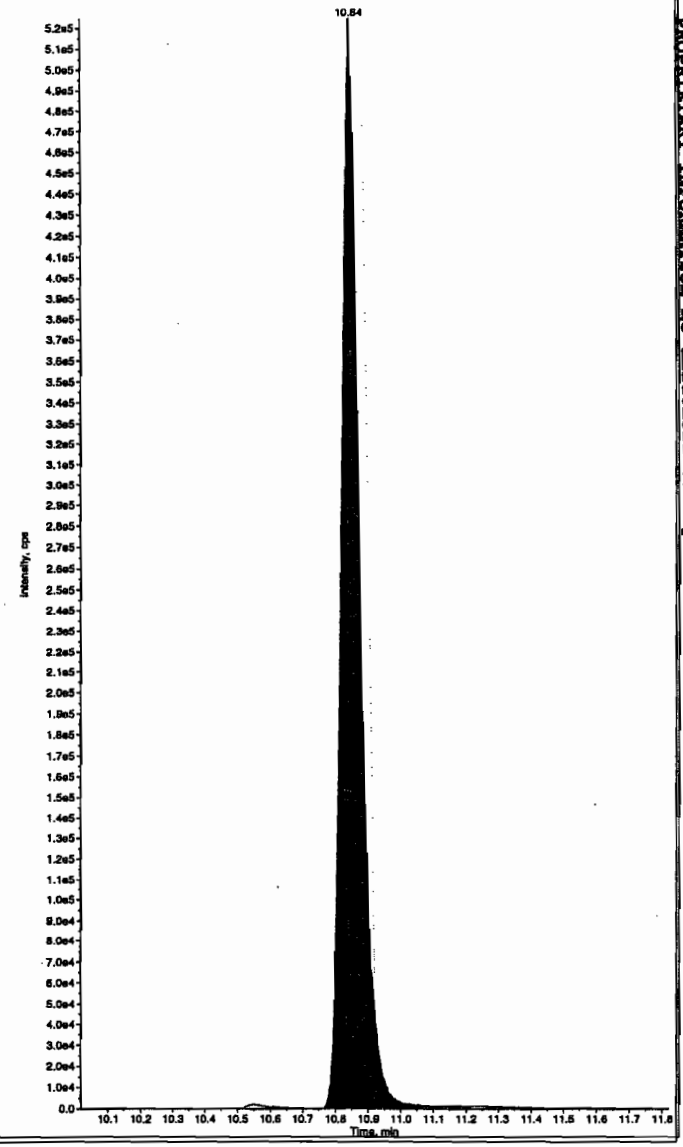
ample Name: "WXX100402-27CRI" Sample ID: "[1]LER" File: "EXS04020026.wiff"
eak Name: "24-Diamino-6-nitrotoluene" Mass(es): "166.0/46.0 amu"
omment: "LCMSEXP_C" Annotation: ""

ple Index:	1	
ple Type:	QC	
centration:	100.	ng/mL
culated Conc:	111.	ng/mL
. Date:	4/2/2010	
. Time:	9:00:16 PM	
ified:	No	
c. Algorithm:	IntelliQuan - IQA	
. Peak Height:	350.00	cps
. Peak Width:	0.00	sec
othing Width:	3	points
Window:	30.0	sec
ected RT:	5.39	min
Relative RT:	No	
. Type:	Valley	
ention Time:	5.42	min
a:	2.56e+005	counts
ght:	55356.621	cps
rt Time:	5.32	min
Time:	6.06	min



Sample Name: "WXX100402-27CRI" Sample ID: "[1]LER" File: "EXS04020026.wiff"
Peak Name: "tris(o-cresyl) phosphate" Mass(es): "369.1/91.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1	
Sample Type:	QC	
Concentration:	100.	ng/mL
Calculated Conc:	108.	ng/mL
Acq. Date:	4/2/2010	
Acq. Time:	9:00:16 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:	10.8	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	10.8	min
Area:	2.11e+006	counts
Height:	524103.455	cps
Start Time:	10.7	min
End Time:	11.2	min



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7A
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10–2089

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXS04020037.wiff

Analysis Date: 02–APR–10 23:53

LCMSMS ID: 1358

Column ID: JSphere ODS–H80

Compound	True	Found	Recovery	Q
2,4–Diamino–6–nitrotoluene	500	569	114	
2,6–Diamino–4–nitrotoluene	500	529	106	
3,4–Dinitrotoluene	250	223	89	
3,5–Dinitroaniline	500	484	97	
TATB	500	481	96	
tris(o–cresyl) phosphate	500	502	100	

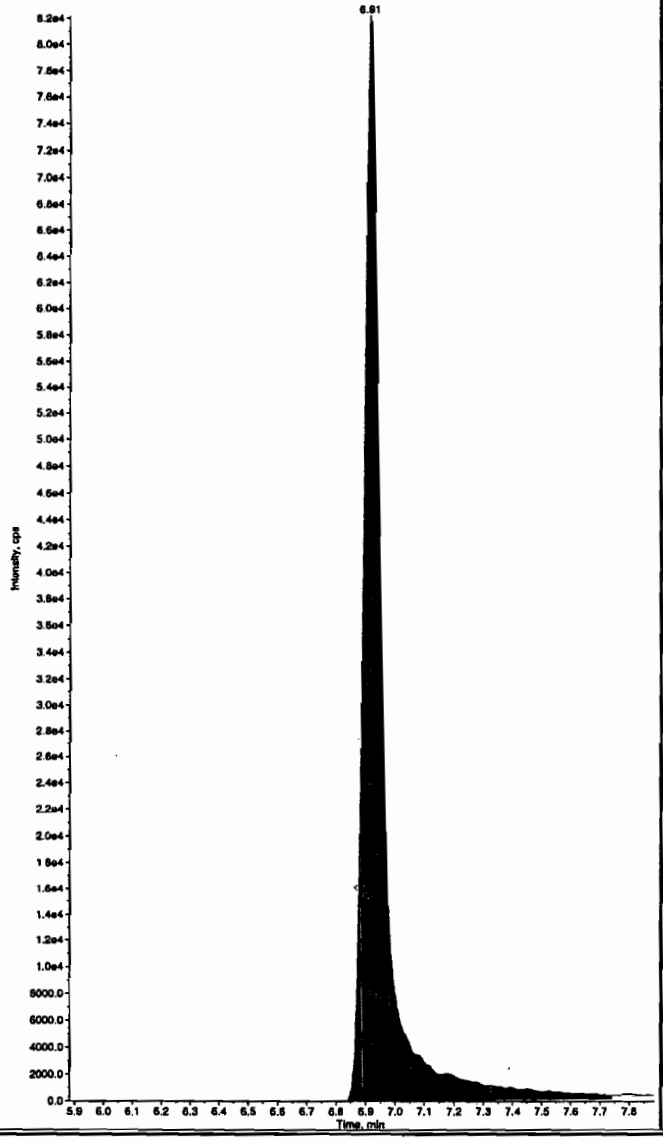
Recovery Limits:
3,4–Dinitrotoluene (Surrogate),TATB, tris(o–cresyl)phosphate, 3,5–Dinitroaniline, 2,6–Diamino–4–nitrotoluene , 2,4–Diamino–6–nitrotoluene 70–130%
OtherTarget Analytes 80–120%
Column used to flag Recovery outside of Limits
* Value outside of Recovery Limits

Before Run 4/7/10

ample Name: "WXX100402-26CCV" Sample ID: "|1|LER" File: "EXS04020037.wiff"
eak Name: "TATB" Mass(es): "257.2/204.9 amu"
omment: "LCMSEXP_C" Annotation: ""
ple Index: 1
ple Type: QC
centration: 500. ng/mL
culated Conc: 481. ng/mL
. Date: 4/2/2010
. Time: 11:53:05 PM

ified: No
c. Algorithm: IntelliQuan - IQA
. Peak Height: 2500.00 cps
. Peak Width: 0.00 sec
othing Width: 3 points
Window: 30.0 sec
ected RT: 6.88 min
Relative RT: No

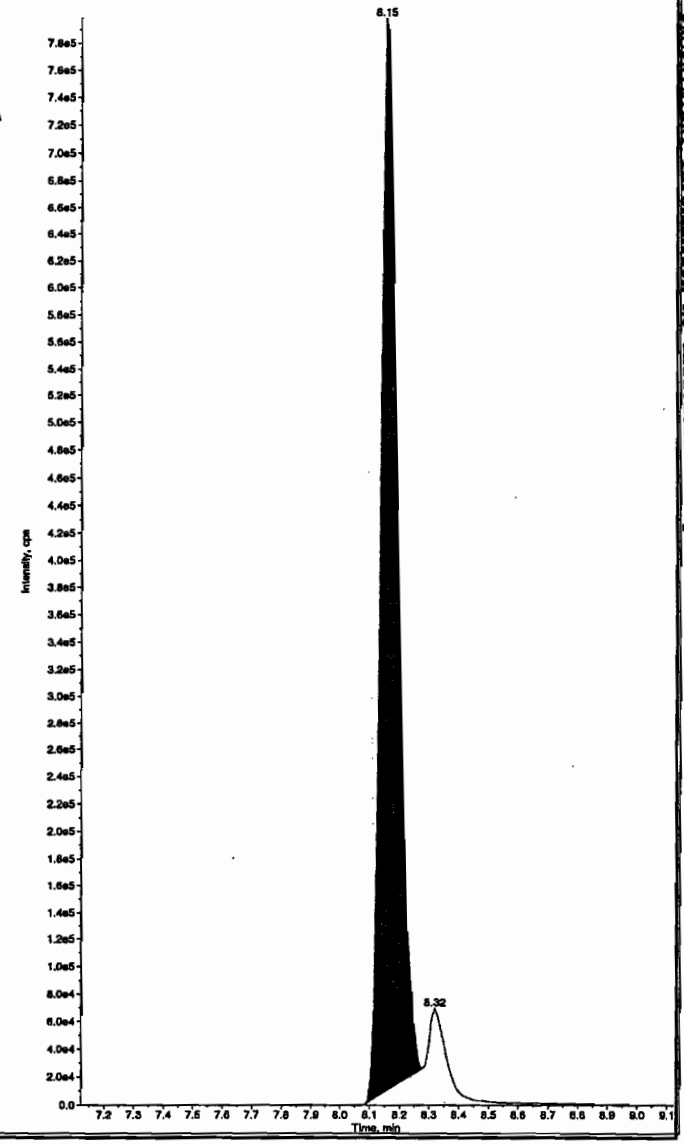
. Type: Valley
ention Time: 6.91 min
a: 3.91e+005 counts
ght: 82143.143 cps
rt Time: 6.82 min
Time: 7.74 min



Sample Name: "WXX100402-26CCV" Sample ID: "|1|LER" File: "EXS04020037.wiff"
Peak Name: "35-Dinitroaniline" Mass(es): "182.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: ""
Sample Index: 1
Sample Type: QC
Concentration: 500. ng/mL
Calculated Conc: 464. ng/mL
Acq. Date: 4/2/2010
Acq. Time: 11:53:05 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: 8.12 min
Use Relative RT: No

Int. Type: Valley
Retention Time: 8.15 min
Area: 3.26e+006 counts
Height: 788878.845 cps
Start Time: 8.08 min
End Time: 8.28 min



HMM 04/08/10

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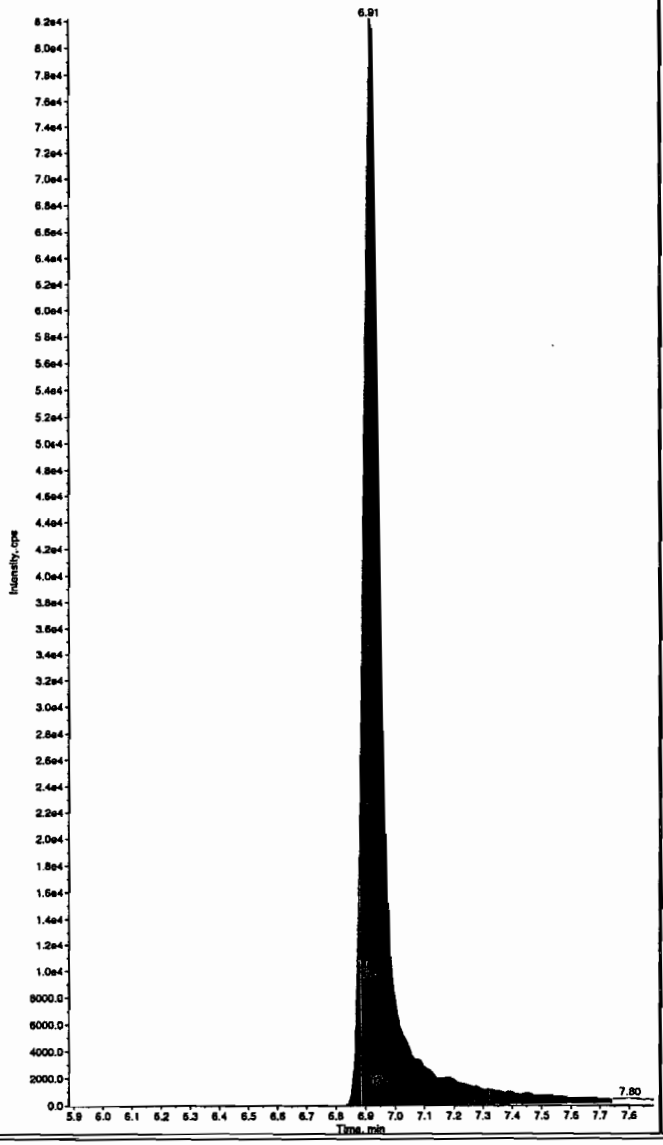
after Lan 4/7/10

ample Name: "WXX100402-26CCV" Sample ID: "|1|LER" File: "EXS04020037.wiff"
eak Name: "TATB" Mass(es): "257.2/204.9 amu"
omment: "LCMSEXP_C" Annotation: ""
ple Index: 1
ple Type: QC
centration: 500. ng/mL
culated Conc: 481. ng/mL
. Date: 4/2/2010
. Time: 11:53:05 PM

ified: No
c. Algorithm: IntelliQuan - IQA
. Peak Height: 2500.00 cps
. Peak Width: 0.00 sec
othing Width: 3 points
Window: 30.0 sec
ected RT: 6.88 min
Relative RT: No

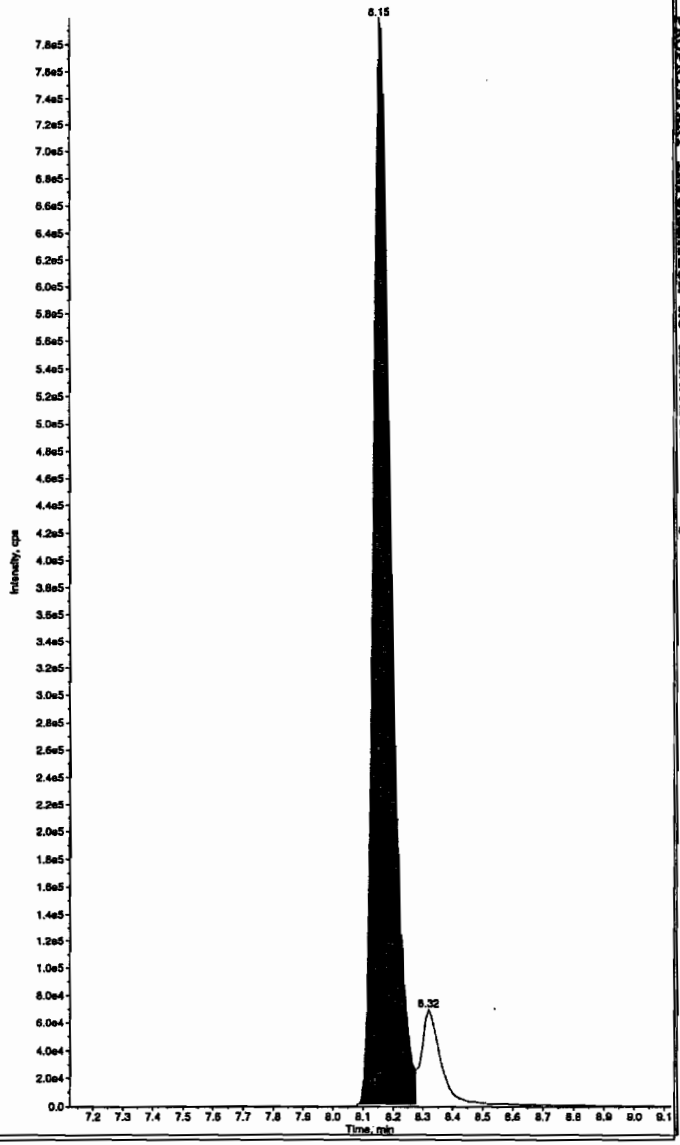
. Type: Valley
ention Time: 6.91 min
a: 3.91e+005 counts
ght: 82143.143 cps
rt Time: 6.82 min
Time: 7.74 min



Sample Name: "WXX100402-26CCV" Sample ID: "|1|LER" File: "EXS04020037.wiff"
Peak Name: "35-Dinitroaniline" Mass(es): "182.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: ""
Sample Index: 1
Sample Type: QC
Concentration: 500. ng/mL
Calculated Conc: 484. ng/mL
Acq. Date: 4/2/2010
Acq. Time: 11:53:05 PM

Modified: Yes
RT Window: 15.0 sec
Expected RT: 8.12 min
Use Relative RT: No

Int. Type: Manual
Retention Time: 8.16 min
Area: 3.40e+006 counts
Height: 811769.165 cps
Start Time: 8.08 min
End Time: 8.28 min



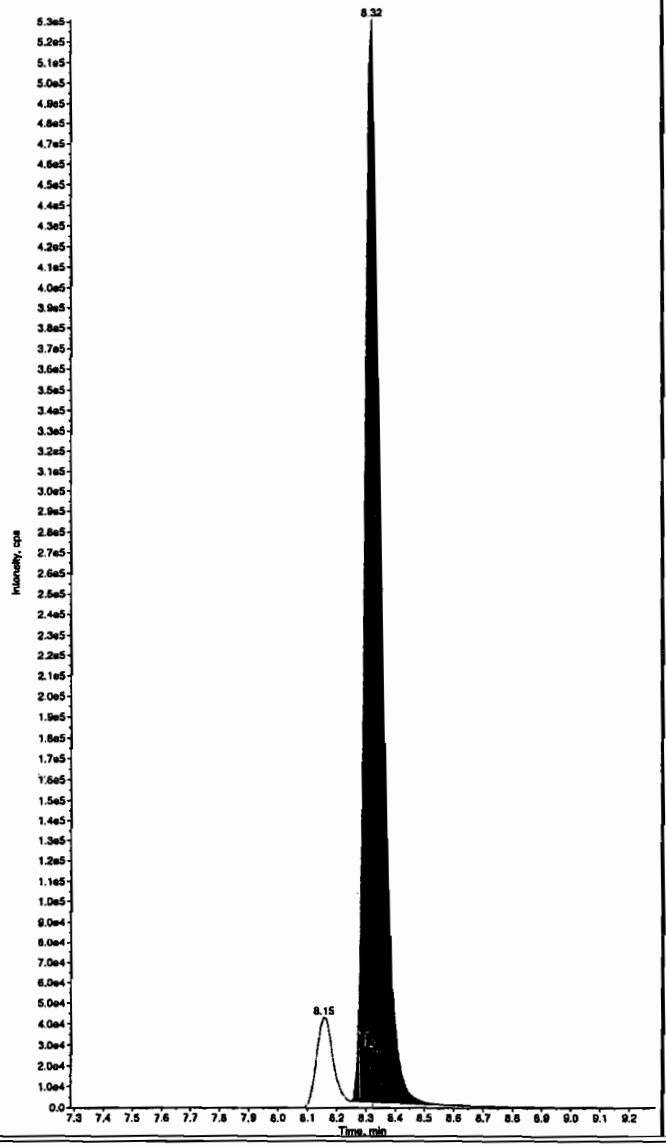
PROPRIETARY INFORMATION-No unauthorized reproduction without written permission from GEL.

Sample Name: "WXX100402-26CCV" Sample ID: "[1]LER" File: "EXS04020037.wiff"
Peak Name: "34-Dinitrotoluene" Mass(es): "182.1/151.9 amu"
Comment: "LCMSEXP_C" Annotation: ""

mple Index: 1
mple Type: QC
ncentration: 250. ng/mL
lculated Conc: 223. ng/mL
q. Date: 4/2/2010
q. Time: 11:53:05 PM

dified: No
oc. Algorithm: IntelliQuan - IQA
n. Peak Height: 1460.00 cps
n. Peak Width: 0.00 sec
oothing Width: 3 points
Window: 15.0 sec
pected RT: 8.29 min
Relative RT: No

:. Type: Valley
:ention Time: 8.32 min
ea: 2.09e+006 counts
.ght: 528392.273 cps
art Time: 8.25 min
d Time: 8.58 min

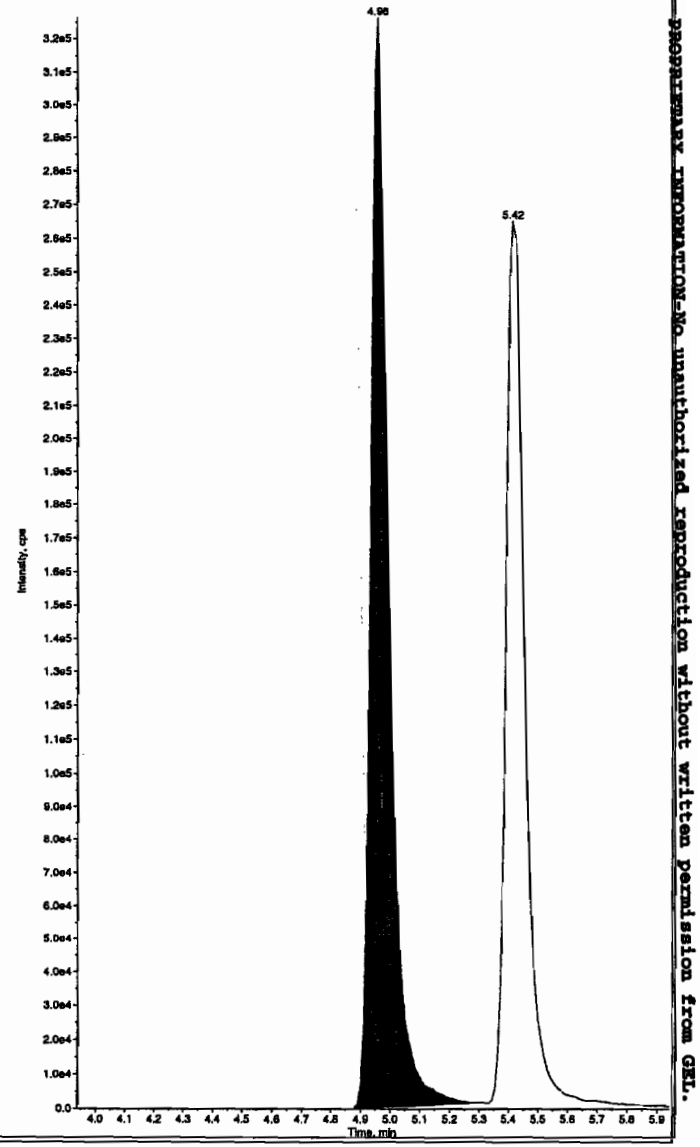


Sample Name: "WXX100402-26CCV" Sample ID: "[1]LER" File: "EXS04020037.wiff"
Peak Name: "26-Diamino-4-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index: 1
Sample Type: QC
Concentration: 500. ng/mL
Calculated Conc: 529. ng/mL
Acq. Date: 4/2/2010
Acq. Time: 11:53:05 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: 4.94 min
Use Relative RT: No

Int. Type: Valley
Retention Time: 4.96 min
Area: 1.45e+006 counts
Height: 325939.484 cps
Start Time: 4.87 min
End Time: 5.27 min



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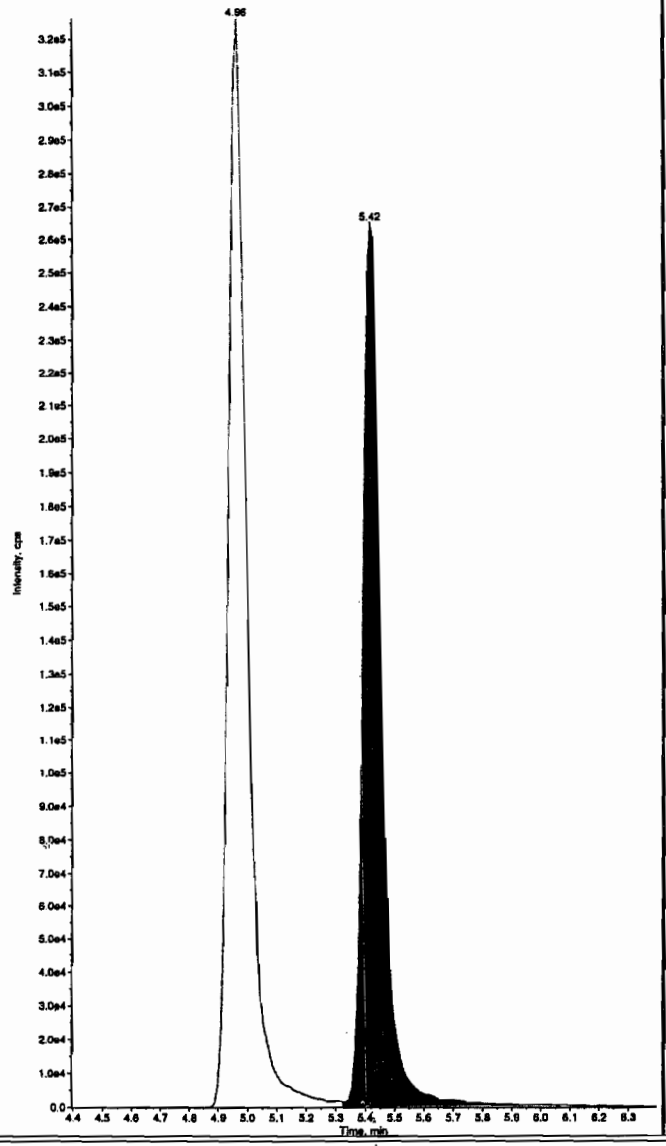
PROPRIETARY INFORMATION-No unauthorized reproduction without written permission from GEL.

Sample Name: "WXX100402-26CCV" Sample ID: "|1|LER" File: "EXS04020037.wiff"
Peak Name: "24-Diamino-6-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

```
ple Index:        1
ple Type:          QC
centration:       500.     ng/mL
culated Conc:     569.     ng/mL
. Date:        4/2/2010
. Time:        11:53:05 PM

ified:             No
c. Algorithm: IntelliQuan - IQA
. Peak Height: 350.00    cps
. Peak Width:    0.00    sec
othing Width:  3        points
Window:         30.0     sec
ected RT:        5.39    min
 Relative RT:    No

. Type:        Valley
ention Time:     5.42    min
a:          1.21e+006   counts
ght:        264564.697   cps
rt Time:         5.32    min
 Time:           5.94    min
```

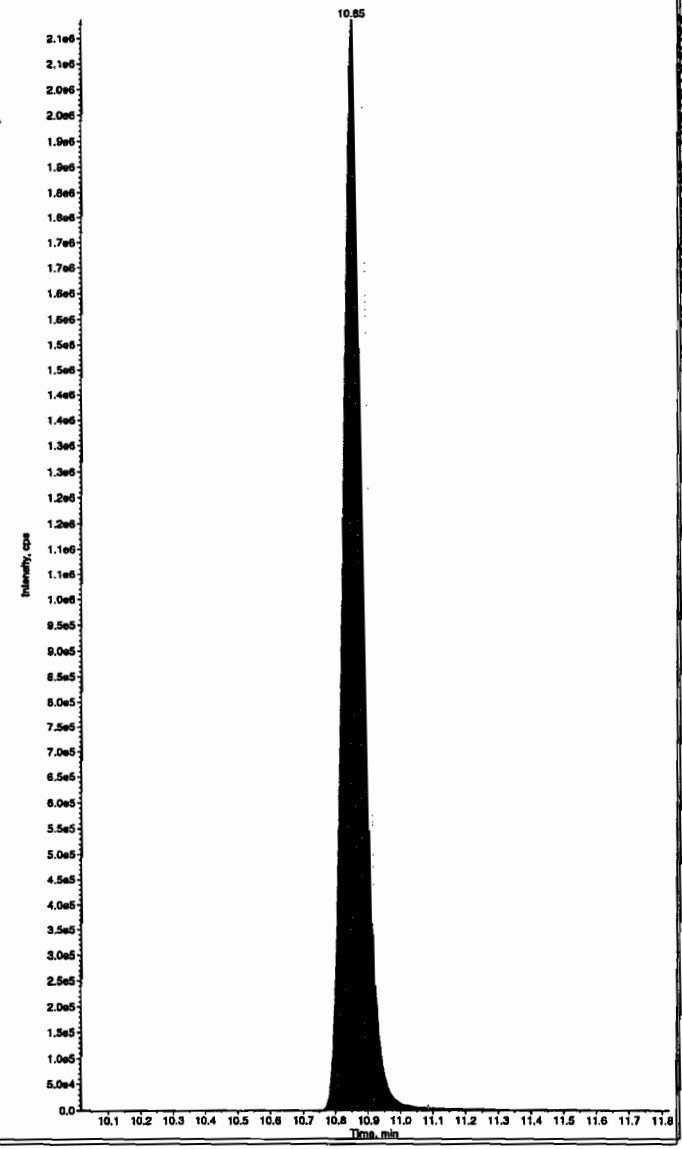


Sample Name: "WXX100402-26CCV" Sample ID: "|1|LER" File: "EXS04020037.wiff"
Peak Name: "tris(o-cresyl) phosphate" Mass(es): "369.1/91.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

```
Sample Index:        1
Sample Type:          QC
Concentration:       500.     ng/mL
Calculated Conc:     502.     ng/mL
Acq. Date:        4/2/2010
Acq. Time:        11:53:05 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:       10.8     min
Use Relative RT:   No

Int. Type:        Valley
Retention Time:    10.8     min
Area:         9.21e+006   counts
Height:       2138127.686   cps
Start Time:        10.7     min
End Time:          11.2     min
```



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7B
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10–2089

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXS04020039.wiff

Analysis Date: 03–APR–10 00:24

LCMSMS ID: 1358

Column ID: JSphere ODS–H80

Compound	True	Found	Recovery	Q
3,4–Dinitrotoluene	50	49.8	100	
3,5–Dinitroaniline	100	118	118	
TATB	100	103	103	
tris(o–cresyl) phosphate	100	111	111	
2,4–Diamino–6–nitrotoluene	100	104	104	
2,6–Diamino–4–nitrotoluene	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%
OtherTarget Analytes 70–130%
Column used to flag Recovery outside of Limits
* Value outside of Recovery Limits

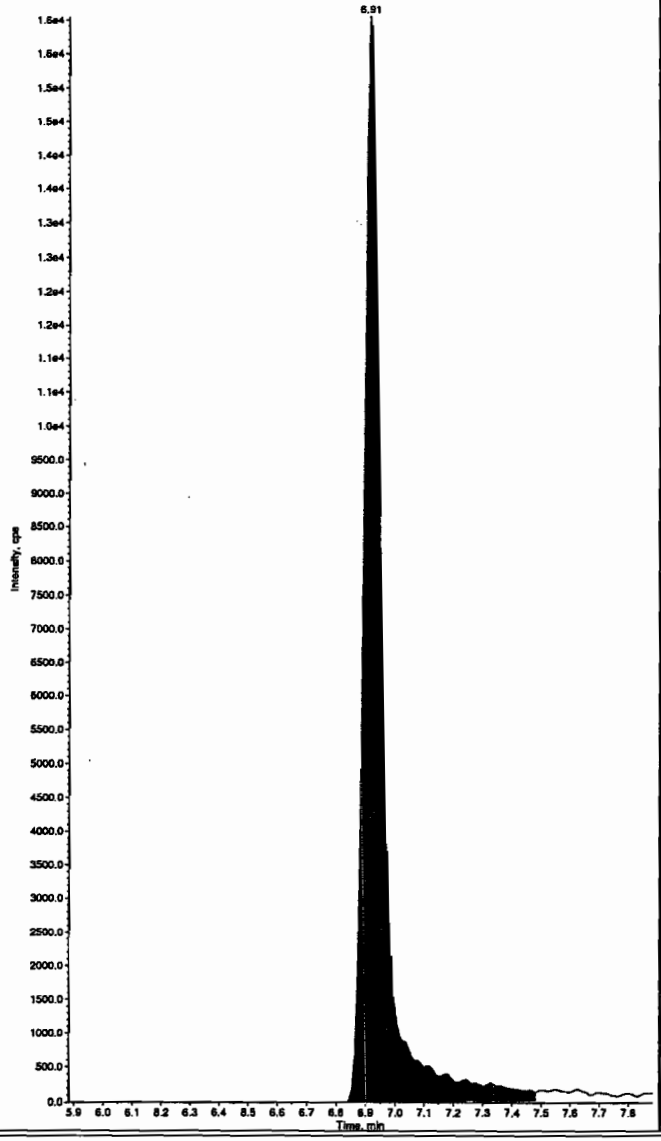
Lan 4/7/10

Sample Name: "WXX100402-27CRI" Sample ID: "|1|LER" File: "EXS04020039.wiff"
Peak Name: "TATB" Mass(es): "257.2/204.9 amu"
Comment: "LCMSEXP_C" Annotation: ""

ample Index: 1
ample Type: QC
oncentration: 100. ng/mL
alculated Conc: 103. ng/mL
. Date: 4/3/2010
. Time: 12:24:31 AM

odified: No
roc. Algorithm: IntelliQuan - IQA
in. Peak Height: 2500.00 cps
in. Peak Width: 0.00 sec
moothing Width: 3 points
T Window: 30.0 sec
xpected RT: 6.88 min
se Relative RT: No

nt. Type: Valley
etention Time: 6.91 min
rea: 7.52e+004 counts
eight: 16050.308 cps
tart Time: 6.77 min
nd Time: 7.48 min

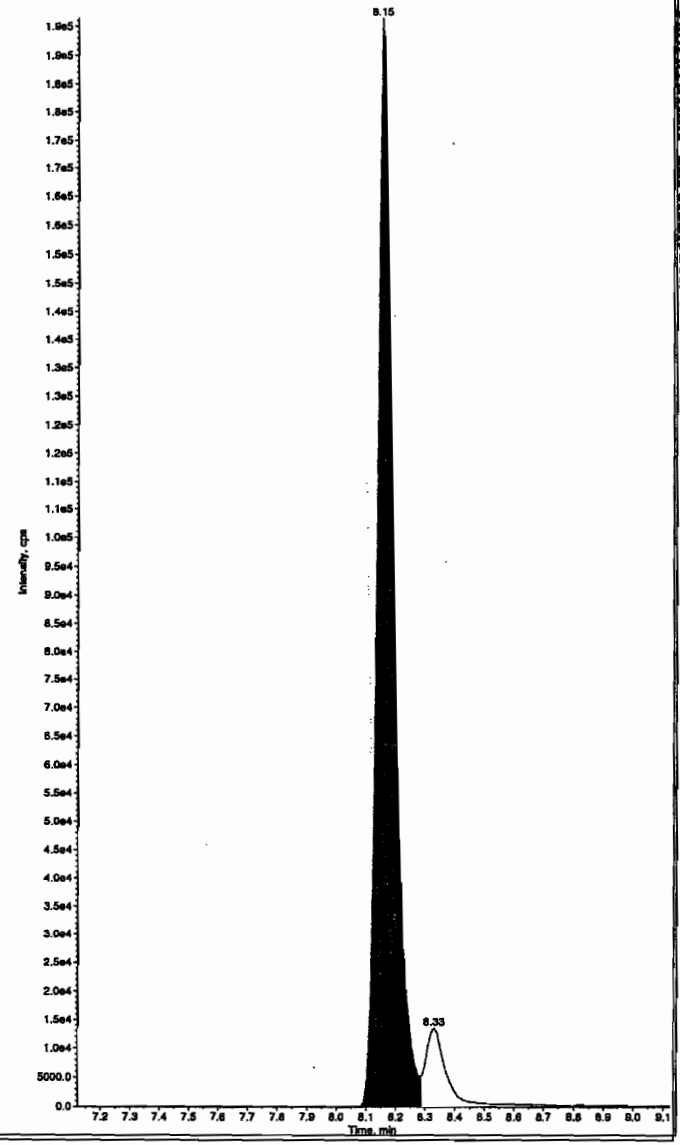


Sample Name: "WXX100402-27CRI" Sample ID: "|1|LER" File: "EXS04020039.wiff"
Peak Name: "35-Dinitroaniline" Mass(es): "162.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index: 1
Sample Type: QC
Concentration: 100. ng/mL
Calculated Conc: 118. ng/mL
Acq. Date: 4/3/2010
Acq. Time: 12:24:31 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: 8.12 min
Use Relative RT: No

Int. Type: Valley
Retention Time: 8.15 min
Area: 7.64e+005 counts
Height: 191460.388 cps
Start Time: 8.04 min
End Time: 8.29 min



HMW 04/08/10

L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

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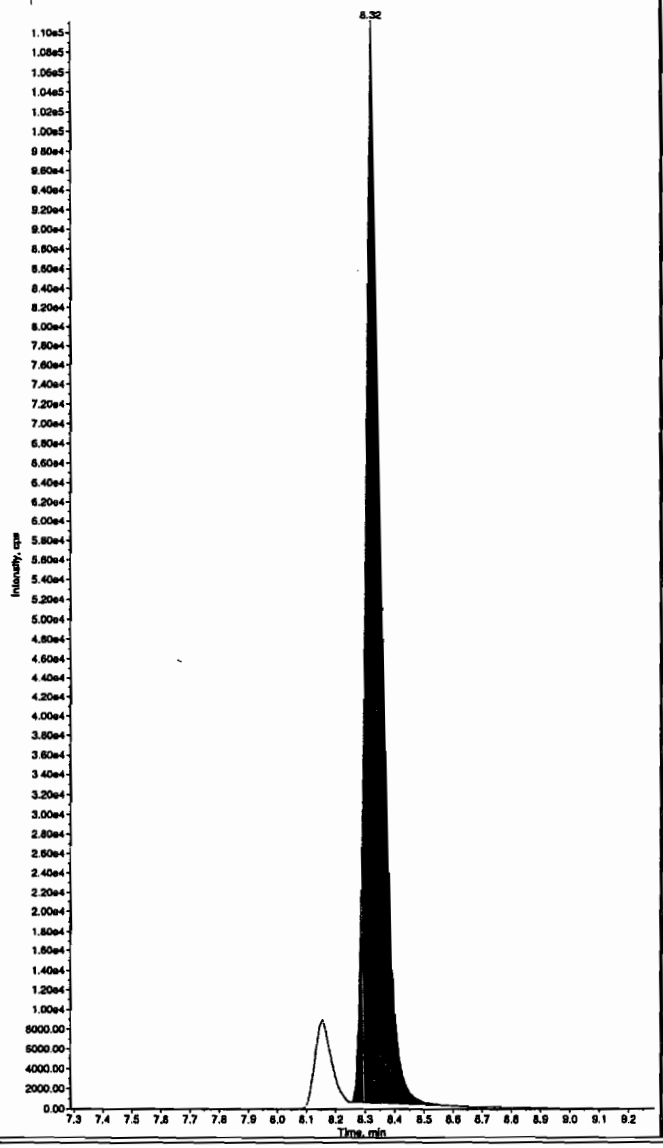
PROPRIETARY INFORMATION-No unauthorized reproduction without written permission from GEL.

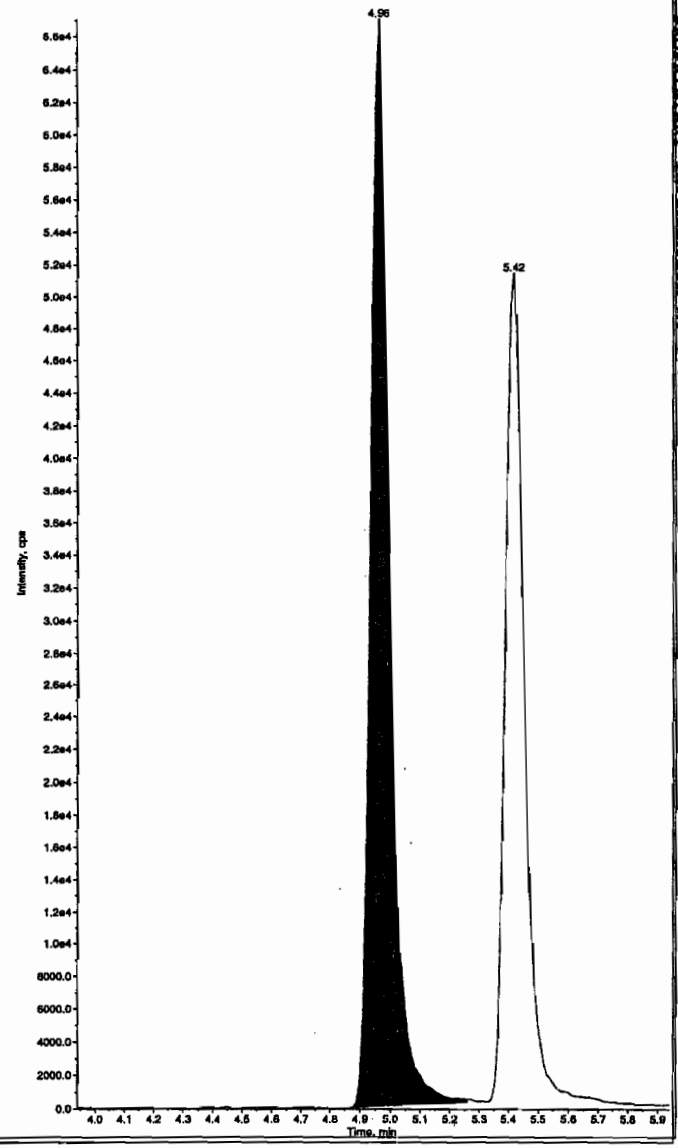
Sample Name: "WXX100402-27CRI" Sample ID: "[1]LER" File: "EXS04020039.wiff"
Peak Name: "34-Dinitrotoluene" Mass(es): "182.1/151.9 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1	
Sample Type:	QC	
Concentration:	50.0	ng/mL
Calculated Conc:	49.8	ng/mL
Acq. Date:	4/3/2010	
Acq. Time:	12:24:31 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:	8.29	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	8.32	min
Area:	4.25e+005	counts
Height:	110566.597	cps
Start Time:	8.25	min
End Time:	8.61	min



Sample Name: "WXX100402-27CRI" Sample ID: "[1]LER" File: "EXS04020039.wiff"
Peak Name: "26-Diamino-4-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1	
Sample Type:	QC	
Concentration:	100.	ng/mL
Calculated Conc:	105.	ng/mL
Acq. Date:	4/3/2010	
Acq. Time:	12:24:31 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:	4.94	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	4.96	min
Area:	3.07e+005	counts
Height:	66944.458	cps
Start Time:	4.85	min
End Time:	5.26	min



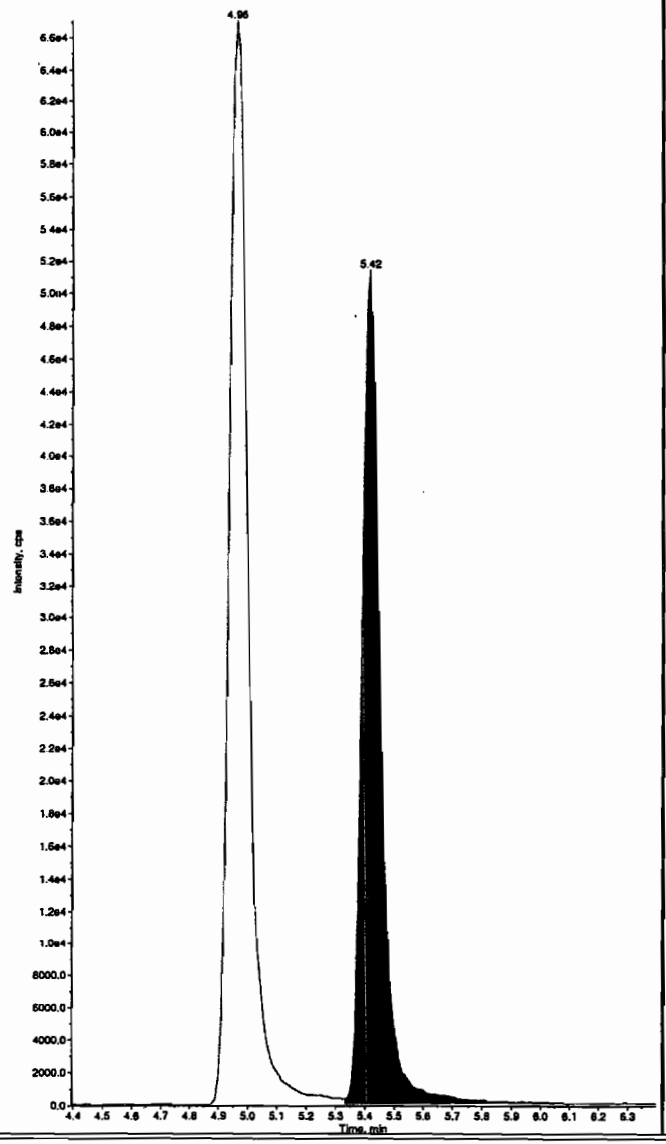
PROPRIETARY INFORMATION-No unauthorized reproduction without written permission from GEL.

ample Name: "WXX100402-27CRI" Sample ID: "[1]LER" File: "EXS04020039.wiff"
eak Name: "24-Diamino-6-nitrotoluene" Mass(es): "166.0/46.0 amu"
omment: "LCMSEXP_C" Annotation: ""

```
ple Index:          1
ple Type:           QC
centration:         100.     ng/mL
culated Conc:       104.     ng/mL
. Date:          4/3/2010
. Time:          12:24:31 AM

ified:              No
c. Algorithm:  IntelliQuan - IQA
. Peak Height: 350.00    cps
. Peak Width:    0.00    sec
othing Width:  3         points
Window:          30.0    sec
ected RT:         5.39   min
 Relative RT:    No

. Type:          Valley
ention Time:      5.42   min
s:            2.39e+005  counts
ght:          51333.801  cps
rt Time:          5.33   min
 Time:            6.04   min
```

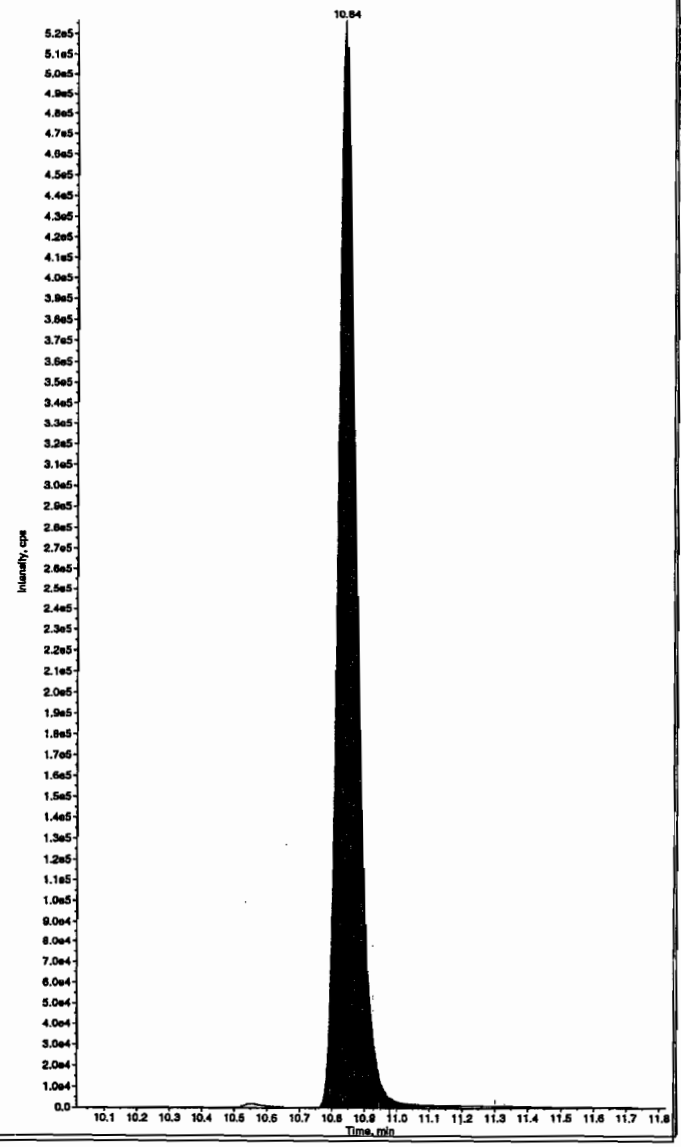


Sample Name: "WXX100402-27CRI" Sample ID: "[1]LER" File: "EXS04020039.wiff"
Peak Name: "tris(o-cresyl) phosphate" Mass(es): "369.1/91.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

```
Sample Index:        1
Sample Type:         QC
Concentration:       100.     ng/mL
Calculated Conc:     111.     ng/mL
Acq. Date:        4/3/2010
Acq. Time:        12:24:31 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:         10.8    min
Use Relative RT:     No

Int. Type:           Valley
Retention Time:      10.8    min
Area:           2.17e+006    counts
Height:         526247.986   cps
Start Time:          10.7    min
End Time:            11.2    min
```



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7A
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10–2089

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXS04020050.wiff

Analysis Date: 03–APR–10 03:17

LCMSMS ID: 1358

Column ID: JSphere ODS–H80

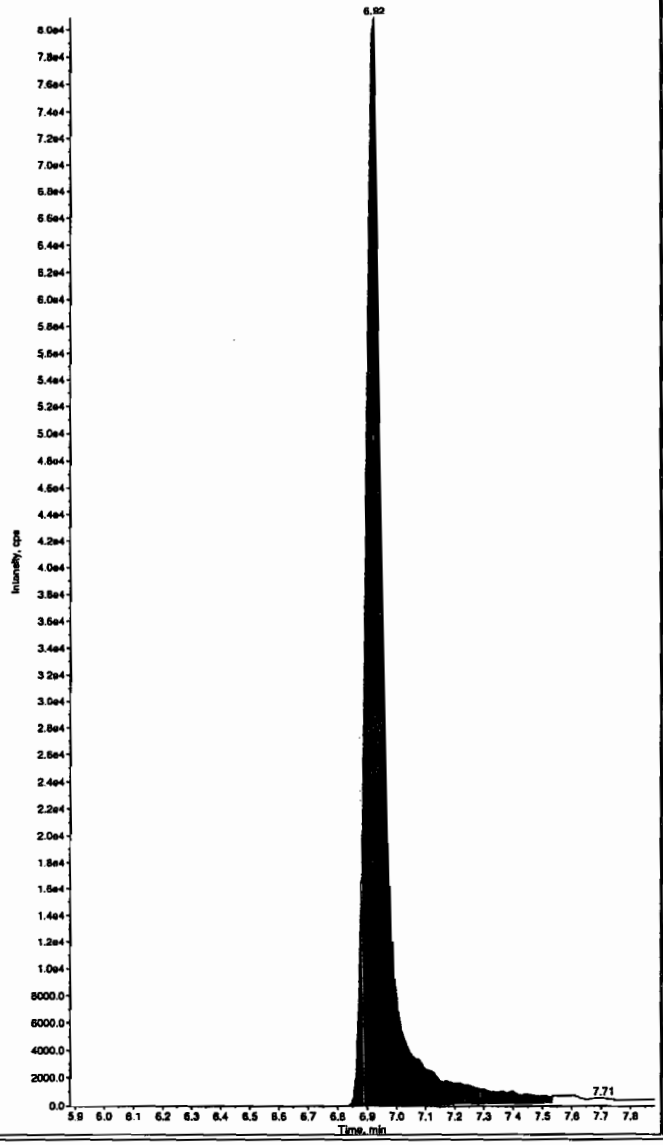
Compound	True	Found	Recovery	Q
2,4–Diamino–6–nitrotoluene	500	531	106	
2,6–Diamino–4–nitrotoluene	500	509	102	
3,4–Dinitrotoluene	250	223	89	
3,5–Dinitroaniline	500	497	99	
TATB	500	458	92	
tris(o–cresyl) phosphate	500	506	101	

Recovery Limits:
3,4–Dinitrotoluene (Surrogate),TATB, tris(o–cresyl)phosphate, 3,5–Dinitroaniline, 2,6–Diamino–4–nitrotoluene ,
2,4–Diamino–6–nitrotoluene 70–130%
OtherTarget Analytes 80–120%
Column used to flag Recovery outside of Limits
* Value outside of Recovery Limits

Lan 4/7/10

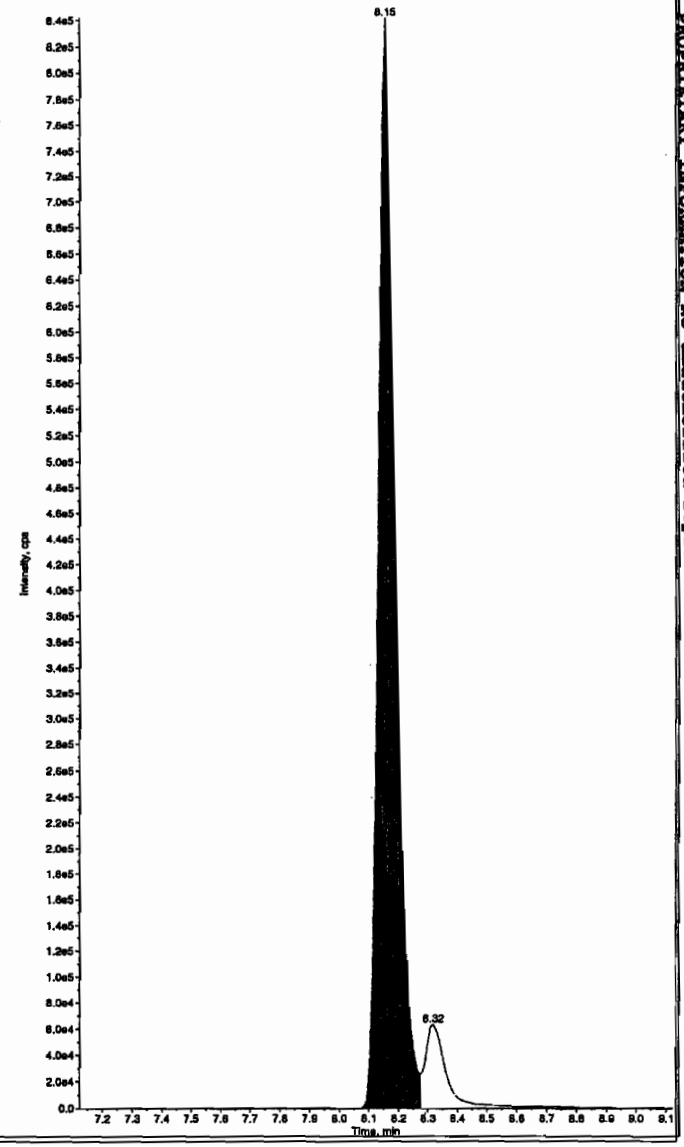
Sample Name: "WXX100402-26CCV" Sample ID: "[1]LER" File: "EXS04020050.wiff"
Peak Name: "TATB" Mass(es): "257.2/204.9 amu"
Comment: "LCMSEXP_C" Annotation: ""

ple Index:	1	
ple Type:	QC	
centration:	500.	ng/mL
culated Conc:	458.	ng/mL
. Date:	4/3/2010	
. Time:	3:17:24 AM	
ified:	No	
c. Algorithm:	IntelliQuan - IQA	
. Peak Height:	2500.00	cps
. Peak Width:	0.00	sec
othing Width:	3	points
Window:	30.0	sec
ected RT:	6.88	min
Relative RT:	No	
. Type:	Valley	
ention Time:	6.92	min
a:	3.71e+005	counts
ght:	80918.373	cps
rt Time:	6.82	min
Time:	7.53	min



Sample Name: "WXX100402-26CCV" Sample ID: "[1]LER" File: "EXS04020050.wiff"
Peak Name: "35-Dinitroaniline" Mass(es): "182.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1	
Sample Type:	QC	
Concentration:	500.	ng/mL
Calculated Conc:	497.	ng/mL
Acq. Date:	4/3/2010	
Acq. Time:	3:17:24 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:	8.12	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	8.15	min
Area:	3.49e+006	counts
Height:	842252.197	cps
Start Time:	8.06	min
End Time:	8.28	min



HMW 04/08/10

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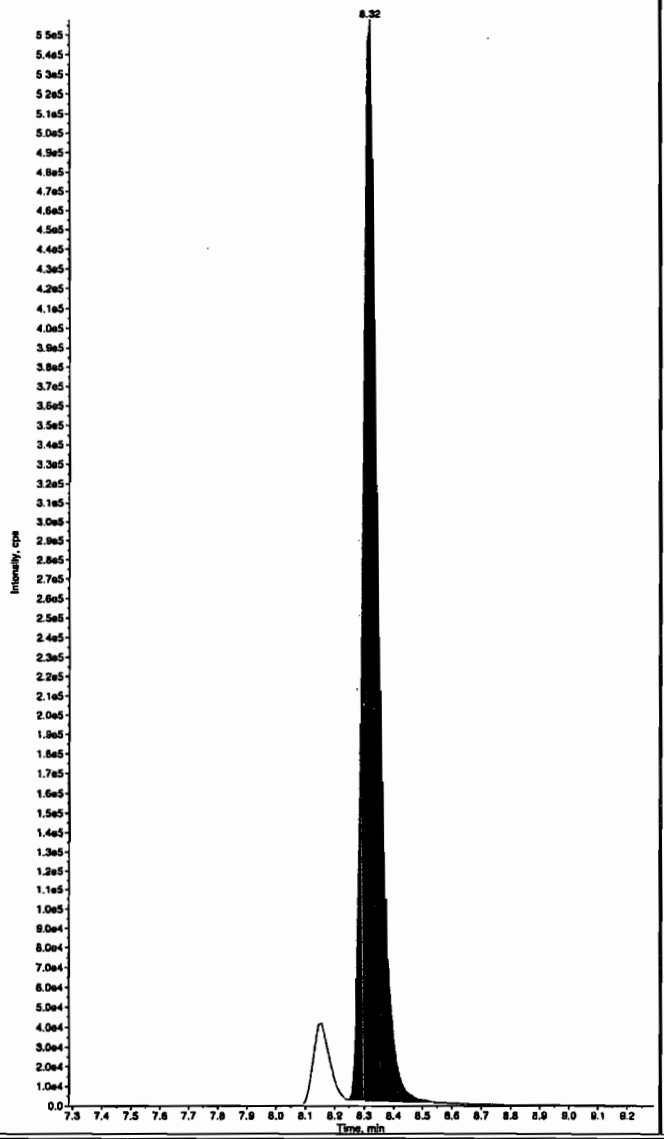
PROPRIETARY INFORMATION-No unauthorized reproduction without written permission from GEL.

ample Name: "WXX100402-26CCV" Sample ID: "|1|LER" File: "EXS04020050.wiff"
eak Name: "34-Dinitrotoluene" Mass(es): "182.1/151.9 amu"
omment: "LCMSEXP_C" Annotation: "

ple Index: 1
ple Type: QC
centration: 250. ng/mL
culated Conc: 223. ng/mL
. Date: 4/3/2010
. Time: 3:17:24 AM

ified: No
c. Algorithm: IntelliQuan - IQA
. Peak Height: 1460.00 cps
. Peak Width: 0.00 sec
othing Width: 3 points
Window: 15.0 sec
ected RT: 8.29 min
Relative RT: No

. Type: Valley
ention Time: 8.32 min
a: 2.09e+006 counts
ght: 555706.543 cps
t Time: 8.25 min
Time: 8.58 min

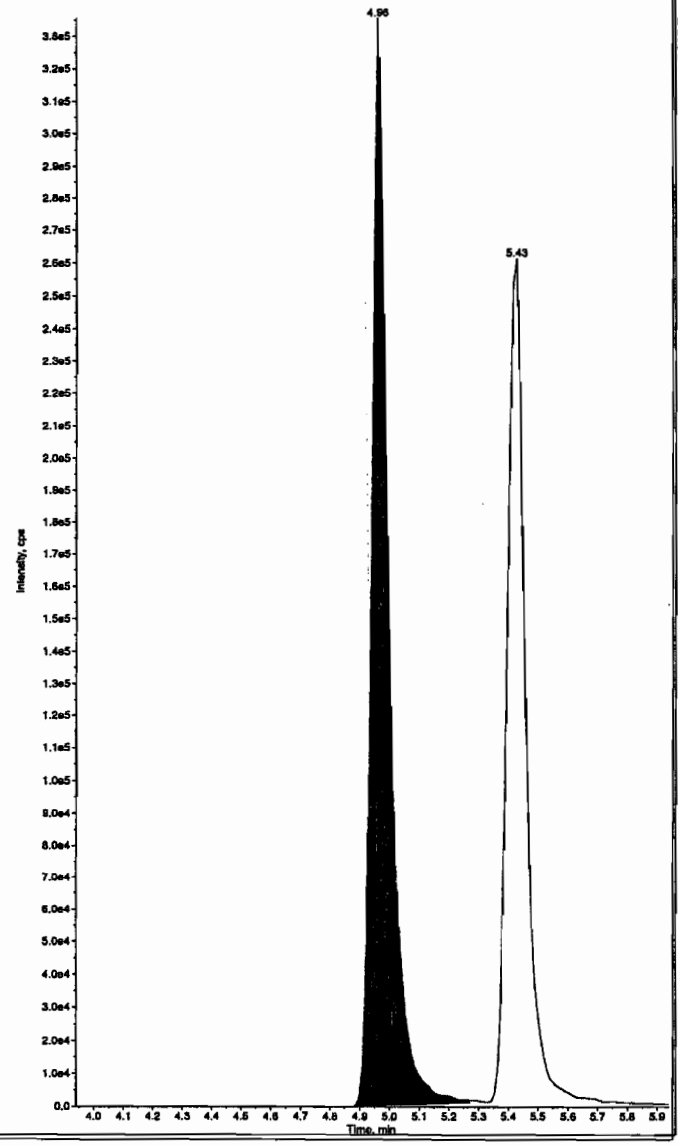


Sample Name: "WXX100402-26CCV" Sample ID: "|1|LER" File: "EXS04020050.wiff"
Peak Name: "26-Diamino-4-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: "

Sample Index: 1
Sample Type: QC
Concentration: 500. ng/mL
Calculated Conc: 509. ng/mL
Acq. Date: 4/3/2010
Acq. Time: 3:17:24 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: 4.94 min
Use Relative RT: No

Int. Type: Valley
Retention Time: 4.96 min
Area: 1.39e+006 counts
Height: 335309.784 cps
Start Time: 4.87 min
End Time: 5.27 min



L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

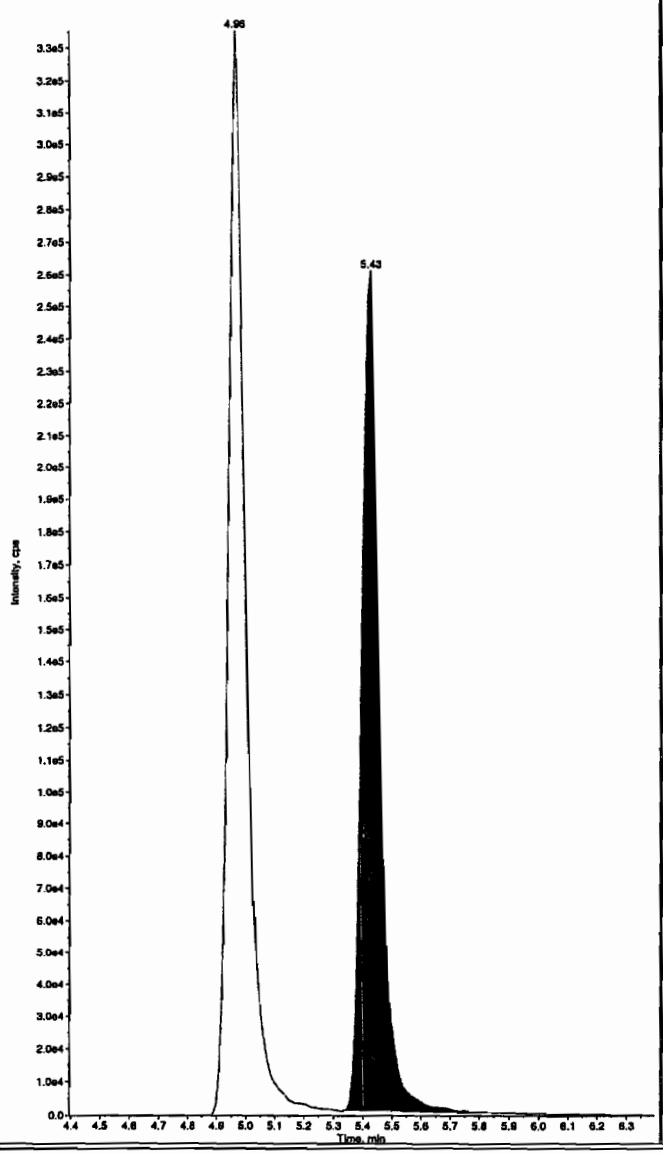
PROPRIETARY INFORMATION-No unauthorized reproduction without written permission from GEL.

ample Name: "WXX100402-26CCV" Sample ID: "[1]LER" File: "EXS04020050.wiff"
Peak Name: "24-Diamino-6-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

ple Index: 1
ple Type: QC
centration: 500. ng/mL
culated Conc: 531. ng/mL
. Date: 4/3/2010
. Time: 3:17:24 AM

ified: No
c. Algorithm: IntelliQuan - IQA
. Peak Height: 350.00 cps
. Peak Width: 0.00 sec
othing Width: 3 points
Window: 30.0 sec
ected RT: 5.39 min
Relative RT: No

. Type: Valley
ention Time: 5.43 min
a: 1.13e+006 counts
ght: 259792.755 cps
rt Time: 5.33 min
Time: 6.05 min

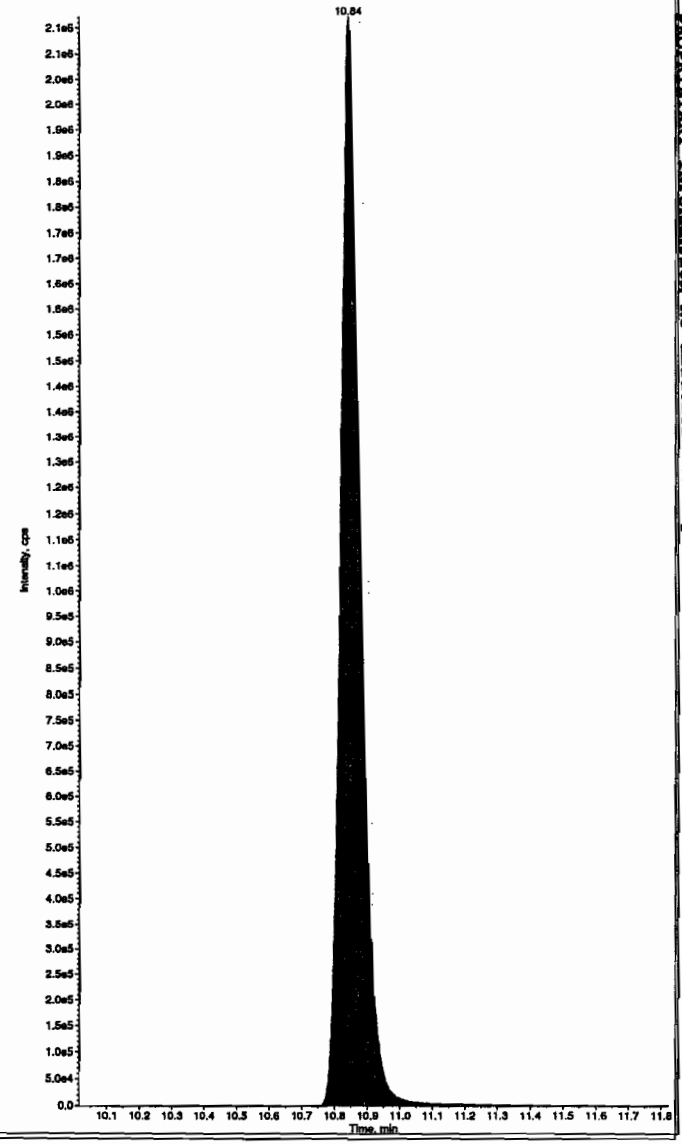


Sample Name: "WXX100402-26CCV" Sample ID: "[1]LER" File: "EXS04020050.wiff"
Peak Name: "tris(o-cresyl) phosphate" Mass(es): "369.1/91.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index: 1
Sample Type: QC
Concentration: 500. ng/mL
Calculated Conc: 506. ng/mL
Acq. Date: 4/3/2010
Acq. Time: 3:17:24 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: 10.8 min
Use Relative RT: No

Int. Type: Valley
Retention Time: 10.8 min
Area: 9.28e+006 counts
Height: 2120247.314 cps
Start Time: 10.7 min
End Time: 11.2 min



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7B
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10–2089

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXS04020052.wiff

Analysis Date: 03–APR–10 03:48

LCMSMS ID: 1358

Column ID: JSphere ODS–H80

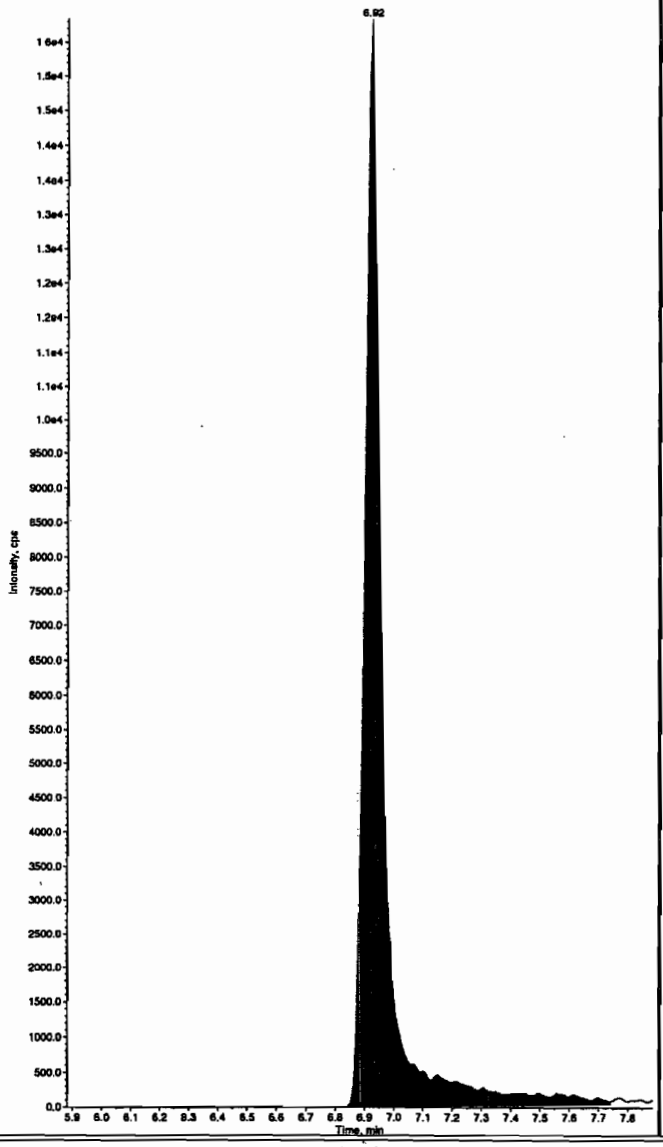
Compound	True	Found	Recovery	Q
2,4–Diamino–6–nitrotoluene	100	105	105	
2,6–Diamino–4–nitrotoluene	100	100	100	
3,4–Dinitrotoluene	50	47.3	95	
3,5–Dinitroaniline	100	113	113	
TATB	100	100	100	
tris(o–cresyl) phosphate	100	109	109	

Recovery Limits:
3,4–Dinitrotoluene (Surrogate),TATB, tris(o–cresyl)phosphate, 3,5–Dinitroaniline, 2,6–Diamino–4–nitrotoluene , 2,4–Diamino–6–nitrotoluene 50–150%
OtherTarget Analytes 70–130%
Column used to flag Recovery outside of Limits
* Value outside of Recovery Limits

Lau 4/7/10

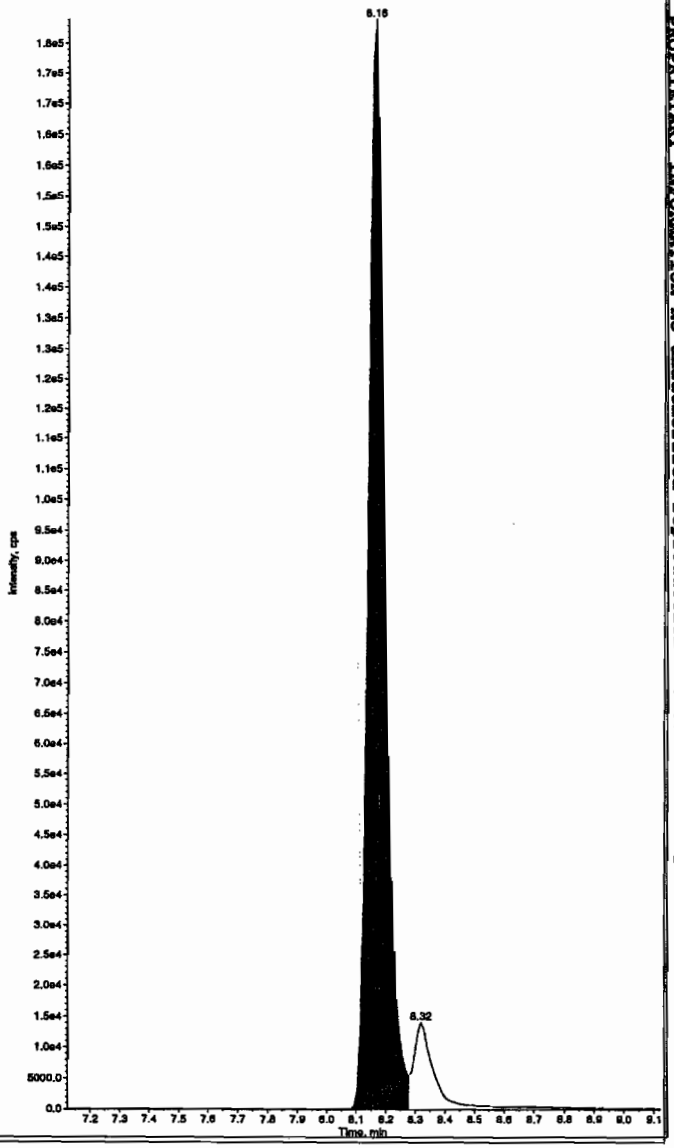
ample Name: "WXX100402-27CRI" Sample ID: "|1|LER" File: "EXS04020052.wiff"
eak Name: "TATB" Mass(es): "257.2/204.9 amu"
omment: "LCMSEXP_C" Annotation: ""

ple Index:	1	
ple Type:	QC	
centration:	100.	ng/mL
culated Conc:	100.	ng/mL
. Date:	4/3/2010	
. Time:	3:48:48 AM	
ified:	No	
c. Algorithm:	IntelliQuan - IQA	
. Peak Height:	2500.00	cps
. Peak Width:	0.00	sec
othing Width:	3	points
Window:	30.0	sec
ected RT:	6.88	min
Relative RT:	No	
. Type:	Valley	
ention Time:	6.92	min
a:	7.30e+004	counts
ght:	15840.425	cps
rt Time:	6.81	min
Time:	7.74	min



Sample Name: "WXX100402-27CRI" Sample ID: "|1|LER" File: "EXS04020052.wiff"
Peak Name: "35-Dinitroaniline" Mass(es): "182.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1	
Sample Type:	QC	
Concentration:	100.	ng/mL
Calculated Conc:	113.	ng/mL
Acq. Date:	4/3/2010	
Acq. Time:	3:48:48 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:	8.12	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	8.16	min
Area:	7.26e+005	counts
Height:	179031.479	cps
Start Time:	8.06	min
End Time:	8.28	min



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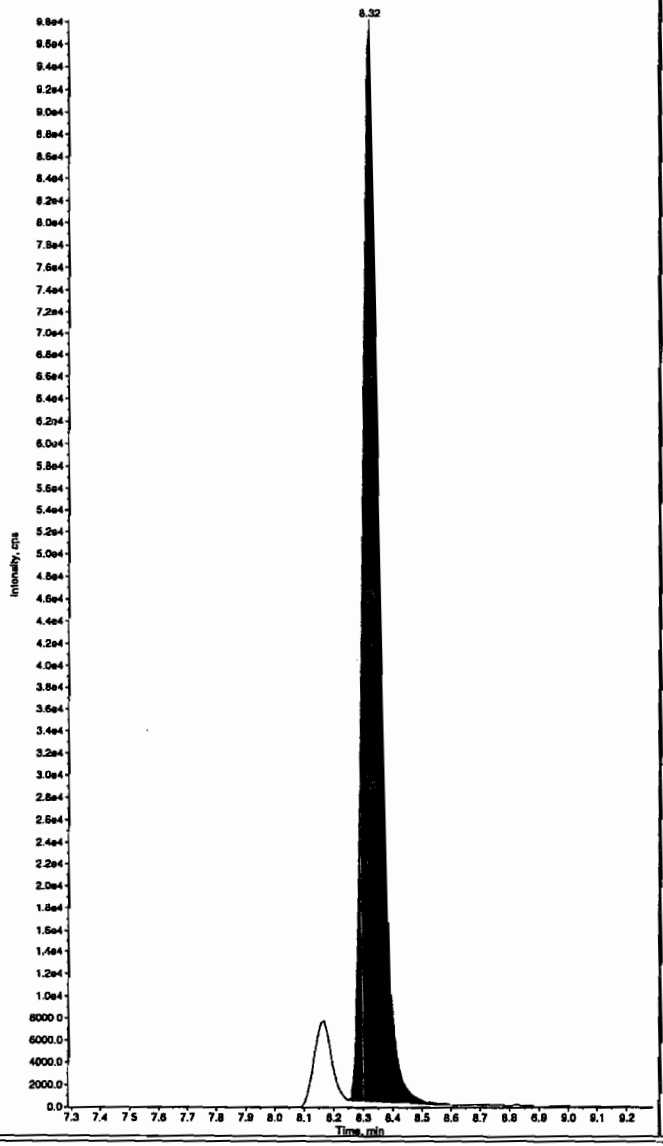
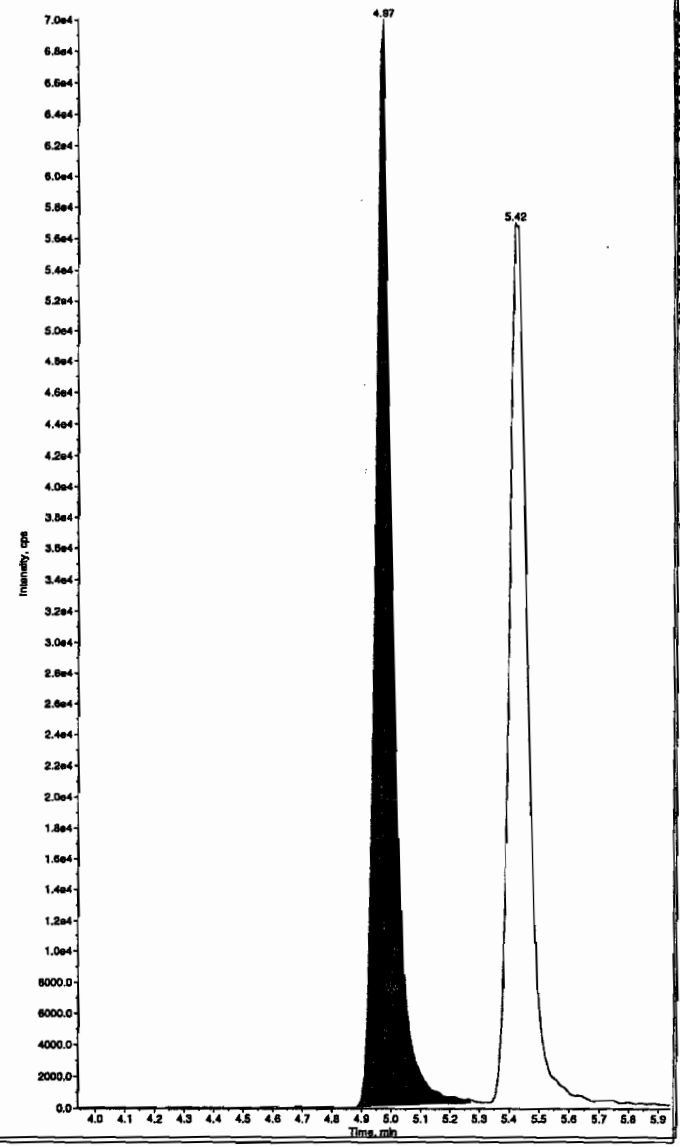
Sample Name: "WXX100402-27CRI" Sample ID: "|1|LER" File: "EXS04020052.wiff"
Peak Name: "34-Dinitrotoluene" Mass(es): "182.1/151.9 amu"
Comment: "LCMSEXP_C" Annotation: ""

ple Index:	1
ple Type:	QC
centration:	50.0 ng/mL
culated Conc:	47.3 ng/mL
. Date:	4/3/2010
. Time:	3:48:48 AM
lified:	No
c. Algorithm:	IntelliQuan - IQA
. Peak Height:	1460.00 cps
. Peak Width:	0.00 sec
othing Width:	3 points
Window:	15.0 sec
ected RT:	8.29 min
Relative RT:	No
. Type:	Valley
ention Time:	8.32 min
a:	4.00e+005 counts
ght:	97628.998 cps
rt Time:	8.25 min
Time:	8.62 min



Sample Name: "WXX100402-27CRI" Sample ID: "|1|LER" File: "EXS04020052.wiff"
Peak Name: "26-Diamino-4-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1
Sample Type:	QC
Concentration:	100. ng/mL
Calculated Conc:	100. ng/mL
Acq. Date:	4/3/2010
Acq. Time:	3:48:48 AM
Modified:	No
Proc. Algorithm:	IntelliQusn - IQA
Min. Peak Height:	450.00 cps
Min. Peak Width:	0.00 sec
Smoothing Width:	3 points
RT Window:	30.0 sec
Expected RT:	4.94 min
Uae Relative RT:	No
Int. Type:	Valley
Retention Time:	4.97 min
Area:	2.95e+005 counts
Height:	69931.038 cps
Start Time:	4.88 min
End Time:	5.27 min



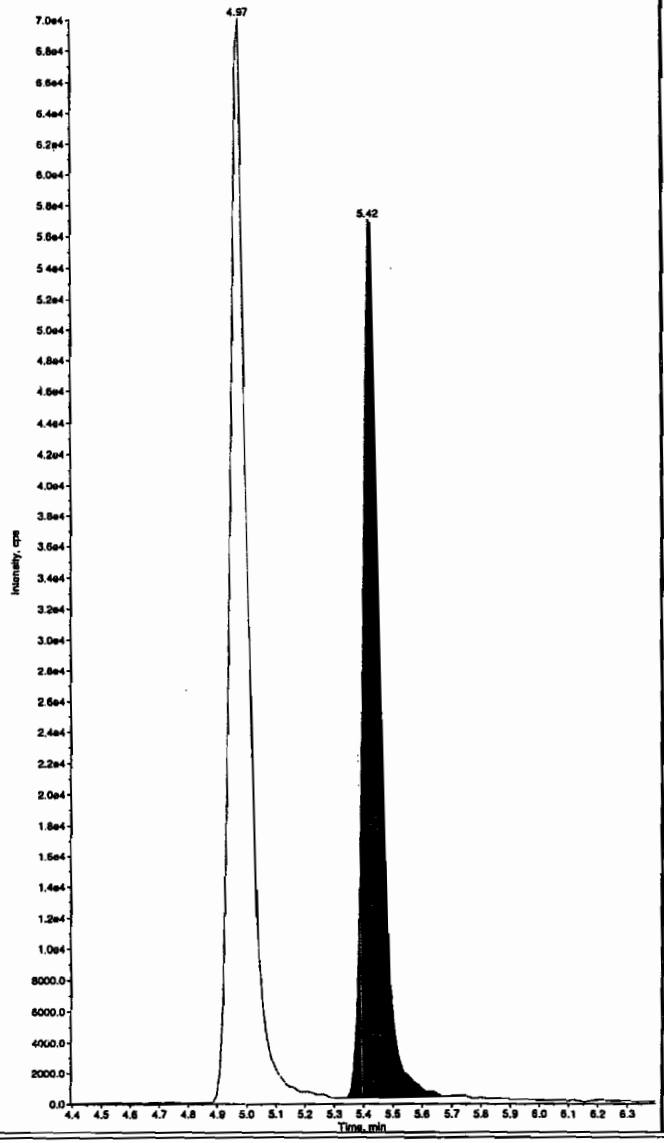
L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

Sample Name: "WXX100402-27CRI" Sample ID: "[1]LER" File: "EXS04020052.wiff"
Peak Name: "24-Diamino-6-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

ple Index: 1
ple Type: QC
centration: 100. ng/mL
culated Conc: 105. ng/mL
. Date: 4/3/2010
. Time: 3:48:48 AM

ified: No
c. Algorithm: IntelliQuan - IQA
. Peak Height: 350.00 cps
. Peak Width: 0.00 sec
othing Width: 3 points
Window: 30.0 sec
ected RT: 5.39 min
: Relative RT: No

.. Type: Valley
ention Time: 5.42 min
s: 2.43e+005 counts
ght: 56638.531 cps
rt Time: 5.33 min
Time: 5.68 min

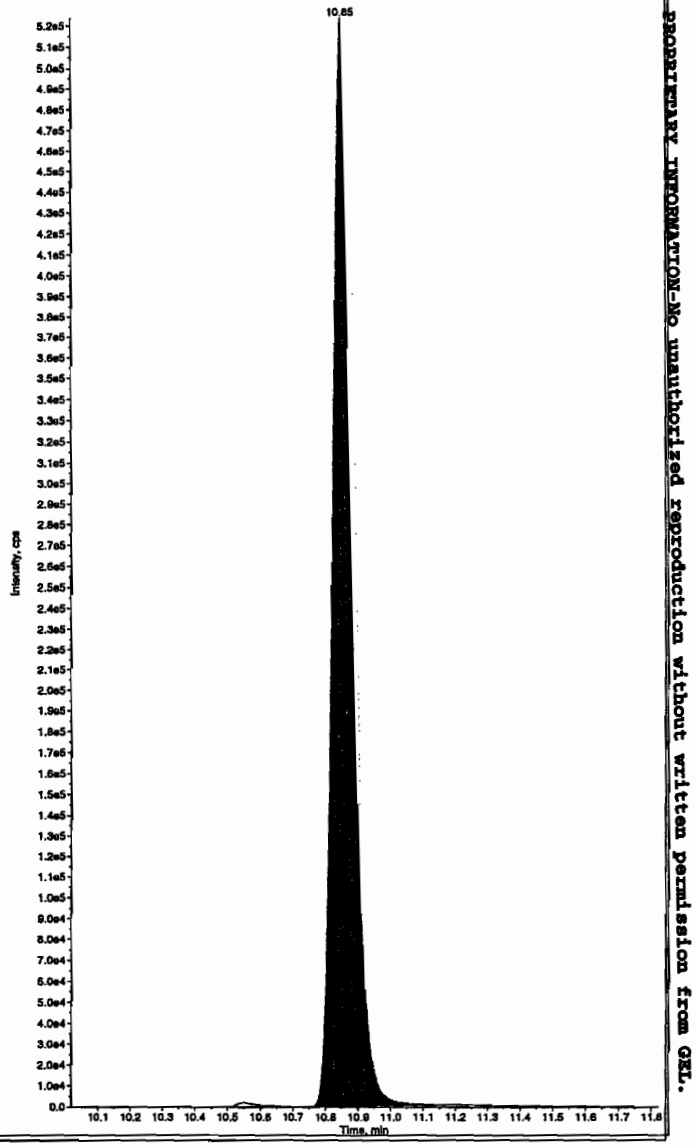


Sample Name: "WXX100402-27CRI" Sample ID: "[1]LER" File: "EXS04020052.wiff"
Peak Name: "tris(o-cresyl) phosphate" Mass(es): "369.1/91.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index: 1
Sample Type: QC
Concentration: 100. ng/mL
Calculated Conc: 109. ng/mL
Acq. Date: 4/3/2010
Acq. Time: 3:48:48 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: 10.8 min
Use Relative RT: No

Int. Type: Valley
Retention Time: 10.8 min
Area: 2.13e+006 counts
Height: 523456.238 cps
Start Time: 10.7 min
End Time: 11.2 min



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7A
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10–2089

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXS04020063.wiff

Analysis Date: 03–APR–10 06:41

LCMSMS ID: 1358

Column ID: JSphere ODS–H80

Compound	True	Found	Recovery	Q
2,4–Diamino–6–nitrotoluene	500	557	111	
2,6–Diamino–4–nitrotoluene	500	514	103	
3,4–Dinitrotoluene	250	221	88	
3,5–Dinitroaniline	500	482	96	
TATB	500	481	96	
tris(o–cresyl) phosphate	500	511	102	

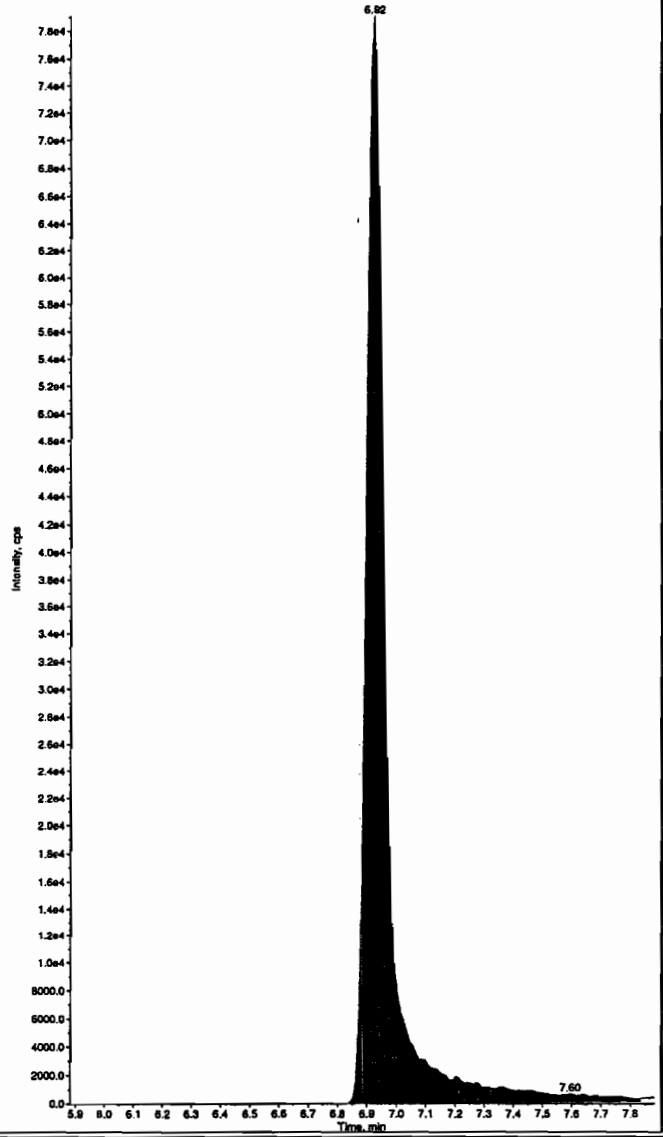
Recovery Limits:
3,4–Dinitrotoluene (Surrogate),TATB, tris(o–cresyl)phosphate, 3,5–Dinitroaniline, 2,6–Diamino–4–nitrotoluene , 2,4–Diamino–6–nitrotoluene 70–130%
OtherTarget Analytes 80–120%
Column used to flag Recovery outside of Limits
* Value outside of Recovery Limits

Lan 4/7/10

ample Name: "WXX100402-26CCV" Sample ID: "|1|LER" File: "EXS04020063.wiff"
eak Name: "TATB" Mass(es): "257.2/204.9 amu"
omment: "LCMSEXP_C" Annotation: ""
ple Index: 1
ple Type: QC
centration: 500. ng/mL
culated Conc: 481. ng/mL
. Date: 4/3/2010
. Time: 6:41:41 AM

ified: No
c. Algorithm: IntelliQuan - IQA
. Peak Height: 2500.00 cps
. Peak Width: 0.00 sec
othing Width: 3 points
Window: 30.0 sec
ected RT: 6.88 min
Relative RT: No

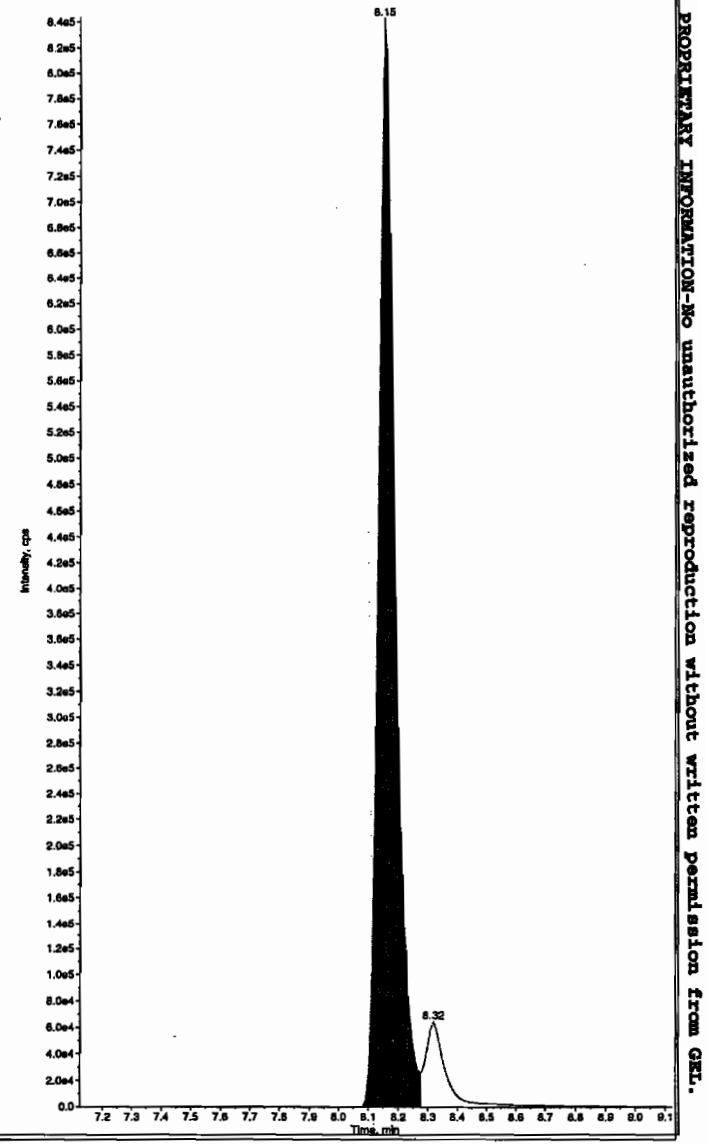
. Type: Valley
ention Time: 6.92 min
a: 3.90e+005 counts
ght: 79117.477 cps
rt Time: 6.80 min
Time: 7.83 min



Sample Name: "WXX100402-26CCV" Sample ID: "|1|LER" File: "EXS04020063.wiff"
Peak Name: "35-Dinitroaniline" Mass(es): "182.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: ""
Sample Index: 1
Sample Type: QC
Concentration: 500. ng/mL
Calculated Conc: 482. ng/mL
Acq. Date: 4/3/2010
Acq. Time: 6:41:41 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: 8.12 min
Use Relative RT: No

Int. Type: Valley
Retention Time: 8.15 min
Area: 3.38e+006 counts
Height: 843162.354 cps
Start Time: 8.06 min
End Time: 8.28 min



HMM 04/08/10

:L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

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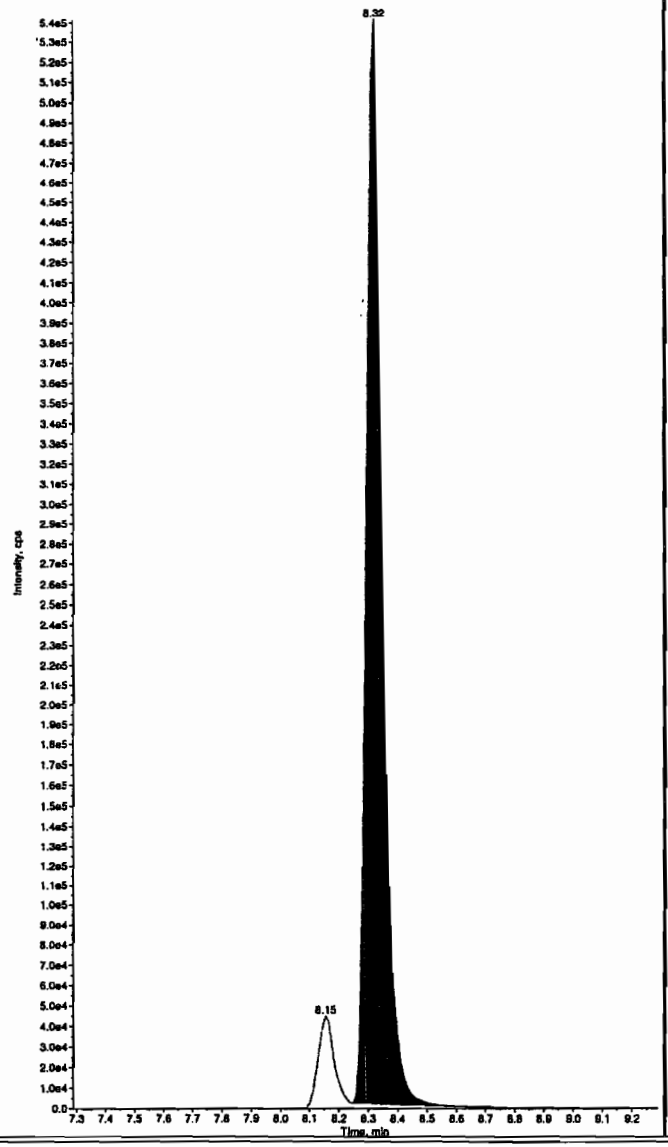
Sample Name: "WXX100402-26CCV" Sample ID: "[1]LER" File: "EXS04020063.wiff"
Peak Name: "34-Dinitrotoluene" Mass(es): "182.1/151.9 amu"
Comment: "LCMSEXP_C" Annotation: ""

mple Index: 1
mple Type: QC
ncentration: 250. ng/mL
lculated Conc: 221. ng/mL
q. Date: 4/3/2010
q. Time: 6:41:41 AM

dified: No
oc. Algorithm: IntelliQuan - IQA
n. Peak Height: 460.00 cps
n. Peak Width: 0.00 sec
oothing Width: 3 points
Window: 15.0 sec
pected RT: 8.29 min
Relative RT: No

. Type: Valley
etention Time: 8.32 min
a: 2.06e+006 counts
ght: 539353.821 cps
rt Time: 8.25 min
Time: 8.65 min

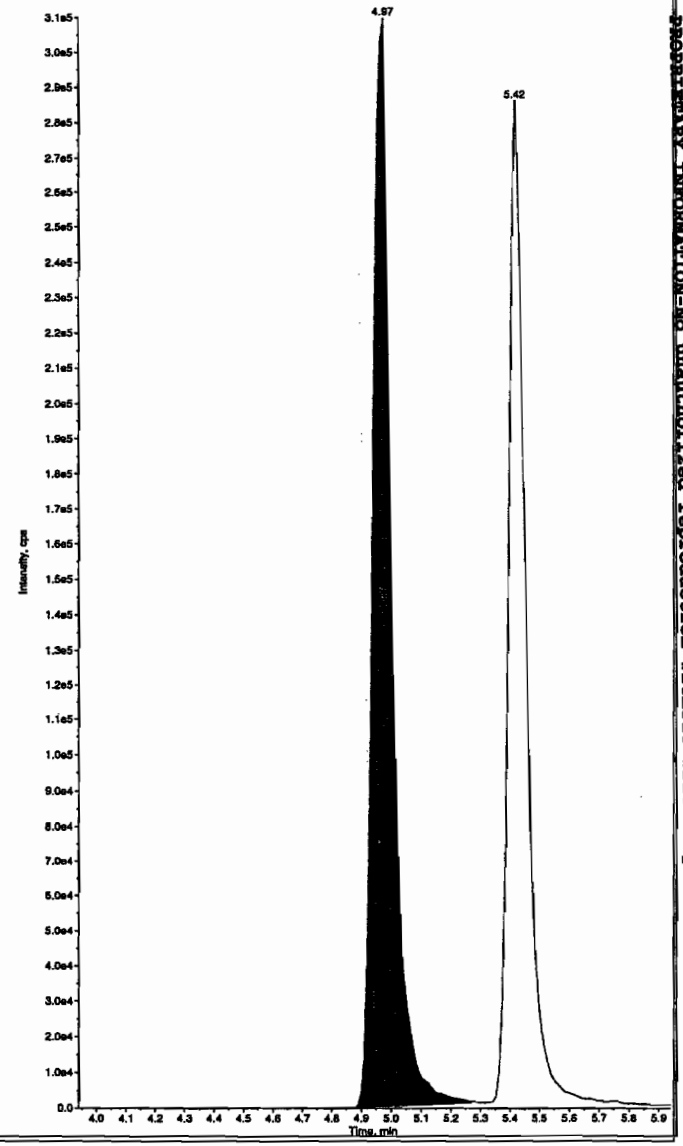


Sample Name: "WXX100402-26CCV" Sample ID: "[1]LER" File: "EXS04020063.wiff"
Peak Name: "26-Diamino-4-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index: 1
Sample Type: QC
Concentration: 500. ng/mL
Calculated Conc: 514. ng/mL
Acq. Date: 4/3/2010
Acq. Time: 6:41:41 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: 4.94 min
Use Relative RT: No

Int. Type: Valley
Retention Time: 4.97 min
Area: 1.41e+006 counts
Height: 309657.990 cps
Start Time: 4.87 min
End Time: 5.27 min



:L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

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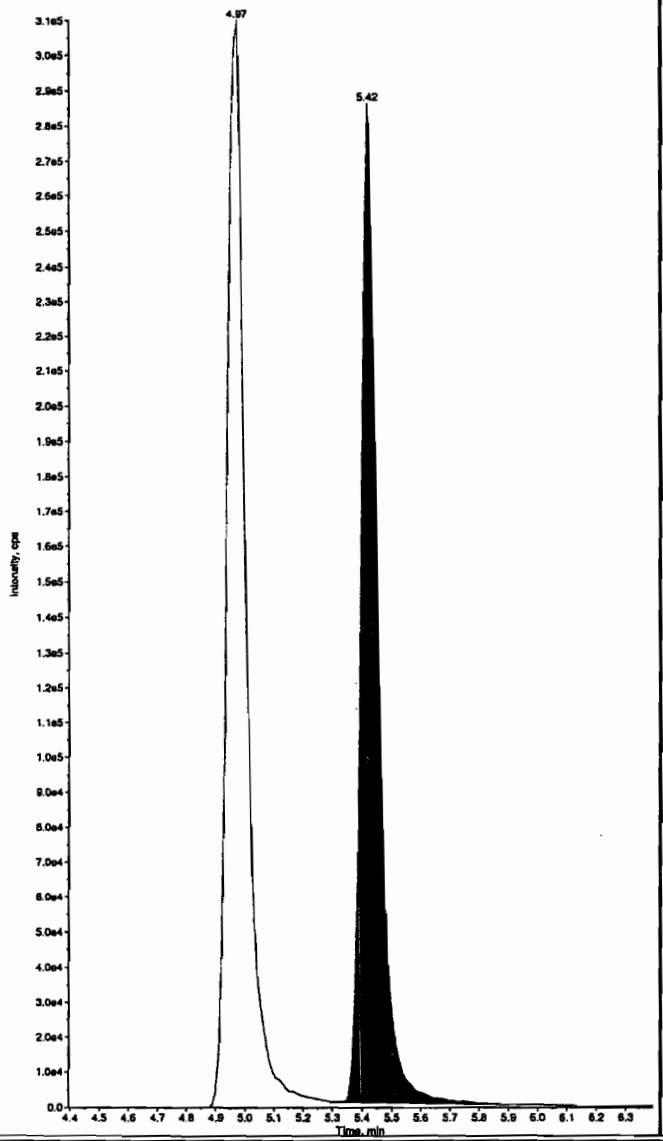
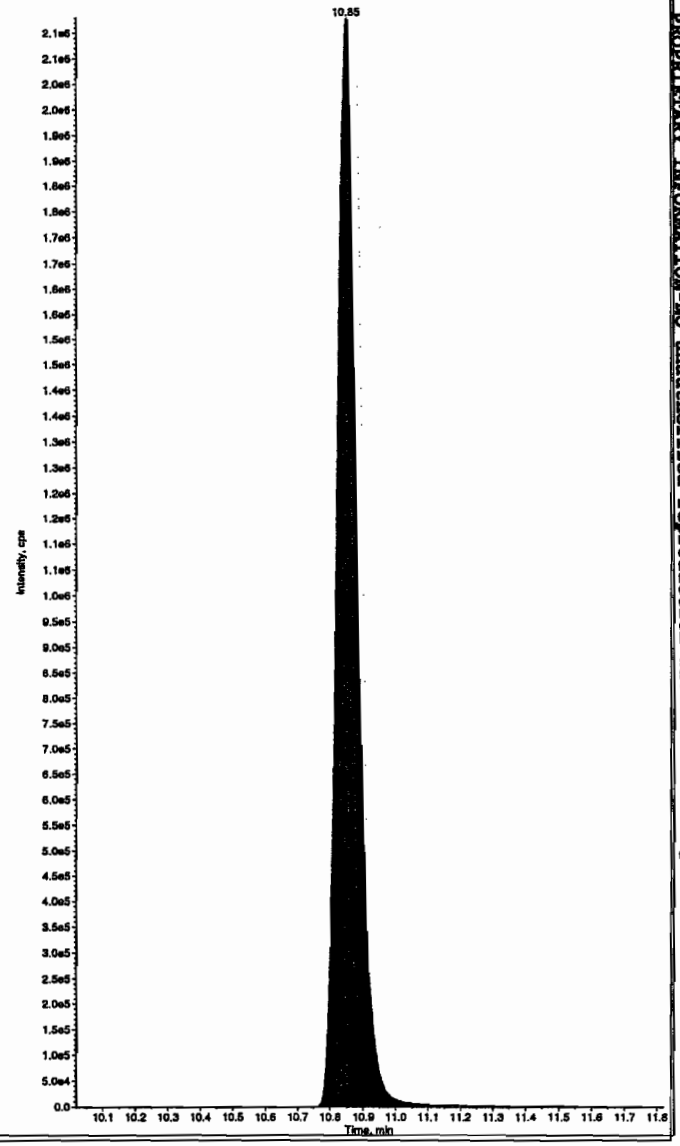
Sample Name: "WXX100402-26CCV" Sample ID: "|1|LER" File: "EXS04020063.wiff"
Peak Name: "24-Diamino-6-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1	
Sample Type:	QC	
Concentration:	500.	ng/mL
Calculated Conc:	557.	ng/mL
Acq. Date:	4/3/2010	
Acq. Time:	6:41:41 AM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - IQA	
Min. Peak Height:	350.00	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	3	points
RT Window:	30.0	sec
Expected RT:	5.39	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	5.42	min
Area:	1.19e+006	counts
Height:	285006.012	cps
Start Time:	5.30	min
End Time:	5.89	min



Sample Name: "WXX100402-26CCV" Sample ID: "|1|LER" File: "EXS04020063.wiff"
Peak Name: "tris(o-cresyl) phosphate" Mass(es): "369.1/91.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1	
Sample Type:	QC	
Concentration:	500.	ng/mL
Calculated Conc:	511.	ng/mL
Acq. Date:	4/3/2010	
Acq. Time:	6:41:41 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:	10.8	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	10.8	min
Area:	9.37e+006	counts
Height:	2130168.701	cps
Start Time:	10.7	min
End Time:	11.2	min



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7B
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10–2089

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXS04020065.wiff

Analysis Date: 03–APR–10 07:13

LCMSMS ID: 1358

Column ID: JSphere ODS–H80

Compound	True	Found	Recovery	Q
2,4–Diamino–6–nitrotoluene	100	94.7	95	
2,6–Diamino–4–nitrotoluene	100	95.2	95	
3,4–Dinitrotoluene	50	51.3	103	
3,5–Dinitroaniline	100	114	114	
TATB	100	96.6	97	
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%
OtherTarget Analytes 70–130%
Column used to flag Recovery outside of Limits
* Value outside of Recovery Limits.

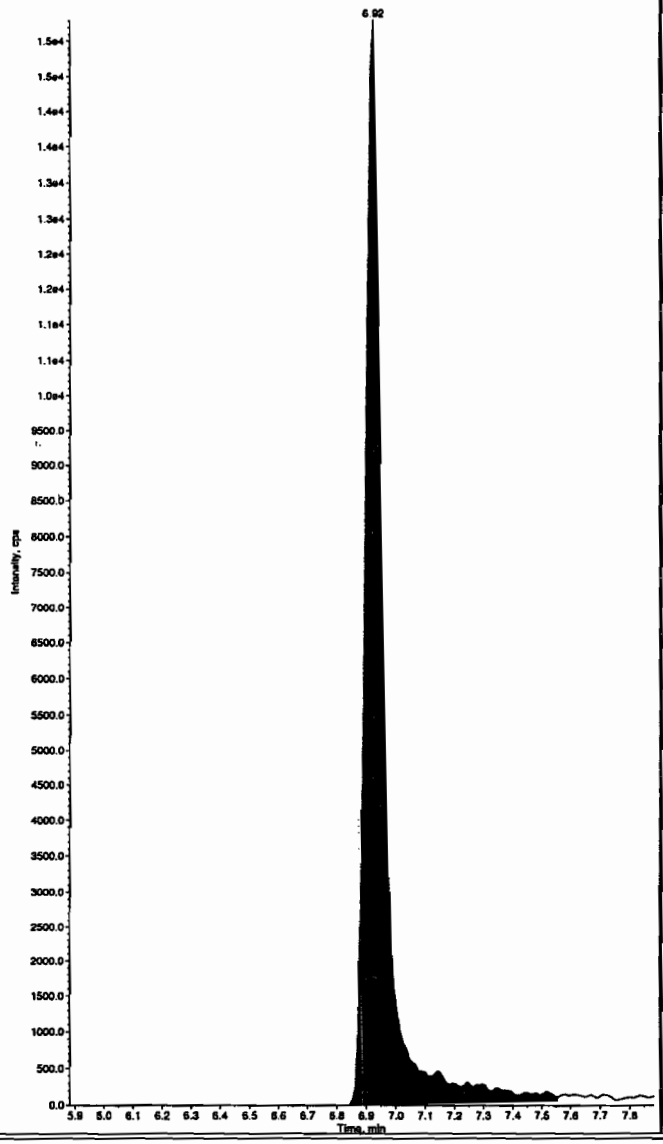
Lan 4/7/10

Sample Name: "WXX100402-27CRI" Sample ID: "[1]LER" File: "EXS04020065.wiff"
Peak Name: "TATB" Mass(es): "257.2/204.9 amu"
Comment: "LCMSEXP_C" Annotation: ""

```
mple Index:        1
mple Type:        QC
ncentration:      100.     ng/mL
lculated Conc:    96.6     ng/mL
q. Date:       4/3/2010
q. Time:       7:13:05 AM

dified:           No
oc. Algorithm: IntelliQuan - IQA
n. Peak Height:2500.00   cps
n. Peak Width:    0.00   sec
oothing Width:  3       points
 Window:         30.0    sec
ected RT:        6.88   min
 Relative RT:    No

:. Type:        Valley
tention Time:    6.92   min
a:          6.98e+004   counts
ght:          15299.933  cps
rt Time:         6.81   min
 Time:           7.55   min
```

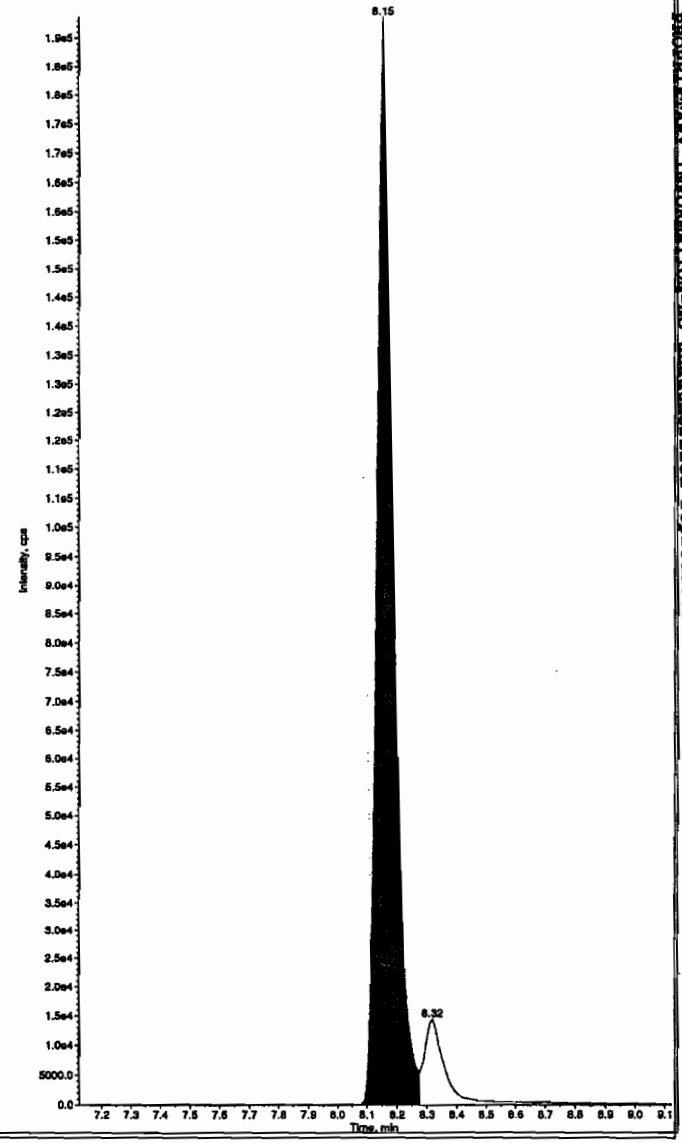


Sample Name: "WXX100402-27CRI" Sample ID: "[1]LER" File: "EXS04020065.wiff"
Peak Name: "35-Dinitroaniline" Mass(es): "182.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

```
Sample Index:        1
Sample Type:        QC
Concentration:      100.     ng/mL
Calculated Conc:    114.     ng/mL
Acq. Date:       4/3/2010
Acq. Time:       7:13:05 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:        8.12   min
Use Relative RT:    No

Int. Type:        Valley
Retention Time:     8.15   min
Area:          7.34e+005   counts
Height:        188582.275  cps
Start Time:         8.06   min
End Time:           8.28   min
```



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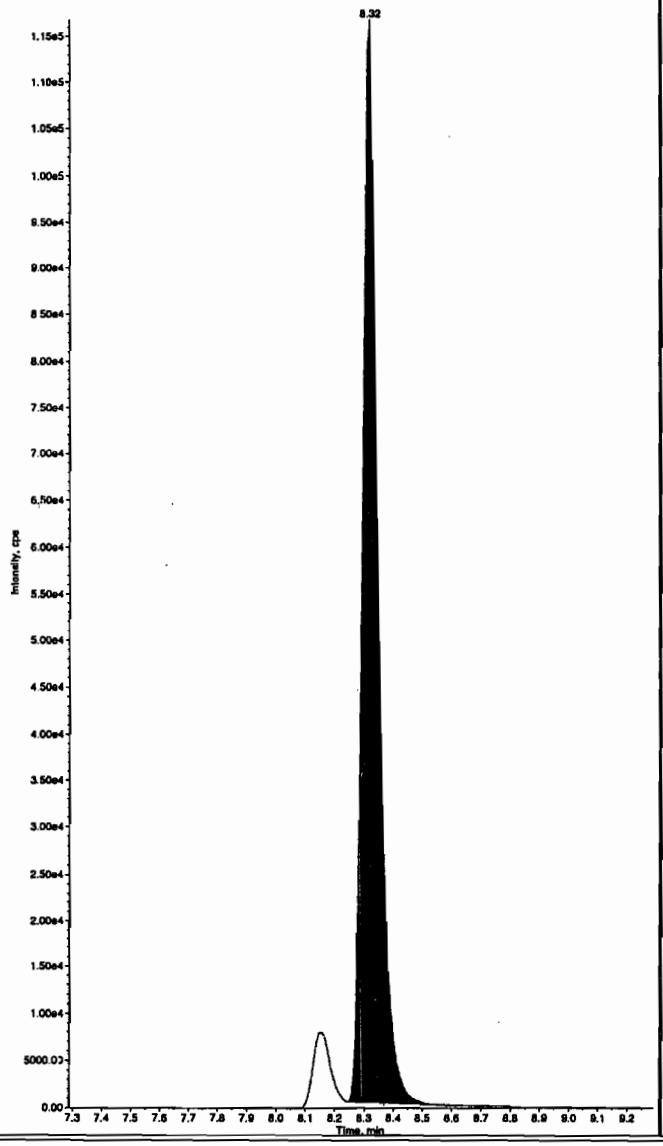
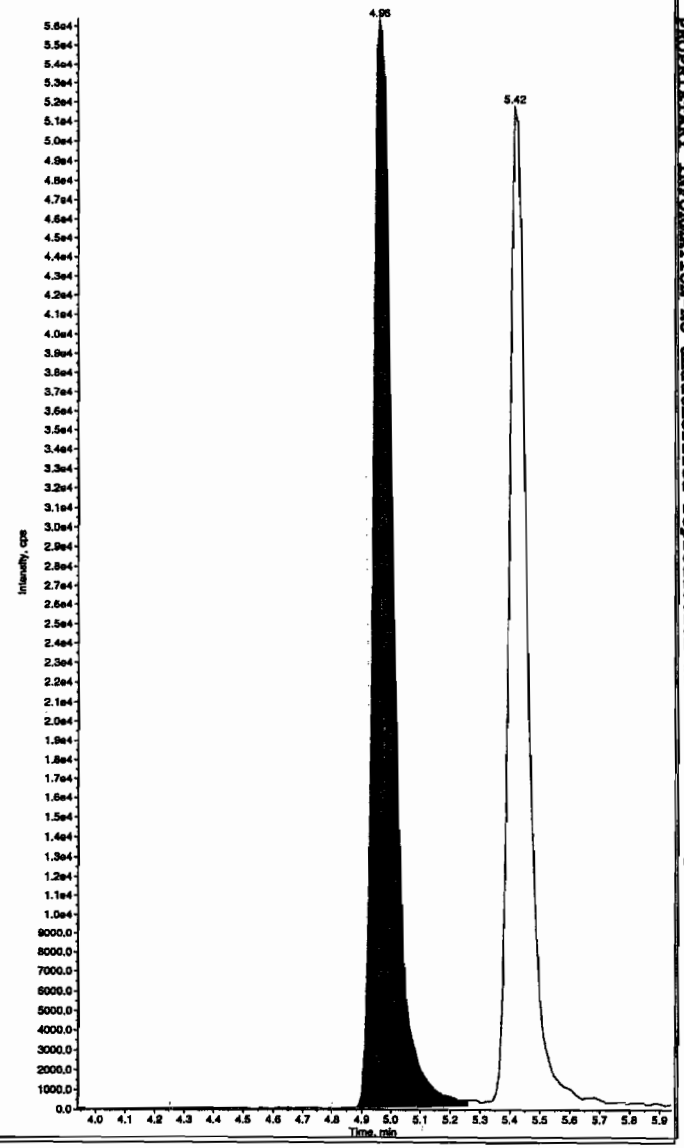
ample Name: "WXX100402-27CRI" Sample ID: "[1]LER" File: "EXS04020065.wiff"
eak Name: "34-Dinitrotoluene" Mass(es): "182.1/151.9 amu"
omment: "LCMSEXP_C" Annotation: ""

ple Index:	1	
ple Type:	QC	
centration:	50.0	ng/mL
culated Conc:	51.3	ng/mL
. Date:	4/3/2010	
. Time:	7:13:05 AM	
ified:	No	
c. Algorithm:	IntelliQuan - IQA	
. Peak Height:	1460.00	cps
. Peak Width:	0.00	sec
othing Width:	3	points
Window:	15.0	sec
ected RT:	8.29	min
Relative RT:	No	
. Type:	Valley	
ention Time:	8.32	min
a:	4.41e+005	counts
ght:	116264.267	cps
rt Time:	8.25	min
Time:	8.63	min



Sample Name: "WXX100402-27CRI" Sample ID: "[1]LER" File: "EXS04020065.wiff"
Peak Name: "26-Diamino-4-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1	
Sample Type:	QC	
Concentration:	100.	ng/mL
Calculated Conc:	95.2	ng/mL
Acq. Date:	4/3/2010	
Acq. Time:	7:13:05 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:	4.94	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	4.96	min
Area:	2.81e+005	counts
Height:	56285.141	cps
Start Time:	4.82	min
End Time:	5.26	min



:L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

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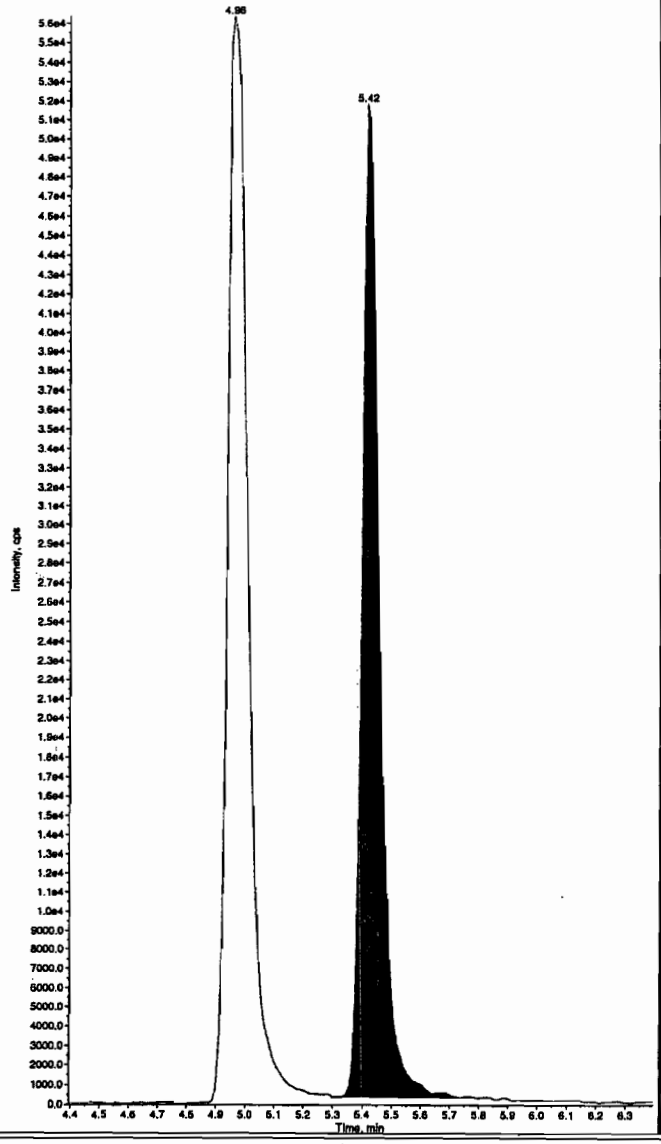
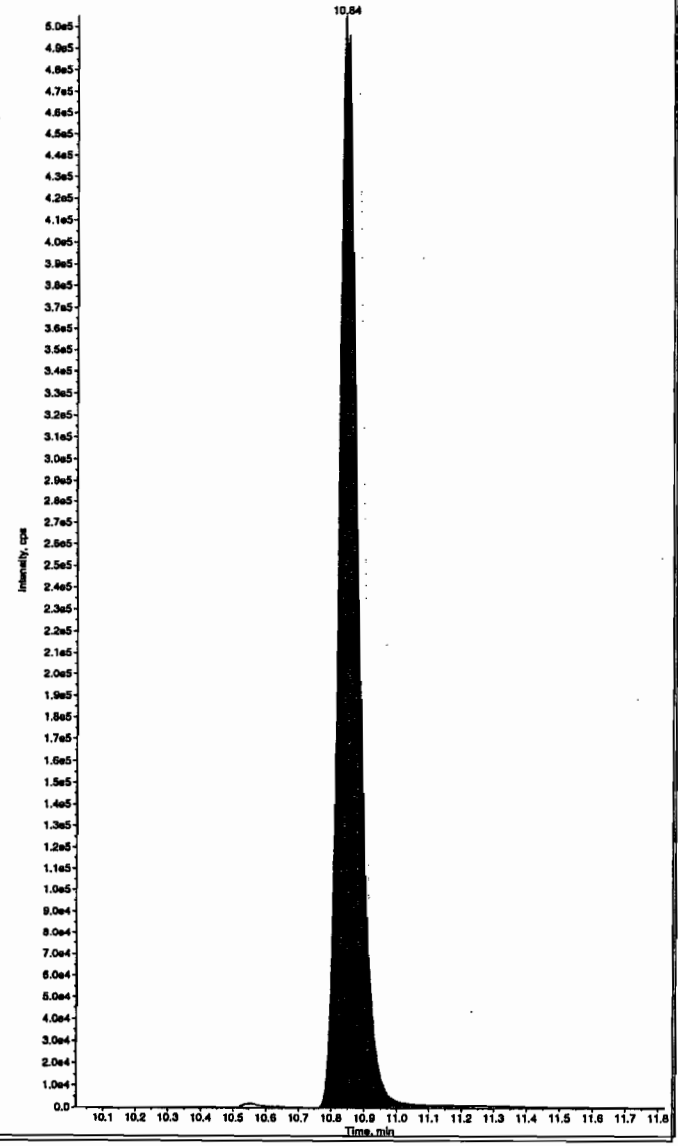
Sample Name: "WXX100402-27CRI" Sample ID: "[1]LER" File: "EXS04020065.wiff"
Peak Name: "24-Diamino-6-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1	
Sample Type:	QC	
Concentration:	100.	ng/mL
Calculated Conc:	94.7	ng/mL
Acq. Date:	4/3/2010	
Acq. Time:	7:13:05 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:	5.39	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	5.42	min
Area:	2.21e+005	counts
Height:	51445.549	cps
Start Time:	5.30	min
End Time:	5.74	min



Sample Name: "WXX100402-27CRI" Sample ID: "[1]LER" File: "EXS04020065.wiff"
Peak Name: "tris(o-cresyl) phosphate" Mass(es): "369.1/91.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1	
Sample Type:	QC	
Concentration:	100.	ng/mL
Calculated Conc:	108.	ng/mL
Acq. Date:	4/3/2010	
Acq. Time:	7:13:05 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:	10.8	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	10.8	min
Area:	2.11e+006	counts
Height:	504514.954	cps
Start Time:	10.7	min
End Time:	11.2	min



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7A
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10–2089

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXS04020071.wiff

Analysis Date: 03–APR–10 08:47

LCMSMS ID: 1358

Column ID: JSphere ODS–H80

Compound	True	Found	Recovery	Q
2,4–Diamino–6–nitrotoluene	500	529	106	
2,6–Diamino–4–nitrotoluene	500	490	98	
3,4–Dinitrotoluene	250	220	88	
3,5–Dinitroaniline	500	491	98	
TATB	500	485	97	
tris(o–cresyl) phosphate	500	510	102	

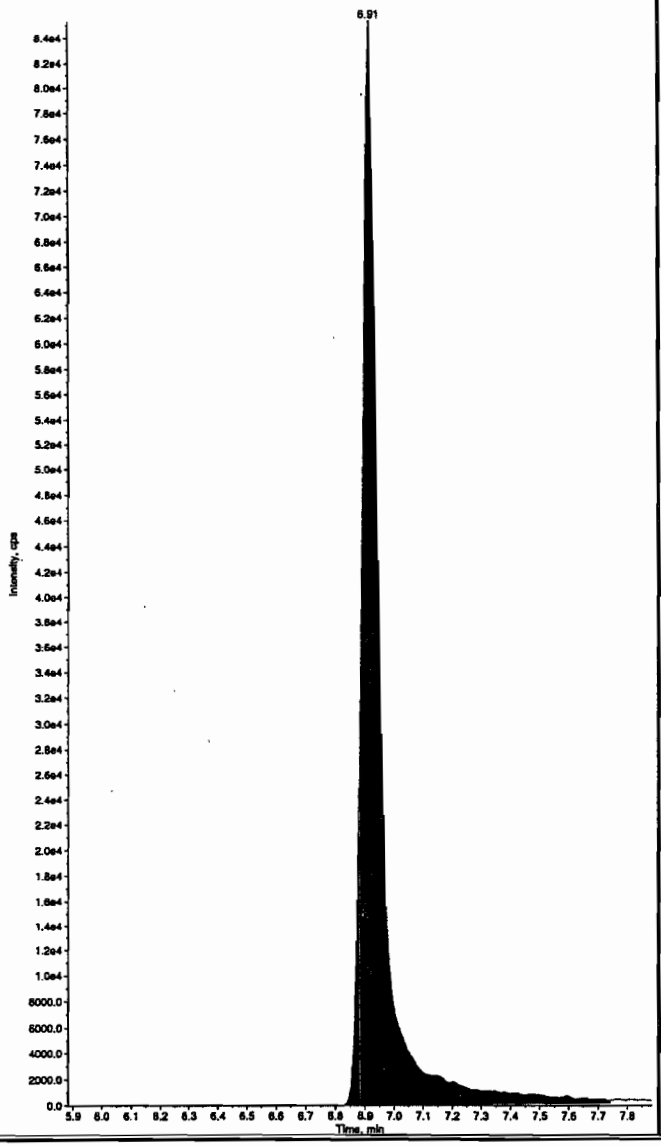
Recovery Limits:
3,4–Dinitrotoluene (Surrogate),TATB, tris(o–cresyl)phosphate, 3,5–Dinitroaniline, 2,6–Diamino–4–nitrotoluene ,
2,4–Diamino–6–nitrotoluene 70–130%
OtherTarget Analytes 80–120%
Column used to flag Recovery outside of Limits
* Value outside of Recovery Limits

Before Last 4/7/10

mple Name: "WXX100402-26CCV" Sample ID: "]1|LER" File: "EXS04020071.wiff"
ak Name: "TATB" Mass(es): "257.2/204.9 amu"
mment: "LCMSEXP_C" Annotation: ""
ple Index: 1
ple Type: QC
entration: 500. ng/mL
ulated Conc: 485. ng/mL
Date: 4/3/2010
Time: 8:47:24 AM

fied: No
. Algorithm: IntelliQuan - IQA
Peak Height: 2500.00 cps
Peak Width: 0.00 sec
thing Width: 3 points
Window: 30.0 sec
cted RT: 6.88 min
Relative RT: No

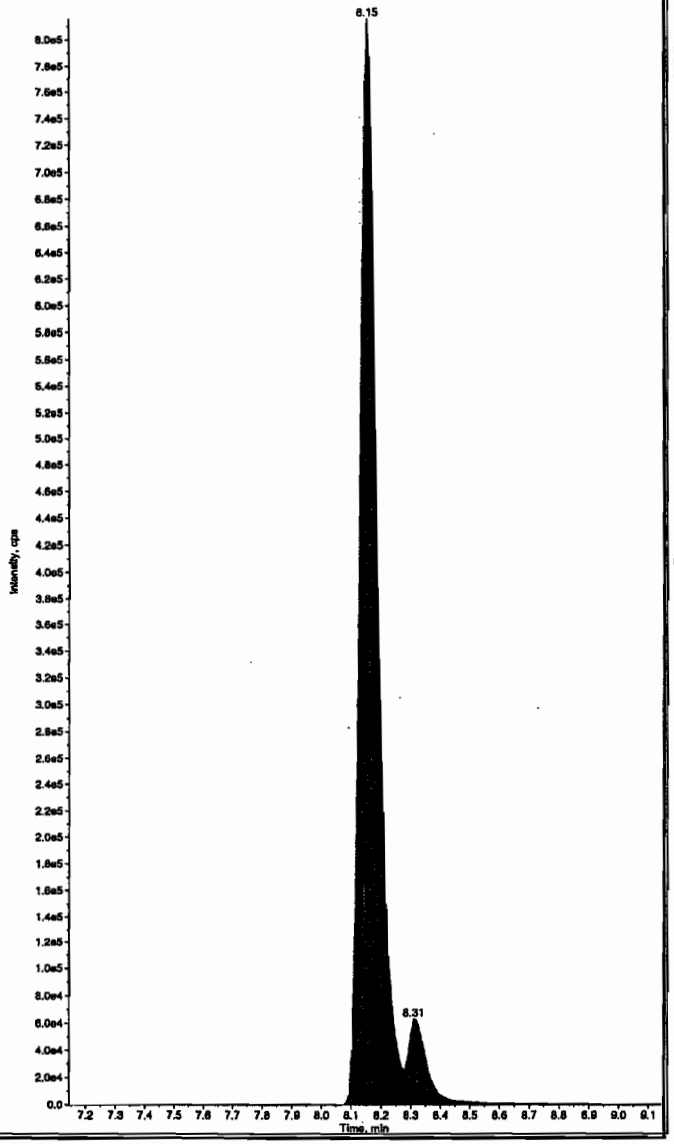
Type: Valley
ntion Time: 6.91 min
: 3.94e+005 counts
ht: 85294.159 cps
t Time: 6.82 min
Time: 7.74 min



Sample Name: "WXX100402-26CCV" Sample ID: "]1|LER" File: "EXS04020071.wiff"
Peak Name: "35-Dinitroaniline" Mass(es): "182.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: ""
Sample Index: 1
Sample Type: QC
Concentration: 500. ng/mL
Calculated Conc: 542. ng/mL
Acq. Date: 4/3/2010
Acq. Time: 8:47:24 AM

Modified: Yes
Proc. Algorithm: IntelliQuan - IQA
Min. Peak Height: 2000.00 cps
Min. Peak Width: 0.00 sec
Smoothing Width: 3 points
RT Window: 15.0 sec
Expected RT: 8.14 min
Use Relative RT: No

Int. Type: Valley
Retention Time: 8.15 min
Area: 3.79e+006 counts
Height: 816092.407 cps
Start Time: 8.06 min
End Time: 8.91 min



Hmm 04/08/10

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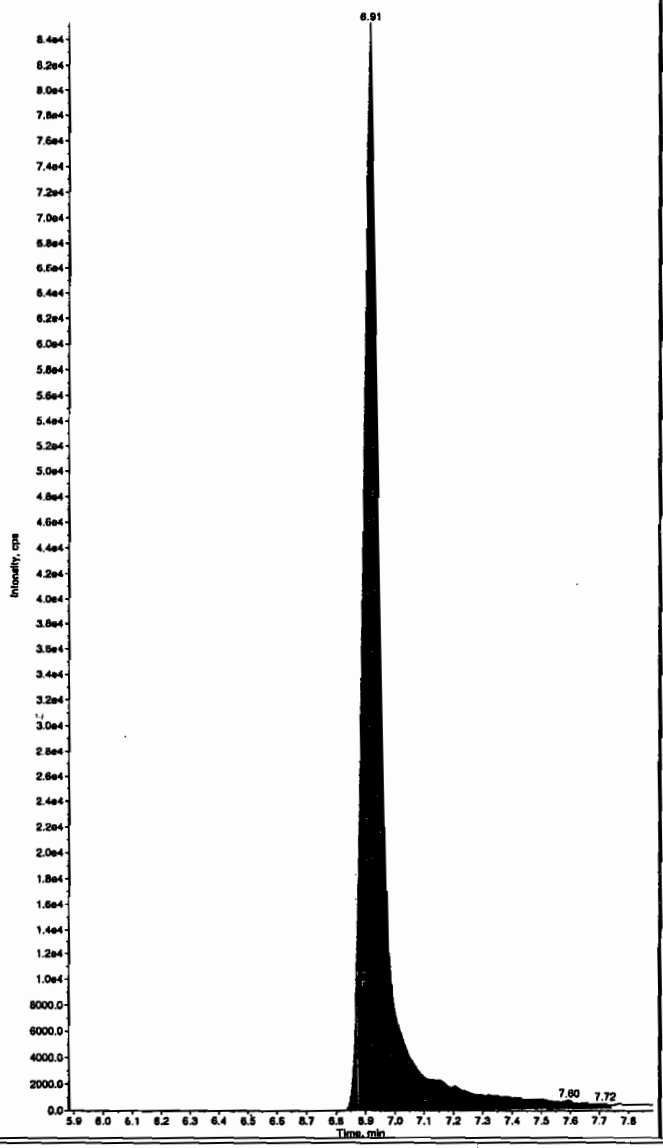
afyu dan 4/7/10

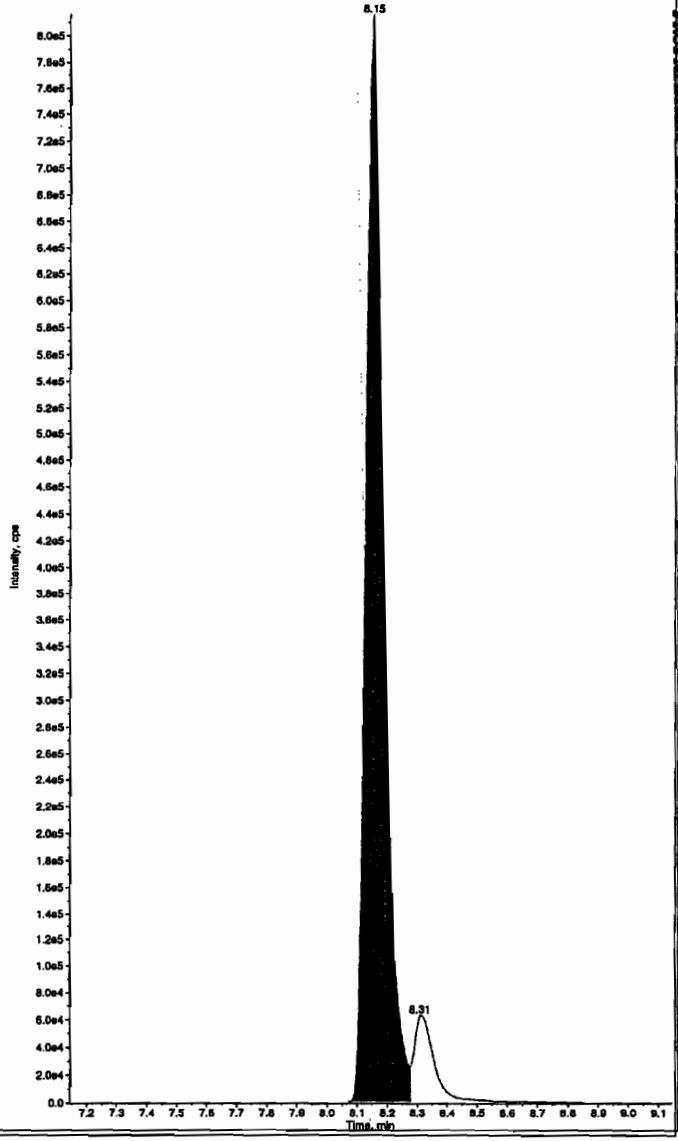
Sample Name: "WXX100402-26CCV" Sample ID: "|1|LER" File: "EXS04020071.wiff"
Peak Name: "TATB" Mass(es): "257.2/204.9 amu"
Comment: "LCMSEXP_C" Annotation: ""

mple Index:	1	
mple Type:	QC	
ncentration:	500.	ng/mL
lculated Conc:	485.	ng/mL
q. Date:	4/3/2010	
q. Time:	8:47:24 AM	
dified:	No	
pc. Algorithm:	IntelliQuan - IQA	
n. Peak Height:	2500.00	cps
n. Peak Width:	0.00	sec
oothing Width:	3	points
Window:	30.0	sec
pected RT:	6.88	min
Relative RT:	No	
. Type:	Valley	
tention Time:	6.91	min
ea:	3.94e+005	counts
ght:	85294.159	cps
rt Time:	6.82	min
Time:	7.74	min



Sample Name: "WXX100402-26CCV" Sample ID: "|1|LER" File: "EXS04020071.wiff"
Peak Name: "35-Dinitroaniline" Mass(es): "182.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1	
Sample Type:	QC	
Concentration:	500.	ng/mL
Calculated Conc:	491.	ng/mL
Acq. Date:	4/3/2010	
Acq. Time:	8:47:24 AM	
Modified:	Yes	
RT Window:	15.0	sec
Expected RT:	8.14	min
Use Relative RT:	No	
Int. Type:	Manual	
Retention Time:	8.15	min
Area:	3.45e+006	counts
Height:	814663.088	cps
Start Time:	8.07	min
End Time:	8.28	min



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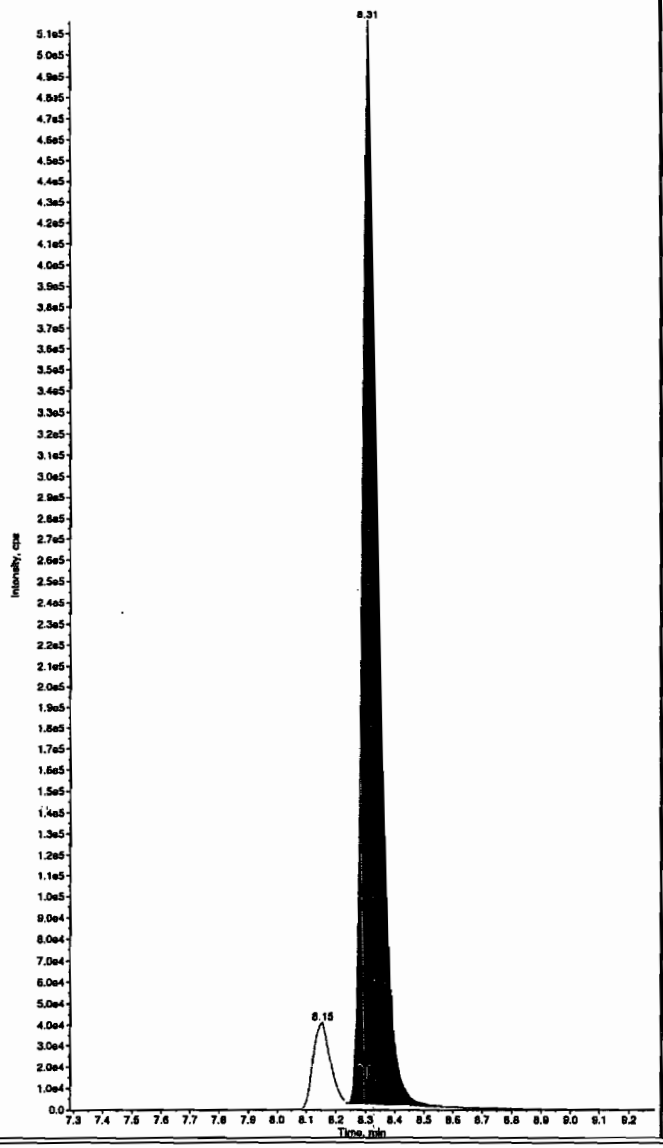
PROPRIETARY INFORMATION-No unauthorized reproduction without written permission from GEL.

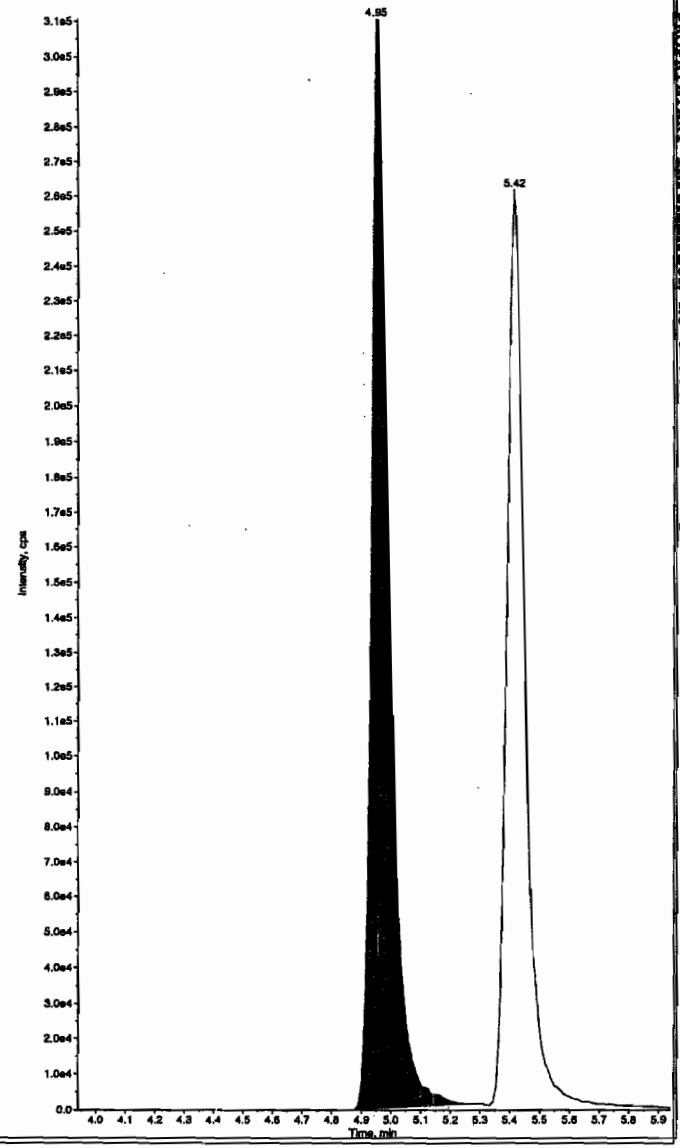
Sample Name: "WXX100402-26CCV" Sample ID: "|1|LER" File: "EXS04020071.wiff"
Peak Name: "34-Dinitrotoluene" Mass(es): "182.1/151.9 amu"
Comment: "LCMSEXP_C" Annotation: ""

ple Index:	1
ple Type:	QC
centration:	250. ng/mL
culated Conc:	220. ng/mL
. Date:	4/3/2010
. Time:	8:47:24 AM
ified:	No
c. Algorithm:	IntelliQuan - IQA
. Peak Height:	1460.00 cps
. Peak Width:	0.00 sec
othing Width:	3 points
Window:	15.0 sec
ected RT:	8.29 min
Relative RT:	No
. Type:	Valley
ention Time:	8.31 min
a:	2.06e+006 counts
ght:	513220.947 cps
rt Time:	8.24 min
Time:	8.58 min



Sample Name: "WXX100402-26CCV" Sample ID: "|1|LER" File: "EXS04020071.wiff"
Peak Name: "26-Diamino-4-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1
Sample Type:	QC
Concentration:	500. ng/mL
Calculated Conc:	490. ng/mL
Acq. Date:	4/3/2010
Acq. Time:	8:47:24 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:	4.94 min
Use Relative RT:	No
Int. Type:	Valley
Retention Time:	4.95 min
Area:	1.34e+006 counts
Height:	310299.561 cps
Start Time:	4.87 min
End Time:	5.26 min



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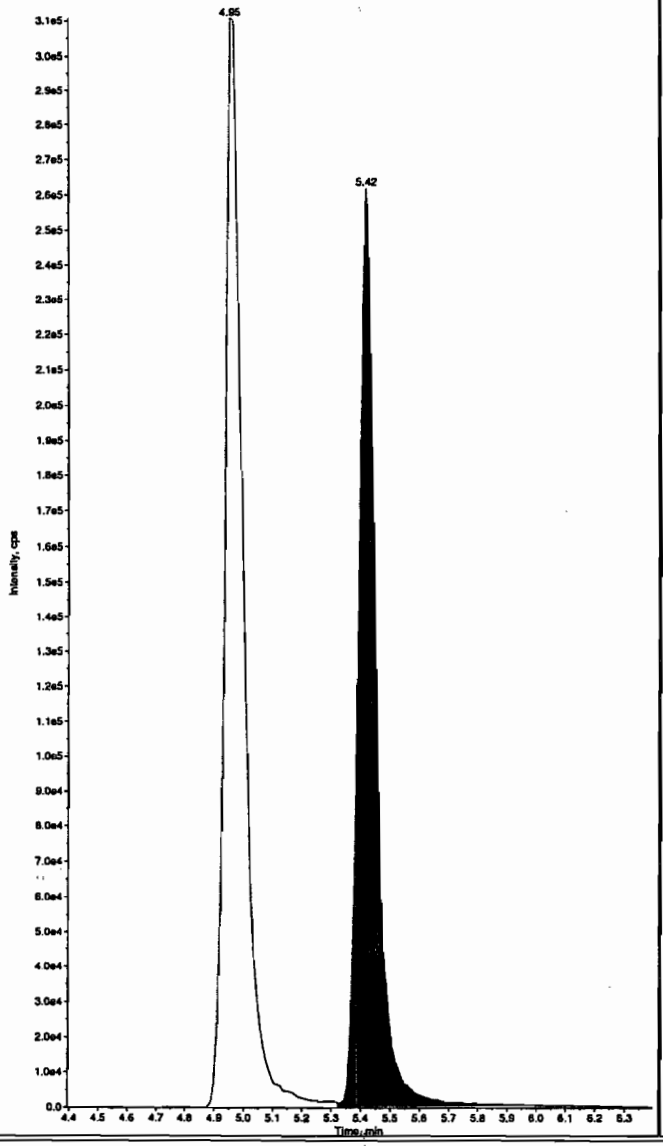
Sample Name: "WXX100402-26CCV" Sample ID: "|1|LER" File: "EXS04020071.wiff"
Peak Name: "24-Diamino-6-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

```
sple Index:        1
sple Type:         QC
ncentration:       500.     ng/mL
culated Conc:      529.     ng/mL
. Date:        4/3/2010
. Time:        8:47:24 AM

ified:             No
c. Algorithm: IncelliQuan - IQA
. Peak Height: 350.00    cps
. Peak Width:    0.00    sec
oothing Width:  3        points
 Window:         30.0    sec
ected RT:         5.39   min
: Relative RT:    No

. Type:         Valley
ention Time:      5.42   min
a:          1.13e+006   counts
ght:        261452.301   cps
rt Time:          5.32   min
 Time:            5.94   min
```

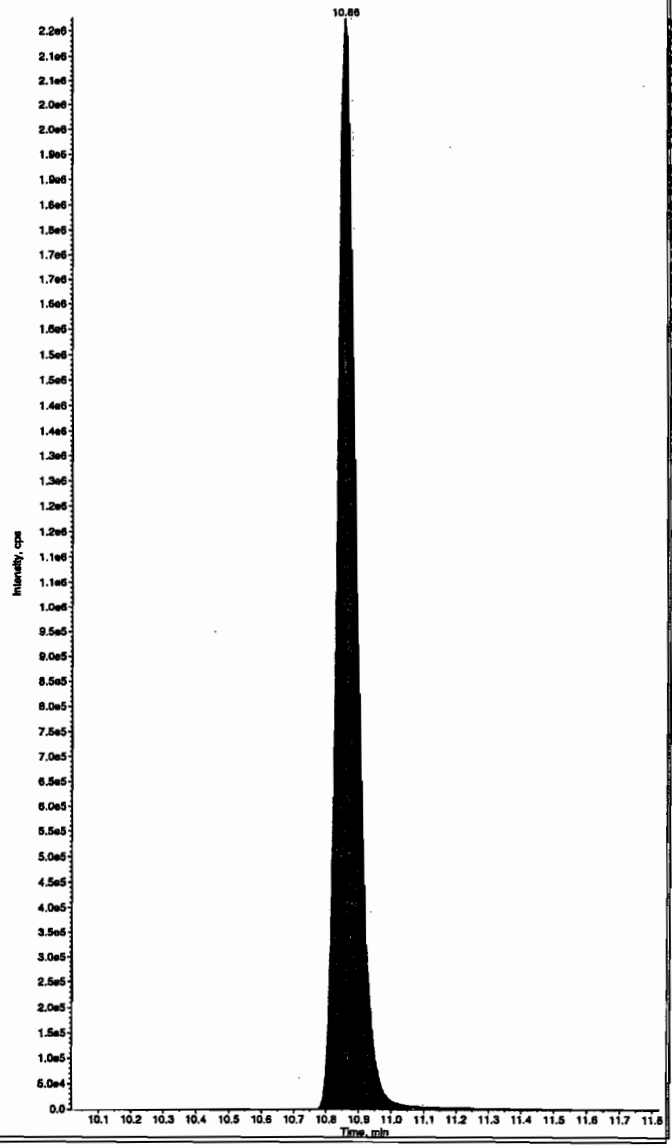


Sample Name: "WXX100402-26CCV" Sample ID: "|1|LER" File: "EXS04020071.wiff"
Peak Name: "tris(o-cresyl) phosphate" Mass(es): "369.1/91.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

```
Sample Index:        1
Sample Type:         QC
Concentration:       500.     ng/mL
Calculated Conc:     510.     ng/mL
Acq. Date:       4/3/2010
Acq. Time:       8:47:24 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:        10.8    min
Use Relative RT:    No

Int. Type:        Valley
Retention Time:     10.9    min
Area:         9.34e+006   counts
Height:       2174589.355   cps
Start Time:         10.8    min
End Time:           11.2    min
```



EL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

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7B
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10–2089

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXS04020073.wiff

Analysis Date: 03–APR–10 09:18

LCMSMS ID: 1358

Column ID: JSphere ODS–H80

Compound	True	Found	Recovery	Q
2,4–Diamino–6–nitrotoluene	100	100	100	
2,6–Diamino–4–nitrotoluene	100	97	97	
3,4–Dinitrotoluene	50	51.5	103	
3,5–Dinitroaniline	100	112	112	
TATB	100	99.8	100	
tris(o–cresyl) phosphate	100	111	111	

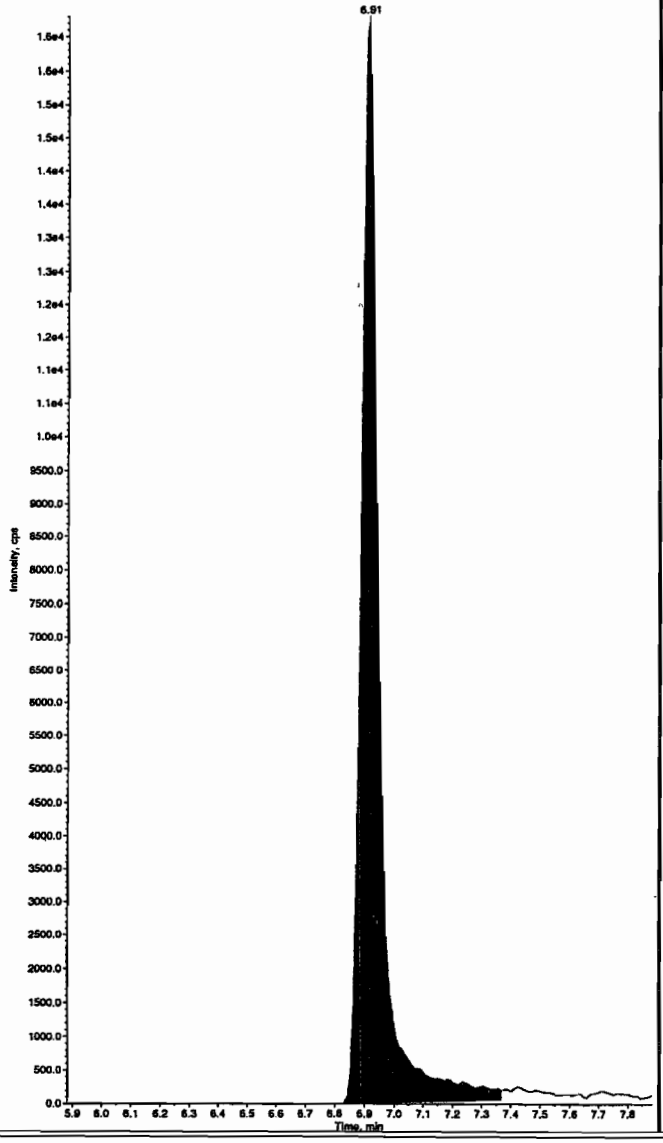
Recovery Limits:
3,4–Dinitrotoluene (Surrogate),TATB, tris(o–cresyl)phosphate, 3,5–Dinitroaniline, 2,6–Diamino–4–nitrotoluene , 2,4–Diamino–6–nitrotoluene 50–150%
OtherTarget Analytes 70–130%
Column used to flag Recovery outside of Limits
* Value outside of Recovery Limits

LCW 4/7/10

ample Name: "WXX100402-27CRI" Sample ID: "|1|LER" File: "EXS04020073.wiff"
eak Name: "TATB" Mass(es): "257.2/204.9 amu"
omment: "LCMSEXP_C" Annotation: ""
ple Index: 1
ple Type: QC
centration: 100. ng/mL
culated Conc: 99.8 ng/mL
. Date: 4/3/2010
. Time: 9:18:49 AM

ified: No
c. Algorithm: IntelliQuan - IQA
. Peak Height: 2500.00 cps
. Peak Width: 0.00 sec
othing Width: 3 points
Window: 30.0 sec
ected RT: 6.88 min
Relative RT: No

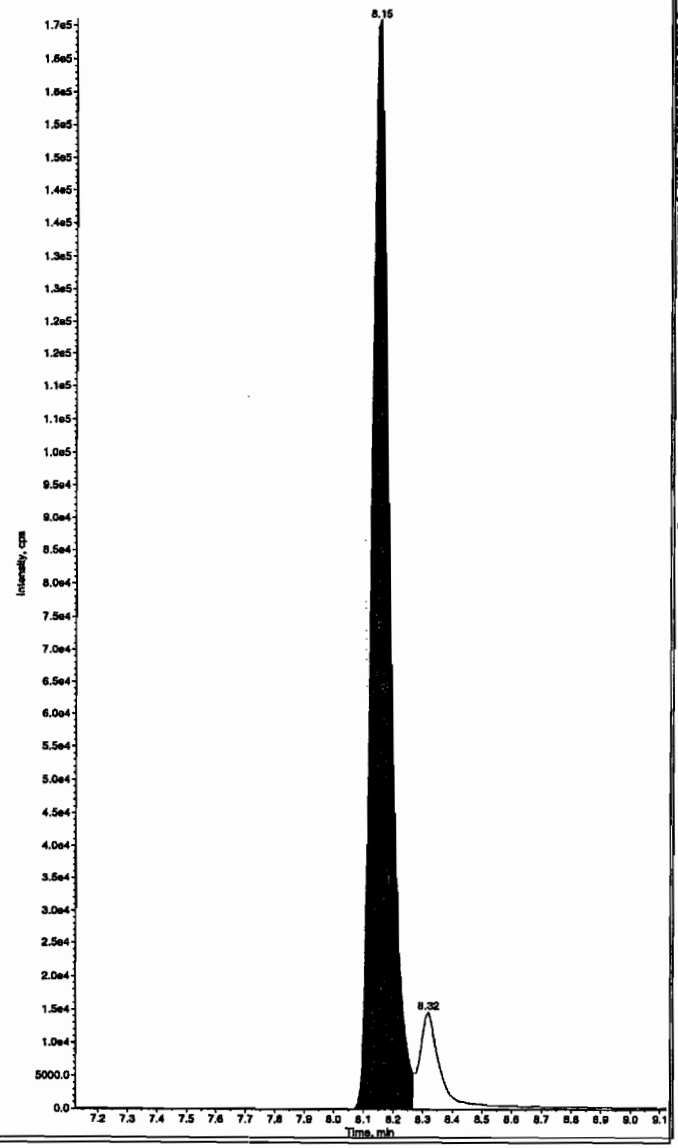
. Type: Valley
ention Time: 6.91 min
a: 7.26e+004 counts
ght: 16300.823 cps
rt Time: 6.82 min
Time: 7.37 min



Sample Name: "WXX100402-27CRI" Sample ID: "|1|LER" File: "EXS04020073.wiff"
Peak Name: "35-Dinitroanilins" Mass(es): "182.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: ""
Sample Index: 1
Sample Type: QC
Concentration: 100. ng/mL
Calculated Conc: 112. ng/mL
Acq. Date: 4/3/2010
Acq. Time: 9:18:49 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: 8.12 min
Use Relative RT: No

Int. Type: Valley
Retention Time: 8.15 min
Area: 7.23e+005 counts
Height: 165794.083 cps
Start Time: 8.05 min
End Time: 8.27 min



Hmm 04/08/10

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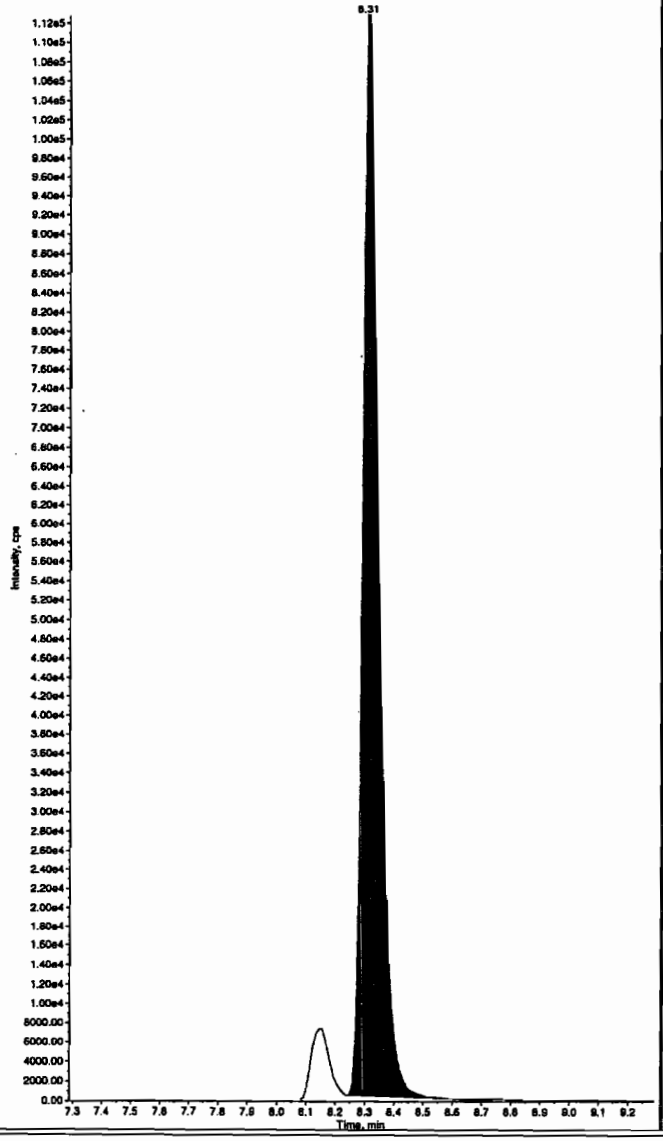
PROPRIETARY INFORMATION-No unauthorized reproduction without written permission from GEL.

ample Name: "WXX100402-27CRI" Sample ID: "1|LER" File: "EXS04020073.wiff"
eak Name: "34-Dinitrotoluene" Mass(es): "182.1/151.9 amu"
omment: "LCMSEXP_C" Annotation: ""

```
ple Index:        1
ple Type:        QC
centration:      50.0     ng/mL
culated Conc:    51.5     ng/mL
. Date:        4/3/2010
. Time:        9:18:49 AM

ified:            No
c. Algorithm: IntelliQuan - IQA
. Peak Height:1460.00    cps
. Peak Width:     0.00   sec
oothing Width:  3        points
Window:          15.0    sec
ected RT:         8.29   min
 Relative RT:     No

. Type:         Valley
ention Time:      8.31   min
a:          4.42e+005   counts
ght:          112317.490  cps
rt Time:          8.24   min
 Time:            8.64   min
```

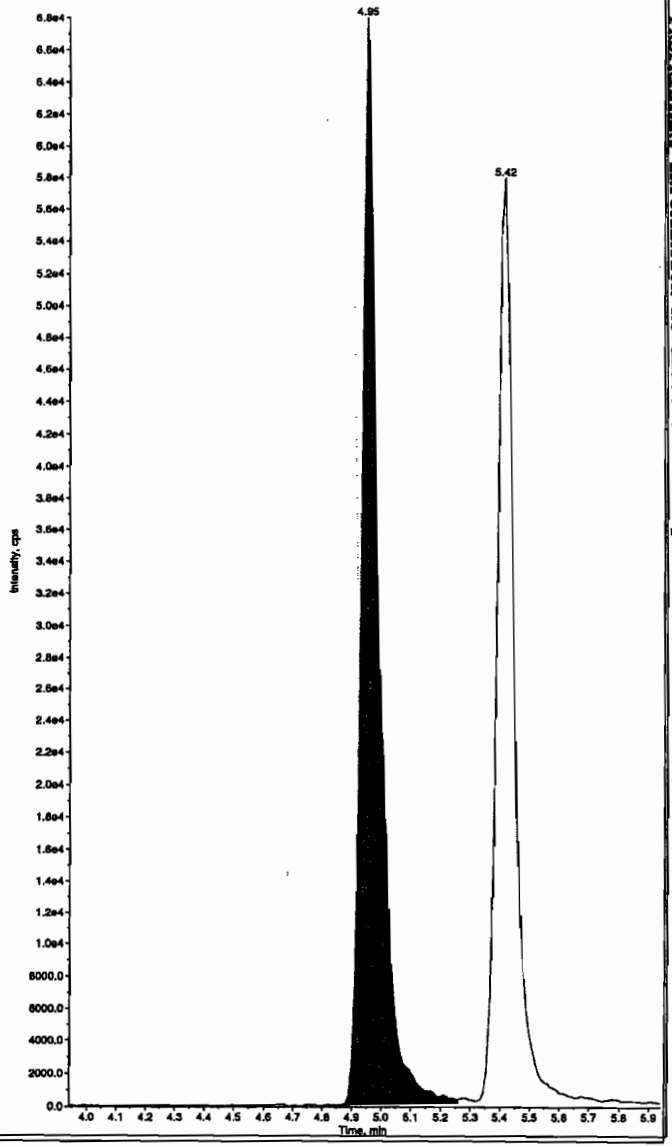


Sample Name: "WXX100402-27CRI" Sample ID: "1|LER" File: "EXS04020073.wiff"
Peak Name: "26-Diamino-4-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

```
Sample Index:        1
Sample Type:        QC
Concentration:      100.     ng/mL
Calculated Conc:    97.0     ng/mL
Acq. Date:        4/3/2010
Acq. Time:        9:18:49 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:         4.94    min
Use Relative RT:     No

Int. Type:        Valley
Retention Time:      4.95    min
Area:          2.86e+005     counts
Height:        67930.717     cps
Start Time:          4.86    min
End Time:            5.26    min
```



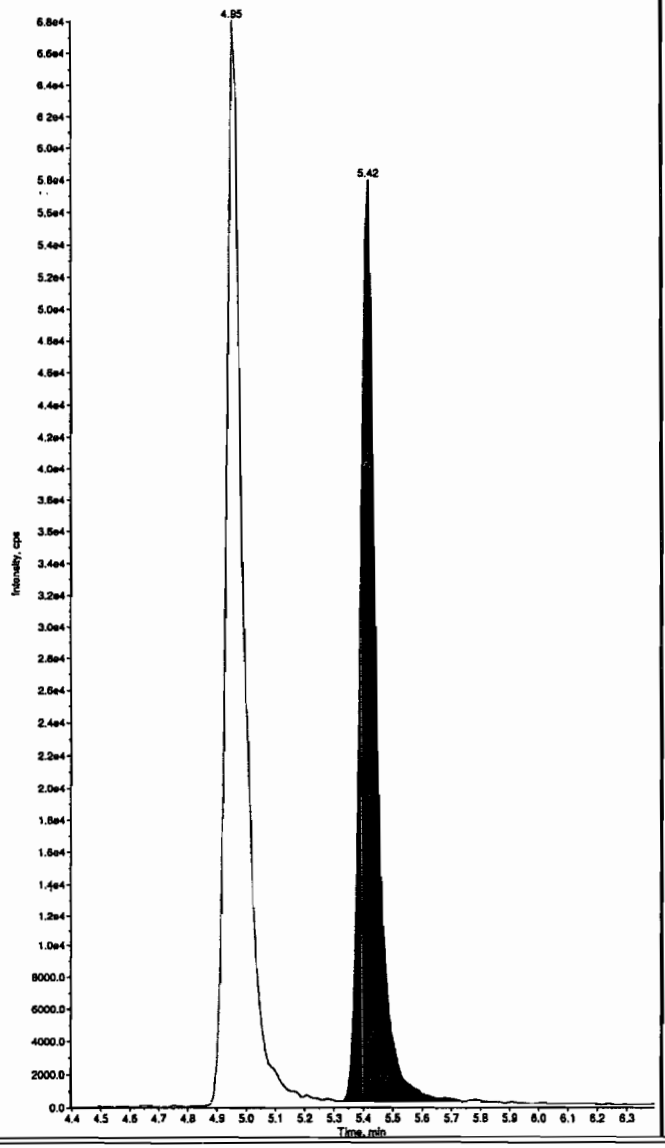
PROPRIETARY INFORMATION-No unauthorized reproduction without written permission from GEL.

ample Name: "WXX100402-27CRI" Sample ID: "[1]LER" File: "EXS04020073.wiff"
eak Name: "24-Diamino-6-nitrotoluene" Mass(es): "166.0/46.0 amu"
omment: "LCMSEXP_C" Annotation: ""

```
ple Index:          1
ple Type:          QC
centration:       100.     ng/mL
culated Conc:     100.     ng/mL
. Date:        4/3/2010
. Time:        9:18:49 AM

ified:             No
:. Algorithm: IntelliQuan - IQA
. Peak Height: 350.00    cps
. Peak Width:    0.00    sec
othing Width:  3        points
Window:          30.0    sec
cted RT:          5.39   min
Relative RT:      No

Type:          Valley
ention Time:      5.42   min
:          2.32e+005    counts
ht:          57621.098  cps
t Time:           5.32   min
Time:             5.75   min
```

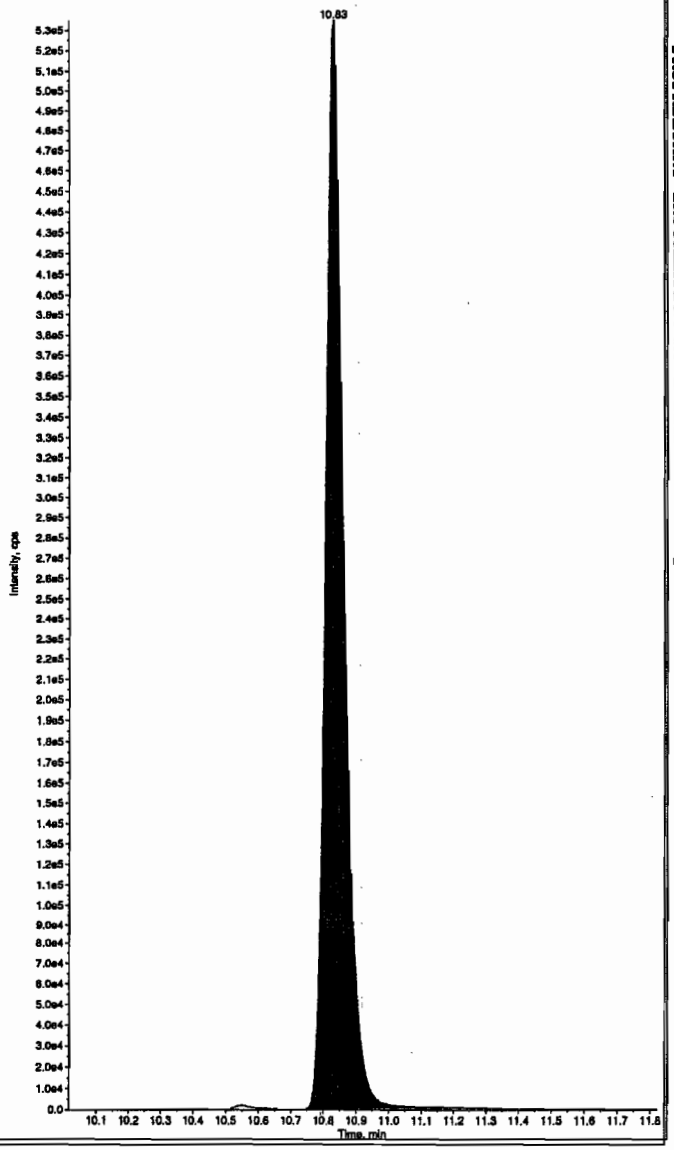


Sample Name: "WXX100402-27CRI" Sample ID: "[1]LER" File: "EXS04020073.wiff"
Peak Name: "tris(o-cresyl) phosphate" Mass(es): "369.1/91.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

```
Sample Index:          1
Sample Type:          QC
Concentration:       100.     ng/mL
Calculated Conc:     111.     ng/mL
Acq. Date:        4/3/2010
Acq. Time:        9:18:49 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:        10.8    min
Use Relative RT:    No

Int. Type:         Valley
Retention Time:     10.8    min
Area:          2.16e+006    counts
Height:        534474.731   cps
Start Time:         10.7    min
End Time:           11.2    min
```



:L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

PROPRIETARY INFORMATION-No unauthorized reproduction without written permission from GEL.

7A
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10–2089

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXS04020084.wiff

Analysis Date: 03–APR–10 12:11

LCMSMS ID: 1358

Column ID: JSphere ODS–H80

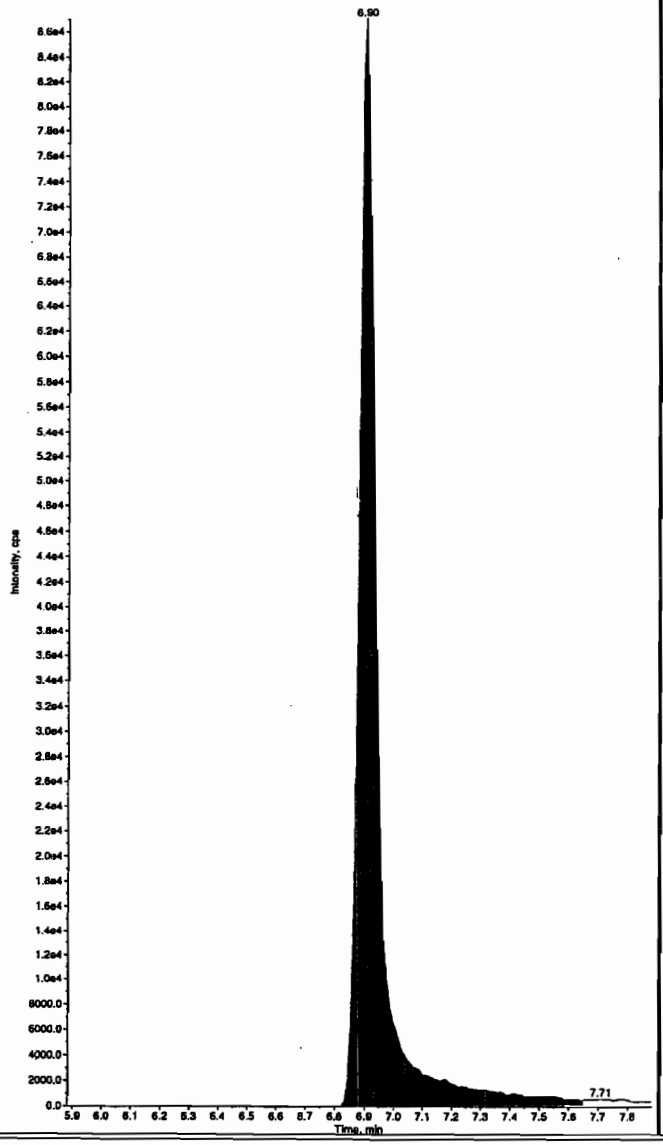
Compound	True	Found	Recovery	Q
2,6–Diamino–4–nitrotoluene	500	532	106	
3,4–Dinitrotoluene	250	219	87	
3,5–Dinitroaniline	500	536	107	
TATB	500	499	100	
tris(o–cresyl) phosphate	500	506	101	
2,4–Diamino–6–nitrotoluene	500	578	116	

Recovery Limits:
3,4–Dinitrotoluene (Surrogate),TATB, tris(o–cresyl)phosphate, 3,5–Dinitroaniline, 2,6–Diamino–4–nitrotoluene ,
2,4–Diamino–6–nitrotoluene 70–130%
OtherTarget Analytes 80–120%
Column used to flag Recovery outside of Limits
* Value outside of Recovery Limits

LER 4/7/10

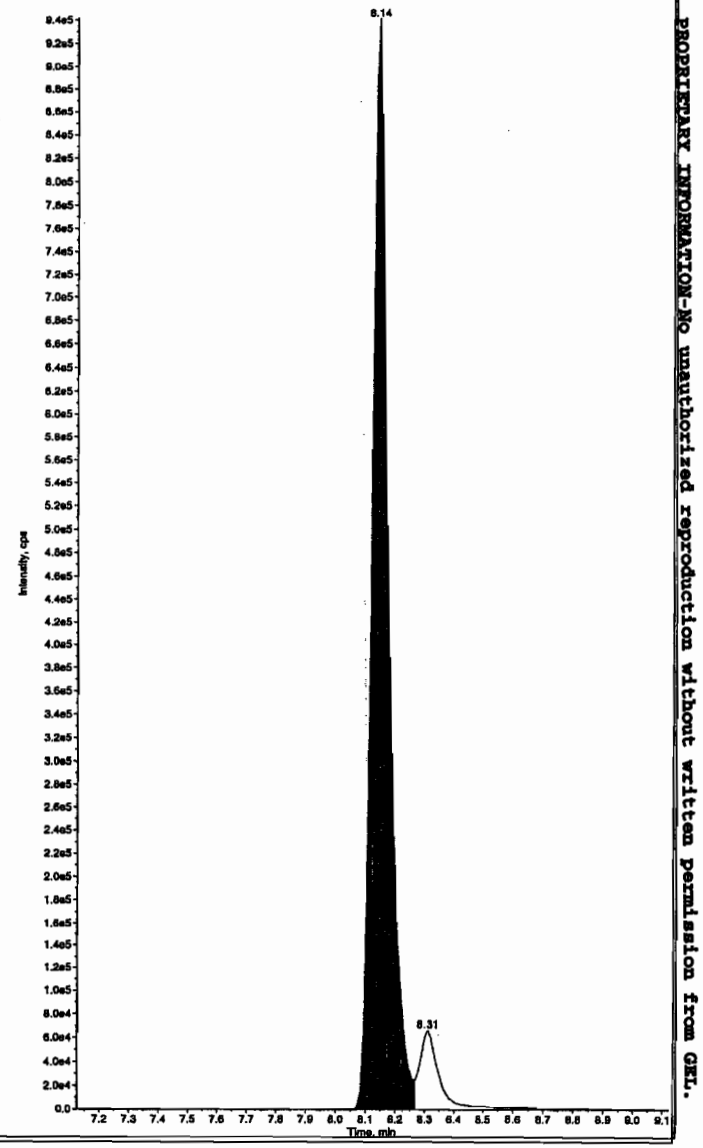
ample Name: "WXX100402-26CCV" Sample ID: "|1|LER" File: "EXS04020084.wiff"
eak Name: "TATB" Mass(es): "257.2/204.9 amu"
omment: "LCMSEXP_C" Annotation: ""

ple Index:	1
ple Type:	QC
centration:	500. ng/mL
culated Conc:	499. ng/mL
. Date:	4/3/2010
. Time:	12:11:29 PM
ified:	No
c. Algorithm:	IntelliQuan - IQA
. Peak Height:	2500.00 cps
. Peak Width:	0.00 sec
othing Width:	3 points
Window:	30.0 sec
ected RT:	6.88 min
Relative RT:	No
. Type:	Valley
ention Time:	6.90 min
a:	4.05e+005 counts
ght:	87064.285 cps
rt Time:	6.80 min
Time:	7.65 min



Sample Name: "WXX100402-26CCV" Sample ID: "|1|LER" File: "EXS04020084.wiff"
Peak Name: "35-Dinitroaniline" Mass(es): "182.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1
Sample Type:	QC
Concentration:	500. ng/mL
Calculated Conc:	536. ng/mL
Acq. Date:	4/3/2010
Acq. Time:	12:11:29 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:	8.12 min
Use Relative RT:	No
Int. Type:	Valley
Retention Time:	8.14 min
Area:	3.75e+006 counts
Height:	941214.417 cps
Start Time:	8.05 min
End Time:	8.27 min



HMM 04/08/10

EL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

PROPRIETARY INFORMATION-No unauthorized reproduction without written permission from GEL.

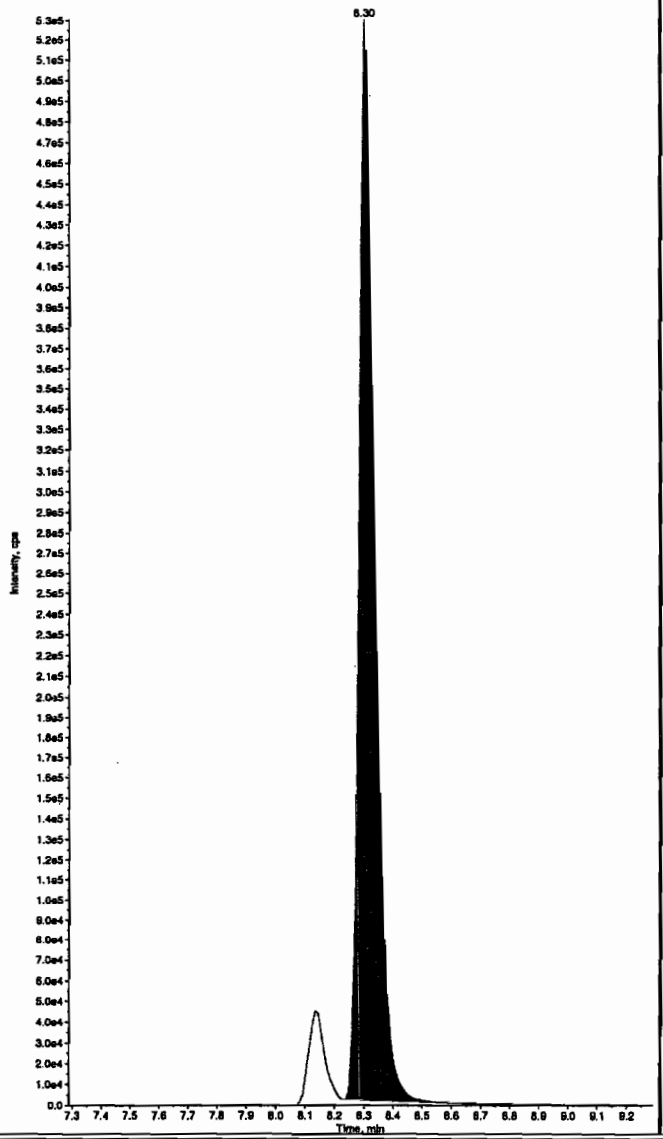
PROPRIETARY INFORMATION-No unauthorized reproduction without written permission from GEL.

Sample Name: "WXX100402-26CCV" Sample ID: "|1|LER" File: "EXS04020084.wiff"
Peak Name: "34-Dinitrotoluene" Mass(es): "182.1/151.9 amu"
Comment: "LCMSEXP_C" Annotation: ""

```
aple Index:        1
aple Type:        QC
ncentration:      250.     ng/mL
.culated Conc:    219.     ng/mL
i. Date:       4/3/2010
i. Time:       12:11:29 PM

lified:           No
c. Algorithm: IntelliQuan - IQA
i. Peak Height:1460.00   cps
i. Peak Width:    0.00   sec
oothing Width:  3        points
Window:          15.0    sec
ected RT:         8.29   min
Relative RT:      No

. Type:        Valley
ention Time:      8.30   min
a:          2.04e+006   counts
ght:        528112.488   cps
rt Time:          8.24   min
Time:             8.60   min
```

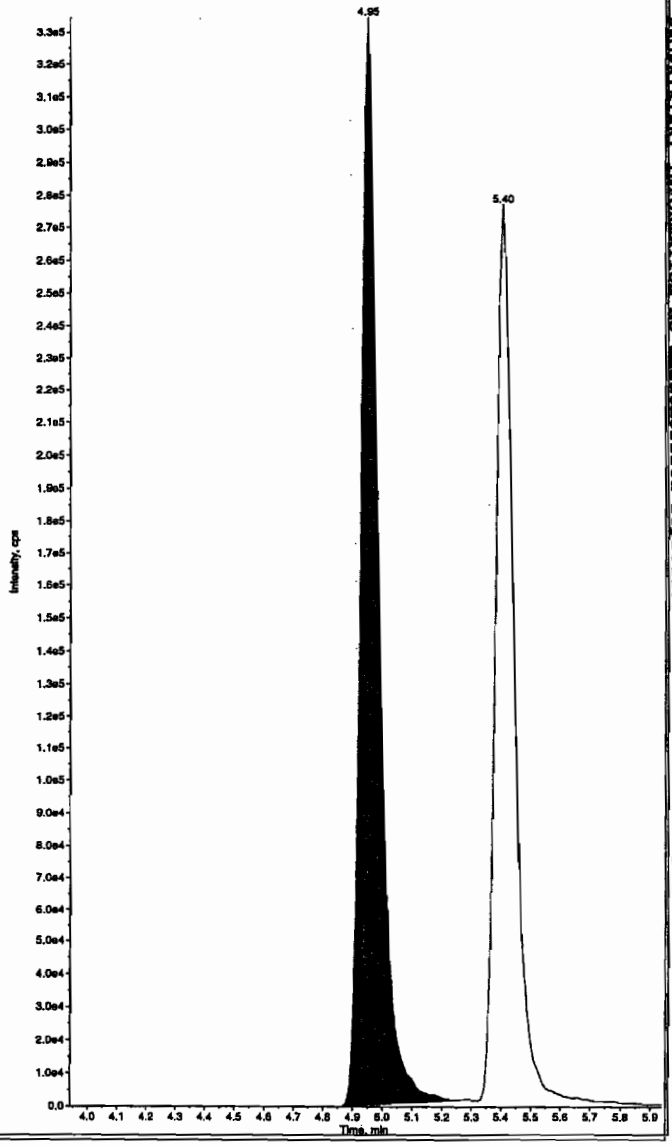


Sample Name: "WXX100402-26CCV" Sample ID: "|1|LER" File: "EXS04020084.wiff"
Peak Name: "26-Diamino-4-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

```
Sample Index:        1
Sample Type:        QC
Concentration:      500.     ng/mL
Calculated Conc:    532.     ng/mL
Acq. Date:       4/3/2010
Acq. Time:       12:11:29 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:        4.94   min
Use Relative RT:    No

Int. Type:        Valley
Retention Time:     4.95   min
Area:          1.46e+006   counts
Height:        334308.929   cps
Start Time:         4.86   min
End Time:           5.25   min
```



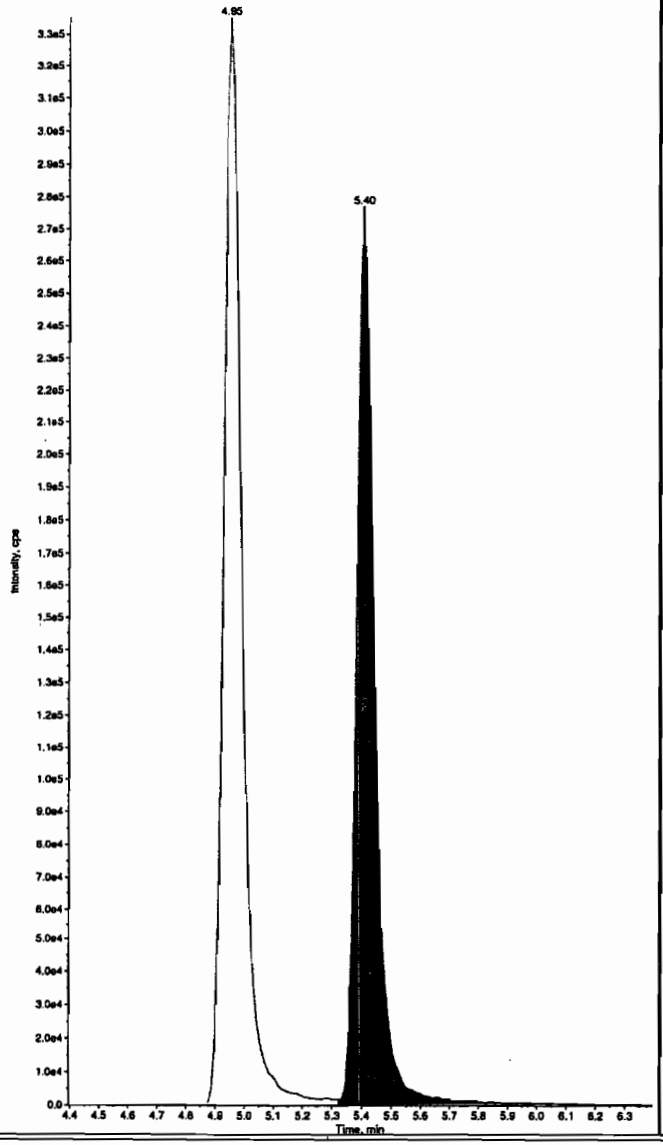
PROPRIETARY INFORMATION-No unauthorized reproduction without written permission from GEL.

ample Name: "WXX100402-26CCV" Sample ID: "[1]LER" File: "EXS04020084.wiff"
ak Name: "24-Diamino-6-nitrotoluene" Mass(es): "166.0/46.0 amu"
omment: "LCMSEXP_C" Annotation: ""

ple Index: 1
ple Type: QC
centration: 500. ng/mL
culated Conc: 578. ng/mL
. Date: 4/3/2010
. Time: 12:11:29 PM

ified: No
:. Algorithm: IntelliQuan - IQA
. Peak Height: 350.00 cps
. Peak Width: 0.00 sec
othing Width: 3 points
Window: 30.0 sec
ected RT: 5.39 min
Relative RT: No

. Type: Valley
ention Time: 5.40 min
a: 1.23e+006 counts
ght: 276508.423 cps
t Time: 5.32 min
Time: 5.90 min

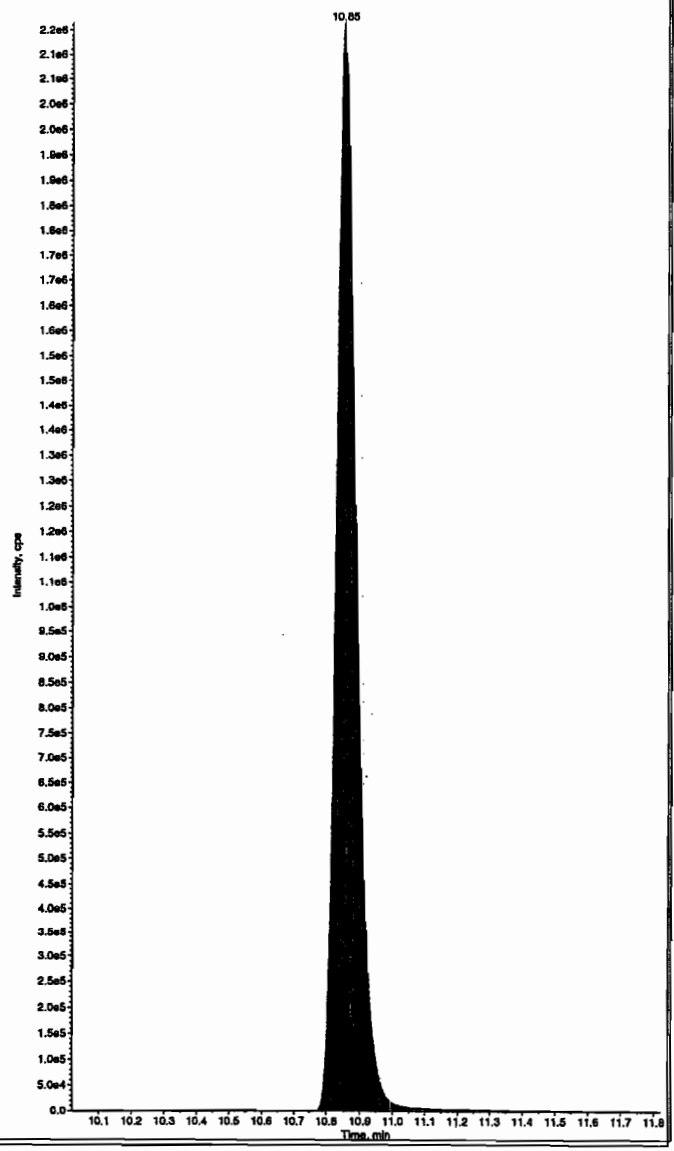


Sample Name: "WXX100402-26CCV" Sample ID: "[1]LER" File: "EXS04020084.wiff"
Peak Name: "tris(o-cresyl) phosphate" Mass(es): "369.1/91.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index: 1
Sample Type: QC
Concentration: 500. ng/mL
Calculated Conc: 506. ng/mL
Acq. Date: 4/3/2010
Acq. Time: 12:11:29 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: 10.8 min
Use Relative RT: No

Int. Type: Valley
Retention Time: 10.9 min
Area: 9.28e+006 counts
Height: 2164912.109 cps
Start Time: 10.8 min
End Time: 11.2 min



EL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

PROPRIETARY INFORMATION-No unauthorized reproduction without written permission from GEL.

7B
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10–2089

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXS04020086.wiff

Analysis Date: 03–APR–10 12:42

LCMSMS ID: 1358

Column ID: JSphere ODS–H80

Compound	True	Found	Recovery	Q
2,4–Diamino–6–nitrotoluene	100	101	101	
2,6–Diamino–4–nitrotoluene	100	94.6	95	
3,4–Dinitrotoluene	50	50.6	101	
3,5–Dinitroaniline	100	116	116	
TATB	100	97	97	
tris(o–cresyl) phosphate	100	107	107	

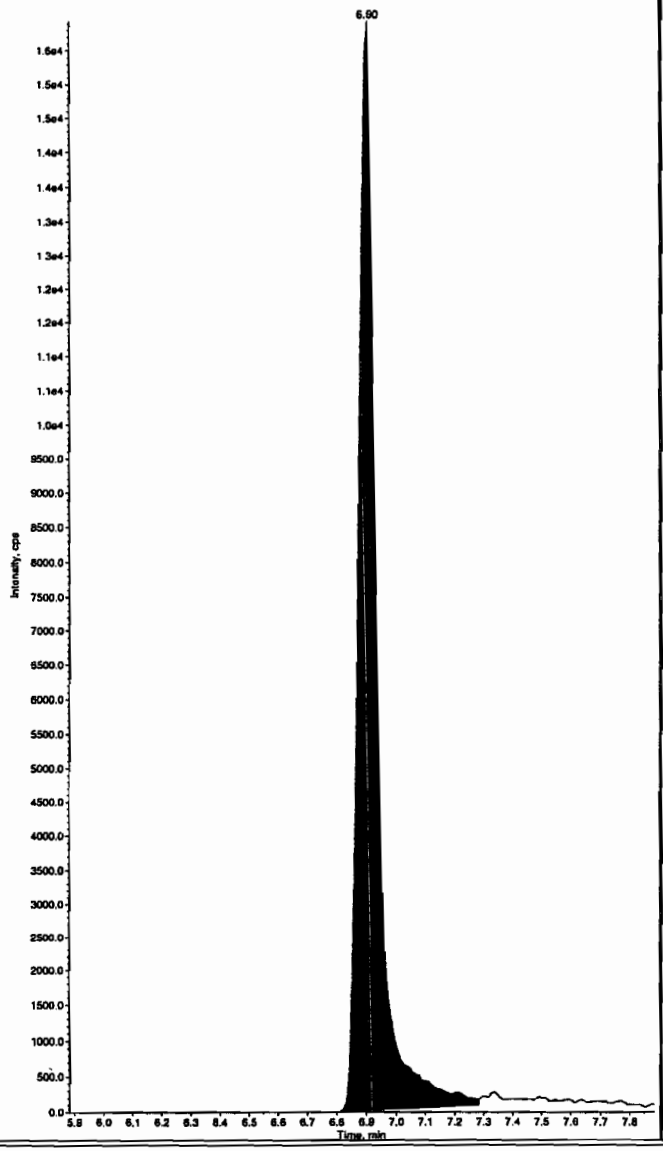
Recovery Limits:
3,4–Dinitrotoluene (Surrogate),TATB, tris(o–cresyl)phosphate, 3,5–Dinitroaniline, 2,6–Diamino–4–nitrotoluene , 2,4–Diamino–6–nitrotoluene 50–150%
OtherTarget Analytes 70–130%
Column used to flag Recovery outside of Limits
* Value outside of Recovery Limits

Rar 4/7/10

ample Name: "WXX100402-27CRI" Sample ID: "|1|LER" File: "EXS04020086.wiff"
eak Name: "TATB" Mass(es): "257.2/204.9 amu"
omment: "LCMSEXP_C" Annotation: ""
ple Index: 1
ple Type: QC
centration: 100. ng/mL
culated Conc: 97.0 ng/mL
. Date: 4/3/2010
. Time: 12:42:54 PM

.fied: No
:. Algorithm: IntelliQuan - IQA
Peak Height: 2500.00 cps
Peak Width: 0.00 sec
othing Width: 3 points
Window: 30.0 sec
ected RT: 6.88 min
Relative RT: No

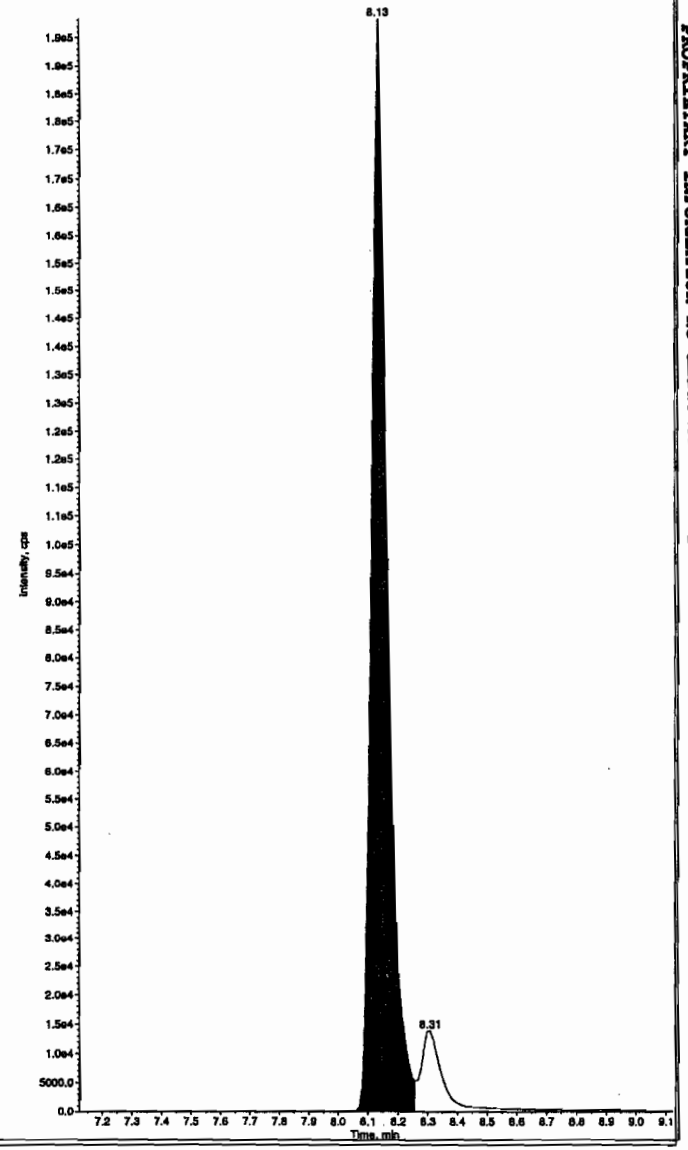
Type: Valley
ntion Time: 6.90 min
: 7.02e+004 counts
ht: 15916.348 cps
t Time: 6.80 min
Time: 7.29 min



Sample Name: "WXX100402-27CRI" Sample ID: "|1|LER" File: "EXS04020086.wiff"
Peak Name: "35-Dinitroaniline" Mass(es): "182.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: ""
Sample Index: 1
Sample Type: QC
Concentration: 100. ng/mL
Calculated Conc: 116. ng/mL
Acq. Date: 4/3/2010
Acq. Time: 12:42:54 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: 8.12 min
Use Relative RT: No

Int. Type: Valley
Retention Time: 8.13 min
Area: 7.49e+005 counts
Height: 193245.468 cps
Start Time: 8.00 min
End Time: 8.26 min



Hnm 04/08/10

L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

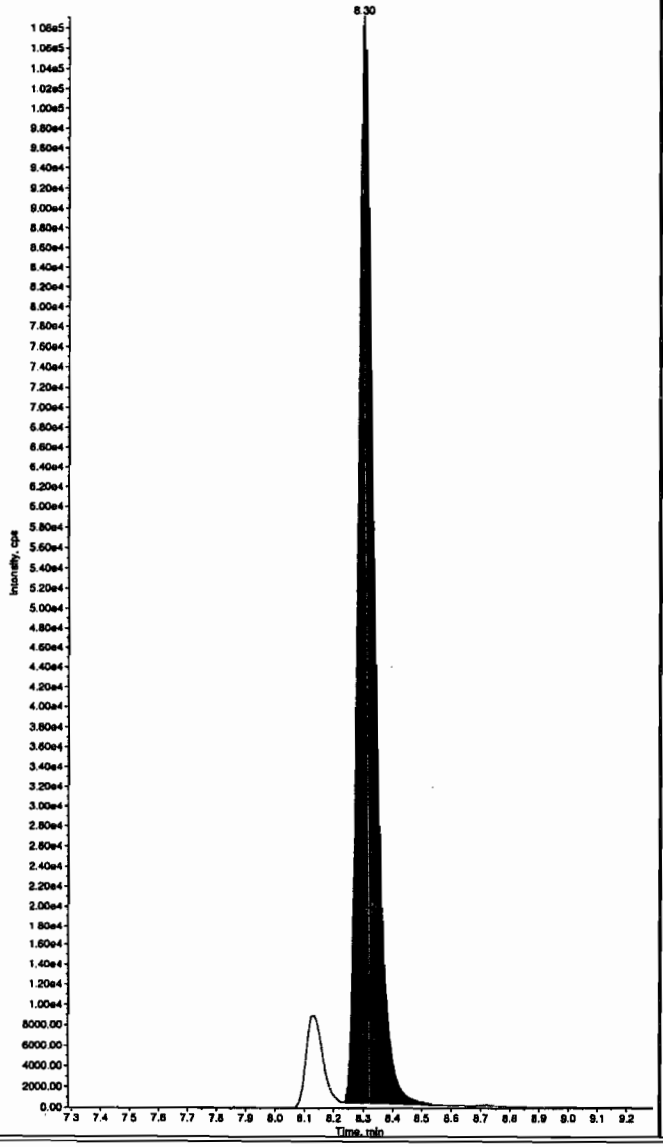
PROPRIETARY INFORMATION-No unauthorized reproduction without written permission from GEL.

PROPRIETARY INFORMATION-No unauthorized reproduction without written permission from GEL.

nple Name: "WXX100402-27CRI" Sample ID: "|1|LER" File: "EXS04020086.wiff"
ak Name: "34-Dinitrotoluene" Mass(es): "182.1/151.9 amu"
nment: "LCMSEXP_C" Annotation: ""
le Index: 1
le Type: QC
entration: 50.0 ng/mL
ulated Conc: 50.6 ng/mL
Date: 4/3/2010
Time: 12:42:54 PM

fied: No
. Algorithm: IntelliQuan - IQA
Peak Height: 1460.00 cps
Peak Width: 0.00 sec
thing Width: 3 points
indow: 15.0 sec
cted RT: 8.29 min
Relative RT: No

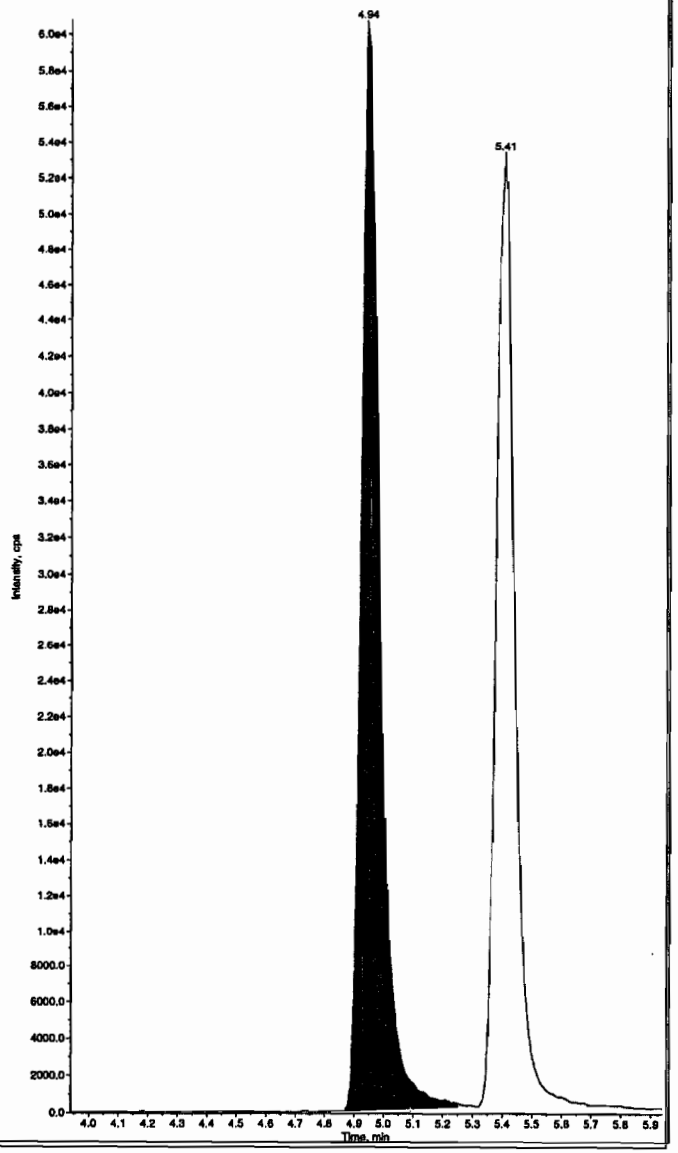
Type: Valley
ction Time: 8.30 min
: 4.33e+005 counts
ht: 108574.837 cps
: Time: 8.23 min
Time: 8.60 min



Sample Name: "WXX100402-27CRI" Sample ID: "|1|LER" File: "EXS04020086.wiff"
Peak Name: "26-Diamino-4-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: ""
Sample Index: 1
Sample Type: QC
Concentration: 100. ng/mL
Calculated Conc: 94.6 ng/mL
Acq. Date: 4/3/2010
Acq. Time: 12:42:54 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: 4.94 min
Use Relative RT: No

Int. Type: Valley
Retention Time: 4.94 min
Area: 2.79e+005 counts
Height: 60606.571 cps
Start Time: 4.81 min
End Time: 5.25 min



L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

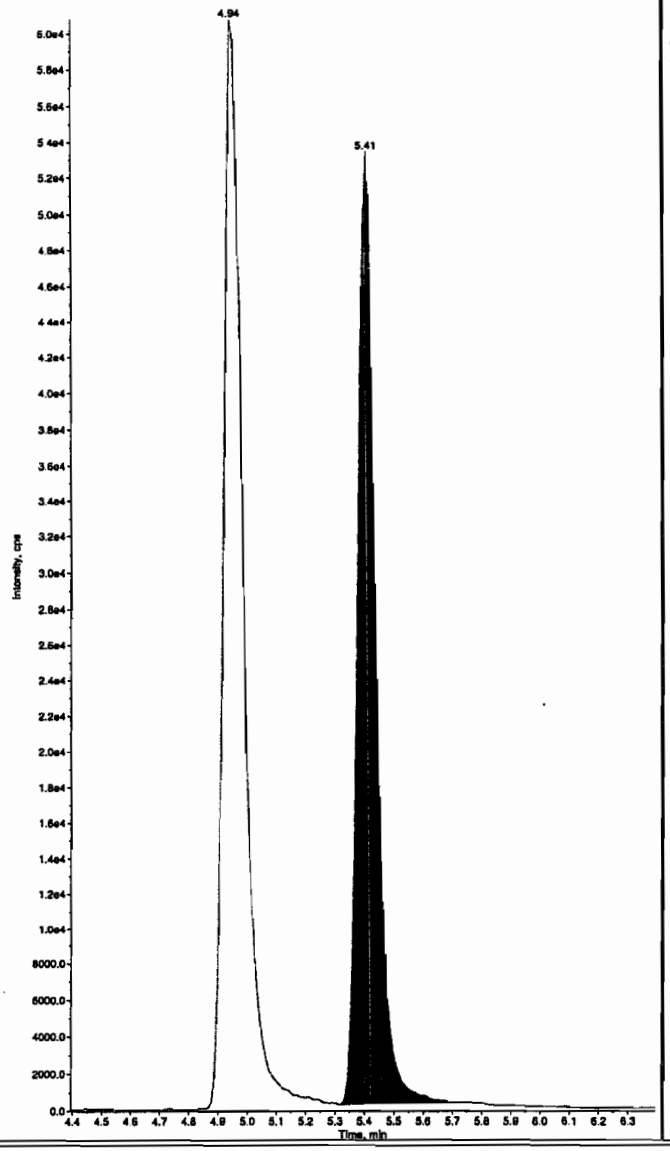
PROPRIETARY INFORMATION-No unauthorized reproduction without written permission from GEL.

mple Name: "WXX100402-27CRI" Sample ID: "[1]LER" File: "EXS04020086.wiff"
sk Name: "24-Diamino-6-nitrotoluene" Mass(es): "166.0/46.0 amu"
mment: "LCMSEXP_C" Annotation: ""

le Index: 1
le Type: QC
entration: 100. ng/mL
ulated Conc: 101. ng/mL
Date: 4/3/2010
Time: 12:42:54 PM

fied: No
. Algorithm: IntelliQuan - IQA
Peak Height: 350.00 cps
Peak Width: 0.00 sec
thing Width: 3 points
indow: 30.0 sec
cted RT: 5.39 min
Relative RT: No

Type: Valley
ntion Time: 5.41 min
: 2.34e+005 counts
ht: 53080.269 cps
t Time: 5.31 min
Time: 5.69 min

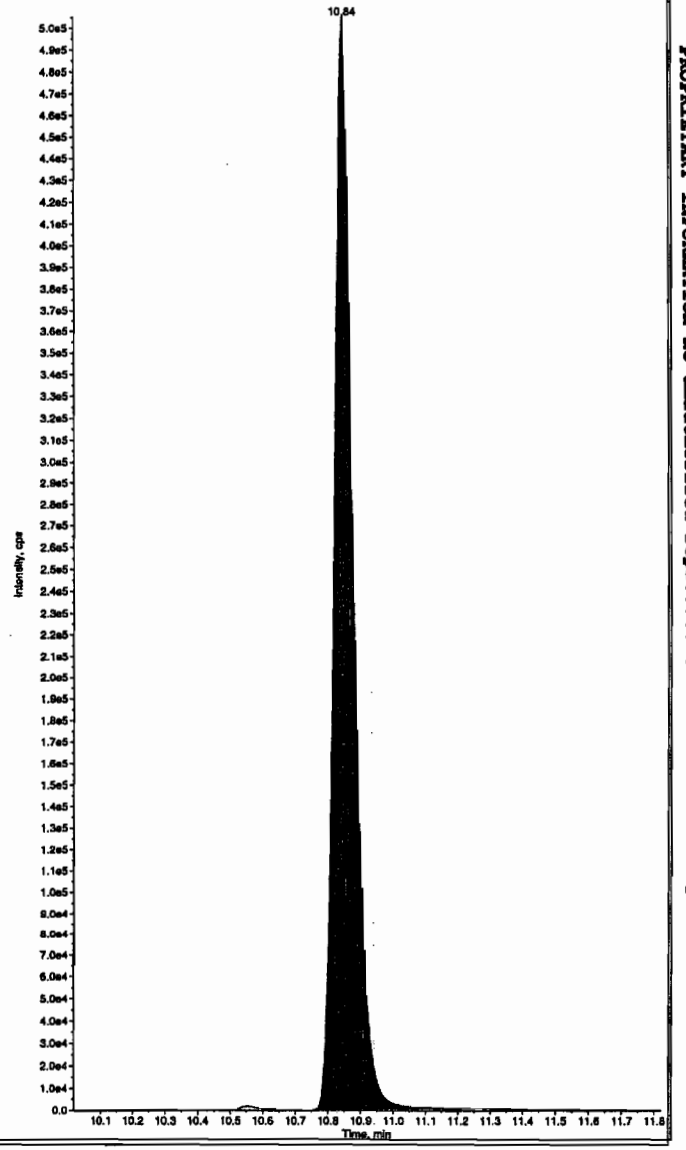


Sample Name: "WXX100402-27CRI" Sample ID: "[1]LER" File: "EXS04020086.wiff"
Peak Name: "tris(o-cresyl) phosphate" Mass(es): "369.1/91.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index: 1
Sample Type: QC
Concentration: 100. ng/mL
Calculated Conc: 107. ng/mL
Acq. Date: 4/3/2010
Acq. Time: 12:42:54 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: 10.8 min
Use Relative RT: No

Int. Type: Valley
Retention Time: 10.8 min
Area: 2.09e+006 counts
Height: 504614.655 cps
Start Time: 10.7 min
End Time: 11.2 min



L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

PROPRIETARY INFORMATION-No unauthorized reproduction without written permission from GEL.

7A
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10–2089

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXS04020096.wiff

Analysis Date: 03–APR–10 15:19

LCMSMS ID: 1358

Column ID: JSphere ODS–H80

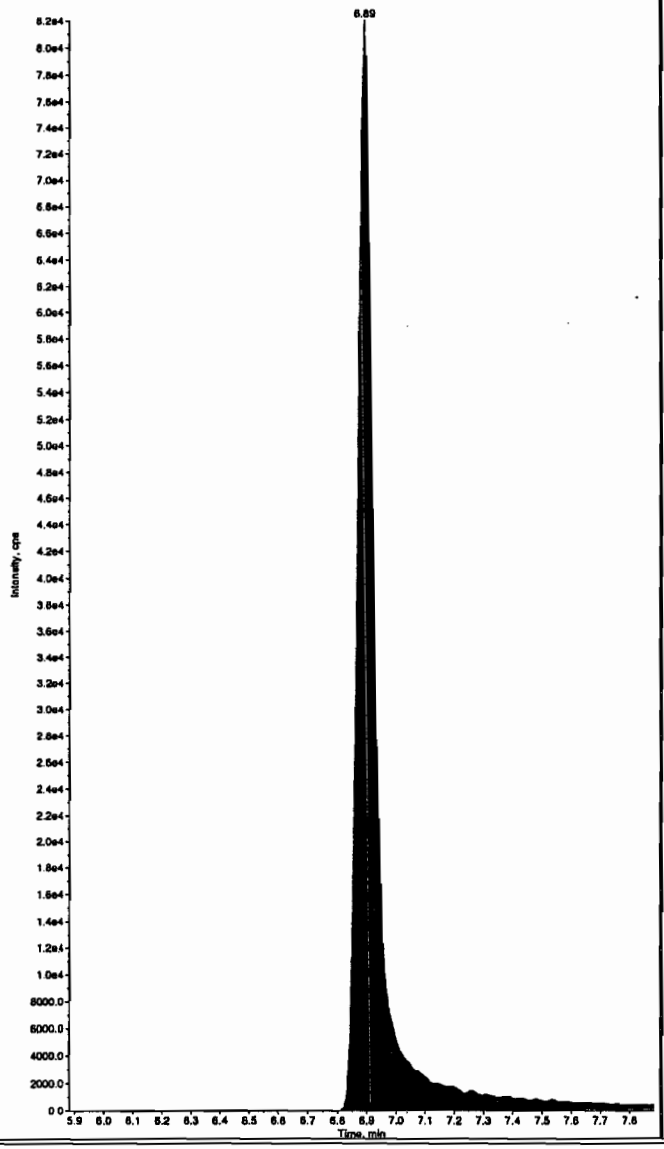
Compound	True	Found	Recovery	Q
2,4–Diamino–6–nitrotoluene	500	593	119	
2,6–Diamino–4–nitrotoluene	500	547	109	
3,4–Dinitrotoluene	250	220	88	
3,5–Dinitroaniline	500	504	101	
TATB	500	490	98	
tris(o–cresyl) phosphate	500	496	99	

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%
OtherTarget Analytes 80–120%
Column used to flag Recovery outside of Limits
* Value outside of Recovery Limits

Kae 4/7/10

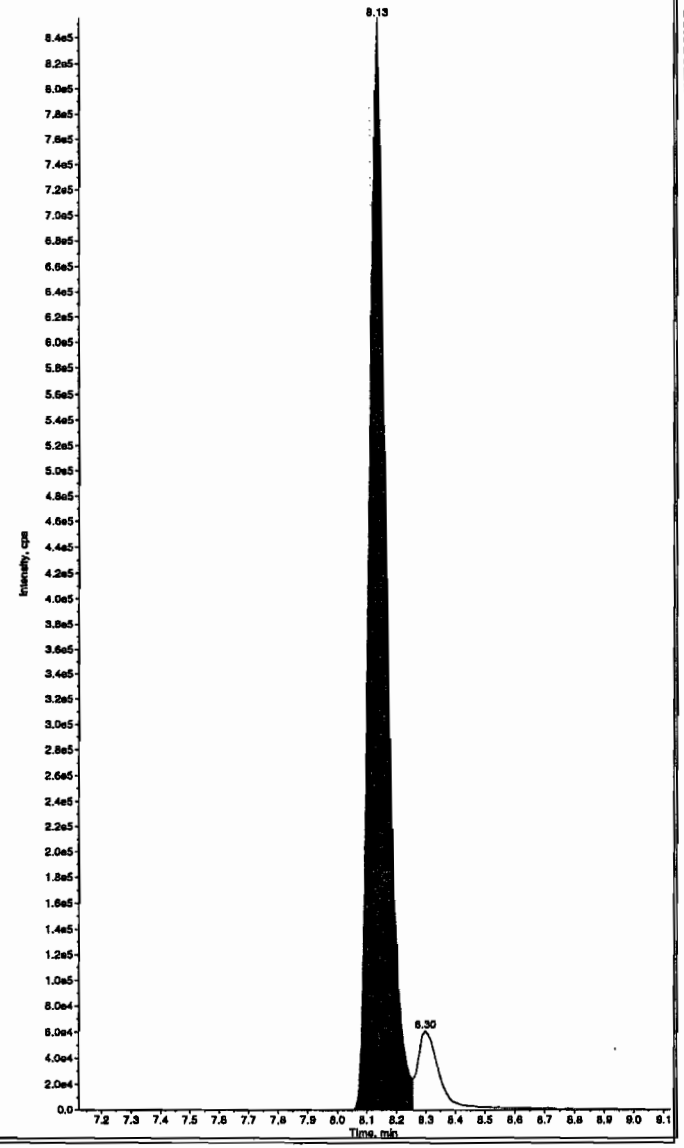
mple Name: "WXX100402-26CCV" Sample ID: "|1|LER" File: "EXS04020096.wiff"
ak Name: "TATB" Mass(es): "257.2/204.9 amu"
mment: "LCMSEXP_C" Annotation: ""

ple Index:	1	
ple Type:	QC	
centration:	500.	ng/mL
culated Conc:	490.	ng/mL
Date:	4/3/2010	
Time:	3:19:56 PM	
fied:	No	
. Algorithm:	IntelliQuan - IQA	
Peak Height:	2500.00	cps
Peak Width:	0.00	sec
thing Width:	3	points
indow:	30.0	sec
cted RT:	6.88	min
Relative RT:	No	
Type:	Valley	
ntion Time:	6.89	min
:	3.98e+005	counts
ht:	82046.608	cps
t Time:	6.77	min
Time:	7.95	min



Sample Name: "WXX100402-26CCV" Sample ID: "|1|LER" File: "EXS04020096.wiff"
Peak Name: "35-Dinitroaniline" Mass(es): "182.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1	
Sample Type:	QC	
Concentration:	500.	ng/mL
Calculated Conc:	504.	ng/mL
Acq. Date:	4/3/2010	
Acq. Time:	3:19:56 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:	8.12	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	8.13	min
Area:	3.53e+006	counts
Height:	854641.846	cps
Start Time:	8.04	min
End Time:	8.26	min



HMC 04/08/10

L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

PROPRIETARY INFORMATION-No unauthorized reproduction without written permission from GEL.

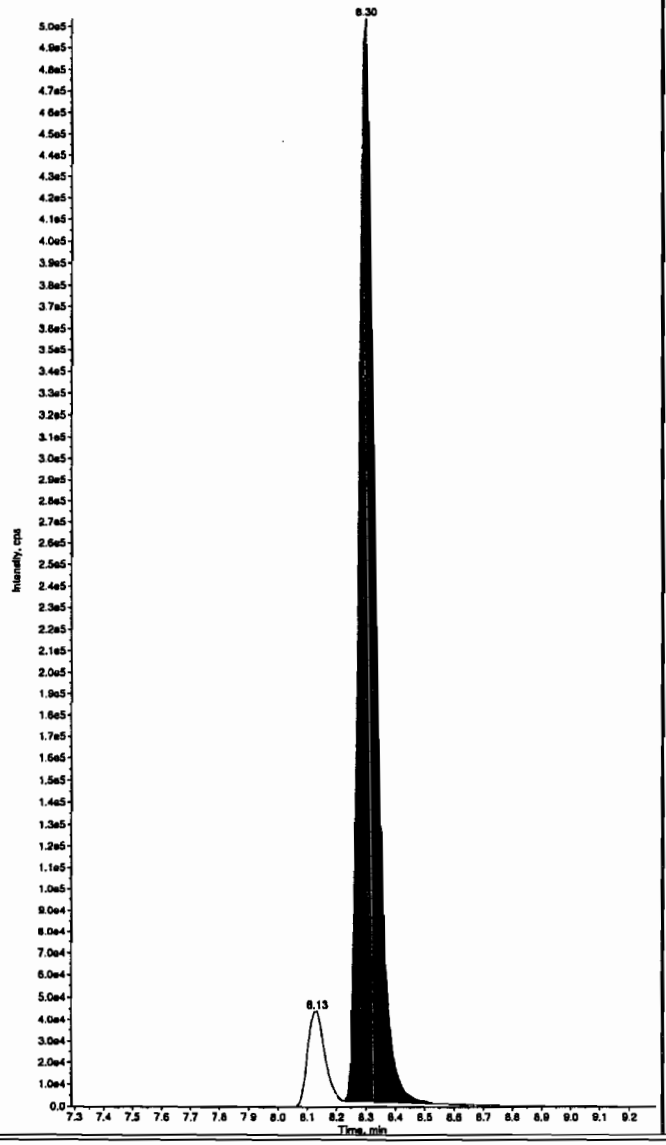
PROPRIETARY INFORMATION-No unauthorized reproduction without written permission from GEL.

mple Name: "WXX100402-26CCV" Sample ID: "|1|LER" File: "EXS04020096.wiff"
ak Name: "34-Dinitrotoluene" Mass(es): "182.1/151.9 amu"
mment: "LCMSEXP_C" Annotation: ""

```
ple Index:        1
ple Type:          QC
entration:       250.    ng/mL
culated Conc:    220.    ng/mL
 Date:        4/3/2010
 Time:        3:19:56 PM

fied:             No
. Algorithm: IntelliQuan - IQA
 Peak Height:1460.00   cps
 Peak Width:    0.00   sec
thing Width:  3       points
indow:         15.0    sec
cted RT:        8.29   min
Relative RT:    No

Type:         Valley
ntion Time:     8.30   min
:          2.06e+006   counts
ht:         501842.407  cps
t Time:         8.23   min
Time:           8.59   min
```

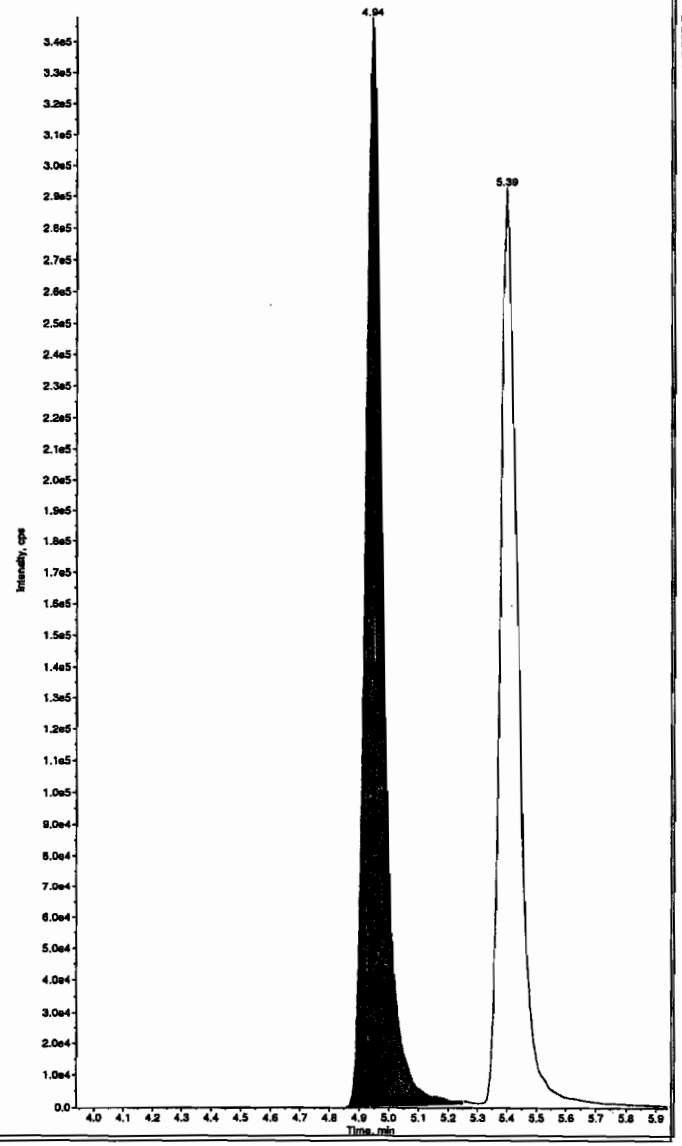


Sample Name: "WXX100402-26CCV" Sample ID: "|1|LER" File: "EXS04020096.wiff"
Peak Name: "26-Diamino-4-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

```
Sample Index:        1
Sample Type:          QC
Concentration:       500.    ng/mL
Calculated Conc:     547.    ng/mL
Acq. Date:        4/3/2010
Acq. Time:        3:19:56 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:        4.94   min
Use Relative RT:    No

Int. Type:         Valley
Retention Time:     4.94   min
Area:          1.50e+006   counts
Height:        347770.081  cps
Start Time:         4.84   min
End Time:           5.25   min
```



L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

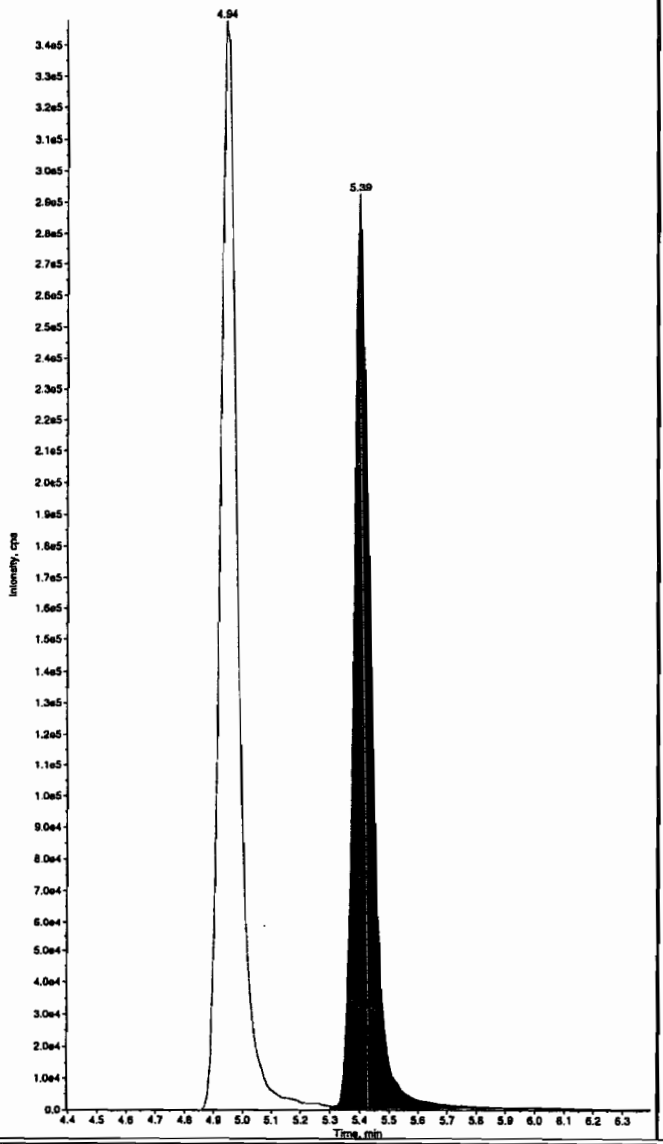
PROPRIETARY INFORMATION-No unauthorized reproduction without written permission from GEL.

mple Name: "WXX100402-26CCV" Sample ID: "[1]LER" File: "EXS04020096.wiff"
ak Name: "24-Diamino-6-nitrotoluene" Mass(es): "166.0/46.0 amu"
mment: "LCMSEXP_C" Annotation: ""

```
ple Index:          1
ple Type:          QC
entration:       500.    ng/mL
culated Conc:    593.    ng/mL
  Date:       4/3/2010
  Time:       3:19:56 PM

fied:            No
. Algorithm: IntelliQuan - IQA
  Peak Height: 350.00   cps
  Peak Width:    0.00   sec
thing Width:  3        points
indow:          30.0   sec
cted RT:         5.39  min
Relative RT:     No

  Type:        Valley
ntion Time:      5.39  min
:          1.26e+006   counts
ht:        292412.567  cps
t Time:          5.30  min
Time:            5.97  min
```

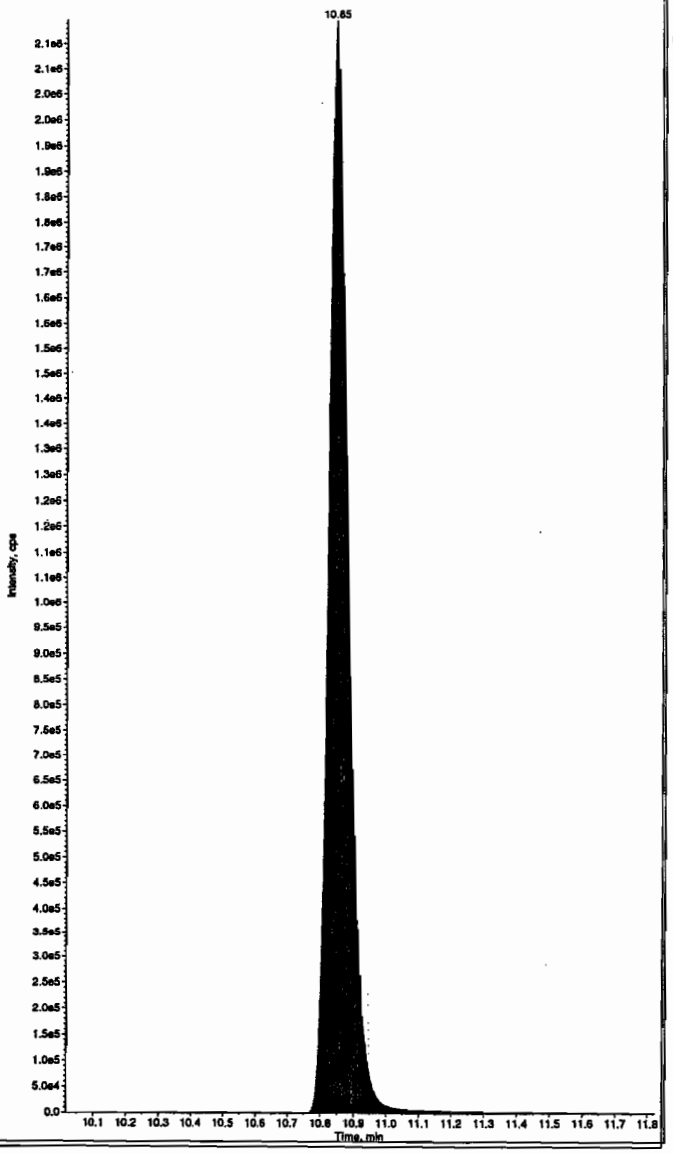


Sample Name: "WXX100402-26CCV" Sample ID: "[1]LER" File: "EXS04020096.wiff"
Peak Name: "tris(o-cresyl) phosphate" Mass(es): "369.1/91.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

```
Sample Index:          1
Sample Type:          QC
Concentration:       500.    ng/mL
Calculated Conc:     496.    ng/mL
Acq. Date:       4/3/2010
Acq. Time:       3:19:56 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:        10.8   min
Use Relative RT:    No

Int. Type:        Valley
Retention Time:     10.8   min
Area:        9.11e+006   counts
Height:      2145990.723  cps
Start Time:         10.7   min
End Time:           11.2   min
```



L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

PROPRIETARY INFORMATION-No unauthorized reproduction without written permission from GEL.

7B
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10–2089

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXS04020098.wiff

Analysis Date: 03–APR–10 15:51

LCMSMS ID: 1358

Column ID: JSphere ODS–H80

Compound	True	Found	Recovery	Q
3,5–Dinitroaniline	100	109	109	
TATB	100	106	106	
tris(o–cresyl) phosphate	100	108	108	
2,4–Diamino–6–nitrotoluene	100	109	109	
2,6–Diamino–4–nitrotoluene	100	104	104	
3,4–Dinitrotoluene	50	51	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%
OtherTarget Analytes 70–130%
Column used to flag Recovery outside of Limits
* Value outside of Recovery Limits

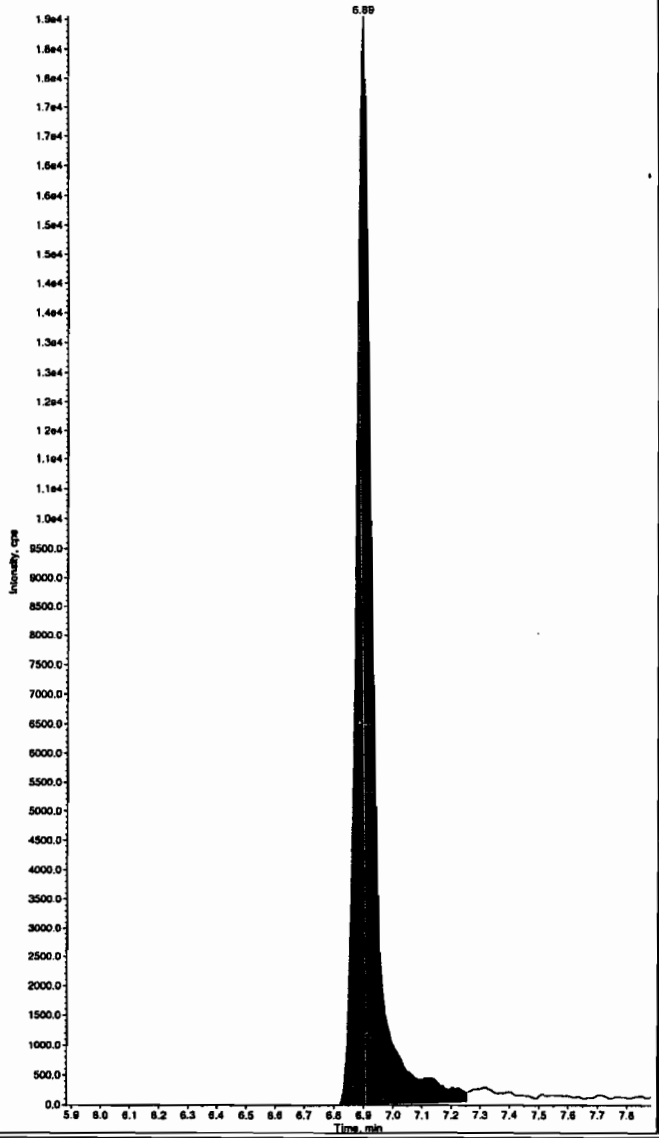
Lan 4/7/10

PROPRIETARY INFORMATION-No unauthorized reproduction without written permission from GEL.

ımple Name: "WXX100402-27CRI" Sample ID: "|1|LER" File: "EXS04020098.wiff"
ıak Name: "TATB" Mass(es): "257.2/204.9 amu"
xmment: "LCMSEXP_C" Annotation: ""
ɔle Index: 1
ɔle Type: QC
:entration: 100. ng/mL
:ulated Conc: 106. ng/mL
. Date: 4/3/2010
. Time: 3:51:21 PM

.fied: No
:. Algorithm: IntelliQuan - IQA
Peak Height: 2500.00 cps
Peak Width: 0.00 sec
ɔthing Width: 3 points
/indow: 30.0 sec
:cted RT: 6.88 min
Relative RT: No

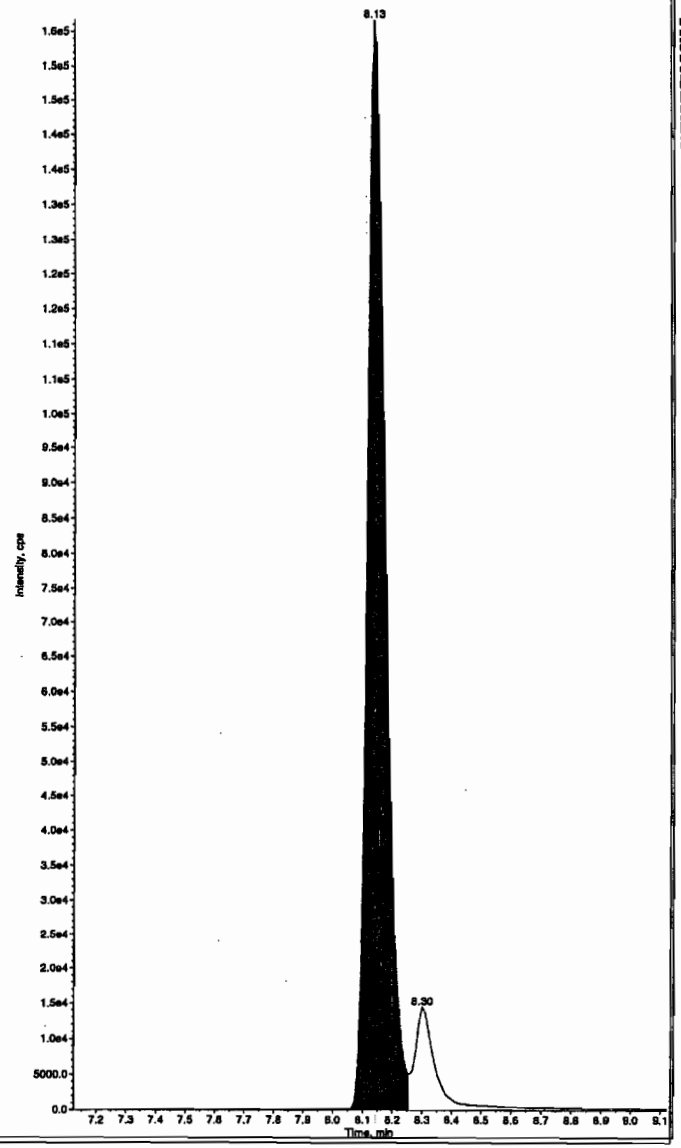
Type: Valley
ntion Time: 6.89 min
: 7.76e+004 counts
ht: 18548.697 cps
t Time: 6.80 min
Time: 7.25 min



Sample Name: "WXX100402-27CRI" Sample ID: "|1|LER" File: "EXS04020098.wiff"
Peak Name: "35-Dinitroaniline" Mass(es): "182.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: ""
Sample Index: 1
Sample Type: QC
Concentration: 100. ng/mL
Calculated Conc: 109. ng/mL
Acq. Date: 4/3/2010
Acq. Time: 3:51:21 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: 8.12 min
Use Relative RT: No

Int. Type: Valley
Retention Time: 8.13 min
Area: 6.97e+005 counts
Height: 156518.616 cps
Start Time: 8.05 min
End Time: 8.26 min



HMW 04/08/10

L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

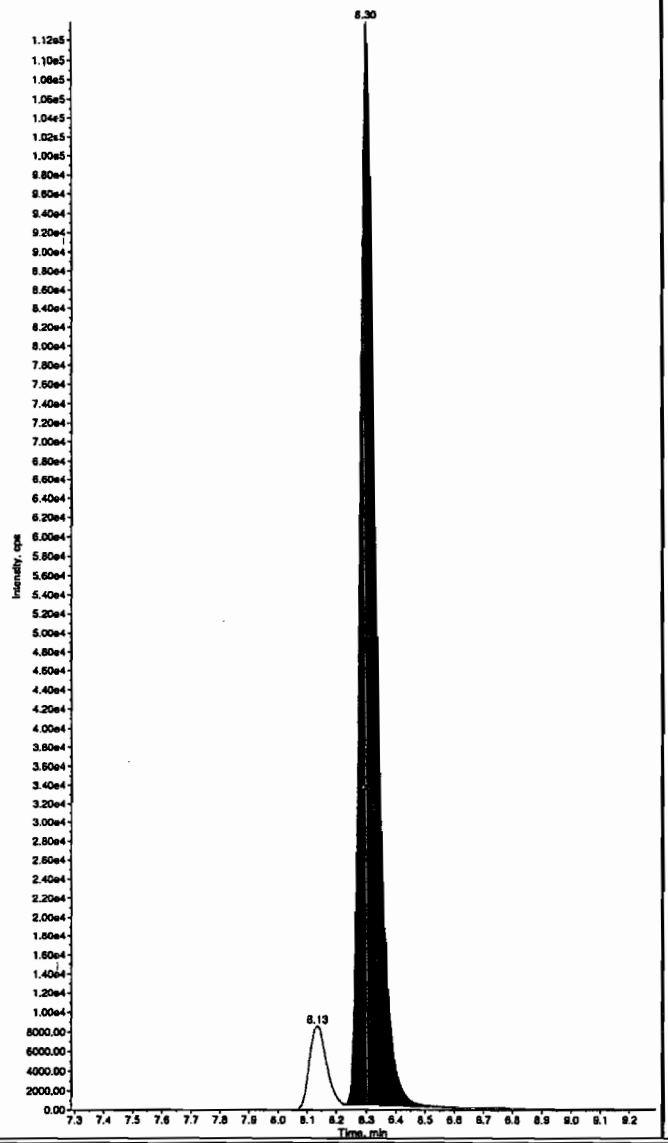
PROPRIETARY INFORMATION-No unauthorized reproduction without written permission from GEL.

mple Name: "WXX100402-27CRI" Sample ID: "|1|LER" File: "EXS04020098.wiff"
ak Name: "34-Dinitrotoluene" Mass(es): "182.1/151.9 amu"
mment: "LCMSEXP_C" Annotation: ""

le Index: 1
la Type: QC
entration: 50.0 ng/mL
ulated Conc: 51.0 ng/mL
Date: 4/3/2010
Time: 3:51:21 PM

fied: No
. Algorithm: IntelliQuan - IQA
Peak Height: 1460.00 cps
Peak Width: 0.00 sec
thing Width: 3 points
indow: 15.0 sec
cted RT: 8.29 min
Relative RT: No

Type: Valley
ntion Time: 8.30 min
: 4.38e+005 counts
ht: 113425.552 cps
t Time: 8.23 min
Time: 8.62 min

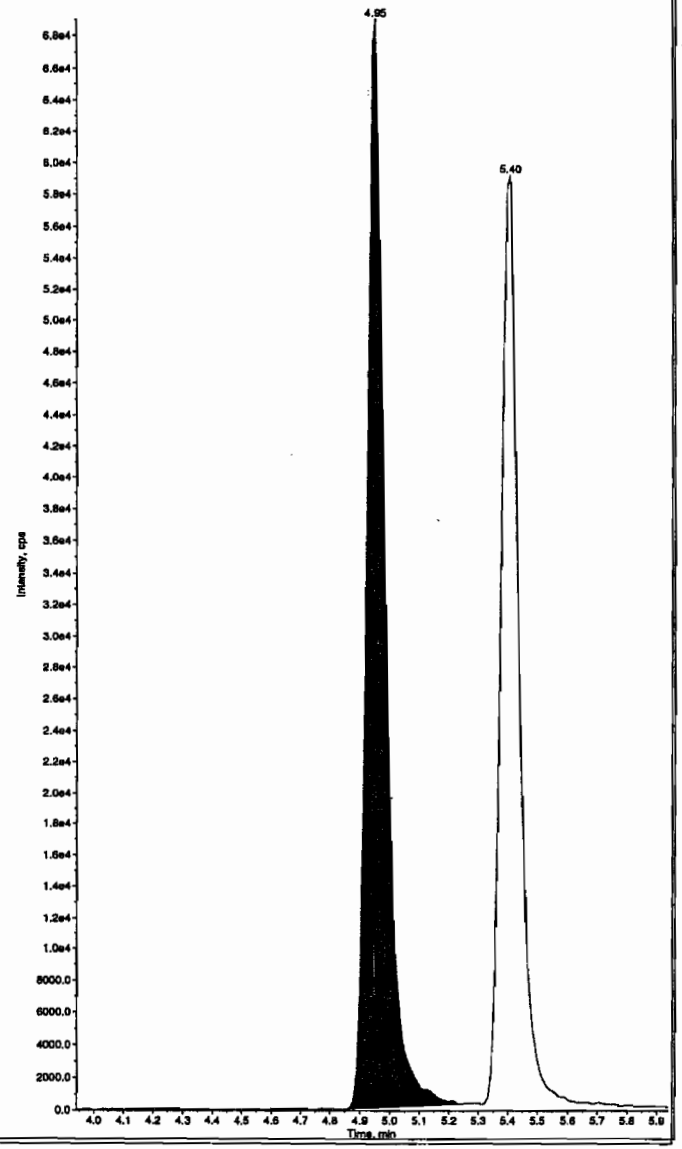


Sample Name: "WXX100402-27CRI" Sample ID: "|1|LER" File: "EXS04020098.wiff"
Peak Name: "26-Diamino-4-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index: 1
Sample Type: QC
Concentration: 100. ng/mL
Calculated Conc: 104. ng/mL
Acq. Date: 4/3/2010
Acq. Time: 3:51:21 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: 4.94 min
Use Relative RT: No

Int. Type: Valley
Retention Time: 4.95 min
Area: 3.04e+005 counts
Height: 68851.997 cps
Start Time: 4.86 min
End Time: 5.25 min



L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

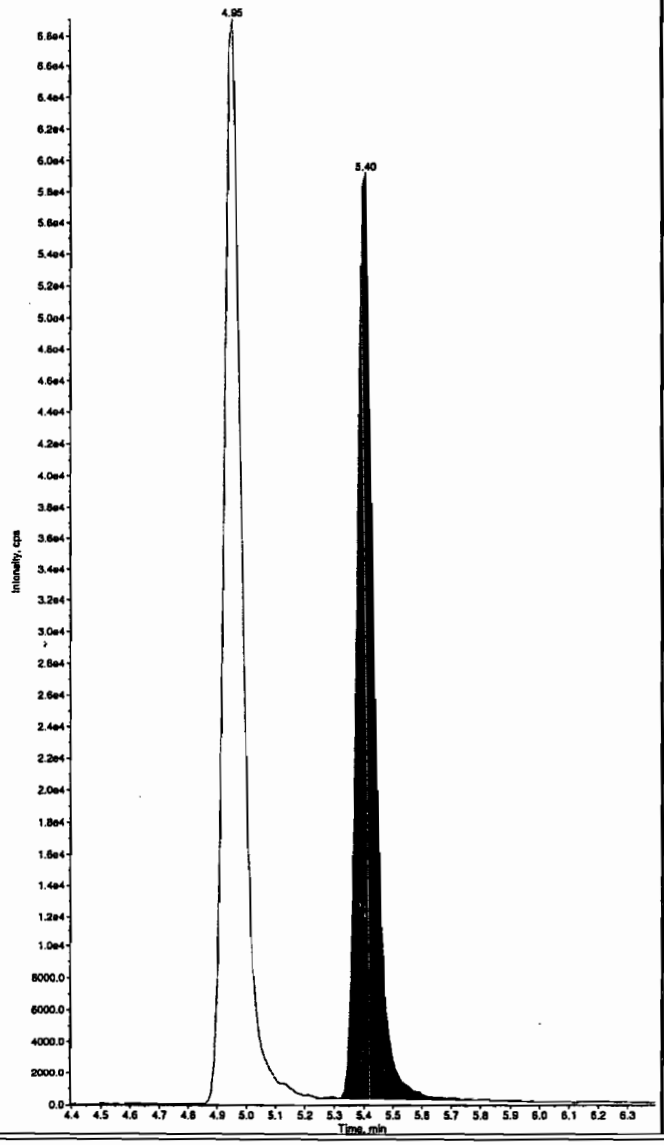
PROPRIETARY INFORMATION-No unauthorized reproduction without written permission from GEL.

mple Name: "WXX100402-27CRI" Sample ID: "|1|LER" File: "EXS04020098.wiff"
ak Name: "24-Diamino-6-nitrotoluene" Mass(es): "166.0/46.0 amu"
mment: "LCMSEXP_C" Annotation: ""

```
ple Index:          1
ple Type:           QC
entration:        100.     ng/mL
culated Conc:     109.     ng/mL
 Date:         4/3/2010
 Time:         3:51:21 PM

fied:              No
. Algorithm: IntelliQuan - IQA
 Peak Height: 350.00    cps
 Peak Width:    0.00    sec
thing Width:  3        points
indow:         30.0     sec
cted RT:        5.39    min
Relative RT:    No

 Type:         Valley
ntion Time:     5.40    min
:          2.51e+005   counts
ht:          58789.200  cps
t Time:         5.31    min
Time:           5.78    min
```

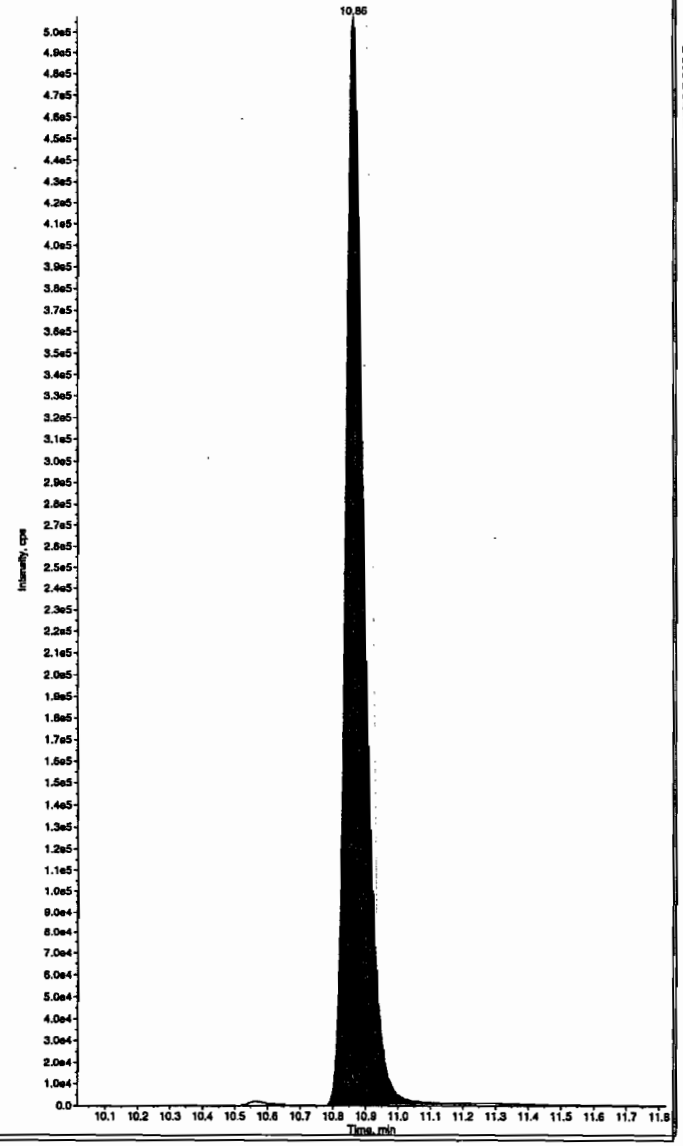


Sample Name: "WXX100402-27CRI" Sample ID: "|1|LER" File: "EXS04020098.wiff"
Peak Name: "tris(o-cresyl) phosphate" Mass(es): "369.1/91.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

```
Sample Index:          1
Sample Type:           QC
Concentration:       100.     ng/mL
Calculated Conc:     108.     ng/mL
Acq. Date:         4/3/2010
Acq. Time:         3:51:21 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:        10.8    min
Use Relative RT:    No

Int. Type:         Valley
Retention Time:     10.9    min
Area:          2.10e+006   counts
Height:        506826.385  cps
Start Time:         10.8    min
End Time:           11.2    min
```



L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

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QUALITY CONTROL DATA

PROPRIETARY INFORMATION-No unauthorized reproduction without written permission from GEL.

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: MB for batch 958599

Lab Code: GEL

GEL Job No (SDG) 10–2089

Matrix: SOIL

GEL Sample ID: 1202055877

Sample Amount 2

Moisture:

Amount Units g

Date Received: 27–FEB–10

Extraction Type Sonication

Extraction Batch ID: 958599

Concentrated Extract Volume (mL) 10

Date Extracted: 04–MAR–10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0412113a

Date Analyzed: 14–APR–10 22:44

Units: ug/kg

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

*Concentration =

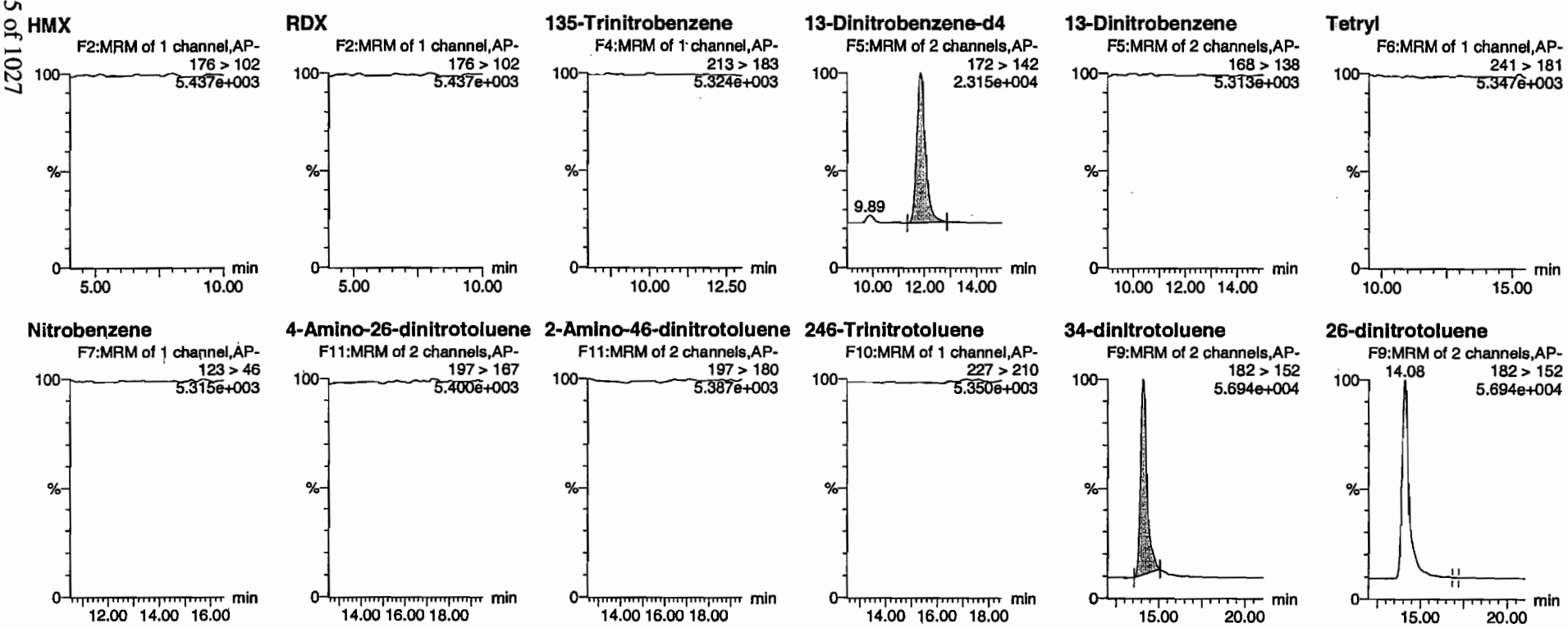
$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Sample Amoun}} \times \text{Dilution Factor}$$

Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA2.qld, Time: Thu Apr 15 14:49:38 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0412113a
Date: 14-Apr-2010
Time: 22:44:49
ID: 1202055877 | LANL | 958603 | Solids | MB | 2 |
Vial: 3:5,A

MAP 4/15/10



HMW 04/15/10

GEL SOP GL-OA-E-056, Method 8321A-Modified / MM = Manual Modification

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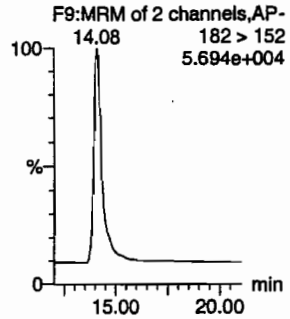
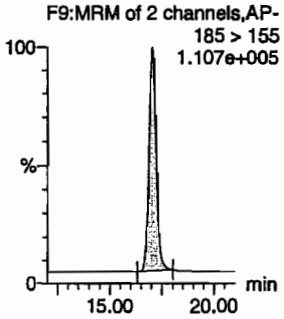
Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA2.qld, Time: Thu Apr 15 14:49:38 2010

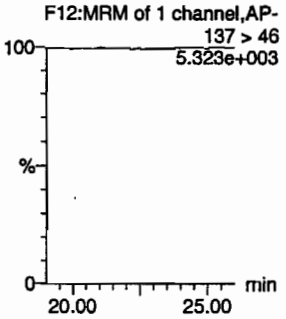
24-dinitrotoluene



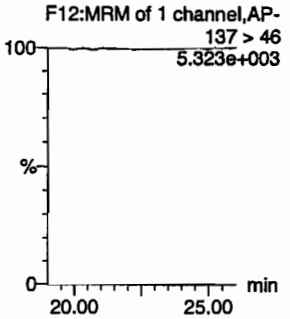
26-dinitrotoluene-d3



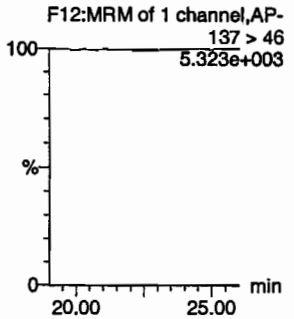
2-Nitrotoluene



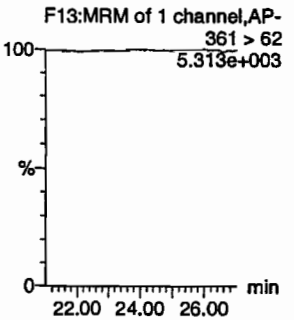
4-Nitrotoluene



3-Nitrotoluene



PETN



ID	Name	Trace	RT	Area	IS Area	Abs.Resp	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N
1202055877	HMX	176 > 102			6876.354									
1202055877	RDX	176 > 102			6876.354									
1202055877	135-Trinitrobenzene	213 > 183			6876.354									
1202055877	13-Dinitrobenzene-d4	172 > 142	11.87	6876.354		6876.354	6876.354	bb			584.6878	116.9	16.9	701.8
1202055877	13-Dinitrobenzene	168 > 138			6876.354									
1202055877	Tetryl	241 > 181			6876.354									
1202055877	Nitrobenzene	123 > 46			6876.354									
1202055877	4-Amino-26-dinitrotoluene	197 > 167			43123.199									
1202055877	2-Amino-46-dinitrotoluene	197 > 180			43123.199									
1202055877	246-Trinitrotoluene	227 > 210			43123.199									
1202055877	34-dinitrotoluene	182 > 152	14.08	22074.395	43123.199	22074.395	255.946	bb			248.2192	99.3	-0.7	756.8
1202055877	26-dinitrotoluene	182 > 152			43123.199			MM-	15-Apr-10	14:40:12				
1202055877	24-dinitrotoluene	182 > 152			43123.199									
1202055877	26-dinitrotoluene-d3	185 > 155	17.05	43123.199		43123.199	43123.199	bb			616.3419	123.3	23.3	4384.5
1202055877	2-Nitrotoluene	137 > 46			43123.199									
1202055877	4-Nitrotoluene	137 > 46			43123.199									
1202055877	3-Nitrotoluene	137 > 46			43123.199									
1202055877	PETN	361 > 62			43123.199									

GEL SOP GL-OA-E-056, Method 8321A-Modified / MM = Manual Modification

PROPRIETARY INFORMATION-No unauthorized reproduction without written permission from GEL.

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High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: MB for batch 958599

Lab Code: GEL

GEL Job No (SDG) 10–2089

Matrix: SOIL

GEL Sample ID: 1202055877

Sample Amount 2

Moisture:

Amount Units g

Date Received: 27–FEB–10

Extraction Type Sonication

Extraction Batch ID: 958599

Concentrated Extract Volume (mL) 10

Date Extracted: 04–MAR–10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS04020074.wiff

Date Analyzed: 03–APR–10 09:34

Units: ug/kg

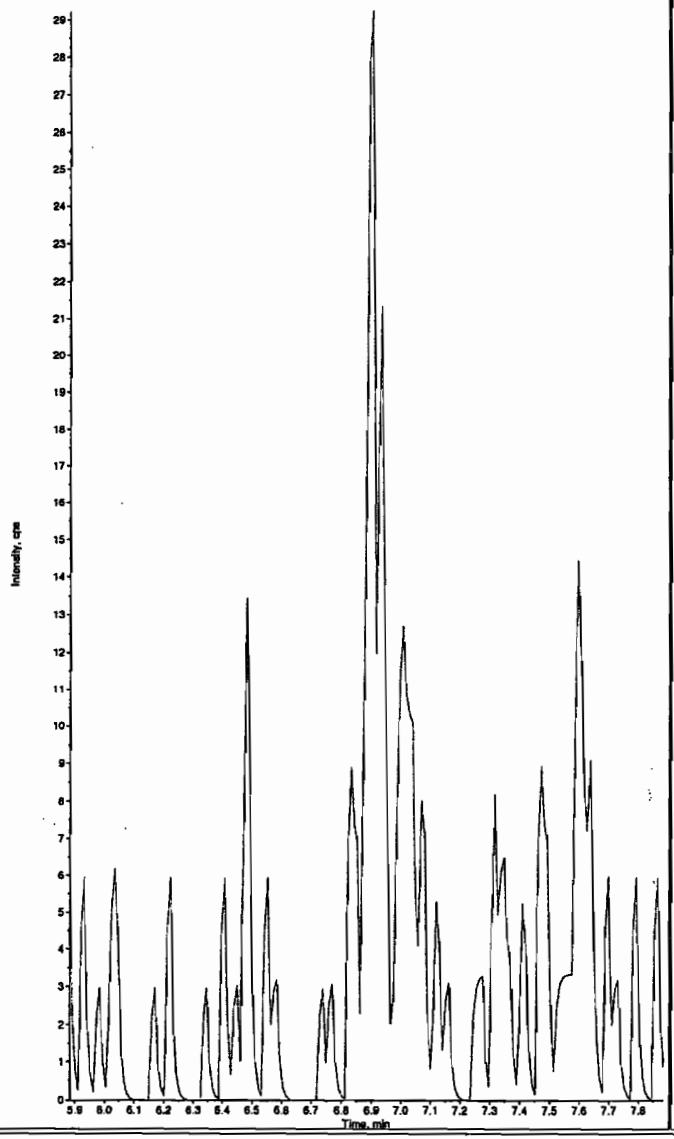
Cas No.	Compound	Concentration*	Q
3058–38–6	TATB	1000	U
59229–75–3	2,6–Diamino–4–nitrotoluene	2000	U
618–87–1	3,5–Dinitroaniline	1000	U
6629–29–4	2,4–Diamino–6–nitrotoluene	2000	U
78–30–8	tris(o–cresyl) phosphate	1000	U

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Sample Amoun}} \times \text{Dilution Factor}$$

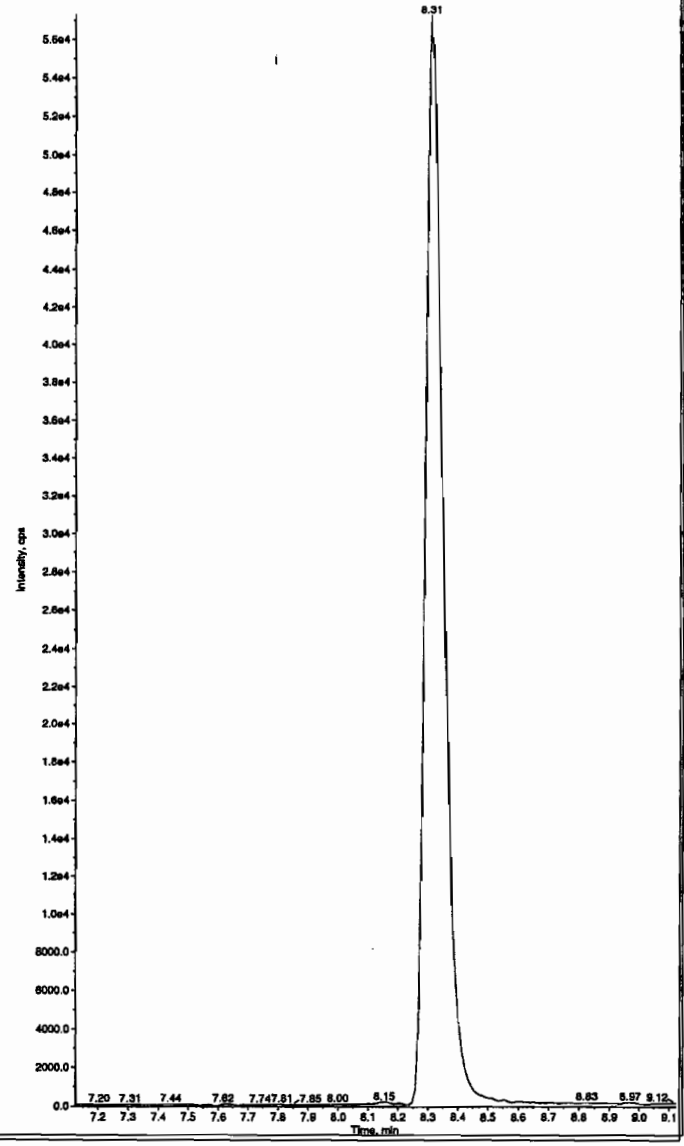
Lan 4/7/10

Sample Name: "1202055877" Sample ID: "958603|2|LER" File: "EXS04020074.wiff"
Peak Name: "TATB" Mass(es): "257.2/204.9 amu"
Comment: "LCX83212S" Annotation: ""
ple Index: 1
ple Type: Unknown
ncentration: N/A
culated Conc: 0.00 ng/mL
l. Date: 4/3/2010
l. Time: 9:34:31 AM
ified: No



Sample Name: "1202055877" Sample ID: "958603|2|LER" File: "EXS04020074.wiff"
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: 4/3/2010
Acq. Time: 9:34:31 AM

Modified: No



AMW 04/08/10

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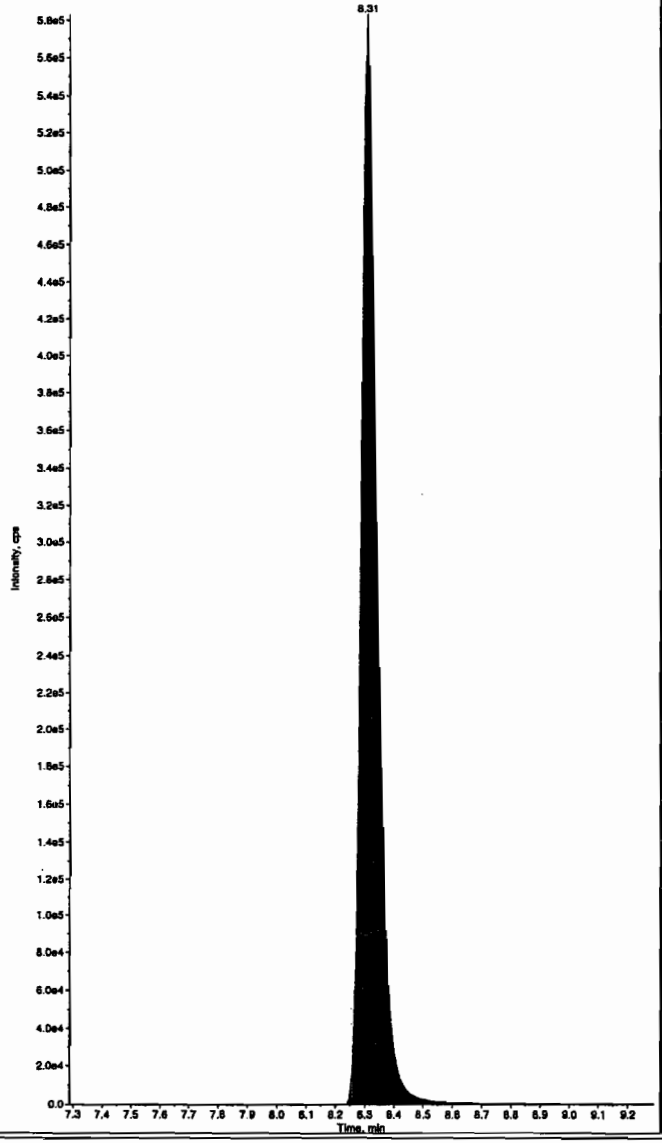
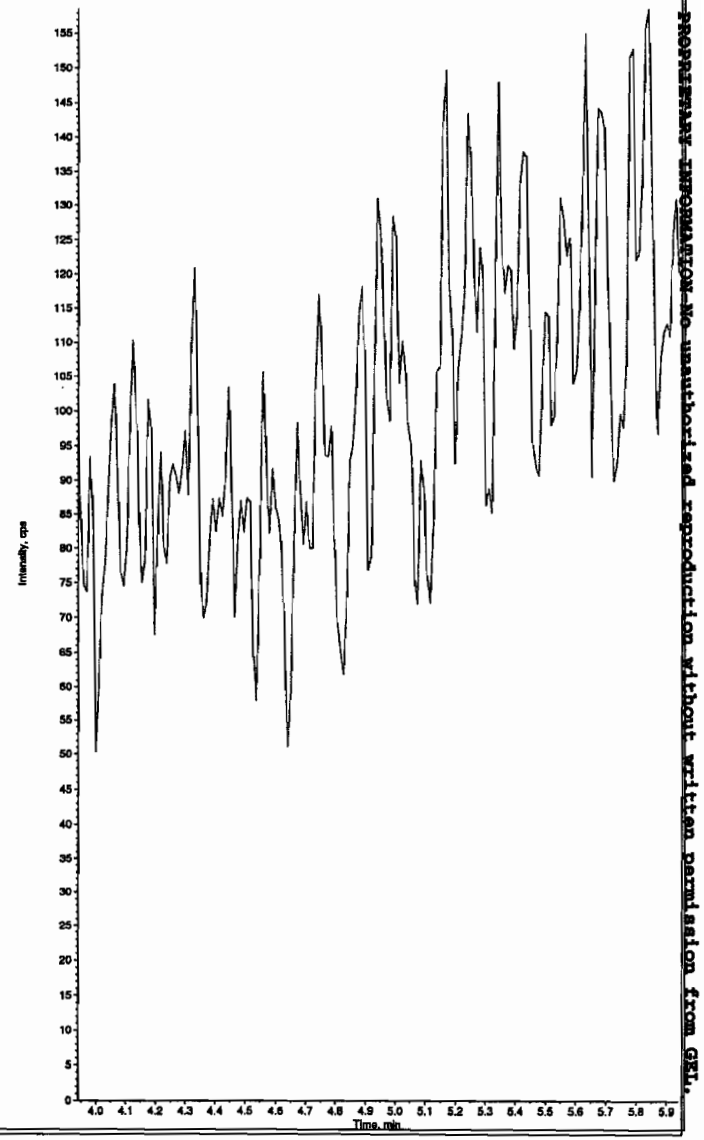
Sample Name: "1202055877" Sample ID: "958603|2|LER" File: "EXS04020074.wiff"
Peak Name: "34-Dinitrotoluene" Mass(es): "182.1/151.9 amu"
Comment: "LCX83212S" Annotation: ""

```
mple Index:        1
mple Type:      Unknown
ncentration:      N/A
lculated Conc:    249.     ng/mL
q. Date:        4/3/2010
q. Time:        9:34:31 AM

dified:            No
oc. Algorithm: IntelliQuan - IQA
n. Peak Height:1460.00   cps
n. Peak Width:    0.00   sec
oothing Width:  3        points
 Window:         15.0    sec
pected RT:        8.29   min
e Relative RT:    No

t. Type:        Valley
tention Time:     8.31   min
sa:          2.32e+006   counts
ight:         583061.462  cps
art Time:         8.20   min
d Time:           8.86   min
```



Sample Name: "1202055877" Sample ID: "958603|2|LER" File: "EXS04020074.wiff"
Peak Name: "26-Diamino-4-nitrotoluene" 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:        4/3/2010
Acq. Time:        9:34:31 AM

Modified:            No
```



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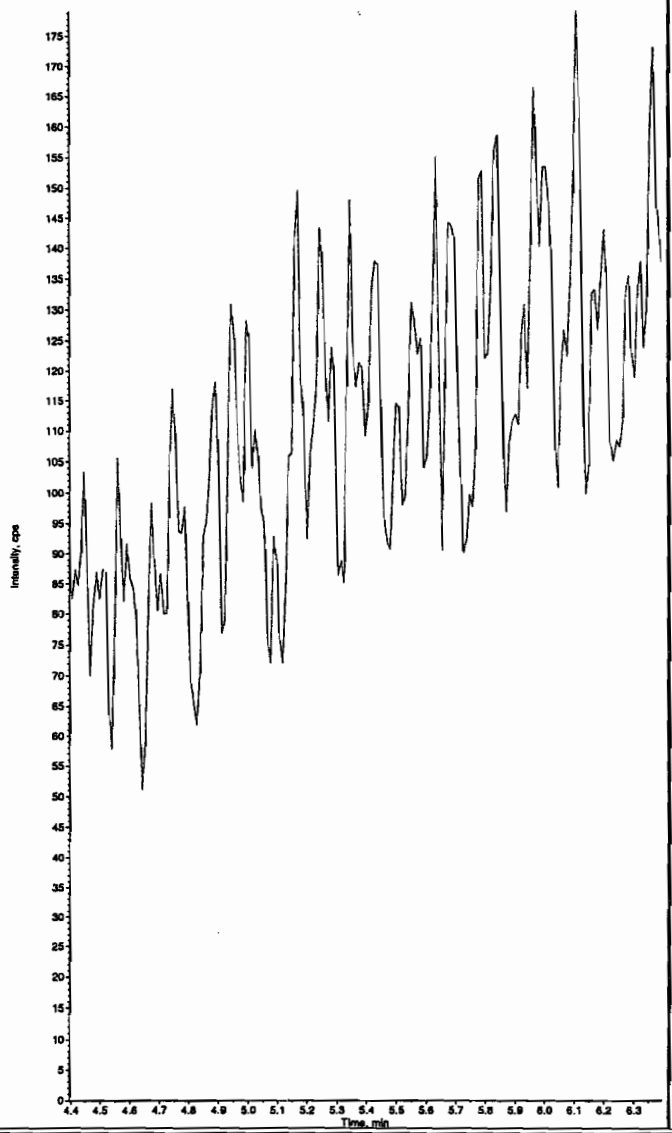
Sample Name: "1202055877" Sample ID: "958603|2|LER" File: "EXS04020074.wiff"
Peak Name: "24-Diamino-6-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCX83212S" Annotation: ""

```
mple Index:        1
mple Type:       Unknown
oncentration:      N/A
lculated Conc:     0.00     ng/mL
cq. Date:        4/3/2010
cq. Time:        9:34:31 AM

odified:           No
```

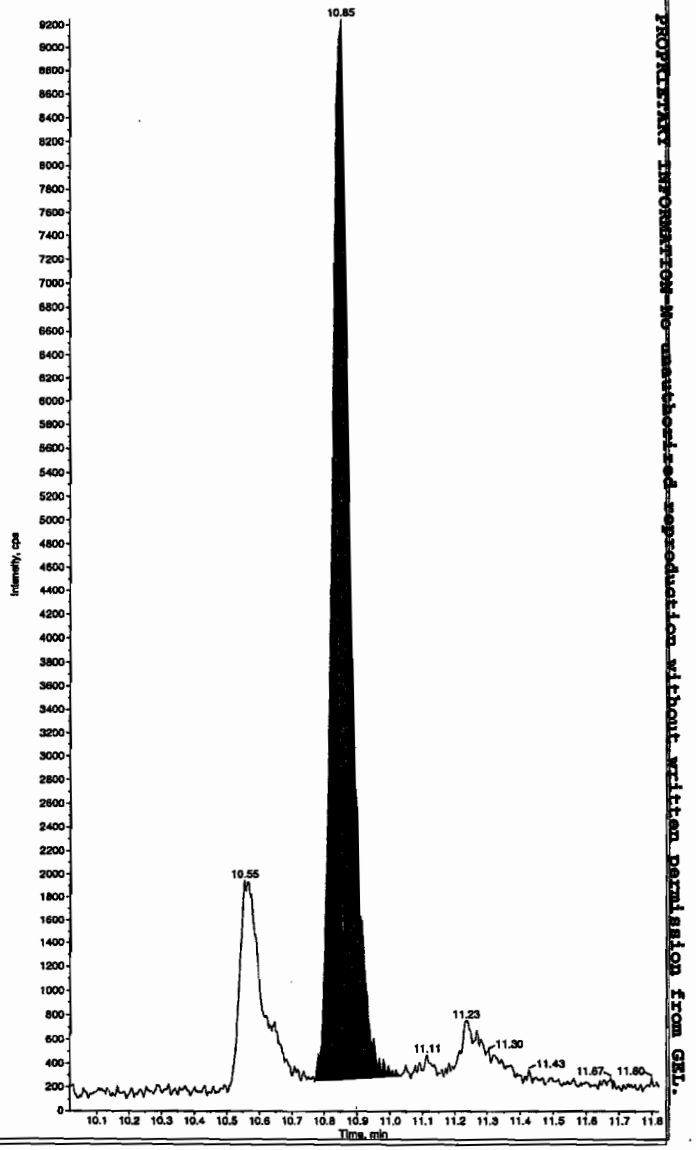


Sample Name: "1202055877" Sample ID: "958603|2|LER" File: "EXS04020074.wiff"
Peak Name: "tris(o-cresyl) phosphate" Mass(es): "369.1/91.0 amu"
Comment: "LCX83212S" Annotation: ""

```
Sample Index:        1
Sample Type:       Unknown
Concentration:       N/A
Calculated Conc:     1.83     ng/mL
Acq. Date:         4/3/2010
Acq. Time:         9:34:31 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:        10.8     min
Use Relative RT:    No

Int. Type:         Valley
Retention Time:      10.9    min
Area:          3.66e+004    counts
Height:          8987.143   cps
Start Time:         10.8     min
End Time:           11.0     min
```



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1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: LCS for batch 958599

Lab Code: GEL

GEL Job No (SDG) 10–2089

Matrix: SOIL

GEL Sample ID: 1202055878

Sample Amount 2

Moisture:

Amount Units g

Date Received: 27–FEB–10

Extraction Type Sonication

Extraction Batch ID: 958599

Concentrated Extract Volume (mL) 10

Date Extracted: 04–MAR–10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0412139a

Date Analyzed: 15–APR–10 11:32

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118–96–7	2,4,6–Trinitrotoluene	5030	
121–14–2	2,4–Dinitrotoluene	5280	
121–82–4	RDX	5710	
19406–51–0	4–Amino–2,6–dinitrotoluene	4730	
2691–41–0	HMX	4990	
35572–78–2	2–Amino–4,6–dinitrotoluene	4970	
479–45–8	Tetryl	1940	
606–20–2	2,6–Dinitrotoluene	4770	
78–11–5	PETN	5790	
88–72–2	o–Nitrotoluene	4480	
98–95–3	Nitrobenzene	4710	
99–08–1	m–Nitrotoluene	4400	
99–35–4	1,3,5–Trinitrobenzene	4210	
99–65–0	m–Dinitrobenzene	4770	
99–99–0	p–Nitrotoluene	4880	

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Sample Amoun}} \times \text{Dilution Factor}$$

Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA2.qld, Time: Thu Apr 15 14:49:38 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0412139a
Date: 15-Apr-2010
Time: 11:32:06
ID: 1202055878 | LANL | 958603 | Soil | LCS | 2 |
Vial: 3:5,B

4/15/10

+ Tetryl

HMX
F2:MRM of 1 channel,AP-
176 > 102
1.186e+005
7.54

RDX
F2:MRM of 1 channel,AP-
5.20
176 > 102
1.186e+005
RDX
7.54
22979.82

135-Trinitrobenzene
F4:MRM of 1 channel,AP-
213 > 183
9.322e+004

13-Dinitrobenzene-d4
F5:MRM of 2 channels,AP-
172 > 142
2.377e+004
9.91

13-Dinitrobenzene
F5:MRM of 2 channels,AP-
168 > 138
2.995e+004

Tetryl
F6:MRM of 1 channel,AP-
Tetryl
12.49
3526.35
241 > 181
1.616e+004

Nitrobenzene
F7:MRM of 1 channel,AP-
123 > 46
1.717e+004

4-Amino-26-dinitrotoluene
F11:MRM of 2 channels,AP-
197 > 167
3.737e+004

2-Amino-46-dinitrotoluene
F11:MRM of 2 channels,AP-
197 > 180
5.710e+004

246-Trinitrotoluene
F10:MRM of 1 channel,AP-
227 > 210
4.456e+004

34-dinitrotoluene
F9:MRM of 2 channels,AP-
17.29
182 > 152
1.336e+005
17.92

26-dinitrotoluene
F9:MRM of 2 channels,AP-
182 > 152
1.336e+005
14.16
17.92

HMM 04/15/10

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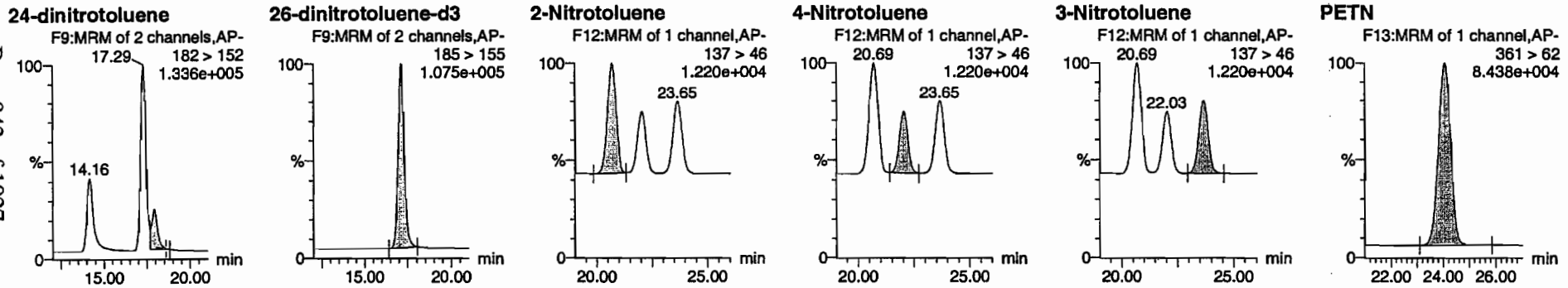
Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA2.qld, Time: Thu Apr 15 14:49:38 2010



ID	Name	Trace	RT	Area	IS Area	Abs Resp	Response	Flags	Mod Date	Mod Time	ng/ml	%Rec	%Dev	S/N
1202055878	HMX	176 > 102	5.20	29753.076	7028.348	29753.076	2116.648	bb			499.3665	99.9	-0.1	2573.6
1202055878	RDX	176 > 102	7.54	22979.820	7028.348	22979.820	1634.795	bb			571.1672	114.2	14.2	1852.2
1202055878	135-Trinitrobenzene	213 > 183	10.07	25608.447	7028.348	25608.447	1821.797	bb			421.4216	84.3	-15.7	3487.3
1202055878	13-Dinitrobenzene-d4	172 > 142	11.90	7028.348		7028.348	7028.348	bb			597.6117	119.5	19.5	558.3
1202055878	13-Dinitrobenzene	168 > 138	12.00	8968.724	7028.348	8968.724	638.039	bb			477.1923	95.4	-4.6	994.2
1202055878	Tetryl	241 > 181	12.49	3526.346	7028.348	3526.346	250.866	bb			193.5286	38.7	-61.3	323.3
1202055878	Nitrobenzene	123 > 46	13.40	4150.063	7028.348	4150.063	295.237	bb			470.6505	94.1	-5.9	778.9
1202055878	4-Amino-26-dinitrotoluene	197 > 167	15.38	13302.051	41635.000	13302.051	159.746	MM	15-Apr-10	14:35:38	472.9537	94.6	-5.4	422.2
1202055878	2-Amino-46-dinitrotoluene	197 > 180	16.22	21217.236	41635.000	21217.236	254.800	bb			497.4654	99.5	-0.5	1546.8
1202055878	246-Trinitrotoluene	227 > 210	15.13	18239.121	41635.000	18239.121	219.036	bb			503.4928	100.7	0.7	936.0
1202055878	34-dinitrotoluene	182 > 152	14.16	21183.381	41635.000	21183.381	254.394	bb			246.7142	98.7	-1.3	617.4
1202055878	26-dinitrotoluene	182 > 152	17.29	47051.605	41635.000	47051.605	565.049	MM	15-Apr-10	14:41:41	477.4233	95.5	-4.5	1594.8
1202055878	24-dinitrotoluene	182 > 152	17.92	11478.965	41635.000	11478.965	137.852	MM	15-Apr-10	14:43:52	528.1621	105.6	5.6	346.7
1202055878	26-dinitrotoluene-d3	185 > 155	17.11	41635.000		41635.000	41635.000	bb			595.0717	119.0	19.0	1928.5
1202055878	2-Nitrotoluene	137 > 46	20.69	3231.212	41635.000	3231.212	38.804	bb			448.1446	89.6	-10.4	1075.1
1202055878	4-Nitrotoluene	137 > 46	22.03	1684.635	41635.000	1684.635	20.231	bb			487.7362	97.5	-2.5	588.8
1202055878	3-Nitrotoluene	137 > 46	23.65	2135.741	41635.000	2135.741	25.648	bb			439.9227	88.0	-12.0	698.2
1202055878	PETN	361 > 62	24.05	43197.250	41635.000	43197.250	518.761	bb			579.1599	115.8	15.8	13827.6

GEL SOP GL-OA-E-056, Method 8321A-Modified / MM = Manual Modification

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1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: LCS for batch 958599

Lab Code: GEL

GEL Job No (SDG) 10–2089

Matrix: SOIL

GEL Sample ID: 1202055878

Sample Amount 2

Moisture:

Amount Units g

Date Received: 27–FEB–10

Extraction Type Sonication

Extraction Batch ID: 958599

Concentrated Extract Volume (mL) 10

Date Extracted: 04–MAR–10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS04020075.wiff

Date Analyzed: 03–APR–10 09:50

Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058–38–6	TATB	6360	
59229–75–3	2,6–Diamino–4–nitrotoluene	5140	
618–87–1	3,5–Dinitroaniline	4800	
6629–29–4	2,4–Diamino–6–nitrotoluene	4850	
78–30–8	tris(o–cresyl) phosphate	5010	

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Sample Amoun}} \times \text{Dilution Factor}$$

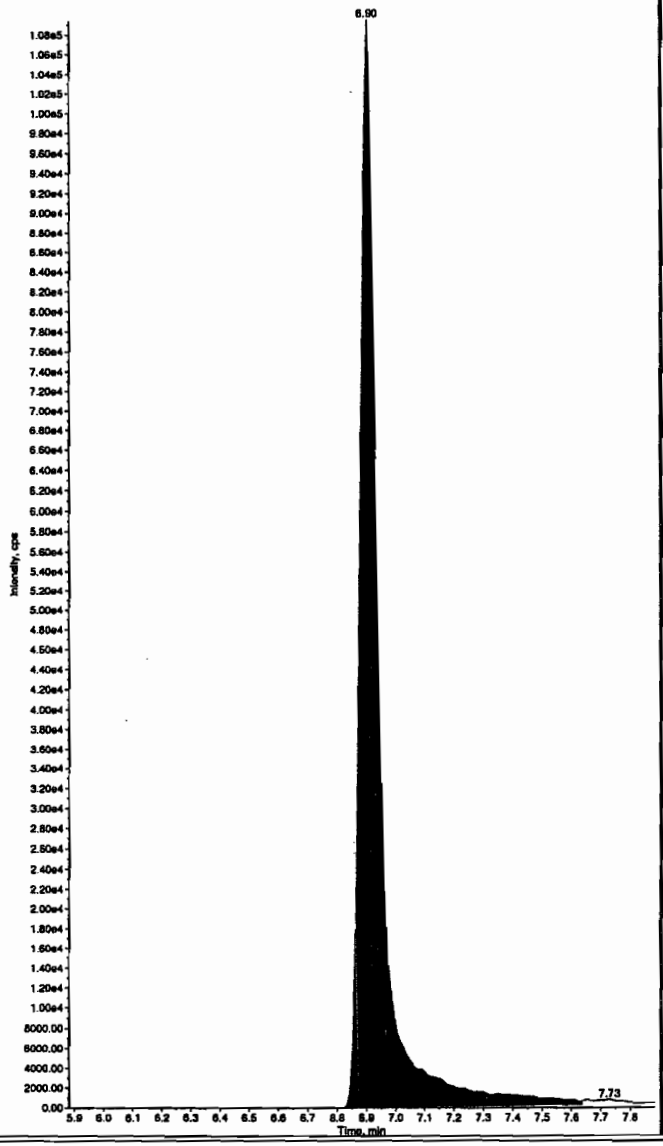
Lan 4/7/10

Sample Name: "1202055878" Sample ID: "958603|2|LER" File: "EXS04020075.wiff"
Peak Name: "TATB" Mass(es): "257.2/204.9 amu"
Comment: "LCX83212S" Annotation: ""

ample Index: 1
ample Type: Unknown
oncentration: N/A
alculated Conc: 636. ng/mL
cq. Date: 4/3/2010
cq. Time: 9:50:13 AM

odified: No
roc. Algorithm: IntelliQuan - IQA
in. Peak Height: 2500.00 cps
in. Peak Width: 0.00 sec
oothing Width: 3 points
Window: 30.0 sec
pected RT: 6.88 min
e Relative RT: No

t. Type: Valley
tention Time: 6.90 min
ea: 5.20e+005 counts
ight: 109416.496 cps
art Time: 6.81 min
d Time: 7.64 min

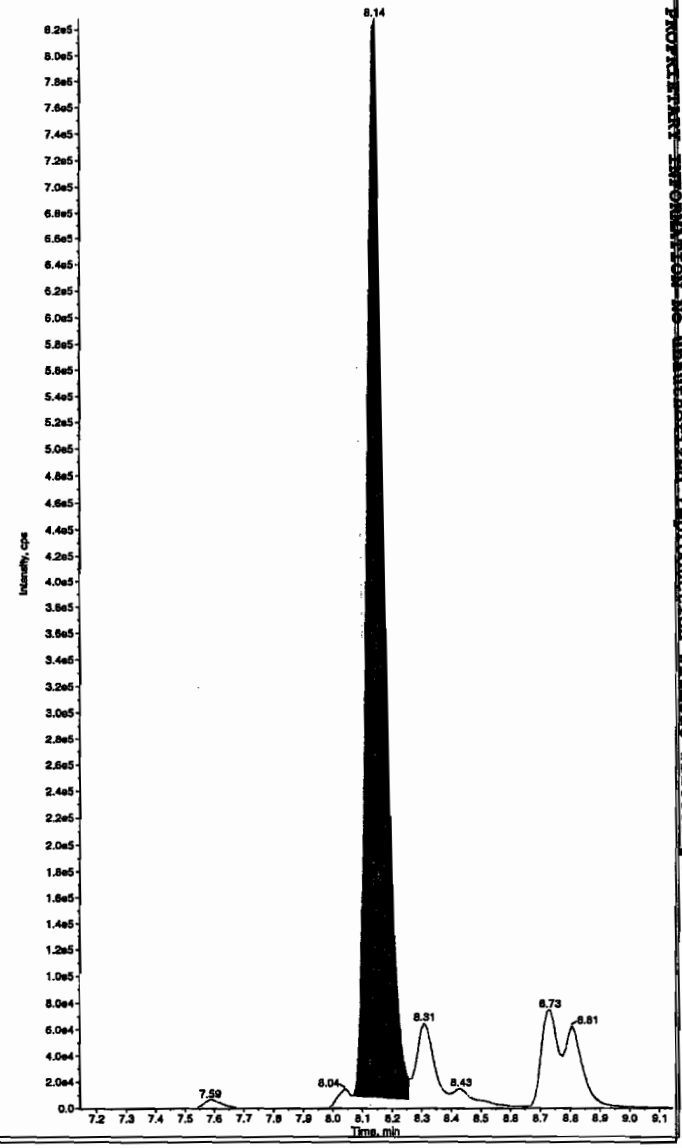


Sample Name: "1202055878" Sample ID: "958603|2|LER" File: "EXS04020075.wiff"
Peak Name: "35-Dinitroaniline" Mass(es): "182.0/46.0 amu"
Comment: "LCX83212S" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 480. ng/mL
Acq. Date: 4/3/2010
Acq. Time: 9:50:13 AM

Modified: Yes
Proc. Algorithm: IntelliQuan - IQA
Min. Peak Height: 2000.00 cps
Min. Peak Width: 0.00 sec
Smoothing Width: 3 points
RT Window: 15.0 sec
Expected RT: 8.14 min
Use Relative RT: No

Int. Type: Valley
Retention Time: 8.14 min
Area: 3.37e+006 counts
Height: 820256.592 cps
Start Time: 8.07 min
End Time: 8.26 min



Hmm 04/08/10

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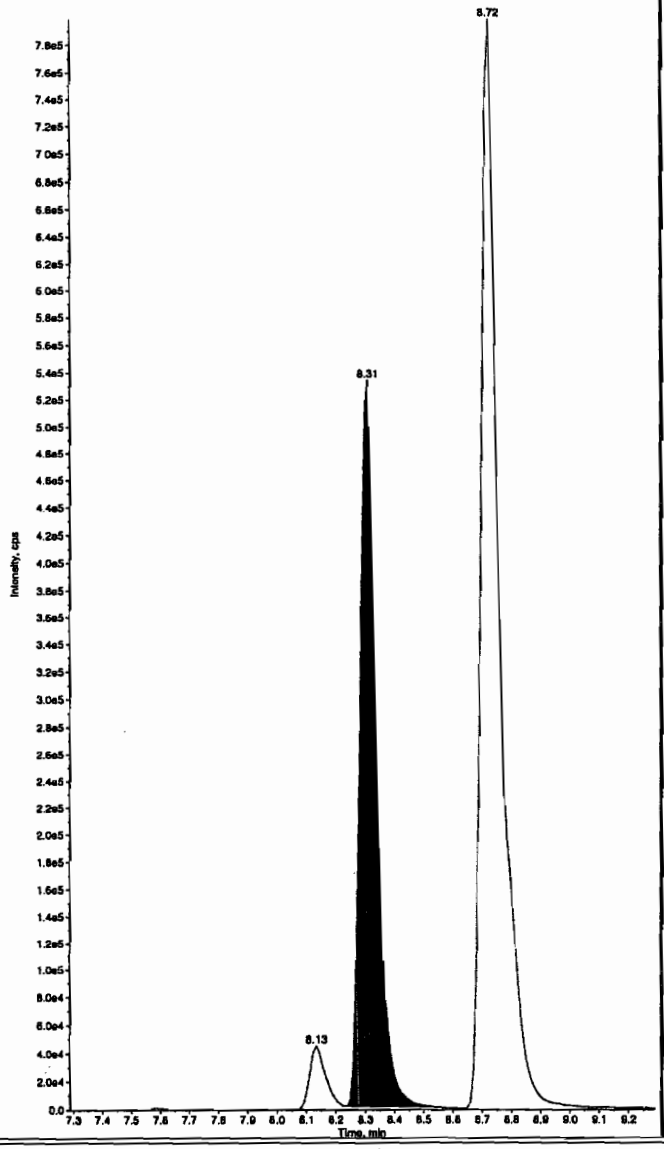
Sample Name: "1202055876" Sample ID: "958603|2|LER" File: "EXS04020075.wiff"
Peak Name: "34-Dinitrotoluene" Mass(es): "182.1/151.9 amu"
Comment: "LCX83212S" Annotation: ""

ample Index: 1
ample Type: Unknown
oncentration: N/A
alculated Conc: 225. ng/mL
cq. Date: 4/3/2010
cq. Time: 9:50:13 AM

odified: No
roc. Algorithm: IntelliQuan - IQA
n. Peak Height: 1460.00 cps
n. Peak Width: 0.00 sec
oothing Width: 3 points
' Window: 15.0 sec
pected RT: 8.29 min
e Relative RT: No

t. Type: Valley
tention Time: 8.31 min
ea: 2.10e+006 counts
ight: 532360.229 cps
art Time: 8.24 min
d Time: 8.55 min

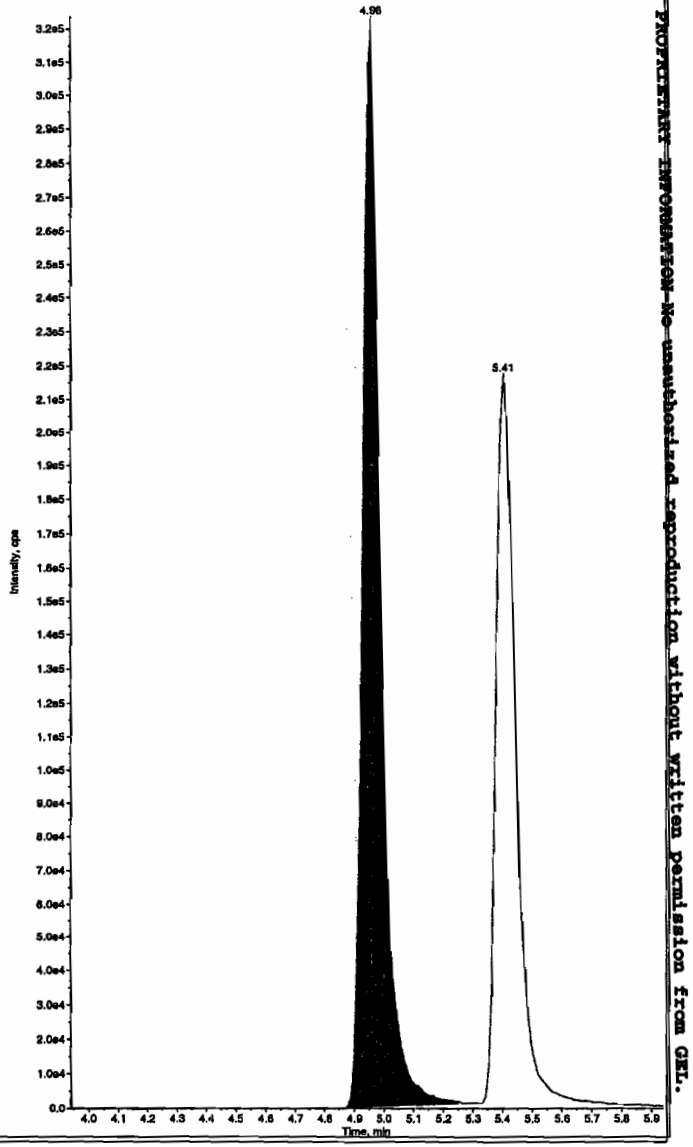


Sample Name: "1202055876" Sample ID: "958603|2|LER" File: "EXS04020075.wiff"
Peak Name: "26-Diamino-4-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCX83212S" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 514. ng/mL
Acq. Date: 4/3/2010
Acq. Time: 9:50:13 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: 4.94 min
Use Relative RT: No

Int. Type: Valley
Retention Time: 4.96 min
Area: 1.41e+006 counts
Height: 323235.901 cps
Start Time: 4.87 min
End Time: 5.25 min



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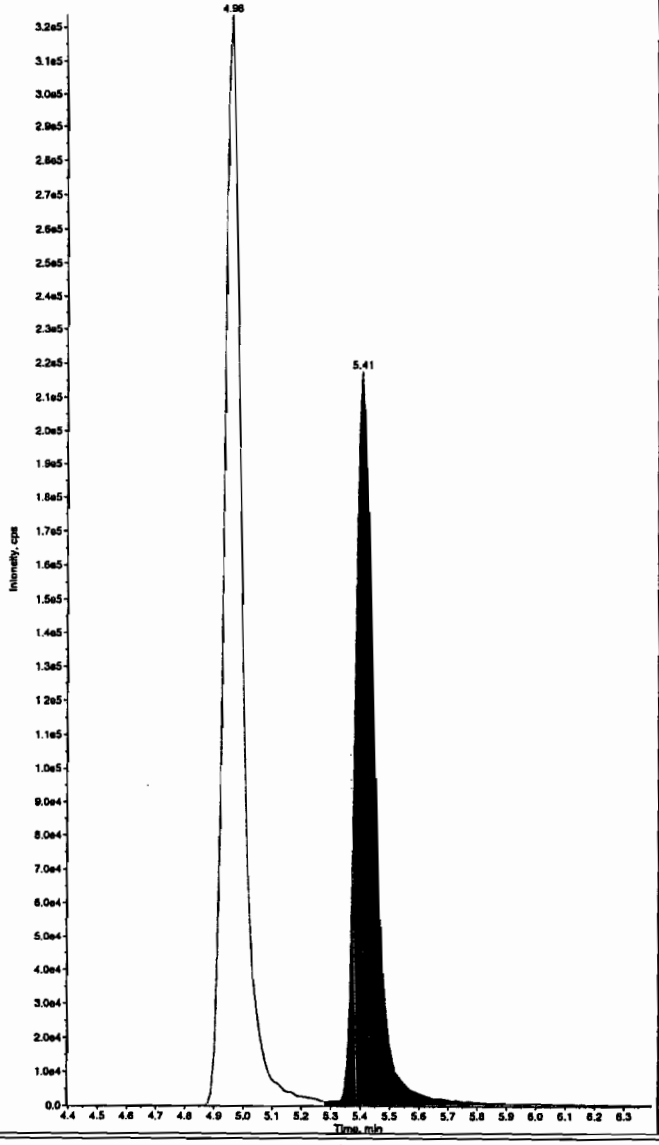
Sample Name: "1202055878" Sample ID: "958603|2|LER" File: "EXS04020075.wiff"
Peak Name: "24-Diamino-6-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCX83212S" Annotation: ""

```
mple Index:        1
mple Type:      Unknown
ncentration:       N/A
lculated Conc:     485.     ng/mL
q. Date:        4/3/2010
q. Time:        9:50:13 AM

dified:            No
oc. Algorithm: IntelliQuan - IQA
n. Peak Height: 350.00    cps
n. Peak Width:    0.00    sec
oothing Width:  3        points
 Window:         30.0     sec
pected RT:        5.39    min
e Relative RT:    No

t. Type:        Valley
tention Time:     5.41    min
ea:          1.04e+006   counts
ight:         217255.524  cps
art Time:         5.28    min
d Time:           5.96    min
```

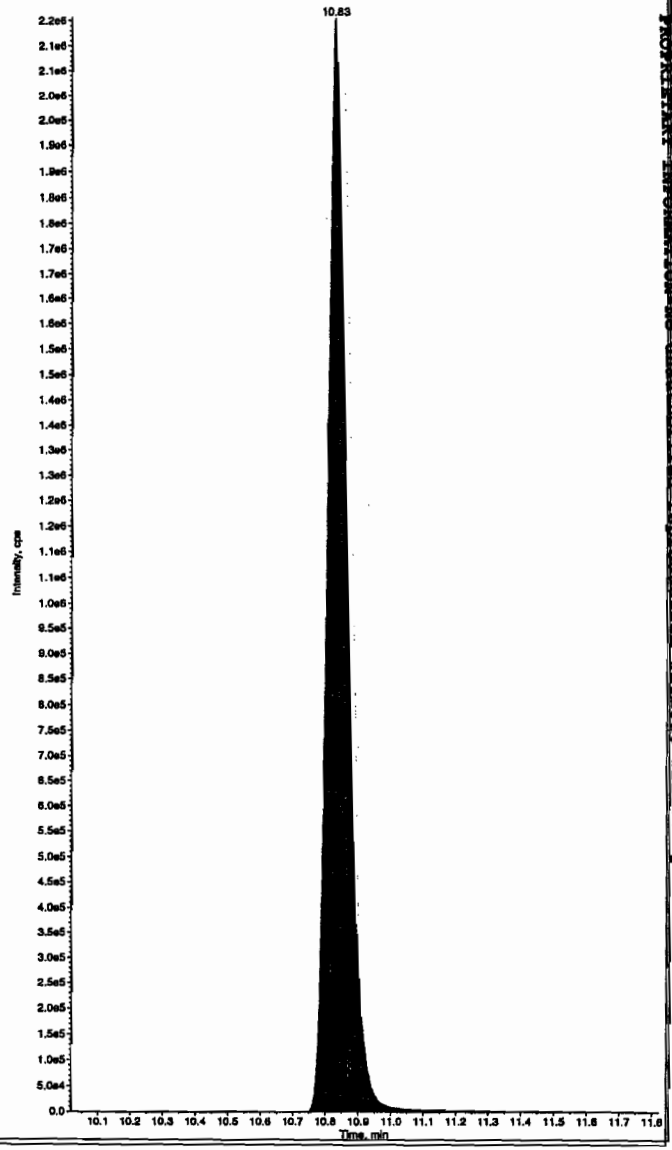


Sample Name: "1202055878" Sample ID: "958603|2|LER" File: "EXS04020075.wiff"
Peak Name: "tris(o-cresyl) phosphate" Mass(es): "369.1/91.0 amu"
Comment: "LCX83212S" Annotation: ""

```
Sample Index:        1
Sample Type:      Unknown
Concentration:       N/A
Calculated Conc:     501.     ng/mL
Acq. Date:        4/3/2010
Acq. Time:        9:50:13 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:        10.8    min
Use Relative RT:    No

Int. Type:        Valley
Retention Time:     10.8    min
Area:          9.20e+006   counts
Height:        2155441.895  cps
Start Time:         10.7    min
End Time:           11.2    min
```



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1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8404(248102001MS)

Lab Code: GEL

GEL Job No (SDG) 10-2089

Matrix: SOIL

GEL Sample ID: 1202055879

Sample Amount 2

Moisture: 9.4

Amount Units g

Date Received: 26-FEB-10

Extraction Type Sonication

Extraction Batch ID: 958599

Concentrated Extract Volume (mL) 10

Date Extracted: 04-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0412116a

Date Analyzed: 15-APR-10 00:13

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	4700	H
121-14-2	2,4-Dinitrotoluene	4510	H
121-82-4	RDX	3900	H
19406-51-0	4-Amino-2,6-dinitrotoluene	4580	H
2691-41-0	HMX	4340	H
35572-78-2	2-Amino-4,6-dinitrotoluene	5020	H
479-45-8	Tetryl	2930	H
606-20-2	2,6-Dinitrotoluene	4730	H
78-11-5	PETN	4240	H
88-72-2	o-Nitrotoluene	3930	H
98-95-3	Nitrobenzene	4240	H
99-08-1	m-Nitrotoluene	4080	H
99-35-4	1,3,5-Trinitrobenzene	3640	H
99-65-0	m-Dinitrobenzene	4660	H
99-99-0	p-Nitrotoluene	4290	H

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Sample Amoun}} \times \text{Dilution Factor}$$

Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA2.qld, Time: Thu Apr 15 14:49:38 2010

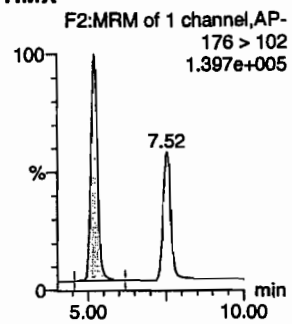
Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0412116a
Date: 15-Apr-2010
Time: 00:13:25
ID: 1202055879 | LANL | 958603 | Solid | 248102001 MS | 2 |
Vial: 3:5,D

MAP 4/15/10

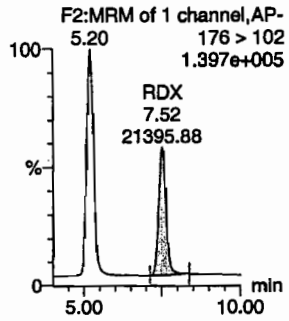
PBS

XC: EXP0412117a

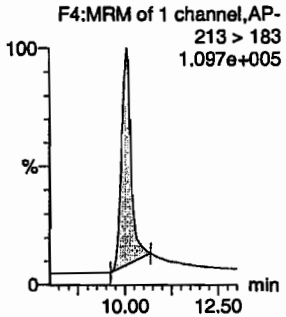
HMX



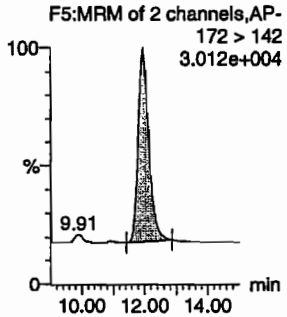
RDX



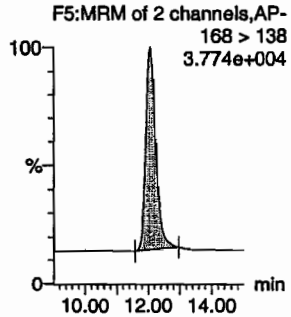
135-Trinitrobenzene



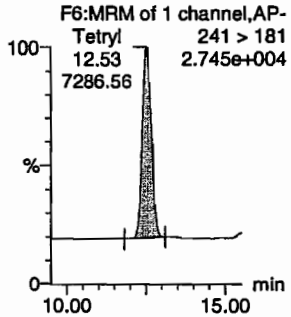
13-Dinitrobenzene-d4



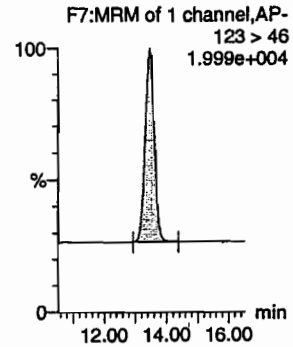
13-Dinitrobenzene



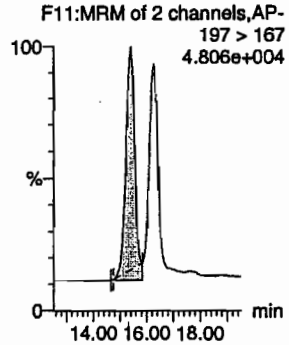
Tetryl



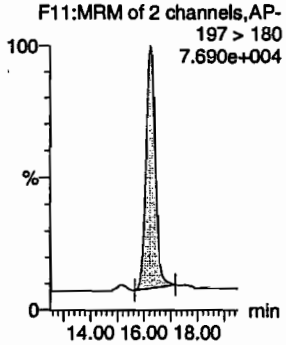
Nitrobenzene



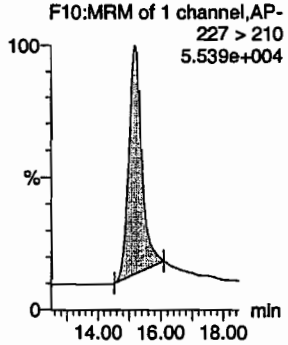
4-Amino-26-dinitrotoluene



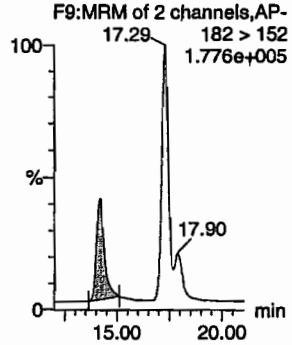
2-Amino-46-dinitrotoluene



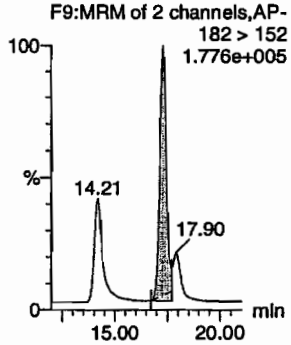
246-Trinitrotoluene



34-dinitrotoluene



26-dinitrotoluene



HMM 04/15/10

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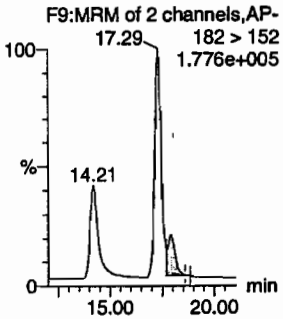
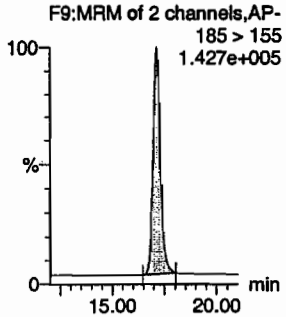
Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA2.qld, Time: Thu Apr 15 14:49:38 2010

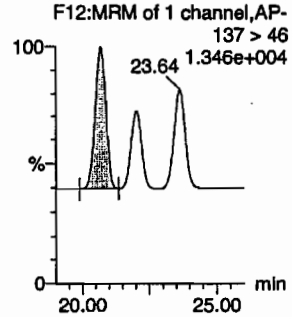
24-dinitrotoluene



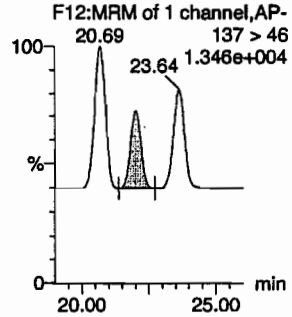
26-dinitrotoluene-d3



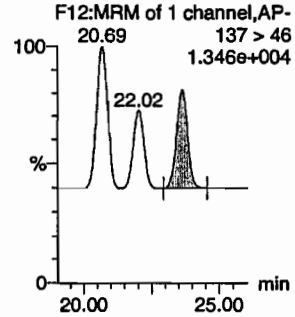
2-Nitrotoluene



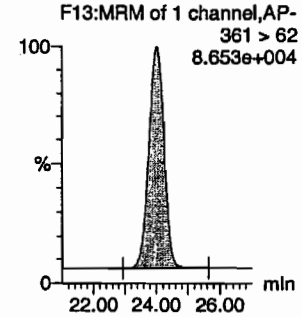
4-Nitrotoluene



3-Nitrotoluene



PETN



ID	Name	Trace	RT	Area	IS Area	Abs Resp	Response	Flags	Mod Date	Mod Time	ng/mL	%Rec	%Dev	S/N
1202055879	HMX	176 > 102	5.20	35228.289	9578.610	35228.289	1838.904	bb			433.8403	86.8	-13.2	867.9
1202055879	RDX	176 > 102	7.52	21395.879	9578.610	21395.879	1116.857	bb			390.2092	78.0	-22.0	490.5
1202055879	135-Trinitrobenzene	213 > 183	10.06	30112.326	9578.610	30112.326	1571.853	bb			363.6040	72.7	-27.3	859.4
1202055879	13-Dinitrobenzene-d4	172 > 142	11.95	9578.610		9578.610	9578.610	bb			814.4573	162.9	62.9	586.7
1202055879	13-Dinitrobenzene	168 > 138	12.07	11940.753	9578.610	11940.753	623.303	bb			466.1710	93.2	-6.8	997.6
1202055879	Tetryl	241 > 181	12.53	7286.564	9578.610	7286.564	380.356	bb			293.4227	58.7	-41.3	879.1
1202055879	Nitrobenzene	123 > 46	13.45	5089.533	9578.610	5089.533	265.672	bb			423.5186	84.7	-15.3	483.0
1202055879	4-Amino-26-dinitrotoluene	197 > 167	15.39	17399.957	56204.684	17399.957	154.791	MM	15-Apr-10	14:34:27	458.2835	91.7	-8.3	135.8
1202055879	2-Amino-46-dinitrotoluene	197 > 180	16.25	28899.840	56204.684	28899.840	257.095	bb			501.9444	100.4	0.4	1276.5
1202055879	246-Trinitrotoluene	227 > 210	15.17	22993.914	56204.684	22993.914	204.555	bb			470.2061	94.0	-6.0	1162.3
1202055879	34-dinitrotoluene	182 > 152	14.21	29292.596	56204.684	29292.596	260.589	bb			252.7219	101.1	1.1	904.0
1202055879	26-dinitrotoluene	182 > 152	17.29	62911.992	56204.684	62911.992	559.669	MM	15-Apr-10	14:40:32	472.8775	94.6	-5.4	2291.4
1202055879	24-dinitrotoluene	182 > 152	17.90	13244.424	56204.684	13244.424	117.823	MM	15-Apr-10	14:45:18	451.4229	90.3	-9.7	418.7
1202055879	26-dinitrotoluene-d3	185 > 155	17.14	56204.684		56204.684	56204.684	bb			803.3101	160.7	60.7	5359.4
1202055879	2-Nitrotoluene	137 > 46	20.69	3824.727	56204.684	3824.727	34.025	bb			392.9517	78.6	-21.4	1478.6
1202055879	4-Nitrotoluene	137 > 46	22.02	1998.452	56204.684	1998.452	17.778	bb			428.6067	85.7	-14.3	802.7
1202055879	3-Nitrotoluene	137 > 46	23.64	2674.211	56204.684	2674.211	23.790	bb			408.0463	81.6	-18.4	1023.9
1202055879	PETN	361 > 62	24.02	44571.410	56204.684	44571.410	396.510	bb			423.5980	84.7	-15.3	21537.2

GEL SOP GL-OA-E-056, Method 8321A-Modified / MM = Manual Modification

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1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8404(248102001MS)

Lab Code: GEL

GEL Job No (SDG) 10-2089

Matrix: SOIL

GEL Sample ID: 1202055879

Sample Amount 2

Moisture: 9.4

Amount Units g

Date Received: 26-FEB-10

Extraction Type Sonication

Extraction Batch ID: 958599

Concentrated Extract Volume (mL) 10

Date Extracted: 04-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS04020077.wiff

Date Analyzed: 03-APR-10 10:21

Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	5530	
59229-75-3	2,6-Diamino-4-nitrotoluene	5150	
618-87-1	3,5-Dinitroaniline	4860	
6629-29-4	2,4-Diamino-6-nitrotoluene	5360	
78-30-8	tris(o-cresyl) phosphate	5090	

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Sample Amoun}} \times \text{Dilution Factor}$$

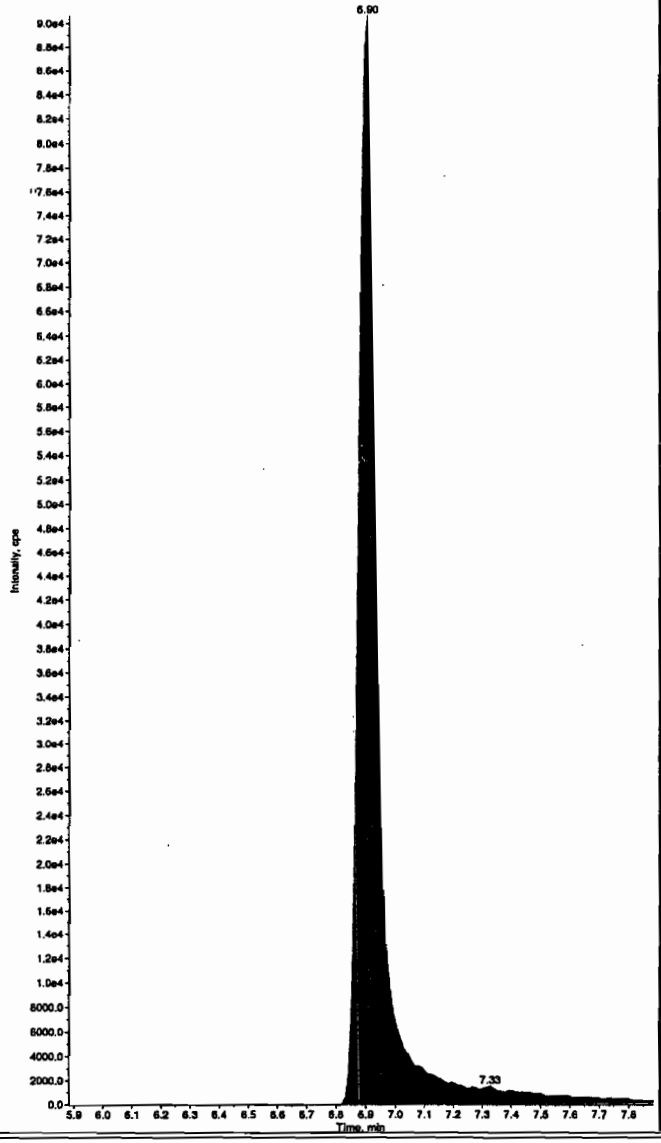
Lar 4/7/10

Sample Name: "1202055879" Sample ID: "958603|2|LER" File: "EXS04020077.wiff"
Peak Name: "TATB" Mass(es): "257.2/204.9 amu"
Comment: "LCX83212S" Annotation: ""

mple Index: 1
mple Type: Unknown
ncentration: N/A
lculated Conc: 553. ng/mL
q. Date: 4/3/2010
q. Time: 10:21:37 AM

dified: No
oc. Algorithm: IntelliQuan - IQA
n. Peak Height: 2500.00 cps
n. Peak Width: 0.00 sec
oothing Width: 3 points
Window: 30.0 sec
pected RT: 6.88 min
e Relative RT: No

t. Type: Valley
tention Time: 6.90 min
ea: 4.50e+005 counts
ight: 90668.121 cps
art Time: 6.80 min
d Time: 7.91 min

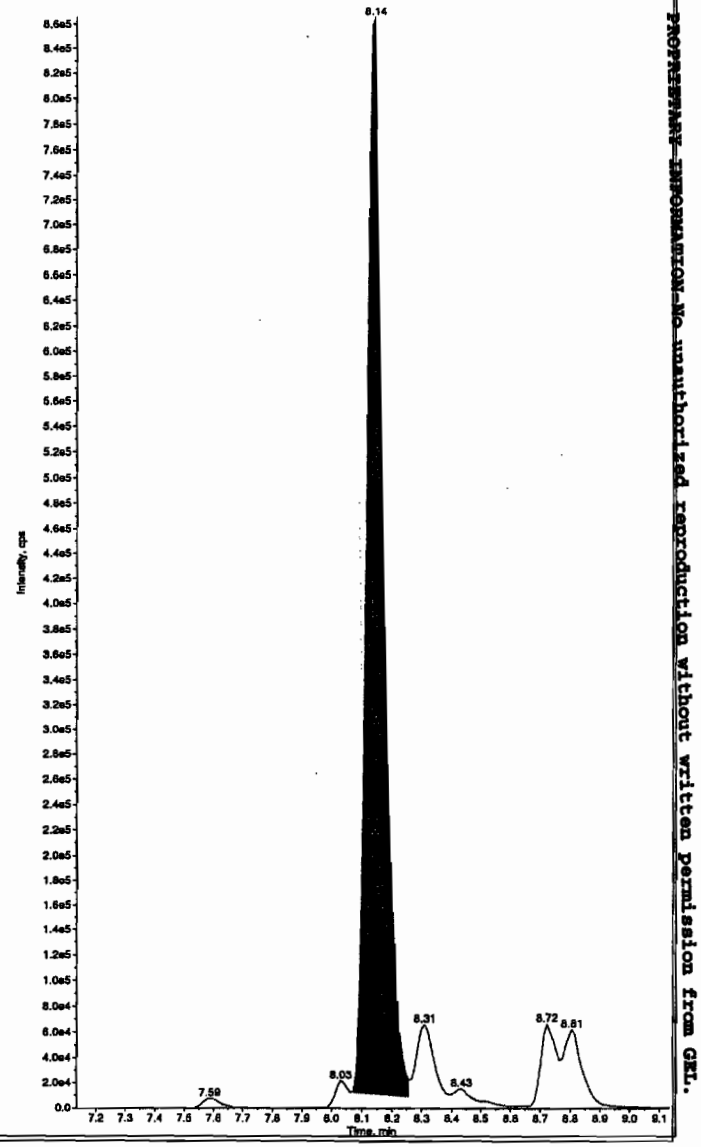


Sample Name: "1202055879" Sample ID: "958603|2|LER" File: "EXS04020077.wiff"
Peak Name: "35-Dinitroaniline" Mass(es): "182.0/46.0 amu"
Comment: "LCX83212S" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 486. ng/mL
Acq. Date: 4/3/2010
Acq. Time: 10:21:37 AM

Modified: Yes
Proc. Algorithm: IntelliQuan - IQA
Min. Peak Height: 2000.00 cps
Min. Peak Width: 0.00 sec
Smoothing Width: 3 points
RT Window: 15.0 sec
Expected RT: 8.13 min
Use Relative RT: No

Int. Type: Valley
Retention Time: 8.14 min
Area: 3.41e+006 counts
Height: 854249.390 cps
Start Time: 8.06 min
End Time: 8.26 min



Hmm 04/08/10

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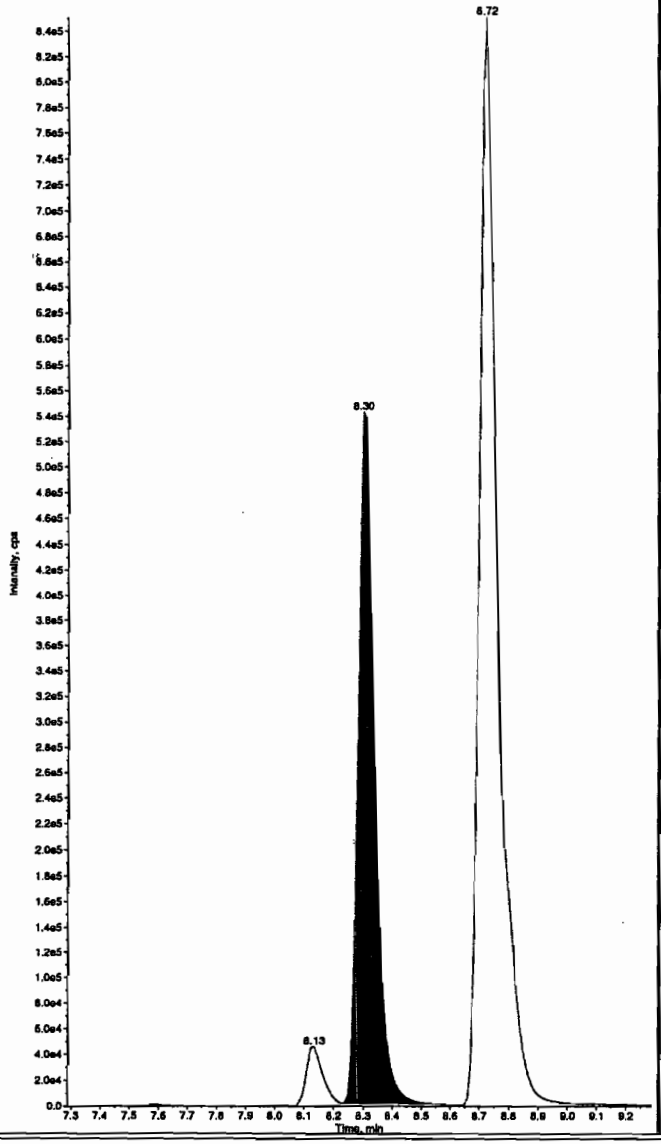
Sample Name: "1202055879" Sample ID: "958603|2|LER" File: "EXS04020077.wiff"
Peak Name: "34-Dinitrotoluene" Mass(es): "182.1/151.9 amu"
Comment: "LCX83212S" Annotation: ""

mple Index: 1
mple Type: Unknown
ncentration: N/A
lculated Conc: 234. ng/mL
q. Date: 4/3/2010
q. Time: 10:21:37 AM

dified: No
oc. Algorithm: IntelliQuan - IQA
n. Peak Height: 1460.00 cps
n. Peak Width: 0.00 sec
oothing Width: 3 points
Window: 15.0 sec
pected RT: 8.29 min
e Relative RT: No

t. Type: Valley
tention Time: 8.30 min
ea: 2.19e+006 counts
ight: 540985.046 cps
art Time: 8.23 min
d Time: 8.55 min

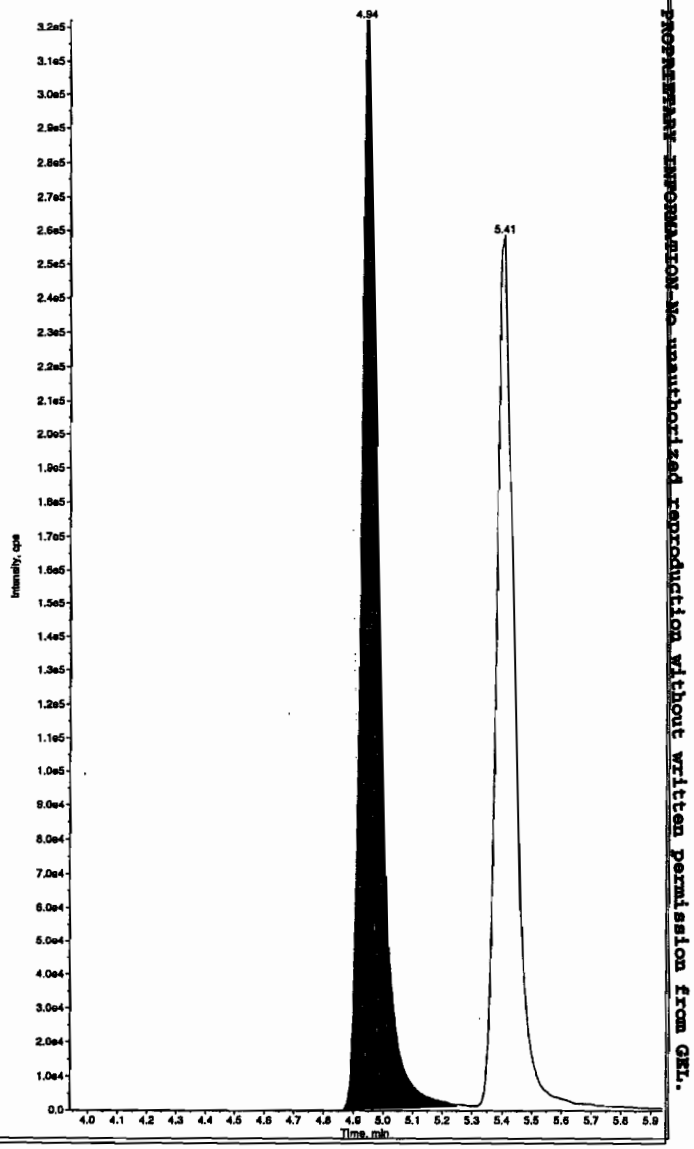


Sample Name: "1202055879" Sample ID: "958603|2|LER" File: "EXS04020077.wiff"
Peak Name: "26-Diamino-4-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCX83212S" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 515. ng/mL
Acq. Date: 4/3/2010
Acq. Time: 10:21:37 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: 4.94 min
Use Relative RT: No

Int. Type: Valley
Retention Time: 4.94 min
Area: 1.41e+006 counts
Height: 321851.837 cps
Start Time: 4.86 min
End Time: 5.25 min



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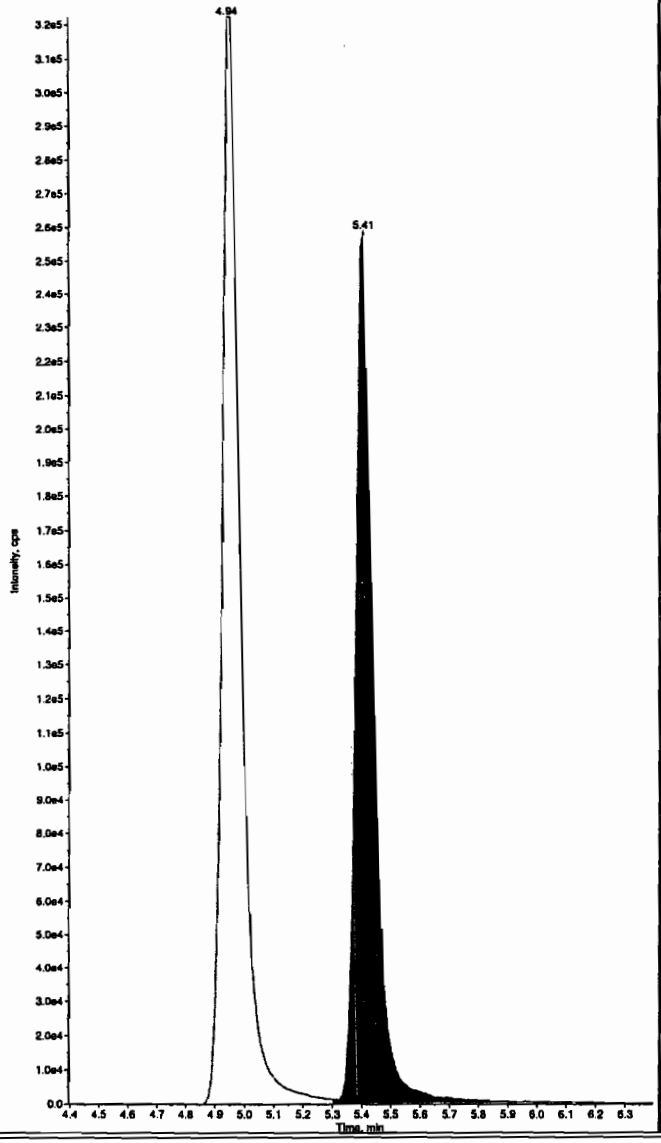
Sample Name: "1202055879" Sample ID: "958603|2|LER" File: "EXS04020077.wiff"
Peak Name: "24-Diamino-6-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCX83212S" Annotation: ""

ample Index: 1
ample Type: Unknown
oncentration: N/A
alculated Conc: 536. ng/mL
cq. Date: 4/3/2010
cq. Time: 10:21:37 AM

odified: No
roc. Algorithm: IntelliQuan - IQA
n. Peak Height: 350.00 cps
n. Peak Width: 0.00 sec
oothing Width: 3 points
Window: 30.0 sec
pected RT: 5.39 min
e Relative RT: No

t. Type: Valley
tention Time: 5.41 min
ea: 1.14e+006 counts
ight: 258339.172 cps
art Time: 5.30 min
d Time: 5.94 min

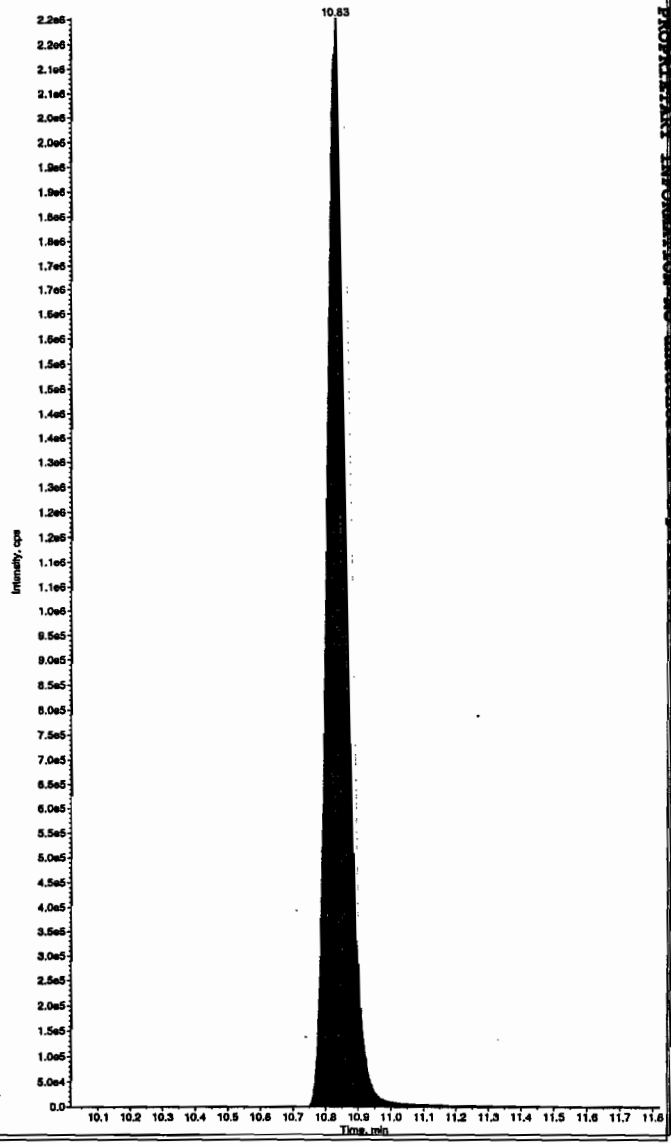


Sample Name: "1202055879" Sample ID: "958603|2|LER" File: "EXS04020077.wiff"
Peak Name: "tris(o-cresyl) phosphate" Mass(es): "369.1/91.0 amu"
Comment: "LCX83212S" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 509. ng/mL
Acq. Date: 4/3/2010
Acq. Time: 10:21:37 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: 10.8 min
Use Relative RT: No

Int. Type: Valley
Retention Time: 10.8 min
Area: 9.33e+006 counts
Height: 2202946.289 cps
Start Time: 10.7 min
End Time: 11.2 min



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1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8404(248102001MSD)

Lab Code: GEL

GEL Job No (SDG) 10-2089

Matrix: SOIL

GEL Sample ID: 1202055880

Sample Amount 2

Moisture: 9.4

Amount Units g

Date Received: 26-FEB-10

Extraction Type Sonication

Extraction Batch ID: 958599

Concentrated Extract Volume (mL) 10

Date Extracted: 04-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0412117a

Date Analyzed: 15-APR-10 00:42

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	3950	H
121-14-2	2,4-Dinitrotoluene	4480	H
121-82-4	RDX	4830	H
19406-51-0	4-Amino-2,6-dinitrotoluene	3940	H
2691-41-0	HMX	4530	H
35572-78-2	2-Amino-4,6-dinitrotoluene	4220	H
479-45-8	Tetryl	2510	H
606-20-2	2,6-Dinitrotoluene	4960	H
78-11-5	PETN	3720	H
88-72-2	o-Nitrotoluene	3540	H
98-95-3	Nitrobenzene	4490	H
99-08-1	m-Nitrotoluene	3210	H
99-35-4	1,3,5-Trinitrobenzene	4790	H
99-65-0	m-Dinitrobenzene	4990	H
99-99-0	p-Nitrotoluene	3490	H

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Sample Amoun}} \times \text{Dilution Factor}$$

Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

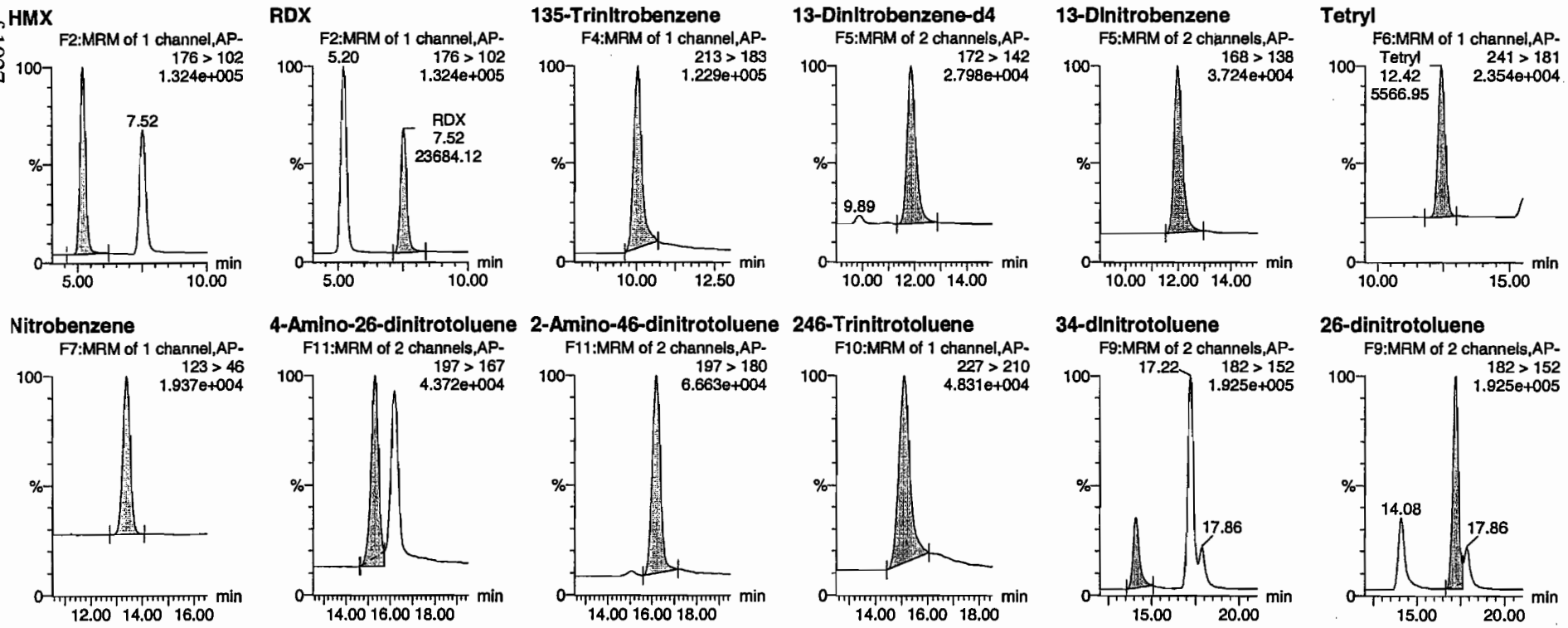
Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA2.qld, Time: Thu Apr 15 14:49:38 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0412117a
Date: 15-Apr-2010
Time: 00:42:54
ID: 1202055880 | LANC | 958603 | Soil | 248102001 MSD | 2 |
Vial: 3:5,E

MM 4/15/10

P28

XC: EXP0412117a



MM 04/15/10

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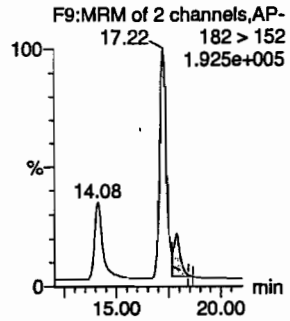
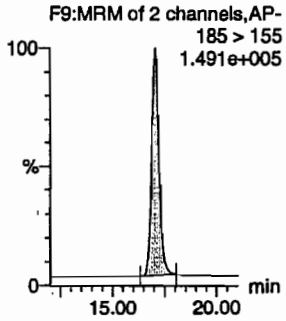
Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA2.qld, Time: Thu Apr 15 14:49:38 2010

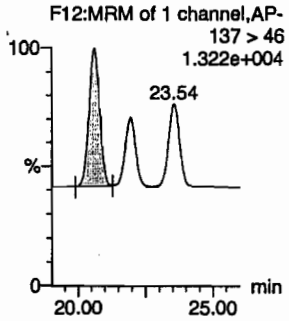
24-dinitrotoluene



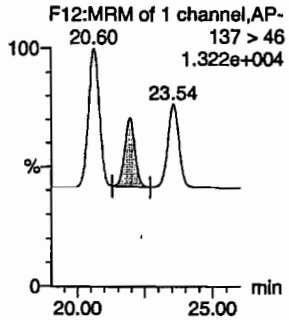
26-dinitrotoluene-d3



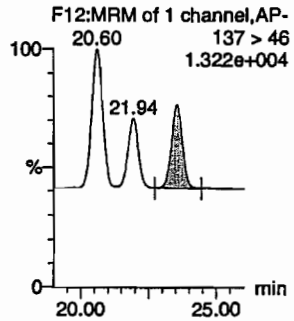
2-Nitrotoluene



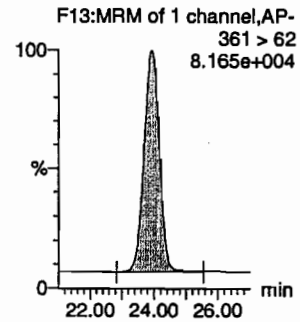
4-Nitrotoluene



3-Nitrotoluene



PETN



ID	Name	Trace	RT	Area	IS Area	Abs Resp	Response	Flags	Mod Date	Mod Time	ng/mL	%Rec	%Dev	S/N
1202055880	HMX	176 > 102	5.20	32894.133	8568.904	32894.133	1919.390	bb			452.8288	90.6	-9.4	4816.6
1202055880	RDX	176 > 102	7.52	23684.115	8568.904	23684.115	1381.980	bb			482.8383	96.6	-3.4	3173.9
1202055880	135-Trinitrobenzene	213 > 183	10.06	35455.766	8568.904	35455.766	2068.862	bb			478.5732	95.7	-4.3	968.5
1202055880	13-Dinitrobenzene-d4	172 > 142	11.87	8568.904		8568.904	8568.904	bb			728.6032	145.7	45.7	205.3
1202055880	13-Dinitrobenzene	168 > 138	11.97	11435.379	8568.904	11435.379	667.260	bb			499.0468	99.8	-0.2	1129.8
1202055880	Tetryl	241 > 181	12.42	5566.949	8568.904	5566.949	324.834	bb			250.5910	50.1	-49.9	558.5
1202055880	Nitrobenzene	123 > 46	13.37	4828.076	8568.904	4828.076	281.721	bb			449.1029	89.8	-10.2	329.5
1202055880	4-Amino-26-dinitrotoluene	197 > 167	15.32	15764.999	59193.723	15764.999	133.164	MM	15-Apr-10	14:34:38	394.2547	78.9	-21.1	288.7
1202055880	2-Amino-46-dinitrotoluene	197 > 180	16.19	25601.629	59193.723	25601.629	216.253	bb			422.2062	84.4	-15.6	650.7
1202055880	246-Trinitrotoluene	227 > 210	15.10	20347.943	59193.723	20347.943	171.876	bb			395.0870	79.0	-21.0	306.7
1202055880	34-dinitrotoluene	182 > 152	14.08	26192.625	59193.723	26192.625	221.245	bb			214.5660	85.8	-14.2	521.9
1202055880	26-dinitrotoluene	182 > 152	17.22	69484.664	59193.723	69484.664	586.926	MM	15-Apr-10	14:40:44	495.9079	99.2	-0.8	1582.8
1202055880	24-dinitrotoluene	182 > 152	17.86	13851.622	59193.723	13851.622	117.002	MM	15-Apr-10	14:44:49	448.2786	89.7	-10.3	296.8
1202055880	26-dinitrotoluene-d3	185 > 155	17.05	59193.723		59193.723	59193.723	bb			846.0312	169.2	69.2	974.5
1202055880	2-Nitrotoluene	137 > 46	20.60	3628.688	59193.723	3628.688	30.651	bb			353.9853	70.8	-29.2	727.5
1202055880	4-Nitrotoluene	137 > 46	21.94	1714.586	59193.723	1714.586	14.483	bb			349.1575	69.8	-30.2	364.4
1202055880	3-Nitrotoluene	137 > 46	23.54	2214.034	59193.723	2214.034	18.702	bb			320.7709	64.2	-35.8	440.6
1202055880	PETN	361 > 62	23.93	41890.301	59193.723	41890.301	353.841	bb			372.2755	74.5	-25.5	13581.4

GEL SOP GL-OA-E-056, Method 8321A-Modified / MM = Manual Modification

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1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8404(248102001MSD)

Lab Code: GEL

GEL Job No (SDG) 10-2089

Matrix: SOIL

GEL Sample ID: 1202055880

Sample Amount 2

Moisture: 9.4

Amount Units g

Date Received: 26-FEB-10

Extraction Type Sonication

Extraction Batch ID: 958599

Concentrated Extract Volume (mL) 10

Date Extracted: 04-MAR-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS04020078.wiff

Date Analyzed: 03-APR-10 10:37

Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	5250	
59229-75-3	2,6-Diamino-4-nitrotoluene	5760	
618-87-1	3,5-Dinitroaniline	4990	
6629-29-4	2,4-Diamino-6-nitrotoluene	5050	
78-30-8	tris(o-cresyl) phosphate	5150	

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Sample Amoun}} \times \text{Dilution Factor}$$

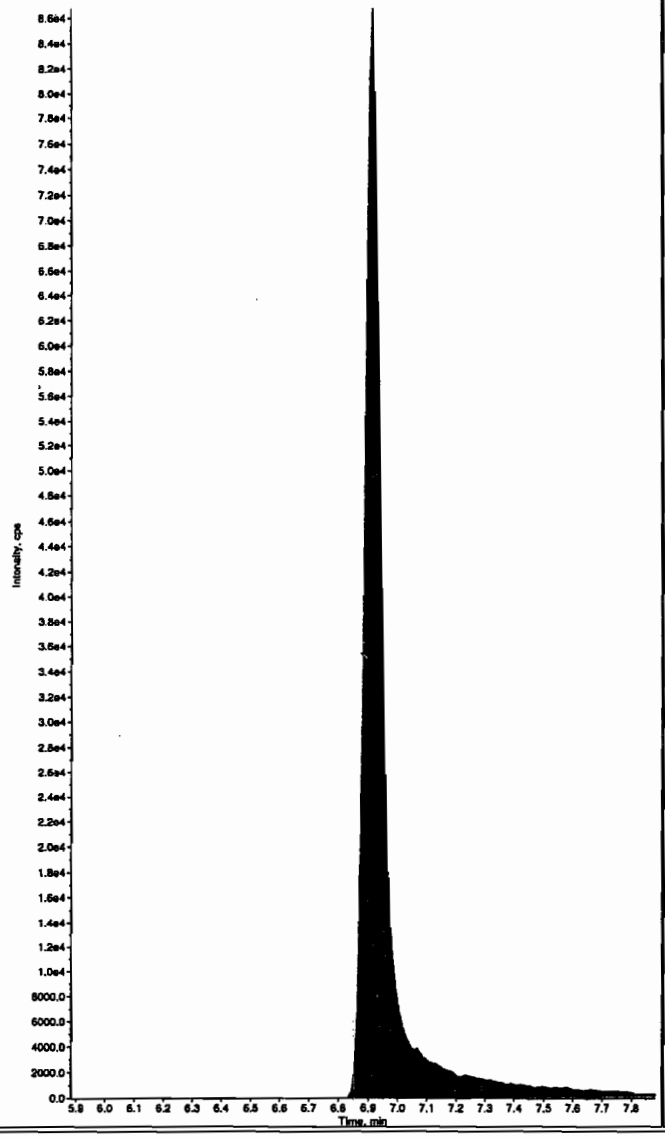
Lan 4/7/10

Sample Name: "1202055880" Sample ID: "958603|2|LER" File: "EXS04020078.wiff"
Peak Name: "TATB" Mass(es): "257.2/204.9 amu"
Comment: "LCX83212S" Annotation: ""

ample Index: 1
ample Type: Unknown
oncentration: N/A
alculated Conc: 525. ng/mL
cq. Date: 4/3/2010
cq. Time: 10:37:19 AM

odified: No
roc. Algorithm: IntelliQuan - IQA
in. Peak Height: 2500.00 cps
in. Peak Width: 0.00 sec
oothing Width: 3 points
Window: 30.0 sec
pected RT: 6.88 min
e Relative RT: No

t. Type: Valley
tention Time: 6.91 min
ea: 4.27e+005 counts
ight: 86708.778 cps
art Time: 6.78 min
d Time: 7.92 min

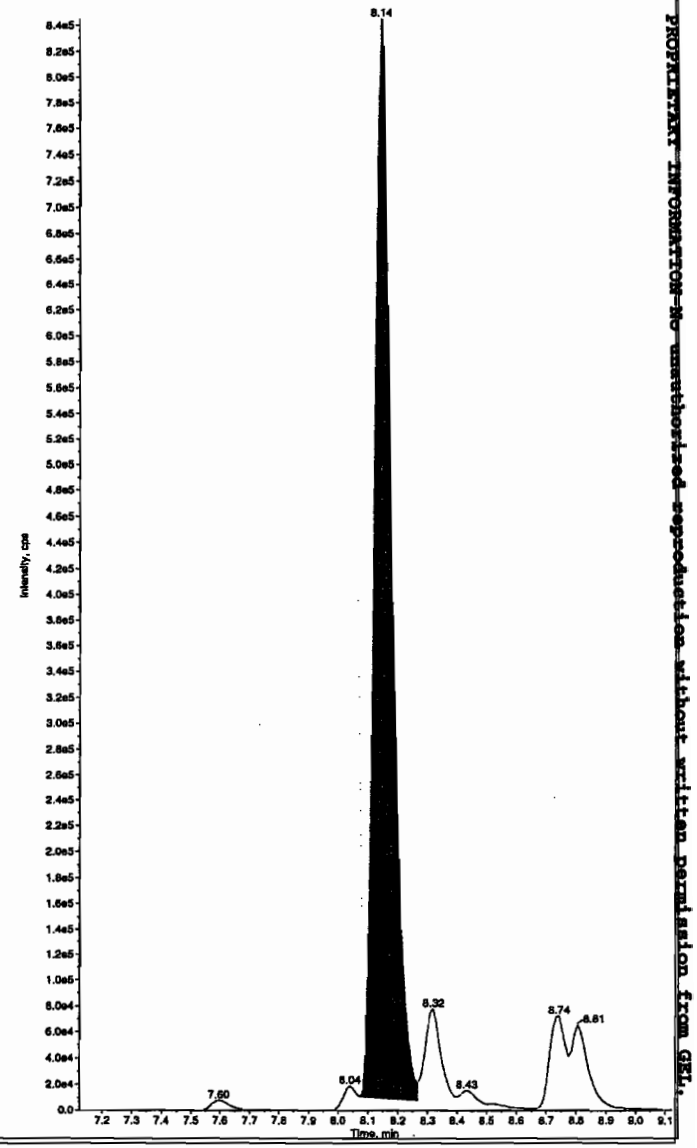


Sample Name: "1202055880" Sample ID: "958603|2|LER" File: "EXS04020078.wiff"
Peak Name: "35-Dinitroaniline" Mass(es): "182.0/46.0 amu"
Comment: "LCX83212S" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 499. ng/mL
Acq. Date: 4/3/2010
Acq. Time: 10:37:19 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: 8.12 min
Use Relative RT: No

Int. Type: Valley
Retention Time: 8.14 min
Area: 3.50e+006 counts
Height: 835066.833 cps
Start Time: 8.07 min
End Time: 8.27 min



HMM 04/08/10

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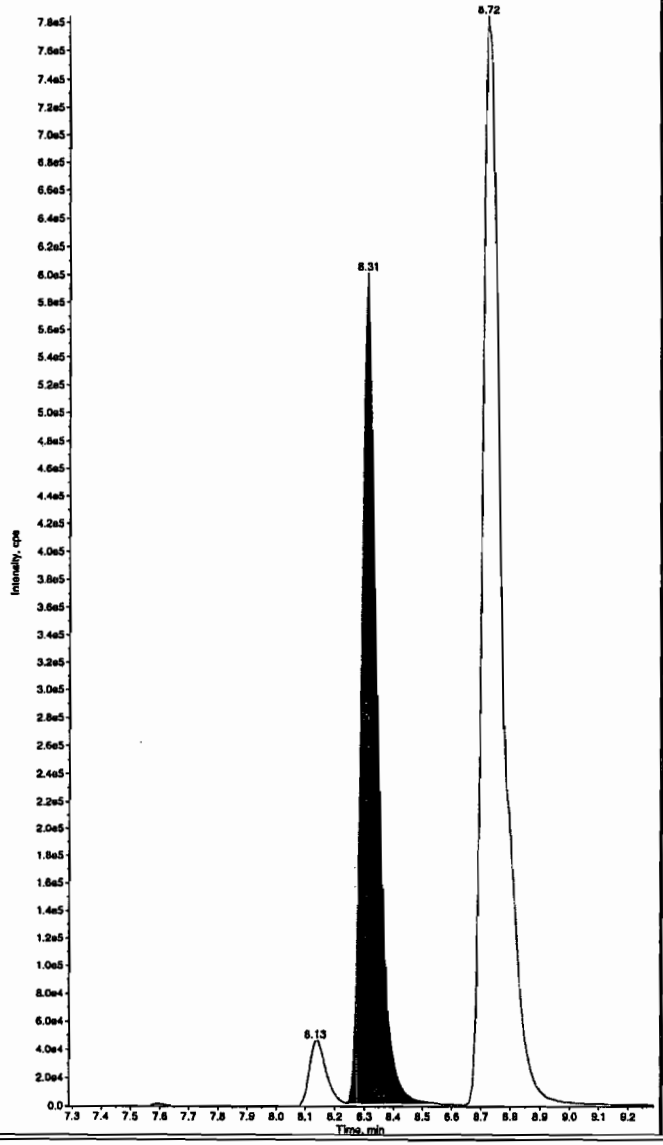
Sample Name: "1202055880" Sample ID: "958603|2|LER" File: "EXS04020078.wiff"
Peak Name: "34-Dinitrotoluene" Mass(es): "182.1/151.9 amu"
Comment: "LCX83212S" Annotation: ""

mple Index: 1
mple Type: Unknown
ncentration: N/A
lculated Conc: 248. ng/mL
q. Date: 4/3/2010
q. Time: 10:37:19 AM

dified: No
oc. Algorithm: IntelliQuan - IQA
n. Peak Height: 1460.00 cps
n. Peak Width: 0.00 sec
oothing Width: 3 points
Window: 15.0 sec
pected RT: 8.29 min
e Relative RT: No

t. Type: Valley
etention Time: 8.31 min
a: 2.31e+006 counts
ght: 598974.182 cps
rt Time: 8.24 min
d Time: 8.55 min

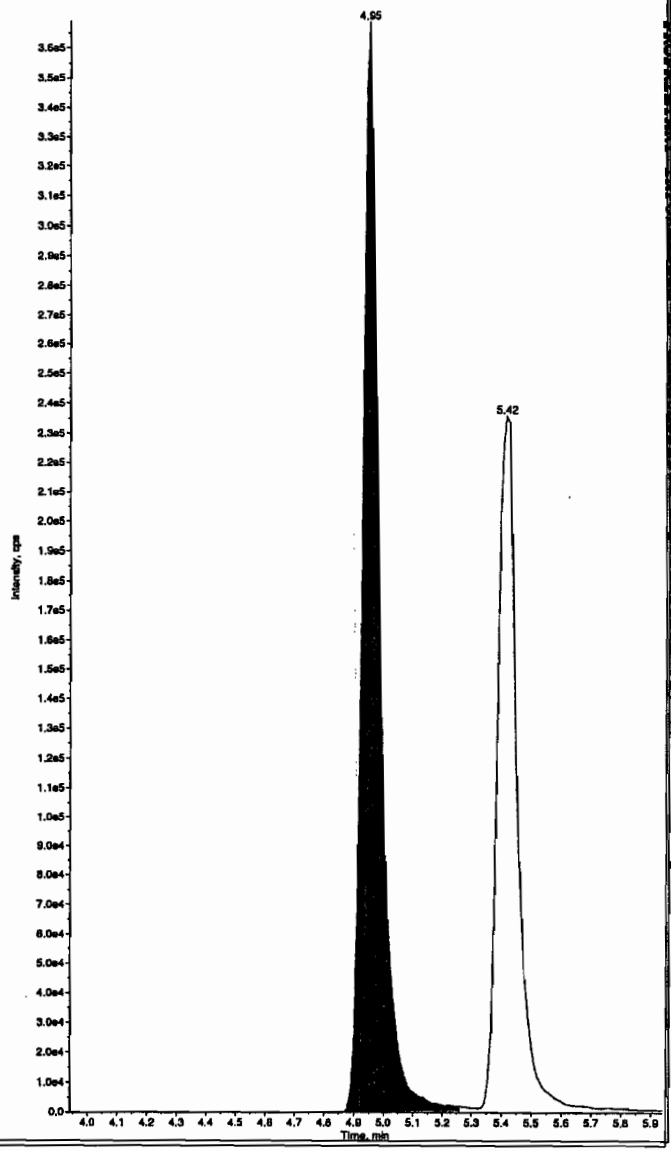


Sample Name: "1202055880" Sample ID: "958603|2|LER" File: "EXS04020078.wiff"
Peak Name: "26-Diamino-4-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCX83212S" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 576. ng/mL
Acq. Date: 4/3/2010
Acq. Time: 10:37:19 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: 4.94 min
Use Relative RT: No

Int. Type: Valley
Retention Time: 4.95 min
Area: 1.57e+006 counts
Height: 368724.121 cps
Start Time: 4.86 min
End Time: 5.26 min



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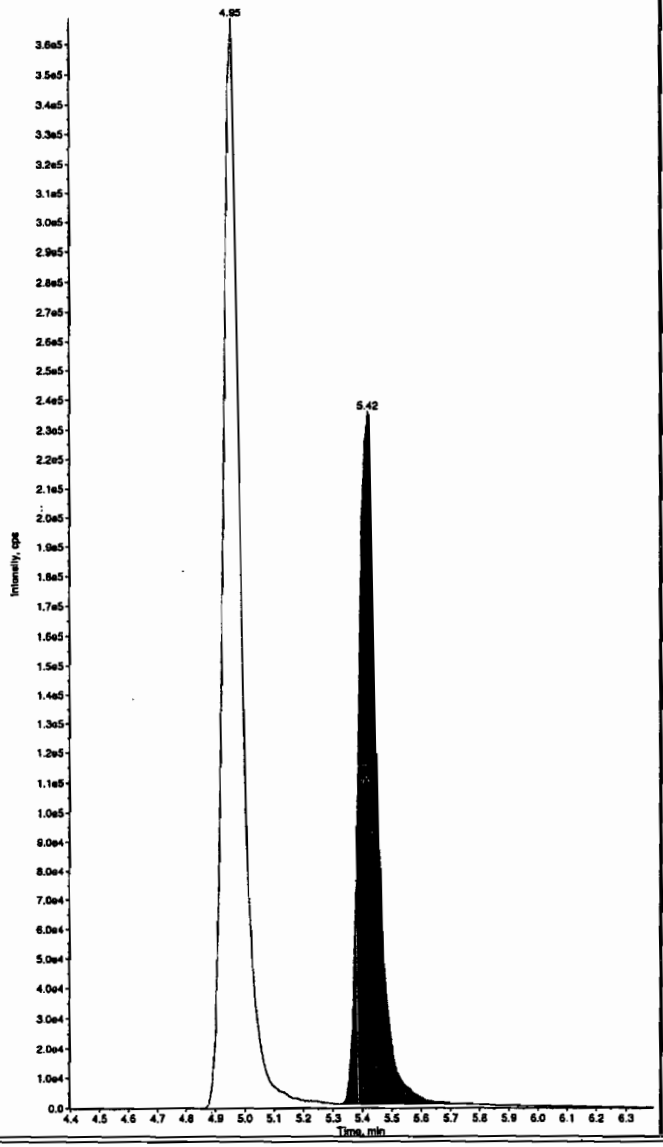
Sample Name: "1202055880" Sample ID: "958603|2|LER" File: "EXS04020078.wiff"
Peak Name: "24-Diamino-6-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCX83212S" Annotation: ""

ample Index: 1
ample Type: Unknown
ncentration: N/A
lculated Conc: 505. ng/mL
q. Date: 4/3/2010
q. Time: 10:37:19 AM

iified: No
oc. Algorithm: IntelliQuan - IQA
n. Peak Height: 350.00 cps
n. Peak Width: 0.00 sec
oothing Width: 3 points
Window: 30.0 sec
pected RT: 5.39 min
e Relative RT: No

:. Type: Valley
tention Time: 5.42 min
ea: 1.08e+006 counts
ght: 234635.468 cps
rt Time: 5.32 min
l Time: 5.73 min

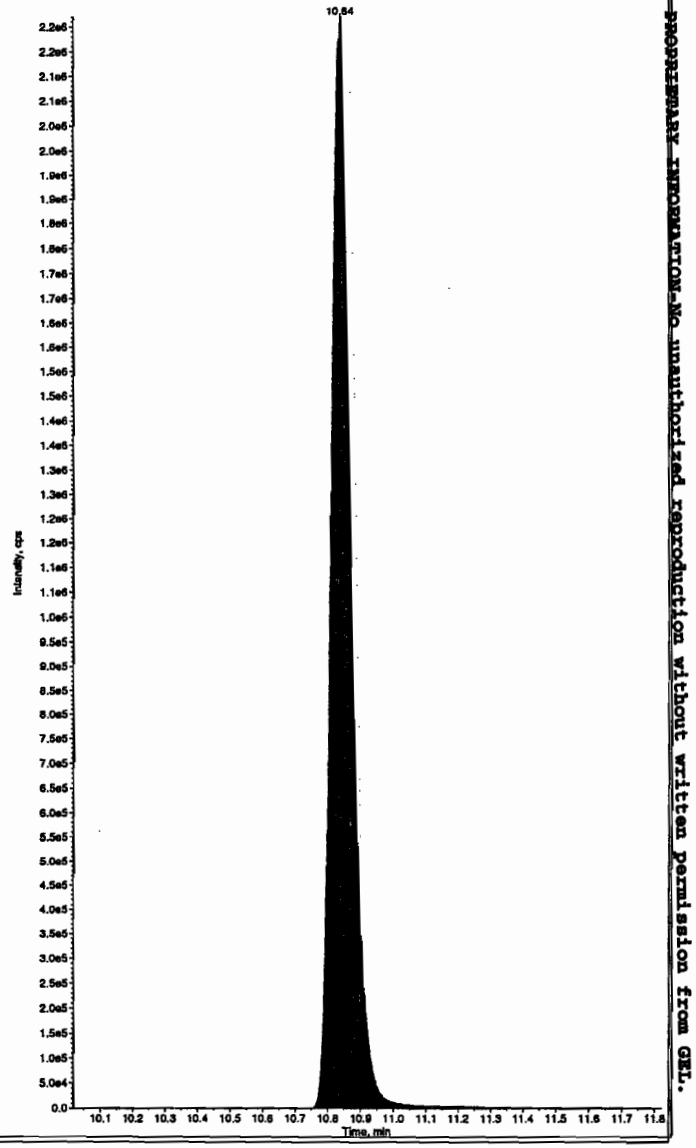


Sample Name: "1202055880" Sample ID: "958603|2|LER" File: "EXS04020078.wiff"
Peak Name: "tris(o-cresyl) phosphate" Mass(es): "369.1/91.0 amu"
Comment: "LCX83212S" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 515. ng/mL
Acq. Date: 4/3/2010
Acq. Time: 10:37:19 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: 10.8 min
Use Relative RT: No

Int. Type: Valley
Retention Time: 10.8 min
Area: 9.44e+006 counts
Height: 2219702.637 cps
Start Time: 10.7 min
End Time: 11.2 min



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MISCELLANEOUS DATA

Prep Logbook

Nitroaromatics and Nitramines by High Performance Liquid Chromatography (HPLC)

Batch ID: 958599 **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)
1202055877 MB	04-MAR-2010 14:50:00	2	10	5
1202055878 LCS	04-MAR-2010 14:50:00	2	10	5
248102001	04-MAR-2010 14:50:00	2	10	5
1202055879 MS (248102001)	04-MAR-2010 14:50:00	2	10	5
1202055880 MSD (248102001)	04-MAR-2010 14:50:00	2	10	5
248102002	04-MAR-2010 14:50:00	2	10	5
248102003	04-MAR-2010 14:50:00	2	10	5
248102004	04-MAR-2010 14:50:00	2	10	5
248102005	04-MAR-2010 14:50:00	2	10	5
248102006	04-MAR-2010 14:50:00	2	10	5
248102007	04-MAR-2010 14:50:00	2	10	5
248102008	04-MAR-2010 14:50:00	2	10	5
248114002	04-MAR-2010 14:50:00	2	10	5
248114003	04-MAR-2010 14:50:00	2	10	5
248114004	04-MAR-2010 14:50:00	2	10	5
248114005	04-MAR-2010 14:50:00	2	10	5
248114006	04-MAR-2010 14:50:00	2	10	5
248114007	04-MAR-2010 14:50:00	2	10	5
248114008	04-MAR-2010 14:50:00	2	10	5

Type	Sample Id	Description	Serial Number	Spike Amt	Units
LCS	1202055878	8321 Explosives LCS	DXX100225-03	.1	mL
LCS	1202055878	8321 LANL Explosives Mix 10mg/L	UXX100223-02.02	1	mL
MS	1202055879	8321 Explosives LCS	DXX100225-03	.1	mL
MS	1202055879	8321 LANL Explosives Mix 10mg/L	UXX100223-02.02	1	mL
MSD	1202055880	8321 Explosives LCS	DXX100225-03	.1	mL
MSD	1202055880	8321 LANL Explosives Mix 10mg/L	UXX100223-02.02	1	mL
SURR	All	3,4-Dinitrotoluene (8330 Surr.) 100ppm	DXP100301-02	.05	mL

Comments:

Final Solvent: ACN

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GEL ORGANIC RUN LOG

INSTRUMENT ID: LCMSMS #1

Date: 04/12/10
Extr. Injection Volume: 50uL
Sequence Number: 041210expA
Initial Calibration Date: 04/12/10

Method: SW846 8321A-Modified
Int. Std.: UXX100324-02.3
Mobile Phase Lot#: 1296548, 1289686
Standard-Samp Reagent Lot#: 1299881, 1284736

Reviewed BY: Hnm
Date: 04/15/10
SOP: GL-OA-E-056 Rev.12
Alt Check Std. ID: WXX100412-07 & WXX100415-07

DataFile	Sample	Analyst	Injection Date	Batch	SDG	Dilution	Client	Comments	QC_Flag
EXP0412001a	XIBLK01	MAP	4/12/10 15:40			1		USE	B
EXP0412002a	XIBLK01	MAP	4/12/10 16:10			1		USE	B
EXP0412003a	WXXICAL-01	MAP	4/12/10 16:39			1		USE	I
EXP0412004a	WXXICAL-02	MAP	4/12/10 17:09			1		USE	I
EXP0412005a	WXXICAL-03	MAP	4/12/10 17:38			1		USE	I
EXP0412006a	WXXICAL-04	MAP	4/12/10 18:08			1		USE	I
EXP0412007a	WXXICAL-05	MAP	4/12/10 18:37			1		USE	I
EXP0412008a	WXXICAL-06	MAP	4/12/10 19:07			1		USE	I
EXP0412009a	XIBLK02	MAP	4/12/10 19:36			1		USE	B
EXP0412010a	WXXICV	MAP	4/12/10 20:06			1		USE	C
EXP0412011a	XIBLK03	MAP	4/12/10 20:35			1		USE	B
EXP0412012a	WXXCRI	MAP	4/12/10 21:04			1		USE	C
EXP0412013a	1202047525	MAP	4/12/10 21:34	955063	Various	2	LANL	USE	S
EXP0412014a	1202047526	MAP	4/12/10 22:04	955063	Various	2	LANL	USE	S
EXP0412015a	247332002	MAP	4/12/10 22:33	955063	10-1905	2	LANL	USE	S
EXP0412016a	1202047527	MAP	4/12/10 23:02	955063	10-1905	2	LANL	USE	S
EXP0412017a	1202047528	MAP	4/12/10 23:32	955063	10-1905	2	LANL	USE	S
EXP0412018a	247332003	MAP	4/13/10 0:01	955063	10-1905	2	LANL	USE	S
EXP0412019a	247332004	MAP	4/13/10 0:31	955063	10-1905	2	LANL	USE	S
EXP0412020a	247332005	MAP	4/13/10 1:00	955063	10-1905	2	LANL	USE	S
EXP0412021a	247332006	MAP	4/13/10 1:30	955063	10-1905	2	LANL	USE	S
EXP0412022a	247332007	MAP	4/13/10 1:59	955063	10-1905	2	LANL	USE	S
EXP0412023a	WXXCCV	MAP	4/13/10 2:29			1		USE	C
EXP0412024a	XIBLK04	MAP	4/13/10 2:58			1		USE	B
EXP0412025a	WXXCRI	MAP	4/13/10 3:28			1		USE	C
EXP0412026a	247332008	MAP	4/13/10 3:57	955063	10-1905	2	LANL	USE	S
EXP0412027a	247343001	MAP	4/13/10 4:27	955063	10-1908	2	LANL	USE	S
EXP0412028a	247343002	MAP	4/13/10 4:56	955063	10-1908	2	LANL	USE	S
EXP0412029a	247343003	MAP	4/13/10 5:26	955063	10-1908	2	LANL	USE	S
EXP0412030a	247343004	MAP	4/13/10 5:55	955063	10-1908	2	LANL	USE	S
EXP0412031a	247343005	MAP	4/13/10 6:25	955063	10-1908	2	LANL	USE	S

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EXP0412032a	247343006	MAP	4/13/10 6:54	955063	10-1908	2	LANL	USE	S
EXP0412033a	247343007	MAP	4/13/10 7:24	955063	10-1908	2	LANL	USE	S
EXP0412034a	247343008	MAP	4/13/10 7:53	955063	10-1908	2	LANL	USE	S
EXP0412035a	247343009	MAP	4/13/10 8:23	955063	10-1908	2	LANL	USE	S
EXP0412036a	WXXCCV	MAP	4/13/10 8:52			1		USE	C
EXP0412037a	XIBLK05	MAP	4/13/10 9:22			1		USE	B
EXP0412038a	WXXCRI	MAP	4/13/10 9:51			1		USE	C
EXP0412039a	247343010	MAP	4/13/10 10:21	955063	10-1908	2	LANL	USE	S
EXP0412040a	247343011	MAP	4/13/10 10:50	955063	10-1908	2	LANL	USE	S
EXP0412041a	XIBLK06	MAP	4/13/10 11:20			1		USE	B
EXP0412042a	1202052398	MAP	4/13/10 11:50	957196	10-1972	2	LANL	USE	S
EXP0412043a	1202052399	MAP	4/13/10 12:19	957196	10-1972	2	LANL	USE	S
EXP0412044a	247767001	MAP	4/13/10 12:49	957196	10-1972	2	LANL	USE	S
EXP0412045a	1202052400	MAP	4/13/10 13:18	957196	10-1972	2	LANL	USE	S
EXP0412046a	1202052401	MAP	4/13/10 13:48	957196	10-1972	2	LANL	USE	S
EXP0412047a	247767002	MAP	4/13/10 14:17	957196	10-1972	2	LANL	USE	S
EXP0412048a	247767003	MAP	4/13/10 14:47	957196	10-1972	2	LANL	USE	S
EXP0412049a	WXXCCV	MAP	4/13/10 15:16			1		USE	C
EXP0412050a	XIBLK07	MAP	4/13/10 15:46			1		USE	B
EXP0412051a	WXXCRI	MAP	4/13/10 16:15			1		USE	C
EXP0412052a	247767004	MAP	4/13/10 16:45	957196	10-1972	2	LANL	USE	S
EXP0412053a	247767005	MAP	4/13/10 17:14	957196	10-1972	2	LANL	USE	S
EXP0412054a	247767006	MAP	4/13/10 17:44	957196	10-1972	2	LANL	USE	S
EXP0412055a	247767007	MAP	4/13/10 18:13	957196	10-1972	2	LANL	USE	S
EXP0412056a	247767008	MAP	4/13/10 18:43	957196	10-1972	2	LANL	USE	S
EXP0412057a	247767009	MAP	4/13/10 19:12	957196	10-1972	2	LANL	USE	S
EXP0412058a	247767010	MAP	4/13/10 19:42	957196	10-1972	2	LANL	USE	S
EXP0412059a	247767011	MAP	4/13/10 20:11	957196	10-1972	2	LANL	USE	S
EXP0412060a	WXXCCV	MAP	4/13/10 20:41			1		USE	C
EXP0412061a	XIBLK08	MAP	4/13/10 21:10			1		USE	B
EXP0412062a	WXXCRI	MAP	4/13/10 21:40			1		USE	C
EXP0412063a	1202055078	MAP	4/13/10 22:09	958282	Various	2	LANL	USE	S
EXP0412064a	1202055079	MAP	4/13/10 22:39	958282	Various	2	LANL	DUSE	S
EXP0412065a	248017003	MAP	4/13/10 23:08	958282	10-2039	2	LANL	USE	S
EXP0412066a	1202055080	MAP	4/13/10 23:38	958282	10-2039	2	LANL	DUSE	S
EXP0412067a	1202055081	MAP	4/14/10 0:07	958282	10-2039	2	LANL	USE	S
EXP0412068a	248042002	MAP	4/14/10 0:37	958282	10-2057	2	LANL	USE	S
EXP0412069a	248042008	MAP	4/14/10 1:06	958282	10-2057	2	LANL	USE	S
EXP0412070a	248042010	MAP	4/14/10 1:36	958282	10-2057	2	LANL	DUSE	S

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EXP0412071a	248047003	MAP	4/14/10 2:05	958282	10-2045	2	LANL	USE	S
EXP0412072a	248047007	MAP	4/14/10 2:35	958282	10-2045	2	LANL	USE	S
EXP0412073a	WXXCCV	MAP	4/14/10 3:04			1		USE	C
EXP0412074a	XIBLK09	MAP	4/14/10 3:34			1		USE	B
EXP0412075a	WXXCRI	MAP	4/14/10 4:03			1		USE	C
EXP0412076a	1202055034	MAP	4/14/10 4:33	958262	10-2074	2	LANL	USE	S
EXP0412077a	1202055035	MAP	4/14/10 5:02	958262	10-2074	2	LANL	USE	S
EXP0412078a	248043001	MAP	4/14/10 5:32	958262	10-2074	2	LANL	USE	S
EXP0412079a	1202055036	MAP	4/14/10 6:01	958262	10-2074	2	LANL	USE	S
EXP0412080a	1202055037	MAP	4/14/10 6:31	958262	10-2074	2	LANL	USE	S
EXP0412081a	248043002	MAP	4/14/10 7:00	958262	10-2074	2	LANL	USE	S
EXP0412082a	XIBLK10	MAP	4/14/10 7:30			1		USE	B
EXP0412083a	248043003	MAP	4/14/10 7:59	958262	10-2074	2	LANL	USE	S
EXP0412084a	248043004	MAP	4/14/10 8:29	958262	10-2074	2	LANL	USE	S
EXP0412085a	XIBLK11	MAP	4/14/10 8:58			1		USE	B
EXP0412086a	WXXCCV	MAP	4/14/10 9:28			1		USE	C
EXP0412087a	XIBLK12	MAP	4/14/10 9:57			1		USE	B
EXP0412088a	WXXCRI	MAP	4/14/10 10:27			1		USE	C
EXP0412089a	248043005	MAP	4/14/10 10:56	958262	10-2074	2	LANL	USE	S
EXP0412090a	248043006	MAP	4/14/10 11:26	958262	10-2074	2	LANL	DUSE-RA	S
EXP0412091a	XIBLK13	MAP	4/14/10 11:55			1		USE	B
EXP0412092a	248043007	MAP	4/14/10 12:25	958262	10-2074	2	LANL	USE	S
EXP0412093a	248043008	MAP	4/14/10 12:54	958262	10-2074	2	LANL	DUSE-RA	S
EXP0412094a	248043009	MAP	4/14/10 13:24	958262	10-2074	2	LANL	USE	S
EXP0412095a	248043010	MAP	4/14/10 13:53	958262	10-2074	2	LANL	USE	S
EXP0412096a	248043011	MAP	4/14/10 14:23	958262	10-2074	2	LANL	USE	S
EXP0412097a	248043012	MAP	4/14/10 14:52	958262	10-2074	2	LANL	USE	S
EXP0412098a	XIBLK14	MAP	4/14/10 15:22			1		USE	B
EXP0412099a	WXXCCV	MAP	4/14/10 15:51			1		USE	C
EXP0412100a	XIBLK15	MAP	4/14/10 16:21			1		USE	B
EXP0412101a	WXXCRI	MAP	4/14/10 16:50			1		USE	C
EXP0412102a	248043013	MAP	4/14/10 17:20	958262	10-2074	2	LANL	USE	S
EXP0412103a	248043014	MAP	4/14/10 17:49	958262	10-2074	2	LANL	USE	S
EXP0412104a	248043015	MAP	4/14/10 18:19	958262	10-2074	2	LANL	USE	S
EXP0412105a	248043016	MAP	4/14/10 18:48	958262	10-2074	2	LANL	DUSE-RA	S
EXP0412106a	248043017	MAP	4/14/10 19:18	958262	10-2074	2	LANL	USE	S
EXP0412107a	248043018	MAP	4/14/10 19:47	958262	10-2074	2	LANL	USE	S
EXP0412108a	248043006	MAP	4/14/10 20:17	958262	10-2074	2	LANL	USE	S
EXP0412109a	248043008	MAP	4/14/10 20:46	958262	10-2074	2	LANL	USE	S

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EXP0412110a	WXXCCV	MAP	4/14/10 21:16			1		USE	C
EXP0412111a	XIBLK16	MAP	4/14/10 21:45			1		USE	B
EXP0412112a	WXXCRI	MAP	4/14/10 22:15			1		USE	C
EXP0412113a	1202055877	MAP	4/14/10 22:44	958603	Various	2	LANL	USE	S
EXP0412114a	1202055878	MAP	4/14/10 23:14	958603	Various	2	LANL	DUSE-RA	S
EXP0412115a	248102001	MAP	4/14/10 23:43	958603	10-2089	2	LANL	USE	S
EXP0412116a	1202055879	MAP	4/15/10 0:13	958603	10-2089	2	LANL	USE	S
EXP0412117a	1202055880	MAP	4/15/10 0:42	958603	10-2089	2	LANL	USE	S
EXP0412118a	248102002	MAP	4/15/10 1:12	958603	10-2089	2	LANL	USE	S
EXP0412119a	248102003	MAP	4/15/10 1:41	958603	10-2089	2	LANL	USE	S
EXP0412120a	248102004	MAP	4/15/10 2:11	958603	10-2089	2	LANL	USE	S
EXP0412121a	248102005	MAP	4/15/10 2:40	958603	10-2089	2	LANL	USE	S
EXP0412122a	248102006	MAP	4/15/10 3:10	958603	10-2089	2	LANL	USE	S
EXP0412123a	WXXCCV	MAP	4/15/10 3:39			1		USE	C
EXP0412124a	XIBLK17	MAP	4/15/10 4:09			1		USE	B
EXP0412125a	WXXCRI	MAP	4/15/10 4:38			1		USE	C
EXP0412126a	248102007	MAP	4/15/10 5:08	958603	10-2089	2	LANL	USE	S
EXP0412127a	248102008	MAP	4/15/10 5:37	958603	10-2089	2	LANL	USE	S
EXP0412128a	248114002	MAP	4/15/10 6:07	958603	10-2092	2	LANL	USE	S
EXP0412129a	248114003	MAP	4/15/10 6:36	958603	10-2092	2	LANL	USE	S
EXP0412130a	248114004	MAP	4/15/10 7:06	958603	10-2092	2	LANL	USE	S
EXP0412131a	248114005	MAP	4/15/10 7:35	958603	10-2092	2	LANL	USE	S
EXP0412132a	248114006	MAP	4/15/10 8:05	958603	10-2092	2	LANL	USE	S
EXP0412133a	248114007	MAP	4/15/10 8:34	958603	10-2092	2	LANL	USE	S
EXP0412134a	248114008	MAP	4/15/10 9:04	958603	10-2092	2	LANL	USE	S
EXP0412135a	WXXCCV	MAP	4/15/10 9:33			1		USE	C
EXP0412136a	XIBLK18	MAP	4/15/10 10:03			1		USE	B
EXP0412137a	WXXCRI	MAP	4/15/10 10:33			1		USE	C
EXP0412138a	248043016	MAP	4/15/10 11:02	958262	10-2074	2	LANL	USE	S
EXP0412139a	1202055878	MAP	4/15/10 11:32	958603	Various	2	LANL	USE	S
EXP0412140a	248102003	MAP	4/15/10 12:01	958603	10-2089	2	LANL	DUSE	S
EXP0412141a	WXXCCV	MAP	4/15/10 12:31			1		USE	C
EXP0412142a	XIBLK19	MAP	4/15/10 13:00			1		USE	B
EXP0412143a	WXXCRI	MAP	4/15/10 13:30			1		USE	C

GEL ORGANIC RUN LOG INSTRUMENT ID: LCMSMS4

Date: 04/02/10 Method: 8321A-Modified Reviewed By: [illegible]
Extr. Injection Volume: 10uL Int. Std.: N/A Date: 04/08/10
Sequence Number: 040210exs Mobile Phase Lot#:1268566, 1268568 SOP: GL-OA-E-056 Rev.12
Initial Calibration Date: 040210 Standard-Samp Reagent Lot# :1292884, 1284736 Alt Check Std. ID: WXX100402-26

DataFile	Sample	Analyst	Injection Date	Batch	SDG	Dilution	Client	Comments	QC Flag
EXS04020001.wiff	XIBLK01	LER	4/2/2010 14:27			1		USE	B
EXS04020002.wiff	XIBLK01	LER	4/2/2010 14:43			1		USE	B
EXS04020003.wiff	WXXICAL-19	LER	4/2/2010 14:59			1		USE	I
EXS04020004.wiff	WXXICAL-20	LER	4/2/2010 15:14			1		USE	I
EXS04020005.wiff	WXXICAL-21	LER	4/2/2010 15:30			1		USE	I
EXS04020006.wiff	WXXICAL-22	LER	4/2/2010 15:46			1		USE	I
EXS04020007.wiff	WXXICAL-23	LER	4/2/2010 16:01			1		USE	I
EXS04020008.wiff	WXXICAL-24	LER	4/2/2010 16:17			1		USE	I
EXS04020009.wiff	WXXICAL-25	LER	4/2/2010 16:33			1		USE	I
EXS04020010.wiff	XIBLK02	LER	4/2/2010 16:49			1		USE	B
EXS04020011.wiff	WXXICV	LER	4/2/2010 17:04			1		USE	C
EXS04020012.wiff	XIBLK03	LER	4/2/2010 17:20			1		USE	B
EXS04020013.wiff	WXXCRI	LER	4/2/2010 17:36			1		USE	C
EXS04020014.wiff	1202064570	LER	4/2/2010 17:51	962426	VARIOUS	2	LANL	USE	S
EXS04020015.wiff	1202064571	LER	4/2/2010 18:07	962426	VARIOUS	2	LANL	USE	S
EXS04020016.wiff	248620001	LER	4/2/2010 18:23	962426	10-2236	2	LANL	USE	S
EXS04020017.wiff	1202064572	LER	4/2/2010 18:38	962426	10-2236	2	LANL	USE	S
EXS04020018.wiff	1202064573	LER	4/2/2010 18:54	962426	10-2236	2	LANL	USE	S
EXS04020019.wiff	248620002	LER	4/2/2010 19:10	962426	10-2236	2	LANL	USE	S
EXS04020020.wiff	248620003	LER	4/2/2010 19:26	962426	10-2236	2	LANL	USE	S
EXS04020021.wiff	248620004	LER	4/2/2010 19:41	962426	10-2236	2	LANL	USE	S
EXS04020022.wiff	248620005	LER	4/2/2010 19:57	962426	10-2236	2	LANL	USE	S
EXS04020023.wiff	248620006	LER	4/2/2010 20:13	962426	10-2236	2	LANL	USE	S
EXS04020024.wiff	WXXCCV	LER	4/2/2010 20:28			1		USE	C
EXS04020025.wiff	XIBLK04	LER	4/2/2010 20:44			1		USE	B
EXS04020026.wiff	WXXCRI	LER	4/2/2010 21:00			1		USE	C
EXS04020027.wiff	248620007	LER	4/2/2010 21:15	962426	10-2236	2	LANL	USE	S
EXS04020028.wiff	248620008	LER	4/2/2010 21:31	962426	10-2236	2	LANL	USE	S
EXS04020029.wiff	248620009	LER	4/2/2010 21:47	962426	10-2236	2	LANL	USE	S
EXS04020030.wiff	248642002	LER	4/2/2010 22:03	962426	10-2239	2	LANL	USE	S

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EXS04020031.wiff	248642003	LER	4/2/2010 22:18	962426	10-2239	2	LANL	USE	S
EXS04020032.wiff	248642004	LER	4/2/2010 22:34	962426	10-2239	2	LANL	USE	S
EXS04020033.wiff	248642005	LER	4/2/2010 22:50	962426	10-2239	2	LANL	USE	S
EXS04020034.wiff	248642006	LER	4/2/2010 23:05	962426	10-2239	2	LANL	USE	S
EXS04020035.wiff	248642007	LER	4/2/2010 23:21	962426	10-2239	2	LANL	USE	S
EXS04020036.wiff	248642008	LER	4/2/2010 23:37	962426	10-2239	2	LANL	USE	S
EXS04020037.wiff	WXXCCV	LER	4/2/2010 23:53			1		USE	C
EXS04020038.wiff	XIBLK05	LER	4/3/2010 0:08			1		USE	B
EXS04020039.wiff	WXXCRI	LER	4/3/2010 0:24			1		USE	C
EXS04020040.wiff	248642009	LER	4/3/2010 0:40	962426	10-2239	2	LANL	USE	S
EXS04020041.wiff	XIBLK06	LER	4/3/2010 0:55			1		USE	B
EXS04020042.wiff	1202064590	LER	4/3/2010 1:11	962434	VARIOUS	2	LANL	USE	S
EXS04020043.wiff	1202064591	LER	4/3/2010 1:27	962434	VARIOUS	2	LANL	USE	S
EXS04020044.wiff	248646002	LER	4/3/2010 1:43	962434	10-2242	2	LANL	USE	S
EXS04020045.wiff	1202064592	LER	4/3/2010 1:58	962434	10-2242	2	LANL	USE	S
EXS04020046.wiff	1202064593	LER	4/3/2010 2:14	962434	10-2242	2	LANL	USE	S
EXS04020047.wiff	248646003	LER	4/3/2010 2:30	962434	10-2242	2	LANL	USE	S
EXS04020048.wiff	248646004	LER	4/3/2010 2:45	962434	10-2242	2	LANL	USE	S
EXS04020049.wiff	248646005	LER	4/3/2010 3:01	962434	10-2242	2	LANL	USE	S
EXS04020050.wiff	WXXCCV	LER	4/3/2010 3:17			1		USE	C
EXS04020051.wiff	XIBLK07	LER	4/3/2010 3:33			1		USE	B
EXS04020052.wiff	WXXCRI	LER	4/3/2010 3:48			1		USE	C
EXS04020053.wiff	248646006	LER	4/3/2010 4:04	962434	10-2242	2	LANL	USE	S
EXS04020054.wiff	248660002	LER	4/3/2010 4:20	962434	10-2244	2	LANL	USE	S
EXS04020055.wiff	248759001	LER	4/3/2010 4:35	962434	10-2280	2	LANL	USE	S
EXS04020056.wiff	248759002	LER	4/3/2010 4:51	962434	10-2280	2	LANL	USE	S
EXS04020057.wiff	248759004	LER	4/3/2010 5:07	962434	10-2280	2	LANL	USE	S
EXS04020058.wiff	248759005	LER	4/3/2010 5:23	962434	10-2280	2	LANL	USE	S
EXS04020059.wiff	248759006	LER	4/3/2010 5:38	962434	10-2280	2	LANL	USE	S
EXS04020060.wiff	248780002	LER	4/3/2010 5:54	962434	10-2283	2	LANL	USE	S
EXS04020061.wiff	248780003	LER	4/3/2010 6:10	962434	10-2283	2	LANL	USE	S
EXS04020062.wiff	248780004	LER	4/3/2010 6:25	962434	10-2283	2	LANL	USE	S
EXS04020063.wiff	WXXCCV	LER	4/3/2010 6:41			1		USE	C
EXS04020064.wiff	XIBLK08	LER	4/3/2010 6:57			1		USE	B
EXS04020065.wiff	WXXCRI	LER	4/3/2010 7:13			1		USE	C
EXS04020066.wiff	248780005	LER	4/3/2010 7:28	962434	10-2283	2	LANL	USE	S
EXS04020067.wiff	248780006	LER	4/3/2010 7:44	962434	10-2283	2	LANL	USE	S

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EXS04020068.wiff	248780007	LER	4/3/2010 8:00	962434	10-2283	2	LANL	USE	S
EXS04020069.wiff	248780008	LER	4/3/2010 8:15	962434	10-2283	2	LANL	USE	S
EXS04020070.wiff	248780009	LER	4/3/2010 8:31	962434	10-2283	2	LANL	USE	S
EXS04020071.wiff	WXXCCV	LER	4/3/2010 8:47			1		USE	C
EXS04020072.wiff	XIBLK09	LER	4/3/2010 9:03			1		USE	B
EXS04020073.wiff	WXXCRI	LER	4/3/2010 9:18			1		USE	C
EXS04020074.wiff	1202055877	LER	4/3/2010 9:34	958603	VARIOUS	2	LANL	USE	S
EXS04020075.wiff	1202055878	LER	4/3/2010 9:50	958603	VARIOUS	2	LANL	USE	S
EXS04020076.wiff	248102001	LER	4/3/2010 10:05	958603	10-2089	2	LANL	USE	S
EXS04020077.wiff	1202055879	LER	4/3/2010 10:21	958603	10-2089	2	LANL	USE	S
EXS04020078.wiff	1202055880	LER	4/3/2010 10:37	958603	10-2089	2	LANL	USE	S
EXS04020079.wiff	248102002	LER	4/3/2010 10:53	958603	10-2089	2	LANL	USE	S
EXS04020080.wiff	248102003	LER	4/3/2010 11:08	958603	10-2089	2	LANL	USE	S
EXS04020081.wiff	248102004	LER	4/3/2010 11:24	958603	10-2089	2	LANL	USE	S
EXS04020082.wiff	248102005	LER	4/3/2010 11:40	958603	10-2089	2	LANL	USE	S
EXS04020083.wiff	248102006	LER	4/3/2010 11:55	958603	10-2089	2	LANL	USE	S
EXS04020084.wiff	WXXCCV	LER	4/3/2010 12:11			1		USE	C
EXS04020085.wiff	XIBLK09	LER	4/3/2010 12:27			1		USE	B
EXS04020086.wiff	WXXCRI	LER	4/3/2010 12:42			1		USE	C
EXS04020087.wiff	248102007	LER	4/3/2010 12:58	958603	10-2089	2	LANL	USE	S
EXS04020088.wiff	248102008	LER	4/3/2010 13:14	958603	10-2089	2	LANL	USE	S
EXS04020089.wiff	248114002	LER	4/3/2010 13:30	958603	10-2092	2	LANL	USE	S
EXS04020090.wiff	248114003	LER	4/3/2010 13:45	958603	10-2092	2	LANL	USE	S
EXS04020091.wiff	248114004	LER	4/3/2010 14:01	958603	10-2092	2	LANL	USE	S
EXS04020092.wiff	248114005	LER	4/3/2010 14:17	958603	10-2092	2	LANL	USE	S
EXS04020093.wiff	248114006	LER	4/3/2010 14:32	958603	10-2092	2	LANL	USE	S
EXS04020094.wiff	248114007	LER	4/3/2010 14:48	958603	10-2092	2	LANL	USE	S
EXS04020095.wiff	248114008	LER	4/3/2010 15:04	958603	10-2092	2	LANL	USE	S
EXS04020096.wiff	WXXCCV	LER	4/3/2010 15:19			1		USE	C
EXS04020097.wiff	XIBLK10	LER	4/3/2010 15:35			1		USE	B
EXS04020098.wiff	WXXCRI	LER	4/3/2010 15:51			1		USE	C

Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

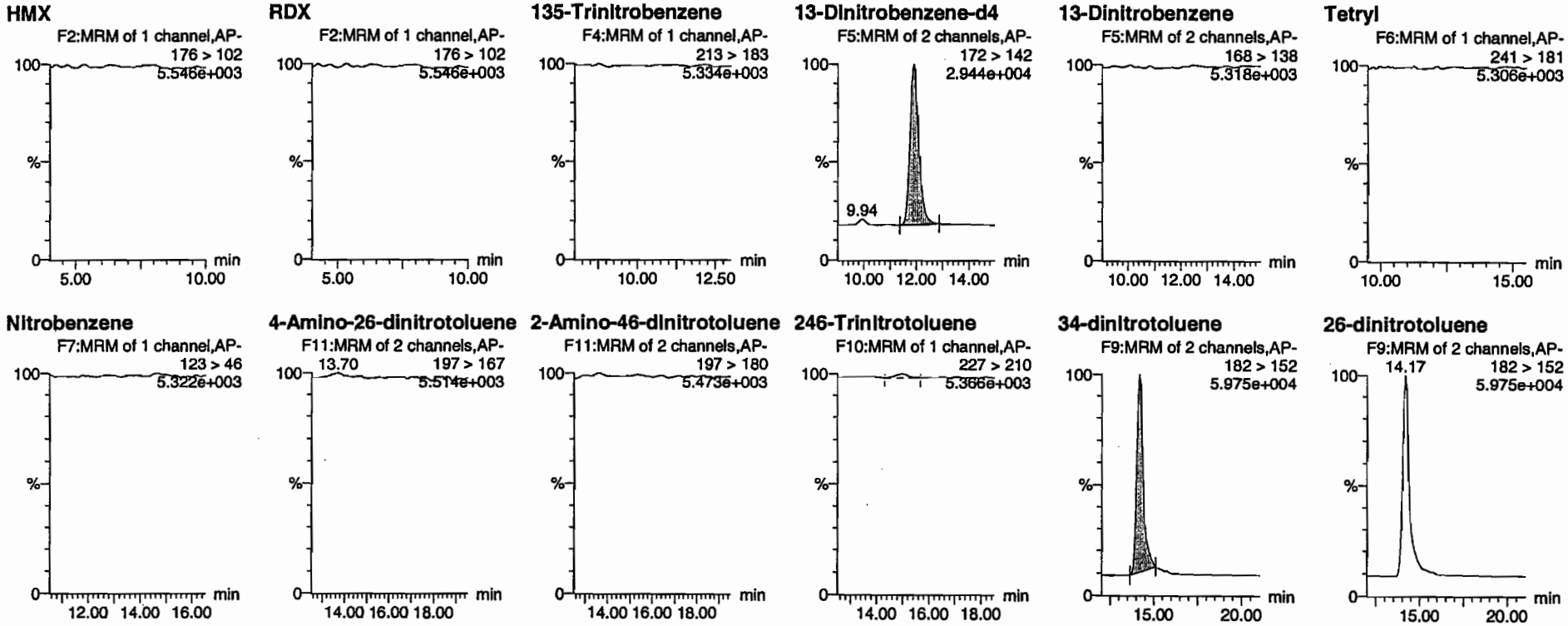
Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA2.qld, Time: Thu Apr 15 14:49:38 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0412140a
Date: 15-Apr-2010
Time: 12:01:36
ID: 248102003 | LANU | 958603 | Solid | 2 |
Vial: 3:6,A

MATT 4/15/10

DUPE – CONFIRMS EXP0412119a

1284



HMM 04/15/10

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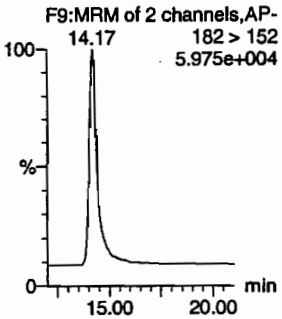
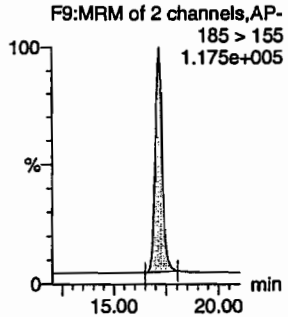
Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\041210expA2.qld, Time: Thu Apr 15 14:49:38 2010

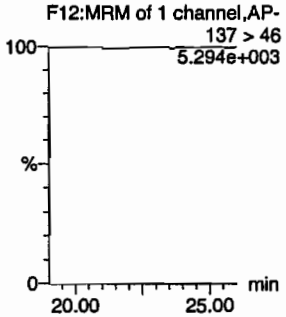
24-dinitrotoluene



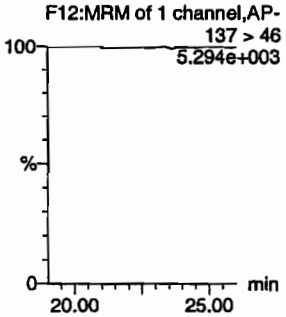
26-dinitrotoluene-d3



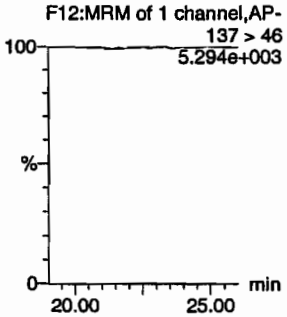
2-Nitrotoluene



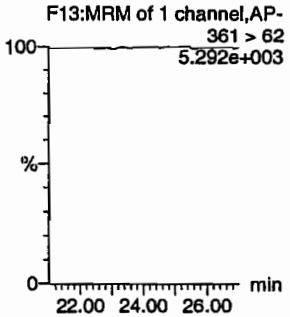
4-Nitrotoluene



3-Nitrotoluene



PETN



ID	Name	Trace	RT	Area	IS Area	Abs Resp	Response	Flags	Mod Date	Mod Time	ng/mL	%Rec	%Dev	S/N
248102003	HMX	176 > 102			9236.539									
248102003	RDX	176 > 102			9236.539									
248102003	135-Trinitrobenzene	213 > 183			9236.539									
248102003	13-Dinitrobenzene-d4	172 > 142	11.89	9236.539		9236.539	9236.539	bb			785.3714	157.1	57.1	247.3
248102003	13-Dinitrobenzene	168 > 138			9236.539									
248102003	Tetryl	241 > 181			9236.539									
248102003	Nitrobenzene	123 > 46			9236.539									
248102003	4-Amino-26-dinitrotoluene	197 > 167			43776.973									
248102003	2-Amino-46-dinitrotoluene	197 > 180			43776.973									
248102003	246-Trinitrotoluene	227 > 210			43776.973			MM-	15-Apr-10	14:36:50				
248102003	34-dinitrotoluene	182 > 152	14.17	22593.582	43776.973	22593.582	258.053	bb			250.2631	100.1	0.1	447.1
248102003	26-dinitrotoluene	182 > 152			43776.973									
248102003	24-dinitrotoluene	182 > 152			43776.973									
248102003	26-dinitrotoluene-d3	185 > 155	17.16	43776.973		43776.973	43776.973	bb			625.6860	125.1	25.1	4351.0
248102003	2-Nitrotoluene	137 > 46			43776.973									
248102003	4-Nitrotoluene	137 > 46			43776.973									
248102003	3-Nitrotoluene	137 > 46			43776.973									
248102003	PETN	361 > 62			43776.973									

GEL SOP GL-OA-E-056, Method 8321A-Modified / MM = Manual Modification

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GEL Laboratories LLC
Form GEL-DER

DER Report No.: 817810
Revision No.: 1

DATA EXCEPTION REPORT

Mo.Day Yr.	Division:	Quality Criteria:	Type:
15-APR-10	Industrial	Specifications	Process
Instrument Type:	**Test / Method:**	**Matrix Type:**	**Client Code:**
LC-MS/MS	SW846 8321A Modified	Solid	LANL
Batch ID:	**Sample Numbers:**		
958603	See Below		

Potentially affected work order(s)(SDG): 248102(10-2089),248114(10-2092)

Application Issues:

Sample Analyzed out of Holding

Other

Failed Recovery for LCS/LCSD

Specification and Requirements Exception Description:	DER Disposition:
1. The following samples and QC were analyzed out of holding for the Primary analyte analysis: 248102001, 248102002, 248102003, 248102004, 248102005, 248102006, 248102007, 248102008, 248114002, 248114003, 248114004, 248114005, 248114006, 248114007, 248114008, 1202055879(MS) and 1202055880(MSD).	1. The analytical holding times for the samples in this batch were exceeded due to limitations of instrument capacity. However, these samples were analyzed within two times the analytical holding time of the method. The client was notified of this situation and is in agreement to receive these qualified data. The data are reported with the appropriate DER. The discrepancies are noted in the case narrative.
2. The LCS (1202055878) did not meet spike recovery limits for Tetryl at 38.7%. The recovery limits are 51-112%.	2. Since both the MS and MSD met acceptance limits for Tetryl, the data are reported with the appropriate DER. The discrepancy is noted in the case narrative.
3.The MSD recovered 2-Amino-4,6-dinitrotoluene at 84.4%. The limits are 85-137%. The MSD recovered 3-Nitrotoluene at 64.2%. The limits are 70-120%.	3. The LCS passed recovery for both of these analytes. The data are reported.
4. The internal standard responses were outside of the acceptance criteria in the following samples: 248102001, 248102003, 1202055879(MS) and 1202055880(MSD). Please see the Form 8 in the data package for the exact recoveries.	4. Sample 248102003 was re-analyzed and similar recoveries were observed. The initial analysis data are reported with the appropriate DER. The confirmation raw data are located in the Miscellaneous Section of the data package. Since similar recoveries were obtained between sample 248102001 and the associated matrix spikes, the noted exceptions are attributed to sample matrix interference. Sample re-analysis was not required and the data are reported with the appropriate DER. The discrepancies are noted in the case narrative.

Originator's Name:

Michael Penny 15-APR-10

Data Validator/Group Leader:

Herbert Maier 16-APR-10

GC SEMIVOLATILE PCB ANALYSIS

PCB Case Narrative
Los Alamos National Laboratory (LANL)
SDG 10-2089

Method/Analysis Information

Procedure:	**Analysis of Polychlorinated Biphenyls by ECD**
Analytical Method:	SW846 8082
Prep Method:	SW846 3550B
Analytical Batch Number:	961902
Prep Batch Number:	961901

Sample Analysis

The following samples were analyzed using the analytical protocol as established in SW846 8082:

Sample ID	Client ID
248102001	RE15-10-8404
1202063216	Method Blank (MB)
1202063217	Laboratory Control Sample (LCS)
1202063218	248253001(WST01-10-13669) Matrix Spike (MS)
1202063219	248253001(WST01-10-13669) 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 inversed in Target, so that the instrument response is treated as the independent variable (x) and the concentration ratio is treated as the dependent variable (y). The equation used in Target to calculate sample results is adjusted to account for the linear equation inversion and reciprocal slope. The adjusted calculation has been independently verified to produce valid results.

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

One of the five quantified peaks did not meet the acceptance criteria in Aroclor-1242 and Aroclor-1260 standards analyzed for this SDG; however, the average concentration of the five quantitated peaks met the acceptance criteria.

Quality Control (QC) Information

Method Blank (MB) Statement
The MB analyzed with this SDG met the acceptance criteria. The Method Blank contained a detection of Aroclor-1242 (below the PQL).

Surrogate Recoveries
All surrogate recoveries were within the established acceptance criteria for this SDG.

Laboratory Control Sample (LCS) Recovery
The LCS spike recoveries met the acceptance limits.

QC Sample Designation
A LANL sample of similar matrix associated with another SDG (#10-2143) 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 recovery was not within the established acceptance limits due to dilution and matrix interference.

Matrix Spike Duplicate (MSD) Recovery Statement
The MSD recovery was not within the established acceptance limits due to dilution and matrix interference.

MS/MSD Relative Percent Difference (RPD) Statement
The RPD between the MS and MSD was not within the required acceptance limits due to dilution and matrix interference.

Technical Information

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

Preparation/Analytical Method Verification
All procedures were performed as stated in the SOP. All sample extracts were cleaned using alumina. Additionally, copper was added to all sample extracts to remove sulfur.

Sample Dilutions
Sample 248102001 (RE15-10-8404) was diluted at 1:5 due to the oily matrix of the extract.

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 reports (DERs) are for documentation of any procedural anomalies that may deviate from referenced SOP or contractual document. A DER was not required for this SDG.

Manual Integrations

Certain standards and samples may have required manual integration to correctly position the baseline as set in the calibration standard injections. If manual integration was performed, copies of all manual integration peak profiles are included in the raw data section of this PCB fraction.

Additional Comments

The additional comments field is used to address special issues associated with each analysis, clarify method/contractual issues pertaining to the analysis, and to list any report documents generated as a result of sample analysis or review. The following additional comments were required:

The higher results from either column have been chosen and reported in the data package for the client samples, MB and LCS.

The data reported on the form I and III may differ slightly from the data reported on the form X. This is due to software limitations in rounding differences between the forms.

Aroclors quantitated on the raw data report by the Target data system do not necessarily represent positive Aroclor identification. In order for positive identification to be made, the Aroclor must match in pattern and retention time; as well as quantitate relatively close between the primary and confirmation columns, as specified in SW846 method 8000. When these conditions are not met, the Aroclor is reported as a non-detect on the data report. These situations will be noted on the raw data as DMP, representing does not match pattern, or DNC does not confirm.

Due to software limitation, the Form VIIs will display the results either in the % difference or % drift depending on the type of the calibration curve. If the curve of all analytes is generated using an average response factor (RF), the Form VII will display results using the %difference calculation (RF). If the curve of one or more analytes is generated using a linear curve, the Form VII will display results using the % drift calculation (by concentration) for all analytes.

System Configuration

The Semi-Volatiles-PCB analysis was performed on the following instrument configuration:

Instrument ID	Instrument	System Configuration	Column ID	Column Description
ECD1A.I_1	HP Gas Chromatograph	HP6890 Series ECD	Rtx-CLP I	30m x 0.25mm, 0.25um (Rtx-CLPesticide)
ECD1A.I_2	HP Gas Chromatograph	HP6890 Series ECD	Rtx-CLP II	30m x 0.25mm, 0.20um (Rtx-CLPesticideII)

Certification Statement

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

Review Validation

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

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

Reviewer: _____ Date: 03-25-10

Roadmap for LANL 10-2089 PCB

This roadmap was analyzed by yip00818 on 03-09-2010, 11:52.
This roadmap was reviewed by jim01140 on 03-09-2010, 14:36.
This roadmap was packaged by yml on 03-25-2010, 09:50.

Front Sample Column

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	prepbatchid	comment
☐	N	/chem/ecd1a.i/030810.b/058f5801.d	248102001	sample	08-MAR-2010	17:00	10-2089.sub	RE15-10-8404	5.00000	961902	UPLOAD BOTH COLUMNS, USE HIGHER

Back Sample Column

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	prepbatchid	comment
☐	N	/chem/ecd1a.i/030810.b/058b5801.d	248102001	sample	08-MAR-2010	17:00	10-2089.sub	RE15-10-8404	5.00000	961902	UPLOAD BOTH COLUMNS, USE HIGHER

Front QC Sample Column

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	prepbatchid	comment
☐	N	/chem/ecd1a.i/030810.b/038f3801-2.d	1202063216	mb	08-MAR-2010	13:00	10-2089.sub	PBLK01	1.00000	961902	
☐	N	/chem/ecd1a.i/030810.b/039f3901-2.d	1202063217	lcs	08-MAR-2010	13:10	10-2089.sub	PBLK01LCS	1.00000	961902	

Back QC Sample Column

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	prepbatchid	comment
☐	N	/chem/ecd1a.i/030810.b/038b3801-2.d	1202063216	mb	08-MAR-2010	13:00	10-2089.sub	PBLK01	1.00000	961902	
☐	N	/chem/ecd1a.i/030810.b/039b3901-2.d	1202063217	lcs	08-MAR-2010	13:10	10-2089.sub	PBLK01LCS	1.00000	961902	

SAMPLE DATA SUMMARY

PCB
Certificate of Analysis
Sample Summary

SDG Number:	**10–2089**	**Date Collected:**	**02/22/2010 12:00**	**Matrix:**	**R**
Lab Sample ID:	**248102001**	**Date Received:**	**02/26/2010 08:45**	**%Moisture:**	**9.4**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE15–10–8404**	**Method:**	**SW846 8082**	**SOP Ref:**	**GL–OA–E–040**
Batch ID:	**961902**	**Inst:**	**ECD1A.I**	**Dilution:**	**5**
Run Date:	**03/08/2010 17:00**	**Analyst:**	**YS1**	**Inj. Vol:**	**1 uL**
Prep Date:	**03/07/2010 11:43**	**Aliquot:**	**30.16 g**	**Final Volume:**	**1 mL**
Data File:	**058f5801.d**	**Column:**	**1 CLP1**	**Level:**	**LOW**
	058b5801.d		**2 CLP2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	18.3	ug/kg	6.10	18.3	1
11104–28–2	Aroclor–1221	U	18.3	ug/kg	6.10	18.3	1
11141–16–5	Aroclor–1232	U	18.3	ug/kg	6.10	18.3	1
53469–21–9	Aroclor–1242	U	18.3	ug/kg	6.10	18.3	1
12672–29–6	Aroclor–1248	U	18.3	ug/kg	6.10	18.3	1
11097–69–1	Aroclor–1254	U	18.3	ug/kg	6.10	18.3	1
11096–82–5	Aroclor–1260	U	18.3	ug/kg	6.10	18.3	1

QUALITY CONTROL SUMMARY

PCB

Surrogate Recovery Report

SDG Number: 10–2089

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 #	
1202063216	MB for batch 961901	64		63		60		69	
1202063217	LCS for batch 961901	61		60		60		64	
248102001	RE15–10–8404	73	D	74	D	70	D	88	D

Surrogate		Acceptance Limits
4CMX	= 4cmx	(32%–120%)
DCB	= Decachlorobiphenyl	(30%–116%)

* Recovery outside Acceptance Limits

\# Column to be used to flag recovery values

D Sample Diluted

PCB

Quality Control Summary
Spike Recovery Report

SDG Number: **10–2089**
Client ID: **LCS for batch 961901**
Lab Sample ID: **1202063217**
Instrument: **ECD1A.I**
Analyst: **YS1**
Inj. Vol: **1 uL**

Sample Type: **Laboratory Control Sample**
Matrix: **SOIL**
Analysis Date: **03/08/2010 13:10**
Dilution: **1**
Prep Batch ID: **961901**
Batch ID: **961902**

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	22.3	67	39–102
11096–82–5	LCS	Aroclor–1260	33.3	0.0	26.4	79	45–118

PCB

Quality Control Summary
Spike Recovery Report

SDG Number: 10-2143
Client ID: WST01-10-13669MS
Lab Sample ID: 1202063218
Instrument: ECD1A.I
Analyst: YS1
Inj. Vol: 1 uL

Sample Type: Matrix Spike
Matrix: S
%Moisture: 18.3
Analysis Date: 03/08/2010 13:33
Prep Batch ID: 961901
Batch ID: 961902

Dilution: 20

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits
12674-11-2	MS	Aroclor-1016	40.7	0.00	U	48.2	119	23-119
11096-82-5	MS	Aroclor-1260	40.7	926	P	265	-1625 *	28-124

Quality Control Summary
Spike Recovery Report

SDG Number:	**10-2143**	**Sample Type:**	**Matrix Spike Duplicate**
Client ID:	**WST01-10-13669MSD**	**Matrix:**	**S**
Lab Sample ID:	**1202063219**	**%Moisture:**	**18.3**
Instrument:	**ECD1A.I**	**Analysis Date:**	**03/08/2010 13:46**
Analyst:	**YS1**	**Prep Batch ID:**	**961901**
Inj. Vol:	**1 uL**	**Batch ID:**	**961902**

Dilution: 20

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	40.6	0.00	U	94.6	233 *	23-119	65 *	0-28
11096-82-5	MSD Aroclor-1260	40.6	926	P	550	-926 *	28-124	70 *	0-30

Method Blank Summary

SDG Number:	10-2089	Client:	LANL010	Matrix:	SOIL
Client ID:	MB for batch 961901	Instrument ID:	ECD1A.I_2 ECD1A.I_1	Data File:	038b3801-1.d 038f3801-1.d
Lab Sample ID:	1202063216				
Column:	CLP2 CLP1	Prep Date:	03/07/2010 11:43	Analyzed:	03/08/10 13:00
		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 961901	1202063217	039f3901-1.d 039b3901-1.d	03/08/10	1310
04 RE15-10-8404	248102001	058f5801.d 058b5801.d	03/08/10	1700

SAMPLE DATA

PCB
Certificate of Analysis
Sample Summary

SDG Number:	**10–2089**	**Date Collected:**	**02/22/2010 12:00**	**Matrix:**	**R**
Lab Sample ID:	**248102001**	**Date Received:**	**02/26/2010 08:45**	**%Moisture:**	**9.4**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE15–10–8404**	**Method:**	**SW846 8082**	**SOP Ref:**	**GL–OA–E–040**
Batch ID:	**961902**	**Inst:**	**ECD1A.I**	**Dilution:**	**5**
Run Date:	**03/08/2010 17:00**	**Analyst:**	**YS1**	**Inj. Vol:**	**1 uL**
Prep Date:	**03/07/2010 11:43**	**Aliquot:**	**30.16 g**	**Final Volume:**	**1 mL**
Data File:	**058f5801.d**	**Column:**	**1 CLP1**	**Level:**	**LOW**
	058b5801.d		**2 CLP2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	18.3	ug/kg	6.10	18.3	1
11104–28–2	Aroclor–1221	U	18.3	ug/kg	6.10	18.3	1
11141–16–5	Aroclor–1232	U	18.3	ug/kg	6.10	18.3	1
53469–21–9	Aroclor–1242	U	18.3	ug/kg	6.10	18.3	1
12672–29–6	Aroclor–1248	U	18.3	ug/kg	6.10	18.3	1
11097–69–1	Aroclor–1254	U	18.3	ug/kg	6.10	18.3	1
11096–82–5	Aroclor–1260	U	18.3	ug/kg	6.10	18.3	1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/030810.b/058f5801.d
Lab Smp Id: 248102001 Client Smp ID: RE15-10-8404
Inj Date : 08-MAR-2010 17:00
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |248102001|5|
Misc Info : |ECD82P_1S|961902|2|SVA|LANL|SOIL|RE15-10-8404|||
Comment :
Method : /chem/ecd1a.i/030810.b/ECD1-F-8082-022210.m
Meth Date : 09-Mar-2010 06:38 yip00818 Quant Type: ESTD
Cal Date : 22-FEB-2010 12:08 Cal File: 036f3601.d
Als bottle: 58
Dil Factor: 5.00000
Integrator: Falcon Compound Sublist: 10-2089.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	5.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.16000	Weight of sample extracted (g)
M	9.44350	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.917	1.917	0.000	12504733	29.0378	5.3	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.221	5.223	-0.002	8556088	27.8438	5.1	80.00- 120.00	100.00

Data File: /chem/ecd1a.i/030810.b/058f5801.d

Date : 08-MAR-2010 17:00

Client ID: RE15-10-8404

Sample Info: |248102001|5|

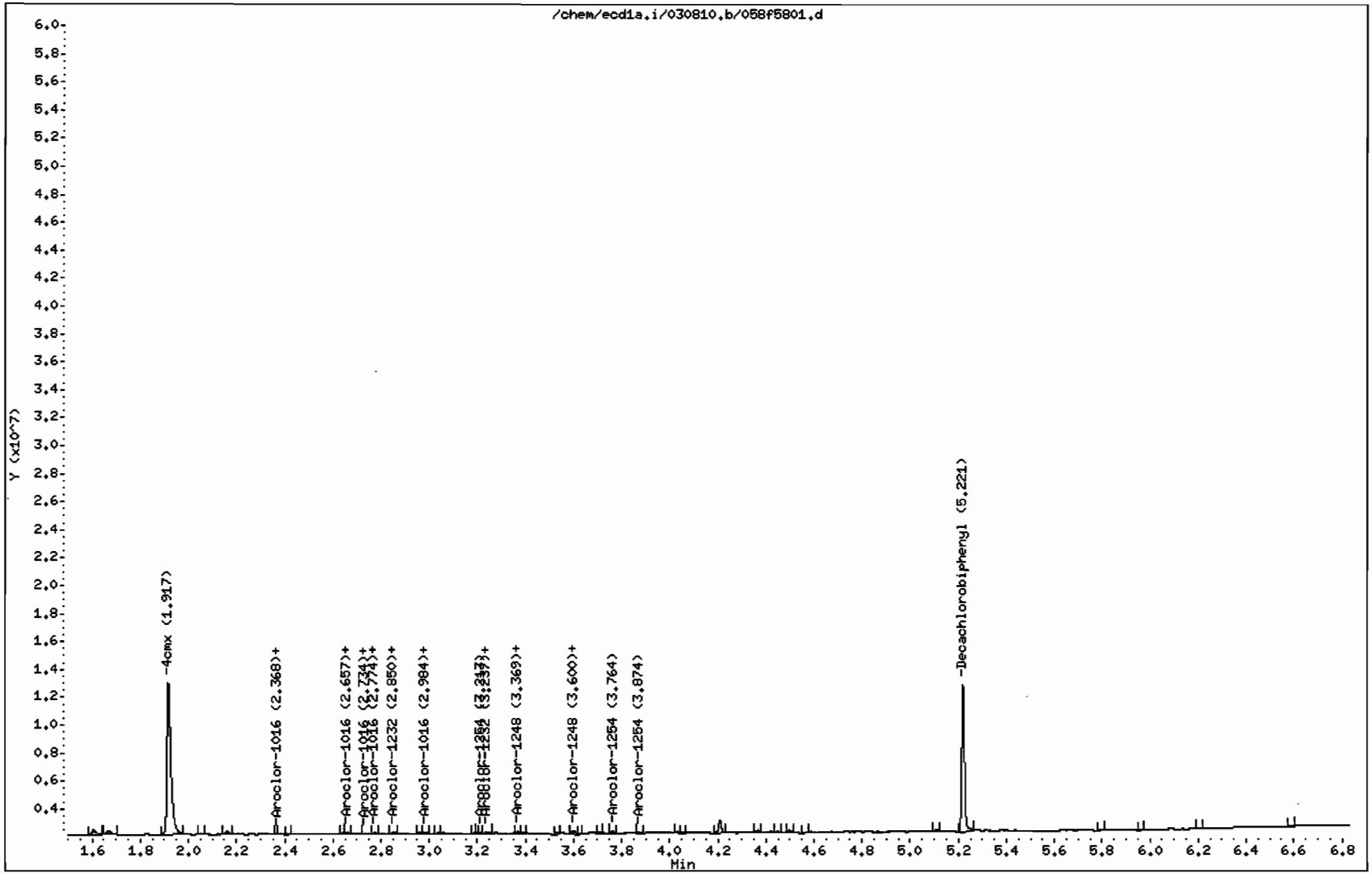
Volume Injected (uL): 1.0

Column phase: CLP1

Instrument: ecd1a.i

Operator: YS1

Column diameter: 0.25



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RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/030810.b/058b5801.d
Lab Smp Id: 248102001 Client Smp ID: RE15-10-8404
Inj Date : 08-MAR-2010 17:00
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |248102001|5|
Misc Info : |ECD82P_1S|961902|2|SVA|LANL|SOIL|RE15-10-8404|||
Comment :
Method : /chem/ecd1a.i/030810.b/ECD1-B-8082-022210.m
Meth Date : 12-Mar-2010 08:48 jc Quant Type: ESTD
Cal Date : 22-FEB-2010 12:08 Cal File: 036b3601.d
Als bottle: 58
Dil Factor: 5.00000
Integrator: Falcon Compound Sublist: 10-2089.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: kilroy

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

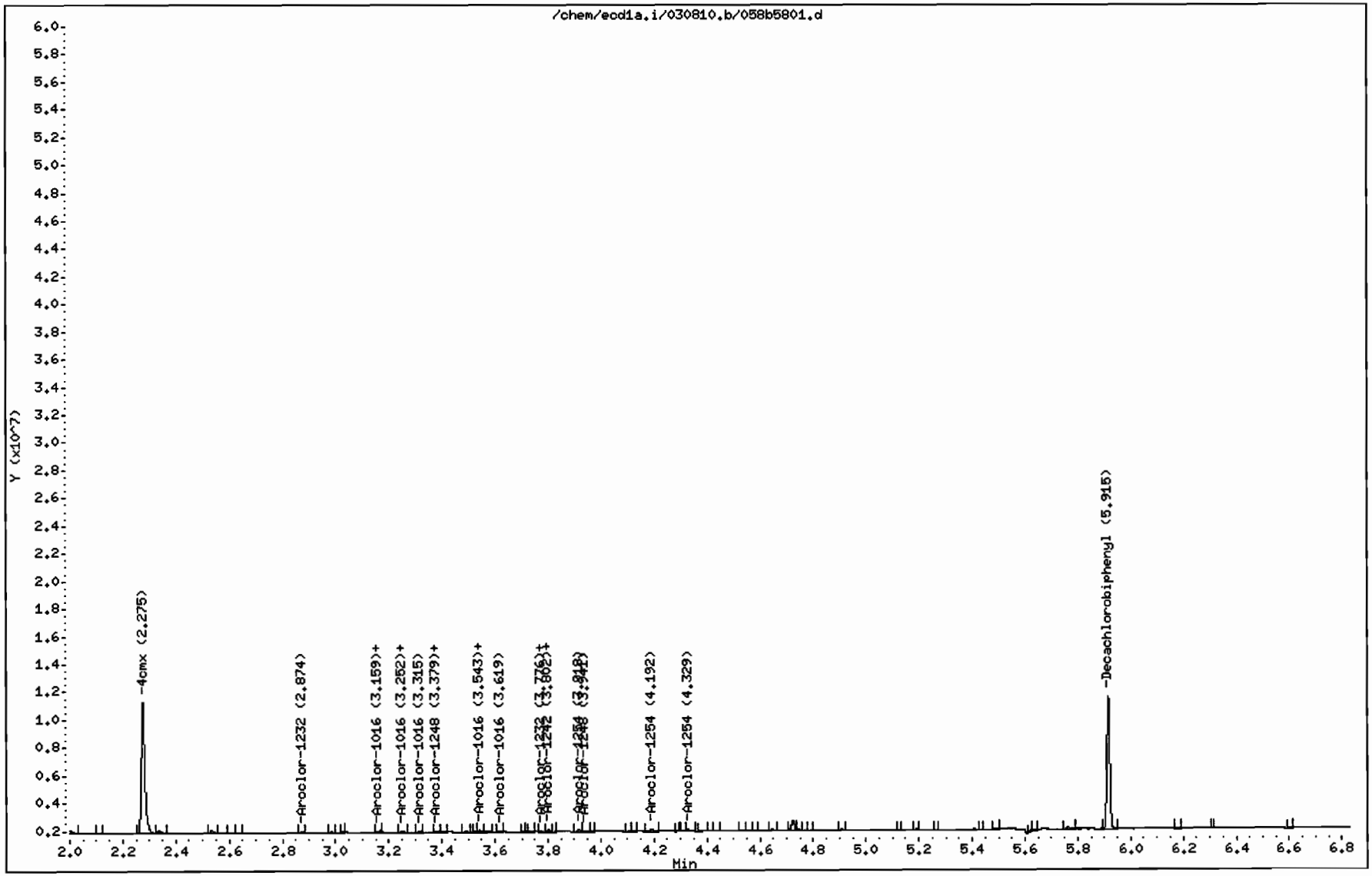
Name	Value	Description
DF	5.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.16000	Weight of sample extracted (g)
M	9.44350	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.275	2.277	-0.002	8841122	29.7284	5.4	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.915	5.918	-0.003	7474769	35.3420	6.5	80.00- 120.00	100.00

Data File: /chem/ecd1a.i/030810.b/058b5801.d
Date : 08-MAR-2010 17:00
Client ID: RE15-10-8404
Sample Info: |248102001|5|
Volume Injected (uL): 1.0
Column phase: CLP2

Instrument: ecd1a.i
Operator: YS1
Column diameter: 0.25



STANDARDS DATA

Report Date: 09-Mar-2010 07:33

Calibration History

Method : /chem/ecd1a.i/030810.b/ECD1-F-8082-022210.m
Start Cal Date: 22-FEB-2010 06:31
End Cal Date : 24-FEB-2010 02:39

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
22-FEB-2010 10:23	AR1248	/chem/ecd1a.i/022210.b/026f2601.d
22-FEB-2010 09:20	AR1242	/chem/ecd1a.i/022210.b/020f2001.d
22-FEB-2010 08:16	AR1254	/chem/ecd1a.i/022210.b/014f1401.d
22-FEB-2010 07:13	AR1660	/chem/ecd1a.i/022210.b/008f0801.d
Cal Level: 2 , Cal Amount: 250.00000		
22-FEB-2010 11:37	AR1268	/chem/ecd1a.i/022210.b/033f3301.d
22-FEB-2010 10:33	AR1248	/chem/ecd1a.i/022210.b/027f2701.d
22-FEB-2010 09:30	AR1242	/chem/ecd1a.i/022210.b/021f2101.d
22-FEB-2010 08:27	AR1254	/chem/ecd1a.i/022210.b/015f1501.d
22-FEB-2010 07:24	AR1660	/chem/ecd1a.i/022210.b/009f0901.d
Cal Level: 3 , Cal Amount: 500.00000		
22-FEB-2010 11:47	AR1268	/chem/ecd1a.i/022210.b/034f3401.d
22-FEB-2010 10:44	AR1248	/chem/ecd1a.i/022210.b/028f2801.d
22-FEB-2010 09:41	AR1242	/chem/ecd1a.i/022210.b/022f2201.d
22-FEB-2010 08:37	AR1254	/chem/ecd1a.i/022210.b/016f1601.d
22-FEB-2010 07:34	AR1660	/chem/ecd1a.i/022210.b/010f1001.d
Cal Level: 4 , Cal Amount: 1000.00000		
22-FEB-2010 11:58	AR1268	/chem/ecd1a.i/022210.b/035f3501.d
22-FEB-2010 11:05	AR1248	/chem/ecd1a.i/022210.b/030f3001.d
22-FEB-2010 09:51	AR1242	/chem/ecd1a.i/022210.b/023f2301.d
22-FEB-2010 08:48	AR1254	/chem/ecd1a.i/022210.b/017f1701.d
22-FEB-2010 07:45	AR1660	/chem/ecd1a.i/022210.b/011f1101.d
22-FEB-2010 07:03	AR1262	/chem/ecd1a.i/022210.b/007f0701.d
22-FEB-2010 06:52	AR1221	/chem/ecd1a.i/022210.b/006f0601.d
22-FEB-2010 06:41	AR1232	/chem/ecd1a.i/022210.b/005f0501.d
22-FEB-2010 06:31	DDTANALOGSTD	/chem/ecd1a.i/022210.b/004f0401.d
Cal Level: 5 , Cal Amount: 4000.00000		
22-FEB-2010 12:08	AR1268	/chem/ecd1a.i/022210.b/036f3601.d
22-FEB-2010 10:54	AR1248	/chem/ecd1a.i/022210.b/029f2901.d
22-FEB-2010 10:02	AR1242	/chem/ecd1a.i/022210.b/024f2401.d
22-FEB-2010 08:59	AR1254	/chem/ecd1a.i/022210.b/018f1801.d
22-FEB-2010 07:55	AR1660	/chem/ecd1a.i/022210.b/012f1201.d

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 4

Ccal Level: 4 , Ccal Amount: 1000		
08-MAR-2010 18:28	AR1660	/chem/ecd1a.i/030810.b/065f6501.d
Ccal Level: 4 , Ccal Amount: 1000		
08-MAR-2010 16:01	AR1660	/chem/ecd1a.i/030810.b/053f5301.d
Ccal Level: 4 , Ccal Amount: 1000		
08-MAR-2010 14:11	AR1660	/chem/ecd1a.i/030810.b/044f4401.d
Ccal Level: 4 , Ccal Amount: 1000		
08-MAR-2010 12:39	AR1660	/chem/ecd1a.i/030810.b/036f3601.d
Ccal Level: 4 , Ccal Amount: 1000		
08-MAR-2010 11:44	AR1660	/chem/ecd1a.i/030810.b/031f3101.d
Ccal Level: 4 , Ccal Amount: 1000		
08-MAR-2010 09:55	AR1660	/chem/ecd1a.i/030810.b/022f2201.d
Ccal Level: 4 , Ccal Amount: 1000		
08-MAR-2010 07:17	AR1262	/chem/ecd1a.i/030810.b/009f0901.d
Ccal Level: 4 , Ccal Amount: 1000		
08-MAR-2010 07:07	AR1221	/chem/ecd1a.i/030810.b/008f0801.d
Ccal Level: 4 , Ccal Amount: 1000		
08-MAR-2010 06:56	AR1232	/chem/ecd1a.i/030810.b/007f0701.d
Ccal Level: 4 , Ccal Amount: 1000		
08-MAR-2010 06:46	AR1268	/chem/ecd1a.i/030810.b/006f0601.d
Ccal Level: 4 , Ccal Amount: 1000		
08-MAR-2010 06:35	AR1248	/chem/ecd1a.i/030810.b/005f0501.d
Ccal Level: 4 , Ccal Amount: 1000		
08-MAR-2010 06:25	AR1242	/chem/ecd1a.i/030810.b/004f0401.d
Ccal Level: 4 , Ccal Amount: 1000		
08-MAR-2010 06:14	AR1254	/chem/ecd1a.i/030810.b/003f0301.d
Ccal Level: 4 , Ccal Amount: 1000		
08-MAR-2010 06:04	AR1660	/chem/ecd1a.i/030810.b/002f0201.d

Report Date: 09-Mar-2010 07:33

Calibration History

Method : /chem/ecd1a.i/030810.b/ECD1-B-8082-022210.m
Start Cal Date: 22-FEB-2010 06:31
End Cal Date : 24-FEB-2010 02:39

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/032b3201.d
22-FEB-2010 10:23	AR1248	/chem/ecd1a.i/022210.b/026b2601.d
22-FEB-2010 09:20	AR1242	/chem/ecd1a.i/022210.b/020b2001.d
22-FEB-2010 08:16	AR1254	/chem/ecd1a.i/022210.b/014b1401.d
22-FEB-2010 07:13	AR1660	/chem/ecd1a.i/022210.b/008b0801.d
Cal Level: 2 , Cal Amount: 250.00000		
22-FEB-2010 11:37	AR1268	/chem/ecd1a.i/022210.b/033b3301.d
22-FEB-2010 10:33	AR1248	/chem/ecd1a.i/022210.b/027b2701.d
22-FEB-2010 09:30	AR1242	/chem/ecd1a.i/022210.b/021b2101.d
22-FEB-2010 08:27	AR1254	/chem/ecd1a.i/022210.b/015b1501.d
22-FEB-2010 07:24	AR1660	/chem/ecd1a.i/022210.b/009b0901.d
Cal Level: 3 , Cal Amount: 500.00000		
22-FEB-2010 11:47	AR1268	/chem/ecd1a.i/022210.b/034b3401.d
22-FEB-2010 10:44	AR1248	/chem/ecd1a.i/022210.b/028b2801.d
22-FEB-2010 09:41	AR1242	/chem/ecd1a.i/022210.b/022b2201.d
22-FEB-2010 08:37	AR1254	/chem/ecd1a.i/022210.b/016b1601.d
22-FEB-2010 07:34	AR1660	/chem/ecd1a.i/022210.b/010b1001.d
Cal Level: 4 , Cal Amount: 1000.00000		
22-FEB-2010 11:58	AR1268	/chem/ecd1a.i/022210.b/035b3501.d
22-FEB-2010 11:05	AR1248	/chem/ecd1a.i/022210.b/030b3001.d
22-FEB-2010 09:51	AR1242	/chem/ecd1a.i/022210.b/023b2301.d
22-FEB-2010 08:48	AR1254	/chem/ecd1a.i/022210.b/017b1701.d
22-FEB-2010 07:45	AR1660	/chem/ecd1a.i/022210.b/011b1101.d
22-FEB-2010 07:03	AR1262	/chem/ecd1a.i/022210.b/007b0701.d
22-FEB-2010 06:52	AR1221	/chem/ecd1a.i/022210.b/006b0601.d
22-FEB-2010 06:41	AR1232	/chem/ecd1a.i/022210.b/005b0501.d
22-FEB-2010 06:31	DDTANALOGSTD	/chem/ecd1a.i/022210.b/004b0401.d
Cal Level: 5 , Cal Amount: 4000.00000		
22-FEB-2010 12:08	AR1268	/chem/ecd1a.i/022210.b/036b3601.d
22-FEB-2010 10:54	AR1248	/chem/ecd1a.i/022210.b/029b2901.d
22-FEB-2010 10:02	AR1242	/chem/ecd1a.i/022210.b/024b2401.d
22-FEB-2010 08:59	AR1254	/chem/ecd1a.i/022210.b/018b1801.d
22-FEB-2010 07:55	AR1660	/chem/ecd1a.i/022210.b/012b1201.d

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 4

Ccal Level: 4 , Ccal Amount: 1000		
08-MAR-2010 16:01	AR1660	/chem/ecd1a.i/030810.b/053b5301.d
Ccal Level: 4 , Ccal Amount: 1000		
08-MAR-2010 18:28	AR1660	/chem/ecd1a.i/030810.b/065b6501.d
Ccal Level: 4 , Ccal Amount: 1000		
08-MAR-2010 14:11	AR1660	/chem/ecd1a.i/030810.b/044b4401.d
Ccal Level: 4 , Ccal Amount: 1000		
08-MAR-2010 12:39	AR1660	/chem/ecd1a.i/030810.b/036b3601.d
Ccal Level: 4 , Ccal Amount: 1000		
08-MAR-2010 11:44	AR1660	/chem/ecd1a.i/030810.b/031b3101.d
Ccal Level: 4 , Ccal Amount: 1000		
08-MAR-2010 09:55	AR1660	/chem/ecd1a.i/030810.b/022b2201.d
Ccal Level: 4 , Ccal Amount: 1000		
08-MAR-2010 06:04	AR1660	/chem/ecd1a.i/030810.b/002b0201.d
Ccal Level: 4 , Ccal Amount: 1000		
08-MAR-2010 06:46	AR1268	/chem/ecd1a.i/030810.b/006b0601.d
Ccal Level: 4 , Ccal Amount: 1000		
08-MAR-2010 07:17	AR1262	/chem/ecd1a.i/030810.b/009b0901.d
Ccal Level: 4 , Ccal Amount: 1000		
08-MAR-2010 07:07	AR1221	/chem/ecd1a.i/030810.b/008b0801.d
Ccal Level: 4 , Ccal Amount: 1000		
08-MAR-2010 06:56	AR1232	/chem/ecd1a.i/030810.b/007b0701.d
Ccal Level: 4 , Ccal Amount: 1000		
08-MAR-2010 06:35	AR1248	/chem/ecd1a.i/030810.b/005b0501.d
Ccal Level: 4 , Ccal Amount: 1000		
08-MAR-2010 06:25	AR1242	/chem/ecd1a.i/030810.b/004b0401.d
Ccal Level: 4 , Ccal Amount: 1000		
08-MAR-2010 06:14	AR1254	/chem/ecd1a.i/030810.b/003b0301.d

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COMPOUND LISTING

Method file : /chem/ecd1a.i/030810.b/ECD1-F-8082-022210.m
Quant Method : ESTD Target Version : 3.50
Last Update : 09-Mar-2010 06:41 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	2.371	2.341-2.401	1.538e+04
	2.657	2.627-2.687	1.824e+04
	2.737	2.707-2.767	1.207e+04
	2.775	2.745-2.805	7.096e+03
	2.986	2.956-3.016	8.912e+03
63 4,4-DDD	3.900	3.880-3.920	3.060e+05
64 4,4-DDE	3.551	3.531-3.571	3.552e+05
62 4,4-DDT	4.064	4.044-4.084	2.080e+05
2 Aroclor-1221	2.030	2.000-2.060	4.398e+03
	2.123	2.093-2.153	2.431e+03
	2.148	2.118-2.178	1.042e+04
3 Aroclor-1232	2.371	2.341-2.401	6.218e+03
	2.658	2.628-2.688	7.488e+03
	2.739	2.709-2.769	4.887e+03
	2.853	2.823-2.883	2.191e+03
	3.239	3.209-3.269	2.731e+03
4 Aroclor-1242	2.371	2.341-2.401	1.256e+04
	2.658	2.628-2.688	1.461e+04
	2.776	2.746-2.806	5.629e+03
	2.986	2.956-3.016	7.310e+03
	3.239	3.209-3.269	6.183e+03

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecd1a.i/030810.b/ECD1-F-8082-022210.m

Compound	RT	RT Window	RF
5 Aroclor-1248	2.852	2.822-2.882	9.301e+03
	2.986	2.956-3.016	1.241e+04
	3.238	3.208-3.268	1.220e+04
	3.371	3.341-3.401	1.042e+04
	3.603	3.573-3.633	6.820e+03
6 Aroclor-1254	3.215	3.185-3.245	1.201e+04
	3.369	3.339-3.399	1.583e+04
	3.602	3.572-3.632	1.952e+04
	3.765	3.735-3.795	1.381e+04
	3.875	3.845-3.905	1.428e+04
7 Aroclor-1260	3.711	3.681-3.741	1.707e+04
	3.873	3.843-3.903	2.364e+04
	4.036	4.006-4.066	2.497e+04
	4.104	4.074-4.134	1.441e+04
	4.247	4.217-4.277	1.443e+04
8 Aroclor-1262	3.712	3.682-3.742	1.261e+04
	3.874	3.844-3.904	1.569e+04
	4.104	4.074-4.134	1.995e+04
	4.247	4.217-4.277	1.798e+04
	4.426	4.396-4.456	3.725e+04
9 Aroclor-1268	4.610	4.580-4.640	4.848e+04
	4.633	4.603-4.663	5.448e+04
	4.746	4.716-4.776	3.862e+04
	4.948	4.918-4.978	1.635e+04
	5.114	5.084-5.144	1.121e+05
M 10 Aroclor-Total	1.000	0.980-1.020	
$ 11 4cmx	1.917	1.887-1.947	4.306e+05
$ 12 Decachlorobiphenyl	5.223	5.193-5.253	3.073e+05

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecd1a.i/030810.b/ECD1-B-8082-022210.m
Quant Method : ESTD Target Version : 3.50
Last Update : 12-Mar-2010 08:39 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	3.171	3.141-3.201	1.279e+04
	3.254	3.224-3.284	8.918e+03
	3.317	3.287-3.347	5.406e+03
	3.544	3.514-3.574	6.916e+03
	3.619	3.589-3.649	6.425e+03
62 4,4-DDT	4.660	4.640-4.680	1.000e+05
63 4,4-DDE	4.128	4.108-4.148	2.505e+05
64 4,4-DDD	4.473	4.453-4.493	2.085e+05
2 Aroclor-1221	2.472	2.442-2.502	3.431e+03
	2.567	2.537-2.597	2.152e+03
	2.607	2.577-2.637	7.328e+03
3 Aroclor-1232	2.874	2.844-2.904	4.920e+03
	3.172	3.142-3.202	5.252e+03
	3.254	3.224-3.284	3.768e+03
	3.545	3.515-3.575	2.699e+03
	3.779	3.749-3.809	2.631e+03
4 Aroclor-1242	3.171	3.141-3.201	1.035e+04
	3.254	3.224-3.284	7.279e+03
	3.544	3.514-3.574	5.768e+03
	3.778	3.748-3.808	5.788e+03
	3.806	3.776-3.836	6.641e+03

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COMPOUND LISTING

Method file : /chem/ecd1a.i/030810.b/ECD1-B-8082-022210.m

Compound	RT	RT Window	RF
5 Aroclor-1248	3.379	3.349-3.409	7.602e+03
	3.544	3.514-3.574	9.360e+03
	3.777	3.747-3.807	1.065e+04
	3.805	3.775-3.835	1.210e+04
	3.942	3.912-3.972	1.150e+04
6 Aroclor-1254	3.380	3.350-3.410	6.068e+03
	3.801	3.771-3.831	1.074e+04
	3.918	3.888-3.948	1.164e+04
	4.194	4.164-4.224	1.590e+04
	4.330	4.300-4.360	1.198e+04
7 Aroclor-1260	4.310	4.280-4.340	1.321e+04
	4.435	4.405-4.465	1.557e+04
	4.701	4.671-4.731	1.184e+04
	4.874	4.844-4.904	1.220e+04
	5.021	4.991-5.051	2.653e+04
8 Aroclor-1262	4.436	4.406-4.466	1.126e+04
	4.701	4.671-4.731	1.550e+04
	4.875	4.845-4.905	1.407e+04
	5.022	4.992-5.052	2.845e+04
	5.234	5.204-5.264	1.972e+04
9 Aroclor-1268	5.232	5.202-5.262	3.730e+04
	5.260	5.230-5.290	3.492e+04
	5.409	5.379-5.439	2.658e+04
	5.574	5.544-5.604	1.223e+04
	5.767	5.737-5.797	7.433e+04
10 Aroclor-Total	1.000	0.980-1.020	
$ 11 4cmx	2.277	2.247-2.307	2.974e+05
$ 12 Decachlorobiphenyl	5.918	5.888-5.948	2.115e+05

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 22-FEB-2010 06:31
End Cal Date : 24-FEB-2010 02:39
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /chem/ecd1a.i/030810.b/ECD1-F-8082-022210.m
Cal Date : 09-Mar-2010 06:41 yip00818
Curve Type : Average

Calibration File Names:
Level 1: /chem/ecd1a.i/022210.b/032f3201.d
Level 2: /chem/ecd1a.i/022210.b/033f3301.d
Level 3: /chem/ecd1a.i/022210.b/034f3401.d
Level 4: /chem/ecd1a.i/022210.b/035f3501.d
Level 5: /chem/ecd1a.i/022210.b/036f3601.d

Compound	100.000 Level 1	250.000 Level 2	500.000 Level 3	1000.000 Level 4	4000.000 Level 5	RRF	% RSD
1 Aroclor-1016(1)	18473	16312	15150	14238	12749	15384	14.060
(2)	20194	18537	17759	17625	17070	18237	6.651
(3)	14170	12473	11875	11163	10646	12065	11.317
(4)	8163	7198	6933	6624	6564	7096	9.135
(5)	10345	9178	8623	8273	8142	8912	10.051
63 4,4-DDD	+++++	+++++	+++++	305990	+++++	305990	0.000
64 4,4-DDE	+++++	+++++	+++++	355239	+++++	355239	0.000
62 4,4-DDT	+++++	+++++	+++++	208015	+++++	208015	0.000
2 Aroclor-1221(1)	+++++	+++++	+++++	4398	+++++	4398	0.000
(2)	+++++	+++++	+++++	2431	+++++	2431	0.000
(3)	+++++	+++++	+++++	10418	+++++	10418	0.000
3 Aroclor-1232(1)	+++++	+++++	+++++	6218	+++++	6218	0.000
(2)	+++++	+++++	+++++	7488	+++++	7488	0.000
(3)	+++++	+++++	+++++	4887	+++++	4887	0.000
(4)	+++++	+++++	+++++	2191	+++++	2191	0.000
(5)	+++++	+++++	+++++	2731	+++++	2731	0.000
4 Aroclor-1242(1)	14895	13406	12308	11554	10624	12557	13.200
(2)	15940	15326	14418	13613	13761	14612	6.870
(3)	6066	5934	5542	5337	5267	5629	6.326
(4)	8523	7616	7127	6725	6562	7310	10.814
(5)	6824	6256	5999	5817	6020	6183	6.317
5 Aroclor-1248(1)	10594	9810	9017	8885	8199	9301	9.911
(2)	14228	12736	11895	11712	11476	12409	9.043
(3)	12841	12156	11815	11785	12410	12201	3.615
(4)	11297	10503	10013	9956	10333	10420	5.179
(5)	7445	6917	6453	6460	6824	6820	5.977

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 22-FEB-2010 06:31
End Cal Date : 24-FEB-2010 02:39
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /chem/ecd1a.i/030810.b/ECD1-F-8082-022210.m
Cal Date : 09-Mar-2010 06:41 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)	13496	12213	11744	11466	11117	12007	7.694
(2)	16789	15969	15727	15423	15253	15832	3.802
(3)	20267	19353	19208	19481	19310	19524	2.185
(4)	14142	13669	13487	13772	13976	13809	1.858
(5)	15228	14234	13851	14228	13864	14281	3.932
7 Aroclor-1260(1)	19445	17307	16758	16208	15645	17072	8.574
(2)	25625	23757	23316	22992	22528	23643	5.056
(3)	27164	24948	24176	24127	24442	24971	5.079
(4)	16166	14596	13941	13551	13775	14406	7.345
(5)	15672	14437	13986	13647	14411	14431	5.316
8 Aroclor-1262(1)	+++++	+++++	+++++	12612	+++++	12612	0.000
(2)	+++++	+++++	+++++	15693	+++++	15693	0.000
(3)	+++++	+++++	+++++	19946	+++++	19946	0.000
(4)	+++++	+++++	+++++	17981	+++++	17981	0.000
(5)	+++++	+++++	+++++	37250	+++++	37250	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
M 10 Aroclor-Total	+++++	+++++	+++++	+++++	+++++	+++++	+++++
$ 11 4cmx	457836	439032	431646	423676	400995	430637	4.841
$ 12 Decachlorobiphenyl	331580	312081	303953	298909	289924	307289	5.135

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 22-FEB-2010 06:31
End Cal Date : 24-FEB-2010 02:39
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /chem/ecd1a.i/030810.b/ECD1-B-8082-022210.m
Cal Date : 09-Mar-2010 06:41 yip00818
Curve Type : Average

Calibration File Names:
Level 1: /chem/ecd1a.i/022210.b/032b3201.d
Level 2: /chem/ecd1a.i/022210.b/033b3301.d
Level 3: /chem/ecd1a.i/022210.b/034b3401.d
Level 4: /chem/ecd1a.i/022210.b/035b3501.d
Level 5: /chem/ecd1a.i/022210.b/036b3601.d

Compound	100.000 Level 1	250.000 Level 2	500.000 Level 3	1000.000 Level 4	4000.000 Level 5	RRF	% RSD
1 Aroclor-1016(1)	14790	13406	12599	11956	11198	12790	10.807
(2)	11020	9550	8735	8081	7204	8918	16.336
(3)	6667	5702	5261	4923	4477	5406	15.464
(4)	8469	7466	6811	6206	5627	6916	15.991
(5)	7861	6755	6366	5845	5300	6425	15.123
62 4,4-DDT	+++++	+++++	+++++	100019	+++++	100019	0.000
63 4,4-DDE	+++++	+++++	+++++	250510	+++++	250510	0.000
64 4,4-DDD	+++++	+++++	+++++	208527	+++++	208527	0.000
2 Aroclor-1221(1)	+++++	+++++	+++++	3431	+++++	3431	0.000
(2)	+++++	+++++	+++++	2152	+++++	2152	0.000
(3)	+++++	+++++	+++++	7328	+++++	7328	0.000
3 Aroclor-1232(1)	+++++	+++++	+++++	4920	+++++	4920	0.000
(2)	+++++	+++++	+++++	5252	+++++	5252	0.000
(3)	+++++	+++++	+++++	3768	+++++	3768	0.000
(4)	+++++	+++++	+++++	2699	+++++	2699	0.000
(5)	+++++	+++++	+++++	2631	+++++	2631	0.000
4 Aroclor-1242(1)	12162	10602	10267	9852	8873	10351	11.615
(2)	8972	7860	7095	6551	5917	7279	16.286
(3)	7172	6222	5595	5138	4714	5768	16.707
(4)	7092	6149	5608	5215	4876	5788	15.018
(5)	8262	7049	6439	5944	5512	6641	16.138
5 Aroclor-1248(1)	9375	8130	7334	6873	6297	7602	15.743
(2)	11273	9902	9059	8609	7955	9360	13.704
(3)	12356	11118	10348	9982	9432	10647	10.657
(4)	14147	12783	11698	11327	10532	12097	11.596
(5)	13387	12032	11069	10719	10286	11499	10.750

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 22-FEB-2010 06:31
End Cal Date : 24-FEB-2010 02:39
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /chem/ecd1a.i/030810.b/ECD1-B-8082-022210.m
Cal Date : 09-Mar-2010 06:41 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)	7593	6474	5915	5463	4897	6068	16.986
(2)	13079	11278	10543	9836	8978	10743	14.511
(3)	14023	12144	11373	10769	9907	11643	13.419
(4)	18579	16173	15683	15087	13972	15899	10.745
(5)	14693	12059	11530	11303	10291	11975	13.772
7 Aroclor-1260(1)	16156	14478	12627	11898	10869	13206	15.988
(2)	18308	16389	15401	14483	13254	15567	12.332
(3)	14169	12468	11644	10875	10061	11844	13.319
(4)	14677	12787	11930	11182	10430	12201	13.416
(5)	30570	27429	26347	25126	23163	26527	10.405
8 Aroclor-1262(1)	+++++	+++++	+++++	11265	+++++	11265	0.000
(2)	+++++	+++++	+++++	15504	+++++	15504	0.000
(3)	+++++	+++++	+++++	14070	+++++	14070	0.000
(4)	+++++	+++++	+++++	28448	+++++	28448	0.000
(5)	+++++	+++++	+++++	19723	+++++	19723	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	335261	308362	295849	285028	262485	297397	9.098
$ 12 Decachlorobiphenyl	252219	220293	206273	196840	181867	211498	12.633

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.: 10-2089

Instrument ID: ECD1A Calibration Date: 03/08/10 Time: 0604

Lab File ID: 002F0201 Init. Calib. Date(s): 02/22/10 02/22/10

Heated Purge: (Y/N) N Init. Calib. Times: 0713 0755

GC Column: CLP1 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D	
Aroclor-1016	15384.345	13481.222	0.01	-12.4	15.0	
(2)	18237.012	17195.389	0.01	-5.7	15.0	
(3)	12065.482	10902.321	0.01	-9.6	15.0	
(4)	7096.105	6581.876	0.01	-7.2	15.0	
(5)	8912.192	8592.313	0.01	-3.6	15.0	
Aroclor-1260	17072.421	17807.542	0.01	4.3	15.0	
(2)	23643.449	26717.327	0.01	13.0	15.0	
(3)	24971.335	28532.566	0.01	14.3	15.0	
(4)	14405.675	16030.863	0.01	11.3	15.0	
(5)	14430.527	16715.031	0.01	15.8	15.0	<-
4cmx	430636.91	385502.88	0.01	-10.5	15.0	
Decachlorobiphenyl	307289.35	292688.92	0.01	-4.8	15.0	

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-2089

Instrument ID: ECD1A Calibration Date: 03/08/10 Time: 0604

Lab File ID: 002B0201 Init. Calib. Date(s): 02/22/10 02/22/10

Heated Purge: (Y/N) N Init. Calib. Times: 0713 0755

GC Column: CLP2 ID: 0.25 (mm)

COMPOUND	$\overline{RRF}$	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	12789.782	12098.691	0.01	-5.4	15.0
(2)	8917.926	7815.484	0.01	-12.4	15.0
(3)	5406.011	4884.189	0.01	-9.6	15.0
(4)	6915.638	6347.666	0.01	-8.2	15.0
(5)	6425.213	5865.050	0.01	-8.7	15.0
Aroclor-1260	13205.642	12768.884	0.01	-3.3	15.0
(2)	15566.814	15639.909	0.01	0.5	15.0
(3)	11843.501	11734.406	0.01	-0.9	15.0
(4)	12201.193	12159.638	0.01	-0.3	15.0
(5)	26527.172	27323.488	0.01	3.0	15.0
4cmx	297396.93	265967.17	0.01	-10.6	15.0
Decachlorobiphenyl	211498.34	183352.94	0.01	-13.3	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-2089

Instrument ID: ECD1A Calibration Date: 03/08/10 Time: 0625

Lab File ID: 004F0401 Init. Calib. Date(s): 02/22/10 02/22/10

Heated Purge: (Y/N) N Init. Calib. Times: 0920 1002

GC Column: CLP1 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D	
Aroclor-1242	12557.447	11550.756	0.01	-8.0	15.0	
(2)	14611.650	14964.468	0.01	2.4	15.0	
(3)	5629.225	5575.501	0.01	-1.0	15.0	
(4)	7310.356	7185.557	0.01	-1.7	15.0	
(5)	6183.099	7126.568	0.01	15.2	15.0	<-

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-2089

Instrument ID: ECD1A Calibration Date: 03/08/10 Time: 0625

Lab File ID: 004B0401 Init. Calib. Date(s): 02/22/10 02/22/10

Heated Purge: (Y/N) N Init. Calib. Times: 0920 1002

GC Column: CLP2 ID: 0.25 (mm)

COMPOUND	$\overline{RRF}$	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1242	10351.237	9810.536	0.01	-5.2	15.0
(2)	7278.919	6567.920	0.01	-9.8	15.0
(3)	5768.408	5190.648	0.01	-10.0	15.0
(4)	5788.073	5509.217	0.01	-4.8	15.0
(5)	6641.390	6141.253	0.01	-7.5	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.: 10-2089

Instrument ID: ECD1A Calibration Date: 03/08/10 Time: 1239

Lab File ID: 036F3601 Init. Calib. Date(s): 02/22/10 02/22/10

Heated Purge: (Y/N) N Init. Calib. Times: 0713 0755

GC Column: CLP1 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	15384.345	13301.358	0.01	-13.5	15.0
(2)	18237.012	17589.486	0.01	-3.6	15.0
(3)	12065.482	11087.034	0.01	-8.1	15.0
(4)	7096.105	6668.717	0.01	-6.0	15.0
(5)	8912.192	8520.554	0.01	-4.4	15.0
Aroclor-1260	17072.421	16657.973	0.01	-2.4	15.0
(2)	23643.449	24941.302	0.01	5.5	15.0
(3)	24971.335	26166.458	0.01	4.8	15.0
(4)	14405.675	15049.113	0.01	4.5	15.0
(5)	14430.527	15765.208	0.01	9.2	15.0
4cmx	430636.91	388997.50	0.01	-9.7	15.0
Decachlorobiphenyl	307289.35	306903.07	0.01	-0.1	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-2089

Instrument ID: ECD1A Calibration Date: 03/08/10 Time: 1239

Lab File ID: 036B3601 Init. Calib. Date(s): 02/22/10 02/22/10

Heated Purge: (Y/N) N Init. Calib. Times: 0713 0755

GC Column: CLP2 ID: 0.25 (mm)

COMPOUND	$\overline{RRF}$	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	12789.782	11707.346	0.01	-8.5	15.0
(2)	8917.926	7830.180	0.01	-12.2	15.0
(3)	5406.011	4851.376	0.01	-10.2	15.0
(4)	6915.638	6339.833	0.01	-8.3	15.0
(5)	6425.213	5947.084	0.01	-7.4	15.0
Aroclor-1260	13205.642	11874.655	0.01	-10.1	15.0
(2)	15566.814	14572.850	0.01	-6.4	15.0
(3)	11843.501	10941.327	0.01	-7.6	15.0
(4)	12201.193	11383.856	0.01	-6.7	15.0
(5)	26527.172	25485.891	0.01	-3.9	15.0
4cmx	297396.93	265326.16	0.01	-10.8	15.0
Decachlorobiphenyl	211498.34	190790.53	0.01	-9.8	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-2089

Instrument ID: ECD1A Calibration Date: 03/08/10 Time: 1411

Lab File ID: 044F4401 Init. Calib. Date(s): 02/22/10 02/22/10

Heated Purge: (Y/N) N Init. Calib. Times: 0713 0755

GC Column: CLP1 ID: 0.25 (mm)

COMPOUND	$\overline{RRF}$	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	15384.345	13717.671	0.01	-10.8	15.0
(2)	18237.012	17493.181	0.01	-4.1	15.0
(3)	12065.482	11035.120	0.01	-8.5	15.0
(4)	7096.105	6703.609	0.01	-5.5	15.0
(5)	8912.192	8568.272	0.01	-3.8	15.0
Aroclor-1260	17072.421	16539.345	0.01	-3.1	15.0
(2)	23643.449	23440.130	0.01	-0.8	15.0
(3)	24971.335	24136.062	0.01	-3.3	15.0
(4)	14405.675	14509.054	0.01	0.7	15.0
(5)	14430.527	15246.659	0.01	5.6	15.0
4cmx	430636.91	388800.75	0.01	-9.7	15.0
Decachlorobiphenyl	307289.35	303885.68	0.01	-1.1	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-2089

Instrument ID: ECD1A Calibration Date: 03/08/10 Time: 1411

Lab File ID: 044B4401 Init. Calib. Date(s): 02/22/10 02/22/10

Heated Purge: (Y/N) N Init. Calib. Times: 0713 0755

GC Column: CLP2 ID: 0.25 (mm)

COMPOUND	$\overline{RRF}$	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	12789.782	12102.351	0.01	-5.4	15.0
(2)	8917.926	7777.446	0.01	-12.8	15.0
(3)	5406.011	4854.908	0.01	-10.2	15.0
(4)	6915.638	6307.429	0.01	-8.8	15.0
(5)	6425.213	5811.575	0.01	-9.6	15.0
Aroclor-1260	13205.642	11836.710	0.01	-10.4	15.0
(2)	15566.814	14451.961	0.01	-7.2	15.0
(3)	11843.501	10893.820	0.01	-8.0	15.0
(4)	12201.193	11339.319	0.01	-7.1	15.0
(5)	26527.172	25373.227	0.01	-4.4	15.0
4cmx	297396.93	263604.48	0.01	-11.4	15.0
Decachlorobiphenyl	211498.34	190998.26	0.01	-9.7	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-2089

Instrument ID: ECD1A Calibration Date: 03/08/10 Time: 1601

Lab File ID: 053F5301 Init. Calib. Date(s): 02/22/10 02/22/10

Heated Purge: (Y/N) N Init. Calib. Times: 0713 0755

GC Column: CLP1 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	15384.345	13689.414	0.01	-11.0	15.0
(2)	18237.012	17627.982	0.01	-3.3	15.0
(3)	12065.482	11020.579	0.01	-8.7	15.0
(4)	7096.105	6640.864	0.01	-6.4	15.0
(5)	8912.192	8549.838	0.01	-4.1	15.0
Aroclor-1260	17072.421	16519.938	0.01	-3.2	15.0
(2)	23643.449	24665.953	0.01	4.3	15.0
(3)	24971.335	26229.103	0.01	5.0	15.0
(4)	14405.675	14894.434	0.01	3.4	15.0
(5)	14430.527	15497.470	0.01	7.4	15.0
4cmx	430636.91	388071.37	0.01	-9.9	15.0
Decachlorobiphenyl	307289.35	299247.22	0.01	-2.6	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.: 10-2089

Instrument ID: ECD1A Calibration Date: 03/08/10 Time: 1601

Lab File ID: 053B5301 Init. Calib. Date(s): 02/22/10 02/22/10

Heated Purge: (Y/N) N Init. Calib. Times: 0713 0755

GC Column: CLP2 ID: 0.25 (mm)

COMPOUND	$\overline{RRF}$	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	12789.782	11924.622	0.01	-6.8	15.0
(2)	8917.926	7791.781	0.01	-12.6	15.0
(3)	5406.011	4886.721	0.01	-9.6	15.0
(4)	6915.638	6337.865	0.01	-8.4	15.0
(5)	6425.213	6020.515	0.01	-6.3	15.0
Aroclor-1260	13205.642	11785.178	0.01	-10.8	15.0
(2)	15566.814	14436.394	0.01	-7.3	15.0
(3)	11843.501	10861.469	0.01	-8.3	15.0
(4)	12201.193	11356.689	0.01	-6.9	15.0
(5)	26527.172	25281.887	0.01	-4.7	15.0
4cmx	297396.93	264285.66	0.01	-11.1	15.0
Decachlorobiphenyl	211498.34	189893.65	0.01	-10.2	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-2089

Instrument ID: ECD1A Calibration Date: 03/08/10 Time: 1828

Lab File ID: 065F6501 Init. Calib. Date(s): 02/22/10 02/22/10

Heated Purge: (Y/N) N Init. Calib. Times: 0713 0755

GC Column: CLP1 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D	
Aroclor-1016	15384.345	13831.390	0.01	-10.1	15.0	
(2)	18237.012	18291.555	0.01	0.3	15.0	
(3)	12065.482	11473.048	0.01	-4.9	15.0	
(4)	7096.105	6927.606	0.01	-2.4	15.0	
(5)	8912.192	8896.244	0.01	-0.2	15.0	
Aroclor-1260	17072.421	17156.096	0.01	0.5	15.0	
(2)	23643.449	25802.680	0.01	9.1	15.0	
(3)	24971.335	20334.710	0.01	-18.6	15.0	<-
(4)	14405.675	15499.213	0.01	7.6	15.0	
(5)	14430.527	16201.843	0.01	12.3	15.0	
4cmx	430636.91	404635.01	0.01	-6.0	15.0	
Decachlorobiphenyl	307289.35	312982.77	0.01	1.8	15.0	

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-2089

Instrument ID: ECD1A Calibration Date: 03/08/10 Time: 1828

Lab File ID: 065B6501 Init. Calib. Date(s): 02/22/10 02/22/10

Heated Purge: (Y/N) N Init. Calib. Times: 0713 0755

GC Column: CLP2 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	12789.782	12363.279	0.01	-3.3	15.0
(2)	8917.926	8088.905	0.01	-9.3	15.0
(3)	5406.011	5020.826	0.01	-7.1	15.0
(4)	6915.638	6551.772	0.01	-5.3	15.0
(5)	6425.213	6049.423	0.01	-5.8	15.0
Aroclor-1260	13205.642	12313.814	0.01	-6.8	15.0
(2)	15566.814	15043.198	0.01	-3.4	15.0
(3)	11843.501	11303.603	0.01	-4.6	15.0
(4)	12201.193	11764.381	0.01	-3.6	15.0
(5)	26527.172	26327.954	0.01	-0.8	15.0
4cmx	297396.93	274643.58	0.01	-7.6	15.0
Decachlorobiphenyl	211498.34	197604.48	0.01	-6.6	15.0

FORM VII PEST

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/030810.b/002f0201.d
Lab Smp Id: WAR100222-60 01 Client Smp ID: AR166001
Inj Date : 08-MAR-2010 06:04
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |WAR100222-60 01
Misc Info :
Comment :
Method : /chem/ecd1a.i/030810.b/ECD1-F-8082-022210.m
Meth Date : 08-Mar-2010 09:20 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

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.917	1.917	0.000	38550288	100.000	89.5	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.223	5.223	0.000	29268892	100.000	95.2	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.371	2.371	0.000	13481222	1000.00	876	80.00- 120.00	100.00
2.657	2.657	0.000	17195389	1000.00	943	107.55- 147.55	127.55
2.737	2.737	0.000	10902321	1000.00	904	60.87- 100.87	80.87
2.775	2.775	0.000	6581876	1000.00	928	28.82- 68.82	48.82
2.986	2.986	0.000	8592313	1000.00	964	43.74- 83.74	63.74
Average of Peak Amounts =					923		
7 Aroclor-1260					CAS #: 11096-82-5		
3.711	3.711	0.000	17807542	1000.00	1040	80.00- 120.00	100.00
3.873	3.873	0.000	26717327	1000.00	1130	130.03- 170.03	150.03
4.036	4.036	0.000	28532566	1000.00	1140	140.23- 180.23	160.23
4.104	4.104	0.000	16030863	1000.00	1110	70.02- 110.02	90.02
4.247	4.247	0.000	16715031	1000.00	1160	73.86- 113.86	93.86
Average of Peak Amounts =					1.12e+03		

Data File: /chem/ecd1a.i/030810.b/002f0201.d

Date : 08-MAR-2010 06:04

Client ID: AR166001

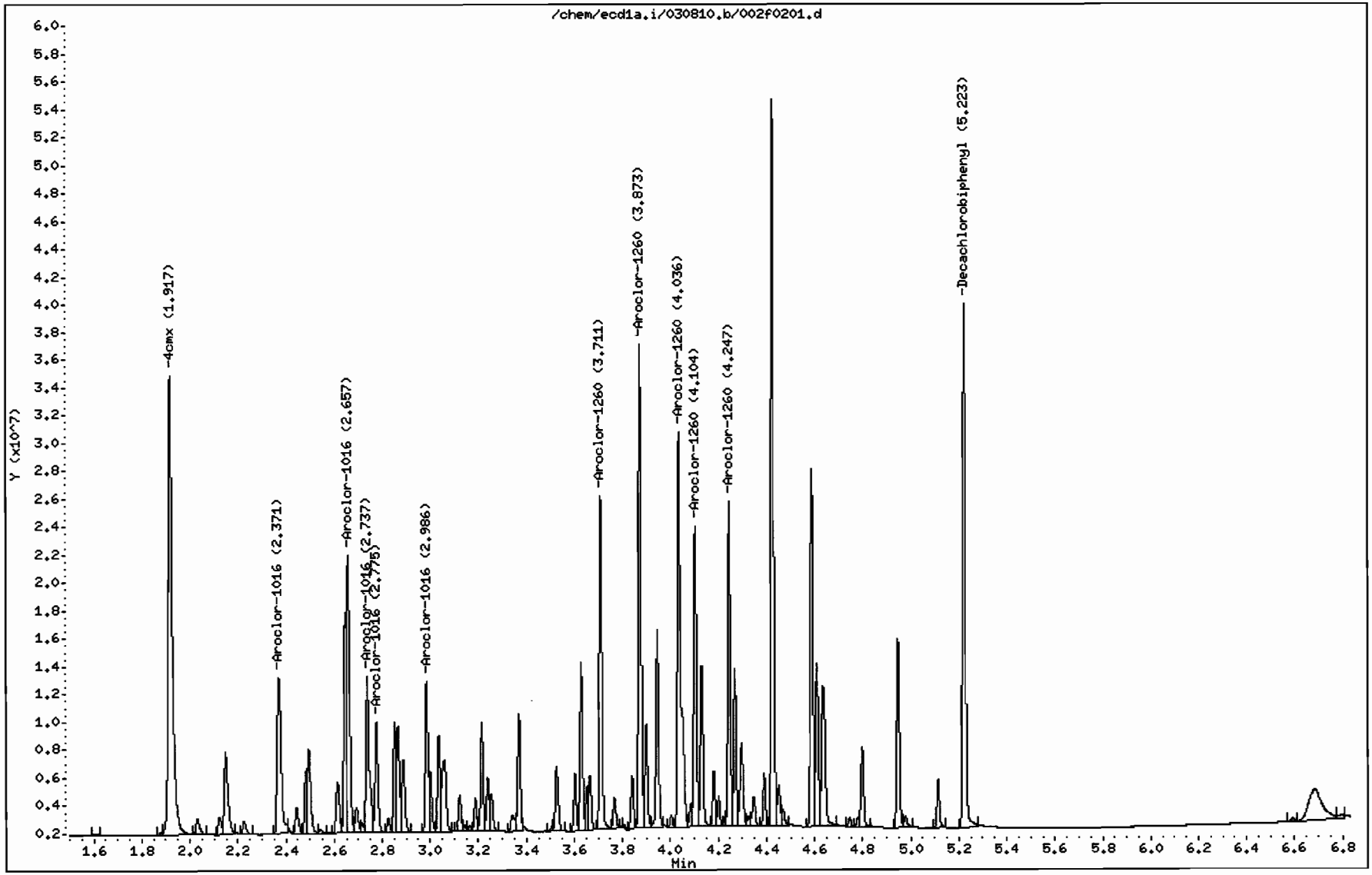
Sample Info: IWAR100222-60 01

Column phase: CLP1

Instrument: ecd1a.i

Operator: YS1

Column diameter: 0.25



GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/030810.b/002b0201.d
Lab Smp Id: WAR100222-60 01 Client Smp ID: AR166001
Inj Date : 08-MAR-2010 06:04
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |WAR100222-60 01
Misc Info :
Comment :
Method : /chem/ecd1a.i/030810.b/ECD1-B-8082-022210.m
Meth Date : 12-Mar-2010 08:39 jc 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: kilroy

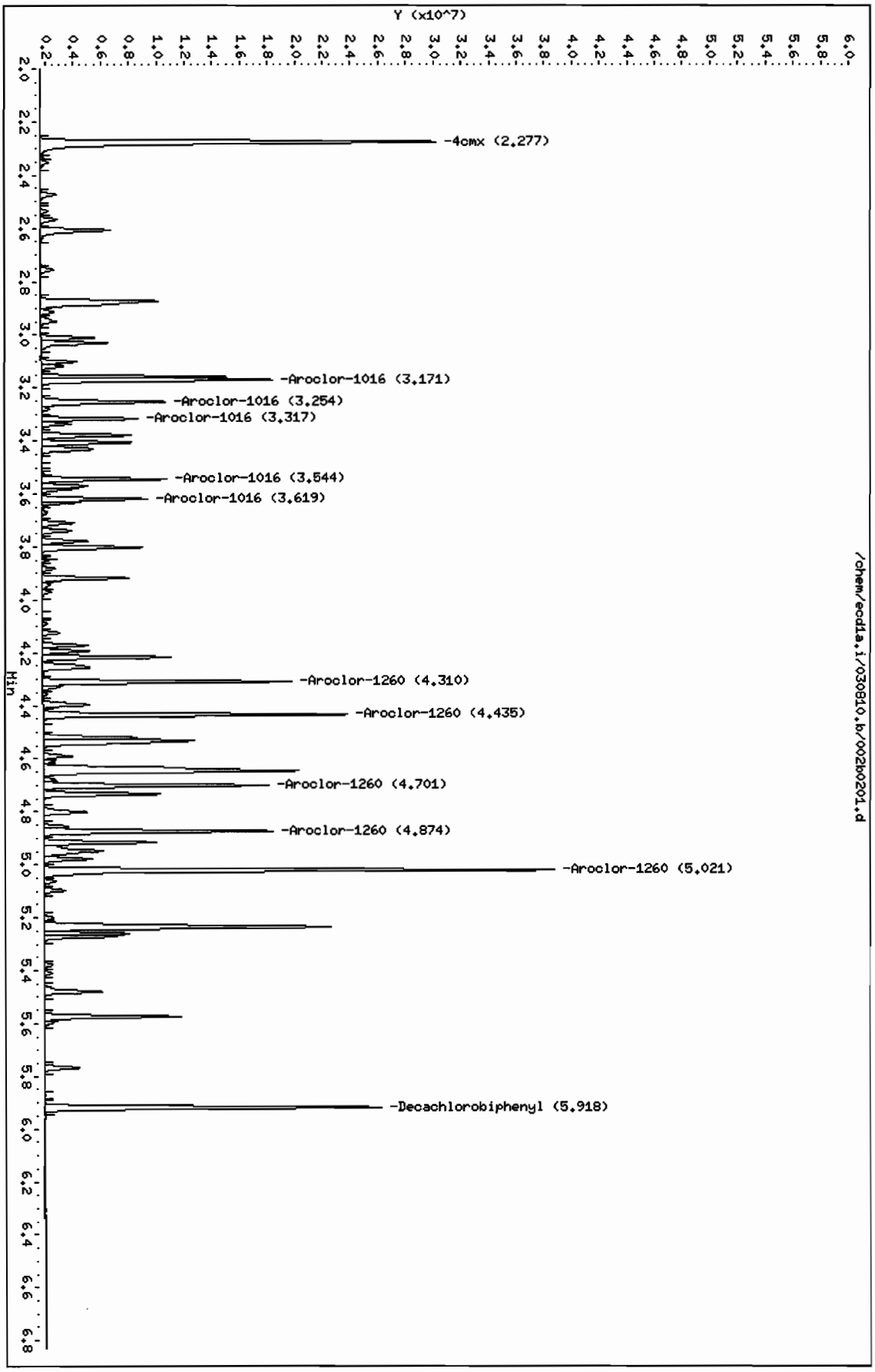
RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.277	2.277	0.000	26596717	100.000	89.4	80.00- 120.00	100.00
$ 12 Decachlorobipheny1					CAS #: 2051-24-3		
5.918	5.918	0.000	18335294	100.000	86.7	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
3.171	3.171	0.000	12098691	1000.00	946	80.00- 120.00	100.00(M)
3.254	3.254	0.000	7815484	1000.00	876	44.60- 84.60	64.60
3.317	3.317	0.000	4884189	1000.00	903	20.37- 60.37	40.37
3.544	3.544	0.000	6347666	1000.00	918	32.47- 72.47	52.47
3.619	3.619	0.000	5865050	1000.00	913	28.48- 68.48	48.48
Average of Peak Amounts =					911		
7 Aroclor-1260					CAS #: 11096-82-5		
4.310	4.310	0.000	12768884	1000.00	967	80.00- 120.00	100.00
4.435	4.435	0.000	15639909	1000.00	1000	102.48- 142.48	122.48
4.701	4.701	0.000	11734406	1000.00	991	71.90- 111.90	91.90
4.874	4.874	0.000	12159638	1000.00	996	75.23- 115.23	95.23
5.021	5.021	0.000	27323488	1000.00	1030	193.98- 233.98	213.98
Average of Peak Amounts =					998		

QC Flag Legend

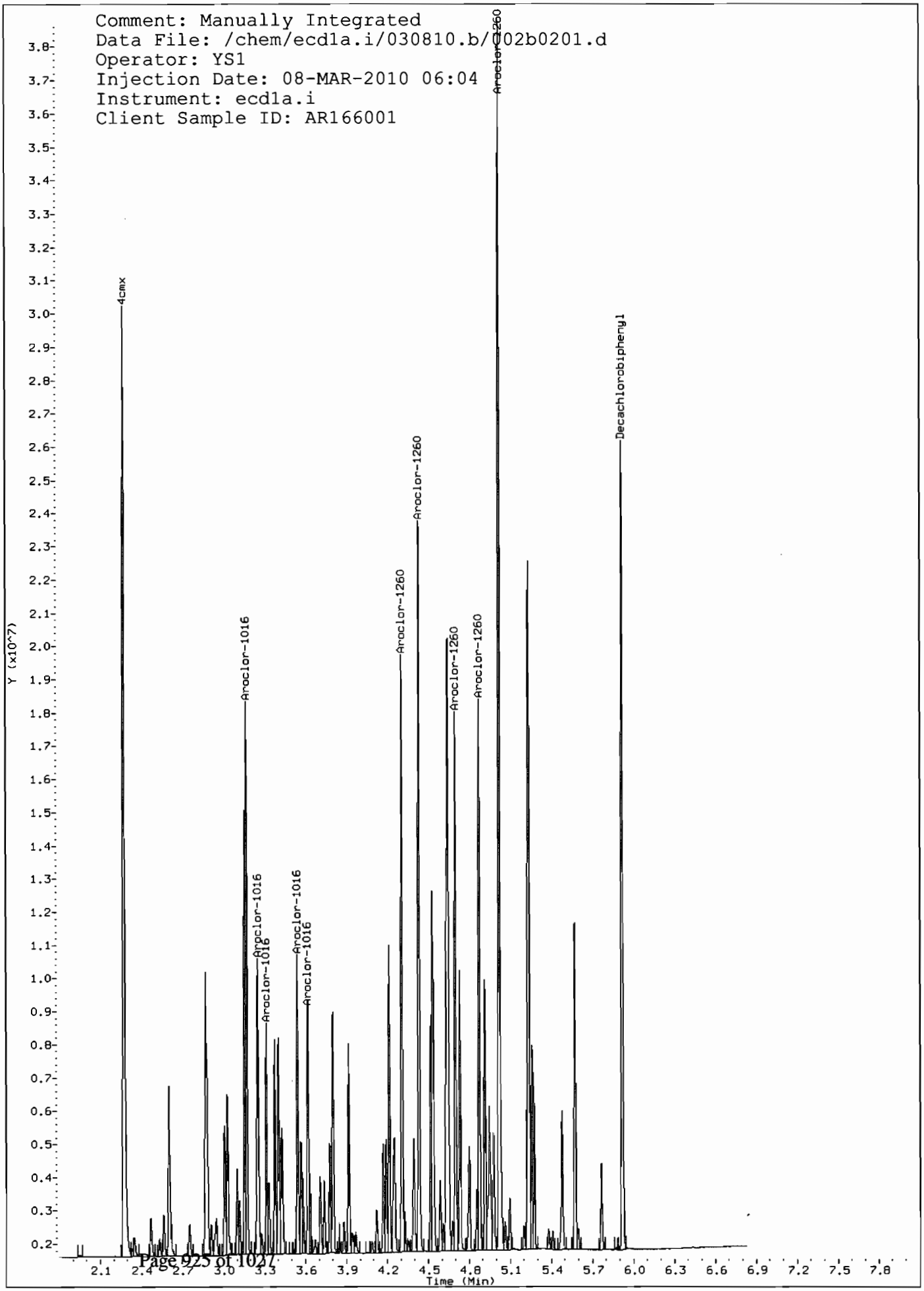
M - Compound response manually integrated.

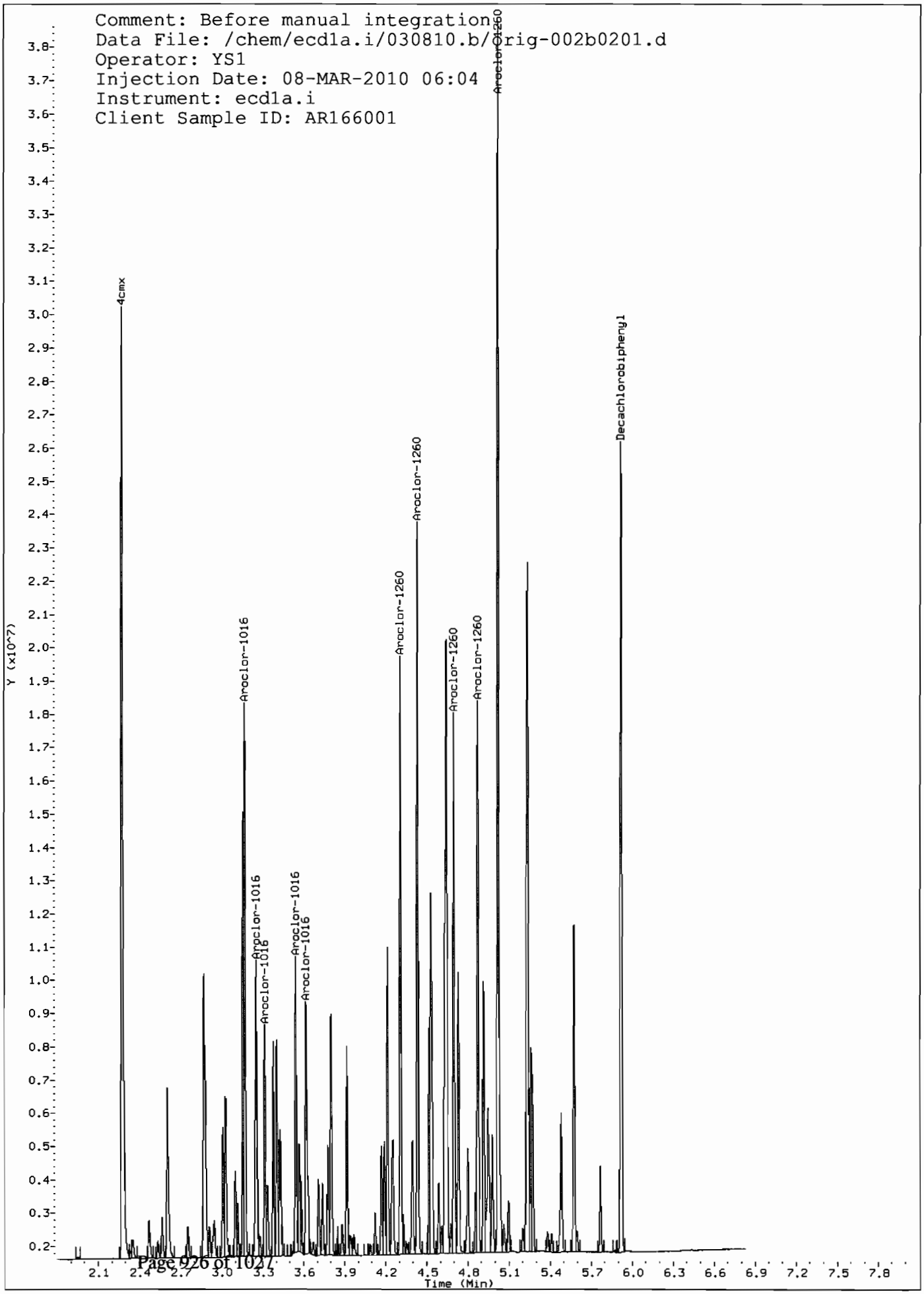
Data File: /chem/ecdia.i/030810.b/0026b0201.d
Date : 08-MAR-2010 06:04
Client ID: AR166001
Sample Info: IWAR100222-60 01
Column phase: CLP2

Instrument: ecdia.i
Operator: YS1
Column diameter: 0.25



Page 1


Comment: Manually Integrated
Data File: /chem/ecd1a.i/030810.b/002b0201.d
Operator: YS1
Injection Date: 08-MAR-2010 06:04
Instrument: ecd1a.i
Client Sample ID: AR166001
4cmx
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Decachlorobiphenyl
Y (x10^7)
Time (Min)


Comment: Before manual integration
Data File: /chem/ecd1a.i/030810.b/Orig-002b0201.d
Operator: YS1
Injection Date: 08-MAR-2010 06:04
Instrument: ecd1a.i
Client Sample ID: AR166001
4cmx
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Decachlorobiphenyl
Y (x10^7)
Time (Min)

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/030810.b/003f0301.d
Lab Smp Id: WAR100219-54 Client Smp ID: AR125401
Inj Date : 08-MAR-2010 06:14
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |WAR100219-54
Misc Info :
Comment :
Method : /chem/ecd1a.i/030810.b/ECD1-F-8082-022210.m
Meth Date : 08-Mar-2010 09:20 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

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
6 Aroclor-1254					CAS #: 11097-69-1		
3.215	3.215	0.000	12399171	1000.00	1030	80.00- 120.00	100.00
3.369	3.369	0.000	16964870	1000.00	1070	116.82- 156.82	136.82
3.602	3.602	0.000	21964052	1000.00	1120	157.14- 197.14	177.14
3.765	3.765	0.000	16418377	1000.00	1190	112.42- 152.42	132.42
3.875	3.875	0.000	15997723	1000.00	1120	109.02- 149.02	129.02

Average of Peak Amounts = 1.11e+03

Data File: /chem/ecd1a.i/030810.b/003f0301.d

Date : 08-MAR-2010 06:14

Client ID: AR125401

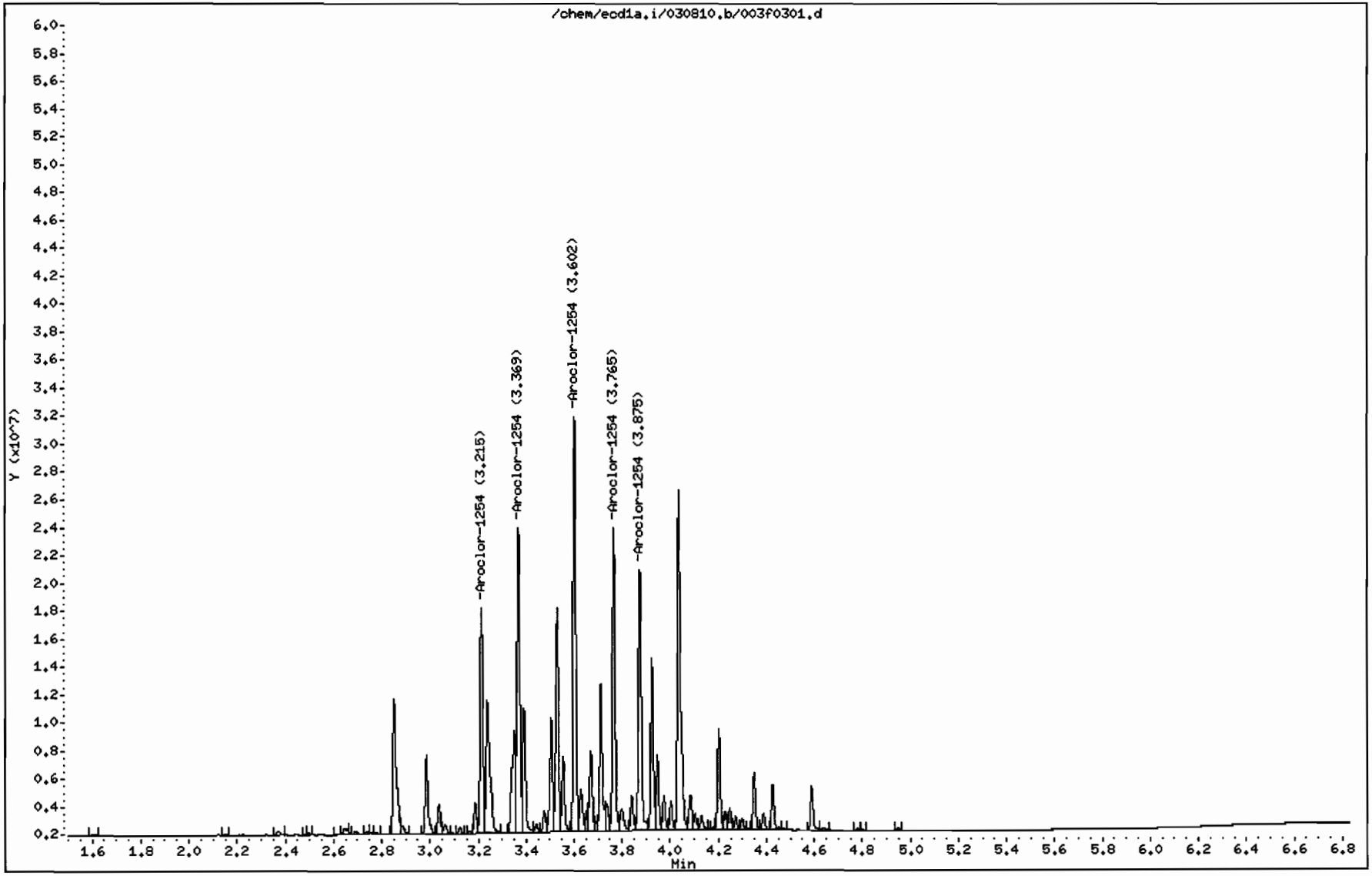
Sample Info: IWAR100219-54

Column phase: CLP1

Instrument: ecd1a.i

Operator: YS1

Column diameter: 0.25



GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/030810.b/003b0301.d
Lab Smp Id: WAR100219-54 Client Smp ID: AR125401
Inj Date : 08-MAR-2010 06:14
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |WAR100219-54
Misc Info :
Comment :
Method : /chem/ecd1a.i/030810.b/ECD1-B-8082-022210.m
Meth Date : 12-Mar-2010 08:39 jc 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: kilroy

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
6 Aroclor-1254					CAS #: 11097-69-1		
3.380	3.380	0.000	5601063	1000.00	923	80.00- 120.00	100.00
3.801	3.801	0.000	10230676	1000.00	952	162.66- 202.66	182.66
3.918	3.918	0.000	11365962	1000.00	976	182.93- 222.93	202.93
4.194	4.194	0.000	15999617	1000.00	1010	265.65- 305.65	285.65
4.330	4.330	0.000	11756841	1000.00	982	189.90- 229.90	209.90
Average of Peak Amounts =					968		

Data File: /chem/ecd1a.i/030810.b/003b0301.d

Page 1

Date : 08-MAR-2010 06:14

Client ID: AR125401

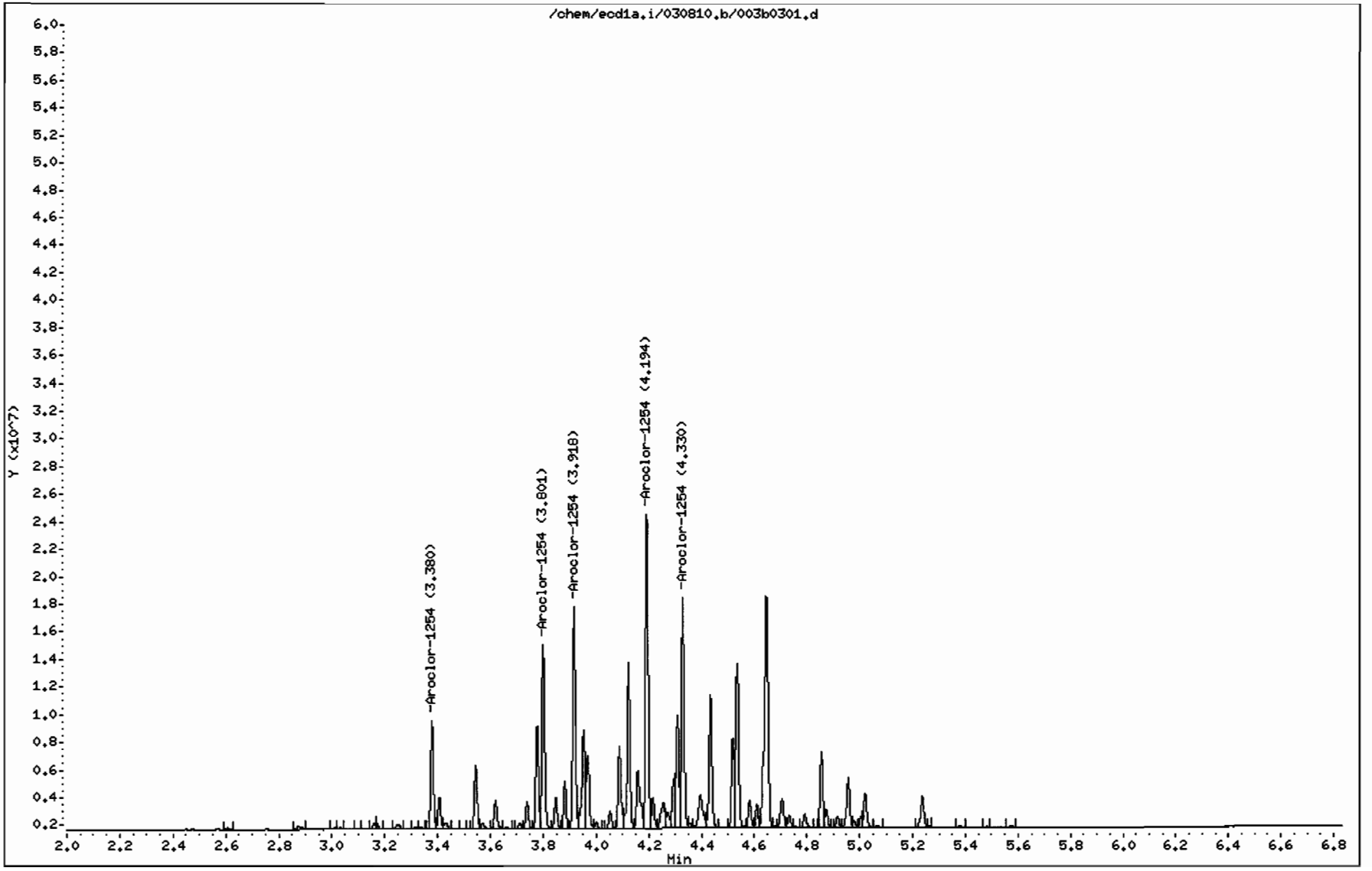
Instrument: ecd1a.i

Sample Info: IWAR100219-54

Operator: YS1

Column phase: CLP2

Column diameter: 0.25



GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/030810.b/004f0401.d
Lab Smp Id: WAR100219-42 Client Smp ID: AR124201
Inj Date : 08-MAR-2010 06:25
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |WAR100219-42
Misc Info :
Comment :
Method : /chem/ecd1a.i/030810.b/ECD1-F-8082-022210.m
Meth Date : 08-Mar-2010 09:20 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

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
4 Aroclor-1242					CAS #: 53469-21-9		
2.371	2.371	0.000	11550756	1000.00	920	80.00- 120.00	100.00
2.658	2.658	0.000	14964468	1000.00	1020	109.55- 149.55	129.55
2.776	2.776	0.000	5575501	1000.00	990	28.27- 68.27	48.27
2.986	2.986	0.000	7185557	1000.00	983	42.21- 82.21	62.21
3.239	3.239	0.000	7126568	1000.00	1150	41.70- 81.70	61.70

Average of Peak Amounts = 1.01e+03

Data File: /chem/ecd1a.i/030810.b/004f0401.d

Date : 08-MAR-2010 06:25

Client ID: AR124201

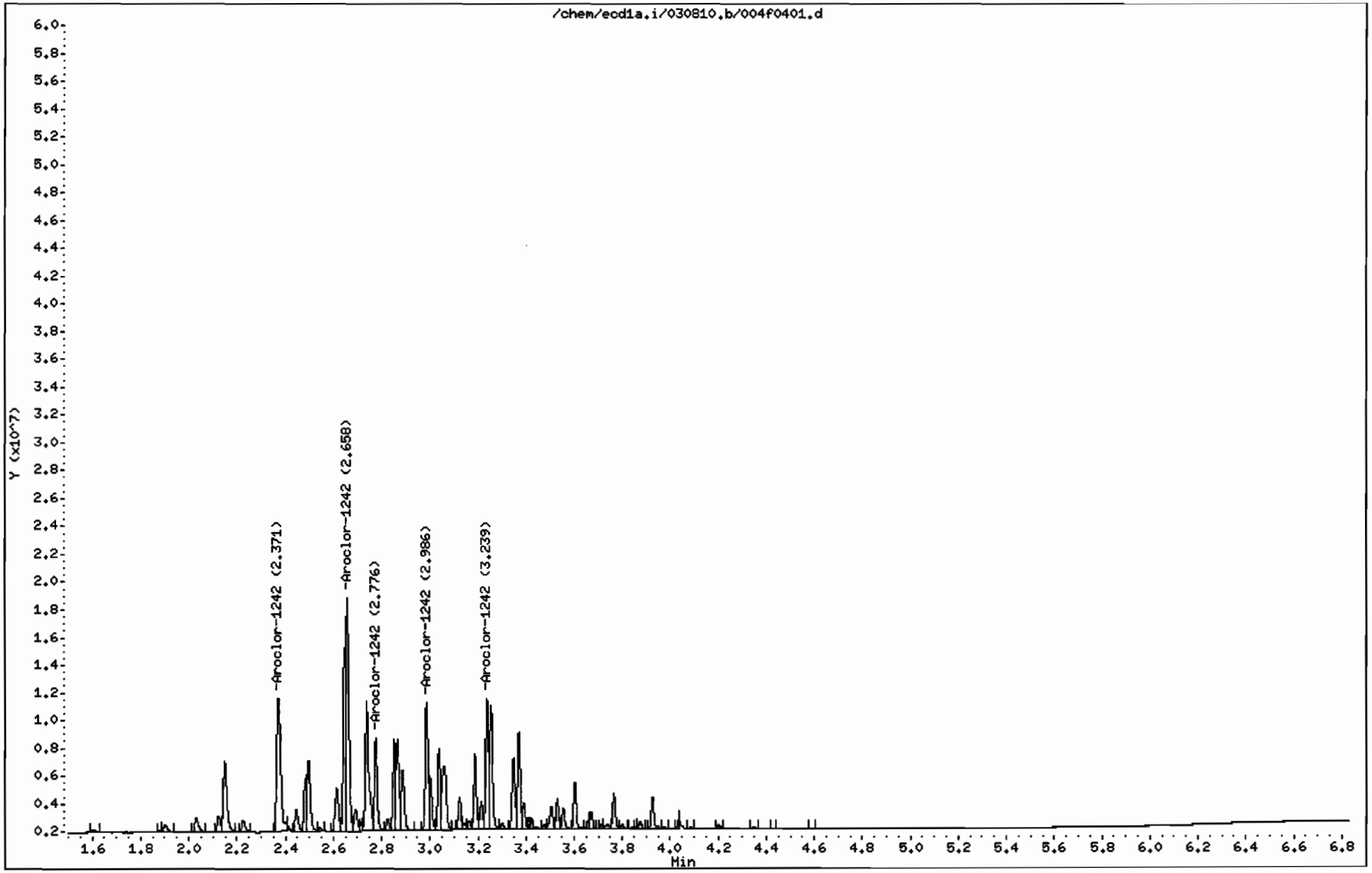
Sample Info: IWAR100219-42

Column phase: CLP1

Instrument: ecd1a.i

Operator: YS1

Column diameter: 0.25



GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/030810.b/004b0401.d
Lab Smp Id: WAR100219-42 Client Smp ID: AR124201
Inj Date : 08-MAR-2010 06:25
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |WAR100219-42
Misc Info :
Comment :
Method : /chem/ecd1a.i/030810.b/ECD1-B-8082-022210.m
Meth Date : 12-Mar-2010 08:39 jc 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: kilroy

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
4 Aroclor-1242					CAS #: 53469-21-9		
3.171	3.171	0.000	9810536	1000.00	948	80.00- 120.00	100.00
3.254	3.254	0.000	6567920	1000.00	902	46.95- 86.95	66.95
3.544	3.544	0.000	5190648	1000.00	900	32.91- 72.91	52.91
3.778	3.778	0.000	5509217	1000.00	952	36.16- 76.16	56.16
3.806	3.806	0.000	6141253	1000.00	925	42.60- 82.60	62.60
Average of Peak Amounts =					925		

Data File: /chem/ecd1a.i/030810.b/004b0401.d

Date : 08-MAR-2010 06:25

Client ID: AR124201

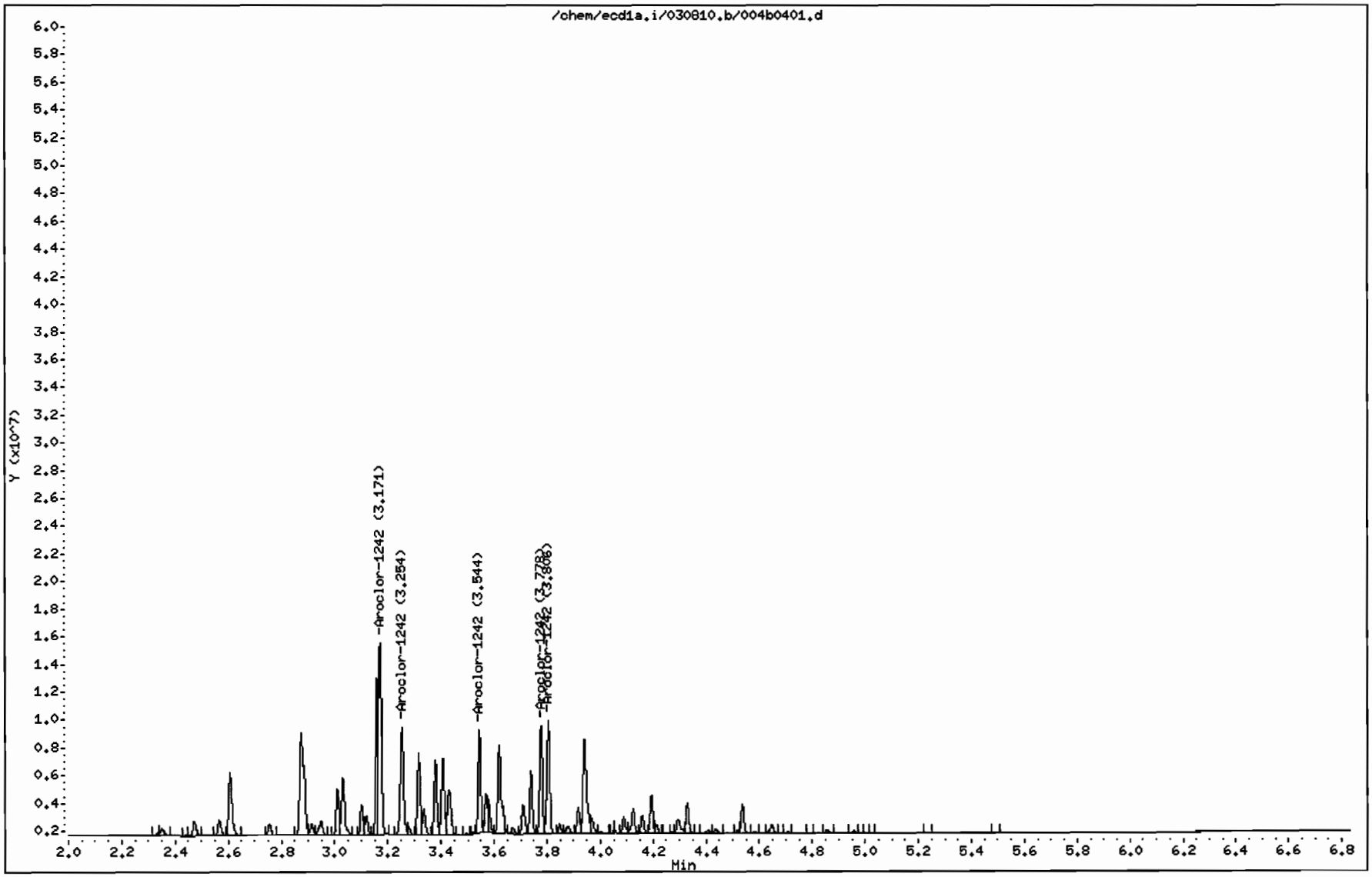
Sample Info: IWAR100219-42

Column phase: CLP2

Instrument: ecd1a.i

Operator: YS1

Column diameter: 0.25



GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/030810.b/005f0501.d
Lab Smp Id: WAR100223-48 Client Smp ID: AR124801
Inj Date : 08-MAR-2010 06:35
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |WAR100223-48
Misc Info :
Comment :
Method : /chem/ecd1a.i/030810.b/ECD1-F-8082-022210.m
Meth Date : 08-Mar-2010 09:20 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

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
5 Aroclor-1248					CAS #: 12672-29-6		
2.852	2.852	0.000	9604842	1000.00	1030	80.00- 120.00	100.00
2.986	2.986	0.000	12597846	1000.00	1020	111.16- 151.16	131.16
3.238	3.238	0.000	14264976	1000.00	1170	128.52- 168.52	148.52
3.371	3.371	0.000	11529970	1000.00	1110	100.04- 140.04	120.04
3.603	3.603	0.000	7467875	1000.00	1100	57.75- 97.75	77.75

Average of Peak Amounts = 1.08e+03

Data File: /chem/ecd1a.i/030810.b/005f0501.d

Date : 08-MAR-2010 06:35

Client ID: AR124801

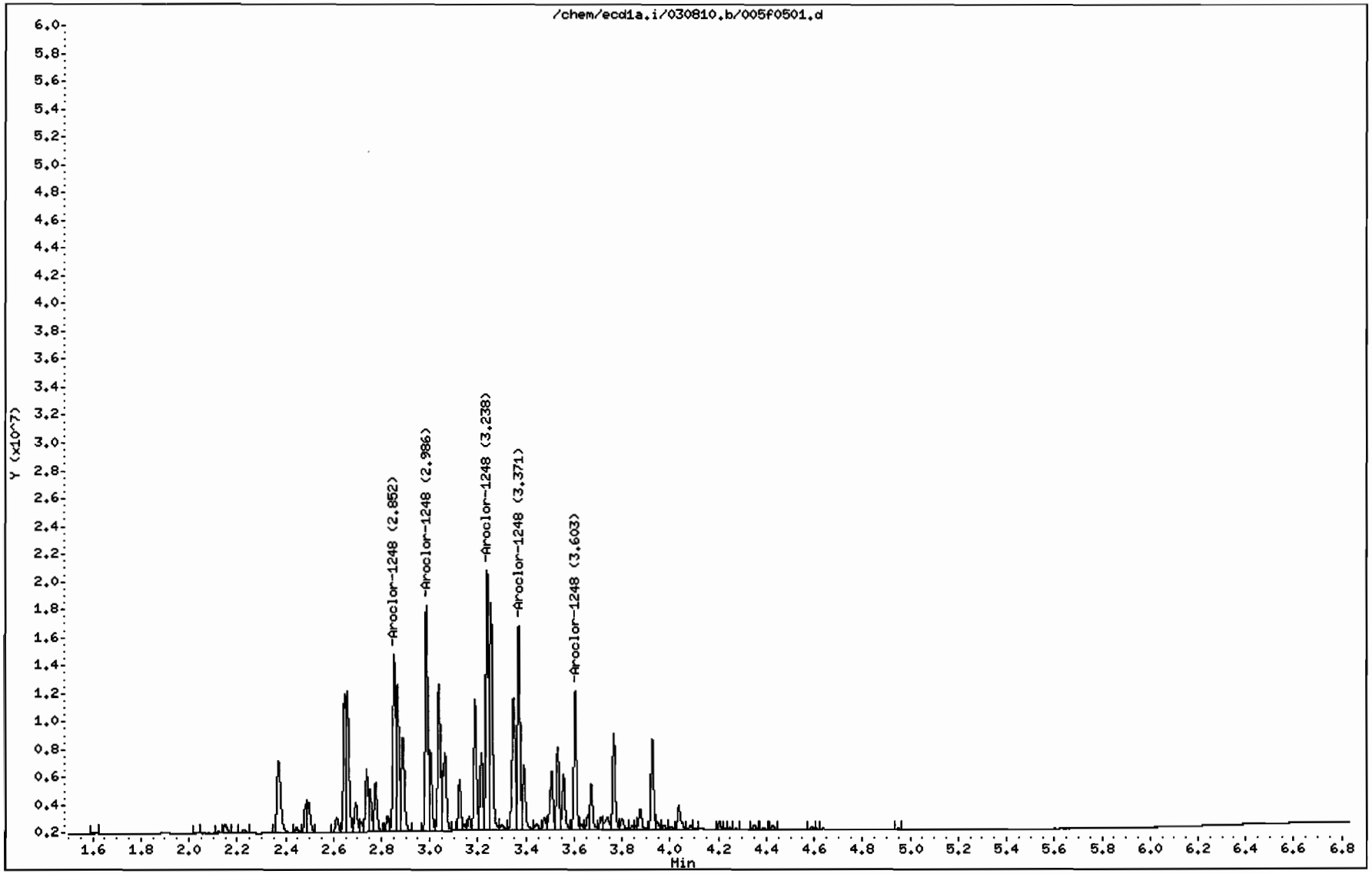
Sample Info: IWAR100223-48

Column phase: CLP1

Instrument: ecd1a.i

Operator: YS1

Column diameter: 0.25



GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/030810.b/005b0501.d
Lab Smp Id: WAR100223-48 Client Smp ID: AR124801
Inj Date : 08-MAR-2010 06:35
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |WAR100223-48
Misc Info :
Comment :
Method : /chem/ecd1a.i/030810.b/ECD1-B-8082-022210.m
Meth Date : 12-Mar-2010 08:39 jc 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: kilroy

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
5 Aroclor-1248					CAS #: 12672-29-6		
3.379	3.379	0.000	7274115	1000.00	957	80.00- 120.00	100.00
3.544	3.544	0.000	9142550	1000.00	977	105.69- 145.69	125.69
3.777	3.777	0.000	10634156	1000.00	999	126.19- 166.19	146.19
3.805	3.805	0.000	11813593	1000.00	976	142.41- 182.41	162.41
3.942	3.942	0.000	11372871	1000.00	989	136.35- 176.35	156.35
Average of Peak Amounts =					980		

Data File: /chem/ecd1a.i/030810.b/005b0501.d

Date : 08-MAR-2010 06:35

Client ID: AR124801

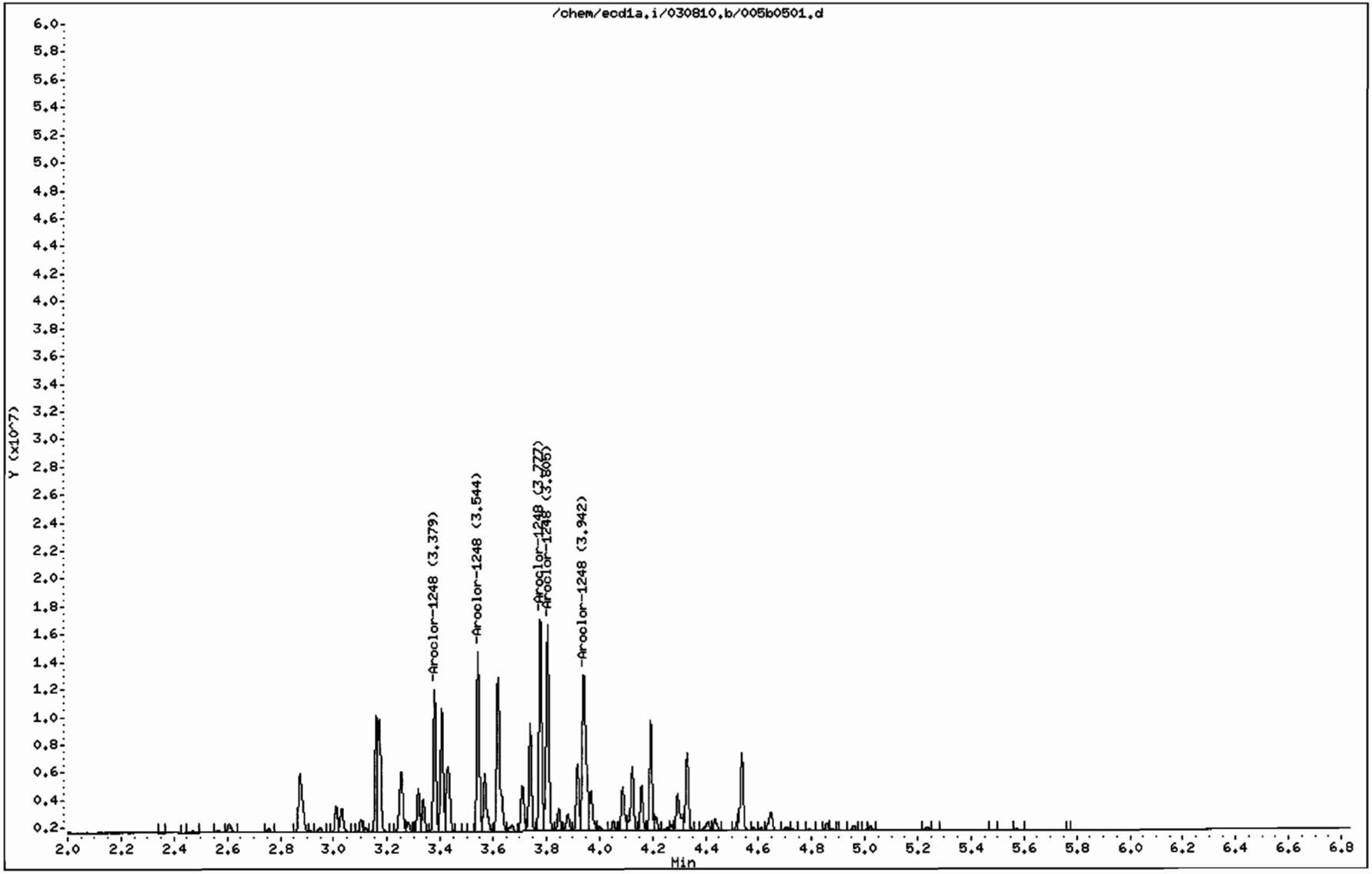
Sample Info: IWAR100223-48

Column phase: CLP2

Instrument: ecd1a.i

Operator: YS1

Column diameter: 0.25



GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/030810.b/007f0701.d
Lab Smp Id: WAR100104-32 Client Smp ID: AR123201
Inj Date : 08-MAR-2010 06:56
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |WAR100104-32
Misc Info :
Comment :
Method : /chem/ecd1a.i/030810.b/ECD1-F-8082-022210.m
Meth Date : 08-Mar-2010 09:20 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

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
3 Aroclor-1232					CAS #: 11141-16-5		
2.371	2.371	0.000	6435244	1000.00	1030	80.00- 120.00	100.00
2.658	2.658	0.000	8537753	1000.00	1140	112.67- 152.67	132.67
2.739	2.739	0.000	5379785	1000.00	1100	63.60- 103.60	83.60
2.853	2.853	0.000	2536681	1000.00	1160	19.42- 59.42	39.42
3.239	3.239	0.000	3617202	1000.00	1320	36.21- 76.21	56.21

Average of Peak Amounts = 1.15e+03

Data File: /chem/ecd1a.i/030810.b/007f0701.d

Page 1

Date : 08-MAR-2010 06:56

Client ID: AR123201

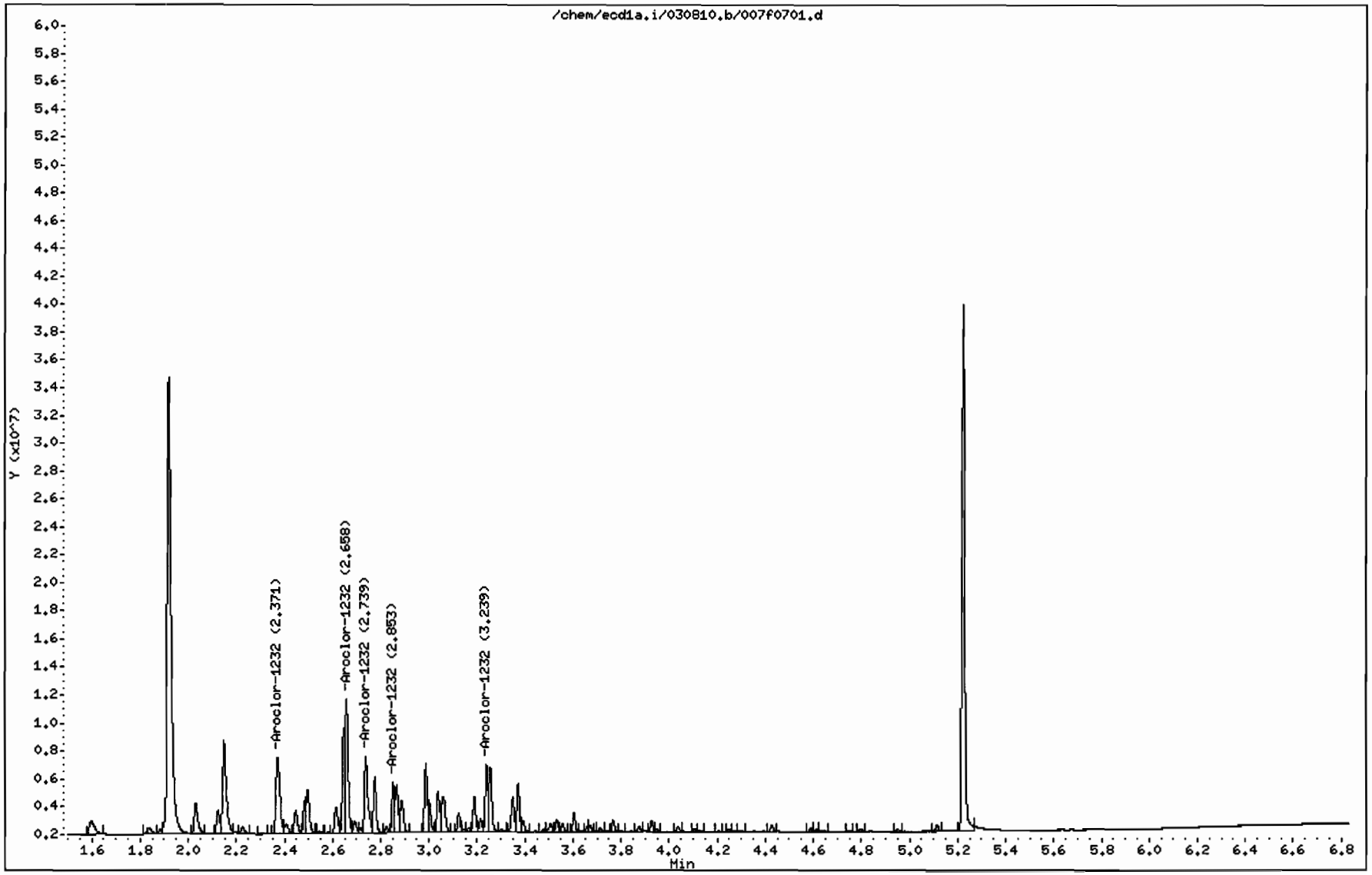
Instrument: ecd1a.i

Sample Info: IWAR100104-32

Operator: YS1

Column phase: CLP1

Column diameter: 0.25



GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/030810.b/007b0701.d
Lab Smp Id: WAR100104-32 Client Smp ID: AR123201
Inj Date : 08-MAR-2010 06:56
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |WAR100104-32
Misc Info :
Comment :
Method : /chem/ecd1a.i/030810.b/ECD1-B-8082-022210.m
Meth Date : 08-Mar-2010 09:28 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

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
3 Aroclor-1232					CAS #: 11141-16-5		
2.874	2.874	0.000	5091903	1000.00	1030	80.00- 120.00	100.00
3.172	3.172	0.000	5851853	1000.00	1110	94.92- 134.92	114.92
3.254	3.254	0.000	3935940	1000.00	1040	57.30- 97.30	77.30
3.545	3.545	0.000	2932147	1000.00	1090	37.58- 77.58	57.58
3.779	3.779	0.000	2956209	1000.00	1120	38.06- 78.06	58.06

Average of Peak Amounts = 1.08e+03

Data File: /chem/ecd1a.i/030810.b/007b0701.d

Date : 08-MAR-2010 06:56

Client ID: AR123201

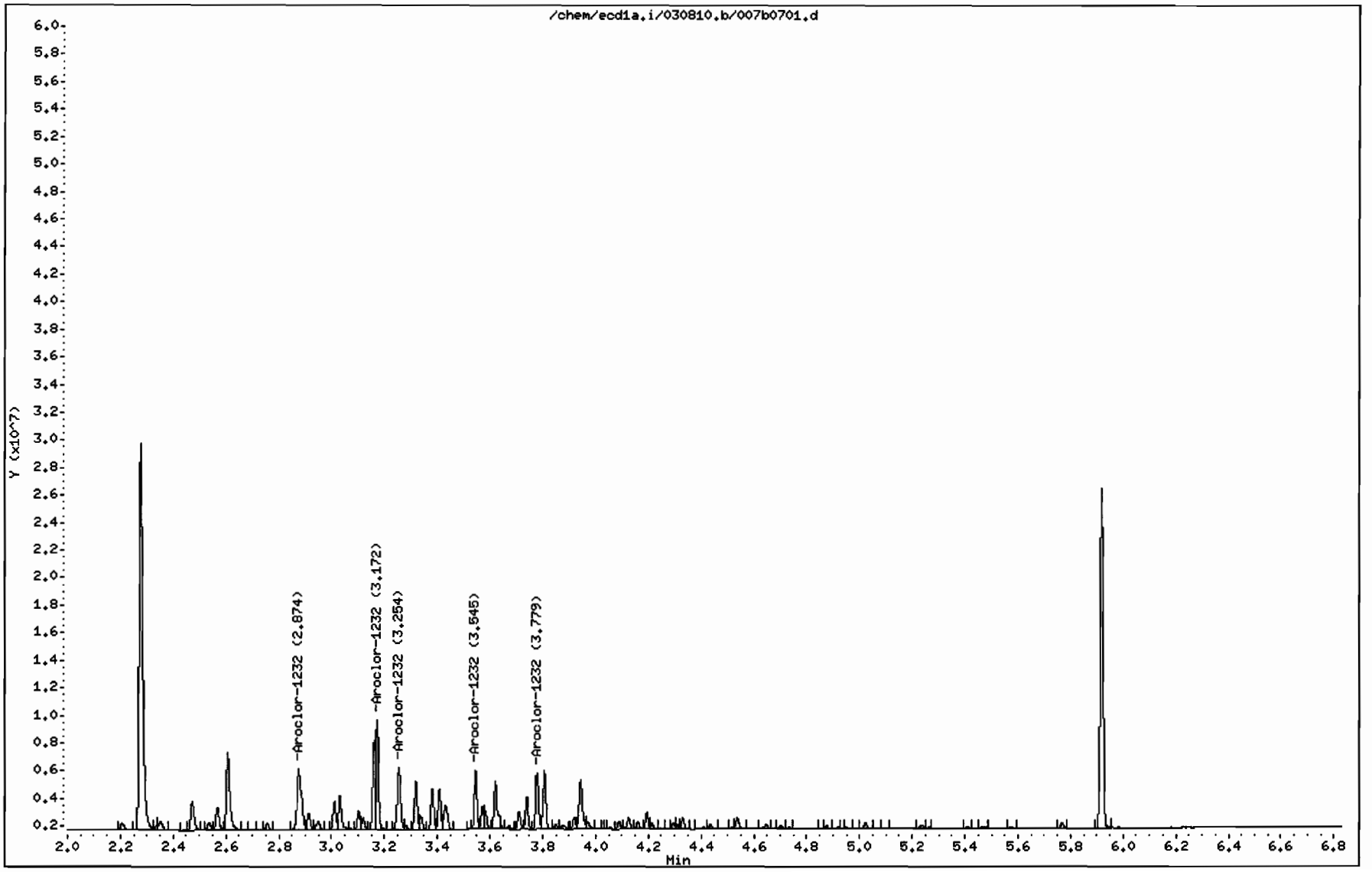
Sample Info: IWAR100104-32

Column phase: CLP2

Instrument: ecd1a.i

Operator: YS1

Column diameter: 0.25



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RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/030810.b/008f0801.d
Lab Smp Id: WAR100104-21 Client Smp ID: AR122101
Inj Date : 08-MAR-2010 07:07
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |WAR100104-21
Misc Info :
Comment :
Method : /chem/ecd1a.i/030810.b/ECD1-F-8082-022210.m
Meth Date : 08-Mar-2010 09:20 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

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
2 Aroclor-1221					CAS #: 11104-28-2		
2.030	2.030	0.000	4472060	1000.00	1020	80.00- 120.00	100.00
2.123	2.123	0.000	2420848	1000.00	996	34.13- 74.13	54.13
2.148	2.148	0.000	10898728	1000.00	1050	223.71- 263.71	243.71

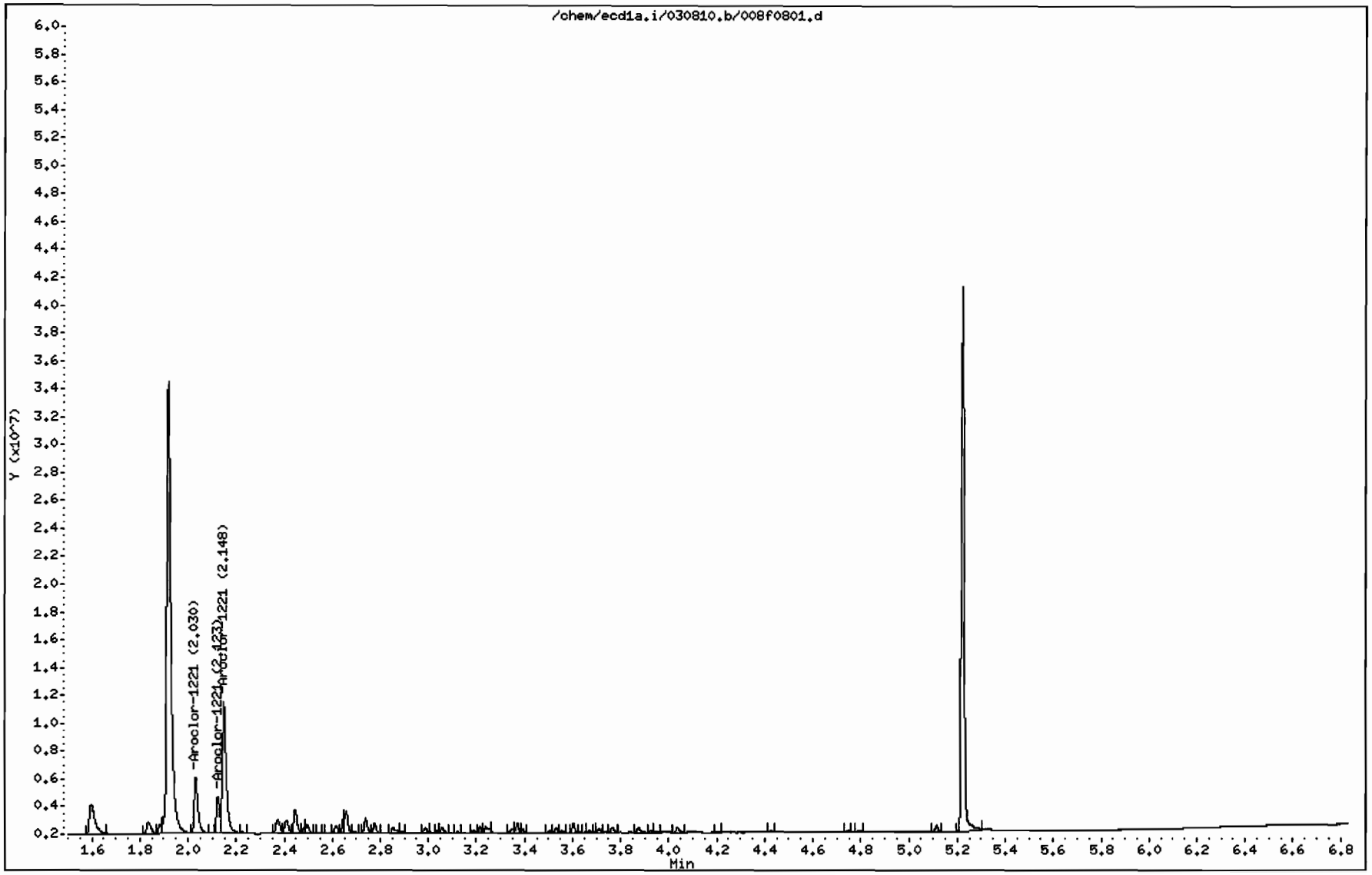
Average of Peak Amounts = 1.02e+03

Data File: /chem/ecd1a.i/030810.b/008f0801.d
Date : 08-MAR-2010 07:07
Client ID: AR122101
Sample Info: IWAR100104-21

Column phase: CLP1

Instrument: ecd1a.i

Operator: YS1
Column diameter: 0.25



GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/030810.b/008b0801.d
Lab Smp Id: WAR100104-21 Client Smp ID: AR122101
Inj Date : 08-MAR-2010 07:07
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |WAR100104-21
Misc Info :
Comment :
Method : /chem/ecd1a.i/030810.b/ECD1-B-8082-022210.m
Meth Date : 08-Mar-2010 09:28 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

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
2 Aroclor-1221					CAS #: 11104-28-2		
2.472	2.472	0.000	3539602	1000.00	1030	80.00- 120.00	100.00
2.567	2.567	0.000	2193195	1000.00	1020	41.96- 81.96	61.96
2.607	2.607	0.000	7453017	1000.00	1020	190.56- 230.56	210.56

Average of Peak Amounts = 1.02e+03

Data File: /chem/ecd1a.i/030810.b/008b0801.d

Date : 08-MAR-2010 07:07

Client ID: AR122101

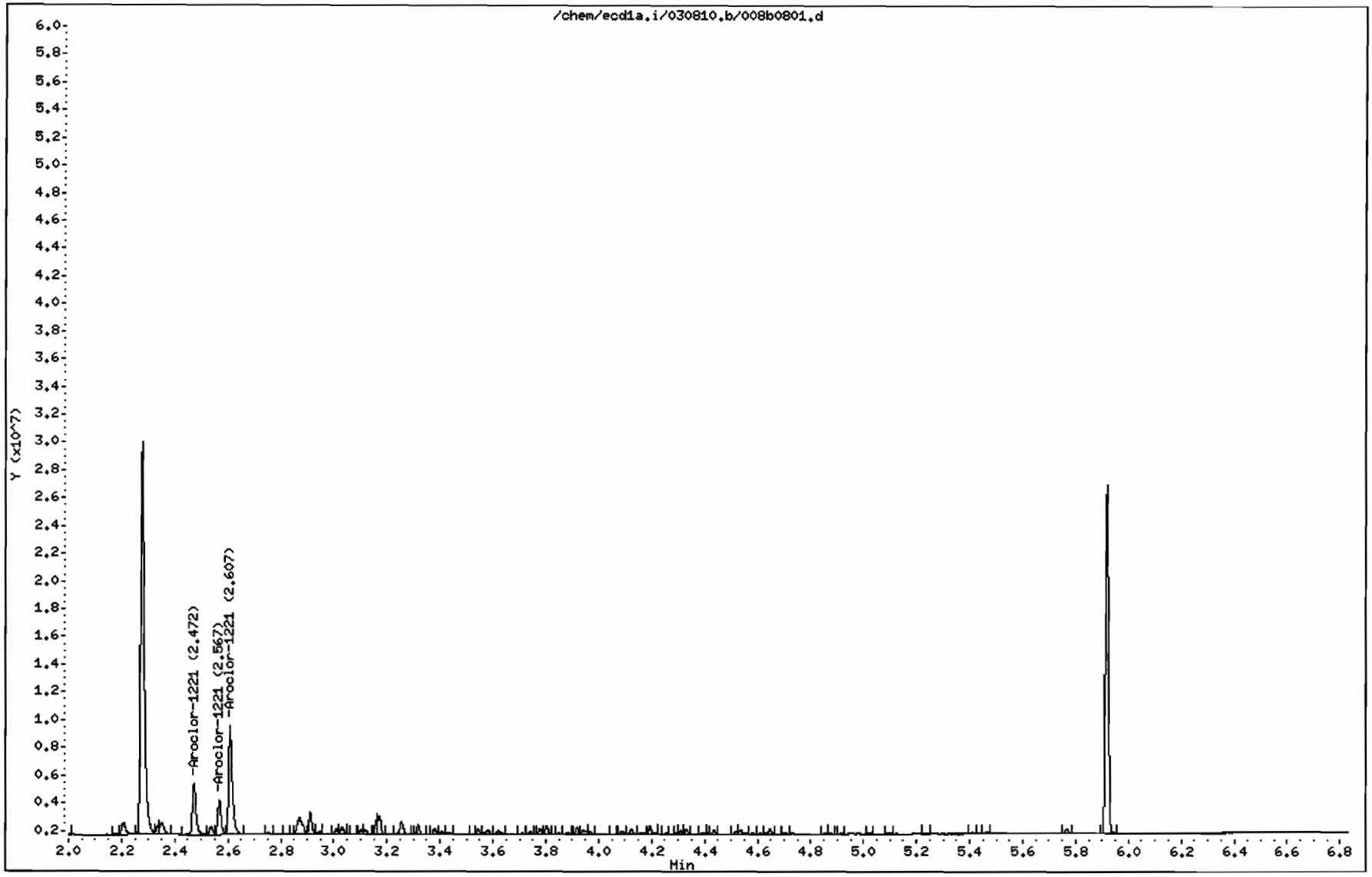
Sample Info: IWAR100104-21

Column phase: CLP2

Instrument: ecd1a.i

Operator: YS1

Column diameter: 0.25



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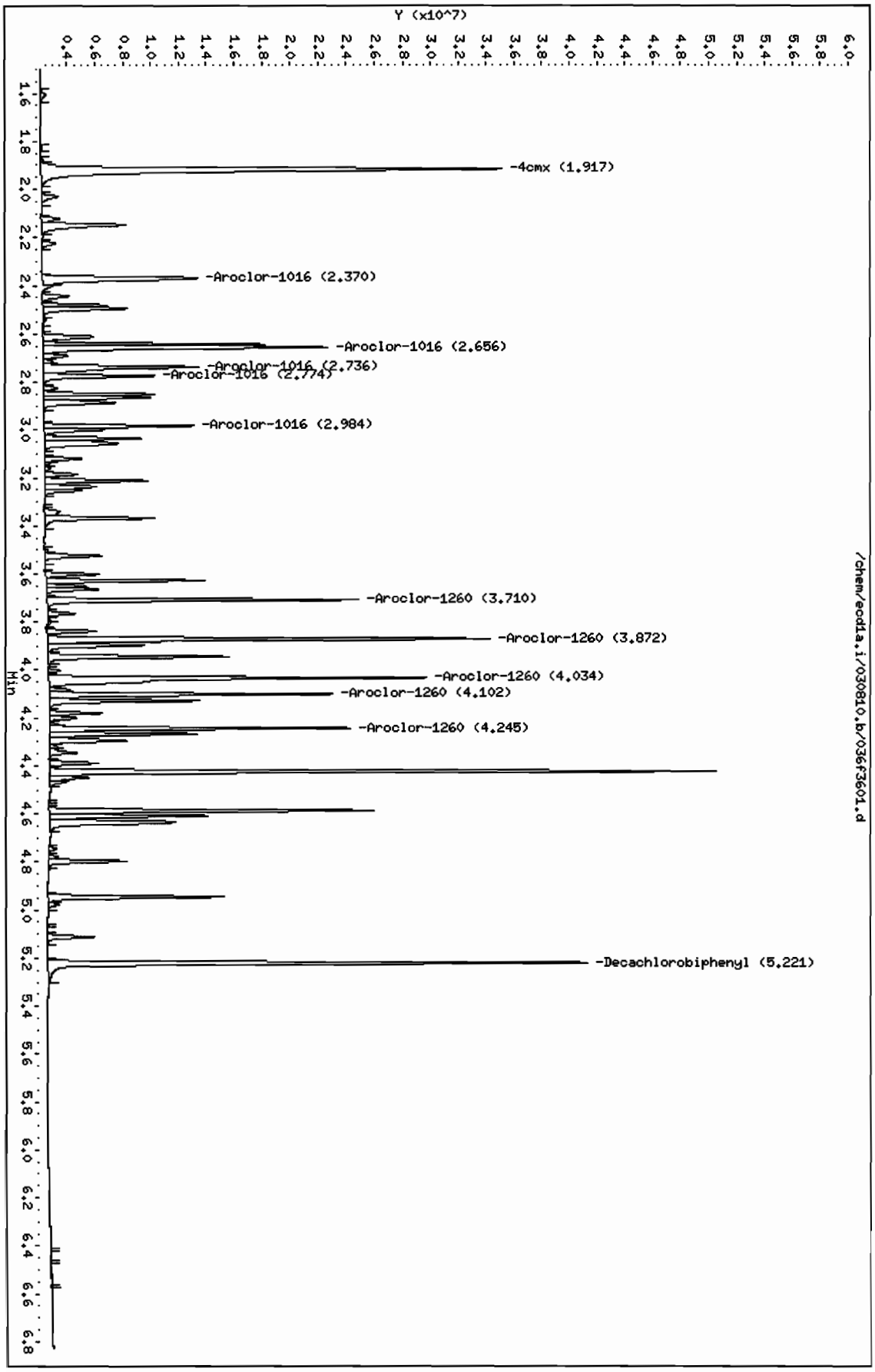
RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/030810.b/036f3601.d
Lab Smp Id: WAR100222-60 04 Client Smp ID: AR166004
Inj Date : 08-MAR-2010 12:39
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |WAR100222-60 04
Misc Info :
Comment :
Method : /chem/ecd1a.i/030810.b/ECD1-F-8082-022210.m
Meth Date : 08-Mar-2010 13:37 yip00818 Quant Type: ESTD
Cal Date : 22-FEB-2010 12:08 Cal File: 036f3601.d
Als bottle: 36 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: hpclp1

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.917	1.917	0.000	38899750	100.000	90.3	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.221	5.223	-0.002	30690307	100.000	99.9	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.370	2.371	-0.001	13301358	1000.00	865	80.00- 120.00	100.00
2.656	2.657	-0.001	17589485	1000.00	964	112.24- 152.24	132.24
2.736	2.737	-0.001	11087033	1000.00	919	63.35- 103.35	83.35
2.774	2.775	-0.001	6668716	1000.00	940	30.14- 70.14	50.14
2.984	2.986	-0.002	8520553	1000.00	956	44.06- 84.06	64.06
Average of Peak Amounts =					929		
7 Aroclor-1260					CAS #: 11096-82-5		
3.710	3.711	-0.001	16657972	1000.00	976	80.00- 120.00	100.00
3.872	3.873	-0.001	24941301	1000.00	1050	129.73- 169.73	149.73
4.034	4.036	-0.002	26166457	1000.00	1050	137.08- 177.08	157.08
4.102	4.104	-0.002	15049112	1000.00	1040	70.34- 110.34	90.34
4.245	4.247	-0.002	15765208	1000.00	1090	74.64- 114.64	94.64
Average of Peak Amounts =					1.04e+03		

Data File: /chem/ecd1a.i/030810.b/036f3601.d
Date : 08-MAR-2010 12:39
Client ID: AR166004
Sample Info: IWAR100222-60 04
Column phase: CLP1

Instrument: ecd1a.i
Operator: YSI
Column diameter: 0.25



Page 1

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RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/030810.b/036b3601.d
Lab Smp Id: WAR100222-60 04 Client Smp ID: AR166004
Inj Date : 08-MAR-2010 12:39
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |WAR100222-60 04
Misc Info :
Comment :
Method : /chem/ecd1a.i/030810.b/ECD1-B-8082-022210.m
Meth Date : 12-Mar-2010 08:46 jc Quant Type: ESTD
Cal Date : 22-FEB-2010 12:08 Cal File: 036b3601.d
Als bottle: 36 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: kilroy

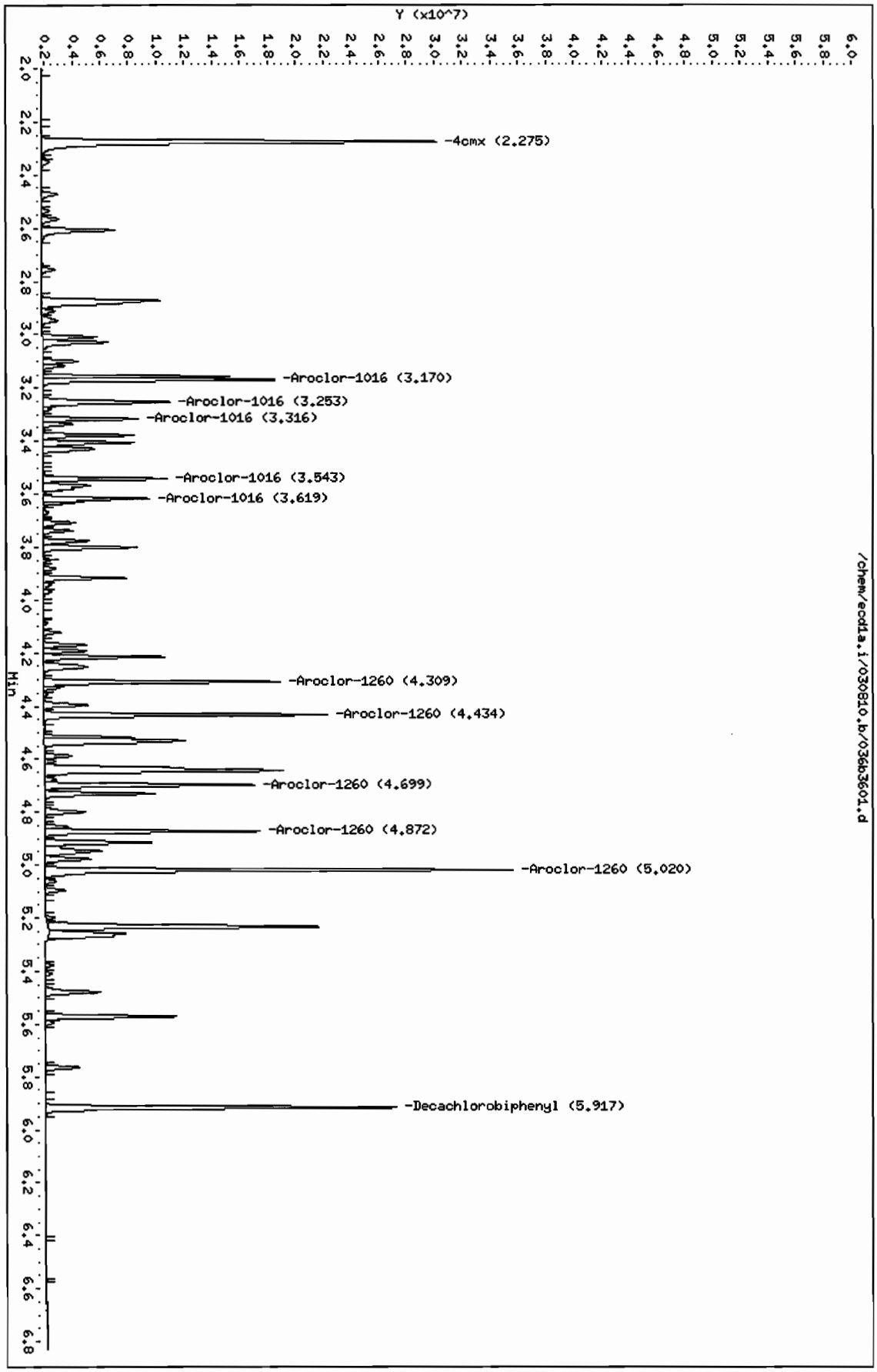
RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.275	2.277	-0.002	26532616	100.000	89.2	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.917	5.918	-0.001	19079053	100.000	90.2	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
3.170	3.171	-0.001	11707346	1000.00	915	80.00- 120.00	100.00(M)
3.253	3.254	-0.001	7830180	1000.00	878	46.88- 86.88	66.88
3.316	3.317	-0.001	4851376	1000.00	897	21.44- 61.44	41.44
3.543	3.544	-0.001	6339832	1000.00	917	34.15- 74.15	54.15
3.619	3.619	0.000	5947083	1000.00	926	30.80- 70.80	50.80
Average of Peak Amounts =					907		
7 Aroclor-1260					CAS #: 11096-82-5		
4.309	4.310	-0.001	11874655	1000.00	899	80.00- 120.00	100.00
4.434	4.435	-0.001	14572850	1000.00	936	102.72- 142.72	122.72
4.699	4.701	-0.002	10941327	1000.00	924	72.14- 112.14	92.14
4.872	4.874	-0.002	11383856	1000.00	933	75.87- 115.87	95.87
5.020	5.021	-0.001	25485891	1000.00	961	194.62- 234.62	214.62
Average of Peak Amounts =					931		

QC Flag Legend

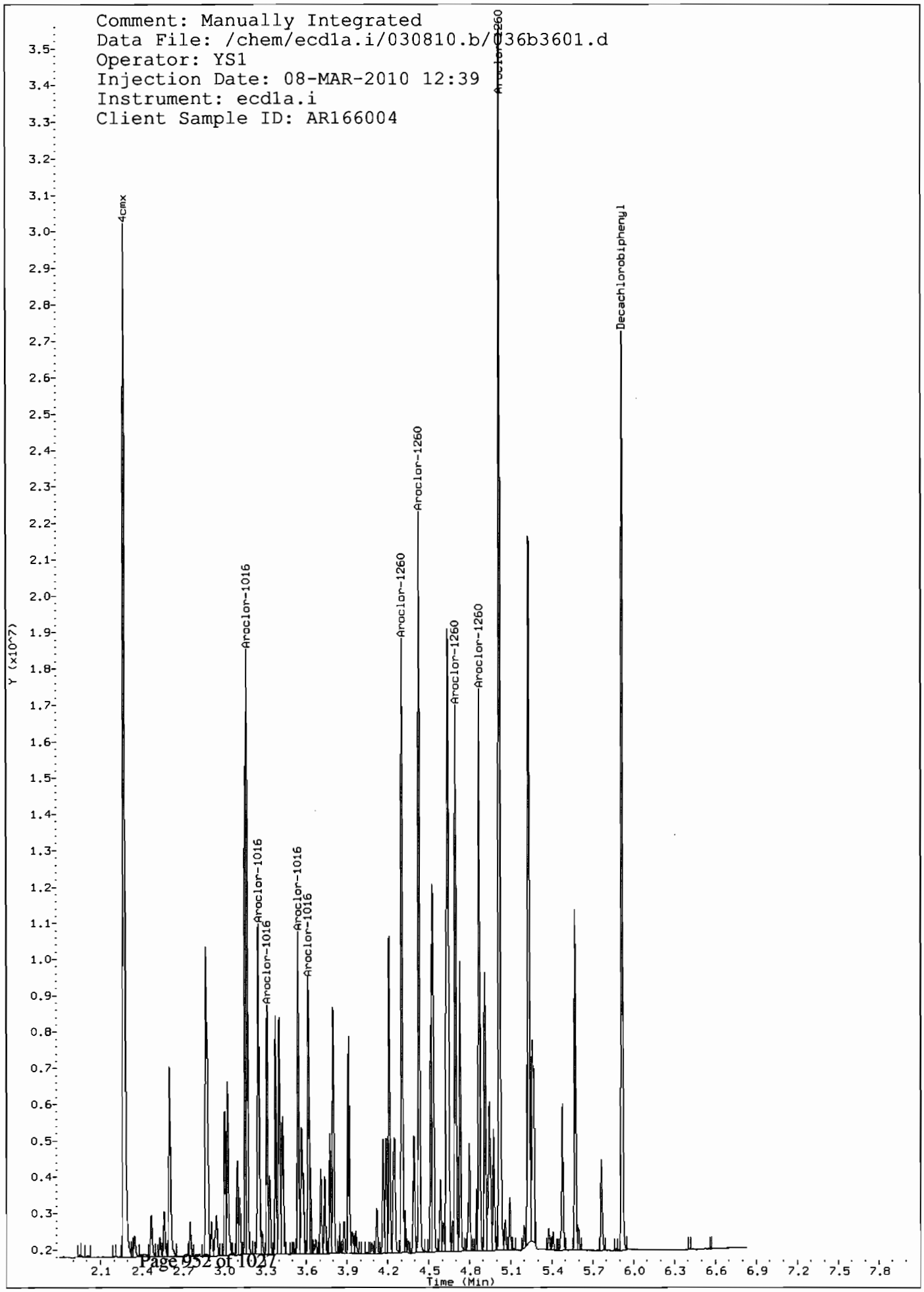
M - Compound response manually integrated.

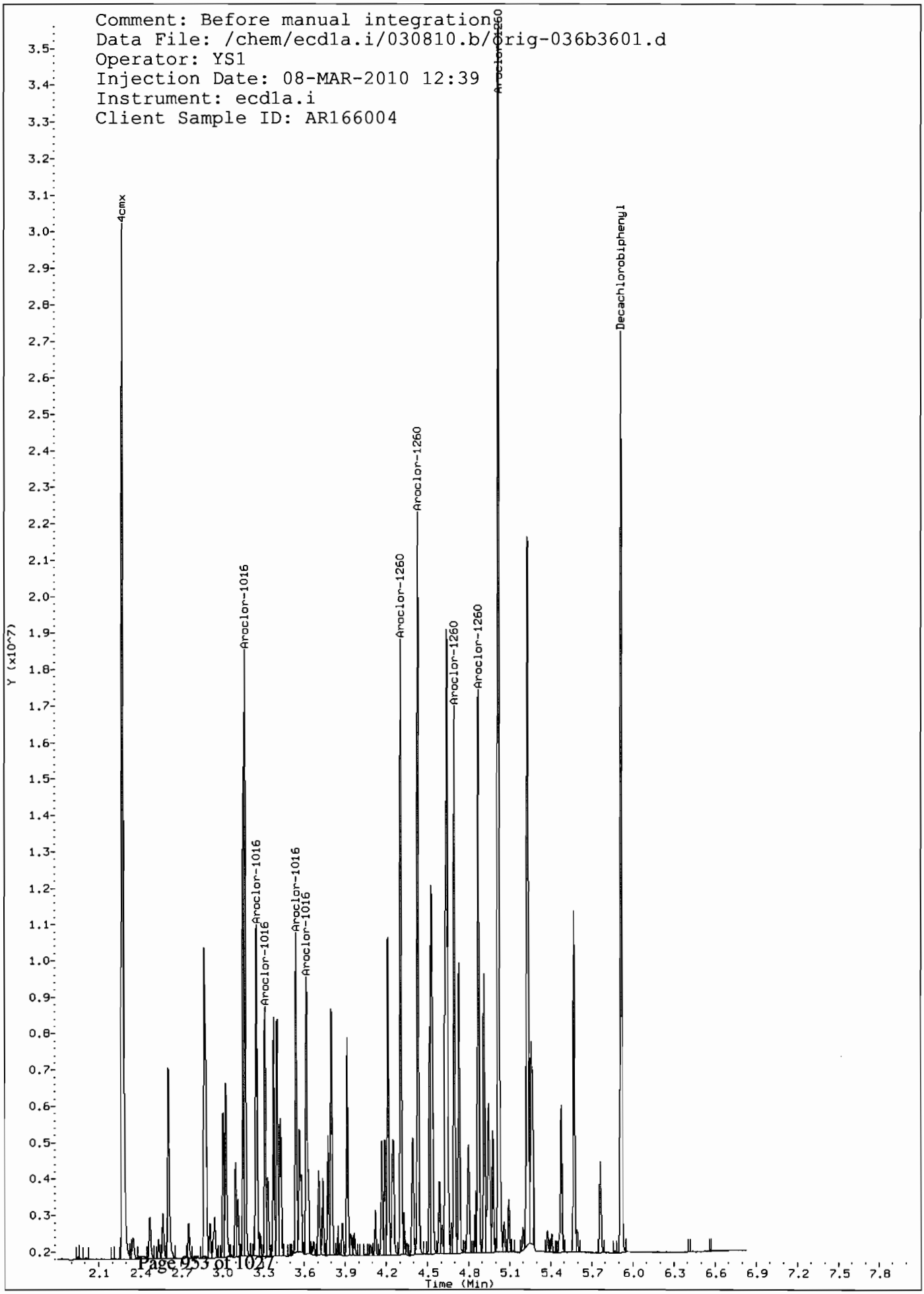
Data File: /chem/ecd1a.i/030810.b/036b3601.d
Date : 08-MAR-2010 12:39
Client ID: AR166004
Sample Info: IWAR100222-60 04
Column phase: CLP2

Instrument: ecd1a.i
Operator: YS1
Column diameter: 0.25



Page 1


Comment: Manually Integrated
Data File: /chem/ecd1a.i/030810.b/036b3601.d
Operator: YS1
Injection Date: 08-MAR-2010 12:39
Instrument: ecd1a.i
Client Sample ID: AR166004
4cmx
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Decachlorobiphenyl
Y (x10^7)
Time (Min)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Operator: YS1
Injection Date: 08-MAR-2010 12:39
Instrument: ecd1a.i
Client Sample ID: AR166004
4cmx
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Decachlorobiphenyl
Y (x10^7)
Time (Min)

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/030810.b/044f4401.d
Lab Smp Id: WAR100222-60 05 Client Smp ID: AR166005
Inj Date : 08-MAR-2010 14:11
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |WAR100222-60 05
Misc Info :
Comment :
Method : /chem/ecd1a.i/030810.b/ECD1-F-8082-022210.m
Meth Date : 08-Mar-2010 14:36 yip00818 Quant Type: ESTD
Cal Date : 22-FEB-2010 12:08 Cal File: 036f3601.d
Als bottle: 44 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: hpclp1

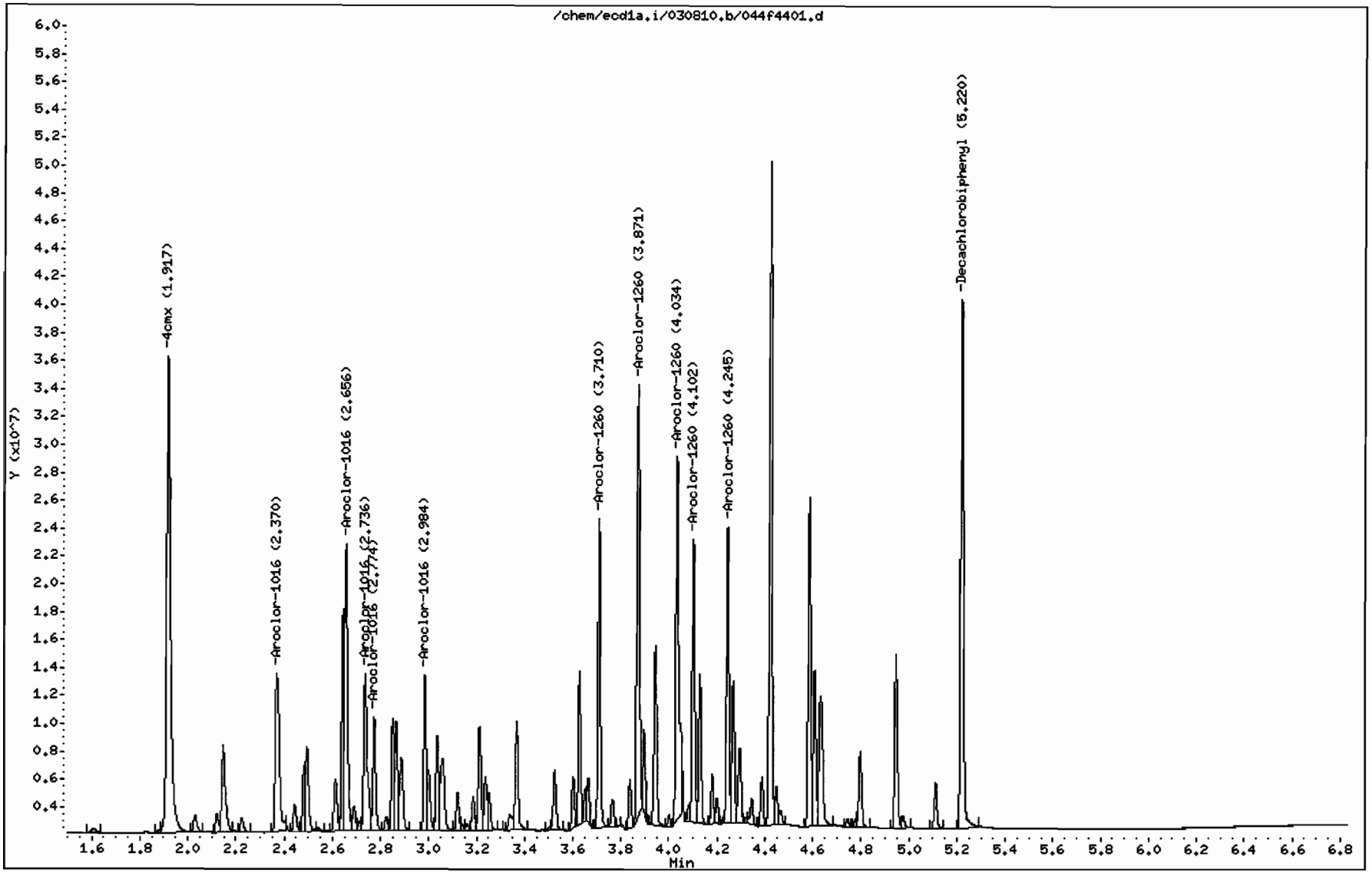
RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.917	1.917	0.000	38880075	100.000	90.3	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.220	5.223	-0.003	30388568	100.000	98.9	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.370	2.371	-0.001	13717670	1000.00	892	80.00- 120.00	100.00
2.656	2.657	-0.001	17493181	1000.00	959	107.52- 147.52	127.52
2.736	2.737	-0.001	11035120	1000.00	915	60.44- 100.44	80.44
2.774	2.775	-0.001	6703608	1000.00	945	28.87- 68.87	48.87
2.984	2.986	-0.002	8568272	1000.00	961	42.46- 82.46	62.46
Average of Peak Amounts =					934		
7 Aroclor-1260					CAS #: 11096-82-5		
3.710	3.711	-0.001	16539344	1000.00	969	80.00- 120.00	100.00
3.871	3.873	-0.002	23440129	1000.00	991	121.72- 161.72	141.72
4.034	4.036	-0.002	24136062	1000.00	966	125.93- 165.93	145.93
4.102	4.104	-0.002	14509053	1000.00	1010	67.72- 107.72	87.72
4.245	4.247	-0.002	15246659	1000.00	1060	72.18- 112.18	92.18
Average of Peak Amounts =					998		

Data File: /chem/ecd1a.i/030810.b/044f4401.d
Date : 08-MAR-2010 14:11
Client ID: AR166005
Sample Info: IWAR100222-60 05

Column phase: CLP1

Instrument: ecd1a.i

Operator: YS1
Column diameter: 0.25



GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/030810.b/044b4401.d
Lab Smp Id: WAR100222-60 05 Client Smp ID: AR166005
Inj Date : 08-MAR-2010 14:11
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |WAR100222-60 05
Misc Info :
Comment :
Method : /chem/ecd1a.i/030810.b/ECD1-B-8082-022210.m
Meth Date : 12-Mar-2010 08:48 jc Quant Type: ESTD
Cal Date : 22-FEB-2010 12:08 Cal File: 036b3601.d
Als bottle: 44 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: kilroy

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.275	2.277	-0.002	26360448	100.000	88.6	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.916	5.918	-0.002	19099826	100.000	90.3	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
3.170	3.171	-0.001	12102351	1000.00	946	80.00- 120.00	100.00(M)
3.253	3.254	-0.001	7777446	1000.00	872	44.26- 84.26	64.26
3.316	3.317	-0.001	4854908	1000.00	898	20.12- 60.12	40.12
3.543	3.544	-0.001	6307429	1000.00	912	32.12- 72.12	52.12
3.618	3.619	-0.001	5811574	1000.00	904	28.02- 68.02	48.02
Average of Peak Amounts =					907		
7 Aroclor-1260					CAS #: 11096-82-5		
4.308	4.310	-0.002	11836710	1000.00	896	80.00- 120.00	100.00
4.433	4.435	-0.002	14451961	1000.00	928	102.09- 142.09	122.09
4.699	4.701	-0.002	10893820	1000.00	920	72.03- 112.03	92.03
4.871	4.874	-0.003	11339319	1000.00	929	75.80- 115.80	95.80
5.019	5.021	-0.002	25373227	1000.00	956	194.36- 234.36	214.36
Average of Peak Amounts =					926		

QC Flag Legend

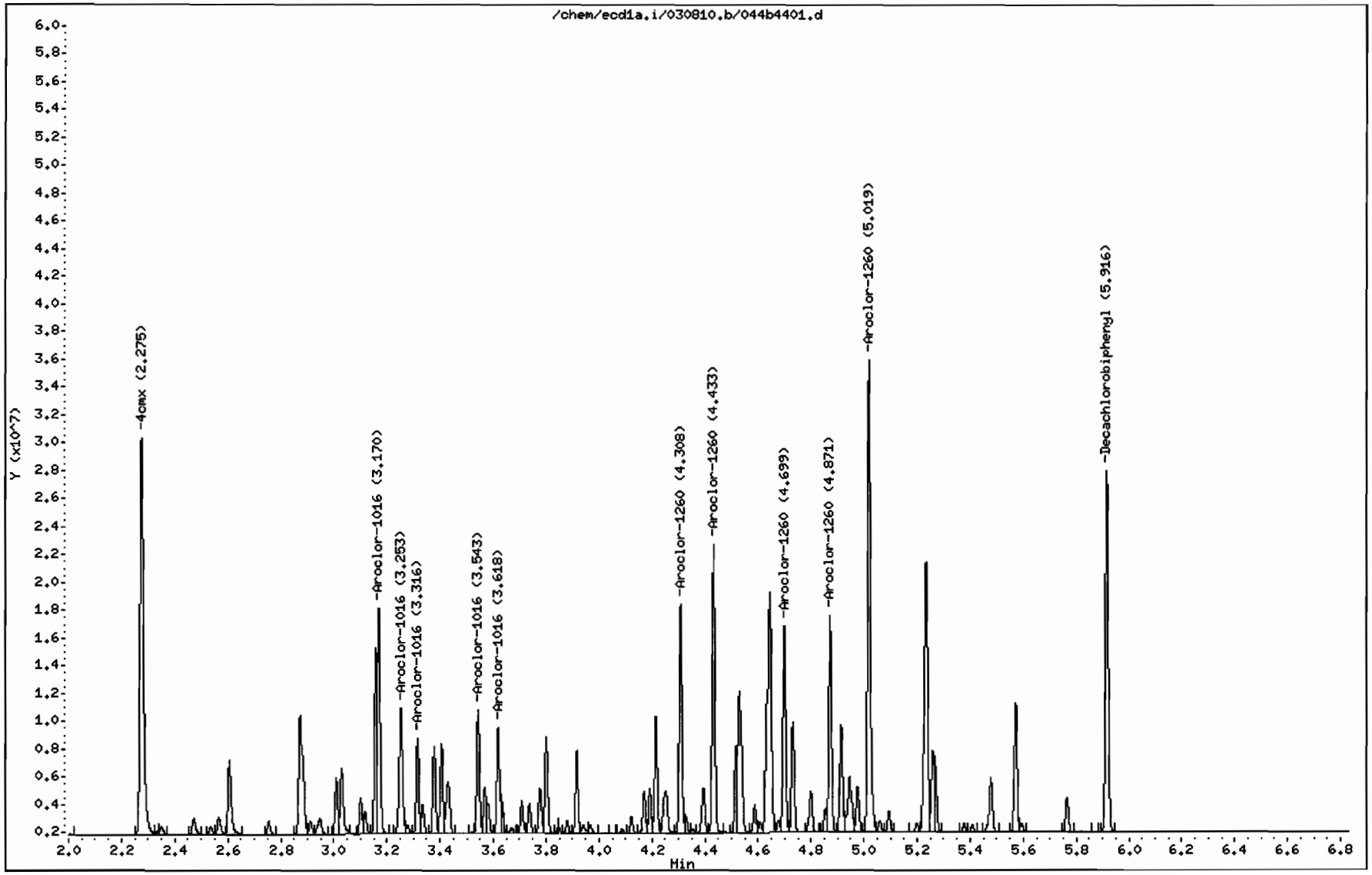
M - Compound response manually integrated.

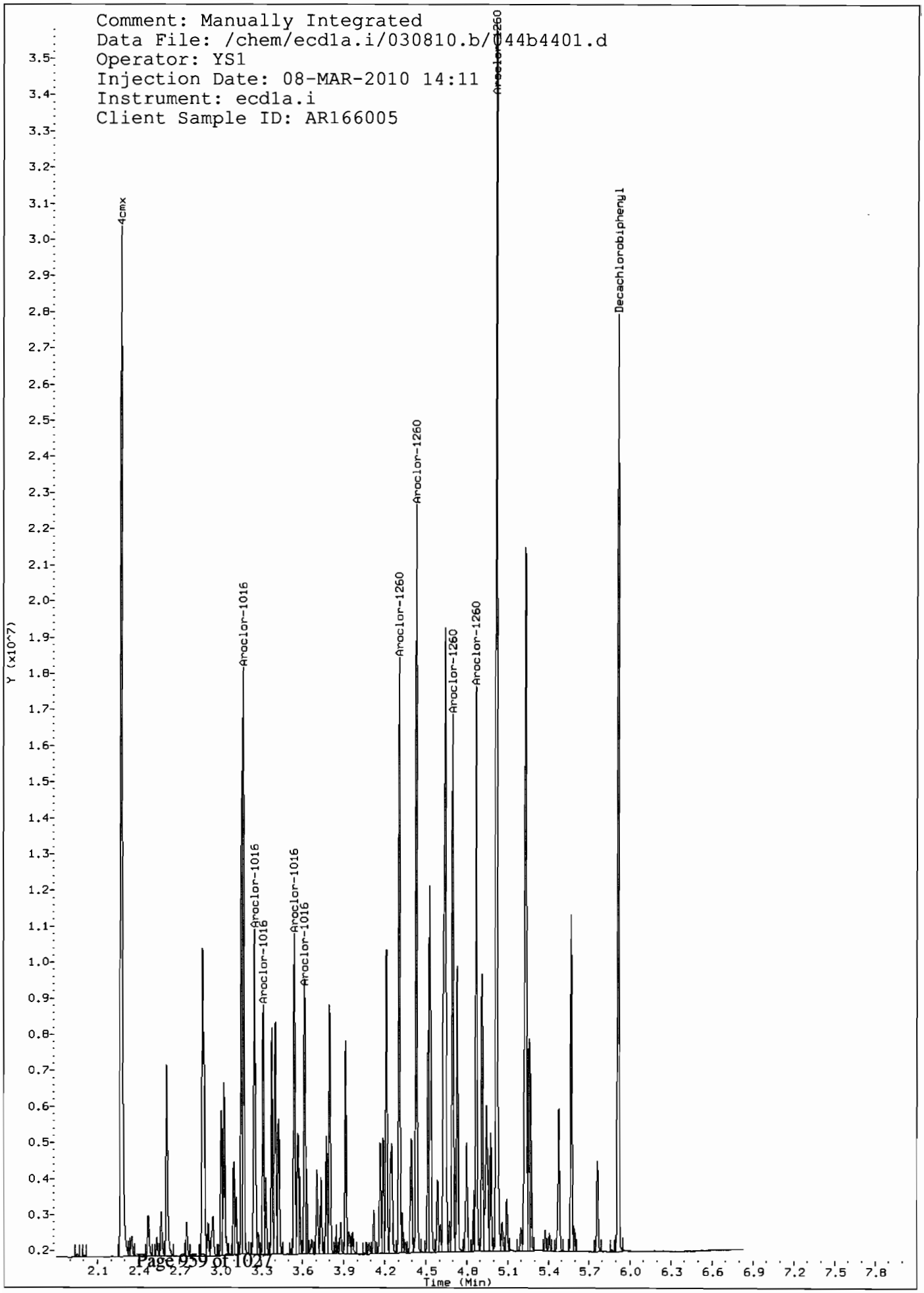
Data File: /chem/ecd1a.i/030810.b/044b4401.d
Date : 08-MAR-2010 14:11
Client ID: AR166005
Sample Info: IWAR100222-60 05

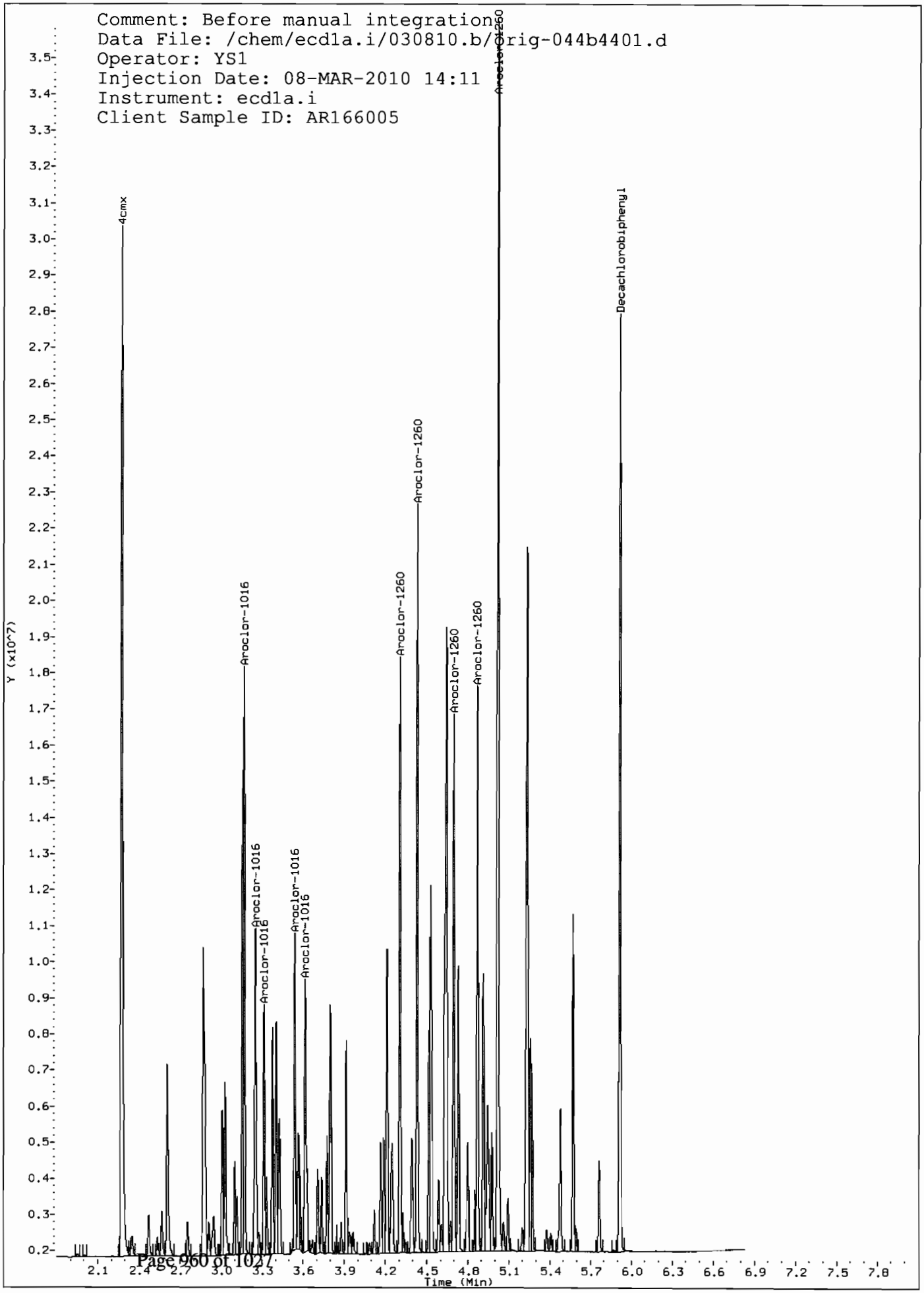
Column phase: CLP2

Instrument: ecd1a.i

Operator: YS1
Column diameter: 0.25




Comment: Manually Integrated
Data File: /chem/ecd1a.i/030810.b/044b4401.d
Operator: YS1
Injection Date: 08-MAR-2010 14:11
Instrument: ecd1a.i
Client Sample ID: AR166005
4cmx
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Decachlorobiphenyl
Y (x10^7)
Time (Min)


Comment: Before manual integration
Data File: /chem/ecd1a.i/030810.b/Orig-044b4401.d
Operator: YS1
Injection Date: 08-MAR-2010 14:11
Instrument: ecd1a.i
Client Sample ID: AR166005
4cmx
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Decachlorobiphenyl
Y (x10^7)
Time (Min)

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

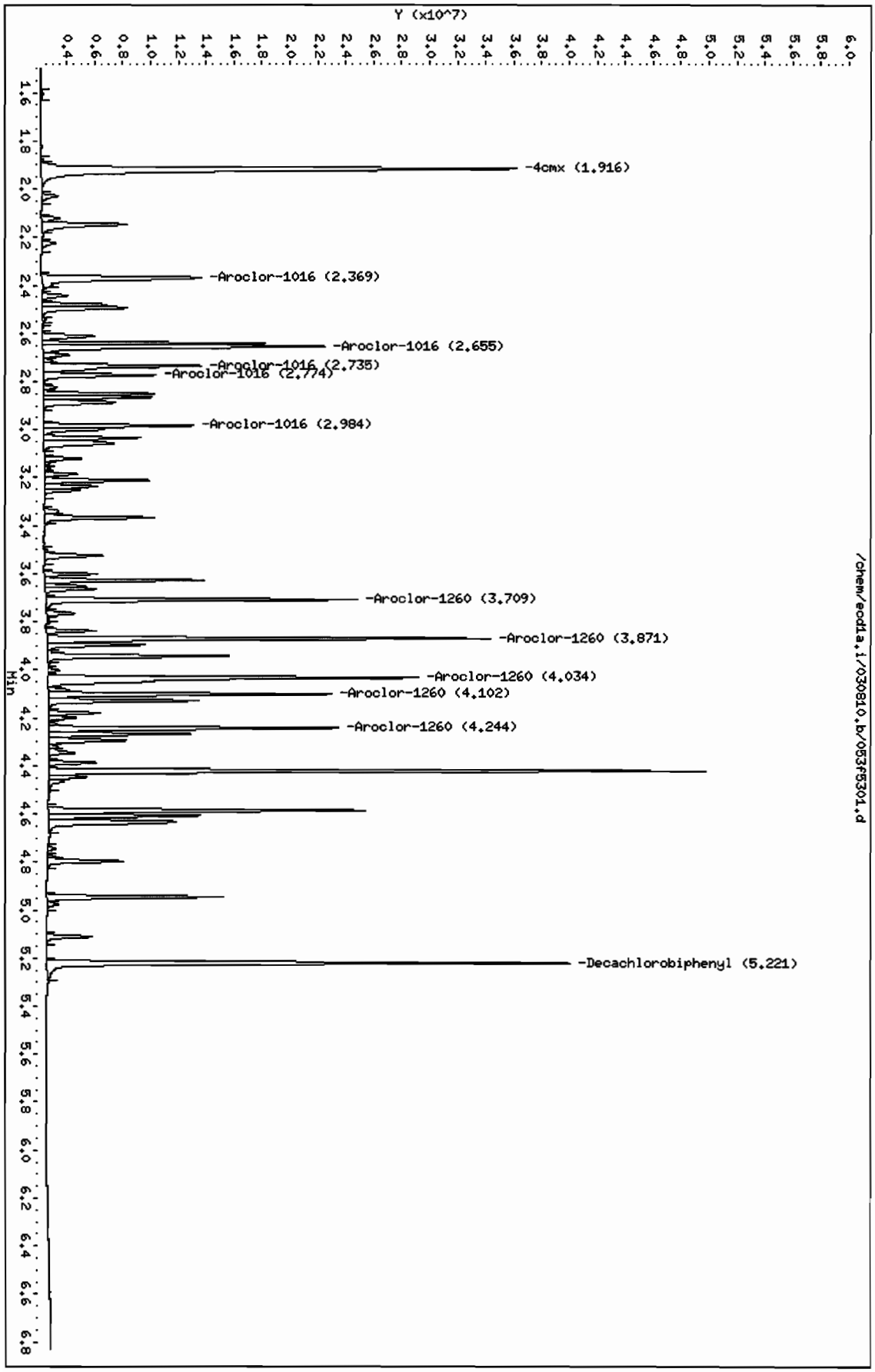
Data file : /chem/ecd1a.i/030810.b/053f5301.d
Lab Smp Id: WAR100222-60 06 Client Smp ID: AR166006
Inj Date : 08-MAR-2010 16:01
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |WAR100222-60 06
Misc Info :
Comment :
Method : /chem/ecd1a.i/030810.b/ECD1-F-8082-022210.m
Meth Date : 09-Mar-2010 06:38 yip00818 Quant Type: ESTD
Cal Date : 22-FEB-2010 12:08 Cal File: 036f3601.d
Als bottle: 53 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: hpclp1

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.916	1.917	-0.001	38807137	100.000	90.1	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.221	5.223	-0.002	29924722	100.000	97.4	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.369	2.371	-0.002	13689414	1000.00	890	80.00- 120.00	100.00
2.655	2.657	-0.002	17627981	1000.00	967	108.77- 148.77	128.77
2.735	2.737	-0.002	11020579	1000.00	913	60.50- 100.50	80.50
2.774	2.775	-0.001	6640864	1000.00	936	28.51- 68.51	48.51
2.984	2.986	-0.002	8549837	1000.00	959	42.46- 82.46	62.46
Average of Peak Amounts =					933		
7 Aroclor-1260					CAS #: 11096-82-5		
3.709	3.711	-0.002	16519937	1000.00	968	80.00- 120.00	100.00
3.871	3.873	-0.002	24665952	1000.00	1040	129.31- 169.31	149.31
4.034	4.036	-0.002	26229103	1000.00	1050	138.77- 178.77	158.77
4.102	4.104	-0.002	14894433	1000.00	1030	70.16- 110.16	90.16
4.244	4.247	-0.003	15497470	1000.00	1070	73.81- 113.81	93.81
Average of Peak Amounts =					1.03e+03		

Data File: /chem/ecd1a.i/030810.b/053f5301.d
Date : 08-MAR-2010 16:01
Client ID: AR166006
Sample Info: IWAR100222-60 06

Column phase: CLP1

Instrument: ecd1a.i
Operator: YS1
Column diameter: 0.25



Page 1

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RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/030810.b/053b5301.d
Lab Smp Id: WAR100222-60 06 Client Smp ID: AR166006
Inj Date : 08-MAR-2010 16:01
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |WAR100222-60 06
Misc Info :
Comment :
Method : /chem/ecd1a.i/030810.b/ECD1-B-8082-022210.m
Meth Date : 12-Mar-2010 08:48 jc Quant Type: ESTD
Cal Date : 22-FEB-2010 12:08 Cal File: 036b3601.d
Als bottle: 53 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: kilroy

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.275	2.277	-0.002	26428566	100.000	88.9	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.916	5.918	-0.002	18989365	100.000	89.8	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
3.170	3.171	-0.001	11924622	1000.00	932	80.00- 120.00	100.00(M)
3.252	3.254	-0.002	7791781	1000.00	874	45.34- 85.34	65.34
3.316	3.317	-0.001	4886721	1000.00	904	20.98- 60.98	40.98
3.543	3.544	-0.001	6337865	1000.00	916	33.15- 73.15	53.15
3.618	3.619	-0.001	6020515	1000.00	937	30.49- 70.49	50.49
Average of Peak Amounts =					913		
7 Aroclor-1260					CAS #: 11096-82-5		
4.308	4.310	-0.002	11785178	1000.00	892	80.00- 120.00	100.00
4.433	4.435	-0.002	14436394	1000.00	927	102.50- 142.50	122.50
4.699	4.701	-0.002	10861469	1000.00	917	72.16- 112.16	92.16
4.871	4.874	-0.003	11356689	1000.00	931	76.36- 116.36	96.36
5.019	5.021	-0.002	25281887	1000.00	953	194.52- 234.52	214.52
Average of Peak Amounts =					924		

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd1a.i/030810.b/053b5301.d

Date : 08-MAR-2010 16:01

Client ID: AR166006

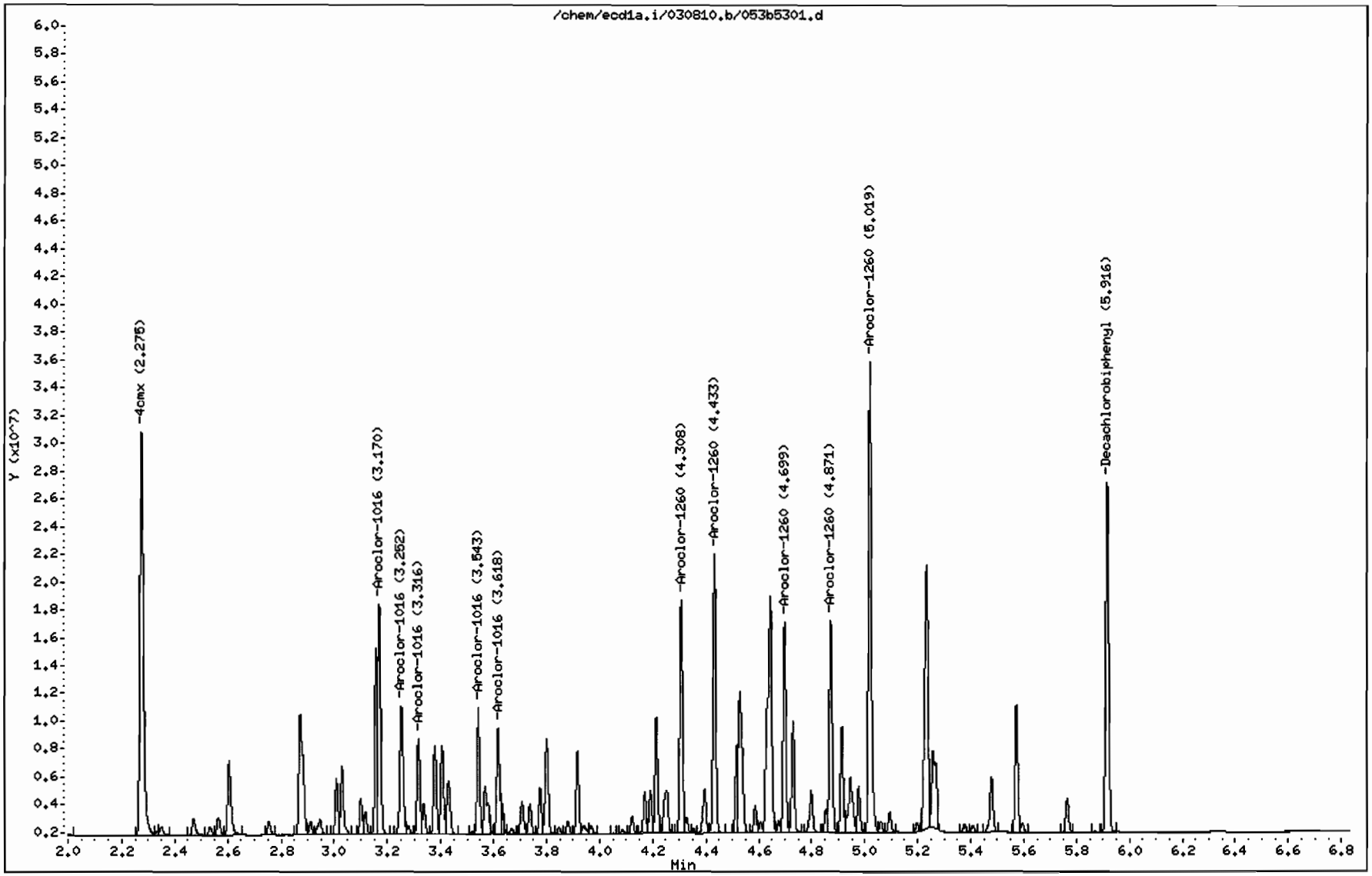
Sample Info: !WAR100222-60 06

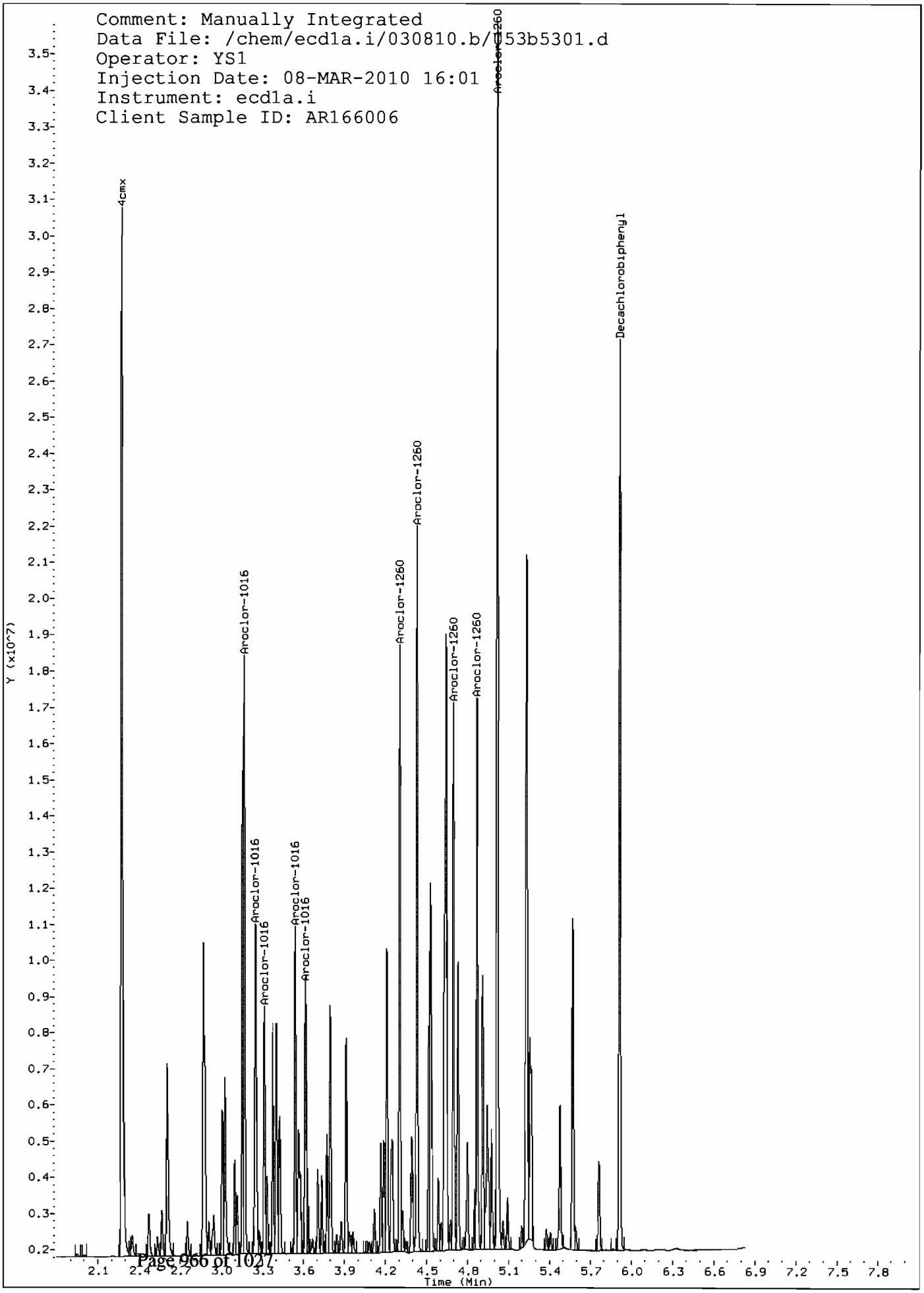
Column phase: CLP2

Instrument: ecd1a.i

Operator: YS1

Column diameter: 0.25

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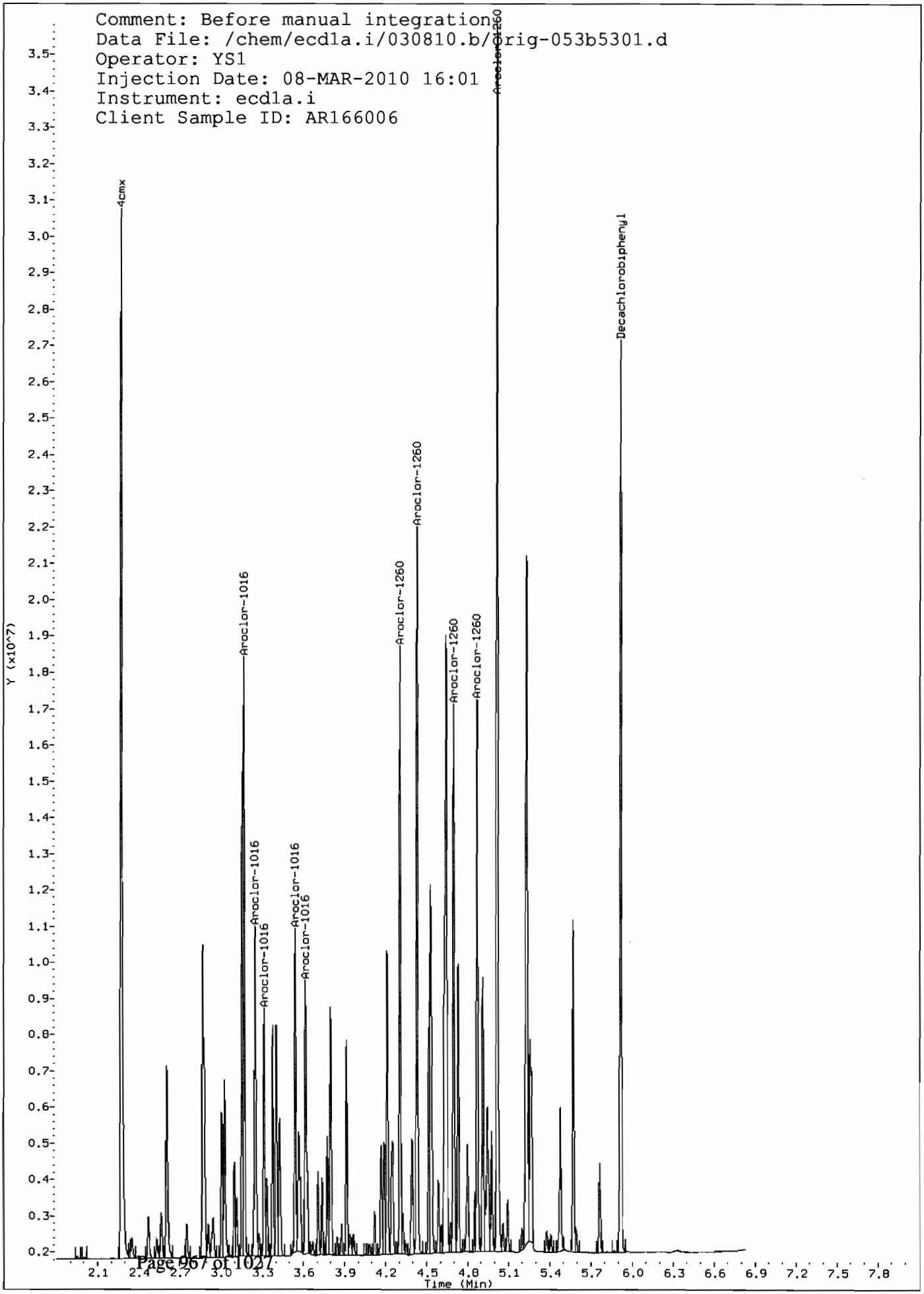
Data File: /chem/ecd1a.i/030810.b/153b5301.d
Operator: YS1
Injection Date: 08-MAR-2010 16:01
Instrument: ecd1a.i
Client Sample ID: AR166006
4cmx
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Decachlorobiphenyl
Y (x10^7)
Time (Min)


Comment: Before manual integration
Data File: /chem/ecd1a.i/030810.b/orig-053b5301.d
Operator: YS1
Injection Date: 08-MAR-2010 16:01
Instrument: ecd1a.i
Client Sample ID: AR166006
4cmx
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Decachlorobiphenyl
Y (x10^7)
Time (Min)

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

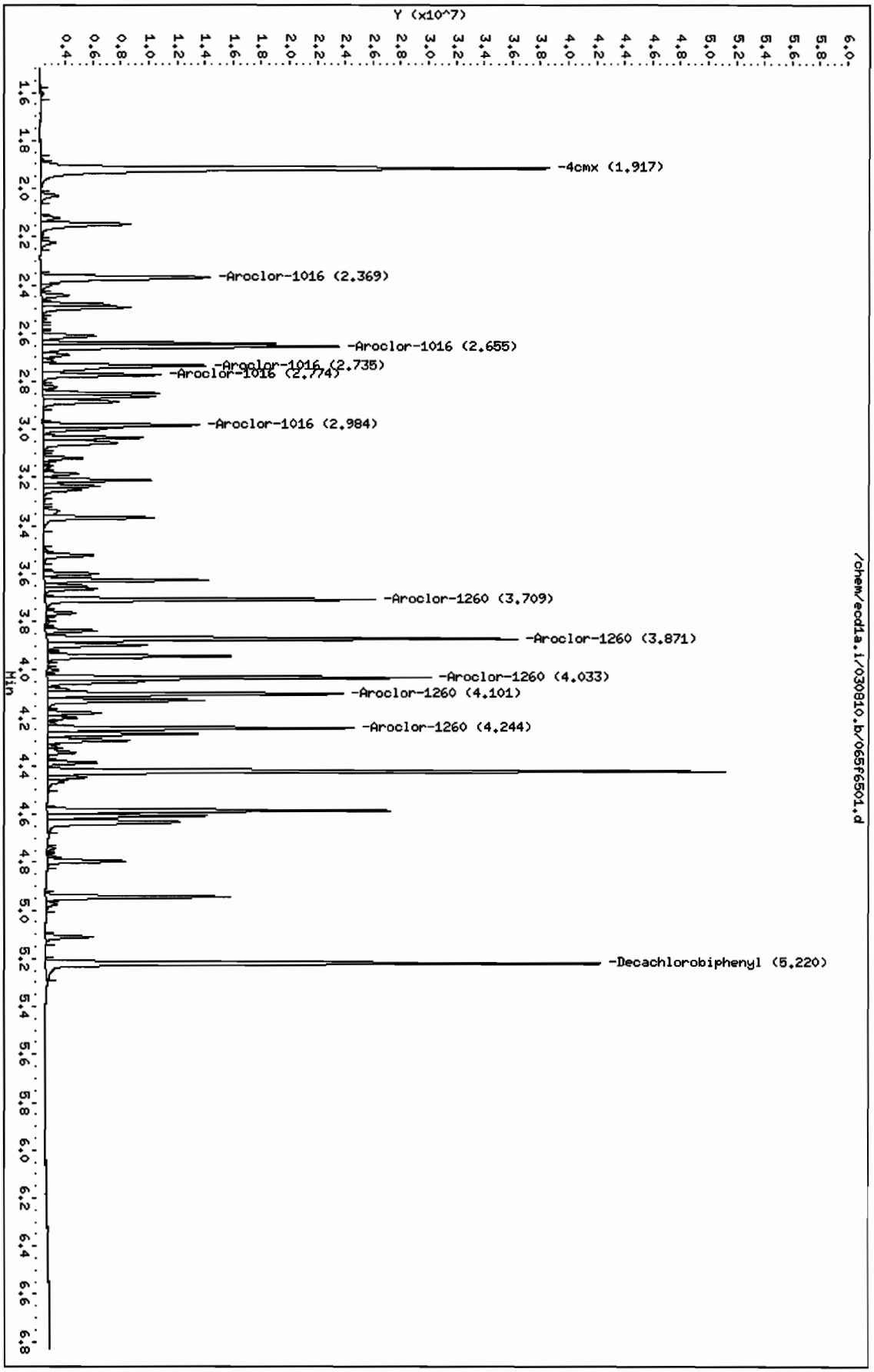
Data file : /chem/ecd1a.i/030810.b/065f6501.d
Lab Smp Id: WAR100222-60 07 Client Smp ID: AR166007
Inj Date : 08-MAR-2010 18:28
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |WAR100222-60 07
Misc Info :
Comment :
Method : /chem/ecd1a.i/030810.b/ECD1-F-8082-022210.m
Meth Date : 09-Mar-2010 06:41 yip00818 Quant Type: ESTD
Cal Date : 22-FEB-2010 12:08 Cal File: 036f3601.d
Als bottle: 65 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: hpclp1

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.917	1.917	0.000	40463501	100.000	94.0	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.220	5.223	-0.003	31298277	100.000	102	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.369	2.371	-0.002	13831389	1000.00	899	80.00- 120.00	100.00
2.655	2.657	-0.002	18291555	1000.00	1000	112.25- 152.25	132.25
2.735	2.737	-0.002	11473048	1000.00	951	62.95- 102.95	82.95
2.774	2.775	-0.001	6927605	1000.00	976	30.09- 70.09	50.09
2.984	2.986	-0.002	8896243	1000.00	998	44.32- 84.32	64.32
		Average of Peak Amounts =			965		
7 Aroclor-1260					CAS #: 11096-82-5		
3.709	3.711	-0.002	17156095	1000.00	1000	80.00- 120.00	100.00
3.871	3.873	-0.002	25802680	1000.00	1090	130.40- 170.40	150.40
4.033	4.036	-0.003	20334710	1000.00	814	98.53- 138.53	118.53
4.101	4.104	-0.003	15499212	1000.00	1080	70.34- 110.34	90.34
4.244	4.247	-0.003	16201843	1000.00	1120	74.44- 114.44	94.44
		Average of Peak Amounts =			1.02e+03		

Data File: /chem/ecd1a.i/030810.b/065f6501.d
Date : 08-MAR-2010 18:28
Client ID: AR166007
Sample Info: IWAR100222-60 07

Column phase: CLP1

Instrument: ecd1a.i
Operator: YS1
Column diameter: 0.25



Page 1

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

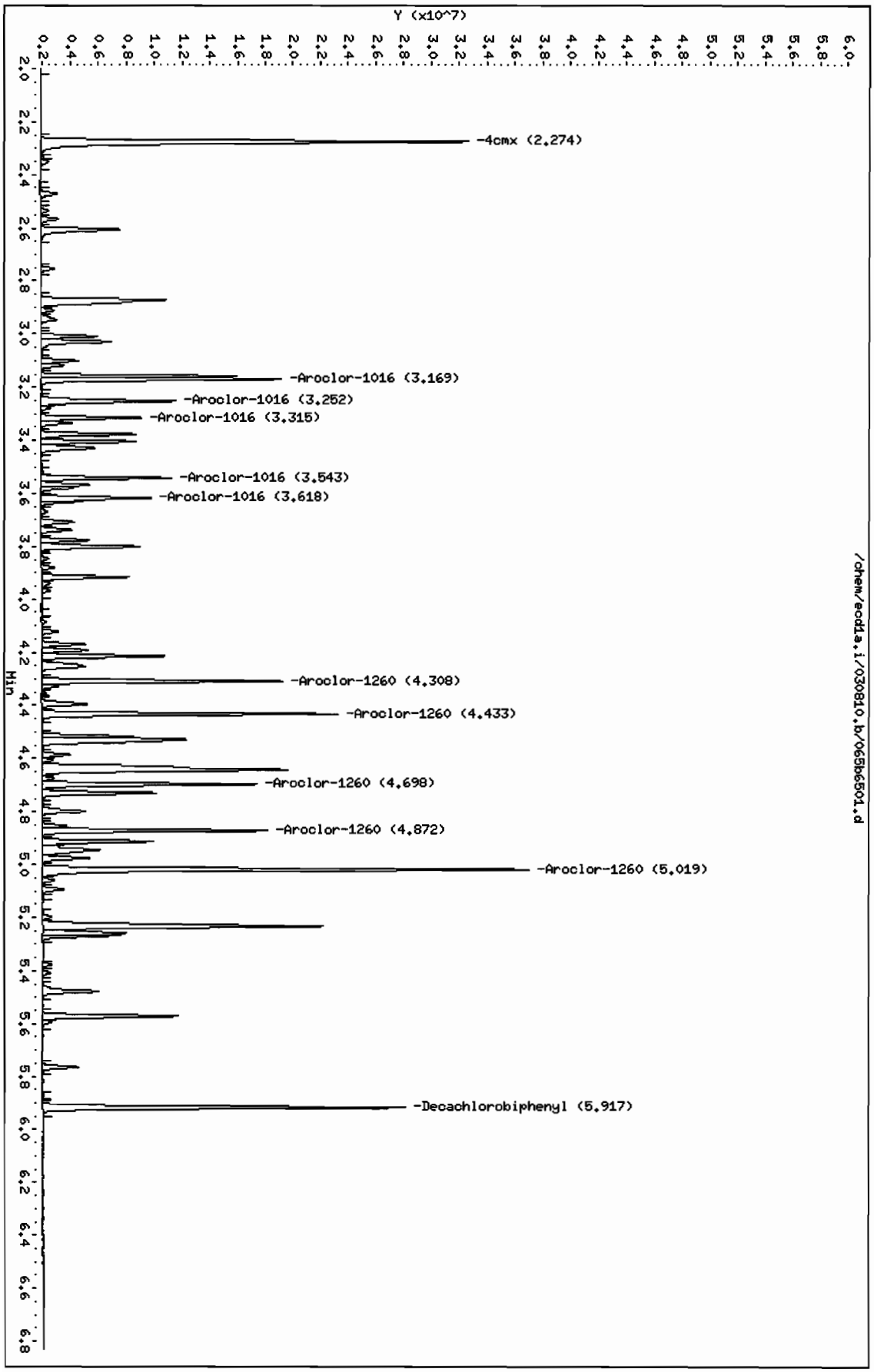
Data file : /chem/ecd1a.i/030810.b/065b6501.d
Lab Smp Id: WAR100222-60 07 Client Smp ID: AR166007
Inj Date : 08-MAR-2010 18:28
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |WAR100222-60 07
Misc Info :
Comment :
Method : /chem/ecd1a.i/030810.b/ECD1-B-8082-022210.m
Meth Date : 12-Mar-2010 08:49 jc Quant Type: ESTD
Cal Date : 22-FEB-2010 12:08 Cal File: 036b3601.d
Als bottle: 65 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: kilroy

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.274	2.277	-0.003	27464358	100.000	92.3	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.917	5.918	-0.001	19760448	100.000	93.4	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
3.169	3.171	-0.002	12363278	1000.00	967	80.00- 120.00	100.00
3.252	3.254	-0.002	8088904	1000.00	907	45.43- 85.43	65.43
3.315	3.317	-0.002	5020825	1000.00	929	20.61- 60.61	40.61
3.543	3.544	-0.001	6551771	1000.00	947	32.99- 72.99	52.99
3.618	3.619	-0.001	6049423	1000.00	942	28.93- 68.93	48.93
Average of Peak Amounts =					938		
7 Aroclor-1260					CAS #: 11096-82-5		
4.308	4.310	-0.002	12313814	1000.00	932	80.00- 120.00	100.00
4.433	4.435	-0.002	15043197	1000.00	966	102.17- 142.17	122.17
4.698	4.701	-0.003	11303603	1000.00	954	71.80- 111.80	91.80
4.872	4.874	-0.002	11764380	1000.00	964	75.54- 115.54	95.54
5.019	5.021	-0.002	26327953	1000.00	992	193.81- 233.81	213.81
Average of Peak Amounts =					962		

Data File: /chem/ecd1a.i/030810.b/065b6501.d
Date : 08-MAR-2010 18:28
Client ID: AR166007
Sample Info: IWAR100222-60 07

Instrument: ecd1a.i
Operator: YS1
Column diameter: 0.25

Column phase: CLP2



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.: 10-2089

GC Column: CLP1 ID: 0.25 (mm) Init. Calib. Date(s): 02/22/10 02/22/10

Instrument ID: ECD1A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 1.92 DCB: 5.23

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	PIBLK01	WAR100219-99	02/22/10	0559	1.92	5.23
02	ZZZZZ	ZZZZZ	02/22/10	0610	1.92	5.23
03	ZZZZZ	ZZZZZ	02/22/10	0620	1.92	5.23
04	DDTANALOGSTD	WAR091219-DD	02/22/10	0631		
05	AR123201	WAR100104-32	02/22/10	0641		
06	AR122101	WAR100104-21	02/22/10	0652		
07	AR126201	WAR100104-62	02/22/10	0703		
08	AR166001	WAR100222-01	02/22/10	0713	1.92	5.23
09	AR166002	WAR100222-02	02/22/10	0724	1.92	5.23
10	AR166003	WAR100222-03	02/22/10	0734	1.92	5.23
11	AR166004	WAR100222-04	02/22/10	0745	1.92	5.23
12	AR166005	IAR100104-01	02/22/10	0755	1.92	5.23
13	AR166001	WAR100203-60	02/22/10	0806	1.92	5.23
14	AR125401	WAR100222-05	02/22/10	0816		
15	AR125402	WAR100222-06	02/22/10	0827		
16	AR125403	WAR100222-07	02/22/10	0837		
17	AR125404	WAR100222-08	02/22/10	0848		
18	AR125405	IAR100219-02	02/22/10	0859		
19	AR125401	WAR100219-54	02/22/10	0909		
20	AR124201	WAR100222-09	02/22/10	0920		
21	AR124202	WAR100222-10	02/22/10	0930		
22	AR124203	WAR100222-11	02/22/10	0941		
23	AR124204	WAR100222-12	02/22/10	0951		
24	AR124205	IAR100219-01	02/22/10	1002		
25	AR124201	WAR100219-42	02/22/10	1012		
26	AR124801	WAR100222-13	02/22/10	1023		
27	AR124802	WAR100222-14	02/22/10	1033		
28	AR124803	WAR100222-15	02/22/10	1044		
29	AR124805	IAR100211-01	02/22/10	1054		
30	AR124804	WAR100222-16	02/22/10	1105		
31	AR124801	WAR091217-48	02/22/10	1116		
32	AR126801	WAR100222-17	02/22/10	1126		

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.

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.: 10-2089

GC Column: CLP1 ID: 0.25 (mm) Init. Calib. Date(s): 02/22/10 02/22/10

Instrument ID: ECD1A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 1.92 DCB: 5.23

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	AR126802	WAR100222-18	02/22/10	1137		
02	AR126803	WAR100222-19	02/22/10	1147		
03	AR126804	WAR100222-20	02/22/10	1158		
04	AR126805	IAR100104-05	02/22/10	1208		
05	AR126801	WAR100107-68	02/22/10	1219		
06	PIBLK02	WAR100219-99	02/22/10	1229	1.92	5.23
07	ZZZZZ	ZZZZZ	02/22/10	1240	1.92	5.23
08	ZZZZZ	ZZZZZ	02/22/10	1250	1.93	5.23
09	ZZZZZ	ZZZZZ	02/22/10	1301	1.92	5.23
10	ZZZZZ	ZZZZZ	02/22/10	1314	1.92	5.23
11	ZZZZZ	ZZZZZ	02/22/10	1326	1.92	5.23
12	ZZZZZ	ZZZZZ	02/22/10	1339	1.92	5.23
13	ZZZZZ	ZZZZZ	02/22/10	1351	1.92	5.23
14	ZZZZZ	ZZZZZ	02/22/10	1404	1.92	5.23
15	ZZZZZ	ZZZZZ	02/22/10	1417	1.92	5.23
16	ZZZZZ	ZZZZZ	02/22/10	1430	1.92	5.23
17	AR166002	WAR100203-60	02/22/10	1442	1.92	5.23
18	PIBLK03	WAR100219-99	02/22/10	1453	1.92	5.23
19	ZZZZZ	ZZZZZ	02/22/10	1503	1.92	5.23
20	ZZZZZ	ZZZZZ	02/22/10	1516	1.92	5.23
21	ZZZZZ	ZZZZZ	02/22/10	1528	1.92	5.23
22	ZZZZZ	ZZZZZ	02/22/10	1541	1.92	5.23
23	ZZZZZ	ZZZZZ	02/22/10	1554	1.92	5.23
24	ZZZZZ	ZZZZZ	02/22/10	1606	1.92	5.23
25	ZZZZZ	ZZZZZ	02/22/10	1619	1.92	5.23
26	ZZZZZ	ZZZZZ	02/22/10	1632	1.92	5.23
27	ZZZZZ	ZZZZZ	02/22/10	1644	1.92	5.23
28	ZZZZZ	ZZZZZ	02/22/10	1657	1.92	5.23
29	AR166003	WAR100203-60	02/22/10	1710	1.92	5.23
30	PIBLK04	WAR100219-99	02/22/10	1722	1.92	5.23
31	ZZZZZ	ZZZZZ	02/22/10	1735	1.92	5.23
32	ZZZZZ	ZZZZZ	02/22/10	1748	1.92	5.23

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.

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.: 10-2089

GC Column: CLP2 ID: 0.25 (mm) Init. Calib. Date(s): 02/22/10 02/22/10

Instrument ID: ECD1A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 2.29 DCB: 5.94

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	PIBLK01	WAR100219-99	02/22/10	0559	2.29	5.93
02	ZZZZZ	ZZZZZ	02/22/10	0610	2.29	5.94
03	ZZZZZ	ZZZZZ	02/22/10	0620	2.29	5.94
04	DDTANALOGSTD	WAR091219-DD	02/22/10	0631		
05	AR123201	WAR100104-32	02/22/10	0641		
06	AR122101	WAR100104-21	02/22/10	0652		
07	AR126201	WAR100104-62	02/22/10	0703		
08	AR166001	WAR100222-01	02/22/10	0713	2.29	5.94
09	AR166002	WAR100222-02	02/22/10	0724	2.29	5.94
10	AR166003	WAR100222-03	02/22/10	0734	2.29	5.94
11	AR166004	WAR100222-04	02/22/10	0745	2.29	5.94
12	AR166005	IAR100104-01	02/22/10	0755	2.29	5.94
13	AR166001	WAR100203-60	02/22/10	0806	2.29	5.94
14	AR125401	WAR100222-05	02/22/10	0816		
15	AR125402	WAR100222-06	02/22/10	0827		
16	AR125403	WAR100222-07	02/22/10	0837		
17	AR125404	WAR100222-08	02/22/10	0848		
18	AR125405	IAR100219-02	02/22/10	0859		
19	AR125401	WAR100219-54	02/22/10	0909		
20	AR124201	WAR100222-09	02/22/10	0920		
21	AR124202	WAR100222-10	02/22/10	0930		
22	AR124203	WAR100222-11	02/22/10	0941		
23	AR124204	WAR100222-12	02/22/10	0951		
24	AR124205	IAR100219-01	02/22/10	1002		
25	AR124201	WAR100219-42	02/22/10	1012		
26	AR124801	WAR100222-13	02/22/10	1023		
27	AR124802	WAR100222-14	02/22/10	1033		
28	AR124803	WAR100222-15	02/22/10	1044		
29	AR124805	IAR100211-01	02/22/10	1054		
30	AR124804	WAR100222-16	02/22/10	1105		
31	AR124801	WAR091217-48	02/22/10	1116		
32	AR126801	WAR100222-17	02/22/10	1126		

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.: 10-2089

GC Column: CLP2 ID: 0.25 (mm) Init. Calib. Date(s): 02/22/10 02/22/10

Instrument ID: ECD1A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 2.29 DCB: 5.94

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	AR126802	WAR100222-18	02/22/10	1137		
02	AR126803	WAR100222-19	02/22/10	1147		
03	AR126804	WAR100222-20	02/22/10	1158		
04	AR126805	IAR100104-05	02/22/10	1208		
05	AR126801	WAR100107-68	02/22/10	1219		
06	PIBLK02	WAR100219-99	02/22/10	1229	2.29	5.94
07	ZZZZZ	ZZZZZ	02/22/10	1240	2.29	5.94
08	ZZZZZ	ZZZZZ	02/22/10	1250	2.29	5.94
09	ZZZZZ	ZZZZZ	02/22/10	1301	2.29	5.94
10	ZZZZZ	ZZZZZ	02/22/10	1314	2.29	5.94
11	ZZZZZ	ZZZZZ	02/22/10	1326	2.29	5.94
12	ZZZZZ	ZZZZZ	02/22/10	1339	2.29	5.93
13	ZZZZZ	ZZZZZ	02/22/10	1351	2.29	5.93
14	ZZZZZ	ZZZZZ	02/22/10	1404	2.29	5.94
15	ZZZZZ	ZZZZZ	02/22/10	1417	2.29	5.93
16	ZZZZZ	ZZZZZ	02/22/10	1430	2.29	5.93
17	AR166002	WAR100203-60	02/22/10	1442	2.29	5.94
18	PIBLK03	WAR100219-99	02/22/10	1453	2.29	5.94
19	ZZZZZ	ZZZZZ	02/22/10	1503	2.29	5.94
20	ZZZZZ	ZZZZZ	02/22/10	1516	2.29	5.93
21	ZZZZZ	ZZZZZ	02/22/10	1528	2.29	5.93
22	ZZZZZ	ZZZZZ	02/22/10	1541	2.29	5.94
23	ZZZZZ	ZZZZZ	02/22/10	1554	2.29	5.93
24	ZZZZZ	ZZZZZ	02/22/10	1606	2.29	5.93
25	ZZZZZ	ZZZZZ	02/22/10	1619	2.29	5.94
26	ZZZZZ	ZZZZZ	02/22/10	1632	2.29	5.93
27	ZZZZZ	ZZZZZ	02/22/10	1644	2.29	5.93
28	ZZZZZ	ZZZZZ	02/22/10	1657	2.29	5.93
29	AR166003	WAR100203-60	02/22/10	1710	2.29	5.93
30	PIBLK04	WAR100219-99	02/22/10	1722	2.29	5.93
31	ZZZZZ	ZZZZZ	02/22/10	1735	2.29	5.93
32	ZZZZZ	ZZZZZ	02/22/10	1748	2.29	5.94

	QC LIMITS
S1 = 4cmx	(+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl	(+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

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.: 10-2089

GC Column: CLP1 ID: 0.25 (mm) Init. Calib. Date(s): 02/22/10 02/22/10

Instrument ID: ECD1A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 1.92 DCB: 5.22

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	PIBLK01	WAR100219-99	03/08/10	0553	1.92	5.22
02	AR166001	WAR100222-60	03/08/10	0604	1.92	5.22
03	AR125401	WAR100219-54	03/08/10	0614		
04	AR124201	WAR100219-42	03/08/10	0625		
05	AR124801	WAR100223-48	03/08/10	0635		
06	AR126801	WAR100107-68	03/08/10	0646		
07	AR123201	WAR100104-32	03/08/10	0656		
08	AR122101	WAR100104-21	03/08/10	0707		
09	AR126201	WAR100104-62	03/08/10	0717		
10	DDTANALOGSTD	WAR091219-DD	03/08/10	0728		
11	PIBLK02	WAR100219-99	03/08/10	0738	1.92	5.22
12	ZZZZZ	ZZZZZ	03/08/10	0749	1.92	5.22
13	ZZZZZ	ZZZZZ	03/08/10	0801	1.92	5.22
14	ZZZZZ	ZZZZZ	03/08/10	0814	1.92	5.22
15	ZZZZZ	ZZZZZ	03/08/10	0827	1.92	5.22
16	ZZZZZ	ZZZZZ	03/08/10	0839	1.92	5.22
17	ZZZZZ	ZZZZZ	03/08/10	0852	1.92	5.22
18	ZZZZZ	ZZZZZ	03/08/10	0904	1.92	5.22
19	ZZZZZ	ZZZZZ	03/08/10	0917	1.92	5.22
20	ZZZZZ	ZZZZZ	03/08/10	0930	1.92	5.22
21	ZZZZZ	ZZZZZ	03/08/10	0942	1.92	5.22
22	AR166002	WAR100222-60	03/08/10	0955	1.92	5.22
23	PIBLK03	WAR100219-99	03/08/10	1006	1.92	5.22
24	ZZZZZ	ZZZZZ	03/08/10	1016	1.92	5.22
25	ZZZZZ	ZZZZZ	03/08/10	1029	1.92	5.22
26	ZZZZZ	ZZZZZ	03/08/10	1041	1.92	5.22
27	ZZZZZ	ZZZZZ	03/08/10	1054	1.92	5.22
28	ZZZZZ	ZZZZZ	03/08/10	1106	1.92	5.22
29	ZZZZZ	ZZZZZ	03/08/10	1119	1.92	5.22
30	ZZZZZ	ZZZZZ	03/08/10	1132	1.92	5.22
31	AR166003	WAR100222-60	03/08/10	1144	1.92	5.22
32	ZZZZZ	ZZZZZ	03/08/10	1155	1.92	5.22

	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.

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.: 10-2089

GC Column: CLP1 ID: 0.25 (mm) Init. Calib. Date(s): 02/22/10 02/22/10

Instrument ID: ECD1A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 1.92 DCB: 5.22

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	ZZZZZ	ZZZZZ	03/08/10	1205	1.92	5.22
02	ZZZZZ	ZZZZZ	03/08/10	1216	1.92	5.22
03	ZZZZZ	ZZZZZ	03/08/10	1226	1.92	5.22
04	AR166004	WAR100222-60	03/08/10	1239	1.92	5.22
05	PIBLK04	WAR100219-99	03/08/10	1249	1.92	5.22
06	PBLK01	1202063216	03/08/10	1300	1.92	5.22
07	PBLK01LCS	1202063217	03/08/10	1310	1.92	5.22
08	ZZZZZ	ZZZZZ	03/08/10	1321	1.92	5.22
09	ZZZZZ	ZZZZZ	03/08/10	1333	1.92	5.22
10	ZZZZZ	ZZZZZ	03/08/10	1346	1.92	5.22
11	ZZZZZ	ZZZZZ	03/08/10	1359	1.92	5.22
12	AR166005	WAR100222-60	03/08/10	1411	1.92	5.22
13	PIBLK05	WAR100219-99	03/08/10	1422	1.92	5.22
14	ZZZZZ	ZZZZZ	03/08/10	1432	1.92	5.22
15	ZZZZZ	ZZZZZ	03/08/10	1445	1.92	5.22
16	ZZZZZ	ZZZZZ	03/08/10	1457	1.92	5.22
17	ZZZZZ	ZZZZZ	03/08/10	1510	1.92	5.22
18	ZZZZZ	ZZZZZ	03/08/10	1523	1.92	5.22
19	ZZZZZ	ZZZZZ	03/08/10	1535	1.92	5.22
20	ZZZZZ	ZZZZZ	03/08/10	1548	1.92	5.22
21	AR166006	WAR100222-60	03/08/10	1601	1.92	5.22
22	PIBLK06	WAR100219-99	03/08/10	1611	1.92	5.22
23	ZZZZZ	ZZZZZ	03/08/10	1622	1.92	5.22
24	ZZZZZ	ZZZZZ	03/08/10	1634	1.92	5.22
25	ZZZZZ	ZZZZZ	03/08/10	1647	1.92	5.22
26	RE15-10-8404	248102001	03/08/10	1700	1.92	5.22
27	ZZZZZ	ZZZZZ	03/08/10	1712	1.92	5.22
28	ZZZZZ	ZZZZZ	03/08/10	1725	1.92	5.22
29	ZZZZZ	ZZZZZ	03/08/10	1737	1.92	5.22
30	ZZZZZ	ZZZZZ	03/08/10	1750	1.92	5.22
31	ZZZZZ	ZZZZZ	03/08/10	1803	1.92	5.22
32	ZZZZZ	ZZZZZ	03/08/10	1815	1.92	5.22

	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.

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.: 10-2089

GC Column: CLP1 ID: 0.25 (mm) Init. Calib. Date(s): 02/22/10 02/22/10

Instrument ID: ECD1A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 1.92 DCB: 5.22

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	AR166007	WAR100222-60	03/08/10	1828	1.92	5.22
02	PIBLK07	WAR100219-99	03/08/10	1838	1.92	5.22
03						
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	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.

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.: 10-2089

GC Column: CLP2 ID: 0.25 (mm) Init. Calib. Date(s): 02/22/10 02/22/10

Instrument ID: ECD1A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 2.28 DCB: 5.92

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	PIBLK01	WAR100219-99	03/08/10	0553	2.27	5.92
02	AR166001	WAR100222-60	03/08/10	0604	2.28	5.92
03	AR125401	WAR100219-54	03/08/10	0614		
04	AR124201	WAR100219-42	03/08/10	0625		
05	AR124801	WAR100223-48	03/08/10	0635		
06	AR126801	WAR100107-68	03/08/10	0646		
07	AR123201	WAR100104-32	03/08/10	0656		
08	AR122101	WAR100104-21	03/08/10	0707		
09	AR126201	WAR100104-62	03/08/10	0717		
10	DDTANALOGSTD	WAR091219-DD	03/08/10	0728		
11	PIBLK02	WAR100219-99	03/08/10	0738	2.28	5.92
12	ZZZZZ	ZZZZZ	03/08/10	0749	2.28	5.92
13	ZZZZZ	ZZZZZ	03/08/10	0801	2.28	5.92
14	ZZZZZ	ZZZZZ	03/08/10	0814	2.28	5.92
15	ZZZZZ	ZZZZZ	03/08/10	0827	2.28	5.92
16	ZZZZZ	ZZZZZ	03/08/10	0839	2.28	5.92
17	ZZZZZ	ZZZZZ	03/08/10	0852	2.27	5.92
18	ZZZZZ	ZZZZZ	03/08/10	0904	2.28	5.92
19	ZZZZZ	ZZZZZ	03/08/10	0917	2.28	5.92
20	ZZZZZ	ZZZZZ	03/08/10	0930	2.27	5.92
21	ZZZZZ	ZZZZZ	03/08/10	0942	2.28	5.92
22	AR166002	WAR100222-60	03/08/10	0955	2.28	5.92
23	PIBLK03	WAR100219-99	03/08/10	1006	2.28	5.92
24	ZZZZZ	ZZZZZ	03/08/10	1016	2.28	5.92
25	ZZZZZ	ZZZZZ	03/08/10	1029	2.28	5.92
26	ZZZZZ	ZZZZZ	03/08/10	1041	2.28	5.92
27	ZZZZZ	ZZZZZ	03/08/10	1054	2.28	5.92
28	ZZZZZ	ZZZZZ	03/08/10	1106	2.28	5.92
29	ZZZZZ	ZZZZZ	03/08/10	1119	2.28	5.92
30	ZZZZZ	ZZZZZ	03/08/10	1132	2.28	5.92
31	AR166003	WAR100222-60	03/08/10	1144	2.28	5.92
32	ZZZZZ	ZZZZZ	03/08/10	1155	2.28	5.92

	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.

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.: 10-2089

GC Column: CLP2 ID: 0.25 (mm) Init. Calib. Date(s): 02/22/10 02/22/10

Instrument ID: ECD1A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 2.28 DCB: 5.92

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	ZZZZZ	ZZZZZ	03/08/10	1205	2.28	5.92
02	ZZZZZ	ZZZZZ	03/08/10	1216	2.28	5.92
03	ZZZZZ	ZZZZZ	03/08/10	1226	2.28	5.92
04	AR166004	WAR100222-60	03/08/10	1239	2.28	5.92
05	PIBLK04	WAR100219-99	03/08/10	1249	2.28	5.92
06	PBLK01	1202063216	03/08/10	1300	2.28	5.92
07	PBLK01LCS	1202063217	03/08/10	1310	2.28	5.92
08	ZZZZZ	ZZZZZ	03/08/10	1321	2.28	5.92
09	ZZZZZ	ZZZZZ	03/08/10	1333	2.28	5.92
10	ZZZZZ	ZZZZZ	03/08/10	1346	2.27	5.91
11	ZZZZZ	ZZZZZ	03/08/10	1359	2.28	5.92
12	AR166005	WAR100222-60	03/08/10	1411	2.28	5.92
13	PIBLK05	WAR100219-99	03/08/10	1422	2.28	5.92
14	ZZZZZ	ZZZZZ	03/08/10	1432	2.28	5.92
15	ZZZZZ	ZZZZZ	03/08/10	1445	2.27	5.92
16	ZZZZZ	ZZZZZ	03/08/10	1457	2.28	5.92
17	ZZZZZ	ZZZZZ	03/08/10	1510	2.27	5.92
18	ZZZZZ	ZZZZZ	03/08/10	1523	2.28	5.92
19	ZZZZZ	ZZZZZ	03/08/10	1535	2.28	5.92
20	ZZZZZ	ZZZZZ	03/08/10	1548	2.28	5.92
21	AR166006	WAR100222-60	03/08/10	1601	2.27	5.92
22	PIBLK06	WAR100219-99	03/08/10	1611	2.28	5.92
23	ZZZZZ	ZZZZZ	03/08/10	1622	2.28	5.92
24	ZZZZZ	ZZZZZ	03/08/10	1634	2.28	5.91
25	ZZZZZ	ZZZZZ	03/08/10	1647	2.28	5.92
26	RE15-10-8404	248102001	03/08/10	1700	2.28	5.92
27	ZZZZZ	ZZZZZ	03/08/10	1712	2.27	5.92
28	ZZZZZ	ZZZZZ	03/08/10	1725	2.27	5.92
29	ZZZZZ	ZZZZZ	03/08/10	1737	2.28	5.92
30	ZZZZZ	ZZZZZ	03/08/10	1750	2.27	5.92
31	ZZZZZ	ZZZZZ	03/08/10	1803	2.27	5.92
32	ZZZZZ	ZZZZZ	03/08/10	1815	2.27	5.92

	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.

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.: 10-2089

GC Column: CLP2 ID: 0.25 (mm) Init. Calib. Date(s): 02/22/10 02/22/10

Instrument ID: ECD1A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 2.28 DCB: 5.92

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	AR166007	WAR100222-60	03/08/10	1828	2.27	5.92
02	PIBLK07	WAR100219-99	03/08/10	1838	2.28	5.92
03						
04						
05						
06						
07						
08						
09						
10						
11						
12						
13						
14						
15						
16						
17						
18						
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.

FORM VIII PEST OLM03.0

Identification Summary

SDG Number: 10–2089 **Client ID:** MB for batch 961901

Lab Sample ID: 1202063216

Data File:	038f3801.d	**Data File:**	038b3801.d
Inst:	ECD1A.I_1	**Inst:**	ECD1A.I_2
Column:	CLP1	**Column:**	CLP2
Analyzed:	08–MAR–10 13:00	**Analyzed:**	08–MAR–10 13:00

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
Aroclor–1242							15.1
Column 1	1	2.38	2.34 – 2.4	3.03		ug/kg	
	2	2.66	2.63 – 2.69	1.2		ug/kg	
	3	2.77	2.75 – 2.81	2.24		ug/kg	
	4	2.99	2.96 – 3.02	3.42		ug/kg	
	5	3.24	3.21 – 3.27	2.79		ug/kg	
					2.54		
Column 2	1	3.17	3.14 – 3.2	1.39		ug/kg	
	2	3.25	3.22 – 3.28	2.03		ug/kg	
	3	3.54	3.52 – 3.58	3		ug/kg	
	4	3.78	3.75 – 3.81	2.08		ug/kg	
	5	3.8	3.78 – 3.84	2.4		ug/kg	
					2.18		

Identification Summary

SDG Number: 10–2089 **Client ID:** LCS for batch 961901

Lab Sample ID: 1202063217

Data File:	039f3901.d	**Data File:**	039b3901.d
Inst:	ECD1A.I_1	**Inst:**	ECD1A.I_2
Column:	CLP1	**Column:**	CLP2
Analyzed:	08–MAR–10 13:10	**Analyzed:**	08–MAR–10 13:10

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
Aroclor–1016							3.39
Column 1	1	2.37	2.34 – 2.4	22.7		ug/kg	
	2	2.66	2.63 – 2.69	21.9		ug/kg	
	3	2.74	2.71 – 2.77	21.2		ug/kg	
	4	2.78	2.74 – 2.8	22.3		ug/kg	
	5	2.99	2.96 – 3.02	23.3		ug/kg	
					22.3		
Column 2	1	3.17	3.14 – 3.2	22.9		ug/kg	
	2	3.25	3.22 – 3.28	21.2		ug/kg	
	3	3.32	3.29 – 3.35	20.7		ug/kg	
	4	3.54	3.51 – 3.57	21.8		ug/kg	
	5	3.62	3.59 – 3.65	21.2		ug/kg	
					21.5		
Aroclor–1260							6.28
Column 1	1	3.71	3.68 – 3.74	25.8		ug/kg	
	2	3.87	3.84 – 3.9	28.1		ug/kg	
	3	4.04	4.01 – 4.07	26.6		ug/kg	
	4	4.1	4.07 – 4.13	27.6		ug/kg	
	5	4.25	4.22 – 4.28	23.7		ug/kg	
					26.4		
Column 2	1	4.31	4.28 – 4.34	23.6		ug/kg	
	2	4.43	4.4 – 4.46	24.7		ug/kg	
	3	4.7	4.67 – 4.73	24.5		ug/kg	
	4	4.87	4.84 – 4.9	25		ug/kg	
	5	5.02	4.99 – 5.05	26		ug/kg	
					24.8		

QUALITY CONTROL DATA

PCB
Certificate of Analysis
Sample Summary

SDG Number:	**10–2089**			**Matrix:**	**SOIL**
Lab Sample ID:	**1202063216**				
Client Sample:	**QC for batch 961901**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**MB for batch 961901**	**Method:**	**SW846 8082**	**SOP Ref:**	**GL–OA–E–040**
Batch ID:	**961902**	**Inst:**	**ECD1A.I**	**Dilution:**	**1**
Run Date:	**03/08/2010 13:00**	**Analyst:**	**YS1**	**Inj. Vol:**	**1 uL**
Prep Date:	**03/07/2010 11:43**	**Aliquot:**	**30 g**	**Final Volume:**	**1 mL**
Data File:	**038f3801–1.d**	**Column:**	**1 CLP1**	**Level:**	**LOW**
	038b3801–1.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	J	2.50	ug/kg	1.11	3.33	1
12672–29–6	Aroclor–1248	U	3.33	ug/kg	1.11	3.33	1
11097–69–1	Aroclor–1254	U	3.33	ug/kg	1.11	3.33	1
11096–82–5	Aroclor–1260	U	3.33	ug/kg	1.11	3.33	1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/030810.b/038f3801-2.d
Lab Smp Id: 1202063216 Client Smp ID: PBLK01
Inj Date : 08-MAR-2010 13:00
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |1202063216|1|
Misc Info : |ECD82P_1S|961902|SVA|QC A|SOIL|MB|||
Comment :
Method : /chem/ecd1a.i/030810.b/ECD1-F-8082-022210.m
Meth Date : 09-Mar-2010 06:41 yip00818 Quant Type: ESTD
Cal Date : 22-FEB-2010 12:08 Cal File: 036f3601.d
Als bottle: 38 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-2089.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.917	1.917	0.000	54907494	127.503	4.2	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.224	5.223	0.001	36840760	119.889	4.0	80.00- 120.00	100.00
4 Aroclor-1242					CAS #: 53469-21-9		
2.377	2.371	0.006	1142466	90.9792	3.0	80.00- 120.00	100.00(aM)
2.657	2.658	-0.001	525795	35.9846	1.2	109.55- 149.55	46.02
2.775	2.776	-0.001	379025	67.3316	2.2	28.27- 68.27	33.18
2.986	2.986	0.000	749459	102.520	3.4	42.21- 82.21	65.60

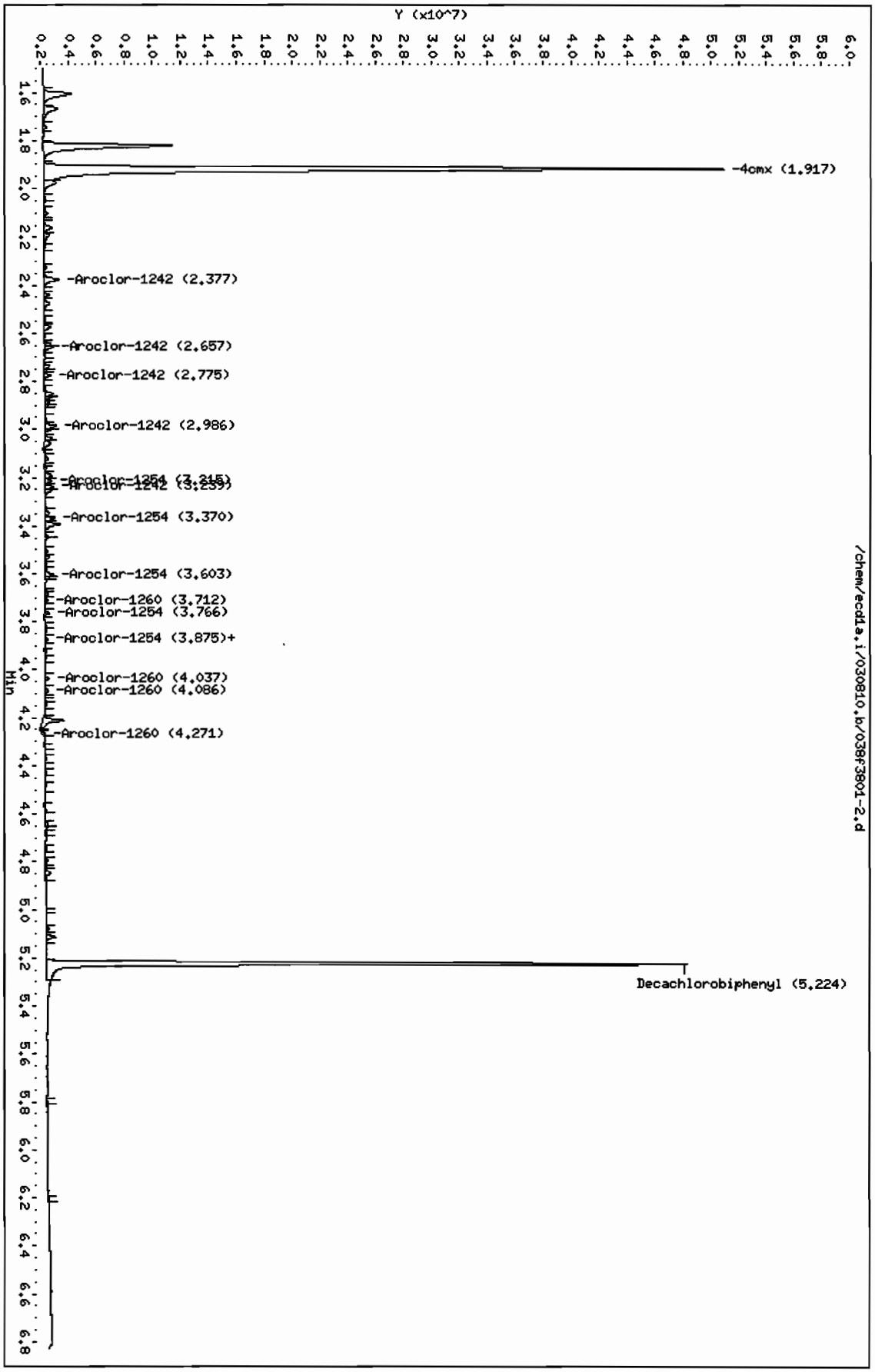
RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
4 Aroclor-1242 (continued)							
3.239	3.239	0.000	517870	83.7557	2.8	41.70- 81.70	45.33
Average of Peak Concentrations =					2.5		

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

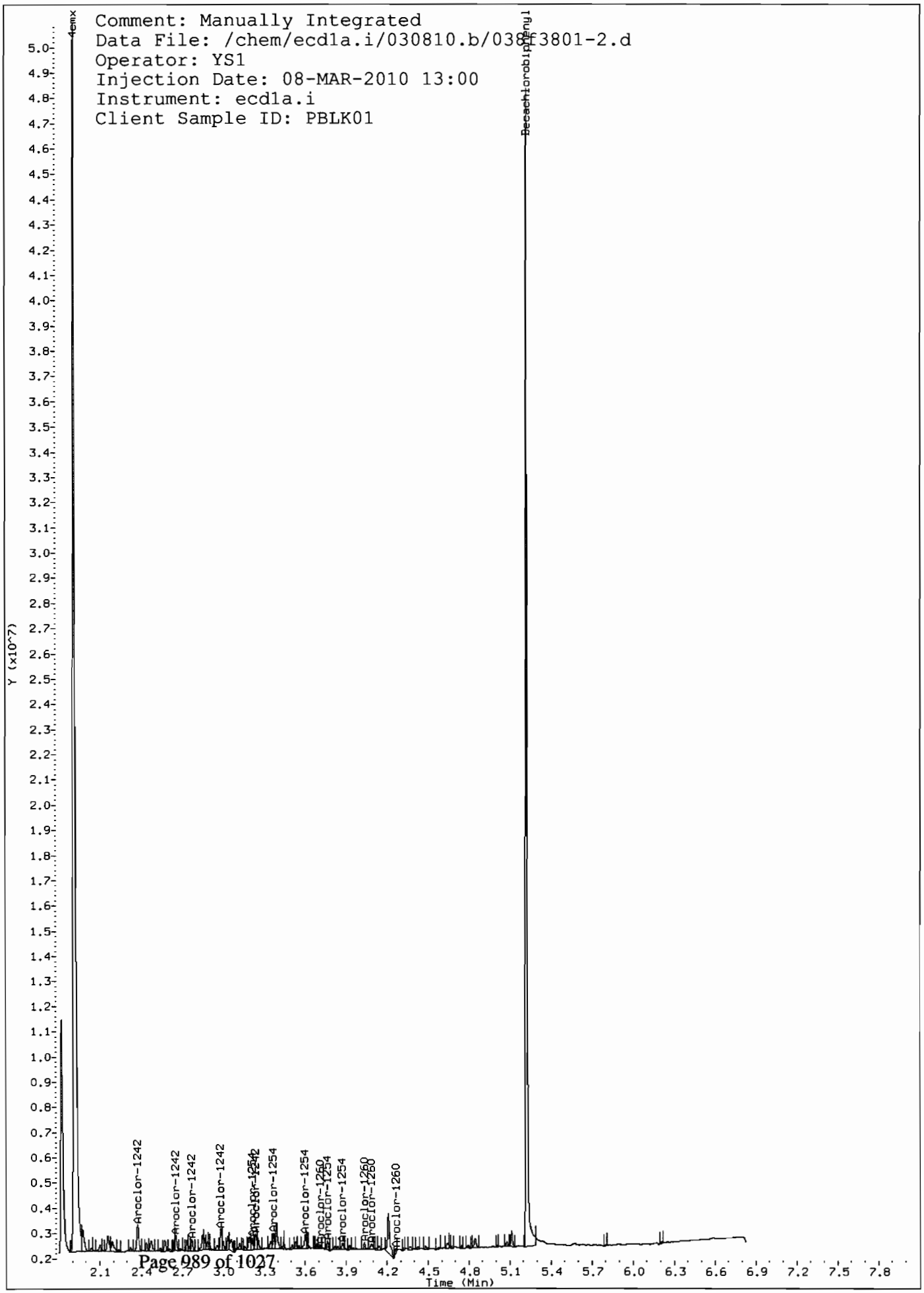
Data File: /chem/ecd1a.i/030810.b/038f3801-2.d
Date : 08-MAR-2010 13:00
Client ID: PBLK01
Sample Info: |1202063216|1|
Volume Injected (uL): 1.0
Column phase: CLP1

Instrument: ecd1a.i
Operator: YS1
Column diameter: 0.25

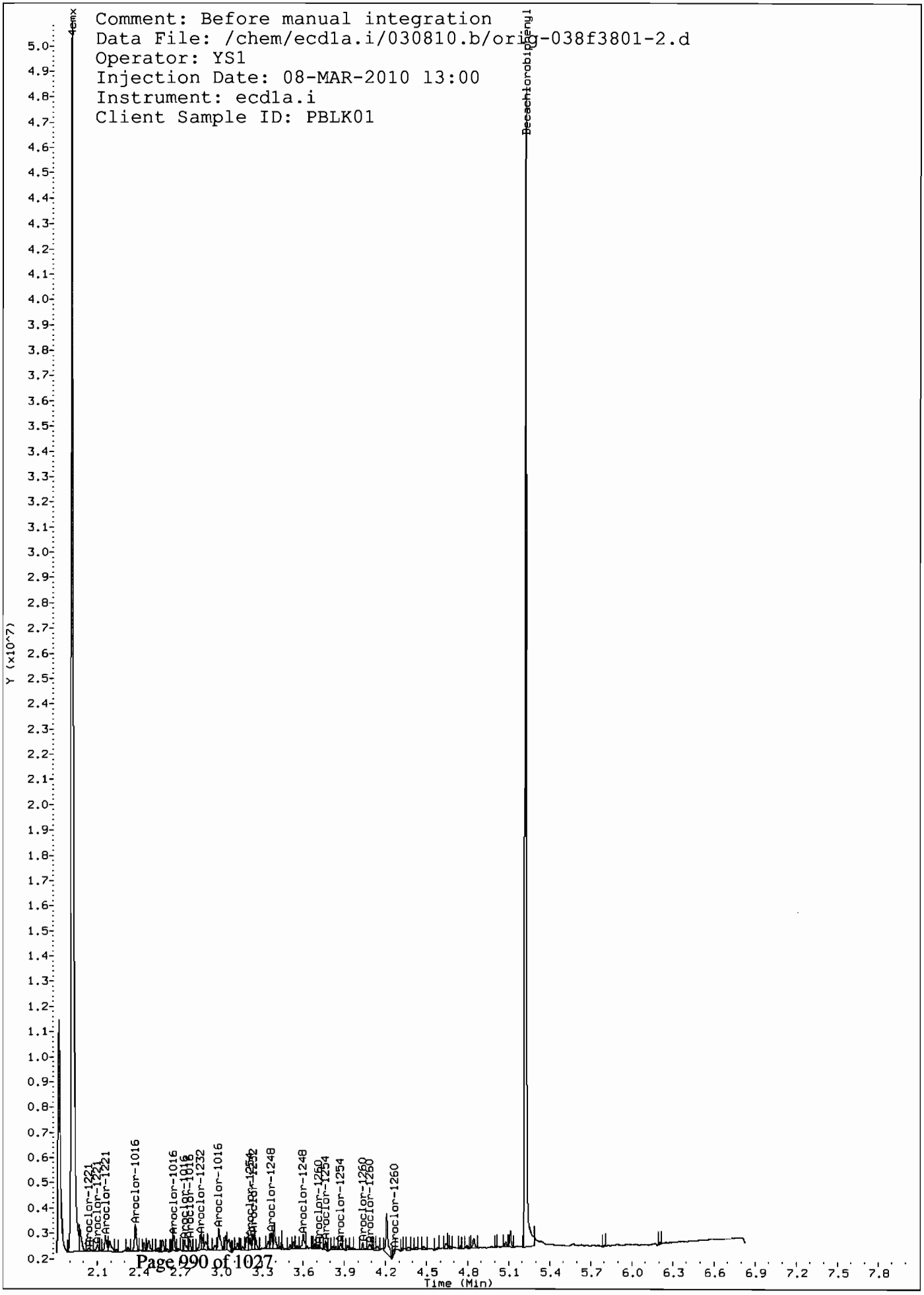


Page 1

Comment: Manually Integrated
Data File: /chem/ecd1a.i/030810.b/038f3801-2.d
Operator: YS1
Injection Date: 08-MAR-2010 13:00
Instrument: ecd1a.i
Client Sample ID: PBLK01



Comment: Before manual integration
Data File: /chem/ecd1a.i/030810.b/orig-038f3801-2.d
Operator: YS1
Injection Date: 08-MAR-2010 13:00
Instrument: ecd1a.i
Client Sample ID: PBLK01



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RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/030810.b/038b3801-2.d
Lab Smp Id: 1202063216 Client Smp ID: PBLK01
Inj Date : 08-MAR-2010 13:00
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |1202063216|1|
Misc Info : |ECD82P_1S|961902|SVA|QC A|SOIL|MB|||
Comment :
Method : /chem/ecd1a.i/030810.b/ECD1-B-8082-022210.m
Meth Date : 12-Mar-2010 08:46 jc Quant Type: ESTD
Cal Date : 22-FEB-2010 12:08 Cal File: 036b3601.d
Als bottle: 38 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-2089.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: kilroy

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

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.276	2.277	-0.001	37340808	125.559	4.2	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.918	5.918	0.000	29192014	138.025	4.6	80.00- 120.00	100.00
4 Aroclor-1242					CAS #: 53469-21-9		
3.172	3.171	0.001	430513	41.5905	1.4	80.00- 120.00	100.00(a)
3.255	3.254	0.001	443889	60.9828	2.0	46.95- 86.95	103.11
3.545	3.544	0.001	519742	90.1015	3.0	32.91- 72.91	120.73
3.778	3.778	0.000	361155	62.3964	2.1	36.16- 76.16	83.89

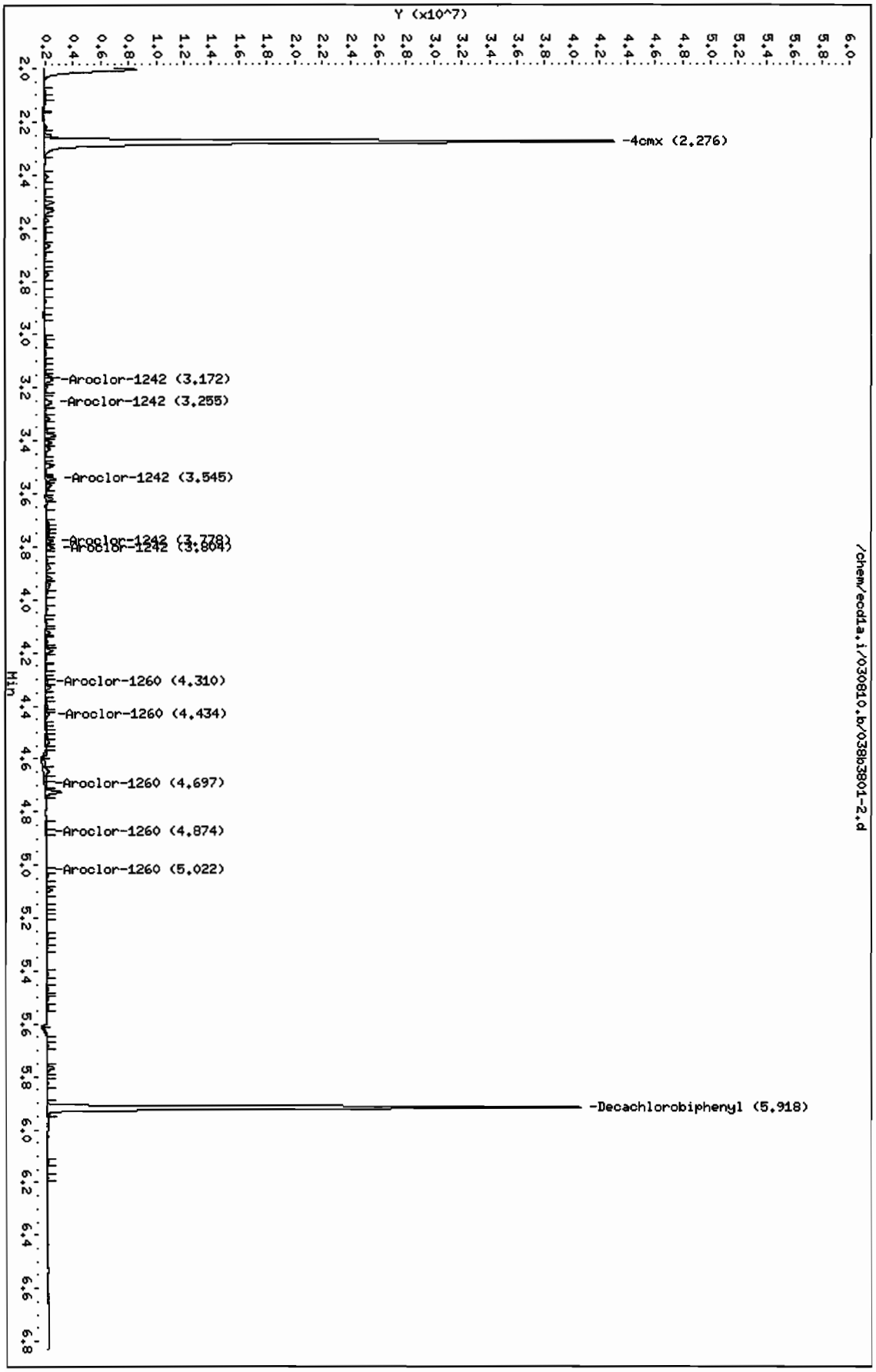
RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
4 Aroclor-1242 (continued)							
3.804	3.806	-0.002	477832	71.9476	2.4	42.60- 82.60	110.99
			Average of Peak Concentrations =		2.2		

QC Flag Legend

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

Data File: /chem/ecd1a.i/030810.b/038b3801-2.d
Date : 08-MAR-2010 13:00
Client ID: PBLK01
Sample Info: 1120206321611
Volume Injected (uL): 1.0
Column phase: CLP2

Instrument: ecd1a.i
Operator: YS1
Column diameter: 0.25



Page 1

PCB
Certificate of Analysis
Sample Summary

SDG Number:	**10–2089**			**Matrix:**	**SOIL**
Lab Sample ID:	**1202063217**				
Client Sample:	**QC for batch 961901**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**LCS for batch 961901**	**Method:**	**SW846 8082**	**SOP Ref:**	**GL–OA–E–040**
Batch ID:	**961902**	**Inst:**	**ECD1A.I**	**Dilution:**	**1**
Run Date:	**03/08/2010 13:10**	**Analyst:**	**YS1**	**Inj. Vol:**	**1 uL**
Prep Date:	**03/07/2010 11:43**	**Aliquot:**	**30 g**	**Final Volume:**	**1 mL**
Data File:	**039f3901–1.d**	**Column:**	**1 CLP1**	**Level:**	**LOW**
	039b3901–1.d		**2 CLP2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016		22.3	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		26.4	ug/kg	1.11	3.33	1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/030810.b/039f3901-2.d
Lab Smp Id: 1202063217 Client Smp ID: PBLK01LCS
Inj Date : 08-MAR-2010 13:10
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |1202063217|1|
Misc Info : |ECD82P_1S|961902|SVA|QC A|SOIL|LCS|||
Comment :
Method : /chem/ecd1a.i/030810.b/ECD1-F-8082-022210.m
Meth Date : 09-Mar-2010 06:41 yip00818 Quant Type: ESTD
Cal Date : 22-FEB-2010 12:08 Cal File: 036f3601.d
Als bottle: 39 QC Sample: LCS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-2089.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.918	1.917	0.001	52603144	122.152	4.1	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.223	5.223	0.000	37135374	120.848	4.0	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.371	2.371	0.000	10463984	680.171	22.7	80.00- 120.00	100.00
2.658	2.657	0.001	12007594	658.419	21.9	112.25- 152.25	114.75
2.738	2.737	0.001	7688455	637.227	21.2	62.95- 102.95	73.48
2.776	2.775	0.001	4739243	667.865	22.3	30.09- 70.09	45.29

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
1 Aroclor-1016 (continued)							
2.986	2.986	0.000	6242773	700.476	23.3	44.32- 84.32	59.66
Average of Peak Concentrations =					22.3		
7 Aroclor-1260					CAS #: 11096-82-5		
3.711	3.711	0.000	13235309	775.245	25.8	80.00- 120.00	100.00
3.873	3.873	0.000	19933681	843.095	28.1	130.40- 170.40	150.61
4.035	4.036	-0.001	19927547	798.017	26.6	98.53- 138.53	150.56
4.103	4.104	-0.001	11948640	829.440	27.6	70.34- 110.34	90.28
4.246	4.247	-0.001	10268016	711.548	23.7	74.44- 114.44	77.58
Average of Peak Concentrations =					26.4		

Data File: /chem/ecd1a.i/030810.b/039f3901-2.d

Date : 08-MAR-2010 13:10

Client ID: PBLK01LCS

Sample Info: |120206321711|

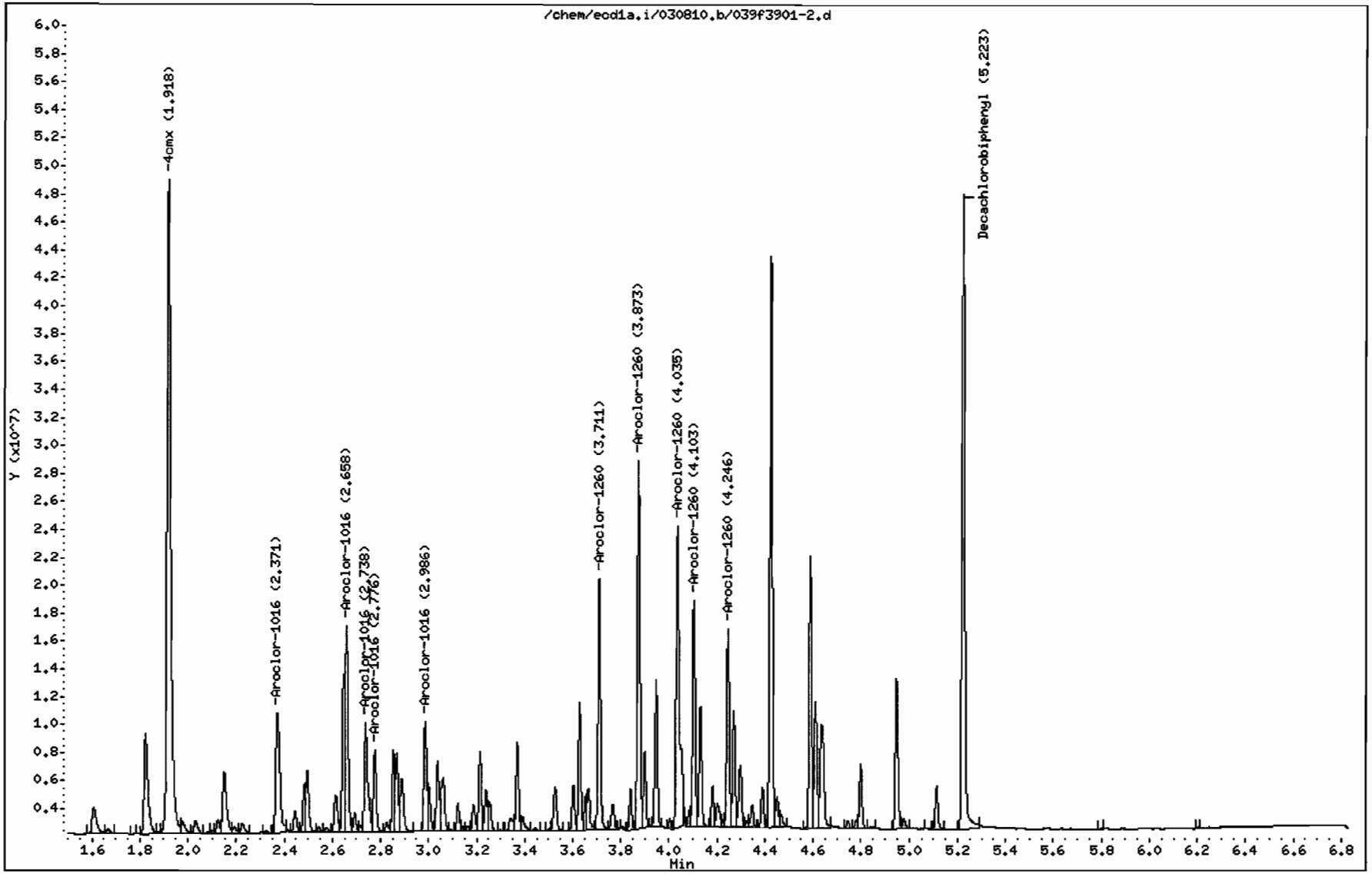
Volume Injected (uL): 1.0

Column phase: CLP1

Instrument: ecd1a.i

Operator: YS1

Column diameter: 0.25



GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/030810.b/039b3901-2.d
Lab Smp Id: 1202063217 Client Smp ID: PBLK01LCS
Inj Date : 08-MAR-2010 13:10
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |1202063217|1|
Misc Info : |ECD82P_1S|961902|SVA|QC A|SOIL|LCS|||
Comment :
Method : /chem/ecd1a.i/030810.b/ECD1-B-8082-022210.m
Meth Date : 12-Mar-2010 08:46 jc Quant Type: ESTD
Cal Date : 22-FEB-2010 12:08 Cal File: 036b3601.d
Als bottle: 39 QC Sample: LCS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-2089.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: kilroy

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

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.277	2.277	0.000	35479064	119.299	4.0	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.918	5.918	0.000	26934787	127.352	4.2	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
3.171	3.171	0.000	8798032	687.895	22.9	80.00- 120.00	100.00(M)
3.254	3.254	0.000	5659913	634.667	21.2	46.88- 86.88	64.33
3.318	3.317	0.001	3361108	621.735	20.7	21.44- 61.44	38.20
3.544	3.544	0.000	4520597	653.677	21.8	34.15- 74.15	51.38

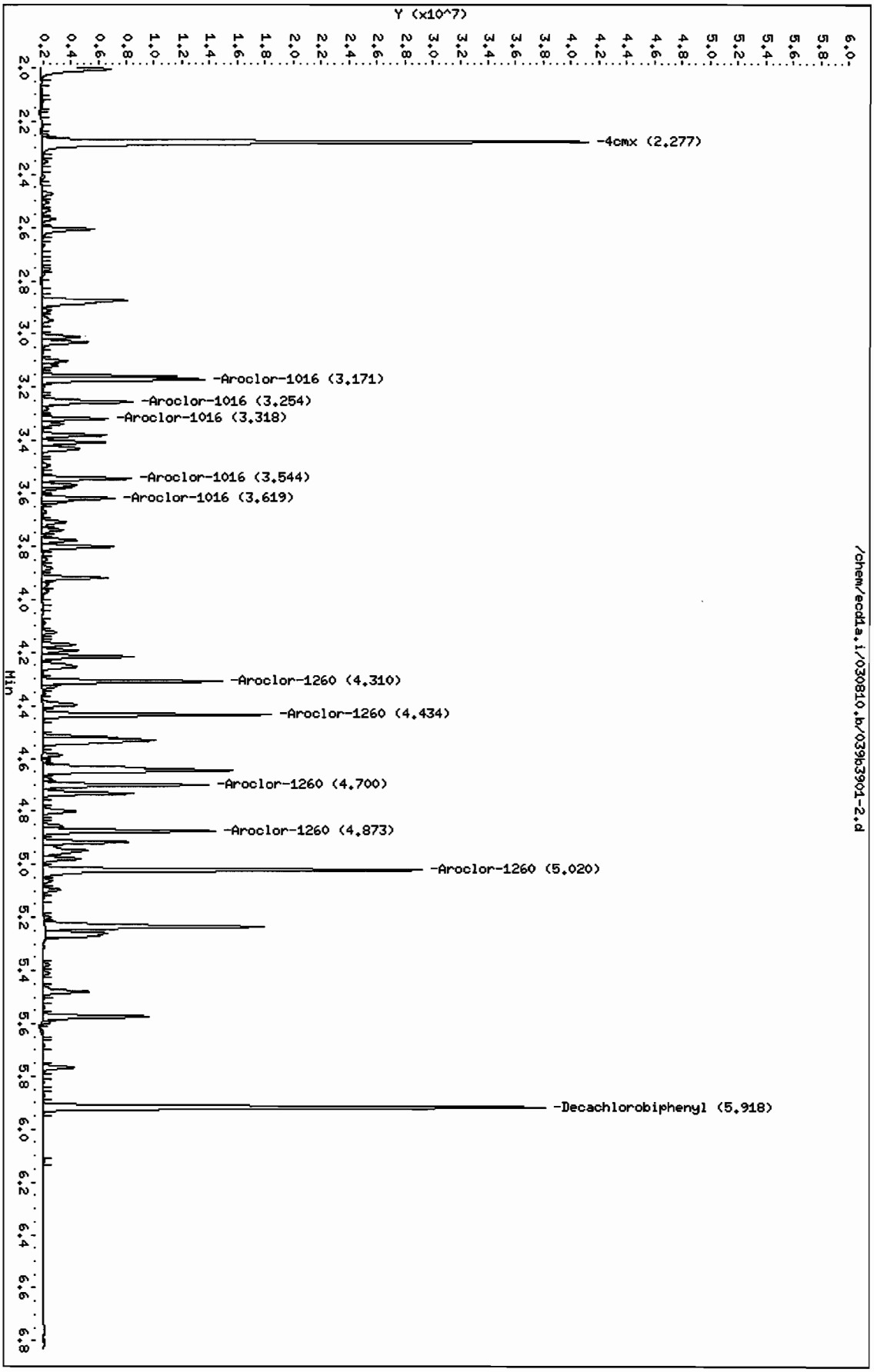
RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
1 Aroclor-1016 (continued)							
3.619	3.619	0.000	4077679	634.637	21.2	30.80- 70.80	46.35
Average of Peak Concentrations =					21.6		
7 Aroclor-1260					CAS #: 11096-82-5		
4.310	4.310	0.000	9363344	709.041	23.6	80.00- 120.00	100.00
4.434	4.435	-0.001	11545718	741.688	24.7	102.72- 142.72	123.31
4.700	4.701	-0.001	8699198	734.512	24.5	72.14- 112.14	92.91
4.873	4.874	-0.001	9152562	750.137	25.0	75.87- 115.87	97.75
5.020	5.021	-0.001	20722872	781.194	26.0	194.62- 234.62	221.32
Average of Peak Concentrations =					24.8		

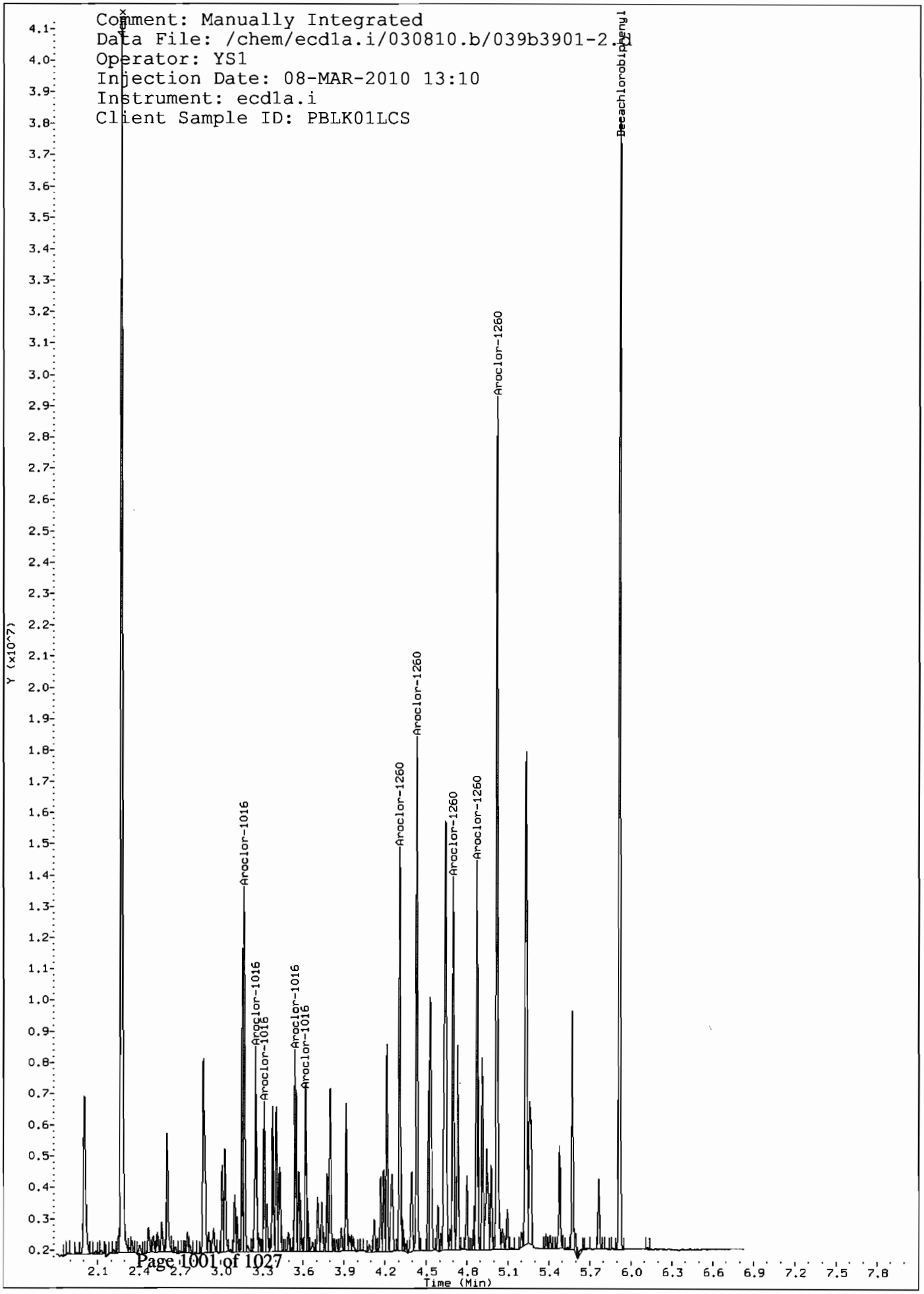
QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd1a.i/030810.b/039b3901-2.d
Date : 08-MAR-2010 13:10
Client ID: PBLK01LCS
Sample Info: 1120206321711
Volume Injected (uL): 1.0
Column phase: CLP2

Instrument: ecd1a.i
Operator: YS1
Column diameter: 0.25




Comment: Manually Integrated
Data File: /chem/ecd1a.i/030810.b/039b3901-2.d
Operator: YS1
Injection Date: 08-MAR-2010 13:10
Instrument: ecd1a.i
Client Sample ID: PBLK01LCS
Decachlorobiphenyl
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1016
Aroclor-1016
Aroclor-1016
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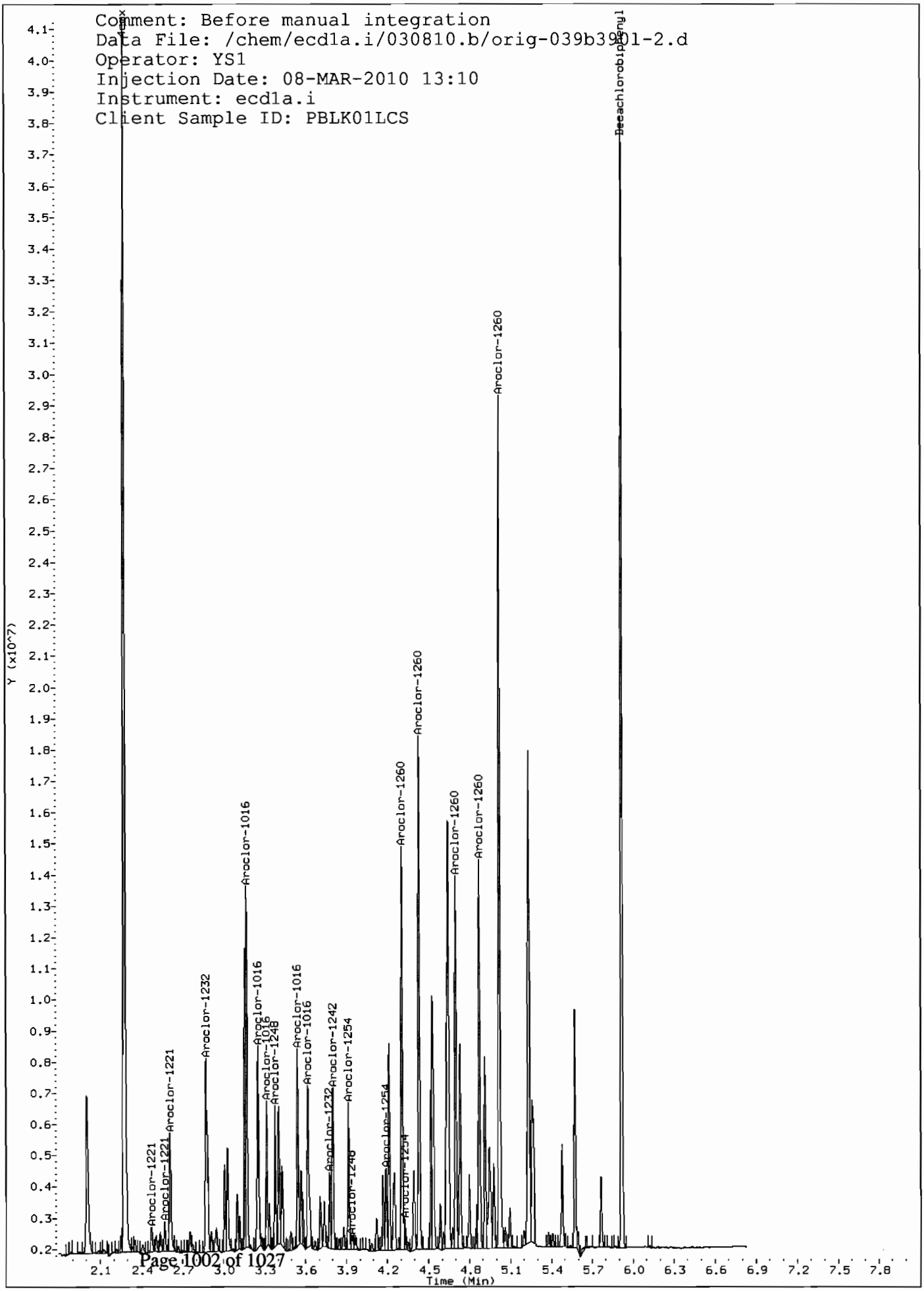
Y (x10^7)
Time (Min)


Comment: Before manual integration
Data File: /chem/ecd1a.i/030810.b/orig-039b3901-2.d
Operator: YS1
Injection Date: 08-MAR-2010 13:10
Instrument: ecd1a.i
Client Sample ID: PBLK01LCS
Decachlorobiphenyl
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1016
Aroclor-1232
Aroclor-1221
Aroclor-1221
Aroclor-1221
Aroclor-1016
Aroclor-1016
Aroclor-1248
Aroclor-1016
Aroclor-1016
Aroclor-1232
Aroclor-1242
Aroclor-1254
Aroclor-1248
Aroclor-1254
Aroclor-1254
Y (x10^7)
Time (Min)

MISCELLANEOUS DATA

GEL ORGANIC RUN LOG INSTRUMENT ID: ECD1

DATE: 02/23/2010 METHOD: ECD1-F-8082-022210.m OPERATOR:YS1 REVIEWED BY:_____
DATE:_____

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1

SOLVENT LOT DA699
ALUMINA LOT 1240553-A
COPPER LOT 236547-A

Calibration & QC Information
Initial Calibration Dates: See Calibration History and Standard Logbook.
Initial Calibration Std ID's: See Calibration History and Standard Logbook.
GEL SOP GL-OA-E-040 Polychlorinated Biphenyl: EPA 8082
Chromatogram Abbreviation Legend: AB-Assign Baseline, AP-Assign Peak,
DNC-Do Not Call, DMP-Doesn't Match Pattern, NC-Not Confirmed, RT-Retention Time,
BF-Before, AF-After.

Sequence Number: /chem/ecd1a.i/022210.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	22-FEB-2010 05:59		022210	1.0		CLEAN
002f0201.d	WAR100203-60 01	YS1	22-FEB-2010 06:10		022210	1.0		DUSE RE-ICAL
003f0301.d	AR1660-4	YS1	22-FEB-2010 06:20		022210	1.0		DUSE SCREEN
004f0401.d	WAR091219-DDT	YS1	22-FEB-2010 06:31		022210	1.0		DDT ANALOG STANDARD
005f0501.d	WAR100104-32	YS1	22-FEB-2010 06:41		022210	1.0		PATTERN ONLY
006f0601.d	WAR100104-21	YS1	22-FEB-2010 06:52		022210	1.0		PATTERN ONLY
007f0701.d	WAR100104-62	YS1	22-FEB-2010 07:03		022210	1.0		PATTERN ONLY
008f0801.d	WAR100222-01 60	YS1	22-FEB-2010 07:13		022210	1.0		AR1660 I-CAL LEVEL 1
009f0901.d	WAR100222-02 60	YS1	22-FEB-2010 07:24		022210	1.0		AR1660 I-CAL LEVEL 2
010f1001.d	WAR100222-03 60	YS1	22-FEB-2010 07:34		022210	1.0		AR1660 I-CAL LEVEL 3
011f1101.d	WAR100222-04 60	YS1	22-FEB-2010 07:45		022210	1.0		AR1660 I-CAL LEVEL 4
012f1201.d	IAR100104-01	YS1	22-FEB-2010 07:55		022210	1.0		AR1660 I-CAL LEVEL 5
013f1301.d	WAR100203-60 01	YS1	22-FEB-2010 08:06		022210	1.0		PASSED ON BOTH COLUMNS
014f1401.d	WAR100222-05 54	YS1	22-FEB-2010 08:16		022210	1.0		AR1254 I-CAL LEVEL 1
015f1501.d	WAR100222-06 54	YS1	22-FEB-2010 08:27		022210	1.0		AR1254 I-CAL LEVEL 2

Instrument Batch: /chem/ecd1a.i/022210.b Page: 1

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments

016f1601.d	WAR100222-07 54	YS1	22-FEB-2010 08:37		022210		1.0	AR1254 I-CAL LEVEL 3
017f1701.d	WAR100222-08 54	YS1	22-FEB-2010 08:48		022210		1.0	AR1254 I-CAL LEVEL 4
018f1801.d	IAR100219-02	YS1	22-FEB-2010 08:59		022210		1.0	AR1254 I-CAL LEVEL 5
019f1901.d	WAR100219-54	YS1	22-FEB-2010 09:09		022210		1.0	PASSED ON BOTH COLUMNS
020f2001.d	WAR100222-09 42	YS1	22-FEB-2010 09:20		022210		1.0	AR1242 I-CAL LEVEL 1
021f2101.d	WAR100222-10 42	YS1	22-FEB-2010 09:30		022210		1.0	AR1242 I-CAL LEVEL 2
022f2201.d	WAR100222-11 42	YS1	22-FEB-2010 09:41		022210		1.0	AR1242 I-CAL LEVEL 3
023f2301.d	WAR100222-12 42	YS1	22-FEB-2010 09:51		022210		1.0	AR1242 I-CAL LEVEL 4
024f2401.d	IAR100219-01	YS1	22-FEB-2010 10:02		022210		1.0	AR1242 I-CAL LEVEL 5
025f2501.d	WAR100219-42	YS1	22-FEB-2010 10:12		022210		1.0	PASSED ON BOTH COLUMNS
026f2601.d	WAR100222-13 48	YS1	22-FEB-2010 10:23		022210		1.0	AR1248 I-CAL LEVEL 1
027f2701.d	WAR100222-14 48	YS1	22-FEB-2010 10:33		022210		1.0	AR1248 I-CAL LEVEL 2
028f2801.d	WAR100222-15 48	YS1	22-FEB-2010 10:44		022210		1.0	AR1248 I-CAL LEVEL 3
029f2901.d	IAR100211-01	YS1	22-FEB-2010 10:54		022210		1.0	AR1248 I-CAL LEVEL 5
030f3001.d	WAR100222-16	YS1	22-FEB-2010 11:05		022210		1.0	AR1248 I-CAL LEVEL 4
031f3101.d	WAR091217-48	YS1	22-FEB-2010 11:16		022210		1.0	PASSED ON BOTH COLUMNS
032f3201.d	WAR100222-17 68	YS1	22-FEB-2010 11:26		022210		1.0	AR1268 I-CAL LEVEL 1
033f3301.d	WAR100222-18 68	YS1	22-FEB-2010 11:37		022210		1.0	AR1268 I-CAL LEVEL 2
034f3401.d	WAR100222-19 68	YS1	22-FEB-2010 11:47		022210		1.0	AR1268 I-CAL LEVEL 3
035f3501.d	WAR100222-20 68	YS1	22-FEB-2010 11:58		022210		1.0	AR1268 I-CAL LEVEL 4

Instrument Batch: /chem/ecd1a.i/022210.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
036f3601.d	IAR100104-05	YS1	22-FEB-2010 12:08		022210	1.0		AR1268 I-CAL LEVEL 5
037f3701.d	WAR100107-68	YS1	22-FEB-2010 12:19		022210	1.0		PASSED ON BOTH COLUMNS
038f3801.d	WAR100219-99 02	YS1	22-FEB-2010 12:29		022210	1.0		CLEAN
039f3901-1.d	1202046866	YS1	22-FEB-2010 12:40	954781	10-1846	1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
039f3901-2.d	1202046866	YS1	22-FEB-2010 12:40	954781	10-1848	1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER

039f3901.d	1202046866	YS1	22-FEB-2010 12:40	954781	10-1808		1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
040f4001-1.d	1202046867	YS1	22-FEB-2010 12:50	954781	10-1846		1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
040f4001-2.d	1202046867	YS1	22-FEB-2010 12:50	954781	10-1848		1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
040f4001.d	1202046867	YS1	22-FEB-2010 12:50	954781	10-1808		1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
041f4101.d	246968001	YS1	22-FEB-2010 13:01	954781	10-1808		1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
042f4201.d	246968002	YS1	22-FEB-2010 13:14	954781	10-1808		1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
043f4301.d	246968003	YS1	22-FEB-2010 13:26	954781	10-1808		1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
044f4401.d	246968004	YS1	22-FEB-2010 13:39	954781	10-1808		1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
045f4501.d	246968005	YS1	22-FEB-2010 13:51	954781	10-1808		1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
046f4601.d	246968006	YS1	22-FEB-2010 14:04	954781	10-1808		1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
047f4701.d	246968007	YS1	22-FEB-2010 14:17	954781	10-1808		1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
048f4801.d	246968008	YS1	22-FEB-2010 14:30	954781	10-1808		1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
049f4901.d	WAR100203-60 02	YS1	22-FEB-2010 14:42		022210		1.0		PASSED ON BOTH COLUMNS
050f5001.d	WAR100219-99 03	YS1	22-FEB-2010 14:53		022210		1.0		CLEAN
051f5101.d	246968009	YS1	22-FEB-2010 15:03	954781	10-1808		1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER

Instrument Batch: /chem/ecd1a.i/022210.b Page: 3

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
052f5201.d	246968010	YS1	22-FEB-2010 15:16	954781	10-1808	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
053f5301.d	246968011	YS1	22-FEB-2010 15:28	954781	10-1808	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
054f5401.d	246968012	YS1	22-FEB-2010 15:41	954781	10-1808	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
055f5501.d	246968013	YS1	22-FEB-2010 15:54	954781	10-1808	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
056f5601.d	246968014	YS1	22-FEB-2010 16:06	954781	10-1808	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
057f5701.d	246968015	YS1	22-FEB-2010 16:19	954781	10-1808	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
058f5801.d	246968016	YS1	22-FEB-2010 16:32	954781	10-1808	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
059f5901.d	246968017	YS1	22-FEB-2010 16:44	954781	10-1808	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
060f6001.d	247121002	YS1	22-FEB-2010 16:57	954781	10-1846	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER

061f6101.d	WAR100203-60 03	YS1	22-FEB-2010 17:10		022210		1.0		PASSED ON BOTH COLUMNS
062f6201.d	WAR100219-99 04	YS1	22-FEB-2010 17:22		022210		1.0		CLEAN
063f6301.d	247123001	YS1	22-FEB-2010 17:35	954781	10-1848		1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
064f6401.d	1202046868	YS1	22-FEB-2010 17:48	954781	10-1848		1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
065f6501.d	1202046869	YS1	22-FEB-2010 18:00	954781	10-1848		1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
066f6601.d	WAR100203-60 04	YS1	22-FEB-2010 18:13		022210		1.0		PASSED ON BOTH COLUMNS
067f6701.d	WAR100219-99 05	YS1	22-FEB-2010 18:26		022210		1.0		CLEAN
068f6801.d	1202048527	YS1	22-FEB-2010 18:38	955479	10-1818		1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
069f6901.d	1202048528	YS1	22-FEB-2010 18:51	955479	10-1818		1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
070f7001.d	247043003	YS1	22-FEB-2010 19:04	955479	10-1818		1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
071f7101.d	1202048529	YS1	22-FEB-2010 19:16	955479	10-1818		1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
072f7201.d	1202048530	YS1	22-FEB-2010 19:29	955479	10-1818	1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
073f7301.d	247043004	YS1	22-FEB-2010 19:42	955479	10-1818	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
074f7401.d	247043005	YS1	22-FEB-2010 19:54	955479	10-1818	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
075f7501.d	247043006	YS1	22-FEB-2010 20:07	955479	10-1818	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
076f7601.d	247043007	YS1	22-FEB-2010 20:20	955479	10-1818	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
077f7701.d	247043008	YS1	22-FEB-2010 20:32	955479	10-1818	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
078f7801.d	WAR100203-60 05	YS1	22-FEB-2010 20:45		022210	1.0		PASSED ON BOTH COLUMNS
079f7901.d	WAR100219-99 06	YS1	22-FEB-2010 20:58		022210	1.0		CLEAN
080f8001.d	247043009	YS1	22-FEB-2010 21:10	955479	10-1818	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
081f8101.d	247043010	YS1	22-FEB-2010 21:23	955479	10-1818	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
082f8201.d	247043011	YS1	22-FEB-2010 21:35	955479	10-1818	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
083f8301.d	247043012	YS1	22-FEB-2010 21:48	955479	10-1818	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
084f8401.d	247043013	YS1	22-FEB-2010 22:01	955479	10-1818	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
085f8501.d	247043014	YS1	22-FEB-2010 22:13	955479	10-1818	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER

086f8601.d	247043015	YS1	22-FEB-2010 22:26	955479	10-1818		1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
087f8701.d	247043016	YS1	22-FEB-2010 22:39	955479	10-1818		1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
088f8801.d	247043017	YS1	22-FEB-2010 22:51	955479	10-1818		1.0	LANL	SURROGATE LOW RE
089f8901.d	247043018	YS1	22-FEB-2010 23:04	955479	10-1818		1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
090f9001.d	WAR100203-60 06	YS1	22-FEB-2010 23:17		022210		1.0		PASSED ON BOTH COLUMNS
091f9101.d	WAR100219-99 07	YS1	22-FEB-2010 23:29		022210		1.0		CLEAN

Instrument Batch: /chem/ecd1a.i/022210.b Page: 5

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
092f9201.d	1660	YS1	22-FEB-2010 23:42		022210	1.0		DUSE SCREEN
093f9301.d	1660-4	YS1	22-FEB-2010 23:55		022210	1.0		DUSE SCREEN

GEL ORGANIC RUN LOG INSTRUMENT ID: ECD1

DATE: 03/09/2010 METHOD: ECD1-F-8082-022210.m OPERATOR:YS1 REVIEWED BY:_____
DATE:_____

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1

SOLVENT LOT DA936
ALUMINA LOT 1273992-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/030810.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	08-MAR-2010 05:53		030810	1.0		CLEAN
002f0201.d	WAR100222-60 01	YS1	08-MAR-2010 06:04		030810	1.0		PASSED ON BOTH COLUMNS
003f0301.d	WAR100219-54	YS1	08-MAR-2010 06:14		030810	1.0		PASSED ON BOTH COLUMNS
004f0401.d	WAR100219-42	YS1	08-MAR-2010 06:25		030810	1.0		PASSED ON BOTH COLUMNS
005f0501.d	WAR100223-48	YS1	08-MAR-2010 06:35		030810	1.0		PASSED ON BOTH COLUMNS
006f0601.d	WAR100107-68	YS1	08-MAR-2010 06:46		030810	1.0		PASSED ON BOTH COLUMNS
007f0701.d	WAR100104-32	YS1	08-MAR-2010 06:56		030810	1.0		PATTERN ONLY
008f0801.d	WAR100104-21	YS1	08-MAR-2010 07:07		030810	1.0		PATTERN ONLY
009f0901.d	WAR100104-62	YS1	08-MAR-2010 07:17		030810	1.0		PATTERN ONLY
010f1001.d	WAR091219-DDT	YS1	08-MAR-2010 07:28		030810	1.0		PATTERN ONLY
011f1101.d	WAR100219-99 02	YS1	08-MAR-2010 07:38		030810	1.0		CLEAN
012f1201.d	1202061567	YS1	08-MAR-2010 07:49	961145	EUI-7522	1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
013f1301.d	1202061568	YS1	08-MAR-2010 08:01	961145	EUI-7522	1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
014f1401.d	1202061575	YS1	08-MAR-2010 08:14	961145	EUI-7522	1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
015f1501.d	247914001	YS1	08-MAR-2010 08:27	961145	EUI-7522	5.0	CARE	UPLOAD BOTH COLUMNS, USE HIGHER

Instrument Batch: /chem/ecd1a.i/030810.b Page: 1

| Data File | GEL Lab Sample ID | Analyst | Injection Date/Time | Batch | SDG | Dilution | Client | Comments |

016f1601.d	SCREEN	YS1	08-MAR-2010 08:39	961145	030810		1.0		DUSE SCREEN
017f1701.d	247923001	YS1	08-MAR-2010 08:52	961145	EUI-7523		1.0	CARE	DUSE RE
018f1801.d	247927001	YS1	08-MAR-2010 09:04	961145	EUI-7524		5.0	CARE	UPLOAD BOTH COLUMNS, USE HIGHER
019f1901.d	247930001	YS1	08-MAR-2010 09:17	961145	EUI-7525		10.0	CARE	UPLOAD BOTH COLUMNS, USE HIGHER
020f2001.d	247933001	YS1	08-MAR-2010 09:30	961145	EUI-7526		5.0	CARE	UPLOAD BOTH COLUMNS, USE HIGHER
021f2101.d	247941001	YS1	08-MAR-2010 09:42	961145	EUI-7528		1.0	CARE	UPLOAD BOTH COLUMNS, USE HIGHER
022f2201.d	WAR100222-60 02	YS1	08-MAR-2010 09:55		030810		1.0		PASSED ON BOTH COLUMNS
023f2301.d	WAR100219-99 03	YS1	08-MAR-2010 10:06		030810		1.0		CLEAN
024f2401.d	247943001	YS1	08-MAR-2010 10:16	961145	EUI-7529		1.0	CARE	UPLOAD BOTH COLUMNS, USE HIGHER
025f2501.d	1202061569	YS1	08-MAR-2010 10:29	961145	EUI-7529		1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
026f2601.d	1202061570	YS1	08-MAR-2010 10:41	961145	EUI-7529		1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
027f2701.d	247945001	YS1	08-MAR-2010 10:54	961145	EUI-7530		5.0	CARE	DUSE RR AFTER MORE SULFUR CLEANED
028f2801.d	248224001	YS1	08-MAR-2010 11:06	961145	EUI-7534		5.0	CARE	DUSE RE
029f2901.d	248225001	YS1	08-MAR-2010 11:19	961145	EUI-7535		50.0	CARE	UPLOAD BOTH COLUMNS, USE HIGHER
030f3001.d	247945001	YS1	08-MAR-2010 11:32	961145	EUI-7530		5.0	CARE	DUSE RE
031f3101.d	WAR100222-60 03	YS1	08-MAR-2010 11:44		030810		1.0		PASSED ON BOTH COLUMNS
032f3201.d	AR1660	YS1	08-MAR-2010 11:55		030810		1.0		WAS A CHECK
033f3301.d	1202063216	YS1	08-MAR-2010 12:05	961902	030810		1.0	QC A	DUSE RR
034f3401.d	1202063217	YS1	08-MAR-2010 12:16	961902	030810		1.0	QC A	DUSE RR
035f3501.d	248253001	YS1	08-MAR-2010 12:26		030810		20.0		DUSE RR

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
036f3601.d	WAR100222-60 04	YS1	08-MAR-2010 12:39		030810		1.0		PASSED ON BOTH COLUMNS
037f3701.d	WAR100219-99 04	YS1	08-MAR-2010 12:49		030810		1.0		CLEAN
038f3801.d	1202063216	YS1	08-MAR-2010 13:00	961902	10-2047		1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
039f3901.d	1202063217	YS1	08-MAR-2010 13:10	961902	10-2047		1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
040f4001.d	248253001	YS1	08-MAR-2010 13:21	961902	10-2143		20.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER

041f4101.d	1202063218	YS1	08-MAR-2010 13:33	961902	10-2143		20.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
042f4201.d	1202063219	YS1	08-MAR-2010 13:46	961902	10-2143		20.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
043f4301.d	248253002	YS1	08-MAR-2010 13:59	961902	10-2143		50.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
044f4401.d	WAR100222-60 05	YS1	08-MAR-2010 14:11		030810		1.0		PASSED ON BOTH COLUMNS
045f4501.d	WAR100219-99 05	YS1	08-MAR-2010 14:22		030810		1.0		CLEAN
046f4601.d	248018002	YS1	08-MAR-2010 14:32	961902	10-2047		1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
047f4701.d	248018003	YS1	08-MAR-2010 14:45	961902	10-2047		1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
048f4801.d	248018004	YS1	08-MAR-2010 14:57	961902	10-2047		1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
049f4901.d	248018005	YS1	08-MAR-2010 15:10	961902	10-2047		1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
050f5001.d	248018006	YS1	08-MAR-2010 15:23	961902	10-2047		1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
051f5101.d	248018007	YS1	08-MAR-2010 15:35	961902	10-2047		1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
052f5201.d	248018008	YS1	08-MAR-2010 15:48	961902	10-2047		1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
053f5301.d	WAR100222-60 06	YS1	08-MAR-2010 16:01		030810		1.0		PASSED ON BOTH COLUMNS
054f5401.d	WAR100219-99 06	YS1	08-MAR-2010 16:11		030810		1.0		CLEAN
055f5501.d	248043001	YS1	08-MAR-2010 16:22	961902	10-2074		1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER

Instrument Batch: /chem/ecd1a.i/030810.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
056f5601.d	248043002	YS1	08-MAR-2010 16:34	961902	10-2074	5.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
057f5701.d	248043018	YS1	08-MAR-2010 16:47	961902	10-2074	20.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
058f5801.d	248102001	YS1	08-MAR-2010 17:00	961902	10-2089	5.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
059f5901.d	248114002	YS1	08-MAR-2010 17:12	961902	10-2092	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
060f6001.d	248114003	YS1	08-MAR-2010 17:25	961902	10-2092	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
061f6101.d	248114004	YS1	08-MAR-2010 17:37	961902	10-2092	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
062f6201.d	248114005	YS1	08-MAR-2010 17:50	961902	10-2092	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
063f6301.d	248114006	YS1	08-MAR-2010 18:03	961902	10-2092	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
064f6401.d	248203002	YS1	08-MAR-2010 18:15	961902	10-2125	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER

065f6501.d	WAR100222-60 07	YS1	08-MAR-2010 18:28		030810	1.0	PASSED ON BOTH COLUMNS
066f6601.d	WAR100219-99 07	YS1	08-MAR-2010 18:38		030810	1.0	CLEAN

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RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/030810.b/041b4101.d
Lab Smp Id: 1202063218 Client Smp ID: WST01-10-13669MS
Inj Date : 08-MAR-2010 13:33
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |1202063218|20|
Misc Info : |ECD82P_1S|961902|2|SVA|QC A|SOIL|MS|||
Comment :
Method : /chem/ecd1a.i/030810.b/ECD1-B-8082-022210.m
Meth Date : 12-Mar-2010 08:46 jc Quant Type: ESTD
Cal Date : 22-FEB-2010 12:08 Cal File: 036b3601.d
Als bottle: 41 QC Sample: MS
Dil Factor: 20.00000
Integrator: Falcon Compound Sublist: 10-2143.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: kilroy

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

Name	Value	Description
DF	20.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.09000	Weight of sample extracted (g)
M	18.27580	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.276	2.277	-0.001	1367178	4.59715	3.7	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.916	5.918	-0.002	1179499	5.57687	4.5	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
3.171	3.171	0.000	458459	35.8457	29.2	80.00- 120.00	100.00(aRH)
3.253	3.254	-0.001	346408	38.8440	31.6	46.88- 86.88	75.56
3.316	3.317	-0.001	182858	33.8249	27.5	21.44- 61.44	39.89
3.544	3.544	0.000	1038585	150.179	122	34.15- 74.15	226.54

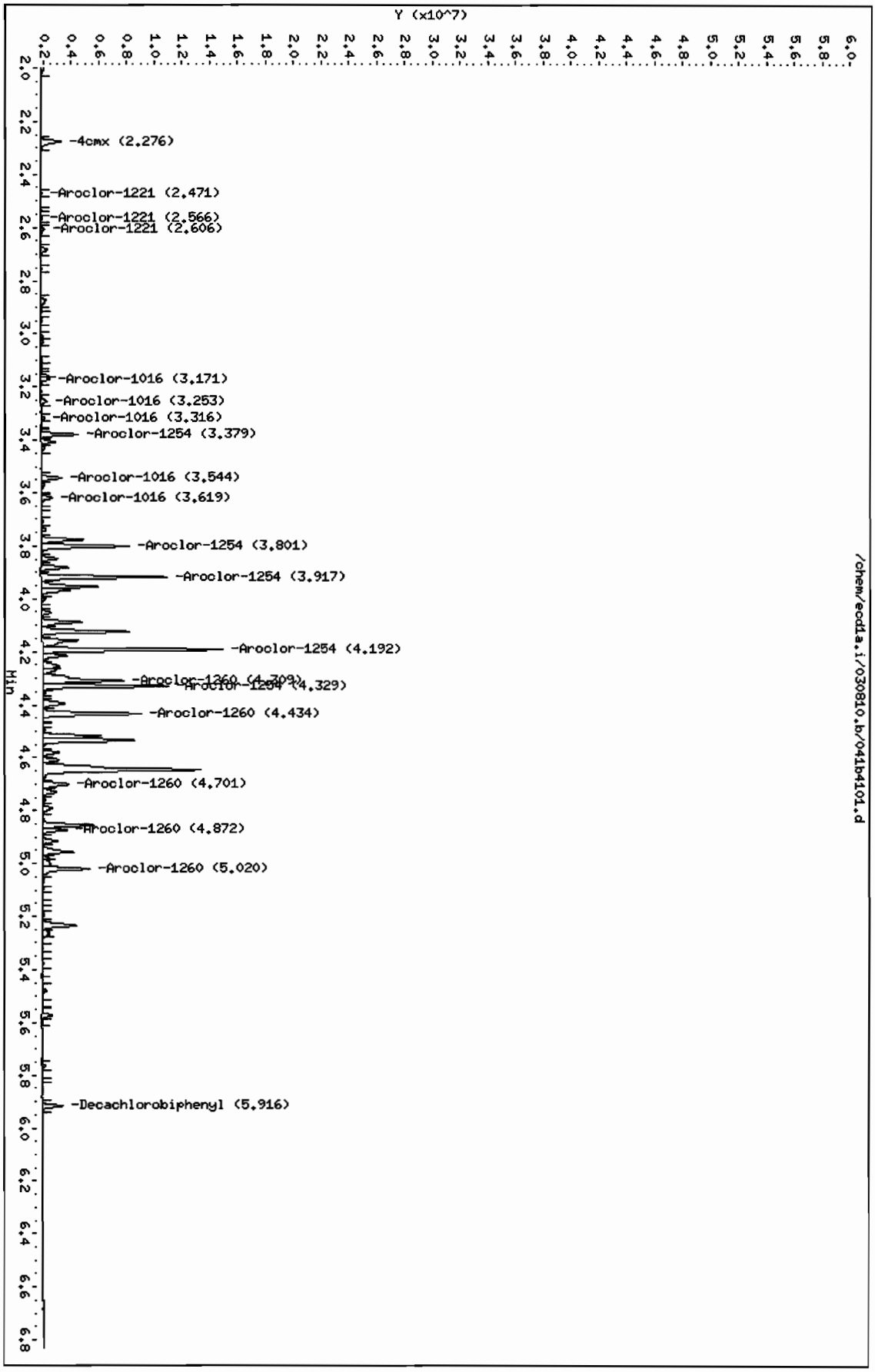
RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
1 Aroclor-1016 (continued)							
3.619	3.619	0.000	674624	104.996	85.4	30.80- 70.80	147.15
Average of Peak Concentrations =					59.2		
6 Aroclor-1254					CAS #: 11097-69-1		
3.379	3.380	-0.001	1979960	326.274	265	80.00- 120.00	100.00
3.801	3.801	0.000	4864710	452.838	368	162.66- 202.66	245.70
3.917	3.918	-0.001	6464994	555.256	452	182.93- 222.93	326.52
4.192	4.194	-0.002	9103480	572.594	466	265.65- 305.65	459.78
4.329	4.330	-0.001	6489837	541.938	441	189.90- 229.90	327.78
Average of Peak Concentrations =					398		
7 Aroclor-1260					CAS #: 11096-82-5		
4.309	4.310	-0.001	5718116	433.006	352	80.00- 120.00	100.00(R)
4.434	4.435	-0.001	5396749	346.683	282	102.72- 142.72	94.38
4.701	4.701	0.000	1806525	152.533	124	72.14- 112.14	31.59
4.872	4.874	-0.002	1355090	111.062	90.3	75.87- 115.87	23.70
5.020	5.021	-0.001	2824423	106.473	86.6	194.62- 234.62	49.39
Average of Peak Concentrations =					187		

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
R - Spike/Surrogate failed recovery limits.
H - Operator selected an alternate compound hit.

Data File: /chem/ecd1a.i/030810.b/041b4101.d
Date : 08-MAR-2010 13:33
Client ID: WST01-10-13669MS
Sample Info: 1120206321812 01
Volume Injected (uL): 1.0
Column phase: CLP2

Instrument: ecd1a.i
Operator: YS1
Column diameter: 0.25



Page 1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/030810.b/041f4101.d
Lab Smp Id: 1202063218 Client Smp ID: WST01-10-13669MS
Inj Date : 08-MAR-2010 13:33
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |1202063218|20|
Misc Info : |ECD82P_1S|961902|2|SVA|QC A|SOIL|MS|||
Comment :
Method : /chem/ecd1a.i/030810.b/ECD1-F-8082-022210.m
Meth Date : 08-Mar-2010 13:37 yip00818 Quant Type: ESTD
Cal Date : 22-FEB-2010 12:08 Cal File: 036f3601.d
Als bottle: 41 QC Sample: MS
Dil Factor: 20.00000
Integrator: Falcon Compound Sublist: 10-2143.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	20.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.09000	Weight of sample extracted (g)
M	18.27580	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.917	1.917	0.000	1809192	4.20120	3.4	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.221	5.223	-0.002	1581508	5.14664	4.2	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.370	2.371	-0.001	474841	30.8652	25.1	80.00- 120.00	100.00(aH)
2.656	2.657	-0.001	559790	30.6953	25.0	112.24- 152.24	117.89
2.736	2.737	-0.001	395361	32.7679	26.6	63.35- 103.35	83.26
2.774	2.775	-0.001	221709	31.2438	25.4	30.14- 70.14	46.69

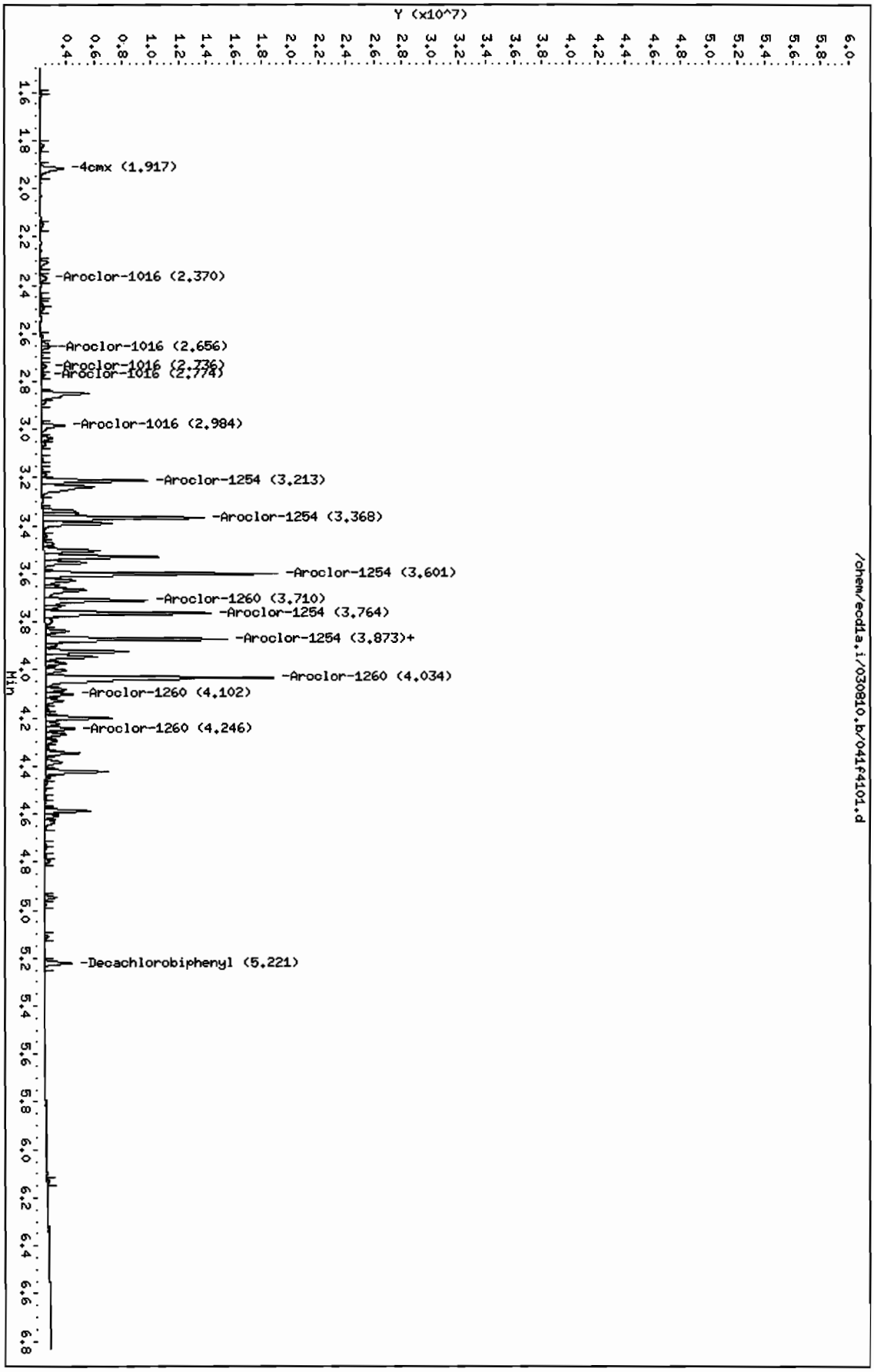
RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
1 Aroclor-1016 (continued)							
2.984	2.986	-0.002	1522145	170.794	139	44.06- 84.06	320.56
Average of Peak Concentrations =					48.2		
6 Aroclor-1254					CAS #: 11097-69-1		
3.213	3.215	-0.002	5787617	482.006	392	80.00- 120.00	100.00(M)
3.368	3.369	-0.001	9063234	572.458	466	116.82- 156.82	156.60
3.601	3.602	-0.001	12295965	629.787	512	157.14- 197.14	212.45
3.764	3.765	-0.001	9129543	661.121	538	112.42- 152.42	157.74
3.873	3.875	-0.002	10710818	750.004	610	109.02- 149.02	185.06
Average of Peak Concentrations =					504		
7 Aroclor-1260					CAS #: 11096-82-5		
3.710	3.711	-0.001	5973760	349.907	284	80.00- 120.00	100.00(RM)
3.873	3.873	0.000	10710818	453.014	368	129.73- 169.73	179.30
4.034	4.036	-0.002	15432985	618.028	503	137.08- 177.08	258.35
4.102	4.104	-0.002	1505232	104.489	85.0	70.34- 110.34	25.20
4.246	4.247	-0.001	1548571	107.312	87.3	74.64- 114.64	25.92
Average of Peak Concentrations =					265		

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Data File: /chem/ecdia.i/030810.b/041f4101.d
Date : 08-MAR-2010 13:33
Client ID: WST01-10-13669MS
Sample Info: 1120206321812 01
Volume Injected (uL): 1.0
Column phase: CLP1

Instrument: ecdia.i
Operator: YS1
Column diameter: 0.25



Page 1

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RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/030810.b/042b4201.d
Lab Smp Id: 1202063219 Client Smp ID: WST01-10-13669MSD
Inj Date : 08-MAR-2010 13:46
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |1202063219|20|
Misc Info : |ECD82P_1S|961902|2|SVA|QC A|SOIL|MSD|||
Comment :
Method : /chem/ecd1a.i/030810.b/ECD1-B-8082-022210.m
Meth Date : 12-Mar-2010 08:46 jc Quant Type: ESTD
Cal Date : 22-FEB-2010 12:08 Cal File: 036b3601.d
Als bottle: 42 QC Sample: MSD
Dil Factor: 20.00000
Integrator: Falcon Compound Sublist: 10-2143.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: kilroy

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

Name	Value	Description
DF	20.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.13000	Weight of sample extracted (g)
M	18.27580	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.274	2.277	-0.003	2484493	8.35413	6.8	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.915	5.918	-0.003	2078734	9.82861	8.0	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
3.169	3.171	-0.002	776582	60.7189	49.3	80.00- 120.00	100.00(RH)
3.252	3.254	-0.002	590011	66.1601	53.7	46.88- 86.88	75.98
3.316	3.317	-0.001	334868	61.9436	50.3	21.44- 61.44	43.12
3.542	3.544	-0.002	2195471	317.465	258	34.15- 74.15	282.71

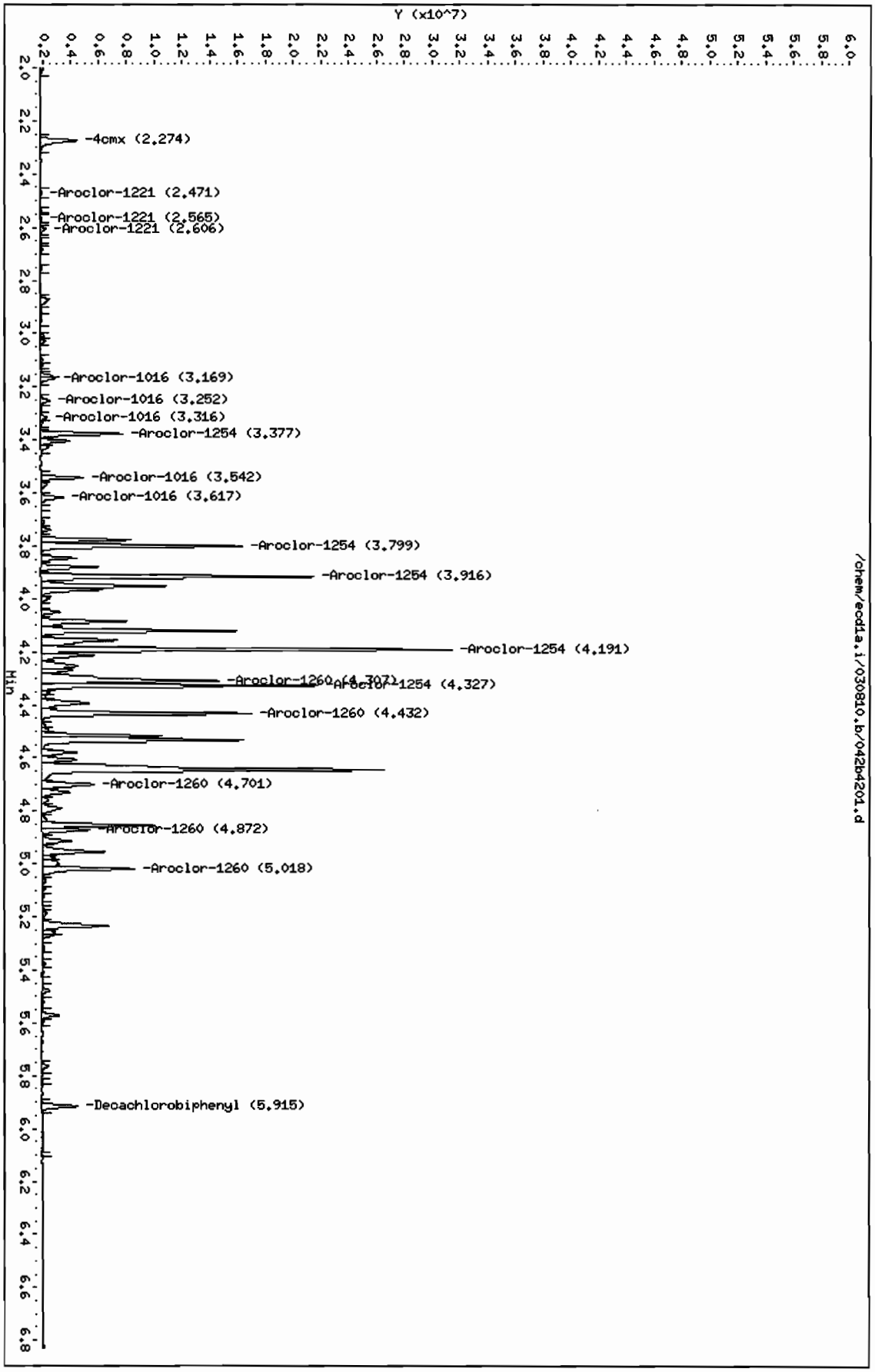
RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
1 Aroclor-1016 (continued)							
3.617	3.619	-0.002	1341640	208.809	170	30.80- 70.80	172.76
Average of Peak Concentrations =					116		
6 Aroclor-1254					CAS #: 11097-69-1		
3.377	3.380	-0.003	4254271	701.054	569	80.00- 120.00	100.00
3.799	3.801	-0.002	10829791	1008.11	819	162.66- 202.66	254.56
3.916	3.918	-0.002	14096936	1210.74	983	182.93- 222.93	331.36
4.191	4.194	-0.003	20291591	1276.31	1040	265.65- 305.65	476.97
4.327	4.330	-0.003	14104010	1177.77	957	189.90- 229.90	331.53
Average of Peak Concentrations =					874		
7 Aroclor-1260					CAS #: 11096-82-5		
4.307	4.310	-0.003	12206329	924.327	751	80.00- 120.00	100.00(R)
4.432	4.435	-0.003	11288294	725.151	589	102.72- 142.72	92.48
4.701	4.701	0.000	3689183	311.494	253	72.14- 112.14	30.22
4.872	4.874	-0.002	2716735	222.661	181	75.87- 115.87	22.26
5.018	5.021	-0.003	5410422	203.958	166	194.62- 234.62	44.32
Average of Peak Concentrations =					388		

QC Flag Legend

R - Spike/Surrogate failed recovery limits.
H - Operator selected an alternate compound hit.

Data File: /chem/ecd1a.i/030810.b/042b4201.d
Date : 08-MAR-2010 13:46
Client ID: WST01-10-13669MSD
Sample Info: 1120206321912 01
Volume Injected (uL): 1.0
Column phase: CLP2

Instrument: ecd1a.i
Operator: YS1
Column diameter: 0.25



Page 1

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RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/030810.b/042f4201.d
Lab Smp Id: 1202063219 Client Smp ID: WST01-10-13669MSD
Inj Date : 08-MAR-2010 13:46
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |1202063219|20|
Misc Info : |ECD82P_1S|961902|2|SVA|QC A|SOIL|MSD|||
Comment :
Method : /chem/ecd1a.i/030810.b/ECD1-F-8082-022210.m
Meth Date : 08-Mar-2010 13:37 yip00818 Quant Type: ESTD
Cal Date : 22-FEB-2010 12:08 Cal File: 036f3601.d
Als bottle: 42 QC Sample: MSD
Dil Factor: 20.00000
Integrator: Falcon Compound Sublist: 10-2143.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	20.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.13000	Weight of sample extracted (g)
M	18.27580	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.916	1.917	-0.001	3373779	7.83439	6.4	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.221	5.223	-0.002	2748592	8.94464	7.3	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.368	2.371	-0.003	827668	53.7994	43.7	80.00- 120.00	100.00(RH)
2.655	2.657	-0.002	972633	53.3329	43.3	112.24- 152.24	117.51
2.736	2.737	-0.001	678620	56.2447	45.7	63.35- 103.35	81.99
2.773	2.775	-0.002	371073	52.2925	42.5	30.14- 70.14	44.83

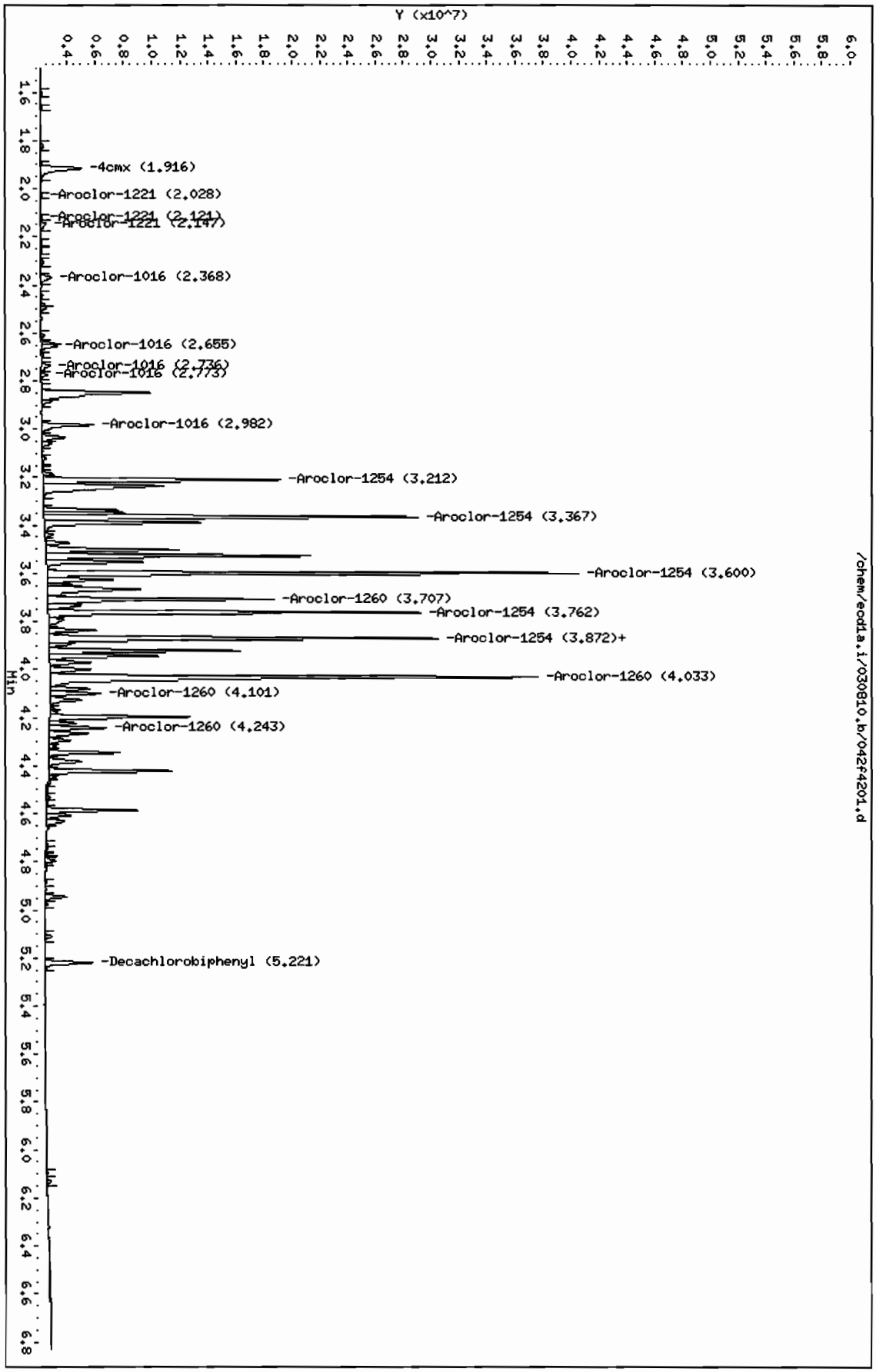
RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
1 Aroclor-1016 (continued)							
2.982	2.986	-0.004	3269332	366.838	298	44.06- 84.06	395.00
Average of Peak Concentrations =					94.6		
6 Aroclor-1254					CAS #: 11097-69-1		
3.212	3.215	-0.003	13101774	1091.15	886	80.00- 120.00	100.00(M)
3.367	3.369	-0.002	20276625	1280.72	1040	116.82- 156.82	154.76
3.600	3.602	-0.002	27664844	1416.97	1150	157.14- 197.14	211.15
3.762	3.765	-0.003	20026063	1450.20	1180	112.42- 152.42	152.85
3.872	3.875	-0.003	22548237	1578.90	1280	109.02- 149.02	172.10
Average of Peak Concentrations =					1110		
7 Aroclor-1260					CAS #: 11096-82-5		
3.707	3.711	-0.004	12712899	744.645	605	80.00- 120.00	100.00(RM)
3.872	3.873	-0.001	22548237	953.678	775	129.73- 169.73	177.37
4.033	4.036	-0.003	32219484	1290.26	1050	137.08- 177.08	253.44
4.101	4.104	-0.003	2766009	192.008	156	70.34- 110.34	21.76
4.243	4.247	-0.004	2947936	204.285	166	74.64- 114.64	23.19
Average of Peak Concentrations =					550		

QC Flag Legend

R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Data File: /chem/ecd1a.i/030810.b/042f4201.d
Date : 08-MAR-2010 13:46
Client ID: WST01-10-13669MSD
Sample Info: 1120206321912 01
Volume Injected (uL): 1.0
Column phase: CLP1

Instrument: ecd1a.i
Operator: YS1
Column diameter: 0.25



Page 1

Prep Logbook

Extraction of Semivolatile and Nonvolatile Organic Compounds from Soil, Sludge, and Other Miscellaneous Solid Samples

Batch ID: 961901 **Verified by:** _____

Analyst: Alberto Velasco

Method: SW846 3550B

Lab SOP: GL–OA–E–010 REV# 18

Instrument: Semi–Volatiles Manual

Sample ID	Run Date	Aliquot (g)	Clean Up	Prior to Clean up (mL)	Amount Cleaned (mL)	After Clean up (mL)	Prepped Aliquot (mL)	Prepped Factor (mL/g)
1202063216 MB	07–MAR–2010 11:43:00	30	H2SO4/KMi2		2	9	1	0.03333
1202063217 LCS	07–MAR–2010 11:43:00	30	H2SO4/KMi2		2	9	1	0.03333
248018002 – 2	07–MAR–2010 11:43:00	30.11	H2SO4/KMi2		2	9	1	0.03321
248018003 – 2	07–MAR–2010 11:43:00	30.07	H2SO4/KMi2		2	9	1	0.03326
248018004 – 2	07–MAR–2010 11:43:00	30.16	H2SO4/KMi2		2	9	1	0.03316
248018005 – 2	07–MAR–2010 11:43:00	30.07	H2SO4/KMi2		2	9	1	0.03326
248018006 – 2	07–MAR–2010 11:43:00	30.19	H2SO4/KMi2		2	9	1	0.03312
248018007 – 2	07–MAR–2010 11:43:00	30.03	H2SO4/KMi2		2	9	1	0.0333
248018008 – 2	07–MAR–2010 11:43:00	30.16	H2SO4/KMi2		2	9	1	0.03316
248043001 – 2	07–MAR–2010 11:43:00	30.11	H2SO4/KMi2		2	9	1	0.03321
248043002 – 2	07–MAR–2010 11:43:00	30.05	H2SO4/KMi2		2	9	1	0.03328
248043018 – 2	07–MAR–2010 11:43:00	30.04	H2SO4/KMi2		2	9	1	0.03329
248102001 – 2	07–MAR–2010 11:43:00	30.16	H2SO4/KMi2		2	9	1	0.03316
248114002 – 2	07–MAR–2010 11:43:00	30.05	H2SO4/KMi2		2	9	1	0.03328
248114003 – 2	07–MAR–2010 11:43:00	30.1	H2SO4/KMi2		2	9	1	0.03322
248114004 – 2	07–MAR–2010 11:43:00	30.08	H2SO4/KMi2		2	9	1	0.03324
248114005 – 2	07–MAR–2010 11:43:00	30.04	H2SO4/KMi2		2	9	1	0.03329
248114006 – 2	07–MAR–2010 11:43:00	30.12	H2SO4/KMi2		2	9	1	0.0332
248203002 – 2	07–MAR–2010 11:43:00	30.17	H2SO4/KMi2		2	9	1	0.03315
248253001 – 2	07–MAR–2010 11:43:00	30.06	H2SO4/KMi2		2	9	1	0.03327
1202063218 – 2 MS (248253001)	07–MAR–2010 11:43:00	30.09	H2SO4/KMi2		2	9	1	0.03323
1202063219 – 2 MSD (248253001)	07–MAR–2010 11:43:00	30.13	H2SO4/KMi2		2	9	1	0.03319
248253002 – 2	07–MAR–2010 11:43:00	30.09	H2SO4/KMi2		2	9	1	0.03323

Type	Sample Id	Description	Serial Number	Spike Amt	Units
LCS	1202063217	PCB Laboratory Control	WE100224–07	1	mL
MS	1202063218	PCB Laboratory Control	WE100224–07	1	mL
MSD	1202063219	PCB Laboratory Control	WE100224–07	1	mL
SURR	All	PEST LOW LEVEL SURROGATE 200 UG/L	UE100302–16	1	mL
REGNT	All	1:1 sulfuric acid	1260695a	5	mL
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

Comments:

Clean up Date: 3/7/10
Clean up Initials: AAW
Verified By: AAW
Final Solvent: Hexane
Clean Up SOP: GL–OA–E–037

DATA EXCEPTION REPORT

Mo.Day Yr.	Division:	Quality Criteria:	Type:
09-MAR-10	Industrial	Specifications	Process
Instrument Type:	**Test / Method:**	**Matrix Type:**	**Client Code:**
GC/ECD	SW846 8082	Solid	LANL
Batch ID:	**Sample Numbers:**		
961902	See Below		

Potentially affected work order(s)(SDG):248018(10-2047),248043(10-2074),248102(10-2089),248114(10-2092),248203(10-2125),248253(10-2143)

Application Issues:

Failed Recovery for MSD/PSD

Failed Recovery for MS/PS

Failed RPD for MS/MSD, or PS/PSD

Failed Yield for Surrogates

Specification and Requirements Exception Description:	DER Disposition:
1. 1202063218MS and 1202063219MSD did not meet the spike recovery limit. 2. The RPD between 1202063218MS and 1202063219MSD did not meet the acceptance limit. 3. Sample 248043002 and 248043018 did not meet the surrogate recovery limit for Decachlorobiphenyl on one column.	1, 2 & 3. The failures were due to sample matrix and dilutions. The data were reported.

Originator's Name:

Yiping Shi 09-MAR-10

Data Validator/Group Leader:

Jimin Cao 09-MAR-10