

**DATA VALIDATION COVER SHEET****5114-1****Data Validation Cover Sheet**

Records Use only

**Section I.**REQUEST NUMBER: 10-1758 VALIDATION DATE: 04/13/10 LAB CODE: GELCONTRACT LABORATORY NAME: GEL Laboratories LLCVALIDATOR: Monica Dymerski ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

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

**Section II. Completeness Check**

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

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

- The ICV/CCV %Ds were >20% for acetone; 2-butanone; and 2-hexanone. The acetone results for samples RE15-10-8367, -8365, and -8341 were detects and, thus, were qualified J,V7c. The remaining associated sample results were NDs and, thus, were qualified UJ,V7c.
- The MS and/or MSD %Rs did not meet laboratory acceptance criteria for 19 analytes, and the MS/MSD RPDs did not meet laboratory acceptance criteria for 21 analytes. It should be noted that trichlorotrifluoroethane was not represented in the MS/MSD analyses. Since MS/MSD analyses are not a client requirement for this method, no sample data were qualified as a result.

**Reviewed by:** Susan Ball**Level:** I**Date:** 04/13/10

VALIDATOR'S SIGNATURE: \_\_\_\_\_

DATE: 04/13/10

## VOLATILE ORGANIC COMPOUND (VOC) ANALYTICAL DATA VALIDATION CHECKLIST

5114-2

### Volatile Organic Compound (VOC) Analytical Data Validation Checklist

Records Use only \_\_\_\_\_



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



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

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

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Records Use only \_\_\_\_\_



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

**Volatile  
Certificate of Analysis  
Sample Summary**

**SDG Number:** 10-1758  
**Lab Sample ID:** 246866001

**Date Collected:** 02/09/2010 12:00  
**Date Received:** 02/11/2010 09:20

**Matrix:** S

**Client ID:** RE15-10-8384  
**Batch ID:** 955077  
**Run Date:** 02/19/2010 07:00  
**Prep Date:** 02/18/2010 20:06  
**Data File:** 021810\AY431.D

**Client:** LANL010  
**Method:** SW846 8260B  
**Inst:** VOAA.I  
**Analyst:** JEB  
**Aliquot:** 5 g  
**Column:** DB-624

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

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
75-71-8	Dichlorodifluoromethane	U	1.00	ug/kg	0.340	1.00	
74-87-3	Chloromethane	U	1.00	ug/kg	0.300	1.00	
75-01-4	Vinyl chloride	U	1.00	ug/kg	0.300	1.00	
74-83-9	Bromomethane	U	1.00	ug/kg	0.300	1.00	
75-00-3	Chloroethane	U	1.00	ug/kg	0.300	1.00	
75-69-4	Trichlorofluoromethane	U	1.00	ug/kg	0.300	1.00	
67-64-1	Acetone	U	5.00	ug/kg	1.66	5.00	UJ,V7c
75-35-4	1,1-Dichloroethylene	U	1.00	ug/kg	0.300	1.00	
74-88-4	Iodomethane	U	5.00	ug/kg	1.60	5.00	
75-09-2	Methylene chloride	U	5.00	ug/kg	2.00	5.00	
75-15-0	Carbon disulfide	U	5.00	ug/kg	1.25	5.00	
156-60-5	trans-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00	
75-34-3	1,1-Dichloroethane	U	1.00	ug/kg	0.300	1.00	
78-93-3	2-Butanone	U	5.00	ug/kg	1.50	5.00	UJ,V7c
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	UJ,V7c
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:** 10-1758  
**Lab Sample ID:** 246866001

**Date Collected:** 02/09/2010 12:00  
**Date Received:** 02/11/2010 09:20  
**Client:** LANL010  
**Method:** SW846 8260B  
**Inst:** VOAA.I  
**Analyst:** JEB  
**Aliquot:** 5 g  
**Column:** DB-624

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

**Client ID:** RE15-10-8384  
**Batch ID:** 955077  
**Run Date:** 02/19/2010 07:00  
**Prep Date:** 02/18/2010 20:06  
**Data File:** 021810\AY431.D

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

**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	unknown siloxane	17.73	11.6	ug/kg	0	J

**Volatile  
Certificate of Analysis  
Sample Summary**

**SDG Number:** 10-1758  
**Lab Sample ID:** 246866002

**Date Collected:** 02/09/2010 12:00  
**Date Received:** 02/11/2010 09:20  
**Client:** LANL010  
**Method:** SW846 8260B  
**Inst:** VOAA.I  
**Analyst:** JEB  
**Aliquot:** 5.2 g  
**Column:** DB-624

**Matrix:** R  
**%Moisture:** 18  
**Project:** LANL01004  
**SOP Ref:** GL-OA-E-038  
**Dilution:** 1  
**Purge Vol:** 5 mL  
**Final Volume:** 5 mL

**Client ID:** RE15-10-8366  
**Batch ID:** 955077  
**Run Date:** 02/19/2010 07:26  
**Prep Date:** 02/18/2010 20:07  
**Data File:** 021810\AY432.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
75-71-8	Dichlorodifluoromethane	U	1.17	ug/kg	0.399	1.17	
74-87-3	Chloromethane	U	1.17	ug/kg	0.352	1.17	
75-01-4	Vinyl chloride	U	1.17	ug/kg	0.352	1.17	
74-83-9	Bromomethane	U	1.17	ug/kg	0.352	1.17	
75-00-3	Chloroethane	U	1.17	ug/kg	0.352	1.17	
75-69-4	Trichlorofluoromethane	U	1.17	ug/kg	0.352	1.17	
67-64-1	Acetone	U	5.86	ug/kg	1.95	5.86	UJ,V7c
75-35-4	1,1-Dichloroethylene	U	1.17	ug/kg	0.352	1.17	
74-88-4	Iodomethane	U	5.86	ug/kg	1.88	5.86	
75-09-2	Methylene chloride	U	5.86	ug/kg	2.35	5.86	
75-15-0	Carbon disulfide	U	5.86	ug/kg	1.47	5.86	
156-60-5	trans-1,2-Dichloroethylene	U	1.17	ug/kg	0.352	1.17	
75-34-3	1,1-Dichloroethane	U	1.17	ug/kg	0.352	1.17	
78-93-3	2-Butanone	U	5.86	ug/kg	1.76	5.86	UJ,V7c
156-59-2	cis-1,2-Dichloroethylene	U	1.17	ug/kg	0.352	1.17	
594-20-7	2,2-Dichloropropane	U	1.17	ug/kg	0.352	1.17	
67-66-3	Chloroform	U	1.17	ug/kg	0.352	1.17	
74-97-5	Bromochloromethane	U	1.17	ug/kg	0.387	1.17	
71-55-6	1,1,1-Trichloroethane	U	1.17	ug/kg	0.352	1.17	
563-58-6	1,1-Dichloropropene	U	1.17	ug/kg	0.352	1.17	
56-23-5	Carbon tetrachloride	U	1.17	ug/kg	0.352	1.17	
107-06-2	1,2-Dichloroethane	U	1.17	ug/kg	0.352	1.17	
71-43-2	Benzene	U	1.17	ug/kg	0.352	1.17	
79-01-6	Trichloroethylene	U	1.17	ug/kg	0.387	1.17	
78-87-5	1,2-Dichloropropane	U	1.17	ug/kg	0.352	1.17	
75-27-4	Bromodichloromethane	U	1.17	ug/kg	0.352	1.17	
74-95-3	Dibromomethane	U	1.17	ug/kg	0.352	1.17	
108-10-1	4-Methyl-2-pentanone	U	5.86	ug/kg	1.47	5.86	
10061-01-5	cis-1,3-Dichloropropylene	U	1.17	ug/kg	0.352	1.17	
108-88-3	Toluene	U	1.17	ug/kg	0.352	1.17	
10061-02-6	trans-1,3-Dichloropropylene	U	1.17	ug/kg	0.352	1.17	
79-00-5	1,1,2-Trichloroethane	U	1.17	ug/kg	0.352	1.17	
591-78-6	2-Hexanone	U	5.86	ug/kg	1.76	5.86	UJ,V7c
142-28-9	1,3-Dichloropropane	U	1.17	ug/kg	0.352	1.17	
127-18-4	Tetrachloroethylene	U	1.17	ug/kg	0.352	1.17	
124-48-1	Dibromochloromethane	U	1.17	ug/kg	0.352	1.17	
106-93-4	1,2-Dibromoethane	U	1.17	ug/kg	0.352	1.17	
108-90-7	Chlorobenzene	U	1.17	ug/kg	0.352	1.17	

**Volatile**  
**Certificate of Analysis**  
**Sample Summary**

**SDG Number:** 10-1758  
**Lab Sample ID:** 246866002

**Date Collected:** 02/09/2010 12:00  
**Date Received:** 02/11/2010 09:20  
**Client:** LANL010  
**Method:** SW846 8260B  
**Inst:** VOAA.I  
**Analyst:** JEB  
**Aliquot:** 5.2 g  
**Column:** DB-624

**Matrix:** R  
**%Moisture:** 18  
**Project:** LANL01004  
**SOP Ref:** GL-OA-E-038  
**Dilution:** 1  
**Purge Vol:** 5 mL  
**Final Volume:** 5 mL

**Client ID:** RE15-10-8366  
**Batch ID:** 955077  
**Run Date:** 02/19/2010 07:26  
**Prep Date:** 02/18/2010 20:07  
**Data File:** 021810\AY432.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.17	ug/kg	0.352	1.17
179601-23-1	m,p-Xylenes	U	2.35	ug/kg	0.352	2.35
95-47-6	o-Xylene	U	1.17	ug/kg	0.352	1.17
100-42-5	Styrene	U	1.17	ug/kg	0.352	1.17
75-25-2	Bromoform	U	1.17	ug/kg	0.352	1.17
79-34-5	1,1,2,2-Tetrachloroethane	U	1.17	ug/kg	0.352	1.17
96-18-4	1,2,3-Trichloropropane	U	1.17	ug/kg	0.352	1.17
108-86-1	Bromobenzene	U	1.17	ug/kg	0.352	1.17
103-65-1	n-Propylbenzene	U	1.17	ug/kg	0.352	1.17
95-49-8	2-Chlorotoluene	U	1.17	ug/kg	0.352	1.17
98-82-8	Isopropylbenzene	U	1.17	ug/kg	0.352	1.17
108-67-8	1,3,5-Trimethylbenzene	U	1.17	ug/kg	0.352	1.17
106-43-4	4-Chlorotoluene	U	1.17	ug/kg	0.352	1.17
98-06-6	tert-Butylbenzene	U	1.17	ug/kg	0.352	1.17
95-63-6	1,2,4-Trimethylbenzene	U	1.17	ug/kg	0.352	1.17
135-98-8	sec-Butylbenzene	U	1.17	ug/kg	0.352	1.17
99-87-6	4-Isopropyltoluene	U	1.17	ug/kg	0.352	1.17
541-73-1	1,3-Dichlorobenzene	U	1.17	ug/kg	0.352	1.17
106-46-7	1,4-Dichlorobenzene	U	1.17	ug/kg	0.352	1.17
104-51-8	n-Butylbenzene	U	1.17	ug/kg	0.352	1.17
96-12-8	1,2-Dibromo-3-chloropropane	U	1.17	ug/kg	0.352	1.17
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.86	ug/kg	1.88	5.86
630-20-6	1,1,1,2-Tetrachloroethane	U	1.17	ug/kg	0.352	1.17
95-50-1	1,2-Dichlorobenzene	U	1.17	ug/kg	0.352	1.17

**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	unknown siloxane	15.61	6.91	ug/kg	0	J

**Volatile  
Certificate of Analysis  
Sample Summary**

**SDG Number:** 10-1758  
**Lab Sample ID:** 246866003

**Date Collected:** 02/09/2010 12:00  
**Date Received:** 02/11/2010 09:20  
**Client:** LANL010  
**Method:** SW846 8260B  
**Inst:** VOAA.I  
**Analyst:** JEB  
**Aliquot:** 5.2 g  
**Column:** DB-624

**Matrix:** R  
**%Moisture:** 19.3  
**Project:** LANL01004  
**SOP Ref:** GL-OA-E-038  
**Dilution:** 1  
**Purge Vol:** 5 mL  
**Final Volume:** 5 mL

**Client ID:** RE15-10-8367  
**Batch ID:** 955077  
**Run Date:** 02/19/2010 07:53  
**Prep Date:** 02/18/2010 20:08  
**Data File:** 021810\AY433.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
75-71-8	Dichlorodifluoromethane	U	1.19	ug/kg	0.405	1.19	
74-87-3	Chloromethane	U	1.19	ug/kg	0.357	1.19	
75-01-4	Vinyl chloride	U	1.19	ug/kg	0.357	1.19	
74-83-9	Bromomethane	U	1.19	ug/kg	0.357	1.19	
75-00-3	Chloroethane	U	1.19	ug/kg	0.357	1.19	
75-69-4	Trichlorofluoromethane	U	1.19	ug/kg	0.357	1.19	
67-64-1	Acetone	J	2.13	ug/kg	1.98	5.96	J,V7c
75-35-4	1,1-Dichloroethylene	U	1.19	ug/kg	0.357	1.19	
74-88-4	Iodomethane	U	5.96	ug/kg	1.91	5.96	
75-09-2	Methylene chloride	U	5.96	ug/kg	2.38	5.96	
75-15-0	Carbon disulfide	U	5.96	ug/kg	1.49	5.96	
156-60-5	trans-1,2-Dichloroethylene	U	1.19	ug/kg	0.357	1.19	
75-34-3	1,1-Dichloroethane	U	1.19	ug/kg	0.357	1.19	
78-93-3	2-Butanone	U	5.96	ug/kg	1.79	5.96	UJ,V7c
156-59-2	cis-1,2-Dichloroethylene	U	1.19	ug/kg	0.357	1.19	
594-20-7	2,2-Dichloropropane	U	1.19	ug/kg	0.357	1.19	
67-66-3	Chloroform	U	1.19	ug/kg	0.357	1.19	
74-97-5	Bromochloromethane	U	1.19	ug/kg	0.393	1.19	
71-55-6	1,1,1-Trichloroethane	U	1.19	ug/kg	0.357	1.19	
563-58-6	1,1-Dichloropropene	U	1.19	ug/kg	0.357	1.19	
56-23-5	Carbon tetrachloride	U	1.19	ug/kg	0.357	1.19	
107-06-2	1,2-Dichloroethane	U	1.19	ug/kg	0.357	1.19	
71-43-2	Benzene	U	1.19	ug/kg	0.357	1.19	
79-01-6	Trichloroethylene	U	1.19	ug/kg	0.393	1.19	
78-87-5	1,2-Dichloropropane	U	1.19	ug/kg	0.357	1.19	
75-27-4	Bromodichloromethane	U	1.19	ug/kg	0.357	1.19	
74-95-3	Dibromomethane	U	1.19	ug/kg	0.357	1.19	
108-10-1	4-Methyl-2-pentanone	U	5.96	ug/kg	1.49	5.96	
10061-01-5	cis-1,3-Dichloropropylene	U	1.19	ug/kg	0.357	1.19	
108-88-3	Toluene	U	1.19	ug/kg	0.357	1.19	
10061-02-6	trans-1,3-Dichloropropylene	U	1.19	ug/kg	0.357	1.19	
79-00-5	1,1,2-Trichloroethane	U	1.19	ug/kg	0.357	1.19	
591-78-6	2-Hexanone	U	5.96	ug/kg	1.79	5.96	UJ,V7c
142-28-9	1,3-Dichloropropane	U	1.19	ug/kg	0.357	1.19	
127-18-4	Tetrachloroethylene	U	1.19	ug/kg	0.357	1.19	
124-48-1	Dibromochloromethane	U	1.19	ug/kg	0.357	1.19	
106-93-4	1,2-Dibromoethane	U	1.19	ug/kg	0.357	1.19	
108-90-7	Chlorobenzene	U	1.19	ug/kg	0.357	1.19	



**Volatile  
Certificate of Analysis  
Sample Summary**

**SDG Number:** 10-1758  
**Lab Sample ID:** 246866003

**Date Collected:** 02/09/2010 12:00  
**Date Received:** 02/11/2010 09:20  
**Client:** LANL010  
**Method:** SW846 8260B  
**Inst:** VOAA.I  
**Analyst:** JEB  
**Aliquot:** 5.2 g  
**Column:** DB-624

**Matrix:** R  
**%Moisture:** 19.3  
**Project:** LANL01004  
**SOP Ref:** GL-OA-E-038  
**Dilution:** 1  
**Purge Vol:** 5 mL  
**Final Volume:** 5 mL

**Client ID:** RE15-10-8367  
**Batch ID:** 955077  
**Run Date:** 02/19/2010 07:53  
**Prep Date:** 02/18/2010 20:08  
**Data File:** 021810\AY433.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.19	ug/kg	0.357	1.19
179601-23-1	m,p-Xylenes	U	2.38	ug/kg	0.357	2.38
95-47-6	o-Xylene	U	1.19	ug/kg	0.357	1.19
100-42-5	Styrene	U	1.19	ug/kg	0.357	1.19
75-25-2	Bromoform	U	1.19	ug/kg	0.357	1.19
79-34-5	1,1,2,2-Tetrachloroethane	U	1.19	ug/kg	0.357	1.19
96-18-4	1,2,3-Trichloropropane	U	1.19	ug/kg	0.357	1.19
108-86-1	Bromobenzene	U	1.19	ug/kg	0.357	1.19
103-65-1	n-Propylbenzene	U	1.19	ug/kg	0.357	1.19
95-49-8	2-Chlorotoluene	U	1.19	ug/kg	0.357	1.19
98-82-8	Isopropylbenzene	U	1.19	ug/kg	0.357	1.19
108-67-8	1,3,5-Trimethylbenzene	U	1.19	ug/kg	0.357	1.19
106-43-4	4-Chlorotoluene	U	1.19	ug/kg	0.357	1.19
98-06-6	tert-Butylbenzene	U	1.19	ug/kg	0.357	1.19
95-63-6	1,2,4-Trimethylbenzene	U	1.19	ug/kg	0.357	1.19
135-98-8	sec-Butylbenzene	U	1.19	ug/kg	0.357	1.19
99-87-6	4-Isopropyltoluene	U	1.19	ug/kg	0.357	1.19
541-73-1	1,3-Dichlorobenzene	U	1.19	ug/kg	0.357	1.19
106-46-7	1,4-Dichlorobenzene	U	1.19	ug/kg	0.357	1.19
104-51-8	n-Butylbenzene	U	1.19	ug/kg	0.357	1.19
96-12-8	1,2-Dibromo-3-chloropropane	U	1.19	ug/kg	0.357	1.19
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.96	ug/kg	1.91	5.96
	<i>Trichlorotrifluoroethane</i>					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.19	ug/kg	0.357	1.19
95-50-1	1,2-Dichlorobenzene	U	1.19	ug/kg	0.357	1.19

**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	unknown siloxane	15.61	8.82	ug/kg	0	J
	unknown siloxane	17.73	14.2	ug/kg	0	J

**Volatile  
Certificate of Analysis  
Sample Summary**

**SDG Number:** 10-1758  
**Lab Sample ID:** 246866004

**Date Collected:** 02/09/2010 12:00  
**Date Received:** 02/11/2010 09:20  
**Client:** LANL010  
**Method:** SW846 8260B  
**Inst:** VOAA.I  
**Analyst:** JEB  
**Aliquot:** 5.2 g  
**Column:** DB-624

**Matrix:** R  
**%Moisture:** 23.2  
**Project:** LANL01004  
**SOP Ref:** GL-OA-E-038  
**Dilution:** 1  
**Purge Vol:** 5 mL  
**Final Volume:** 5 mL

**Client ID:** RE15-10-8364  
**Batch ID:** 955077  
**Run Date:** 02/19/2010 08:19  
**Prep Date:** 02/18/2010 20:09  
**Data File:** 021810\AY434.D

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	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	UJ,V7c
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	J	0.438	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	UJ,V7c
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:** 10-1758  
**Lab Sample ID:** 246866004

**Date Collected:** 02/09/2010 12:00  
**Date Received:** 02/11/2010 09:20  
**Client:** LANL010  
**Method:** SW846 8260B  
**Inst:** VOAA.I  
**Analyst:** JEB  
**Aliquot:** 5.2 g  
**Column:** DB-624

**Matrix:** R  
**%Moisture:** 23.2  
**Project:** LANL01004  
**SOP Ref:** GL-OA-E-038  
**Dilution:** 1  
**Purge Vol:** 5 mL  
**Final Volume:** 5 mL

**Client ID:** RE15-10-8364  
**Batch ID:** 955077  
**Run Date:** 02/19/2010 08:19  
**Prep Date:** 02/18/2010 20:09  
**Data File:** 021810\AY434.D

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-Trifluoroethane	U	6.26	ug/kg	2.00	6.26
	<i>Trichlorotrifluoroethane</i>					
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	3.33	9.22	ug/kg	0	J
007785-70-8	1R-.alpha.-Pinene	13.55	135	ug/kg	97	NJ
	unknown siloxane	17.73	19.2	ug/kg	0	J

**Volatile  
Certificate of Analysis  
Sample Summary**

**SDG Number:** 10-1758  
**Lab Sample ID:** 246866005

**Date Collected:** 02/09/2010 12:00  
**Date Received:** 02/11/2010 09:20  
**Client:** LANL010  
**Method:** SW846 8260B  
**Inst:** VOAA.I  
**Analyst:** JEB  
**Aliquot:** 5.3 g  
**Column:** DB-624

**Matrix:** R  
**%Moisture:** 16.9  
**Project:** LANL01004  
**SOP Ref:** GL-OA-E-038  
**Dilution:** 1  
**Purge Vol:** 5 mL  
**Final Volume:** 5 mL

**Client ID:** RE15-10-8365  
**Batch ID:** 955077  
**Run Date:** 02/19/2010 08:45  
**Prep Date:** 02/18/2010 20:10  
**Data File:** 021810\AY435.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.14	ug/kg	0.386	1.14
74-87-3	Chloromethane	U	1.14	ug/kg	0.341	1.14
75-01-4	Vinyl chloride	U	1.14	ug/kg	0.341	1.14
74-83-9	Bromomethane	U	1.14	ug/kg	0.341	1.14
75-00-3	Chloroethane	U	1.14	ug/kg	0.341	1.14
75-69-4	Trichlorofluoromethane	U	1.14	ug/kg	0.341	1.14
67-64-1	Acetone	J	4.06	ug/kg	1.89	5.68 J,V7c
75-35-4	1,1-Dichloroethylene	U	1.14	ug/kg	0.341	1.14
74-88-4	Iodomethane	U	5.68	ug/kg	1.82	5.68
75-09-2	Methylene chloride	U	5.68	ug/kg	2.27	5.68
75-15-0	Carbon disulfide	U	5.68	ug/kg	1.42	5.68
156-60-5	trans-1,2-Dichloroethylene	U	1.14	ug/kg	0.341	1.14
75-34-3	1,1-Dichloroethane	U	1.14	ug/kg	0.341	1.14
78-93-3	2-Butanone	U	5.68	ug/kg	1.70	5.68 UJ,V7c
156-59-2	cis-1,2-Dichloroethylene	U	1.14	ug/kg	0.341	1.14
594-20-7	2,2-Dichloropropane	U	1.14	ug/kg	0.341	1.14
67-66-3	Chloroform	U	1.14	ug/kg	0.341	1.14
74-97-5	Bromochloromethane	U	1.14	ug/kg	0.375	1.14
71-55-6	1,1,1-Trichloroethane	U	1.14	ug/kg	0.341	1.14
563-58-6	1,1-Dichloropropene	U	1.14	ug/kg	0.341	1.14
56-23-5	Carbon tetrachloride	U	1.14	ug/kg	0.341	1.14
107-06-2	1,2-Dichloroethane	U	1.14	ug/kg	0.341	1.14
71-43-2	Benzene	U	1.14	ug/kg	0.341	1.14
79-01-6	Trichloroethylene	U	1.14	ug/kg	0.375	1.14
78-87-5	1,2-Dichloropropane	U	1.14	ug/kg	0.341	1.14
75-27-4	Bromodichloromethane	U	1.14	ug/kg	0.341	1.14
74-95-3	Dibromomethane	U	1.14	ug/kg	0.341	1.14
108-10-1	4-Methyl-2-pentanone	U	5.68	ug/kg	1.42	5.68
10061-01-5	cis-1,3-Dichloropropylene	U	1.14	ug/kg	0.341	1.14
108-88-3	Toluene	U	1.14	ug/kg	0.341	1.14
10061-02-6	trans-1,3-Dichloropropylene	U	1.14	ug/kg	0.341	1.14
79-00-5	1,1,2-Trichloroethane	U	1.14	ug/kg	0.341	1.14
591-78-6	2-Hexanone	U	5.68	ug/kg	1.70	5.68 UJ,V7c
142-28-9	1,3-Dichloropropane	U	1.14	ug/kg	0.341	1.14
127-18-4	Tetrachloroethylene	U	1.14	ug/kg	0.341	1.14
124-48-1	Dibromochloromethane	U	1.14	ug/kg	0.341	1.14
106-93-4	1,2-Dibromoethane	U	1.14	ug/kg	0.341	1.14
108-90-7	Chlorobenzene	U	1.14	ug/kg	0.341	1.14

**Volatile  
Certificate of Analysis  
Sample Summary**

**SDG Number:** 10-1758  
**Lab Sample ID:** 246866005

**Date Collected:** 02/09/2010 12:00  
**Date Received:** 02/11/2010 09:20  
**Client:** LANL010  
**Method:** SW846 8260B  
**Inst:** VOAA.I  
**Analyst:** JEB  
**Aliquot:** 5.3 g  
**Column:** DB-624

**Matrix:** R  
**%Moisture:** 16.9  
**Project:** LANL01004  
**SOP Ref:** GL-OA-E-038  
**Dilution:** 1  
**Purge Vol:** 5 mL  
**Final Volume:** 5 mL

**Client ID:** RE15-10-8365  
**Batch ID:** 955077  
**Run Date:** 02/19/2010 08:45  
**Prep Date:** 02/18/2010 20:10  
**Data File:** 021810\AY435.D

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

**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	unknown	3.32	5.84	ug/kg	0	J

**Volatile  
Certificate of Analysis  
Sample Summary**

**SDG Number:** 10-1758  
**Lab Sample ID:** 246866006

**Date Collected:** 02/09/2010 12:00  
**Date Received:** 02/11/2010 09:20  
**Client:** LANL010  
**Method:** SW846 8260B  
**Inst:** VOAA.I  
**Analyst:** JEB  
**Aliquot:** 5 g  
**Column:** DB-624

**Matrix:** R  
**%Moisture:** 24.6  
**Project:** LANL01004  
**SOP Ref:** GL-OA-E-038  
**Dilution:** 1  
**Purge Vol:** 5 mL  
**Final Volume:** 5 mL

**Client ID:** RE15-10-8368  
**Batch ID:** 955077  
**Run Date:** 02/19/2010 09:11  
**Prep Date:** 02/18/2010 20:15  
**Data File:** 021810\AY436.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.33	ug/kg	0.451	1.33
74-87-3	Chloromethane	U	1.33	ug/kg	0.398	1.33
75-01-4	Vinyl chloride	U	1.33	ug/kg	0.398	1.33
74-83-9	Bromomethane	U	1.33	ug/kg	0.398	1.33
75-00-3	Chloroethane	U	1.33	ug/kg	0.398	1.33
75-69-4	Trichlorofluoromethane	U	1.33	ug/kg	0.398	1.33
67-64-1	Acetone	U	6.63	ug/kg	2.20	6.63
75-35-4	1,1-Dichloroethylene	U	1.33	ug/kg	0.398	1.33
74-88-4	Iodomethane	U	6.63	ug/kg	2.12	6.63
75-09-2	Methylene chloride	U	6.63	ug/kg	2.65	6.63
75-15-0	Carbon disulfide	U	6.63	ug/kg	1.66	6.63
156-60-5	trans-1,2-Dichloroethylene	U	1.33	ug/kg	0.398	1.33
75-34-3	1,1-Dichloroethane	U	1.33	ug/kg	0.398	1.33
78-93-3	2-Butanone	U	6.63	ug/kg	1.99	6.63
156-59-2	cis-1,2-Dichloroethylene	U	1.33	ug/kg	0.398	1.33
594-20-7	2,2-Dichloropropane	U	1.33	ug/kg	0.398	1.33
67-66-3	Chloroform	U	1.33	ug/kg	0.398	1.33
74-97-5	Bromochloromethane	U	1.33	ug/kg	0.437	1.33
71-55-6	1,1,1-Trichloroethane	U	1.33	ug/kg	0.398	1.33
563-58-6	1,1-Dichloropropene	U	1.33	ug/kg	0.398	1.33
56-23-5	Carbon tetrachloride	U	1.33	ug/kg	0.398	1.33
107-06-2	1,2-Dichloroethane	U	1.33	ug/kg	0.398	1.33
71-43-2	Benzene	U	1.33	ug/kg	0.398	1.33
79-01-6	Trichloroethylene	U	1.33	ug/kg	0.437	1.33
78-87-5	1,2-Dichloropropane	U	1.33	ug/kg	0.398	1.33
75-27-4	Bromodichloromethane	U	1.33	ug/kg	0.398	1.33
74-95-3	Dibromomethane	U	1.33	ug/kg	0.398	1.33
108-10-1	4-Methyl-2-pentanone	U	6.63	ug/kg	1.66	6.63
10061-01-5	cis-1,3-Dichloropropylene	U	1.33	ug/kg	0.398	1.33
108-88-3	Toluene	U	1.33	ug/kg	0.398	1.33
10061-02-6	trans-1,3-Dichloropropylene	U	1.33	ug/kg	0.398	1.33
79-00-5	1,1,2-Trichloroethane	U	1.33	ug/kg	0.398	1.33
591-78-6	2-Hexanone	U	6.63	ug/kg	1.99	6.63
142-28-9	1,3-Dichloropropane	U	1.33	ug/kg	0.398	1.33
127-18-4	Tetrachloroethylene	U	1.33	ug/kg	0.398	1.33
124-48-1	Dibromochloromethane	U	1.33	ug/kg	0.398	1.33
106-93-4	1,2-Dibromoethane	U	1.33	ug/kg	0.398	1.33
108-90-7	Chlorobenzene	U	1.33	ug/kg	0.398	1.33

**Volatile  
Certificate of Analysis  
Sample Summary**

**SDG Number:** 10-1758  
**Lab Sample ID:** 246866006

**Date Collected:** 02/09/2010 12:00  
**Date Received:** 02/11/2010 09:20  
**Client:** LANL010  
**Method:** SW846 8260B  
**Inst:** VOAA.I  
**Analyst:** JEB  
**Aliquot:** 5 g  
**Column:** DB-624

**Matrix:** R  
**%Moisture:** 24.6  
**Project:** LANL01004  
**SOP Ref:** GL-OA-E-038  
**Dilution:** 1  
**Purge Vol:** 5 mL  
**Final Volume:** 5 mL

**Client ID:** RE15-10-8368  
**Batch ID:** 955077  
**Run Date:** 02/19/2010 09:11  
**Prep Date:** 02/18/2010 20:15  
**Data File:** 021810\AY436.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.33	ug/kg	0.398	1.33
179601-23-1	m,p-Xylenes	U	2.65	ug/kg	0.398	2.65
95-47-6	o-Xylene	U	1.33	ug/kg	0.398	1.33
100-42-5	Styrene	U	1.33	ug/kg	0.398	1.33
75-25-2	Bromoform	U	1.33	ug/kg	0.398	1.33
79-34-5	1,1,2,2-Tetrachloroethane	U	1.33	ug/kg	0.398	1.33
96-18-4	1,2,3-Trichloropropane	U	1.33	ug/kg	0.398	1.33
108-86-1	Bromobenzene	U	1.33	ug/kg	0.398	1.33
103-65-1	n-Propylbenzene	U	1.33	ug/kg	0.398	1.33
95-49-8	2-Chlorotoluene	U	1.33	ug/kg	0.398	1.33
98-82-8	Isopropylbenzene	U	1.33	ug/kg	0.398	1.33
108-67-8	1,3,5-Trimethylbenzene	U	1.33	ug/kg	0.398	1.33
106-43-4	4-Chlorotoluene	U	1.33	ug/kg	0.398	1.33
98-06-6	tert-Butylbenzene	U	1.33	ug/kg	0.398	1.33
95-63-6	1,2,4-Trimethylbenzene	U	1.33	ug/kg	0.398	1.33
135-98-8	sec-Butylbenzene	U	1.33	ug/kg	0.398	1.33
99-87-6	4-Isopropyltoluene	U	1.33	ug/kg	0.398	1.33
541-73-1	1,3-Dichlorobenzene	U	1.33	ug/kg	0.398	1.33
106-46-7	1,4-Dichlorobenzene	U	1.33	ug/kg	0.398	1.33
104-51-8	n-Butylbenzene	U	1.33	ug/kg	0.398	1.33
96-12-8	1,2-Dibromo-3-chloropropane	U	1.33	ug/kg	0.398	1.33
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	6.63	ug/kg	2.12	6.63
630-20-6	1,1,1,2-Tetrachloroethane	U	1.33	ug/kg	0.398	1.33
95-50-1	1,2-Dichlorobenzene	U	1.33	ug/kg	0.398	1.33

**Tentatively Identified Compound Summary**

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

**Volatile  
Certificate of Analysis  
Sample Summary**

**SDG Number:** 10-1758  
**Lab Sample ID:** 246866007

**Date Collected:** 02/09/2010 12:00  
**Date Received:** 02/11/2010 09:20  
**Client:** LANL010  
**Method:** SW846 8260B  
**Inst:** VOAA.I  
**Analyst:** JEB  
**Aliquot:** 5.5 g  
**Column:** DB-624

**Matrix:** R  
**%Moisture:** 24.2  
**Project:** LANL01004  
**SOP Ref:** GL-OA-E-038  
**Dilution:** 1  
**Purge Vol:** 5 mL  
**Final Volume:** 5 mL

**Client ID:** RE15-10-8340  
**Batch ID:** 955077  
**Run Date:** 02/19/2010 09:37  
**Prep Date:** 02/18/2010 20:16  
**Data File:** 021810\AY437.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.20	ug/kg	0.408	1.20
74-87-3	Chloromethane	U	1.20	ug/kg	0.360	1.20
75-01-4	Vinyl chloride	U	1.20	ug/kg	0.360	1.20
74-83-9	Bromomethane	U	1.20	ug/kg	0.360	1.20
75-00-3	Chloroethane	U	1.20	ug/kg	0.360	1.20
75-69-4	Trichlorofluoromethane	U	1.20	ug/kg	0.360	1.20
67-64-1	Acetone	U	5.99	ug/kg	1.99	5.99 UJ,V7c
75-35-4	1,1-Dichloroethylene	U	1.20	ug/kg	0.360	1.20
74-88-4	Iodomethane	U	5.99	ug/kg	1.92	5.99
75-09-2	Methylene chloride	U	5.99	ug/kg	2.40	5.99
75-15-0	Carbon disulfide	U	5.99	ug/kg	1.50	5.99
156-60-5	trans-1,2-Dichloroethylene	U	1.20	ug/kg	0.360	1.20
75-34-3	1,1-Dichloroethane	U	1.20	ug/kg	0.360	1.20
78-93-3	2-Butanone	U	5.99	ug/kg	1.80	5.99 UJ,V7c
156-59-2	cis-1,2-Dichloroethylene	U	1.20	ug/kg	0.360	1.20
594-20-7	2,2-Dichloropropane	U	1.20	ug/kg	0.360	1.20
67-66-3	Chloroform	U	1.20	ug/kg	0.360	1.20
74-97-5	Bromochloromethane	U	1.20	ug/kg	0.396	1.20
71-55-6	1,1,1-Trichloroethane	U	1.20	ug/kg	0.360	1.20
563-58-6	1,1-Dichloropropene	U	1.20	ug/kg	0.360	1.20
56-23-5	Carbon tetrachloride	U	1.20	ug/kg	0.360	1.20
107-06-2	1,2-Dichloroethane	U	1.20	ug/kg	0.360	1.20
71-43-2	Benzene	U	1.20	ug/kg	0.360	1.20
79-01-6	Trichloroethylene	U	1.20	ug/kg	0.396	1.20
78-87-5	1,2-Dichloropropane	U	1.20	ug/kg	0.360	1.20
75-27-4	Bromodichloromethane	U	1.20	ug/kg	0.360	1.20
74-95-3	Dibromomethane	U	1.20	ug/kg	0.360	1.20
108-10-1	4-Methyl-2-pentanone	U	5.99	ug/kg	1.50	5.99
10061-01-5	cis-1,3-Dichloropropylene	U	1.20	ug/kg	0.360	1.20
108-88-3	Toluene	U	1.20	ug/kg	0.360	1.20
10061-02-6	trans-1,3-Dichloropropylene	U	1.20	ug/kg	0.360	1.20
79-00-5	1,1,2-Trichloroethane	U	1.20	ug/kg	0.360	1.20
591-78-6	2-Hexanone	U	5.99	ug/kg	1.80	5.99 UJ,V7c
142-28-9	1,3-Dichloropropane	U	1.20	ug/kg	0.360	1.20
127-18-4	Tetrachloroethylene	U	1.20	ug/kg	0.360	1.20
124-48-1	Dibromochloromethane	U	1.20	ug/kg	0.360	1.20
106-93-4	1,2-Dibromoethane	U	1.20	ug/kg	0.360	1.20
108-90-7	Chlorobenzene	U	1.20	ug/kg	0.360	1.20



**Volatile  
Certificate of Analysis  
Sample Summary**

**SDG Number:** 10-1758  
**Lab Sample ID:** 246866007

**Date Collected:** 02/09/2010 12:00  
**Date Received:** 02/11/2010 09:20  
**Client:** LANL010  
**Method:** SW846 8260B  
**Inst:** VOAA.I  
**Analyst:** JEB  
**Aliquot:** 5.5 g  
**Column:** DB-624

**Matrix:** R  
**%Moisture:** 24.2  
**Project:** LANL01004  
**SOP Ref:** GL-OA-E-038  
**Dilution:** 1  
**Purge Vol:** 5 mL  
**Final Volume:** 5 mL

**Client ID:** RE15-10-8340  
**Batch ID:** 955077  
**Run Date:** 02/19/2010 09:37  
**Prep Date:** 02/18/2010 20:16  
**Data File:** 021810\AY437.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.20	ug/kg	0.360	1.20
179601-23-1	m,p-Xylenes	U	2.40	ug/kg	0.360	2.40
95-47-6	o-Xylene	U	1.20	ug/kg	0.360	1.20
100-42-5	Styrene	U	1.20	ug/kg	0.360	1.20
75-25-2	Bromoform	U	1.20	ug/kg	0.360	1.20
79-34-5	1,1,2,2-Tetrachloroethane	U	1.20	ug/kg	0.360	1.20
96-18-4	1,2,3-Trichloropropane	U	1.20	ug/kg	0.360	1.20
108-86-1	Bromobenzene	U	1.20	ug/kg	0.360	1.20
103-65-1	n-Propylbenzene	U	1.20	ug/kg	0.360	1.20
95-49-8	2-Chlorotoluene	U	1.20	ug/kg	0.360	1.20
98-82-8	Isopropylbenzene	U	1.20	ug/kg	0.360	1.20
108-67-8	1,3,5-Trimethylbenzene	U	1.20	ug/kg	0.360	1.20
106-43-4	4-Chlorotoluene	U	1.20	ug/kg	0.360	1.20
98-06-6	tert-Butylbenzene	U	1.20	ug/kg	0.360	1.20
95-63-6	1,2,4-Trimethylbenzene	U	1.20	ug/kg	0.360	1.20
135-98-8	sec-Butylbenzene	U	1.20	ug/kg	0.360	1.20
99-87-6	4-Isopropyltoluene	U	1.20	ug/kg	0.360	1.20
541-73-1	1,3-Dichlorobenzene	U	1.20	ug/kg	0.360	1.20
106-46-7	1,4-Dichlorobenzene	U	1.20	ug/kg	0.360	1.20
104-51-8	n-Butylbenzene	U	1.20	ug/kg	0.360	1.20
96-12-8	1,2-Dibromo-3-chloropropane	U	1.20	ug/kg	0.360	1.20
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.99	ug/kg	1.92	5.99
	Trichlorotrifluoroethane					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.20	ug/kg	0.360	1.20
95-50-1	1,2-Dichlorobenzene	U	1.20	ug/kg	0.360	1.20

**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	unknown siloxane	17.73	19.6	ug/kg	0	J

**Volatile  
Certificate of Analysis  
Sample Summary**

**SDG Number:** 10-1758  
**Lab Sample ID:** 246866008

**Date Collected:** 02/09/2010 12:00  
**Date Received:** 02/11/2010 09:20  
**Client:** LANL010  
**Method:** SW846 8260B  
**Inst:** VOAA.I  
**Analyst:** JEB  
**Aliquot:** 5.2 g  
**Column:** DB-624

**Matrix:** R  
**%Moisture:** 7.6  
**Project:** LANL01004  
**SOP Ref:** GL-OA-E-038  
**Dilution:** 1  
**Purge Vol:** 5 mL  
**Final Volume:** 5 mL

**Client ID:** RE15-10-8341  
**Batch ID:** 955077  
**Run Date:** 02/19/2010 10:03  
**Prep Date:** 02/18/2010 20:17  
**Data File:** 021810\AY438.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
75-71-8	Dichlorodifluoromethane	U	1.04	ug/kg	0.354	1.04	
74-87-3	Chloromethane	U	1.04	ug/kg	0.312	1.04	
75-01-4	Vinyl chloride	U	1.04	ug/kg	0.312	1.04	
74-83-9	Bromomethane	U	1.04	ug/kg	0.312	1.04	
75-00-3	Chloroethane	U	1.04	ug/kg	0.312	1.04	
75-69-4	Trichlorofluoromethane	U	1.04	ug/kg	0.312	1.04	
67-64-1	Acetone		5.74	ug/kg	1.73	5.20	J,V7c
75-35-4	1,1-Dichloroethylene	U	1.04	ug/kg	0.312	1.04	
74-88-4	Iodomethane	U	5.20	ug/kg	1.66	5.20	
75-09-2	Methylene chloride	U	5.20	ug/kg	2.08	5.20	
75-15-0	Carbon disulfide	U	5.20	ug/kg	1.30	5.20	
156-60-5	trans-1,2-Dichloroethylene	U	1.04	ug/kg	0.312	1.04	
75-34-3	1,1-Dichloroethane	U	1.04	ug/kg	0.312	1.04	
78-93-3	2-Butanone	U	5.20	ug/kg	1.56	5.20	UJ,V7c
156-59-2	cis-1,2-Dichloroethylene	U	1.04	ug/kg	0.312	1.04	
594-20-7	2,2-Dichloropropane	U	1.04	ug/kg	0.312	1.04	
67-66-3	Chloroform	U	1.04	ug/kg	0.312	1.04	
74-97-5	Bromochloromethane	U	1.04	ug/kg	0.343	1.04	
71-55-6	1,1,1-Trichloroethane	U	1.04	ug/kg	0.312	1.04	
563-58-6	1,1-Dichloropropene	U	1.04	ug/kg	0.312	1.04	
56-23-5	Carbon tetrachloride	U	1.04	ug/kg	0.312	1.04	
107-06-2	1,2-Dichloroethane	U	1.04	ug/kg	0.312	1.04	
71-43-2	Benzene	U	1.04	ug/kg	0.312	1.04	
79-01-6	Trichloroethylene	U	1.04	ug/kg	0.343	1.04	
78-87-5	1,2-Dichloropropane	U	1.04	ug/kg	0.312	1.04	
75-27-4	Bromodichloromethane	U	1.04	ug/kg	0.312	1.04	
74-95-3	Dibromomethane	U	1.04	ug/kg	0.312	1.04	
108-10-1	4-Methyl-2-pentanone	U	5.20	ug/kg	1.30	5.20	
10061-01-5	cis-1,3-Dichloropropylene	U	1.04	ug/kg	0.312	1.04	
108-88-3	Toluene	U	1.04	ug/kg	0.312	1.04	
10061-02-6	trans-1,3-Dichloropropylene	U	1.04	ug/kg	0.312	1.04	
79-00-5	1,1,2-Trichloroethane	U	1.04	ug/kg	0.312	1.04	
591-78-6	2-Hexanone	U	5.20	ug/kg	1.56	5.20	UJ,V7c
142-28-9	1,3-Dichloropropane	U	1.04	ug/kg	0.312	1.04	
127-18-4	Tetrachloroethylene	U	1.04	ug/kg	0.312	1.04	
124-48-1	Dibromochloromethane	U	1.04	ug/kg	0.312	1.04	
106-93-4	1,2-Dibromoethane	U	1.04	ug/kg	0.312	1.04	
108-90-7	Chlorobenzene	U	1.04	ug/kg	0.312	1.04	

**Volatile  
Certificate of Analysis  
Sample Summary**

**SDG Number:** 10-1758  
**Lab Sample ID:** 246866008

**Date Collected:** 02/09/2010 12:00  
**Date Received:** 02/11/2010 09:20  
**Client:** LANL010  
**Method:** SW846 8260B  
**Inst:** VOAA.I  
**Analyst:** JEB  
**Aliquot:** 5.2 g  
**Column:** DB-624

**Matrix:** R  
**%Moisture:** 7.6  
**Project:** LANL01004  
**SOP Ref:** GL-OA-E-038  
**Dilution:** 1  
**Purge Vol:** 5 mL  
**Final Volume:** 5 mL

**Client ID:** RE15-10-8341  
**Batch ID:** 955077  
**Run Date:** 02/19/2010 10:03  
**Prep Date:** 02/18/2010 20:17  
**Data File:** 021810\AY438.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.04	ug/kg	0.312	1.04
179601-23-1	m,p-Xylenes	U	2.08	ug/kg	0.312	2.08
95-47-6	o-Xylene	U	1.04	ug/kg	0.312	1.04
100-42-5	Styrene	U	1.04	ug/kg	0.312	1.04
75-25-2	Bromoform	U	1.04	ug/kg	0.312	1.04
79-34-5	1,1,2,2-Tetrachloroethane	U	1.04	ug/kg	0.312	1.04
96-18-4	1,2,3-Trichloropropane	U	1.04	ug/kg	0.312	1.04
108-86-1	Bromobenzene	U	1.04	ug/kg	0.312	1.04
103-65-1	n-Propylbenzene	U	1.04	ug/kg	0.312	1.04
95-49-8	2-Chlorotoluene	U	1.04	ug/kg	0.312	1.04
98-82-8	Isopropylbenzene	U	1.04	ug/kg	0.312	1.04
108-67-8	1,3,5-Trimethylbenzene	U	1.04	ug/kg	0.312	1.04
106-43-4	4-Chlorotoluene	U	1.04	ug/kg	0.312	1.04
98-06-6	tert-Butylbenzene	U	1.04	ug/kg	0.312	1.04
95-63-6	1,2,4-Trimethylbenzene	U	1.04	ug/kg	0.312	1.04
135-98-8	sec-Butylbenzene	U	1.04	ug/kg	0.312	1.04
99-87-6	4-Isopropyltoluene	U	1.04	ug/kg	0.312	1.04
541-73-1	1,3-Dichlorobenzene	U	1.04	ug/kg	0.312	1.04
106-46-7	1,4-Dichlorobenzene	U	1.04	ug/kg	0.312	1.04
104-51-8	n-Butylbenzene	U	1.04	ug/kg	0.312	1.04
96-12-8	1,2-Dibromo-3-chloropropane	U	1.04	ug/kg	0.312	1.04
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.20	ug/kg	1.66	5.20
	<i>Trichlorotrifluoroethane</i>					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.04	ug/kg	0.312	1.04
95-50-1	1,2-Dichlorobenzene	U	1.04	ug/kg	0.312	1.04

**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	unknown siloxane	17.73	7.98	ug/kg	0	J

**Volatile  
Certificate of Analysis  
Sample Summary**

**SDG Number:** 10-1758  
**Lab Sample ID:** 246866009

**Date Collected:** 02/09/2010 12:00  
**Date Received:** 02/11/2010 09:20  
**Client:** LANL010  
**Method:** SW846 8260B  
**Inst:** VOAA.I  
**Analyst:** JEB  
**Aliquot:** 5.5 g  
**Column:** DB-624

**Matrix:** R  
**%Moisture:** 24.2  
**Project:** LANL01004  
**SOP Ref:** GL-OA-E-038  
**Dilution:** 1  
**Purge Vol:** 5 mL  
**Final Volume:** 5 mL

**Client ID:** RE15-10-8376  
**Batch ID:** 955077  
**Run Date:** 02/19/2010 10:30  
**Prep Date:** 02/18/2010 20:18  
**Data File:** 021810\AY439.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.20	ug/kg	0.408	1.20
74-87-3	Chloromethane	U	1.20	ug/kg	0.360	1.20
75-01-4	Vinyl chloride	U	1.20	ug/kg	0.360	1.20
74-83-9	Bromomethane	U	1.20	ug/kg	0.360	1.20
75-00-3	Chloroethane	U	1.20	ug/kg	0.360	1.20
75-69-4	Trichlorofluoromethane	U	1.20	ug/kg	0.360	1.20
67-64-1	Acetone	U	5.99	ug/kg	1.99	5.99
75-35-4	1,1-Dichloroethylene	U	1.20	ug/kg	0.360	1.20
74-88-4	Iodomethane	U	5.99	ug/kg	1.92	5.99
75-09-2	Methylene chloride	U	5.99	ug/kg	2.40	5.99
75-15-0	Carbon disulfide	U	5.99	ug/kg	1.50	5.99
156-60-5	trans-1,2-Dichloroethylene	U	1.20	ug/kg	0.360	1.20
75-34-3	1,1-Dichloroethane	U	1.20	ug/kg	0.360	1.20
78-93-3	2-Butanone	U	5.99	ug/kg	1.80	5.99
156-59-2	cis-1,2-Dichloroethylene	U	1.20	ug/kg	0.360	1.20
594-20-7	2,2-Dichloropropane	U	1.20	ug/kg	0.360	1.20
67-66-3	Chloroform	U	1.20	ug/kg	0.360	1.20
74-97-5	Bromochloromethane	U	1.20	ug/kg	0.396	1.20
71-55-6	1,1,1-Trichloroethane	U	1.20	ug/kg	0.360	1.20
563-58-6	1,1-Dichloropropene	U	1.20	ug/kg	0.360	1.20
56-23-5	Carbon tetrachloride	U	1.20	ug/kg	0.360	1.20
107-06-2	1,2-Dichloroethane	U	1.20	ug/kg	0.360	1.20
71-43-2	Benzene	U	1.20	ug/kg	0.360	1.20
79-01-6	Trichloroethylene	U	1.20	ug/kg	0.396	1.20
78-87-5	1,2-Dichloropropane	U	1.20	ug/kg	0.360	1.20
75-27-4	Bromodichloromethane	U	1.20	ug/kg	0.360	1.20
74-95-3	Dibromomethane	U	1.20	ug/kg	0.360	1.20
108-10-1	4-Methyl-2-pentanone	U	5.99	ug/kg	1.50	5.99
10061-01-5	cis-1,3-Dichloropropylene	U	1.20	ug/kg	0.360	1.20
108-88-3	Toluene	J	0.372	ug/kg	0.360	1.20
10061-02-6	trans-1,3-Dichloropropylene	U	1.20	ug/kg	0.360	1.20
79-00-5	1,1,2-Trichloroethane	U	1.20	ug/kg	0.360	1.20
591-78-6	2-Hexanone	U	5.99	ug/kg	1.80	5.99
142-28-9	1,3-Dichloropropane	U	1.20	ug/kg	0.360	1.20
127-18-4	Tetrachloroethylene	U	1.20	ug/kg	0.360	1.20
124-48-1	Dibromochloromethane	U	1.20	ug/kg	0.360	1.20
106-93-4	1,2-Dibromoethane	U	1.20	ug/kg	0.360	1.20
108-90-7	Chlorobenzene	U	1.20	ug/kg	0.360	1.20

**Volatile  
Certificate of Analysis  
Sample Summary**

**SDG Number:** 10-1758  
**Lab Sample ID:** 246866009

**Date Collected:** 02/09/2010 12:00  
**Date Received:** 02/11/2010 09:20  
**Client:** LANL010  
**Method:** SW846 8260B  
**Inst:** VOAA.I  
**Analyst:** JEB  
**Aliquot:** 5.5 g  
**Column:** DB-624

**Matrix:** R  
**%Moisture:** 24.2  
**Project:** LANL01004  
**SOP Ref:** GL-OA-E-038  
**Dilution:** 1  
**Purge Vol:** 5 mL  
**Final Volume:** 5 mL

**Client ID:** RE15-10-8376  
**Batch ID:** 955077  
**Run Date:** 02/19/2010 10:30  
**Prep Date:** 02/18/2010 20:18  
**Data File:** 021810\AY439.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.20	ug/kg	0.360	1.20
179601-23-1	m,p-Xylenes	U	2.40	ug/kg	0.360	2.40
95-47-6	o-Xylene	U	1.20	ug/kg	0.360	1.20
100-42-5	Styrene	U	1.20	ug/kg	0.360	1.20
75-25-2	Bromoform	U	1.20	ug/kg	0.360	1.20
79-34-5	1,1,2,2-Tetrachloroethane	U	1.20	ug/kg	0.360	1.20
96-18-4	1,2,3-Trichloropropane	U	1.20	ug/kg	0.360	1.20
108-86-1	Bromobenzene	U	1.20	ug/kg	0.360	1.20
103-65-1	n-Propylbenzene	U	1.20	ug/kg	0.360	1.20
95-49-8	2-Chlorotoluene	U	1.20	ug/kg	0.360	1.20
98-82-8	Isopropylbenzene	U	1.20	ug/kg	0.360	1.20
108-67-8	1,3,5-Trimethylbenzene	U	1.20	ug/kg	0.360	1.20
106-43-4	4-Chlorotoluene	U	1.20	ug/kg	0.360	1.20
98-06-6	tert-Butylbenzene	U	1.20	ug/kg	0.360	1.20
95-63-6	1,2,4-Trimethylbenzene	U	1.20	ug/kg	0.360	1.20
135-98-8	sec-Butylbenzene	U	1.20	ug/kg	0.360	1.20
99-87-6	4-Isopropyltoluene	U	1.20	ug/kg	0.360	1.20
541-73-1	1,3-Dichlorobenzene	U	1.20	ug/kg	0.360	1.20
106-46-7	1,4-Dichlorobenzene	U	1.20	ug/kg	0.360	1.20
104-51-8	n-Butylbenzene	U	1.20	ug/kg	0.360	1.20
96-12-8	1,2-Dibromo-3-chloropropane	U	1.20	ug/kg	0.360	1.20
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.99	ug/kg	1.92	5.99
630-20-6	1,1,1,2-Tetrachloroethane	U	1.20	ug/kg	0.360	1.20
95-50-1	1,2-Dichlorobenzene	U	1.20	ug/kg	0.360	1.20

**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
007785-70-8	1R-.alpha.-Pinene	13.55	22.3	ug/kg	97	NJ
000127-91-3	.beta.-Pinene	14.27	6.2	ug/kg	96	NJ
013466-78-9	3-Carene	14.58	13.8	ug/kg	95	NJ
	unknown siloxane	17.73	13.1	ug/kg	0	J

**DATA VALIDATION COVER SHEET****5115-1****Data Validation Cover Sheet**

Records Use only

**Section I.**REQUEST NUMBER: 10-1758 VALIDATION DATE: 04/13/10 LAB CODE: GELCONTRACT LABORATORY NAME: GEL Laboratories LLCVALIDATOR: Monica Dymerski ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

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

**Section II. Completeness Check**

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

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

- The %Ds were >20% for 4-nitrophenol; benzyl alcohol; hexachlorocyclopentadiene; 3-nitroaniline; and 4-nitroaniline in the ICV and CCVs associated with all samples. The %D was also >20% for bis(2-chloroisopropyl)ether in the CCV associated with sample RE15-10-8376. All associated sample results were NDs and, thus, were qualified UJ,SV7c.

**Reviewed by:** Susan Ball**Level:** I**Date:** 04/13/10

VALIDATOR'S SIGNATURE: \_\_\_\_\_

DATE: 04/13/10

## SEMIVOLATILE ORGANIC COMPOUND (SVOC) ANALYTICAL DATA VALIDATION CHECKLIST

5115-2

### Semivolatile Organic Compound (SVOC) Analytical Data Validation Checklist

Records Use only \_\_\_\_\_



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

## SEMIVOLATILE ORGANIC COMPOUND (SVOC) ANALYTICAL DATA VALIDATION CHECKLIST

5115-2

### Semivolatile Organic Compound (SVOC) Analytical Data Validation Checklist

Records Use only \_\_\_\_\_



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



## SEMIVOLATILE ORGANIC COMPOUND (SVOC) ANALYTICAL DATA VALIDATION CHECKLIST

5115-2

### Semivolatile Organic Compound (SVOC) Analytical Data Validation Checklist

Records Use only \_\_\_\_\_



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

## SEMIVOLATILE ORGANIC COMPOUND (SVOC) ANALYTICAL DATA VALIDATION CHECKLIST

5115-2

### Semivolatile Organic Compound (SVOC) Analytical Data Validation Checklist

Records Use only \_\_\_\_\_



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



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

Page 1 of 3

**SDG Number:** 10-1758  
**Lab Sample ID:** 246866007

**Date Collected:** 02/09/2010 12:00  
**Date Received:** 02/11/2010 09:20  
**Client:** LANL010  
**Method:** SW846 8270C  
**Inst:** MSD2.I  
**Analyst:** AGS1  
**Aliquot:** 30.15 g  
**Column:** J&W DB-5MS

**Matrix:** R  
**%Moisture:** 24.2  
**Project:** LANL01004  
**SOP Ref:** GL-OA-E-009  
**Dilution:** 1  
**Inj. Vol:** .5 uL  
**Final Volume:** 1 mL  
**Level:** LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
62-75-9	N-Methyl-N-nitrosomethylamine	U	437	ug/kg	87.5	437	
108-95-2	Phenol	U	437	ug/kg	87.5	437	
95-57-8	2-Chlorophenol	U	437	ug/kg	87.5	437	
106-46-7	1,4-Dichlorobenzene	U	437	ug/kg	87.5	437	
621-64-7	N-Nitrosodipropylamine	U	437	ug/kg	87.5	437	
59-50-7	4-Chloro-3-methylphenol	U	437	ug/kg	87.5	437	
83-32-9	Acenaphthene	U	43.7	ug/kg	14.4	43.7	
121-14-2	2,4-Dinitrotoluene	U	437	ug/kg	43.7	437	
100-02-7	4-Nitrophenol	U	437	ug/kg	144	437	UJ,SV7c
87-86-5	Pentachlorophenol	U	437	ug/kg	109	437	
129-00-0	Pyrene	U	43.7	ug/kg	13.1	43.7	
110-86-1	Pyridine	U	437	ug/kg	87.5	437	
62-53-3	Aniline	U	437	ug/kg	131	437	
111-44-4	bis(2-Chloroethyl) ether	U	437	ug/kg	87.5	437	
541-73-1	1,3-Dichlorobenzene	U	437	ug/kg	87.5	437	
100-51-6	Benzyl alcohol	U	437	ug/kg	131	437	UJ,SV7c
95-50-1	1,2-Dichlorobenzene	U	437	ug/kg	87.5	437	
108-60-1	bis(2-Chloroisopropyl)ether	U	437	ug/kg	87.5	437	
95-48-7	o-Cresol	U	437	ug/kg	87.5	437	
65794-96-9	m,p-Cresols	U	437	ug/kg	131	437	
67-72-1	Hexachloroethane	U	437	ug/kg	87.5	437	
98-95-3	Nitrobenzene	U	437	ug/kg	87.5	437	
78-59-1	Isophorone	U	437	ug/kg	87.5	437	
88-75-5	2-Nitrophenol	U	437	ug/kg	87.5	437	
105-67-9	2,4-Dimethylphenol	U	437	ug/kg	153	437	
111-91-1	bis(2-Chloroethoxy)methane	U	437	ug/kg	87.5	437	
120-83-2	2,4-Dichlorophenol	U	437	ug/kg	87.5	437	
65-85-0	Benzoic acid	U	875	ug/kg	219	875	
91-20-3	Naphthalene	U	43.7	ug/kg	13.1	43.7	
106-47-8	4-Chloroaniline	U	437	ug/kg	87.5	437	
87-68-3	Hexachlorobutadiene	U	437	ug/kg	87.5	437	
91-57-6	2-Methylnaphthalene	U	43.7	ug/kg	8.75	43.7	
77-47-4	Hexachlorocyclopentadiene	U	437	ug/kg	87.5	437	UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	437	ug/kg	87.5	437	
95-95-4	2,4,5-Trichlorophenol	U	437	ug/kg	87.5	437	
91-58-7	2-Chloronaphthalene	U	43.7	ug/kg	14.4	43.7	
88-74-4	2-Nitroaniline	U	437	ug/kg	87.5	437	
	<i>o-Nitroaniline</i>						
99-09-2	3-Nitroaniline	U	437	ug/kg	87.5	437	UJ,SV7c

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

**SDG Number:** 10-1758  
**Lab Sample ID:** 246866007

**Date Collected:** 02/09/2010 12:00  
**Date Received:** 02/11/2010 09:20  
**Client:** LANL010  
**Method:** SW846 8270C  
**Inst:** MSD2.I  
**Analyst:** AGS1  
**Aliquot:** 30.15 g  
**Column:** J&W DB-5MS

**Matrix:** R  
**%Moisture:** 24.2  
**Project:** LANL01004  
**SOP Ref:** GL-OA-E-009  
**Dilution:** 1  
**Inj. Vol:** .5 uL  
**Final Volume:** 1 mL  
**Level:** LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
606-20-2	Dimethylphthalate	U	437	ug/kg	87.5	437
208-96-8	2,6-Dinitrotoluene	U	437	ug/kg	43.7	437
51-28-5	Acenaphthylene	U	43.7	ug/kg	13.1	43.7
132-64-9	2,4-Dinitrophenol	U	875	ug/kg	166	875
84-66-2	Dibenzofuran	U	437	ug/kg	87.5	437
86-73-7	Diethylphthalate	U	437	ug/kg	87.5	437
7005-72-3	Fluorene	U	43.7	ug/kg	13.1	43.7
534-52-1	4-Chlorophenylphenylether	U	437	ug/kg	87.5	437
100-01-6	2-Methyl-4,6-dinitrophenol	U	437	ug/kg	87.5	437
100-01-6	4-Nitroaniline	U	437	ug/kg	131	437 UJ,SV7c
122-39-4	<i>p</i> -Nitroaniline					
122-66-7	Diphenylamine	U	437	ug/kg	87.5	437
101-55-3	Azobenzene	U	437	ug/kg	87.5	437
118-74-1	<i>1,2</i> -Diphenylhydrazine					
85-01-8	4-Bromophenylphenylether	U	437	ug/kg	87.5	437
120-12-7	Hexachlorobenzene	U	437	ug/kg	87.5	437
84-74-2	Phenanthrene	U	43.7	ug/kg	13.1	43.7
206-44-0	Anthracene	U	43.7	ug/kg	8.75	43.7
85-68-7	Di-n-butylphthalate	U	437	ug/kg	87.5	437
56-55-3	Fluoranthene	U	43.7	ug/kg	13.1	43.7
91-94-1	Butylbenzylphthalate	U	437	ug/kg	87.5	437
218-01-9	Benzo(a)anthracene	U	43.7	ug/kg	13.1	43.7
117-81-7	3,3'-Dichlorobenzidine	U	437	ug/kg	131	437
117-84-0	Chrysene	U	43.7	ug/kg	13.1	43.7
205-99-2	bis(2-Ethylhexyl)phthalate	U	437	ug/kg	87.5	437
207-08-9	Di-n-octylphthalate	U	437	ug/kg	87.5	437
50-32-8	Benzo(b)fluoranthene	U	43.7	ug/kg	13.1	43.7
193-39-5	Benzo(k)fluoranthene	U	43.7	ug/kg	13.1	43.7
53-70-3	Benzo(a)pyrene	U	43.7	ug/kg	13.1	43.7
191-24-2	Indeno(1,2,3-cd)pyrene	U	43.7	ug/kg	13.1	43.7
120-82-1	Dibenzo(a,h)anthracene	U	43.7	ug/kg	13.1	43.7
	Benzo(ghi)perylene	U	43.7	ug/kg	13.1	43.7
	1,2,4-Trichlorobenzene	U	437	ug/kg	87.5	437

**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	3.19	829	ug/kg		J
127-91-3	.beta.-Pinene	4.3	253	ug/kg	97	NJ

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

SDG Number: 10-1758  
Lab Sample ID: 246866007

Date Collected: 02/09/2010 12:00  
Date Received: 02/11/2010 09:20  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD2.I  
Analyst: AGS1  
Aliquot: 30.15 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 24.2  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
Tentatively Identified Compound Summary							
CAS No.	Tentatively Identified Compound (TIC)		RT	Estimated	Units	Fit	Qual
77-53-2	Cedrol		8.41	713	ug/kg	94	NJ
	Unknown		11.37	229	ug/kg		J
511-15-9	2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa		11.48	2980	ug/kg	98	NJ

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

Page 1 of 3

**SDG Number:** 10-1758  
**Lab Sample ID:** 246866008

**Date Collected:** 02/09/2010 12:00  
**Date Received:** 02/11/2010 09:20  
**Client:** LANL010  
**Method:** SW846 8270C  
**Inst:** MSD2.I  
**Analyst:** AGS1  
**Aliquot:** 30.02 g  
**Column:** J&W DB-5MS

**Matrix:** R  
**%Moisture:** 7.6  
**Project:** LANL01004  
**SOP Ref:** GL-OA-E-009  
**Dilution:** 1  
**Inj. Vol:** .5 uL  
**Final Volume:** 1 mL  
**Level:** LOW

**Client ID:** RE15-10-8341  
**Batch ID:** 954297  
**Run Date:** 02/23/2010 01:50  
**Prep Date:** 02/17/2010 21:06  
**Data File:** s2b2228.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
62-75-9	N-Methyl-N-nitrosomethylamine	U	360	ug/kg	72.1	360	
108-95-2	Phenol	U	360	ug/kg	72.1	360	
95-57-8	2-Chlorophenol	U	360	ug/kg	72.1	360	
106-46-7	1,4-Dichlorobenzene	U	360	ug/kg	72.1	360	
621-64-7	N-Nitrosodipropylamine	U	360	ug/kg	72.1	360	
59-50-7	4-Chloro-3-methylphenol	U	360	ug/kg	72.1	360	
83-32-9	Acenaphthene	U	36.0	ug/kg	11.9	36.0	
121-14-2	2,4-Dinitrotoluene	U	360	ug/kg	36.0	360	
100-02-7	4-Nitrophenol	U	360	ug/kg	119	360	UJ,SV7c
87-86-5	Pentachlorophenol	U	360	ug/kg	90.1	360	
129-00-0	Pyrene	U	36.0	ug/kg	10.8	36.0	
110-86-1	Pyridine	U	360	ug/kg	72.1	360	
62-53-3	Aniline	U	360	ug/kg	108	360	
111-44-4	bis(2-Chloroethyl) ether	U	360	ug/kg	72.1	360	
541-73-1	1,3-Dichlorobenzene	U	360	ug/kg	72.1	360	
100-51-6	Benzyl alcohol	U	360	ug/kg	108	360	UJ,SV7c
95-50-1	1,2-Dichlorobenzene	U	360	ug/kg	72.1	360	
108-60-1	bis(2-Chloroisopropyl)ether	U	360	ug/kg	72.1	360	
95-48-7	o-Cresol	U	360	ug/kg	72.1	360	
65794-96-9	m,p-Cresols	U	360	ug/kg	108	360	
67-72-1	Hexachloroethane	U	360	ug/kg	72.1	360	
98-95-3	Nitrobenzene	U	360	ug/kg	72.1	360	
78-59-1	Isophorone	U	360	ug/kg	72.1	360	
88-75-5	2-Nitrophenol	U	360	ug/kg	72.1	360	
105-67-9	2,4-Dimethylphenol	U	360	ug/kg	126	360	
111-91-1	bis(2-Chloroethoxy)methane	U	360	ug/kg	72.1	360	
120-83-2	2,4-Dichlorophenol	U	360	ug/kg	72.1	360	
65-85-0	Benzoic acid	U	721	ug/kg	180	721	
91-20-3	Naphthalene	U	36.0	ug/kg	10.8	36.0	
106-47-8	4-Chloroaniline	U	360	ug/kg	72.1	360	
87-68-3	Hexachlorobutadiene	U	360	ug/kg	72.1	360	
91-57-6	2-Methylnaphthalene	U	36.0	ug/kg	7.21	36.0	
77-47-4	Hexachlorocyclopentadiene	U	360	ug/kg	72.1	360	UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	360	ug/kg	72.1	360	
95-95-4	2,4,5-Trichlorophenol	U	360	ug/kg	72.1	360	
91-58-7	2-Chloronaphthalene	U	36.0	ug/kg	11.9	36.0	
88-74-4	2-Nitroaniline	U	360	ug/kg	72.1	360	
	<i>o</i> -Nitroaniline						
99-09-2	3-Nitroaniline	U	360	ug/kg	72.1	360	UJ,SV7c

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

**SDG Number:** 10-1758  
**Lab Sample ID:** 246866008

**Date Collected:** 02/09/2010 12:00  
**Date Received:** 02/11/2010 09:20  
**Client:** LANL010  
**Method:** SW846 8270C  
**Inst:** MSD2.I  
**Analyst:** AGS1  
**Aliquot:** 30.02 g  
**Column:** J&W DB-5MS

**Matrix:** R  
**%Moisture:** 7.6  
**Project:** LANL01004  
**SOP Ref:** GL-OA-E-009  
**Dilution:** 1  
**Inj. Vol:** .5 uL  
**Final Volume:** 1 mL  
**Level:** LOW

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

UJ,SV7c

**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	1.99	183	ug/kg		J
	Unknown Aldol Condensate	3.19	766	ug/kg		J



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

Page 3 of 3

**SDG Number:** 10-1758  
**Lab Sample ID:** 246866008

**Date Collected:** 02/09/2010 12:00  
**Date Received:** 02/11/2010 09:20

**Matrix:** R  
**%Moisture:** 7.6

**Client ID:** RE15-10-8341  
**Batch ID:** 954297

**Client:** LANL010  
**Method:** SW846 8270C  
**Inst:** MSD2.I

**Project:** LANL01004  
**SOP Ref:** GL-OA-E-009  
**Dilution:** 1

**Run Date:** 02/23/2010 01:50  
**Prep Date:** 02/17/2010 21:06

**Analyst:** AGS1  
**Aliquot:** 30.02 g

**Inj. Vol:** .5 uL  
**Final Volume:** 1 mL

**Data File:** s2b2228.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
4630-07-3	Naphthalene, 1,2,3,5,6,7,8,8a-octahydro-	7.29	280	ug/kg	98	NJ
	Unknown	11.52	786	ug/kg		J
301-02-0	9-Octadecenamide, (Z)-	13.37	417	ug/kg	97	NJ

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

Page 1 of 3

**SDG Number:** 10-1758  
**Lab Sample ID:** 246866004

**Date Collected:** 02/09/2010 12:00  
**Date Received:** 02/11/2010 09:20  
**Client:** LANL010  
**Method:** SW846 8270C  
**Inst:** MSD2.I  
**Analyst:** AGS1  
**Aliquot:** 30.17 g  
**Column:** J&W DB-5MS

**Matrix:** R  
**%Moisture:** 23.2  
**Project:** LANL01004  
**SOP Ref:** GL-OA-E-009  
**Dilution:** 1  
**Inj. Vol:** .5 uL  
**Final Volume:** 1 mL  
**Level:** LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
62-75-9	N-Methyl-N-nitrosomethylamine	U	432	ug/kg	86.3	432	
108-95-2	Phenol	U	432	ug/kg	86.3	432	
95-57-8	2-Chlorophenol	U	432	ug/kg	86.3	432	
106-46-7	1,4-Dichlorobenzene	U	432	ug/kg	86.3	432	
621-64-7	N-Nitrosodipropylamine	U	432	ug/kg	86.3	432	
59-50-7	4-Chloro-3-methylphenol	U	432	ug/kg	86.3	432	
83-32-9	Acenaphthene	U	43.2	ug/kg	14.2	43.2	
121-14-2	2,4-Dinitrotoluene	U	432	ug/kg	43.2	432	
100-02-7	4-Nitrophenol	U	432	ug/kg	142	432	UJ,SV7c
87-86-5	Pentachlorophenol	U	432	ug/kg	108	432	
129-00-0	Pyrene	U	43.2	ug/kg	13.0	43.2	
110-86-1	Pyridine	U	432	ug/kg	86.3	432	
62-53-3	Aniline	U	432	ug/kg	130	432	
111-44-4	bis(2-Chloroethyl) ether	U	432	ug/kg	86.3	432	
541-73-1	1,3-Dichlorobenzene	U	432	ug/kg	86.3	432	
100-51-6	Benzyl alcohol	U	432	ug/kg	130	432	UJ,SV7c
95-50-1	1,2-Dichlorobenzene	U	432	ug/kg	86.3	432	
108-60-1	bis(2-Chloroisopropyl)ether	U	432	ug/kg	86.3	432	
95-48-7	o-Cresol	U	432	ug/kg	86.3	432	
65794-96-9	m,p-Cresols	U	432	ug/kg	130	432	
67-72-1	Hexachloroethane	U	432	ug/kg	86.3	432	
98-95-3	Nitrobenzene	U	432	ug/kg	86.3	432	
78-59-1	Isophorone	U	432	ug/kg	86.3	432	
88-75-5	2-Nitrophenol	U	432	ug/kg	86.3	432	
105-67-9	2,4-Dimethylphenol	U	432	ug/kg	151	432	
111-91-1	bis(2-Chloroethoxy)methane	U	432	ug/kg	86.3	432	
120-83-2	2,4-Dichlorophenol	U	432	ug/kg	86.3	432	
65-85-0	Benzoic acid	U	863	ug/kg	216	863	
91-20-3	Naphthalene	U	43.2	ug/kg	13.0	43.2	
106-47-8	4-Chloroaniline	U	432	ug/kg	86.3	432	
87-68-3	Hexachlorobutadiene	U	432	ug/kg	86.3	432	
91-57-6	2-Methylnaphthalene	U	43.2	ug/kg	8.63	43.2	
77-47-4	Hexachlorocyclopentadiene	U	432	ug/kg	86.3	432	UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	432	ug/kg	86.3	432	
95-95-4	2,4,5-Trichlorophenol	U	432	ug/kg	86.3	432	
91-58-7	2-Chloronaphthalene	U	43.2	ug/kg	14.2	43.2	
88-74-4	2-Nitroaniline	U	432	ug/kg	86.3	432	
	<i>o-Nitroaniline</i>						
99-09-2	3-Nitroaniline	U	432	ug/kg	86.3	432	UJ,SV7c

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

**SDG Number:** 10-1758  
**Lab Sample ID:** 246866004

**Date Collected:** 02/09/2010 12:00  
**Date Received:** 02/11/2010 09:20  
**Client:** LANL010  
**Method:** SW846 8270C  
**Inst:** MSD2.I  
**Analyst:** AGS1  
**Aliquot:** 30.17 g  
**Column:** J&W DB-5MS

**Matrix:** R  
**%Moisture:** 23.2  
**Project:** LANL01004  
**SOP Ref:** GL-OA-E-009  
**Dilution:** 1  
**Inj. Vol:** .5 uL  
**Final Volume:** 1 mL  
**Level:** LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
	Dimethylphthalate	U	432	ug/kg	86.3	432
606-20-2	2,6-Dinitrotoluene	U	432	ug/kg	43.2	432
208-96-8	Acenaphthylene	U	43.2	ug/kg	13.0	43.2
51-28-5	2,4-Dinitrophenol	U	863	ug/kg	164	863
132-64-9	Dibenzofuran	U	432	ug/kg	86.3	432
84-66-2	Diethylphthalate	U	432	ug/kg	86.3	432
86-73-7	Fluorene	U	43.2	ug/kg	13.0	43.2
7005-72-3	4-Chlorophenylphenylether	U	432	ug/kg	86.3	432
534-52-1	2-Methyl-4,6-dinitrophenol	U	432	ug/kg	86.3	432
100-01-6	4-Nitroaniline	U	432	ug/kg	130	432
	<i>p</i> -Nitroaniline					UJ,SV7c
122-39-4	Diphenylamine	U	432	ug/kg	86.3	432
122-66-7	Azobenzene	U	432	ug/kg	86.3	432
	<i>1,2</i> -Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	432	ug/kg	86.3	432
118-74-1	Hexachlorobenzene	U	432	ug/kg	86.3	432
85-01-8	Phenanthrene	U	43.2	ug/kg	13.0	43.2
120-12-7	Anthracene	U	43.2	ug/kg	8.63	43.2
84-74-2	Di-n-butylphthalate	U	432	ug/kg	86.3	432
206-44-0	Fluoranthene	U	43.2	ug/kg	13.0	43.2
85-68-7	Butylbenzylphthalate	U	432	ug/kg	86.3	432
56-55-3	Benzo(a)anthracene	U	43.2	ug/kg	13.0	43.2
91-94-1	3,3'-Dichlorobenzidine	U	432	ug/kg	130	432
218-01-9	Chrysene	U	43.2	ug/kg	13.0	43.2
117-81-7	bis(2-Ethylhexyl)phthalate	U	432	ug/kg	86.3	432
117-84-0	Di-n-octylphthalate	U	432	ug/kg	86.3	432
205-99-2	Benzo(b)fluoranthene	U	43.2	ug/kg	13.0	43.2
207-08-9	Benzo(k)fluoranthene	U	43.2	ug/kg	13.0	43.2
50-32-8	Benzo(a)pyrene	U	43.2	ug/kg	13.0	43.2
193-39-5	Indeno(1,2,3-cd)pyrene	U	43.2	ug/kg	13.0	43.2
53-70-3	Dibenzo(a,h)anthracene	U	43.2	ug/kg	13.0	43.2
191-24-2	Benzo(ghi)perylene	U	43.2	ug/kg	13.0	43.2
120-82-1	1,2,4-Trichlorobenzene	U	432	ug/kg	86.3	432

**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
78-95-5	2-Propanone, 1-chloro-	2.15	201	ug/kg	80	NJ
	Unknown Aldol Condensate	3.19	464	ug/kg		J

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

<b>SDG Number:</b>	<b>10-1758</b>	<b>Date Collected:</b>	<b>02/09/2010 12:00</b>	<b>Matrix:</b>	<b>R</b>
<b>Lab Sample ID:</b>	<b>246866004</b>	<b>Date Received:</b>	<b>02/11/2010 09:20</b>	<b>%Moisture:</b>	<b>23.2</b>
<b>Client ID:</b>	<b>RE15-10-8364</b>	<b>Client:</b>	<b>LANL010</b>	<b>Project:</b>	<b>LANL01004</b>
<b>Batch ID:</b>	<b>954297</b>	<b>Method:</b>	<b>SW846 8270C</b>	<b>SOP Ref:</b>	<b>GL-OA-E-009</b>
<b>Run Date:</b>	<b>02/23/2010 00:09</b>	<b>Inst:</b>	<b>MSD2.I</b>	<b>Dilution:</b>	<b>1</b>
<b>Prep Date:</b>	<b>02/17/2010 21:06</b>	<b>Analyst:</b>	<b>AGS1</b>	<b>Inj. Vol:</b>	<b>.5 uL</b>
<b>Data File:</b>	<b>s2b2224.d</b>	<b>Aliquot:</b>	<b>30.17 g</b>	<b>Final Volume:</b>	<b>1 mL</b>
		<b>Column:</b>	<b>J&amp;W DB-5MS</b>	<b>Level:</b>	<b>LOW</b>

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
Tentatively Identified Compound Summary							
CAS No.	Tentatively Identified Compound (TIC)		RT	Estimated	Units	Fit	Qual
	Unknown		10.81	657	ug/kg		J

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

Page 1 of 3

**SDG Number:** 10-1758  
**Lab Sample ID:** 246866005

**Date Collected:** 02/09/2010 12:00  
**Date Received:** 02/11/2010 09:20  
**Client:** LANL010  
**Method:** SW846 8270C  
**Inst:** MSD2.I  
**Analyst:** AGS1  
**Aliquot:** 30.07 g  
**Column:** J&W DB-5MS

**Matrix:** R  
**%Moisture:** 16.9  
**Project:** LANL01004  
**SOP Ref:** GL-OA-E-009  
**Dilution:** 1  
**Inj. Vol:** .5 uL  
**Final Volume:** 1 mL  
**Level:** LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
62-75-9	N-Methyl-N-nitrosomethylamine	U	400	ug/kg	80.1	400	
108-95-2	Phenol	U	400	ug/kg	80.1	400	
95-57-8	2-Chlorophenol	U	400	ug/kg	80.1	400	
106-46-7	1,4-Dichlorobenzene	U	400	ug/kg	80.1	400	
621-64-7	N-Nitrosodipropylamine	U	400	ug/kg	80.1	400	
59-50-7	4-Chloro-3-methylphenol	U	400	ug/kg	80.1	400	
83-32-9	Acenaphthene	U	40.0	ug/kg	13.2	40.0	
121-14-2	2,4-Dinitrotoluene	U	400	ug/kg	40.0	400	
100-02-7	4-Nitrophenol	U	400	ug/kg	132	400	UJ,SV7c
87-86-5	Pentachlorophenol	U	400	ug/kg	100	400	
129-00-0	Pyrene	U	40.0	ug/kg	12.0	40.0	
110-86-1	Pyridine	U	400	ug/kg	80.1	400	
62-53-3	Aniline	U	400	ug/kg	120	400	
111-44-4	bis(2-Chloroethyl) ether	U	400	ug/kg	80.1	400	
541-73-1	1,3-Dichlorobenzene	U	400	ug/kg	80.1	400	
100-51-6	Benzyl alcohol	U	400	ug/kg	120	400	UJ,SV7c
95-50-1	1,2-Dichlorobenzene	U	400	ug/kg	80.1	400	
108-60-1	bis(2-Chloroisopropyl)ether	U	400	ug/kg	80.1	400	
95-48-7	o-Cresol	U	400	ug/kg	80.1	400	
65794-96-9	m,p-Cresols	U	400	ug/kg	120	400	
67-72-1	Hexachloroethane	U	400	ug/kg	80.1	400	
98-95-3	Nitrobenzene	U	400	ug/kg	80.1	400	
78-59-1	Isophorone	U	400	ug/kg	80.1	400	
88-75-5	2-Nitrophenol	U	400	ug/kg	80.1	400	
105-67-9	2,4-Dimethylphenol	U	400	ug/kg	140	400	
111-91-1	bis(2-Chloroethoxy)methane	U	400	ug/kg	80.1	400	
120-83-2	2,4-Dichlorophenol	U	400	ug/kg	80.1	400	
65-85-0	Benzoic acid	U	801	ug/kg	200	801	
91-20-3	Naphthalene	U	40.0	ug/kg	12.0	40.0	
106-47-8	4-Chloroaniline	U	400	ug/kg	80.1	400	
87-68-3	Hexachlorobutadiene	U	400	ug/kg	80.1	400	
91-57-6	2-Methylnaphthalene	U	40.0	ug/kg	8.01	40.0	
77-47-4	Hexachlorocyclopentadiene	U	400	ug/kg	80.1	400	UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	400	ug/kg	80.1	400	
95-95-4	2,4,5-Trichlorophenol	U	400	ug/kg	80.1	400	
91-58-7	2-Chloronaphthalene	U	40.0	ug/kg	13.2	40.0	
88-74-4	2-Nitroaniline	U	400	ug/kg	80.1	400	
	<i>o</i> -Nitroaniline						
99-09-2	3-Nitroaniline	U	400	ug/kg	80.1	400	UJ,SV7c

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

**SDG Number:** 10-1758  
**Lab Sample ID:** 246866005

**Date Collected:** 02/09/2010 12:00  
**Date Received:** 02/11/2010 09:20  
**Client:** LANL010  
**Method:** SW846 8270C  
**Inst:** MSD2.I  
**Analyst:** AGS1  
**Aliquot:** 30.07 g  
**Column:** J&W DB-5MS

**Matrix:** R  
**%Moisture:** 16.9  
**Project:** LANL01004  
**SOP Ref:** GL-OA-E-009  
**Dilution:** 1  
**Inj. Vol:** .5 uL  
**Final Volume:** 1 mL  
**Level:** LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
606-20-2	Dimethylphthalate	U	400	ug/kg	80.1	400
208-96-8	2,6-Dinitrotoluene	U	400	ug/kg	40.0	400
51-28-5	Acenaphthylene	U	40.0	ug/kg	12.0	40.0
132-64-9	2,4-Dinitrophenol	U	801	ug/kg	152	801
84-66-2	Dibenzofuran	U	400	ug/kg	80.1	400
86-73-7	Diethylphthalate	U	400	ug/kg	80.1	400
7005-72-3	Fluorene	U	40.0	ug/kg	12.0	40.0
534-52-1	4-Chlorophenylphenylether	U	400	ug/kg	80.1	400
100-01-6	2-Methyl-4,6-dinitrophenol	U	400	ug/kg	80.1	400
100-01-6	4-Nitroaniline	U	400	ug/kg	120	400
	<i>p</i> -Nitroaniline					UJ,SV7c
122-39-4	Diphenylamine	U	400	ug/kg	80.1	400
122-66-7	Azobenzene	U	400	ug/kg	80.1	400
101-55-3	<i>1,2</i> -Diphenylhydrazine					
118-74-1	4-Bromophenylphenylether	U	400	ug/kg	80.1	400
85-01-8	Hexachlorobenzene	U	400	ug/kg	80.1	400
120-12-7	Phenanthrene	U	40.0	ug/kg	12.0	40.0
84-74-2	Anthracene	U	40.0	ug/kg	8.01	40.0
206-44-0	Di-n-butylphthalate	U	400	ug/kg	80.1	400
85-68-7	Fluoranthene	U	40.0	ug/kg	12.0	40.0
56-55-3	Butylbenzylphthalate	U	400	ug/kg	80.1	400
91-94-1	Benzo(a)anthracene	U	40.0	ug/kg	12.0	40.0
218-01-9	3,3'-Dichlorobenzidine	U	400	ug/kg	120	400
117-81-7	Chrysene	U	40.0	ug/kg	12.0	40.0
117-84-0	bis(2-Ethylhexyl)phthalate	U	400	ug/kg	80.1	400
205-99-2	Di-n-octylphthalate	U	400	ug/kg	80.1	400
207-08-9	Benzo(b)fluoranthene	U	40.0	ug/kg	12.0	40.0
50-32-8	Benzo(k)fluoranthene	U	40.0	ug/kg	12.0	40.0
193-39-5	Benzo(a)pyrene	U	40.0	ug/kg	12.0	40.0
53-70-3	Indeno(1,2,3-cd)pyrene	U	40.0	ug/kg	12.0	40.0
191-24-2	Dibenzo(a,h)anthracene	U	40.0	ug/kg	12.0	40.0
120-82-1	Benzo(ghi)perylene	U	40.0	ug/kg	12.0	40.0
	1,2,4-Trichlorobenzene	U	400	ug/kg	80.1	400

**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	3.19	893	ug/kg		J
18172-67-3	Bicyclo[3.1.1]heptane, 6,6-dimethyl-2-me	4.3	162	ug/kg	95	NJ

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

**SDG Number:** 10-1758  
**Lab Sample ID:** 246866005

**Date Collected:** 02/09/2010 12:00  
**Date Received:** 02/11/2010 09:20  
**Client:** LANL010  
**Method:** SW846 8270C  
**Inst:** MSD2.I  
**Analyst:** AGS1  
**Aliquot:** 30.07 g  
**Column:** J&W DB-5MS

**Matrix:** R  
**%Moisture:** 16.9  
**Project:** LANL01004  
**SOP Ref:** GL-OA-E-009  
**Dilution:** 1  
**Inj. Vol:** .5 uL  
**Final Volume:** 1 mL  
**Level:** LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
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**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
77-53-2	Cedrol	8.41	474	ug/kg	94	NJ
629-54-9	Hexadecanamide	10.81	208	ug/kg	86	NJ
	Unknown	11.22	612	ug/kg		J

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

Page 1 of 3

**SDG Number:** 10-1758  
**Lab Sample ID:** 246866002

**Date Collected:** 02/09/2010 12:00  
**Date Received:** 02/11/2010 09:20  
**Client:** LANL010  
**Method:** SW846 8270C  
**Inst:** MSD2.I  
**Analyst:** AGS1  
**Aliquot:** 30.19 g  
**Column:** J&W DB-5MS

**Matrix:** R  
**%Moisture:** 18  
**Project:** LANL01004  
**SOP Ref:** GL-OA-E-009  
**Dilution:** 1  
**Inj. Vol:** .5 uL  
**Final Volume:** 1 mL  
**Level:** LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
62-75-9	N-Methyl-N-nitrosomethylamine	U	404	ug/kg	80.8	404	
108-95-2	Phenol	U	404	ug/kg	80.8	404	
95-57-8	2-Chlorophenol	U	404	ug/kg	80.8	404	
106-46-7	1,4-Dichlorobenzene	U	404	ug/kg	80.8	404	
621-64-7	N-Nitrosodipropylamine	U	404	ug/kg	80.8	404	
59-50-7	4-Chloro-3-methylphenol	U	404	ug/kg	80.8	404	
83-32-9	Acenaphthene	U	40.4	ug/kg	13.3	40.4	
121-14-2	2,4-Dinitrotoluene	U	404	ug/kg	40.4	404	
100-02-7	4-Nitrophenol	U	404	ug/kg	133	404	UJ,SV7c
87-86-5	Pentachlorophenol	U	404	ug/kg	101	404	
129-00-0	Pyrene	U	40.4	ug/kg	12.1	40.4	
110-86-1	Pyridine	U	404	ug/kg	80.8	404	
62-53-3	Aniline	U	404	ug/kg	121	404	
111-44-4	bis(2-Chloroethyl) ether	U	404	ug/kg	80.8	404	
541-73-1	1,3-Dichlorobenzene	U	404	ug/kg	80.8	404	
100-51-6	Benzyl alcohol	U	404	ug/kg	121	404	UJ,SV7c
95-50-1	1,2-Dichlorobenzene	U	404	ug/kg	80.8	404	
108-60-1	bis(2-Chloroisopropyl)ether	U	404	ug/kg	80.8	404	
95-48-7	o-Cresol	U	404	ug/kg	80.8	404	
65794-96-9	m,p-Cresols	U	404	ug/kg	121	404	
67-72-1	Hexachloroethane	U	404	ug/kg	80.8	404	
98-95-3	Nitrobenzene	U	404	ug/kg	80.8	404	
78-59-1	Isophorone	U	404	ug/kg	80.8	404	
88-75-5	2-Nitrophenol	U	404	ug/kg	80.8	404	
105-67-9	2,4-Dimethylphenol	U	404	ug/kg	141	404	
111-91-1	bis(2-Chloroethoxy)methane	U	404	ug/kg	80.8	404	
120-83-2	2,4-Dichlorophenol	U	404	ug/kg	80.8	404	
65-85-0	Benzoic acid	U	808	ug/kg	202	808	
91-20-3	Naphthalene	U	40.4	ug/kg	12.1	40.4	
106-47-8	4-Chloroaniline	U	404	ug/kg	80.8	404	
87-68-3	Hexachlorobutadiene	U	404	ug/kg	80.8	404	
91-57-6	2-Methylnaphthalene	U	40.4	ug/kg	8.08	40.4	
77-47-4	Hexachlorocyclopentadiene	U	404	ug/kg	80.8	404	UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	404	ug/kg	80.8	404	
95-95-4	2,4,5-Trichlorophenol	U	404	ug/kg	80.8	404	
91-58-7	2-Chloronaphthalene	U	40.4	ug/kg	13.3	40.4	
88-74-4	2-Nitroaniline	U	404	ug/kg	80.8	404	
	<i>o</i> -Nitroaniline						
99-09-2	3-Nitroaniline	U	404	ug/kg	80.8	404	UJ,SV7c



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

**SDG Number:** 10-1758  
**Lab Sample ID:** 246866002

**Date Collected:** 02/09/2010 12:00  
**Date Received:** 02/11/2010 09:20  
**Client:** LANL010  
**Method:** SW846 8270C  
**Inst:** MSD2.I  
**Analyst:** AGS1  
**Aliquot:** 30.19 g  
**Column:** J&W DB-5MS

**Matrix:** R  
**%Moisture:** 18  
**Project:** LANL01004  
**SOP Ref:** GL-OA-E-009  
**Dilution:** 1  
**Inj. Vol:** .5 uL  
**Final Volume:** 1 mL  
**Level:** LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
606-20-2	Dimethylphthalate	U	404	ug/kg	80.8	404
208-96-8	2,6-Dinitrotoluene	U	404	ug/kg	40.4	404
51-28-5	Acenaphthylene	U	40.4	ug/kg	12.1	40.4
132-64-9	2,4-Dinitrophenol	U	808	ug/kg	153	808
84-66-2	Dibenzofuran	U	404	ug/kg	80.8	404
86-73-7	Diethylphthalate	U	404	ug/kg	80.8	404
7005-72-3	Fluorene	U	40.4	ug/kg	12.1	40.4
534-52-1	4-Chlorophenylphenylether	U	404	ug/kg	80.8	404
100-01-6	2-Methyl-4,6-dinitrophenol	U	404	ug/kg	80.8	404
122-39-4	4-Nitroaniline	U	404	ug/kg	121	404
122-66-7	<i>p</i> -Nitroaniline					
101-55-3	Diphenylamine	U	404	ug/kg	80.8	404
118-74-1	Azobenzene	U	404	ug/kg	80.8	404
85-01-8	<i>1,2</i> -Diphenylhydrazine					
120-12-7	4-Bromophenylphenylether	U	404	ug/kg	80.8	404
84-74-2	Hexachlorobenzene	U	404	ug/kg	80.8	404
206-44-0	Phenanthrene	U	40.4	ug/kg	12.1	40.4
85-68-7	Anthracene	U	40.4	ug/kg	8.08	40.4
56-55-3	Di-n-butylphthalate	U	404	ug/kg	80.8	404
91-94-1	Fluoranthene	U	40.4	ug/kg	12.1	40.4
218-01-9	Butylbenzylphthalate	U	404	ug/kg	80.8	404
117-81-7	Benzo(a)anthracene	U	40.4	ug/kg	12.1	40.4
117-84-0	3,3'-Dichlorobenzidine	U	404	ug/kg	121	404
205-99-2	Chrysene	U	40.4	ug/kg	12.1	40.4
207-08-9	bis(2-Ethylhexyl)phthalate	U	404	ug/kg	80.8	404
50-32-8	Di-n-octylphthalate	U	404	ug/kg	80.8	404
193-39-5	Benzo(b)fluoranthene	U	40.4	ug/kg	12.1	40.4
53-70-3	Benzo(k)fluoranthene	U	40.4	ug/kg	12.1	40.4
191-24-2	Benzo(a)pyrene	U	40.4	ug/kg	12.1	40.4
120-82-1	Indeno(1,2,3-cd)pyrene	U	40.4	ug/kg	12.1	40.4
	Dibenzo(a,h)anthracene	U	40.4	ug/kg	12.1	40.4
	Benzo(ghi)perylene	U	40.4	ug/kg	12.1	40.4
	1,2,4-Trichlorobenzene	U	404	ug/kg	80.8	404

UJ,SV7c

**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	1.73	179	ug/kg		J
	Unknown	1.98	170	ug/kg		J

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

**SDG Number:** 10-1758  
**Lab Sample ID:** 246866002

**Date Collected:** 02/09/2010 12:00  
**Date Received:** 02/11/2010 09:20  
**Client:** LANL010  
**Method:** SW846 8270C  
**Inst:** MSD2.I  
**Analyst:** AGS1  
**Aliquot:** 30.19 g  
**Column:** J&W DB-5MS

**Matrix:** R  
**%Moisture:** 18  
**Project:** LANL01004  
**SOP Ref:** GL-OA-E-009  
**Dilution:** 1  
**Inj. Vol:** .5 uL  
**Final Volume:** 1 mL  
**Level:** LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
<b>Tentatively Identified Compound Summary</b>						
CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
78-95-5	2-Propanone, 1-chloro-	2.14	250	ug/kg	91	NJ
	Unknown Aldol Condensate	3.18	602	ug/kg		JA
301-02-0	9-Octadecenamide, (Z)-	11.52	231	ug/kg	96	NJ
	Unknown	13.37	285	ug/kg		J

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

Page 1 of 3

**SDG Number:** 10-1758  
**Lab Sample ID:** 246866003

**Date Collected:** 02/09/2010 12:00  
**Date Received:** 02/11/2010 09:20  
**Client:** LANL010  
**Method:** SW846 8270C  
**Inst:** MSD2.I  
**Analyst:** AGS1  
**Aliquot:** 30.04 g  
**Column:** J&W DB-5MS

**Matrix:** R  
**%Moisture:** 19.3  
**Project:** LANL01004  
**SOP Ref:** GL-OA-E-009  
**Dilution:** 1  
**Inj. Vol:** .5 uL  
**Final Volume:** 1 mL  
**Level:** LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
62-75-9	N-Methyl-N-nitrosomethylamine	U	413	ug/kg	82.5	413	
108-95-2	Phenol	U	413	ug/kg	82.5	413	
95-57-8	2-Chlorophenol	U	413	ug/kg	82.5	413	
106-46-7	1,4-Dichlorobenzene	U	413	ug/kg	82.5	413	
621-64-7	N-Nitrosodipropylamine	U	413	ug/kg	82.5	413	
59-50-7	4-Chloro-3-methylphenol	U	413	ug/kg	82.5	413	
83-32-9	Acenaphthene	U	41.3	ug/kg	13.6	41.3	
121-14-2	2,4-Dinitrotoluene	U	413	ug/kg	41.3	413	
100-02-7	4-Nitrophenol	U	413	ug/kg	136	413	UJ,SV7c
87-86-5	Pentachlorophenol	U	413	ug/kg	103	413	
129-00-0	Pyrene	U	41.3	ug/kg	12.4	41.3	
110-86-1	Pyridine	U	413	ug/kg	82.5	413	
62-53-3	Aniline	U	413	ug/kg	124	413	
111-44-4	bis(2-Chloroethyl) ether	U	413	ug/kg	82.5	413	
541-73-1	1,3-Dichlorobenzene	U	413	ug/kg	82.5	413	
100-51-6	Benzyl alcohol	U	413	ug/kg	124	413	UJ,SV7c
95-50-1	1,2-Dichlorobenzene	U	413	ug/kg	82.5	413	
108-60-1	bis(2-Chloroisopropyl)ether	U	413	ug/kg	82.5	413	
95-48-7	o-Cresol	U	413	ug/kg	82.5	413	
65794-96-9	m,p-Cresols	U	413	ug/kg	124	413	
67-72-1	Hexachloroethane	U	413	ug/kg	82.5	413	
98-95-3	Nitrobenzene	U	413	ug/kg	82.5	413	
78-59-1	Isophorone	U	413	ug/kg	82.5	413	
88-75-5	2-Nitrophenol	U	413	ug/kg	82.5	413	
105-67-9	2,4-Dimethylphenol	U	413	ug/kg	144	413	
111-91-1	bis(2-Chloroethoxy)methane	U	413	ug/kg	82.5	413	
120-83-2	2,4-Dichlorophenol	U	413	ug/kg	82.5	413	
65-85-0	Benzoic acid	U	825	ug/kg	206	825	
91-20-3	Naphthalene	U	41.3	ug/kg	12.4	41.3	
106-47-8	4-Chloroaniline	U	413	ug/kg	82.5	413	
87-68-3	Hexachlorobutadiene	U	413	ug/kg	82.5	413	
91-57-6	2-Methylnaphthalene	U	41.3	ug/kg	8.25	41.3	
77-47-4	Hexachlorocyclopentadiene	U	413	ug/kg	82.5	413	UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	413	ug/kg	82.5	413	
95-95-4	2,4,5-Trichlorophenol	U	413	ug/kg	82.5	413	
91-58-7	2-Chloronaphthalene	U	41.3	ug/kg	13.6	41.3	
88-74-4	2-Nitroaniline	U	413	ug/kg	82.5	413	
	<i>o</i> -Nitroaniline						
99-09-2	3-Nitroaniline	U	413	ug/kg	82.5	413	UJ,SV7c

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

**SDG Number:** 10-1758  
**Lab Sample ID:** 246866003

**Date Collected:** 02/09/2010 12:00  
**Date Received:** 02/11/2010 09:20  
**Client:** LANL010  
**Method:** SW846 8270C  
**Inst:** MSD2.I  
**Analyst:** AGS1  
**Aliquot:** 30.04 g  
**Column:** J&W DB-5MS

**Matrix:** R  
**%Moisture:** 19.3  
**Project:** LANL01004  
**SOP Ref:** GL-OA-E-009  
**Dilution:** 1  
**Inj. Vol:** .5 uL  
**Final Volume:** 1 mL  
**Level:** LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
606-20-2	Dimethylphthalate	U	413	ug/kg	82.5	413
208-96-8	2,6-Dinitrotoluene	U	413	ug/kg	41.3	413
51-28-5	Acenaphthylene	U	41.3	ug/kg	12.4	41.3
132-64-9	2,4-Dinitrophenol	U	825	ug/kg	157	825
84-66-2	Dibenzofuran	U	413	ug/kg	82.5	413
86-73-7	Diethylphthalate	U	413	ug/kg	82.5	413
7005-72-3	Fluorene	U	41.3	ug/kg	12.4	41.3
534-52-1	4-Chlorophenylphenylether	U	413	ug/kg	82.5	413
100-01-6	2-Methyl-4,6-dinitrophenol	U	413	ug/kg	82.5	413
100-01-6	4-Nitroaniline	U	413	ug/kg	124	413
	<i>p</i> -Nitroaniline					UJ,SV7c
122-39-4	Diphenylamine	U	413	ug/kg	82.5	413
122-66-7	Azobenzene	U	413	ug/kg	82.5	413
101-55-3	<i>1,2</i> -Diphenylhydrazine					
118-74-1	4-Bromophenylphenylether	U	413	ug/kg	82.5	413
85-01-8	Hexachlorobenzene	U	413	ug/kg	82.5	413
120-12-7	Phenanthrene	U	41.3	ug/kg	12.4	41.3
84-74-2	Anthracene	U	41.3	ug/kg	8.25	41.3
206-44-0	Di-n-butylphthalate	U	413	ug/kg	82.5	413
85-68-7	Fluoranthene	U	41.3	ug/kg	12.4	41.3
56-55-3	Butylbenzylphthalate	U	413	ug/kg	82.5	413
91-94-1	Benzo(a)anthracene	U	41.3	ug/kg	12.4	41.3
218-01-9	3,3'-Dichlorobenzidine	U	413	ug/kg	124	413
117-81-7	Chrysene	U	41.3	ug/kg	12.4	41.3
117-84-0	bis(2-Ethylhexyl)phthalate	U	413	ug/kg	82.5	413
205-99-2	Di-n-octylphthalate	U	413	ug/kg	82.5	413
207-08-9	Benzo(b)fluoranthene	U	41.3	ug/kg	12.4	41.3
50-32-8	Benzo(k)fluoranthene	U	41.3	ug/kg	12.4	41.3
193-39-5	Benzo(a)pyrene	U	41.3	ug/kg	12.4	41.3
53-70-3	Indeno(1,2,3-cd)pyrene	U	41.3	ug/kg	12.4	41.3
191-24-2	Dibenzo(a,h)anthracene	U	41.3	ug/kg	12.4	41.3
120-82-1	Benzo(ghi)perylene	U	41.3	ug/kg	12.4	41.3
	1,2,4-Trichlorobenzene	U	413	ug/kg	82.5	413

**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	3.19	645	ug/kg		J
7785-70-8	1R-.alpha.-Pinene	3.94	195	ug/kg	98	NJ

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

Page 3 of 3

**SDG Number:** 10-1758  
**Lab Sample ID:** 246866003

**Date Collected:** 02/09/2010 12:00  
**Date Received:** 02/11/2010 09:20  
**Client:** LANL010  
**Method:** SW846 8270C  
**Inst:** MSD2.I  
**Analyst:** AGS1  
**Aliquot:** 30.04 g  
**Column:** J&W DB-5MS

**Matrix:** R  
**%Moisture:** 19.3  
**Project:** LANL01004  
**SOP Ref:** GL-OA-E-009  
**Dilution:** 1  
**Inj. Vol:** .5 uL  
**Final Volume:** 1 mL  
**Level:** LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
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**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
498-15-7	Bicyclo[4.1.0]hept-3-ene, 3,7,7-trimethy	4.51	224	ug/kg	97	NJ
1235-74-1	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	11.54	762	ug/kg	98	NJ

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

Page 1 of 3

**SDG Number:** 10-1758  
**Lab Sample ID:** 246866006

**Date Collected:** 02/09/2010 12:00  
**Date Received:** 02/11/2010 09:20  
**Client:** LANL010  
**Method:** SW846 8270C  
**Inst:** MSD2.I  
**Analyst:** AGS1  
**Aliquot:** 30.02 g  
**Column:** J&W DB-5MS

**Matrix:** R  
**%Moisture:** 24.6  
**Project:** LANL01004  
**SOP Ref:** GL-OA-E-009  
**Dilution:** 1  
**Inj. Vol:** .5 uL  
**Final Volume:** 1 mL  
**Level:** LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
62-75-9	N-Methyl-N-nitrosomethylamine	U	442	ug/kg	88.3	442	
108-95-2	Phenol	U	442	ug/kg	88.3	442	
95-57-8	2-Chlorophenol	U	442	ug/kg	88.3	442	
106-46-7	1,4-Dichlorobenzene	U	442	ug/kg	88.3	442	
621-64-7	N-Nitrosodipropylamine	U	442	ug/kg	88.3	442	
59-50-7	4-Chloro-3-methylphenol	U	442	ug/kg	88.3	442	
83-32-9	Acenaphthene	U	44.2	ug/kg	14.6	44.2	
121-14-2	2,4-Dinitrotoluene	U	442	ug/kg	44.2	442	
100-02-7	4-Nitrophenol	U	442	ug/kg	146	442	UJ,SV7c
87-86-5	Pentachlorophenol	U	442	ug/kg	110	442	
129-00-0	Pyrene	U	44.2	ug/kg	13.2	44.2	
110-86-1	Pyridine	U	442	ug/kg	88.3	442	
62-53-3	Aniline	U	442	ug/kg	132	442	
111-44-4	bis(2-Chloroethyl) ether	U	442	ug/kg	88.3	442	
541-73-1	1,3-Dichlorobenzene	U	442	ug/kg	88.3	442	
100-51-6	Benzyl alcohol	U	442	ug/kg	132	442	UJ,SV7c
95-50-1	1,2-Dichlorobenzene	U	442	ug/kg	88.3	442	
108-60-1	bis(2-Chloroisopropyl)ether	U	442	ug/kg	88.3	442	
95-48-7	o-Cresol	U	442	ug/kg	88.3	442	
65794-96-9	m,p-Cresols	U	442	ug/kg	132	442	
67-72-1	Hexachloroethane	U	442	ug/kg	88.3	442	
98-95-3	Nitrobenzene	U	442	ug/kg	88.3	442	
78-59-1	Isophorone	U	442	ug/kg	88.3	442	
88-75-5	2-Nitrophenol	U	442	ug/kg	88.3	442	
105-67-9	2,4-Dimethylphenol	U	442	ug/kg	155	442	
111-91-1	bis(2-Chloroethoxy)methane	U	442	ug/kg	88.3	442	
120-83-2	2,4-Dichlorophenol	U	442	ug/kg	88.3	442	
65-85-0	Benzoic acid	U	883	ug/kg	221	883	
91-20-3	Naphthalene	U	44.2	ug/kg	13.2	44.2	
106-47-8	4-Chloroaniline	U	442	ug/kg	88.3	442	
87-68-3	Hexachlorobutadiene	U	442	ug/kg	88.3	442	
91-57-6	2-Methylnaphthalene	U	44.2	ug/kg	8.83	44.2	
77-47-4	Hexachlorocyclopentadiene	U	442	ug/kg	88.3	442	UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	442	ug/kg	88.3	442	
95-95-4	2,4,5-Trichlorophenol	U	442	ug/kg	88.3	442	
91-58-7	2-Chloronaphthalene	U	44.2	ug/kg	14.6	44.2	
88-74-4	2-Nitroaniline	U	442	ug/kg	88.3	442	
	<i>o-Nitroaniline</i>						
99-09-2	3-Nitroaniline	U	442	ug/kg	88.3	442	UJ,SV7c

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

**SDG Number:** 10-1758  
**Lab Sample ID:** 246866006

**Date Collected:** 02/09/2010 12:00  
**Date Received:** 02/11/2010 09:20  
**Client:** LANL010  
**Method:** SW846 8270C  
**Inst:** MSD2.I  
**Analyst:** AGS1  
**Aliquot:** 30.02 g  
**Column:** J&W DB-5MS

**Matrix:** R  
**%Moisture:** 24.6  
**Project:** LANL01004  
**SOP Ref:** GL-OA-E-009  
**Dilution:** 1  
**Inj. Vol:** .5 uL  
**Final Volume:** 1 mL  
**Level:** LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
606-20-2	Dimethylphthalate	U	442	ug/kg	88.3	442
208-96-8	2,6-Dinitrotoluene	U	442	ug/kg	44.2	442
51-28-5	Acenaphthylene	U	44.2	ug/kg	13.2	44.2
132-64-9	2,4-Dinitrophenol	U	883	ug/kg	168	883
84-66-2	Dibenzofuran	U	442	ug/kg	88.3	442
86-73-7	Diethylphthalate	U	442	ug/kg	88.3	442
7005-72-3	Fluorene	U	44.2	ug/kg	13.2	44.2
534-52-1	4-Chlorophenylphenylether	U	442	ug/kg	88.3	442
100-01-6	2-Methyl-4,6-dinitrophenol	U	442	ug/kg	88.3	442
100-01-6	4-Nitroaniline	U	442	ug/kg	132	442
	<i>p</i> -Nitroaniline					UJ,SV7c
122-39-4	Diphenylamine	U	442	ug/kg	88.3	442
122-66-7	Azobenzene	U	442	ug/kg	88.3	442
101-55-3	<i>1,2</i> -Diphenylhydrazine					
118-74-1	4-Bromophenylphenylether	U	442	ug/kg	88.3	442
85-01-8	Hexachlorobenzene	U	442	ug/kg	88.3	442
120-12-7	Phenanthrene	U	44.2	ug/kg	13.2	44.2
84-74-2	Anthracene	U	44.2	ug/kg	8.83	44.2
206-44-0	Di-n-butylphthalate	U	442	ug/kg	88.3	442
85-68-7	Fluoranthene	U	44.2	ug/kg	13.2	44.2
56-55-3	Butylbenzylphthalate	U	442	ug/kg	88.3	442
91-94-1	Benzo(a)anthracene	U	44.2	ug/kg	13.2	44.2
218-01-9	3,3'-Dichlorobenzidine	U	442	ug/kg	132	442
117-81-7	Chrysene	U	44.2	ug/kg	13.2	44.2
117-84-0	bis(2-Ethylhexyl)phthalate	U	442	ug/kg	88.3	442
205-99-2	Di-n-octylphthalate	U	442	ug/kg	88.3	442
207-08-9	Benzo(b)fluoranthene	U	44.2	ug/kg	13.2	44.2
50-32-8	Benzo(k)fluoranthene	U	44.2	ug/kg	13.2	44.2
193-39-5	Benzo(a)pyrene	U	44.2	ug/kg	13.2	44.2
53-70-3	Indeno(1,2,3-cd)pyrene	U	44.2	ug/kg	13.2	44.2
191-24-2	Dibenzo(a,h)anthracene	U	44.2	ug/kg	13.2	44.2
120-82-1	Benzo(ghi)perylene	U	44.2	ug/kg	13.2	44.2
	1,2,4-Trichlorobenzene	U	442	ug/kg	88.3	442

**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	2.76	337	ug/kg		J
	Unknown Aldol Condensate	3.19	851	ug/kg		J

Semi-Volatile  
Certificate of Analysis  
Sample Summary

Page 3 of 3

SDG Number: 10-1758  
Lab Sample ID: 246866006

Date Collected: 02/09/2010 12:00  
Date Received: 02/11/2010 09:20  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD2.I  
Analyst: AGS1  
Aliquot: 30.02 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 24.6  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
Tentatively Identified Compound Summary						
CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
7785-70-8	1R-.alpha.-Pinene	3.94	658	ug/kg	98	NJ
127-91-3	.beta.-Pinene	4.3	302	ug/kg	97	NJ
498-15-7	Bicyclo[4.1.0]hept-3-ene, 3,7,7-trimethy	4.51	1270	ug/kg	97	NJ
25246-27-9	1H-Cycloprop[e]azulene, decahydro-1,1,7-	7.29	338	ug/kg	95	NJ
57-10-3	n-Hexadecanoic acid	9.86	187	ug/kg	99	NJ
112-80-1	Oleic Acid	10.62	459	ug/kg	98	NJ
301-02-0	9-Octadecenamide, (Z)-	11.53	951	ug/kg	98	NJ



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

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**SDG Number:** 10-1758  
**Lab Sample ID:** 246866009

**Date Collected:** 02/09/2010 12:00  
**Date Received:** 02/11/2010 09:20  
**Client:** LANL010  
**Method:** SW846 8270C  
**Inst:** MSD2.I  
**Analyst:** AGS1  
**Aliquot:** 30.07 g  
**Column:** J&W DB-5MS

**Matrix:** R  
**%Moisture:** 24.2  
**Project:** LANL01004  
**SOP Ref:** GL-OA-E-009  
**Dilution:** 1  
**Inj. Vol:** .5 uL  
**Final Volume:** 1 mL  
**Level:** LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
62-75-9	N-Methyl-N-nitrosomethylamine	U	439	ug/kg	87.7	439	
108-95-2	Phenol	U	439	ug/kg	87.7	439	
95-57-8	2-Chlorophenol	U	439	ug/kg	87.7	439	
106-46-7	1,4-Dichlorobenzene	U	439	ug/kg	87.7	439	
621-64-7	N-Nitrosodipropylamine	U	439	ug/kg	87.7	439	
59-50-7	4-Chloro-3-methylphenol	U	439	ug/kg	87.7	439	
83-32-9	Acenaphthene	U	43.9	ug/kg	14.5	43.9	
121-14-2	2,4-Dinitrotoluene	U	439	ug/kg	43.9	439	
100-02-7	4-Nitrophenol	U	439	ug/kg	145	439	UJ,SV7c
87-86-5	Pentachlorophenol	U	439	ug/kg	110	439	
129-00-0	Pyrene	U	43.9	ug/kg	13.2	43.9	
110-86-1	Pyridine	U	439	ug/kg	87.7	439	
62-53-3	Aniline	U	439	ug/kg	132	439	
111-44-4	bis(2-Chloroethyl) ether	U	439	ug/kg	87.7	439	
541-73-1	1,3-Dichlorobenzene	U	439	ug/kg	87.7	439	
100-51-6	Benzyl alcohol	U	439	ug/kg	132	439	UJ,SV7c
95-50-1	1,2-Dichlorobenzene	U	439	ug/kg	87.7	439	
108-60-1	bis(2-Chloroisopropyl)ether	U	439	ug/kg	87.7	439	UJ,SV7c
95-48-7	o-Cresol	U	439	ug/kg	87.7	439	
65794-96-9	m,p-Cresols	U	439	ug/kg	132	439	
67-72-1	Hexachloroethane	U	439	ug/kg	87.7	439	
98-95-3	Nitrobenzene	U	439	ug/kg	87.7	439	
78-59-1	Isophorone	U	439	ug/kg	87.7	439	
88-75-5	2-Nitrophenol	U	439	ug/kg	87.7	439	
105-67-9	2,4-Dimethylphenol	U	439	ug/kg	153	439	
111-91-1	bis(2-Chloroethoxy)methane	U	439	ug/kg	87.7	439	
120-83-2	2,4-Dichlorophenol	U	439	ug/kg	87.7	439	
65-85-0	Benzoic acid	U	877	ug/kg	219	877	
91-20-3	Naphthalene	U	43.9	ug/kg	13.2	43.9	
106-47-8	4-Chloroaniline	U	439	ug/kg	87.7	439	
87-68-3	Hexachlorobutadiene	U	439	ug/kg	87.7	439	
91-57-6	2-Methylnaphthalene	U	43.9	ug/kg	8.77	43.9	
77-47-4	Hexachlorocyclopentadiene	U	439	ug/kg	87.7	439	UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	439	ug/kg	87.7	439	
95-95-4	2,4,5-Trichlorophenol	U	439	ug/kg	87.7	439	
91-58-7	2-Chloronaphthalene	U	43.9	ug/kg	14.5	43.9	
88-74-4	2-Nitroaniline	U	439	ug/kg	87.7	439	
	<i>o</i> -Nitroaniline						
99-09-2	3-Nitroaniline	U	439	ug/kg	87.7	439	UJ,SV7c

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

**SDG Number:** 10-1758  
**Lab Sample ID:** 246866009

**Date Collected:** 02/09/2010 12:00  
**Date Received:** 02/11/2010 09:20  
**Client:** LANL010  
**Method:** SW846 8270C  
**Inst:** MSD2.I  
**Analyst:** AGS1  
**Aliquot:** 30.07 g  
**Column:** J&W DB-5MS

**Matrix:** R  
**%Moisture:** 24.2  
**Project:** LANL01004  
**SOP Ref:** GL-OA-E-009  
**Dilution:** 1  
**Inj. Vol:** .5 uL  
**Final Volume:** 1 mL  
**Level:** LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
606-20-2	Dimethylphthalate	U	439	ug/kg	87.7	439
208-96-8	2,6-Dinitrotoluene	U	439	ug/kg	43.9	439
51-28-5	Acenaphthylene	U	43.9	ug/kg	13.2	43.9
132-64-9	2,4-Dinitrophenol	U	877	ug/kg	167	877
84-66-2	Dibenzofuran	U	439	ug/kg	87.7	439
86-73-7	Diethylphthalate	U	439	ug/kg	87.7	439
7005-72-3	Fluorene	U	43.9	ug/kg	13.2	43.9
534-52-1	4-Chlorophenylphenylether	U	439	ug/kg	87.7	439
100-01-6	2-Methyl-4,6-dinitrophenol	U	439	ug/kg	87.7	439
122-39-4	4-Nitroaniline	U	439	ug/kg	132	439
122-66-7	<i>p</i> -Nitroaniline					
101-55-3	Diphenylamine	U	439	ug/kg	87.7	439
118-74-1	Azobenzene	U	439	ug/kg	87.7	439
85-01-8	<i>1,2</i> -Diphenylhydrazine					
120-12-7	4-Bromophenylphenylether	U	439	ug/kg	87.7	439
84-74-2	Hexachlorobenzene	U	439	ug/kg	87.7	439
206-44-0	Phenanthrene	U	43.9	ug/kg	13.2	43.9
85-68-7	Anthracene	U	43.9	ug/kg	8.77	43.9
56-55-3	Di-n-butylphthalate	U	439	ug/kg	87.7	439
91-94-1	Fluoranthene	U	43.9	ug/kg	13.2	43.9
218-01-9	Butylbenzylphthalate	U	439	ug/kg	87.7	439
117-81-7	Benzo(a)anthracene	U	43.9	ug/kg	13.2	43.9
117-84-0	3,3'-Dichlorobenzidine	U	439	ug/kg	132	439
205-99-2	Chrysene	U	43.9	ug/kg	13.2	43.9
207-08-9	bis(2-Ethylhexyl)phthalate	U	439	ug/kg	87.7	439
50-32-8	Di-n-octylphthalate	U	439	ug/kg	87.7	439
193-39-5	Benzo(b)fluoranthene	U	43.9	ug/kg	13.2	43.9
53-70-3	Benzo(k)fluoranthene	U	43.9	ug/kg	13.2	43.9
191-24-2	Benzo(a)pyrene	U	43.9	ug/kg	13.2	43.9
120-82-1	Indeno(1,2,3-cd)pyrene	U	43.9	ug/kg	13.2	43.9
	Dibenzo(a,h)anthracene	U	43.9	ug/kg	13.2	43.9
	Benzo(ghi)perylene	U	43.9	ug/kg	13.2	43.9
	1,2,4-Trichlorobenzene	U	439	ug/kg	87.7	439

UJ,SV7c

**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	3.15	897	ug/kg		JA
301-02-0	9-Octadecenamide, (Z)-	11.48	338	ug/kg	96	NJ

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

Page 3 of 3

<b>SDG Number:</b>	<b>10-1758</b>	<b>Date Collected:</b>	<b>02/09/2010 12:00</b>	<b>Matrix:</b>	<b>R</b>
<b>Lab Sample ID:</b>	<b>246866009</b>	<b>Date Received:</b>	<b>02/11/2010 09:20</b>	<b>%Moisture:</b>	<b>24.2</b>
<b>Client ID:</b>	<b>RE15-10-8376</b>	<b>Client:</b>	<b>LANL010</b>	<b>Project:</b>	<b>LANL01004</b>
<b>Batch ID:</b>	<b>954297</b>	<b>Method:</b>	<b>SW846 8270C</b>	<b>SOP Ref:</b>	<b>GL-OA-E-009</b>
<b>Run Date:</b>	<b>02/23/2010 18:15</b>	<b>Inst:</b>	<b>MSD2.I</b>	<b>Dilution:</b>	<b>1</b>
<b>Prep Date:</b>	<b>02/17/2010 21:06</b>	<b>Analyst:</b>	<b>AGS1</b>	<b>Inj. Vol:</b>	<b>.5 uL</b>
<b>Data File:</b>	<b>s2b2313.d</b>	<b>Aliquot:</b>	<b>30.07 g</b>	<b>Final Volume:</b>	<b>1 mL</b>
		<b>Column:</b>	<b>J&amp;W DB-5MS</b>	<b>Level:</b>	<b>LOW</b>

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
Tentatively Identified Compound Summary							
CAS No.	Tentatively Identified Compound (TIC)		RT	Estimated	Units	Fit	Qual
301-02-0	9-Octadecenamide, (Z)-		13.31	360	ug/kg	97	NJ

**DATA VALIDATION COVER SHEET****5122-1****Data Validation Cover Sheet**

Records Use only

**Section I.**REQUEST NUMBER: 10-1758 VALIDATION DATE: 04/13/10 LAB CODE: GELCONTRACT LABORATORY NAME: GEL Laboratories LLCVALIDATOR: Monica Dymerski ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

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

**Section II. Completeness Check**

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

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

- The ICAL RRFs were  $<0.05$  but  $\geq 0.01$  for 2-amino-4,6-dinitrotoluene; PETN; m-nitrotoluene; o-nitrotoluene; and p-nitrotoluene. The associated sample results were NDs and, thus, were qualified UJ,HE7b.
- The MS and/or MSD %Rs were  $<$  the laboratory LALs but  $\geq 10\%$  for 2,6-dinitrotoluene; 2-amino-4,6-dinitrotoluene; and tetraol. The associated sample results were NDs and, thus, were qualified UJ,HE12e. The MS and MSD %Rs were  $>$  the laboratory UAL for TATB. The associated sample results were NDs and, thus, were not qualified.

**Reviewed by:** Susan Ball**Level:** I**Date:** 04/13/10

VALIDATOR'S SIGNATURE: \_\_\_\_\_

DATE: 04/13/10

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

Records Use only \_\_\_\_\_



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

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

Records Use only \_\_\_\_\_



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

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

Records Use only \_\_\_\_\_



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

# **LC/MS/MS HIGH EXPLOSIVE ANALYTICAL DATA VALIDATION CHECKLIST**

5122-2

## **LC/MS/MS High Explosive Analytical Data Validation Checklist**

Records Use only \_\_\_\_\_



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



1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8366

Lab Code: GEL

GEL Job No (SDG) 10-1758

Matrix: SOIL

GEL Sample ID: 246866002

Sample Amount 2

Moisture: 18.0

Amount Units g

Date Received: 11-FEB-10

Extraction Type Sonication

Extraction Batch ID: 952704

Concentrated Extract Volume (mL) 10

Date Extracted: 18-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0322050.wiff

Date Analyzed: 23-MAR-10 14:14

Units: ug/kg

Cas No.	Compound	Concentration*	Q	
118-96-7	2,4,6-Trinitrotoluene	500	U	
121-14-2	2,4-Dinitrotoluene	500	U	
121-82-4	RDX	500	U	
19406-51-0	4-Amino-2,6-dinitrotoluene	500	U	
2691-41-0	HMX	500	U	
35572-78-2	2-Amino-4,6-dinitrotoluene	UJ,HE7b	500	U
479-45-8	Tetryl	UJ,HE12e	500	U
606-20-2	2,6-Dinitrotoluene	UJ,HE12e	500	U
78-11-5	PETN	UJ,HE7b	1000	U
88-72-2	o-Nitrotoluene	UJ,HE7b	500	U
98-95-3	Nitrobenzene	500	U	
99-08-1	m-Nitrotoluene	UJ,HE7b	500	U
99-35-4	1,3,5-Trinitrobenzene	500	U	
99-65-0	m-Dinitrobenzene	500	U	
99-99-0	p-Nitrotoluene	UJ,HE7b	500	U

\*Concentration =

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

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8366

Lab Code: GEL

GEL Job No (SDG) 10-1758

Matrix: SOIL

GEL Sample ID: 246866002

Sample Amount 2

Moisture: 18.0

Amount Units g

Date Received: 11-FEB-10

Extraction Type Sonication

Extraction Batch ID: 952704

Concentrated Extract Volume (mL) 10

Date Extracted: 18-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS03050071.wiff

Date Analyzed: 06-MAR-10 11:26

Units: ug/kg

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

\*Concentration =

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

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8367

Lab Code: GEL

GEL Job No (SDG) 10-1758

Matrix: SOIL

GEL Sample ID: 246866003

Sample Amount 2

Moisture: 19.3

Amount Units g

Date Received: 11-FEB-10

Extraction Type Sonication

Extraction Batch ID: 952704

Concentrated Extract Volume (mL) 10

Date Extracted: 18-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0322053.wiff

Date Analyzed: 23-MAR-10 15:33

Units: ug/kg

Cas No.	Compound	Concentration*	Q	
118-96-7	2,4,6-Trinitrotoluene	500	U	
121-14-2	2,4-Dinitrotoluene	500	U	
121-82-4	RDX	500	U	
19406-51-0	4-Amino-2,6-dinitrotoluene	500	U	
2691-41-0	HMX	500	U	
35572-78-2	2-Amino-4,6-dinitrotoluene	UJ,HE7b	500	U
479-45-8	Tetryl	UJ,HE12e	500	U
606-20-2	2,6-Dinitrotoluene	UJ,HE12e	500	U
78-11-5	PETN	UJ,HE7b	1000	U
88-72-2	o-Nitrotoluene	UJ,HE7b	500	U
98-95-3	Nitrobenzene	500	U	
99-08-1	m-Nitrotoluene	UJ,HE7b	500	U
99-35-4	1,3,5-Trinitrobenzene	500	U	
99-65-0	m-Dinitrobenzene	500	U	
99-99-0	p-Nitrotoluene	UJ,HE7b	500	U

\*Concentration =

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

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8367

Lab Code: GEL

GEL Job No (SDG) 10-1758

Matrix: SOIL

GEL Sample ID: 246866003

Sample Amount 2

Moisture: 19.3

Amount Units g

Date Received: 11-FEB-10

Extraction Type Sonication

Extraction Batch ID: 952704

Concentrated Extract Volume (mL) 10

Date Extracted: 18-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS03050074.wiff

Date Analyzed: 06-MAR-10 12:14

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 =

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

1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8364

Lab Code: GEL

GEL Job No (SDG) 10-1758

Matrix: SOIL

GEL Sample ID: 246866004

Sample Amount 2

Moisture: 23.2

Amount Units g

Date Received: 11-FEB-10

Extraction Type Sonication

Extraction Batch ID: 952704

Concentrated Extract Volume (mL) 10

Date Extracted: 18-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0322054.wiff

Date Analyzed: 23-MAR-10 16:00

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	UJ,HE7b	500	U
479-45-8	Tetryl	UJ,HE12e	500	U
606-20-2	2,6-Dinitrotoluene	UJ,HE12e	500	U
78-11-5	PETN	UJ,HE7b	1000	U
88-72-2	o-Nitrotoluene	UJ,HE7b	500	U
98-95-3	Nitrobenzene		500	U
99-08-1	m-Nitrotoluene	UJ,HE7b	500	U
99-35-4	1,3,5-Trinitrobenzene		500	U
99-65-0	m-Dinitrobenzene		500	U
99-99-0	p-Nitrotoluene	UJ,HE7b	500	U

\*Concentration =

Instrument Value	X	<u>Concentrated Extract Volume</u>	X	Dilution Factor
		Sample Amount		

1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8364

Lab Code: GEL

GEL Job No (SDG) 10-1758

Matrix: SOIL

GEL Sample ID: 246866004

Sample Amount 2

Moisture: 23.2

Amount Units g

Date Received: 11-FEB-10

Extraction Type Sonication

Extraction Batch ID: 952704

Concentrated Extract Volume (mL) 10

Date Extracted: 18-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS03050075.wiff

Date Analyzed: 06-MAR-10 12:29

Units: ug/kg

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

\*Concentration =

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

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8365

Lab Code: GEL

GEL Job No (SDG) 10-1758

Matrix: SOIL

GEL Sample ID: 246866005

Sample Amount 2

Moisture: 16.9

Amount Units g

Date Received: 11-FEB-10

Extraction Type Sonication

Extraction Batch ID: 952704

Concentrated Extract Volume (mL) 10

Date Extracted: 18-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0322055.wiff

Date Analyzed: 23-MAR-10 16:26

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	UJ,HE7b	500	U
479-45-8	Tetryl	UJ,HE12e	500	U
606-20-2	2,6-Dinitrotoluene	UJ,HE12e	500	U
78-11-5	PETN	UJ,HE7b	1000	U
88-72-2	o-Nitrotoluene	UJ,HE7b	500	U
98-95-3	Nitrobenzene		500	U
99-08-1	m-Nitrotoluene	UJ,HE7b	500	U
99-35-4	1,3,5-Trinitrobenzene		500	U
99-65-0	m-Dinitrobenzene		500	U
99-99-0	p-Nitrotoluene	UJ,HE7b	500	U

\*Concentration =

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

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8365

Lab Code: GEL

GEL Job No (SDG) 10-1758

Matrix: SOIL

GEL Sample ID: 246866005

Sample Amount 2

Moisture: 16.9

Amount Units g

Date Received: 11-FEB-10

Extraction Type Sonication

Extraction Batch ID: 952704

Concentrated Extract Volume (mL) 10

Date Extracted: 18-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS03050076.wiff

Date Analyzed: 06-MAR-10 12:45

Units: ug/kg

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

\*Concentration =

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



1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8368

Lab Code: GEL

GEL Job No (SDG) 10-1758

Matrix: SOIL

GEL Sample ID: 246866006

Sample Amount 2

Moisture: 24.6

Amount Units g

Date Received: 11-FEB-10

Extraction Type Sonication

Extraction Batch ID: 952704

Concentrated Extract Volume (mL) 10

Date Extracted: 18-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0322056.wiff

Date Analyzed: 23-MAR-10 16:53

Units: ug/kg

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

\*Concentration =

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

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8368

Lab Code: GEL

GEL Job No (SDG) 10-1758

Matrix: SOIL

GEL Sample ID: 246866006

Sample Amount 2

Moisture: 24.6

Amount Units g

Date Received: 11-FEB-10

Extraction Type Sonication

Extraction Batch ID: 952704

Concentrated Extract Volume (mL) 10

Date Extracted: 18-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS03050077.wiff

Date Analyzed: 06-MAR-10 13:01

Units: ug/kg

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

\*Concentration =

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

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8340

Lab Code: GEL

GEL Job No (SDG) 10-1758

Matrix: SOIL

GEL Sample ID: 246866007

Sample Amount 2

Moisture: 24.2

Amount Units g

Date Received: 11-FEB-10

Extraction Type Sonication

Extraction Batch ID: 952704

Concentrated Extract Volume (mL) 10

Date Extracted: 18-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0322057.wiff

Date Analyzed: 23-MAR-10 17:19

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	UJ,HE7b	500	U
479-45-8	Tetryl	UJ,HE12e	500	U
606-20-2	2,6-Dinitrotoluene	UJ,HE12e	500	U
78-11-5	PETN	UJ,HE7b	1000	U
88-72-2	o-Nitrotoluene	UJ,HE7b	500	U
98-95-3	Nitrobenzene		500	U
99-08-1	m-Nitrotoluene	UJ,HE7b	500	U
99-35-4	1,3,5-Trinitrobenzene		500	U
99-65-0	m-Dinitrobenzene		500	U
99-99-0	p-Nitrotoluene	UJ,HE7b	500	U

\*Concentration =

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

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8340

Lab Code: GEL

GEL Job No (SDG) 10-1758

Matrix: SOIL

GEL Sample ID: 246866007

Sample Amount 2

Moisture: 24.2

Amount Units g

Date Received: 11-FEB-10

Extraction Type Sonication

Extraction Batch ID: 952704

Concentrated Extract Volume (mL) 10

Date Extracted: 18-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS03050078.wiff

Date Analyzed: 06-MAR-10 13:16

Units: ug/kg

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

\*Concentration =

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

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8341

Lab Code: GEL

GEL Job No (SDG) 10-1758

Matrix: SOIL

GEL Sample ID: 246866008

Sample Amount 2

Moisture: 7.6

Amount Units g

Date Received: 11-FEB-10

Extraction Type Sonication

Extraction Batch ID: 952704

Concentrated Extract Volume (mL) 10

Date Extracted: 18-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0322061.wiff

Date Analyzed: 23-MAR-10 19:05

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 UJ,HE7b	500	U
479-45-8	Tetryl UJ,HE12e	500	U
606-20-2	2,6-Dinitrotoluene UJ,HE12e	500	U
78-11-5	PETN UJ,HE7b	1000	U
88-72-2	o-Nitrotoluene UJ,HE7b	500	U
98-95-3	Nitrobenzene	500	U
99-08-1	m-Nitrotoluene UJ,HE7b	500	U
99-35-4	1,3,5-Trinitrobenzene	500	U
99-65-0	m-Dinitrobenzene	500	U
99-99-0	p-Nitrotoluene UJ,HE7b	500	U

\*Concentration =

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

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8341

Lab Code: GEL

GEL Job No (SDG) 10-1758

Matrix: SOIL

GEL Sample ID: 246866008

Sample Amount 2

Moisture: 7.6

Amount Units g

Date Received: 11-FEB-10

Extraction Type Sonication

Extraction Batch ID: 952704

Concentrated Extract Volume (mL) 10

Date Extracted: 18-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS03050082.wiff

Date Analyzed: 06-MAR-10 14:19

Units: ug/kg

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

\*Concentration =

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

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8376

Lab Code: GEL

GEL Job No (SDG) 10-1758

Matrix: SOIL

GEL Sample ID: 246866009

Sample Amount 2

Moisture: 24.2

Amount Units g

Date Received: 11-FEB-10

Extraction Type Sonication

Extraction Batch ID: 952704

Concentrated Extract Volume (mL) 10

Date Extracted: 18-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0322062.wiff

Date Analyzed: 23-MAR-10 19:31

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	UJ,HE7b	500	U
479-45-8	Tetryl	UJ,HE12e	500	U
606-20-2	2,6-Dinitrotoluene	UJ,HE12e	500	U
78-11-5	PETN	UJ,HE7b	1000	U
88-72-2	o-Nitrotoluene	UJ,HE7b	500	U
98-95-3	Nitrobenzene		500	U
99-08-1	m-Nitrotoluene	UJ,HE7b	500	U
99-35-4	1,3,5-Trinitrobenzene		500	U
99-65-0	m-Dinitrobenzene		500	U
99-99-0	p-Nitrotoluene	UJ,HE7b	500	U

\*Concentration =

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

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8376

Lab Code: GEL

GEL Job No (SDG) 10-1758

Matrix: SOIL

GEL Sample ID: 246866009

Sample Amount 2

Moisture: 24.2

Amount Units g

Date Received: 11-FEB-10

Extraction Type Sonication

Extraction Batch ID: 952704

Concentrated Extract Volume (mL) 10

Date Extracted: 18-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS03050083.wiff

Date Analyzed: 06-MAR-10 14:35

Units: ug/kg

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

\*Concentration =

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



**DATA VALIDATION COVER SHEET****5116-1****Data Validation Cover Sheet**

Records Use only

**Section I.**REQUEST NUMBER: 10-1758 VALIDATION DATE: 04/13/10 LAB CODE: GELCONTRACT LABORATORY NAME: GEL Laboratories LLCVALIDATOR: Monica Dymerski ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

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

**Section II. Completeness Check**

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

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

None.

**Reviewed by:** Susan Ball**Level:** I**Date:** 04/13/10VALIDATOR'S SIGNATURE: *Monica Dymerski*DATE: 04/13/10

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

5116-2

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

Records Use only \_\_\_\_\_



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

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


5116-2

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

Records Use only \_\_\_\_\_



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

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

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

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

5116-2

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

Records Use only \_\_\_\_\_



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

**PCB**  
**Certificate of Analysis**  
**Sample Summary**

**SDG Number:** 10-1758  
**Lab Sample ID:** 246866007

**Date Collected:** 02/09/2010 12:00  
**Date Received:** 02/11/2010 09:20  
**Client:** LANL010  
**Method:** SW846 8082  
**Inst:** ECD8A.I  
**Analyst:** JAOC  
**Aliquot:** 30.02 g  
**Column:** 1 CLP1  
2 CLP2

**Matrix:** R  
**%Moisture:** 24.2  
**Project:** LANL01004  
**SOP Ref:** GL-OA-E-040  
**Dilution:** 1  
**Inj. Vol:** 1 uL  
**Final Volume:** 1 mL  
**Level:** LOW

**Client ID:** RE15-10-8340  
**Batch ID:** 953960  
**Run Date:** 02/18/2010 16:26  
**Prep Date:** 02/17/2010 13:09  
**Data File:** 051f5101.d  
051b5101.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	4.39	ug/kg	1.46	4.39	1
11104-28-2	Aroclor-1221	U	4.39	ug/kg	1.46	4.39	1
11141-16-5	Aroclor-1232	U	4.39	ug/kg	1.46	4.39	1
53469-21-9	Aroclor-1242	U	4.39	ug/kg	1.46	4.39	1
12672-29-6	Aroclor-1248	U	4.39	ug/kg	1.46	4.39	1
11097-69-1	Aroclor-1254	U	4.39	ug/kg	1.46	4.39	1
11096-82-5	Aroclor-1260	U	4.39	ug/kg	1.46	4.39	1

**PCB**  
**Certificate of Analysis**  
**Sample Summary**

**SDG Number:** 10-1758  
**Lab Sample ID:** 246866008

**Date Collected:** 02/09/2010 12:00  
**Date Received:** 02/11/2010 09:20  
**Client:** LANL010  
**Method:** SW846 8082  
**Inst:** ECD8A.I  
**Analyst:** JAOC  
**Aliquot:** 30.01 g  
**Column:** 1 CLP1  
2 CLP2

**Matrix:** R  
**%Moisture:** 7.6  
**Project:** LANL01004  
**SOP Ref:** GL-OA-E-040  
**Dilution:** 1  
**Inj. Vol:** 1 uL  
**Final Volume:** 1 mL  
**Level:** LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.60	ug/kg	1.20	3.60	1
11104-28-2	Aroclor-1221	U	3.60	ug/kg	1.20	3.60	1
11141-16-5	Aroclor-1232	U	3.60	ug/kg	1.20	3.60	1
53469-21-9	Aroclor-1242	U	3.60	ug/kg	1.20	3.60	1
12672-29-6	Aroclor-1248	U	3.60	ug/kg	1.20	3.60	1
11097-69-1	Aroclor-1254	U	3.60	ug/kg	1.20	3.60	1
11096-82-5	Aroclor-1260	U	3.60	ug/kg	1.20	3.60	1

**PCB**  
**Certificate of Analysis**  
**Sample Summary**

**SDG Number:** 10-1758  
**Lab Sample ID:** 246866009

**Date Collected:** 02/09/2010 12:00  
**Date Received:** 02/11/2010 09:20  
**Client:** LANL010  
**Method:** SW846 8082  
**Inst:** ECD8A.I  
**Analyst:** JAOC  
**Aliquot:** 30 g  
**Column:** 1 CLP1  
2 CLP2

**Matrix:** R  
**%Moisture:** 24.2  
**Project:** LANL01004  
**SOP Ref:** GL-OA-E-040  
**Dilution:** 1  
**Inj. Vol:** 1 uL  
**Final Volume:** 1 mL  
**Level:** LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	4.40	ug/kg	1.46	4.40	1
11104-28-2	Aroclor-1221	U	4.40	ug/kg	1.46	4.40	1
11141-16-5	Aroclor-1232	U	4.40	ug/kg	1.46	4.40	1
53469-21-9	Aroclor-1242	U	4.40	ug/kg	1.46	4.40	1
12672-29-6	Aroclor-1248	U	4.40	ug/kg	1.46	4.40	1
11097-69-1	Aroclor-1254	U	4.40	ug/kg	1.46	4.40	1
11096-82-5	Aroclor-1260	U	4.40	ug/kg	1.46	4.40	1



Wednesday, February 10, 2010

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-1758

LOS ALAMOS

REQUEST NUMBER: 10-1758

NATIONAL LABORATORY

ATTN: Valerie Davis

TURNAROUND/REPORT DUE: 3/12/2010

General Engineering Laboratories, Inc.,  
Charleston, SC.

TURNAROUND REQ'D: 30

2040 Savage Rd

Charleston, SC 29407

LAB REQUEST COMMENTS:

246866

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE15-10-8384	1	SEPTUM AMBER GLASS	8260B Trip Blank	Ice	S
RE15-10-8366	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE15-10-8366	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE15-10-8367	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE15-10-8367	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE15-10-8364	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE15-10-8364	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE15-10-8365	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE15-10-8365	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE15-10-8368	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE15-10-8368	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE15-10-8340	1	AMBER GLASS	8082+8270+NMED-EXP	Ice	R
RE15-10-8340	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE15-10-8341	1	AMBER GLASS	8082+8270+NMED-EXP	Ice	R
RE15-10-8341	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE15-10-8376	1	AMBER GLASS	8082+8270+NMED-EXP	Ice	R
RE15-10-8376	1	SEPTUM AMBER GLASS	8260B	Ice	R

Relinquished By:

Date

Time

Received By:

Date

Time

*[Signature]*  
Printed Name      Signature

2/10/10 1400 Patricia Dover Dent P.W. Dent 2/10/10 09:20  
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

Wednesday, February 10, 2010

Page 1 of 2

REQUEST NUMBER: 10-1758

**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:10-1758

Per Agreement Number:126310011

Project Cost Code: MR3A05529E00

Please analyse the enclosed samples  
according to the schedule indicated:

**SHIP DATE: 2/10/2010****TURNAROUND/REPORT DUE: 3/12/2010****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	RE15-10-8340	R	2/9/2010	
		1	RE15-10-8341	R	2/9/2010	
		1	RE15-10-8376	R	2/9/2010	
	SW-846:8260B	1	RE15-10-8340	R	2/9/2010	
		1	RE15-10-8341	R	2/9/2010	
		1	RE15-10-8364	R	2/9/2010	
		1	RE15-10-8365	R	2/9/2010	
		1	RE15-10-8366	R	2/9/2010	
		1	RE15-10-8367	R	2/9/2010	

Wednesday, February 10, 2010

REQUEST NUMBER: 10-1758

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8260B	1	RE15-10-8368	R	2/9/2010	
		1	RE15-10-8376	R	2/9/2010	
		1	RE15-10-8384	S	2/9/2010	
	SW-846:8270C	1	RE15-10-8340	R	2/9/2010	
		1	RE15-10-8341	R	2/9/2010	
		1	RE15-10-8364	R	2/9/2010	
		1	RE15-10-8365	R	2/9/2010	
		1	RE15-10-8366	R	2/9/2010	
		1	RE15-10-8367	R	2/9/2010	
		1	RE15-10-8368	R	2/9/2010	
		1	RE15-10-8376	R	2/9/2010	
	SW-846:8321A_MOD	1	RE15-10-8340	R	2/9/2010	
		1	RE15-10-8341	R	2/9/2010	
		1	RE15-10-8364	R	2/9/2010	
		1	RE15-10-8365	R	2/9/2010	
		1	RE15-10-8366	R	2/9/2010	
		1	RE15-10-8367	R	2/9/2010	
		1	RE15-10-8368	R	2/9/2010	
		1	RE15-10-8376	R	2/9/2010	

Final Page of REQUEST NUMBER 10-1758

**Case Narrative for  
Los Alamos National Laboratory (72733-001-09)  
LANL ER Project  
Workorder #: 246866  
SDG # : 10-1758**

**February 17, 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 11, 2010 for analysis. The samples were prepared/analyzed within the required holding time. Shipping container temperatures were checked, documented, and within specifications. The samples were screened according to GEL Standard Operating Procedure. The samples were delivered with proper chain of custody documentation and signatures. All sample containers arrived without any visible signs of tampering or breakage. Containers were checked for pH, where appropriate, and matched the preservative as documented on the accompanying chain of custody. Shipping container temperature was within specification (0 - 6C).

**Sample Identification** The laboratory received the following samples:

<u>Laboratory ID</u>	<u>Client ID</u>
246866001	RE15-10-8384
246866002	RE15-10-8366
246866003	RE15-10-8367
246866004	RE15-10-8364
246866005	RE15-10-8365
246866006	RE15-10-8368
246866007	RE15-10-8340
246866008	RE15-10-8341
246866009	RE15-10-8376

**Case Narrative**

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

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

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

  
Valerie Davis  
Project Manager

**List of current GEL Certifications as of 17 February 2010**

<b>State</b>	<b>Certification</b>
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**

Wednesday, February 10, 2010

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-1758

REQUEST NUMBER: 10-1758

**LOS ALAMOS****NATIONAL LABORATORY**

ATTN: Valerie Davis

TURNAROUND/REPORT DUE: 3/12/2010

General Engineering Laboratories, Inc.,  
Charleston, SC.

TURNAROUND REQ'D: 30

2040 Savage Rd

Charleston, SC 29407

LAB REQUEST COMMENTS:

246866

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE15-10-8384	1	SEPTUM AMBER GLASS	8260B Trip Blank	Ice	S
RE15-10-8366	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE15-10-8366	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE15-10-8367	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE15-10-8367	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE15-10-8364	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE15-10-8364	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE15-10-8365	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE15-10-8365	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE15-10-8368	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE15-10-8368	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE15-10-8340	1	AMBER GLASS	8082+8270+NMED-EXP	Ice	R
RE15-10-8340	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE15-10-8341	1	AMBER GLASS	8082+8270+NMED-EXP	Ice	R
RE15-10-8341	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE15-10-8376	1	AMBER GLASS	8082+8270+NMED-EXP	Ice	R
RE15-10-8376	1	SEPTUM AMBER GLASS	8260B	Ice	R

Relinquished By:

Date

Time

Received By:

Date

Time

*[Signature]*  
Printed Name      Signature

2/10/10 1400 Patricia Dover Dent P.W. Dent 2/10/10 09:20  
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

Wednesday, February 10, 2010

**LOS ALAMOS**  
NATIONAL LABORATORY

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

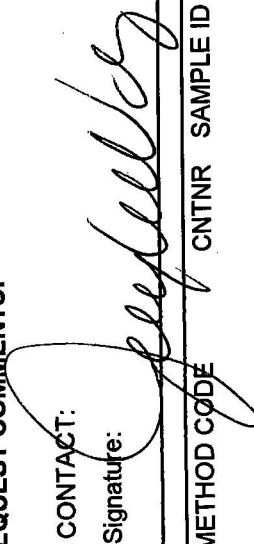
Please analyse the enclosed samples  
according to the schedule indicated:

**SHIP DATE: 2/10/2010**  
**TURNAROUND/REPORT DUE: 3/12/2010**  
**TURNAROUND REQ'D: 30 Days**

**RAD SCREENING: Yes, Below Background**  
**LAB REQUEST COMMENTS:**

LANL ER SMO CONTACT:

Signature:



Page 1 of 2  
REQUEST NUMBER: 10-1758

These Samples are on:  
LANL Request Number: 10-1758  
Per Agreement Number: 126310011  
Project Cost Code: MR3A05529E00

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846-8082	1	RE15-10-8340	R	2/9/2010	
		1	RE15-10-8341	R	2/9/2010	
		1	RE15-10-8376	R	2/9/2010	
		1	RE15-10-8340	R	2/9/2010	
		1	RE15-10-8341	R	2/9/2010	
		1	RE15-10-8364	R	2/9/2010	
		1	RE15-10-8365	R	2/9/2010	
		1	RE15-10-8366	R	2/9/2010	
	SW-846-8260B	1	RE15-10-8367	R	2/9/2010	



REQUEST NUMBER: 10-1758

Wednesday, February 10, 2010

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8260B	1	RE15-10-8368	R	2/9/2010	
		1	RE15-10-8376	R	2/9/2010	
		1	RE15-10-8384	S	2/9/2010	
	SW-846:8270C	1	RE15-10-8340	R	2/9/2010	
		1	RE15-10-8341	R	2/9/2010	
		1	RE15-10-8364	R	2/9/2010	
		1	RE15-10-8365	R	2/9/2010	
		1	RE15-10-8366	R	2/9/2010	
		1	RE15-10-8367	R	2/9/2010	
		1	RE15-10-8368	R	2/9/2010	
		1	RE15-10-8376	R	2/9/2010	
	SW-846:8321A_MOD	1	RE15-10-8340	R	2/9/2010	
		1	RE15-10-8341	R	2/9/2010	
		1	RE15-10-8364	R	2/9/2010	
		1	RE15-10-8365	R	2/9/2010	
		1	RE15-10-8366	R	2/9/2010	
		1	RE15-10-8367	R	2/9/2010	
		1	RE15-10-8368	R	2/9/2010	
		1	RE15-10-8376	R	2/9/2010	

Final Page of REQUEST NUMBER 10-1758



## SAMPLE RECEIPT &amp; REVIEW FORM

Client: LANL			SDG/ARCOC/Work Order: 10-1758		
Received By: Patricia Dover-Dent			Date Received: February 11, 2009		
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*: 40 CPM		
Classified Radioactive II by RSO?		X			
COC/Samples marked containing PCBs?		X			
Shipped as a DOT Hazardous?		X	Hazard Class Shipped: UN#:		
Samples identified as Foreign Soil?		X			

Sample Receipt Criteria	Yes	NA	No	Comments/Qualifiers (Required for Non-Conforming Items)
1 Shipping containers received intact and sealed?	X			Circle Applicable: seals broken damaged container leaking container other (describe)
2 Samples requiring cold preservation within $0 \leq 6$ deg. C?	X			Preservation Method: ice bags blue ice dry ice none other (describe) 1-6 8, 10-13,15
3 Chain of custody documents included with shipment?	X			
4 Sample containers intact and sealed?	X			Circle Applicable: seals broken damaged container leaking container other (describe)
5 Samples requiring chemical preservation at proper pH?		X		Sample ID's, containers affected and observed pH: If Preservation added, Lot#:
6 VOA vials free of headspace (defined as < 6mm bubble)?		X		Sample ID's and containers affected:
7 Are Encore containers present?			X	(If yes, immediately deliver to Volatiles laboratory)
8 Samples received within holding time?	X			Id's and tests affected:
9 Sample ID's on COC match ID's on bottles?	X			Sample ID's and containers affected:
10 Date & time on COC match date & time on bottles?			X	Sample ID's affected: time written on containers, not on COC
11 Number of containers received match number indicated on COC?	X			Sample ID's affected:
12 COC form is properly signed in relinquished/received sections?	X			

## Comments: FEDEX#S

7209 7849 9959 1C	7209 7849 9948 2C	7209 7849 9890 10C
7209 7850 0095 1C	7209 7850 0030 2C	7209 7850 0051 8C
7209 7850 0007 1C	7209 7849 9992 4C	7209 7849 9878 12C
7209 7850 0084 1C	7209 7849 9926 3C	7209 7849 9867 11C
7209 7849 9981 2C	7209 7850 0073 6C	7209 7849 9904 15C
7209 7849 9937 1C	7209 7850 0040 5C	7209 7849 9889 13C
7209 7849 9915 2C	7209 7849 9970 6C	
7209 7850 0062 2C	7209 7849 9960 6C	

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: 10FEB10  
ACTWGT: 53.0 LB MAN  
CAD: 0014176/CAFE2449

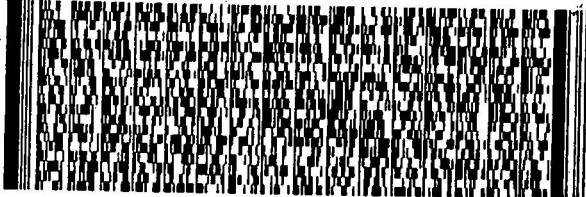
BILL SENDER

VALERIE DAVIS  
GENERAL ENGINEERING LAB  
2040 SAVAGE RD

CHARLESTON SC 29407

(843) 556-8171

REF: 6B010AMR3A05529E00



FedEx  
Express



J09200911302223

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: 10FEB10  
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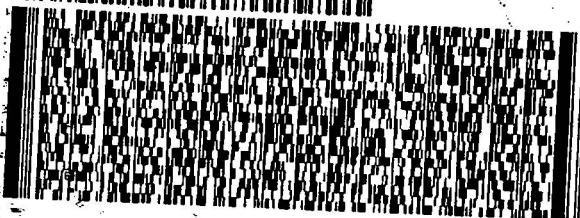
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VALERIE DAVIS  
GENERAL ENGINEERING LAB  
2040 SAVAGE RD

CHARLESTON SC 29407

(843) 556-8171

REF: 6B010AMR3A0532VA00



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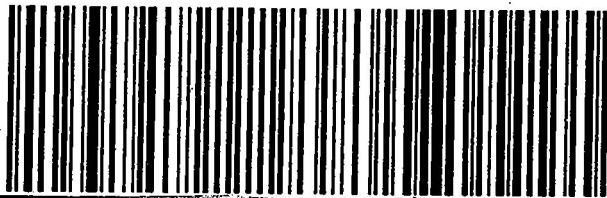


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PRIORITY OVERNIGHT

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SC-US  
CHS



1# 156148-434 NRIT V3 08-09

TRK# 7209 7850 0095  
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PRIORITY OVERNIGHT

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SC-US  
CHS



Part # 156148-434 NRIT V3 08-09

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

LOS ALAMOS, NM 87545  
UNITED STATES US

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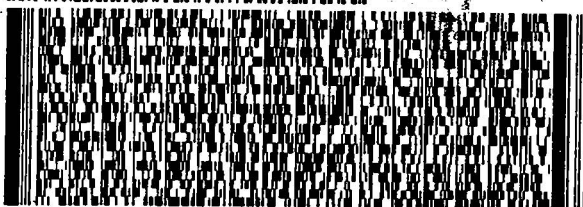
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(843) 556-8171

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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

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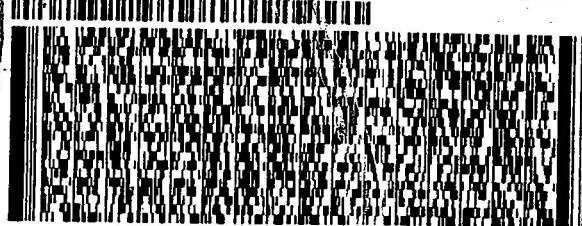
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2040 SAVAGE RD

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(843) 556-8171

REF: 6B010AMR3A0532VA00



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PRIORITY OVERNIGHT

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Page 9 of 120

MPS# 7209 7850 0084  
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PRIORITY OVERNIGHT

Mstr# 7209 7850 0073 0201

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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: 10FEB10  
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BILL SENDER

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

LOS ALAMOS, NM 87545  
UNITED STATES US

SHIP DATE:  
ACTWGT:  
CAD: 0

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GENERAL ENGINEERING LAB  
2040 SAVAGE RD

CHARLESTON SC 29407

(843) 556-8171

REF: 6B010AMR3A0532VA00

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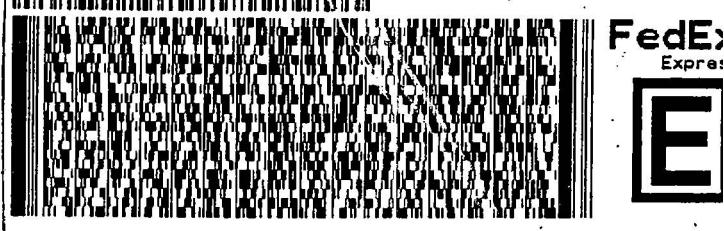
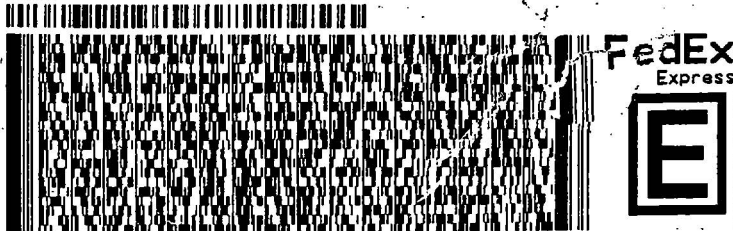
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2040 SAVAGE RD

CHARLESTON SC 29407

(843) 556-8171

REF: 6B010AMR3A0532VA00

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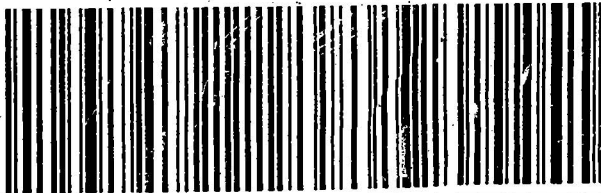
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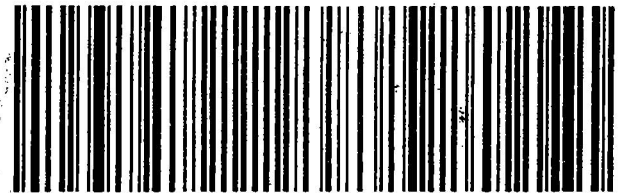
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# 156148-434 NRIT V3 06-09



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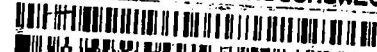
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GENERAL ENGINEERING LAB  
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ORIGIN ID: SAFA (505) 665-9968  
JOYLENE VALDEZ  
LOS ALAMOS NATL LAB  
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545  
UNITED STATES US

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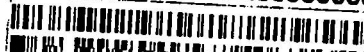
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PRIORITY OVERNIGHT

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THU - 11FEB A1  
PRIORITY OVERNIGHT

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SC-US  
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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: 10FEB10  
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GENERAL ENGINEERING LAB  
2040 SAVAGE RD

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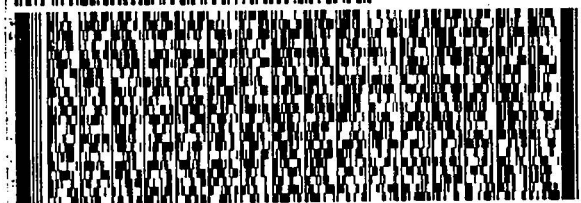
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CHS



LOS ALAMOS, NM 87545  
UNITED STATES US

VALERIE DAVIS  
GENERAL ENGINEERING LAB  
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1 of 2  
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Page 13 of 1254

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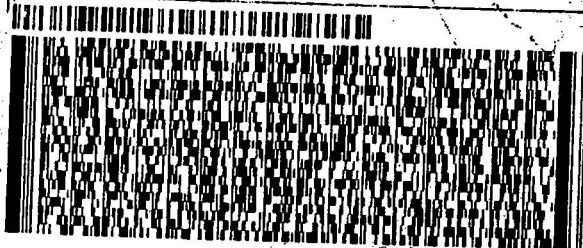
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1 of 2  
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## MASTER ##

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PRIORITY OVERNIGHT

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

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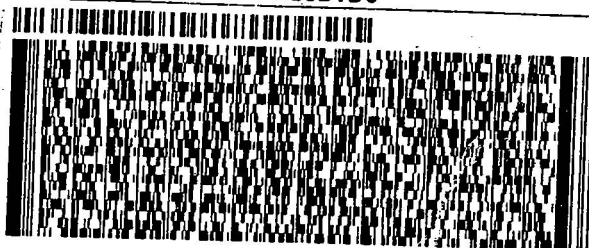
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ORIGIN ID: SAFA (505) 665-9968  
JOYLENE VALDEZ  
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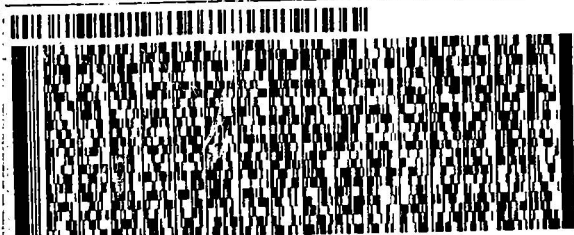
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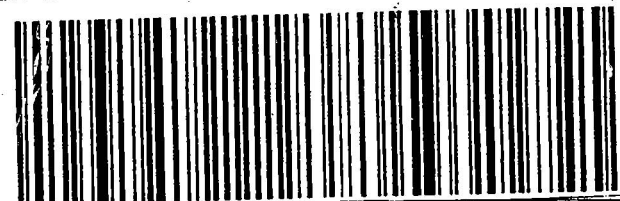
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ORIGIN ID: SAFA (505) 665-9968  
JOYLENE VALDEZ  
LOS ALAMOS NATL LAB  
TA00 BLDG 1237 DPU 03

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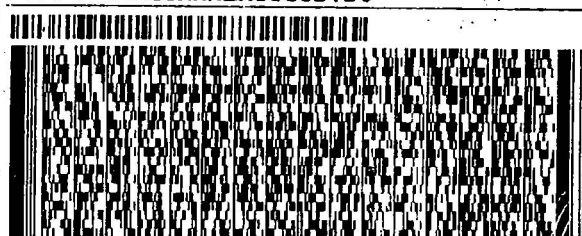
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PRIORITY OVERNIGHT

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# **Data Review Qualifier Flag Definition Sheet**

## Data Review Qualifier Definitions

Qualifier Explanation

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

\*\* Analyte is a surrogate compound

< Result is less than value reported

> Result is greater than value reported

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

A The TIC is a suspected aldol-condensation product

B Target analyte was detected in the associated blank

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

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

C Analyte has been confirmed by GC/MS analysis

D Results are reported from a diluted aliquot of the sample

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

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

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

H Analytical holding time was exceeded

h Preparation or preservation holding time was exceeded

J Value is estimated

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

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

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

ND Analyte concentration is not detected above the reporting limit

UI Gamma Spectroscopy-Uncertain identification

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

Y QC Samples were not spiked with this compound

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

# **GC/MS Volatile Analysis**

# Case Narrative

**ChemStation Case Narrative  
Los Alamos National Laboratory (LANL)  
SDG 10-1758**

**Method/Analysis Information**

Procedure: Volatile Organic Compounds (VOC) by Gas Chromatograph/Mass Spectrometer  
Analytical Method: SW846 8260B  
Prep Method: SW846 5030  
Analytical Batch Number: 955077  
Prep Batch Number: 955076

**Sample Analysis**

The following client and quality control samples were analyzed to complete this SDG using the methods referenced in the Analysis Information section:

<b>Sample ID</b>	<b>Client ID</b>
246866001	RE15-10-8384
246866002	RE15-10-8366
246866003	RE15-10-8367
246866004	RE15-10-8364
246866005	RE15-10-8365
246866006	RE15-10-8368
246866007	RE15-10-8340
246866008	RE15-10-8341
246866009	RE15-10-8376
1202047550	Method Blank (MB)
1202047553	Laboratory Control Sample (LCS)
1202047554	Laboratory Control Sample (LCS)
1202047551	246866002(RE15-10-8366) Post Spike (PS)
1202047552	246866002(RE15-10-8366) Post Spike Duplicate (PSD)

NOTE: For volatile organic analyses the matrix spike designations may be indicated as "PS" or "PSD". The "PS" designation (post spike) indicates that the matrix was fortified prior to analysis but after applying any prep factors, such as a dilution. The laboratory considers the MS/MSD and PS/PSD designations interchangeable.

Samples 246866 002, 003, 004, 005, 006, 007, 008 and 009 in this SDG were analyzed on an "dry weight" basis. Samples 246866 001 in this SDG were analyzed on a "as received" basis.

**Preparation/Analytical Method Verification**

**SOP Reference**

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

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

**Calibration Information**

Please note that the 'Cal Date' indicated on each quantitation report reflects the date and time of the most recent calibrated analyte(s) in the processing method. Since the laboratory may calibrate with multiple solutions on different days using the same processing method, the software will update the 'Cal Date' to the

last calibration file, date and time. The correct dates and times for all calibration files are located on the Calibration History report in the Standard Data section in the data package.

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

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

#### **Initial Calibration**

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

#### **Continuing Calibration Verification Requirements**

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

#### **Quality Control (QC) Information**

##### **Method Blank (MB) Statement**

The MB analyzed with this SDG met the acceptance criteria.

##### **Surrogate Recoveries**

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

##### **Laboratory Control Sample (LCS) Recovery**

The LCS spike recoveries met the acceptance limits.

##### **QC Sample Designation**

Sample 246866002 (RE15-10-8366) was designated for spike analysis.

##### **Matrix Spike (PS) Recovery Statement**

The spike recoveries were not all within the acceptance limits. The spike duplicate recovered in a similar manner. The results are reported. See DER 793510.

##### **Matrix Spike Duplicate (PSD) Recovery Statement**

The spike duplicate recoveries were not all within the acceptance limits. The spike recovered in a similar manner. The results are reported. See DER 793510.

##### **Relative Percent Difference (RPD) Statement**

The RPD between the matrix spike pair were not all within the acceptance limits. The results are reported. See DER 793510.

##### **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**

DER # 793510 was generated for this SDG.

**Manual Integrations**

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

**TIC Comment**

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

**Additional Comments**

Additional comments were not required for this SDG.

**Residual Chlorine**

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

**System Configuration**

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

<b>Instrument ID</b>	<b>Instrument</b>	<b>System Configuration</b>	<b>Column ID</b>	<b>Column Description</b>	<b>P &amp; T Trap</b>
VOAA.I	Agilent 7890/5975C GC/MS system	HP7890A/HP5975C	DB-624	J&W, 60m x 0.25mm x 1.4um	Trap 10

**Certification Statement**

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

## **GEL LABORATORIES LLC**

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

### **Certificate of Analysis Report for**

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

Client SDG: 10-1758 GEL Work Order: 246866

**The Qualifiers in this report are defined as follows:**

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

\*\* Analyte is a surrogate compound

J Value is estimated

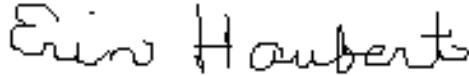
U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.

**Review/Validation**

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

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

**Signature:**



**Name:** Erin Haubert

**Date:** 06 MAR 2010

**Title:** Data Validator



# **Sample Data Summary**

**Volatile  
Certificate of Analysis  
Sample Summary**

**SDG Number:** 10-1758  
**Lab Sample ID:** 246866001

**Date Collected:** 02/09/2010 12:00  
**Date Received:** 02/11/2010 09:20

**Matrix:** S

**Client ID:** RE15-10-8384  
**Batch ID:** 955077  
**Run Date:** 02/19/2010 07:00  
**Prep Date:** 02/18/2010 20:06  
**Data File:** 021810\AY431.D

**Client:** LANL010  
**Method:** SW846 8260B  
**Inst:** VOAA.I  
**Analyst:** JEB  
**Aliquot:** 5 g  
**Column:** DB-624

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

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.00	ug/kg	0.340	1.00
74-87-3	Chloromethane	U	1.00	ug/kg	0.300	1.00
75-01-4	Vinyl chloride	U	1.00	ug/kg	0.300	1.00
74-83-9	Bromomethane	U	1.00	ug/kg	0.300	1.00
75-00-3	Chloroethane	U	1.00	ug/kg	0.300	1.00
75-69-4	Trichlorofluoromethane	U	1.00	ug/kg	0.300	1.00
67-64-1	Acetone	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:** 10-1758  
**Lab Sample ID:** 246866001

**Date Collected:** 02/09/2010 12:00  
**Date Received:** 02/11/2010 09:20  
**Client:** LANL010  
**Method:** SW846 8260B  
**Inst:** VOAA.I  
**Analyst:** JEB  
**Aliquot:** 5 g  
**Column:** DB-624

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

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

**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	unknown siloxane	17.73	11.6	ug/kg	0	J

**Volatile  
Certificate of Analysis  
Sample Summary**

**SDG Number:** 10-1758  
**Lab Sample ID:** 246866002

**Date Collected:** 02/09/2010 12:00  
**Date Received:** 02/11/2010 09:20  
**Client:** LANL010  
**Method:** SW846 8260B  
**Inst:** VOAA.I  
**Analyst:** JEB  
**Aliquot:** 5.2 g  
**Column:** DB-624

**Matrix:** R  
**%Moisture:** 18  
**Project:** LANL01004  
**SOP Ref:** GL-OA-E-038  
**Dilution:** 1  
**Purge Vol:** 5 mL  
**Final Volume:** 5 mL

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.17	ug/kg	0.399	1.17
74-87-3	Chloromethane	U	1.17	ug/kg	0.352	1.17
75-01-4	Vinyl chloride	U	1.17	ug/kg	0.352	1.17
74-83-9	Bromomethane	U	1.17	ug/kg	0.352	1.17
75-00-3	Chloroethane	U	1.17	ug/kg	0.352	1.17
75-69-4	Trichlorofluoromethane	U	1.17	ug/kg	0.352	1.17
67-64-1	Acetone	U	5.86	ug/kg	1.95	5.86
75-35-4	1,1-Dichloroethylene	U	1.17	ug/kg	0.352	1.17
74-88-4	Iodomethane	U	5.86	ug/kg	1.88	5.86
75-09-2	Methylene chloride	U	5.86	ug/kg	2.35	5.86
75-15-0	Carbon disulfide	U	5.86	ug/kg	1.47	5.86
156-60-5	trans-1,2-Dichloroethylene	U	1.17	ug/kg	0.352	1.17
75-34-3	1,1-Dichloroethane	U	1.17	ug/kg	0.352	1.17
78-93-3	2-Butanone	U	5.86	ug/kg	1.76	5.86
156-59-2	cis-1,2-Dichloroethylene	U	1.17	ug/kg	0.352	1.17
594-20-7	2,2-Dichloropropane	U	1.17	ug/kg	0.352	1.17
67-66-3	Chloroform	U	1.17	ug/kg	0.352	1.17
74-97-5	Bromochloromethane	U	1.17	ug/kg	0.387	1.17
71-55-6	1,1,1-Trichloroethane	U	1.17	ug/kg	0.352	1.17
563-58-6	1,1-Dichloropropene	U	1.17	ug/kg	0.352	1.17
56-23-5	Carbon tetrachloride	U	1.17	ug/kg	0.352	1.17
107-06-2	1,2-Dichloroethane	U	1.17	ug/kg	0.352	1.17
71-43-2	Benzene	U	1.17	ug/kg	0.352	1.17
79-01-6	Trichloroethylene	U	1.17	ug/kg	0.387	1.17
78-87-5	1,2-Dichloropropane	U	1.17	ug/kg	0.352	1.17
75-27-4	Bromodichloromethane	U	1.17	ug/kg	0.352	1.17
74-95-3	Dibromomethane	U	1.17	ug/kg	0.352	1.17
108-10-1	4-Methyl-2-pentanone	U	5.86	ug/kg	1.47	5.86
10061-01-5	cis-1,3-Dichloropropylene	U	1.17	ug/kg	0.352	1.17
108-88-3	Toluene	U	1.17	ug/kg	0.352	1.17
10061-02-6	trans-1,3-Dichloropropylene	U	1.17	ug/kg	0.352	1.17
79-00-5	1,1,2-Trichloroethane	U	1.17	ug/kg	0.352	1.17
591-78-6	2-Hexanone	U	5.86	ug/kg	1.76	5.86
142-28-9	1,3-Dichloropropane	U	1.17	ug/kg	0.352	1.17
127-18-4	Tetrachloroethylene	U	1.17	ug/kg	0.352	1.17
124-48-1	Dibromochloromethane	U	1.17	ug/kg	0.352	1.17
106-93-4	1,2-Dibromoethane	U	1.17	ug/kg	0.352	1.17
108-90-7	Chlorobenzene	U	1.17	ug/kg	0.352	1.17

**Volatile**  
**Certificate of Analysis**  
**Sample Summary**

**SDG Number:** 10-1758  
**Lab Sample ID:** 246866002

**Date Collected:** 02/09/2010 12:00  
**Date Received:** 02/11/2010 09:20  
**Client:** LANL010  
**Method:** SW846 8260B  
**Inst:** VOAA.I  
**Analyst:** JEB  
**Aliquot:** 5.2 g  
**Column:** DB-624

**Matrix:** R  
**%Moisture:** 18  
**Project:** LANL01004  
**SOP Ref:** GL-OA-E-038  
**Dilution:** 1  
**Purge Vol:** 5 mL  
**Final Volume:** 5 mL

**Client ID:** RE15-10-8366  
**Batch ID:** 955077  
**Run Date:** 02/19/2010 07:26  
**Prep Date:** 02/18/2010 20:07  
**Data File:** 021810\AY432.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.17	ug/kg	0.352	1.17
179601-23-1	m,p-Xylenes	U	2.35	ug/kg	0.352	2.35
95-47-6	o-Xylene	U	1.17	ug/kg	0.352	1.17
100-42-5	Styrene	U	1.17	ug/kg	0.352	1.17
75-25-2	Bromoform	U	1.17	ug/kg	0.352	1.17
79-34-5	1,1,2,2-Tetrachloroethane	U	1.17	ug/kg	0.352	1.17
96-18-4	1,2,3-Trichloropropane	U	1.17	ug/kg	0.352	1.17
108-86-1	Bromobenzene	U	1.17	ug/kg	0.352	1.17
103-65-1	n-Propylbenzene	U	1.17	ug/kg	0.352	1.17
95-49-8	2-Chlorotoluene	U	1.17	ug/kg	0.352	1.17
98-82-8	Isopropylbenzene	U	1.17	ug/kg	0.352	1.17
108-67-8	1,3,5-Trimethylbenzene	U	1.17	ug/kg	0.352	1.17
106-43-4	4-Chlorotoluene	U	1.17	ug/kg	0.352	1.17
98-06-6	tert-Butylbenzene	U	1.17	ug/kg	0.352	1.17
95-63-6	1,2,4-Trimethylbenzene	U	1.17	ug/kg	0.352	1.17
135-98-8	sec-Butylbenzene	U	1.17	ug/kg	0.352	1.17
99-87-6	4-Isopropyltoluene	U	1.17	ug/kg	0.352	1.17
541-73-1	1,3-Dichlorobenzene	U	1.17	ug/kg	0.352	1.17
106-46-7	1,4-Dichlorobenzene	U	1.17	ug/kg	0.352	1.17
104-51-8	n-Butylbenzene	U	1.17	ug/kg	0.352	1.17
96-12-8	1,2-Dibromo-3-chloropropane	U	1.17	ug/kg	0.352	1.17
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.86	ug/kg	1.88	5.86
	<i>Trichlorotrifluoroethane</i>					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.17	ug/kg	0.352	1.17
95-50-1	1,2-Dichlorobenzene	U	1.17	ug/kg	0.352	1.17

**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	unknown siloxane	15.61	6.91	ug/kg	0	J

**Volatile**  
**Certificate of Analysis**  
**Sample Summary**

**SDG Number:** 10-1758  
**Lab Sample ID:** 246866003

**Date Collected:** 02/09/2010 12:00  
**Date Received:** 02/11/2010 09:20  
**Client:** LANL010  
**Method:** SW846 8260B  
**Inst:** VOAA.I  
**Analyst:** JEB  
**Aliquot:** 5.2 g  
**Column:** DB-624

**Matrix:** R  
**%Moisture:** 19.3  
**Project:** LANL01004  
**SOP Ref:** GL-OA-E-038  
**Dilution:** 1  
**Purge Vol:** 5 mL  
**Final Volume:** 5 mL

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.19	ug/kg	0.405	1.19
74-87-3	Chloromethane	U	1.19	ug/kg	0.357	1.19
75-01-4	Vinyl chloride	U	1.19	ug/kg	0.357	1.19
74-83-9	Bromomethane	U	1.19	ug/kg	0.357	1.19
75-00-3	Chloroethane	U	1.19	ug/kg	0.357	1.19
75-69-4	Trichlorofluoromethane	U	1.19	ug/kg	0.357	1.19
67-64-1	Acetone	J	2.13	ug/kg	1.98	5.96
75-35-4	1,1-Dichloroethylene	U	1.19	ug/kg	0.357	1.19
74-88-4	Iodomethane	U	5.96	ug/kg	1.91	5.96
75-09-2	Methylene chloride	U	5.96	ug/kg	2.38	5.96
75-15-0	Carbon disulfide	U	5.96	ug/kg	1.49	5.96
156-60-5	trans-1,2-Dichloroethylene	U	1.19	ug/kg	0.357	1.19
75-34-3	1,1-Dichloroethane	U	1.19	ug/kg	0.357	1.19
78-93-3	2-Butanone	U	5.96	ug/kg	1.79	5.96
156-59-2	cis-1,2-Dichloroethylene	U	1.19	ug/kg	0.357	1.19
594-20-7	2,2-Dichloropropane	U	1.19	ug/kg	0.357	1.19
67-66-3	Chloroform	U	1.19	ug/kg	0.357	1.19
74-97-5	Bromochloromethane	U	1.19	ug/kg	0.393	1.19
71-55-6	1,1,1-Trichloroethane	U	1.19	ug/kg	0.357	1.19
563-58-6	1,1-Dichloropropene	U	1.19	ug/kg	0.357	1.19
56-23-5	Carbon tetrachloride	U	1.19	ug/kg	0.357	1.19
107-06-2	1,2-Dichloroethane	U	1.19	ug/kg	0.357	1.19
71-43-2	Benzene	U	1.19	ug/kg	0.357	1.19
79-01-6	Trichloroethylene	U	1.19	ug/kg	0.393	1.19
78-87-5	1,2-Dichloropropane	U	1.19	ug/kg	0.357	1.19
75-27-4	Bromodichloromethane	U	1.19	ug/kg	0.357	1.19
74-95-3	Dibromomethane	U	1.19	ug/kg	0.357	1.19
108-10-1	4-Methyl-2-pentanone	U	5.96	ug/kg	1.49	5.96
10061-01-5	cis-1,3-Dichloropropylene	U	1.19	ug/kg	0.357	1.19
108-88-3	Toluene	U	1.19	ug/kg	0.357	1.19
10061-02-6	trans-1,3-Dichloropropylene	U	1.19	ug/kg	0.357	1.19
79-00-5	1,1,2-Trichloroethane	U	1.19	ug/kg	0.357	1.19
591-78-6	2-Hexanone	U	5.96	ug/kg	1.79	5.96
142-28-9	1,3-Dichloropropane	U	1.19	ug/kg	0.357	1.19
127-18-4	Tetrachloroethylene	U	1.19	ug/kg	0.357	1.19
124-48-1	Dibromochloromethane	U	1.19	ug/kg	0.357	1.19
106-93-4	1,2-Dibromoethane	U	1.19	ug/kg	0.357	1.19
108-90-7	Chlorobenzene	U	1.19	ug/kg	0.357	1.19

**Volatile**  
**Certificate of Analysis**  
**Sample Summary**

**SDG Number:** 10-1758  
**Lab Sample ID:** 246866003

**Date Collected:** 02/09/2010 12:00  
**Date Received:** 02/11/2010 09:20  
**Client:** LANL010  
**Method:** SW846 8260B  
**Inst:** VOAA.I  
**Analyst:** JEB  
**Aliquot:** 5.2 g  
**Column:** DB-624

**Matrix:** R  
**%Moisture:** 19.3  
**Project:** LANL01004  
**SOP Ref:** GL-OA-E-038  
**Dilution:** 1  
**Purge Vol:** 5 mL  
**Final Volume:** 5 mL

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.19	ug/kg	0.357	1.19
179601-23-1	m,p-Xylenes	U	2.38	ug/kg	0.357	2.38
95-47-6	o-Xylene	U	1.19	ug/kg	0.357	1.19
100-42-5	Styrene	U	1.19	ug/kg	0.357	1.19
75-25-2	Bromoform	U	1.19	ug/kg	0.357	1.19
79-34-5	1,1,2,2-Tetrachloroethane	U	1.19	ug/kg	0.357	1.19
96-18-4	1,2,3-Trichloropropane	U	1.19	ug/kg	0.357	1.19
108-86-1	Bromobenzene	U	1.19	ug/kg	0.357	1.19
103-65-1	n-Propylbenzene	U	1.19	ug/kg	0.357	1.19
95-49-8	2-Chlorotoluene	U	1.19	ug/kg	0.357	1.19
98-82-8	Isopropylbenzene	U	1.19	ug/kg	0.357	1.19
108-67-8	1,3,5-Trimethylbenzene	U	1.19	ug/kg	0.357	1.19
106-43-4	4-Chlorotoluene	U	1.19	ug/kg	0.357	1.19
98-06-6	tert-Butylbenzene	U	1.19	ug/kg	0.357	1.19
95-63-6	1,2,4-Trimethylbenzene	U	1.19	ug/kg	0.357	1.19
135-98-8	sec-Butylbenzene	U	1.19	ug/kg	0.357	1.19
99-87-6	4-Isopropyltoluene	U	1.19	ug/kg	0.357	1.19
541-73-1	1,3-Dichlorobenzene	U	1.19	ug/kg	0.357	1.19
106-46-7	1,4-Dichlorobenzene	U	1.19	ug/kg	0.357	1.19
104-51-8	n-Butylbenzene	U	1.19	ug/kg	0.357	1.19
96-12-8	1,2-Dibromo-3-chloropropane	U	1.19	ug/kg	0.357	1.19
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.96	ug/kg	1.91	5.96
	<i>Trichlorotrifluoroethane</i>					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.19	ug/kg	0.357	1.19
95-50-1	1,2-Dichlorobenzene	U	1.19	ug/kg	0.357	1.19

**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	unknown siloxane	15.61	8.82	ug/kg	0	J
	unknown siloxane	17.73	14.2	ug/kg	0	J

**Volatile**  
**Certificate of Analysis**  
**Sample Summary**

**SDG Number:** 10-1758  
**Lab Sample ID:** 246866004

**Date Collected:** 02/09/2010 12:00  
**Date Received:** 02/11/2010 09:20  
**Client:** LANL010  
**Method:** SW846 8260B  
**Inst:** VOAA.I  
**Analyst:** JEB  
**Aliquot:** 5.2 g  
**Column:** DB-624

**Matrix:** R  
**%Moisture:** 23.2  
**Project:** LANL01004  
**SOP Ref:** GL-OA-E-038  
**Dilution:** 1  
**Purge Vol:** 5 mL  
**Final Volume:** 5 mL

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.25	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	J	0.438	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:** 10-1758  
**Lab Sample ID:** 246866004

**Date Collected:** 02/09/2010 12:00  
**Date Received:** 02/11/2010 09:20  
**Client:** LANL010  
**Method:** SW846 8260B  
**Inst:** VOAA.I  
**Analyst:** JEB  
**Aliquot:** 5.2 g  
**Column:** DB-624

**Matrix:** R  
**%Moisture:** 23.2  
**Project:** LANL01004  
**SOP Ref:** GL-OA-E-038  
**Dilution:** 1  
**Purge Vol:** 5 mL  
**Final Volume:** 5 mL

**Client ID:** RE15-10-8364  
**Batch ID:** 955077  
**Run Date:** 02/19/2010 08:19  
**Prep Date:** 02/18/2010 20:09  
**Data File:** 021810\AY434.D

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-Trifluoroethane	U	6.26	ug/kg	2.00	6.26
	<i>Trichlorotrifluoroethane</i>					
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	3.33	9.22	ug/kg	0	J
007785-70-8	1R-.alpha.-Pinene	13.55	135	ug/kg	97	NJ
	unknown siloxane	17.73	19.2	ug/kg	0	J

**Volatile**  
**Certificate of Analysis**  
**Sample Summary**

**SDG Number:** 10-1758  
**Lab Sample ID:** 246866005

**Date Collected:** 02/09/2010 12:00  
**Date Received:** 02/11/2010 09:20  
**Client:** LANL010  
**Method:** SW846 8260B  
**Inst:** VOAA.I  
**Analyst:** JEB  
**Aliquot:** 5.3 g  
**Column:** DB-624

**Matrix:** R  
**%Moisture:** 16.9  
**Project:** LANL01004  
**SOP Ref:** GL-OA-E-038  
**Dilution:** 1  
**Purge Vol:** 5 mL  
**Final Volume:** 5 mL

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.14	ug/kg	0.386	1.14
74-87-3	Chloromethane	U	1.14	ug/kg	0.341	1.14
75-01-4	Vinyl chloride	U	1.14	ug/kg	0.341	1.14
74-83-9	Bromomethane	U	1.14	ug/kg	0.341	1.14
75-00-3	Chloroethane	U	1.14	ug/kg	0.341	1.14
75-69-4	Trichlorofluoromethane	U	1.14	ug/kg	0.341	1.14
67-64-1	Acetone	J	4.06	ug/kg	1.89	5.68
75-35-4	1,1-Dichloroethylene	U	1.14	ug/kg	0.341	1.14
74-88-4	Iodomethane	U	5.68	ug/kg	1.82	5.68
75-09-2	Methylene chloride	U	5.68	ug/kg	2.27	5.68
75-15-0	Carbon disulfide	U	5.68	ug/kg	1.42	5.68
156-60-5	trans-1,2-Dichloroethylene	U	1.14	ug/kg	0.341	1.14
75-34-3	1,1-Dichloroethane	U	1.14	ug/kg	0.341	1.14
78-93-3	2-Butanone	U	5.68	ug/kg	1.70	5.68
156-59-2	cis-1,2-Dichloroethylene	U	1.14	ug/kg	0.341	1.14
594-20-7	2,2-Dichloropropane	U	1.14	ug/kg	0.341	1.14
67-66-3	Chloroform	U	1.14	ug/kg	0.341	1.14
74-97-5	Bromochloromethane	U	1.14	ug/kg	0.375	1.14
71-55-6	1,1,1-Trichloroethane	U	1.14	ug/kg	0.341	1.14
563-58-6	1,1-Dichloropropene	U	1.14	ug/kg	0.341	1.14
56-23-5	Carbon tetrachloride	U	1.14	ug/kg	0.341	1.14
107-06-2	1,2-Dichloroethane	U	1.14	ug/kg	0.341	1.14
71-43-2	Benzene	U	1.14	ug/kg	0.341	1.14
79-01-6	Trichloroethylene	U	1.14	ug/kg	0.375	1.14
78-87-5	1,2-Dichloropropane	U	1.14	ug/kg	0.341	1.14
75-27-4	Bromodichloromethane	U	1.14	ug/kg	0.341	1.14
74-95-3	Dibromomethane	U	1.14	ug/kg	0.341	1.14
108-10-1	4-Methyl-2-pentanone	U	5.68	ug/kg	1.42	5.68
10061-01-5	cis-1,3-Dichloropropylene	U	1.14	ug/kg	0.341	1.14
108-88-3	Toluene	U	1.14	ug/kg	0.341	1.14
10061-02-6	trans-1,3-Dichloropropylene	U	1.14	ug/kg	0.341	1.14
79-00-5	1,1,2-Trichloroethane	U	1.14	ug/kg	0.341	1.14
591-78-6	2-Hexanone	U	5.68	ug/kg	1.70	5.68
142-28-9	1,3-Dichloropropane	U	1.14	ug/kg	0.341	1.14
127-18-4	Tetrachloroethylene	U	1.14	ug/kg	0.341	1.14
124-48-1	Dibromochloromethane	U	1.14	ug/kg	0.341	1.14
106-93-4	1,2-Dibromoethane	U	1.14	ug/kg	0.341	1.14
108-90-7	Chlorobenzene	U	1.14	ug/kg	0.341	1.14

**Volatile  
Certificate of Analysis  
Sample Summary**

**SDG Number:** 10-1758  
**Lab Sample ID:** 246866005

**Date Collected:** 02/09/2010 12:00  
**Date Received:** 02/11/2010 09:20  
**Client:** LANL010  
**Method:** SW846 8260B  
**Inst:** VOAA.I  
**Analyst:** JEB  
**Aliquot:** 5.3 g  
**Column:** DB-624

**Matrix:** R  
**%Moisture:** 16.9  
**Project:** LANL01004  
**SOP Ref:** GL-OA-E-038  
**Dilution:** 1  
**Purge Vol:** 5 mL  
**Final Volume:** 5 mL

**Client ID:** RE15-10-8365  
**Batch ID:** 955077  
**Run Date:** 02/19/2010 08:45  
**Prep Date:** 02/18/2010 20:10  
**Data File:** 021810\AY435.D

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

**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	unknown	3.32	5.84	ug/kg	0	J

**Volatile**  
**Certificate of Analysis**  
**Sample Summary**

**SDG Number:** 10-1758  
**Lab Sample ID:** 246866006

**Date Collected:** 02/09/2010 12:00  
**Date Received:** 02/11/2010 09:20  
**Client:** LANL010  
**Method:** SW846 8260B  
**Inst:** VOAA.I  
**Analyst:** JEB  
**Aliquot:** 5 g  
**Column:** DB-624

**Matrix:** R  
**%Moisture:** 24.6  
**Project:** LANL01004  
**SOP Ref:** GL-OA-E-038  
**Dilution:** 1  
**Purge Vol:** 5 mL  
**Final Volume:** 5 mL

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.33	ug/kg	0.451	1.33
74-87-3	Chloromethane	U	1.33	ug/kg	0.398	1.33
75-01-4	Vinyl chloride	U	1.33	ug/kg	0.398	1.33
74-83-9	Bromomethane	U	1.33	ug/kg	0.398	1.33
75-00-3	Chloroethane	U	1.33	ug/kg	0.398	1.33
75-69-4	Trichlorofluoromethane	U	1.33	ug/kg	0.398	1.33
67-64-1	Acetone	U	6.63	ug/kg	2.20	6.63
75-35-4	1,1-Dichloroethylene	U	1.33	ug/kg	0.398	1.33
74-88-4	Iodomethane	U	6.63	ug/kg	2.12	6.63
75-09-2	Methylene chloride	U	6.63	ug/kg	2.65	6.63
75-15-0	Carbon disulfide	U	6.63	ug/kg	1.66	6.63
156-60-5	trans-1,2-Dichloroethylene	U	1.33	ug/kg	0.398	1.33
75-34-3	1,1-Dichloroethane	U	1.33	ug/kg	0.398	1.33
78-93-3	2-Butanone	U	6.63	ug/kg	1.99	6.63
156-59-2	cis-1,2-Dichloroethylene	U	1.33	ug/kg	0.398	1.33
594-20-7	2,2-Dichloropropane	U	1.33	ug/kg	0.398	1.33
67-66-3	Chloroform	U	1.33	ug/kg	0.398	1.33
74-97-5	Bromochloromethane	U	1.33	ug/kg	0.437	1.33
71-55-6	1,1,1-Trichloroethane	U	1.33	ug/kg	0.398	1.33
563-58-6	1,1-Dichloropropene	U	1.33	ug/kg	0.398	1.33
56-23-5	Carbon tetrachloride	U	1.33	ug/kg	0.398	1.33
107-06-2	1,2-Dichloroethane	U	1.33	ug/kg	0.398	1.33
71-43-2	Benzene	U	1.33	ug/kg	0.398	1.33
79-01-6	Trichloroethylene	U	1.33	ug/kg	0.437	1.33
78-87-5	1,2-Dichloropropane	U	1.33	ug/kg	0.398	1.33
75-27-4	Bromodichloromethane	U	1.33	ug/kg	0.398	1.33
74-95-3	Dibromomethane	U	1.33	ug/kg	0.398	1.33
108-10-1	4-Methyl-2-pentanone	U	6.63	ug/kg	1.66	6.63
10061-01-5	cis-1,3-Dichloropropylene	U	1.33	ug/kg	0.398	1.33
108-88-3	Toluene	U	1.33	ug/kg	0.398	1.33
10061-02-6	trans-1,3-Dichloropropylene	U	1.33	ug/kg	0.398	1.33
79-00-5	1,1,2-Trichloroethane	U	1.33	ug/kg	0.398	1.33
591-78-6	2-Hexanone	U	6.63	ug/kg	1.99	6.63
142-28-9	1,3-Dichloropropane	U	1.33	ug/kg	0.398	1.33
127-18-4	Tetrachloroethylene	U	1.33	ug/kg	0.398	1.33
124-48-1	Dibromochloromethane	U	1.33	ug/kg	0.398	1.33
106-93-4	1,2-Dibromoethane	U	1.33	ug/kg	0.398	1.33
108-90-7	Chlorobenzene	U	1.33	ug/kg	0.398	1.33

**Volatile  
Certificate of Analysis  
Sample Summary**

**SDG Number:** 10-1758  
**Lab Sample ID:** 246866006

**Date Collected:** 02/09/2010 12:00  
**Date Received:** 02/11/2010 09:20  
**Client:** LANL010  
**Method:** SW846 8260B  
**Inst:** VOAA.I  
**Analyst:** JEB  
**Aliquot:** 5 g  
**Column:** DB-624

**Matrix:** R  
**%Moisture:** 24.6  
**Project:** LANL01004  
**SOP Ref:** GL-OA-E-038  
**Dilution:** 1  
**Purge Vol:** 5 mL  
**Final Volume:** 5 mL

**Client ID:** RE15-10-8368  
**Batch ID:** 955077  
**Run Date:** 02/19/2010 09:11  
**Prep Date:** 02/18/2010 20:15  
**Data File:** 021810\AY436.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.33	ug/kg	0.398	1.33
179601-23-1	m,p-Xylenes	U	2.65	ug/kg	0.398	2.65
95-47-6	o-Xylene	U	1.33	ug/kg	0.398	1.33
100-42-5	Styrene	U	1.33	ug/kg	0.398	1.33
75-25-2	Bromoform	U	1.33	ug/kg	0.398	1.33
79-34-5	1,1,2,2-Tetrachloroethane	U	1.33	ug/kg	0.398	1.33
96-18-4	1,2,3-Trichloropropane	U	1.33	ug/kg	0.398	1.33
108-86-1	Bromobenzene	U	1.33	ug/kg	0.398	1.33
103-65-1	n-Propylbenzene	U	1.33	ug/kg	0.398	1.33
95-49-8	2-Chlorotoluene	U	1.33	ug/kg	0.398	1.33
98-82-8	Isopropylbenzene	U	1.33	ug/kg	0.398	1.33
108-67-8	1,3,5-Trimethylbenzene	U	1.33	ug/kg	0.398	1.33
106-43-4	4-Chlorotoluene	U	1.33	ug/kg	0.398	1.33
98-06-6	tert-Butylbenzene	U	1.33	ug/kg	0.398	1.33
95-63-6	1,2,4-Trimethylbenzene	U	1.33	ug/kg	0.398	1.33
135-98-8	sec-Butylbenzene	U	1.33	ug/kg	0.398	1.33
99-87-6	4-Isopropyltoluene	U	1.33	ug/kg	0.398	1.33
541-73-1	1,3-Dichlorobenzene	U	1.33	ug/kg	0.398	1.33
106-46-7	1,4-Dichlorobenzene	U	1.33	ug/kg	0.398	1.33
104-51-8	n-Butylbenzene	U	1.33	ug/kg	0.398	1.33
96-12-8	1,2-Dibromo-3-chloropropane	U	1.33	ug/kg	0.398	1.33
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	6.63	ug/kg	2.12	6.63
630-20-6	1,1,1,2-Tetrachloroethane	U	1.33	ug/kg	0.398	1.33
95-50-1	1,2-Dichlorobenzene	U	1.33	ug/kg	0.398	1.33

**Tentatively Identified Compound Summary**

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

**Volatile**  
**Certificate of Analysis**  
**Sample Summary**

**SDG Number:** 10-1758  
**Lab Sample ID:** 246866007

**Date Collected:** 02/09/2010 12:00  
**Date Received:** 02/11/2010 09:20  
**Client:** LANL010  
**Method:** SW846 8260B  
**Inst:** VOAA.I  
**Analyst:** JEB  
**Aliquot:** 5.5 g  
**Column:** DB-624

**Matrix:** R  
**%Moisture:** 24.2  
**Project:** LANL01004  
**SOP Ref:** GL-OA-E-038  
**Dilution:** 1  
**Purge Vol:** 5 mL  
**Final Volume:** 5 mL

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.20	ug/kg	0.408	1.20
74-87-3	Chloromethane	U	1.20	ug/kg	0.360	1.20
75-01-4	Vinyl chloride	U	1.20	ug/kg	0.360	1.20
74-83-9	Bromomethane	U	1.20	ug/kg	0.360	1.20
75-00-3	Chloroethane	U	1.20	ug/kg	0.360	1.20
75-69-4	Trichlorofluoromethane	U	1.20	ug/kg	0.360	1.20
67-64-1	Acetone	U	5.99	ug/kg	1.99	5.99
75-35-4	1,1-Dichloroethylene	U	1.20	ug/kg	0.360	1.20
74-88-4	Iodomethane	U	5.99	ug/kg	1.92	5.99
75-09-2	Methylene chloride	U	5.99	ug/kg	2.40	5.99
75-15-0	Carbon disulfide	U	5.99	ug/kg	1.50	5.99
156-60-5	trans-1,2-Dichloroethylene	U	1.20	ug/kg	0.360	1.20
75-34-3	1,1-Dichloroethane	U	1.20	ug/kg	0.360	1.20
78-93-3	2-Butanone	U	5.99	ug/kg	1.80	5.99
156-59-2	cis-1,2-Dichloroethylene	U	1.20	ug/kg	0.360	1.20
594-20-7	2,2-Dichloropropane	U	1.20	ug/kg	0.360	1.20
67-66-3	Chloroform	U	1.20	ug/kg	0.360	1.20
74-97-5	Bromochloromethane	U	1.20	ug/kg	0.396	1.20
71-55-6	1,1,1-Trichloroethane	U	1.20	ug/kg	0.360	1.20
563-58-6	1,1-Dichloropropene	U	1.20	ug/kg	0.360	1.20
56-23-5	Carbon tetrachloride	U	1.20	ug/kg	0.360	1.20
107-06-2	1,2-Dichloroethane	U	1.20	ug/kg	0.360	1.20
71-43-2	Benzene	U	1.20	ug/kg	0.360	1.20
79-01-6	Trichloroethylene	U	1.20	ug/kg	0.396	1.20
78-87-5	1,2-Dichloropropane	U	1.20	ug/kg	0.360	1.20
75-27-4	Bromodichloromethane	U	1.20	ug/kg	0.360	1.20
74-95-3	Dibromomethane	U	1.20	ug/kg	0.360	1.20
108-10-1	4-Methyl-2-pentanone	U	5.99	ug/kg	1.50	5.99
10061-01-5	cis-1,3-Dichloropropylene	U	1.20	ug/kg	0.360	1.20
108-88-3	Toluene	U	1.20	ug/kg	0.360	1.20
10061-02-6	trans-1,3-Dichloropropylene	U	1.20	ug/kg	0.360	1.20
79-00-5	1,1,2-Trichloroethane	U	1.20	ug/kg	0.360	1.20
591-78-6	2-Hexanone	U	5.99	ug/kg	1.80	5.99
142-28-9	1,3-Dichloropropane	U	1.20	ug/kg	0.360	1.20
127-18-4	Tetrachloroethylene	U	1.20	ug/kg	0.360	1.20
124-48-1	Dibromochloromethane	U	1.20	ug/kg	0.360	1.20
106-93-4	1,2-Dibromoethane	U	1.20	ug/kg	0.360	1.20
108-90-7	Chlorobenzene	U	1.20	ug/kg	0.360	1.20

**Volatile**  
**Certificate of Analysis**  
**Sample Summary**

**SDG Number:** 10-1758  
**Lab Sample ID:** 246866007

**Date Collected:** 02/09/2010 12:00  
**Date Received:** 02/11/2010 09:20  
**Client:** LANL010  
**Method:** SW846 8260B  
**Inst:** VOAA.I  
**Analyst:** JEB  
**Aliquot:** 5.5 g  
**Column:** DB-624

**Matrix:** R  
**%Moisture:** 24.2  
**Project:** LANL01004  
**SOP Ref:** GL-OA-E-038  
**Dilution:** 1  
**Purge Vol:** 5 mL  
**Final Volume:** 5 mL

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.20	ug/kg	0.360	1.20
179601-23-1	m,p-Xylenes	U	2.40	ug/kg	0.360	2.40
95-47-6	o-Xylene	U	1.20	ug/kg	0.360	1.20
100-42-5	Styrene	U	1.20	ug/kg	0.360	1.20
75-25-2	Bromoform	U	1.20	ug/kg	0.360	1.20
79-34-5	1,1,2,2-Tetrachloroethane	U	1.20	ug/kg	0.360	1.20
96-18-4	1,2,3-Trichloropropane	U	1.20	ug/kg	0.360	1.20
108-86-1	Bromobenzene	U	1.20	ug/kg	0.360	1.20
103-65-1	n-Propylbenzene	U	1.20	ug/kg	0.360	1.20
95-49-8	2-Chlorotoluene	U	1.20	ug/kg	0.360	1.20
98-82-8	Isopropylbenzene	U	1.20	ug/kg	0.360	1.20
108-67-8	1,3,5-Trimethylbenzene	U	1.20	ug/kg	0.360	1.20
106-43-4	4-Chlorotoluene	U	1.20	ug/kg	0.360	1.20
98-06-6	tert-Butylbenzene	U	1.20	ug/kg	0.360	1.20
95-63-6	1,2,4-Trimethylbenzene	U	1.20	ug/kg	0.360	1.20
135-98-8	sec-Butylbenzene	U	1.20	ug/kg	0.360	1.20
99-87-6	4-Isopropyltoluene	U	1.20	ug/kg	0.360	1.20
541-73-1	1,3-Dichlorobenzene	U	1.20	ug/kg	0.360	1.20
106-46-7	1,4-Dichlorobenzene	U	1.20	ug/kg	0.360	1.20
104-51-8	n-Butylbenzene	U	1.20	ug/kg	0.360	1.20
96-12-8	1,2-Dibromo-3-chloropropane	U	1.20	ug/kg	0.360	1.20
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.99	ug/kg	1.92	5.99
	<i>Trichlorotrifluoroethane</i>					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.20	ug/kg	0.360	1.20
95-50-1	1,2-Dichlorobenzene	U	1.20	ug/kg	0.360	1.20

**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	unknown siloxane	17.73	19.6	ug/kg	0	J

**Volatile**  
**Certificate of Analysis**  
**Sample Summary**

**SDG Number:** 10-1758  
**Lab Sample ID:** 246866008

**Date Collected:** 02/09/2010 12:00  
**Date Received:** 02/11/2010 09:20  
**Client:** LANL010  
**Method:** SW846 8260B  
**Inst:** VOAA.I  
**Analyst:** JEB  
**Aliquot:** 5.2 g  
**Column:** DB-624

**Matrix:** R  
**%Moisture:** 7.6  
**Project:** LANL01004  
**SOP Ref:** GL-OA-E-038  
**Dilution:** 1  
**Purge Vol:** 5 mL  
**Final Volume:** 5 mL

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.04	ug/kg	0.354	1.04
74-87-3	Chloromethane	U	1.04	ug/kg	0.312	1.04
75-01-4	Vinyl chloride	U	1.04	ug/kg	0.312	1.04
74-83-9	Bromomethane	U	1.04	ug/kg	0.312	1.04
75-00-3	Chloroethane	U	1.04	ug/kg	0.312	1.04
75-69-4	Trichlorofluoromethane	U	1.04	ug/kg	0.312	1.04
67-64-1	Acetone		5.74	ug/kg	1.73	5.20
75-35-4	1,1-Dichloroethylene	U	1.04	ug/kg	0.312	1.04
74-88-4	Iodomethane	U	5.20	ug/kg	1.66	5.20
75-09-2	Methylene chloride	U	5.20	ug/kg	2.08	5.20
75-15-0	Carbon disulfide	U	5.20	ug/kg	1.30	5.20
156-60-5	trans-1,2-Dichloroethylene	U	1.04	ug/kg	0.312	1.04
75-34-3	1,1-Dichloroethane	U	1.04	ug/kg	0.312	1.04
78-93-3	2-Butanone	U	5.20	ug/kg	1.56	5.20
156-59-2	cis-1,2-Dichloroethylene	U	1.04	ug/kg	0.312	1.04
594-20-7	2,2-Dichloropropane	U	1.04	ug/kg	0.312	1.04
67-66-3	Chloroform	U	1.04	ug/kg	0.312	1.04
74-97-5	Bromochloromethane	U	1.04	ug/kg	0.343	1.04
71-55-6	1,1,1-Trichloroethane	U	1.04	ug/kg	0.312	1.04
563-58-6	1,1-Dichloropropene	U	1.04	ug/kg	0.312	1.04
56-23-5	Carbon tetrachloride	U	1.04	ug/kg	0.312	1.04
107-06-2	1,2-Dichloroethane	U	1.04	ug/kg	0.312	1.04
71-43-2	Benzene	U	1.04	ug/kg	0.312	1.04
79-01-6	Trichloroethylene	U	1.04	ug/kg	0.343	1.04
78-87-5	1,2-Dichloropropane	U	1.04	ug/kg	0.312	1.04
75-27-4	Bromodichloromethane	U	1.04	ug/kg	0.312	1.04
74-95-3	Dibromomethane	U	1.04	ug/kg	0.312	1.04
108-10-1	4-Methyl-2-pentanone	U	5.20	ug/kg	1.30	5.20
10061-01-5	cis-1,3-Dichloropropylene	U	1.04	ug/kg	0.312	1.04
108-88-3	Toluene	U	1.04	ug/kg	0.312	1.04
10061-02-6	trans-1,3-Dichloropropylene	U	1.04	ug/kg	0.312	1.04
79-00-5	1,1,2-Trichloroethane	U	1.04	ug/kg	0.312	1.04
591-78-6	2-Hexanone	U	5.20	ug/kg	1.56	5.20
142-28-9	1,3-Dichloropropane	U	1.04	ug/kg	0.312	1.04
127-18-4	Tetrachloroethylene	U	1.04	ug/kg	0.312	1.04
124-48-1	Dibromochloromethane	U	1.04	ug/kg	0.312	1.04
106-93-4	1,2-Dibromoethane	U	1.04	ug/kg	0.312	1.04
108-90-7	Chlorobenzene	U	1.04	ug/kg	0.312	1.04



**Volatile**  
**Certificate of Analysis**  
**Sample Summary**

**SDG Number:** 10-1758  
**Lab Sample ID:** 246866008

**Date Collected:** 02/09/2010 12:00  
**Date Received:** 02/11/2010 09:20  
**Client:** LANL010  
**Method:** SW846 8260B  
**Inst:** VOAA.I  
**Analyst:** JEB  
**Aliquot:** 5.2 g  
**Column:** DB-624

**Matrix:** R  
**%Moisture:** 7.6  
**Project:** LANL01004  
**SOP Ref:** GL-OA-E-038  
**Dilution:** 1  
**Purge Vol:** 5 mL  
**Final Volume:** 5 mL

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.04	ug/kg	0.312	1.04
179601-23-1	m,p-Xylenes	U	2.08	ug/kg	0.312	2.08
95-47-6	o-Xylene	U	1.04	ug/kg	0.312	1.04
100-42-5	Styrene	U	1.04	ug/kg	0.312	1.04
75-25-2	Bromoform	U	1.04	ug/kg	0.312	1.04
79-34-5	1,1,2,2-Tetrachloroethane	U	1.04	ug/kg	0.312	1.04
96-18-4	1,2,3-Trichloropropane	U	1.04	ug/kg	0.312	1.04
108-86-1	Bromobenzene	U	1.04	ug/kg	0.312	1.04
103-65-1	n-Propylbenzene	U	1.04	ug/kg	0.312	1.04
95-49-8	2-Chlorotoluene	U	1.04	ug/kg	0.312	1.04
98-82-8	Isopropylbenzene	U	1.04	ug/kg	0.312	1.04
108-67-8	1,3,5-Trimethylbenzene	U	1.04	ug/kg	0.312	1.04
106-43-4	4-Chlorotoluene	U	1.04	ug/kg	0.312	1.04
98-06-6	tert-Butylbenzene	U	1.04	ug/kg	0.312	1.04
95-63-6	1,2,4-Trimethylbenzene	U	1.04	ug/kg	0.312	1.04
135-98-8	sec-Butylbenzene	U	1.04	ug/kg	0.312	1.04
99-87-6	4-Isopropyltoluene	U	1.04	ug/kg	0.312	1.04
541-73-1	1,3-Dichlorobenzene	U	1.04	ug/kg	0.312	1.04
106-46-7	1,4-Dichlorobenzene	U	1.04	ug/kg	0.312	1.04
104-51-8	n-Butylbenzene	U	1.04	ug/kg	0.312	1.04
96-12-8	1,2-Dibromo-3-chloropropane	U	1.04	ug/kg	0.312	1.04
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.20	ug/kg	1.66	5.20
	<i>Trichlorotrifluoroethane</i>					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.04	ug/kg	0.312	1.04
95-50-1	1,2-Dichlorobenzene	U	1.04	ug/kg	0.312	1.04

**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	unknown siloxane	17.73	7.98	ug/kg	0	J

**Volatile**  
**Certificate of Analysis**  
**Sample Summary**

**SDG Number:** 10-1758  
**Lab Sample ID:** 246866009

**Date Collected:** 02/09/2010 12:00  
**Date Received:** 02/11/2010 09:20  
**Client:** LANL010  
**Method:** SW846 8260B  
**Inst:** VOAA.I  
**Analyst:** JEB  
**Aliquot:** 5.5 g  
**Column:** DB-624

**Matrix:** R  
**%Moisture:** 24.2  
**Project:** LANL01004  
**SOP Ref:** GL-OA-E-038  
**Dilution:** 1  
**Purge Vol:** 5 mL  
**Final Volume:** 5 mL

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.20	ug/kg	0.408	1.20
74-87-3	Chloromethane	U	1.20	ug/kg	0.360	1.20
75-01-4	Vinyl chloride	U	1.20	ug/kg	0.360	1.20
74-83-9	Bromomethane	U	1.20	ug/kg	0.360	1.20
75-00-3	Chloroethane	U	1.20	ug/kg	0.360	1.20
75-69-4	Trichlorofluoromethane	U	1.20	ug/kg	0.360	1.20
67-64-1	Acetone	U	5.99	ug/kg	1.99	5.99
75-35-4	1,1-Dichloroethylene	U	1.20	ug/kg	0.360	1.20
74-88-4	Iodomethane	U	5.99	ug/kg	1.92	5.99
75-09-2	Methylene chloride	U	5.99	ug/kg	2.40	5.99
75-15-0	Carbon disulfide	U	5.99	ug/kg	1.50	5.99
156-60-5	trans-1,2-Dichloroethylene	U	1.20	ug/kg	0.360	1.20
75-34-3	1,1-Dichloroethane	U	1.20	ug/kg	0.360	1.20
78-93-3	2-Butanone	U	5.99	ug/kg	1.80	5.99
156-59-2	cis-1,2-Dichloroethylene	U	1.20	ug/kg	0.360	1.20
594-20-7	2,2-Dichloropropane	U	1.20	ug/kg	0.360	1.20
67-66-3	Chloroform	U	1.20	ug/kg	0.360	1.20
74-97-5	Bromochloromethane	U	1.20	ug/kg	0.396	1.20
71-55-6	1,1,1-Trichloroethane	U	1.20	ug/kg	0.360	1.20
563-58-6	1,1-Dichloropropene	U	1.20	ug/kg	0.360	1.20
56-23-5	Carbon tetrachloride	U	1.20	ug/kg	0.360	1.20
107-06-2	1,2-Dichloroethane	U	1.20	ug/kg	0.360	1.20
71-43-2	Benzene	U	1.20	ug/kg	0.360	1.20
79-01-6	Trichloroethylene	U	1.20	ug/kg	0.396	1.20
78-87-5	1,2-Dichloropropane	U	1.20	ug/kg	0.360	1.20
75-27-4	Bromodichloromethane	U	1.20	ug/kg	0.360	1.20
74-95-3	Dibromomethane	U	1.20	ug/kg	0.360	1.20
108-10-1	4-Methyl-2-pentanone	U	5.99	ug/kg	1.50	5.99
10061-01-5	cis-1,3-Dichloropropylene	U	1.20	ug/kg	0.360	1.20
108-88-3	Toluene	J	0.372	ug/kg	0.360	1.20
10061-02-6	trans-1,3-Dichloropropylene	U	1.20	ug/kg	0.360	1.20
79-00-5	1,1,2-Trichloroethane	U	1.20	ug/kg	0.360	1.20
591-78-6	2-Hexanone	U	5.99	ug/kg	1.80	5.99
142-28-9	1,3-Dichloropropane	U	1.20	ug/kg	0.360	1.20
127-18-4	Tetrachloroethylene	U	1.20	ug/kg	0.360	1.20
124-48-1	Dibromochloromethane	U	1.20	ug/kg	0.360	1.20
106-93-4	1,2-Dibromoethane	U	1.20	ug/kg	0.360	1.20
108-90-7	Chlorobenzene	U	1.20	ug/kg	0.360	1.20

**Volatile**  
**Certificate of Analysis**  
**Sample Summary**

**SDG Number:** 10-1758  
**Lab Sample ID:** 246866009

**Date Collected:** 02/09/2010 12:00  
**Date Received:** 02/11/2010 09:20  
**Client:** LANL010  
**Method:** SW846 8260B  
**Inst:** VOAA.I  
**Analyst:** JEB  
**Aliquot:** 5.5 g  
**Column:** DB-624

**Matrix:** R  
**%Moisture:** 24.2  
**Project:** LANL01004  
**SOP Ref:** GL-OA-E-038  
**Dilution:** 1  
**Purge Vol:** 5 mL  
**Final Volume:** 5 mL

**Client ID:** RE15-10-8376  
**Batch ID:** 955077  
**Run Date:** 02/19/2010 10:30  
**Prep Date:** 02/18/2010 20:18  
**Data File:** 021810\AY439.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.20	ug/kg	0.360	1.20
179601-23-1	m,p-Xylenes	U	2.40	ug/kg	0.360	2.40
95-47-6	o-Xylene	U	1.20	ug/kg	0.360	1.20
100-42-5	Styrene	U	1.20	ug/kg	0.360	1.20
75-25-2	Bromoform	U	1.20	ug/kg	0.360	1.20
79-34-5	1,1,2,2-Tetrachloroethane	U	1.20	ug/kg	0.360	1.20
96-18-4	1,2,3-Trichloropropane	U	1.20	ug/kg	0.360	1.20
108-86-1	Bromobenzene	U	1.20	ug/kg	0.360	1.20
103-65-1	n-Propylbenzene	U	1.20	ug/kg	0.360	1.20
95-49-8	2-Chlorotoluene	U	1.20	ug/kg	0.360	1.20
98-82-8	Isopropylbenzene	U	1.20	ug/kg	0.360	1.20
108-67-8	1,3,5-Trimethylbenzene	U	1.20	ug/kg	0.360	1.20
106-43-4	4-Chlorotoluene	U	1.20	ug/kg	0.360	1.20
98-06-6	tert-Butylbenzene	U	1.20	ug/kg	0.360	1.20
95-63-6	1,2,4-Trimethylbenzene	U	1.20	ug/kg	0.360	1.20
135-98-8	sec-Butylbenzene	U	1.20	ug/kg	0.360	1.20
99-87-6	4-Isopropyltoluene	U	1.20	ug/kg	0.360	1.20
541-73-1	1,3-Dichlorobenzene	U	1.20	ug/kg	0.360	1.20
106-46-7	1,4-Dichlorobenzene	U	1.20	ug/kg	0.360	1.20
104-51-8	n-Butylbenzene	U	1.20	ug/kg	0.360	1.20
96-12-8	1,2-Dibromo-3-chloropropane	U	1.20	ug/kg	0.360	1.20
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.99	ug/kg	1.92	5.99
630-20-6	1,1,1,2-Tetrachloroethane	U	1.20	ug/kg	0.360	1.20
95-50-1	1,2-Dichlorobenzene	U	1.20	ug/kg	0.360	1.20

**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
007785-70-8	1R-.alpha.-Pinene	13.55	22.3	ug/kg	97	NJ
000127-91-3	.beta.-Pinene	14.27	6.2	ug/kg	96	NJ
013466-78-9	3-Carene	14.58	13.8	ug/kg	95	NJ
	unknown siloxane	17.73	13.1	ug/kg	0	J

# **Quality Control Summary**

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**Volatile**  
**Surrogate Recovery Report**

Page 1 of 1

**SDG Number: 10-1758****Matrix Type: SOLID**

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<b>Sample ID</b>	<b>Client ID</b>	<b>DCED4 %REC</b>	<b>TOL %REC</b>	<b>BFB %REC</b>
1202047553	LCS for batch 955076	97	100	92
1202047554	LCS for batch 955076	94	100	95
1202047550	MB for batch 955076	93	99	93
246866001	RE15-10-8384	100	97	92
246866002	RE15-10-8366	99	97	92
246866003	RE15-10-8367	100	98	93
246866004	RE15-10-8364	101	98	95
246866005	RE15-10-8365	100	98	93
246866006	RE15-10-8368	101	97	91
246866007	RE15-10-8340	103	96	91
246866008	RE15-10-8341	106	96	94
246866009	RE15-10-8376	106	98	93
1202047551	RE15-10-8366PS	109	97	92
1202047552	RE15-10-8366PSD	106	98	91

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**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

Page 1 of 6

SDG Number: 10-1758

Sample Type: Post Spike

Client ID: RE15-10-8366PS

Matrix: R

Lab Sample ID: 1202047551

%Moisture: 18

Instrument: VOAA.I

Analysis Date: 02/19/2010 13:32

Dilution: 1

Analyst: JEB

Prep Batch ID: 955076

Purge Vol: 5 mL

Batch ID: 955077

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 43.0	86	39-148
74-87-3	PS Chloromethane	50.0	0.00	U 31.8	64	42-131
75-01-4	PS Vinyl chloride	50.0	0.00	U 44.2	88	50-127
74-83-9	PS Bromomethane	50.0	0.00	U 37.1	74	26-135
75-00-3	PS Chloroethane	50.0	0.00	U 47.9	96	54-128
75-69-4	PS Trichlorofluoromethane	50.0	0.00	U 50.9	102	55-138
67-64-1	PS Acetone	250	0.00	U 59.5	24	20-144
75-35-4	PS 1,1-Dichloroethylene	50.0	0.00	U 39.0	78	55-128
74-88-4	PS Iodomethane	250	0.00	U 149	59	47-132
75-09-2	PS Methylene chloride	50.0	0.00	U 41.0	82	56-123
75-15-0	PS Carbon disulfide	250	0.00	U 190	76	53-133
156-60-5	PS trans-1,2-Dichloroethylene	50.0	0.00	U 37.2	74	57-119
75-34-3	PS 1,1-Dichloroethane	50.0	0.00	U 39.1	78	62-125
78-93-3	PS 2-Butanone	250	0.00	U 57.3	23 *	30-150
156-59-2	PS cis-1,2-Dichloroethylene	50.0	0.00	U 37.4	75	60-124
594-20-7	PS 2,2-Dichloropropane	50.0	0.00	U 40.0	80	56-129
67-66-3	PS Chloroform	50.0	0.00	U 42.9	86	62-120
74-97-5	PS Bromochloromethane	50.0	0.00	U 40.0	80	51-135
71-55-6	PS 1,1,1-Trichloroethane	50.0	0.00	U 44.0	88	58-129
563-58-6	PS 1,1-Dichloropropene	50.0	0.00	U 37.6	75	59-126
56-23-5	PS Carbon tetrachloride	50.0	0.00	U 44.3	89	55-132
107-06-2	PS 1,2-Dichloroethane	50.0	0.00	U 42.2	84	54-121

Volatile  
Quality Control Summary  
Spike Recovery Report

Page 2 of 6

SDG Number: 10-1758

Sample Type: Post Spike

Client ID: RE15-10-8366PS

Matrix: R

Lab Sample ID: 1202047551

%Moisture: 18

Instrument: VOAA.I

Analysis Date: 02/19/2010 13:32

Dilution: 1

Analyst: JEB

Prep Batch ID: 955076

Purge Vol: 5 mL

Batch ID: 955077

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	36.6	73 58-120
79-01-6	PS Trichloroethylene	50.0	0.00	U	36.0	72 54-130
78-87-5	PS 1,2-Dichloropropane	50.0	0.00	U	36.2	72 59-121
75-27-4	PS Bromodichloromethane	50.0	0.00	U	40.3	81 57-130
74-95-3	PS Dibromomethane	50.0	0.00	U	40.9	82 57-124
108-10-1	PS 4-Methyl-2-pentanone	250	0.00	U	138	55 40-137
10061-01-5	PS cis-1,3-Dichloropropylene	50.0	0.00	U	20.2	40 * 50-131
108-88-3	PS Toluene	50.0	0.00	U	31.9	64 54-119
10061-02-6	PS trans-1,3-Dichloropropylene	50.0	0.00	U	23.8	48 47-133
79-00-5	PS 1,1,2-Trichloroethane	50.0	0.00	U	38.4	77 60-130
591-78-6	PS 2-Hexanone	250	0.00	U	33.8	14 * 30-139
142-28-9	PS 1,3-Dichloropropane	50.0	0.00	U	37.0	74 59-125
127-18-4	PS Tetrachloroethylene	50.0	0.00	U	33.1	66 50-126
124-48-1	PS Dibromochloromethane	50.0	0.00	U	35.9	72 54-131
106-93-4	PS 1,2-Dibromoethane	50.0	0.00	U	33.6	67 55-127
108-90-7	PS Chlorobenzene	50.0	0.00	U	27.6	55 50-130
100-41-4	PS Ethylbenzene	50.0	0.00	U	26.0	52 50-121
179601-23-1	PS m,p-Xylenes	100	0.00	U	45.0	45 * 47-125
95-47-6	PS o-Xylene	50.0	0.00	U	25.4	51 51-127
100-42-5	PS Styrene	50.0	0.00	U	20.1	40 * 41-136
75-25-2	PS Bromoform	50.0	0.00	U	34.5	69 48-143
79-34-5	PS 1,1,2,2-Tetrachloroethane	50.0	0.00	U	33.5	67 52-129

Volatile  
Quality Control Summary  
Spike Recovery Report

Page 3 of 6

SDG Number: 10-1758

Client ID: RE15-10-8366PS

Lab Sample ID: 1202047551

Instrument: VOAA.I

Analyst: JEB

Purge Vol: 5 mL

Sample Type: Post Spike

Matrix: R

%Moisture: 18

Analysis Date: 02/19/2010 13:32

Dilution: 1

Prep Batch ID: 955076

Batch ID: 955077

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 37.1	74	56-139
108-86-1	PS Bromobenzene	50.0	0.00	U 25.7	51 *	54-125
103-65-1	PS n-Propylbenzene	50.0	0.00	U 16.7	33 *	46-127
95-49-8	PS 2-Chlorotoluene	50.0	0.00	U 19.2	38 *	47-130
98-82-8	PS Isopropylbenzene	50.0	0.00	U 20.0	40 *	42-126
108-67-8	PS 1,3,5-Trimethylbenzene	50.0	0.00	U 17.5	35 *	44-132
106-43-4	PS 4-Chlorotoluene	50.0	0.00	U 16.0	32 *	46-127
98-06-6	PS tert-Butylbenzene	50.0	0.00	U 17.8	36 *	48-136
95-63-6	PS 1,2,4-Trimethylbenzene	50.0	0.00	U 15.8	32 *	42-132
135-98-8	PS sec-Butylbenzene	50.0	0.00	U 14.2	28 *	47-130
99-87-6	PS 4-Isopropyltoluene	50.0	0.00	U 6.02	12 *	36-142
541-73-1	PS 1,3-Dichlorobenzene	50.0	0.00	U 18.4	37 *	41-130
106-46-7	PS 1,4-Dichlorobenzene	50.0	0.00	U 18.1	36 *	41-126
104-51-8	PS n-Butylbenzene	50.0	0.00	U 9.24	18 *	37-136
96-12-8	PS 1,2-Dibromo-3-chloropropane	50.0	0.00	U 27.2	54	42-143
630-20-6	PS 1,1,1,2-Tetrachloroethane	50.0	0.00	U 36.3	73	58-127
95-50-1	PS 1,2-Dichlorobenzene	50.0	0.00	U 19.8	40 *	42-128



Volatile  
Quality Control Summary  
Spike Recovery Report

Page 4 of 6

SDG Number: 10-1758

Sample Type: Post Spike Duplicate

Client ID: RE15-10-8366PSD

Matrix: R

Lab Sample ID: 1202047552

%Moisture: 18

Instrument: VOAA.I

Analysis Date: 02/19/2010 13:58

Dilution: 1

Analyst: JEB

Prep Batch ID: 955076

Purge Vol: 5 mL

Batch ID: 955077

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 42.8	86	39-148	0	0-19
74-87-3	PSD Chloromethane	50.0	0.00	U 31.7	63	42-131	0	0-23
75-01-4	PSD Vinyl chloride	50.0	0.00	U 44.4	89	50-127	0	0-23
74-83-9	PSD Bromomethane	50.0	0.00	U 36.9	74	26-135	0	0-22
75-00-3	PSD Chloroethane	50.0	0.00	U 47.6	95	54-128	1	0-25
75-69-4	PSD Trichlorofluoromethane	50.0	0.00	U 50.5	101	55-138	1	0-21
67-64-1	PSD Acetone	250	0.00	U 61.1	24	20-144	3	0-22
75-35-4	PSD 1,1-Dichloroethylene	50.0	0.00	U 39.9	80	55-128	2	0-20
74-88-4	PSD Iodomethane	250	0.00	U 151	60	47-132	2	0-20
75-09-2	PSD Methylene chloride	50.0	0.00	U 42.5	85	56-123	4	0-20
75-15-0	PSD Carbon disulfide	250	0.00	U 205	82	53-133	8	0-22
156-60-5	PSD trans-1,2-Dichloroethylene	50.0	0.00	U 39.7	79	57-119	7	0-20
75-34-3	PSD 1,1-Dichloroethane	50.0	0.00	U 40.4	81	62-125	3	0-20
78-93-3	PSD 2-Butanone	250	0.00	U 63.0	25 *	30-150	10	0-21
156-59-2	PSD cis-1,2-Dichloroethylene	50.0	0.00	U 39.6	79	60-124	6	0-20
594-20-7	PSD 2,2-Dichloropropane	50.0	0.00	U 41.4	83	56-129	3	0-20
67-66-3	PSD Chloroform	50.0	0.00	U 45.0	90	62-120	5	0-25
74-97-5	PSD Bromochloromethane	50.0	0.00	U 42.2	84	51-135	5	0-20
71-55-6	PSD 1,1,1-Trichloroethane	50.0	0.00	U 46.4	93	58-129	5	0-20
563-58-6	PSD 1,1-Dichloropropene	50.0	0.00	U 42.6	85	59-126	13	0-20
56-23-5	PSD Carbon tetrachloride	50.0	0.00	U 47.6	95	55-132	7	0-20
107-06-2	PSD 1,2-Dichloroethane	50.0	0.00	U 43.1	86	54-121	2	0-20

Volatile  
Quality Control Summary  
Spike Recovery Report

Page 5 of 6

SDG Number: 10-1758

Sample Type: Post Spike Duplicate

Client ID: RE15-10-8366PSD

Matrix: R

Lab Sample ID: 1202047552

%Moisture: 18

Instrument: VOAA.I

Analysis Date: 02/19/2010 13:58

Dilution: 1

Analyst: JEB

Prep Batch ID: 955076

Purge Vol: 5 mL

Batch ID: 955077

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 40.1	80	58-120	9	0-20
79-01-6	PSD Trichloroethylene	50.0	0.00	U 41.8	84	54-130	15	0-23
78-87-5	PSD 1,2-Dichloropropane	50.0	0.00	U 38.5	77	59-121	6	0-20
75-27-4	PSD Bromodichloromethane	50.0	0.00	U 43.1	86	57-130	7	0-20
74-95-3	PSD Dibromomethane	50.0	0.00	U 43.4	87	57-124	6	0-20
108-10-1	PSD 4-Methyl-2-pentanone	250	0.00	U 148	59	40-137	7	0-25
10061-01-5	PSD cis-1,3-Dichloropropylene	50.0	0.00	U 23.1	46 *	50-131	13	0-20
108-88-3	PSD Toluene	50.0	0.00	U 39.3	79	54-119	21	0-23
10061-02-6	PSD trans-1,3-Dichloropropylene	50.0	0.00	U 26.7	53	47-133	12	0-24
79-00-5	PSD 1,1,2-Trichloroethane	50.0	0.00	U 40.7	81	60-130	6	0-20
591-78-6	PSD 2-Hexanone	250	0.00	U 44.3	18 *	30-139	27 *	0-21
142-28-9	PSD 1,3-Dichloropropane	50.0	0.00	U 39.9	80	59-125	7	0-20
127-18-4	PSD Tetrachloroethylene	50.0	0.00	U 44.6	89	50-126	30 *	0-20
124-48-1	PSD Dibromochloromethane	50.0	0.00	U 39.3	79	54-131	9	0-23
106-93-4	PSD 1,2-Dibromoethane	50.0	0.00	U 36.7	73	55-127	9	0-23
108-90-7	PSD Chlorobenzene	50.0	0.00	U 36.9	74	50-130	29 *	0-24
100-41-4	PSD Ethylbenzene	50.0	0.00	U 38.4	77	50-121	38 *	0-24
179601-23-1	PSD m,p-Xylenes	100	0.00	U 70.1	70	47-125	44 *	0-25
95-47-6	PSD o-Xylene	50.0	0.00	U 36.4	73	51-127	36 *	0-24
100-42-5	PSD Styrene	50.0	0.00	U 30.0	60	41-136	40 *	0-24
75-25-2	PSD Bromoform	50.0	0.00	U 37.2	74	48-143	8	0-20
79-34-5	PSD 1,1,2,2-Tetrachloroethane	50.0	0.00	U 34.9	70	52-129	4	0-20

Volatile  
Quality Control Summary  
Spike Recovery Report

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SDG Number: 10-1758

Client ID: RE15-10-8366PSD

Lab Sample ID: 1202047552

Instrument: VOAA.I

Analyst: JEB

Purge Vol: 5 mL

Sample Type: Post Spike Duplicate

Matrix: R

%Moisture: 18

Analysis Date: 02/19/2010 13:58

Dilution: 1

Prep Batch ID: 955076

Batch ID: 955077

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 38.7	77	56-139	4	0-34
108-86-1	PSD Bromobenzene	50.0	0.00	U 34.7	69	54-125	30 *	0-22
103-65-1	PSD n-Propylbenzene	50.0	0.00	U 30.8	62	46-127	60 *	0-25
95-49-8	PSD 2-Chlorotoluene	50.0	0.00	U 30.8	62	47-130	47 *	0-24
98-82-8	PSD Isopropylbenzene	50.0	0.00	U 34.1	68	42-126	52 *	0-22
108-67-8	PSD 1,3,5-Trimethylbenzene	50.0	0.00	U 30.8	62	44-132	55 *	0-25
106-43-4	PSD 4-Chlorotoluene	50.0	0.00	U 27.7	55	46-127	54 *	0-26
98-06-6	PSD tert-Butylbenzene	50.0	0.00	U 32.0	64	48-136	57 *	0-24
95-63-6	PSD 1,2,4-Trimethylbenzene	50.0	0.00	U 28.6	57	42-132	58 *	0-26
135-98-8	PSD sec-Butylbenzene	50.0	0.00	U 29.3	59	47-130	69 *	0-27
99-87-6	PSD 4-Isopropyltoluene	50.0	0.00	U 19.9	40	36-142	107 *	0-27
541-73-1	PSD 1,3-Dichlorobenzene	50.0	0.00	U 29.6	59	41-130	47 *	0-25
106-46-7	PSD 1,4-Dichlorobenzene	50.0	0.00	U 29.0	58	41-126	46 *	0-25
104-51-8	PSD n-Butylbenzene	50.0	0.00	U 24.0	48	37-136	89 *	0-29
96-12-8	PSD 1,2-Dibromo-3-chloropropane	50.0	0.00	U 29.2	58	42-143	7	0-21
630-20-6	PSD 1,1,1,2-Tetrachloroethane	50.0	0.00	U 42.6	85	58-127	16	0-20
95-50-1	PSD 1,2-Dichlorobenzene	50.0	0.00	U 28.7	57	42-128	37 *	0-24

Volatile  
Quality Control Summary  
Spike Recovery Report

Page 1 of 3

SDG Number: 10-1758

Sample Type: Laboratory Control Sample

Client ID: LCS for batch 955076

Matrix: SOIL

Lab Sample ID: 1202047553

Instrument: VOAA.I

Analysis Date: 02/19/2010 05:41

Dilution: 1

Analyst: JEB

Prep Batch ID: 955076

Purge Vol: 5 mL

Batch ID: 955077

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	52.3	105	52-151
74-87-3	LCS Chloromethane	50.0	0.0	40.6	81	56-130
75-01-4	LCS Vinyl chloride	50.0	0.0	49.2	98	66-130
74-83-9	LCS Bromomethane	50.0	0.0	56.4	113	70-126
75-00-3	LCS Chloroethane	50.0	0.0	54.3	109	67-129
75-69-4	LCS Trichlorofluoromethane	50.0	0.0	54.3	109	73-143
67-64-1	LCS Acetone	250	0.0	141	56	30-140
75-35-4	LCS 1,1-Dichloroethylene	50.0	0.0	48.8	98	71-129
74-88-4	LCS Iodomethane	250	0.0	288	115	72-125
75-09-2	LCS Methylene chloride	50.0	0.0	53.0	106	64-121
75-15-0	LCS Carbon disulfide	250	0.0	269	108	70-133
156-60-5	LCS trans-1,2-Dichloroethylene	50.0	0.0	48.3	97	73-120
75-34-3	LCS 1,1-Dichloroethane	50.0	0.0	49.2	98	73-120
78-93-3	LCS 2-Butanone	250	0.0	168	67	32-145
156-59-2	LCS cis-1,2-Dichloroethylene	50.0	0.0	48.6	97	74-124
594-20-7	LCS 2,2-Dichloropropane	50.0	0.0	50.0	100	73-134
67-66-3	LCS Chloroform	50.0	0.0	53.9	108	74-120
74-97-5	LCS Bromochloromethane	50.0	0.0	55.2	110	73-122
71-55-6	LCS 1,1,1-Trichloroethane	50.0	0.0	53.9	108	74-132
563-58-6	LCS 1,1-Dichloropropene	50.0	0.0	51.2	102	79-128
56-23-5	LCS Carbon tetrachloride	50.0	0.0	55.8	112	75-135
107-06-2	LCS 1,2-Dichloroethane	50.0	0.0	50.8	102	65-120

Volatile  
Quality Control Summary  
Spike Recovery Report

Page 2 of 3

SDG Number: 10-1758

Sample Type: Laboratory Control Sample

Client ID: LCS for batch 955076

Matrix: SOIL

Lab Sample ID: 1202047553

Instrument: VOAA.I

Analysis Date: 02/19/2010 05:41

Dilution: 1

Analyst: JEB

Prep Batch ID: 955076

Purge Vol: 5 mL

Batch ID: 955077

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	50.7	101	74-120
79-01-6	LCS Trichloroethylene	50.0	0.0	54.0	108	77-124
78-87-5	LCS 1,2-Dichloropropane	50.0	0.0	48.8	98	73-120
75-27-4	LCS Bromodichloromethane	50.0	0.0	54.4	109	75-128
74-95-3	LCS Dibromomethane	50.0	0.0	55.2	110	75-120
108-10-1	LCS 4-Methyl-2-pentanone	250	0.0	221	89	63-133
10061-01-5	LCS cis-1,3-Dichloropropylene	50.0	0.0	52.5	105	78-127
108-88-3	LCS Toluene	50.0	0.0	51.1	102	74-120
10061-02-6	LCS trans-1,3-Dichloropropylene	50.0	0.0	52.1	104	70-125
79-00-5	LCS 1,1,2-Trichloroethane	50.0	0.0	52.2	104	75-120
591-78-6	LCS 2-Hexanone	250	0.0	183	73	40-153
142-28-9	LCS 1,3-Dichloropropane	50.0	0.0	51.4	103	73-120
127-18-4	LCS Tetrachloroethylene	50.0	0.0	59.5	119	72-126
124-48-1	LCS Dibromochloromethane	50.0	0.0	54.7	109	74-126
106-93-4	LCS 1,2-Dibromoethane	50.0	0.0	53.7	107	79-120
108-90-7	LCS Chlorobenzene	50.0	0.0	52.6	105	76-120
100-41-4	LCS Ethylbenzene	50.0	0.0	51.9	104	74-120
179601-23-1	LCS m,p-Xylenes	100	0.0	104	104	76-120
95-47-6	LCS o-Xylene	50.0	0.0	52.0	104	76-122
100-42-5	LCS Styrene	50.0	0.0	51.7	103	75-125
75-25-2	LCS Bromoform	50.0	0.0	56.4	113	68-135
79-34-5	LCS 1,1,2,2-Tetrachloroethane	50.0	0.0	48.8	98	72-122

Volatile  
Quality Control Summary  
Spike Recovery Report

Page 3 of 3

SDG Number: 10-1758

Sample Type: Laboratory Control Sample

Client ID: LCS for batch 955076

Matrix: SOIL

Lab Sample ID: 1202047553

Instrument: VOAA.I

Analysis Date: 02/19/2010 05:41

Dilution: 1

Analyst: JEB

Prep Batch ID: 955076

Purge Vol: 5 mL

Batch ID: 955077

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
96-18-4	LCS 1,2,3-Trichloropropane	50.0	0.0	50.8	102	72-129
108-86-1	LCS Bromobenzene	50.0	0.0	56.6	113	74-120
103-65-1	LCS n-Propylbenzene	50.0	0.0	48.4	97	70-120
95-49-8	LCS 2-Chlorotoluene	50.0	0.0	49.7	99	70-120
98-82-8	LCS Isopropylbenzene	50.0	0.0	48.0	96	60-121
108-67-8	LCS 1,3,5-Trimethylbenzene	50.0	0.0	48.9	98	71-121
106-43-4	LCS 4-Chlorotoluene	50.0	0.0	48.2	96	71-120
98-06-6	LCS tert-Butylbenzene	50.0	0.0	51.2	102	75-123
95-63-6	LCS 1,2,4-Trimethylbenzene	50.0	0.0	49.0	98	73-120
135-98-8	LCS sec-Butylbenzene	50.0	0.0	48.7	97	74-123
99-87-6	LCS 4-Isopropyltoluene	50.0	0.0	48.8	98	76-127
541-73-1	LCS 1,3-Dichlorobenzene	50.0	0.0	54.8	110	75-120
106-46-7	LCS 1,4-Dichlorobenzene	50.0	0.0	54.1	108	73-120
104-51-8	LCS n-Butylbenzene	50.0	0.0	48.2	96	73-128
96-12-8	LCS 1,2-Dibromo-3-chloropropane	50.0	0.0	44.6	89	69-136
630-20-6	LCS 1,1,1,2-Tetrachloroethane	50.0	0.0	57.4	115	75-124
95-50-1	LCS 1,2-Dichlorobenzene	50.0	0.0	54.6	109	75-120

Volatile  
Quality Control Summary  
Spike Recovery Report

Page 1 of 1

SDG Number: 10-1758

Sample Type: Laboratory Control Sample

Client ID: LCS for batch 955076

Matrix: SOIL

Lab Sample ID: 1202047554

Instrument: VOAA.I

Analysis Date: 02/19/2010 06:07

Dilution: 1

Analyst: JEB

Prep Batch ID: 955076

Purge Vol: 5 mL

Batch ID: 955077

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	267	107	67-140

## Method Blank Summary

Page 1 of 1

SDG Number:	10-1758	Client:	LANL010	Matrix:	SOIL
Client ID:	MB for batch 955076	Instrument ID:	VOAA.I	Data File:	021810\AY430LA.D
Lab Sample ID:	1202047550	Prep Date:	02/18/2010 17:07	Analyzed:	02/19/10 06:33
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 955076	1202047553	021810\AY428LA.D	02/19/10	0541
02 LCS for batch 955076	1202047554	021810\AY429LA.D	02/19/10	0607
03 RE15-10-8384	246866001	021810\AY431.D	02/19/10	0700
04 RE15-10-8366	246866002	021810\AY432.D	02/19/10	0726
05 RE15-10-8367	246866003	021810\AY433.D	02/19/10	0753
06 RE15-10-8364	246866004	021810\AY434.D	02/19/10	0819
07 RE15-10-8365	246866005	021810\AY435.D	02/19/10	0845
08 RE15-10-8368	246866006	021810\AY436.D	02/19/10	0911
09 RE15-10-8340	246866007	021810\AY437.D	02/19/10	0937
10 RE15-10-8341	246866008	021810\AY438.D	02/19/10	1003
11 RE15-10-8376	246866009	021810\AY439.D	02/19/10	1030
12 RE15-10-8366PS	1202047551	021810\AY446.D	02/19/10	1332
13 RE15-10-8366PSD	1202047552	021810\AY447.D	02/19/10	1358



## Instrument Performance Check

## BFB

Lab Name GEL Laboratories LLC

Client SDG: 10-1758

Instrument ID: VOAA.I

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

Column Description: DB-624

Lab File ID 020210\AW301.D

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

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

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

## Instrument Performance Check

## BFB

Lab Name GEL Laboratories LLC

Client SDG: 10-1758

Instrument ID: VOAA.I

Injection Date/Time: 19-FEB-10 05:16

Column Description: DB-624

Lab File ID 021810\AY427.D

m/e	Ion Abundance Criteria	% Relative Abundance
50	15.0 - 40.0% of mass 95	22.5
75	30.0 - 60.0% of mass 95	54.8
95	Base Peak, 100% Relative Abundance	100
96	5.0 - 9.0% of mass 95	6.5
173	Less than 2.0% of mass 174	0.5
174	50.0 - 100.0% of mass 95	75.6
175	5.0 - 9.0% of mass 174	7.4
176	95.0 - 101.0% of mass 174	96.8
177	5.0 - 9.0% of mass 176	6.8

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]05	WAVM100218-04	021810\AY428.D	19-FEB-10 05:41
BLK01LCS	1202047553	021810\AY428LA.D	19-FEB-10 05:41
CCVMIX[B]06	WAVM100218-05	021810\AY429.D	19-FEB-10 06:07
BLK01SLCS	1202047554	021810\AY429LA.D	19-FEB-10 06:07
BLK01	1202047550	021810\AY430LA.D	19-FEB-10 06:33
RE15-10-8384	246866001	021810\AY431.D	19-FEB-10 07:00
RE15-10-8366	246866002	021810\AY432.D	19-FEB-10 07:26
RE15-10-8367	246866003	021810\AY433.D	19-FEB-10 07:53
RE15-10-8364	246866004	021810\AY434.D	19-FEB-10 08:19
RE15-10-8365	246866005	021810\AY435.D	19-FEB-10 08:45
RE15-10-8368	246866006	021810\AY436.D	19-FEB-10 09:11
RE15-10-8340	246866007	021810\AY437.D	19-FEB-10 09:37
RE15-10-8341	246866008	021810\AY438.D	19-FEB-10 10:03
RE15-10-8376	246866009	021810\AY439.D	19-FEB-10 10:30
RE15-10-8366MS	1202047551	021810\AY446.D	19-FEB-10 13:32
RE15-10-8366MSD	1202047552	021810\AY447.D	19-FEB-10 13:58

Internal Standard  
Area and RT Summary

Lab Name : GEL Laboratories LLC

Instrument: VOAA.I

GC Column: DB-624

Client SDG: 10-1758

STD Analysis Time: 19-FEB-10 05:41

Data File: C:\msdchem\1\DATA\021810\AY428.D

	Fluorobenzene		Chlorobenzene-d5		1,4-Dichlorobenzene-d4	
	Area	# RT #	Area	# RT #	Area	# RT #
12 Hour STD	955921	9.34	710200	12.5	441150	14.9
Upper Limit	1911842	9.84	1420400	13.0	882300	15.4
Lower Limit	477961	8.84	355100	12.0	220575	14.4
Sample ID						
BLK01LCS	955921	9.34	710200	12.5	441150	14.9
BLK01SLCS	991518	9.34	717573	12.5	438339	14.9
BLK01	947629	9.34	676763	12.5	406316	14.9
RE15-10-8384	928708	9.34	674997	12.5	411082	14.9
RE15-10-8366	913649	9.34	658150	12.5	391517	14.9
RE15-10-8367	875424	9.34	629526	12.5	376839	14.9
RE15-10-8364	859596	9.34	614123	12.5	373663	14.9
RE15-10-8365	861131	9.34	617275	12.5	370917	14.9
RE15-10-8368	846846	9.34	605615	12.5	366166	14.9
RE15-10-8340	830926	9.34	599131	12.5	364797	14.9
RE15-10-8341	828883	9.34	601780	12.5	369596	14.9
RE15-10-8376	799861	9.34	579735	12.5	363437	14.9
RE15-10-8366MS	784815	9.34	574113	12.5	360348	14.9
RE15-10-8366MSD	807004	9.34	589937	12.5	379689	14.9

Area Upper Limit = +100% of internal standard area  
Area Lower Limit = - 50% of internal standard area  
RT Upper Limit = + 0.50 minutes of internal standard RT  
RT Lower Limit = - 0.50 minutes of internal standard RT

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

# Sample Data

**Volatile**  
**Certificate of Analysis**  
**Sample Summary**

**SDG Number:** 10-1758  
**Lab Sample ID:** 246866001

**Date Collected:** 02/09/2010 12:00  
**Date Received:** 02/11/2010 09:20

**Matrix:** S

**Client ID:** RE15-10-8384  
**Batch ID:** 955077  
**Run Date:** 02/19/2010 07:00  
**Prep Date:** 02/18/2010 20:06  
**Data File:** 021810\AY431.D

**Client:** LANL010  
**Method:** SW846 8260B  
**Inst:** VOAA.I  
**Analyst:** JEB  
**Aliquot:** 5 g  
**Column:** DB-624

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

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.00	ug/kg	0.340	1.00
74-87-3	Chloromethane	U	1.00	ug/kg	0.300	1.00
75-01-4	Vinyl chloride	U	1.00	ug/kg	0.300	1.00
74-83-9	Bromomethane	U	1.00	ug/kg	0.300	1.00
75-00-3	Chloroethane	U	1.00	ug/kg	0.300	1.00
75-69-4	Trichlorofluoromethane	U	1.00	ug/kg	0.300	1.00
67-64-1	Acetone	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:** 10-1758  
**Lab Sample ID:** 246866001

**Date Collected:** 02/09/2010 12:00  
**Date Received:** 02/11/2010 09:20  
**Client:** LANL010  
**Method:** SW846 8260B  
**Inst:** VOAA.I  
**Analyst:** JEB  
**Aliquot:** 5 g  
**Column:** DB-624

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

**Client ID:** RE15-10-8384  
**Batch ID:** 955077  
**Run Date:** 02/19/2010 07:00  
**Prep Date:** 02/18/2010 20:06  
**Data File:** 021810\AY431.D

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

**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	unknown siloxane	17.73	11.6	ug/kg	0	J

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\021810\  
Data File : AY431.D  
Acq On : 19 Feb 2010 7:00 am  
Operator : JEB  
InstName : VOAA  
Sample : |246866001|955077|1|VOA|1|VOA8260BS|  
Misc : LANL 5.0G N/A SOIL  
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Feb 19 13:58:01 2010  
Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M  
Quant Title : Volatile Organics 8260B SubList :  
QLast Update : Wed Feb 03 22:34:28 2010  
Response via : Initial Calibration  
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
Internal Standards								Dev(Min)
1) Fluorobenzene	9.339	9.342	1.000	96	928708	50.00	ug/L	0.00
41) Chlorobenzene-d5	12.508	12.507	1.000	117	674997	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	14.941	14.944	1.000	152	411082	50.00	ug/L	0.00
82) B Fluorobenzene	9.339	9.339	1.000	96	928708	50.00	ug/L	0.00
103) B Chlorobenzene-d5	12.508	12.508	1.000	117	674997	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	14.941	14.944	1.000	152	411082	50.00	ug/L	0.00
System Monitoring Compounds								Dev(Min)
29) 1,2-Dichloroethane-d4	8.978	8.982	0.961	65	385580	49.92	ug/L	0.00
Spiked Amount	50.000	Range	66 - 134	Recovery	=	99.84%		
43) Toluene-d8	10.983	10.987	0.878	98	880589	48.48	ug/L	0.00
Spiked Amount	50.000	Range	71 - 128	Recovery	=	96.96%		
61) Bromofluorobenzene	13.713	13.713	0.918	95	383269	45.81	ug/L	0.00
Spiked Amount	50.000	Range	65 - 130	Recovery	=	91.62%		
Target Compounds	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	QValue
2) Dichlorodifluoromethane	0.000	3.731	0.000		0	N.D.		
3) Chloromethane	4.023	4.043	0.431	50	157	N.D.		
4) Vinyl chloride	0.000	4.265	0.000		0	N.D.		
5) Bromomethane	0.000	4.839	0.000		0	N.D.		
6) Chloroethane	0.000	4.990	0.000		0	N.D.		
7) Trichlorofluoromethane	0.000	5.382	0.000		0	N.D.		
8) Ethyl ether	0.000	5.732	0.000		0	N.D.		
9) Acetone	6.089	6.082	0.652	43	5408	N.D.		
10) 1,1-Dichloroethylene	0.000	6.082	0.000		0	N.D.		
11) Iodomethane	0.000	6.305	0.000		0	N.D.		
12) Acetonitrile	0.000	6.421	0.000		0	N.D.		
13) Methyl acetate	0.000	6.481	0.000		0	N.D.		
14) Carbon disulfide	6.421	6.428	0.688	76	1288	N.D.		
15) Methylene chloride	6.651	6.651	0.712	84	2632	Below Cal		92
16) tert-Butyl methyl ether	0.000	6.973	0.000		0	N.D.		
17) trans-1,2-Dichloroethy...	0.000	6.994	0.000		0	N.D.		
18) Vinyl acetate	7.302	7.454	0.782	43	110	N.D.		
19) 1,1-Dichloroethane	0.000	7.471	0.000		0	N.D.		
20) 2-Butanone	0.000	8.062	0.000		0	N.D.		
21) cis-1,2-Dichloroethylene	0.000	8.108	0.000		0	N.D.		
22) 2,2-Dichloropropane	0.000	8.140	0.000		0	N.D.		
23) Bromochloromethane	0.000	8.373	0.000		0	N.D.		
24) Chloroform	0.000	8.423	0.000		0	N.D.		
25) 1,1,1-Trichloroethane	0.000	8.692	0.000		0	N.D.		
26) Cyclohexane	0.000	8.791	0.000		0	N.D.		
27) 1,1-Dichloropropene	0.000	8.851	0.000		0	N.D.		
28) Carbon tetrachloride	0.000	8.886	0.000		0	N.D.		
30) 1,2-Dichloroethane	0.000	9.063	0.000		0	N.D.		
31) Benzene	0.000	9.084	0.000		0	N.D.		
32) Cyclohexene	0.000	9.208	0.000		0	N.D.		
33) n-Butyl alcohol	0.000	9.462	0.000		0	N.D.		
34) Trichloroethylene	0.000	9.731	0.000		0	N.D.		
35) 1,2-Dichloropropane	0.000	9.965	0.000		0	N.D.		
36) Methylcyclohexane	0.000	9.982	0.000		0	N.D.		
37) Dibromomethane	0.000	10.095	0.000		0	N.D.		
38) Bromodichloromethane	0.000	10.216	0.000		0	N.D.		
39) 2-Chloroethylvinyl ether	0.000	10.453	0.000		0	N.D.		

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\021810\  
Data File : AY431.D  
Acq On : 19 Feb 2010 7:00 am  
Operator : JEB  
InstName : VOAA  
Sample : |246866001|955077|1|VOA|1|VOA8260BS|  
Misc : LANL 5.0G N/A SOIL  
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Feb 19 13:58:01 2010  
Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M  
Quant Title : Volatile Organics 8260B SubList :  
QLast Update : Wed Feb 03 22:34:28 2010  
Response via : Initial Calibration  
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
40) cis-1,3-Dichloropropylene	0.000	10.668	0.000		0	N.D.	
42) 4-Methyl-2-pentanone	0.000	10.774	0.000		0	N.D.	
44) Toluene	11.058	11.057	0.884	91	1291	N.D.	
45) trans-1,3-Dichloroprop...	0.000	11.213	0.000		0	N.D.	
46) 1,1,2-Trichloroethane	0.000	11.429	0.000		0	N.D.	
47) 2-Hexanone	0.000	11.627	0.000		0	N.D.	
48) 1,3-Dichloropropane	0.000	11.620	0.000		0	N.D.	
49) Tetrachloroethylene	0.000	11.655	0.000		0	N.D.	
50) Dibromochloromethane	0.000	11.881	0.000		0	N.D.	
51) 1,2-Dibromoethane	0.000	12.044	0.000		0	N.D.	
52) Chlorobenzene	0.000	12.543	0.000		0	N.D.	
53) 1,1,1,2-Tetrachloroethane	0.000	12.599	0.000		0	N.D.	
54) Ethylbenzene	12.617	12.617	1.009	91	334	N.D.	
55) m,p-Xylenes	0.000	12.730	0.000		0	N.D.	
56) o-Xylene	0.000	13.162	0.000		0	N.D.	
57) Styrene	0.000	13.162	0.000		0	N.D.	
59) Bromoform	0.000	13.402	0.000		0	N.D.	
60) Isopropylbenzene	0.000	13.529	0.000		0	N.D.	
62) 1,1,2,2-Tetrachloroethane	0.000	13.795	0.000		0	N.D.	
63) 1,2,3-Trichloropropane	0.000	13.879	0.000		0	N.D.	
64) Bromobenzene	0.000	13.918	0.000		0	N.D.	
65) n-Propylbenzene	13.957	13.957	0.934	91	239	N.D.	
66) 1,3,5-Trimethylbenzene	0.000	14.116	0.000		0	N.D.	
67) 2-Chlorotoluene	0.000	14.095	0.000		0	N.D.	
68) 4-Chlorotoluene	14.194	14.198	0.950	91	563	N.D.	
69) tert-Butylbenzene	0.000	14.488	0.000		0	N.D.	
70) 1,2,4-Trimethylbenzene	0.000	14.527	0.000		0	N.D.	
71) sec-Butylbenzene	0.000	14.718	0.000		0	N.D.	
72) 4-Isopropyltoluene	0.000	14.841	0.000		0	N.D.	
73) 1,3-Dichlorobenzene	14.880	14.884	0.996	146	481	N.D.	
74) 1,4-Dichlorobenzene	14.969	14.969	1.002	146	1229	N.D.	
75) n-Butylbenzene	15.082	15.276	1.009	91	1184	N.D.	
76) 1,2-Dichlorobenzene	0.000	15.379	0.000		0	N.D.	
77) 1,2-Dibromo-3-chloropr...	0.000	16.192	0.000		0	N.D.	
78) 1,2,4-Trichlorobenzene	17.183	17.183	1.150	180	889	N.D.	
79) Hexachlorobutadiene	0.000	17.360	0.000		0	N.D.	
80) Naphthalene	17.530	17.529	1.173	128	3805	N.D.	
81) 1,2,3-Trichlorobenzene	17.847	17.847	1.195	180	694	N.D.	
83) Chlorotrifluoroethylene	0.000	3.661	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000	4.416	0.000		0	N.D.	
85) Acrolein	0.000	5.898	0.000		0	N.D.	
86) Trichlorotrifluoroethane	0.000	6.068	0.000		0	N.D.	
87) Isopropyl Alcohol	0.000	6.188	0.000		0	N.D.	
88) Allyl chloride	0.000	6.506	0.000		0	N.D.	
89) tert-Butyl Alcohol	0.000	6.687	0.000		0	N.D.	
90) Acrylonitrile	0.000	6.895	0.000		0	N.D.	
91) Isopropyl ether	0.000	7.489	0.000		0	N.D.	
92) 2-Chloro-1,3-butadiene	0.000	7.581	0.000		0	N.D.	
93) Ethyl tert-butyl ether	0.000	7.893	0.000		0	N.D.	
94) Ethyl acetate	0.000	8.094	0.000		0	N.D.	
95) Propionitrile	0.000	8.122	0.000		0	N.D.	
96) Methacrylonitrile	0.000	8.306	0.000		0	N.D.	
97) Tetrahydrofuran	0.000	8.430	0.000		0	N.D.	
98) Isobutyl alcohol	0.000	8.777	0.000		0	N.D.	



Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\021810\  
Data File : AY431.D  
Acq On : 19 Feb 2010 7:00 am  
Operator : JEB  
InstName : VOAA  
Sample : |246866001|955077|1|VOA|1|VOA8260BS|  
Misc : LANL 5.0G N/A SOIL  
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Feb 19 13:58:01 2010  
Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M  
Quant Title : Volatile Organics 8260B SubList :  
QLast Update : Wed Feb 03 22:34:28 2010  
Response via : Initial Calibration  
Integrator: RTE

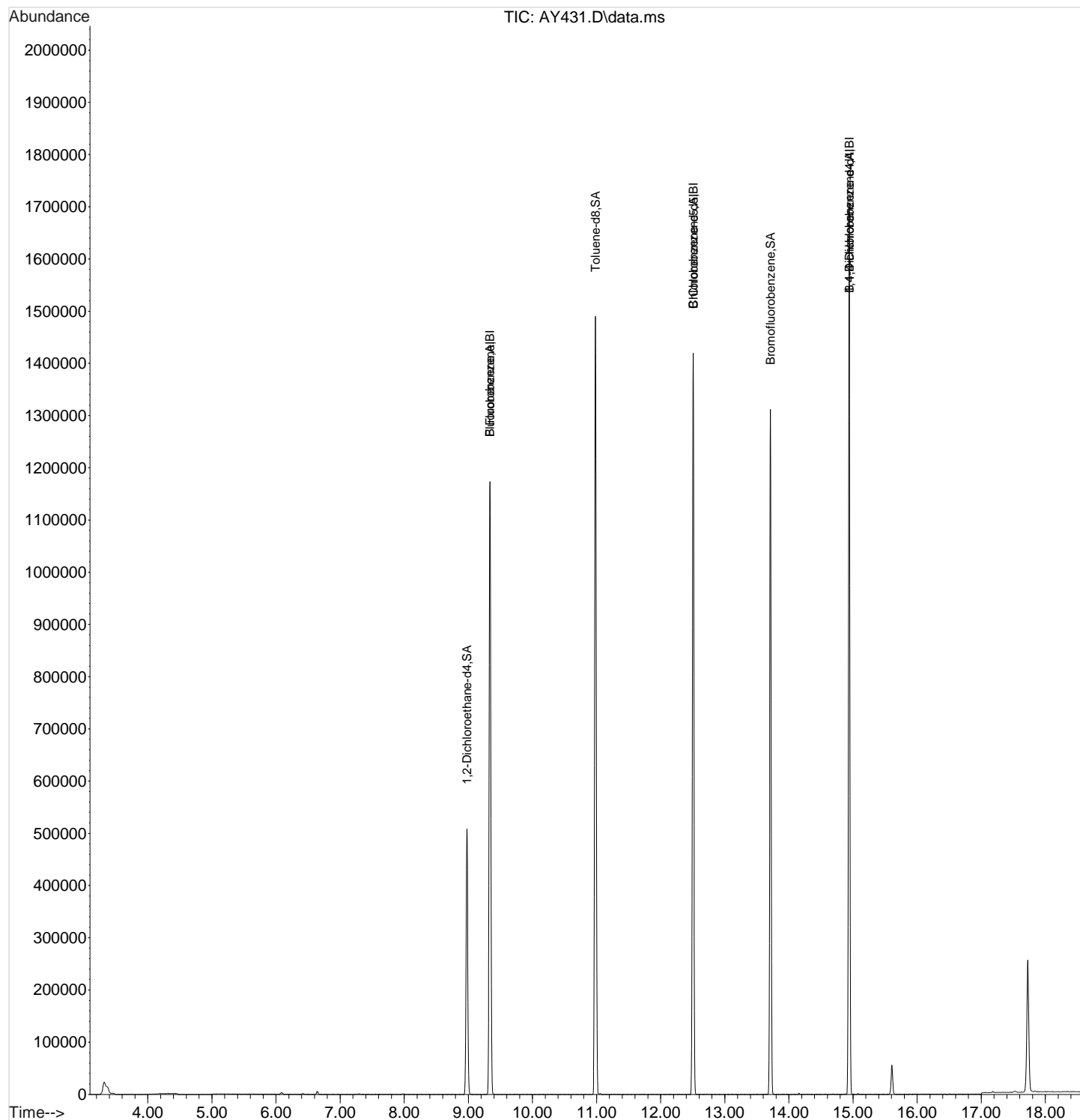
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
99) Methyl tert-amyl ether	0.000	9.127	0.000		0	N.D.	
100) Methyl methacrylate	0.000	9.968	0.000		0	N.D.	
101) 1,4-Dioxane	0.000	10.060	0.000		0	N.D.	
102) 2-Nitropropane	0.000	10.414	0.000		0	N.D.	
104) Ethyl methacrylate	10.994	11.238	0.879	69	3159	N.D.	
106) 1-Chlorohexane	0.000	12.426	0.000		0	N.D.	
107) cis-1,4-Dichloro-2-butene	0.000	13.554	0.000		0	N.D.	
108) Cyclohexanone	0.000	13.657	0.000		0	N.D.	
109) trans-1,4-Dichloro-2-b...	0.000	13.844	0.000		0	N.D.	
110) Pentachloroethane	0.000	14.541	0.000		0	N.D.	
111) Benzyl chloride	15.082	15.082	1.009	91	1184	N.D.	
112) bis(2-Chloroisopropyl)...	15.609	15.485	1.045	45	3755	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\021810\  
Data File : AY431.D  
Acq On : 19 Feb 2010 7:00 am  
Operator : JEB  
InstName : VOAA  
Sample : |246866001|955077|1|VOA|1|VOA8260BS|  
Misc : LANL 5.0G N/A SOIL  
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Feb 19 13:58:01 2010  
Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M  
Quant Title : Volatile Organics 8260B SubList :  
QLast Update : Wed Feb 03 22:34:28 2010  
Response via : Initial Calibration  
Integrator: RTE



GEL Laboratories, LLC

Tentatively Identified Compound (LSC) summary  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\021810\  
Data File : AY431.D  
Acq On : 19 Feb 2010 7:00 am  
Operator : JEB  
Sample : |246866001|955077|1|VOA|1|VOA8260BS|  
Misc : LANL 5.0G N/A SOIL  
ALS Vial : 31 Sample Multiplier: 1

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

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

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard--			
					#	RT	Resp	Conc
unknown siloxane	17.729	11.6	ug/L	586890	6	14.941	2522800	50.0

**Volatile**  
**Certificate of Analysis**  
**Sample Summary**

**SDG Number:** 10-1758  
**Lab Sample ID:** 246866002

**Date Collected:** 02/09/2010 12:00  
**Date Received:** 02/11/2010 09:20  
**Client:** LANL010  
**Method:** SW846 8260B  
**Inst:** VOAA.I  
**Analyst:** JEB  
**Aliquot:** 5.2 g  
**Column:** DB-624

**Matrix:** R  
**%Moisture:** 18  
**Project:** LANL01004  
**SOP Ref:** GL-OA-E-038  
**Dilution:** 1  
**Purge Vol:** 5 mL  
**Final Volume:** 5 mL

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.17	ug/kg	0.399	1.17
74-87-3	Chloromethane	U	1.17	ug/kg	0.352	1.17
75-01-4	Vinyl chloride	U	1.17	ug/kg	0.352	1.17
74-83-9	Bromomethane	U	1.17	ug/kg	0.352	1.17
75-00-3	Chloroethane	U	1.17	ug/kg	0.352	1.17
75-69-4	Trichlorofluoromethane	U	1.17	ug/kg	0.352	1.17
67-64-1	Acetone	U	5.86	ug/kg	1.95	5.86
75-35-4	1,1-Dichloroethylene	U	1.17	ug/kg	0.352	1.17
74-88-4	Iodomethane	U	5.86	ug/kg	1.88	5.86
75-09-2	Methylene chloride	U	5.86	ug/kg	2.35	5.86
75-15-0	Carbon disulfide	U	5.86	ug/kg	1.47	5.86
156-60-5	trans-1,2-Dichloroethylene	U	1.17	ug/kg	0.352	1.17
75-34-3	1,1-Dichloroethane	U	1.17	ug/kg	0.352	1.17
78-93-3	2-Butanone	U	5.86	ug/kg	1.76	5.86
156-59-2	cis-1,2-Dichloroethylene	U	1.17	ug/kg	0.352	1.17
594-20-7	2,2-Dichloropropane	U	1.17	ug/kg	0.352	1.17
67-66-3	Chloroform	U	1.17	ug/kg	0.352	1.17
74-97-5	Bromochloromethane	U	1.17	ug/kg	0.387	1.17
71-55-6	1,1,1-Trichloroethane	U	1.17	ug/kg	0.352	1.17
563-58-6	1,1-Dichloropropene	U	1.17	ug/kg	0.352	1.17
56-23-5	Carbon tetrachloride	U	1.17	ug/kg	0.352	1.17
107-06-2	1,2-Dichloroethane	U	1.17	ug/kg	0.352	1.17
71-43-2	Benzene	U	1.17	ug/kg	0.352	1.17
79-01-6	Trichloroethylene	U	1.17	ug/kg	0.387	1.17
78-87-5	1,2-Dichloropropane	U	1.17	ug/kg	0.352	1.17
75-27-4	Bromodichloromethane	U	1.17	ug/kg	0.352	1.17
74-95-3	Dibromomethane	U	1.17	ug/kg	0.352	1.17
108-10-1	4-Methyl-2-pentanone	U	5.86	ug/kg	1.47	5.86
10061-01-5	cis-1,3-Dichloropropylene	U	1.17	ug/kg	0.352	1.17
108-88-3	Toluene	U	1.17	ug/kg	0.352	1.17
10061-02-6	trans-1,3-Dichloropropylene	U	1.17	ug/kg	0.352	1.17
79-00-5	1,1,2-Trichloroethane	U	1.17	ug/kg	0.352	1.17
591-78-6	2-Hexanone	U	5.86	ug/kg	1.76	5.86
142-28-9	1,3-Dichloropropane	U	1.17	ug/kg	0.352	1.17
127-18-4	Tetrachloroethylene	U	1.17	ug/kg	0.352	1.17
124-48-1	Dibromochloromethane	U	1.17	ug/kg	0.352	1.17
106-93-4	1,2-Dibromoethane	U	1.17	ug/kg	0.352	1.17
108-90-7	Chlorobenzene	U	1.17	ug/kg	0.352	1.17

**Volatile**  
**Certificate of Analysis**  
**Sample Summary**

**SDG Number:** 10-1758  
**Lab Sample ID:** 246866002

**Date Collected:** 02/09/2010 12:00  
**Date Received:** 02/11/2010 09:20  
**Client:** LANL010  
**Method:** SW846 8260B  
**Inst:** VOAA.I  
**Analyst:** JEB  
**Aliquot:** 5.2 g  
**Column:** DB-624

**Matrix:** R  
**%Moisture:** 18  
**Project:** LANL01004  
**SOP Ref:** GL-OA-E-038  
**Dilution:** 1  
**Purge Vol:** 5 mL  
**Final Volume:** 5 mL

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.17	ug/kg	0.352	1.17
179601-23-1	m,p-Xylenes	U	2.35	ug/kg	0.352	2.35
95-47-6	o-Xylene	U	1.17	ug/kg	0.352	1.17
100-42-5	Styrene	U	1.17	ug/kg	0.352	1.17
75-25-2	Bromoform	U	1.17	ug/kg	0.352	1.17
79-34-5	1,1,2,2-Tetrachloroethane	U	1.17	ug/kg	0.352	1.17
96-18-4	1,2,3-Trichloropropane	U	1.17	ug/kg	0.352	1.17
108-86-1	Bromobenzene	U	1.17	ug/kg	0.352	1.17
103-65-1	n-Propylbenzene	U	1.17	ug/kg	0.352	1.17
95-49-8	2-Chlorotoluene	U	1.17	ug/kg	0.352	1.17
98-82-8	Isopropylbenzene	U	1.17	ug/kg	0.352	1.17
108-67-8	1,3,5-Trimethylbenzene	U	1.17	ug/kg	0.352	1.17
106-43-4	4-Chlorotoluene	U	1.17	ug/kg	0.352	1.17
98-06-6	tert-Butylbenzene	U	1.17	ug/kg	0.352	1.17
95-63-6	1,2,4-Trimethylbenzene	U	1.17	ug/kg	0.352	1.17
135-98-8	sec-Butylbenzene	U	1.17	ug/kg	0.352	1.17
99-87-6	4-Isopropyltoluene	U	1.17	ug/kg	0.352	1.17
541-73-1	1,3-Dichlorobenzene	U	1.17	ug/kg	0.352	1.17
106-46-7	1,4-Dichlorobenzene	U	1.17	ug/kg	0.352	1.17
104-51-8	n-Butylbenzene	U	1.17	ug/kg	0.352	1.17
96-12-8	1,2-Dibromo-3-chloropropane	U	1.17	ug/kg	0.352	1.17
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.86	ug/kg	1.88	5.86
	<i>Trichlorotrifluoroethane</i>					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.17	ug/kg	0.352	1.17
95-50-1	1,2-Dichlorobenzene	U	1.17	ug/kg	0.352	1.17

**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	unknown siloxane	15.61	6.91	ug/kg	0	J

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\021810\  
Data File : AY432.D  
Acq On : 19 Feb 2010 7:26 am  
Operator : JEB  
InstName : VOAA  
Sample : |246866002|955077|1|VOA|1|VOA8260BS|  
Misc : LANL 5.2G N/A SOIL  
ALS Vial : 32 Sample Multiplier: 1

Quant Time: Feb 19 14:02:29 2010  
Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M  
Quant Title : Volatile Organics 8260B SubList :  
QLast Update : Wed Feb 03 22:34:28 2010  
Response via : Initial Calibration  
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
Internal Standards								Dev(Min)
1) Fluorobenzene	9.339	9.342	1.000	96	913649	50.00	ug/L	0.00
41) Chlorobenzene-d5	12.507	12.507	1.000	117	658150	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	14.940	14.944	1.000	152	391517	50.00	ug/L	0.00
82) B Fluorobenzene	9.339	9.339	1.000	96	913649	50.00	ug/L	0.00
103) B Chlorobenzene-d5	12.507	12.508	1.000	117	658150	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	14.940	14.944	1.000	152	391517	50.00	ug/L	0.00
System Monitoring Compounds								Dev(Min)
29) 1,2-Dichloroethane-d4	8.978	8.982	0.961	65	376419	49.54	ug/L	0.00
Spiked Amount	50.000	Range	66 - 134	Recovery	=	99.08%		
43) Toluene-d8	10.983	10.987	0.878	98	855527	48.31	ug/L	0.00
Spiked Amount	50.000	Range	71 - 128	Recovery	=	96.62%		
61) Bromofluorobenzene	13.713	13.713	0.918	95	366621	46.01	ug/L	0.00
Spiked Amount	50.000	Range	65 - 130	Recovery	=	92.02%		
Target Compounds	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	QValue
2) Dichlorodifluoromethane	0.000	3.731	0.000		0	N.D.		
3) Chloromethane	0.000	4.043	0.000		0	N.D.		
4) Vinyl chloride	0.000	4.265	0.000		0	N.D.		
5) Bromomethane	0.000	4.839	0.000		0	N.D.		
6) Chloroethane	0.000	4.990	0.000		0	N.D.		
7) Trichlorofluoromethane	0.000	5.382	0.000		0	N.D.		
8) Ethyl ether	0.000	5.732	0.000		0	N.D.		
9) Acetone	6.099	6.082	0.653	43	966	N.D.		
10) 1,1-Dichloroethylene	0.000	6.082	0.000		0	N.D.		
11) Iodomethane	0.000	6.305	0.000		0	N.D.		
12) Acetonitrile	0.000	6.421	0.000		0	N.D.		
13) Methyl acetate	0.000	6.481	0.000		0	N.D.		
14) Carbon disulfide	6.425	6.428	0.688	76	830	N.D.		
15) Methylene chloride	6.648	6.651	0.712	84	2633	Below Cal		90
16) tert-Butyl methyl ether	0.000	6.973	0.000		0	N.D.		
17) trans-1,2-Dichloroethy...	0.000	6.994	0.000		0	N.D.		
18) Vinyl acetate	7.295	7.454	0.781	43	108	N.D.		
19) 1,1-Dichloroethane	0.000	7.471	0.000		0	N.D.		
20) 2-Butanone	0.000	8.062	0.000		0	N.D.		
21) cis-1,2-Dichloroethylene	0.000	8.108	0.000		0	N.D.		
22) 2,2-Dichloropropane	0.000	8.140	0.000		0	N.D.		
23) Bromochloromethane	0.000	8.373	0.000		0	N.D.		
24) Chloroform	0.000	8.423	0.000		0	N.D.		
25) 1,1,1-Trichloroethane	0.000	8.692	0.000		0	N.D.		
26) Cyclohexane	0.000	8.791	0.000		0	N.D.		
27) 1,1-Dichloropropene	0.000	8.851	0.000		0	N.D.		
28) Carbon tetrachloride	0.000	8.886	0.000		0	N.D.		
30) 1,2-Dichloroethane	0.000	9.063	0.000		0	N.D.		
31) Benzene	0.000	9.084	0.000		0	N.D.		
32) Cyclohexene	0.000	9.208	0.000		0	N.D.		
33) n-Butyl alcohol	0.000	9.462	0.000		0	N.D.		
34) Trichloroethylene	0.000	9.731	0.000		0	N.D.		
35) 1,2-Dichloropropane	0.000	9.965	0.000		0	N.D.		
36) Methylcyclohexane	0.000	9.982	0.000		0	N.D.		
37) Dibromomethane	0.000	10.095	0.000		0	N.D.		
38) Bromodichloromethane	0.000	10.216	0.000		0	N.D.		
39) 2-Chloroethylvinyl ether	0.000	10.453	0.000		0	N.D.		

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\021810\  
Data File : AY432.D  
Acq On : 19 Feb 2010 7:26 am  
Operator : JEB  
InstName : VOAA  
Sample : |246866002|955077|1|VOA|1|VOA8260BS|  
Misc : LANL 5.2G N/A SOIL  
ALS Vial : 32 Sample Multiplier: 1

Quant Time: Feb 19 14:02:29 2010  
Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M  
Quant Title : Volatile Organics 8260B SubList :  
QLast Update : Wed Feb 03 22:34:28 2010  
Response via : Initial Calibration  
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
40) cis-1,3-Dichloropropylene	0.000	10.668	0.000		0	N.D.	
42) 4-Methyl-2-pentanone	0.000	10.774	0.000		0	N.D.	
44) Toluene	0.000	11.057	0.000		0	N.D.	
45) trans-1,3-Dichloroprop...	0.000	11.213	0.000		0	N.D.	
46) 1,1,2-Trichloroethane	0.000	11.429	0.000		0	N.D.	
47) 2-Hexanone	0.000	11.627	0.000		0	N.D.	
48) 1,3-Dichloropropane	0.000	11.620	0.000		0	N.D.	
49) Tetrachloroethylene	0.000	11.655	0.000		0	N.D.	
50) Dibromochloromethane	0.000	11.881	0.000		0	N.D.	
51) 1,2-Dibromoethane	0.000	12.044	0.000		0	N.D.	
52) Chlorobenzene	0.000	12.543	0.000		0	N.D.	
53) 1,1,1,2-Tetrachloroethane	0.000	12.599	0.000		0	N.D.	
54) Ethylbenzene	12.511	12.617	1.000	91	1394	N.D.	
55) m,p-Xylenes	0.000	12.730	0.000		0	N.D.	
56) o-Xylene	0.000	13.162	0.000		0	N.D.	
57) Styrene	0.000	13.162	0.000		0	N.D.	
59) Bromoform	0.000	13.402	0.000		0	N.D.	
60) Isopropylbenzene	0.000	13.529	0.000		0	N.D.	
62) 1,1,2,2-Tetrachloroethane	0.000	13.795	0.000		0	N.D.	
63) 1,2,3-Trichloropropane	0.000	13.879	0.000		0	N.D.	
64) Bromobenzene	0.000	13.918	0.000		0	N.D.	
65) n-Propylbenzene	14.201	13.957	0.951	91	267	N.D.	
66) 1,3,5-Trimethylbenzene	0.000	14.116	0.000		0	N.D.	
67) 2-Chlorotoluene	0.000	14.095	0.000		0	N.D.	
68) 4-Chlorotoluene	14.201	14.198	0.951	91	267	N.D.	
69) tert-Butylbenzene	0.000	14.488	0.000		0	N.D.	
70) 1,2,4-Trimethylbenzene	0.000	14.527	0.000		0	N.D.	
71) sec-Butylbenzene	0.000	14.718	0.000		0	N.D.	
72) 4-Isopropyltoluene	0.000	14.841	0.000		0	N.D.	
73) 1,3-Dichlorobenzene	14.891	14.884	0.997	146	106	N.D.	
74) 1,4-Dichlorobenzene	14.972	14.969	1.002	146	819	N.D.	
75) n-Butylbenzene	15.089	15.276	1.010	91	404	N.D.	
76) 1,2-Dichlorobenzene	0.000	15.379	0.000		0	N.D.	
77) 1,2-Dibromo-3-chloropr...	0.000	16.192	0.000		0	N.D.	
78) 1,2,4-Trichlorobenzene	17.183	17.183	1.150	180	749	N.D.	
79) Hexachlorobutadiene	0.000	17.360	0.000		0	N.D.	
80) Naphthalene	17.529	17.529	1.173	128	2632	N.D.	
81) 1,2,3-Trichlorobenzene	17.839	17.847	1.194	180	443	N.D.	
83) Chlorotrifluoroethylene	0.000	3.661	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000	4.416	0.000		0	N.D.	
85) Acrolein	0.000	5.898	0.000		0	N.D.	
86) Trichlorotrifluoroethane	0.000	6.068	0.000		0	N.D.	
87) Isopropyl Alcohol	0.000	6.188	0.000		0	N.D.	
88) Allyl chloride	0.000	6.506	0.000		0	N.D.	
89) tert-Butyl Alcohol	0.000	6.687	0.000		0	N.D.	
90) Acrylonitrile	0.000	6.895	0.000		0	N.D.	
91) Isopropyl ether	0.000	7.489	0.000		0	N.D.	
92) 2-Chloro-1,3-butadiene	0.000	7.581	0.000		0	N.D.	
93) Ethyl tert-butyl ether	0.000	7.893	0.000		0	N.D.	
94) Ethyl acetate	0.000	8.094	0.000		0	N.D.	
95) Propionitrile	0.000	8.122	0.000		0	N.D.	
96) Methacrylonitrile	0.000	8.306	0.000		0	N.D.	
97) Tetrahydrofuran	0.000	8.430	0.000		0	N.D.	
98) Isobutyl alcohol	0.000	8.777	0.000		0	N.D.	



Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\021810\  
Data File : AY432.D  
Acq On : 19 Feb 2010 7:26 am  
Operator : JEB  
InstName : VOAA  
Sample : |246866002|955077|1|VOA|1|VOA8260BS|  
Misc : LANL 5.2G N/A SOIL  
ALS Vial : 32 Sample Multiplier: 1

Quant Time: Feb 19 14:02:29 2010  
Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M  
Quant Title : Volatile Organics 8260B SubList :  
QLast Update : Wed Feb 03 22:34:28 2010  
Response via : Initial Calibration  
Integrator: RTE

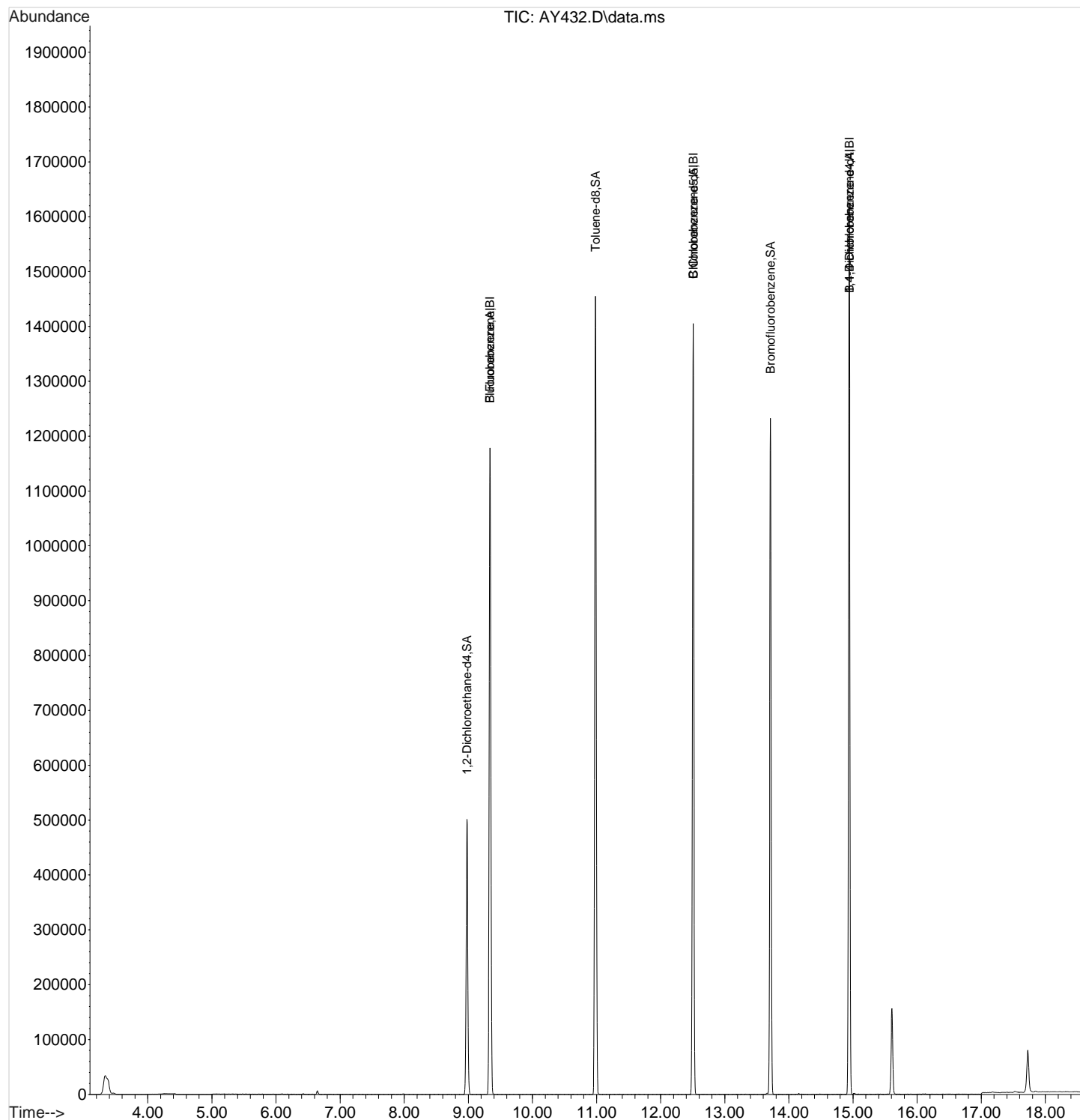
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
99) Methyl tert-amyl ether	0.000	9.127	0.000		0	N.D.	
100) Methyl methacrylate	0.000	9.968	0.000		0	N.D.	
101) 1,4-Dioxane	0.000	10.060	0.000		0	N.D.	
102) 2-Nitropropane	0.000	10.414	0.000		0	N.D.	
104) Ethyl methacrylate	0.000	11.238	0.000		0	N.D.	
106) 1-Chlorohexane	0.000	12.426	0.000		0	N.D.	
107) cis-1,4-Dichloro-2-butene	0.000	13.554	0.000		0	N.D.	
108) Cyclohexanone	0.000	13.657	0.000		0	N.D.	
109) trans-1,4-Dichloro-2-b...	0.000	13.844	0.000		0	N.D.	
110) Pentachloroethane	0.000	14.541	0.000		0	N.D.	
111) Benzyl chloride	15.089	15.082	1.010	91	404	N.D.	
112) bis(2-Chloroisopropyl)...	0.000	15.485	0.000		0m	N.D.	d

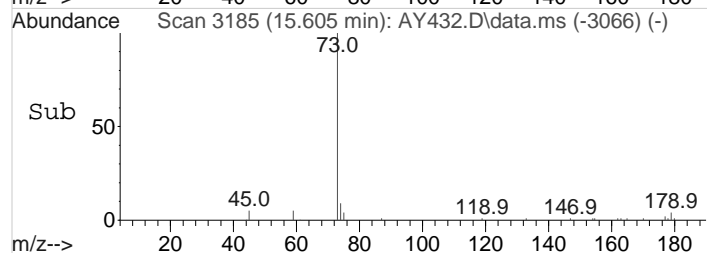
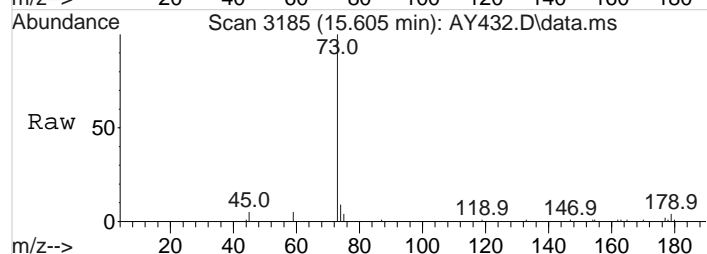
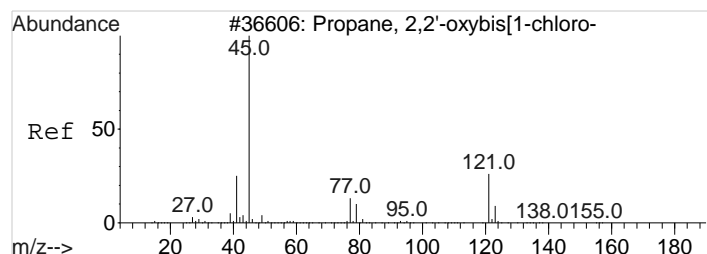
(#) = qualifier out of range (m) = manual integration (+) = signals summed  
(E) = Over the calibration range (d) = deleted

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\021810\  
Data File : AY432.D  
Acq On : 19 Feb 2010 7:26 am  
Operator : JEB  
InstName : VOAA  
Sample : |246866002|955077|1|VOA|1|VOA8260BS|  
Misc : LANL 5.2G N/A SOIL  
ALS Vial : 32 Sample Multiplier: 1

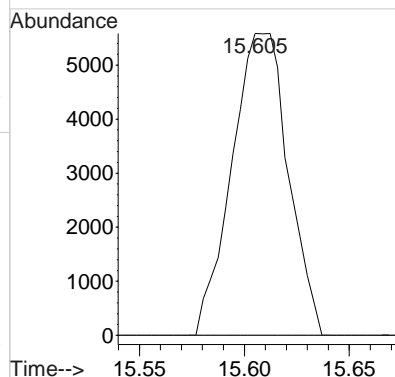
Quant Time: Feb 19 14:02:29 2010  
Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M  
Quant Title : Volatile Organics 8260B SubList :  
QLast Update : Wed Feb 03 22:34:28 2010  
Response via : Initial Calibration  
Integrator: RTE





#112 BEFORE analyst DELETION  
bis(2-Chloroisopropyl)ether  
Concen: 3.10 ug/L  
RT: 15.605 min Scan# 3185  
Delta R.T. 0.120 min  
Lab File: AY432.D  
Acq: 19 Feb 2010 7:26 am

Tgt Ion	Ratio	Lower	Upper
45	100		
121	0.0	0.0	49.0



GEL Laboratories, LLC

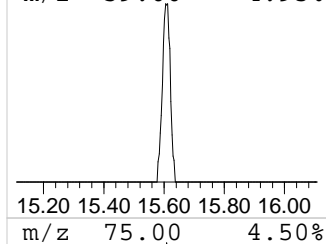
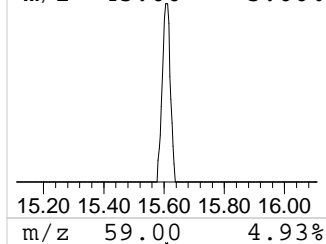
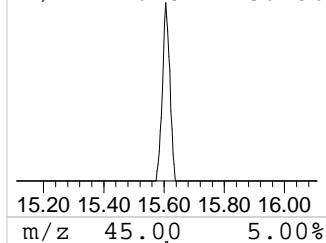
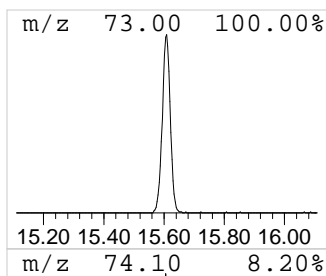
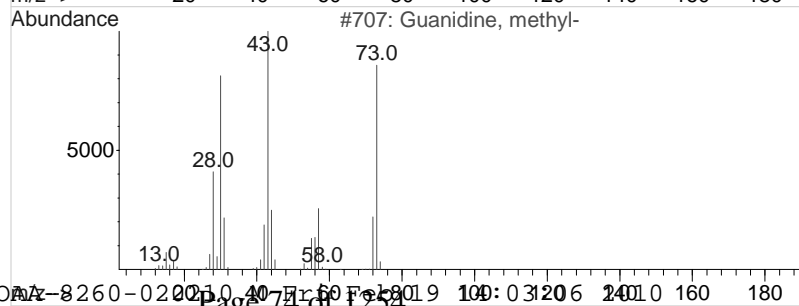
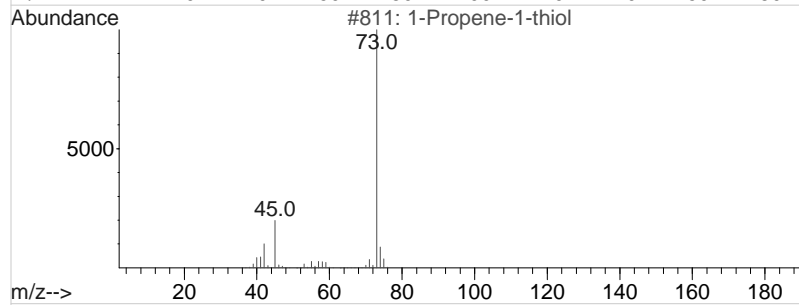
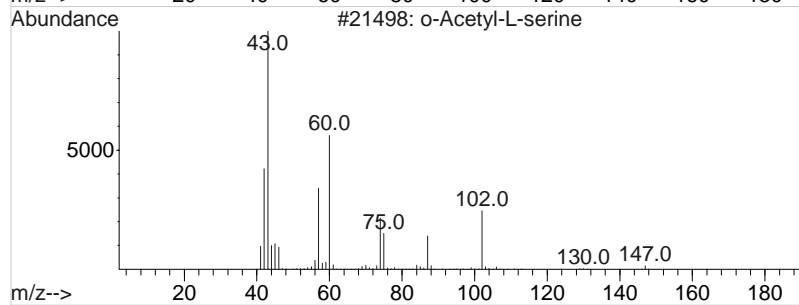
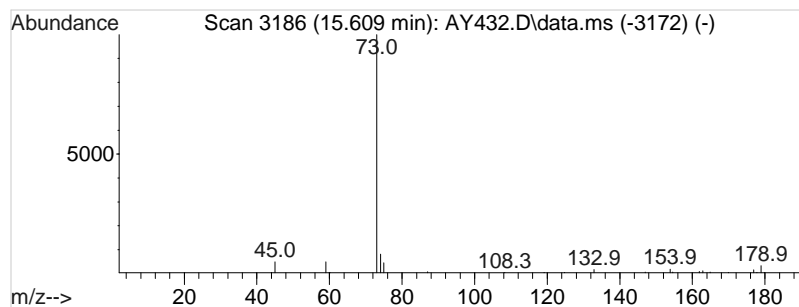
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TIC Library      : C:\Database\NIST05.L
TIC Integration  Parameters: ron.P
```

```

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

```

R.T.	EstConc	Area	Relative to ISTD			R.T.
15.609	5.89 ug/L	284739	B 1,4-Dichlorobenzene-d4			14.940
Hit# of	5	Tentative ID	MW	MolForm	CAS#	Qual
1		o-Acetyl-L-serine	147	C5H9NO4	005147-00-2	5
2		1-Propene-1-thiol	74	C3H6S	000925-89-3	4
3		Guanidine, methyl-	73	C2H7N3	000471-29-4	4
4		Formamide, N,N-dimethyl-	73	C3H7NO	000068-12-2	4
5		Acetamide, N-methyl-	73	C3H7NO	000079-16-3	4



Tentatively Identified Compound (LSC) summary  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\021810\  
Data File : AY432.D  
Acq On : 19 Feb 2010 7:26 am  
Operator : JEB  
Sample : |246866002|955077|1|VOA|1|VOA8260BS|  
Misc : LANL 5.2G N/A SOIL  
ALS Vial : 32 Sample Multiplier: 1

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

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

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard--			
					#	RT	Resp	Conc
unknown siloxane	15.609	5.9	ug/L	284739	6	14.940	2416820	50.0

**Volatile**  
**Certificate of Analysis**  
**Sample Summary**

**SDG Number:** 10-1758  
**Lab Sample ID:** 246866003

**Date Collected:** 02/09/2010 12:00  
**Date Received:** 02/11/2010 09:20  
**Client:** LANL010  
**Method:** SW846 8260B  
**Inst:** VOAA.I  
**Analyst:** JEB  
**Aliquot:** 5.2 g  
**Column:** DB-624

**Matrix:** R  
**%Moisture:** 19.3  
**Project:** LANL01004  
**SOP Ref:** GL-OA-E-038  
**Dilution:** 1  
**Purge Vol:** 5 mL  
**Final Volume:** 5 mL

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.19	ug/kg	0.405	1.19
74-87-3	Chloromethane	U	1.19	ug/kg	0.357	1.19
75-01-4	Vinyl chloride	U	1.19	ug/kg	0.357	1.19
74-83-9	Bromomethane	U	1.19	ug/kg	0.357	1.19
75-00-3	Chloroethane	U	1.19	ug/kg	0.357	1.19
75-69-4	Trichlorofluoromethane	U	1.19	ug/kg	0.357	1.19
67-64-1	Acetone	J	2.13	ug/kg	1.98	5.96
75-35-4	1,1-Dichloroethylene	U	1.19	ug/kg	0.357	1.19
74-88-4	Iodomethane	U	5.96	ug/kg	1.91	5.96
75-09-2	Methylene chloride	U	5.96	ug/kg	2.38	5.96
75-15-0	Carbon disulfide	U	5.96	ug/kg	1.49	5.96
156-60-5	trans-1,2-Dichloroethylene	U	1.19	ug/kg	0.357	1.19
75-34-3	1,1-Dichloroethane	U	1.19	ug/kg	0.357	1.19
78-93-3	2-Butanone	U	5.96	ug/kg	1.79	5.96
156-59-2	cis-1,2-Dichloroethylene	U	1.19	ug/kg	0.357	1.19
594-20-7	2,2-Dichloropropane	U	1.19	ug/kg	0.357	1.19
67-66-3	Chloroform	U	1.19	ug/kg	0.357	1.19
74-97-5	Bromochloromethane	U	1.19	ug/kg	0.393	1.19
71-55-6	1,1,1-Trichloroethane	U	1.19	ug/kg	0.357	1.19
563-58-6	1,1-Dichloropropene	U	1.19	ug/kg	0.357	1.19
56-23-5	Carbon tetrachloride	U	1.19	ug/kg	0.357	1.19
107-06-2	1,2-Dichloroethane	U	1.19	ug/kg	0.357	1.19
71-43-2	Benzene	U	1.19	ug/kg	0.357	1.19
79-01-6	Trichloroethylene	U	1.19	ug/kg	0.393	1.19
78-87-5	1,2-Dichloropropane	U	1.19	ug/kg	0.357	1.19
75-27-4	Bromodichloromethane	U	1.19	ug/kg	0.357	1.19
74-95-3	Dibromomethane	U	1.19	ug/kg	0.357	1.19
108-10-1	4-Methyl-2-pentanone	U	5.96	ug/kg	1.49	5.96
10061-01-5	cis-1,3-Dichloropropylene	U	1.19	ug/kg	0.357	1.19
108-88-3	Toluene	U	1.19	ug/kg	0.357	1.19
10061-02-6	trans-1,3-Dichloropropylene	U	1.19	ug/kg	0.357	1.19
79-00-5	1,1,2-Trichloroethane	U	1.19	ug/kg	0.357	1.19
591-78-6	2-Hexanone	U	5.96	ug/kg	1.79	5.96
142-28-9	1,3-Dichloropropane	U	1.19	ug/kg	0.357	1.19
127-18-4	Tetrachloroethylene	U	1.19	ug/kg	0.357	1.19
124-48-1	Dibromochloromethane	U	1.19	ug/kg	0.357	1.19
106-93-4	1,2-Dibromoethane	U	1.19	ug/kg	0.357	1.19
108-90-7	Chlorobenzene	U	1.19	ug/kg	0.357	1.19

**Volatile**  
**Certificate of Analysis**  
**Sample Summary**

**SDG Number:** 10-1758  
**Lab Sample ID:** 246866003

**Date Collected:** 02/09/2010 12:00  
**Date Received:** 02/11/2010 09:20  
**Client:** LANL010  
**Method:** SW846 8260B  
**Inst:** VOAA.I  
**Analyst:** JEB  
**Aliquot:** 5.2 g  
**Column:** DB-624

**Matrix:** R  
**%Moisture:** 19.3  
**Project:** LANL01004  
**SOP Ref:** GL-OA-E-038  
**Dilution:** 1  
**Purge Vol:** 5 mL  
**Final Volume:** 5 mL

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.19	ug/kg	0.357	1.19
179601-23-1	m,p-Xylenes	U	2.38	ug/kg	0.357	2.38
95-47-6	o-Xylene	U	1.19	ug/kg	0.357	1.19
100-42-5	Styrene	U	1.19	ug/kg	0.357	1.19
75-25-2	Bromoform	U	1.19	ug/kg	0.357	1.19
79-34-5	1,1,2,2-Tetrachloroethane	U	1.19	ug/kg	0.357	1.19
96-18-4	1,2,3-Trichloropropane	U	1.19	ug/kg	0.357	1.19
108-86-1	Bromobenzene	U	1.19	ug/kg	0.357	1.19
103-65-1	n-Propylbenzene	U	1.19	ug/kg	0.357	1.19
95-49-8	2-Chlorotoluene	U	1.19	ug/kg	0.357	1.19
98-82-8	Isopropylbenzene	U	1.19	ug/kg	0.357	1.19
108-67-8	1,3,5-Trimethylbenzene	U	1.19	ug/kg	0.357	1.19
106-43-4	4-Chlorotoluene	U	1.19	ug/kg	0.357	1.19
98-06-6	tert-Butylbenzene	U	1.19	ug/kg	0.357	1.19
95-63-6	1,2,4-Trimethylbenzene	U	1.19	ug/kg	0.357	1.19
135-98-8	sec-Butylbenzene	U	1.19	ug/kg	0.357	1.19
99-87-6	4-Isopropyltoluene	U	1.19	ug/kg	0.357	1.19
541-73-1	1,3-Dichlorobenzene	U	1.19	ug/kg	0.357	1.19
106-46-7	1,4-Dichlorobenzene	U	1.19	ug/kg	0.357	1.19
104-51-8	n-Butylbenzene	U	1.19	ug/kg	0.357	1.19
96-12-8	1,2-Dibromo-3-chloropropane	U	1.19	ug/kg	0.357	1.19
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.96	ug/kg	1.91	5.96
	<i>Trichlorotrifluoroethane</i>					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.19	ug/kg	0.357	1.19
95-50-1	1,2-Dichlorobenzene	U	1.19	ug/kg	0.357	1.19

**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	unknown siloxane	15.61	8.82	ug/kg	0	J
	unknown siloxane	17.73	14.2	ug/kg	0	J

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\021810\  
Data File : AY433.D  
Acq On : 19 Feb 2010 7:53 am  
Operator : JEB  
InstName : VOAA  
Sample : |246866003|955077|1|VOA|1|VOA8260BS|  
Misc : LANL 5.2G N/A SOIL  
ALS Vial : 33 Sample Multiplier: 1

Quant Time: Feb 19 14:03:33 2010  
Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M  
Quant Title : Volatile Organics 8260B SubList :  
QLast Update : Wed Feb 03 22:34:28 2010  
Response via : Initial Calibration  
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
-----								
Internal Standards								Dev(Min)
1) Fluorobenzene	9.339	9.342	1.000	96	875424	50.00	ug/L	0.00
41) Chlorobenzene-d5	12.507	12.507	1.000	117	629526	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	14.940	14.944	1.000	152	376839	50.00	ug/L	0.00
82) B Fluorobenzene	9.339	9.339	1.000	96	875424	50.00	ug/L	0.00
103) B Chlorobenzene-d5	12.507	12.508	1.000	117	629526	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	14.940	14.944	1.000	152	376839	50.00	ug/L	0.00
System Monitoring Compounds								Dev(Min)
29) 1,2-Dichloroethane-d4	8.978	8.982	0.961	65	364173	50.02	ug/L	0.00
Spiked Amount	50.000	Range	66 - 134	Recovery	=	100.04%		
43) Toluene-d8	10.983	10.987	0.878	98	827637	48.86	ug/L	0.00
Spiked Amount	50.000	Range	71 - 128	Recovery	=	97.72%		
61) Bromofluorobenzene	13.713	13.713	0.918	95	357632	46.63	ug/L	0.00
Spiked Amount	50.000	Range	65 - 130	Recovery	=	93.26%		
Target Compounds								QValue
2) Dichlorodifluoromethane	0.000	3.731	0.000		0	N.D.		
3) Chloromethane	0.000	4.043	0.000		0	N.D.		
4) Vinyl chloride	0.000	4.265	0.000		0	N.D.		
5) Bromomethane	0.000	4.839	0.000		0	N.D.		
6) Chloroethane	0.000	4.990	0.000		0	N.D.		
7) Trichlorofluoromethane	0.000	5.382	0.000		0	N.D.		
8) Ethyl ether	0.000	5.732	0.000		0	N.D.		
9) Acetone	6.085	6.082	0.652	43	7496	1.79	ug/L	99
10) 1,1-Dichloroethylene	0.000	6.082	0.000		0	N.D.		
11) Iodomethane	0.000	6.305	0.000		0	N.D.		
12) Acetonitrile	0.000	6.421	0.000		0	N.D.		
13) Methyl acetate	0.000	6.481	0.000		0	N.D.		
14) Carbon disulfide	6.421	6.428	0.688	76	641	N.D.		
15) Methylene chloride	6.651	6.651	0.712	84	4359	N.D.		
16) tert-Butyl methyl ether	0.000	6.973	0.000		0	N.D.		
17) trans-1,2-Dichloroethy...	0.000	6.994	0.000		0	N.D.		
18) Vinyl acetate	0.000	7.454	0.000		0	N.D.		
19) 1,1-Dichloroethane	0.000	7.471	0.000		0	N.D.		
20) 2-Butanone	0.000	8.062	0.000		0	N.D.		
21) cis-1,2-Dichloroethylene	0.000	8.108	0.000		0	N.D.		
22) 2,2-Dichloropropane	0.000	8.140	0.000		0	N.D.		
23) Bromochloromethane	0.000	8.373	0.000		0	N.D.		
24) Chloroform	0.000	8.423	0.000		0	N.D.		
25) 1,1,1-Trichloroethane	0.000	8.692	0.000		0	N.D.		
26) Cyclohexane	0.000	8.791	0.000		0	N.D.		
27) 1,1-Dichloropropene	0.000	8.851	0.000		0	N.D.		
28) Carbon tetrachloride	0.000	8.886	0.000		0	N.D.		
30) 1,2-Dichloroethane	0.000	9.063	0.000		0	N.D.		
31) Benzene	0.000	9.084	0.000		0	N.D.		
32) Cyclohexene	0.000	9.208	0.000		0	N.D.		
33) n-Butyl alcohol	0.000	9.462	0.000		0	N.D.		
34) Trichloroethylene	0.000	9.731	0.000		0	N.D.		
35) 1,2-Dichloropropane	0.000	9.965	0.000		0	N.D.		
36) Methylcyclohexane	0.000	9.982	0.000		0	N.D.		
37) Dibromomethane	0.000	10.095	0.000		0	N.D.		
38) Bromodichloromethane	0.000	10.216	0.000		0	N.D.		
39) 2-Chloroethylvinyl ether	0.000	10.453	0.000		0	N.D.		



Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\021810\  
Data File : AY433.D  
Acq On : 19 Feb 2010 7:53 am  
Operator : JEB  
InstName : VOAA  
Sample : |246866003|955077|1|VOA|1|VOA8260BS|  
Misc : LANL 5.2G N/A SOIL  
ALS Vial : 33 Sample Multiplier: 1

Quant Time: Feb 19 14:03:33 2010

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

Quant Title : Volatile Organics 8260B

SubList :

QLast Update : Wed Feb 03 22:34:28 2010

Response via : Initial Calibration

Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
40) cis-1,3-Dichloropropylene	0.000	10.668	0.000		0	N.D.	
42) 4-Methyl-2-pentanone	0.000	10.774	0.000		0	N.D.	
44) Toluene	11.057	11.057	0.884	91	5220	0.30 ug/L	93
45) trans-1,3-Dichloroprop...	0.000	11.213	0.000		0	N.D.	
46) 1,1,2-Trichloroethane	0.000	11.429	0.000		0	N.D.	
47) 2-Hexanone	0.000	11.627	0.000		0	N.D.	
48) 1,3-Dichloropropane	0.000	11.620	0.000		0	N.D.	
49) Tetrachloroethylene	0.000	11.655	0.000		0	N.D.	
50) Dibromochloromethane	0.000	11.881	0.000		0	N.D.	
51) 1,2-Dibromoethane	0.000	12.044	0.000		0	N.D.	
52) Chlorobenzene	0.000	12.543	0.000		0	N.D.	
53) 1,1,1,2-Tetrachloroethane	0.000	12.599	0.000		0	N.D.	
54) Ethylbenzene	12.617	12.617	1.009	91	1164	N.D.	
55) m,p-Xylenes	12.727	12.730	1.018	106	634	N.D.	
56) o-Xylene	0.000	13.162	0.000		0	N.D.	
57) Styrene	0.000	13.162	0.000		0	N.D.	
59) Bromoform	0.000	13.402	0.000		0	N.D.	
60) Isopropylbenzene	13.551	13.529	0.907	105	933	N.D.	
62) 1,1,2,2-Tetrachloroethane	0.000	13.795	0.000		0	N.D.	
63) 1,2,3-Trichloropropane	0.000	13.879	0.000		0	N.D.	
64) Bromobenzene	0.000	13.918	0.000		0	N.D.	
65) n-Propylbenzene	13.717	13.957	0.918	91	1030	N.D.	
66) 1,3,5-Trimethylbenzene	0.000	14.116	0.000		0	N.D.	
67) 2-Chlorotoluene	0.000	14.095	0.000		0	N.D.	
68) 4-Chlorotoluene	0.000	14.198	0.000		0	N.D.	
69) tert-Butylbenzene	14.580	14.488	0.976	134	250	N.D.	
70) 1,2,4-Trimethylbenzene	14.530	14.527	0.973	105	1532	N.D.	
71) sec-Butylbenzene	14.580	14.718	0.976	105	3568	N.D.	
72) 4-Isopropyltoluene	0.000	14.841	0.000		0	N.D.	
73) 1,3-Dichlorobenzene	14.884	14.884	0.996	146	113	N.D.	
74) 1,4-Dichlorobenzene	14.969	14.969	1.002	146	458	N.D.	
75) n-Butylbenzene	0.000	15.276	0.000		0	N.D.	
76) 1,2-Dichlorobenzene	0.000	15.379	0.000		0	N.D.	
77) 1,2-Dibromo-3-chloropr...	0.000	16.192	0.000		0	N.D.	
78) 1,2,4-Trichlorobenzene	17.183	17.183	1.150	180	670	N.D.	
79) Hexachlorobutadiene	0.000	17.360	0.000		0	N.D.	
80) Naphthalene	17.522	17.529	1.173	128	2498	N.D.	
81) 1,2,3-Trichlorobenzene	17.839	17.847	1.194	180	279	N.D.	
83) Chlorotrifluoroethylene	0.000	3.661	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000	4.416	0.000		0	N.D.	
85) Acrolein	0.000	5.898	0.000		0	N.D.	
86) Trichlorotrifluoroethane	0.000	6.068	0.000		0	N.D.	
87) Isopropyl Alcohol	0.000	6.188	0.000		0	N.D.	
88) Allyl chloride	0.000	6.506	0.000		0	N.D.	
89) tert-Butyl Alcohol	0.000	6.687	0.000		0	N.D.	
90) Acrylonitrile	0.000	6.895	0.000		0	N.D.	
91) Isopropyl ether	0.000	7.489	0.000		0	N.D.	
92) 2-Chloro-1,3-butadiene	0.000	7.581	0.000		0	N.D.	
93) Ethyl tert-butyl ether	0.000	7.893	0.000		0	N.D.	
94) Ethyl acetate	0.000	8.094	0.000		0	N.D.	
95) Propionitrile	0.000	8.122	0.000		0	N.D.	
96) Methacrylonitrile	0.000	8.306	0.000		0	N.D.	
97) Tetrahydrofuran	0.000	8.430	0.000		0	N.D.	
98) Isobutyl alcohol	0.000	8.777	0.000		0	N.D.	

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\021810\  
Data File : AY433.D  
Acq On : 19 Feb 2010 7:53 am  
Operator : JEB  
InstName : VOAA  
Sample : |246866003|955077|1|VOA|1|VOA8260BS|  
Misc : LANL 5.2G N/A SOIL  
ALS Vial : 33 Sample Multiplier: 1

Quant Time: Feb 19 14:03:33 2010  
Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M  
Quant Title : Volatile Organics 8260B SubList :  
QLast Update : Wed Feb 03 22:34:28 2010  
Response via : Initial Calibration  
Integrator: RTE

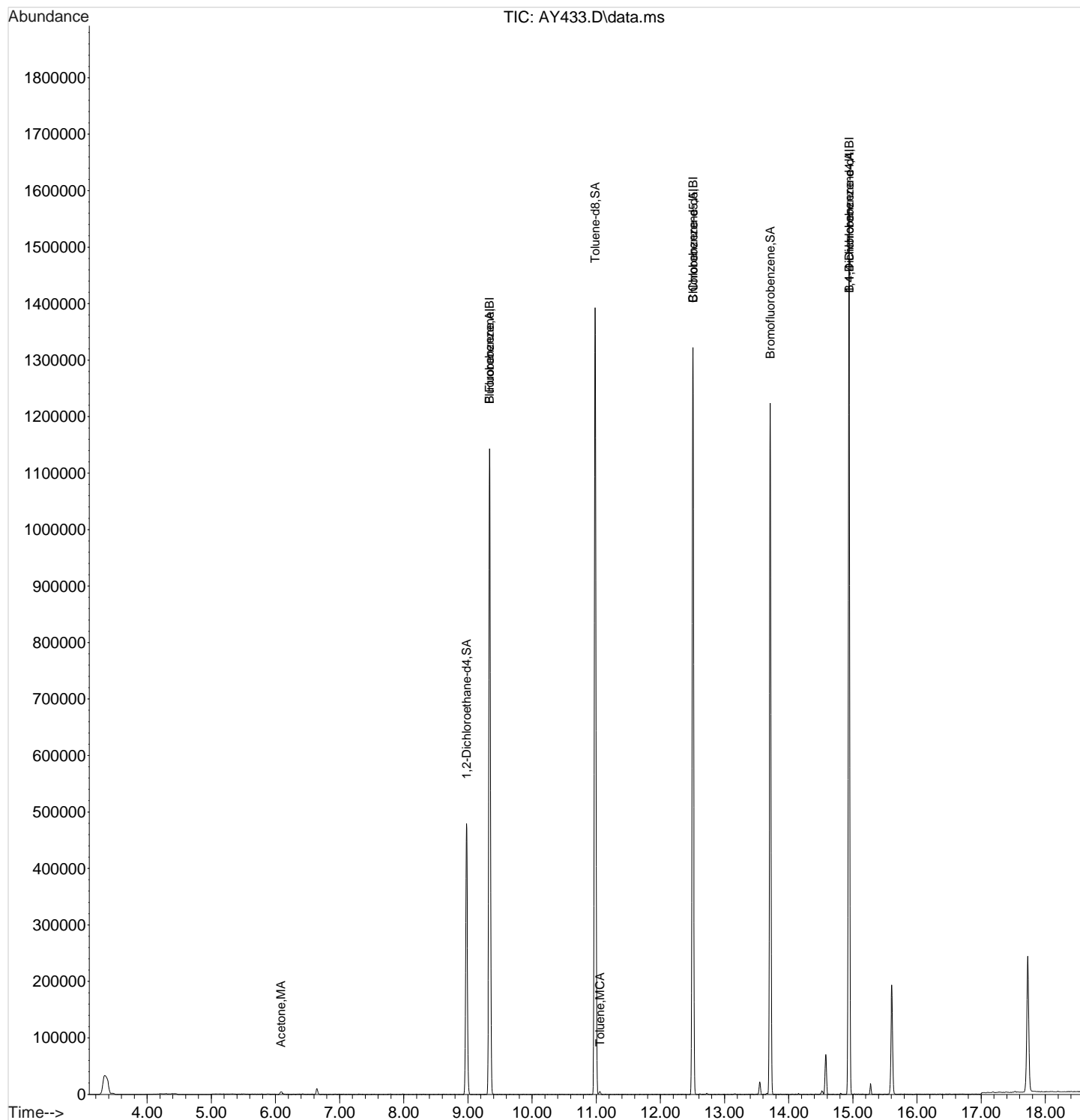
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
99) Methyl tert-amyl ether	0.000	9.127	0.000		0	N.D.	
100) Methyl methacrylate	0.000	9.968	0.000		0	N.D.	
101) 1,4-Dioxane	0.000	10.060	0.000		0	N.D.	
102) 2-Nitropropane	0.000	10.414	0.000		0	N.D.	
104) Ethyl methacrylate	0.000	11.238	0.000		0	N.D.	
106) 1-Chlorohexane	0.000	12.426	0.000		0	N.D.	
107) cis-1,4-Dichloro-2-butene	13.547	13.554	0.907	53	685	N.D.	
108) Cyclohexanone	0.000	13.657	0.000		0	N.D.	
109) trans-1,4-Dichloro-2-b...	0.000	13.844	0.000		0	N.D.	
110) Pentachloroethane	0.000	14.541	0.000		0	N.D.	
111) Benzyl chloride	14.937	15.082	1.000	91	645	N.D.	
112) bis(2-Chloroisopropyl)...	0.000	15.485	0.000		0m	N.D.	d

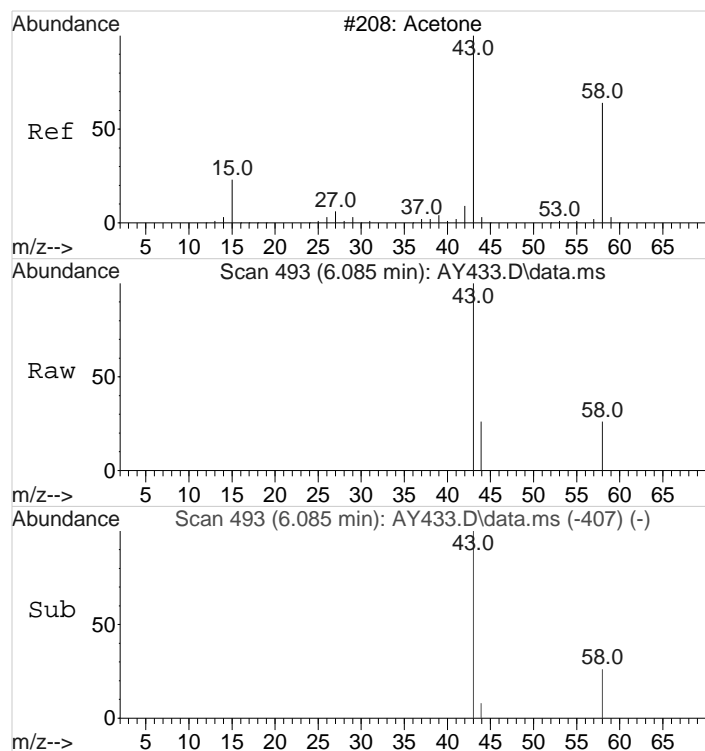
(#) = qualifier out of range (m) = manual integration (+) = signals summed  
(E) = Over the calibration range (d) = deleted

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\021810\  
Data File : AY433.D  
Acq On : 19 Feb 2010 7:53 am  
Operator : JEB  
InstName : VOAA  
Sample : |246866003|955077|1|VOA|1|VOA8260BS|  
Misc : LANL 5.2G N/A SOIL  
ALS Vial : 33 Sample Multiplier: 1

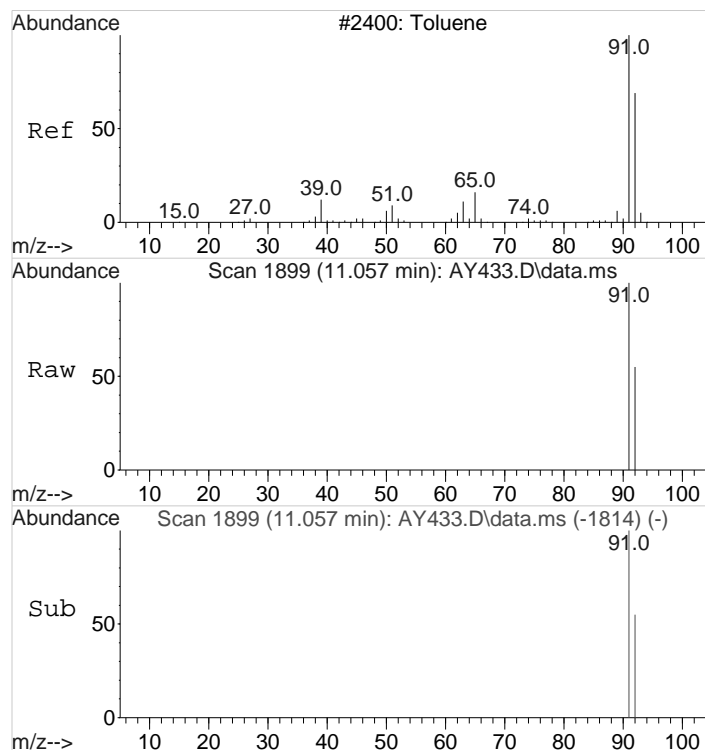
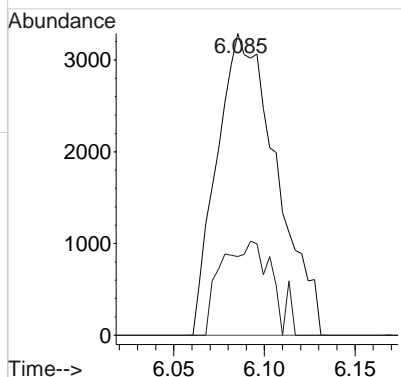
Quant Time: Feb 19 14:03:33 2010  
Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M  
Quant Title : Volatile Organics 8260B SubList :  
QLast Update : Wed Feb 03 22:34:28 2010  
Response via : Initial Calibration  
Integrator: RTE





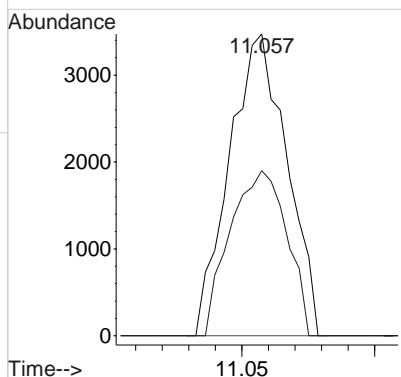
#9  
Acetone  
Concen: 1.79 ug/L  
RT: 6.085 min Scan# 493  
Delta R.T. 0.003 min  
Lab File: AY433.D  
Acq: 19 Feb 2010 7:53 am

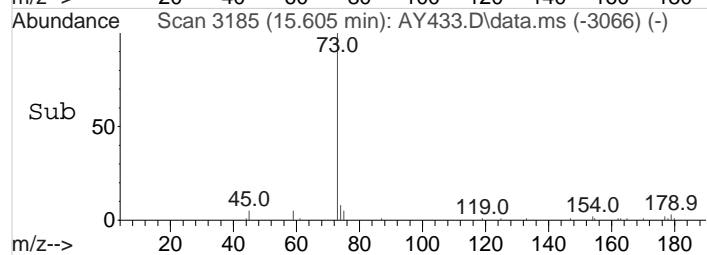
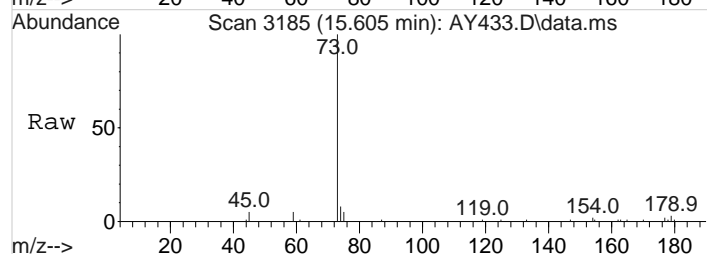
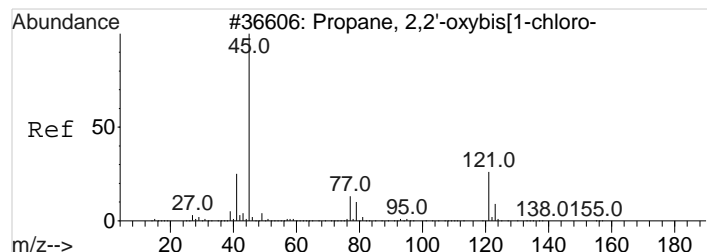
Tgt Ion: 43 Resp: 7496  
Ion Ratio Lower Upper  
43 100  
58 26.9 0.0 56.6



#44  
Toluene  
Concen: 0.30 ug/L  
RT: 11.057 min Scan# 1899  
Delta R.T. 0.000 min  
Lab File: AY433.D  
Acq: 19 Feb 2010 7:53 am

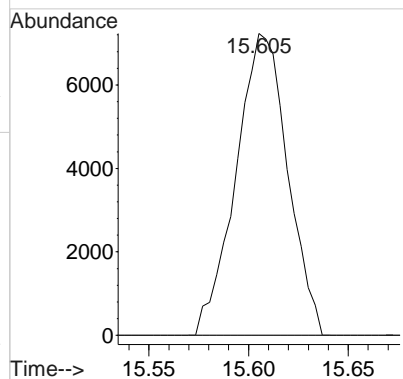
Tgt Ion: 91 Resp: 5220  
Ion Ratio Lower Upper  
91 100  
92 54.1 29.5 89.5





#112 BEFORE analyst DELETION  
bis(2-Chloroisopropyl)ether  
Concen: 4.02 ug/L  
RT: 15.605 min Scan# 3185  
Delta R.T. 0.120 min  
Lab File: AY433.D  
Acq: 19 Feb 2010 7:53 am

Tgt Ion	Ratio	Lower	Upper
45	100		
121	0.0	0.0	49.0



Library Search Compound Report  
GEL Laboratories, LLC

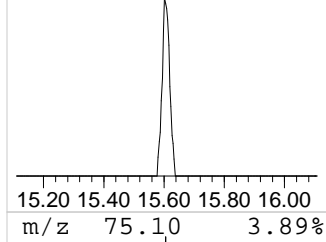
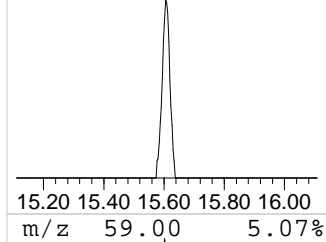
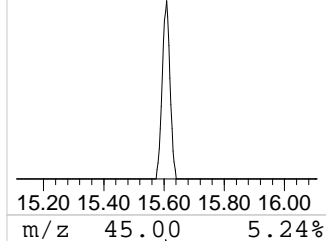
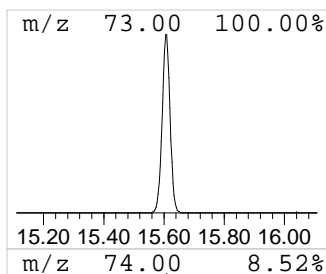
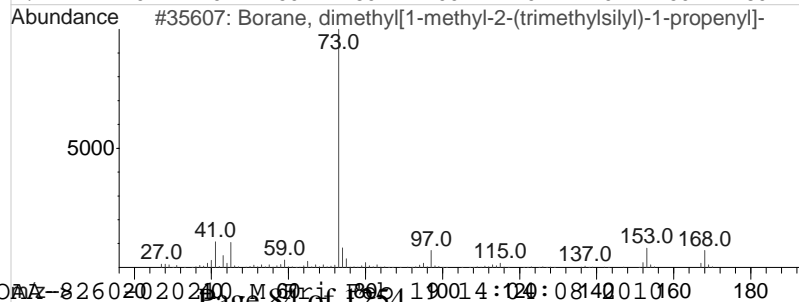
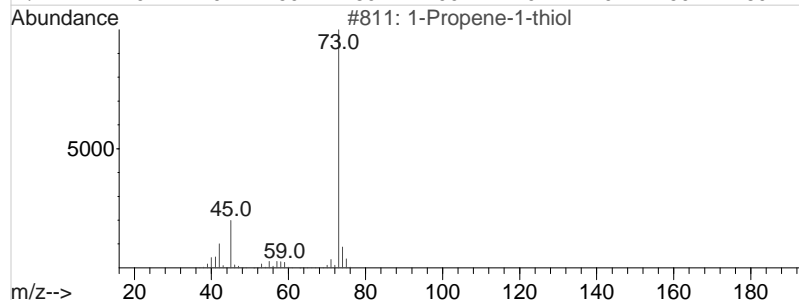
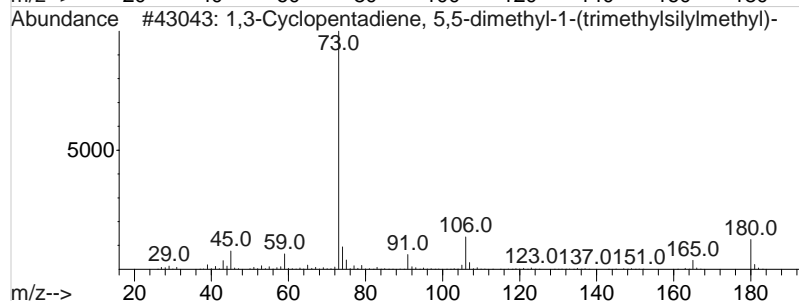
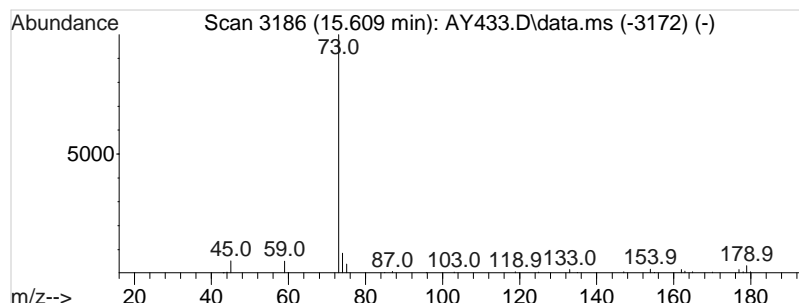
Data Path : C:\msdchem\1\DATA\021810\  
Data File : AY433.D  
Acq On : 19 Feb 2010 7:53 am  
Operator : JEB  
Sample : |246866003|955077|1|VOA|1|VOA8260BS|  
Misc : LANL 5.2G N/A SOIL  
ALS Vial : 33 Sample Multiplier: 1

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

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

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

R.T.	EstConc	Area	Relative to ISTD			R.T.
15.609	7.40 ug/L	345076	B 1,4-Dichlorobenzene-d4			14.940
Hit# of 5	Tentative ID		MW	MolForm	CAS#	Qual
1	1,3-Cyclopentadiene, 5,5-dimethy...		180	C11H20Si	1000163-65-0	9
2	1-Propene-1-thiol		74	C3H6S	000925-89-3	4
3	Borane, dimethyl[1-methyl-2-(tri...		168	C9H21BSi	062108-35-4	4
4	Acetaldehyde, O-methyloxime		73	C3H7NO	033581-43-0	4
5	Silane, butyltrimethyl-		130	C7H18Si	001000-49-3	4



Library Search Compound Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\021810\  
Data File : AY433.D  
Acq On : 19 Feb 2010 7:53 am  
Operator : JEB  
Sample : |246866003|955077|1|VOA|1|VOA8260BS|  
Misc : LANL 5.2G N/A SOIL  
ALS Vial : 33 Sample Multiplier: 1

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

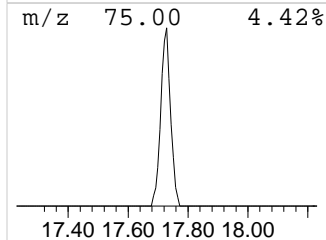
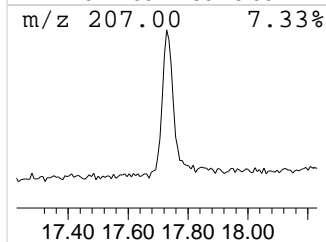
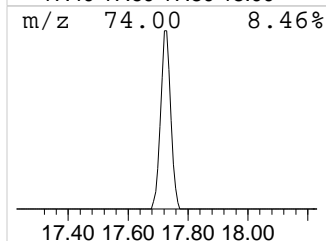
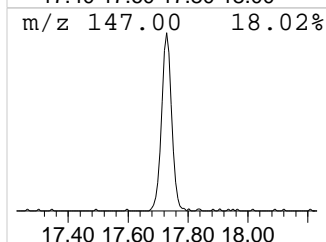
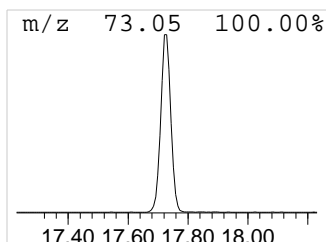
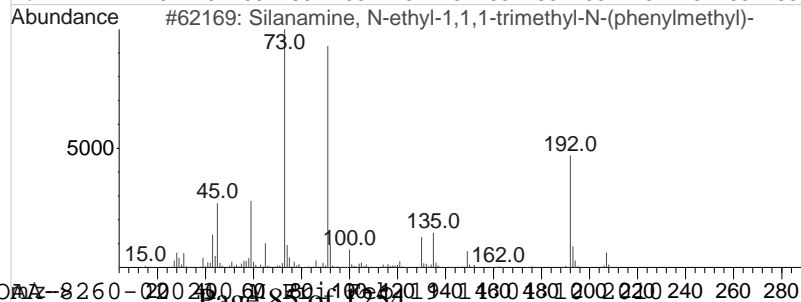
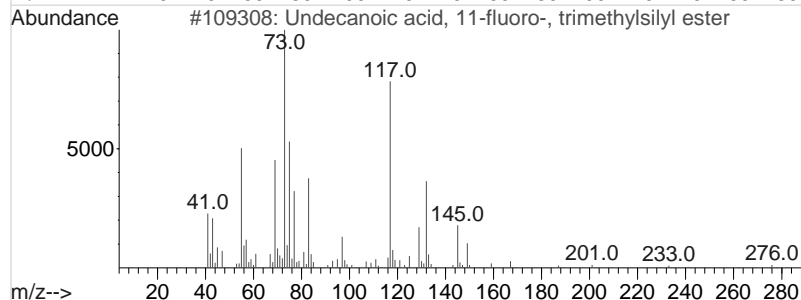
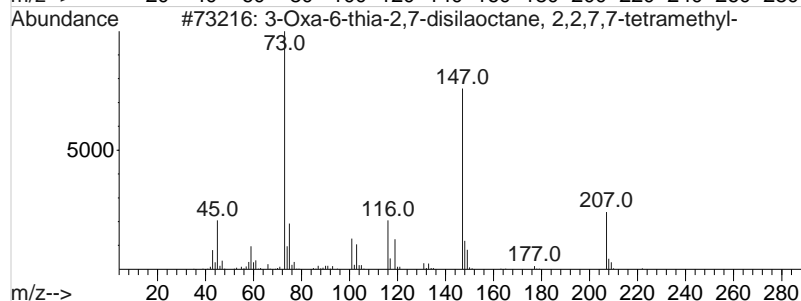
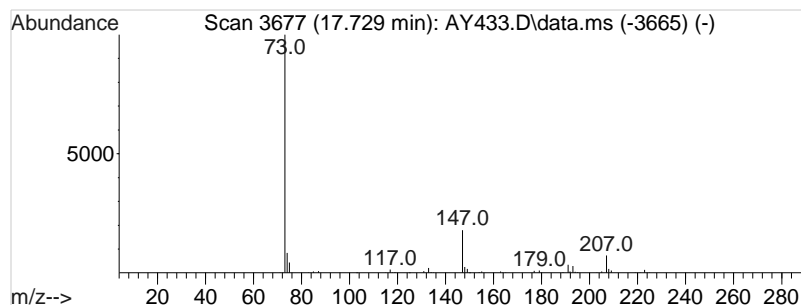
TIC Library : C:\Database\NIST05.L  
TIC Integration Parameters: ron.P

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

R.T.	EstConc	Area	Relative to ISTD	R.T.
17.729	11.89 ug/L	554587	B 1,4-Dichlorobenzene-d4	14.940

Hit# of	5	Tentative ID	MW	MolForm	CAS#	Qual
1		3-Oxa-6-thia-2,7-disilaoctane, 2...	222	C8H22OSSi2	078921-31-0	33
2		Undecanoic acid, 11-fluoro-, tri...	276	C14H29FO2Si	026305-97-5	12
3		Silanamine, N-ethyl-1,1,1-trimet...	207	C12H21NSi	014629-66-4	9
4		Silane, trimethyl[1-methyl-2-oxo...	218	C9H22O2Si2	055255-93-1	9
5		2-Methyl-1,4-bis(trimethylsiloxy...	248	C11H28O2Si2	105747-05-5	9



Tentatively Identified Compound (LSC) summary  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\021810\  
Data File : AY433.D  
Acq On : 19 Feb 2010 7:53 am  
Operator : JEB  
Sample : |246866003|955077|1|VOA|1|VOA8260BS|  
Misc : LANL 5.2G N/A SOIL  
ALS Vial : 33 Sample Multiplier: 1

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

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

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard--			
					#	RT	Resp	Conc
unknown siloxane	15.609	7.4	ug/L	345076	6	14.940	2332980	50.0
unknown siloxane	17.729	11.9	ug/L	554587	6	14.940	2332980	50.0



**Volatile**  
**Certificate of Analysis**  
**Sample Summary**

**SDG Number:** 10-1758  
**Lab Sample ID:** 246866004

**Date Collected:** 02/09/2010 12:00  
**Date Received:** 02/11/2010 09:20  
**Client:** LANL010  
**Method:** SW846 8260B  
**Inst:** VOAA.I  
**Analyst:** JEB  
**Aliquot:** 5.2 g  
**Column:** DB-624

**Matrix:** R  
**%Moisture:** 23.2  
**Project:** LANL01004  
**SOP Ref:** GL-OA-E-038  
**Dilution:** 1  
**Purge Vol:** 5 mL  
**Final Volume:** 5 mL

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.25	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	J	0.438	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:** 10-1758  
**Lab Sample ID:** 246866004

**Date Collected:** 02/09/2010 12:00  
**Date Received:** 02/11/2010 09:20  
**Client:** LANL010  
**Method:** SW846 8260B  
**Inst:** VOAA.I  
**Analyst:** JEB  
**Aliquot:** 5.2 g  
**Column:** DB-624

**Matrix:** R  
**%Moisture:** 23.2  
**Project:** LANL01004  
**SOP Ref:** GL-OA-E-038  
**Dilution:** 1  
**Purge Vol:** 5 mL  
**Final Volume:** 5 mL

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.25	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-Trifluoroethane	U	6.26	ug/kg	2.00	6.26
	<i>Trichlorotrifluoroethane</i>					
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	3.33	9.22	ug/kg	0	J
007785-70-8	1R-.alpha.-Pinene	13.55	135	ug/kg	97	NJ
	unknown siloxane	17.73	19.2	ug/kg	0	J

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\021810\  
Data File : AY434.D  
Acq On : 19 Feb 2010 8:19 am  
Operator : JEB  
InstName : VOAA  
Sample : |246866004|955077|1|VOA|1|VOA8260BS|  
Misc : LANL 5.2G N/A SOIL  
ALS Vial : 34 Sample Multiplier: 1

Quant Time: Feb 19 14:05:00 2010  
Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M  
Quant Title : Volatile Organics 8260B SubList :  
QLast Update : Wed Feb 03 22:34:28 2010  
Response via : Initial Calibration  
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
Internal Standards								Dev(Min)
1) Fluorobenzene	9.339	9.342	1.000	96	859596	50.00	ug/L	0.00
41) Chlorobenzene-d5	12.507	12.507	1.000	117	614123	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	14.940	14.944	1.000	152	373663	50.00	ug/L	0.00
82) B Fluorobenzene	9.339	9.339	1.000	96	859596	50.00	ug/L	0.00
103) B Chlorobenzene-d5	12.507	12.508	1.000	117	614123	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	14.940	14.944	1.000	152	373663	50.00	ug/L	0.00
System Monitoring Compounds								Dev(Min)
29) 1,2-Dichloroethane-d4	8.978	8.982	0.961	65	360200	50.38	ug/L	0.00
Spiked Amount	50.000	Range	66 - 134	Recovery	=	100.76%		
43) Toluene-d8	10.983	10.987	0.878	98	812473	49.16	ug/L	0.00
Spiked Amount	50.000	Range	71 - 128	Recovery	=	98.32%		
61) Bromofluorobenzene	13.713	13.713	0.918	95	360047	47.35	ug/L	0.00
Spiked Amount	50.000	Range	65 - 130	Recovery	=	94.70%		
Target Compounds	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	QValue
2) Dichlorodifluoromethane	0.000	3.731	0.000		0	N.D.		
3) Chloromethane	0.000	4.043	0.000		0	N.D.		
4) Vinyl chloride	0.000	4.265	0.000		0	N.D.		
5) Bromomethane	0.000	4.839	0.000		0	N.D.		
6) Chloroethane	0.000	4.990	0.000		0	N.D.		
7) Trichlorofluoromethane	0.000	5.382	0.000		0	N.D.		
8) Ethyl ether	0.000	5.732	0.000		0	N.D.		
9) Acetone	6.085	6.082	0.652	43	4750	N.D.		
10) 1,1-Dichloroethylene	0.000	6.082	0.000		0	N.D.		
11) Iodomethane	0.000	6.305	0.000		0	N.D.		
12) Acetonitrile	0.000	6.421	0.000		0	N.D.		
13) Methyl acetate	0.000	6.481	0.000		0	N.D.		
14) Carbon disulfide	6.418	6.428	0.687	76	301	N.D.		
15) Methylene chloride	6.641	6.651	0.711	84	2383	Below Cal		96
16) tert-Butyl methyl ether	0.000	6.973	0.000		0	N.D.		
17) trans-1,2-Dichloroethy...	0.000	6.994	0.000		0	N.D.		
18) Vinyl acetate	7.295	7.454	0.781	43	110	N.D.		
19) 1,1-Dichloroethane	0.000	7.471	0.000		0	N.D.		
20) 2-Butanone	0.000	8.062	0.000		0	N.D.		
21) cis-1,2-Dichloroethylene	0.000	8.108	0.000		0	N.D.		
22) 2,2-Dichloropropane	0.000	8.140	0.000		0	N.D.		
23) Bromochloromethane	0.000	8.373	0.000		0	N.D.		
24) Chloroform	0.000	8.423	0.000		0	N.D.		
25) 1,1,1-Trichloroethane	0.000	8.692	0.000		0	N.D.		
26) Cyclohexane	0.000	8.791	0.000		0	N.D.		
27) 1,1-Dichloropropene	0.000	8.851	0.000		0	N.D.		
28) Carbon tetrachloride	0.000	8.886	0.000		0	N.D.		
30) 1,2-Dichloroethane	0.000	9.063	0.000		0	N.D.		
31) Benzene	0.000	9.084	0.000		0	N.D.		
32) Cyclohexene	0.000	9.208	0.000		0	N.D.		
33) n-Butyl alcohol	0.000	9.462	0.000		0	N.D.		
34) Trichloroethylene	0.000	9.731	0.000		0	N.D.		
35) 1,2-Dichloropropane	0.000	9.965	0.000		0	N.D.		
36) Methylcyclohexane	0.000	9.982	0.000		0	N.D.		
37) Dibromomethane	0.000	10.095	0.000		0	N.D.		
38) Bromodichloromethane	0.000	10.216	0.000		0	N.D.		
39) 2-Chloroethylvinyl ether	0.000	10.453	0.000		0	N.D.		

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\021810\  
Data File : AY434.D  
Acq On : 19 Feb 2010 8:19 am  
Operator : JEB  
InstName : VOAA  
Sample : |246866004|955077|1|VOA|1|VOA8260BS|  
Misc : LANL 5.2G N/A SOIL  
ALS Vial : 34 Sample Multiplier: 1

Quant Time: Feb 19 14:05:00 2010  
Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M  
Quant Title : Volatile Organics 8260B SubList :  
QLast Update : Wed Feb 03 22:34:28 2010  
Response via : Initial Calibration  
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
40) cis-1,3-Dichloropropylene	0.000	10.668	0.000		0	N.D.	
42) 4-Methyl-2-pentanone	0.000	10.774	0.000		0	N.D.	
44) Toluene	11.054	11.057	0.884	91	5822	0.35 ug/L	98
45) trans-1,3-Dichloroprop...	0.000	11.213	0.000		0	N.D.	
46) 1,1,2-Trichloroethane	0.000	11.429	0.000		0	N.D.	
47) 2-Hexanone	0.000	11.627	0.000		0	N.D.	
48) 1,3-Dichloropropane	0.000	11.620	0.000		0	N.D.	
49) Tetrachloroethylene	0.000	11.655	0.000		0	N.D.	
50) Dibromochloromethane	0.000	11.881	0.000		0	N.D.	
51) 1,2-Dibromoethane	0.000	12.044	0.000		0	N.D.	
52) Chlorobenzene	0.000	12.543	0.000		0	N.D.	
53) 1,1,1,2-Tetrachloroethane	0.000	12.599	0.000		0	N.D.	
54) Ethylbenzene	12.610	12.617	1.008	91	473	N.D.	
55) m,p-Xylenes	12.723	12.730	1.017	106	114	N.D.	
56) o-Xylene	0.000	13.162	0.000		0	N.D.	
57) Styrene	0.000	13.162	0.000		0	N.D.	
59) Bromoform	0.000	13.402	0.000		0	N.D.	
60) Isopropylbenzene	0.000	13.529	0.000		0m	N.D.	d
62) 1,1,2,2-Tetrachloroethane	0.000	13.795	0.000		0	N.D.	
63) 1,2,3-Trichloropropane	0.000	13.879	0.000		0	N.D.	
64) Bromobenzene	0.000	13.918	0.000		0	N.D.	
65) n-Propylbenzene	13.869	13.957	0.928	91	1225	N.D.	
66) 1,3,5-Trimethylbenzene	0.000	14.116	0.000		0	N.D.	
67) 2-Chlorotoluene	0.000	14.095	0.000		0	N.D.	
68) 4-Chlorotoluene	14.201	14.198	0.951	91	457	N.D.	
69) tert-Butylbenzene	0.000	14.488	0.000		0m	N.D.	d
70) 1,2,4-Trimethylbenzene	0.000	14.527	0.000		0m	N.D.	d
71) sec-Butylbenzene	0.000	14.718	0.000		0m	N.D.	d
72) 4-Isopropyltoluene	14.838	14.841	0.993	119	2182	N.D.	
73) 1,3-Dichlorobenzene	0.000	14.884	0.000		0	N.D.	
74) 1,4-Dichlorobenzene	14.969	14.969	1.002	146	348	N.D.	
75) n-Butylbenzene	15.085	15.276	1.010	91	108	N.D.	
76) 1,2-Dichlorobenzene	0.000	15.379	0.000		0	N.D.	
77) 1,2-Dibromo-3-chloropr...	0.000	16.192	0.000		0	N.D.	
78) 1,2,4-Trichlorobenzene	17.175	17.183	1.150	180	520	N.D.	
79) Hexachlorobutadiene	0.000	17.360	0.000		0	N.D.	
80) Naphthalene	17.529	17.529	1.173	128	2291	N.D.	
81) 1,2,3-Trichlorobenzene	17.839	17.847	1.194	180	350	N.D.	
83) Chlorotrifluoroethylene	0.000	3.661	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000	4.416	0.000		0	N.D.	
85) Acrolein	0.000	5.898	0.000		0	N.D.	
86) Trichlorotrifluoroethane	0.000	6.068	0.000		0	N.D.	
87) Isopropyl Alcohol	0.000	6.188	0.000		0	N.D.	
88) Allyl chloride	0.000	6.506	0.000		0	N.D.	
89) tert-Butyl Alcohol	0.000	6.687	0.000		0	N.D.	
90) Acrylonitrile	0.000	6.895	0.000		0	N.D.	
91) Isopropyl ether	0.000	7.489	0.000		0	N.D.	
92) 2-Chloro-1,3-butadiene	0.000	7.581	0.000		0	N.D.	
93) Ethyl tert-butyl ether	0.000	7.893	0.000		0	N.D.	
94) Ethyl acetate	0.000	8.094	0.000		0	N.D.	
95) Propionitrile	0.000	8.122	0.000		0	N.D.	
96) Methacrylonitrile	0.000	8.306	0.000		0	N.D.	
97) Tetrahydrofuran	0.000	8.430	0.000		0	N.D.	
98) Isobutyl alcohol	0.000	8.777	0.000		0	N.D.	

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\021810\  
Data File : AY434.D  
Acq On : 19 Feb 2010 8:19 am  
Operator : JEB  
InstName : VOAA  
Sample : |246866004|955077|1|VOA|1|VOA8260BS|  
Misc : LANL 5.2G N/A SOIL  
ALS Vial : 34 Sample Multiplier: 1

Quant Time: Feb 19 14:05:00 2010  
Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M  
Quant Title : Volatile Organics 8260B SubList :  
QLast Update : Wed Feb 03 22:34:28 2010  
Response via : Initial Calibration  
Integrator: RTE

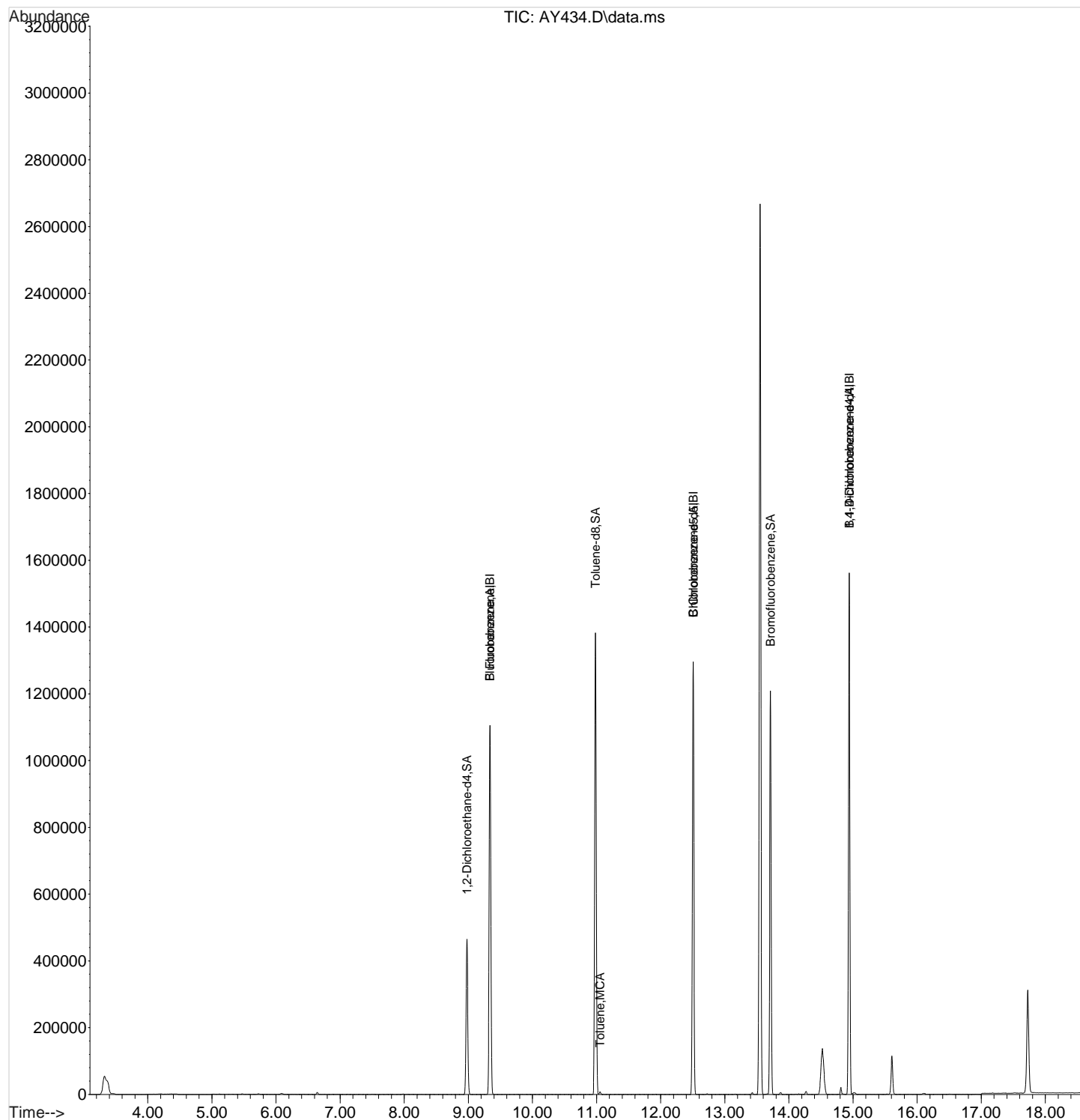
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
99) Methyl tert-amyl ether	0.000	9.127	0.000		0	N.D.	
100) Methyl methacrylate	0.000	9.968	0.000		0	N.D.	
101) 1,4-Dioxane	0.000	10.060	0.000		0	N.D.	
102) 2-Nitropropane	0.000	10.414	0.000		0	N.D.	
104) Ethyl methacrylate	10.994	11.238	0.879	69	3087	N.D.	
106) 1-Chlorohexane	0.000	12.426	0.000		0	N.D.	
107) cis-1,4-Dichloro-2-butene	0.000	13.554	0.000		0m	N.D.	d
108) Cyclohexanone	13.551	13.657	0.907	42	11703	N.D.	
109) trans-1,4-Dichloro-2-b...	0.000	13.844	0.000		0	N.D.	
110) Pentachloroethane	0.000	14.541	0.000		0	N.D.	
111) Benzyl chloride	15.085	15.082	1.010	91	108	N.D.	
112) bis(2-Chloroisopropyl)...	0.000	15.485	0.000		0m	N.D.	d

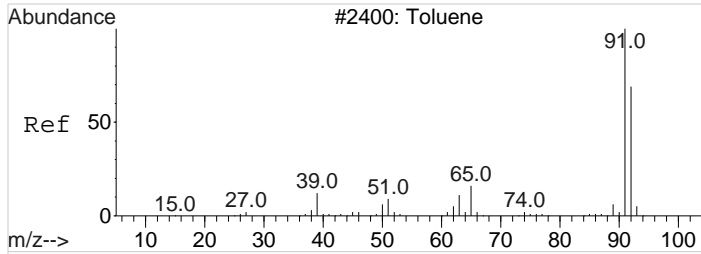
(#) = qualifier out of range (m) = manual integration (+) = signals summed  
(E) = Over the calibration range (d) = deleted

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\021810\  
Data File : AY434.D  
Acq On : 19 Feb 2010 8:19 am  
Operator : JEB  
InstName : VOAA  
Sample : |246866004|955077|1|VOA|1|VOA8260BS|  
Misc : LANL 5.2G N/A SOIL  
ALS Vial : 34 Sample Multiplier: 1

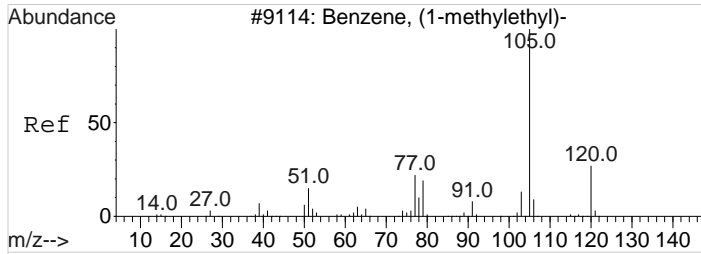
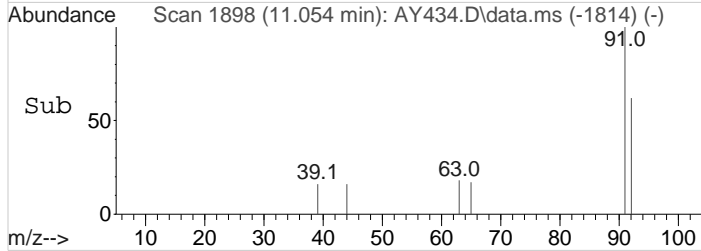
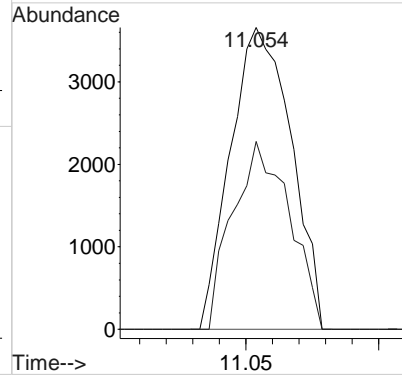
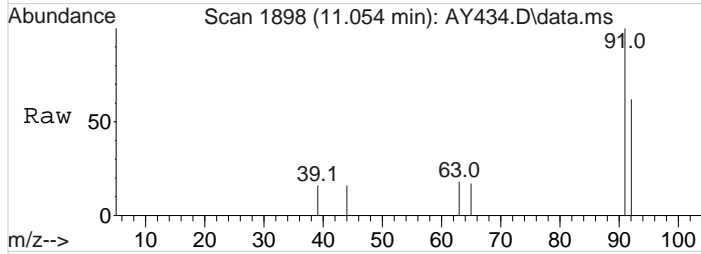
Quant Time: Feb 19 14:05:00 2010  
Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M  
Quant Title : Volatile Organics 8260B SubList :  
QLast Update : Wed Feb 03 22:34:28 2010  
Response via : Initial Calibration  
Integrator: RTE





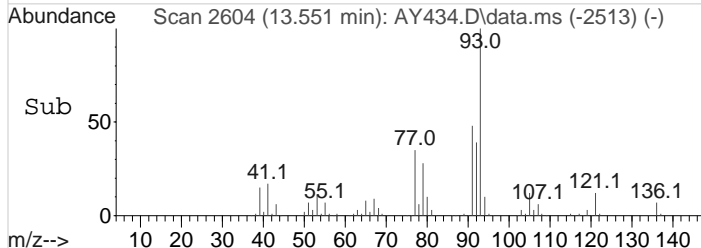
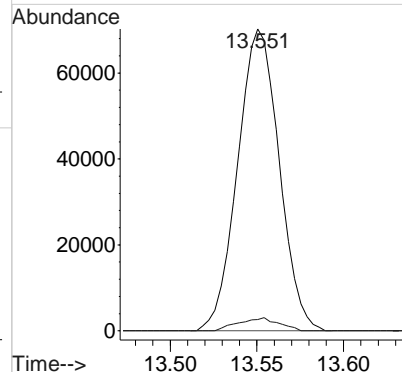
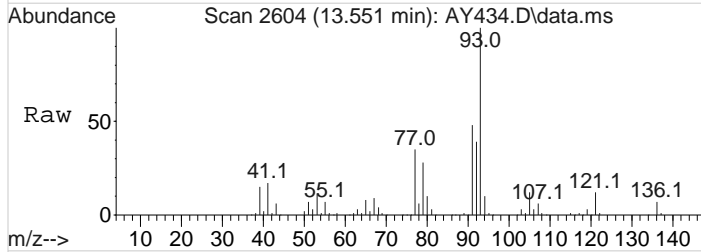
#44  
Toluene  
Concen: 0.35 ug/L  
RT: 11.054 min Scan# 1898  
Delta R.T. -0.004 min  
Lab File: AY434.D  
Acq: 19 Feb 2010 8:19 am

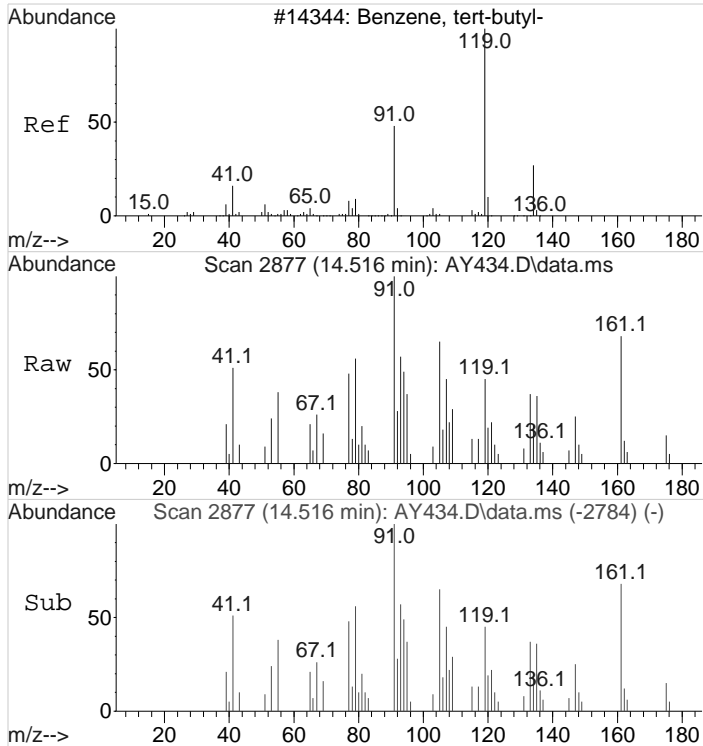
Tgt Ion: 91 Resp: 5822  
Ion Ratio Lower Upper  
91 100  
92 58.1 29.5 89.5



#60 BEFORE analyst DELETION  
Isopropylbenzene  
Concen: 5.49 ug/L  
RT: 13.551 min Scan# 2604  
Delta R.T. 0.021 min  
Lab File: AY434.D  
Acq: 19 Feb 2010 8:19 am

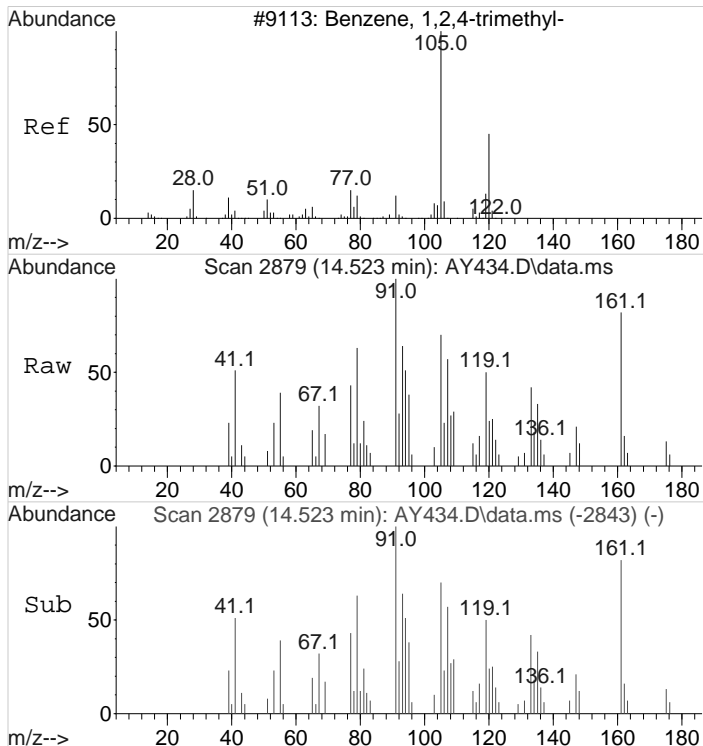
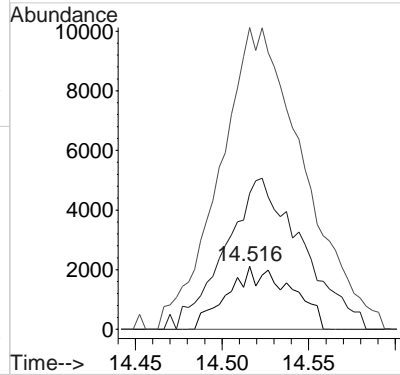
Tgt Ion: 105 Resp: 117062  
Ion Ratio Lower Upper  
105 100  
120 4.2 0.0 54.9





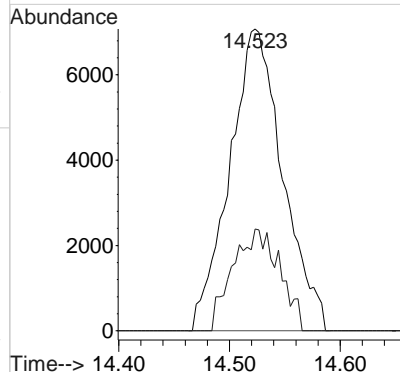
#69 BEFORE analyst DELETION  
tert-Butylbenzene  
Concen: 1.56 ug/L  
RT: 14.516 min Scan# 2877  
Delta R.T. 0.028 min  
Lab File: AY434.D  
Acq: 19 Feb 2010 8:19 am

Tgt Ion	Ratio	Lower	Upper
134	100		
119	293.2	420.0	480.0#
91	638.2	318.4	378.4#

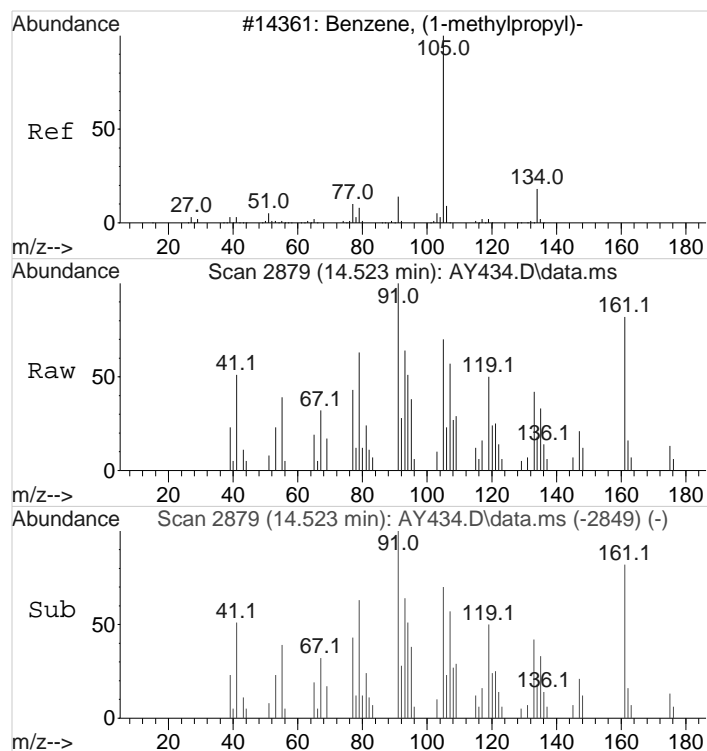


#70 BEFORE analyst DELETION  
1,2,4-Trimethylbenzene  
Concen: 1.28 ug/L  
RT: 14.523 min Scan# 2879  
Delta R.T. -0.004 min  
Lab File: AY434.D  
Acq: 19 Feb 2010 8:19 am

Tgt Ion	Ratio	Lower	Upper
105	100		
120	29.6	10.6	70.6

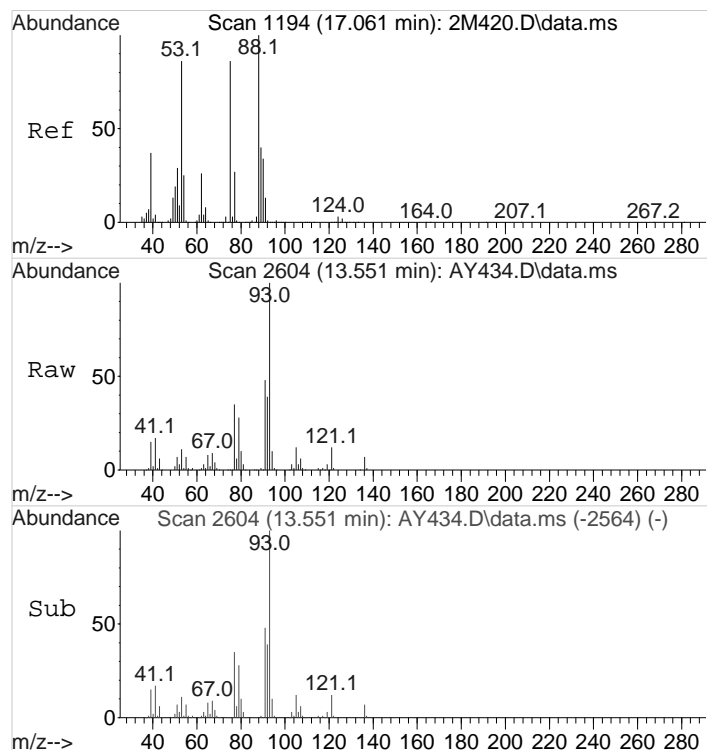
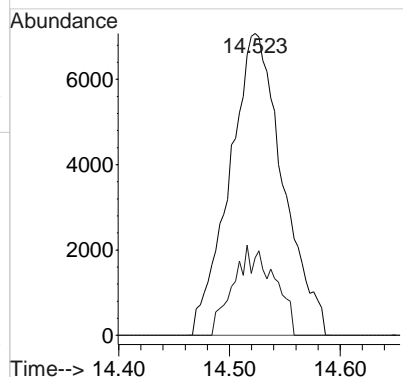






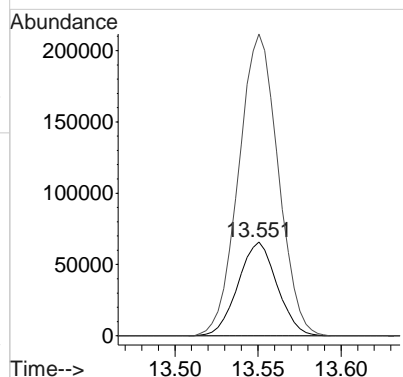
#71 BEFORE analyst DELETION  
sec-Butylbenzene  
Concen: 1.03 ug/L  
RT: 14.523 min Scan# 2879  
Delta R.T. -0.194 min  
Lab File: AY434.D  
Acq: 19 Feb 2010 8:19 am

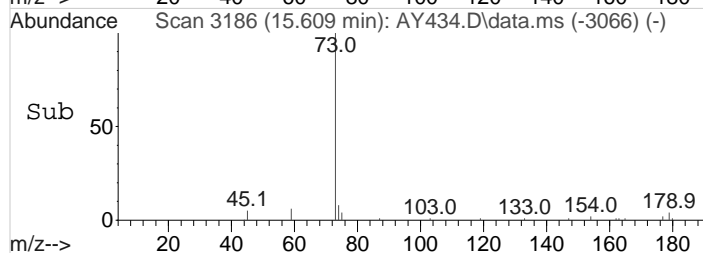
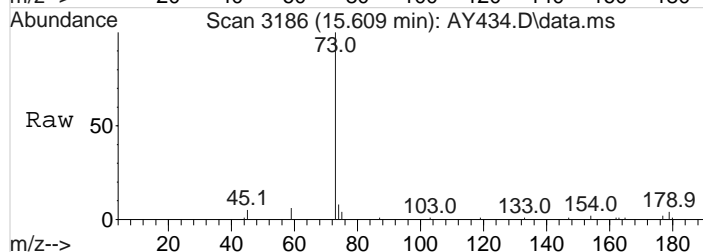
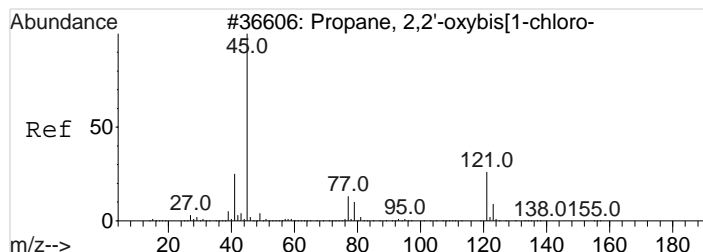
Tgt Ion: 105 Resp: 23622  
Ion Ratio Lower Upper  
105 100  
134 22.7 0.0 48.7



#107 BEFORE analyst DELETION  
cis-1,4-Dichloro-2-butene  
Concen: 53.77 ug/L  
RT: 13.551 min Scan# 2604  
Delta R.T. -0.004 min  
Lab File: AY434.D  
Acq: 19 Feb 2010 8:19 am

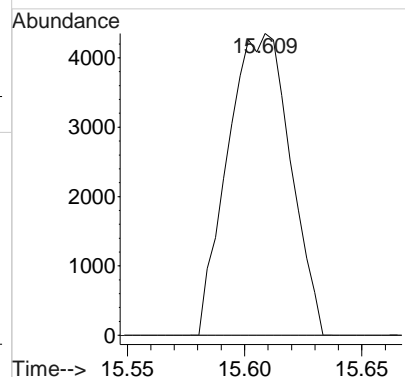
Tgt Ion: 53 Resp: 107410  
Ion Ratio Lower Upper  
53 100  
88 0.0 80.3 140.3#  
77 326.3 0.0 53.7#





#112 BEFORE analyst DELETION  
bis(2-Chloroisopropyl)ether  
Concen: 2.49 ug/L  
RT: 15.609 min Scan# 3186  
Delta R.T. 0.124 min  
Lab File: AY434.D  
Acq: 19 Feb 2010 8:19 am

Tgt Ion	Ratio	Lower	Upper
45	100		
121	0.0	0.0	49.0



Library Search Compound Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\021810\  
Data File : AY434.D  
Acq On : 19 Feb 2010 8:19 am  
Operator : JEB  
Sample : |246866004|955077|1|VOA|1|VOA8260BS|  
Misc : LANL 5.2G N/A SOIL  
ALS Vial : 34 Sample Multiplier: 1

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

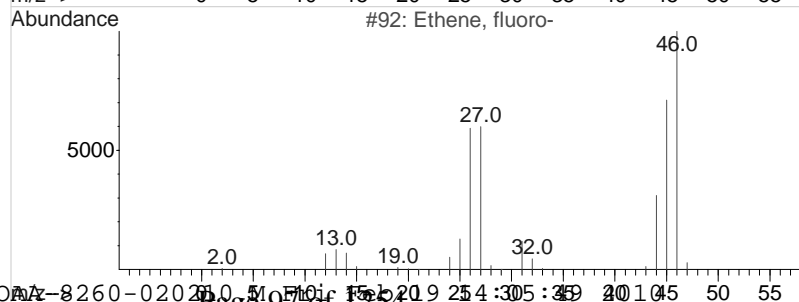
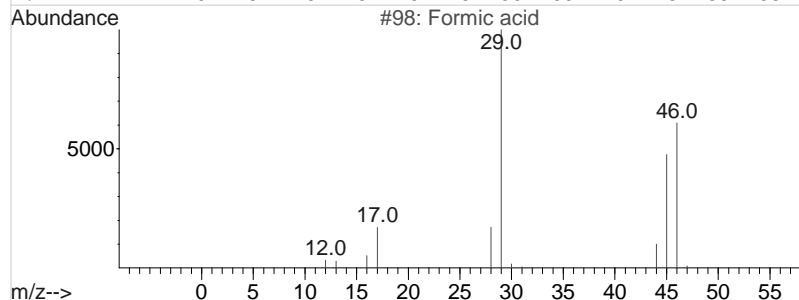
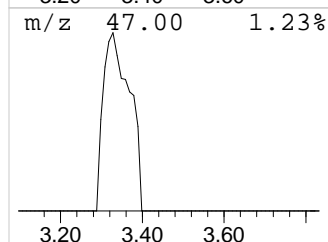
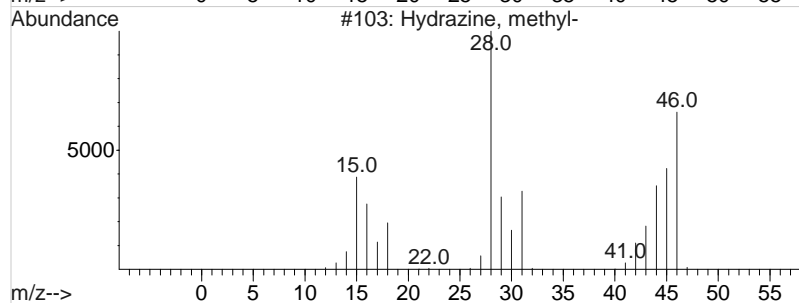
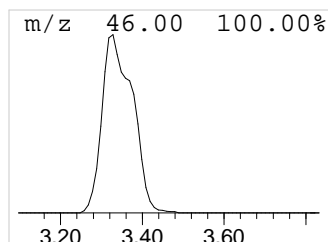
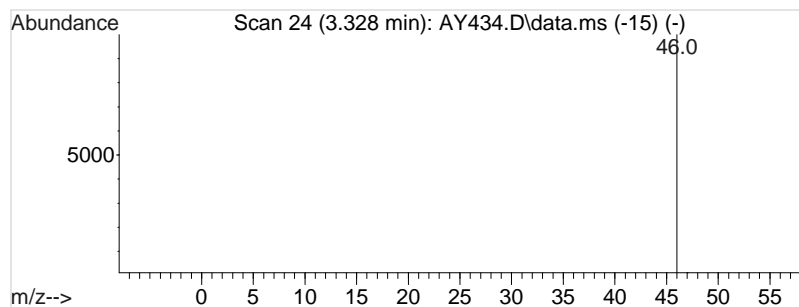
TIC Library : C:\Database\NIST05.L  
TIC Integration Parameters: ron.P

\*\*\*\*\*  
Peak Number 1 unknown Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.328	7.36 ug/L	285944	Fluorobenzene	9.339

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



Library Search Compound Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\021810\  
Data File : AY434.D  
Acq On : 19 Feb 2010 8:19 am  
Operator : JEB  
Sample : |246866004|955077|1|VOA|1|VOA8260BS|  
Misc : LANL 5.2G N/A SOIL  
ALS Vial : 34 Sample Multiplier: 1

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

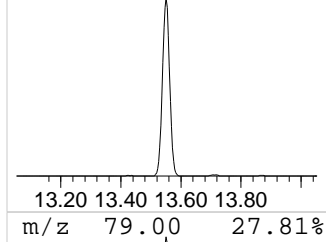
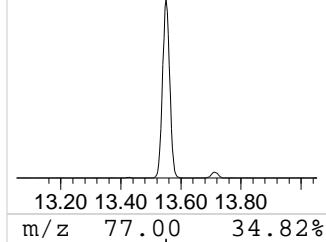
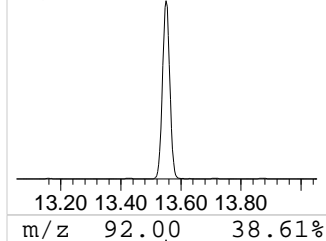
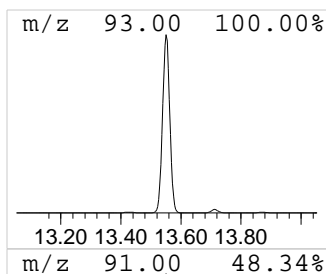
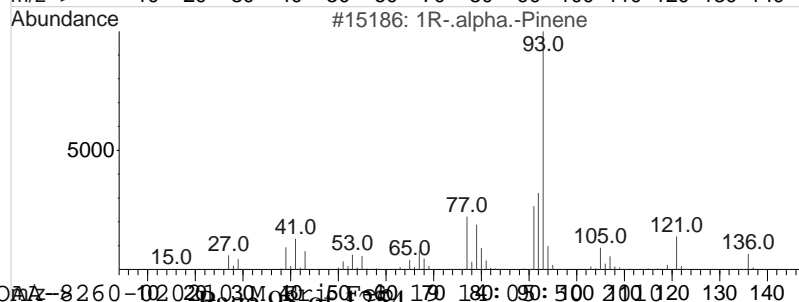
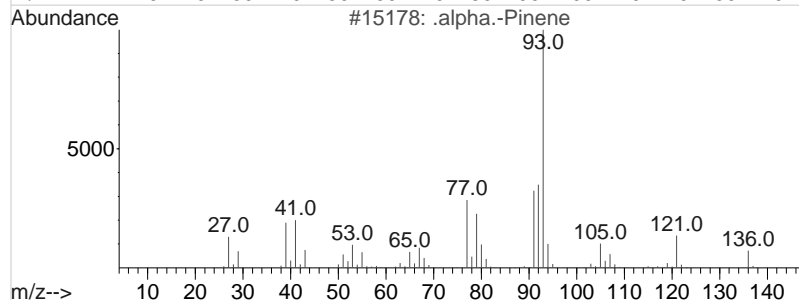
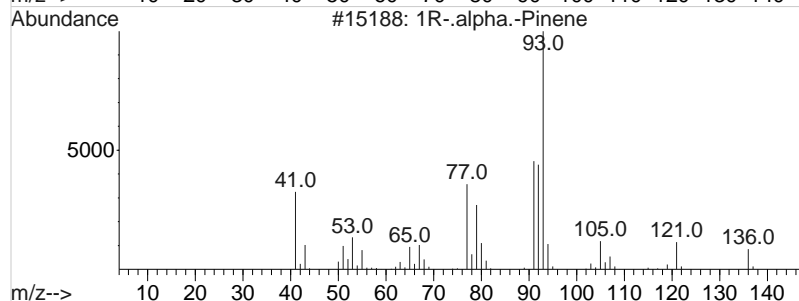
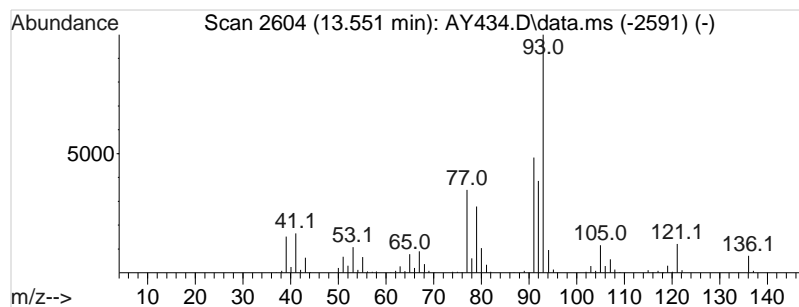
TIC Library : C:\Database\NIST05.L  
TIC Integration Parameters: ron.P

\*\*\*\*\*  
Peak Number 2 1R-.alpha.-Pinene Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.551	107.99 ug/L	4431560	B Chlorobenzene-d5	12.507

Hit# of	5	Tentative ID	MW	MolForm	CAS#	Qual
1	1R-.alpha.-Pinene		136	C10H16	007785-70-8	97
2	.alpha.-Pinene		136	C10H16	000080-56-8	96
3	1R-.alpha.-Pinene		136	C10H16	007785-70-8	95
4	Bicyclo[3.1.1]hept-2-ene, 2,6,6-...		136	C10H16	002437-95-8	95
5	Tricyclo[2.2.1.0(2,6)]heptane, 1...		136	C10H16	000508-32-7	91



Library Search Compound Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\021810\  
Data File : AY434.D  
Acq On : 19 Feb 2010 8:19 am  
Operator : JEB  
Sample : |246866004|955077|1|VOA|1|VOA8260BS|  
Misc : LANL 5.2G N/A SOIL  
ALS Vial : 34 Sample Multiplier: 1

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

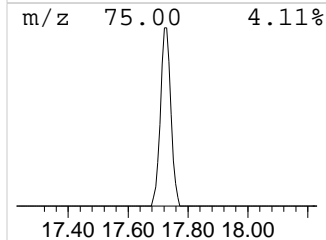
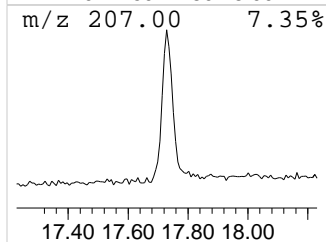
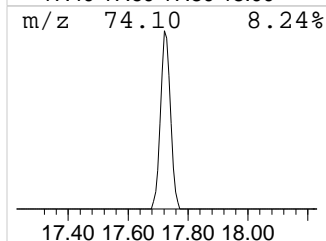
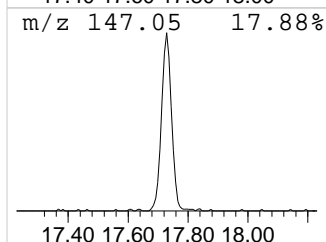
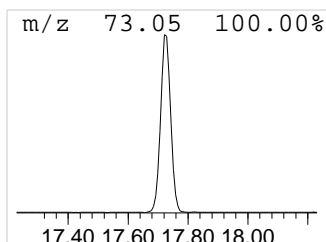
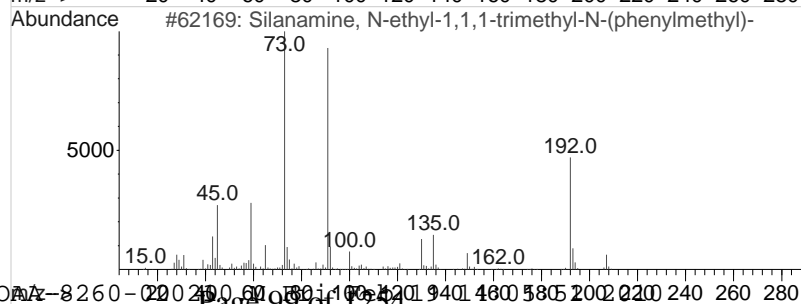
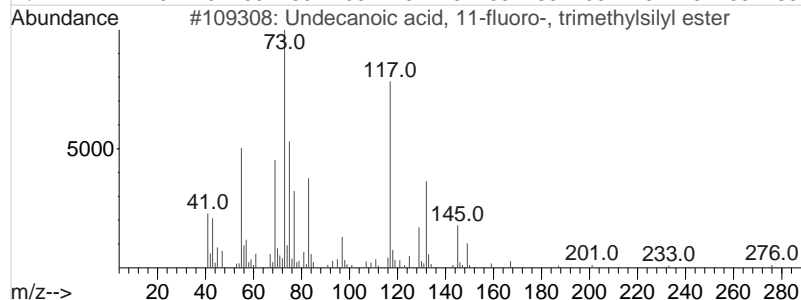
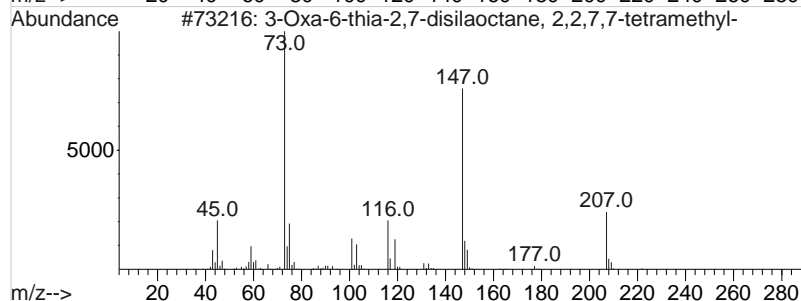
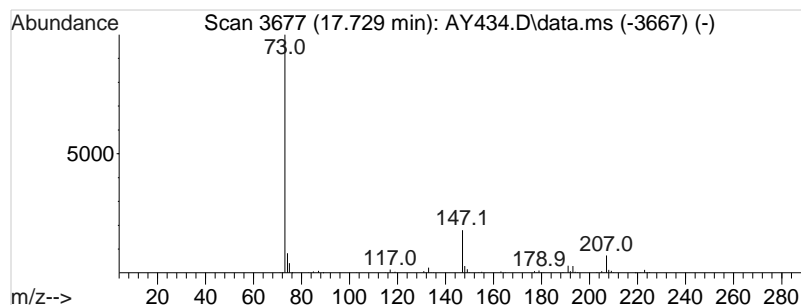
TIC Library : C:\Database\NIST05.L  
TIC Integration Parameters: ron.P

\*\*\*\*\*  
Peak Number 3 unknown siloxane Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
17.729	15.35 ug/L	721681	B 1,4-Dichlorobenzene-d4	14.940

Hit# of	5	Tentative ID	MW	MolForm	CAS#	Qual
1		3-Oxa-6-thia-2,7-disilaoctane, 2...	222	C8H22OSSi2	078921-31-0	36
2		Undecanoic acid, 11-fluoro-, tri...	276	C14H29FO2Si	026305-97-5	22
3		Silamine, N-ethyl-1,1,1-trimet...	207	C12H21NSi	014629-66-4	9
4		1,2-Bis(trimethylsiloxy)ethane	206	C8H22O2Si2	007381-30-8	9
5		Malonic acid, bis(2-trimethylsil...	304	C13H28O4Si2	090744-45-9	9



Tentatively Identified Compound (LSC) summary  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\021810\  
Data File : AY434.D  
Acq On : 19 Feb 2010 8:19 am  
Operator : JEB  
Sample : |246866004|955077|1|VOA|1|VOA8260BS|  
Misc : LANL 5.2G N/A SOIL  
ALS Vial : 34 Sample Multiplier: 1

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

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

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard--			
					#	RT	Resp	Conc
unknown	3.328	7.4	ug/L	285944	1	9.339	1941850	50.0
1R-.alpha.-Pinene	13.551	108.0	ug/L	4431560	4	12.507	2051920	50.0
unknown siloxane	17.729	15.4	ug/L	721681	6	14.940	2350500	50.0

**Volatile  
Certificate of Analysis  
Sample Summary**

**SDG Number:** 10-1758  
**Lab Sample ID:** 246866005

**Date Collected:** 02/09/2010 12:00  
**Date Received:** 02/11/2010 09:20  
**Client:** LANL010  
**Method:** SW846 8260B  
**Inst:** VOAA.I  
**Analyst:** JEB  
**Aliquot:** 5.3 g  
**Column:** DB-624

**Matrix:** R  
**%Moisture:** 16.9  
**Project:** LANL01004  
**SOP Ref:** GL-OA-E-038  
**Dilution:** 1  
**Purge Vol:** 5 mL  
**Final Volume:** 5 mL

**Client ID:** RE15-10-8365  
**Batch ID:** 955077  
**Run Date:** 02/19/2010 08:45  
**Prep Date:** 02/18/2010 20:10  
**Data File:** 021810\AY435.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.14	ug/kg	0.386	1.14
74-87-3	Chloromethane	U	1.14	ug/kg	0.341	1.14
75-01-4	Vinyl chloride	U	1.14	ug/kg	0.341	1.14
74-83-9	Bromomethane	U	1.14	ug/kg	0.341	1.14
75-00-3	Chloroethane	U	1.14	ug/kg	0.341	1.14
75-69-4	Trichlorofluoromethane	U	1.14	ug/kg	0.341	1.14
67-64-1	Acetone	J	4.06	ug/kg	1.89	5.68
75-35-4	1,1-Dichloroethylene	U	1.14	ug/kg	0.341	1.14
74-88-4	Iodomethane	U	5.68	ug/kg	1.82	5.68
75-09-2	Methylene chloride	U	5.68	ug/kg	2.27	5.68
75-15-0	Carbon disulfide	U	5.68	ug/kg	1.42	5.68
156-60-5	trans-1,2-Dichloroethylene	U	1.14	ug/kg	0.341	1.14
75-34-3	1,1-Dichloroethane	U	1.14	ug/kg	0.341	1.14
78-93-3	2-Butanone	U	5.68	ug/kg	1.70	5.68
156-59-2	cis-1,2-Dichloroethylene	U	1.14	ug/kg	0.341	1.14
594-20-7	2,2-Dichloropropane	U	1.14	ug/kg	0.341	1.14
67-66-3	Chloroform	U	1.14	ug/kg	0.341	1.14
74-97-5	Bromochloromethane	U	1.14	ug/kg	0.375	1.14
71-55-6	1,1,1-Trichloroethane	U	1.14	ug/kg	0.341	1.14
563-58-6	1,1-Dichloropropene	U	1.14	ug/kg	0.341	1.14
56-23-5	Carbon tetrachloride	U	1.14	ug/kg	0.341	1.14
107-06-2	1,2-Dichloroethane	U	1.14	ug/kg	0.341	1.14
71-43-2	Benzene	U	1.14	ug/kg	0.341	1.14
79-01-6	Trichloroethylene	U	1.14	ug/kg	0.375	1.14
78-87-5	1,2-Dichloropropane	U	1.14	ug/kg	0.341	1.14
75-27-4	Bromodichloromethane	U	1.14	ug/kg	0.341	1.14
74-95-3	Dibromomethane	U	1.14	ug/kg	0.341	1.14
108-10-1	4-Methyl-2-pentanone	U	5.68	ug/kg	1.42	5.68
10061-01-5	cis-1,3-Dichloropropylene	U	1.14	ug/kg	0.341	1.14
108-88-3	Toluene	U	1.14	ug/kg	0.341	1.14
10061-02-6	trans-1,3-Dichloropropylene	U	1.14	ug/kg	0.341	1.14
79-00-5	1,1,2-Trichloroethane	U	1.14	ug/kg	0.341	1.14
591-78-6	2-Hexanone	U	5.68	ug/kg	1.70	5.68
142-28-9	1,3-Dichloropropane	U	1.14	ug/kg	0.341	1.14
127-18-4	Tetrachloroethylene	U	1.14	ug/kg	0.341	1.14
124-48-1	Dibromochloromethane	U	1.14	ug/kg	0.341	1.14
106-93-4	1,2-Dibromoethane	U	1.14	ug/kg	0.341	1.14
108-90-7	Chlorobenzene	U	1.14	ug/kg	0.341	1.14

**Volatile  
Certificate of Analysis  
Sample Summary**

**SDG Number:** 10-1758  
**Lab Sample ID:** 246866005

**Date Collected:** 02/09/2010 12:00  
**Date Received:** 02/11/2010 09:20  
**Client:** LANL010  
**Method:** SW846 8260B  
**Inst:** VOAA.I  
**Analyst:** JEB  
**Aliquot:** 5.3 g  
**Column:** DB-624

**Matrix:** R  
**%Moisture:** 16.9  
**Project:** LANL01004  
**SOP Ref:** GL-OA-E-038  
**Dilution:** 1  
**Purge Vol:** 5 mL  
**Final Volume:** 5 mL

**Client ID:** RE15-10-8365  
**Batch ID:** 955077  
**Run Date:** 02/19/2010 08:45  
**Prep Date:** 02/18/2010 20:10  
**Data File:** 021810\AY435.D

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

**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	unknown	3.32	5.84	ug/kg	0	J



Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\021810\  
Data File : AY435.D  
Acq On : 19 Feb 2010 8:45 am  
Operator : JEB  
InstName : VOAA  
Sample : |246866005|955077|1|VOA|1|VOA8260BS|  
Misc : LANL 5.3G N/A SOIL  
ALS Vial : 35 Sample Multiplier: 1

Quant Time: Feb 19 14:06:19 2010  
Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M  
Quant Title : Volatile Organics 8260B SubList :  
QLast Update : Wed Feb 03 22:34:28 2010  
Response via : Initial Calibration  
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
Internal Standards								Dev(Min)
1) Fluorobenzene	9.339	9.342	1.000	96	861131	50.00	ug/L	0.00
41) Chlorobenzene-d5	12.507	12.507	1.000	117	617275	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	14.940	14.944	1.000	152	370917	50.00	ug/L	0.00
82) B Fluorobenzene	9.339	9.339	1.000	96	861131	50.00	ug/L	0.00
103) B Chlorobenzene-d5	12.507	12.508	1.000	117	617275	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	14.940	14.944	1.000	152	370917	50.00	ug/L	0.00
System Monitoring Compounds								Dev(Min)
29) 1,2-Dichloroethane-d4	8.978	8.982	0.961	65	358736	50.09	ug/L	0.00
Spiked Amount	50.000	Range	66 - 134	Recovery	=	100.18%		
43) Toluene-d8	10.983	10.987	0.878	98	812853	48.94	ug/L	0.00
Spiked Amount	50.000	Range	71 - 128	Recovery	=	97.88%		
61) Bromofluorobenzene	13.713	13.713	0.918	95	349718	46.33	ug/L	0.00
Spiked Amount	50.000	Range	65 - 130	Recovery	=	92.66%		
Target Compounds	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	QValue
2) Dichlorodifluoromethane	0.000	3.731	0.000		0	N.D.		
3) Chloromethane	0.000	4.043	0.000		0	N.D.		
4) Vinyl chloride	0.000	4.265	0.000		0	N.D.		
5) Bromomethane	0.000	4.839	0.000		0	N.D.		
6) Chloroethane	0.000	4.990	0.000		0	N.D.		
7) Trichlorofluoromethane	0.000	5.382	0.000		0	N.D.		
8) Ethyl ether	0.000	5.732	0.000		0	N.D.		
9) Acetone	6.085	6.082	0.652	43	14713	3.57	ug/L	100
10) 1,1-Dichloroethylene	0.000	6.082	0.000		0	N.D.		
11) Iodomethane	0.000	6.305	0.000		0	N.D.		
12) Acetonitrile	0.000	6.421	0.000		0	N.D.		
13) Methyl acetate	0.000	6.481	0.000		0	N.D.		
14) Carbon disulfide	6.411	6.428	0.686	76	327	N.D.		
15) Methylene chloride	6.641	6.651	0.711	84	4557	N.D.		
16) tert-Butyl methyl ether	0.000	6.973	0.000		0	N.D.		
17) trans-1,2-Dichloroethy...	0.000	6.994	0.000		0	N.D.		
18) Vinyl acetate	0.000	7.454	0.000		0	N.D.		
19) 1,1-Dichloroethane	0.000	7.471	0.000		0	N.D.		
20) 2-Butanone	0.000	8.062	0.000		0	N.D.		
21) cis-1,2-Dichloroethylene	0.000	8.108	0.000		0	N.D.		
22) 2,2-Dichloropropane	0.000	8.140	0.000		0	N.D.		
23) Bromochloromethane	0.000	8.373	0.000		0	N.D.		
24) Chloroform	0.000	8.423	0.000		0	N.D.		
25) 1,1,1-Trichloroethane	0.000	8.692	0.000		0	N.D.		
26) Cyclohexane	0.000	8.791	0.000		0	N.D.		
27) 1,1-Dichloropropene	0.000	8.851	0.000		0	N.D.		
28) Carbon tetrachloride	0.000	8.886	0.000		0	N.D.		
30) 1,2-Dichloroethane	0.000	9.063	0.000		0	N.D.		
31) Benzene	0.000	9.084	0.000		0	N.D.		
32) Cyclohexene	0.000	9.208	0.000		0	N.D.		
33) n-Butyl alcohol	0.000	9.462	0.000		0	N.D.		
34) Trichloroethylene	0.000	9.731	0.000		0	N.D.		
35) 1,2-Dichloropropane	0.000	9.965	0.000		0	N.D.		
36) Methylcyclohexane	0.000	9.982	0.000		0	N.D.		
37) Dibromomethane	0.000	10.095	0.000		0	N.D.		
38) Bromodichloromethane	0.000	10.216	0.000		0	N.D.		
39) 2-Chloroethylvinyl ether	0.000	10.453	0.000		0	N.D.		

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\021810\  
Data File : AY435.D  
Acq On : 19 Feb 2010 8:45 am  
Operator : JEB  
InstName : VOAA  
Sample : |246866005|955077|1|VOA|1|VOA8260BS|  
Misc : LANL 5.3G N/A SOIL  
ALS Vial : 35 Sample Multiplier: 1

Quant Time: Feb 19 14:06:19 2010  
Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M  
Quant Title : Volatile Organics 8260B SubList :  
QLast Update : Wed Feb 03 22:34:28 2010  
Response via : Initial Calibration  
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
40) cis-1,3-Dichloropropylene	0.000	10.668	0.000		0	N.D.	
42) 4-Methyl-2-pentanone	0.000	10.774	0.000		0	N.D.	
44) Toluene	11.054	11.057	0.884	91	1947	N.D.	
45) trans-1,3-Dichloroprop...	0.000	11.213	0.000		0	N.D.	
46) 1,1,2-Trichloroethane	0.000	11.429	0.000		0	N.D.	
47) 2-Hexanone	0.000	11.627	0.000		0	N.D.	
48) 1,3-Dichloropropane	0.000	11.620	0.000		0	N.D.	
49) Tetrachloroethylene	0.000	11.655	0.000		0	N.D.	
50) Dibromochloromethane	0.000	11.881	0.000		0	N.D.	
51) 1,2-Dibromoethane	0.000	12.044	0.000		0	N.D.	
52) Chlorobenzene	0.000	12.543	0.000		0	N.D.	
53) 1,1,1,2-Tetrachloroethane	0.000	12.599	0.000		0	N.D.	
54) Ethylbenzene	12.610	12.617	1.008	91	258	N.D.	
55) m,p-Xylenes	0.000	12.730	0.000		0	N.D.	
56) o-Xylene	0.000	13.162	0.000		0	N.D.	
57) Styrene	0.000	13.162	0.000		0	N.D.	
59) Bromoform	0.000	13.402	0.000		0	N.D.	
60) Isopropylbenzene	0.000	13.529	0.000		0	N.D.	
62) 1,1,2,2-Tetrachloroethane	0.000	13.795	0.000		0	N.D.	
63) 1,2,3-Trichloropropane	0.000	13.879	0.000		0	N.D.	
64) Bromobenzene	0.000	13.918	0.000		0	N.D.	
65) n-Propylbenzene	13.713	13.957	0.918	91	1084	N.D.	
66) 1,3,5-Trimethylbenzene	0.000	14.116	0.000		0	N.D.	
67) 2-Chlorotoluene	0.000	14.095	0.000		0	N.D.	
68) 4-Chlorotoluene	0.000	14.198	0.000		0	N.D.	
69) tert-Butylbenzene	0.000	14.488	0.000		0	N.D.	
70) 1,2,4-Trimethylbenzene	0.000	14.527	0.000		0	N.D.	
71) sec-Butylbenzene	0.000	14.718	0.000		0	N.D.	
72) 4-Isopropyltoluene	0.000	14.841	0.000		0	N.D.	
73) 1,3-Dichlorobenzene	0.000	14.884	0.000		0	N.D.	
74) 1,4-Dichlorobenzene	14.965	14.969	1.002	146	110	N.D.	
75) n-Butylbenzene	0.000	15.276	0.000		0	N.D.	
76) 1,2-Dichlorobenzene	0.000	15.379	0.000		0	N.D.	
77) 1,2-Dibromo-3-chloropr...	0.000	16.192	0.000		0	N.D.	
78) 1,2,4-Trichlorobenzene	17.183	17.183	1.150	180	451	N.D.	
79) Hexachlorobutadiene	0.000	17.360	0.000		0	N.D.	
80) Naphthalene	17.522	17.529	1.173	128	2124	N.D.	
81) 1,2,3-Trichlorobenzene	0.000	17.847	0.000		0	N.D.	
83) Chlorotrifluoroethylene	0.000	3.661	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000	4.416	0.000		0	N.D.	
85) Acrolein	0.000	5.898	0.000		0	N.D.	
86) Trichlorotrifluoroethane	0.000	6.068	0.000		0	N.D.	
87) Isopropyl Alcohol	0.000	6.188	0.000		0	N.D.	
88) Allyl chloride	0.000	6.506	0.000		0	N.D.	
89) tert-Butyl Alcohol	0.000	6.687	0.000		0	N.D.	
90) Acrylonitrile	0.000	6.895	0.000		0	N.D.	
91) Isopropyl ether	0.000	7.489	0.000		0	N.D.	
92) 2-Chloro-1,3-butadiene	0.000	7.581	0.000		0	N.D.	
93) Ethyl tert-butyl ether	0.000	7.893	0.000		0	N.D.	
94) Ethyl acetate	0.000	8.094	0.000		0	N.D.	
95) Propionitrile	0.000	8.122	0.000		0	N.D.	
96) Methacrylonitrile	0.000	8.306	0.000		0	N.D.	
97) Tetrahydrofuran	0.000	8.430	0.000		0	N.D.	
98) Isobutyl alcohol	0.000	8.777	0.000		0	N.D.	

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\021810\  
Data File : AY435.D  
Acq On : 19 Feb 2010 8:45 am  
Operator : JEB  
InstName : VOAA  
Sample : |246866005|955077|1|VOA|1|VOA8260BS|  
Misc : LANL 5.3G N/A SOIL  
ALS Vial : 35 Sample Multiplier: 1

Quant Time: Feb 19 14:06:19 2010  
Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M  
Quant Title : Volatile Organics 8260B SubList :  
QLast Update : Wed Feb 03 22:34:28 2010  
Response via : Initial Calibration  
Integrator: RTE

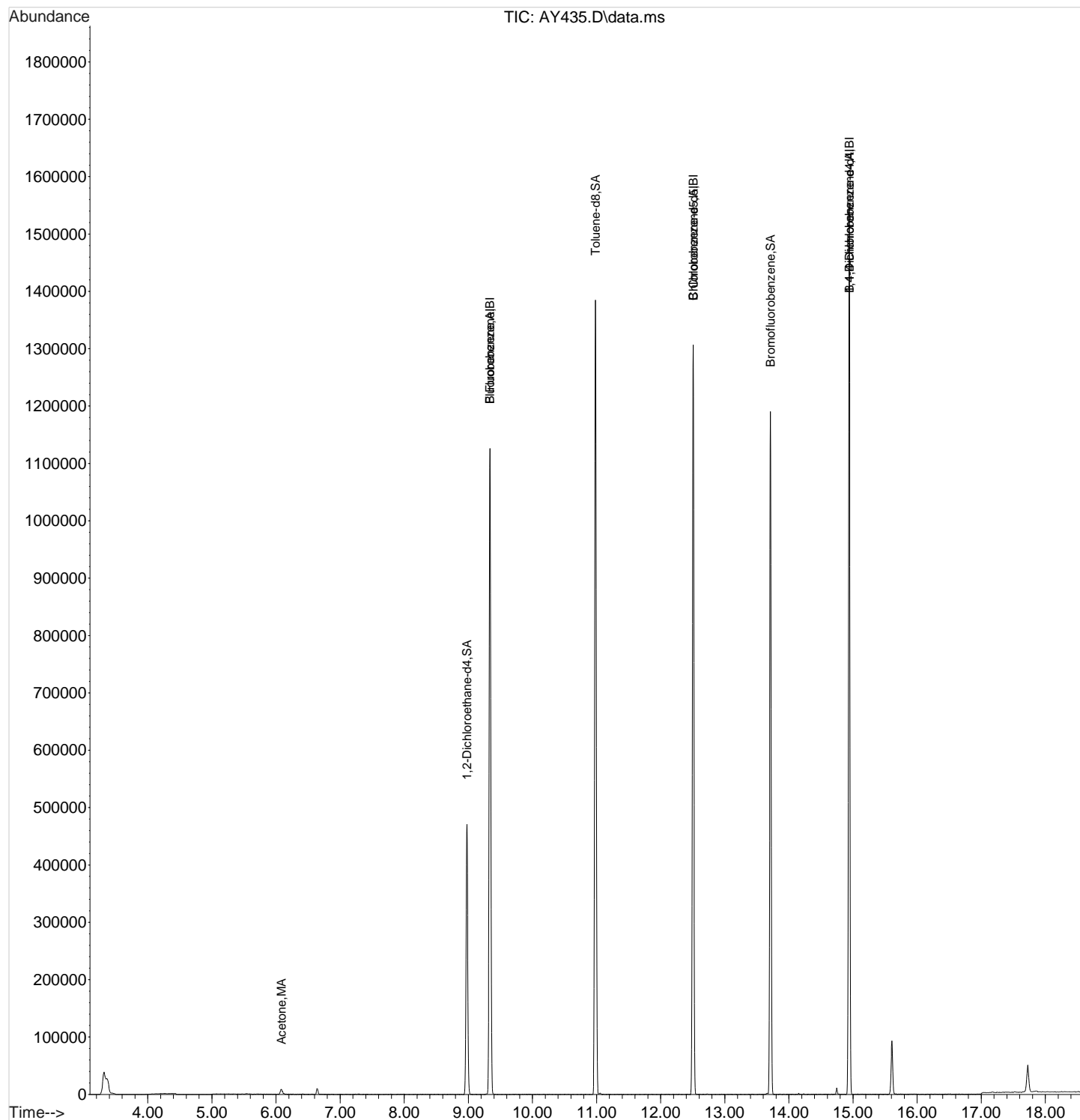
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
99) Methyl tert-amyl ether	0.000	9.127	0.000		0	N.D.	
100) Methyl methacrylate	0.000	9.968	0.000		0	N.D.	
101) 1,4-Dioxane	0.000	10.060	0.000		0	N.D.	
102) 2-Nitropropane	0.000	10.414	0.000		0	N.D.	
104) Ethyl methacrylate	0.000	11.238	0.000		0	N.D.	
106) 1-Chlorohexane	0.000	12.426	0.000		0	N.D.	
107) cis-1,4-Dichloro-2-butene	0.000	13.554	0.000		0	N.D.	
108) Cyclohexanone	0.000	13.657	0.000		0	N.D.	
109) trans-1,4-Dichloro-2-b...	0.000	13.844	0.000		0	N.D.	
110) Pentachloroethane	0.000	14.541	0.000		0	N.D.	
111) Benzyl chloride	14.937	15.082	1.000	91	696	N.D.	
112) bis(2-Chloroisopropyl)...	0.000	15.485	0.000		0m	N.D.	d

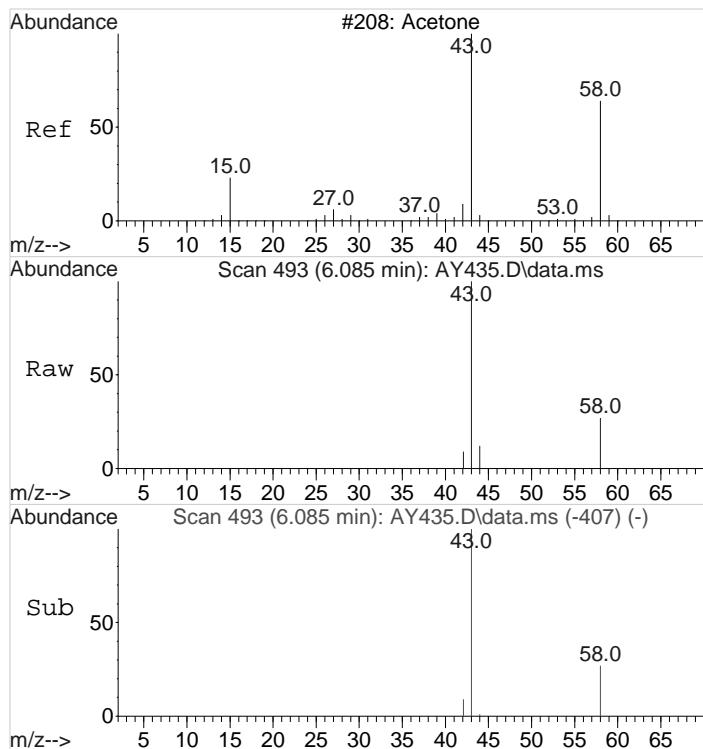
(#) = qualifier out of range (m) = manual integration (+) = signals summed  
(E) = Over the calibration range (d) = deleted

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\021810\  
Data File : AY435.D  
Acq On : 19 Feb 2010 8:45 am  
Operator : JEB  
InstName : VOAA  
Sample : |246866005|955077|1|VOA|1|VOA8260BS|  
Misc : LANL 5.3G N/A SOIL  
ALS Vial : 35 Sample Multiplier: 1

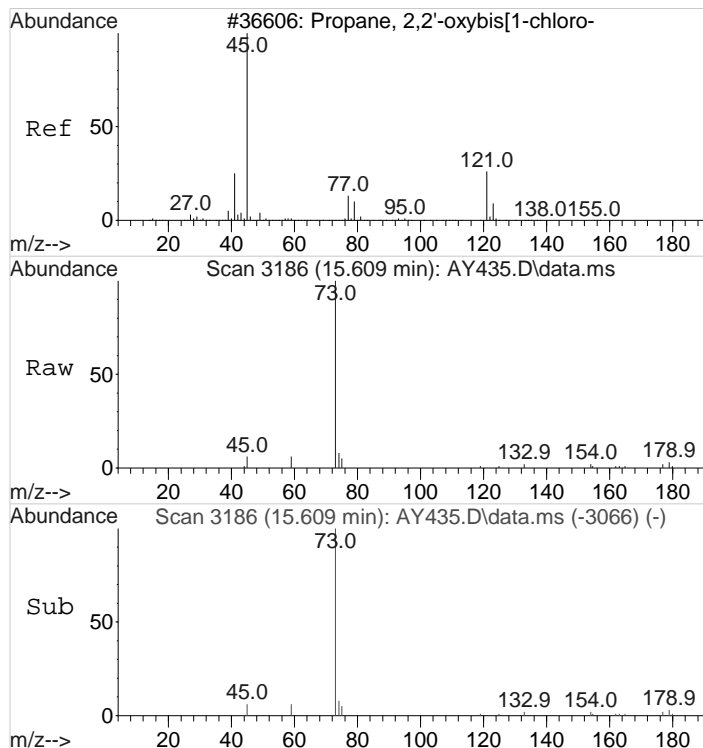
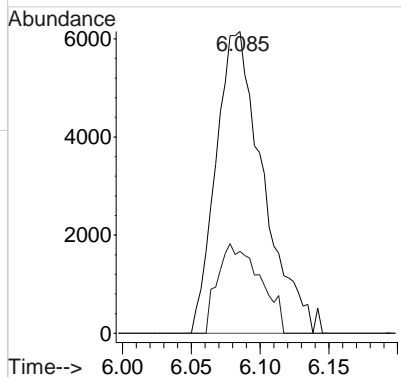
Quant Time: Feb 19 14:06:19 2010  
Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M  
Quant Title : Volatile Organics 8260B SubList :  
QLast Update : Wed Feb 03 22:34:28 2010  
Response via : Initial Calibration  
Integrator: RTE





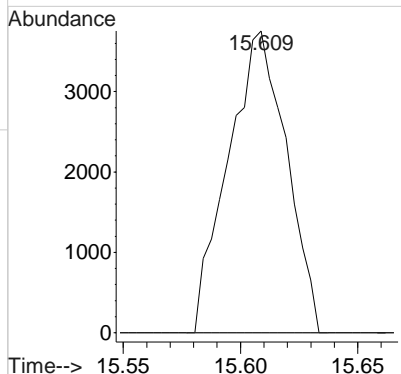
#9  
Acetone  
Concen: 3.57 ug/L  
RT: 6.085 min Scan# 493  
Delta R.T. 0.003 min  
Lab File: AY435.D  
Acq: 19 Feb 2010 8:45 am

Tgt Ion: 43 Resp: 14713  
Ion Ratio Lower Upper  
43 100  
58 26.7 0.0 56.6



#112 BEFORE analyst DELETION  
bis(2-Chloroisopropyl)ether  
Concen: 2.02 ug/L  
RT: 15.609 min Scan# 3186  
Delta R.T. 0.124 min  
Lab File: AY435.D  
Acq: 19 Feb 2010 8:45 am

Tgt Ion: 45 Resp: 6475  
Ion Ratio Lower Upper  
45 100  
121 0.0 0.0 49.0



Library Search Compound Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\021810\  
Data File : AY435.D  
Acq On : 19 Feb 2010 8:45 am  
Operator : JEB  
Sample : |246866005|955077|1|VOA|1|VOA8260BS|  
Misc : LANL 5.3G N/A SOIL  
ALS Vial : 35 Sample Multiplier: 1

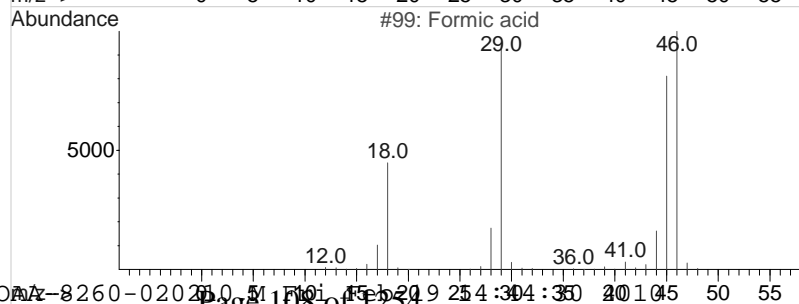
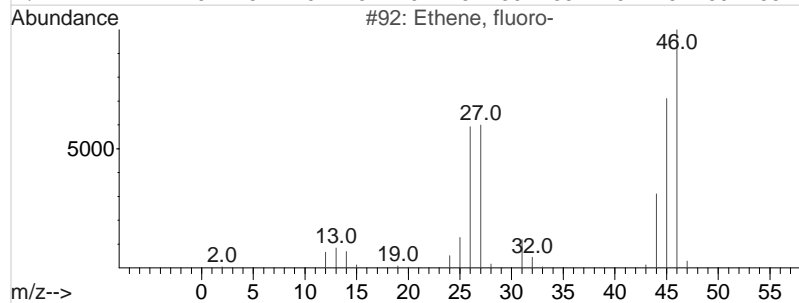
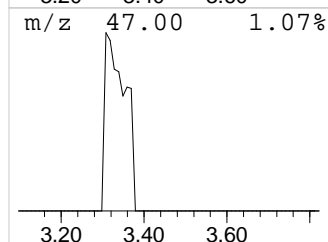
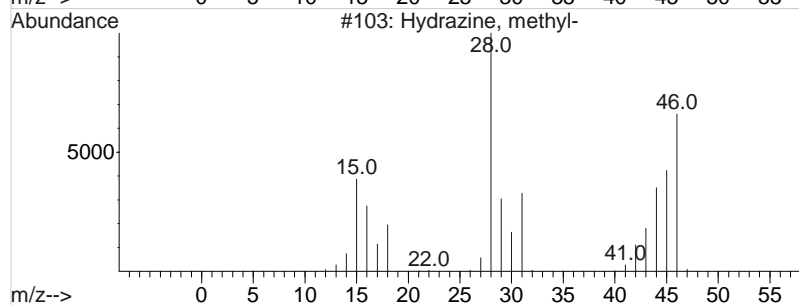
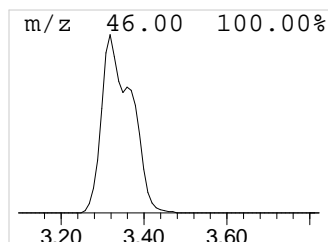
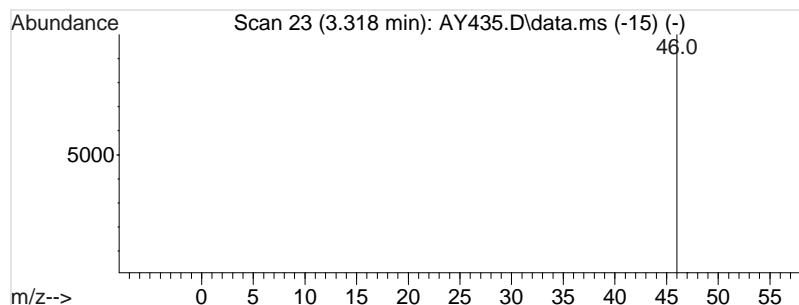
Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M  
Quant Title : Volatile Organics 8260B SubList :

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

\*\*\*\*\*  
Peak Number 1 unknown Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.318	5.14 ug/L	200152	Fluorobenzene	9.339

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



Tentatively Identified Compound (LSC) summary  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\021810\  
Data File : AY435.D  
Acq On : 19 Feb 2010 8:45 am  
Operator : JEB  
Sample : |246866005|955077|1|VOA|1|VOA8260BS|  
Misc : LANL 5.3G N/A SOIL  
ALS Vial : 35 Sample Multiplier: 1

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

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

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard--			
					#	RT	Resp	Conc
unknown	3.318	5.1	ug/L	200152	1	9.339	1945640	50.0

**Volatile**  
**Certificate of Analysis**  
**Sample Summary**

**SDG Number:** 10-1758  
**Lab Sample ID:** 246866006

**Date Collected:** 02/09/2010 12:00  
**Date Received:** 02/11/2010 09:20  
**Client:** LANL010  
**Method:** SW846 8260B  
**Inst:** VOAA.I  
**Analyst:** JEB  
**Aliquot:** 5 g  
**Column:** DB-624

**Matrix:** R  
**%Moisture:** 24.6  
**Project:** LANL01004  
**SOP Ref:** GL-OA-E-038  
**Dilution:** 1  
**Purge Vol:** 5 mL  
**Final Volume:** 5 mL

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.33	ug/kg	0.451	1.33
74-87-3	Chloromethane	U	1.33	ug/kg	0.398	1.33
75-01-4	Vinyl chloride	U	1.33	ug/kg	0.398	1.33
74-83-9	Bromomethane	U	1.33	ug/kg	0.398	1.33
75-00-3	Chloroethane	U	1.33	ug/kg	0.398	1.33
75-69-4	Trichlorofluoromethane	U	1.33	ug/kg	0.398	1.33
67-64-1	Acetone	U	6.63	ug/kg	2.20	6.63
75-35-4	1,1-Dichloroethylene	U	1.33	ug/kg	0.398	1.33
74-88-4	Iodomethane	U	6.63	ug/kg	2.12	6.63
75-09-2	Methylene chloride	U	6.63	ug/kg	2.65	6.63
75-15-0	Carbon disulfide	U	6.63	ug/kg	1.66	6.63
156-60-5	trans-1,2-Dichloroethylene	U	1.33	ug/kg	0.398	1.33
75-34-3	1,1-Dichloroethane	U	1.33	ug/kg	0.398	1.33
78-93-3	2-Butanone	U	6.63	ug/kg	1.99	6.63
156-59-2	cis-1,2-Dichloroethylene	U	1.33	ug/kg	0.398	1.33
594-20-7	2,2-Dichloropropane	U	1.33	ug/kg	0.398	1.33
67-66-3	Chloroform	U	1.33	ug/kg	0.398	1.33
74-97-5	Bromochloromethane	U	1.33	ug/kg	0.437	1.33
71-55-6	1,1,1-Trichloroethane	U	1.33	ug/kg	0.398	1.33
563-58-6	1,1-Dichloropropene	U	1.33	ug/kg	0.398	1.33
56-23-5	Carbon tetrachloride	U	1.33	ug/kg	0.398	1.33
107-06-2	1,2-Dichloroethane	U	1.33	ug/kg	0.398	1.33
71-43-2	Benzene	U	1.33	ug/kg	0.398	1.33
79-01-6	Trichloroethylene	U	1.33	ug/kg	0.437	1.33
78-87-5	1,2-Dichloropropane	U	1.33	ug/kg	0.398	1.33
75-27-4	Bromodichloromethane	U	1.33	ug/kg	0.398	1.33
74-95-3	Dibromomethane	U	1.33	ug/kg	0.398	1.33
108-10-1	4-Methyl-2-pentanone	U	6.63	ug/kg	1.66	6.63
10061-01-5	cis-1,3-Dichloropropylene	U	1.33	ug/kg	0.398	1.33
108-88-3	Toluene	U	1.33	ug/kg	0.398	1.33
10061-02-6	trans-1,3-Dichloropropylene	U	1.33	ug/kg	0.398	1.33
79-00-5	1,1,2-Trichloroethane	U	1.33	ug/kg	0.398	1.33
591-78-6	2-Hexanone	U	6.63	ug/kg	1.99	6.63
142-28-9	1,3-Dichloropropane	U	1.33	ug/kg	0.398	1.33
127-18-4	Tetrachloroethylene	U	1.33	ug/kg	0.398	1.33
124-48-1	Dibromochloromethane	U	1.33	ug/kg	0.398	1.33
106-93-4	1,2-Dibromoethane	U	1.33	ug/kg	0.398	1.33
108-90-7	Chlorobenzene	U	1.33	ug/kg	0.398	1.33



**Volatile**  
**Certificate of Analysis**  
**Sample Summary**

**SDG Number:** 10-1758  
**Lab Sample ID:** 246866006

**Date Collected:** 02/09/2010 12:00  
**Date Received:** 02/11/2010 09:20  
**Client:** LANL010  
**Method:** SW846 8260B  
**Inst:** VOAA.I  
**Analyst:** JEB  
**Aliquot:** 5 g  
**Column:** DB-624

**Matrix:** R  
**%Moisture:** 24.6  
**Project:** LANL01004  
**SOP Ref:** GL-OA-E-038  
**Dilution:** 1  
**Purge Vol:** 5 mL  
**Final Volume:** 5 mL

**Client ID:** RE15-10-8368  
**Batch ID:** 955077  
**Run Date:** 02/19/2010 09:11  
**Prep Date:** 02/18/2010 20:15  
**Data File:** 021810\AY436.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.33	ug/kg	0.398	1.33
179601-23-1	m,p-Xylenes	U	2.65	ug/kg	0.398	2.65
95-47-6	o-Xylene	U	1.33	ug/kg	0.398	1.33
100-42-5	Styrene	U	1.33	ug/kg	0.398	1.33
75-25-2	Bromoform	U	1.33	ug/kg	0.398	1.33
79-34-5	1,1,2,2-Tetrachloroethane	U	1.33	ug/kg	0.398	1.33
96-18-4	1,2,3-Trichloropropane	U	1.33	ug/kg	0.398	1.33
108-86-1	Bromobenzene	U	1.33	ug/kg	0.398	1.33
103-65-1	n-Propylbenzene	U	1.33	ug/kg	0.398	1.33
95-49-8	2-Chlorotoluene	U	1.33	ug/kg	0.398	1.33
98-82-8	Isopropylbenzene	U	1.33	ug/kg	0.398	1.33
108-67-8	1,3,5-Trimethylbenzene	U	1.33	ug/kg	0.398	1.33
106-43-4	4-Chlorotoluene	U	1.33	ug/kg	0.398	1.33
98-06-6	tert-Butylbenzene	U	1.33	ug/kg	0.398	1.33
95-63-6	1,2,4-Trimethylbenzene	U	1.33	ug/kg	0.398	1.33
135-98-8	sec-Butylbenzene	U	1.33	ug/kg	0.398	1.33
99-87-6	4-Isopropyltoluene	U	1.33	ug/kg	0.398	1.33
541-73-1	1,3-Dichlorobenzene	U	1.33	ug/kg	0.398	1.33
106-46-7	1,4-Dichlorobenzene	U	1.33	ug/kg	0.398	1.33
104-51-8	n-Butylbenzene	U	1.33	ug/kg	0.398	1.33
96-12-8	1,2-Dibromo-3-chloropropane	U	1.33	ug/kg	0.398	1.33
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	6.63	ug/kg	2.12	6.63
	<i>Trichlorotrifluoroethane</i>					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.33	ug/kg	0.398	1.33
95-50-1	1,2-Dichlorobenzene	U	1.33	ug/kg	0.398	1.33

**Tentatively Identified Compound Summary**

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

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\021810\  
Data File : AY436.D  
Acq On : 19 Feb 2010 9:11 am  
Operator : JEB  
InstName : VOAA  
Sample : |246866006|955077|1|VOA|1|VOA8260BS|  
Misc : LANL 5.0G N/A SOIL  
ALS Vial : 36 Sample Multiplier: 1

Quant Time: Feb 19 14:08:15 2010  
Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M  
Quant Title : Volatile Organics 8260B SubList :  
QLast Update : Wed Feb 03 22:34:28 2010  
Response via : Initial Calibration  
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
-----								
Internal Standards								Dev(Min)
1) Fluorobenzene	9.339	9.342	1.000	96	846846	50.00	ug/L	0.00
41) Chlorobenzene-d5	12.507	12.507	1.000	117	605615	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	14.940	14.944	1.000	152	366166	50.00	ug/L	0.00
82) B Fluorobenzene	9.339	9.339	1.000	96	846846	50.00	ug/L	0.00
103) B Chlorobenzene-d5	12.507	12.508	1.000	117	605615	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	14.940	14.944	1.000	152	366166	50.00	ug/L	0.00
System Monitoring Compounds								Dev(Min)
29) 1,2-Dichloroethane-d4	8.978	8.982	0.961	65	354931	50.39	ug/L	0.00
Spiked Amount	50.000	Range	66 - 134	Recovery	=	100.78%		
43) Toluene-d8	10.983	10.987	0.878	98	792645	48.64	ug/L	0.00
Spiked Amount	50.000	Range	71 - 128	Recovery	=	97.28%		
61) Bromofluorobenzene	13.713	13.713	0.918	95	340117	45.64	ug/L	0.00
Spiked Amount	50.000	Range	65 - 130	Recovery	=	91.28%		
-----								
Target Compounds	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	QValue
2) Dichlorodifluoromethane	0.000	3.731	0.000		0	N.D.		
3) Chloromethane	0.000	4.043	0.000		0	N.D.		
4) Vinyl chloride	0.000	4.265	0.000		0	N.D.		
5) Bromomethane	0.000	4.839	0.000		0	N.D.		
6) Chloroethane	0.000	4.990	0.000		0	N.D.		
7) Trichlorofluoromethane	0.000	5.382	0.000		0	N.D.		
8) Ethyl ether	0.000	5.732	0.000		0	N.D.		
9) Acetone	6.096	6.082	0.653	43	632	N.D.		
10) 1,1-Dichloroethylene	0.000	6.082	0.000		0	N.D.		
11) Iodomethane	0.000	6.305	0.000		0	N.D.		
12) Acetonitrile	0.000	6.421	0.000		0	N.D.		
13) Methyl acetate	0.000	6.481	0.000		0	N.D.		
14) Carbon disulfide	6.418	6.428	0.687	76	133	N.D.		
15) Methylene chloride	6.648	6.651	0.712	84	1947	Below Cal		91
16) tert-Butyl methyl ether	0.000	6.973	0.000		0	N.D.		
17) trans-1,2-Dichloroethy...	0.000	6.994	0.000		0	N.D.		
18) Vinyl acetate	0.000	7.454	0.000		0	N.D.		
19) 1,1-Dichloroethane	0.000	7.471	0.000		0	N.D.		
20) 2-Butanone	0.000	8.062	0.000		0	N.D.		
21) cis-1,2-Dichloroethylene	0.000	8.108	0.000		0	N.D.		
22) 2,2-Dichloropropane	0.000	8.140	0.000		0	N.D.		
23) Bromochloromethane	0.000	8.373	0.000		0	N.D.		
24) Chloroform	0.000	8.423	0.000		0	N.D.		
25) 1,1,1-Trichloroethane	0.000	8.692	0.000		0	N.D.		
26) Cyclohexane	0.000	8.791	0.000		0	N.D.		
27) 1,1-Dichloropropene	0.000	8.851	0.000		0	N.D.		
28) Carbon tetrachloride	0.000	8.886	0.000		0	N.D.		
30) 1,2-Dichloroethane	0.000	9.063	0.000		0	N.D.		
31) Benzene	0.000	9.084	0.000		0	N.D.		
32) Cyclohexene	0.000	9.208	0.000		0	N.D.		
33) n-Butyl alcohol	0.000	9.462	0.000		0	N.D.		
34) Trichloroethylene	0.000	9.731	0.000		0	N.D.		
35) 1,2-Dichloropropane	0.000	9.965	0.000		0	N.D.		
36) Methylcyclohexane	0.000	9.982	0.000		0	N.D.		
37) Dibromomethane	0.000	10.095	0.000		0	N.D.		
38) Bromodichloromethane	0.000	10.216	0.000		0	N.D.		
39) 2-Chloroethylvinyl ether	0.000	10.453	0.000		0	N.D.		

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\021810\  
Data File : AY436.D  
Acq On : 19 Feb 2010 9:11 am  
Operator : JEB  
InstName : VOAA  
Sample : |246866006|955077|1|VOA|1|VOA8260BS|  
Misc : LANL 5.0G N/A SOIL  
ALS Vial : 36 Sample Multiplier: 1

Quant Time: Feb 19 14:08:15 2010  
Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M  
Quant Title : Volatile Organics 8260B SubList :  
QLast Update : Wed Feb 03 22:34:28 2010  
Response via : Initial Calibration  
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
40) cis-1,3-Dichloropropylene	0.000	10.668	0.000		0	N.D.	
42) 4-Methyl-2-pentanone	0.000	10.774	0.000		0	N.D.	
44) Toluene	11.058	11.057	0.884	91	1240	N.D.	
45) trans-1,3-Dichloroprop...	0.000	11.213	0.000		0	N.D.	
46) 1,1,2-Trichloroethane	0.000	11.429	0.000		0	N.D.	
47) 2-Hexanone	0.000	11.627	0.000		0	N.D.	
48) 1,3-Dichloropropane	0.000	11.620	0.000		0	N.D.	
49) Tetrachloroethylene	0.000	11.655	0.000		0	N.D.	
50) Dibromochloromethane	0.000	11.881	0.000		0	N.D.	
51) 1,2-Dibromoethane	0.000	12.044	0.000		0	N.D.	
52) Chlorobenzene	0.000	12.543	0.000		0	N.D.	
53) 1,1,1,2-Tetrachloroethane	0.000	12.599	0.000		0	N.D.	
54) Ethylbenzene	12.511	12.617	1.000	91	1262	N.D.	
55) m,p-Xylenes	0.000	12.730	0.000		0	N.D.	
56) o-Xylene	0.000	13.162	0.000		0	N.D.	
57) Styrene	0.000	13.162	0.000		0	N.D.	
59) Bromoform	0.000	13.402	0.000		0	N.D.	
60) Isopropylbenzene	0.000	13.529	0.000		0	N.D.	
62) 1,1,2,2-Tetrachloroethane	0.000	13.795	0.000		0	N.D.	
63) 1,2,3-Trichloropropane	0.000	13.879	0.000		0	N.D.	
64) Bromobenzene	0.000	13.918	0.000		0	N.D.	
65) n-Propylbenzene	13.713	13.957	0.918	91	635	N.D.	
66) 1,3,5-Trimethylbenzene	0.000	14.116	0.000		0	N.D.	
67) 2-Chlorotoluene	0.000	14.095	0.000		0	N.D.	
68) 4-Chlorotoluene	0.000	14.198	0.000		0	N.D.	
69) tert-Butylbenzene	0.000	14.488	0.000		0m	N.D.	d
70) 1,2,4-Trimethylbenzene	0.000	14.527	0.000		0m	N.D.	d
71) sec-Butylbenzene	0.000	14.718	0.000		0m	N.D.	d
72) 4-Isopropyltoluene	0.000	14.841	0.000		0	N.D.	
73) 1,3-Dichlorobenzene	0.000	14.884	0.000		0	N.D.	
74) 1,4-Dichlorobenzene	14.965	14.969	1.002	146	115	N.D.	
75) n-Butylbenzene	0.000	15.276	0.000		0	N.D.	
76) 1,2-Dichlorobenzene	0.000	15.379	0.000		0	N.D.	
77) 1,2-Dibromo-3-chloropr...	0.000	16.192	0.000		0	N.D.	
78) 1,2,4-Trichlorobenzene	17.183	17.183	1.150	180	271	N.D.	
79) Hexachlorobutadiene	0.000	17.360	0.000		0	N.D.	
80) Naphthalene	17.530	17.529	1.173	128	1830	N.D.	
81) 1,2,3-Trichlorobenzene	0.000	17.847	0.000		0	N.D.	
83) Chlorotrifluoroethylene	0.000	3.661	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000	4.416	0.000		0	N.D.	
85) Acrolein	0.000	5.898	0.000		0	N.D.	
86) Trichlorotrifluoroethane	0.000	6.068	0.000		0	N.D.	
87) Isopropyl Alcohol	0.000	6.188	0.000		0	N.D.	
88) Allyl chloride	0.000	6.506	0.000		0	N.D.	
89) tert-Butyl Alcohol	0.000	6.687	0.000		0	N.D.	
90) Acrylonitrile	0.000	6.895	0.000		0	N.D.	
91) Isopropyl ether	0.000	7.489	0.000		0	N.D.	
92) 2-Chloro-1,3-butadiene	0.000	7.581	0.000		0	N.D.	
93) Ethyl tert-butyl ether	0.000	7.893	0.000		0	N.D.	
94) Ethyl acetate	0.000	8.094	0.000		0	N.D.	
95) Propionitrile	0.000	8.122	0.000		0	N.D.	
96) Methacrylonitrile	0.000	8.306	0.000		0	N.D.	
97) Tetrahydrofuran	0.000	8.430	0.000		0	N.D.	
98) Isobutyl alcohol	0.000	8.777	0.000		0	N.D.	

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\021810\  
Data File : AY436.D  
Acq On : 19 Feb 2010 9:11 am  
Operator : JEB  
InstName : VOAA  
Sample : |246866006|955077|1|VOA|1|VOA8260BS|  
Misc : LANL 5.0G N/A SOIL  
ALS Vial : 36 Sample Multiplier: 1

Quant Time: Feb 19 14:08:15 2010  
Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M  
Quant Title : Volatile Organics 8260B SubList :  
QLast Update : Wed Feb 03 22:34:28 2010  
Response via : Initial Calibration  
Integrator: RTE

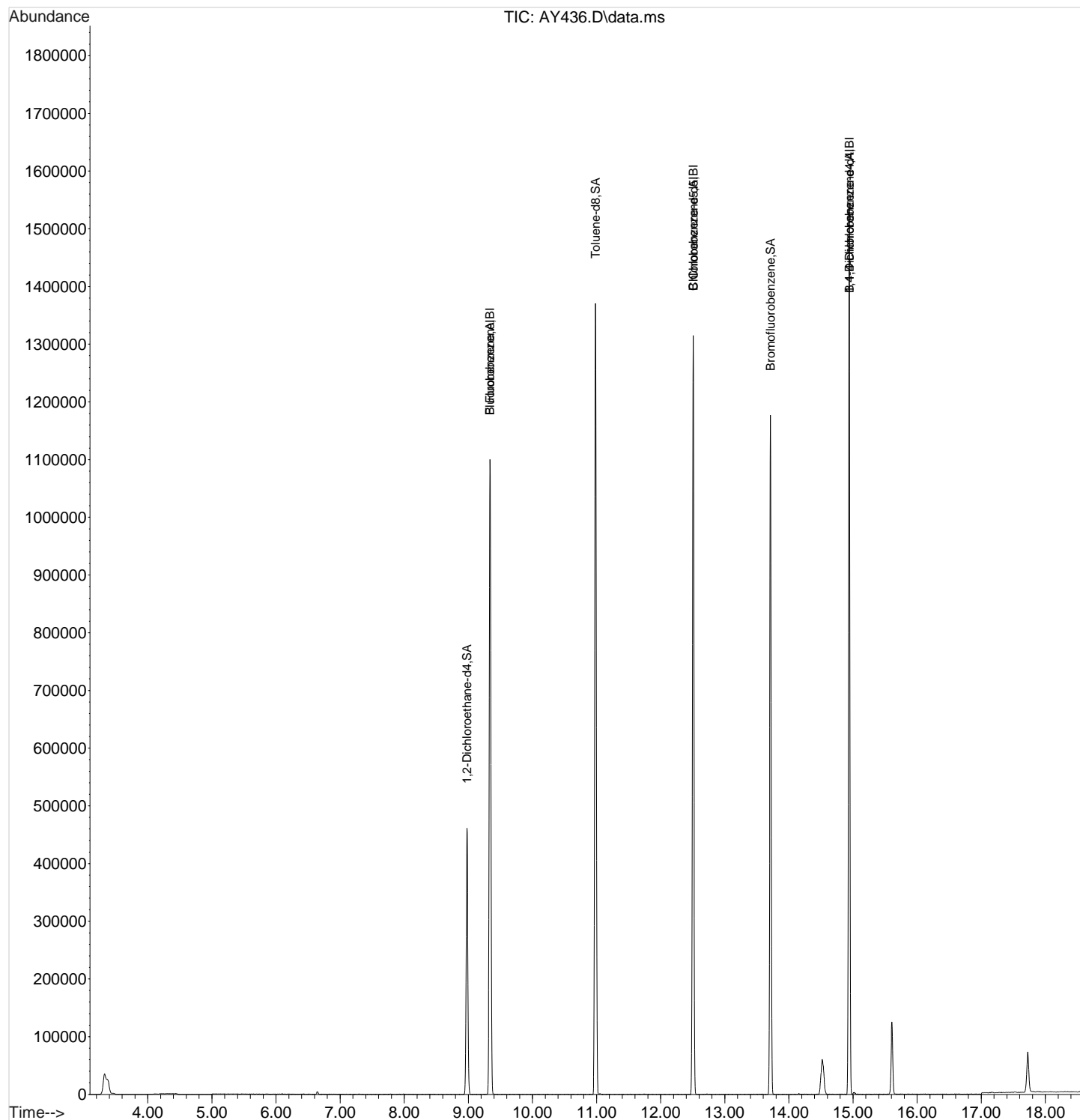
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
99) Methyl tert-amyl ether	0.000	9.127	0.000		0	N.D.	
100) Methyl methacrylate	0.000	9.968	0.000		0	N.D.	
101) 1,4-Dioxane	0.000	10.060	0.000		0	N.D.	
102) 2-Nitropropane	0.000	10.414	0.000		0	N.D.	
104) Ethyl methacrylate	0.000	11.238	0.000		0	N.D.	
106) 1-Chlorohexane	0.000	12.426	0.000		0	N.D.	
107) cis-1,4-Dichloro-2-butene	0.000	13.554	0.000		0	N.D.	
108) Cyclohexanone	0.000	13.657	0.000		0	N.D.	
109) trans-1,4-Dichloro-2-b...	0.000	13.844	0.000		0	N.D.	
110) Pentachloroethane	0.000	14.541	0.000		0	N.D.	
111) Benzyl chloride	14.940	15.082	1.000	91	815	N.D.	
112) bis(2-Chloroisopropyl)...	0.000	15.485	0.000		0m	N.D.	d

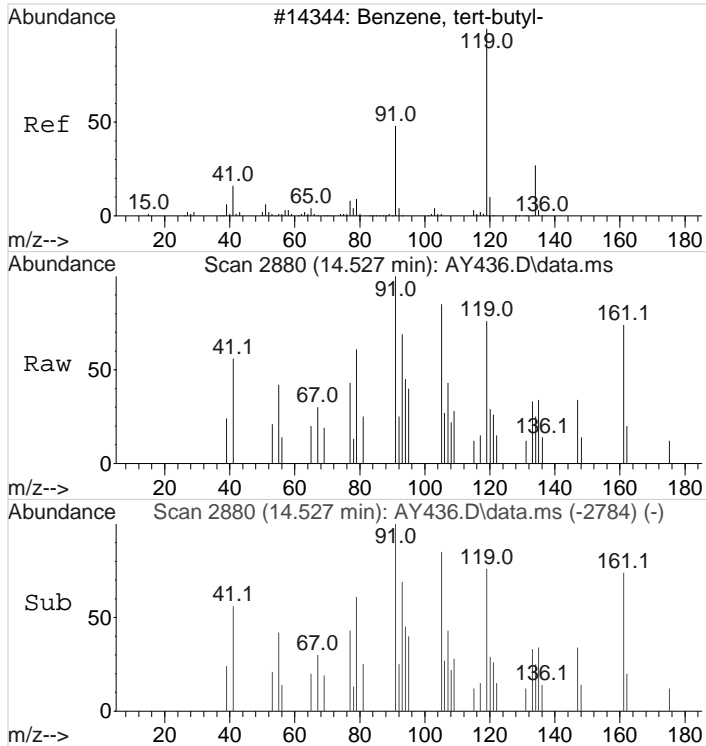
(#) = qualifier out of range (m) = manual integration (+) = signals summed  
(E) = Over the calibration range (d) = deleted

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\021810\  
Data File : AY436.D  
Acq On : 19 Feb 2010 9:11 am  
Operator : JEB  
InstName : VOAA  
Sample : |246866006|955077|1|VOA|1|VOA8260BS|  
Misc : LANL 5.0G N/A SOIL  
ALS Vial : 36 Sample Multiplier: 1

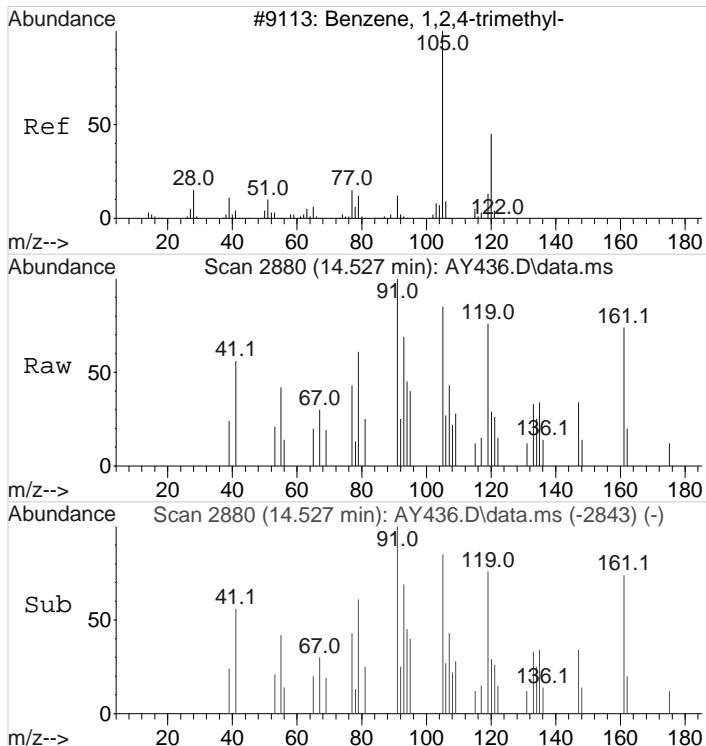
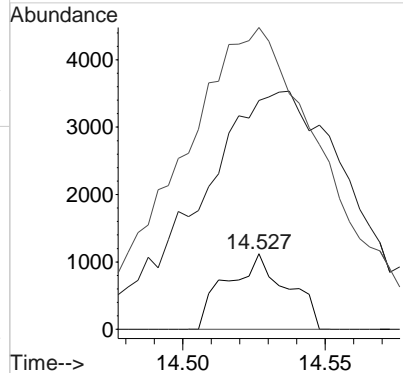
Quant Time: Feb 19 14:08:15 2010  
Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M  
Quant Title : Volatile Organics 8260B SubList :  
QLast Update : Wed Feb 03 22:34:28 2010  
Response via : Initial Calibration  
Integrator: RTE





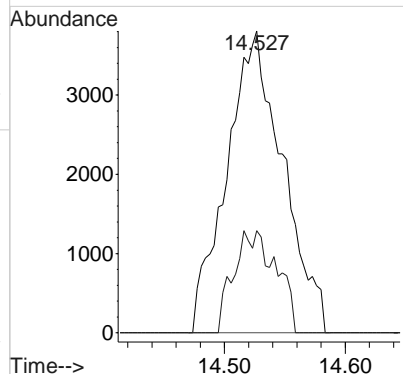
#69 BEFORE analyst DELETION  
tert-Butylbenzene  
Concen: 0.49 ug/L  
RT: 14.527 min Scan# 2880  
Delta R.T. 0.039 min  
Lab File: AY436.D  
Acq: 19 Feb 2010 9:11 am

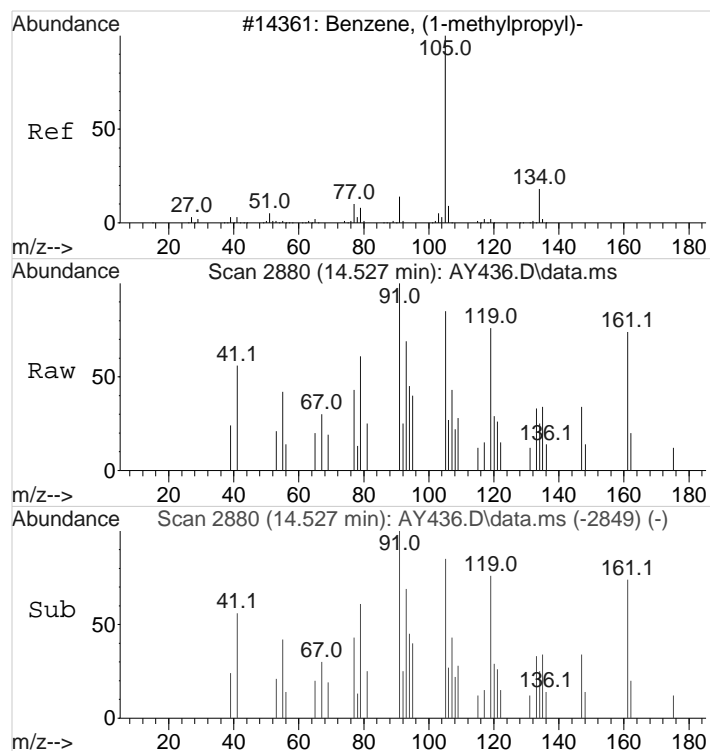
Tgt Ion	Ratio	Lower	Upper
134	100		
119	807.1	420.0	480.0#
91	968.9	318.4	378.4#



#70 BEFORE analyst DELETION  
1,2,4-Trimethylbenzene  
Concen: 0.68 ug/L  
RT: 14.527 min Scan# 2880  
Delta R.T. 0.000 min  
Lab File: AY436.D  
Acq: 19 Feb 2010 9:11 am

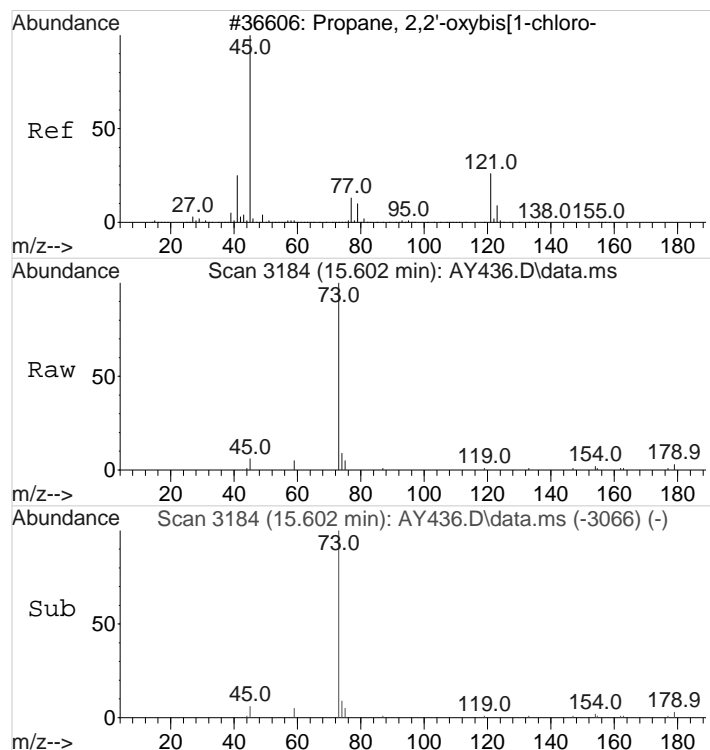
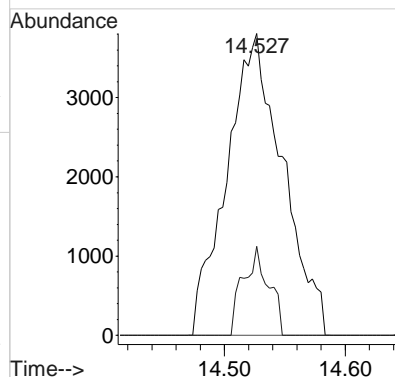
Tgt Ion	Ratio	Lower	Upper
105	100		
120	25.7	10.6	70.6





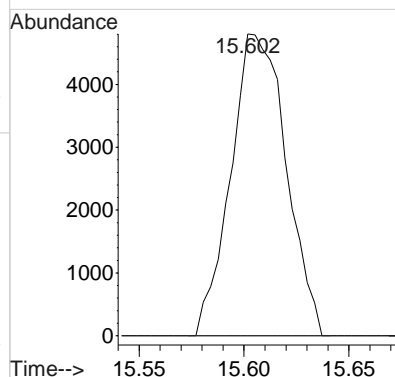
#71 BEFORE analyst DELETION  
sec-Butylbenzene  
Concen: 0.55 ug/L  
RT: 14.527 min Scan# 2880  
Delta R.T. -0.191 min  
Lab File: AY436.D  
Acq: 19 Feb 2010 9:11 am

Tgt Ion: 105 Resp: 12260  
Ion Ratio Lower Upper  
105 100  
134 13.5 0.0 48.7



#112 BEFORE analyst DELETION  
bis(2-Chloroisopropyl)ether  
Concen: 2.79 ug/L  
RT: 15.602 min Scan# 3184  
Delta R.T. 0.117 min  
Lab File: AY436.D  
Acq: 19 Feb 2010 9:11 am

Tgt Ion: 45 Resp: 8818  
Ion Ratio Lower Upper  
45 100  
121 0.0 0.0 49.0



Library Search Compound Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\021810\  
Data File : AY436.D  
Acq On : 19 Feb 2010 9:11 am  
Operator : JEB  
Sample : |246866006|955077|1|VOA|1|VOA8260BS|  
Misc : LANL 5.0G N/A SOIL  
ALS Vial : 36 Sample Multiplier: 1

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

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

No Library Search Compounds Detected

\*\*\*\*\*



Tentatively Identified Compound (LSC) summary  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\021810\  
Data File : AY436.D  
Acq On : 19 Feb 2010 9:11 am  
Operator : JEB  
Sample : |246866006|955077|1|VOA|1|VOA8260BS|  
Misc : LANL 5.0G N/A SOIL  
ALS Vial : 36 Sample Multiplier: 1

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

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

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

**Volatile**  
**Certificate of Analysis**  
**Sample Summary**

**SDG Number:** 10-1758  
**Lab Sample ID:** 246866007

**Date Collected:** 02/09/2010 12:00  
**Date Received:** 02/11/2010 09:20  
**Client:** LANL010  
**Method:** SW846 8260B  
**Inst:** VOAA.I  
**Analyst:** JEB  
**Aliquot:** 5.5 g  
**Column:** DB-624

**Matrix:** R  
**%Moisture:** 24.2  
**Project:** LANL01004  
**SOP Ref:** GL-OA-E-038  
**Dilution:** 1  
**Purge Vol:** 5 mL  
**Final Volume:** 5 mL

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.20	ug/kg	0.408	1.20
74-87-3	Chloromethane	U	1.20	ug/kg	0.360	1.20
75-01-4	Vinyl chloride	U	1.20	ug/kg	0.360	1.20
74-83-9	Bromomethane	U	1.20	ug/kg	0.360	1.20
75-00-3	Chloroethane	U	1.20	ug/kg	0.360	1.20
75-69-4	Trichlorofluoromethane	U	1.20	ug/kg	0.360	1.20
67-64-1	Acetone	U	5.99	ug/kg	1.99	5.99
75-35-4	1,1-Dichloroethylene	U	1.20	ug/kg	0.360	1.20
74-88-4	Iodomethane	U	5.99	ug/kg	1.92	5.99
75-09-2	Methylene chloride	U	5.99	ug/kg	2.40	5.99
75-15-0	Carbon disulfide	U	5.99	ug/kg	1.50	5.99
156-60-5	trans-1,2-Dichloroethylene	U	1.20	ug/kg	0.360	1.20
75-34-3	1,1-Dichloroethane	U	1.20	ug/kg	0.360	1.20
78-93-3	2-Butanone	U	5.99	ug/kg	1.80	5.99
156-59-2	cis-1,2-Dichloroethylene	U	1.20	ug/kg	0.360	1.20
594-20-7	2,2-Dichloropropane	U	1.20	ug/kg	0.360	1.20
67-66-3	Chloroform	U	1.20	ug/kg	0.360	1.20
74-97-5	Bromochloromethane	U	1.20	ug/kg	0.396	1.20
71-55-6	1,1,1-Trichloroethane	U	1.20	ug/kg	0.360	1.20
563-58-6	1,1-Dichloropropene	U	1.20	ug/kg	0.360	1.20
56-23-5	Carbon tetrachloride	U	1.20	ug/kg	0.360	1.20
107-06-2	1,2-Dichloroethane	U	1.20	ug/kg	0.360	1.20
71-43-2	Benzene	U	1.20	ug/kg	0.360	1.20
79-01-6	Trichloroethylene	U	1.20	ug/kg	0.396	1.20
78-87-5	1,2-Dichloropropane	U	1.20	ug/kg	0.360	1.20
75-27-4	Bromodichloromethane	U	1.20	ug/kg	0.360	1.20
74-95-3	Dibromomethane	U	1.20	ug/kg	0.360	1.20
108-10-1	4-Methyl-2-pentanone	U	5.99	ug/kg	1.50	5.99
10061-01-5	cis-1,3-Dichloropropylene	U	1.20	ug/kg	0.360	1.20
108-88-3	Toluene	U	1.20	ug/kg	0.360	1.20
10061-02-6	trans-1,3-Dichloropropylene	U	1.20	ug/kg	0.360	1.20
79-00-5	1,1,2-Trichloroethane	U	1.20	ug/kg	0.360	1.20
591-78-6	2-Hexanone	U	5.99	ug/kg	1.80	5.99
142-28-9	1,3-Dichloropropane	U	1.20	ug/kg	0.360	1.20
127-18-4	Tetrachloroethylene	U	1.20	ug/kg	0.360	1.20
124-48-1	Dibromochloromethane	U	1.20	ug/kg	0.360	1.20
106-93-4	1,2-Dibromoethane	U	1.20	ug/kg	0.360	1.20
108-90-7	Chlorobenzene	U	1.20	ug/kg	0.360	1.20

**Volatile**  
**Certificate of Analysis**  
**Sample Summary**

**SDG Number:** 10-1758  
**Lab Sample ID:** 246866007

**Date Collected:** 02/09/2010 12:00  
**Date Received:** 02/11/2010 09:20  
**Client:** LANL010  
**Method:** SW846 8260B  
**Inst:** VOAA.I  
**Analyst:** JEB  
**Aliquot:** 5.5 g  
**Column:** DB-624

**Matrix:** R  
**%Moisture:** 24.2  
**Project:** LANL01004  
**SOP Ref:** GL-OA-E-038  
**Dilution:** 1  
**Purge Vol:** 5 mL  
**Final Volume:** 5 mL

**Client ID:** RE15-10-8340  
**Batch ID:** 955077  
**Run Date:** 02/19/2010 09:37  
**Prep Date:** 02/18/2010 20:16  
**Data File:** 021810\AY437.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.20	ug/kg	0.360	1.20
179601-23-1	m,p-Xylenes	U	2.40	ug/kg	0.360	2.40
95-47-6	o-Xylene	U	1.20	ug/kg	0.360	1.20
100-42-5	Styrene	U	1.20	ug/kg	0.360	1.20
75-25-2	Bromoform	U	1.20	ug/kg	0.360	1.20
79-34-5	1,1,2,2-Tetrachloroethane	U	1.20	ug/kg	0.360	1.20
96-18-4	1,2,3-Trichloropropane	U	1.20	ug/kg	0.360	1.20
108-86-1	Bromobenzene	U	1.20	ug/kg	0.360	1.20
103-65-1	n-Propylbenzene	U	1.20	ug/kg	0.360	1.20
95-49-8	2-Chlorotoluene	U	1.20	ug/kg	0.360	1.20
98-82-8	Isopropylbenzene	U	1.20	ug/kg	0.360	1.20
108-67-8	1,3,5-Trimethylbenzene	U	1.20	ug/kg	0.360	1.20
106-43-4	4-Chlorotoluene	U	1.20	ug/kg	0.360	1.20
98-06-6	tert-Butylbenzene	U	1.20	ug/kg	0.360	1.20
95-63-6	1,2,4-Trimethylbenzene	U	1.20	ug/kg	0.360	1.20
135-98-8	sec-Butylbenzene	U	1.20	ug/kg	0.360	1.20
99-87-6	4-Isopropyltoluene	U	1.20	ug/kg	0.360	1.20
541-73-1	1,3-Dichlorobenzene	U	1.20	ug/kg	0.360	1.20
106-46-7	1,4-Dichlorobenzene	U	1.20	ug/kg	0.360	1.20
104-51-8	n-Butylbenzene	U	1.20	ug/kg	0.360	1.20
96-12-8	1,2-Dibromo-3-chloropropane	U	1.20	ug/kg	0.360	1.20
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.99	ug/kg	1.92	5.99
	<i>Trichlorotrifluoroethane</i>					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.20	ug/kg	0.360	1.20
95-50-1	1,2-Dichlorobenzene	U	1.20	ug/kg	0.360	1.20

**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	unknown siloxane	17.73	19.6	ug/kg	0	J

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\021810\  
Data File : AY437.D  
Acq On : 19 Feb 2010 9:37 am  
Operator : JEB  
InstName : VOAA  
Sample : |246866007|955077|1|VOA|1|VOA8260BS|  
Misc : LANL 5.5G N/A SOIL  
ALS Vial : 37 Sample Multiplier: 1

Quant Time: Feb 19 13:58:13 2010  
Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M  
Quant Title : Volatile Organics 8260B SubList :  
QLast Update : Wed Feb 03 22:34:28 2010  
Response via : Initial Calibration  
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
Internal Standards								Dev(Min)
1) Fluorobenzene	9.339	9.342	1.000	96	830926	50.00	ug/L	0.00
41) Chlorobenzene-d5	12.507	12.507	1.000	117	599131	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	14.940	14.944	1.000	152	364797	50.00	ug/L	0.00
82) B Fluorobenzene	9.339	9.339	1.000	96	830926	50.00	ug/L	0.00
103) B Chlorobenzene-d5	12.507	12.508	1.000	117	599131	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	14.940	14.944	1.000	152	364797	50.00	ug/L	0.00
System Monitoring Compounds								Dev(Min)
29) 1,2-Dichloroethane-d4	8.978	8.982	0.961	65	355616	51.46	ug/L	0.00
Spiked Amount	50.000	Range	66 - 134	Recovery	=	102.92%		
43) Toluene-d8	10.983	10.987	0.878	98	777078	48.20	ug/L	0.00
Spiked Amount	50.000	Range	71 - 128	Recovery	=	96.40%		
61) Bromofluorobenzene	13.713	13.713	0.918	95	337151	45.41	ug/L	0.00
Spiked Amount	50.000	Range	65 - 130	Recovery	=	90.82%		
Target Compounds	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	QValue
2) Dichlorodifluoromethane	0.000	3.731	0.000		0	N.D.		
3) Chloromethane	0.000	4.043	0.000		0	N.D.		
4) Vinyl chloride	0.000	4.265	0.000		0	N.D.		
5) Bromomethane	0.000	4.839	0.000		0	N.D.		
6) Chloroethane	0.000	4.990	0.000		0	N.D.		
7) Trichlorofluoromethane	0.000	5.382	0.000		0	N.D.		
8) Ethyl ether	0.000	5.732	0.000		0	N.D.		
9) Acetone	6.092	6.082	0.652	43	107	N.D.		
10) 1,1-Dichloroethylene	0.000	6.082	0.000		0	N.D.		
11) Iodomethane	0.000	6.305	0.000		0	N.D.		
12) Acetonitrile	0.000	6.421	0.000		0	N.D.		
13) Methyl acetate	0.000	6.481	0.000		0	N.D.		
14) Carbon disulfide	6.421	6.428	0.688	76	226	N.D.		
15) Methylene chloride	6.648	6.651	0.712	84	2854	Below Cal		98
16) tert-Butyl methyl ether	0.000	6.973	0.000		0	N.D.		
17) trans-1,2-Dichloroethy...	0.000	6.994	0.000		0	N.D.		
18) Vinyl acetate	0.000	7.454	0.000		0	N.D.		
19) 1,1-Dichloroethane	0.000	7.471	0.000		0	N.D.		
20) 2-Butanone	0.000	8.062	0.000		0	N.D.		
21) cis-1,2-Dichloroethylene	0.000	8.108	0.000		0	N.D.		
22) 2,2-Dichloropropane	0.000	8.140	0.000		0	N.D.		
23) Bromochloromethane	0.000	8.373	0.000		0	N.D.		
24) Chloroform	0.000	8.423	0.000		0	N.D.		
25) 1,1,1-Trichloroethane	0.000	8.692	0.000		0	N.D.		
26) Cyclohexane	0.000	8.791	0.000		0	N.D.		
27) 1,1-Dichloropropene	0.000	8.851	0.000		0	N.D.		
28) Carbon tetrachloride	0.000	8.886	0.000		0	N.D.		
30) 1,2-Dichloroethane	0.000	9.063	0.000		0	N.D.		
31) Benzene	0.000	9.084	0.000		0	N.D.		
32) Cyclohexene	0.000	9.208	0.000		0	N.D.		
33) n-Butyl alcohol	0.000	9.462	0.000		0	N.D.		
34) Trichloroethylene	0.000	9.731	0.000		0	N.D.		
35) 1,2-Dichloropropane	0.000	9.965	0.000		0	N.D.		
36) Methylcyclohexane	0.000	9.982	0.000		0	N.D.		
37) Dibromomethane	0.000	10.095	0.000		0	N.D.		
38) Bromodichloromethane	0.000	10.216	0.000		0	N.D.		
39) 2-Chloroethylvinyl ether	0.000	10.453	0.000		0	N.D.		

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\021810\  
Data File : AY437.D  
Acq On : 19 Feb 2010 9:37 am  
Operator : JEB  
InstName : VOAA  
Sample : |246866007|955077|1|VOA|1|VOA8260BS|  
Misc : LANL 5.5G N/A SOIL  
ALS Vial : 37 Sample Multiplier: 1

Quant Time: Feb 19 13:58:13 2010  
Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M  
Quant Title : Volatile Organics 8260B SubList :  
QLast Update : Wed Feb 03 22:34:28 2010  
Response via : Initial Calibration  
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
40) cis-1,3-Dichloropropylene	0.000	10.668	0.000		0	N.D.	
42) 4-Methyl-2-pentanone	0.000	10.774	0.000		0	N.D.	
44) Toluene	11.054	11.057	0.884	91	1274	N.D.	
45) trans-1,3-Dichloroprop...	0.000	11.213	0.000		0	N.D.	
46) 1,1,2-Trichloroethane	0.000	11.429	0.000		0	N.D.	
47) 2-Hexanone	0.000	11.627	0.000		0	N.D.	
48) 1,3-Dichloropropane	0.000	11.620	0.000		0	N.D.	
49) Tetrachloroethylene	0.000	11.655	0.000		0	N.D.	
50) Dibromochloromethane	0.000	11.881	0.000		0	N.D.	
51) 1,2-Dibromoethane	0.000	12.044	0.000		0	N.D.	
52) Chlorobenzene	0.000	12.543	0.000		0	N.D.	
53) 1,1,1,2-Tetrachloroethane	0.000	12.599	0.000		0	N.D.	
54) Ethylbenzene	12.507	12.617	1.000	91	1173	N.D.	
55) m,p-Xylenes	0.000	12.730	0.000		0	N.D.	
56) o-Xylene	0.000	13.162	0.000		0	N.D.	
57) Styrene	0.000	13.162	0.000		0	N.D.	
59) Bromoform	0.000	13.402	0.000		0	N.D.	
60) Isopropylbenzene	0.000	13.529	0.000		0	N.D.	
62) 1,1,2,2-Tetrachloroethane	0.000	13.795	0.000		0	N.D.	
63) 1,2,3-Trichloropropane	0.000	13.879	0.000		0	N.D.	
64) Bromobenzene	0.000	13.918	0.000		0	N.D.	
65) n-Propylbenzene	13.710	13.957	0.918	91	906	N.D.	
66) 1,3,5-Trimethylbenzene	0.000	14.116	0.000		0	N.D.	
67) 2-Chlorotoluene	0.000	14.095	0.000		0	N.D.	
68) 4-Chlorotoluene	0.000	14.198	0.000		0	N.D.	
69) tert-Butylbenzene	0.000	14.488	0.000		0	N.D.	
70) 1,2,4-Trimethylbenzene	14.527	14.527	0.972	105	3693	N.D.	
71) sec-Butylbenzene	14.527	14.718	0.972	105	3693	N.D.	
72) 4-Isopropyltoluene	0.000	14.841	0.000		0	N.D.	
73) 1,3-Dichlorobenzene	0.000	14.884	0.000		0	N.D.	
74) 1,4-Dichlorobenzene	0.000	14.969	0.000		0	N.D.	
75) n-Butylbenzene	0.000	15.276	0.000		0	N.D.	
76) 1,2-Dichlorobenzene	0.000	15.379	0.000		0	N.D.	
77) 1,2-Dibromo-3-chloropr...	0.000	16.192	0.000		0	N.D.	
78) 1,2,4-Trichlorobenzene	17.190	17.183	1.151	180	391	N.D.	
79) Hexachlorobutadiene	0.000	17.360	0.000		0	N.D.	
80) Naphthalene	17.530	17.529	1.173	128	1737	N.D.	
81) 1,2,3-Trichlorobenzene	17.721	17.847	1.186	180	599	N.D.	
83) Chlorotrifluoroethylene	0.000	3.661	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000	4.416	0.000		0	N.D.	
85) Acrolein	0.000	5.898	0.000		0	N.D.	
86) Trichlorotrifluoroethane	0.000	6.068	0.000		0	N.D.	
87) Isopropyl Alcohol	0.000	6.188	0.000		0	N.D.	
88) Allyl chloride	0.000	6.506	0.000		0	N.D.	
89) tert-Butyl Alcohol	0.000	6.687	0.000		0	N.D.	
90) Acrylonitrile	0.000	6.895	0.000		0	N.D.	
91) Isopropyl ether	0.000	7.489	0.000		0	N.D.	
92) 2-Chloro-1,3-butadiene	0.000	7.581	0.000		0	N.D.	
93) Ethyl tert-butyl ether	0.000	7.893	0.000		0	N.D.	
94) Ethyl acetate	0.000	8.094	0.000		0	N.D.	
95) Propionitrile	0.000	8.122	0.000		0	N.D.	
96) Methacrylonitrile	0.000	8.306	0.000		0	N.D.	
97) Tetrahydrofuran	0.000	8.430	0.000		0	N.D.	
98) Isobutyl alcohol	0.000	8.777	0.000		0	N.D.	

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\021810\  
Data File : AY437.D  
Acq On : 19 Feb 2010 9:37 am  
Operator : JEB  
InstName : VOAA  
Sample : |246866007|955077|1|VOA|1|VOA8260BS|  
Misc : LANL 5.5G N/A SOIL  
ALS Vial : 37 Sample Multiplier: 1

Quant Time: Feb 19 13:58:13 2010  
Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M  
Quant Title : Volatile Organics 8260B SubList :  
QLast Update : Wed Feb 03 22:34:28 2010  
Response via : Initial Calibration  
Integrator: RTE

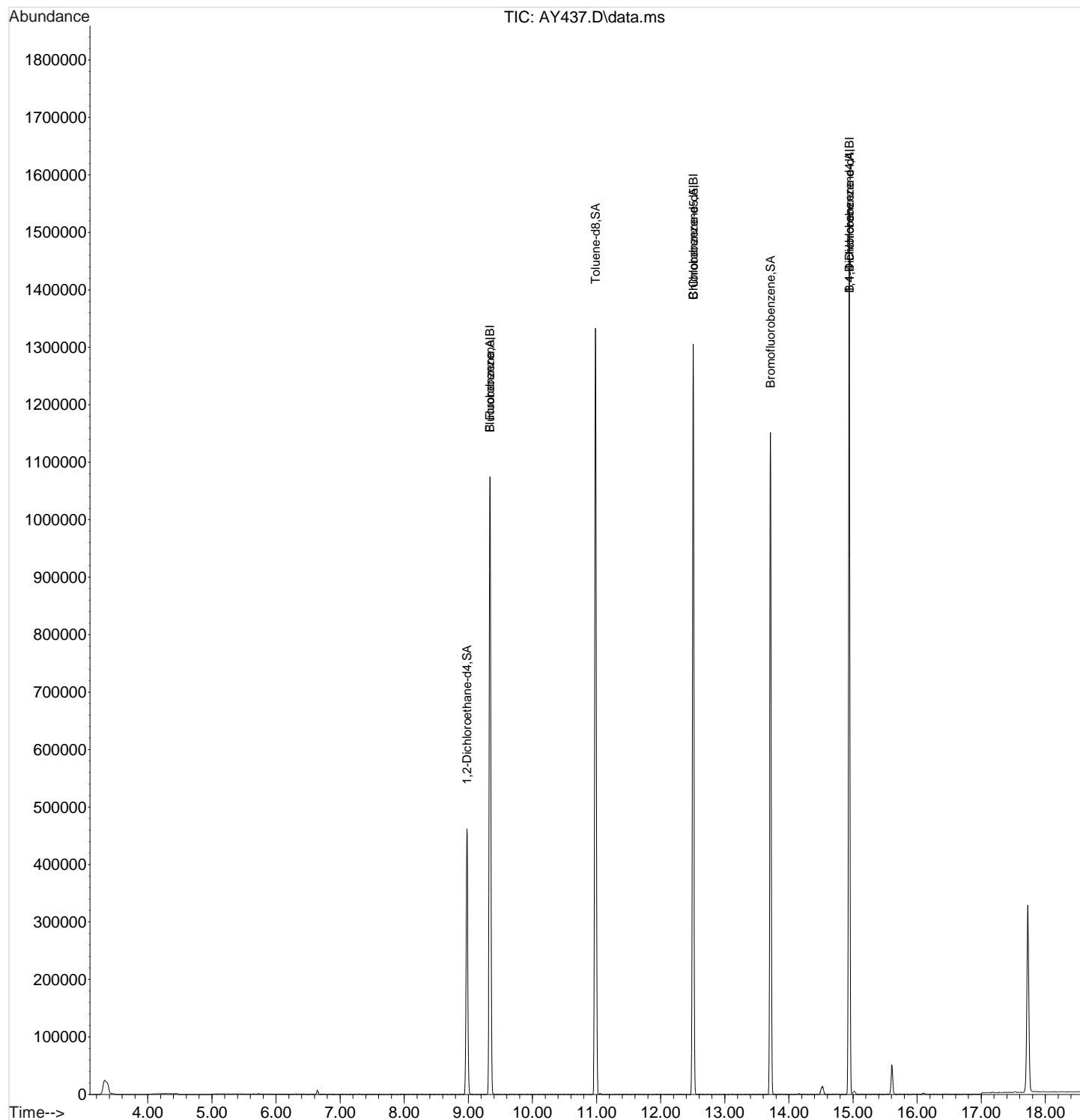
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
99) Methyl tert-amyl ether	0.000	9.127	0.000		0	N.D.	
100) Methyl methacrylate	0.000	9.968	0.000		0	N.D.	
101) 1,4-Dioxane	0.000	10.060	0.000		0	N.D.	
102) 2-Nitropropane	0.000	10.414	0.000		0	N.D.	
104) Ethyl methacrylate	10.997	11.238	0.879	69	2722	N.D.	
106) 1-Chlorohexane	0.000	12.426	0.000		0	N.D.	
107) cis-1,4-Dichloro-2-butene	0.000	13.554	0.000		0	N.D.	
108) Cyclohexanone	0.000	13.657	0.000		0	N.D.	
109) trans-1,4-Dichloro-2-b...	0.000	13.844	0.000		0	N.D.	
110) Pentachloroethane	0.000	14.541	0.000		0	N.D.	
111) Benzyl chloride	14.940	15.082	1.000	91	867	N.D.	
112) bis(2-Chloroisopropyl)...	15.609	15.485	1.045	45	3694	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\021810\  
Data File : AY437.D  
Acq On : 19 Feb 2010 9:37 am  
Operator : JEB  
InstName : VOAA  
Sample : |246866007|955077|1|VOA|1|VOA8260BS|  
Misc : LANL 5.5G N/A SOIL  
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Quant Time: Feb 19 13:58:13 2010  
Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M  
Quant Title : Volatile Organics 8260B SubList :  
QLast Update : Wed Feb 03 22:34:28 2010  
Response via : Initial Calibration  
Integrator: RTE



Library Search Compound Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\021810\  
Data File : AY437.D  
Acq On : 19 Feb 2010 9:37 am  
Operator : JEB  
Sample : |246866007|955077|1|VOA|1|VOA8260BS|  
Misc : LANL 5.5G N/A SOIL  
ALS Vial : 37 Sample Multiplier: 1

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

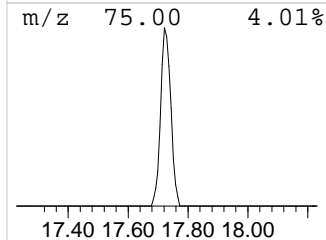
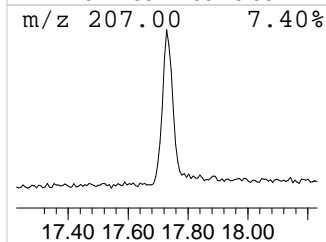
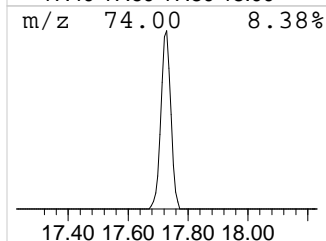
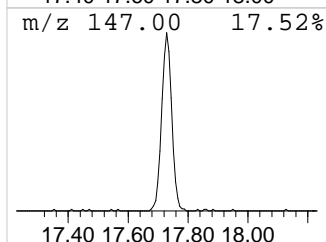
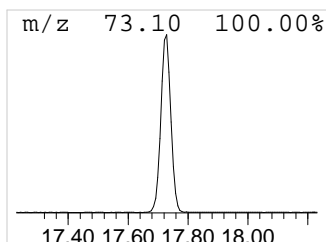
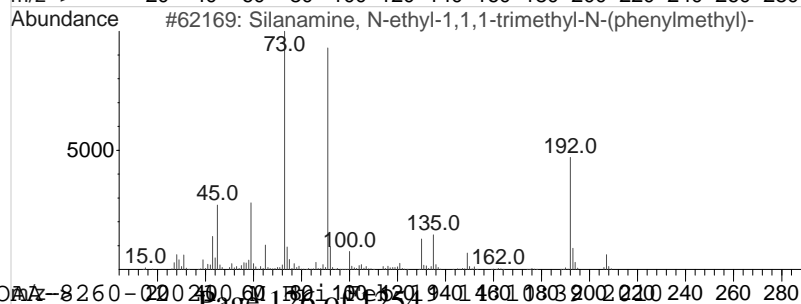
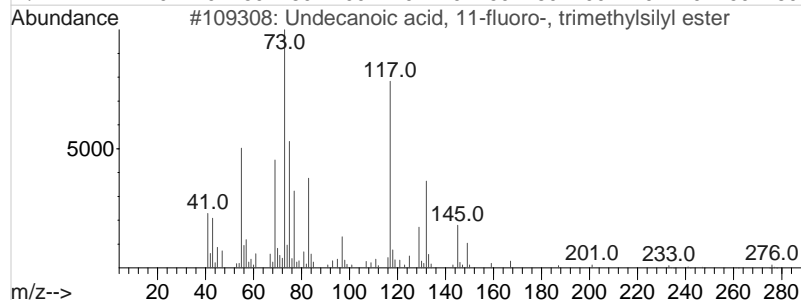
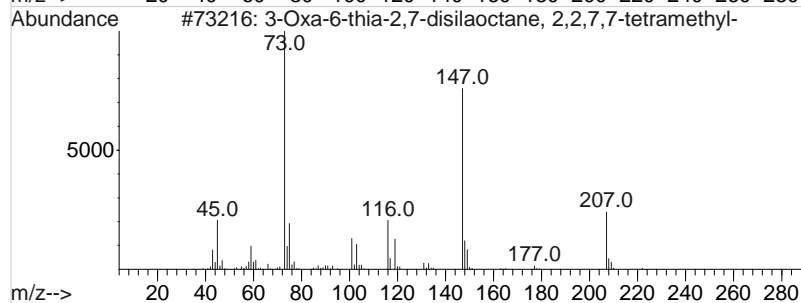
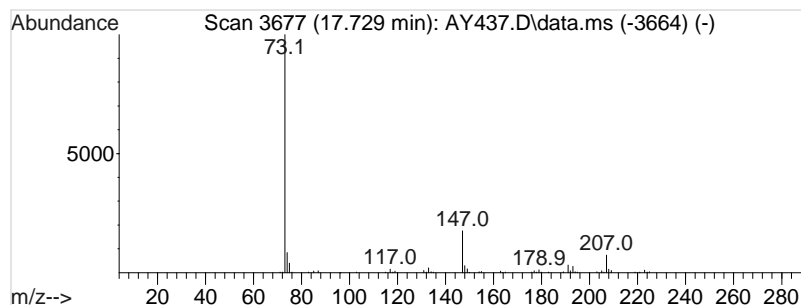
TIC Library : C:\Database\NIST05.L  
TIC Integration Parameters: ron.P

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

R.T.	EstConc	Area	Relative to ISTD	R.T.
17.729	16.37 ug/L	748609	B 1,4-Dichlorobenzene-d4	14.940

Hit# of	5	Tentative ID	MW	MolForm	CAS#	Qual
1		3-Oxa-6-thia-2,7-disilaoctane, 2...	222	C8H22OSSi2	078921-31-0	23
2		Undecanoic acid, 11-fluoro-, tri...	276	C14H29FO2Si	026305-97-5	22
3		Silamine, N-ethyl-1,1,1-trimet...	207	C12H21NSi	014629-66-4	9
4		1,2-Bis(trimethylsiloxy)ethane	206	C8H22O2Si2	007381-30-8	9
5		3-Phenyl-3-trimethylsilyloxyprop...	310	C15H26O3Si2	1000079-40-7	9





Tentatively Identified Compound (LSC) summary  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\021810\  
Data File : AY437.D  
Acq On : 19 Feb 2010 9:37 am  
Operator : JEB  
Sample : |246866007|955077|1|VOA|1|VOA8260BS|  
Misc : LANL 5.5G N/A SOIL  
ALS Vial : 37 Sample Multiplier: 1

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

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

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard--			
					#	RT	Resp	Conc
unknown siloxane	17.729	16.4	ug/L	748609	6	14.940	2286510	50.0

**Volatile**  
**Certificate of Analysis**  
**Sample Summary**

**SDG Number:** 10-1758  
**Lab Sample ID:** 246866008

**Date Collected:** 02/09/2010 12:00  
**Date Received:** 02/11/2010 09:20  
**Client:** LANL010  
**Method:** SW846 8260B  
**Inst:** VOAA.I  
**Analyst:** JEB  
**Aliquot:** 5.2 g  
**Column:** DB-624

**Matrix:** R  
**%Moisture:** 7.6  
**Project:** LANL01004  
**SOP Ref:** GL-OA-E-038  
**Dilution:** 1  
**Purge Vol:** 5 mL  
**Final Volume:** 5 mL

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.04	ug/kg	0.354	1.04
74-87-3	Chloromethane	U	1.04	ug/kg	0.312	1.04
75-01-4	Vinyl chloride	U	1.04	ug/kg	0.312	1.04
74-83-9	Bromomethane	U	1.04	ug/kg	0.312	1.04
75-00-3	Chloroethane	U	1.04	ug/kg	0.312	1.04
75-69-4	Trichlorofluoromethane	U	1.04	ug/kg	0.312	1.04
67-64-1	Acetone		5.74	ug/kg	1.73	5.20
75-35-4	1,1-Dichloroethylene	U	1.04	ug/kg	0.312	1.04
74-88-4	Iodomethane	U	5.20	ug/kg	1.66	5.20
75-09-2	Methylene chloride	U	5.20	ug/kg	2.08	5.20
75-15-0	Carbon disulfide	U	5.20	ug/kg	1.30	5.20
156-60-5	trans-1,2-Dichloroethylene	U	1.04	ug/kg	0.312	1.04
75-34-3	1,1-Dichloroethane	U	1.04	ug/kg	0.312	1.04
78-93-3	2-Butanone	U	5.20	ug/kg	1.56	5.20
156-59-2	cis-1,2-Dichloroethylene	U	1.04	ug/kg	0.312	1.04
594-20-7	2,2-Dichloropropane	U	1.04	ug/kg	0.312	1.04
67-66-3	Chloroform	U	1.04	ug/kg	0.312	1.04
74-97-5	Bromochloromethane	U	1.04	ug/kg	0.343	1.04
71-55-6	1,1,1-Trichloroethane	U	1.04	ug/kg	0.312	1.04
563-58-6	1,1-Dichloropropene	U	1.04	ug/kg	0.312	1.04
56-23-5	Carbon tetrachloride	U	1.04	ug/kg	0.312	1.04
107-06-2	1,2-Dichloroethane	U	1.04	ug/kg	0.312	1.04
71-43-2	Benzene	U	1.04	ug/kg	0.312	1.04
79-01-6	Trichloroethylene	U	1.04	ug/kg	0.343	1.04
78-87-5	1,2-Dichloropropane	U	1.04	ug/kg	0.312	1.04
75-27-4	Bromodichloromethane	U	1.04	ug/kg	0.312	1.04
74-95-3	Dibromomethane	U	1.04	ug/kg	0.312	1.04
108-10-1	4-Methyl-2-pentanone	U	5.20	ug/kg	1.30	5.20
10061-01-5	cis-1,3-Dichloropropylene	U	1.04	ug/kg	0.312	1.04
108-88-3	Toluene	U	1.04	ug/kg	0.312	1.04
10061-02-6	trans-1,3-Dichloropropylene	U	1.04	ug/kg	0.312	1.04
79-00-5	1,1,2-Trichloroethane	U	1.04	ug/kg	0.312	1.04
591-78-6	2-Hexanone	U	5.20	ug/kg	1.56	5.20
142-28-9	1,3-Dichloropropane	U	1.04	ug/kg	0.312	1.04
127-18-4	Tetrachloroethylene	U	1.04	ug/kg	0.312	1.04
124-48-1	Dibromochloromethane	U	1.04	ug/kg	0.312	1.04
106-93-4	1,2-Dibromoethane	U	1.04	ug/kg	0.312	1.04
108-90-7	Chlorobenzene	U	1.04	ug/kg	0.312	1.04

**Volatile  
Certificate of Analysis  
Sample Summary**

**SDG Number:** 10-1758  
**Lab Sample ID:** 246866008

**Date Collected:** 02/09/2010 12:00  
**Date Received:** 02/11/2010 09:20  
**Client:** LANL010  
**Method:** SW846 8260B  
**Inst:** VOAA.I  
**Analyst:** JEB  
**Aliquot:** 5.2 g  
**Column:** DB-624

**Matrix:** R  
**%Moisture:** 7.6  
**Project:** LANL01004  
**SOP Ref:** GL-OA-E-038  
**Dilution:** 1  
**Purge Vol:** 5 mL  
**Final Volume:** 5 mL

**Client ID:** RE15-10-8341  
**Batch ID:** 955077  
**Run Date:** 02/19/2010 10:03  
**Prep Date:** 02/18/2010 20:17  
**Data File:** 021810\AY438.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.04	ug/kg	0.312	1.04
179601-23-1	m,p-Xylenes	U	2.08	ug/kg	0.312	2.08
95-47-6	o-Xylene	U	1.04	ug/kg	0.312	1.04
100-42-5	Styrene	U	1.04	ug/kg	0.312	1.04
75-25-2	Bromoform	U	1.04	ug/kg	0.312	1.04
79-34-5	1,1,2,2-Tetrachloroethane	U	1.04	ug/kg	0.312	1.04
96-18-4	1,2,3-Trichloropropane	U	1.04	ug/kg	0.312	1.04
108-86-1	Bromobenzene	U	1.04	ug/kg	0.312	1.04
103-65-1	n-Propylbenzene	U	1.04	ug/kg	0.312	1.04
95-49-8	2-Chlorotoluene	U	1.04	ug/kg	0.312	1.04
98-82-8	Isopropylbenzene	U	1.04	ug/kg	0.312	1.04
108-67-8	1,3,5-Trimethylbenzene	U	1.04	ug/kg	0.312	1.04
106-43-4	4-Chlorotoluene	U	1.04	ug/kg	0.312	1.04
98-06-6	tert-Butylbenzene	U	1.04	ug/kg	0.312	1.04
95-63-6	1,2,4-Trimethylbenzene	U	1.04	ug/kg	0.312	1.04
135-98-8	sec-Butylbenzene	U	1.04	ug/kg	0.312	1.04
99-87-6	4-Isopropyltoluene	U	1.04	ug/kg	0.312	1.04
541-73-1	1,3-Dichlorobenzene	U	1.04	ug/kg	0.312	1.04
106-46-7	1,4-Dichlorobenzene	U	1.04	ug/kg	0.312	1.04
104-51-8	n-Butylbenzene	U	1.04	ug/kg	0.312	1.04
96-12-8	1,2-Dibromo-3-chloropropane	U	1.04	ug/kg	0.312	1.04
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.20	ug/kg	1.66	5.20
	<i>Trichlorotrifluoroethane</i>					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.04	ug/kg	0.312	1.04
95-50-1	1,2-Dichlorobenzene	U	1.04	ug/kg	0.312	1.04

**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	unknown siloxane	17.73	7.98	ug/kg	0	J

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\021810\  
Data File : AY438.D  
Acq On : 19 Feb 2010 10:03 am  
Operator : JEB  
InstName : VOAA  
Sample : |246866008|955077|1|VOA|1|VOA8260BS|  
Misc : LANL 5.2G N/A SOIL  
ALS Vial : 38 Sample Multiplier: 1

Quant Time: Feb 19 13:58:15 2010  
Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M  
Quant Title : Volatile Organics 8260B SubList :  
QLast Update : Wed Feb 03 22:34:28 2010  
Response via : Initial Calibration  
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
Internal Standards								Dev(Min)
1) Fluorobenzene	9.339	9.342	1.000	96	828883	50.00	ug/L	0.00
41) Chlorobenzene-d5	12.508	12.507	1.000	117	601780	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	14.944	14.944	1.000	152	369596	50.00	ug/L	0.00
82) B Fluorobenzene	9.339	9.339	1.000	96	828883	50.00	ug/L	0.00
103) B Chlorobenzene-d5	12.508	12.508	1.000	117	601780	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	14.944	14.944	1.000	152	369596	50.00	ug/L	0.00
System Monitoring Compounds								Dev(Min)
29) 1,2-Dichloroethane-d4	8.982	8.982	0.962	65	365391	53.00	ug/L	0.00
Spiked Amount	50.000	Range	66 - 134	Recovery	=	106.00%		
43) Toluene-d8	10.983	10.987	0.878	98	780876	48.22	ug/L	0.00
Spiked Amount	50.000	Range	71 - 128	Recovery	=	96.44%		
61) Bromofluorobenzene	13.713	13.713	0.918	95	355073	47.21	ug/L	0.00
Spiked Amount	50.000	Range	65 - 130	Recovery	=	94.42%		
Target Compounds	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	QValue
2) Dichlorodifluoromethane	0.000	3.731	0.000		0	N.D.		
3) Chloromethane	4.034	4.043	0.432	50	320	N.D.		
4) Vinyl chloride	0.000	4.265	0.000		0	N.D.		
5) Bromomethane	0.000	4.839	0.000		0	N.D.		
6) Chloroethane	0.000	4.990	0.000		0	N.D.		
7) Trichlorofluoromethane	0.000	5.382	0.000		0	N.D.		
8) Ethyl ether	0.000	5.732	0.000		0	N.D.		
9) Acetone	6.085	6.082	0.652	43	21890	5.52	ug/L	99
10) 1,1-Dichloroethylene	0.000	6.082	0.000		0	N.D.		
11) Iodomethane	0.000	6.305	0.000		0	N.D.		
12) Acetonitrile	0.000	6.421	0.000		0	N.D.		
13) Methyl acetate	0.000	6.481	0.000		0	N.D.		
14) Carbon disulfide	0.000	6.428	0.000		0	N.D.		
15) Methylene chloride	6.655	6.651	0.713	84	2680	Below Cal		90
16) tert-Butyl methyl ether	0.000	6.973	0.000		0	N.D.		
17) trans-1,2-Dichloroethy...	0.000	6.994	0.000		0	N.D.		
18) Vinyl acetate	0.000	7.454	0.000		0	N.D.		
19) 1,1-Dichloroethane	0.000	7.471	0.000		0	N.D.		
20) 2-Butanone	8.073	8.062	0.864	43	369	N.D.		
21) cis-1,2-Dichloroethylene	0.000	8.108	0.000		0	N.D.		
22) 2,2-Dichloropropane	0.000	8.140	0.000		0	N.D.		
23) Bromochloromethane	0.000	8.373	0.000		0	N.D.		
24) Chloroform	0.000	8.423	0.000		0	N.D.		
25) 1,1,1-Trichloroethane	0.000	8.692	0.000		0	N.D.		
26) Cyclohexane	0.000	8.791	0.000		0	N.D.		
27) 1,1-Dichloropropene	0.000	8.851	0.000		0	N.D.		
28) Carbon tetrachloride	0.000	8.886	0.000		0	N.D.		
30) 1,2-Dichloroethane	0.000	9.063	0.000		0	N.D.		
31) Benzene	0.000	9.084	0.000		0	N.D.		
32) Cyclohexene	0.000	9.208	0.000		0	N.D.		
33) n-Butyl alcohol	0.000	9.462	0.000		0	N.D.		
34) Trichloroethylene	0.000	9.731	0.000		0	N.D.		
35) 1,2-Dichloropropane	0.000	9.965	0.000		0	N.D.		
36) Methylcyclohexane	0.000	9.982	0.000		0	N.D.		
37) Dibromomethane	0.000	10.095	0.000		0	N.D.		
38) Bromodichloromethane	0.000	10.216	0.000		0	N.D.		
39) 2-Chloroethylvinyl ether	0.000	10.453	0.000		0	N.D.		

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\021810\  
Data File : AY438.D  
Acq On : 19 Feb 2010 10:03 am  
Operator : JEB  
InstName : VOAA  
Sample : |246866008|955077|1|VOA|1|VOA8260BS|  
Misc : LANL 5.2G N/A SOIL  
ALS Vial : 38 Sample Multiplier: 1

Quant Time: Feb 19 13:58:15 2010  
Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M  
Quant Title : Volatile Organics 8260B SubList :  
QLast Update : Wed Feb 03 22:34:28 2010  
Response via : Initial Calibration  
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
40) cis-1,3-Dichloropropylene	0.000	10.668	0.000		0	N.D.	
42) 4-Methyl-2-pentanone	0.000	10.774	0.000		0	N.D.	
44) Toluene	11.058	11.057	0.884	91	841	N.D.	
45) trans-1,3-Dichloroprop...	0.000	11.213	0.000		0	N.D.	
46) 1,1,2-Trichloroethane	0.000	11.429	0.000		0	N.D.	
47) 2-Hexanone	0.000	11.627	0.000		0	N.D.	
48) 1,3-Dichloropropane	0.000	11.620	0.000		0	N.D.	
49) Tetrachloroethylene	0.000	11.655	0.000		0	N.D.	
50) Dibromochloromethane	0.000	11.881	0.000		0	N.D.	
51) 1,2-Dibromoethane	0.000	12.044	0.000		0	N.D.	
52) Chlorobenzene	0.000	12.543	0.000		0	N.D.	
53) 1,1,1,2-Tetrachloroethane	0.000	12.599	0.000		0	N.D.	
54) Ethylbenzene	12.511	12.617	1.000	91	1301	N.D.	
55) m,p-Xylenes	0.000	12.730	0.000		0	N.D.	
56) o-Xylene	0.000	13.162	0.000		0	N.D.	
57) Styrene	0.000	13.162	0.000		0	N.D.	
59) Bromoform	0.000	13.402	0.000		0	N.D.	
60) Isopropylbenzene	13.551	13.529	0.907	105	821	N.D.	
62) 1,1,2,2-Tetrachloroethane	0.000	13.795	0.000		0	N.D.	
63) 1,2,3-Trichloropropane	13.660	13.879	0.914	110	316	N.D.	
64) Bromobenzene	0.000	13.918	0.000		0	N.D.	
65) n-Propylbenzene	13.713	13.957	0.918	91	995	N.D.	
66) 1,3,5-Trimethylbenzene	0.000	14.116	0.000		0	N.D.	
67) 2-Chlorotoluene	0.000	14.095	0.000		0	N.D.	
68) 4-Chlorotoluene	14.269	14.198	0.955	91	3202	N.D.	
69) tert-Butylbenzene	0.000	14.488	0.000		0	N.D.	
70) 1,2,4-Trimethylbenzene	14.580	14.527	0.976	105	879	N.D.	
71) sec-Butylbenzene	14.580	14.718	0.976	105	879	N.D.	
72) 4-Isopropyltoluene	0.000	14.841	0.000		0	N.D.	
73) 1,3-Dichlorobenzene	0.000	14.884	0.000		0	N.D.	
74) 1,4-Dichlorobenzene	0.000	14.969	0.000		0	N.D.	
75) n-Butylbenzene	0.000	15.276	0.000		0	N.D.	
76) 1,2-Dichlorobenzene	0.000	15.379	0.000		0	N.D.	
77) 1,2-Dibromo-3-chloropr...	0.000	16.192	0.000		0	N.D.	
78) 1,2,4-Trichlorobenzene	17.183	17.183	1.150	180	263	N.D.	
79) Hexachlorobutadiene	0.000	17.360	0.000		0	N.D.	
80) Naphthalene	17.522	17.529	1.173	128	1899	N.D.	
81) 1,2,3-Trichlorobenzene	17.847	17.847	1.194	180	113	N.D.	
83) Chlorotrifluoroethylene	0.000	3.661	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000	4.416	0.000		0	N.D.	
85) Acrolein	0.000	5.898	0.000		0	N.D.	
86) Trichlorotrifluoroethane	0.000	6.068	0.000		0	N.D.	
87) Isopropyl Alcohol	6.202	6.188	0.664	45	238	N.D.	
88) Allyl chloride	0.000	6.506	0.000		0	N.D.	
89) tert-Butyl Alcohol	0.000	6.687	0.000		0	N.D.	
90) Acrylonitrile	0.000	6.895	0.000		0	N.D.	
91) Isopropyl ether	0.000	7.489	0.000		0	N.D.	
92) 2-Chloro-1,3-butadiene	0.000	7.581	0.000		0	N.D.	
93) Ethyl tert-butyl ether	0.000	7.893	0.000		0	N.D.	
94) Ethyl acetate	8.073	8.094	0.864	43	369	N.D.	
95) Propionitrile	0.000	8.122	0.000		0	N.D.	
96) Methacrylonitrile	0.000	8.306	0.000		0	N.D.	
97) Tetrahydrofuran	0.000	8.430	0.000		0	N.D.	
98) Isobutyl alcohol	0.000	8.777	0.000		0	N.D.	

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\021810\  
Data File : AY438.D  
Acq On : 19 Feb 2010 10:03 am  
Operator : JEB  
InstName : VOAA  
Sample : |246866008|955077|1|VOA|1|VOA8260BS|  
Misc : LANL 5.2G N/A SOIL  
ALS Vial : 38 Sample Multiplier: 1

Quant Time: Feb 19 13:58:15 2010  
Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M  
Quant Title : Volatile Organics 8260B SubList :  
QLast Update : Wed Feb 03 22:34:28 2010  
Response via : Initial Calibration  
Integrator: RTE

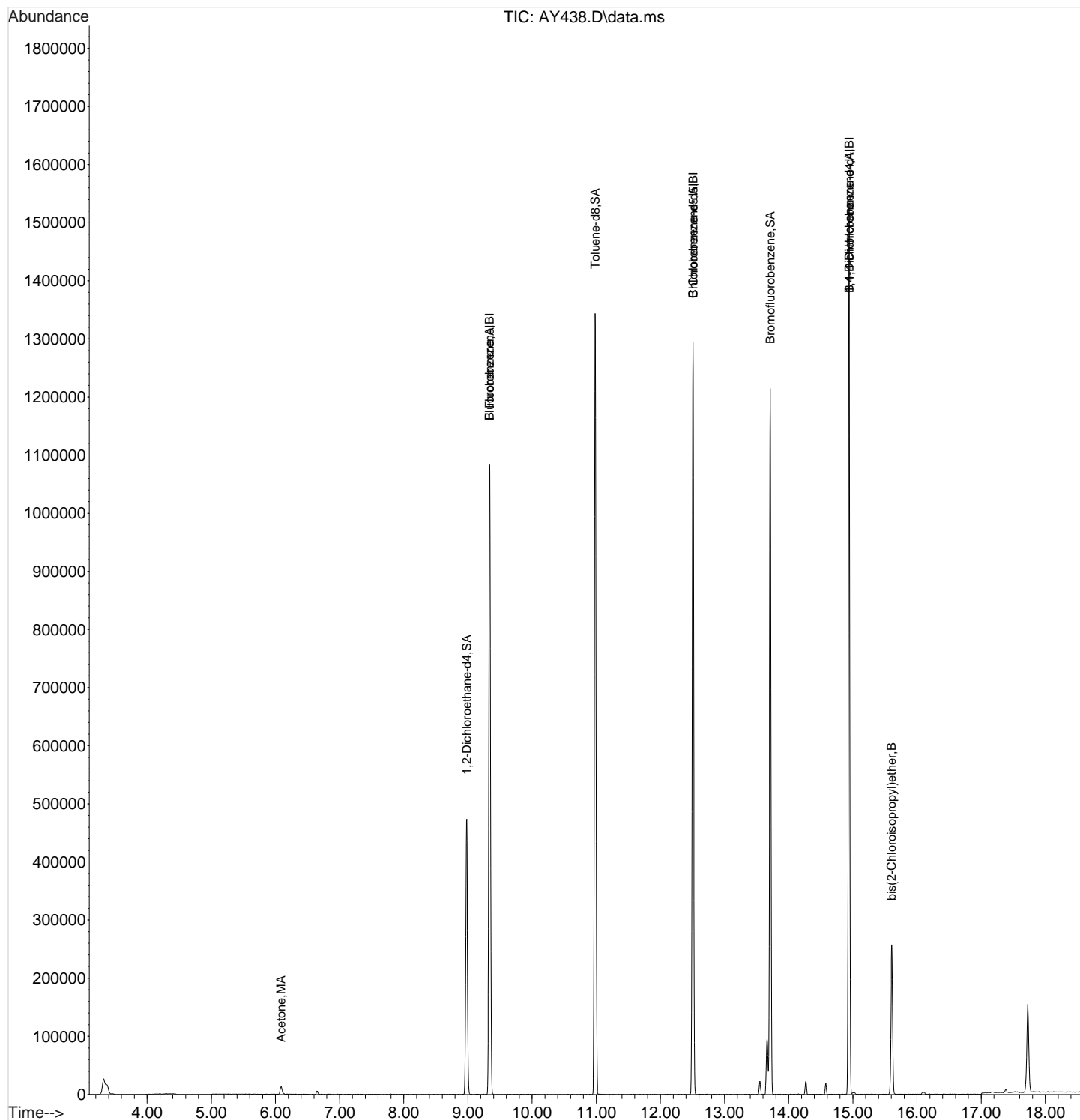
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
99) Methyl tert-amyl ether	0.000	9.127	0.000		0	N.D.	
100) Methyl methacrylate	0.000	9.968	0.000		0	N.D.	
101) 1,4-Dioxane	0.000	10.060	0.000		0	N.D.	
102) 2-Nitropropane	0.000	10.414	0.000		0	N.D.	
104) Ethyl methacrylate	10.990	11.238	0.879	69	3117	N.D.	
106) 1-Chlorohexane	0.000	12.426	0.000		0	N.D.	
107) cis-1,4-Dichloro-2-butene	13.551	13.554	0.907	53	644	N.D.	
108) Cyclohexanone	0.000	13.657	0.000		0	N.D.	
109) trans-1,4-Dichloro-2-b...	0.000	13.844	0.000		0	N.D.	
110) Pentachloroethane	0.000	14.541	0.000		0	N.D.	
111) Benzyl chloride	14.937	15.082	1.000	91	1064	N.D.	
112) bis(2-Chloroisopropyl)...	15.605	15.485	1.044	45	17141	5.37 ug/L	# 58

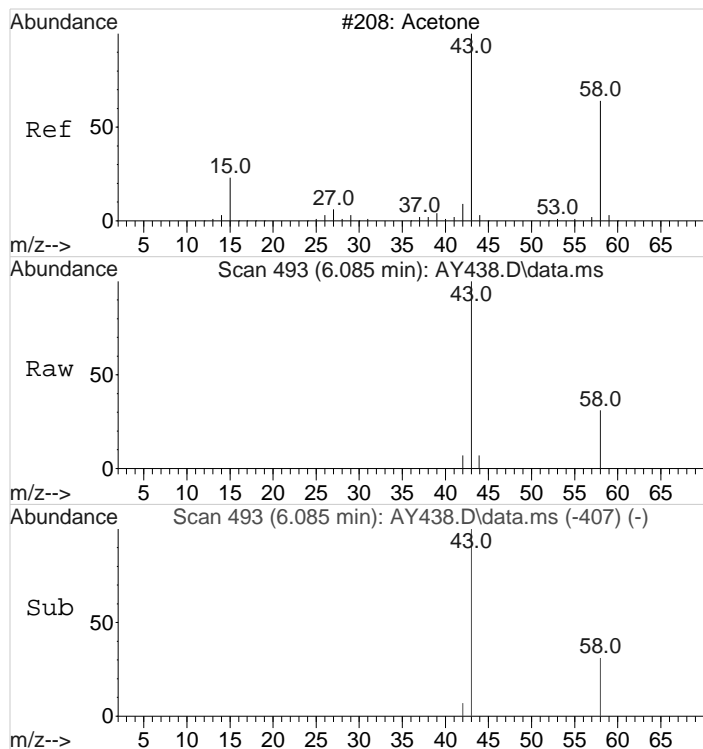
(#) = qualifier out of range (m) = manual integration (+) = signals summed  
(E) = Over the calibration range (d) = deleted

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\021810\  
Data File : AY438.D  
Acq On : 19 Feb 2010 10:03 am  
Operator : JEB  
InstName : VOAA  
Sample : |246866008|955077|1|VOA|1|VOA8260BS|  
Misc : LANL 5.2G N/A SOIL  
ALS Vial : 38 Sample Multiplier: 1

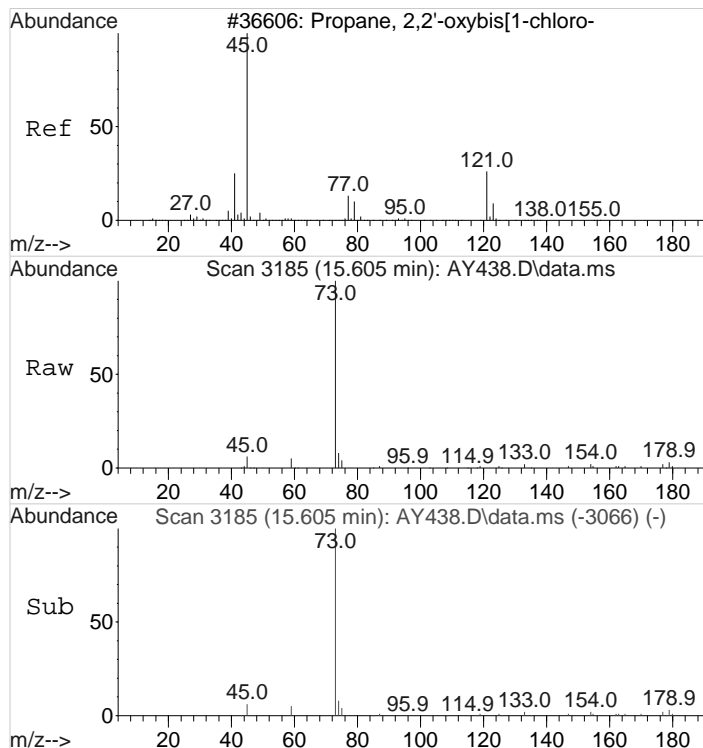
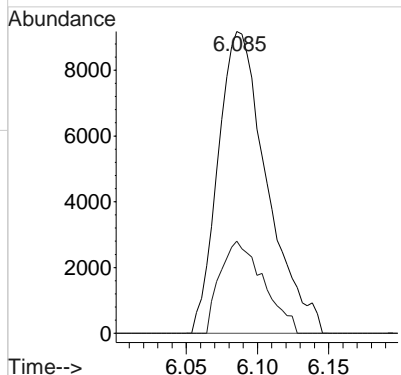
Quant Time: Feb 19 13:58:15 2010  
Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M  
Quant Title : Volatile Organics 8260B SubList :  
QLast Update : Wed Feb 03 22:34:28 2010  
Response via : Initial Calibration  
Integrator: RTE





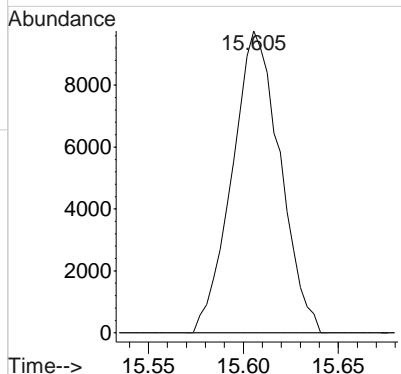
#9  
Acetone  
Concen: 5.52 ug/L  
RT: 6.085 min Scan# 493  
Delta R.T. 0.003 min  
Lab File: AY438.D  
Acq: 19 Feb 2010 10:03 am

Tgt Ion: 43 Resp: 21890  
Ion Ratio Lower Upper  
43 100  
58 27.2 0.0 56.6



#112  
bis(2-Chloroisopropyl)ether  
Concen: 5.37 ug/L  
RT: 15.605 min Scan# 3185  
Delta R.T. 0.120 min  
Lab File: AY438.D  
Acq: 19 Feb 2010 10:03 am

Tgt Ion: 45 Resp: 17141  
Ion Ratio Lower Upper  
45 100  
121 0.0 0.0 49.0





Library Search Compound Report  
GEL Laboratories, LLC

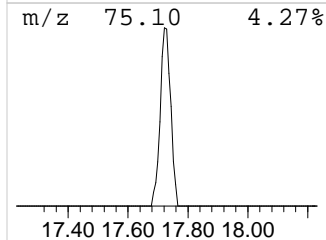
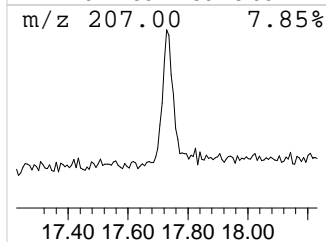
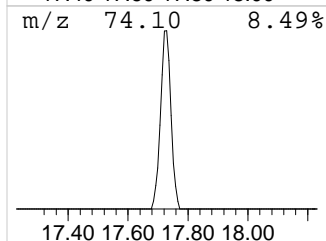
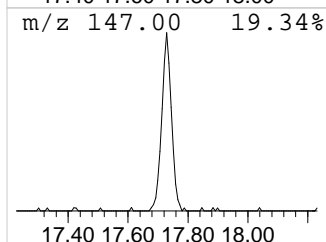
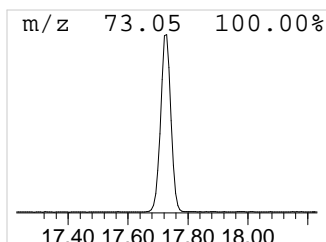
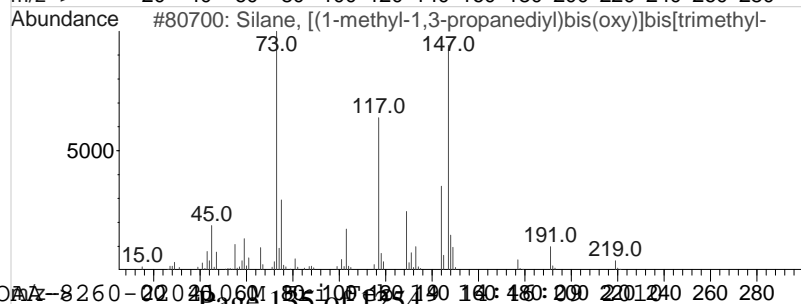
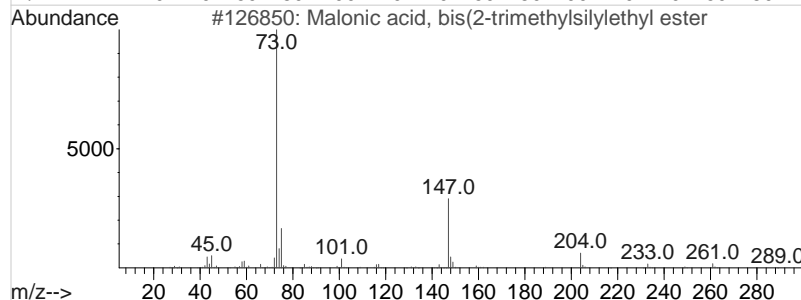
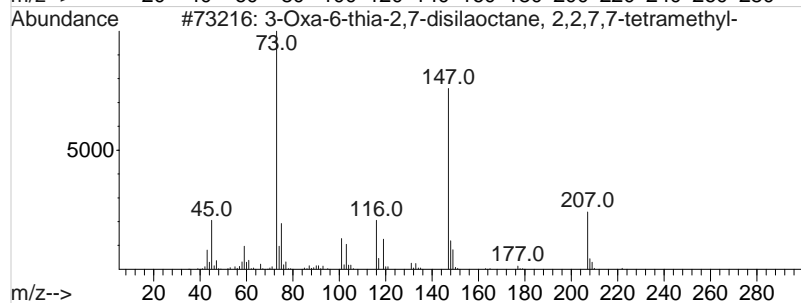
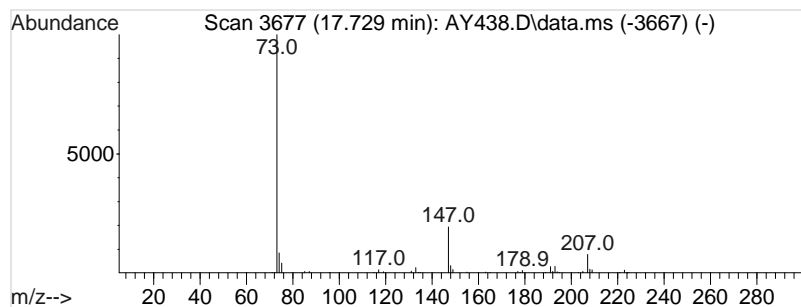
Data Path : C:\msdchem\1\DATA\021810\  
Data File : AY438.D  
Acq On : 19 Feb 2010 10:03 am  
Operator : JEB  
Sample : |246866008|955077|1|VOA|1|VOA8260BS|  
Misc : LANL 5.2G N/A SOIL  
ALS Vial : 38 Sample Multiplier: 1

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

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

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

R.T.	EstConc	Area	Relative to ISTD			R.T.
17.729	7.67 ug/L	354607	B 1,4-Dichlorobenzene-d4			14.944
Hit# of 5	Tentative ID		MW	MolForm	CAS#	Qual
1	3-Oxa-6-thia-2,7-disilaoctane, 2...		222	C8H22OSSi2	078921-31-0	28
2	Malonic acid, bis(2-trimethylsil...		304	C13H28O4Si2	090744-45-9	28
3	Silane, [(1-methyl-1,3-propanedi...		234	C10H26O2Si2	056771-47-2	17
4	Silanamine, N-ethyl-1,1,1-trimet...		207	C12H21NSi	014629-66-4	12
5	Ethanol, 1-(methylenecyclopropyl...		222	C13H22OSi	1000158-10-0	9



Tentatively Identified Compound (LSC) summary  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\021810\  
Data File : AY438.D  
Acq On : 19 Feb 2010 10:03 am  
Operator : JEB  
Sample : |246866008|955077|1|VOA|1|VOA8260BS|  
Misc : LANL 5.2G N/A SOIL  
ALS Vial : 38 Sample Multiplier: 1

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

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

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard--			
					#	RT	Resp	Conc
unknown siloxane	17.729	7.7	ug/L	354607	6	14.944	2313050	50.0

**Volatile**  
**Certificate of Analysis**  
**Sample Summary**

**SDG Number:** 10-1758  
**Lab Sample ID:** 246866009

**Date Collected:** 02/09/2010 12:00  
**Date Received:** 02/11/2010 09:20  
**Client:** LANL010  
**Method:** SW846 8260B  
**Inst:** VOAA.I  
**Analyst:** JEB  
**Aliquot:** 5.5 g  
**Column:** DB-624

**Matrix:** R  
**%Moisture:** 24.2  
**Project:** LANL01004  
**SOP Ref:** GL-OA-E-038  
**Dilution:** 1  
**Purge Vol:** 5 mL  
**Final Volume:** 5 mL

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.20	ug/kg	0.408	1.20
74-87-3	Chloromethane	U	1.20	ug/kg	0.360	1.20
75-01-4	Vinyl chloride	U	1.20	ug/kg	0.360	1.20
74-83-9	Bromomethane	U	1.20	ug/kg	0.360	1.20
75-00-3	Chloroethane	U	1.20	ug/kg	0.360	1.20
75-69-4	Trichlorofluoromethane	U	1.20	ug/kg	0.360	1.20
67-64-1	Acetone	U	5.99	ug/kg	1.99	5.99
75-35-4	1,1-Dichloroethylene	U	1.20	ug/kg	0.360	1.20
74-88-4	Iodomethane	U	5.99	ug/kg	1.92	5.99
75-09-2	Methylene chloride	U	5.99	ug/kg	2.40	5.99
75-15-0	Carbon disulfide	U	5.99	ug/kg	1.50	5.99
156-60-5	trans-1,2-Dichloroethylene	U	1.20	ug/kg	0.360	1.20
75-34-3	1,1-Dichloroethane	U	1.20	ug/kg	0.360	1.20
78-93-3	2-Butanone	U	5.99	ug/kg	1.80	5.99
156-59-2	cis-1,2-Dichloroethylene	U	1.20	ug/kg	0.360	1.20
594-20-7	2,2-Dichloropropane	U	1.20	ug/kg	0.360	1.20
67-66-3	Chloroform	U	1.20	ug/kg	0.360	1.20
74-97-5	Bromochloromethane	U	1.20	ug/kg	0.396	1.20
71-55-6	1,1,1-Trichloroethane	U	1.20	ug/kg	0.360	1.20
563-58-6	1,1-Dichloropropene	U	1.20	ug/kg	0.360	1.20
56-23-5	Carbon tetrachloride	U	1.20	ug/kg	0.360	1.20
107-06-2	1,2-Dichloroethane	U	1.20	ug/kg	0.360	1.20
71-43-2	Benzene	U	1.20	ug/kg	0.360	1.20
79-01-6	Trichloroethylene	U	1.20	ug/kg	0.396	1.20
78-87-5	1,2-Dichloropropane	U	1.20	ug/kg	0.360	1.20
75-27-4	Bromodichloromethane	U	1.20	ug/kg	0.360	1.20
74-95-3	Dibromomethane	U	1.20	ug/kg	0.360	1.20
108-10-1	4-Methyl-2-pentanone	U	5.99	ug/kg	1.50	5.99
10061-01-5	cis-1,3-Dichloropropylene	U	1.20	ug/kg	0.360	1.20
108-88-3	Toluene	J	0.372	ug/kg	0.360	1.20
10061-02-6	trans-1,3-Dichloropropylene	U	1.20	ug/kg	0.360	1.20
79-00-5	1,1,2-Trichloroethane	U	1.20	ug/kg	0.360	1.20
591-78-6	2-Hexanone	U	5.99	ug/kg	1.80	5.99
142-28-9	1,3-Dichloropropane	U	1.20	ug/kg	0.360	1.20
127-18-4	Tetrachloroethylene	U	1.20	ug/kg	0.360	1.20
124-48-1	Dibromochloromethane	U	1.20	ug/kg	0.360	1.20
106-93-4	1,2-Dibromoethane	U	1.20	ug/kg	0.360	1.20
108-90-7	Chlorobenzene	U	1.20	ug/kg	0.360	1.20

**Volatile**  
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**Sample Summary**

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

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.20	ug/kg	0.360	1.20
179601-23-1	m,p-Xylenes	U	2.40	ug/kg	0.360	2.40
95-47-6	o-Xylene	U	1.20	ug/kg	0.360	1.20
100-42-5	Styrene	U	1.20	ug/kg	0.360	1.20
75-25-2	Bromoform	U	1.20	ug/kg	0.360	1.20
79-34-5	1,1,2,2-Tetrachloroethane	U	1.20	ug/kg	0.360	1.20
96-18-4	1,2,3-Trichloropropane	U	1.20	ug/kg	0.360	1.20
108-86-1	Bromobenzene	U	1.20	ug/kg	0.360	1.20
103-65-1	n-Propylbenzene	U	1.20	ug/kg	0.360	1.20
95-49-8	2-Chlorotoluene	U	1.20	ug/kg	0.360	1.20
98-82-8	Isopropylbenzene	U	1.20	ug/kg	0.360	1.20
108-67-8	1,3,5-Trimethylbenzene	U	1.20	ug/kg	0.360	1.20
106-43-4	4-Chlorotoluene	U	1.20	ug/kg	0.360	1.20
98-06-6	tert-Butylbenzene	U	1.20	ug/kg	0.360	1.20
95-63-6	1,2,4-Trimethylbenzene	U	1.20	ug/kg	0.360	1.20
135-98-8	sec-Butylbenzene	U	1.20	ug/kg	0.360	1.20
99-87-6	4-Isopropyltoluene	U	1.20	ug/kg	0.360	1.20
541-73-1	1,3-Dichlorobenzene	U	1.20	ug/kg	0.360	1.20
106-46-7	1,4-Dichlorobenzene	U	1.20	ug/kg	0.360	1.20
104-51-8	n-Butylbenzene	U	1.20	ug/kg	0.360	1.20
96-12-8	1,2-Dibromo-3-chloropropane	U	1.20	ug/kg	0.360	1.20
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.99	ug/kg	1.92	5.99
	<i>Trichlorotrifluoroethane</i>					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.20	ug/kg	0.360	1.20
95-50-1	1,2-Dichlorobenzene	U	1.20	ug/kg	0.360	1.20

**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
007785-70-8	1R-.alpha.-Pinene	13.55	22.3	ug/kg	97	NJ
000127-91-3	.beta.-Pinene	14.27	6.2	ug/kg	96	NJ
013466-78-9	3-Carene	14.58	13.8	ug/kg	95	NJ
	unknown siloxane	17.73	13.1	ug/kg	0	J

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\021810\  
Data File : AY439.D  
Acq On : 19 Feb 2010 10:30 am  
Operator : JEB  
InstName : VOAA  
Sample : |246866009|955077|1|VOA|1|VOA8260BS|  
Misc : LANL 5.5G N/A SOIL  
ALS Vial : 39 Sample Multiplier: 1

Quant Time: Feb 19 14:15:33 2010  
Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M  
Quant Title : Volatile Organics 8260B SubList :  
QLast Update : Wed Feb 03 22:34:28 2010  
Response via : Initial Calibration  
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
-----								
Internal Standards								Dev(Min)
1) Fluorobenzene	9.339	9.342	1.000	96	799861	50.00	ug/L	0.00
41) Chlorobenzene-d5	12.507	12.507	1.000	117	579735	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	14.940	14.944	1.000	152	363437	50.00	ug/L	0.00
82) B Fluorobenzene	9.339	9.339	1.000	96	799861	50.00	ug/L	0.00
103) B Chlorobenzene-d5	12.507	12.508	1.000	117	579735	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	14.940	14.944	1.000	152	363437	50.00	ug/L	0.00
System Monitoring Compounds								Dev(Min)
29) 1,2-Dichloroethane-d4	8.982	8.982	0.962	65	351693	52.87	ug/L	0.00
Spiked Amount	50.000	Range	66 - 134	Recovery	=	105.74%		
43) Toluene-d8	10.983	10.987	0.878	98	763465	48.94	ug/L	0.00
Spiked Amount	50.000	Range	71 - 128	Recovery	=	97.88%		
61) Bromofluorobenzene	13.713	13.713	0.918	95	342802	46.35	ug/L	0.00
Spiked Amount	50.000	Range	65 - 130	Recovery	=	92.70%		
Target Compounds								QValue
2) Dichlorodifluoromethane	0.000	3.731	0.000		0	N.D.		
3) Chloromethane	0.000	4.043	0.000		0	N.D.		
4) Vinyl chloride	0.000	4.265	0.000		0	N.D.		
5) Bromomethane	0.000	4.839	0.000		0	N.D.		
6) Chloroethane	0.000	4.990	0.000		0	N.D.		
7) Trichlorofluoromethane	0.000	5.382	0.000		0	N.D.		
8) Ethyl ether	0.000	5.732	0.000		0	N.D.		
9) Acetone	6.096	6.082	0.653	43	1161	N.D.		
10) 1,1-Dichloroethylene	0.000	6.082	0.000		0	N.D.		
11) Iodomethane	0.000	6.305	0.000		0	N.D.		
12) Acetonitrile	0.000	6.421	0.000		0	N.D.		
13) Methyl acetate	0.000	6.481	0.000		0	N.D.		
14) Carbon disulfide	0.000	6.428	0.000		0	N.D.		
15) Methylene chloride	6.648	6.651	0.712	84	3341	N.D.		
16) tert-Butyl methyl ether	0.000	6.973	0.000		0	N.D.		
17) trans-1,2-Dichloroethy...	0.000	6.994	0.000		0	N.D.		
18) Vinyl acetate	0.000	7.454	0.000		0	N.D.		
19) 1,1-Dichloroethane	0.000	7.471	0.000		0	N.D.		
20) 2-Butanone	0.000	8.062	0.000		0	N.D.		
21) cis-1,2-Dichloroethylene	0.000	8.108	0.000		0	N.D.		
22) 2,2-Dichloropropane	0.000	8.140	0.000		0	N.D.		
23) Bromochloromethane	0.000	8.373	0.000		0	N.D.		
24) Chloroform	0.000	8.423	0.000		0	N.D.		
25) 1,1,1-Trichloroethane	0.000	8.692	0.000		0	N.D.		
26) Cyclohexane	0.000	8.791	0.000		0	N.D.		
27) 1,1-Dichloropropene	0.000	8.851	0.000		0	N.D.		
28) Carbon tetrachloride	0.000	8.886	0.000		0	N.D.		
30) 1,2-Dichloroethane	0.000	9.063	0.000		0	N.D.		
31) Benzene	0.000	9.084	0.000		0	N.D.		
32) Cyclohexene	0.000	9.208	0.000		0	N.D.		
33) n-Butyl alcohol	0.000	9.462	0.000		0	N.D.		
34) Trichloroethylene	0.000	9.731	0.000		0	N.D.		
35) 1,2-Dichloropropane	0.000	9.965	0.000		0	N.D.		
36) Methylcyclohexane	0.000	9.982	0.000		0	N.D.		
37) Dibromomethane	0.000	10.095	0.000		0	N.D.		
38) Bromodichloromethane	0.000	10.216	0.000		0	N.D.		
39) 2-Chloroethylvinyl ether	0.000	10.453	0.000		0	N.D.		

Quantitation Report  
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Acq On : 19 Feb 2010 10:30 am  
Operator : JEB  
InstName : VOAA  
Sample : |246866009|955077|1|VOA|1|VOA8260BS|  
Misc : LANL 5.5G N/A SOIL  
ALS Vial : 39 Sample Multiplier: 1

Quant Time: Feb 19 14:15:33 2010  
Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M  
Quant Title : Volatile Organics 8260B SubList :  
QLast Update : Wed Feb 03 22:34:28 2010  
Response via : Initial Calibration  
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
40) cis-1,3-Dichloropropylene	0.000	10.668	0.000		0	N.D.	
42) 4-Methyl-2-pentanone	0.000	10.774	0.000		0	N.D.	
44) Toluene	11.057	11.057	0.884	91	4961	0.31 ug/L	96
45) trans-1,3-Dichloroprop...	0.000	11.213	0.000		0	N.D.	
46) 1,1,2-Trichloroethane	0.000	11.429	0.000		0	N.D.	
47) 2-Hexanone	0.000	11.627	0.000		0	N.D.	
48) 1,3-Dichloropropane	0.000	11.620	0.000		0	N.D.	
49) Tetrachloroethylene	0.000	11.655	0.000		0	N.D.	
50) Dibromochloromethane	0.000	11.881	0.000		0	N.D.	
51) 1,2-Dibromoethane	0.000	12.044	0.000		0	N.D.	
52) Chlorobenzene	0.000	12.543	0.000		0	N.D.	
53) 1,1,1,2-Tetrachloroethane	0.000	12.599	0.000		0	N.D.	
54) Ethylbenzene	12.511	12.617	1.000	91	891	N.D.	
55) m,p-Xylenes	0.000	12.730	0.000		0	N.D.	
56) o-Xylene	0.000	13.162	0.000		0	N.D.	
57) Styrene	0.000	13.162	0.000		0	N.D.	
59) Bromoform	0.000	13.402	0.000		0	N.D.	
60) Isopropylbenzene	0.000	13.529	0.000		0m	N.D.	d
62) 1,1,2,2-Tetrachloroethane	0.000	13.795	0.000		0	N.D.	
63) 1,2,3-Trichloropropane	0.000	13.879	0.000		0	N.D.	
64) Bromobenzene	0.000	13.918	0.000		0	N.D.	
65) n-Propylbenzene	13.879	13.957	0.929	91	1719	N.D.	
66) 1,3,5-Trimethylbenzene	14.268	14.116	0.955	105	3022	N.D.	
67) 2-Chlorotoluene	0.000	14.095	0.000		0	N.D.	
68) 4-Chlorotoluene	14.184	14.198	0.949	91	1214	N.D.	
69) tert-Butylbenzene	14.491	14.488	0.970	134	335	N.D.	
70) 1,2,4-Trimethylbenzene	0.000	14.527	0.000		0m	N.D.	d
71) sec-Butylbenzene	0.000	14.718	0.000		0m	N.D.	d
72) 4-Isopropyltoluene	14.841	14.841	0.993	119	1832	N.D.	
73) 1,3-Dichlorobenzene	0.000	14.884	0.000		0	N.D.	
74) 1,4-Dichlorobenzene	0.000	14.969	0.000		0	N.D.	
75) n-Butylbenzene	0.000	15.276	0.000		0	N.D.	
76) 1,2-Dichlorobenzene	0.000	15.379	0.000		0	N.D.	
77) 1,2-Dibromo-3-chloropr...	0.000	16.192	0.000		0	N.D.	
78) 1,2,4-Trichlorobenzene	17.183	17.183	1.150	180	264	N.D.	
79) Hexachlorobutadiene	0.000	17.360	0.000		0	N.D.	
80) Naphthalene	17.529	17.529	1.173	128	1919	N.D.	
81) 1,2,3-Trichlorobenzene	17.721	17.847	1.186	180	111	N.D.	
83) Chlorotrifluoroethylene	0.000	3.661	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000	4.416	0.000		0	N.D.	
85) Acrolein	0.000	5.898	0.000		0	N.D.	
86) Trichlorotrifluoroethane	0.000	6.068	0.000		0	N.D.	
87) Isopropyl Alcohol	0.000	6.188	0.000		0	N.D.	
88) Allyl chloride	0.000	6.506	0.000		0	N.D.	
89) tert-Butyl Alcohol	0.000	6.687	0.000		0	N.D.	
90) Acrylonitrile	0.000	6.895	0.000		0	N.D.	
91) Isopropyl ether	0.000	7.489	0.000		0	N.D.	
92) 2-Chloro-1,3-butadiene	0.000	7.581	0.000		0	N.D.	
93) Ethyl tert-butyl ether	0.000	7.893	0.000		0	N.D.	
94) Ethyl acetate	0.000	8.094	0.000		0	N.D.	
95) Propionitrile	0.000	8.122	0.000		0	N.D.	
96) Methacrylonitrile	0.000	8.306	0.000		0	N.D.	
97) Tetrahydrofuran	0.000	8.430	0.000		0	N.D.	
98) Isobutyl alcohol	0.000	8.777	0.000		0	N.D.	

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QLast Update : Wed Feb 03 22:34:28 2010  
Response via : Initial Calibration  
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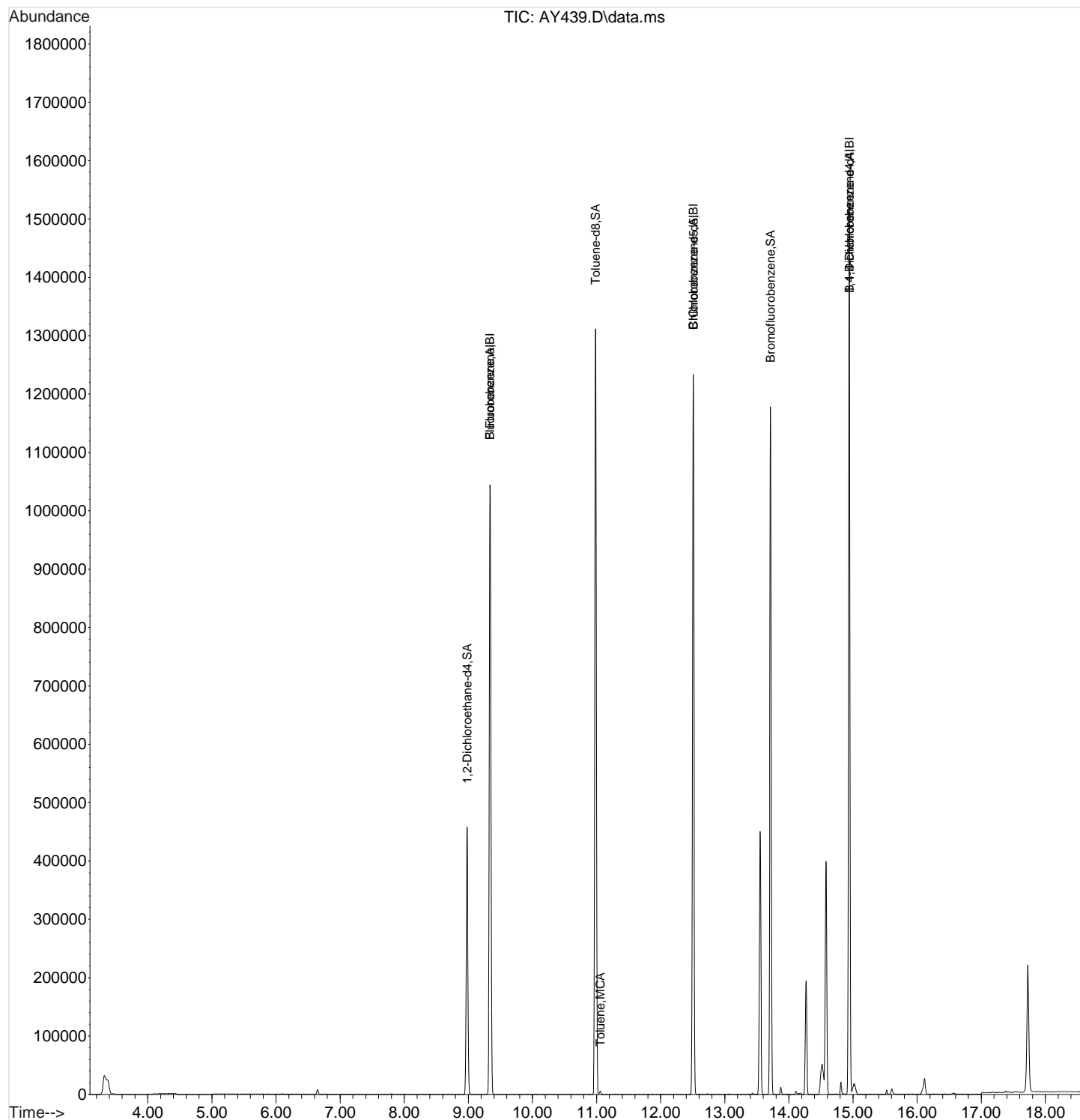
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
99) Methyl tert-amyl ether	0.000	9.127	0.000		0	N.D.	
100) Methyl methacrylate	0.000	9.968	0.000		0	N.D.	
101) 1,4-Dioxane	0.000	10.060	0.000		0	N.D.	
102) 2-Nitropropane	0.000	10.414	0.000		0	N.D.	
104) Ethyl methacrylate	10.990	11.238	0.879	69	2946	N.D.	
106) 1-Chlorohexane	0.000	12.426	0.000		0	N.D.	
107) cis-1,4-Dichloro-2-butene	0.000	13.554	0.000		0m	N.D.	d
108) Cyclohexanone	13.551	13.657	0.907	42	1708	N.D.	
109) trans-1,4-Dichloro-2-b...	13.872	13.844	0.929	53	120	N.D.	
110) Pentachloroethane	0.000	14.541	0.000		0	N.D.	
111) Benzyl chloride	14.940	15.082	1.000	91	2796	N.D.	
112) bis(2-Chloroisopropyl)...	15.612	15.485	1.045	45	117	N.D.	

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

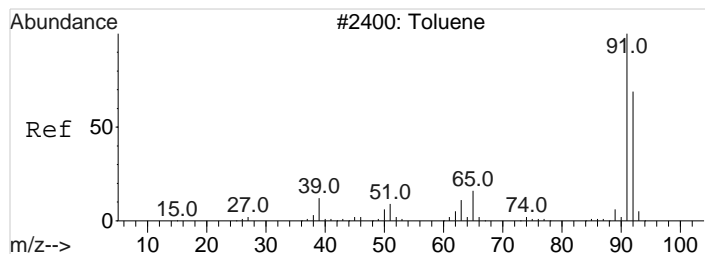
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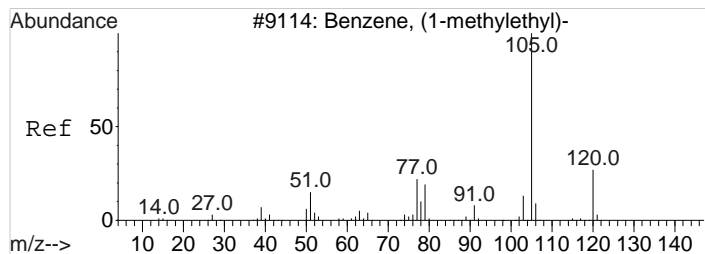
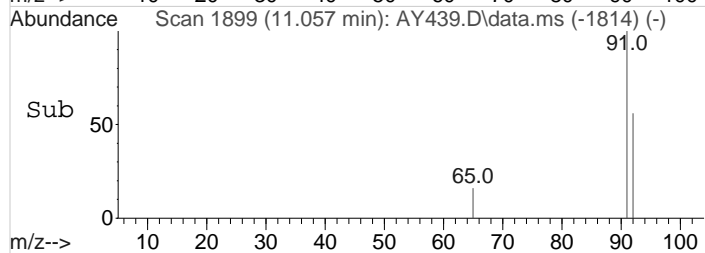
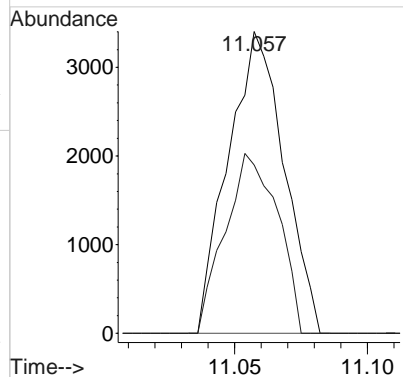
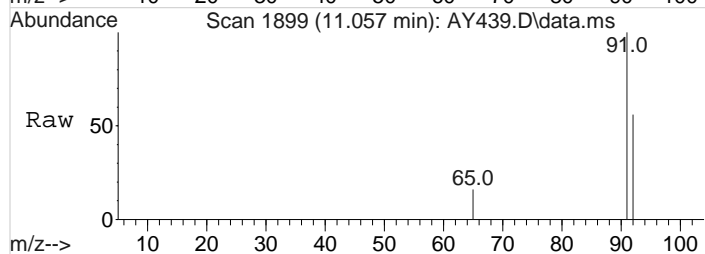






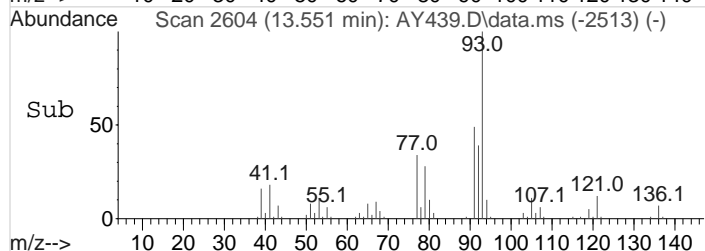
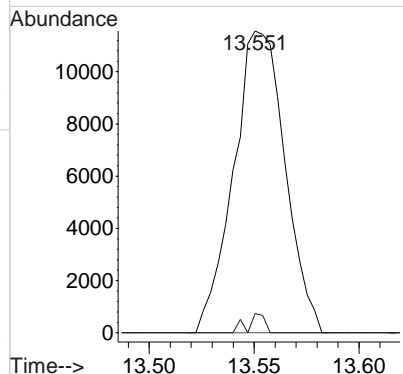
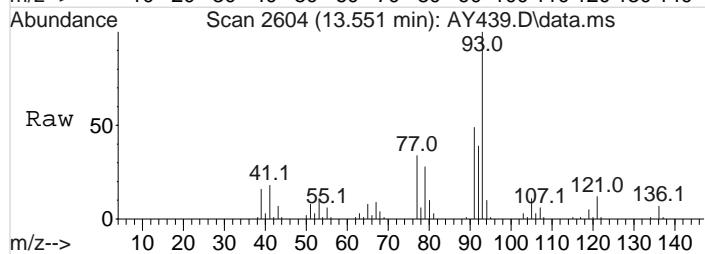
#44  
Toluene  
Concen: 0.31 ug/L  
RT: 11.057 min Scan# 1899  
Delta R.T. -0.000 min  
Lab File: AY439.D  
Acq: 19 Feb 2010 10:30 am

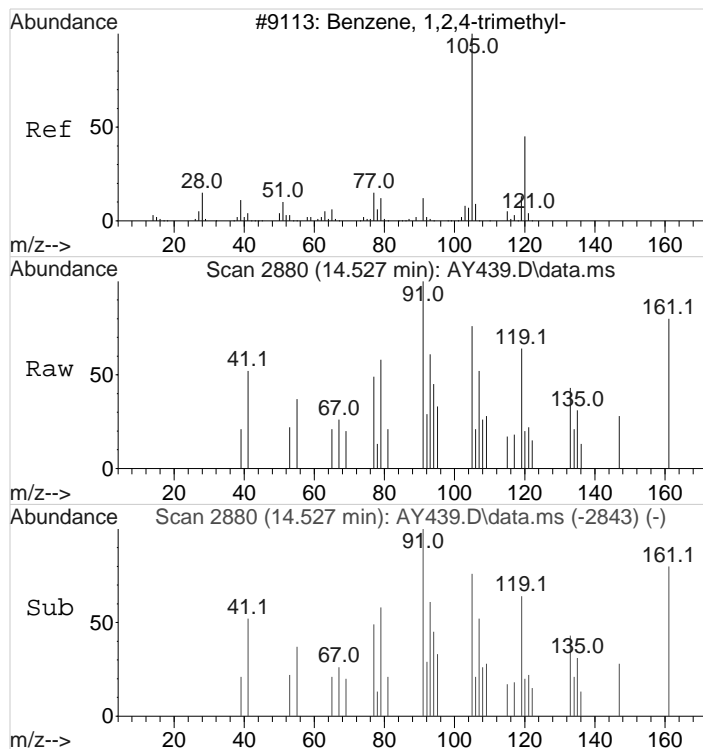
Tgt Ion: 91 Resp: 4961  
Ion Ratio Lower Upper  
91 100  
92 56.3 29.5 89.5



#60 BEFORE analyst DELETION  
Isopropylbenzene  
Concen: 0.95 ug/L  
RT: 13.551 min Scan# 2604  
Delta R.T. 0.021 min  
Lab File: AY439.D  
Acq: 19 Feb 2010 10:30 am

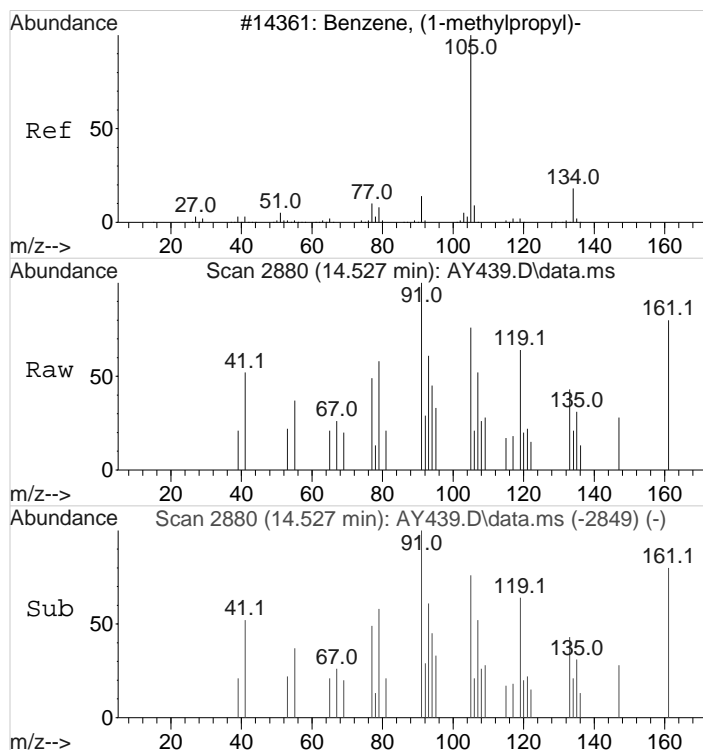
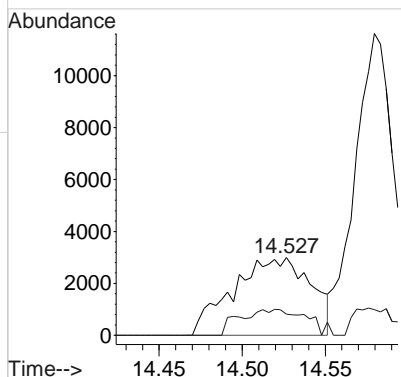
Tgt Ion: 105 Resp: 19756  
Ion Ratio Lower Upper  
105 100  
120 2.1 0.0 54.9





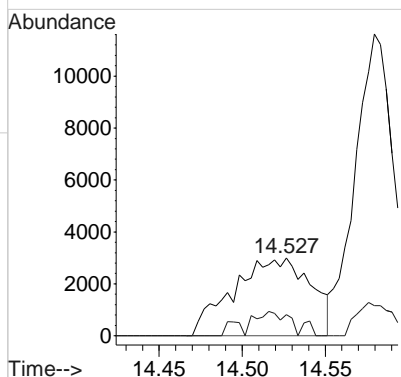
#70 BEFORE analyst DELETION  
1,2,4-Trimethylbenzene  
Concen: 0.54 ug/L  
RT: 14.527 min Scan# 2880  
Delta R.T. -0.000 min  
Lab File: AY439.D  
Acq: 19 Feb 2010 10:30 am

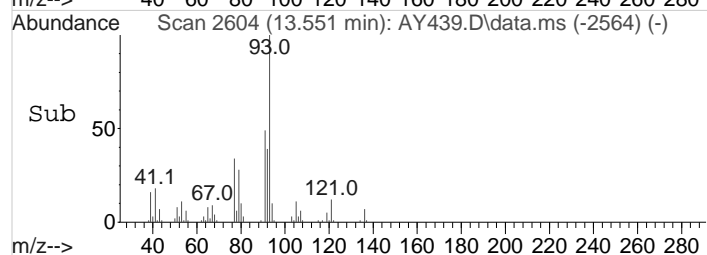
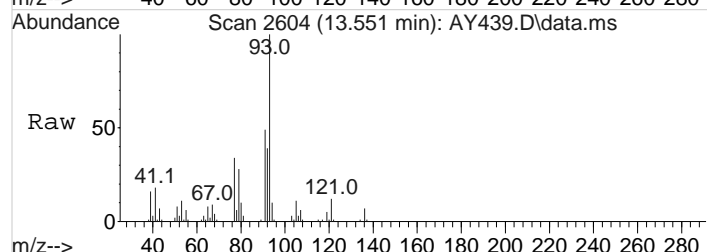
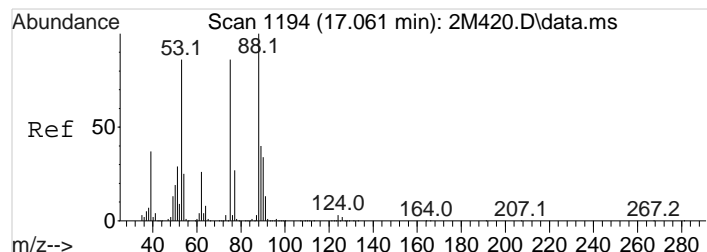
Tgt Ion:105 Resp: 9790  
Ion Ratio Lower Upper  
105 100  
120 7.5 10.6 70.6#



#71 BEFORE analyst DELETION  
sec-Butylbenzene  
Concen: 0.44 ug/L  
RT: 14.527 min Scan# 2880  
Delta R.T. -0.191 min  
Lab File: AY439.D  
Acq: 19 Feb 2010 10:30 am

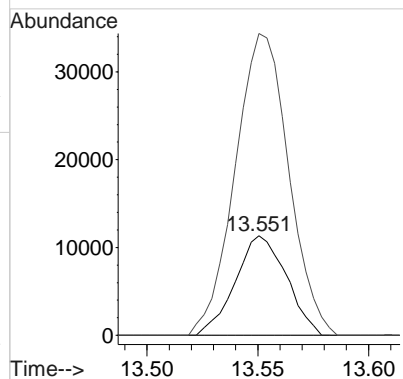
Tgt Ion:105 Resp: 9790  
Ion Ratio Lower Upper  
105 100  
134 3.4 0.0 48.7





#107 BEFORE analyst DELETION  
 cis-1,4-Dichloro-2-butene  
 Concen: 9.35 ug/L  
 RT: 13.551 min Scan# 2604  
 Delta R.T. -0.004 min  
 Lab File: AY439.D  
 Acq: 19 Feb 2010 10:30 am

Tgt Ion	Resp	Lower	Upper
53	18173		
53	100		
88	0.0	80.3	140.3#
77	318.3	0.0	53.7#



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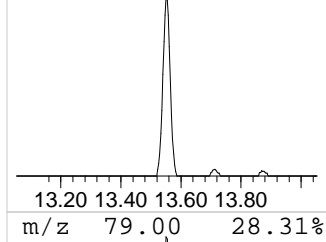
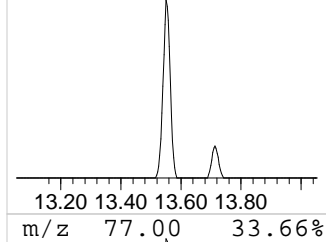
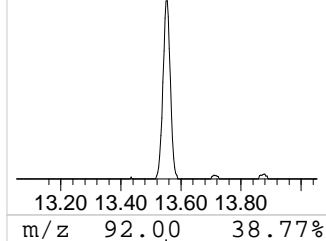
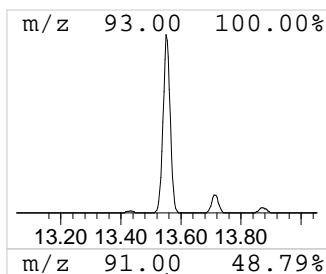
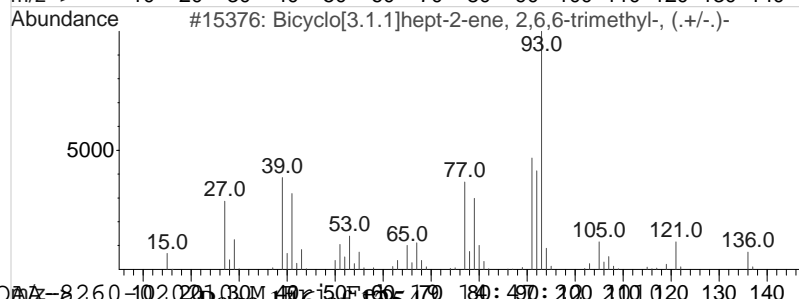
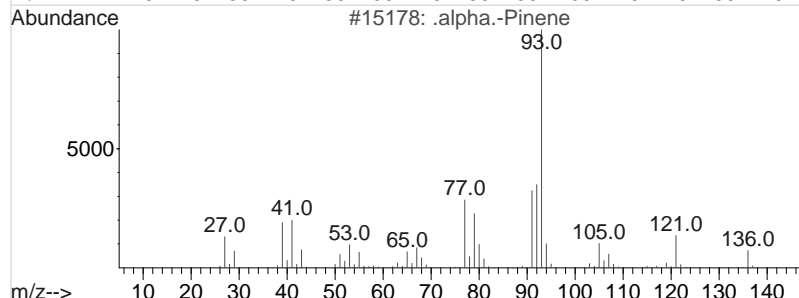
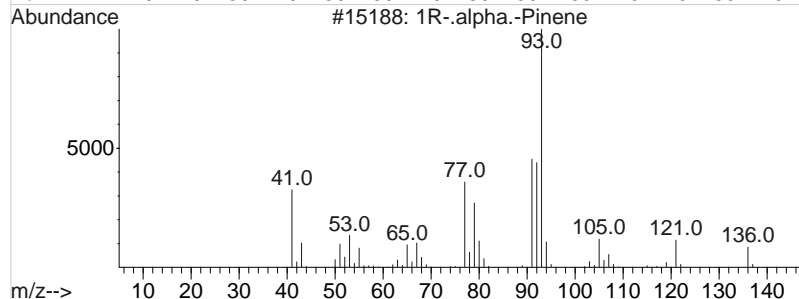
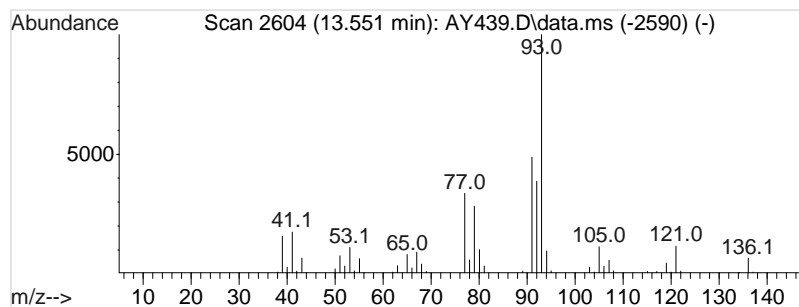
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Data File : AY439.D  
Acq On : 19 Feb 2010 10:30 am  
Operator : JEB  
Sample : |246866009|955077|1|VOA|1|VOA8260BS|  
Misc : LANL 5.5G N/A SOIL  
ALS Vial : 39 Sample Multiplier: 1

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

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

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

R.T.	EstConc	Area	Relative to ISTD			R.T.
13.551	18.61 ug/L	732898	B Chlorobenzene-d5			12.507
Hit#	of 5	Tentative ID	MW	MolForm	CAS#	Qual
1		1R-.alpha.-Pinene	136	C10H16	007785-70-8	97
2		.alpha.-Pinene	136	C10H16	000080-56-8	97
3		Bicyclo[3.1.1]hept-2-ene, 2,6,6-...	136	C10H16	002437-95-8	95
4		1R-.alpha.-Pinene	136	C10H16	007785-70-8	94
5		1,4-Cyclohexadiene, 1-methyl-4-(...	136	C10H16	000099-85-4	93



Library Search Compound Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\021810\  
Data File : AY439.D  
Acq On : 19 Feb 2010 10:30 am  
Operator : JEB  
Sample : |246866009|955077|1|VOA|1|VOA8260BS|  
Misc : LANL 5.5G N/A SOIL  
ALS Vial : 39 Sample Multiplier: 1

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

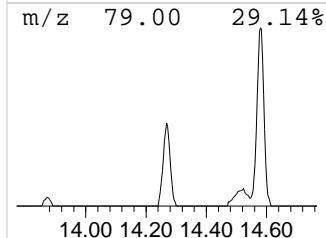
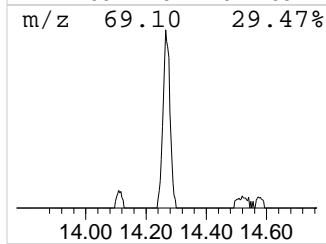
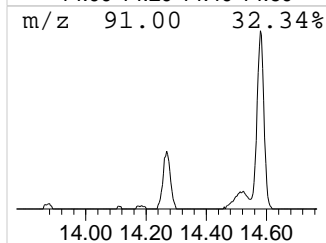
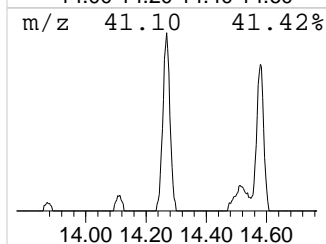
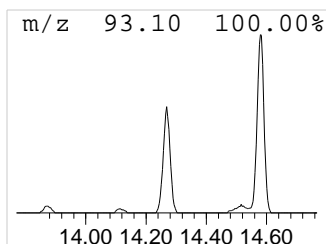
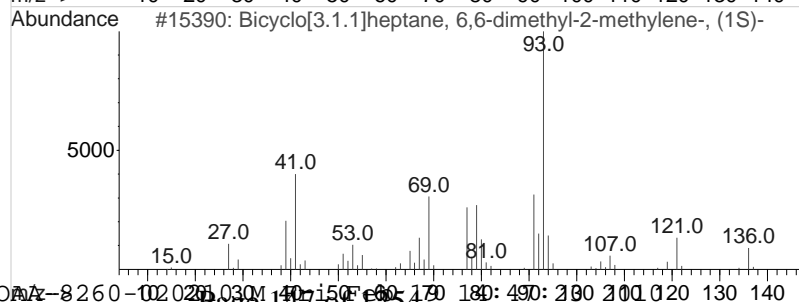
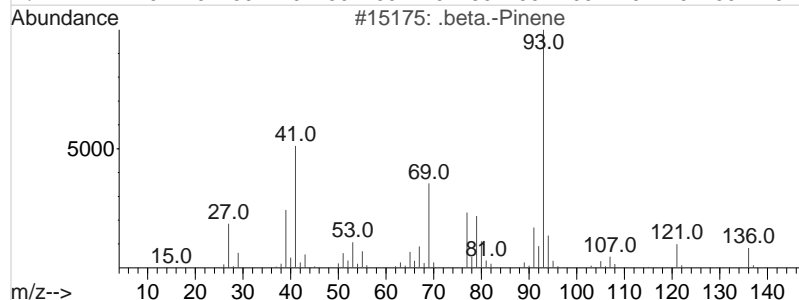
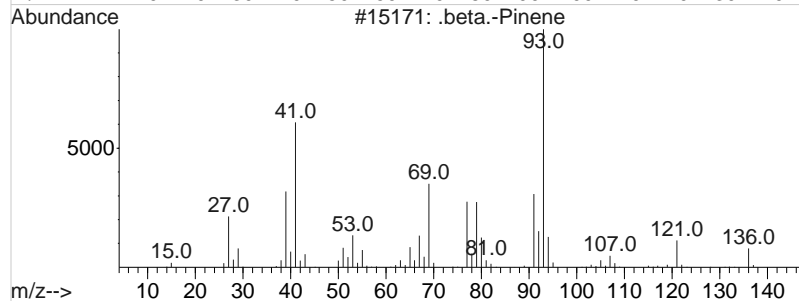
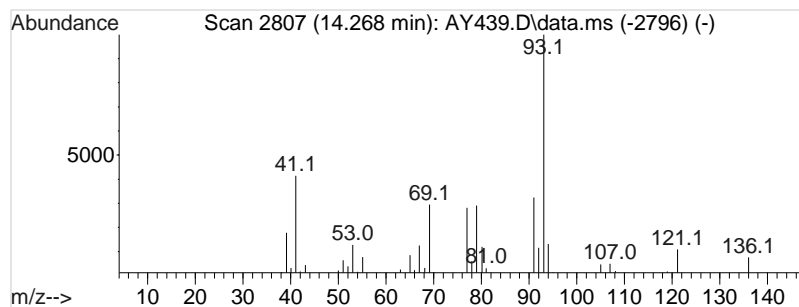
TIC Library : C:\Database\NIST05.L  
TIC Integration Parameters: ron.P

\*\*\*\*\*  
Peak Number 2 .beta.-Pinene Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
14.268	5.17 ug/L	237916	1,4-Dichlorobenzene-d4	14.940

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	.beta.-Pinene	136	C10H16	000127-91-3	96
2	.beta.-Pinene	136	C10H16	000127-91-3	94
3	Bicyclo[3.1.1]heptane, 6,6-dimet...	136	C10H16	018172-67-3	91
4	.beta.-Pinene	136	C10H16	000127-91-3	91
5	Bicyclo[3.1.1]hept-2-ene, 2,6,6-...	136	C10H16	002437-95-8	91



Library Search Compound Report  
GEL Laboratories, LLC

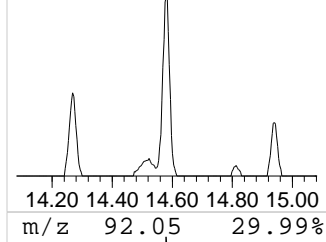
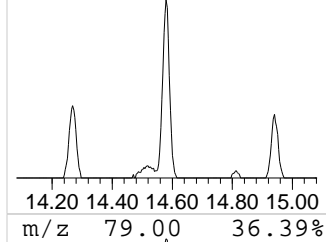
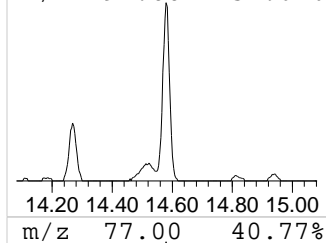
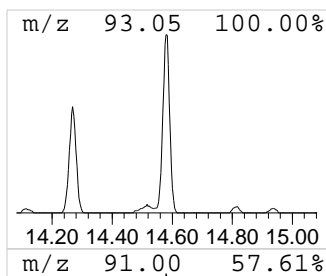
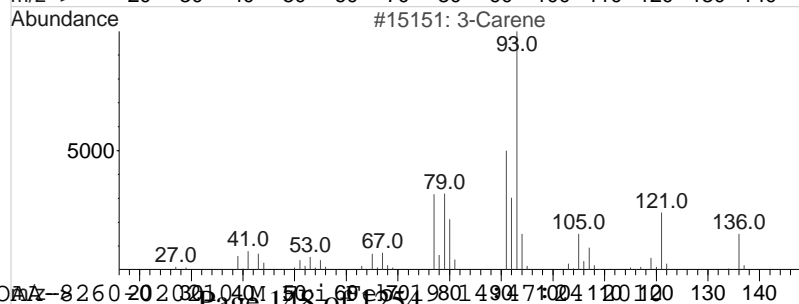
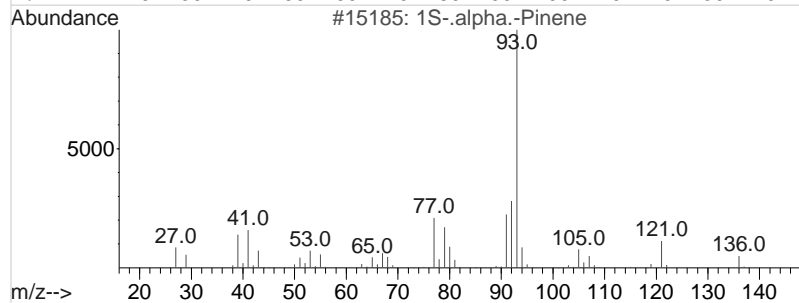
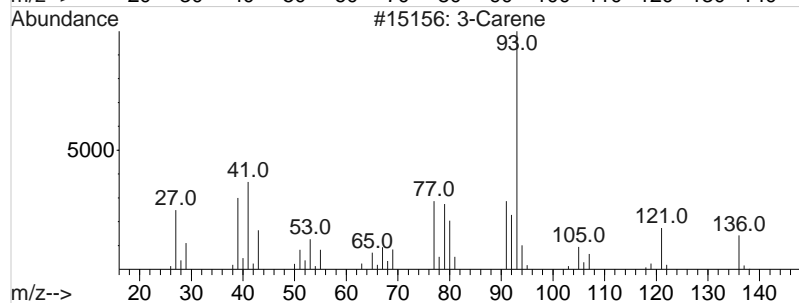
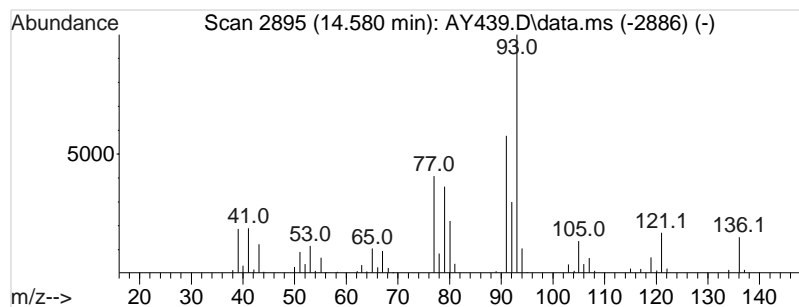
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Data File : AY439.D  
Acq On : 19 Feb 2010 10:30 am  
Operator : JEB  
Sample : |246866009|955077|1|VOA|1|VOA8260BS|  
Misc : LANL 5.5G N/A SOIL  
ALS Vial : 39 Sample Multiplier: 1

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

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

\*\*\*\*\*  
Peak Number 3 3-Carene Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD			R.T.
14.580	11.54 ug/L	530542	1,4-Dichlorobenzene-d4			14.940
Hit#	of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	3	Carene	136	C10H16	013466-78-9	95
2	1S	.alpha.-Pinene	136	C10H16	007785-26-4	95
3	3	Carene	136	C10H16	013466-78-9	94
4	.alpha.	-Phellandrene	136	C10H16	000099-83-2	93
5	1,4	-Cyclohexadiene, 1-methyl-4-(...	136	C10H16	000099-85-4	93



Library Search Compound Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\021810\  
Data File : AY439.D  
Acq On : 19 Feb 2010 10:30 am  
Operator : JEB  
Sample : |246866009|955077|1|VOA|1|VOA8260BS|  
Misc : LANL 5.5G N/A SOIL  
ALS Vial : 39 Sample Multiplier: 1

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

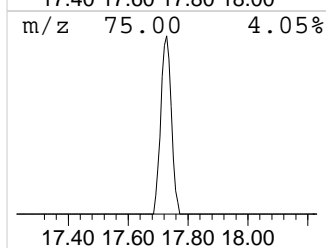
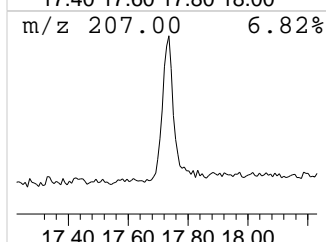
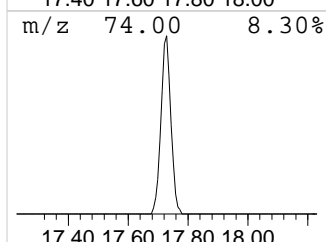
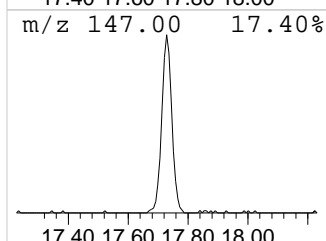
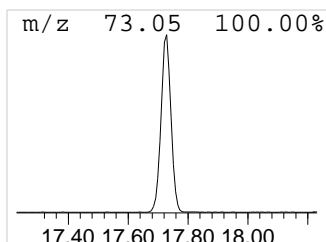
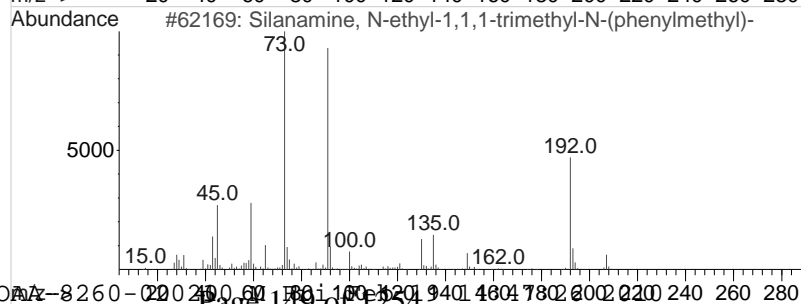
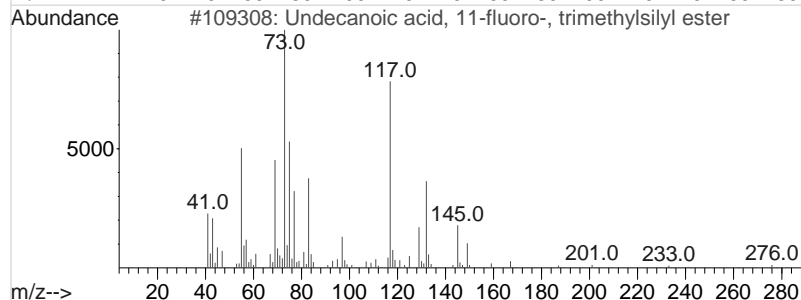
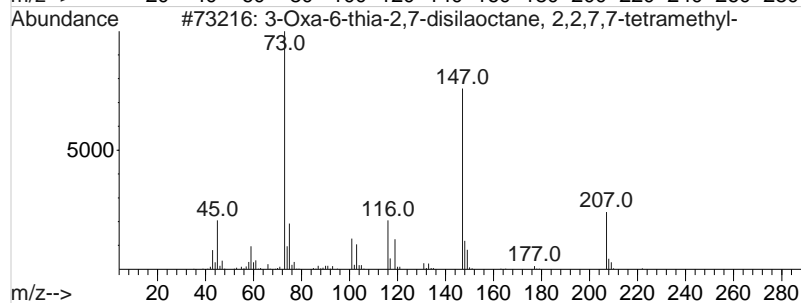
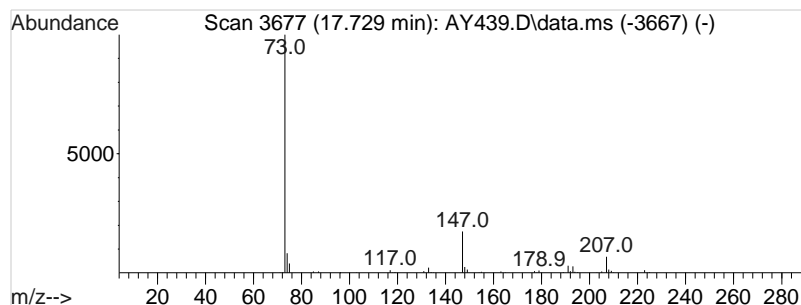
TIC Library : C:\Database\NIST05.L  
TIC Integration Parameters: ron.P

\*\*\*\*\*  
Peak Number 4 unknown siloxane Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
17.729	10.89 ug/L	500677	B 1,4-Dichlorobenzene-d4	14.940

Hit# of	5	Tentative ID	MW	MolForm	CAS#	Qual
1		3-Oxa-6-thia-2,7-disilaooctane, 2...	222	C8H22OSSi2	078921-31-0	23
2		Undecanoic acid, 11-fluoro-, tri...	276	C14H29FO2Si	026305-97-5	12
3		Silanamine, N-ethyl-1,1,1-trimet...	207	C12H21NSi	014629-66-4	9
4		3,6,9-Trioxa-2,10-disilaundecane...	250	C10H26O3Si2	016654-74-3	9
5		Butanoic acid, 3-methyl-2-[(trim...	262	C11H26O3Si2	055124-92-0	9



Tentatively Identified Compound (LSC) summary  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\021810\  
Data File : AY439.D  
Acq On : 19 Feb 2010 10:30 am  
Operator : JEB  
Sample : |246866009|955077|1|VOA|1|VOA8260BS|  
Misc : LANL 5.5G N/A SOIL  
ALS Vial : 39 Sample Multiplier: 1

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

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

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard--			
					#	RT	Resp	Conc
1R-.alpha.-Pinene	13.551	18.6	ug/L	732898	4	12.507	1968680	50.0
.beta.-Pinene	14.268	5.2	ug/L	237916	5	14.940	2299180	50.0
3-Carene	14.580	11.5	ug/L	530542	5	14.940	2299180	50.0
unknown siloxane	17.729	10.9	ug/L	500677	6	14.940	2299180	50.0



# Standards

## 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 VOAA

GEL Laboratories, LLC

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

Last Update : Wed Feb 03 22:34:28 2010

Integrator : (RTE Integrator)

Response via : Initial Calibration

Cal Lvl:8 Amt:-1 Last Updated with: C:\msdchem\1\DATA\020210\AW303.D

Injection Date	Mix	Calibration File
2 Feb 2010 10:55 pm	A	C:\msdchem\1\DATA\020210\AW303.D

Cal Lvl:1 Amt:1 Last Updated with: C:\msdchem\1\DATA\020210\AW313.D

Injection Date	Mix	Calibration File
2 Feb 2010 11:47 pm	A	C:\msdchem\1\DATA\020210\AW305.D
3 Feb 2010 3:17 am	B	C:\msdchem\1\DATA\020210\AW313.D

Cal Lvl:2 Amt:2 Last Updated with: C:\msdchem\1\DATA\020210\AW314.D

Injection Date	Mix	Calibration File
3 Feb 2010 12:14 am	A	C:\msdchem\1\DATA\020210\AW306.D
3 Feb 2010 3:43 am	B	C:\msdchem\1\DATA\020210\AW314.D

Cal Lvl:3 Amt:5 Last Updated with: C:\msdchem\1\DATA\020210\AW315.D

Injection Date	Mix	Calibration File
3 Feb 2010 12:40 am	A	C:\msdchem\1\DATA\020210\AW307.D
3 Feb 2010 4:09 am	B	C:\msdchem\1\DATA\020210\AW315.D

Cal Lvl:4 Amt:10 Last Updated with: C:\msdchem\1\DATA\020210\AW316.D

Injection Date	Mix	Calibration File
3 Feb 2010 1:06 am	A	C:\msdchem\1\DATA\020210\AW308.D
3 Feb 2010 4:35 am	B	C:\msdchem\1\DATA\020210\AW316.D

Cal Lvl:5 Amt:20 Last Updated with: C:\msdchem\1\DATA\020210\AW317.D

Injection Date	Mix	Calibration File
3 Feb 2010 1:32 am	A	C:\msdchem\1\DATA\020210\AW309.D
3 Feb 2010 5:02 am	B	C:\msdchem\1\DATA\020210\AW317.D

Cal Lvl:6 Amt:50 Last Updated with: C:\msdchem\1\DATA\020210\AW318.D

Injection Date	Mix	Calibration File
3 Feb 2010 1:59 am	A	C:\msdchem\1\DATA\020210\AW310.D
3 Feb 2010 5:28 am	B	C:\msdchem\1\DATA\020210\AW318.D

Cal Lvl:7 Amt:100 Last Updated with: C:\msdchem\1\DATA\020210\AW319.D

Injection Date	Mix	Calibration File
3 Feb 2010 2:25 am	A	C:\msdchem\1\DATA\020210\AW311.D
3 Feb 2010 5:55 am	B	C:\msdchem\1\DATA\020210\AW319.D



## Response Factor Report VOAA

GEL Laboratories, LLC

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

Last Update : Wed Feb 03 22:34:28 2010

Integrator : (RTE Integrator)

Response via : Initial Calibration

For Linear Calibration:  $y = \text{concentration ratio}$ ,  $x = \text{response ratio}$ .  $y = b + m1(x) + m2(xE2)$ 

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b	Compound ml	m2	8 6	1 7	2	3	4	5	Avg	Curve	Exp	%RSD/r <sup>2</sup>
2)MA	Dichlorodifluoromethane		0.2385542	0.2177688 0.2252913	0.2448628	0.2683433	0.2418479	0.2373488	0.2391	AVRG		6.7100
3)MPA	Chloromethane		0.2994965	0.4188132 0.2788950	0.3649641	0.3207923	0.3084509	0.2977658	0.3270	AVRG		14.8649
4)MCA	Vinyl chloride		0.2917077	0.3196001 0.2733973	0.3131282	0.2949595	0.2950989	0.2889657	0.2967	AVRG		5.1991
5)MA	Bromomethane		0.1871993	0.1910020 0.1749093	0.1850689	0.1840110	0.1876557	0.1874027	0.1853	AVRG		2.7494
6)MA	Chloroethane 0.0052   0.1053   0.00		154410	4460 271253	9002	18270	32282	61349		LINR		0.9942
7)MA	Trichlorofluoromethane		0.4627652	0.4452675 0.4343512	0.4545760	0.4505400	0.4608244	0.4582548	0.4524	AVRG		2.2060
8)MA	Ethyl ether		0.2495694	0.2297650 0.2307527	0.2419205	0.2358205	0.2459701	0.2505338	0.2406	AVRG		3.5868
9)MA	Acetone		0.2210842	0.2871985 0.2217309	0.2560594	0.2422324	0.2322602	0.2132260	0.2391	AVRG		10.7351
10)MCA	1,1-Dichloroethylene		0.4448336	0.4366708 0.4546305	0.4627907	0.4806969	0.4780774	0.4189814	0.4538	AVRG		4.9113
11)MA	Iodomethane		0.3744511	0.3720631 0.3854221	0.3788423	0.4000460	0.3961622	0.3525849	0.3799	AVRG		4.2155
12)MA	Acetonitrile		0.0373952	0.0436397 0.0357479	0.0420264	0.0410509	0.0402577	0.0357799	0.0394	AVRG		7.9423
13)MA	Methyl acetate		0.2273735	0.2391667 0.2253824	0.2336584	0.2379882	0.2286672	0.2012925	0.2276	AVRG		5.6042
14)MA	Carbon disulfide		0.6952276	0.6959614 0.7328280	0.7149046	0.7610247	0.7539913	0.6574611	0.7159	AVRG		5.1051
15)MA	Methylene chloride 0.0035   0.2377   0.00		302164		18197	36579	66367	116317		LINR		0.9997
16)MA	tert-Butyl methyl ether		0.7815815	0.8059361 0.7826571	0.9417937	0.8446745	0.9144057	0.7321587	0.8290	AVRG		9.1558

## Response Factor Report VOAA

GEL Laboratories, LLC

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

Last Update : Wed Feb 03 22:34:28 2010

Integrator : (RTE Integrator)

Response via : Initial Calibration

For Linear Calibration:  $y = \text{concentration ratio}$ ,  $x = \text{response ratio}$ .  $y = b + m1(x) + m2(xE2)$ 

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b	Compound ml	m2	8 6	1 7	2	3	4	5	Avg	Curve	Exp	%RSD/r <sup>2</sup>
7)MA	trans-1,2-Dichloroethyle		0.4307833	0.4378040 0.4398208	0.4457491	0.4625292	0.4591634	0.4136231	0.4414	AVRG		3.7920
18)MA	Vinyl acetate		0.5701527	0.5788204 0.5162012	0.5655818	0.5407487	0.6057377	0.5882265	0.5665	AVRG		5.2813
19)MPA	1,1-Dichloroethane		0.5105945	0.5241222 0.5153500	0.5270672	0.5512337	0.5395770	0.4901051	0.5226	AVRG		3.8136
20)MA	2-Butanone		0.2603803	0.2788207 0.2795955	0.2614029	0.2694703	0.2616377	0.2535838	0.2664	AVRG		3.7094
21)MA	cis-1,2-Dichloroethylene		0.4942956	0.4907125 0.5009409	0.5121977	0.5264719	0.5162673	0.4757449	0.5024	AVRG		3.4311
22)MA	2,2-Dichloropropane		0.4508151	0.4785600 0.4609637	0.4641533	0.4684439	0.4691171	0.4277495	0.4600	AVRG		3.5960
23)MA	Bromochloromethane		0.1174770	0.1022611 0.1181459	0.1152830	0.1199884	0.1201518	0.1121099	0.1151	AVRG		5.4755
24)MCA	Chloroform		0.5012549	0.5161898 0.5057099	0.5080706	0.5286779	0.5173129	0.4839673	0.5087	AVRG		2.7866
25)MA	1,1,1-Trichloroethane		0.4835590	0.4938776 0.4950057	0.4808395	0.4980254	0.5038524	0.4588563	0.4877	AVRG		3.0815
26)MA	Cyclohexane		0.5061283	0.5273264 0.5200301	0.5251320	0.5568446	0.5481271	0.4852124	0.5241	AVRG		4.6166
27)MA	1,1-Dichloropropene		0.3698426	0.3724304 0.3747430	0.3711251	0.3893948	0.3896487	0.3507817	0.3740	AVRG		3.5364
28)MA	Carbon tetrachloride		0.4305904	0.4002523 0.4417764	0.4142526	0.4405889	0.4352747	0.4057424	0.4241	AVRG		4.0319
29)SA	1,2-Dichloroethane-d4		0.4185267	0.4144250 0.4089249	0.4132889	0.4118562	0.4237107	0.4202146	0.4158	AVRG		1.2437
30)MA	1,2-Dichloroethane		0.4709627	0.4713309 0.4768172	0.4875732	0.4975858	0.4878099	0.4565019	0.4784	AVRG		2.8664
31)MA	Benzene		0.9855503 0.9175513	0.9591128 0.9311177	0.9623504	0.9598272	0.9484654	0.8731669	0.9421	AVRG		3.6806



## Response Factor Report VOAA

GEL Laboratories, LLC

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

Last Update : Wed Feb 03 22:34:28 2010

Integrator : (RTE Integrator)

Response via : Initial Calibration

For Linear Calibration:  $y = \text{concentration ratio}, x = \text{response ratio. } y = b + m_1(x) + m_2(xE2)$ 

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b	Compound ml	m2	8 6	1 7	2	3	4	5	Avg	Curve	Exp	%RSD/r <sup>2</sup>
2)MA	Cyclohexene		0.5074292	0.5314294 0.5218520	0.5302267	0.5414424	0.5419136	0.4846988	0.5227	AVRG		3.9295
3)MA	n-Butyl alcohol		0.0080997 0.0099530	0.0081402 0.0102307	0.0083135	0.0088410	0.0095615	0.0096783	0.0091	AVRG	#	9.4333
34)MA	Trichloroethylene		0.2591424	0.2586811 0.2615899	0.2627339	0.2735307	0.2706149	0.2508116	0.2624	AVRG		2.9138
35)MCA	1,2-Dichloropropane		0.2696337	0.2677466 0.2731998	0.2711263	0.2806603	0.2777011	0.2629194	0.2719	AVRG		2.2056
36)MA	Methylcyclohexane		0.4192760	0.4229162 0.4257842	0.4344143	0.4465755	0.4499297	0.3955433	0.4278	AVRG		4.2967
37)MA	Dibromomethane		0.1586009	0.1456351 0.1599450	0.1555274	0.1606879	0.1632682	0.1543632	0.1569	AVRG		3.7015
38)MA	Bromodichloromethane		0.3834628	0.3523064 0.3925865	0.3535108	0.3728896	0.3810181	0.3707962	0.3724	AVRG		4.0543
39)MA	2-Chloroethylvinyl ether		0.1471383	0.1395627 0.1378339	0.1359818	0.1657474	0.1436456	0.1448516	0.1450	AVRG		6.8931
40)MA	cis-1,3-Dichloropropyl		0.4172425	0.3851300 0.4260431	0.3985142	0.4111912	0.4106941	0.4006699	0.4071	AVRG		3.3097
42)MA	4-Methyl-2-pentanone		0.1688665	0.1562685 0.1772762	0.1599605	0.1708793	0.1689419	0.1679933	0.1672	AVRG		4.1832
43)SA	Toluene-d8		1.3520386	1.3431112 1.3470052	1.3367832	1.3405691	1.3540508	1.3449102	1.3455	AVRG		0.4546
44)MCA	Toluene		1.3076759	1.4332347 1.3402087	1.3833823	1.4204063	1.3681986	1.2769041	1.3614	AVRG		4.2031
45)MA	trans-1,3-Dichloropropyl		0.5675656	0.5249764 0.5869785	0.5245505	0.5538819	0.5601831	0.5542609	0.5532	AVRG		4.0522
46)MA	1,1,2-Trichloroethane		0.2305078	0.2183401 0.2333061	0.2276846	0.2422380	0.2358528	0.2296616	0.2311	AVRG		3.2016
47)MA	2-Hexanone		0.4768393	0.4889568 0.5193377	0.4659797	0.4981286	0.4716690	0.4793765	0.4858	AVRG		3.7593

## Response Factor Report VOAA

GEL Laboratories, LLC

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

Last Update : Wed Feb 03 22:34:28 2010

Integrator : (RTE Integrator)

Response via : Initial Calibration

For Linear Calibration:  $y = \text{concentration ratio}$ ,  $x = \text{response ratio}$ .  $y = b + m_1(x) + m_2(xE2)$ 

Page 160 of 1254	b	Compound ml	m2	8 6	1 7	2	3	4	5	Avg	Curve	Exp	%RSD/r <sup>2</sup>
48)MA	1,3-Dichloropropane			0.5136580	0.5462279 0.5168251	0.5113419	0.5398010	0.5370849	0.5070997	0.5246	AVRG		3.0311
49)MA	Tetrachloroethylene			0.2760900	0.2796135 0.2783270	0.2835482	0.2954103	0.2903799	0.2671434	0.2815	AVRG		3.3247
50)MA	Dibromochloromethane			0.3537629	0.3176396 0.3723235	0.3076184	0.3304406	0.3404751	0.3409890	0.3376	AVRG		6.4389
51)MA	1,2-Dibromoethane			0.2913374	0.2712531 0.2945651	0.2828386	0.2962203	0.2916184	0.2864034	0.2877	AVRG		2.9899
52)MPA	Chlorobenzene			0.8305045	0.8760035 0.8507380	0.8663366	0.8805720	0.8674466	0.8396810	0.8588	AVRG		2.1954
53)MA	1,1,1,2-Tetrachloroethan			0.3473239	0.3103580 0.3569188	0.3207451	0.3439889	0.3439351	0.3420465	0.3379	AVRG		4.8238
54)MCA	Ethylbenzene			1.6044667	1.6711004 1.6449923	1.6712424	1.6859350	1.6556294	1.5962957	1.6471	AVRG		2.0948
55)MA	m,p-Xylenes			0.5744294	0.5823123 0.5845427	0.5856266	0.6103719	0.5970936	0.5738560	0.5869	AVRG		2.2093
56)MA	o-Xylene			0.5674394	0.5963361 0.5789702	0.5824064	0.6006407	0.5919341	0.5719526	0.5842	AVRG		2.1411
57)MA	Styrene			0.9532494	0.9241700 0.9708665	0.9158416	0.9816904	0.9628218	0.9521263	0.9515	AVRG		2.5151
59)MPA	Bromoform			0.4422719	0.3321333 0.4736539	0.3564595	0.3939360	0.4065686	0.4195564	0.4035	AVRG		12.0093
60)MA	Isopropylbenzene			2.8059741	2.8390379 2.8902554	2.8238870	2.9173115	2.8965075	2.8091851	2.8546	AVRG		1.6036
61)SA	Bromofluorobenzene			1.0199187	1.0178117 1.0169340	1.0131430	1.0000442	1.0297192	1.0254793	1.0176	AVRG		0.9348
62)MPA	1,1,2,2-Tetrachloroethan			0.6373970	0.6405027 0.6531101	0.6235666	0.6434916	0.6392097	0.6529942	0.6415	AVRG		1.5790
63)MA	1,2,3-Trichloropropane			0.2028210	0.1630728 0.2076139	0.1882528	0.2041486	0.2091267	0.2087850	0.1977	AVRG		8.5343

## Response Factor Report VOAA

GEL Laboratories, LLC

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

Last Update : Wed Feb 03 22:34:28 2010

Integrator : (RTE Integrator)

Response via : Initial Calibration

For Linear Calibration:  $y = \text{concentration ratio}, x = \text{response ratio}. y = b + m1(x) + m2(xE2)$ 

Page 961 of 1254	Compound			8	1	2	3	4	5	Avg	Curve	Exp	%RSD/r <sup>2</sup>
	b	m1	m2	6	7								
4)MA	Bromobenzene			0.6472395	0.6275916 0.6636465	0.6592886	0.6650334	0.6688129	0.6601157	0.6560	AVRG		2.1701
5)MA	n-Propylbenzene			3.3076036	3.4376263 3.3845357	3.3886454	3.4847729	3.4006035	3.3383655	3.3917	AVRG		1.7371
6)MA	1,3,5-Trimethylbenzene			2.3966152	2.3951956 2.4686459	2.3955560	2.4988192	2.4371692	2.4119383	2.4291	AVRG		1.6902
67)MA	2-Chlorotoluene			0.5970273	0.6190777 0.6122079	0.5991028	0.6139627	0.6275443	0.6013597	0.6100	AVRG		1.8600
68)MA	4-Chlorotoluene			2.0521041	2.2596291 2.0878533	2.1889672	2.1847149	2.1375415	2.0893009	2.1429	AVRG		3.3905
69)MA	tert-Butylbenzene			0.4593125	0.4406613 0.4708390	0.4423442	0.4697358	0.4684619	0.4608197	0.4589	AVRG		2.7593
70)MA	1,2,4-Trimethylbenzene			2.4298309	2.4238245 2.4848269	2.4635798	2.5554003	2.5112015	2.4680135	2.4767	AVRG		1.8569
71)MA	sec-Butylbenzene			3.0240989	2.9964036 3.1085773	3.0039693	3.1916152	3.0648005	3.0303279	3.0600	AVRG		2.2743
72)MA	4-Isopropyltoluene			2.4610780	2.4242923 2.5223827	2.4152221	2.5543251	2.5239590	2.4843057	2.4837	AVRG		2.1328
73)MA	1,3-Dichlorobenzene			1.1458512	1.2215020 1.1634890	1.2163990	1.2231063	1.2029470	1.1745468	1.1925	AVRG		2.6067
74)MA	1,4-Dichlorobenzene			1.1680582	1.3035530 1.1945796	1.2528810	1.2605453	1.2503431	1.2110366	1.2344	AVRG		3.7115
75)MA	n-Butylbenzene			2.4532193	2.5374983 2.5231534	2.5080422	2.6146500	2.5650730	2.5052073	2.5295	AVRG		2.0086
76)MA	1,2-Dichlorobenzene			1.1328855	1.2482598 1.1539174	1.1748818	1.1875679	1.1882662	1.1721890	1.1797	AVRG		3.0508
77)MA	1,2-Dibromo-3-chloroprop -0.0016   0.1568   0.00			81247	985	2758	7433	15003	31203		LINR		0.9999
78)MA	1,2,4-Trichlorobenzene			0.9694614	1.0715275 0.9966666	0.9938019	1.0355844	1.0274441	1.0046721	1.0142	AVRG		3.3036

## Response Factor Report VOAA

GEL Laboratories, LLC

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

Last Update : Wed Feb 03 22:34:28 2010

Integrator : (RTE Integrator)

Response via : Initial Calibration

For Linear Calibration:  $y = \text{concentration ratio}, x = \text{response ratio}. y = b + m_1(x) + m_2(xE2)$ 

Page 162 of 1254

b	Compound ml	m2	8 6	1 7	2	3	4	5	Avg	Curve	Exp	%RSD/r^2
9)MA	Hexachlorobutadiene		0.6819756	0.6650150 0.7091170	0.6684091	0.7147602	0.7033065	0.6844503	0.6896	AVRG		2.8638
10)MA	Naphthalene		2.1611243	2.3168870 2.2332118	2.1637434	2.1508661	2.1982944	2.2122179	2.2052	AVRG		2.6161
81)MA	1,2,3-Trichlorobenzene		0.9198888	0.9923768 0.9397709	0.9591250	0.9709012	0.9701899	0.9519720	0.9577	AVRG		2.4556
83)B	Chlorotrifluoroethylene		0.1675495	0.1545077 0.1826572	0.1637749	0.1711184	0.1655019	0.1998214	0.1721	AVRG		8.6296
84)B	2-Chloro-1,1,1-trifluoro		0.2688861	0.2536732 0.2682404	0.2503474	0.2514422	0.2473082	0.2616670	0.2574	AVRG		3.4338
85)B	Acrolein		0.0484340	0.0514738 0.0498812	0.0509818	0.0471297	0.0485942	0.0483780	0.0493	AVRG		3.1762
86)B	Trichlorotrifluoroethane		0.1022431	0.1139564 0.1039375	0.1012790	0.1002761	0.1039117	0.1011428	0.1038	AVRG		4.5082
87)B	Isopropyl Alcohol		0.0250177	0.0241432 0.0249797	0.0230015	0.0232875	0.0236424	0.0250832	0.0242	AVRG		3.6358
88)B	Allyl chloride		0.4628992	0.4879103 0.4640660	0.4759531	0.4631783	0.4779541	0.4652477	0.4710	AVRG		2.0635
89)B	tert-Butyl Alcohol		0.0420428	0.0402061 0.0419608	0.0383375	0.0389020	0.0399164	0.0415679	0.0404	AVRG		3.6788
90)B	Acrylonitrile		0.1039009	0.1022257 0.1034836	0.1019832	0.0993805	0.1049458	0.1019885	0.1026	AVRG		1.7453
91)B	Isopropyl ether		1.0796499	1.0803219 1.1215483	1.0559044	1.0790138	1.0559427	1.0977074	1.0814	AVRG		2.1308
92)B	2-Chloro-1,3-butadiene		0.4907408	0.4782511 0.5052759	0.4727880	0.4708845	0.4904941	0.4833293	0.4845	AVRG		2.4844
93)B	Ethyl tert-butyl ether		1.0286049	1.0019342 1.0794600	0.9907637	1.0044684	0.9901999	1.0389514	1.0192	AVRG		3.1729
94)B	Ethyl acetate		0.2856064	0.3301855 0.2860745	0.2906485	0.2800202	0.2869687	0.2824676	0.2917	AVRG		5.9294

## Response Factor Report VOAA

GEL Laboratories, LLC

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

Last Update : Wed Feb 03 22:34:28 2010

Integrator : (RTE Integrator)

Response via : Initial Calibration

For Linear Calibration:  $y = \text{concentration ratio}, x = \text{response ratio. } y = b + m_1(x) + m_2(xE2)$ 

Page 163 of 1254	b	Compound ml	m2	8 6	1 7	2	3	4	5	Avg	Curve	Exp	%RSD/r <sup>2</sup>
5)B		Propionitrile		0.0407366	0.0364711 0.0407413	0.0391705	0.0385692	0.0416155	0.0398314	0.0396	AVRG		4.3440
6)B		Methacrylonitrile		0.1830359	0.1818924 0.1818713	0.1857662	0.1789612	0.1877184	0.1815158	0.1830	AVRG		1.5923
97)B		Tetrahydrofuran		0.0883990	0.0960190 0.0872267	0.0939003	0.0890542	0.0905842	0.0873487	0.0904	AVRG		3.7541
98)B		Isobutyl alcohol		0.0119286	0.0127296 0.0117598	0.0115199	0.0108352	0.0116607	0.0115863	0.0117	AVRG		4.8134
99)B		Methyl tert-amyl ether		0.7915634	0.7996485 0.8353931	0.7704397	0.7713128	0.7632083	0.7974335	0.7899	AVRG		3.1273
100)B		Methyl methacrylate		0.1636172	0.1597414 0.1664293	0.1566936	0.1554329	0.1619850	0.1600165	0.1606	AVRG		2.3856
101)B		1,4-Dioxane		0.0026775	0.0019569 0.0027388	0.0023455	0.0025010	0.0026900	0.0027413	0.0025	AVRG	#	11.4303
102)B		2-Nitropropane		0.0961194	0.0747782 0.0988517	0.0774176	0.0775306	0.0848201	0.0882881	0.0854	AVRG		11.1394
104)B		Ethyl methacrylate		0.4371484	0.3877646 0.4431927	0.4030788	0.4122445	0.4315604	0.4316063	0.4209	AVRG		4.8295
106)B		1-Chlorohexane		0.7802548	0.7883855 0.8108573	0.7895554	0.7851573	0.7653485	0.7970432	0.7881	AVRG		1.7854
107)B		cis-1,4-Dichloro-2-buten		0.2883336	0.2357172 0.2997519	0.2487551	0.2527046	0.2689231	0.2769942	0.2673	AVRG		8.5669
108)B		Cyclohexanone		0.1281330	0.1118408 0.1399375	0.1201373	0.1216406	0.1290551	0.1267126	0.1254	AVRG		6.9818
109)B		trans-1,4-Dichloro-2-but		0.2688412	0.2218657 0.2766715	0.2402934	0.2459768	0.2568598	0.2603657	0.2530	AVRG		7.3253
110)B		Pentachloroethane		0.2078111	0.1718814 0.1804959	0.1901216	0.2004149	0.1950654	0.2298334	0.1965	AVRG		9.6534
111)B		Benzyl chloride		1.1464261	0.9262137 1.1767395	0.9816031	1.0299901	1.0918255	1.1006369	1.0648	AVRG		8.4479

## Response Factor Report VOAA

GEL Laboratories, LLC

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

Last Update : Wed Feb 03 22:34:28 2010

Integrator : (RTE Integrator)

Response via : Initial Calibration

For Linear Calibration:  $y = \text{concentration ratio}, x = \text{response ratio}. y = b + m1(x) + m2(xE2)$ 

b	Compound		8	1	2	3	4	5	Avg	Curve	Exp	%RSD/r^2
	m1	m2	6	7								
2)B	bis(2-Chloroisopropyl)et		0.4490478	0.4014342	0.4154083	0.4233880	0.4427023	0.4399476	0.4315	AVRG		4.2576

) = Out of Range

## Continuing Calibration Summary

Client SDG: 10-1758

Instrument ID: VOAA.I

Injection Date 03-FEB-10 06:48

Data File: 020210\AW321.D

Init. Cal. Date(s) 02-FEB-10 22:55 - 03-FEB-10 05:55

Lab Sample ID WAVM100202-17 Quant Type ISTD

Method:122209\Methods\VOAA-8260-020210.M

Compound	AVERF / Amount	RF CCV	Nominal CCV	Min RF	RF Q	%D / %Drift	Max	Drift Q	Curve Type	
S 1,2-Dichloroethane-d4	0.4158	0.41367		.01		-0.51227	30		Averaged	
S Toluene-d8	1.3455	1.35484		.01		0.69417	30		Averaged	
S Bromofluorobenzene	1.0176	1.01378		.01		-0.37539	30		Averaged	
Dichlorodifluoromethane	0.2391	0.23204		.01		-2.95274	30		Averaged	
Chloromethane	0.327	0.27449		.1		-16.0581	30		Averaged	spcc
Vinyl chloride	0.2967	0.28428		.01		-4.18605	20		Averaged	ccc
Bromomethane	0.1853	0.18155		.01		-2.02375	30		Averaged	
Chloroethane	50	50	50			0	30		Linear	
Trichlorofluoromethane	0.4524	0.45736		.01		1.09637	30		Averaged	
Ethyl ether	0.2406	0.23219		.01		-3.49543	30		Averaged	
Acetone	0.2391	0.18425		.01		-22.94019	40		Averaged	
1,1-Dichloroethylene	0.4538	0.4361		.01		-3.9004	20		Averaged	ccc
Iodomethane	0.3799	0.37491		.01		-1.3135	30		Averaged	
Acetonitrile	0.0394	0.03631		.01		-7.84264	30		Averaged	
Carbon disulfide	0.7159	0.74392		.01		3.91395	30		Averaged	
Methyl acetate	0.2276	0.21647		.01		-4.89016	40		Averaged	
Methylene chloride	50	51.17	50			2.34	30		Linear	
tert-Butyl methyl ether	0.829	0.78733		.01		-5.02654	30		Averaged	
trans-1,2-Dichloroethylene	0.4414	0.43645		.01		-1.12143	30		Averaged	
Vinyl acetate	0.5665	0.45697		.01		-19.33451	40		Averaged	
1,1-Dichloroethane	0.5226	0.51924		.1		-0.64294	30		Averaged	spcc
2-Butanone	0.2664	0.2146		.01		-19.44444	40		Averaged	
cis-1,2-Dichloroethylene	0.5024	0.50352		.01		0.22293	30		Averaged	
2,2-Dichloropropane	0.46	0.45136		.01		-1.87826	30		Averaged	
Bromochloromethane	0.1151	0.1198		.01		4.08341	30		Averaged	
Chloroform	0.5087	0.5124		.01		0.72734	20		Averaged	ccc
1,1,1-Trichloroethane	0.4877	0.49369		.01		1.22821	30		Averaged	
Cyclohexane	0.5241	0.51908		.01		-0.95783	30		Averaged	
1,1-Dichloropropene	0.374	0.37562		.01		0.43316	30		Averaged	
Carbon tetrachloride	0.4241	0.44132		.01		4.06036	30		Averaged	
1,2-Dichloroethane	0.4784	0.47662		.01		-0.37207	30		Averaged	
Benzene	0.9421	0.92378		.01		-1.94459	30		Averaged	
Cyclohexene	0.5227	0.50067		.01		-4.21465	30		Averaged	
n-Butyl alcohol	0.0091	0.00949		.01		4.28571	40		Averaged	
Trichloroethylene	0.2624	0.26825		.01		2.22942	30		Averaged	
1,2-Dichloropropane	0.2719	0.27456		.01		0.9783	20		Averaged	ccc
Methylcyclohexane	0.4278	0.42512		.01		-0.62646	30		Averaged	

## Continuing Calibration Summary

Instrument ID: VOAA.I

Injection Date 03-FEB-10 06:48

Data File: 020210\AW321.D

Init. Cal. Date(s) 02-FEB-10 22:55 03-FEB-10 05:55

Lab Sample ID WAVM100202-17 Quant Type ISTD

Method:122209\Methods\VOAA-8260-020210.M

Compound	AVERF / Amount	RF CCV	Nominal CCV	Min RF	RF Q	%D / %Drift	Max	Drift Q	Curve Type	
Dibromomethane	0.1569	0.15852		.01		1.0325	30		Averaged	
Bromodichloromethane	0.3724	0.38792		.01		4.16756	30		Averaged	
2-Chloroethylvinyl ether	0.145	0.131		.01		-9.65517	30		Averaged	
cis-1,3-Dichloropropylene	0.4071	0.41297		.01		1.44191	30		Averaged	
4-Methyl-2-pentanone	0.1672	0.1602		.01		-4.1866	40		Averaged	
Toluene	1.3614	1.32364		.01		-2.77362	20		Averaged	ccc
trans-1,3-Dichloropropylene	0.5532	0.5627		.01		1.71728	30		Averaged	
1,1,2-Trichloroethane	0.2311	0.22996		.01		-0.49329	30		Averaged	
2-Hexanone	0.4858	0.40036		.01		-17.58748	40		Averaged	
1,3-Dichloropropane	0.5246	0.51782		.01		-1.29241	30		Averaged	
Tetrachloroethylene	0.2815	0.27989		.01		-0.57194	30		Averaged	
Dibromochloromethane	0.3376	0.35528		.01		5.23697	30		Averaged	
1,2-Dibromoethane	0.2877	0.29123		.01		1.22697	30		Averaged	
Chlorobenzene	0.8588	0.85329		.3		-0.64159	30		Averaged	spcc
1,1,1,2-Tetrachloroethane	0.3379	0.35484		.01		5.01332	30		Averaged	
Ethylbenzene	1.6471	1.61437		.01		-1.98713	20		Averaged	ccc
m,p-Xylenes	0.5869	0.57705		.01		-1.67831	30		Averaged	
o-Xylene	0.5842	0.57647		.01		-1.32318	30		Averaged	
Styrene	0.9515	0.96058		.01		0.95428	30		Averaged	
Bromoform	0.4035	0.43647		.1		8.171	30		Averaged	spcc
Isopropylbenzene	2.8546	2.80344		.01		-1.7922	30		Averaged	
1,1,2,2-Tetrachloroethane	0.6415	0.60262		.3		-6.0608	30		Averaged	spcc
1,2,3-Trichloropropane	0.1977	0.20214		.01		2.24583	30		Averaged	
Bromobenzene	0.656	0.66402		.01		1.22256	30		Averaged	
n-Propylbenzene	3.3917	3.2717		.01		-3.53805	30		Averaged	
2-Chlorotoluene	0.61	0.60918		.01		-0.13443	30		Averaged	
1,3,5-Trimethylbenzene	2.4291	2.38921		.01		-1.64217	30		Averaged	
4-Chlorotoluene	2.1429	2.05806		.01		-3.95912	30		Averaged	
tert-Butylbenzene	0.4589	0.46143		.01		0.55132	30		Averaged	
1,2,4-Trimethylbenzene	2.4767	2.42585		.01		-2.05314	30		Averaged	
sec-Butylbenzene	3.06	3.00994		.01		-1.63595	30		Averaged	
4-Isopropyltoluene	2.4837	2.44876		.01		-1.40677	30		Averaged	
1,3-Dichlorobenzene	1.1925	1.15178		.01		-3.41468	30		Averaged	
1,4-Dichlorobenzene	1.2344	1.18293		.01		-4.16964	30		Averaged	
n-Butylbenzene	2.5295	2.42397		.01		-4.17197	30		Averaged	
1,2-Dichlorobenzene	1.1797	1.15375		.01		-2.19971	30		Averaged	
1,2-Dibromo-3-chloropropane	50	49.08	50			-1.84	30		Linear	



## Continuing Calibration Summary

Instrument ID: VOAA.I

Injection Date 03-FEB-10 06:48

Data File: 020210\AW321.D

Init. Cal. Date(s) 02-FEB-10 22:55 03-FEB-10 05:55

Lab Sample ID WAVM100202-17 Quant Type ISTD

Method:122209\Methods\VOAA-8260-020210.M

Compound	AVERF / Amount	RF CCV	Nominal CCV	Min RF	RF Q	%D / %Drift	Max	Drift Q	Curve Type
1,2,4-Trichlorobenzene	1.0142	0.96718		.01		-4.63617	30		Averaged
Hexachlorobutadiene	0.6896	0.7053		.01		2.27668	30		Averaged
Naphthalene	2.2052	2.07507		.01		-5.90105	30		Averaged
1,2,3-Trichlorobenzene	0.9577	0.96128		.01		0.37381	30		Averaged

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\020210\  
Data File : AW321.D  
Acq On : 3 Feb 2010 6:48 am  
Operator : JEB  
InstName : VOAA  
Sample : |WAVM100202-17|ICV|1|VOA|1|VOA8260BL|  
Misc : GEEL 5ML N/A MIX[A] 100126-01A/100202-01  
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Feb 03 22:35:00 2010  
Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M  
Quant Title : Volatile Organics 8260B SubList :  
QLast Update : Wed Feb 03 22:34:28 2010  
Response via : Initial Calibration  
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
-----								
Internal Standards								Dev(Min)
1) Fluorobenzene	9.339	9.342	1.000	96	1249146	50.00	ug/L	0.00
41) Chlorobenzene-d5	12.507	12.507	1.000	117	911788	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	14.940	14.944	1.000	152	523089	50.00	ug/L	0.00
82) B Fluorobenzene	9.339	9.339	1.000	96	1249146	50.00	ug/L	0.00
103) B Chlorobenzene-d5	12.507	12.508	1.000	117	911788	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	14.940	14.944	1.000	152	523089	50.00	ug/L	0.00
System Monitoring Compounds								Dev(Min)
29) 1,2-Dichloroethane-d4	8.978	8.982	0.961	65	516737	49.74	ug/L	0.00
43) Toluene-d8	10.983	10.987	0.878	98	1235324	50.35	ug/L	0.00
61) Bromofluorobenzene	13.713	13.713	0.918	95	530295	49.81	ug/L	0.00
Target Compounds								QValue
2) Dichlorodifluoromethane	3.731	3.731	0.400	85	289855	48.51	ug/L	99
3) Chloromethane	4.034	4.043	0.432	50	342874	41.97	ug/L	99
4) Vinyl chloride	4.265	4.265	0.457	62	355107	47.91	ug/L	97
5) Bromomethane	4.829	4.839	0.517	94	226787	48.98	ug/L	98
6) Chloroethane	4.980	4.990	0.533	64	138042	50.00	ug/L	96
7) Trichlorofluoromethane	5.375	5.382	0.576	101	571306	50.55	ug/L	100
8) Ethyl ether	5.728	5.732	0.613	59	290039	48.25	ug/L	100
9) Acetone	6.075	6.082	0.650	43	1150776	192.64	ug/L	100
10) 1,1-Dichloroethylene	6.078	6.082	0.651	61	544758	48.05	ug/L	100
11) Iodomethane	6.298	6.305	0.674	142	2341568	246.69	ug/L	99
12) Acetonitrile	6.414	6.421	0.687	41	1133839	1151.49	ug/L	99
13) Methyl acetate	6.478	6.481	0.694	43	1352041	237.73	ug/L	100
14) Carbon disulfide	6.425	6.428	0.688	76	4646336	259.78	ug/L	100
15) Methylene chloride	6.644	6.651	0.711	84	308287	51.17	ug/L	99
16) tert-Butyl methyl ether	6.970	6.973	0.746	73	983484	47.48	ug/L	100
17) trans-1,2-Dichloroethy...	6.991	6.994	0.749	61	545193	49.44	ug/L	99
18) Vinyl acetate	7.447	7.454	0.797	43	2854099	201.66	ug/L	100
19) 1,1-Dichloroethane	7.468	7.471	0.800	63	648607	49.68	ug/L	100
20) 2-Butanone	8.059	8.062	0.863	43	1340327	201.38	ug/L	100
21) cis-1,2-Dichloroethylene	8.105	8.108	0.868	61	628967	50.11	ug/L	100
22) 2,2-Dichloropropane	8.133	8.140	0.871	77	563809	49.06	ug/L	100
23) Bromochloromethane	8.373	8.373	0.897	128	149644	52.06	ug/L	98
24) Chloroform	8.419	8.423	0.902	83	640063	50.36	ug/L	100
25) 1,1,1-Trichloroethane	8.688	8.692	0.930	97	616685	50.61	ug/L	99
26) Cyclohexane	8.787	8.791	0.941	56	648406	49.52	ug/L	99
27) 1,1-Dichloropropene	8.847	8.851	0.947	75	469202	50.22	ug/L	100
28) Carbon tetrachloride	8.883	8.886	0.951	117	551269	52.03	ug/L	99
30) 1,2-Dichloroethane	9.059	9.063	0.970	62	595363	49.82	ug/L	98
31) Benzene	9.084	9.084	0.973	78	1153939	49.03	ug/L	100
32) Cyclohexene	9.204	9.208	0.986	67	625416	47.89	ug/L	99
33) n-Butyl alcohol	9.459	9.462	1.013	56	1185084	5211.45	ug/L	100
34) Trichloroethylene	9.728	9.731	1.042	95	335088	51.11	ug/L	99
35) 1,2-Dichloropropane	9.965	9.965	1.067	63	342968	50.50	ug/L	100
36) Methylcyclohexane	9.979	9.982	1.069	83	531041	49.69	ug/L	100
37) Dibromomethane	10.092	10.095	1.081	93	198015	50.53	ug/L	99
38) Bromodichloromethane	10.212	10.216	1.094	83	484567	52.09	ug/L	100
39) 2-Chloroethylvinyl ether	10.453	10.453	1.119	63	818163	225.91	ug/L	100
40) cis-1,3-Dichloropropylene	10.669	10.668	1.142	75	515858	50.72	ug/L	99
42) 4-Methyl-2-pentanone	10.775	10.774	0.861	58	730341	239.58	ug/L	99
44) Toluene	11.058	11.057	0.884	91	1206877	48.61	ug/L	100

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\020210\  
Data File : AW321.D  
Acq On : 3 Feb 2010 6:48 am  
Operator : JEB  
InstName : VOAA  
Sample : |WAVM100202-17|ICV|1|VOA|1|VOA8260BL|  
Misc : GEEL 5ML N/A MIX[A] 100126-01A/100202-01  
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Feb 03 22:35:00 2010  
Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M  
Quant Title : Volatile Organics 8260B SubList :  
QLast Update : Wed Feb 03 22:34:28 2010  
Response via : Initial Calibration  
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
45) trans-1,3-Dichloroprop...	11.213	11.213	0.897	75	513063	50.86	ug/L	100
46) 1,1,2-Trichloroethane	11.429	11.429	0.914	83	209672	49.76	ug/L	98
47) 2-Hexanone	11.623	11.627	0.929	43	1825213	206.05	ug/L	100
48) 1,3-Dichloropropane	11.616	11.620	0.929	76	472143	49.36	ug/L	91
49) Tetrachloroethylene	11.652	11.655	0.932	164	255197	49.71	ug/L	100
50) Dibromochloromethane	11.882	11.881	0.950	129	323944	52.62	ug/L	100
51) 1,2-Dibromoethane	12.044	12.044	0.963	107	265542	50.61	ug/L	99
52) Chlorobenzene	12.539	12.543	1.003	112	778021	49.68	ug/L	99
53) 1,1,1,2-Tetrachloroethane	12.596	12.599	1.007	131	323538	52.51	ug/L	99
54) Ethylbenzene	12.614	12.617	1.008	91	1471962	49.01	ug/L	99
55) m,p-Xylenes	12.727	12.730	1.018	106	1052288	98.32	ug/L	99
56) o-Xylene	13.162	13.162	1.052	106	525616	49.33	ug/L	99
57) Styrene	13.162	13.162	1.052	104	875848	50.48	ug/L	99
59) Bromoform	13.402	13.402	0.897	173	228315	54.08	ug/L	100
60) Isopropylbenzene	13.529	13.529	0.906	105	1466447	49.10	ug/L	100
62) 1,1,2,2-Tetrachloroethane	13.795	13.795	0.923	83	315226	46.97	ug/L	99
63) 1,2,3-Trichloropropane	13.880	13.879	0.929	110	105735	51.12	ug/L	99
64) Bromobenzene	13.918	13.918	0.932	156	347340	50.61	ug/L	98
65) n-Propylbenzene	13.957	13.957	0.934	91	1711392	48.23	ug/L	100
66) 1,3,5-Trimethylbenzene	14.117	14.116	0.945	105	1249767	49.18	ug/L	100
67) 2-Chlorotoluene	14.095	14.095	0.943	126	318655	49.93	ug/L	99
68) 4-Chlorotoluene	14.198	14.198	0.950	91	1076549	48.02	ug/L	100
69) tert-Butylbenzene	14.488	14.488	0.970	134	241370	50.28	ug/L	99
70) 1,2,4-Trimethylbenzene	14.530	14.530	0.973	105	1268936	48.97	ug/L	99
71) sec-Butylbenzene	14.714	14.718	0.985	105	1574467	49.18	ug/L	100
72) 4-Isopropyltoluene	14.841	14.841	0.993	119	1280921	49.30	ug/L	100
73) 1,3-Dichlorobenzene	14.884	14.884	0.996	146	602486	48.29	ug/L	100
74) 1,4-Dichlorobenzene	14.969	14.969	1.002	146	618780	47.91	ug/L	100
75) n-Butylbenzene	15.276	15.276	1.022	91	1267953	47.91	ug/L	99
76) 1,2-Dichlorobenzene	15.379	15.379	1.029	146	603515	48.90	ug/L	100
77) 1,2-Dibromo-3-chloropr...	16.192	16.192	1.084	157	79646	49.08	ug/L	99
78) 1,2,4-Trichlorobenzene	17.183	17.183	1.150	180	505922	47.68	ug/L	100
79) Hexachlorobutadiene	17.360	17.360	1.162	225	368933	51.14	ug/L	100
80) Naphthalene	17.530	17.529	1.173	128	1085444	47.05	ug/L	100
81) 1,2,3-Trichlorobenzene	17.847	17.847	1.195	180	502835	50.18	ug/L	100
83) Chlorotrifluoroethylene	3.651	3.661	0.391		0m	N.D.	d	
84) 2-Chloro-1,1,1-trifluo...	4.406	4.416	0.472		0m	N.D.	d	
85) Acrolein	5.902	5.898	0.632		0m	N.D.	d	
86) Trichlorotrifluoroethane	6.068	6.068	0.650		0m	N.D.	d	
87) Isopropyl Alcohol	6.191	6.188	0.663		0m	N.D.	d	
88) Allyl chloride	6.414	6.506	0.687		0m	N.D.	d	
89) tert-Butyl Alcohol	6.694	6.687	0.717		0m	N.D.	d	
90) Acrylonitrile	6.899	6.895	0.739		0m	N.D.	d	
91) Isopropyl ether	7.447	7.489	0.797		0m	N.D.	d	
92) 2-Chloro-1,3-butadiene	7.585	7.581	0.812		0m	N.D.	d	
93) Ethyl tert-butyl ether	8.105	7.893	0.868		0m	N.D.	d	
94) Ethyl acetate	8.059	8.094	0.863		0m	N.D.	d	
95) Propionitrile	8.055	8.122	0.863		0m	N.D.	d	
96) Methacrylonitrile	8.303	8.306	0.889		0m	N.D.	d	
97) Tetrahydrofuran	8.419	8.430	0.902		0m	N.D.	d	
98) Isobutyl alcohol	8.787	8.777	0.941		0m	N.D.	d	
99) Methyl tert-amyl ether	9.081	9.127	0.972		0m	N.D.	d	
100) Methyl methacrylate	9.979	9.968	1.069		0m	N.D.	d	
101) 1,4-Dioxane	10.092	10.060	1.081		0m	N.D.	d	

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\020210\  
Data File : AW321.D  
Acq On : 3 Feb 2010 6:48 am  
Operator : JEB  
InstName : VOAA  
Sample : |WAVM100202-17|ICV|1|VOA|1|VOA8260BL|  
Misc : GEEL 5ML N/A MIX[A] 100126-01A/100202-01  
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Feb 03 22:35:00 2010  
Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M  
Quant Title : Volatile Organics 8260B SubList :  
QLast Update : Wed Feb 03 22:34:28 2010  
Response via : Initial Calibration  
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
102) 2-Nitropropane	10.584	10.414	1.133		0m	N.D.	d
104) Ethyl methacrylate	11.238	11.238	0.898		0m	N.D.	d
106) 1-Chlorohexane	12.430	12.426	0.832		0m	N.D.	d
107) cis-1,4-Dichloro-2-butene	13.526	13.554	0.905		0m	N.D.	d
108) Cyclohexanone	13.660	13.657	0.914		0m	N.D.	d
109) trans-1,4-Dichloro-2-b...	13.841	13.844	0.926		0m	N.D.	d
110) Pentachloroethane	14.541	14.541	0.973		0m	N.D.	d
111) Benzyl chloride	15.082	15.082	1.009		0m	N.D.	d
112) bis(2-Chloroisopropyl)...	15.482	15.485	1.036		0m	N.D.	d

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

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Data Path : C:\msdchem\1\DATA\020210\
Data File : AW321.D
Acq On    : 3 Feb 2010 6:48 am
Operator  : JEB
InstName  : VOAA
Sample    : |WAVM100202-17|ICV|1|VOA|1|VOA8260BL|
Misc      : GEEL 5ML N/A MIX[A] 100126-01A/100202-01
ALS Vial  : 21 Sample Multiplier: 1

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[illegible]

## Continuing Calibration Summary

Client SDG: 10-1758

Instrument ID: VOAA.I

Injection Date 03-FEB-10 07:40

Data File: 020210\AW323.D

Init. Cal. Date(s) 02-FEB-10 22:55 - 03-FEB-10 05:55

Lab Sample ID WAVM100202-19 Quant Type ISTD

Method:122209\Methods\VOAA-8260-020210.M

Compound	AVERF / Amount	RF CCV	Nominal CCV	Min RF	RF Q	%D / %Drift	Max	Drift Q	Curve Type
S 1,2-Dichloroethane-d4	0.4158	0.41146		.01		-1.04377	30		Averaged
S Toluene-d8	1.3455	1.34459		.01		-0.06763	30		Averaged
S Bromofluorobenzene	1.0176	0.99795		.01		-1.93101	30		Averaged
Chlorotrifluoroethylene	0.1721	0.13162		.01		-23.52121	30		Averaged
2-Chloro-1,1,1-trifluoroethane	0.2574	0.24703		.01		-4.02875	30		Averaged
Acrolein	0.0493	0.03977		.01		-19.33063	30		Averaged
Trichlorotrifluoroethane	0.1038	0.1054		.01		1.54143	30		Averaged
Isopropyl Alcohol	0.0242	0.02382		.01		-1.57025	40		Averaged
Allyl chloride	0.471	0.43912		.01		-6.76858	30		Averaged
tert-Butyl Alcohol	0.0404	0.03953		.01		-2.15347	40		Averaged
Acrylonitrile	0.1026	0.09834		.01		-4.15205	30		Averaged
Isopropyl ether	1.0814	1.00659		.01		-6.91788	30		Averaged
2-Chloro-1,3-butadiene	0.4845	0.47933		.01		-1.06708	30		Averaged
Ethyl tert-butyl ether	1.0192	0.9653		.01		-5.28846	30		Averaged
Ethyl acetate	0.2917	0.25283		.01		-13.32533	40		Averaged
Propionitrile	0.0396	0.03804		.01		-3.93939	30		Averaged
Methacrylonitrile	0.183	0.16856		.01		-7.89071	30		Averaged
Tetrahydrofuran	0.0904	0.08491		.01		-6.07301	30		Averaged
Isobutyl alcohol	0.0117	0.01057		.01		-9.65812	40		Averaged
Methyl tert-amyl ether	0.7899	0.74292		.01		-5.94759	30		Averaged
Methyl methacrylate	0.1606	0.15118		.01		-5.8655	30		Averaged
1,4-Dioxane	0.0025	0.00259		.01		3.6	40		Averaged
2-Nitropropane	0.0854	0.08732		.01		2.24824	30		Averaged
Ethyl methacrylate	0.4209	0.40888		.01		-2.85579	30		Averaged
1-Chlorohexane	0.7881	0.71856		.01		-8.82375	30		Averaged
cis-1,4-Dichloro-2-butene	0.2673	0.27531		.01		2.99663	30		Averaged
Cyclohexanone	0.1254	0.03024		.01		-75.88517	40	*	Averaged
trans-1,4-Dichloro-2-butene	0.253	0.25984		.01		2.70356	30		Averaged
Pentachloroethane	0.1965	0.15216		.01		-22.56489	30		Averaged
Benzyl chloride	1.0648	0.95098		.01		-10.68933	30		Averaged
bis(2-Chloroisopropyl)ether	0.4315	0.41569		.01		-3.66396	30		Averaged

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\020210\  
Data File : AW323.D  
Acq On : 3 Feb 2010 7:40 am  
Operator : JEB  
InstName : VOAA  
Sample : |WAVM100202-19|ICV|1|VOA|1|VOA8260BL|  
Misc : GEEL 5ML N/A MIX[B] 100125-08A/100118-08A  
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Feb 03 22:35:17 2010  
Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M  
Quant Title : Volatile Organics 8260B SubList :  
QLast Update : Wed Feb 03 22:34:28 2010  
Response via : Initial Calibration  
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
Internal Standards								Dev(Min)
1) Fluorobenzene	9.339	9.342	1.000	96	1257590	50.00	ug/L	0.00
41) Chlorobenzene-d5	12.507	12.507	1.000	117	917718	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	14.944	14.944	1.000	152	533691	50.00	ug/L	0.00
82) B Fluorobenzene	9.339	9.339	1.000	96	1257590	50.00	ug/L	0.00
103) B Chlorobenzene-d5	12.507	12.508	1.000	117	917718	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	14.944	14.944	1.000	152	533691	50.00	ug/L	0.00
System Monitoring Compounds								Dev(Min)
29) 1,2-Dichloroethane-d4	8.978	8.982	0.961	65	517449	49.47	ug/L	0.00
43) Toluene-d8	10.983	10.987	0.878	98	1233954	49.97	ug/L	0.00
61) Bromofluorobenzene	13.713	13.713	0.918	95	532598	49.04	ug/L	0.00
Target Compounds								QValue
2) Dichlorodifluoromethane	3.651	3.731	0.391		0m	N.D.	d	
3) Chloromethane	4.023	4.043	0.431		0m	N.D.	d	
4) Vinyl chloride	4.255	4.265	0.456		0m	N.D.	d	
5) Bromomethane	4.829	4.839	0.517		0m	N.D.	d	
6) Chloroethane	4.990	4.990	0.534		0m	N.D.	d	
7) Trichlorofluoromethane	5.367	5.382	0.575		0m	N.D.	d	
8) Ethyl ether	5.732	5.732	0.614		0m	N.D.	d	
9) Acetone	6.089	6.082	0.652		0m	N.D.	d	
10) 1,1-Dichloroethylene	6.071	6.082	0.650		0m	N.D.	d	
11) Iodomethane	6.305	6.305	0.675		0m	N.D.	d	
12) Acetonitrile	6.510	6.421	0.697		0m	N.D.	d	
13) Methyl acetate	6.683	6.481	0.716		0m	N.D.	d	
14) Carbon disulfide	6.428	6.428	0.688		0m	N.D.	d	
15) Methylene chloride	6.648	6.651	0.712		0m	N.D.	d	
16) tert-Butyl methyl ether	6.980	6.973	0.747		0m	N.D.	d	
17) trans-1,2-Dichloroethy...	6.998	6.994	0.749		0m	N.D.	d	
18) Vinyl acetate	7.489	7.454	0.802		0m	N.D.	d	
19) 1,1-Dichloroethane	7.471	7.471	0.800		0m	N.D.	d	
20) 2-Butanone	8.094	8.062	0.867		0m	N.D.	d	
21) cis-1,2-Dichloroethylene	8.094	8.108	0.867		0m	N.D.	d	
22) 2,2-Dichloropropane	8.140	8.140	0.872		0m	N.D.	d	
23) Bromochloromethane	0.000	8.373	0.000		0	N.D.		
24) Chloroform	8.419	8.423	0.902		0m	N.D.	d	
25) 1,1,1-Trichloroethane	8.692	8.692	0.931		0m	N.D.	d	
26) Cyclohexane	8.776	8.791	0.940		0m	N.D.	d	
27) 1,1-Dichloropropene	8.851	8.851	0.948		0m	N.D.	d	
28) Carbon tetrachloride	8.893	8.886	0.952		0m	N.D.	d	
30) 1,2-Dichloroethane	9.063	9.063	0.970		0m	N.D.	d	
31) Benzene	9.084	9.084	0.973		0m	N.D.	d	
32) Cyclohexene	9.204	9.208	0.986		0m	N.D.	d	
33) n-Butyl alcohol	9.466	9.462	1.014		0m	N.D.	d	
34) Trichloroethylene	9.731	9.731	1.042		0m	N.D.	d	
35) 1,2-Dichloropropane	9.965	9.965	1.067		0m	N.D.	d	
36) Methylcyclohexane	9.968	9.982	1.067		0m	N.D.	d	
37) Dibromomethane	10.095	10.095	1.081		0m	N.D.	d	
38) Bromodichloromethane	10.219	10.216	1.094		0m	N.D.	d	
39) 2-Chloroethylvinyl ether	10.456	10.453	1.120		0m	N.D.	d	
40) cis-1,3-Dichloropropylene	10.672	10.668	1.143		0m	N.D.	d	
42) 4-Methyl-2-pentanone	10.774	10.774	0.861		0m	N.D.	d	
44) Toluene	11.061	11.057	0.884		0m	N.D.	d	

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\020210\  
Data File : AW323.D  
Acq On : 3 Feb 2010 7:40 am  
Operator : JEB  
InstName : VOAA  
Sample : |WAVM100202-19|ICV|1|VOA|1|VOA8260BL|  
Misc : GEEL 5ML N/A MIX[B] 100125-08A/100118-08A  
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Feb 03 22:35:17 2010

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

Quant Title : Volatile Organics 8260B

SubList :

QLast Update : Wed Feb 03 22:34:28 2010

Response via : Initial Calibration

Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
45) trans-1,3-Dichloroprop...	11.213	11.213	0.897		0m	N.D.	d
46) 1,1,2-Trichloroethane	11.425	11.429	0.913		0m	N.D.	d
47) 2-Hexanone	11.623	11.627	0.929		0m	N.D.	d
48) 1,3-Dichloropropane	11.616	11.620	0.929		0m	N.D.	d
49) Tetrachloroethylene	11.651	11.655	0.932		0m	N.D.	d
50) Dibromochloromethane	11.888	11.881	0.951		0m	N.D.	d
51) 1,2-Dibromoethane	12.040	12.044	0.963		0m	N.D.	d
52) Chlorobenzene	12.539	12.543	1.003		0m	N.D.	d
53) 1,1,1,2-Tetrachloroethane	12.596	12.599	1.007		0m	N.D.	d
54) Ethylbenzene	12.617	12.617	1.009		0m	N.D.	d
55) m,p-Xylenes	12.727	12.730	1.018		0m	N.D.	d
56) o-Xylene	13.165	13.162	1.053		0m	N.D.	d
57) Styrene	13.162	13.162	1.052		0m	N.D.	d
59) Bromoform	13.406	13.402	0.897		0m	N.D.	d
60) Isopropylbenzene	13.526	13.529	0.905		0m	N.D.	d
62) 1,1,2,2-Tetrachloroethane	13.795	13.795	0.923		0m	N.D.	d
63) 1,2,3-Trichloropropane	0.000	13.879	0.000		0	N.D.	
64) Bromobenzene	13.915	13.918	0.931		0m	N.D.	d
65) n-Propylbenzene	13.957	13.957	0.934		0m	N.D.	d
66) 1,3,5-Trimethylbenzene	14.116	14.116	0.945		0m	N.D.	d
67) 2-Chlorotoluene	14.095	14.095	0.943		0m	N.D.	d
68) 4-Chlorotoluene	14.201	14.198	0.950		0m	N.D.	d
69) tert-Butylbenzene	14.491	14.488	0.970		0m	N.D.	d
70) 1,2,4-Trimethylbenzene	14.530	14.530	0.972		0m	N.D.	d
71) sec-Butylbenzene	14.714	14.718	0.985		0m	N.D.	d
72) 4-Isopropyltoluene	14.845	14.841	0.993		0m	N.D.	d
73) 1,3-Dichlorobenzene	14.884	14.884	0.996		0m	N.D.	d
74) 1,4-Dichlorobenzene	14.969	14.969	1.002		0m	N.D.	d
75) n-Butylbenzene	15.276	15.276	1.022		0m	N.D.	d
76) 1,2-Dichlorobenzene	15.382	15.379	1.029		0m	N.D.	d
77) 1,2-Dibromo-3-chloropr...	16.192	16.192	1.084		0m	N.D.	d
78) 1,2,4-Trichlorobenzene	17.183	17.183	1.150		0m	N.D.	d
79) Hexachlorobutadiene	17.367	17.360	1.162		0m	N.D.	d
80) Naphthalene	17.529	17.529	1.173		0m	N.D.	d
81) 1,2,3-Trichlorobenzene	17.847	17.847	1.194		0m	N.D.	d
83) Chlorotrifluoroethylene	3.661	3.661	0.392	116	496559	114.69	ug/L 100
84) 2-Chloro-1,1,1-trifluo...	4.416	4.416	0.473	118	931987	143.98	ug/L 100
85) Acrolein	5.898	5.898	0.632	56	250080	201.81	ug/L 99
86) Trichlorotrifluoroethane	6.071	6.068	0.650	85	662722	253.79	ug/L 99
87) Isopropyl Alcohol	6.188	6.188	0.663	45	1498060	2464.75	ug/L 99
88) Allyl chloride	6.510	6.506	0.697	41	2761188	233.07	ug/L 99
89) tert-Butyl Alcohol	6.686	6.687	0.716	59	2485789	2445.17	ug/L 100
90) Acrylonitrile	6.899	6.895	0.739	53	618366	239.72	ug/L 99
91) Isopropyl ether	7.489	7.489	0.802	45	1265875	46.54	ug/L 99
92) 2-Chloro-1,3-butadiene	7.581	7.581	0.812	53	602806	49.46	ug/L 99
93) Ethyl tert-butyl ether	7.892	7.893	0.845	59	1213957	47.36	ug/L 100
94) Ethyl acetate	8.094	8.094	0.867	43	1589756	216.68	ug/L 100
95) Propionitrile	8.122	8.122	0.870	54	239166	240.18	ug/L 99
96) Methacrylonitrile	8.306	8.306	0.889	41	1059868	230.31	ug/L 100
97) Tetrahydrofuran	8.430	8.430	0.903	42	533886	234.91	ug/L 99
98) Isobutyl alcohol	8.776	8.777	0.940	41	664588	2255.08	ug/L 100
99) Methyl tert-amyl ether	9.130	9.127	0.978	73	934288	47.03	ug/L 98
100) Methyl methacrylate	9.968	9.968	1.067	69	950624	235.40	ug/L 99
101) 1,4-Dioxane	10.060	10.060	1.077	88	162970	2569.59	ug/L 100



Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\020210\  
Data File : AW323.D  
Acq On : 3 Feb 2010 7:40 am  
Operator : JEB  
InstName : VOAA  
Sample : |WAVM100202-19|ICV|1|VOA|1|VOA8260BL|  
Misc : GEEL 5ML N/A MIX[B] 100125-08A/100118-08A  
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Feb 03 22:35:17 2010  
Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M  
Quant Title : Volatile Organics 8260B SubList :  
QLast Update : Wed Feb 03 22:34:28 2010  
Response via : Initial Calibration  
Integrator: RTE

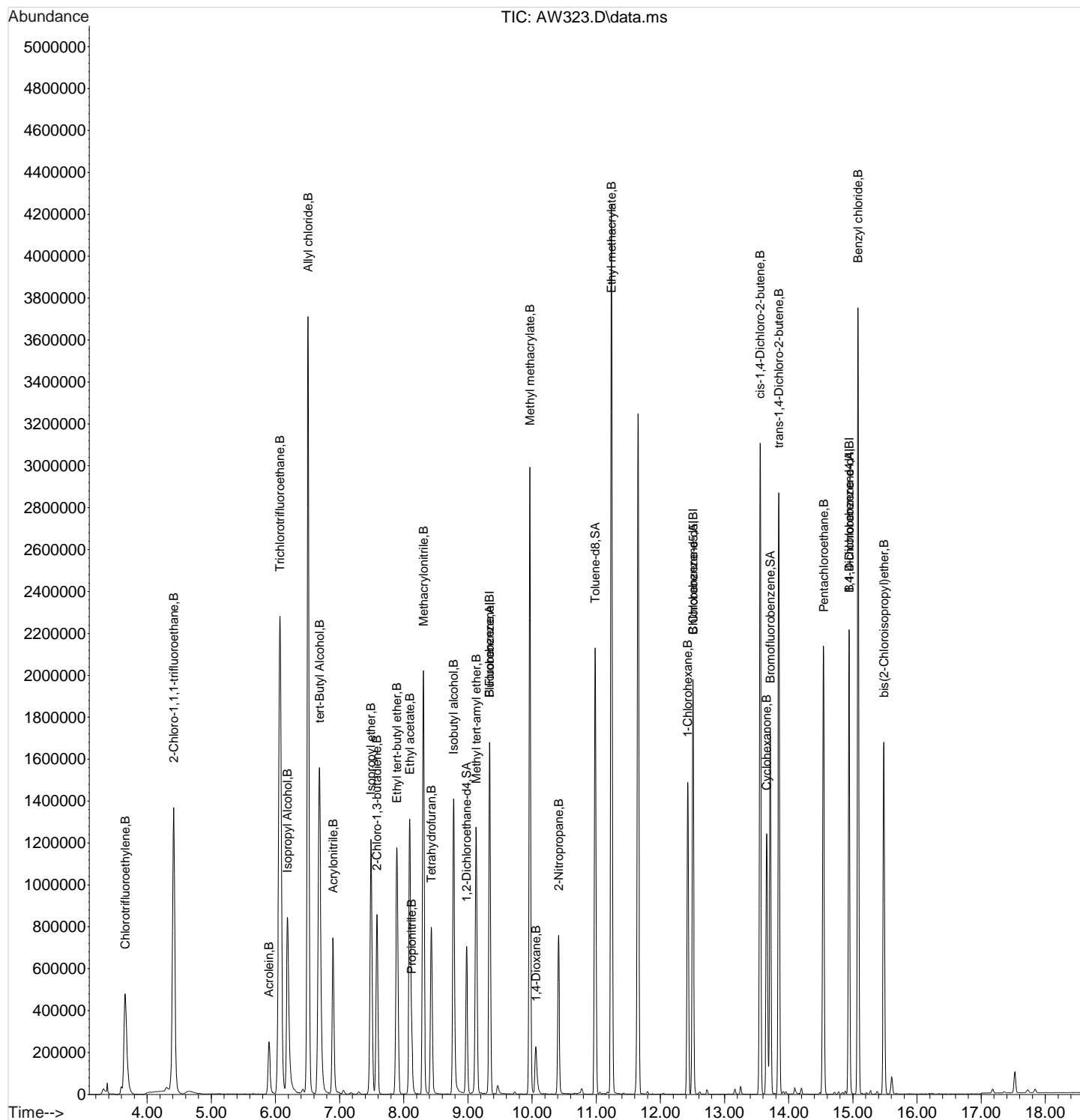
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
102) 2-Nitropropane	10.414	10.414	1.115	43	549045	255.61	ug/L	99
104) Ethyl methacrylate	11.238	11.238	0.898	69	1876183	242.84	ug/L	99
106) 1-Chlorohexane	12.426	12.426	0.832	55	383489	45.59	ug/L	99
107) cis-1,4-Dichloro-2-butene	13.554	13.554	0.907	53	734656	257.48	ug/L	100
108) Cyclohexanone	13.657	13.657	0.914	42	403446	301.54	ug/L	99
109) trans-1,4-Dichloro-2-b...	13.848	13.844	0.927	53	693381	256.78	ug/L	99
110) Pentachloroethane	14.544	14.541	0.973	167	406032	193.57	ug/L	99
111) Benzyl chloride	15.082	15.082	1.009	91	2537655	223.28	ug/L	100
112) bis(2-Chloroisopropyl)...	15.485	15.485	1.036	45	1109248	240.84	ug/L	100

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

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\020210\  
Data File : AW323.D  
Acq On : 3 Feb 2010 7:40 am  
Operator : JEB  
InstName : VOAA  
Sample : |WAVM100202-19|ICV|1|VOA|1|VOA8260BL|  
Misc : GEEL 5ML N/A MIX[B] 100125-08A/100118-08A  
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Feb 03 22:35:17 2010  
Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M  
Quant Title : Volatile Organics 8260B SubList :  
QLast Update : Wed Feb 03 22:34:28 2010  
Response via : Initial Calibration  
Integrator: RTE



## Continuing Calibration Summary

Client SDG: 10-1758

Instrument ID: VOAA.I

Injection Date 19-FEB-10 05:41

Data File: 021810\AY428.D

Init. Cal. Date(s) 02-FEB-10 22:55 - 03-FEB-10 05:55

Lab Sample ID WAVM100218-04 Quant Type ISTD

Method:122209\Methods\VOAA-8260-020210.M

Compound	AVERF / Amount	RF CCV	Nominal CCV	Min RF	RF Q	%D / %Drift	Max	Drift Q	Curve Type	
S 1,2-Dichloroethane-d4	0.4158	0.40171		.01		-3.38865	30		Averaged	
S Toluene-d8	1.3455	1.33879		.01		-0.4987	30		Averaged	
S Bromofluorobenzene	1.0176	0.93255		.01		-8.3579	30		Averaged	
Dichlorodifluoromethane	0.2391	0.24992		.01		4.5253	30		Averaged	
Chloromethane	0.327	0.26548		.1		-18.81346	30		Averaged	spcc
Vinyl chloride	0.2967	0.29203		.01		-1.57398	20		Averaged	ccc
Bromomethane	0.1853	0.20893		.01		12.75229	30		Averaged	
Chloroethane	50	54.3	50			8.6	30		Linear	
Trichlorofluoromethane	0.4524	0.4915		.01		8.64279	30		Averaged	
Ethyl ether	0.2406	0.22215		.01		-7.66833	30		Averaged	
Acetone	0.2391	0.13502		.01		-43.5299	40	*	Averaged	
1,1-Dichloroethylene	0.4538	0.44244		.01		-2.50331	20		Averaged	ccc
Iodomethane	0.3799	0.4377		.01		15.21453	30		Averaged	
Acetonitrile	0.0394	0.02881		.01		-26.87817	30		Averaged	
Carbon disulfide	0.7159	0.76988		.01		7.54016	30		Averaged	
Methyl acetate	0.2276	0.18109		.01		-20.43497	40		Averaged	
Methylene chloride	50	53.03	50			6.06	30		Linear	
tert-Butyl methyl ether	0.829	0.76542		.01		-7.66948	30		Averaged	
trans-1,2-Dichloroethylene	0.4414	0.42669		.01		-3.33258	30		Averaged	
Vinyl acetate	0.5665	0.45922		.01		-18.93733	40		Averaged	
1,1-Dichloroethane	0.5226	0.51372		.1		-1.6992	30		Averaged	spcc
2-Butanone	0.2664	0.17938		.01		-32.66517	40		Averaged	
cis-1,2-Dichloroethylene	0.5024	0.48869		.01		-2.7289	30		Averaged	
2,2-Dichloropropane	0.46	0.45991		.01		-0.01957	30		Averaged	
Bromochloromethane	0.1151	0.127		.01		10.33884	30		Averaged	
Chloroform	0.5087	0.54844		.01		7.81207	20		Averaged	ccc
1,1,1-Trichloroethane	0.4877	0.52596		.01		7.84499	30		Averaged	
Cyclohexane	0.5241	0.48704		.01		-7.07117	30		Averaged	
1,1-Dichloropropene	0.374	0.38304		.01		2.41711	30		Averaged	
Carbon tetrachloride	0.4241	0.47332		.01		11.60575	30		Averaged	
1,2-Dichloroethane	0.4784	0.48645		.01		1.68269	30		Averaged	
Benzene	0.9421	0.95607		.01		1.48286	30		Averaged	
Cyclohexene	0.5227	0.49694		.01		-4.92826	30		Averaged	
n-Butyl alcohol	0.0091	0.00834		.01		-8.35165	40		Averaged	
Trichloroethylene	0.2624	0.28319		.01		7.92302	30		Averaged	
1,2-Dichloropropane	0.2719	0.26556		.01		-2.33174	20		Averaged	ccc
Methylcyclohexane	0.4278	0.43507		.01		1.69939	30		Averaged	

## Continuing Calibration Summary

Instrument ID: VOAA.I

Injection Date 19-FEB-10 05:41

Data File: 021810\AY428.D

Init. Cal. Date(s) 02-FEB-10 22:55 03-FEB-10 05:55

Lab Sample ID WAVM100218-04 Quant Type ISTD

Method:122209\Methods\VOAA-8260-020210.M

Compound	AVERF / Amount	RF CCV	Nominal CCV	Min RF	RF Q	%D / %Drift	Max	Drift Q	Curve Type	
Dibromomethane	0.1569	0.17313		.01		10.34417	30		Averaged	
Bromodichloromethane	0.3724	0.40477		.01		8.69227	30		Averaged	
2-Chloroethylvinyl ether	0.145	0.15692		.01		8.22069	30		Averaged	
cis-1,3-Dichloropropylene	0.4071	0.42723		.01		4.94473	30		Averaged	
4-Methyl-2-pentanone	0.1672	0.14799		.01		-11.48923	40		Averaged	
Toluene	1.3614	1.39231		.01		2.27046	20		Averaged	ccc
trans-1,3-Dichloropropylene	0.5532	0.57584		.01		4.09255	30		Averaged	
1,1,2-Trichloroethane	0.2311	0.24134		.01		4.43098	30		Averaged	
2-Hexanone	0.4858	0.35537		.01		-26.8485	40		Averaged	
1,3-Dichloropropane	0.5246	0.53923		.01		2.78879	30		Averaged	
Tetrachloroethylene	0.2815	0.335		.01		19.00533	30		Averaged	
Dibromochloromethane	0.3376	0.36918		.01		9.35427	30		Averaged	
1,2-Dibromoethane	0.2877	0.3089		.01		7.36879	30		Averaged	
Chlorobenzene	0.8588	0.90374		.3		5.23288	30		Averaged	spcc
1,1,1,2-Tetrachloroethane	0.3379	0.38763		.01		14.71737	30		Averaged	
Ethylbenzene	1.6471	1.70918		.01		3.76905	20		Averaged	ccc
m,p-Xylenes	0.5869	0.60917		.01		3.79451	30		Averaged	
o-Xylene	0.5842	0.60755		.01		3.99692	30		Averaged	
Styrene	0.9515	0.98346		.01		3.35891	30		Averaged	
Bromoform	0.4035	0.45548		.1		12.88228	30		Averaged	spcc
Isopropylbenzene	2.8546	2.74268		.01		-3.92069	30		Averaged	
1,1,2,2-Tetrachloroethane	0.6415	0.62642		.3		-2.35074	30		Averaged	spcc
1,2,3-Trichloropropane	0.1977	0.20067		.01		1.50228	30		Averaged	
Bromobenzene	0.656	0.74238		.01		13.16768	30		Averaged	
n-Propylbenzene	3.3917	3.27965		.01		-3.30365	30		Averaged	
2-Chlorotoluene	0.61	0.60673		.01		-0.53607	30		Averaged	
1,3,5-Trimethylbenzene	2.4291	2.37592		.01		-2.18929	30		Averaged	
4-Chlorotoluene	2.1429	2.06348		.01		-3.70619	30		Averaged	
tert-Butylbenzene	0.4589	0.47026		.01		2.47548	30		Averaged	
1,2,4-Trimethylbenzene	2.4767	2.42655		.01		-2.02487	30		Averaged	
sec-Butylbenzene	3.06	2.97915		.01		-2.64216	30		Averaged	
4-Isopropyltoluene	2.4837	2.4216		.01		-2.5003	30		Averaged	
1,3-Dichlorobenzene	1.1925	1.30695		.01		9.59748	30		Averaged	
1,4-Dichlorobenzene	1.2344	1.33544		.01		8.18535	30		Averaged	
n-Butylbenzene	2.5295	2.43712		.01		-3.65211	30		Averaged	
1,2-Dichlorobenzene	1.1797	1.28923		.01		9.28456	30		Averaged	
1,2-Dibromo-3-chloropropane	50	44.55	50			-10.9	30		Linear	

## Continuing Calibration Summary

Instrument ID: VOAA.I

Injection Date 19-FEB-10 05:41

Data File: 021810\AY428.D

Init. Cal. Date(s) 02-FEB-10 22:55 03-FEB-10 05:55

Lab Sample ID WAVM100218-04 Quant Type ISTD

Method:122209\Methods\VOAA-8260-020210.M

Compound	AVERF / Amount	RF CCV	Nominal CCV	Min RF	RF Q	%D / %Drift	Max	Drift Q	Curve Type
1,2,4-Trichlorobenzene	1.0142	1.16742		.01		15.10747	30		Averaged
Hexachlorobutadiene	0.6896	0.84612		.01		22.69722	30		Averaged
Naphthalene	2.2052	2.20485		.01		-0.01587	30		Averaged
1,2,3-Trichlorobenzene	0.9577	1.12358		.01		17.32066	30		Averaged

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\021810\  
Data File : AY428.D  
Acq On : 19 Feb 2010 5:41 am  
Operator : JEB  
InstName : VOAA  
Sample : |WAVM100218-04|CCV|1|VOA|1|VOA8260BL|  
Misc : GEEL 5G N/A MIX[A] SOIL100126-01E/100218-01  
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Feb 19 13:46:25 2010  
Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M  
Quant Title : Volatile Organics 8260B SubList :  
QLast Update : Wed Feb 03 22:34:28 2010  
Response via : Initial Calibration  
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
Internal Standards								Dev(Min)
1) Fluorobenzene	9.339	9.342	1.000	96	955921	50.00	ug/L	0.00
41) Chlorobenzene-d5	12.507	12.507	1.000	117	710200	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	14.940	14.944	1.000	152	441150	50.00	ug/L	0.00
82) B Fluorobenzene	9.339	9.339	1.000	96	955921	50.00	ug/L	0.00
103) B Chlorobenzene-d5	12.507	12.508	1.000	117	710200	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	14.940	14.944	1.000	152	441150	50.00	ug/L	0.00
System Monitoring Compounds								Dev(Min)
29) 1,2-Dichloroethane-d4	8.978	8.982	0.961	65	384000	48.30	ug/L	0.00
43) Toluene-d8	10.983	10.987	0.878	98	950806	49.75	ug/L	0.00
61) Bromofluorobenzene	13.713	13.713	0.918	95	411393	45.82	ug/L	0.00
Target Compounds								QValue
2) Dichlorodifluoromethane	3.731	3.731	0.400	85	238907	52.25	ug/L	100
3) Chloromethane	4.043	4.043	0.433	50	253775	40.59	ug/L	97
4) Vinyl chloride	4.265	4.265	0.457	62	279156	49.21	ug/L	99
5) Bromomethane	4.839	4.839	0.518	94	199723	56.37	ug/L	99
6) Chloroethane	4.990	4.990	0.534	64	114295	54.30	ug/L	95
7) Trichlorofluoromethane	5.378	5.382	0.576	101	469838	54.33	ug/L	100
8) Ethyl ether	5.728	5.732	0.613	59	212360	46.16	ug/L	92
9) Acetone	6.078	6.082	0.651	43	645355	141.17	ug/L	93
10) 1,1-Dichloroethylene	6.078	6.082	0.651	61	422935	48.75	ug/L	96
11) Iodomethane	6.301	6.305	0.675	142	2092050	288.01	ug/L	98
12) Acetonitrile	6.414	6.421	0.687	41	688407	913.57	ug/L	99
13) Methyl acetate	6.478	6.481	0.694	43	865520	198.87	ug/L	94
14) Carbon disulfide	6.425	6.428	0.688	76	3679729	268.85	ug/L	100
15) Methylene chloride	6.648	6.651	0.712	84	244404	53.03	ug/L	87
16) tert-Butyl methyl ether	6.969	6.973	0.746	73	731681	46.16	ug/L	96
17) trans-1,2-Dichloroethy...	6.994	6.994	0.749	61	407885	48.34	ug/L	93
18) Vinyl acetate	7.450	7.454	0.798	43	2194896	202.66	ug/L	95
19) 1,1-Dichloroethane	7.468	7.471	0.800	63	491075	49.15	ug/L	99
20) 2-Butanone	8.062	8.062	0.863	43	857376	168.33	ug/L	92
21) cis-1,2-Dichloroethylene	8.105	8.108	0.868	61	467145	48.64	ug/L	93
22) 2,2-Dichloropropane	8.136	8.140	0.871	77	439633	49.99	ug/L	86
23) Bromochloromethane	8.370	8.373	0.896	128	121401	55.19	ug/L	# 85
24) Chloroform	8.419	8.423	0.902	83	524270	53.90	ug/L	100
25) 1,1,1-Trichloroethane	8.692	8.692	0.931	97	502772	53.92	ug/L	97
26) Cyclohexane	8.787	8.791	0.941	56	465573	46.46	ug/L	95
27) 1,1-Dichloropropene	8.847	8.851	0.947	75	366158	51.21	ug/L	88
28) Carbon tetrachloride	8.883	8.886	0.951	117	452457	55.81	ug/L	100
30) 1,2-Dichloroethane	9.059	9.063	0.970	62	465008	50.84	ug/L	99
31) Benzene	9.084	9.084	0.973	78	913925	50.74	ug/L	97
32) Cyclohexene	9.204	9.208	0.986	67	475033	47.53	ug/L	96
33) n-Butyl alcohol	9.459	9.462	1.013	56	797268	4581.47	ug/L	90
34) Trichloroethylene	9.728	9.731	1.042	95	270711	53.95	ug/L	99
35) 1,2-Dichloropropane	9.965	9.965	1.067	63	253854	48.84	ug/L	96
36) Methylcyclohexane	9.979	9.982	1.069	83	415894	50.85	ug/L	92
37) Dibromomethane	10.092	10.095	1.081	93	165500	55.19	ug/L	93
38) Bromodichloromethane	10.212	10.216	1.094	83	386931	54.35	ug/L	99
39) 2-Chloroethylvinyl ether	10.453	10.453	1.119	63	750026	270.62	ug/L	98
40) cis-1,3-Dichloropropylene	10.668	10.668	1.142	75	408400	52.48	ug/L	89
42) 4-Methyl-2-pentanone	10.775	10.774	0.861	58	525498	221.31	ug/L	# 81
44) Toluene	11.057	11.057	0.884	91	988818	51.13	ug/L	99

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\021810\  
Data File : AY428.D  
Acq On : 19 Feb 2010 5:41 am  
Operator : JEB  
InstName : VOAA  
Sample : |WAVM100218-04|CCV|1|VOA|1|VOA8260BL|  
Misc : GEEL 5G N/A MIX[A] SOIL100126-01E/100218-01  
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Feb 19 13:46:25 2010  
Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M  
Quant Title : Volatile Organics 8260B SubList :  
QLast Update : Wed Feb 03 22:34:28 2010  
Response via : Initial Calibration  
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
45) trans-1,3-Dichloroprop...	11.213	11.213	0.897	75	408963	52.05	ug/L	90
46) 1,1,2-Trichloroethane	11.425	11.429	0.913	83	171401	52.22	ug/L	98
47) 2-Hexanone	11.623	11.627	0.929	43	1261925	182.90	ug/L	91
48) 1,3-Dichloropropane	11.616	11.620	0.929	76	382963	51.40	ug/L #	74
49) Tetrachloroethylene	11.652	11.655	0.932	164	237915	59.50	ug/L	92
50) Dibromochloromethane	11.878	11.881	0.950	129	262190	54.68	ug/L	99
51) 1,2-Dibromoethane	12.044	12.044	0.963	107	219379	53.67	ug/L	100
52) Chlorobenzene	12.539	12.543	1.003	112	641834	52.62	ug/L	98
53) 1,1,1,2-Tetrachloroethane	12.596	12.599	1.007	131	275297	57.36	ug/L	97
54) Ethylbenzene	12.613	12.617	1.008	91	1213859	51.88	ug/L	99
55) m,p-Xylenes	12.727	12.730	1.018	106	865260	103.80	ug/L	97
56) o-Xylene	13.162	13.162	1.052	106	431485	52.00	ug/L	99
57) Styrene	13.162	13.162	1.052	104	698455	51.68	ug/L	99
59) Bromoform	13.402	13.402	0.897	173	200936	56.44	ug/L	100
60) Isopropylbenzene	13.526	13.529	0.905	105	1209932	48.04	ug/L	100
62) 1,1,2,2-Tetrachloroethane	13.791	13.795	0.923	83	276346	48.83	ug/L	99
63) 1,2,3-Trichloropropane	13.876	13.879	0.929	110	88524	50.75	ug/L	95
64) Bromobenzene	13.918	13.918	0.932	156	327499	56.59	ug/L	87
65) n-Propylbenzene	13.957	13.957	0.934	91	1446816	48.35	ug/L	100
66) 1,3,5-Trimethylbenzene	14.116	14.116	0.945	105	1048139	48.90	ug/L	99
67) 2-Chlorotoluene	14.095	14.095	0.943	126	267661	49.73	ug/L	99
68) 4-Chlorotoluene	14.198	14.198	0.950	91	910306	48.15	ug/L	99
69) tert-Butylbenzene	14.488	14.488	0.970	134	207457	51.24	ug/L	91
70) 1,2,4-Trimethylbenzene	14.530	14.527	0.973	105	1070474	48.99	ug/L	100
71) sec-Butylbenzene	14.714	14.718	0.985	105	1314253	48.68	ug/L	98
72) 4-Isopropyltoluene	14.841	14.841	0.993	119	1068288	48.75	ug/L	99
73) 1,3-Dichlorobenzene	14.884	14.884	0.996	146	576559	54.80	ug/L	96
74) 1,4-Dichlorobenzene	14.969	14.969	1.002	146	589128	54.09	ug/L	96
75) n-Butylbenzene	15.276	15.276	1.022	91	1075137	48.17	ug/L	99
76) 1,2-Dichlorobenzene	15.379	15.379	1.029	146	568742	54.64	ug/L	97
77) 1,2-Dibromo-3-chloropr...	16.192	16.192	1.084	157	60893	44.55	ug/L	94
78) 1,2,4-Trichlorobenzene	17.183	17.183	1.150	180	515006	57.56	ug/L	100
79) Hexachlorobutadiene	17.360	17.360	1.162	225	373265	61.35	ug/L	100
80) Naphthalene	17.530	17.529	1.173	128	972669	49.99	ug/L	100
81) 1,2,3-Trichlorobenzene	17.847	17.847	1.195	180	495669	58.66	ug/L	98
83) Chlorotrifluoroethylene	0.000	3.661	0.000		0	N.D.		
84) 2-Chloro-1,1,1-trifluo...	0.000	4.416	0.000		0	N.D.		
85) Acrolein	5.855	5.898	0.627		0m	N.D.	d	
86) Trichlorotrifluoroethane	0.000	6.068	0.000		0	N.D.		
87) Isopropyl Alcohol	6.428	6.188	0.688		0m	N.D.	d	
88) Allyl chloride	6.414	6.506	0.687		0m	N.D.	d	
89) tert-Butyl Alcohol	6.478	6.687	0.694		0m	N.D.	d	
90) Acrylonitrile	6.962	6.895	0.746		0m	N.D.	d	
91) Isopropyl ether	7.447	7.489	0.797		0m	N.D.	d	
92) 2-Chloro-1,3-butadiene	7.613	7.581	0.815		0m	N.D.	d	
93) Ethyl tert-butyl ether	8.105	7.893	0.868		0m	N.D.	d	
94) Ethyl acetate	8.062	8.094	0.863		0m	N.D.	d	
95) Propionitrile	8.059	8.122	0.863		0m	N.D.	d	
96) Methacrylonitrile	8.416	8.306	0.901		0m	N.D.	d	
97) Tetrahydrofuran	8.430	8.430	0.903		0m	N.D.	d	
98) Isobutyl alcohol	8.787	8.777	0.941		0m	N.D.	d	
99) Methyl tert-amyl ether	9.084	9.127	0.973		0m	N.D.	d	
100) Methyl methacrylate	9.979	9.968	1.069		0m	N.D.	d	
101) 1,4-Dioxane	0.000	10.060	0.000		0	N.D.		

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\021810\  
Data File : AY428.D  
Acq On : 19 Feb 2010 5:41 am  
Operator : JEB  
InstName : VOAA  
Sample : |WAVM100218-04|CCV|1|VOA|1|VOA8260BL|  
Misc : GEEL 5G N/A MIX[A] SOIL100126-01E/100218-01  
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Feb 19 13:46:25 2010  
Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M  
Quant Title : Volatile Organics 8260B SubList :  
QLast Update : Wed Feb 03 22:34:28 2010  
Response via : Initial Calibration  
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
102) 2-Nitropropane	10.453	10.414	1.119		0m	N.D.	d
104) Ethyl methacrylate	10.994	11.238	0.879		0m	N.D.	d
106) 1-Chlorohexane	0.000	12.426	0.000		0	N.D.	
107) cis-1,4-Dichloro-2-butene	13.529	13.554	0.906		0m	N.D.	d
108) Cyclohexanone	13.533	13.657	0.906		0m	N.D.	d
109) trans-1,4-Dichloro-2-b...	13.957	13.844	0.934		0m	N.D.	d
110) Pentachloroethane	14.541	14.541	0.973		0m	N.D.	d
111) Benzyl chloride	14.937	15.082	1.000		0m	N.D.	d
112) bis(2-Chloroisopropyl)...	15.602	15.485	1.044		0m	N.D.	d

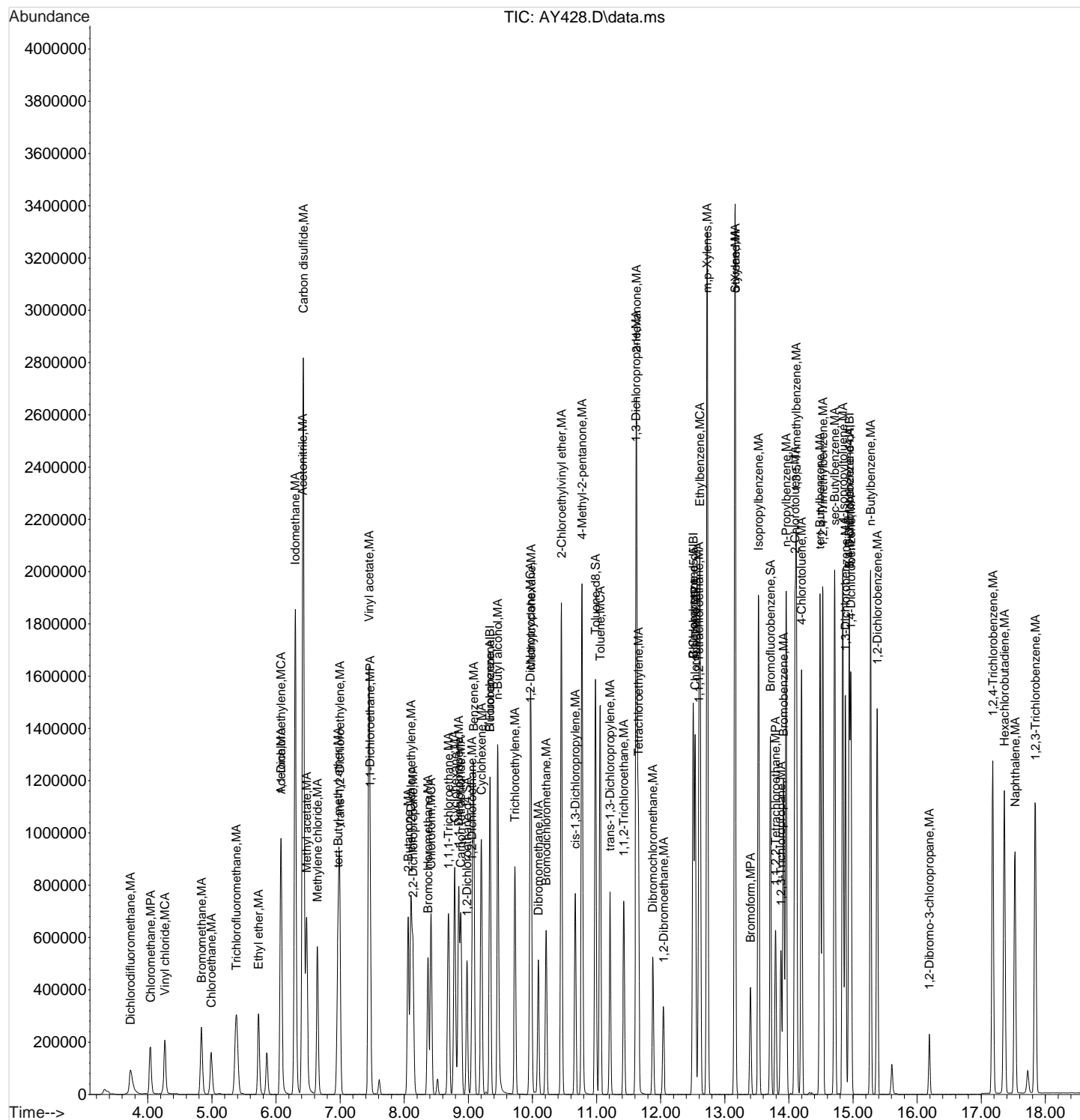
(#) = qualifier out of range (m) = manual integration (+) = signals summed  
(E) = Over the calibration range (d) = deleted



Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\021810\  
Data File : AY428.D  
Acq On : 19 Feb 2010 5:41 am  
Operator : JEB  
InstName : VOAA  
Sample : |WAVM100218-04|CCV|1|VOA|1|VOA8260BL|  
Misc : GEEL 5G N/A MIX[A] SOIL100126-01E/100218-01  
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Feb 19 13:46:25 2010  
Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M  
Quant Title : Volatile Organics 8260B SubList :  
QLast Update : Wed Feb 03 22:34:28 2010  
Response via : Initial Calibration  
Integrator: RTE



## Continuing Calibration Summary

Client SDG: 10-1758

Instrument ID: VOAA.I

Injection Date: 19-FEB-10 06:07

Data File: 021810\AY429.D

Init. Cal. Date(s) 02-FEB-10 22:55 - 03-FEB-10 05:55

Lab Sample ID WAVM100218-05 Quant Type ISTD

Method:122209\Methods\VOAA-8260-020210.M

Compound	AVERF / Amount	RF CCV	Nominal CCV	Min RF	RF Q	%D / %Drift	Max	Drift Q	Curve Type
S 1,2-Dichloroethane-d4	0.4158	0.39092		.01		-5.98365	30		Averaged
S Toluene-d8	1.3455	1.33886		.01		-0.4935	30		Averaged
S Bromofluorobenzene	1.0176	0.96579		.01		-5.09139	30		Averaged
Acrolein	0.0493	0.03865		.01		-21.60243	30		Averaged
Trichlorotrifluoroethane	0.1038	0.11071		.01		6.65703	30		Averaged
Allyl chloride	0.471	0.35404		.01		-24.83227	30		Averaged
Acrylonitrile	0.1026	0.08511		.01		-17.04678	30		Averaged
2-Chloro-1,3-butadiene	0.4845	0.39867		.01		-17.71517	30		Averaged
Ethyl acetate	0.2917	0.20161		.01		-30.88447	40		Averaged
Propionitrile	0.0396	0.03338		.01		-15.70707	30		Averaged
Methacrylonitrile	0.183	0.12962		.01		-29.1694	30		Averaged
Tetrahydrofuran	0.0904	0.06449		.01		-28.6615	30		Averaged
Isobutyl alcohol	0.0117	0.00767		.01		-34.44444	40		Averaged
Methyl methacrylate	0.1606	0.14706		.01		-8.43088	30		Averaged
1,4-Dioxane	0.0025	0.00235		.01		-6	40		Averaged
2-Nitropropane	0.0854	0.07009		.01		-17.9274	30		Averaged
Ethyl methacrylate	0.4209	0.41122		.01		-2.29983	30		Averaged
cis-1,4-Dichloro-2-butene	0.2673	0.24157		.01		-9.62589	30		Averaged
Cyclohexanone	0.1254	0.02017		.01		-83.91547	40	*	Averaged
trans-1,4-Dichloro-2-butene	0.253	0.23209		.01		-8.26482	30		Averaged
Pentachloroethane	0.1965	0.34138		.01		73.73028	30	*	Averaged
Benzyl chloride	1.0648	1.03733		.01		-2.57983	30		Averaged
bis(2-Chloroisopropyl)ether	0.4315	0.31233		.01		-27.61761	30		Averaged

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\021810\  
Data File : AY429.D  
Acq On : 19 Feb 2010 6:07 am  
Operator : JEB  
InstName : VOAA  
Sample : |WAVM100218-05|CCV|1|VOA|1|VOA8260BL|  
Misc : GEEL 5G N/A MIX[B] SOIL 091216-08B  
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Feb 19 13:47:15 2010  
Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M  
Quant Title : Volatile Organics 8260B SubList :  
QLast Update : Wed Feb 03 22:34:28 2010  
Response via : Initial Calibration  
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
-----								
Internal Standards								Dev(Min)
1) Fluorobenzene	9.339	9.342	1.000	96	991518	50.00	ug/L	0.00
41) Chlorobenzene-d5	12.508	12.507	1.000	117	717573	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	14.941	14.944	1.000	152	438339	50.00	ug/L	0.00
82) B Fluorobenzene	9.339	9.339	1.000	96	991518	50.00	ug/L	0.00
103) B Chlorobenzene-d5	12.508	12.508	1.000	117	717573	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	14.941	14.944	1.000	152	438339	50.00	ug/L	0.00
System Monitoring Compounds								Dev(Min)
29) 1,2-Dichloroethane-d4	8.978	8.982	0.961	65	387600	47.00	ug/L	0.00
43) Toluene-d8	10.983	10.987	0.878	98	960730	49.75	ug/L	0.00
61) Bromofluorobenzene	13.713	13.713	0.918	95	423342	47.46	ug/L	0.00
Target Compounds								
	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	QValue
2) Dichlorodifluoromethane	0.000	3.731	0.000		0	N.D.		
3) Chloromethane	4.023	4.043	0.431		0m	N.D.	d	
4) Vinyl chloride	4.245	4.265	0.455		0m	N.D.	d	
5) Bromomethane	4.829	4.839	0.517		0m	N.D.	d	
6) Chloroethane	0.000	4.990	0.000		0	N.D.		
7) Trichlorofluoromethane	5.382	5.382	0.576		0m	N.D.	d	
8) Ethyl ether	0.000	5.732	0.000		0	N.D.		
9) Acetone	6.075	6.082	0.650		0m	N.D.	d	
10) 1,1-Dichloroethylene	6.068	6.082	0.650		0m	N.D.	d	
11) Iodomethane	6.294	6.305	0.674		0m	N.D.	d	
12) Acetonitrile	6.425	6.421	0.688		0m	N.D.	d	
13) Methyl acetate	6.478	6.481	0.694		0m	N.D.	d	
14) Carbon disulfide	6.503	6.428	0.696		0m	N.D.	d	
15) Methylene chloride	6.637	6.651	0.711		0m	N.D.	d	
16) tert-Butyl methyl ether	6.959	6.973	0.745		0m	N.D.	d	
17) trans-1,2-Dichloroethy...	6.991	6.994	0.749		0m	N.D.	d	
18) Vinyl acetate	7.447	7.454	0.797		0m	N.D.	d	
19) 1,1-Dichloroethane	7.468	7.471	0.800		0m	N.D.	d	
20) 2-Butanone	8.091	8.062	0.866		0m	N.D.	d	
21) cis-1,2-Dichloroethylene	8.091	8.108	0.866		0m	N.D.	d	
22) 2,2-Dichloropropane	0.000	8.140	0.000		0	N.D.		
23) Bromochloromethane	0.000	8.373	0.000		0	N.D.		
24) Chloroform	8.416	8.423	0.901		0m	N.D.	d	
25) 1,1,1-Trichloroethane	0.000	8.692	0.000		0	N.D.		
26) Cyclohexane	8.777	8.791	0.940		0m	N.D.	d	
27) 1,1-Dichloropropene	8.844	8.851	0.947		0m	N.D.	d	
28) Carbon tetrachloride	8.886	8.886	0.952		0m	N.D.	d	
30) 1,2-Dichloroethane	9.056	9.063	0.970		0m	N.D.	d	
31) Benzene	9.084	9.084	0.973		0m	N.D.	d	
32) Cyclohexene	0.000	9.208	0.000		0	N.D.		
33) n-Butyl alcohol	9.466	9.462	1.014		0m	N.D.	d	
34) Trichloroethylene	9.724	9.731	1.041		0m	N.D.	d	
35) 1,2-Dichloropropane	0.000	9.965	0.000		0	N.D.		
36) Methylcyclohexane	9.965	9.982	1.067		0m	N.D.	d	
37) Dibromomethane	0.000	10.095	0.000		0	N.D.		
38) Bromodichloromethane	10.219	10.216	1.094		0m	N.D.	d	
39) 2-Chloroethylvinyl ether	10.453	10.453	1.119		0m	N.D.	d	
40) cis-1,3-Dichloropropylene	10.662	10.668	1.142		0m	N.D.	d	
42) 4-Methyl-2-pentanone	10.775	10.774	0.861		0m	N.D.	d	
44) Toluene	11.054	11.057	0.884		0m	N.D.	d	

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\021810\  
Data File : AY429.D  
Acq On : 19 Feb 2010 6:07 am  
Operator : JEB  
InstName : VOAA  
Sample : |WAVM100218-05|CCV|1|VOA|1|VOA8260BL|  
Misc : GEEL 5G N/A MIX[B] SOIL 091216-08B  
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Feb 19 13:47:15 2010  
Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M  
Quant Title : Volatile Organics 8260B SubList :  
QLast Update : Wed Feb 03 22:34:28 2010  
Response via : Initial Calibration  
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
45) trans-1,3-Dichloroprop...	11.206	11.213	0.896		0m	N.D.	d	
46) 1,1,2-Trichloroethane	11.652	11.429	0.932		0m	N.D.	d	
47) 2-Hexanone	11.620	11.627	0.929		0m	N.D.	d	
48) 1,3-Dichloropropane	11.613	11.620	0.928		0m	N.D.	d	
49) Tetrachloroethylene	11.652	11.655	0.932		0m	N.D.	d	
50) Dibromochloromethane	11.652	11.881	0.932		0m	N.D.	d	
51) 1,2-Dibromoethane	12.037	12.044	0.962		0m	N.D.	d	
52) Chlorobenzene	12.539	12.543	1.003		0m	N.D.	d	
53) 1,1,1,2-Tetrachloroethane	12.596	12.599	1.007		0m	N.D.	d	
54) Ethylbenzene	12.610	12.617	1.008		0m	N.D.	d	
55) m,p-Xylenes	12.730	12.730	1.018		0m	N.D.	d	
56) o-Xylene	13.165	13.162	1.053		0m	N.D.	d	
57) Styrene	13.162	13.162	1.052		0m	N.D.	d	
59) Bromoform	0.000	13.402	0.000		0	N.D.		
60) Isopropylbenzene	13.522	13.529	0.905		0m	N.D.	d	
62) 1,1,2,2-Tetrachloroethane	13.791	13.795	0.923		0m	N.D.	d	
63) 1,2,3-Trichloropropane	0.000	13.879	0.000		0	N.D.		
64) Bromobenzene	13.919	13.918	0.932		0m	N.D.	d	
65) n-Propylbenzene	13.957	13.957	0.934		0m	N.D.	d	
66) 1,3,5-Trimethylbenzene	14.120	14.116	0.945		0m	N.D.	d	
67) 2-Chlorotoluene	14.092	14.095	0.943		0m	N.D.	d	
68) 4-Chlorotoluene	14.198	14.198	0.950		0m	N.D.	d	
69) tert-Butylbenzene	14.541	14.488	0.973		0m	N.D.	d	
70) 1,2,4-Trimethylbenzene	14.534	14.527	0.973		0m	N.D.	d	
71) sec-Butylbenzene	14.714	14.718	0.985		0m	N.D.	d	
72) 4-Isopropyltoluene	14.842	14.841	0.993		0m	N.D.	d	
73) 1,3-Dichlorobenzene	14.884	14.884	0.996		0m	N.D.	d	
74) 1,4-Dichlorobenzene	14.969	14.969	1.002		0m	N.D.	d	
75) n-Butylbenzene	15.273	15.276	1.022		0m	N.D.	d	
76) 1,2-Dichlorobenzene	15.376	15.379	1.029		0m	N.D.	d	
77) 1,2-Dibromo-3-chloropr...	0.000	16.192	0.000		0	N.D.		
78) 1,2,4-Trichlorobenzene	17.183	17.183	1.150		0m	N.D.	d	
79) Hexachlorobutadiene	17.367	17.360	1.162		0m	N.D.	d	
80) Naphthalene	17.522	17.529	1.173		0m	N.D.	d	
81) 1,2,3-Trichlorobenzene	17.847	17.847	1.195		0m	N.D.	d	
83) Chlorotrifluoroethylene	0.000	3.661	0.000		0	N.D.		
84) 2-Chloro-1,1,1-trifluo...	0.000	4.416	0.000		0	N.D.		
85) Acrolein	5.894	5.898	0.631	56	191599	196.11	ug/L	95
86) Trichlorotrifluoroethane	6.064	6.068	0.649	85	548846	266.58	ug/L	94
87) Isopropyl Alcohol	0.000	6.188	0.000		0m	N.D.	d	
88) Allyl chloride	6.503	6.506	0.696	41	1755181	187.91	ug/L	96
89) tert-Butyl Alcohol	0.000	6.687	0.000		0m	N.D.	d	
90) Acrylonitrile	6.892	6.895	0.738	53	421943	207.47	ug/L	99
91) Isopropyl ether	0.000	7.489	0.000		0	N.D.		
92) 2-Chloro-1,3-butadiene	7.581	7.581	0.812	53	395291	41.14	ug/L	89
93) Ethyl tert-butyl ether	0.000	7.893	0.000		0m	N.D.	d	
94) Ethyl acetate	8.091	8.094	0.866	43	999504	172.78	ug/L	95
95) Propionitrile	8.119	8.122	0.869	54	165488	210.79	ug/L	98
96) Methacrylonitrile	8.303	8.306	0.889	41	642587	177.11	ug/L	100
97) Tetrahydrofuran	8.427	8.430	0.902	42	319701	178.41	ug/L	87
98) Isobutyl alcohol	8.777	8.777	0.940	41	380070	1635.73	ug/L	98
99) Methyl tert-amyl ether	0.000	9.127	0.000		0	N.D.		
100) Methyl methacrylate	9.965	9.968	1.067	69	729083	228.99	ug/L #	79
101) 1,4-Dioxane	10.057	10.060	1.077	88	116527	2330.35	ug/L	93

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\021810\  
Data File : AY429.D  
Acq On : 19 Feb 2010 6:07 am  
Operator : JEB  
InstName : VOAA  
Sample : |WAVM100218-05|CCV|1|VOA|1|VOA8260BL|  
Misc : GEEL 5G N/A MIX[B] SOIL 091216-08B  
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Feb 19 13:47:15 2010  
Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M  
Quant Title : Volatile Organics 8260B SubList :  
QLast Update : Wed Feb 03 22:34:28 2010  
Response via : Initial Calibration  
Integrator: RTE

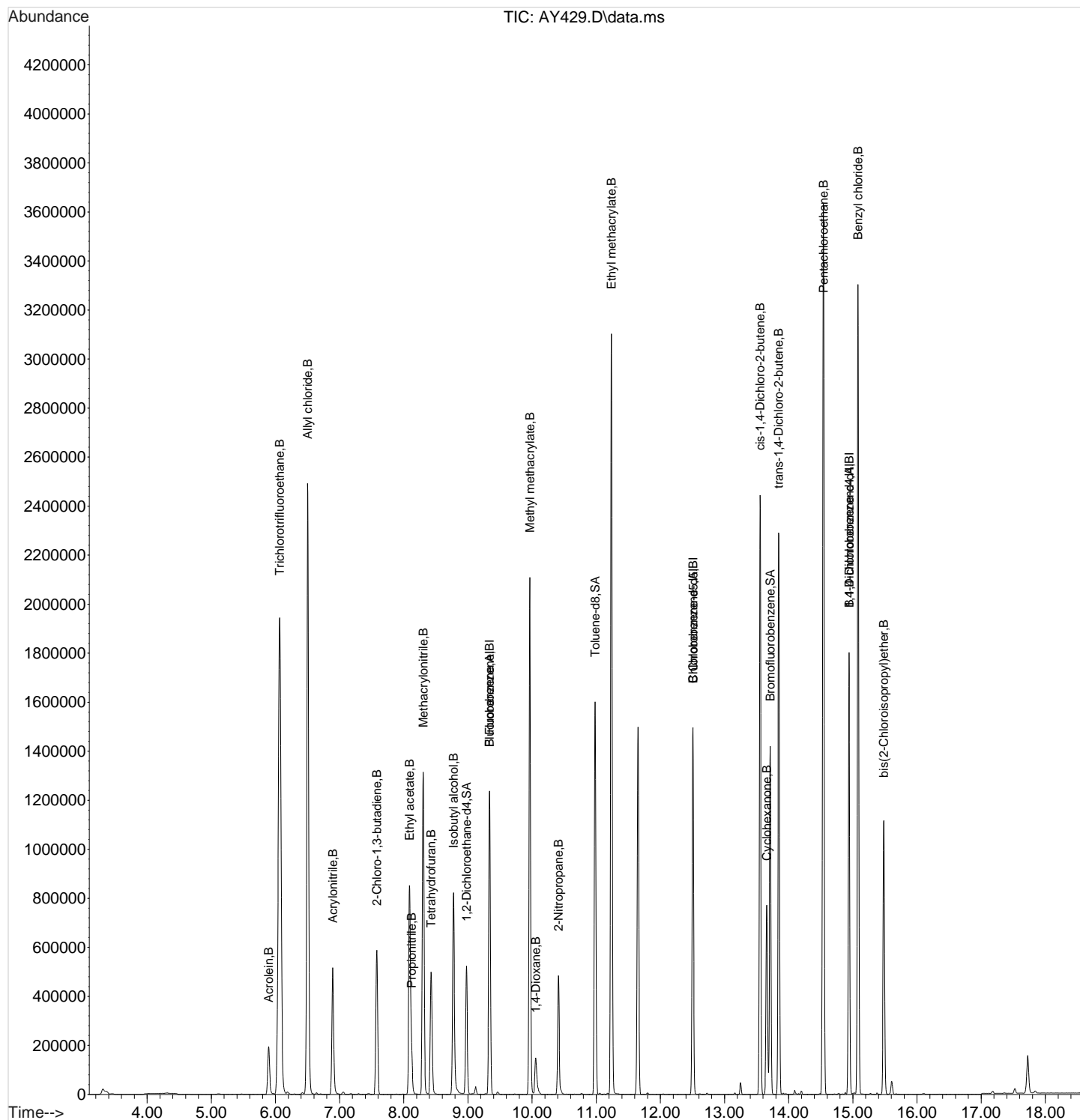
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
102) 2-Nitropropane	10.410	10.414	1.115	43	347473	205.18	ug/L	99
104) Ethyl methacrylate	11.238	11.238	0.898	69	1475399	244.23	ug/L	84
106) 1-Chlorohexane	0.000	12.426	0.000		0	N.D.		
107) cis-1,4-Dichloro-2-butene	13.554	13.554	0.907	53	529439	225.92	ug/L	85
108) Cyclohexanone	13.660	13.657	0.914	42	221086	201.18	ug/L	83
109) trans-1,4-Dichloro-2-b...	13.844	13.844	0.927	53	508672	229.35	ug/L	87
110) Pentachloroethane	14.541	14.541	0.973	167	748208	434.29	ug/L	95
111) Benzyl chloride	15.082	15.082	1.009	91	2273508	243.56	ug/L	99
112) bis(2-Chloroisopropyl)...	15.482	15.485	1.036	45	684532	180.96	ug/L	88

(#) = 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\021810\  
Data File : AY429.D  
Acq On : 19 Feb 2010 6:07 am  
Operator : JEB  
InstName : VOAA  
Sample : |WAVM100218-05|CCV|1|VOA|1|VOA8260BL|  
Misc : GEEL 5G N/A MIX[B] SOIL 091216-08B  
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Feb 19 13:47:15 2010  
Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M  
Quant Title : Volatile Organics 8260B SubList :  
QLast Update : Wed Feb 03 22:34:28 2010  
Response via : Initial Calibration  
Integrator: RTE

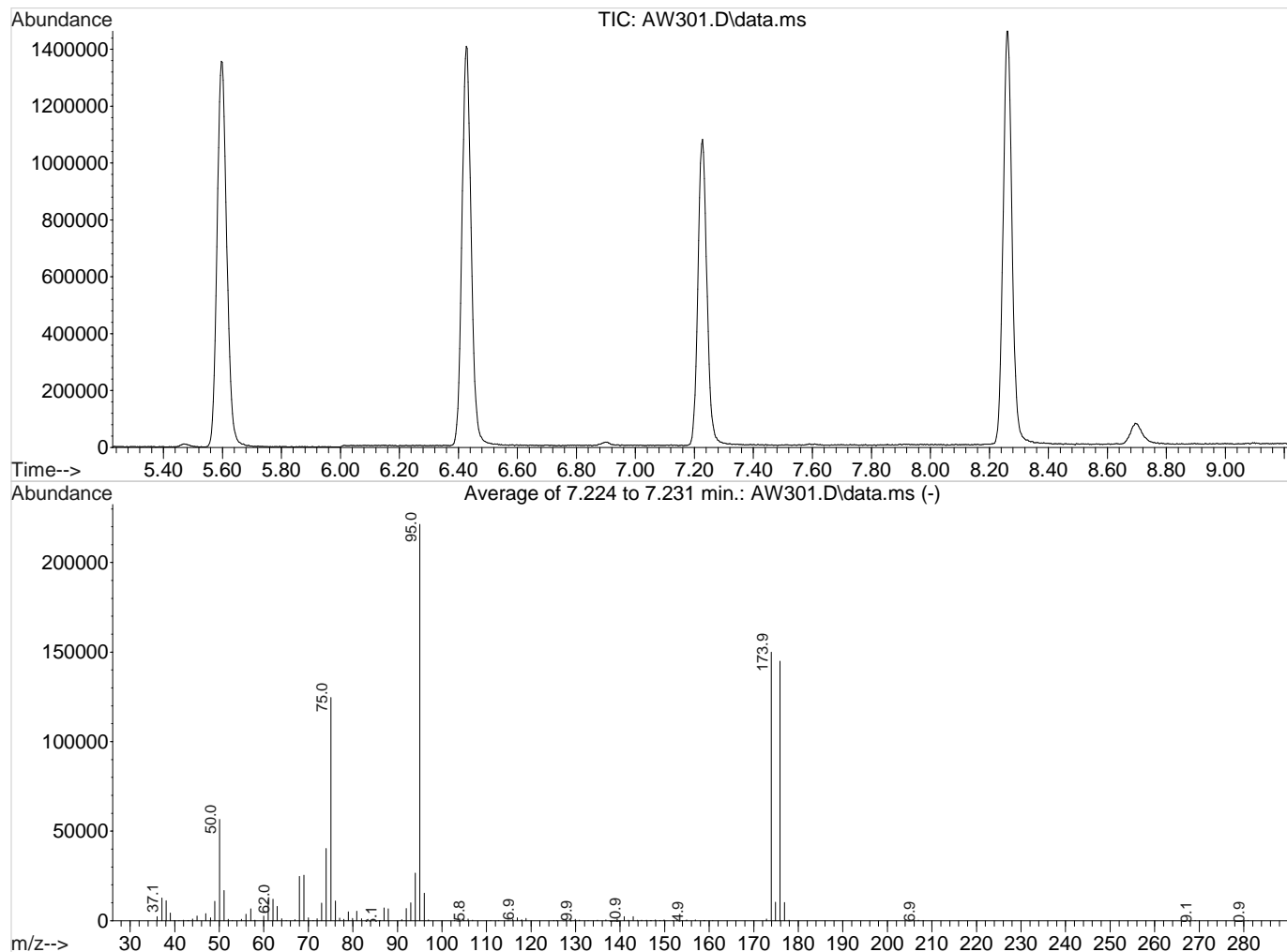


# Quality Control Data

Data Path : C:\msdchem\1\DATA\020210\  
Data File : AW301.D  
Acq On : 2 Feb 2010 10:04 pm  
Operator : JEB  
Sample : |UVM100114-02|BFB|1|VOA|1|  
Misc : GEL 5ML N/A  
ALS Vial : 1 Sample Multiplier: 1

Integration File: default.P

Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M  
Title : Volatile Organics 8260B SubList :  
Last Update : Wed Jan 27 17:03:34 2010



AutoFind: Scans 835, 836, 837; Background Corrected with Scan 818

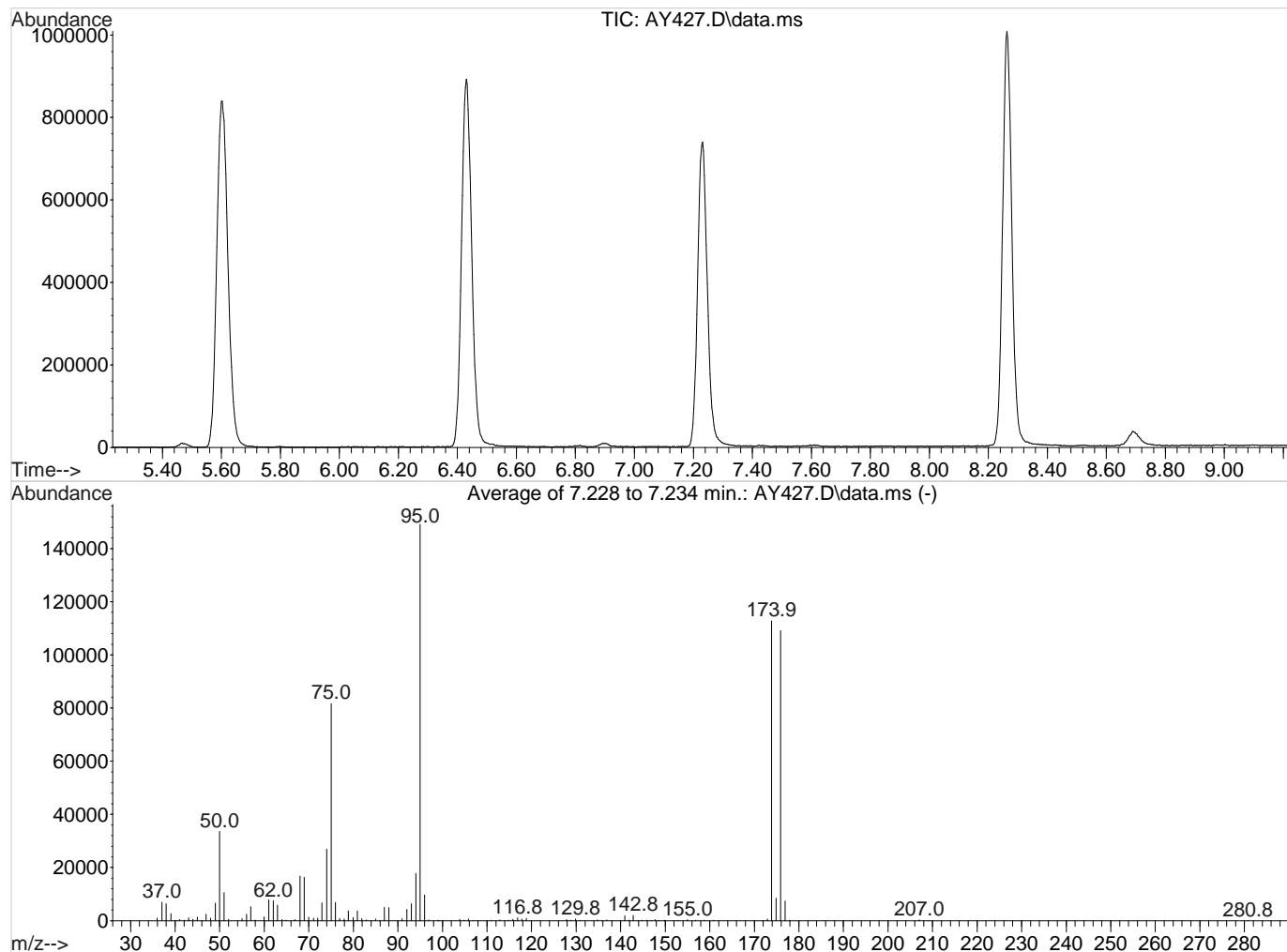
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	25.6	56651	PASS
75	95	30	60	56.3	124699	PASS
95	95	100	100	100.0	221440	PASS
96	95	5	9	6.9	15318	PASS
173	174	0.00	2	0.6	868	PASS
174	95	50	100	67.7	149909	PASS
175	174	5	9	6.8	10237	PASS
176	174	95	101	96.7	144960	PASS
177	176	5	9	6.9	10065	PASS



Data Path : C:\msdchem\1\DATA\021810\  
Data File : AY427.D  
Acq On : 19 Feb 2010 5:16 am  
Operator : JEB  
Sample : |UVM100114-02|BFB|1|VOA|1|  
Misc : GEL 5ML N/A  
ALS Vial : 27 Sample Multiplier: 1

Integration File: default.P

Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M  
Title : Volatile Organics 8260B SubList :  
Last Update : Wed Feb 03 22:34:28 2010



AutoFind: Scans 836, 837, 838; Background Corrected with Scan 819

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	22.5	33568	PASS
75	95	30	60	54.8	81712	PASS
95	95	100	100	100.0	149184	PASS
96	95	5	9	6.5	9678	PASS
173	174	0.00	2	0.5	608	PASS
174	95	50	100	75.6	112725	PASS
175	174	5	9	7.4	8380	PASS
176	174	95	101	96.8	109112	PASS
177	176	5	9	6.8	7426	PASS

**Volatile**  
**Certificate of Analysis**  
**Sample Summary**

SDG Number: 10-1758

Matrix: SOIL

Lab Sample ID: 1202047550

Client Sample: QC for batch 955076

Client: LANL010

Project: QC

Client ID: MB for batch 955076

Method: SW846 8260B

SOP Ref: GL-OA-E-038

Batch ID: 955077

Inst: VOAA.I

Dilution: 1

Run Date: 02/19/2010 06:33

Analyst: JEB

Purge Vol: 5 mL

Prep Date: 02/18/2010 17:07

Aliquot: 5 g

Final Volume: 5 mL

Data File: 021810\AY430LA.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:** 10-1758  
**Lab Sample ID:** 1202047550  
**Client Sample:** QC for batch 955076  
**Client ID:** MB for batch 955076  
**Batch ID:** 955077  
**Run Date:** 02/19/2010 06:33  
**Prep Date:** 02/18/2010 17:07  
**Data File:** 021810\AY430LA.D

**Client:** LANL010  
**Method:** SW846 8260B  
**Inst:** VOAA.I  
**Analyst:** JEB  
**Aliquot:** 5 g  
**Column:** DB-624

**Matrix:** SOIL  
**Project:** QC  
**SOP Ref:** GL-OA-E-038  
**Dilution:** 1  
**Purge Vol:** 5 mL  
**Final Volume:** 5 mL

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

**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	unknown siloxane	17.73	12.9	ug/kg	0	J

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\021810\  
Data File : AY430LA.D  
Acq On : 19 Feb 2010 6:33 am  
Operator : JEB  
InstName : VOAA  
Sample : |1202047550|955077|1|VOA|1|VOA8260BS|  
Misc : GEL 5G N/A SOIL  
ALS Vial : 30 Sample Multiplier: 1

Quant Time: Feb 19 13:48:10 2010  
Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M  
Quant Title : Volatile Organics 8260B SubList :  
QLast Update : Wed Feb 03 22:34:28 2010  
Response via : Initial Calibration  
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
-----								
Internal Standards								Dev(Min)
1) Fluorobenzene	9.339	9.342	1.000	96	947629	50.00	ug/L	0.00
41) Chlorobenzene-d5	12.507	12.507	1.000	117	676763	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	14.940	14.944	1.000	152	406316	50.00	ug/L	0.00
82) B Fluorobenzene	9.339	9.339	1.000	96	947629	50.00	ug/L	0.00
103) B Chlorobenzene-d5	12.507	12.508	1.000	117	676763	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	14.940	14.944	1.000	152	406316	50.00	ug/L	0.00
System Monitoring Compounds								Dev(Min)
29) 1,2-Dichloroethane-d4	8.978	8.982	0.961	65	366247	46.47	ug/L	0.00
Spiked Amount	50.000	Range	66 - 134	Recovery	=	92.94%		
43) Toluene-d8	10.983	10.987	0.878	98	903441	49.61	ug/L	0.00
Spiked Amount	50.000	Range	71 - 128	Recovery	=	99.22%		
61) Bromofluorobenzene	13.713	13.713	0.918	95	384978	46.56	ug/L	0.00
Spiked Amount	50.000	Range	65 - 130	Recovery	=	93.12%		
Target Compounds								QValue
2) Dichlorodifluoromethane	0.000	3.731	0.000		0	N.D.		
3) Chloromethane	4.023	4.043	0.431	50	397	N.D.		
4) Vinyl chloride	4.245	4.265	0.455	62	427	N.D.		
5) Bromomethane	0.000	4.839	0.000		0	N.D.		
6) Chloroethane	0.000	4.990	0.000		0	N.D.		
7) Trichlorofluoromethane	0.000	5.382	0.000		0	N.D.		
8) Ethyl ether	0.000	5.732	0.000		0	N.D.		
9) Acetone	6.085	6.082	0.652	43	987	N.D.		
10) 1,1-Dichloroethylene	0.000	6.082	0.000		0	N.D.		
11) Iodomethane	0.000	6.305	0.000		0	N.D.		
12) Acetonitrile	0.000	6.421	0.000		0	N.D.		
13) Methyl acetate	0.000	6.481	0.000		0	N.D.		
14) Carbon disulfide	6.425	6.428	0.688	76	1108	N.D.		
15) Methylene chloride	6.648	6.651	0.712	84	1931	Below Cal		95
16) tert-Butyl methyl ether	0.000	6.973	0.000		0	N.D.		
17) trans-1,2-Dichloroethy...	0.000	6.994	0.000		0	N.D.		
18) Vinyl acetate	7.302	7.454	0.782	43	121	N.D.		
19) 1,1-Dichloroethane	0.000	7.471	0.000		0	N.D.		
20) 2-Butanone	8.083	8.062	0.866	43	1073	N.D.		
21) cis-1,2-Dichloroethylene	0.000	8.108	0.000		0	N.D.		
22) 2,2-Dichloropropane	0.000	8.140	0.000		0	N.D.		
23) Bromochloromethane	0.000	8.373	0.000		0	N.D.		
24) Chloroform	0.000	8.423	0.000		0	N.D.		
25) 1,1,1-Trichloroethane	0.000	8.692	0.000		0	N.D.		
26) Cyclohexane	8.784	8.791	0.941	56	106	N.D.		
27) 1,1-Dichloropropene	0.000	8.851	0.000		0	N.D.		
28) Carbon tetrachloride	0.000	8.886	0.000		0	N.D.		
30) 1,2-Dichloroethane	0.000	9.063	0.000		0	N.D.		
31) Benzene	0.000	9.084	0.000		0	N.D.		
32) Cyclohexene	0.000	9.208	0.000		0	N.D.		
33) n-Butyl alcohol	0.000	9.462	0.000		0	N.D.		
34) Trichloroethylene	0.000	9.731	0.000		0	N.D.		
35) 1,2-Dichloropropane	0.000	9.965	0.000		0	N.D.		
36) Methylcyclohexane	0.000	9.982	0.000		0	N.D.		
37) Dibromomethane	0.000	10.095	0.000		0	N.D.		
38) Bromodichloromethane	0.000	10.216	0.000		0	N.D.		
39) 2-Chloroethylvinyl ether	0.000	10.453	0.000		0	N.D.		

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\021810\  
Data File : AY430LA.D  
Acq On : 19 Feb 2010 6:33 am  
Operator : JEB  
InstName : VOAA  
Sample : |1202047550|955077|1|VOA|1|VOA8260BS|  
Misc : GEL 5G N/A SOIL  
ALS Vial : 30 Sample Multiplier: 1

Quant Time: Feb 19 13:48:10 2010  
Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M  
Quant Title : Volatile Organics 8260B SubList :  
QLast Update : Wed Feb 03 22:34:28 2010  
Response via : Initial Calibration  
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
40) cis-1,3-Dichloropropylene	0.000	10.668	0.000		0	N.D.	
42) 4-Methyl-2-pentanone	0.000	10.774	0.000		0	N.D.	
44) Toluene	11.057	11.057	0.884	91	1651	N.D.	
45) trans-1,3-Dichloroprop...	0.000	11.213	0.000		0	N.D.	
46) 1,1,2-Trichloroethane	0.000	11.429	0.000		0	N.D.	
47) 2-Hexanone	11.623	11.627	0.929	43	477	N.D.	
48) 1,3-Dichloropropane	0.000	11.620	0.000		0	N.D.	
49) Tetrachloroethylene	0.000	11.655	0.000		0	N.D.	
50) Dibromochloromethane	0.000	11.881	0.000		0	N.D.	
51) 1,2-Dibromoethane	0.000	12.044	0.000		0	N.D.	
52) Chlorobenzene	12.536	12.543	1.002	112	122	N.D.	
53) 1,1,1,2-Tetrachloroethane	0.000	12.599	0.000		0	N.D.	
54) Ethylbenzene	12.610	12.617	1.008	91	232	N.D.	
55) m,p-Xylenes	0.000	12.730	0.000		0	N.D.	
56) o-Xylene	0.000	13.162	0.000		0	N.D.	
57) Styrene	13.158	13.162	1.052	104	109	N.D.	
59) Bromoform	0.000	13.402	0.000		0	N.D.	
60) Isopropylbenzene	0.000	13.529	0.000		0	N.D.	
62) 1,1,2,2-Tetrachloroethane	0.000	13.795	0.000		0	N.D.	
63) 1,2,3-Trichloropropane	0.000	13.879	0.000		0	N.D.	
64) Bromobenzene	0.000	13.918	0.000		0	N.D.	
65) n-Propylbenzene	13.954	13.957	0.934	91	106	N.D.	
66) 1,3,5-Trimethylbenzene	0.000	14.116	0.000		0	N.D.	
67) 2-Chlorotoluene	0.000	14.095	0.000		0	N.D.	
68) 4-Chlorotoluene	14.198	14.198	0.950	91	1304	N.D.	
69) tert-Butylbenzene	0.000	14.488	0.000		0	N.D.	
70) 1,2,4-Trimethylbenzene	0.000	14.527	0.000		0	N.D.	
71) sec-Butylbenzene	0.000	14.718	0.000		0	N.D.	
72) 4-Isopropyltoluene	0.000	14.841	0.000		0	N.D.	
73) 1,3-Dichlorobenzene	14.880	14.884	0.996	146	1017	N.D.	
74) 1,4-Dichlorobenzene	14.965	14.969	1.002	146	1532	N.D.	
75) n-Butylbenzene	15.082	15.276	1.009	91	4064	N.D.	
76) 1,2-Dichlorobenzene	15.375	15.379	1.029	146	407	N.D.	
77) 1,2-Dibromo-3-chloropr...	0.000	16.192	0.000		0	N.D.	
78) 1,2,4-Trichlorobenzene	17.183	17.183	1.150	180	1391	N.D.	
79) Hexachlorobutadiene	0.000	17.360	0.000		0	N.D.	
80) Naphthalene	17.529	17.529	1.173	128	4529	N.D.	
81) 1,2,3-Trichlorobenzene	17.847	17.847	1.195	180	1045	N.D.	
83) Chlorotrifluoroethylene	0.000	3.661	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000	4.416	0.000		0	N.D.	
85) Acrolein	0.000	5.898	0.000		0	N.D.	
86) Trichlorotrifluoroethane	0.000	6.068	0.000		0	N.D.	
87) Isopropyl Alcohol	0.000	6.188	0.000		0	N.D.	
88) Allyl chloride	0.000	6.506	0.000		0	N.D.	
89) tert-Butyl Alcohol	0.000	6.687	0.000		0	N.D.	
90) Acrylonitrile	6.906	6.895	0.739	53	277	N.D.	
91) Isopropyl ether	0.000	7.489	0.000		0	N.D.	
92) 2-Chloro-1,3-butadiene	0.000	7.581	0.000		0	N.D.	
93) Ethyl tert-butyl ether	0.000	7.893	0.000		0	N.D.	
94) Ethyl acetate	8.083	8.094	0.866	43	1073	N.D.	
95) Propionitrile	0.000	8.122	0.000		0	N.D.	
96) Methacrylonitrile	8.303	8.306	0.889	41	233	N.D.	
97) Tetrahydrofuran	8.441	8.430	0.904	42	132	N.D.	
98) Isobutyl alcohol	8.784	8.777	0.941	41	354	N.D.	

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\021810\  
Data File : AY430LA.D  
Acq On : 19 Feb 2010 6:33 am  
Operator : JEB  
InstName : VOAA  
Sample : |1202047550|955077|1|VOA|1|VOA8260BS|  
Misc : GEL 5G N/A SOIL  
ALS Vial : 30 Sample Multiplier: 1

Quant Time: Feb 19 13:48:10 2010  
Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M  
Quant Title : Volatile Organics 8260B SubList :  
QLast Update : Wed Feb 03 22:34:28 2010  
Response via : Initial Calibration  
Integrator: RTE

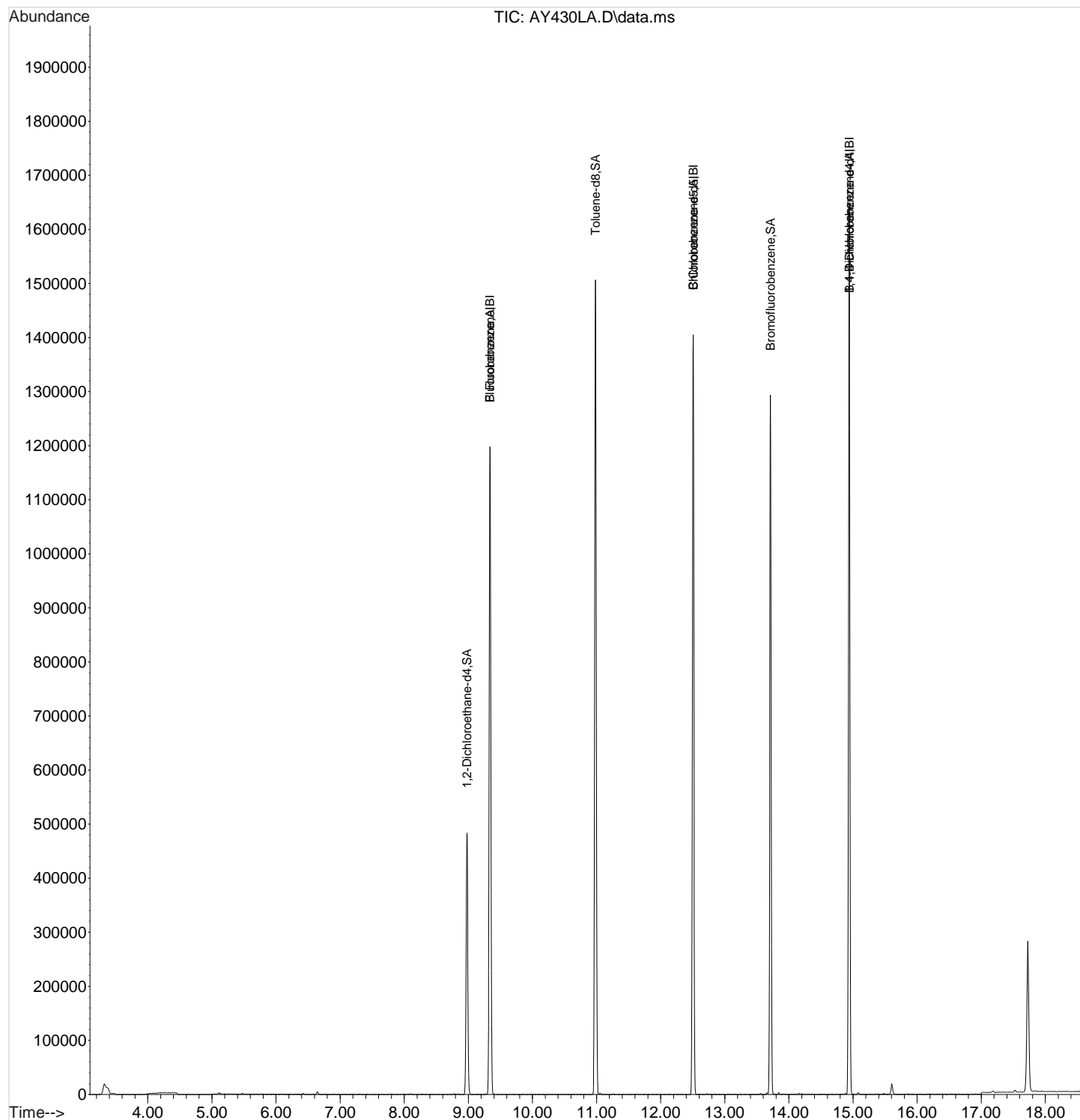
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
99) Methyl tert-amyl ether	0.000	9.127	0.000		0	N.D.	
100) Methyl methacrylate	0.000	9.968	0.000		0	N.D.	
101) 1,4-Dioxane	0.000	10.060	0.000		0	N.D.	
102) 2-Nitropropane	0.000	10.414	0.000		0	N.D.	
104) Ethyl methacrylate	11.241	11.238	0.899	69	248	N.D.	
106) 1-Chlorohexane	0.000	12.426	0.000		0	N.D.	
107) cis-1,4-Dichloro-2-butene	13.554	13.554	0.907	53	808	N.D.	
108) Cyclohexanone	13.653	13.657	0.914	42	806	N.D.	
109) trans-1,4-Dichloro-2-b...	0.000	13.844	0.000		0m	N.D.	d
110) Pentachloroethane	0.000	14.541	0.000		0	N.D.	
111) Benzyl chloride	15.082	15.082	1.009	91	4064	N.D.	
112) bis(2-Chloroisopropyl)...	15.485	15.485	1.036	45	936	N.D.	

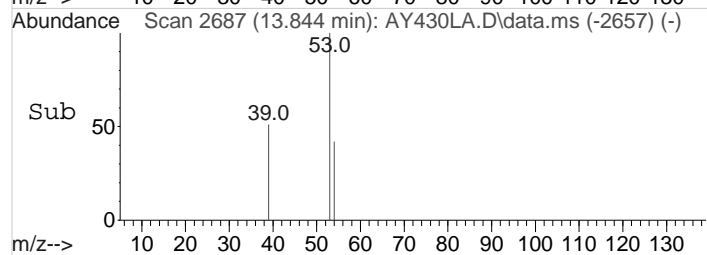
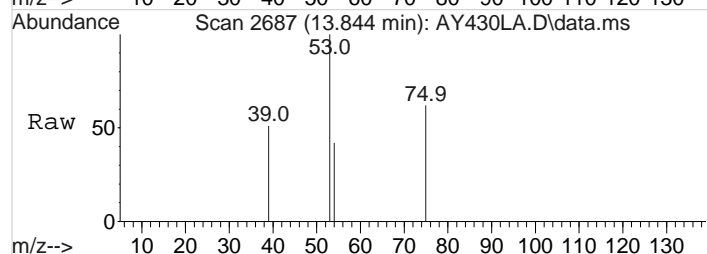
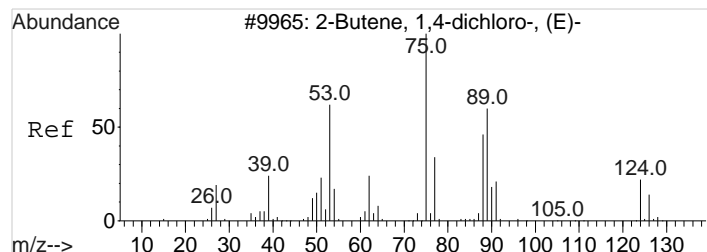
(#) = qualifier out of range (m) = manual integration (+) = signals summed  
(E) = Over the calibration range (d) = deleted

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\021810\  
Data File : AY430LA.D  
Acq On : 19 Feb 2010 6:33 am  
Operator : JEB  
InstName : VOAA  
Sample : |1202047550|955077|1|VOA|1|VOA8260BS|  
Misc : GEL 5G N/A SOIL  
ALS Vial : 30 Sample Multiplier: 1

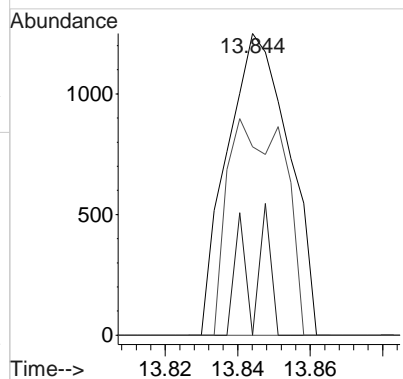
Quant Time: Feb 19 13:48:10 2010  
Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M  
Quant Title : Volatile Organics 8260B SubList :  
QLast Update : Wed Feb 03 22:34:28 2010  
Response via : Initial Calibration  
Integrator: RTE





#109 BEFORE analyst DELETION  
trans-1,4-Dichloro-2-butene  
Concen: 0.72 ug/L  
RT: 13.844 min Scan# 2687  
Delta R.T. -0.000 min  
Lab File: AY430LA.D  
Acq: 19 Feb 2010 6:33 am

Tgt Ion	Ratio	Lower	Upper
53	100		
88	15.2	21.0	81.0#
75	66.4	61.9	121.9





Library Search Compound Report  
GEL Laboratories, LLC

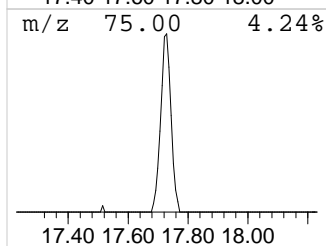
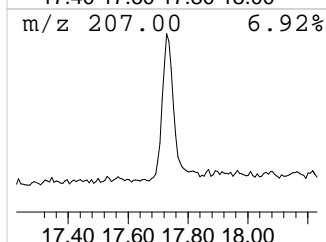
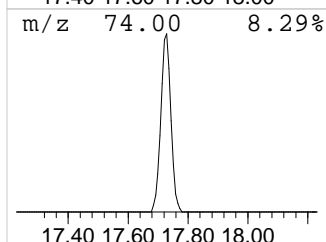
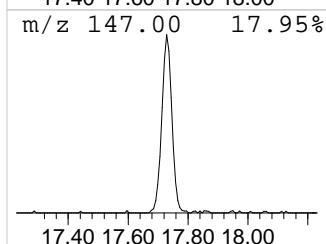
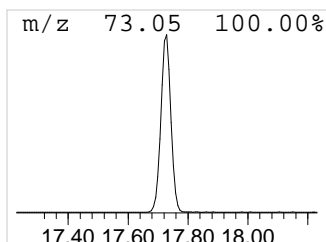
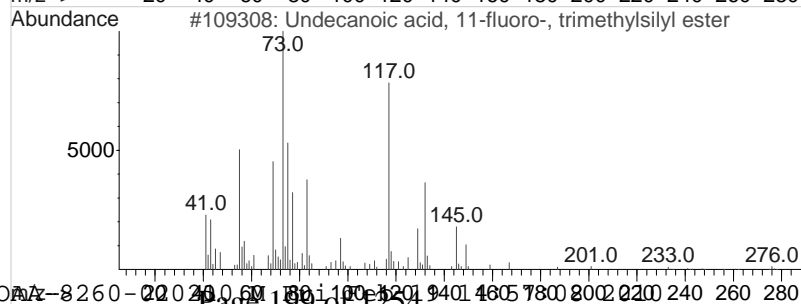
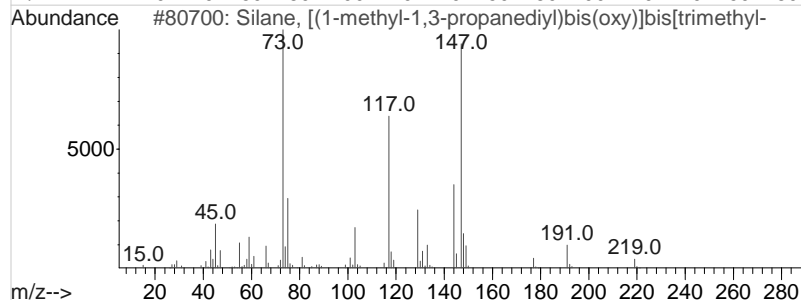
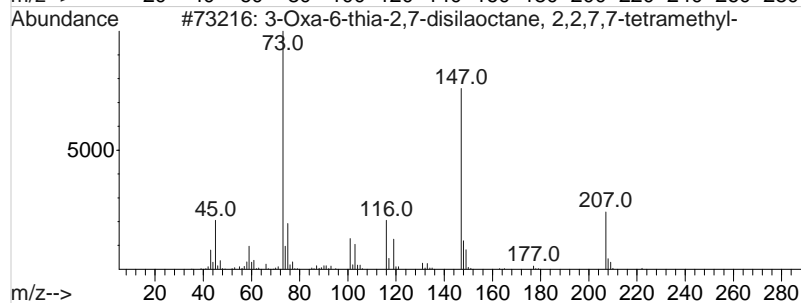
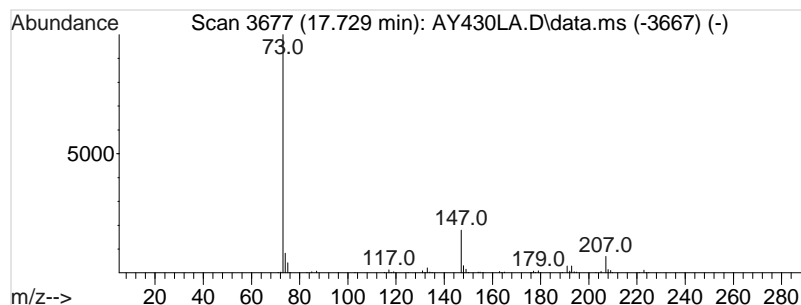
Data Path : C:\msdchem\1\DATA\021810\  
Data File : AY430LA.D  
Acq On : 19 Feb 2010 6:33 am  
Operator : JEB  
Sample : |1202047550|955077|1|VOA|1|VOA8260BS|  
Misc : GEL 5G N/A SOIL  
ALS Vial : 30 Sample Multiplier: 1

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

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

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

R.T.	EstConc	Area	Relative to ISTD			R.T.
17.729	12.89 ug/L	641709	B 1,4-Dichlorobenzene-d4			14.940
Hit# of 5	Tentative ID		MW	MolForm	CAS#	Qual
1	3-Oxa-6-thia-2,7-disilaoctane, 2...		222	C8H22OSSi2	078921-31-0	38
2	Silane, [(1-methyl-1,3-propanedi...		234	C10H26O2Si2	056771-47-2	17
3	Undecanoic acid, 11-fluoro-, tri...		276	C14H29FO2Si	026305-97-5	12
4	Silanamine, N-ethyl-1,1,1-trimet...		207	C12H21NSi	014629-66-4	9
5	1,2-Bis(trimethylsiloxy)ethane		206	C8H22O2Si2	007381-30-8	9



Tentatively Identified Compound (LSC) summary  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\021810\  
Data File : AY430LA.D  
Acq On : 19 Feb 2010 6:33 am  
Operator : JEB  
Sample : |1202047550|955077|1|VOA|1|VOA8260BS|  
Misc : GEL 5G N/A SOIL  
ALS Vial : 30 Sample Multiplier: 1

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

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

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard--			
					#	RT	Resp	Conc
unknown siloxane	17.729	12.9	ug/L	641709	6	14.940	2489490	50.0

**Volatile**  
**Certificate of Analysis**  
**Sample Summary**

SDG Number: 10-1758

Matrix: SOIL

Lab Sample ID: 1202047553

Client Sample: QC for batch 955076

Client: LANL010

Project: QC

Client ID: LCS for batch 955076

Method: SW846 8260B

SOP Ref: GL-OA-E-038

Batch ID: 955077

Inst: VOAA.I

Dilution: 1

Run Date: 02/19/2010 05:41

Analyst: JEB

Purge Vol: 5 mL

Prep Date: 02/18/2010 17:07

Aliquot: 5 g

Final Volume: 5 mL

Data File: 021810\AY428LA.D

Column: DB-624

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane		52.3	ug/kg	0.340	1.00
74-87-3	Chloromethane		40.6	ug/kg	0.300	1.00
75-01-4	Vinyl chloride		49.2	ug/kg	0.300	1.00
74-83-9	Bromomethane		56.4	ug/kg	0.300	1.00
75-00-3	Chloroethane		54.3	ug/kg	0.300	1.00
75-69-4	Trichlorofluoromethane		54.3	ug/kg	0.300	1.00
67-64-1	Acetone		141	ug/kg	1.66	5.00
75-35-4	1,1-Dichloroethylene		48.8	ug/kg	0.300	1.00
74-88-4	Iodomethane		288	ug/kg	1.60	5.00
75-09-2	Methylene chloride		53.0	ug/kg	2.00	5.00
75-15-0	Carbon disulfide		269	ug/kg	1.25	5.00
156-60-5	trans-1,2-Dichloroethylene		48.3	ug/kg	0.300	1.00
75-34-3	1,1-Dichloroethane		49.2	ug/kg	0.300	1.00
78-93-3	2-Butanone		168	ug/kg	1.50	5.00
156-59-2	cis-1,2-Dichloroethylene		48.6	ug/kg	0.300	1.00
594-20-7	2,2-Dichloropropane		50.0	ug/kg	0.300	1.00
67-66-3	Chloroform		53.9	ug/kg	0.300	1.00
74-97-5	Bromochloromethane		55.2	ug/kg	0.330	1.00
71-55-6	1,1,1-Trichloroethane		53.9	ug/kg	0.300	1.00
563-58-6	1,1-Dichloropropene		51.2	ug/kg	0.300	1.00
56-23-5	Carbon tetrachloride		55.8	ug/kg	0.300	1.00
107-06-2	1,2-Dichloroethane		50.8	ug/kg	0.300	1.00
71-43-2	Benzene		50.7	ug/kg	0.300	1.00
79-01-6	Trichloroethylene		54.0	ug/kg	0.330	1.00
78-87-5	1,2-Dichloropropane		48.8	ug/kg	0.300	1.00
75-27-4	Bromodichloromethane		54.4	ug/kg	0.300	1.00
74-95-3	Dibromomethane		55.2	ug/kg	0.300	1.00
108-10-1	4-Methyl-2-pentanone		221	ug/kg	1.25	5.00
10061-01-5	cis-1,3-Dichloropropylene		52.5	ug/kg	0.300	1.00
108-88-3	Toluene		51.1	ug/kg	0.300	1.00
10061-02-6	trans-1,3-Dichloropropylene		52.1	ug/kg	0.300	1.00
79-00-5	1,1,2-Trichloroethane		52.2	ug/kg	0.300	1.00
591-78-6	2-Hexanone		183	ug/kg	1.50	5.00
142-28-9	1,3-Dichloropropane		51.4	ug/kg	0.300	1.00
127-18-4	Tetrachloroethylene		59.5	ug/kg	0.300	1.00
124-48-1	Dibromochloromethane		54.7	ug/kg	0.300	1.00
106-93-4	1,2-Dibromoethane		53.7	ug/kg	0.300	1.00
108-90-7	Chlorobenzene		52.6	ug/kg	0.300	1.00

**Volatile**  
**Certificate of Analysis**  
**Sample Summary**

SDG Number: 10-1758

Matrix: SOIL

Lab Sample ID: 1202047553

Client Sample: QC for batch 955076

Client: LANL010

Project: QC

Client ID: LCS for batch 955076

Method: SW846 8260B

SOP Ref: GL-OA-E-038

Batch ID: 955077

Inst: VOAA.I

Dilution: 1

Run Date: 02/19/2010 05:41

Analyst: JEB

Purge Vol: 5 mL

Prep Date: 02/18/2010 17:07

Aliquot: 5 g

Final Volume: 5 mL

Data File: 021810\AY428LA.D

Column: DB-624

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene		51.9	ug/kg	0.300	1.00
179601-23-1	m,p-Xylenes		104	ug/kg	0.300	2.00
95-47-6	o-Xylene		52.0	ug/kg	0.300	1.00
100-42-5	Styrene		51.7	ug/kg	0.300	1.00
75-25-2	Bromoform		56.4	ug/kg	0.300	1.00
79-34-5	1,1,2,2-Tetrachloroethane		48.8	ug/kg	0.300	1.00
96-18-4	1,2,3-Trichloropropane		50.8	ug/kg	0.300	1.00
108-86-1	Bromobenzene		56.6	ug/kg	0.300	1.00
103-65-1	n-Propylbenzene		48.4	ug/kg	0.300	1.00
95-49-8	2-Chlorotoluene		49.7	ug/kg	0.300	1.00
98-82-8	Isopropylbenzene		48.0	ug/kg	0.300	1.00
108-67-8	1,3,5-Trimethylbenzene		48.9	ug/kg	0.300	1.00
106-43-4	4-Chlorotoluene		48.2	ug/kg	0.300	1.00
98-06-6	tert-Butylbenzene		51.2	ug/kg	0.300	1.00
95-63-6	1,2,4-Trimethylbenzene		49.0	ug/kg	0.300	1.00
135-98-8	sec-Butylbenzene		48.7	ug/kg	0.300	1.00
99-87-6	4-Isopropyltoluene		48.8	ug/kg	0.300	1.00
541-73-1	1,3-Dichlorobenzene		54.8	ug/kg	0.300	1.00
106-46-7	1,4-Dichlorobenzene		54.1	ug/kg	0.300	1.00
104-51-8	n-Butylbenzene		48.2	ug/kg	0.300	1.00
96-12-8	1,2-Dibromo-3-chloropropane		44.6	ug/kg	0.300	1.00
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.00	ug/kg	1.60	5.00
	<i>Trichlorotrifluoroethane</i>					
630-20-6	1,1,1,2-Tetrachloroethane		57.4	ug/kg	0.300	1.00
95-50-1	1,2-Dichlorobenzene		54.6	ug/kg	0.300	1.00

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\021810\  
Data File : AY428LA.D  
Acq On : 19 Feb 2010 5:41 am  
Operator : JEB  
InstName : VOAA  
Sample : |1202047553|955077|1|VOA|1|VOA8260BS|  
Misc : LCS 5G N/A MIX[A] SOIL100126-01E/100218-01  
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Feb 19 13:46:25 2010  
Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M  
Quant Title : Volatile Organics 8260B SubList :  
QLast Update : Wed Feb 03 22:34:28 2010  
Response via : Initial Calibration  
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
Internal Standards								Dev(Min)
1) Fluorobenzene	9.339	9.342	1.000	96	955921	50.00	ug/L	0.00
41) Chlorobenzene-d5	12.507	12.507	1.000	117	710200	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	14.940	14.944	1.000	152	441150	50.00	ug/L	0.00
82) B Fluorobenzene	9.339	9.339	1.000	96	955921	50.00	ug/L	0.00
103) B Chlorobenzene-d5	12.507	12.508	1.000	117	710200	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	14.940	14.944	1.000	152	441150	50.00	ug/L	0.00
System Monitoring Compounds								Dev(Min)
29) 1,2-Dichloroethane-d4	8.978	8.982	0.961	65	384000	48.30	ug/L	0.00
Spiked Amount 50.000	Range 66	- 134	Recovery	=	96.60%			
43) Toluene-d8	10.983	10.987	0.878	98	950806	49.75	ug/L	0.00
Spiked Amount 50.000	Range 71	- 128	Recovery	=	99.50%			
61) Bromofluorobenzene	13.713	13.713	0.918	95	411393	45.82	ug/L	0.00
Spiked Amount 50.000	Range 65	- 130	Recovery	=	91.64%			
Target Compounds	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	QValue
2) Dichlorodifluoromethane	3.731	3.731	0.400	85	238907	52.25	ug/L	100
3) Chloromethane	4.043	4.043	0.433	50	253775	40.59	ug/L	97
4) Vinyl chloride	4.265	4.265	0.457	62	279156	49.21	ug/L	99
5) Bromomethane	4.839	4.839	0.518	94	199723	56.37	ug/L	99
6) Chloroethane	4.990	4.990	0.534	64	114295	54.30	ug/L	95
7) Trichlorofluoromethane	5.378	5.382	0.576	101	469838	54.33	ug/L	100
8) Ethyl ether	5.728	5.732	0.613	59	212360	46.16	ug/L	92
9) Acetone	6.078	6.082	0.651	43	645355	141.17	ug/L	93
10) 1,1-Dichloroethylene	6.078	6.082	0.651	61	422935	48.75	ug/L	96
11) Iodomethane	6.301	6.305	0.675	142	2092050	288.01	ug/L	98
12) Acetonitrile	6.414	6.421	0.687	41	688407	913.57	ug/L	99
13) Methyl acetate	6.478	6.481	0.694	43	865520	198.87	ug/L	94
14) Carbon disulfide	6.425	6.428	0.688	76	3679729	268.85	ug/L	100
15) Methylene chloride	6.648	6.651	0.712	84	244404	53.03	ug/L	87
16) tert-Butyl methyl ether	6.969	6.973	0.746	73	731681	46.16	ug/L	96
17) trans-1,2-Dichloroethy...	6.994	6.994	0.749	61	407885	48.34	ug/L	93
18) Vinyl acetate	7.450	7.454	0.798	43	2194896	202.66	ug/L	95
19) 1,1-Dichloroethane	7.468	7.471	0.800	63	491075	49.15	ug/L	99
20) 2-Butanone	8.062	8.062	0.863	43	857376	168.33	ug/L	92
21) cis-1,2-Dichloroethylene	8.105	8.108	0.868	61	467145	48.64	ug/L	93
22) 2,2-Dichloropropane	8.136	8.140	0.871	77	439633	49.99	ug/L	86
23) Bromochloromethane	8.370	8.373	0.896	128	121401	55.19	ug/L	# 85
24) Chloroform	8.419	8.423	0.902	83	524270	53.90	ug/L	100
25) 1,1,1-Trichloroethane	8.692	8.692	0.931	97	502772	53.92	ug/L	97
26) Cyclohexane	8.787	8.791	0.941	56	465573	46.46	ug/L	95
27) 1,1-Dichloropropene	8.847	8.851	0.947	75	366158	51.21	ug/L	88
28) Carbon tetrachloride	8.883	8.886	0.951	117	452457	55.81	ug/L	100
30) 1,2-Dichloroethane	9.059	9.063	0.970	62	465008	50.84	ug/L	99
31) Benzene	9.084	9.084	0.973	78	913925	50.74	ug/L	97
32) Cyclohexene	9.204	9.208	0.986	67	475033	47.53	ug/L	96
33) n-Butyl alcohol	9.459	9.462	1.013	56	797268	4581.47	ug/L	90
34) Trichloroethylene	9.728	9.731	1.042	95	270711	53.95	ug/L	99
35) 1,2-Dichloropropane	9.965	9.965	1.067	63	253854	48.84	ug/L	96
36) Methylcyclohexane	9.979	9.982	1.069	83	415894	50.85	ug/L	92
37) Dibromomethane	10.092	10.095	1.081	93	165500	55.19	ug/L	93
38) Bromodichloromethane	10.212	10.216	1.094	83	386931	54.35	ug/L	99
39) 2-Chloroethylvinyl ether	10.453	10.453	1.119	63	750026	270.62	ug/L	98

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\021810\  
Data File : AY428LA.D  
Acq On : 19 Feb 2010 5:41 am  
Operator : JEB  
InstName : VOAA  
Sample : |1202047553|955077|1|VOA|1|VOA8260BS|  
Misc : LCS 5G N/A MIX[A] SOIL100126-01E/100218-01  
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Feb 19 13:46:25 2010  
Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M  
Quant Title : Volatile Organics 8260B SubList :  
QLast Update : Wed Feb 03 22:34:28 2010  
Response via : Initial Calibration  
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
40) cis-1,3-Dichloropropylene	10.668	10.668	1.142	75	408400	52.48	ug/L	89
42) 4-Methyl-2-pentanone	10.775	10.774	0.861	58	525498	221.31	ug/L #	81
44) Toluene	11.057	11.057	0.884	91	988818	51.13	ug/L	99
45) trans-1,3-Dichloroprop...	11.213	11.213	0.897	75	408963	52.05	ug/L	90
46) 1,1,2-Trichloroethane	11.425	11.429	0.913	83	171401	52.22	ug/L	98
47) 2-Hexanone	11.623	11.627	0.929	43	1261925	182.90	ug/L	91
48) 1,3-Dichloropropane	11.616	11.620	0.929	76	382963	51.40	ug/L #	74
49) Tetrachloroethylene	11.652	11.655	0.932	164	237915	59.50	ug/L	92
50) Dibromochloromethane	11.878	11.881	0.950	129	262190	54.68	ug/L	99
51) 1,2-Dibromoethane	12.044	12.044	0.963	107	219379	53.67	ug/L	100
52) Chlorobenzene	12.539	12.543	1.003	112	641834	52.62	ug/L	98
53) 1,1,1,2-Tetrachloroethane	12.596	12.599	1.007	131	275297	57.36	ug/L	97
54) Ethylbenzene	12.613	12.617	1.008	91	1213859	51.88	ug/L	99
55) m,p-Xylenes	12.727	12.730	1.018	106	865260	103.80	ug/L	97
56) o-Xylene	13.162	13.162	1.052	106	431485	52.00	ug/L	99
57) Styrene	13.162	13.162	1.052	104	698455	51.68	ug/L	99
59) Bromoform	13.402	13.402	0.897	173	200936	56.44	ug/L	100
60) Isopropylbenzene	13.526	13.529	0.905	105	1209932	48.04	ug/L	100
62) 1,1,2,2-Tetrachloroethane	13.791	13.795	0.923	83	276346	48.83	ug/L	99
63) 1,2,3-Trichloropropane	13.876	13.879	0.929	110	88524	50.75	ug/L	95
64) Bromobenzene	13.918	13.918	0.932	156	327499	56.59	ug/L	87
65) n-Propylbenzene	13.957	13.957	0.934	91	1446816	48.35	ug/L	100
66) 1,3,5-Trimethylbenzene	14.116	14.116	0.945	105	1048139	48.90	ug/L	99
67) 2-Chlorotoluene	14.095	14.095	0.943	126	267661	49.73	ug/L	99
68) 4-Chlorotoluene	14.198	14.198	0.950	91	910306	48.15	ug/L	99
69) tert-Butylbenzene	14.488	14.488	0.970	134	207457	51.24	ug/L	91
70) 1,2,4-Trimethylbenzene	14.530	14.527	0.973	105	1070474	48.99	ug/L	100
71) sec-Butylbenzene	14.714	14.718	0.985	105	1314253	48.68	ug/L	98
72) 4-Isopropyltoluene	14.841	14.841	0.993	119	1068288	48.75	ug/L	99
73) 1,3-Dichlorobenzene	14.884	14.884	0.996	146	576559	54.80	ug/L	96
74) 1,4-Dichlorobenzene	14.969	14.969	1.002	146	589128	54.09	ug/L	96
75) n-Butylbenzene	15.276	15.276	1.022	91	1075137	48.17	ug/L	99
76) 1,2-Dichlorobenzene	15.379	15.379	1.029	146	568742	54.64	ug/L	97
77) 1,2-Dibromo-3-chloropr...	16.192	16.192	1.084	157	60893	44.55	ug/L	94
78) 1,2,4-Trichlorobenzene	17.183	17.183	1.150	180	515006	57.56	ug/L	100
79) Hexachlorobutadiene	17.360	17.360	1.162	225	373265	61.35	ug/L	100
80) Naphthalene	17.530	17.529	1.173	128	972669	49.99	ug/L	100
81) 1,2,3-Trichlorobenzene	17.847	17.847	1.195	180	495669	58.66	ug/L	98
83) Chlorotrifluoroethylene	0.000	3.661	0.000		0	N.D.		
84) 2-Chloro-1,1,1-trifluo...	0.000	4.416	0.000		0	N.D.		
85) Acrolein	5.855	5.898	0.627		0m	N.D.	d	
86) Trichlorotrifluoroethane	0.000	6.068	0.000		0	N.D.		
87) Isopropyl Alcohol	6.428	6.188	0.688		0m	N.D.	d	
88) Allyl chloride	6.414	6.506	0.687		0m	N.D.	d	
89) tert-Butyl Alcohol	6.478	6.687	0.694		0m	N.D.	d	
90) Acrylonitrile	6.962	6.895	0.746		0m	N.D.	d	
91) Isopropyl ether	7.447	7.489	0.797		0m	N.D.	d	
92) 2-Chloro-1,3-butadiene	7.613	7.581	0.815		0m	N.D.	d	
93) Ethyl tert-butyl ether	8.105	7.893	0.868		0m	N.D.	d	
94) Ethyl acetate	8.062	8.094	0.863		0m	N.D.	d	
95) Propionitrile	8.059	8.122	0.863		0m	N.D.	d	
96) Methacrylonitrile	8.416	8.306	0.901		0m	N.D.	d	
97) Tetrahydrofuran	8.430	8.430	0.903		0m	N.D.	d	
98) Isobutyl alcohol	8.787	8.777	0.941		0m	N.D.	d	

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\021810\  
Data File : AY428LA.D  
Acq On : 19 Feb 2010 5:41 am  
Operator : JEB  
InstName : VOAA  
Sample : |1202047553|955077|1|VOA|1|VOA8260BS|  
Misc : LCS 5G N/A MIX[A] SOIL100126-01E/100218-01  
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Feb 19 13:46:25 2010  
Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M  
Quant Title : Volatile Organics 8260B SubList :  
QLast Update : Wed Feb 03 22:34:28 2010  
Response via : Initial Calibration  
Integrator: RTE

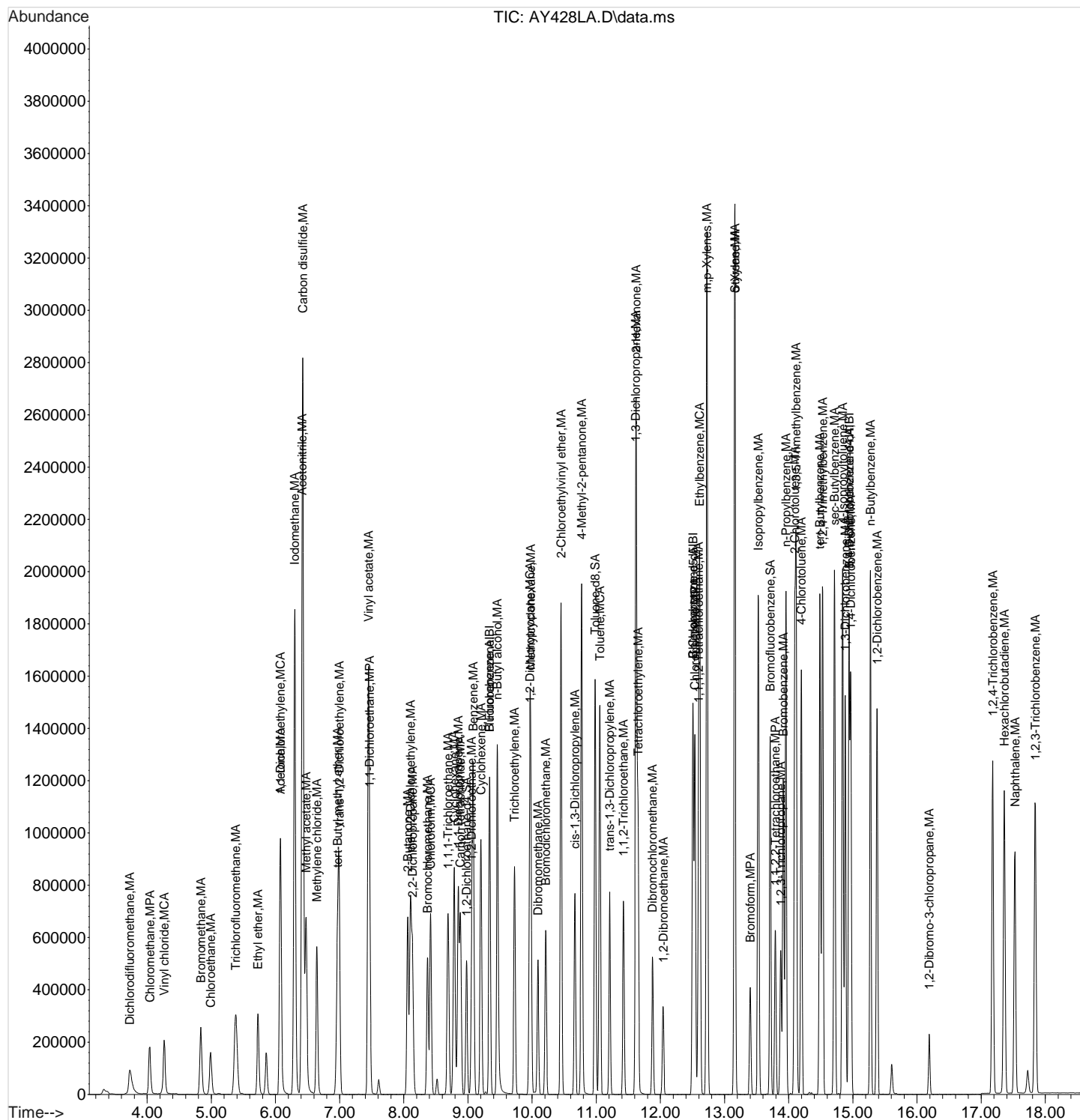
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
99) Methyl tert-amyl ether	9.084	9.127	0.973		0m	N.D.	d
100) Methyl methacrylate	9.979	9.968	1.069		0m	N.D.	d
101) 1,4-Dioxane	0.000	10.060	0.000		0	N.D.	
102) 2-Nitropropane	10.453	10.414	1.119		0m	N.D.	d
104) Ethyl methacrylate	10.994	11.238	0.879		0m	N.D.	d
106) 1-Chlorohexane	0.000	12.426	0.000		0	N.D.	
107) cis-1,4-Dichloro-2-butene	13.529	13.554	0.906		0m	N.D.	d
108) Cyclohexanone	13.533	13.657	0.906		0m	N.D.	d
109) trans-1,4-Dichloro-2-b...	13.957	13.844	0.934		0m	N.D.	d
110) Pentachloroethane	14.541	14.541	0.973		0m	N.D.	d
111) Benzyl chloride	14.937	15.082	1.000		0m	N.D.	d
112) bis(2-Chloroisopropyl)...	15.602	15.485	1.044		0m	N.D.	d

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

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\021810\  
Data File : AY428LA.D  
Acq On : 19 Feb 2010 5:41 am  
Operator : JEB  
InstName : VOAA  
Sample : |1202047553|955077|1|VOA|1|VOA8260BS|  
Misc : LCS 5G N/A MIX[A] SOIL100126-01E/100218-01  
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Feb 19 13:46:25 2010  
Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M  
Quant Title : Volatile Organics 8260B SubList :  
QLast Update : Wed Feb 03 22:34:28 2010  
Response via : Initial Calibration  
Integrator: RTE





**Volatile**  
**Certificate of Analysis**  
**Sample Summary**

SDG Number: 10-1758

Matrix: SOIL

Lab Sample ID: 1202047554

Client Sample: QC for batch 955076

Client: LANL010

Project: QC

Client ID: LCS for batch 955076

Method: SW846 8260B

SOP Ref: GL-OA-E-038

Batch ID: 955077

Inst: VOAA.I

Dilution: 1

Run Date: 02/19/2010 06:07

Analyst: JEB

Purge Vol: 5 mL

Prep Date: 02/18/2010 17:07

Aliquot: 5 g

Final Volume: 5 mL

Data File: 021810\AY429LA.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: 10-1758

Matrix: SOIL

Lab Sample ID: 1202047554

Client Sample: QC for batch 955076

Client: LANL010

Project: QC

Client ID: LCS for batch 955076

Method: SW846 8260B

SOP Ref: GL-OA-E-038

Batch ID: 955077

Inst: VOAA.I

Dilution: 1

Run Date: 02/19/2010 06:07

Analyst: JEB

Purge Vol: 5 mL

Prep Date: 02/18/2010 17:07

Aliquot: 5 g

Final Volume: 5 mL

Data File: 021810\AY429LA.D

Column: DB-624

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.00	ug/kg	0.300	1.00
179601-23-1	m,p-Xylenes	U	2.00	ug/kg	0.300	2.00
95-47-6	o-Xylene	U	1.00	ug/kg	0.300	1.00
100-42-5	Styrene	U	1.00	ug/kg	0.300	1.00
75-25-2	Bromoform	U	1.00	ug/kg	0.300	1.00
79-34-5	1,1,2,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
96-18-4	1,2,3-Trichloropropane	U	1.00	ug/kg	0.300	1.00
108-86-1	Bromobenzene	U	1.00	ug/kg	0.300	1.00
103-65-1	n-Propylbenzene	U	1.00	ug/kg	0.300	1.00
95-49-8	2-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-82-8	Isopropylbenzene	U	1.00	ug/kg	0.300	1.00
108-67-8	1,3,5-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
106-43-4	4-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-06-6	tert-Butylbenzene	U	1.00	ug/kg	0.300	1.00
95-63-6	1,2,4-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
135-98-8	sec-Butylbenzene	U	1.00	ug/kg	0.300	1.00
99-87-6	4-Isopropyltoluene	U	1.00	ug/kg	0.300	1.00
541-73-1	1,3-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
106-46-7	1,4-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
104-51-8	n-Butylbenzene	U	1.00	ug/kg	0.300	1.00
96-12-8	1,2-Dibromo-3-chloropropane	U	1.00	ug/kg	0.300	1.00
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane		267	ug/kg	1.60	5.00
	<i>Trichlorotrifluoroethane</i>					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
95-50-1	1,2-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\021810\  
Data File : AY429LA.D  
Acq On : 19 Feb 2010 6:07 am  
Operator : JEB  
InstName : VOAA  
Sample : |1202047554|955077|1|VOA|1|VOA8260BS|  
Misc : LCS 5G N/A MIX[B] SOIL 091216-08B  
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Feb 19 13:47:15 2010  
Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M  
Quant Title : Volatile Organics 8260B SubList :  
QLast Update : Wed Feb 03 22:34:28 2010  
Response via : Initial Calibration  
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
-----								
Internal Standards								Dev(Min)
1) Fluorobenzene	9.339	9.342	1.000	96	991518	50.00	ug/L	0.00
41) Chlorobenzene-d5	12.508	12.507	1.000	117	717573	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	14.941	14.944	1.000	152	438339	50.00	ug/L	0.00
82) B Fluorobenzene	9.339	9.339	1.000	96	991518	50.00	ug/L	0.00
103) B Chlorobenzene-d5	12.508	12.508	1.000	117	717573	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	14.941	14.944	1.000	152	438339	50.00	ug/L	0.00
System Monitoring Compounds								Dev(Min)
29) 1,2-Dichloroethane-d4	8.978	8.982	0.961	65	387600	47.00	ug/L	0.00
Spiked Amount 50.000	Range 66	- 134	Recovery	=	94.00%			
43) Toluene-d8	10.983	10.987	0.878	98	960730	49.75	ug/L	0.00
Spiked Amount 50.000	Range 71	- 128	Recovery	=	99.50%			
61) Bromofluorobenzene	13.713	13.713	0.918	95	423342	47.46	ug/L	0.00
Spiked Amount 50.000	Range 65	- 130	Recovery	=	94.92%			
Target Compounds								QValue
2) Dichlorodifluoromethane	0.000	3.731	0.000		0	N.D.		
3) Chloromethane	4.023	4.043	0.431		0m	N.D.	d	
4) Vinyl chloride	4.245	4.265	0.455		0m	N.D.	d	
5) Bromomethane	4.829	4.839	0.517		0m	N.D.	d	
6) Chloroethane	0.000	4.990	0.000		0	N.D.		
7) Trichlorofluoromethane	5.382	5.382	0.576		0m	N.D.	d	
8) Ethyl ether	0.000	5.732	0.000		0	N.D.		
9) Acetone	6.075	6.082	0.650		0m	N.D.	d	
10) 1,1-Dichloroethylene	6.068	6.082	0.650		0m	N.D.	d	
11) Iodomethane	6.294	6.305	0.674		0m	N.D.	d	
12) Acetonitrile	6.425	6.421	0.688		0m	N.D.	d	
13) Methyl acetate	6.478	6.481	0.694		0m	N.D.	d	
14) Carbon disulfide	6.503	6.428	0.696		0m	N.D.	d	
15) Methylene chloride	6.637	6.651	0.711		0m	N.D.	d	
16) tert-Butyl methyl ether	6.959	6.973	0.745		0m	N.D.	d	
17) trans-1,2-Dichloroethy...	6.991	6.994	0.749		0m	N.D.	d	
18) Vinyl acetate	7.447	7.454	0.797		0m	N.D.	d	
19) 1,1-Dichloroethane	7.468	7.471	0.800		0m	N.D.	d	
20) 2-Butanone	8.091	8.062	0.866		0m	N.D.	d	
21) cis-1,2-Dichloroethylene	8.091	8.108	0.866		0m	N.D.	d	
22) 2,2-Dichloropropane	0.000	8.140	0.000		0	N.D.		
23) Bromochloromethane	0.000	8.373	0.000		0	N.D.		
24) Chloroform	8.416	8.423	0.901		0m	N.D.	d	
25) 1,1,1-Trichloroethane	0.000	8.692	0.000		0	N.D.		
26) Cyclohexane	8.777	8.791	0.940		0m	N.D.	d	
27) 1,1-Dichloropropene	8.844	8.851	0.947		0m	N.D.	d	
28) Carbon tetrachloride	8.886	8.886	0.952		0m	N.D.	d	
30) 1,2-Dichloroethane	9.056	9.063	0.970		0m	N.D.	d	
31) Benzene	9.084	9.084	0.973		0m	N.D.	d	
32) Cyclohexene	0.000	9.208	0.000		0	N.D.		
33) n-Butyl alcohol	9.466	9.462	1.014		0m	N.D.	d	
34) Trichloroethylene	9.724	9.731	1.041		0m	N.D.	d	
35) 1,2-Dichloropropane	0.000	9.965	0.000		0	N.D.		
36) Methylcyclohexane	9.965	9.982	1.067		0m	N.D.	d	
37) Dibromomethane	0.000	10.095	0.000		0	N.D.		
38) Bromodichloromethane	10.219	10.216	1.094		0m	N.D.	d	
39) 2-Chloroethylvinyl ether	10.453	10.453	1.119		0m	N.D.	d	

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\021810\  
Data File : AY429LA.D  
Acq On : 19 Feb 2010 6:07 am  
Operator : JEB  
InstName : VOAA  
Sample : |1202047554|955077|1|VOA|1|VOA8260BS|  
Misc : LCS 5G N/A MIX[B] SOIL 091216-08B  
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Feb 19 13:47:15 2010

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

Quant Title : Volatile Organics 8260B

SubList :

QLast Update : Wed Feb 03 22:34:28 2010

Response via : Initial Calibration

Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
40) cis-1,3-Dichloropropylene	10.662	10.668	1.142		0m	N.D.	d
42) 4-Methyl-2-pentanone	10.775	10.774	0.861		0m	N.D.	d
44) Toluene	11.054	11.057	0.884		0m	N.D.	d
45) trans-1,3-Dichloroprop...	11.206	11.213	0.896		0m	N.D.	d
46) 1,1,2-Trichloroethane	11.652	11.429	0.932		0m	N.D.	d
47) 2-Hexanone	11.620	11.627	0.929		0m	N.D.	d
48) 1,3-Dichloropropane	11.613	11.620	0.928		0m	N.D.	d
49) Tetrachloroethylene	11.652	11.655	0.932		0m	N.D.	d
50) Dibromochloromethane	11.652	11.881	0.932		0m	N.D.	d
51) 1,2-Dibromoethane	12.037	12.044	0.962		0m	N.D.	d
52) Chlorobenzene	12.539	12.543	1.003		0m	N.D.	d
53) 1,1,1,2-Tetrachloroethane	12.596	12.599	1.007		0m	N.D.	d
54) Ethylbenzene	12.610	12.617	1.008		0m	N.D.	d
55) m,p-Xylenes	12.730	12.730	1.018		0m	N.D.	d
56) o-Xylene	13.165	13.162	1.053		0m	N.D.	d
57) Styrene	13.162	13.162	1.052		0m	N.D.	d
59) Bromoform	0.000	13.402	0.000		0	N.D.	
60) Isopropylbenzene	13.522	13.529	0.905		0m	N.D.	d
62) 1,1,2,2-Tetrachloroethane	13.791	13.795	0.923		0m	N.D.	d
63) 1,2,3-Trichloropropane	0.000	13.879	0.000		0	N.D.	
64) Bromobenzene	13.919	13.918	0.932		0m	N.D.	d
65) n-Propylbenzene	13.957	13.957	0.934		0m	N.D.	d
66) 1,3,5-Trimethylbenzene	14.120	14.116	0.945		0m	N.D.	d
67) 2-Chlorotoluene	14.092	14.095	0.943		0m	N.D.	d
68) 4-Chlorotoluene	14.198	14.198	0.950		0m	N.D.	d
69) tert-Butylbenzene	14.541	14.488	0.973		0m	N.D.	d
70) 1,2,4-Trimethylbenzene	14.534	14.527	0.973		0m	N.D.	d
71) sec-Butylbenzene	14.714	14.718	0.985		0m	N.D.	d
72) 4-Isopropyltoluene	14.842	14.841	0.993		0m	N.D.	d
73) 1,3-Dichlorobenzene	14.884	14.884	0.996		0m	N.D.	d
74) 1,4-Dichlorobenzene	14.969	14.969	1.002		0m	N.D.	d
75) n-Butylbenzene	15.273	15.276	1.022		0m	N.D.	d
76) 1,2-Dichlorobenzene	15.376	15.379	1.029		0m	N.D.	d
77) 1,2-Dibromo-3-chloropr...	0.000	16.192	0.000		0	N.D.	
78) 1,2,4-Trichlorobenzene	17.183	17.183	1.150		0m	N.D.	d
79) Hexachlorobutadiene	17.367	17.360	1.162		0m	N.D.	d
80) Naphthalene	17.522	17.529	1.173		0m	N.D.	d
81) 1,2,3-Trichlorobenzene	17.847	17.847	1.195		0m	N.D.	d
83) Chlorotrifluoroethylene	0.000	3.661	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000	4.416	0.000		0	N.D.	
85) Acrolein	5.894	5.898	0.631	56	191599	196.11	ug/L 95
86) Trichlorotrifluoroethane	6.064	6.068	0.649	85	548846	266.58	ug/L 94
87) Isopropyl Alcohol	0.000	6.188	0.000		0m	N.D.	d
88) Allyl chloride	6.503	6.506	0.696	41	1755181	187.91	ug/L 96
89) tert-Butyl Alcohol	0.000	6.687	0.000		0m	N.D.	d
90) Acrylonitrile	6.892	6.895	0.738	53	421943	207.47	ug/L 99
91) Isopropyl ether	0.000	7.489	0.000		0	N.D.	
92) 2-Chloro-1,3-butadiene	7.581	7.581	0.812	53	395291	41.14	ug/L 89
93) Ethyl tert-butyl ether	0.000	7.893	0.000		0m	N.D.	d
94) Ethyl acetate	8.091	8.094	0.866	43	999504	172.78	ug/L 95
95) Propionitrile	8.119	8.122	0.869	54	165488	210.79	ug/L 98
96) Methacrylonitrile	8.303	8.306	0.889	41	642587	177.11	ug/L 100
97) Tetrahydrofuran	8.427	8.430	0.902	42	319701	178.41	ug/L 87
98) Isobutyl alcohol	8.777	8.777	0.940	41	380070	1635.73	ug/L 98

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\021810\  
Data File : AY429LA.D  
Acq On : 19 Feb 2010 6:07 am  
Operator : JEB  
InstName : VOAA  
Sample : |1202047554|955077|1|VOA|1|VOA8260BS|  
Misc : LCS 5G N/A MIX[B] SOIL 091216-08B  
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Feb 19 13:47:15 2010  
Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M  
Quant Title : Volatile Organics 8260B SubList :  
QLast Update : Wed Feb 03 22:34:28 2010  
Response via : Initial Calibration  
Integrator: RTE

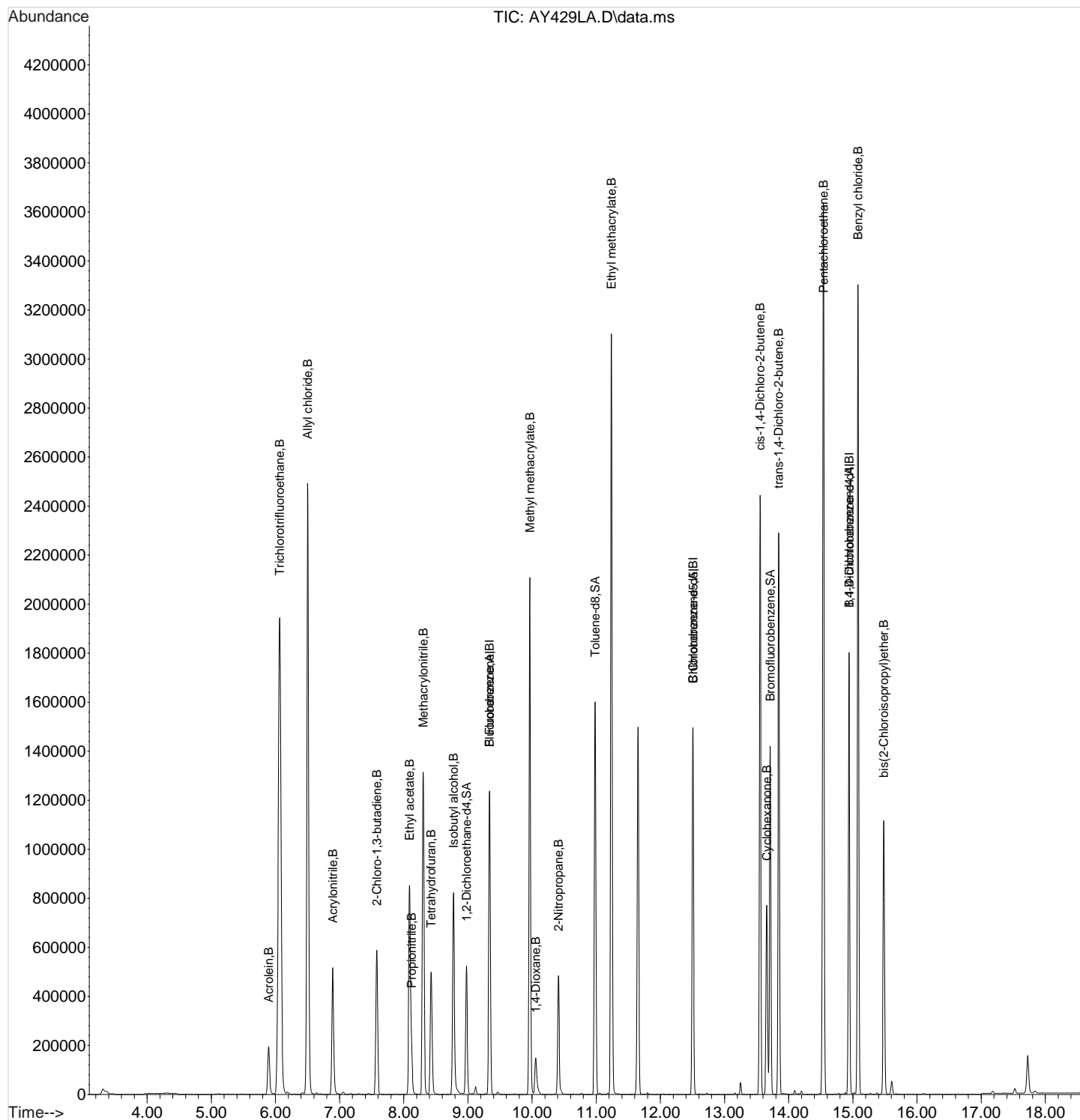
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
99) Methyl tert-amyl ether	0.000	9.127	0.000		0	N.D.		
100) Methyl methacrylate	9.965	9.968	1.067	69	729083	228.99	ug/L	# 79
101) 1,4-Dioxane	10.057	10.060	1.077	88	116527	2330.35	ug/L	93
102) 2-Nitropropane	10.410	10.414	1.115	43	347473	205.18	ug/L	99
104) Ethyl methacrylate	11.238	11.238	0.898	69	1475399	244.23	ug/L	84
106) 1-Chlorohexane	0.000	12.426	0.000		0	N.D.		
107) cis-1,4-Dichloro-2-butene	13.554	13.554	0.907	53	529439	225.92	ug/L	85
108) Cyclohexanone	13.660	13.657	0.914	42	221086	201.18	ug/L	83
109) trans-1,4-Dichloro-2-b...	13.844	13.844	0.927	53	508672	229.35	ug/L	87
110) Pentachloroethane	14.541	14.541	0.973	167	748208	434.29	ug/L	95
111) Benzyl chloride	15.082	15.082	1.009	91	2273508	243.56	ug/L	99
112) bis(2-Chloroisopropyl)...	15.482	15.485	1.036	45	684532	180.96	ug/L	88

(#) = 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\021810\  
Data File : AY429LA.D  
Acq On : 19 Feb 2010 6:07 am  
Operator : JEB  
InstName : VOAA  
Sample : |1202047554|955077|1|VOA|1|VOA8260BS|  
Misc : LCS 5G N/A MIX[B] SOIL 091216-08B  
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Feb 19 13:47:15 2010  
Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M  
Quant Title : Volatile Organics 8260B SubList :  
QLast Update : Wed Feb 03 22:34:28 2010  
Response via : Initial Calibration  
Integrator: RTE



**Volatile**  
**Certificate of Analysis**  
**Sample Summary**

<b>SDG Number:</b> 10-1758	<b>Date Collected:</b> 02/09/2010 12:00	<b>Matrix:</b> R
<b>Lab Sample ID:</b> 1202047551	<b>Date Received:</b> 02/11/2010 09:20	<b>%Moisture:</b> 18
<b>Client Sample:</b> QC for batch 955076	<b>Client:</b> LANL010	<b>Project:</b> QC
<b>Client ID:</b> RE15-10-8366PS	<b>Method:</b> SW846 8260B	<b>SOP Ref:</b> GL-OA-E-038
<b>Batch ID:</b> 955077	<b>Inst:</b> VOAA.I	<b>Dilution:</b> 1
<b>Run Date:</b> 02/19/2010 13:32	<b>Analyst:</b> JEB	<b>Purge Vol:</b> 5 mL
<b>Prep Date:</b> 02/18/2010 20:25	<b>Aliquot:</b> 5.2 g	<b>Final Volume:</b> 5 mL
<b>Data File:</b> 021810\AY446.D	<b>Column:</b> DB-624	

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane		50.4	ug/kg	0.399	1.17
74-87-3	Chloromethane		37.3	ug/kg	0.352	1.17
75-01-4	Vinyl chloride		51.9	ug/kg	0.352	1.17
74-83-9	Bromomethane		43.5	ug/kg	0.352	1.17
75-00-3	Chloroethane		56.2	ug/kg	0.352	1.17
75-69-4	Trichlorofluoromethane		59.7	ug/kg	0.352	1.17
67-64-1	Acetone		69.8	ug/kg	1.95	5.86
75-35-4	1,1-Dichloroethylene		45.7	ug/kg	0.352	1.17
74-88-4	Iodomethane		174	ug/kg	1.88	5.86
75-09-2	Methylene chloride		48.1	ug/kg	2.35	5.86
75-15-0	Carbon disulfide		222	ug/kg	1.47	5.86
156-60-5	trans-1,2-Dichloroethylene		43.6	ug/kg	0.352	1.17
75-34-3	1,1-Dichloroethane		45.9	ug/kg	0.352	1.17
78-93-3	2-Butanone		67.2	ug/kg	1.76	5.86
156-59-2	cis-1,2-Dichloroethylene		43.8	ug/kg	0.352	1.17
594-20-7	2,2-Dichloropropane		46.9	ug/kg	0.352	1.17
67-66-3	Chloroform		50.3	ug/kg	0.352	1.17
74-97-5	Bromochloromethane		46.9	ug/kg	0.387	1.17
71-55-6	1,1,1-Trichloroethane		51.5	ug/kg	0.352	1.17
563-58-6	1,1-Dichloropropene		44.1	ug/kg	0.352	1.17
56-23-5	Carbon tetrachloride		51.9	ug/kg	0.352	1.17
107-06-2	1,2-Dichloroethane		49.4	ug/kg	0.352	1.17
71-43-2	Benzene		42.9	ug/kg	0.352	1.17
79-01-6	Trichloroethylene		42.2	ug/kg	0.387	1.17
78-87-5	1,2-Dichloropropane		42.4	ug/kg	0.352	1.17
75-27-4	Bromodichloromethane		47.3	ug/kg	0.352	1.17
74-95-3	Dibromomethane		47.9	ug/kg	0.352	1.17
108-10-1	4-Methyl-2-pentanone		162	ug/kg	1.47	5.86
10061-01-5	cis-1,3-Dichloropropylene		23.7	ug/kg	0.352	1.17
108-88-3	Toluene		37.4	ug/kg	0.352	1.17
10061-02-6	trans-1,3-Dichloropropylene		27.8	ug/kg	0.352	1.17
79-00-5	1,1,2-Trichloroethane		45.0	ug/kg	0.352	1.17
591-78-6	2-Hexanone		39.6	ug/kg	1.76	5.86
142-28-9	1,3-Dichloropropane		43.4	ug/kg	0.352	1.17
127-18-4	Tetrachloroethylene		38.8	ug/kg	0.352	1.17
124-48-1	Dibromochloromethane		42.1	ug/kg	0.352	1.17
106-93-4	1,2-Dibromoethane		39.3	ug/kg	0.352	1.17
108-90-7	Chlorobenzene		32.4	ug/kg	0.352	1.17

**Volatile**  
**Certificate of Analysis**  
**Sample Summary**

<b>SDG Number:</b> 10-1758	<b>Date Collected:</b> 02/09/2010 12:00	<b>Matrix:</b> R
<b>Lab Sample ID:</b> 1202047551	<b>Date Received:</b> 02/11/2010 09:20	<b>%Moisture:</b> 18
<b>Client Sample:</b> QC for batch 955076	<b>Client:</b> LANL010	<b>Project:</b> QC
<b>Client ID:</b> RE15-10-8366PS	<b>Method:</b> SW846 8260B	<b>SOP Ref:</b> GL-OA-E-038
<b>Batch ID:</b> 955077	<b>Inst:</b> VOAA.I	<b>Dilution:</b> 1
<b>Run Date:</b> 02/19/2010 13:32	<b>Analyst:</b> JEB	<b>Purge Vol:</b> 5 mL
<b>Prep Date:</b> 02/18/2010 20:25	<b>Aliquot:</b> 5.2 g	<b>Final Volume:</b> 5 mL
<b>Data File:</b> 021810\AY446.D	<b>Column:</b> DB-624	

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene		30.5	ug/kg	0.352	1.17
179601-23-1	m,p-Xylenes		52.8	ug/kg	0.352	2.35
95-47-6	o-Xylene		29.7	ug/kg	0.352	1.17
100-42-5	Styrene		23.5	ug/kg	0.352	1.17
75-25-2	Bromoform		40.4	ug/kg	0.352	1.17
79-34-5	1,1,2,2-Tetrachloroethane		39.3	ug/kg	0.352	1.17
96-18-4	1,2,3-Trichloropropane		43.5	ug/kg	0.352	1.17
108-86-1	Bromobenzene		30.2	ug/kg	0.352	1.17
103-65-1	n-Propylbenzene		19.5	ug/kg	0.352	1.17
95-49-8	2-Chlorotoluene		22.5	ug/kg	0.352	1.17
98-82-8	Isopropylbenzene		23.5	ug/kg	0.352	1.17
108-67-8	1,3,5-Trimethylbenzene		20.5	ug/kg	0.352	1.17
106-43-4	4-Chlorotoluene		18.8	ug/kg	0.352	1.17
98-06-6	tert-Butylbenzene		20.8	ug/kg	0.352	1.17
95-63-6	1,2,4-Trimethylbenzene		18.5	ug/kg	0.352	1.17
135-98-8	sec-Butylbenzene		16.7	ug/kg	0.352	1.17
99-87-6	4-Isopropyltoluene		7.06	ug/kg	0.352	1.17
541-73-1	1,3-Dichlorobenzene		21.6	ug/kg	0.352	1.17
106-46-7	1,4-Dichlorobenzene		21.2	ug/kg	0.352	1.17
104-51-8	n-Butylbenzene		10.8	ug/kg	0.352	1.17
96-12-8	1,2-Dibromo-3-chloropropane		31.9	ug/kg	0.352	1.17
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.86	ug/kg	1.88	5.86
	<i>Trichlorotrifluoroethane</i>					
630-20-6	1,1,1,2-Tetrachloroethane		42.6	ug/kg	0.352	1.17
95-50-1	1,2-Dichlorobenzene		23.2	ug/kg	0.352	1.17



Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\021810\  
Data File : AY446.D  
Acq On : 19 Feb 2010 1:32 pm  
Operator : JEB  
InstName : VOAA  
Sample : |1202047551|955077|1|VOA|1|VOA8260BS|  
Misc : LANL 5.2G N/A SOIL MIX[A]  
ALS Vial : 46 Sample Multiplier: 1

Quant Time: Feb 19 14:23:04 2010  
Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M  
Quant Title : Volatile Organics 8260B SubList :  
QLast Update : Wed Feb 03 22:34:28 2010  
Response via : Initial Calibration  
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
-----								
Internal Standards								Dev(Min)
1) Fluorobenzene	9.342	9.342	1.000	96	784815	50.00	ug/L	0.00
41) Chlorobenzene-d5	12.508	12.507	1.000	117	574113	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	14.944	14.944	1.000	152	360348	50.00	ug/L	0.00
82) B Fluorobenzene	9.342	9.339	1.000	96	784815	50.00	ug/L	0.00
103) B Chlorobenzene-d5	12.508	12.508	1.000	117	574113	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	14.944	14.944	1.000	152	360348	50.00	ug/L	0.00
System Monitoring Compounds								Dev(Min)
29) 1,2-Dichloroethane-d4	8.982	8.982	0.961	65	355557	54.47	ug/L	0.00
Spiked Amount 50.000	Range 66	- 134	Recovery	=	108.94%			
43) Toluene-d8	10.987	10.987	0.878	98	752774	48.73	ug/L	0.00
Spiked Amount 50.000	Range 71	- 128	Recovery	=	97.46%			
61) Bromofluorobenzene	13.713	13.713	0.918	95	337440	46.01	ug/L	0.00
Spiked Amount 50.000	Range 65	- 130	Recovery	=	92.02%			
Target Compounds								QValue
2) Dichlorodifluoromethane	3.731	3.731	0.399	85	161264	42.96	ug/L	99
3) Chloromethane	4.034	4.043	0.432	50	163173	31.79	ug/L	98
4) Vinyl chloride	4.275	4.265	0.458	62	205950	44.22	ug/L	98
5) Bromomethane	4.839	4.839	0.518	94	107921	37.10	ug/L	99
6) Chloroethane	4.990	4.990	0.534	64	83317	47.93	ug/L	99
7) Trichlorofluoromethane	5.382	5.382	0.576	101	361241	50.88	ug/L	99
8) Ethyl ether	5.732	5.732	0.614	59	140468	37.19	ug/L	99
9) Acetone	6.082	6.082	0.651	43	223449	59.54	ug/L	99
10) 1,1-Dichloroethylene	6.082	6.082	0.651	61	277416	38.95	ug/L	99
11) Iodomethane	6.305	6.305	0.675	142	887029	148.74	ug/L	93
12) Acetonitrile	6.418	6.421	0.687	41	440535	712.09	ug/L	98
13) Methyl acetate	6.482	6.481	0.694	43	115141	32.22	ug/L	98
14) Carbon disulfide	6.429	6.428	0.688	76	2129635	189.52	ug/L	99
15) Methylene chloride	6.651	6.651	0.712	84	155727	40.99	ug/L	95
16) tert-Butyl methyl ether	6.970	6.973	0.746	73	488196	37.52	ug/L	97
17) trans-1,2-Dichloroethy...	6.994	6.994	0.749	61	257880	37.22	ug/L	97
18) Vinyl acetate	0.000	7.454	0.000		0	N.D.		
19) 1,1-Dichloroethane	7.472	7.471	0.800	63	320797	39.11	ug/L	99
20) 2-Butanone	8.062	8.062	0.863	43	239559	57.29	ug/L	97
21) cis-1,2-Dichloroethylene	8.108	8.108	0.868	61	294571	37.36	ug/L	97
22) 2,2-Dichloropropane	8.137	8.140	0.871	77	288726	39.99	ug/L	92
23) Bromochloromethane	8.374	8.373	0.896	128	72241	40.00	ug/L	93
24) Chloroform	8.423	8.423	0.902	83	342465	42.89	ug/L	100
25) 1,1,1-Trichloroethane	8.692	8.692	0.930	97	336565	43.96	ug/L	98
26) Cyclohexane	8.791	8.791	0.941	56	284986	34.64	ug/L	98
27) 1,1-Dichloropropene	8.851	8.851	0.947	75	220606	37.58	ug/L	93
28) Carbon tetrachloride	8.886	8.886	0.951	117	294593	44.26	ug/L	100
30) 1,2-Dichloroethane	9.063	9.063	0.970	62	316566	42.16	ug/L	98
31) Benzene	9.084	9.084	0.972	78	541358	36.61	ug/L	100
32) Cyclohexene	9.205	9.208	0.985	67	273112	33.29	ug/L	100
33) n-Butyl alcohol	9.463	9.462	1.013	56	101854	712.91	ug/L	98
34) Trichloroethylene	9.732	9.731	1.042	95	148400	36.02	ug/L	97
35) 1,2-Dichloropropane	9.965	9.965	1.067	63	154465	36.20	ug/L	97
36) Methylcyclohexane	9.983	9.982	1.069	83	213690	31.83	ug/L	97
37) Dibromomethane	10.092	10.095	1.080	93	100642	40.88	ug/L	93
38) Bromodichloromethane	10.216	10.216	1.093	83	235560	40.30	ug/L	99
39) 2-Chloroethylvinyl ether	10.669	10.453	1.142	63	122	N.D.		

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\021810\  
Data File : AY446.D  
Acq On : 19 Feb 2010 1:32 pm  
Operator : JEB  
InstName : VOAA  
Sample : |1202047551|955077|1|VOA|1|VOA8260BS|  
Misc : LANL 5.2G N/A SOIL MIX[A]  
ALS Vial : 46 Sample Multiplier: 1

Quant Time: Feb 19 14:23:04 2010  
Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M  
Quant Title : Volatile Organics 8260B SubList :  
QLast Update : Wed Feb 03 22:34:28 2010  
Response via : Initial Calibration  
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
40) cis-1,3-Dichloropropylene	10.669	10.668	1.142	75	129037	20.20	ug/L	95
42) 4-Methyl-2-pentanone	10.775	10.774	0.861	58	265668	138.41	ug/L	91
44) Toluene	11.058	11.057	0.884	91	498356	31.88	ug/L	98
45) trans-1,3-Dichloroprop...	11.213	11.213	0.897	75	150862	23.75	ug/L	94
46) 1,1,2-Trichloroethane	11.429	11.429	0.914	83	101758	38.35	ug/L	99
47) 2-Hexanone	11.627	11.627	0.930	43	188404	33.78	ug/L	97
48) 1,3-Dichloropropane	11.620	11.620	0.929	76	222729	36.98	ug/L #	51
49) Tetrachloroethylene	11.652	11.655	0.932	164	107003	33.10	ug/L	92
50) Dibromochloromethane	11.882	11.881	0.950	129	139331	35.94	ug/L	100
51) 1,2-Dibromoethane	12.044	12.044	0.963	107	110865	33.55	ug/L	100
52) Chlorobenzene	12.543	12.543	1.003	112	272197	27.60	ug/L	97
53) 1,1,1,2-Tetrachloroethane	12.599	12.599	1.007	131	140827	36.30	ug/L	96
54) Ethylbenzene	12.617	12.617	1.009	91	492206	26.03	ug/L	98
55) m,p-Xylenes	12.727	12.730	1.018	106	303253	45.00	ug/L	94
56) o-Xylene	13.162	13.162	1.052	106	170075	25.35	ug/L	95
57) Styrene	13.162	13.162	1.052	104	219217	20.06	ug/L	95
59) Bromoform	13.402	13.402	0.897	173	100225	34.46	ug/L	100
60) Isopropylbenzene	13.530	13.529	0.905	105	412011	20.03	ug/L	98
62) 1,1,2,2-Tetrachloroethane	13.791	13.795	0.923	83	154780	33.48	ug/L	99
63) 1,2,3-Trichloropropane	13.880	13.879	0.929	110	52831	37.08	ug/L	93
64) Bromobenzene	13.919	13.918	0.931	156	121602	25.72	ug/L	93
65) n-Propylbenzene	13.957	13.957	0.934	91	407442	16.67	ug/L	98
66) 1,3,5-Trimethylbenzene	14.117	14.116	0.945	105	305728	17.46	ug/L	97
67) 2-Chlorotoluene	14.099	14.095	0.943	126	84196	19.15	ug/L	97
68) 4-Chlorotoluene	14.198	14.198	0.950	91	247001	15.99	ug/L	99
69) tert-Butylbenzene	14.491	14.488	0.970	134	58801	17.78	ug/L	96
70) 1,2,4-Trimethylbenzene	14.530	14.527	0.972	105	281117	15.75	ug/L	98
71) sec-Butylbenzene	14.718	14.718	0.985	105	313858	14.23	ug/L	99
72) 4-Isopropyltoluene	14.842	14.841	0.993	119	107770	6.02	ug/L	98
73) 1,3-Dichlorobenzene	14.884	14.884	0.996	146	158097	18.39	ug/L	97
74) 1,4-Dichlorobenzene	14.969	14.969	1.002	146	161079	18.11	ug/L	96
75) n-Butylbenzene	15.277	15.276	1.022	91	168460	9.24	ug/L	98
76) 1,2-Dichlorobenzene	15.379	15.379	1.029	146	168315	19.80	ug/L	97
77) 1,2-Dibromo-3-chloropr...	16.192	16.192	1.084	157	30120	27.18	ug/L	98
78) 1,2,4-Trichlorobenzene	17.183	17.183	1.150	180	93614	12.81	ug/L	100
79) Hexachlorobutadiene	17.367	17.360	1.162	225	44424	8.94	ug/L	99
80) Naphthalene	17.530	17.529	1.173	128	242326	15.25	ug/L	100
81) 1,2,3-Trichlorobenzene	17.847	17.847	1.194	180	96970	14.05	ug/L	99
83) Chlorotrifluoroethylene	0.000	3.661	0.000		0	N.D.		
84) 2-Chloro-1,1,1-trifluo...	0.000	4.416	0.000		0	N.D.		
85) Acrolein	0.000	5.898	0.000		0	N.D.		
86) Trichlorotrifluoroethane	0.000	6.068	0.000		0	N.D.		
87) Isopropyl Alcohol	6.202	6.188	0.664		0m	N.D.	d	
88) Allyl chloride	6.418	6.506	0.687		0m	N.D.	d	
89) tert-Butyl Alcohol	6.485	6.687	0.694		0m	N.D.	d	
90) Acrylonitrile	6.970	6.895	0.746		0m	N.D.	d	
91) Isopropyl ether	0.000	7.489	0.000		0	N.D.		
92) 2-Chloro-1,3-butadiene	0.000	7.581	0.000		0	N.D.		
93) Ethyl tert-butyl ether	8.112	7.893	0.868		0m	N.D.	d	
94) Ethyl acetate	8.062	8.094	0.863		0m	N.D.	d	
95) Propionitrile	8.073	8.122	0.864		0m	N.D.	d	
96) Methacrylonitrile	8.137	8.306	0.871		0m	N.D.	d	
97) Tetrahydrofuran	8.416	8.430	0.901		0m	N.D.	d	
98) Isobutyl alcohol	8.787	8.777	0.941		0m	N.D.	d	

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\021810\  
Data File : AY446.D  
Acq On : 19 Feb 2010 1:32 pm  
Operator : JEB  
InstName : VOAA  
Sample : |1202047551|955077|1|VOA|1|VOA8260BS|  
Misc : LANL 5.2G N/A SOIL MIX[A]  
ALS Vial : 46 Sample Multiplier: 1

Quant Time: Feb 19 14:23:04 2010  
Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M  
Quant Title : Volatile Organics 8260B SubList :  
QLast Update : Wed Feb 03 22:34:28 2010  
Response via : Initial Calibration  
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
99) Methyl tert-amyl ether	9.081	9.127	0.972		0m	N.D.	d
100) Methyl methacrylate	9.979	9.968	1.068		0m	N.D.	d
101) 1,4-Dioxane	0.000	10.060	0.000		0	N.D.	
102) 2-Nitropropane	0.000	10.414	0.000		0	N.D.	
104) Ethyl methacrylate	11.097	11.238	0.887		0m	N.D.	d
106) 1-Chlorohexane	0.000	12.426	0.000		0	N.D.	
107) cis-1,4-Dichloro-2-butene	13.526	13.554	0.905		0m	N.D.	d
108) Cyclohexanone	13.533	13.657	0.906		0m	N.D.	d
109) trans-1,4-Dichloro-2-b...	13.954	13.844	0.934		0m	N.D.	d
110) Pentachloroethane	14.537	14.541	0.973		0m	N.D.	d
111) Benzyl chloride	14.944	15.082	1.000		0m	N.D.	d
112) bis(2-Chloroisopropyl)...	15.609	15.485	1.044		0m	N.D.	d

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

Data Path : C:\msdchem\1\DATA\021810\  
Data File : AY446.D  
Acq On : 19 Feb 2010 1:32 pm  
Operator : JEB  
InstName : VOAA  
Sample : |1202047551|955077|1|VOA|1|VOA8260BS|  
Misc : LANL 5.2G N/A SOIL MIX[A]  
ALS Vial : 46 Sample Multiplier: 1

[illegible]

**Volatile**  
**Certificate of Analysis**  
**Sample Summary**

<b>SDG Number:</b>	<b>10-1758</b>	<b>Date Collected:</b>	<b>02/09/2010 12:00</b>	<b>Matrix:</b>	<b>R</b>
<b>Lab Sample ID:</b>	<b>1202047552</b>	<b>Date Received:</b>	<b>02/11/2010 09:20</b>	<b>%Moisture:</b>	<b>18</b>
<b>Client Sample:</b>	<b>QC for batch 955076</b>	<b>Client:</b>	<b>LANL010</b>	<b>Project:</b>	<b>QC</b>
<b>Client ID:</b>	<b>RE15-10-8366PSD</b>	<b>Method:</b>	<b>SW846 8260B</b>	<b>SOP Ref:</b>	<b>GL-OA-E-038</b>
<b>Batch ID:</b>	<b>955077</b>	<b>Inst:</b>	<b>VOAA.I</b>	<b>Dilution:</b>	<b>1</b>
<b>Run Date:</b>	<b>02/19/2010 13:58</b>	<b>Analyst:</b>	<b>JEB</b>	<b>Purge Vol:</b>	<b>5 mL</b>
<b>Prep Date:</b>	<b>02/18/2010 20:26</b>	<b>Aliquot:</b>	<b>5.1 g</b>	<b>Final Volume:</b>	<b>5 mL</b>
<b>Data File:</b>	<b>021810\AY447.D</b>	<b>Column:</b>	<b>DB-624</b>		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane		51.2	ug/kg	0.407	1.20
74-87-3	Chloromethane		37.9	ug/kg	0.359	1.20
75-01-4	Vinyl chloride		53.1	ug/kg	0.359	1.20
74-83-9	Bromomethane		44.2	ug/kg	0.359	1.20
75-00-3	Chloroethane		56.9	ug/kg	0.359	1.20
75-69-4	Trichlorofluoromethane		60.3	ug/kg	0.359	1.20
67-64-1	Acetone		73.0	ug/kg	1.98	5.98
75-35-4	1,1-Dichloroethylene		47.7	ug/kg	0.359	1.20
74-88-4	Iodomethane		181	ug/kg	1.91	5.98
75-09-2	Methylene chloride		50.9	ug/kg	2.39	5.98
75-15-0	Carbon disulfide		245	ug/kg	1.49	5.98
156-60-5	trans-1,2-Dichloroethylene		47.5	ug/kg	0.359	1.20
75-34-3	1,1-Dichloroethane		48.3	ug/kg	0.359	1.20
78-93-3	2-Butanone		75.4	ug/kg	1.79	5.98
156-59-2	cis-1,2-Dichloroethylene		47.3	ug/kg	0.359	1.20
594-20-7	2,2-Dichloropropane		49.4	ug/kg	0.359	1.20
67-66-3	Chloroform		53.8	ug/kg	0.359	1.20
74-97-5	Bromochloromethane		50.4	ug/kg	0.395	1.20
71-55-6	1,1,1-Trichloroethane		55.5	ug/kg	0.359	1.20
563-58-6	1,1-Dichloropropene		50.9	ug/kg	0.359	1.20
56-23-5	Carbon tetrachloride		56.9	ug/kg	0.359	1.20
107-06-2	1,2-Dichloroethane		51.5	ug/kg	0.359	1.20
71-43-2	Benzene		48.0	ug/kg	0.359	1.20
79-01-6	Trichloroethylene		50.0	ug/kg	0.395	1.20
78-87-5	1,2-Dichloropropane		46.0	ug/kg	0.359	1.20
75-27-4	Bromodichloromethane		51.5	ug/kg	0.359	1.20
74-95-3	Dibromomethane		51.9	ug/kg	0.359	1.20
108-10-1	4-Methyl-2-pentanone		177	ug/kg	1.49	5.98
10061-01-5	cis-1,3-Dichloropropylene		27.6	ug/kg	0.359	1.20
108-88-3	Toluene		47.0	ug/kg	0.359	1.20
10061-02-6	trans-1,3-Dichloropropylene		31.9	ug/kg	0.359	1.20
79-00-5	1,1,2-Trichloroethane		48.7	ug/kg	0.359	1.20
591-78-6	2-Hexanone		53.0	ug/kg	1.79	5.98
142-28-9	1,3-Dichloropropane		47.6	ug/kg	0.359	1.20
127-18-4	Tetrachloroethylene		53.3	ug/kg	0.359	1.20
124-48-1	Dibromochloromethane		47.0	ug/kg	0.359	1.20
106-93-4	1,2-Dibromoethane		43.9	ug/kg	0.359	1.20
108-90-7	Chlorobenzene		44.1	ug/kg	0.359	1.20

**Volatile  
Certificate of Analysis  
Sample Summary**

<b>SDG Number:</b>	<b>10-1758</b>	<b>Date Collected:</b>	<b>02/09/2010 12:00</b>	<b>Matrix:</b>	<b>R</b>
<b>Lab Sample ID:</b>	<b>1202047552</b>	<b>Date Received:</b>	<b>02/11/2010 09:20</b>	<b>%Moisture:</b>	<b>18</b>
<b>Client Sample:</b>	<b>QC for batch 955076</b>	<b>Client:</b>	<b>LANL010</b>	<b>Project:</b>	<b>QC</b>
<b>Client ID:</b>	<b>RE15-10-8366PSD</b>	<b>Method:</b>	<b>SW846 8260B</b>	<b>SOP Ref:</b>	<b>GL-OA-E-038</b>
<b>Batch ID:</b>	<b>955077</b>	<b>Inst:</b>	<b>VOAA.I</b>	<b>Dilution:</b>	<b>1</b>
<b>Run Date:</b>	<b>02/19/2010 13:58</b>	<b>Analyst:</b>	<b>JEB</b>	<b>Purge Vol:</b>	<b>5 mL</b>
<b>Prep Date:</b>	<b>02/18/2010 20:26</b>	<b>Aliquot:</b>	<b>5.1 g</b>	<b>Final Volume:</b>	<b>5 mL</b>
<b>Data File:</b>	<b>021810\AY447.D</b>	<b>Column:</b>	<b>DB-624</b>		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene		45.9	ug/kg	0.359	1.20
179601-23-1	m,p-Xylenes		83.8	ug/kg	0.359	2.39
95-47-6	o-Xylene		43.5	ug/kg	0.359	1.20
100-42-5	Styrene		35.9	ug/kg	0.359	1.20
75-25-2	Bromoform		44.5	ug/kg	0.359	1.20
79-34-5	1,1,2,2-Tetrachloroethane		41.7	ug/kg	0.359	1.20
96-18-4	1,2,3-Trichloropropane		46.2	ug/kg	0.359	1.20
108-86-1	Bromobenzene		41.5	ug/kg	0.359	1.20
103-65-1	n-Propylbenzene		36.9	ug/kg	0.359	1.20
95-49-8	2-Chlorotoluene		36.8	ug/kg	0.359	1.20
98-82-8	Isopropylbenzene		40.7	ug/kg	0.359	1.20
108-67-8	1,3,5-Trimethylbenzene		36.8	ug/kg	0.359	1.20
106-43-4	4-Chlorotoluene		33.1	ug/kg	0.359	1.20
98-06-6	tert-Butylbenzene		38.3	ug/kg	0.359	1.20
95-63-6	1,2,4-Trimethylbenzene		34.2	ug/kg	0.359	1.20
135-98-8	sec-Butylbenzene		35.0	ug/kg	0.359	1.20
99-87-6	4-Isopropyltoluene		23.7	ug/kg	0.359	1.20
541-73-1	1,3-Dichlorobenzene		35.4	ug/kg	0.359	1.20
106-46-7	1,4-Dichlorobenzene		34.6	ug/kg	0.359	1.20
104-51-8	n-Butylbenzene		28.7	ug/kg	0.359	1.20
96-12-8	1,2-Dibromo-3-chloropropane		34.9	ug/kg	0.359	1.20
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.98	ug/kg	1.91	5.98
	<i>Trichlorotrifluoroethane</i>					
630-20-6	1,1,1,2-Tetrachloroethane		50.9	ug/kg	0.359	1.20
95-50-1	1,2-Dichlorobenzene		34.4	ug/kg	0.359	1.20

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\021810\  
Data File : AY447.D  
Acq On : 19 Feb 2010 1:58 pm  
Operator : JEB  
InstName : VOAA  
Sample : |1202047552|955077|1|VOA|1|VOA8260BS|  
Misc : LANL 5.1G N/A SOIL MIX[A]  
ALS Vial : 47 Sample Multiplier: 1

Quant Time: Feb 19 14:23:12 2010  
Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M  
Quant Title : Volatile Organics 8260B SubList :  
QLast Update : Wed Feb 03 22:34:28 2010  
Response via : Initial Calibration  
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
-----								
Internal Standards								Dev(Min)
1) Fluorobenzene	9.342	9.342	1.000	96	807004	50.00	ug/L	0.00
41) Chlorobenzene-d5	12.511	12.507	1.000	117	589937	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	14.944	14.944	1.000	152	379689	50.00	ug/L	0.00
82) B Fluorobenzene	9.342	9.339	1.000	96	807004	50.00	ug/L	0.00
103) B Chlorobenzene-d5	12.511	12.508	1.000	117	589937	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	14.944	14.944	1.000	152	379689	50.00	ug/L	0.00
System Monitoring Compounds								Dev(Min)
29) 1,2-Dichloroethane-d4	8.982	8.982	0.961	65	355239	52.93	ug/L	0.00
Spiked Amount 50.000	Range 66	- 134	Recovery	=	105.86%			
43) Toluene-d8	10.987	10.987	0.878	98	775276	48.84	ug/L	0.00
Spiked Amount 50.000	Range 71	- 128	Recovery	=	97.68%			
61) Bromofluorobenzene	13.713	13.713	0.918	95	350756	45.39	ug/L	0.00
Spiked Amount 50.000	Range 65	- 130	Recovery	=	90.78%			
Target Compounds								QValue
2) Dichlorodifluoromethane	3.731	3.731	0.399	85	165215	42.80	ug/L	100
3) Chloromethane	4.034	4.043	0.432	50	167356	31.71	ug/L	98
4) Vinyl chloride	4.265	4.265	0.457	62	212796	44.44	ug/L	99
5) Bromomethane	4.839	4.839	0.518	94	110457	36.93	ug/L	99
6) Chloroethane	4.990	4.990	0.534	64	85043	47.56	ug/L	98
7) Trichlorofluoromethane	5.385	5.382	0.576	101	368472	50.47	ug/L	99
8) Ethyl ether	5.732	5.732	0.614	59	142127	36.60	ug/L	95
9) Acetone	6.085	6.082	0.651	43	235705	61.07	ug/L	98
10) 1,1-Dichloroethylene	6.082	6.082	0.651	61	291984	39.86	ug/L	98
11) Iodomethane	6.301	6.305	0.674	142	925966	151.00	ug/L	93
12) Acetonitrile	6.418	6.421	0.687	41	454833	714.98	ug/L	98
13) Methyl acetate	6.485	6.481	0.694	43	93474	25.44	ug/L	99
14) Carbon disulfide	6.428	6.428	0.688	76	2369208	205.04	ug/L	99
15) Methylene chloride	6.648	6.651	0.712	84	166074	42.54	ug/L	93
16) tert-Butyl methyl ether	6.973	6.973	0.746	73	502406	37.55	ug/L	97
17) trans-1,2-Dichloroethy...	6.994	6.994	0.749	61	282990	39.73	ug/L	96
18) Vinyl acetate	7.298	7.454	0.781	43	136	N.D.		
19) 1,1-Dichloroethane	7.468	7.471	0.799	63	340815	40.41	ug/L	99
20) 2-Butanone	8.066	8.062	0.863	43	271029	63.03	ug/L	96
21) cis-1,2-Dichloroethylene	8.108	8.108	0.868	61	321023	39.59	ug/L	96
22) 2,2-Dichloropropane	8.137	8.140	0.871	77	306996	41.35	ug/L	91
23) Bromochloromethane	8.377	8.373	0.897	128	78276	42.15	ug/L	92
24) Chloroform	8.423	8.423	0.902	83	369773	45.03	ug/L	100
25) 1,1,1-Trichloroethane	8.695	8.692	0.931	97	365594	46.44	ug/L	98
26) Cyclohexane	8.787	8.791	0.941	56	313846	37.10	ug/L	98
27) 1,1-Dichloropropene	8.851	8.851	0.947	75	257211	42.61	ug/L	92
28) Carbon tetrachloride	8.886	8.886	0.951	117	325680	47.58	ug/L	100
30) 1,2-Dichloroethane	9.063	9.063	0.970	62	332383	43.05	ug/L	99
31) Benzene	9.084	9.084	0.972	78	610371	40.14	ug/L	99
32) Cyclohexene	9.208	9.208	0.986	67	317047	37.58	ug/L	99
33) n-Butyl alcohol	9.463	9.462	1.013	56	115424	785.67	ug/L	97
34) Trichloroethylene	9.731	9.731	1.042	95	177166	41.83	ug/L	98
35) 1,2-Dichloropropane	9.965	9.965	1.067	63	168909	38.50	ug/L	96
36) Methylcyclohexane	9.982	9.982	1.069	83	244510	35.41	ug/L	96
37) Dibromomethane	10.092	10.095	1.080	93	109873	43.40	ug/L	93
38) Bromodichloromethane	10.216	10.216	1.093	83	258995	43.09	ug/L	98
39) 2-Chloroethylvinyl ether	10.665	10.453	1.142	63	350	N.D.		

Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\021810\  
Data File : AY447.D  
Acq On : 19 Feb 2010 1:58 pm  
Operator : JEB  
InstName : VOAA  
Sample : |1202047552|955077|1|VOA|1|VOA8260BS|  
Misc : LANL 5.1G N/A SOIL MIX[A]  
ALS Vial : 47 Sample Multiplier: 1

Quant Time: Feb 19 14:23:12 2010  
Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M  
Quant Title : Volatile Organics 8260B SubList :  
QLast Update : Wed Feb 03 22:34:28 2010  
Response via : Initial Calibration  
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
40) cis-1,3-Dichloropropylene	10.672	10.668	1.142	75	151585	23.07	ug/L	94
42) 4-Methyl-2-pentanone	10.775	10.774	0.861	58	292674	148.39	ug/L	89
44) Toluene	11.058	11.057	0.884	91	631607	39.32	ug/L	99
45) trans-1,3-Dichloroprop...	11.213	11.213	0.896	75	173993	26.66	ug/L	93
46) 1,1,2-Trichloroethane	11.429	11.429	0.914	83	111043	40.73	ug/L	99
47) 2-Hexanone	11.627	11.627	0.929	43	254148	44.34	ug/L	96
48) 1,3-Dichloropropane	11.620	11.620	0.929	76	246634	39.85	ug/L #	53
49) Tetrachloroethylene	11.655	11.655	0.932	164	148079	44.58	ug/L	93
50) Dibromochloromethane	11.882	11.881	0.950	129	156645	39.33	ug/L	100
51) 1,2-Dibromoethane	12.044	12.044	0.963	107	124602	36.70	ug/L	99
52) Chlorobenzene	12.543	12.543	1.003	112	373949	36.91	ug/L	99
53) 1,1,1,2-Tetrachloroethane	12.599	12.599	1.007	131	169824	42.60	ug/L	96
54) Ethylbenzene	12.617	12.617	1.008	91	746052	38.39	ug/L	98
55) m,p-Xylenes	12.730	12.730	1.018	106	485504	70.11	ug/L	93
56) o-Xylene	13.162	13.162	1.052	106	250935	36.40	ug/L	95
57) Styrene	13.162	13.162	1.052	104	336655	29.99	ug/L	95
59) Bromoform	13.402	13.402	0.897	173	113942	37.19	ug/L	99
60) Isopropylbenzene	13.529	13.529	0.905	105	738621	34.07	ug/L	96
62) 1,1,2,2-Tetrachloroethane	13.795	13.795	0.923	83	169934	34.89	ug/L	98
63) 1,2,3-Trichloropropane	13.876	13.879	0.929	110	58074	38.68	ug/L	91
64) Bromobenzene	13.918	13.918	0.931	156	173020	34.73	ug/L	91
65) n-Propylbenzene	13.957	13.957	0.934	91	794408	30.84	ug/L	98
66) 1,3,5-Trimethylbenzene	14.117	14.116	0.945	105	568513	30.82	ug/L	97
67) 2-Chlorotoluene	14.095	14.095	0.943	126	142679	30.80	ug/L	96
68) 4-Chlorotoluene	14.198	14.198	0.950	91	450813	27.70	ug/L	100
69) tert-Butylbenzene	14.488	14.488	0.969	134	111538	32.01	ug/L	96
70) 1,2,4-Trimethylbenzene	14.530	14.527	0.972	105	538510	28.63	ug/L	98
71) sec-Butylbenzene	14.718	14.718	0.985	105	680424	29.28	ug/L	99
72) 4-Isopropyltoluene	14.845	14.841	0.993	119	374510	19.86	ug/L	96
73) 1,3-Dichlorobenzene	14.884	14.884	0.996	146	268028	29.60	ug/L	97
74) 1,4-Dichlorobenzene	14.969	14.969	1.002	146	271674	28.98	ug/L	96
75) n-Butylbenzene	15.276	15.276	1.022	91	460871	23.99	ug/L	99
76) 1,2-Dichlorobenzene	15.379	15.379	1.029	146	257501	28.74	ug/L	96
77) 1,2-Dibromo-3-chloropr...	16.192	16.192	1.084	157	34146	29.20	ug/L	98
78) 1,2,4-Trichlorobenzene	17.183	17.183	1.150	180	153210	19.89	ug/L	99
79) Hexachlorobutadiene	17.360	17.360	1.162	225	119458	22.81	ug/L	98
80) Naphthalene	17.530	17.529	1.173	128	316056	18.87	ug/L	100
81) 1,2,3-Trichlorobenzene	17.847	17.847	1.194	180	146155	20.10	ug/L	99
83) Chlorotrifluoroethylene	0.000	3.661	0.000		0	N.D.		
84) 2-Chloro-1,1,1-trifluo...	0.000	4.416	0.000		0	N.D.		
85) Acrolein	0.000	5.898	0.000		0	N.D.		
86) Trichlorotrifluoroethane	0.000	6.068	0.000		0	N.D.		
87) Isopropyl Alcohol	6.209	6.188	0.665		0m	N.D.	d	
88) Allyl chloride	6.418	6.506	0.687		0m	N.D.	d	
89) tert-Butyl Alcohol	6.481	6.687	0.694		0m	N.D.	d	
90) Acrylonitrile	6.977	6.895	0.747		0m	N.D.	d	
91) Isopropyl ether	0.000	7.489	0.000		0	N.D.		
92) 2-Chloro-1,3-butadiene	0.000	7.581	0.000		0	N.D.		
93) Ethyl tert-butyl ether	8.112	7.893	0.868		0m	N.D.	d	
94) Ethyl acetate	8.066	8.094	0.863		0m	N.D.	d	
95) Propionitrile	0.000	8.122	0.000		0	N.D.		
96) Methacrylonitrile	8.137	8.306	0.871		0m	N.D.	d	
97) Tetrahydrofuran	8.419	8.430	0.901		0m	N.D.	d	
98) Isobutyl alcohol	8.787	8.777	0.941		0m	N.D.	d	



Quantitation Report  
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\021810\  
Data File : AY447.D  
Acq On : 19 Feb 2010 1:58 pm  
Operator : JEB  
InstName : VOAA  
Sample : |1202047552|955077|1|VOA|1|VOA8260BS|  
Misc : LANL 5.1G N/A SOIL MIX[A]  
ALS Vial : 47 Sample Multiplier: 1

Quant Time: Feb 19 14:23:12 2010  
Quant Method : C:\msdchem\1\DATA\122209\Methods\VOAA-8260-020210.M  
Quant Title : Volatile Organics 8260B SubList :  
QLast Update : Wed Feb 03 22:34:28 2010  
Response via : Initial Calibration  
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
99) Methyl tert-amyl ether	9.088	9.127	0.973		0m	N.D.	d
100) Methyl methacrylate	9.979	9.968	1.068		0m	N.D.	d
101) 1,4-Dioxane	0.000	10.060	0.000		0	N.D.	
102) 2-Nitropropane	0.000	10.414	0.000		0	N.D.	
104) Ethyl methacrylate	11.100	11.238	0.887		0m	N.D.	d
106) 1-Chlorohexane	0.000	12.426	0.000		0	N.D.	
107) cis-1,4-Dichloro-2-butene	13.547	13.554	0.907		0m	N.D.	d
108) Cyclohexanone	13.547	13.657	0.907		0m	N.D.	d
109) trans-1,4-Dichloro-2-b...	13.865	13.844	0.928		0m	N.D.	d
110) Pentachloroethane	14.544	14.541	0.973		0m	N.D.	d
111) Benzyl chloride	15.128	15.082	1.012		0m	N.D.	d
112) bis(2-Chloroisopropyl)...	15.609	15.485	1.044		0m	N.D.	d

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



# Miscellaneous

# Prep Logbook

## Volatile Organic Compounds (VOC) by Gas Chromatograph/Mass Spectrometer

**Batch ID:** 955076      Verified by: \_\_\_\_\_      Type \_\_\_\_\_ Sample Id \_\_\_\_\_ Description \_\_\_\_\_ Serial Number \_\_\_\_\_ Spike Amount \_\_\_\_\_ Spike Units \_\_\_\_\_  
**Analyst:** John Bell, Jr.  
**Method:** SW846 5030  
**Lab SOP:** GL-OA-E-038 REV# 14  
**Instrument:** Sartorius Balance B-001

Sample ID	Run Date	Matrix	Initial Weight (g)	Final Volume (mL)	Prep Factor (mL/g)	pH Check 1
1202047550 MB	18-FEB-2010 17:07:00	Soil	5	5	1	
1202047553 LCS	18-FEB-2010 17:07:00	Soil	5	5	1	
1202047554 LCS	18-FEB-2010 17:07:00	Soil	5	5	1	
246866001	18-FEB-2010 20:06:00	Soil	5	5	1	
246866002	18-FEB-2010 20:07:00	Soil	5.2	5	0.96154	
246866003	18-FEB-2010 20:08:00	Soil	5.2	5	0.96154	
246866004	18-FEB-2010 20:09:00	Soil	5.2	5	0.96154	
246866005	18-FEB-2010 20:10:00	Soil	5.3	5	0.9434	
246866006	18-FEB-2010 20:15:00	Soil	5	5	1	
246866007	18-FEB-2010 20:16:00	Soil	5.5	5	0.90909	
246866008	18-FEB-2010 20:17:00	Soil	5.2	5	0.96154	
246866009	18-FEB-2010 20:18:00	Soil	5.5	5	0.90909	
246897001	18-FEB-2010 20:19:00	Soil	5.2	5	0.96154	
246897003	18-FEB-2010 20:21:00	Soil	5.1	5	0.98039	
246897004	18-FEB-2010 20:22:00	Soil	5.2	5	0.96154	
246897005	18-FEB-2010 20:23:00	Soil	5	5	1	
246897006	18-FEB-2010 20:24:00	Soil	5.3	5	0.9434	
1202047551 PS (246866002)	18-FEB-2010 20:25:00	Soil	5.2	5	0.96154	
1202047552 PSD (246866002)	18-FEB-2010 20:26:00	Soil	5.1	5	0.98039	

Reagent/Solvent Lot ID	Description	Amount	Comments:
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Date: 2/2/2010

Method 8260B/624 Operator: JEB

REVIEWED BY: \_\_\_\_\_

DATE: \_\_\_\_\_

HARDWARE CONFIGURATION & METHOD CONDITIONS SUMMARY No# 1

Daily Instrument Readings:

Multiplier Voltage: 1306

CALIBRATION & CC INFORMATION:

Initial Calibration Date: 2/2/2010

Daily Standard

Volume Added for Purge (ul)

Purge Amount

(See pg. 14 for ICAL Std. Sci. Ids)

NaHSO4 lot # N/A

Cl test lot # 84515

Sequence Number: 020210VA

Solution ID#

Blk/  
Smpl

CCV

MS/  
LCS

BFB

CCV	N/A		5+5		
IS	UVM100114-01	1	1	1	
SS	UVM100114-02	1	1	1	
LCS/MS	N/A			5+5	
BFB	UVM100114-02				1
SHORT	N/A		5+5	5+5	
DHEC	N/A			5	

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		Data File	Lab Sample ID	Client	Batch #	Wt.(g) or	Dil.	pH	AS	Matrix	Analyst	Cl test	Acceptable	Comments
Date	Time					Vol(ml/ul)	Factor		Slot #	w or s		(Y/N)	(O/X)	
2 Feb 2010	22:04	AW301.D	UVM100114-02	GEL	BFB	5ML	1	N/A	1	W	JEB	N/A	O	
2 Feb 2010	22:29	AW302.D	BLANK	GEEL	BLANK	5ML	1	N/A	2	w	JEB	N/A	O	
2 Feb 2010	22:55	AW303.D	WAVM100202-01	GEEL	ICAL	5ML	1	N/A	3	w	JEB	N/A	O	UVM100106-01B/UVM100202-01A
2 Feb 2010	23:21	AW304.D	WAVM100202-02	GEEL	ICAL	5ML	1	N/A	4	w	JEB	N/A	X	UVM100106-02B/UVM100202-02A
2 Feb 2010	23:47	AW305.D	WAVM100202-03	GEEL	ICAL	5ML	1	N/A	5	w	JEB	N/A	O	UVM100106-02B/UVM100202-02A
3 Feb 2010	00:14	AW306.D	WAVM100202-04	GEEL	ICAL	5ML	1	N/A	6	w	JEB	N/A	O	UVM100106-03B/UVM100202-03A
3 Feb 2010	00:40	AW307.D	WAVM100202-05	GEEL	ICAL	5ML	1	N/A	7	w	JEB	N/A	O	UVM100106-04B/UVM100202-04A
3 Feb 2010	01:06	AW308.D	WAVM100202-06	GEEL	ICAL	5ML	1	N/A	8	w	JEB	N/A	O	UVM100106-05B/UVM100202-05A
3 Feb 2010	01:32	AW309.D	WAVM100202-07	GEEL	ICAL	5ML	1	N/A	9	w	JEB	N/A	O	UVM100106-06B/UVM100202-06A
3 Feb 2010	01:59	AW310.D	WAVM100202-08	GEEL	ICAL	5ML	1	N/A	10	w	JEB	N/A	O	UVM100106-07B/UVM100202-07A
3 Feb 2010	02:25	AW311.D	WAVM100202-09	GEEL	ICAL	5ML	1	N/A	11	w	JEB	N/A	O	UVM100106-08B/UVM100202-08A
3 Feb 2010	02:51	AW312.D	BLANK	GEEL	BLANK	5ML	1	N/A	12	w	JEB	N/A	O	
3 Feb 2010	03:17	AW313.D	WAVM100202-10	GEEL	ICAL	5ML	1	N/A	13	w	JEB	N/A	O	UVM100118-01/UVM100125-01B
3 Feb 2010	03:43	AW314.D	WAVM100202-11	GEEL	ICAL	5ML	1	N/A	14	w	JEB	N/A	O	UVM100118-02/UVM100125-02B
3 Feb 2010	04:09	AW315.D	WAVM100202-12	GEEL	ICAL	5ML	1	N/A	15	w	JEB	N/A	O	UVM100118-03/UVM100125-03B
3 Feb 2010	04:35	AW316.D	WAVM100202-13	GEEL	ICAL	5ML	1	N/A	16	w	JEB	N/A	O	UVM100118-04/UVM100125-04B
3 Feb 2010	05:02	AW317.D	WAVM100202-14	GEEL	ICAL	5ML	1	N/A	17	w	JEB	N/A	O	UVM100118-05/UVM100125-05B
3 Feb 2010	05:28	AW318.D	WAVM100202-15	GEEL	ICAL	5ML	1	N/A	18	w	JEB	N/A	O	UVM100118-06/UVM100125-06B
3 Feb 2010	05:55	AW319.D	WAVM100202-16	GEEL	ICAL	5ML	1	N/A	19	w	JEB	N/A	O	UVM100118-07/UVM100125-07B
3 Feb 2010	06:21	AW320.D	BLANK	GEEL	BLANK	5ML	1	N/A	20	w	JEB	N/A	O	
3 Feb 2010	06:48	AW321.D	WAVM100202-17	GEEL	ICV	5ML	1	N/A	21	w	JEB	N/A	O	UVM100126-01A/IVM100202-01
3 Feb 2010	07:14	AW322.D	WAVM100202-18	GEEL	ICV	5ML	1	N/A	22	w	JEB	N/A	X	UVM100126-02A/IVM100202-01
3 Feb 2010	07:40	AW323.D	WAVM100202-19	GEEL	ICV	5ML	1	N/A	23	w	JEB	N/A	O	UVM100125-08A/UVM100118-08A

Date: 2/18/2010

Method 8260B/624 Operator: JEB

REVIEWED BY: \_\_\_\_\_

DATE: \_\_\_\_\_

HARDWARE CONFIGURATION & METHOD CONDITIONS SUMMARY No# 1

Daily Instrument Readings:

Multiplier Voltage: 1306

CALIBRATION & CC INFORMATION:

Initial Calibration Date: 2/2/2010

Daily Standard

Volume Added for Purge (ul)

Purge Amount

(See pg. 14 for ICAL Std. Sci. Ids)

NaHSO4 lot # N/A

Cl test lot # 84515

Sequence Number: 021810VA

Solution ID#	Blk/ Smpl	CCV	MS/ LCS	BFB
CCV WAVM100218-04		5+5		
IS UVM100114-01	1	1	1	
SS UVM100114-02	1	1	1	
LCS/MS WAVM100218-04,05			5+5	
BFB UVM100114-02				1
SHORT WAVM100218-05		5	5	
DHEC N/A			5	

<u>5</u>	Water Purge Vol:
<u>VARIOUS</u>	Soil Purge Wt.
<u>VARIOUS</u>	Mid level ext. MeOH Vol:
<u>VARIOUS</u>	ul
<u>N/A</u>	Methanol Lot #
<u>x</u>	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
2/19/2010 5:16	AY427.D	UVM100114-02	GEL	BFB	5ML	1	N/A	27	w	JEB	N/A	O	
2/19/2010 5:41	AY428.D	WAVM100218-04	GEL	CCV/LCS	5G	1	N/A	28	s	JEB	N/A	O	UVM100126-01E/IVM100218-01
2/19/2010 6:07	AY429.D	WAVM100218-05	GEL	CCV/LCS	5G	1	N/A	29	s	JEB	N/A	O	UVM091216-08B
2/19/2010 6:33	AY430.D	BLANK	GEL	BLANK	5G	1	N/A	30	s	JEB	N/A	O	
2/19/2010 7:00	AY431.D	246866001	LANL	955077	5.0G	1	N/A	31	s	JEB	N/A	O	
2/19/2010 7:26	AY432.D	246866002	LANL	955077	5.2G	1	N/A	32	s	JEB	N/A	O	
2/19/2010 7:53	AY433.D	246866003	LANL	955077	5.2G	1	N/A	33	s	JEB	N/A	O	
2/19/2010 8:19	AY434.D	246866004	LANL	955077	5.2G	1	N/A	34	s	JEB	N/A	O	
2/19/2010 8:45	AY435.D	246866005	LANL	955077	5.3G	1	N/A	35	s	JEB	N/A	O	
2/19/2010 9:11	AY436.D	246866006	LANL	955077	5.0G	1	N/A	36	s	JEB	N/A	O	
2/19/2010 9:37	AY437.D	246866007	LANL	955077	5.5G	1	N/A	37	s	JEB	N/A	O	
2/19/2010 10:03	AY438.D	246866008	LANL	955077	5.2G	1	N/A	38	s	JEB	N/A	O	
2/19/2010 10:30	AY439.D	246866009	LANL	955077	5.5G	1	N/A	39	s	JEB	N/A	O	
2/19/2010 10:55	AY440.D	246897001	LANL	955077	5.2G	1	N/A	40	s	JEB	N/A	O	
2/19/2010 11:22	AY441.D	246897002	LANL	955077	5.3G	1	N/A	41	s	JEB	N/A	X	DO NOT NEED
2/19/2010 11:48	AY442.D	246897003	LANL	955077	5.1G	1	N/A	42	s	JEB	N/A	O	
2/19/2010 12:14	AY443.D	246897004	LANL	955077	5.2G	1	N/A	43	s	JEB	N/A	O	
2/19/2010 12:40	AY444.D	246897005	LANL	955077	5.0G	1	N/A	44	s	JEB	N/A	O	
2/19/2010 13:06	AY445.D	246897006	LANL	955077	5.3G	1	N/A	45	s	JEB	N/A	O	
2/19/2010 13:32	AY446.D	1202047551	LANL	955077	5.3G	1	N/A	46	s	JEB	N/A	O	246866002MS
2/19/2010 13:58	AY447.D	1202047552	LANL	955077	5.3G	1	N/A	47	s	JEB	N/A	O	246866002MSD

### DATA EXCEPTION REPORT

<b>Mo.Day Yr.</b> 19-FEB-10	<b>Division:</b> Industrial	<b>Quality Criteria:</b> Specifications	<b>Type:</b> Process
<b>Instrument Type:</b> VOA GC/MS	<b>Test / Method:</b> SW846 8260B	<b>Matrix Type:</b> Solid	<b>Client Code:</b> LANL
<b>Batch ID:</b> 955077	<b>Sample Numbers:</b> See Below		
<b>Potentially affected work order(s)(SDG): 246866(10-1758),246897(10-1769)</b> <b>Application Issues:</b> Failed Recovery for MS/PS Failed RPD for MS/MSD, or PS/PSD Failed Recovery for MSD/PSD			
<b>Specification and Requirements</b>		<b>DER Disposition:</b>	
<b>Exception Description:</b>  1. The spike recoveries for the Matrix Spike and Matrix Spike Duplicate were not all within the acceptance limits:  QC1202047551MS, QC1202047552MSD  2. The RPD between the matrix spike pair were not all within the acceptance limits.		1/2. The Matrix Spike / Matrix Spike Duplicate recovered similarly. Matrix interference has been demonstrated. Narrate and Report.	

**Originator's Name:**

John Bell, Jr. 19-FEB-10

**Data Validator/Group Leader:**

Sarah Kozlik 28-FEB-10

# **GC/MS Semivolatile Analysis**



**Semi-Volatile Case Narrative  
Los Alamos National Laboratory (LANL)  
SDG 10-1758**

**Method/Analysis Information**

<b>Procedure:</b>	<b>Analysis of Semivolatile Organic Compounds by Gas Chromatography/Mass Spectrometry</b>
Analytical Method:	SW846 8270C
Prep Method:	SW846 3550B
Analytical Batch Number:	954297
Prep Batch Number:	954286

**Sample Analysis**

The following samples were analyzed using the analytical protocol as established in SW846 8270C:

<b>Sample ID</b>	<b>Client ID</b>
246866002	RE15-10-8366
246866003	RE15-10-8367
246866004	RE15-10-8364
246866005	RE15-10-8365
246866006	RE15-10-8368
246866007	RE15-10-8340
246866008	RE15-10-8341
246866009	RE15-10-8376
1202045697	Method Blank (MB)
1202045698	Laboratory Control Sample (LCS)
1202045699	246866002(RE15-10-8366) Matrix Spike (MS)
1202045700	246866002(RE15-10-8366) Matrix Spike Duplicate (MSD)

The samples in this SDG were analyzed on a "dry weight" basis.

**Preparation/Analytical Method Verification**

**SOP Reference**

Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-OA-E-009 REV# 23.

Raw data reports are processed and reviewed by the analyst using the Target software package. False positives have been removed from the Target quantitation reports per standard operating procedures (SOP) section 18.2.

**Calibration Information**

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

Due to software limitations, the Calibration Summary Form 6 may not indicate all the calibration files comprising the initial calibration. A complete list of the initial calibration data files are shown in the Calibration History report located in the Standard Data section of the data package. Please note that the second level of the initial calibration (5 mg/L) is only used for n-Nitrosodipropylamine. The various calibration mixes may not be calibrated using all of the calibration levels. In addition, not all of the mixes are calibrated using the same levels.

Diphenylamine has now superseded N-Nitroso-diphenylamine as a CCC on Quantitation Reports, Initial Calibration Reports, Calibration Check Standard Reports, etc. Previous versions of EPA Method 8270 (prior to 8270C) listed N-Nitroso-diphenylamine as a CCC. However, as stated in EPA Method 8270C, Revision 3, December, 1996, Section 1.4.5, "N-Nitroso-diphenylamine decomposes in the gas chromatographic inlet and cannot be separated from Diphenylamine." Studies of these two compounds at GEL, both independent of each other and together, show that they not only co-elute, but also have similar mass spectra. N-Nitroso-diphenylamine and Diphenylamine will be reported as Diphenylamine on all reports and forms. 2,4-Toluene diisocyanate rapidly hydrolyzes in water (half-life less than 30 minutes). Therefore, recoveries of this compound from aqueous matrices should not be expected. In addition, in solid matrices, 2,4-Toluene diisocyanate often reacts with alcohols and amines to produce urethane and ureas and consequently cannot usually coexist in a solution containing these materials. 2,4-Toluene diisocyanate is reported as an estimated value.

The linear equation used in Target and indicated on the initial calibration summary form is not a conventional linear equation (slope intercept formula) and does not match the equation found in SW-846 method 8000B. The x and y axes are inversed in Target, so that the instrument response is treated as the independent variable (x) and the concentration ratio is treated as the dependent variable (y). The equation used in Target to calculate sample results is adjusted to account for the linear equation inversion and reciprocal slope. The adjusted calculation has been independently verified to produce valid results.

#### **Initial Calibration**

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

#### **CCV Requirements**

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

#### **Quality Control (QC) Information**

##### **Method Blank (MB) Statement**

The MB analyzed with this SDG met the acceptance criteria.

##### **Surrogate Recoveries**

All the surrogate recoveries were within the established acceptance criteria for this SDG.

##### **Laboratory Control Sample (LCS) Recovery**

The LCS spike recoveries met the acceptance limits.

##### **QC Sample Designation**

Sample 246866002 (RE15-10-8366) was selected for analysis as the matrix spike and matrix spike duplicate.

##### **Matrix Spike (MS) Recovery Statement**

The MS recoveries were within the established acceptance limits.

##### **Matrix Spike Duplicate (MSD) Recovery Statement**

The MSD recoveries were within the established acceptance limits.

**MS/MSD Relative Percent Difference (RPD) Statement**

The RPD(s) between the MS and MSD met the acceptance limits.

**Internal Standard (ISTD) Acceptance**

The internal standard responses were outside of the acceptance criteria for the following sample: 246866009 (RE15-10-8376). The sample was re-analyzed and the failures were not confirmed. The re-analysis data are reported.

**Technical Information****Holding Time Specifications**

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

**Preparation/Analytical Method Verification**

All procedures were performed as stated in the SOP.

**Sample Dilutions**

The samples in this SDG did not require dilutions.

**Sample Re-extraction/Re-analysis**

Sample was re-analyzed due to internal standard response failure.

**Miscellaneous Information****Data Exception (DER) Documentation**

Data exception reports (DERs) are generated to document procedural anomalies that may deviate from referenced SOP or contractual documents. A data exception report (DER) was not generated for this SDG.

**Manual Integrations**

Some initial calibration standards, continuing calibration standards, and/or samples may require manual integrations due to software limitations. Please see the raw data in the Miscellaneous Section.

**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
MSD2.I	Agilent 5975 Mass Spectrometer	HP7890A/HP5975C	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: Don Berchman Date: 3-10-10

## Roadmap for LANL 10-1758 SVOA

This roadmap was analyzed by ANN00964 on 02-23-2010, 20:17.

This roadmap was reviewed by jcb on 02-25-2010, 15:58.

Sample

exclude	manual	datafile	smpid	injdate	injtime	sublist	clientid	dilution	batchid	comment
<input type="checkbox"/>	N	/chem/MSD2.i/s022210.b/s2b2209.d	246866002	22-FEB-2010	17:48	10-1758.sub	RE15-10-8366	1	954297	
<input type="checkbox"/>	N	/chem/MSD2.i/s022210.b/s2b2223.d	246866003	22-FEB-2010	23:44	10-1758.sub	RE15-10-8367	1	954297	
<input type="checkbox"/>	N	/chem/MSD2.i/s022210.b/s2b2224.d	246866004	23-FEB-2010	00:09	10-1758.sub	RE15-10-8364	1	954297	
<input type="checkbox"/>	N	/chem/MSD2.i/s022210.b/s2b2225.d	246866005	23-FEB-2010	00:34	10-1758.sub	RE15-10-8365	1	954297	
<input type="checkbox"/>	N	/chem/MSD2.i/s022210.b/s2b2226.d	246866006	23-FEB-2010	01:00	10-1758.sub	RE15-10-8368	1	954297	
<input type="checkbox"/>	N	/chem/MSD2.i/s022210.b/s2b2227.d	246866007	23-FEB-2010	01:25	10-1758.sub	RE15-10-8340	1	954297	
<input type="checkbox"/>	N	/chem/MSD2.i/s022210.b/s2b2228.d	246866008	23-FEB-2010	01:50	10-1758.sub	RE15-10-8341	1	954297	
<input checked="" type="checkbox"/>	N	/chem/MSD2.i/s022210.b/s2b2229.d	246866009	23-FEB-2010	02:16	10-1758.sub	RE15-10-8376	1	954297	**FAILS ISTD - RERUN _____
<input type="checkbox"/>	N	/chem/MSD2.i/s022310.b/s2b2313.d	246866009	23-FEB-2010	18:15	10-1758.sub	RE15-10-8376	1	954297	

QC Sample

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	batchid	comment
<input type="checkbox"/>	Y	/chem/MSD2.i/s022210.b/s2b2205-1.d	1202045697	mb	22-FEB-2010	16:06	10-1758.sub	SBLK01	1.00000	954297	
<input type="checkbox"/>	Y	/chem/MSD2.i/s022210.b/s2b2206-1.d	1202045698	lcs	22-FEB-2010	16:31	10-1758.sub	SBLK01LCS	1.00000	954297	
<input type="checkbox"/>	Y	/chem/MSD2.i/s022210.b/s2b2210.d	1202045699	ms	22-FEB-2010	18:14	10-1758.sub	RE15-10-8366MS	1.00000	954297	
<input type="checkbox"/>	Y	/chem/MSD2.i/s022210.b/s2b2211.d	1202045700	msd	22-FEB-2010	18:39	10-1758.sub	RE15-10-8366MSD	1.00000	954297	

# Sample Data Summary

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

Page 1 of 3

**SDG Number:** 10-1758  
**Lab Sample ID:** 246866007

**Date Collected:** 02/09/2010 12:00  
**Date Received:** 02/11/2010 09:20  
**Client:** LANL010  
**Method:** SW846 8270C  
**Inst:** MSD2.I  
**Analyst:** AGS1  
**Aliquot:** 30.15 g  
**Column:** J&W DB-5MS

**Matrix:** R  
**%Moisture:** 24.2  
**Project:** LANL01004  
**SOP Ref:** GL-OA-E-009  
**Dilution:** 1  
**Inj. Vol:** .5 uL  
**Final Volume:** 1 mL  
**Level:** LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	437	ug/kg	87.5	437
108-95-2	Phenol	U	437	ug/kg	87.5	437
95-57-8	2-Chlorophenol	U	437	ug/kg	87.5	437
106-46-7	1,4-Dichlorobenzene	U	437	ug/kg	87.5	437
621-64-7	N-Nitrosodipropylamine	U	437	ug/kg	87.5	437
59-50-7	4-Chloro-3-methylphenol	U	437	ug/kg	87.5	437
83-32-9	Acenaphthene	U	43.7	ug/kg	14.4	43.7
121-14-2	2,4-Dinitrotoluene	U	437	ug/kg	43.7	437
100-02-7	4-Nitrophenol	U	437	ug/kg	144	437
87-86-5	Pentachlorophenol	U	437	ug/kg	109	437
129-00-0	Pyrene	U	43.7	ug/kg	13.1	43.7
110-86-1	Pyridine	U	437	ug/kg	87.5	437
62-53-3	Aniline	U	437	ug/kg	131	437
111-44-4	bis(2-Chloroethyl) ether	U	437	ug/kg	87.5	437
541-73-1	1,3-Dichlorobenzene	U	437	ug/kg	87.5	437
100-51-6	Benzyl alcohol	U	437	ug/kg	131	437
95-50-1	1,2-Dichlorobenzene	U	437	ug/kg	87.5	437
108-60-1	bis(2-Chloroisopropyl)ether	U	437	ug/kg	87.5	437
95-48-7	o-Cresol	U	437	ug/kg	87.5	437
65794-96-9	m,p-Cresols	U	437	ug/kg	131	437
67-72-1	Hexachloroethane	U	437	ug/kg	87.5	437
98-95-3	Nitrobenzene	U	437	ug/kg	87.5	437
78-59-1	Isophorone	U	437	ug/kg	87.5	437
88-75-5	2-Nitrophenol	U	437	ug/kg	87.5	437
105-67-9	2,4-Dimethylphenol	U	437	ug/kg	153	437
111-91-1	bis(2-Chloroethoxy)methane	U	437	ug/kg	87.5	437
120-83-2	2,4-Dichlorophenol	U	437	ug/kg	87.5	437
65-85-0	Benzoic acid	U	875	ug/kg	219	875
91-20-3	Naphthalene	U	43.7	ug/kg	13.1	43.7
106-47-8	4-Chloroaniline	U	437	ug/kg	87.5	437
87-68-3	Hexachlorobutadiene	U	437	ug/kg	87.5	437
91-57-6	2-Methylnaphthalene	U	43.7	ug/kg	8.75	43.7
77-47-4	Hexachlorocyclopentadiene	U	437	ug/kg	87.5	437
88-06-2	2,4,6-Trichlorophenol	U	437	ug/kg	87.5	437
95-95-4	2,4,5-Trichlorophenol	U	437	ug/kg	87.5	437
91-58-7	2-Chloronaphthalene	U	43.7	ug/kg	14.4	43.7
88-74-4	2-Nitroaniline	U	437	ug/kg	87.5	437
99-09-2	<i>o</i> -Nitroaniline	U	437	ug/kg	87.5	437
	3-Nitroaniline					



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

**SDG Number:** 10-1758  
**Lab Sample ID:** 246866007

**Date Collected:** 02/09/2010 12:00  
**Date Received:** 02/11/2010 09:20  
**Client:** LANL010  
**Method:** SW846 8270C  
**Inst:** MSD2.I  
**Analyst:** AGS1  
**Aliquot:** 30.15 g  
**Column:** J&W DB-5MS

**Matrix:** R  
**%Moisture:** 24.2  
**Project:** LANL01004  
**SOP Ref:** GL-OA-E-009  
**Dilution:** 1  
**Inj. Vol:** .5 uL  
**Final Volume:** 1 mL  
**Level:** LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	<i>m</i> -Nitroaniline					
131-11-3	Dimethylphthalate	U	437	ug/kg	87.5	437
606-20-2	2,6-Dinitrotoluene	U	437	ug/kg	43.7	437
208-96-8	Acenaphthylene	U	43.7	ug/kg	13.1	43.7
51-28-5	2,4-Dinitrophenol	U	875	ug/kg	166	875
132-64-9	Dibenzofuran	U	437	ug/kg	87.5	437
84-66-2	Diethylphthalate	U	437	ug/kg	87.5	437
86-73-7	Fluorene	U	43.7	ug/kg	13.1	43.7
7005-72-3	4-Chlorophenylphenylether	U	437	ug/kg	87.5	437
534-52-1	2-Methyl-4,6-dinitrophenol	U	437	ug/kg	87.5	437
100-01-6	4-Nitroaniline	U	437	ug/kg	131	437
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	437	ug/kg	87.5	437
122-66-7	Azobenzene	U	437	ug/kg	87.5	437
	<i>1,2</i> -Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	437	ug/kg	87.5	437
118-74-1	Hexachlorobenzene	U	437	ug/kg	87.5	437
85-01-8	Phenanthrene	U	43.7	ug/kg	13.1	43.7
120-12-7	Anthracene	U	43.7	ug/kg	8.75	43.7
84-74-2	Di-n-butylphthalate	U	437	ug/kg	87.5	437
206-44-0	Fluoranthene	U	43.7	ug/kg	13.1	43.7
85-68-7	Butylbenzylphthalate	U	437	ug/kg	87.5	437
56-55-3	Benzo(a)anthracene	U	43.7	ug/kg	13.1	43.7
91-94-1	3,3'-Dichlorobenzidine	U	437	ug/kg	131	437
218-01-9	Chrysene	U	43.7	ug/kg	13.1	43.7
117-81-7	bis(2-Ethylhexyl)phthalate	U	437	ug/kg	87.5	437
117-84-0	Di-n-octylphthalate	U	437	ug/kg	87.5	437
205-99-2	Benzo(b)fluoranthene	U	43.7	ug/kg	13.1	43.7
207-08-9	Benzo(k)fluoranthene	U	43.7	ug/kg	13.1	43.7
50-32-8	Benzo(a)pyrene	U	43.7	ug/kg	13.1	43.7
193-39-5	Indeno(1,2,3-cd)pyrene	U	43.7	ug/kg	13.1	43.7
53-70-3	Dibenzo(a,h)anthracene	U	43.7	ug/kg	13.1	43.7
191-24-2	Benzo(ghi)perylene	U	43.7	ug/kg	13.1	43.7
120-82-1	1,2,4-Trichlorobenzene	U	437	ug/kg	87.5	437

**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	3.19	829	ug/kg		J
127-91-3	.beta.-Pinene	4.3	253	ug/kg	97	NJ

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

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**SDG Number:** 10-1758  
**Lab Sample ID:** 246866007

**Date Collected:** 02/09/2010 12:00  
**Date Received:** 02/11/2010 09:20  
**Client:** LANL010  
**Method:** SW846 8270C  
**Inst:** MSD2.I  
**Analyst:** AGS1  
**Aliquot:** 30.15 g  
**Column:** J&W DB-5MS

**Matrix:** R  
**%Moisture:** 24.2  
**Project:** LANL01004  
**SOP Ref:** GL-OA-E-009  
**Dilution:** 1  
**Inj. Vol:** .5 uL  
**Final Volume:** 1 mL  
**Level:** LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
Tentatively Identified Compound Summary							
CAS No.	Tentatively Identified Compound (TIC)		RT	Estimated	Units	Fit	Qual
77-53-2	Cedrol		8.41	713	ug/kg	94	NJ
	Unknown		11.37	229	ug/kg		J
511-15-9	2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa		11.48	2980	ug/kg	98	NJ

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

Page 1 of 3

**SDG Number:** 10-1758  
**Lab Sample ID:** 246866008

**Date Collected:** 02/09/2010 12:00  
**Date Received:** 02/11/2010 09:20  
**Client:** LANL010  
**Method:** SW846 8270C  
**Inst:** MSD2.I  
**Analyst:** AGS1  
**Aliquot:** 30.02 g  
**Column:** J&W DB-5MS

**Matrix:** R  
**%Moisture:** 7.6  
**Project:** LANL01004  
**SOP Ref:** GL-OA-E-009  
**Dilution:** 1  
**Inj. Vol:** .5 uL  
**Final Volume:** 1 mL  
**Level:** LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	360	ug/kg	72.1	360
108-95-2	Phenol	U	360	ug/kg	72.1	360
95-57-8	2-Chlorophenol	U	360	ug/kg	72.1	360
106-46-7	1,4-Dichlorobenzene	U	360	ug/kg	72.1	360
621-64-7	N-Nitrosodipropylamine	U	360	ug/kg	72.1	360
59-50-7	4-Chloro-3-methylphenol	U	360	ug/kg	72.1	360
83-32-9	Acenaphthene	U	36.0	ug/kg	11.9	36.0
121-14-2	2,4-Dinitrotoluene	U	360	ug/kg	36.0	360
100-02-7	4-Nitrophenol	U	360	ug/kg	119	360
87-86-5	Pentachlorophenol	U	360	ug/kg	90.1	360
129-00-0	Pyrene	U	36.0	ug/kg	10.8	36.0
110-86-1	Pyridine	U	360	ug/kg	72.1	360
62-53-3	Aniline	U	360	ug/kg	108	360
111-44-4	bis(2-Chloroethyl) ether	U	360	ug/kg	72.1	360
541-73-1	1,3-Dichlorobenzene	U	360	ug/kg	72.1	360
100-51-6	Benzyl alcohol	U	360	ug/kg	108	360
95-50-1	1,2-Dichlorobenzene	U	360	ug/kg	72.1	360
108-60-1	bis(2-Chloroisopropyl)ether	U	360	ug/kg	72.1	360
95-48-7	o-Cresol	U	360	ug/kg	72.1	360
65794-96-9	m,p-Cresols	U	360	ug/kg	108	360
67-72-1	Hexachloroethane	U	360	ug/kg	72.1	360
98-95-3	Nitrobenzene	U	360	ug/kg	72.1	360
78-59-1	Isophorone	U	360	ug/kg	72.1	360
88-75-5	2-Nitrophenol	U	360	ug/kg	72.1	360
105-67-9	2,4-Dimethylphenol	U	360	ug/kg	126	360
111-91-1	bis(2-Chloroethoxy)methane	U	360	ug/kg	72.1	360
120-83-2	2,4-Dichlorophenol	U	360	ug/kg	72.1	360
65-85-0	Benzoic acid	U	721	ug/kg	180	721
91-20-3	Naphthalene	U	36.0	ug/kg	10.8	36.0
106-47-8	4-Chloroaniline	U	360	ug/kg	72.1	360
87-68-3	Hexachlorobutadiene	U	360	ug/kg	72.1	360
91-57-6	2-Methylnaphthalene	U	36.0	ug/kg	7.21	36.0
77-47-4	Hexachlorocyclopentadiene	U	360	ug/kg	72.1	360
88-06-2	2,4,6-Trichlorophenol	U	360	ug/kg	72.1	360
95-95-4	2,4,5-Trichlorophenol	U	360	ug/kg	72.1	360
91-58-7	2-Chloronaphthalene	U	36.0	ug/kg	11.9	36.0
88-74-4	2-Nitroaniline	U	360	ug/kg	72.1	360
99-09-2	<i>o</i> -Nitroaniline	U	360	ug/kg	72.1	360
	3-Nitroaniline					

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

**SDG Number:** 10-1758  
**Lab Sample ID:** 246866008

**Date Collected:** 02/09/2010 12:00  
**Date Received:** 02/11/2010 09:20  
**Client:** LANL010  
**Method:** SW846 8270C  
**Inst:** MSD2.I  
**Analyst:** AGS1  
**Aliquot:** 30.02 g  
**Column:** J&W DB-5MS

**Matrix:** R  
**%Moisture:** 7.6  
**Project:** LANL01004  
**SOP Ref:** GL-OA-E-009  
**Dilution:** 1  
**Inj. Vol:** .5 uL  
**Final Volume:** 1 mL  
**Level:** LOW

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

**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	1.99	183	ug/kg		J
	Unknown Aldol Condensate	3.19	766	ug/kg		J

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

Page 3 of 3

**SDG Number:** 10-1758  
**Lab Sample ID:** 246866008

**Date Collected:** 02/09/2010 12:00  
**Date Received:** 02/11/2010 09:20  
**Client:** LANL010  
**Method:** SW846 8270C  
**Inst:** MSD2.I  
**Analyst:** AGS1  
**Aliquot:** 30.02 g  
**Column:** J&W DB-5MS

**Matrix:** R  
**%Moisture:** 7.6  
**Project:** LANL01004  
**SOP Ref:** GL-OA-E-009  
**Dilution:** 1  
**Inj. Vol:** .5 uL  
**Final Volume:** 1 mL  
**Level:** LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
Tentatively Identified Compound Summary							
CAS No.	Tentatively Identified Compound (TIC)		RT	Estimated	Units	Fit	Qual
4630-07-3	Naphthalene, 1,2,3,5,6,7,8,8a-octahydro-		7.29	280	ug/kg	98	NJ
	Unknown		11.52	786	ug/kg		J
301-02-0	9-Octadecenamide, (Z)-		13.37	417	ug/kg	97	NJ

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

Page 1 of 3

**SDG Number:** 10-1758  
**Lab Sample ID:** 246866004

**Date Collected:** 02/09/2010 12:00  
**Date Received:** 02/11/2010 09:20  
**Client:** LANL010  
**Method:** SW846 8270C  
**Inst:** MSD2.I  
**Analyst:** AGS1  
**Aliquot:** 30.17 g  
**Column:** J&W DB-5MS

**Matrix:** R  
**%Moisture:** 23.2  
**Project:** LANL01004  
**SOP Ref:** GL-OA-E-009  
**Dilution:** 1  
**Inj. Vol:** .5 uL  
**Final Volume:** 1 mL  
**Level:** LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	432	ug/kg	86.3	432
108-95-2	Phenol	U	432	ug/kg	86.3	432
95-57-8	2-Chlorophenol	U	432	ug/kg	86.3	432
106-46-7	1,4-Dichlorobenzene	U	432	ug/kg	86.3	432
621-64-7	N-Nitrosodipropylamine	U	432	ug/kg	86.3	432
59-50-7	4-Chloro-3-methylphenol	U	432	ug/kg	86.3	432
83-32-9	Acenaphthene	U	43.2	ug/kg	14.2	43.2
121-14-2	2,4-Dinitrotoluene	U	432	ug/kg	43.2	432
100-02-7	4-Nitrophenol	U	432	ug/kg	142	432
87-86-5	Pentachlorophenol	U	432	ug/kg	108	432
129-00-0	Pyrene	U	43.2	ug/kg	13.0	43.2
110-86-1	Pyridine	U	432	ug/kg	86.3	432
62-53-3	Aniline	U	432	ug/kg	130	432
111-44-4	bis(2-Chloroethyl) ether	U	432	ug/kg	86.3	432
541-73-1	1,3-Dichlorobenzene	U	432	ug/kg	86.3	432
100-51-6	Benzyl alcohol	U	432	ug/kg	130	432
95-50-1	1,2-Dichlorobenzene	U	432	ug/kg	86.3	432
108-60-1	bis(2-Chloroisopropyl)ether	U	432	ug/kg	86.3	432
95-48-7	o-Cresol	U	432	ug/kg	86.3	432
65794-96-9	m,p-Cresols	U	432	ug/kg	130	432
67-72-1	Hexachloroethane	U	432	ug/kg	86.3	432
98-95-3	Nitrobenzene	U	432	ug/kg	86.3	432
78-59-1	Isophorone	U	432	ug/kg	86.3	432
88-75-5	2-Nitrophenol	U	432	ug/kg	86.3	432
105-67-9	2,4-Dimethylphenol	U	432	ug/kg	151	432
111-91-1	bis(2-Chloroethoxy)methane	U	432	ug/kg	86.3	432
120-83-2	2,4-Dichlorophenol	U	432	ug/kg	86.3	432
65-85-0	Benzoic acid	U	863	ug/kg	216	863
91-20-3	Naphthalene	U	43.2	ug/kg	13.0	43.2
106-47-8	4-Chloroaniline	U	432	ug/kg	86.3	432
87-68-3	Hexachlorobutadiene	U	432	ug/kg	86.3	432
91-57-6	2-Methylnaphthalene	U	43.2	ug/kg	8.63	43.2
77-47-4	Hexachlorocyclopentadiene	U	432	ug/kg	86.3	432
88-06-2	2,4,6-Trichlorophenol	U	432	ug/kg	86.3	432
95-95-4	2,4,5-Trichlorophenol	U	432	ug/kg	86.3	432
91-58-7	2-Chloronaphthalene	U	43.2	ug/kg	14.2	43.2
88-74-4	2-Nitroaniline	U	432	ug/kg	86.3	432
99-09-2	<i>o</i> -Nitroaniline	U	432	ug/kg	86.3	432
	3-Nitroaniline					

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

**SDG Number:** 10-1758  
**Lab Sample ID:** 246866004

**Date Collected:** 02/09/2010 12:00  
**Date Received:** 02/11/2010 09:20  
**Client:** LANL010  
**Method:** SW846 8270C  
**Inst:** MSD2.I  
**Analyst:** AGS1  
**Aliquot:** 30.17 g  
**Column:** J&W DB-5MS

**Matrix:** R  
**%Moisture:** 23.2  
**Project:** LANL01004  
**SOP Ref:** GL-OA-E-009  
**Dilution:** 1  
**Inj. Vol:** .5 uL  
**Final Volume:** 1 mL  
**Level:** LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	<i>m-Nitroaniline</i>					
131-11-3	Dimethylphthalate	U	432	ug/kg	86.3	432
606-20-2	2,6-Dinitrotoluene	U	432	ug/kg	43.2	432
208-96-8	Acenaphthylene	U	43.2	ug/kg	13.0	43.2
51-28-5	2,4-Dinitrophenol	U	863	ug/kg	164	863
132-64-9	Dibenzofuran	U	432	ug/kg	86.3	432
84-66-2	Diethylphthalate	U	432	ug/kg	86.3	432
86-73-7	Fluorene	U	43.2	ug/kg	13.0	43.2
7005-72-3	4-Chlorophenylphenylether	U	432	ug/kg	86.3	432
534-52-1	2-Methyl-4,6-dinitrophenol	U	432	ug/kg	86.3	432
100-01-6	4-Nitroaniline	U	432	ug/kg	130	432
	<i>p-Nitroaniline</i>					
122-39-4	Diphenylamine	U	432	ug/kg	86.3	432
122-66-7	Azobenzene	U	432	ug/kg	86.3	432
	<i>1,2-Diphenylhydrazine</i>					
101-55-3	4-Bromophenylphenylether	U	432	ug/kg	86.3	432
118-74-1	Hexachlorobenzene	U	432	ug/kg	86.3	432
85-01-8	Phenanthrene	U	43.2	ug/kg	13.0	43.2
120-12-7	Anthracene	U	43.2	ug/kg	8.63	43.2
84-74-2	Di-n-butylphthalate	U	432	ug/kg	86.3	432
206-44-0	Fluoranthene	U	43.2	ug/kg	13.0	43.2
85-68-7	Butylbenzylphthalate	U	432	ug/kg	86.3	432
56-55-3	Benzo(a)anthracene	U	43.2	ug/kg	13.0	43.2
91-94-1	3,3'-Dichlorobenzidine	U	432	ug/kg	130	432
218-01-9	Chrysene	U	43.2	ug/kg	13.0	43.2
117-81-7	bis(2-Ethylhexyl)phthalate	U	432	ug/kg	86.3	432
117-84-0	Di-n-octylphthalate	U	432	ug/kg	86.3	432
205-99-2	Benzo(b)fluoranthene	U	43.2	ug/kg	13.0	43.2
207-08-9	Benzo(k)fluoranthene	U	43.2	ug/kg	13.0	43.2
50-32-8	Benzo(a)pyrene	U	43.2	ug/kg	13.0	43.2
193-39-5	Indeno(1,2,3-cd)pyrene	U	43.2	ug/kg	13.0	43.2
53-70-3	Dibenzo(a,h)anthracene	U	43.2	ug/kg	13.0	43.2
191-24-2	Benzo(ghi)perylene	U	43.2	ug/kg	13.0	43.2
120-82-1	1,2,4-Trichlorobenzene	U	432	ug/kg	86.3	432

**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
78-95-5	2-Propanone, 1-chloro-	2.15	201	ug/kg	80	NJ
	Unknown Aldol Condensate	3.19	464	ug/kg		J

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

SDG Number: 10-1758  
Lab Sample ID: 246866004

Date Collected: 02/09/2010 12:00  
Date Received: 02/11/2010 09:20  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD2.I  
Analyst: AGS1  
Aliquot: 30.17 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 23.2  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
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**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	10.81	657	ug/kg		J



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

Page 1 of 3

**SDG Number:** 10-1758  
**Lab Sample ID:** 246866005

**Date Collected:** 02/09/2010 12:00  
**Date Received:** 02/11/2010 09:20  
**Client:** LANL010  
**Method:** SW846 8270C  
**Inst:** MSD2.I  
**Analyst:** AGS1  
**Aliquot:** 30.07 g  
**Column:** J&W DB-5MS

**Matrix:** R  
**%Moisture:** 16.9  
**Project:** LANL01004  
**SOP Ref:** GL-OA-E-009  
**Dilution:** 1  
**Inj. Vol:** .5 uL  
**Final Volume:** 1 mL  
**Level:** LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	400	ug/kg	80.1	400
108-95-2	Phenol	U	400	ug/kg	80.1	400
95-57-8	2-Chlorophenol	U	400	ug/kg	80.1	400
106-46-7	1,4-Dichlorobenzene	U	400	ug/kg	80.1	400
621-64-7	N-Nitrosodipropylamine	U	400	ug/kg	80.1	400
59-50-7	4-Chloro-3-methylphenol	U	400	ug/kg	80.1	400
83-32-9	Acenaphthene	U	40.0	ug/kg	13.2	40.0
121-14-2	2,4-Dinitrotoluene	U	400	ug/kg	40.0	400
100-02-7	4-Nitrophenol	U	400	ug/kg	132	400
87-86-5	Pentachlorophenol	U	400	ug/kg	100	400
129-00-0	Pyrene	U	40.0	ug/kg	12.0	40.0
110-86-1	Pyridine	U	400	ug/kg	80.1	400
62-53-3	Aniline	U	400	ug/kg	120	400
111-44-4	bis(2-Chloroethyl) ether	U	400	ug/kg	80.1	400
541-73-1	1,3-Dichlorobenzene	U	400	ug/kg	80.1	400
100-51-6	Benzyl alcohol	U	400	ug/kg	120	400
95-50-1	1,2-Dichlorobenzene	U	400	ug/kg	80.1	400
108-60-1	bis(2-Chloroisopropyl)ether	U	400	ug/kg	80.1	400
95-48-7	o-Cresol	U	400	ug/kg	80.1	400
65794-96-9	m,p-Cresols	U	400	ug/kg	120	400
67-72-1	Hexachloroethane	U	400	ug/kg	80.1	400
98-95-3	Nitrobenzene	U	400	ug/kg	80.1	400
78-59-1	Isophorone	U	400	ug/kg	80.1	400
88-75-5	2-Nitrophenol	U	400	ug/kg	80.1	400
105-67-9	2,4-Dimethylphenol	U	400	ug/kg	140	400
111-91-1	bis(2-Chloroethoxy)methane	U	400	ug/kg	80.1	400
120-83-2	2,4-Dichlorophenol	U	400	ug/kg	80.1	400
65-85-0	Benzoic acid	U	801	ug/kg	200	801
91-20-3	Naphthalene	U	40.0	ug/kg	12.0	40.0
106-47-8	4-Chloroaniline	U	400	ug/kg	80.1	400
87-68-3	Hexachlorobutadiene	U	400	ug/kg	80.1	400
91-57-6	2-Methylnaphthalene	U	40.0	ug/kg	8.01	40.0
77-47-4	Hexachlorocyclopentadiene	U	400	ug/kg	80.1	400
88-06-2	2,4,6-Trichlorophenol	U	400	ug/kg	80.1	400
95-95-4	2,4,5-Trichlorophenol	U	400	ug/kg	80.1	400
91-58-7	2-Chloronaphthalene	U	40.0	ug/kg	13.2	40.0
88-74-4	2-Nitroaniline	U	400	ug/kg	80.1	400
99-09-2	<i>o</i> -Nitroaniline	U	400	ug/kg	80.1	400
	3-Nitroaniline					

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

**SDG Number:** 10-1758  
**Lab Sample ID:** 246866005

**Date Collected:** 02/09/2010 12:00  
**Date Received:** 02/11/2010 09:20  
**Client:** LANL010  
**Method:** SW846 8270C  
**Inst:** MSD2.I  
**Analyst:** AGS1  
**Aliquot:** 30.07 g  
**Column:** J&W DB-5MS

**Matrix:** R  
**%Moisture:** 16.9  
**Project:** LANL01004  
**SOP Ref:** GL-OA-E-009  
**Dilution:** 1  
**Inj. Vol:** .5 uL  
**Final Volume:** 1 mL  
**Level:** LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	<i>m</i> -Nitroaniline					
131-11-3	Dimethylphthalate	U	400	ug/kg	80.1	400
606-20-2	2,6-Dinitrotoluene	U	400	ug/kg	40.0	400
208-96-8	Acenaphthylene	U	40.0	ug/kg	12.0	40.0
51-28-5	2,4-Dinitrophenol	U	801	ug/kg	152	801
132-64-9	Dibenzofuran	U	400	ug/kg	80.1	400
84-66-2	Diethylphthalate	U	400	ug/kg	80.1	400
86-73-7	Fluorene	U	40.0	ug/kg	12.0	40.0
7005-72-3	4-Chlorophenylphenylether	U	400	ug/kg	80.1	400
534-52-1	2-Methyl-4,6-dinitrophenol	U	400	ug/kg	80.1	400
100-01-6	4-Nitroaniline	U	400	ug/kg	120	400
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	400	ug/kg	80.1	400
122-66-7	Azobenzene	U	400	ug/kg	80.1	400
	<i>1,2</i> -Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	400	ug/kg	80.1	400
118-74-1	Hexachlorobenzene	U	400	ug/kg	80.1	400
85-01-8	Phenanthrene	U	40.0	ug/kg	12.0	40.0
120-12-7	Anthracene	U	40.0	ug/kg	8.01	40.0
84-74-2	Di-n-butylphthalate	U	400	ug/kg	80.1	400
206-44-0	Fluoranthene	U	40.0	ug/kg	12.0	40.0
85-68-7	Butylbenzylphthalate	U	400	ug/kg	80.1	400
56-55-3	Benzo(a)anthracene	U	40.0	ug/kg	12.0	40.0
91-94-1	3,3'-Dichlorobenzidine	U	400	ug/kg	120	400
218-01-9	Chrysene	U	40.0	ug/kg	12.0	40.0
117-81-7	bis(2-Ethylhexyl)phthalate	U	400	ug/kg	80.1	400
117-84-0	Di-n-octylphthalate	U	400	ug/kg	80.1	400
205-99-2	Benzo(b)fluoranthene	U	40.0	ug/kg	12.0	40.0
207-08-9	Benzo(k)fluoranthene	U	40.0	ug/kg	12.0	40.0
50-32-8	Benzo(a)pyrene	U	40.0	ug/kg	12.0	40.0
193-39-5	Indeno(1,2,3-cd)pyrene	U	40.0	ug/kg	12.0	40.0
53-70-3	Dibenzo(a,h)anthracene	U	40.0	ug/kg	12.0	40.0
191-24-2	Benzo(ghi)perylene	U	40.0	ug/kg	12.0	40.0
120-82-1	1,2,4-Trichlorobenzene	U	400	ug/kg	80.1	400

**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	3.19	893	ug/kg		J
18172-67-3	Bicyclo[3.1.1]heptane, 6,6-dimethyl-2-me	4.3	162	ug/kg	95	NJ

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

**SDG Number:** 10-1758  
**Lab Sample ID:** 246866005

**Date Collected:** 02/09/2010 12:00  
**Date Received:** 02/11/2010 09:20  
**Client:** LANL010  
**Method:** SW846 8270C  
**Inst:** MSD2.I  
**Analyst:** AGS1  
**Aliquot:** 30.07 g  
**Column:** J&W DB-5MS

**Matrix:** R  
**%Moisture:** 16.9  
**Project:** LANL01004  
**SOP Ref:** GL-OA-E-009  
**Dilution:** 1  
**Inj. Vol:** .5 uL  
**Final Volume:** 1 mL  
**Level:** LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
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**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
77-53-2	Cedrol	8.41	474	ug/kg	94	NJ
629-54-9	Hexadecanamide	10.81	208	ug/kg	86	NJ
	Unknown	11.22	612	ug/kg		J

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

Page 1 of 3

**SDG Number:** 10-1758  
**Lab Sample ID:** 246866002

**Date Collected:** 02/09/2010 12:00  
**Date Received:** 02/11/2010 09:20  
**Client:** LANL010  
**Method:** SW846 8270C  
**Inst:** MSD2.I  
**Analyst:** AGS1  
**Aliquot:** 30.19 g  
**Column:** J&W DB-5MS

**Matrix:** R  
**%Moisture:** 18  
**Project:** LANL01004  
**SOP Ref:** GL-OA-E-009  
**Dilution:** 1  
**Inj. Vol:** .5 uL  
**Final Volume:** 1 mL  
**Level:** LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	404	ug/kg	80.8	404
108-95-2	Phenol	U	404	ug/kg	80.8	404
95-57-8	2-Chlorophenol	U	404	ug/kg	80.8	404
106-46-7	1,4-Dichlorobenzene	U	404	ug/kg	80.8	404
621-64-7	N-Nitrosodipropylamine	U	404	ug/kg	80.8	404
59-50-7	4-Chloro-3-methylphenol	U	404	ug/kg	80.8	404
83-32-9	Acenaphthene	U	40.4	ug/kg	13.3	40.4
121-14-2	2,4-Dinitrotoluene	U	404	ug/kg	40.4	404
100-02-7	4-Nitrophenol	U	404	ug/kg	133	404
87-86-5	Pentachlorophenol	U	404	ug/kg	101	404
129-00-0	Pyrene	U	40.4	ug/kg	12.1	40.4
110-86-1	Pyridine	U	404	ug/kg	80.8	404
62-53-3	Aniline	U	404	ug/kg	121	404
111-44-4	bis(2-Chloroethyl) ether	U	404	ug/kg	80.8	404
541-73-1	1,3-Dichlorobenzene	U	404	ug/kg	80.8	404
100-51-6	Benzyl alcohol	U	404	ug/kg	121	404
95-50-1	1,2-Dichlorobenzene	U	404	ug/kg	80.8	404
108-60-1	bis(2-Chloroisopropyl)ether	U	404	ug/kg	80.8	404
95-48-7	o-Cresol	U	404	ug/kg	80.8	404
65794-96-9	m,p-Cresols	U	404	ug/kg	121	404
67-72-1	Hexachloroethane	U	404	ug/kg	80.8	404
98-95-3	Nitrobenzene	U	404	ug/kg	80.8	404
78-59-1	Isophorone	U	404	ug/kg	80.8	404
88-75-5	2-Nitrophenol	U	404	ug/kg	80.8	404
105-67-9	2,4-Dimethylphenol	U	404	ug/kg	141	404
111-91-1	bis(2-Chloroethoxy)methane	U	404	ug/kg	80.8	404
120-83-2	2,4-Dichlorophenol	U	404	ug/kg	80.8	404
65-85-0	Benzoic acid	U	808	ug/kg	202	808
91-20-3	Naphthalene	U	40.4	ug/kg	12.1	40.4
106-47-8	4-Chloroaniline	U	404	ug/kg	80.8	404
87-68-3	Hexachlorobutadiene	U	404	ug/kg	80.8	404
91-57-6	2-Methylnaphthalene	U	40.4	ug/kg	8.08	40.4
77-47-4	Hexachlorocyclopentadiene	U	404	ug/kg	80.8	404
88-06-2	2,4,6-Trichlorophenol	U	404	ug/kg	80.8	404
95-95-4	2,4,5-Trichlorophenol	U	404	ug/kg	80.8	404
91-58-7	2-Chloronaphthalene	U	40.4	ug/kg	13.3	40.4
88-74-4	2-Nitroaniline	U	404	ug/kg	80.8	404
99-09-2	<i>o</i> -Nitroaniline	U	404	ug/kg	80.8	404
	3-Nitroaniline					

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

**SDG Number:** 10-1758  
**Lab Sample ID:** 246866002

**Date Collected:** 02/09/2010 12:00  
**Date Received:** 02/11/2010 09:20  
**Client:** LANL010  
**Method:** SW846 8270C  
**Inst:** MSD2.I  
**Analyst:** AGS1  
**Aliquot:** 30.19 g  
**Column:** J&W DB-5MS

**Matrix:** R  
**%Moisture:** 18  
**Project:** LANL01004  
**SOP Ref:** GL-OA-E-009  
**Dilution:** 1  
**Inj. Vol:** .5 uL  
**Final Volume:** 1 mL  
**Level:** LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
	Dimethylphthalate	U	404	ug/kg	80.8	404
606-20-2	2,6-Dinitrotoluene	U	404	ug/kg	40.4	404
208-96-8	Acenaphthylene	U	40.4	ug/kg	12.1	40.4
51-28-5	2,4-Dinitrophenol	U	808	ug/kg	153	808
132-64-9	Dibenzofuran	U	404	ug/kg	80.8	404
84-66-2	Diethylphthalate	U	404	ug/kg	80.8	404
86-73-7	Fluorene	U	40.4	ug/kg	12.1	40.4
7005-72-3	4-Chlorophenylphenylether	U	404	ug/kg	80.8	404
534-52-1	2-Methyl-4,6-dinitrophenol	U	404	ug/kg	80.8	404
100-01-6	4-Nitroaniline	U	404	ug/kg	121	404
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	404	ug/kg	80.8	404
122-66-7	Azobenzene	U	404	ug/kg	80.8	404
	<i>1,2-Diphenylhydrazine</i>					
101-55-3	4-Bromophenylphenylether	U	404	ug/kg	80.8	404
118-74-1	Hexachlorobenzene	U	404	ug/kg	80.8	404
85-01-8	Phenanthrene	U	40.4	ug/kg	12.1	40.4
120-12-7	Anthracene	U	40.4	ug/kg	8.08	40.4
84-74-2	Di-n-butylphthalate	U	404	ug/kg	80.8	404
206-44-0	Fluoranthene	U	40.4	ug/kg	12.1	40.4
85-68-7	Butylbenzylphthalate	U	404	ug/kg	80.8	404
56-55-3	Benzo(a)anthracene	U	40.4	ug/kg	12.1	40.4
91-94-1	3,3'-Dichlorobenzidine	U	404	ug/kg	121	404
218-01-9	Chrysene	U	40.4	ug/kg	12.1	40.4
117-81-7	bis(2-Ethylhexyl)phthalate	U	404	ug/kg	80.8	404
117-84-0	Di-n-octylphthalate	U	404	ug/kg	80.8	404
205-99-2	Benzo(b)fluoranthene	U	40.4	ug/kg	12.1	40.4
207-08-9	Benzo(k)fluoranthene	U	40.4	ug/kg	12.1	40.4
50-32-8	Benzo(a)pyrene	U	40.4	ug/kg	12.1	40.4
193-39-5	Indeno(1,2,3-cd)pyrene	U	40.4	ug/kg	12.1	40.4
53-70-3	Dibenzo(a,h)anthracene	U	40.4	ug/kg	12.1	40.4
191-24-2	Benzo(ghi)perylene	U	40.4	ug/kg	12.1	40.4
120-82-1	1,2,4-Trichlorobenzene	U	404	ug/kg	80.8	404

**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	1.73	179	ug/kg		J
	Unknown	1.98	170	ug/kg		J

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

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**SDG Number:** 10-1758  
**Lab Sample ID:** 246866002

**Date Collected:** 02/09/2010 12:00  
**Date Received:** 02/11/2010 09:20  
**Client:** LANL010  
**Method:** SW846 8270C  
**Inst:** MSD2.I  
**Analyst:** AGS1  
**Aliquot:** 30.19 g  
**Column:** J&W DB-5MS

**Matrix:** R  
**%Moisture:** 18  
**Project:** LANL01004  
**SOP Ref:** GL-OA-E-009  
**Dilution:** 1  
**Inj. Vol:** .5 uL  
**Final Volume:** 1 mL  
**Level:** LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
<b>Tentatively Identified Compound Summary</b>						
CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
78-95-5	2-Propanone, 1-chloro-	2.14	250	ug/kg	91	NJ
	Unknown Aldol Condensate	3.18	602	ug/kg		JA
301-02-0	9-Octadecenamide, (Z)-	11.52	231	ug/kg	96	NJ
	Unknown	13.37	285	ug/kg		J

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

Page 1 of 3

**SDG Number:** 10-1758  
**Lab Sample ID:** 246866003

**Date Collected:** 02/09/2010 12:00  
**Date Received:** 02/11/2010 09:20  
**Client:** LANL010  
**Method:** SW846 8270C  
**Inst:** MSD2.I  
**Analyst:** AGS1  
**Aliquot:** 30.04 g  
**Column:** J&W DB-5MS

**Matrix:** R  
**%Moisture:** 19.3  
**Project:** LANL01004  
**SOP Ref:** GL-OA-E-009  
**Dilution:** 1  
**Inj. Vol:** .5 uL  
**Final Volume:** 1 mL  
**Level:** LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	413	ug/kg	82.5	413
108-95-2	Phenol	U	413	ug/kg	82.5	413
95-57-8	2-Chlorophenol	U	413	ug/kg	82.5	413
106-46-7	1,4-Dichlorobenzene	U	413	ug/kg	82.5	413
621-64-7	N-Nitrosodipropylamine	U	413	ug/kg	82.5	413
59-50-7	4-Chloro-3-methylphenol	U	413	ug/kg	82.5	413
83-32-9	Acenaphthene	U	41.3	ug/kg	13.6	41.3
121-14-2	2,4-Dinitrotoluene	U	413	ug/kg	41.3	413
100-02-7	4-Nitrophenol	U	413	ug/kg	136	413
87-86-5	Pentachlorophenol	U	413	ug/kg	103	413
129-00-0	Pyrene	U	41.3	ug/kg	12.4	41.3
110-86-1	Pyridine	U	413	ug/kg	82.5	413
62-53-3	Aniline	U	413	ug/kg	124	413
111-44-4	bis(2-Chloroethyl) ether	U	413	ug/kg	82.5	413
541-73-1	1,3-Dichlorobenzene	U	413	ug/kg	82.5	413
100-51-6	Benzyl alcohol	U	413	ug/kg	124	413
95-50-1	1,2-Dichlorobenzene	U	413	ug/kg	82.5	413
108-60-1	bis(2-Chloroisopropyl)ether	U	413	ug/kg	82.5	413
95-48-7	o-Cresol	U	413	ug/kg	82.5	413
65794-96-9	m,p-Cresols	U	413	ug/kg	124	413
67-72-1	Hexachloroethane	U	413	ug/kg	82.5	413
98-95-3	Nitrobenzene	U	413	ug/kg	82.5	413
78-59-1	Isophorone	U	413	ug/kg	82.5	413
88-75-5	2-Nitrophenol	U	413	ug/kg	82.5	413
105-67-9	2,4-Dimethylphenol	U	413	ug/kg	144	413
111-91-1	bis(2-Chloroethoxy)methane	U	413	ug/kg	82.5	413
120-83-2	2,4-Dichlorophenol	U	413	ug/kg	82.5	413
65-85-0	Benzoic acid	U	825	ug/kg	206	825
91-20-3	Naphthalene	U	41.3	ug/kg	12.4	41.3
106-47-8	4-Chloroaniline	U	413	ug/kg	82.5	413
87-68-3	Hexachlorobutadiene	U	413	ug/kg	82.5	413
91-57-6	2-Methylnaphthalene	U	41.3	ug/kg	8.25	41.3
77-47-4	Hexachlorocyclopentadiene	U	413	ug/kg	82.5	413
88-06-2	2,4,6-Trichlorophenol	U	413	ug/kg	82.5	413
95-95-4	2,4,5-Trichlorophenol	U	413	ug/kg	82.5	413
91-58-7	2-Chloronaphthalene	U	41.3	ug/kg	13.6	41.3
88-74-4	2-Nitroaniline	U	413	ug/kg	82.5	413
99-09-2	<i>o</i> -Nitroaniline	U	413	ug/kg	82.5	413
	3-Nitroaniline					

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

**SDG Number:** 10-1758  
**Lab Sample ID:** 246866003

**Date Collected:** 02/09/2010 12:00  
**Date Received:** 02/11/2010 09:20  
**Client:** LANL010  
**Method:** SW846 8270C  
**Inst:** MSD2.I  
**Analyst:** AGS1  
**Aliquot:** 30.04 g  
**Column:** J&W DB-5MS

**Matrix:** R  
**%Moisture:** 19.3  
**Project:** LANL01004  
**SOP Ref:** GL-OA-E-009  
**Dilution:** 1  
**Inj. Vol:** .5 uL  
**Final Volume:** 1 mL  
**Level:** LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	<i>m</i> -Nitroaniline					
131-11-3	Dimethylphthalate	U	413	ug/kg	82.5	413
606-20-2	2,6-Dinitrotoluene	U	413	ug/kg	41.3	413
208-96-8	Acenaphthylene	U	41.3	ug/kg	12.4	41.3
51-28-5	2,4-Dinitrophenol	U	825	ug/kg	157	825
132-64-9	Dibenzofuran	U	413	ug/kg	82.5	413
84-66-2	Diethylphthalate	U	413	ug/kg	82.5	413
86-73-7	Fluorene	U	41.3	ug/kg	12.4	41.3
7005-72-3	4-Chlorophenylphenylether	U	413	ug/kg	82.5	413
534-52-1	2-Methyl-4,6-dinitrophenol	U	413	ug/kg	82.5	413
100-01-6	4-Nitroaniline	U	413	ug/kg	124	413
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	413	ug/kg	82.5	413
122-66-7	Azobenzene	U	413	ug/kg	82.5	413
	<i>1,2</i> -Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	413	ug/kg	82.5	413
118-74-1	Hexachlorobenzene	U	413	ug/kg	82.5	413
85-01-8	Phenanthrene	U	41.3	ug/kg	12.4	41.3
120-12-7	Anthracene	U	41.3	ug/kg	8.25	41.3
84-74-2	Di-n-butylphthalate	U	413	ug/kg	82.5	413
206-44-0	Fluoranthene	U	41.3	ug/kg	12.4	41.3
85-68-7	Butylbenzylphthalate	U	413	ug/kg	82.5	413
56-55-3	Benzo(a)anthracene	U	41.3	ug/kg	12.4	41.3
91-94-1	3,3'-Dichlorobenzidine	U	413	ug/kg	124	413
218-01-9	Chrysene	U	41.3	ug/kg	12.4	41.3
117-81-7	bis(2-Ethylhexyl)phthalate	U	413	ug/kg	82.5	413
117-84-0	Di-n-octylphthalate	U	413	ug/kg	82.5	413
205-99-2	Benzo(b)fluoranthene	U	41.3	ug/kg	12.4	41.3
207-08-9	Benzo(k)fluoranthene	U	41.3	ug/kg	12.4	41.3
50-32-8	Benzo(a)pyrene	U	41.3	ug/kg	12.4	41.3
193-39-5	Indeno(1,2,3-cd)pyrene	U	41.3	ug/kg	12.4	41.3
53-70-3	Dibenzo(a,h)anthracene	U	41.3	ug/kg	12.4	41.3
191-24-2	Benzo(ghi)perylene	U	41.3	ug/kg	12.4	41.3
120-82-1	1,2,4-Trichlorobenzene	U	413	ug/kg	82.5	413

**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	3.19	645	ug/kg		J
7785-70-8	1R-.alpha.-Pinene	3.94	195	ug/kg	98	NJ



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

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**SDG Number:** 10-1758  
**Lab Sample ID:** 246866003

**Date Collected:** 02/09/2010 12:00  
**Date Received:** 02/11/2010 09:20  
**Client:** LANL010  
**Method:** SW846 8270C  
**Inst:** MSD2.I  
**Analyst:** AGS1  
**Aliquot:** 30.04 g  
**Column:** J&W DB-5MS

**Matrix:** R  
**%Moisture:** 19.3  
**Project:** LANL01004  
**SOP Ref:** GL-OA-E-009  
**Dilution:** 1  
**Inj. Vol:** .5 uL  
**Final Volume:** 1 mL  
**Level:** LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
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**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
498-15-7	Bicyclo[4.1.0]hept-3-ene, 3,7,7-trimethy	4.51	224	ug/kg	97	NJ
1235-74-1	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	11.54	762	ug/kg	98	NJ

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

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**SDG Number:** 10-1758  
**Lab Sample ID:** 246866006

**Date Collected:** 02/09/2010 12:00  
**Date Received:** 02/11/2010 09:20  
**Client:** LANL010  
**Method:** SW846 8270C  
**Inst:** MSD2.I  
**Analyst:** AGS1  
**Aliquot:** 30.02 g  
**Column:** J&W DB-5MS

**Matrix:** R  
**%Moisture:** 24.6  
**Project:** LANL01004  
**SOP Ref:** GL-OA-E-009  
**Dilution:** 1  
**Inj. Vol:** .5 uL  
**Final Volume:** 1 mL  
**Level:** LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	442	ug/kg	88.3	442
108-95-2	Phenol	U	442	ug/kg	88.3	442
95-57-8	2-Chlorophenol	U	442	ug/kg	88.3	442
106-46-7	1,4-Dichlorobenzene	U	442	ug/kg	88.3	442
621-64-7	N-Nitrosodipropylamine	U	442	ug/kg	88.3	442
59-50-7	4-Chloro-3-methylphenol	U	442	ug/kg	88.3	442
83-32-9	Acenaphthene	U	44.2	ug/kg	14.6	44.2
121-14-2	2,4-Dinitrotoluene	U	442	ug/kg	44.2	442
100-02-7	4-Nitrophenol	U	442	ug/kg	146	442
87-86-5	Pentachlorophenol	U	442	ug/kg	110	442
129-00-0	Pyrene	U	44.2	ug/kg	13.2	44.2
110-86-1	Pyridine	U	442	ug/kg	88.3	442
62-53-3	Aniline	U	442	ug/kg	132	442
111-44-4	bis(2-Chloroethyl) ether	U	442	ug/kg	88.3	442
541-73-1	1,3-Dichlorobenzene	U	442	ug/kg	88.3	442
100-51-6	Benzyl alcohol	U	442	ug/kg	132	442
95-50-1	1,2-Dichlorobenzene	U	442	ug/kg	88.3	442
108-60-1	bis(2-Chloroisopropyl)ether	U	442	ug/kg	88.3	442
95-48-7	o-Cresol	U	442	ug/kg	88.3	442
65794-96-9	m,p-Cresols	U	442	ug/kg	132	442
67-72-1	Hexachloroethane	U	442	ug/kg	88.3	442
98-95-3	Nitrobenzene	U	442	ug/kg	88.3	442
78-59-1	Isophorone	U	442	ug/kg	88.3	442
88-75-5	2-Nitrophenol	U	442	ug/kg	88.3	442
105-67-9	2,4-Dimethylphenol	U	442	ug/kg	155	442
111-91-1	bis(2-Chloroethoxy)methane	U	442	ug/kg	88.3	442
120-83-2	2,4-Dichlorophenol	U	442	ug/kg	88.3	442
65-85-0	Benzoic acid	U	883	ug/kg	221	883
91-20-3	Naphthalene	U	44.2	ug/kg	13.2	44.2
106-47-8	4-Chloroaniline	U	442	ug/kg	88.3	442
87-68-3	Hexachlorobutadiene	U	442	ug/kg	88.3	442
91-57-6	2-Methylnaphthalene	U	44.2	ug/kg	8.83	44.2
77-47-4	Hexachlorocyclopentadiene	U	442	ug/kg	88.3	442
88-06-2	2,4,6-Trichlorophenol	U	442	ug/kg	88.3	442
95-95-4	2,4,5-Trichlorophenol	U	442	ug/kg	88.3	442
91-58-7	2-Chloronaphthalene	U	44.2	ug/kg	14.6	44.2
88-74-4	2-Nitroaniline	U	442	ug/kg	88.3	442
99-09-2	<i>o</i> -Nitroaniline	U	442	ug/kg	88.3	442
	3-Nitroaniline					

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

**SDG Number:** 10-1758  
**Lab Sample ID:** 246866006

**Date Collected:** 02/09/2010 12:00  
**Date Received:** 02/11/2010 09:20  
**Client:** LANL010  
**Method:** SW846 8270C  
**Inst:** MSD2.I  
**Analyst:** AGS1  
**Aliquot:** 30.02 g  
**Column:** J&W DB-5MS

**Matrix:** R  
**%Moisture:** 24.6  
**Project:** LANL01004  
**SOP Ref:** GL-OA-E-009  
**Dilution:** 1  
**Inj. Vol:** .5 uL  
**Final Volume:** 1 mL  
**Level:** LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	<i>m-Nitroaniline</i>					
131-11-3	Dimethylphthalate	U	442	ug/kg	88.3	442
606-20-2	2,6-Dinitrotoluene	U	442	ug/kg	44.2	442
208-96-8	Acenaphthylene	U	44.2	ug/kg	13.2	44.2
51-28-5	2,4-Dinitrophenol	U	883	ug/kg	168	883
132-64-9	Dibenzofuran	U	442	ug/kg	88.3	442
84-66-2	Diethylphthalate	U	442	ug/kg	88.3	442
86-73-7	Fluorene	U	44.2	ug/kg	13.2	44.2
7005-72-3	4-Chlorophenylphenylether	U	442	ug/kg	88.3	442
534-52-1	2-Methyl-4,6-dinitrophenol	U	442	ug/kg	88.3	442
100-01-6	4-Nitroaniline	U	442	ug/kg	132	442
	<i>p-Nitroaniline</i>					
122-39-4	Diphenylamine	U	442	ug/kg	88.3	442
122-66-7	Azobenzene	U	442	ug/kg	88.3	442
	<i>1,2-Diphenylhydrazine</i>					
101-55-3	4-Bromophenylphenylether	U	442	ug/kg	88.3	442
118-74-1	Hexachlorobenzene	U	442	ug/kg	88.3	442
85-01-8	Phenanthrene	U	44.2	ug/kg	13.2	44.2
120-12-7	Anthracene	U	44.2	ug/kg	8.83	44.2
84-74-2	Di-n-butylphthalate	U	442	ug/kg	88.3	442
206-44-0	Fluoranthene	U	44.2	ug/kg	13.2	44.2
85-68-7	Butylbenzylphthalate	U	442	ug/kg	88.3	442
56-55-3	Benzo(a)anthracene	U	44.2	ug/kg	13.2	44.2
91-94-1	3,3'-Dichlorobenzidine	U	442	ug/kg	132	442
218-01-9	Chrysene	U	44.2	ug/kg	13.2	44.2
117-81-7	bis(2-Ethylhexyl)phthalate	U	442	ug/kg	88.3	442
117-84-0	Di-n-octylphthalate	U	442	ug/kg	88.3	442
205-99-2	Benzo(b)fluoranthene	U	44.2	ug/kg	13.2	44.2
207-08-9	Benzo(k)fluoranthene	U	44.2	ug/kg	13.2	44.2
50-32-8	Benzo(a)pyrene	U	44.2	ug/kg	13.2	44.2
193-39-5	Indeno(1,2,3-cd)pyrene	U	44.2	ug/kg	13.2	44.2
53-70-3	Dibenzo(a,h)anthracene	U	44.2	ug/kg	13.2	44.2
191-24-2	Benzo(ghi)perylene	U	44.2	ug/kg	13.2	44.2
120-82-1	1,2,4-Trichlorobenzene	U	442	ug/kg	88.3	442

**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	2.76	337	ug/kg		J
	Unknown Aldol Condensate	3.19	851	ug/kg		J

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

**SDG Number:** 10-1758  
**Lab Sample ID:** 246866006

**Date Collected:** 02/09/2010 12:00  
**Date Received:** 02/11/2010 09:20  
**Client:** LANL010  
**Method:** SW846 8270C  
**Inst:** MSD2.I  
**Analyst:** AGS1  
**Aliquot:** 30.02 g  
**Column:** J&W DB-5MS

**Matrix:** R  
**%Moisture:** 24.6  
**Project:** LANL01004  
**SOP Ref:** GL-OA-E-009  
**Dilution:** 1  
**Inj. Vol:** .5 uL  
**Final Volume:** 1 mL  
**Level:** LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
<b>Tentatively Identified Compound Summary</b>						
CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
7785-70-8	1R-.alpha.-Pinene	3.94	658	ug/kg	98	NJ
127-91-3	.beta.-Pinene	4.3	302	ug/kg	97	NJ
498-15-7	Bicyclo[4.1.0]hept-3-ene, 3,7,7-trimethy	4.51	1270	ug/kg	97	NJ
25246-27-9	1H-Cycloprop[e]azulene, decahydro-1,1,7-	7.29	338	ug/kg	95	NJ
57-10-3	n-Hexadecanoic acid	9.86	187	ug/kg	99	NJ
112-80-1	Oleic Acid	10.62	459	ug/kg	98	NJ
301-02-0	9-Octadecenamide, (Z)-	11.53	951	ug/kg	98	NJ

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

Page 1 of 3

**SDG Number:** 10-1758  
**Lab Sample ID:** 246866009

**Date Collected:** 02/09/2010 12:00  
**Date Received:** 02/11/2010 09:20  
**Client:** LANL010  
**Method:** SW846 8270C  
**Inst:** MSD2.I  
**Analyst:** AGS1  
**Aliquot:** 30.07 g  
**Column:** J&W DB-5MS

**Matrix:** R  
**%Moisture:** 24.2  
**Project:** LANL01004  
**SOP Ref:** GL-OA-E-009  
**Dilution:** 1  
**Inj. Vol:** .5 uL  
**Final Volume:** 1 mL  
**Level:** LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	439	ug/kg	87.7	439
108-95-2	Phenol	U	439	ug/kg	87.7	439
95-57-8	2-Chlorophenol	U	439	ug/kg	87.7	439
106-46-7	1,4-Dichlorobenzene	U	439	ug/kg	87.7	439
621-64-7	N-Nitrosodipropylamine	U	439	ug/kg	87.7	439
59-50-7	4-Chloro-3-methylphenol	U	439	ug/kg	87.7	439
83-32-9	Acenaphthene	U	43.9	ug/kg	14.5	43.9
121-14-2	2,4-Dinitrotoluene	U	439	ug/kg	43.9	439
100-02-7	4-Nitrophenol	U	439	ug/kg	145	439
87-86-5	Pentachlorophenol	U	439	ug/kg	110	439
129-00-0	Pyrene	U	43.9	ug/kg	13.2	43.9
110-86-1	Pyridine	U	439	ug/kg	87.7	439
62-53-3	Aniline	U	439	ug/kg	132	439
111-44-4	bis(2-Chloroethyl) ether	U	439	ug/kg	87.7	439
541-73-1	1,3-Dichlorobenzene	U	439	ug/kg	87.7	439
100-51-6	Benzyl alcohol	U	439	ug/kg	132	439
95-50-1	1,2-Dichlorobenzene	U	439	ug/kg	87.7	439
108-60-1	bis(2-Chloroisopropyl)ether	U	439	ug/kg	87.7	439
95-48-7	o-Cresol	U	439	ug/kg	87.7	439
65794-96-9	m,p-Cresols	U	439	ug/kg	132	439
67-72-1	Hexachloroethane	U	439	ug/kg	87.7	439
98-95-3	Nitrobenzene	U	439	ug/kg	87.7	439
78-59-1	Isophorone	U	439	ug/kg	87.7	439
88-75-5	2-Nitrophenol	U	439	ug/kg	87.7	439
105-67-9	2,4-Dimethylphenol	U	439	ug/kg	153	439
111-91-1	bis(2-Chloroethoxy)methane	U	439	ug/kg	87.7	439
120-83-2	2,4-Dichlorophenol	U	439	ug/kg	87.7	439
65-85-0	Benzoic acid	U	877	ug/kg	219	877
91-20-3	Naphthalene	U	43.9	ug/kg	13.2	43.9
106-47-8	4-Chloroaniline	U	439	ug/kg	87.7	439
87-68-3	Hexachlorobutadiene	U	439	ug/kg	87.7	439
91-57-6	2-Methylnaphthalene	U	43.9	ug/kg	8.77	43.9
77-47-4	Hexachlorocyclopentadiene	U	439	ug/kg	87.7	439
88-06-2	2,4,6-Trichlorophenol	U	439	ug/kg	87.7	439
95-95-4	2,4,5-Trichlorophenol	U	439	ug/kg	87.7	439
91-58-7	2-Chloronaphthalene	U	43.9	ug/kg	14.5	43.9
88-74-4	2-Nitroaniline	U	439	ug/kg	87.7	439
99-09-2	<i>o</i> -Nitroaniline	U	439	ug/kg	87.7	439
	3-Nitroaniline					

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

**SDG Number:** 10-1758  
**Lab Sample ID:** 246866009

**Date Collected:** 02/09/2010 12:00  
**Date Received:** 02/11/2010 09:20  
**Client:** LANL010  
**Method:** SW846 8270C  
**Inst:** MSD2.I  
**Analyst:** AGS1  
**Aliquot:** 30.07 g  
**Column:** J&W DB-5MS

**Matrix:** R  
**%Moisture:** 24.2  
**Project:** LANL01004  
**SOP Ref:** GL-OA-E-009  
**Dilution:** 1  
**Inj. Vol:** .5 uL  
**Final Volume:** 1 mL  
**Level:** LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
	Dimethylphthalate	U	439	ug/kg	87.7	439
606-20-2	2,6-Dinitrotoluene	U	439	ug/kg	43.9	439
208-96-8	Acenaphthylene	U	43.9	ug/kg	13.2	43.9
51-28-5	2,4-Dinitrophenol	U	877	ug/kg	167	877
132-64-9	Dibenzofuran	U	439	ug/kg	87.7	439
84-66-2	Diethylphthalate	U	439	ug/kg	87.7	439
86-73-7	Fluorene	U	43.9	ug/kg	13.2	43.9
7005-72-3	4-Chlorophenylphenylether	U	439	ug/kg	87.7	439
534-52-1	2-Methyl-4,6-dinitrophenol	U	439	ug/kg	87.7	439
100-01-6	4-Nitroaniline	U	439	ug/kg	132	439
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	439	ug/kg	87.7	439
122-66-7	Azobenzene	U	439	ug/kg	87.7	439
	<i>1,2-Diphenylhydrazine</i>					
101-55-3	4-Bromophenylphenylether	U	439	ug/kg	87.7	439
118-74-1	Hexachlorobenzene	U	439	ug/kg	87.7	439
85-01-8	Phenanthrene	U	43.9	ug/kg	13.2	43.9
120-12-7	Anthracene	U	43.9	ug/kg	8.77	43.9
84-74-2	Di-n-butylphthalate	U	439	ug/kg	87.7	439
206-44-0	Fluoranthene	U	43.9	ug/kg	13.2	43.9
85-68-7	Butylbenzylphthalate	U	439	ug/kg	87.7	439
56-55-3	Benzo(a)anthracene	U	43.9	ug/kg	13.2	43.9
91-94-1	3,3'-Dichlorobenzidine	U	439	ug/kg	132	439
218-01-9	Chrysene	U	43.9	ug/kg	13.2	43.9
117-81-7	bis(2-Ethylhexyl)phthalate	U	439	ug/kg	87.7	439
117-84-0	Di-n-octylphthalate	U	439	ug/kg	87.7	439
205-99-2	Benzo(b)fluoranthene	U	43.9	ug/kg	13.2	43.9
207-08-9	Benzo(k)fluoranthene	U	43.9	ug/kg	13.2	43.9
50-32-8	Benzo(a)pyrene	U	43.9	ug/kg	13.2	43.9
193-39-5	Indeno(1,2,3-cd)pyrene	U	43.9	ug/kg	13.2	43.9
53-70-3	Dibenzo(a,h)anthracene	U	43.9	ug/kg	13.2	43.9
191-24-2	Benzo(ghi)perylene	U	43.9	ug/kg	13.2	43.9
120-82-1	1,2,4-Trichlorobenzene	U	439	ug/kg	87.7	439

**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	3.15	897	ug/kg		JA
301-02-0	9-Octadecenamide, (Z)-	11.48	338	ug/kg	96	NJ

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

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<b>SDG Number:</b>	<b>10-1758</b>	<b>Date Collected:</b>	<b>02/09/2010 12:00</b>	<b>Matrix:</b>	<b>R</b>
<b>Lab Sample ID:</b>	<b>246866009</b>	<b>Date Received:</b>	<b>02/11/2010 09:20</b>	<b>%Moisture:</b>	<b>24.2</b>
		<b>Client:</b>	<b>LANL010</b>	<b>Project:</b>	<b>LANL01004</b>
<b>Client ID:</b>	<b>RE15-10-8376</b>	<b>Method:</b>	<b>SW846 8270C</b>	<b>SOP Ref:</b>	<b>GL-OA-E-009</b>
<b>Batch ID:</b>	<b>954297</b>	<b>Inst:</b>	<b>MSD2.I</b>	<b>Dilution:</b>	<b>1</b>
<b>Run Date:</b>	<b>02/23/2010 18:15</b>	<b>Analyst:</b>	<b>AGS1</b>	<b>Inj. Vol:</b>	<b>.5 uL</b>
<b>Prep Date:</b>	<b>02/17/2010 21:06</b>	<b>Aliquot:</b>	<b>30.07 g</b>	<b>Final Volume:</b>	<b>1 mL</b>
<b>Data File:</b>	<b>s2b2313.d</b>	<b>Column:</b>	<b>J&amp;W DB-5MS</b>	<b>Level:</b>	<b>LOW</b>

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
Tentatively Identified Compound Summary							
CAS No.	Tentatively Identified Compound (TIC)		RT	Estimated	Units	Fit	Qual
301-02-0	9-Octadecenamide, (Z)-		13.31	360	ug/kg	97	NJ

# QC Summary



Semi-Volatile  
Surrogate Recovery Report

Page 1 of 1

SDG Number: 10-1758

Matrix Type: SOLID

CAP Column (1) : J&amp;W DB-5MS

Sample ID	Client ID	2FP %REC	PHL %REC	NBZ %REC	FBP %REC	TBP %REC	TPH %REC
1202045697	MB for batch 954286	76	70	84	72	77	90
1202045698	LCS for batch 954286	78	73	84	74	83	85
246866002	RE15-10-8366	72	66	78	68	68	86
1202045699	RE15-10-8366MS	71	68	76	67	75	77
1202045700	RE15-10-8366MSD	75	72	81	71	79	81
246866003	RE15-10-8367	73	66	75	68	77	92
246866004	RE15-10-8364	61	58	63	55	61	72
246866005	RE15-10-8365	69	65	73	63	73	85
246866006	RE15-10-8368	70	65	74	66	74	89
246866007	RE15-10-8340	69	63	73	65	75	91
246866008	RE15-10-8341	69	63	70	65	73	92
246866009	RE15-10-8376	63	57	67	59	59	88

**Surrogate****Acceptance Limits**

2FP	= 2-Fluorophenol	(29%-99%)
PHL	= Phenol-d5	(33%-98%)
NBZ	= Nitrobenzene-d5	(31%-105%)
FBP	= 2-Fluorobiphenyl	(25%-109%)
TBP	= 2,4,6-Tribromophenol	(37%-106%)
TPH	= p-Terphenyl-d14	(13%-150%)

\* Recovery outside Acceptance Limits

# Column to be used to flag recovery values

D Sample Diluted

Semi-Volatile  
Quality Control Summary  
Spike Recovery Report

Page 1 of 4

SDG Number: 10-1758

Sample Type: Laboratory Control Sample

Client ID: LCS for batch 954286

Matrix: SOIL

Lab Sample ID: 1202045698

Instrument: MSD2.I

Analysis Date: 02/22/2010 16:31

Dilution: 1

Analyst: AGS1

Prep Batch ID: 954286

Inj. Vol: .5 uL

Batch ID: 954297

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	1190	72	22-114
108-95-2	LCS Phenol	1670	0.0	1240	74	39-104
95-57-8	LCS 2-Chlorophenol	1670	0.0	1260	76	40-107
106-46-7	LCS 1,4-Dichlorobenzene	1670	0.0	1190	72	33-108
621-64-7	LCS N-Nitrosodipropylamine	1670	0.0	1330	80	34-113
59-50-7	LCS 4-Chloro-3-methylphenol	1670	0.0	1570	94	42-114
83-32-9	LCS Acenaphthene	1670	0.0	1220	73	40-105
121-14-2	LCS 2,4-Dinitrotoluene	1670	0.0	1460	87	49-112
100-02-7	LCS 4-Nitrophenol	1670	0.0	996	60	24-113
87-86-5	LCS Pentachlorophenol	1670	0.0	1200	72	27-116
129-00-0	LCS Pyrene	1670	0.0	1340	80	42-113
110-86-1	LCS Pyridine	1670	0.0	1400	84	8-125
62-53-3	LCS Aniline	1670	0.0	1340	80	18-126
111-44-4	LCS bis(2-Chloroethyl) ether	1670	0.0	1170	70	32-103
541-73-1	LCS 1,3-Dichlorobenzene	1670	0.0	1210	72	32-108
100-51-6	LCS Benzyl alcohol	1670	0.0	893	54	27-108
95-50-1	LCS 1,2-Dichlorobenzene	1670	0.0	1210	73	35-111
108-60-1	LCS bis(2-Chloroisopropyl)ether	1670	0.0	1090	66	28-117
95-48-7	LCS o-Cresol	1670	0.0	1170	70	39-111
65794-96-9	LCS m,p-Cresols	1670	0.0	1410	84	45-121
67-72-1	LCS Hexachloroethane	1670	0.0	1130	68	30-109
98-95-3	LCS Nitrobenzene	1670	0.0	1520	91	33-116

Semi-Volatile  
Quality Control Summary  
Spike Recovery Report

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SDG Number: 10-1758

Sample Type: Laboratory Control Sample

Client ID: LCS for batch 954286

Matrix: SOIL

Lab Sample ID: 1202045698

Instrument: MSD2.I

Analysis Date: 02/22/2010 16:31

Dilution: 1

Analyst: AGS1

Prep Batch ID: 954286

Inj. Vol: .5 uL

Batch ID: 954297

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	1470	88	35-113
88-75-5	LCS 2-Nitrophenol	1670	0.0	1430	86	31-117
105-67-9	LCS 2,4-Dimethylphenol	1670	0.0	1290	77	32-112
111-91-1	LCS bis(2-Chloroethoxy)methane	1670	0.0	1420	85	34-110
120-83-2	LCS 2,4-Dichlorophenol	1670	0.0	1490	89	34-116
65-85-0	LCS Benzoic acid	3330	0.0	3170	95	22-138
91-20-3	LCS Naphthalene	1670	0.0	1380	83	35-103
106-47-8	LCS 4-Chloroaniline	1670	0.0	1390	83	20-118
87-68-3	LCS Hexachlorobutadiene	1670	0.0	1400	84	31-117
91-57-6	LCS 2-Methylnaphthalene	1670	0.0	1420	85	38-115
77-47-4	LCS Hexachlorocyclopentadiene	1670	0.0	789	47	22-140
88-06-2	LCS 2,4,6-Trichlorophenol	1670	0.0	1360	82	40-110
95-95-4	LCS 2,4,5-Trichlorophenol	1670	0.0	1400	84	43-113
91-58-7	LCS 2-Chloronaphthalene	1670	0.0	1290	77	37-111
88-74-4	LCS 2-Nitroaniline <i>o</i> -Nitroaniline	1670	0.0	1430	86	41-113
99-09-2	LCS 3-Nitroaniline <i>m</i> -Nitroaniline	1670	0.0	1640	99	34-125
131-11-3	LCS Dimethylphthalate	1670	0.0	1440	87	48-122
606-20-2	LCS 2,6-Dinitrotoluene	1670	0.0	1400	84	47-107
208-96-8	LCS Acenaphthylene	1670	0.0	1310	79	44-110
51-28-5	LCS 2,4-Dinitrophenol	1670	0.0	1230	74	18-127
132-64-9	LCS Dibenzofuran	1670	0.0	1350	81	49-115
84-66-2	LCS Diethylphthalate	1670	0.0	1410	85	51-126

Semi-Volatile  
Quality Control Summary  
Spike Recovery Report

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SDG Number: 10-1758

Sample Type: Laboratory Control Sample

Client ID: LCS for batch 954286

Matrix: SOIL

Lab Sample ID: 1202045698

Instrument: MSD2.I

Analysis Date: 02/22/2010 16:31

Dilution: 1

Analyst: AGS1

Prep Batch ID: 954286

Inj. Vol: .5 uL

Batch ID: 954297

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	1310	78	43-109
7005-72-3	LCS 4-Chlorophenylphenylether	1670	0.0	1410	84	45-115
534-52-1	LCS 2-Methyl-4,6-dinitrophenol	1670	0.0	1140	68	32-117
100-01-6	LCS 4-Nitroaniline <i>p-Nitroaniline</i>	1670	0.0	1700	102	33-148
122-39-4	LCS Diphenylamine	1670	0.0	1530	92	46-114
122-66-7	LCS Azobenzene <i>1,2-Diphenylhydrazine</i>	1670	0.0	1390	84	38-123
101-55-3	LCS 4-Bromophenylphenylether	1670	0.0	1360	82	40-119
118-74-1	LCS Hexachlorobenzene	1670	0.0	1370	82	43-111
85-01-8	LCS Phenanthrene	1670	0.0	1340	81	46-107
120-12-7	LCS Anthracene	1670	0.0	1380	83	46-110
84-74-2	LCS Di-n-butylphthalate	1670	0.0	1460	88	52-132
206-44-0	LCS Fluoranthene	1670	0.0	1510	90	51-115
85-68-7	LCS Butylbenzylphthalate	1670	0.0	1410	84	47-137
56-55-3	LCS Benzo(a)anthracene	1670	0.0	1390	83	50-108
91-94-1	LCS 3,3'-Dichlorobenzidine	1670	0.0	1580	95	36-103
218-01-9	LCS Chrysene	1670	0.0	1460	88	48-111
117-81-7	LCS bis(2-Ethylhexyl)phthalate	1670	0.0	1380	83	48-139
117-84-0	LCS Di-n-octylphthalate	1670	0.0	1180	71	42-141
205-99-2	LCS Benzo(b)fluoranthene	1670	0.0	1340	80	49-114
207-08-9	LCS Benzo(k)fluoranthene	1670	0.0	1370	82	50-116
50-32-8	LCS Benzo(a)pyrene	1670	0.0	1460	87	54-114
193-39-5	LCS Indeno(1,2,3-cd)pyrene	1670	0.0	1680	101	53-120

Semi-Volatile  
Quality Control Summary  
Spike Recovery Report

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SDG Number: 10-1758

Sample Type: Laboratory Control Sample

Client ID: LCS for batch 954286

Matrix: SOIL

Lab Sample ID: 1202045698

Instrument: MSD2.I

Analysis Date: 02/22/2010 16:31

Dilution: 1

Analyst: AGS1

Prep Batch ID: 954286

Inj. Vol: .5 uL

Batch ID: 954297

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	1710	103	53-121
191-24-2	LCS Benzo(ghi)perylene	1670	0.0	1640	99	50-121
120-82-1	LCS 1,2,4-Trichlorobenzene	1670	0.0	1450	87	32-114

Semi-Volatile  
Quality Control Summary  
Spike Recovery Report

Page 1 of 8

SDG Number: 10-1758

Sample Type: Matrix Spike

Client ID: RE15-10-8366MS

Matrix: R

Lab Sample ID: 1202045699

%Moisture: 18

Instrument: MSD2.I

Analysis Date: 02/22/2010 18:14

Dilution: 1

Analyst: AGS1

Prep Batch ID: 954286

Inj. Vol: .5 uL

Batch ID: 954297

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	2020	0.00	U	1330	66 27-98
108-95-2	MS Phenol	2020	0.00	U	1320	65 33-94
95-57-8	MS 2-Chlorophenol	2020	0.00	U	1360	67 29-96
106-46-7	MS 1,4-Dichlorobenzene	2020	0.00	U	1300	64 27-96
621-64-7	MS N-Nitrosodipropylamine	2020	0.00	U	1470	73 29-102
59-50-7	MS 4-Chloro-3-methylphenol	2020	0.00	U	1750	87 29-110
83-32-9	MS Acenaphthene	2020	0.00	U	1360	67 17-109
121-14-2	MS 2,4-Dinitrotoluene	2020	0.00	U	1570	78 33-107
100-02-7	MS 4-Nitrophenol	2020	0.00	U	993	49 15-110
87-86-5	MS Pentachlorophenol	2020	0.00	U	1370	68 23-110
129-00-0	MS Pyrene	2020	0.00	U	1500	74 24-118
110-86-1	MS Pyridine	2020	0.00	U	1500	74 25-102
62-53-3	MS Aniline	2020	0.00	U	1580	78 18-109
111-44-4	MS bis(2-Chloroethyl) ether	2020	0.00	U	1280	63 29-96
541-73-1	MS 1,3-Dichlorobenzene	2020	0.00	U	1300	64 26-97
100-51-6	MS Benzyl alcohol	2020	0.00	U	440	22 19-112
95-50-1	MS 1,2-Dichlorobenzene	2020	0.00	U	1320	65 30-97
108-60-1	MS bis(2-Chloroisopropyl)ether	2020	0.00	U	1220	61 28-103
95-48-7	MS o-Cresol	2020	0.00	U	1280	63 32-107
65794-96-9	MS m,p-Cresols	2020	0.00	U	1610	80 33-115
67-72-1	MS Hexachloroethane	2020	0.00	U	1240	61 25-100
98-95-3	MS Nitrobenzene	2020	0.00	U	1630	81 27-106

Semi-Volatile  
Quality Control Summary  
Spike Recovery Report

Page 2 of 8

SDG Number: 10-1758

Sample Type: Matrix Spike

Client ID: RE15-10-8366MS

Matrix: R

Lab Sample ID: 1202045699

%Moisture: 18

Instrument: MSD2.I

Analysis Date: 02/22/2010 18:14

Dilution: 1

Analyst: AGS1

Prep Batch ID: 954286

Inj. Vol: .5 uL

Batch ID: 954297

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
78-59-1	MS Isophorone	2020	0.00 U	1640	81	29-104
88-75-5	MS 2-Nitrophenol	2020	0.00 U	1570	78	26-102
105-67-9	MS 2,4-Dimethylphenol	2020	0.00 U	1340	66	22-104
111-91-1	MS bis(2-Chloroethoxy)methane	2020	0.00 U	1570	78	27-101
120-83-2	MS 2,4-Dichlorophenol	2020	0.00 U	1670	82	26-103
65-85-0	MS Benzoic acid	4040	0.00 U	4000	99	13-131
91-20-3	MS Naphthalene	2020	0.00 U	1510	75	23-103
106-47-8	MS 4-Chloroaniline	2020	0.00 U	1540	76	26-103
87-68-3	MS Hexachlorobutadiene	2020	0.00 U	1530	76	28-101
91-57-6	MS 2-Methylnaphthalene	2020	0.00 U	1590	79	27-106
77-47-4	MS Hexachlorocyclopentadiene	2020	0.00 U	805	40	24-117
88-06-2	MS 2,4,6-Trichlorophenol	2020	0.00 U	1470	73	26-105
95-95-4	MS 2,4,5-Trichlorophenol	2020	0.00 U	1630	81	30-110
91-58-7	MS 2-Chloronaphthalene	2020	0.00 U	1410	70	28-102
88-74-4	MS 2-Nitroaniline <i>o</i> -Nitroaniline	2020	0.00 U	1530	76	33-106
99-09-2	MS 3-Nitroaniline <i>m</i> -Nitroaniline	2020	0.00 U	1720	85	33-116
131-11-3	MS Dimethylphthalate	2020	0.00 U	1600	79	38-113
606-20-2	MS 2,6-Dinitrotoluene	2020	0.00 U	1550	77	29-107
208-96-8	MS Acenaphthylene	2020	0.00 U	1450	72	25-108
51-28-5	MS 2,4-Dinitrophenol	2020	0.00 U	1300	65	14-102
132-64-9	MS Dibenzofuran	2020	0.00 U	1500	74	35-112
84-66-2	MS Diethylphthalate	2020	0.00 U	1560	77	36-122

Semi-Volatile  
Quality Control Summary  
Spike Recovery Report

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SDG Number: 10-1758

Sample Type: Matrix Spike

Client ID: RE15-10-8366MS

Matrix: R

Lab Sample ID: 1202045699

%Moisture: 18

Instrument: MSD2.I

Analysis Date: 02/22/2010 18:14

Dilution: 1

Analyst: AGS1

Prep Batch ID: 954286

Inj. Vol: .5 uL

Batch ID: 954297

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits
86-73-7	MS	Fluorene	2020	0.00	U	1450	72	33-105
7005-72-3	MS	4-Chlorophenylphenylether	2020	0.00	U	1540	76	30-110
534-52-1	MS	2-Methyl-4,6-dinitrophenol	2020	0.00	U	1170	58	26-97
100-01-6	MS	4-Nitroaniline <i>p</i> -Nitroaniline	2020	0.00	U	1690	84	28-135
122-39-4	MS	Diphenylamine	2020	0.00	U	1670	83	33-109
122-66-7	MS	Azobenzene <i>1,2-Diphenylhydrazine</i>	2020	0.00	U	1520	75	31-113
101-55-3	MS	4-Bromophenylphenylether	2020	0.00	U	1490	74	31-109
118-74-1	MS	Hexachlorobenzene	2020	0.00	U	1500	74	37-99
85-01-8	MS	Phenanthrene	2020	0.00	U	1460	72	29-109
120-12-7	MS	Anthracene	2020	0.00	U	1500	74	19-118
84-74-2	MS	Di-n-butylphthalate	2020	0.00	U	1600	79	39-123
206-44-0	MS	Fluoranthene	2020	0.00	U	1610	80	33-114
85-68-7	MS	Butylbenzylphthalate	2020	0.00	U	1610	80	35-131
56-55-3	MS	Benzo(a)anthracene	2020	0.00	U	1490	74	30-111
91-94-1	MS	3,3'-Dichlorobenzidine	2020	0.00	U	1640	81	30-124
218-01-9	MS	Chrysene	2020	0.00	U	1560	77	32-108
117-81-7	MS	bis(2-Ethylhexyl)phthalate	2020	0.00	U	1580	78	37-129
117-84-0	MS	Di-n-octylphthalate	2020	0.00	U	1430	71	31-143
205-99-2	MS	Benzo(b)fluoranthene	2020	0.00	U	1440	71	29-118
207-08-9	MS	Benzo(k)fluoranthene	2020	0.00	U	1530	76	32-118
50-32-8	MS	Benzo(a)pyrene	2020	0.00	U	1560	77	33-115
193-39-5	MS	Indeno(1,2,3-cd)pyrene	2020	0.00	U	1630	81	29-114



Semi-Volatile  
Quality Control Summary  
Spike Recovery Report

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SDG Number: 10-1758

Client ID: RE15-10-8366MS

Lab Sample ID: 1202045699

Instrument: MSD2.I

Analyst: AGS1

Inj. Vol: .5 uL

Sample Type: Matrix Spike

Matrix: R

%Moisture: 18

Analysis Date: 02/22/2010 18:14

Dilution: 1

Prep Batch ID: 954286

Batch ID: 954297

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	2020	0.00 U	1650	82	27-119
191-24-2	MS Benzo(ghi)perylene	2020	0.00 U	1550	77	28-112
120-82-1	MS 1,2,4-Trichlorobenzene	2020	0.00 U	1590	79	28-99

Semi-Volatile  
Quality Control Summary  
Spike Recovery Report

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SDG Number: 10-1758

Client ID: RE15-10-8366MSD

Lab Sample ID: 1202045700

Instrument: MSD2.I

Analyst: AGS1

Inj. Vol: .5 uL

Sample Type: Matrix Spike Duplicate

Matrix: R

%Moisture: 18

Analysis Date: 02/22/2010 18:39

Dilution: 1

Prep Batch ID: 954286

Batch ID: 954297

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg	U	Spike Conc. ug/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
62-75-9	MSD N-Methyl-N-nitrosomethylam	2020	0.00	U	1420	70	27-98	7	0-30
108-95-2	MSD Phenol	2020	0.00	U	1420	70	33-94	8	0-30
95-57-8	MSD 2-Chlorophenol	2020	0.00	U	1480	73	29-96	9	0-30
106-46-7	MSD 1,4-Dichlorobenzene	2020	0.00	U	1410	70	27-96	8	0-30
621-64-7	MSD N-Nitrosodipropylamine	2020	0.00	U	1580	78	29-102	8	0-30
59-50-7	MSD 4-Chloro-3-methylphenol	2020	0.00	U	1870	92	29-110	7	0-30
83-32-9	MSD Acenaphthene	2020	0.00	U	1450	72	17-109	6	0-30
121-14-2	MSD 2,4-Dinitrotoluene	2020	0.00	U	1650	82	33-107	5	0-30
100-02-7	MSD 4-Nitrophenol	2020	0.00	U	1030	51	15-110	3	0-30
87-86-5	MSD Pentachlorophenol	2020	0.00	U	1510	74	23-110	9	0-30
129-00-0	MSD Pyrene	2020	0.00	U	1570	78	24-118	4	0-30
110-86-1	MSD Pyridine	2020	0.00	U	1620	80	25-102	8	0-30
62-53-3	MSD Aniline	2020	0.00	U	1770	87	18-109	11	0-30
111-44-4	MSD bis(2-Chloroethyl) ether	2020	0.00	U	1390	69	29-96	8	0-30
541-73-1	MSD 1,3-Dichlorobenzene	2020	0.00	U	1410	70	26-97	8	0-30
100-51-6	MSD Benzyl alcohol	2020	0.00	U	500	25	19-112	13	0-30
95-50-1	MSD 1,2-Dichlorobenzene	2020	0.00	U	1410	70	30-97	7	0-30
108-60-1	MSD bis(2-Chloroisopropyl)ether	2020	0.00	U	1310	65	28-103	7	0-30
95-48-7	MSD o-Cresol	2020	0.00	U	1610	80	32-107	23	0-30
65794-96-9	MSD m,p-Cresols	2020	0.00	U	1800	89	33-115	11	0-30
67-72-1	MSD Hexachloroethane	2020	0.00	U	1350	67	25-100	9	0-30
98-95-3	MSD Nitrobenzene	2020	0.00	U	1810	90	27-106	10	0-30

Semi-Volatile  
Quality Control Summary  
Spike Recovery Report

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SDG Number: 10-1758

Client ID: RE15-10-8366MSD

Lab Sample ID: 1202045700

Instrument: MSD2.I

Analyst: AGS1

Inj. Vol: .5 uL

Sample Type: Matrix Spike Duplicate

Matrix: R

%Moisture: 18

Analysis Date: 02/22/2010 18:39

Dilution: 1

Prep Batch ID: 954286

Batch ID: 954297

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	2020	0.00	U	1760	87	29-104	7	0-30
88-75-5	MSD 2-Nitrophenol	2020	0.00	U	1660	82	26-102	6	0-30
105-67-9	MSD 2,4-Dimethylphenol	2020	0.00	U	1470	73	22-104	9	0-30
111-91-1	MSD bis(2-Chloroethoxy)methane	2020	0.00	U	1690	83	27-101	7	0-30
120-83-2	MSD 2,4-Dichlorophenol	2020	0.00	U	1770	88	26-103	6	0-30
65-85-0	MSD Benzoic acid	4040	0.00	U	4190	104	13-131	5	0-30
91-20-3	MSD Naphthalene	2020	0.00	U	1630	81	23-103	8	0-30
106-47-8	MSD 4-Chloroaniline	2020	0.00	U	1730	86	26-103	12	0-30
87-68-3	MSD Hexachlorobutadiene	2020	0.00	U	1660	82	28-101	8	0-30
91-57-6	MSD 2-Methylnaphthalene	2020	0.00	U	1700	84	27-106	7	0-30
77-47-4	MSD Hexachlorocyclopentadiene	2020	0.00	U	811	40	24-117	1	0-30
88-06-2	MSD 2,4,6-Trichlorophenol	2020	0.00	U	1540	76	26-105	5	0-30
95-95-4	MSD 2,4,5-Trichlorophenol	2020	0.00	U	1690	84	30-110	4	0-30
91-58-7	MSD 2-Chloronaphthalene	2020	0.00	U	1490	74	28-102	6	0-30
88-74-4	MSD 2-Nitroaniline <i>o</i> -Nitroaniline	2020	0.00	U	1600	79	33-106	4	0-30
99-09-2	MSD 3-Nitroaniline <i>m</i> -Nitroaniline	2020	0.00	U	1850	92	33-116	8	0-30
131-11-3	MSD Dimethylphthalate	2020	0.00	U	1690	84	38-113	6	0-30
606-20-2	MSD 2,6-Dinitrotoluene	2020	0.00	U	1640	81	29-107	6	0-30
208-96-8	MSD Acenaphthylene	2020	0.00	U	1540	76	25-108	6	0-30
51-28-5	MSD 2,4-Dinitrophenol	2020	0.00	U	1260	62	14-102	4	0-30
132-64-9	MSD Dibenzofuran	2020	0.00	U	1580	78	35-112	5	0-30
84-66-2	MSD Diethylphthalate	2020	0.00	U	1660	82	36-122	6	0-30

Semi-Volatile  
Quality Control Summary  
Spike Recovery Report

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SDG Number: 10-1758

Sample Type: Matrix Spike Duplicate

Client ID: RE15-10-8366MSD

Matrix: R

Lab Sample ID: 1202045700

%Moisture: 18

Instrument: MSD2.I

Analysis Date: 02/22/2010 18:39

Dilution: 1

Analyst: AGS1

Prep Batch ID: 954286

Inj. Vol: .5 uL

Batch ID: 954297

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	2020	0.00	U	1540	76	33-105	6	0-30
7005-72-3	MSD 4-Chlorophenylphenylether	2020	0.00	U	1620	80	30-110	5	0-30
534-52-1	MSD 2-Methyl-4,6-dinitrophenol	2020	0.00	U	1130	56	26-97	3	0-30
100-01-6	MSD 4-Nitroaniline <i>p</i> -Nitroaniline	2020	0.00	U	1770	88	28-135	5	0-30
122-39-4	MSD Diphenylamine	2020	0.00	U	1750	87	33-109	5	0-30
122-66-7	MSD Azobenzene <i>1,2-Diphenylhydrazine</i>	2020	0.00	U	1610	79	31-113	5	0-30
101-55-3	MSD 4-Bromophenylphenylether	2020	0.00	U	1570	78	31-109	6	0-30
118-74-1	MSD Hexachlorobenzene	2020	0.00	U	1580	78	37-99	6	0-30
85-01-8	MSD Phenanthrene	2020	0.00	U	1540	76	29-109	5	0-30
120-12-7	MSD Anthracene	2020	0.00	U	1570	78	19-118	5	0-30
84-74-2	MSD Di-n-butylphthalate	2020	0.00	U	1710	84	39-123	6	0-30
206-44-0	MSD Fluoranthene	2020	0.00	U	1700	84	33-114	5	0-30
85-68-7	MSD Butylbenzylphthalate	2020	0.00	U	1720	85	35-131	6	0-30
56-55-3	MSD Benzo(a)anthracene	2020	0.00	U	1570	78	30-111	5	0-30
91-94-1	MSD 3,3'-Dichlorobenzidine	2020	0.00	U	1650	82	30-124	1	0-30
218-01-9	MSD Chrysene	2020	0.00	U	1640	81	32-108	5	0-30
117-81-7	MSD bis(2-Ethylhexyl)phthalate	2020	0.00	U	1670	83	37-129	6	0-30
117-84-0	MSD Di-n-octylphthalate	2020	0.00	U	1590	79	31-143	11	0-30
205-99-2	MSD Benzo(b)fluoranthene	2020	0.00	U	1580	78	29-118	9	0-30
207-08-9	MSD Benzo(k)fluoranthene	2020	0.00	U	1630	81	32-118	6	0-30
50-32-8	MSD Benzo(a)pyrene	2020	0.00	U	1660	82	33-115	6	0-30
193-39-5	MSD Indeno(1,2,3-cd)pyrene	2020	0.00	U	1560	77	29-114	5	0-30

Semi-Volatile  
Quality Control Summary  
Spike Recovery Report

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SDG Number: 10-1758

Sample Type: Matrix Spike Duplicate

Client ID: RE15-10-8366MSD

Matrix: R

Lab Sample ID: 1202045700

%Moisture: 18

Instrument: MSD2.I

Analysis Date: 02/22/2010 18:39

Dilution: 1

Analyst: AGS1

Prep Batch ID: 954286

Inj. Vol: .5 uL

Batch ID: 954297

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	2020	0.00	U	1590	78	27-119	4	0-30
191-24-2	MSD Benzo(ghi)perylene	2020	0.00	U	1440	71	28-112	8	0-30
120-82-1	MSD 1,2,4-Trichlorobenzene	2020	0.00	U	1700	84	28-99	7	0-30

## Method Blank Summary

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SDG Number: 10-1758  
Client ID: MB for batch 954286  
Lab Sample ID: 1202045697  
Column: J&W DB-5MS

Client: LANL010  
Instrument ID: MSD2.I  
Prep Date: 02/17/2010 21:06  
Level: LOW

Matrix: SOIL  
Data File: s2b2205-1.d  
Analyzed: 02/22/10 16:06

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 954286	1202045698	s2b2206-1.d	02/22/10	1631
02 RE15-10-8366	246866002	s2b2209.d	02/22/10	1748
03 RE15-10-8366MS	1202045699	s2b2210.d	02/22/10	1814
04 RE15-10-8366MSD	1202045700	s2b2211.d	02/22/10	1839
05 RE15-10-8367	246866003	s2b2223.d	02/22/10	2344
06 RE15-10-8364	246866004	s2b2224.d	02/23/10	0009
07 RE15-10-8365	246866005	s2b2225.d	02/23/10	0034
08 RE15-10-8368	246866006	s2b2226.d	02/23/10	0100
09 RE15-10-8340	246866007	s2b2227.d	02/23/10	0125
10 RE15-10-8341	246866008	s2b2228.d	02/23/10	0150
11 RE15-10-8376	246866009	s2b2313.d	02/23/10	1815

## Instrument Performance Check

## DFTPP

Lab Name GEL Laboratories LLC

Client SDG: 10-1758

Instrument ID: MSD2.I

Injection Date/Time: 08-JAN-10 21:18

Column Description: J&amp;W DB-5MS

Lab File ID /chem/MSD2.i/s010810a.b/s2a0808.d

m/e	Ion Abundance Criteria	% Relative Abundance
198	Base Peak, 100% Relative Abundance	100
51	30 - 60% of mass 198	49.3
68	Less than 2% of mass 69	1.7
69	Mass 69 Relative Abundance	39
70	Less than 2% of mass 69	0.5
127	40 - 60% of mass 198	42.6
197	0 - 1% of mass 198	0
199	5 - 9% of mass 198	6.8
275	10 - 30% of mass 198	27.5
365	Greater than 1% of mass 198	3.8
441	Present, but less than mass 443	80.8
442	Greater than 40% of mass 198	91.9
443	17 - 23% of mass 442	19.1

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

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
MEGA001	WBN091225-09	s2a0810.d	08-JAN-10 22:16
MEGA010	WBN091225-10	s2a0811.d	08-JAN-10 22:44
MEGA020	WBN091225-11	s2a0812.d	08-JAN-10 23:13
MEGA040	WBN091225-12.4	s2a0813.d	08-JAN-10 23:41
MEGA050	WBN091225-13	s2a0814.d	09-JAN-10 00:10
MEGA080	WBN091225-14	s2a0815.d	09-JAN-10 00:38
MEGA100	WBN091225-15	s2a0816.d	09-JAN-10 01:07
MEGA120	WBN091225-16	s2a0817.d	09-JAN-10 01:35
MEGAICV	WBN091223-17.2	s2a0820.d	09-JAN-10 02:58

## Instrument Performance Check

## DFTPP

Lab Name GEL Laboratories LLC

Client SDG: 10-1758

Instrument ID: MSD2.I

Injection Date/Time: 11-JAN-10 14:49

Column Description: J&amp;W DB-5MS

Lab File ID /chem/MSD2.i/s010810a.b/s2a0846D.d

m/e	Ion Abundance Criteria	% Relative Abundance
198	Base Peak, 100% Relative Abundance	100
51	10 - 80% of mass 198	59.2
68	Less than 2% of mass 69	1.7
69	Mass 69 Relative Abundance	42
70	Less than 2% of mass 69	0.4
127	10 - 80% of mass 198	44.5
197	Less than 2% of mass 198	0
199	5 - 9% of mass 198	6.8
275	10 - 60% of mass 198	27.3
365	Greater than 1% of mass 198	3.4
441	Less than 24% of mass 442	16.2
442	Greater than 50% of mass 198	75.4
443	15 - 24% of mass 442	18.7

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
AP010	WBN100103-01	s2a0848.d	11-JAN-10 15:27
AP020	WBN100103-02	s2a0849.d	11-JAN-10 15:52
AP050	WBN100103-04	s2a0851.d	11-JAN-10 16:43
AP100	WBN100103-06	s2a0853.d	11-JAN-10 17:33
AP120	WBN100103-07	s2a0854.d	11-JAN-10 17:58
AP040	WBN100103-03.1	s2a0856.d	11-JAN-10 18:50
AP080	WBN100103-05	s2a0857.d	11-JAN-10 19:45
APICV	WBN100103-08.1	s2a0864.d	11-JAN-10 22:49



## Instrument Performance Check

## DFTPP

Lab Name GEL Laboratories LLC

Client SDG: 10-1758

Instrument ID: MSD2.I

Injection Date/Time: 22-FEB-10 14:34

Column Description: J&amp;W DB-5MS

Lab File ID /chem/MSD2.i/s022210.b/s2b2201.d

m/e	Ion Abundance Criteria	% Relative Abundance
198	Base Peak, 100% Relative Abundance	100
51	30 - 60% of mass 198	50.6
68	Less than 2% of mass 69	1.4
69	Mass 69 Relative Abundance	42.6
70	Less than 2% of mass 69	0.5
127	40 - 60% of mass 198	43.6
197	0 - 1% of mass 198	0.5
199	5 - 9% of mass 198	6.6
275	10 - 30% of mass 198	24.5
365	Greater than 1% of mass 198	2.8
441	Present, but less than mass 443	72.3
442	Greater than 40% of mass 198	68.8
443	17 - 23% of mass 442	21.4

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

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
MEGACVS	WBN100121-13.2	s2b2202.d	22-FEB-10 14:46
APCVS	WBN100120-03.2	s2b2203.d	22-FEB-10 15:15
SBLK01	1202045697	s2b2205-1.d	22-FEB-10 16:06
SBLK01LCS	1202045698	s2b2206-1.d	22-FEB-10 16:31
RE15-10-8366	246866002	s2b2209.d	22-FEB-10 17:48
RE15-10-8366MS	1202045699	s2b2210.d	22-FEB-10 18:14
RE15-10-8366MSD	1202045700	s2b2211.d	22-FEB-10 18:39
RE15-10-8367	246866003	s2b2223.d	22-FEB-10 23:44
RE15-10-8364	246866004	s2b2224.d	23-FEB-10 00:09
RE15-10-8365	246866005	s2b2225.d	23-FEB-10 00:34
RE15-10-8368	246866006	s2b2226.d	23-FEB-10 01:00
RE15-10-8340	246866007	s2b2227.d	23-FEB-10 01:25
RE15-10-8341	246866008	s2b2228.d	23-FEB-10 01:50

## Instrument Performance Check

## DFTPP

Lab Name GEL Laboratories LLC

Client SDG: 10-1758

Instrument ID: MSD2.I

Injection Date/Time: 23-FEB-10 13:05

Column Description: J&amp;W DB-5MS

Lab File ID /chem/MSD2.i/s022310.b/s2b2301D.d

m/e	Ion Abundance Criteria	% Relative Abundance
198	Base Peak, 100% Relative Abundance	100
51	10 - 80% of mass 198	49.2
68	Less than 2% of mass 69	1.3
69	Mass 69 Relative Abundance	42
70	Less than 2% of mass 69	0.4
127	10 - 80% of mass 198	43.6
197	Less than 2% of mass 198	0.5
199	5 - 9% of mass 198	6.7
275	10 - 60% of mass 198	24.3
365	Greater than 1% of mass 198	2.9
441	Less than 24% of mass 442	15.6
442	Greater than 50% of mass 198	71.6
443	15 - 24% of mass 442	21.6

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

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
MEGACVS	WBN100129-05.3	s2b2303.d	23-FEB-10 13:46
APCVS	WBN100218-03.2	s2b2304.d	23-FEB-10 14:15
RE15-10-8376	246866009	s2b2313.d	23-FEB-10 18:15

Internal Standard  
Area and RT Summary

Lab Name : GEL Laboratories LLC  
  
Instrument: MSD2.I  
  
GC Column: J&W DB-5MS

Client SDG: 10-1758  
  
STD Analysis Time: 22-FEB-10 14:46  
  
Data File: s2b2202.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 Upper Limit Lower Limit	250813	4.56	954269	5.83	543746	7.69	967029	9.29	949099	12.2	830488	14.4
	501626	5.06	1908538	6.33	1087492	8.19	1934058	9.79	1898198	12.7	1660976	14.9
	125407	4.06	477135	5.33	271873	7.19	483515	8.79	474550	11.7	415244	13.9
Sample ID												
BLK01	239463	4.56	807967	5.82	505137	7.69	893314	9.29	792250	12.2	652238	14.4
BLK01LCS	216981	4.56	746815	5.83	461829	7.69	838990	9.29	844662	12.2	746955	14.4
RE15-10-8366	214580	4.56	737830	5.83	468096	7.68	847066	9.29	769588	12.2	649248	14.4
RE15-10-8366MS	227035	4.56	782658	5.83	495051	7.69	901543	9.29	863395	12.2	715076	14.4
RE15-10-8366MSD	219369	4.56	757246	5.83	479432	7.69	873677	9.29	830072	12.2	653751	14.4
RE15-10-8367	252941	4.56	874748	5.83	561118	7.69	1025039	9.29	867408	12.2	531566	14.4
RE15-10-8364	252874	4.56	874887	5.83	561892	7.69	1026102	9.29	846020	12.2	529666	14.4
RE15-10-8365	254958	4.56	877174	5.83	566770	7.69	1043669	9.29	891055	12.2	580096	14.4
RE15-10-8368	231531	4.56	793432	5.83	506650	7.69	916169	9.29	763598	12.2	461657	14.4
RE15-10-8340	242763	4.56	831780	5.83	534909	7.69	983356	9.29	790189	12.2	437659	14.4
RE15-10-8341	241162	4.56	833744	5.83	536840	7.69	974834	9.29	796430	12.2	441170	14.4

Area Upper Limit = +100% of internal standard area  
Area Lower Limit = - 50% of internal standard area  
RT Upper Limit = + 0.50 minutes of internal standard RT  
RT Lower Limit = - 0.50 minutes of internal standard RT

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

Internal Standard  
Area and RT Summary

Lab Name : GEL Laboratories LLC  
Instrument: MSD2.I  
GC Column: J&W DB-5MS

Client SDG: 10-1758  
STD Analysis Time: 23-FEB-10 13:46  
Data File: s2b2303D.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	254206	4.53	973901	5.79	563919	7.66	967463	9.26	792577	12.2	513141	14.3
Upper Limit	508412	5.03	1947802	6.29	1127838	8.16	1934926	9.76	1585154	12.7	1026282	14.8
Lower Limit	127103	4.03	486951	5.29	281960	7.16	483732	8.76	396289	11.7	256571	13.8
Sample ID												
RE15-10-8376	226079	4.52	782144	5.78	493448	7.65	865058	9.25	659877	12.2	442584	14.3

Area Upper Limit = +100% of internal standard area  
Area Lower Limit = - 50% of internal standard area  
RT Upper Limit = + 0.50 minutes of internal standard RT  
RT Lower Limit = - 0.50 minutes of internal standard RT

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

# Sample Data

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

**SDG Number:** 10-1758  
**Lab Sample ID:** 246866007

**Date Collected:** 02/09/2010 12:00  
**Date Received:** 02/11/2010 09:20  
**Client:** LANL010  
**Method:** SW846 8270C  
**Inst:** MSD2.I  
**Analyst:** AGS1  
**Aliquot:** 30.15 g  
**Column:** J&W DB-5MS

**Matrix:** R  
**%Moisture:** 24.2  
**Project:** LANL01004  
**SOP Ref:** GL-OA-E-009  
**Dilution:** 1  
**Inj. Vol:** .5 uL  
**Final Volume:** 1 mL  
**Level:** LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	437	ug/kg	87.5	437
108-95-2	Phenol	U	437	ug/kg	87.5	437
95-57-8	2-Chlorophenol	U	437	ug/kg	87.5	437
106-46-7	1,4-Dichlorobenzene	U	437	ug/kg	87.5	437
621-64-7	N-Nitrosodipropylamine	U	437	ug/kg	87.5	437
59-50-7	4-Chloro-3-methylphenol	U	437	ug/kg	87.5	437
83-32-9	Acenaphthene	U	43.7	ug/kg	14.4	43.7
121-14-2	2,4-Dinitrotoluene	U	437	ug/kg	43.7	437
100-02-7	4-Nitrophenol	U	437	ug/kg	144	437
87-86-5	Pentachlorophenol	U	437	ug/kg	109	437
129-00-0	Pyrene	U	43.7	ug/kg	13.1	43.7
110-86-1	Pyridine	U	437	ug/kg	87.5	437
62-53-3	Aniline	U	437	ug/kg	131	437
111-44-4	bis(2-Chloroethyl) ether	U	437	ug/kg	87.5	437
541-73-1	1,3-Dichlorobenzene	U	437	ug/kg	87.5	437
100-51-6	Benzyl alcohol	U	437	ug/kg	131	437
95-50-1	1,2-Dichlorobenzene	U	437	ug/kg	87.5	437
108-60-1	bis(2-Chloroisopropyl)ether	U	437	ug/kg	87.5	437
95-48-7	o-Cresol	U	437	ug/kg	87.5	437
65794-96-9	m,p-Cresols	U	437	ug/kg	131	437
67-72-1	Hexachloroethane	U	437	ug/kg	87.5	437
98-95-3	Nitrobenzene	U	437	ug/kg	87.5	437
78-59-1	Isophorone	U	437	ug/kg	87.5	437
88-75-5	2-Nitrophenol	U	437	ug/kg	87.5	437
105-67-9	2,4-Dimethylphenol	U	437	ug/kg	153	437
111-91-1	bis(2-Chloroethoxy)methane	U	437	ug/kg	87.5	437
120-83-2	2,4-Dichlorophenol	U	437	ug/kg	87.5	437
65-85-0	Benzoic acid	U	875	ug/kg	219	875
91-20-3	Naphthalene	U	43.7	ug/kg	13.1	43.7
106-47-8	4-Chloroaniline	U	437	ug/kg	87.5	437
87-68-3	Hexachlorobutadiene	U	437	ug/kg	87.5	437
91-57-6	2-Methylnaphthalene	U	43.7	ug/kg	8.75	43.7
77-47-4	Hexachlorocyclopentadiene	U	437	ug/kg	87.5	437
88-06-2	2,4,6-Trichlorophenol	U	437	ug/kg	87.5	437
95-95-4	2,4,5-Trichlorophenol	U	437	ug/kg	87.5	437
91-58-7	2-Chloronaphthalene	U	43.7	ug/kg	14.4	43.7
88-74-4	2-Nitroaniline	U	437	ug/kg	87.5	437
99-09-2	<i>o</i> -Nitroaniline	U	437	ug/kg	87.5	437
	3-Nitroaniline					

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

**SDG Number:** 10-1758  
**Lab Sample ID:** 246866007

**Date Collected:** 02/09/2010 12:00  
**Date Received:** 02/11/2010 09:20  
**Client:** LANL010  
**Method:** SW846 8270C  
**Inst:** MSD2.I  
**Analyst:** AGS1  
**Aliquot:** 30.15 g  
**Column:** J&W DB-5MS

**Matrix:** R  
**%Moisture:** 24.2  
**Project:** LANL01004  
**SOP Ref:** GL-OA-E-009  
**Dilution:** 1  
**Inj. Vol:** .5 uL  
**Final Volume:** 1 mL  
**Level:** LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
	Dimethylphthalate	U	437	ug/kg	87.5	437
606-20-2	2,6-Dinitrotoluene	U	437	ug/kg	43.7	437
208-96-8	Acenaphthylene	U	43.7	ug/kg	13.1	43.7
51-28-5	2,4-Dinitrophenol	U	875	ug/kg	166	875
132-64-9	Dibenzofuran	U	437	ug/kg	87.5	437
84-66-2	Diethylphthalate	U	437	ug/kg	87.5	437
86-73-7	Fluorene	U	43.7	ug/kg	13.1	43.7
7005-72-3	4-Chlorophenylphenylether	U	437	ug/kg	87.5	437
534-52-1	2-Methyl-4,6-dinitrophenol	U	437	ug/kg	87.5	437
100-01-6	4-Nitroaniline	U	437	ug/kg	131	437
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	437	ug/kg	87.5	437
122-66-7	Azobenzene	U	437	ug/kg	87.5	437
	<i>1,2-Diphenylhydrazine</i>					
101-55-3	4-Bromophenylphenylether	U	437	ug/kg	87.5	437
118-74-1	Hexachlorobenzene	U	437	ug/kg	87.5	437
85-01-8	Phenanthrene	U	43.7	ug/kg	13.1	43.7
120-12-7	Anthracene	U	43.7	ug/kg	8.75	43.7
84-74-2	Di-n-butylphthalate	U	437	ug/kg	87.5	437
206-44-0	Fluoranthene	U	43.7	ug/kg	13.1	43.7
85-68-7	Butylbenzylphthalate	U	437	ug/kg	87.5	437
56-55-3	Benzo(a)anthracene	U	43.7	ug/kg	13.1	43.7
91-94-1	3,3'-Dichlorobenzidine	U	437	ug/kg	131	437
218-01-9	Chrysene	U	43.7	ug/kg	13.1	43.7
117-81-7	bis(2-Ethylhexyl)phthalate	U	437	ug/kg	87.5	437
117-84-0	Di-n-octylphthalate	U	437	ug/kg	87.5	437
205-99-2	Benzo(b)fluoranthene	U	43.7	ug/kg	13.1	43.7
207-08-9	Benzo(k)fluoranthene	U	43.7	ug/kg	13.1	43.7
50-32-8	Benzo(a)pyrene	U	43.7	ug/kg	13.1	43.7
193-39-5	Indeno(1,2,3-cd)pyrene	U	43.7	ug/kg	13.1	43.7
53-70-3	Dibenzo(a,h)anthracene	U	43.7	ug/kg	13.1	43.7
191-24-2	Benzo(ghi)perylene	U	43.7	ug/kg	13.1	43.7
120-82-1	1,2,4-Trichlorobenzene	U	437	ug/kg	87.5	437

**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	3.19	829	ug/kg		J
127-91-3	.beta.-Pinene	4.3	253	ug/kg	97	NJ

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

Page 3 of 3

**SDG Number:** 10-1758  
**Lab Sample ID:** 246866007

**Date Collected:** 02/09/2010 12:00  
**Date Received:** 02/11/2010 09:20  
**Client:** LANL010  
**Method:** SW846 8270C  
**Inst:** MSD2.I  
**Analyst:** AGS1  
**Aliquot:** 30.15 g  
**Column:** J&W DB-5MS

**Matrix:** R  
**%Moisture:** 24.2  
**Project:** LANL01004  
**SOP Ref:** GL-OA-E-009  
**Dilution:** 1  
**Inj. Vol:** .5 uL  
**Final Volume:** 1 mL  
**Level:** LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
Tentatively Identified Compound Summary						
CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
77-53-2	Cedrol	8.41	713	ug/kg	94	NJ
	Unknown	11.37	229	ug/kg		J
511-15-9	2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa	11.48	2980	ug/kg	98	NJ



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Data file : /chem/MSD2.i/s022210.b/s2b2227.d  
Lab Smp Id: 246866007 Client Smp ID: RE15-10-8340  
Inj Date : 23-FEB-2010 01:25  
Operator : AGS1 Inst ID: MSD2.i  
Smp Info : |246866007|954297|1|SVM|1|LANL  
Misc Info : |MSD8270\_S|WBN100205-01|  
Comment : Column: J & W Scientific DB-5MS 25m x 0.2mm x 0.33um  
Method : /chem/MSD2.i/s022210.b/MSD2-M8270PAQA-010810a.m  
Meth Date : 22-Feb-2010 16:54 ann00964 Quant Type: ISTD  
Cal Date : 11-JAN-2010 20:43 Cal File: s2a0859.d  
Als bottle: 27  
Dil Factor: 1.00000  
Integrator: HP RTE Compound Sublist: 10-1758.sub  
Target Version: 3.50  
Processing Host: kilroy

Concentration Formula:  $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vi} * \text{Ws} * (100 - \text{M}) / 100) * \text{CpndVariable}$

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.15000	weight of sample
M	24.17840	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG					CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	4.562	4.565	(1.000)	242763	40.0000	
* 29 Naphthalene-d8	136	5.826	5.830	(1.000)	831780	40.0000	
* 46 Acenaphthene-d10	164	7.689	7.691	(1.000)	534909	40.0000	
* 67 Phenanthrene-d10	188	9.292	9.293	(1.000)	983356	40.0000	
* 91 Chrysene-d12	240	12.223	12.232	(1.000)	790189	40.0000	
* 98 Perylene-d12	264	14.405	14.417	(1.000)	437659	40.0000	
\$ 3 2-Fluorophenol	112	3.430	3.415	(0.752)	406835	69.0623	3020
\$ 5 Phenol-d5	99	4.196	4.195	(0.920)	496757	63.0139	2760
\$ 20 Nitrobenzene-d5	82	5.093	5.102	(0.874)	241809	36.6910	1600
\$ 39 2-Fluorobiphenyl	172	6.952	6.954	(0.904)	539377	32.5910	1420
\$ 60 2,4,6-Tribromophenol	329	8.537	8.538	(1.110)	172665	74.6318	3260
\$ 81 p-Terphenyl-d14	244	11.001	10.998	(0.900)	694000	45.7265	2000

## ION RATIO REPORT

## SV REPORT

Data file: s2b2227.d

Report Date: 02/23/2010 09:16

Lab. ID: 246866007

SampleType: SAMPLE

Injection Date: 23-FEB-2010 01:25

Operator: AGS1

Instrument: MSD2.i

Sample Info: |246866007|954297|1|SVM|1|LANL

Miscellaneous Info: |MSD8270\_S|WBN100205-01|

Comment:

Method used: /chem/MSD2.i/s022210.b/MSD2-M8270PAQA-010810a.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-1758

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
4 Aniline		CAS#: 62-53-3				
66	29081	4.20	4.26	80-120	100	(T)
93	2050	4.23	4.26	194-254	7	(Q)
-----						
17 N-Nitrosodipropylamine		CAS#: 621-64-7				
70	33612	5.09	4.95	80-120	100	(T)
42	25418	5.09	4.95	58-118	76	(T)
-----						
27 Benzoic acid		CAS#: 65-85-0				
105	926	5.83	5.59	80-120	100	(T)
122	166	5.83	5.58	44-104	18	(QT)
77	3263	5.83	5.58	46-106	352	(QT)
-----						
34 2-Methylnaphthalene		CAS#: 91-57-6				
142	3535	6.42	6.57	80-120	100	(T)
141	189	6.42	6.57	55-115	5	(QT)
-----						
40 2-Chloronaphthalene		CAS#: 91-58-7				
162	13659	7.29	7.09	80-120	100	(T)
164	659	7.29	7.09	3- 63	5	(T)
127	945	7.29	7.09	5- 65	7	(T)
-----						
42 o-Nitroaniline		CAS#: 88-74-4				
65	19013	7.29	7.20	80-120	100	(T)
92	19391	7.29	7.20	25- 85	102	(QT)
138	1329	7.29	7.20	55-115	7	(QT)
-----						

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
44	2,6-Dinitrotoluene			CAS#: 606-20-2		
165	69134	7.69	7.46	80-120	100	(T)
63	1083	7.69	7.46	41-101	2	(QT)
-----						
50	2,4-Dinitrotoluene			CAS#: 121-14-2		
165	69134	7.69	7.90	80-120	100	(T)
89	934	7.69	7.89	51-111	1	(QT)
63	1083	7.69	7.90	52-112	2	(QT)
-----						
56	p-Nitroaniline			CAS#: 100-01-6		
138	160	8.34	8.31	80-120	100	( )
108	551	8.34	8.31	30- 90	343	(Q)
92	550	8.32	8.31	7- 67	342	(Q)
-----						
Q qualifier indicates ion failed ratio requirement						

GEL Laboratories LLC

GEL Laboratories, LLC

Data file : /chem/MSD2.i/s022210.b/s2b2227.d  
Lab Smp Id: 246866007 Client Smp ID: RE15-10-8340  
Inj Date : 23-FEB-2010 01:25  
Operator : AGS1 Inst ID: MSD2.i  
Smp Info : |246866007|954297|1|SVM|1|LANL  
Misc Info : |MSD8270\_S|WBN100205-01|  
Comment : Column: J & W Scientific DB-5MS 25m x 0.2mm x 0.33um  
Method : /chem/MSD2.i/s022210.b/MSD2-M8270PAQA-010810a.m  
Meth Date : 22-Feb-2010 16:54 ann00964 Quant Type: ISTD  
Cal Date : 11-JAN-2010 20:43 Cal File: s2a0859.d  
Als bottle: 27  
Dil Factor: 1.00000  
Integrator: HP RTE Compound Sublist: 10-1758.sub  
Target Version: 3.50  
Processing Host: kilroy

Concentration Formula: Amt \* DF \* Uf \* Vt / (Vi \* Ws \* (100 - M) / 100) \* CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.15000	weight of sample
M	24.17840	% moisture

Cpnd Variable Local Compound Variable

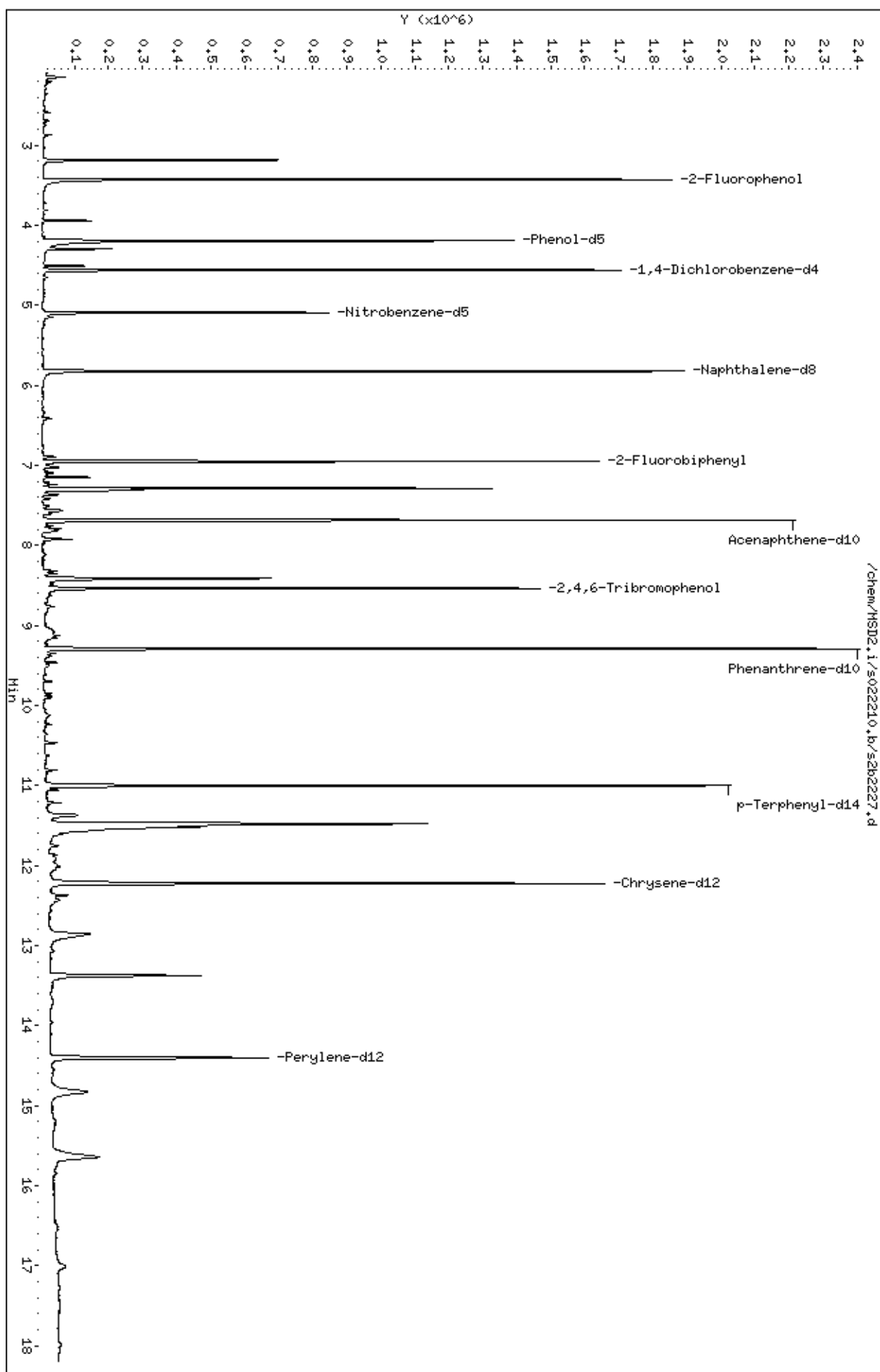
ISTD	RT	AREA	AMOUNT
=====	====	=====	=====
* 10 1,4-Dichlorobenzene-d4	4.562	1559196	40.000
* 46 Acenaphthene-d10	7.689	2363740	40.000
* 91 Chrysene-d12	12.223	1798182	40.000

CONCENTRATIONS					QUANT		
RT	AREA	ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
----	----	-----	-----	----	-----	-----	-----

RT	AREA	CONCENTRATIONS		QUAL	QUANT			CPND #
		ON-COL(ng/ul)	FINAL(ug/Kg)		LIBRARY	LIB	ENTRY	
====	====	=====	=====	====	=====	=====	=====	=====
Unknown Aldol Condensate					CAS #:			
3.187	738781	18.9528602	829	0			0	10
.beta.-Pinene					CAS #: 127-91-3			
4.298	225846	5.79391896	253	97	NIST05.L		15171	10
Cedrol					CAS #: 77-53-2			
8.413	963029	16.2966966	713	94	NIST05.L		72887	46
Unknown					CAS #:			
11.372	235547	5.23966726	229	0			0	91
2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa					CAS #: 511-15-9			
11.478	3062722	68.1292629	2980	98	NIST05.L		116239	91

Data File: /chem/HSD2.i/s022210.b/s2b2227.d  
 Date : 23-FEB-2010 01:25  
 Client ID: RE15-10-8340  
 Sample Info: 124686607195429711SVH11LNL  
 Volume Injected (uL): 0.5  
 Column phase: 3uM DB-5MS

Instrument: HSD2.i  
 Operator: AGS1  
 Column diameter: 0.20



Date : 23-FEB-2010 01:25

Client ID: RE15-10-8340

Instrument: MSD2.i

Sample Info: I246866007195429711ISVH11ILANL

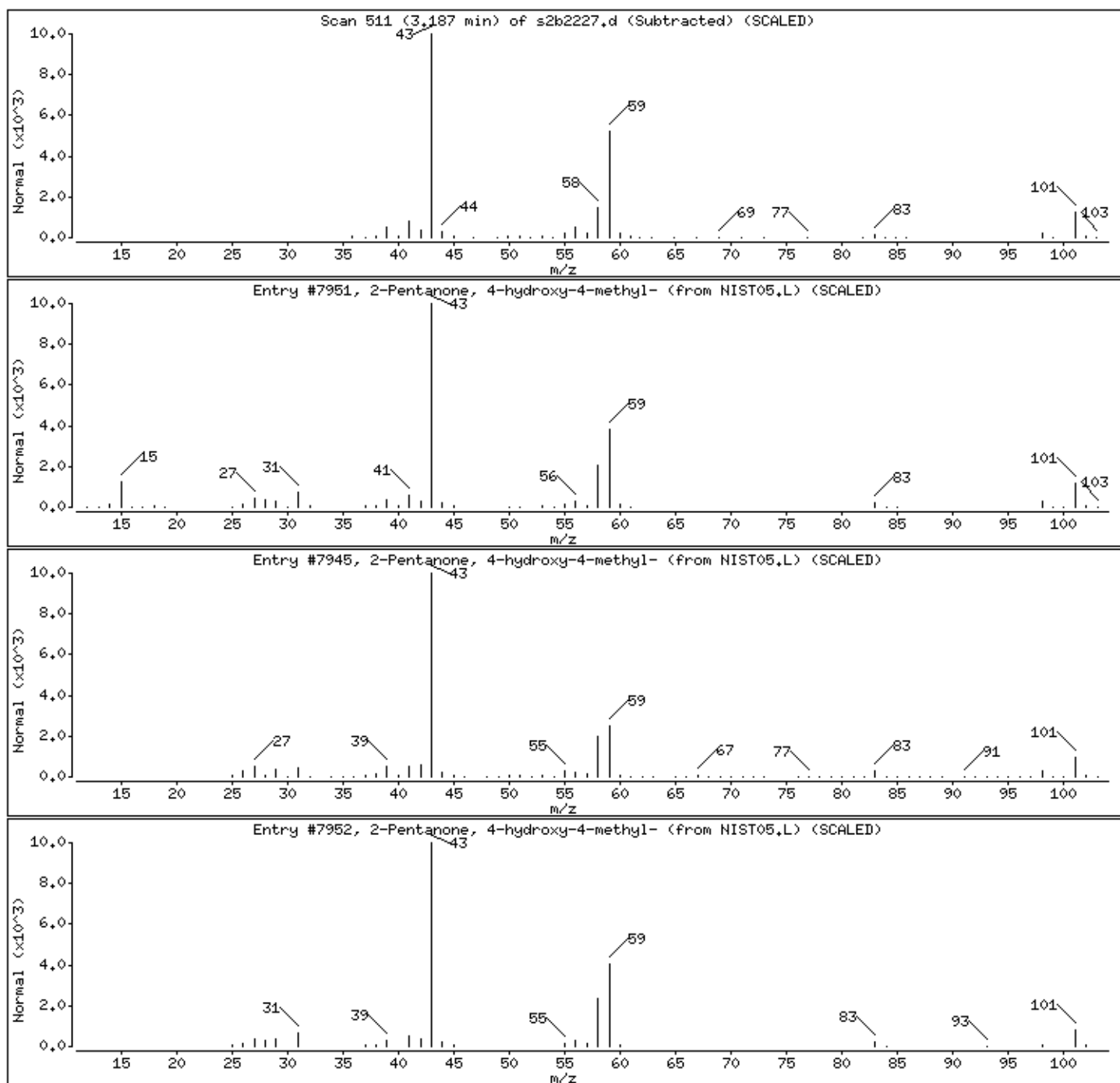
Volume Injected (uL): 0.5

Operator: AGS1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	59	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7945	59	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	50	C6H12O2	116



Date : 23-FEB-2010 01:25

Client ID: RE15-10-8340

Instrument: MSD2.i

Sample Info: 1246866007195429711SVH11ILANL

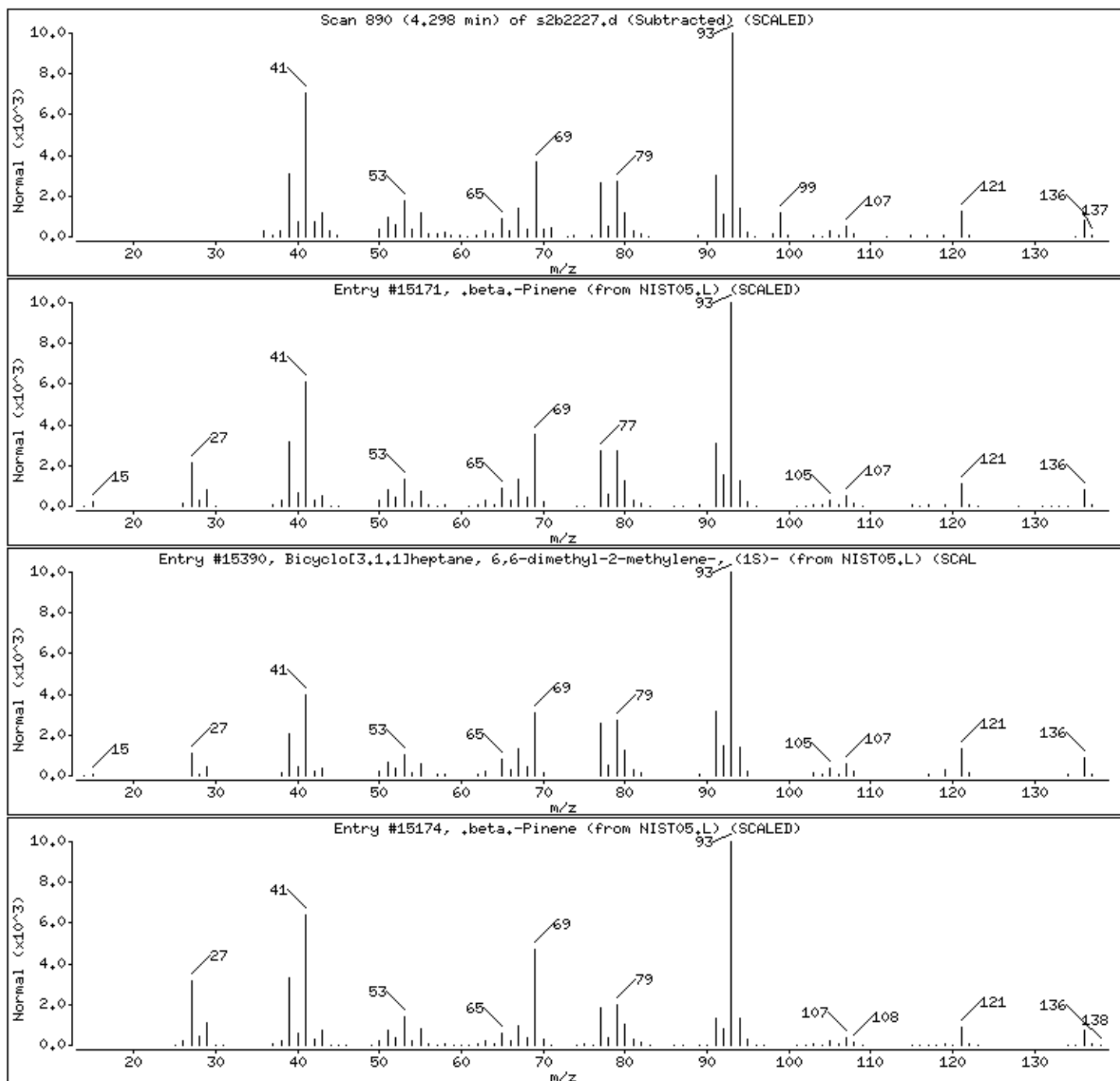
Volume Injected (uL): 0.5

Operator: AGS1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
.beta.-Pinene	127-91-3	NIST05.L	15171	97	C10H16	136
Bicyclo[3.1.1]heptane, 6,6-dimethyl-2-me	18172-67-3	NIST05.L	15390	95	C10H16	136
.beta.-Pinene	127-91-3	NIST05.L	15174	94	C10H16	136





Date : 23-FEB-2010 01:25

Client ID: RE15-10-8340

Instrument: MSD2.i

Sample Info: 1246866007195429711ISVH11ILANL

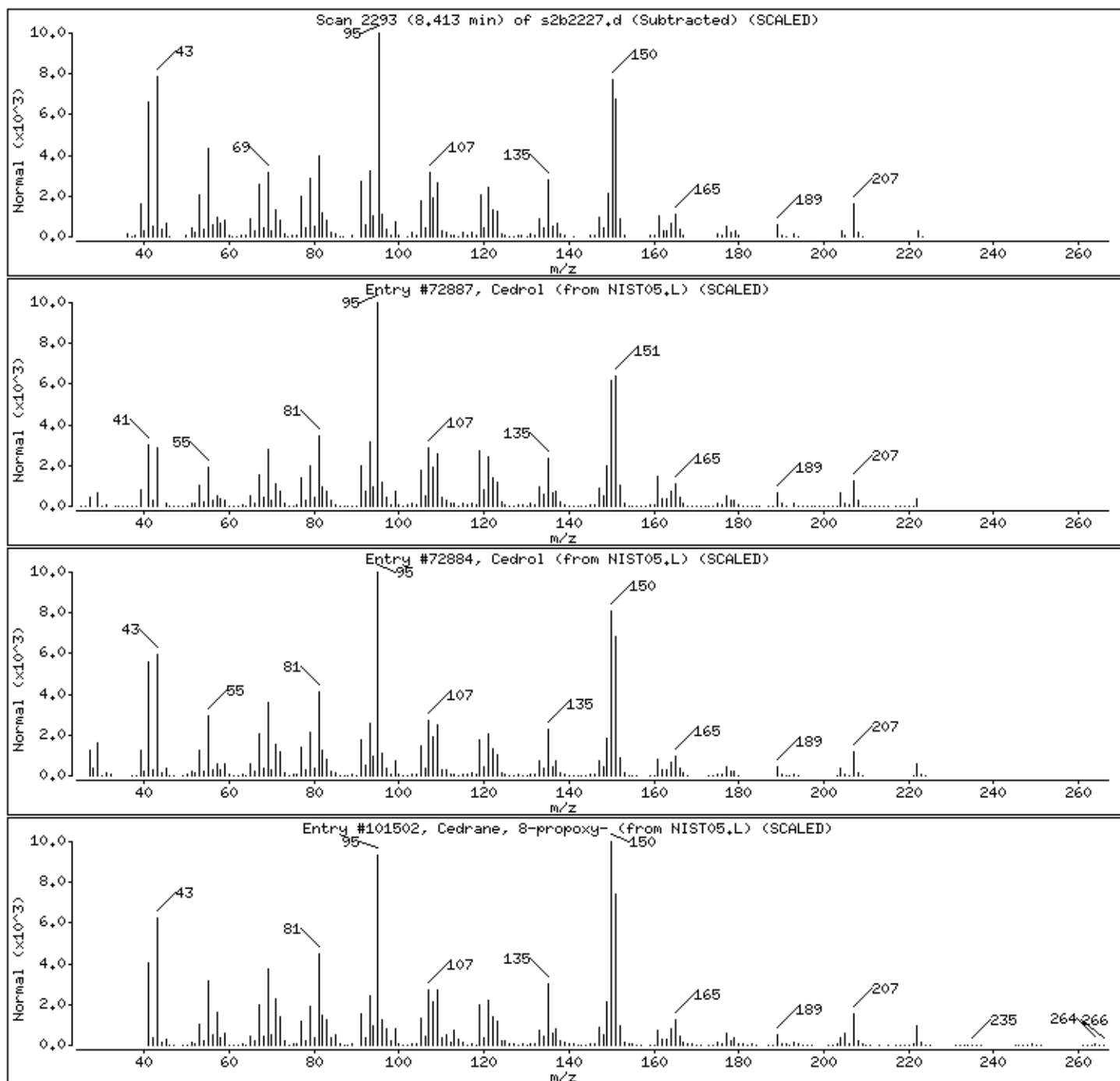
Volume Injected (uL): 0.5

Operator: AGS1

Column phase: J&amp;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	72884	94	C15H26O	222
Cedrane, 8-propoxy-	19870-75-8	NIST05.L	101502	91	C18H32O	264



Date : 23-FEB-2010 01:25

Client ID: RE15-10-8340

Instrument: MSD2.i

Sample Info: 1246866007195429711SVH11ILANL

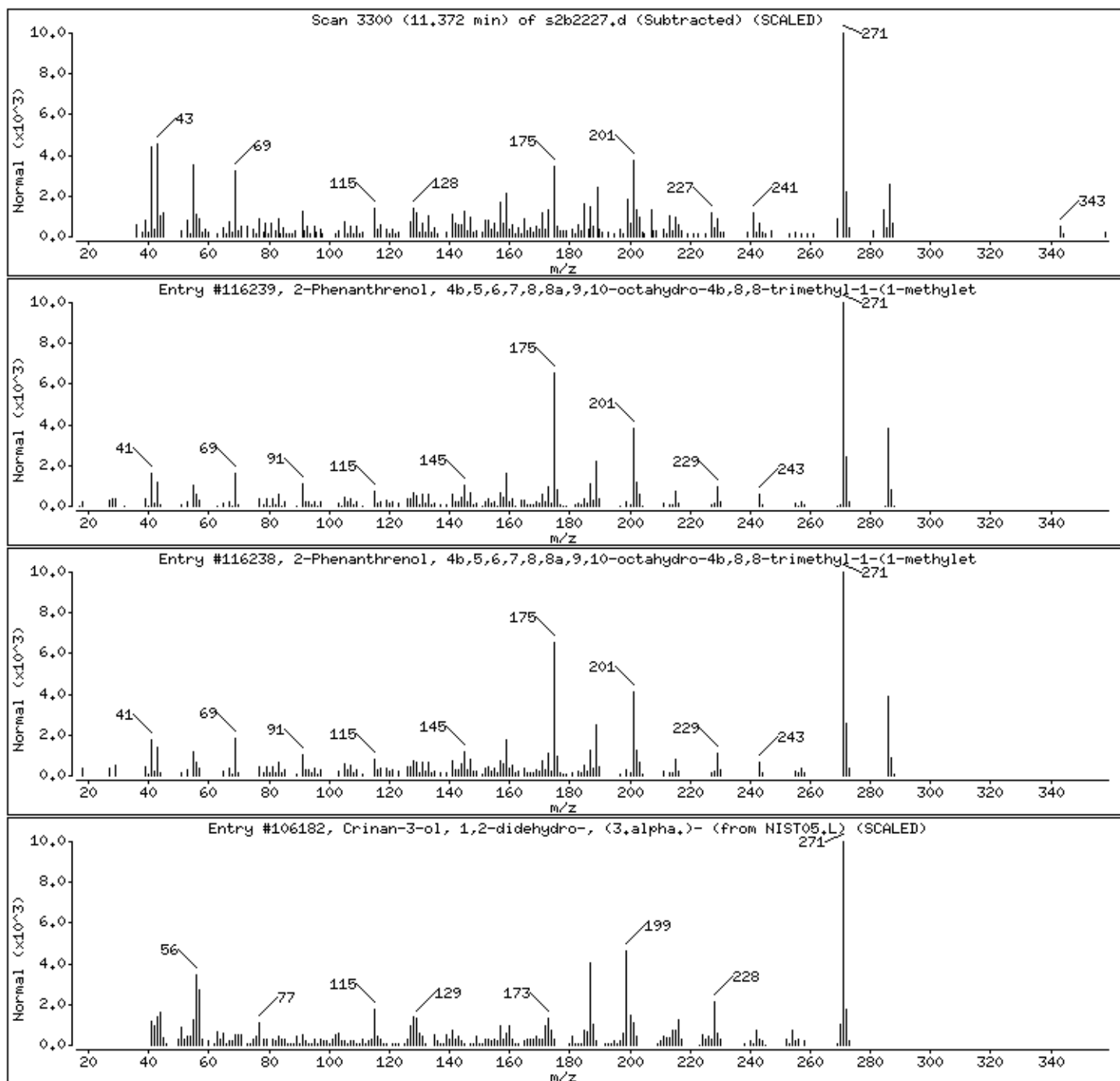
Volume Injected (uL): 0.5

Operator: AGS1

Column phase: J&amp;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	93	C20H30O	286
2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa	511-15-9	NIST05.L	116238	90	C20H30O	286
Crinan-3-ol, 1,2-didehydro-, (3.alpha.)-	510-67-8	NIST05.L	106182	46	C16H17NO3	271



Date : 23-FEB-2010 01:25

Client ID: RE15-10-8340

Instrument: MSD2.i

Sample Info: 1246866007195429711SVH11ILANL

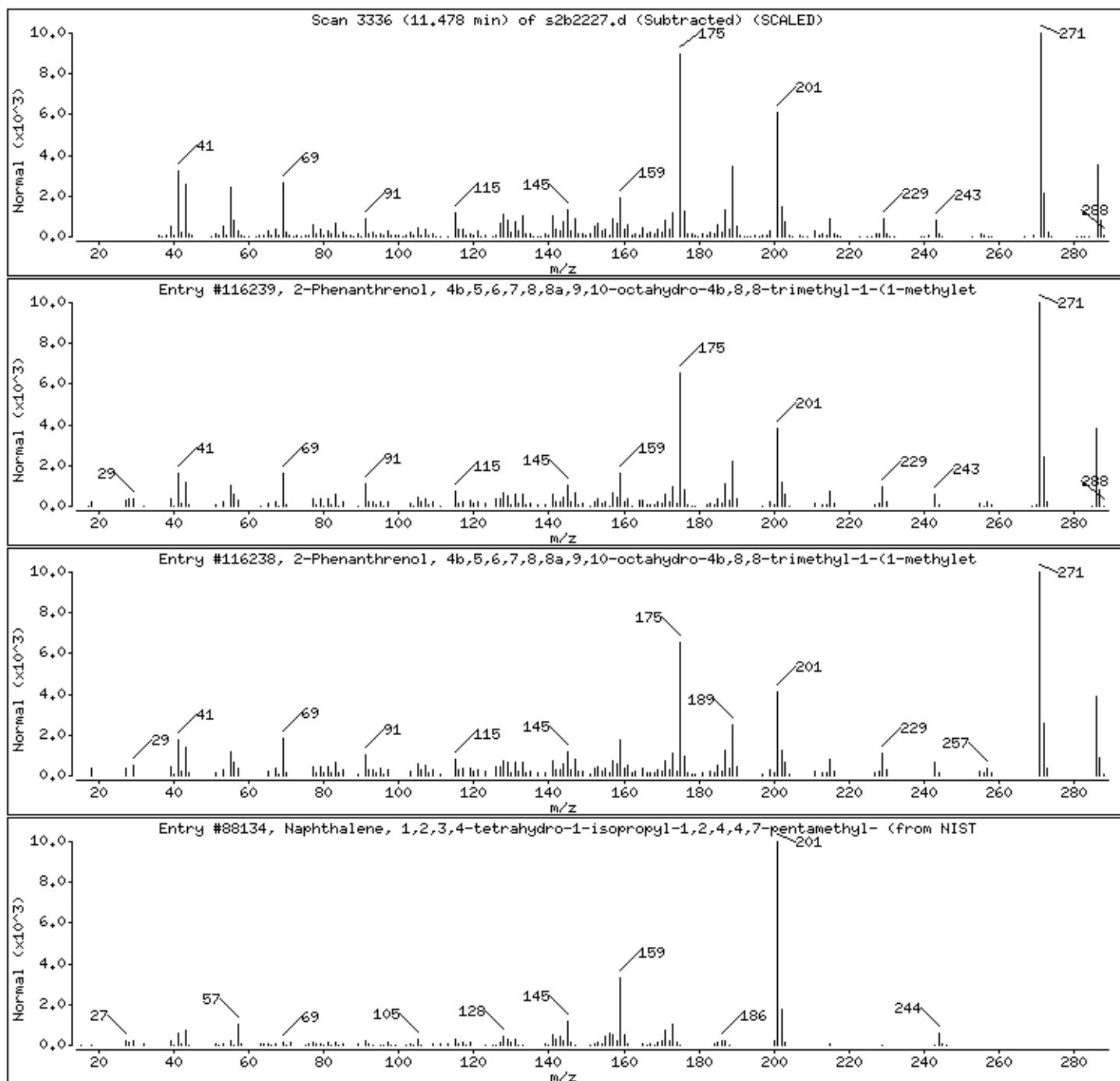
Volume Injected (uL): 0.5

Operator: AGS1

Column phase: J&amp;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	95	C20H30O	286
Naphthalene, 1,2,3,4-tetrahydro-1-isopro	29577-17-1	NIST05.L	88134	25	C18H28	244



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

**SDG Number:** 10-1758  
**Lab Sample ID:** 246866008

**Date Collected:** 02/09/2010 12:00  
**Date Received:** 02/11/2010 09:20  
**Client:** LANL010  
**Method:** SW846 8270C  
**Inst:** MSD2.I  
**Analyst:** AGS1  
**Aliquot:** 30.02 g  
**Column:** J&W DB-5MS

**Matrix:** R  
**%Moisture:** 7.6  
**Project:** LANL01004  
**SOP Ref:** GL-OA-E-009  
**Dilution:** 1  
**Inj. Vol:** .5 uL  
**Final Volume:** 1 mL  
**Level:** LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	360	ug/kg	72.1	360
108-95-2	Phenol	U	360	ug/kg	72.1	360
95-57-8	2-Chlorophenol	U	360	ug/kg	72.1	360
106-46-7	1,4-Dichlorobenzene	U	360	ug/kg	72.1	360
621-64-7	N-Nitrosodipropylamine	U	360	ug/kg	72.1	360
59-50-7	4-Chloro-3-methylphenol	U	360	ug/kg	72.1	360
83-32-9	Acenaphthene	U	36.0	ug/kg	11.9	36.0
121-14-2	2,4-Dinitrotoluene	U	360	ug/kg	36.0	360
100-02-7	4-Nitrophenol	U	360	ug/kg	119	360
87-86-5	Pentachlorophenol	U	360	ug/kg	90.1	360
129-00-0	Pyrene	U	36.0	ug/kg	10.8	36.0
110-86-1	Pyridine	U	360	ug/kg	72.1	360
62-53-3	Aniline	U	360	ug/kg	108	360
111-44-4	bis(2-Chloroethyl) ether	U	360	ug/kg	72.1	360
541-73-1	1,3-Dichlorobenzene	U	360	ug/kg	72.1	360
100-51-6	Benzyl alcohol	U	360	ug/kg	108	360
95-50-1	1,2-Dichlorobenzene	U	360	ug/kg	72.1	360
108-60-1	bis(2-Chloroisopropyl)ether	U	360	ug/kg	72.1	360
95-48-7	o-Cresol	U	360	ug/kg	72.1	360
65794-96-9	m,p-Cresols	U	360	ug/kg	108	360
67-72-1	Hexachloroethane	U	360	ug/kg	72.1	360
98-95-3	Nitrobenzene	U	360	ug/kg	72.1	360
78-59-1	Isophorone	U	360	ug/kg	72.1	360
88-75-5	2-Nitrophenol	U	360	ug/kg	72.1	360
105-67-9	2,4-Dimethylphenol	U	360	ug/kg	126	360
111-91-1	bis(2-Chloroethoxy)methane	U	360	ug/kg	72.1	360
120-83-2	2,4-Dichlorophenol	U	360	ug/kg	72.1	360
65-85-0	Benzoic acid	U	721	ug/kg	180	721
91-20-3	Naphthalene	U	36.0	ug/kg	10.8	36.0
106-47-8	4-Chloroaniline	U	360	ug/kg	72.1	360
87-68-3	Hexachlorobutadiene	U	360	ug/kg	72.1	360
91-57-6	2-Methylnaphthalene	U	36.0	ug/kg	7.21	36.0
77-47-4	Hexachlorocyclopentadiene	U	360	ug/kg	72.1	360
88-06-2	2,4,6-Trichlorophenol	U	360	ug/kg	72.1	360
95-95-4	2,4,5-Trichlorophenol	U	360	ug/kg	72.1	360
91-58-7	2-Chloronaphthalene	U	36.0	ug/kg	11.9	36.0
88-74-4	2-Nitroaniline	U	360	ug/kg	72.1	360
99-09-2	<i>o</i> -Nitroaniline	U	360	ug/kg	72.1	360
	3-Nitroaniline					

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

**SDG Number:** 10-1758  
**Lab Sample ID:** 246866008

**Date Collected:** 02/09/2010 12:00  
**Date Received:** 02/11/2010 09:20  
**Client:** LANL010  
**Method:** SW846 8270C  
**Inst:** MSD2.I  
**Analyst:** AGS1  
**Aliquot:** 30.02 g  
**Column:** J&W DB-5MS

**Matrix:** R  
**%Moisture:** 7.6  
**Project:** LANL01004  
**SOP Ref:** GL-OA-E-009  
**Dilution:** 1  
**Inj. Vol:** .5 uL  
**Final Volume:** 1 mL  
**Level:** LOW

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

**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	1.99	183	ug/kg		J
	Unknown Aldol Condensate	3.19	766	ug/kg		J

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

**SDG Number:** 10-1758  
**Lab Sample ID:** 246866008

**Date Collected:** 02/09/2010 12:00  
**Date Received:** 02/11/2010 09:20  
**Client:** LANL010  
**Method:** SW846 8270C  
**Inst:** MSD2.I  
**Analyst:** AGS1  
**Aliquot:** 30.02 g  
**Column:** J&W DB-5MS

**Matrix:** R  
**%Moisture:** 7.6  
**Project:** LANL01004  
**SOP Ref:** GL-OA-E-009  
**Dilution:** 1  
**Inj. Vol:** .5 uL  
**Final Volume:** 1 mL  
**Level:** LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
Tentatively Identified Compound Summary						
CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
4630-07-3	Naphthalene, 1,2,3,5,6,7,8,8a-octahydro-	7.29	280	ug/kg	98	NJ
	Unknown	11.52	786	ug/kg		J
301-02-0	9-Octadecenamide, (Z)-	13.37	417	ug/kg	97	NJ

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Data file : /chem/MSD2.i/s022210.b/s2b2228.d  
Lab Smp Id: 246866008 Client Smp ID: RE15-10-8341  
Inj Date : 23-FEB-2010 01:50  
Operator : AGS1 Inst ID: MSD2.i  
Smp Info : |246866008|954297|1|SVM|1|LANL  
Misc Info : |MSD8270\_S|WBN100205-01|  
Comment : Column: J & W Scientific DB-5MS 25m x 0.2mm x 0.33um  
Method : /chem/MSD2.i/s022210.b/MSD2-M8270PAQA-010810a.m  
Meth Date : 22-Feb-2010 16:54 ann00964 Quant Type: ISTD  
Cal Date : 11-JAN-2010 20:43 Cal File: s2a0859.d  
Als bottle: 28  
Dil Factor: 1.00000  
Integrator: HP RTE Compound Sublist: 10-1758.sub  
Target Version: 3.50  
Processing Host: kilroy

Concentration Formula:  $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vi} * \text{Ws} * (100 - \text{M}) / 100) * \text{CpndVariable}$

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.02000	weight of sample
M	7.55700	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG						CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE		ON-COLUMN	FINAL
							(ng/ul)	(ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	4.562	4.565	(1.000)	241162		40.0000	
* 29 Naphthalene-d8	136	5.826	5.830	(1.000)	833744		40.0000	
* 46 Acenaphthene-d10	164	7.688	7.691	(1.000)	536840		40.0000	
* 67 Phenanthrene-d10	188	9.293	9.293	(1.000)	974834		40.0000	
* 91 Chrysene-d12	240	12.224	12.232	(1.000)	796430		40.0000	
* 98 Perylene-d12	264	14.406	14.417	(1.000)	441170		40.0000	
\$ 3 2-Fluorophenol	112	3.430	3.415	(0.752)	401625		68.6305	2470
\$ 5 Phenol-d5	99	4.196	4.195	(0.920)	491226		62.7260	2260
\$ 20 Nitrobenzene-d5	82	5.093	5.102	(0.874)	231338		35.0195	1260
\$ 39 2-Fluorobiphenyl	172	6.952	6.954	(0.904)	537099		32.3367	1160
\$ 60 2,4,6-Tribromophenol	329	8.536	8.538	(1.110)	169527		73.0119	2630
\$ 81 p-Terphenyl-d14	244	11.001	10.998	(0.900)	701830		45.8800	1650

## ION RATIO REPORT

## SV REPORT

Data file: s2b2228.d

Report Date: 02/23/2010 09:16

Lab. ID: 246866008

SampleType: SAMPLE

Injection Date: 23-FEB-2010 01:50

Operator: AGS1

Instrument: MSD2.i

Sample Info: |246866008|954297|1|SVM|1|LANL

Miscellaneous Info: |MSD8270\_S|WBN100205-01|

Comment:

Method used: /chem/MSD2.i/s022210.b/MSD2-M8270PAQA-010810a.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-1758

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
4	Aniline		CAS#: 62-53-3			
66	29231	4.20	4.26	80-120	100	(T)
93	809	4.23	4.26	194-254	3	(Q)
-----						
17	N-Nitrosodipropylamine		CAS#: 621-64-7			
70	33087	5.09	4.95	80-120	100	(T)
42	25175	5.09	4.95	58-118	76	(T)
-----						
27	Benzoic acid		CAS#: 65-85-0			
105	836	5.57	5.59	80-120	100	( )
122	164	5.55	5.58	44-104	20	(Q)
77	398	5.56	5.58	46-106	48	( )
-----						
34	2-Methylnaphthalene		CAS#: 91-57-6			
142	4409	6.42	6.57	80-120	100	(T)
141	236	6.42	6.57	55-115	5	(QT)
-----						
44	2,6-Dinitrotoluene		CAS#: 606-20-2			
165	69856	7.69	7.46	80-120	100	(T)
63	1016	7.69	7.46	41-101	1	(QT)
-----						
50	2,4-Dinitrotoluene		CAS#: 121-14-2			
165	69856	7.69	7.90	80-120	100	(T)
89	947	7.69	7.89	51-111	1	(QT)
63	1016	7.69	7.90	52-112	1	(QT)
-----						



MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
56	p-Nitroaniline			CAS#: 100-01-6		
138	229	8.41	8.31	80-120	100	(T)
108	4191	8.41	8.31	30- 90	1827	(QT)
92	1101	8.42	8.31	7- 67	480	(QT)

-----  
 Q qualifier indicates ion failed ratio requirement

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Data file : /chem/MSD2.i/s022210.b/s2b2228.d  
Lab Smp Id: 246866008 Client Smp ID: RE15-10-8341  
Inj Date : 23-FEB-2010 01:50  
Operator : AGS1 Inst ID: MSD2.i  
Smp Info : |246866008|954297|1|SVM|1|LANL  
Misc Info : |MSD8270\_S|WBN100205-01|  
Comment : Column: J & W Scientific DB-5MS 25m x 0.2mm x 0.33um  
Method : /chem/MSD2.i/s022210.b/MSD2-M8270PAQA-010810a.m  
Meth Date : 22-Feb-2010 16:54 ann00964 Quant Type: ISTD  
Cal Date : 11-JAN-2010 20:43 Cal File: s2a0859.d  
Als bottle: 28  
Dil Factor: 1.00000  
Integrator: HP RTE Compound Sublist: 10-1758.sub  
Target Version: 3.50  
Processing Host: kilroy

Concentration Formula: Amt \* DF \* Uf \* Vt / (Vi \* Ws \* (100 - M) / 100) \* CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.02000	weight of sample
M	7.55700	% moisture

Cpnd Variable Local Compound Variable

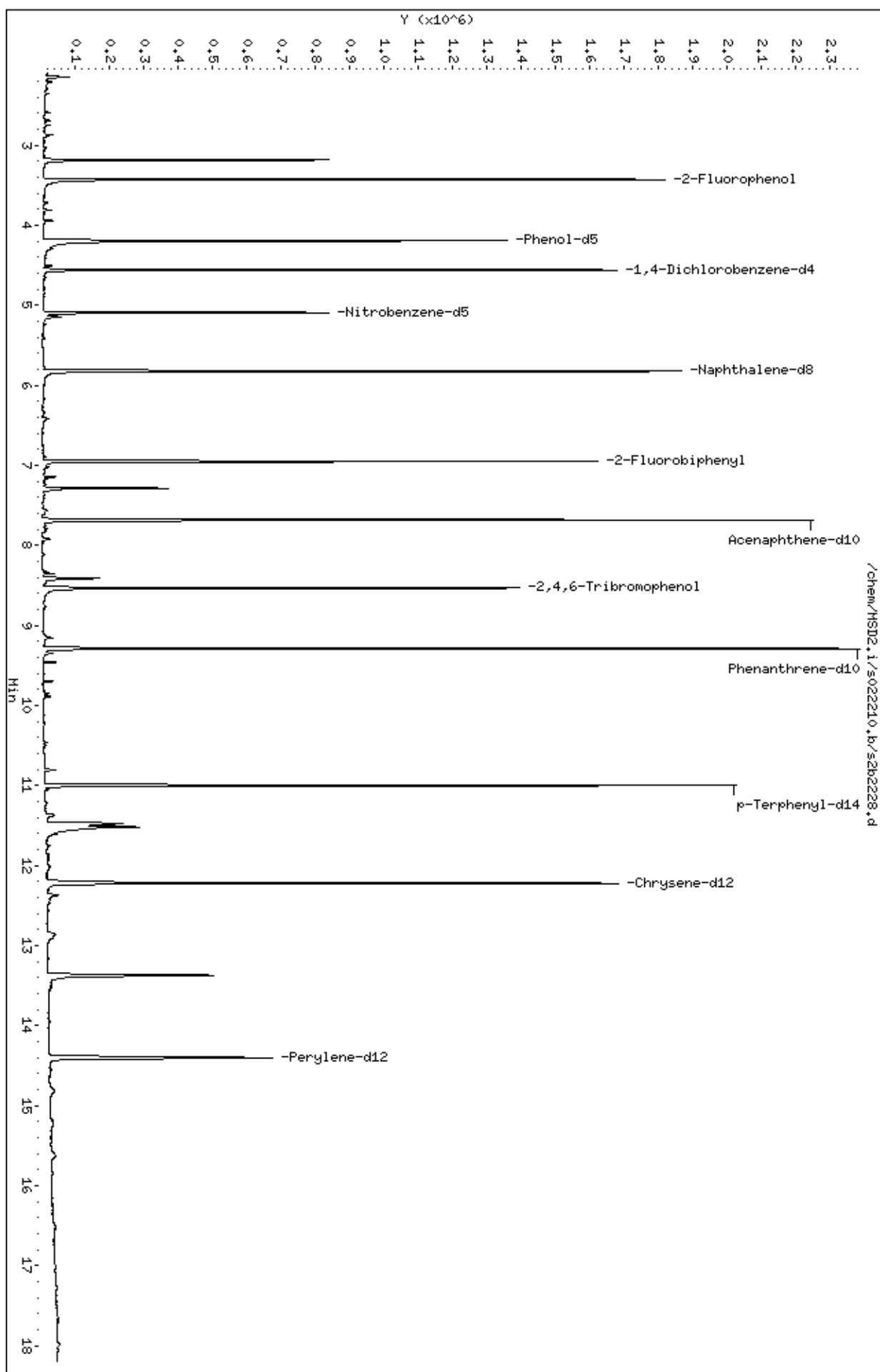
ISTD	RT	AREA	AMOUNT
=====	====	=====	=====
* 10 1,4-Dichlorobenzene-d4	4.562	1605176	40.000
* 46 Acenaphthene-d10	7.688	2364787	40.000
* 91 Chrysene-d12	12.224	2023086	40.000
* 98 Perylene-d12	14.406	2488015	40.000

CONCENTRATIONS					QUANT		
RT	AREA	ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
----	----	-----	-----	----	-----	-----	-----

RT	AREA	CONCENTRATIONS		QUAL	QUANT			CPND #
		ON-COL(ng/ul)	FINAL(ug/Kg)		LIBRARY	LIB	ENTRY	
====	====	=====	=====	====	=====		=====	=====
Unknown					CAS #:			
1.985	204317	5.09146044	183	0			0	10
Unknown Aldol Condensate					CAS #:			
3.187	852798	21.2511938	766	0			0	10
Naphthalene, 1,2,3,5,6,7,8,8a-octahydro-					CAS #: 4630-07-3			
7.286	459687	7.77552554	280	98	NIST05.L		60047	46
Unknown					CAS #:			
11.521	1103257	21.8133445	786	0			0	91
9-Octadecenamide, (Z)-					CAS #: 301-02-0			
13.373	719711	11.5708383	417	97	NIST05.L		112655	98

Data File: /chem/HSD2.i/s022210.b/s2b2228.d  
 Date : 23-FEB-2010 01:50  
 Client ID: RE15-10-8341  
 Sample Info: 124686008195429711SVH11LNL  
 Volume Injected (uL): 0.5  
 Column phase: 3uM DB-5MS

Instrument: HSD2.i  
 Operator: AGS1  
 Column diameter: 0.20



Date : 23-FEB-2010 01:50

Client ID: RE15-10-8341

Instrument: MSD2.i

Sample Info: I246866008195429711ISVH11ILANL

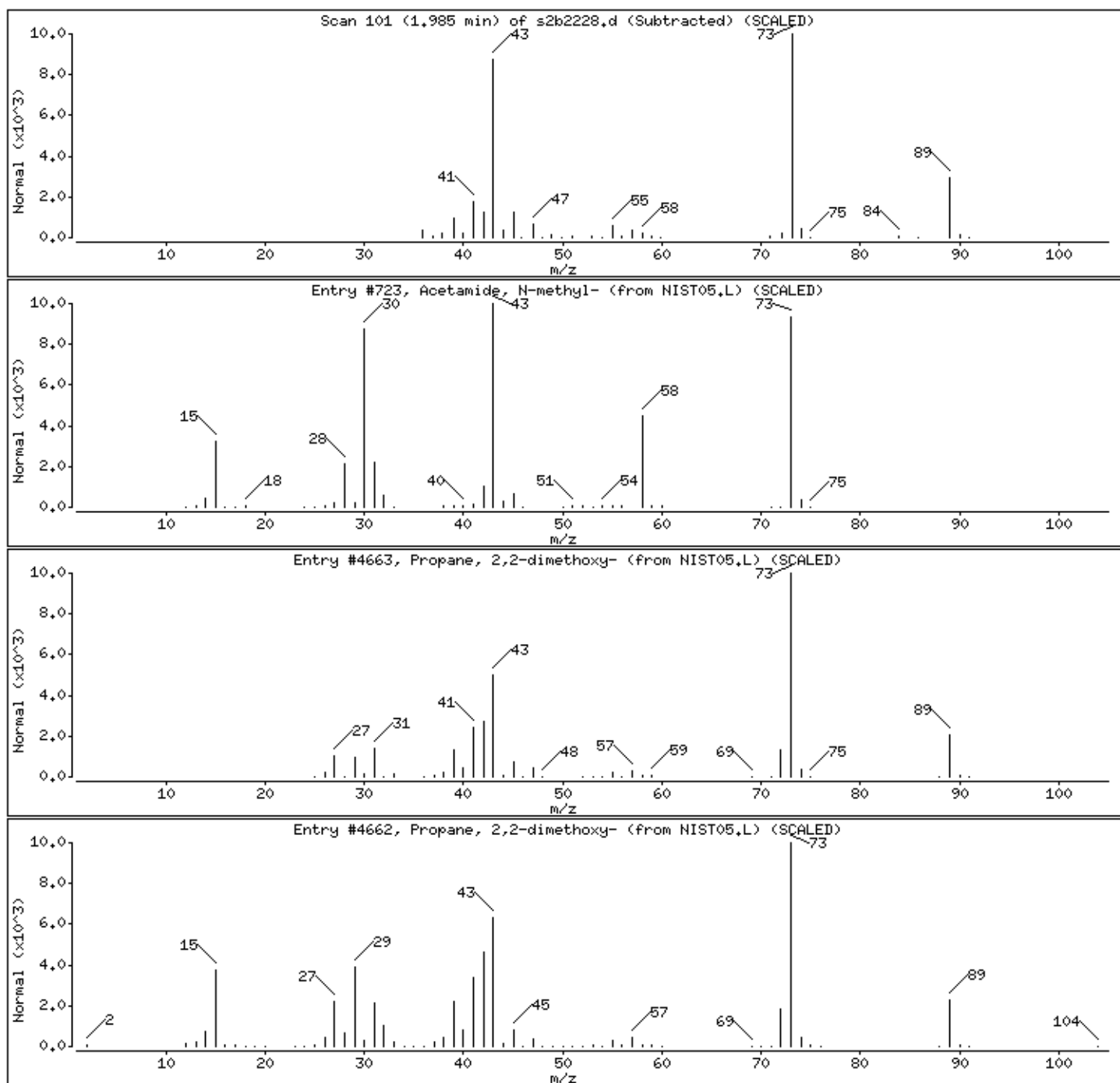
Volume Injected (uL): 0.5

Operator: AGS1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Acetamide, N-methyl-	79-16-3	NIST05.L	723	47	C3H7NO	73
Propane, 2,2-dimethoxy-	77-76-9	NIST05.L	4663	42	C5H12O2	104
Propane, 2,2-dimethoxy-	77-76-9	NIST05.L	4662	36	C5H12O2	104



Date : 23-FEB-2010 01:50

Client ID: RE15-10-8341

Instrument: MSD2.i

Sample Info: 1246866008195429711ISVH11ILANL

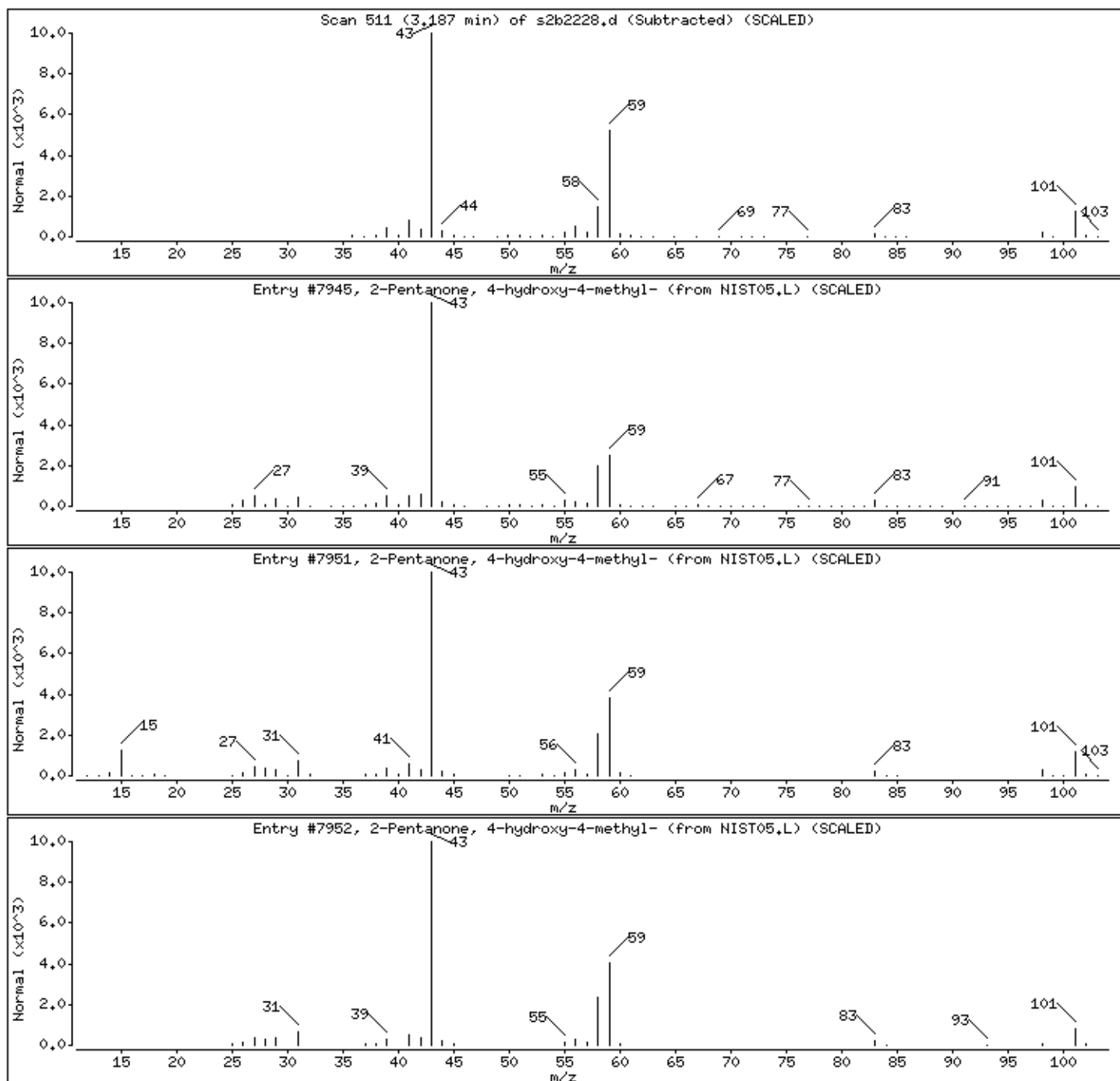
Volume Injected (uL): 0.5

Operator: AGS1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7945	59	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	50	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	50	C6H12O2	116



Date : 23-FEB-2010 01:50

Client ID: RE15-10-8341

Instrument: MSD2.i

Sample Info: 1246866008195429711SVH11ILANL

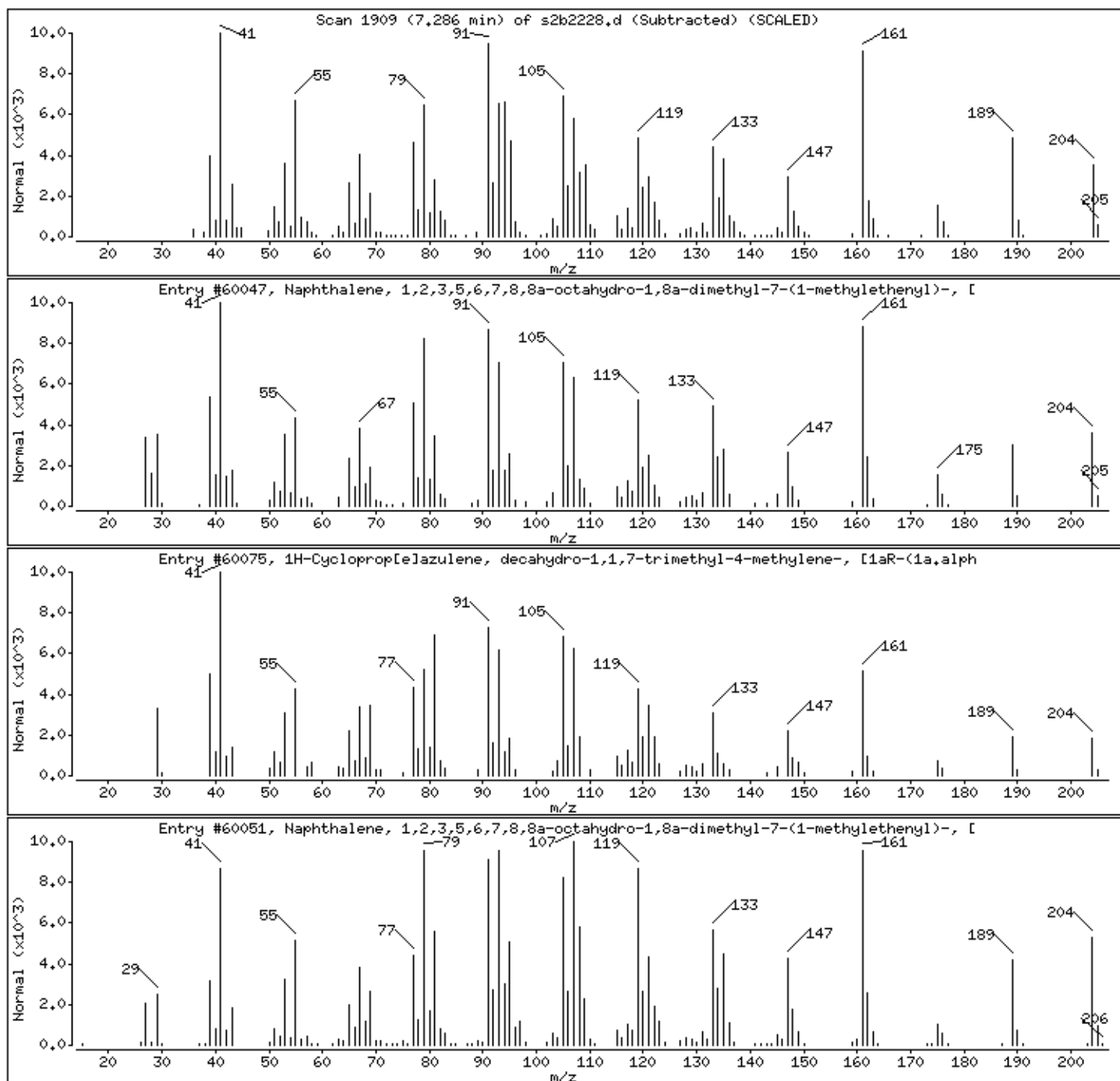
Volume Injected (uL): 0.5

Operator: AGS1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Naphthalene, 1,2,3,5,6,7,8,8a-octahydro-	4630-07-3	NIST05.L	60047	98	C15H24	204
1H-Cycloprop[elazulene, decahydro-1,1,7-	25246-27-9	NIST05.L	60075	97	C15H24	204
Naphthalene, 1,2,3,5,6,7,8,8a-octahydro-	10219-75-7	NIST05.L	60051	96	C15H24	204



Date : 23-FEB-2010 01:50

Client ID: RE15-10-8341

Instrument: MSD2.i

Sample Info: 1246866008195429711SVH11ILANL

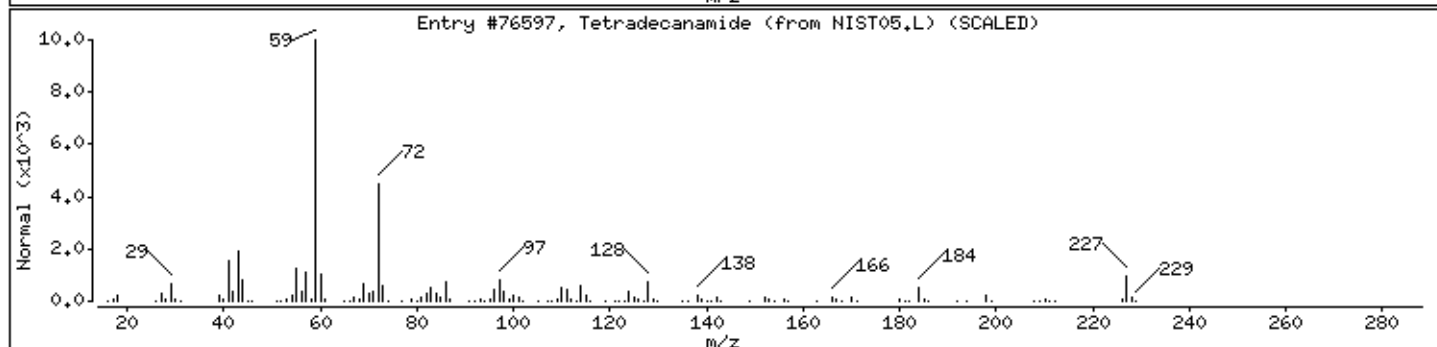
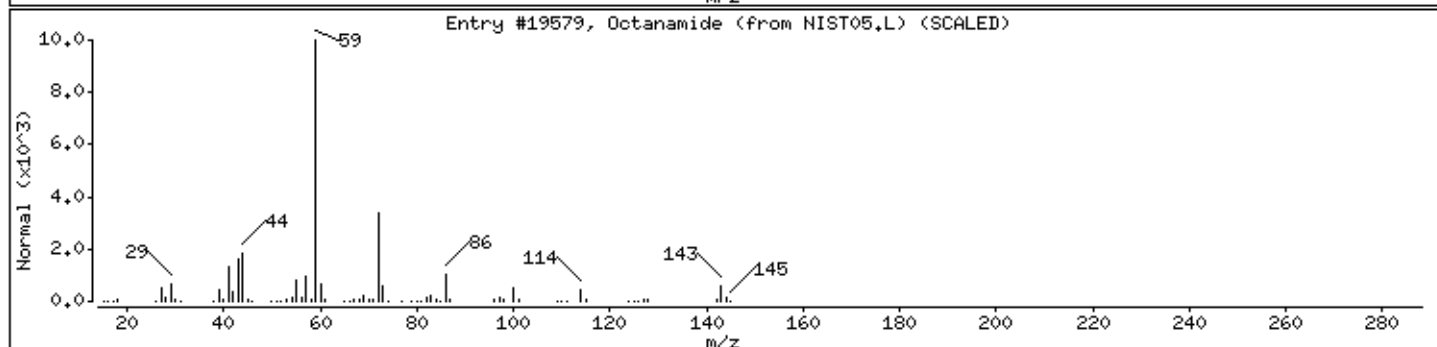
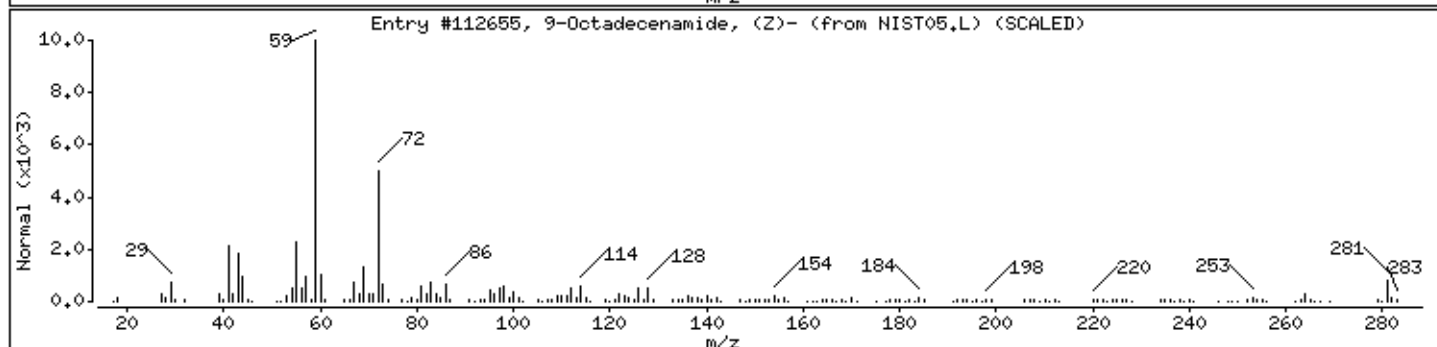
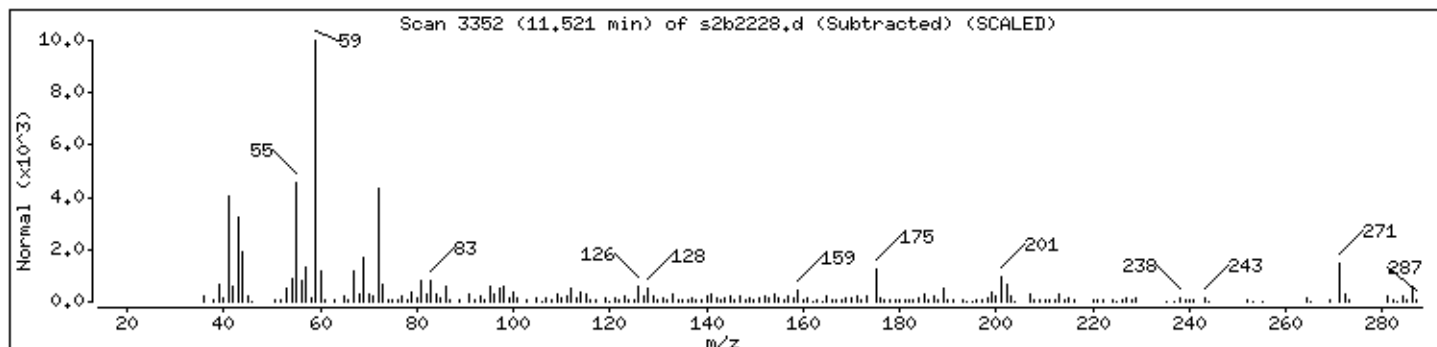
Volume Injected (uL): 0.5

Operator: AGS1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
9-Octadecenamide, (Z)-	301-02-0	NIST05.L	112655	96	C18H35NO	281
Octanamide	629-01-6	NIST05.L	19579	72	C8H17NO	143
Tetradecanamide	638-58-4	NIST05.L	76597	70	C14H29NO	227





Date : 23-FEB-2010 01:50

Client ID: RE15-10-8341

Instrument: MSD2.i

Sample Info: 1246866008195429711ISVH11ILANL

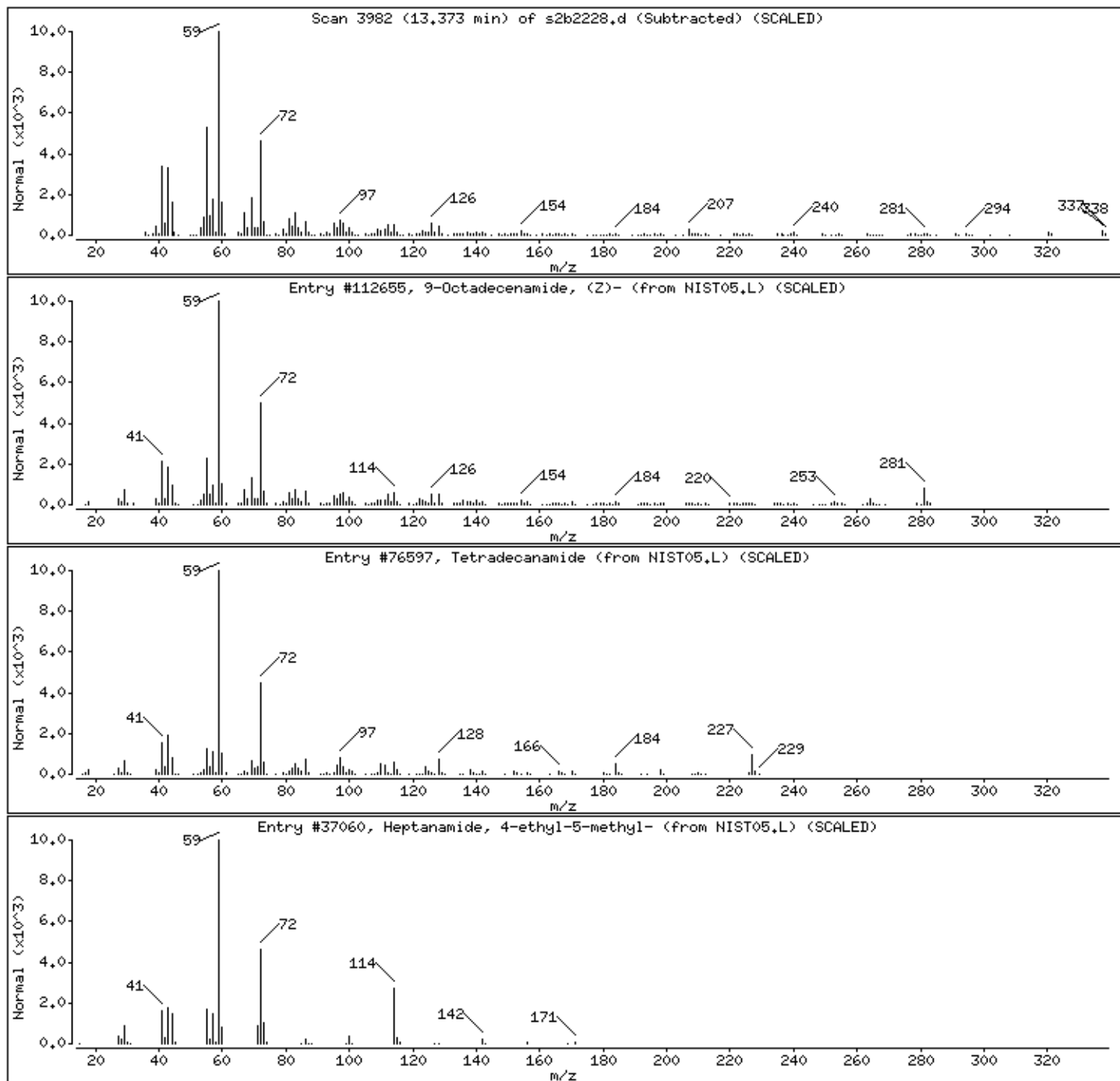
Volume Injected (uL): 0.5

Operator: AGS1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
9-Octadecenamide, (Z)-	301-02-0	NIST05.L	112655	97	C18H35NO	281
Tetradecanamide	638-58-4	NIST05.L	76597	78	C14H29NO	227
Heptanamide, 4-ethyl-5-methyl-	54789-40-1	NIST05.L	37060	72	C10H21NO	171



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

Page 1 of 3

**SDG Number:** 10-1758  
**Lab Sample ID:** 246866004

**Date Collected:** 02/09/2010 12:00  
**Date Received:** 02/11/2010 09:20  
**Client:** LANL010  
**Method:** SW846 8270C  
**Inst:** MSD2.I  
**Analyst:** AGS1  
**Aliquot:** 30.17 g  
**Column:** J&W DB-5MS

**Matrix:** R  
**%Moisture:** 23.2  
**Project:** LANL01004  
**SOP Ref:** GL-OA-E-009  
**Dilution:** 1  
**Inj. Vol:** .5 uL  
**Final Volume:** 1 mL  
**Level:** LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	432	ug/kg	86.3	432
108-95-2	Phenol	U	432	ug/kg	86.3	432
95-57-8	2-Chlorophenol	U	432	ug/kg	86.3	432
106-46-7	1,4-Dichlorobenzene	U	432	ug/kg	86.3	432
621-64-7	N-Nitrosodipropylamine	U	432	ug/kg	86.3	432
59-50-7	4-Chloro-3-methylphenol	U	432	ug/kg	86.3	432
83-32-9	Acenaphthene	U	43.2	ug/kg	14.2	43.2
121-14-2	2,4-Dinitrotoluene	U	432	ug/kg	43.2	432
100-02-7	4-Nitrophenol	U	432	ug/kg	142	432
87-86-5	Pentachlorophenol	U	432	ug/kg	108	432
129-00-0	Pyrene	U	43.2	ug/kg	13.0	43.2
110-86-1	Pyridine	U	432	ug/kg	86.3	432
62-53-3	Aniline	U	432	ug/kg	130	432
111-44-4	bis(2-Chloroethyl) ether	U	432	ug/kg	86.3	432
541-73-1	1,3-Dichlorobenzene	U	432	ug/kg	86.3	432
100-51-6	Benzyl alcohol	U	432	ug/kg	130	432
95-50-1	1,2-Dichlorobenzene	U	432	ug/kg	86.3	432
108-60-1	bis(2-Chloroisopropyl)ether	U	432	ug/kg	86.3	432
95-48-7	o-Cresol	U	432	ug/kg	86.3	432
65794-96-9	m,p-Cresols	U	432	ug/kg	130	432
67-72-1	Hexachloroethane	U	432	ug/kg	86.3	432
98-95-3	Nitrobenzene	U	432	ug/kg	86.3	432
78-59-1	Isophorone	U	432	ug/kg	86.3	432
88-75-5	2-Nitrophenol	U	432	ug/kg	86.3	432
105-67-9	2,4-Dimethylphenol	U	432	ug/kg	151	432
111-91-1	bis(2-Chloroethoxy)methane	U	432	ug/kg	86.3	432
120-83-2	2,4-Dichlorophenol	U	432	ug/kg	86.3	432
65-85-0	Benzoic acid	U	863	ug/kg	216	863
91-20-3	Naphthalene	U	43.2	ug/kg	13.0	43.2
106-47-8	4-Chloroaniline	U	432	ug/kg	86.3	432
87-68-3	Hexachlorobutadiene	U	432	ug/kg	86.3	432
91-57-6	2-Methylnaphthalene	U	43.2	ug/kg	8.63	43.2
77-47-4	Hexachlorocyclopentadiene	U	432	ug/kg	86.3	432
88-06-2	2,4,6-Trichlorophenol	U	432	ug/kg	86.3	432
95-95-4	2,4,5-Trichlorophenol	U	432	ug/kg	86.3	432
91-58-7	2-Chloronaphthalene	U	43.2	ug/kg	14.2	43.2
88-74-4	2-Nitroaniline	U	432	ug/kg	86.3	432
99-09-2	<i>o</i> -Nitroaniline	U	432	ug/kg	86.3	432
	3-Nitroaniline					

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

**SDG Number:** 10-1758  
**Lab Sample ID:** 246866004

**Date Collected:** 02/09/2010 12:00  
**Date Received:** 02/11/2010 09:20  
**Client:** LANL010  
**Method:** SW846 8270C  
**Inst:** MSD2.I  
**Analyst:** AGS1  
**Aliquot:** 30.17 g  
**Column:** J&W DB-5MS

**Matrix:** R  
**%Moisture:** 23.2  
**Project:** LANL01004  
**SOP Ref:** GL-OA-E-009  
**Dilution:** 1  
**Inj. Vol:** .5 uL  
**Final Volume:** 1 mL  
**Level:** LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	<i>m</i> -Nitroaniline					
131-11-3	Dimethylphthalate	U	432	ug/kg	86.3	432
606-20-2	2,6-Dinitrotoluene	U	432	ug/kg	43.2	432
208-96-8	Acenaphthylene	U	43.2	ug/kg	13.0	43.2
51-28-5	2,4-Dinitrophenol	U	863	ug/kg	164	863
132-64-9	Dibenzofuran	U	432	ug/kg	86.3	432
84-66-2	Diethylphthalate	U	432	ug/kg	86.3	432
86-73-7	Fluorene	U	43.2	ug/kg	13.0	43.2
7005-72-3	4-Chlorophenylphenylether	U	432	ug/kg	86.3	432
534-52-1	2-Methyl-4,6-dinitrophenol	U	432	ug/kg	86.3	432
100-01-6	4-Nitroaniline	U	432	ug/kg	130	432
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	432	ug/kg	86.3	432
122-66-7	Azobenzene	U	432	ug/kg	86.3	432
	<i>1,2</i> -Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	432	ug/kg	86.3	432
118-74-1	Hexachlorobenzene	U	432	ug/kg	86.3	432
85-01-8	Phenanthrene	U	43.2	ug/kg	13.0	43.2
120-12-7	Anthracene	U	43.2	ug/kg	8.63	43.2
84-74-2	Di-n-butylphthalate	U	432	ug/kg	86.3	432
206-44-0	Fluoranthene	U	43.2	ug/kg	13.0	43.2
85-68-7	Butylbenzylphthalate	U	432	ug/kg	86.3	432
56-55-3	Benzo(a)anthracene	U	43.2	ug/kg	13.0	43.2
91-94-1	3,3'-Dichlorobenzidine	U	432	ug/kg	130	432
218-01-9	Chrysene	U	43.2	ug/kg	13.0	43.2
117-81-7	bis(2-Ethylhexyl)phthalate	U	432	ug/kg	86.3	432
117-84-0	Di-n-octylphthalate	U	432	ug/kg	86.3	432
205-99-2	Benzo(b)fluoranthene	U	43.2	ug/kg	13.0	43.2
207-08-9	Benzo(k)fluoranthene	U	43.2	ug/kg	13.0	43.2
50-32-8	Benzo(a)pyrene	U	43.2	ug/kg	13.0	43.2
193-39-5	Indeno(1,2,3-cd)pyrene	U	43.2	ug/kg	13.0	43.2
53-70-3	Dibenzo(a,h)anthracene	U	43.2	ug/kg	13.0	43.2
191-24-2	Benzo(ghi)perylene	U	43.2	ug/kg	13.0	43.2
120-82-1	1,2,4-Trichlorobenzene	U	432	ug/kg	86.3	432

**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
78-95-5	2-Propanone, 1-chloro-	2.15	201	ug/kg	80	NJ
	Unknown Aldol Condensate	3.19	464	ug/kg		J

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

Page 3 of 3

**SDG Number:** 10-1758  
**Lab Sample ID:** 246866004

**Date Collected:** 02/09/2010 12:00  
**Date Received:** 02/11/2010 09:20  
**Client:** LANL010  
**Method:** SW846 8270C  
**Inst:** MSD2.I  
**Analyst:** AGS1  
**Aliquot:** 30.17 g  
**Column:** J&W DB-5MS

**Matrix:** R  
**%Moisture:** 23.2  
**Project:** LANL01004  
**SOP Ref:** GL-OA-E-009  
**Dilution:** 1  
**Inj. Vol:** .5 uL  
**Final Volume:** 1 mL  
**Level:** LOW

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CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
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**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	10.81	657	ug/kg		J

GEL Laboratories LLC

GEL Laboratories, LLC

Data file : /chem/MSD2.i/s022210.b/s2b2224.d  
Lab Smp Id: 246866004 Client Smp ID: RE15-10-8364  
Inj Date : 23-FEB-2010 00:09  
Operator : AGS1 Inst ID: MSD2.i  
Smp Info : |246866004|954297|1|SVM|1|LANL  
Misc Info : |MSD8270\_S|WBN100205-01|  
Comment : Column: J & W Scientific DB-5MS 25m x 0.2mm x 0.33um  
Method : /chem/MSD2.i/s022210.b/MSD2-M8270PAQA-010810a.m  
Meth Date : 22-Feb-2010 16:54 ann00964 Quant Type: ISTD  
Cal Date : 11-JAN-2010 20:43 Cal File: s2a0859.d  
Als bottle: 24  
Dil Factor: 1.00000  
Integrator: HP RTE Compound Sublist: 10-1758.sub  
Target Version: 3.50  
Processing Host: kilroy

Concentration Formula:  $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vi} * \text{Ws} * (100 - \text{M}) / 100) * \text{CpndVariable}$

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.17000	weight of sample
M	23.21890	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG					CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	4.562	4.565	(1.000)	252874	40.0000	
* 29 Naphthalene-d8	136	5.826	5.830	(1.000)	874887	40.0000	
* 46 Acenaphthene-d10	164	7.688	7.691	(1.000)	561892	40.0000	
* 67 Phenanthrene-d10	188	9.293	9.293	(1.000)	1026102	40.0000	
* 91 Chrysene-d12	240	12.224	12.232	(1.000)	846020	40.0000	
* 98 Perylene-d12	264	14.405	14.417	(1.000)	529666	40.0000	
\$ 3 2-Fluorophenol	112	3.430	3.415	(0.752)	376190	61.3068	2650
\$ 5 Phenol-d5	99	4.195	4.195	(0.920)	473258	57.6327	2490
\$ 20 Nitrobenzene-d5	82	5.093	5.102	(0.874)	216971	31.3001	1350
\$ 39 2-Fluorobiphenyl	172	6.952	6.954	(0.904)	474858	27.3147	1180
\$ 60 2,4,6-Tribromophenol	329	8.535	8.538	(1.110)	149365	61.4604	2650
\$ 81 p-Terphenyl-d14	244	10.999	10.998	(0.900)	585369	36.0237	1560

## ION RATIO REPORT

## SV REPORT

Data file: s2b2224.d

Report Date: 02/23/2010 09:15

Lab. ID: 246866004

SampleType: SAMPLE

Injection Date: 23-FEB-2010 00:09

Operator: AGS1

Instrument: MSD2.i

Sample Info: |246866004|954297|1|SVM|1|LANL

Miscellaneous Info: |MSD8270\_S|WBN100205-01|

Comment:

Method used: /chem/MSD2.i/s022210.b/MSD2-M8270PAQA-010810a.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-1758

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
4	Aniline		CAS#: 62-53-3			
66	28002	4.20	4.26	80-120	100	(T)
93	835	4.23	4.26	194-254	3	(Q)
-----						
17	N-Nitrosodipropylamine		CAS#: 621-64-7			
70	30868	5.09	4.95	80-120	100	(T)
42	23295	5.09	4.95	58-118	75	(T)
-----						
27	Benzoic acid		CAS#: 65-85-0			
105	234	5.55	5.59	80-120	100	( )
122	250	5.55	5.58	44-104	107	(Q)
77	466	5.55	5.58	46-106	199	(Q)
-----						
44	2,6-Dinitrotoluene		CAS#: 606-20-2			
165	73035	7.69	7.46	80-120	100	(T)
63	1033	7.69	7.46	41-101	1	(QT)
-----						
50	2,4-Dinitrotoluene		CAS#: 121-14-2			
165	73035	7.69	7.90	80-120	100	(T)
89	908	7.69	7.89	51-111	1	(QT)
63	1033	7.69	7.90	52-112	1	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

GEL Laboratories, LLC

Data file : /chem/MSD2.i/s022210.b/s2b2224.d  
Lab Smp Id: 246866004 Client Smp ID: RE15-10-8364  
Inj Date : 23-FEB-2010 00:09  
Operator : AGS1 Inst ID: MSD2.i  
Smp Info : |246866004|954297|1|SVM|1|LANL  
Misc Info : |MSD8270\_S|WBN100205-01|  
Comment : Column: J & W Scientific DB-5MS 25m x 0.2mm x 0.33um  
Method : /chem/MSD2.i/s022210.b/MSD2-M8270PAQA-010810a.m  
Meth Date : 22-Feb-2010 16:54 ann00964 Quant Type: ISTD  
Cal Date : 11-JAN-2010 20:43 Cal File: s2a0859.d  
Als bottle: 24  
Dil Factor: 1.00000  
Integrator: HP RTE Compound Sublist: 10-1758.sub  
Target Version: 3.50  
Processing Host: kilroy

Concentration Formula: Amt \* DF \* Uf \* Vt / (Vi \* Ws \* (100 - M) / 100) \* CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.17000	weight of sample
M	23.21890	% moisture

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
=====	====	=====	=====
* 10 1,4-Dichlorobenzene-d4	4.562	1685284	40.000
* 91 Chrysene-d12	12.224	1069456	40.000

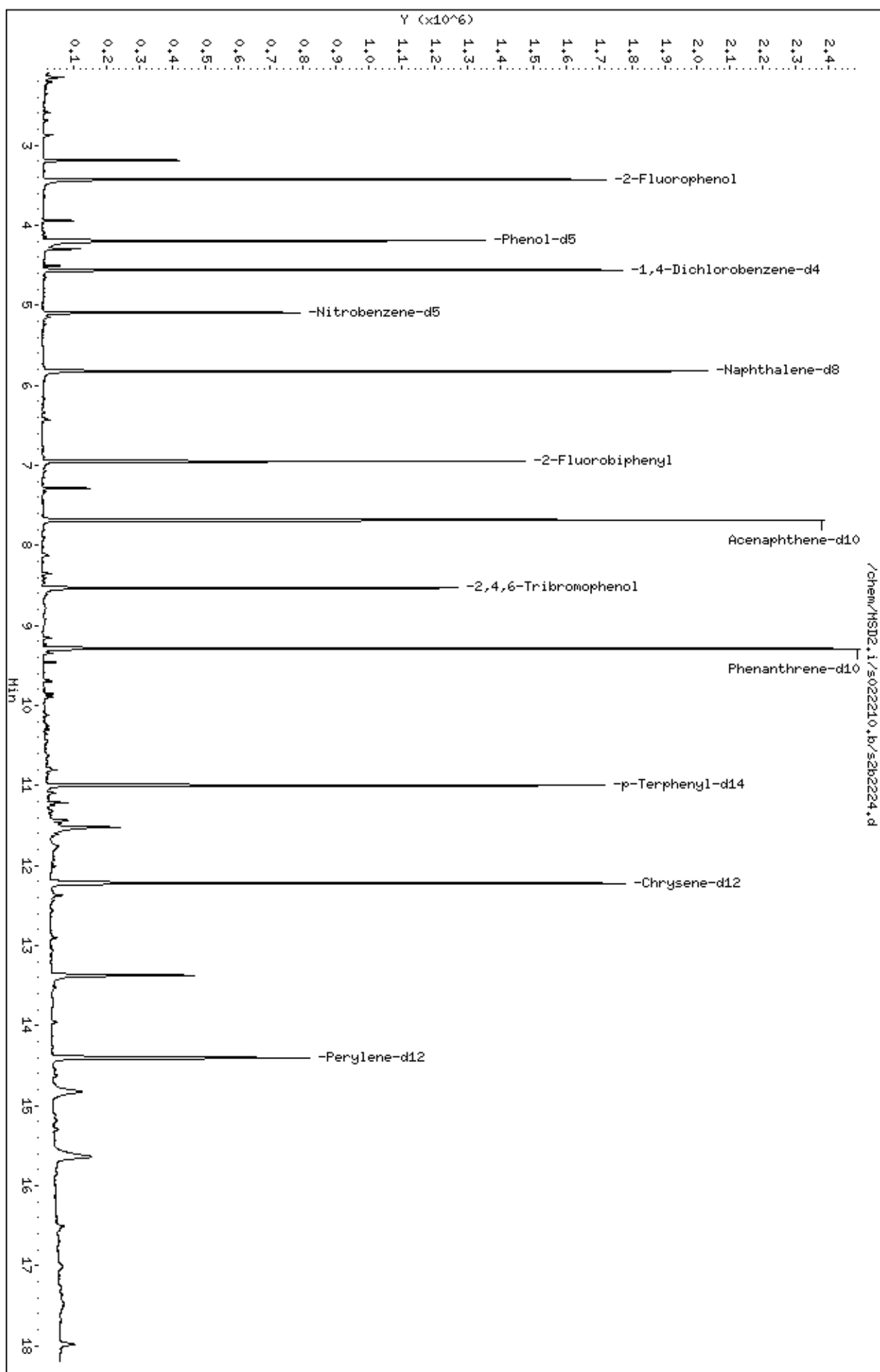
CONCENTRATIONS				QUANT			
RT	AREA	ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
----	----	-----	-----	----	-----	-----	-----
2-Propanone, 1-chloro-					CAS #: 78-95-5		
2.153	196227	4.65742222	201	80	NIST05.L	2355	10

CONCENTRATIONS					QUANT		
RT	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
====	====	=====	=====	====	=====	=====	=====
Unknown Aldol Condensate					CAS #:		
3.190	453155	10.7555746	464	0		0	10
Unknown					CAS #:		
10.808	406738	15.2128815	657	0		0	91



Data File: /chem/HSD2.i/s022210.b/s2b2224.d  
 Date : 23-FEB-2010 00:09  
 Client ID: RE15-10-8364  
 Sample Info: 124686004195429711SVH11LNL  
 Volume Injected (uL): 0.5  
 Column phase: 3uM DB-5MS

Instrument: HSD2.i  
 Operator: AGS1  
 Column diameter: 0.20



Date : 23-FEB-2010 00:09

Client ID: RE15-10-8364

Instrument: MSD2.i

Sample Info: 1246866004195429711ISVH11ILANL

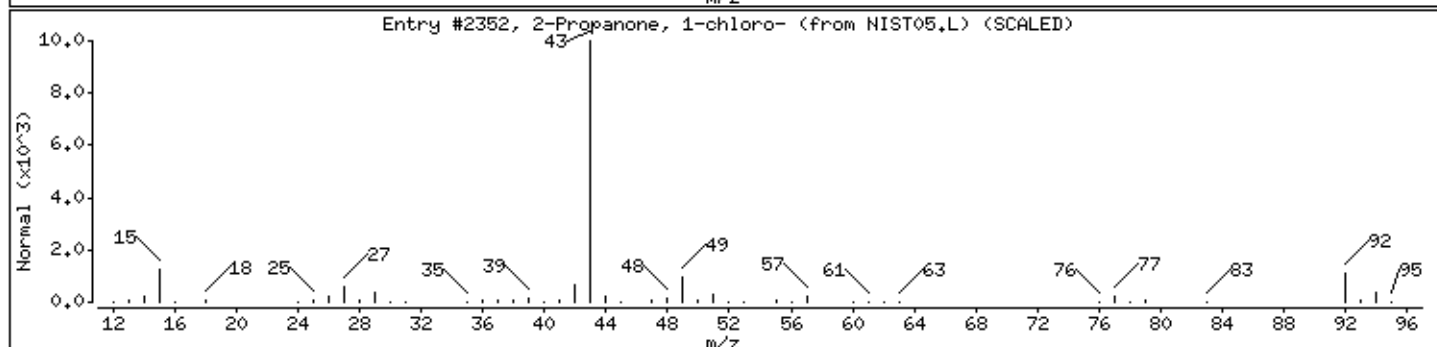
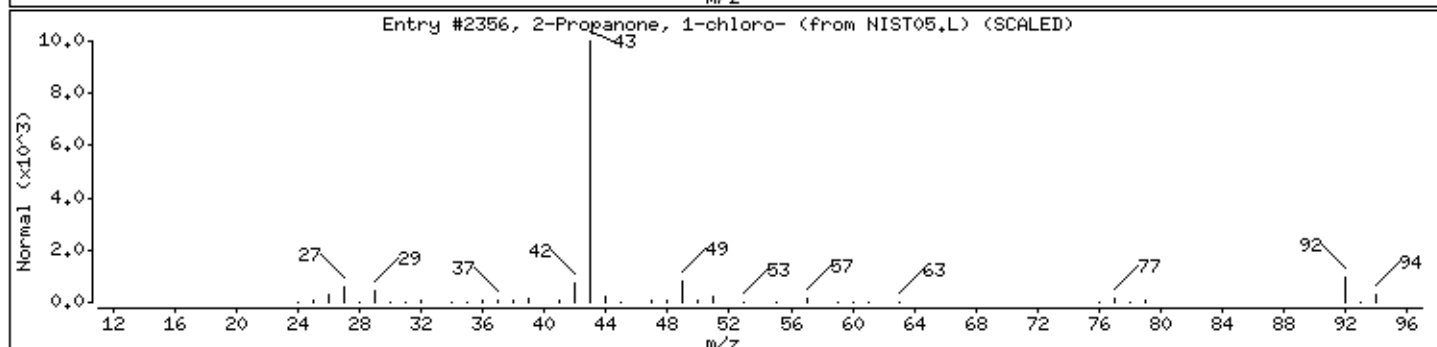
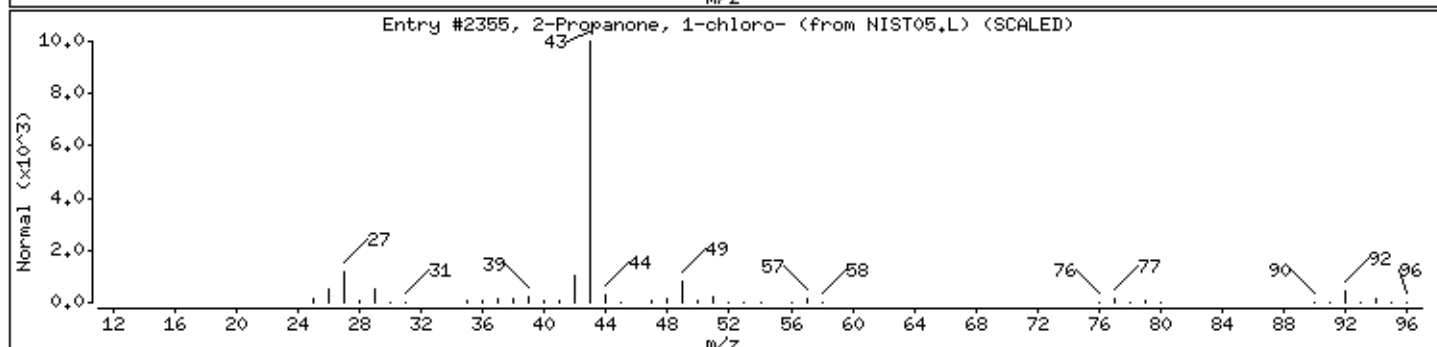
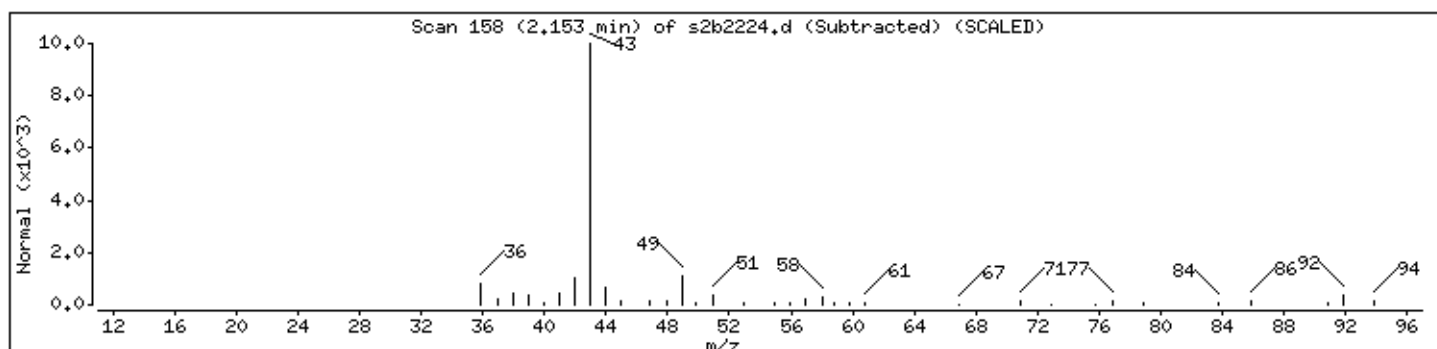
Volume Injected (uL): 0.5

Operator: AGS1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
2-Propanone, 1-chloro-	78-95-5	NIST05.L	2355	80	C3H5ClO	92
2-Propanone, 1-chloro-	78-95-5	NIST05.L	2356	78	C3H5ClO	92
2-Propanone, 1-chloro-	78-95-5	NIST05.L	2352	52	C3H5ClO	92



Date : 23-FEB-2010 00:09

Client ID: RE15-10-8364

Instrument: MSD2.i

Sample Info: 1246866004195429711ISVH11ILANL

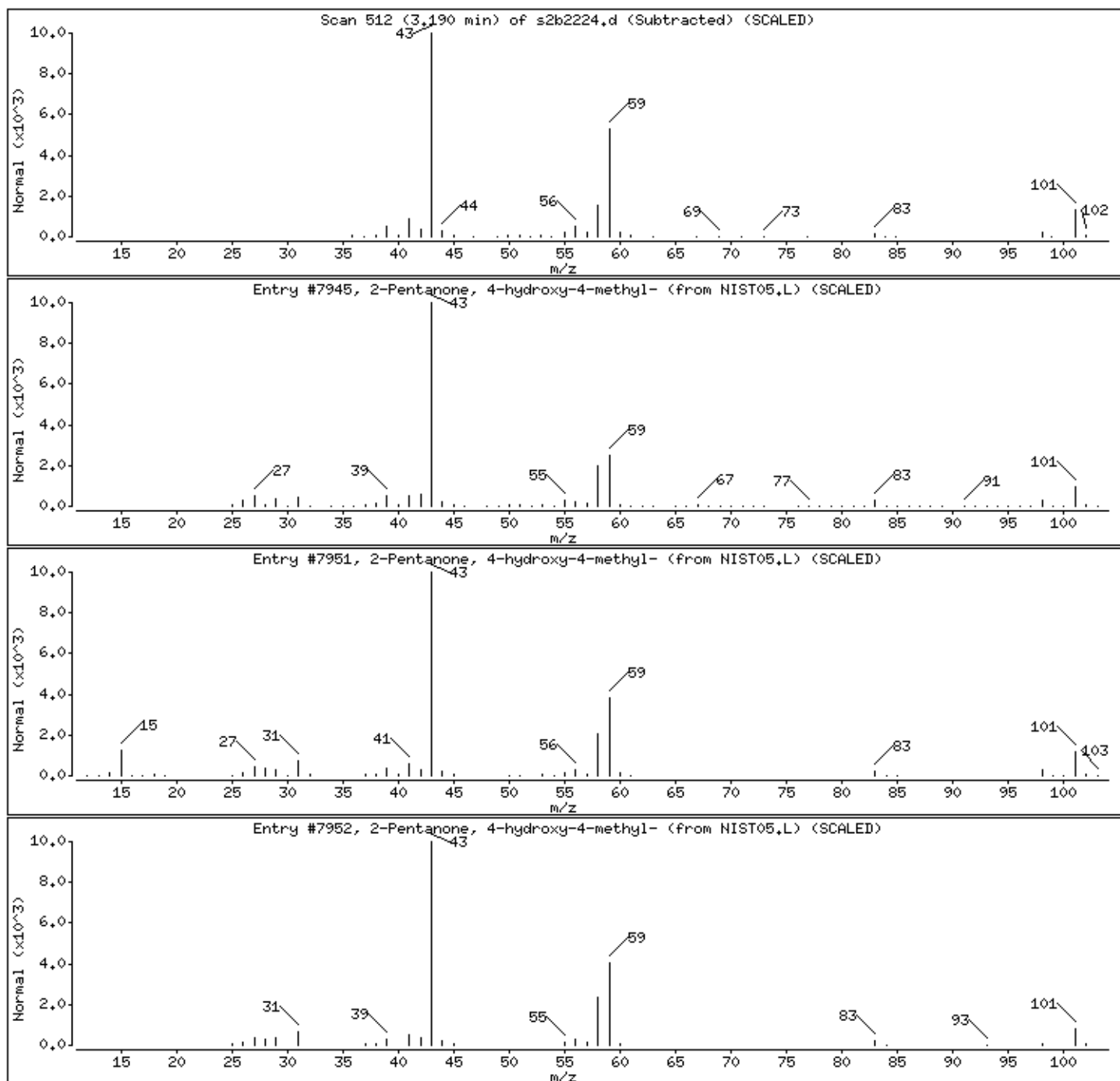
Volume Injected (uL): 0.5

Operator: AGS1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7945	59	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	53	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	50	C6H12O2	116



Date : 23-FEB-2010 00:09

Client ID: RE15-10-8364

Instrument: MSD2.i

Sample Info: 1246866004195429711ISVH11ILANL

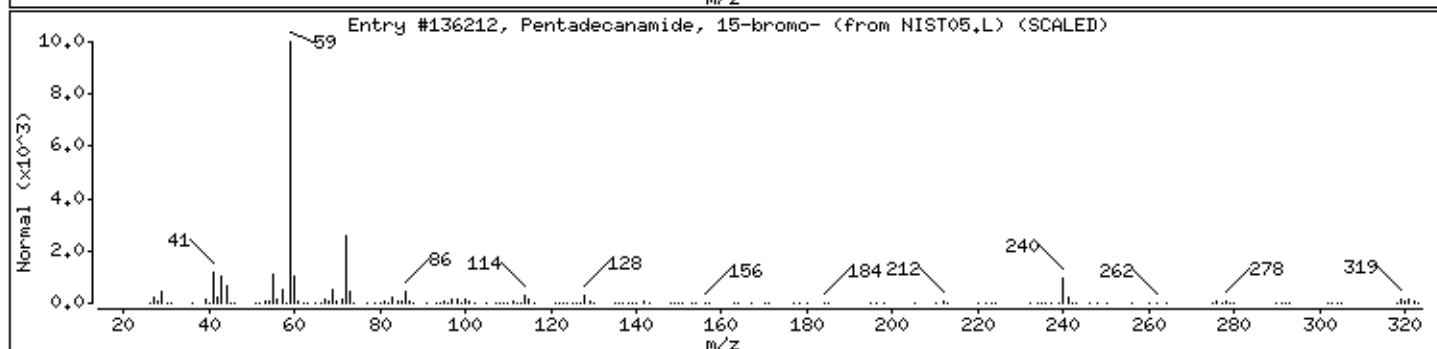
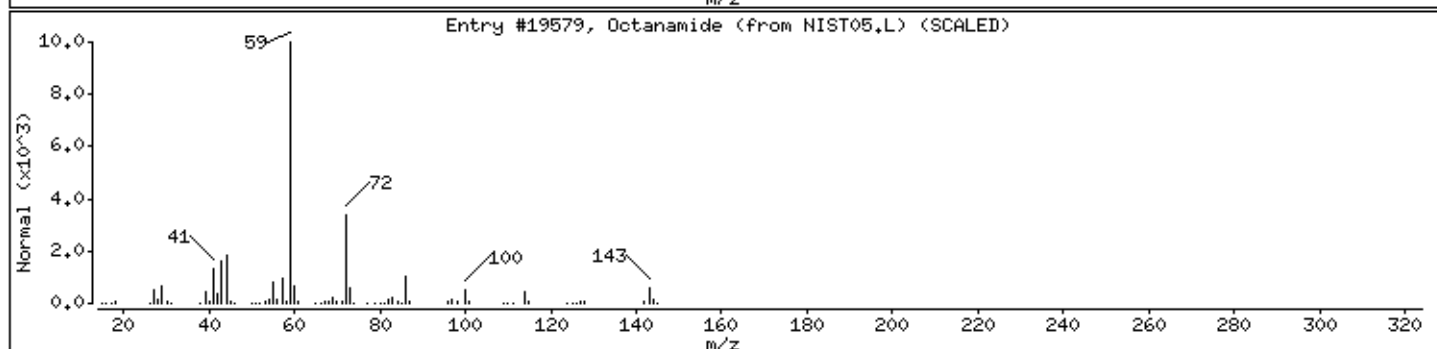
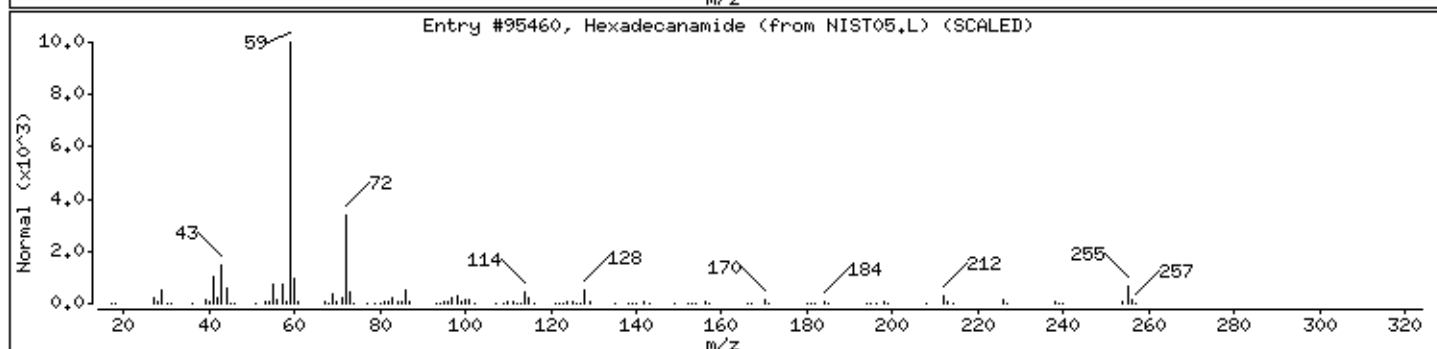
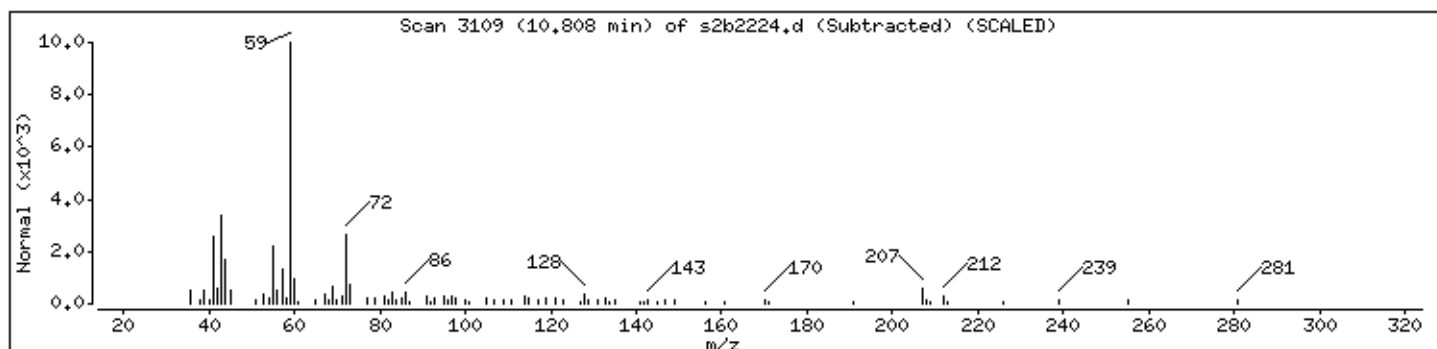
Volume Injected (uL): 0.5

Operator: AGS1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Hexadecanamide	629-54-9	NIST05.L	95460	72	C16H33NO	255
Octanamide	629-01-6	NIST05.L	19579	72	C8H17NO	143
Pentadecanamide, 15-bromo-	1000163-86-1	NIST05.L	136212	72	C15H30BrNO	319



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

Page 1 of 3

**SDG Number:** 10-1758  
**Lab Sample ID:** 246866005

**Date Collected:** 02/09/2010 12:00  
**Date Received:** 02/11/2010 09:20  
**Client:** LANL010  
**Method:** SW846 8270C  
**Inst:** MSD2.I  
**Analyst:** AGS1  
**Aliquot:** 30.07 g  
**Column:** J&W DB-5MS

**Matrix:** R  
**%Moisture:** 16.9  
**Project:** LANL01004  
**SOP Ref:** GL-OA-E-009  
**Dilution:** 1  
**Inj. Vol:** .5 uL  
**Final Volume:** 1 mL  
**Level:** LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	400	ug/kg	80.1	400
108-95-2	Phenol	U	400	ug/kg	80.1	400
95-57-8	2-Chlorophenol	U	400	ug/kg	80.1	400
106-46-7	1,4-Dichlorobenzene	U	400	ug/kg	80.1	400
621-64-7	N-Nitrosodipropylamine	U	400	ug/kg	80.1	400
59-50-7	4-Chloro-3-methylphenol	U	400	ug/kg	80.1	400
83-32-9	Acenaphthene	U	40.0	ug/kg	13.2	40.0
121-14-2	2,4-Dinitrotoluene	U	400	ug/kg	40.0	400
100-02-7	4-Nitrophenol	U	400	ug/kg	132	400
87-86-5	Pentachlorophenol	U	400	ug/kg	100	400
129-00-0	Pyrene	U	40.0	ug/kg	12.0	40.0
110-86-1	Pyridine	U	400	ug/kg	80.1	400
62-53-3	Aniline	U	400	ug/kg	120	400
111-44-4	bis(2-Chloroethyl) ether	U	400	ug/kg	80.1	400
541-73-1	1,3-Dichlorobenzene	U	400	ug/kg	80.1	400
100-51-6	Benzyl alcohol	U	400	ug/kg	120	400
95-50-1	1,2-Dichlorobenzene	U	400	ug/kg	80.1	400
108-60-1	bis(2-Chloroisopropyl)ether	U	400	ug/kg	80.1	400
95-48-7	o-Cresol	U	400	ug/kg	80.1	400
65794-96-9	m,p-Cresols	U	400	ug/kg	120	400
67-72-1	Hexachloroethane	U	400	ug/kg	80.1	400
98-95-3	Nitrobenzene	U	400	ug/kg	80.1	400
78-59-1	Isophorone	U	400	ug/kg	80.1	400
88-75-5	2-Nitrophenol	U	400	ug/kg	80.1	400
105-67-9	2,4-Dimethylphenol	U	400	ug/kg	140	400
111-91-1	bis(2-Chloroethoxy)methane	U	400	ug/kg	80.1	400
120-83-2	2,4-Dichlorophenol	U	400	ug/kg	80.1	400
65-85-0	Benzoic acid	U	801	ug/kg	200	801
91-20-3	Naphthalene	U	40.0	ug/kg	12.0	40.0
106-47-8	4-Chloroaniline	U	400	ug/kg	80.1	400
87-68-3	Hexachlorobutadiene	U	400	ug/kg	80.1	400
91-57-6	2-Methylnaphthalene	U	40.0	ug/kg	8.01	40.0
77-47-4	Hexachlorocyclopentadiene	U	400	ug/kg	80.1	400
88-06-2	2,4,6-Trichlorophenol	U	400	ug/kg	80.1	400
95-95-4	2,4,5-Trichlorophenol	U	400	ug/kg	80.1	400
91-58-7	2-Chloronaphthalene	U	40.0	ug/kg	13.2	40.0
88-74-4	2-Nitroaniline	U	400	ug/kg	80.1	400
99-09-2	<i>o</i> -Nitroaniline	U	400	ug/kg	80.1	400
	3-Nitroaniline					

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

**SDG Number:** 10-1758  
**Lab Sample ID:** 246866005

**Date Collected:** 02/09/2010 12:00  
**Date Received:** 02/11/2010 09:20  
**Client:** LANL010  
**Method:** SW846 8270C  
**Inst:** MSD2.I  
**Analyst:** AGS1  
**Aliquot:** 30.07 g  
**Column:** J&W DB-5MS

**Matrix:** R  
**%Moisture:** 16.9  
**Project:** LANL01004  
**SOP Ref:** GL-OA-E-009  
**Dilution:** 1  
**Inj. Vol:** .5 uL  
**Final Volume:** 1 mL  
**Level:** LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	<i>m</i> -Nitroaniline					
131-11-3	Dimethylphthalate	U	400	ug/kg	80.1	400
606-20-2	2,6-Dinitrotoluene	U	400	ug/kg	40.0	400
208-96-8	Acenaphthylene	U	40.0	ug/kg	12.0	40.0
51-28-5	2,4-Dinitrophenol	U	801	ug/kg	152	801
132-64-9	Dibenzofuran	U	400	ug/kg	80.1	400
84-66-2	Diethylphthalate	U	400	ug/kg	80.1	400
86-73-7	Fluorene	U	40.0	ug/kg	12.0	40.0
7005-72-3	4-Chlorophenylphenylether	U	400	ug/kg	80.1	400
534-52-1	2-Methyl-4,6-dinitrophenol	U	400	ug/kg	80.1	400
100-01-6	4-Nitroaniline	U	400	ug/kg	120	400
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	400	ug/kg	80.1	400
122-66-7	Azobenzene	U	400	ug/kg	80.1	400
	<i>1,2</i> -Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	400	ug/kg	80.1	400
118-74-1	Hexachlorobenzene	U	400	ug/kg	80.1	400
85-01-8	Phenanthrene	U	40.0	ug/kg	12.0	40.0
120-12-7	Anthracene	U	40.0	ug/kg	8.01	40.0
84-74-2	Di-n-butylphthalate	U	400	ug/kg	80.1	400
206-44-0	Fluoranthene	U	40.0	ug/kg	12.0	40.0
85-68-7	Butylbenzylphthalate	U	400	ug/kg	80.1	400
56-55-3	Benzo(a)anthracene	U	40.0	ug/kg	12.0	40.0
91-94-1	3,3'-Dichlorobenzidine	U	400	ug/kg	120	400
218-01-9	Chrysene	U	40.0	ug/kg	12.0	40.0
117-81-7	bis(2-Ethylhexyl)phthalate	U	400	ug/kg	80.1	400
117-84-0	Di-n-octylphthalate	U	400	ug/kg	80.1	400
205-99-2	Benzo(b)fluoranthene	U	40.0	ug/kg	12.0	40.0
207-08-9	Benzo(k)fluoranthene	U	40.0	ug/kg	12.0	40.0
50-32-8	Benzo(a)pyrene	U	40.0	ug/kg	12.0	40.0
193-39-5	Indeno(1,2,3-cd)pyrene	U	40.0	ug/kg	12.0	40.0
53-70-3	Dibenzo(a,h)anthracene	U	40.0	ug/kg	12.0	40.0
191-24-2	Benzo(ghi)perylene	U	40.0	ug/kg	12.0	40.0
120-82-1	1,2,4-Trichlorobenzene	U	400	ug/kg	80.1	400

**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	3.19	893	ug/kg		J
18172-67-3	Bicyclo[3.1.1]heptane, 6,6-dimethyl-2-me	4.3	162	ug/kg	95	NJ

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

**SDG Number:** 10-1758  
**Lab Sample ID:** 246866005

**Date Collected:** 02/09/2010 12:00  
**Date Received:** 02/11/2010 09:20  
**Client:** LANL010  
**Method:** SW846 8270C  
**Inst:** MSD2.I  
**Analyst:** AGS1  
**Aliquot:** 30.07 g  
**Column:** J&W DB-5MS

**Matrix:** R  
**%Moisture:** 16.9  
**Project:** LANL01004  
**SOP Ref:** GL-OA-E-009  
**Dilution:** 1  
**Inj. Vol:** .5 uL  
**Final Volume:** 1 mL  
**Level:** LOW

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

**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
77-53-2	Cedrol	8.41	474	ug/kg	94	NJ
629-54-9	Hexadecanamide	10.81	208	ug/kg	86	NJ
	Unknown	11.22	612	ug/kg		J

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Data file : /chem/MSD2.i/s022210.b/s2b2225.d  
Lab Smp Id: 246866005 Client Smp ID: RE15-10-8365  
Inj Date : 23-FEB-2010 00:34  
Operator : AGS1 Inst ID: MSD2.i  
Smp Info : |246866005|954297|1|SVM|1|LANL  
Misc Info : |MSD8270\_S|WBN100205-01|  
Comment : Column: J & W Scientific DB-5MS 25m x 0.2mm x 0.33um  
Method : /chem/MSD2.i/s022210.b/MSD2-M8270PAQA-010810a.m  
Meth Date : 22-Feb-2010 16:54 ann00964 Quant Type: ISTD  
Cal Date : 11-JAN-2010 20:43 Cal File: s2a0859.d  
Als bottle: 25  
Dil Factor: 1.00000  
Integrator: HP RTE Compound Sublist: 10-1758.sub  
Target Version: 3.50  
Processing Host: kilroy

Concentration Formula:  $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vi} * \text{Ws} * (100 - \text{M}) / 100) * \text{CpndVariable}$

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.07000	weight of sample
M	16.94580	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG					CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	4.562	4.565	(1.000)	254958	40.0000	
* 29 Naphthalene-d8	136	5.826	5.830	(1.000)	877174	40.0000	
* 46 Acenaphthene-d10	164	7.689	7.691	(1.000)	566770	40.0000	
* 67 Phenanthrene-d10	188	9.292	9.293	(1.000)	1043669	40.0000	
* 91 Chrysene-d12	240	12.223	12.232	(1.000)	891055	40.0000	
* 98 Perylene-d12	264	14.408	14.417	(1.000)	580096	40.0000	
\$ 3 2-Fluorophenol	112	3.430	3.415	(0.752)	427365	69.0774	2760
\$ 5 Phenol-d5	99	4.196	4.195	(0.920)	541803	65.4407	2620
\$ 20 Nitrobenzene-d5	82	5.093	5.102	(0.874)	254950	36.6830	1470
\$ 39 2-Fluorobiphenyl	172	6.952	6.954	(0.904)	554865	31.6422	1270
\$ 60 2,4,6-Tribromophenol	329	8.537	8.538	(1.110)	177938	72.5874	2910
\$ 81 p-Terphenyl-d14	244	11.001	10.998	(0.900)	726876	42.4712	1700



## ION RATIO REPORT

## SV REPORT

Data file: s2b2225.d

Report Date: 02/23/2010 09:15

Lab. ID: 246866005

SampleType: SAMPLE

Injection Date: 23-FEB-2010 00:34

Operator: AGS1

Instrument: MSD2.i

Sample Info: |246866005|954297|1|SVM|1|LANL

Miscellaneous Info: |MSD8270\_S|WBN100205-01|

Comment:

Method used: /chem/MSD2.i/s022210.b/MSD2-M8270PAQA-010810a.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-1758

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
4	Aniline		CAS#: 62-53-3			
66	31687	4.20	4.26	80-120	100	(T)
93	398	4.23	4.26	194-254	1	(Q)
-----						
17	N-Nitrosodipropylamine		CAS#: 621-64-7			
70	36254	5.09	4.95	80-120	100	(T)
42	27734	5.09	4.95	58-118	76	(T)
-----						
27	Benzoic acid		CAS#: 65-85-0			
105	128	5.61	5.59	80-120	100	( )
122	226	5.57	5.58	44-104	176	(Q)
77	197	5.65	5.58	46-106	153	(QT)
-----						
40	2-Chloronaphthalene		CAS#: 91-58-7			
162	11589	7.29	7.09	80-120	100	(T)
164	594	7.29	7.09	3- 63	5	(T)
127	775	7.29	7.09	5- 65	7	(T)
-----						
42	o-Nitroaniline		CAS#: 88-74-4			
65	16250	7.29	7.20	80-120	100	(T)
92	16479	7.29	7.20	25- 85	101	(QT)
138	1078	7.29	7.20	55-115	7	(QT)
-----						
44	2,6-Dinitrotoluene		CAS#: 606-20-2			
165	72711	7.69	7.46	80-120	100	(T)
63	1179	7.69	7.46	41-101	2	(QT)
-----						

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
50	2,4-Dinitrotoluene			CAS#: 121-14-2		
165	72711	7.69	7.90	80-120	100	(T)
89	853	7.69	7.89	51-111	1	(QT)
63	1179	7.69	7.90	52-112	2	(QT)
-----						
56	p-Nitroaniline			CAS#: 100-01-6		
138	249	8.35	8.31	80-120	100	( )
108	612	8.34	8.31	30- 90	246	(Q)
92	129	8.35	8.31	7- 67	52	( )
-----						
Q qualifier indicates ion failed ratio requirement						

GEL Laboratories LLC

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Data file : /chem/MSD2.i/s022210.b/s2b2225.d  
Lab Smp Id: 246866005 Client Smp ID: RE15-10-8365  
Inj Date : 23-FEB-2010 00:34  
Operator : AGS1 Inst ID: MSD2.i  
Smp Info : |246866005|954297|1|SVM|1|LANL  
Misc Info : |MSD8270\_S|WBN100205-01|  
Comment : Column: J & W Scientific DB-5MS 25m x 0.2mm x 0.33um  
Method : /chem/MSD2.i/s022210.b/MSD2-M8270PAQA-010810a.m  
Meth Date : 22-Feb-2010 16:54 ann00964 Quant Type: ISTD  
Cal Date : 11-JAN-2010 20:43 Cal File: s2a0859.d  
Als bottle: 25  
Dil Factor: 1.00000  
Integrator: HP RTE Compound Sublist: 10-1758.sub  
Target Version: 3.50  
Processing Host: kilroy

Concentration Formula: Amt \* DF \* Uf \* Vt / (Vi \* Ws \* (100 - M) / 100) \* CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.07000	weight of sample
M	16.94580	% moisture

Cpnd Variable Local Compound Variable

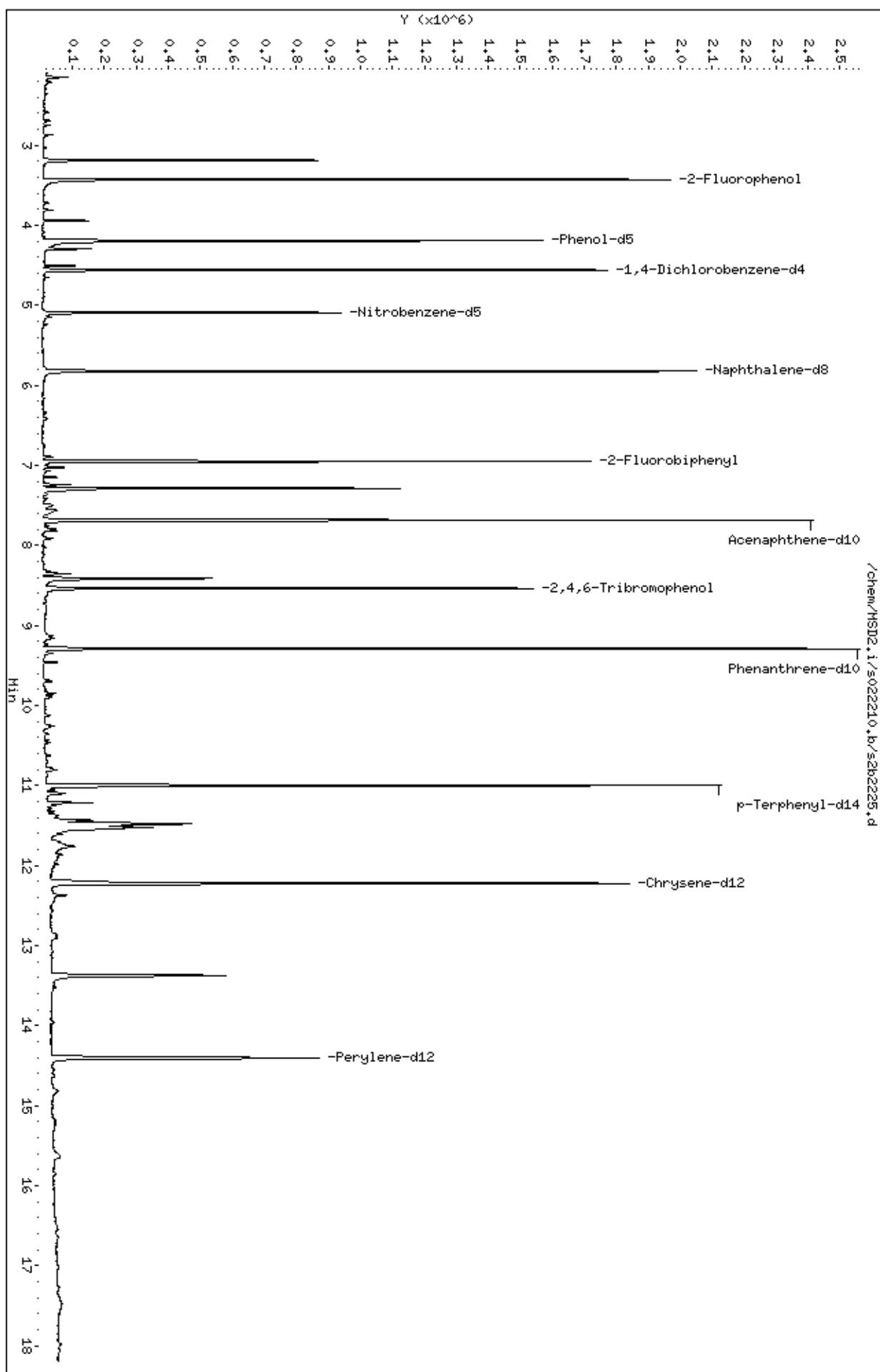
ISTD	RT	AREA	AMOUNT
=====	====	=====	=====
* 10 1,4-Dichlorobenzene-d4	4.562	1634477	40.000
* 46 Acenaphthene-d10	7.689	2577683	40.000
* 91 Chrysene-d12	12.223	1349135	40.000

CONCENTRATIONS					QUANT		
RT	AREA	ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
----	----	-----	-----	----	-----	-----	-----

CONCENTRATIONS					QUANT		
RT	AREA	ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
====	====	=====	=====	====	=====	=====	=====
Unknown Aldol Condensate					CAS #:		
3.190	911745	22.3128113	893	0		0	10
Bicyclo[3.1.1]heptane, 6,6-dimethyl-2-me					CAS #: 18172-67-3		
4.298	164990	4.03774146	162	95	NIST05.L	15390	10
Cedrol					CAS #: 77-53-2		
8.414	762123	11.8264716	474	94	NIST05.L	72884	46
Hexadecanamide					CAS #: 629-54-9		
10.807	175272	5.19655957	208	86	NIST05.L	95460	91
Unknown					CAS #:		
11.216	515251	15.2764720	612	0		0	91

Data File: /chem/HSD2.i/s022210.b/s2b2225.d  
Date : 23-FEB-2010 00:34  
Client ID: RE15-10-8365  
Sample Info: 124686005195429711SVH11LNL  
Volume Injected (uL): 0.5  
Column phase: 3uM DB-5MS

Instrument: HSD2.i  
Operator: AGS1  
Column diameter: 0.20



Date : 23-FEB-2010 00:34

Client ID: RE15-10-8365

Instrument: MSD2.i

Sample Info: 1246866005195429711ISVH11ILANL

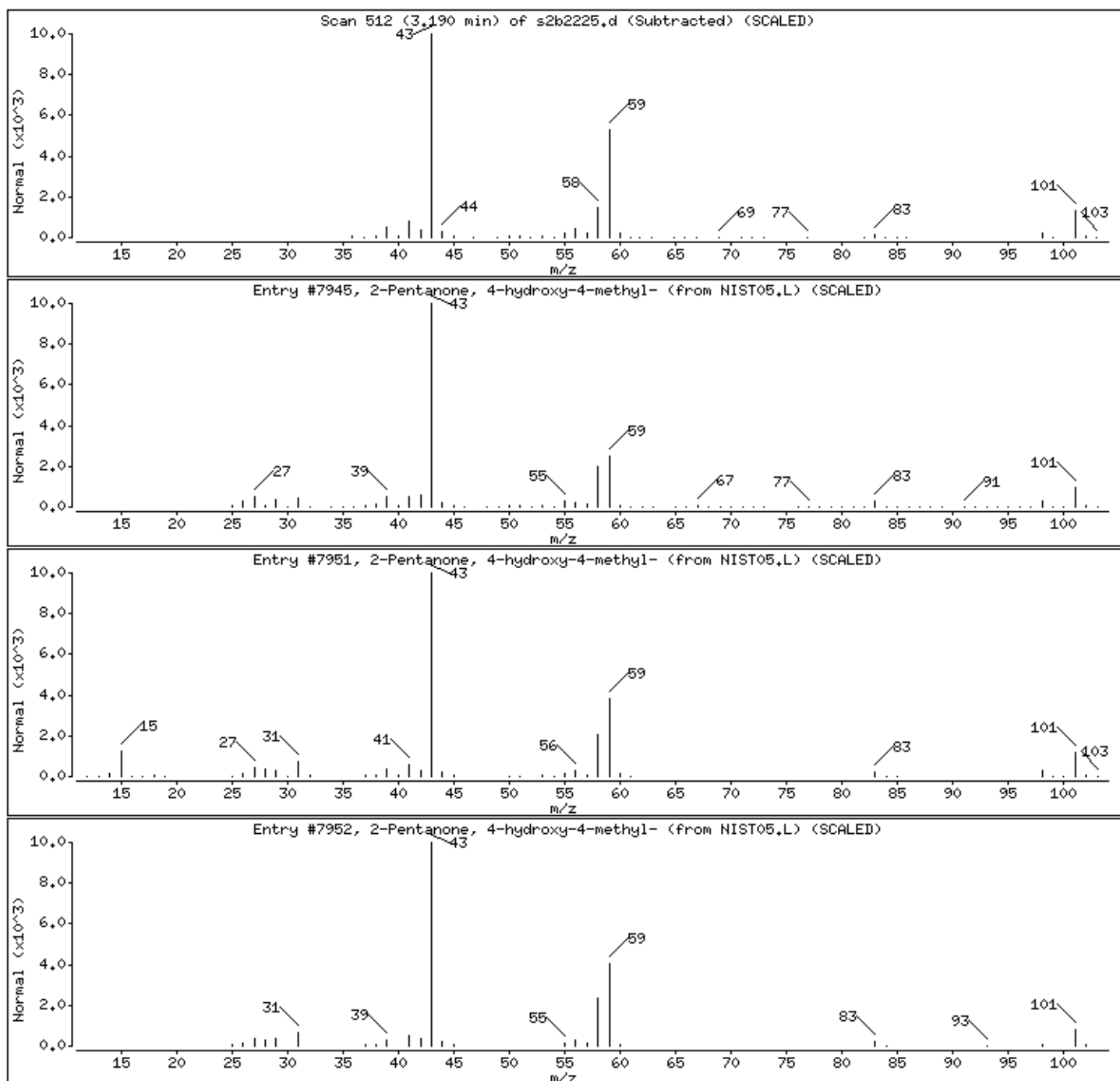
Volume Injected (uL): 0.5

Operator: AGS1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7945	59	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	59	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	50	C6H12O2	116



Date : 23-FEB-2010 00:34

Client ID: RE15-10-8365

Instrument: MSD2.i

Sample Info: 1246866005195429711ISVH11ILANL

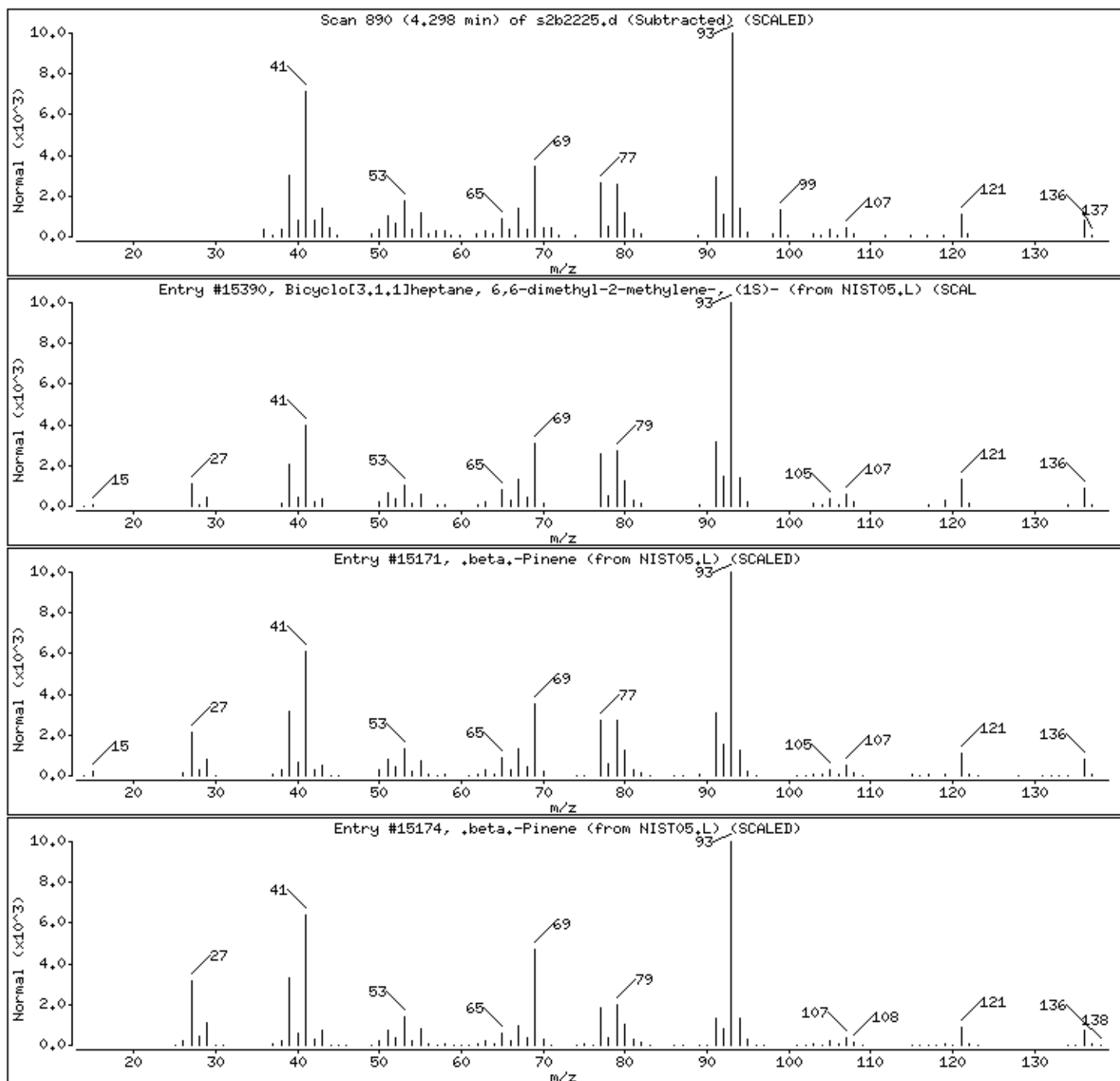
Volume Injected (uL): 0.5

Operator: AGS1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Bicyclo[3.1.1]heptane, 6,6-dimethyl-2-me	18172-67-3	NIST05.L	15390	95	C10H16	136
.beta.-Pinene	127-91-3	NIST05.L	15171	94	C10H16	136
.beta.-Pinene	127-91-3	NIST05.L	15174	94	C10H16	136



Date : 23-FEB-2010 00:34

Client ID: RE15-10-8365

Instrument: MSD2.i

Sample Info: 1246866005195429711ISVH11ILANL

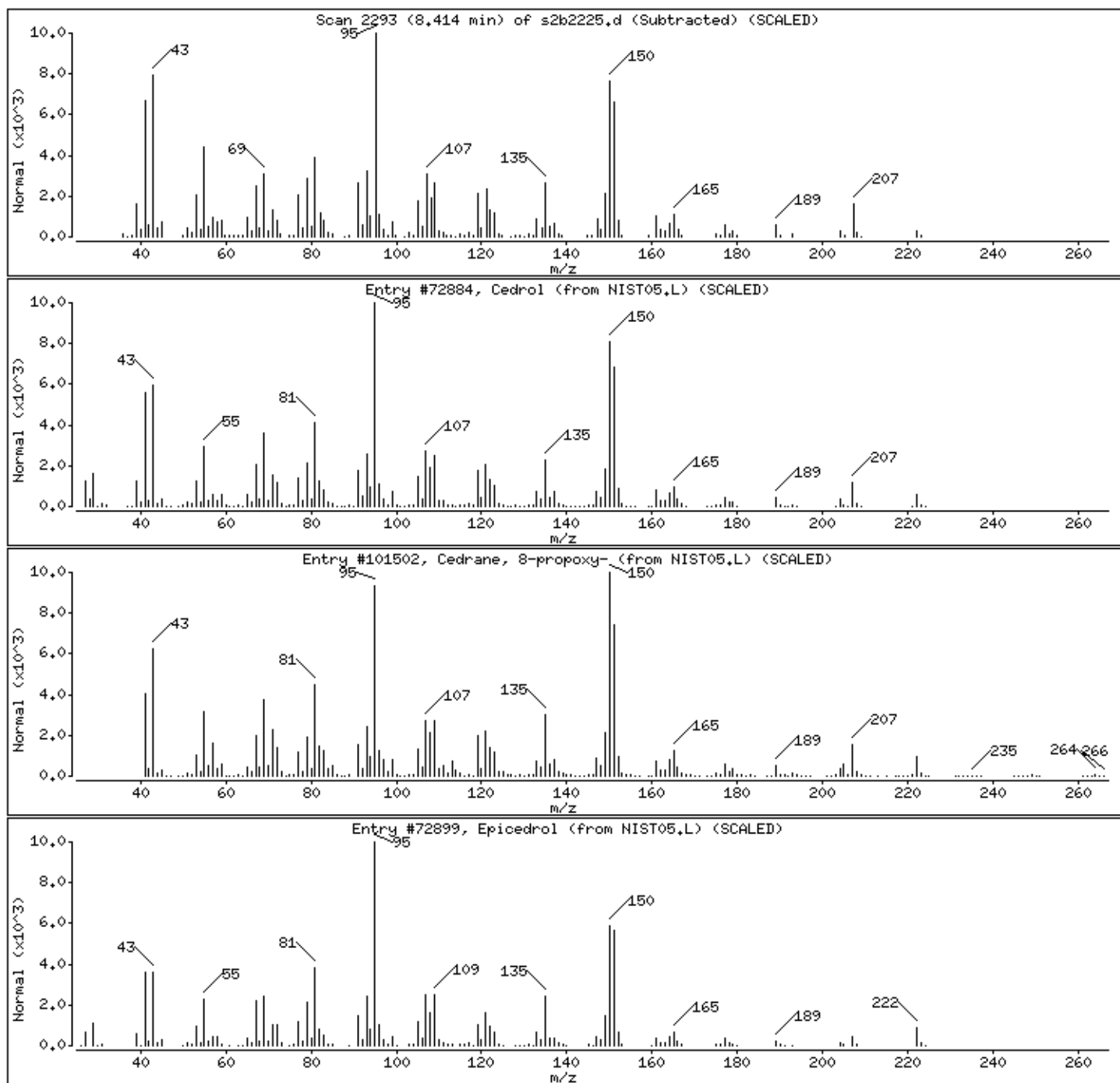
Volume Injected (uL): 0.5

Operator: AGS1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Cedrol	77-53-2	NIST05.L	72884	94	C <sub>15</sub> H <sub>26</sub> O	222
Cedrane, 8-propoxy-	19870-75-8	NIST05.L	101502	94	C <sub>18</sub> H <sub>32</sub> O	264
Epicedrol	1000156-22-8	NIST05.L	72899	91	C <sub>15</sub> H <sub>26</sub> O	222





Date : 23-FEB-2010 00:34

Client ID: RE15-10-8365

Instrument: MSD2.i

Sample Info: 1246866005195429711ISVH11ILANL

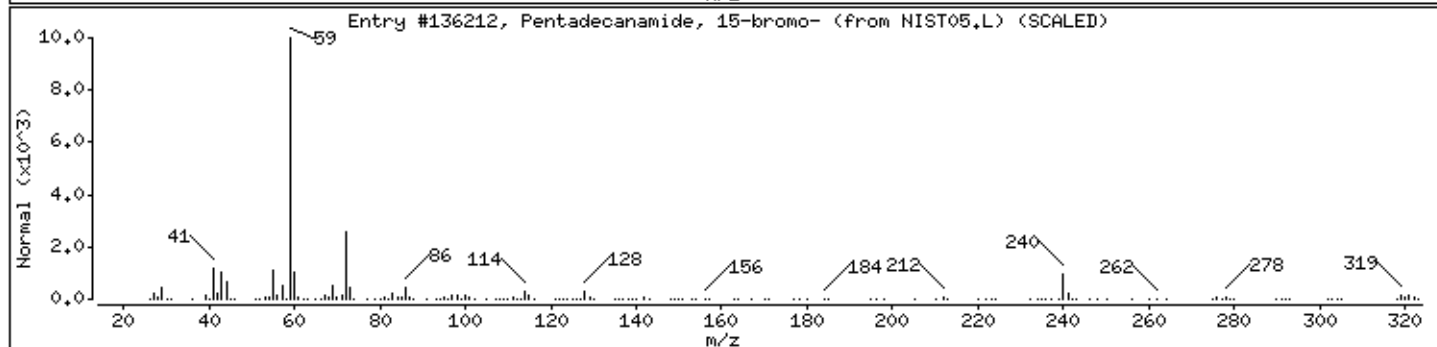
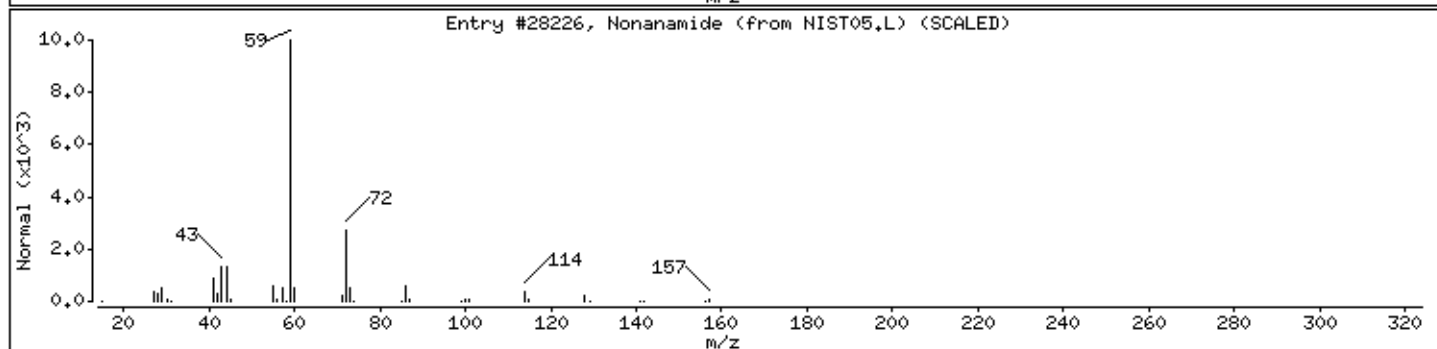
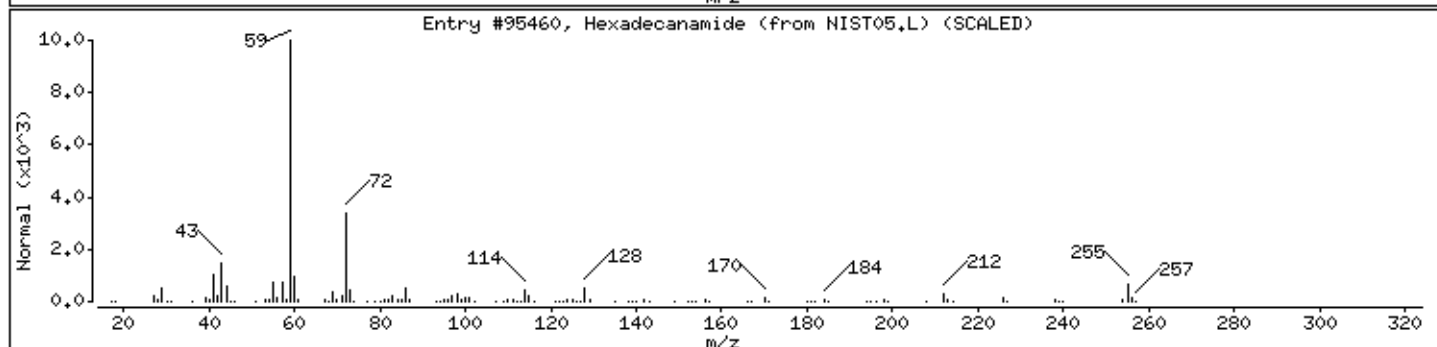
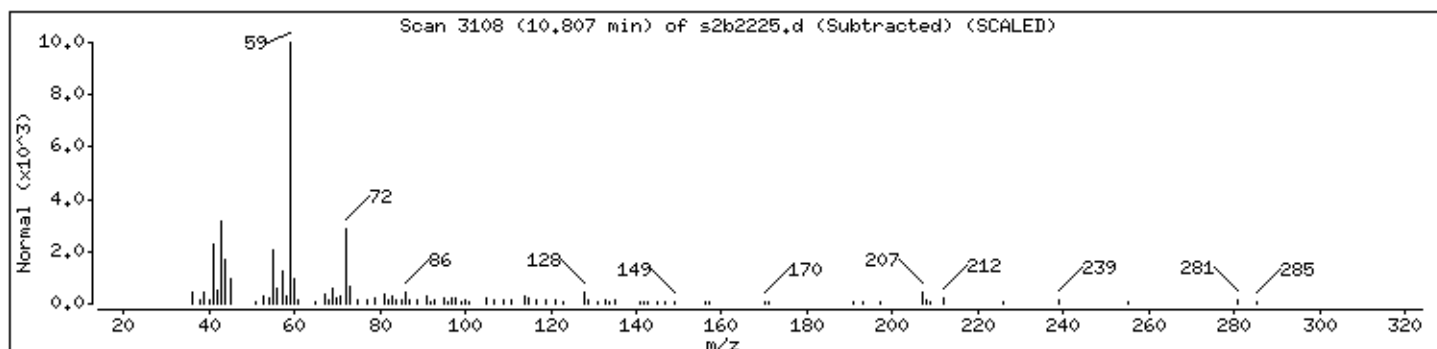
Volume Injected (uL): 0.5

Operator: AGS1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Hexadecanamide	629-54-9	NIST05.L	95460	86	C16H33NO	255
Nonanamide	1120-07-6	NIST05.L	28226	80	C9H19NO	157
Pentadecanamide, 15-bromo-	1000163-86-1	NIST05.L	136212	78	C15H30BrNO	319



Date : 23-FEB-2010 00:34

Client ID: RE15-10-8365

Instrument: MSD2.i

Sample Info: 1246866005195429711SVH11ILANL

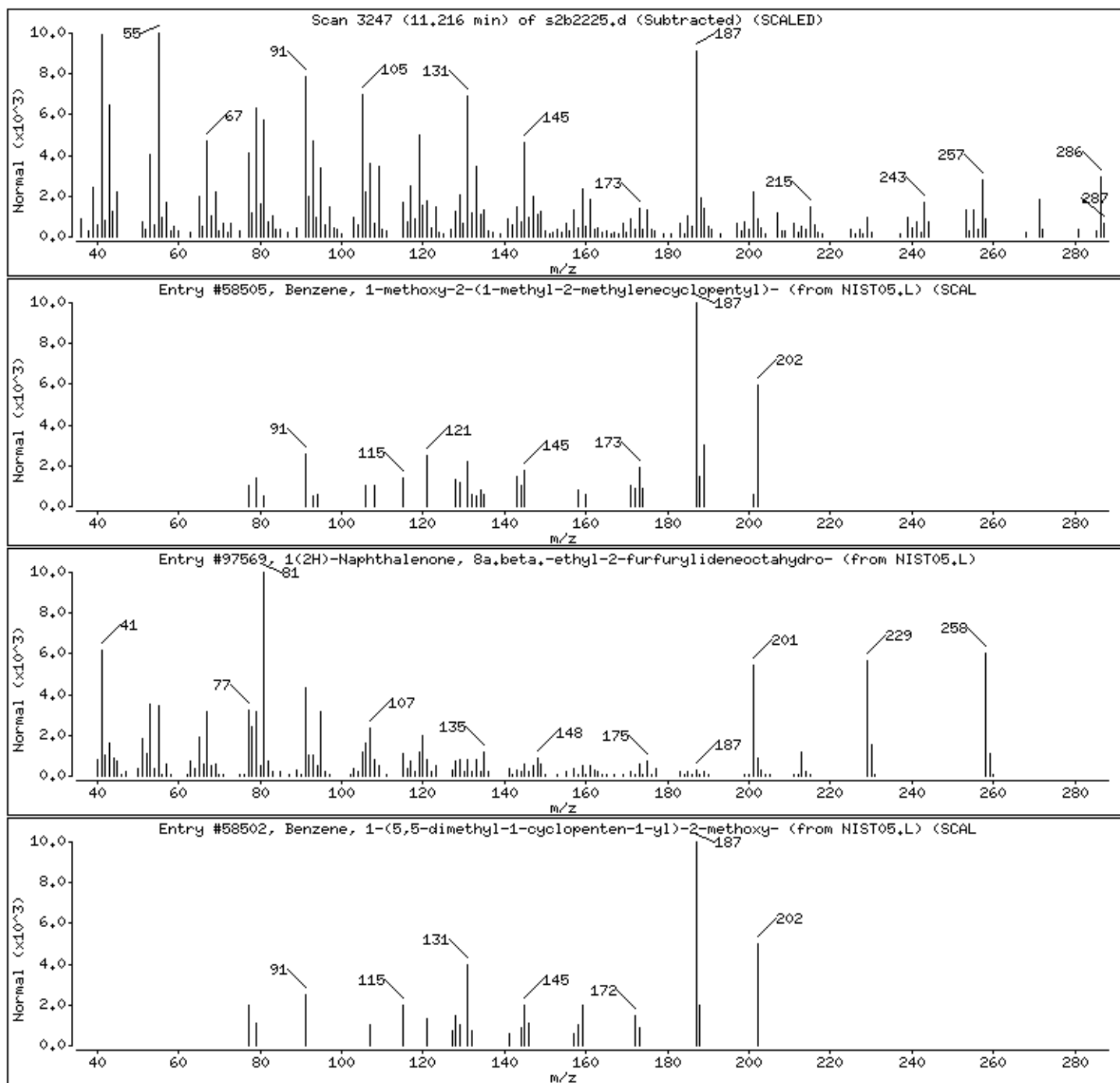
Volume Injected (uL): 0.5

Operator: AGS1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Benzene, 1-methoxy-2-(1-methyl-2-methyle	39877-94-6	NIST05.L	58505	47	C14H18O	202
1(2H)-Naphthalenone, 8a,beta,-ethyl-2-fu	17429-51-5	NIST05.L	97569	35	C17H22O2	258
Benzene, 1-(5,5-dimethyl-1-cyclopenten-1	39877-93-5	NIST05.L	58502	35	C14H18O	202



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

Page 1 of 3

**SDG Number:** 10-1758  
**Lab Sample ID:** 246866002

**Date Collected:** 02/09/2010 12:00  
**Date Received:** 02/11/2010 09:20  
**Client:** LANL010  
**Method:** SW846 8270C  
**Inst:** MSD2.I  
**Analyst:** AGS1  
**Aliquot:** 30.19 g  
**Column:** J&W DB-5MS

**Matrix:** R  
**%Moisture:** 18  
**Project:** LANL01004  
**SOP Ref:** GL-OA-E-009  
**Dilution:** 1  
**Inj. Vol:** .5 uL  
**Final Volume:** 1 mL  
**Level:** LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	404	ug/kg	80.8	404
108-95-2	Phenol	U	404	ug/kg	80.8	404
95-57-8	2-Chlorophenol	U	404	ug/kg	80.8	404
106-46-7	1,4-Dichlorobenzene	U	404	ug/kg	80.8	404
621-64-7	N-Nitrosodipropylamine	U	404	ug/kg	80.8	404
59-50-7	4-Chloro-3-methylphenol	U	404	ug/kg	80.8	404
83-32-9	Acenaphthene	U	40.4	ug/kg	13.3	40.4
121-14-2	2,4-Dinitrotoluene	U	404	ug/kg	40.4	404
100-02-7	4-Nitrophenol	U	404	ug/kg	133	404
87-86-5	Pentachlorophenol	U	404	ug/kg	101	404
129-00-0	Pyrene	U	40.4	ug/kg	12.1	40.4
110-86-1	Pyridine	U	404	ug/kg	80.8	404
62-53-3	Aniline	U	404	ug/kg	121	404
111-44-4	bis(2-Chloroethyl) ether	U	404	ug/kg	80.8	404
541-73-1	1,3-Dichlorobenzene	U	404	ug/kg	80.8	404
100-51-6	Benzyl alcohol	U	404	ug/kg	121	404
95-50-1	1,2-Dichlorobenzene	U	404	ug/kg	80.8	404
108-60-1	bis(2-Chloroisopropyl)ether	U	404	ug/kg	80.8	404
95-48-7	o-Cresol	U	404	ug/kg	80.8	404
65794-96-9	m,p-Cresols	U	404	ug/kg	121	404
67-72-1	Hexachloroethane	U	404	ug/kg	80.8	404
98-95-3	Nitrobenzene	U	404	ug/kg	80.8	404
78-59-1	Isophorone	U	404	ug/kg	80.8	404
88-75-5	2-Nitrophenol	U	404	ug/kg	80.8	404
105-67-9	2,4-Dimethylphenol	U	404	ug/kg	141	404
111-91-1	bis(2-Chloroethoxy)methane	U	404	ug/kg	80.8	404
120-83-2	2,4-Dichlorophenol	U	404	ug/kg	80.8	404
65-85-0	Benzoic acid	U	808	ug/kg	202	808
91-20-3	Naphthalene	U	40.4	ug/kg	12.1	40.4
106-47-8	4-Chloroaniline	U	404	ug/kg	80.8	404
87-68-3	Hexachlorobutadiene	U	404	ug/kg	80.8	404
91-57-6	2-Methylnaphthalene	U	40.4	ug/kg	8.08	40.4
77-47-4	Hexachlorocyclopentadiene	U	404	ug/kg	80.8	404
88-06-2	2,4,6-Trichlorophenol	U	404	ug/kg	80.8	404
95-95-4	2,4,5-Trichlorophenol	U	404	ug/kg	80.8	404
91-58-7	2-Chloronaphthalene	U	40.4	ug/kg	13.3	40.4
88-74-4	2-Nitroaniline	U	404	ug/kg	80.8	404
99-09-2	<i>o</i> -Nitroaniline	U	404	ug/kg	80.8	404
	3-Nitroaniline					

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

**SDG Number:** 10-1758  
**Lab Sample ID:** 246866002

**Date Collected:** 02/09/2010 12:00  
**Date Received:** 02/11/2010 09:20  
**Client:** LANL010  
**Method:** SW846 8270C  
**Inst:** MSD2.I  
**Analyst:** AGS1  
**Aliquot:** 30.19 g  
**Column:** J&W DB-5MS

**Matrix:** R  
**%Moisture:** 18  
**Project:** LANL01004  
**SOP Ref:** GL-OA-E-009  
**Dilution:** 1  
**Inj. Vol:** .5 uL  
**Final Volume:** 1 mL  
**Level:** LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
	Dimethylphthalate	U	404	ug/kg	80.8	404
606-20-2	2,6-Dinitrotoluene	U	404	ug/kg	40.4	404
208-96-8	Acenaphthylene	U	40.4	ug/kg	12.1	40.4
51-28-5	2,4-Dinitrophenol	U	808	ug/kg	153	808
132-64-9	Dibenzofuran	U	404	ug/kg	80.8	404
84-66-2	Diethylphthalate	U	404	ug/kg	80.8	404
86-73-7	Fluorene	U	40.4	ug/kg	12.1	40.4
7005-72-3	4-Chlorophenylphenylether	U	404	ug/kg	80.8	404
534-52-1	2-Methyl-4,6-dinitrophenol	U	404	ug/kg	80.8	404
100-01-6	4-Nitroaniline	U	404	ug/kg	121	404
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	404	ug/kg	80.8	404
122-66-7	Azobenzene	U	404	ug/kg	80.8	404
	<i>1,2-Diphenylhydrazine</i>					
101-55-3	4-Bromophenylphenylether	U	404	ug/kg	80.8	404
118-74-1	Hexachlorobenzene	U	404	ug/kg	80.8	404
85-01-8	Phenanthrene	U	40.4	ug/kg	12.1	40.4
120-12-7	Anthracene	U	40.4	ug/kg	8.08	40.4
84-74-2	Di-n-butylphthalate	U	404	ug/kg	80.8	404
206-44-0	Fluoranthene	U	40.4	ug/kg	12.1	40.4
85-68-7	Butylbenzylphthalate	U	404	ug/kg	80.8	404
56-55-3	Benzo(a)anthracene	U	40.4	ug/kg	12.1	40.4
91-94-1	3,3'-Dichlorobenzidine	U	404	ug/kg	121	404
218-01-9	Chrysene	U	40.4	ug/kg	12.1	40.4
117-81-7	bis(2-Ethylhexyl)phthalate	U	404	ug/kg	80.8	404
117-84-0	Di-n-octylphthalate	U	404	ug/kg	80.8	404
205-99-2	Benzo(b)fluoranthene	U	40.4	ug/kg	12.1	40.4
207-08-9	Benzo(k)fluoranthene	U	40.4	ug/kg	12.1	40.4
50-32-8	Benzo(a)pyrene	U	40.4	ug/kg	12.1	40.4
193-39-5	Indeno(1,2,3-cd)pyrene	U	40.4	ug/kg	12.1	40.4
53-70-3	Dibenzo(a,h)anthracene	U	40.4	ug/kg	12.1	40.4
191-24-2	Benzo(ghi)perylene	U	40.4	ug/kg	12.1	40.4
120-82-1	1,2,4-Trichlorobenzene	U	404	ug/kg	80.8	404

**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	1.73	179	ug/kg		J
	Unknown	1.98	170	ug/kg		J

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

Page 3 of 3

**SDG Number:** 10-1758  
**Lab Sample ID:** 246866002

**Date Collected:** 02/09/2010 12:00  
**Date Received:** 02/11/2010 09:20  
**Client:** LANL010  
**Method:** SW846 8270C  
**Inst:** MSD2.I  
**Analyst:** AGS1  
**Aliquot:** 30.19 g  
**Column:** J&W DB-5MS

**Matrix:** R  
**%Moisture:** 18  
**Project:** LANL01004  
**SOP Ref:** GL-OA-E-009  
**Dilution:** 1  
**Inj. Vol:** .5 uL  
**Final Volume:** 1 mL  
**Level:** LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
<b>Tentatively Identified Compound Summary</b>						
CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
78-95-5	2-Propanone, 1-chloro-	2.14	250	ug/kg	91	NJ
	Unknown Aldol Condensate	3.18	602	ug/kg		JA
301-02-0	9-Octadecenamide, (Z)-	11.52	231	ug/kg	96	NJ
	Unknown	13.37	285	ug/kg		J

Data File: /chem/MSD2.i/s022210.b/s2b2209.d  
Report Date: 22-Feb-2010 19:14

Page 1

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Data file : /chem/MSD2.i/s022210.b/s2b2209.d  
Lab Smp Id: 246866002 Client Smp ID: RE15-10-8366  
Inj Date : 22-FEB-2010 17:48  
Operator : AGS1 Inst ID: MSD2.i  
Smp Info : |246866002|954297|1|SVM|1|LANL  
Misc Info : |MSD8270\_S|WBN100205-01|  
Comment : Column: J & W Scientific DB-5MS 25m x 0.2mm x 0.33um  
Method : /chem/MSD2.i/s022210.b/MSD2-M8270PAQA-010810a.m  
Meth Date : 22-Feb-2010 16:54 ann00964 Quant Type: ISTD  
Cal Date : 11-JAN-2010 20:43 Cal File: s2a0859.d  
Als bottle: 9  
Dil Factor: 1.00000  
Integrator: HP RTE Compound Sublist: 10-1758.sub  
Target Version: 3.50  
Processing Host: hpclp1

Concentration Formula:  $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vi} * \text{Ws} * (100 - \text{M}) / 100) * \text{CpndVariable}$

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.19000	weight of sample
M	18.00010	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG						CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE		ON-COLUMN	FINAL
							(ng/ul)	(ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	4.562	4.565	(1.000)	214580		40.0000	
* 29 Naphthalene-d8	136	5.825	5.830	(1.000)	737830		40.0000	
* 46 Acenaphthene-d10	164	7.683	7.691	(1.000)	468096		40.0000	
* 67 Phenanthrene-d10	188	9.287	9.293	(1.000)	847066		40.0000	
* 91 Chrysene-d12	240	12.218	12.232	(1.000)	769588		40.0000	
* 98 Perylene-d12	264	14.398	14.417	(1.000)	649248		40.0000	
\$ 3 2-Fluorophenol	112	3.427	3.415	(0.751)	375418		72.0994	2910
\$ 5 Phenol-d5	99	4.190	4.195	(0.918)	456516		65.5151	2650
\$ 20 Nitrobenzene-d5	82	5.093	5.102	(0.874)	227584		38.9297	1570
\$ 39 2-Fluorobiphenyl	172	6.951	6.954	(0.905)	492621		34.0145	1370
\$ 60 2,4,6-Tribromophenol	329	8.533	8.538	(1.111)	137674		68.0012	2750
\$ 81 p-Terphenyl-d14	244	10.997	10.998	(0.900)	634270		42.9096	1730

## ION RATIO REPORT

## SV REPORT

Data file: s2b2209.d

Report Date: 02/22/2010 18:18

Lab. ID: 246866002

SampleType: SAMPLE

Injection Date: 22-FEB-2010 17:48

Operator: AGS1

Instrument: MSD2.i

Sample Info: |246866002|954297|1|SVM|1|LANL

Miscellaneous Info: |MSD8270\_S|WBN100205-01|

Comment:

Method used: /chem/MSD2.i/s022210.b/MSD2-M8270PAQA-010810a.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-1758

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
4	Aniline		CAS#: 62-53-3			
66	25354	4.19	4.26	80-120	100	(T)
93	554	4.23	4.26	194-254	2	(Q)
-----						
17	N-Nitrosodipropylamine		CAS#: 621-64-7			
70	32161	5.09	4.95	80-120	100	(T)
42	24758	5.09	4.95	58-118	77	(T)
-----						
27	Benzoic acid		CAS#: 65-85-0			
105	376	5.56	5.59	80-120	100	( )
122	300	5.55	5.58	44-104	80	( )
77	390	5.55	5.58	46-106	104	( )
-----						
44	2,6-Dinitrotoluene		CAS#: 606-20-2			
165	60839	7.68	7.46	80-120	100	(T)
63	908	7.68	7.46	41-101	1	(QT)
-----						
50	2,4-Dinitrotoluene		CAS#: 121-14-2			
165	60839	7.68	7.90	80-120	100	(T)
89	745	7.69	7.89	51-111	1	(QT)
63	908	7.68	7.90	52-112	1	(QT)

Q qualifier indicates ion failed ratio requirement

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Data file : /chem/MSD2.i/s022210.b/s2b2209.d  
Lab Smp Id: 246866002 Client Smp ID: RE15-10-8366  
Inj Date : 22-FEB-2010 17:48  
Operator : AGS1 Inst ID: MSD2.i  
Smp Info : |246866002|954297|1|SVM|1|LANL  
Misc Info : |MSD8270\_S|WBN100205-01|  
Comment : Column: J & W Scientific DB-5MS 25m x 0.2mm x 0.33um  
Method : /chem/MSD2.i/s022210.b/MSD2-M8270PAQA-010810a.m  
Meth Date : 22-Feb-2010 16:54 ann00964 Quant Type: ISTD  
Cal Date : 11-JAN-2010 20:43 Cal File: s2a0859.d  
Als bottle: 9  
Dil Factor: 1.00000  
Integrator: HP RTE Compound Sublist: 10-1758.sub  
Target Version: 3.50  
Processing Host: hpclpl

Concentration Formula:  $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vi} * \text{Ws} * (100 - \text{M}) / 100) * \text{CpndVariable}$

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.19000	weight of sample
M	18.00010	% moisture

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
=====	====	=====	=====
* 10 1,4-Dichlorobenzene-d4	4.562	1381036	40.000
* 91 Chrysene-d12	12.218	1871628	40.000
* 98 Perylene-d12	14.398	2023721	40.000

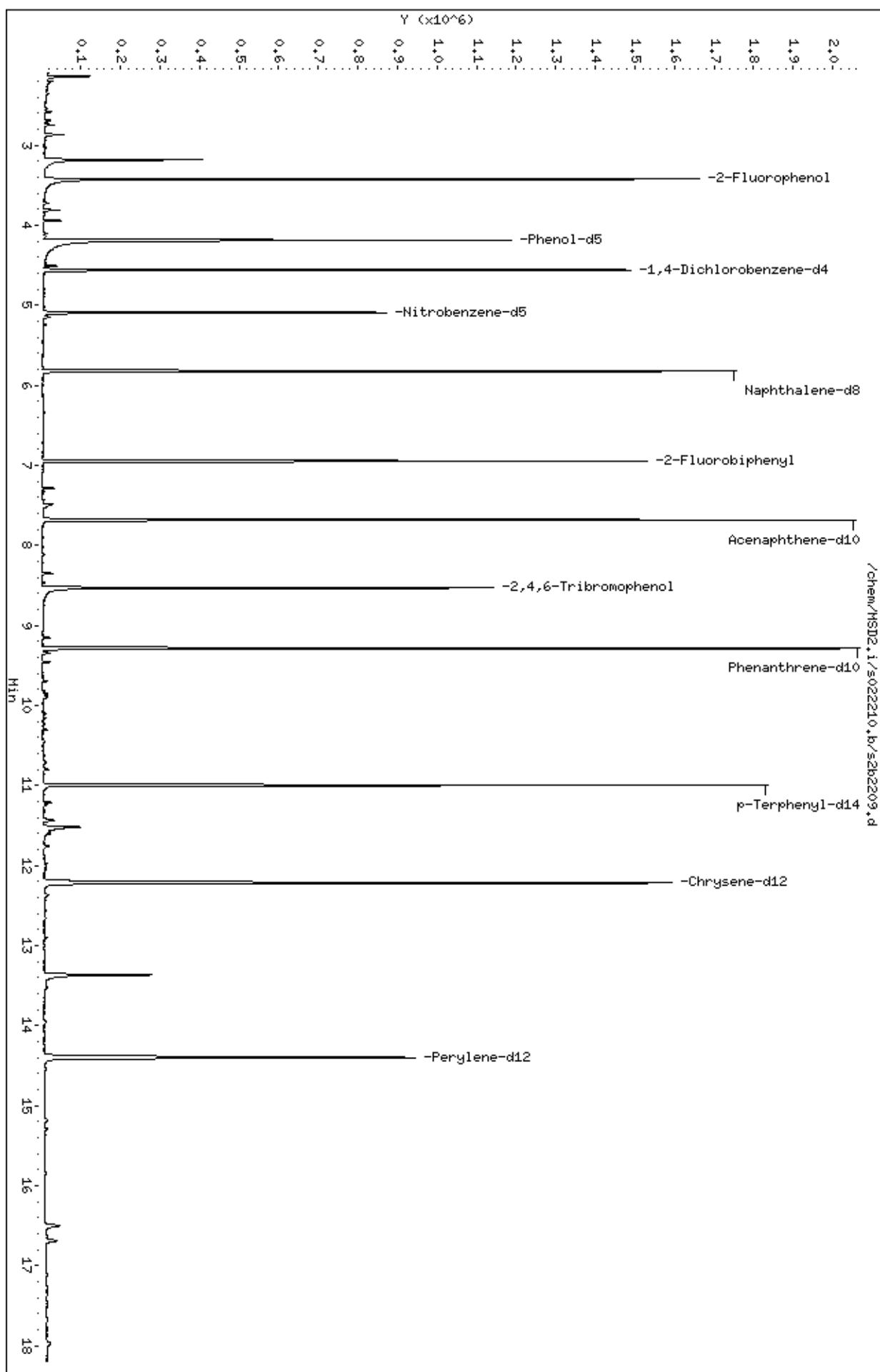
CONCENTRATIONS					QUANT		
RT	AREA	ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
----	----	-----	-----	----	-----	-----	-----



RT	AREA	CONCENTRATIONS		QUAL	QUANT		CPND #
		ON-COL(ng/ul)	FINAL(ug/Kg)		LIBRARY	LIB ENTRY	
====	====	=====	=====	====	=====	=====	=====
Unknown					CAS #:		
1.733	152757	4.42440272	179	0		0	10
Unknown					CAS #:		
1.980	145558	4.21590809	170	0		0	10
2-Propanone, 1-chloro-					CAS #: 78-95-5		
2.141	213503	6.18384985	250	91	NIST05.L	2355	10
Unknown Aldol Condensate					CAS #:		
3.184	514231	14.8940423	602	0		0	10
9-Octadecenamide, (Z)-					CAS #: 301-02-0		
11.519	268126	5.73032332	231	96	NIST05.L	112655	91
Unknown					CAS #:		
13.368	356765	7.05166360	285	0		0	98

Data File: /chem/HSD2.i/s022210.b/s2b2209.d  
Date : 22-FEB-2010 17:48  
Client ID: RE15-10-8366  
Sample Info: 124686002195429711SVH11LNL  
Volume Injected (uL): 0.5  
Column phase: 3uM DB-5MS

Instrument: HSD2.i  
Operator: AGS1  
Column diameter: 0.20



Date : 22-FEB-2010 17:48

Client ID: RE15-10-8366

Instrument: MSD2.i

Sample Info: 1246866002195429711SVH11ILANL

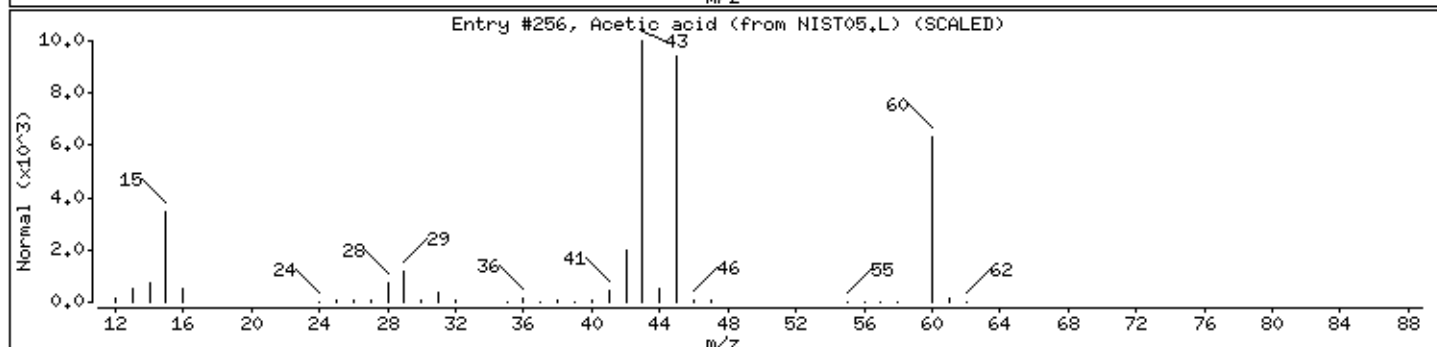
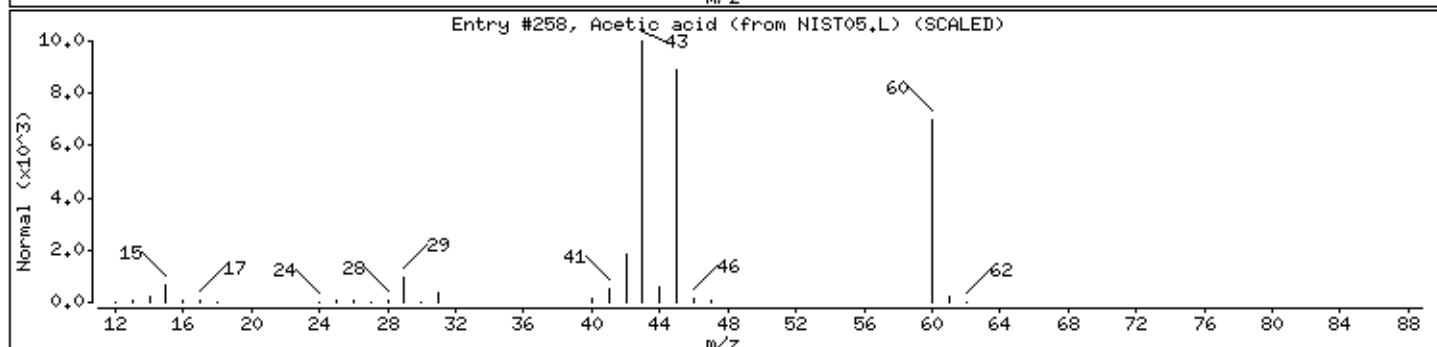
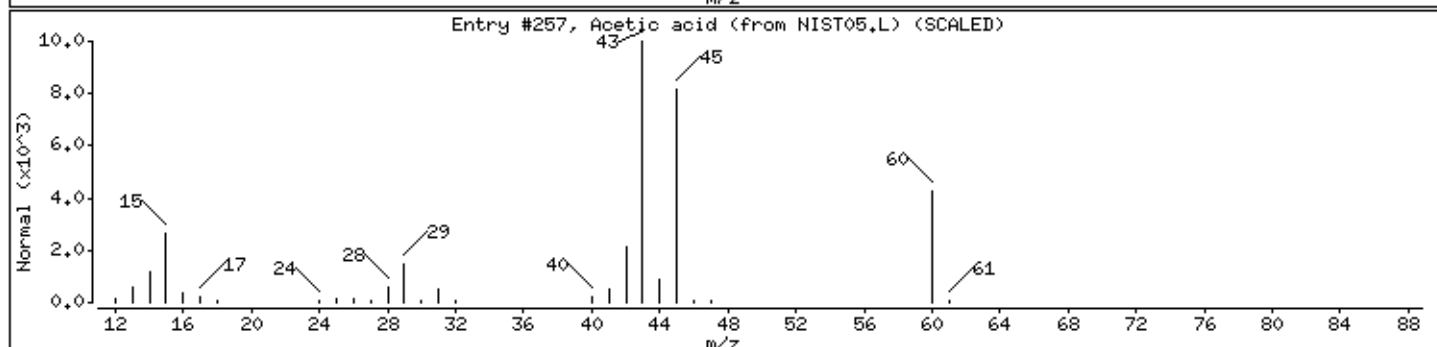
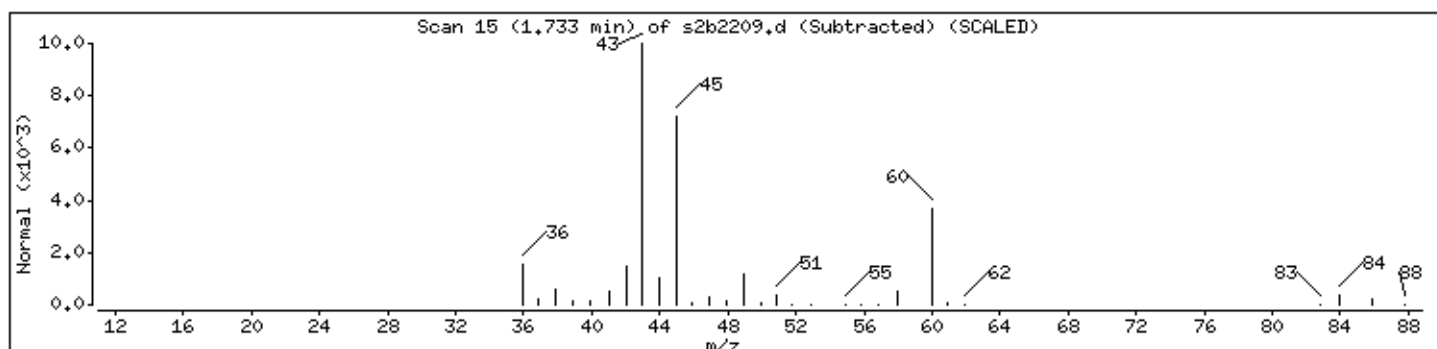
Volume Injected (uL): 0.5

Operator: AGS1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Acetic acid	64-19-7	NIST05.L	257	72	C2H4O2	60
Acetic acid	64-19-7	NIST05.L	258	72	C2H4O2	60
Acetic acid	64-19-7	NIST05.L	256	64	C2H4O2	60



Date : 22-FEB-2010 17:48

Client ID: RE15-10-8366

Instrument: MSD2.i

Sample Info: 1246866002195429711ISVH11ILANL

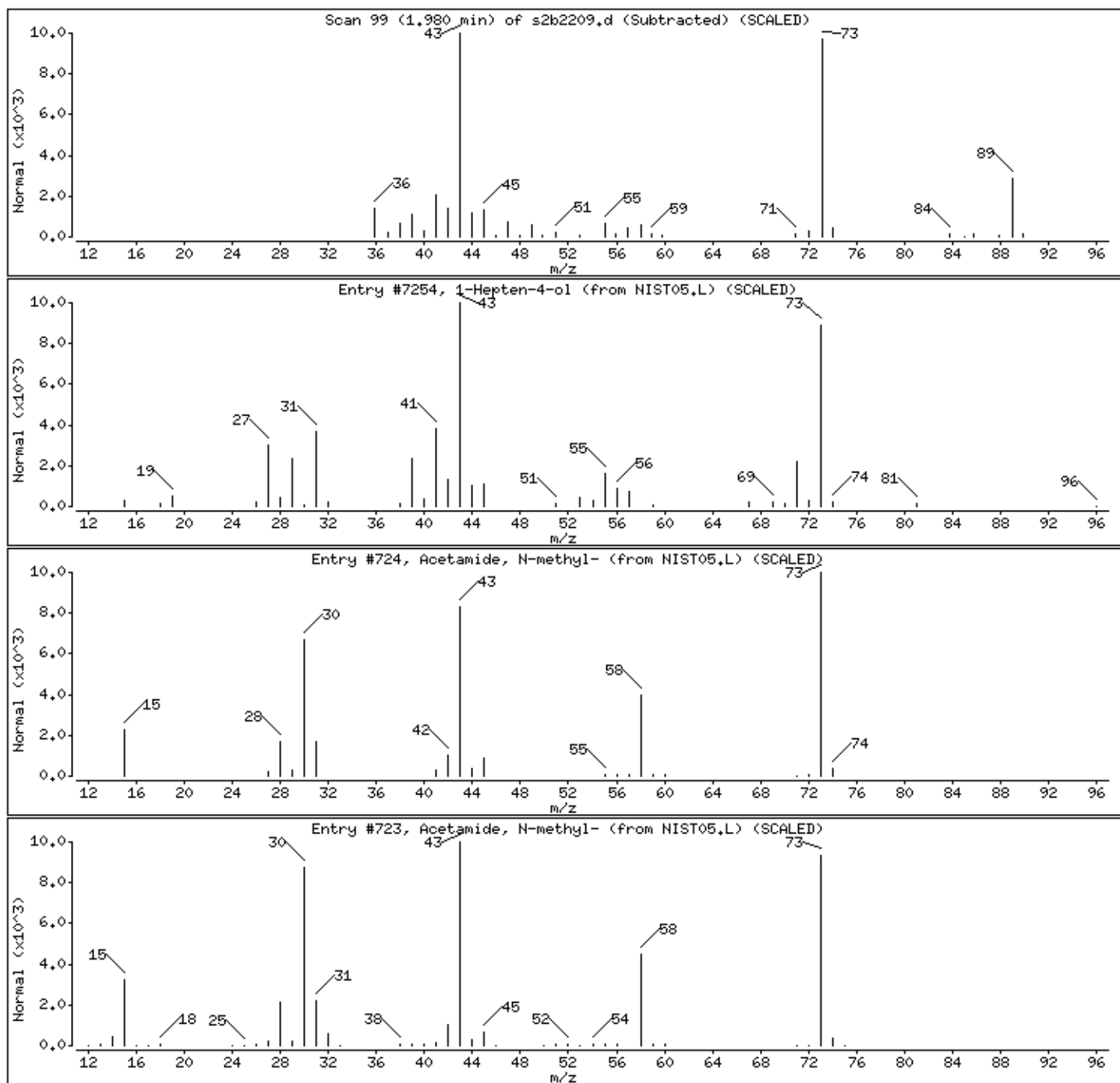
Volume Injected (uL): 0.5

Operator: AGS1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1-Hepten-4-ol	3521-91-3	NIST05.L	7254	47	C7H14O	114
Acetamide, N-methyl-	79-16-3	NIST05.L	724	46	C3H7NO	73
Acetamide, N-methyl-	79-16-3	NIST05.L	723	38	C3H7NO	73



Date : 22-FEB-2010 17:48

Client ID: RE15-10-8366

Instrument: MSD2.i

Sample Info: 1246866002195429711ISVH11ILANL

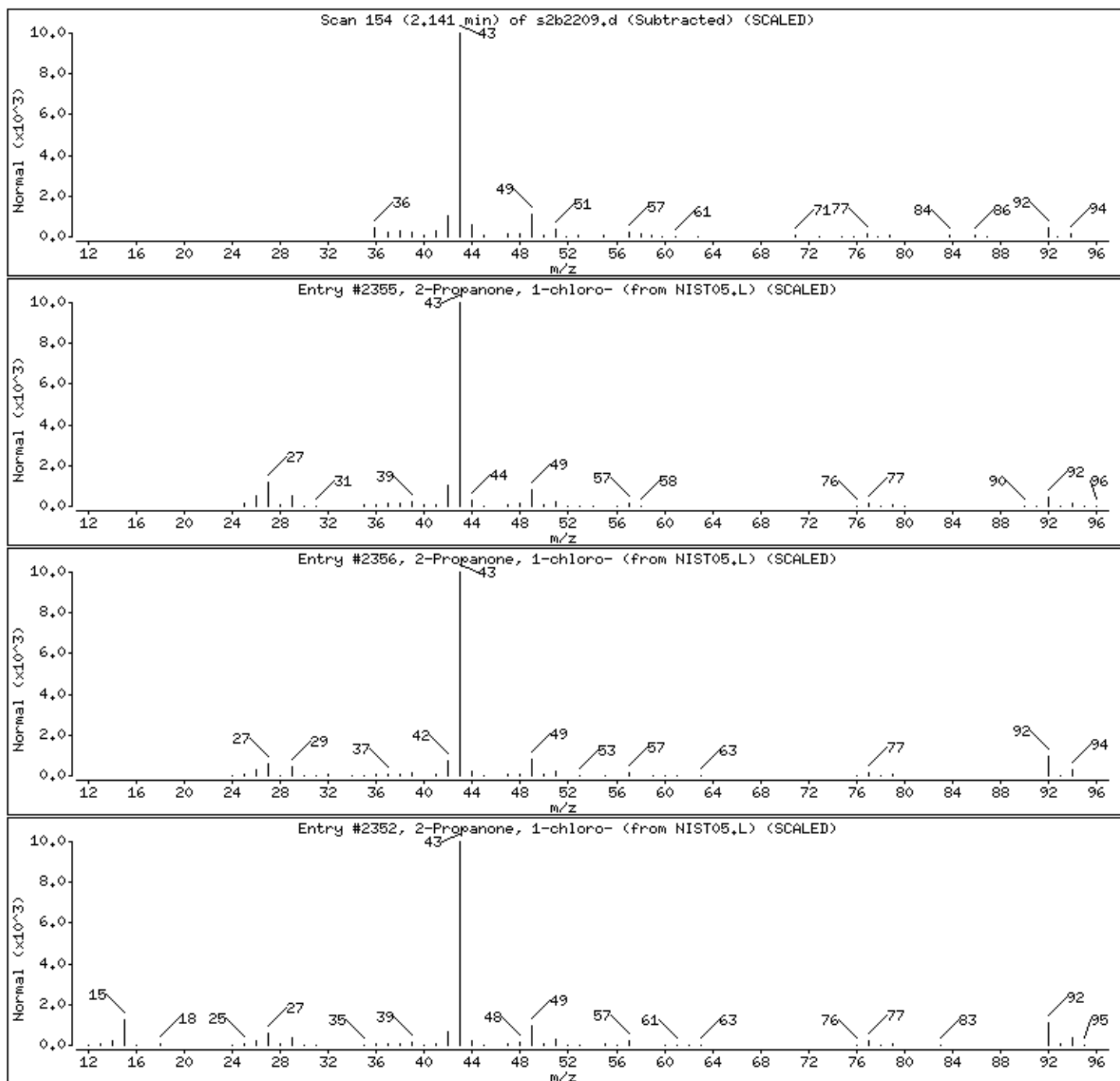
Volume Injected (uL): 0.5

Operator: AGS1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
2-Propanone, 1-chloro-	78-95-5	NIST05.L	2355	91	C3H5ClO	92
2-Propanone, 1-chloro-	78-95-5	NIST05.L	2356	78	C3H5ClO	92
2-Propanone, 1-chloro-	78-95-5	NIST05.L	2352	78	C3H5ClO	92



Date : 22-FEB-2010 17:48

Client ID: RE15-10-8366

Instrument: MSD2.i

Sample Info: 1246866002195429711ISVH11ILANL

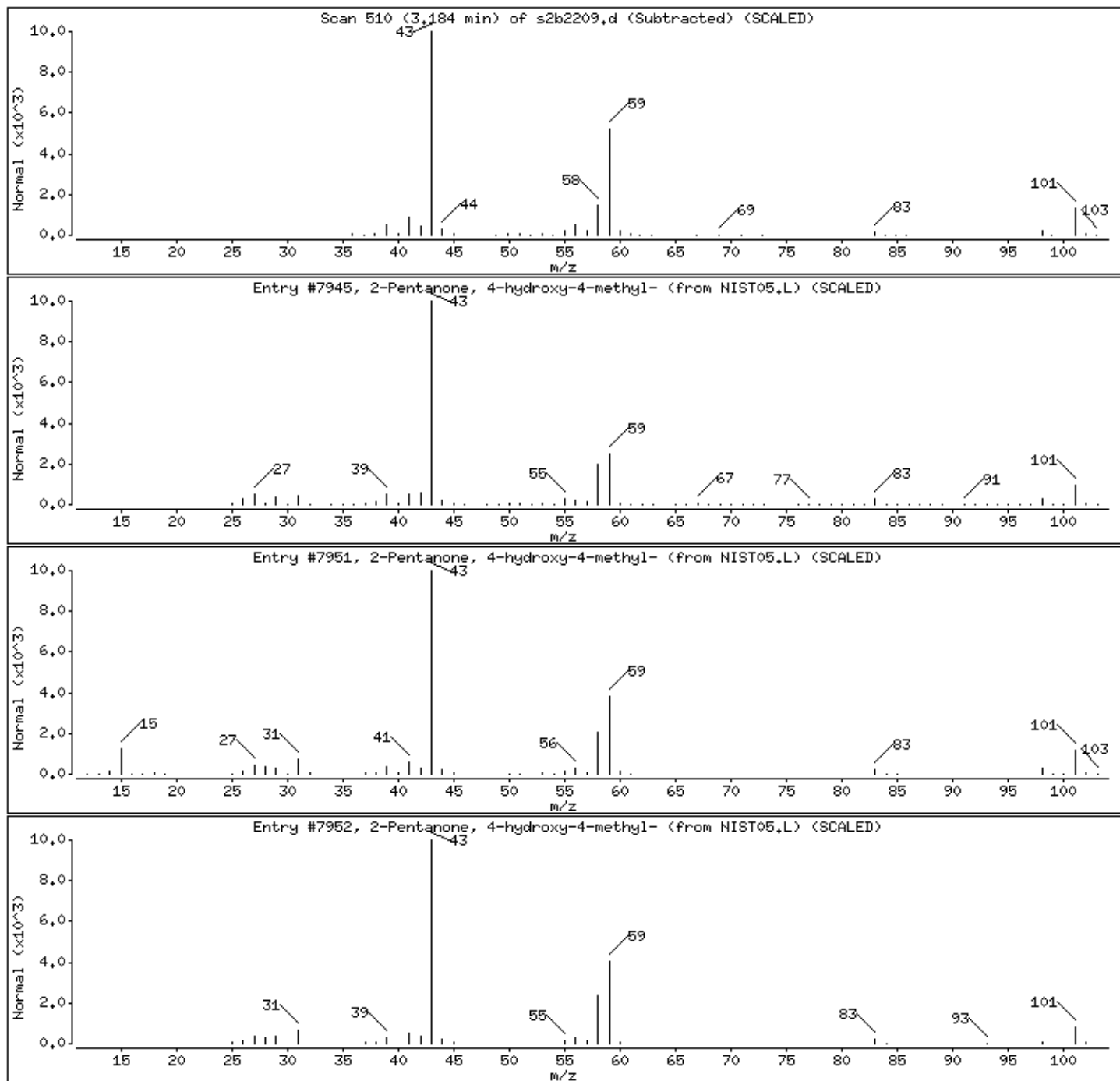
Volume Injected (uL): 0.5

Operator: AGS1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7945	59	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	50	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	50	C6H12O2	116



Date : 22-FEB-2010 17:48

Client ID: RE15-10-8366

Instrument: MSD2.i

Sample Info: 1246866002195429711ISVH11ILANL

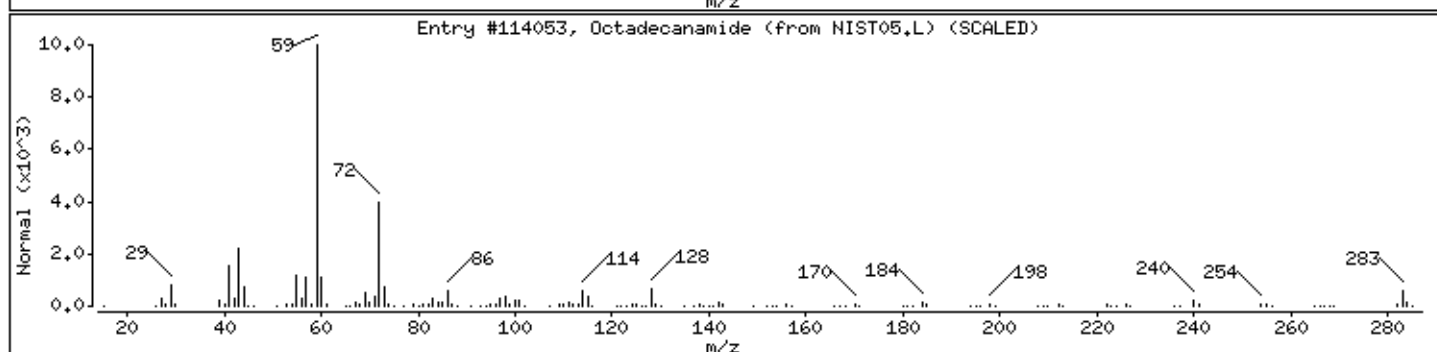
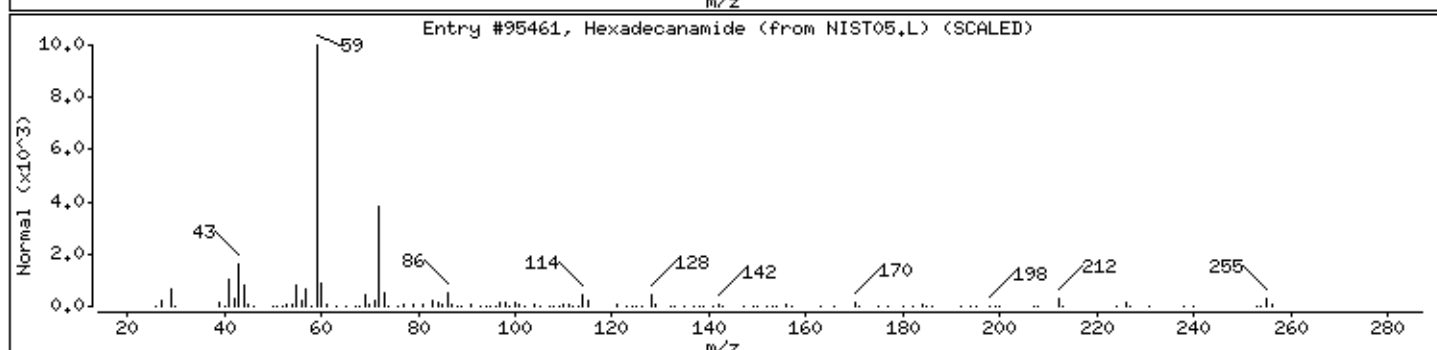
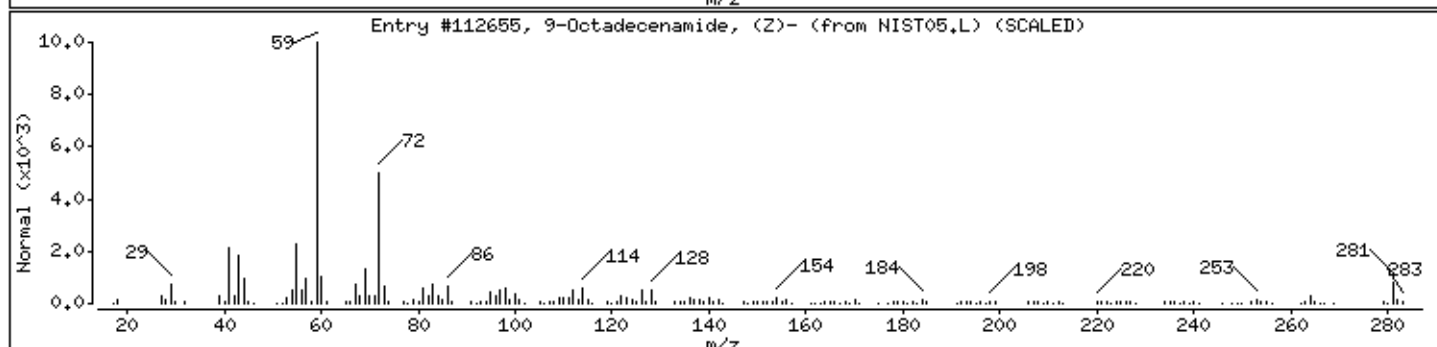
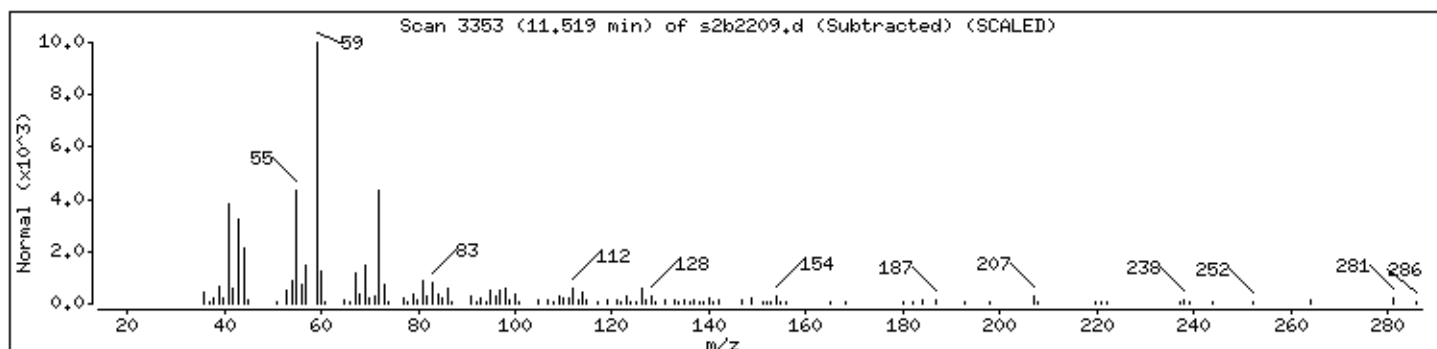
Volume Injected (uL): 0.5

Operator: AGS1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
9-Octadecenamide, (Z)-	301-02-0	NIST05.L	112655	96	C18H35NO	281
Hexadecanamide	629-54-9	NIST05.L	95461	64	C16H33NO	255
Octadecanamide	124-26-5	NIST05.L	114053	64	C18H37NO	283



Date : 22-FEB-2010 17:48

Client ID: RE15-10-8366

Instrument: MSD2.i

Sample Info: 1246866002195429711ISVH11ILANL

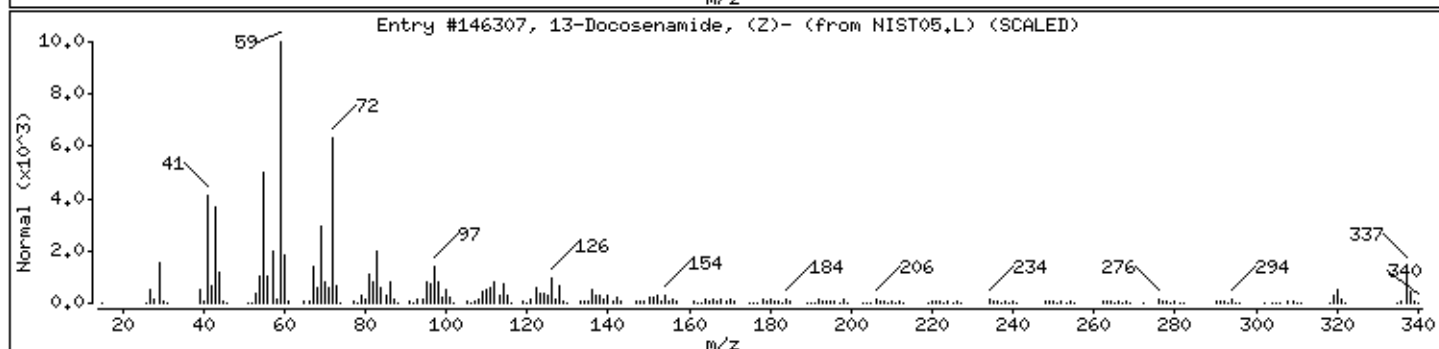
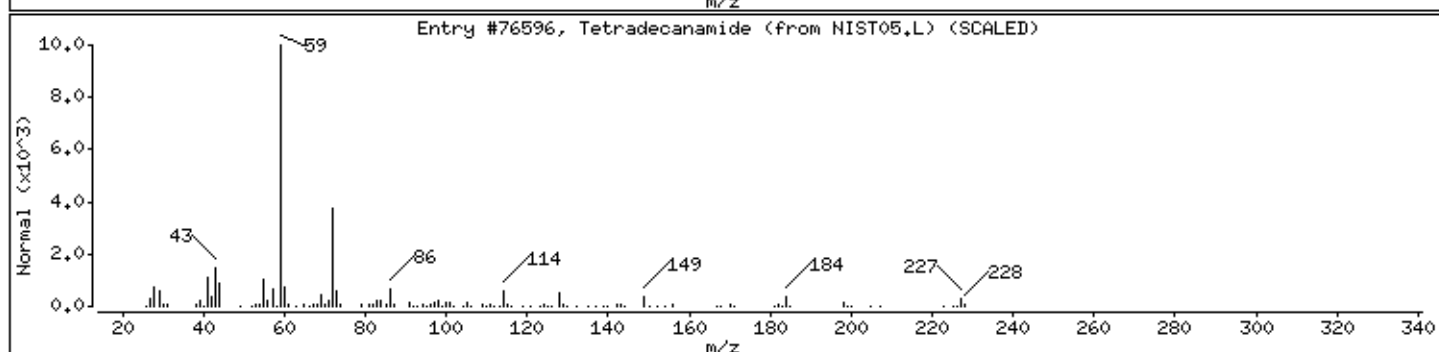
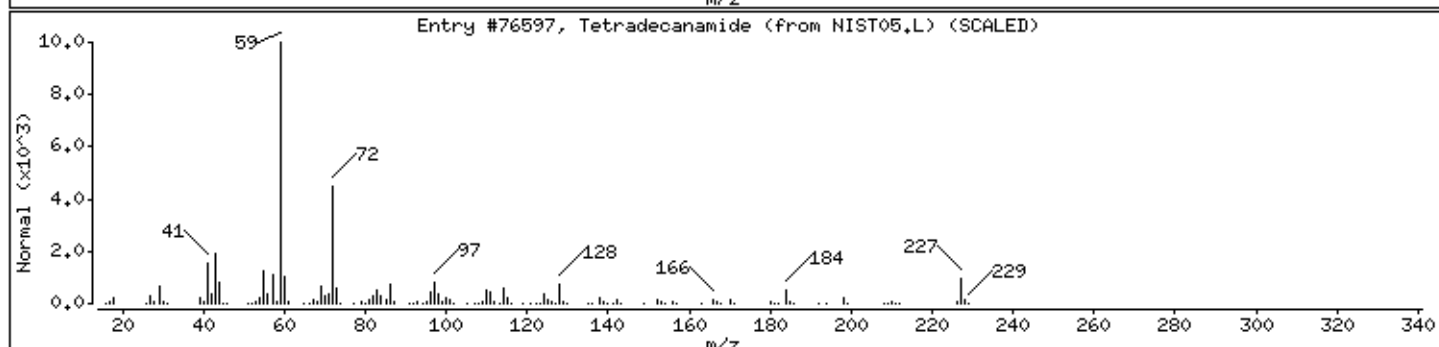
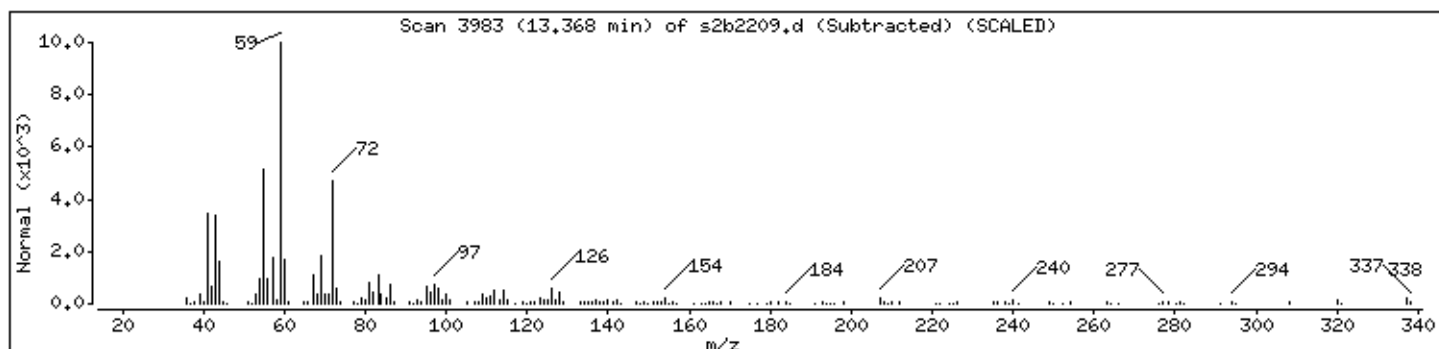
Volume Injected (uL): 0.5

Operator: AGS1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Tetradecanamide	638-58-4	NIST05.L	76597	72	C14H29NO	227
Tetradecanamide	638-58-4	NIST05.L	76596	72	C14H29NO	227
13-Docosenamide, (Z)-	112-84-5	NIST05.L	146307	72	C22H43NO	337





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

Page 1 of 3

**SDG Number:** 10-1758  
**Lab Sample ID:** 246866003

**Date Collected:** 02/09/2010 12:00  
**Date Received:** 02/11/2010 09:20  
**Client:** LANL010  
**Method:** SW846 8270C  
**Inst:** MSD2.I  
**Analyst:** AGS1  
**Aliquot:** 30.04 g  
**Column:** J&W DB-5MS

**Matrix:** R  
**%Moisture:** 19.3  
**Project:** LANL01004  
**SOP Ref:** GL-OA-E-009  
**Dilution:** 1  
**Inj. Vol:** .5 uL  
**Final Volume:** 1 mL  
**Level:** LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	413	ug/kg	82.5	413
108-95-2	Phenol	U	413	ug/kg	82.5	413
95-57-8	2-Chlorophenol	U	413	ug/kg	82.5	413
106-46-7	1,4-Dichlorobenzene	U	413	ug/kg	82.5	413
621-64-7	N-Nitrosodipropylamine	U	413	ug/kg	82.5	413
59-50-7	4-Chloro-3-methylphenol	U	413	ug/kg	82.5	413
83-32-9	Acenaphthene	U	41.3	ug/kg	13.6	41.3
121-14-2	2,4-Dinitrotoluene	U	413	ug/kg	41.3	413
100-02-7	4-Nitrophenol	U	413	ug/kg	136	413
87-86-5	Pentachlorophenol	U	413	ug/kg	103	413
129-00-0	Pyrene	U	41.3	ug/kg	12.4	41.3
110-86-1	Pyridine	U	413	ug/kg	82.5	413
62-53-3	Aniline	U	413	ug/kg	124	413
111-44-4	bis(2-Chloroethyl) ether	U	413	ug/kg	82.5	413
541-73-1	1,3-Dichlorobenzene	U	413	ug/kg	82.5	413
100-51-6	Benzyl alcohol	U	413	ug/kg	124	413
95-50-1	1,2-Dichlorobenzene	U	413	ug/kg	82.5	413
108-60-1	bis(2-Chloroisopropyl)ether	U	413	ug/kg	82.5	413
95-48-7	o-Cresol	U	413	ug/kg	82.5	413
65794-96-9	m,p-Cresols	U	413	ug/kg	124	413
67-72-1	Hexachloroethane	U	413	ug/kg	82.5	413
98-95-3	Nitrobenzene	U	413	ug/kg	82.5	413
78-59-1	Isophorone	U	413	ug/kg	82.5	413
88-75-5	2-Nitrophenol	U	413	ug/kg	82.5	413
105-67-9	2,4-Dimethylphenol	U	413	ug/kg	144	413
111-91-1	bis(2-Chloroethoxy)methane	U	413	ug/kg	82.5	413
120-83-2	2,4-Dichlorophenol	U	413	ug/kg	82.5	413
65-85-0	Benzoic acid	U	825	ug/kg	206	825
91-20-3	Naphthalene	U	41.3	ug/kg	12.4	41.3
106-47-8	4-Chloroaniline	U	413	ug/kg	82.5	413
87-68-3	Hexachlorobutadiene	U	413	ug/kg	82.5	413
91-57-6	2-Methylnaphthalene	U	41.3	ug/kg	8.25	41.3
77-47-4	Hexachlorocyclopentadiene	U	413	ug/kg	82.5	413
88-06-2	2,4,6-Trichlorophenol	U	413	ug/kg	82.5	413
95-95-4	2,4,5-Trichlorophenol	U	413	ug/kg	82.5	413
91-58-7	2-Chloronaphthalene	U	41.3	ug/kg	13.6	41.3
88-74-4	2-Nitroaniline	U	413	ug/kg	82.5	413
99-09-2	<i>o</i> -Nitroaniline	U	413	ug/kg	82.5	413
	3-Nitroaniline					

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

**SDG Number:** 10-1758  
**Lab Sample ID:** 246866003

**Date Collected:** 02/09/2010 12:00  
**Date Received:** 02/11/2010 09:20  
**Client:** LANL010  
**Method:** SW846 8270C  
**Inst:** MSD2.I  
**Analyst:** AGS1  
**Aliquot:** 30.04 g  
**Column:** J&W DB-5MS

**Matrix:** R  
**%Moisture:** 19.3  
**Project:** LANL01004  
**SOP Ref:** GL-OA-E-009  
**Dilution:** 1  
**Inj. Vol:** .5 uL  
**Final Volume:** 1 mL  
**Level:** LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	<i>m</i> -Nitroaniline					
131-11-3	Dimethylphthalate	U	413	ug/kg	82.5	413
606-20-2	2,6-Dinitrotoluene	U	413	ug/kg	41.3	413
208-96-8	Acenaphthylene	U	41.3	ug/kg	12.4	41.3
51-28-5	2,4-Dinitrophenol	U	825	ug/kg	157	825
132-64-9	Dibenzofuran	U	413	ug/kg	82.5	413
84-66-2	Diethylphthalate	U	413	ug/kg	82.5	413
86-73-7	Fluorene	U	41.3	ug/kg	12.4	41.3
7005-72-3	4-Chlorophenylphenylether	U	413	ug/kg	82.5	413
534-52-1	2-Methyl-4,6-dinitrophenol	U	413	ug/kg	82.5	413
100-01-6	4-Nitroaniline	U	413	ug/kg	124	413
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	413	ug/kg	82.5	413
122-66-7	Azobenzene	U	413	ug/kg	82.5	413
	<i>1,2</i> -Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	413	ug/kg	82.5	413
118-74-1	Hexachlorobenzene	U	413	ug/kg	82.5	413
85-01-8	Phenanthrene	U	41.3	ug/kg	12.4	41.3
120-12-7	Anthracene	U	41.3	ug/kg	8.25	41.3
84-74-2	Di-n-butylphthalate	U	413	ug/kg	82.5	413
206-44-0	Fluoranthene	U	41.3	ug/kg	12.4	41.3
85-68-7	Butylbenzylphthalate	U	413	ug/kg	82.5	413
56-55-3	Benzo(a)anthracene	U	41.3	ug/kg	12.4	41.3
91-94-1	3,3'-Dichlorobenzidine	U	413	ug/kg	124	413
218-01-9	Chrysene	U	41.3	ug/kg	12.4	41.3
117-81-7	bis(2-Ethylhexyl)phthalate	U	413	ug/kg	82.5	413
117-84-0	Di-n-octylphthalate	U	413	ug/kg	82.5	413
205-99-2	Benzo(b)fluoranthene	U	41.3	ug/kg	12.4	41.3
207-08-9	Benzo(k)fluoranthene	U	41.3	ug/kg	12.4	41.3
50-32-8	Benzo(a)pyrene	U	41.3	ug/kg	12.4	41.3
193-39-5	Indeno(1,2,3-cd)pyrene	U	41.3	ug/kg	12.4	41.3
53-70-3	Dibenzo(a,h)anthracene	U	41.3	ug/kg	12.4	41.3
191-24-2	Benzo(ghi)perylene	U	41.3	ug/kg	12.4	41.3
120-82-1	1,2,4-Trichlorobenzene	U	413	ug/kg	82.5	413

**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	3.19	645	ug/kg		J
7785-70-8	1R-.alpha.-Pinene	3.94	195	ug/kg	98	NJ

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

Page 3 of 3

**SDG Number:** 10-1758  
**Lab Sample ID:** 246866003

**Date Collected:** 02/09/2010 12:00  
**Date Received:** 02/11/2010 09:20  
**Client:** LANL010  
**Method:** SW846 8270C  
**Inst:** MSD2.I  
**Analyst:** AGS1  
**Aliquot:** 30.04 g  
**Column:** J&W DB-5MS

**Matrix:** R  
**%Moisture:** 19.3  
**Project:** LANL01004  
**SOP Ref:** GL-OA-E-009  
**Dilution:** 1  
**Inj. Vol:** .5 uL  
**Final Volume:** 1 mL  
**Level:** LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
<b>Tentatively Identified Compound Summary</b>						
CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
498-15-7	Bicyclo[4.1.0]hept-3-ene, 3,7,7-trimethy	4.51	224	ug/kg	97	NJ
1235-74-1	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	11.54	762	ug/kg	98	NJ

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Data file : /chem/MSD2.i/s022210.b/s2b2223.d  
Lab Smp Id: 246866003 Client Smp ID: RE15-10-8367  
Inj Date : 22-FEB-2010 23:44  
Operator : AGS1 Inst ID: MSD2.i  
Smp Info : |246866003|954297|1|SVM|1|LANL  
Misc Info : |MSD8270\_S|WBN100205-01|  
Comment : Column: J & W Scientific DB-5MS 25m x 0.2mm x 0.33um  
Method : /chem/MSD2.i/s022210.b/MSD2-M8270PAQA-010810a.m  
Meth Date : 22-Feb-2010 16:54 ann00964 Quant Type: ISTD  
Cal Date : 11-JAN-2010 20:43 Cal File: s2a0859.d  
Als bottle: 23  
Dil Factor: 1.00000  
Integrator: HP RTE Compound Sublist: 10-1758.sub  
Target Version: 3.50  
Processing Host: kilroy

Concentration Formula:  $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vi} * \text{Ws} * (100 - \text{M}) / 100) * \text{CpndVariable}$

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.04000	weight of sample
M	19.30750	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG					CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	4.563	4.565	(1.000)	252941	40.0000	
* 29 Naphthalene-d8	136	5.826	5.830	(1.000)	874748	40.0000	
* 46 Acenaphthene-d10	164	7.685	7.691	(1.000)	561118	40.0000	
* 67 Phenanthrene-d10	188	9.293	9.293	(1.000)	1025039	40.0000	
* 91 Chrysene-d12	240	12.224	12.232	(1.000)	867408	40.0000	
* 98 Perylene-d12	264	14.407	14.417	(1.000)	531566	40.0000	
\$ 3 2-Fluorophenol	112	3.431	3.415	(0.752)	445265	72.5446	2990
\$ 5 Phenol-d5	99	4.196	4.195	(0.920)	545601	66.4249	2740
\$ 20 Nitrobenzene-d5	82	5.093	5.102	(0.874)	260456	37.5792	1550
\$ 39 2-Fluorobiphenyl	172	6.952	6.954	(0.905)	588451	33.8955	1400
\$ 60 2,4,6-Tribromophenol	329	8.536	8.538	(1.111)	187066	77.0797	3180
\$ 81 p-Terphenyl-d14	244	10.999	10.998	(0.900)	764907	45.9118	1890

## ION RATIO REPORT

## SV REPORT

Data file: s2b2223.d

Report Date: 02/23/2010 09:15

Lab. ID: 246866003

SampleType: SAMPLE

Injection Date: 22-FEB-2010 23:44

Operator: AGS1

Instrument: MSD2.i

Sample Info: |246866003|954297|1|SVM|1|LANL

Miscellaneous Info: |MSD8270\_S|WBN100205-01|

Comment:

Method used: /chem/MSD2.i/s022210.b/MSD2-M8270PAQA-010810a.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-1758

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
4	Aniline		CAS#: 62-53-3			
66	32700	4.20	4.26	80-120	100	(T)
93	2543	4.23	4.26	194-254	8	(Q)
-----						
17	N-Nitrosodipropylamine		CAS#: 621-64-7			
70	37599	5.09	4.95	80-120	100	(T)
42	28927	5.09	4.95	58-118	77	(T)
-----						
27	Benzoic acid		CAS#: 65-85-0			
105	145	5.58	5.59	80-120	100	( )
122	667	5.54	5.58	44-104	457	(Q)
77	1069	5.54	5.58	46-106	733	(Q)
-----						
44	2,6-Dinitrotoluene		CAS#: 606-20-2			
165	72864	7.69	7.46	80-120	100	(T)
63	1188	7.69	7.46	41-101	2	(QT)
-----						
50	2,4-Dinitrotoluene		CAS#: 121-14-2			
165	72864	7.69	7.90	80-120	100	(T)
89	962	7.69	7.89	51-111	1	(QT)
63	1188	7.69	7.90	52-112	2	(QT)

Q qualifier indicates ion failed ratio requirement

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Data file : /chem/MSD2.i/s022210.b/s2b2223.d  
Lab Smp Id: 246866003 Client Smp ID: RE15-10-8367  
Inj Date : 22-FEB-2010 23:44  
Operator : AGS1 Inst ID: MSD2.i  
Smp Info : |246866003|954297|1|SVM|1|LANL  
Misc Info : |MSD8270\_S|WBN100205-01|  
Comment : Column: J & W Scientific DB-5MS 25m x 0.2mm x 0.33um  
Method : /chem/MSD2.i/s022210.b/MSD2-M8270PAQA-010810a.m  
Meth Date : 22-Feb-2010 16:54 ann00964 Quant Type: ISTD  
Cal Date : 11-JAN-2010 20:43 Cal File: s2a0859.d  
Als bottle: 23  
Dil Factor: 1.00000  
Integrator: HP RTE Compound Sublist: 10-1758.sub  
Target Version: 3.50  
Processing Host: kilroy

Concentration Formula: Amt \* DF \* Uf \* Vt / (Vi \* Ws \* (100 - M) / 100) \* CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.04000	weight of sample
M	19.30750	% moisture

Cpnd Variable Local Compound Variable

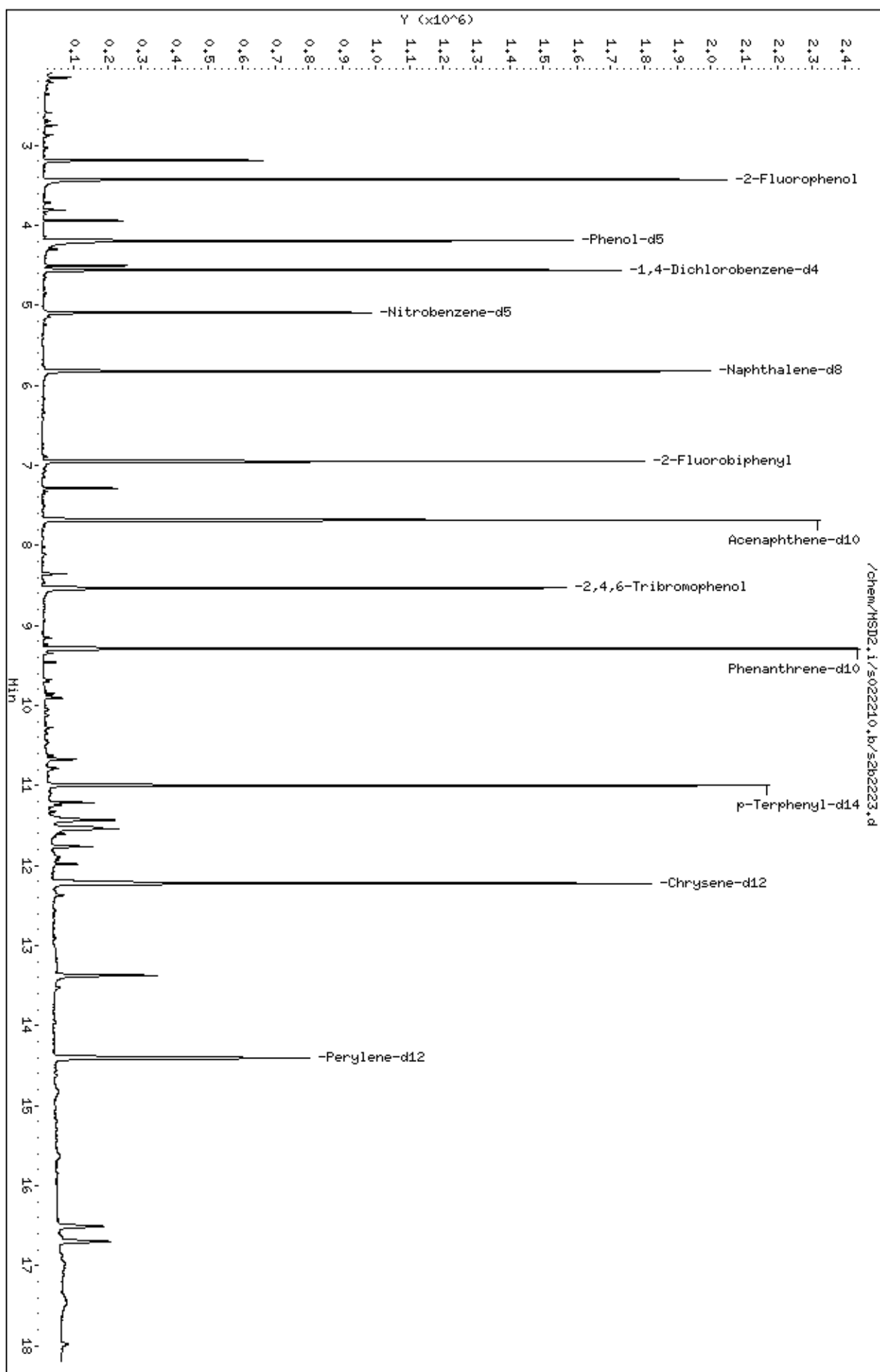
ISTD	RT	AREA	AMOUNT
=====	====	=====	=====
* 10 1,4-Dichlorobenzene-d4	4.563	1670198	40.000
* 67 Phenanthrene-d10	9.293	2575819	40.000

CONCENTRATIONS					QUANT		
RT	AREA	ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
----	----	-----	-----	----	-----	-----	-----
Unknown Aldol Condensate							
3.190	652568	15.6285206	645	0		0	10

RT	AREA	CONCENTRATIONS		QUAL	QUANT		CPND #
		ON-COL(ng/ul)	FINAL(ug/Kg)		LIBRARY	LIB ENTRY	
====	====	=====	=====	====	=====	=====	=====
1R-.alpha.-Pinene					CAS #: 7785-70-8		
3.944	196974	4.71738390	195	98	NIST05.L	15188	10
Bicyclo[4.1.0]hept-3-ene, 3,7,7-trimethy					CAS #: 498-15-7		
4.507	227124	5.43944933	224	97	NIST05.L	15369	10
1-Phenanthrenecarboxylic acid, 1,2,3,4,4					CAS #: 1235-74-1		
11.544	1189929	18.4784478	762	98	NIST05.L	133618	67

Data File: /chem/HSD2.i/s022210.b/s2b2223.d  
Date : 22-FEB-2010 23:44  
Client ID: RE15-10-8367  
Sample Info: 124686003195429711SVH11LNL  
Volume Injected (uL): 0.5  
Column phase: 3uM DB-5MS

Instrument: HSD2.i  
Operator: AGS1  
Column diameter: 0.20





Date : 22-FEB-2010 23:44

Client ID: RE15-10-8367

Instrument: MSD2.i

Sample Info: 1246866003195429711ISVH11ILANL

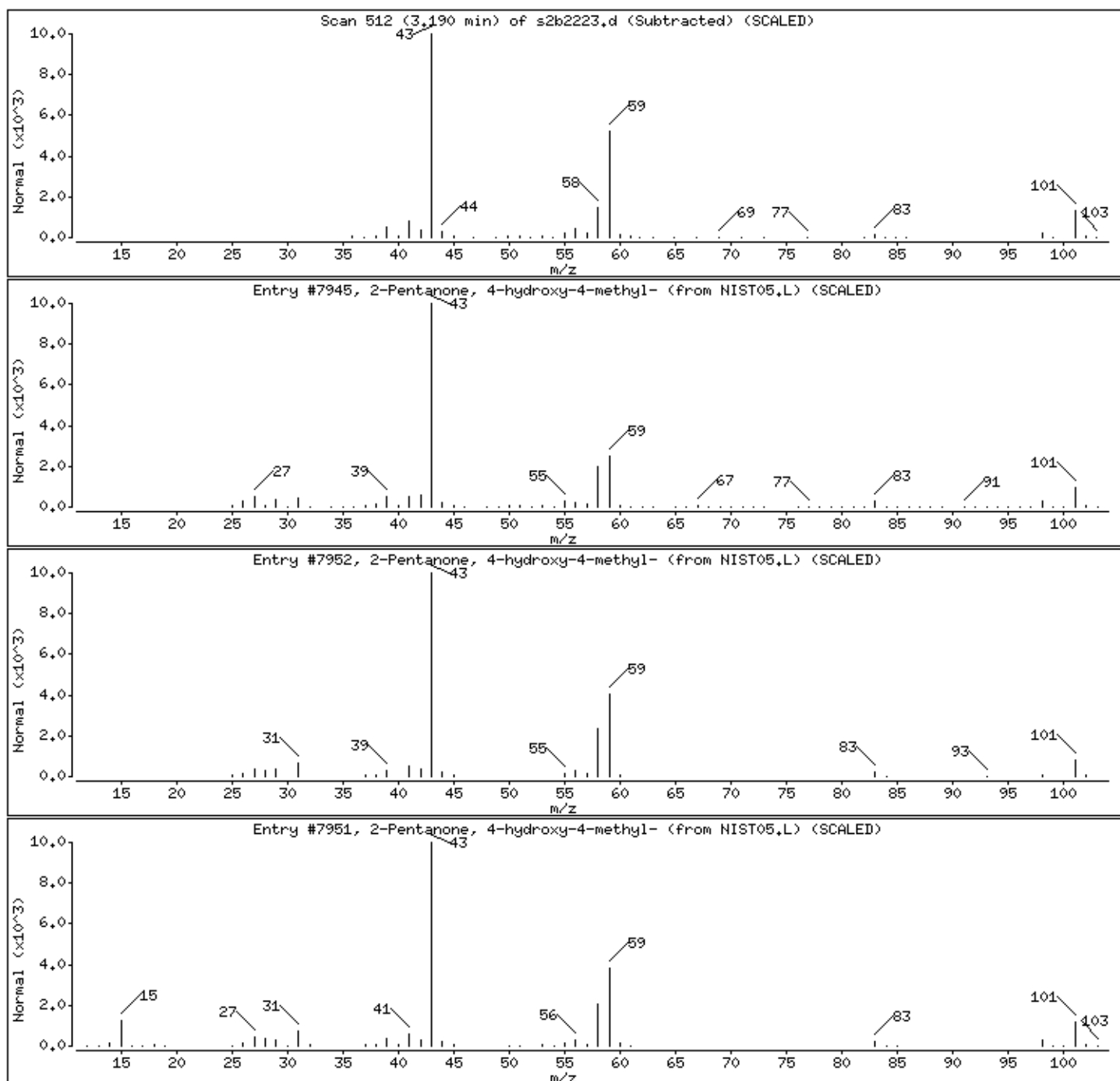
Volume Injected (uL): 0.5

Operator: AGS1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7945	59	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	50	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	50	C6H12O2	116



Date : 22-FEB-2010 23:44

Client ID: RE15-10-8367

Instrument: MSD2.i

Sample Info: 1246866003195429711ISVH11ILANL

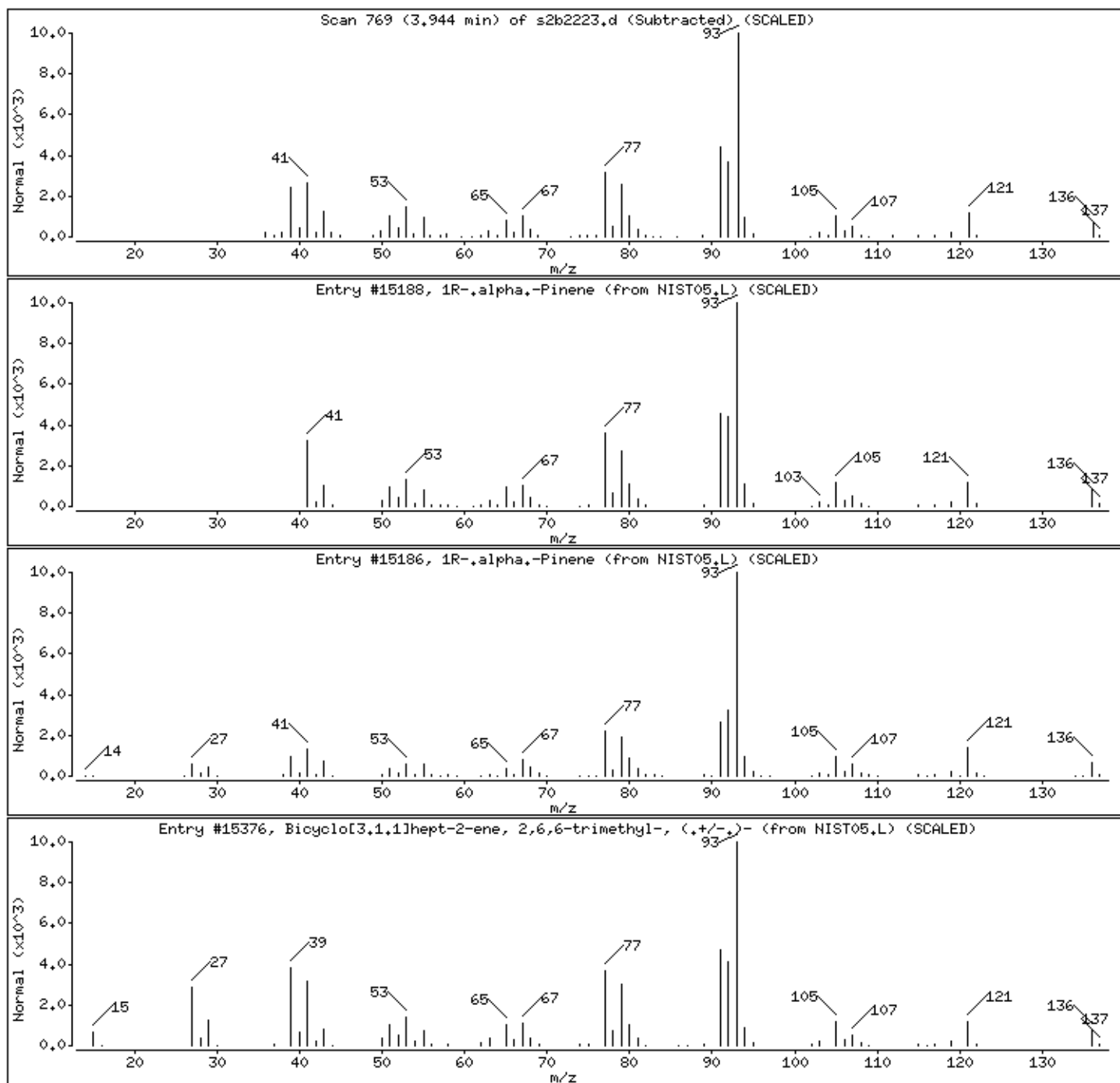
Volume Injected (uL): 0.5

Operator: AGS1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1R-.alpha.-Pinene	7785-70-8	NIST05.L	15188	98	C10H16	136
1R-.alpha.-Pinene	7785-70-8	NIST05.L	15186	96	C10H16	136
Bicyclo[3.1.1]hept-2-ene, 2,6,6-trimethy	2437-95-8	NIST05.L	15376	95	C10H16	136



Date : 22-FEB-2010 23:44

Client ID: RE15-10-8367

Instrument: MSD2.i

Sample Info: I246866003195429711ISVH11ILANL

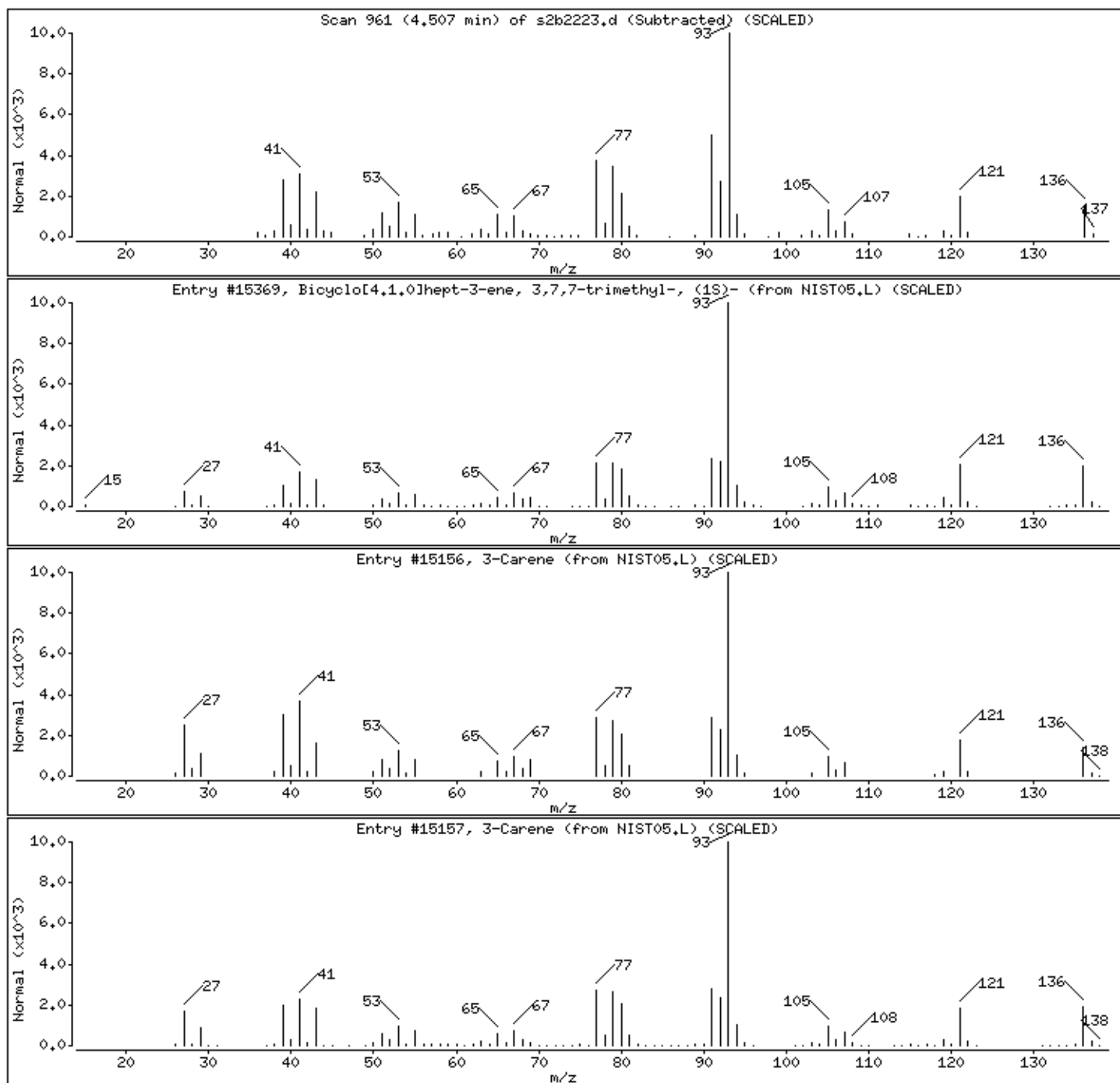
Volume Injected (uL): 0.5

Operator: AGS1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Bicyclo[4.1.0]hept-3-ene, 3,7,7-trimethyl	498-15-7	NIST05.L	15369	97	C10H16	136
3-Carene	13466-78-9	NIST05.L	15156	97	C10H16	136
3-Carene	13466-78-9	NIST05.L	15157	95	C10H16	136



Date : 22-FEB-2010 23:44

Client ID: RE15-10-8367

Instrument: MSD2.i

Sample Info: 12468660031954297111SVH111LANL

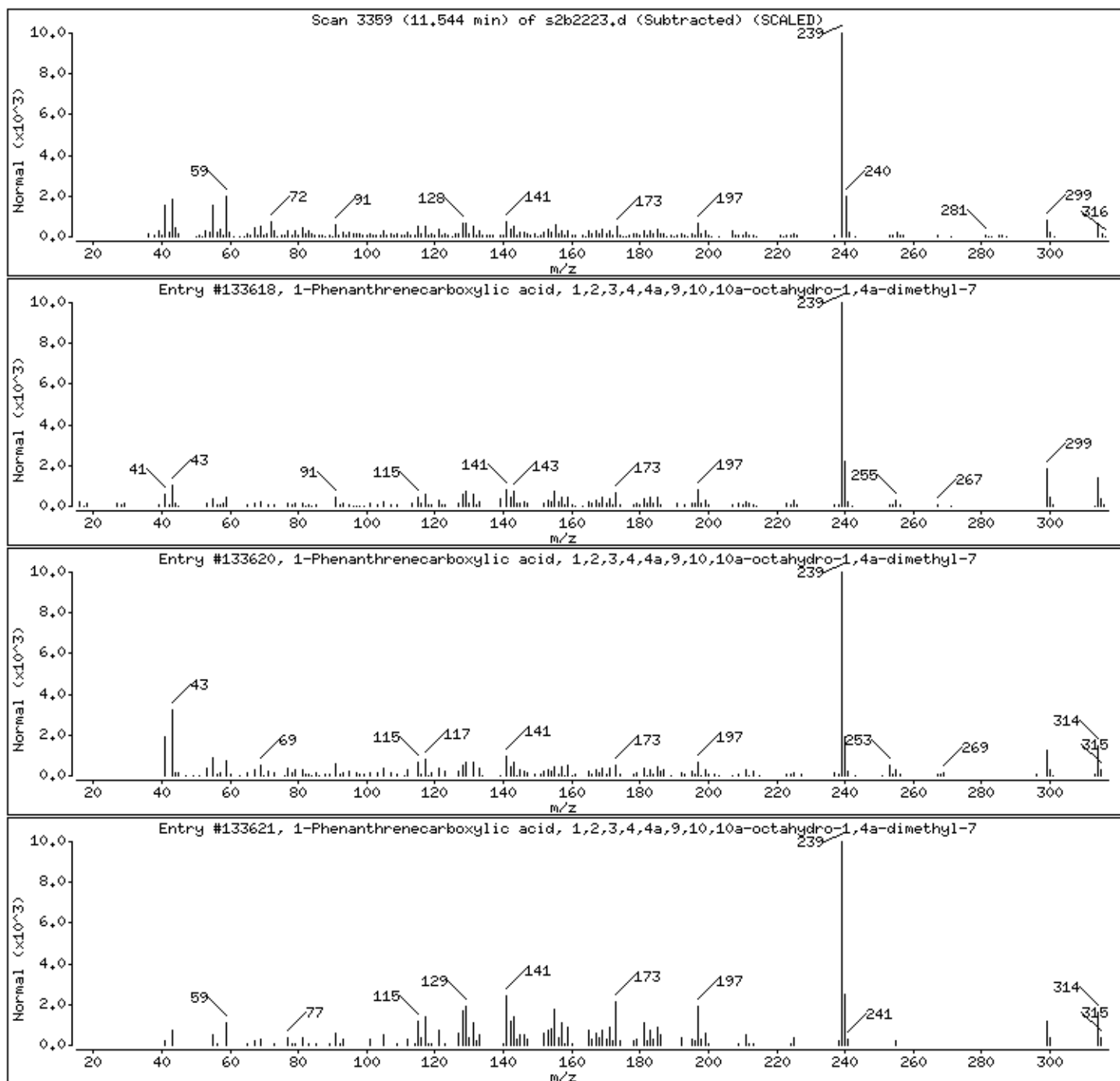
Volume Injected (uL): 0.5

Operator: AGS1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	1235-74-1	NIST05.L	133618	98	C21H30O2	314
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	1235-74-1	NIST05.L	133620	86	C21H30O2	314
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	1235-74-1	NIST05.L	133621	68	C21H30O2	314



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

**SDG Number:** 10-1758  
**Lab Sample ID:** 246866006

**Date Collected:** 02/09/2010 12:00  
**Date Received:** 02/11/2010 09:20  
**Client:** LANL010  
**Method:** SW846 8270C  
**Inst:** MSD2.I  
**Analyst:** AGS1  
**Aliquot:** 30.02 g  
**Column:** J&W DB-5MS

**Matrix:** R  
**%Moisture:** 24.6  
**Project:** LANL01004  
**SOP Ref:** GL-OA-E-009  
**Dilution:** 1  
**Inj. Vol:** .5 uL  
**Final Volume:** 1 mL  
**Level:** LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	442	ug/kg	88.3	442
108-95-2	Phenol	U	442	ug/kg	88.3	442
95-57-8	2-Chlorophenol	U	442	ug/kg	88.3	442
106-46-7	1,4-Dichlorobenzene	U	442	ug/kg	88.3	442
621-64-7	N-Nitrosodipropylamine	U	442	ug/kg	88.3	442
59-50-7	4-Chloro-3-methylphenol	U	442	ug/kg	88.3	442
83-32-9	Acenaphthene	U	44.2	ug/kg	14.6	44.2
121-14-2	2,4-Dinitrotoluene	U	442	ug/kg	44.2	442
100-02-7	4-Nitrophenol	U	442	ug/kg	146	442
87-86-5	Pentachlorophenol	U	442	ug/kg	110	442
129-00-0	Pyrene	U	44.2	ug/kg	13.2	44.2
110-86-1	Pyridine	U	442	ug/kg	88.3	442
62-53-3	Aniline	U	442	ug/kg	132	442
111-44-4	bis(2-Chloroethyl) ether	U	442	ug/kg	88.3	442
541-73-1	1,3-Dichlorobenzene	U	442	ug/kg	88.3	442
100-51-6	Benzyl alcohol	U	442	ug/kg	132	442
95-50-1	1,2-Dichlorobenzene	U	442	ug/kg	88.3	442
108-60-1	bis(2-Chloroisopropyl)ether	U	442	ug/kg	88.3	442
95-48-7	o-Cresol	U	442	ug/kg	88.3	442
65794-96-9	m,p-Cresols	U	442	ug/kg	132	442
67-72-1	Hexachloroethane	U	442	ug/kg	88.3	442
98-95-3	Nitrobenzene	U	442	ug/kg	88.3	442
78-59-1	Isophorone	U	442	ug/kg	88.3	442
88-75-5	2-Nitrophenol	U	442	ug/kg	88.3	442
105-67-9	2,4-Dimethylphenol	U	442	ug/kg	155	442
111-91-1	bis(2-Chloroethoxy)methane	U	442	ug/kg	88.3	442
120-83-2	2,4-Dichlorophenol	U	442	ug/kg	88.3	442
65-85-0	Benzoic acid	U	883	ug/kg	221	883
91-20-3	Naphthalene	U	44.2	ug/kg	13.2	44.2
106-47-8	4-Chloroaniline	U	442	ug/kg	88.3	442
87-68-3	Hexachlorobutadiene	U	442	ug/kg	88.3	442
91-57-6	2-Methylnaphthalene	U	44.2	ug/kg	8.83	44.2
77-47-4	Hexachlorocyclopentadiene	U	442	ug/kg	88.3	442
88-06-2	2,4,6-Trichlorophenol	U	442	ug/kg	88.3	442
95-95-4	2,4,5-Trichlorophenol	U	442	ug/kg	88.3	442
91-58-7	2-Chloronaphthalene	U	44.2	ug/kg	14.6	44.2
88-74-4	2-Nitroaniline	U	442	ug/kg	88.3	442
99-09-2	<i>o</i> -Nitroaniline	U	442	ug/kg	88.3	442
	3-Nitroaniline					

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

**SDG Number:** 10-1758  
**Lab Sample ID:** 246866006

**Date Collected:** 02/09/2010 12:00  
**Date Received:** 02/11/2010 09:20  
**Client:** LANL010  
**Method:** SW846 8270C  
**Inst:** MSD2.I  
**Analyst:** AGS1  
**Aliquot:** 30.02 g  
**Column:** J&W DB-5MS

**Matrix:** R  
**%Moisture:** 24.6  
**Project:** LANL01004  
**SOP Ref:** GL-OA-E-009  
**Dilution:** 1  
**Inj. Vol:** .5 uL  
**Final Volume:** 1 mL  
**Level:** LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
	Dimethylphthalate	U	442	ug/kg	88.3	442
606-20-2	2,6-Dinitrotoluene	U	442	ug/kg	44.2	442
208-96-8	Acenaphthylene	U	44.2	ug/kg	13.2	44.2
51-28-5	2,4-Dinitrophenol	U	883	ug/kg	168	883
132-64-9	Dibenzofuran	U	442	ug/kg	88.3	442
84-66-2	Diethylphthalate	U	442	ug/kg	88.3	442
86-73-7	Fluorene	U	44.2	ug/kg	13.2	44.2
7005-72-3	4-Chlorophenylphenylether	U	442	ug/kg	88.3	442
534-52-1	2-Methyl-4,6-dinitrophenol	U	442	ug/kg	88.3	442
100-01-6	4-Nitroaniline	U	442	ug/kg	132	442
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	442	ug/kg	88.3	442
122-66-7	Azobenzene	U	442	ug/kg	88.3	442
	<i>1,2-Diphenylhydrazine</i>					
101-55-3	4-Bromophenylphenylether	U	442	ug/kg	88.3	442
118-74-1	Hexachlorobenzene	U	442	ug/kg	88.3	442
85-01-8	Phenanthrene	U	44.2	ug/kg	13.2	44.2
120-12-7	Anthracene	U	44.2	ug/kg	8.83	44.2
84-74-2	Di-n-butylphthalate	U	442	ug/kg	88.3	442
206-44-0	Fluoranthene	U	44.2	ug/kg	13.2	44.2
85-68-7	Butylbenzylphthalate	U	442	ug/kg	88.3	442
56-55-3	Benzo(a)anthracene	U	44.2	ug/kg	13.2	44.2
91-94-1	3,3'-Dichlorobenzidine	U	442	ug/kg	132	442
218-01-9	Chrysene	U	44.2	ug/kg	13.2	44.2
117-81-7	bis(2-Ethylhexyl)phthalate	U	442	ug/kg	88.3	442
117-84-0	Di-n-octylphthalate	U	442	ug/kg	88.3	442
205-99-2	Benzo(b)fluoranthene	U	44.2	ug/kg	13.2	44.2
207-08-9	Benzo(k)fluoranthene	U	44.2	ug/kg	13.2	44.2
50-32-8	Benzo(a)pyrene	U	44.2	ug/kg	13.2	44.2
193-39-5	Indeno(1,2,3-cd)pyrene	U	44.2	ug/kg	13.2	44.2
53-70-3	Dibenzo(a,h)anthracene	U	44.2	ug/kg	13.2	44.2
191-24-2	Benzo(ghi)perylene	U	44.2	ug/kg	13.2	44.2
120-82-1	1,2,4-Trichlorobenzene	U	442	ug/kg	88.3	442

**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	2.76	337	ug/kg		J
	Unknown Aldol Condensate	3.19	851	ug/kg		J

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

Page 3 of 3

**SDG Number:** 10-1758  
**Lab Sample ID:** 246866006

**Date Collected:** 02/09/2010 12:00  
**Date Received:** 02/11/2010 09:20  
**Client:** LANL010  
**Method:** SW846 8270C  
**Inst:** MSD2.I  
**Analyst:** AGS1  
**Aliquot:** 30.02 g  
**Column:** J&W DB-5MS

**Matrix:** R  
**%Moisture:** 24.6  
**Project:** LANL01004  
**SOP Ref:** GL-OA-E-009  
**Dilution:** 1  
**Inj. Vol:** .5 uL  
**Final Volume:** 1 mL  
**Level:** LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
<b>Tentatively Identified Compound Summary</b>						
CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
7785-70-8	1R-.alpha.-Pinene	3.94	658	ug/kg	98	NJ
127-91-3	.beta.-Pinene	4.3	302	ug/kg	97	NJ
498-15-7	Bicyclo[4.1.0]hept-3-ene, 3,7,7-trimethy	4.51	1270	ug/kg	97	NJ
25246-27-9	1H-Cycloprop[e]azulene, decahydro-1,1,7-	7.29	338	ug/kg	95	NJ
57-10-3	n-Hexadecanoic acid	9.86	187	ug/kg	99	NJ
112-80-1	Oleic Acid	10.62	459	ug/kg	98	NJ
301-02-0	9-Octadecenamide, (Z)-	11.53	951	ug/kg	98	NJ

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Data file : /chem/MSD2.i/s022210.b/s2b2226.d  
Lab Smp Id: 246866006 Client Smp ID: RE15-10-8368  
Inj Date : 23-FEB-2010 01:00  
Operator : AGS1 Inst ID: MSD2.i  
Smp Info : |246866006|954297|1|SVM|1|LANL  
Misc Info : |MSD8270\_S|WBN100205-01|  
Comment : Column: J & W Scientific DB-5MS 25m x 0.2mm x 0.33um  
Method : /chem/MSD2.i/s022210.b/MSD2-M8270PAQA-010810a.m  
Meth Date : 22-Feb-2010 16:54 ann00964 Quant Type: ISTD  
Cal Date : 11-JAN-2010 20:43 Cal File: s2a0859.d  
Als bottle: 26  
Dil Factor: 1.00000  
Integrator: HP RTE Compound Sublist: 10-1758.sub  
Target Version: 3.50  
Processing Host: kilroy

Concentration Formula:  $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vi} * \text{Ws} * (100 - \text{M}) / 100) * \text{CpndVariable}$

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.02000	weight of sample
M	24.55390	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG					CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	4.563	4.565	(1.000)	231531	40.0000	
* 29 Naphthalene-d8	136	5.827	5.830	(1.000)	793432	40.0000	
* 46 Acenaphthene-d10	164	7.687	7.691	(1.000)	506650	40.0000	
* 67 Phenanthrene-d10	188	9.290	9.293	(1.000)	916169	40.0000	
* 91 Chrysene-d12	240	12.224	12.232	(1.000)	763598	40.0000	
* 98 Perylene-d12	264	14.405	14.417	(1.000)	461657	40.0000	
\$ 3 2-Fluorophenol	112	3.431	3.415	(0.752)	395710	70.4326	3110
\$ 5 Phenol-d5	99	4.196	4.195	(0.920)	489339	65.0842	2870
\$ 20 Nitrobenzene-d5	82	5.093	5.102	(0.874)	232259	36.9452	1630
\$ 39 2-Fluorobiphenyl	172	6.950	6.954	(0.904)	520396	33.1980	1460
\$ 60 2,4,6-Tribromophenol	329	8.538	8.538	(1.111)	161421	73.6634	3250
\$ 81 p-Terphenyl-d14	244	11.001	10.998	(0.900)	650445	44.3491	1960



## ION RATIO REPORT

## SV REPORT

Data file: s2b2226.d

Report Date: 02/23/2010 09:16

Lab. ID: 246866006

SampleType: SAMPLE

Injection Date: 23-FEB-2010 01:00

Operator: AGS1

Instrument: MSD2.i

Sample Info: |246866006|954297|1|SVM|1|LANL

Miscellaneous Info: |MSD8270\_S|WBN100205-01|

Comment:

Method used: /chem/MSD2.i/s022210.b/MSD2-M8270PAQA-010810a.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-1758

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
4	Aniline		CAS#: 62-53-3			
66	28860	4.20	4.26	80-120	100	(T)
93	5169	4.23	4.26	194-254	18	(Q)
-----						
17	N-Nitrosodipropylamine		CAS#: 621-64-7			
70	33399	5.09	4.95	80-120	100	(T)
42	25648	5.09	4.95	58-118	77	(T)
-----						
27	Benzoic acid		CAS#: 65-85-0			
105	922	5.57	5.59	80-120	100	( )
122	2392	5.53	5.58	44-104	259	(Q)
77	729	5.55	5.58	46-106	79	( )
-----						
44	2,6-Dinitrotoluene		CAS#: 606-20-2			
165	65768	7.69	7.46	80-120	100	(T)
63	1087	7.69	7.46	41-101	2	(QT)
-----						
50	2,4-Dinitrotoluene		CAS#: 121-14-2			
165	65768	7.69	7.90	80-120	100	(T)
89	707	7.69	7.89	51-111	1	(QT)
63	1087	7.69	7.90	52-112	2	(QT)
-----						
56	p-Nitroaniline		CAS#: 100-01-6			
138	221	8.25	8.31	80-120	100	( )
108	1366	8.29	8.31	30- 90	617	(Q)
92	2500	8.54	8.31	7- 67	1130	(QT)

Q qualifier indicates ion failed ratio requirement

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Data file : /chem/MSD2.i/s022210.b/s2b2226.d  
Lab Smp Id: 246866006 Client Smp ID: RE15-10-8368  
Inj Date : 23-FEB-2010 01:00  
Operator : AGS1 Inst ID: MSD2.i  
Smp Info : |246866006|954297|1|SVM|1|LANL  
Misc Info : |MSD8270\_S|WBN100205-01|  
Comment : Column: J & W Scientific DB-5MS 25m x 0.2mm x 0.33um  
Method : /chem/MSD2.i/s022210.b/MSD2-M8270PAQA-010810a.m  
Meth Date : 22-Feb-2010 16:54 ann00964 Quant Type: ISTD  
Cal Date : 11-JAN-2010 20:43 Cal File: s2a0859.d  
Als bottle: 26  
Dil Factor: 1.00000  
Integrator: HP RTE Compound Sublist: 10-1758.sub  
Target Version: 3.50  
Processing Host: kilroy

Concentration Formula: Amt \* DF \* Uf \* Vt / (Vi \* Ws \* (100 - M) / 100) \* CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.02000	weight of sample
M	24.55390	% moisture

Cpnd Variable Local Compound Variable

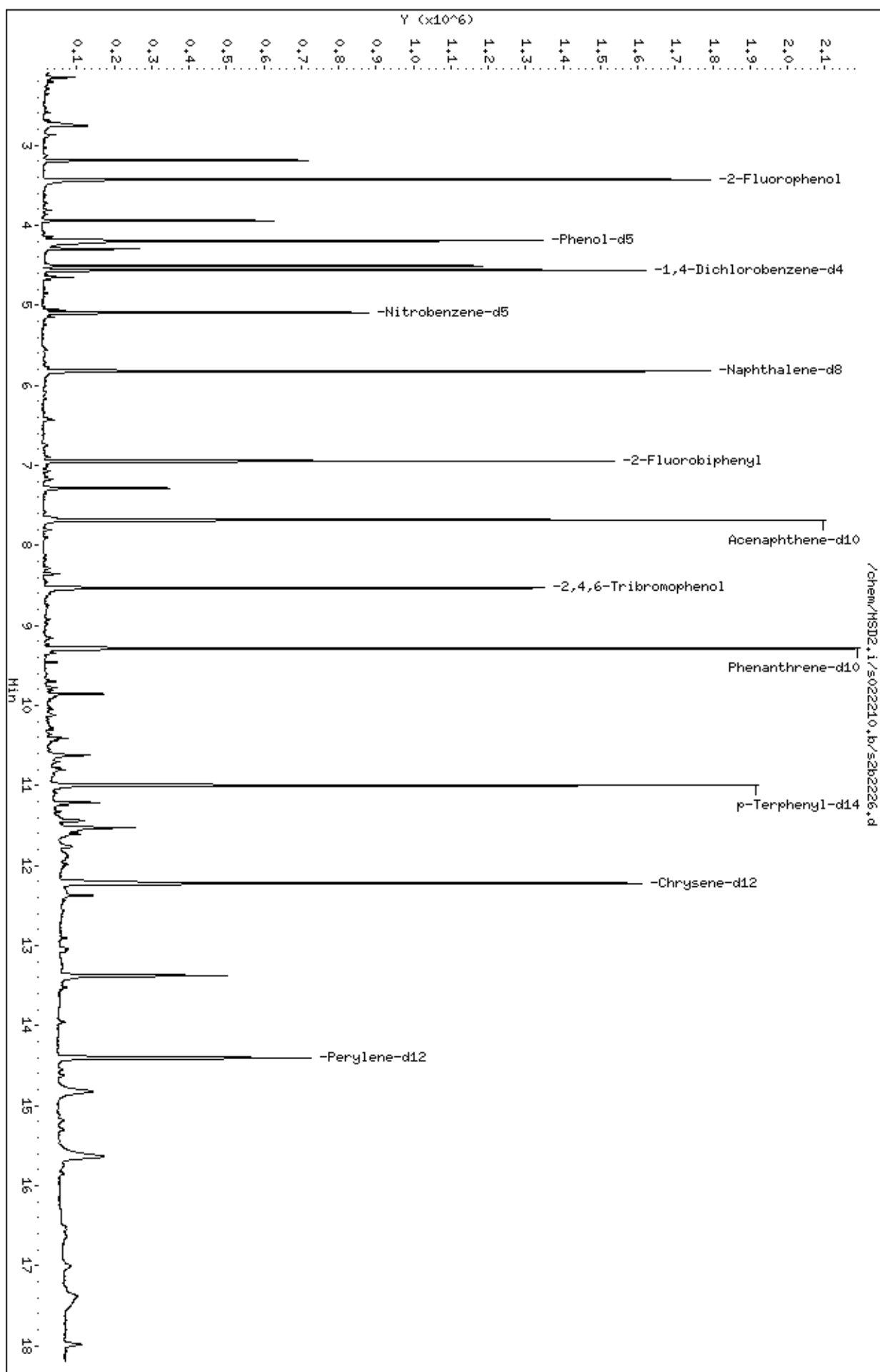
ISTD	RT	AREA	AMOUNT
=====	====	=====	=====
* 10 1,4-Dichlorobenzene-d4	4.563	1483452	40.000
* 46 Acenaphthene-d10	7.687	2196079	40.000
* 67 Phenanthrene-d10	9.290	2353114	40.000

CONCENTRATIONS					QUANT		
RT	AREA	ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
----	----	-----	-----	----	-----	-----	-----

RT	AREA	CONCENTRATIONS		QUAL	QUANT			CPND #
		ON-COL(ng/ul)	FINAL(ug/Kg)		LIBRARY	LIB	ENTRY	
====	====	=====	=====	====	=====	=====	=====	=====
Unknown					CAS #:			
2.762	283275	7.63825669	337	0			0	10
Unknown Aldol Condensate					CAS #:			
3.190	714665	19.2703007	851	0			0	10
1R-.alpha.-Pinene					CAS #: 7785-70-8			
3.944	552505	14.8978039	658	98	NIST05.L		15188	10
.beta.-Pinene					CAS #: 127-91-3			
4.299	253562	6.83708059	302	97	NIST05.L		15171	10
Bicyclo[4.1.0]hept-3-ene, 3,7,7-trimethy					CAS #: 498-15-7			
4.510	1064271	28.6971407	1270	97	NIST05.L		15369	10
1H-Cycloprop[e]azulene, decahydro-1,1,7-					CAS #: 25246-27-9			
7.288	419984	7.64971224	338	95	NIST05.L		60075	46
n-Hexadecanoic acid					CAS #: 57-10-3			
9.857	249284	4.23752325	187	99	NIST05.L		96235	67
Oleic Acid					CAS #: 112-80-1			
10.624	610931	10.3850627	458	98	NIST05.L		113353	67
9-Octadecenamide, (Z)-					CAS #: 301-02-0			
11.528	1267132	21.5396577	951	98	NIST05.L		112655	67

Data File: /chem/HSD2.i/s022210.b/s2b2226.d  
 Date : 23-FEB-2010 01:00  
 Client ID: RE15-10-8368  
 Sample Info: 124686006195429711SVH11LNL  
 Volume Injected (uL): 0.5  
 Column phase: 3uM DB-5MS

Instrument: HSD2.i  
 Operator: AGS1  
 Column diameter: 0.20



Date : 23-FEB-2010 01:00

Client ID: RE15-10-8368

Instrument: MSD2.i

Sample Info: 1246866006195429711ISVH11ILANL

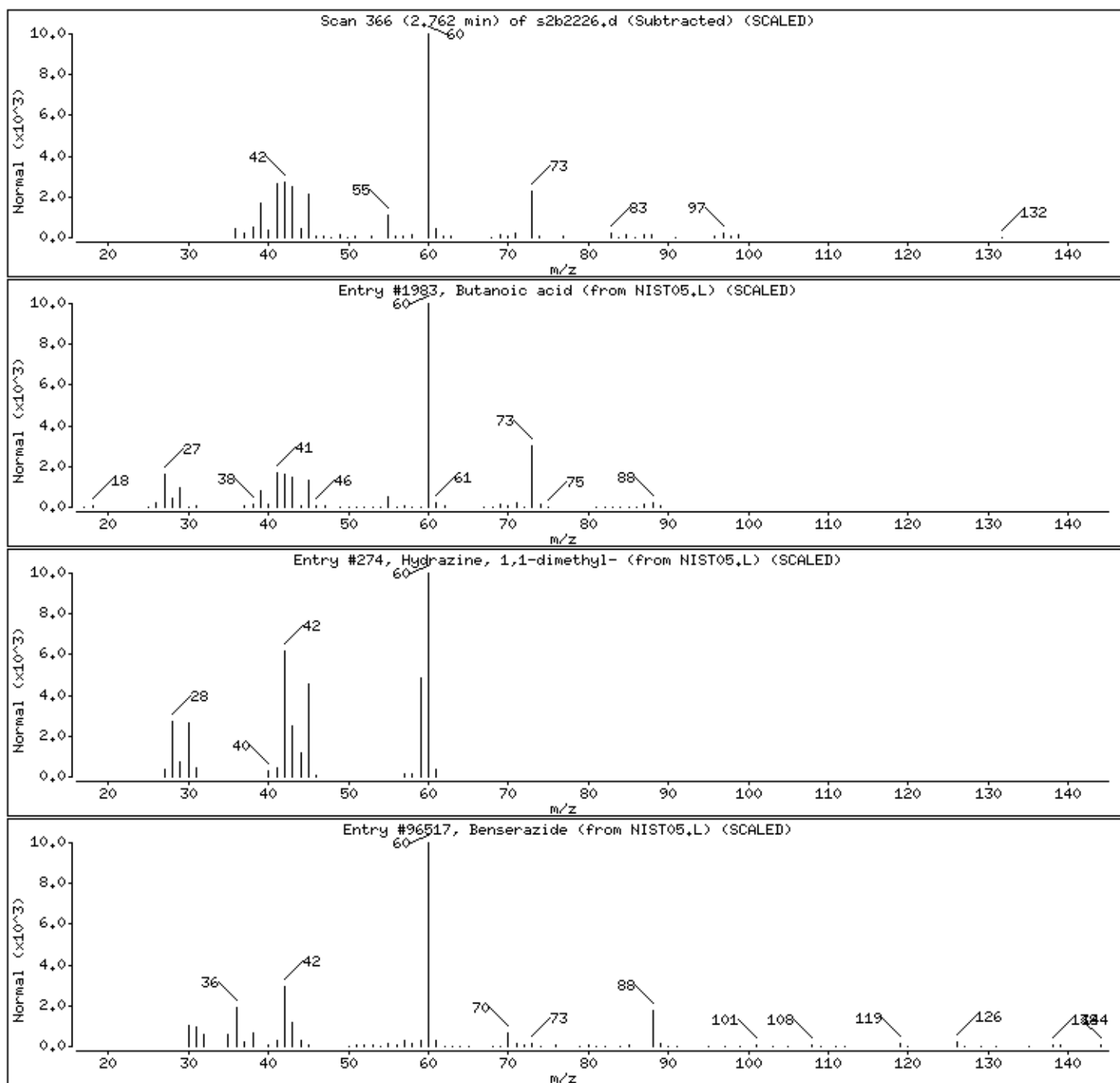
Volume Injected (uL): 0.5

Operator: AGS1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Butanoic acid	107-92-6	NIST05.L	1983	50	C4H8O2	88
Hydrazine, 1,1-dimethyl-	57-14-7	NIST05.L	274	40	C2H8N2	60
Benserazide	322-35-0	NIST05.L	96517	33	C10H15N3O5	257



Date : 23-FEB-2010 01:00

Client ID: RE15-10-8368

Instrument: MSD2.i

Sample Info: 12468660061954297111SVH111LANL

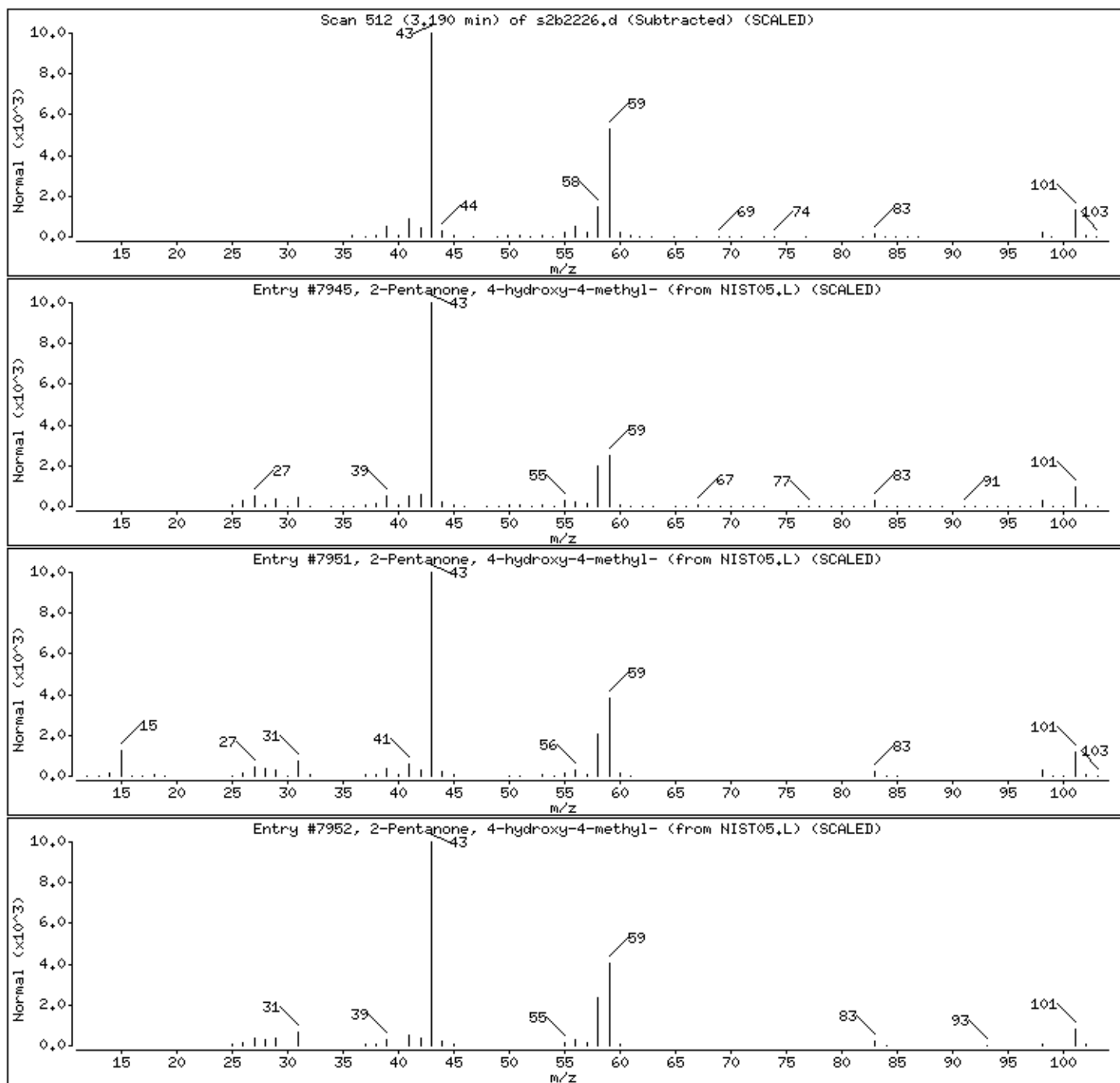
Volume Injected (uL): 0.5

Operator: AGS1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7945	59	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	59	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	50	C6H12O2	116



Date : 23-FEB-2010 01:00

Client ID: RE15-10-8368

Instrument: MSD2.i

Sample Info: I246866006195429711SVH11ILANL

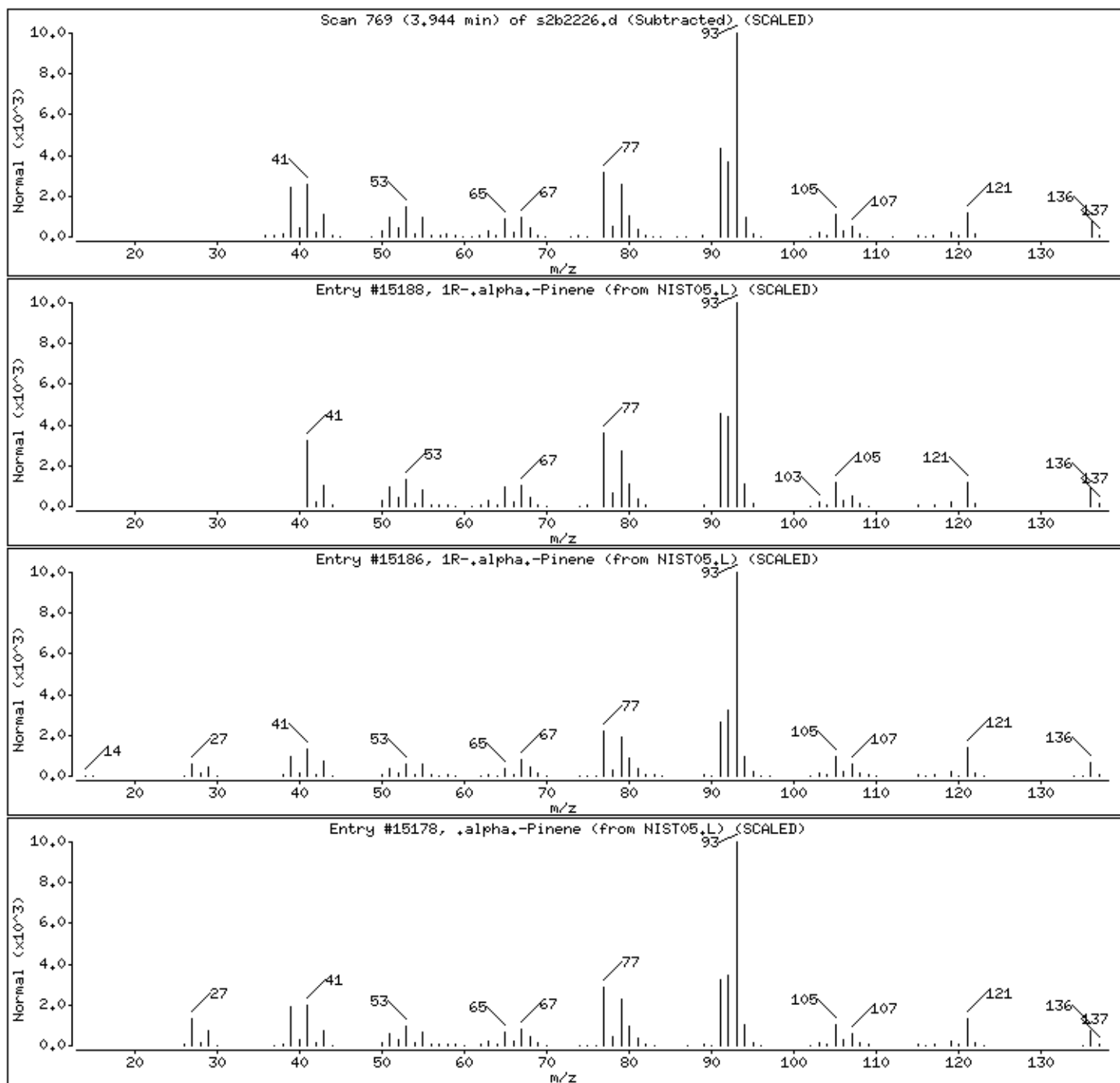
Volume Injected (uL): 0.5

Operator: AGS1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1R-.alpha.-Pinene	7785-70-8	NIST05.L	15188	98	C10H16	136
1R-.alpha.-Pinene	7785-70-8	NIST05.L	15186	96	C10H16	136
.alpha.-Pinene	80-56-8	NIST05.L	15178	96	C10H16	136



Date : 23-FEB-2010 01:00

Client ID: RE15-10-8368

Instrument: MSD2.i

Sample Info: 1246866006195429711SVH11ILANL

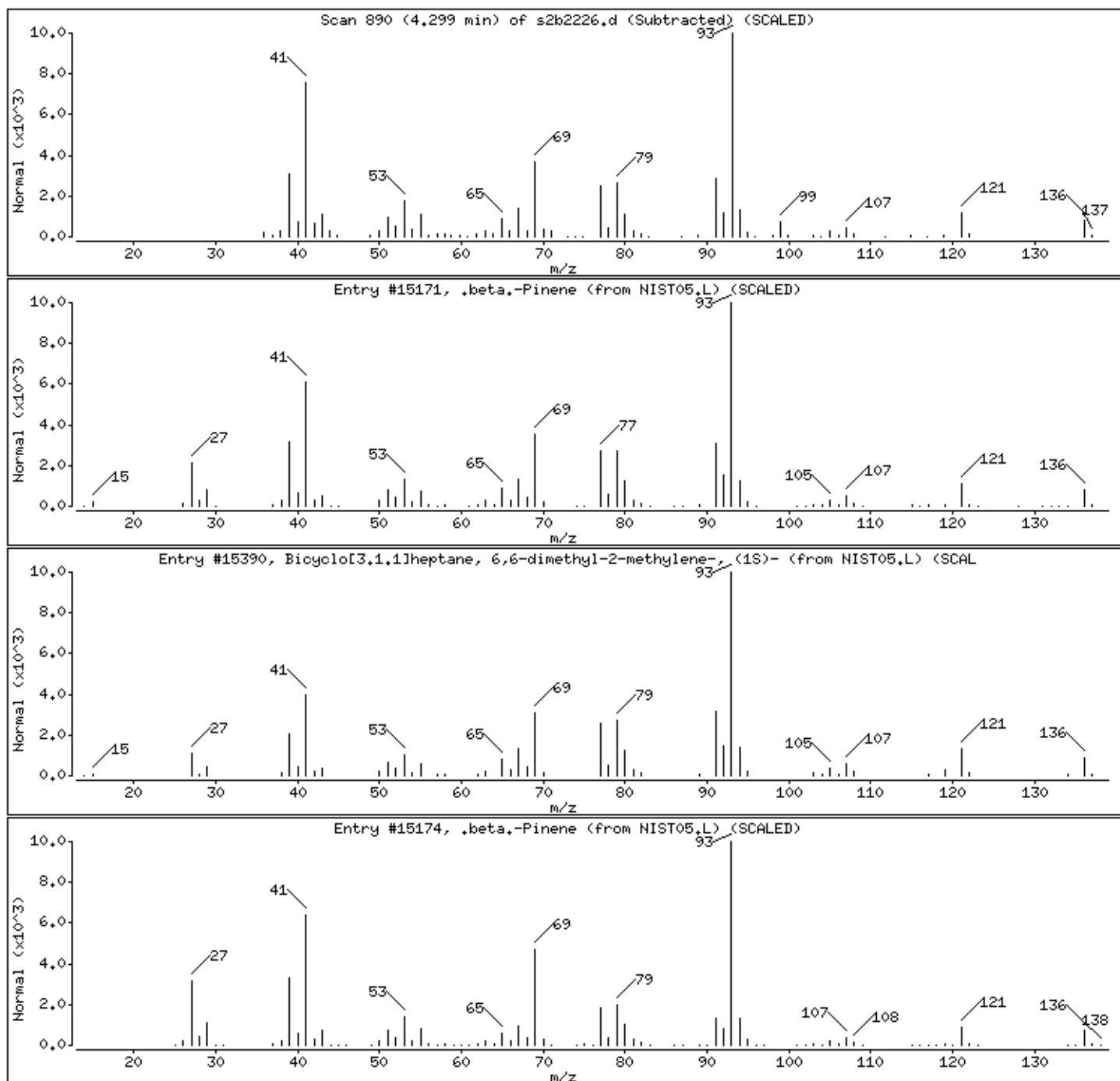
Volume Injected (uL): 0.5

Operator: AGS1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
.beta.-Pinene	127-91-3	NIST05.L	15171	97	C10H16	136
Bicyclo[3.1.1]heptane, 6,6-dimethyl-2-me	18172-67-3	NIST05.L	15390	97	C10H16	136
.beta.-Pinene	127-91-3	NIST05.L	15174	94	C10H16	136





Date : 23-FEB-2010 01:00

Client ID: RE15-10-8368

Instrument: MSD2.i

Sample Info: I246866006195429711ISVH11ILANL

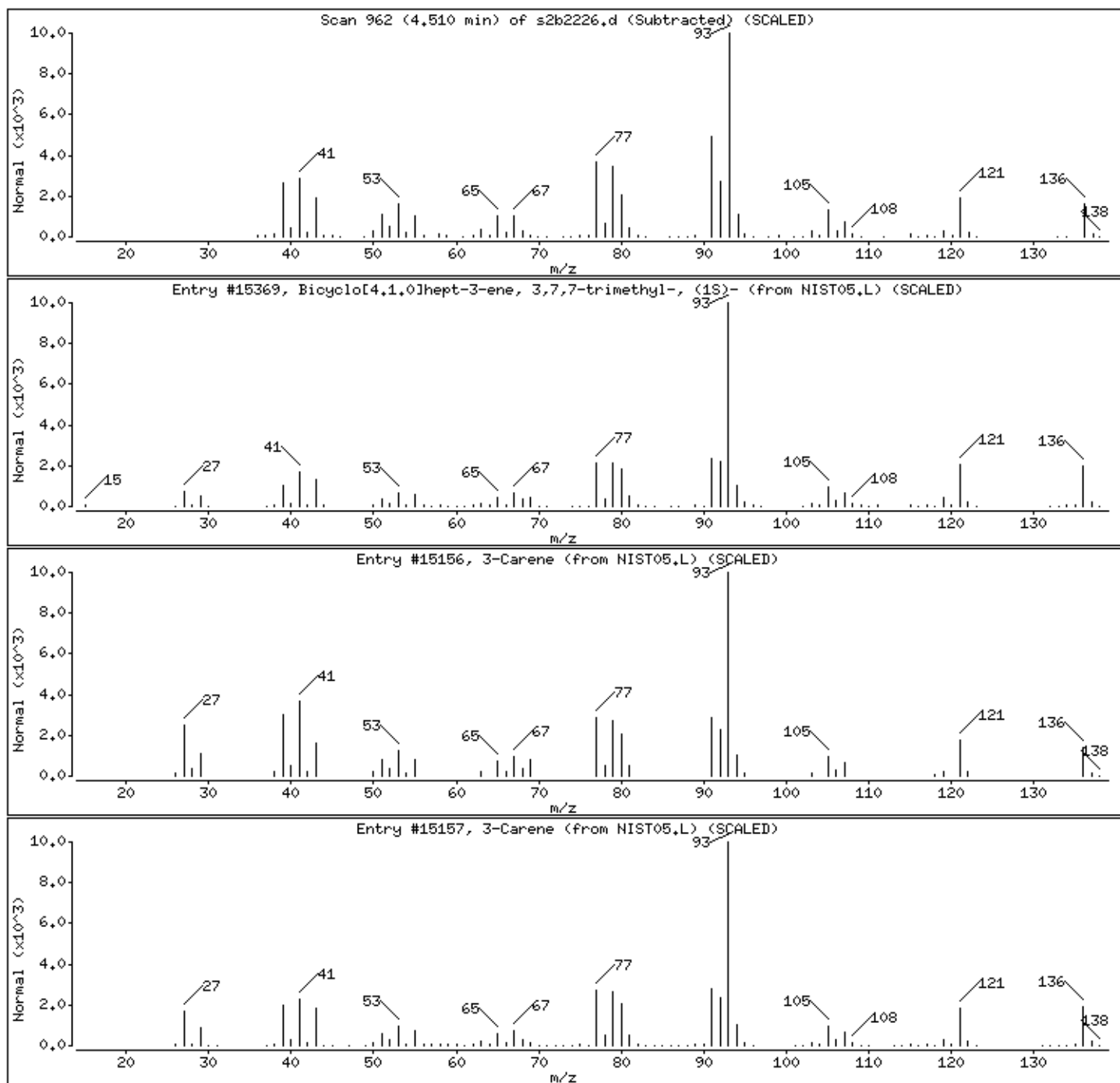
Volume Injected (uL): 0.5

Operator: AGS1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Bicyclo[4.1.0]hept-3-ene, 3,7,7-trimethyl	498-15-7	NIST05.L	15369	97	C10H16	136
3-Carene	13466-78-9	NIST05.L	15156	97	C10H16	136
3-Carene	13466-78-9	NIST05.L	15157	95	C10H16	136



Date : 23-FEB-2010 01:00

Client ID: RE15-10-8368

Instrument: MSD2.i

Sample Info: 1246866006195429711SVH11ILANL

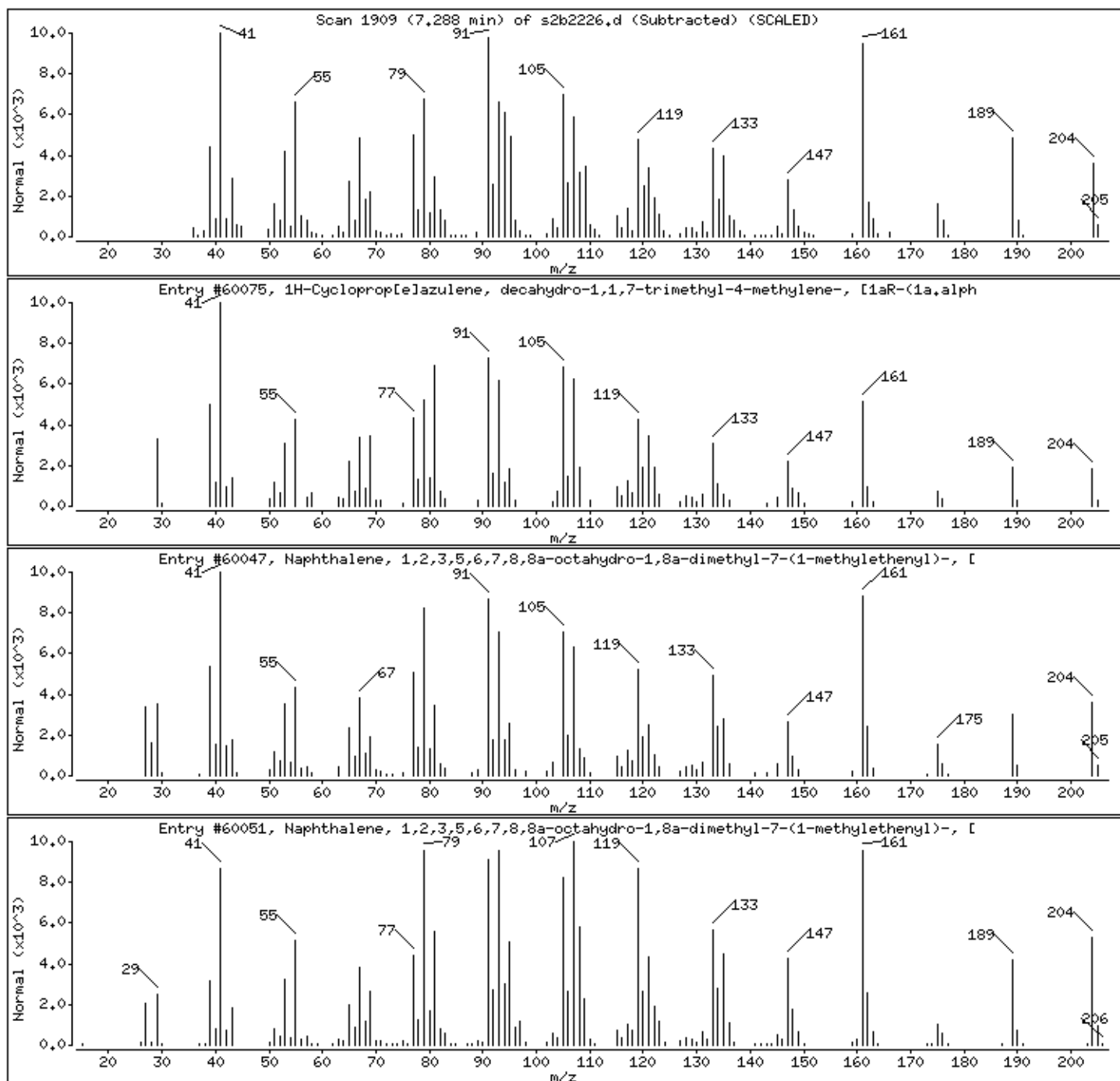
Volume Injected (uL): 0.5

Operator: AGS1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1H-Cycloprop[elazulene, decahydro-1,1,7-	25246-27-9	NIST05.L	60075	95	C15H24	204
Naphthalene, 1,2,3,5,6,7,8,8a-octahydro-	4630-07-3	NIST05.L	60047	95	C15H24	204
Naphthalene, 1,2,3,5,6,7,8,8a-octahydro-	10219-75-7	NIST05.L	60051	94	C15H24	204



Date : 23-FEB-2010 01:00

Client ID: RE15-10-8368

Instrument: MSD2.i

Sample Info: I246866006195429711SVH11ILANL

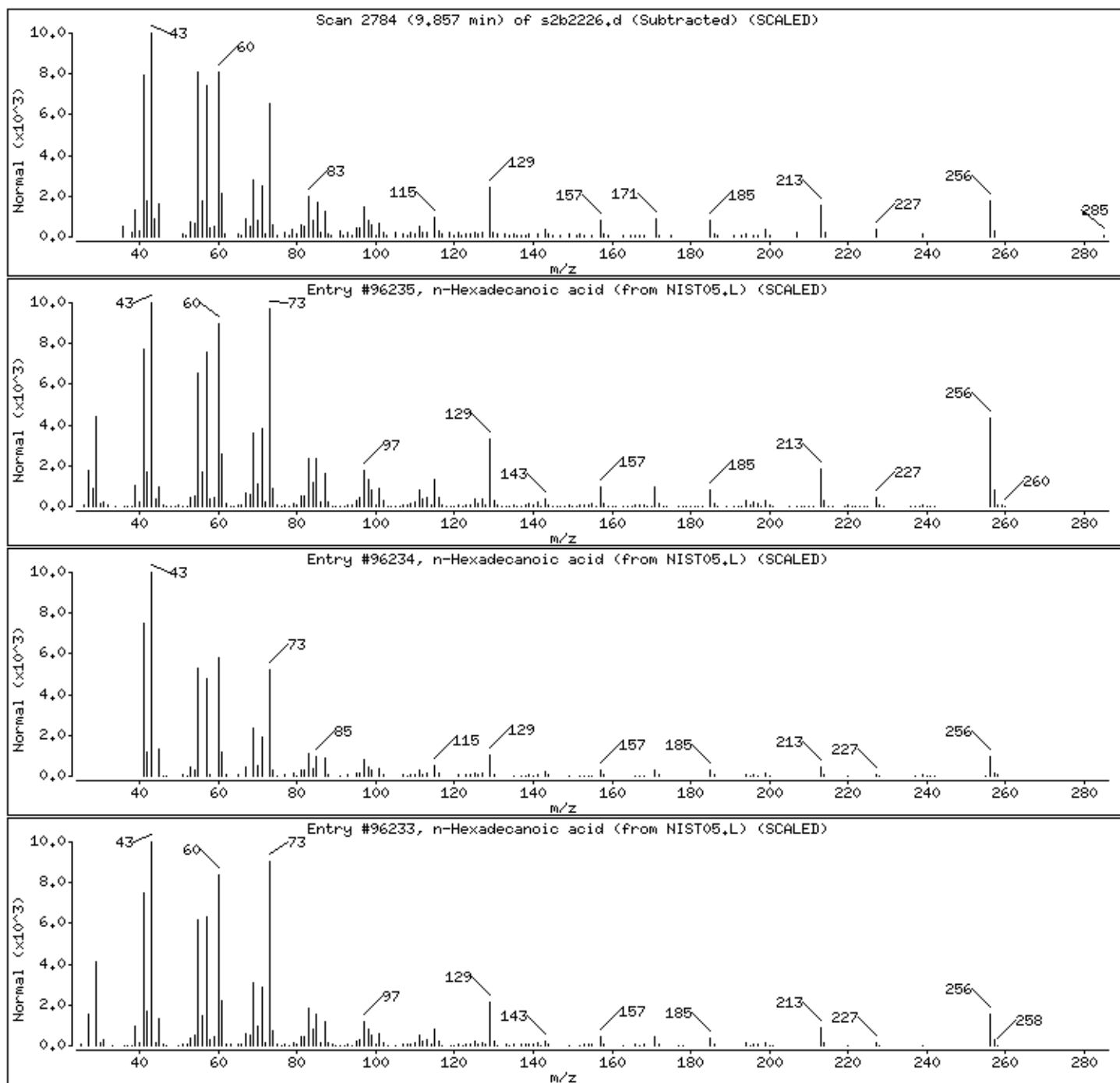
Volume Injected (uL): 0.5

Operator: AGS1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
n-Hexadecanoic acid	57-10-3	NIST05.L	96235	99	C16H32O2	256
n-Hexadecanoic acid	57-10-3	NIST05.L	96234	96	C16H32O2	256
n-Hexadecanoic acid	57-10-3	NIST05.L	96233	95	C16H32O2	256



Date : 23-FEB-2010 01:00

Client ID: RE15-10-8368

Instrument: MSD2.i

Sample Info: 1246866006195429711SVH11ILANL

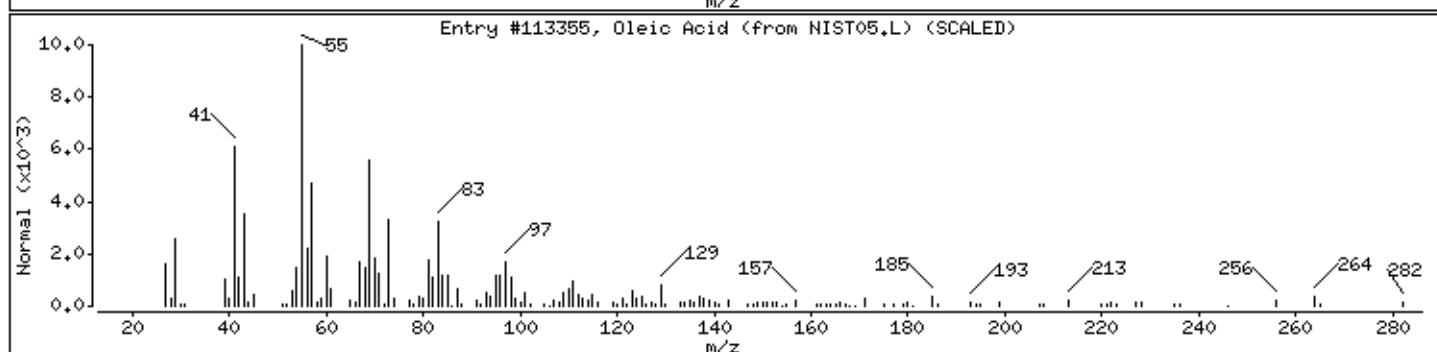
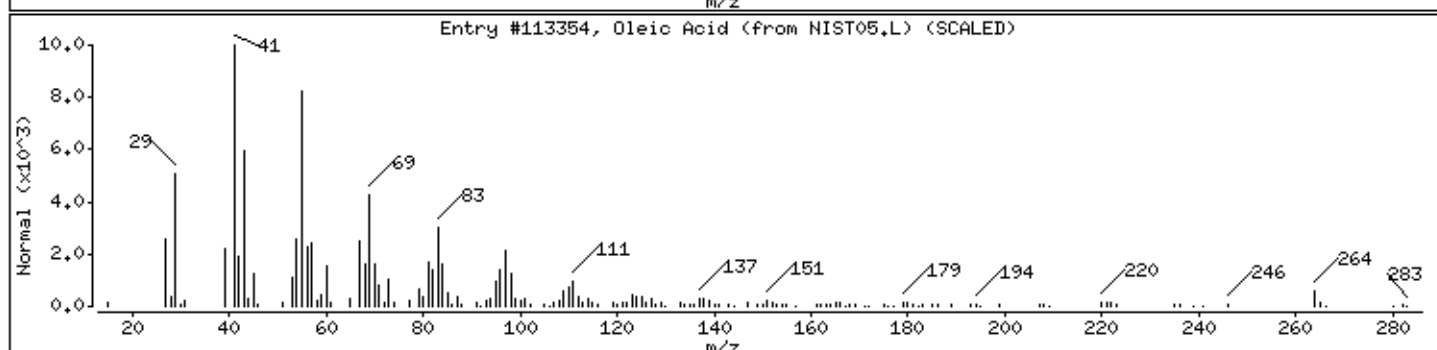
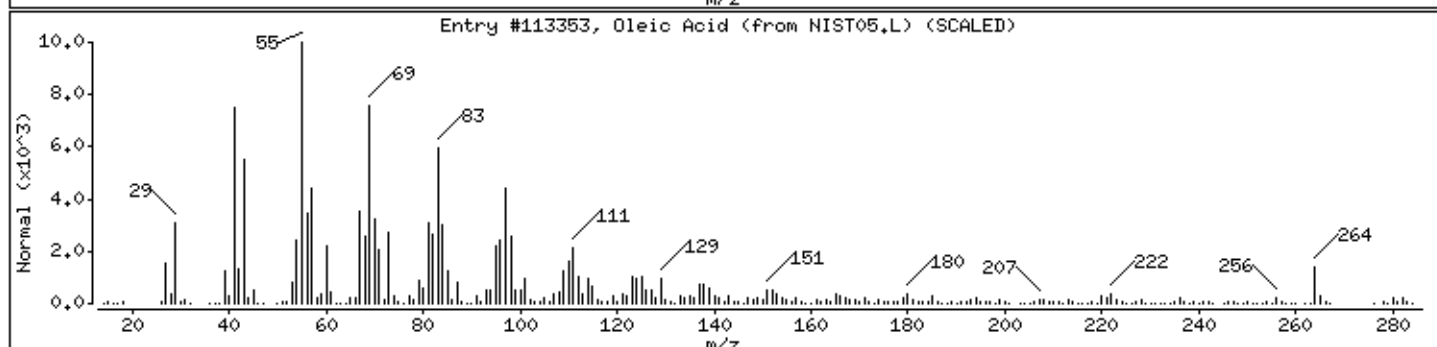
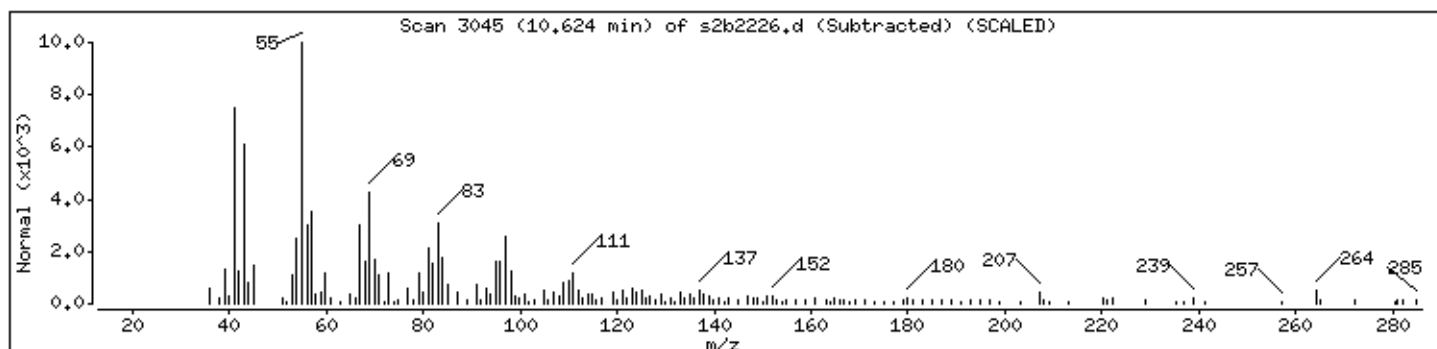
Volume Injected (uL): 0.5

Operator: AGS1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Oleic Acid	112-80-1	NIST05.L	113353	98	C18H34O2	282
Oleic Acid	112-80-1	NIST05.L	113354	94	C18H34O2	282
Oleic Acid	112-80-1	NIST05.L	113355	89	C18H34O2	282



Date : 23-FEB-2010 01:00

Client ID: RE15-10-8368

Instrument: MSD2.i

Sample Info: 1246866006195429711SVH11ILANL

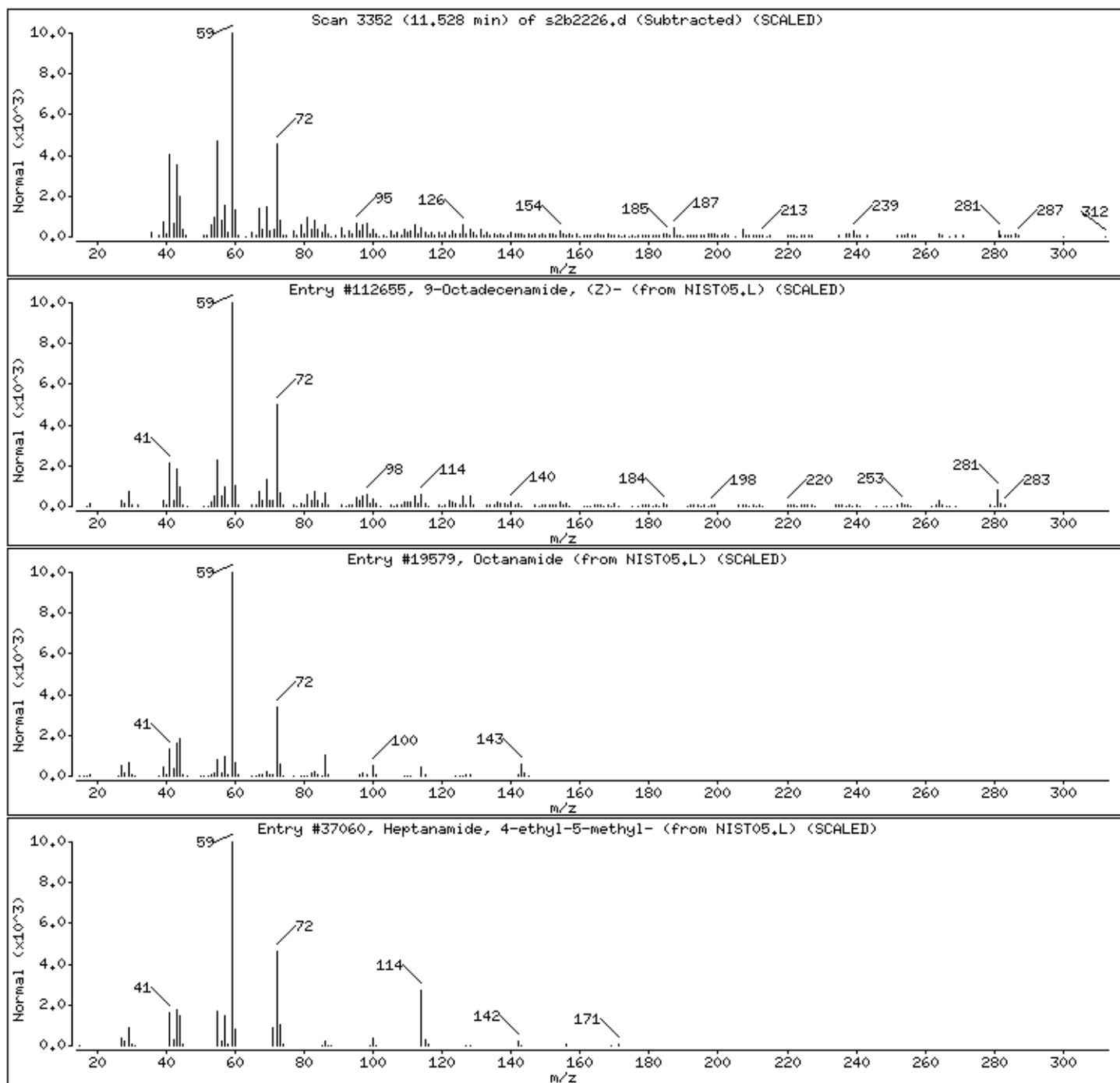
Volume Injected (uL): 0.5

Operator: AGS1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
9-Octadecenamide, (Z)-	301-02-0	NIST05.L	112655	98	C18H35NO	281
Octanamide	629-01-6	NIST05.L	19579	86	C8H17NO	143
Heptanamide, 4-ethyl-5-methyl-	54789-40-1	NIST05.L	37060	86	C10H21NO	171



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

Page 1 of 3

**SDG Number:** 10-1758  
**Lab Sample ID:** 246866009

**Date Collected:** 02/09/2010 12:00  
**Date Received:** 02/11/2010 09:20  
**Client:** LANL010  
**Method:** SW846 8270C  
**Inst:** MSD2.I  
**Analyst:** AGS1  
**Aliquot:** 30.07 g  
**Column:** J&W DB-5MS

**Matrix:** R  
**%Moisture:** 24.2  
**Project:** LANL01004  
**SOP Ref:** GL-OA-E-009  
**Dilution:** 1  
**Inj. Vol:** .5 uL  
**Final Volume:** 1 mL  
**Level:** LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	439	ug/kg	87.7	439
108-95-2	Phenol	U	439	ug/kg	87.7	439
95-57-8	2-Chlorophenol	U	439	ug/kg	87.7	439
106-46-7	1,4-Dichlorobenzene	U	439	ug/kg	87.7	439
621-64-7	N-Nitrosodipropylamine	U	439	ug/kg	87.7	439
59-50-7	4-Chloro-3-methylphenol	U	439	ug/kg	87.7	439
83-32-9	Acenaphthene	U	43.9	ug/kg	14.5	43.9
121-14-2	2,4-Dinitrotoluene	U	439	ug/kg	43.9	439
100-02-7	4-Nitrophenol	U	439	ug/kg	145	439
87-86-5	Pentachlorophenol	U	439	ug/kg	110	439
129-00-0	Pyrene	U	43.9	ug/kg	13.2	43.9
110-86-1	Pyridine	U	439	ug/kg	87.7	439
62-53-3	Aniline	U	439	ug/kg	132	439
111-44-4	bis(2-Chloroethyl) ether	U	439	ug/kg	87.7	439
541-73-1	1,3-Dichlorobenzene	U	439	ug/kg	87.7	439
100-51-6	Benzyl alcohol	U	439	ug/kg	132	439
95-50-1	1,2-Dichlorobenzene	U	439	ug/kg	87.7	439
108-60-1	bis(2-Chloroisopropyl)ether	U	439	ug/kg	87.7	439
95-48-7	o-Cresol	U	439	ug/kg	87.7	439
65794-96-9	m,p-Cresols	U	439	ug/kg	132	439
67-72-1	Hexachloroethane	U	439	ug/kg	87.7	439
98-95-3	Nitrobenzene	U	439	ug/kg	87.7	439
78-59-1	Isophorone	U	439	ug/kg	87.7	439
88-75-5	2-Nitrophenol	U	439	ug/kg	87.7	439
105-67-9	2,4-Dimethylphenol	U	439	ug/kg	153	439
111-91-1	bis(2-Chloroethoxy)methane	U	439	ug/kg	87.7	439
120-83-2	2,4-Dichlorophenol	U	439	ug/kg	87.7	439
65-85-0	Benzoic acid	U	877	ug/kg	219	877
91-20-3	Naphthalene	U	43.9	ug/kg	13.2	43.9
106-47-8	4-Chloroaniline	U	439	ug/kg	87.7	439
87-68-3	Hexachlorobutadiene	U	439	ug/kg	87.7	439
91-57-6	2-Methylnaphthalene	U	43.9	ug/kg	8.77	43.9
77-47-4	Hexachlorocyclopentadiene	U	439	ug/kg	87.7	439
88-06-2	2,4,6-Trichlorophenol	U	439	ug/kg	87.7	439
95-95-4	2,4,5-Trichlorophenol	U	439	ug/kg	87.7	439
91-58-7	2-Chloronaphthalene	U	43.9	ug/kg	14.5	43.9
88-74-4	2-Nitroaniline	U	439	ug/kg	87.7	439
99-09-2	<i>o</i> -Nitroaniline	U	439	ug/kg	87.7	439
	3-Nitroaniline					

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

**SDG Number:** 10-1758  
**Lab Sample ID:** 246866009

**Date Collected:** 02/09/2010 12:00  
**Date Received:** 02/11/2010 09:20  
**Client:** LANL010  
**Method:** SW846 8270C  
**Inst:** MSD2.I  
**Analyst:** AGS1  
**Aliquot:** 30.07 g  
**Column:** J&W DB-5MS

**Matrix:** R  
**%Moisture:** 24.2  
**Project:** LANL01004  
**SOP Ref:** GL-OA-E-009  
**Dilution:** 1  
**Inj. Vol:** .5 uL  
**Final Volume:** 1 mL  
**Level:** LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	<i>m</i> -Nitroaniline					
131-11-3	Dimethylphthalate	U	439	ug/kg	87.7	439
606-20-2	2,6-Dinitrotoluene	U	439	ug/kg	43.9	439
208-96-8	Acenaphthylene	U	43.9	ug/kg	13.2	43.9
51-28-5	2,4-Dinitrophenol	U	877	ug/kg	167	877
132-64-9	Dibenzofuran	U	439	ug/kg	87.7	439
84-66-2	Diethylphthalate	U	439	ug/kg	87.7	439
86-73-7	Fluorene	U	43.9	ug/kg	13.2	43.9
7005-72-3	4-Chlorophenylphenylether	U	439	ug/kg	87.7	439
534-52-1	2-Methyl-4,6-dinitrophenol	U	439	ug/kg	87.7	439
100-01-6	4-Nitroaniline	U	439	ug/kg	132	439
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	439	ug/kg	87.7	439
122-66-7	Azobenzene	U	439	ug/kg	87.7	439
	<i>1,2-Diphenylhydrazine</i>					
101-55-3	4-Bromophenylphenylether	U	439	ug/kg	87.7	439
118-74-1	Hexachlorobenzene	U	439	ug/kg	87.7	439
85-01-8	Phenanthrene	U	43.9	ug/kg	13.2	43.9
120-12-7	Anthracene	U	43.9	ug/kg	8.77	43.9
84-74-2	Di-n-butylphthalate	U	439	ug/kg	87.7	439
206-44-0	Fluoranthene	U	43.9	ug/kg	13.2	43.9
85-68-7	Butylbenzylphthalate	U	439	ug/kg	87.7	439
56-55-3	Benzo(a)anthracene	U	43.9	ug/kg	13.2	43.9
91-94-1	3,3'-Dichlorobenzidine	U	439	ug/kg	132	439
218-01-9	Chrysene	U	43.9	ug/kg	13.2	43.9
117-81-7	bis(2-Ethylhexyl)phthalate	U	439	ug/kg	87.7	439
117-84-0	Di-n-octylphthalate	U	439	ug/kg	87.7	439
205-99-2	Benzo(b)fluoranthene	U	43.9	ug/kg	13.2	43.9
207-08-9	Benzo(k)fluoranthene	U	43.9	ug/kg	13.2	43.9
50-32-8	Benzo(a)pyrene	U	43.9	ug/kg	13.2	43.9
193-39-5	Indeno(1,2,3-cd)pyrene	U	43.9	ug/kg	13.2	43.9
53-70-3	Dibenzo(a,h)anthracene	U	43.9	ug/kg	13.2	43.9
191-24-2	Benzo(ghi)perylene	U	43.9	ug/kg	13.2	43.9
120-82-1	1,2,4-Trichlorobenzene	U	439	ug/kg	87.7	439

**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	3.15	897	ug/kg		JA
301-02-0	9-Octadecenamide, (Z)-	11.48	338	ug/kg	96	NJ

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

Page 3 of 3

<b>SDG Number:</b>	<b>10-1758</b>	<b>Date Collected:</b>	<b>02/09/2010 12:00</b>	<b>Matrix:</b>	<b>R</b>
<b>Lab Sample ID:</b>	<b>246866009</b>	<b>Date Received:</b>	<b>02/11/2010 09:20</b>	<b>%Moisture:</b>	<b>24.2</b>
		<b>Client:</b>	<b>LANL010</b>	<b>Project:</b>	<b>LANL01004</b>
<b>Client ID:</b>	<b>RE15-10-8376</b>	<b>Method:</b>	<b>SW846 8270C</b>	<b>SOP Ref:</b>	<b>GL-OA-E-009</b>
<b>Batch ID:</b>	<b>954297</b>	<b>Inst:</b>	<b>MSD2.I</b>	<b>Dilution:</b>	<b>1</b>
<b>Run Date:</b>	<b>02/23/2010 18:15</b>	<b>Analyst:</b>	<b>AGS1</b>	<b>Inj. Vol:</b>	<b>.5 uL</b>
<b>Prep Date:</b>	<b>02/17/2010 21:06</b>	<b>Aliquot:</b>	<b>30.07 g</b>	<b>Final Volume:</b>	<b>1 mL</b>
<b>Data File:</b>	<b>s2b2313.d</b>	<b>Column:</b>	<b>J&amp;W DB-5MS</b>	<b>Level:</b>	<b>LOW</b>

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
Tentatively Identified Compound Summary							
CAS No.	Tentatively Identified Compound (TIC)		RT	Estimated	Units	Fit	Qual
301-02-0	9-Octadecenamide, (Z)-		13.31	360	ug/kg	97	NJ



Data File: /chem/MSD2.i/s022310.b/s2b2313.d  
Report Date: 23-Feb-2010 18:40

Page 1

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Data file : /chem/MSD2.i/s022310.b/s2b2313.d  
Lab Smp Id: 246866009 Client Smp ID: RE15-10-8376  
Inj Date : 23-FEB-2010 18:15  
Operator : AGS1 Inst ID: MSD2.i  
Smp Info : |246866009|954297|1|SVM|1|LANL  
Misc Info : |MSD8270\_S|WBN100217-01|  
Comment : Column: J & W Scientific DB-5MS 25m x 0.2mm x 0.33um  
Method : /chem/MSD2.i/s022310.b/MSD2-M8270PAQA-010810a.m  
Meth Date : 23-Feb-2010 16:10 ann00964 Quant Type: ISTD  
Cal Date : 11-JAN-2010 20:43 Cal File: s2a0859.d  
Als bottle: 10  
Dil Factor: 1.00000  
Integrator: HP RTE Compound Sublist: 10-1758.sub  
Target Version: 3.50  
Processing Host: hpclp1

Concentration Formula:  $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vi} * \text{Ws} * (100 - \text{M}) / 100) * \text{CpndVariable}$

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.07000	weight of sample
M	24.16580	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG						CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE		ON-COLUMN	FINAL
							(ng/ul)	(ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	4.524	4.529	(1.000)	226079		40.0000	
* 29 Naphthalene-d8	136	5.784	5.794	(1.000)	782144		40.0000	
* 46 Acenaphthene-d10	164	7.645	7.655	(1.000)	493448		40.0000	
* 67 Phenanthrene-d10	188	9.249	9.256	(1.000)	865058		40.0000	
* 91 Chrysene-d12	240	12.169	12.184	(1.000)	659877		40.0000	
* 98 Perylene-d12	264	14.328	14.342	(1.000)	442584		40.0000	
\$ 3 2-Fluorophenol	112	3.392	3.383	(0.750)	344359		62.7707	2750
\$ 5 Phenol-d5	99	4.154	4.163	(0.918)	420111		57.2241	2510
\$ 20 Nitrobenzene-d5	82	5.051	5.066	(0.873)	207419		33.4701	1470
\$ 39 2-Fluorobiphenyl	172	6.910	6.918	(0.904)	452876		29.6636	1300
\$ 60 2,4,6-Tribromophenol	329	8.492	8.502	(1.111)	125291		58.7054	2570
\$ 81 p-Terphenyl-d14	244	10.958	10.962	(0.900)	555098		43.7971	1920

## ION RATIO REPORT

## SV REPORT

Data file: s2b2313.d

Report Date: 02/23/2010 18:39

Lab. ID: 246866009

SampleType: SAMPLE

Injection Date: 23-FEB-2010 18:15

Operator: AGS1

Instrument: MSD2.i

Sample Info: |246866009|954297|1|SVM|1|LANL

Miscellaneous Info: |MSD8270\_S|WBN100217-01|

Comment:

Method used: /chem/MSD2.i/s022310.b/MSD2-M8270PAQA-010810a.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-1758

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
4	Aniline		CAS#: 62-53-3			
66	25304	4.15	4.22	80-120	100	(T)
93	614	4.20	4.22	173-233	2	(Q)
-----						
17	N-Nitrosodipropylamine		CAS#: 621-64-7			
70	29267	5.05	4.90	80-120	100	(T)
42	22393	5.05	4.90	56-116	77	(T)
-----						
27	Benzoic acid		CAS#: 65-85-0			
105	950	5.79	5.55	80-120	100	(T)
122	209	5.78	5.55	45-105	22	(QT)
77	2972	5.78	5.55	43-103	313	(QT)
-----						
44	2,6-Dinitrotoluene		CAS#: 606-20-2			
165	64633	7.64	7.43	80-120	100	(T)
63	915	7.64	7.43	42-102	1	(QT)
-----						
50	2,4-Dinitrotoluene		CAS#: 121-14-2			
165	64633	7.64	7.86	80-120	100	(T)
89	848	7.65	7.86	50-110	1	(QT)
63	915	7.64	7.86	50-110	1	(QT)
-----						
53	Fluorene		CAS#: 86-73-7			
166	6624	8.49	8.24	80-120	100	(T)
165	6920	8.49	8.24	62-122	104	(T)
167	2131	8.49	8.24	0- 44	32	(T)

Q qualifier indicates ion failed ratio requirement

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Data file : /chem/MSD2.i/s022310.b/s2b2313.d  
Lab Smp Id: 246866009 Client Smp ID: RE15-10-8376  
Inj Date : 23-FEB-2010 18:15  
Operator : AGS1 Inst ID: MSD2.i  
Smp Info : |246866009|954297|1|SVM|1|LANL  
Misc Info : |MSD8270\_S|WBN100217-01|  
Comment : Column: J & W Scientific DB-5MS 25m x 0.2mm x 0.33um  
Method : /chem/MSD2.i/s022310.b/MSD2-M8270PAQA-010810a.m  
Meth Date : 23-Feb-2010 16:10 ann00964 Quant Type: ISTD  
Cal Date : 11-JAN-2010 20:43 Cal File: s2a0859.d  
Als bottle: 10  
Dil Factor: 1.00000  
Integrator: HP RTE Compound Sublist: 10-1758.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	24.16580	% moisture

Cpnd Variable Local Compound Variable

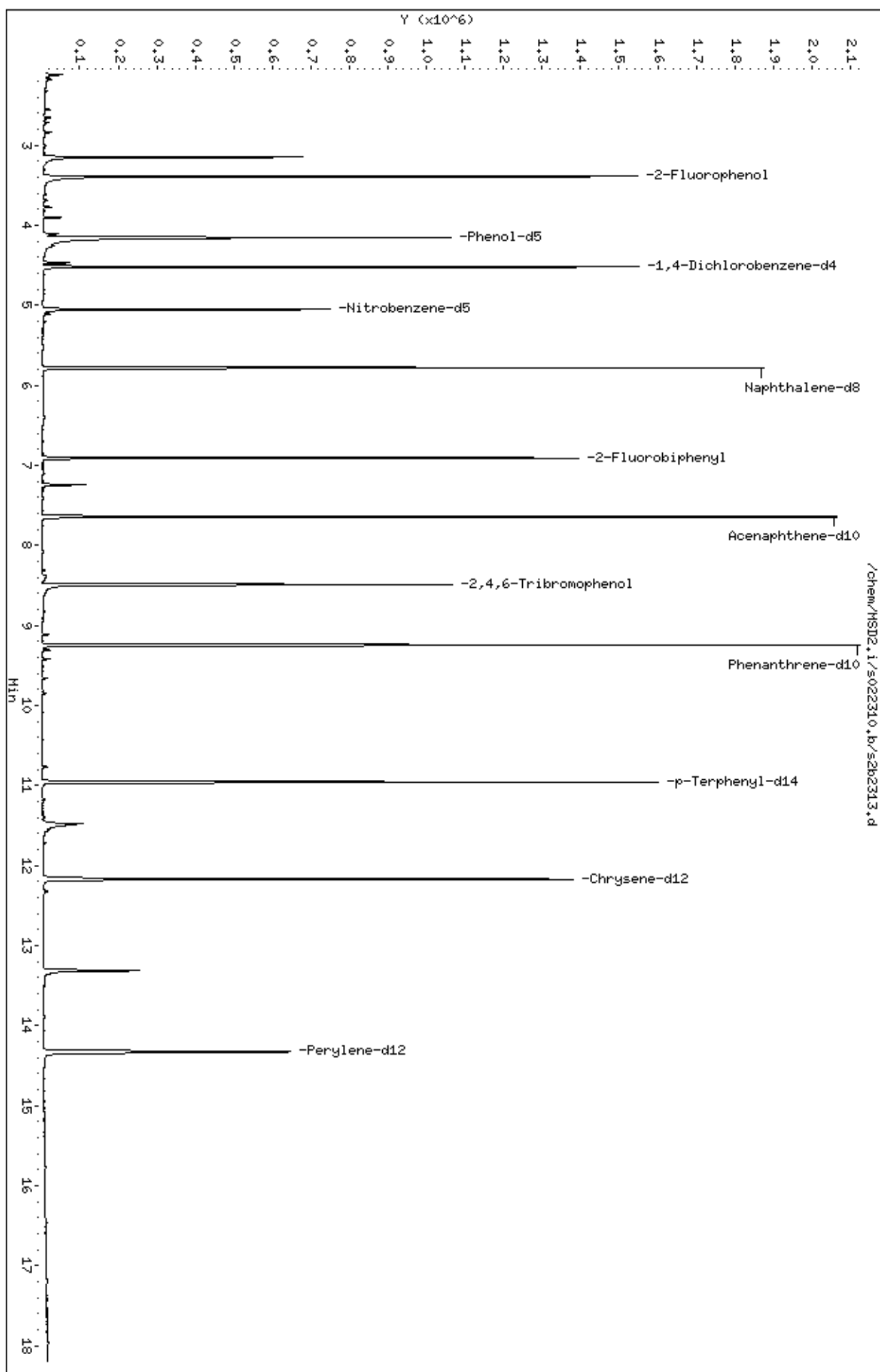
ISTD	RT	AREA	AMOUNT
=====	====	=====	=====
* 10 1,4-Dichlorobenzene-d4	4.524	1453868	40.000
* 91 Chrysene-d12	12.169	1630532	40.000
* 98 Perylene-d12	14.328	1912883	40.000

CONCENTRATIONS					QUANT		
RT	AREA	ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
----	----	-----	-----	----	-----	-----	-----

RT	AREA	CONCENTRATIONS		QUAL	QUANT		CPND #
		ON-COL(ng/ul)	FINAL(ug/Kg)		LIBRARY	LIB ENTRY	
====	====	=====	=====	====	=====	=====	=====
Unknown Aldol Condensate					CAS #:		
3.149	743061	20.4436841	896	0		0	10
9-Octadecenamide, (Z)-					CAS #: 301-02-0		
11.480	314470	7.71453362	338	96	NIST05.L	112655	91
9-Octadecenamide, (Z)-					CAS #: 301-02-0		
13.313	392116	8.19946901	360	97	NIST05.L	112655	98

Data File: /chem/HSD2.i/s022310.b/s2b2313.d  
 Date : 23-FEB-2010 18:15  
 Client ID: RE15-10-8376  
 Sample Info: 124686609195429711SVH11L6NL  
 Volume Injected (uL): 0.5  
 Column phase: 3uM DB-5MS

Instrument: HSD2.i  
 Operator: AGS1  
 Column diameter: 0.20



Date : 23-FEB-2010 18:15

Client ID: RE15-10-8376

Instrument: MSD2.i

Sample Info: 1246866009195429711ISVH11ILANL

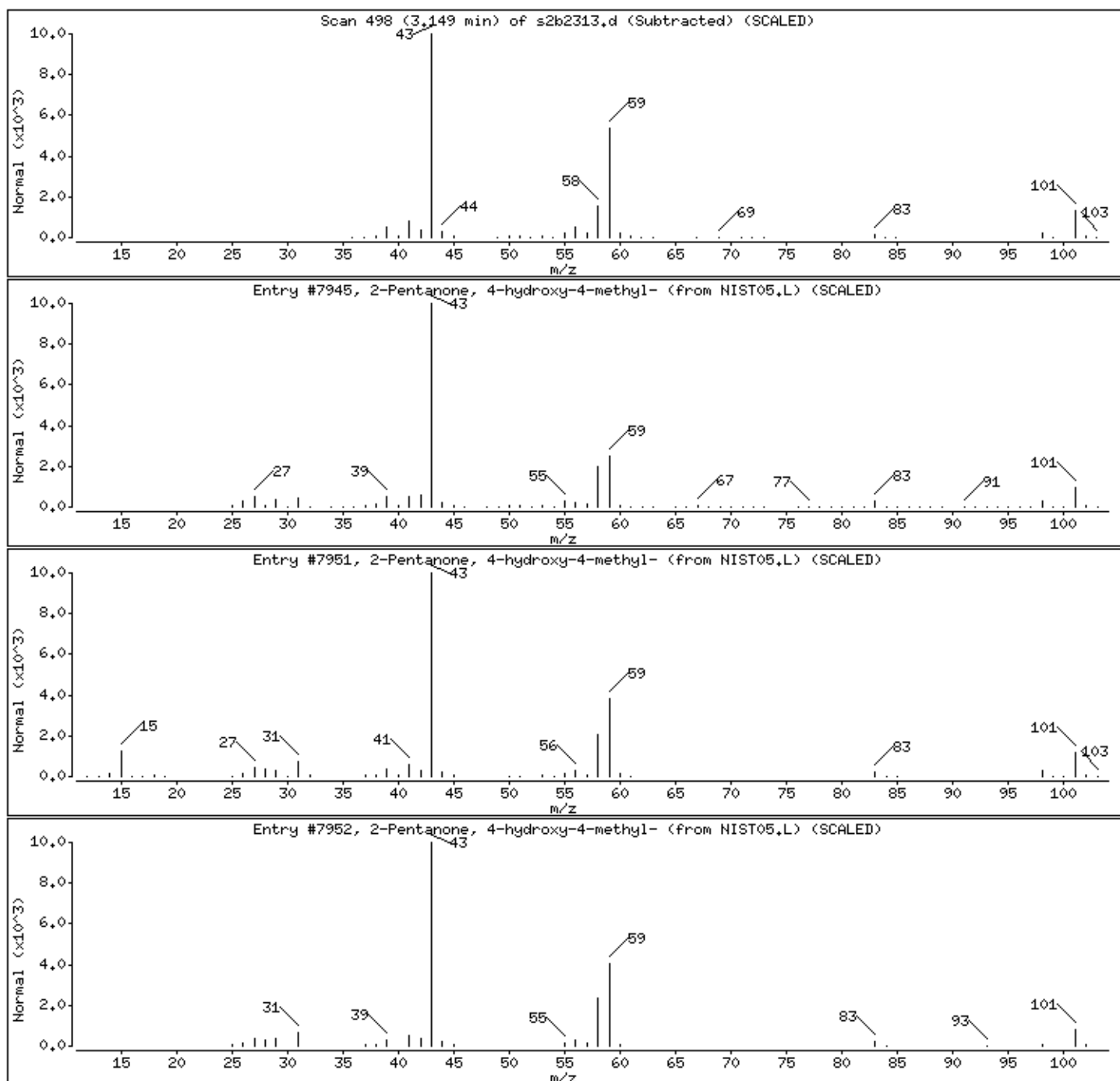
Volume Injected (uL): 0.5

Operator: AGS1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7945	59	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	59	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	50	C6H12O2	116



Date : 23-FEB-2010 18:15

Client ID: RE15-10-8376

Instrument: MSD2.i

Sample Info: 1246866009195429711ISVH11ILANL

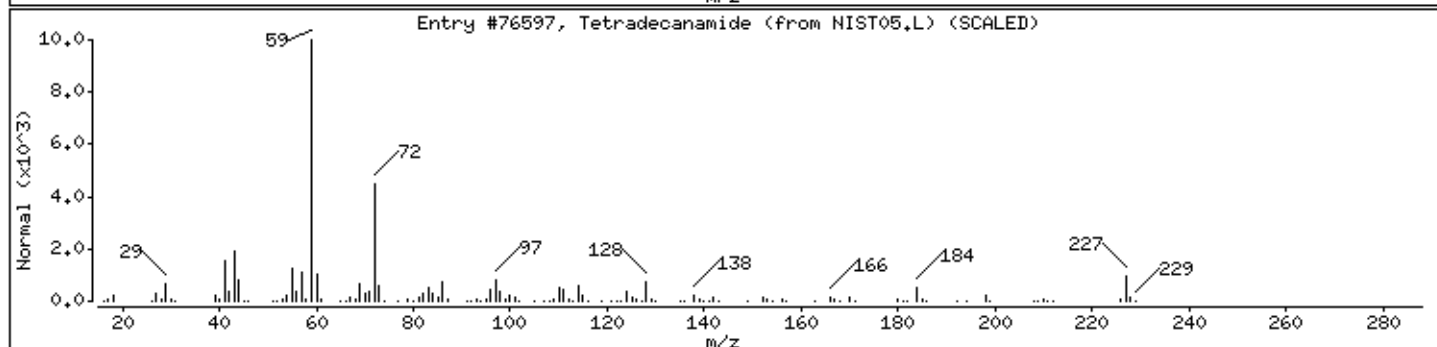
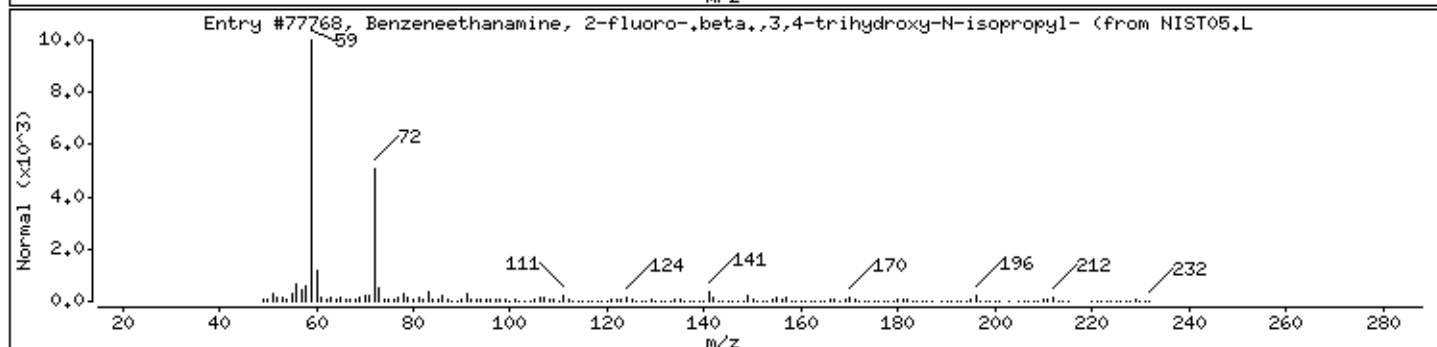
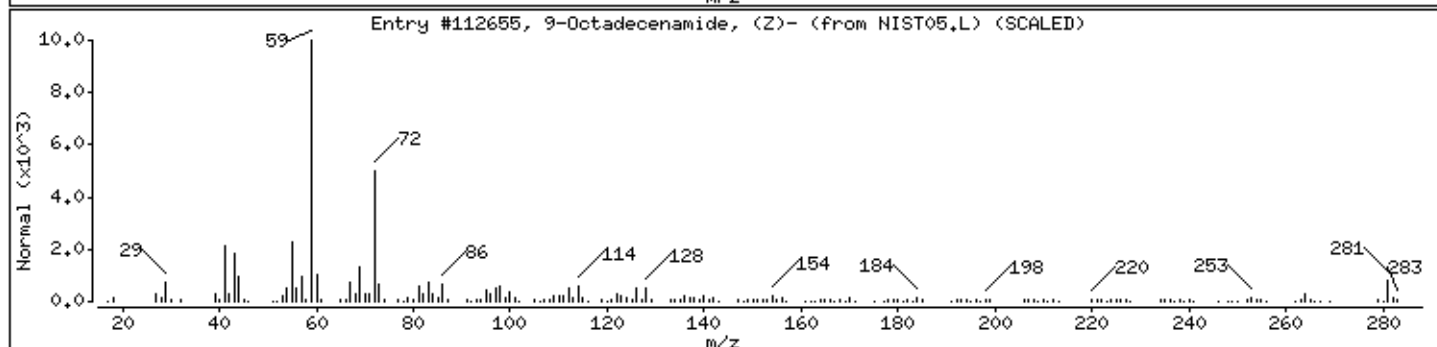
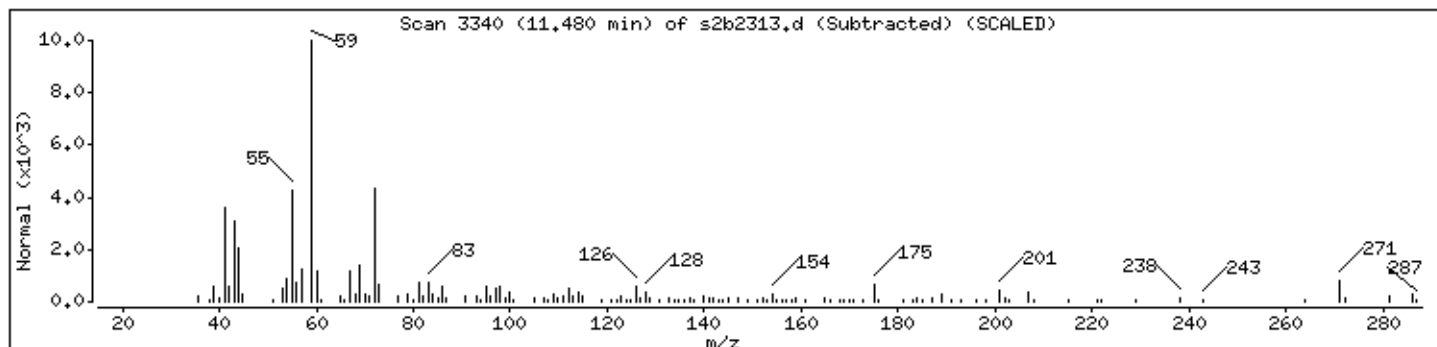
Volume Injected (uL): 0.5

Operator: AGS1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
9-Octadecenamide, (Z)-	301-02-0	NIST05.L	112655	96	C18H35NO	281
Benzeneethanamine, 2-fluoro-,beta.,3,4-t	61338-98-5	NIST05.L	77768	72	C11H16FN03	229
Tetradecanamide	638-58-4	NIST05.L	76597	64	C14H29NO	227



Date : 23-FEB-2010 18:15

Client ID: RE15-10-8376

Instrument: MSD2.i

Sample Info: 1246866009195429711ISVH11ILANL

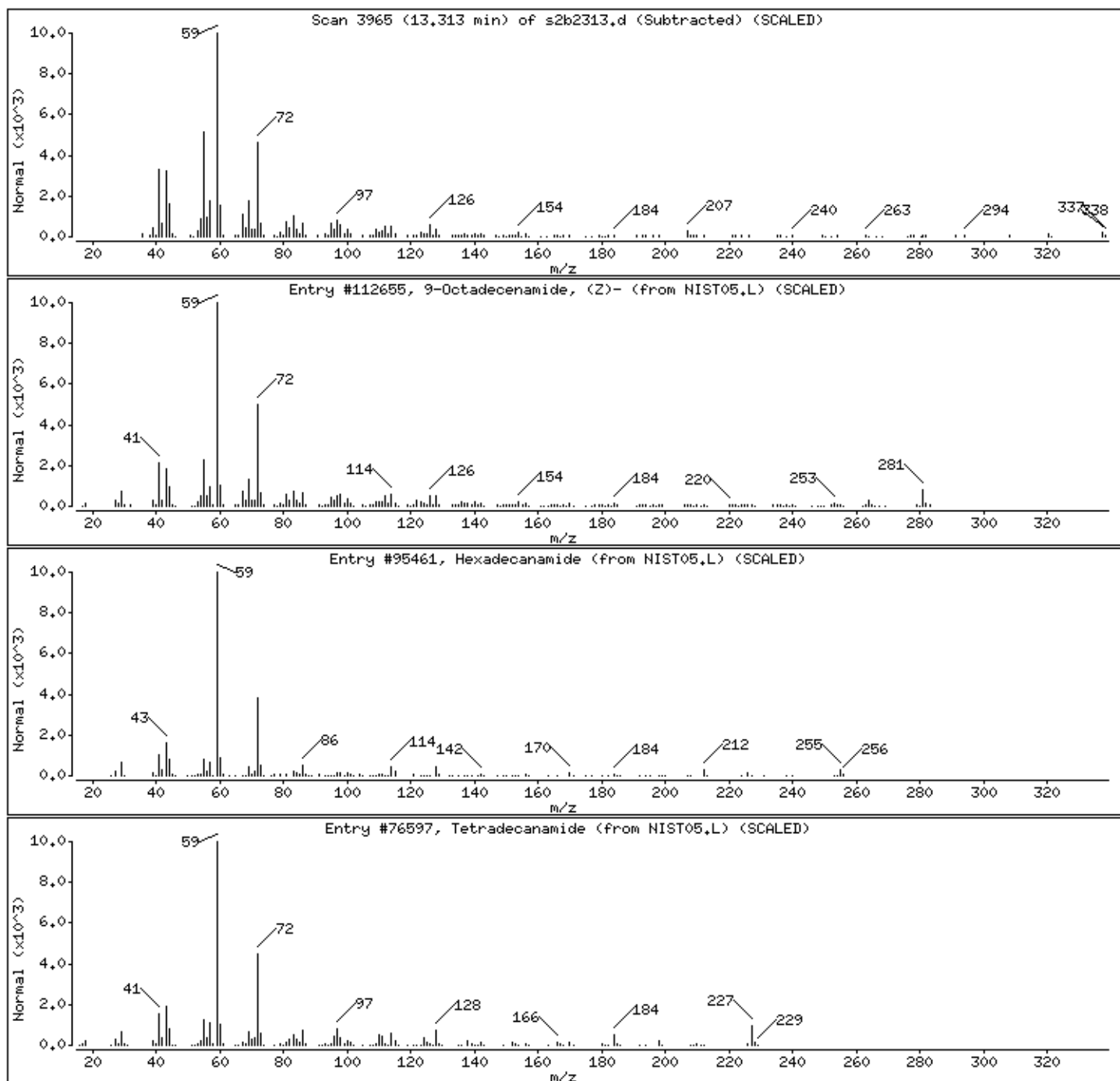
Volume Injected (uL): 0.5

Operator: AGS1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
9-Octadecenamide, (Z)-	301-02-0	NIST05.L	112655	97	C18H35NO	281
Hexadecanamide	629-54-9	NIST05.L	95461	78	C16H33NO	255
Tetradecanamide	638-58-4	NIST05.L	76597	78	C14H29NO	227





# Standard Data

SW846 8270/EPA 625								
Calibration Standard Concentration Levels*								
MEGA MIX	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
1,4-Dichlorobenzene-d4 (INTERNAL STANDARD)								
Naphthalene-d8 (INTERNAL STANDARD)								
Acenaphthene-d10 (INTERNAL STANDARD)								
Phenanthrene-d10 (INTERNAL STANDARD)								
Chrysene-d12 (INTERNAL STANDARD)								
Perylene-d12 (INTERNAL STANDARD)								
2-Fluorophenol (SURROGATE)		10	20	40	50	80	100	120
Phenol-d5 (SURROGATE)		10	20	40	50	80	100	120
2-Chlorophenol-d4 (CLP SURROGATE)		10	20	40	50	80	100	120
1,2-Dichlorobenzene-d4 (CLP SURROGATE)		10	20	40	50	80	100	120
Nitrobenzene-d5 (SURROGATE)		10	20	40	50	80	100	120
2-Fluorobiphenyl (SURROGATE)		10	20	40	50	80	100	120
2,4,6-Tribromophenol (SURROGATE)		10	20	40	50	80	100	120
p-Terphenyl-d14 (SURROGATE)		10	20	40	50	80	100	120
N-Nitrosodimethylamine	1**	10	20	40	50	80	100	120
Pyridine		10	20	40	50	80	100	120
Aniline		10	20	40	50	80	100	120
Phenol		10	20	40	50	80	100	120
bis(2-Chloroethyl)ether		10	20	40	50	80	100	120
2-Chlorophenol		10	20	40	50	80	100	120
n-Decane		10	20	40	50	80	100	120
1,3-Dichlorobenzene		10	20	40	50	80	100	120
1,4-Dichlorobenzene		10	20	40	50	80	100	120
Benzyl Alcohol		10	20	40	50	80	100	120
1,2-Dichlorobenzene		10	20	40	50	80	100	120
bis(2-Chloroisopropyl)ether		10	20	40	50	80	100	120
o-Cresol (2-Methylphenol)		10	20	40	50	80	100	120
N-Nitrosodipropylamine	1**	10	20	40	50	80	100	120
m,p-Cresols (3-Methylphenol & 4-Methylphenol)		10	20	40	50	80	100	120
Hexachloroethane		10	20	40	50	80	100	120
Nitrobenzene		10	20	40	50	80	100	120
Isophorone		10	20	40	50	80	100	120
2-Nitrophenol		10	20	40	50	80	100	120
2,4-Dimethylphenol		10	20	40	50	80	100	120
bis(2-Chloroethoxy)methane		10	20	40	50	80	100	120
2,4-Dichlorophenol		10	20	40	50	80	100	120
Benzoic Acid			20	40	50	80	100	120
1,2,4-Trichlorobenzene		10	20	40	50	80	100	120
Naphthalene	1	10	20	40	50	80	100	120
alpha-Terpineol		10	20	40	50	80	100	120
4-Chloroaniline		10	20	40	50	80	100	120

SW846 8270/EPA 625								
Calibration Standard Concentration Levels*								
MEGA MIX	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
Hexachlorobutadiene		10	20	40	50	80	100	120
4-Chloro-3-methylphenol		10	20	40	50	80	100	120
2-Methylnaphthalene	1	10	20	40	50	80	100	120

1-Methylnaphthalene	1	10	20	40	50	80	100	120
Hexachlorocyclopentadiene		10	20	40	50	80	100	120
2,3-Dichloroaniline		10	20	40	50	80	100	120
2,4,6-Trichlorophenol		10	20	40	50	80	100	120
2,4,5-Trichlorophenol		10	20	40	50	80	100	120
2-Chloronaphthalene	1	10	20	40	50	80	100	120
o-Nitroaniline		10	20	40	50	80	100	120
m-Nitroaniline		10	20	40	50	80	100	120
Dimethylphthalate	1**	10	20	40	50	80	100	120
2,6-Dinitrotoluene		10	20	40	50	80	100	120
Acenaphthylene	1	10	20	40	50	80	100	120
Acenaphthene	1	10	20	40	50	80	100	120
2,4-Dinitrophenol			20	40	50	80	100	120
Dibenzofuran		10	20	40	50	80	100	120
2,4-Dinitrotoluene		10	20	40	50	80	100	120
Diethylphthalate	1**	10	20	40	50	80	100	120
4-Nitrophenol		10	20	40	50	80	100	120
Fluorene	1	10	20	40	50	80	100	120
4-Chlorophenyl phenyl ether		10	20	40	50	80	100	120
2-Methyl-4,6-dinitrophenol		10	20	40	50	80	100	120
p-Nitroaniline		10	20	40	50	80	100	120
Diphenylamine		10	20	40	50	80	100	120
1,2-Diphenylhydrazine		10	20	40	50	80	100	120
4-Bromophenyl phenylether		10	20	40	50	80	100	120
Hexachlorobenzene		10	20	40	50	80	100	120
Pentachlorophenol		10	20	40	50	80	100	120
n-Octadecane		10	20	40	50	80	100	120
Phenanthrene	1	10	20	40	50	80	100	120
Anthracene	1	10	20	40	50	80	100	120
Di-n-butylphthalate	1**	10	20	40	50	80	100	120
Fluoranthene	1	10	20	40	50	80	100	120
Pyrene	1	10	20	40	50	80	100	120
Butylbenzylphthalate	1**	10	20	40	50	80	100	120
Benzo(a)anthracene	1	10	20	40	50	80	100	120
Chrysene	1	10	20	40	50	80	100	120
bis (2-Ethylhexyl) phthalate	1	10	20	40	50	80	100	120
Di-n-octylphthalate	1**	10	20	40	50	80	100	120

SW846 8270/EPA 625								
Calibration Standard Concentration Levels*								
MEGA MIX	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
Benzo(b)fluoranthene	1	10	20	40	50	80	100	120
Benzo(k)fluoranthene	1	10	20	40	50	80	100	120
Benzo(a)pyrene	1	10	20	40	50	80	100	120
Indeno-(1,2,3-cd)pyrene	1	10	20	40	50	80	100	120
Dibenzo(a,h)anthracene	1	10	20	40	50	80	100	120
Benzo(ghi)perylene	1	10	20	40	50	80	100	120
m-Dinitrobenzene		10	20	40	50	80	100	120
2,3,4,6-Tetrachlorophenol		10	20	40	50	80	100	120
Dinoseb		10	20	40	50	80	100	120
Carbazole	1	10	20	40	50	80	100	120

p-Benzoquinone		10	20	40	50	80	100	120
Methoxychlor	1**	10	20	40	50	80	100	120
p-Toluidine		10	20	40	50	80	100	120
m-Toluidine		10	20	40	50	80	10	120
1,4-Dinitrobenzene		10	20	40	50	80	100	120
2-Ethoxyethanol		10	20	40	50	80	100	120
Phthalic anhydride		10	20	40	50	80	100	120
Methylenebis(2-chloroaniline)		10	20	40	50	80	100	120
Dibenzo(a,e)pyrene		10	20	40	50	80	100	120

SW846 8270/EPA 625								
Calibration Standard Concentration Levels*								
AP MIX	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
Benzaldehyde		10	20	40	50	80	100	120
Acetophenone		10	20	40	50	80	100	120
Caprolactam		10	20	40	50	80	100	120
1,1'-Biphenyl		10	20	40	50	80	100	120
Atrazine		10	20	40	50	80	100	120
Benzidine		10	20	40	50	80	100	120
3,3'-Dichlorobenzidine		10	20	40	50	80	100	120
1,4-Dioxane		10	20	40	50	80	100	120
Methyl methacrylate		10	20	40	50	80	100	120
Ethyl methacrylate		10	20	40	50	80	100	120
2-Picoline		10	20	40	50	80	100	120
N-Nitrosomethylethylamine		10	20	40	50	80	100	120
Methyl methanesulfonate		10	20	40	50	80	100	120
N-Nitrosodiethylamine		10	20	40	50	80	100	120
Ethyl methanesulfonate		10	20	40	50	80	100	120
Pentachloroethane		10	20	40	50	80	100	120
N-Nitrosopyrrolidine		10	20	40	50	80	100	120
N-Nitrosomorpholine		10	20	40	50	80	100	120
o-Toluidine		10	20	40	50	80	100	120
N-Nitrosopiperidine		10	20	40	50	80	100	120
a,a-Dimethylphenethylamine		10	20	40	50	80	100	120
2,6-Dichlorophenol		10	20	40	50	80	100	120

SW846 8270/EPA 625								
Calibration Standard Concentration Levels*								
AP MIX	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
Hexachloropropene		10	20	40	50	80	100	120
p-Phenylenediamine		10	20	40	50	80	100	120
N-Nitrosodi-n-butylamine		10	20	40	50	80	100	120
Safrole		10	20	40	50	80	100	120
1,2,4,5-Tetrachlorobenzene		10	20	40	50	80	100	120
Isosafrole		10	20	40	50	80	100	120
1,4-Naphthoquinone		10	20	40	50	80	100	120
Pentachlorobenzene		10	20	40	50	80	100	120
1-Naphthylamine		10	20	40	50	80	100	120
2-Naphthylamine		10	20	40	50	80	100	120
5-Nitro-o-toluidine		10	20	40	50	80	100	120
1,3,5-Trinitrobenzene		10	20	40	50	80	100	120
Phenacetin		10	20	40	50	80	100	120
Diallate		10	20	40	50	80	100	120
cis-Diallate		1.5	3	6	7.5	12	15	18
trans-Diallate		8.5	17	34	42	68	85	102
4-Aminobiphenyl		10	20	40	50	80	100	120

Pentachloronitrobenzene		10	20	40	50	80	100	120
Pronamide		10	20	40	50	80	100	120
4-Nitroquinoline oxide		10	20	40	50	80	100	120
Methapyrilene	1**	10	20	40	50	80	100	120
Isodrin	1**	10	20	40	50	80	100	120
Aramite		10	20	40	50	80	100	120
Kepone	1**	10	20	40	50	80	100	120
p-(Dimethylamino)azobenzene		10	20	40	50	80	100	120
Chlorobenzilate		10	20	40	50	80	100	120
3,3'-Dimethylbenzidine		10	20	40	50	80	100	120
2-Acetylaminofluorene		10	20	40	50	80	100	120
7,12-Dimethylbenz(a)anthracene		10	20	40	50	80	100	120
3-Methylcholanthrene		10	20	40	50	80	100	120

SW846 8270/EPA 625								
Calibration Standard Concentration Levels*								
	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
Hexachlorophene		500	1000	1250	1500	1750	2000	

SW846 8270/EPA 625								
Calibration Standard Concentration Levels*								
PEST MIX	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
Tributylphosphate		10	20	40	50	80	100	120
Triethylphosphorothioate		10	20	40	50	80	100	120
Thionazin		10	20	40	50	80	100	120
Sulfotepp		10	20	40	50	80	100	120
Phorate		10	20	40	50	80	100	120
Dimethoate		10	20	40	50	80	100	120
Disulfoton		10	20	40	50	80	100	120
Methyl parathion		10	20	40	50	80	100	120
Famphur		10	20	40	50	80	100	120
Parathion		10	20	40	50	80	100	120

SW846 8270/EPA 625								
Calibration Standard Concentration Levels*								
NEVADA MIX	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
bis(Chloromethyl)ether		10	20	40	50	80	100	120
4-Chlorothiophenol		10	20	40	50	80	100	120
4-Chlorothioanisole		10	20	40	50	80	100	120
Phthalic acid		10	20	40	50	80	100	120
Hydroxymethyl phthalimide		10	20	40	50	80	100	120
Diphenyl sulfide		10	20	40	50	80	100	120
Diphenyl disulfide		10	20	40	50	80	100	120
Phenyl sulfone		10	20	40	50	80	100	120
Octachlorostyrene		10	20	40	50	80	100	120
Thiophenol		10	20	40	50	80	100	120
2,2'-Dichlorobenzil		10	20	40	50	80	100	120
bis(p-Chlorophenyl)disulfide		10	20	40	50	80	100	120

bis(p-Chlorophenyl)sulfone		10	20	40	50	80	100	120
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SW846 8270C/8270D/EPA 625								
Calibration Standard Concentration Levels*								
BJCO MIX	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
1-Hexanol		10	20	40	50	80	100	120
Quinoline		10	20	40	50	80	100	120
2,4-Toluene diisocyanate		10	20	40	50	80	100	120
1-Nitropyrene		10	20	40	50	80	100	120
5-Methylchrysene		10	20	40	50	80	100	120
Benzo(j)fluoranthene		10	20	40	50	80	100	120
Dibenzo(a,h)pyrene		10	20	40	50	80	100	120
Dibenzo(a,h)acridine		10	20	40	50	80	100	120
Dibenzo(a,i)acridine		10	20	40	50	80	100	120
Dibenzo(a,i)pyrene		10	20	40	50	80	100	120
Dibenzo(a,l)pyrene		10	20	40	50	80	100	120
7H-Dibenzo(c,g)carbazole		10	20	40	50	80	10	120

All values are mg/L without the prep factor.

# Indicates the calibration verification concentration level used

\* Usual calibration levels using SCAN methodology

\*\* This analyte included in this level at special client request.

(0210/Full list)

Report Date: 22-Feb-2010 16:55

### Calibration History

Method : /chem/MSD2.i/s022210.b/MSD2-M8270PAQA-010810a.m  
Start Cal Date: 08-JAN-2010 22:16  
End Cal Date : 11-JAN-2010 22:24

#### Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 1.00000		
08-JAN-2010 22:16	MEGAI	/chem/MSD2.i/s010810a.b/s2a0810.d
Cal Level: 2 , Cal Amount: 10.00000		
11-JAN-2010 18:23	NEV	/chem/MSD2.i/s010810a.b/s2a0855.d
10-JAN-2010 23:03	HEX	/chem/MSD2.i/s010810a.b/s2a0837.d
10-JAN-2010 20:06	PEST	/chem/MSD2.i/s010810a.b/s2a0830.d
11-JAN-2010 15:27	AP12	/chem/MSD2.i/s010810a.b/s2a0848.d
08-JAN-2010 22:44	MEGAI	/chem/MSD2.i/s010810a.b/s2a0811.d
Cal Level: 3 , Cal Amount: 20.00000		
11-JAN-2010 20:18	NEV	/chem/MSD2.i/s010810a.b/s2a0858.d
10-JAN-2010 23:28	HEX	/chem/MSD2.i/s010810a.b/s2a0838.d
10-JAN-2010 20:31	PEST	/chem/MSD2.i/s010810a.b/s2a0831.d
11-JAN-2010 15:52	AP12	/chem/MSD2.i/s010810a.b/s2a0849.d
08-JAN-2010 23:13	MEGAI	/chem/MSD2.i/s010810a.b/s2a0812.d
Cal Level: 4 , Cal Amount: 40.00000		
11-JAN-2010 20:43	NEV	/chem/MSD2.i/s010810a.b/s2a0859.d
10-JAN-2010 23:53	HEX	/chem/MSD2.i/s010810a.b/s2a0839.d
10-JAN-2010 20:57	PEST	/chem/MSD2.i/s010810a.b/s2a0832.d
11-JAN-2010 18:50	AP12	/chem/MSD2.i/s010810a.b/s2a0856.d
08-JAN-2010 23:41	MEGAI	/chem/MSD2.i/s010810a.b/s2a0813.d
Cal Level: 5 , Cal Amount: 50.00000		
11-JAN-2010 21:08	NEV	/chem/MSD2.i/s010810a.b/s2a0860.d
11-JAN-2010 00:18	HEX	/chem/MSD2.i/s010810a.b/s2a0840.d
10-JAN-2010 21:22	PEST	/chem/MSD2.i/s010810a.b/s2a0833.d
11-JAN-2010 16:43	AP12	/chem/MSD2.i/s010810a.b/s2a0851.d
09-JAN-2010 00:10	MEGAI	/chem/MSD2.i/s010810a.b/s2a0814.d
Cal Level: 6 , Cal Amount: 80.00000		
11-JAN-2010 21:33	NEV	/chem/MSD2.i/s010810a.b/s2a0861.d
11-JAN-2010 00:44	HEX	/chem/MSD2.i/s010810a.b/s2a0841.d
10-JAN-2010 21:47	PEST	/chem/MSD2.i/s010810a.b/s2a0834.d
11-JAN-2010 19:45	AP12	/chem/MSD2.i/s010810a.b/s2a0857.d
09-JAN-2010 00:38	MEGAI	/chem/MSD2.i/s010810a.b/s2a0815.d
Cal Level: 7 , Cal Amount: 100.00000		

11-JAN-2010	21:58	NEV	/chem/MSD2.i/s010810a.b/s2a0862.d
11-JAN-2010	01:09	HEX	/chem/MSD2.i/s010810a.b/s2a0842.d
10-JAN-2010	22:12	PEST	/chem/MSD2.i/s010810a.b/s2a0835.d
11-JAN-2010	17:33	AP12	/chem/MSD2.i/s010810a.b/s2a0853.d
09-JAN-2010	01:07	MEGAI1	/chem/MSD2.i/s010810a.b/s2a0816.d
-----			
Cal Level: 8 , Cal Amount: 120.00000			
=====			
11-JAN-2010	22:24	NEV	/chem/MSD2.i/s010810a.b/s2a0863.d
10-JAN-2010	22:37	PEST	/chem/MSD2.i/s010810a.b/s2a0836.d
11-JAN-2010	17:58	AP12	/chem/MSD2.i/s010810a.b/s2a0854.d
09-JAN-2010	01:35	MEGAI1	/chem/MSD2.i/s010810a.b/s2a0817.d
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Continuing Calibration  
Ccal Level Mode: GLOBAL LEVEL 4

Cal Level: 4 , Ccal Amount: 40.0			
=====			
22-FEB-2010	14:46	MEGAI1	/chem/MSD2.i/s022210.b/s2b2202.d
Cal Level: 4 , Ccal Amount: 40.0			
=====			
22-FEB-2010	15:15	AP12	/chem/MSD2.i/s022210.b/s2b2203.d
Cal Level: 4 , Ccal Amount: 40.0			
=====			
22-FEB-2010	15:40	PEST	/chem/MSD2.i/s022210.b/s2b2204.d
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## GEL Laboratories LLC

## INITIAL CALIBRATION DATA

Start Cal Date : 08-JAN-2010 22:16  
 End Cal Date : 11-JAN-2010 22:24  
 Quant Method : ISTD  
 Target Version : 3.50  
 Integrator : HP RTE  
 Method file : /chem/MSD2.i/s022210.b/MSD2-M8270PAQA-010810a.m  
 Cal Date : 22-Feb-2010 16:54 ann00964

## Calibration File Names:

Level 1: /chem/MSD2.i/s010810a.b/s2a0810.d  
 Level 2: /chem/MSD2.i/s010810a.b/s2a0855.d  
 Level 3: /chem/MSD2.i/s010810a.b/s2a0858.d  
 Level 4: /chem/MSD2.i/s010810a.b/s2a0859.d  
 Level 5: /chem/MSD2.i/s010810a.b/s2a0860.d  
 Level 6: /chem/MSD2.i/s010810a.b/s2a0861.d  
 Level 7: /chem/MSD2.i/s010810a.b/s2a0862.d  
 Level 8: /chem/MSD2.i/s010810a.b/s2a0863.d

Compound	1	10	20	40	50	80	Curve	Coefficients			%RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6		b	m1	m2	
	-----	-----	-----	-----	-----	-----					
	100	120									
	Level 7	Level 8									
=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====
1 N-Methyl-N-nitrosomethylamine	+++++	0.63761	0.64632	0.64526	0.62385	+++++					
	0.59745	0.60573					AVRG		0.62604		3.31164
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2 Pyridine	+++++	0.72709	0.72999	0.73846	0.75349	+++++					
	0.76525	0.74110					AVRG		0.74256		1.95182
4 Aniline	+++++	0.59912	0.59830	0.59346	0.59956	+++++					
	0.59741	0.61902					AVRG		0.60115		1.50143
209 Benzaldehyde	+++++	0.87025	0.92113	0.87338	0.82804	0.78634					
	0.78914	0.75957					AVRG		0.83255		6.98655
6 Phenol	+++++	1.33105	1.32361	1.33305	1.32476	+++++					
	1.29936	1.34281					AVRG		1.32577		1.10557
=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====

## GEL Laboratories LLC

## INITIAL CALIBRATION DATA

Start Cal Date : 08-JAN-2010 22:16  
 End Cal Date : 11-JAN-2010 22:24  
 Quant Method : ISTD  
 Target Version : 3.50  
 Integrator : HP RTE  
 Method file : /chem/MSD2.i/s022210.b/MSD2-M8270PAQA-010810a.m  
 Cal Date : 22-Feb-2010 16:54 ann00964

Compound	1	10	20	40	50	80	Curve	Coefficients			%RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6		b	m1	m2	
	-----	-----	-----	-----	-----	-----					
	100	120									
	Level 7	Level 8									
=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====
7 bis(2-Chloroethyl) ether	1.29526	1.20902	1.20257	1.21026	1.19166	+++++					
	1.13636	1.17464					AVRG		1.20282		4.01246
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
8 2-Chlorophenol	+++++	1.11883	1.10895	1.10873	1.09288	+++++					
	1.06793	1.09433					AVRG		1.09861		1.63365
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
203 n-Decane	+++++	2.72389	2.57086	2.41450	2.38312	+++++					
	1.82052	+++++					AVRG		2.38258		14.36978
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
9 1,3-Dichlorobenzene	+++++	1.33095	1.30515	1.30437	1.27460	+++++					
	1.23474	1.25820					AVRG		1.28467		2.75096
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
11 1,4-Dichlorobenzene	+++++	1.36878	1.34649	1.33434	1.31483	+++++					
	1.26111	1.29644					AVRG		1.32033		2.90120
12 Benzyl alcohol	+++++	0.62843	0.65475	0.67958	0.67338	+++++					
	0.66712	0.68651					AVRG		0.66496		3.14877
13 1,2-Dichlorobenzene	+++++	1.28260	1.24569	1.23787	1.22001	+++++					
	1.17260	1.19909					AVRG		1.22631		3.12486
14 bis(2-Chloroisopropyl)ether	+++++	3.65170	3.50650	3.44826	3.40400	+++++					
	3.05104	3.05356					AVRG		3.35251		7.37073
15 o-Cresol	+++++	0.87727	0.87099	0.87014	0.85547	+++++					
	0.84346	0.86276					AVRG		0.86335		1.42473
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## GEL Laboratories LLC

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Start Cal Date : 08-JAN-2010 22:16  
 End Cal Date : 11-JAN-2010 22:24  
 Quant Method : ISTD  
 Target Version : 3.50  
 Integrator : HP RTE  
 Method file : /chem/MSD2.i/s022210.b/MSD2-M8270PAQA-010810a.m  
 Cal Date : 22-Feb-2010 16:54 ann00964

Compound	1	10	20	40	50	80	Curve	Coefficients			%RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6		b	m1	m2	
	100	120									
	Level 7	Level 8									
=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	
16 Acetophenone	+++++	1.11623	1.20062	1.16649	1.10593	1.06848					
	1.09325	1.07929					AVRG		1.11861		4.30077
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
17 N-Nitrosodipropylamine	0.82213	0.88397	0.89023	0.89319	0.87698	+++++					
	0.85968	0.82349					AVRG		0.86424		3.50979
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
18 m,p-Cresols	+++++	1.09720	1.09271	1.11076	1.10067	+++++					
	1.07163	1.10848					AVRG		1.09691		1.28710
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
19 Hexachloroethane	+++++	0.54642	0.53706	0.53643	0.52927	+++++					
	0.50470	0.51472					AVRG		0.52810		2.94925
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
21 Nitrobenzene	+++++	0.36833	0.35581	0.34060	0.32558	+++++					
	0.28712	0.27886					AVRG		0.32605		11.16626
22 Isophorone	+++++	0.67509	0.65709	0.62511	0.60103	+++++					
	0.53305	0.52297					AVRG		0.60239		10.47554
23 2-Nitrophenol	+++++	0.16213	0.15447	0.15102	0.14264	+++++					
	0.12859	0.12687					AVRG		0.14429		9.89820
24 2,4-Dimethylphenol	+++++	0.28413	0.27957	0.26483	0.25521	+++++					
	0.22716	0.22367					AVRG		0.25576		10.04849
25 bis(2-Chloroethoxy)methane	+++++	0.39351	0.37872	0.36031	0.34403	+++++					
	0.30811	0.30216					AVRG		0.34780		10.66159

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Compound	1	10	20	40	50	80	Curve	Coefficients			%RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6		b	m1	m2	
	100	120									
	Level 7	Level 8									
=====											
26 2,4-Dichlorophenol	+++++	0.25264	0.25626	0.24953	0.23947	+++++					
	0.21737	0.21619					AVRG		0.23858		7.45653
-----											
27 Benzoic acid	+++++	+++++	69252	186460	189551	+++++					
	582522	666475					LINR	0.20770	0.16849		0.99827
-----											
28 1,2,4-Trichlorobenzene	+++++	0.34835	0.33647	0.31658	0.30126	+++++					
	0.26730	0.26295					AVRG		0.30548		11.53249
-----											
30 Naphthalene	1.01599	0.93024	0.90095	0.84770	0.81638	+++++					
	0.71552	0.69944					AVRG		0.84660		13.50199
-----											
204 alpha-Terpineol	+++++	0.43388	0.42129	0.39918	0.38403	+++++					
	0.31466	0.30147					AVRG		0.37575		14.73143
31 4-Chloroaniline	+++++	0.25746	0.26476	0.27498	0.26576	+++++					
	0.24416	0.24278					AVRG		0.25832		4.94888
189 Caprolactam	+++++	0.07011	0.08353	0.08541	0.08234	0.07978					
	0.08392	0.08387					AVRG		0.08128		6.42987
32 Hexachlorobutadiene	+++++	0.21613	0.20909	0.19876	0.19016	+++++					
	0.16972	0.16810					AVRG		0.19199		10.39280
33 4-Chloro-3-methylphenol	+++++	0.25577	0.25838	0.25359	0.24346	+++++					
	0.22077	0.21768					AVRG		0.24161		7.48603
-----											

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	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6		b	m1	m2	
	100	120									
	Level 7	Level 8									
=====	=====	=====	=====	=====	=====	=====	=====	=====			=====
34 2-Methylnaphthalene	0.68742	0.63799	0.61758	0.59523	0.56618	++++					
	0.50503	0.49794					AVRG		0.58677		11.80134
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
35 1-Methylnaphthalene	0.68721	0.63795	0.60977	0.58293	0.56006	++++					
	0.49366	0.48697					AVRG		0.57979		12.64563
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
36 Hexachlorocyclopentadiene	++++	0.14834	0.19351	0.22438	0.20401	++++					
	0.22752	0.22187					AVRG		0.20327		14.74777
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
208 1,1'-Biphenyl	++++	1.15748	1.22014	1.16849	1.14034	1.09072					
	1.10444	1.08426					AVRG		1.13798		4.29177
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
205 2,3-Dichloroaniline	++++	0.55201	0.55323	0.55927	0.55334	++++					
	0.55515	0.56191					AVRG		0.55582		0.70507
37 2,4,6-Trichlorophenol	++++	0.32074	0.33052	0.34751	0.33801	++++					
	0.34031	0.34898					AVRG		0.33768		3.16026
38 2,4,5-Trichlorophenol	++++	0.31372	0.34016	0.34931	0.35235	++++					
	0.37091	0.37117					AVRG		0.34960		6.13895
40 2-Chloronaphthalene	1.11140	1.03920	1.02461	1.03089	1.01947	++++					
	1.00306	1.01988					AVRG		1.03550		3.40679
42 o-Nitroaniline	++++	0.34924	0.35751	0.37154	0.36584	++++					
	0.37726	0.38556					AVRG		0.36783		3.59192
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	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6		b	m1	m2	
	100	120									
	Level 7	Level 8									
=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	
41 m-Nitroaniline	+++++	25863	61359	138272	145870	+++++					
	386731	427590					LINR	0.14739	0.21907		0.99848
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
43 Dimethylphthalate	+++++	1.24597	1.21156	1.20575	1.19101	+++++					
	1.17233	1.13900					AVRG		1.19427		3.05378
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
44 2,6-Dinitrotoluene	+++++	0.28498	0.28306	0.28241	0.28145	+++++					
	0.27264	0.27172					AVRG		0.27938		2.04088
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
45 Acenaphthylene	1.68429	1.65369	1.63467	1.63281	1.60990	+++++					
	1.60029	1.62052					AVRG		1.63374		1.73439
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
47 Acenaphthene	1.09095	1.02778	1.02484	1.03364	1.03036	+++++					
	0.98622	0.99703					AVRG		1.02726		3.25549
48 2,4-Dinitrophenol	+++++	+++++	32952	80865	77979	+++++					
	254554	301020					LINR	0.35590	0.16274		0.99385
49 Dibenzofuran	+++++	1.43069	1.40517	1.41259	1.39167	+++++					
	1.39282	1.41896					AVRG		1.40865		1.08070
50 2,4-Dinitrotoluene	+++++	0.34597	0.34978	0.35871	0.35340	+++++					
	0.35843	0.36681					AVRG		0.35552		2.08511
51 Diethylphthalate	+++++	1.27139	1.19174	1.18125	1.17456	+++++					
	1.12436	1.11680					AVRG		1.17668		4.73878

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Compound	1	10	20	40	50	80	Curve	Coefficients			%RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6		b	m1	m2	
	100 Level 7	120 Level 8									
=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====
52 4-Nitrophenol	+++++	17553	51952	103251	103185	+++++					
	274946	318562					LINR	0.14069	0.15956		0.99848
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
53 Fluorene	1.25778	1.23313	1.21822	1.21859	1.21117	+++++					
	1.20006	1.21651					AVRG		1.22221		1.51553
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
54 4-Chlorophenylphenylether	+++++	0.64571	0.63486	0.63779	0.63480	+++++					
	0.63002	0.64028					AVRG		0.63724		0.84510
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
55 2-Methyl-4,6-dinitrophenol	+++++	0.07848	0.09933	0.11179	0.10655	+++++					
	0.11895	0.12072					AVRG		0.10597		14.73901
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
56 p-Nitroaniline	+++++	26604	47743	122085	121088	+++++					
	364178	427452					LINR	0.23126	0.21955		0.99282
133 Diphenylamine	+++++	0.53271	0.51078	0.47784	0.50828	+++++					
	0.53090	0.54197					AVRG		0.51708		4.50352
58 1,2-Diphenylhydrazine	+++++	0.70493	0.70105	0.70243	0.69712	+++++					
	0.66648	0.66450					AVRG		0.68942		2.71481
59 Tributylphosphate	+++++	1.24861	1.19004	1.24636	1.25074	1.22436					
	1.25557	1.20492					AVRG		1.23152		2.08073
61 4-Bromophenylphenylether	+++++	0.20678	0.21104	0.21499	0.21328	+++++					
	0.21646	0.22036					AVRG		0.21382		2.17997
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

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	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6		b	m1	m2	
	100	120									
	Level 7	Level 8									
=====	=====	=====	=====	=====	=====	=====	=====	=====			=====
63 Hexachlorobenzene	+++++	0.22177	0.22237	0.22770	0.22499	+++++					
	0.22682	0.23115					AVRG		0.22580		1.55833
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
207 Atrazine	+++++	0.04195	0.04517	0.04228	0.03997	0.03794					
	0.03735	0.03556					AVRG		0.04003		8.32518
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
65 Pentachlorophenol	+++++	25001	69688	140228	142436	+++++					
	388787	456367					LINR	0.15328	0.12576		0.99822
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
206 n-Octadecane	+++++	0.78939	0.78166	0.76760	0.75958	+++++					
	0.66657	0.65046					AVRG		0.73588		8.29433
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
68 Phenanthrene	1.05740	0.95057	0.94773	0.95068	0.94730	+++++					
	0.93823	0.94984					AVRG		0.96311		4.34028
69 Anthracene	0.95911	0.93816	0.94986	0.95188	0.93165	+++++					
	0.92759	0.93972					AVRG		0.94257		1.21344
72 Di-n-butylphthalate	+++++	1.09506	1.11859	1.10016	1.09503	+++++					
	1.03560	1.03874					AVRG		1.08053		3.21132
76 Fluoranthene	1.01009	1.01601	1.03558	1.05383	1.02447	+++++					
	1.04686	1.05418					AVRG		1.03443		1.74417
77 Benzidine	+++++	0.15240	0.13245	0.13675	0.15671	0.18680					
	+++++	+++++					AVRG		0.15302		14.02699



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	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6		b	m1	m2	
	100	120									
	Level 7	Level 8									
=====											
79 Pyrene	1.22091	1.18391	1.19988	1.22328	1.24428	++++					
	1.17153	1.19858					AVRG		1.20605		2.07419
-----											
85 Butylbenzylphthalate	++++	0.47282	0.49511	0.50444	0.51836	++++					
	0.47396	0.47804					AVRG		0.49046		3.79616
-----											
89 Benzo(a)anthracene	1.12866	0.99758	0.99444	1.00803	0.99958	++++					
	1.01027	1.01938					AVRG		1.02256		4.65102
-----											
90 3,3'-Dichlorobenzidine	++++	45935	140385	273432	320339	535869					
	775922	1076355					LINR	0.10334	0.26981		0.99828
-----											
92 Chrysene	1.00912	0.92899	0.93491	0.94602	0.93267	++++					
	0.93410	0.94559					AVRG		0.94734		2.95510
93 bis(2-Ethylhexyl)phthalate	0.62454	0.71345	0.72042	0.72009	0.73948	++++					
	0.66220	0.66808					AVRG		0.69261		5.98758
94 Di-n-octylphthalate	++++	1.32159	1.44131	1.54182	1.56209	++++					
	1.48687	1.50063					AVRG		1.47572		5.86949
95 Benzo(b)fluoranthene	1.00639	1.02065	1.05649	1.10460	1.10606	++++					
	1.17630	1.18495					AVRG		1.09363		6.44030
96 Benzo(k)fluoranthene	1.00014	1.06621	1.07635	1.10277	1.09046	++++					
	1.10776	1.14132					AVRG		1.08357		4.06676

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	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6		b	m1	m2	
	100	120									
	Level 7	Level 8									
=====	=====	=====	=====	=====	=====	=====	=====	=====			=====
97 Benzo(a)pyrene	0.81432	0.89123	0.91998	0.94378	0.94362	+++++					
	0.97856	0.99992					AVRG		0.92735		6.61212
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
99 Indeno(1,2,3-cd)pyrene	0.72484	0.79688	0.81373	0.80167	0.81219	+++++					
	0.83619	0.82791					AVRG		0.80192		4.57102
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
100 Dibenzo(a,h)anthracene	0.56136	0.63315	0.63537	0.63773	0.64494	+++++					
	0.68015	0.68362					AVRG		0.63947		6.31858
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
101 Benzo(ghi)perylene	0.65204	0.69699	0.68787	0.68101	0.68414	+++++					
	0.68158	0.65805					AVRG		0.67738		2.40109
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
102 1,4-Dioxane	+++++	0.32143	0.32624	0.27301	0.29830	0.28435					
	0.28747	0.28934					AVRG		0.29716		6.64399
103 Methyl methacrylate	+++++	0.16851	0.17916	0.15254	0.14957	0.16049					
	0.14334	0.16511					AVRG		0.15982		7.69531
104 Ethyl methacrylate	+++++	0.74916	0.78704	0.75124	0.73161	0.69625					
	0.70379	0.70541					AVRG		0.73207		4.48747
105 2-Picoline	+++++	1.10397	1.17182	1.11176	1.08004	1.04858					
	1.06254	1.07118					AVRG		1.09284		3.77825
106 N-Nitrosomethylethylamine	+++++	0.42686	0.46510	0.44380	0.42655	0.41062					
	0.41926	0.42388					AVRG		0.43087		4.20253
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

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 Target Version : 3.50  
 Integrator : HP RTE  
 Method file : /chem/MSD2.i/s022210.b/MSD2-M8270PAQA-010810a.m  
 Cal Date : 22-Feb-2010 16:54 ann00964

Compound	1	10	20	40	50	80	Curve	Coefficients			%RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6		b	m1	m2	
	100	120									
	Level 7	Level 8									
=====											
107 Methyl methanesulfonate	+++++	0.53396	0.56607	0.53925	0.50732	0.48843					
	0.49424	0.48518					AVRG		0.51635		5.93127
108 N-Nitrosodiethylamine	+++++	0.44669	0.48537	0.47042	0.44360	0.42871					
	0.43875	0.44360					AVRG		0.45102		4.37240
109 Ethyl Methanesulfonate	+++++	0.61754	0.66207	0.64474	0.61104	0.58806					
	0.60547	0.59721					AVRG		0.61802		4.27651
110 Pentachloroethane	+++++	0.33344	0.34652	0.32562	0.31963	0.30660					
	0.31130	0.31064					AVRG		0.32196		4.45052
111 N-Nitrosopyrrolidine	+++++	0.40737	0.46609	0.47958	0.45167	0.44121					
	0.46347	0.46856					AVRG		0.45399		5.27841
113 N-Nitrosomorpholine	+++++	0.97320	1.06334	1.01984	0.97575	0.92743					
	0.95586	0.92395					AVRG		0.97705		5.12153
114 o-Toluidine	+++++	1.54564	1.66423	1.61932	1.53197	1.48471					
	1.53015	1.51300					AVRG		1.55557		4.06618
115 N-Nitrosopiperidine	+++++	0.13419	0.14247	0.13995	0.13345	0.12805					
	0.13154	0.13151					AVRG		0.13445		3.76537
116 a,a-Dimethylphenethylamine	+++++	0.89379	1.15381	1.20543	1.19755	1.17674					
	1.24315	1.23148					AVRG		1.15742		10.38220

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 Cal Date : 22-Feb-2010 16:54 ann00964

Compound	1	10	20	40	50	80	Curve	Coefficients			%RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6		b	m1	m2	
	-----	-----	-----	-----	-----	-----					
	100	120									
	Level 7	Level 8									
=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====
117 Triethylphosphorothioate	+++++	0.15919	0.15258	0.16177	0.16424	0.15866					
	0.16398	0.16055					AVRG		0.16014		2.47892
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118 2,6-Dichlorophenol	+++++	0.21072	0.23421	0.22908	0.22592	0.21578					
	0.22920	0.22906					AVRG		0.22485		3.74425
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119 Hexachloropropene	+++++	0.12239	0.14252	0.12942	0.13490	0.12372					
	0.13098	0.13533					AVRG		0.13132		5.34487
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120 p-Phenylenediamine	+++++	29624	90488	240898	273192	397904					
	+++++	+++++					LINR	0.07383	0.19901		0.98176
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121 N-Nitrosodi-n-butylamine	+++++	0.24309	0.26539	0.24246	0.22267	0.20476					
	0.20617	0.20292					AVRG		0.22678		10.64805
122 Safrole	+++++	0.20561	0.21482	0.21249	0.20332	0.19669					
	0.20287	0.20052					AVRG		0.20519		3.14015
123 1,2,4,5-Tetrachlorobenzene	+++++	0.47684	0.50356	0.48388	0.47824	0.45810					
	0.47366	0.46935					AVRG		0.47766		2.93364
124 Isosafrole	+++++	0.30995	0.33693	0.32389	0.31806	0.30715					
	0.31322	0.31374					AVRG		0.31756		3.18883
125 1,4-Naphthoquinone	+++++	0.32592	0.35472	0.33891	0.32200	0.27132					
	0.25255	+++++					AVRG		0.31090		12.88558
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 Cal Date : 22-Feb-2010 16:54 ann00964

Compound	1	10	20	40	50	80	Curve	Coefficients			%RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6		b	m1	m2	
	100 Level 7	120 Level 8									
=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====
126 m-Dinitrobenzene	+++++	0.19180	0.19463	0.19852	0.19438	+++++					
	0.18982	0.19593					AVRG		0.19418		1.57572
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127 Pentachlorobenzene	+++++	0.42628	0.44754	0.43910	0.43323	0.42112					
	0.43611	0.43421					AVRG		0.43394		1.97299
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128 1-Naphthylamine	+++++	0.73004	0.78479	0.81511	0.81571	0.77995					
	0.81161	0.79779					AVRG		0.79071		3.84239
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129 2-Naphthylamine	+++++	0.79039	0.80447	0.88775	0.86253	0.84175					
	0.88032	0.86441					AVRG		0.84738		4.40382
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130 2,3,4,6-Tetrachlorophenol	+++++	0.29384	0.30293	0.32429	0.31700	+++++					
	0.34139	0.34149					AVRG		0.32016		6.12428
131 5-Nitro-o-toluidine	+++++	0.20259	0.25119	0.25622	0.25427	0.24775					
	0.26225	0.26292					AVRG		0.24817		8.39559
132 Thionazin	+++++	0.15088	0.15561	0.16174	0.16209	0.15947					
	0.16309	0.15779					AVRG		0.15867		2.72498
134 Sulfotepp	+++++	0.10122	0.10209	0.10778	0.10785	0.11026					
	0.11483	0.11355					AVRG		0.10823		4.81653
135 Phorate	+++++	0.34095	0.34418	0.35895	0.36152	0.35059					
	0.35719	0.34847					AVRG		0.35169		2.21160
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Compound	1	10	20	40	50	80	Curve	Coefficients			%RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6		b	m1	m2	
	100	120									
	Level 7	Level 8									
=====											
136 1,3,5-Trinitrobenzene	+++++	0.08318	0.11374	0.10171	0.11623	0.09836					
	0.11134	0.10645					AVRG		0.10443		10.87101
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137 Phenacetin	+++++	0.18928	0.23057	0.23299	0.23009	0.22889					
	0.23907	0.23833					AVRG		0.22703		7.54037
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138 Diallyate	+++++	0.23800	0.24856	0.23613	0.23134	0.22111					
	0.22282	0.21945					AVRG		0.23106		4.61473
-----											
139 Dimethoate	+++++	0.17778	0.19266	0.20336	0.21098	0.21540					
	0.22283	0.21559					AVRG		0.20551		7.61092
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140 4-Aminobiphenyl	+++++	0.45801	0.49676	0.48635	0.46753	0.51878					
	+++++	+++++					AVRG		0.48549		4.95405
141 Pentachloronitrobenzene	+++++	0.07791	0.08333	0.07829	0.07757	0.07465					
	0.07467	0.07205					AVRG		0.07692		4.69721
142 Pronamide	+++++	0.26163	0.28043	0.27445	0.26582	0.25620					
	0.26100	+++++					AVRG		0.26659		3.42860
143 Dinoseb	+++++	40629	117068	235547	239669	+++++					
	638825	733814					LINR	0.12953	0.20251		0.99928
144 Disulfoton	+++++	0.30043	0.30038	0.31066	0.31457	0.30871					
	0.31269	0.30526					AVRG		0.30753		1.84974

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Compound	1	10	20	40	50	80	Curve	Coefficients			%RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6		b	m1	m2	
	100	120									
	Level 7	Level 8									
=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	
145 Methyl parathion	+++++	0.12516	0.14971	0.16336	0.17094	0.17377					
	0.18093	0.17444					AVRG		0.16261	11.87945	
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146 4-Nitroquinoline-1-oxide	+++++	0.00707	0.01581	0.00917	0.01112	0.00789					
	0.00984	0.00908					AVRG		0.01000	28.76060 <-	
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147 Methapyrilene	+++++	0.38533	0.48161	0.48205	0.45427	0.42981					
	0.42853	0.38843					AVRG		0.43572	9.11222	
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148 Isodrin	+++++	0.10718	0.09865	0.10554	0.10369	0.09915					
	0.10066	0.09703					AVRG		0.10170	3.75258	
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149 Aramite	+++++	0.03793	0.04543	0.04576	0.04442	0.04392					
	0.04469	0.04261					AVRG		0.04354	6.15709	
150 Kepone	+++++	0.08171	0.08765	0.08379	0.07999	0.07667					
	0.07823	0.07766					AVRG		0.08081	4.81353	
151 p-(Dimethylamino)azobenzene	+++++	0.24822	0.26986	0.27383	0.26584	0.25591					
	0.25363	0.24919					AVRG		0.25950	3.96083	
152 Chlorobenzilate	+++++	0.25638	0.28440	0.30071	0.30028	0.29621					
	0.29794	0.29579					AVRG		0.29024	5.47857	
153 3,3'-Dimethylbenzidine	+++++	0.37715	0.40175	0.36994	0.37585	0.39540					
	0.41845	0.43914					AVRG		0.39681	6.37088	

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Compound	1	10	20	40	50	80	Curve	Coefficients			%RSD
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6		b	m1	m2	or R^2
	-----	-----	-----	-----	-----	-----		-----	-----	-----	-----
=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	
154 Famphur	+++++	0.31027	0.32380	0.36714	0.37181	0.35978					
	0.37041	0.37503					AVRG		0.35403	7.34715	
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155 2-Acetylaminofluorene	+++++	33933	127212	258889	294131	523343					
	771364	1062704					LINR	0.16084	0.27228	0.99705	
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157 7,12Dimethylbenz(a)anthracene	+++++	0.47054	0.50738	0.51798	0.53452	0.50064					
	0.51605	0.50354					AVRG		0.50724	3.89414	
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158 3-Methylcholanthrene	+++++	0.29893	0.36801	0.36620	0.36312	0.36621					
	0.37956	0.37996					AVRG		0.36028	7.73571	
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	
26 Phthalic anhydride	+++++	0.08886	0.09847	0.11107	0.11559	+++++					
	0.11207	+++++					AVRG		0.10521	10.64298	
173 Carbazole	0.78252	0.63611	0.52107	0.62825	0.57068	+++++					
	0.72226	0.73615					AVRG		0.65672	14.37452	
174 Hexachlorophene	+++++	121425	1431309	2267332	2843485	3664649					
	4115015	+++++					LINR	10.57801	0.09520	0.99426	
179 Dibenzo(a,e)pyrene	+++++	0.34803	0.34566	0.33495	0.33825	+++++					
	0.33137	0.29010					AVRG		0.33140	6.39501	
185 (2,3-Dibromopropyl)phosphate	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+00	0.000e+00 <-	



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	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6		b	m1	m2	
	100 Level 7	120 Level 8									
184 p-Benzquinone	+++++	0.05369	0.09247	0.18592	0.14740	+++++					
	0.15623	0.16677					AVRG		0.13375		37.55790 <-
191 Parathion	+++++	0.05709	0.06689	0.07486	0.07781	0.07971					
	0.08372	0.08285					AVRG		0.07470		12.85868
192 Methoxychlor	+++++	0.59434	0.64741	0.65487	0.66562	+++++					
	0.63006	0.63209					AVRG		0.63740		3.93042
210 m-Toluidine	+++++	1.15735	1.10412	1.30602	1.29864	+++++					
	1.41555	1.44380					AVRG		1.28758		10.52715
211 p-Toluidine	+++++	0.87585	0.86231	0.80086	0.86700	+++++					
	0.79581	0.85277					AVRG		0.84243		4.15429
212 Cis Diallylate	+++++	0.23424	0.24290	0.23542	0.22810	0.21465					
	0.21897	0.21342					AVRG		0.22681		5.02336
213 Trans Diallylate	+++++	0.28000	0.29243	0.27779	0.27217	0.26013					
	0.26214	0.25817					AVRG		0.27183		4.61473
214 1,4-Dinitrobenzene	+++++	0.18366	0.19226	0.20016	0.19606	+++++					
	0.20910	0.21480					AVRG		0.19934		5.68290
215 2-Ethoxyethanol	+++++	0.85866	0.87332	0.89964	0.89199	+++++					
	0.85411	0.86573					AVRG		0.87391		2.09786

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	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6		b	m1	m2	
	-----	-----	-----	-----	-----	-----					
	100	120									
	Level 7	Level 8									
=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====
216 Methylenebis(2-chloroaniline)	+++++	28312	60511	148973	127008	+++++					
	445652	509185					LINR	0.22177	0.15485		0.99204
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226 2,2'-Dichlorobenzil	+++++	0.52161	0.53870	0.56892	0.58722	0.59226					
	0.59041	0.55699					AVRG		0.56516		4.86533
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227 4-Chlorothioanisole	+++++	0.23191	0.24121	0.24822	0.25038	0.25573					
	0.25990	0.26145					AVRG		0.24983		4.22868
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228 4-Chlorothiophenol	+++++	26748	87390	176797	198893	447331					
	505877	805045					LINR	0.21573	0.21185		0.99563
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229 bis(p-Chlorophenyl)sulfone	+++++	0.34179	0.32852	0.33634	0.34306	0.34040					
	0.33779	0.32169					AVRG		0.33565		2.32701
230 bis(p-Chlorophenyl)disulfide	+++++	0.09814	0.11109	0.11150	0.12476	0.11867					
	0.11928	0.11564					AVRG		0.11416		7.45252
231 Diphenyl disulfide	+++++	0.18968	0.19778	0.19198	0.19468	0.19235					
	0.19092	0.18725					AVRG		0.19209		1.77566
232 Diphenyl sulfide	+++++	0.75129	0.74810	0.74411	0.75143	0.74831					
	0.74668	0.74095					AVRG		0.74727		0.50561
233 Phenyl sulfone	+++++	0.37656	0.37482	0.36982	0.37025	0.36285					
	0.36141	0.35636					AVRG		0.36744		2.02232
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	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6		b	m1	m2	
	-----	-----	-----	-----	-----	-----					
	100	120									
	Level 7	Level 8									
=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====
234 Hydroxymethyl phthalimide	+++++	0.13617	0.12694	0.14582	0.14181	0.13202					
	0.12727	0.12345					AVRG		0.13335		6.22052
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235 Phthalic acid	+++++	12065	45184	101099	123990	234309					
	306948	465365					LINR	0.24147	0.12427		0.99322
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236 Thiophenol	+++++	46935	135083	264715	306344	624372					
	715121	1104311					LINR	0.14719	1.02141		0.99896
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237 bis(Chloromethyl)ether	+++++	0.81871	0.79897	0.78615	0.79654	0.76346					
	0.77919	0.73553					AVRG		0.78265		3.44949
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238 Octachlorostyrene	+++++	0.07696	0.07606	0.07666	0.07661	0.07698					
	0.07826	0.07769					AVRG		0.07703		0.94895
M 222 Trichlorophenols	+++++	0.31723	0.33534	0.34841	0.34518	+++++					
	0.35561	0.36007					AVRG		0.34364		4.51688
M 223 Tetrachlorophenols	+++++	0.29384	0.30293	0.32429	0.31700	+++++					
	0.34139	0.34149					AVRG		0.32016		6.12428
M 224 Benzo(b,k)fluoranthene	1.00326	1.04343	1.06642	1.10368	1.09826	+++++					
	1.14203	1.16314					AVRG		1.08860		5.10717
M 225 TTO Sum Semivolatiles	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+00		0.000e+00 <-
=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====

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 Method file : /chem/MSD2.i/s022210.b/MSD2-M8270PAQA-010810a.m  
 Cal Date : 22-Feb-2010 16:54 ann00964

Compound	1	10	20	40	50	80	Curve	Coefficients			%RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6		b	m1	m2	
	100	120									
	Level 7	Level 8									
=====											
\$ 3 2-Fluorophenol	+++++	0.97853	0.97289	0.98262	0.97150	+++++					
	0.94528	0.97298					AVRG		0.97063		1.35137
-----											
\$ 5 Phenol-d5	+++++	1.28372	1.29769	1.30966	1.30030	+++++					
	1.28148	1.32071					AVRG		1.29893		1.15675
-----											
\$ 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	+++++	0.34989	0.34516	0.33216	0.31694	+++++					
	0.28133	0.27611					AVRG		0.31693		10.02588
\$ 39 2-Fluorobiphenyl	+++++	1.25352	1.24435	1.24725	1.23057	+++++					
	1.21523	1.23459					AVRG		1.23758		1.11429
\$ 60 2,4,6-Tribromophenol	+++++	0.15570	0.16134	0.17540	0.16872	+++++					
	0.18427	0.19261					AVRG		0.17301		8.05527
\$ 81 p-Terphenyl-d14	+++++	0.74414	0.75809	0.78310	0.78931	+++++					
	0.75859	0.77646					AVRG		0.76828		2.26115

## GEL Laboratories LLC

## INITIAL CALIBRATION DATA

Start Cal Date : 08-JAN-2010 22:16  
End Cal Date : 11-JAN-2010 22:24  
Quant Method : ISTD  
Target Version : 3.50  
Integrator : HP RTE  
Method file : /chem/MSD2.i/s022210.b/MSD2-M8270PAQA-010810a.m  
Cal Date : 22-Feb-2010 16:54 ann00964

Curve	Formula	Units
=====	=====	=====
Averaged	Amt = Rsp/ml	Response
Linear	Amt = b + Rsp/ml	Response

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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD2.i Injection Date: 09-JAN-2010 02:58  
 Lab File ID: s2a0820.d Init. Cal. Date(s): 08-JAN-2010 11-JAN-2010  
 Analysis Type: Init. Cal. Times: 22:16 22:24  
 Lab Sample ID: WBN091223-17.2 Quant Type: ISTD  
 Method: /chem/MSD2.i/s010810a.b/MSD2-M8270PAQA-010810a.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
\$ 3 2-Fluorophenol	0.97063	0.98122	0.98122	0.000	1.09072	60.00000	Averaged
\$ 5 Phenol-d5	1.29893	1.26464	1.26464	0.000	-2.63983	60.00000	Averaged
\$ 20 Nitrobenzene-d5	0.31693	0.32982	0.32982	0.000	4.06639	60.00000	Averaged
\$ 39 2-Fluorobiphenyl	1.23758	1.25137	1.25137	0.000	1.11439	60.00000	Averaged
\$ 60 2,4,6-Tribromophenol	0.17301	0.16641	0.16641	0.000	-3.81005	60.00000	Averaged
\$ 81 p-Terphenyl-d14	0.76828	0.82709	0.82709	0.000	7.65454	60.00000	Averaged
1 N-Methyl-N-nitrosomethylami	0.62604	0.59403	0.59403	0.000	-5.11288	60.00000	Averaged
2 Pyridine	0.74256	0.75813	0.75813	0.000	2.09592	60.00000	Averaged
4 Aniline	0.60115	0.61335	0.61335	0.000	2.02988	60.00000	Averaged
6 Phenol	1.32577	1.28164	1.28164	0.001	-3.32861	20.00000	Averaged ccc
7 bis(2-Chloroethyl) ether	1.20282	1.12876	1.12876	0.000	-6.15781	60.00000	Averaged
8 2-Chlorophenol	1.09861	1.07015	1.07015	0.000	-2.59022	60.00000	Averaged
203 n-Decane	2.38258	2.45882	2.45882	0.000	3.19991	60.00000	Averaged
9 1,3-Dichlorobenzene	1.28467	1.26134	1.26134	0.000	-1.81585	60.00000	Averaged
11 1,4-Dichlorobenzene	1.32033	1.28105	1.28105	0.001	-2.97538	20.00000	Averaged ccc
13 1,2-Dichlorobenzene	1.22631	1.20644	1.20644	0.000	-1.62045	60.00000	Averaged
14 bis(2-Chloroisopropyl)ether	3.35251	3.39906	3.39906	0.000	1.38848	60.00000	Averaged
12 Benzyl alcohol	0.66496	0.66268	0.66268	0.000	-0.34359	60.00000	Averaged
15 o-Cresol	0.86335	0.83811	0.83811	0.000	-2.92349	60.00000	Averaged
18 m,p-Cresols	1.09691	1.10391	1.10391	0.000	0.63881	60.00000	Averaged
17 N-Nitrosodipropylamine	0.86424	0.85244	0.85244	0.050	-1.36492	60.00000	Averaged spcc
19 Hexachloroethane	0.52810	0.51112	0.51112	0.000	-3.21547	60.00000	Averaged
21 Nitrobenzene	0.32605	0.33748	0.33748	0.000	3.50588	60.00000	Averaged
22 Isophorone	0.60239	0.59773	0.59773	0.000	-0.77401	60.00000	Averaged
23 2-Nitrophenol	0.14429	0.14396	0.14396	0.001	-0.22447	20.00000	Averaged ccc
24 2,4-Dimethylphenol	0.25576	0.25458	0.25458	0.000	-0.46205	60.00000	Averaged
25 bis(2-Chloroethoxy)methane	0.34780	0.34154	0.34154	0.000	-1.80066	60.00000	Averaged
26 2,4-Dichlorophenol	0.23858	0.23965	0.23965	0.001	0.44897	20.00000	Averaged ccc
27 Benzoic acid	39.88125	40.00000	0.13300	0.000	-0.29688	60.00000	Linear
28 1,2,4-Trichlorobenzene	0.30548	0.29620	0.29620	0.000	-3.03997	60.00000	Averaged
30 Naphthalene	0.84660	0.89781	0.89781	0.000	6.04832	60.00000	Averaged
204 alpha-Terpineol	0.37575	0.36177	0.36177	0.000	-3.72106	60.00000	Averaged
31 4-Chloroaniline	0.25832	0.28081	0.28081	0.000	8.70665	60.00000	Averaged
32 Hexachlorobutadiene	0.19199	0.19491	0.19491	0.001	1.51996	20.00000	Averaged ccc
33 4-Chloro-3-methylphenol	0.24161	0.23863	0.23863	0.001	-1.23084	20.00000	Averaged ccc
34 2-Methylnaphthalene	0.58677	0.65139	0.65139	0.000	11.01307	60.00000	Averaged

## GEL Laboratories LLC

## CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD2.i Injection Date: 09-JAN-2010 02:58  
Lab File ID: s2a0820.d Init. Cal. Date(s): 08-JAN-2010 11-JAN-2010  
Analysis Type: Init. Cal. Times: 22:16 22:24  
Lab Sample ID: WBN091223-17.2 Quant Type: ISTD  
Method: /chem/MSD2.i/s010810a.b/MSD2-M8270PAQA-010810a.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
35 1-Methylnaphthalene	0.57979	0.61491	0.61491	0.000	6.05656	60.00000	Averaged
36 Hexachlorocyclopentadiene	0.20327	0.15904	0.15904	0.050	-21.76015	60.00000	Averaged spcc
205 2,3-Dichloroaniline	0.55582	0.55124	0.55124	0.000	-0.82273	60.00000	Averaged
37 2,4,6-Trichlorophenol	0.33768	0.32240	0.32240	0.001	-4.52315	20.00000	Averaged ccc
38 2,4,5-Trichlorophenol	0.34960	0.35503	0.35503	0.000	1.55224	60.00000	Averaged
40 2-Chloronaphthalene	1.03550	0.99755	0.99755	0.000	-3.66544	60.00000	Averaged
42 o-Nitroaniline	0.36783	0.36190	0.36190	0.000	-1.60998	60.00000	Averaged
41 m-Nitroaniline	40.37953	40.00000	0.18886	0.000	0.94883	60.00000	Linear
43 Dimethylphthalate	1.19427	1.21262	1.21262	0.000	1.53605	60.00000	Averaged
44 2,6-Dinitrotoluene	0.27938	0.27506	0.27506	0.000	-1.54523	60.00000	Averaged
50 2,4-Dinitrotoluene	0.35552	0.35875	0.35875	0.000	0.91107	60.00000	Averaged
45 Acenaphthylene	1.63374	1.76412	1.76412	0.000	7.98060	60.00000	Averaged
47 Acenaphthene	1.02726	1.07391	1.07391	0.001	4.54122	20.00000	Averaged ccc
48 2,4-Dinitrophenol	36.28328	40.00000	0.08970	0.050	-9.29180	60.00000	Linear spcc
49 Dibenzofuran	1.40865	1.38546	1.38546	0.000	-1.64616	60.00000	Averaged
51 Diethylphthalate	1.17668	1.18152	1.18152	0.000	0.41069	60.00000	Averaged
52 4-Nitrophenol	38.23138	40.00000	0.13006	0.050	-4.42155	60.00000	Linear spcc
53 Fluorene	1.22221	1.29971	1.29971	0.000	6.34143	60.00000	Averaged
54 4-Chlorophenylphenylether	0.63724	0.62544	0.62544	0.000	-1.85157	60.00000	Averaged
55 2-Methyl-4,6-dinitrophenol	0.10597	0.12744	0.12744	0.000	20.25633	60.00000	Averaged
56 p-Nitroaniline	35.48424	40.00000	0.14399	0.000	-11.28940	60.00000	Linear
133 Diphenylamine	0.51708	0.50396	0.50396	0.001	-2.53811	20.00000	Averaged ccc
58 1,2-Diphenylhydrazine	0.68942	0.69088	0.69088	0.000	0.21240	60.00000	Averaged
61 4-Bromophenylphenylether	0.21382	0.20589	0.20589	0.000	-3.70912	60.00000	Averaged
63 Hexachlorobenzene	0.22580	0.21389	0.21389	0.000	-5.27535	60.00000	Averaged
65 Pentachlorophenol	35.56322	40.00000	0.09254	0.001	-11.09195	20.00000	Linear ccc
206 n-Octadecane	0.73588	0.74305	0.74305	0.000	0.97516	60.00000	Averaged
68 Phenanthrene	0.96311	1.00354	1.00354	0.000	4.19794	60.00000	Averaged
69 Anthracene	0.94257	1.02862	1.02862	0.000	9.12944	60.00000	Averaged
72 Di-n-butylphthalate	1.08053	1.11260	1.11260	0.000	2.96805	60.00000	Averaged
76 Fluoranthene	1.03443	1.14983	1.14983	0.001	11.15585	20.00000	Averaged ccc
79 Pyrene	1.20605	1.27865	1.27865	0.000	6.01942	60.00000	Averaged
85 Butylbenzylphthalate	0.49046	0.50254	0.50254	0.000	2.46384	60.00000	Averaged
89 Benzo(a)anthracene	1.02256	1.06764	1.06764	0.000	4.40842	60.00000	Averaged
92 Chrysene	0.94734	1.01121	1.01121	0.000	6.74165	60.00000	Averaged
93 bis(2-Ethylhexyl)phthalate	0.69261	0.71391	0.71391	0.000	3.07503	60.00000	Averaged

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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD2.i Injection Date: 09-JAN-2010 02:58  
 Lab File ID: s2a0820.d Init. Cal. Date(s): 08-JAN-2010 11-JAN-2010  
 Analysis Type: Init. Cal. Times: 22:16 22:24  
 Lab Sample ID: WBN091223-17.2 Quant Type: ISTD  
 Method: /chem/MSD2.i/s010810a.b/MSD2-M8270PAQA-010810a.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
94 Di-n-octylphthalate	1.47572	1.52929	1.52929	0.001	3.62975	20.00000	Averaged	ccc
95 Benzo(b)fluoranthene	1.09363	1.17797	1.17797	0.000	7.71197	60.00000	Averaged	
96 Benzo(k)fluoranthene	1.08357	1.21032	1.21032	0.000	11.69724	60.00000	Averaged	
97 Benzo(a)pyrene	0.92735	1.02972	1.02972	0.001	11.03945	20.00000	Averaged	ccc
99 Indeno(1,2,3-cd)pyrene	0.80192	0.88836	0.88836	0.000	10.77950	60.00000	Averaged	
100 Dibenzo(a,h)anthracene	0.63947	0.70615	0.70615	0.000	10.42717	60.00000	Averaged	
101 Benzo(ghi)perylene	0.67738	0.74484	0.74484	0.000	9.95777	60.00000	Averaged	
126 m-Dinitrobenzene	0.19418	0.19157	0.19157	0.000	-1.34257	60.00000	Averaged	
130 2,3,4,6-Tetrachlorophenol	0.32016	0.29167	0.29167	0.000	-8.89900	60.00000	Averaged	
143 Dinoseb	36.73574	40.00000	0.15975	0.000	-8.16065	60.00000	Linear	
173 Carbazole	0.65672	0.59711	0.59711	0.000	-9.07758	60.00000	Averaged	
184 p-Benzoquinone	0.13375	0.11208	0.11208	0.000	-16.19783	60.00000	Averaged	
192 Methoxychlor	0.63740	0.61003	0.61003	0.000	-4.29433	60.00000	Averaged	
211 p-Toluidine	0.84243	0.89202	0.89202	0.000	5.88664	60.00000	Averaged	
210 m-Toluidine	1.28758	1.37542	1.37542	0.000	6.82241	60.00000	Averaged	
214 1,4-Dinitrobenzene	0.19934	0.19794	0.19794	0.000	-0.70323	60.00000	Averaged	
215 2-Ethoxyethanol	0.87391	0.91649	0.91649	0.000	4.87264	60.00000	Averaged	
216 Methylenebis(2-chloroanilin	37.22363	40.00000	0.10976	0.000	-6.94093	60.00000	Linear	
179 Dibenzo(a,e)pyrene	0.33140	0.23834	0.23834	0.000	-28.07870	60.00000	Averaged	
26 Phthalic anhydride	0.10521	0.17800	0.17800	0.000	69.18545	60.00000	Averaged	<-
M 222 Trichlorophenols	0.34364	0.33872	0.33872	0.000	-1.43274	60.00000	Averaged	
M 223 Tetrachlorophenols	0.32016	0.29167	0.29167	0.000	-8.89900	60.00000	Averaged	
M 224 Benzo(b,k)fluoranthene	1.08860	1.19415	1.19415	0.000	9.69540	60.00000	Averaged	



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Data file : /chem/MSD2.i/s010810a.b/s2a0820.d  
Lab Smp Id: WBN091223-17.2 Client Smp ID: MEGAICV  
Inj Date : 09-JAN-2010 02:58  
Operator : AGS1 Inst ID: MSD2.i  
Smp Info : |WBN091223-17.2|40 PPM|1|SVMF|1|MEGAICV  
Misc Info : |MSD8270|WBN091128-02|  
Comment : Column: J & W Scientific DB-5MS 25m x 0.2mm x 0.33um  
Method : /chem/MSD2.i/s010810a.b/MSD2-M8270PAQA-010810a.m  
Meth Date : 12-Jan-2010 16:39 ann00964 Quant Type: ISTD  
Cal Date : 11-JAN-2010 22:24 Cal File: s2a0863.d  
Als bottle: 20 Continuing Calibration Sample  
Dil Factor: 1.00000  
Integrator: HP RTE Compound Sublist: MEGAI.sub  
Target Version: 3.50  
Processing Host: hpc1p1

Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE		CAL-AMT (ng/ul)	ON-COL (ng/ul)
=====	=====	==	=====	=====	=====		=====	=====
* 10 1,4-Dichlorobenzene-d4	152	4.726	4.726	(1.000)	293321		40.0000	
* 29 Naphthalene-d8	136	6.000	6.000	(1.000)	1135161		40.0000	
* 46 Acenaphthene-d10	164	7.868	7.868	(1.000)	640817		40.0000	
* 67 Phenanthrene-d10	188	9.474	9.474	(1.000)	1136949		40.0000	
* 91 Chrysene-d12	240	12.459	12.459	(1.000)	1052993		40.0000	
* 98 Perylene-d12	264	14.730	14.730	(1.000)	746718		40.0000	
\$ 3 2-Fluorophenol	112	3.556	3.556	(0.752)	287812		40.0000	40.4
\$ 5 Phenol-d5	99	4.333	4.333	(0.917)	370945		40.0000	38.9
\$ 20 Nitrobenzene-d5	82	5.260	5.260	(0.877)	374397		40.0000	41.6
\$ 39 2-Fluorobiphenyl	172	7.125	7.125	(0.906)	801902		40.0000	40.4
\$ 60 2,4,6-Tribromophenol	329	8.714	8.714	(1.108)	106641		40.0000	38.5
\$ 81 p-Terphenyl-d14	244	11.182	11.182	(0.897)	870921		40.0000	43.1
1 N-Methyl-N-nitrosomethylamine	74	2.586	2.586	(0.547)	174241		40.0000	38.0
2 Pyridine	79	2.621	2.621	(0.555)	222374		40.0000	40.8
4 Aniline	66	4.415	4.415	(0.934)	179908		40.0000	40.8
6 Phenol	94	4.348	4.348	(0.920)	375933		40.0000	38.7(Q)
7 bis(2-Chloroethyl) ether	63	4.453	4.453	(0.942)	331088		40.0000	37.5
8 2-Chlorophenol	128	4.527	4.527	(0.958)	313898		40.0000	39.0
203 n-Decane	43	4.535	4.535	(0.960)	721223		40.0000	41.3
9 1,3-Dichlorobenzene	146	4.673	4.673	(0.989)	369978		40.0000	39.3
11 1,4-Dichlorobenzene	146	4.741	4.741	(1.003)	375758		40.0000	38.8
13 1,2-Dichlorobenzene	146	4.891	4.891	(1.035)	353874		40.0000	39.4
14 bis(2-Chloroisopropyl)ether	45	4.961	4.961	(1.050)	997015		40.0000	40.6
12 Benzyl alcohol	108	4.838	4.838	(1.024)	194377		40.0000	39.9
15 o-Cresol	107	4.923	4.923	(1.042)	245835		40.0000	38.8
18 m,p-Cresols	107	5.078	5.078	(1.075)	323801		40.0000	40.2

Compounds	QUANT SIG			REL RT	RESPONSE	AMOUNTS	
	MASS	RT	EXP RT			CAL-AMT (ng/ul)	ON-COL (ng/ul)
=====	=====	==	=====	=====	=====	=====	=====
17 N-Nitrosodipropylamine	70	5.102	5.102	(1.079)	250039	40.0000	39.4
19 Hexachloroethane	117	5.222	5.222	(1.105)	149922	40.0000	38.7
21 Nitrobenzene	77	5.281	5.281	(0.880)	383094	40.0000	41.4
22 Isophorone	82	5.516	5.516	(0.919)	678518	40.0000	39.7
23 2-Nitrophenol	139	5.598	5.598	(0.933)	163420	40.0000	39.9
24 2,4-Dimethylphenol	122	5.612	5.612	(0.935)	288989	40.0000	39.8
25 bis(2-Chloroethoxy)methane	93	5.715	5.715	(0.953)	387705	40.0000	39.3
26 2,4-Dichlorophenol	162	5.838	5.838	(0.973)	272037	40.0000	40.2
27 Benzoic acid	105	5.727	5.727	(0.954)	150971	40.0000	39.9(H)
28 1,2,4-Trichlorobenzene	180	5.932	5.932	(0.989)	336232	40.0000	38.8
30 Naphthalene	128	6.024	6.024	(1.004)	1019157	40.0000	42.4
204 alpha-Terpineol	59	6.012	6.012	(1.002)	410665	40.0000	38.5
31 4-Chloroaniline	127	6.062	6.062	(1.010)	318764	40.0000	43.5
32 Hexachlorobutadiene	225	6.135	6.135	(1.023)	221256	40.0000	40.6
33 4-Chloro-3-methylphenol	107	6.546	6.546	(1.091)	270889	40.0000	39.5
34 2-Methylnaphthalene	142	6.746	6.746	(1.124)	739432	40.0000	44.4
35 1-Methylnaphthalene	142	6.851	6.851	(1.142)	698022	40.0000	42.4
36 Hexachlorocyclopentadiene	237	6.904	6.904	(0.878)	101916	40.0000	31.3
205 2,3-Dichloroaniline	161	7.039	7.039	(0.895)	353246	40.0000	39.7
37 2,4,6-Trichlorophenol	196	7.034	7.034	(0.894)	206601	40.0000	38.2
38 2,4,5-Trichlorophenol	196	7.072	7.072	(0.899)	227510	40.0000	40.6
40 2-Chloronaphthalene	162	7.269	7.269	(0.924)	639244	40.0000	38.5
42 o-Nitroaniline	65	7.365	7.365	(0.936)	231914	40.0000	39.4
41 m-Nitroaniline	138	7.809	7.809	(0.993)	121024	40.0000	40.4
43 Dimethylphthalate	163	7.556	7.556	(0.960)	777065	40.0000	40.6
44 2,6-Dinitrotoluene	165	7.627	7.627	(0.969)	176262	40.0000	39.4
50 2,4-Dinitrotoluene	165	8.058	8.058	(1.024)	229896	40.0000	40.4
45 Acenaphthylene	152	7.718	7.718	(0.981)	1130478	40.0000	43.2
47 Acenaphthene	154	7.903	7.903	(1.004)	688180	40.0000	41.8
48 2,4-Dinitrophenol	184	7.920	7.920	(1.007)	57481	40.0000	36.3
49 Dibenzofuran	168	8.085	8.085	(1.028)	887827	40.0000	39.3
51 Diethylphthalate	149	8.308	8.308	(1.056)	757135	40.0000	40.2
52 4-Nitrophenol	139	7.967	7.967	(1.013)	83343	40.0000	38.2
53 Fluorene	166	8.458	8.458	(1.075)	832878	40.0000	42.5
54 4-Chlorophenylphenylether	204	8.443	8.443	(1.073)	400795	40.0000	39.2
55 2-Methyl-4,6-dinitrophenol	198	8.499	8.499	(0.897)	144888	40.0000	48.1
56 p-Nitroaniline	138	8.467	8.467	(1.076)	92271	40.0000	35.5
133 Diphenylamine	169	8.570	8.570	(0.905)	572974	40.0000	39.0
58 1,2-Diphenylhydrazine	77	8.617	8.617	(0.909)	785499	40.0000	40.1
61 4-Bromophenylphenylether	248	8.975	8.975	(0.947)	234084	40.0000	38.5
63 Hexachlorobenzene	284	9.051	9.051	(0.955)	243182	40.0000	37.9
65 Pentachlorophenol	266	9.257	9.257	(0.977)	105210	40.0000	35.6
206 n-Octadecane	57	9.312	9.312	(0.983)	844812	40.0000	40.4
68 Phenanthrene	178	9.504	9.504	(1.003)	1140973	40.0000	41.7
69 Anthracene	178	9.557	9.557	(1.009)	1169487	40.0000	43.6
72 Di-n-butylphthalate	149	10.070	10.070	(1.063)	1264973	40.0000	41.2
76 Fluoranthene	202	10.788	10.788	(1.139)	1307300	40.0000	44.5

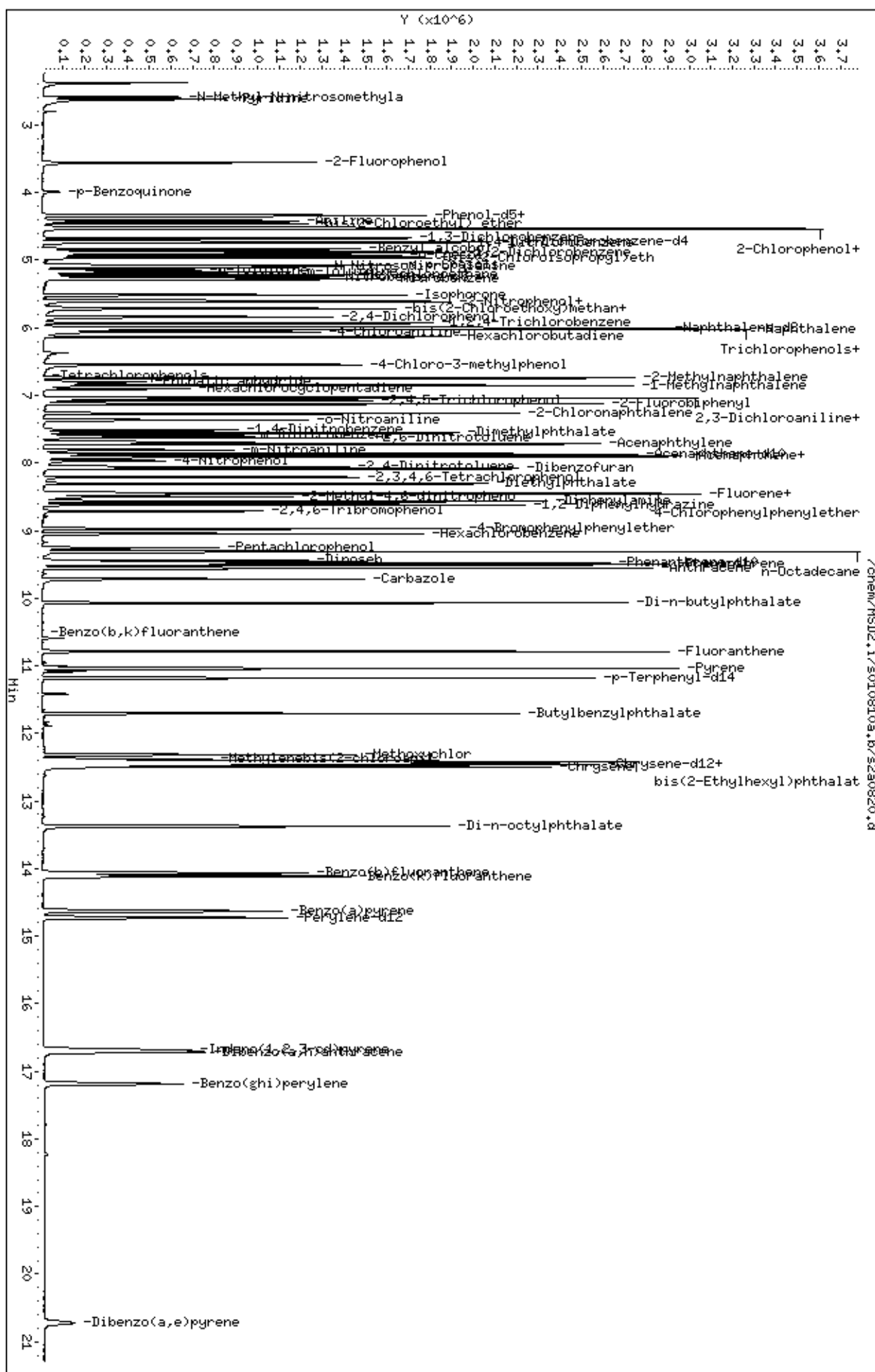
Compounds	QUANT SIG			REL RT	RESPONSE	AMOUNTS	
	MASS	RT	EXP RT			CAL-AMT (ng/ul)	ON-COL (ng/ul)
=====	=====	==	=====	=====	=====	=====	=====
79 Pyrene	202	11.041	11.041	(0.886)	1346412	40.0000	42.4
85 Butylbenzylphthalate	149	11.710	11.710	(0.940)	529171	40.0000	41.0
89 Benzo(a)anthracene	228	12.441	12.441	(0.999)	1124218	40.0000	41.8
92 Chrysene	228	12.494	12.494	(1.003)	1064797	40.0000	42.7
93 bis(2-Ethylhexyl)phthalate	149	12.417	12.417	(0.997)	751740	40.0000	41.2
94 Di-n-octylphthalate	149	13.377	13.377	(0.908)	1141945	40.0000	41.4
95 Benzo(b)fluoranthene	252	14.070	14.070	(0.955)	879615	40.0000	43.1(H)
96 Benzo(k)fluoranthene	252	14.117	14.117	(0.958)	903769	40.0000	44.7
97 Benzo(a)pyrene	252	14.633	14.633	(0.993)	768910	40.0000	44.4
99 Indeno(1,2,3-cd)pyrene	276	16.683	16.683	(1.133)	663353	40.0000	44.3
100 Dibenzo(a,h)anthracene	278	16.716	16.716	(1.135)	527297	40.0000	44.2
101 Benzo(ghi)perylene	276	17.189	17.189	(1.167)	556182	40.0000	44.0
126 m-Dinitrobenzene	168	7.597	7.597	(0.966)	122763	40.0000	39.5
130 2,3,4,6-Tetrachlorophenol	232	8.208	8.208	(1.043)	186904	40.0000	36.4
143 Dinoseb	211	9.442	9.442	(0.997)	181629	40.0000	36.7
173 Carbazole	167	9.718	9.718	(1.026)	678879	40.0000	36.4
184 p-Benzoquinone	54	3.987	3.987	(0.844)	32876	40.0000	33.5
192 Methoxychlor	227	12.317	12.317	(0.989)	642354	40.0000	38.3
211 p-Toluidine	106	5.143	5.143	(1.088)	261649	40.0000	42.4
210 m-Toluidine	106	5.178	5.178	(1.096)	403441	40.0000	42.7
214 1,4-Dinitrobenzene	75	7.512	7.512	(0.955)	126844	40.0000	39.7
215 2-Ethoxyethanol	59	2.378	2.378	(0.503)	268826	40.0000	41.9
216 Methylenebis(2-chloroaniline)	231	12.385	12.385	(0.994)	115578	40.0000	37.2(Q)
179 Dibenzo(a,e)pyrene	302	20.723	20.723	(1.407)	177976	40.0000	28.8
26 Phthalic anhydride	104	6.801	6.801	(1.134)	202061	40.0000	67.7
M 222 Trichlorophenols	196				434111	80.0000	78.8
M 223 Tetrachlorophenols	232				186904	40.0000	36.4
M 224 Benzo(b,k)fluoranthene	252				1783384	80.0000	87.8

## QC Flag Legend

Q - Qualifier signal failed the ratio test.  
H - Operator selected an alternate compound hit.

Data File: /chem/HSD2.i/s010810a.b/s2a0820.d  
 Date : 09-JAN-2010 02:58  
 Client ID: MEGAICV  
 Sample Info: IABN091223-17.2140 PPH11SVHF11.MEGAICV  
 Column phase: 3M IB-5MS

Instrument: HSD2.i  
 Operator: AGS1  
 Column diameter: 0.20



GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD2.i Injection Date: 11-JAN-2010 22:49  
Lab File ID: s2a0864.d Init. Cal. Date(s): 08-JAN-2010 11-JAN-2010  
Analysis Type: Init. Cal. Times: 22:16 22:24  
Lab Sample ID: WBN100103-08.1 Quant Type: ISTD  
Method: /chem/MSD2.i/s010810a.b/MSD2-M8270PAQA-010810a.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
209 Benzaldehyde	0.83255	0.74802	0.74802	0.000	-10.15375	60.00000	Averaged
16 Acetophenone	1.11861	1.08804	1.08804	0.000	-2.73333	60.00000	Averaged
189 Caprolactam	0.08128	0.08273	0.08273	0.000	1.78130	60.00000	Averaged
208 1,1'-Biphenyl	1.13798	1.14350	1.14350	0.000	0.48523	60.00000	Averaged
207 Atrazine	0.04003	0.04098	0.04098	0.000	2.36989	60.00000	Averaged
77 Benzidine	0.15302	0.16749	0.16749	0.000	9.45475	60.00000	Averaged
90 3,3'-Dichlorobenzidine	39.13340	40.00000	0.23608	0.000	-2.16649	60.00000	Linear
102 1,4-Dioxane	0.29716	0.32167	0.32167	0.000	8.24855	60.00000	Averaged
103 Methyl methacrylate	0.15982	0.18404	0.18404	0.000	15.15408	60.00000	Averaged
104 Ethyl methacrylate	0.73207	0.79002	0.79002	0.000	7.91564	60.00000	Averaged
105 2-Picoline	1.09284	1.04378	1.04378	0.000	-4.48952	60.00000	Averaged
106 N-Nitrosomethylethylamine	0.43087	0.42341	0.42341	0.000	-1.73145	60.00000	Averaged
107 Methyl methanesulfonate	0.51635	0.52171	0.52171	0.000	1.03722	60.00000	Averaged
108 N-Nitrosodiethylamine	0.45102	0.44108	0.44108	0.000	-2.20401	60.00000	Averaged
109 Ethyl Methanesulfonate	0.61802	0.67148	0.67148	0.000	8.65002	60.00000	Averaged
110 Pentachloroethane	0.32196	0.37451	0.37451	0.000	16.31929	60.00000	Averaged
111 N-Nitrosopyrrolidine	0.45399	0.44312	0.44312	0.000	-2.39525	60.00000	Averaged
113 N-Nitrosomorpholine	0.97705	0.93380	0.93380	0.000	-4.42733	60.00000	Averaged
114 o-Toluidine	1.55557	1.49475	1.49475	0.000	-3.90982	60.00000	Averaged
115 N-Nitrosopiperidine	0.13445	0.12927	0.12927	0.000	-3.85755	60.00000	Averaged
116 a,a-Dimethylphenethylamine	1.15742	1.08648	1.08648	0.000	-6.12957	60.00000	Averaged
118 2,6-Dichlorophenol	0.22485	0.20883	0.20883	0.000	-7.12412	60.00000	Averaged
119 Hexachloropropene	0.13132	0.16112	0.16112	0.000	22.69185	60.00000	Averaged
120 p-Phenylenediamine	41.64983	40.00000	0.19252	0.000	4.12457	60.00000	Linear
121 N-Nitrosodi-n-butylamine	0.22678	0.22740	0.22740	0.000	0.27277	60.00000	Averaged
122 Safrole	0.20519	0.21699	0.21699	0.000	5.74956	60.00000	Averaged
123 1,2,4,5-Tetrachlorobenzene	0.47766	0.49247	0.49247	0.000	3.10059	60.00000	Averaged
124 Isosafrole	0.31756	0.36586	0.36586	0.000	15.20763	60.00000	Averaged
125 1,4-Naphthoquinone	0.31090	0.31208	0.31208	0.000	0.37918	60.00000	Averaged
127 Pentachlorobenzene	0.43394	0.44194	0.44194	0.000	1.84301	60.00000	Averaged
128 1-Naphthylamine	0.79071	0.81437	0.81437	0.000	2.99211	60.00000	Averaged
129 2-Naphthylamine	0.84738	0.88415	0.88415	0.000	4.34022	60.00000	Averaged
131 5-Nitro-o-toluidine	0.24817	0.25016	0.25016	0.000	0.80330	60.00000	Averaged
136 1,3,5-Trinitrobenzene	0.10443	0.12531	0.12531	0.000	19.99427	60.00000	Averaged
137 Phenacetin	0.22703	0.23521	0.23521	0.000	3.60380	60.00000	Averaged
138 Diallate	0.23106	0.21505	0.21505	0.000	-6.92809	60.00000	Averaged

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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD2.i Injection Date: 11-JAN-2010 22:49  
 Lab File ID: s2a0864.d Init. Cal. Date(s): 08-JAN-2010 11-JAN-2010  
 Analysis Type: Init. Cal. Times: 22:16 22:24  
 Lab Sample ID: WBN100103-08.1 Quant Type: ISTD  
 Method: /chem/MSD2.i/s010810a.b/MSD2-M8270PAQA-010810a.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
212 Cis Diallate	0.22681	0.24816	0.24816	0.000	9.41289	60.00000	Averaged
213 Trans Diallate	0.27183	0.25300	0.25300	0.000	-6.92809	60.00000	Averaged
140 4-Aminobiphenyl	0.48549	0.49489	0.49489	0.000	1.93767	60.00000	Averaged
141 Pentachloronitrobenzene	0.07692	0.07716	0.07716	0.000	0.30599	60.00000	Averaged
142 Pronamide	0.26659	0.26516	0.26516	0.000	-0.53710	60.00000	Averaged
146 4-Nitroquinoline-1-oxide	0.01000	0.01062	0.01062	0.000	6.27369	60.00000	Averaged
147 Methapyrilene	0.43572	0.46399	0.46399	0.000	6.48847	60.00000	Averaged
148 Isodrin	0.10170	0.09653	0.09653	0.000	-5.08039	60.00000	Averaged
149 Aramite	0.04354	0.04213	0.04213	0.000	-3.22360	60.00000	Averaged
150 Kepone	0.08081	0.07712	0.07712	0.000	-4.56746	60.00000	Averaged
151 p-(Dimethylamino)azobenzene	0.25950	0.24129	0.24129	0.000	-7.01479	60.00000	Averaged
152 Chlorobenzilate	0.29024	0.21775	0.21775	0.000	-24.97798	60.00000	Averaged
153 3,3'-Dimethylbenzidine	0.39681	0.37826	0.37826	0.000	-4.67495	60.00000	Averaged
155 2-Acetylaminofluorene	39.58165	40.00000	0.22564	0.000	-1.04587	60.00000	Linear
157 7,12Dimethylbenz(a)anthrace	0.50724	0.47565	0.47565	0.000	-6.22661	60.00000	Averaged
158 3-Methylcholanthrene	0.36028	0.36915	0.36915	0.000	2.46062	60.00000	Averaged

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Data file : /chem/MSD2.i/s010810a.b/s2a0864.d  
Lab Smp Id: WBN100103-08.1 Client Smp ID: APICV  
Inj Date : 11-JAN-2010 22:49  
Operator : AGS1 Inst ID: MSD2.i  
Smp Info : |WBN100103-08.1|40 PPM|1|SVMF|1|APICV  
Misc Info : |MSD8270|WBN091128-02|  
Comment : Column: J & W Scientific DB-5MS 25m x 0.2mm x 0.33um  
Method : /chem/MSD2.i/s010810a.b/MSD2-M8270PAQA-010810a.m  
Meth Date : 12-Jan-2010 16:42 ann00964 Quant Type: ISTD  
Cal Date : 11-JAN-2010 21:33 Cal File: s2a0861.d  
Als bottle: 17 Continuing Calibration Sample  
Dil Factor: 1.00000  
Integrator: HP RTE Compound Sublist: AP12.sub  
Target Version: 3.50  
Processing Host: hpc1p1

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ng/ul)	ON-COL (ng/ul)
=====	=====	==	=====	=====	=====	=====	=====
* 10 1,4-Dichlorobenzene-d4	152	4.723	4.723	(1.000)	384349	40.0000	
* 29 Naphthalene-d8	136	5.998	5.998	(1.000)	1356992	40.0000	
* 46 Acenaphthene-d10	164	7.865	7.865	(1.000)	840785	40.0000	
* 67 Phenanthrene-d10	188	9.477	9.477	(1.000)	1532830	40.0000	
* 91 Chrysene-d12	240	12.451	12.451	(1.000)	1422013	40.0000	
* 98 Perylene-d12	264	14.727	14.727	(1.000)	1015949	40.0000	
209 Benzaldehyde	77	4.322	4.322	(0.915)	287499	40.0000	35.9
16 Acetophenone	105	5.101	5.101	(1.080)	418186	40.0000	38.9
189 Caprolactam	113	6.424	6.424	(1.071)	112261	40.0000	40.7
208 1,1'-Biphenyl	154	7.237	7.237	(0.920)	961440	40.0000	40.2
207 Atrazine	173	9.139	9.139	(0.964)	62818	40.0000	40.9
77 Benzidine	184	10.915	10.915	(0.877)	238169	40.0000	43.8
90 3,3'-Dichlorobenzidine	252	12.381	12.381	(0.994)	335712	40.0000	39.1
102 1,4-Dioxane	88	2.381	2.381	(0.504)	123635	40.0000	43.3
103 Methyl methacrylate	100	2.378	2.378	(0.504)	70735	40.0000	46.1
104 Ethyl methacrylate	69	2.885	2.885	(0.611)	303643	40.0000	43.2
105 2-Picoline	93	3.137	3.137	(0.664)	401175	40.0000	38.2
106 N-Nitrosomethylethylamine	88	3.208	3.208	(0.679)	162736	40.0000	39.3
107 Methyl methanesulfonate	80	3.433	3.433	(0.727)	200517	40.0000	40.4
108 N-Nitrosodiethylamine	102	3.762	3.762	(0.796)	169528	40.0000	39.1
109 Ethyl Methanesulfonate	79	3.996	3.996	(0.846)	258081	40.0000	43.5
110 Pentachloroethane	167	4.465	4.465	(0.945)	143941	40.0000	46.5
111 N-Nitrosopyrrolidine	100	5.087	5.087	(1.077)	170312	40.0000	39.0(Q)
113 N-Nitrosomorpholine	56	5.119	5.119	(1.084)	358904	40.0000	38.2
114 o-Toluidine	106	5.139	5.139	(1.088)	574507	40.0000	38.4
115 N-Nitrosopiperidine	114	5.427	5.427	(0.905)	175413	40.0000	38.4

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ng/ul)	ON-COL (ng/ul)
=====	=====	==	=====	=====	=====	=====	=====
116 a,a-Dimethylphenethylamine	58	5.808	5.808	(0.968)	1474342	40.0000	37.5
118 2,6-Dichlorophenol	162	6.072	6.072	(1.012)	283387	40.0000	37.2
119 Hexachloropropene	213	6.104	6.104	(1.018)	218641	40.0000	49.1
120 p-Phenylenediamine	108	6.433	6.433	(1.072)	261253	40.0000	41.6
121 N-Nitrosodi-n-butylamine	84	6.403	6.403	(1.067)	308581	40.0000	40.1
122 Safrole	162	6.635	6.635	(1.106)	294449	40.0000	42.3
123 1,2,4,5-Tetrachlorobenzene	216	6.920	6.920	(0.880)	414063	40.0000	41.2
124 Isosafrole	162	7.190	7.190	(0.914)	307607	40.0000	46.1
125 1,4-Naphthoquinone	158	7.451	7.451	(0.947)	262394	40.0000	40.2
127 Pentachlorobenzene	250	8.038	8.038	(1.022)	371577	40.0000	40.7
128 1-Naphthylamine	143	8.167	8.167	(1.038)	684713	40.0000	41.2
129 2-Naphthylamine	143	8.249	8.249	(1.049)	743383	40.0000	41.7
131 5-Nitro-o-toluidine	152	8.458	8.458	(1.075)	210334	40.0000	40.3
136 1,3,5-Trinitrobenzene	75	8.842	8.842	(0.933)	192080	40.0000	48.0
137 Phenacetin	108	8.898	8.898	(0.939)	360542	40.0000	41.4(Q)
138 Diallate	86	8.871	8.871	(0.936)	329635	40.0000	37.2
212 Cis Diallate	86	8.968	8.968	(0.946)	57059	6.00000	6.6
213 Trans Diallate	86	8.871	8.871	(0.936)	329635	34.0000	31.6
140 4-Aminobiphenyl	169	9.259	9.259	(0.977)	758586	40.0000	40.8
141 Pentachloronitrobenzene	237	9.271	9.271	(0.978)	118273	40.0000	40.1
142 Pronamide	173	9.303	9.303	(0.982)	406438	40.0000	39.8
146 4-Nitroquinoline-1-oxide	101	10.325	10.325	(1.089)	16286	40.0000	42.5
147 Methapyrilene	58	10.392	10.392	(1.097)	711220	40.0000	42.6
148 Isodrin	193	10.621	10.621	(1.121)	147967	40.0000	38.0
149 Aramite	185	11.141	11.141	(1.176)	64583	40.0000	38.7
150 Kepone	272	11.787	11.787	(1.244)	118216	40.0000	38.2
151 p-(Dimethylamino)azobenzene	120	11.332	11.332	(0.910)	343121	40.0000	37.2
152 Chlorobenzilate	251	11.376	11.376	(0.914)	309640	40.0000	30.0
153 3,3'-Dimethylbenzidine	212	11.705	11.705	(0.940)	537892	40.0000	38.1
155 2-Acetylaminofluorene	181	12.014	12.014	(0.965)	320865	40.0000	39.6
157 7,12Dimethylbenz(a)anthracene	256	14.044	14.044	(0.954)	483238	40.0000	37.5
158 3-Methylcholanthrene	268	15.243	15.243	(1.035)	375037	40.0000	41.0(Q)

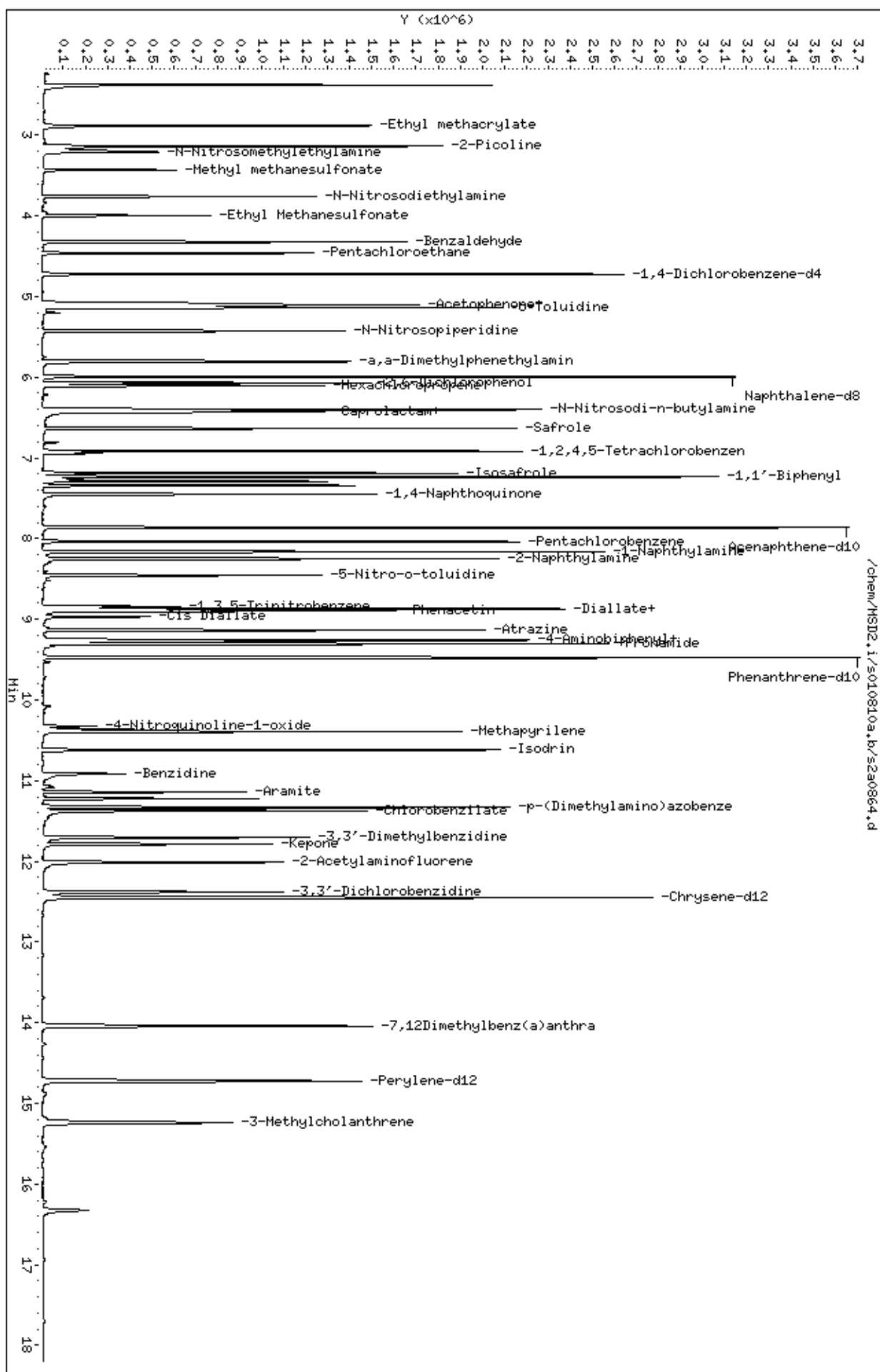
## QC Flag Legend

Q - Qualifier signal failed the ratio test.



Data File: /chem/HSD2.i/s010810a,b/s2a0864.d  
 Date: 11-JAN-2010 22:49  
 Client ID: APICV  
 Sample Info: IABN100103-08.1140 PPH111SVHF11APICV  
 Column phase: 3M IB-5HS

Instrument: HSD2.i  
 Operator: AGS1  
 Column diameter: 0.20



GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD2.i Injection Date: 22-FEB-2010 14:46  
 Lab File ID: s2b2202.d Init. Cal. Date(s): 08-JAN-2010 11-JAN-2010  
 Analysis Type: Init. Cal. Times: 22:16 22:24  
 Lab Sample ID: WBN100121-13.2 Quant Type: ISTD  
 Method: /chem/MSD2.i/s022210.b/MSD2-M8270PAQA-010810a.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
\$ 3 2-Fluorophenol	0.97063	0.91656	0.91656	0.000	-5.57084	60.00000	Averaged
\$ 5 Phenol-d5	1.29893	1.24500	1.24500	0.000	-4.15178	60.00000	Averaged
\$ 20 Nitrobenzene-d5	0.31693	0.32396	0.32396	0.000	2.21824	60.00000	Averaged
\$ 39 2-Fluorobiphenyl	1.23758	1.21436	1.21436	0.000	-1.87623	60.00000	Averaged
\$ 60 2,4,6-Tribromophenol	0.17301	0.15659	0.15659	0.000	-9.48662	60.00000	Averaged
\$ 81 p-Terphenyl-d14	0.76828	0.68721	0.68721	0.000	-10.55248	60.00000	Averaged
1 N-Methyl-N-nitrosomethylami	0.62604	0.66416	0.66416	0.000	6.08962	60.00000	Averaged
2 Pyridine	0.74256	0.83220	0.83220	0.000	12.07120	60.00000	Averaged
4 Aniline	0.60115	0.51654	0.51654	0.000	-14.07474	60.00000	Averaged
6 Phenol	1.32577	1.23463	1.23463	0.001	-6.87452	20.00000	Averaged ccc
7 bis(2-Chloroethyl) ether	1.20282	1.13293	1.13293	0.000	-5.81070	60.00000	Averaged
8 2-Chlorophenol	1.09861	1.03258	1.03258	0.000	-6.00998	60.00000	Averaged
203 n-Decane	2.38258	1.74349	1.74349	0.000	-26.82337	60.00000	Averaged
9 1,3-Dichlorobenzene	1.28467	1.26960	1.26960	0.000	-1.17338	60.00000	Averaged
11 1,4-Dichlorobenzene	1.32033	1.31138	1.31138	0.001	-0.67836	20.00000	Averaged ccc
13 1,2-Dichlorobenzene	1.22631	1.22299	1.22299	0.000	-0.27043	60.00000	Averaged
14 bis(2-Chloroisopropyl)ether	3.35251	2.71843	2.71843	0.000	-18.91351	60.00000	Averaged
12 Benzyl alcohol	0.66496	0.44927	0.44927	0.000	-32.43654	60.00000	Averaged
15 o-Cresol	0.86335	0.86261	0.86261	0.000	-0.08597	60.00000	Averaged
18 m,p-Cresols	1.09691	0.98820	0.98820	0.000	-9.91005	60.00000	Averaged
17 N-Nitrosodipropylamine	0.86424	0.84217	0.84217	0.050	-2.55351	60.00000	Averaged spcc
19 Hexachloroethane	0.52810	0.50888	0.50888	0.000	-3.64003	60.00000	Averaged
21 Nitrobenzene	0.32605	0.35415	0.35415	0.000	8.61981	60.00000	Averaged
22 Isophorone	0.60239	0.63051	0.63051	0.000	4.66805	60.00000	Averaged
23 2-Nitrophenol	0.14429	0.13834	0.13834	0.001	-4.11766	20.00000	Averaged ccc
24 2,4-Dimethylphenol	0.25576	0.21943	0.21943	0.000	-14.20328	60.00000	Averaged
25 bis(2-Chloroethoxy)methane	0.34780	0.34840	0.34840	0.000	0.17078	60.00000	Averaged
26 2,4-Dichlorophenol	0.23858	0.23770	0.23770	0.001	-0.36798	20.00000	Averaged ccc
27 Benzoic acid	43.09368	40.00000	0.14653	0.000	7.73420	60.00000	Linear
28 1,2,4-Trichlorobenzene	0.30548	0.32003	0.32003	0.000	4.76266	60.00000	Averaged
30 Naphthalene	0.84660	0.84695	0.84695	0.000	0.04134	60.00000	Averaged
204 alpha-Terpineol	0.37575	0.35740	0.35740	0.000	-4.88348	60.00000	Averaged
31 4-Chloroaniline	0.25832	0.22606	0.22606	0.000	-12.48834	60.00000	Averaged
32 Hexachlorobutadiene	0.19199	0.19907	0.19907	0.001	3.68352	20.00000	Averaged ccc
33 4-Chloro-3-methylphenol	0.24161	0.23796	0.23796	0.001	-1.50967	20.00000	Averaged ccc
34 2-Methylnaphthalene	0.58677	0.57249	0.57249	0.000	-2.43275	60.00000	Averaged

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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD2.i Injection Date: 22-FEB-2010 14:46  
 Lab File ID: s2b2202.d Init. Cal. Date(s): 08-JAN-2010 11-JAN-2010  
 Analysis Type: Init. Cal. Times: 22:16 22:24  
 Lab Sample ID: WBN100121-13.2 Quant Type: ISTD  
 Method: /chem/MSD2.i/s022210.b/MSD2-M8270PAQA-010810a.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
35 1-Methylnaphthalene	0.57979	0.56899	0.56899	0.000	-1.86324	60.00000	Averaged
36 Hexachlorocyclopentadiene	0.20327	0.15427	0.15427	0.050	-24.10592	60.00000	Averaged spcc
205 2,3-Dichloroaniline	0.55582	0.53245	0.53245	0.000	-4.20378	60.00000	Averaged
37 2,4,6-Trichlorophenol	0.33768	0.33212	0.33212	0.001	-1.64590	20.00000	Averaged ccc
38 2,4,5-Trichlorophenol	0.34960	0.35356	0.35356	0.000	1.13204	60.00000	Averaged
40 2-Chloronaphthalene	1.03550	1.00151	1.00151	0.000	-3.28293	60.00000	Averaged
42 o-Nitroaniline	0.36783	0.33810	0.33810	0.000	-8.08168	60.00000	Averaged
41 m-Nitroaniline	16.01865	40.00000	0.05544	0.000	-59.95337	60.00000	Linear
43 Dimethylphthalate	1.19427	1.18202	1.18202	0.000	-1.02611	60.00000	Averaged
44 2,6-Dinitrotoluene	0.27938	0.28277	0.28277	0.000	1.21378	60.00000	Averaged
50 2,4-Dinitrotoluene	0.35552	0.35268	0.35268	0.000	-0.79879	60.00000	Averaged
45 Acenaphthylene	1.63374	1.57140	1.57140	0.000	-3.81560	60.00000	Averaged
47 Acenaphthene	1.02726	0.97416	0.97416	0.001	-5.16868	20.00000	Averaged ccc
48 2,4-Dinitrophenol	36.24722	40.00000	0.08955	0.050	-9.38195	60.00000	Linear spcc
49 Dibenzofuran	1.40865	1.34786	1.34786	0.000	-4.31552	60.00000	Averaged
51 Diethylphthalate	1.17668	1.13528	1.13528	0.000	-3.51874	60.00000	Averaged
52 4-Nitrophenol	31.05798	40.00000	0.10144	0.050	-22.35505	60.00000	Linear spcc
53 Fluorene	1.22221	1.17815	1.17815	0.000	-3.60448	60.00000	Averaged
54 4-Chlorophenylphenylether	0.63724	0.62973	0.62973	0.000	-1.17842	60.00000	Averaged
55 2-Methyl-4,6-dinitrophenol	0.10597	0.08573	0.08573	0.000	-19.09829	60.00000	Averaged
56 p-Nitroaniline	26.64283	40.00000	0.09546	0.000	-33.39292	60.00000	Linear
133 Diphenylamine	0.51708	0.42675	0.42675	0.001	-17.47023	20.00000	Averaged ccc
58 1,2-Diphenylhydrazine	0.68942	0.63505	0.63505	0.000	-7.88616	60.00000	Averaged
61 4-Bromophenylphenylether	0.21382	0.20633	0.20633	0.000	-3.50432	60.00000	Averaged
63 Hexachlorobenzene	0.22580	0.23112	0.23112	0.000	2.35627	60.00000	Averaged
65 Pentachlorophenol	36.49859	40.00000	0.09548	0.001	-8.75353	20.00000	Linear ccc
206 n-Octadecane	0.73588	0.61253	0.61253	0.000	-16.76125	60.00000	Averaged
68 Phenanthrene	0.96311	0.94353	0.94353	0.000	-2.03327	60.00000	Averaged
69 Anthracene	0.94257	0.92334	0.92334	0.000	-2.03986	60.00000	Averaged
72 Di-n-butylphthalate	1.08053	1.06153	1.06153	0.000	-1.75816	60.00000	Averaged
76 Fluoranthene	1.03443	1.09193	1.09193	0.001	5.55832	20.00000	Averaged ccc
79 Pyrene	1.20605	1.19331	1.19331	0.000	-1.05703	60.00000	Averaged
85 Butylbenzylphthalate	0.49046	0.46255	0.46255	0.000	-5.68951	60.00000	Averaged
89 Benzo(a)anthracene	1.02256	0.99965	0.99965	0.000	-2.24019	60.00000	Averaged
92 Chrysene	0.94734	0.94991	0.94991	0.000	0.27130	60.00000	Averaged
93 bis(2-Ethylhexyl)phthalate	0.69261	0.66534	0.66534	0.000	-3.93674	60.00000	Averaged

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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD2.i Injection Date: 22-FEB-2010 14:46  
 Lab File ID: s2b2202.d Init. Cal. Date(s): 08-JAN-2010 11-JAN-2010  
 Analysis Type: Init. Cal. Times: 22:16 22:24  
 Lab Sample ID: WBN100121-13.2 Quant Type: ISTD  
 Method: /chem/MSD2.i/s022210.b/MSD2-M8270PAQA-010810a.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
94 Di-n-octylphthalate	1.47572	1.23802	1.23802	0.001	-16.10724	20.00000	Averaged	ccc
95 Benzo(b)fluoranthene	1.09363	1.03909	1.03909	0.000	-4.98728	60.00000	Averaged	
96 Benzo(k)fluoranthene	1.08357	1.04014	1.04014	0.000	-4.00867	60.00000	Averaged	
97 Benzo(a)pyrene	0.92735	0.93555	0.93555	0.001	0.88485	20.00000	Averaged	ccc
99 Indeno(1,2,3-cd)pyrene	0.80192	0.88268	0.88268	0.000	10.07096	60.00000	Averaged	
100 Dibenzo(a,h)anthracene	0.63947	0.70520	0.70520	0.000	10.27739	60.00000	Averaged	
101 Benzo(ghi)perylene	0.67738	0.72796	0.72796	0.000	7.46685	60.00000	Averaged	
126 m-Dinitrobenzene	0.19418	0.18998	0.18998	0.000	-2.16168	60.00000	Averaged	
130 2,3,4,6-Tetrachlorophenol	0.32016	0.29207	0.29207	0.000	-8.77306	60.00000	Averaged	
143 Dinoseb	28.89452	40.00000	0.12005	0.000	-27.76371	60.00000	Linear	
173 Carbazole	0.65672	0.31864	0.31864	0.000	-51.47981	60.00000	Averaged	
184 p-Benzoquinone	0.13375	0.34050	0.34050	0.000	155	60.00000	Averaged	<-
192 Methoxychlor	0.63740	0.58100	0.58100	0.000	-8.84903	60.00000	Averaged	
211 p-Toluidine	0.84243	0.76621	0.76621	0.000	-9.04803	60.00000	Averaged	
210 m-Toluidine	1.28758	1.03248	1.03248	0.000	-19.81223	60.00000	Averaged	
214 1,4-Dinitrobenzene	0.19934	0.18779	0.18779	0.000	-5.79555	60.00000	Averaged	
215 2-Ethoxyethanol	0.87391	0.75690	0.75690	0.000	-13.38926	60.00000	Averaged	
216 Methylenebis(2-chloroanilin	28.94288	40.00000	0.07770	0.000	-27.64280	60.00000	Linear	
179 Dibenzo(a,e)pyrene	0.33140	0.29914	0.29914	0.000	-9.73344	60.00000	Averaged	
26 Phthalic anhydride	0.10521	0.07677	0.07677	0.000	-27.03471	60.00000	Averaged	
M 222 Trichlorophenols	0.34364	0.34284	0.34284	0.000	-0.23282	60.00000	Averaged	
M 223 Tetrachlorophenols	0.32016	0.29207	0.29207	0.000	-8.77306	60.00000	Averaged	
M 224 Benzo(b,k)fluoranthene	1.08860	1.03961	1.03961	0.000	-4.50023	60.00000	Averaged	

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Data file : /chem/MSD2.i/s022210.b/s2b2202.d  
Lab Smp Id: WBN100121-13.2 Client Smp ID: MEGACVS  
Inj Date : 22-FEB-2010 14:46  
Operator : AGS1 Inst ID: MSD2.i  
Smp Info : |WBN100121-13.2|40 PPM|1|SVMF|1|MEGACVS  
Misc Info : |MSD8270|WBN100205-01|  
Comment : Column: J & W Scientific DB-5MS 25m x 0.2mm x 0.33um  
Method : /chem/MSD2.i/s022210.b/MSD2-M8270PAQA-010810a.m  
Meth Date : 22-Feb-2010 16:54 ann00964 Quant Type: ISTD  
Cal Date : 11-JAN-2010 20:43 Cal File: s2a0859.d  
Als bottle: 2 Continuing Calibration Sample  
Dil Factor: 1.00000  
Integrator: HP RTE Compound Sublist: MEGAI1.sub  
Target Version: 3.50  
Processing Host: hpclp1

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ng/ul)	ON-COL (ng/ul)
=====	=====	==	=====	=====	=====	=====	=====
* 10 1,4-Dichlorobenzene-d4	152	4.565	4.565	(1.000)	250813	40.0000	
* 29 Naphthalene-d8	136	5.830	5.830	(1.000)	954269	40.0000	
* 46 Acenaphthene-d10	164	7.691	7.691	(1.000)	543746	40.0000	
* 67 Phenanthrene-d10	188	9.293	9.293	(1.000)	967029	40.0000	
* 91 Chrysene-d12	240	12.232	12.232	(1.000)	949099	40.0000	
* 98 Perylene-d12	264	14.417	14.417	(1.000)	830488	40.0000	
\$ 3 2-Fluorophenol	112	3.415	3.415	(0.748)	229885	40.0000	37.8
\$ 5 Phenol-d5	99	4.195	4.195	(0.919)	312262	40.0000	38.3
\$ 20 Nitrobenzene-d5	82	5.102	5.102	(0.875)	309146	40.0000	40.9
\$ 39 2-Fluorobiphenyl	172	6.954	6.954	(0.904)	660305	40.0000	39.2
\$ 60 2,4,6-Tribromophenol	329	8.538	8.538	(1.110)	85147	40.0000	36.2
\$ 81 p-Terphenyl-d14	244	10.998	10.998	(0.899)	652230	40.0000	35.8
1 N-Methyl-N-nitrosomethylamine	74	2.460	2.460	(0.539)	166580	40.0000	42.4
2 Pyridine	79	2.489	2.489	(0.545)	208726	40.0000	44.8
4 Aniline	66	4.260	4.260	(0.933)	129554	40.0000	34.4
6 Phenol	94	4.207	4.207	(0.922)	309662	40.0000	37.2
7 bis(2-Chloroethyl) ether	63	4.301	4.301	(0.942)	284154	40.0000	37.7
8 2-Chlorophenol	128	4.371	4.371	(0.958)	258985	40.0000	37.6
203 n-Decane	43	4.377	4.377	(0.959)	437290	40.0000	29.3
9 1,3-Dichlorobenzene	146	4.512	4.512	(0.988)	318431	40.0000	39.5
11 1,4-Dichlorobenzene	146	4.579	4.579	(1.003)	328910	40.0000	39.7
13 1,2-Dichlorobenzene	146	4.726	4.726	(1.035)	306743	40.0000	39.9
14 bis(2-Chloroisopropyl)ether	45	4.802	4.802	(1.052)	681818	40.0000	32.4
12 Benzyl alcohol	108	4.682	4.682	(1.026)	112683	40.0000	27.0
15 o-Cresol	107	4.773	4.773	(1.046)	216353	40.0000	40.0
18 m,p-Cresols	107	4.932	4.932	(1.080)	247854	40.0000	36.0

Compounds	QUANT SIG	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
						CAL-AMT (ng/ul)	ON-COL (ng/ul)
=====	=====	==	=====	=====	=====	=====	=====
17 N-Nitrosodipropylamine	70	4.949	4.949	(1.084)	211227	40.0000	39.0
19 Hexachloroethane	117	5.052	5.052	(1.107)	127633	40.0000	38.5
21 Nitrobenzene	77	5.119	5.119	(0.878)	337958	40.0000	43.4
22 Isophorone	82	5.354	5.354	(0.918)	601677	40.0000	41.9
23 2-Nitrophenol	139	5.433	5.433	(0.932)	132018	40.0000	38.4
24 2,4-Dimethylphenol	122	5.457	5.457	(0.936)	209400	40.0000	34.3
25 bis(2-Chloroethoxy)methane	93	5.557	5.557	(0.953)	332466	40.0000	40.1
26 2,4-Dichlorophenol	162	5.683	5.683	(0.975)	226827	40.0000	39.8
27 Benzoic acid	105	5.586	5.586	(0.958)	139826	40.0000	43.1
28 1,2,4-Trichlorobenzene	180	5.765	5.765	(0.989)	305398	40.0000	41.9
30 Naphthalene	128	5.853	5.853	(1.004)	808221	40.0000	40.0
204 alpha-Terpineol	59	5.847	5.847	(1.003)	341056	40.0000	38.0
31 4-Chloroaniline	127	5.897	5.897	(1.012)	215721	40.0000	35.0
32 Hexachlorobutadiene	225	5.965	5.965	(1.023)	189962	40.0000	41.5
33 4-Chloro-3-methylphenol	107	6.393	6.393	(1.097)	227079	40.0000	39.4
34 2-Methylnaphthalene	142	6.572	6.572	(1.127)	546313	40.0000	39.0
35 1-Methylnaphthalene	142	6.678	6.678	(1.145)	542971	40.0000	39.2
36 Hexachlorocyclopentadiene	237	6.728	6.728	(0.875)	83885	40.0000	30.4
205 2,3-Dichloroaniline	161	6.872	6.872	(0.893)	289518	40.0000	38.3
37 2,4,6-Trichlorophenol	196	6.869	6.869	(0.893)	180588	40.0000	39.3
38 2,4,5-Trichlorophenol	196	6.907	6.907	(0.898)	192248	40.0000	40.4
40 2-Chloronaphthalene	162	7.092	7.092	(0.922)	544565	40.0000	38.7
42 o-Nitroaniline	65	7.201	7.201	(0.936)	183840	40.0000	36.8
41 m-Nitroaniline	138	7.650	7.650	(0.995)	30146	40.0000	16.0
43 Dimethylphthalate	163	7.395	7.395	(0.961)	642717	40.0000	39.6
44 2,6-Dinitrotoluene	165	7.462	7.462	(0.970)	153753	40.0000	40.5
50 2,4-Dinitrotoluene	165	7.897	7.897	(1.027)	191766	40.0000	39.7
45 Acenaphthylene	152	7.541	7.541	(0.981)	854443	40.0000	38.5
47 Acenaphthene	154	7.726	7.726	(1.005)	529698	40.0000	37.9
48 2,4-Dinitrophenol	184	7.759	7.759	(1.009)	48694	40.0000	36.2
49 Dibenzofuran	168	7.908	7.908	(1.028)	732893	40.0000	38.3
51 Diethylphthalate	149	8.141	8.141	(1.058)	617303	40.0000	38.6
52 4-Nitrophenol	139	7.826	7.826	(1.018)	55159	40.0000	31.0
53 Fluorene	166	8.279	8.279	(1.076)	640616	40.0000	38.6
54 4-Chlorophenylphenylether	204	8.267	8.267	(1.075)	342415	40.0000	39.5
55 2-Methyl-4,6-dinitrophenol	198	8.332	8.332	(0.897)	82905	40.0000	32.4
56 p-Nitroaniline	138	8.305	8.305	(1.080)	51907	40.0000	26.6
133 Diphenylamine	169	8.397	8.397	(0.904)	412676	40.0000	33.0
58 1,2-Diphenylhydrazine	77	8.441	8.441	(0.908)	614112	40.0000	36.8
61 4-Bromophenylphenylether	248	8.796	8.796	(0.947)	199523	40.0000	38.6
63 Hexachlorobenzene	284	8.869	8.869	(0.954)	223502	40.0000	40.9
65 Pentachlorophenol	266	9.081	9.081	(0.977)	92330	40.0000	36.5
206 n-Octadecane	57	9.140	9.140	(0.984)	592338	40.0000	33.3
68 Phenanthrene	178	9.319	9.319	(1.003)	912417	40.0000	39.2
69 Anthracene	178	9.375	9.375	(1.009)	892897	40.0000	39.2
72 Di-n-butylphthalate	149	9.895	9.895	(1.065)	1026535	40.0000	39.3
76 Fluoranthene	202	10.604	10.604	(1.141)	1055927	40.0000	42.2

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ng/ul)	ON-COL (ng/ul)
=====	=====	==	=====	=====	=====	=====	=====
79 Pyrene	202	10.851	10.851	(0.887)	1132566	40.0000	39.6
85 Butylbenzylphthalate	149	11.517	11.517	(0.942)	439007	40.0000	37.7
89 Benzo(a)anthracene	228	12.214	12.214	(0.999)	948771	40.0000	39.1
92 Chrysene	228	12.264	12.264	(1.003)	901562	40.0000	40.1
93 bis(2-Ethylhexyl)phthalate	149	12.193	12.193	(0.997)	631477	40.0000	38.4
94 Di-n-octylphthalate	149	13.110	13.110	(0.909)	1028163	40.0000	33.6
95 Benzo(b)fluoranthene	252	13.776	13.776	(0.956)	862953	40.0000	38.0
96 Benzo(k)fluoranthene	252	13.824	13.824	(0.959)	863821	40.0000	38.4
97 Benzo(a)pyrene	252	14.320	14.320	(0.993)	776964	40.0000	40.4
99 Indeno(1,2,3-cd)pyrene	276	16.315	16.315	(1.132)	733052	40.0000	44.0
100 Dibenzo(a,h)anthracene	278	16.344	16.344	(1.134)	585656	40.0000	44.1
101 Benzo(ghi)perylene	276	16.808	16.808	(1.166)	604564	40.0000	43.0
126 m-Dinitrobenzene	168	7.436	7.436	(0.967)	103302	40.0000	39.1
130 2,3,4,6-Tetrachlorophenol	232	8.038	8.038	(1.045)	158811	40.0000	36.5
143 Dinoseb	211	9.269	9.269	(0.997)	116095	40.0000	28.9
173 Carbazole	167	9.542	9.542	(1.027)	308136	40.0000	19.4
184 p-Benzoquinone	54	3.837	3.837	(0.841)	85403	40.0000	102(A)
192 Methoxychlor	227	12.096	12.096	(0.989)	551422	40.0000	36.5
211 p-Toluidine	106	4.984	4.984	(1.092)	192175	40.0000	36.4
210 m-Toluidine	106	5.020	5.020	(1.100)	258960	40.0000	32.1
214 1,4-Dinitrobenzene	75	7.353	7.353	(0.956)	102110	40.0000	37.7
215 2-Ethoxyethanol	59	2.255	2.255	(0.494)	189840	40.0000	34.6
216 Methylenebis(2-chloroaniline)	231	12.164	12.164	(0.994)	73749	40.0000	28.9
179 Dibenzo(a,e)pyrene	302	20.104	20.104	(1.395)	248432	40.0000	36.1
26 Phthalic anhydride	104	6.637	6.637	(1.138)	73257	40.0000	29.2
M 222 Trichlorophenols	196				372836	80.0000	79.8
M 223 Tetrachlorophenols	232				158811	40.0000	36.5
M 224 Benzo(b,k)fluoranthene	252				1726774	80.0000	76.4

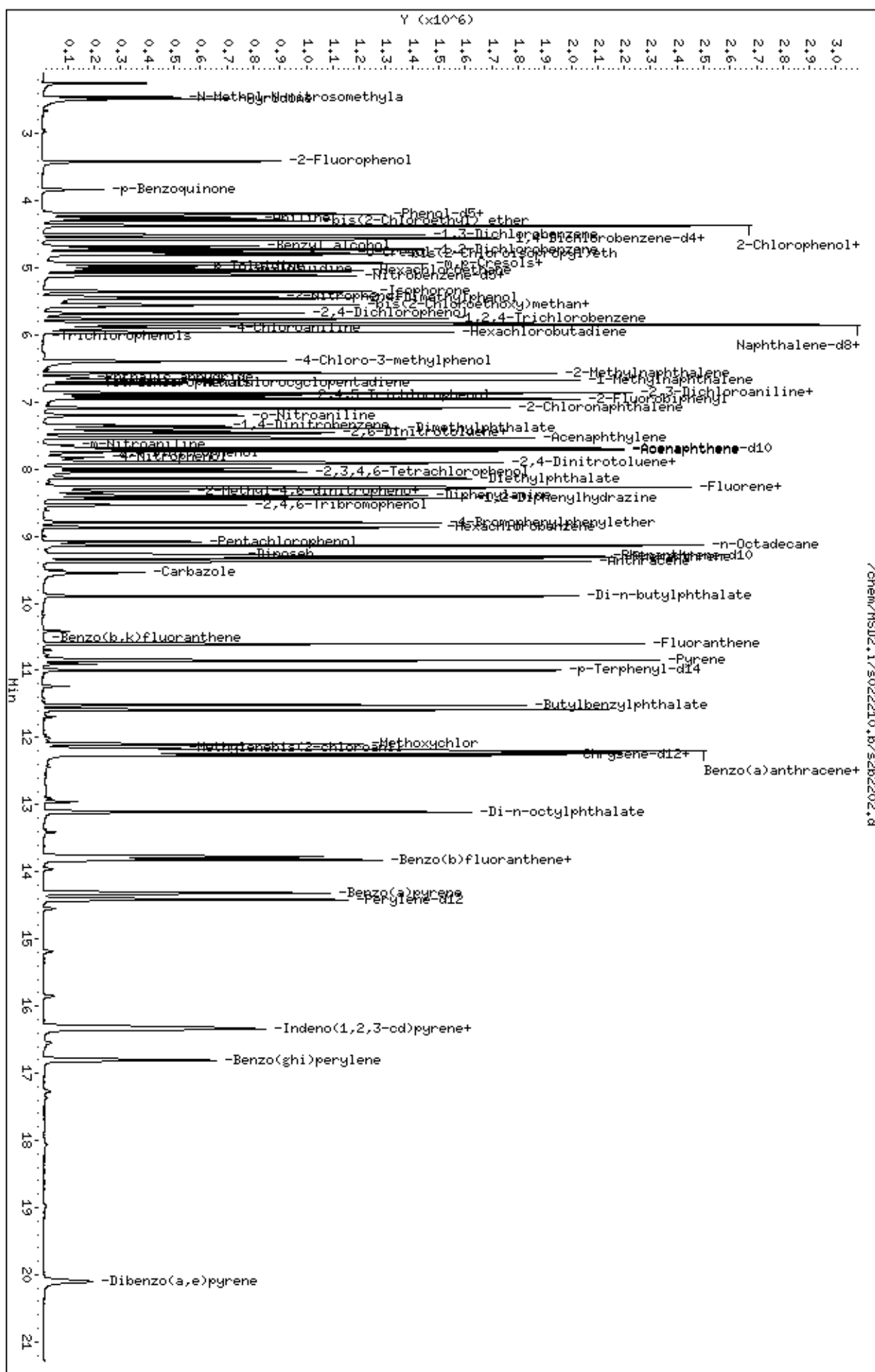
## QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: /chem/HSD2.i/s022210.b/s2b2202.d  
 Date: 22-FEB-2010 14:46  
 Client ID: MEGACVS  
 Sample Info: IABN100121-13.2140 PPH11SVHF11.MEGACVS

Instrument: HSD2.i  
 Operator: AGS1  
 Column diameter: 0.20

Column phase: 3M IB-SHS





GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD2.i Injection Date: 22-FEB-2010 15:15  
 Lab File ID: s2b2203.d Init. Cal. Date(s): 08-JAN-2010 11-JAN-2010  
 Analysis Type: Init. Cal. Times: 22:16 22:24  
 Lab Sample ID: WBN100120-03.2 Quant Type: ISTD  
 Method: /chem/MSD2.i/s022210.b/MSD2-M8270PAQA-010810a.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
209 Benzaldehyde	0.83255	0.71581	0.71581	0.000	-14.02227	60.00000	Averaged
16 Acetophenone	1.11861	1.15825	1.15825	0.000	3.54351	60.00000	Averaged
189 Caprolactam	0.08128	0.09082	0.09082	0.000	11.73891	60.00000	Averaged
208 1,1'-Biphenyl	1.13798	1.18160	1.18160	0.000	3.83324	60.00000	Averaged
207 Atrazine	0.04003	0.04336	0.04336	0.000	8.31534	60.00000	Averaged
77 Benzidine	0.15302	0.06436	0.06436	0.000	-57.93893	60.00000	Averaged
90 3,3'-Dichlorobenzidine	40.69866	40.00000	0.24664	0.000	1.74666	60.00000	Linear
102 1,4-Dioxane	0.29716	0.32280	0.32280	0.000	8.62617	60.00000	Averaged
103 Methyl methacrylate	0.15982	0.17844	0.17844	0.000	11.64906	60.00000	Averaged
104 Ethyl methacrylate	0.73207	0.76405	0.76405	0.000	4.36876	60.00000	Averaged
105 2-Picoline	1.09284	1.16511	1.16511	0.000	6.61280	60.00000	Averaged
106 N-Nitrosomethylethylamine	0.43087	0.47506	0.47506	0.000	10.25647	60.00000	Averaged
107 Methyl methanesulfonate	0.51635	0.46067	0.46067	0.000	-10.78319	60.00000	Averaged
108 N-Nitrosodiethylamine	0.45102	0.48490	0.48490	0.000	7.51235	60.00000	Averaged
109 Ethyl Methanesulfonate	0.61802	0.60956	0.60956	0.000	-1.36855	60.00000	Averaged
110 Pentachloroethane	0.32196	0.33570	0.33570	0.000	4.26558	60.00000	Averaged
111 N-Nitrosopyrrolidine	0.45399	0.49501	0.49501	0.000	9.03379	60.00000	Averaged
113 N-Nitrosomorpholine	0.97705	0.97475	0.97475	0.000	-0.23623	60.00000	Averaged
114 o-Toluidine	1.55557	1.54648	1.54648	0.000	-0.58477	60.00000	Averaged
115 N-Nitrosopiperidine	0.13445	0.14643	0.14643	0.000	8.91189	60.00000	Averaged
116 a,a-Dimethylphenethylamine	1.15742	1.16190	1.16190	0.000	0.38657	60.00000	Averaged
118 2,6-Dichlorophenol	0.22485	0.23758	0.23758	0.000	5.66164	60.00000	Averaged
119 Hexachloropropene	0.13132	0.12193	0.12193	0.000	-7.15308	60.00000	Averaged
120 p-Phenylenediamine	33.15880	40.00000	0.15028	0.000	-17.10300	60.00000	Linear
121 N-Nitrosodi-n-butylamine	0.22678	0.24477	0.24477	0.000	7.93357	60.00000	Averaged
122 Safrole	0.20519	0.21546	0.21546	0.000	5.00706	60.00000	Averaged
123 1,2,4,5-Tetrachlorobenzene	0.47766	0.53623	0.53623	0.000	12.26123	60.00000	Averaged
124 Isosafrole	0.31756	0.33142	0.33142	0.000	4.36487	60.00000	Averaged
125 1,4-Naphthoquinone	0.31090	0.32753	0.32753	0.000	5.34918	60.00000	Averaged
127 Pentachlorobenzene	0.43394	0.47260	0.47260	0.000	8.90876	60.00000	Averaged
128 1-Naphthylamine	0.79071	0.80777	0.80777	0.000	2.15670	60.00000	Averaged
129 2-Naphthylamine	0.84738	0.82483	0.82483	0.000	-2.66090	60.00000	Averaged
131 5-Nitro-o-toluidine	0.24817	0.26380	0.26380	0.000	6.29962	60.00000	Averaged
136 1,3,5-Trinitrobenzene	0.10443	0.11810	0.11810	0.000	13.08719	60.00000	Averaged
137 Phenacetin	0.22703	0.24177	0.24177	0.000	6.49120	60.00000	Averaged
138 Diallate	0.23106	0.24980	0.24980	0.000	8.11199	60.00000	Averaged

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD2.i Injection Date: 22-FEB-2010 15:15  
 Lab File ID: s2b2203.d Init. Cal. Date(s): 08-JAN-2010 11-JAN-2010  
 Analysis Type: Init. Cal. Times: 22:16 22:24  
 Lab Sample ID: WBN100120-03.2 Quant Type: ISTD  
 Method: /chem/MSD2.i/s022210.b/MSD2-M8270PAQA-010810a.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
212 Cis Diallate	0.22681	0.24835	0.24835	0.000	9.49625	60.00000	Averaged
213 Trans Diallate	0.27183	0.29388	0.29388	0.000	8.11199	60.00000	Averaged
140 4-Aminobiphenyl	0.48549	0.41971	0.41971	0.000	-13.54826	60.00000	Averaged
141 Pentachloronitrobenzene	0.07692	0.08335	0.08335	0.000	8.35834	60.00000	Averaged
142 Pronamide	0.26659	0.28510	0.28510	0.000	6.94515	60.00000	Averaged
146 4-Nitroquinoline-1-oxide	0.01000	0.00622	0.00622	0.000	-37.77261	60.00000	Averaged
147 Methapyrilene	0.43572	0.34239	0.34239	0.000	-21.42084	60.00000	Averaged
148 Isodrin	0.10170	0.11751	0.11751	0.000	15.55052	60.00000	Averaged
149 Aramite	0.04354	0.05291	0.05291	0.000	21.52735	60.00000	Averaged
150 Kepone	0.08081	0.09560	0.09560	0.000	18.29158	60.00000	Averaged
151 p-(Dimethylamino)azobenzene	0.25950	0.25872	0.25872	0.000	-0.29995	60.00000	Averaged
152 Chlorobenzilate	0.29024	0.32179	0.32179	0.000	10.86733	60.00000	Averaged
153 3,3'-Dimethylbenzidine	0.39681	0.26760	0.26760	0.000	-32.56320	60.00000	Averaged
155 2-Acetylaminofluorene	49.80449	40.00000	0.29523	0.000	24.51123	60.00000	Linear
157 7,12Dimethylbenz(a)anthrace	0.50724	0.50208	0.50208	0.000	-1.01675	60.00000	Averaged
158 3-Methylcholanthrene	0.36028	0.38386	0.38386	0.000	6.54394	60.00000	Averaged

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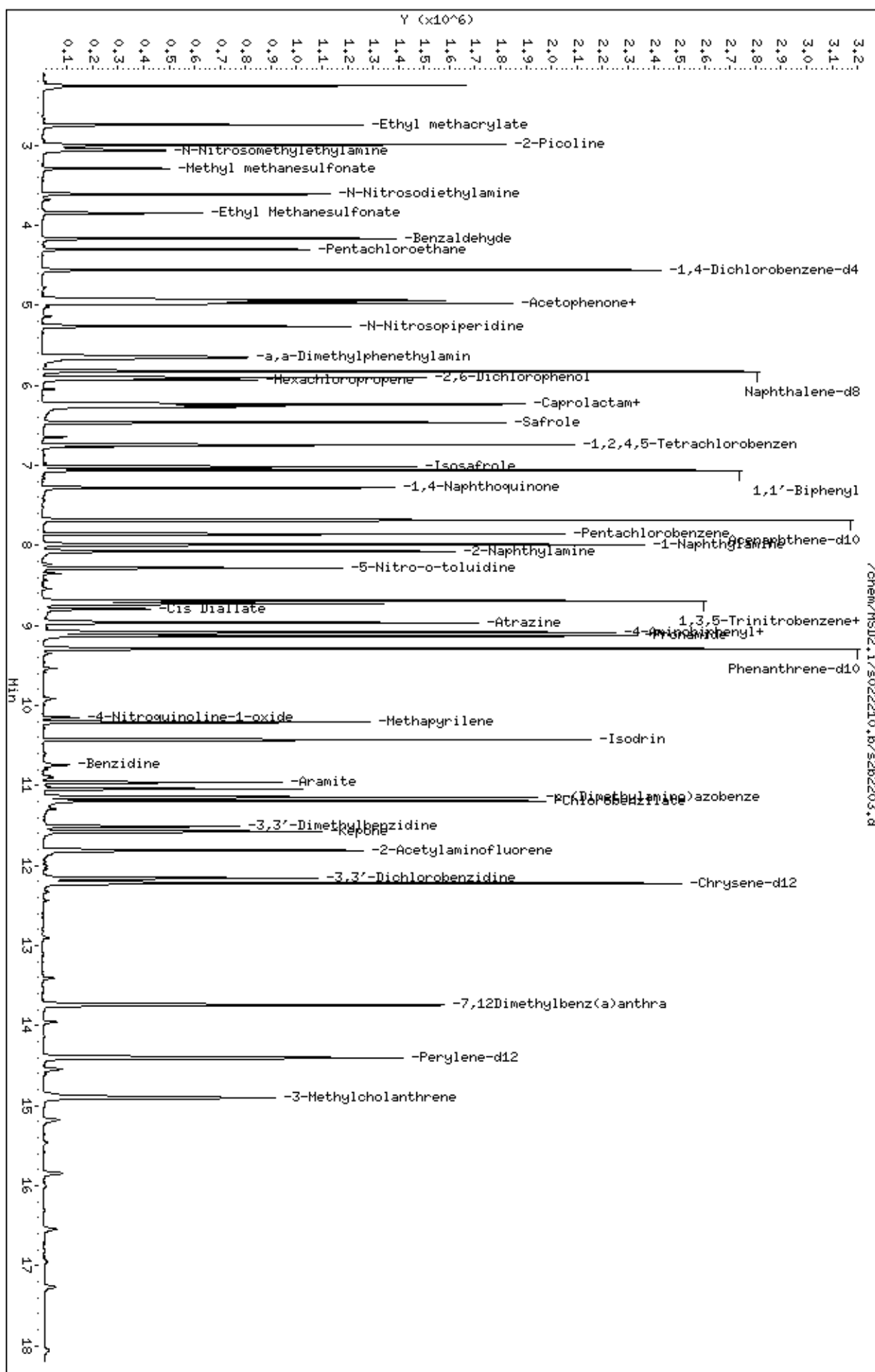
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Lab Smp Id: WBN100120-03.2 Client Smp ID: APCVS  
Inj Date : 22-FEB-2010 15:15  
Operator : AGS1 Inst ID: MSD2.i  
Smp Info : |WBN100120-03.2|40 PPM|1|SVMF|1|APCVS  
Misc Info : |MSD8270|WBN100205-01|  
Comment : Column: J & W Scientific DB-5MS 25m x 0.2mm x 0.33um  
Method : /chem/MSD2.i/s022210.b/MSD2-M8270PAQA-010810a.m  
Meth Date : 22-Feb-2010 16:53 ann00964 Quant Type: ISTD  
Cal Date : 11-JAN-2010 20:43 Cal File: s2a0859.d  
Als bottle: 3 Continuing Calibration Sample  
Dil Factor: 1.00000  
Integrator: HP RTE Compound Sublist: AP12.sub  
Target Version: 3.50  
Processing Host: hpclp1

Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE		CAL-AMT (ng/ul)	ON-COL (ng/ul)
=====	=====	==	=====	=====	=====		=====	=====
* 10 1,4-Dichlorobenzene-d4	152	4.562	4.562	(1.000)	358564		40.0000	
* 29 Naphthalene-d8	136	5.828	5.828	(1.000)	1220836		40.0000	
* 46 Acenaphthene-d10	164	7.688	7.688	(1.000)	766531		40.0000	
* 67 Phenanthrene-d10	188	9.295	9.295	(1.000)	1370790		40.0000	
* 91 Chrysene-d12	240	12.226	12.226	(1.000)	1300339		40.0000	
* 98 Perylene-d12	264	14.409	14.409	(1.000)	1063239		40.0000	
209 Benzaldehyde	77	4.166	4.166	(0.913)	256663		40.0000	34.4
16 Acetophenone	105	4.943	4.943	(1.084)	415307		40.0000	41.4
189 Caprolactam	113	6.266	6.266	(1.075)	110878		40.0000	44.7
208 1,1'-Biphenyl	154	7.064	7.064	(0.919)	905735		40.0000	41.5
207 Atrazine	173	8.968	8.968	(0.965)	59440		40.0000	43.3
77 Benzidine	184	10.747	10.747	(0.879)	83692		40.0000	16.8
90 3,3'-Dichlorobenzidine	252	12.161	12.161	(0.995)	320716		40.0000	40.7
102 1,4-Dioxane	88	2.258	2.258	(0.495)	115743		40.0000	43.4
103 Methyl methacrylate	100	2.258	2.258	(0.495)	63981		40.0000	44.6
104 Ethyl methacrylate	69	2.748	2.748	(0.602)	273962		40.0000	41.7
105 2-Picoline	93	2.997	2.997	(0.657)	417766		40.0000	42.6
106 N-Nitrosomethylethylamine	88	3.070	3.070	(0.673)	170339		40.0000	44.1
107 Methyl methanesulfonate	80	3.293	3.293	(0.722)	165180		40.0000	35.7
108 N-Nitrosodiethylamine	102	3.615	3.615	(0.792)	173868		40.0000	43.0
109 Ethyl Methanesulfonate	79	3.853	3.853	(0.844)	218566		40.0000	39.4
110 Pentachloroethane	167	4.304	4.304	(0.943)	120369		40.0000	41.7
111 N-Nitrosopyrrolidine	100	4.931	4.931	(1.081)	177491		40.0000	43.6
113 N-Nitrosomorpholine	56	4.964	4.964	(1.088)	349509		40.0000	39.9
114 o-Toluidine	106	4.981	4.981	(1.092)	554511		40.0000	39.8
115 N-Nitrosopiperidine	114	5.266	5.266	(0.903)	178773		40.0000	43.6

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ng/ul)	ON-COL (ng/ul)
=====	=====	==	=====	=====	=====	=====	=====
116 a,a-Dimethylphenethylamine	58	5.655	5.655	(0.970)	1418486	40.0000	40.2
118 2,6-Dichlorophenol	162	5.908	5.908	(1.014)	290051	40.0000	42.3
119 Hexachloropropene	213	5.931	5.931	(1.018)	148855	40.0000	37.1
120 p-Phenylenediamine	108	6.277	6.277	(1.077)	183466	40.0000	33.2
121 N-Nitrosodi-n-butylamine	84	6.239	6.239	(1.070)	298829	40.0000	43.2
122 Safrole	162	6.468	6.468	(1.110)	263045	40.0000	42.0
123 1,2,4,5-Tetrachlorobenzene	216	6.747	6.747	(0.878)	411036	40.0000	44.9
124 Isosafrole	162	7.022	7.022	(0.913)	254047	40.0000	41.7
125 1,4-Naphthoquinone	158	7.284	7.284	(0.947)	251065	40.0000	42.1
127 Pentachlorobenzene	250	7.861	7.861	(1.023)	362264	40.0000	43.6
128 1-Naphthylamine	143	7.991	7.991	(1.039)	619179	40.0000	40.9
129 2-Naphthylamine	143	8.079	8.079	(1.051)	632256	40.0000	38.9
131 5-Nitro-o-toluidine	152	8.287	8.287	(1.078)	202214	40.0000	42.5
136 1,3,5-Trinitrobenzene	75	8.692	8.692	(0.935)	161887	40.0000	45.2
137 Phenacetin	108	8.736	8.736	(0.940)	331414	40.0000	42.6
138 Diallate	86	8.695	8.695	(0.935)	342425	40.0000	43.2
212 Cis Diallate	86	8.795	8.795	(0.946)	51066	6.00000	6.6
213 Trans Diallate	86	8.695	8.695	(0.935)	342425	34.0000	36.8
140 4-Aminobiphenyl	169	9.083	9.083	(0.977)	575335	40.0000	34.6
141 Pentachloronitrobenzene	237	9.095	9.095	(0.978)	114261	40.0000	43.3
142 Pronamide	173	9.136	9.136	(0.983)	390815	40.0000	42.8
146 4-Nitroquinoline-1-oxide	101	10.151	10.151	(1.092)	8528	40.0000	24.9
147 Methapyrilene	58	10.213	10.213	(1.099)	469338	40.0000	31.4
148 Isodrin	193	10.433	10.433	(1.122)	161086	40.0000	46.2
149 Aramite	185	10.964	10.964	(1.180)	72527	40.0000	48.6
150 Kepone	272	11.579	11.579	(1.246)	131042	40.0000	47.3
151 p-(Dimethylamino)azobenzene	120	11.153	11.153	(0.912)	336420	40.0000	39.9
152 Chlorobenzilate	251	11.194	11.194	(0.916)	418432	40.0000	44.3
153 3,3'-Dimethylbenzidine	212	11.514	11.514	(0.942)	347967	40.0000	27.0
155 2-Acetylaminofluorene	181	11.811	11.811	(0.966)	383898	40.0000	49.8
157 7,12Dimethylbenz(a)anthracene	256	13.745	13.745	(0.954)	533829	40.0000	39.6
158 3-Methylcholanthrene	268	14.905	14.905	(1.034)	408136	40.0000	42.6

Data File: /chem/HSD2.i/s022210.b/s2b2203.d  
 Date : 22-FEB-2010 15:15  
 Client ID: APCVS  
 Sample Info: IABN100120-03.2140 PPH11SVHF11APCVS  
 Column phase: 3M DB-5MS

Instrument: HSD2.i  
 Operator: AGS1  
 Column diameter: 0.20



GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD2.i Injection Date: 23-FEB-2010 13:46  
 Lab File ID: s2b2303.d Init. Cal. Date(s): 08-JAN-2010 11-JAN-2010  
 Analysis Type: Init. Cal. Times: 22:16 22:24  
 Lab Sample ID: WBN100129-05.3 Quant Type: ISTD  
 Method: /chem/MSD2.i/s022310.b/MSD2-M8270PAQA-010810a.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
\$ 3 2-Fluorophenol	0.97063	0.95743	0.95743	0.000	-1.36029	60.00000	Averaged
\$ 5 Phenol-d5	1.29893	1.25587	1.25587	0.000	-3.31478	60.00000	Averaged
\$ 20 Nitrobenzene-d5	0.31693	0.31951	0.31951	0.000	0.81475	60.00000	Averaged
\$ 39 2-Fluorobiphenyl	1.23758	1.19273	1.19273	0.000	-3.62425	60.00000	Averaged
\$ 60 2,4,6-Tribromophenol	0.17301	0.15722	0.15722	0.000	-9.12373	60.00000	Averaged
\$ 81 p-Terphenyl-d14	0.76828	0.79801	0.79801	0.000	3.86945	60.00000	Averaged
1 N-Methyl-N-nitrosomethylami	0.62604	0.64668	0.64668	0.000	3.29684	60.00000	Averaged
2 Pyridine	0.74256	0.66758	0.66758	0.000	-10.09708	60.00000	Averaged
4 Aniline	0.60115	0.60232	0.60232	0.000	0.19572	60.00000	Averaged
6 Phenol	1.32577	1.25868	1.25868	0.001	-5.06041	20.00000	Averaged ccc
7 bis(2-Chloroethyl) ether	1.20282	1.11532	1.11532	0.000	-7.27458	60.00000	Averaged
8 2-Chlorophenol	1.09861	1.06437	1.06437	0.000	-3.11695	60.00000	Averaged
203 n-Decane	2.38258	1.72475	1.72475	0.000	-27.60988	60.00000	Averaged
9 1,3-Dichlorobenzene	1.28467	1.27523	1.27523	0.000	-0.73480	60.00000	Averaged
11 1,4-Dichlorobenzene	1.32033	1.31244	1.31244	0.001	-0.59746	20.00000	Averaged ccc
13 1,2-Dichlorobenzene	1.22631	1.21815	1.21815	0.000	-0.66552	60.00000	Averaged
14 bis(2-Chloroisopropyl)ether	3.35251	2.65353	2.65353	0.000	-20.84957	60.00000	Averaged
12 Benzyl alcohol	0.66496	0.37967	0.37967	0.000	-42.90369	60.00000	Averaged
15 o-Cresol	0.86335	0.94751	0.94751	0.000	9.74786	60.00000	Averaged
18 m,p-Cresols	1.09691	1.01807	1.01807	0.000	-7.18733	60.00000	Averaged
17 N-Nitrosodipropylamine	0.86424	0.83904	0.83904	0.050	-2.91560	60.00000	Averaged spcc
19 Hexachloroethane	0.52810	0.51582	0.51582	0.000	-2.32500	60.00000	Averaged
21 Nitrobenzene	0.32605	0.34109	0.34109	0.000	4.61346	60.00000	Averaged
22 Isophorone	0.60239	0.62643	0.62643	0.000	3.99097	60.00000	Averaged
23 2-Nitrophenol	0.14429	0.13969	0.13969	0.001	-3.18539	20.00000	Averaged ccc
24 2,4-Dimethylphenol	0.25576	0.22987	0.22987	0.000	-10.12355	60.00000	Averaged
25 bis(2-Chloroethoxy)methane	0.34780	0.35016	0.35016	0.000	0.67863	60.00000	Averaged
26 2,4-Dichlorophenol	0.23858	0.23805	0.23805	0.001	-0.21970	20.00000	Averaged ccc
27 Benzoic acid	41.17681	40.00000	0.13845	0.000	2.94203	60.00000	Linear
28 1,2,4-Trichlorobenzene	0.30548	0.32188	0.32188	0.000	5.36839	60.00000	Averaged
30 Naphthalene	0.84660	0.84541	0.84541	0.000	-0.14124	60.00000	Averaged
204 alpha-Terpineol	0.37575	0.35741	0.35741	0.000	-4.87979	60.00000	Averaged
31 4-Chloroaniline	0.25832	0.25942	0.25942	0.000	0.42661	60.00000	Averaged
32 Hexachlorobutadiene	0.19199	0.19872	0.19872	0.001	3.50380	20.00000	Averaged ccc
33 4-Chloro-3-methylphenol	0.24161	0.24104	0.24104	0.001	-0.23372	20.00000	Averaged ccc
34 2-Methylnaphthalene	0.58677	0.57354	0.57354	0.000	-2.25377	60.00000	Averaged

## GEL Laboratories LLC

## CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD2.i Injection Date: 23-FEB-2010 13:46  
Lab File ID: s2b2303.d Init. Cal. Date(s): 08-JAN-2010 11-JAN-2010  
Analysis Type: Init. Cal. Times: 22:16 22:24  
Lab Sample ID: WBN100129-05.3 Quant Type: ISTD  
Method: /chem/MSD2.i/s022310.b/MSD2-M8270PAQA-010810a.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
35 1-Methylnaphthalene	0.57979	0.57063	0.57063	0.000	-1.58138	60.00000	Averaged
36 Hexachlorocyclopentadiene	0.20327	0.12087	0.12087	0.050	-40.53895	60.00000	Averaged spcc
205 2,3-Dichloroaniline	0.55582	0.54330	0.54330	0.000	-2.25158	60.00000	Averaged
37 2,4,6-Trichlorophenol	0.33768	0.32812	0.32812	0.001	-2.83054	20.00000	Averaged ccc
38 2,4,5-Trichlorophenol	0.34960	0.35104	0.35104	0.000	0.41157	60.00000	Averaged
40 2-Chloronaphthalene	1.03550	0.98230	0.98230	0.000	-5.13816	60.00000	Averaged
42 o-Nitroaniline	0.36783	0.32985	0.32985	0.000	-10.32418	60.00000	Averaged
41 m-Nitroaniline	29.32401	40.00000	0.12831	0.000	-26.68997	60.00000	Linear
43 Dimethylphthalate	1.19427	1.18707	1.18707	0.000	-0.60305	60.00000	Averaged
44 2,6-Dinitrotoluene	0.27938	0.27720	0.27720	0.000	-0.77819	60.00000	Averaged
50 2,4-Dinitrotoluene	0.35552	0.34068	0.34068	0.000	-4.17293	60.00000	Averaged
45 Acenaphthylene	1.63374	1.53842	1.53842	0.000	-5.83459	60.00000	Averaged
47 Acenaphthene	1.02726	0.96461	0.96461	0.001	-6.09840	20.00000	Averaged ccc
48 2,4-Dinitrophenol	36.45009	40.00000	0.09038	0.050	-8.87477	60.00000	Linear spcc
49 Dibenzofuran	1.40865	1.32121	1.32121	0.000	-6.20752	60.00000	Averaged
51 Diethylphthalate	1.17668	1.12943	1.12943	0.000	-4.01591	60.00000	Averaged
52 4-Nitrophenol	30.98445	40.00000	0.10115	0.050	-22.53888	60.00000	Linear spcc
53 Fluorene	1.22221	1.16723	1.16723	0.000	-4.49808	60.00000	Averaged
54 4-Chlorophenylphenylether	0.63724	0.61838	0.61838	0.000	-2.96040	60.00000	Averaged
55 2-Methyl-4,6-dinitrophenol	0.10597	0.08996	0.08996	0.000	-15.11203	60.00000	Averaged
56 p-Nitroaniline	21.36406	40.00000	0.06649	0.000	-46.58986	60.00000	Linear
133 Diphenylamine	0.51708	0.46046	0.46046	0.001	-10.95043	20.00000	Averaged ccc
58 1,2-Diphenylhydrazine	0.68942	0.64417	0.64417	0.000	-6.56329	60.00000	Averaged
61 4-Bromophenylphenylether	0.21382	0.21133	0.21133	0.000	-1.16340	60.00000	Averaged
63 Hexachlorobenzene	0.22580	0.23447	0.23447	0.000	3.83745	60.00000	Averaged
65 Pentachlorophenol	34.47759	40.00000	0.08912	0.001	-13.80601	20.00000	Linear ccc
206 n-Octadecane	0.73588	0.64151	0.64151	0.000	-12.82391	60.00000	Averaged
68 Phenanthrene	0.96311	0.94397	0.94397	0.000	-1.98706	60.00000	Averaged
69 Anthracene	0.94257	0.93076	0.93076	0.000	-1.25290	60.00000	Averaged
72 Di-n-butylphthalate	1.08053	1.08417	1.08417	0.000	0.33700	60.00000	Averaged
76 Fluoranthene	1.03443	1.04883	1.04883	0.001	1.39225	20.00000	Averaged ccc
79 Pyrene	1.20605	1.35846	1.35846	0.000	12.63707	60.00000	Averaged
85 Butylbenzylphthalate	0.49046	0.52845	0.52845	0.000	7.74688	60.00000	Averaged
89 Benzo(a)anthracene	1.02256	1.00338	1.00338	0.000	-1.87596	60.00000	Averaged
92 Chrysene	0.94734	0.93648	0.93648	0.000	-1.14706	60.00000	Averaged
93 bis(2-Ethylhexyl)phthalate	0.69261	0.72277	0.72277	0.000	4.35421	60.00000	Averaged

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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD2.i Injection Date: 23-FEB-2010 13:46  
 Lab File ID: s2b2303.d Init. Cal. Date(s): 08-JAN-2010 11-JAN-2010  
 Analysis Type: Init. Cal. Times: 22:16 22:24  
 Lab Sample ID: WBN100129-05.3 Quant Type: ISTD  
 Method: /chem/MSD2.i/s022310.b/MSD2-M8270PAQA-010810a.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
94 Di-n-octylphthalate	1.47572	1.66681	1.66681	0.001	12.94908	20.00000	Averaged	ccc
95 Benzo(b)fluoranthene	1.09363	1.12797	1.12797	0.000	3.13986	60.00000	Averaged	
96 Benzo(k)fluoranthene	1.08357	1.16385	1.16385	0.000	7.40829	60.00000	Averaged	
97 Benzo(a)pyrene	0.92735	0.95487	0.95487	0.001	2.96831	20.00000	Averaged	ccc
99 Indeno(1,2,3-cd)pyrene	0.80192	0.78463	0.78463	0.000	-2.15501	60.00000	Averaged	
100 Dibenzo(a,h)anthracene	0.63947	0.63985	0.63985	0.000	0.05844	60.00000	Averaged	
101 Benzo(ghi)perylene	0.67738	0.63916	0.63916	0.000	-5.64225	60.00000	Averaged	
126 m-Dinitrobenzene	0.19418	0.18125	0.18125	0.000	-6.65706	60.00000	Averaged	
130 2,3,4,6-Tetrachlorophenol	0.32016	0.30033	0.30033	0.000	-6.19133	60.00000	Averaged	
143 Dinoseb	34.29487	40.00000	0.14739	0.000	-14.26283	60.00000	Linear	
173 Carbazole	0.65672	0.33653	0.33653	0.000	-48.75538	60.00000	Averaged	
184 p-Benzoquinone	0.13375	0.22332	0.22332	0.000	66.97247	60.00000	Averaged	<-
192 Methoxychlor	0.63740	0.54530	0.54530	0.000	-14.44863	60.00000	Averaged	
211 p-Toluidine	0.84243	0.81908	0.81908	0.000	-2.77197	60.00000	Averaged	
210 m-Toluidine	1.28758	1.10191	1.10191	0.000	-14.41987	60.00000	Averaged	
214 1,4-Dinitrobenzene	0.19934	0.17546	0.17546	0.000	-11.97924	60.00000	Averaged	
215 2-Ethoxyethanol	0.87391	0.70941	0.70941	0.000	-18.82298	60.00000	Averaged	
216 Methylenabis(2-chloroanilin	26.85619	40.00000	0.06963	0.000	-32.85952	60.00000	Linear	
179 Dibenzo(a,e)pyrene	0.33140	0.34735	0.34735	0.000	4.81445	60.00000	Averaged	
26 Phthalic anhydride	0.10521	0.08926	0.08926	0.000	-15.15762	60.00000	Averaged	
M 222 Trichlorophenols	0.34364	0.33958	0.33958	0.000	-1.18135	60.00000	Averaged	
M 223 Tetrachlorophenols	0.32016	0.30033	0.30033	0.000	-6.19133	60.00000	Averaged	
M 224 Benzo(b,k)fluoranthene	1.08860	1.14591	1.14591	0.000	5.26421	60.00000	Averaged	



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Data file : /chem/MSD2.i/s022310.b/s2b2303.d  
Lab Smp Id: WBN100129-05.3 Client Smp ID: MEGACVS  
Inj Date : 23-FEB-2010 13:46  
Operator : AGS1 Inst ID: MSD2.i  
Smp Info : |WBN100129-05.3|40 PPM|1|SVMF|1|MEGACVS  
Misc Info : |MSD8270|WBN100217-01|  
Comment : Column: J & W Scientific DB-5MS 25m x 0.2mm x 0.33um  
Method : /chem/MSD2.i/s022310.b/MSD2-M8270PAQA-010810a.m  
Meth Date : 23-Feb-2010 16:10 ann00964 Quant Type: ISTD  
Cal Date : 11-JAN-2010 20:43 Cal File: s2a0859.d  
Als bottle: 2 Continuing Calibration Sample  
Dil Factor: 1.00000  
Integrator: HP RTE Compound Sublist: MEGAI1.sub  
Target Version: 3.50  
Processing Host: hpclp1

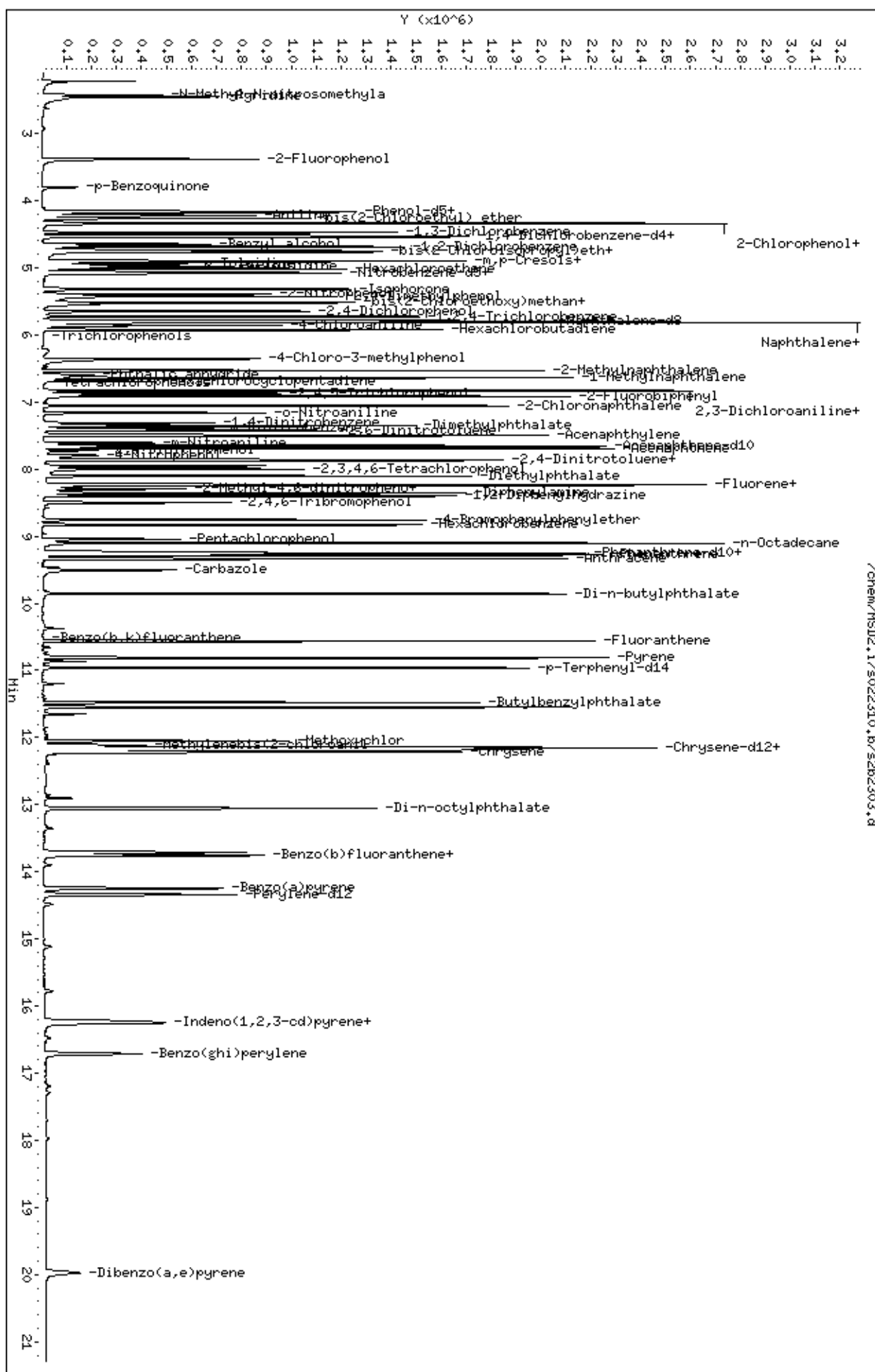
Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ng/ul)	ON-COL (ng/ul)
=====	=====	==	=====	=====	=====	=====	=====
* 10 1,4-Dichlorobenzene-d4	152	4.529	4.529	(1.000)	254206	40.0000	
* 29 Naphthalene-d8	136	5.794	5.794	(1.000)	973901	40.0000	
* 46 Acenaphthene-d10	164	7.655	7.655	(1.000)	563919	40.0000	
* 67 Phenanthrene-d10	188	9.256	9.256	(1.000)	967463	40.0000	
* 91 Chrysene-d12	240	12.184	12.184	(1.000)	792577	40.0000	
* 98 Perylene-d12	264	14.342	14.342	(1.000)	513141	40.0000	
\$ 3 2-Fluorophenol	112	3.383	3.383	(0.747)	243384	40.0000	39.4
\$ 5 Phenol-d5	99	4.163	4.163	(0.919)	319250	40.0000	38.7
\$ 20 Nitrobenzene-d5	82	5.066	5.066	(0.874)	311174	40.0000	40.3
\$ 39 2-Fluorobiphenyl	172	6.918	6.918	(0.904)	672603	40.0000	38.6
\$ 60 2,4,6-Tribromophenol	329	8.502	8.502	(1.111)	88660	40.0000	36.4
\$ 81 p-Terphenyl-d14	244	10.962	10.962	(0.900)	632485	40.0000	41.5
1 N-Methyl-N-nitrosomethylamine	74	2.428	2.428	(0.536)	164389	40.0000	41.3
2 Pyridine	79	2.457	2.457	(0.542)	169704	40.0000	36.0
4 Aniline	66	4.224	4.224	(0.933)	153114	40.0000	40.1
6 Phenol	94	4.174	4.174	(0.922)	319965	40.0000	38.0
7 bis(2-Chloroethyl) ether	63	4.265	4.265	(0.942)	283522	40.0000	37.1
8 2-Chlorophenol	128	4.336	4.336	(0.957)	270568	40.0000	38.8
203 n-Decane	43	4.342	4.342	(0.959)	438442	40.0000	29.0
9 1,3-Dichlorobenzene	146	4.476	4.476	(0.988)	324171	40.0000	39.7
11 1,4-Dichlorobenzene	146	4.544	4.544	(1.003)	333631	40.0000	39.8
13 1,2-Dichlorobenzene	146	4.691	4.691	(1.036)	309661	40.0000	39.7
14 bis(2-Chloroisopropyl)ether	45	4.767	4.767	(1.052)	674542	40.0000	31.7
12 Benzyl alcohol	108	4.650	4.650	(1.027)	96514	40.0000	22.8
15 o-Cresol	107	4.741	4.741	(1.047)	240862	40.0000	43.9
18 m,p-Cresols	107	4.899	4.899	(1.082)	258799	40.0000	37.1

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ng/ul)	ON-COL (ng/ul)
=====	=====	==	=====	=====	=====	=====	=====
17 N-Nitrosodipropylamine	70	4.905	4.905	(1.083)	213289	40.0000	38.8
19 Hexachloroethane	117	5.017	5.017	(1.108)	131125	40.0000	39.1
21 Nitrobenzene	77	5.087	5.087	(0.878)	332189	40.0000	41.8
22 Isophorone	82	5.322	5.322	(0.918)	610083	40.0000	41.6
23 2-Nitrophenol	139	5.398	5.398	(0.932)	136044	40.0000	38.7
24 2,4-Dimethylphenol	122	5.424	5.424	(0.936)	223870	40.0000	36.0
25 bis(2-Chloroethoxy)methane	93	5.521	5.521	(0.953)	341026	40.0000	40.3
26 2,4-Dichlorophenol	162	5.647	5.647	(0.975)	231838	40.0000	39.9
27 Benzoic acid	105	5.553	5.553	(0.958)	134839	40.0000	41.2
28 1,2,4-Trichlorobenzene	180	5.730	5.730	(0.989)	313483	40.0000	42.1
30 Naphthalene	128	5.818	5.818	(1.004)	823343	40.0000	39.9
204 alpha-Terpineol	59	5.812	5.812	(1.003)	348086	40.0000	38.0
31 4-Chloroaniline	127	5.862	5.862	(1.012)	252650	40.0000	40.2
32 Hexachlorobutadiene	225	5.926	5.926	(1.023)	193534	40.0000	41.4
33 4-Chloro-3-methylphenol	107	6.360	6.360	(1.098)	234753	40.0000	39.9
34 2-Methylnaphthalene	142	6.537	6.537	(1.128)	558575	40.0000	39.1
35 1-Methylnaphthalene	142	6.642	6.642	(1.146)	555733	40.0000	39.4
36 Hexachlorocyclopentadiene	237	6.692	6.692	(0.874)	68160	40.0000	23.8
205 2,3-Dichloroaniline	161	6.833	6.833	(0.893)	306378	40.0000	39.1
37 2,4,6-Trichlorophenol	196	6.833	6.833	(0.893)	185032	40.0000	38.9
38 2,4,5-Trichlorophenol	196	6.874	6.874	(0.898)	197960	40.0000	40.2
40 2-Chloronaphthalene	162	7.057	7.057	(0.922)	553935	40.0000	37.9
42 o-Nitroaniline	65	7.162	7.162	(0.936)	186009	40.0000	35.9
41 m-Nitroaniline	138	7.608	7.608	(0.994)	72357	40.0000	29.3
43 Dimethylphthalate	163	7.359	7.359	(0.961)	669411	40.0000	39.8
44 2,6-Dinitrotoluene	165	7.426	7.426	(0.970)	156319	40.0000	39.7
50 2,4-Dinitrotoluene	165	7.861	7.861	(1.027)	192116	40.0000	38.3
45 Acenaphthylene	152	7.503	7.503	(0.980)	867542	40.0000	37.7
47 Acenaphthene	154	7.691	7.691	(1.005)	543964	40.0000	37.6
48 2,4-Dinitrophenol	184	7.723	7.723	(1.009)	50966	40.0000	36.4
49 Dibenzofuran	168	7.873	7.873	(1.028)	745054	40.0000	37.5
51 Diethylphthalate	149	8.105	8.105	(1.059)	636906	40.0000	38.4
52 4-Nitrophenol	139	7.793	7.793	(1.018)	57040	40.0000	31.0
53 Fluorene	166	8.243	8.243	(1.077)	658224	40.0000	38.2
54 4-Chlorophenylphenylether	204	8.231	8.231	(1.075)	348715	40.0000	38.8
55 2-Methyl-4,6-dinitrophenol	198	8.299	8.299	(0.897)	87029	40.0000	34.0
56 p-Nitroaniline	138	8.267	8.267	(1.080)	37494	40.0000	21.4
133 Diphenylamine	169	8.361	8.361	(0.903)	445477	40.0000	35.6
58 1,2-Diphenylhydrazine	77	8.405	8.405	(0.908)	623211	40.0000	37.4
61 4-Bromophenylphenylether	248	8.760	8.760	(0.946)	204455	40.0000	39.5
63 Hexachlorobenzene	284	8.833	8.833	(0.954)	226838	40.0000	41.5
65 Pentachlorophenol	266	9.045	9.045	(0.977)	86224	40.0000	34.5
206 n-Octadecane	57	9.104	9.104	(0.983)	620635	40.0000	34.9
68 Phenanthrene	178	9.283	9.283	(1.003)	913257	40.0000	39.2
69 Anthracene	178	9.339	9.339	(1.009)	900474	40.0000	39.5
72 Di-n-butylphthalate	149	9.858	9.858	(1.065)	1048898	40.0000	40.1
76 Fluoranthene	202	10.565	10.565	(1.141)	1014708	40.0000	40.6

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ng/ul)	ON-COL (ng/ul)
=====	=====	==	=====	=====	=====	=====	=====
79 Pyrene	202	10.812	10.812	(0.887)	1076688	40.0000	45.0
85 Butylbenzylphthalate	149	11.478	11.478	(0.942)	418838	40.0000	43.1
89 Benzo(a)anthracene	228	12.166	12.166	(0.999)	795255	40.0000	39.2
92 Chrysene	228	12.216	12.216	(1.003)	742230	40.0000	39.5
93 bis(2-Ethylhexyl)phthalate	149	12.151	12.151	(0.997)	572849	40.0000	41.7
94 Di-n-octylphthalate	149	13.056	13.056	(0.910)	855310	40.0000	45.2
95 Benzo(b)fluoranthene	252	13.711	13.711	(0.956)	578809	40.0000	41.2
96 Benzo(k)fluoranthene	252	13.755	13.755	(0.959)	597218	40.0000	43.0
97 Benzo(a)pyrene	252	14.248	14.248	(0.993)	489984	40.0000	41.2
99 Indeno(1,2,3-cd)pyrene	276	16.227	16.227	(1.131)	402628	40.0000	39.1
100 Dibenzo(a,h)anthracene	278	16.256	16.256	(1.133)	328332	40.0000	40.0
101 Benzo(ghi)perylene	276	16.715	16.715	(1.165)	327981	40.0000	37.7
126 m-Dinitrobenzene	168	7.403	7.403	(0.967)	102212	40.0000	37.3
130 2,3,4,6-Tetrachlorophenol	232	8.002	8.002	(1.045)	169364	40.0000	37.5
143 Dinoseb	211	9.233	9.233	(0.997)	142598	40.0000	34.3
173 Carbazole	167	9.503	9.503	(1.027)	325584	40.0000	20.5
184 p-Benzoquinone	54	3.805	3.805	(0.840)	56769	40.0000	66.8
192 Methoxychlor	227	12.051	12.051	(0.989)	432195	40.0000	34.2
211 p-Toluidine	106	4.949	4.949	(1.093)	208215	40.0000	38.9
210 m-Toluidine	106	4.984	4.984	(1.100)	280113	40.0000	34.2
214 1,4-Dinitrobenzene	75	7.318	7.318	(0.956)	98947	40.0000	35.2
215 2-Ethoxyethanol	59	2.223	2.223	(0.491)	180337	40.0000	32.5
216 Methylenebis(2-chloroaniline)	231	12.119	12.119	(0.995)	55184	40.0000	26.8
179 Dibenzo(a,e)pyrene	302	19.976	19.976	(1.393)	178240	40.0000	41.9
26 Phthalic anhydride	104	6.601	6.601	(1.139)	86934	40.0000	33.9
M 222 Trichlorophenols	196				382992	80.0000	79.0
M 223 Tetrachlorophenols	232				169364	40.0000	37.5
M 224 Benzo(b,k)fluoranthene	252				1176027	80.0000	84.2

Data File: /chem/HSD2.i/s022310.b/s2b2303.d  
 Date : 23-FEB-2010 13:46  
 Client ID: MEGACVS  
 Sample Info: IABN100123-05.3140 PPH11SVHF11.MEGACVS  
 Column phase: 3M DB-SHS

Instrument: HSD2.i  
 Operator: AGS1  
 Column diameter: 0.20



GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD2.i Injection Date: 23-FEB-2010 14:15  
 Lab File ID: s2b2304.d Init. Cal. Date(s): 08-JAN-2010 11-JAN-2010  
 Analysis Type: Init. Cal. Times: 22:16 22:24  
 Lab Sample ID: WBN100218-03.2 Quant Type: ISTD  
 Method: /chem/MSD2.i/s022310.b/MSD2-M8270PAQA-010810a.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
209 Benzaldehyde	0.83255	0.71118	0.71118	0.000	-14.57786	60.00000	Averaged
16 Acetophenone	1.11861	1.16131	1.16131	0.000	3.81670	60.00000	Averaged
189 Caprolactam	0.08128	0.09294	0.09294	0.000	14.34802	60.00000	Averaged
208 1,1'-Biphenyl	1.13798	1.18202	1.18202	0.000	3.86988	60.00000	Averaged
207 Atrazine	0.04003	0.04494	0.04494	0.000	12.26774	60.00000	Averaged
77 Benzidine	0.15302	0.08007	0.08007	0.000	-47.67439	60.00000	Averaged
90 3,3'-Dichlorobenzidine	40.04160	40.00000	0.24221	0.000	0.10400	60.00000	Linear
102 1,4-Dioxane	0.29716	0.32060	0.32060	0.000	7.88564	60.00000	Averaged
103 Methyl methacrylate	0.15982	0.17922	0.17922	0.000	12.14196	60.00000	Averaged
104 Ethyl methacrylate	0.73207	0.75685	0.75685	0.000	3.38534	60.00000	Averaged
105 2-Picoline	1.09284	1.16988	1.16988	0.000	7.04927	60.00000	Averaged
106 N-Nitrosomethylethylamine	0.43087	0.47525	0.47525	0.000	10.30065	60.00000	Averaged
107 Methyl methanesulfonate	0.51635	0.46796	0.46796	0.000	-9.37090	60.00000	Averaged
108 N-Nitrosodiethylamine	0.45102	0.48386	0.48386	0.000	7.28232	60.00000	Averaged
109 Ethyl Methanesulfonate	0.61802	0.61816	0.61816	0.000	0.02303	60.00000	Averaged
110 Pentachloroethane	0.32196	0.34251	0.34251	0.000	6.38049	60.00000	Averaged
111 N-Nitrosopyrrolidine	0.45399	0.49820	0.49820	0.000	9.73667	60.00000	Averaged
113 N-Nitrosomorpholine	0.97705	0.97163	0.97163	0.000	-0.55490	60.00000	Averaged
114 o-Toluidine	1.55557	1.60288	1.60288	0.000	3.04099	60.00000	Averaged
115 N-Nitrosopiperidine	0.13445	0.14706	0.14706	0.000	9.37951	60.00000	Averaged
116 a,a-Dimethylphenethylamine	1.15742	1.17782	1.17782	0.000	1.76227	60.00000	Averaged
118 2,6-Dichlorophenol	0.22485	0.23883	0.23883	0.000	6.21544	60.00000	Averaged
119 Hexachloropropene	0.13132	0.12230	0.12230	0.000	-6.87312	60.00000	Averaged
120 p-Phenylenediamine	37.74031	40.00000	0.17307	0.000	-5.64923	60.00000	Linear
121 N-Nitrosodi-n-butylamine	0.22678	0.24019	0.24019	0.000	5.91336	60.00000	Averaged
122 Safrole	0.20519	0.21967	0.21967	0.000	7.05926	60.00000	Averaged
123 1,2,4,5-Tetrachlorobenzene	0.47766	0.52284	0.52284	0.000	9.45855	60.00000	Averaged
124 Isosafrole	0.31756	0.33291	0.33291	0.000	4.83273	60.00000	Averaged
125 1,4-Naphthoquinone	0.31090	0.30418	0.30418	0.000	-2.16121	60.00000	Averaged
127 Pentachlorobenzene	0.43394	0.46893	0.46893	0.000	8.06179	60.00000	Averaged
128 1-Naphthylamine	0.79071	0.82156	0.82156	0.000	3.90150	60.00000	Averaged
129 2-Naphthylamine	0.84738	0.82825	0.82825	0.000	-2.25732	60.00000	Averaged
131 5-Nitro-o-toluidine	0.24817	0.26541	0.26541	0.000	6.94839	60.00000	Averaged
136 1,3,5-Trinitrobenzene	0.10443	0.11791	0.11791	0.000	12.90707	60.00000	Averaged
137 Phenacetin	0.22703	0.24625	0.24625	0.000	8.46464	60.00000	Averaged
138 Diallate	0.23106	0.24709	0.24709	0.000	6.94029	60.00000	Averaged

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD2.i Injection Date: 23-FEB-2010 14:15  
 Lab File ID: s2b2304.d Init. Cal. Date(s): 08-JAN-2010 11-JAN-2010  
 Analysis Type: Init. Cal. Times: 22:16 22:24  
 Lab Sample ID: WBN100218-03.2 Quant Type: ISTD  
 Method: /chem/MSD2.i/s022310.b/MSD2-M8270PAQA-010810a.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
212 Cis Diallate	0.22681	0.24366	0.24366	0.000	7.42782	60.00000	Averaged
213 Trans Diallate	0.27183	0.29070	0.29070	0.000	6.94029	60.00000	Averaged
140 4-Aminobiphenyl	0.48549	0.47731	0.47731	0.000	-1.68473	60.00000	Averaged
141 Pentachloronitrobenzene	0.07692	0.08196	0.08196	0.000	6.55070	60.00000	Averaged
142 Pronamide	0.26659	0.28698	0.28698	0.000	7.65004	60.00000	Averaged
146 4-Nitroquinoline-1-oxide	0.01000	0.00565	0.00565	0.000	-43.49959	60.00000	Averaged
147 Methapyrilene	0.43572	0.34265	0.34265	0.000	-21.35978	60.00000	Averaged
148 Isodrin	0.10170	0.11278	0.11278	0.000	10.89943	60.00000	Averaged
149 Aramite	0.04354	0.05228	0.05228	0.000	20.08084	60.00000	Averaged
150 Kepone	0.08081	0.08469	0.08469	0.000	4.79675	60.00000	Averaged
151 p-(Dimethylamino)azobenzene	0.25950	0.28277	0.28277	0.000	8.96963	60.00000	Averaged
152 Chlorobenzilate	0.29024	0.36000	0.36000	0.000	24.03331	60.00000	Averaged
153 3,3'-Dimethylbenzidine	0.39681	0.29070	0.29070	0.000	-26.74035	60.00000	Averaged
155 2-Acetylaminofluorene	47.17304	40.00000	0.27732	0.000	17.93259	60.00000	Linear
157 7,12Dimethylbenz(a)anthrace	0.50724	0.55646	0.55646	0.000	9.70483	60.00000	Averaged
158 3-Methylcholanthrene	0.36028	0.39622	0.39622	0.000	9.97303	60.00000	Averaged

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Data file : /chem/MSD2.i/s022310.b/s2b2304.d  
Lab Smp Id: WBN100218-03.2 Client Smp ID: APCVS  
Inj Date : 23-FEB-2010 14:15  
Operator : AGS1 Inst ID: MSD2.i  
Smp Info : |WBN100218-03.2|40 PPM|1|SVMF|1|APCVS  
Misc Info : |MSD8270|WBN100217-01|  
Comment : Column: J & W Scientific DB-5MS 25m x 0.2mm x 0.33um  
Method : /chem/MSD2.i/s022310.b/MSD2-M8270PAQA-010810a.m  
Meth Date : 23-Feb-2010 15:31 ann00964 Quant Type: ISTD  
Cal Date : 11-JAN-2010 20:43 Cal File: s2a0859.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

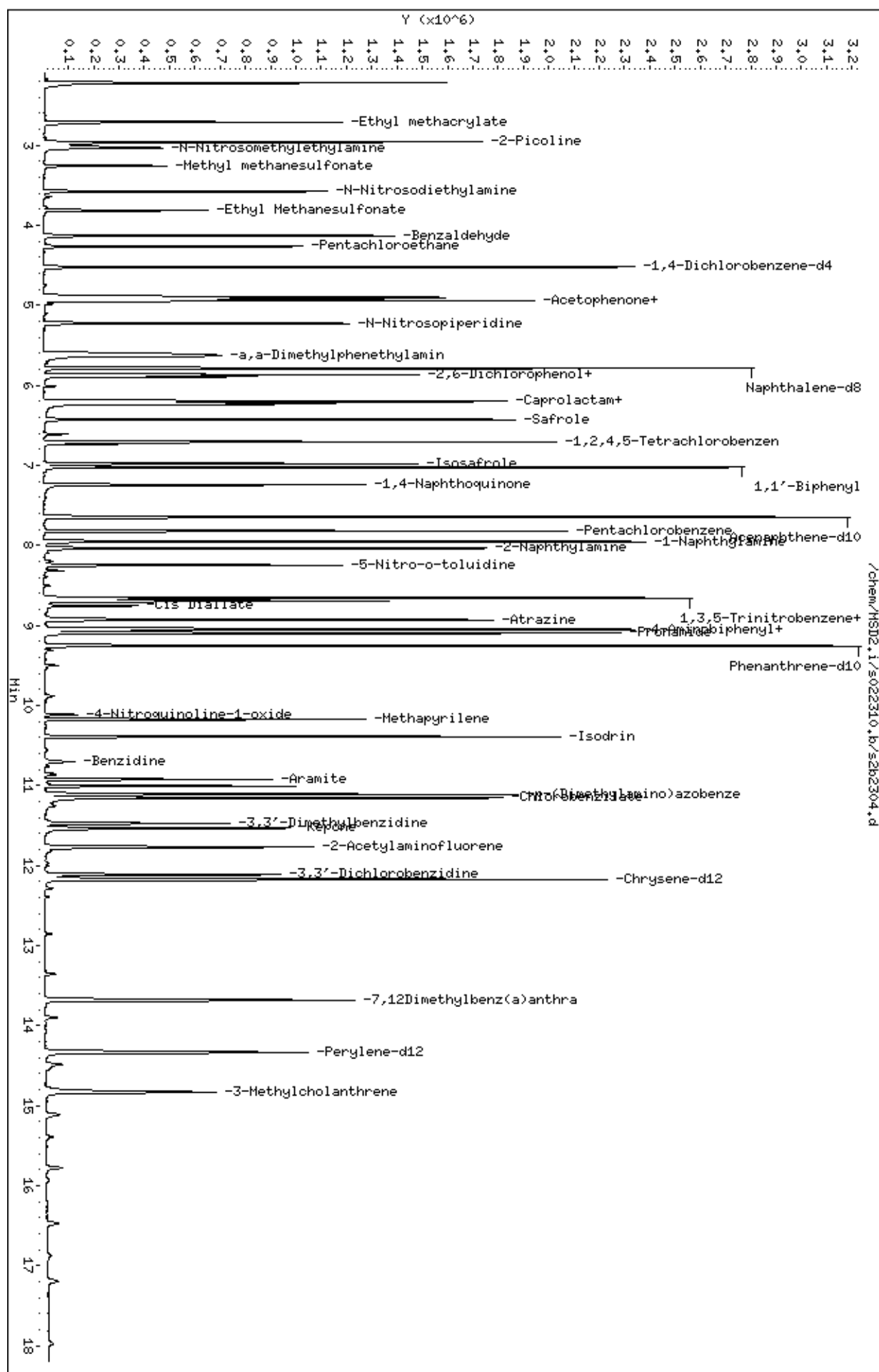
						AMOUNTS	
QUANT SIG						CAL-AMT	ON-COL
Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ng/ul)	(ng/ul)
=====	====	==	=====	=====	=====	=====	=====
* 10 1,4-Dichlorobenzene-d4	152	4.524	4.524	(1.000)	355342	40.0000	
* 29 Naphthalene-d8	136	5.790	5.790	(1.000)	1219717	40.0000	
* 46 Acenaphthene-d10	164	7.650	7.650	(1.000)	774906	40.0000	
* 67 Phenanthrene-d10	188	9.256	9.256	(1.000)	1382272	40.0000	
* 91 Chrysene-d12	240	12.176	12.176	(1.000)	1147818	40.0000	
* 98 Perylene-d12	264	14.336	14.336	(1.000)	760205	40.0000	
209 Benzaldehyde	77	4.131	4.131	(0.913)	252713	40.0000	34.2
16 Acetophenone	105	4.908	4.908	(1.085)	412661	40.0000	41.5
189 Caprolactam	113	6.230	6.230	(1.076)	113363	40.0000	45.7
208 1,1'-Biphenyl	154	7.025	7.025	(0.918)	915954	40.0000	41.5
207 Atrazine	173	8.933	8.933	(0.965)	62125	40.0000	44.9
77 Benzidine	184	10.706	10.706	(0.879)	91904	40.0000	20.9
90 3,3'-Dichlorobenzidine	252	12.117	12.117	(0.995)	278011	40.0000	40.0
102 1,4-Dioxane	88	2.223	2.223	(0.491)	113921	40.0000	43.2
103 Methyl methacrylate	100	2.223	2.223	(0.491)	63686	40.0000	44.8
104 Ethyl methacrylate	69	2.715	2.715	(0.600)	268942	40.0000	41.4
105 2-Picoline	93	2.962	2.962	(0.655)	415707	40.0000	42.8
106 N-Nitrosomethylethylamine	88	3.035	3.035	(0.671)	168876	40.0000	44.1
107 Methyl methanesulfonate	80	3.261	3.261	(0.721)	166287	40.0000	36.2
108 N-Nitrosodiethylamine	102	3.580	3.580	(0.791)	171937	40.0000	42.9
109 Ethyl Methanesulfonate	79	3.817	3.817	(0.844)	219658	40.0000	40.0
110 Pentachloroethane	167	4.266	4.266	(0.943)	121707	40.0000	42.6
111 N-Nitrosopyrrolidine	100	4.896	4.896	(1.082)	177030	40.0000	43.9
113 N-Nitrosomorpholine	56	4.928	4.928	(1.089)	345262	40.0000	39.8
114 o-Toluidine	106	4.943	4.943	(1.093)	569570	40.0000	41.2
115 N-Nitrosopiperidine	114	5.230	5.230	(0.903)	179376	40.0000	43.8

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ng/ul)	ON-COL (ng/ul)
=====	=====	==	=====	=====	=====	=====	=====
116 a,a-Dimethylphenethylamine	58	5.626	5.626	(0.972)	1436607	40.0000	40.7
118 2,6-Dichlorophenol	162	5.870	5.870	(1.014)	291304	40.0000	42.5
119 Hexachloropropene	213	5.896	5.896	(1.018)	149167	40.0000	37.2
120 p-Phenylenediamine	108	6.239	6.239	(1.078)	211100	40.0000	37.7
121 N-Nitrosodi-n-butylamine	84	6.204	6.204	(1.071)	292967	40.0000	42.4
122 Safrole	162	6.430	6.430	(1.110)	267940	40.0000	42.8
123 1,2,4,5-Tetrachlorobenzene	216	6.709	6.709	(0.877)	405153	40.0000	43.8
124 Isosafrole	162	6.984	6.984	(0.913)	257974	40.0000	41.9
125 1,4-Naphthoquinone	158	7.245	7.245	(0.947)	235714	40.0000	39.1
127 Pentachlorobenzene	250	7.823	7.823	(1.023)	363374	40.0000	43.2
128 1-Naphthylamine	143	7.952	7.952	(1.040)	636635	40.0000	41.6
129 2-Naphthylamine	143	8.040	8.040	(1.051)	641814	40.0000	39.1
131 5-Nitro-o-toluidine	152	8.252	8.252	(1.079)	205671	40.0000	42.8
136 1,3,5-Trinitrobenzene	75	8.659	8.659	(0.936)	162983	40.0000	45.2
137 Phenacetin	108	8.698	8.698	(0.940)	340383	40.0000	43.4
138 Diallate	86	8.656	8.656	(0.935)	341551	40.0000	42.8
212 Cis Diallate	86	8.756	8.756	(0.946)	50521	6.00000	6.4
213 Trans Diallate	86	8.656	8.656	(0.935)	341551	34.0000	36.4
140 4-Aminobiphenyl	169	9.044	9.044	(0.977)	659767	40.0000	39.3
141 Pentachloronitrobenzene	237	9.056	9.056	(0.978)	113296	40.0000	42.6
142 Pronamide	173	9.097	9.097	(0.983)	396686	40.0000	43.1
146 4-Nitroquinoline-1-oxide	101	10.113	10.113	(1.093)	7808	40.0000	22.6
147 Methapyrilene	58	10.174	10.174	(1.099)	473637	40.0000	31.4
148 Isodrin	193	10.392	10.392	(1.123)	155897	40.0000	44.4
149 Aramite	185	10.926	10.926	(1.180)	72264	40.0000	48.0
150 Kepone	272	11.535	11.535	(1.246)	117065	40.0000	41.9
151 p-(Dimethylamino)azobenzene	120	11.114	11.114	(0.913)	324570	40.0000	43.6
152 Chlorobenzilate	251	11.155	11.155	(0.916)	413215	40.0000	49.6
153 3,3'-Dimethylbenzidine	212	11.476	11.476	(0.943)	333674	40.0000	29.3
155 2-Acetylaminofluorene	181	11.770	11.770	(0.967)	318309	40.0000	47.2
157 7,12Dimethylbenz(a)anthracene	256	13.684	13.684	(0.955)	423025	40.0000	43.9
158 3-Methylcholanthrene	268	14.833	14.833	(1.035)	301205	40.0000	44.0



Data File: /chem/HSD2.i/s022310.b/s2b2304.d  
 Date : 23-FEB-2010 14:15  
 Client ID: APCVS  
 Sample Info: IABN100218-03.2140 PPH11SVHF11APCVS  
 Column phase: 3% IB-5MS

Instrument: HSD2.i  
 Operator: AGS1  
 Column diameter: 0.20



# QC Data

Data File: /chem/MSD2.i/s010810a,b/s2a0808.d

Page 1

Date : 08-JAN-2010 21:18

Client ID: DFTPP

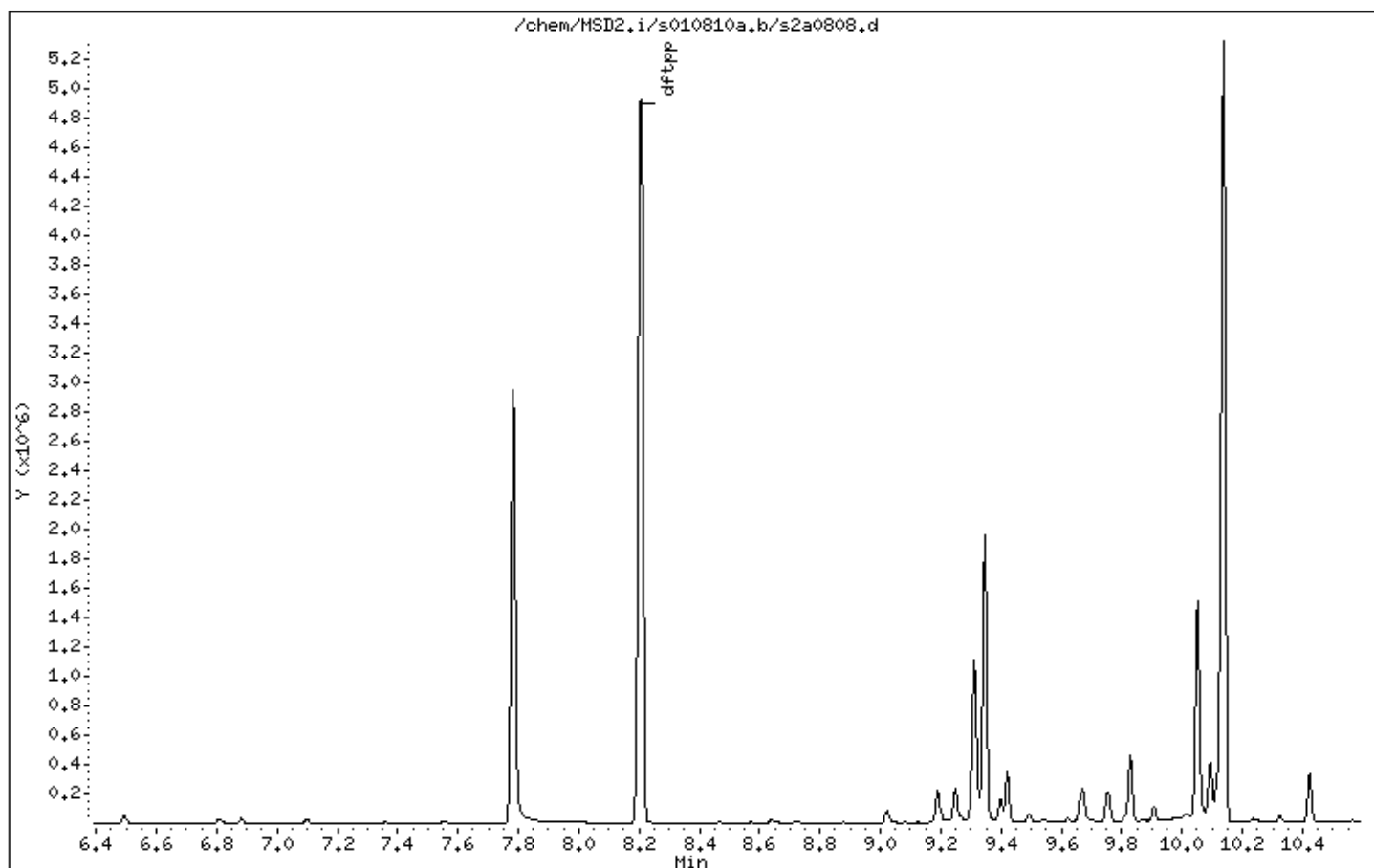
Instrument: MSD2.i

Sample Info: IWBNO91213-01I50PPH11SVHF11IDFTPP1

Operator: AGS1

Column phase: J&W DB-5MS

Column diameter: 0.20



Date : 08-JAN-2010 21:18

Client ID: DFTPP

Instrument: MSD2.i

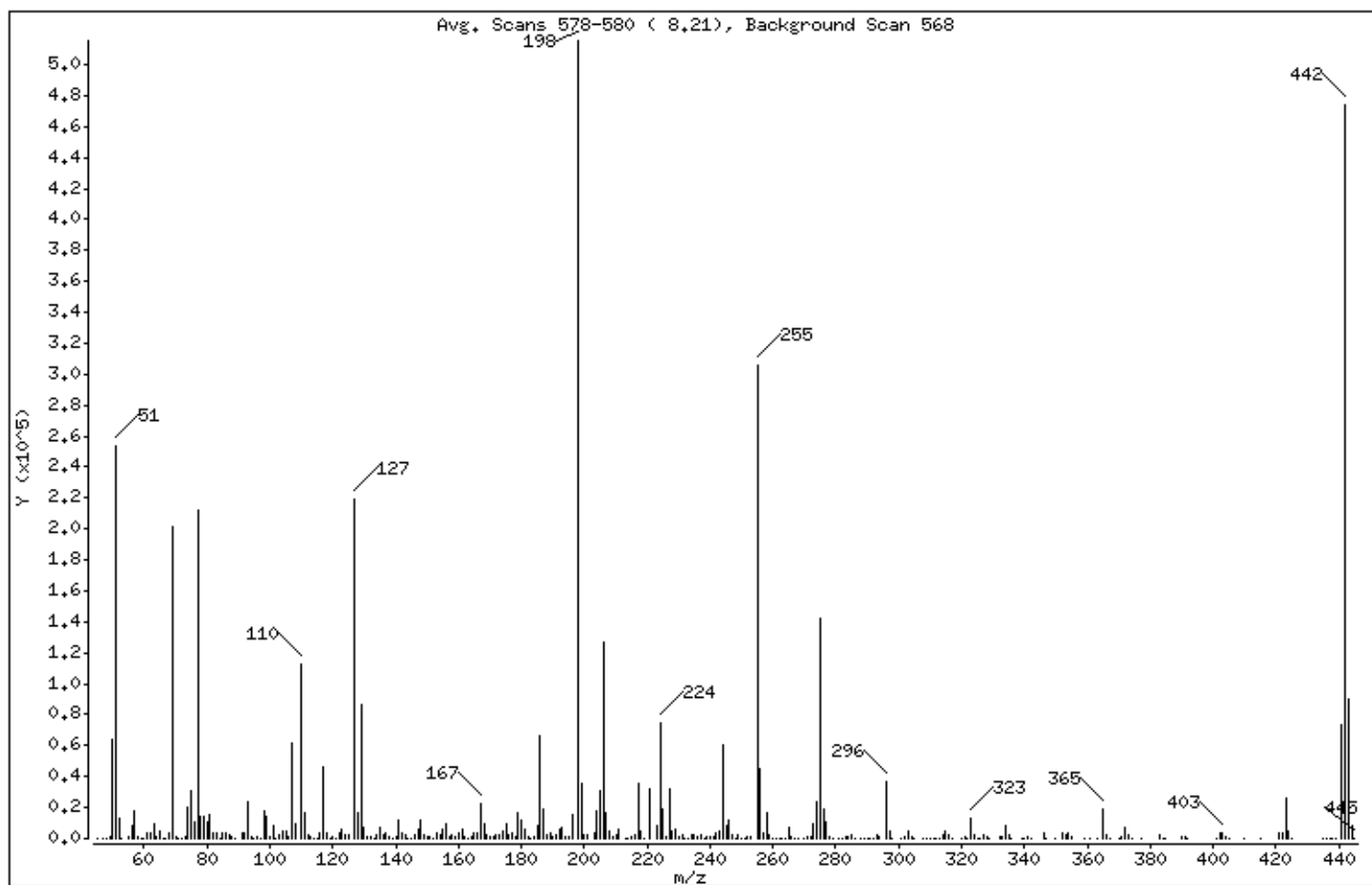
Sample Info: IWBNO91213-01I50PPH11SVHF11IDFTPP1

Operator: AGS1

Column phase: J&amp;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	49.27
68	Less than 2.00% of mass 69	0.66 ( 1.69)
69	Mass 69 relative abundance	38.98
70	Less than 2.00% of mass 69	0.19 ( 0.48)
127	40.00 - 60.00% of mass 198	42.59
197	Less than 1.00% of mass 198	0.00
199	5.00 - 9.00% of mass 198	6.80
275	10.00 - 30.00% of mass 198	27.54
365	Greater than 1.00% of mass 198	3.76
441	Present, but less than mass 443	14.20
442	Greater than 40.00% of mass 198	91.86
443	17.00 - 23.00% of mass 442	17.57 ( 19.13)

Date : 08-JAN-2010 21:18

Client ID: DFTPP

Instrument: MSD2.i

Sample Info: IWBNO91213-01I50PPH1I1SVHF1I1DFTPP1

Operator: AGS1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Data File: s2a0808.d

Spectrum: Avg. Scans 578-580 ( 8.21), Background Scan 568

Location of Maximum: 198.00

Number of points: 320

m/z	Y	m/z	Y	m/z	Y	m/z	Y
45.00	467	131.00	1465	215.00	1579	305.00	138
47.00	110	132.00	778	216.00	2960	308.00	543
48.00	146	133.00	343	217.00	35712	309.00	397
49.00	1579	134.00	2379	218.00	4591	310.00	526
50.00	63816	135.00	6625	219.00	430	311.00	70
51.00	253952	136.00	2636	221.00	31760	312.00	118
52.00	12818	137.00	3249	223.00	8542	313.00	445
53.00	547	138.00	728	224.00	74968	314.00	1934
55.00	1215	139.00	377	225.00	19528	315.00	4291
56.00	7733	140.00	1108	226.00	1307	316.00	2457
57.00	17840	141.00	11261	227.00	31568	317.00	348
58.00	761	142.00	3573	228.00	4451	320.00	204
59.00	219	143.00	2466	229.00	6401	321.00	1210
60.00	225	144.00	573	230.00	1022	322.00	527
61.00	2993	145.00	581	231.00	2694	323.00	13410
62.00	3302	146.00	1800	232.00	515	324.00	2293
63.00	9584	147.00	5568	233.00	486	325.00	260
64.00	1295	148.00	11861	234.00	1963	326.00	334
65.00	4265	149.00	2420	235.00	2399	327.00	2441
66.00	358	150.00	694	236.00	1468	328.00	1369
67.00	264	151.00	1417	237.00	2300	329.00	203
68.00	3392	152.00	504	238.00	303	332.00	988
69.00	200896	153.00	3369	239.00	1310	333.00	1323
70.00	956	154.00	2701	240.00	952	334.00	8317
71.00	163	155.00	6326	241.00	1740	335.00	2116
72.00	128	156.00	9013	242.00	3819	336.00	227
73.00	1409	157.00	1772	243.00	4517	339.00	195
74.00	19824	158.00	2056	244.00	60672	340.00	169
75.00	31392	159.00	1452	245.00	7887	341.00	1701
76.00	10489	160.00	3502	246.00	11478	342.00	382
77.00	212608	161.00	5499	247.00	2199	346.00	3026
78.00	14550	162.00	1511	248.00	587	347.00	466
79.00	13932	163.00	437	249.00	2297	350.00	142
80.00	10828	164.00	618	250.00	352	352.00	4023
81.00	15372	165.00	4004	251.00	474	353.00	2776

Date : 08-JAN-2010 21:18

Client ID: DFTPP

Instrument: MSD2.i

Sample Info: IWBNO91213-01I50PPH1I1SVHF1I1DFTPP1

Operator: AGS1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Data File: s2a0808.d

Spectrum: Avg. Scans 578-580 ( 8.21), Background Scan 568

Location of Maximum: 198.00

Number of points: 320

m/z	Y	m/z	Y	m/z	Y	m/z	Y
-----							
82.00	3790	166.00	3506	252.00	643	354.00	4015
83.00	3750	167.00	22536	253.00	1336	355.00	774
84.00	319	168.00	9329	255.00	305728	359.00	251
85.00	3663	169.00	1906	256.00	45264	361.00	78
86.00	3918	170.00	782	257.00	3419	363.00	84
-----							
87.00	1956	171.00	910	258.00	16832	365.00	19384
88.00	777	172.00	2048	259.00	2582	366.00	2749
89.00	349	173.00	2809	260.00	467	367.00	150
91.00	3587	174.00	4729	261.00	543	370.00	405
92.00	3799	175.00	8961	262.00	73	371.00	1087
-----							
93.00	23560	176.00	2851	263.00	179	372.00	7563
94.00	1518	177.00	3925	264.00	571	373.00	1860
95.00	300	178.00	1422	265.00	6920	374.00	192
96.00	1133	179.00	17064	266.00	1043	377.00	209
97.00	494	180.00	11823	267.00	105	383.00	2053
-----							
98.00	17912	181.00	6007	268.00	136	384.00	510
99.00	13948	182.00	912	270.00	474	385.00	153
100.00	1131	183.00	541	271.00	623	390.00	904
101.00	7980	184.00	1517	272.00	933	391.00	668
102.00	474	185.00	8531	273.00	9609	392.00	450
-----							
103.00	2615	186.00	66344	274.00	23968	401.00	412
104.00	5000	187.00	18624	275.00	141952	402.00	3005
105.00	4839	188.00	1845	276.00	19216	403.00	4030
106.00	1714	189.00	3978	277.00	11123	404.00	1384
107.00	61184	190.00	697	278.00	1675	405.00	219
-----							
108.00	9542	191.00	1936	279.00	364	410.00	72
110.00	112160	192.00	5806	281.00	107	415.00	171
111.00	16960	193.00	6610	282.00	352	421.00	3564
112.00	1940	194.00	1428	283.00	1210	422.00	3734
113.00	627	195.00	970	284.00	842	423.00	26512
-----							
114.00	110	196.00	15546	285.00	2113	424.00	5149
115.00	282	198.00	515456	286.00	312	425.00	490
116.00	3476	199.00	35064	288.00	158	435.00	45
117.00	46536	200.00	2791	289.00	432	436.00	65
118.00	3387	201.00	2675	290.00	400	437.00	127

Date : 08-JAN-2010 21:18

Client ID: DFTPP

Instrument: MSD2.i

Sample Info: IWBNO91213-01I50PPH11SVHF11IDFTPP1

Operator: AGS1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Data File: s2a0808.d

Spectrum: Avg. Scans 578-580 ( 8.21), Background Scan 568

Location of Maximum: 198.00

Number of points: 320

m/z	Y	m/z	Y	m/z	Y	m/z	Y
119.00	440	203.00	3515	291.00	245	438.00	206
120.00	760	204.00	18128	292.00	567	439.00	152
121.00	303	205.00	30744	293.00	2591	441.00	73176
122.00	4114	206.00	127040	294.00	673	442.00	473536
123.00	6340	207.00	16440	296.00	37320	443.00	90568
124.00	2801	208.00	4173	297.00	5217	444.00	8263
125.00	2674	209.00	1408	298.00	322	445.00	416
127.00	219520	210.00	2187	301.00	508		
128.00	16648	211.00	5413	302.00	734		
129.00	85984	213.00	387	303.00	4384		
130.00	7151	214.00	168	304.00	1243		

Data File: /chem/MSD2.i/s010810a,b/s2a0846.d

Page 1

Date : 11-JAN-2010 14:49

Client ID: DFTPP

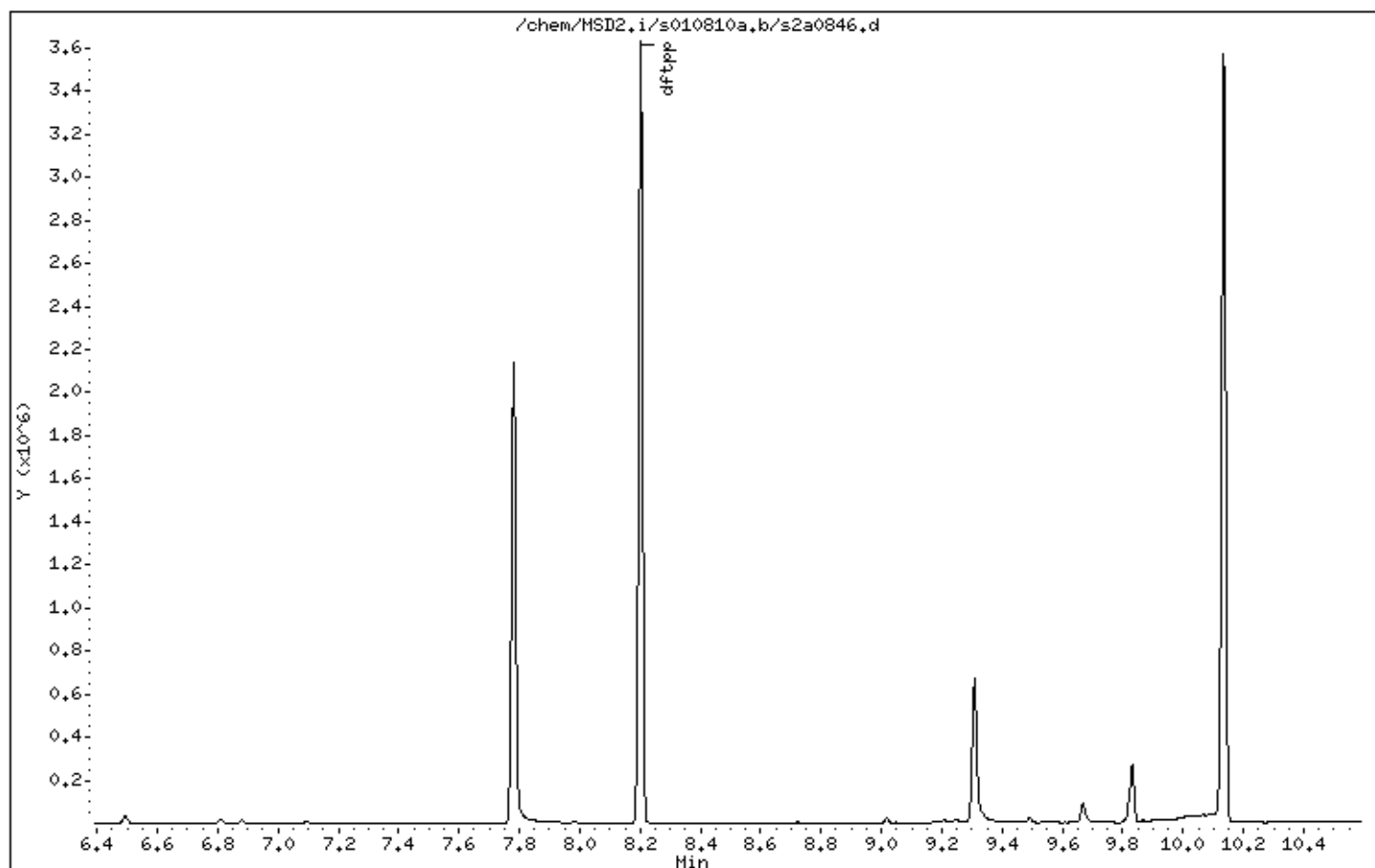
Instrument: MSD2.i

Sample Info: IWBNO91213-01I50PPH11SVHF11IDFTPP1

Operator: AGS1

Column phase: J&W DB-5MS

Column diameter: 0,20





Date : 11-JAN-2010 14:49

Client ID: DFTPP

Instrument: MSD2.i

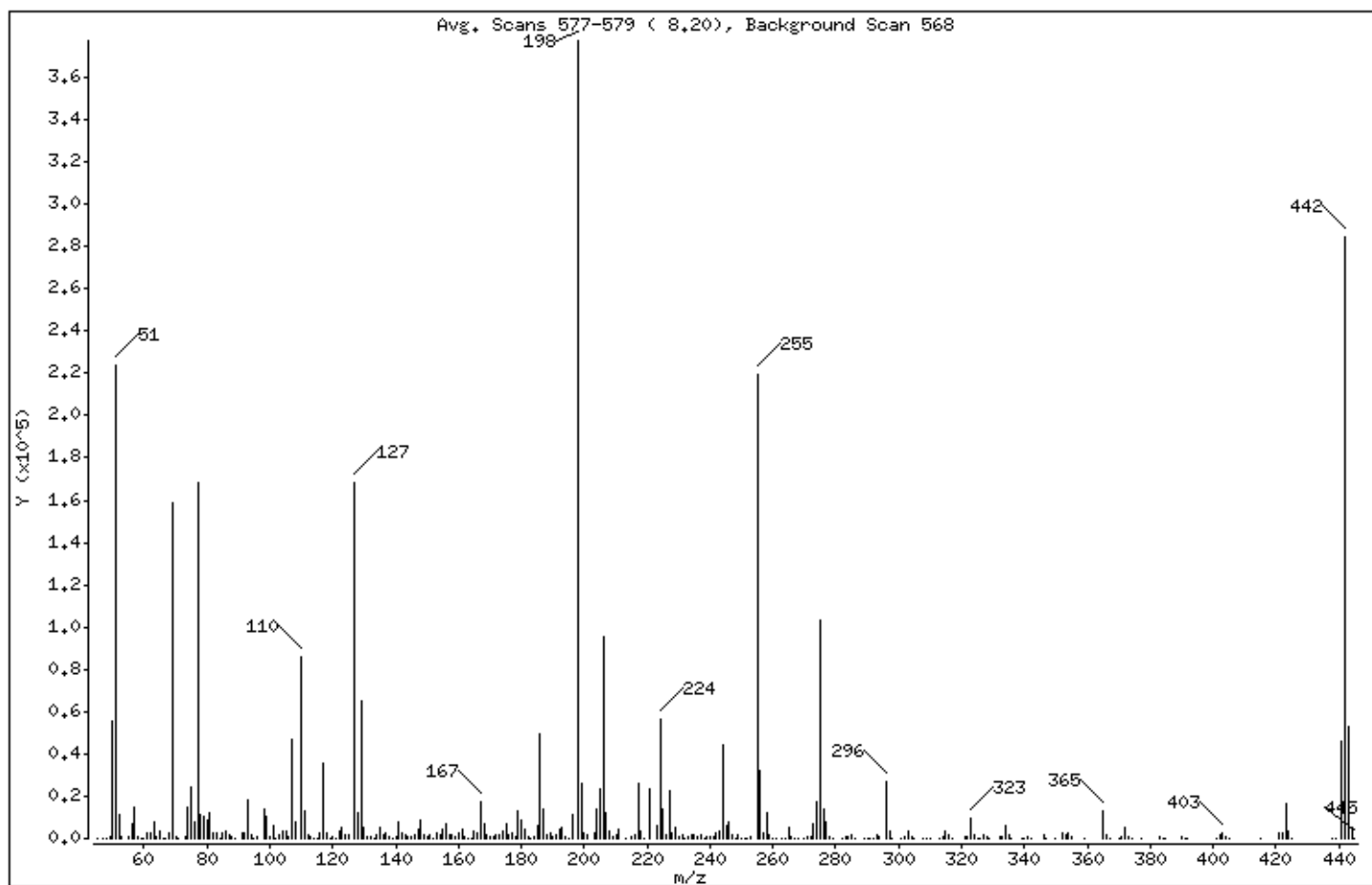
Sample Info: IWBNO91213-01I50PPH11SVHF11IDFTPP1

Operator: AGS1

Column phase: J&amp;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	59.23
68	Less than 2.00% of mass 69	0.70 ( 1.66)
69	Mass 69 relative abundance	42.00
70	Less than 2.00% of mass 69	0.18 ( 0.44)
127	40.00 - 60.00% of mass 198	44.53
197	Less than 1.00% of mass 198	0.00
199	5.00 - 9.00% of mass 198	6.83
275	10.00 - 30.00% of mass 198	27.35
365	Greater than 1.00% of mass 198	3.43
441	Present, but less than mass 443	12.21
442	Greater than 40.00% of mass 198	75.37
443	17.00 - 23.00% of mass 442	14.10 ( 18.71)

Date : 11-JAN-2010 14:49

Client ID: DFTPP

Instrument: MSD2.i

Sample Info: IWBNO91213-01I50PPH1I1SVHF1I1DFTPP1

Operator: AGS1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Data File: s2a0846.d

Spectrum: Avg. Scans 577-579 ( 8.20), Background Scan 568

Location of Maximum: 198.00

Number of points: 305

m/z	Y	m/z	Y	m/z	Y	m/z	Y
45.00	211	129.00	65112	208.00	3080	297.00	3660
47.00	121	130.00	5253	209.00	1041	298.00	252
48.00	121	131.00	928	210.00	1705	301.00	340
49.00	1277	132.00	559	211.00	4264	302.00	534
50.00	55408	133.00	230	213.00	281	303.00	3302
51.00	223424	134.00	1833	215.00	1096	304.00	861
52.00	11414	135.00	5204	216.00	2103	305.00	33
53.00	456	136.00	2094	217.00	26160	308.00	314
55.00	952	137.00	2588	218.00	3343	309.00	253
56.00	6630	138.00	539	219.00	359	310.00	306
57.00	14960	139.00	288	221.00	23152	313.00	302
58.00	632	140.00	797	223.00	6068	314.00	1261
59.00	198	141.00	8237	224.00	56056	315.00	3111
60.00	146	142.00	2771	225.00	13865	316.00	1655
61.00	2401	143.00	1919	226.00	1478	317.00	244
62.00	2677	144.00	528	227.00	22816	321.00	911
63.00	7656	145.00	489	228.00	3029	322.00	512
64.00	997	146.00	1450	229.00	4833	323.00	9271
65.00	3632	147.00	4330	230.00	754	324.00	1826
66.00	257	148.00	8996	231.00	2105	325.00	139
67.00	151	149.00	1852	232.00	356	326.00	240
68.00	2623	150.00	531	233.00	446	327.00	1758
69.00	158464	151.00	1645	234.00	1530	328.00	941
70.00	690	152.00	259	235.00	1645	329.00	157
71.00	37	153.00	2575	236.00	1091	332.00	694
73.00	1176	154.00	2071	237.00	1802	333.00	904
74.00	14891	155.00	4658	238.00	232	334.00	5715
75.00	24352	156.00	7027	239.00	909	335.00	1438
76.00	8062	157.00	1380	240.00	648	336.00	160
77.00	168448	158.00	1486	241.00	1223	339.00	158
78.00	11284	159.00	1081	242.00	2988	340.00	130
79.00	10789	160.00	2592	243.00	3203	341.00	967
80.00	8345	161.00	4000	244.00	44416	342.00	257
81.00	11922	162.00	1194	245.00	5940	346.00	1972
82.00	2880	163.00	282	246.00	8216	347.00	329

Date : 11-JAN-2010 14:49

Client ID: DFTPP

Instrument: MSD2.i

Sample Info: IWBNO91213-01I50PPH1I1SVHF1I1DFTPP1

Operator: AGS1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Data File: s2a0846.d

Spectrum: Avg. Scans 577-579 ( 8.20), Background Scan 568

Location of Maximum: 198.00

Number of points: 305

m/z	Y	m/z	Y	m/z	Y	m/z	Y
83.00	2833	164.00	421	247.00	1714	350.00	68
84.00	288	165.00	3044	248.00	332	352.00	2779
85.00	2737	166.00	2615	249.00	1707	353.00	2014
86.00	3336	167.00	17176	250.00	269	354.00	2750
87.00	1599	168.00	7143	251.00	362	355.00	514
88.00	607	169.00	1401	252.00	373	359.00	215
89.00	276	170.00	620	253.00	893	365.00	12955
91.00	2637	171.00	813	255.00	219008	366.00	1804
92.00	2957	172.00	1595	256.00	31896	367.00	73
93.00	18640	173.00	2115	257.00	2483	370.00	275
94.00	1316	174.00	3577	258.00	12384	371.00	723
95.00	254	175.00	6716	259.00	1897	372.00	4883
96.00	872	176.00	1945	260.00	362	373.00	1115
98.00	13689	177.00	2936	261.00	361	374.00	148
99.00	10555	178.00	1062	263.00	126	377.00	116
100.00	907	179.00	12953	264.00	287	383.00	1287
101.00	6149	180.00	8771	265.00	5085	384.00	363
102.00	338	181.00	4281	266.00	745	385.00	70
103.00	1998	182.00	741	267.00	82	390.00	645
104.00	3880	183.00	350	268.00	125	391.00	400
105.00	3695	184.00	1109	270.00	260	392.00	327
106.00	1203	185.00	6499	271.00	486	401.00	311
107.00	47016	186.00	49256	272.00	597	402.00	1779
108.00	7531	187.00	13907	273.00	7170	403.00	2685
110.00	85752	188.00	1500	274.00	17624	404.00	962
111.00	13033	189.00	2942	275.00	103168	405.00	79
112.00	1500	190.00	476	276.00	13551	415.00	71
113.00	515	191.00	1502	277.00	8084	421.00	2382
114.00	73	192.00	4105	278.00	1256	422.00	2472
115.00	172	193.00	5134	279.00	294	423.00	16337
116.00	2563	194.00	961	282.00	173	424.00	3247
117.00	35928	195.00	405	283.00	949	425.00	260
118.00	2589	196.00	11463	284.00	583	438.00	144
119.00	368	198.00	377280	285.00	1572	439.00	219
120.00	563	199.00	25768	286.00	252	441.00	46048

Date : 11-JAN-2010 14:49

Client ID: DFTPP

Instrument: MSD2.i

Sample Info: IWBNO91213-01I50PPH11SVHF11IDFTPP1

Operator: AGS1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Data File: s2a0846.d

Spectrum: Avg. Scans 577-579 ( 8.20), Background Scan 568

Location of Maximum: 198.00

Number of points: 305

m/z	Y	m/z	Y	m/z	Y	m/z	Y
121.00	233	200.00	2169	289.00	292	442.00	284352
122.00	3063	201.00	1845	290.00	295	443.00	53208
123.00	4995	203.00	2688	291.00	172	444.00	5014
124.00	2083	204.00	14107	292.00	382	445.00	282
125.00	2066	205.00	23000	293.00	1788		
127.00	168000	206.00	95368	294.00	469		
128.00	12508	207.00	12191	296.00	27008		

Data File: /chem/MSD2.i/s022210,b/s2b2201.d

Page 1

Date : 22-FEB-2010 14:34

Client ID: DFTPP

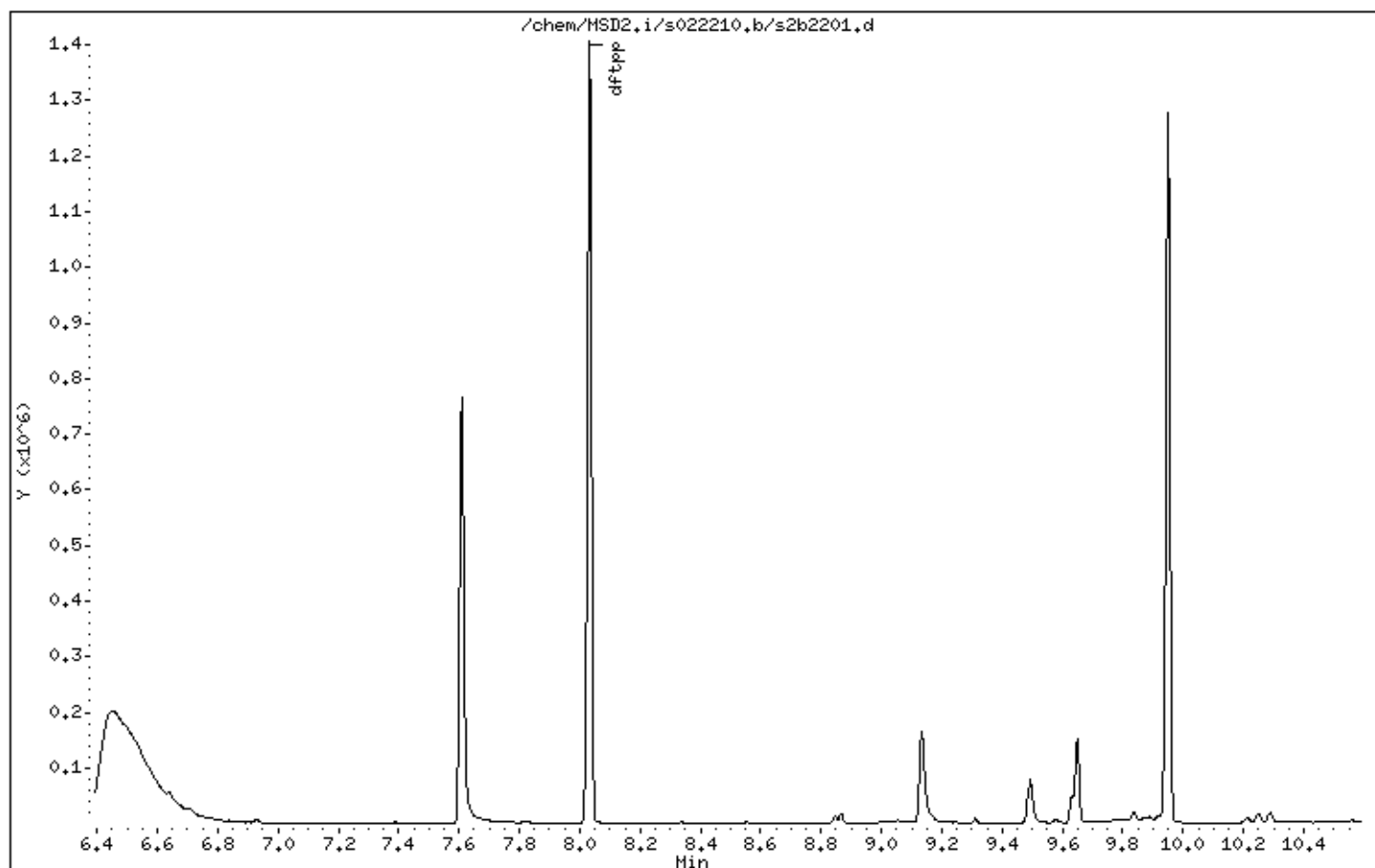
Instrument: MSD2.i

Sample Info: IWBNI00107-01I50PPH1I1SVHF1I1DFTPP1

Operator: AGS1

Column phase: J&W DB-5MS

Column diameter: 0,20



Date : 22-FEB-2010 14:34

Client ID: DFTPP

Instrument: MSD2.i

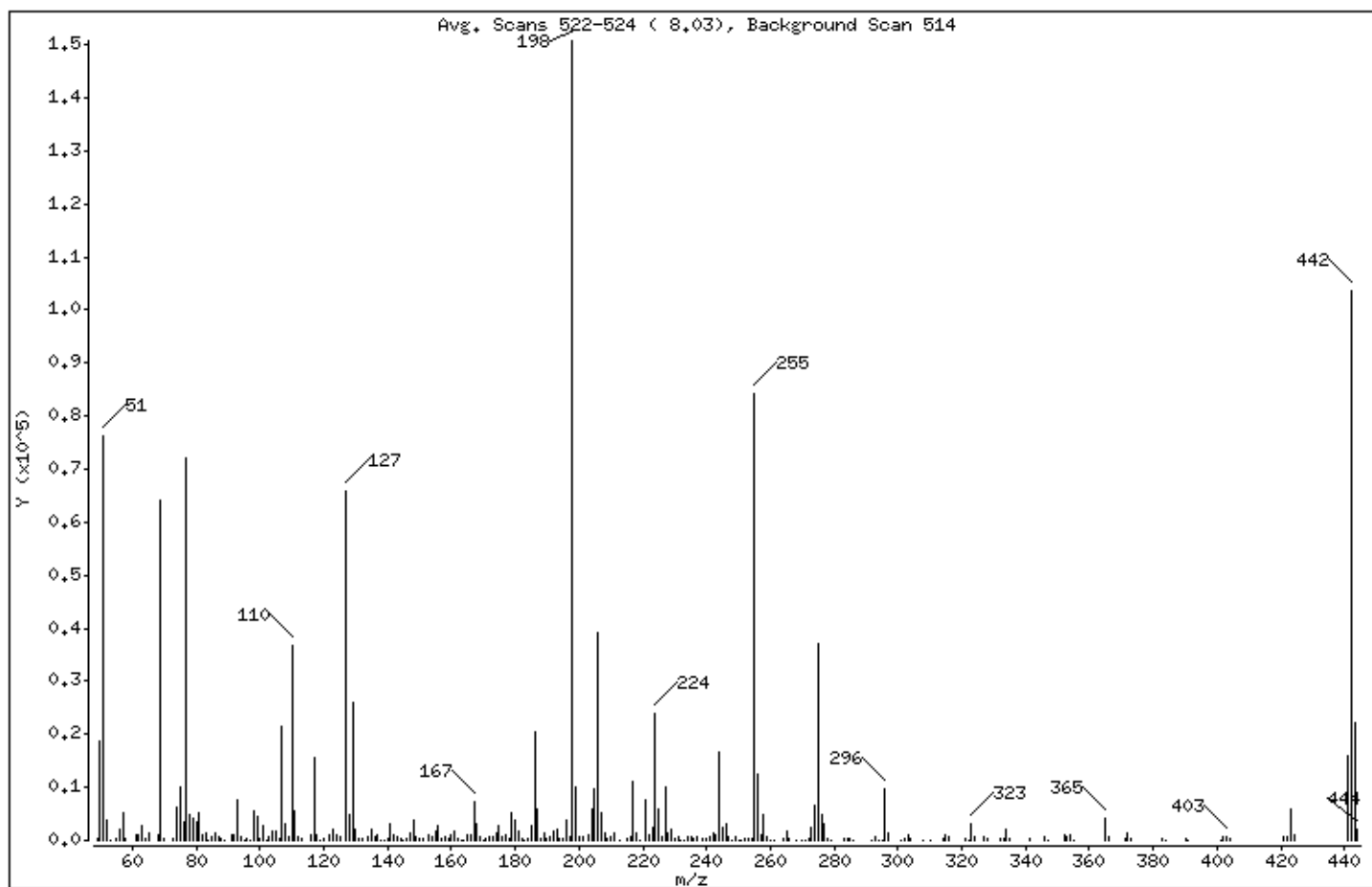
Sample Info: IWBNI00107-01I50PPH11SVHF11IDFTPP1

Operator: AGS1

Column phase: J&amp;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	50.60
68	Less than 2.00% of mass 69	0.60 ( 1.40)
69	Mass 69 relative abundance	42.60
70	Less than 2.00% of mass 69	0.21 ( 0.50)
127	40.00 - 60.00% of mass 198	43.58
197	Less than 1.00% of mass 198	0.51
199	5.00 - 9.00% of mass 198	6.59
275	10.00 - 30.00% of mass 198	24.50
365	Greater than 1.00% of mass 198	2.84
441	Present, but less than mass 443	10.63
442	Greater than 40.00% of mass 198	68.77
443	17.00 - 23.00% of mass 442	14.71 ( 21.39)

Date : 22-FEB-2010 14:34

Client ID: DFTPP

Instrument: MSD2.i

Sample Info: IWBNI00107-01I50PPH1I1SVHF1I1DFTPP1

Operator: AGS1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Data File: s2b2201.d

Spectrum: Avg. Scans 522-524 ( 8.03), Background Scan 514

Location of Maximum: 198.00

Number of points: 265

m/z	Y	m/z	Y	m/z	Y	m/z	Y
49.00	233	128.00	4910	197.00	763	273.00	2511
50.00	18856	129.00	25840	198.00	150720	274.00	6605
51.00	76256	130.00	2146	199.00	9927	275.00	36928
52.00	3931	131.00	446	200.00	780	276.00	4885
53.00	139	132.00	229	201.00	584	277.00	3101
55.00	218	134.00	630	203.00	1010	278.00	469
56.00	2215	135.00	2019	204.00	5899	279.00	118
57.00	5278	136.00	835	205.00	9846	283.00	310
58.00	244	137.00	920	206.00	39312	284.00	204
61.00	869	138.00	170	207.00	5051	285.00	497
62.00	994	139.00	34	208.00	1300	286.00	109
63.00	2669	140.00	348	209.00	380	292.00	76
64.00	387	141.00	3228	210.00	611	293.00	714
65.00	1459	142.00	966	211.00	1554	294.00	146
68.00	901	143.00	726	213.00	71	295.00	57
69.00	64208	144.00	182	215.00	431	296.00	9582
70.00	323	145.00	166	216.00	807	297.00	1388
73.00	468	146.00	483	217.00	11178	301.00	74
74.00	6249	147.00	1444	218.00	1336	302.00	188
75.00	10047	148.00	3874	219.00	76	303.00	1158
76.00	3353	149.00	812	221.00	7532	304.00	337
77.00	72232	150.00	218	222.00	919	308.00	139
78.00	4869	151.00	468	223.00	2451	310.00	134
79.00	4242	153.00	1081	224.00	23888	314.00	454
80.00	3319	154.00	771	225.00	5960	315.00	1029
81.00	5271	155.00	1836	226.00	541	316.00	564
82.00	1148	156.00	2633	227.00	9977	321.00	358
83.00	1282	157.00	491	228.00	1318	322.00	118
84.00	134	158.00	530	229.00	2072	323.00	3153
85.00	818	159.00	463	230.00	286	324.00	598
86.00	1319	160.00	997	231.00	735	327.00	578
87.00	660	161.00	1662	232.00	153	328.00	329
88.00	250	162.00	373	233.00	170	332.00	210
89.00	68	163.00	141	234.00	572	333.00	279
91.00	1101	164.00	150	235.00	644	334.00	1978

Date : 22-FEB-2010 14:34

Client ID: DFTPP

Instrument: MSD2.i

Sample Info: IWBNI00107-01I50PPH1I1SVHF1I1DFTPP1

Operator: AGS1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Data File: s2b2201.d

Spectrum: Avg. Scans 522-524 ( 8.03), Background Scan 514

Location of Maximum: 198.00

Number of points: 265

m/z	Y	m/z	Y	m/z	Y	m/z	Y
92.00	1175	165.00	1202	236.00	413	335.00	447
93.00	7501	166.00	1117	237.00	752	341.00	331
94.00	554	167.00	7233	239.00	339	346.00	541
95.00	155	168.00	3154	240.00	242	347.00	71
96.00	343	169.00	554	241.00	538	352.00	873
97.00	120	170.00	158	242.00	1246	353.00	630
98.00	5581	171.00	249	243.00	1153	354.00	882
99.00	4354	172.00	602	244.00	16608	355.00	146
100.00	369	173.00	777	245.00	2261	365.00	4287
101.00	2797	174.00	1491	246.00	3288	366.00	595
102.00	163	175.00	2828	247.00	621	371.00	184
103.00	810	176.00	773	248.00	70	372.00	1556
104.00	1634	177.00	1209	249.00	569	373.00	410
105.00	1626	178.00	441	250.00	122	383.00	445
106.00	503	179.00	5235	251.00	124	384.00	82
107.00	21472	180.00	3862	252.00	180	390.00	181
108.00	3242	181.00	1644	253.00	357	391.00	128
109.00	542	182.00	267	254.00	406	401.00	71
110.00	36736	183.00	138	255.00	84152	402.00	622
111.00	5664	184.00	462	256.00	12322	403.00	833
112.00	604	185.00	2740	257.00	895	404.00	284
113.00	243	186.00	20280	258.00	4858	421.00	859
116.00	925	187.00	5985	259.00	763	422.00	778
117.00	15589	188.00	516	260.00	113	423.00	5872
118.00	1131	189.00	1289	261.00	121	424.00	1073
119.00	139	190.00	182	264.00	189	441.00	16023
120.00	225	191.00	528	265.00	1801	442.00	103656
122.00	1171	192.00	1734	266.00	320	443.00	22176
123.00	2002	193.00	2060	268.00	106	444.00	2230
124.00	877	194.00	439	270.00	120		
125.00	824	195.00	236	271.00	166		
127.00	65680	196.00	3739	272.00	235		



Data File: /chem/MSD2.i/s022310,b/s2b2301.d

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Date : 23-FEB-2010 13:05

Client ID: DFTPP

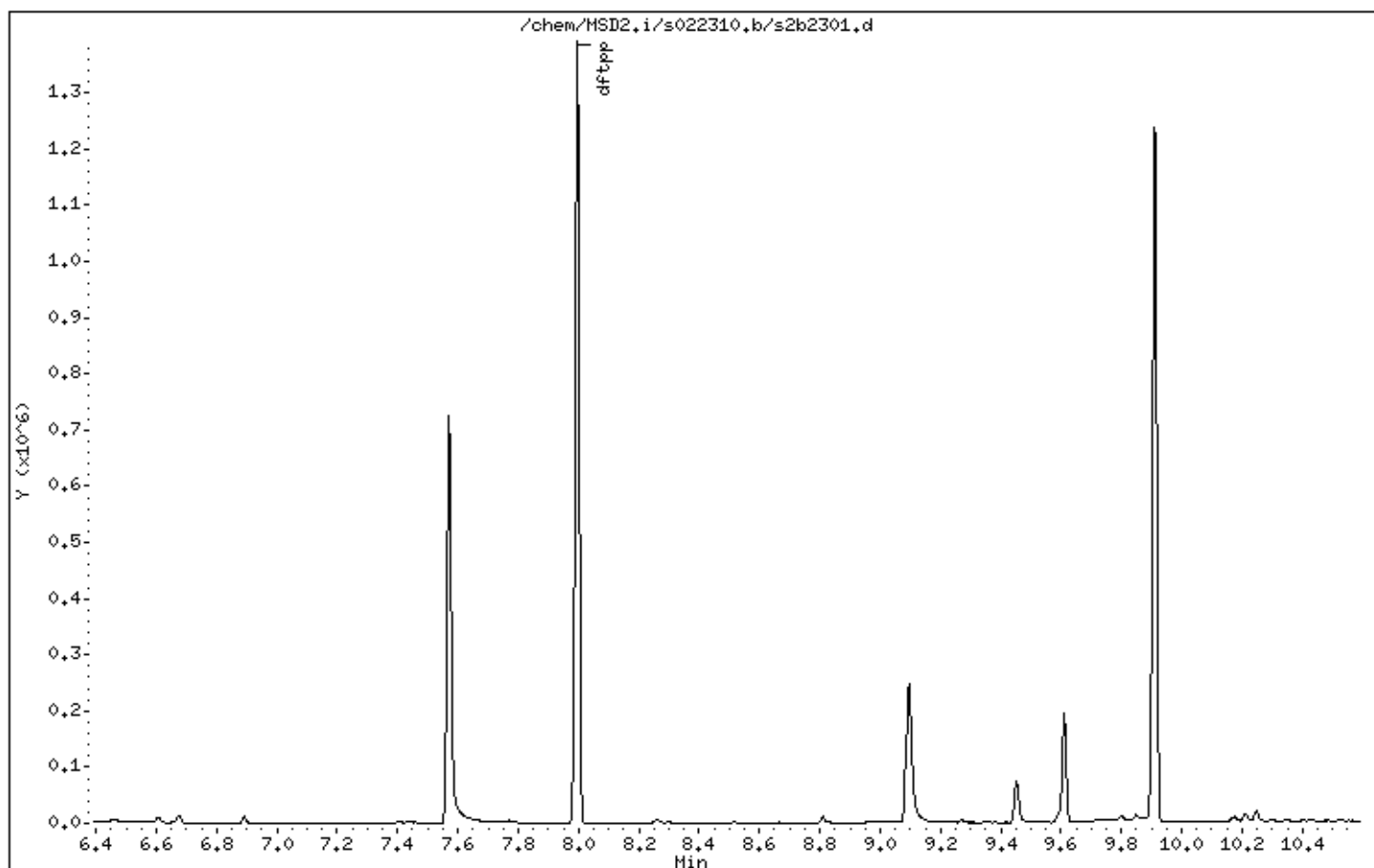
Instrument: MSD2.i

Sample Info: IWBNI00207-01I50PPH11SVHF11IDFTPP1

Operator: AGS1

Column phase: J&W DB-5MS

Column diameter: 0,20



Date : 23-FEB-2010 13:05

Client ID: DFTPP

Instrument: MSD2.i

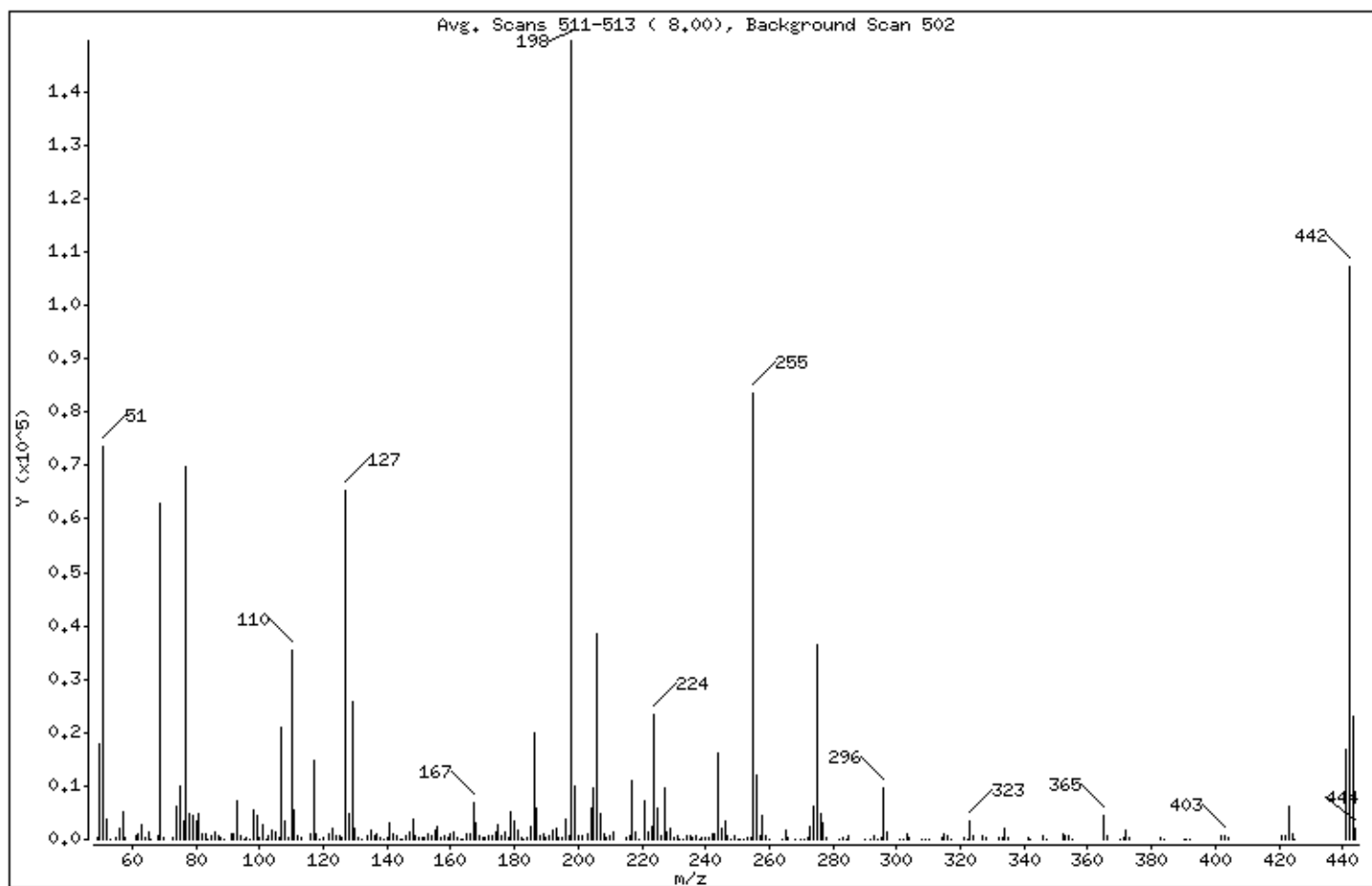
Sample Info: IWBNI00207-01I50PPH11SVHF11IDFTPP1

Operator: AGS1

Column phase: J&amp;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	49.25
68	Less than 2.00% of mass 69	0.55 ( 1.31)
69	Mass 69 relative abundance	42.01
70	Less than 2.00% of mass 69	0.18 ( 0.43)
127	40.00 - 60.00% of mass 198	43.56
197	Less than 1.00% of mass 198	0.45
199	5.00 - 9.00% of mass 198	6.66
275	10.00 - 30.00% of mass 198	24.26
365	Greater than 1.00% of mass 198	2.91
441	Present, but less than mass 443	11.16
442	Greater than 40.00% of mass 198	71.61
443	17.00 - 23.00% of mass 442	15.48 ( 21.61)

Date : 23-FEB-2010 13:05

Client ID: DFTPP

Instrument: MSD2.i

Sample Info: IWBNI00207-01I50PPH1I1SVHF1I1DFTPP1

Operator: AGS1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Data File: s2b2301.d

Spectrum: Avg. Scans 511-513 ( 8.00), Background Scan 502

Location of Maximum: 198.00

Number of points: 272

m/z	Y	m/z	Y	m/z	Y	m/z	Y
49.00	275	128.00	4877	198.00	149504	277.00	2956
50.00	18040	129.00	25840	199.00	9953	278.00	501
51.00	73640	130.00	2175	200.00	770	282.00	67
52.00	3785	131.00	437	201.00	633	283.00	311
53.00	145	132.00	164	203.00	1126	284.00	165
55.00	217	134.00	639	204.00	5894	285.00	555
56.00	2155	135.00	1869	205.00	9631	290.00	33
57.00	5042	136.00	646	206.00	38448	292.00	75
58.00	185	137.00	971	207.00	4973	293.00	730
61.00	788	138.00	179	208.00	1154	294.00	148
62.00	980	139.00	77	209.00	410	295.00	173
63.00	2739	140.00	321	210.00	557	296.00	9489
64.00	388	141.00	3112	211.00	1544	297.00	1338
65.00	1395	142.00	935	215.00	455	301.00	115
66.00	69	143.00	691	216.00	713	302.00	139
68.00	820	144.00	163	217.00	11084	303.00	1186
69.00	62824	145.00	126	218.00	1258	304.00	261
70.00	268	146.00	625	219.00	125	308.00	119
73.00	451	147.00	1498	221.00	7326	309.00	76
74.00	6119	148.00	3659	222.00	1389	310.00	132
75.00	9973	149.00	690	223.00	2514	314.00	510
76.00	3334	150.00	195	224.00	23496	315.00	944
77.00	69720	151.00	414	225.00	5908	316.00	563
78.00	4697	152.00	195	226.00	537	317.00	74
79.00	4320	153.00	915	227.00	9479	321.00	321
80.00	3326	154.00	715	228.00	1299	322.00	119
81.00	4959	155.00	1823	229.00	2046	323.00	3383
82.00	1161	156.00	2489	230.00	316	324.00	619
83.00	1180	157.00	418	231.00	824	327.00	540
84.00	116	158.00	527	232.00	143	328.00	277
85.00	817	159.00	446	233.00	171	332.00	243
86.00	1262	160.00	1037	234.00	576	333.00	294
87.00	568	161.00	1526	235.00	645	334.00	2191
88.00	180	162.00	394	236.00	451	335.00	488
89.00	131	163.00	110	237.00	688	341.00	395

Date : 23-FEB-2010 13:05

Client ID: DFTPP

Instrument: MSD2.i

Sample Info: IWBNI00207-01I50PPH1I1SVHF1I1DFTPP1

Operator: AGS1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Data File: s2b2301.d

Spectrum: Avg. Scans 511-513 ( 8.00), Background Scan 502

Location of Maximum: 198.00

Number of points: 272

m/z	Y	m/z	Y	m/z	Y	m/z	Y
-----							
91.00	1172	164.00	144	238.00	79	342.00	34
92.00	1149	165.00	1167	239.00	420	346.00	609
93.00	7087	166.00	948	240.00	285	347.00	67
94.00	562	167.00	6861	241.00	462	352.00	897
95.00	164	168.00	3113	242.00	1091	353.00	577
-----							
96.00	415	169.00	559	243.00	1060	354.00	859
97.00	133	170.00	202	244.00	16249	355.00	158
98.00	5417	171.00	266	245.00	2220	365.00	4349
99.00	4341	172.00	583	246.00	3295	366.00	595
100.00	353	173.00	781	247.00	640	370.00	126
-----							
101.00	2750	174.00	1376	248.00	171	371.00	208
102.00	131	175.00	2723	249.00	571	372.00	1770
103.00	752	176.00	812	250.00	156	373.00	319
104.00	1594	177.00	1278	251.00	135	383.00	437
105.00	1532	178.00	371	252.00	138	384.00	84
-----							
106.00	445	179.00	5034	253.00	295	390.00	159
107.00	21008	180.00	3493	254.00	368	391.00	127
108.00	3269	181.00	1644	255.00	83472	392.00	144
109.00	456	182.00	230	256.00	12155	402.00	581
110.00	35344	183.00	86	257.00	792	403.00	837
-----							
111.00	5621	184.00	358	258.00	4566	404.00	276
112.00	577	185.00	2527	259.00	698	421.00	805
113.00	216	186.00	19888	260.00	78	422.00	733
116.00	907	187.00	5718	264.00	166	423.00	6101
117.00	14687	188.00	558	265.00	1795	424.00	1146
-----							
118.00	1027	189.00	1135	266.00	344	425.00	120
119.00	139	190.00	198	268.00	122	441.00	16680
120.00	214	191.00	530	270.00	137	442.00	107088
122.00	1011	192.00	1683	271.00	156	443.00	23144
123.00	1933	193.00	2029	272.00	215	444.00	2197
-----							
124.00	820	194.00	375	273.00	2538		
125.00	810	195.00	214	274.00	6185		
126.00	183	196.00	3787	275.00	36280		
127.00	65136	197.00	676	276.00	4865		
-----							

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

Page 1 of 2

SDG Number: 10-1758

Lab Sample ID: 1202045697

Client Sample: QC for batch 954286

Client ID: MB for batch 954286

Batch ID: 954297

Run Date: 02/22/2010 16:06

Prep Date: 02/17/2010 21:06

Data File: s2b2205-1.d

Client: LANL010

Method: SW846 8270C

Inst: MSD2.I

Analyst: AGS1

Aliquot: 30 g

Column: J&amp;W DB-5MS

Matrix: SOIL

Project: QC

SOP Ref: GL-OA-E-009

Dilution: 1

Inj. Vol: .5 uL

Final Volume: 1 mL

Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	333	ug/kg	66.7	333
108-95-2	Phenol	U	333	ug/kg	66.7	333
95-57-8	2-Chlorophenol	U	333	ug/kg	66.7	333
106-46-7	1,4-Dichlorobenzene	U	333	ug/kg	66.7	333
621-64-7	N-Nitrosodipropylamine	U	333	ug/kg	66.7	333
59-50-7	4-Chloro-3-methylphenol	U	333	ug/kg	66.7	333
83-32-9	Acenaphthene	U	33.3	ug/kg	11.0	33.3
121-14-2	2,4-Dinitrotoluene	U	333	ug/kg	33.3	333
100-02-7	4-Nitrophenol	U	333	ug/kg	110	333
87-86-5	Pentachlorophenol	U	333	ug/kg	83.3	333
129-00-0	Pyrene	U	33.3	ug/kg	10.0	33.3
110-86-1	Pyridine	U	333	ug/kg	66.7	333
62-53-3	Aniline	U	333	ug/kg	100	333
111-44-4	bis(2-Chloroethyl) ether	U	333	ug/kg	66.7	333
541-73-1	1,3-Dichlorobenzene	U	333	ug/kg	66.7	333
100-51-6	Benzyl alcohol	U	333	ug/kg	100	333
95-50-1	1,2-Dichlorobenzene	U	333	ug/kg	66.7	333
108-60-1	bis(2-Chloroisopropyl)ether	U	333	ug/kg	66.7	333
95-48-7	o-Cresol	U	333	ug/kg	66.7	333
65794-96-9	m,p-Cresols	U	333	ug/kg	100	333
67-72-1	Hexachloroethane	U	333	ug/kg	66.7	333
98-95-3	Nitrobenzene	U	333	ug/kg	66.7	333
78-59-1	Isophorone	U	333	ug/kg	66.7	333
88-75-5	2-Nitrophenol	U	333	ug/kg	66.7	333
105-67-9	2,4-Dimethylphenol	U	333	ug/kg	117	333
111-91-1	bis(2-Chloroethoxy)methane	U	333	ug/kg	66.7	333
120-83-2	2,4-Dichlorophenol	U	333	ug/kg	66.7	333
65-85-0	Benzoic acid	U	667	ug/kg	167	667
91-20-3	Naphthalene	U	33.3	ug/kg	10.0	33.3
106-47-8	4-Chloroaniline	U	333	ug/kg	66.7	333
87-68-3	Hexachlorobutadiene	U	333	ug/kg	66.7	333
91-57-6	2-Methylnaphthalene	U	33.3	ug/kg	6.67	33.3
77-47-4	Hexachlorocyclopentadiene	U	333	ug/kg	66.7	333
88-06-2	2,4,6-Trichlorophenol	U	333	ug/kg	66.7	333
95-95-4	2,4,5-Trichlorophenol	U	333	ug/kg	66.7	333
91-58-7	2-Chloronaphthalene	U	33.3	ug/kg	11.0	33.3
88-74-4	2-Nitroaniline	U	333	ug/kg	66.7	333
99-09-2	<i>o</i> -Nitroaniline	U	333	ug/kg	66.7	333
	3-Nitroaniline					

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

<b>SDG Number:</b> 10-1758		<b>Matrix:</b> SOIL
<b>Lab Sample ID:</b> 1202045697		
<b>Client Sample:</b> QC for batch 954286	<b>Client:</b> LANL010	<b>Project:</b> QC
<b>Client ID:</b> MB for batch 954286	<b>Method:</b> SW846 8270C	<b>SOP Ref:</b> GL-OA-E-009
<b>Batch ID:</b> 954297	<b>Inst:</b> MSD2.I	<b>Dilution:</b> 1
<b>Run Date:</b> 02/22/2010 16:06	<b>Analyst:</b> AGS1	<b>Inj. Vol:</b> .5 uL
<b>Prep Date:</b> 02/17/2010 21:06	<b>Aliquot:</b> 30 g	<b>Final Volume:</b> 1 mL
<b>Data File:</b> s2b2205-1.d	<b>Column:</b> J&W DB-5MS	<b>Level:</b> LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	<i>m</i> -Nitroaniline					
131-11-3	Dimethylphthalate	U	333	ug/kg	66.7	333
606-20-2	2,6-Dinitrotoluene	U	333	ug/kg	33.3	333
208-96-8	Acenaphthylene	U	33.3	ug/kg	10.0	33.3
51-28-5	2,4-Dinitrophenol	U	667	ug/kg	127	667
132-64-9	Dibenzofuran	U	333	ug/kg	66.7	333
84-66-2	Diethylphthalate	U	333	ug/kg	66.7	333
86-73-7	Fluorene	U	33.3	ug/kg	10.0	33.3
7005-72-3	4-Chlorophenylphenylether	U	333	ug/kg	66.7	333
534-52-1	2-Methyl-4,6-dinitrophenol	U	333	ug/kg	66.7	333
100-01-6	4-Nitroaniline	U	333	ug/kg	100	333
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	333	ug/kg	66.7	333
122-66-7	Azobenzene	U	333	ug/kg	66.7	333
	<i>1,2</i> -Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	333	ug/kg	66.7	333
118-74-1	Hexachlorobenzene	U	333	ug/kg	66.7	333
85-01-8	Phenanthrene	U	33.3	ug/kg	10.0	33.3
120-12-7	Anthracene	U	33.3	ug/kg	6.67	33.3
84-74-2	Di-n-butylphthalate	U	333	ug/kg	66.7	333
206-44-0	Fluoranthene	U	33.3	ug/kg	10.0	33.3
85-68-7	Butylbenzylphthalate	U	333	ug/kg	66.7	333
56-55-3	Benzo(a)anthracene	U	33.3	ug/kg	10.0	33.3
91-94-1	3,3'-Dichlorobenzidine	U	333	ug/kg	100	333
218-01-9	Chrysene	U	33.3	ug/kg	10.0	33.3
117-81-7	bis(2-Ethylhexyl)phthalate	U	333	ug/kg	66.7	333
117-84-0	Di-n-octylphthalate	U	333	ug/kg	66.7	333
205-99-2	Benzo(b)fluoranthene	U	33.3	ug/kg	10.0	33.3
207-08-9	Benzo(k)fluoranthene	U	33.3	ug/kg	10.0	33.3
50-32-8	Benzo(a)pyrene	U	33.3	ug/kg	10.0	33.3
193-39-5	Indeno(1,2,3-cd)pyrene	U	33.3	ug/kg	10.0	33.3
53-70-3	Dibenzo(a,h)anthracene	U	33.3	ug/kg	10.0	33.3
191-24-2	Benzo(ghi)perylene	U	33.3	ug/kg	10.0	33.3
120-82-1	1,2,4-Trichlorobenzene	U	333	ug/kg	66.7	333

**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	3.19	736	ug/kg		JA

Data File: /chem/MSD2.i/s022210.b/s2b2205-1.d  
Report Date: 22-Feb-2010 19:18

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Data file : /chem/MSD2.i/s022210.b/s2b2205-1.d  
Lab Smp Id: 1202045697 Client Smp ID: SBLK01  
Inj Date : 22-FEB-2010 16:06  
Operator : AGS1 Inst ID: MSD2.i  
Smp Info : |1202045697|954297|1|SVM|1|MB  
Misc Info : |MSD8270\_S|WBN100205-01|  
Comment : Column: J & W Scientific DB-5MS 25m x 0.2mm x 0.33um  
Method : /chem/MSD2.i/s022210.b/MSD2-M8270PAQA-010810a.m  
Meth Date : 22-Feb-2010 16:54 ann00964 Quant Type: ISTD  
Cal Date : 11-JAN-2010 20:43 Cal File: s2a0859.d  
Als bottle: 5 QC Sample: BLANK  
Dil Factor: 1.00000  
Integrator: HP RTE Compound Sublist: 10-1758.sub  
Target Version: 3.50  
Processing Host: hpclp1

Concentration Formula:  $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vi} * \text{Ws} * (100 - \text{M}) / 100) * \text{CpndVariable}$

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.00000	weight of sample
M	0.00000	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG					CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	4.562	4.565	(1.000)	239463	40.0000	
* 29 Naphthalene-d8	136	5.825	5.830	(1.000)	807967	40.0000	
* 46 Acenaphthene-d10	164	7.685	7.691	(1.000)	505137	40.0000	
* 67 Phenanthrene-d10	188	9.288	9.293	(1.000)	893314	40.0000	
* 91 Chrysene-d12	240	12.218	12.232	(1.000)	792250	40.0000	
* 98 Perylene-d12	264	14.402	14.417	(1.000)	652238	40.0000	
\$ 3 2-Fluorophenol	112	3.430	3.415	(0.752)	440357	75.7830	2530
\$ 5 Phenol-d5	99	4.189	4.195	(0.918)	546510	70.2805	2340
\$ 20 Nitrobenzene-d5	82	5.092	5.102	(0.874)	269105	42.0362	1400
\$ 39 2-Fluorobiphenyl	172	6.950	6.954	(0.904)	565433	36.1791	1200
\$ 60 2,4,6-Tribromophenol	329	8.532	8.538	(1.110)	168847	77.2829	2580
\$ 81 p-Terphenyl-d14	244	10.999	10.998	(0.900)	681356	44.7766	1490

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Data file : /chem/MSD2.i/s022210.b/s2b2205-1.d  
Lab Smp Id: 1202045697 Client Smp ID: SBLK01  
Inj Date : 22-FEB-2010 16:06  
Operator : AGS1 Inst ID: MSD2.i  
Smp Info : |1202045697|954297|1|SVM|1|MB  
Misc Info : |MSD8270\_S|WBN100205-01|  
Comment : Column: J & W Scientific DB-5MS 25m x 0.2mm x 0.33um  
Method : /chem/MSD2.i/s022210.b/MSD2-M8270PAQA-010810a.m  
Meth Date : 22-Feb-2010 16:54 ann00964 Quant Type: ISTD  
Cal Date : 11-JAN-2010 20:43 Cal File: s2a0859.d  
Als bottle: 5 QC Sample: BLANK  
Dil Factor: 1.00000  
Integrator: HP RTE Compound Sublist: 10-1758.sub  
Target Version: 3.50  
Processing Host: hpclp1

Concentration Formula:  $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vi} * \text{Ws} * (100 - \text{M}) / 100) * \text{CpndVariable}$

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.00000	weight of sample
M	0.00000	% moisture

Cpnd Variable Local Compound Variable

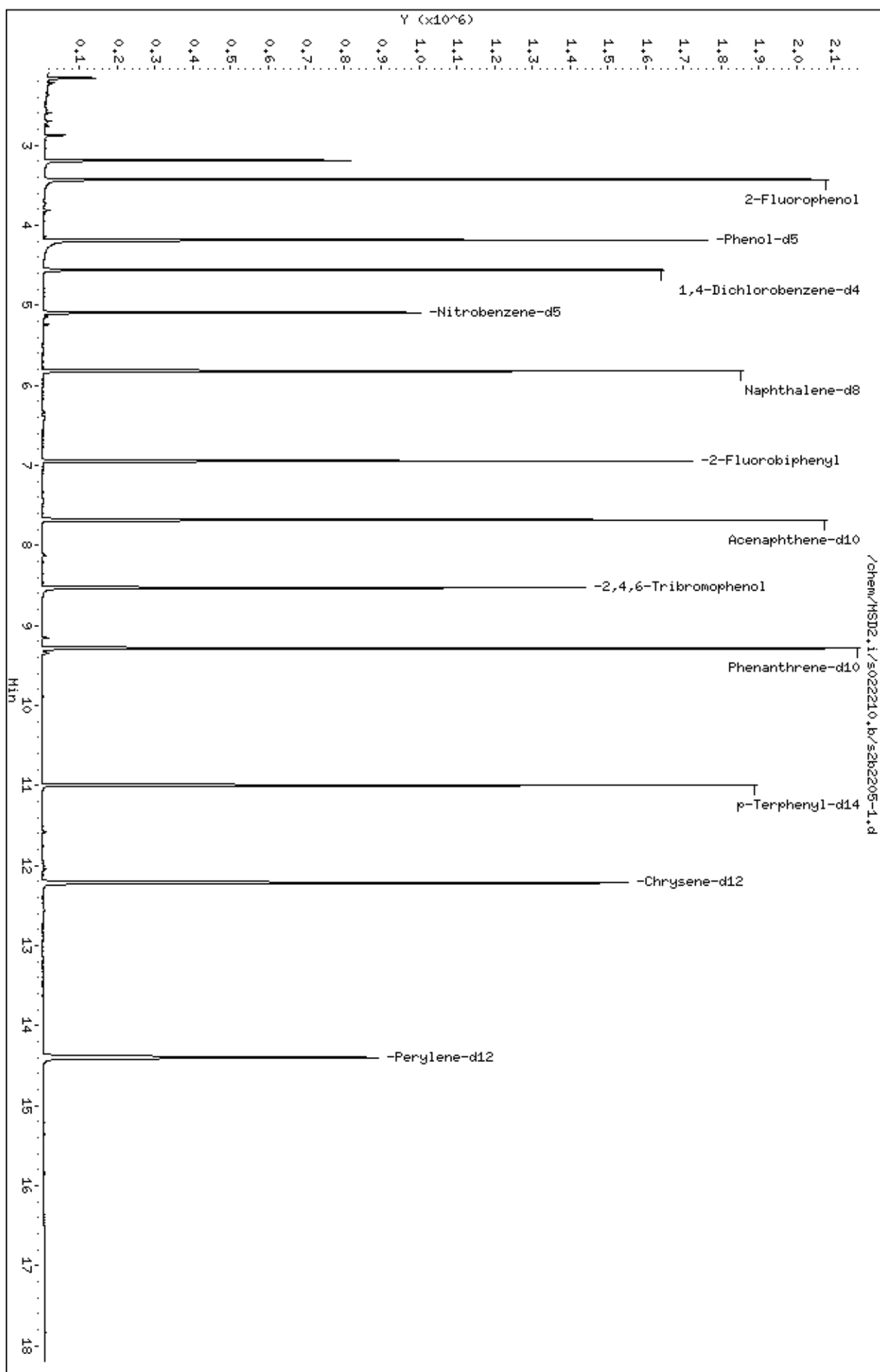
ISTD	RT	AREA	AMOUNT
=====	====	=====	=====
* 10 1,4-Dichlorobenzene-d4	4.562	1550444	40.000

CONCENTRATIONS				QUANT			
RT	AREA	ON-COL(ng/ul)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
====	====	=====	=====	====	=====	=====	=====
Unknown Aldol Condensate CAS #:							
3.190	855779	22.0783053	736	0		0	10



Data File: /chem/HSD2.i/s022210.b/s2b2205-1.d  
 Date : 22-FEB-2010 16:06  
 Client ID: SBLK01  
 Sample Info: 112020456971964297141SVH11HB  
 Volume Injected (uL): 0.5  
 Column phase: 3uM DB-5MS

Instrument: HSD2.i  
 Operator: AGS1  
 Column diameter: 0.20



Date : 22-FEB-2010 16:06

Client ID: SBLK01

Instrument: MSD2.i

Sample Info: I1202045697195429711ISVMI1MB

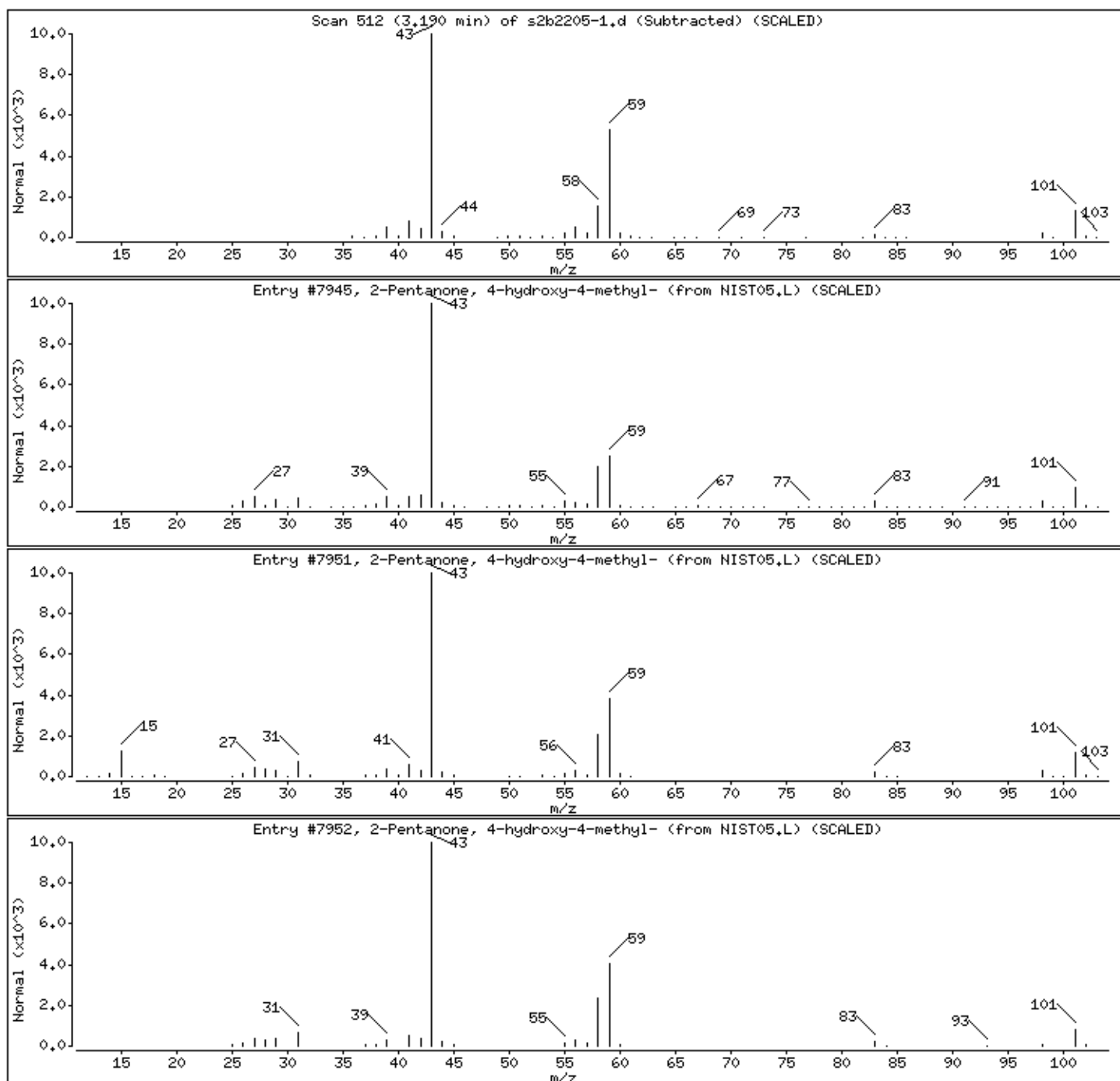
Volume Injected (uL): 0.5

Operator: AGS1

Column phase: J&amp;W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7945	59	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	59	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	50	C6H12O2	116



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

Page 1 of 2

<b>SDG Number:</b> 10-1758		<b>Matrix:</b> SOIL
<b>Lab Sample ID:</b> 1202045698		
<b>Client Sample:</b> QC for batch 954286	<b>Client:</b> LANL010	<b>Project:</b> QC
<b>Client ID:</b> LCS for batch 954286	<b>Method:</b> SW846 8270C	<b>SOP Ref:</b> GL-OA-E-009
<b>Batch ID:</b> 954297	<b>Inst:</b> MSD2.I	<b>Dilution:</b> 1
<b>Run Date:</b> 02/22/2010 16:31	<b>Analyst:</b> AGS1	<b>Inj. Vol:</b> .5 uL
<b>Prep Date:</b> 02/17/2010 21:06	<b>Aliquot:</b> 30 g	<b>Final Volume:</b> 1 mL
<b>Data File:</b> s2b2206-1.d	<b>Column:</b> J&W DB-5MS	<b>Level:</b> LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine		1190	ug/kg	66.7	333
108-95-2	Phenol		1240	ug/kg	66.7	333
95-57-8	2-Chlorophenol		1260	ug/kg	66.7	333
106-46-7	1,4-Dichlorobenzene		1190	ug/kg	66.7	333
621-64-7	N-Nitrosodipropylamine		1330	ug/kg	66.7	333
59-50-7	4-Chloro-3-methylphenol		1570	ug/kg	66.7	333
83-32-9	Acenaphthene		1220	ug/kg	11.0	33.3
121-14-2	2,4-Dinitrotoluene		1460	ug/kg	33.3	333
100-02-7	4-Nitrophenol		996	ug/kg	110	333
87-86-5	Pentachlorophenol		1200	ug/kg	83.3	333
129-00-0	Pyrene		1340	ug/kg	10.0	33.3
110-86-1	Pyridine		1400	ug/kg	66.7	333
62-53-3	Aniline		1340	ug/kg	100	333
111-44-4	bis(2-Chloroethyl) ether		1170	ug/kg	66.7	333
541-73-1	1,3-Dichlorobenzene		1210	ug/kg	66.7	333
100-51-6	Benzyl alcohol		893	ug/kg	100	333
95-50-1	1,2-Dichlorobenzene		1210	ug/kg	66.7	333
108-60-1	bis(2-Chloroisopropyl)ether		1090	ug/kg	66.7	333
95-48-7	o-Cresol		1170	ug/kg	66.7	333
65794-96-9	m,p-Cresols		1410	ug/kg	100	333
67-72-1	Hexachloroethane		1130	ug/kg	66.7	333
98-95-3	Nitrobenzene		1520	ug/kg	66.7	333
78-59-1	Isophorone		1470	ug/kg	66.7	333
88-75-5	2-Nitrophenol		1430	ug/kg	66.7	333
105-67-9	2,4-Dimethylphenol		1290	ug/kg	117	333
111-91-1	bis(2-Chloroethoxy)methane		1420	ug/kg	66.7	333
120-83-2	2,4-Dichlorophenol		1490	ug/kg	66.7	333
65-85-0	Benzoic acid		3170	ug/kg	167	667
91-20-3	Naphthalene		1380	ug/kg	10.0	33.3
106-47-8	4-Chloroaniline		1390	ug/kg	66.7	333
87-68-3	Hexachlorobutadiene		1400	ug/kg	66.7	333
91-57-6	2-Methylnaphthalene		1420	ug/kg	6.67	33.3
77-47-4	Hexachlorocyclopentadiene		789	ug/kg	66.7	333
88-06-2	2,4,6-Trichlorophenol		1360	ug/kg	66.7	333
95-95-4	2,4,5-Trichlorophenol		1400	ug/kg	66.7	333
91-58-7	2-Chloronaphthalene		1290	ug/kg	11.0	33.3
88-74-4	2-Nitroaniline		1430	ug/kg	66.7	333
	<i>o</i> -Nitroaniline					
99-09-2	3-Nitroaniline		1640	ug/kg	66.7	333

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

<b>SDG Number:</b>	<b>10-1758</b>	<b>Matrix:</b>	<b>SOIL</b>
<b>Lab Sample ID:</b>	<b>1202045698</b>		
<b>Client Sample:</b>	<b>QC for batch 954286</b>	<b>Client:</b>	<b>LANL010</b>
<b>Client ID:</b>	<b>LCS for batch 954286</b>	<b>Method:</b>	<b>SW846 8270C</b>
<b>Batch ID:</b>	<b>954297</b>	<b>Inst:</b>	<b>MSD2.I</b>
<b>Run Date:</b>	<b>02/22/2010 16:31</b>	<b>Analyst:</b>	<b>AGS1</b>
<b>Prep Date:</b>	<b>02/17/2010 21:06</b>	<b>Aliquot:</b>	<b>30 g</b>
<b>Data File:</b>	<b>s2b2206-1.d</b>	<b>Column:</b>	<b>J&amp;W DB-5MS</b>
		<b>Project:</b>	<b>QC</b>
		<b>SOP Ref:</b>	<b>GL-OA-E-009</b>
		<b>Dilution:</b>	<b>1</b>
		<b>Inj. Vol:</b>	<b>.5 uL</b>
		<b>Final Volume:</b>	<b>1 mL</b>
		<b>Level:</b>	<b>LOW</b>

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	<i>m-Nitroaniline</i>					
131-11-3	Dimethylphthalate		1440	ug/kg	66.7	333
606-20-2	2,6-Dinitrotoluene		1400	ug/kg	33.3	333
208-96-8	Acenaphthylene		1310	ug/kg	10.0	33.3
51-28-5	2,4-Dinitrophenol		1230	ug/kg	127	667
132-64-9	Dibenzofuran		1350	ug/kg	66.7	333
84-66-2	Diethylphthalate		1410	ug/kg	66.7	333
86-73-7	Fluorene		1310	ug/kg	10.0	33.3
7005-72-3	4-Chlorophenylphenylether		1410	ug/kg	66.7	333
534-52-1	2-Methyl-4,6-dinitrophenol		1140	ug/kg	66.7	333
100-01-6	4-Nitroaniline		1700	ug/kg	100	333
	<i>p-Nitroaniline</i>					
122-39-4	Diphenylamine		1530	ug/kg	66.7	333
122-66-7	Azobenzene		1390	ug/kg	66.7	333
	<i>1,2-Diphenylhydrazine</i>					
101-55-3	4-Bromophenylphenylether		1360	ug/kg	66.7	333
118-74-1	Hexachlorobenzene		1370	ug/kg	66.7	333
85-01-8	Phenanthrene		1340	ug/kg	10.0	33.3
120-12-7	Anthracene		1380	ug/kg	6.67	33.3
84-74-2	Di-n-butylphthalate		1460	ug/kg	66.7	333
206-44-0	Fluoranthene		1510	ug/kg	10.0	33.3
85-68-7	Butylbenzylphthalate		1410	ug/kg	66.7	333
56-55-3	Benzo(a)anthracene		1390	ug/kg	10.0	33.3
91-94-1	3,3'-Dichlorobenzidine		1580	ug/kg	100	333
218-01-9	Chrysene		1460	ug/kg	10.0	33.3
117-81-7	bis(2-Ethylhexyl)phthalate		1380	ug/kg	66.7	333
117-84-0	Di-n-octylphthalate		1180	ug/kg	66.7	333
205-99-2	Benzo(b)fluoranthene		1340	ug/kg	10.0	33.3
207-08-9	Benzo(k)fluoranthene		1370	ug/kg	10.0	33.3
50-32-8	Benzo(a)pyrene		1460	ug/kg	10.0	33.3
193-39-5	Indeno(1,2,3-cd)pyrene		1680	ug/kg	10.0	33.3
53-70-3	Dibenzo(a,h)anthracene		1710	ug/kg	10.0	33.3
191-24-2	Benzo(ghi)perylene		1640	ug/kg	10.0	33.3
120-82-1	1,2,4-Trichlorobenzene		1450	ug/kg	66.7	333

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Data file : /chem/MSD2.i/s022210.b/s2b2206-1.d  
Lab Smp Id: 1202045698 Client Smp ID: SBLK01LCS  
Inj Date : 22-FEB-2010 16:31  
Operator : AGS1 Inst ID: MSD2.i  
Smp Info : |1202045698|954297|1|SVM|1|LCS  
Misc Info : |MSD8270\_S|WBN100205-01|  
Comment : Column: J & W Scientific DB-5MS 25m x 0.2mm x 0.33um  
Method : /chem/MSD2.i/s022210.b/MSD2-M8270PAQA-010810a.m  
Meth Date : 22-Feb-2010 16:54 ann00964 Quant Type: ISTD  
Cal Date : 11-JAN-2010 20:43 Cal File: s2a0859.d  
Als bottle: 6 QC Sample: LCS  
Dil Factor: 1.00000  
Integrator: HP RTE Compound Sublist: 10-1758.sub  
Target Version: 3.50  
Processing Host: hpclp1

Concentration Formula:  $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vi} * \text{Ws} * (100 - \text{M}) / 100) * \text{CpndVariable}$

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.00000	weight of sample
M	0.00000	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG						CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE		ON-COLUMN	FINAL
							(ng/ul)	(ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	4.562	4.565	(1.000)	216981		40.0000	
* 29 Naphthalene-d8	136	5.827	5.830	(1.000)	746815		40.0000	
* 46 Acenaphthene-d10	164	7.686	7.691	(1.000)	461829		40.0000	
* 67 Phenanthrene-d10	188	9.293	9.293	(1.000)	838990		40.0000	
* 91 Chrysene-d12	240	12.227	12.232	(1.000)	844662		40.0000	
* 98 Perylene-d12	264	14.408	14.417	(1.000)	746955		40.0000	
\$ 3 2-Fluorophenol	112	3.427	3.415	(0.751)	409468		77.7685	2590
\$ 5 Phenol-d5	99	4.195	4.195	(0.920)	517718		73.4762	2450
\$ 20 Nitrobenzene-d5	82	5.096	5.102	(0.875)	247687		41.8587	1400
\$ 39 2-Fluorobiphenyl	172	6.952	6.954	(0.904)	527895		36.9447	1230
\$ 60 2,4,6-Tribromophenol	329	8.538	8.538	(1.111)	166627		83.4187	2780
\$ 81 p-Terphenyl-d14	244	10.998	10.998	(0.899)	687449		42.3737	1410

Compounds	QUANT SIG	MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
							(ng/ul)	(ug/Kg)
=====	=====	=====	=====	=====	=====	=====	=====	=====
6 Phenol		94	4.207	4.207	(0.922)	266743	37.0904	1240
8 2-Chlorophenol		128	4.371	4.371	(0.958)	225962	37.9167	1260
11 1,4-Dichlorobenzene		146	4.580	4.579	(1.004)	256433	35.8038	1190
17 N-Nitrosodipropylamine		70	4.935	4.949	(1.082)	186386	39.7574	1320(Q)
28 1,2,4-Trichlorobenzene		180	5.763	5.765	(0.989)	248919	43.6432	1450
33 4-Chloro-3-methylphenol		107	6.403	6.393	(1.099)	212537	47.1161	1570
47 Acenaphthene		154	7.724	7.726	(1.005)	433395	36.5412	1220
50 2,4-Dinitrotoluene		165	7.889	7.897	(1.026)	179459	43.7205	1460
52 4-Nitrophenol		139	7.833	7.826	(1.019)	44654	29.8664	996(Q)
65 Pentachlorophenol		266	9.087	9.081	(0.978)	79101	36.1179	1200
79 Pyrene		202	10.851	10.851	(0.887)	1022817	40.1613	1340
2 Pyridine		79	2.516	2.489	(0.551)	169568	42.0969	1400
4 Aniline		66	4.254	4.260	(0.932)	130976	40.1652	1340
7 bis(2-Chloroethyl) ether		63	4.295	4.301	(0.941)	229594	35.1882	1170
9 1,3-Dichlorobenzene		146	4.512	4.512	(0.989)	252064	36.1708	1200
12 Benzyl alcohol		108	4.683	4.682	(1.026)	96596	26.7794	893
13 1,2-Dichlorobenzene		146	4.724	4.726	(1.035)	241920	36.3672	1210
14 bis(2-Chloroisopropyl)ether		45	4.797	4.802	(1.051)	596135	32.7803	1090
15 o-Cresol		107	4.776	4.773	(1.047)	164623	35.1514	1170
18 m,p-Cresols		107	4.923	4.932	(1.079)	251044	42.1909	1410
19 Hexachloroethane		117	5.052	5.052	(1.107)	97268	33.9541	1130
21 Nitrobenzene		77	5.117	5.119	(0.878)	277779	45.6314	1520
22 Isophorone		82	5.349	5.354	(0.918)	496207	44.1196	1470
23 2-Nitrophenol		139	5.431	5.433	(0.932)	115164	42.7504	1420
24 2,4-Dimethylphenol		122	5.457	5.457	(0.936)	184900	38.7212	1290
25 bis(2-Chloroethoxy)methane		93	5.551	5.557	(0.953)	277055	42.6656	1420
26 2,4-Dichlorophenol		162	5.683	5.683	(0.975)	198776	44.6258	1490
27 Benzoic acid		105	5.595	5.586	(0.960)	272605	94.9653	3160
30 Naphthalene		128	5.851	5.853	(1.004)	652736	41.2957	1380
31 4-Chloroaniline		127	5.898	5.897	(1.012)	201128	41.7027	1390
32 Hexachlorobutadiene		225	5.963	5.965	(1.023)	150208	41.9038	1400
34 2-Methylnaphthalene		142	6.570	6.572	(1.127)	467928	42.7129	1420
36 Hexachlorocyclopentadiene		237	6.729	6.728	(0.875)	55584	23.6836	789
37 2,4,6-Trichlorophenol		196	6.870	6.869	(0.894)	159119	40.8132	1360
38 2,4,5-Trichlorophenol		196	6.917	6.907	(0.900)	169395	41.9665	1400
40 2-Chloronaphthalene		162	7.093	7.092	(0.923)	461902	38.6348	1290
42 o-Nitroaniline		65	7.199	7.201	(0.937)	182161	42.8936	1430
41 m-Nitroaniline		138	7.642	7.650	(0.994)	109846	49.3249	1640
43 Dimethylphthalate		163	7.384	7.395	(0.961)	597364	43.3226	1440
44 2,6-Dinitrotoluene		165	7.457	7.462	(0.970)	135450	41.9923	1400
45 Acenaphthylene		152	7.536	7.541	(0.981)	742502	39.3635	1310
48 2,4-Dinitrophenol		184	7.760	7.759	(1.010)	42351	36.7756	1220
49 Dibenzofuran		168	7.906	7.908	(1.029)	656867	40.3881	1350
51 Diethylphthalate		149	8.135	8.141	(1.058)	575905	42.3907	1410
53 Fluorene		166	8.276	8.279	(1.077)	552838	39.1771	1300
54 4-Chlorophenylphenylether		204	8.267	8.267	(1.076)	310483	42.1999	1410
55 2-Methyl-4,6-dinitrophenol		198	8.332	8.332	(0.897)	75902	34.1486	1140

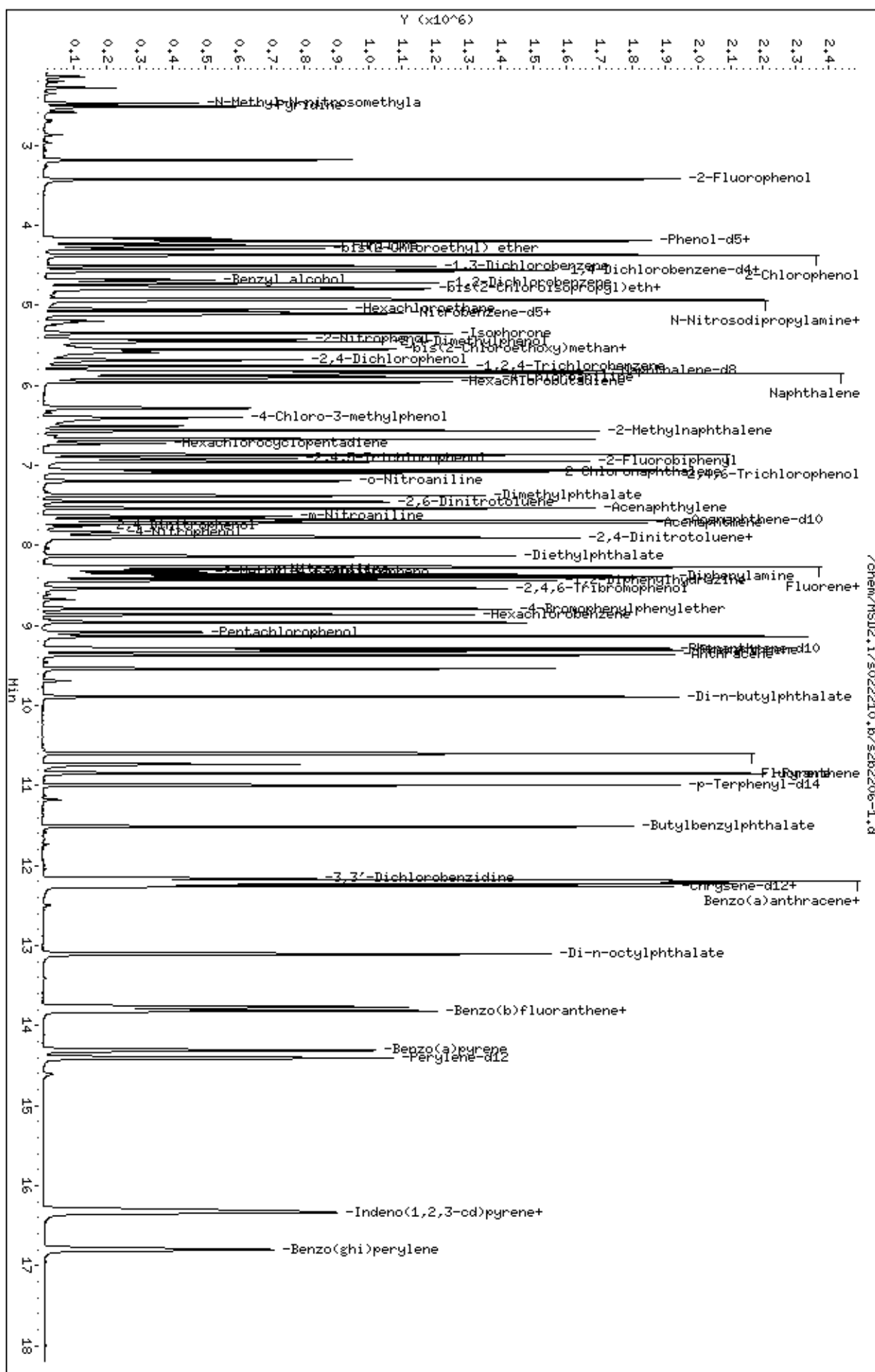
Compounds	QUANT SIG					CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ng/ul)	FINAL (ug/Kg)
=====	=====	==	=====	=====	=====	=====	=====
56 p-Nitroaniline	138	8.303	8.305	(1.080)	105599	50.9095	1700
133 Diphenylamine	169	8.397	8.397	(0.904)	497564	45.8768	1530
58 1,2-Diphenylhydrazine	77	8.441	8.441	(0.908)	603917	41.7635	1390
61 4-Bromophenylphenylether	248	8.793	8.796	(0.946)	183036	40.8126	1360
63 Hexachlorobenzene	284	8.870	8.869	(0.954)	195081	41.1899	1370
68 Phenanthrene	178	9.319	9.319	(1.003)	813869	40.2886	1340
69 Anthracene	178	9.372	9.375	(1.009)	818539	41.4028	1380
72 Di-n-butylphthalate	149	9.892	9.895	(1.064)	995454	43.9225	1460
76 Fluoranthene	202	10.601	10.604	(1.141)	981124	45.2194	1510
85 Butylbenzylphthalate	149	11.517	11.517	(0.942)	437004	42.1951	1410
89 Benzo(a)anthracene	228	12.209	12.214	(0.999)	897900	41.5830	1390
90 3,3'-Dichlorobenzidine	252	12.162	12.161	(0.995)	247090	47.5021	1580
92 Chrysene	228	12.260	12.264	(1.003)	875763	43.7780	1460
93 bis(2-Ethylhexyl)phthalate	149	12.192	12.193	(0.997)	605476	41.3986	1380
94 Di-n-octylphthalate	149	13.108	13.110	(0.910)	978600	35.5113	1180
95 Benzo(b)fluoranthene	252	13.771	13.776	(0.956)	818060	40.0570	1340
96 Benzo(k)fluoranthene	252	13.818	13.824	(0.959)	829913	41.0147	1370
97 Benzo(a)pyrene	252	14.311	14.320	(0.993)	756055	43.6594	1460
99 Indeno(1,2,3-cd)pyrene	276	16.309	16.315	(1.132)	755899	50.4778	1680
100 Dibenzo(a,h)anthracene	278	16.338	16.344	(1.134)	613547	51.3796	1710
101 Benzo(ghi)perylene	276	16.799	16.808	(1.166)	623936	49.3255	1640
1 N-Methyl-N-nitrosomethylamine	74	2.478	2.460	(0.543)	121418	35.7537	1190

# QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: /chem/HSD2.i/s022210.b/s2b2206-1.d  
 Date : 22-FEB-2010 16:31  
 Client ID: SBLK01LCS  
 Sample Info: 112020456981964297141SVH11LCS  
 Volume Injected (uL): 0.5  
 Column phase: 3uM DB-5MS

Instrument: HSD2.i  
 Operator: AGS1  
 Column diameter: 0.20





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

Page 1 of 2

<b>SDG Number:</b> 10-1758	<b>Date Collected:</b> 02/09/2010 12:00	<b>Matrix:</b> R
<b>Lab Sample ID:</b> 1202045699	<b>Date Received:</b> 02/11/2010 09:20	<b>%Moisture:</b> 18
<b>Client Sample:</b> QC for batch 954286	<b>Client:</b> LANL010	<b>Project:</b> QC
<b>Client ID:</b> RE15-10-8366MS	<b>Method:</b> SW846 8270C	<b>SOP Ref:</b> GL-OA-E-009
<b>Batch ID:</b> 954297	<b>Inst:</b> MSD2.I	<b>Dilution:</b> 1
<b>Run Date:</b> 02/22/2010 18:14	<b>Analyst:</b> AGS1	<b>Inj. Vol:</b> .5 uL
<b>Prep Date:</b> 02/17/2010 21:06	<b>Aliquot:</b> 30.17 g	<b>Final Volume:</b> 1 mL
<b>Data File:</b> s2b2210.d	<b>Column:</b> J&W DB-5MS	<b>Level:</b> LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine		1330	ug/kg	80.8	404
108-95-2	Phenol		1320	ug/kg	80.8	404
95-57-8	2-Chlorophenol		1360	ug/kg	80.8	404
106-46-7	1,4-Dichlorobenzene		1300	ug/kg	80.8	404
621-64-7	N-Nitrosodipropylamine		1470	ug/kg	80.8	404
59-50-7	4-Chloro-3-methylphenol		1750	ug/kg	80.8	404
83-32-9	Acenaphthene		1360	ug/kg	13.3	40.4
121-14-2	2,4-Dinitrotoluene		1570	ug/kg	40.4	404
100-02-7	4-Nitrophenol		993	ug/kg	133	404
87-86-5	Pentachlorophenol		1370	ug/kg	101	404
129-00-0	Pyrene		1500	ug/kg	12.1	40.4
110-86-1	Pyridine		1500	ug/kg	80.8	404
62-53-3	Aniline		1580	ug/kg	121	404
111-44-4	bis(2-Chloroethyl) ether		1280	ug/kg	80.8	404
541-73-1	1,3-Dichlorobenzene		1300	ug/kg	80.8	404
100-51-6	Benzyl alcohol		440	ug/kg	121	404
95-50-1	1,2-Dichlorobenzene		1320	ug/kg	80.8	404
108-60-1	bis(2-Chloroisopropyl)ether		1220	ug/kg	80.8	404
95-48-7	o-Cresol		1280	ug/kg	80.8	404
65794-96-9	m,p-Cresols		1610	ug/kg	121	404
67-72-1	Hexachloroethane		1240	ug/kg	80.8	404
98-95-3	Nitrobenzene		1630	ug/kg	80.8	404
78-59-1	Isophorone		1640	ug/kg	80.8	404
88-75-5	2-Nitrophenol		1570	ug/kg	80.8	404
105-67-9	2,4-Dimethylphenol		1340	ug/kg	141	404
111-91-1	bis(2-Chloroethoxy)methane		1570	ug/kg	80.8	404
120-83-2	2,4-Dichlorophenol		1670	ug/kg	80.8	404
65-85-0	Benzoic acid		4000	ug/kg	202	808
91-20-3	Naphthalene		1510	ug/kg	12.1	40.4
106-47-8	4-Chloroaniline		1540	ug/kg	80.8	404
87-68-3	Hexachlorobutadiene		1530	ug/kg	80.8	404
91-57-6	2-Methylnaphthalene		1590	ug/kg	8.08	40.4
77-47-4	Hexachlorocyclopentadiene		805	ug/kg	80.8	404
88-06-2	2,4,6-Trichlorophenol		1470	ug/kg	80.8	404
95-95-4	2,4,5-Trichlorophenol		1630	ug/kg	80.8	404
91-58-7	2-Chloronaphthalene		1410	ug/kg	13.3	40.4
88-74-4	2-Nitroaniline		1530	ug/kg	80.8	404
	<i>o</i> -Nitroaniline					
99-09-2	3-Nitroaniline		1720	ug/kg	80.8	404

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

<b>SDG Number:</b> 10-1758	<b>Date Collected:</b> 02/09/2010 12:00	<b>Matrix:</b> R
<b>Lab Sample ID:</b> 1202045699	<b>Date Received:</b> 02/11/2010 09:20	<b>%Moisture:</b> 18
<b>Client Sample:</b> QC for batch 954286	<b>Client:</b> LANL010	<b>Project:</b> QC
<b>Client ID:</b> RE15-10-8366MS	<b>Method:</b> SW846 8270C	<b>SOP Ref:</b> GL-OA-E-009
<b>Batch ID:</b> 954297	<b>Inst:</b> MSD2.I	<b>Dilution:</b> 1
<b>Run Date:</b> 02/22/2010 18:14	<b>Analyst:</b> AGS1	<b>Inj. Vol:</b> .5 uL
<b>Prep Date:</b> 02/17/2010 21:06	<b>Aliquot:</b> 30.17 g	<b>Final Volume:</b> 1 mL
<b>Data File:</b> s2b2210.d	<b>Column:</b> J&W DB-5MS	<b>Level:</b> LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	<i>m-Nitroaniline</i>					
131-11-3	Dimethylphthalate		1600	ug/kg	80.8	404
606-20-2	2,6-Dinitrotoluene		1550	ug/kg	40.4	404
208-96-8	Acenaphthylene		1450	ug/kg	12.1	40.4
51-28-5	2,4-Dinitrophenol		1300	ug/kg	154	808
132-64-9	Dibenzofuran		1500	ug/kg	80.8	404
84-66-2	Diethylphthalate		1560	ug/kg	80.8	404
86-73-7	Fluorene		1450	ug/kg	12.1	40.4
7005-72-3	4-Chlorophenylphenylether		1540	ug/kg	80.8	404
534-52-1	2-Methyl-4,6-dinitrophenol		1170	ug/kg	80.8	404
100-01-6	4-Nitroaniline		1690	ug/kg	121	404
	<i>p-Nitroaniline</i>					
122-39-4	Diphenylamine		1670	ug/kg	80.8	404
122-66-7	Azobenzene		1520	ug/kg	80.8	404
	<i>1,2-Diphenylhydrazine</i>					
101-55-3	4-Bromophenylphenylether		1490	ug/kg	80.8	404
118-74-1	Hexachlorobenzene		1500	ug/kg	80.8	404
85-01-8	Phenanthrene		1460	ug/kg	12.1	40.4
120-12-7	Anthracene		1500	ug/kg	8.08	40.4
84-74-2	Di-n-butylphthalate		1600	ug/kg	80.8	404
206-44-0	Fluoranthene		1610	ug/kg	12.1	40.4
85-68-7	Butylbenzylphthalate		1610	ug/kg	80.8	404
56-55-3	Benzo(a)anthracene		1490	ug/kg	12.1	40.4
91-94-1	3,3'-Dichlorobenzidine		1640	ug/kg	121	404
218-01-9	Chrysene		1560	ug/kg	12.1	40.4
117-81-7	bis(2-Ethylhexyl)phthalate		1580	ug/kg	80.8	404
117-84-0	Di-n-octylphthalate		1430	ug/kg	80.8	404
205-99-2	Benzo(b)fluoranthene		1440	ug/kg	12.1	40.4
207-08-9	Benzo(k)fluoranthene		1530	ug/kg	12.1	40.4
50-32-8	Benzo(a)pyrene		1560	ug/kg	12.1	40.4
193-39-5	Indeno(1,2,3-cd)pyrene		1630	ug/kg	12.1	40.4
53-70-3	Dibenzo(a,h)anthracene		1650	ug/kg	12.1	40.4
191-24-2	Benzo(ghi)perylene		1550	ug/kg	12.1	40.4
120-82-1	1,2,4-Trichlorobenzene		1590	ug/kg	80.8	404

GEL Laboratories LLC

GEL Laboratories, LLC

Data file : /chem/MSD2.i/s022210.b/s2b2210.d  
Lab Smp Id: 1202045699 Client Smp ID: RE15-10-8366MS  
Inj Date : 22-FEB-2010 18:14  
Operator : AGS1 Inst ID: MSD2.i  
Smp Info : |1202045699|954297|1|SVM|1|MS  
Misc Info : |MSD8270\_S|WBN100205-01|  
Comment : Column: J & W Scientific DB-5MS 25m x 0.2mm x 0.33um  
Method : /chem/MSD2.i/s022210.b/MSD2-M8270PAQA-010810a.m  
Meth Date : 22-Feb-2010 16:54 ann00964 Quant Type: ISTD  
Cal Date : 11-JAN-2010 20:43 Cal File: s2a0859.d  
Als bottle: 10 QC Sample: MS  
Dil Factor: 1.00000  
Integrator: HP RTE Compound Sublist: 10-1758.sub  
Target Version: 3.50  
Processing Host: hpclp1

Concentration Formula:  $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vi} * \text{Ws} * (100 - \text{M}) / 100) * \text{CpndVariable}$

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.17000	weight of sample
M	18.00010	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG						CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE		ON-COLUMN	FINAL
							(ng/ul)	(ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	4.562	4.565	(1.000)	227035		40.0000	
* 29 Naphthalene-d8	136	5.828	5.830	(1.000)	782658		40.0000	
* 46 Acenaphthene-d10	164	7.687	7.691	(1.000)	495051		40.0000	
* 67 Phenanthrene-d10	188	9.291	9.293	(1.000)	901543		40.0000	
* 91 Chrysene-d12	240	12.226	12.232	(1.000)	863395		40.0000	
* 98 Perylene-d12	264	14.406	14.417	(1.000)	715076		40.0000	
\$ 3 2-Fluorophenol	112	3.428	3.415	(0.751)	389596		70.7176	2860
\$ 5 Phenol-d5	99	4.196	4.195	(0.920)	498730		67.6469	2730
\$ 20 Nitrobenzene-d5	82	5.097	5.102	(0.875)	234238		37.7729	1530
\$ 39 2-Fluorobiphenyl	172	6.952	6.954	(0.904)	512960		33.4903	1350
\$ 60 2,4,6-Tribromophenol	329	8.539	8.538	(1.111)	159810		74.6369	3020
\$ 81 p-Terphenyl-d14	244	10.997	10.998	(0.900)	635746		38.3366	1550

Compounds	QUANT SIG					CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ng/ul)	FINAL (ug/Kg)
=====	=====	==	=====	=====	=====	=====	=====
6 Phenol	94	4.207	4.207	(0.922)	244807	32.5328	1320
8 2-Chlorophenol	128	4.372	4.371	(0.958)	209125	33.5375	1360
11 1,4-Dichlorobenzene	146	4.580	4.579	(1.004)	240771	32.1283	1300
17 N-Nitrosodipropylamine	70	4.932	4.949	(1.081)	177906	36.2681	1470(Q)
28 1,2,4-Trichlorobenzene	180	5.763	5.765	(0.989)	234979	39.3123	1590
33 4-Chloro-3-methylphenol	107	6.406	6.393	(1.099)	204494	43.2570	1750
47 Acenaphthene	154	7.722	7.726	(1.005)	427399	33.6173	1360
50 2,4-Dinitrotoluene	165	7.890	7.897	(1.026)	170907	38.8429	1570
52 4-Nitrophenol	139	7.845	7.826	(1.021)	37407	24.5700	993(Q)
65 Pentachlorophenol	266	9.085	9.081	(0.978)	78772	33.9213	1370
79 Pyrene	202	10.850	10.851	(0.888)	966413	37.1233	1500
2 Pyridine	79	2.519	2.489	(0.552)	156052	37.0258	1500
4 Aniline	66	4.254	4.260	(0.932)	133754	39.2007	1580
7 bis(2-Chloroethyl) ether	63	4.295	4.301	(0.941)	216498	31.7117	1280
9 1,3-Dichlorobenzene	146	4.512	4.512	(0.989)	234592	32.1728	1300
12 Benzyl alcohol	108	4.686	4.682	(1.027)	41129	10.8973	440
13 1,2-Dichlorobenzene	146	4.724	4.726	(1.035)	227441	32.6765	1320
14 bis(2-Chloroisopropyl)ether	45	4.797	4.802	(1.051)	576632	30.3037	1220
15 o-Cresol	107	4.777	4.773	(1.047)	154983	31.6275	1280
18 m,p-Cresols	107	4.923	4.932	(1.079)	248481	39.9108	1610(Q)
19 Hexachloroethane	117	5.053	5.052	(1.107)	92138	30.7390	1240
21 Nitrobenzene	77	5.117	5.119	(0.878)	257427	40.3515	1630
22 Isophorone	82	5.346	5.354	(0.917)	479064	40.6446	1640
23 2-Nitrophenol	139	5.431	5.433	(0.932)	109583	38.8157	1570
24 2,4-Dimethylphenol	122	5.458	5.457	(0.936)	165378	33.0469	1340
25 bis(2-Chloroethoxy)methane	93	5.552	5.557	(0.953)	264732	38.9008	1570
26 2,4-Dichlorophenol	162	5.687	5.683	(0.976)	192517	41.2413	1670
27 Benzoic acid	105	5.599	5.586	(0.961)	298677	98.9051	4000
30 Naphthalene	128	5.848	5.853	(1.004)	617752	37.2926	1510
31 4-Chloroaniline	127	5.898	5.897	(1.012)	192050	37.9968	1540
32 Hexachlorobutadiene	225	5.963	5.965	(1.023)	142336	37.8893	1530
34 2-Methylnaphthalene	142	6.570	6.572	(1.127)	451161	39.2964	1590
36 Hexachlorocyclopentadiene	237	6.729	6.728	(0.875)	50076	19.9049	804
37 2,4,6-Trichlorophenol	196	6.867	6.869	(0.893)	151655	36.2883	1470
38 2,4,5-Trichlorophenol	196	6.917	6.907	(0.900)	174437	40.3155	1630
40 2-Chloronaphthalene	162	7.093	7.092	(0.923)	447884	34.9482	1410
42 o-Nitroaniline	65	7.199	7.201	(0.937)	172355	37.8610	1530
41 m-Nitroaniline	138	7.640	7.650	(0.994)	99055	42.4303	1720
43 Dimethylphthalate	163	7.381	7.395	(0.960)	583445	39.4736	1600
44 2,6-Dinitrotoluene	165	7.455	7.462	(0.970)	132678	38.3726	1550
45 Acenaphthylene	152	7.537	7.541	(0.981)	726612	35.9360	1450
48 2,4-Dinitrophenol	184	7.757	7.759	(1.009)	36318	32.2677	1300
49 Dibenzofuran	168	7.907	7.908	(1.029)	647351	37.1319	1500
51 Diethylphthalate	149	8.136	8.141	(1.058)	560407	38.4817	1560
53 Fluorene	166	8.277	8.279	(1.077)	542665	35.8754	1450
54 4-Chlorophenylphenylether	204	8.265	8.267	(1.075)	300417	38.0916	1540
55 2-Methyl-4,6-dinitrophenol	198	8.333	8.332	(0.897)	69321	29.0238	1170

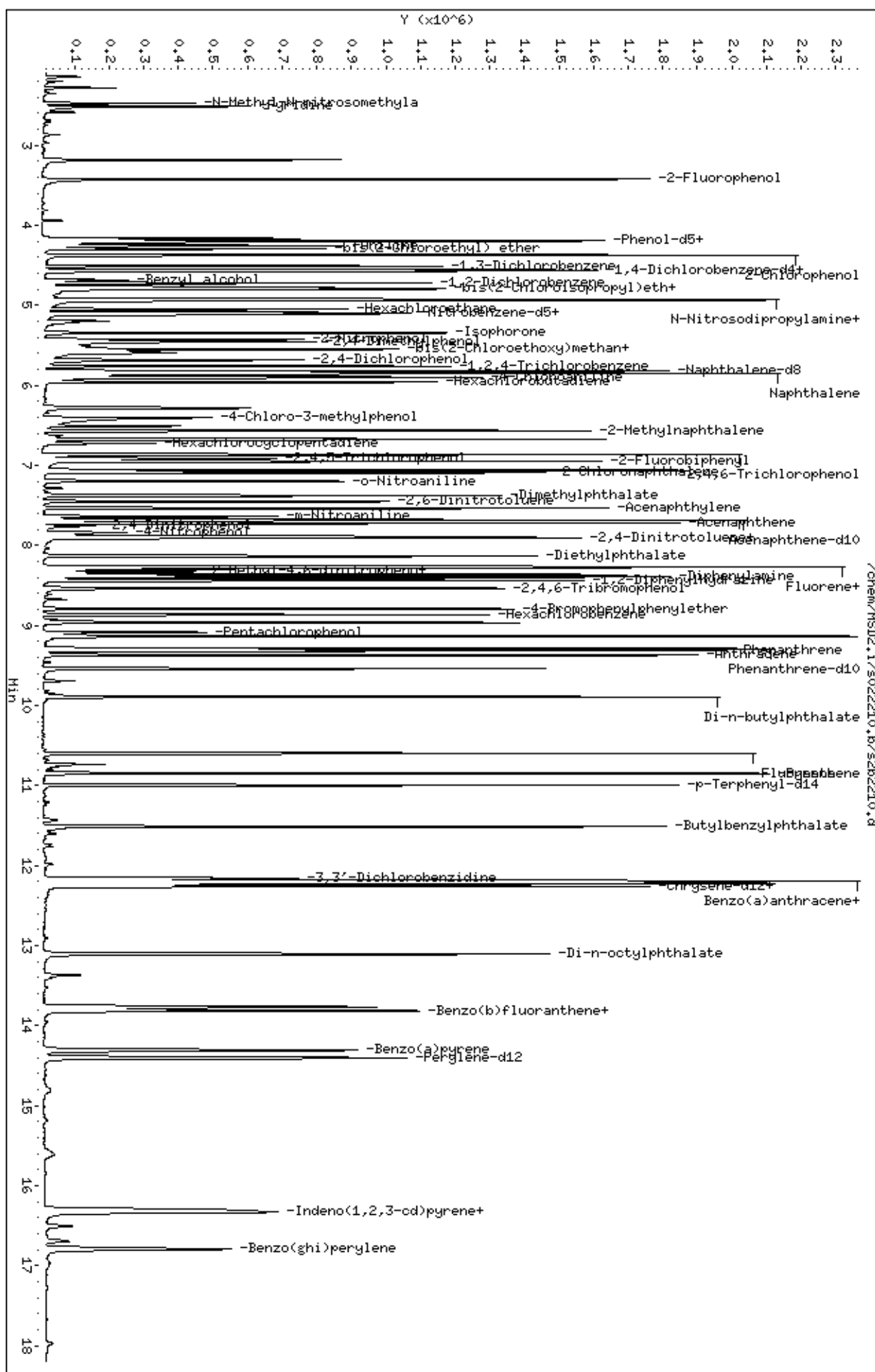
Compounds	QUANT SIG					CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ng/ul)	FINAL (ug/Kg)
=====	=====	==	=====	=====	=====	=====	=====
56 p-Nitroaniline	138	8.301	8.305	(1.080)	88681	41.8875	1690
133 Diphenylamine	169	8.395	8.397	(0.904)	481489	41.3143	1670
58 1,2-Diphenylhydrazine	77	8.439	8.441	(0.908)	585407	37.6746	1520
61 4-Bromophenylphenylether	248	8.794	8.796	(0.947)	177464	36.8246	1490
63 Hexachlorobenzene	284	8.868	8.869	(0.954)	188573	37.0532	1500
68 Phenanthrene	178	9.318	9.319	(1.003)	785532	36.1878	1460
69 Anthracene	178	9.374	9.375	(1.009)	789796	37.1771	1500
72 Di-n-butylphthalate	149	9.893	9.895	(1.065)	966071	39.6684	1600
76 Fluoranthene	202	10.601	10.604	(1.141)	930414	39.9069	1610
85 Butylbenzylphthalate	149	11.514	11.517	(0.942)	422069	39.8689	1610
89 Benzo(a)anthracene	228	12.208	12.214	(0.999)	812833	36.8267	1490
90 3,3'-Dichlorobenzidine	252	12.161	12.161	(0.995)	212432	40.6101	1640
92 Chrysene	228	12.258	12.264	(1.003)	787250	38.4996	1560
93 bis(2-Ethylhexyl)phthalate	149	12.190	12.193	(0.997)	585349	39.1540	1580
94 Di-n-octylphthalate	149	13.107	13.110	(0.910)	932308	35.3397	1430
95 Benzo(b)fluoranthene	252	13.768	13.776	(0.956)	695771	35.5879	1440
96 Benzo(k)fluoranthene	252	13.815	13.824	(0.959)	735069	37.9470	1530
97 Benzo(a)pyrene	252	14.312	14.320	(0.993)	639526	38.5766	1560
99 Indeno(1,2,3-cd)pyrene	276	16.303	16.315	(1.132)	577679	40.2963	1630
100 Dibenzo(a,h)anthracene	278	16.333	16.344	(1.134)	467664	40.9090	1650
101 Benzo(ghi)perylene	276	16.792	16.808	(1.166)	464899	38.3912	1550
1 N-Methyl-N-nitrosomethylamine	74	2.478	2.460	(0.543)	116538	32.7971	1320

## QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: /chem/HSD2.i/s022210.b/s2b2210.d  
 Date : 22-FEB-2010 18:14  
 Client ID: RE15-10-8366HS  
 Sample Info: 11202045639196429711/SH11HS  
 Volume Injected (uL): 0.5  
 Column phase: 3uM DB-5MS

Instrument: HSD2.i  
 Operator: AGS1  
 Column diameter: 0.20



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

Page 1 of 2

<b>SDG Number:</b> 10-1758	<b>Date Collected:</b> 02/09/2010 12:00	<b>Matrix:</b> R
<b>Lab Sample ID:</b> 1202045700	<b>Date Received:</b> 02/11/2010 09:20	<b>%Moisture:</b> 18
<b>Client Sample:</b> QC for batch 954286	<b>Client:</b> LANL010	<b>Project:</b> QC
<b>Client ID:</b> RE15-10-8366MSD	<b>Method:</b> SW846 8270C	<b>SOP Ref:</b> GL-OA-E-009
<b>Batch ID:</b> 954297	<b>Inst:</b> MSD2.I	<b>Dilution:</b> 1
<b>Run Date:</b> 02/22/2010 18:39	<b>Analyst:</b> AGS1	<b>Inj. Vol:</b> .5 uL
<b>Prep Date:</b> 02/17/2010 21:06	<b>Aliquot:</b> 30.18 g	<b>Final Volume:</b> 1 mL
<b>Data File:</b> s2b2211.d	<b>Column:</b> J&W DB-5MS	<b>Level:</b> LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine		1420	ug/kg	80.8	404
108-95-2	Phenol		1420	ug/kg	80.8	404
95-57-8	2-Chlorophenol		1480	ug/kg	80.8	404
106-46-7	1,4-Dichlorobenzene		1410	ug/kg	80.8	404
621-64-7	N-Nitrosodipropylamine		1580	ug/kg	80.8	404
59-50-7	4-Chloro-3-methylphenol		1870	ug/kg	80.8	404
83-32-9	Acenaphthene		1450	ug/kg	13.3	40.4
121-14-2	2,4-Dinitrotoluene		1650	ug/kg	40.4	404
100-02-7	4-Nitrophenol		1030	ug/kg	133	404
87-86-5	Pentachlorophenol		1510	ug/kg	101	404
129-00-0	Pyrene		1570	ug/kg	12.1	40.4
110-86-1	Pyridine		1620	ug/kg	80.8	404
62-53-3	Aniline		1770	ug/kg	121	404
111-44-4	bis(2-Chloroethyl) ether		1390	ug/kg	80.8	404
541-73-1	1,3-Dichlorobenzene		1410	ug/kg	80.8	404
100-51-6	Benzyl alcohol		500	ug/kg	121	404
95-50-1	1,2-Dichlorobenzene		1410	ug/kg	80.8	404
108-60-1	bis(2-Chloroisopropyl)ether		1310	ug/kg	80.8	404
95-48-7	o-Cresol		1610	ug/kg	80.8	404
65794-96-9	m,p-Cresols		1800	ug/kg	121	404
67-72-1	Hexachloroethane		1350	ug/kg	80.8	404
98-95-3	Nitrobenzene		1810	ug/kg	80.8	404
78-59-1	Isophorone		1760	ug/kg	80.8	404
88-75-5	2-Nitrophenol		1660	ug/kg	80.8	404
105-67-9	2,4-Dimethylphenol		1470	ug/kg	141	404
111-91-1	bis(2-Chloroethoxy)methane		1690	ug/kg	80.8	404
120-83-2	2,4-Dichlorophenol		1770	ug/kg	80.8	404
65-85-0	Benzoic acid		4190	ug/kg	202	808
91-20-3	Naphthalene		1630	ug/kg	12.1	40.4
106-47-8	4-Chloroaniline		1730	ug/kg	80.8	404
87-68-3	Hexachlorobutadiene		1660	ug/kg	80.8	404
91-57-6	2-Methylnaphthalene		1700	ug/kg	8.08	40.4
77-47-4	Hexachlorocyclopentadiene		811	ug/kg	80.8	404
88-06-2	2,4,6-Trichlorophenol		1540	ug/kg	80.8	404
95-95-4	2,4,5-Trichlorophenol		1690	ug/kg	80.8	404
91-58-7	2-Chloronaphthalene		1490	ug/kg	13.3	40.4
88-74-4	2-Nitroaniline		1600	ug/kg	80.8	404
	<i>o</i> -Nitroaniline					
99-09-2	3-Nitroaniline		1850	ug/kg	80.8	404

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

<b>SDG Number:</b> 10-1758	<b>Date Collected:</b> 02/09/2010 12:00	<b>Matrix:</b> R
<b>Lab Sample ID:</b> 1202045700	<b>Date Received:</b> 02/11/2010 09:20	<b>%Moisture:</b> 18
<b>Client Sample:</b> QC for batch 954286	<b>Client:</b> LANL010	<b>Project:</b> QC
<b>Client ID:</b> RE15-10-8366MSD	<b>Method:</b> SW846 8270C	<b>SOP Ref:</b> GL-OA-E-009
<b>Batch ID:</b> 954297	<b>Inst:</b> MSD2.I	<b>Dilution:</b> 1
<b>Run Date:</b> 02/22/2010 18:39	<b>Analyst:</b> AGS1	<b>Inj. Vol:</b> .5 uL
<b>Prep Date:</b> 02/17/2010 21:06	<b>Aliquot:</b> 30.18 g	<b>Final Volume:</b> 1 mL
<b>Data File:</b> s2b2211.d	<b>Column:</b> J&W DB-5MS	<b>Level:</b> LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	<i>m-Nitroaniline</i>					
131-11-3	Dimethylphthalate		1690	ug/kg	80.8	404
606-20-2	2,6-Dinitrotoluene		1640	ug/kg	40.4	404
208-96-8	Acenaphthylene		1540	ug/kg	12.1	40.4
51-28-5	2,4-Dinitrophenol		1260	ug/kg	154	808
132-64-9	Dibenzofuran		1580	ug/kg	80.8	404
84-66-2	Diethylphthalate		1660	ug/kg	80.8	404
86-73-7	Fluorene		1540	ug/kg	12.1	40.4
7005-72-3	4-Chlorophenylphenylether		1620	ug/kg	80.8	404
534-52-1	2-Methyl-4,6-dinitrophenol		1130	ug/kg	80.8	404
100-01-6	4-Nitroaniline		1770	ug/kg	121	404
	<i>p-Nitroaniline</i>					
122-39-4	Diphenylamine		1750	ug/kg	80.8	404
122-66-7	Azobenzene		1610	ug/kg	80.8	404
	<i>1,2-Diphenylhydrazine</i>					
101-55-3	4-Bromophenylphenylether		1570	ug/kg	80.8	404
118-74-1	Hexachlorobenzene		1580	ug/kg	80.8	404
85-01-8	Phenanthrene		1540	ug/kg	12.1	40.4
120-12-7	Anthracene		1570	ug/kg	8.08	40.4
84-74-2	Di-n-butylphthalate		1710	ug/kg	80.8	404
206-44-0	Fluoranthene		1700	ug/kg	12.1	40.4
85-68-7	Butylbenzylphthalate		1720	ug/kg	80.8	404
56-55-3	Benzo(a)anthracene		1570	ug/kg	12.1	40.4
91-94-1	3,3'-Dichlorobenzidine		1650	ug/kg	121	404
218-01-9	Chrysene		1640	ug/kg	12.1	40.4
117-81-7	bis(2-Ethylhexyl)phthalate		1670	ug/kg	80.8	404
117-84-0	Di-n-octylphthalate		1590	ug/kg	80.8	404
205-99-2	Benzo(b)fluoranthene		1580	ug/kg	12.1	40.4
207-08-9	Benzo(k)fluoranthene		1630	ug/kg	12.1	40.4
50-32-8	Benzo(a)pyrene		1660	ug/kg	12.1	40.4
193-39-5	Indeno(1,2,3-cd)pyrene		1560	ug/kg	12.1	40.4
53-70-3	Dibenzo(a,h)anthracene		1590	ug/kg	12.1	40.4
191-24-2	Benzo(ghi)perylene		1440	ug/kg	12.1	40.4
120-82-1	1,2,4-Trichlorobenzene		1700	ug/kg	80.8	404



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Data file : /chem/MSD2.i/s022210.b/s2b2211.d  
Lab Smp Id: 1202045700 Client Smp ID: RE15-10-8366MSD  
Inj Date : 22-FEB-2010 18:39  
Operator : AGS1 Inst ID: MSD2.i  
Smp Info : |1202045700|954297|1|SVM|1|MSD  
Misc Info : |MSD8270\_S|WBN100205-01|  
Comment : Column: J & W Scientific DB-5MS 25m x 0.2mm x 0.33um  
Method : /chem/MSD2.i/s022210.b/MSD2-M8270PAQA-010810a.m  
Meth Date : 22-Feb-2010 16:54 ann00964 Quant Type: ISTD  
Cal Date : 11-JAN-2010 20:43 Cal File: s2a0859.d  
Als bottle: 11 QC Sample: MSD  
Dil Factor: 1.00000  
Integrator: HP RTE Compound Sublist: 10-1758.sub  
Target Version: 3.50  
Processing Host: hpclp1

Concentration Formula:  $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vi} * \text{Ws} * (100 - \text{M}) / 100) * \text{CpndVariable}$

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.18000	weight of sample
M	18.00010	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG						CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE		ON-COLUMN	FINAL
							(ng/ul)	(ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	4.562	4.565	(1.000)	219369		40.0000	
* 29 Naphthalene-d8	136	5.828	5.830	(1.000)	757246		40.0000	
* 46 Acenaphthene-d10	164	7.687	7.691	(1.000)	479432		40.0000	
* 67 Phenanthrene-d10	188	9.291	9.293	(1.000)	873677		40.0000	
* 91 Chrysene-d12	240	12.227	12.232	(1.000)	830072		40.0000	
* 98 Perylene-d12	264	14.406	14.417	(1.000)	653751		40.0000	
\$ 3 2-Fluorophenol	112	3.427	3.415	(0.751)	401731		75.4685	3050
\$ 5 Phenol-d5	99	4.196	4.195	(0.920)	511624		71.8209	2900
\$ 20 Nitrobenzene-d5	82	5.097	5.102	(0.875)	242566		40.4286	1630
\$ 39 2-Fluorobiphenyl	172	6.953	6.954	(0.904)	525648		35.4367	1430
\$ 60 2,4,6-Tribromophenol	329	8.539	8.538	(1.111)	164122		79.1479	3200
\$ 81 p-Terphenyl-d14	244	10.998	10.998	(0.899)	648082		40.6493	1640

Compounds	QUANT SIG					CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ng/ul)	FINAL (ug/Kg)
=====	=====	==	=====	=====	=====	=====	=====
6 Phenol	94	4.207	4.207	(0.922)	255117	35.0877	1420
8 2-Chlorophenol	128	4.372	4.371	(0.958)	221321	36.7337	1480
11 1,4-Dichlorobenzene	146	4.580	4.579	(1.004)	252914	34.9281	1410
17 N-Nitrosodipropylamine	70	4.935	4.949	(1.082)	185456	39.1284	1580(Q)
28 1,2,4-Trichlorobenzene	180	5.763	5.765	(0.989)	243792	42.1554	1700
33 4-Chloro-3-methylphenol	107	6.406	6.393	(1.099)	211408	46.2202	1870
47 Acenaphthene	154	7.722	7.726	(1.005)	440324	35.7623	1440
50 2,4-Dinitrotoluene	165	7.890	7.897	(1.026)	173913	40.8137	1650
52 4-Nitrophenol	139	7.855	7.826	(1.022)	37896	25.4428	1030(Q)
65 Pentachlorophenol	266	9.086	9.081	(0.978)	85473	37.2471	1500
79 Pyrene	202	10.851	10.851	(0.887)	970200	38.7649	1570
2 Pyridine	79	2.513	2.489	(0.551)	163731	40.2053	1620
4 Aniline	66	4.254	4.260	(0.932)	144179	43.7328	1770
7 bis(2-Chloroethyl) ether	63	4.295	4.301	(0.941)	226192	34.2894	1380
9 1,3-Dichlorobenzene	146	4.513	4.512	(0.989)	246569	34.9971	1410
12 Benzyl alcohol	108	4.686	4.682	(1.027)	45144	12.3791	500
13 1,2-Dichlorobenzene	146	4.724	4.726	(1.035)	235115	34.9594	1410
14 bis(2-Chloroisopropyl)ether	45	4.797	4.802	(1.051)	595642	32.3967	1310
15 o-Cresol	107	4.777	4.773	(1.047)	189202	39.9599	1610
18 m,p-Cresols	107	4.924	4.932	(1.079)	268208	44.5848	1800(Q)
19 Hexachloroethane	117	5.053	5.052	(1.107)	97049	33.5089	1350
21 Nitrobenzene	77	5.117	5.119	(0.878)	276220	44.7502	1810
22 Isophorone	82	5.349	5.354	(0.918)	497837	43.6548	1760
23 2-Nitrophenol	139	5.431	5.433	(0.932)	112345	41.1295	1660
24 2,4-Dimethylphenol	122	5.458	5.457	(0.936)	176002	36.3501	1470
25 bis(2-Chloroethoxy)methane	93	5.552	5.557	(0.953)	274720	41.7232	1680
26 2,4-Dichlorophenol	162	5.684	5.683	(0.975)	197657	43.7633	1770
27 Benzoic acid	105	5.599	5.586	(0.961)	303900	103.583	4180
30 Naphthalene	128	5.848	5.853	(1.004)	647441	40.3965	1630
31 4-Chloroaniline	127	5.898	5.897	(1.012)	209279	42.7950	1730
32 Hexachlorobutadiene	225	5.963	5.965	(1.023)	148994	40.9926	1660
34 2-Methylnaphthalene	142	6.571	6.572	(1.127)	468279	42.1562	1700
36 Hexachlorocyclopentadiene	237	6.729	6.728	(0.875)	48909	20.0743	811
37 2,4,6-Trichlorophenol	196	6.867	6.869	(0.893)	154507	38.1752	1540
38 2,4,5-Trichlorophenol	196	6.917	6.907	(0.900)	175102	41.7876	1690
40 2-Chloronaphthalene	162	7.091	7.092	(0.922)	459159	36.9952	1490
42 o-Nitroaniline	65	7.200	7.201	(0.937)	174447	39.5690	1600
41 m-Nitroaniline	138	7.640	7.650	(0.994)	104864	45.8329	1850
43 Dimethylphthalate	163	7.382	7.395	(0.960)	597648	41.7518	1690
44 2,6-Dinitrotoluene	165	7.455	7.462	(0.970)	136022	40.6213	1640
45 Acenaphthylene	152	7.537	7.541	(0.981)	747617	38.1795	1540
48 2,4-Dinitrophenol	184	7.761	7.759	(1.010)	32833	31.0685	1260
49 Dibenzofuran	168	7.907	7.908	(1.029)	660322	39.1098	1580
51 Diethylphthalate	149	8.136	8.141	(1.058)	577663	40.9589	1660
53 Fluorene	166	8.277	8.279	(1.077)	556901	38.0160	1540
54 4-Chlorophenylphenylether	204	8.266	8.267	(1.075)	306493	40.1281	1620
55 2-Methyl-4,6-dinitrophenol	198	8.333	8.332	(0.897)	64966	28.0680	1130

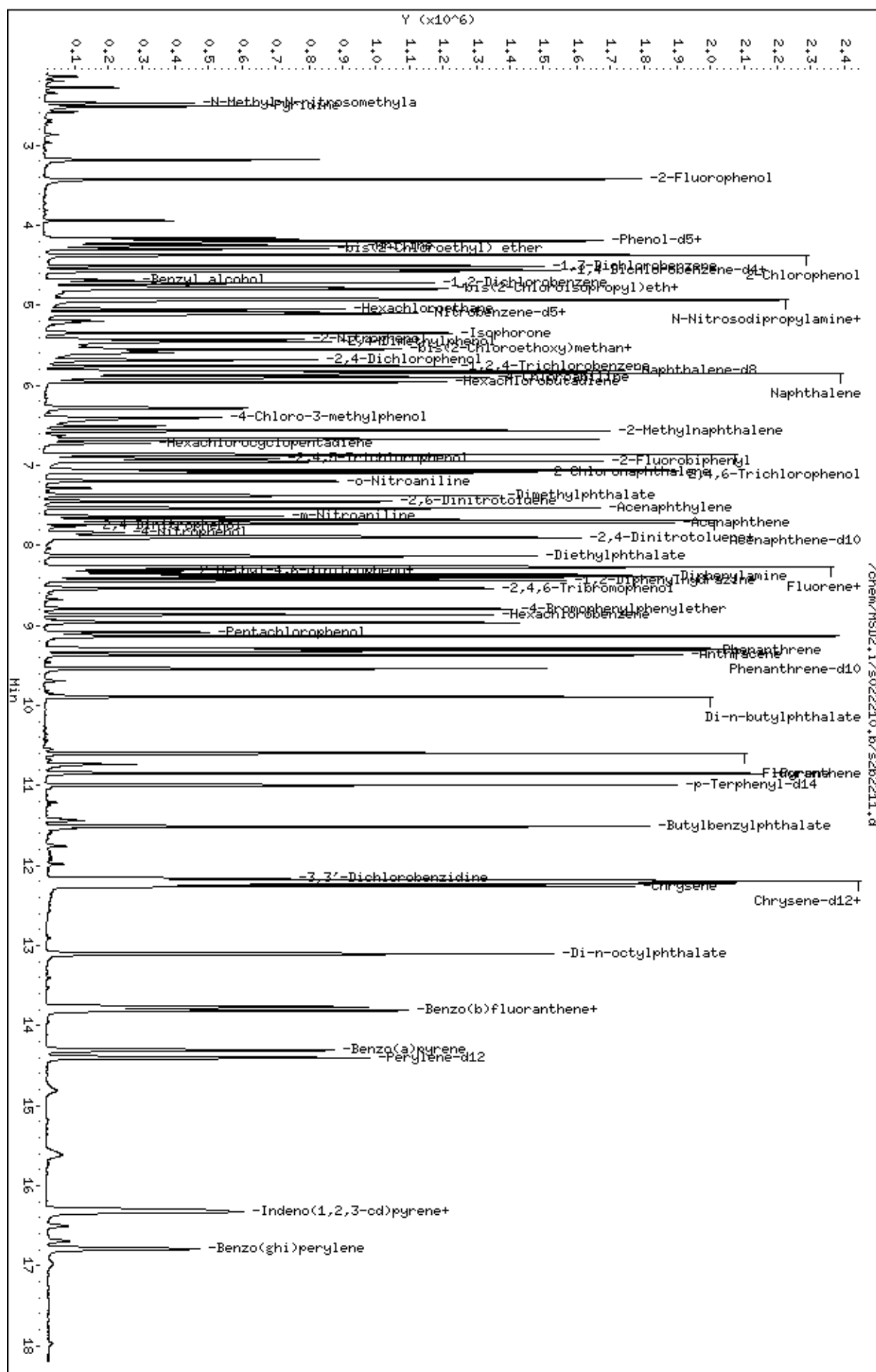
Compounds	QUANT SIG					CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ng/ul)	FINAL (ug/Kg)
=====	=====	==	=====	=====	=====	=====	=====
56 p-Nitroaniline	138	8.301	8.305	(1.080)	91213	43.9129	1770
133 Diphenylamine	169	8.395	8.397	(0.904)	489798	43.3678	1750
58 1,2-Diphenylhydrazine	77	8.439	8.441	(0.908)	598321	39.7338	1600
61 4-Bromophenylphenylether	248	8.795	8.796	(0.947)	181771	38.9214	1570
63 Hexachlorobenzene	284	8.868	8.869	(0.954)	193236	39.1805	1580
68 Phenanthrene	178	9.318	9.319	(1.003)	802377	38.1428	1540
69 Anthracene	178	9.374	9.375	(1.009)	801689	38.9406	1570
72 Di-n-butylphthalate	149	9.894	9.895	(1.065)	997033	42.2455	1710
76 Fluoranthene	202	10.601	10.604	(1.141)	948280	41.9705	1700
85 Butylbenzylphthalate	149	11.515	11.517	(0.942)	432674	42.5114	1720
89 Benzo(a)anthracene	228	12.210	12.214	(0.999)	822804	38.7749	1570
90 3,3'-Dichlorobenzidine	252	12.162	12.161	(0.995)	205997	40.9251	1650
92 Chrysene	228	12.260	12.264	(1.003)	795486	40.4640	1640
93 bis(2-Ethylhexyl)phthalate	149	12.192	12.193	(0.997)	594974	41.3955	1670
94 Di-n-octylphthalate	149	13.107	13.110	(0.910)	949737	39.3774	1590
95 Benzo(b)fluoranthene	252	13.771	13.776	(0.956)	699554	39.1378	1580
96 Benzo(k)fluoranthene	252	13.815	13.824	(0.959)	715737	40.4150	1630
97 Benzo(a)pyrene	252	14.311	14.320	(0.993)	622840	41.0944	1660
99 Indeno(1,2,3-cd)pyrene	276	16.304	16.315	(1.132)	504934	38.5260	1560
100 Dibenzo(a,h)anthracene	278	16.333	16.344	(1.134)	409978	39.2270	1580
101 Benzo(ghi)perylene	276	16.792	16.808	(1.166)	394336	35.6188	1440
1 N-Methyl-N-nitrosomethylamine	74	2.475	2.460	(0.542)	120720	35.1612	1420

# QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: /chem/HSD2.i/s022210.b/s2b2211.d  
 Date : 22-FEB-2010 18:39  
 Client ID: RE15-10-8366HSD  
 Sample Info: 11202045700196429711(SNH11)HSD  
 Volume Injected (uL): 0.5  
 Column phase: 3uM DB-5MS

Instrument: HSD2.i  
 Operator: AGS1  
 Column diameter: 0.20



# Miscellaneous Data

# Prep Logbook

## Extraction of Semivolatile and Nonvolatile Organic Compounds from Soil, Sludge, and Other Miscellaneous Solid Samples

Batch ID: 954286  
 Analyst: Alberto Velasco  
 Method: SW846 3550B

Verified by: \_\_\_\_\_

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)
1202045697 MB	17-FEB-2010 21:06:00	30	1	0.03333
1202045698 LCS	17-FEB-2010 21:06:00	30	1	0.03333
246851001	17-FEB-2010 21:06:00	30.19	1	0.03312
246851002	17-FEB-2010 21:06:00	30.03	1	0.0333
246851003	17-FEB-2010 21:06:00	30.03	1	0.0333
246851004	17-FEB-2010 21:06:00	30.19	1	0.03312
246851005	17-FEB-2010 21:06:00	30.03	1	0.0333
246851006	17-FEB-2010 21:06:00	30.04	1	0.03329
246851007	17-FEB-2010 21:06:00	30.02	1	0.03331
246851008	17-FEB-2010 21:06:00	30.02	1	0.03331
246851009	17-FEB-2010 21:06:00	30.03	1	0.0333
246851010	17-FEB-2010 21:06:00	30.02	1	0.03331
246851011	17-FEB-2010 21:06:00	30.13	1	0.03319
246866002	17-FEB-2010 21:06:00	30.19	1	0.03312
1202045699 MS (246866002)	17-FEB-2010 21:06:00	30.17	1	0.03315
1202045700 MSD (246866002)	17-FEB-2010 21:06:00	30.18	1	0.03313
246866003	17-FEB-2010 21:06:00	30.04	1	0.03329
246866004	17-FEB-2010 21:06:00	30.17	1	0.03315
246866005	17-FEB-2010 21:06:00	30.07	1	0.03326
246866006	17-FEB-2010 21:06:00	30.02	1	0.03331
246866007	17-FEB-2010 21:06:00	30.15	1	0.03317
246866008	17-FEB-2010 21:06:00	30.02	1	0.03331
246866009	17-FEB-2010 21:06:00	30.07	1	0.03326

Type	Sample Id	Description	Serial Number	Spike Amt	Units	Comments:
LCS	1202045698	BNA LCS w/o Benzidine 50ppm	UE100204-14	1	mL	Verified By: AAW
LCS	1202045698	BENZIDINE LCS	UE100212-22	1	mL	Final Solvent: CH2Cl2
MS	1202045699	BNA LCS w/o Benzidine 50ppm	UE100204-14	1	mL	
MS	1202045699	BENZIDINE LCS	UE100212-22	1	mL	
MSD	1202045700	BNA LCS w/o Benzidine 50ppm	UE100204-14	1	mL	
MSD	1202045700	BENZIDINE LCS	UE100212-22	1	mL	
SURR	All	BNA for all Surrogate	UE100212-10	1	mL	
REGNT	All	Acetone	100211-B1	150	mL	
REGNT	All	Methylene Chloride	1270181-D	150	mL	
SOURC	All	SODIUM SULFATE	1269268	30	g	

DATE: 01/08/2010

METHOD:8270C MSD2-DFTPP.m

OPERATOR:AGS1

REVIEWED BY: \_\_\_\_\_

DATE: \_\_\_\_\_

HARDWARE CONFIGURATION &amp; METHOD SUMMARY: No. 1 on pg. 1

SOLVENT LOT:1239699-D

Multiplier Voltage: 1106 Emv

Extr. Injection Volume: 0.5, 1.0 ul

DFTPP Solution ID: WBN091213-01

Internal Std ID: WBN100107-02

## CALIBRATION &amp; 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/MSD2.i/s010810a.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
s2a0808.d	WBN091213-01	AGS1	08-JAN-2010 21:18	50PPM	s010810a	1.0	DFTPP	passes 8270C (MEGA)
s2a0808D.d	WBN091213-01	AGS1	08-JAN-2010 21:18	50PPM	s010810a	1.0	DFTPP	passes 8270D (MEGA)
s2a0809.d	INSTBLK	AGS1	08-JAN-2010 21:51	40 PPM	s010810a	1.0	INSTBLK	
s2a0810.d	WBN091225-09	AGS1	08-JAN-2010 22:16	1 PPM	s010810a	1.0	MEGA001	LEV.1
s2a0811.d	WBN091225-10	AGS1	08-JAN-2010 22:44	10 PPM	s010810a	1.0	MEGA010	LEV.2
s2a0811D.d	WBN091225-10	AGS1	08-JAN-2010 22:44	10 PPM	s010810a	1.0	MEGA010	8270D requant as spl for C56 / C216 failed 70%-130% criteria
s2a0812.d	WBN091225-11	AGS1	08-JAN-2010 23:13	20 PPM	s010810a	1.0	MEGA020	LEV.3
s2a0812D.d	WBN091225-11	AGS1	08-JAN-2010 23:13	20 PPM	s010810a	1.0	MEGA020	8270D requant as spl for C48 passes 70%-130% criteria
s2a0813.d	WBN091225-12.4	AGS1	08-JAN-2010 23:41	40 PPM	s010810a	1.0	MEGA040	LEV.4
s2a0814.d	WBN091225-13	AGS1	09-JAN-2010 00:10	50 PPM	s010810a	1.0	MEGA050	LEV.5
s2a0815.d	WBN091225-14	AGS1	09-JAN-2010 00:38	80 PPM	s010810a	1.0	MEGA080	LEV.6
s2a0816.d	WBN091225-15	AGS1	09-JAN-2010 01:07	100 PPM	s010810a	1.0	MEGA100	LEV.7
s2a0817.d	WBN091225-16	AGS1	09-JAN-2010 01:35	120 PPM	s010810a	1.0	MEGA120	LEV.8
s2a0818.d	INSTBLK	AGS1	09-JAN-2010 02:04	40 PPM	s010810a	1.0	INSTBLK	
s2a0819.d	WBN091223-17.1	AGS1	09-JAN-2010 02:29	40 PPM	s010810a	1.0	MEGAICV	DUSE see s2a0820.d
s2a0820.d	WBN091223-17.2	AGS1	09-JAN-2010 02:58	40 PPM	s010810a	1.0	MEGAICV	PASSES 8270C 293321
s2a0820-625.d	WBN091223-17.2	AGS1	09-JAN-2010 02:58	40 PPM	ICV	1.0	MEGAICV	625 ICV 293321
s2a0820D.d	WBN091223-17.2	AGS1	09-JAN-2010 02:58	40 PPM	ICV	1.0	MEGAICV	8270D ICV 293321
s2a0821.d	WBN091213-01	AGS1	10-JAN-2010 16:32	50PPM	s010810a	1.0	DFTPP	passes 8270C (PEST-HEX)

s2a0821D.d	WBN091213-01	AGS1	10-JAN-2010 16:32	50PPM	s010810a	1.0 DFTPP	passes 8270D (PEST-HEX)	
s2a0822.d	INSTBLK	AGS1	10-JAN-2010 16:44	40 PPM	s010810a	1.0 INSTBLK		
s2a0823.d	WBN100103-01	AGS1	10-JAN-2010 17:09	10 PPM	cal	1.0 AP010	DUSE ICAL failed	
s2a0824.d	WBN100103-02	AGS1	10-JAN-2010 17:34	20 PPM	cal	1.0 AP020	DUSE	
s2a0825.d	WBN100103-03.1	AGS1	10-JAN-2010 17:59	40 PPM	cal	1.0 AP040	DUSE	
s2a0826.d	WBN100103-04	AGS1	10-JAN-2010 18:25	50 PPM	cal	1.0 AP050	DUSE	
s2a0827.d	WBN100103-05	AGS1	10-JAN-2010 18:50	80 PPM	cal	1.0 AP080	DUSE	
s2a0828.d	WBN100103-06	AGS1	10-JAN-2010 19:15	100 PPM	cal	1.0 AP100	DUSE	
s2a0829.d	WBN100103-07	AGS1	10-JAN-2010 19:40	120 PPM	cal	1.0 AP120	DUSE	
s2a0830.d	WBN100103-25	AGS1	10-JAN-2010 20:06	10 PPM	CAL	1.0 PEST010	LEV.2	
s2a0831.d	WBN100103-24	AGS1	10-JAN-2010 20:31	20 PPM	CAL	1.0 PEST020	LEV.3	
s2a0832.d	WBN100103-23.1	AGS1	10-JAN-2010 20:57	40 PPM	CAL	1.0 PEST040	LEV.4	
s2a0833.d	WBN100103-22	AGS1	10-JAN-2010 21:22	50 PPM	CAL	1.0 PEST050	LEV.5	
s2a0834.d	WBN100103-21	AGS1	10-JAN-2010 21:47	80 PPM	CAL	1.0 PEST080	LEV.6	
s2a0835.d	WBN100103-20	AGS1	10-JAN-2010 22:12	100 PPM	CAL	1.0 PEST100	LEV.7	
s2a0836.d	WBN100103-19	AGS1	10-JAN-2010 22:37	120 PPM	CAL	1.0 PEST120	LEV.8	
s2a0837.d	WBN091202-16	AGS1	10-JAN-2010 23:03	500 PPM	CAL	1.0 HEX0500	LEV.2	
s2a0837D.d	WBN091202-16	AGS1	10-JAN-2010 23:03	500 PPM	CAL	1.0 HEX0500	8270D requant as spl for C174 passes 70%-130% criteria	
s2a0838.d	WBN091202-15	AGS1	10-JAN-2010 23:28	1000 PPM	CAL	1.0 HEX1000	LEV.3	
s2a0839.d	WBN091202-14	AGS1	10-JAN-2010 23:53	1250 PPM	CAL	1.0 HEX1250	LEV.4	
s2a0840.d	WBN091202-13	AGS1	11-JAN-2010 00:18	1500 PPM	CAL	1.0 HEX1500	LEV.5	
s2a0841.d	WBN091202-12	AGS1	11-JAN-2010 00:44	1750 PPM	CAL	1.0 HEX1750	LEV.6	
s2a0842.d	UBN090826-02.6	AGS1	11-JAN-2010 01:09	2000 PPM	CAL	1.0 HEX2000	LEV.7	
s2a0843.d	WBN100103-08.1	AGS1	11-JAN-2010 01:35	40 PPM	DUSE	1.0 APICV	DUSE	
s2a0844.d	WBN100103-26.1	AGS1	11-JAN-2010 02:00	40 PPM	DUSE	1.0 PESTICV	DUSE CAP loose concentrated	
s2a0845.d	WBN100103-10.4	AGS1	11-JAN-2010 02:25	1250 PPM	ICV	1.0 HEXICV	passes 8270C	
s2a0845D.d	WBN100103-10.4	AGS1	11-JAN-2010 02:25	1250 PPM	ICV	1.0 HEXICV	8270D ICV	



s2a0846.d	WBN091213-01	AGS1	11-JAN-2010 14:49	50PPM	DFTPP		1.0	DFTPP	passes 8270C (AP-NEV)	
s2a0846D.d	WBN091213-01	AGS1	11-JAN-2010 14:49	50PPM	s010810a		1.0	DFTPP	passes 8270D (AP-NEV)	

Instrument Batch: /chem/MSD2.i/s010810a.b

Page: 1

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client		Comments	
s2a0848.d	WBN100103-01	AGS1	11-JAN-2010 15:27	10 PPM	CAL		1.0	AP010	LEV.2	
s2a0849.d	WBN100103-02	AGS1	11-JAN-2010 15:52	20 PPM	CAL		1.0	AP020	LEV.3	
s2a0850.d	WBN100103-03.1	AGS1	11-JAN-2010 16:17	40 PPM	DUSE		1.0	AP040	DUSE see s2a0856.d	
s2a0851.d	WBN100103-04	AGS1	11-JAN-2010 16:43	50 PPM	CAL		1.0	AP050	LEV.5	
s2a0852.d	WBN100103-05	AGS1	11-JAN-2010 17:08	80 PPM	DUSE		1.0	AP080	DUSE see s2a0857.d	
s2a0853.d	WBN100103-06	AGS1	11-JAN-2010 17:33	100 PPM	CAL		1.0	AP100	LEV.7	
s2a0854.d	WBN100103-07	AGS1	11-JAN-2010 17:58	120 PPM	CAL		1.0	AP120	LEV.8	
s2a0855.d	UBN091117-01	AGS1	11-JAN-2010 18:23	10 PPM	CAL		1.0	NEV010	LEV.2	
s2a0855D.d	UBN091117-01	AGS1	11-JAN-2010 18:23	10 PPM	CAL		1.0	NEV010	8270D requant as spl for C228/235 failed 70%-130% criteria	
s2a0856.d	WBN100103-03.1	AGS1	11-JAN-2010 18:50	40 PPM	CAL		1.0	AP040	LEV.4	
s2a0857.d	WBN100103-05	AGS1	11-JAN-2010 19:45	80 PPM	CAL		1.0	AP080	LEV.6	
s2a0858.d	UBN091117-02	AGS1	11-JAN-2010 20:18	20 PPM	CAL		1.0	NEV020	LEV.3	
s2a0859.d	UBN091117-03	JLD1	11-JAN-2010 20:43	40 PPM	CAL		1.0	NEV040	LEV.4	
s2a0860.d	UBN091117-04	AGS1	11-JAN-2010 21:08	50 PPM	CAL		1.0	NEV050	LEV.5	
s2a0861.d	UBN091117-05	AGS1	11-JAN-2010 21:33	80 PPM	CAL		1.0	NEV080	LEV.6	
s2a0862.d	UBN091117-06	AGS1	11-JAN-2010 21:58	100 PPM	CAL		1.0	NEV100	LEV.7	
s2a0863.d	UBN091117-07	AGS1	11-JAN-2010 22:24	120 PPM	CAL		1.0	NEV120	LEV.8	
s2a0864.d	WBN100103-08.1	AGS1	11-JAN-2010 22:49	40 PPM	ICV		1.0	APICV	passes 8270C	
s2a0864-625.d	WBN100103-08.1	AGS1	11-JAN-2010 22:49	40 PPM	ICV		1.0	APICV	625 ICV	
s2a0864D.d	WBN100103-08.1	AGS1	11-JAN-2010 22:49	40 PPM	ICV		1.0	APICV	8270D ICV	
s2a0865.d	WBN100103-26.3	AGS1	11-JAN-2010 23:14	40 PPM	ICV		1.0	PESTICV	passes 8270C	
s2a0865D.d	WBN100103-26.3	AGS1	11-JAN-2010 23:14	40 PPM	ICV		1.0	PESTICV	8270D ICV	

DATE: 02/22/2010

METHOD:8270C MSD2-DFTPP.m

OPERATOR:AGS1

REVIEWED BY: \_\_\_\_\_

DATE: \_\_\_\_\_

HARDWARE CONFIGURATION &amp; METHOD SUMMARY: No. 1 on pg. 1

SOLVENT LOT:1266705-D

Multiplier Voltage: 1106 Emv

Extr. Injection Volume: 0.5, 1.0 ul

DFTPP Solution ID: WBN100107-01

Internal Std ID: WBN100205-01

## CALIBRATION &amp; 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/MSD2.i/s022210.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
s2b2201.d	WBN100107-01	AGS1	22-FEB-2010 14:34	50PPM	DFTPP	1.0	DFTPP	8270C TUNE
s2b2202.d	WBN100121-13.2	AGS1	22-FEB-2010 14:46	40 PPM	CVS	1.0	MEGACVS	8270C (IS1: 250813)
s2b2203.d	WBN100120-03.2	AGS1	22-FEB-2010 15:15	40 PPM	CVS	1.0	APCVS	8270C
s2b2204.d	WBN100103-23.5	AGS1	22-FEB-2010 15:40	40 PPM	CVS	1.0	PESTCVS	8270C
s2b2205-1.d	1202045697	AGS1	22-FEB-2010 16:06	954297	10-1758	1.0	MB	
s2b2205.d	1202045697	AGS1	22-FEB-2010 16:06	954297	10-1752-1	1.0	MB	
s2b2206-1.d	1202045698	AGS1	22-FEB-2010 16:31	954297	10-1758	1.0	LCS	
s2b2206.d	1202045698	AGS1	22-FEB-2010 16:31	954297	10-1752-1	1.0	LCS	
s2b2207.d	246611002	AGS1	22-FEB-2010 16:57	952601	10-1702	1.0	LANL	
s2b2208.d	246611003	AGS1	22-FEB-2010 17:22	952601	10-1702	1.0	LANL	
s2b2209.d	246866002	AGS1	22-FEB-2010 17:48	954297	10-1758	1.0	LANL	
s2b2210.d	1202045699	AGS1	22-FEB-2010 18:14	954297	10-1758	1.0	MS	
s2b2211.d	1202045700	AGS1	22-FEB-2010 18:39	954297	10-1758	1.0	MSD	
s2b2212.d	246851001	AGS1	22-FEB-2010 19:04	954297	10-1752-1	1.0	LANL	
s2b2213.d	246851002	AGS1	22-FEB-2010 19:30	954297	10-1752-1	1.0	LANL	
s2b2214.d	246851003	AGS1	22-FEB-2010 19:55	954297	10-1752-1	1.0	LANL	
s2b2215.d	246851004	AGS1	22-FEB-2010 20:21	954297	10-1752-1	1.0	LANL	
s2b2216.d	246851005	AGS1	22-FEB-2010 20:46	954297	10-1752-1	1.0	LANL	
s2b2217.d	246851006	AGS1	22-FEB-2010 21:12	954297	10-1752-1	1.0	LANL	

+									
s2b2218.d	246851007	AGS1	22-FEB-2010 21:37	954297	10-1752-1		1.0 LANL		
+									
s2b2219.d	246851008	AGS1	22-FEB-2010 22:03	954297	10-1752-1		1.0 LANL		
+									
s2b2220.d	246851009	AGS1	22-FEB-2010 22:28	954297	10-1752-1		1.0 LANL		
+									
s2b2221.d	246851010	AGS1	22-FEB-2010 22:53	954297	10-1752-1		1.0 LANL		
+									
s2b2222.d	246851011	AGS1	22-FEB-2010 23:19	954297	10-1752-1		1.0 LANL		
+									
s2b2223.d	246866003	AGS1	22-FEB-2010 23:44	954297	10-1758		1.0 LANL		
+									
s2b2224.d	246866004	AGS1	23-FEB-2010 00:09	954297	10-1758		1.0 LANL		
+									
s2b2225.d	246866005	AGS1	23-FEB-2010 00:34	954297	10-1758		1.0 LANL		
+									
s2b2226.d	246866006	AGS1	23-FEB-2010 01:00	954297	10-1758		1.0 LANL		
+									
s2b2227.d	246866007	AGS1	23-FEB-2010 01:25	954297	10-1758		1.0 LANL		
+									
s2b2228.d	246866008	AGS1	23-FEB-2010 01:50	954297	10-1758		1.0 LANL		
+									
s2b2229.d	246866009	AGS1	23-FEB-2010 02:16	954297	10-1758		1.0 LANL	**FAILS ISTD - RERUN _____	
+									

Instrument Batch: /chem/MSD2.i/s022210.b

DATE: 02/23/2010

METHOD:8270C MSD2-DFTPP.m

OPERATOR:AGS1

REVIEWED BY: \_\_\_\_\_

DATE: \_\_\_\_\_

HARDWARE CONFIGURATION &amp; METHOD SUMMARY: No. 1 on pg. 1

SOLVENT LOT:1266705-D

Multiplier Voltage: 1106 Emv

Extr. Injection Volume: 0.5, 1.0 ul

DFTPP Solution ID: WBN100207-01

Internal Std ID: WBN100217-01

## CALIBRATION &amp; 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/MSD2.i/s022310.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
s2b2301.d	WBN100207-01	AGS1	23-FEB-2010 13:05	50PPM	DFTPP	1.0	DFTPP	8270C TUNE
s2b2301D.d	WBN100207-01	AGS1	23-FEB-2010 13:05	50PPM	DFTPP	1.0	DFTPP	8270D TUNE
s2b2302.d	WBN100129-05.3	AGS1	23-FEB-2010 13:17	40 PPM	DUSE	1.0	MEGACVS	DUSE
s2b2303.d	WBN100129-05.3	AGS1	23-FEB-2010 13:46	40 PPM	CVS	1.0	MEGACVS	8270C (IS1: 254206)
s2b2303D.d	WBN100129-05.3	AGS1	23-FEB-2010 13:46	40 PPM	CVS	1.0	MEGACVS	8270D
s2b2304.d	WBN100218-03.2	AGS1	23-FEB-2010 14:15	40 PPM	CVS	1.0	APCVS	8270C
s2b2304D.d	WBN100218-03.2	AGS1	23-FEB-2010 14:15	40 PPM	CVS	1.0	APCVS	8270D
s2b2305.d	WBN100205-23.3	AGS1	23-FEB-2010 14:41	40 PPM	CVS	1.0	PESTCVS	8270C
s2b2305D.d	WBN100205-23.3	AGS1	23-FEB-2010 14:41	40 PPM	CVS	1.0	PESTCVS	8270D
s2b2306.d	UE100222-10	AGS1	23-FEB-2010 15:06	BNALCS	s022310	1.0	LCSnoBenz	
s2b2307-1.d	1202049657	AGS1	23-FEB-2010 15:32	955959	10-1745	1.0	MB	
s2b2307.d	1202049657	AGS1	23-FEB-2010 15:32	955959	10-1706	1.0	MB	
s2b2308-1.d	1202049658	AGS1	23-FEB-2010 15:57	955959	10-1745	1.0	LCS	
s2b2308.d	1202049658	AGS1	23-FEB-2010 15:57	955959	10-1706	1.0	LCS	
s2b2309-1.d	1202049659	AGS1	23-FEB-2010 16:23	955959	10-1745	1.0	LCSD	
s2b2309.d	1202049659	AGS1	23-FEB-2010 16:23	955959	10-1706	1.0	LCSD	
s2b2310.d	1202048661	AGS1	23-FEB-2010 16:49	955564	EUI-7505	1.0	MB	*
s2b2311.d	1202048662	AGS1	23-FEB-2010 17:17	955564	EUI-7505	1.0	LCS	*C52 low
s2b2312.d	1202048669	AGS1	23-FEB-2010 17:47	955564	EUI-7505	1.0	LCSD	*C52 low

s2b2313.d	246866009	AGS1	23-FEB-2010 18:15	954297	10-1758		1.0 LANL	USE: rerun of s2b2229 - passes	
s2b2314.d	246682005	AGS1	23-FEB-2010 18:41	955959	10-1706		1.0 LANL	DUSE: rx of s4b1934 - confirms surr failure - INCLUDE IN MISC	
s2b2315.d	246752003	AGS1	23-FEB-2010 19:07	955959	10-1745		1.0 LANL	USE: rx of s6b1826 - passes surr OUT OF HOLD	
s2b2316.d	247212001	AGS1	23-FEB-2010 19:32	955564	EUI-7505		1.0 CARE	*	
s2b2317.d	247212002	AGS1	23-FEB-2010 20:01	955564	EUI-7505		1.0 CARE	*	
s2b2318.d	247295001	AGS1	23-FEB-2010 20:30	955564	EUI-7510		1.0 CARE	*	
s2b2319.d	247297001	AGS1	23-FEB-2010 20:59	955564	EUI-7511		1.0 CARE	*	
s2b2320.d	1202048663	AGS1	23-FEB-2010 21:27	955564	EUI-7511		1.0 MS	*	
s2b2321.d	1202048664	AGS1	23-FEB-2010 21:56	955564	EUI-7511		1.0 MSD	*	
s2b2322.d	247299001	AGS1	23-FEB-2010 22:25	955564	EUI-7512		1.0 CARE	*	
s2b2323.d	1202048662	AGS1	23-FEB-2010 22:54	955564	EUI-7505		1.0 LCS	DUSE: rerun of s2b2311 - still fails c52 (and c12)	
s2b2324.d	1202048669	AGS1	23-FEB-2010 23:22	955564	EUI-7505		1.0 LCSD	DUSE: rerun of s2b2311 - still fails c52 (and c12)	

Instrument Batch: /chem/MSD2.i/s022310.b

# LC/MS/MS EXPLOSIVES ANALYSIS

**LC/MS/MS Case Narrative  
Los Alamos National Laboratory (LANL)  
SDG 10-1758**

**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: 952706

Prep Batch Number: 952704

**Sample Analysis**

The following samples were analyzed using the analytical protocol as established in SW846 8321A Modified:

<b>Sample ID</b>	<b>Client ID</b>
246866002	RE15-10-8366
246866003	RE15-10-8367
246866004	RE15-10-8364
246866005	RE15-10-8365
246866006	RE15-10-8368
246866007	RE15-10-8340
246866008	RE15-10-8341
246866009	RE15-10-8376
1202041953	Method Blank (MB)
1202041954	Laboratory Control Sample (LCS)
1202041955	246866002(RE15-10-8366) Matrix Spike (MS)
1202041956	246866002(RE15-10-8366) Matrix Spike Duplicate (MSD)

**Preparation/Analytical Method Verification**

**SOP Reference**

Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-OA-E-056 REV# 12.

**Primary Analyte Analysis**

**Calibration Information**

**Initial Calibration**

All initial calibration requirements for this analysis have been met for this SDG.

### **Calibration Verification Standard Requirements**

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

### **Calibration Blank Requirements**

All initial or continuing calibration blanks (ICB or CCB) bracketing the analyses associated with this batch for this analysis were within acceptance criteria. Due to software limitations, the CCBs and/or the ICBs may have a concentration for target analytes in the Found column. These values should be zero.

### **CRI Requirements**

All low level calibration verification (CRI) requirements for this analysis were met by all bracketing CRI standards and may be based off the grand mean average percent recovery of all target analytes.

### **Quality Control (QC) Information**

#### **Method Blank (MB) Statement**

The MB(s) analyzed with this SDG for this analysis met the acceptance criteria.

#### **Surrogate Recoveries**

All the surrogate recoveries were within the established acceptance criteria in this SDG in this analytical batch for this analysis.

#### **Laboratory Control Sample (LCS) Recovery**

The LCS spike recoveries were within the established acceptance limits.

#### **QC Sample Designation**

Sample 246866002 (RE15-10-8366) was chosen for matrix spike and matrix spike duplicate analysis.

#### **Matrix Spike (MS) Recovery Statement**

The MS did not meet acceptance criteria for the recovery of 2,6-Dinitrotoluene at 89% with limits of 90-118%. The MSD confirmed the failure. The failure may be attributed to matrix interference in the samples. Target analytes were not detected in the parent sample. The data are reported. Please see data exception report 813179.

#### **Matrix Spike Duplicate (MSD) Recovery Statement**

The MSD did not meet acceptance criteria for the recovery of 2,6-Dinitrotoluene at 85.8% with limits of 90-118% and for the recovery of 2-Amino-4,6-dinitrotoluene at 83% with limits of 85-137%. The MS confirmed the failure. The failure may be attributed to matrix interference in the samples. Target analytes were not detected in the parent sample. The data are reported. Please see data exception report 813179.

#### **MS/MSD Relative Percent Difference (RPD) Statement**

The RPD(s) between the MS and MSD met the acceptance limits.

#### **Internal Standard (ISTD) Acceptance**

The internal standard responses were within the required acceptance criteria for all samples and QC in this SDG.

### **Technical Information**

#### **Holding Time Specifications**

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



#### **Preparation/Analytical Method Verification**

All procedures were performed as stated in the SOP.

#### **Sample Dilutions**

According to the GEL SOP for Method 8321A, all sample and QC extracts are diluted 1:1 v/v with HPLC grade water. The samples in this SDG in this analytical batch for this analysis did not require any additional dilutions.

#### **Sample Re-extraction/Re-analysis**

The LCS failed acceptance criteria. It was re-analyzed and passed acceptance criteria. The last re-analysis is reported.

#### **Secondary Analyte Analysis**

#### **Calibration Information**

##### **Initial Calibration**

All initial calibration requirements for this analysis have been met for this SDG.

##### **Calibration Verification Standard Requirements**

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

##### **Calibration Blank Requirements**

All initial or continuing calibration blanks (ICB or CCB) bracketing the analyses associated with this batch for this analysis were within acceptance criteria. Due to software limitations, the CCBs and/or the ICBs may have a concentration for target analytes in the Found column. These values should be zero.

##### **CRI Requirements**

All low level calibration verification (CRI) requirements for this analysis were met by all bracketing CRI standards and may be based off the grand mean average percent recovery of all target analytes.

#### **Quality Control (QC) Information**

##### **Method Blank (MB) Statement**

The MB(s) analyzed with this SDG for this analysis met the acceptance criteria.

##### **Surrogate Recoveries**

All the surrogate recoveries were within the established acceptance criteria in this SDG in this analytical batch for this analysis.

##### **Laboratory Control Sample (LCS) Recovery**

The LCS spike recoveries were within the established acceptance limits.

##### **QC Sample Designation**

Sample 246866002 (RE15-10-8366) was chosen for matrix spike and matrix spike duplicate analysis.

##### **Matrix Spike (MS) Recovery Statement**

The MS did not meet acceptance criteria for the recovery of TATB at 212% with limits of 29-155%. The MSD confirmed the failure. The failure may be attributed to matrix interference in the samples. Target analytes were not detected in the parent sample. The data are reported. Please see data exception report 813179.

**Matrix Spike Duplicate (MSD) Recovery Statement**

The MSD did not meet acceptance criteria for the recovery of TATB at 172% with limits of 29-155%. The MS confirmed the failure. The failure may be attributed to matrix interference in the samples. Target analytes were not detected in the parent sample. The data are reported. Please see data exception report 813179.

**MS/MSD Relative Percent Difference (RPD) Statement**

The RPD(s) between the MS and MSD met the acceptance limits.

**Internal Standard (ISTD) Acceptance**

The internal standards were not added to the secondary analyte extracts.

**Technical Information****Holding Time Specifications**

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

**Preparation/Analytical Method Verification**

All procedures were performed as stated in the SOP.

**Sample Dilutions**

According to the GEL SOP for Method 8321A, all sample and QC extracts are diluted 1:1 v/v with HPLC grade water. The samples in this SDG in this analytical batch for this analysis did not require any additional dilutions.

**Sample Re-extraction/Re-analysis**

Re-extractions or re-analyses were not required in this SDG in this analytical batch for this analysis except for dilutions.

**Miscellaneous Information****Data Exception (DER) Documentation**

Data exception report 813179 was generated for this SDG.

The MS did not meet acceptance criteria for the recovery of 2,6-Dinitrotoluene at 89% with limits of 90-118% and for the recovery of TATB at 212% with limits of 29-155%. The MSD did not meet acceptance criteria for the recovery of 2,6-Dinitrotoluene at 85.8% with limits of 90-118%, for the recovery of 2-Amino-4,6-dinitrotoluene at 83% with limits of 85-137% and for the recovery of TATB at 172% with limits of 29-155%. The failures may be attributed to matrix interference in the samples. Target analytes were not detected in the parent sample. 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**

The time gap that appears in the primary analyte analytical sequence of 03/22/10 is due to the addition of samples after the sequence finished. All continuing calibration verification requirements were met following the restart and sample analysis proceeded.

Due to software limitations, all initial calibration blanks must be designated as XIB001 in order for the forms to be correct.

Due to software limitations in the secondary analyte analysis, false positives and analytes detected below the MDL cannot be deleted from the raw data.

Due to software limitations, file extensions such as DL, RE, etc. may not appear on the generated forms and/or raw data.

### **System Configuration**

The laboratory utilizes a Waters LC 2795 liquid chromatography instrument for primary analyte analysis. It is coupled with either a Micromass Quattro Micro Mass Spectrometer/ Mass Spectrometer, or a Micromass Quattro Ultima Mass Spectrometer/ Mass Spectrometer. Each being designated as LCMSMS #1, and LCMSMS #2, respectively. It is fitted with an APCI (Atmospheric Pressure chemical Ionization) probe that is operated in the negative ionization mode for the primary analyte analysis. The laboratory also utilizes an Agilent 1100 liquid chromatography instrument for either primary or secondary analyte analysis. It is coupled with a Applied Biosystems 4000 Mass Spectrometer/ Mass Spectrometer, designated as either LCMSMS #3 or LCMSMS #4. It is fitted with a APCI (Atmospheric Pressure chemical Ionization) probe that is operated in the negative ionization mode for both the primary and secondary analyte analysis.

### **Chromatographic Columns**

The detection of the primary analyte nitroaromatic and nitramines is accomplished through analysis on the following reversed phase column:

Phenomenex: Ultracarb 5u ODS (20), 250 x 4.60 mm ID.

The detection of the secondary analytes is accomplished through analysis on the following reversed phase column:

YMC: J'sphere ODS-H80, 150 x 4.6mm I.D.

### **Certification Statement**

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

### **Review Validation:**

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

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

Reviewer: Herbert K. Meier Date: 04/05/10

# SAMPLE DATA SUMMARY

1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8366

Lab Code: GEL

GEL Job No (SDG) 10-1758

Matrix: SOIL

GEL Sample ID: 246866002

Sample Amount 2

Moisture: 18.0

Amount Units g

Date Received: 11-FEB-10

Extraction Type Sonication

Extraction Batch ID: 952704

Concentrated Extract Volume (mL) 10

Date Extracted: 18-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0322050.wiff

Date Analyzed: 23-MAR-10 14:14

Units: ug/kg

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

\*Concentration =

Instrument	X	<u>Concentrated Extract Volume</u>	X	Dilution
Value		<u>Sample Amount</u>		Factor

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8366

Lab Code: GEL

GEL Job No (SDG) 10-1758

Matrix: SOIL

GEL Sample ID: 246866002

Sample Amount 2

Moisture: 18.0

Amount Units g

Date Received: 11-FEB-10

Extraction Type Sonication

Extraction Batch ID: 952704

Concentrated Extract Volume (mL) 10

Date Extracted: 18-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS03050071.wiff

Date Analyzed: 06-MAR-10 11:26

Units: ug/kg

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

\*Concentration =

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

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8367

Lab Code: GEL

GEL Job No (SDG) 10-1758

Matrix: SOIL

GEL Sample ID: 246866003

Sample Amount 2

Moisture: 19.3

Amount Units g

Date Received: 11-FEB-10

Extraction Type Sonication

Extraction Batch ID: 952704

Concentrated Extract Volume (mL) 10

Date Extracted: 18-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0322053.wiff

Date Analyzed: 23-MAR-10 15:33

Units: ug/kg

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

\*Concentration =

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

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8367

Lab Code: GEL

GEL Job No (SDG) 10-1758

Matrix: SOIL

GEL Sample ID: 246866003

Sample Amount 2

Moisture: 19.3

Amount Units g

Date Received: 11-FEB-10

Extraction Type Sonication

Extraction Batch ID: 952704

Concentrated Extract Volume (mL) 10

Date Extracted: 18-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS03050074.wiff

Date Analyzed: 06-MAR-10 12:14

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 =

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



1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8364

Lab Code: GEL

GEL Job No (SDG) 10-1758

Matrix: SOIL

GEL Sample ID: 246866004

Sample Amount 2

Moisture: 23.2

Amount Units g

Date Received: 11-FEB-10

Extraction Type Sonication

Extraction Batch ID: 952704

Concentrated Extract Volume (mL) 10

Date Extracted: 18-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0322054.wiff

Date Analyzed: 23-MAR-10 16:00

Units: ug/kg

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

\*Concentration =

Instrument				
Value	X	<u>Concentrated Extract Volume</u>	X	Dilution
		Sample Amount		Factor

1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8364

Lab Code: GEL

GEL Job No (SDG) 10-1758

Matrix: SOIL

GEL Sample ID: 246866004

Sample Amount 2

Moisture: 23.2

Amount Units g

Date Received: 11-FEB-10

Extraction Type Sonication

Extraction Batch ID: 952704

Concentrated Extract Volume (mL) 10

Date Extracted: 18-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS03050075.wiff

Date Analyzed: 06-MAR-10 12:29

Units: ug/kg

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

\*Concentration =

Instrument	X	<u>Concentrated Extract Volume</u>	X	Dilution
Value		<u>Sample Amoun</u>		Factor

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8365

Lab Code: GEL

GEL Job No (SDG) 10-1758

Matrix: SOIL

GEL Sample ID: 246866005

Sample Amount 2

Moisture: 16.9

Amount Units g

Date Received: 11-FEB-10

Extraction Type Sonication

Extraction Batch ID: 952704

Concentrated Extract Volume (mL) 10

Date Extracted: 18-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0322055.wiff

Date Analyzed: 23-MAR-10 16:26

Units: ug/kg

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

\*Concentration =

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

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8365

Lab Code: GEL

GEL Job No (SDG) 10-1758

Matrix: SOIL

GEL Sample ID: 246866005

Sample Amount 2

Moisture: 16.9

Amount Units g

Date Received: 11-FEB-10

Extraction Type Sonication

Extraction Batch ID: 952704

Concentrated Extract Volume (mL) 10

Date Extracted: 18-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS03050076.wiff

Date Analyzed: 06-MAR-10 12:45

Units: ug/kg

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

\*Concentration =

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

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8368

Lab Code: GEL

GEL Job No (SDG) 10-1758

Matrix: SOIL

GEL Sample ID: 246866006

Sample Amount 2

Moisture: 24.6

Amount Units g

Date Received: 11-FEB-10

Extraction Type Sonication

Extraction Batch ID: 952704

Concentrated Extract Volume (mL) 10

Date Extracted: 18-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0322056.wiff

Date Analyzed: 23-MAR-10 16:53

Units: ug/kg

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

\*Concentration =

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

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8368

Lab Code: GEL

GEL Job No (SDG) 10-1758

Matrix: SOIL

GEL Sample ID: 246866006

Sample Amount 2

Moisture: 24.6

Amount Units g

Date Received: 11-FEB-10

Extraction Type Sonication

Extraction Batch ID: 952704

Concentrated Extract Volume (mL) 10

Date Extracted: 18-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS03050077.wiff

Date Analyzed: 06-MAR-10 13:01

Units: ug/kg

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

\*Concentration =

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

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8340

Lab Code: GEL

GEL Job No (SDG) 10-1758

Matrix: SOIL

GEL Sample ID: 246866007

Sample Amount 2

Moisture: 24.2

Amount Units g

Date Received: 11-FEB-10

Extraction Type Sonication

Extraction Batch ID: 952704

Concentrated Extract Volume (mL) 10

Date Extracted: 18-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0322057.wiff

Date Analyzed: 23-MAR-10 17:19

Units: ug/kg

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

\*Concentration =

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

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8340

Lab Code: GEL

GEL Job No (SDG) 10-1758

Matrix: SOIL

GEL Sample ID: 246866007

Sample Amount 2

Moisture: 24.2

Amount Units g

Date Received: 11-FEB-10

Extraction Type Sonication

Extraction Batch ID: 952704

Concentrated Extract Volume (mL) 10

Date Extracted: 18-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS03050078.wiff

Date Analyzed: 06-MAR-10 13:16

Units: ug/kg

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

\*Concentration =

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



1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8341

Lab Code: GEL

GEL Job No (SDG) 10-1758

Matrix: SOIL

GEL Sample ID: 246866008

Sample Amount 2

Moisture: 7.6

Amount Units g

Date Received: 11-FEB-10

Extraction Type Sonication

Extraction Batch ID: 952704

Concentrated Extract Volume (mL) 10

Date Extracted: 18-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0322061.wiff

Date Analyzed: 23-MAR-10 19:05

Units: ug/kg

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

\*Concentration =

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

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8341

Lab Code: GEL

GEL Job No (SDG) 10-1758

Matrix: SOIL

GEL Sample ID: 246866008

Sample Amount 2

Moisture: 7.6

Amount Units g

Date Received: 11-FEB-10

Extraction Type Sonication

Extraction Batch ID: 952704

Concentrated Extract Volume (mL) 10

Date Extracted: 18-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS03050082.wiff

Date Analyzed: 06-MAR-10 14:19

Units: ug/kg

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

\*Concentration =

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

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8376

Lab Code: GEL

GEL Job No (SDG) 10-1758

Matrix: SOIL

GEL Sample ID: 246866009

Sample Amount 2

Moisture: 24.2

Amount Units g

Date Received: 11-FEB-10

Extraction Type Sonication

Extraction Batch ID: 952704

Concentrated Extract Volume (mL) 10

Date Extracted: 18-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0322062.wiff

Date Analyzed: 23-MAR-10 19:31

Units: ug/kg

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

\*Concentration =

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

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8376

Lab Code: GEL

GEL Job No (SDG) 10-1758

Matrix: SOIL

GEL Sample ID: 246866009

Sample Amount 2

Moisture: 24.2

Amount Units g

Date Received: 11-FEB-10

Extraction Type Sonication

Extraction Batch ID: 952704

Concentrated Extract Volume (mL) 10

Date Extracted: 18-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS03050083.wiff

Date Analyzed: 06-MAR-10 14:35

Units: ug/kg

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

\*Concentration =

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

# QUALITY CONTROL SUMMARY

# High Explosives Surrogate Recovery Summary

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1758

Lab Code: GEL

HPLC Column: Phenomenex Ultracarb 5u ODS(20)

Lab Sample ID	Client Sample ID	DNT	QC Limits	Flg
246866002	RE15-10-8366	89.6	70 – 144	
246866002	RE15-10-8366	101	70 – 144	
246866003	RE15-10-8367	97.2	70 – 144	
246866003	RE15-10-8367	99.6	70 – 144	
246866004	RE15-10-8364	93.2	70 – 144	
246866004	RE15-10-8364	102	70 – 144	
246866005	RE15-10-8365	98	70 – 144	
246866005	RE15-10-8365	99.2	70 – 144	
246866006	RE15-10-8368	98.4	70 – 144	
246866006	RE15-10-8368	103	70 – 144	
246866007	RE15-10-8340	96	70 – 144	
246866007	RE15-10-8340	101	70 – 144	
246866008	RE15-10-8341	90	70 – 144	
246866008	RE15-10-8341	101	70 – 144	
246866009	RE15-10-8376	92.4	70 – 144	
246866009	RE15-10-8376	103	70 – 144	
1202041953	MB for batch 952704	94.8	70 – 144	
1202041953	MB for batch 952704	107	70 – 144	
1202041954	LCS for batch 952704	104	70 – 144	
1202041954	LCS for batch 952704	104	70 – 144	
1202041955	RE15-10-8366(246866002MS)	86.4	70 – 144	
1202041955	RE15-10-8366(246866002MS)	106	70 – 144	
1202041956	RE15-10-8366(246866002MSD)	95.2	70 – 144	
1202041956	RE15-10-8366(246866002MSD)	98	70 – 144	

DNT = 3,4-Dinitrotoluene

3B  
High Explosives LCS/LCS Duplicate Summary

Lab Name: GEL Laboratories LLC

Client ID: LCS

Lab Code: GEL

GEL Job No (SDG) 10-1758

Extract Batch Code: 952704

Date Extracted: 18-FEB-10

GEL LCS ID: 1202041954

GEL LCSDUP ID:

Analysis Date/Time: 30-MAR-10 14:46

DUP Analysis Date/Time:

Reporting Units: ug/kg

QC Type: LCS/LCSD

Compound	Spike Added	LCS Conc	LCS Rec #	LCSD Conc	LCSD Rec #	RPD #	RPD	Recovery Limits
1,3,5-Trinitrobenzene	5000	4680	93.6					69 – 126
2,4,6-Trinitrotoluene	5000	5210	104					73 – 149
2,4-Dinitrotoluene	5000	5240	105					87 – 137
2,6-Dinitrotoluene	5000	4580	91.6					89 – 120
2-Amino-4,6-dinitrotoluene	5000	5730	115					90 – 130
4-Amino-2,6-dinitrotoluene	5000	5210	104					84 – 130
HMX	5000	4560	91.2					58 – 138
Nitrobenzene	5000	5600	112					71 – 122
PETN	5000	6460	129					64 – 137
RDX	5000	5600	112					81 – 137
Tetryl	5000	2760	55.2					51 – 112
m-Dinitrobenzene	5000	5200	104					83 – 122
m-Nitrotoluene	5000	5060	101					73 – 118
o-Nitrotoluene	5000	5620	112					72 – 119
p-Nitrotoluene	5000	5910	118					67 – 131

# Column to be used to flag recovery and RPD values with an asterisk

\* Values outside of QC limits

3B

High Explosives LCS/LCS Duplicate Summary

Lab Name: GEL Laboratories LLC

Client ID: LCS

Lab Code: GEL

GEL Job No (SDG) 10-1758

Extract Batch Code: 952704

Date Extracted: 18-FEB-10

GEL LCS ID: 1202041954

GEL LCSDUP ID:

Analysis Date/Time: 06-MAR-10 11:11

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	4590	91.8					52 – 114
2,6-Diamino-4-nitrotoluene	5000	4790	95.8					64 – 122
3,5-Dinitroaniline	5000	5120	102					70 – 127
tris(o-cresyl) phosphate	5000	5010	100					84 – 119
TATB	5000	6260	125					28 – 162

# Column to be used to flag recovery and RPD values with an asterisk

\* Values outside of QC limits



# High Explosives MS/MSD Summary

Lab Name: GEL Laboratories LLC

Client ID: RE15-10-8366

Lab Code: GEL

GEL Job No (SDG) 10-1758

Extract Batch Code: 952704

Date Extracted: 18-FEB-10

GEL Spike ID: 1202041955

GEL SpikeDup ID: 1202041956

Analysis Date/Time: 23-MAR-10 14:41

MSD Analysis Date/Time:

Reporting Units: ug/kg

QC Type: MS/MSD

Compound	Spike Added	Sample Conc	MS Conc	MS Rec #	MSD Conc	MSD Rec #	RPD #	RPD Limit	Rec Limits
1,3,5-Trinitrobenzene	5000	0	4560	91.2	4320	86.4	5.41	30	50 – 140
2,4,6-Trinitrotoluene	5000	0	4100	82	3950	79	3.73	30	76 – 144
2,4-Dinitrotoluene	5000	0	4850	97	5060	101	4.24	30	86 – 135
2,6-Dinitrotoluene	5000	40.7	4490	89 *	4330	85.8 *	3.63	30	90 – 118
2-Amino-4,6-dinitrotoluene	5000	0	4340	86.8	4150	83 *	4.48	30	85 – 137
4-Amino-2,6-dinitrotoluene	5000	0	4280	85.6	4100	82	4.3	30	72 – 143
HMX	5000	0	5460	109	5070	101	7.41	30	51 – 144
Nitrobenzene	5000	0	5020	100	4980	99.6	.8	30	70 – 122
PETN	5000	0	4670	93.4	4470	89.4	4.38	30	60 – 140
RDX	5000	0	4670	93.4	4500	90	3.71	30	59 – 152
Tetryl	5000	0	1950	39	1710	34.2 *	13.1	30	36 – 124
m-Dinitrobenzene	5000	0	5160	103	5010	100	2.95	30	85 – 118
m-Nitrotoluene	5000	0	5150	103	4920	98.4	4.57	30	70 – 120
o-Nitrotoluene	5000	0	4580	91.6	4530	90.6	1.1	30	69 – 123
p-Nitrotoluene	5000	0	4730	94.6	4940	98.8	4.34	30	65 – 133

#Column to be used to flag recovery and RPD values with an asterisk

# High Explosives MS/MSD Summary

Lab Name: GEL Laboratories LLC

Client ID: RE15-10-8366

Lab Code: GEL

GEL Job No (SDG) 10-1758

Extract Batch Code: 952704

Date Extracted:18-FEB-10

GEL Spike ID: 1202041955

GEL SpikeDup ID:1202041956

Analysis Date/Time: 06-MAR-10 11:42

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	3570	71.4	3720	74.4	4.12	26	34 – 135
2,6-Diamino-4-nitrotoluene	5000	0	4470	89.4	4240	84.8	5.28	30	55 – 130
3,5-Dinitroaniline	5000	0	5160	103	5080	102	1.56	30	73 – 129
tris(o-cresyl) phosphate	5000	0	4930	98.6	4930	98.6	0	30	72 – 127
TATB	5000	0	10600	212 *	8590	172 *	20.9	30	29 – 155

#Column to be used to flag recovery and RPD values with an asterisk

Explosives Initial Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1758

Lab Code: GEL

Lab Sample ID: XIBLK01

Analysis Date: 22-MAR-10 15:33

GEL Data File: EXP0322001.wiff

Instrument ID: LCMSMS

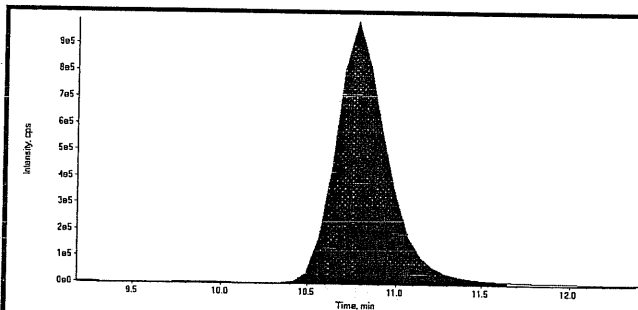
Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
1,3,5-Trinitrobenzene	0	0
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	2.67
2-Amino-4,6-dinitrotoluene	0	0
4-Amino-2,6-dinitrotoluene	0	0
HMX	0	0
Nitrobenzene	0	0
PETN	0	0
RDX	0	0
Tetryl	0	0
m-Dinitrobenzene	0	0
m-Nitrotoluene	0	0
o-Nitrotoluene	0	0
p-Nitrotoluene	0	0

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

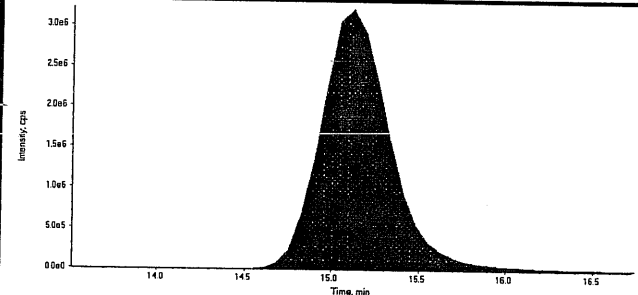
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LCMSMS#3

Data File	EXP0322001.wiff	Acquisition Date	3/22/2010 3:33:15 PM
Sample Name	XIBLK01	Acquisition Method	8321_pntx.dam
Batch Dilution Analyst	1 LER	Result Table	032210.rdb
Procedure Code	LCMSEXP_B	Sample Type	Unknown



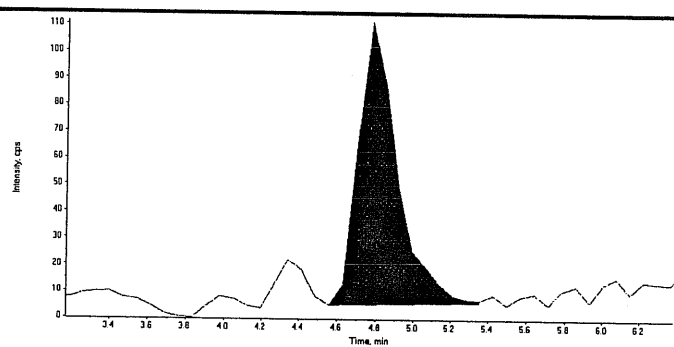
Compound Name:	13-Dinitrobenzene-d4 (172.1/46.1 amu)
Expected RT:	10.80
Actual RT:	10.80
Area Counts:	20000000.00
Manual Modification	No
Amount:	500.00(ng/mL)

Please refer to Form 8 for a list of Internal Standard Recoveries

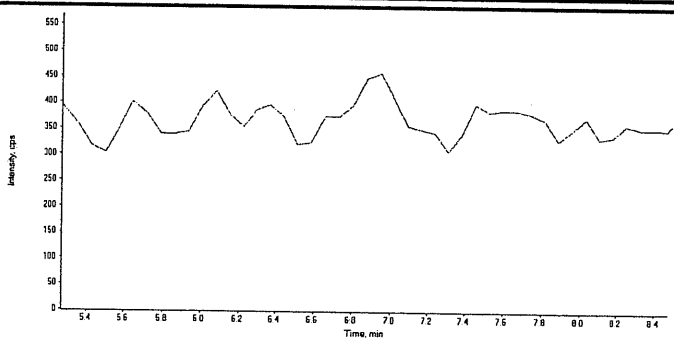


Compound Name:	26-Dinitrotoluene-d3 (185.0/155.0 amu)
Expected RT:	15.10
Actual RT:	15.10
Area Counts:	88600000.00
Manual Modification	No
Amount:	500.00(ng/mL)

Please refer to Form 8 for a list of Internal Standard Recoveries



Compound Name:	HMX (341.2/46.0 amu)
Expected RT:	4.77
Actual RT:	4.77
Area Counts:	1.49e+003
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A



Compound Name:	RDX (267.0/46.1 amu)
Expected RT:	6.87
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A

*Handwritten:* done 3/28/10  
Lan 3/28/10

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 27/03/2010 1:31:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0322001.wiff	<b>Acquisition Date</b>	3/22/2010 3:33:15 PM
<b>Sample Name</b>	XIBLK01	<b>Acquisition Method</b>	8321_pntx.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	032210.rdb
<b>Procedure Code</b>	LCMSEXP_B	<b>Sample Type</b>	Unknown

	<b>Compound Name:</b>	135-Trinitrobenzene (213.0/182.8 amu)
	Expected RT:	9.19
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	13-Dinitrobenzene (168.0/137.9 amu)
	Expected RT:	10.9
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	Tetryl (241.0/180.8 amu)
	Expected RT:	11.1
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

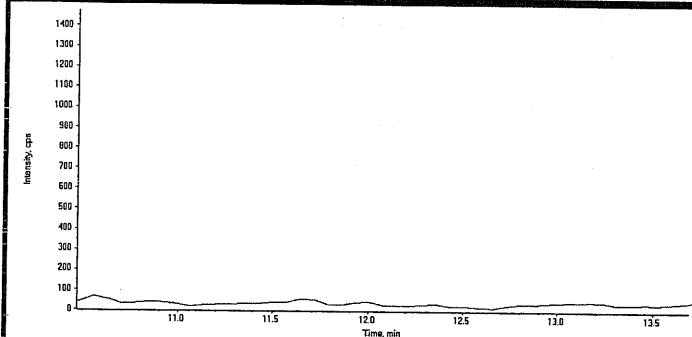
  

	<b>Compound Name:</b>	246-Trinitrotoluene (227.1/209.8 amu)
	Expected RT:	13.5
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

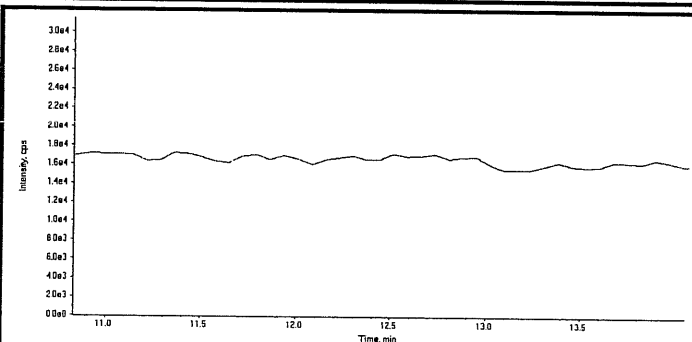
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 27/03/2010 1:31:00 PM  
LCMSMS#3

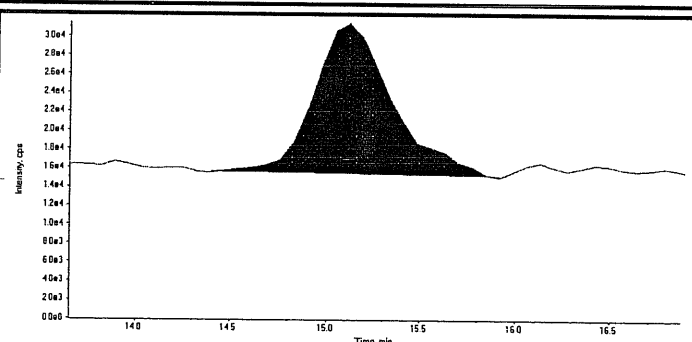
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Sample Name	XIBLK01	Acquisition Method	8321_pntx.dam
Batch Dilution Analyst	1 LER	Result Table	032210.rdb
Procedure Code	LCMSEXP_B	Sample Type	Unknown



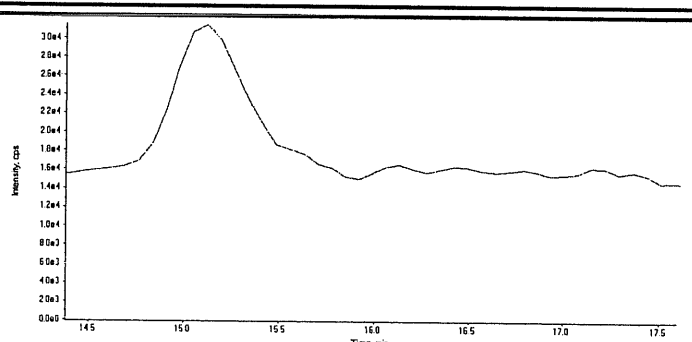
Compound Name:	Nitrobenzene (123.0/46.0 amu)
Expected RT:	12.1
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A



Compound Name:	34-dinitrotoluene (182.0/46.0 amu)
Expected RT:	12.4
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A



Compound Name:	26-dinitrotoluene (182.0/46.0 amu)
Expected RT:	15.3
Actual RT:	15.1
Area Counts:	4.61e+005
Manual Modification	No
Amount:	2.67 (ng/mL)
% Accuracy:	N/A

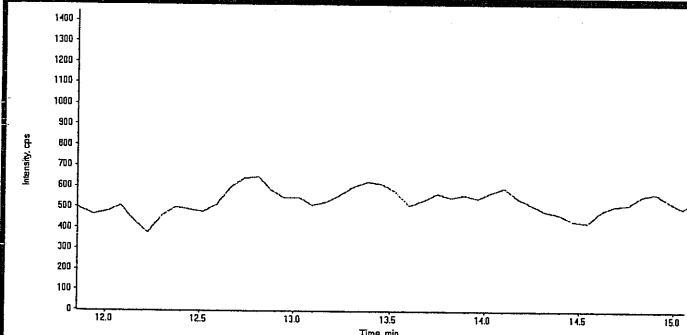


Compound Name:	24-dinitrotoluene (182.0/46.0 amu)
Expected RT:	16.0
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A

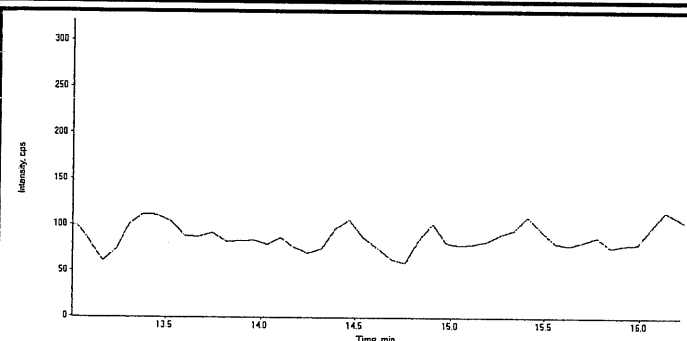
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 27/03/2010 1:31:00 PM  
LCMSMS#3

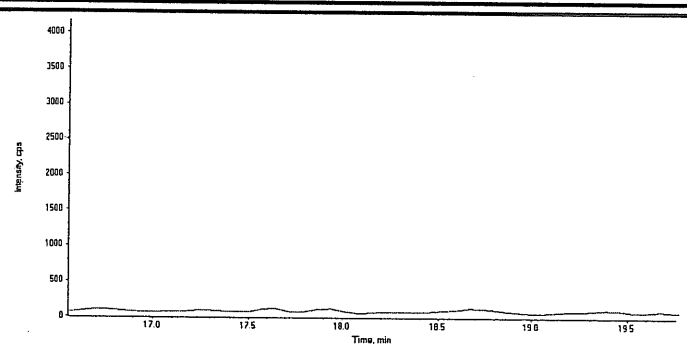
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Sample Name	XIBLK01	Acquisition Method	8321_pntx.dam
Batch Dilution Analyst	1 LER	Result Table	032210.rdb
Procedure Code	LCMSEXP_B	Sample Type	Unknown



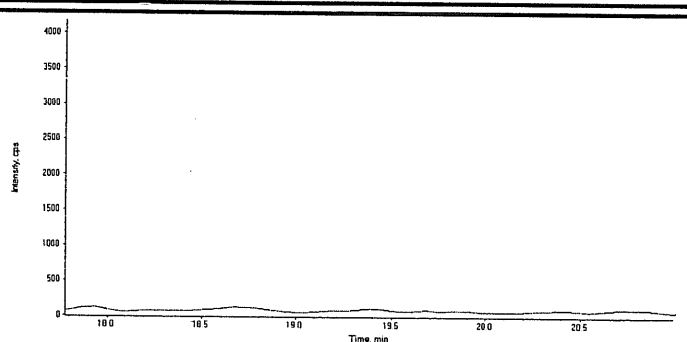
Compound Name:	4-Amino-26-dinitrotoluene (197.0/167.0 amu)
Expected RT:	13.5
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A



Compound Name:	2-Amino-46-dinitrotoluene (197.0/180.0 amu)
Expected RT:	14.6
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A



Compound Name:	2-Nitrotoluene (137.0/46.0 amu)
Expected RT:	18.2
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A



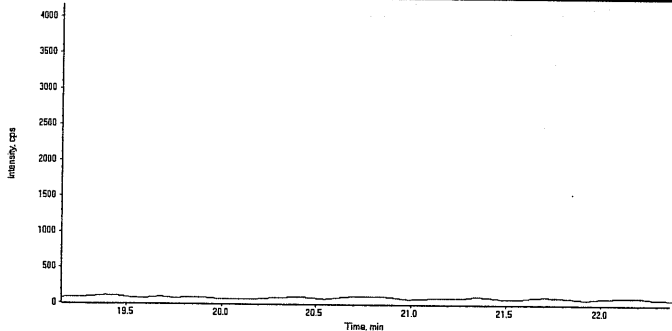
Compound Name:	4-Nitrotoluene (137.0/46.0 amu)
Expected RT:	19.4
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

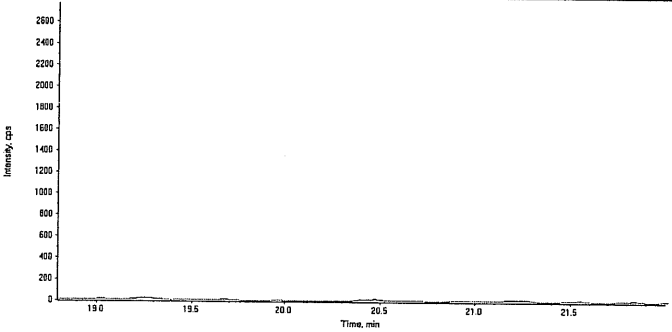
Printed: 27/03/2010 1:31:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0322001.wiff	<b>Acquisition Date</b>	3/22/2010 3:33:15 PM
<b>Sample Name</b>	XIBLK01	<b>Acquisition Method</b>	8321_pntx.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	032210.rdb
<b>Procedure Code</b>	LCMSEXP_B	<b>Sample Type</b>	Unknown

	<b>Compound Name:</b>	3-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	20.8
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	PETN (361.1/62.0 amu)
	Expected RT:	20.4
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A



Explosives Initial Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1758

Lab Code: GEL

Lab Sample ID: XIBLK01

Analysis Date: 22-MAR-10 15:59

GEL Data File: EXP0322002.wiff

Instrument ID: LCMSMS

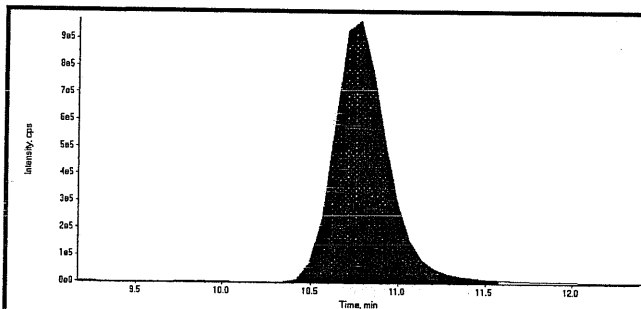
Column: Phenomenex Ultracarb 5u ODS(20)

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
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	2.8
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

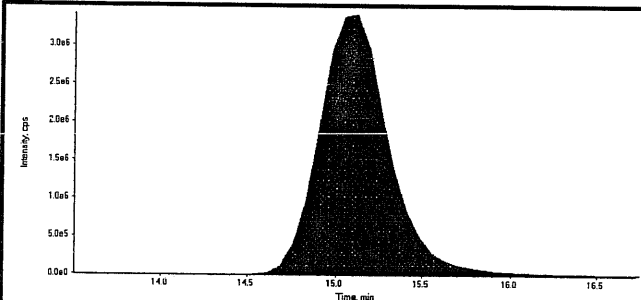
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 27/03/2010 1:31:00 PM  
LCMSMS#3

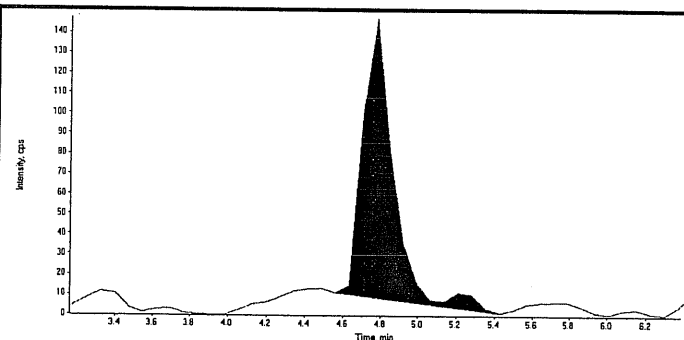
Data File	EXP0322002.wiff	Acquisition Date	3/22/2010 3:59:34 PM
Sample Name	XIBLK01	Acquisition Method	8321_pntx.dam
Batch Dilution Analyst	1 LER	Result Table	032210.rdb
Procedure Code	LCMSEXP_B	Sample Type	Unknown



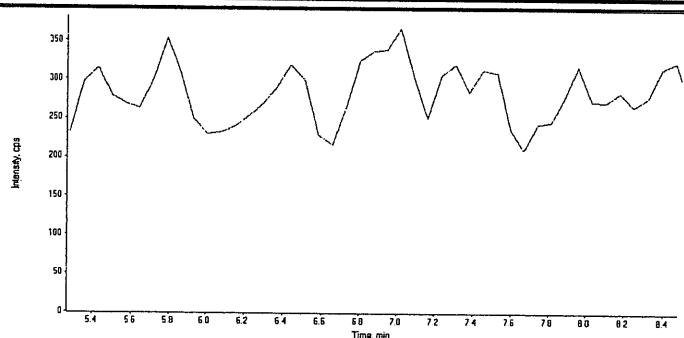
Compound Name:	13-Dinitrobenzene-d4 (172.1/46.1 amu)
Expected RT:	10.80
Actual RT:	10.80
Area Counts:	20800000.00
Manual Modification	No
Amount:	500.00(ng/mL)
Please refer to Form 8 for a list of Internal Standard Recoveries	



Compound Name:	26-Dinitrotoluene-d3 (185.0/155.0 amu)
Expected RT:	15.10
Actual RT:	15.10
Area Counts:	96000000.00
Manual Modification	No
Amount:	500.00(ng/mL)
Please refer to Form 8 for a list of Internal Standard Recoveries	



Compound Name:	HMX (341.2/46.0 amu)
Expected RT:	4.77
Actual RT:	4.77
Area Counts:	1.57e+003
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A



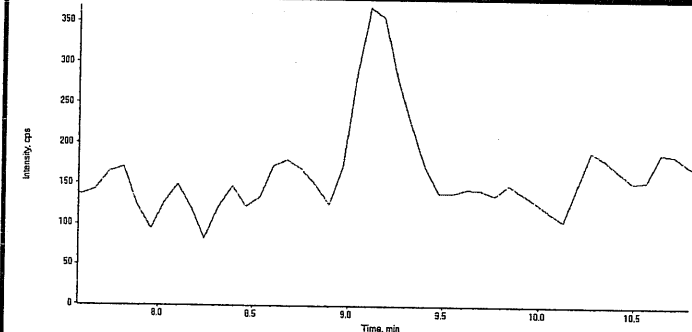
Compound Name:	RDX (267.0/46.1 amu)
Expected RT:	6.87
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A

*Run 3/28/10 HMX 03/25/10*

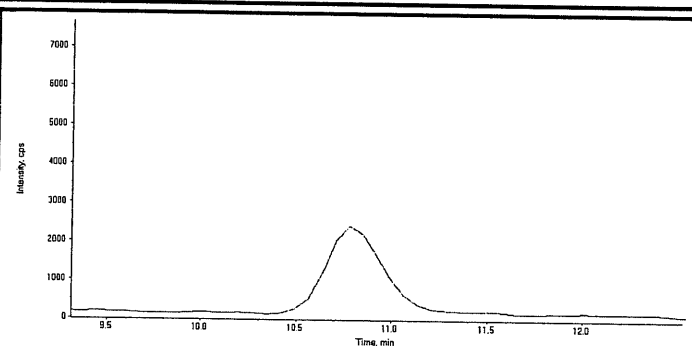
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 27/03/2010 1:31:00 PM  
LCMSMS#3

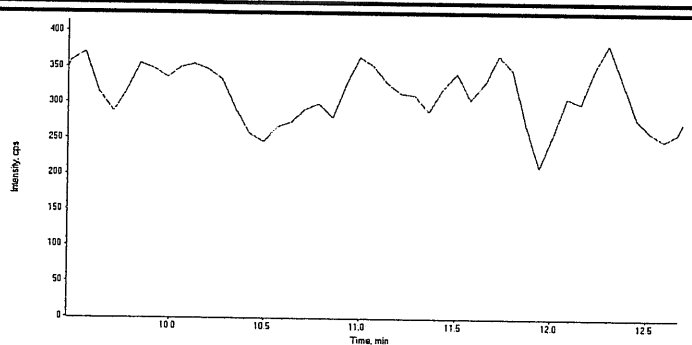
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<b>Sample Name</b>	XIBLK01	<b>Acquisition Method</b>	8321_pntx.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	032210.rdb
<b>Procedure Code</b>	LCMSEXP_B	<b>Sample Type</b>	Unknown



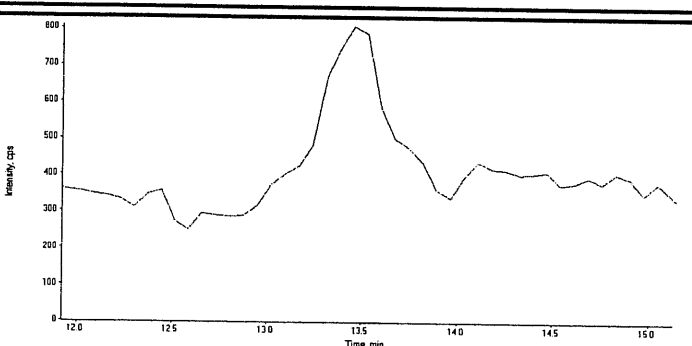
<b>Compound Name:</b>	135-Trinitrobenzene (213.0/182.8 amu)
Expected RT:	9.19
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A



<b>Compound Name:</b>	13-Dinitrobenzene (168.0/137.9 amu)
Expected RT:	10.9
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A



<b>Compound Name:</b>	Tetryl (241.0/180.8 amu)
Expected RT:	11.1
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A



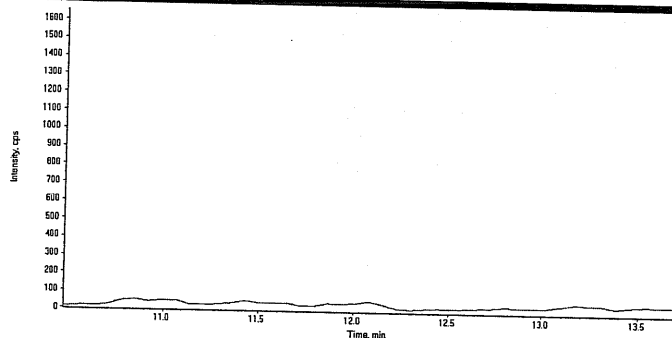
<b>Compound Name:</b>	246-Trinitrotoluene (227.1/209.8 amu)
Expected RT:	13.5
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

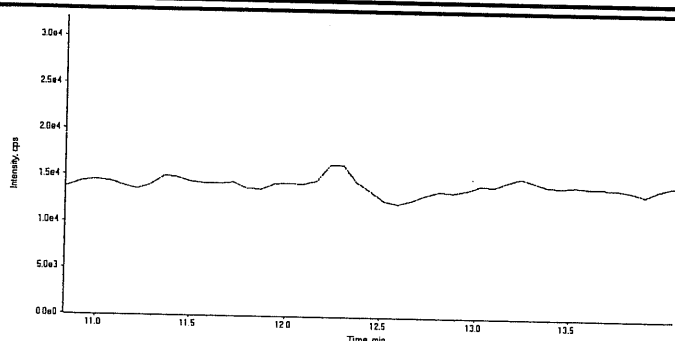
Printed: 27/03/2010 1:31:00 PM  
LCMSMS#3

Data File EXP0322002.wiff  
Sample Name XIBLK01  
Batch|Dilution|Analyst |1|LER  
Procedure Code LCMSEXP\_B

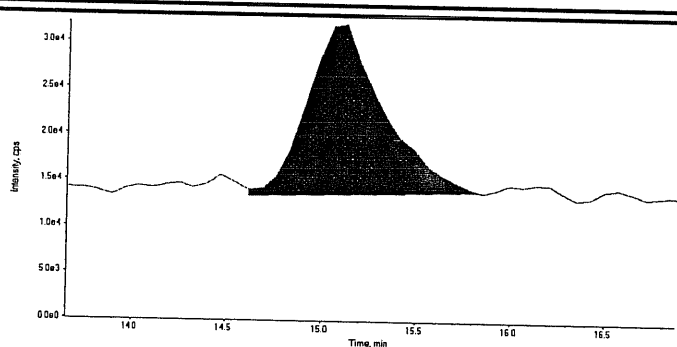
Acquisition Date 3/22/2010 3:59:34 PM  
Acquisition Method 8321\_pntx.dam  
Result Table 032210.rdb  
Sample Type Unknown



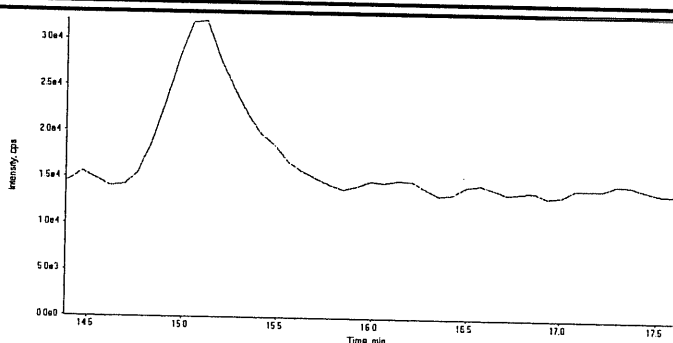
Compound Name:	Nitrobenzene (123.0/46.0 amu)
Expected RT:	12.1
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A



Compound Name:	34-dinitrotoluene (182.0/46.0 amu)
Expected RT:	12.4
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A



Compound Name:	26-dinitrotoluene (182.0/46.0 amu)
Expected RT:	15.3
Actual RT:	15.1
Area Counts:	5.22e+005
Manual Modification	No
Amount:	2.80 (ng/mL)
% Accuracy:	N/A

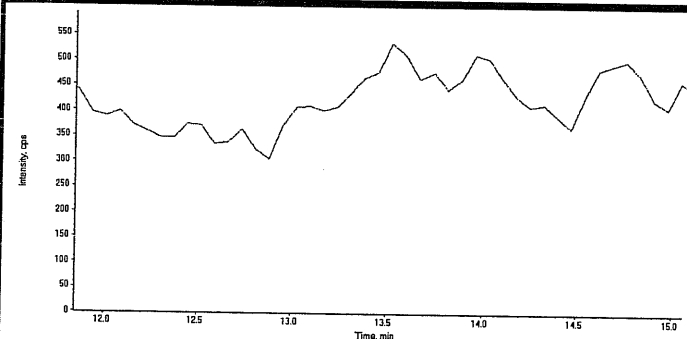


Compound Name:	24-dinitrotoluene (182.0/46.0 amu)
Expected RT:	16.0
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A

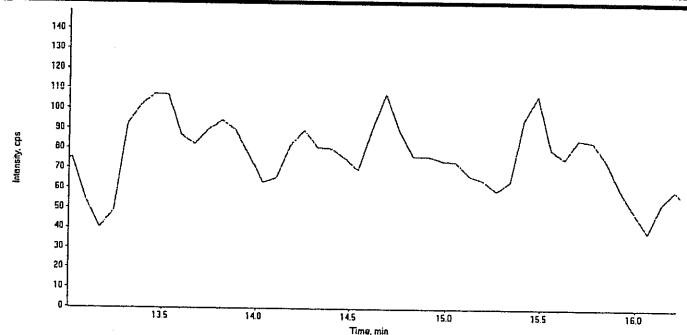
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 27/03/2010 1:31:00 PM  
LCMSMS#3

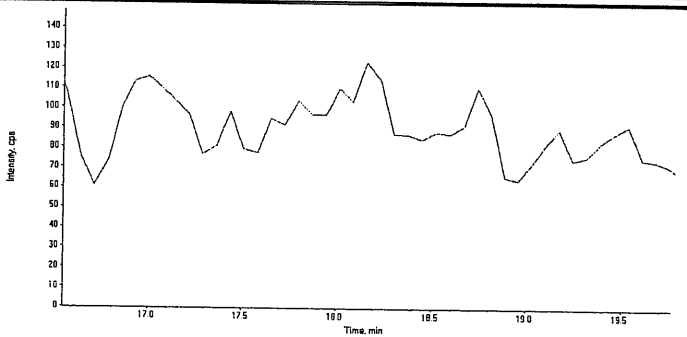
<b>Data File</b>	EXP0322002.wiff	<b>Acquisition Date</b>	3/22/2010 3:59:34 PM
<b>Sample Name</b>	XIBLK01	<b>Acquisition Method</b>	8321_pntx.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	032210.rdb
<b>Procedure Code</b>	LCMSEXP_B	<b>Sample Type</b>	Unknown



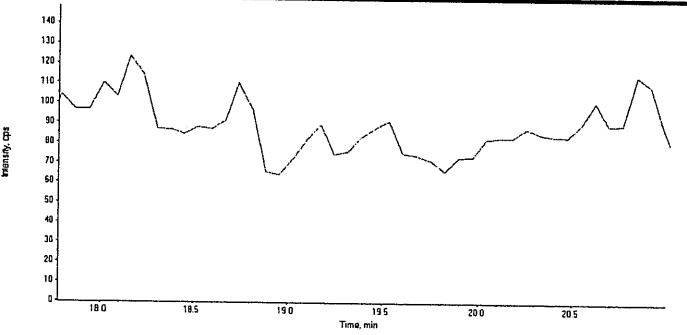
<b>Compound Name:</b>	4-Amino-26-dinitrotoluene (197.0/167.0 amu)
Expected RT:	13.5
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A



<b>Compound Name:</b>	2-Amino-46-dinitrotoluene (197.0/180.0 amu)
Expected RT:	14.6
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A



<b>Compound Name:</b>	2-Nitrotoluene (137.0/46.0 amu)
Expected RT:	18.2
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A



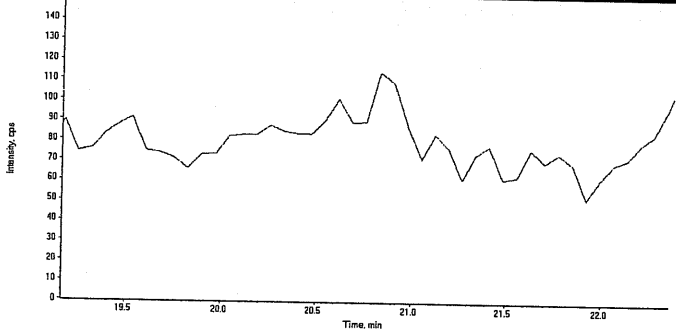
<b>Compound Name:</b>	4-Nitrotoluene (137.0/46.0 amu)
Expected RT:	19.4
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

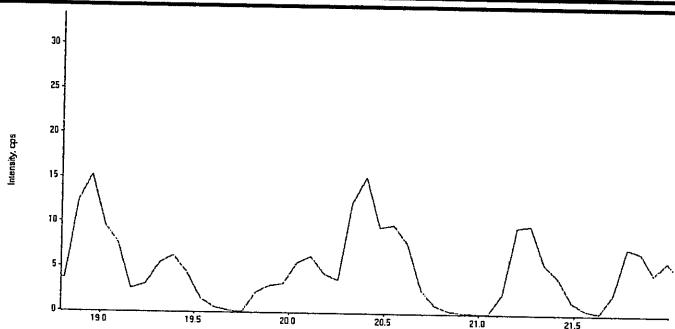
Printed: 27/03/2010 1:31:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0322002.wiff	<b>Acquisition Date</b>	3/22/2010 3:59:34 PM
<b>Sample Name</b>	XIBLK01	<b>Acquisition Method</b>	8321_pntx.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	032210.rdb
<b>Procedure Code</b>	LCMSEXP_B	<b>Sample Type</b>	Unknown

	<b>Compound Name:</b>	3-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	20.8
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	PETN (361.1/62.0 amu)
	Expected RT:	20.4
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

Explosives Initial Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1758

Lab Code: GEL

Lab Sample ID: XIBLK01

Analysis Date: 30-MAR-10 08:37

GEL Data File: EXP0330001.wiff

Instrument ID: LCMSMS

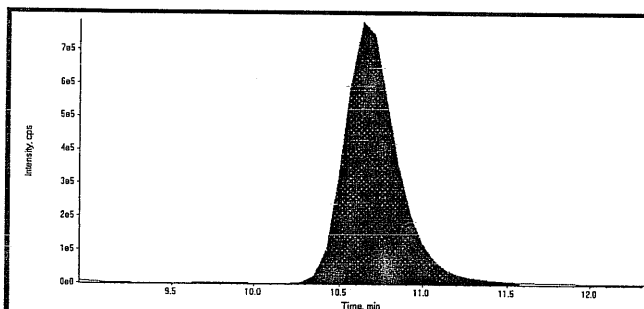
Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
1,3,5-Trinitrobenzene	0	0
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	3.2
2-Amino-4,6-dinitrotoluene	0	0
4-Amino-2,6-dinitrotoluene	0	0
HMX	0	0
Nitrobenzene	0	0
PETN	0	0
RDX	0	0
Tetryl	0	0
m-Dinitrobenzene	0	0
m-Nitrotoluene	0	0
o-Nitrotoluene	0	0
p-Nitrotoluene	0	0

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

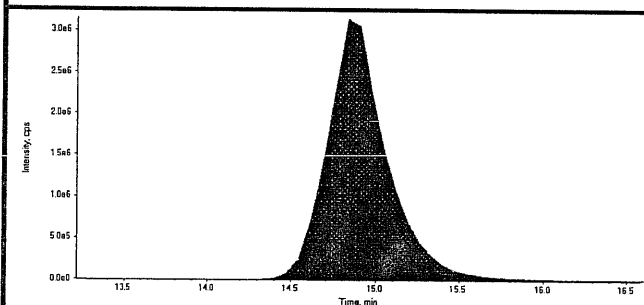
Printed: 31/03/2010 4:24:00 PM  
LCMSMS#3

Data File	EXP0330001.wiff	Acquisition Date	3/30/2010 8:37:03 AM
Sample Name	XIBLK01	Acquisition Method	8321_pntx.dam
Batch Dilution Analyst	1 LER	Result Table	033010.rdb
Procedure Code	LCMSEXP_B	Sample Type	Unknown



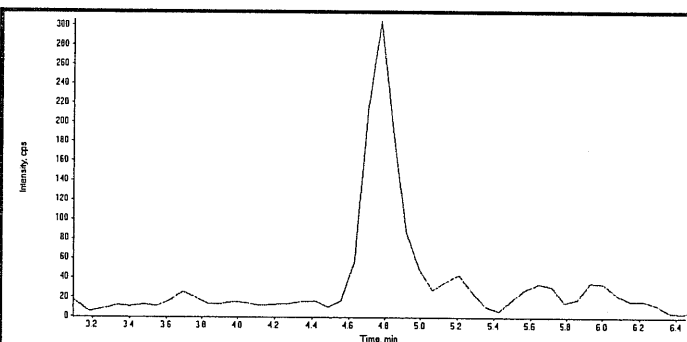
Compound Name:	13-Dinitrobenzene-d4 (172.1/46.1 amu)
Expected RT:	10.60
Actual RT:	10.60
Area Counts:	17400000.00
Manual Modification	No
Amount:	500.00(ng/mL)

Please refer to Form 8 for a list of Internal Standard Recoveries

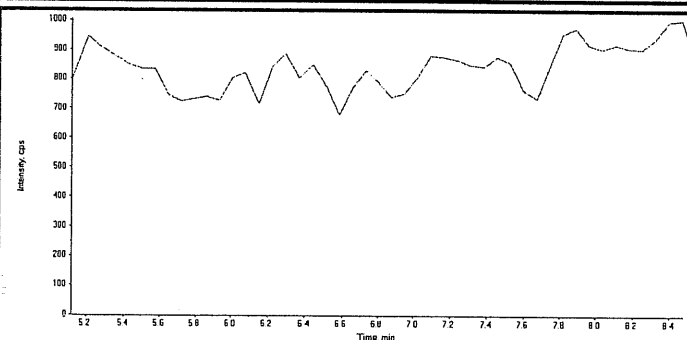


Compound Name:	26-Dinitrotoluene-d3 (185.0/155.0 amu)
Expected RT:	14.90
Actual RT:	14.80
Area Counts:	78300000.00
Manual Modification	No
Amount:	500.00(ng/mL)

Please refer to Form 8 for a list of Internal Standard Recoveries



Compound Name:	HMX (341.2/46.0 amu)
Expected RT:	4.77
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A



Compound Name:	RDX (267.0/46.1 amu)
Expected RT:	6.80
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A

*San*  
*4/2/10*  
*Hinc*  
*04/02/10*

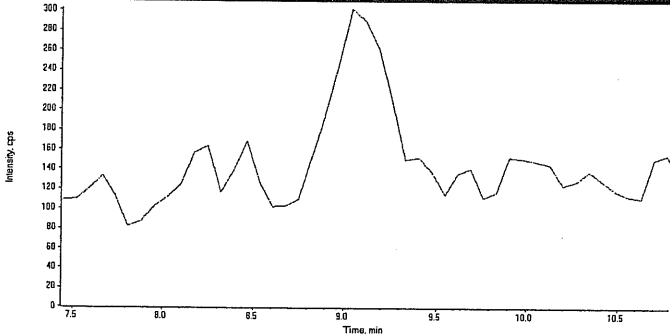


GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

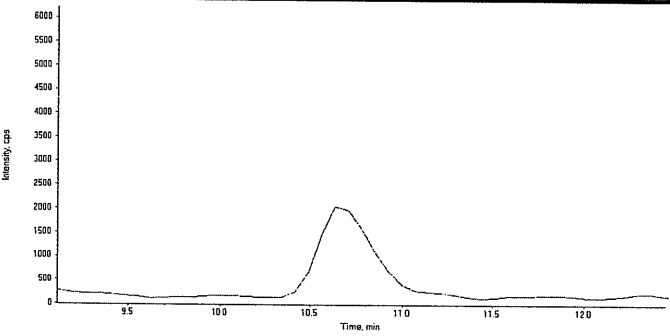
Printed: 31/03/2010 4:24:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0330001.wiff	<b>Acquisition Date</b>	3/30/2010 8:37:03 AM
<b>Sample Name</b>	XIBLK01	<b>Acquisition Method</b>	8321_pntx.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	033010.rdb
<b>Procedure Code</b>	LCMSEXP_B	<b>Sample Type</b>	Unknown

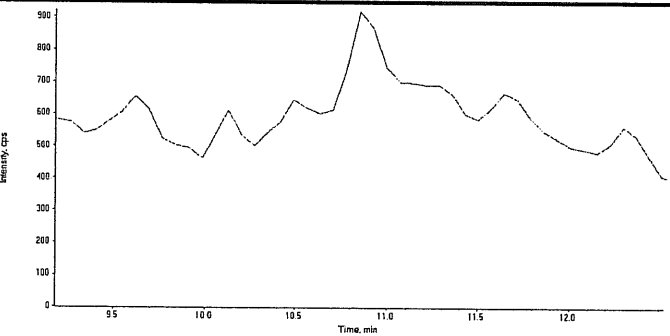
  

	<b>Compound Name:</b>	135-Trinitrobenzene (213.0/182.8 amu)
	Expected RT:	9.12
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

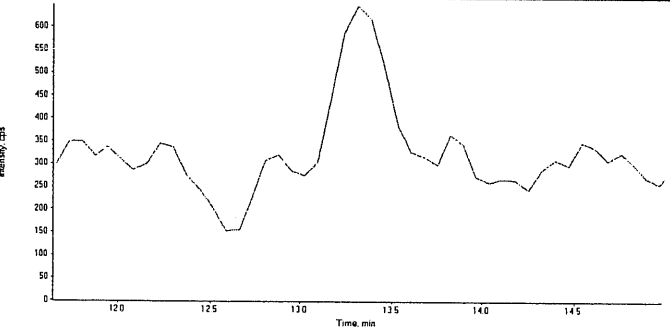
  

	<b>Compound Name:</b>	13-Dinitrobenzene (168.0/137.9 amu)
	Expected RT:	10.8
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	Tetryl (241.0/180.8 amu)
	Expected RT:	10.9
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

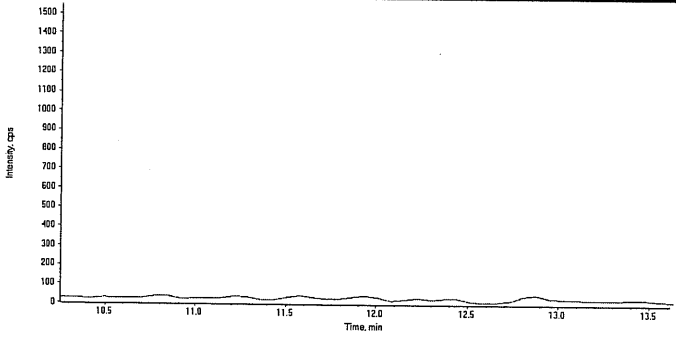
	<b>Compound Name:</b>	246-Trinitrotoluene (227.1/209.8 amu)
	Expected RT:	13.3
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

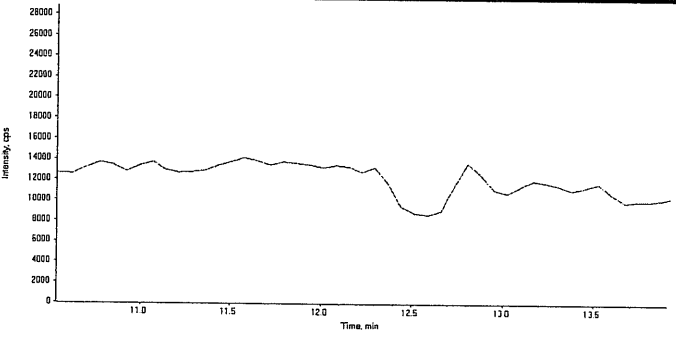
Printed: 31/03/2010 4:24:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0330001.wiff	<b>Acquisition Date</b>	3/30/2010 8:37:03 AM
<b>Sample Name</b>	XIBLK01	<b>Acquisition Method</b>	8321_pntx.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	033010.rdb
<b>Procedure Code</b>	LCMSEXP_B	<b>Sample Type</b>	Unknown

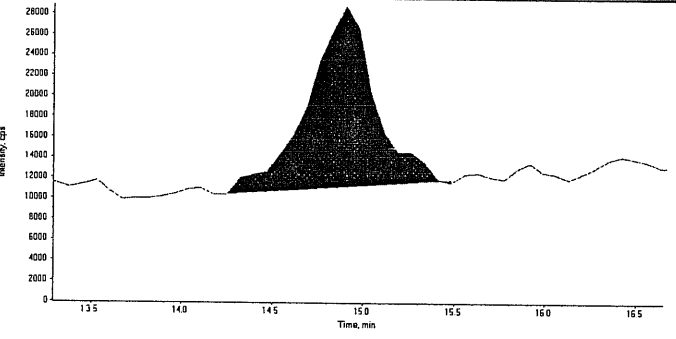
  

	<b>Compound Name:</b>	Nitrobenzene (123.0/46.0 amu)
	Expected RT:	11.9
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

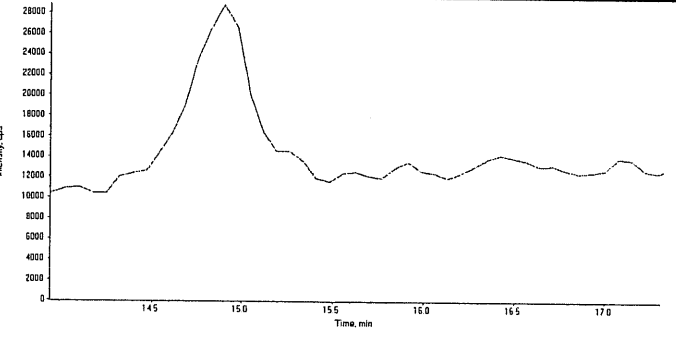
  

	<b>Compound Name:</b>	34-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	12.2
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	26-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	15.0
	Actual RT:	14.9
	Area Counts:	4.53e+005
	Manual Modification	No
	Amount:	3.20 (ng/mL)
	% Accuracy:	N/A

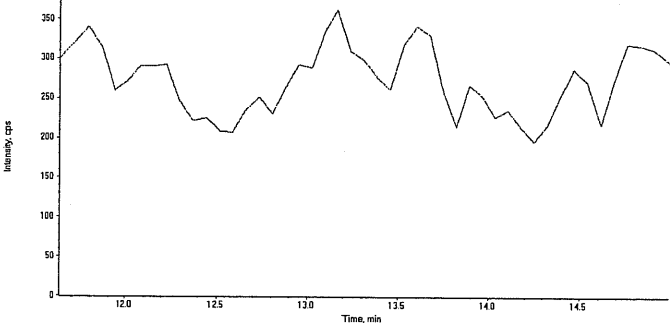
  

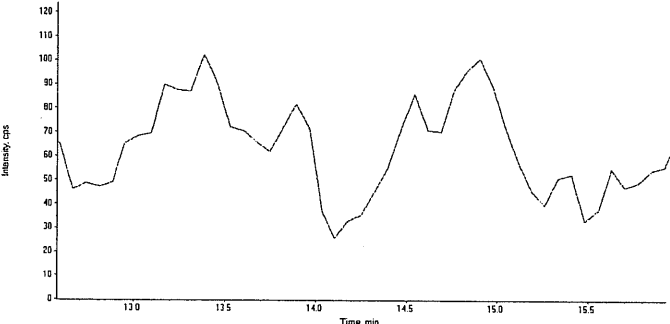
	<b>Compound Name:</b>	24-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	15.6
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

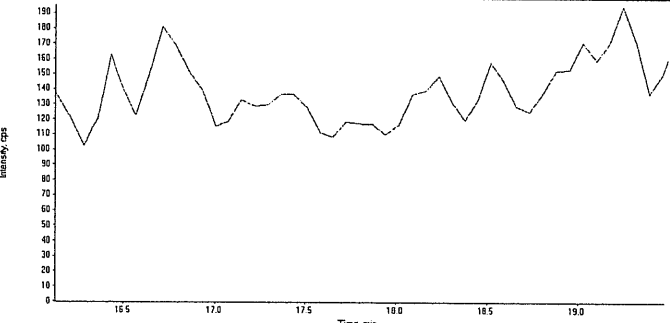
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

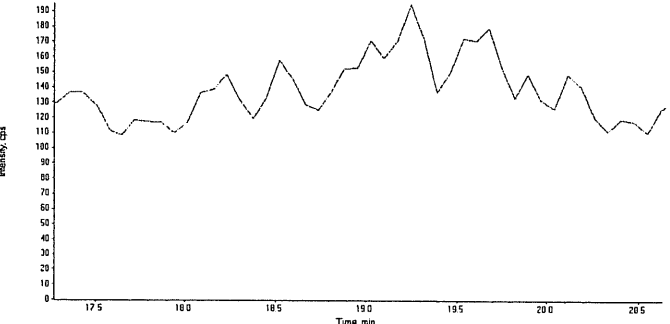
Printed: 31/03/2010 4:24:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0330001.wiff	<b>Acquisition Date</b>	3/30/2010 8:37:03 AM
<b>Sample Name</b>	XIBLK01	<b>Acquisition Method</b>	8321_pntx.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	033010.rdb
<b>Procedure Code</b>	LCMSEXP_B	<b>Sample Type</b>	Unknown

	<b>Compound Name:</b>	4-Amino-26-dinitrotoluene (197.0/167.0 amu)
	Expected RT:	13.3
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	2-Amino-46-dinitrotoluene (197.0/180.0 amu)
	Expected RT:	14.3
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	2-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	17.8
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	4-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	19.0
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 31/03/2010 4:24:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0330001.wiff	<b>Acquisition Date</b>	3/30/2010 8:37:03 AM
<b>Sample Name</b>	XIBLK01	<b>Acquisition Method</b>	8321_pntx.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	033010.rdb
<b>Procedure Code</b>	LCMSEXP_B	<b>Sample Type</b>	Unknown

	<b>Compound Name:</b>	3-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	20.3
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	PETN (361.1/62.0 amu)
	Expected RT:	20.0
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

Explosives Initial Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1758

Lab Code: GEL

Lab Sample ID: XIBLK01

Analysis Date: 30-MAR-10 09:03

GEL Data File: EXP0330002.wiff

Instrument ID: LCMSMS

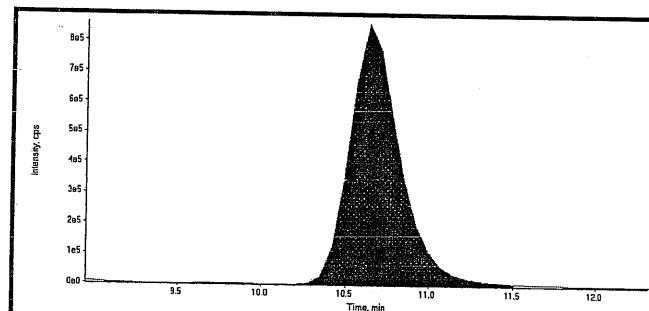
Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
1,3,5-Trinitrobenzene	0	0
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	3.08
2-Amino-4,6-dinitrotoluene	0	0
4-Amino-2,6-dinitrotoluene	0	0
HMX	0	0
Nitrobenzene	0	0
PETN	0	0
RDX	0	0
Tetryl	0	0
m-Dinitrobenzene	0	0
m-Nitrotoluene	0	0
o-Nitrotoluene	0	0
p-Nitrotoluene	0	0

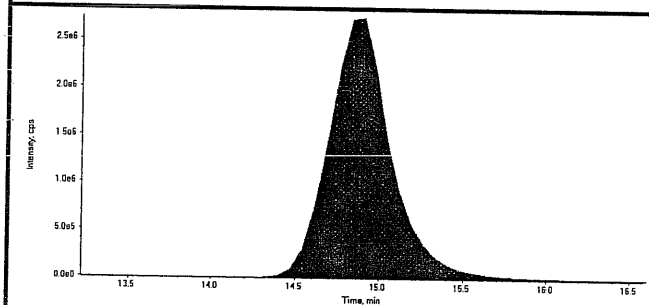
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 31/03/2010 4:24:00 PM  
LCMSMS#3

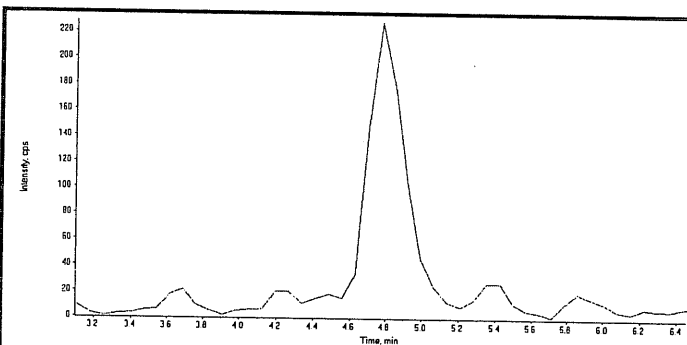
Data File	EXP0330002.wiff	Acquisition Date	3/30/2010 9:03:22 AM
Sample Name	XIBLK01	Acquisition Method	8321_pntx.dam
Batch Dilution Analyst	1 LER	Result Table	033010.rdb
Procedure Code	LCMSEXP_B	Sample Type	Unknown



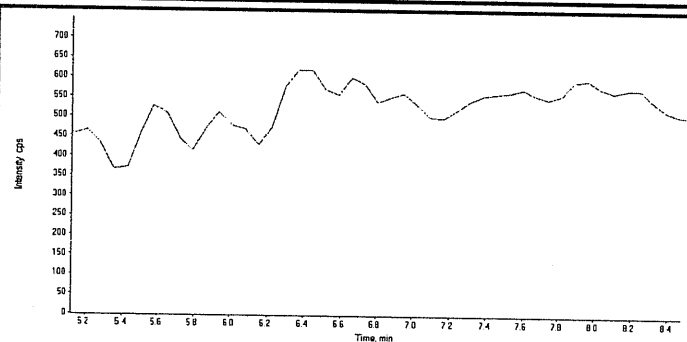
Compound Name:	13-Dinitrobenzene-d4 (172.1/46.1 amu)
Expected RT:	10.60
Actual RT:	10.60
Area Counts:	18200000.00
Manual Modification	No
Amount:	500.00(ng/mL)
Please refer to Form 8 for a list of Internal Standard Recoveries	



Compound Name:	26-Dinitrotoluene-d3 (185.0/155.0 amu)
Expected RT:	14.90
Actual RT:	14.90
Area Counts:	71800000.00
Manual Modification	No
Amount:	500.00(ng/mL)
Please refer to Form 8 for a list of Internal Standard Recoveries	



Compound Name:	HMX (341.2/46.0 amu)
Expected RT:	4.77
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A



Compound Name:	RDX (267.0/46.1 amu)
Expected RT:	6.80
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A

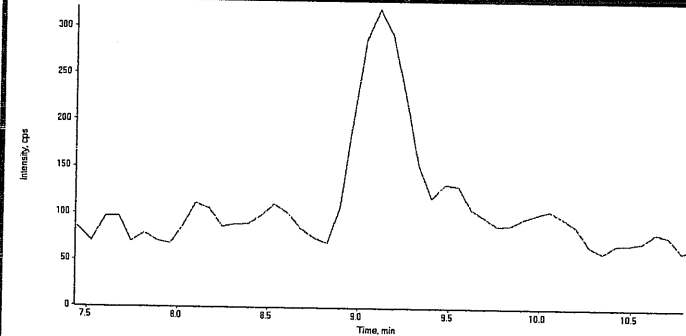
*Jan 4/2/10*

*4/2/10*

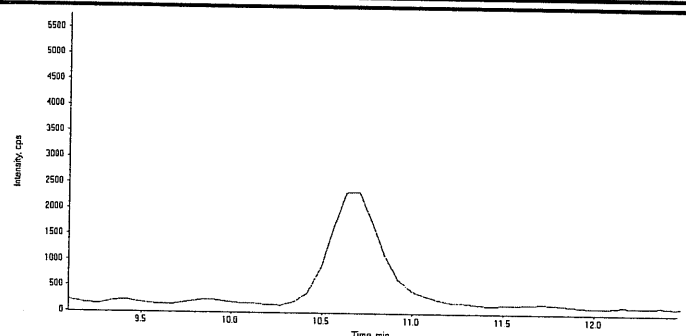
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 31/03/2010 4:24:00 PM  
LCMSMS#3

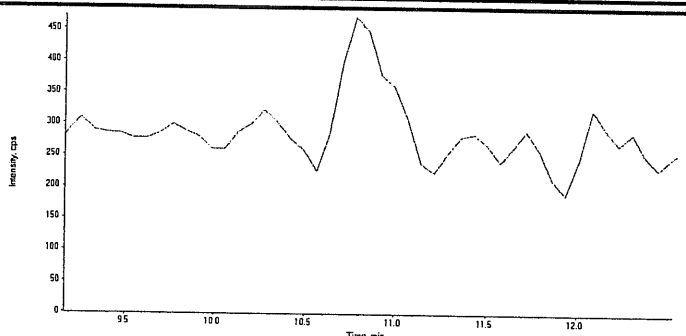
Data File	EXP0330002.wiff	Acquisition Date	3/30/2010 9:03:22 AM
Sample Name	XIBLK01	Acquisition Method	8321_pntx.dam
Batch Dilution Analyst	1 LER	Result Table	033010.rdb
Procedure Code	LCMSEXP_B	Sample Type	Unknown



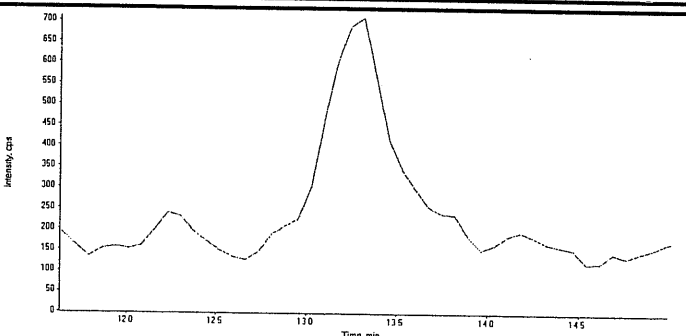
Compound Name:	135-Trinitrobenzene (213.0/182.8 amu)
Expected RT:	9.12
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A



Compound Name:	13-Dinitrobenzene (168.0/137.9 amu)
Expected RT:	10.8
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A



Compound Name:	Tetryl (241.0/180.8 amu)
Expected RT:	10.9
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A

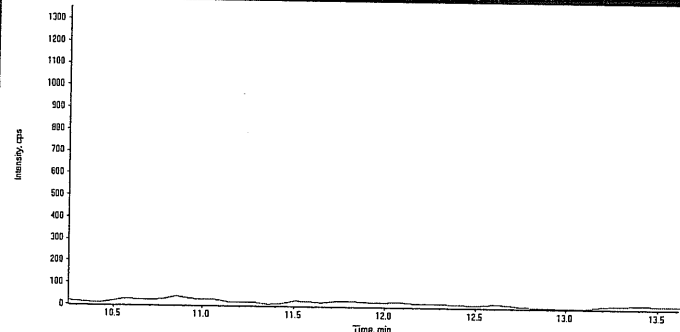


Compound Name:	246-Trinitrotoluene (227.1/209.8 amu)
Expected RT:	13.3
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A

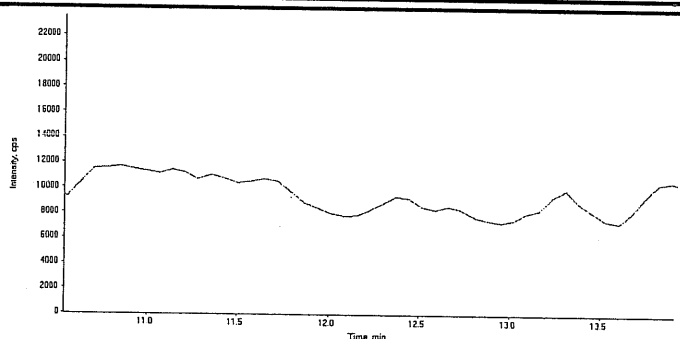
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 31/03/2010 4:24:00 PM  
LCMSMS#3

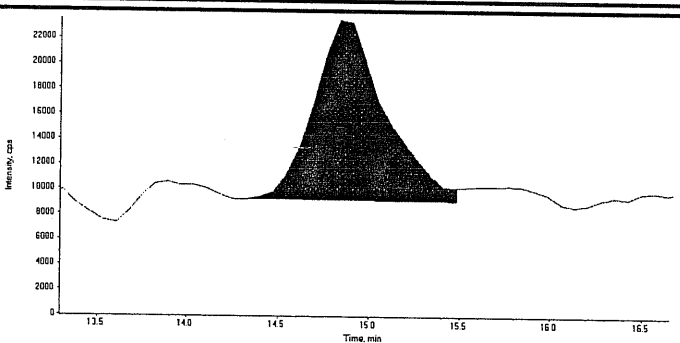
Data File	EXP0330002.wiff	Acquisition Date	3/30/2010 9:03:22 AM
Sample Name	XIBLK01	Acquisition Method	8321_pntx.dam
Batch Dilution Analyst	1 LER	Result Table	033010.rdb
Procedure Code	LCMSEXP_B	Sample Type	Unknown



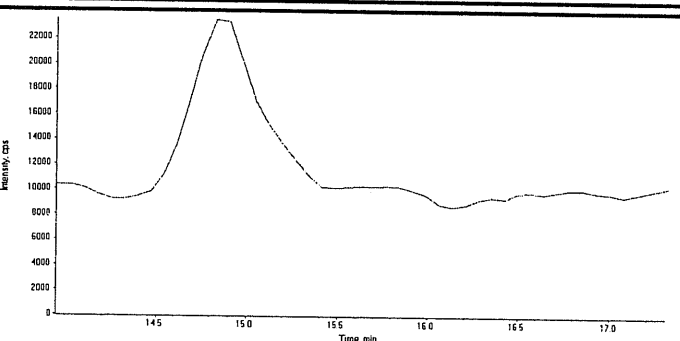
Compound Name:	Nitrobenzene (123.0/46.0 amu)
Expected RT:	11.9
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A



Compound Name:	34-dinitrotoluene (182.0/46.0 amu)
Expected RT:	12.2
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A



Compound Name:	26-dinitrotoluene (182.0/46.0 amu)
Expected RT:	15.0
Actual RT:	14.8
Area Counts:	4.00e+005
Manual Modification	No
Amount:	3.08 (ng/mL)
% Accuracy:	N/A



Compound Name:	24-dinitrotoluene (182.0/46.0 amu)
Expected RT:	15.6
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A



GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 31/03/2010 4:24:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0330002.wiff	<b>Acquisition Date</b>	3/30/2010 9:03:22 AM
<b>Sample Name</b>	XIBLK01	<b>Acquisition Method</b>	8321_pntx.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	033010.rdb
<b>Procedure Code</b>	LCMSEXP_B	<b>Sample Type</b>	Unknown

	<b>Compound Name:</b>	4-Amino-26-dinitrotoluene (197.0/167.0 amu)
	Expected RT:	13.3
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	2-Amino-46-dinitrotoluene (197.0/180.0 amu)
	Expected RT:	14.3
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	2-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	17.8
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

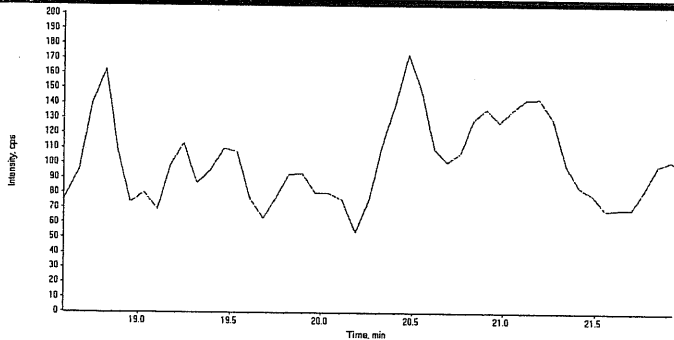
	<b>Compound Name:</b>	4-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	19.0
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

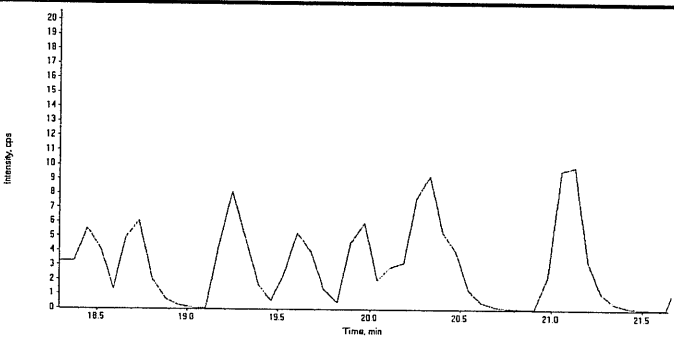
Printed: 31/03/2010 4:24:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0330002.wiff	<b>Acquisition Date</b>	3/30/2010 9:03:22 AM
<b>Sample Name</b>	XIBLK01	<b>Acquisition Method</b>	8321_pntx.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	033010.rdb
<b>Procedure Code</b>	LCMSEXP_B	<b>Sample Type</b>	Unknown

	<b>Compound Name:</b>	3-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	20.3
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	PETN (361.1/62.0 amu)
	Expected RT:	20.0
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

Explosives Initial Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1758

Lab Code: GEL

Lab Sample ID: XIBLK01

Analysis Date: 05-MAR-10 17:07

GEL Data File: EXS03050001.wiff

Instrument ID: LCMSMS

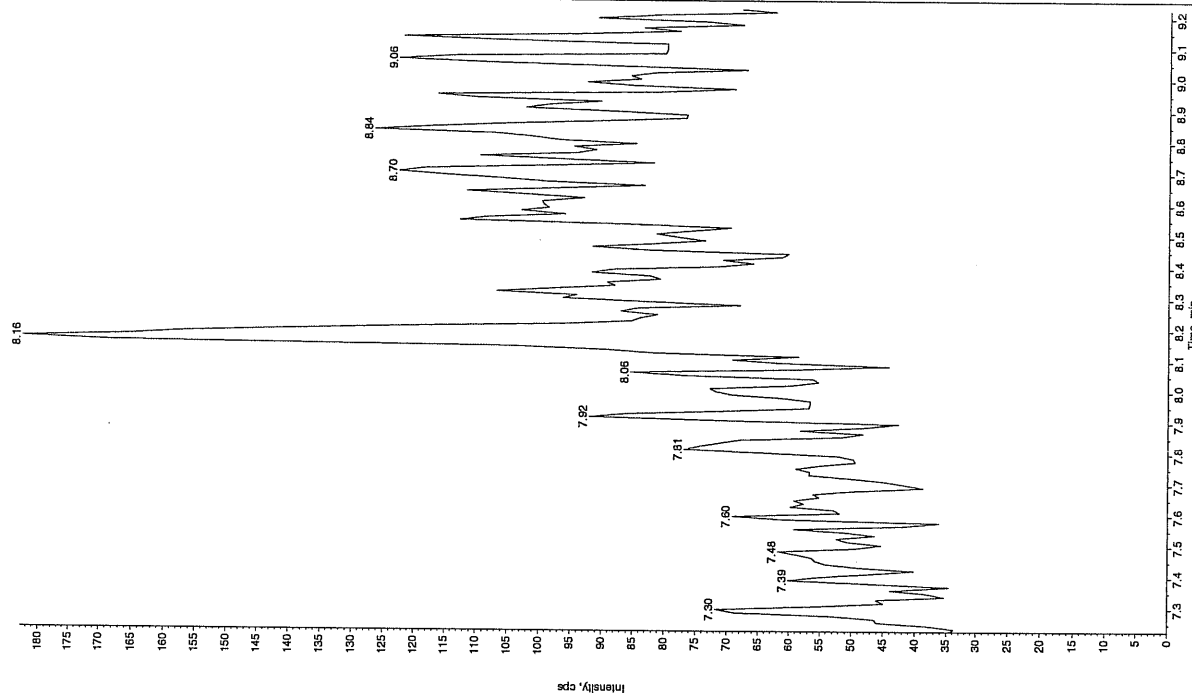
Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	0
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

Jan 31/10

Sample Name: "XIBLK01" Sample ID: "JILER" File: "EXS03050001.wif"  
 Peak Name: "35-Dinitroaniline" Mass(es): "182.046.0 amu"  
 Comment: "LCMSEXP\_B" Annotation: ""

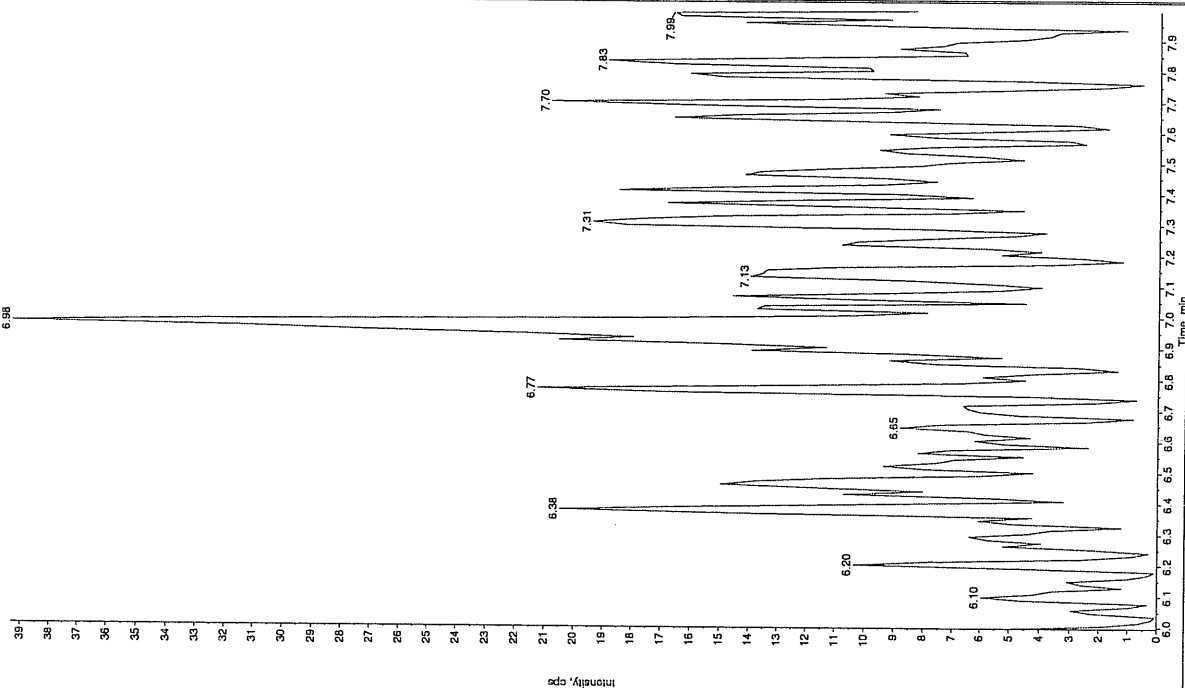
Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 3/5/2010  
 Acq. Time: 5:07:39 PM  
 Modified: No



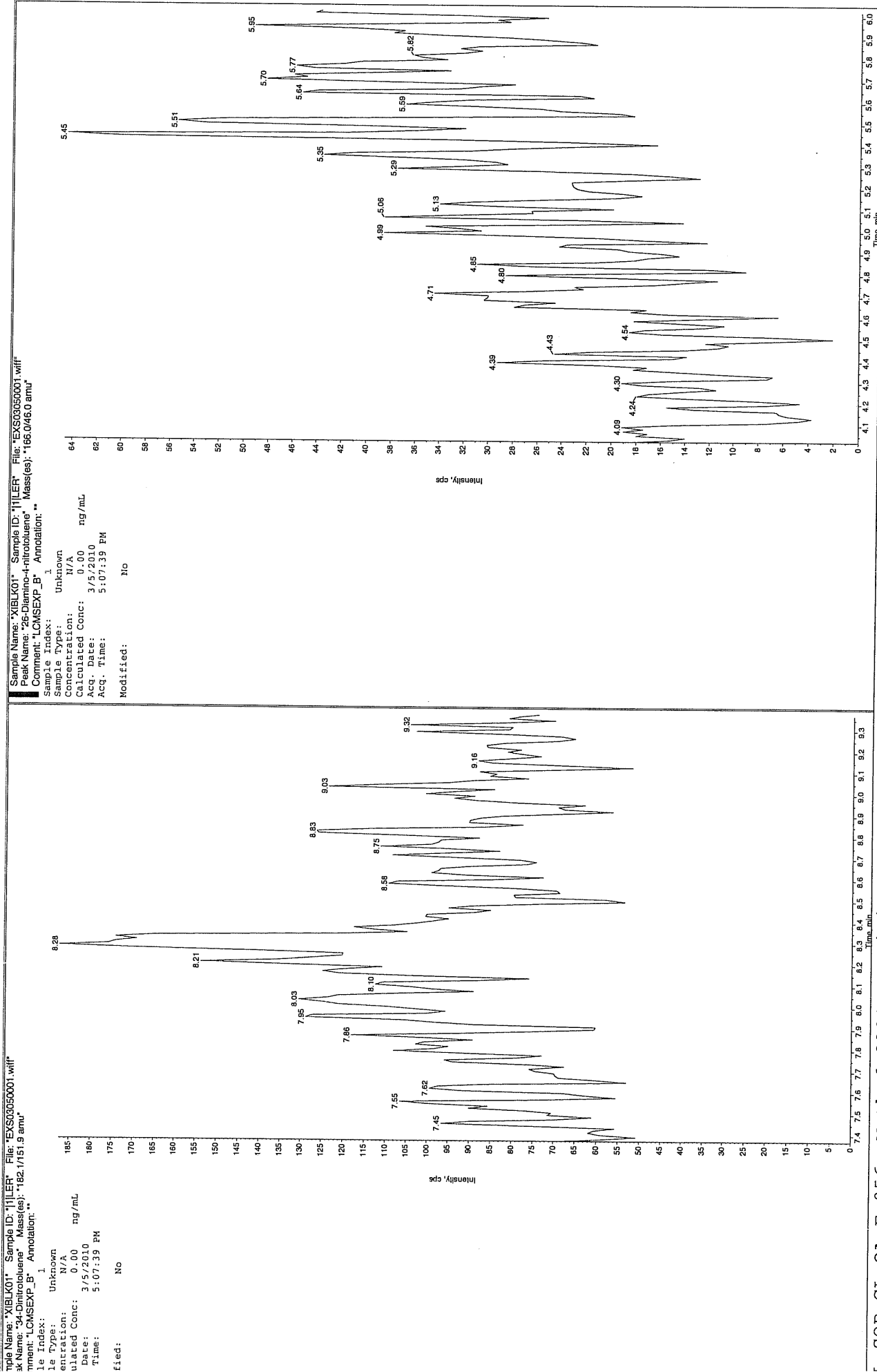
Ann 03/09/10

Sample Name: "XIBLK01" Sample ID: "JILER" File: "EXS03050001.wif"  
 Peak Name: "182.046.0 amu" Mass(es): "257.2204.9 amu"  
 Comment: "LCMSEXP\_B" Annotation: ""

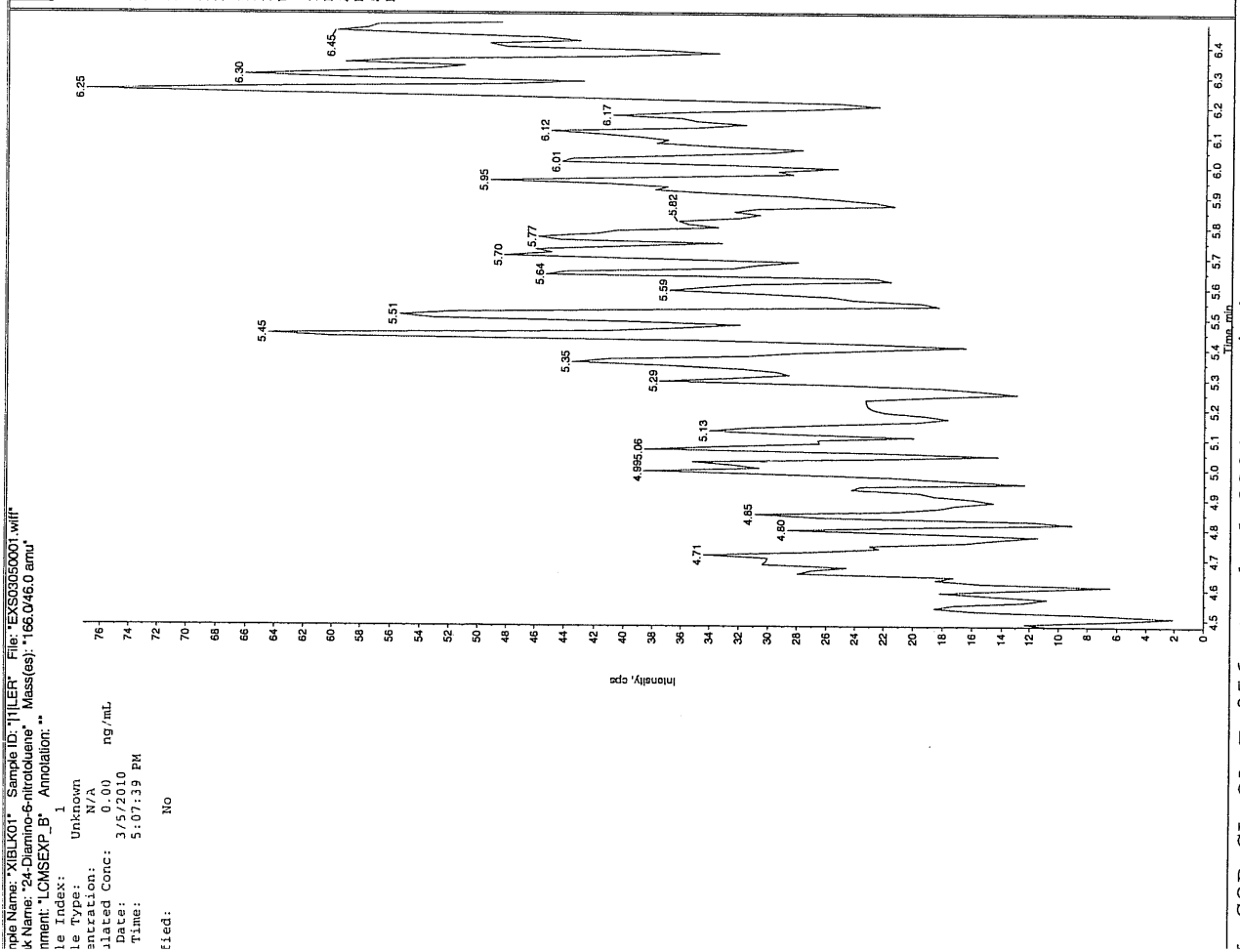
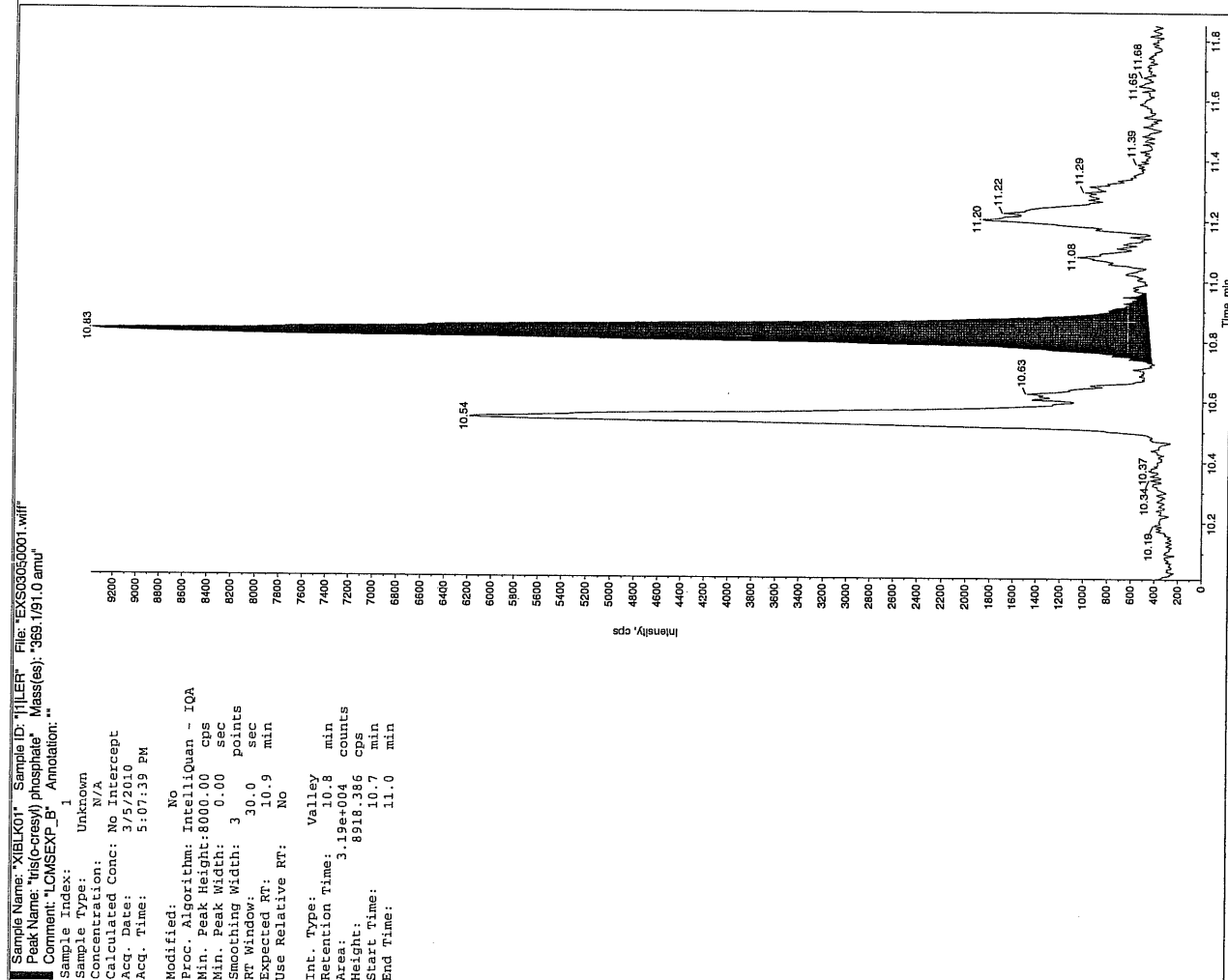
Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 3/5/2010  
 Acq. Time: 5:07:39 PM  
 Modified: No



L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



Explosives Initial Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1758

Lab Code: GEL

Lab Sample ID: XIBLK01

Analysis Date: 05-MAR-10 17:23

GEL Data File: EXS03050002.wiff

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	0
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

Jan 3/10

Sample Name: "XIBLX01" Sample ID: "JILER" File: "EXSC050002.wif"

Peak Name: "35-Dinitroaniline" Mass(es): "182.046.0 amu"

Comment: "LCMSEXP\_B" Annotation: "

Sample Index: 1

Sample Type: Unknown

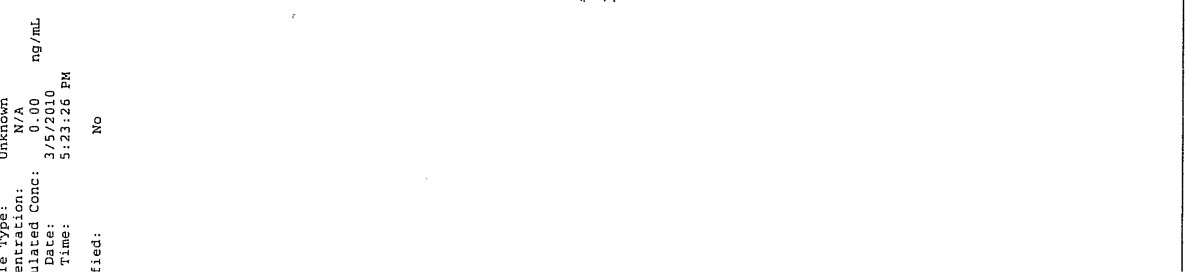
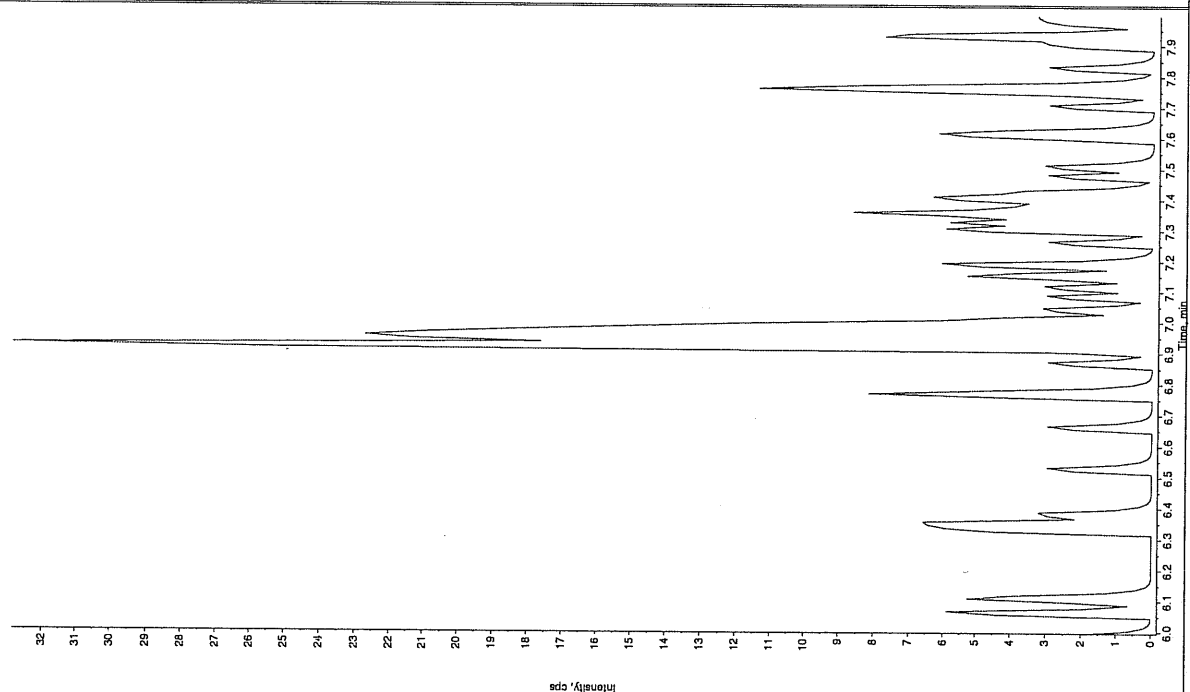
Concentration: N/A

Calculated Conc: 0.00 ng/mL

Acq. Date: 3/5/2010

Acq. Time: 5:23:26 PM

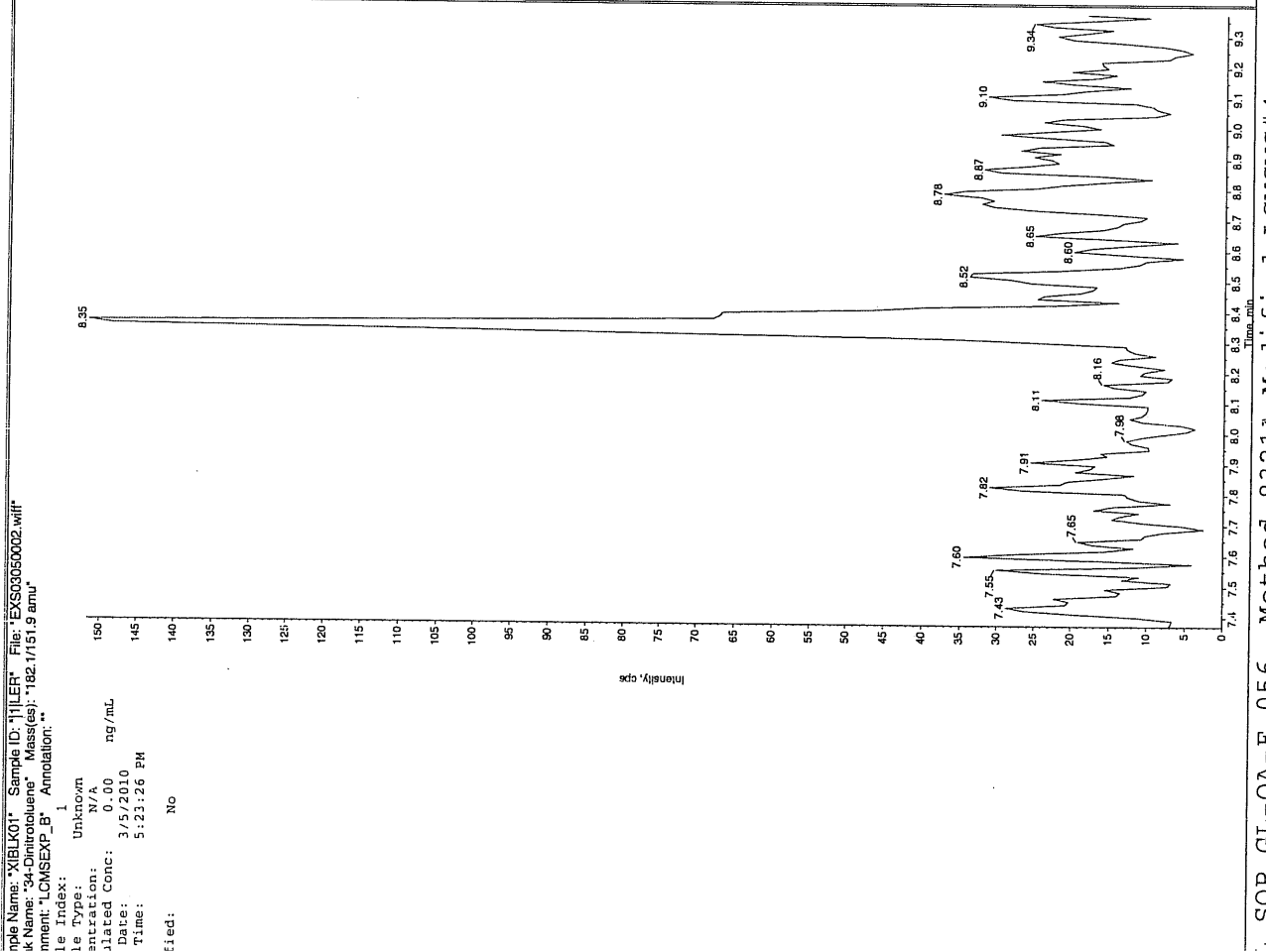
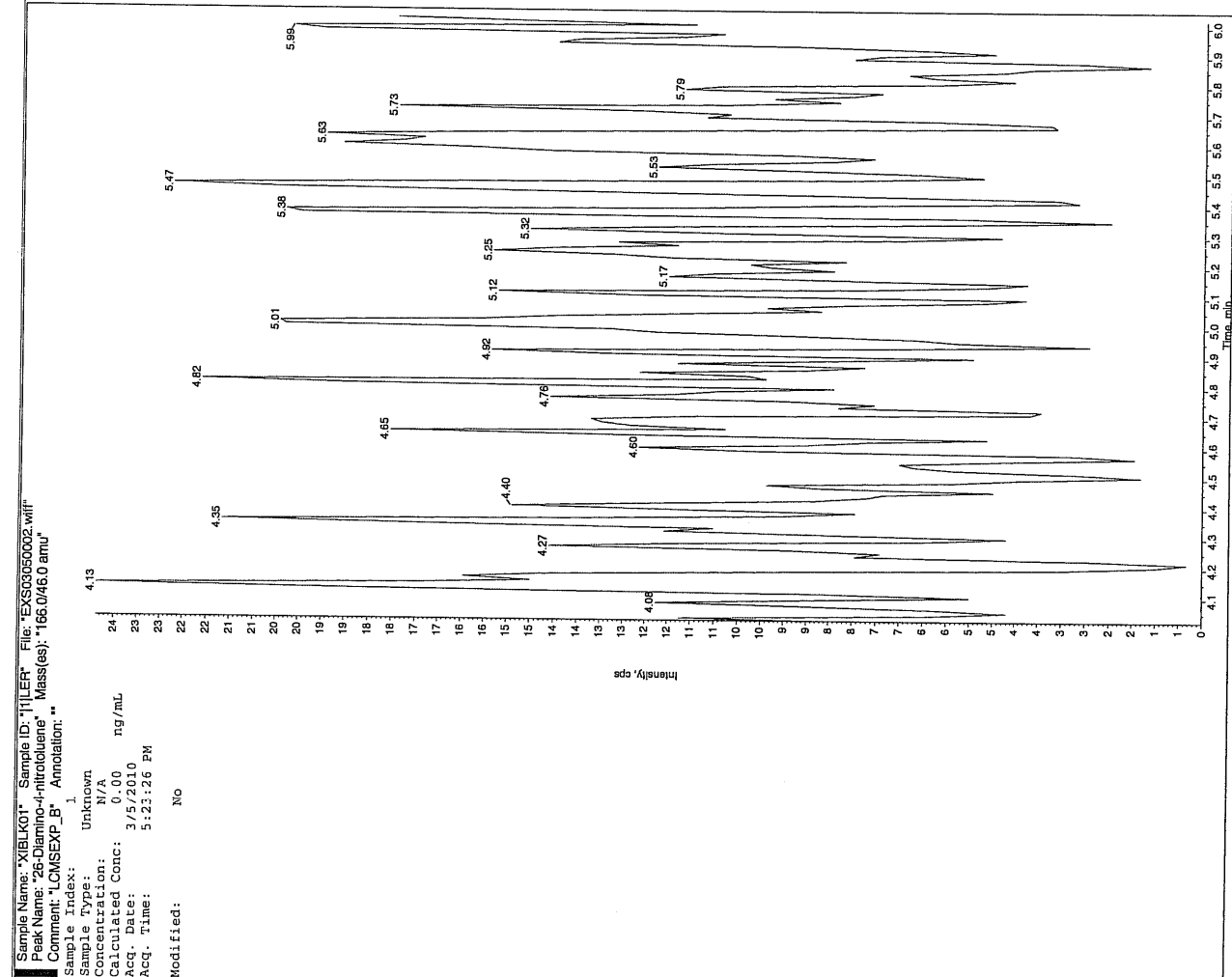
Modified: No



4m03/09/10

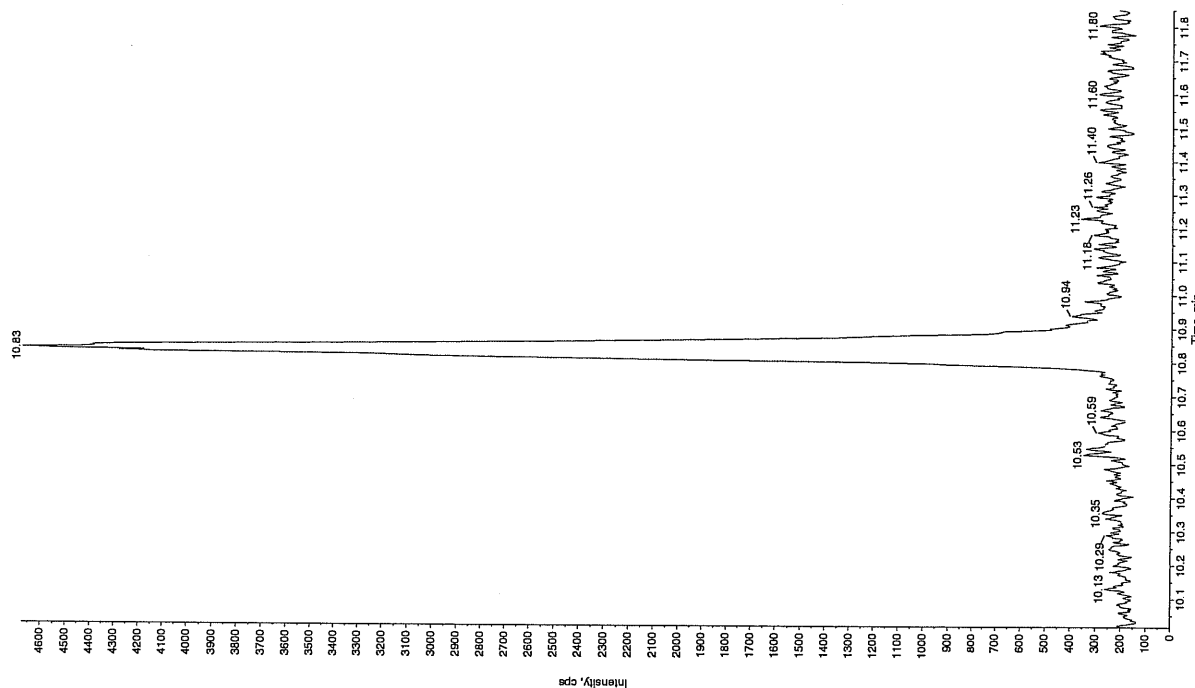
L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4





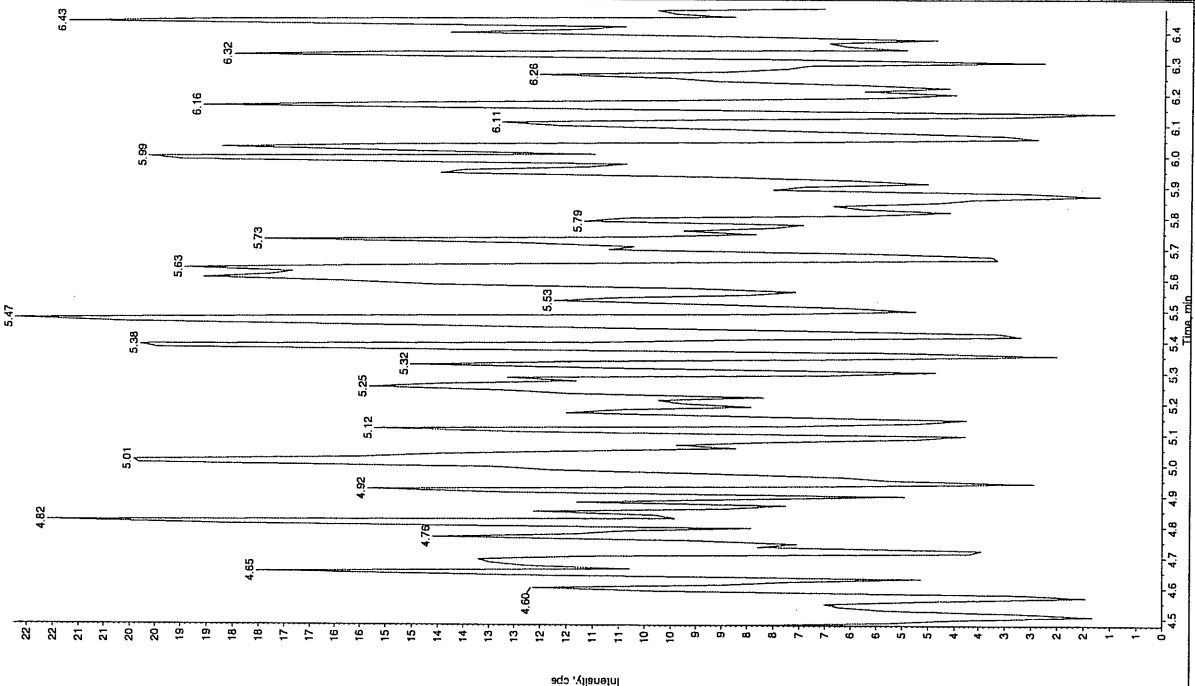
Sample Name: "XIBLK01" Sample ID: "JILER" File: "EXS03050002.wif"  
 Peak Name: "tris(cresyl) phosphate" Mass(es): "369.1/91.0 amu"  
 Comment: "LCMSEXP\_B" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 3/5/2010  
 Acq. Time: 5:23:26 PM  
 Modified: No



Sample Name: "XIBLK01" Sample ID: "JILER" File: "EXS03050002.wif"  
 Peak Name: "24-Diamino-6-nitroindane" Mass(es): "166.0/46.0 amu"  
 Comment: "LCMSEXP\_B" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 3/5/2010  
 Acq. Time: 5:23:26 PM  
 Modified: No



L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1758

Lab Code: GEL

Lab Sample ID: XIBLK02

Analysis Date: 22-MAR-10 19:04

GEL Data File: EXP0322009.wiff

Instrument ID: LCMSMS

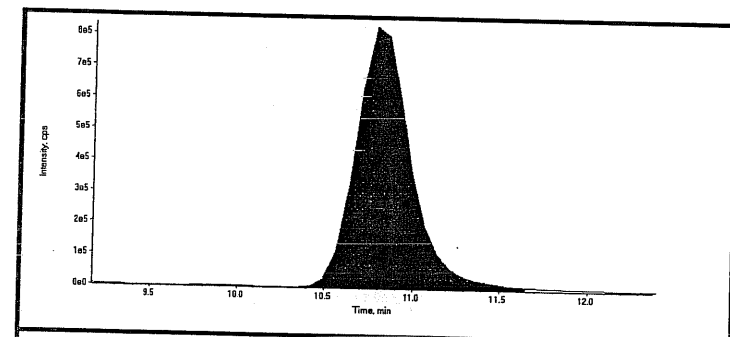
Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
2,6-Dinitrotoluene	0	3.03
2-Amino-4,6-dinitrotoluene	0	0
4-Amino-2,6-dinitrotoluene	0	0
HMX	0	0
Nitrobenzene	0	0
PETN	0	0
RDX	0	0
Tetryl	0	0
m-Dinitrobenzene	0	0
m-Nitrotoluene	0	0
o-Nitrotoluene	0	0
p-Nitrotoluene	0	0
2,4-Dinitrotoluene	0	0
3,4-Dinitrotoluene	0	0
1,3,5-Trinitrobenzene	0	0
2,4,6-Trinitrotoluene	0	0

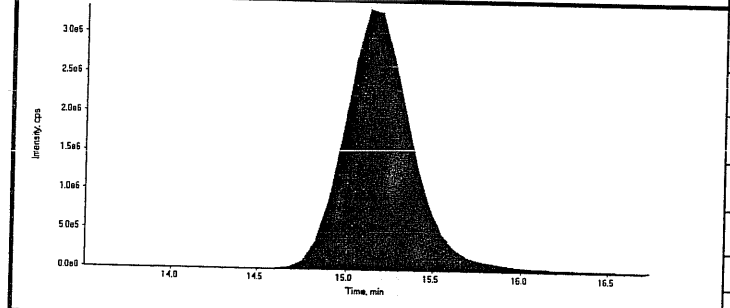
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 27/03/2010 1:31:00 PM  
LCMSMS#3

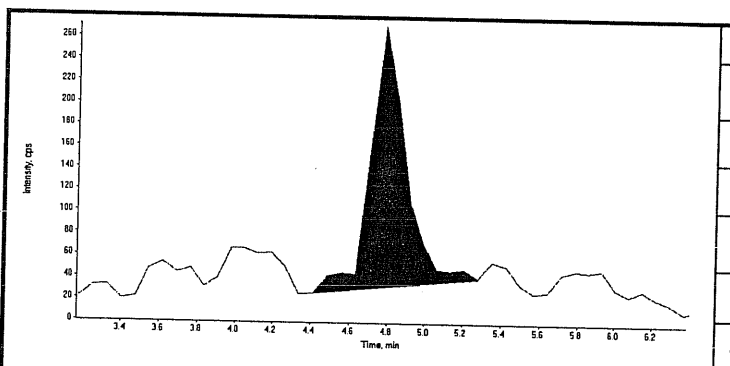
Data File	EXP0322009.wiff	Acquisition Date	3/22/2010 7:04:06 PM
Sample Name	XIBLK02	Acquisition Method	8321_pntx.dam
Batch Dilution Analyst	1 LER	Result Table	032210.rdb
Procedure Code	LCMSEXP_B	Sample Type	Unknown



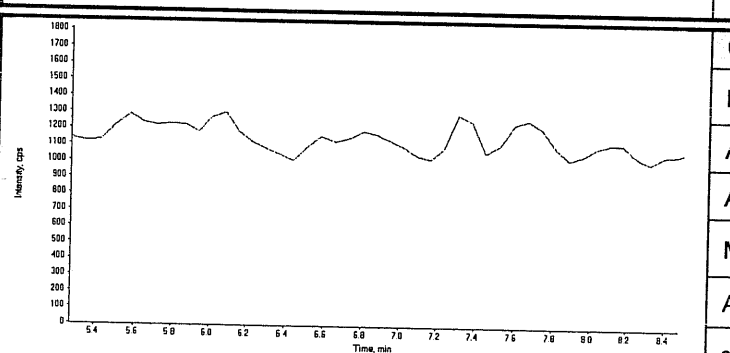
Compound Name:	13-Dinitrobenzene-d4 (172.1/46.1 amu)
Expected RT:	10.80
Actual RT:	10.80
Area Counts:	18200000.00
Manual Modification	No
Amount:	500.00(ng/mL)
Please refer to Form 8 for a list of Internal Standard Recoveries	



Compound Name:	26-Dinitrotoluene-d3 (185.0/155.0 amu)
Expected RT:	15.10
Actual RT:	15.10
Area Counts:	89700000.00
Manual Modification	No
Amount:	500.00(ng/mL)
Please refer to Form 8 for a list of Internal Standard Recoveries	



Compound Name:	HMX (341.2/46.0 amu)
Expected RT:	4.77
Actual RT:	4.77
Area Counts:	3.13e+003
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A



Compound Name:	RDX (267.0/46.1 amu)
Expected RT:	6.87
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A

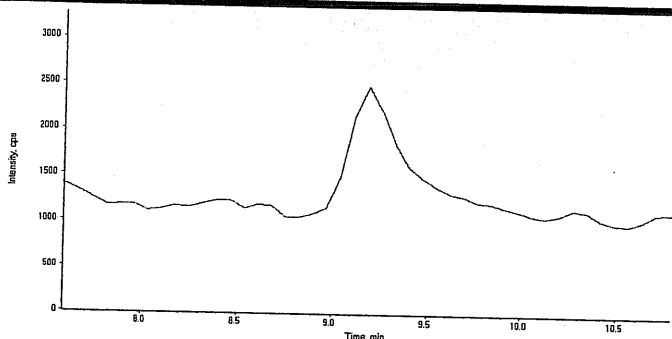
*Handwritten signature: HMX 03/28/10 Lar 3/28/10*

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

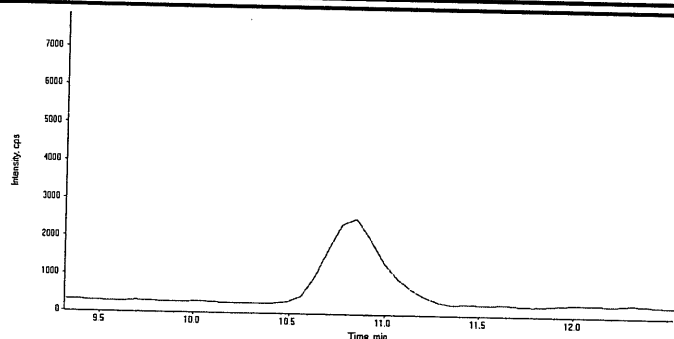
Printed: 27/03/2010 1:31:00 PM  
LCMSMS#3

Data File EXP0322009.wiff  
Sample Name XIBLK02  
Batch|Dilution|Analyst |1|LER  
Procedure Code LCMSEXP\_B

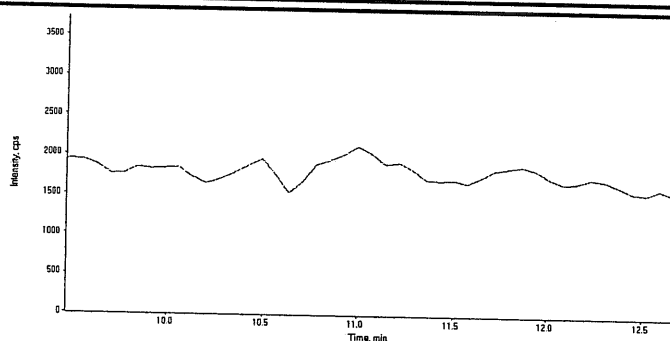
Acquisition Date 3/22/2010 7:04:06 PM  
Acquisition Method 8321\_pntx.dam  
Result Table 032210.rdb  
Sample Type Unknown



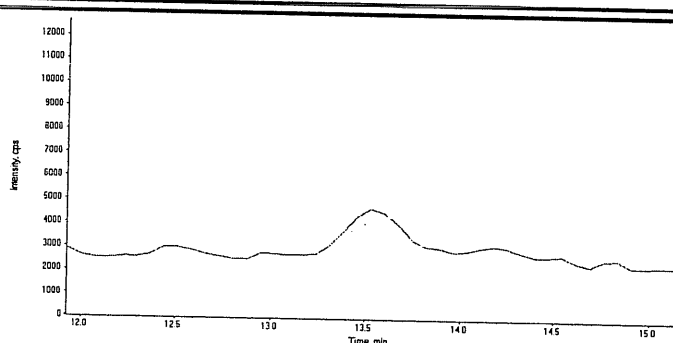
Compound Name:	135-Trinitrobenzene (213.0/182.8 amu)
Expected RT:	9.19
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A



Compound Name:	13-Dinitrobenzene (168.0/137.9 amu)
Expected RT:	10.9
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A



Compound Name:	Tetryl (241.0/180.8 amu)
Expected RT:	11.1
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A

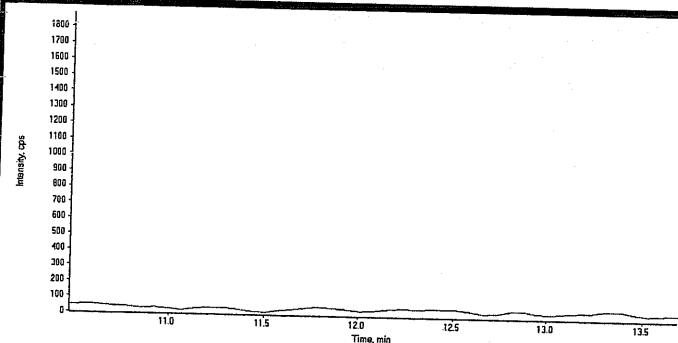


Compound Name:	246-Trinitrotoluene (227.1/209.8 amu)
Expected RT:	13.5
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A

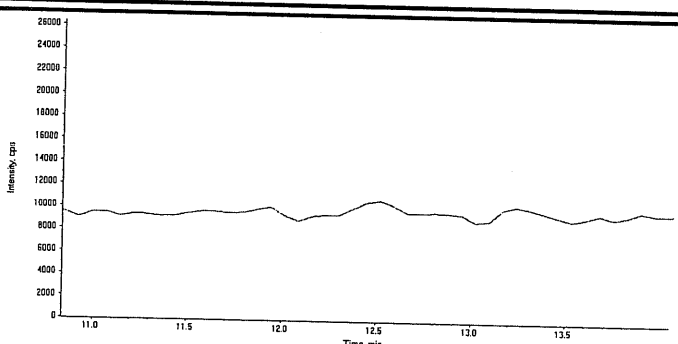
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 27/03/2010 1:31:00 PM  
LCMSMS#3

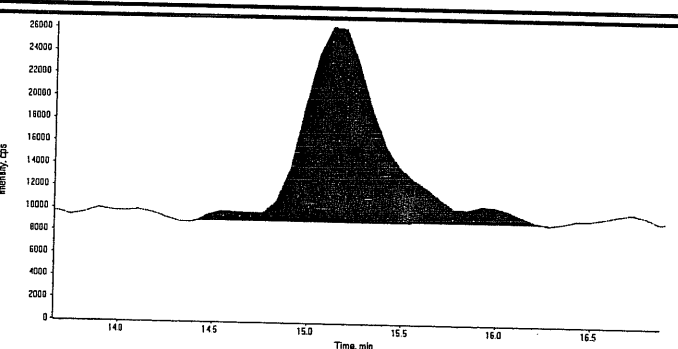
Data File	EXP0322009.wiff	Acquisition Date	3/22/2010 7:04:06 PM
Sample Name	XIBLK02	Acquisition Method	8321_pntx.dam
Batch Dilution Analyst	1 LER	Result Table	032210.rdb
Procedure Code	LCMSEXP_B	Sample Type	Unknown



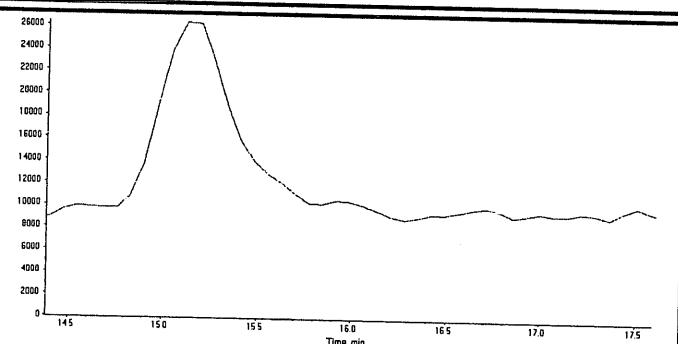
Compound Name:	Nitrobenzene (123.0/46.0 amu)
Expected RT:	12.1
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A



Compound Name:	34-dinitrotoluene (182.0/46.0 amu)
Expected RT:	12.4
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A



Compound Name:	26-dinitrotoluene (182.0/46.0 amu)
Expected RT:	15.3
Actual RT:	15.1
Area Counts:	5.29e+005
Manual Modification	No
Amount:	3.03 (ng/mL)
% Accuracy:	N/A

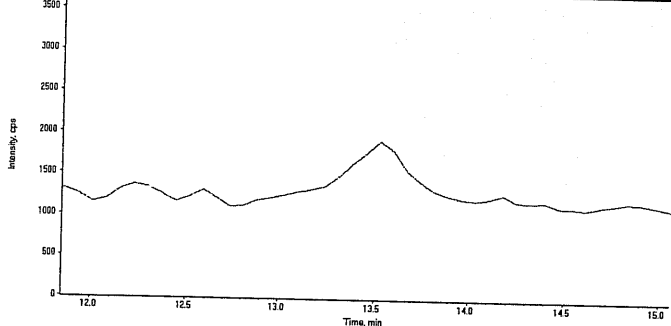


Compound Name:	24-dinitrotoluene (182.0/46.0 amu)
Expected RT:	16.0
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A

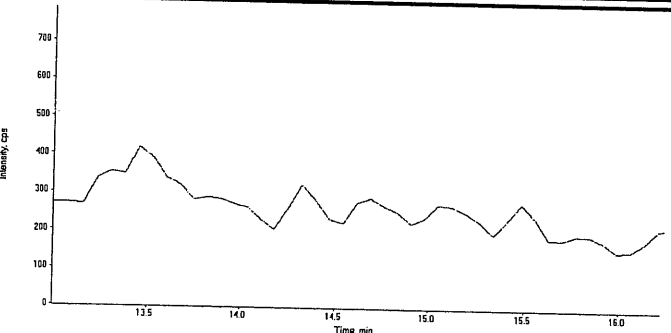
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 27/03/2010 1:31:00 PM  
LCMSMS#3

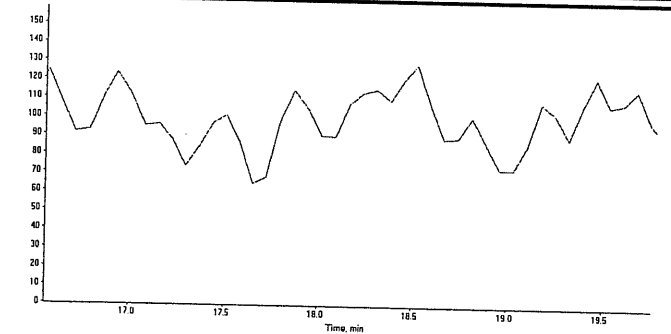
<b>Data File</b>	EXP0322009.wiff	<b>Acquisition Date</b>	3/22/2010 7:04:06 PM
<b>Sample Name</b>	XIBLK02	<b>Acquisition Method</b>	8321_pntx.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	032210.rdb
<b>Procedure Code</b>	LCMSEXP_B	<b>Sample Type</b>	Unknown



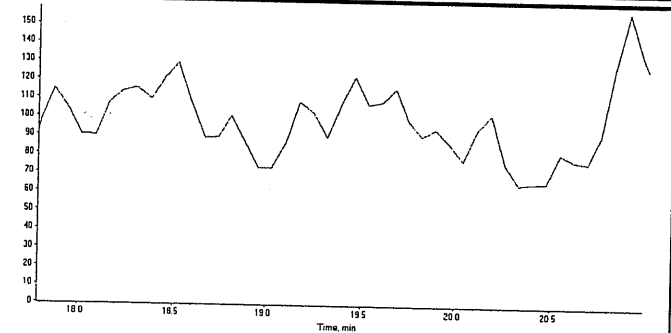
<b>Compound Name:</b>	4-Amino-26-dinitrotoluene (197.0/167.0 amu)
Expected RT:	13.5
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A



<b>Compound Name:</b>	2-Amino-46-dinitrotoluene (197.0/180.0 amu)
Expected RT:	14.6
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A



<b>Compound Name:</b>	2-Nitrotoluene (137.0/46.0 amu)
Expected RT:	18.2
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A

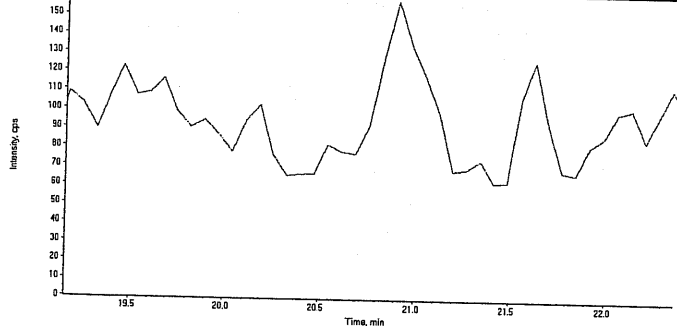


<b>Compound Name:</b>	4-Nitrotoluene (137.0/46.0 amu)
Expected RT:	19.4
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A

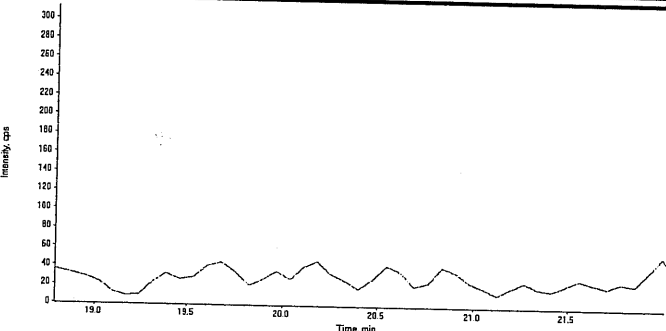
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 27/03/2010 1:31:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0322009.wiff	<b>Acquisition Date</b>	3/22/2010 7:04:06 PM
<b>Sample Name</b>	XIBLK02	<b>Acquisition Method</b>	8321_pntx.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	032210.rdb
<b>Procedure Code</b>	LCMSEXP_B	<b>Sample Type</b>	Unknown



<b>Compound Name:</b>	3-Nitrotoluene (137.0/46.0 amu)
<b>Expected RT:</b>	20.8
<b>Actual RT:</b>	0.00
<b>Area Counts:</b>	0.00e+000
<b>Manual Modification</b>	No
<b>Amount:</b>	N/A (ng/mL)
<b>% Accuracy:</b>	N/A



<b>Compound Name:</b>	PETN (361.1/62.0 amu)
<b>Expected RT:</b>	20.4
<b>Actual RT:</b>	0.00
<b>Area Counts:</b>	0.00e+000
<b>Manual Modification</b>	No
<b>Amount:</b>	N/A (ng/mL)
<b>% Accuracy:</b>	N/A



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1758

Lab Code: GEL

Lab Sample ID: XIBLK03

Analysis Date: 22-MAR-10 19:56

GEL Data File: EXP0322011.wiff

Instrument ID: LCMSMS

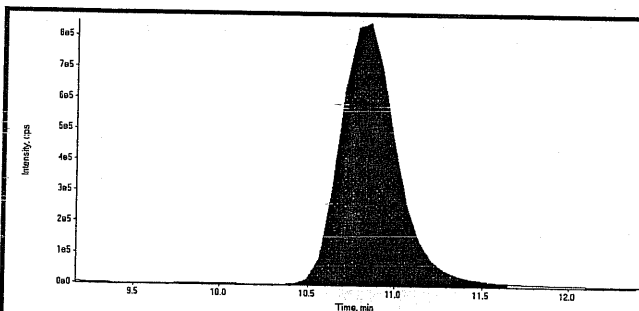
Column: Phenomenex Ultracarb 5u ODS(20)

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
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	2.91
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

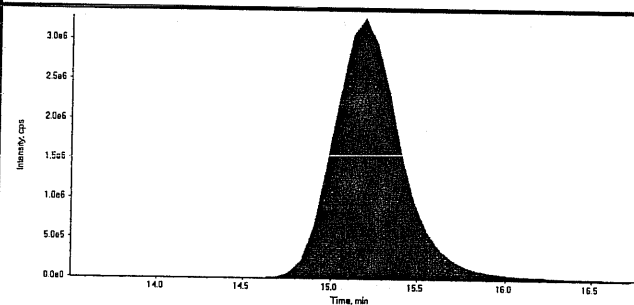
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 27/03/2010 1:31:00 PM  
LCMSMS#3

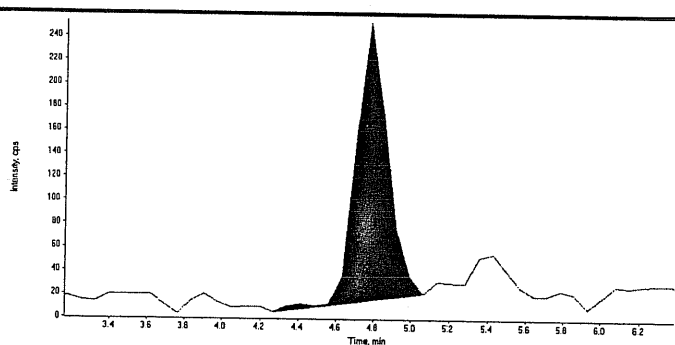
Data File	EXP0322011.wiff	Acquisition Date	3/22/2010 7:56:51 PM
Sample Name	XIBLK03	Acquisition Method	8321_pntx.dam
Batch Dilution Analyst	1 LER	Result Table	032210.rdb
Procedure Code	LCMSEXP_B	Sample Type	Unknown



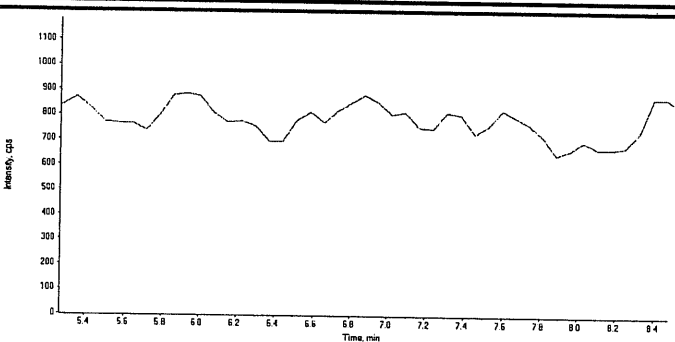
Compound Name:	13-Dinitrobenzene-d4 (172.1/46.1 amu)
Expected RT:	10.80
Actual RT:	10.90
Area Counts:	19500000.00
Manual Modification	No
Amount:	500.00(ng/mL)
Please refer to Form 8 for a list of Internal Standard Recoveries	



Compound Name:	26-Dinitrotoluene-d3 (185.0/155.0 amu)
Expected RT:	15.10
Actual RT:	15.20
Area Counts:	90200000.00
Manual Modification	No
Amount:	500.00(ng/mL)
Please refer to Form 8 for a list of Internal Standard Recoveries	



Compound Name:	HMX (341.2/46.0 amu)
Expected RT:	4.77
Actual RT:	4.77
Area Counts:	2.80e+003
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A



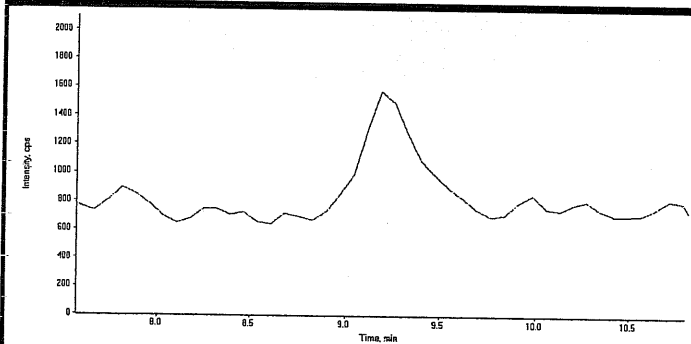
Compound Name:	RDX (267.0/46.1 amu)
Expected RT:	6.87
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A

*done 03/28/10*  
*lar*  
*3/28/10*

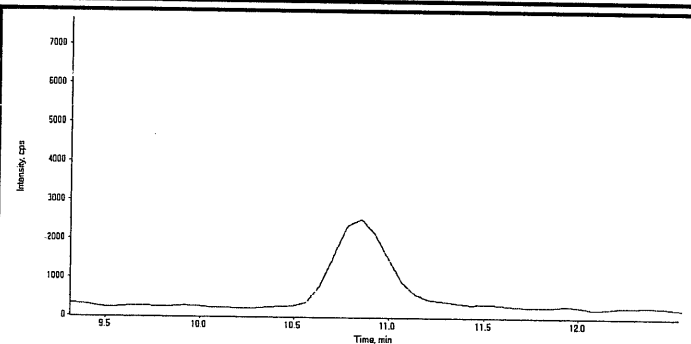
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 27/03/2010 1:31:00 PM  
LCMSMS#3

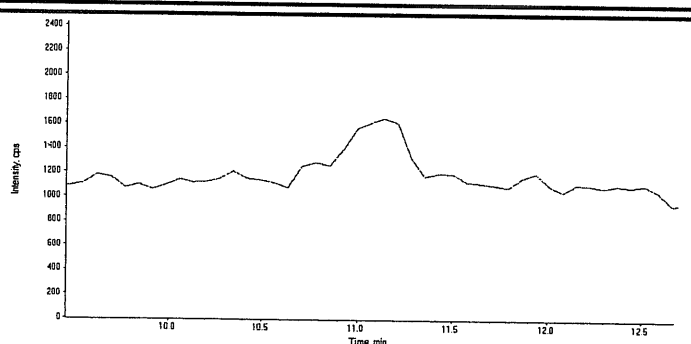
Data File	EXP0322011.wiff	Acquisition Date	3/22/2010 7:56:51 PM
Sample Name	XIBLK03	Acquisition Method	8321_pntx.dam
Batch Dilution Analyst	1 LER	Result Table	032210.rdb
Procedure Code	LCMSEXP_B	Sample Type	Unknown



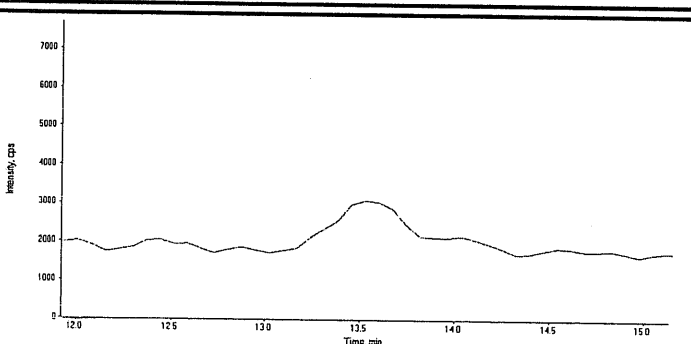
Compound Name:	135-Trinitrobenzene (213.0/182.8 amu)
Expected RT:	9.19
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A



Compound Name:	13-Dinitrobenzene (168.0/137.9 amu)
Expected RT:	10.9
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A



Compound Name:	Tetryl (241.0/180.8 amu)
Expected RT:	11.1
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A

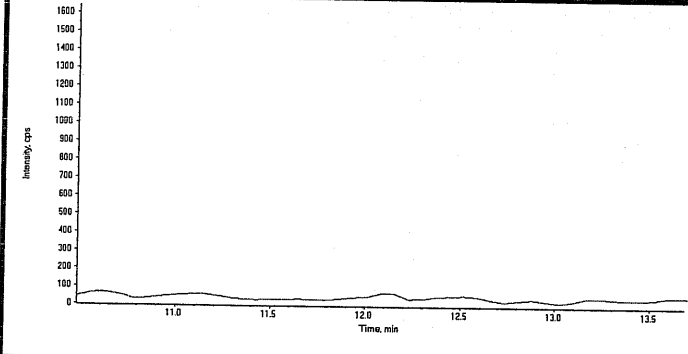


Compound Name:	246-Trinitrotoluene (227.1/209.8 amu)
Expected RT:	13.5
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A

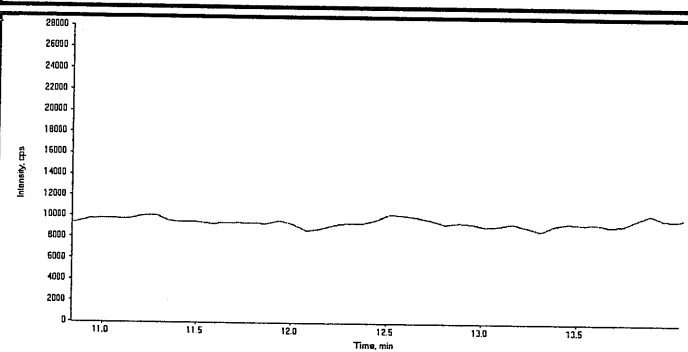
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 27/03/2010 1:31:00 PM  
LCMSMS#3

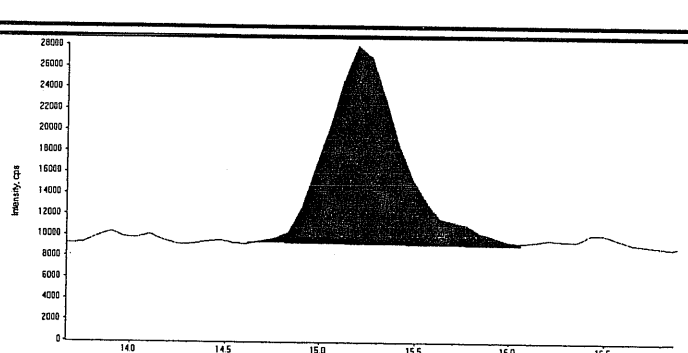
Data File	EXP0322011.wiff	Acquisition Date	3/22/2010 7:56:51 PM
Sample Name	XIBLK03	Acquisition Method	8321_pntx.dam
Batch Dilution Analyst	1 LER	Result Table	032210.rdb
Procedure Code	LCMSEXP_B	Sample Type	Unknown



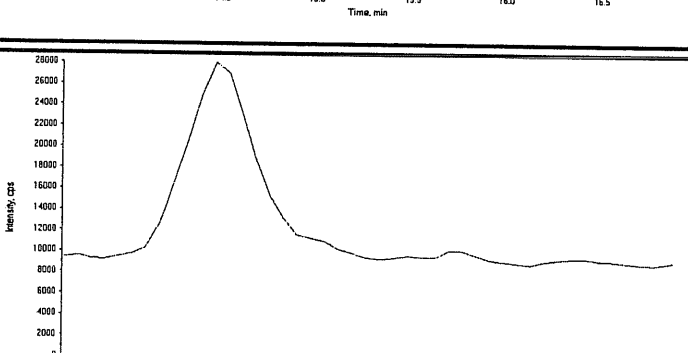
Compound Name:	Nitrobenzene (123.0/46.0 amu)
Expected RT:	12.1
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A



Compound Name:	34-dinitrotoluene (182.0/46.0 amu)
Expected RT:	12.4
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A



Compound Name:	26-dinitrotoluene (182.0/46.0 amu)
Expected RT:	15.3
Actual RT:	15.2
Area Counts:	5.10e+005
Manual Modification	No
Amount:	2.91 (ng/mL)
% Accuracy:	N/A

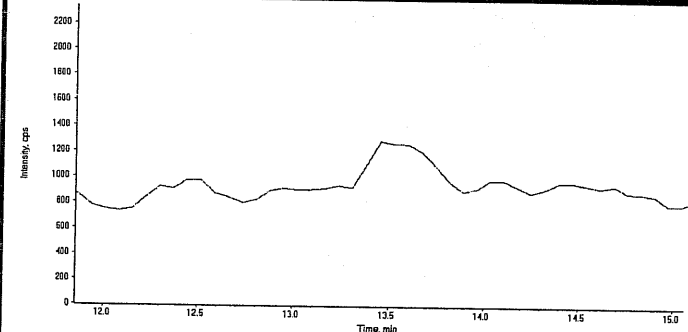


Compound Name:	24-dinitrotoluene (182.0/46.0 amu)
Expected RT:	16.0
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A

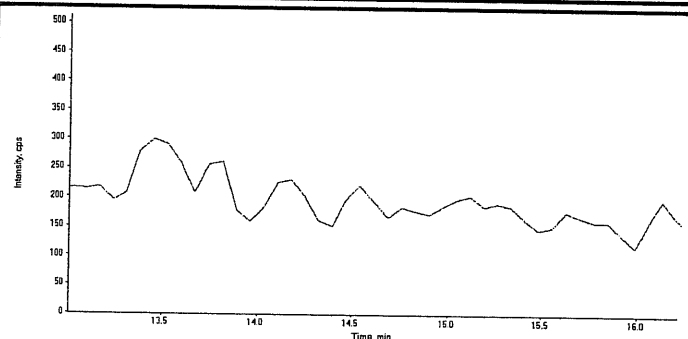
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 27/03/2010 1:31:00 PM  
LCMSMS#3

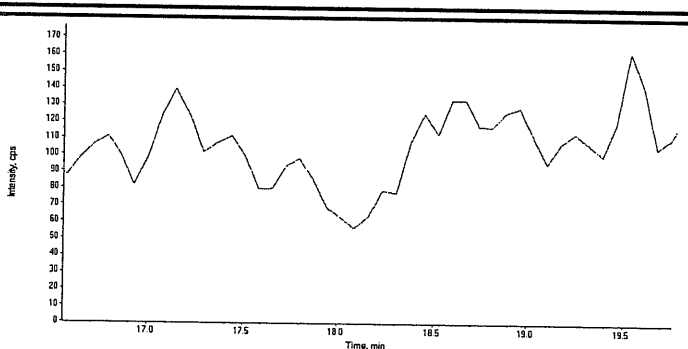
<b>Data File</b>	EXP0322011.wiff	<b>Acquisition Date</b>	3/22/2010 7:56:51 PM
<b>Sample Name</b>	XIBLK03	<b>Acquisition Method</b>	8321_pntx.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	032210.rdb
<b>Procedure Code</b>	LCMSEXP_B	<b>Sample Type</b>	Unknown



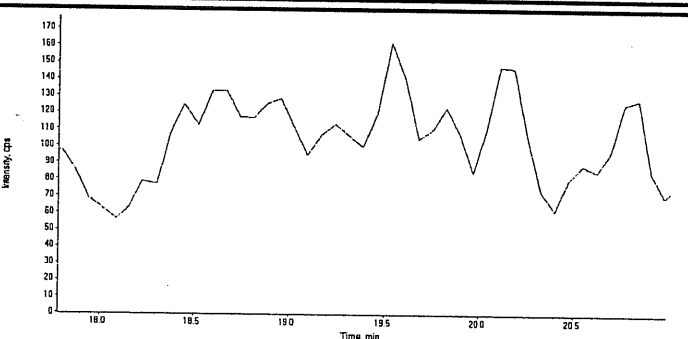
<b>Compound Name:</b>	4-Amino-26-dinitrotoluene (197.0/167.0 amu)
Expected RT:	13.5
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A



<b>Compound Name:</b>	2-Amino-46-dinitrotoluene (197.0/180.0 amu)
Expected RT:	14.6
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A



<b>Compound Name:</b>	2-Nitrotoluene (137.0/46.0 amu)
Expected RT:	18.2
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A



<b>Compound Name:</b>	4-Nitrotoluene (137.0/46.0 amu)
Expected RT:	19.4
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 27/03/2010 1:31:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0322011.wiff	<b>Acquisition Date</b>	3/22/2010 7:56:51 PM
<b>Sample Name</b>	XIBLK03	<b>Acquisition Method</b>	8321_pntx.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	032210.rdb
<b>Procedure Code</b>	LCMSEXP_B	<b>Sample Type</b>	Unknown

	<b>Compound Name:</b>	3-Nitrotoluene (137.0/46.0 amu)
	<b>Expected RT:</b>	20.8
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

	<b>Compound Name:</b>	PETN (361.1/62.0 amu)
	<b>Expected RT:</b>	20.4
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

4A  
Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1758

Lab Code: GEL

Lab Sample ID: XIBLK04

Analysis Date: 22-MAR-10 23:27

GEL Data File: EXP0322019.wiff

Instrument ID: LCMSMS

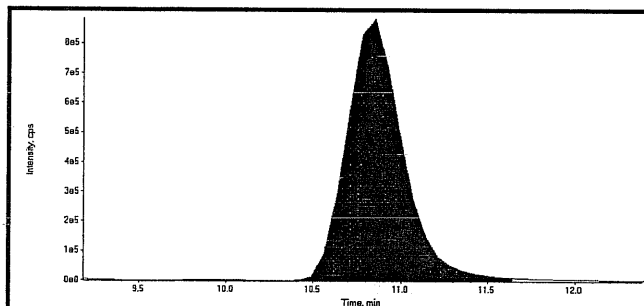
Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
1,3,5-Trinitrobenzene	0	0
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	3.41
2-Amino-4,6-dinitrotoluene	0	0
4-Amino-2,6-dinitrotoluene	0	0
HMX	0	0
Nitrobenzene	0	0
PETN	0	0
RDX	0	0
Tetryl	0	0
m-Dinitrobenzene	0	0
m-Nitrotoluene	0	0
o-Nitrotoluene	0	0
p-Nitrotoluene	0	0

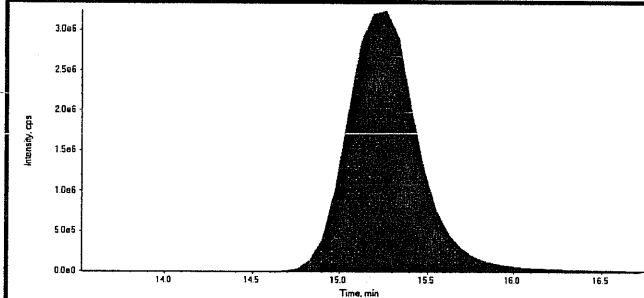
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 27/03/2010 1:31:00 PM  
LCMSMS#3

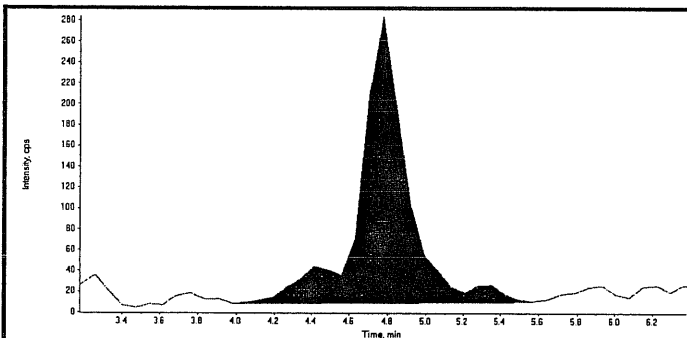
Data File	EXP0322019.wiff	Acquisition Date	3/22/2010 11:27:58 PM
Sample Name	XIBLK04	Acquisition Method	8321_pntx.dam
Batch Dilution Analyst	1 LER	Result Table	032210.rdb
Procedure Code	LCMSEXP_B	Sample Type	Unknown



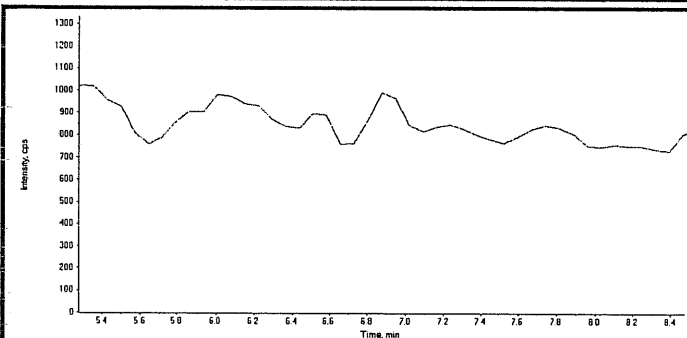
Compound Name:	13-Dinitrobenzene-d4 (172.1/46.1 amu)
Expected RT:	10.80
Actual RT:	10.90
Area Counts:	19700000.00
Manual Modification	No
Amount:	500.00(ng/mL)
Please refer to Form 8 for a list of Internal Standard Recoveries	



Compound Name:	26-Dinitrotoluene-d3 (185.0/155.0 amu)
Expected RT:	15.10
Actual RT:	15.30
Area Counts:	92500000.00
Manual Modification	No
Amount:	500.00(ng/mL)
Please refer to Form 8 for a list of Internal Standard Recoveries	



Compound Name:	HMX (341.2/46.0 amu)
Expected RT:	4.77
Actual RT:	4.77
Area Counts:	4.78e+003
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A



Compound Name:	RDX (267.0/46.1 amu)
Expected RT:	6.87
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A

*Handwritten signature: LER 3/28/10*

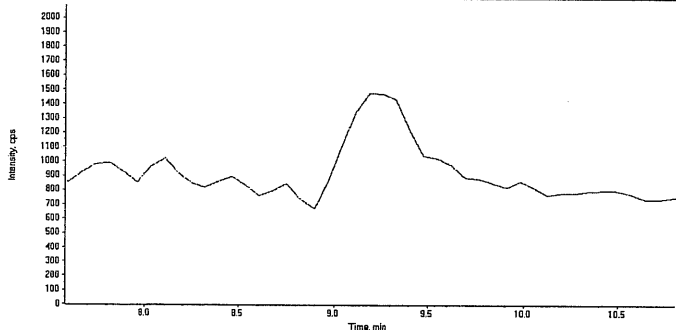


GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

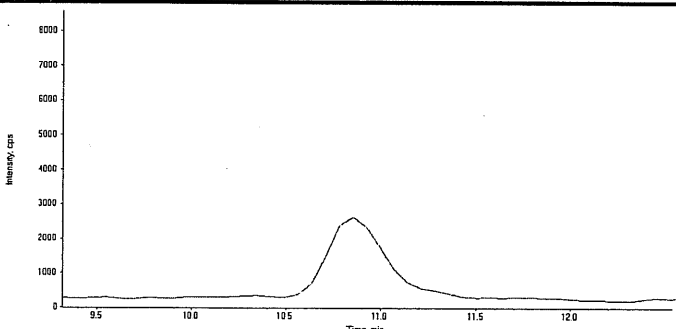
Printed: 27/03/2010 1:31:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0322019.wiff	<b>Acquisition Date</b>	3/22/2010 11:27:58 PM
<b>Sample Name</b>	XIBLK04	<b>Acquisition Method</b>	8321_pntx.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	032210.rdb
<b>Procedure Code</b>	LCMSEXP_B	<b>Sample Type</b>	Unknown

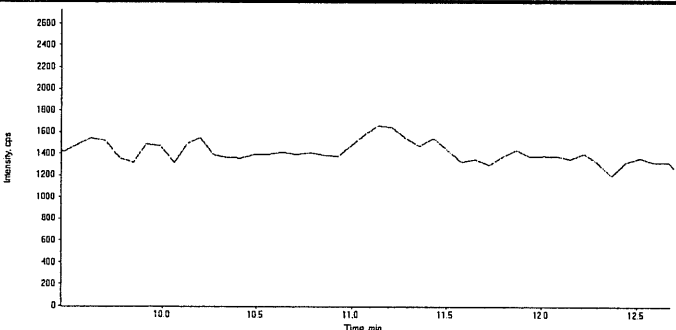
  

	<b>Compound Name:</b>	135-Trinitrobenzene (213.0/182.8 amu)
	Expected RT:	9.19
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

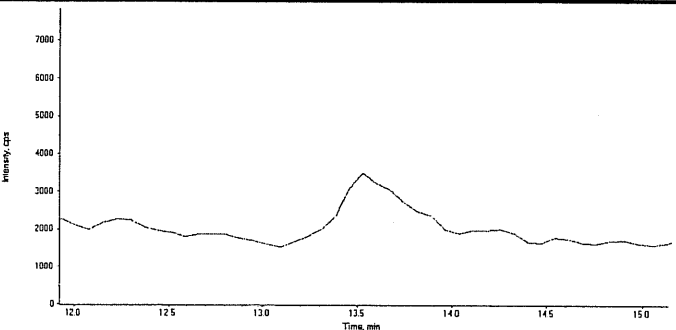
  

	<b>Compound Name:</b>	13-Dinitrobenzene (168.0/137.9 amu)
	Expected RT:	10.9
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	Tetryl (241.0/180.8 amu)
	Expected RT:	11.1
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

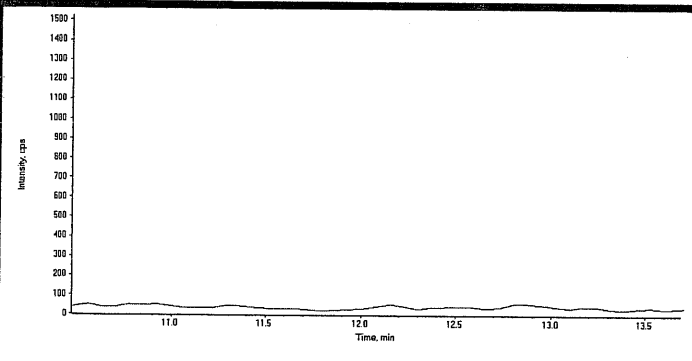
	<b>Compound Name:</b>	246-Trinitrotoluene (227.1/209.8 amu)
	Expected RT:	13.5
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

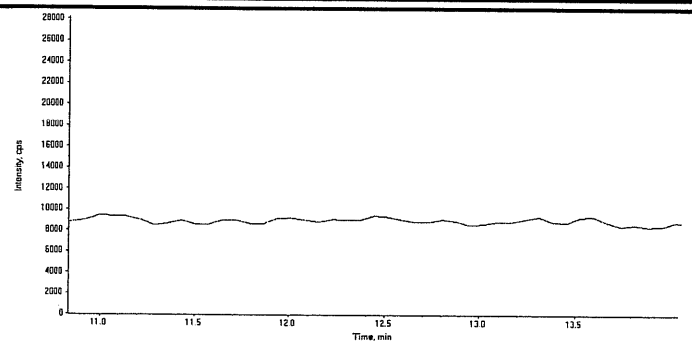
Printed: 27/03/2010 1:31:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0322019.wiff	<b>Acquisition Date</b>	3/22/2010 11:27:58 PM
<b>Sample Name</b>	XIBLK04	<b>Acquisition Method</b>	8321_pntx.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	032210.rdb
<b>Procedure Code</b>	LCMSEXP_B	<b>Sample Type</b>	Unknown

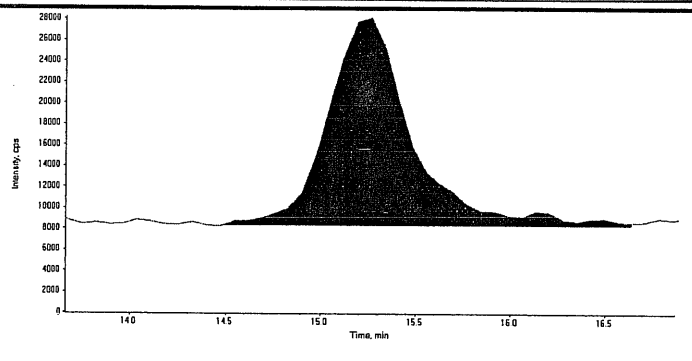
  

	<b>Compound Name:</b>	Nitrobenzene (123.0/46.0 amu)
	Expected RT:	12.1
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

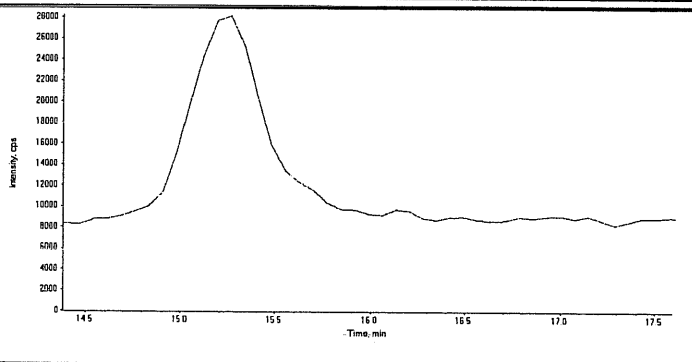
  

	<b>Compound Name:</b>	34-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	12.4
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	26-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	15.3
	Actual RT:	15.3
	Area Counts:	6.13e+005
	Manual Modification	No
	Amount:	3.41 (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	24-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	16.0
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 27/03/2010 1:31:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0322019.wiff	<b>Acquisition Date</b>	3/22/2010 11:27:58 PM
<b>Sample Name</b>	XIBLK04	<b>Acquisition Method</b>	8321_pntx.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	032210.rdb
<b>Procedure Code</b>	LCMSEXP_B	<b>Sample Type</b>	Unknown

	<b>Compound Name:</b>	4-Amino-26-dinitrotoluene (197.0/167.0 amu)
	Expected RT:	13.5
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	2-Amino-46-dinitrotoluene (197.0/180.0 amu)
	Expected RT:	14.6
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	2-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	18.2
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	4-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	19.4
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 27/03/2010 1:31:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0322019.wiff	<b>Acquisition Date</b>	3/22/2010 11:27:58 PM
<b>Sample Name</b>	XIBLK04	<b>Acquisition Method</b>	8321_pntx.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	032210.rdb
<b>Procedure Code</b>	LCMSEXP_B	<b>Sample Type</b>	Unknown

	<b>Compound Name:</b>	3-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	20.8
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	PETN (361.1/62.0 amu)
	Expected RT:	20.4
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1758

Lab Code: GEL

Lab Sample ID: XIBLK05

Analysis Date: 23-MAR-10 04:44

GEL Data File: EXP0322031.wiff

Instrument ID: LCMSMS

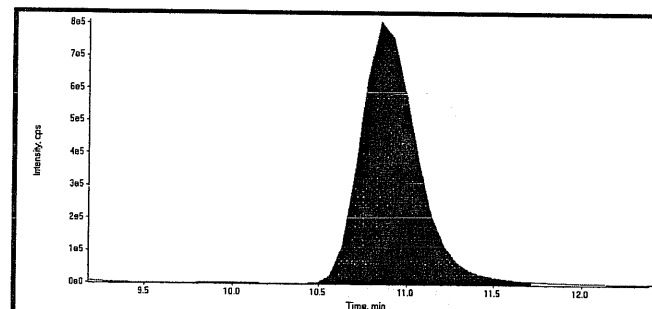
Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
1,3,5-Trinitrobenzene	0	0
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	3.11
2-Amino-4,6-dinitrotoluene	0	0
4-Amino-2,6-dinitrotoluene	0	0
HMX	0	0
Nitrobenzene	0	0
PETN	0	0
RDX	0	0
Tetryl	0	0
m-Dinitrobenzene	0	0
m-Nitrotoluene	0	0
o-Nitrotoluene	0	0
p-Nitrotoluene	0	0

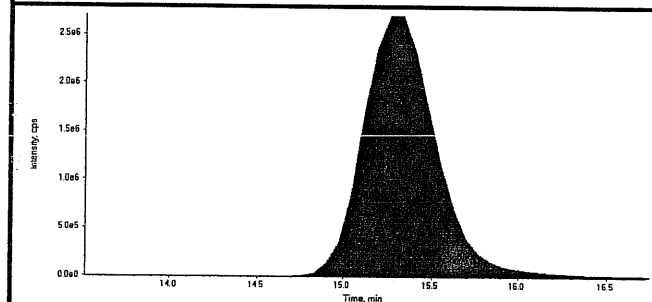
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 27/03/2010 1:31:00 PM  
LCMSMS#3

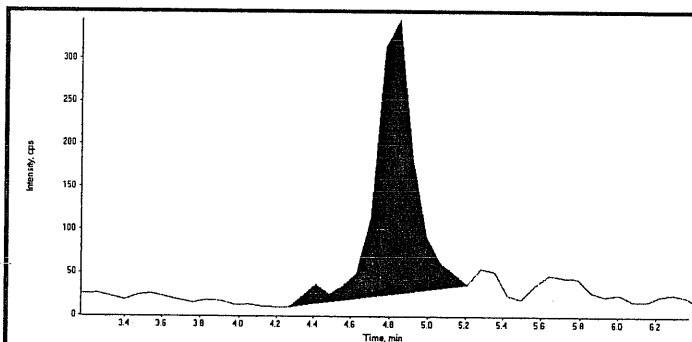
Data File	EXP0322031.wiff	Acquisition Date	3/23/2010 4:44:58 AM
Sample Name	XIBLK05	Acquisition Method	8321_pntx.dam
Batch Dilution Analyst	1 LER	Result Table	032210.rdb
Procedure Code	LCMSEXP_B	Sample Type	Unknown



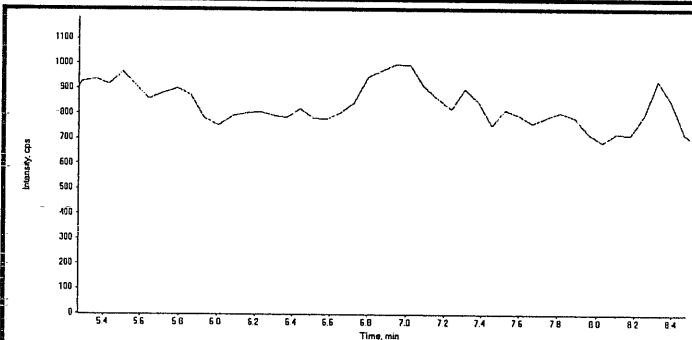
Compound Name:	13-Dinitrobenzene-d4 (172.1/46.1 amu)
Expected RT:	10.80
Actual RT:	10.90
Area Counts:	18000000.00
Manual Modification	No
Amount:	500.00(ng/mL)
Please refer to Form 8 for a list of Internal Standard Recoveries	



Compound Name:	26-Dinitrotoluene-d3 (185.0/155.0 amu)
Expected RT:	15.10
Actual RT:	15.30
Area Counts:	78400000.00
Manual Modification	No
Amount:	500.00(ng/mL)
Please refer to Form 8 for a list of Internal Standard Recoveries	



Compound Name:	HMX (341.2/46.0 amu)
Expected RT:	4.77
Actual RT:	4.85
Area Counts:	4.54e+003
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A



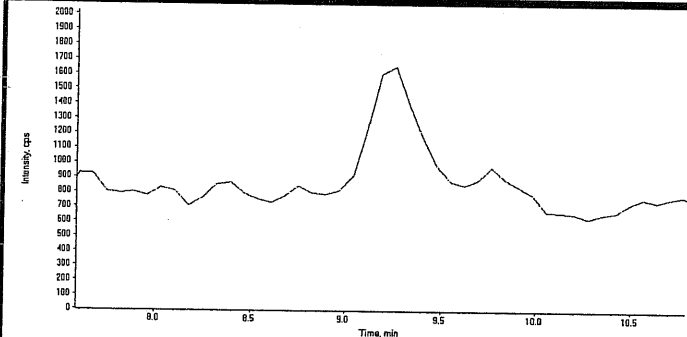
Compound Name:	RDX (267.0/46.1 amu)
Expected RT:	6.87
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A

*Handwritten:*  
HMX 03/28/10  
RDX 3/28/10

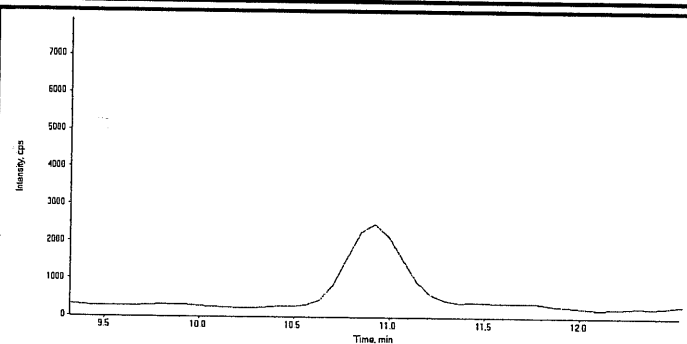
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 27/03/2010 1:31:00 PM  
LCMSMS#3

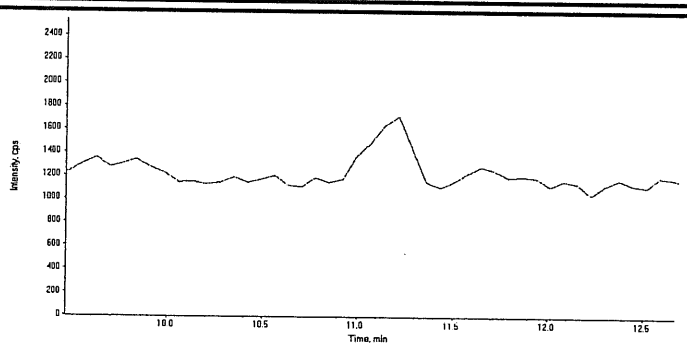
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Sample Name	XIBLK05	Acquisition Method	8321_pntx.dam
Batch Dilution Analyst	1 LER	Result Table	032210.rdb
Procedure Code	LCMSEXP_B	Sample Type	Unknown



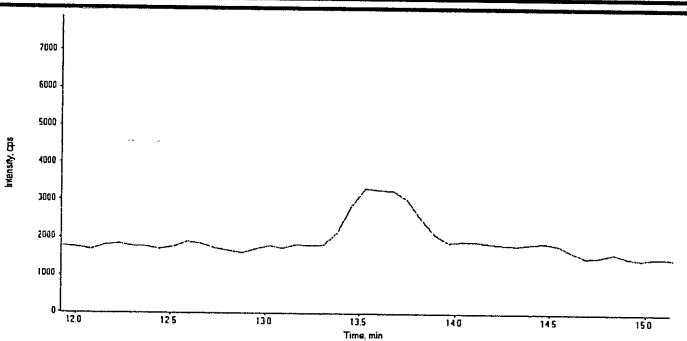
Compound Name:	135-Trinitrobenzene (213.0/182.8 amu)
Expected RT:	9.19
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A



Compound Name:	13-Dinitrobenzene (168.0/137.9 amu)
Expected RT:	10.9
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A



Compound Name:	Tetryl (241.0/180.8 amu)
Expected RT:	11.1
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A

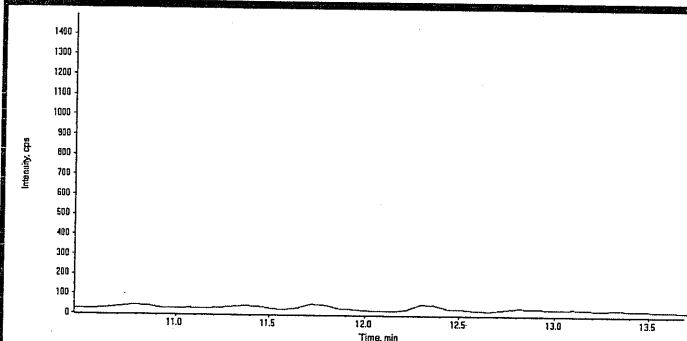


Compound Name:	246-Trinitrotoluene (227.1/209.8 amu)
Expected RT:	13.5
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A

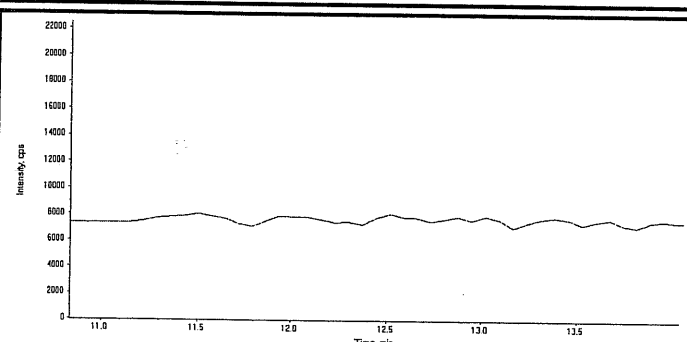
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 27/03/2010 1:31:00 PM  
LCMSMS#3

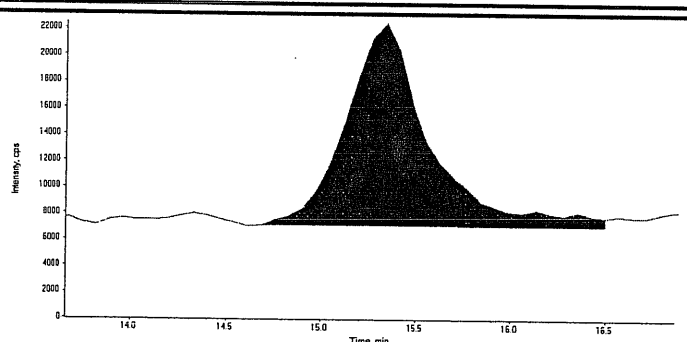
<b>Data File</b>	EXP0322031.wiff	<b>Acquisition Date</b>	3/23/2010 4:44:58 AM
<b>Sample Name</b>	XIBLK05	<b>Acquisition Method</b>	8321_pntx.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	032210.rdb
<b>Procedure Code</b>	LCMSEXP_B	<b>Sample Type</b>	Unknown



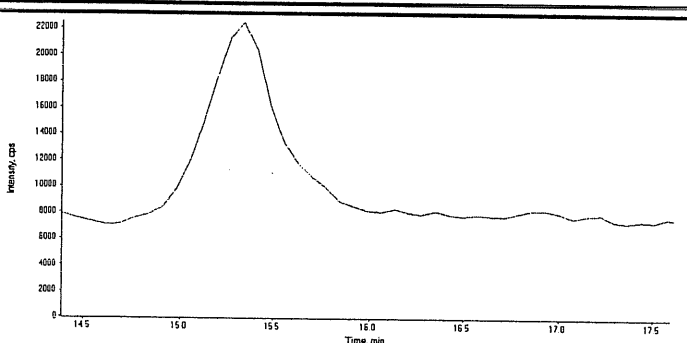
<b>Compound Name:</b>	Nitrobenzene (123.0/46.0 amu)
Expected RT:	12.1
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A



<b>Compound Name:</b>	34-dinitrotoluene (182.0/46.0 amu)
Expected RT:	12.4
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A



<b>Compound Name:</b>	26-dinitrotoluene (182.0/46.0 amu)
Expected RT:	15.3
Actual RT:	15.3
Area Counts:	4.74e+005
Manual Modification	No
Amount:	3.11 (ng/mL)
% Accuracy:	N/A



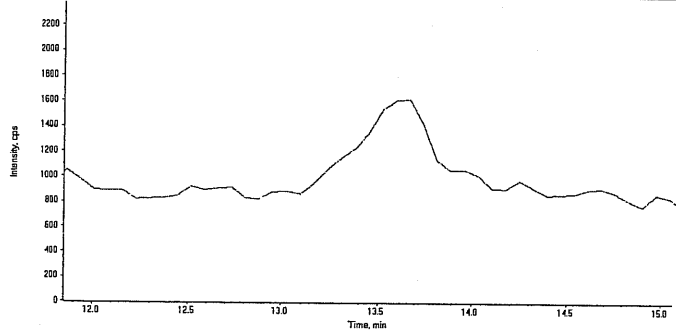
<b>Compound Name:</b>	24-dinitrotoluene (182.0/46.0 amu)
Expected RT:	16.0
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A

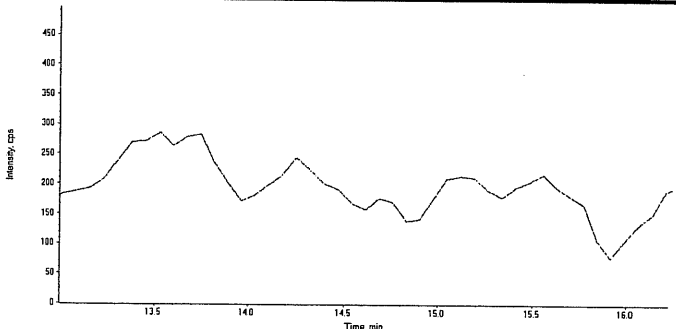


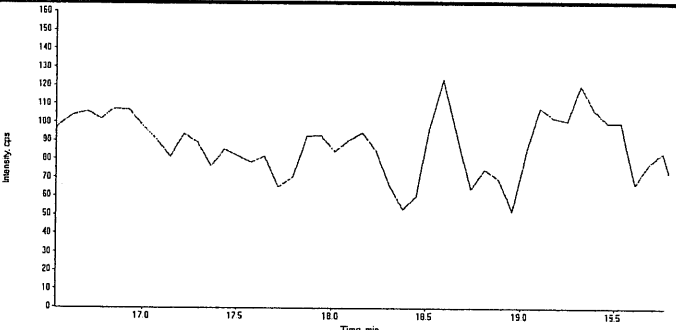
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

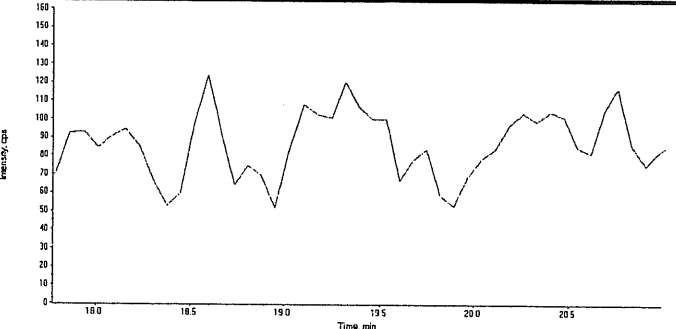
Printed: 27/03/2010 1:31:00 PM  
LCMSMS#3

Data File	EXP0322031.wiff	Acquisition Date	3/23/2010 4:44:58 AM
Sample Name	XIBLK05	Acquisition Method	8321_pntx.dam
Batch Dilution Analyst	1 LER	Result Table	032210.rdb
Procedure Code	LCMSEXP_B	Sample Type	Unknown

	Compound Name:	4-Amino-26-dinitrotoluene (197.0/167.0 amu)
	Expected RT:	13.5
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

	Compound Name:	2-Amino-46-dinitrotoluene (197.0/180.0 amu)
	Expected RT:	14.6
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

	Compound Name:	2-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	18.2
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

	Compound Name:	4-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	19.4
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 27/03/2010 1:31:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0322031.wiff	<b>Acquisition Date</b>	3/23/2010 4:44:58 AM
<b>Sample Name</b>	XIBLK05	<b>Acquisition Method</b>	8321_pntx.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	032210.rdb
<b>Procedure Code</b>	LCMSEXP_B	<b>Sample Type</b>	Unknown

	<b>Compound Name:</b>	3-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	20.8
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	PETN (361.1/62.0 amu)
	Expected RT:	20.4
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1758

Lab Code: GEL

Lab Sample ID: XIBLK06

Analysis Date: 23-MAR-10 09:35

GEL Data File: EXP0322042.wiff

Instrument ID: LCMSMS

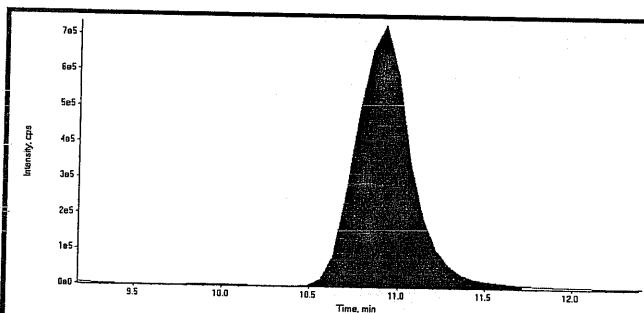
Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
1,3,5-Trinitrobenzene	0	0
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	6.81
2-Amino-4,6-dinitrotoluene	0	0
4-Amino-2,6-dinitrotoluene	0	0
HMX	0	0
Nitrobenzene	0	0
PETN	0	0
RDX	0	0
Tetryl	0	0
m-Dinitrobenzene	0	0
m-Nitrotoluene	0	0
o-Nitrotoluene	0	0
p-Nitrotoluene	0	0

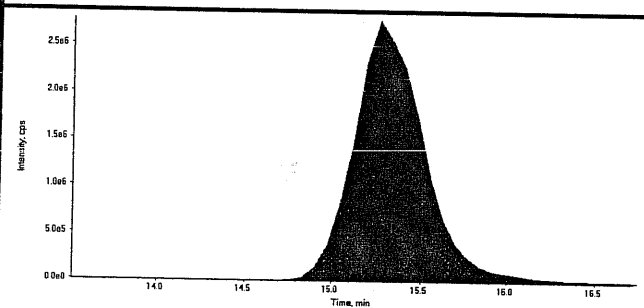
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 27/03/2010 1:31:00 PM  
LCMSMS#3

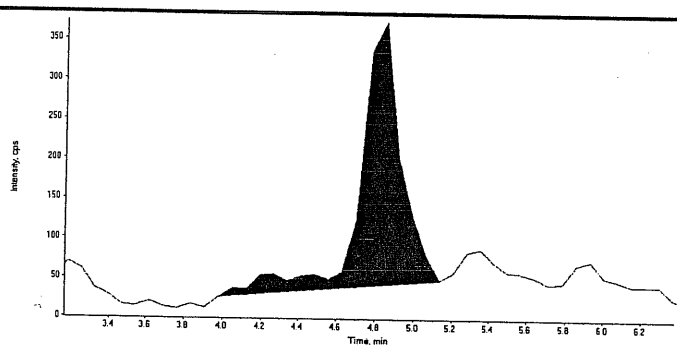
Data File	EXP0322042.wiff	Acquisition Date	3/23/2010 9:35:38 AM
Sample Name	XIBLK06	Acquisition Method	8321_pntx.dam
Batch Dilution Analyst	1 LER	Result Table	032210.rdb
Procedure Code	LCMSEXP_B	Sample Type	Unknown



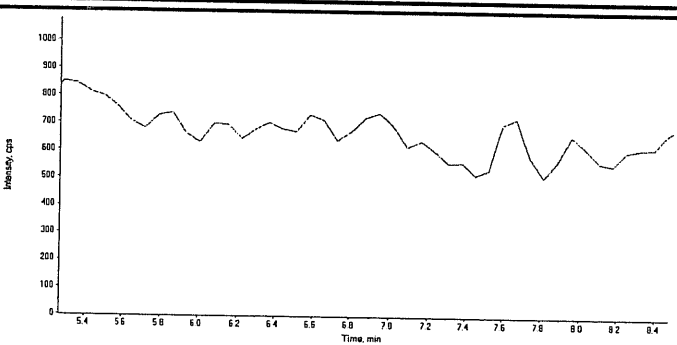
Compound Name:	13-Dinitrobenzene-d4 (172.1/46.1 amu)
Expected RT:	10.80
Actual RT:	10.90
Area Counts:	15900000.00
Manual Modification	No
Amount:	500.00(ng/mL)
Please refer to Form 8 for a list of Internal Standard Recoveries	



Compound Name:	26-Dinitrotoluene-d3 (185.0/155.0 amu)
Expected RT:	15.10
Actual RT:	15.30
Area Counts:	76200000.00
Manual Modification	No
Amount:	500.00(ng/mL)
Please refer to Form 8 for a list of Internal Standard Recoveries	



Compound Name:	HMX (341.2/46.0 amu)
Expected RT:	4.77
Actual RT:	4.85
Area Counts:	4.90e+003
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A



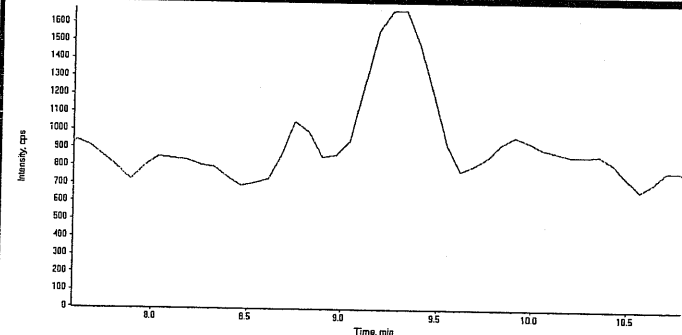
Compound Name:	RDX (267.0/46.1 amu)
Expected RT:	6.87
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A

*Handwritten:*  
HMX 03/28/10  
LER  
3/28/10

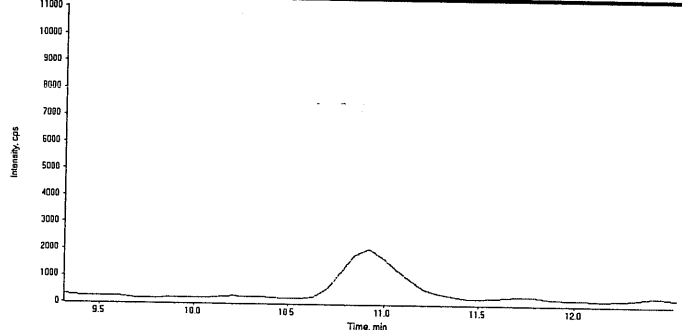
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 27/03/2010 1:31:00 PM  
LCMSMS#3

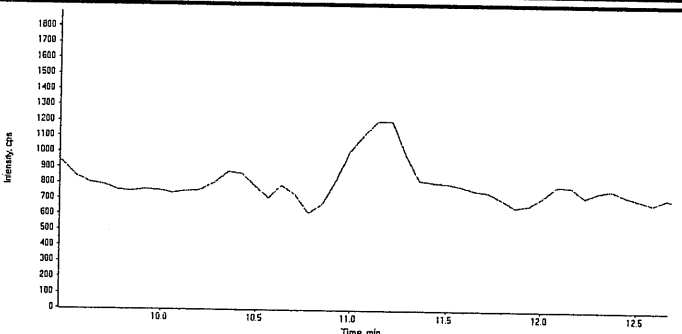
Data File	EXP0322042.wiff	Acquisition Date	3/23/2010 9:35:38 AM
Sample Name	XIBLK06	Acquisition Method	8321_pntx.dam
Batch Dilution Analyst	1 LER	Result Table	032210.rdb
Procedure Code	LCMSEXP_B	Sample Type	Unknown



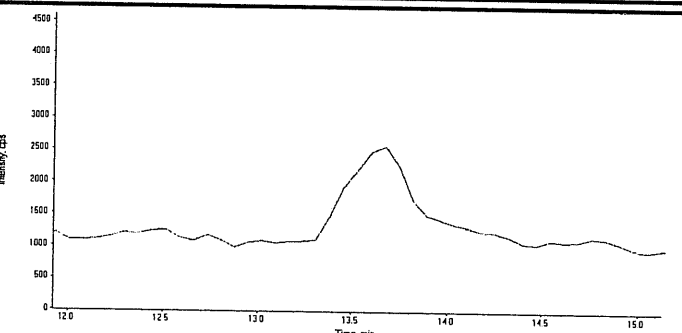
Compound Name:	135-Trinitrobenzene (213.0/182.8 amu)
Expected RT:	9.19
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A



Compound Name:	13-Dinitrobenzene (168.0/137.9 amu)
Expected RT:	10.9
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A



Compound Name:	Tetryl (241.0/180.8 amu)
Expected RT:	11.1
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A

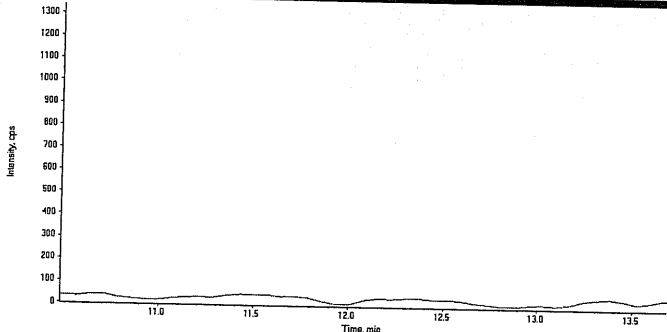


Compound Name:	246-Trinitrotoluene (227.1/209.8 amu)
Expected RT:	13.5
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A

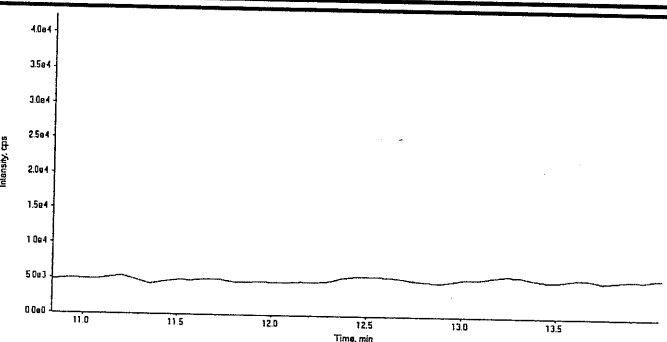
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 27/03/2010 1:31:00 PM  
LCMSMS#3

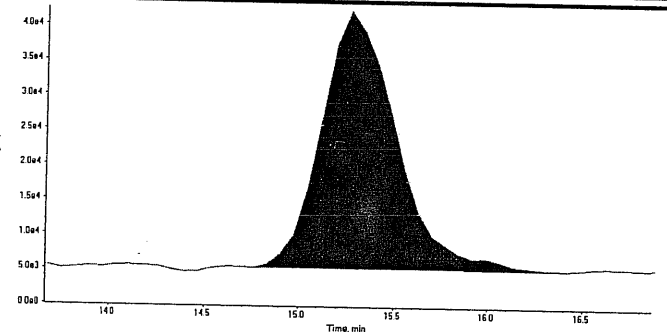
Data File	EXP0322042.wiff	Acquisition Date	3/23/2010 9:35:38 AM
Sample Name	XIBLK06	Acquisition Method	8321_pntx.dam
Batch Dilution Analyst	1 LER	Result Table	032210.rdb
Procedure Code	LCMSEXP_B	Sample Type	Unknown



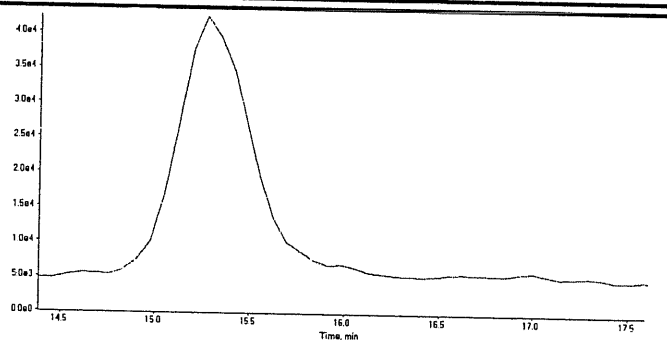
Compound Name:	Nitrobenzene (123.0/46.0 amu)
Expected RT:	12.1
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A



Compound Name:	34-dinitrotoluene (182.0/46.0 amu)
Expected RT:	12.4
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A



Compound Name:	26-dinitrotoluene (182.0/46.0 amu)
Expected RT:	15.3
Actual RT:	15.3
Area Counts:	1.01e+006
Manual Modification	No
Amount:	6.81 (ng/mL)
% Accuracy:	N/A

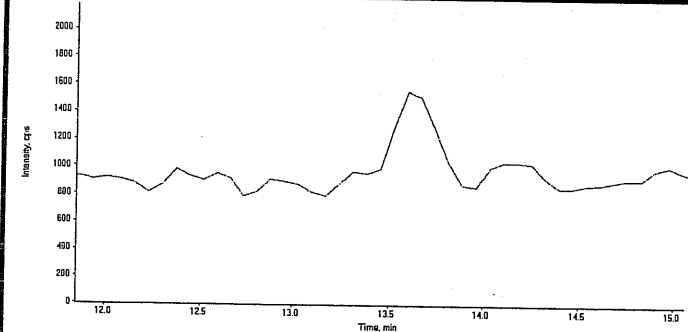


Compound Name:	24-dinitrotoluene (182.0/46.0 amu)
Expected RT:	16.0
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A

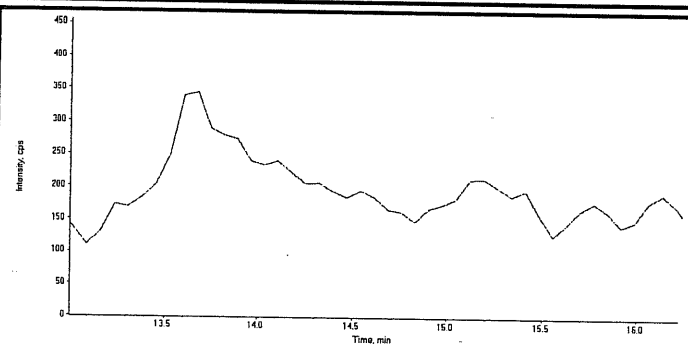
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 27/03/2010 1:31:00 PM  
LCMSMS#3

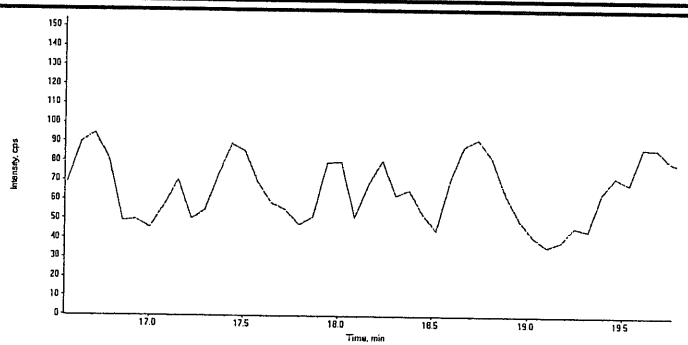
Data File	EXP0322042.wiff	Acquisition Date	3/23/2010 9:35:38 AM
Sample Name	XIBLK06	Acquisition Method	8321_pntx.dam
Batch Dilution Analyst	1 LER	Result Table	032210.rdb
Procedure Code	LCMSEXP_B	Sample Type	Unknown



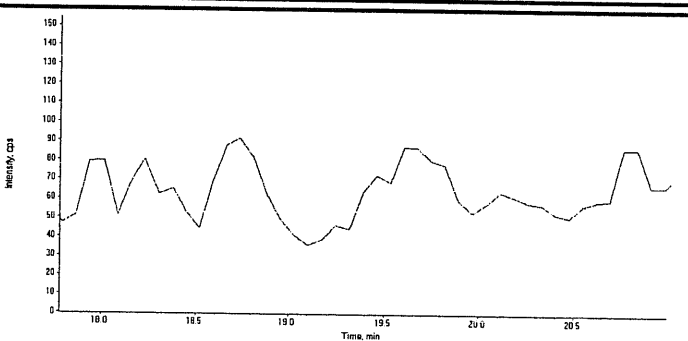
Compound Name:	4-Amino-26-dinitrotoluene (197.0/167.0 amu)
Expected RT:	13.5
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A



Compound Name:	2-Amino-46-dinitrotoluene (197.0/180.0 amu)
Expected RT:	14.6
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A



Compound Name:	2-Nitrotoluene (137.0/46.0 amu)
Expected RT:	18.2
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A



Compound Name:	4-Nitrotoluene (137.0/46.0 amu)
Expected RT:	19.4
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 27/03/2010 1:31:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0322042.wiff	<b>Acquisition Date</b>	3/23/2010 9:35:38 AM
<b>Sample Name</b>	XIBLK06	<b>Acquisition Method</b>	8321_pntx.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	032210.rdb
<b>Procedure Code</b>	LCMSEXP_B	<b>Sample Type</b>	Unknown

	<b>Compound Name:</b>	3-Nitrotoluene (137.0/46.0 amu)
	<b>Expected RT:</b>	20.8
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

	<b>Compound Name:</b>	PETN (361.1/62.0 amu)
	<b>Expected RT:</b>	20.4
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1758

Lab Code: GEL

Lab Sample ID: XIBLK07

Analysis Date: 23-MAR-10 11:36

GEL Data File: EXP0322044.wiff

Instrument ID: LCMSMS

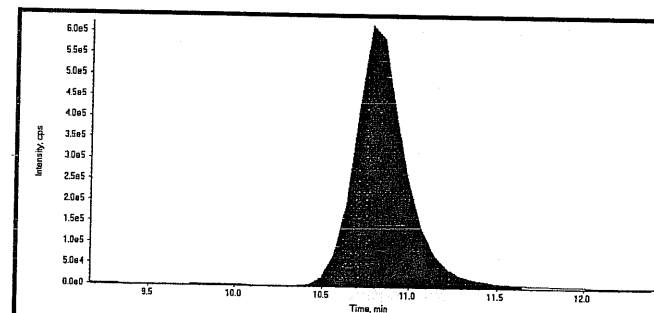
Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
o-Nitrotoluene	0	0
p-Nitrotoluene	0	0
3,4-Dinitrotoluene	0	0
1,3,5-Trinitrobenzene	0	0
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	2.42
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

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

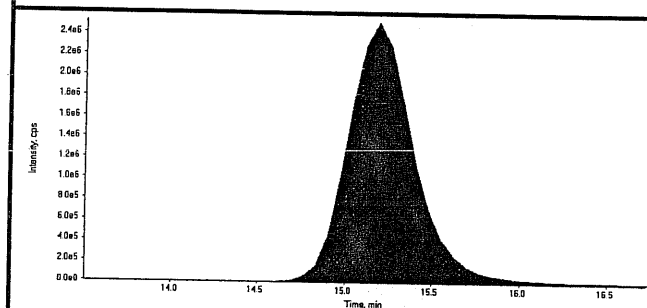
Printed: 27/03/2010 1:31:00 PM  
LCMSMS#3

Data File	EXP0322044.wiff	Acquisition Date	3/23/2010 11:36:22 AM
Sample Name	XIBLK07	Acquisition Method	8321_pntx.dam
Batch Dilution Analyst	1 LER	Result Table	032210.rdb
Procedure Code	LCMSEXP_B	Sample Type	Unknown



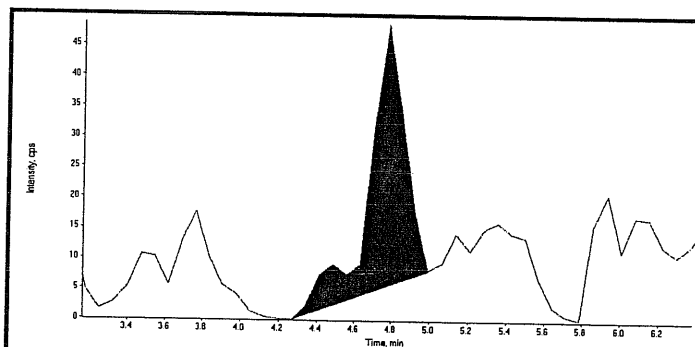
Compound Name:	13-Dinitrobenzene-d4 (172.1/46.1 amu)
Expected RT:	10.80
Actual RT:	10.80
Area Counts:	12600000.00
Manual Modification	No
Amount:	500.00(ng/mL)

Please refer to Form 8 for a list of Internal Standard Recoveries

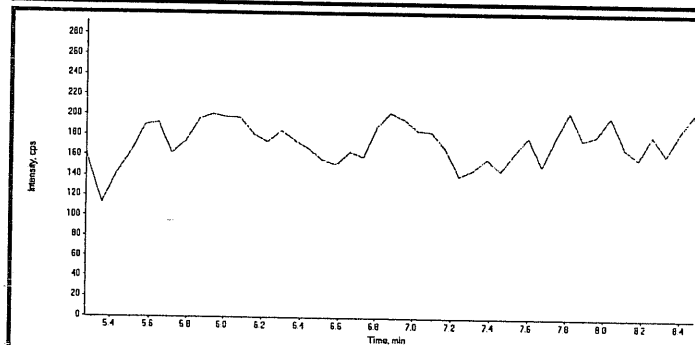


Compound Name:	26-Dinitrotoluene-d3 (185.0/155.0 amu)
Expected RT:	15.10
Actual RT:	15.20
Area Counts:	67300000.00
Manual Modification	No
Amount:	500.00(ng/mL)

Please refer to Form 8 for a list of Internal Standard Recoveries



Compound Name:	HMX (341.2/46.0 amu)
Expected RT:	4.77
Actual RT:	4.77
Area Counts:	5.51e+002
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A



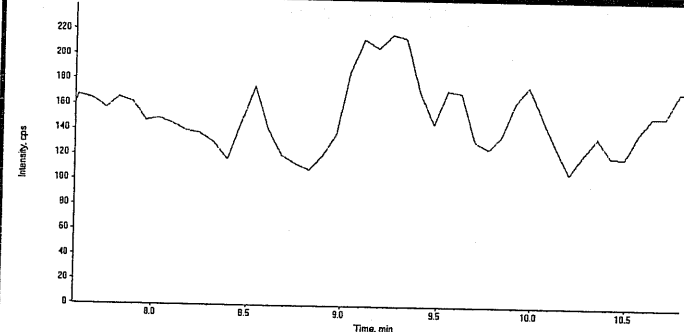
Compound Name:	RDX (267.0/46.1 amu)
Expected RT:	6.87
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A

*Handwritten signature and date:*  
3/28/10

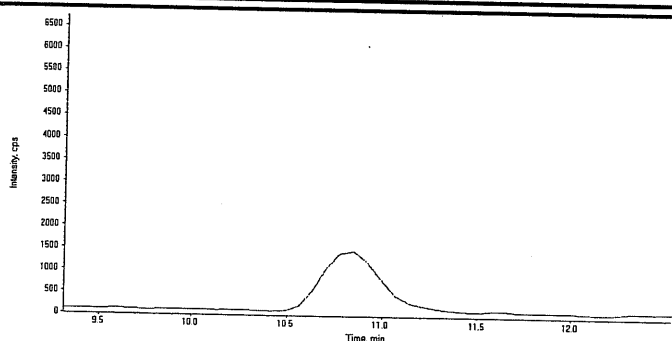
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 27/03/2010 1:31:00 PM  
LCMSMS#3

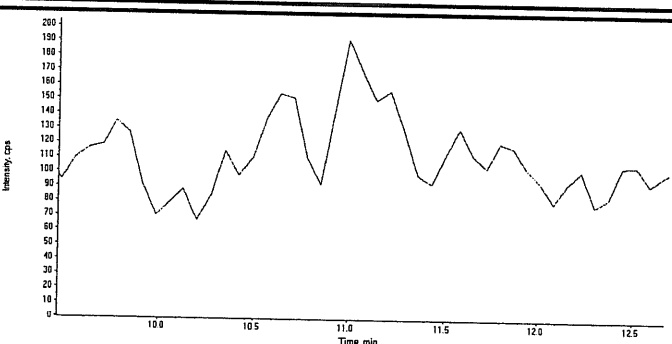
<b>Data File</b>	EXP0322044.wiff	<b>Acquisition Date</b>	3/23/2010 11:36:22 AM
<b>Sample Name</b>	XIBLK07	<b>Acquisition Method</b>	8321_pntx.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	032210.rdb
<b>Procedure Code</b>	LCMSEXP_B	<b>Sample Type</b>	Unknown



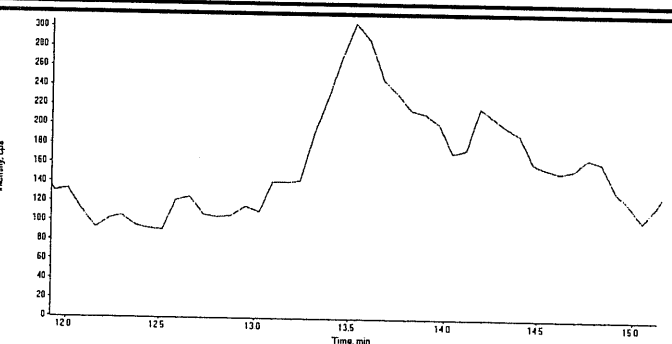
<b>Compound Name:</b>	135-Trinitrobenzene (213.0/182.8 amu)
Expected RT:	9.19
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A



<b>Compound Name:</b>	13-Dinitrobenzene (168.0/137.9 amu)
Expected RT:	10.9
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A



<b>Compound Name:</b>	Tetryl (241.0/180.8 amu)
Expected RT:	11.1
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A

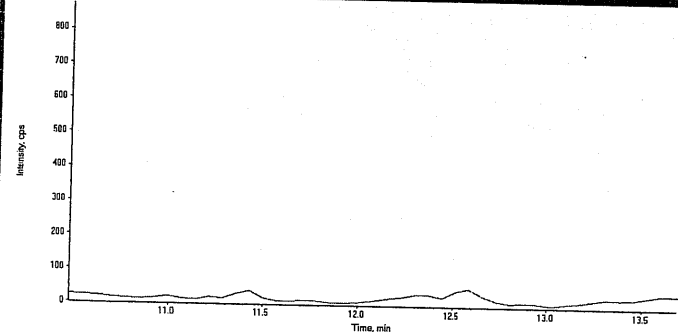


<b>Compound Name:</b>	246-Trinitrotoluene (227.1/209.8 amu)
Expected RT:	13.5
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A

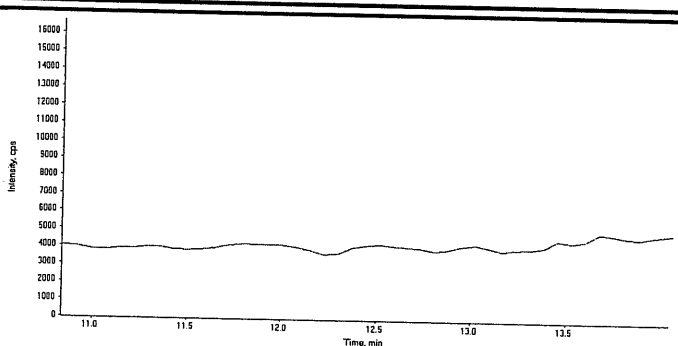
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 27/03/2010 1:31:00 PM  
LCMSMS#3

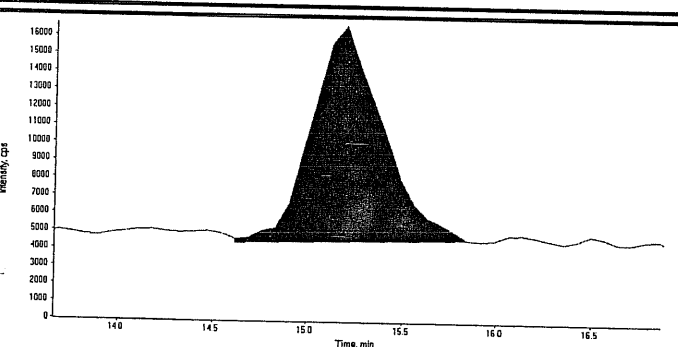
Data File	EXP0322044.wiff	Acquisition Date	3/23/2010 11:36:22 AM
Sample Name	XIBLK07	Acquisition Method	8321_pntx.dam
Batch Dilution Analyst	1 LER	Result Table	032210.rdb
Procedure Code	LCMSEXP_B	Sample Type	Unknown



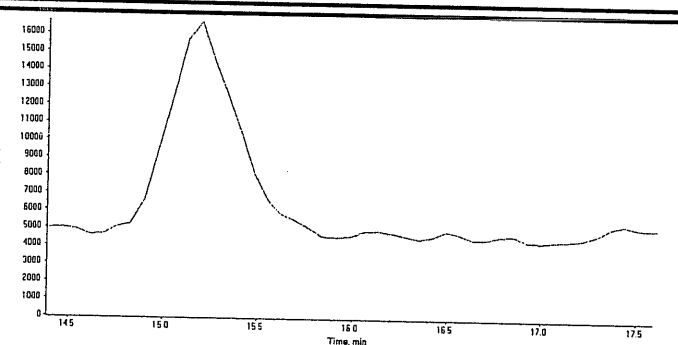
Compound Name:	Nitrobenzene (123.0/46.0 amu)
Expected RT:	12.1
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A



Compound Name:	34-dinitrotoluene (182.0/46.0 amu)
Expected RT:	12.4
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A



Compound Name:	26-dinitrotoluene (182.0/46.0 amu)
Expected RT:	15.3
Actual RT:	15.2
Area Counts:	3.17e+005
Manual Modification	No
Amount:	2.42 (ng/mL)
% Accuracy:	N/A

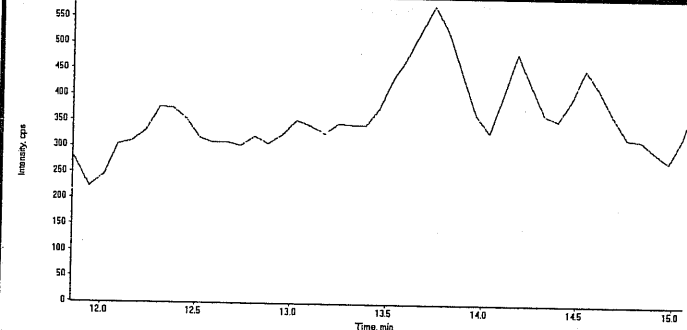


Compound Name:	24-dinitrotoluene (182.0/46.0 amu)
Expected RT:	16.0
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A

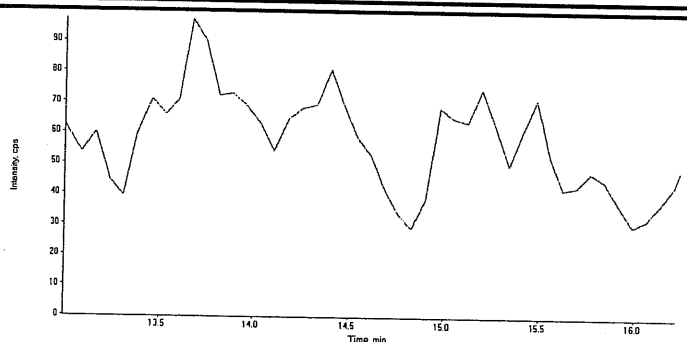
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 27/03/2010 1:31:00 PM  
LCMSMS#3

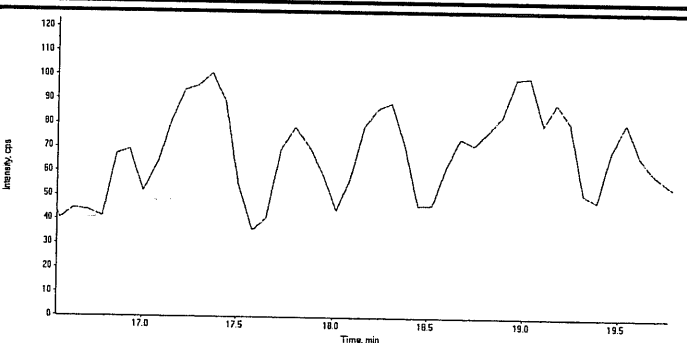
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<b>Sample Name</b>	XIBLK07	<b>Acquisition Method</b>	8321_pntx.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	032210.rdb
<b>Procedure Code</b>	LCMSEXP_B	<b>Sample Type</b>	Unknown



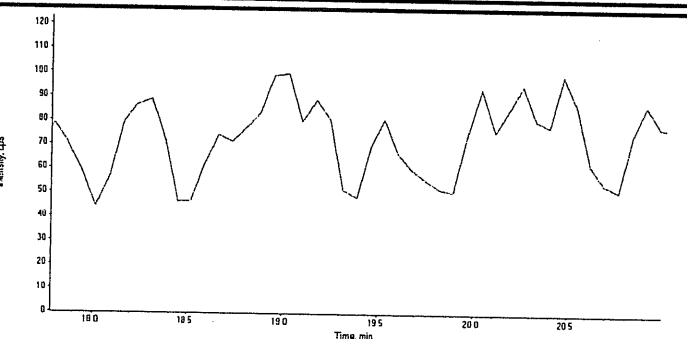
<b>Compound Name:</b>	4-Amino-26-dinitrotoluene (197.0/167.0 amu)
Expected RT:	13.5
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A



<b>Compound Name:</b>	2-Amino-46-dinitrotoluene (197.0/180.0 amu)
Expected RT:	14.6
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A



<b>Compound Name:</b>	2-Nitrotoluene (137.0/46.0 amu)
Expected RT:	18.2
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A

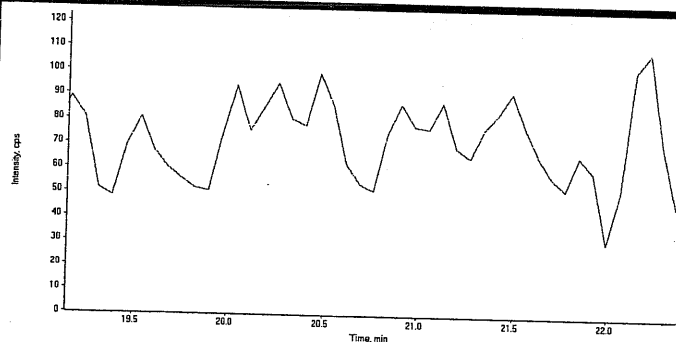


<b>Compound Name:</b>	4-Nitrotoluene (137.0/46.0 amu)
Expected RT:	19.4
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A

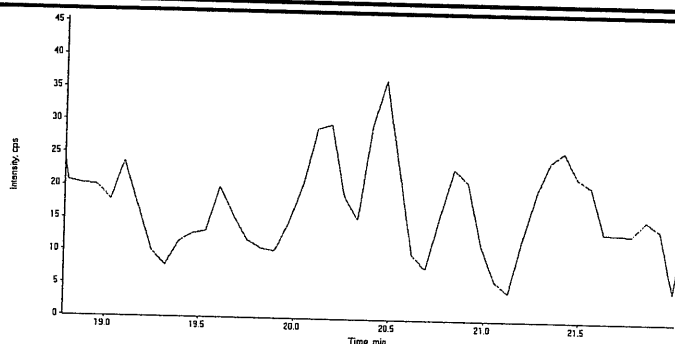
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 27/03/2010 1:31:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0322044.wiff	<b>Acquisition Date</b>	3/23/2010 11:36:22 AM
<b>Sample Name</b>	XIBLK07	<b>Acquisition Method</b>	8321_pntx.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	032210.rdb
<b>Procedure Code</b>	LCMSEXP_B	<b>Sample Type</b>	Unknown



<b>Compound Name:</b>	3-Nitrotoluene (137.0/46.0 amu)
Expected RT:	20.8
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A



<b>Compound Name:</b>	PETN (361.1/62.0 amu)
Expected RT:	20.4
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A

4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1758

Lab Code: GEL

Lab Sample ID: XIBLK08

Analysis Date: 23-MAR-10 12:29

GEL Data File: EXP0322046.wiff

Instrument ID: LCMSMS

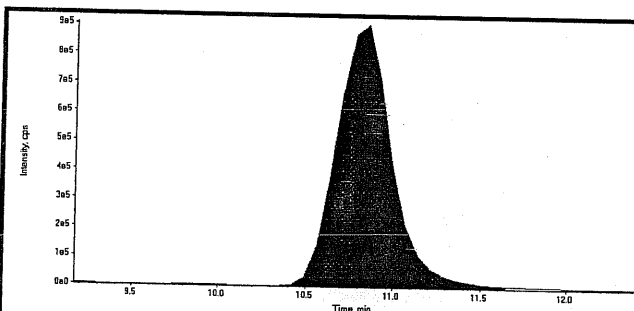
Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
1,3,5-Trinitrobenzene	0	0
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	2.36
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	.605
p-Nitrotoluene	0	0

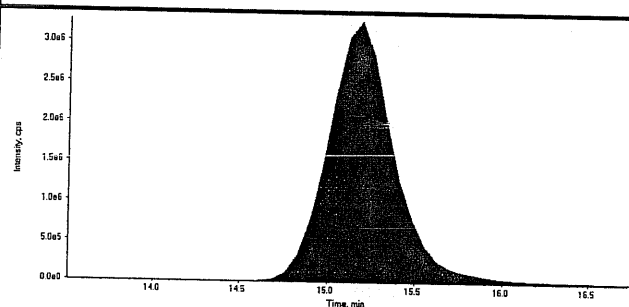
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 27/03/2010 1:31:00 PM  
LCMSMS#3

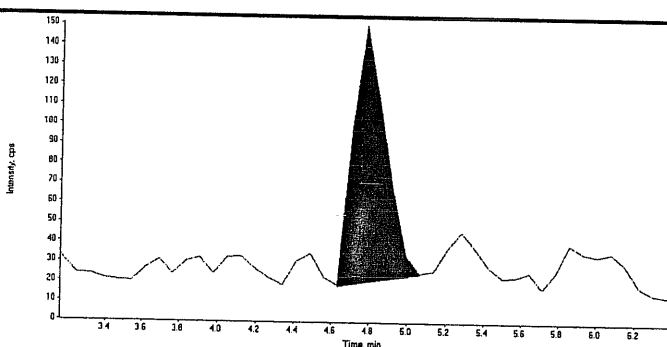
Data File	EXP0322046.wiff	Acquisition Date	3/23/2010 12:29:13 PM
Sample Name	XIBLK08	Acquisition Method	8321_pntx.dam
Batch Dilution Analyst	1 LER	Result Table	032210.rdb
Procedure Code	LCMSEXP_B	Sample Type	Unknown



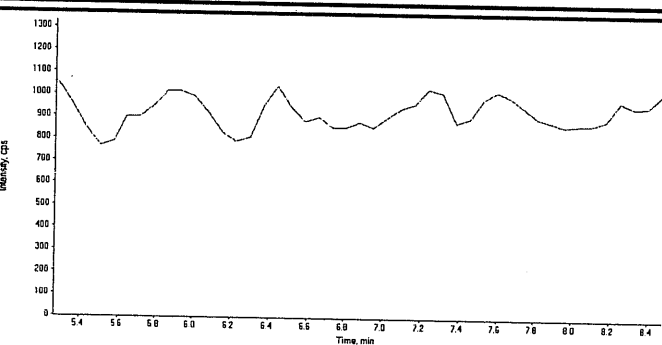
Compound Name:	13-Dinitrobenzene-d4 (172.1/46.1 amu)
Expected RT:	10.80
Actual RT:	10.90
Area Counts:	20100000.00
Manual Modification	No
Amount:	500.00(ng/mL)
Please refer to Form 8 for a list of Internal Standard Recoveries	



Compound Name:	26-Dinitrotoluene-d3 (185.0/155.0 amu)
Expected RT:	15.10
Actual RT:	15.20
Area Counts:	86400000.00
Manual Modification	No
Amount:	500.00(ng/mL)
Please refer to Form 8 for a list of Internal Standard Recoveries	



Compound Name:	HMX (341.2/46.0 amu)
Expected RT:	4.77
Actual RT:	4.77
Area Counts:	1.54e+003
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A



Compound Name:	RDX (267.0/46.1 amu)
Expected RT:	6.87
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A

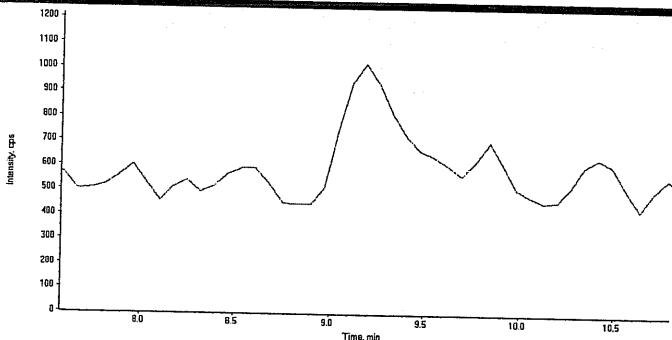
*Handwritten signature and date:*  
3/28/10



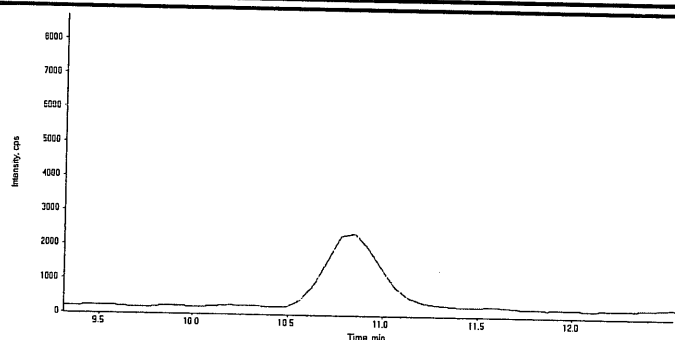
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 27/03/2010 1:31:00 PM  
LCMSMS#3

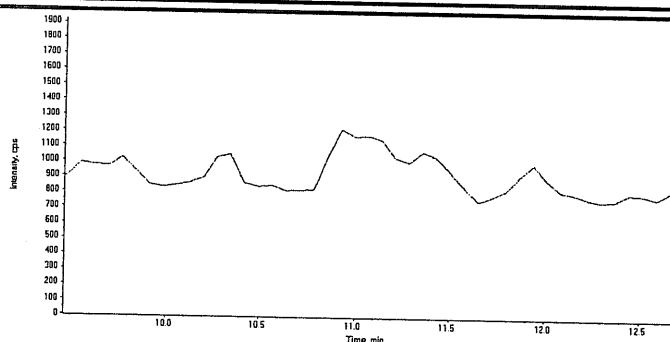
<b>Data File</b>	EXP0322046.wiff	<b>Acquisition Date</b>	3/23/2010 12:29:13 PM
<b>Sample Name</b>	XIBLK08	<b>Acquisition Method</b>	8321_pntx.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	032210.rdb
<b>Procedure Code</b>	LCMSEXP_B	<b>Sample Type</b>	Unknown



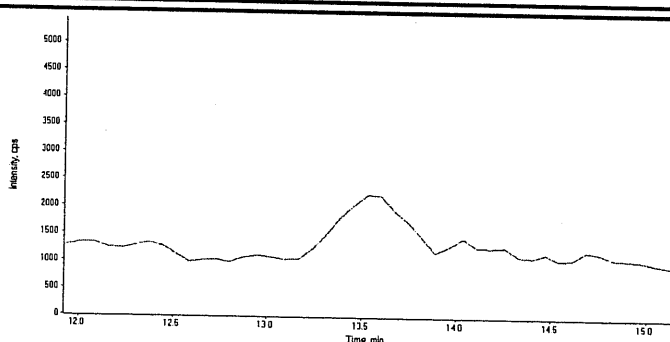
<b>Compound Name:</b>	135-Trinitrobenzene (213.0/182.8 amu)
Expected RT:	9.19
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A



<b>Compound Name:</b>	13-Dinitrobenzene (168.0/137.9 amu)
Expected RT:	10.9
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A



<b>Compound Name:</b>	Tetryl (241.0/180.8 amu)
Expected RT:	11.1
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A



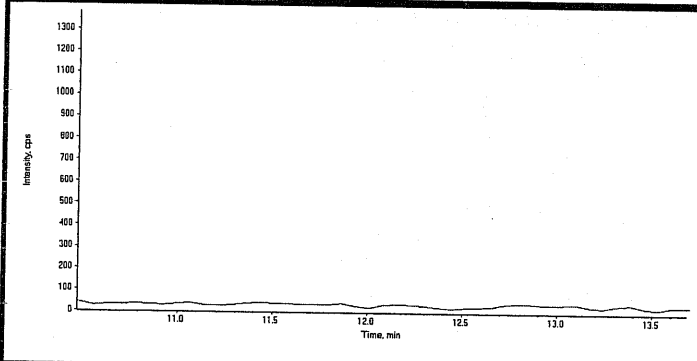
<b>Compound Name:</b>	246-Trinitrotoiuene (227.1/209.8 amu)
Expected RT:	13.5
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A

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GEL SOP GL-OA-E-056, Method 8321A-Modified

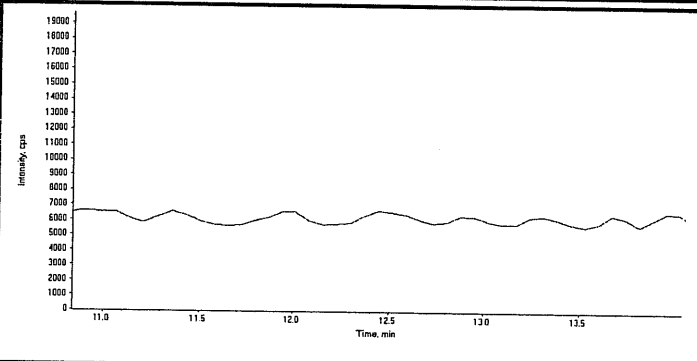
Printed: 27/03/2010 1:31:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0322046.wiff	<b>Acquisition Date</b>	3/23/2010 12:29:13 PM
<b>Sample Name</b>	XIBLK08	<b>Acquisition Method</b>	8321_pntx.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	032210.rdb
<b>Procedure Code</b>	LCMSEXP_B	<b>Sample Type</b>	Unknown

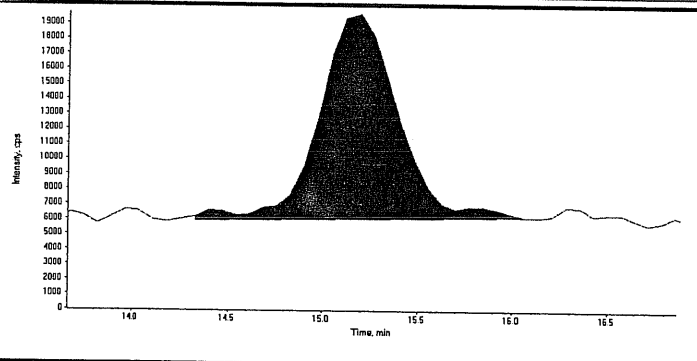
  

	<b>Compound Name:</b>	Nitrobenzene (123.0/46.0 amu)
	Expected RT:	12.1
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

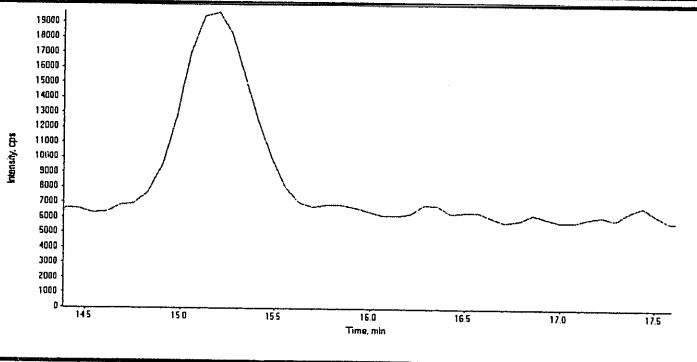
  

	<b>Compound Name:</b>	34-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	12.4
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	26-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	15.3
	Actual RT:	15.2
	Area Counts:	3.97e+005
	Manual Modification	No
	Amount:	2.36 (ng/mL)
	% Accuracy:	N/A

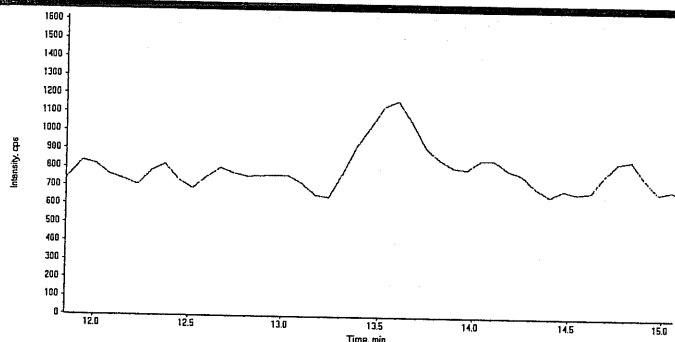
  

	<b>Compound Name:</b>	24-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	16.0
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

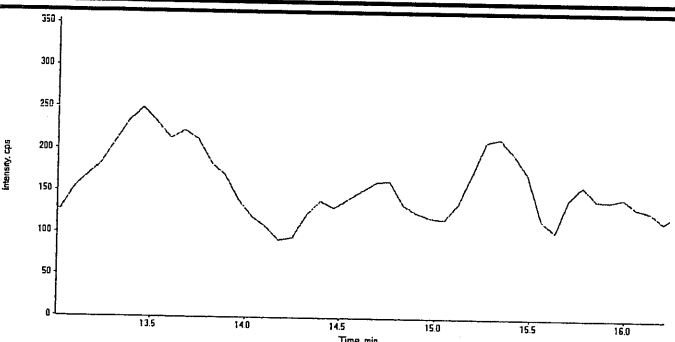
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 27/03/2010 1:31:00 PM  
LCMSMS#3

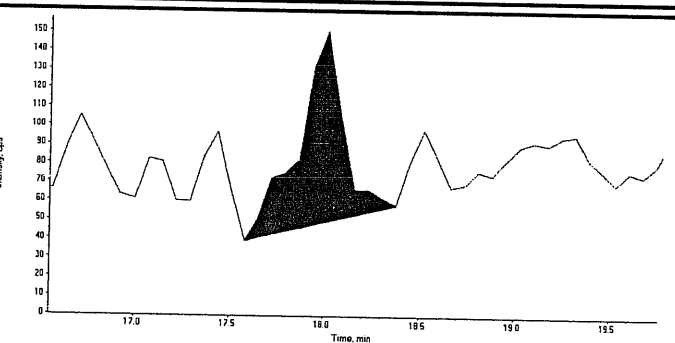
Data File	EXP0322046.wiff	Acquisition Date	3/23/2010 12:29:13 PM
Sample Name	XIBLK08	Acquisition Method	8321_pntx.dam
Batch Dilution Analyst	1 LER	Result Table	032210.rdb
Procedure Code	LCMSEXP_B	Sample Type	Unknown



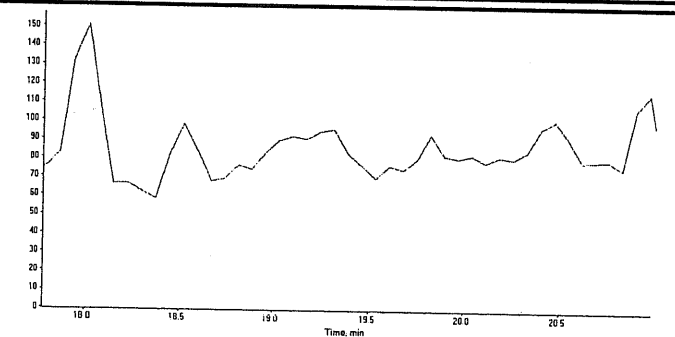
Compound Name:	4-Amino-26-dinitrotoluene (197.0/167.0 amu)
Expected RT:	13.5
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A



Compound Name:	2-Amino-46-dinitrotoluene (197.0/180.0 amu)
Expected RT:	14.6
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A



Compound Name:	2-Nitrotoluene (137.0/46.0 amu)
Expected RT:	18.2
Actual RT:	18.0
Area Counts:	1.63e+003
Manual Modification	No
Amount:	0.605 (ng/mL)
% Accuracy:	N/A



Compound Name:	4-Nitrotoluene (137.0/46.0 amu)
Expected RT:	19.4
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 27/03/2010 1:31:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0322046.wiff	<b>Acquisition Date</b>	3/23/2010 12:29:13 PM
<b>Sample Name</b>	XIBLK08	<b>Acquisition Method</b>	8321_pntx.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	032210.rdb
<b>Procedure Code</b>	LCMSEXP_B	<b>Sample Type</b>	Unknown

	<b>Compound Name:</b>	3-Nitrotoluene (137.0/46.0 amu)
	<b>Expected RT:</b>	20.8
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

	<b>Compound Name:</b>	PETN (361.1/62.0 amu)
	<b>Expected RT:</b>	20.4
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

4A  
Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1758

Lab Code: GEL

Lab Sample ID: XIBLK09

Analysis Date: 23-MAR-10 18:12

GEL Data File: EXP0322059.wiff

Instrument ID: LCMSMS

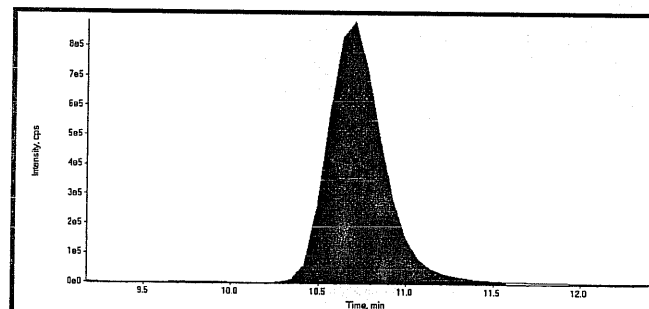
Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
1,3,5-Trinitrobenzene	0	0
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2-Amino-4,6-dinitrotoluene	0	0
4-Amino-2,6-dinitrotoluene	0	0
HMX	0	0
Nitrobenzene	0	0
PETN	0	0
RDX	0	0
Tetryl	0	0
m-Dinitrobenzene	0	0
m-Nitrotoluene	0	0
o-Nitrotoluene	0	0
p-Nitrotoluene	0	0

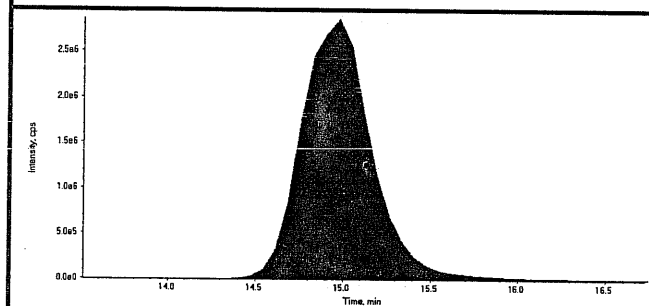
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 27/03/2010 1:31:00 PM  
LCMSMS#3

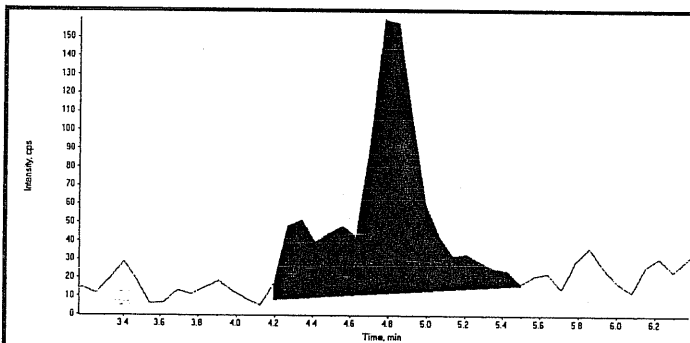
Data File	EXP0322059.wiff	Acquisition Date	3/23/2010 6:12:41 PM
Sample Name	XIBLK09	Acquisition Method	8321_pntx.dam
Batch Dilution Analyst	1 LER	Result Table	032210.rdb
Procedure Code	LCMSEXP_B	Sample Type	Unknown



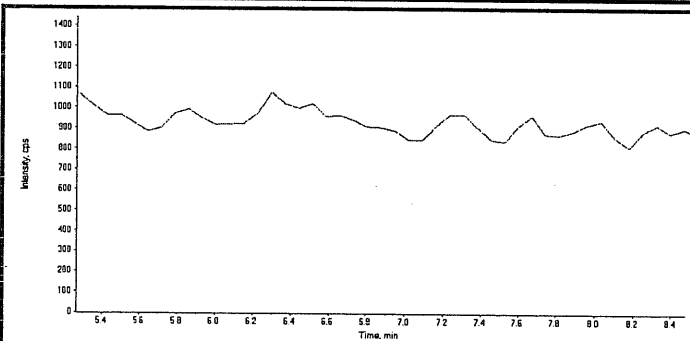
Compound Name:	13-Dinitrobenzene-d4 (172.1/46.1 amu)
Expected RT:	10.80
Actual RT:	10.70
Area Counts:	19600000.00
Manual Modification	No
Amount:	500.00(ng/mL)
Please refer to Form 8 for a list of Internal Standard Recoveries	



Compound Name:	26-Dinitrotoluene-d3 (185.0/155.0 amu)
Expected RT:	15.10
Actual RT:	15.00
Area Counts:	81000000.00
Manual Modification	No
Amount:	500.00(ng/mL)
Please refer to Form 8 for a list of Internal Standard Recoveries	



Compound Name:	HMX (341.2/46.0 amu)
Expected RT:	4.77
Actual RT:	4.77
Area Counts:	3.59e+003
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A



Compound Name:	RDX (267.0/46.1 amu)
Expected RT:	6.87
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A

*done 3/28/10*  
*See 3/28/10*

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 27/03/2010 1:31:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0322059.wiff	<b>Acquisition Date</b>	3/23/2010 6:12:41 PM
<b>Sample Name</b>	XIBLK09	<b>Acquisition Method</b>	8321_pntx.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	032210.rdb
<b>Procedure Code</b>	LCMSEXP_B	<b>Sample Type</b>	Unknown

	<b>Compound Name:</b>	135-Trinitrobenzene (213.0/182.8 amu)
	Expected RT:	9.19
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	13-Dinitrobenzene (168.0/137.9 amu)
	Expected RT:	10.9
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	Tetryl (241.0/180.8 amu)
	Expected RT:	11.1
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

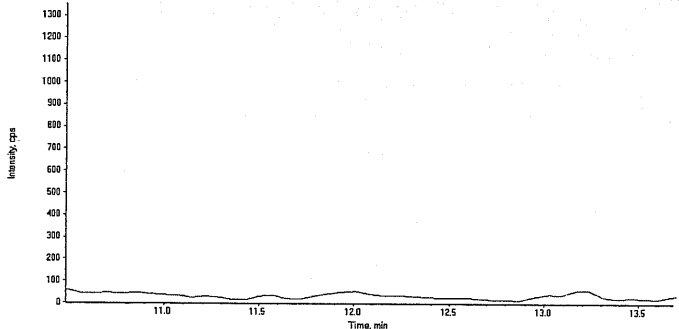
	<b>Compound Name:</b>	246-Trinitrotoluene (227.1/209.8 amu)
	Expected RT:	13.5
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

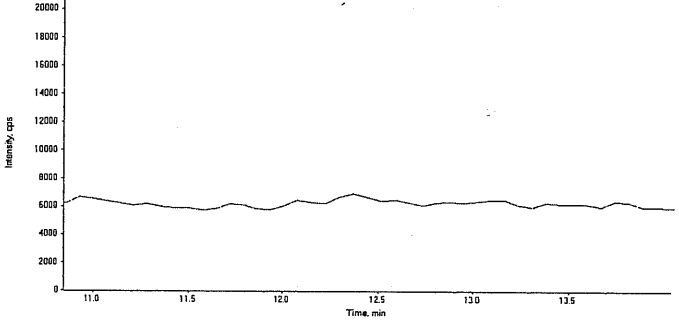
Printed: 27/03/2010 1:31:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0322059.wiff	<b>Acquisition Date</b>	3/23/2010 6:12:41 PM
<b>Sample Name</b>	XIBLK09	<b>Acquisition Method</b>	8321_pntx.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	032210.rdb
<b>Procedure Code</b>	LCMSEXP_B	<b>Sample Type</b>	Unknown

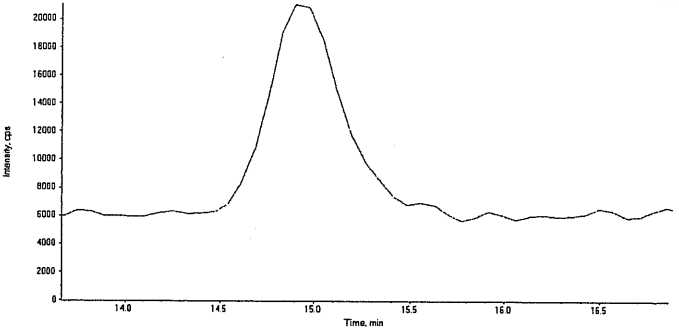
  

	<b>Compound Name:</b>	Nitrobenzene (123.0/46.0 amu)
	Expected RT:	12.1
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

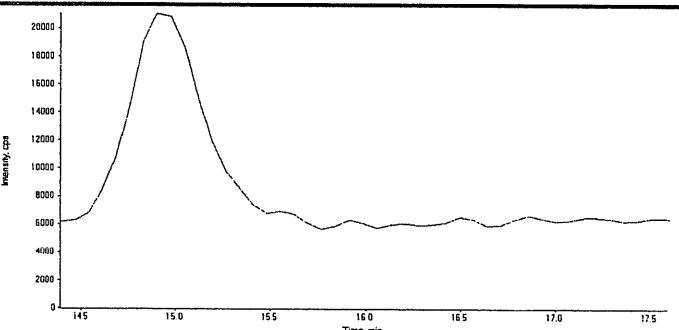
  

	<b>Compound Name:</b>	34-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	12.4
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	26-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	15.3
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	24-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	16.0
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

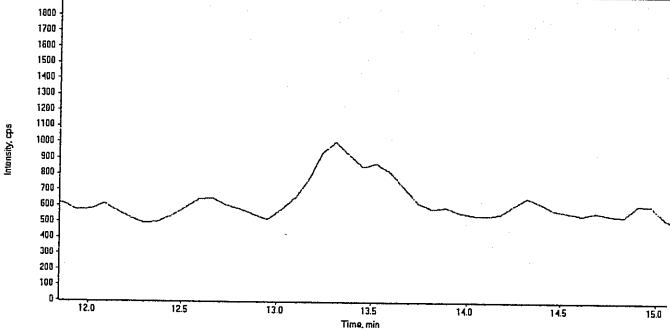


GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

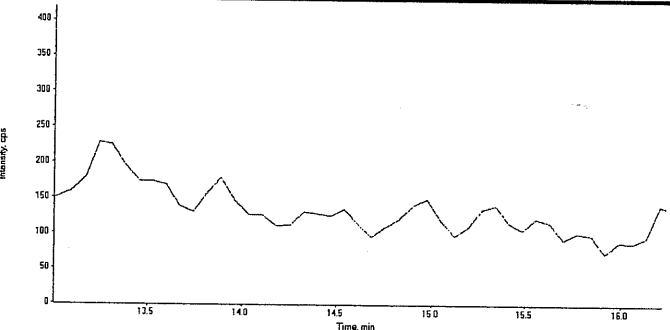
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LCMSMS#3

<b>Data File</b>	EXP0322059.wiff	<b>Acquisition Date</b>	3/23/2010 6:12:41 PM
<b>Sample Name</b>	XIBLK09	<b>Acquisition Method</b>	8321_pntx.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	032210.rdb
<b>Procedure Code</b>	LCMSEXP_B	<b>Sample Type</b>	Unknown

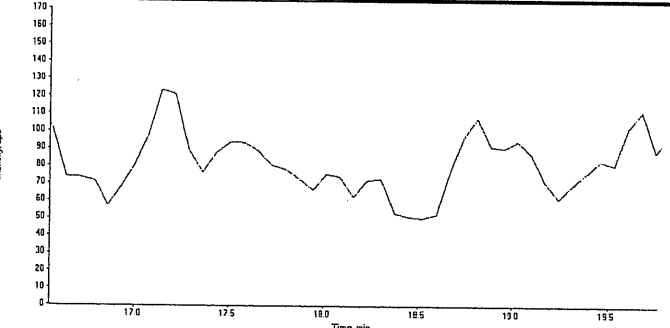
  

	<b>Compound Name:</b>	4-Amino-26-dinitrotoluene (197.0/167.0 amu)
	Expected RT:	13.5
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

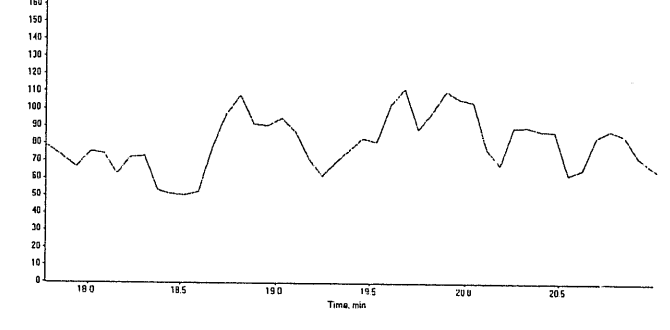
  

	<b>Compound Name:</b>	2-Amino-46-dinitrotoluene (197.0/180.0 amu)
	Expected RT:	14.6
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	2-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	18.2
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	4-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	19.4
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 27/03/2010 1:31:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0322059.wiff	<b>Acquisition Date</b>	3/23/2010 6:12:41 PM
<b>Sample Name</b>	XIBLK09	<b>Acquisition Method</b>	8321_pntx.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	032210.rdb
<b>Procedure Code</b>	LCMSEXP_B	<b>Sample Type</b>	Unknown

	<b>Compound Name:</b>	3-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	20.8
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	PETN (361.1/62.0 amu)
	Expected RT:	20.4
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1758

Lab Code: GEL

Lab Sample ID: XIBLK10

Analysis Date: 23-MAR-10 20:24

GEL Data File: EXP0322064.wiff

Instrument ID: LCMSMS

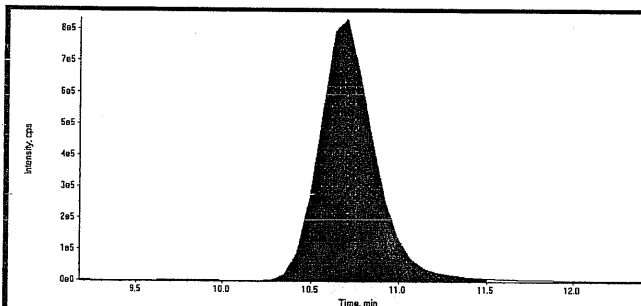
Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
1,3,5-Trinitrobenzene	0	0
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2-Amino-4,6-dinitrotoluene	0	0
4-Amino-2,6-dinitrotoluene	0	0
HMX	0	0
Nitrobenzene	0	0
PETN	0	0
RDX	0	0
Tetryl	0	0
m-Dinitrobenzene	0	0
m-Nitrotoluene	0	0
o-Nitrotoluene	0	0
p-Nitrotoluene	0	0

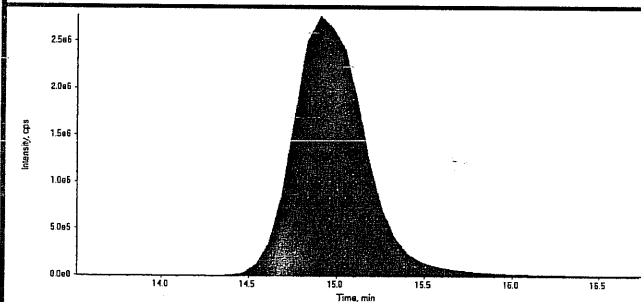
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 27/03/2010 1:31:00 PM  
LCMSMS#3

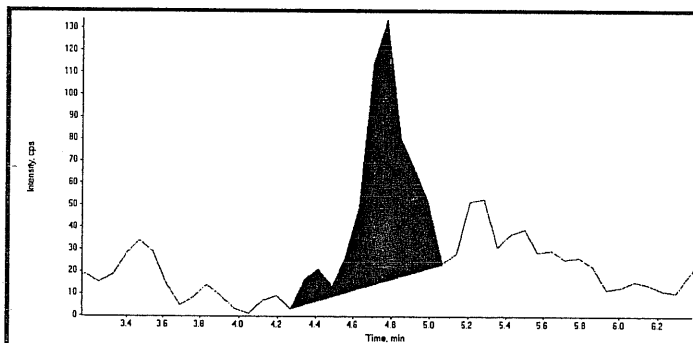
Data File	EXP0322064.wiff	Acquisition Date	3/23/2010 8:24:38 PM
Sample Name	XIBLK10	Acquisition Method	8321_pntx.dam
Batch Dilution Analyst	1 LER	Result Table	032210.rdb
Procedure Code	LCMSEXP_B	Sample Type	Unknown



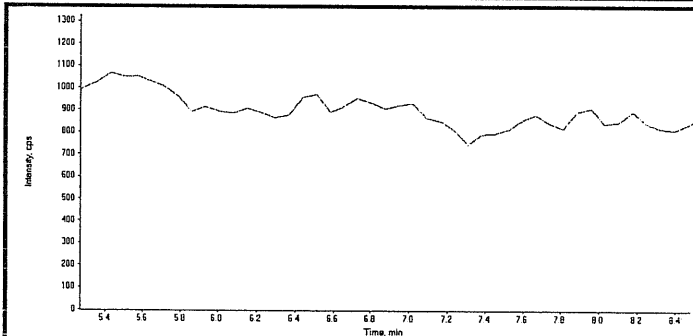
Compound Name:	13-Dinitrobenzene-d4 (172.1/46.1 amu)
Expected RT:	10.80
Actual RT:	10.70
Area Counts:	18300000.00
Manual Modification	No
Amount:	500.00(ng/mL)
Please refer to Form 8 for a list of Internal Standard Recoveries	



Compound Name:	26-Dinitrotoluene-d3 (185.0/155.0 amu)
Expected RT:	15.10
Actual RT:	14.90
Area Counts:	80200000.00
Manual Modification	No
Amount:	500.00(ng/mL)
Please refer to Form 8 for a list of Internal Standard Recoveries	



Compound Name:	HMX (341.2/46.0 amu)
Expected RT:	4.77
Actual RT:	4.77
Area Counts:	1.90e+003
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A



Compound Name:	RDX (267.0/46.1 amu)
Expected RT:	6.87
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A

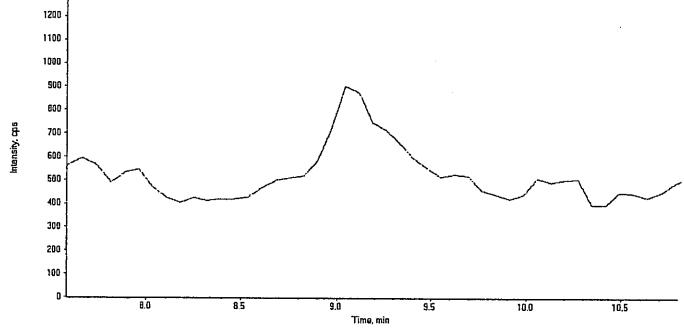
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*3/23/10*

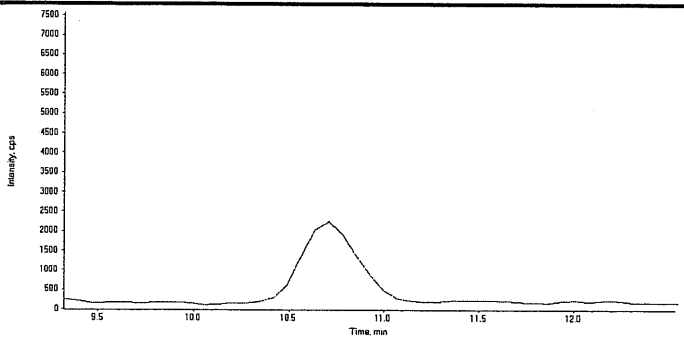
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*0322-8710*

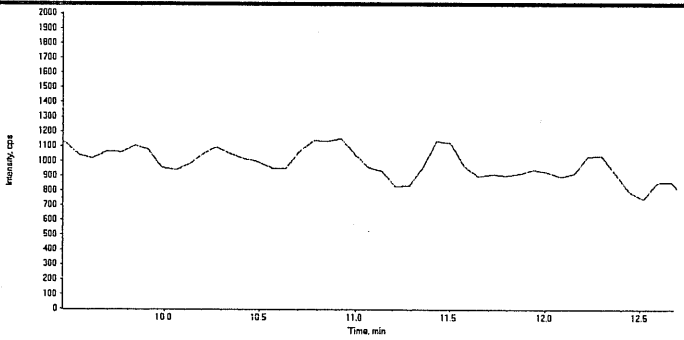
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

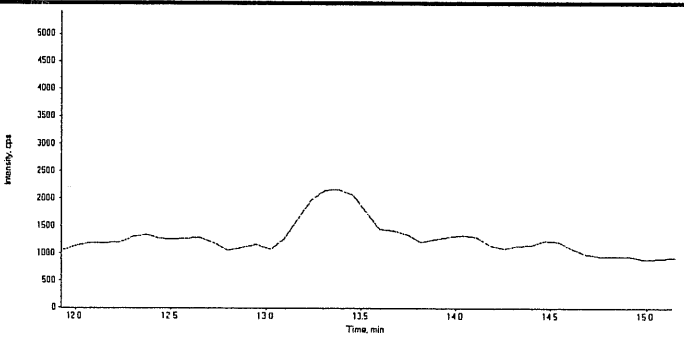
Printed: 27/03/2010 1:31:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0322064.wiff	<b>Acquisition Date</b>	3/23/2010 8:24:38 PM
<b>Sample Name</b>	XIBLK10	<b>Acquisition Method</b>	8321_pntx.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	032210.rdb
<b>Procedure Code</b>	LCMSEXP_B	<b>Sample Type</b>	Unknown

	<b>Compound Name:</b>	135-Trinitrobenzene (213.0/182.8 amu)
	Expected RT:	9.19
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	13-Dinitrobenzene (168.0/137.9 amu)
	Expected RT:	10.9
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	Tetryl (241.0/180.8 amu)
	Expected RT:	11.1
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

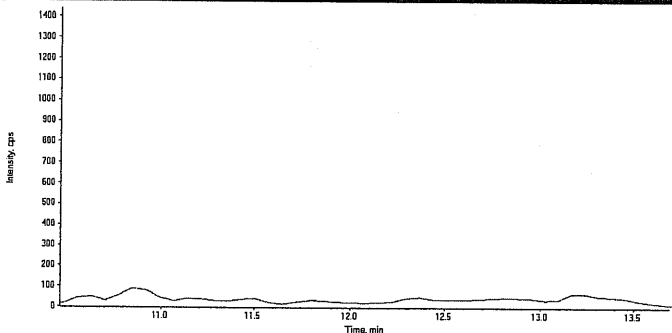
	<b>Compound Name:</b>	246-Trinitrotoluene (227.1/209.8 amu)
	Expected RT:	13.5
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

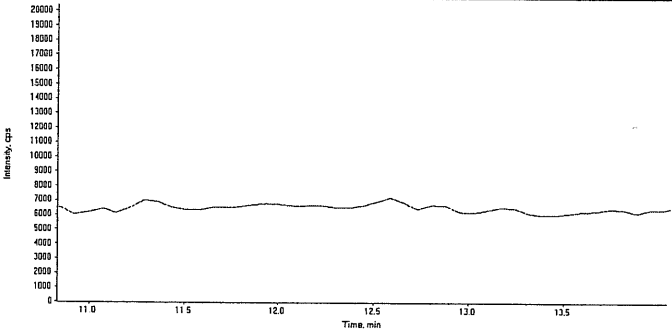
Printed: 27/03/2010 1:31:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0322064.wiff	<b>Acquisition Date</b>	3/23/2010 8:24:38 PM
<b>Sample Name</b>	XIBLK10	<b>Acquisition Method</b>	8321_pntx.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	032210.rdb
<b>Procedure Code</b>	LCMSEXP_B	<b>Sample Type</b>	Unknown

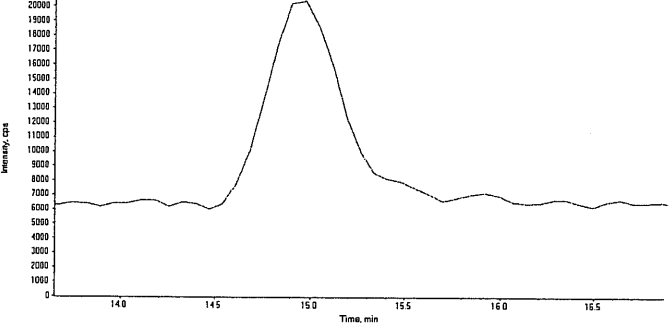
  

	<b>Compound Name:</b>	Nitrobenzene (123.0/46.0 amu)
	Expected RT:	12.1
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

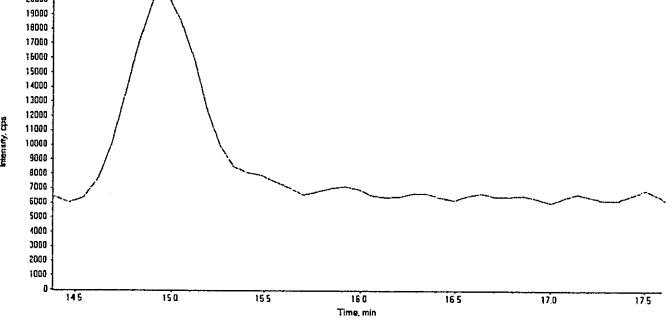
  

	<b>Compound Name:</b>	34-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	12.4
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	26-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	15.3
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

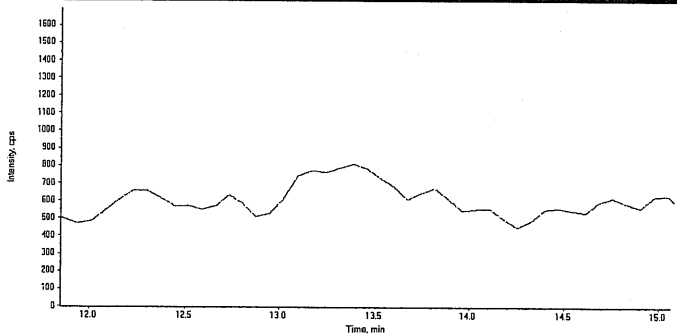
	<b>Compound Name:</b>	24-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	16.0
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

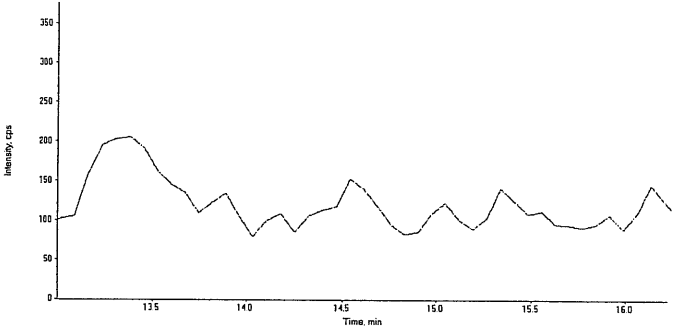
Printed: 27/03/2010 1:31:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0322064.wiff	<b>Acquisition Date</b>	3/23/2010 8:24:38 PM
<b>Sample Name</b>	XIBLK10	<b>Acquisition Method</b>	8321_pntx.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	032210.rdb
<b>Procedure Code</b>	LCMSEXP_B	<b>Sample Type</b>	Unknown


  

	<b>Compound Name:</b>	4-Amino-26-dinitrotoluene (197.0/167.0 amu)
	Expected RT:	13.5
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

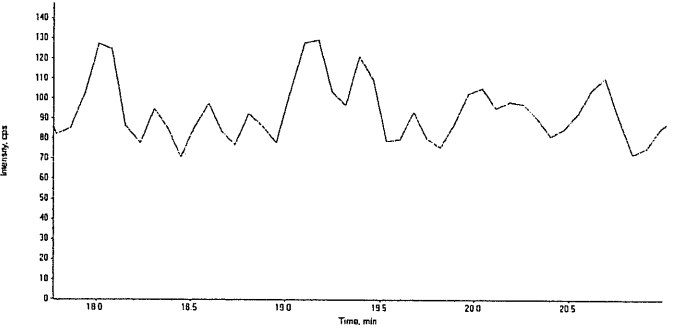
  

	<b>Compound Name:</b>	2-Amino-46-dinitrotoluene (197.0/180.0 amu)
	Expected RT:	14.6
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	2-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	18.2
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	4-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	19.4
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 27/03/2010 1:31:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0322064.wiff	<b>Acquisition Date</b>	3/23/2010 8:24:38 PM
<b>Sample Name</b>	XIBLK10	<b>Acquisition Method</b>	8321_pntx.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	032210.rdb
<b>Procedure Code</b>	LCMSEXP_B	<b>Sample Type</b>	Unknown

	<b>Compound Name:</b>	3-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	20.8
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	PETN (361.1/62.0 amu)
	Expected RT:	20.4
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1758

Lab Code: GEL

Lab Sample ID: XIBLK02

Analysis Date: 30-MAR-10 12:08

GEL Data File: EXP0330009.wiff

Instrument ID: LCMSMS

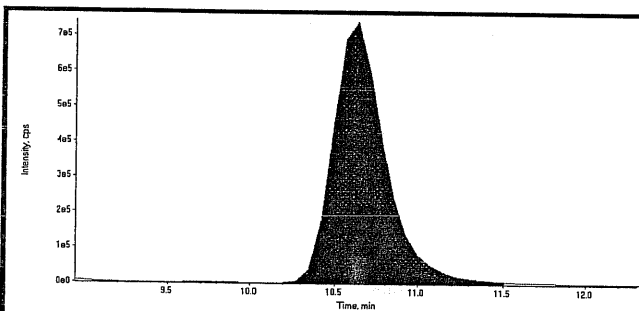
Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
1,3,5-Trinitrobenzene	0	0
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	2.96
2-Amino-4,6-dinitrotoluene	0	0
4-Amino-2,6-dinitrotoluene	0	0
HMX	0	0
Nitrobenzene	0	0
PETN	0	0
RDX	0	0
Tetryl	0	0
m-Dinitrobenzene	0	0
m-Nitrotoluene	0	0
o-Nitrotoluene	0	0
p-Nitrotoluene	0	0

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

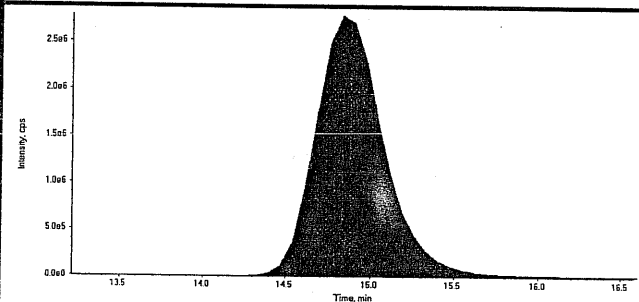
Printed: 31/03/2010 4:24:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0330009.wiff	<b>Acquisition Date</b>	3/30/2010 12:08:12 PM
<b>Sample Name</b>	XIBLK02	<b>Acquisition Method</b>	8321_pntx.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	033010.rdb
<b>Procedure Code</b>	LCMSEXP_B	<b>Sample Type</b>	Unknown



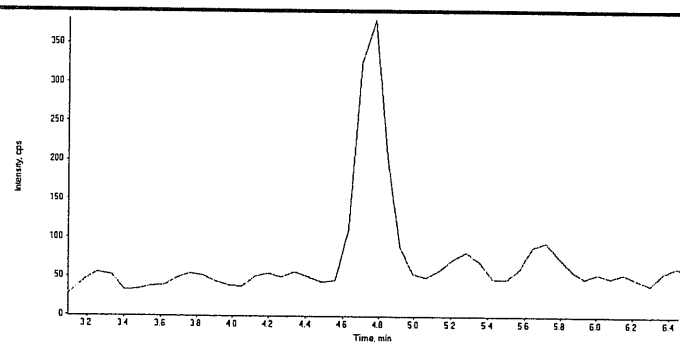
<b>Compound Name:</b>	13-Dinitrobenzene-d4 (172.1/46.1 amu)
Expected RT:	10.60
Actual RT:	10.60
Area Counts:	16200000.00
Manual Modification	No
Amount:	500.00(ng/mL)

Please refer to Form 8 for a list of Internal Standard Recoveries

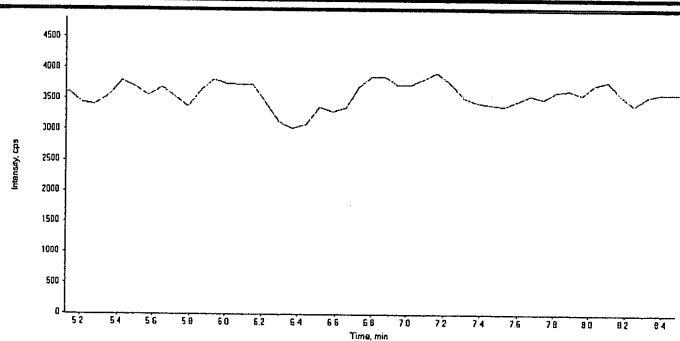


<b>Compound Name:</b>	26-Dinitrotoluene-d3 (185.0/155.0 amu)
Expected RT:	14.90
Actual RT:	14.80
Area Counts:	79200000.00
Manual Modification	No
Amount:	500.00(ng/mL)

Please refer to Form 8 for a list of Internal Standard Recoveries



<b>Compound Name:</b>	HMX (341.2/46.0 amu)
Expected RT:	4.77
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A



<b>Compound Name:</b>	RDX (267.0/46.1 amu)
Expected RT:	6.80
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A

*LER*  
4/2/10

*Hmc*  
04/02/10

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 31/03/2010 4:24:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0330009.wiff	<b>Acquisition Date</b>	3/30/2010 12:08:12 PM
<b>Sample Name</b>	XIBLK02	<b>Acquisition Method</b>	8321_pntx.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	033010.rdb
<b>Procedure Code</b>	LCMSEXP_B	<b>Sample Type</b>	Unknown

	<b>Compound Name:</b>	135-Trinitrobenzene (213.0/182.8 amu)
	Expected RT:	9.12
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	13-Dinitrobenzene (168.0/137.9 amu)
	Expected RT:	10.8
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	Tetryl (241.0/180.8 amu)
	Expected RT:	10.9
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

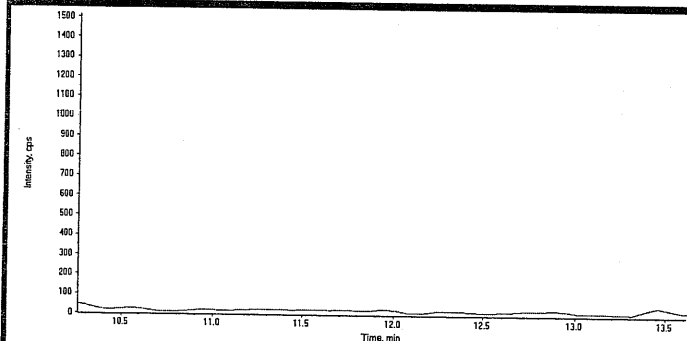
  

	<b>Compound Name:</b>	246-Trinitrotoluene (227.1/209.8 amu)
	Expected RT:	13.3
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

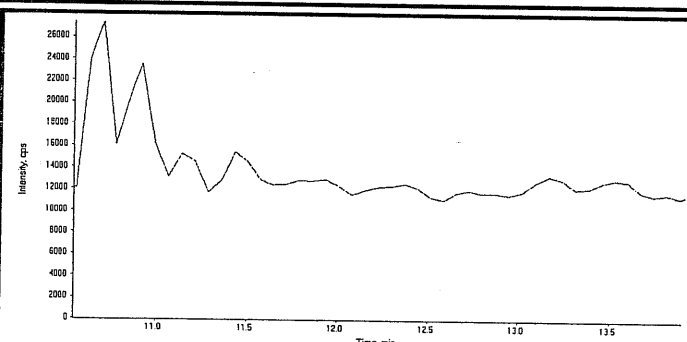
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 31/03/2010 4:24:00 PM  
LCMSMS#3

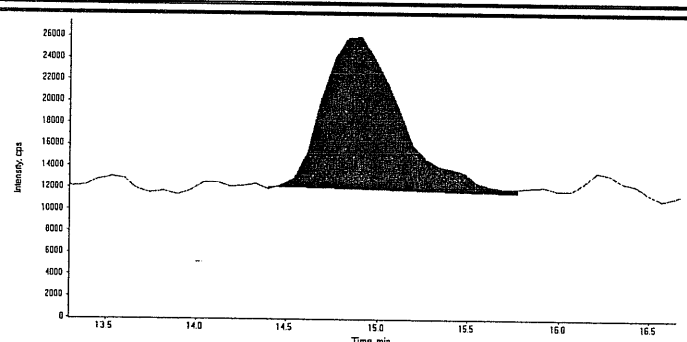
Data File	EXP0330009.wiff	Acquisition Date	3/30/2010 12:08:12 PM
Sample Name	XIBLK02	Acquisition Method	8321_pntx.dam
Batch Dilution Analyst	1 LER	Result Table	033010.rdb
Procedure Code	LCMSEXP_B	Sample Type	Unknown



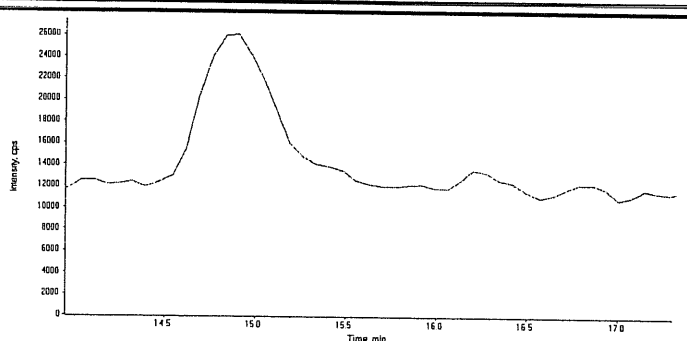
Compound Name:	Nitrobenzene (123.0/46.0 amu)
Expected RT:	11.9
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A



Compound Name:	34-dinitrotoluene (182.0/46.0 amu)
Expected RT:	12.2
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A



Compound Name:	26-dinitrotoluene (182.0/46.0 amu)
Expected RT:	15.0
Actual RT:	14.9
Area Counts:	4.23e+005
Manual Modification	No
Amount:	2.96 (ng/mL)
% Accuracy:	N/A



Compound Name:	24-dinitrotoluene (182.0/46.0 amu)
Expected RT:	15.6
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 31/03/2010 4:24:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0330009.wiff	<b>Acquisition Date</b>	3/30/2010 12:08:12 PM
<b>Sample Name</b>	XIBLK02	<b>Acquisition Method</b>	8321_pntx.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	033010.rdb
<b>Procedure Code</b>	LCMSEXP_B	<b>Sample Type</b>	Unknown

	<b>Compound Name:</b>	4-Amino-26-dinitrotoluene (197.0/167.0 amu)
	Expected RT:	13.3
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	2-Amino-46-dinitrotoluene (197.0/180.0 amu)
	Expected RT:	14.3
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	2-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	17.8
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	4-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	19.0
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 31/03/2010 4:24:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0330009.wiff	<b>Acquisition Date</b>	3/30/2010 12:08:12 PM
<b>Sample Name</b>	XIBLK02	<b>Acquisition Method</b>	8321_pntx.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	033010.rdb
<b>Procedure Code</b>	LCMSEXP_B	<b>Sample Type</b>	Unknown

	<b>Compound Name:</b>	3-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	20.3
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	PETN (361.1/62.0 amu)
	Expected RT:	20.0
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1758

Lab Code: GEL

Lab Sample ID: XIBLK03

Analysis Date: 30-MAR-10 13:00

GEL Data File: EXP0330011.wiff

Instrument ID: LCMSMS

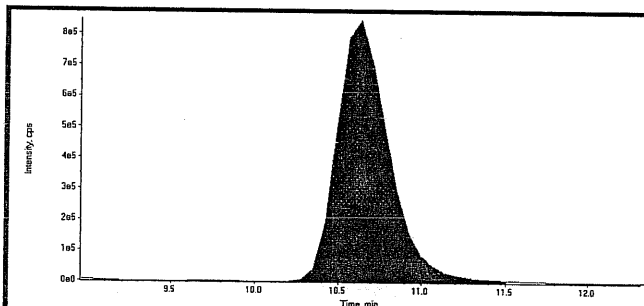
Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
1,3,5-Trinitrobenzene	0	0
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	3.2
2-Amino-4,6-dinitrotoluene	0	0
4-Amino-2,6-dinitrotoluene	0	0
HMX	0	0
Nitrobenzene	0	0
PETN	0	0
RDX	0	0
Tetryl	0	0
m-Dinitrobenzene	0	0
m-Nitrotoluene	0	0
o-Nitrotoluene	0	0
p-Nitrotoluene	0	0

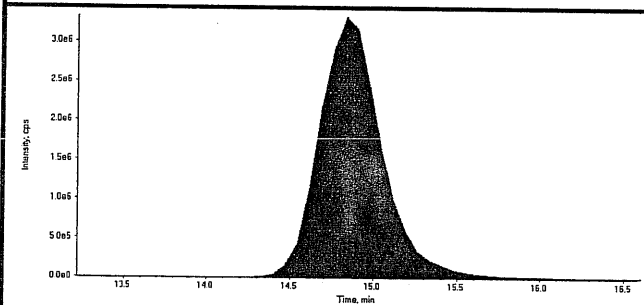
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 31/03/2010 4:24:00 PM  
LCMSMS#3

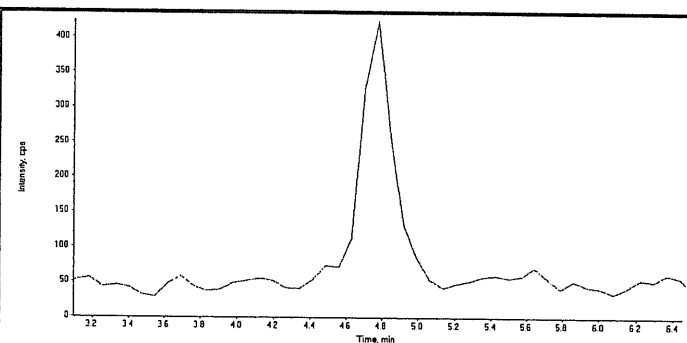
Data File	EXP0330011.wiff	Acquisition Date	3/30/2010 1:00:55 PM
Sample Name	XIBLK03	Acquisition Method	8321_pntx.dam
Batch Dilution Analyst	1 LER	Result Table	033010.rdb
Procedure Code	LCMSEXP_B	Sample Type	Unknown



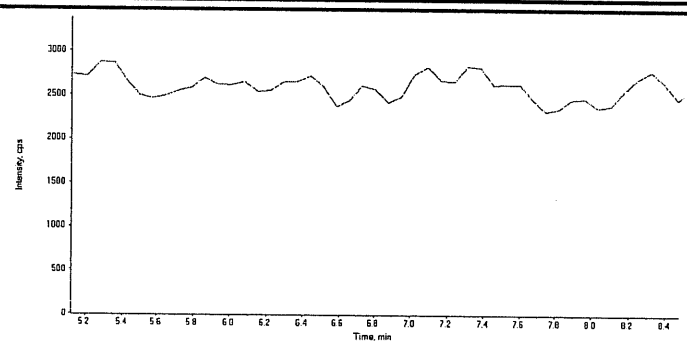
Compound Name:	13-Dinitrobenzene-d4 (172.1/46.1 amu)
Expected RT:	10.60
Actual RT:	10.60
Area Counts:	18600000.00
Manual Modification	No
Amount:	500.00(ng/mL)
Please refer to Form 8 for a list of Internal Standard Recoveries	



Compound Name:	26-Dinitrotoluene-d3 (185.0/155.0 amu)
Expected RT:	14.90
Actual RT:	14.80
Area Counts:	87800000.00
Manual Modification	No
Amount:	500.00(ng/mL)
Please refer to Form 8 for a list of Internal Standard Recoveries	



Compound Name:	HMX (341.2/46.0 amu)
Expected RT:	4.77
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A



Compound Name:	RDX (267.0/46.1 amu)
Expected RT:	6.80
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A

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4/2/10

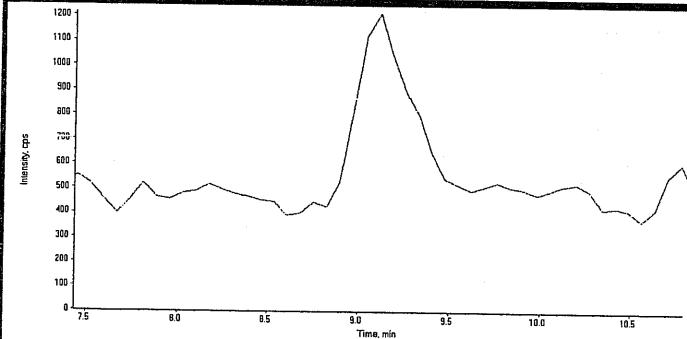
Hum  
04/02/10



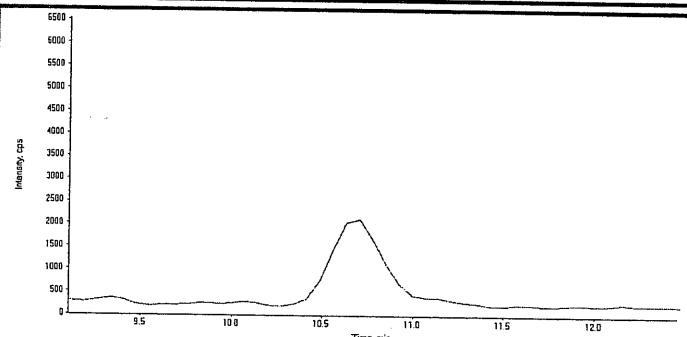
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 31/03/2010 4:24:00 PM  
LCMSMS#3

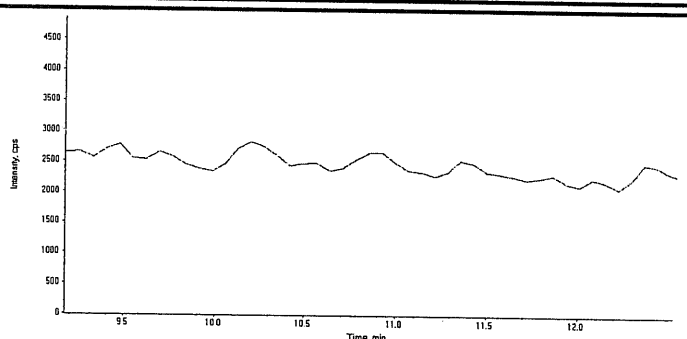
Data File	EXP0330011.wiff	Acquisition Date	3/30/2010 1:00:55 PM
Sample Name	XIBLK03	Acquisition Method	8321_pntx.dam
Batch Dilution Analyst	1 LER	Result Table	033010.rdb
Procedure Code	LCMSEXP_B	Sample Type	Unknown



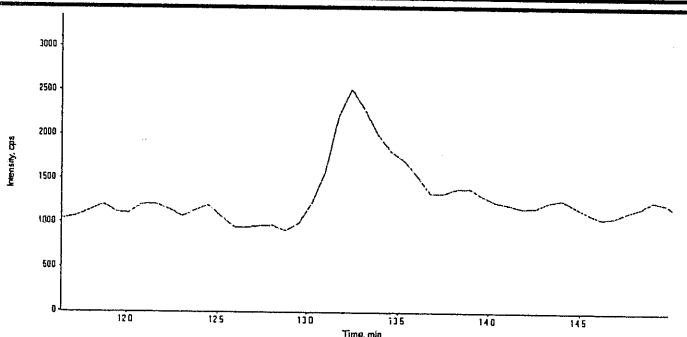
Compound Name:	135-Trinitrobenzene (213.0/182.8 amu)
Expected RT:	9.12
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A



Compound Name:	13-Dinitrobenzene (168.0/137.9 amu)
Expected RT:	10.8
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A



Compound Name:	Tetryl (241.0/180.8 amu)
Expected RT:	10.9
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A



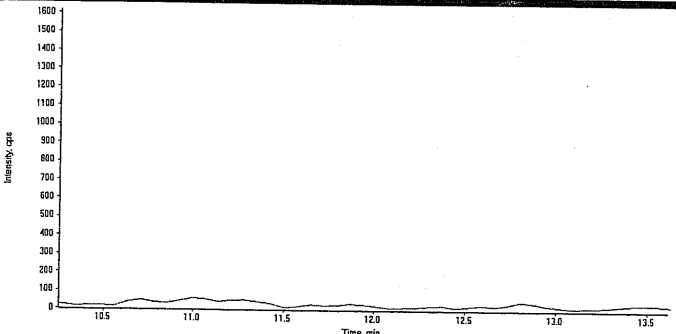
Compound Name:	246-Trinitrotoluene (227.1/209.8 amu)
Expected RT:	13.3
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

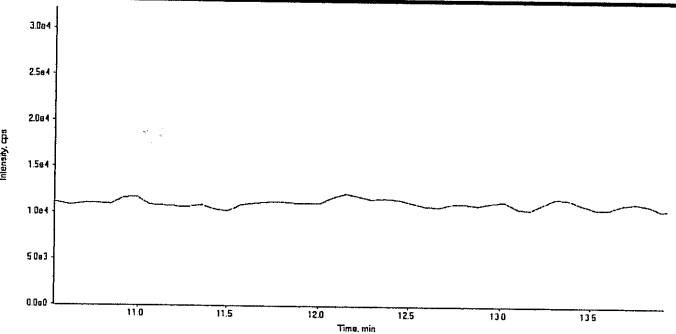
Printed: 31/03/2010 4:24:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0330011.wiff	<b>Acquisition Date</b>	3/30/2010 1:00:55 PM
<b>Sample Name</b>	XIBLK03	<b>Acquisition Method</b>	8321_pntx.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	033010.rdb
<b>Procedure Code</b>	LCMSEXP_B	<b>Sample Type</b>	Unknown

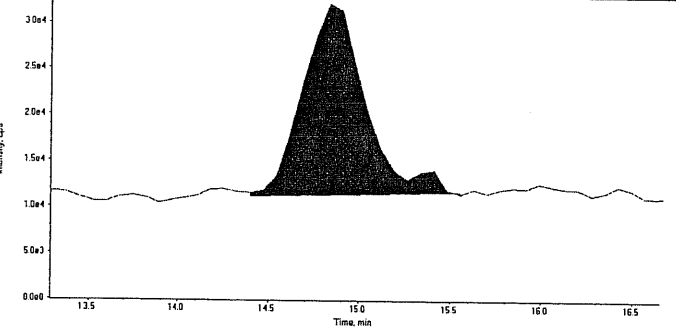
  

	<b>Compound Name:</b>	Nitrobenzene (123.0/46.0 amu)
	Expected RT:	11.9
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

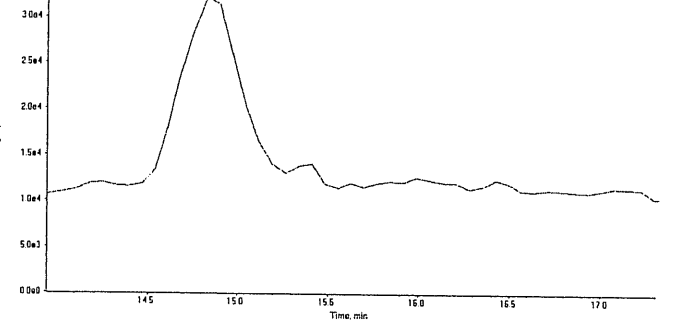
  

	<b>Compound Name:</b>	34-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	12.2
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	26-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	15.0
	Actual RT:	14.8
	Area Counts:	5.08e+005
	Manual Modification	No
	Amount:	3.20 (ng/mL)
	% Accuracy:	N/A

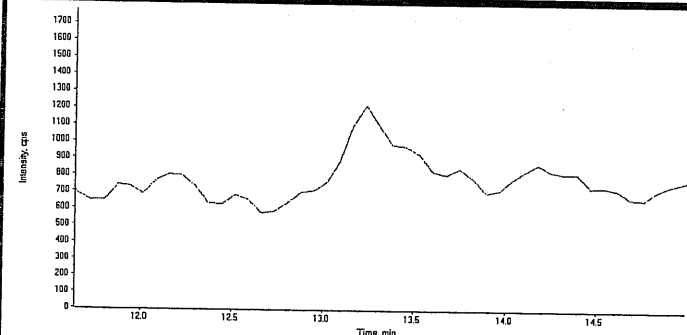
  

	<b>Compound Name:</b>	24-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	15.6
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

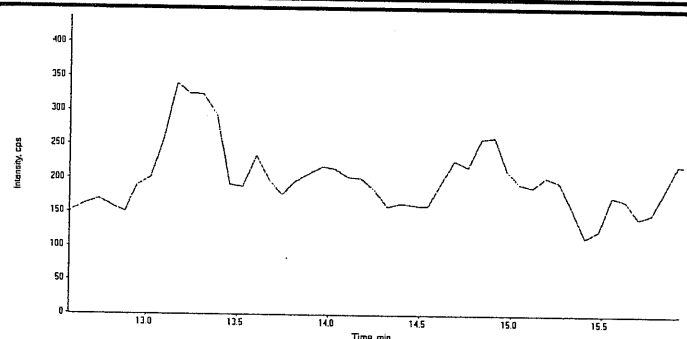
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 31/03/2010 4:24:00 PM  
LCMSMS#3

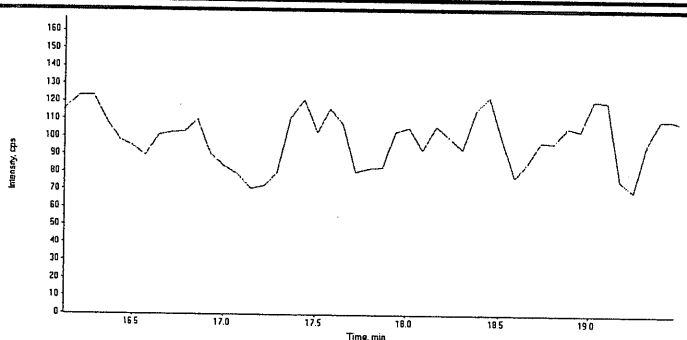
Data File	EXP0330011.wiff	Acquisition Date	3/30/2010 1:00:55 PM
Sample Name	XIBLK03	Acquisition Method	8321_pntx.dam
Batch Dilution Analyst	1 LER	Result Table	033010.rdb
Procedure Code	LCMSEXP_B	Sample Type	Unknown



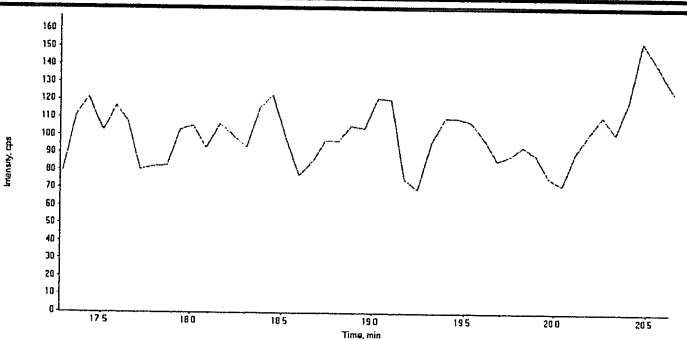
Compound Name:	4-Amino-26-dinitrotoluene (197.0/167.0 amu)
Expected RT:	13.3
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A



Compound Name:	2-Amino-46-dinitrotoluene (197.0/180.0 amu)
Expected RT:	14.3
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A



Compound Name:	2-Nitrotoluene (137.0/46.0 amu)
Expected RT:	17.8
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A



Compound Name:	4-Nitrotoluene (137.0/46.0 amu)
Expected RT:	19.0
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 31/03/2010 4:24:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0330011.wiff	<b>Acquisition Date</b>	3/30/2010 1:00:55 PM
<b>Sample Name</b>	XIBLK03	<b>Acquisition Method</b>	8321_pntx.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	033010.rdb
<b>Procedure Code</b>	LCMSEXP_B	<b>Sample Type</b>	Unknown

	<b>Compound Name:</b>	3-Nitrotoluene (137.0/46.0 amu)
	<b>Expected RT:</b>	20.3
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

	<b>Compound Name:</b>	PETN (361.1/62.0 amu)
	<b>Expected RT:</b>	20.0
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1758

Lab Code: GEL

Lab Sample ID: XIBLK04

Analysis Date: 30-MAR-10 15:12

GEL Data File: EXP0330016.wiff

Instrument ID: LCMSMS

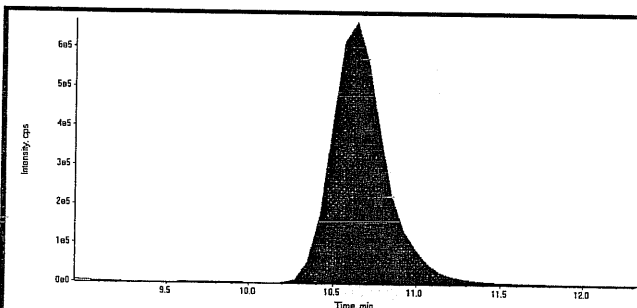
Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	3.49
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
2,4,6-Trinitrotoluene	0	0

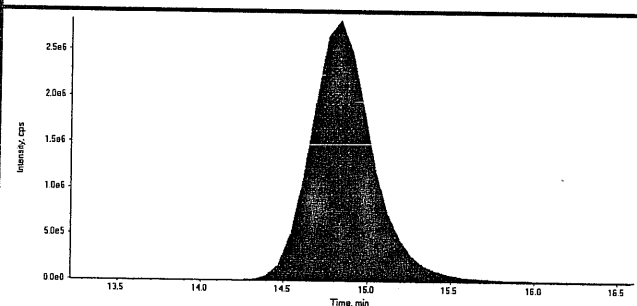
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 31/03/2010 4:24:00 PM  
LCMSMS#3

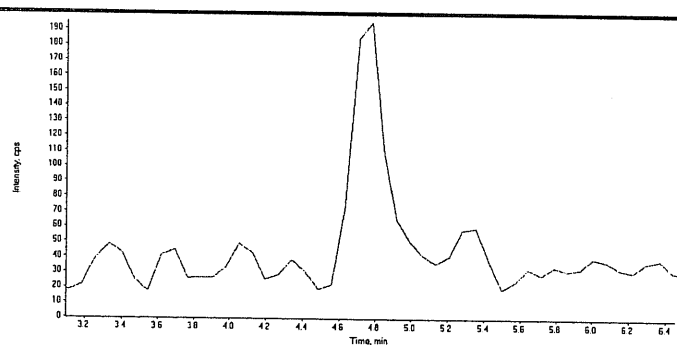
Data File	EXP0330016.wiff	Acquisition Date	3/30/2010 3:12:49 PM
Sample Name	XIBLK04	Acquisition Method	8321_pntx.dam
Batch Dilution Analyst	1 LER	Result Table	033010.rdb
Procedure Code	LCMSEXP_B	Sample Type	Unknown



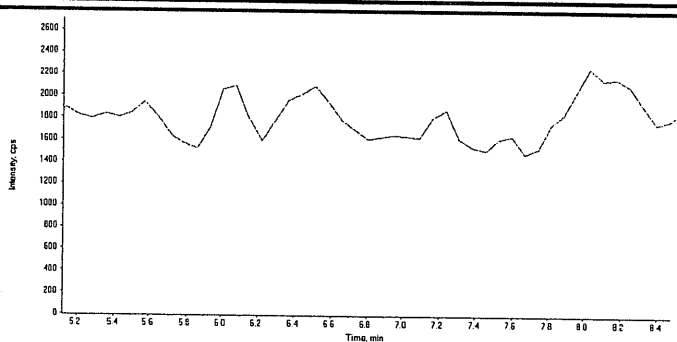
Compound Name:	13-Dinitrobenzene-d4 (172.1/46.1 amu)
Expected RT:	10.60
Actual RT:	10.60
Area Counts:	15000000.00
Manual Modification	No
Amount:	500.00(ng/mL)
Please refer to Form 8 for a list of Internal Standard Recoveries	



Compound Name:	26-Dinitrotoluene-d3 (185.0/155.0 amu)
Expected RT:	14.90
Actual RT:	14.80
Area Counts:	73200000.00
Manual Modification	No
Amount:	500.00(ng/mL)
Please refer to Form 8 for a list of Internal Standard Recoveries	



Compound Name:	HMX (341.2/46.0 amu)
Expected RT:	4.77
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A



Compound Name:	RDX (267.0/46.1 amu)
Expected RT:	6.80
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A

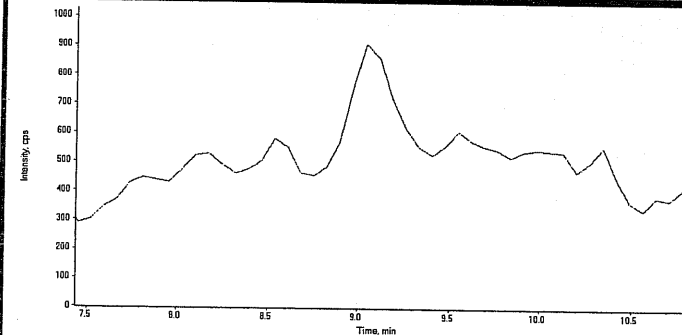
*See 4/2/10*

*thru 6/2/10*

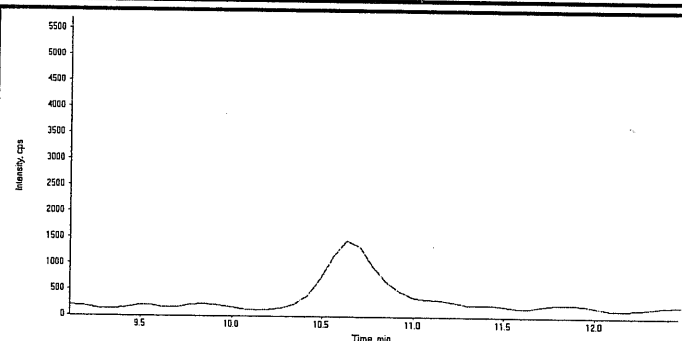
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 31/03/2010 4:24:00 PM  
LCMSMS#3

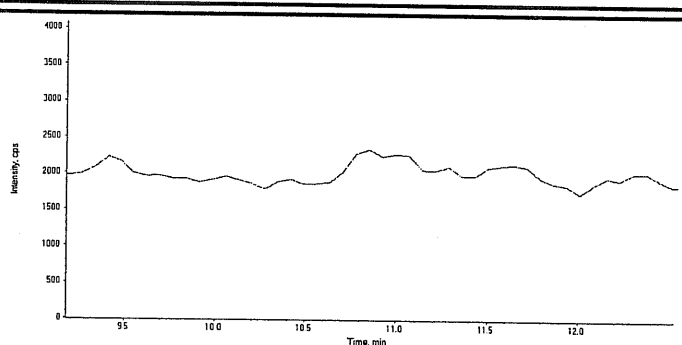
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<b>Sample Name</b>	XIBLK04	<b>Acquisition Method</b>	8321_pntx.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	033010.rdb
<b>Procedure Code</b>	LCMSEXP_B	<b>Sample Type</b>	Unknown



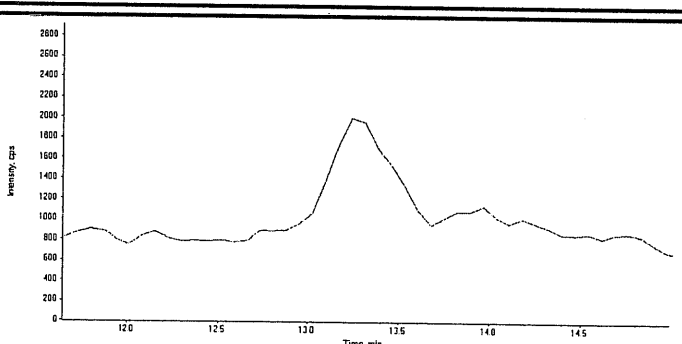
<b>Compound Name:</b>	135-Trinitrobenzene (213.0/182.8 amu)
Expected RT:	9.12
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A



<b>Compound Name:</b>	13-Dinitrobenzene (168.0/137.9 amu)
Expected RT:	10.8
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A



<b>Compound Name:</b>	Tetryl (241.0/180.8 amu)
Expected RT:	10.9
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A



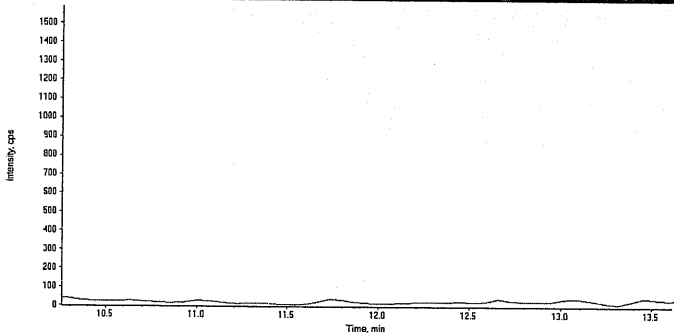
<b>Compound Name:</b>	246-Trinitrotoluene (227.1/209.8 amu)
Expected RT:	13.3
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

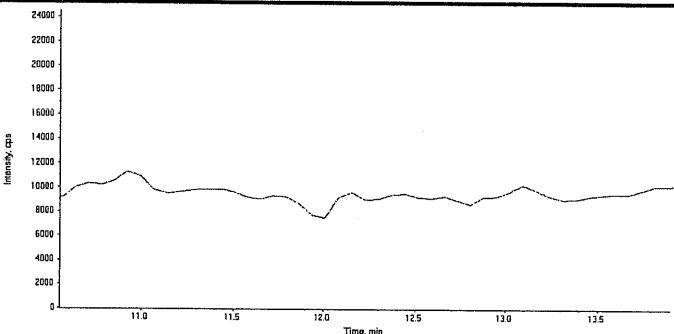
Printed: 31/03/2010 4:24:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0330016.wiff	<b>Acquisition Date</b>	3/30/2010 3:12:49 PM
<b>Sample Name</b>	XIBLK04	<b>Acquisition Method</b>	8321_pntx.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	033010.rdb
<b>Procedure Code</b>	LCMSEXP_B	<b>Sample Type</b>	Unknown

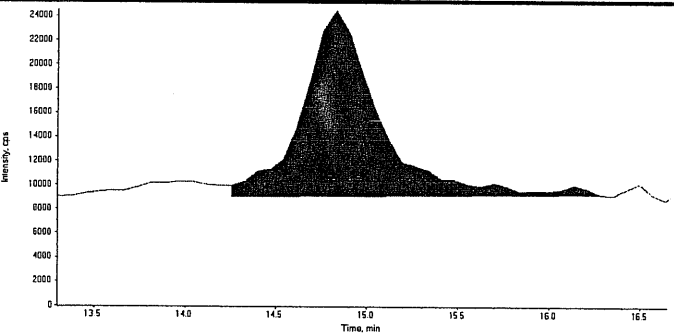
  

	<b>Compound Name:</b>	Nitrobenzene (123.0/46.0 amu)
	Expected RT:	11.9
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

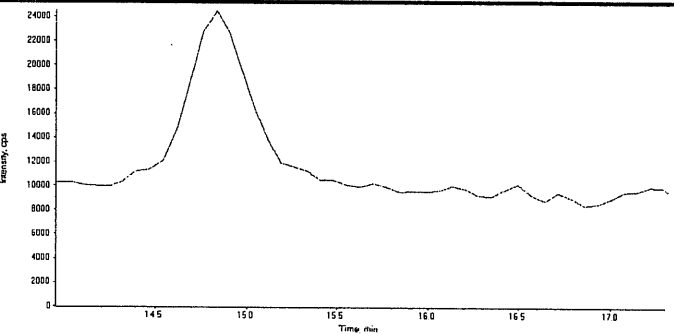
  

	<b>Compound Name:</b>	34-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	12.2
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	26-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	15.0
	Actual RT:	14.8
	Area Counts:	4.61e+005
	Manual Modification	No
	Amount:	3.49 (ng/mL)
	% Accuracy:	N/A

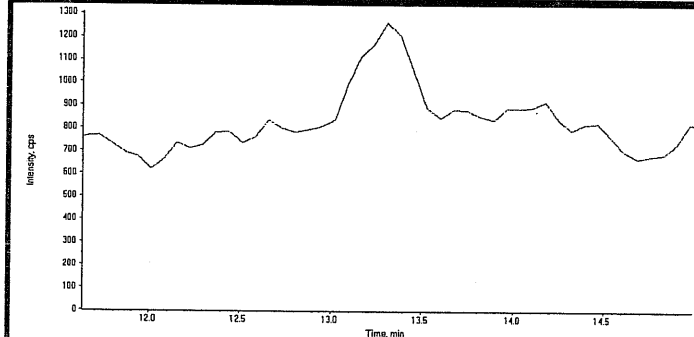
	<b>Compound Name:</b>	24-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	15.6
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A



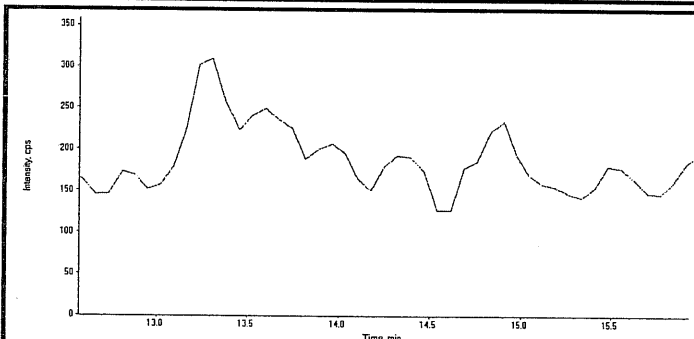
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 31/03/2010 4:24:00 PM  
LCMSMS#3

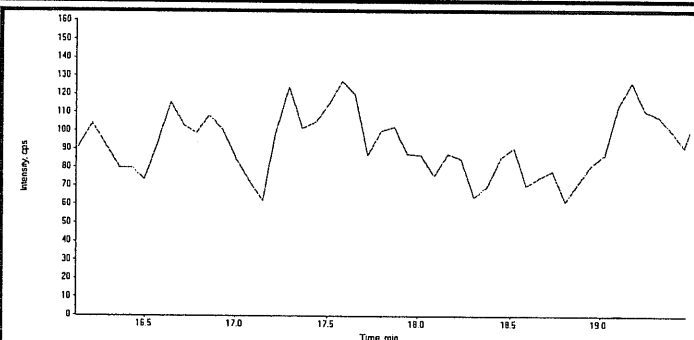
<b>Data File</b>	EXP0330016.wiff	<b>Acquisition Date</b>	3/30/2010 3:12:49 PM
<b>Sample Name</b>	XIBLK04	<b>Acquisition Method</b>	8321_pntx.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	033010.rdb
<b>Procedure Code</b>	LCMSEXP_B	<b>Sample Type</b>	Unknown



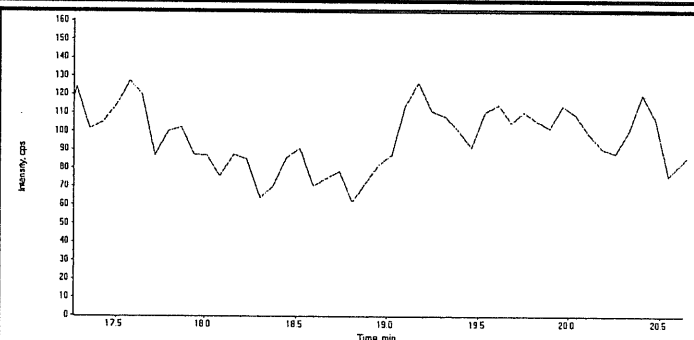
<b>Compound Name:</b>	4-Amino-26-dinitrotoluene (197.0/167.0 amu)
Expected RT:	13.3
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A



<b>Compound Name:</b>	2-Amino-46-dinitrotoluene (197.0/180.0 amu)
Expected RT:	14.3
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A



<b>Compound Name:</b>	2-Nitrotoluene (137.0/46.0 amu)
Expected RT:	17.8
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A



<b>Compound Name:</b>	4-Nitrotoluene (137.0/46.0 amu)
Expected RT:	19.0
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 31/03/2010 4:24:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0330016.wiff	<b>Acquisition Date</b>	3/30/2010 3:12:49 PM
<b>Sample Name</b>	XIBLK04	<b>Acquisition Method</b>	8321_pntx.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	033010.rdb
<b>Procedure Code</b>	LCMSEXP_B	<b>Sample Type</b>	Unknown

	<b>Compound Name:</b>	3-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	20.3
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	PETN (361.1/62.0 amu)
	Expected RT:	20.0
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1758

Lab Code: GEL

Lab Sample ID: XIBLK05

Analysis Date: 30-MAR-10 18:44

GEL Data File: EXP0330024.wiff

Instrument ID: LCMSMS

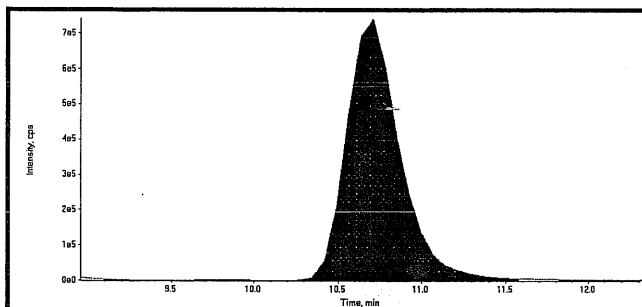
Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
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
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	3.09
2-Amino-4,6-dinitrotoluene	0	0
4-Amino-2,6-dinitrotoluene	0	0
HMX	0	0
Nitrobenzene	0	0
PETN	0	0
RDX	0	0
Tetryl	0	0

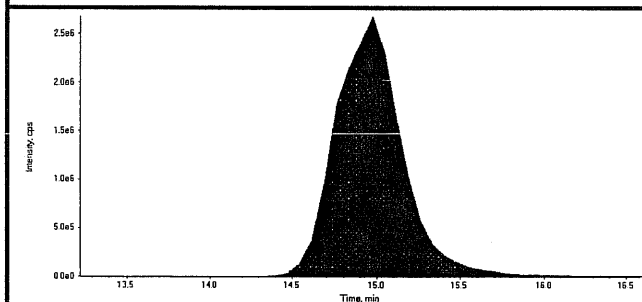
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 31/03/2010 4:24:00 PM  
LCMSMS#3

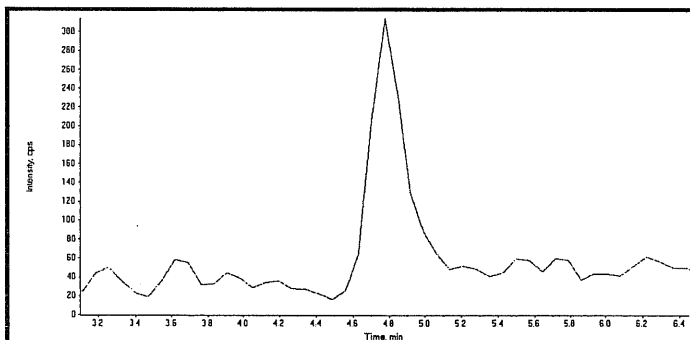
Data File	EXP0330024.wiff	Acquisition Date	3/30/2010 6:44:15 PM
Sample Name	XIBLK05	Acquisition Method	8321_pntx.dam
Batch Dilution Analyst	1 LER	Result Table	033010.rdb
Procedure Code	LCMSEXP_B	Sample Type	Unknown



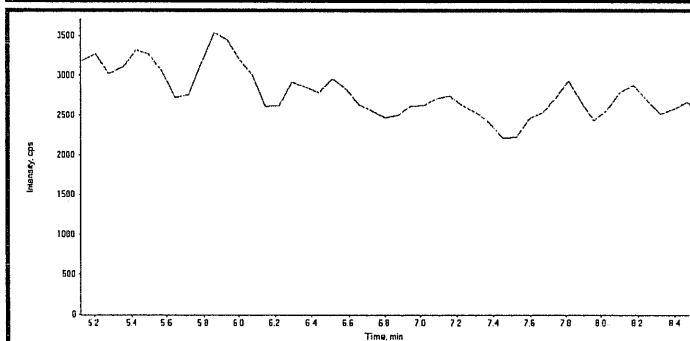
Compound Name:	13-Dinitrobenzene-d4 (172.1/46.1 amu)
Expected RT:	10.60
Actual RT:	10.70
Area Counts:	16400000.00
Manual Modification	No
Amount:	500.00(ng/mL)
Please refer to Form 8 for a list of Internal Standard Recoveries	



Compound Name:	26-Dinitrotoluene-d3 (185.0/155.0 amu)
Expected RT:	14.90
Actual RT:	15.00
Area Counts:	74400000.00
Manual Modification	No
Amount:	500.00(ng/mL)
Please refer to Form 8 for a list of Internal Standard Recoveries	



Compound Name:	HMX (341.2/46.0 amu)
Expected RT:	4.77
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A



Compound Name:	RDX (267.0/46.1 amu)
Expected RT:	6.80
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A

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04/02/10

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 31/03/2010 4:24:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0330024.wiff	<b>Acquisition Date</b>	3/30/2010 6:44:15 PM
<b>Sample Name</b>	XIBLK05	<b>Acquisition Method</b>	8321_pntx.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	033010.rdb
<b>Procedure Code</b>	LCMSEXP_B	<b>Sample Type</b>	Unknown

	<b>Compound Name:</b>	135-Trinitrobenzene (213.0/182.8 amu)
	Expected RT:	9.12
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	13-Dinitrobenzene (168.0/137.9 amu)
	Expected RT:	10.8
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	Tetryl (241.0/180.8 amu)
	Expected RT:	10.9
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

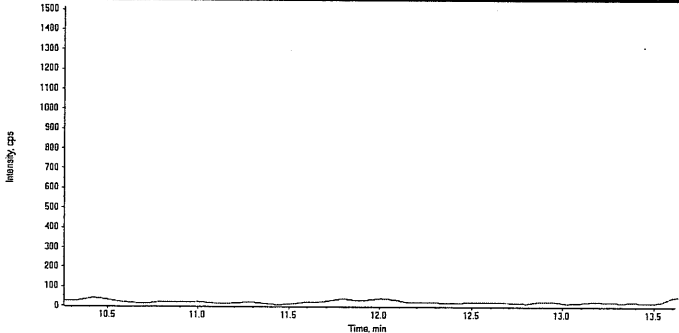
	<b>Compound Name:</b>	246-Trinitrotoluene (227.1/209.8 amu)
	Expected RT:	13.3
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

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GEL SOP GL-OA-E-056, Method 8321A-Modified

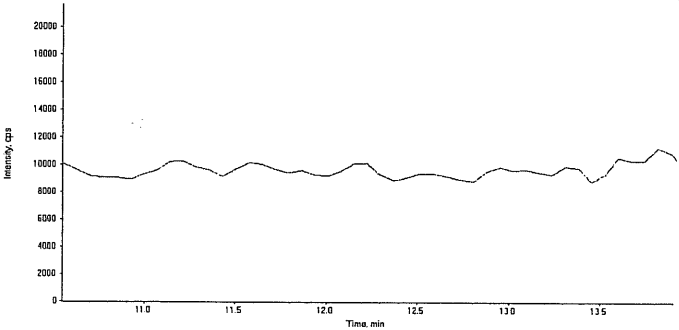
Printed: 31/03/2010 4:24:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0330024.wiff	<b>Acquisition Date</b>	3/30/2010 6:44:15 PM
<b>Sample Name</b>	XIBLK05	<b>Acquisition Method</b>	8321_pntx.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	033010.rdb
<b>Procedure Code</b>	LCMSEXP_B	<b>Sample Type</b>	Unknown

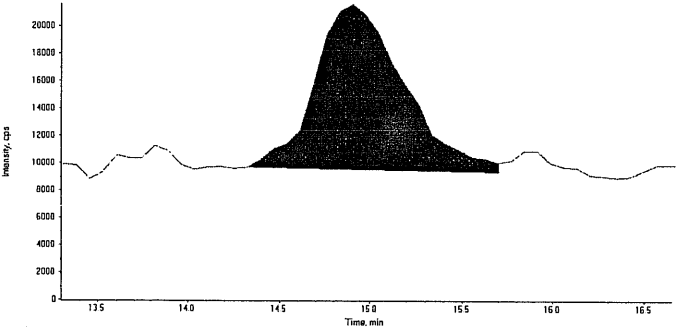
  

	<b>Compound Name:</b>	Nitrobenzene (123.0/46.0 amu)
	Expected RT:	11.9
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

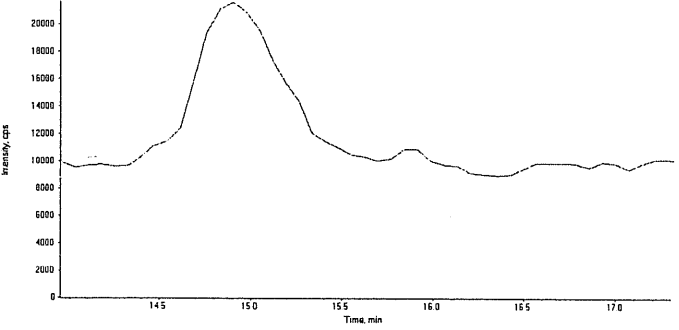
  

	<b>Compound Name:</b>	34-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	12.2
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	26-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	15.0
	Actual RT:	14.9
	Area Counts:	4.16e+005
	Manual Modification	No
	Amount:	3.09 (ng/mL)
	% Accuracy:	N/A

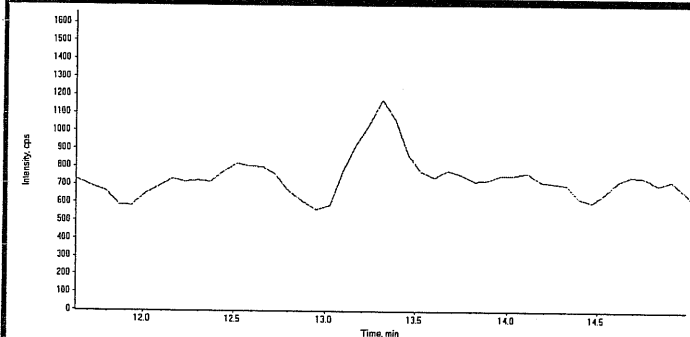
  

	<b>Compound Name:</b>	24-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	15.6
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

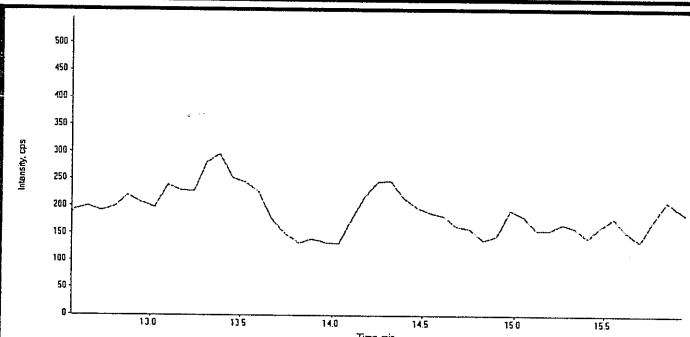
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 31/03/2010 4:24:00 PM  
LCMSMS#3

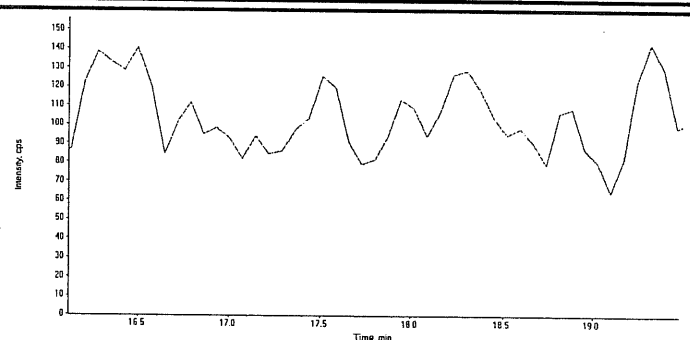
Data File	EXP0330024.wiff	Acquisition Date	3/30/2010 6:44:15 PM
Sample Name	XIBLK05	Acquisition Method	8321_pntx.dam
Batch Dilution Analyst	1 LER	Result Table	033010.rdb
Procedure Code	LCMSEXP_B	Sample Type	Unknown



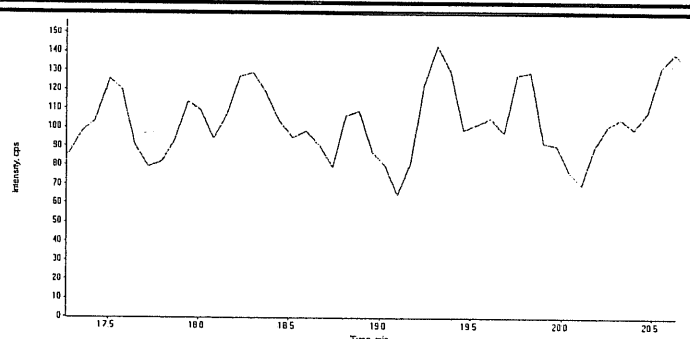
Compound Name:	4-Amino-26-dinitrotoluene (197.0/167.0 amu)
Expected RT:	13.3
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A



Compound Name:	2-Amino-46-dinitrotoluene (197.0/180.0 amu)
Expected RT:	14.3
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A



Compound Name:	2-Nitrotoluene (137.0/46.0 amu)
Expected RT:	17.8
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A



Compound Name:	4-Nitrotoluene (137.0/46.0 amu)
Expected RT:	19.0
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 31/03/2010 4:24:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0330024.wiff	<b>Acquisition Date</b>	3/30/2010 6:44:15 PM
<b>Sample Name</b>	XIBLK05	<b>Acquisition Method</b>	8321_pntx.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	033010.rdb
<b>Procedure Code</b>	LCMSEXP_B	<b>Sample Type</b>	Unknown

	<b>Compound Name:</b>	3-Nitrotoluene (137.0/46.0 amu)
	<b>Expected RT:</b>	20.3
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A

	<b>Compound Name:</b>	PETN (361.1/62.0 amu)
	<b>Expected RT:</b>	20.0
	<b>Actual RT:</b>	0.00
	<b>Area Counts:</b>	0.00e+000
	<b>Manual Modification</b>	No
	<b>Amount:</b>	N/A (ng/mL)
	<b>% Accuracy:</b>	N/A



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1758

Lab Code: GEL

Lab Sample ID: XIBLK02

Analysis Date: 05-MAR-10 19:29

GEL Data File: EXS03050010.wiff

Instrument ID: LCMSMS

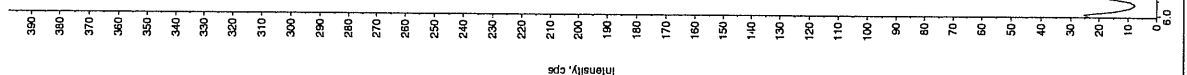
Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	1.24
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

Jan 3/2/10

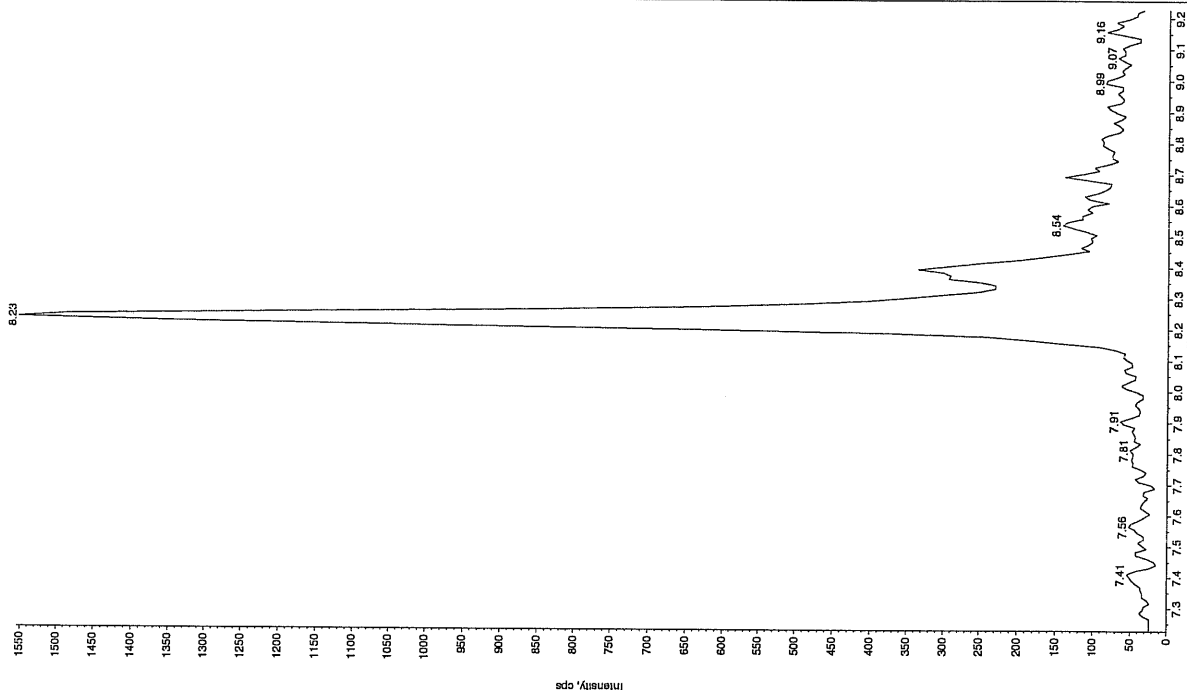
File Name: "XBLK02" Sample ID: "1111ER" File: "EXS03050010.wif"  
 K Name: "TATB" Mass(es): "257.2204.9 amu"  
 Comment: "LCMSEXP\_B" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: 0.00 ng/mL  
 Calculated Conc: 0.00  
 Acq. Date: 3/5/2010  
 Acq. Time: 7:29:01 PM  
 Modified: No

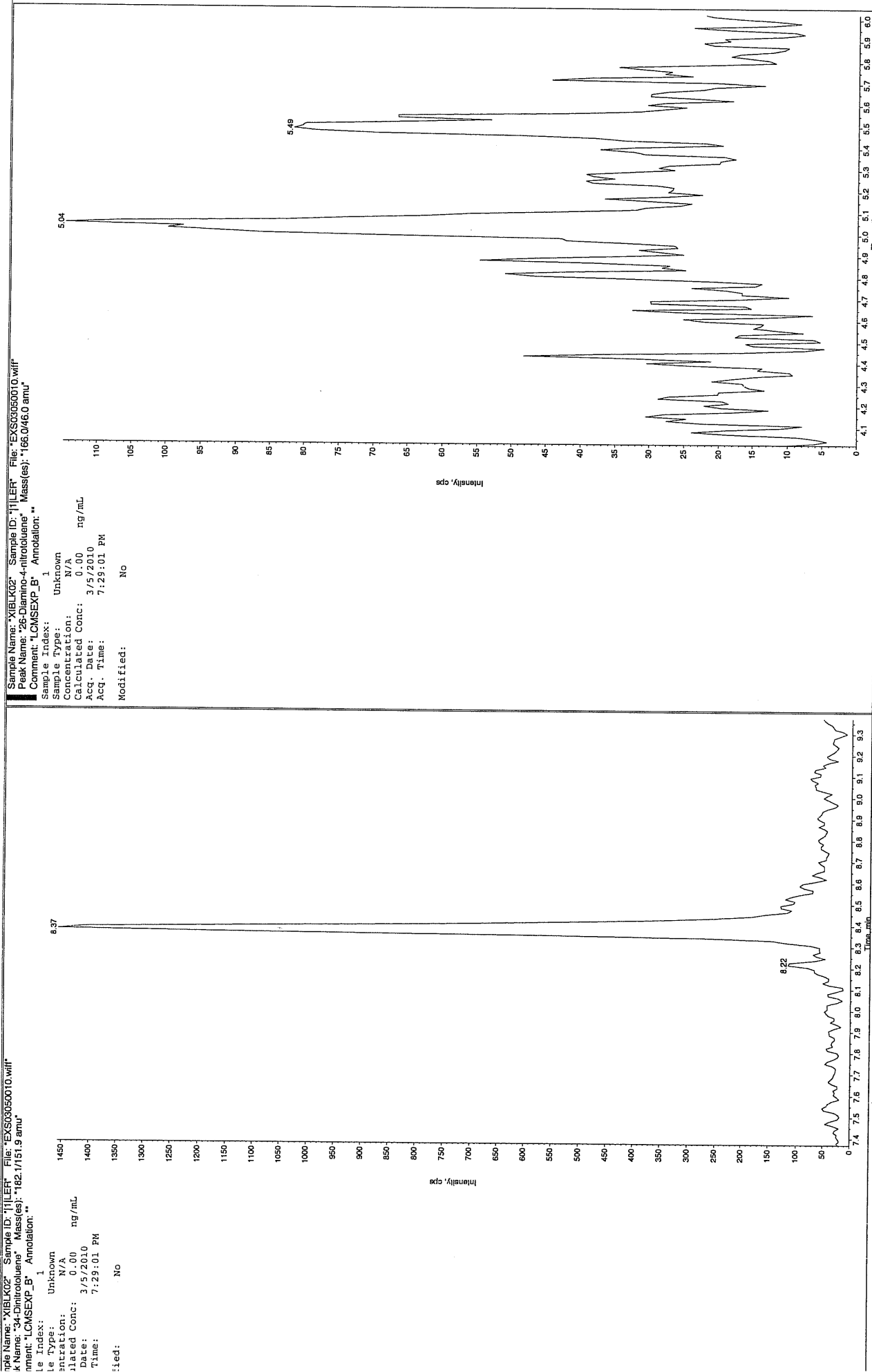


File Name: "XBLK02" Sample ID: "1111ER" File: "EXS03050010.wif"  
 Peak Name: "35-Dinitroaniline" Mass(es): "182.046.0 amu"  
 Comment: "LCMSEXP\_B" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: 0.00 ng/mL  
 Calculated Conc: 0.00  
 Acq. Date: 3/5/2010  
 Acq. Time: 7:29:01 PM  
 Modified: No



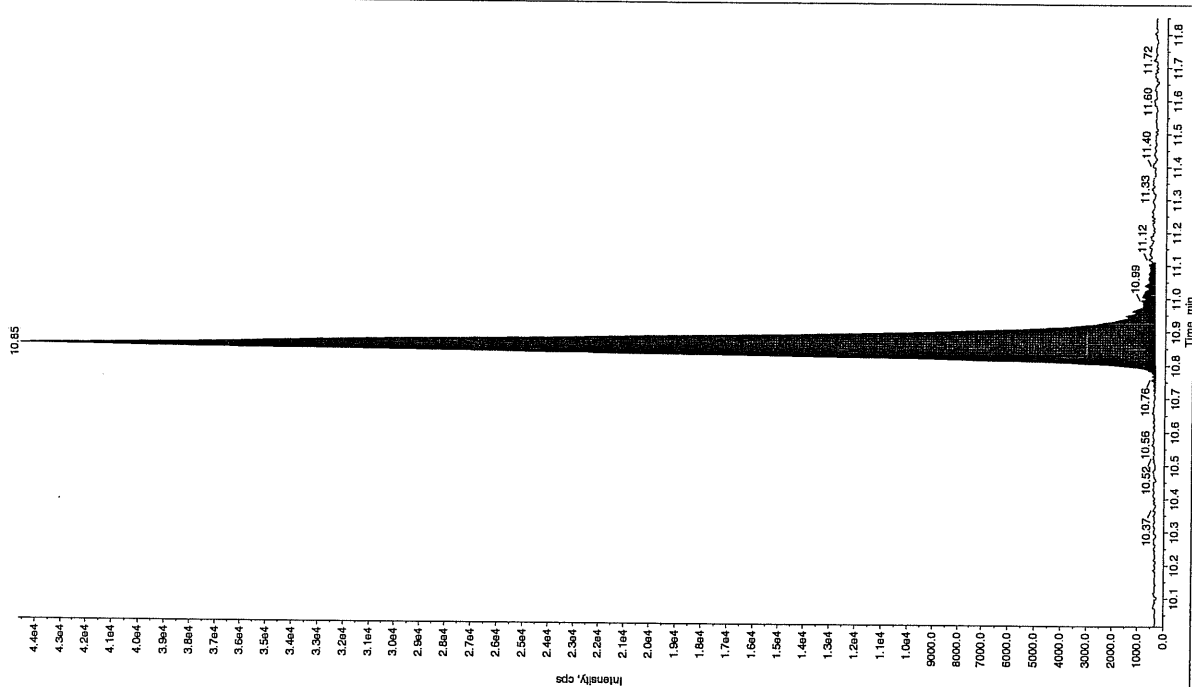
Amos 02/09/10



SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

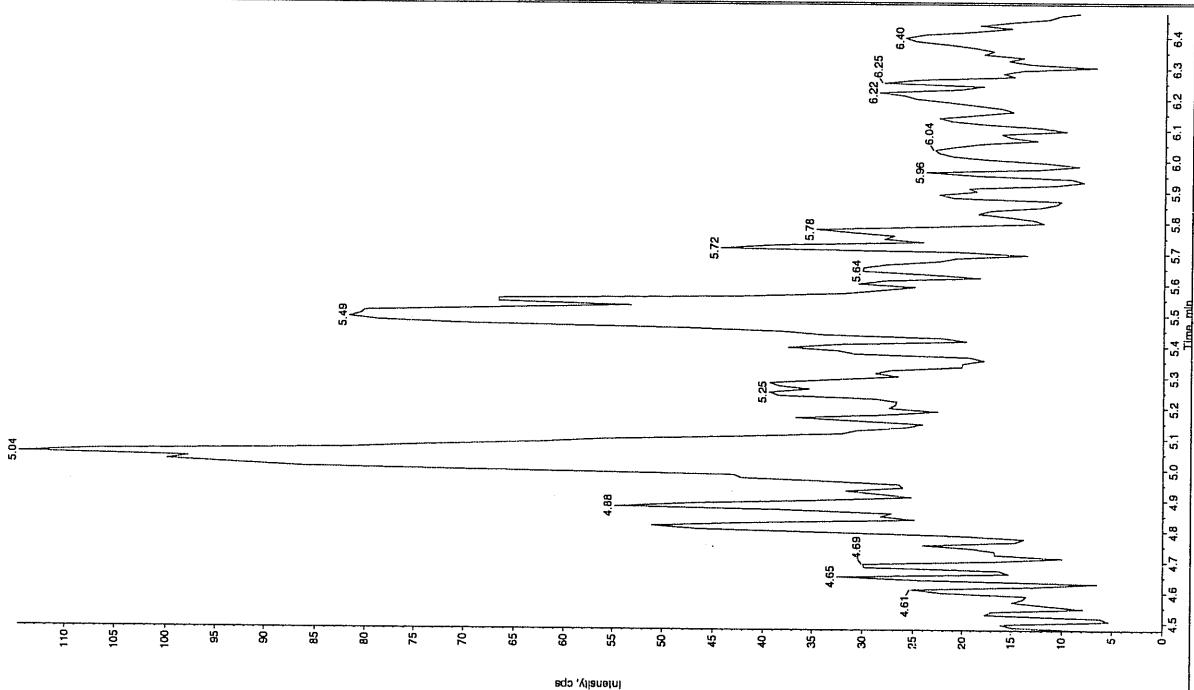
Sample Name: "XIBLK02" Sample ID: "JILF" File: "EXS03050010.wif"  
 Peak Name: "tris(o-cresyl) phosphate" Mass(es): "369.1/91.0 amu"  
 Comment: "LCMSEXP\_B" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 1.24 ng/mL  
 Acq. Date: 3/5/2010  
 Acq. Time: 7:29:01 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: 10.9 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 10.8 min  
 Area: 1.45e+005 counts  
 Height: 44249.924 cps  
 Start Time: 10.7 min  
 End Time: 11.1 min



Sample Name: "XIBLK02" Sample ID: "JILF" File: "EXS03050010.wif"  
 Peak Name: "24-Diamino-6-methylpiperidine" Mass(es): "165.0/43.0 amu"  
 Comment: "LCMSEXP\_B" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 3/5/2010  
 Acq. Time: 7:29:01 PM  
 Modified: No



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1758

Lab Code: GEL

Lab Sample ID: XIBLK03

Analysis Date: 05-MAR-10 20:00

GEL Data File: EXS03050012.wiff

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	0
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

See 3/9/10

Sample Name: "XIBLK03" Sample ID: "JILER" File: "EXS03050012.wif"

Peak Name: "TATE" Mass(es): "257.2204.9 amu"

Comment: "LCMSEXP\_B" Annotation: ""

Sample Index: 1

Sample Type: Unknown

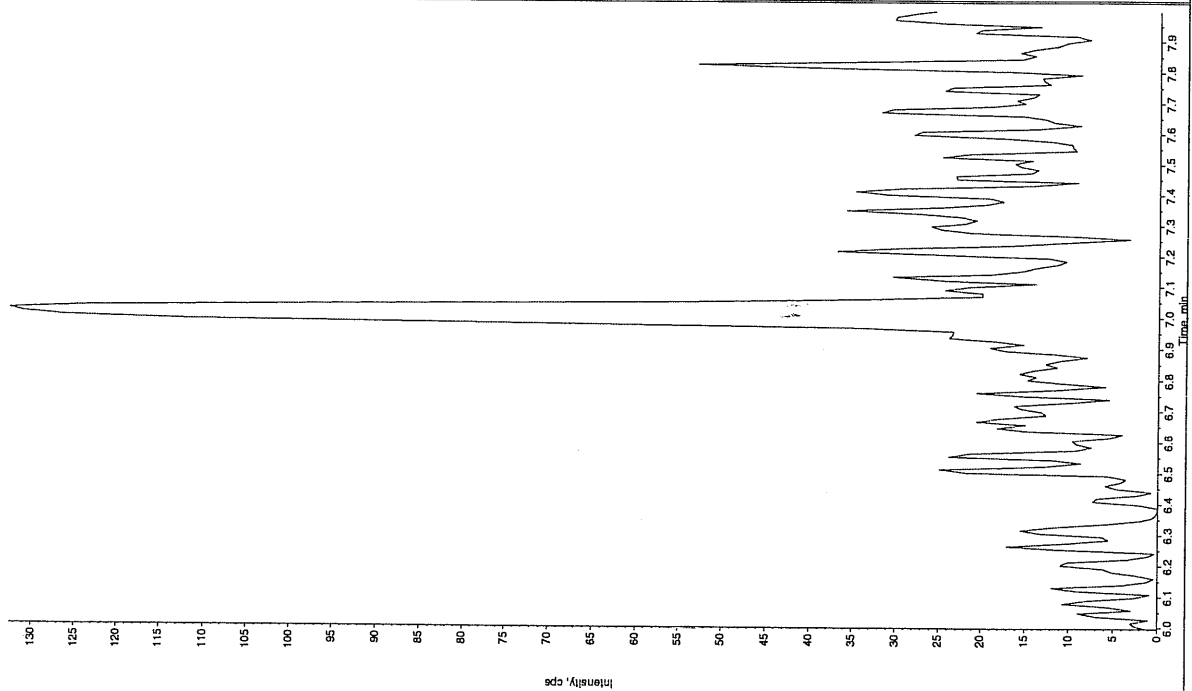
Concentration: N/A

Calculated Conc: 0.00 ng/mL

Acq. Date: 3/5/2010

Acq. Time: 8:00:24 PM

Modified: No



Sample Name: "XIBLK03" Sample ID: "JILER" File: "EXS03050012.wif"

Peak Name: "35-Dinitroaniline" Mass(es): "182.046.0 amu"

Comment: "LCMSEXP\_B" Annotation: ""

Sample Index: 1

Sample Type: Unknown

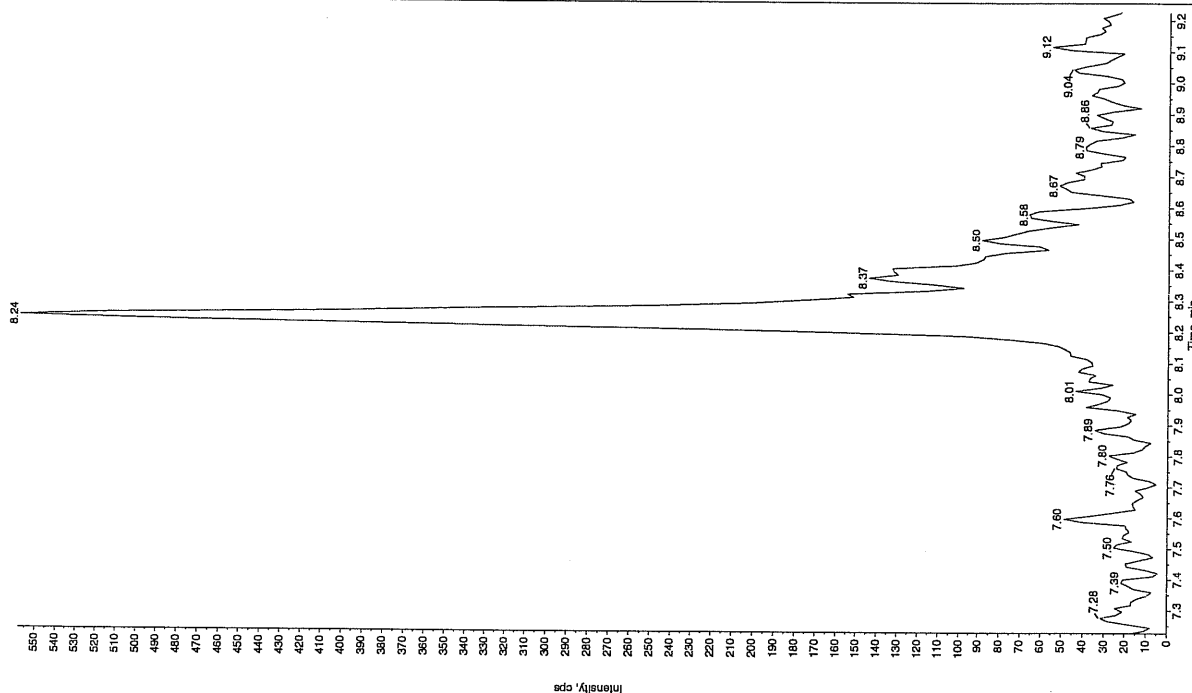
Concentration: N/A

Calculated Conc: 0.00 ng/mL

Acq. Date: 3/5/2010

Acq. Time: 8:00:24 PM

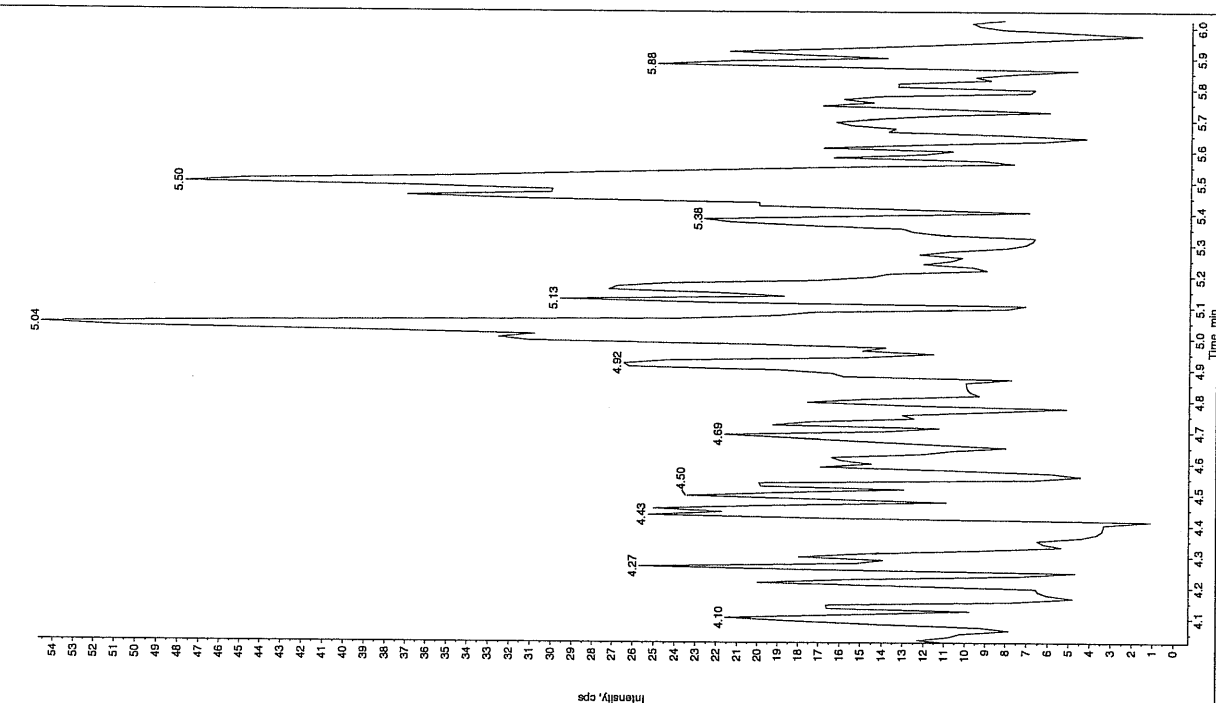
Modified: No



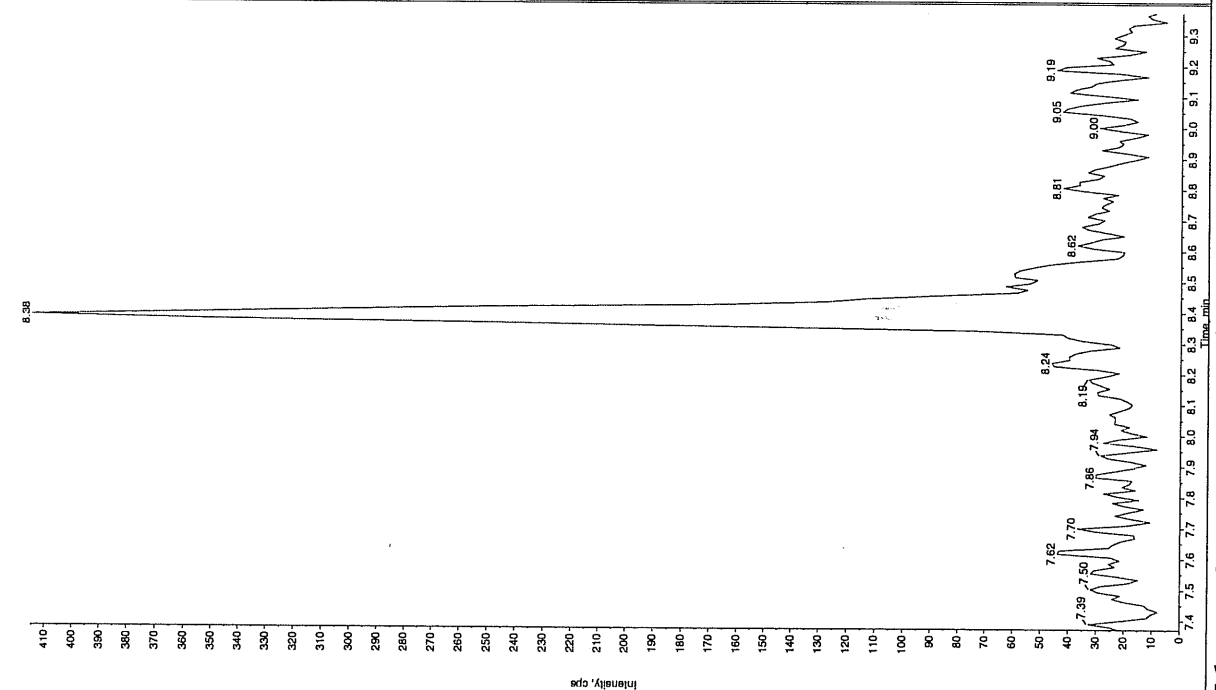
See 03/09/10

L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

Sample Name: "XIBLK03" Sample ID: "JILER" File: "EXS03050012.wiff"  
 Peak Name: "26-Diamino-4-nitrobenzene" Mass(es): "166.0/46.0 amu"  
 Comment: "LCMSEXP\_B" Annotation: ""

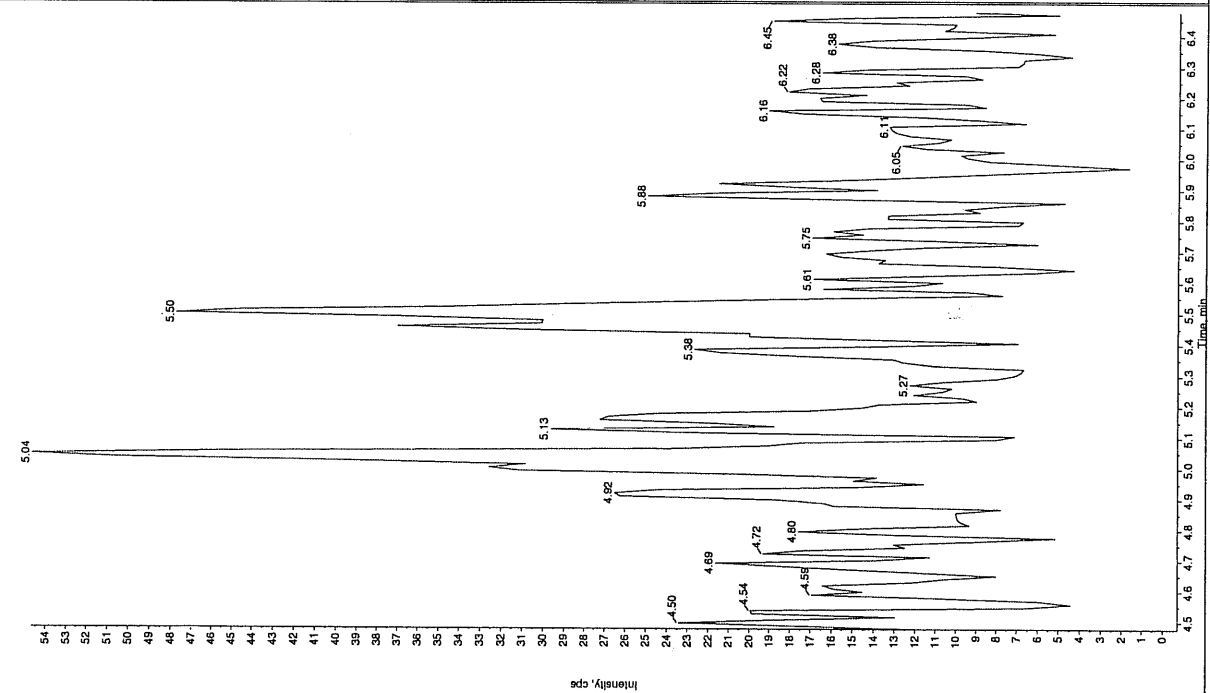


Sample Name: "XIBLK03" Sample ID: "JILER" File: "EXS03050012.wiff"  
 Peak Name: "34-Dinitrobenzene" Mass(es): "182.1/51.9 amu"  
 Comment: "LCMSEXP\_B" Annotation: ""



Sample Name: "XIBLK03" Sample ID: "HILER" File: "EXS03050012.wif"  
 Peak Name: "24-Diamine-6-nitrotoluene" Mass(es): "166.0/46.0 amu"  
 Comment: "LCMSEXP\_B" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: No Intercept  
 Acq. Date: 3/5/2010  
 Acq. Time: 8:00:24 PM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IQA  
 Min. Peak Height: 8000.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 30.0 sec  
 Expected RT: 10.9 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 10.9 min  
 Area: 7.77e+004 counts  
 Height: 22798.788 cps  
 Start Time: 10.8 min  
 End Time: 11.1 min





4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1758

Lab Code: GEL

Lab Sample ID: XIBLK04

Analysis Date: 05-MAR-10 23:24

GEL Data File: EXS03050025.wiff

Instrument ID: LCMSMS

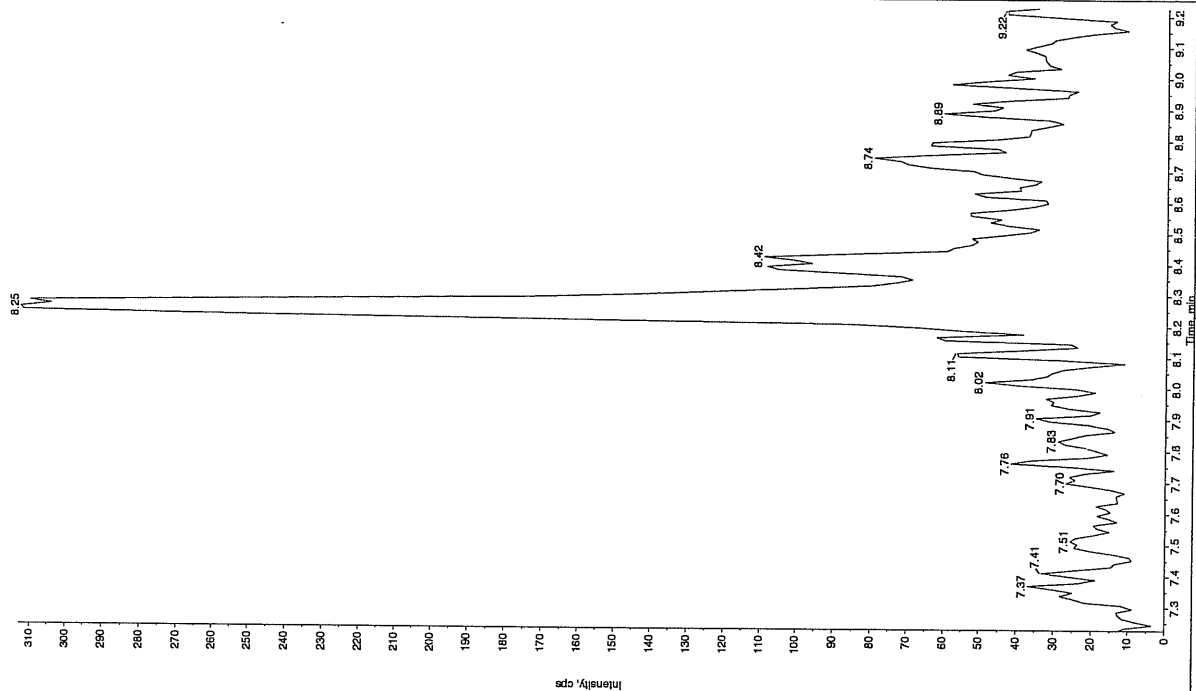
Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	0
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

See 3/9/10

Sample Name: "XIBLK04" Sample ID: "1111ER" File: "EXS03050025.wif"  
 Peak Name: "35-Dinitroaniline" Mass(es): "182.046.0 amu"  
 Comment: "LCMSEXP\_B" Annotation: ""

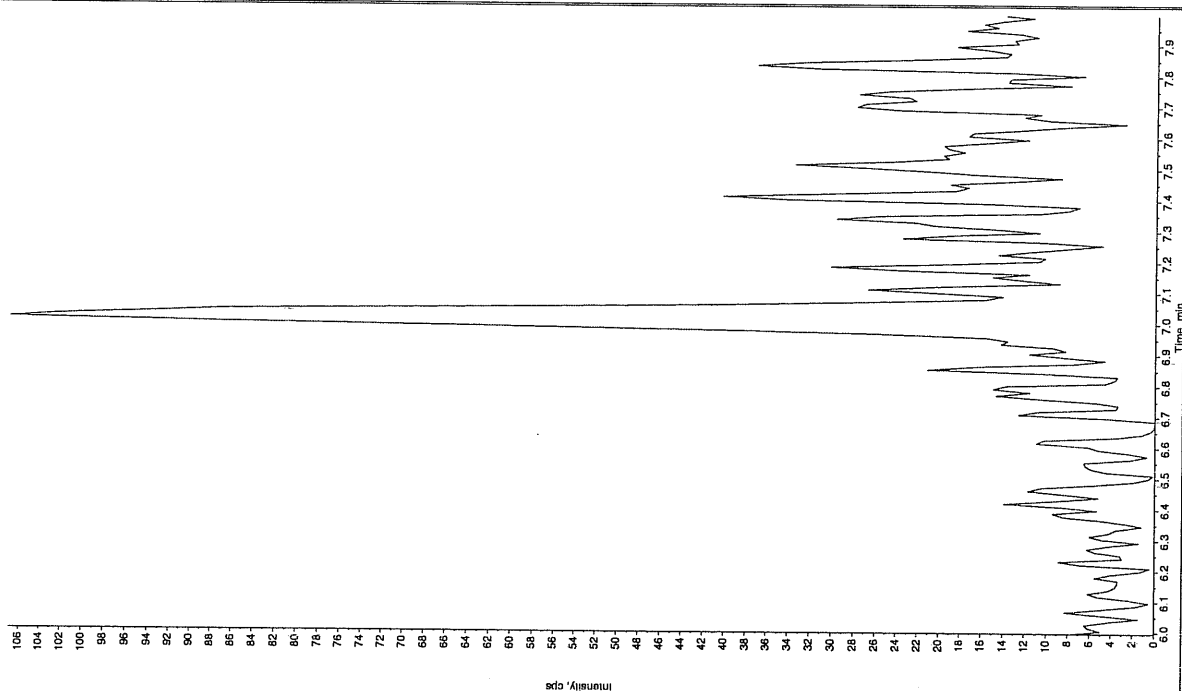
Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 3/5/2010  
 Acq. Time: 11:24:26 PM  
 Modified: No



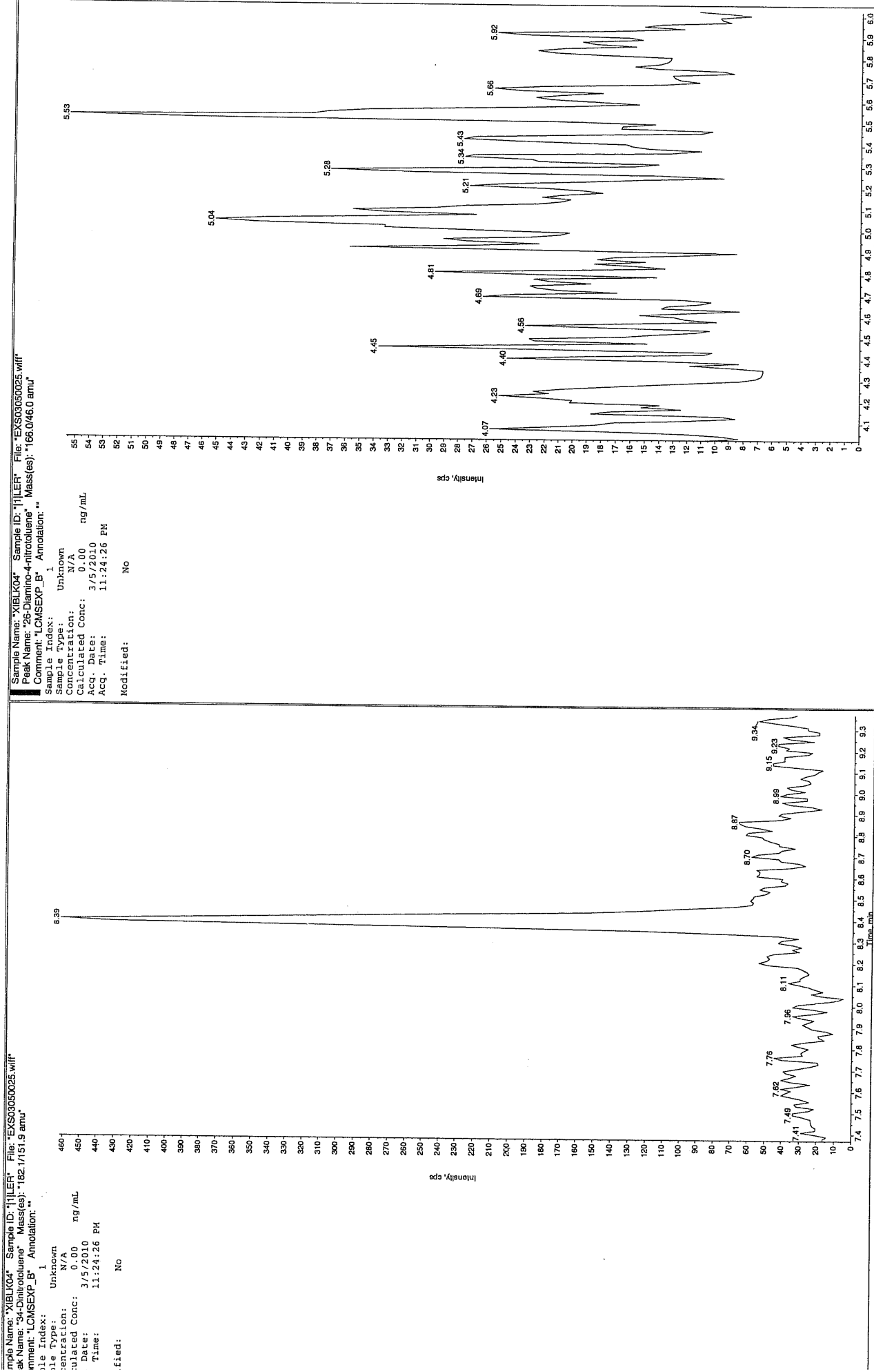
Hum 03/09/10

Sample Name: "XIBLK04" Sample ID: "1111ER" File: "EXS03050025.wif"  
 Peak Name: "1ATB" Mass(es): "257.2204.9 amu"  
 Comment: "LCMSEXP\_B" Annotation: ""

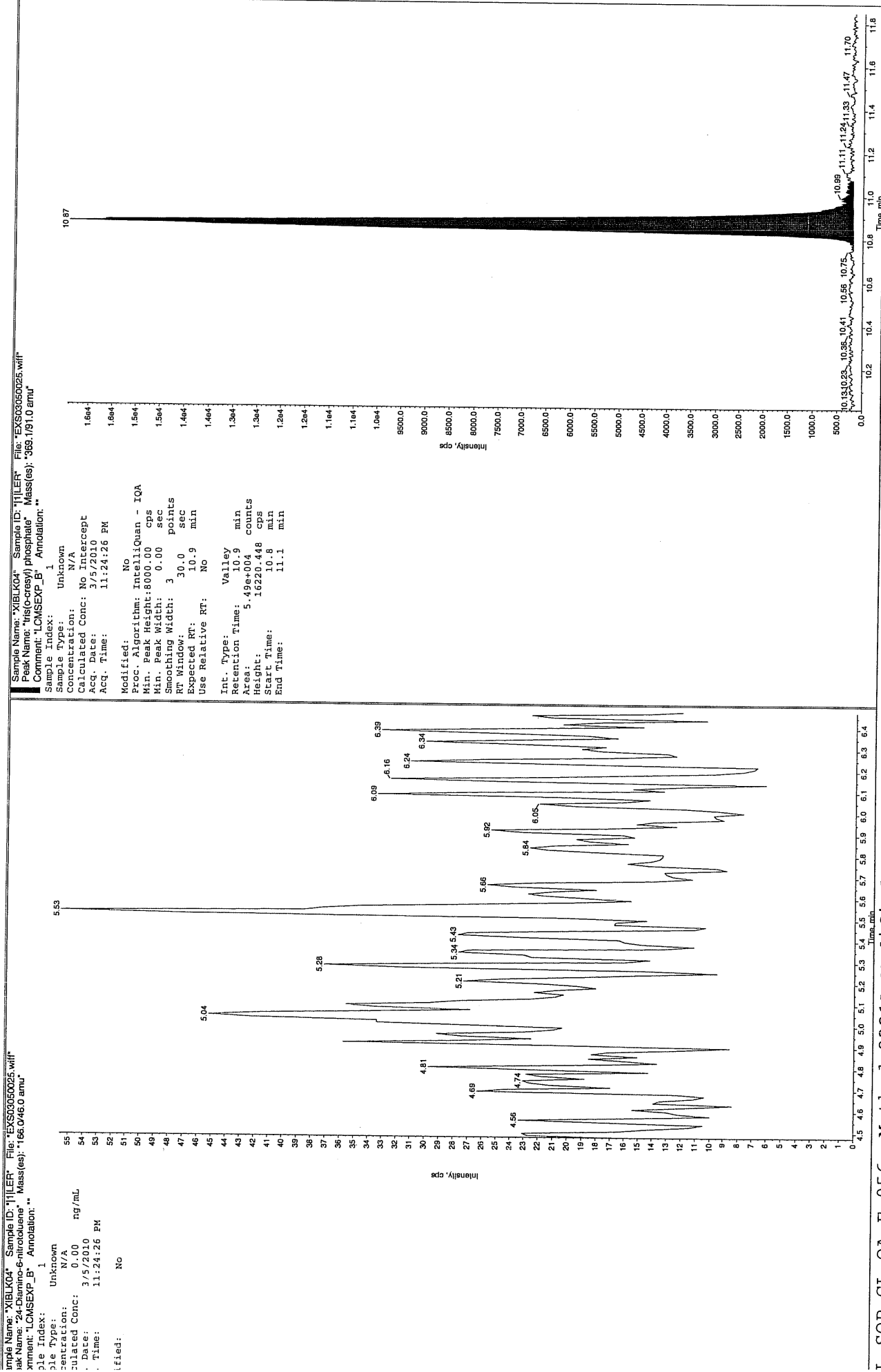
Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 3/5/2010  
 Acq. Time: 11:24:26 PM  
 Modified: No



L SOP GL-OA-E-056, Method 8321A-Modified LCM SMS#4

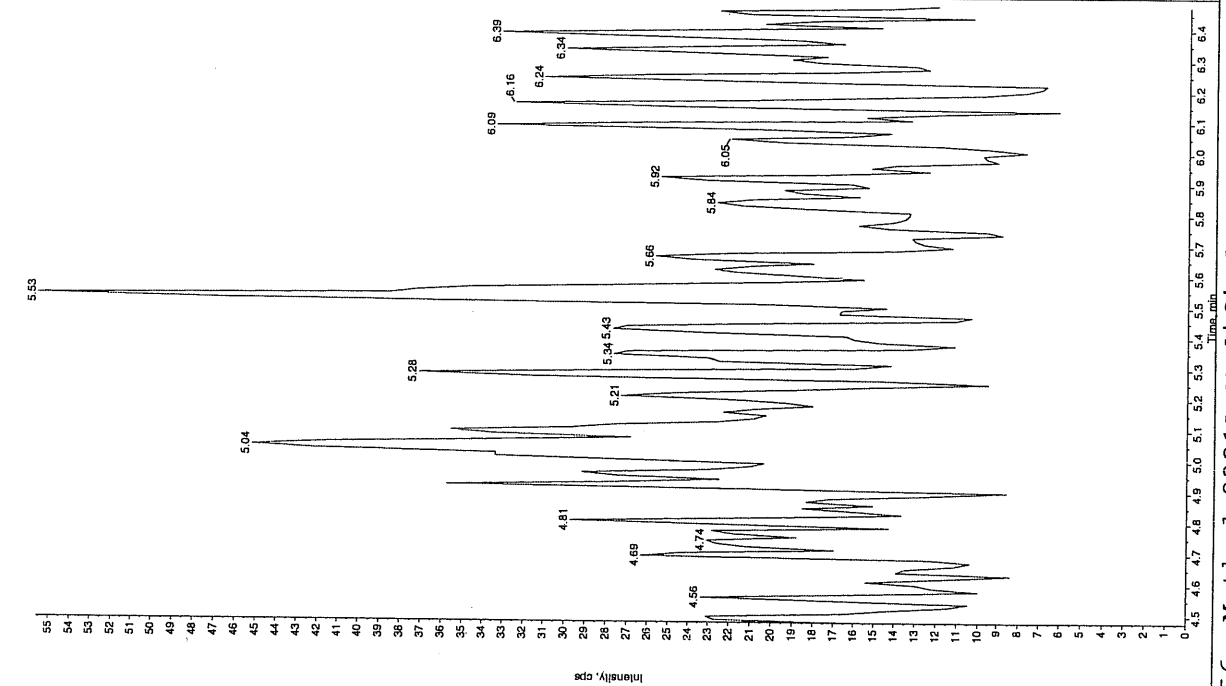


L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



Sample Name: "XIBLK04" Sample ID: "111LER" File: "EXS03050025.wif"  
 Peak Name: "24-Diamino-6-nitrotoluene" Mass(es): "166.0/46.0 amu"  
 Comment: "LCMSEXP\_B" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 3/5/2010  
 Acq. Time: 11:24:26 PM



L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1758

Lab Code: GEL

Lab Sample ID: XIBLK05

Analysis Date: 06-MAR-10 02:17

GEL Data File: EXS03050036.wiff

Instrument ID: LCMSMS

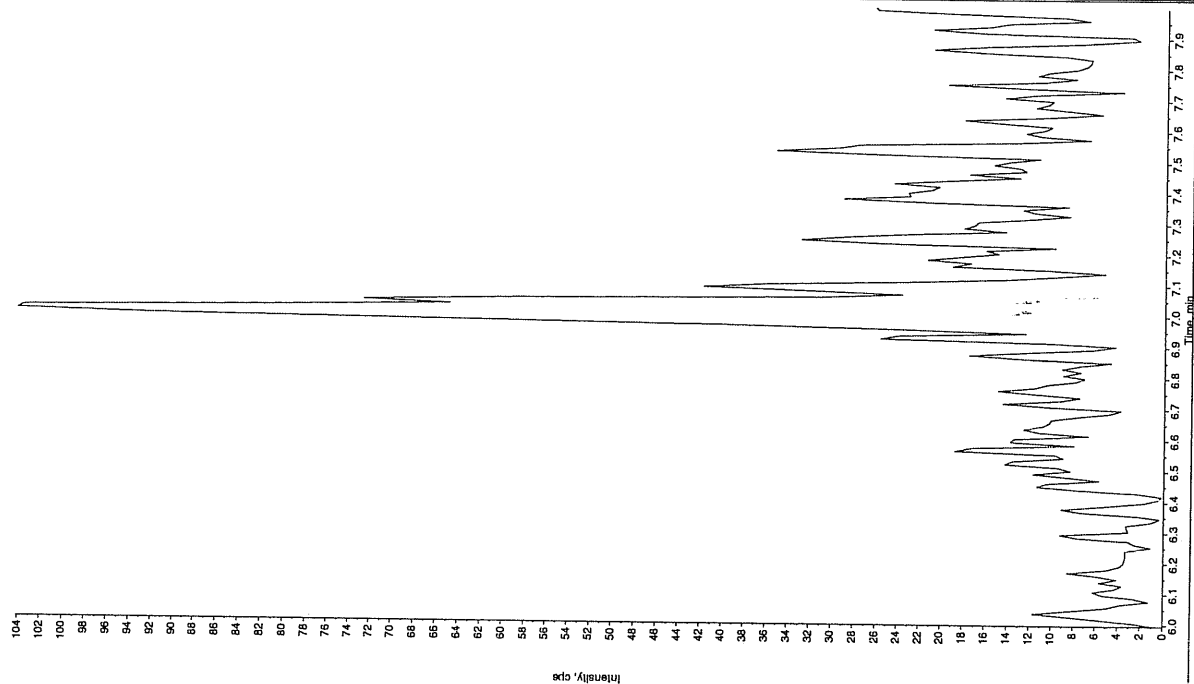
Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	0
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

See 3/2/10

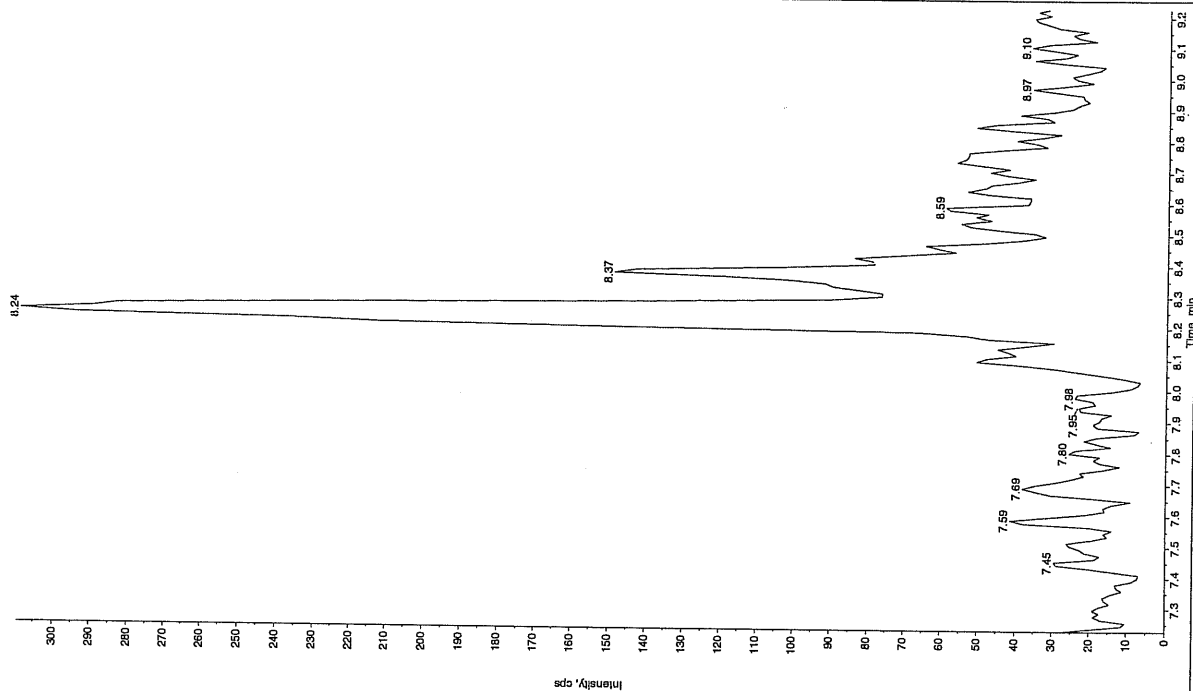
Sample Name: "XIBLK05" Sample ID: "11JLFR" File: "EXS03050036.wif"  
 Peak Name: "TATB" Mass(es): "257.2204.9 amu"  
 Comment: "LCMSEXP\_B" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Date: 3/6/2010  
 Time: 2:17:09 AM  
 Modified: No



Sample Name: "XIBLK05" Sample ID: "11JLFR" File: "EXS03050036.wif"  
 Peak Name: "35-Dinitroaniline" Mass(es): "182.046.0 amu"  
 Comment: "LCMSEXP\_B" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Date: 3/6/2010  
 Time: 2:17:09 AM  
 Modified: No

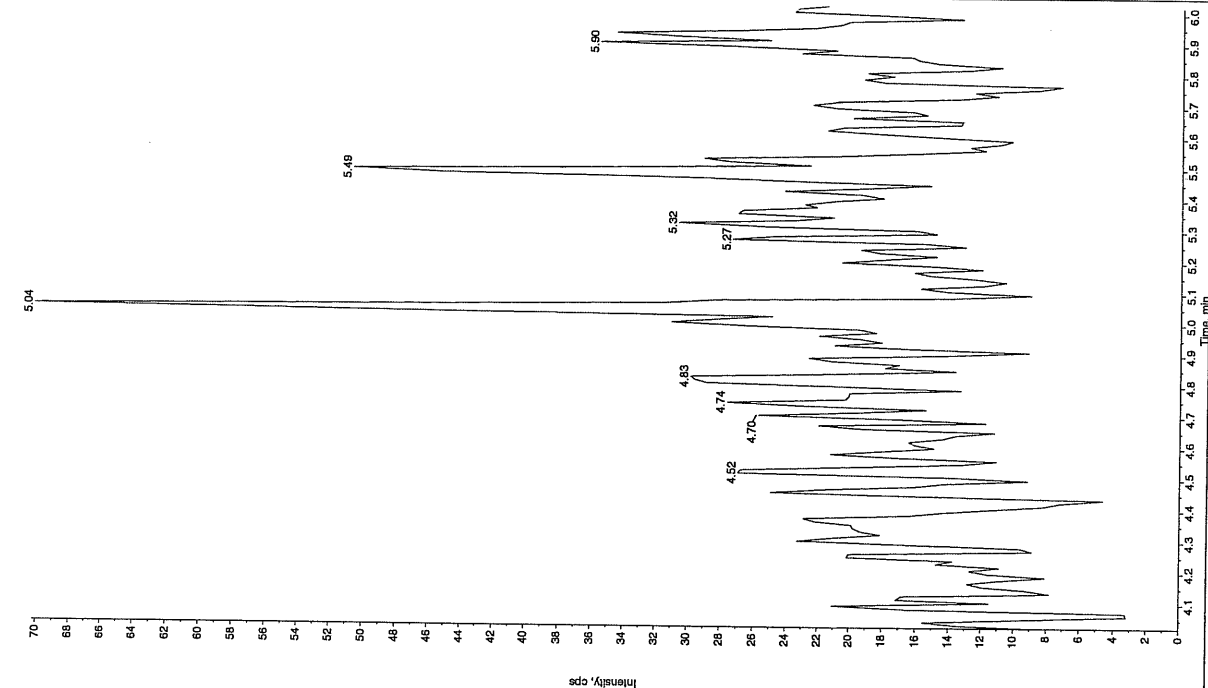


See 07/09/10

L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

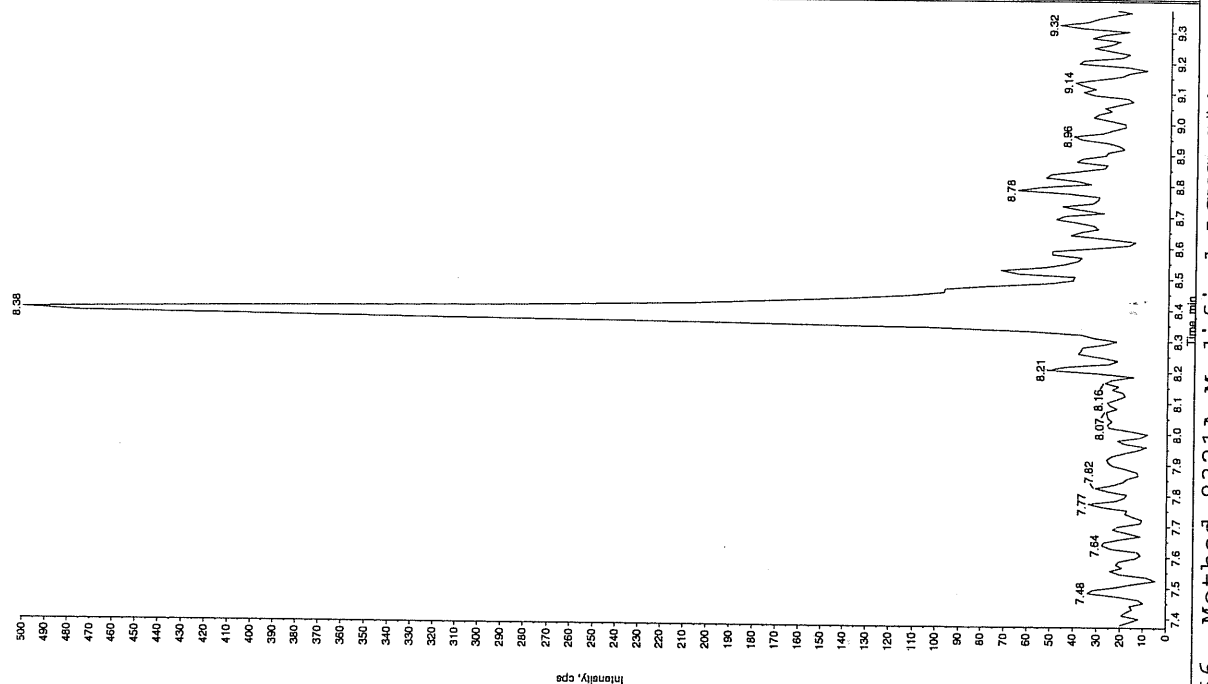
Sample Name: "XIBLK05" Sample ID: "111LER" File: "EXS03050036.wif"  
 Peak Name: "26-Diamino-4-nitrotoluene" Mass(es): "166.046.0 amu"  
 Comment: "LCMSEXP\_B" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 3/6/2010  
 Acq. Time: 2:17:09 AM  
 Modified: No

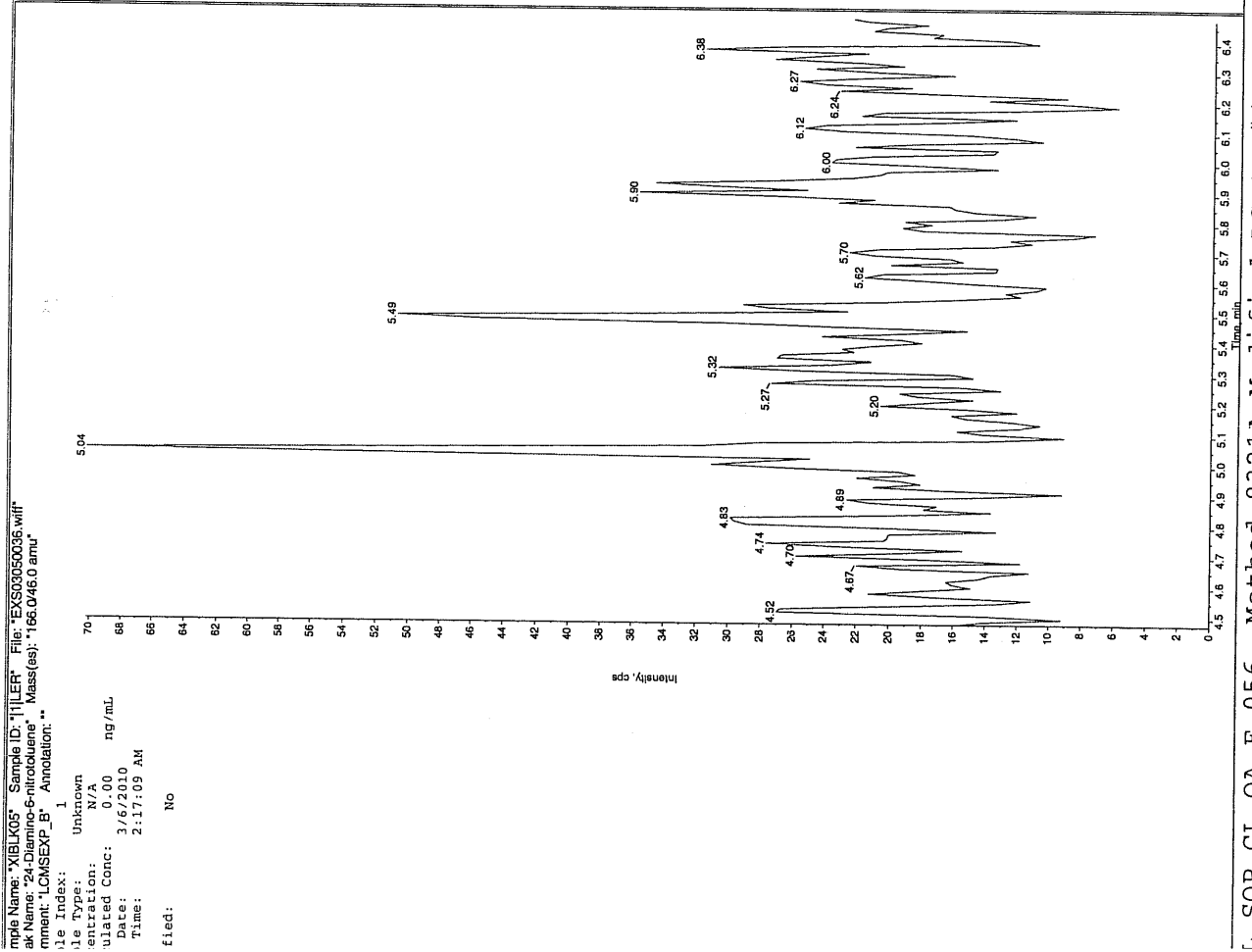
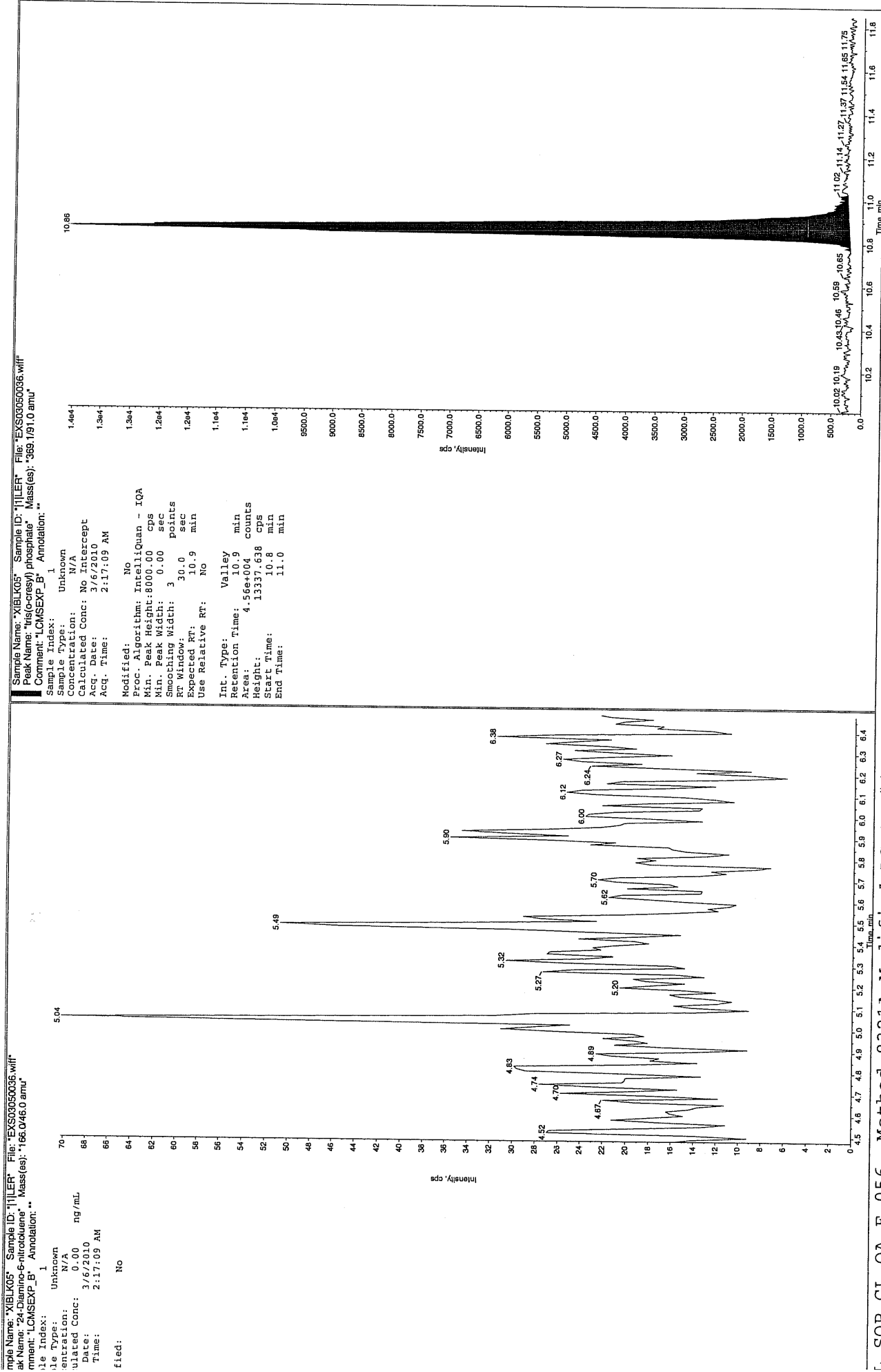


Sample Name: "XIBLK05" Sample ID: "111LER" File: "EXS03050036.wif"  
 Peak Name: "34-Dinitrotoluene" Mass(es): "182.1451.9 amu"  
 Comment: "LCMSEXP\_B" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 3/6/2010  
 Acq. Time: 2:17:09 AM  
 Modified: No



L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1758

Lab Code: GEL

Lab Sample ID: XIBLK06

Analysis Date: 06-MAR-10 05:41

GEL Data File: EXS03050049.wiff

Instrument ID: LCMSMS

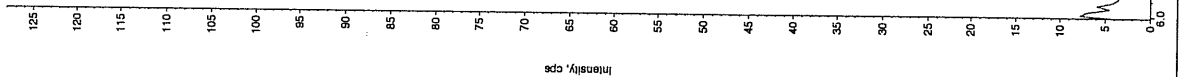
Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	0
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

See 3/9/10

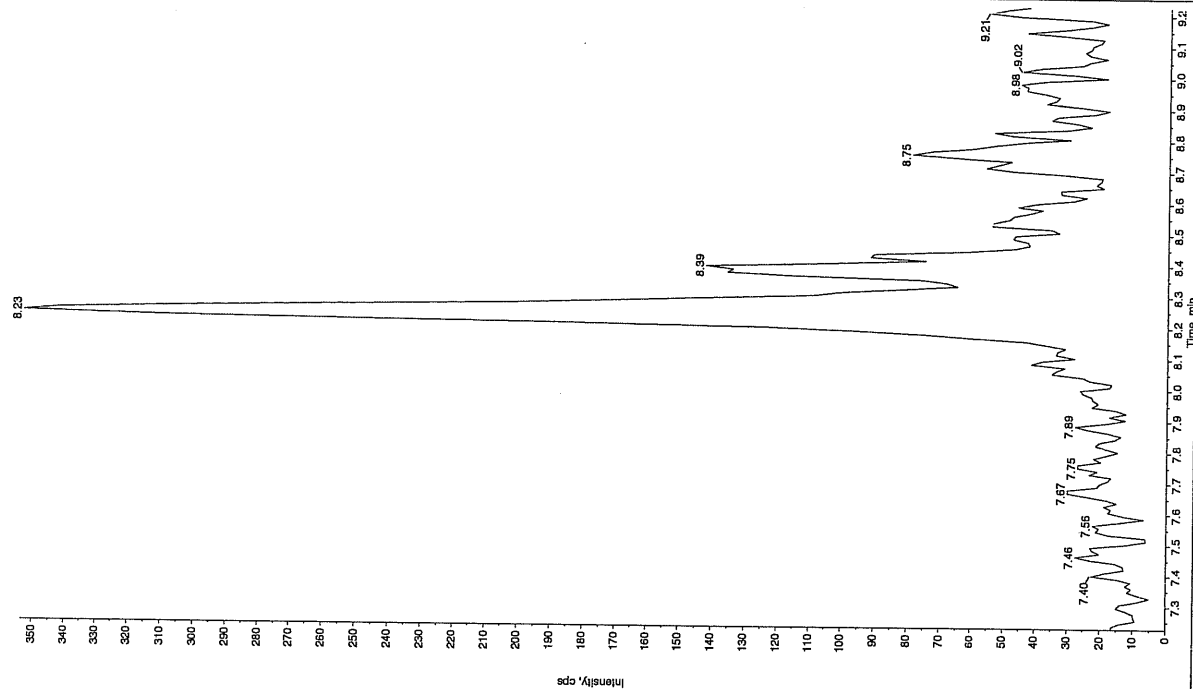
Sample Name: "XIBLK06" Sample ID: "1111ER" File: "EXS03050049.wif"  
 Peak Name: "TATB" Mass(es): "257.2/204.9 amu"  
 Comment: "LCMSEXP\_B" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: 0.00 ng/mL  
 Date: 3/6/2010  
 Acq. Time: 5:41:16 AM  
 Modified: No



Sample Name: "XIBLK06" Sample ID: "1111ER" File: "EXS03050049.wif"  
 Peak Name: "35-Dinitroaniline" Mass(es): "182.0/46.0 amu"  
 Comment: "LCMSEXP\_B" Annotation: ""

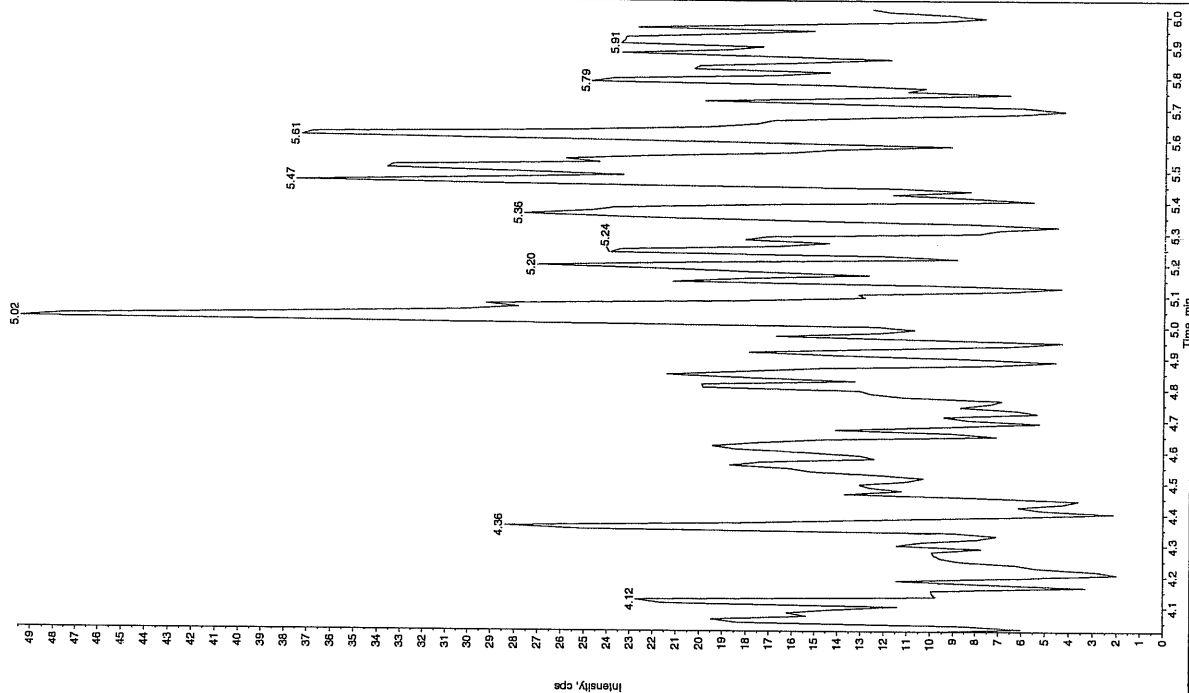
Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Date: 3/6/2010  
 Acq. Time: 5:41:16 AM  
 Modified: No



See 03/09/10

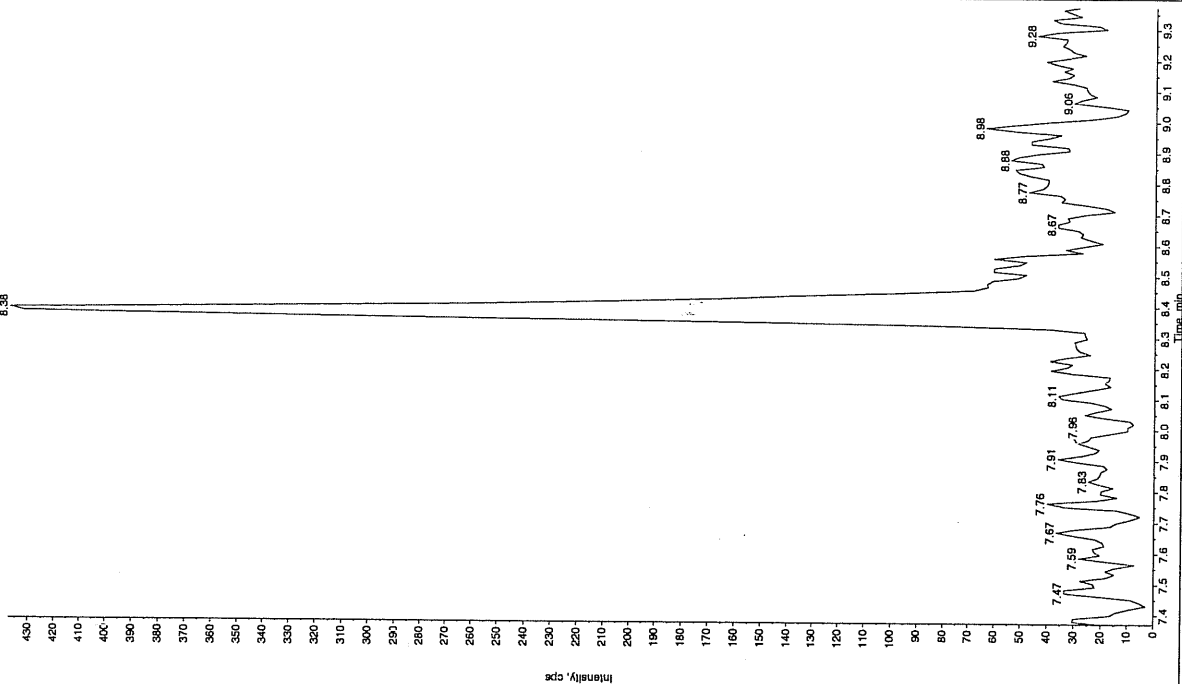
Sample Name: "XIBLK06" Sample ID: "1111ER" File: "EXS03050049.wif"  
 Peak Name: "26-Diamino-4-nitrotoluene" Mass(es): "166.046.0 amu"  
 Comment: "LCMSEXP\_B" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 3/6/2010  
 Acq. Time: 5:41:16 AM  
 Modified: No

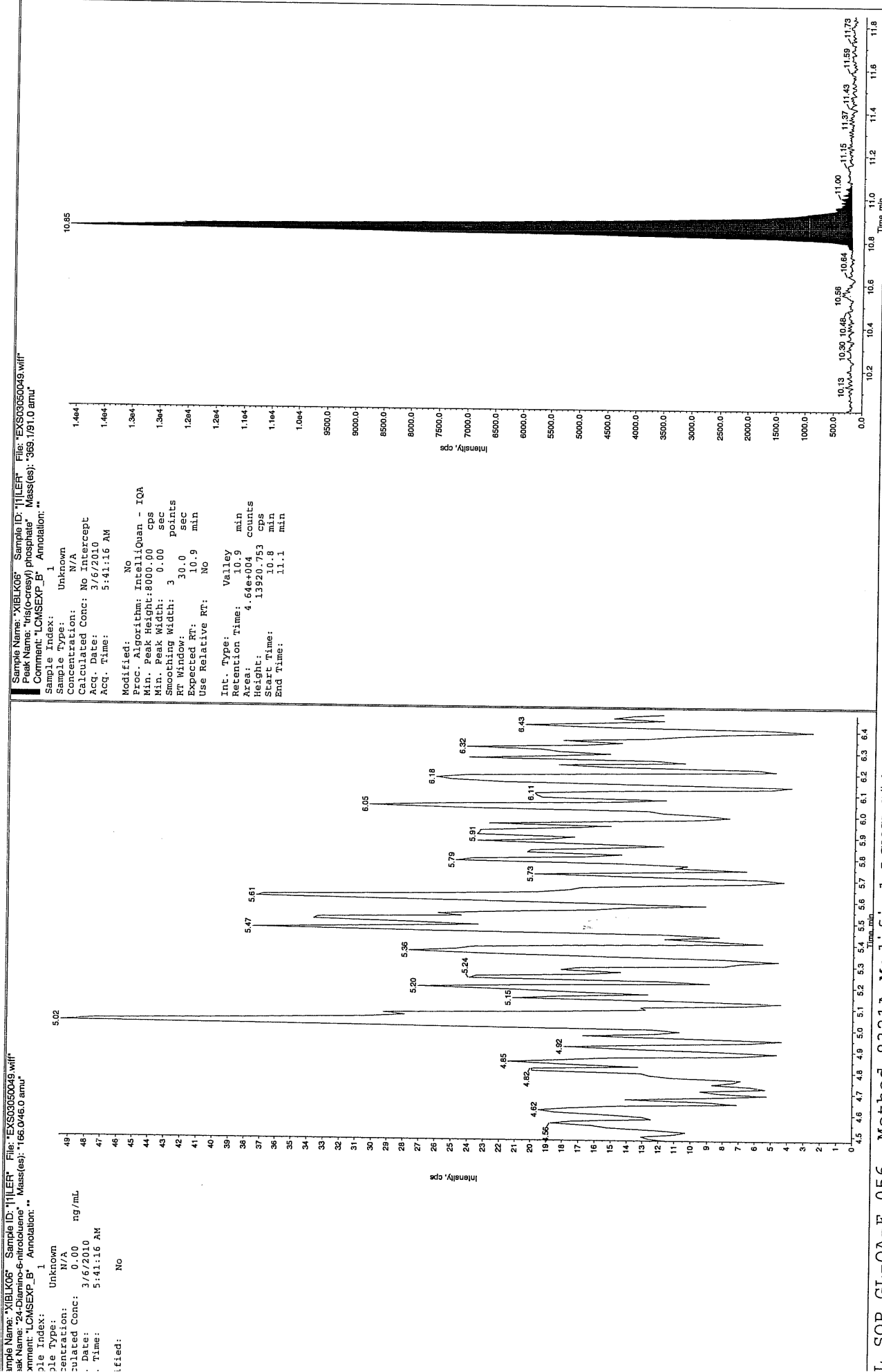


Sample Name: "XIBLK06" Sample ID: "1111ER" File: "EXS03050049.wif"  
 Peak Name: "34-Nitrotoluene" Mass(es): "182.151.9 amu"  
 Comment: "LCMSEXP\_B" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 3/6/2010  
 Acq. Time: 5:41:16 AM  
 Modified: No



L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1758

Lab Code: GEL

Lab Sample ID: XIBLK07

Analysis Date: 06-MAR-10 08:49

GEL Data File: EXS03050061.wiff

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	0
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

Jan 3/9/10

Sample Name: "XIBLK07" Sample ID: "JILLER" File: "EXS03050061.wif"

Peak Name: "TATB" Mass(es): "257.2/204.9 amu"

Comment: "LCMSEXP\_B" Annotation: ""

Sample Index: 1

Sample Type: Unknown

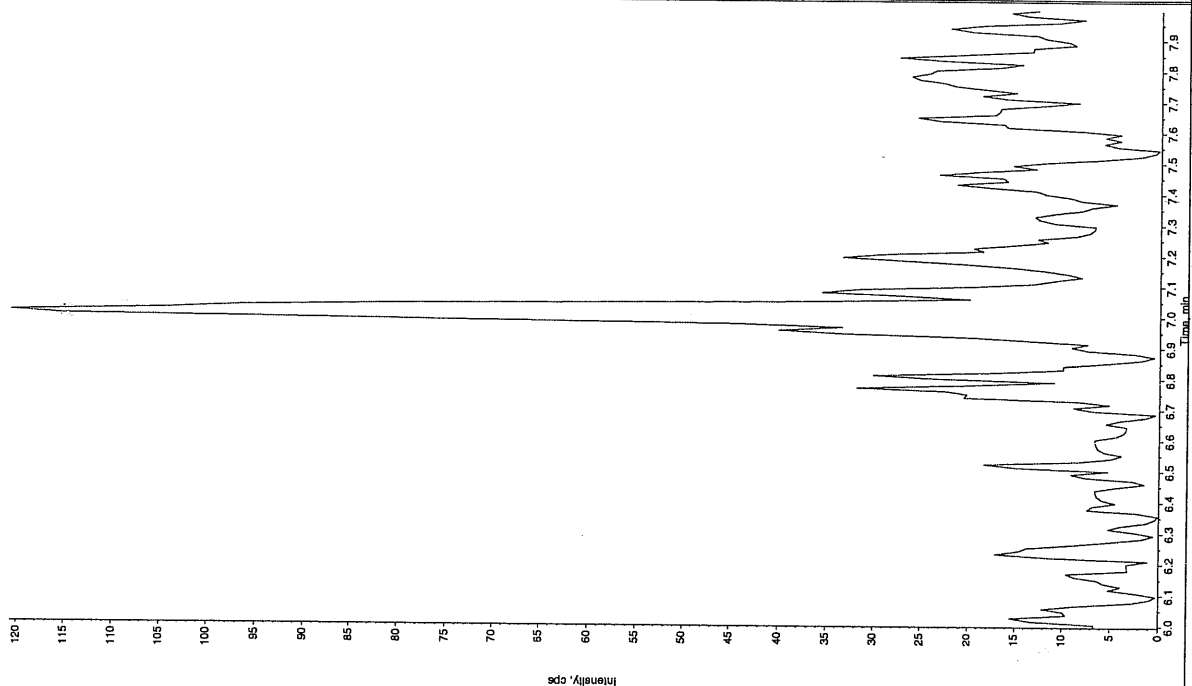
Concentration: N/A

Calculated Conc: 0.00 ng/mL

Date: 3/6/2010

Time: 8:49:43 AM

Modified: No



Sample Name: "XIBLK07" Sample ID: "JILLER" File: "EXS03050061.wif"

Peak Name: "35-Dinitroaniline" Mass(es): "182.0/46.0 amu"

Comment: "LCMSEXP\_B" Annotation: ""

Sample Index: 1

Sample Type: Unknown

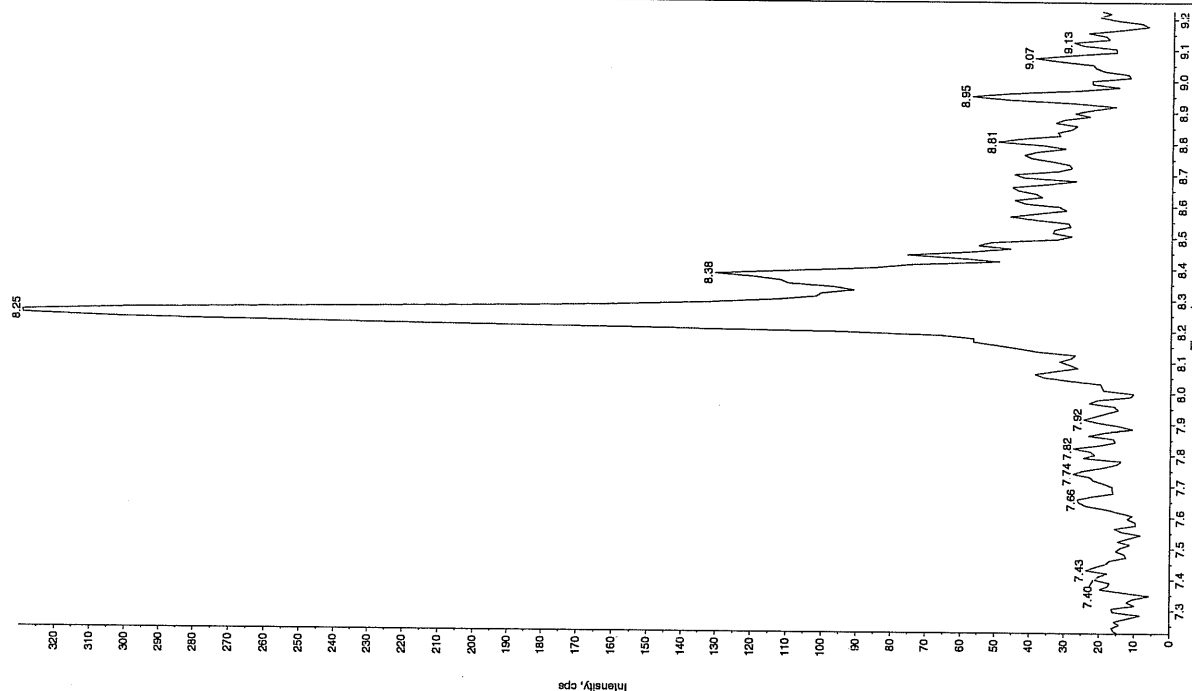
Concentration: N/A

Calculated Conc: 0.00 ng/mL

Date: 3/6/2010

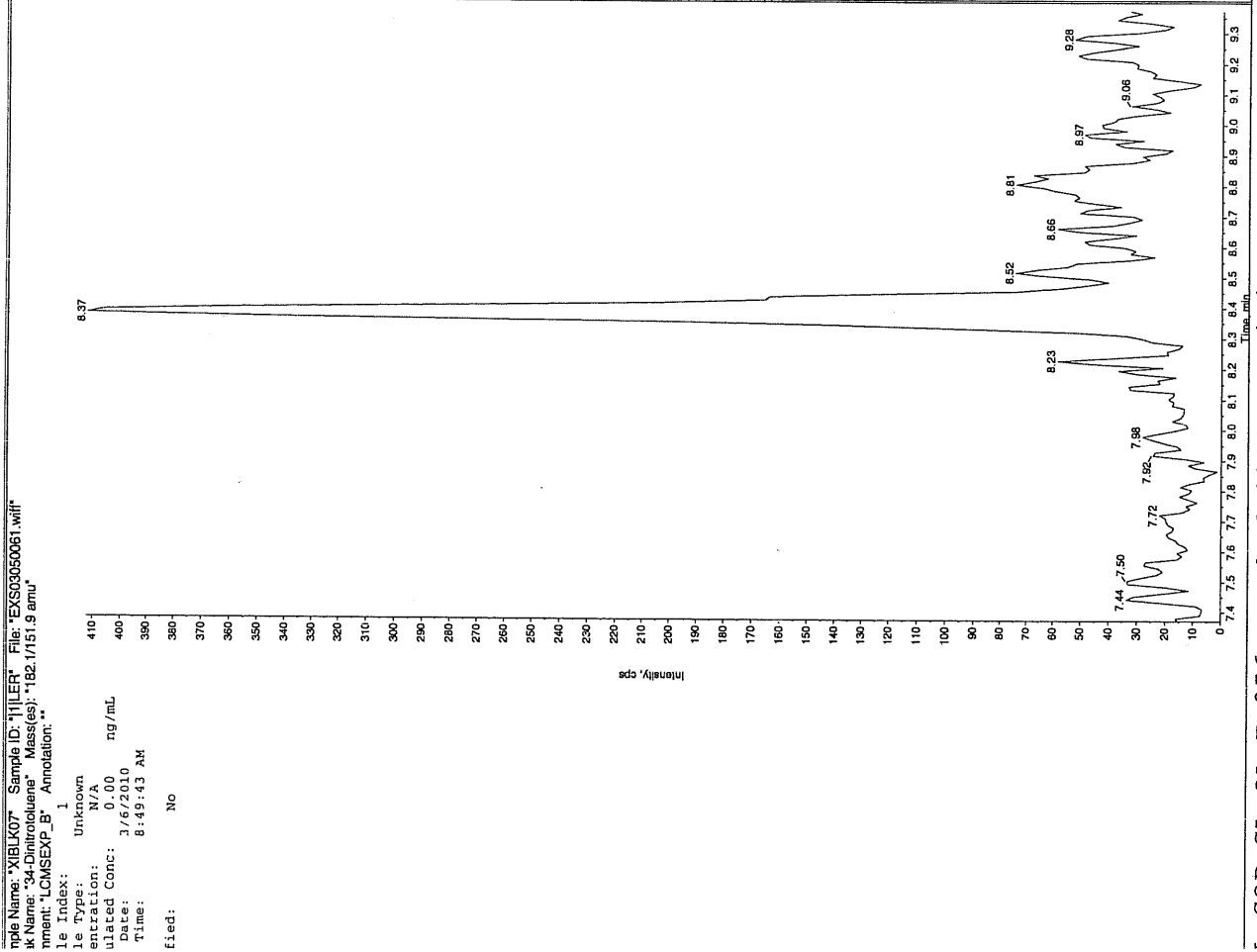
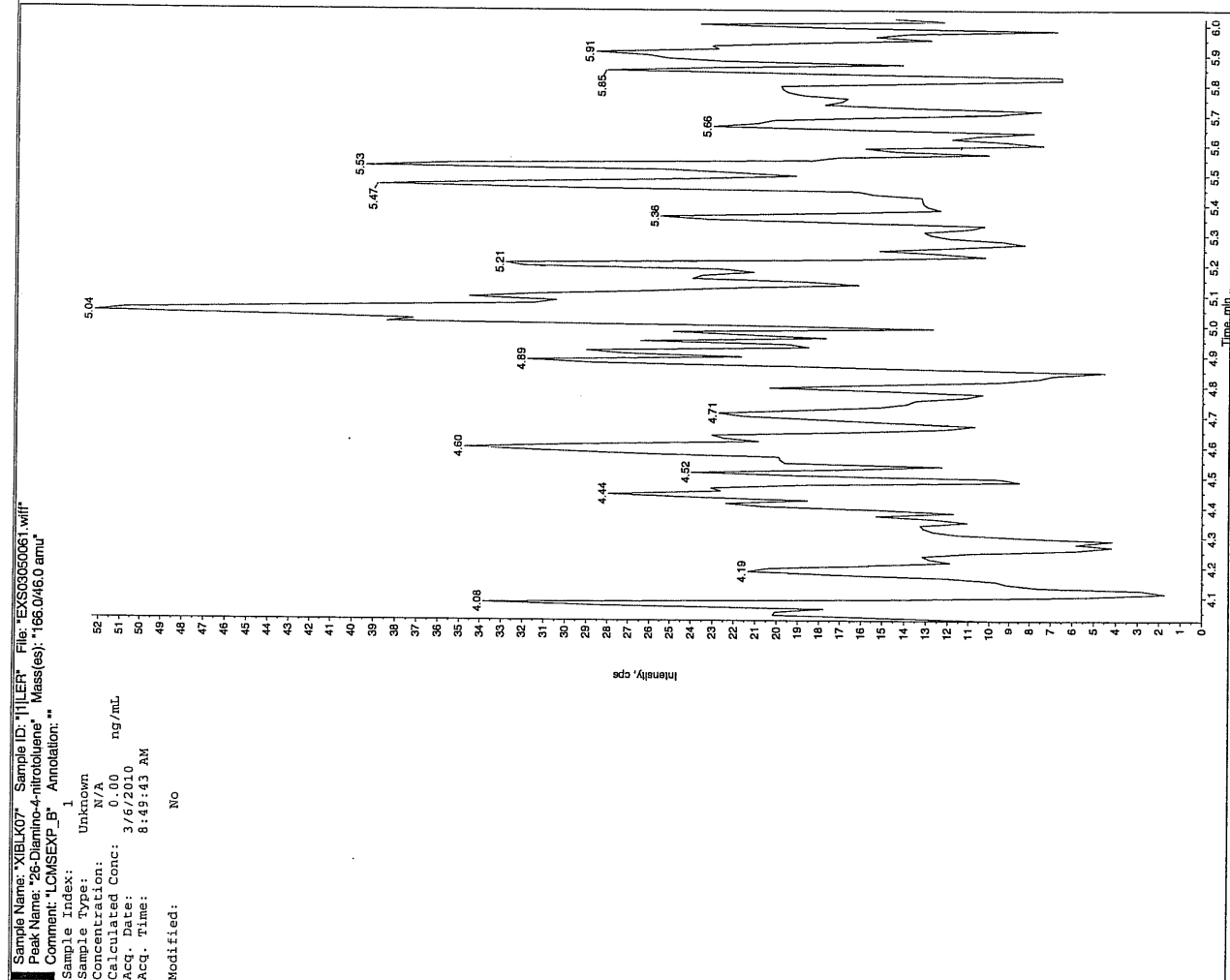
Time: 8:49:43 AM

Modified: No



HW 03/09/10

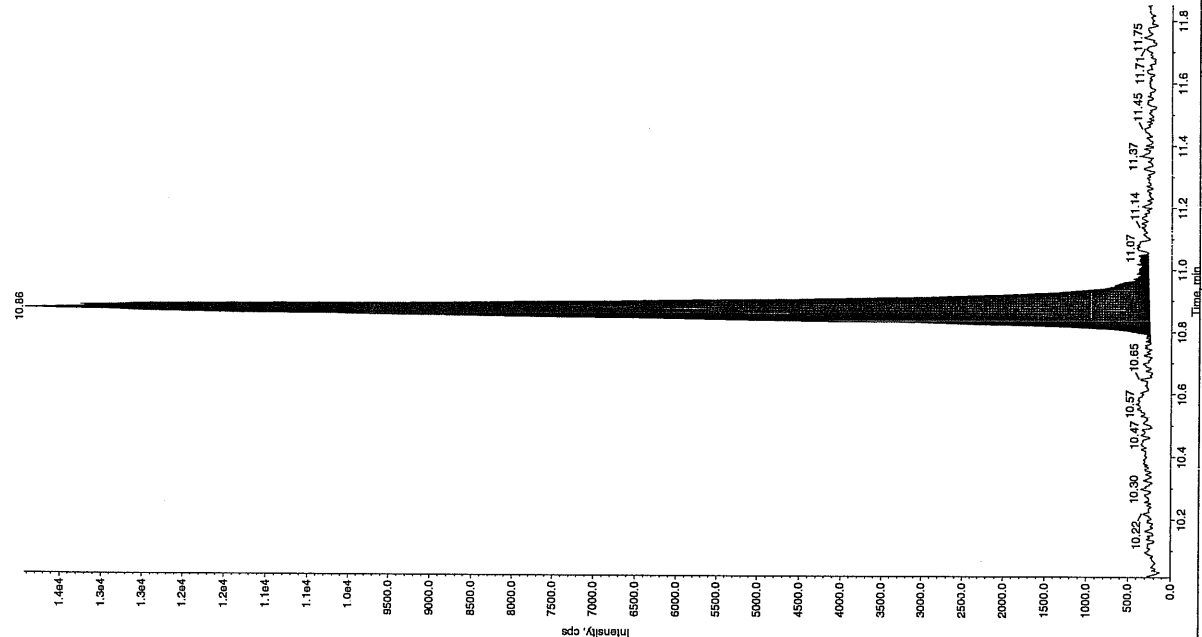
L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

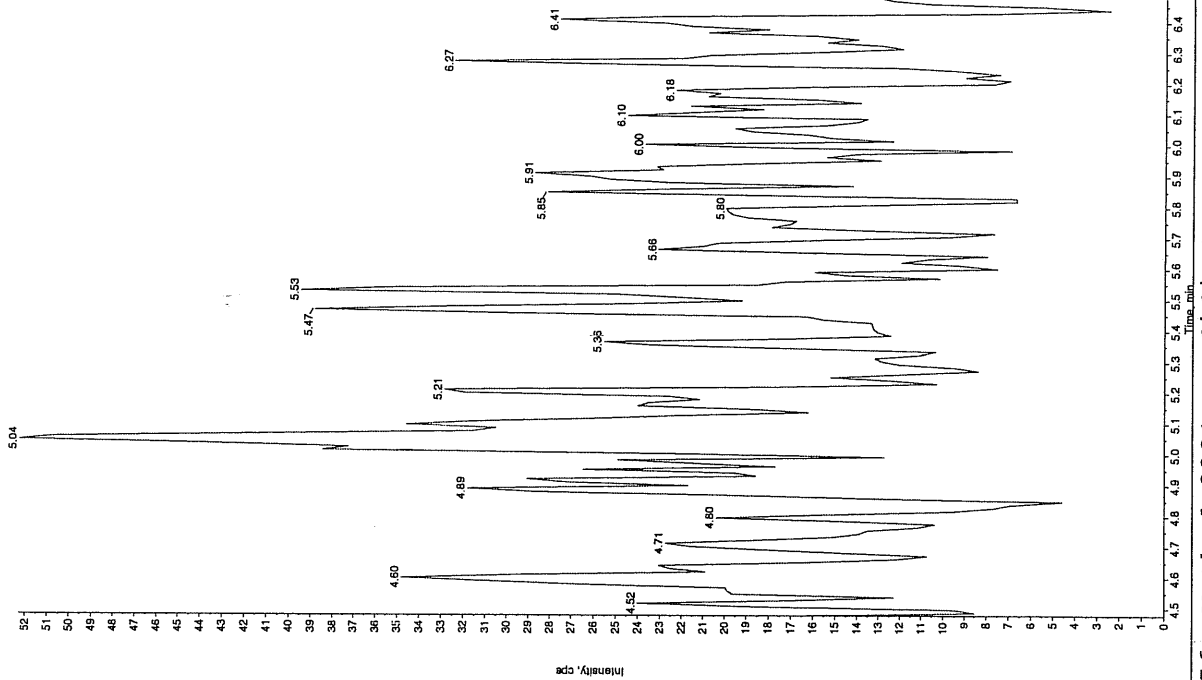
Sample Name: "XIBLK07" Sample ID: "111ER" File: "EXS03050061.wif"  
 Peak Name: "tris(oxo)phosphate" Mass(es): "389.1/91.0 amu"  
 Comment: "LCMSEXP\_B" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: No Intercept  
 Acq. Date: 3/6/2010  
 Acq. Time: 8:49:43 AM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IOA  
 Min. Peak Height: 8000.00 cps  
 Min. Peak Width: 3.00 sec  
 Smoothing Width: 30.0 points  
 RT Window: 30.0 sec  
 Expected RT: 10.9 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 10.9 min  
 Area: 4.89e+004 counts  
 Height: 13667.697 cps  
 Start Time: 10.8 min  
 End Time: 11.1 min



Sample Name: "XIBLK07" Sample ID: "111ER" File: "EXS03050061.wif"  
 Peak Name: "24-Diamino-6-nitrotoluene" Mass(es): "166.0/66.0 amu"  
 Comment: "LCMSEXP\_B" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 3/6/2010  
 Acq. Time: 8:49:43 AM  
 Modified: No



IL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1758

Lab Code: GEL

Lab Sample ID: XIBLK08

Analysis Date: 06-MAR-10 10:23

GEL Data File: EXS03050067.wiff

Instrument ID: LCMSMS

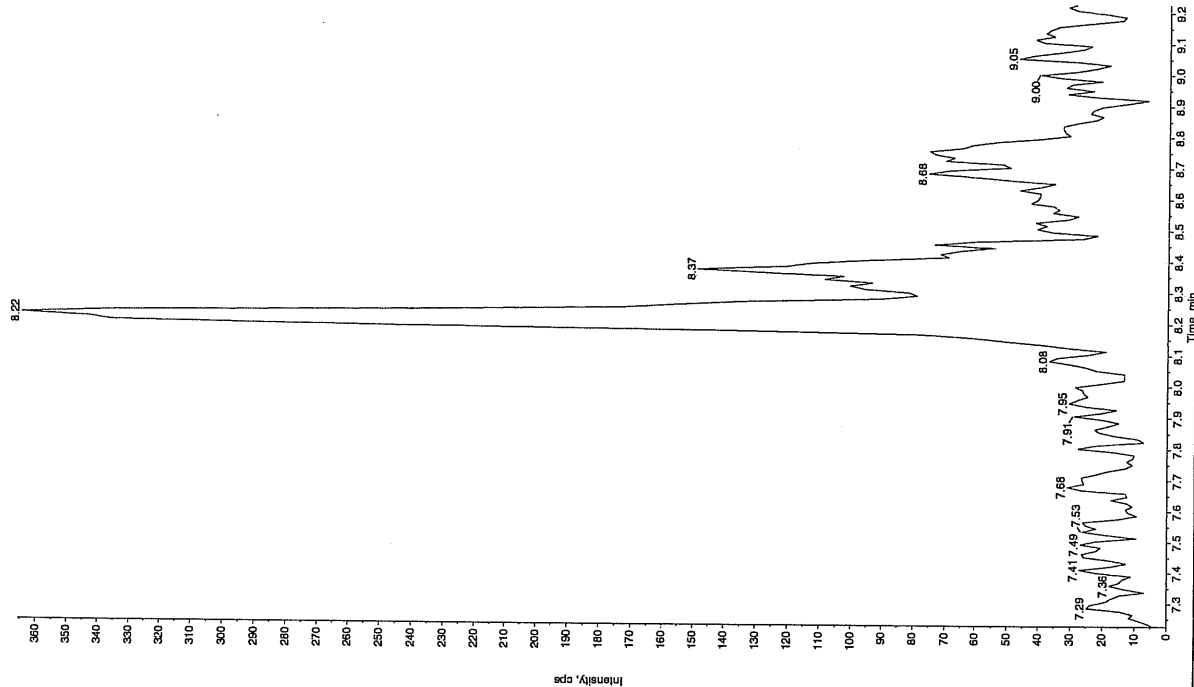
Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	0
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

See 3/2/10

Sample Name: "XIBLK08" Sample ID: "111LRF" File: "EXS03050067.wif"  
 Peak Name: "35 Chloroquine" Mass(es): "182.0460 amu"  
 Comment: "LOMSEXP\_B" Annotation: ""

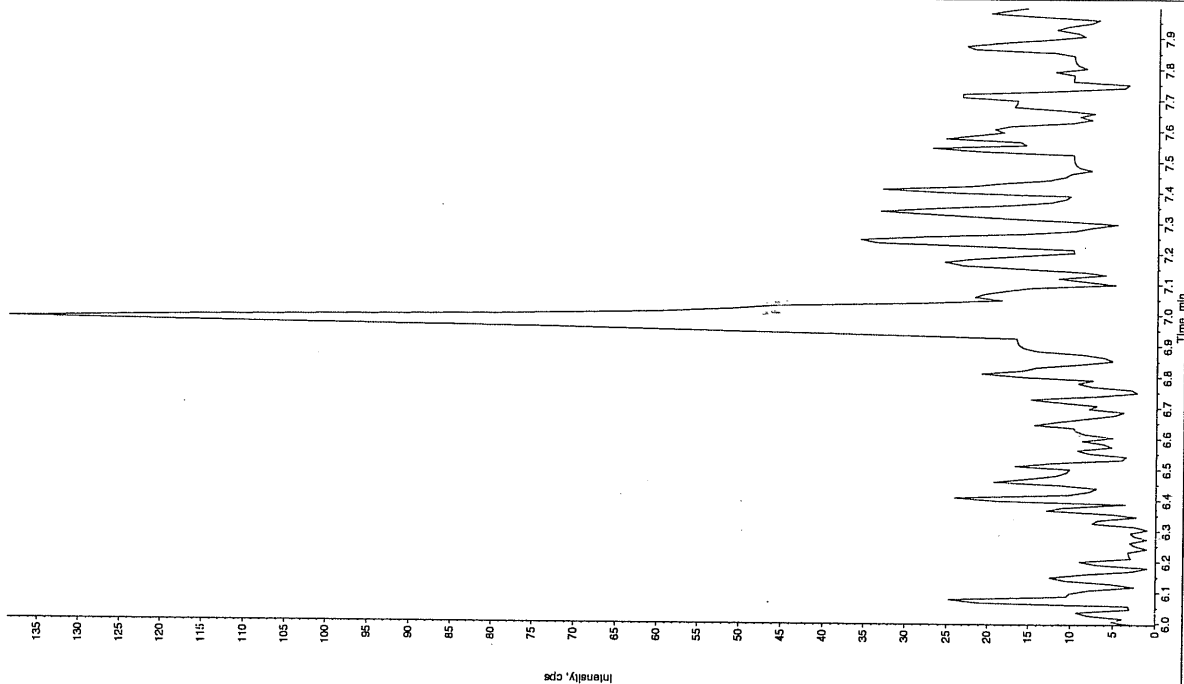
Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A ng/mL  
 Calculated Conc: 0.00  
 Acq. Date: 3/6/2010  
 Acq. Time: 10:23:57 AM  
 Modified: No



4/11/03 10/10

Sample Name: "XIBLK08" Sample ID: "111LRF" File: "EXS03050067.wif"  
 Peak Name: "TATB" Mass(es): "257.22049 amu"  
 Comment: "LOMSEXP\_B" Annotation: ""

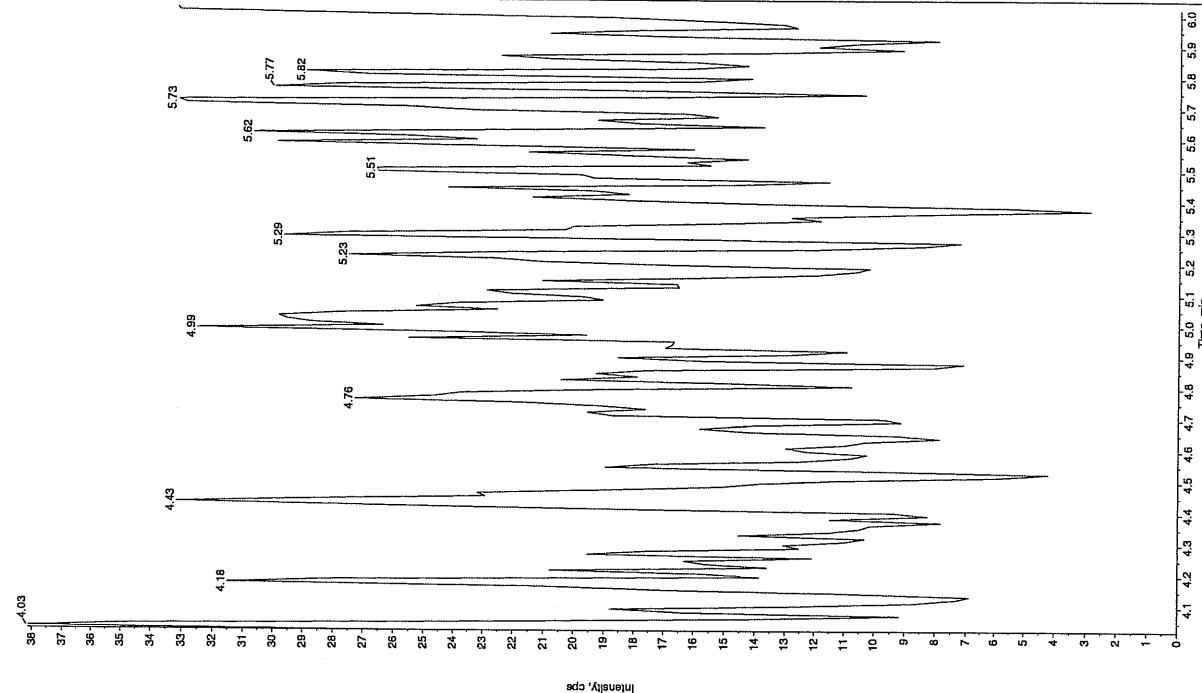
Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A ng/mL  
 Calculated Conc: 0.00  
 Acq. Date: 3/6/2010  
 Acq. Time: 10:23:57 AM  
 Modified: No



L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

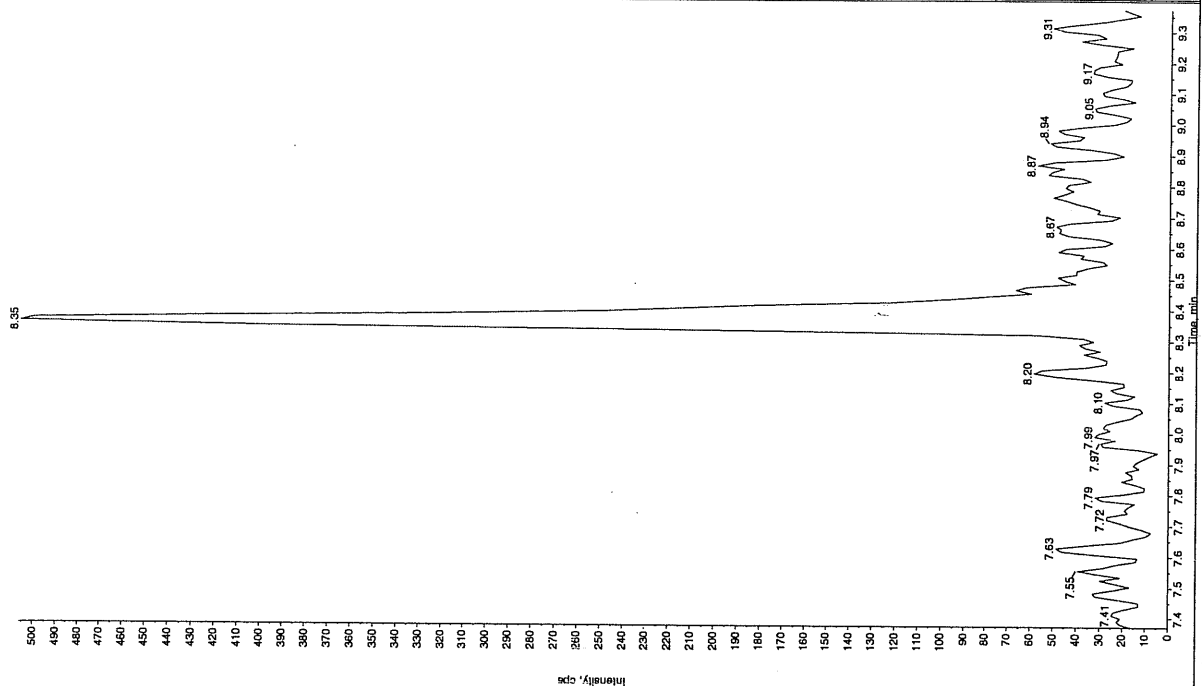
Sample Name: "XIBLK08" Sample ID: "JILER" File: "EXS03050067.wif"  
 Peak Name: "34-Dinitrotoluene" Mass(es): "182.1/151.9 amu"  
 Comment: "LCMSEXP\_B" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 3/6/2010  
 Acq. Time: 10:23:57 AM  
 Modified: No



Sample Name: "XIBLK08" Sample ID: "JILER" File: "EXS03050067.wif"  
 Peak Name: "34-Dinitrotoluene" Mass(es): "182.1/151.9 amu"  
 Comment: "LCMSEXP\_B" Annotation: ""

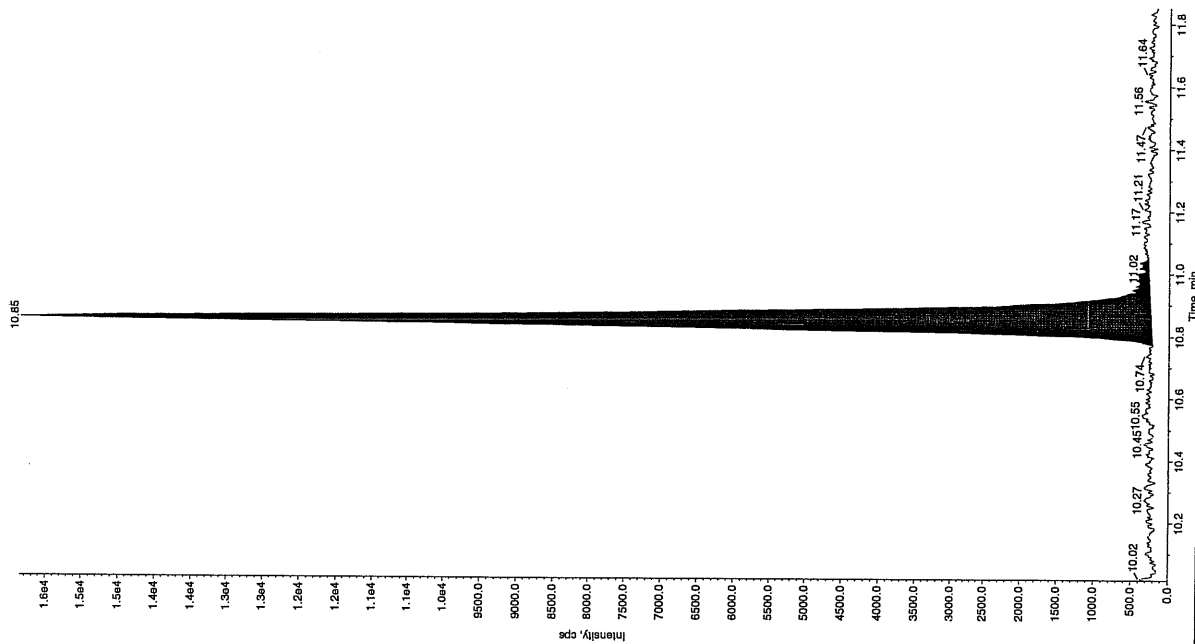
Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 3/6/2010  
 Acq. Time: 10:23:57 AM  
 Modified: No



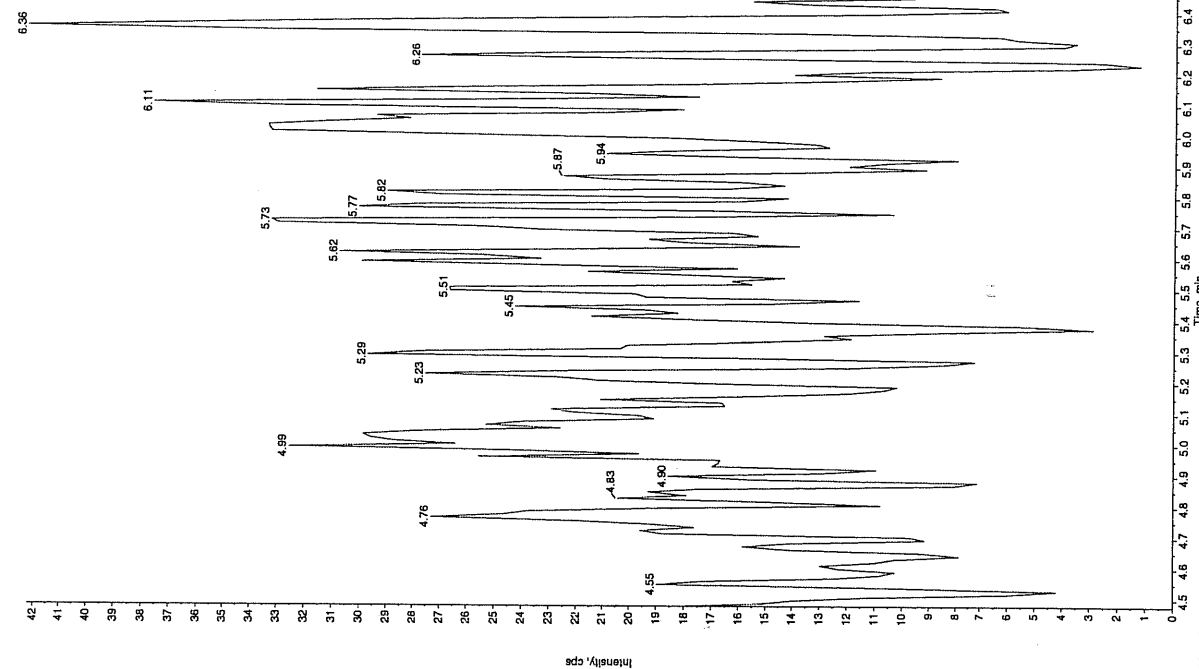
L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

Sample Name: "XIBLK08" Sample ID: "JILER" File: "EXS03050067.wif"  
 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: No Intercept  
 Acq. Date: 3/6/2010  
 Acq. Time: 10:23:57 AM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IQA  
 Min. Peak Height: 8000.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 30.0 sec  
 Expected RT: 10.9 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 10.8 min  
 Area: 4.83e+004 counts  
 Height: 15628.639 cps  
 Start Time: 10.8 min  
 End Time: 11.1 min



Sample Name: "XIBLK08" Sample ID: "JILER" File: "EXS03050067.wif"  
 Peak Name: "24-Diamino-6-nitrothiouracil" Mass(es): "156.0/46.0 amu"  
 Comment: "LCMSEXP\_B" Annotation: ""



L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1758

Lab Code: GEL

Lab Sample ID: XIBLK09

Analysis Date: 06-MAR-10 13:48

GEL Data File: EXS03050080.wiff

Instrument ID: LCMSMS

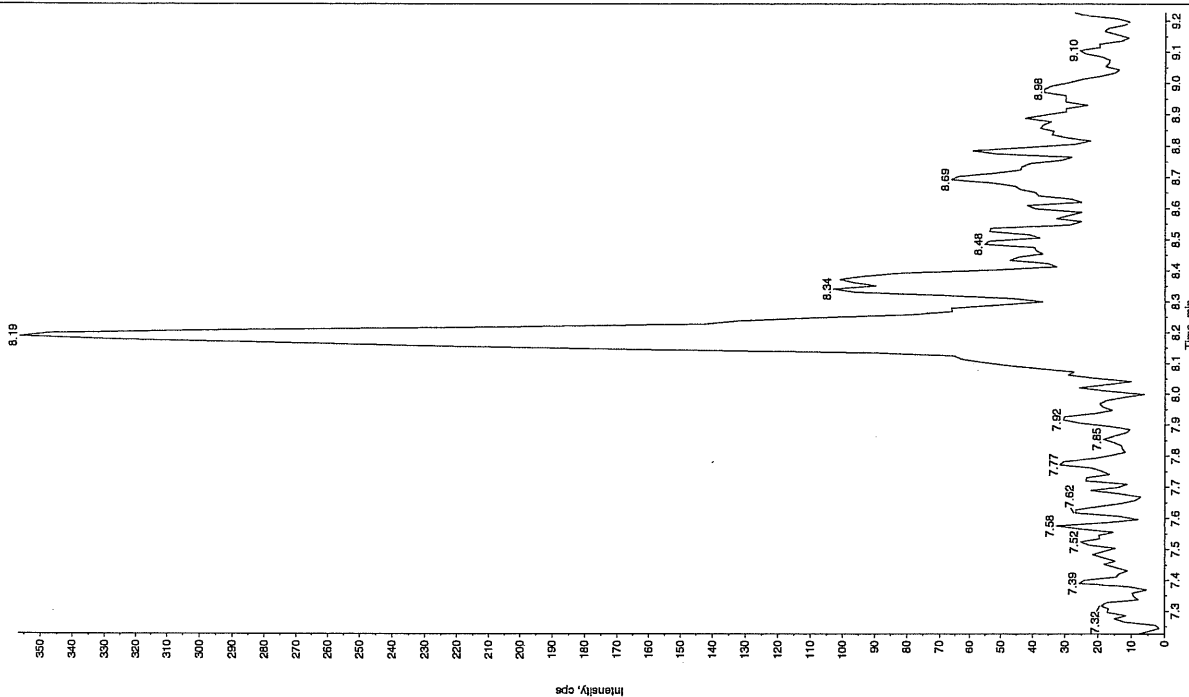
Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	0
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

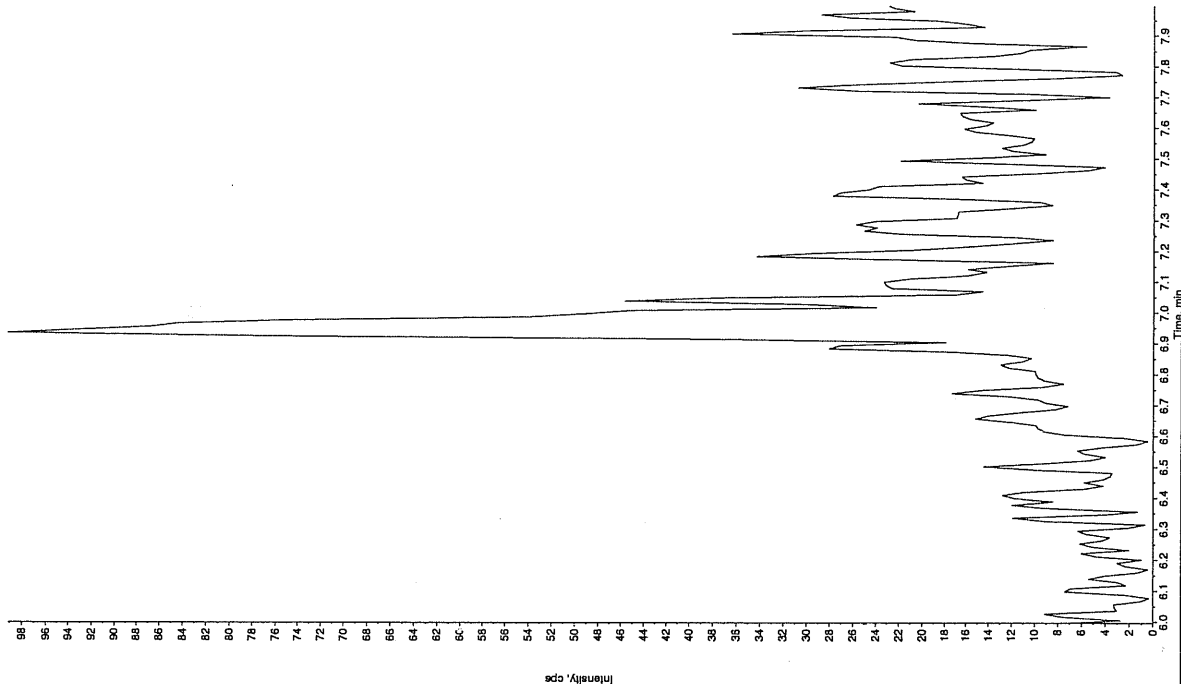
See 30/10

Sample Name: "XIBLK09" Sample ID: "TILER" File: "EXS03050080.wif"  
 Peak Name: "35-Dinitroaniline" Mass(es): "182.046.0 amu"  
 Comment: "LCMSEXP\_B" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 3/6/2010  
 Acq. Time: 1:48:09 PM  
 Modified: No



dim 03/09/12



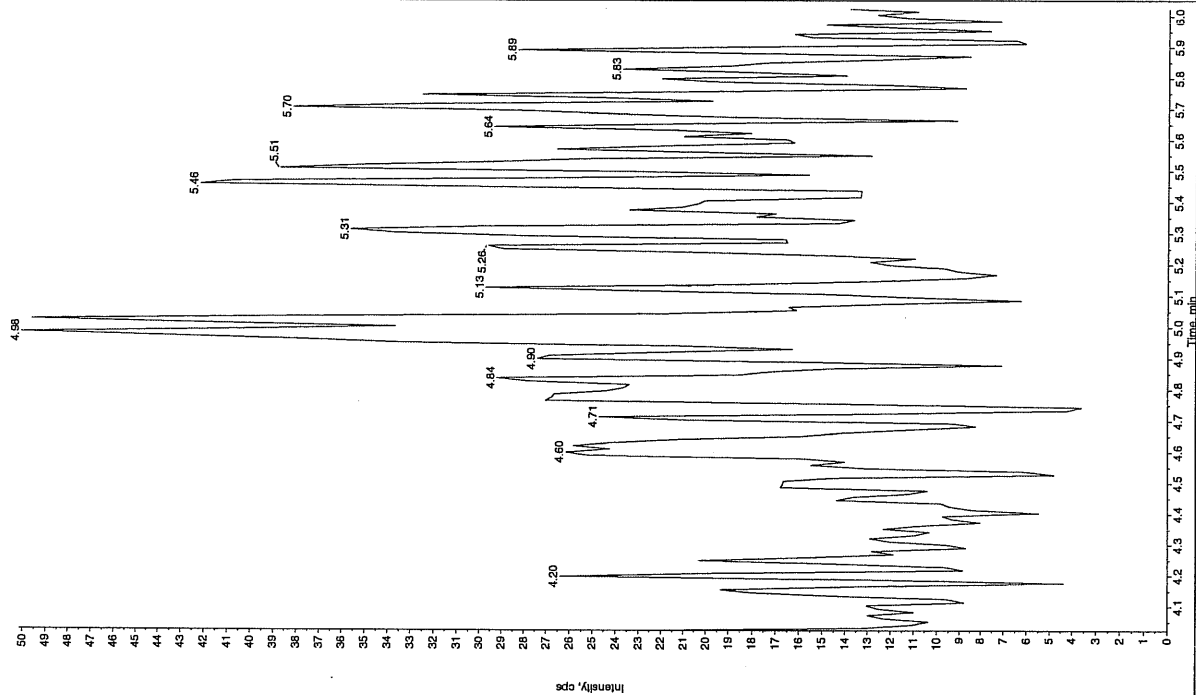
Sample Name: "XIBLK09" Sample ID: "TILER" File: "EXS03050080.wif"  
 Peak Name: "TATB" Mass(es): "257.2204.9 amu"  
 Comment: "LCMSEXP\_B" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 3/6/2010  
 Acq. Time: 1:48:09 PM  
 Modified: No

IL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

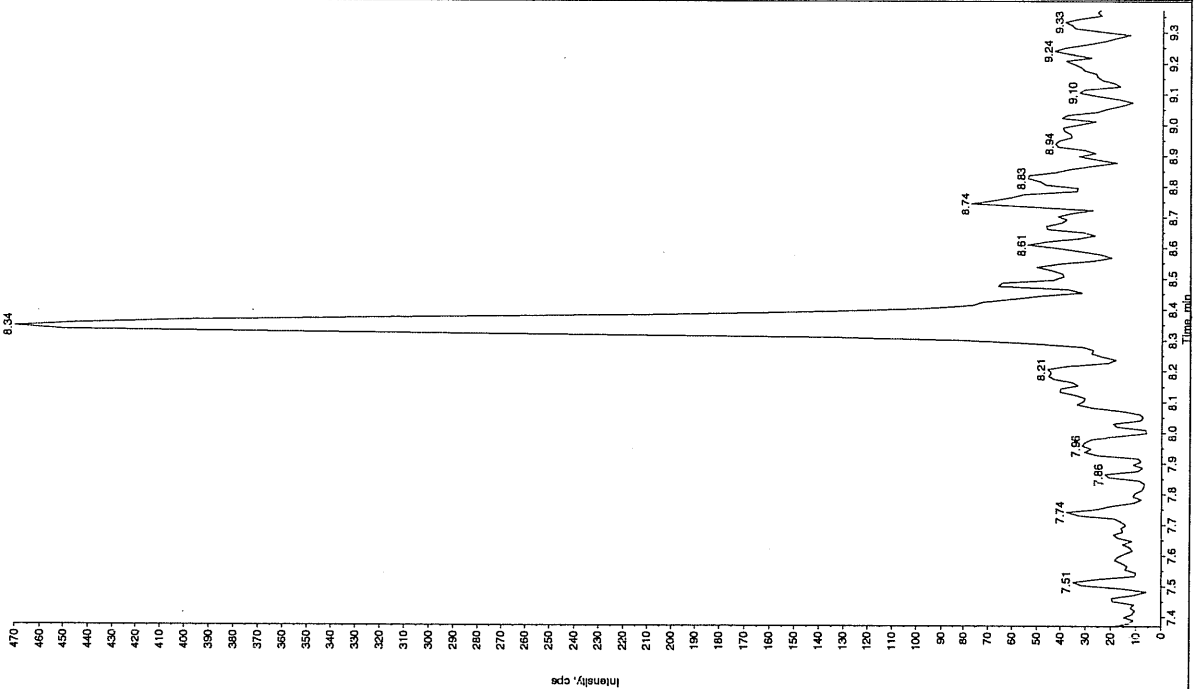
Sample Name: "XIBLK09" Sample ID: "111LER" File: "EXS03050080.wif"  
 Peak Name: "26-Diamino-4-nitrofluorene" Mass(es): "166.046.0 amu"  
 Comment: "LCMSEXP\_B" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: 0.00 ng/mL  
 Acq. Date: 3/6/2010  
 Acq. Time: 1:48:09 PM  
 Modified: No



Sample Name: "XIBLK09" Sample ID: "111LER" File: "EXS03050080.wif"  
 Peak Name: "34-Dinitrofluorene" Mass(es): "182.1151.9 amu"  
 Comment: "LCMSEXP\_B" Annotation: ""

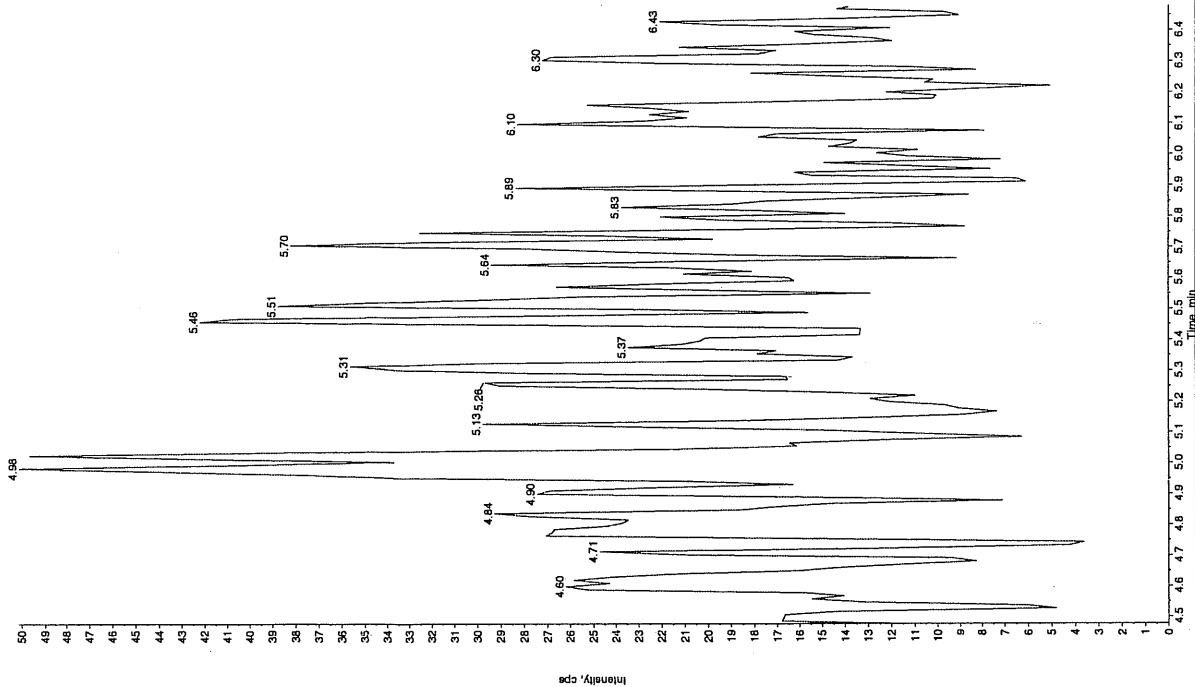
Sample Index: 1  
 Sample Type: Unknown  
 Concentration: 0.00 ng/mL  
 Acq. Date: 3/6/2010  
 Acq. Time: 1:48:09 PM  
 Modified: No



EL SOP GL-OA-E-056, Method 8321A-Modified LCM SMS#4

Sample Name: "XIBLK09" Sample ID: "11LER" File: "EXS03050080.wif"  
 Peak Name: "bis(2-oxo-5-phenyl-2H-tetrazol-4-yl) phosphate" Mass(es): "369.191.0 amu"  
 Comment: "LCMSEXP\_B" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: No Intercept  
 Acq. Date: 3/6/2010  
 Acq. Time: 1:48:09 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: 10.9 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 10.8 min  
 Area: 5.03e+004 counts  
 Height: 14267.236 cps  
 Start Time: 10.7 min  
 End Time: 11.0 min



Sample Name: "XIBLK09" Sample ID: "11LER" File: "EXS03050080.wif"  
 Peak Name: "24-Diamino-6-nitrolobene" Mass(es): "166.046.0 amu"  
 Comment: "LCMSEXP\_B" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 3/6/2010  
 Acq. Time: 1:48:09 PM  
 Modified: No



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1758

Lab Code: GEL

Lab Sample ID: XIBLK10

Analysis Date: 06-MAR-10 15:06

GEL Data File: EXS03050085.wiff

Instrument ID: LCMSMS

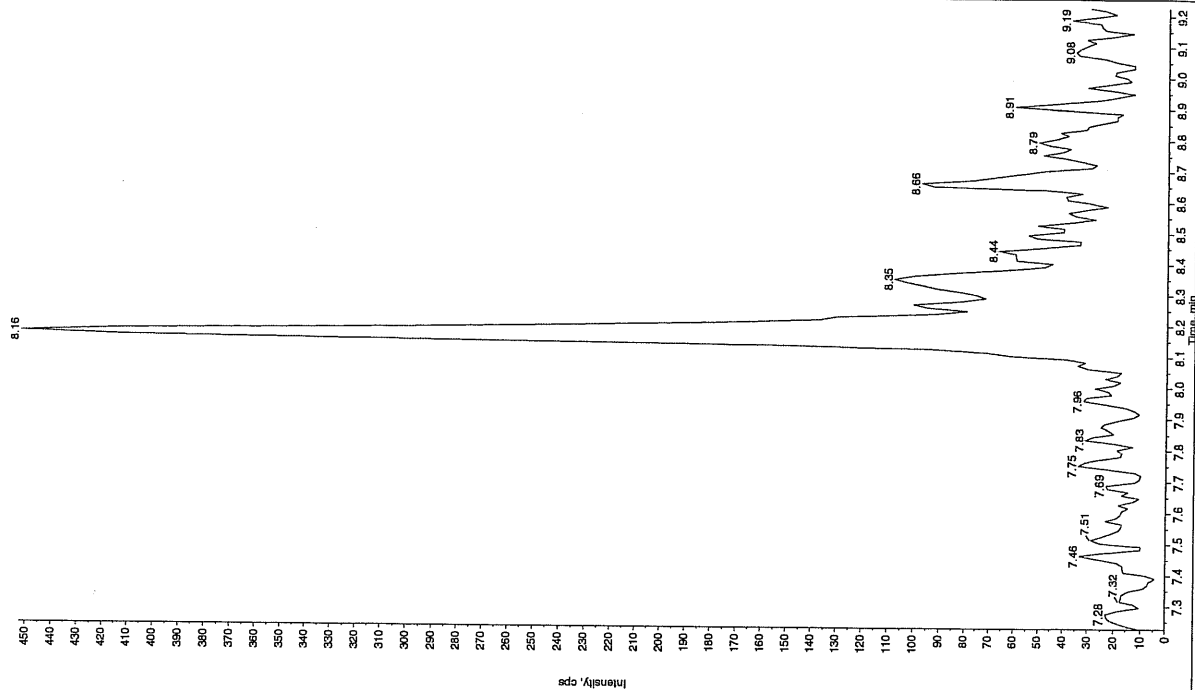
Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	0
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

Jan 3/9/10

Sample Name: "XIBLK10" Sample ID: "11111" File: "EXS03050085.wif"  
 Peak Name: "35-Dinitroaniline" Mass(es): "182.046.0 amu"  
 Comment: "LCMSEXP\_B" Annotation: "

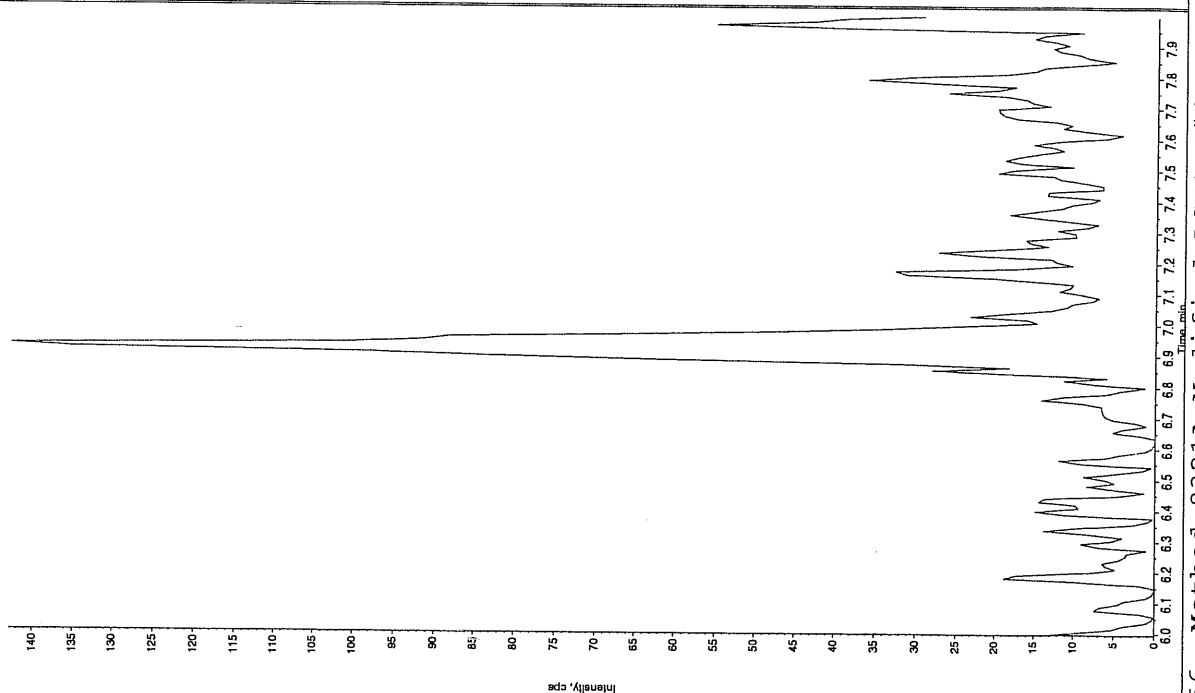
Sample Index: 1  
 Sample Type: Unknown  
 Concentration: 0.00 ng/mL  
 Calculated Conc: 3/6/2010  
 Acq. Date: 3:06:39 PM  
 Modified: No



Jan 03/09/10

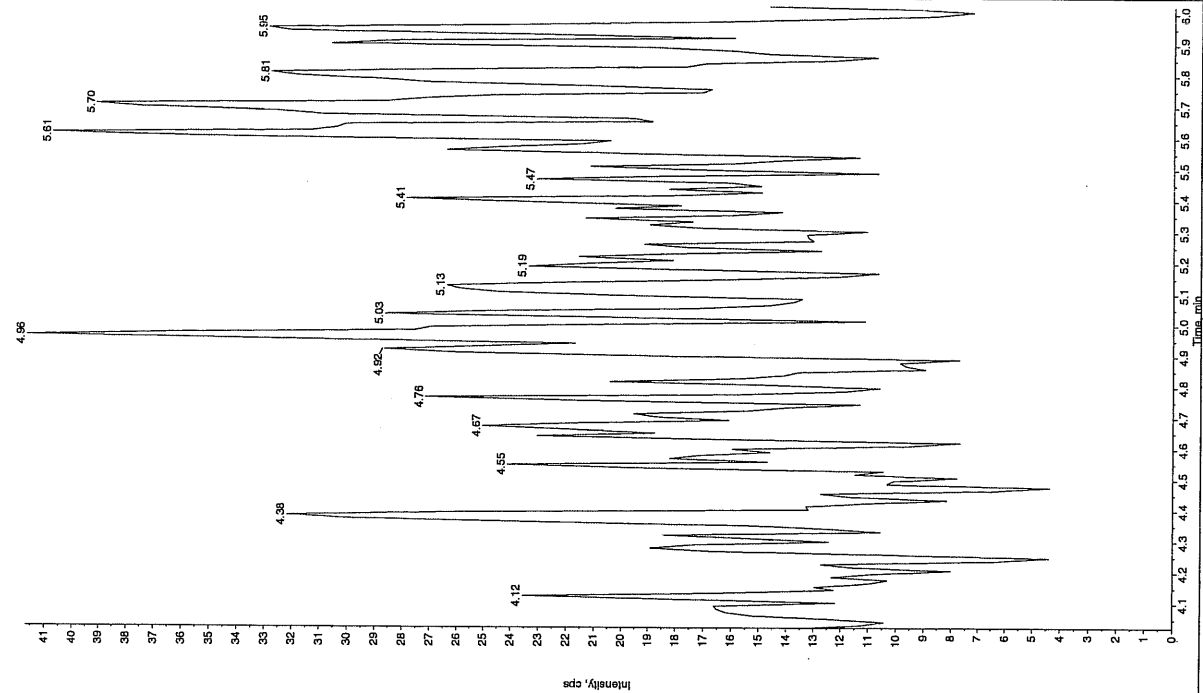
Sample Name: "XIBLK10" Sample ID: "11111" File: "EXS03050085.wif"  
 Peak Name: "TRATB" Mass(es): "257.2204.9 amu"  
 Comment: "LCMSEXP\_B" Annotation: "

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: 0.00 ng/mL  
 Calculated Conc: 3/6/2010  
 Acq. Date: 3:06:39 PM  
 Modified: No

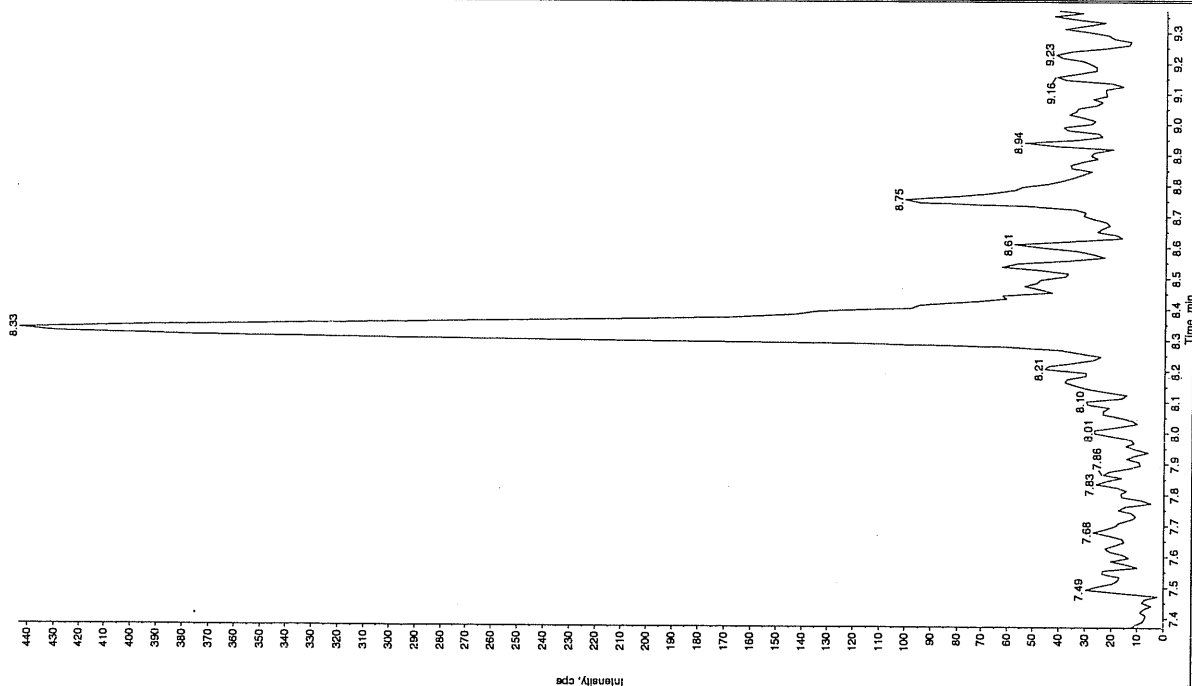


3L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

Sample Name: "XBLK10" Sample ID: "111LER" File: "EXS03050085.wif"  
 Peak Name: "26-Diamino-4-nitrotoluene" Mass(es): "166.046.0 amu"  
 Comment: "LCMSEXP\_B" Annotation: ""  
 Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 3/6/2010  
 Acq. Time: 3:06:39 PM  
 Modified: No

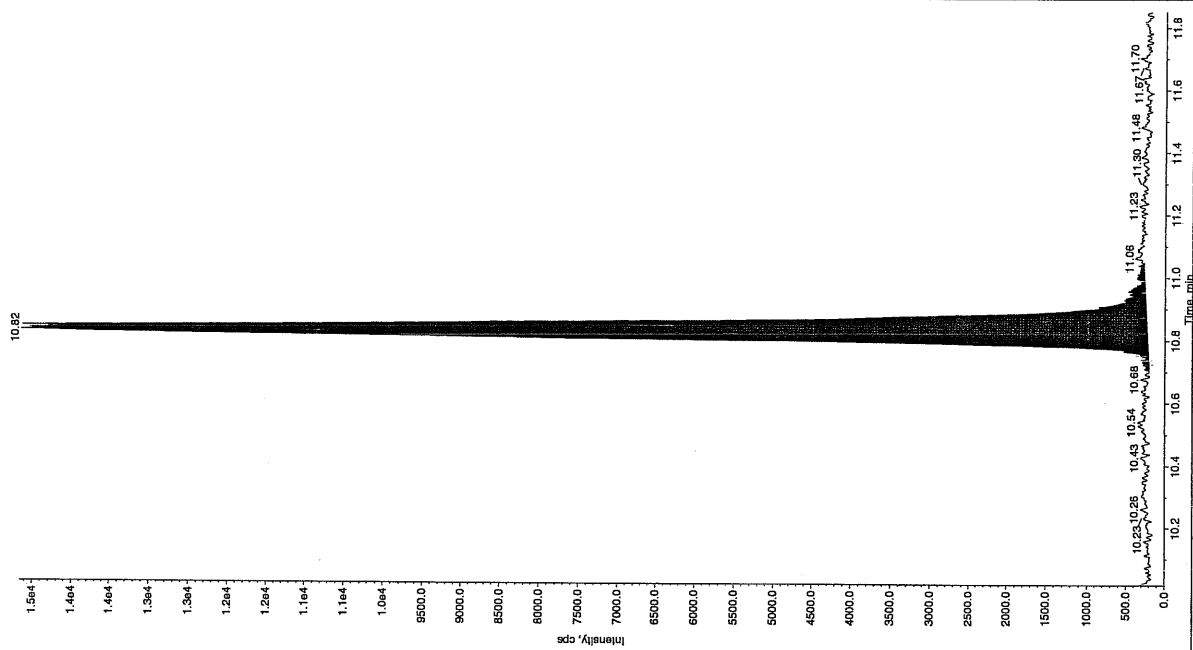


Sample Name: "XBLK10" Sample ID: "111LER" File: "EXS03050085.wif"  
 Peak Name: "34-Dinitrotoluene" Mass(es): "182.1/151.9 amu"  
 Comment: "LCMSEXP\_B" Annotation: ""  
 Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 3/6/2010  
 Acq. Time: 3:06:39 PM  
 Modified: No



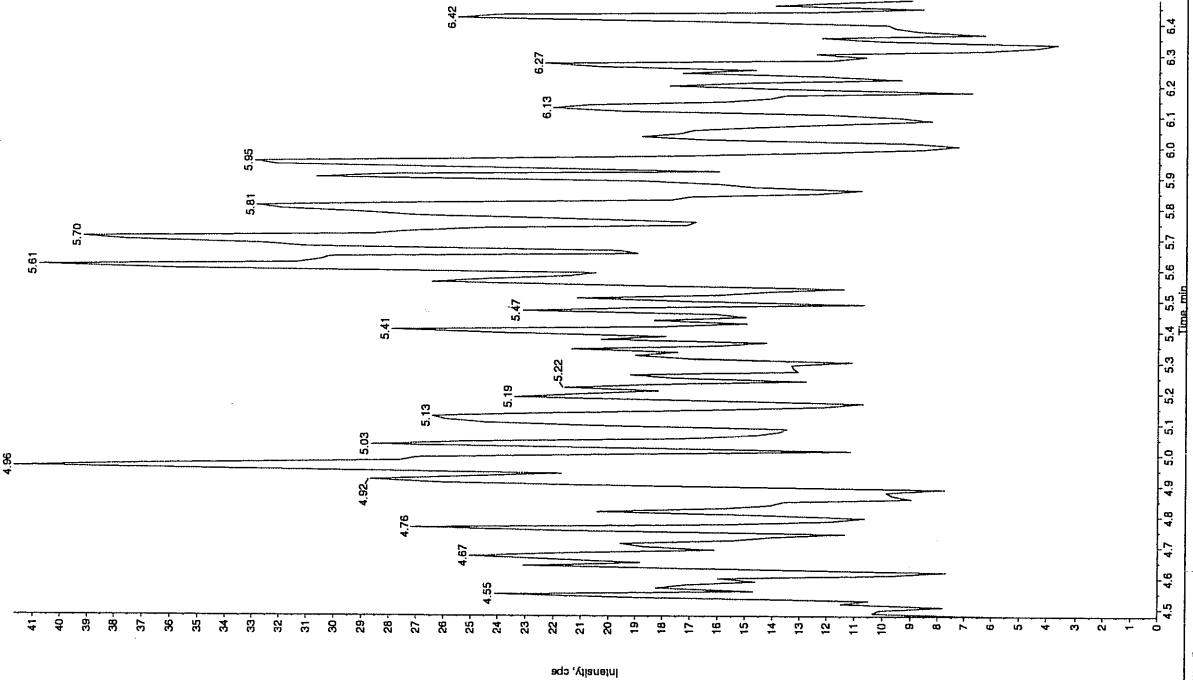
Sample Name: "XBLK10" Sample ID: "11LER" File: "EX503030085.wif"  
 Peak Name: "tris(o-cresyl) phosphate" Mass(es): "359.1/91.0 amu"  
 Comment: "LCMSEXP\_B" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: No Intercept  
 Acq. Date: 3/6/2010  
 Acq. Time: 3:06:39 PM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IQA  
 Min. Peak Height: 8000.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 30.0 sec  
 Expected RT: 10.9 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 10.8 min  
 Area: 5.31e+004 counts  
 Height: 14427.697 cps  
 Start Time: 10.7 min  
 End Time: 11.0 min



Sample Name: "XBLK10" Sample ID: "11LER" File: "EX503030085.wif"  
 Peak Name: "2,4-Diamino-6-nitrotoluene" Mass(es): "166.0/46.0 amu"  
 Comment: "LCMSEXP\_B" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 3/6/2010  
 Acq. Time: 3:06:39 PM  
 Modified: No



Nairb.ref

;Positive ion monoisotopic and average masses from solution  
 ;of NaI/Rbi (2.0/0.05ug/ul) in 50/20 2-propanol/H2O.  
 ;Most useful general purpose calibrant for all low  
 ;MW applications, including MS/MS work.  
 ;At high resolution, readily covers from m/z 50-2000.  
 ;At reduced resolution, can be used to over m/z 3000.  
 ;NOT RECOMMENDED FOR PROTEIN WORK. USE MYO, MYOTRP or TRP.  
 Updated 20 April '95

22.9898	100
84.9118	100
172.8840	100
322.7782	100
472.6725	100
622.5667	100
772.4610	100
922.3552	100
1072.2494	100
; 1222.1437	100
; 1372.0379	100
; 1521.9321	100
; 1671.8264	100
; 1821.7206	100
; 1971.6149	100
; 2121.5091	100
; 2271.4033	100
; 2421.2976	100
; 2571.1918	100
; 2721.0861	100
; 2870.9803	100
; 3020.8745	100
; 3170.7688	100
; 3320.6630	100
; 3470.5572	100
; 3620.4515	100
; 3770.3457	100
; 3920.2400	100

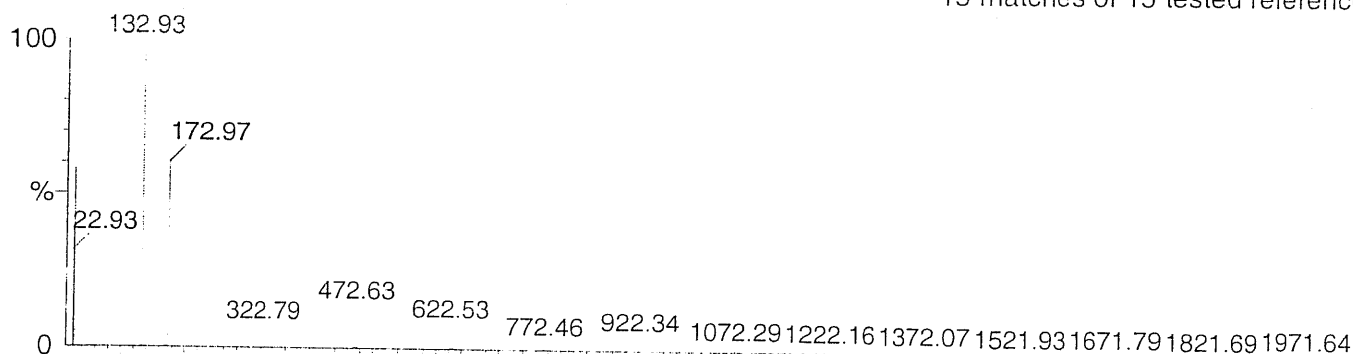
Calibration Report - MS1 Static

Page 1 of 1

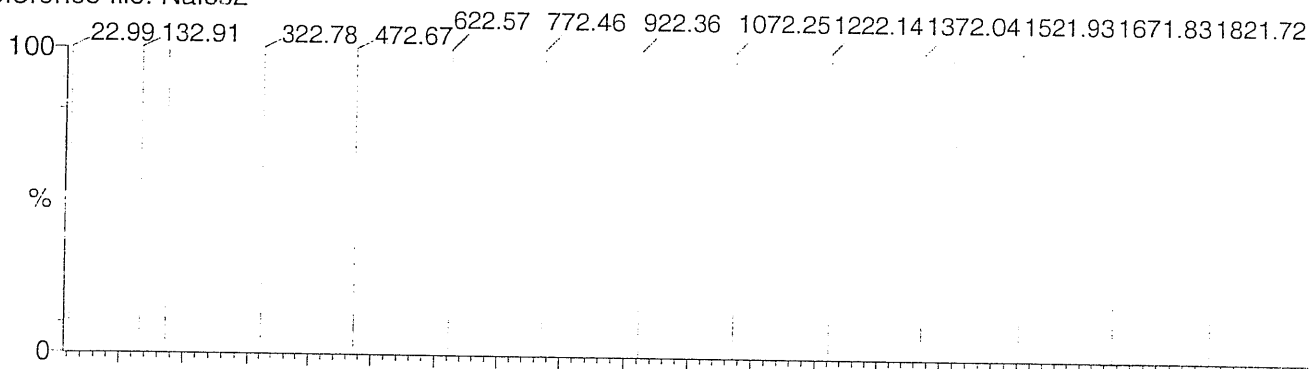
Printed: Fri Aug 25 10:50:01 2006

Data file: STATMS1 - Calibrated

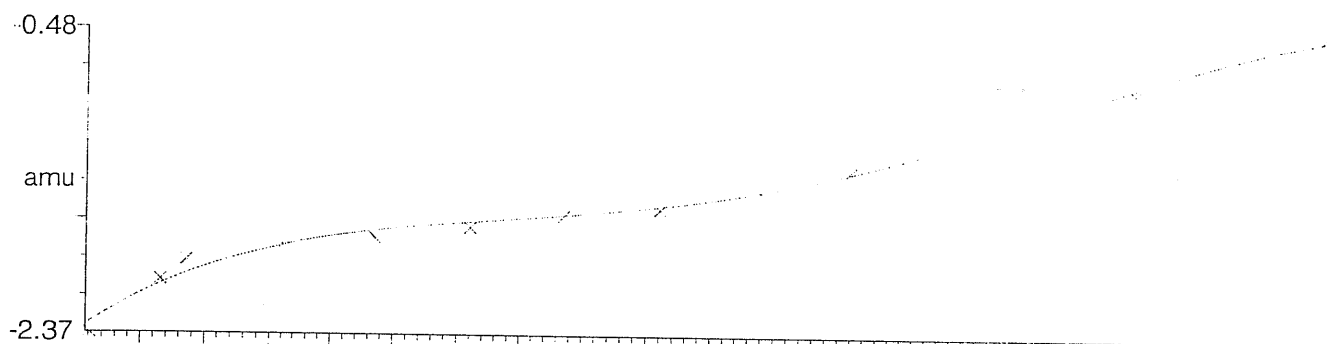
15 matches of 15 tested references



Reference file: Naics2

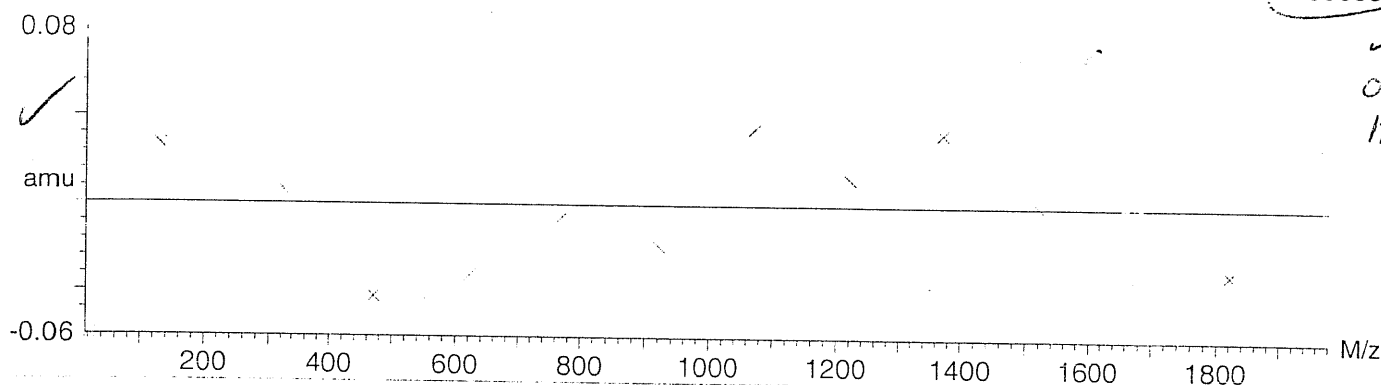


Mass difference (Raw - Ref mass)



Residuals

Mean residual =  $-1.673470 \times 10^{-9} \pm 0.036953$



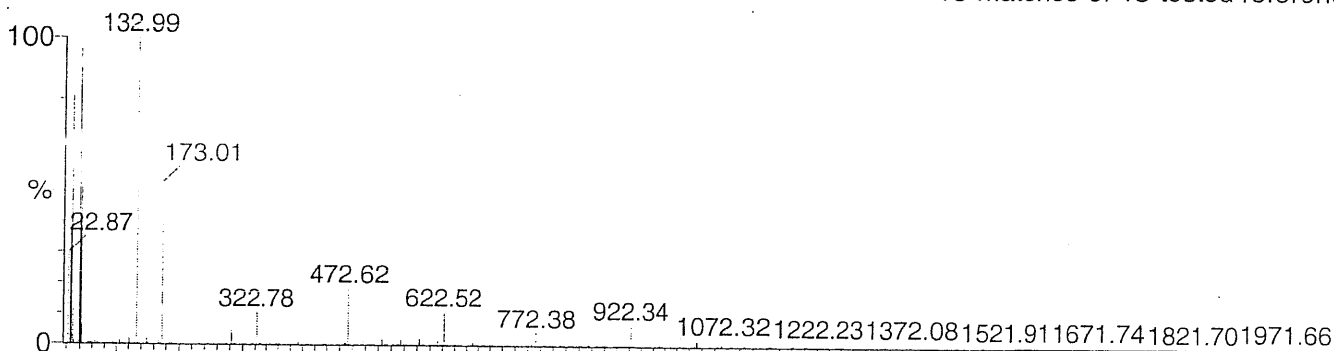
Calibration Report - MS1 Scanning

Page 1 of 1

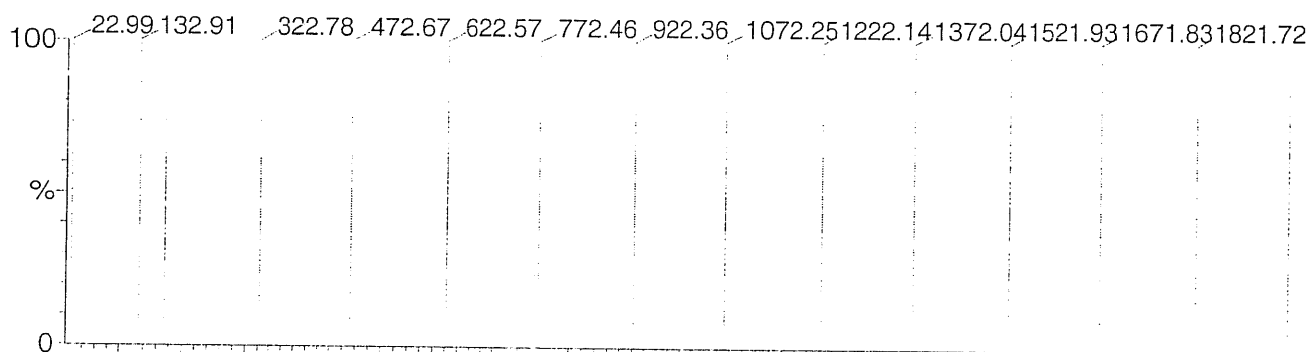
Printed: Fri Aug 25 10:51:06 2006

Data file: SCNMS1 - Calibrated

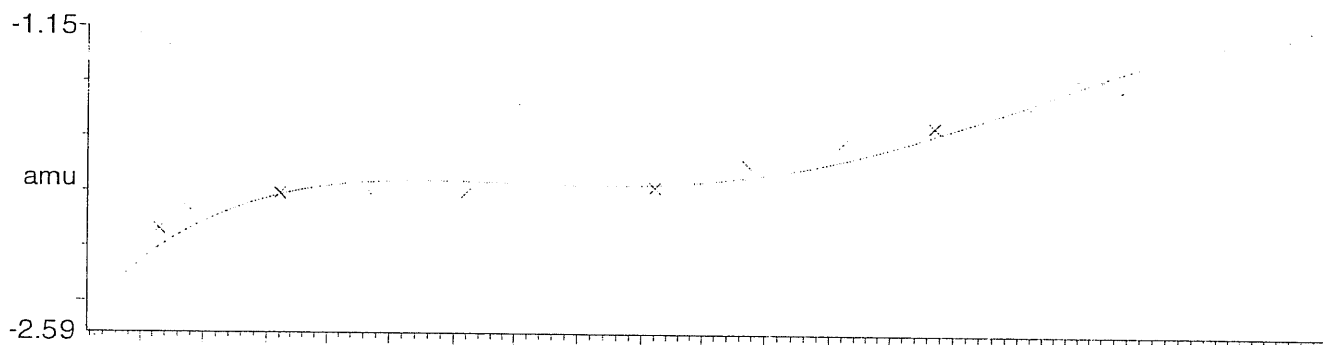
15 matches of 15 tested references



Reference file: Naics2

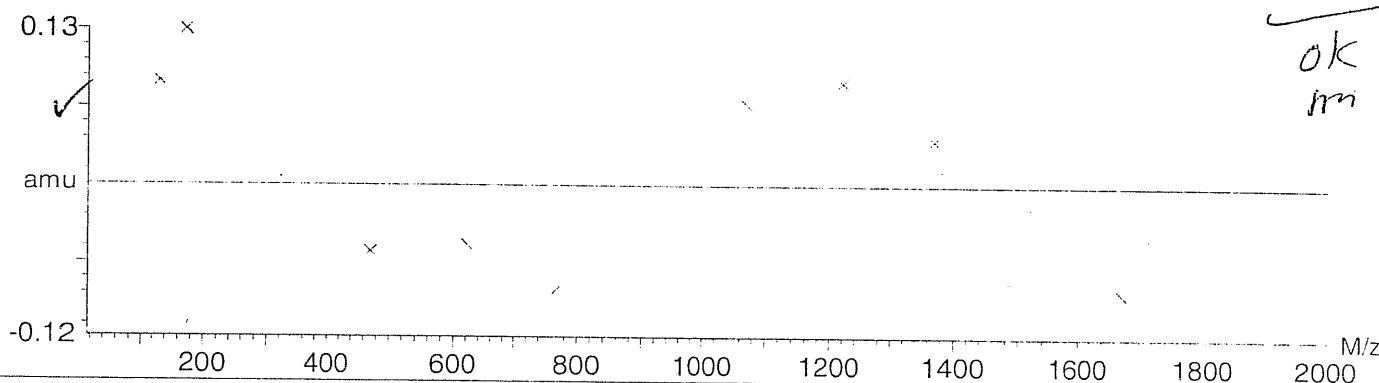


Mass difference (Raw - Ref mass)



Residuals

Mean residual =  $-5.432715 \times 10^{-9} \pm 0.069858$



ok  
m

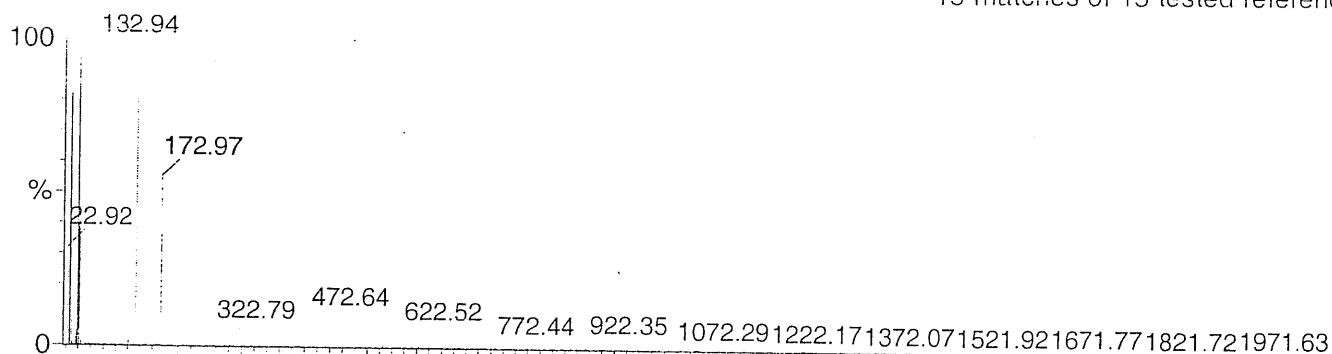
Calibration Report - MS1 Scan Speed Compensation

Page 1 of 1

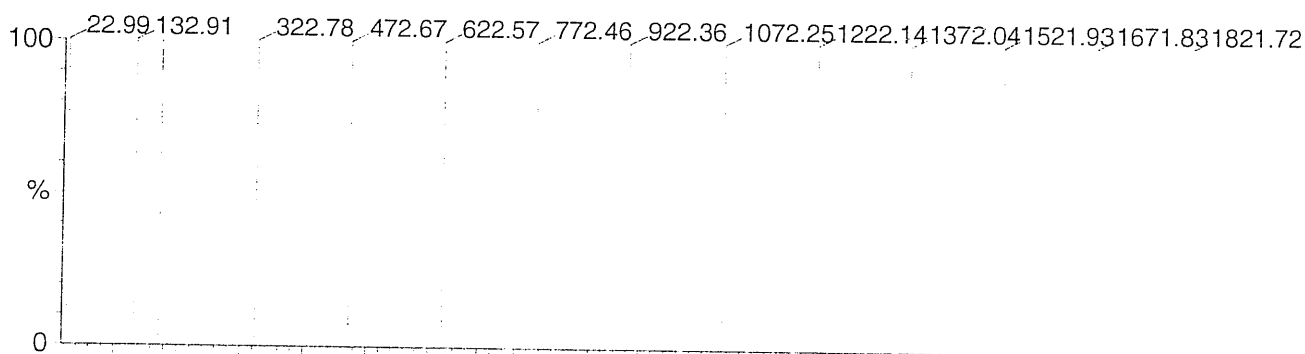
Printed: Fri Aug 25 10:52:01 2006

Data file: FASTMS1 - Calibrated

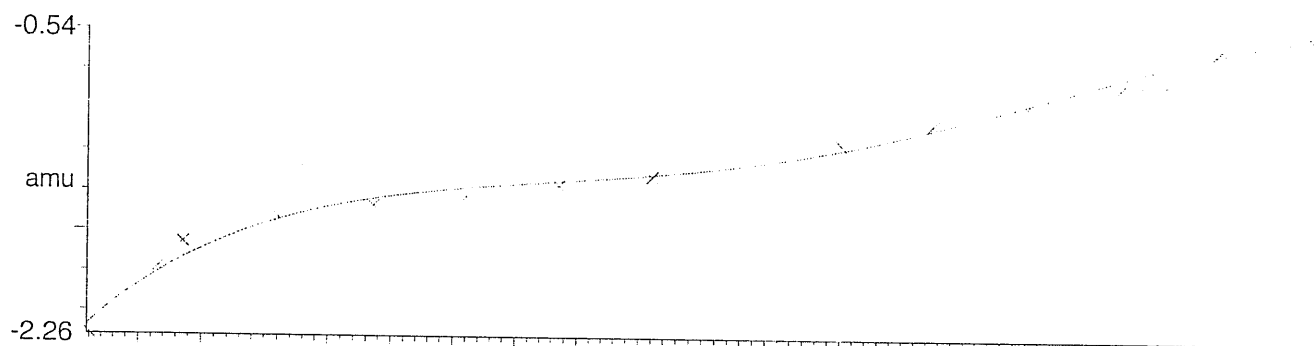
15 matches of 15 tested references



Reference file: Naics2

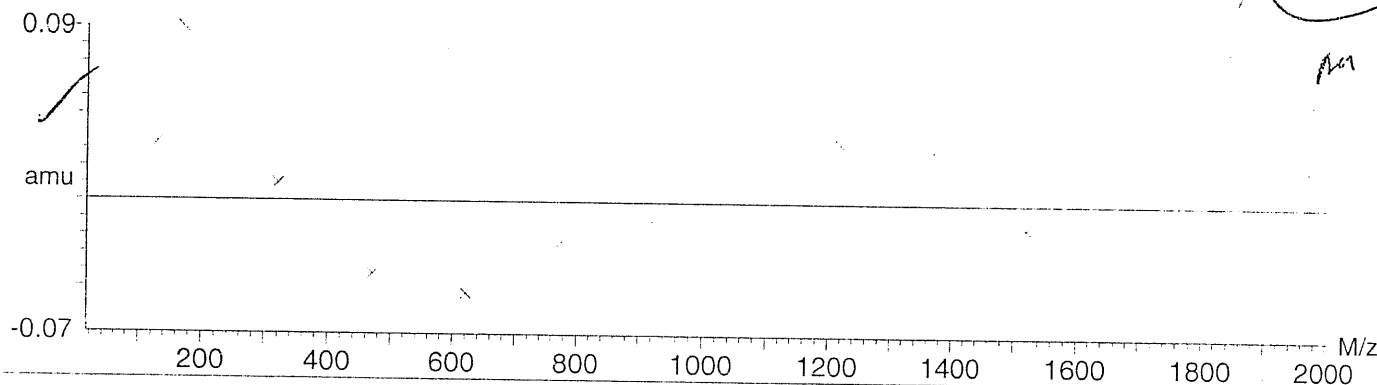


Mass difference (Raw - Ref mass)



Residuals

Mean residual =  $3.486639 \times 10^{-9} \pm 0.040487$





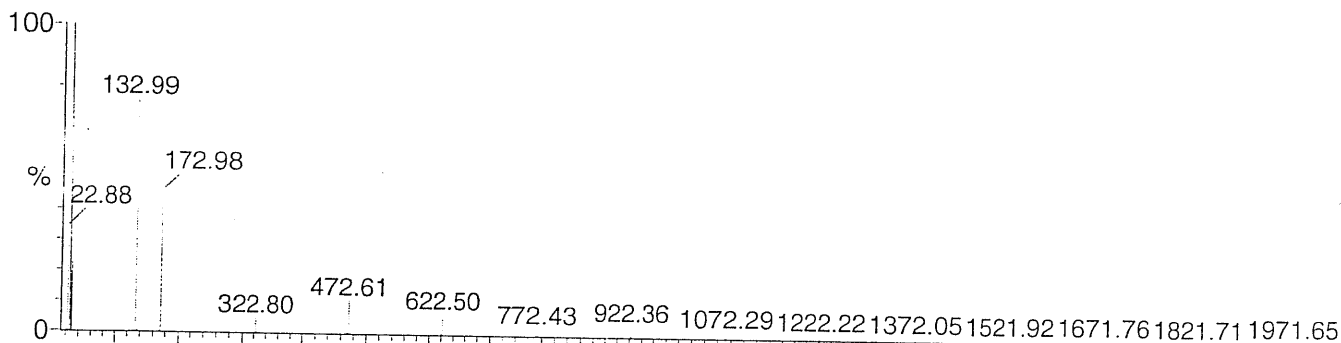
Calibration Report - MS2 Static

Page 1 of 1

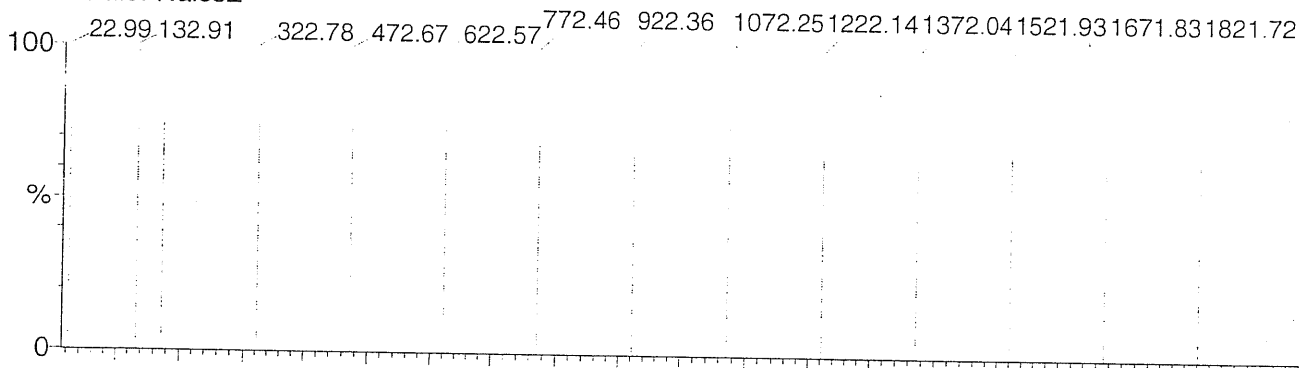
Printed: Fri Aug 25 10:52:54 2006

Data file: STATMS2 - Calibrated

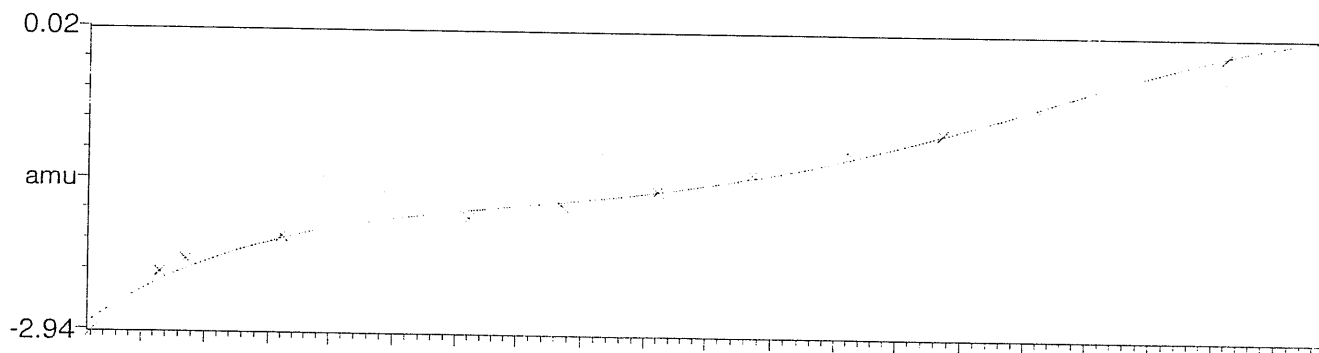
15 matches of 15 tested references



Reference file: Naics2

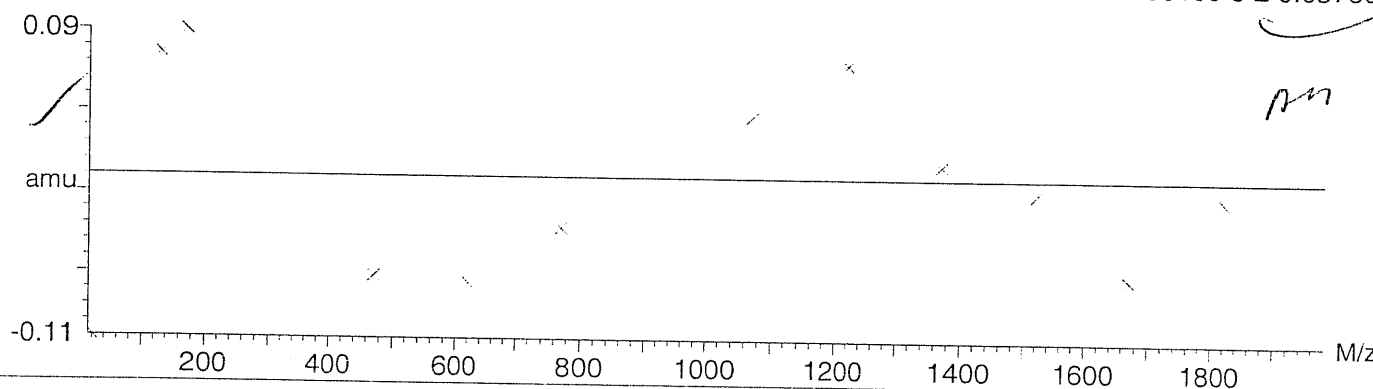


Mass difference (Raw - Ref mass)



Residuals

Mean residual =  $2.048910 \times 10^{-9} \pm 0.057803$



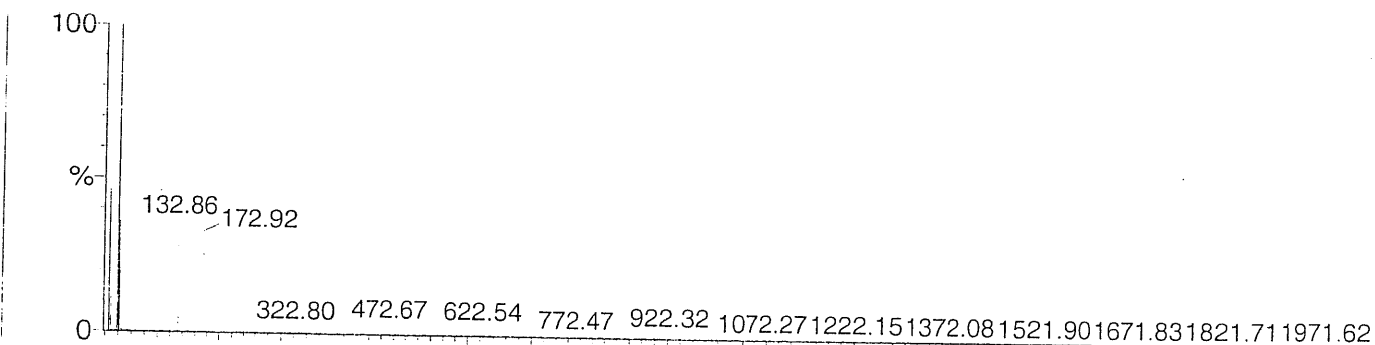
Calibration Report - MS2 Scanning

Page 1 of 1

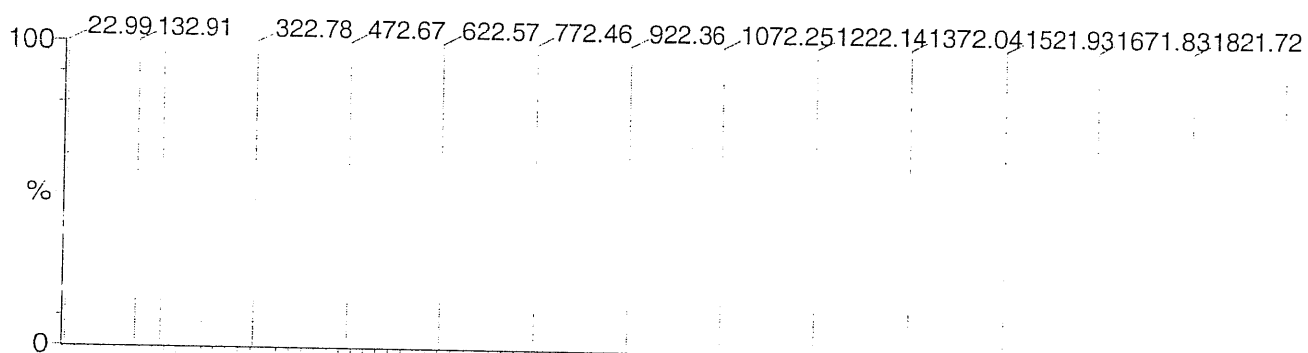
Printed: Fri Aug 25 10:54:00 2006

Data file: SCNMS2 - Calibrated

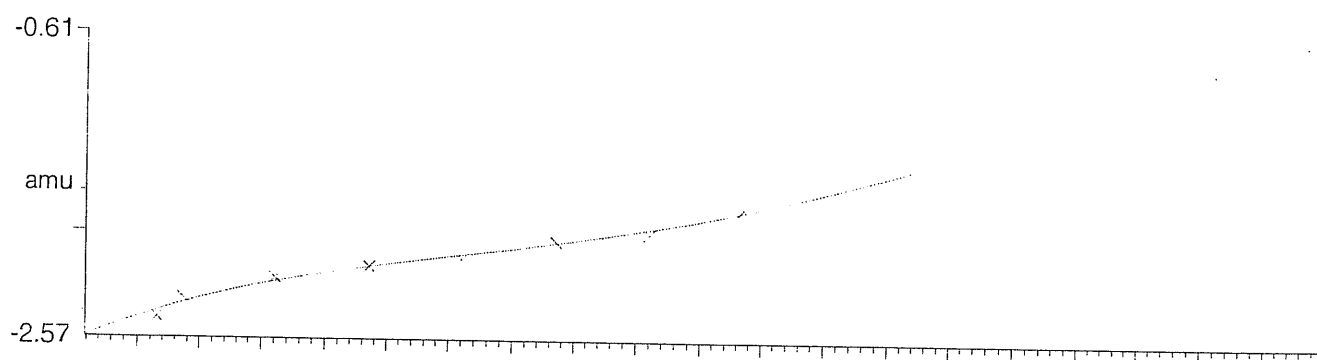
14 matches of 15 tested references



Reference file: Naics2

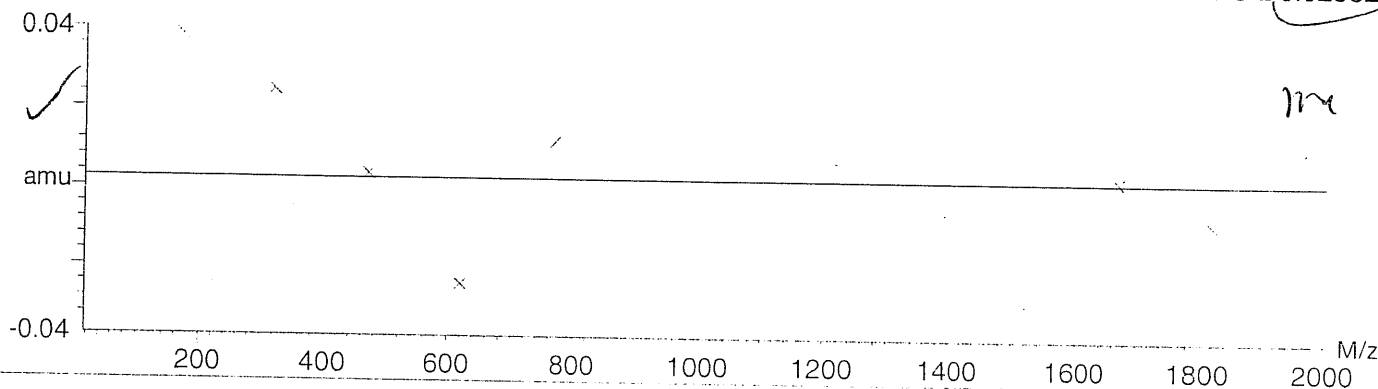


Mass difference (Raw - Ref mass)



Residuals

Mean residual =  $-2.623502 \times 10^{-9} \pm 0.025622$



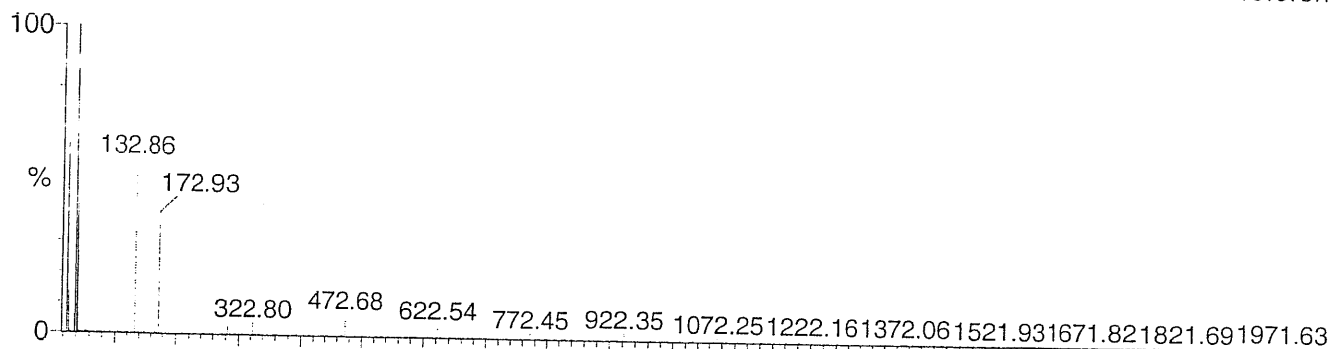
Calibration Report - MS2 Scan Speed Compensation

Page 1 of 1

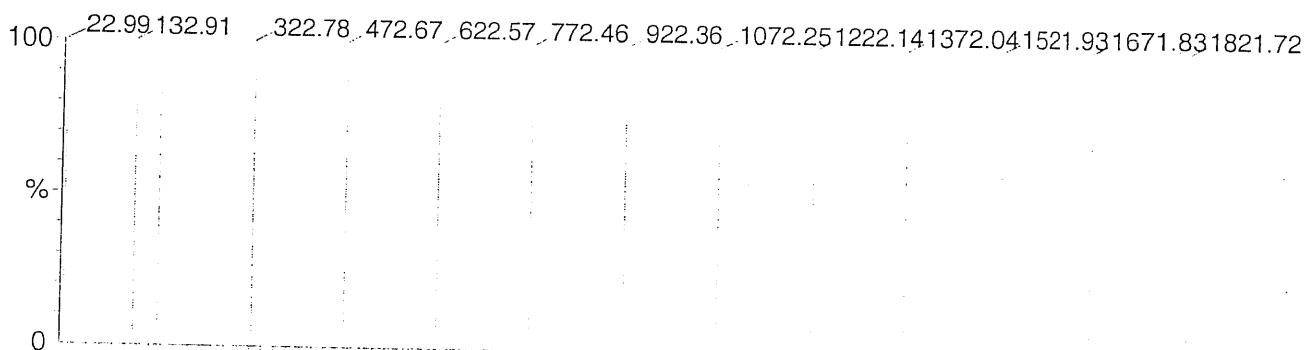
Printed: Fri Aug 25 10:54:54 2006

Data file: FASTMS2 - Calibrated

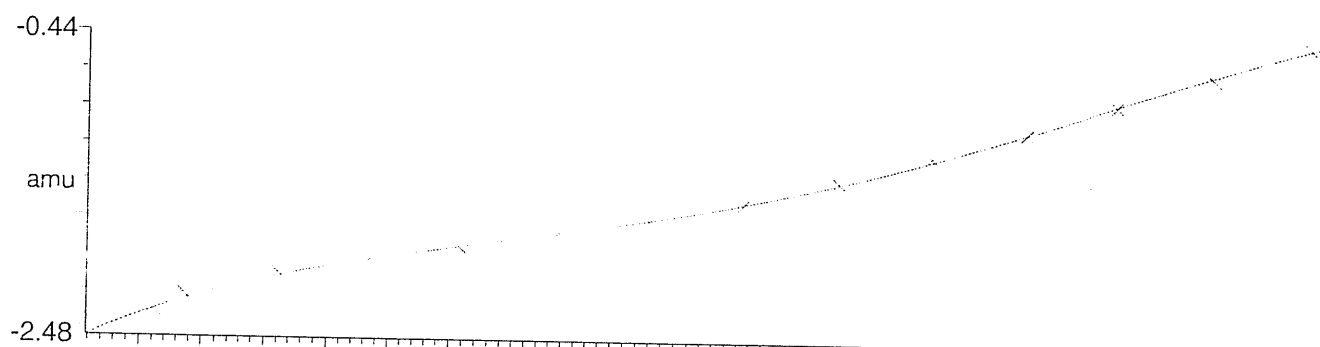
14 matches of 15 tested references



Reference file: Naics2

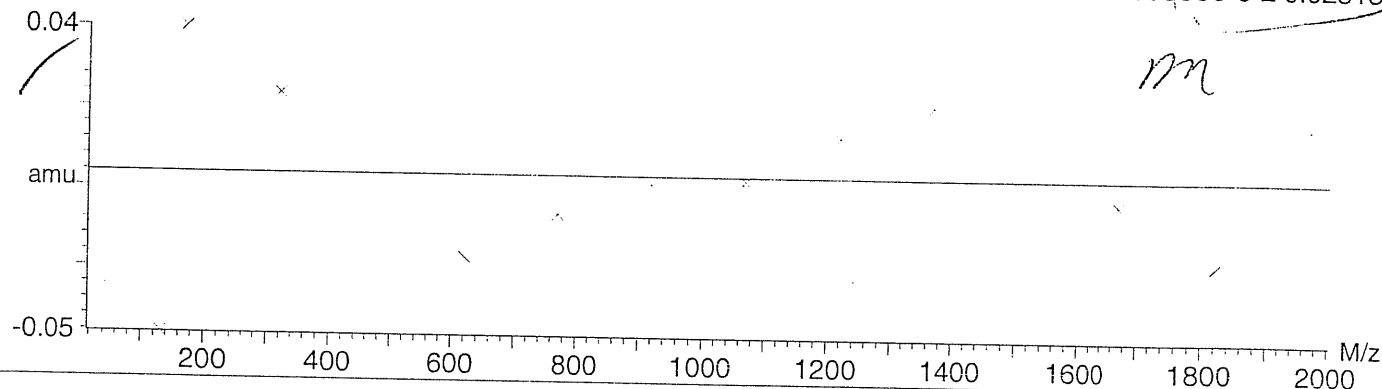


Mass difference (Raw - Ref mass)



Residuals

Mean residual =  $-6.785350 \times 10^{-9} \pm 0.023134$



# High Explosives Internal Standard Summary

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1758

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) #
			20900000	10.767	90983333.333	15.067
Upper Limit			27170000	11.267	118278333.333	15.567
Lower Limit			14630000	10.267	63688333.3331	14.567
MB for batch 952704	23-mar-10 13:22	EXP0322048.w	18600000	10.9	85200000	15.2
RE15-10-8366	23-mar-10 14:14	EXP0322050.w	20100000	10.9	92400000	15.3
RE15-10-8366(246866002MS)	23-mar-10 14:41	EXP0322051.w	18000000	10.9	88400000	15.2
RE15-10-8366(246866002MSD)	23-mar-10 15:07	EXP0322052.w	19100000	10.7	93500000	14.9
RE15-10-8367	23-mar-10 15:33	EXP0322053.w	22500000	10.6	92900000	14.9
RE15-10-8364	23-mar-10 16:00	EXP0322054.w	21000000	10.6	93400000	14.9
RE15-10-8365	23-mar-10 16:26	EXP0322055.w	20100000	10.6	85300000	14.9
RE15-10-8368	23-mar-10 16:53	EXP0322056.w	19900000	10.6	92700000	14.8
RE15-10-8340	23-mar-10 17:19	EXP0322057.w	19200000	10.7	88500000	14.8
RE15-10-8341	23-mar-10 19:05	EXP0322061.w	19400000	10.7	83300000	14.9
RE15-10-8376	23-mar-10 19:31	EXP0322062.w	20200000	10.7	85400000	14.9

	Analysis Date/Time	GEL Data File	IS1 (DNB) (Area) #	RT (min) #	IS2 (DNT) (Area) #	RT2 (min) #
			17683333.333	10.6	80233333.333	14.817
Upper Limit			22988333.3329	11.1	104303333.333	15.317
Lower Limit			12378333.3331	10.1	56163333.3331	14.317
LCS for batch 952704	30-mar-10 14:46	EXP0330015.w	15200000	10.6	71700000	14.8

IS1 (DNB) = 1,3-Dinitrobenzene-d4

IS2 (DNT) = 2,6-Dinitrotoluene-d3

Area Upper Limit = + 30% of average IS area from multipoint calibration

Area Lower Limit = - 30% of average IS area from multipoint calibration

RT Upper Limit = +0.5 of average multipoint RT

RT Lower Limit = -0.5 of average multipoint RT

# Column used to flag values outside QC limits with an asterisk

\* Values outside of QC limits

# SAMPLE DATA

1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8366

Lab Code: GEL

GEL Job No (SDG) 10-1758

Matrix: SOIL

GEL Sample ID: 246866002

Sample Amount 2

Moisture: 18.0

Amount Units g

Date Received: 11-FEB-10

Extraction Type Sonication

Extraction Batch ID: 952704

Concentrated Extract Volume (mL) 10

Date Extracted: 18-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0322050.wiff

Date Analyzed: 23-MAR-10 14:14

Units: ug/kg

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

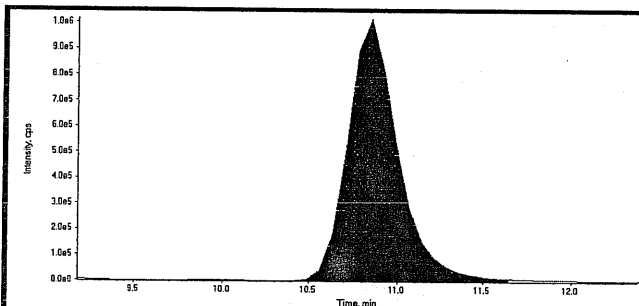
\*Concentration =

Instrument	X	<u>Concentrated Extract Volume</u>	X	Dilution
Value		<u>Sample Amoun</u>		Factor

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

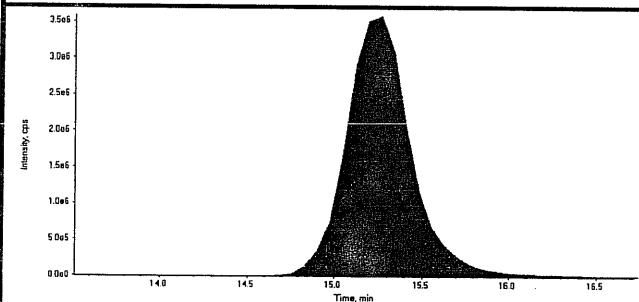
Printed: 27/03/2010 1:31:00 PM  
LCMSMS#3

Data File	EXP0322050.wiff	Acquisition Date	3/23/2010 2:14:54 PM
Sample Name	246866002	Acquisition Method	8321_pntx.dam
Batch Dilution Analyst	952706 2 LER	Result Table	032210.rdb
Procedure Code	LCX8321_S	Sample Type	Unknown



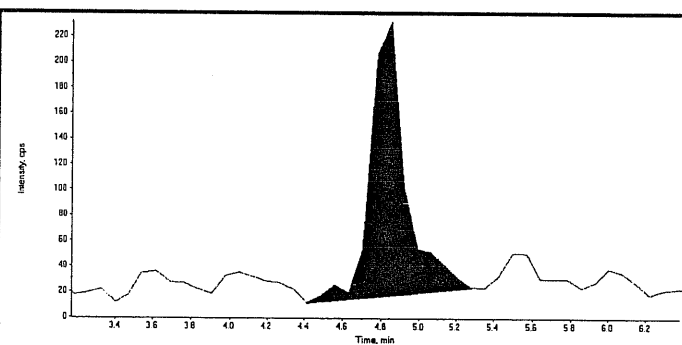
Compound Name:	13-Dinitrobenzene-d4 (172.1/46.1 amu)
Expected RT:	10.80
Actual RT:	10.90
Area Counts:	20100000.00
Manual Modification	No
Amount:	500.00(ng/mL)

Please refer to Form 8 for a list of Internal Standard Recoveries

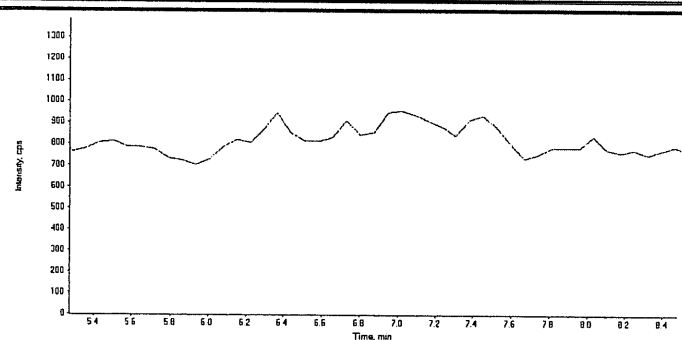


Compound Name:	26-Dinitrotoluene-d3 (185.0/155.0 amu)
Expected RT:	15.10
Actual RT:	15.30
Area Counts:	92400000.00
Manual Modification	No
Amount:	500.00(ng/mL)

Please refer to Form 8 for a list of Internal Standard Recoveries



Compound Name:	HMX (341.2/46.0 amu)
Expected RT:	4.77
Actual RT:	4.85
Area Counts:	2.78e+003
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A



Compound Name:	RDX (267.0/46.1 amu)
Expected RT:	6.87
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A

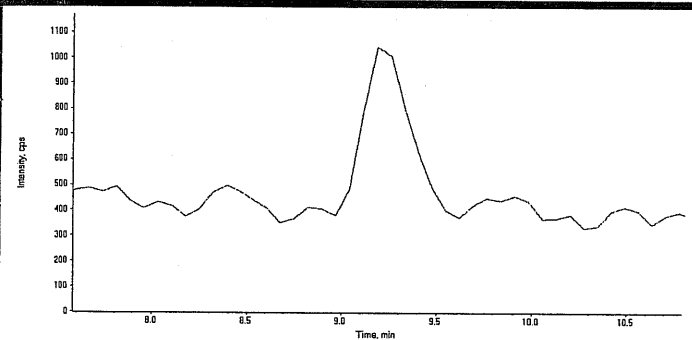
*LER*  
*3/28/10* *Amc 04/02/10*

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

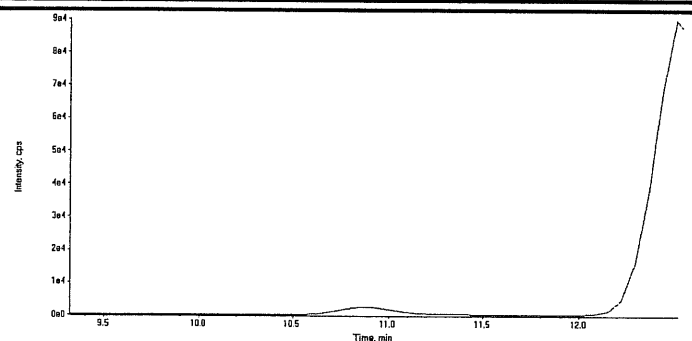
Printed: 27/03/2010 1:31:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0322050.wiff	<b>Acquisition Date</b>	3/23/2010 2:14:54 PM
<b>Sample Name</b>	246866002	<b>Acquisition Method</b>	8321_pntx.dam
<b>Batch Dilution Analyst</b>	952706 2 LER	<b>Result Table</b>	032210.rdb
<b>Procedure Code</b>	LCX8321_S	<b>Sample Type</b>	Unknown

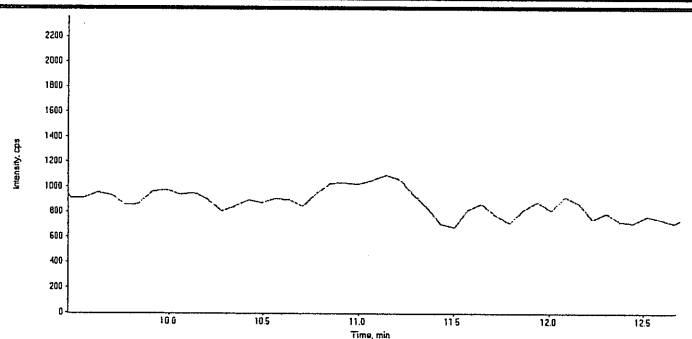
  

	<b>Compound Name:</b>	135-Trinitrobenzene (213.0/182.8 amu)
	Expected RT:	9.19
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

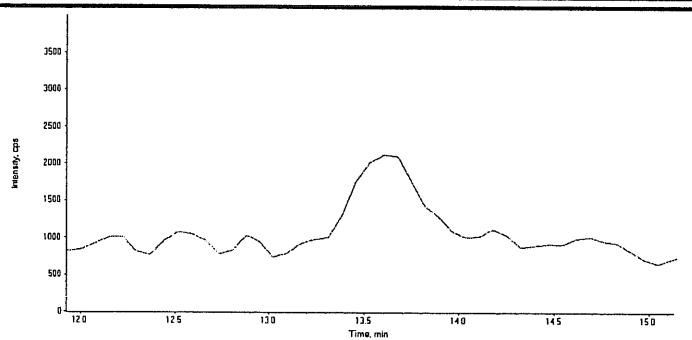
  

	<b>Compound Name:</b>	13-Dinitrobenzene (168.0/137.9 amu)
	Expected RT:	10.9
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	Tetryl (241.0/180.8 amu)
	Expected RT:	11.1
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

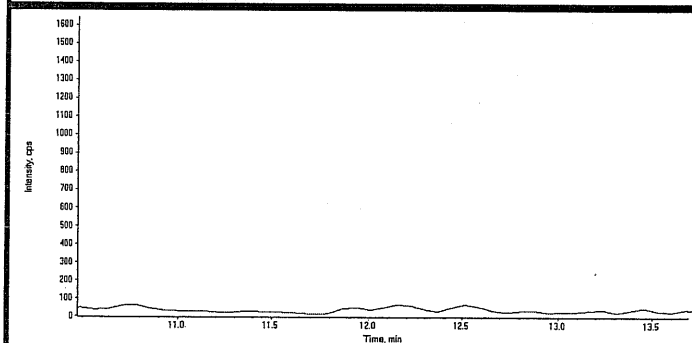
	<b>Compound Name:</b>	246-Trinitrotoluene (227.1/209.8 amu)
	Expected RT:	13.5
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A



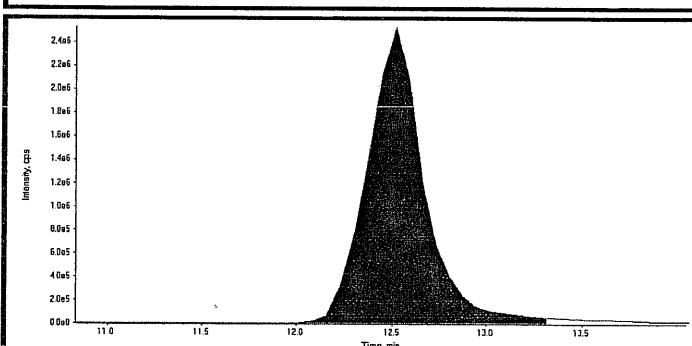
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 27/03/2010 1:31:00 PM  
LCMSMS#3

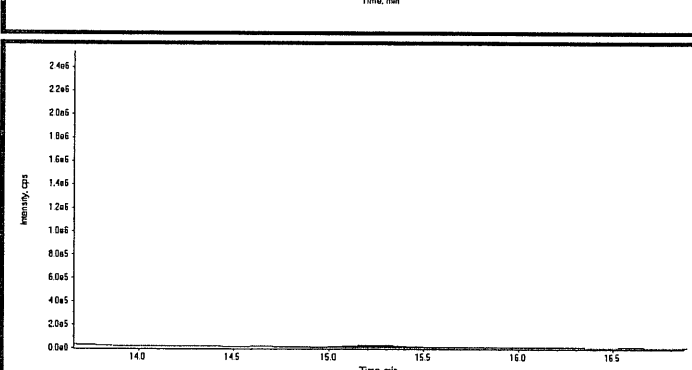
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<b>Sample Name</b>	246866002	<b>Acquisition Method</b>	8321_pntx.dam
<b>Batch Dilution Analyst</b>	952706 2 LER	<b>Result Table</b>	032210.rdb
<b>Procedure Code</b>	LCX8321_S	<b>Sample Type</b>	Unknown



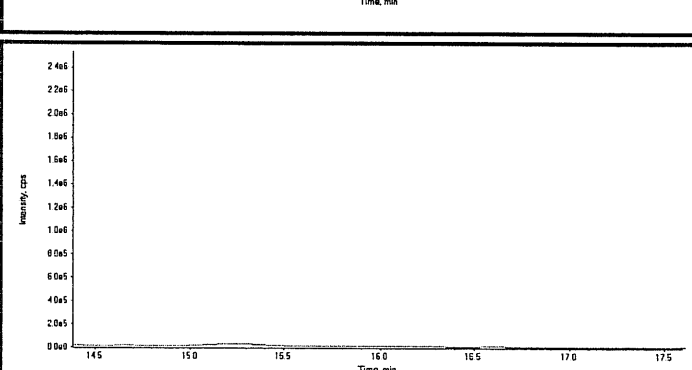
<b>Compound Name:</b>	Nitrobenzene (123.0/46.0 amu)
Expected RT:	12.1
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A



<b>Compound Name:</b>	34-dinitrotoluene (182.0/46.0 amu)
Expected RT:	12.4
Actual RT:	12.5
Area Counts:	5.36e+007
Manual Modification	No
Amount:	224. (ng/mL)
% Accuracy:	N/A



<b>Compound Name:</b>	26-dinitrotoluene (182.0/46.0 amu)
Expected RT:	15.3
Actual RT:	15.3
Area Counts:	7.31e+005
Manual Modification	No
Amount:	4.07 (ng/mL)
% Accuracy:	N/A



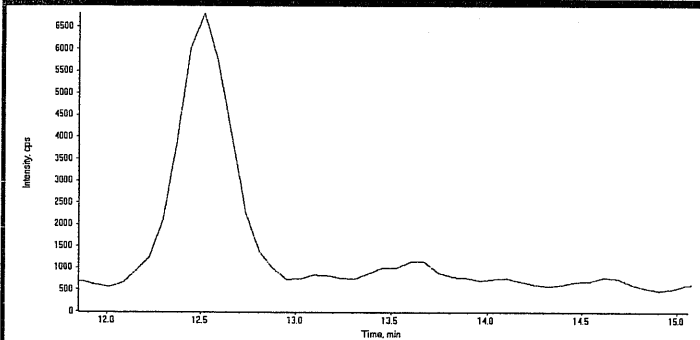
<b>Compound Name:</b>	24-dinitrotoluene (182.0/46.0 amu)
Expected RT:	16.0
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A

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GEL SOP GL-OA-E-056, Method 8321A-Modified

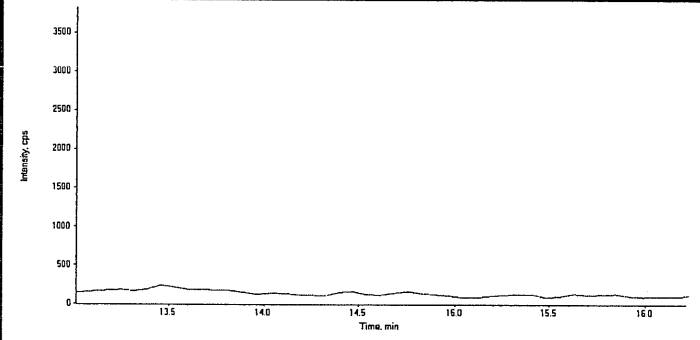
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LCMSMS#3

<b>Data File</b>	EXP0322050.wiff	<b>Acquisition Date</b>	3/23/2010 2:14:54 PM
<b>Sample Name</b>	246866002	<b>Acquisition Method</b>	8321_pntx.dam
<b>Batch Dilution Analyst</b>	952706 2 LER	<b>Result Table</b>	032210.rdb
<b>Procedure Code</b>	LCX8321_S	<b>Sample Type</b>	Unknown

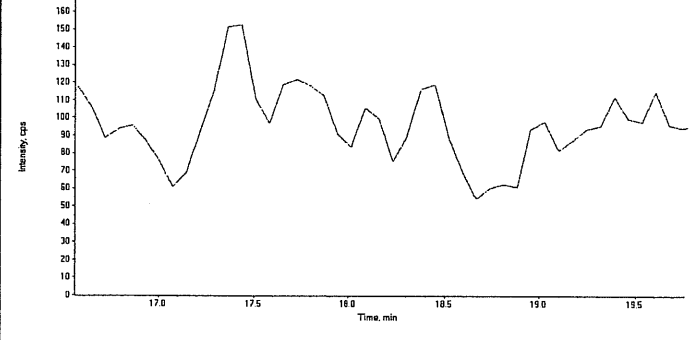
  

	<b>Compound Name:</b>	4-Amino-26-dinitrotoluene (197.0/167.0 amu)
	Expected RT:	13.5
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

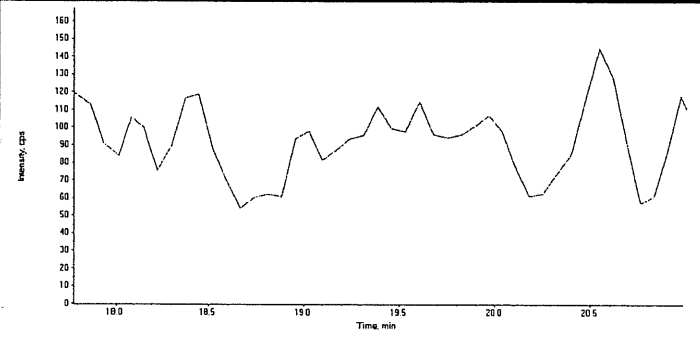
  

	<b>Compound Name:</b>	2-Amino-46-dinitrotoluene (197.0/180.0 amu)
	Expected RT:	14.6
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	2-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	18.2
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

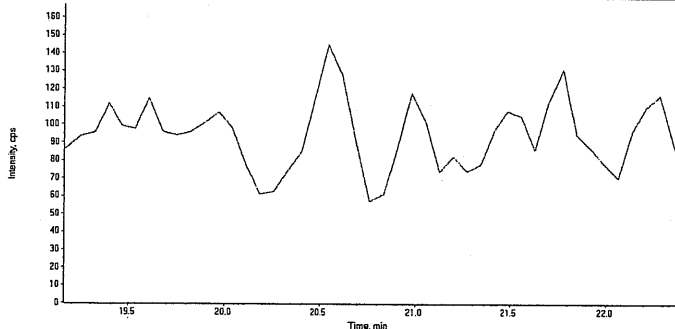
	<b>Compound Name:</b>	4-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	19.4
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

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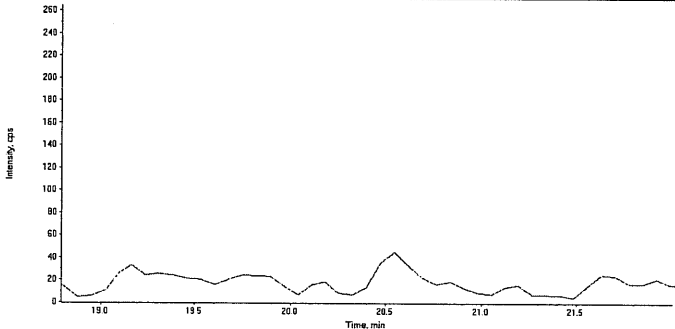
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LCMSMS#3

<b>Data File</b>	EXP0322050.wiff	<b>Acquisition Date</b>	3/23/2010 2:14:54 PM
<b>Sample Name</b>	246866002	<b>Acquisition Method</b>	8321_pntx.dam
<b>Batch Dilution Analyst</b>	952706 2 LER	<b>Result Table</b>	032210.rdb
<b>Procedure Code</b>	LCX8321_S	<b>Sample Type</b>	Unknown

	<b>Compound Name:</b>	3-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	20.8
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	PETN (361.1/62.0 amu)
	Expected RT:	20.4
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8366

Lab Code: GEL

GEL Job No (SDG) 10-1758

Matrix: SOIL

GEL Sample ID: 246866002

Sample Amount 2

Moisture: 18.0

Amount Units g

Date Received: 11-FEB-10

Extraction Type Sonication

Extraction Batch ID: 952704

Concentrated Extract Volume (mL) 10

Date Extracted: 18-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS03050071.wiff

Date Analyzed: 06-MAR-10 11:26

Units: ug/kg

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

\*Concentration =

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

LCM 3/9/10

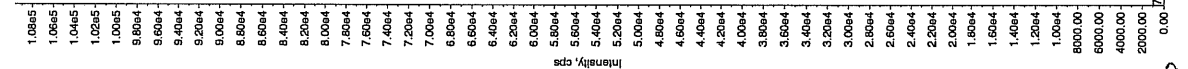
Sample Name: "246866002" Sample ID: "9527092JLER" File: "EXS03050071.wif"

Peak Name: "35-Dinitroaniline" Mass(es): "182.046.0 amu"

Comment: "LCX83212S" Annotation: ""

Sample Index: 1

Sample Type: Unknown  
Concentration: N/A  
Calculated Conc: 0.00 ng/mL  
Acq. Date: 3/6/2010  
Acq. Time: 11:26:53 AM  
Modified: No



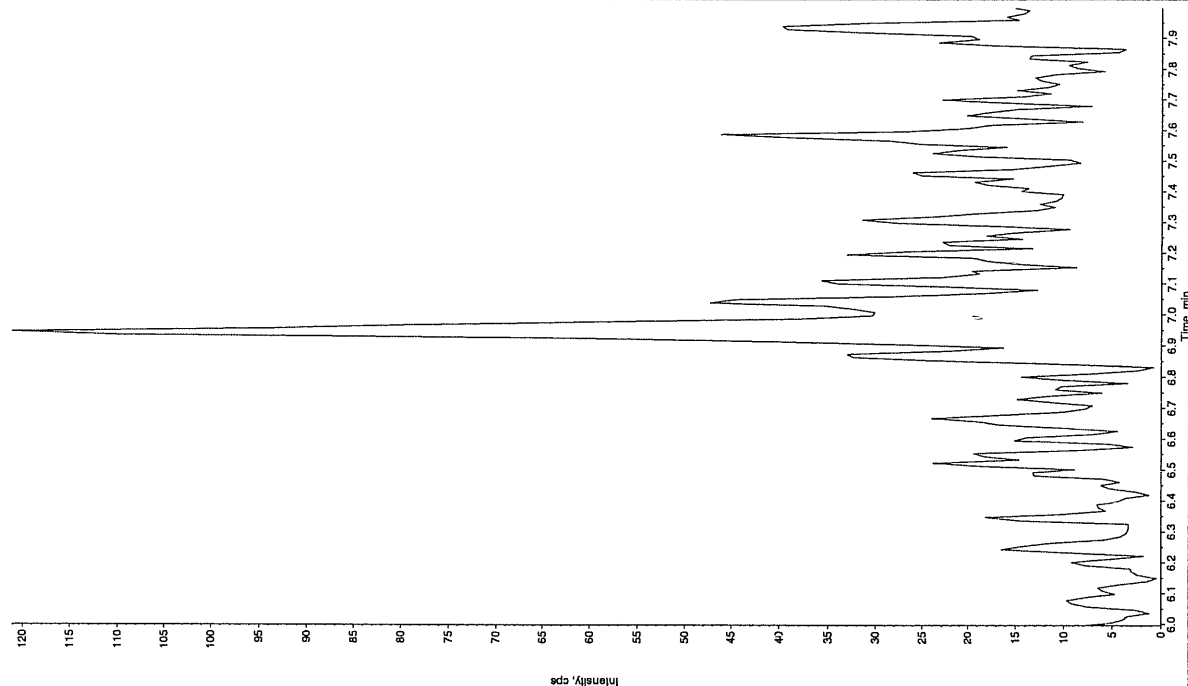
Sample Name: "246866002" Sample ID: "9527092JLER" File: "EXS03050071.wif"

Peak Name: "TATB" Mass(es): "257.2204.9 amu"

Comment: "LCX83212S" Annotation: ""

Sample Index: 1

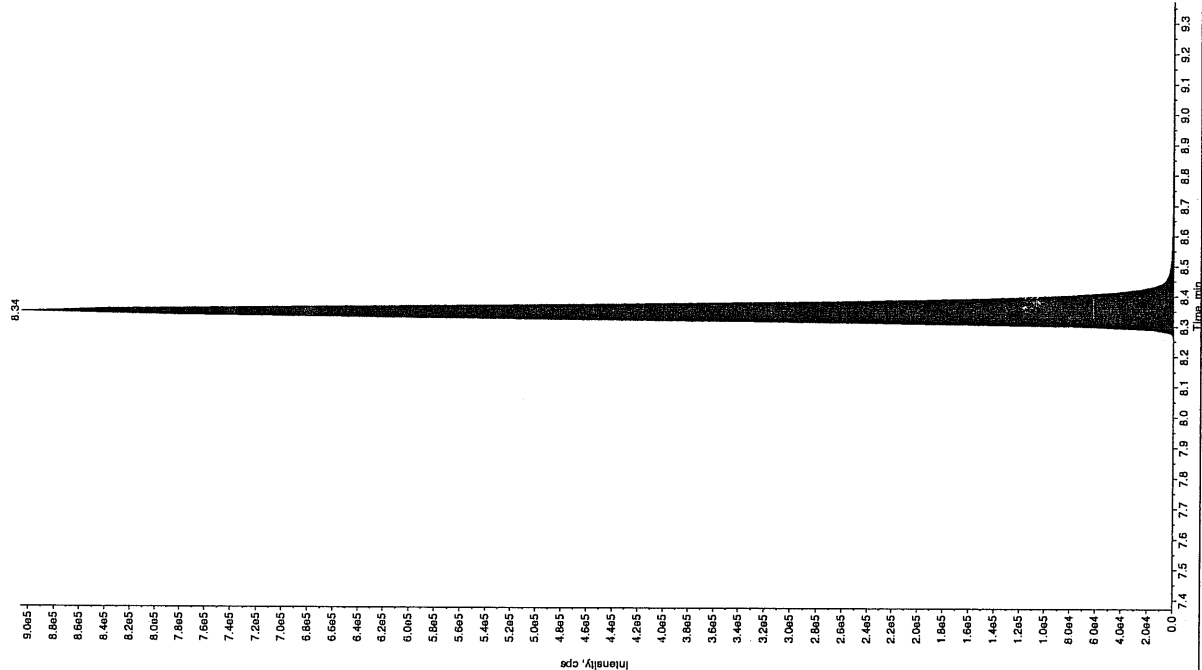
Sample Type: Unknown  
Concentration: N/A  
Calculated Conc: 0.00 ng/mL  
Acq. Date: 3/6/2010  
Acq. Time: 11:26:53 AM  
Modified: No



IL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

Sample Name: "246866002" Sample ID: "9527062JLER" File: "EXS00050071.wif"  
 Peak Name: "34-Dinitrotoluene" Mass(es): "182.17/151.9 amu"  
 Comment: "LCX83212S" Annotation: ""

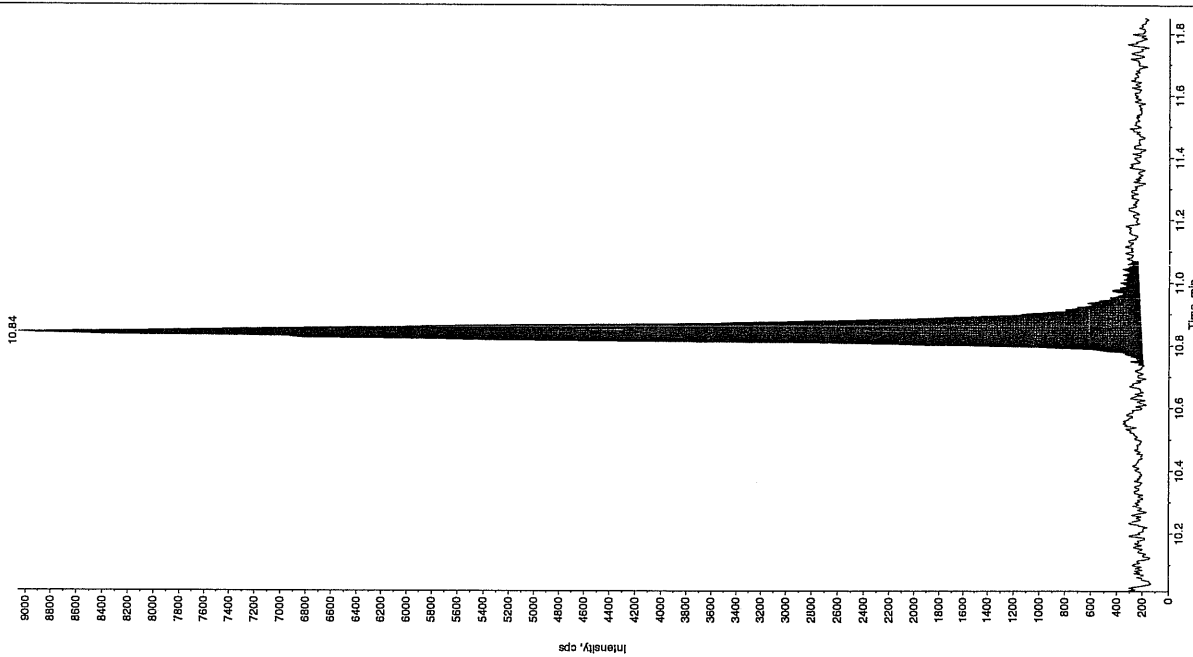
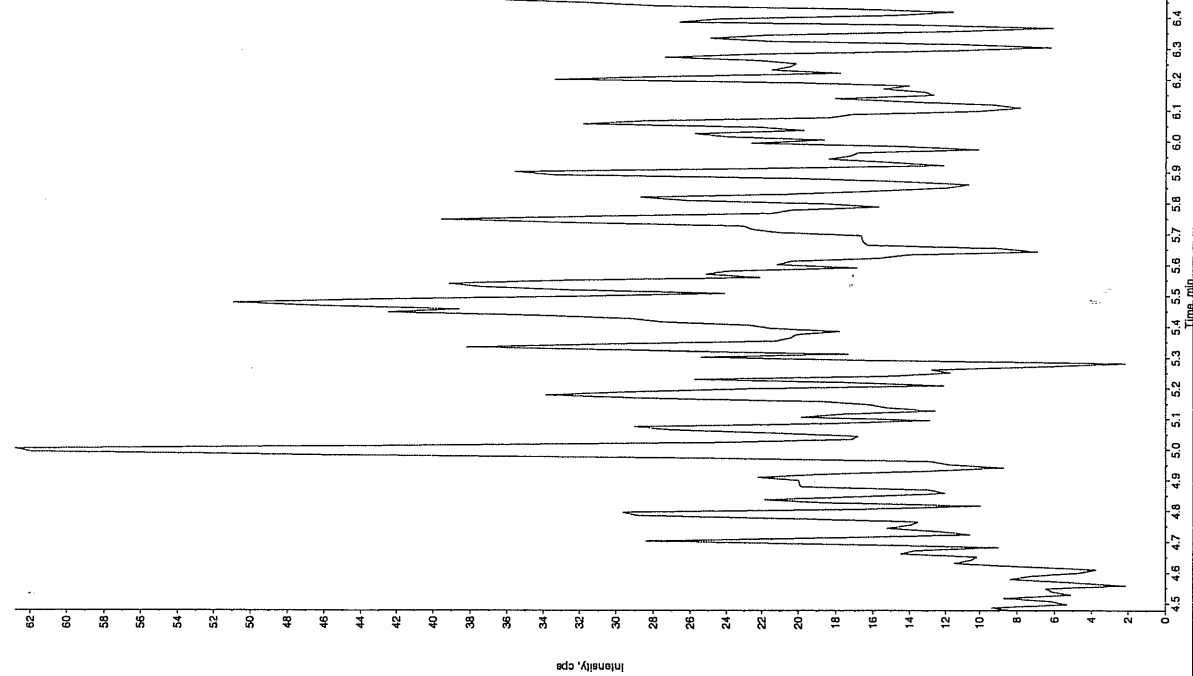
Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 3/6/2010  
 Acq. Time: 11:26:53 AM  
 Modified: No



Peak Name: "34-Dinitrotoluene" Mass(es): "182.17/151.9 amu"  
 Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 3/6/2010  
 Acq. Time: 11:26:53 AM  
 Modified: No  
 Algorithm: IntelliQuan - IQA  
 Peak Height: 1460.00 cps  
 Peak Width: 0.00 sec  
 Peak Width: 3 points  
 Window: 30.0 sec  
 Retention Time: 8.37 min  
 Relative RT: No  
 Type: Valley  
 Retention Time: 8.34 min  
 Counts: 3.16e+006 counts  
 cps: 905835.510 cps  
 Time: 8.24 min  
 Time: 8.69 min

Sample Name: "246866002" Sample ID: "952706121" File: "EXS03050071.wif"  
 Peak Name: "1,3,5-trisubstituted benzene" Mass(es): "166.046.0 amu"  
 Comment: "LCX83212S" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: No Intercept  
 Acq. Date: 3/6/2010  
 Acq. Time: 11:26:53 AM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IQA  
 Min. Peak Height: 8000.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 30.0 sec  
 Expected RT: 10.9 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 10.8 min  
 Area: 3.15e+004 counts  
 Height: 8847.486 cps  
 Start Time: 10.7 min  
 End Time: 11.1 min



L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8367

Lab Code: GEL

GEL Job No (SDG) 10-1758

Matrix: SOIL

GEL Sample ID: 246866003

Sample Amount 2

Moisture: 19.3

Amount Units g

Date Received: 11-FEB-10

Extraction Type Sonication

Extraction Batch ID: 952704

Concentrated Extract Volume (mL) 10

Date Extracted: 18-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0322053.wiff

Date Analyzed: 23-MAR-10 15:33

Units: ug/kg

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

\*Concentration =

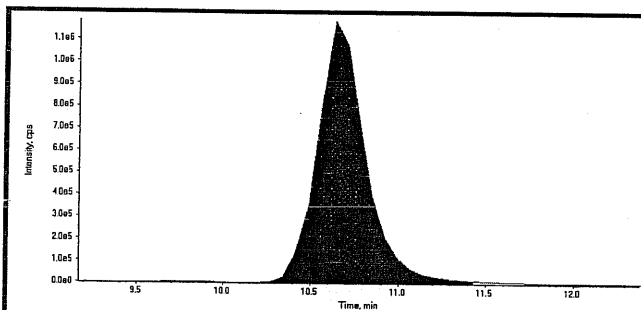
Instrument Value X  $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$  X Dilution Factor



GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

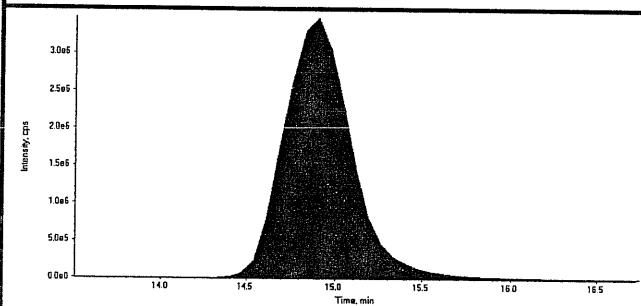
Printed: 27/03/2010 1:31:00 PM  
LCMSMS#3

Data File	EXP0322053.wiff	Acquisition Date	3/23/2010 3:33:57 PM
Sample Name	246866003	Acquisition Method	8321_pntx.dam
Batch Dilution Analyst	952706 2 LER	Result Table	032210.rdb
Procedure Code	LCX8321_S	Sample Type	Unknown



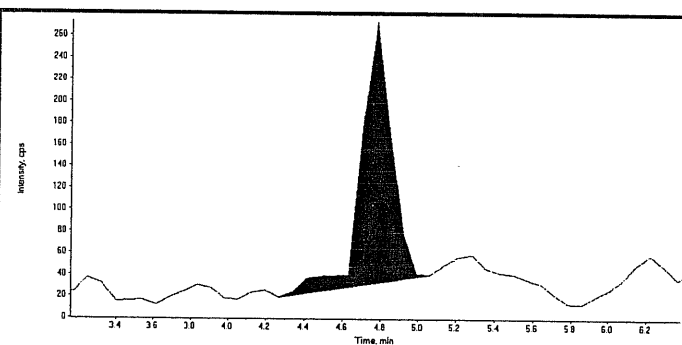
Compound Name:	13-Dinitrobenzene-d4 (172.1/46.1 amu)
Expected RT:	10.80
Actual RT:	10.60
Area Counts:	22500000.00
Manual Modification	No
Amount:	500.00(ng/mL)

Please refer to Form 8 for a list of Internal Standard Recoveries

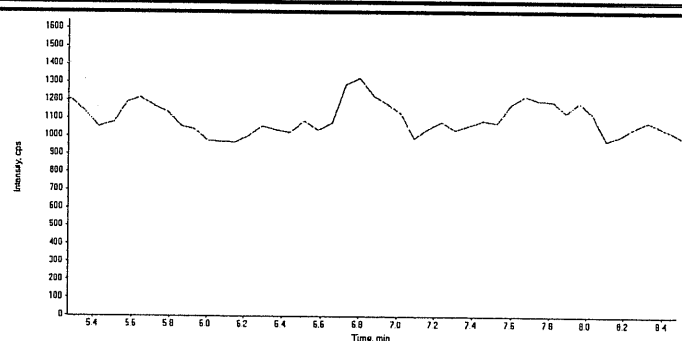


Compound Name:	26-Dinitrotoluene-d3 (185.0/155.0 amu)
Expected RT:	15.10
Actual RT:	14.90
Area Counts:	92900000.00
Manual Modification	No
Amount:	500.00(ng/mL)

Please refer to Form 8 for a list of Internal Standard Recoveries



Compound Name:	HMX (341.2/46.0 amu)
Expected RT:	4.77
Actual RT:	4.77
Area Counts:	2.67e+003
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A



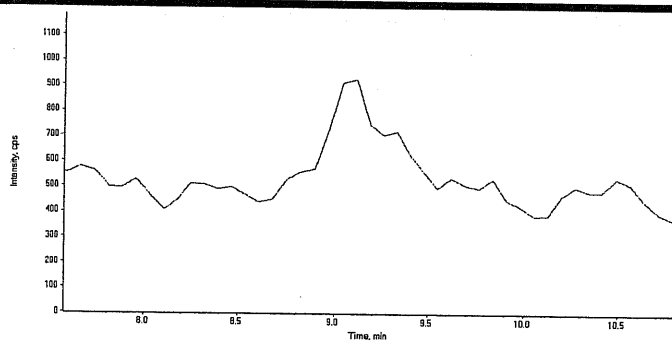
Compound Name:	RDX (267.0/46.1 amu)
Expected RT:	6.87
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A

*LER 3/28/10* *Time 04/02/10*

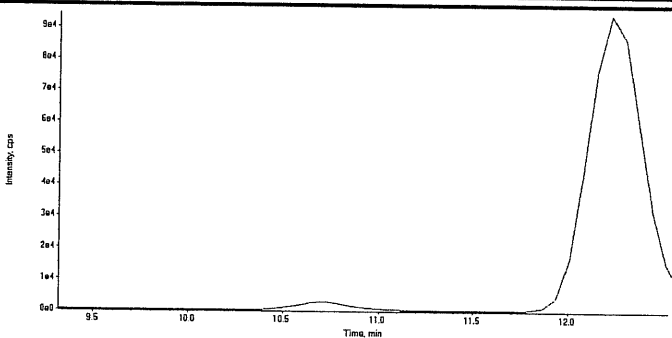
GEL Laboratories, LLC  
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Printed: 27/03/2010 1:31:00 PM  
LCMSMS#3

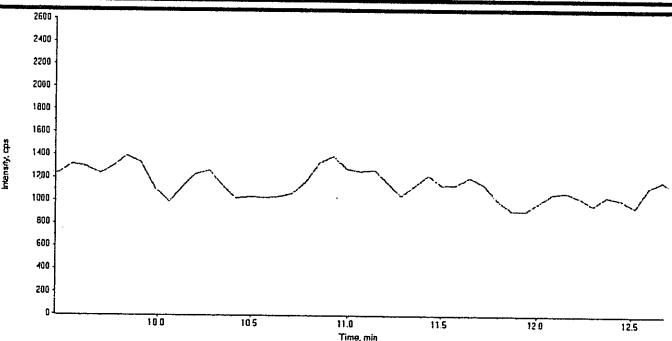
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Sample Name	246866003	Acquisition Method	8321_pntx.dam
Batch Dilution Analyst	952706 2 LER	Result Table	032210.rdb
Procedure Code	LCX8321_S	Sample Type	Unknown



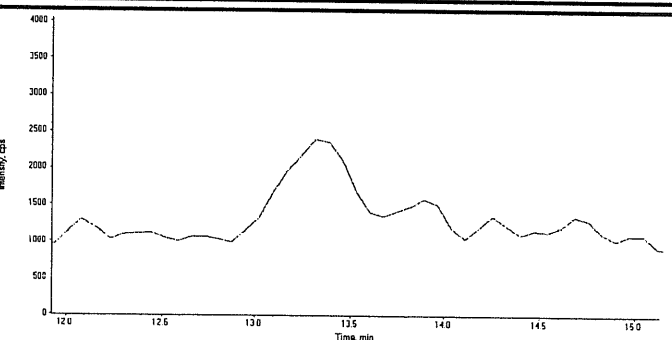
Compound Name:	135-Trinitrobenzene (213.0/182.8 amu)
Expected RT:	9.19
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A



Compound Name:	13-Dinitrobenzene (168.0/137.9 amu)
Expected RT:	10.9
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A



Compound Name:	Tetryl (241.0/180.8 amu)
Expected RT:	11.1
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A

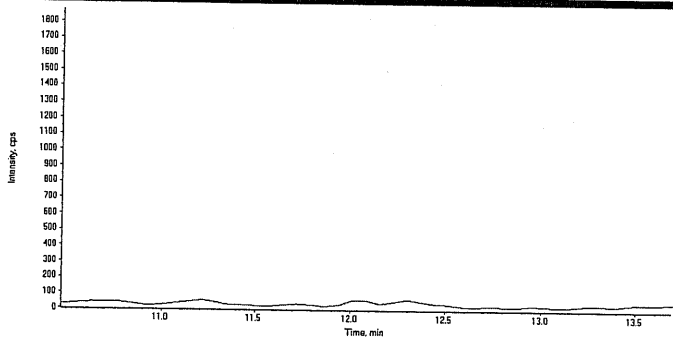


Compound Name:	246-Trinitrotoluene (227.1/209.8 amu)
Expected RT:	13.5
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A

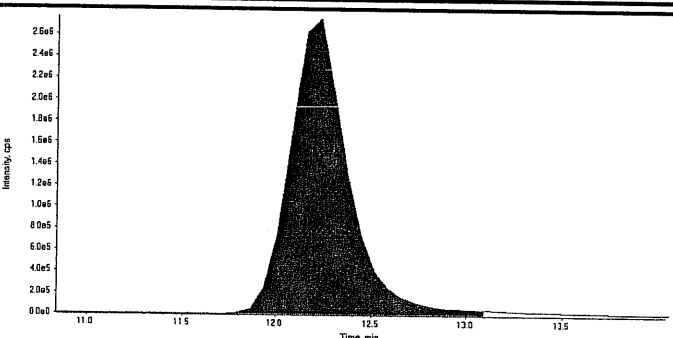
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 27/03/2010 1:31:00 PM  
LCMSMS#3

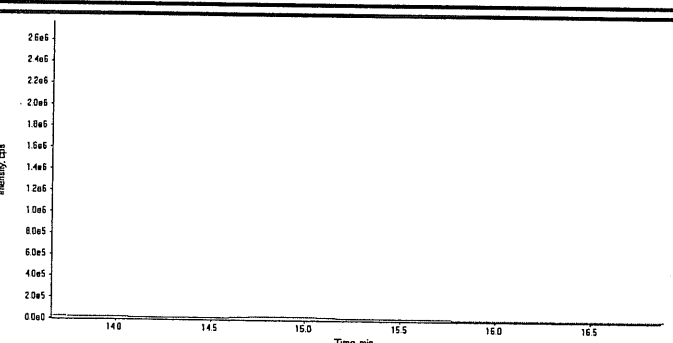
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<b>Sample Name</b>	246866003	<b>Acquisition Method</b>	8321_pntx.dam
<b>Batch Dilution Analyst</b>	952706 2 LER	<b>Result Table</b>	032210.rdb
<b>Procedure Code</b>	LCX8321_S	<b>Sample Type</b>	Unknown



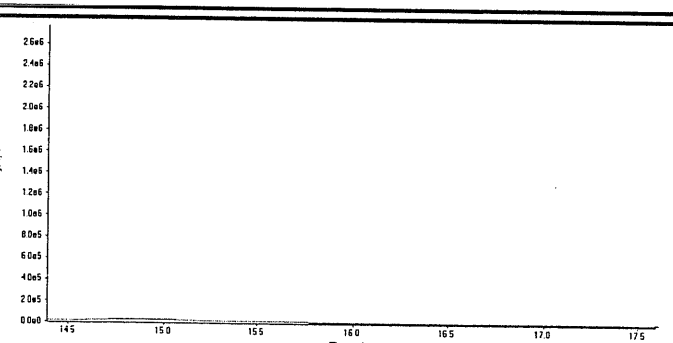
<b>Compound Name:</b>	Nitrobenzene (123.0/46.0 amu)
Expected RT:	12.1
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A



<b>Compound Name:</b>	34-dinitrotoluene (182.0/46.0 amu)
Expected RT:	12.4
Actual RT:	12.2
Area Counts:	5.83e+007
Manual Modification	No
Amount:	243. (ng/mL)
% Accuracy:	N/A



<b>Compound Name:</b>	26-dinitrotoluene (182.0/46.0 amu)
Expected RT:	15.3
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A



<b>Compound Name:</b>	24-dinitrotoluene (182.0/46.0 amu)
Expected RT:	16.0
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 27/03/2010 1:31:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0322053.wiff	<b>Acquisition Date</b>	3/23/2010 3:33:57 PM
<b>Sample Name</b>	246866003	<b>Acquisition Method</b>	8321_pntx.dam
<b>Batch Dilution Analyst</b>	952706 2 LER	<b>Result Table</b>	032210.rdb
<b>Procedure Code</b>	LCX8321_S	<b>Sample Type</b>	Unknown

	<b>Compound Name:</b>	4-Amino-26-dinitrotoluene (197.0/167.0 amu)
	Expected RT:	13.5
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	2-Amino-46-dinitrotoluene (197.0/180.0 amu)
	Expected RT:	14.6
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	2-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	18.2
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

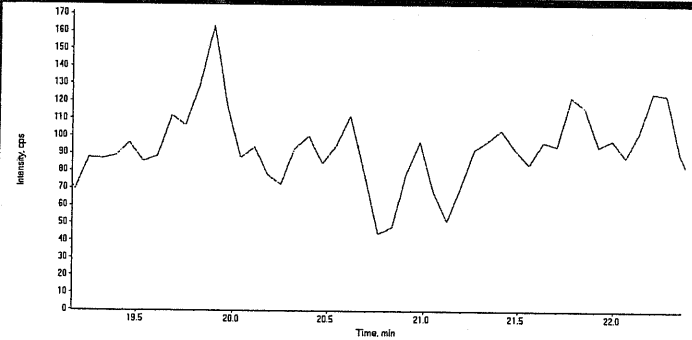
	<b>Compound Name:</b>	4-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	19.4
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

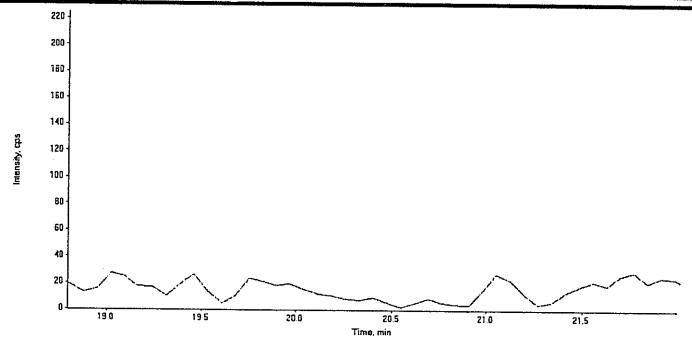
Printed: 27/03/2010 1:31:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0322053.wiff	<b>Acquisition Date</b>	3/23/2010 3:33:57 PM
<b>Sample Name</b>	246866003	<b>Acquisition Method</b>	8321_pntx.dam
<b>Batch Dilution Analyst</b>	952706 2 LER	<b>Result Table</b>	032210.rdb
<b>Procedure Code</b>	LCX8321_S	<b>Sample Type</b>	Unknown

	<b>Compound Name:</b>	3-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	20.8
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	PETN (361.1/62.0 amu)
	Expected RT:	20.4
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8367

Lab Code: GEL

GEL Job No (SDG) 10-1758

Matrix: SOIL

GEL Sample ID: 246866003

Sample Amount 2

Moisture: 19.3

Amount Units g

Date Received: 11-FEB-10

Extraction Type Sonication

Extraction Batch ID: 952704

Concentrated Extract Volume (mL) 10

Date Extracted: 18-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS03050074.wiff

Date Analyzed: 06-MAR-10 12:14

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 =

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

Scan 3/9/10

Sample Name: "246866003" Sample ID: "95270621LER" File: "EXS03050074.wif"

Peak Name: "TATB" Mass(es): "257.2/204.9 amu"

Comment: "LCX83212S" Annotation: ""

Sample Index: 1

Sample Type: Unknown

Concentration: N/A ng/mL

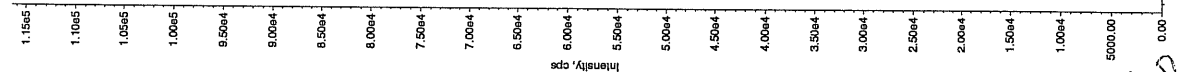
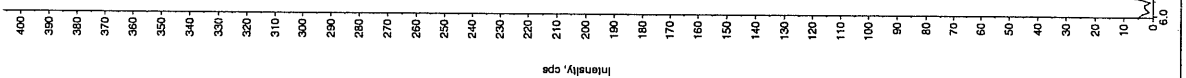
Calculated Conc: 0.00

Date: 3/6/2010

Time: 12:14:00 PM

Acq. Time: 12:14:00 PM

Modified: No

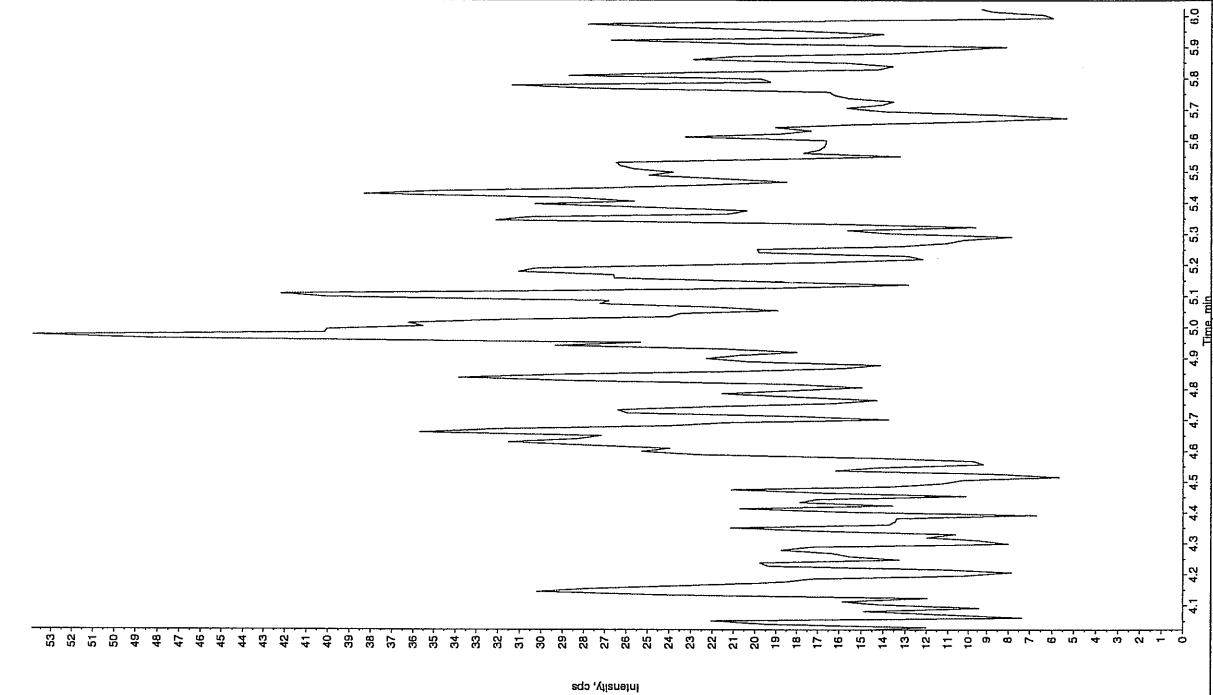


Time 03/09/10

IL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

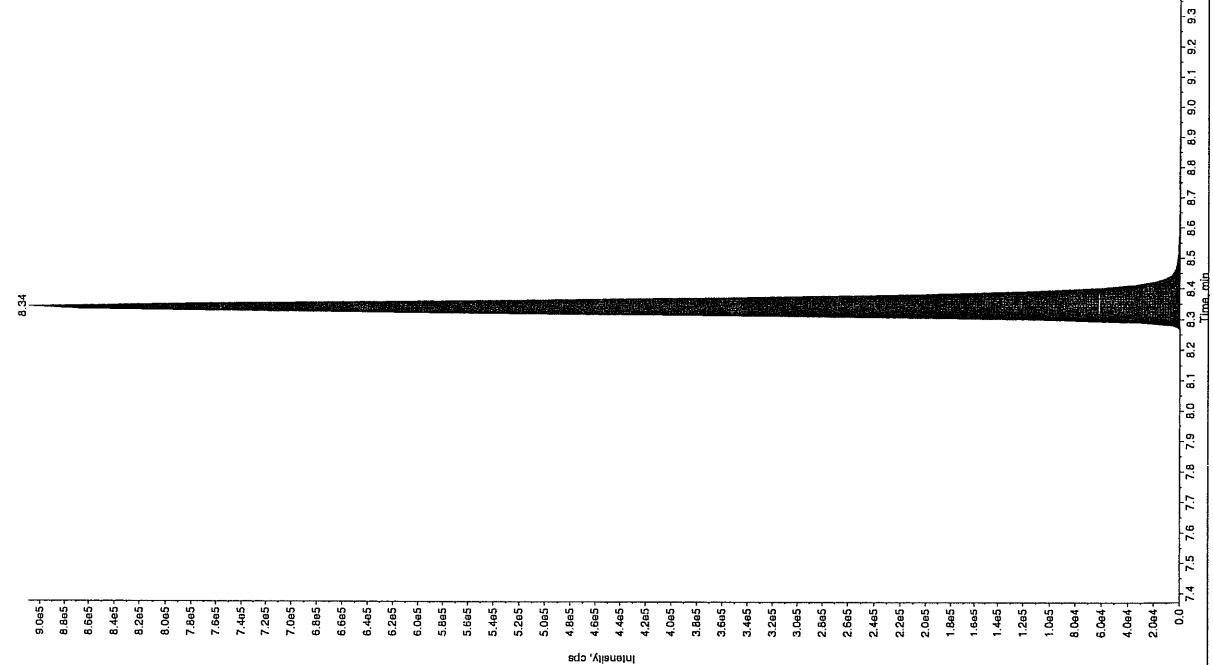
Sample Name: "246866003" Sample ID: "95270621LER" File: "EXS03050074.wif"  
 Peak Name: "25-Diamino-4-nitrofluorene" Mass(es): "166.046.0 amu"  
 Comment: "LCX83212S" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 3/6/2010  
 Acq. Time: 12:14:00 PM  
 Modified: No



Sample Name: "246866003" Sample ID: "95270621LER" File: "EXS03050074.wif"  
 Peak Name: "25-Diamino-4-nitrofluorene" Mass(es): "162.1151.9 amu"  
 Comment: "LCX83212S" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 24.9 ng/mL  
 Acq. Date: 3/6/2010  
 Acq. Time: 12:14:00 PM  
 Modified: No  
 Algorithm: IntelliQuan - IQA  
 Peak Height: 1460.00 cps  
 Peak Width: 3.00 sec  
 Window Width: 30.0 points  
 Window RT: 8.37 min  
 Relative RT: No  
 Type: Valley  
 Retention Time: 8.34 min  
 Counts: 3.12e+006 counts  
 Int. Time: 8.24 min  
 Time: 8.65 min



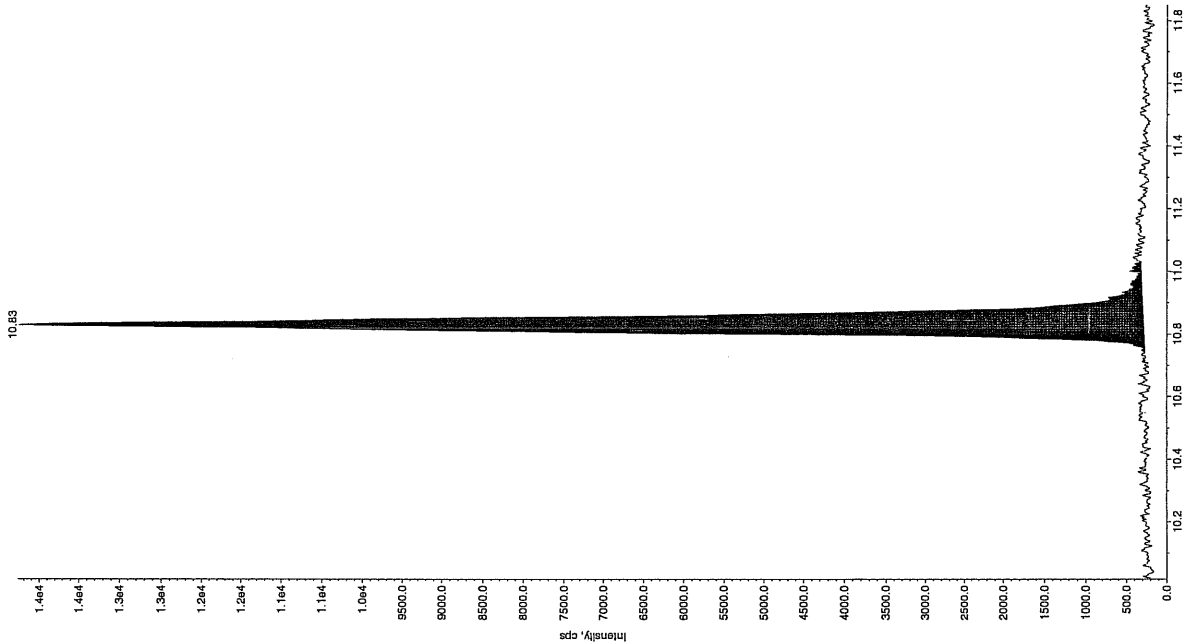
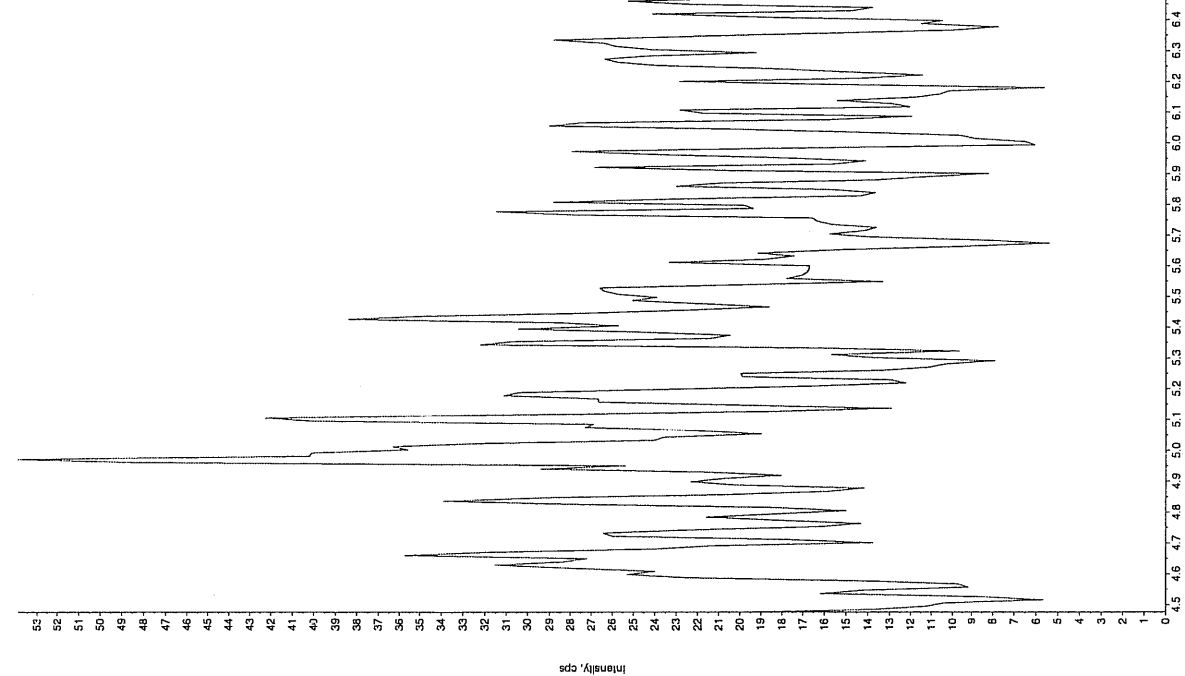
EL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



Sample Name: "246866003" Sample ID: "95270621LER" File: "EXS03050074.wiff"  
 Peak Name: "24-Diamino-6-nitrocoulene" Mass(es): "186.046.0 amu"  
 Comment: "LCX83212S" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 3/6/2010  
 Acq. Time: 12:14:00 PM  
 Modified: No

Proc. Algorithm: IntelliQuan - IOA  
 Min. Peak Height: 8000.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 30.0 sec  
 Expected RT: 10.9 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 10.8 min  
 Area: 4.63e+004 counts  
 Height: 13989.427 cps  
 Start Time: 10.7 min  
 End Time: 11.0 min



EL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8364

Lab Code: GEL

GEL Job No (SDG) 10-1758

Matrix: SOIL

GEL Sample ID: 246866004

Sample Amount 2

Moisture: 23.2

Amount Units g

Date Received: 11-FEB-10

Extraction Type Sonication

Extraction Batch ID: 952704

Concentrated Extract Volume (mL) 10

Date Extracted: 18-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0322054.wiff

Date Analyzed: 23-MAR-10 16:00

Units: ug/kg

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

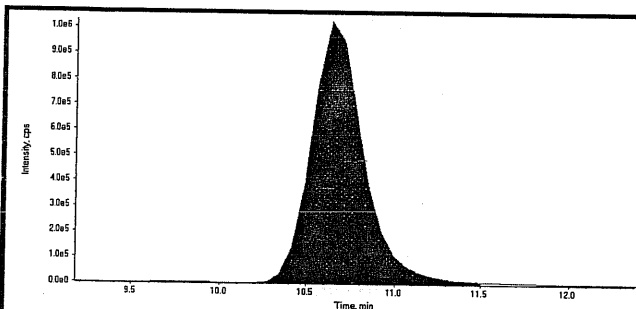
\*Concentration =

Instrument	X	<u>Concentrated Extract Volume</u>	X	Dilution
Value		<u>Sample Amount</u>		Factor

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

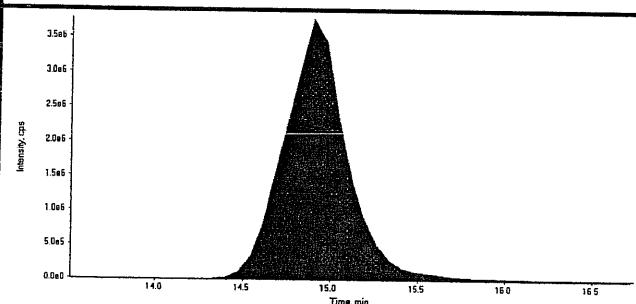
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LCMSMS#3

Data File	EXP0322054.wiff	Acquisition Date	3/23/2010 4:00:23 PM
Sample Name	246866004	Acquisition Method	8321_pntx.dam
Batch Dilution Analyst	952706 2 LER	Result Table	032210.rdb
Procedure Code	LCX8321_S	Sample Type	Unknown



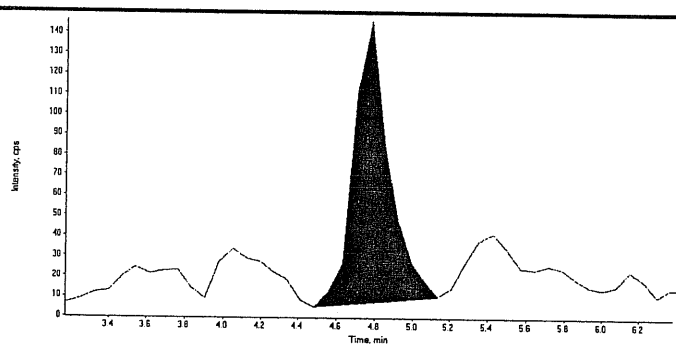
Compound Name:	13-Dinitrobenzene-d4 (172.1/46.1 amu)
Expected RT:	10.80
Actual RT:	10.60
Area Counts:	21000000.00
Manual Modification	No
Amount:	500.00(ng/mL)

Please refer to Form 8 for a list of Internal Standard Recoveries

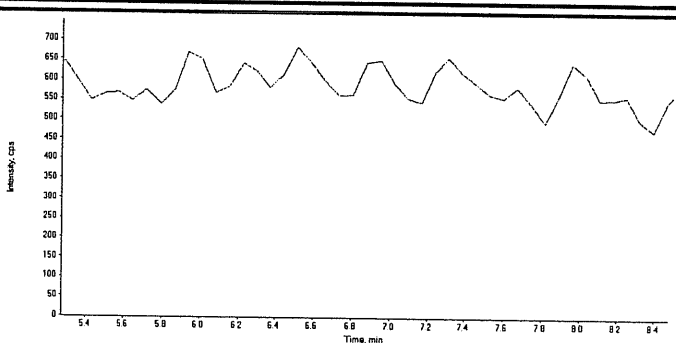


Compound Name:	26-Dinitrotoluene-d3 (185.0/155.0 amu)
Expected RT:	15.10
Actual RT:	14.90
Area Counts:	93400000.00
Manual Modification	No
Amount:	500.00(ng/mL)

Please refer to Form 8 for a list of Internal Standard Recoveries



Compound Name:	HMX (341.2/46.0 amu)
Expected RT:	4.77
Actual RT:	4.77
Area Counts:	1.78e+003
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A



Compound Name:	RDX (267.0/46.1 amu)
Expected RT:	6.87
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A

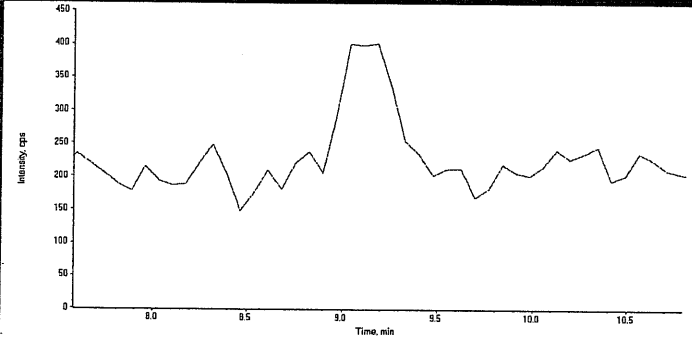
*LER*  
*3/28/10* *HW*  
*04/02/10*

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

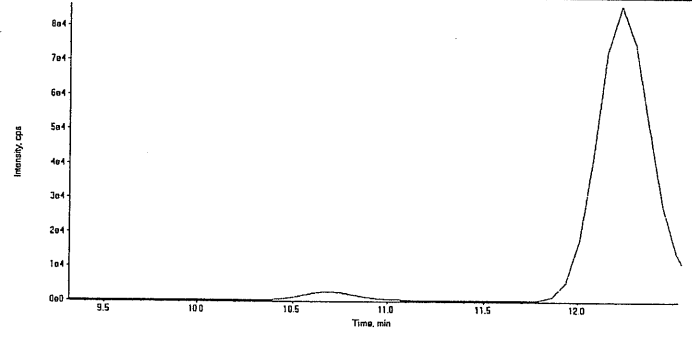
Printed: 27/03/2010 1:31:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0322054.wiff	<b>Acquisition Date</b>	3/23/2010 4:00:23 PM
<b>Sample Name</b>	246866004	<b>Acquisition Method</b>	8321_pntx.dam
<b>Batch Dilution Analyst</b>	952706 2 LER	<b>Result Table</b>	032210.rdb
<b>Procedure Code</b>	LCX8321_S	<b>Sample Type</b>	Unknown

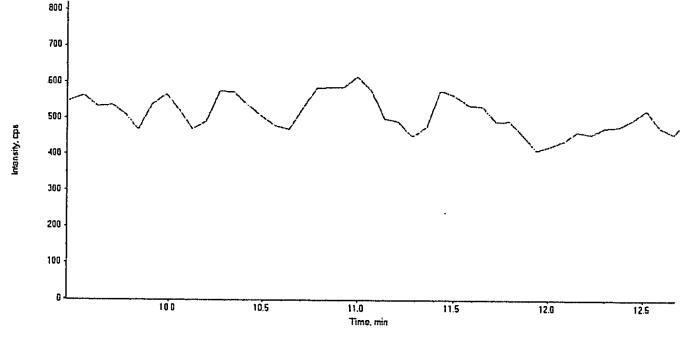
  

	<b>Compound Name:</b>	135-Trinitrobenzene (213.0/182.8 amu)
	Expected RT:	9.19
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A


  

	<b>Compound Name:</b>	13-Dinitrobenzene (168.0/137.9 amu)
	Expected RT:	10.9
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	Tetryl (241.0/180.8 amu)
	Expected RT:	11.1
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	246-Trinitrotoluene (227.1/209.8 amu)
	Expected RT:	13.5
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

GEL Laboratories, LLC  
 GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 27/03/2010 1:31:00 PM  
 LCMSMS#3

<b>Data File</b>	EXP0322054.wiff	<b>Acquisition Date</b>	3/23/2010 4:00:23 PM
<b>Sample Name</b>	246866004	<b>Acquisition Method</b>	8321_pntx.dam
<b>Batch Dilution Analyst</b>	952706 2 LER	<b>Result Table</b>	032210.rdb
<b>Procedure Code</b>	LCX8321_S	<b>Sample Type</b>	Unknown

	<b>Compound Name:</b>	Nitrobenzene (123.0/46.0 amu)
	Expected RT:	12.1
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	34-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	12.4
	Actual RT:	12.2
	Area Counts:	5.63e+007
	Manual Modification	No
	Amount:	233. (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	26-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	15.3
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

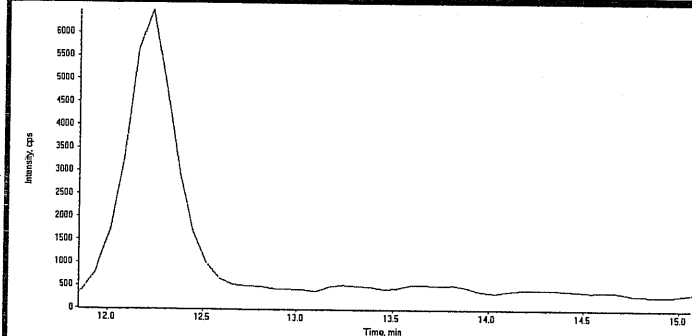
  

	<b>Compound Name:</b>	24-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	16.0
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

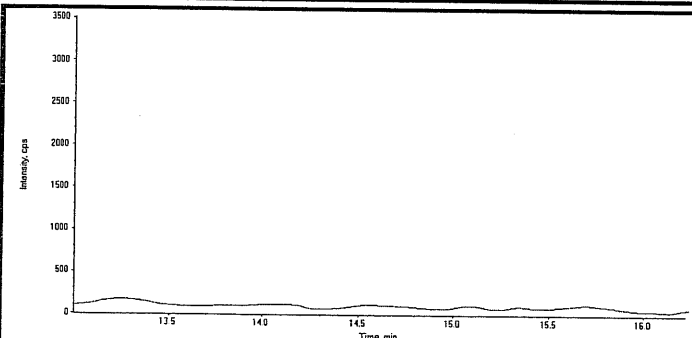
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 27/03/2010 1:31:00 PM  
LCMSMS#3

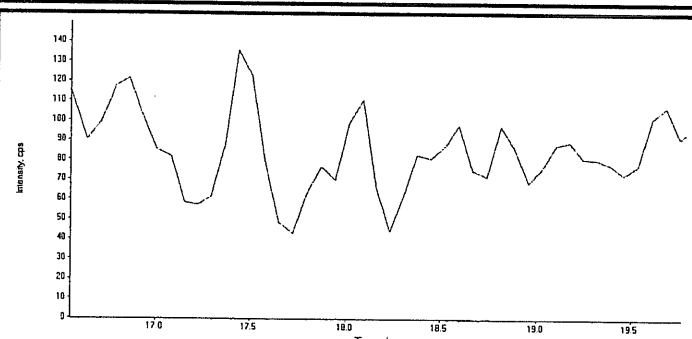
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<b>Sample Name</b>	246866004	<b>Acquisition Method</b>	8321_pntx.dam
<b>Batch Dilution Analyst</b>	952706 2 LER	<b>Result Table</b>	032210.rdb
<b>Procedure Code</b>	LCX8321_S	<b>Sample Type</b>	Unknown



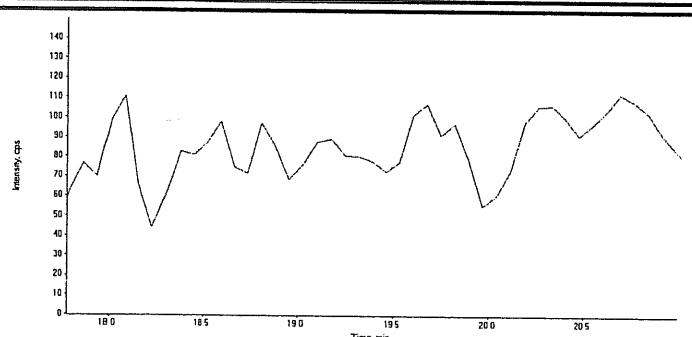
<b>Compound Name:</b>	4-Amino-26-dinitrotoluene (197.0/167.0 amu)
Expected RT:	13.5
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A



<b>Compound Name:</b>	2-Amino-46-dinitrotoluene (197.0/180.0 amu)
Expected RT:	14.6
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A



<b>Compound Name:</b>	2-Nitrotoluene (137.0/46.0 amu)
Expected RT:	18.2
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A

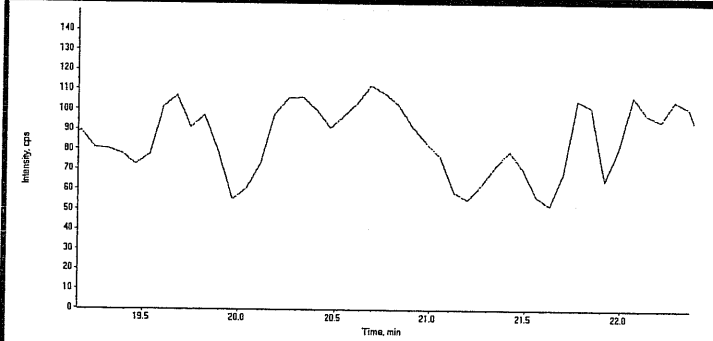


<b>Compound Name:</b>	4-Nitrotoluene (137.0/46.0 amu)
Expected RT:	19.4
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A

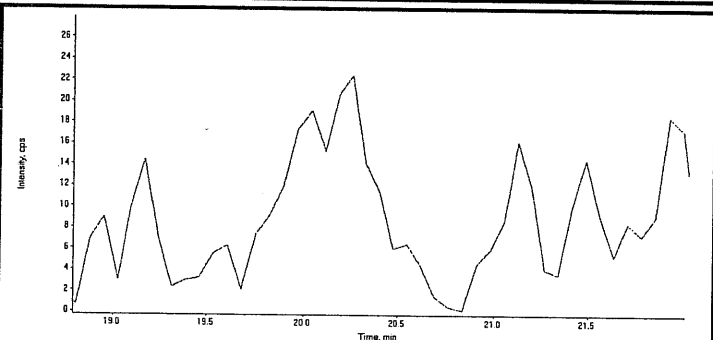
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 27/03/2010 1:31:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0322054.wiff	<b>Acquisition Date</b>	3/23/2010 4:00:23 PM
<b>Sample Name</b>	246866004	<b>Acquisition Method</b>	8321_pntx.dam
<b>Batch Dilution Analyst</b>	952706 2 LER	<b>Result Table</b>	032210.rdb
<b>Procedure Code</b>	LCX8321_S	<b>Sample Type</b>	Unknown



<b>Compound Name:</b>	3-Nitrotoluene (137.0/46.0 amu)
Expected RT:	20.8
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A



<b>Compound Name:</b>	PETN (361.1/62.0 amu)
Expected RT:	20.4
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8364

Lab Code: GEL

GEL Job No (SDG) 10-1758

Matrix: SOIL

GEL Sample ID: 246866004

Sample Amount 2

Moisture: 23.2

Amount Units g

Date Received: 11-FEB-10

Extraction Type Sonication

Extraction Batch ID: 952704

Concentrated Extract Volume (mL) 10

Date Extracted: 18-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS03050075.wiff

Date Analyzed: 06-MAR-10 12:29

Units: ug/kg

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

\*Concentration =

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



See 3/9/10

Sample Name: "246866004" Sample ID: "95270621.ER" File: "EXS03050075.wif"

Peak Name: "35-Dinitroaniline" Mass(es): "182.046.0 amu"

Comment: "LCX83212S" Annotation: "

Sample Index: 1

Sample Type: Unknown

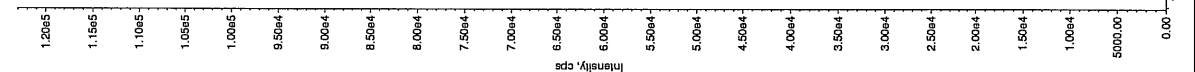
Concentration: N/A

Calculated Conc: 0.00 ng/mL

Acq. Date: 3/6/2010

Acq. Time: 12:29:41 PM

Modified: Yes



See 03/09/10

Sample Name: "246866004" Sample ID: "95270621.ER" File: "EXS03050075.wif"

Peak Name: "TATB" Mass(es): "257.2204.9 amu"

Comment: "LCX83212S" Annotation: "

Sample Index: 1

Sample Type: Unknown

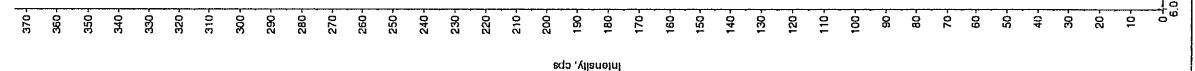
Concentration: N/A

Calculated Conc: 0.00 ng/mL

Acq. Date: 3/6/2010

Acq. Time: 12:29:41 PM

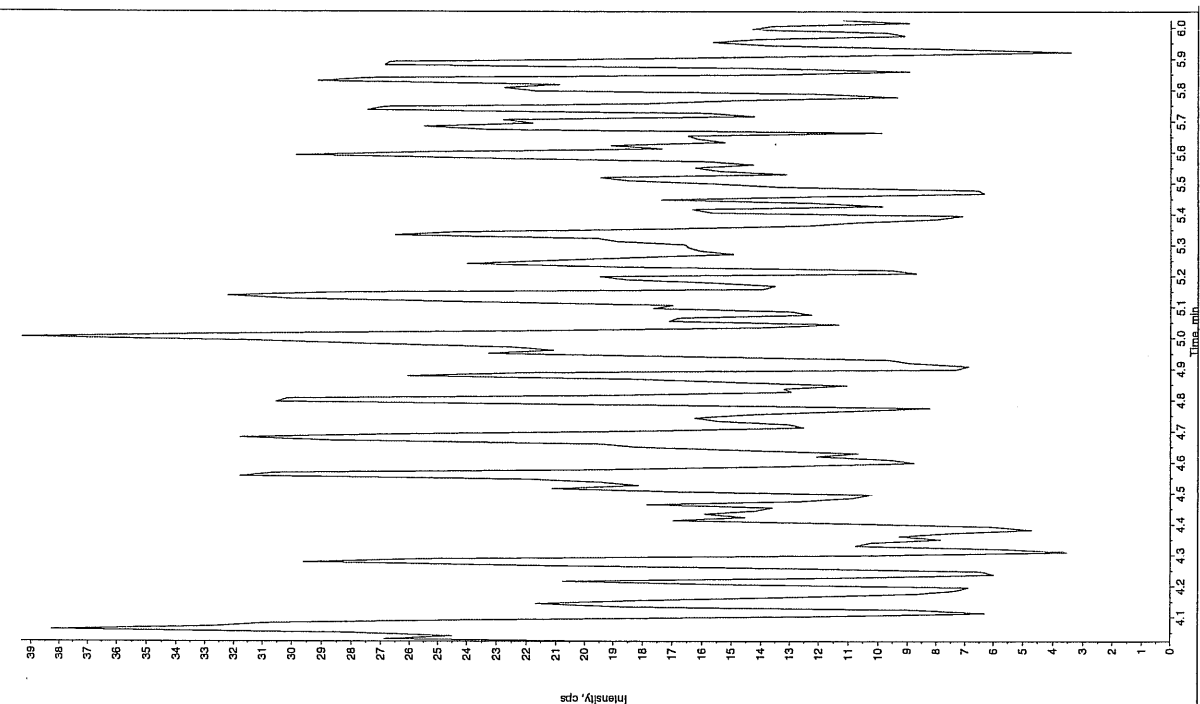
Modified: No



See 03/09/10

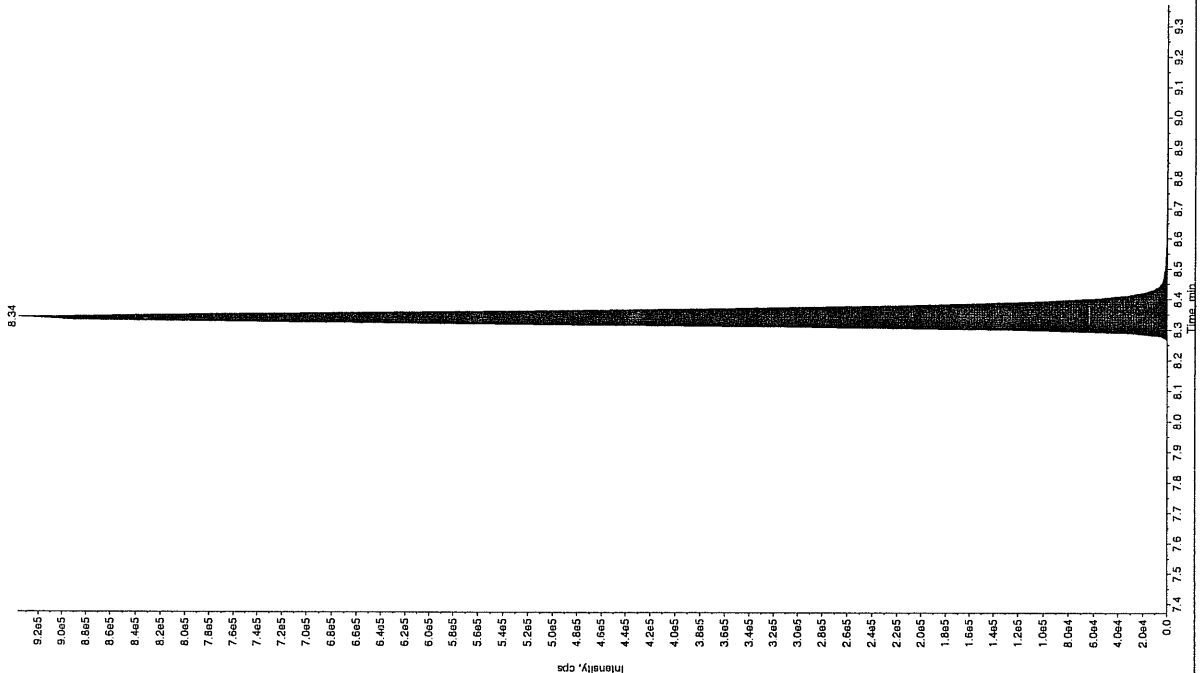
Sample Name: "246866004" Sample ID: "952706[2]LER" File: "EXS03050075.wif"  
 Peak Name: "26-Diantho-4-nitrotoluene" Mass(es): "166.046.0 amu"  
 Comment: "LCX83212S" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 3/6/2010  
 Acq. Time: 12:29:41 PM  
 Modified: No



Sample Name: "246866004" Sample ID: "952706[2]LER" File: "EXS03050075.wif"  
 Peak Name: "34-Diantho-4-nitrotoluene" Mass(es): "132.1751.9 amu"  
 Comment: "LCX83212S" Annotation: ""

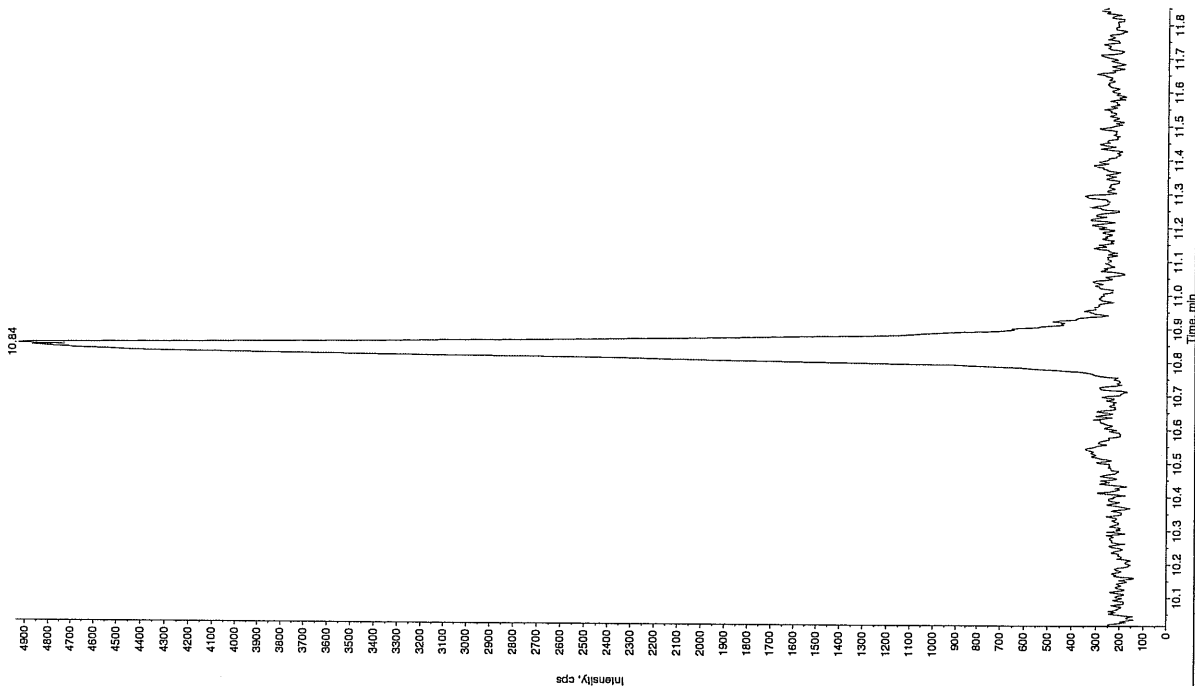
Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 254. ng/mL  
 Acq. Date: 3/6/2010  
 Acq. Time: 12:29:41 PM  
 Modified: No  
 . Algorithm: IntelliQuan - IQA  
 Peak Height: 1460.00 cps  
 Peak Width: 0.00 sec  
 Peak Width: 3 points  
 Window: 30.0 sec  
 Retention Time: 8.37 min  
 Relative RT: No  
 Type: Valley  
 Retention Time: 8.34 min  
 Peak Height: 3.18e+006 counts  
 Peak Width: 937238.281 cps  
 Window: 5.24 min  
 Retention Time: 8.66 min



GL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

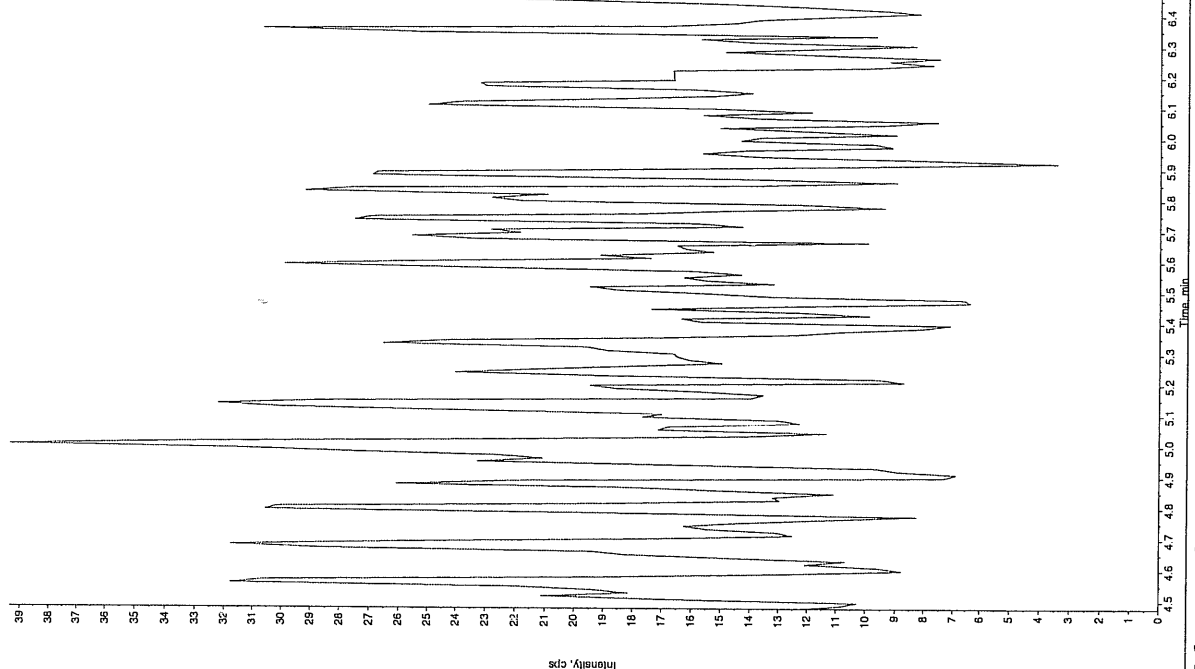
Sample Name: "246866004" Sample ID: "952706[2]ER" File: "EXS03050075.wif"  
 Peak Name: "1,3-bis(4-oxo-5-oxo-1,2,3,4-tetrahydro-2H-pyridin-2-yl)phosphate" Mass(es): "369.191.0 amu"  
 Comment: "LCX83212S" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 3/6/2010  
 Acq. Time: 12:29:41 PM  
 Modified: No



Sample Name: "246866004" Sample ID: "952706[2]ER" File: "EXS03050075.wif"  
 Peak Name: "24-Diamino-6-nitrotoluene" Mass(es): "166.046.0 amu"  
 Comment: "LCX83212S" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 3/6/2010  
 Acq. Time: 12:29:41 PM  
 Modified: No



L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8365

Lab Code: GEL

GEL Job No (SDG) 10-1758

Matrix: SOIL

GEL Sample ID: 246866005

Sample Amount 2

Moisture: 16.9

Amount Units g

Date Received: 11-FEB-10

Extraction Type Sonication

Extraction Batch ID: 952704

Concentrated Extract Volume (mL) 10

Date Extracted: 18-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0322055.wiff

Date Analyzed: 23-MAR-10 16:26

Units: ug/kg

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

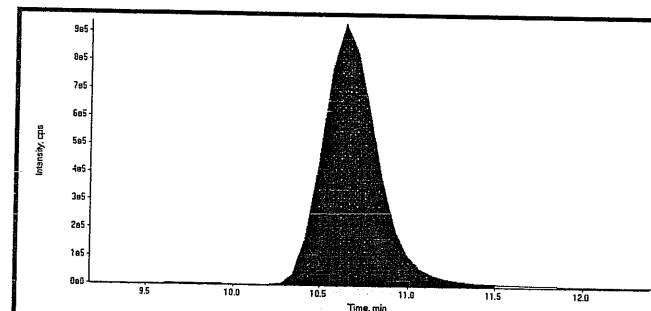
\*Concentration =

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

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

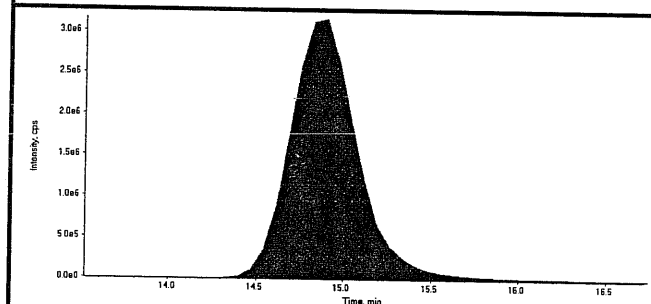
Printed: 27/03/2010 1:31:00 PM  
LCMSMS#3

Data File	EXP0322055.wiff	Acquisition Date	3/23/2010 4:26:49 PM
Sample Name	246866005	Acquisition Method	8321_pntx.dam
Batch Dilution Analyst	952706 2 LER	Result Table	032210.rdb
Procedure Code	LCX8321_S	Sample Type	Unknown



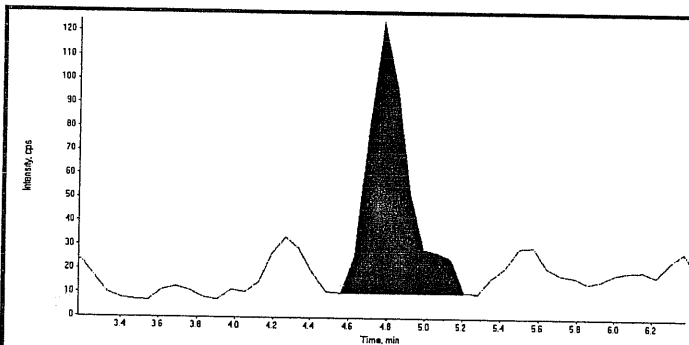
Compound Name:	13-Dinitrobenzene-d4 (172.1/46.1 amu)
Expected RT:	10.80
Actual RT:	10.60
Area Counts:	20100000.00
Manual Modification	No
Amount:	500.00(ng/mL)

Please refer to Form 8 for a list of Internal Standard Recoveries

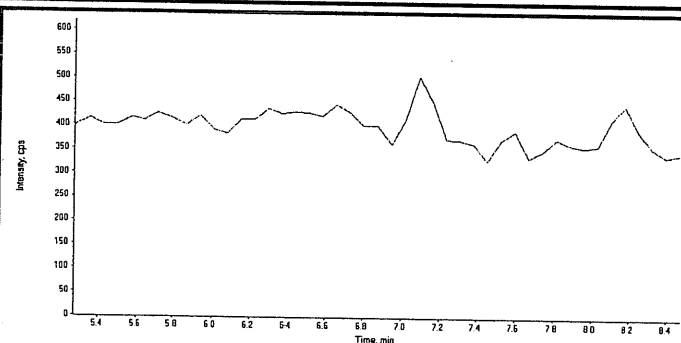


Compound Name:	26-Dinitrotoluene-d3 (185.0/155.0 amu)
Expected RT:	15.10
Actual RT:	14.90
Area Counts:	85300000.00
Manual Modification	No
Amount:	500.00(ng/mL)

Please refer to Form 8 for a list of Internal Standard Recoveries



Compound Name:	HMX (341.2/46.0 amu)
Expected RT:	4.77
Actual RT:	4.77
Area Counts:	1.63e+003
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A



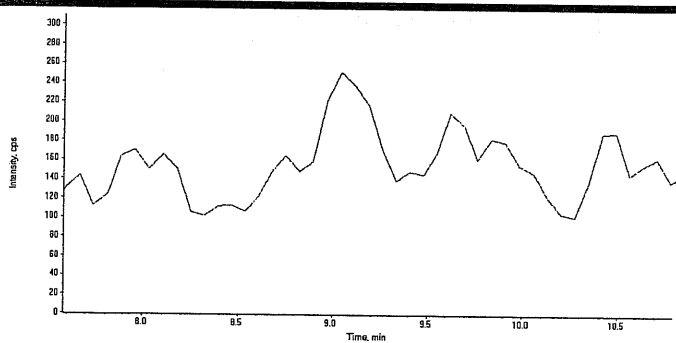
Compound Name:	RDX (267.0/46.1 amu)
Expected RT:	6.87
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A

*LER*  
*3/28/10* *ARM*  
*04/02/10*

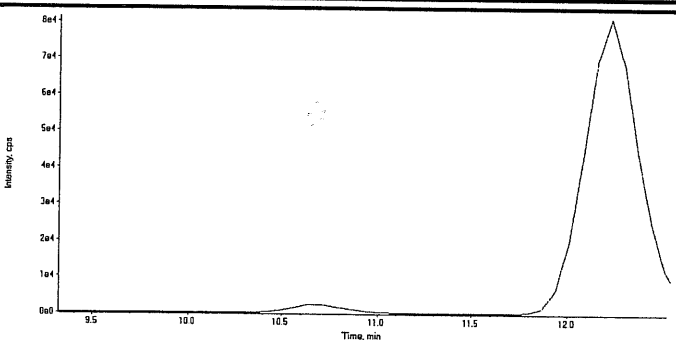
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 27/03/2010 1:31:00 PM  
LCMSMS#3

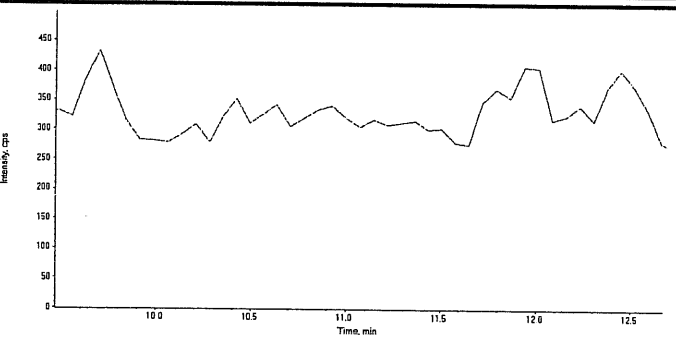
Data File	EXP0322055.wiff	Acquisition Date	3/23/2010 4:26:49 PM
Sample Name	246866005	Acquisition Method	8321_pntx.dam
Batch Dilution Analyst	952706 2 LER	Result Table	032210.rdb
Procedure Code	LCX8321_S	Sample Type	Unknown



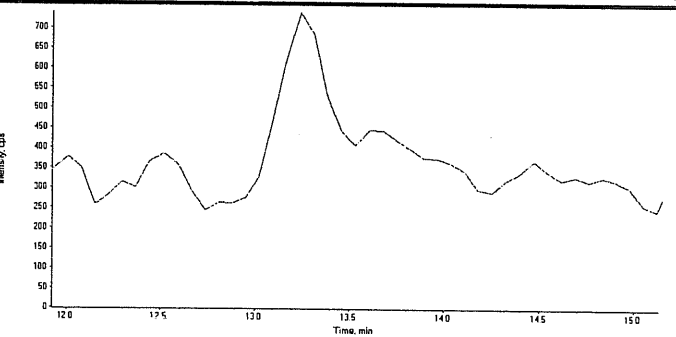
Compound Name:	135-Trinitrobenzene (213.0/182.8 amu)
Expected RT:	9.19
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A



Compound Name:	13-Dinitrobenzene (168.0/137.9 amu)
Expected RT:	10.9
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A



Compound Name:	Tetryl (241.0/180.8 amu)
Expected RT:	11.1
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A



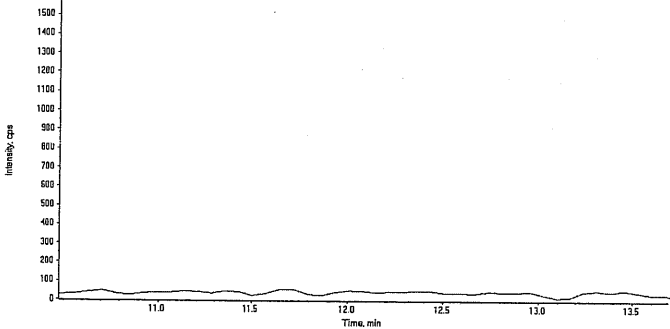
Compound Name:	246-Trinitrotoluene (227.1/209.8 amu)
Expected RT:	13.5
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A

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GEL SOP GL-OA-E-056, Method 8321A-Modified

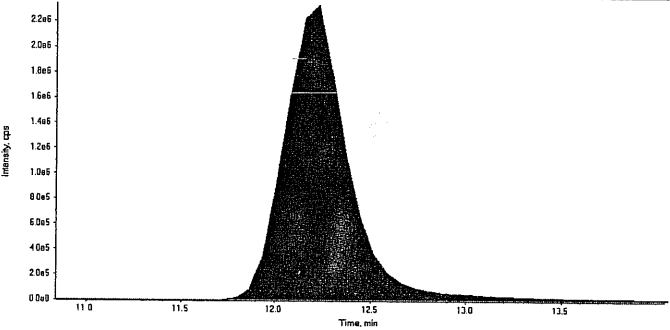
Printed: 27/03/2010 1:31:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0322055.wiff	<b>Acquisition Date</b>	3/23/2010 4:26:49 PM
<b>Sample Name</b>	246866005	<b>Acquisition Method</b>	8321_pntx.dam
<b>Batch Dilution Analyst</b>	952706 2 LER	<b>Result Table</b>	032210.rdb
<b>Procedure Code</b>	LCX8321_S	<b>Sample Type</b>	Unknown

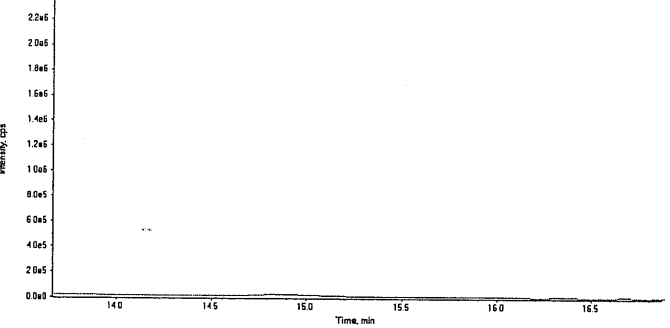
  

	<b>Compound Name:</b>	Nitrobenzene (123.0/46.0 amu)
	Expected RT:	12.1
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

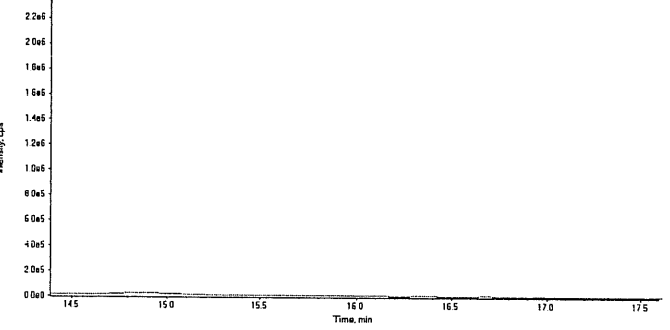
  

	<b>Compound Name:</b>	34-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	12.4
	Actual RT:	12.2
	Area Counts:	5.41e+007
	Manual Modification	No
	Amount:	245. (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	26-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	15.3
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

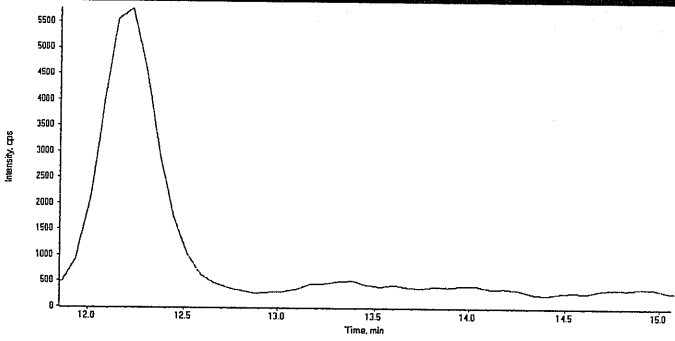
	<b>Compound Name:</b>	24-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	16.0
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

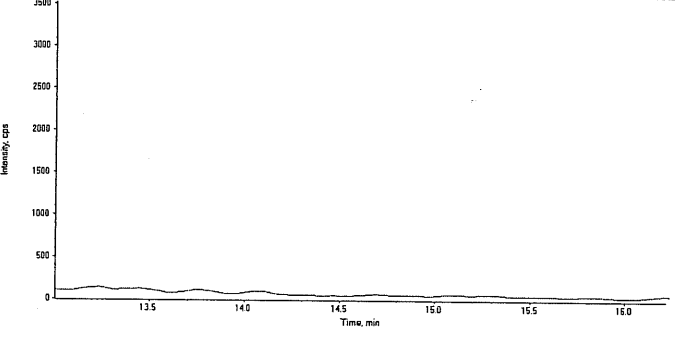
Printed: 27/03/2010 1:31:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0322055.wiff	<b>Acquisition Date</b>	3/23/2010 4:26:49 PM
<b>Sample Name</b>	246866005	<b>Acquisition Method</b>	8321_pntx.dam
<b>Batch Dilution Analyst</b>	952706 2 LER	<b>Result Table</b>	032210.rdb
<b>Procedure Code</b>	LCX8321_S	<b>Sample Type</b>	Unknown

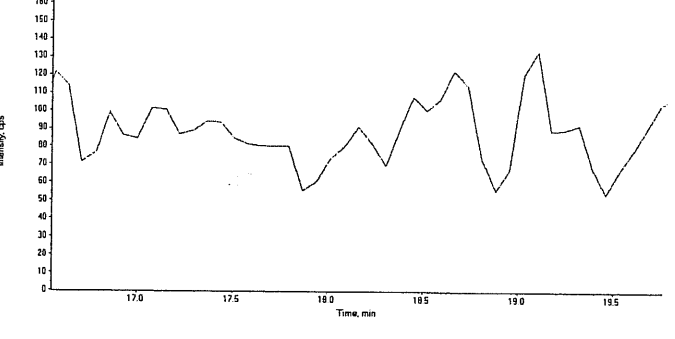
  

	<b>Compound Name:</b>	4-Amino-26-dinitrotoluene (197.0/167.0 amu)
	Expected RT:	13.5
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

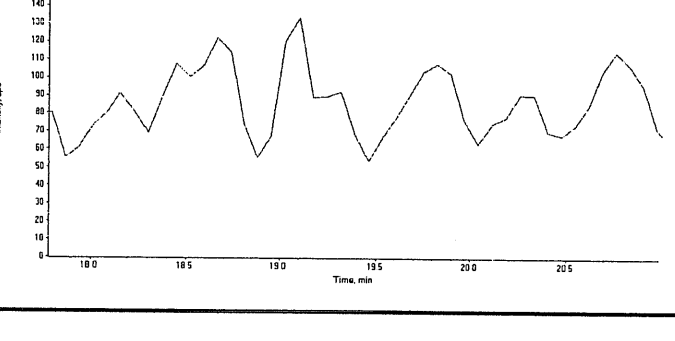
  

	<b>Compound Name:</b>	2-Amino-46-dinitrotoluene (197.0/180.0 amu)
	Expected RT:	14.6
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	2-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	18.2
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

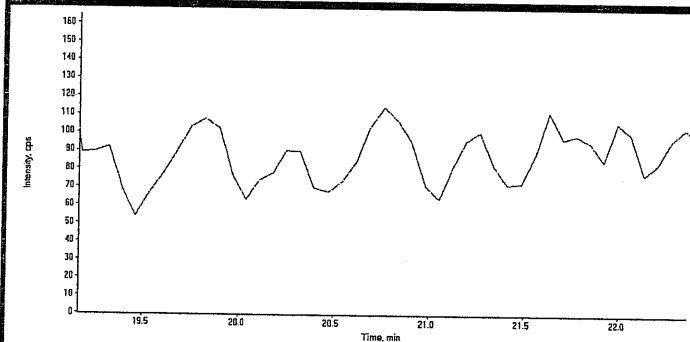
	<b>Compound Name:</b>	4-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	19.4
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A



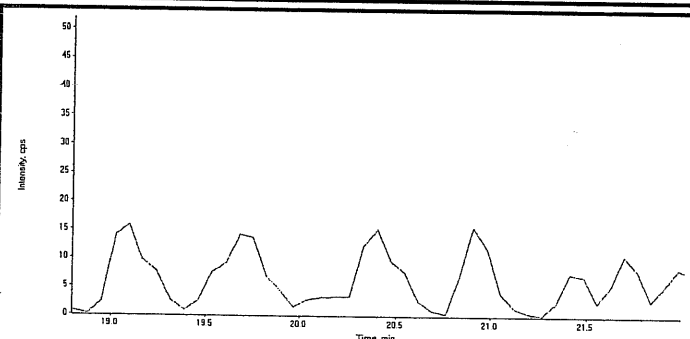
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 27/03/2010 1:31:00 PM  
LCMSMS#3

Data File	EXP0322055.wiff	Acquisition Date	3/23/2010 4:26:49 PM
Sample Name	246866005	Acquisition Method	8321_pntx.dam
Batch Dilution Analyst	952706 2 LER	Result Table	032210.rdb
Procedure Code	LCX8321_S	Sample Type	Unknown



Compound Name:	3-Nitrotoluene (137.0/46.0 amu)
Expected RT:	20.8
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A



Compound Name:	PETN (361.1/62.0 amu)
Expected RT:	20.4
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8365

Lab Code: GEL

GEL Job No (SDG) 10-1758

Matrix: SOIL

GEL Sample ID: 246866005

Sample Amount 2

Moisture: 16.9

Amount Units g

Date Received: 11-FEB-10

Extraction Type Sonication

Extraction Batch ID: 952704

Concentrated Extract Volume (mL) 10

Date Extracted: 18-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS03050076.wiff

Date Analyzed: 06-MAR-10 12:45

Units: ug/kg

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

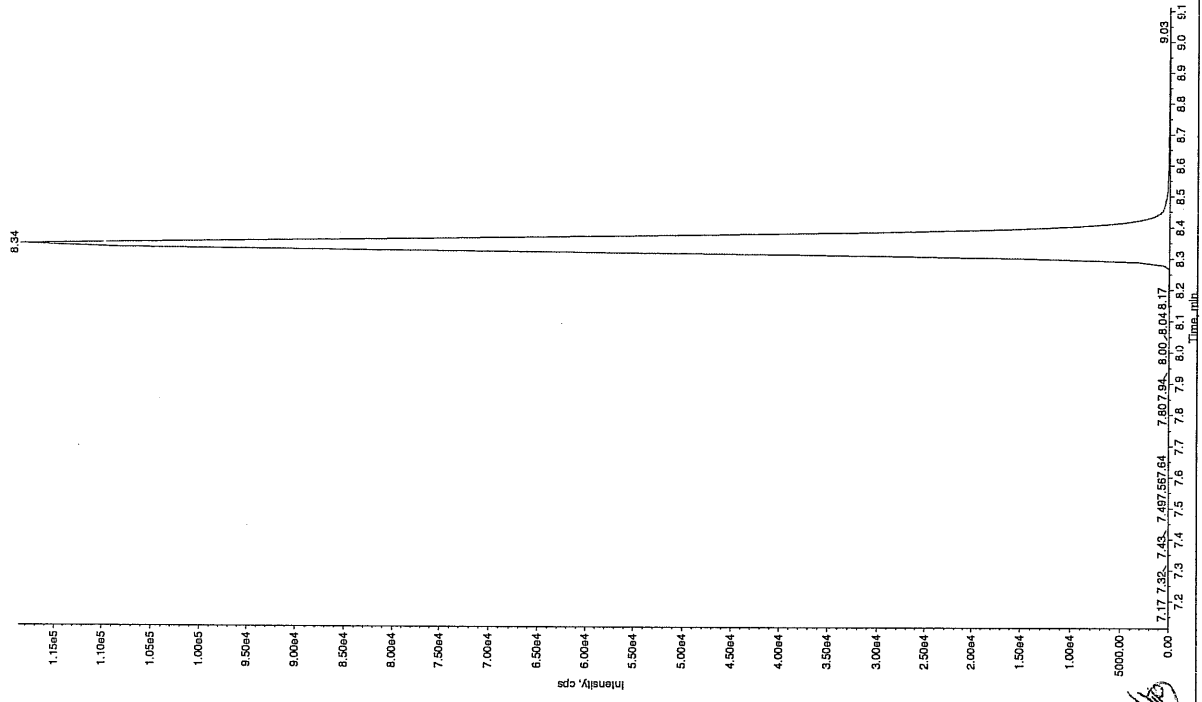
\*Concentration =

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

See 3/9/10

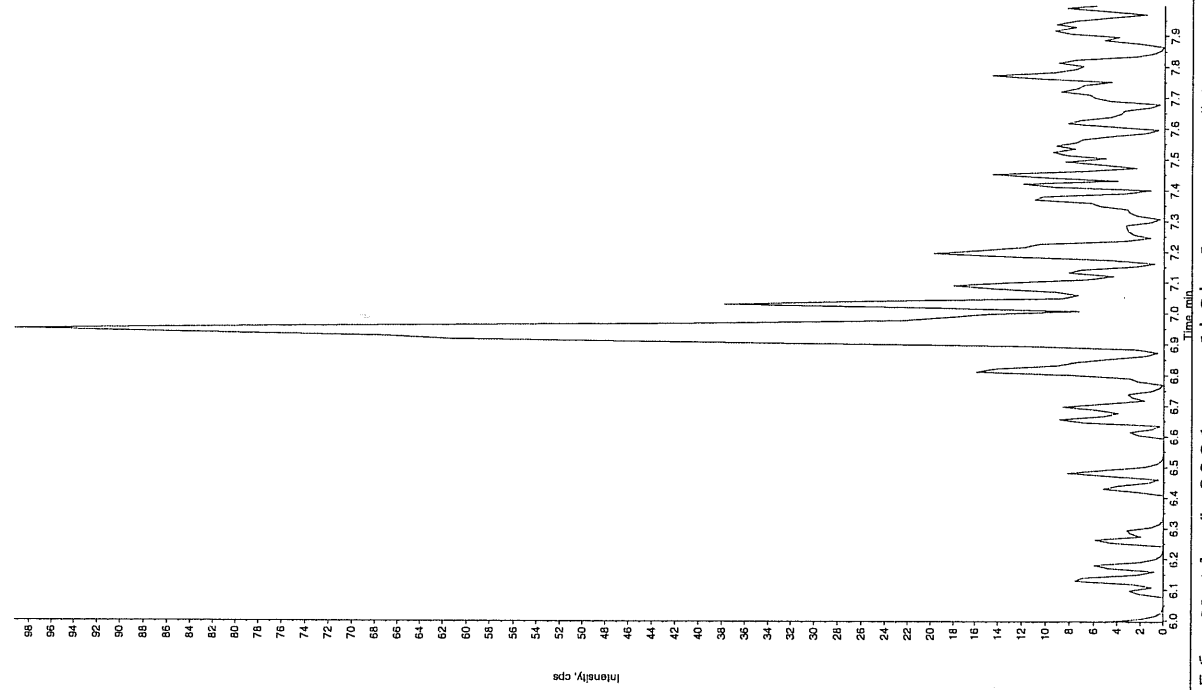
Sample Name: "246866005" Sample ID: "952706121.ER" File: "EXS03050076.wiff"  
Peak Name: "3S-Dinitroaniline" Mass(es): "182.046.0 amu"  
Comment: "LCX83212S" Annotation: ""

Sample Index: 1  
Sample Type: Unknown  
Concentration: N/A  
Calculated Conc: 0.00 ng/mL  
Acq. Date: 3/6/2010  
Acq. Time: 12:45:23 PM  
Modified: Yes



Sample Name: "246866005" Sample ID: "952706121.ER" File: "EXS03050076.wiff"  
Peak Name: "TATB" Mass(es): "257.2204.9 amu"  
Comment: "LCX83212S" Annotation: ""

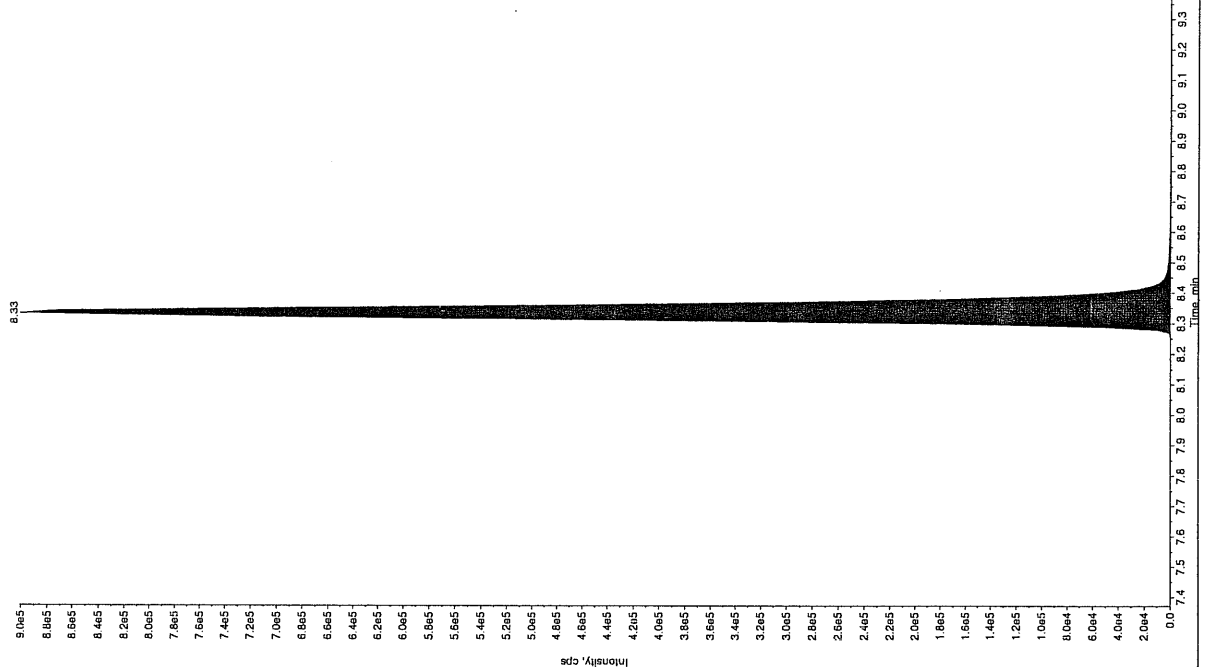
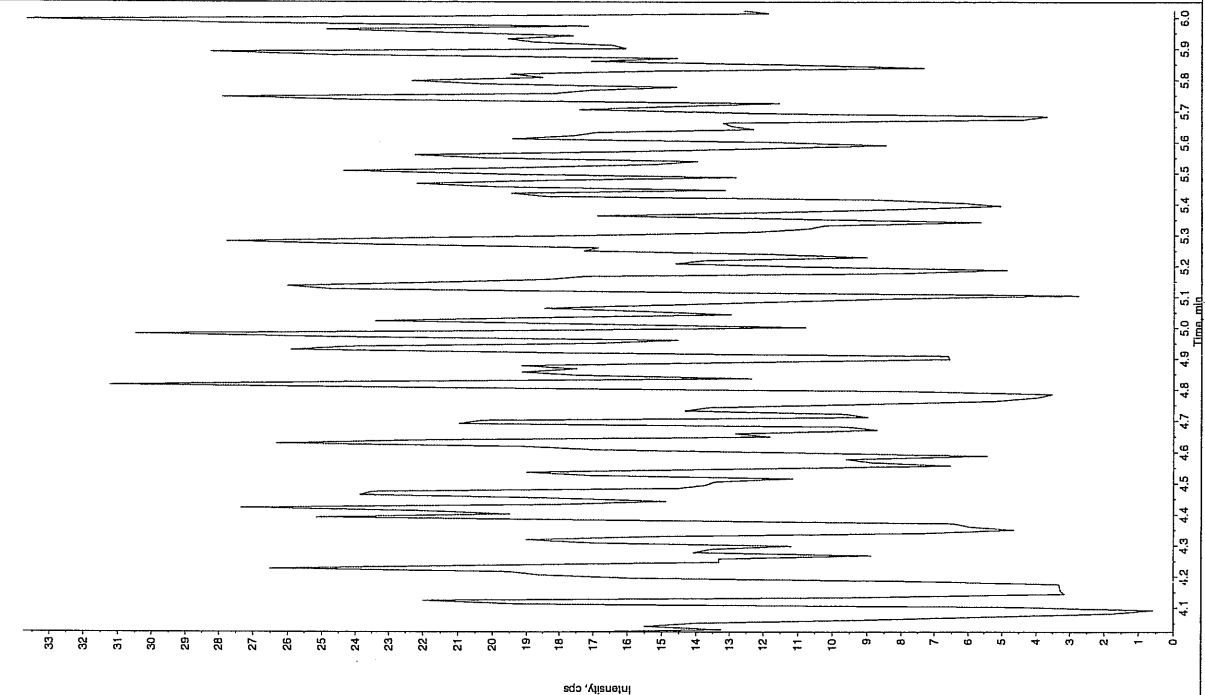
Sample Index: 1  
Sample Type: Unknown  
Concentration: N/A  
Calculated Conc: 0.00 ng/mL  
Acq. Date: 3/6/2010  
Acq. Time: 12:45:23 PM  
Modified: No



IL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

Sample Name: "246866005" Sample ID: "95270621ER" File: "EXS03050076.wif"  
 Peak Name: "26-Diamino-4-nitrotoluene" Mass(es): "166.046.0 amu"  
 Comment: "LCX83212S" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 3/6/2010  
 Acq. Time: 12:45:23 PM  
 Modified: No



Sample Name: "246866005" Sample ID: "95270621ER" File: "EXS03050076.wif"  
 Peak Name: "34-Dinitrotoluene" Mass(es): "192.1/151.9 amu"  
 Comment: "LCX83212S" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 248. ng/mL  
 Acq. Date: 3/6/2010  
 Acq. Time: 12:45:23 PM  
 Modified: No

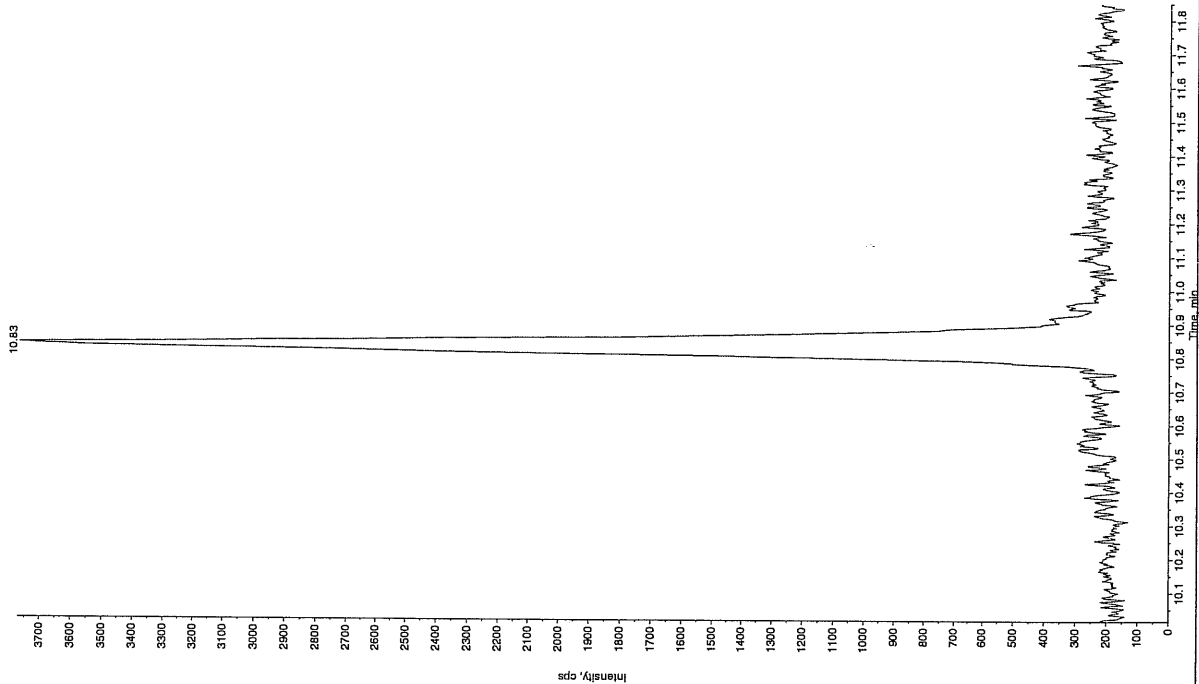
Algorithm: IntelliQuan - IQA  
 Peak Height: 1460.00 cps  
 Peak Width: 0.00 sec  
 Peak Width: 3 points  
 Window: 30.0 sec  
 Retention Time: 8.37 min  
 Relative RT: No

Type: Valley  
 Retention Time: 8.33 min  
 Counts: 3.10e+006  
 Height: 900926.331 cps  
 Retention Time: 8.22 min  
 Retention Time: 8.68 min

IL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

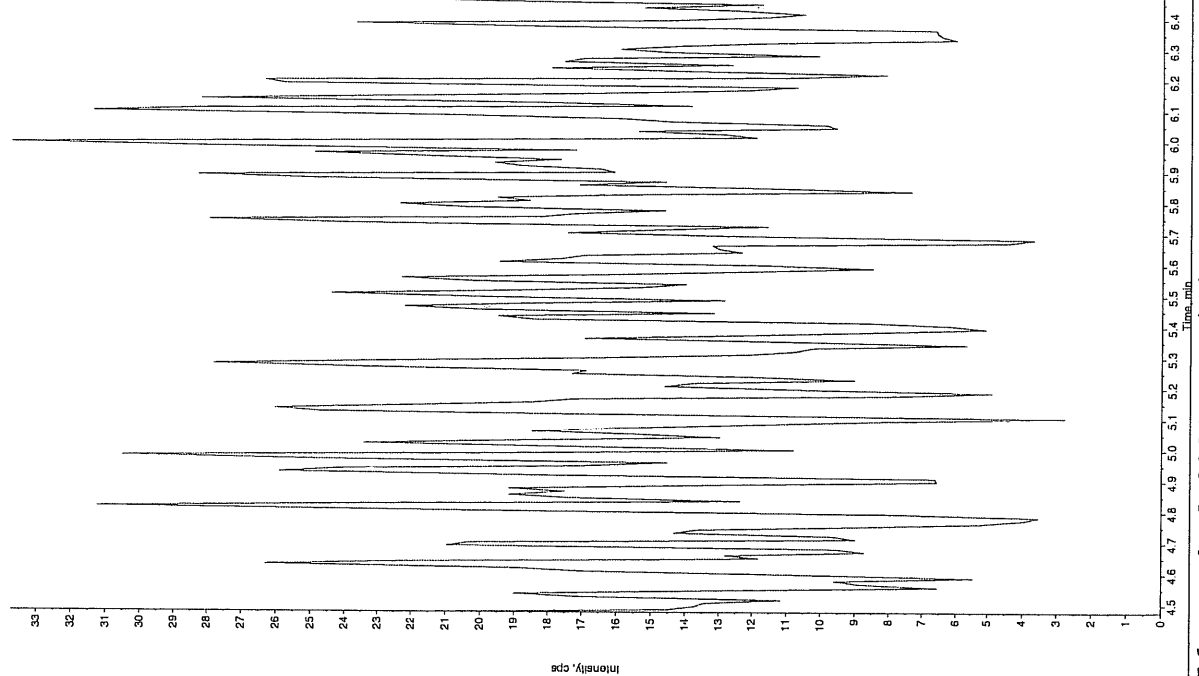
Sample Name: "246866005" Sample ID: "95270621ER" File: "EXS03050076.wif"  
 Peak Name: "tris(2-cresyl) phosphate" Mass(es): "369.1/91.0 amu"  
 Comment: "LCX8321S" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A ng/mL  
 Calculated Conc: 0.00  
 Acq. Date: 3/6/2010  
 Acq. Time: 12:45:23 PM  
 Modified: No



Sample Name: "246866005" Sample ID: "95270621ER" File: "EXS03050076.wif"  
 Peak Name: "24-Diamino-6-nitrotoluene" Mass(es): "156.0/46.0 amu"  
 Comment: "LCX8321S" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A ng/mL  
 Calculated Conc: 0.00  
 Acq. Date: 3/6/2010  
 Acq. Time: 12:45:23 PM  
 Modified: No



IL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8368

Lab Code: GEL

GEL Job No (SDG) 10-1758

Matrix: SOIL

GEL Sample ID: 246866006

Sample Amount 2

Moisture: 24.6

Amount Units g

Date Received: 11-FEB-10

Extraction Type Sonication

Extraction Batch ID: 952704

Concentrated Extract Volume (mL) 10

Date Extracted: 18-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0322056.wiff

Date Analyzed: 23-MAR-10 16:53

Units: ug/kg

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

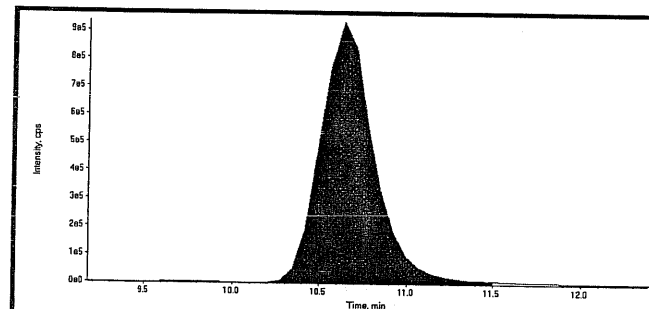
\*Concentration =

Instrument	X	<u>Concentrated Extract Volume</u>	X	Dilution
Value		<u>Sample Amount</u>		Factor

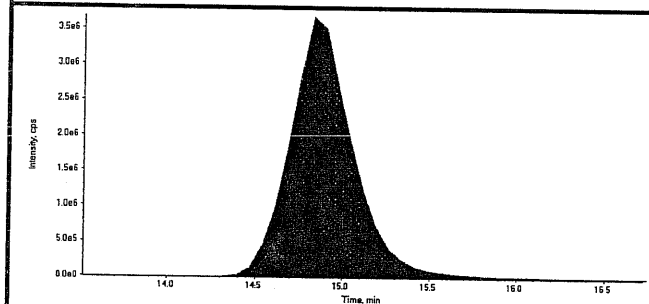
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 27/03/2010 1:31:00 PM  
LCMSMS#3

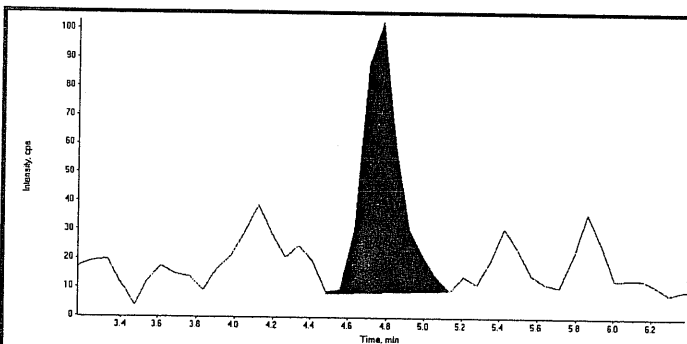
Data File	EXP0322056.wiff	Acquisition Date	3/23/2010 4:53:15 PM
Sample Name	246866006	Acquisition Method	8321_pntx.dam
Batch Dilution Analyst	952706 2 LER	Result Table	032210.rdb
Procedure Code	LCX8321_S	Sample Type	Unknown



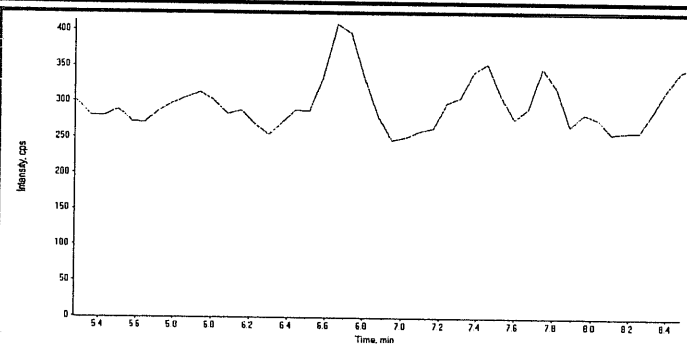
Compound Name:	13-Dinitrobenzene-d4 (172.1/46.1 amu)
Expected RT:	10.80
Actual RT:	10.60
Area Counts:	19900000.00
Manual Modification	No
Amount:	500.00(ng/mL)
Please refer to Form 8 for a list of Internal Standard Recoveries	



Compound Name:	26-Dinitrotoluene-d3 (185.0/155.0 amu)
Expected RT:	15.10
Actual RT:	14.80
Area Counts:	92700000.00
Manual Modification	No
Amount:	500.00(ng/mL)
Please refer to Form 8 for a list of Internal Standard Recoveries	



Compound Name:	HMX (341.2/46.0 amu)
Expected RT:	4.77
Actual RT:	4.77
Area Counts:	1.22e+003
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A



Compound Name:	RDX (267.0/46.1 amu)
Expected RT:	6.87
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A

*LER*  
*3/28/10*  
*dhmc*  
*04/02/10*

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 27/03/2010 1:31:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0322056.wiff	<b>Acquisition Date</b>	3/23/2010 4:53:15 PM
<b>Sample Name</b>	246866006	<b>Acquisition Method</b>	8321_pntx.dam
<b>Batch Dilution Analyst</b>	952706 2 LER	<b>Result Table</b>	032210.rdb
<b>Procedure Code</b>	LCX8321_S	<b>Sample Type</b>	Unknown

	<b>Compound Name:</b>	135-Trinitrobenzene (213.0/182.8 amu)
	Expected RT:	9.19
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	13-Dinitrobenzene (168.0/137.9 amu)
	Expected RT:	10.9
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	Tetryl (241.0/180.8 amu)
	Expected RT:	11.1
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

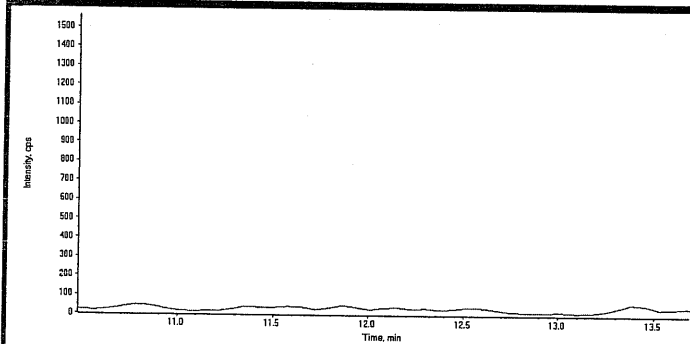
	<b>Compound Name:</b>	246-Trinitrotoluene (227.1/209.8 amu)
	Expected RT:	13.5
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A



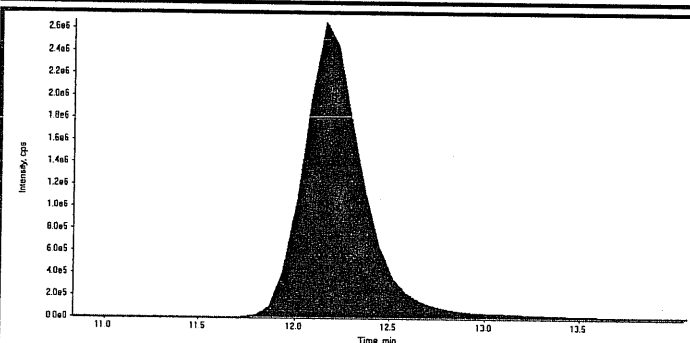
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 27/03/2010 1:31:00 PM  
LCMSMS#3

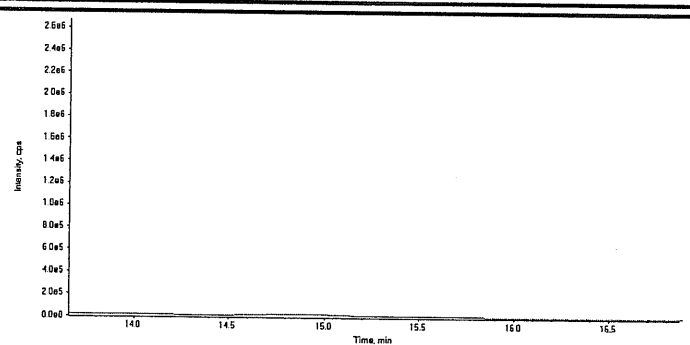
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<b>Sample Name</b>	246866006	<b>Acquisition Method</b>	8321_pntx.dam
<b>Batch Dilution Analyst</b>	952706 2 LER	<b>Result Table</b>	032210.rdb
<b>Procedure Code</b>	LCX8321_S	<b>Sample Type</b>	Unknown



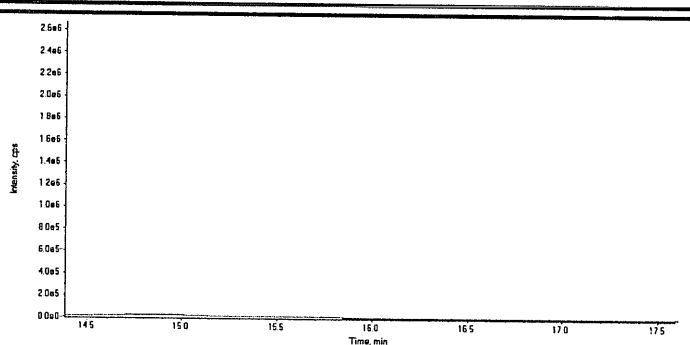
<b>Compound Name:</b>	Nitrobenzene (123.0/46.0 amu)
Expected RT:	12.1
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A



<b>Compound Name:</b>	34-dinitrotoluene (182.0/46.0 amu)
Expected RT:	12.4
Actual RT:	12.2
Area Counts:	5.91e+007
Manual Modification	No
Amount:	246. (ng/mL)
% Accuracy:	N/A



<b>Compound Name:</b>	26-dinitrotoluene (182.0/46.0 amu)
Expected RT:	15.3
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A



<b>Compound Name:</b>	24-dinitrotoluene (182.0/46.0 amu)
Expected RT:	16.0
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 27/03/2010 1:31:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0322056.wiff	<b>Acquisition Date</b>	3/23/2010 4:53:15 PM
<b>Sample Name</b>	246866006	<b>Acquisition Method</b>	8321_pntx.dam
<b>Batch Dilution Analyst</b>	952706 2 LER	<b>Result Table</b>	032210.rdb
<b>Procedure Code</b>	LCX8321_S	<b>Sample Type</b>	Unknown

	<b>Compound Name:</b>	4-Amino-26-dinitrotoluene (197.0/167.0 amu)
	Expected RT:	13.5
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	2-Amino-46-dinitrotoluene (197.0/180.0 amu)
	Expected RT:	14.6
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	2-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	18.2
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	4-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	19.4
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 27/03/2010 1:31:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0322056.wiff	<b>Acquisition Date</b>	3/23/2010 4:53:15 PM
<b>Sample Name</b>	246866006	<b>Acquisition Method</b>	8321_pntx.dam
<b>Batch Dilution Analyst</b>	952706 2 LER	<b>Result Table</b>	032210.rdb
<b>Procedure Code</b>	LCX8321_S	<b>Sample Type</b>	Unknown

	<b>Compound Name:</b>	3-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	20.8
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	PETN (361.1/62.0 amu)
	Expected RT:	20.4
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8368

Lab Code: GEL

GEL Job No (SDG) 10-1758

Matrix: SOIL

GEL Sample ID: 246866006

Sample Amount 2

Moisture: 24.6

Amount Units g

Date Received: 11-FEB-10

Extraction Type Sonication

Extraction Batch ID: 952704

Concentrated Extract Volume (mL) 10

Date Extracted: 18-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS03050077.wiff

Date Analyzed: 06-MAR-10 13:01

Units: ug/kg

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

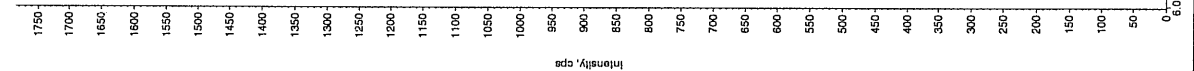
\*Concentration =

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

San 3/9/10

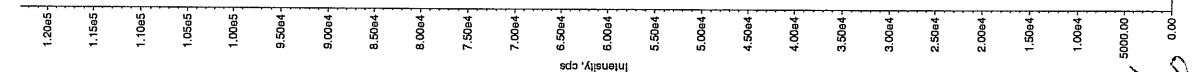
Sample Name: "246866006" Sample ID: "95270621ER" File: "EXS03050077.wif"  
 Peak Name: "TATB" Mass(es): "237.22049 amu"  
 Comment: "LCX83212S" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 3/6/2010  
 Acq. Time: 1:01:05 PM  
 Modified: No



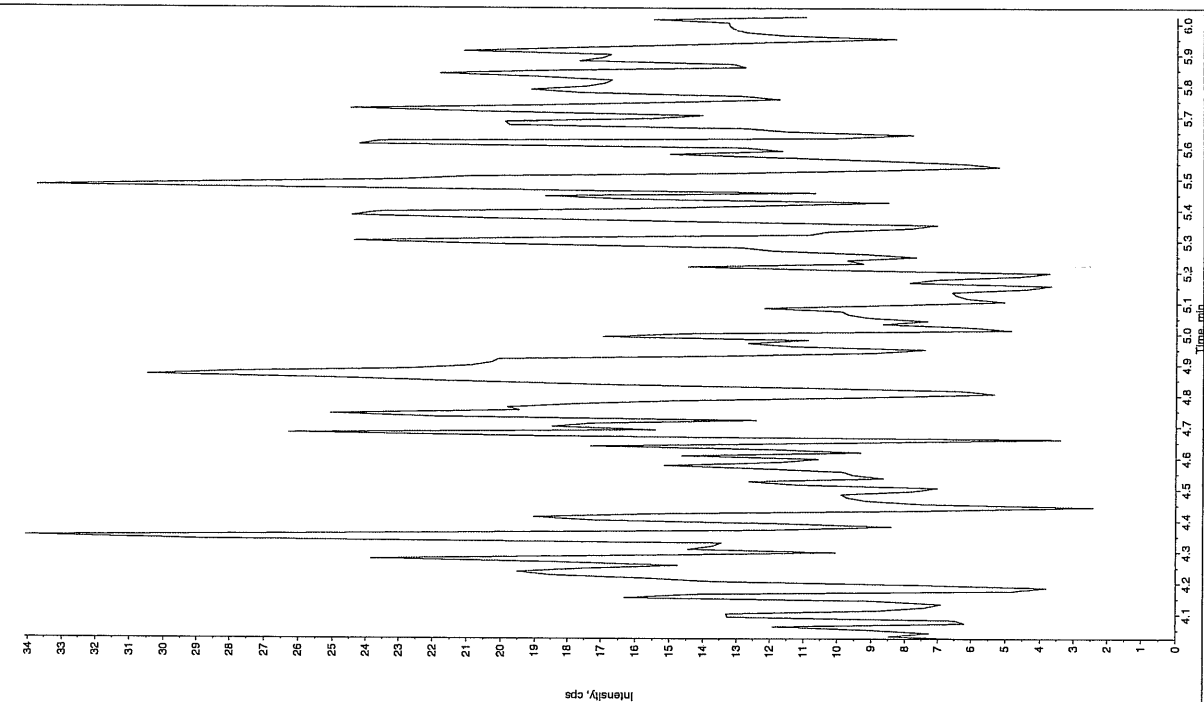
Sample Name: "246866006" Sample ID: "95270621ER" File: "EXS03050077.wif"  
 Peak Name: "35-Dinitroaniline" Mass(es): "182.046.0 amu"  
 Comment: "LCX83212S" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 3/6/2010  
 Acq. Time: 1:01:05 PM  
 Modified: Yes

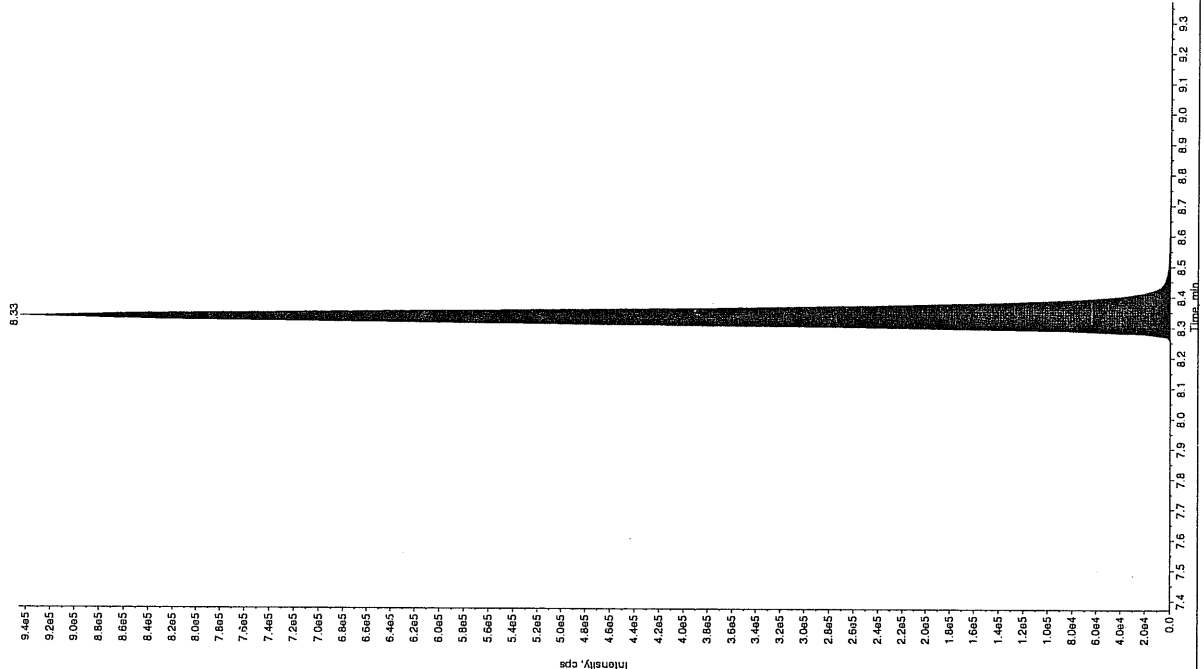


Method 8321A-Modified LCMSMS#4

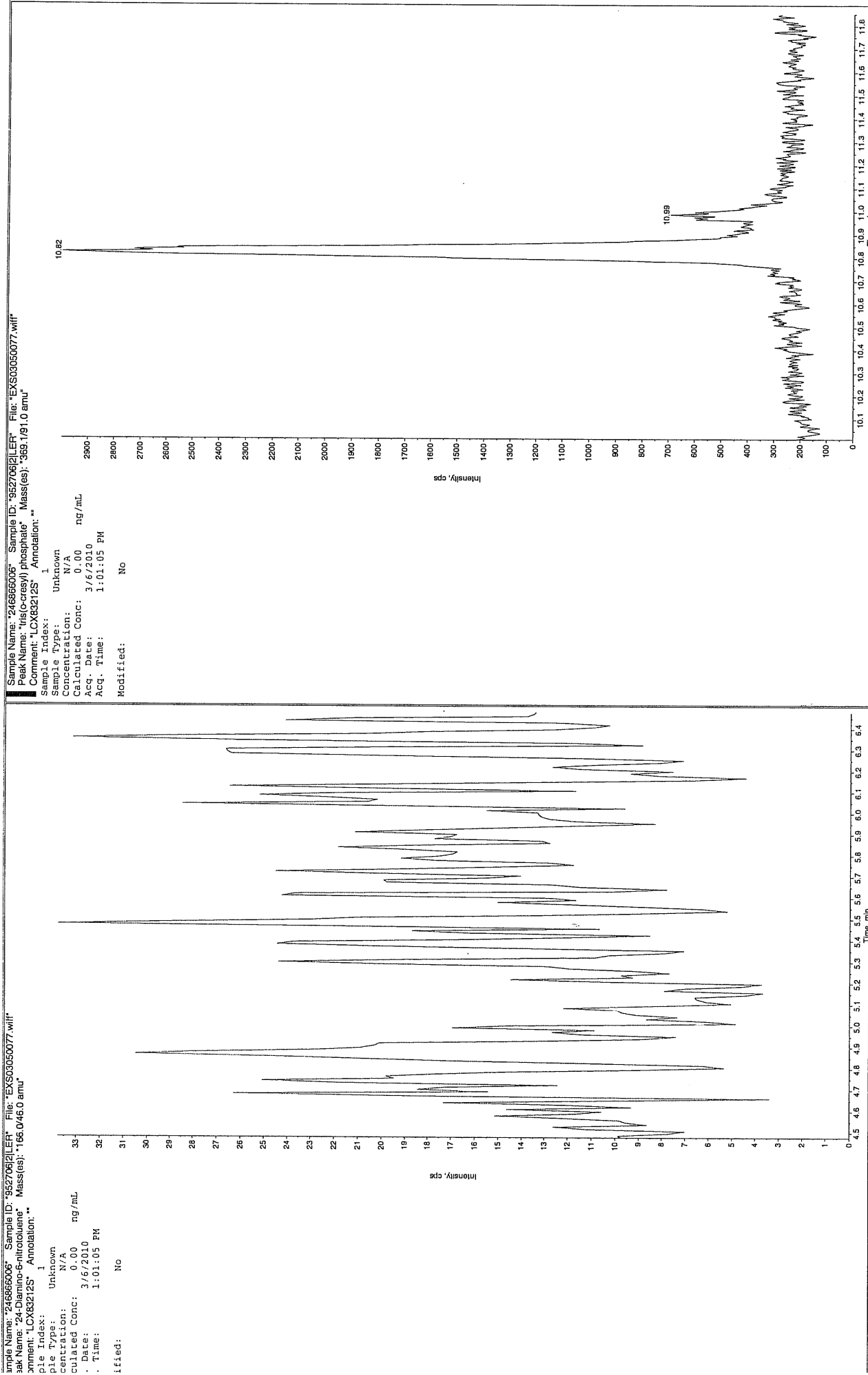
Ann 03/09/10



Sample Name: "246866006" Sample ID: "95270621ER" File: "EXS03050077.wif"  
Peak Name: "26-Diamino-4-nitrotoluene" Mass(es): "166.0/46.0 amu"  
Comment: "LCX83212S" Annotation: ""



Sample Name: "246866006" Sample ID: "9527062|LEFT" File: "EXS03050077.wiff"  
Peak Name: "34-Dinitrotoluene" Mass(es): "182.1/151.9 amu"  
Comment: "LCX83212S" Annotation: ""



EL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8340

Lab Code: GEL

GEL Job No (SDG) 10-1758

Matrix: SOIL

GEL Sample ID: 246866007

Sample Amount 2

Moisture: 24.2

Amount Units g

Date Received: 11-FEB-10

Extraction Type Sonication

Extraction Batch ID: 952704

Concentrated Extract Volume (mL) 10

Date Extracted: 18-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0322057.wiff

Date Analyzed: 23-MAR-10 17:19

Units: ug/kg

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

\*Concentration =

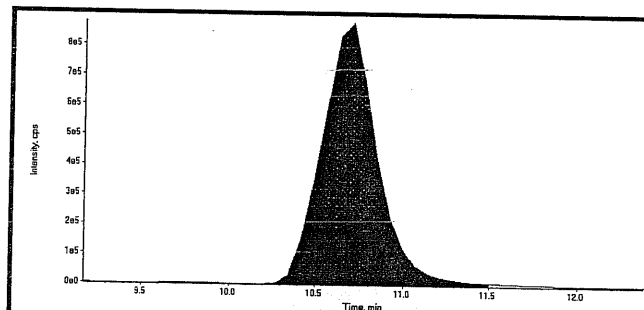
Instrument	X	<u>Concentrated Extract Volume</u>	X	Dilution
Value		<u>Sample Amoun</u>		Factor



GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

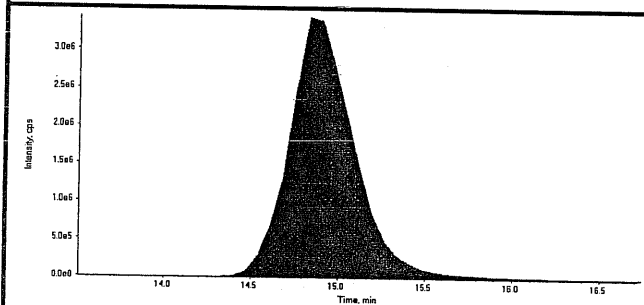
Printed: 27/03/2010 1:31:00 PM  
LCMSMS#3

Data File	EXP0322057.wiff	Acquisition Date	3/23/2010 5:19:42 PM
Sample Name	246866007	Acquisition Method	8321_pntx.dam
Batch Dilution Analyst	952706 2 LER	Result Table	032210.rdb
Procedure Code	LCX8321_S	Sample Type	Unknown



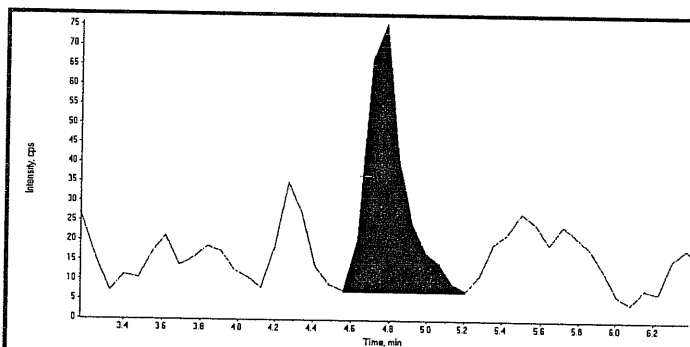
Compound Name:	13-Dinitrobenzene-d4 (172.1/46.1 amu)
Expected RT:	10.80
Actual RT:	10.70
Area Counts:	19200000.00
Manual Modification	No
Amount:	500.00(ng/mL)

Please refer to Form 8 for a list of Internal Standard Recoveries

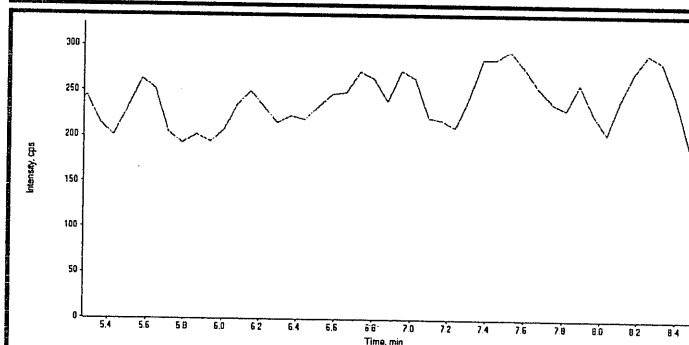


Compound Name:	26-Dinitrotoluene-d3 (185.0/155.0 amu)
Expected RT:	15.10
Actual RT:	14.80
Area Counts:	88500000.00
Manual Modification	No
Amount:	500.00(ng/mL)

Please refer to Form 8 for a list of Internal Standard Recoveries



Compound Name:	HMX (341.2/46.0 amu)
Expected RT:	4.77
Actual RT:	4.77
Area Counts:	9.07e+002
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A



Compound Name:	RDX (267.0/46.1 amu)
Expected RT:	6.87
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A

LER  
3/28/10

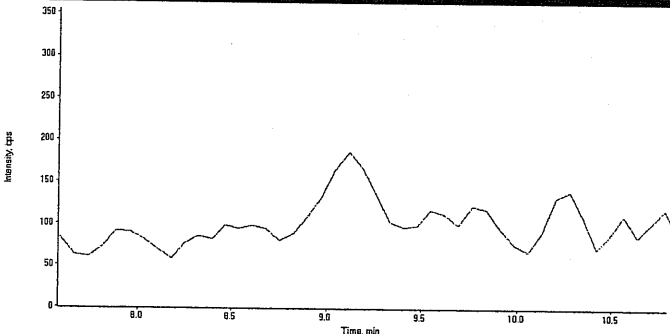
4/1/10

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

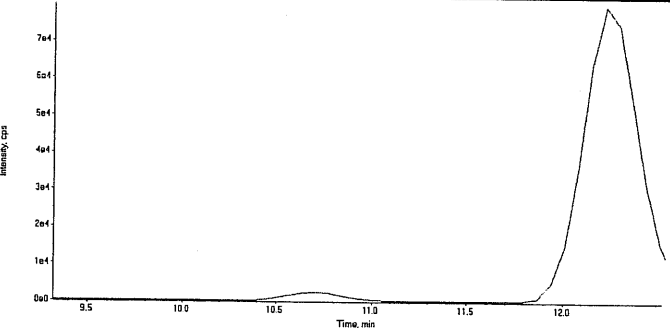
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LCMSMS#3

<b>Data File</b>	EXP0322057.wiff	<b>Acquisition Date</b>	3/23/2010 5:19:42 PM
<b>Sample Name</b>	246866007	<b>Acquisition Method</b>	8321_pntx.dam
<b>Batch Dilution Analyst</b>	952706 2 LER	<b>Result Table</b>	032210.rdb
<b>Procedure Code</b>	LCX8321_S	<b>Sample Type</b>	Unknown

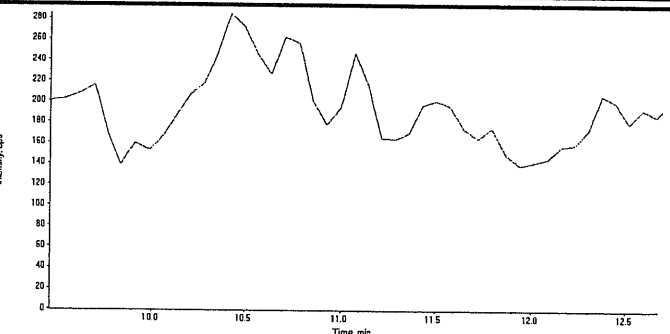
  

	<b>Compound Name:</b>	135-Trinitrobenzene (213.0/182.8 amu)
	Expected RT:	9.19
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

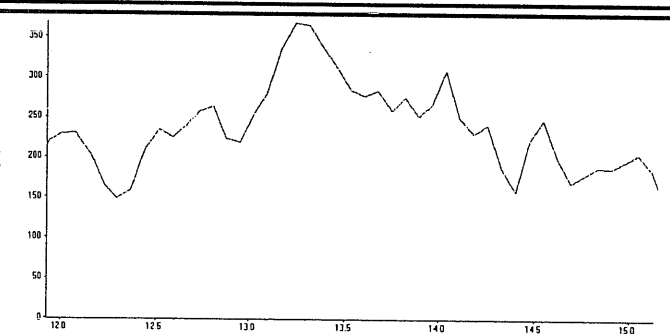
  

	<b>Compound Name:</b>	13-Dinitrobenzene (168.0/137.9 amu)
	Expected RT:	10.9
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	Tetryl (241.0/180.8 amu)
	Expected RT:	11.1
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	246-Trinitrotoluene (227.1/209.8 amu)
	Expected RT:	13.5
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 27/03/2010 1:31:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0322057.wiff	<b>Acquisition Date</b>	3/23/2010 5:19:42 PM
<b>Sample Name</b>	246866007	<b>Acquisition Method</b>	8321_pntx.dam
<b>Batch Dilution Analyst</b>	952706 2 LER	<b>Result Table</b>	032210.rdb
<b>Procedure Code</b>	LCX8321_S	<b>Sample Type</b>	Unknown

	<b>Compound Name:</b>	Nitrobenzene (123.0/46.0 amu)
	Expected RT:	12.1
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	34-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	12.4
	Actual RT:	12.2
	Area Counts:	5.50e+007
	Manual Modification	No
	Amount:	240. (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	26-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	15.3
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

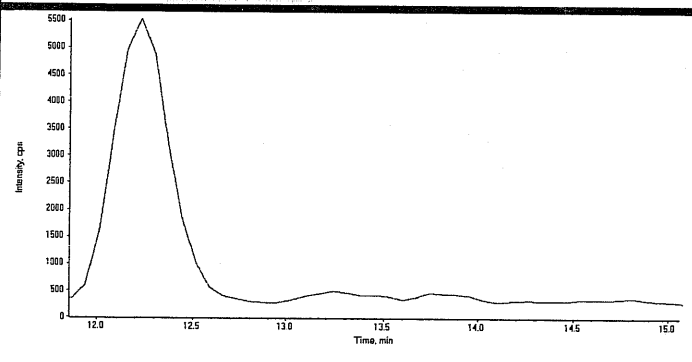
	<b>Compound Name:</b>	24-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	16.0
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

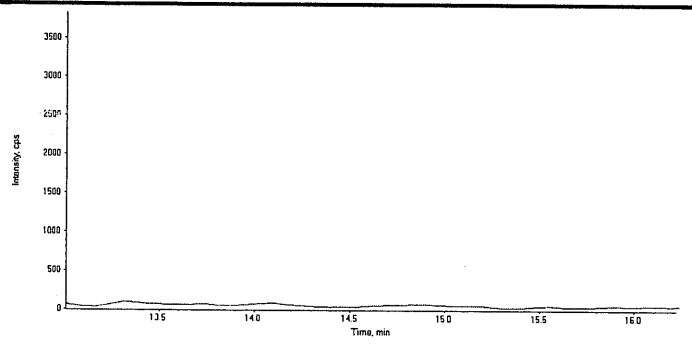
Printed: 27/03/2010 1:31:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0322057.wiff	<b>Acquisition Date</b>	3/23/2010 5:19:42 PM
<b>Sample Name</b>	246866007	<b>Acquisition Method</b>	8321_pntx.dam
<b>Batch Dilution Analyst</b>	952706 2 LER	<b>Result Table</b>	032210.rdb
<b>Procedure Code</b>	LCX8321_S	<b>Sample Type</b>	Unknown

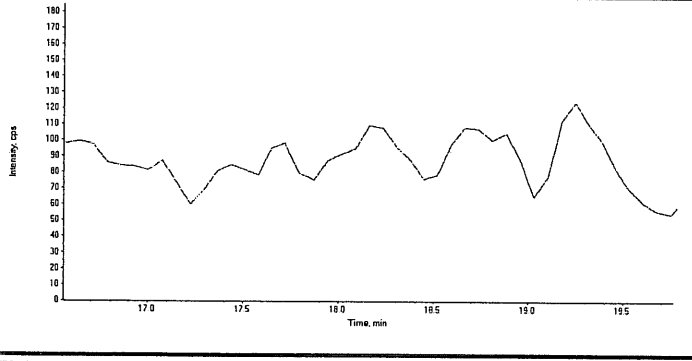
  

	<b>Compound Name:</b>	4-Amino-26-dinitrotoluene (197.0/167.0 amu)
	Expected RT:	13.5
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

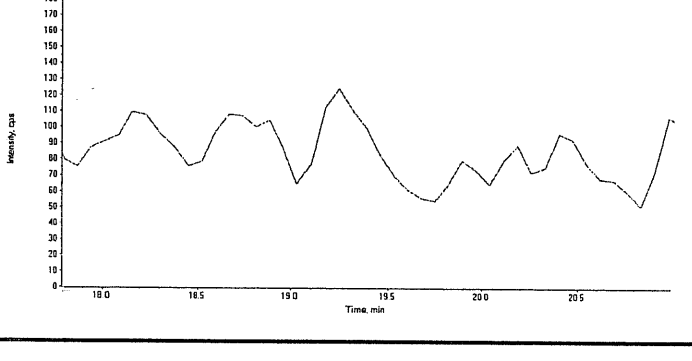
  

	<b>Compound Name:</b>	2-Amino-46-dinitrotoluene (197.0/180.0 amu)
	Expected RT:	14.6
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	2-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	18.2
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	4-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	19.4
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 27/03/2010 1:31:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0322057.wiff	<b>Acquisition Date</b>	3/23/2010 5:19:42 PM
<b>Sample Name</b>	246866007	<b>Acquisition Method</b>	8321_pntx.dam
<b>Batch Dilution Analyst</b>	952706 2 LER	<b>Result Table</b>	032210.rdb
<b>Procedure Code</b>	LCX8321_S	<b>Sample Type</b>	Unknown

	<b>Compound Name:</b>	3-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	20.8
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	PETN (361.1/62.0 amu)
	Expected RT:	20.4
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8340

Lab Code: GEL

GEL Job No (SDG) 10-1758

Matrix: SOIL

GEL Sample ID: 246866007

Sample Amount 2

Moisture: 24.2

Amount Units g

Date Received: 11-FEB-10

Extraction Type Sonication

Extraction Batch ID: 952704

Concentrated Extract Volume (mL) 10

Date Extracted: 18-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS03050078.wiff

Date Analyzed: 06-MAR-10 13:16

Units: ug/kg

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

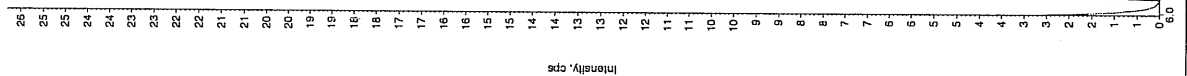
\*Concentration =

Instrument	X	<u>Concentrated Extract Volume</u>	X	Dilution
Value		Sample Amoun		Factor

Jan 30/10

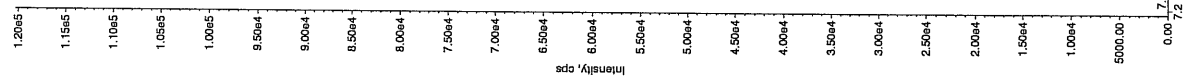
Sample Name: "246866007" Sample ID: "95270621LER" File: "EXS03050078.wif"  
 Peak Name: "TATB" Mass(es): "257.2/204.9 amu"  
 Comment: "LCX83212S" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: 0.00 ng/mL  
 Calculated Conc: 3/6/2010  
 Acq. Date: 1:16:47 PM  
 Acq. Time: 1:16:47 PM  
 Modified: No

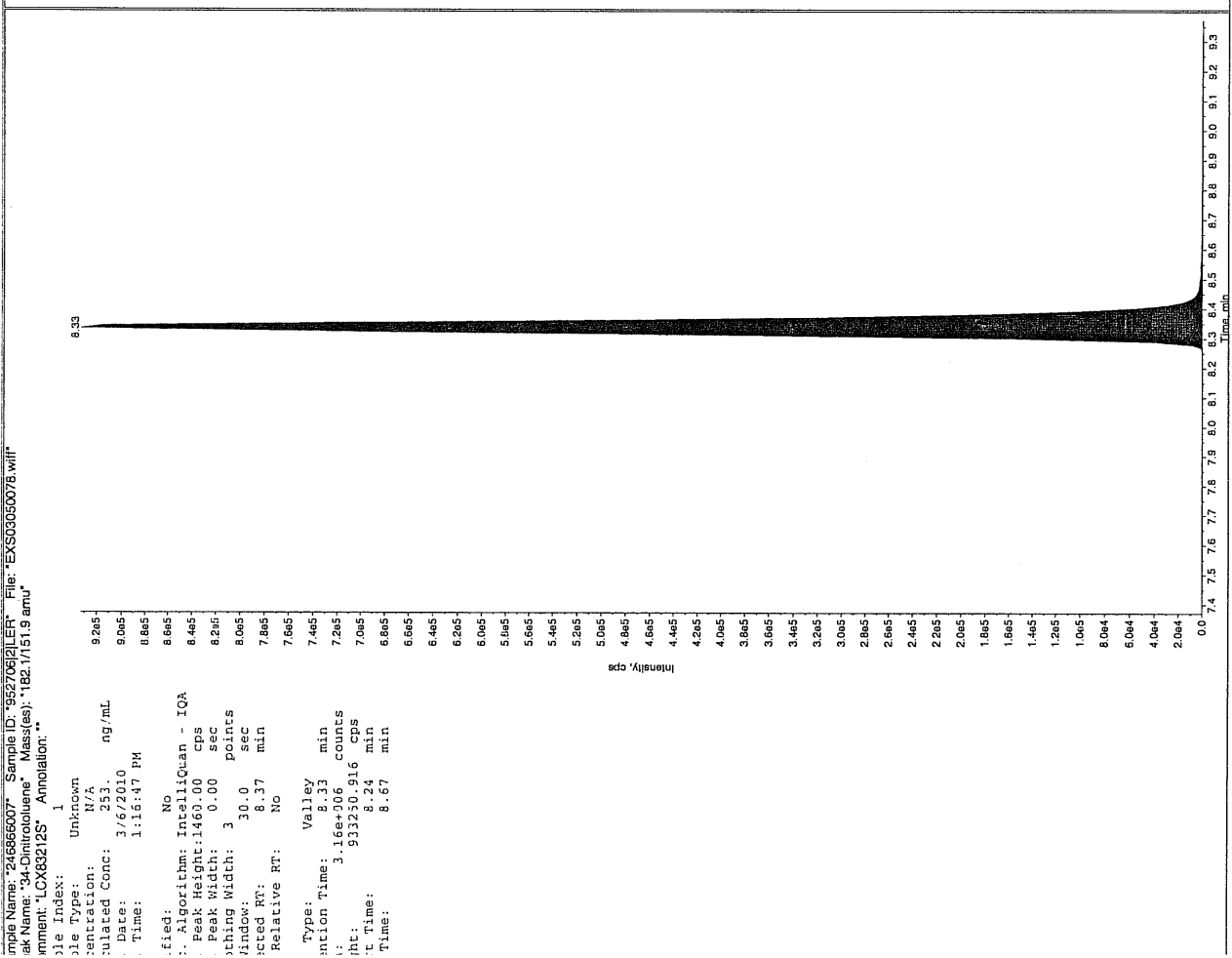
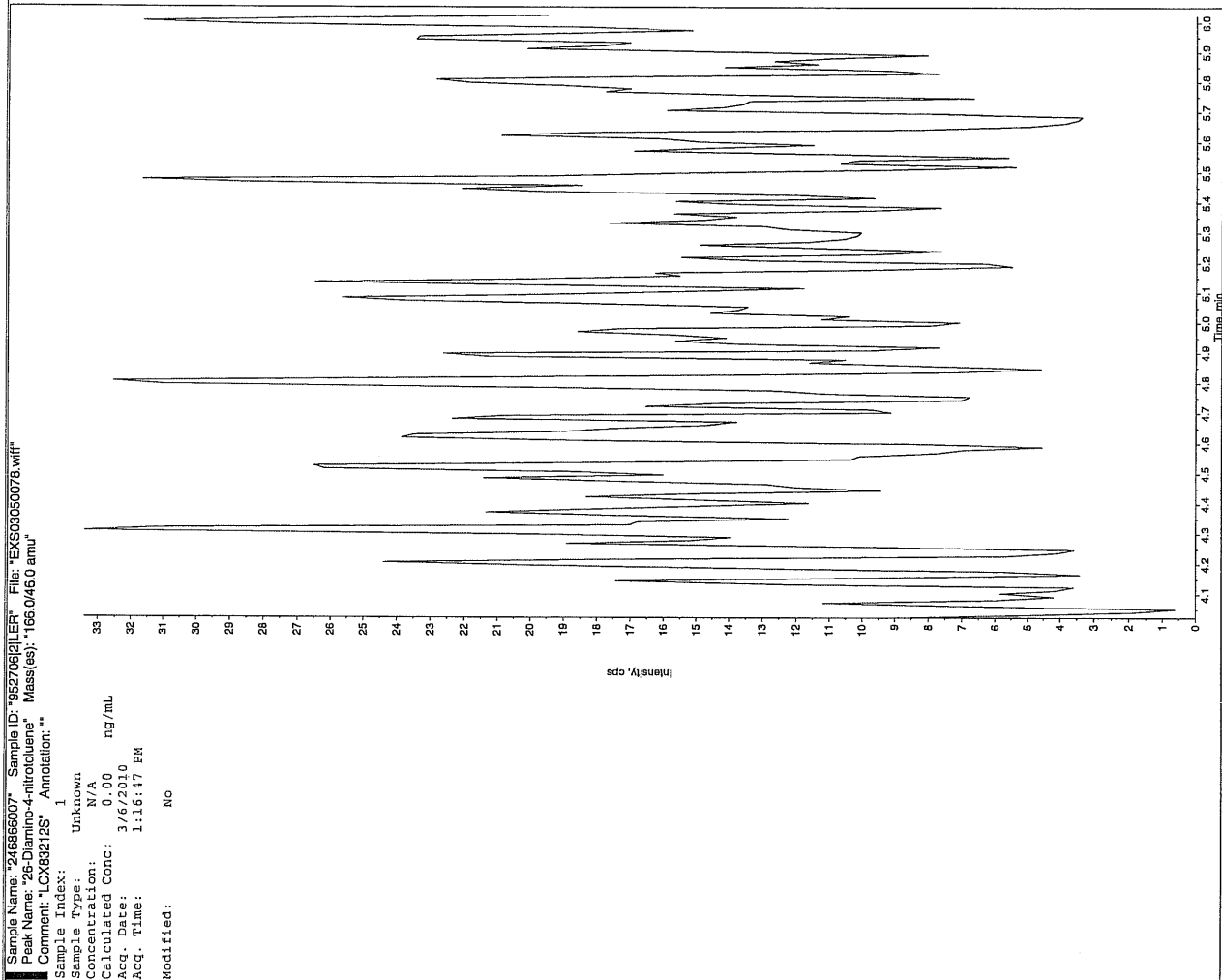


Sample Name: "246866007" Sample ID: "95270621LER" File: "EXS03050078.wif"  
 Peak Name: "35-Dinitroaniline" Mass(es): "182.0/46.0 amu"  
 Comment: "LCX83212S" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 3/6/2010  
 Acq. Time: 1:16:47 PM  
 Modified: Yes

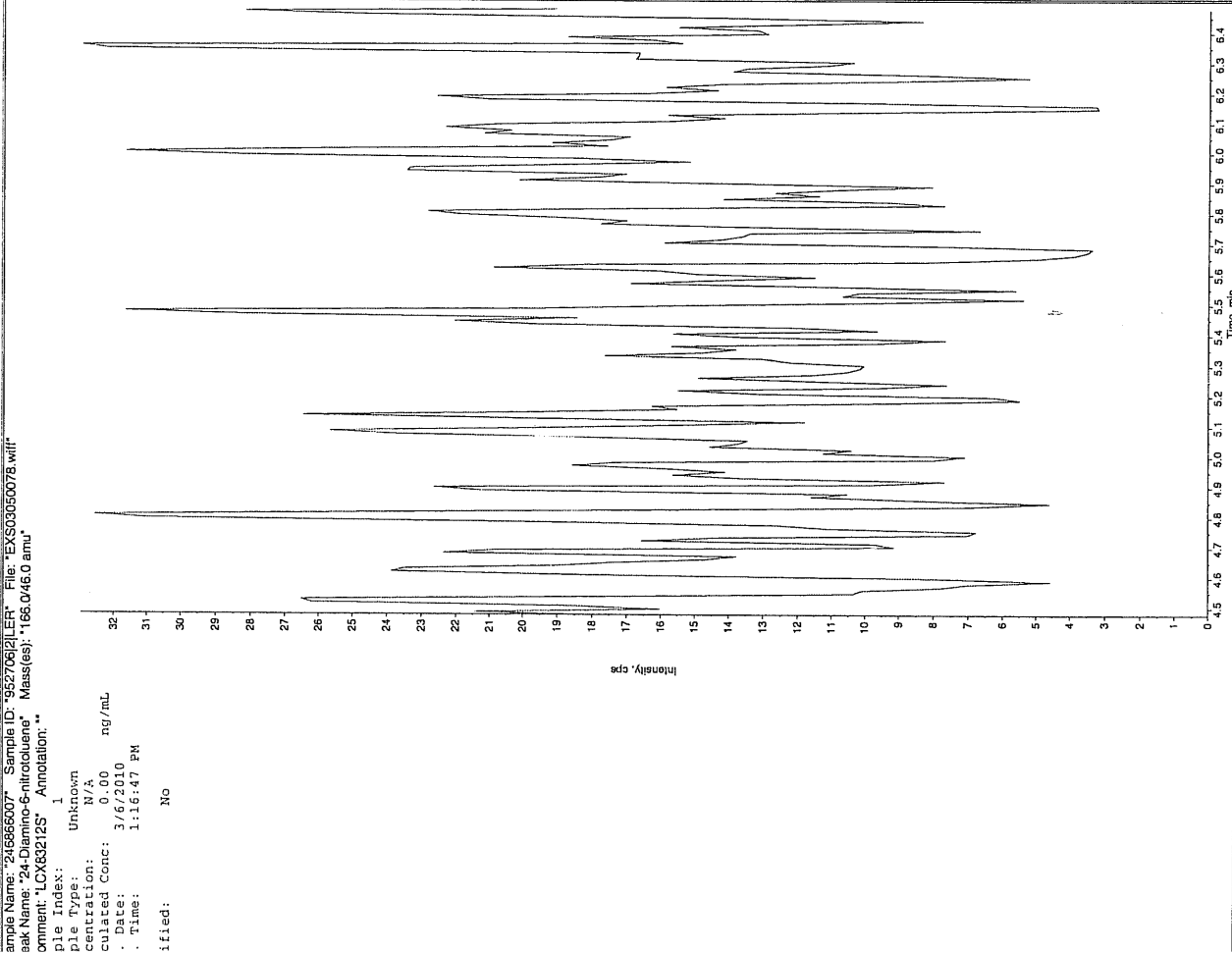
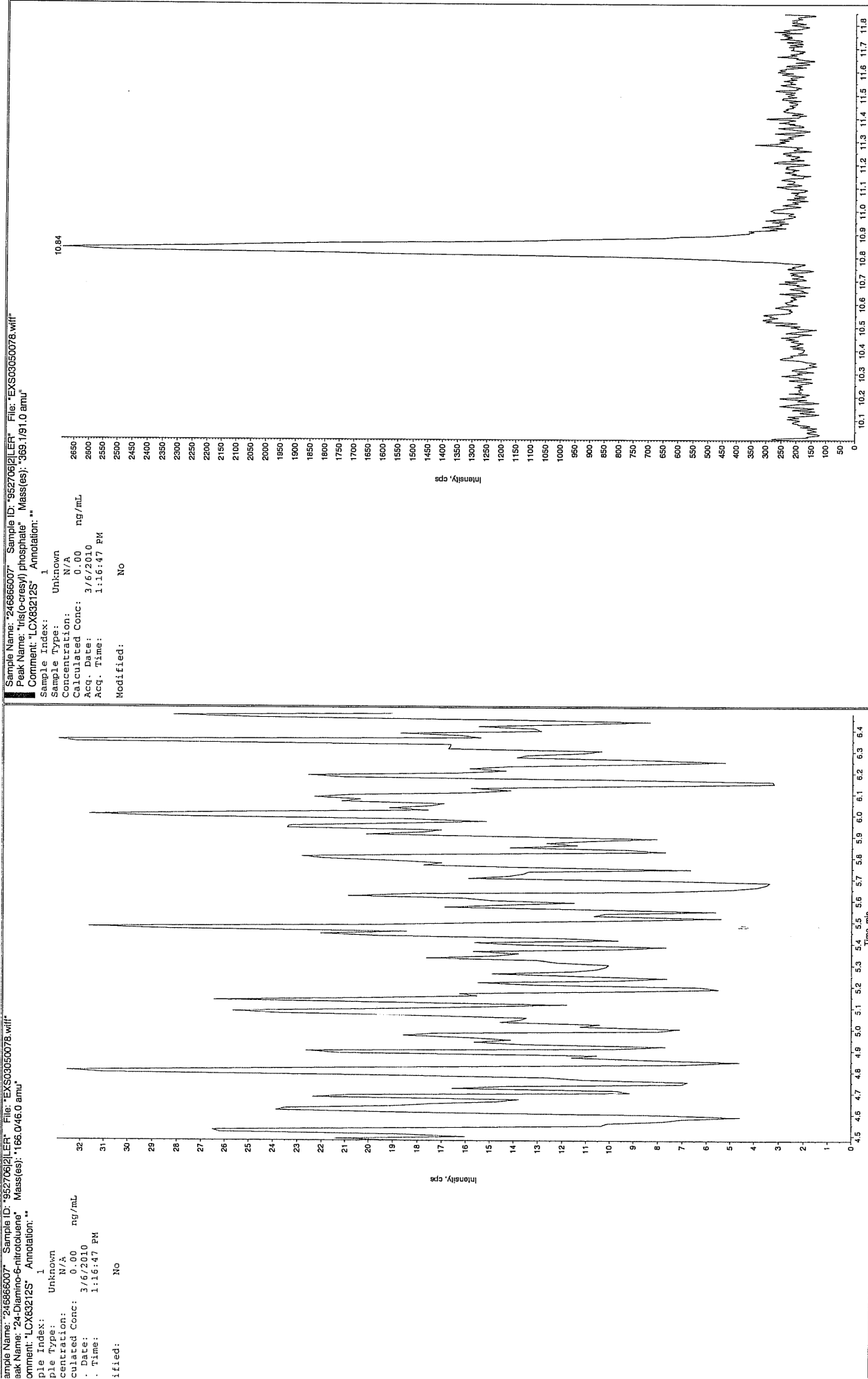


Jan 03/09/10



LL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4





EL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8341

Lab Code: GEL

GEL Job No (SDG) 10-1758

Matrix: SOIL

GEL Sample ID: 246866008

Sample Amount 2

Moisture: 7.6

Amount Units g

Date Received: 11-FEB-10

Extraction Type Sonication

Extraction Batch ID: 952704

Concentrated Extract Volume (mL) 10

Date Extracted: 18-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0322061.wiff

Date Analyzed: 23-MAR-10 19:05

Units: ug/kg

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

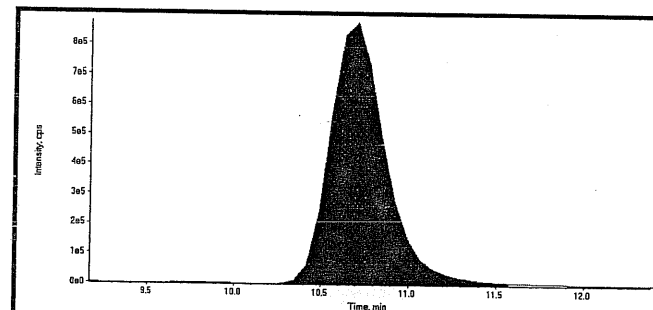
\*Concentration =

Instrument	X	<u>Concentrated Extract Volume</u>	X	Dilution
Value		<u>Sample Amount</u>		Factor

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

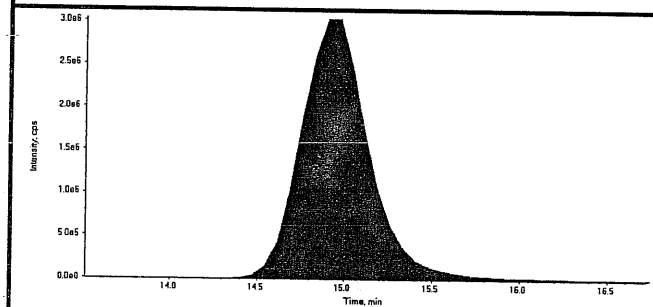
Printed: 27/03/2010 1:31:00 PM  
LCMSMS#3

Data File	EXP0322061.wiff	Acquisition Date	3/23/2010 7:05:29 PM
Sample Name	246866008	Acquisition Method	8321_pntx.dam
Batch Dilution Analyst	952706 2 LER	Result Table	032210.rdb
Procedure Code	LCX8321_S	Sample Type	Unknown



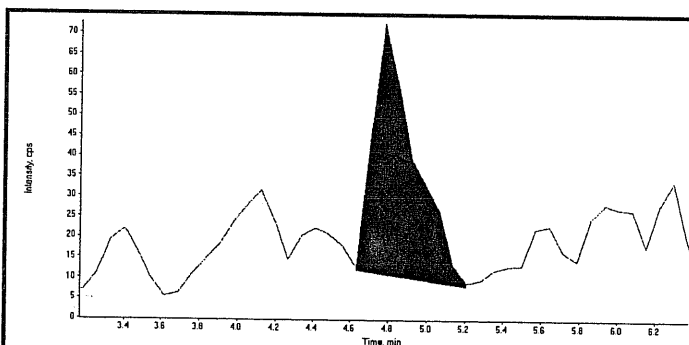
Compound Name:	13-Dinitrobenzene-d4 (172.1/46.1 amu)
Expected RT:	10.80
Actual RT:	10.70
Area Counts:	19400000.00
Manual Modification	No
Amount:	500.00(ng/mL)

Please refer to Form 8 for a list of Internal Standard Recoveries

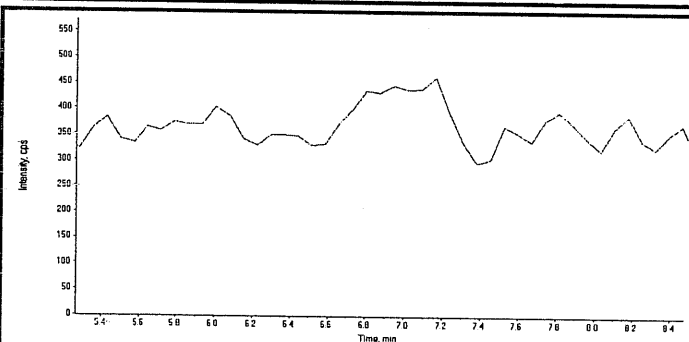


Compound Name:	26-Dinitrotoluene-d3 (185.0/155.0 amu)
Expected RT:	15.10
Actual RT:	14.90
Area Counts:	83300000.00
Manual Modification	No
Amount:	500.00(ng/mL)

Please refer to Form 8 for a list of Internal Standard Recoveries



Compound Name:	HMX (341.2/46.0 amu)
Expected RT:	4.77
Actual RT:	4.77
Area Counts:	9.29e+002
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A



Compound Name:	RDX (267.0/46.1 amu)
Expected RT:	6.87
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A

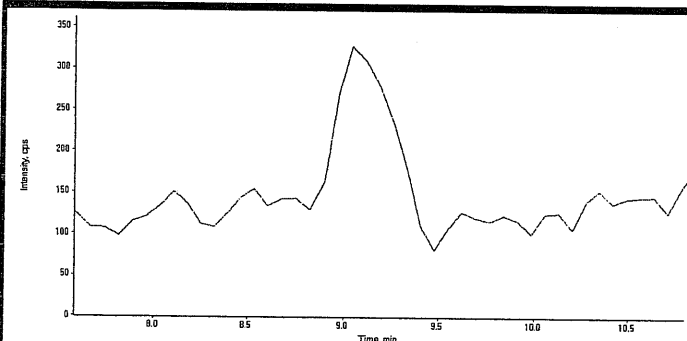
LCN  
3/28/10

HW  
04/02/10

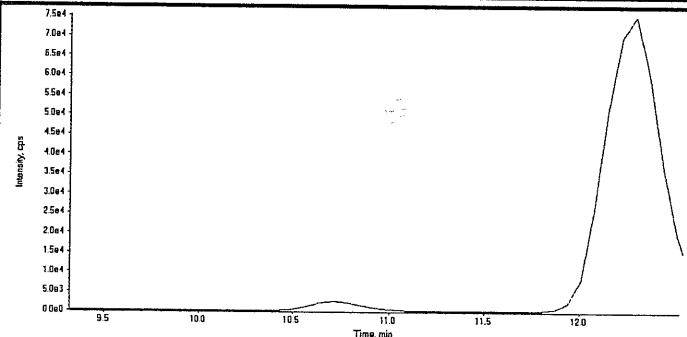
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 27/03/2010 1:31:00 PM  
LCMSMS#3

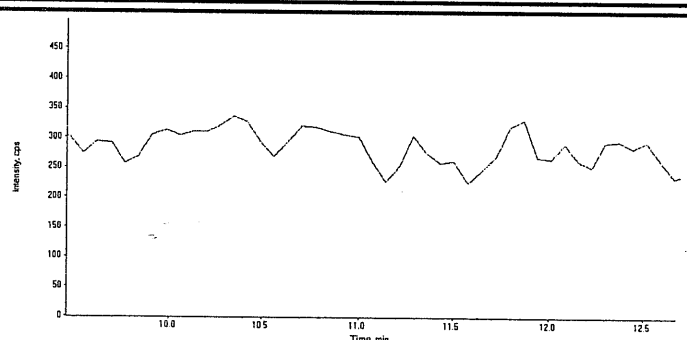
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<b>Sample Name</b>	246866008	<b>Acquisition Method</b>	8321_pntx.dam
<b>Batch Dilution Analyst</b>	952706 2 LER	<b>Result Table</b>	032210.rdb
<b>Procedure Code</b>	LCX8321_S	<b>Sample Type</b>	Unknown



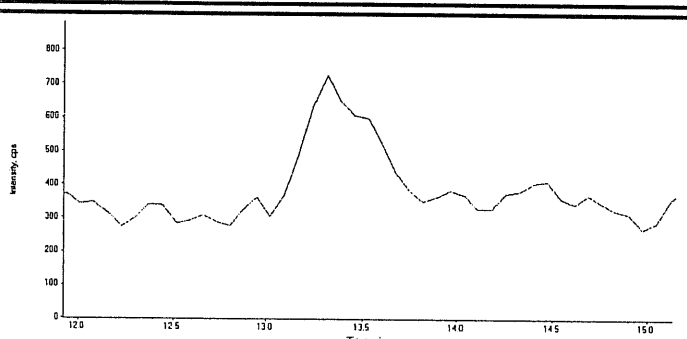
<b>Compound Name:</b>	135-Trinitrobenzene (213.0/182.8 amu)
Expected RT:	9.19
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A



<b>Compound Name:</b>	13-Dinitrobenzene (168.0/137.9 amu)
Expected RT:	10.9
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A



<b>Compound Name:</b>	Tetryl (241.0/180.8 amu)
Expected RT:	11.1
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A

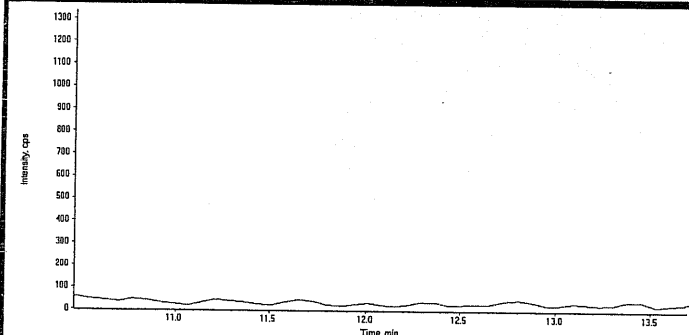


<b>Compound Name:</b>	246-Trinitrotoluene (227.1/209.8 amu)
Expected RT:	13.5
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A

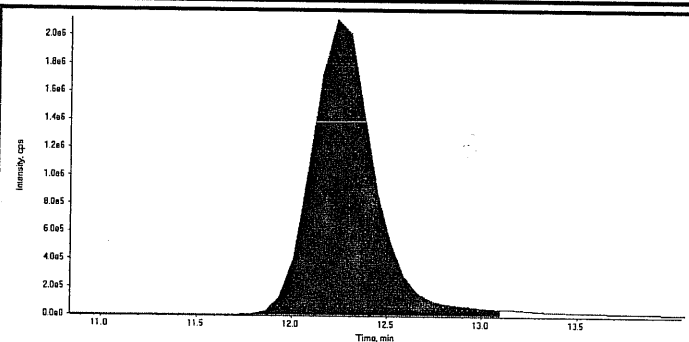
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 27/03/2010 1:31:00 PM  
LCMSMS#3

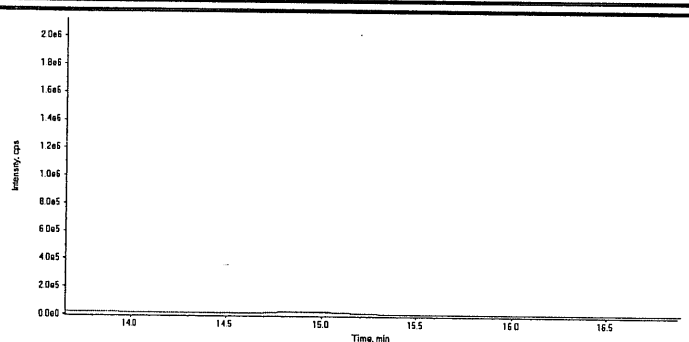
Data File	EXP0322061.wiff	Acquisition Date	3/23/2010 7:05:29 PM
Sample Name	246866008	Acquisition Method	8321_pntx.dam
Batch Dilution Analyst	952706 2 LER	Result Table	032210.rdb
Procedure Code	LCX8321_S	Sample Type	Unknown



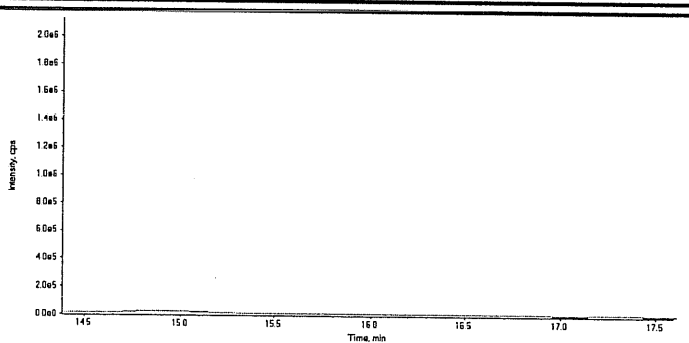
Compound Name:	Nitrobenzene (123.0/46.0 amu)
Expected RT:	12.1
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A



Compound Name:	34-dinitrotoluene (182.0/46.0 amu)
Expected RT:	12.4
Actual RT:	12.2
Area Counts:	4.85e+007
Manual Modification	No
Amount:	225. (ng/mL)
% Accuracy:	N/A



Compound Name:	26-dinitrotoluene (182.0/46.0 amu)
Expected RT:	15.3
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A



Compound Name:	24-dinitrotoluene (182.0/46.0 amu)
Expected RT:	16.0
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 27/03/2010 1:31:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0322061.wiff	<b>Acquisition Date</b>	3/23/2010 7:05:29 PM
<b>Sample Name</b>	246866008	<b>Acquisition Method</b>	8321_pntx.dam
<b>Batch Dilution Analyst</b>	952706 2 LER	<b>Result Table</b>	032210.rdb
<b>Procedure Code</b>	LCX8321_S	<b>Sample Type</b>	Unknown

	<b>Compound Name:</b>	4-Amino-26-dinitrotoluene (197.0/167.0 amu)
	Expected RT:	13.5
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	2-Amino-46-dinitrotoluene (197.0/180.0 amu)
	Expected RT:	14.6
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	2-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	18.2
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

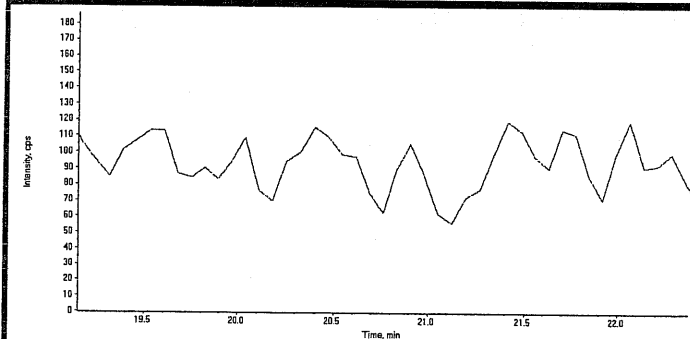
  

	<b>Compound Name:</b>	4-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	19.4
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

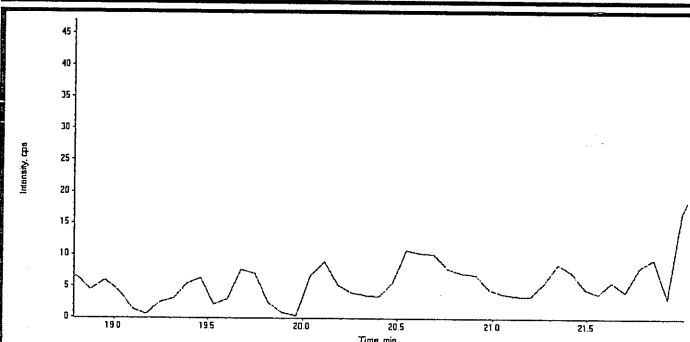
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 27/03/2010 1:31:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0322061.wiff	<b>Acquisition Date</b>	3/23/2010 7:05:29 PM
<b>Sample Name</b>	246866008	<b>Acquisition Method</b>	8321_pntx.dam
<b>Batch Dilution Analyst</b>	952706 2 LER	<b>Result Table</b>	032210.rdb
<b>Procedure Code</b>	LCX8321_S	<b>Sample Type</b>	Unknown



<b>Compound Name:</b>	3-Nitrotoluene (137.0/46.0 amu)
Expected RT:	20.8
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A



<b>Compound Name:</b>	PETN (361.1/62.0 amu)
Expected RT:	20.4
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A

1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8341

Lab Code: GEL

GEL Job No (SDG) 10-1758

Matrix: SOIL

GEL Sample ID: 246866008

Sample Amount 2

Moisture: 7.6

Amount Units g

Date Received: 11-FEB-10

Extraction Type Sonication

Extraction Batch ID: 952704

Concentrated Extract Volume (mL) 10

Date Extracted: 18-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS03050082.wiff

Date Analyzed: 06-MAR-10 14:19

Units: ug/kg

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

\*Concentration =

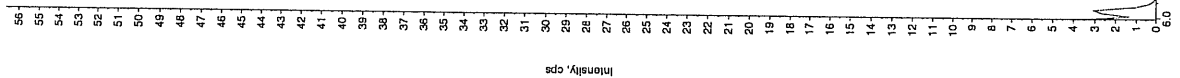
Instrument	X	<u>Concentrated Extract Volume</u>	X	Dilution
Value		Sample Amount		Factor



See 3/9/10

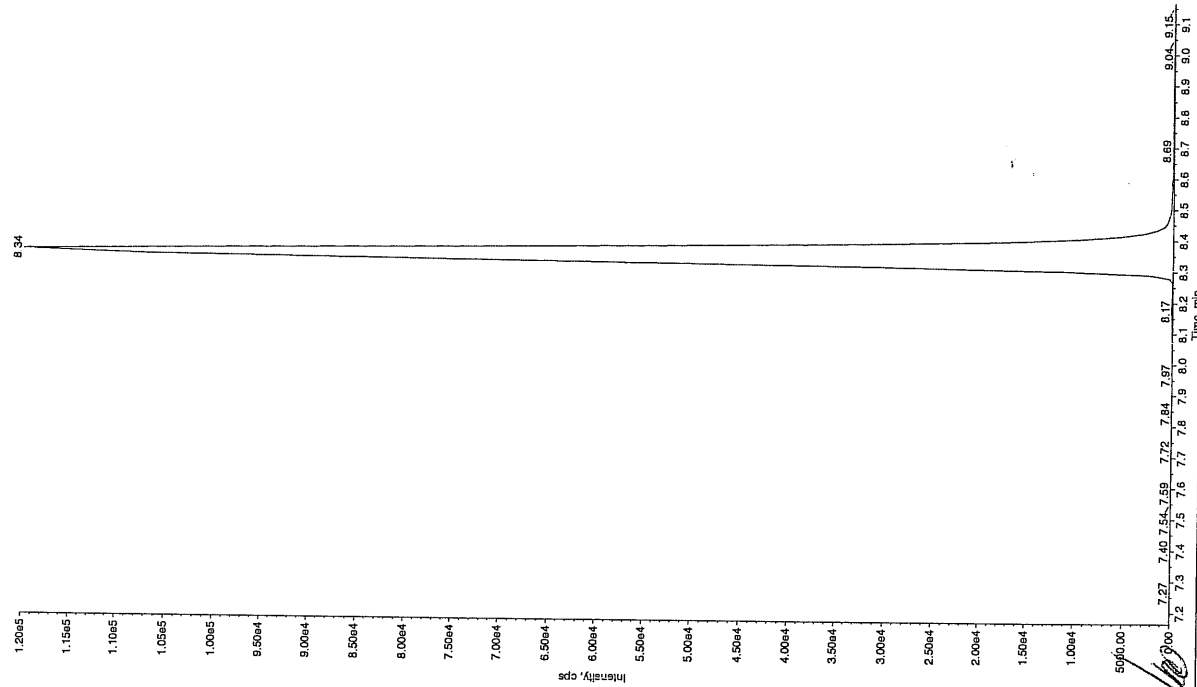
Sample Name: "246866008" Sample ID: "95270621LER" File: "EXS03050082.wif"  
 Peak Name: "TATE" Mass(es): "237.2204.9 amu"  
 Comment: "LCX83212S" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 3/6/2010  
 Acq. Time: 2:19:35 PM  
 Modified: No



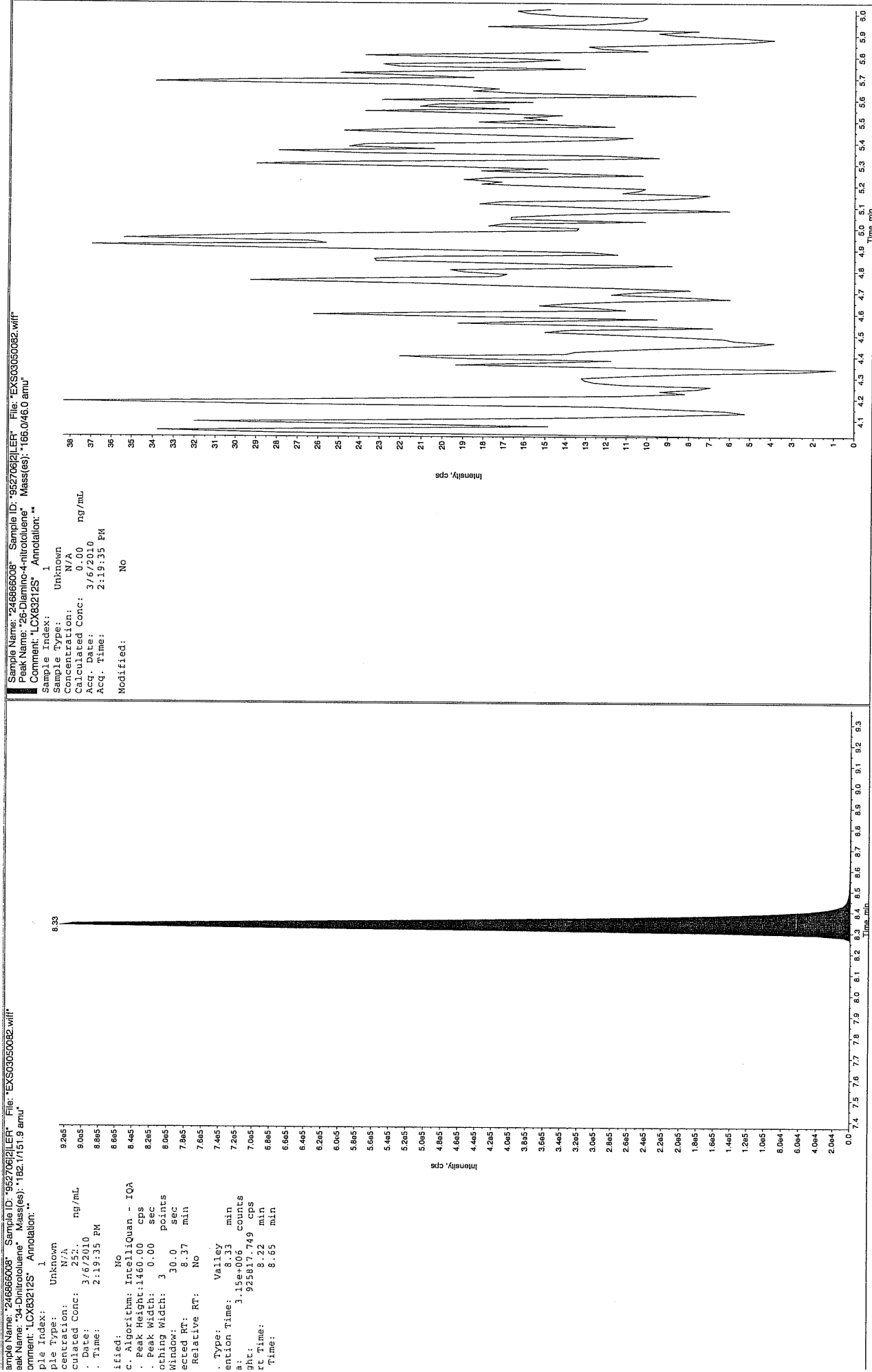
Sample Name: "246866008" Sample ID: "95270621LER" File: "EXS03050082.wif"  
 Peak Name: "35-Dinitroaniline" Mass(es): "182.046.0 amu"  
 Comment: "LCX83212S" Annotation: ""

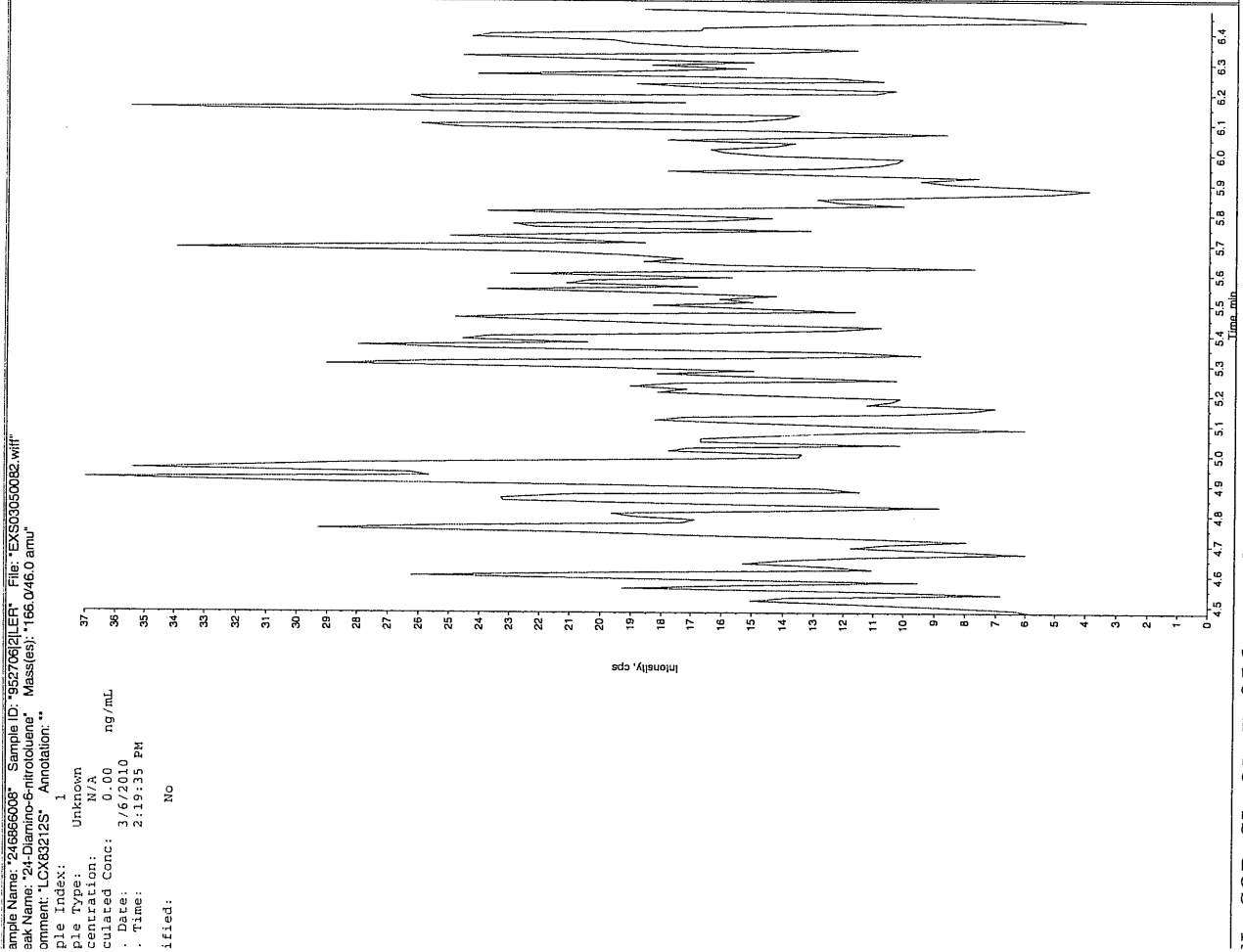
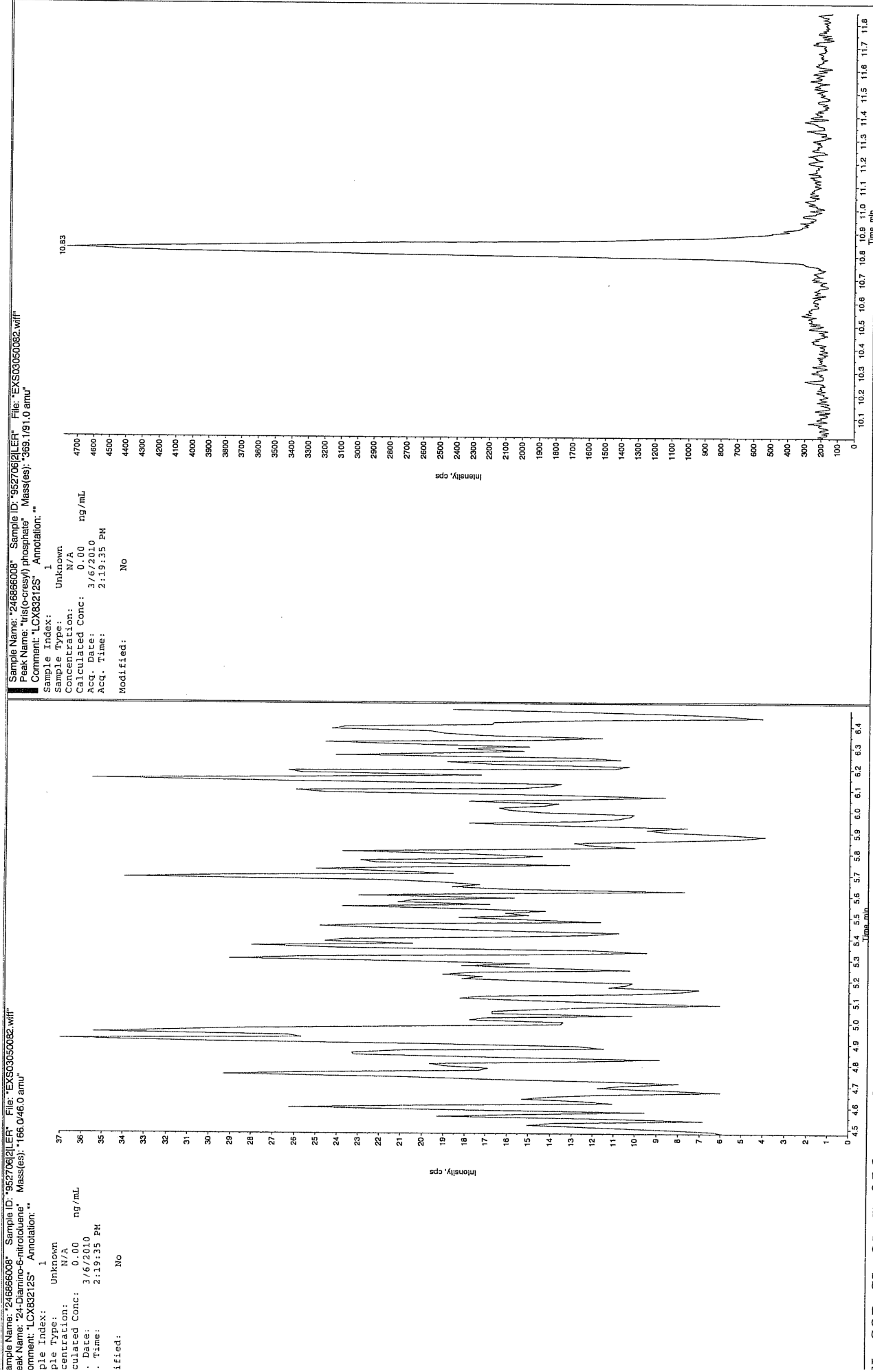
Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 3/6/2010  
 Acq. Time: 2:19:35 PM  
 Modified: Yes



IL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

4/11/10 03/09/10





IL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8376

Lab Code: GEL

GEL Job No (SDG) 10-1758

Matrix: SOIL

GEL Sample ID: 246866009

Sample Amount 2

Moisture: 24.2

Amount Units g

Date Received: 11-FEB-10

Extraction Type Sonication

Extraction Batch ID: 952704

Concentrated Extract Volume (mL) 10

Date Extracted: 18-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0322062.wiff

Date Analyzed: 23-MAR-10 19:31

Units: ug/kg

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

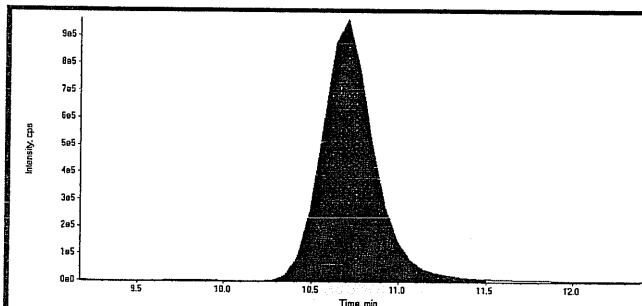
\*Concentration =

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

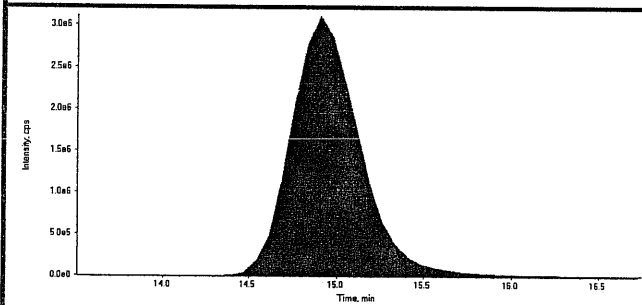
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 27/03/2010 1:31:00 PM  
LCMSMS#3

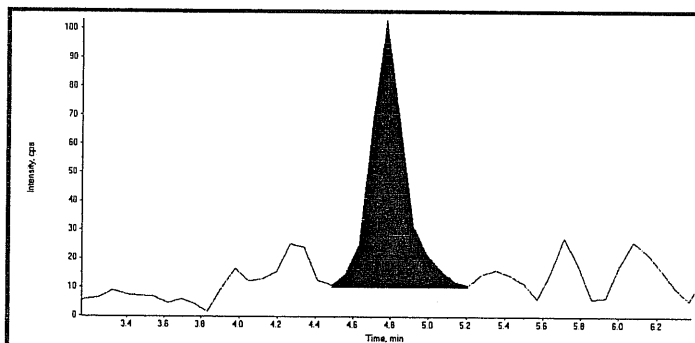
Data File	EXP0322062.wiff	Acquisition Date	3/23/2010 7:31:59 PM
Sample Name	246866009	Acquisition Method	8321_pntx.dam
Batch Dilution Analyst	952706 2 LER	Result Table	032210.rdb
Procedure Code	LCX8321_S	Sample Type	Unknown



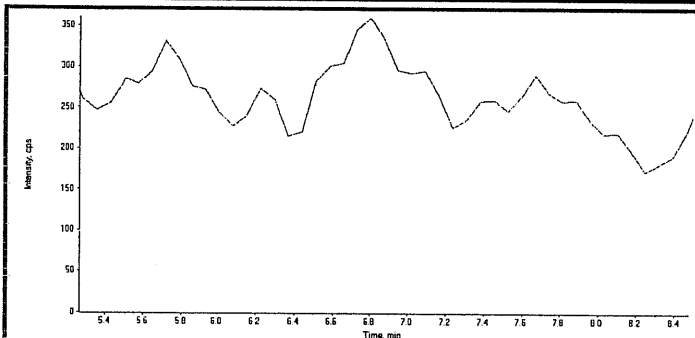
Compound Name:	13-Dinitrobenzene-d4 (172.1/46.1 amu)
Expected RT:	10.80
Actual RT:	10.70
Area Counts:	20200000.00
Manual Modification	No
Amount:	500.00(ng/mL)
Please refer to Form 8 for a list of Internal Standard Recoveries	



Compound Name:	26-Dinitrotoluene-d3 (185.0/155.0 amu)
Expected RT:	15.10
Actual RT:	14.90
Area Counts:	85400000.00
Manual Modification	No
Amount:	500.00(ng/mL)
Please refer to Form 8 for a list of Internal Standard Recoveries	



Compound Name:	HMX (341.2/46.0 amu)
Expected RT:	4.77
Actual RT:	4.77
Area Counts:	1.15e+003
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A



Compound Name:	RDX (267.0/46.1 amu)
Expected RT:	6.87
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A

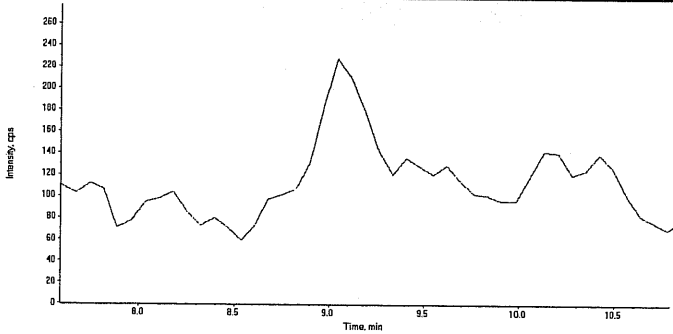
*Lar 3/28/10 dnm 04/01/10*

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GEL SOP GL-OA-E-056, Method 8321A-Modified

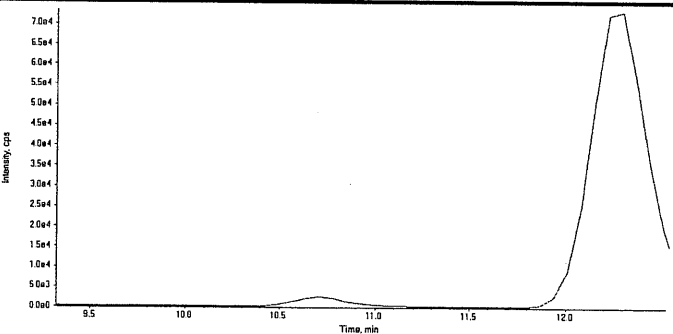
Printed: 27/03/2010 1:31:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0322062.wiff	<b>Acquisition Date</b>	3/23/2010 7:31:59 PM
<b>Sample Name</b>	246866009	<b>Acquisition Method</b>	8321_pntx.dam
<b>Batch Dilution Analyst</b>	952706 2 LER	<b>Result Table</b>	032210.rdb
<b>Procedure Code</b>	LCX8321_S	<b>Sample Type</b>	Unknown

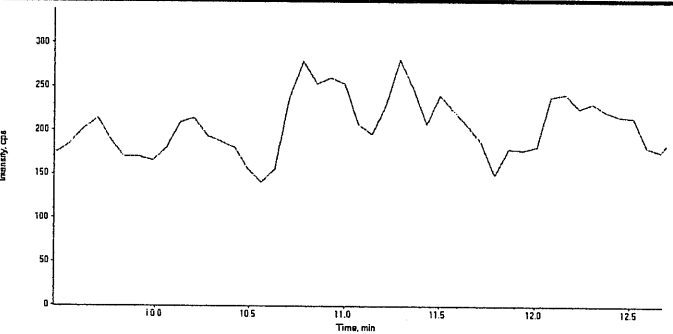
  

	<b>Compound Name:</b>	135-Trinitrobenzene (213.0/182.8 amu)
	Expected RT:	9.19
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

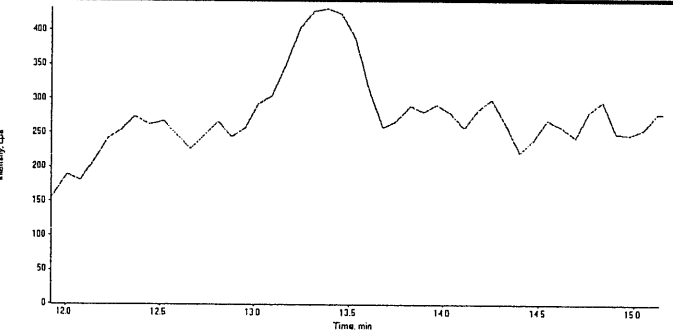
  

	<b>Compound Name:</b>	13-Dinitrobenzene (168.0/137.9 amu)
	Expected RT:	10.9
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	Tetryl (241.0/180.8 amu)
	Expected RT:	11.1
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

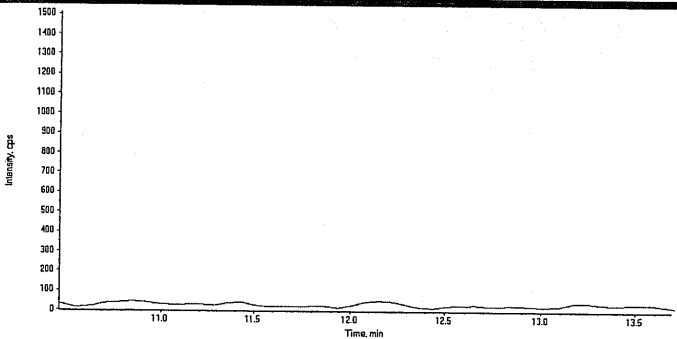
	<b>Compound Name:</b>	246-Trinitrotoluene (227.1/209.8 amu)
	Expected RT:	13.5
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

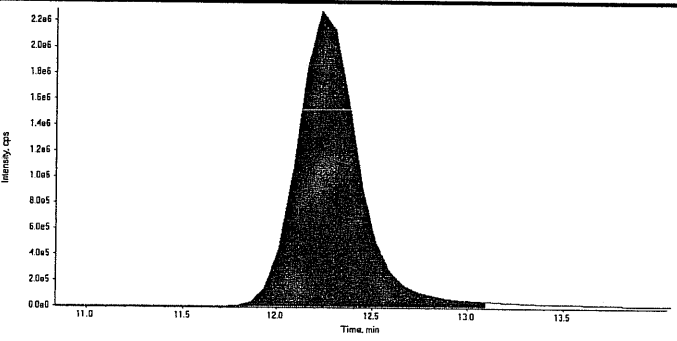
Printed: 27/03/2010 1:31:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0322062.wiff	<b>Acquisition Date</b>	3/23/2010 7:31:59 PM
<b>Sample Name</b>	246866009	<b>Acquisition Method</b>	8321_pntx.dam
<b>Batch Dilution Analyst</b>	952706 2 LER	<b>Result Table</b>	032210.rdb
<b>Procedure Code</b>	LCX8321_S	<b>Sample Type</b>	Unknown

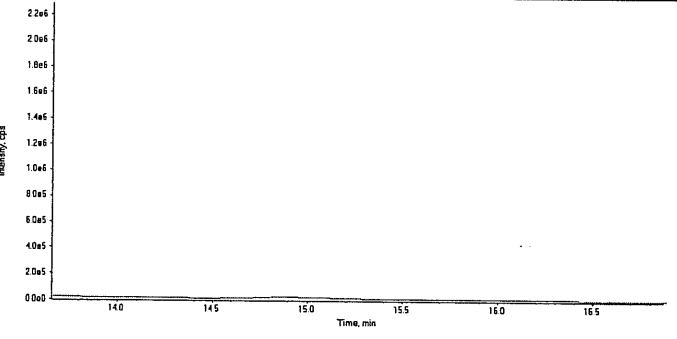
  

	<b>Compound Name:</b>	Nitrobenzene (123.0/46.0 amu)
	Expected RT:	12.1
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

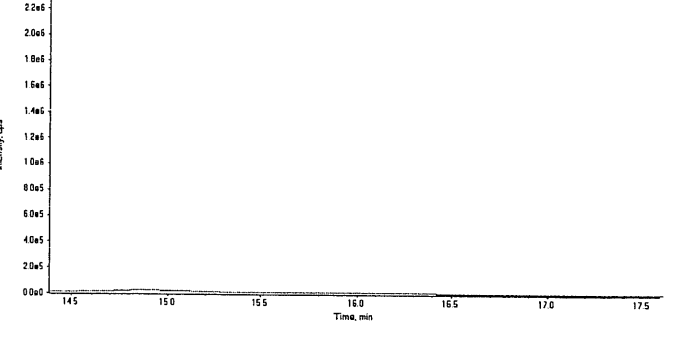
  

	<b>Compound Name:</b>	34-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	12.4
	Actual RT:	12.2
	Area Counts:	5.11e+007
	Manual Modification	No
	Amount:	231. (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	26-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	15.3
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

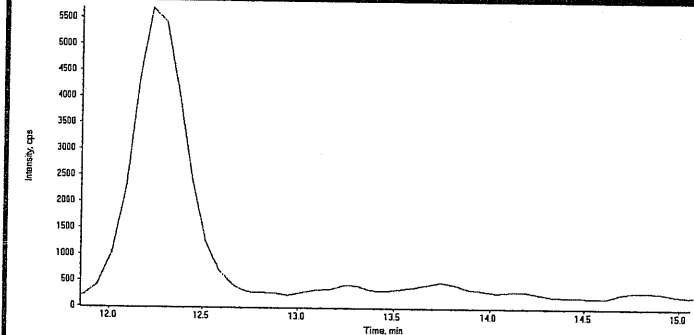
  

	<b>Compound Name:</b>	24-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	16.0
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

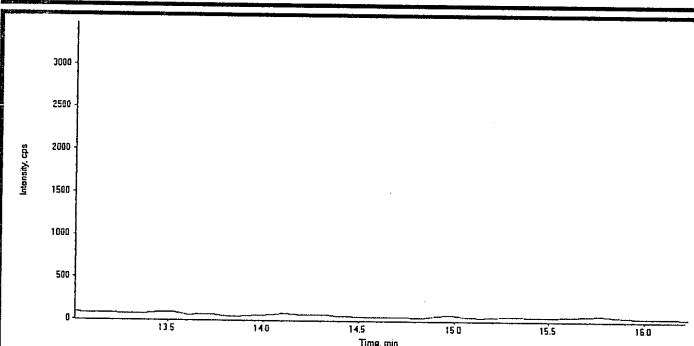
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 27/03/2010 1:31:00 PM  
LCMSMS#3

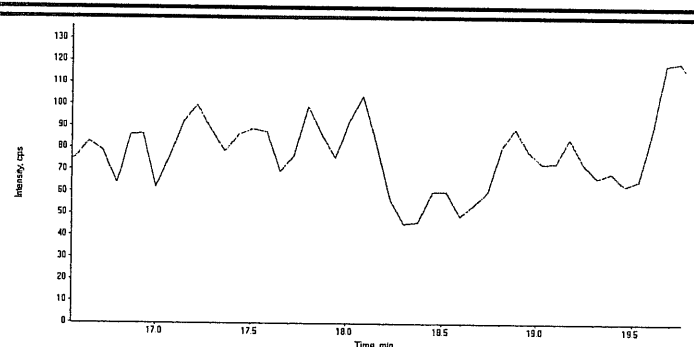
<b>Data File</b>	EXP0322062.wiff	<b>Acquisition Date</b>	3/23/2010 7:31:59 PM
<b>Sample Name</b>	246866009	<b>Acquisition Method</b>	8321_pntx.dam
<b>Batch Dilution Analyst</b>	952706 2 LER	<b>Result Table</b>	032210.rdb
<b>Procedure Code</b>	LCX8321_S	<b>Sample Type</b>	Unknown



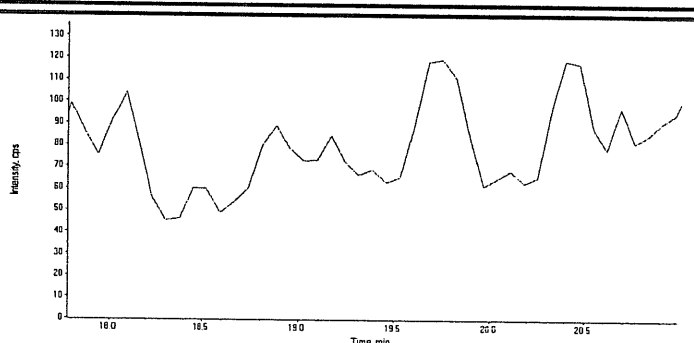
<b>Compound Name:</b>	4-Amino-26-dinitrotoluene (197.0/167.0 amu)
Expected RT:	13.5
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A



<b>Compound Name:</b>	2-Amino-46-dinitrotoluene (197.0/180.0 amu)
Expected RT:	14.6
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A



<b>Compound Name:</b>	2-Nitrotoluene (137.0/46.0 amu)
Expected RT:	18.2
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A



<b>Compound Name:</b>	4-Nitrotoluene (137.0/46.0 amu)
Expected RT:	19.4
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A

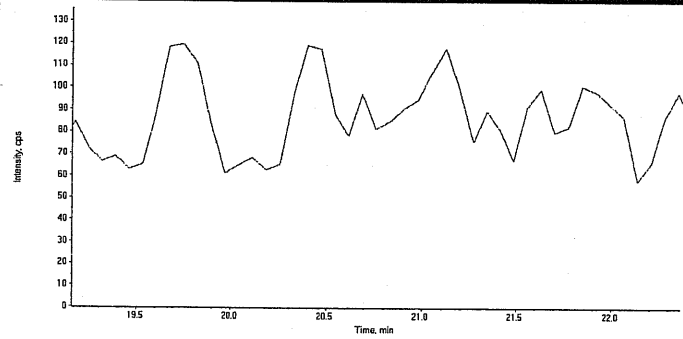


GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

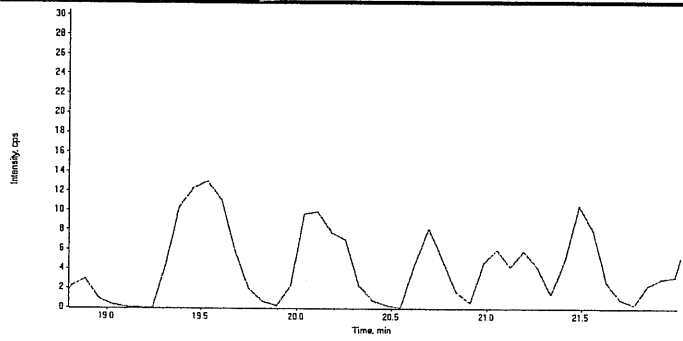
Printed: 27/03/2010 1:31:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0322062.wiff	<b>Acquisition Date</b>	3/23/2010 7:31:59 PM
<b>Sample Name</b>	246866009	<b>Acquisition Method</b>	8321_pntx.dam
<b>Batch Dilution Analyst</b>	952706 2 LER	<b>Result Table</b>	032210.rdb
<b>Procedure Code</b>	LCX8321_S	<b>Sample Type</b>	Unknown

	<b>Compound Name:</b>	3-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	20.8
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	PETN (361.1/62.0 amu)
	Expected RT:	20.4
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8376

Lab Code: GEL

GEL Job No (SDG) 10-1758

Matrix: SOIL

GEL Sample ID: 246866009

Sample Amount 2

Moisture: 24.2

Amount Units g

Date Received: 11-FEB-10

Extraction Type Sonication

Extraction Batch ID: 952704

Concentrated Extract Volume (mL) 10

Date Extracted: 18-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS03050083.wiff

Date Analyzed: 06-MAR-10 14:35

Units: ug/kg

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

\*Concentration =

Instrument	X	<u>Concentrated Extract Volume</u>	X	Dilution
Value		<u>Sample Amount</u>		Factor

San 3/9/10

Sample Name: "246866009" Sample ID: "952706J2LER" File: "EXS03050083.wif"

Peak Name: "TATB" Mass(es): "257.2/204.9 amu"

Comment: "LCX83212S" Annotation: "

Sample Index: 1

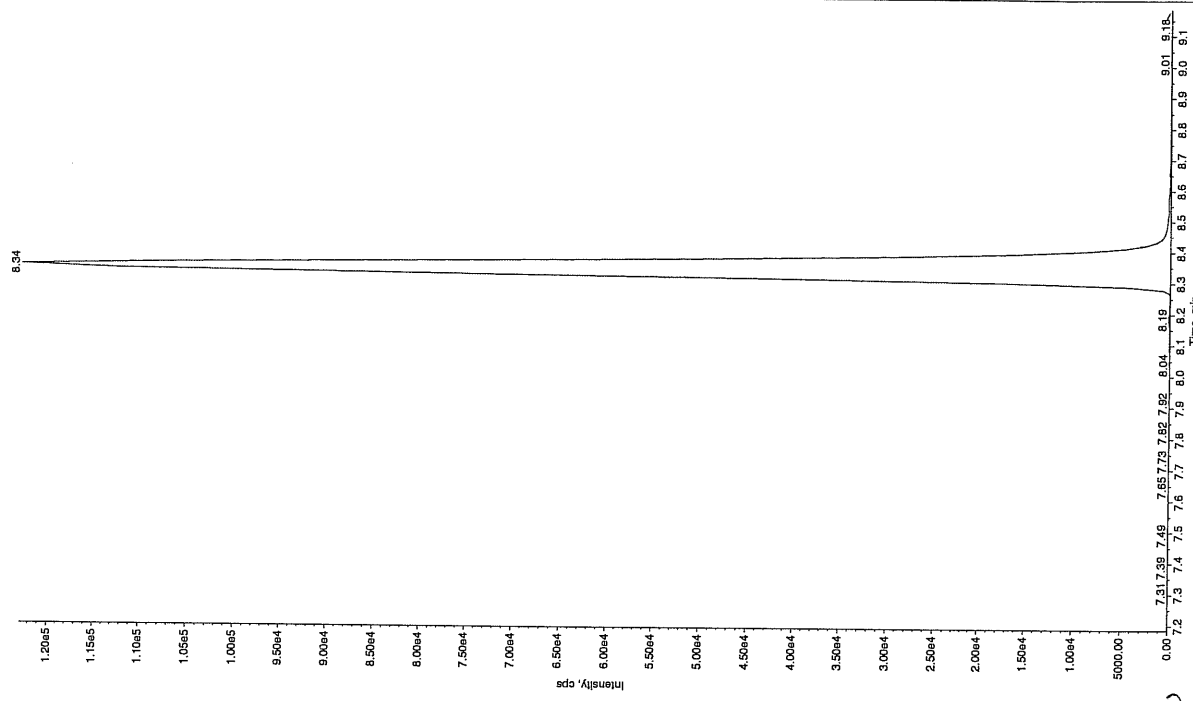
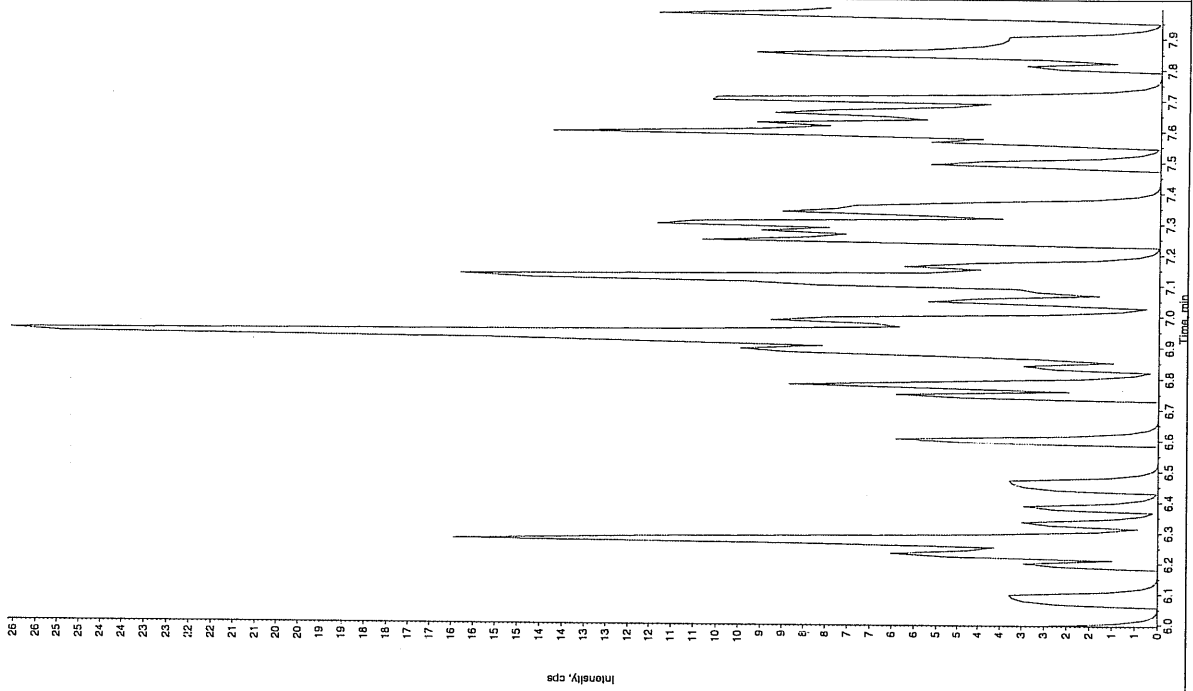
Sample Type: Unknown

Concentration: 0.00 ng/mL

Acq. Date: 3/6/2010

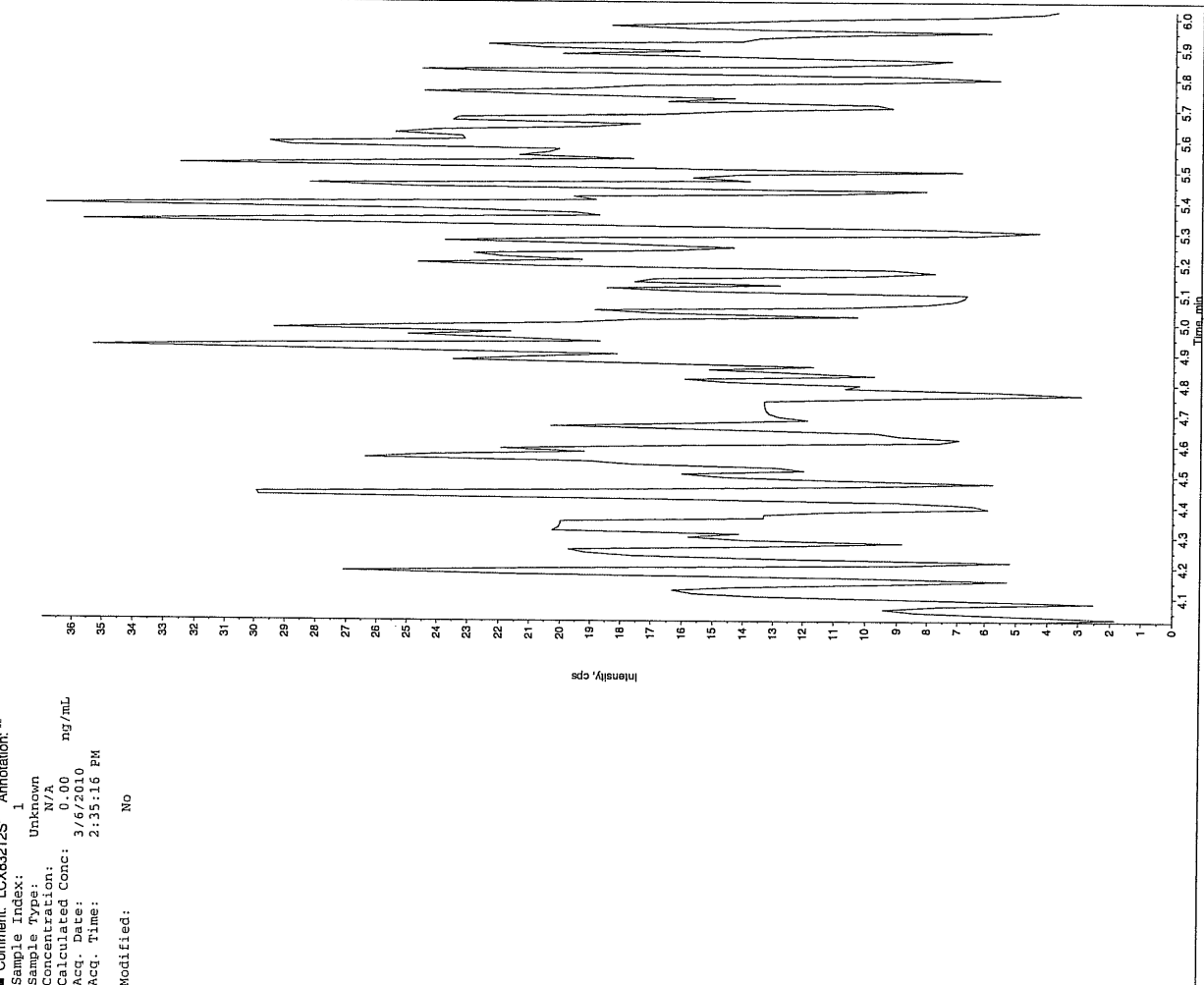
Acq. Time: 2:35:16 PM

Modified: No

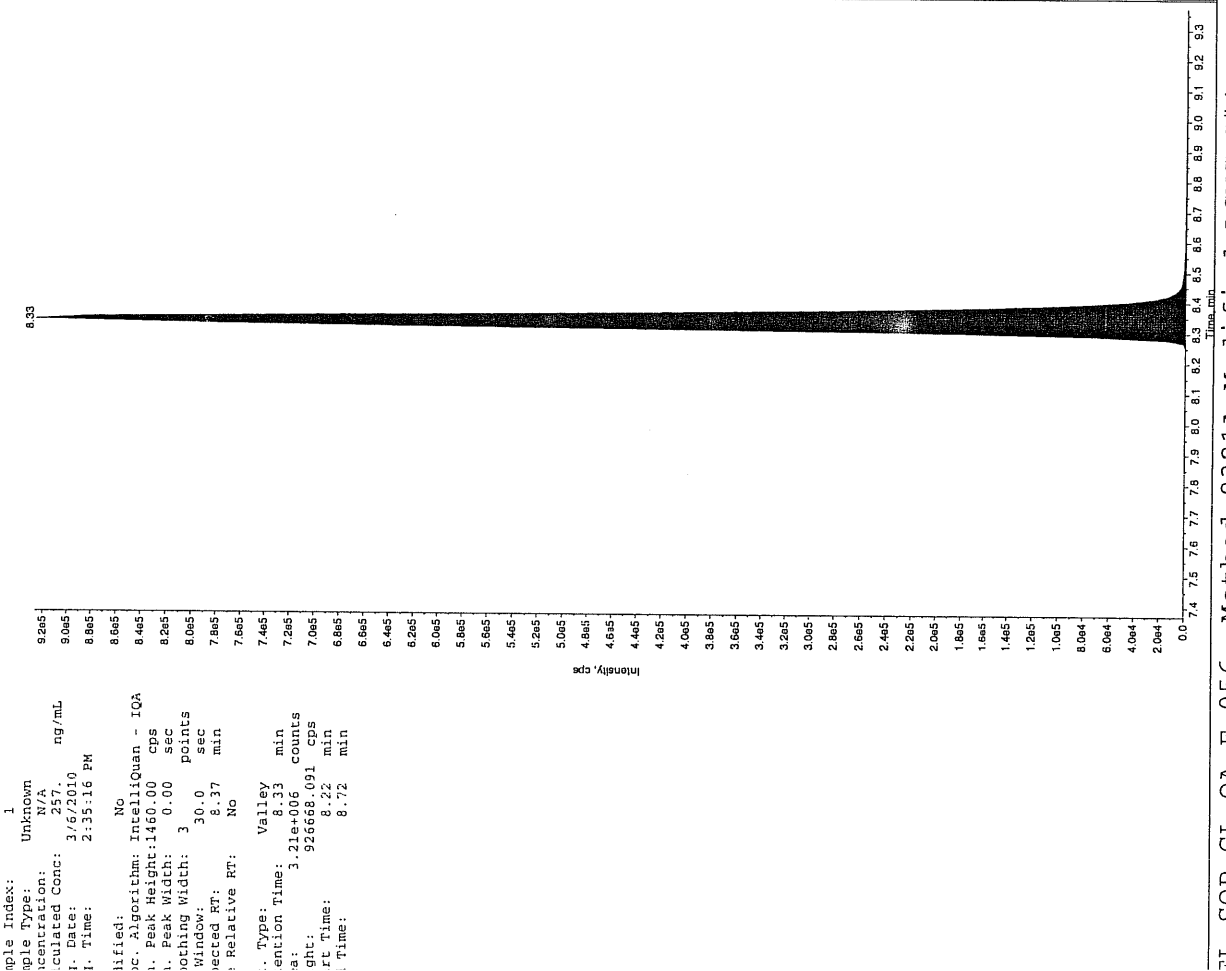


HWL 03/09/10

Sample Name: "246866009" Sample ID: "9527062JLER" File: "EXS03030083.wif"  
 Peak Name: "34-Dinitrofluorene" Mass(es): "166.0460 amu"  
 Comment: "LCX83212S" Annotation: ""

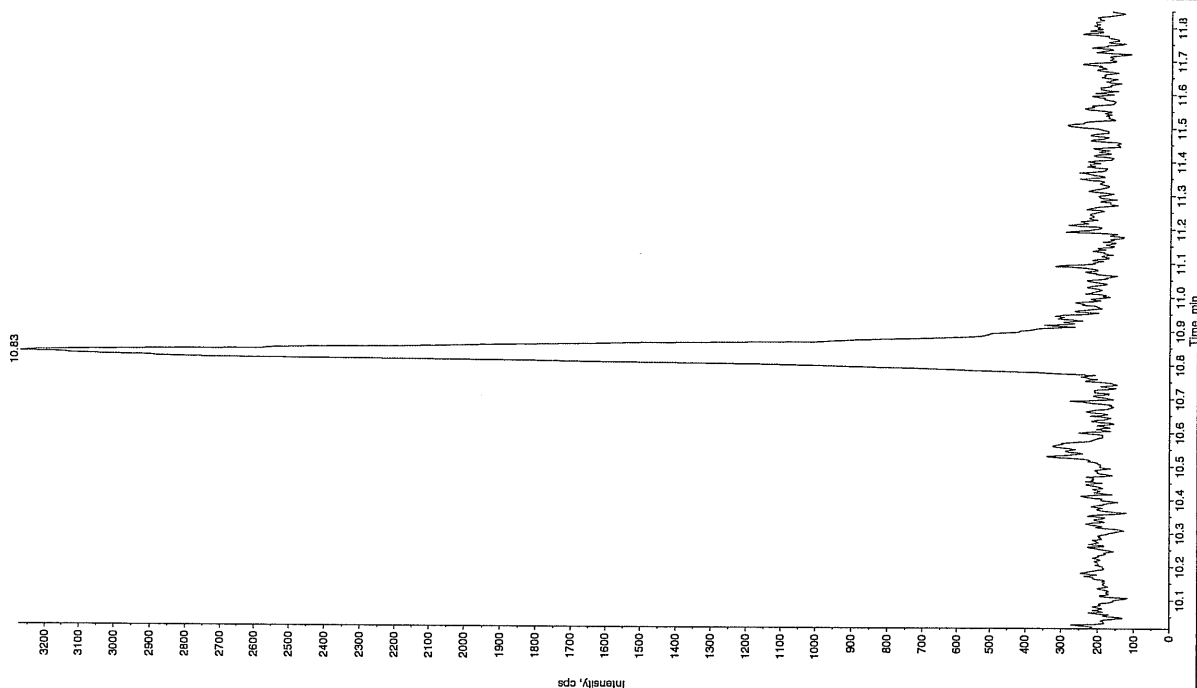


Sample Name: "246866009" Sample ID: "9527062JLER" File: "EXS03030083.wif"  
 Peak Name: "34-Dinitrofluorene" Mass(es): "166.0460 amu"  
 Comment: "LCX83212S" Annotation: ""



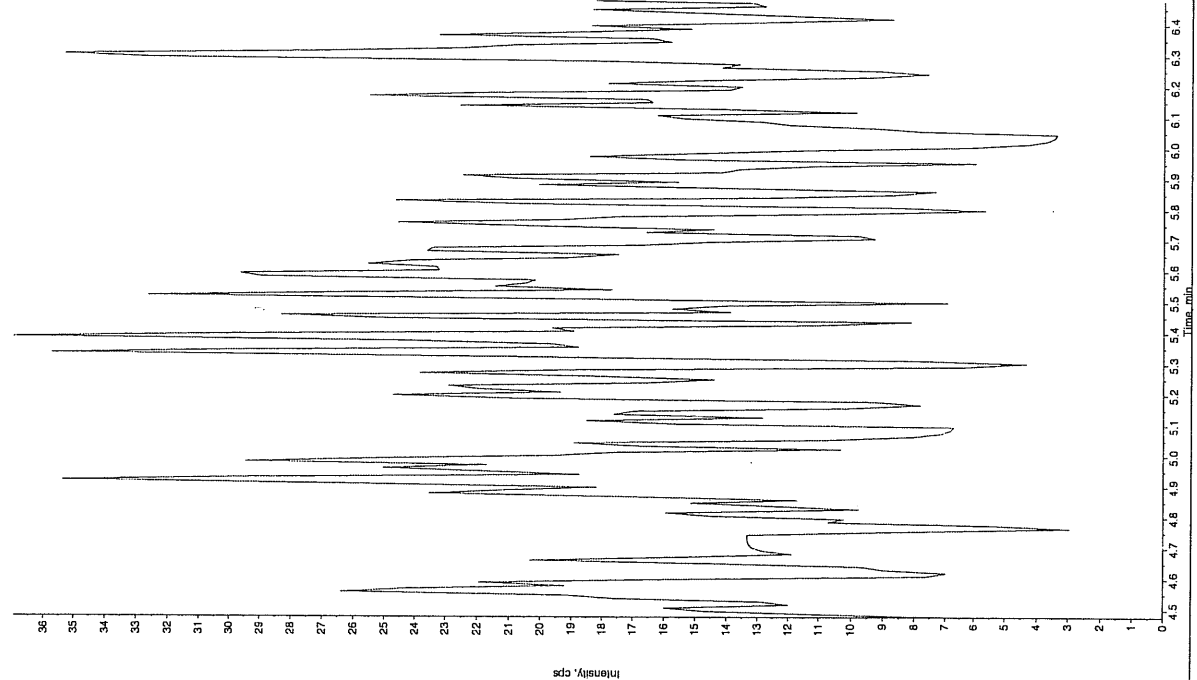
Sample Name: "24686609" Sample ID: "95270621ER" File: "EXS03050083.wif"  
 Peak Name: "tris(o-cresyl) phosphate" Mass(es): "369.191.0 amu"  
 Comment: "LCX83212S" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentrated: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 3/5/2010  
 Acq. Time: 2:35:16 PM  
 Modified: No



Sample Name: "24686609" Sample ID: "95270621ER" File: "EXS03050083.wif"  
 Peak Name: "24-Dinitro-6-nitrofluorene" Mass(es): "166.046.0 amu"  
 Comment: "LCX83212S" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentrated: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 3/5/2010  
 Acq. Time: 2:35:16 PM  
 Modified: No



EL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

# STANDARDS DATA

SW846 8321A Modified-Explosives  
Calibration Standard Concentration Levels

	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Level 7	CCV
3,4-Dinitrotoluene (Surrogate)	12.5	25	100	200	400	500		300
<b>Primary Analytes</b>								
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
<b>Secondary Analytes</b>								
2,4-Diamino-6-nitrotoluene	50	100	250	500	750	1000	2000	500
2,6-Diamino-4-nitrotoluene	50	100	250	500	750	1000	2000	500
3,5-Dinitroaniline	50	100	250	500	750	1000	2000	500
TATB	50	100	250	500	750	1000	2000	500
tris(o-Cresyl)phosphate	50	100	250	500	750	1000	2000	500

All values are ug/L without the prep factor

Calibration Levels 8321A-Modified-EXPL.xls (08/09A)

Calibration Levels 8321A-Modified-EXPL.xls

Explosives Initial Calibration

Lab Name: GEL Laboratories LLC

GEL Job No: 10-1758

Lab Code: GEL

Run Date: 05-MAR-10 22-MAR-10 30-MAR-10

LCMSMS Instrument ID: LCMSMS3

Method: 8321A Modified

HPLC Column: Phenomenex Ultracarb 5 ODS(20)

Calibration Type: Average RF

Parname	50	51	52	53	54	55	Ave RF	RSD	Q
Calibration Level:	EXP03222003.wi	EXP03222004.wi	EXP03222005.wi	EXP03222006.wi	EXP03222007.wi	EXP03222008.wi			
Data File:									
1,3,5-Trinitrobenzene	7.75	7.28	6.98	6.36	5.48	5.07	6.487	16.2	
2,4-Dinitrotoluene	.57	.651	.566	.564	.599	.561	0.585	6.02	
2,6-Dinitrotoluene	1.11	1.15	1.01	.937	.831	.801	0.973	14.7	
2-Amino-4,6-dinitrotoluene	.032	.033	.034	.031	.038	.034	0.034	7.31	
3,4-Dinitrotoluene	1.36	1.42	1.31	1.25	1.28	1.14	1.293	7.44	
4-Amino-2,6-dinitrotoluene	1.12	1.23	1.1	1	1.01	.88	1.057	11.5	
Nitrobenzene	.125	.126	.138	.136	.143	.144	0.135	6.11	
PETN	.011	.012	.012	.011	.013	.013	0.012	7.75	
RDX	1.47	1.58	1.47	1.53	1.6	1.54	1.532	3.6	
Tetryl	4.44	4.71	4.46	4.11	4.11	3.81	4.273	7.57	
m-Dinitrobenzene	2.83	2.67	2.81	2.58	2.64	2.44	2.662	5.53	
m-Nitrotoluene	.008	.01	.009	.009	.01	.01	0.009	8.63	
o-Nitrotoluene	.014	.016	.016	.015	.017	.016	0.016	5.74	
p-Nitrotoluene	.007	.008	.008	.008	.009	.008	0.008	6.86	

Q column used to flag RSD values outside of Limit (>20%)

\* Values outside of QC Limit



# Explosives Initial Calibration

Lab Name: GEL Laboratories LLC

GEL Job No: 10-1758

Lab Code: GEL

Run Date: 05-MAR-10 22-MAR-10 30-MAR-10

LCMSMS Instrument ID: LCMSMS3

Method: 8321A Modified

HPLC Column: Phenomenex Ultracarb 5 ODS(20)

Calibration Type: Linear

Calibration Level:	50	51	52	53	54	55	Slope	Intercept	COD	Q
Data File:	EXP0322003.w	EXP0322004.w	EXP0322005.w	EXP0322006.w	EXP0322007.w	EXP0322008.w				
Parmname										
HMX	2580000	5050000	21000000	38800000	65900000	82000000	2.13	.043	.9997	

Linear fit :  $Y=mx +b$   
where b is Intercept and m is slope

COD is Coefficient of Determination

Q column used to flag COD values outside of Limit (<0.990)

\* Values outside of QC Limit

# Explosives Initial Calibration

Lab Name: GEL Laboratories LLC

GEL Job No: 10-1758

Lab Code: GEL

Run Date: 05-MAR-10.22-MAR-10.30-MAR-10

LCMSMS Instrument ID: LCMSMS3

Method: 8321A Modified

HPLC Column: Phenomenex Ultracarb 5 ODS(20)

Calibration Type: 2nd Order

Calibration Level:	50	51	52	53	54	55	X	X^2	Intercept	COD	Q
Data File:	EXP0322003.wiff	EXP0322004.wiff	EXP0322005.wiff	EXP0322006.wiff	EXP0322007.wiff	EXP0322008.wiff					
Parname:											
2,4,6-Trinitrotoluene	15900000	30600000	116000000	195000000	301000000	345000000	.029	3.07	-.564	.9979	

Quadratic Fit:  $y = Ax^2 + Bx + C$   
 where  $X^2$  column above is coefficient A  
 X column above is coefficient B  
 intercept is C

COD is Coefficient of Determination

Q column used to flag COD outside of Limit (<0.990)

\* Values outside of QC Limit

032210ICAL

Peak Name: 13-Dinitrobenzene-d4  
Use as Internal Standard  
Q1/Q3 Masses: 172.05/46.10 amu  
Peak Name: 26-Dinitrotoluene-d3  
Use as Internal Standard  
Q1/Q3 Masses: 184.99/155.00 amu

Peak Name: HMX  
Internal Standard: 13-Dinitrobenzene-d4  
Q1/Q3 Masses: 341.20/46.00 amu

Fit Linear Weighting None Iterate No  
Intercept 0.0425  
Slope 2.13  
Correlation coefficient 0.9997  
Use Area

Peak Name: RDX  
Internal Standard: 13-Dinitrobenzene-d4  
Q1/Q3 Masses: 267.01/46.10 amu

Fit Mean Response Factor Weighting None Iterate No  
Factor 1.53  
Standard deviation 0.0551  
%RSD 3.6  
Use Area

Peak Name: 135-Trinitrobenzene  
Internal Standard: 13-Dinitrobenzene-d4  
Q1/Q3 Masses: 212.97/182.80 amu

Fit Mean Response Factor Weighting None Iterate No  
Factor 6.49  
Standard deviation 1.05  
%RSD 16.2  
Use Area

Peak Name: 13-Dinitrobenzene  
Internal Standard: 13-Dinitrobenzene-d4  
Q1/Q3 Masses: 167.95/137.90 amu

Fit Mean Response Factor Weighting None Iterate No  
Factor 2.66  
Standard deviation 0.147

*for 3/28/10*

*HWL 03/28/10*

Page 1

032210ICAL

%RSD 5.53  
Use Area

Peak Name: TetraYl  
Internal Standard: 13-Dinitrobenzene-d4  
Q1/Q3 Masses: 240.95/180.80 amu

Fit Factor	Mean Response	Factor	Weighting	None	Iterate No
Standard deviation		0.323			
%RSD		7.57			
Use Area					

Peak Name: 246-Trinitrotoluene  
Internal Standard: 26-Dinitrotoluene-d3  
Q1/Q3 Masses: 227.12/209.80 amu

Fit	Quadratic	Weighting	None	Iterate No
a0	0.029			
a1	3.07			
a2	-0.564			
Correlation coefficient	0.9979			
Use Area				

Peak Name: Nitrobenzene  
Internal Standard: 13-Dinitrobenzene-d4  
Q1/Q3 Masses: 123.04/46.00 amu

Fit Factor	Mean Response	Factor	Weighting	None	Iterate No
Standard deviation		0.00826			
%RSD		6.11			
Use Area					

Peak Name: 34-dinitrotoluene  
Internal Standard: 26-Dinitrotoluene-d3  
Q1/Q3 Masses: 182.00/46.00 amu

Fit Factor	Mean Response	Factor	Weighting	None	Iterate No
Standard deviation		0.0962			
%RSD		7.44			
Use Area					

032210ICAL

Peak Name: 26-dinitrotoluene  
Internal Standard: 26-Dinitrotoluene-d3  
Q1/Q3 Masses: 182.00/46.00 amu

Fit	Mean Response	Factor	Weighting	None	Iterate	No
Factor	0.972					
Standard deviation	0.143					
%RSD	14.7					
Use Area						

Peak Name: 24-dinitrotoluene  
Internal Standard: 26-Dinitrotoluene-d3  
Q1/Q3 Masses: 182.00/46.00 amu

Fit	Mean Response	Factor	Weighting	None	Iterate	No
Factor	0.585					
Standard deviation	0.0352					
%RSD	6.02					
Use Area						

Peak Name: 4-Amino-26-dinitrotoluene  
Internal Standard: 26-Dinitrotoluene-d3  
Q1/Q3 Masses: 197.02/167.00 amu

Fit	Mean Response	Factor	Weighting	None	Iterate	No
Factor	1.06					
Standard deviation	0.121					
%RSD	11.5					
Use Area						

Peak Name: 2-Amino-46-dinitrotoluene  
Internal Standard: 26-Dinitrotoluene-d3  
Q1/Q3 Masses: 197.02/180.00 amu

Fit	Mean Response	Factor	Weighting	None	Iterate	No
Factor	0.0333					
Standard deviation	0.00244					
%RSD	7.31					
Use Area						

Peak Name: 2-Nitrotoluene  
Internal Standard: 26-Dinitrotoluene-d3  
Q1/Q3 Masses: 137.00/46.00 amu

032210ICAL  
None Iterate No

Fit Mean Response Factor weighting  
Factor 0.0156  
Standard deviation 0.000896  
%RSD 5.74  
Use Area

Peak Name: 4-Nitrotoluene  
Internal Standard: 26-Dinitrotoluene-d3  
Q1/Q3 Masses: 137.00/46.00 amu

Fit Mean Response Factor weighting  
Factor 0.0078  
Standard deviation 0.000535  
%RSD 6.86  
Use Area

None Iterate No

Peak Name: 3-Nitrotoluene  
Internal Standard: 26-Dinitrotoluene-d3  
Q1/Q3 Masses: 137.00/46.00 amu

Fit Mean Response Factor weighting  
Factor 0.00928  
Standard deviation 0.0008  
%RSD 8.63  
Use Area

None Iterate No

Peak Name: PETN  
Internal Standard: 26-Dinitrotoluene-d3  
Q1/Q3 Masses: 361.06/62.00 amu

Fit Mean Response Factor weighting  
Factor 0.0119  
Standard deviation 0.000925  
%RSD 7.75  
Use Area

None Iterate No

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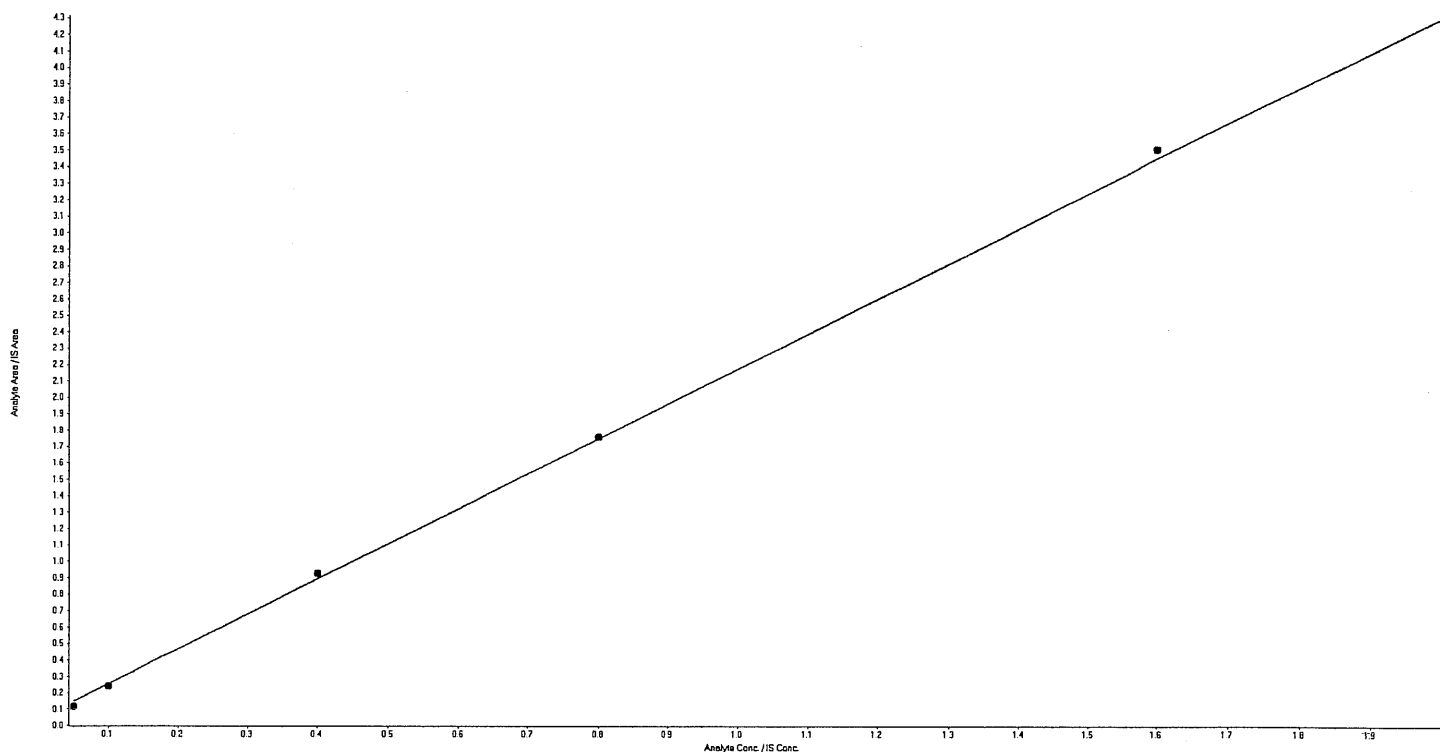
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LCMSMS#3

032210.rdb

Analyte Name: HMX

Regression Equation:  $y = 2.13x + 0.0425$  ( $r = 0.9997$ )

Expected Concentration	Calculated Concentration	% Accuracy
25	17.67	70.7
50	47.17	94.3
200	207.55	103.8
400	402.17	100.5
800	812.43	101.6
1000	988.00	98.8



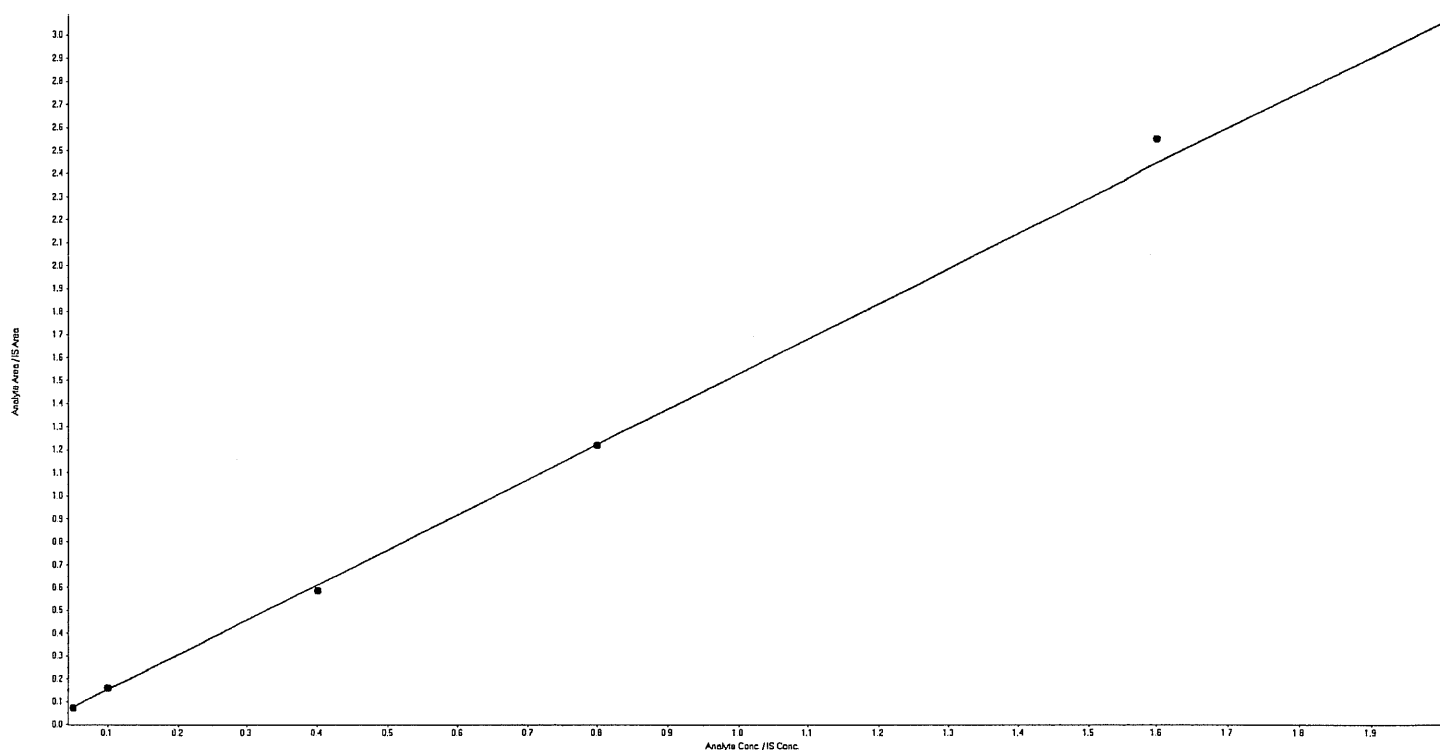
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Printed: 27/03/2010 1:31:00 PM  
LCMSMS#3

Analyte Name: RDX

Regression Equation:  $y = 1.53 x$  (std. dev. = 0.0551)

Expected Concentration	Calculated Concentration	% Accuracy
25	23.98	95.9
50	51.74	103.5
200	191.69	95.8
400	398.64	99.7
800	834.01	104.3
1000	1008.48	100.8





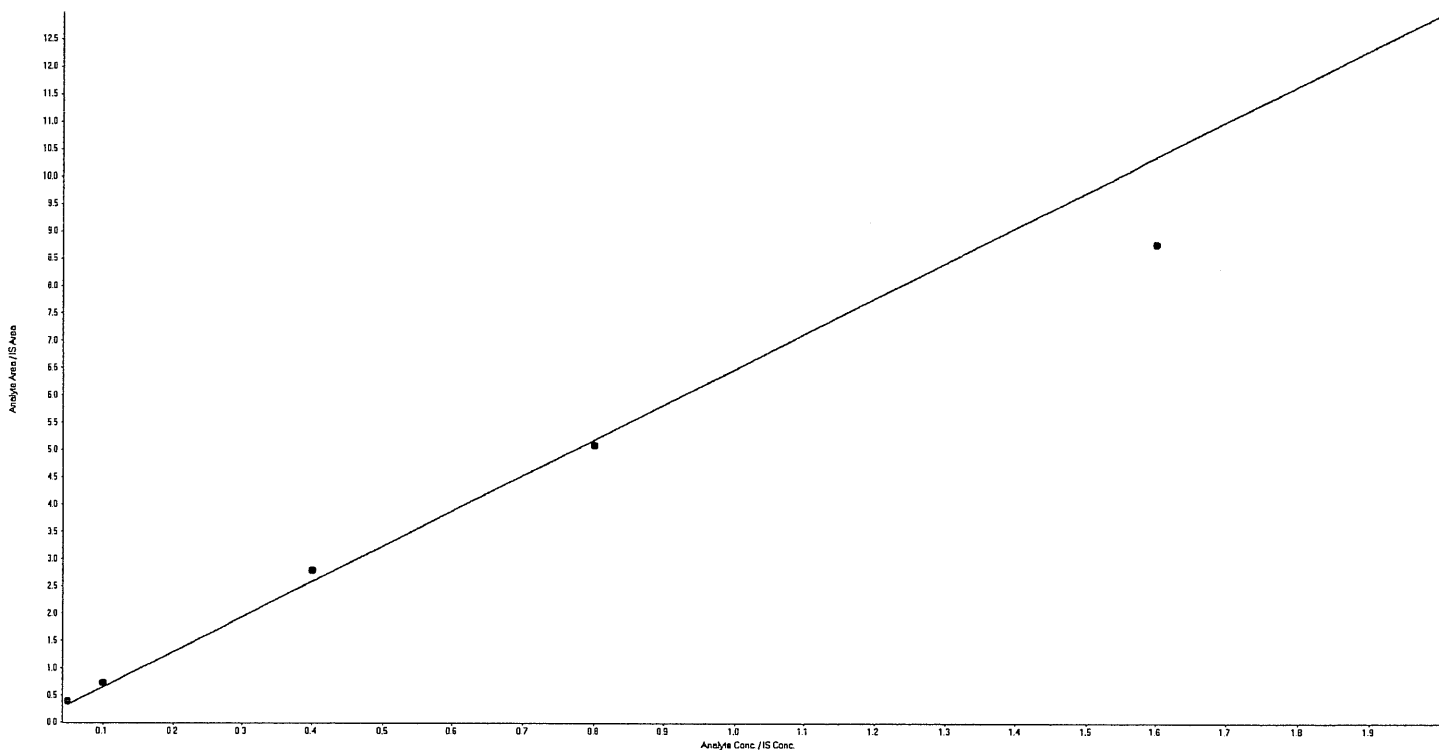
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Printed: 27/03/2010 1:31:00 PM  
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Analyte Name: 135-Trinitrobenzene

Regression Equation:  $y = 6.49x$  (std. dev. = 1.05)

Expected Concentration	Calculated Concentration	% Accuracy
25	29.86	119.4
50	56.14	112.3
200	215.29	107.6
400	392.08	98.0
800	675.96	84.5
1000	781.12	78.1



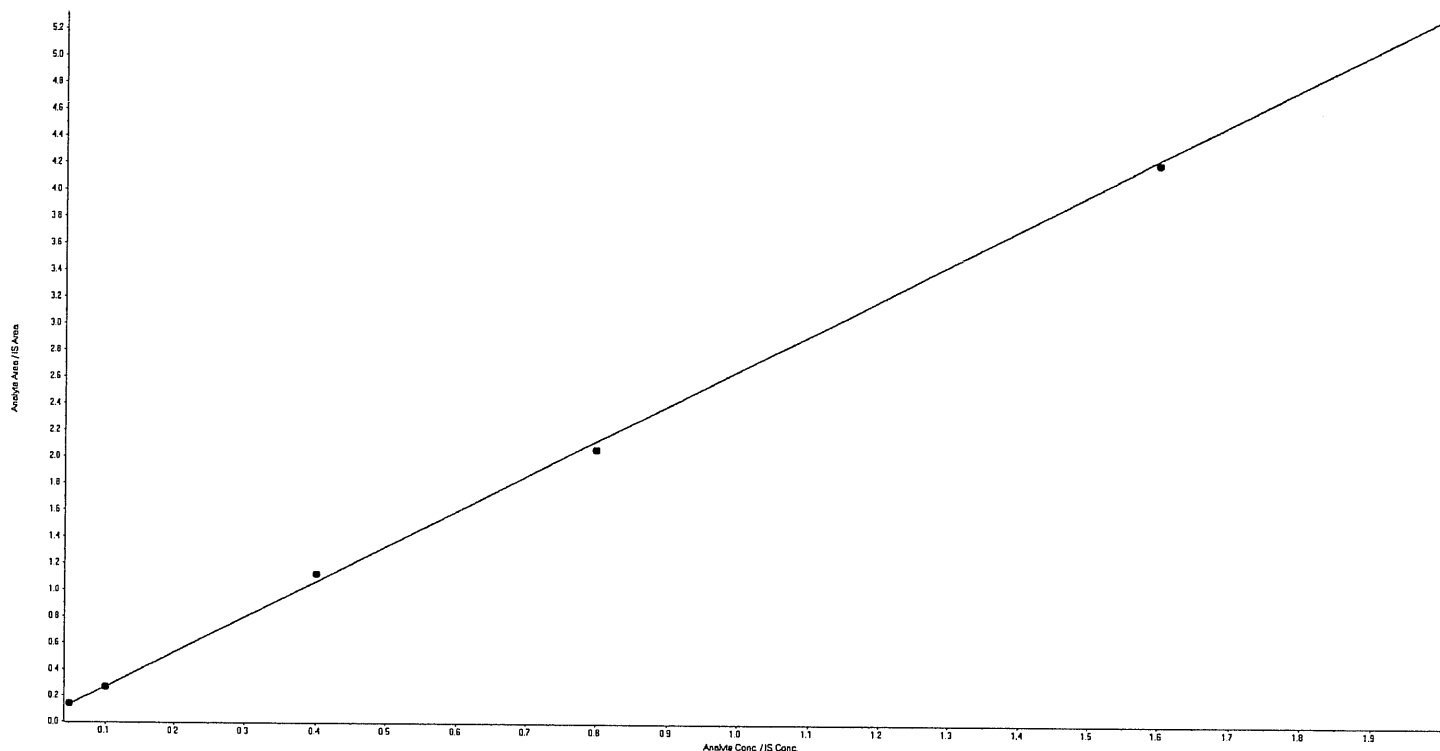
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Printed: 27/03/2010 1:31:00 PM  
LCMSMS#3

Analyte Name: 13-Dinitrobenzene

Regression Equation:  $y = 2.66 x$  (std. dev. = 0.147)

Expected Concentration	Calculated Concentration	% Accuracy
25	26.60	106.4
50	50.25	100.5
200	211.01	105.5
400	387.47	96.9
800	793.17	99.1
1000	915.87	91.6



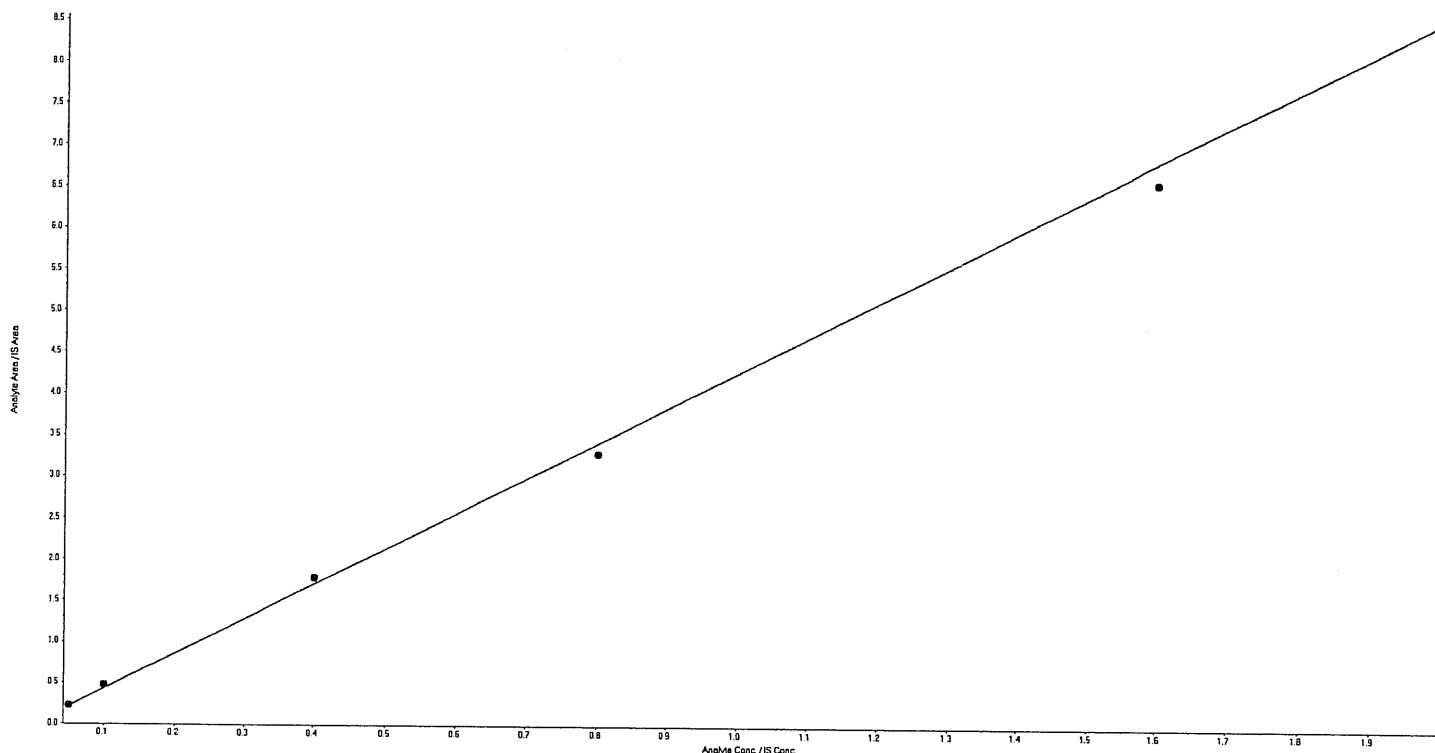
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GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 27/03/2010 1:31:00 PM  
LCMSMS#3

Analyte Name: Tetryl

Regression Equation:  $y = 4.27 x$  (std. dev. = 0.323)

Expected Concentration	Calculated Concentration	% Accuracy
25	25.97	103.9
50	55.09	110.2
200	208.81	104.4
400	384.84	96.2
800	770.32	96.3
1000	890.43	89.0



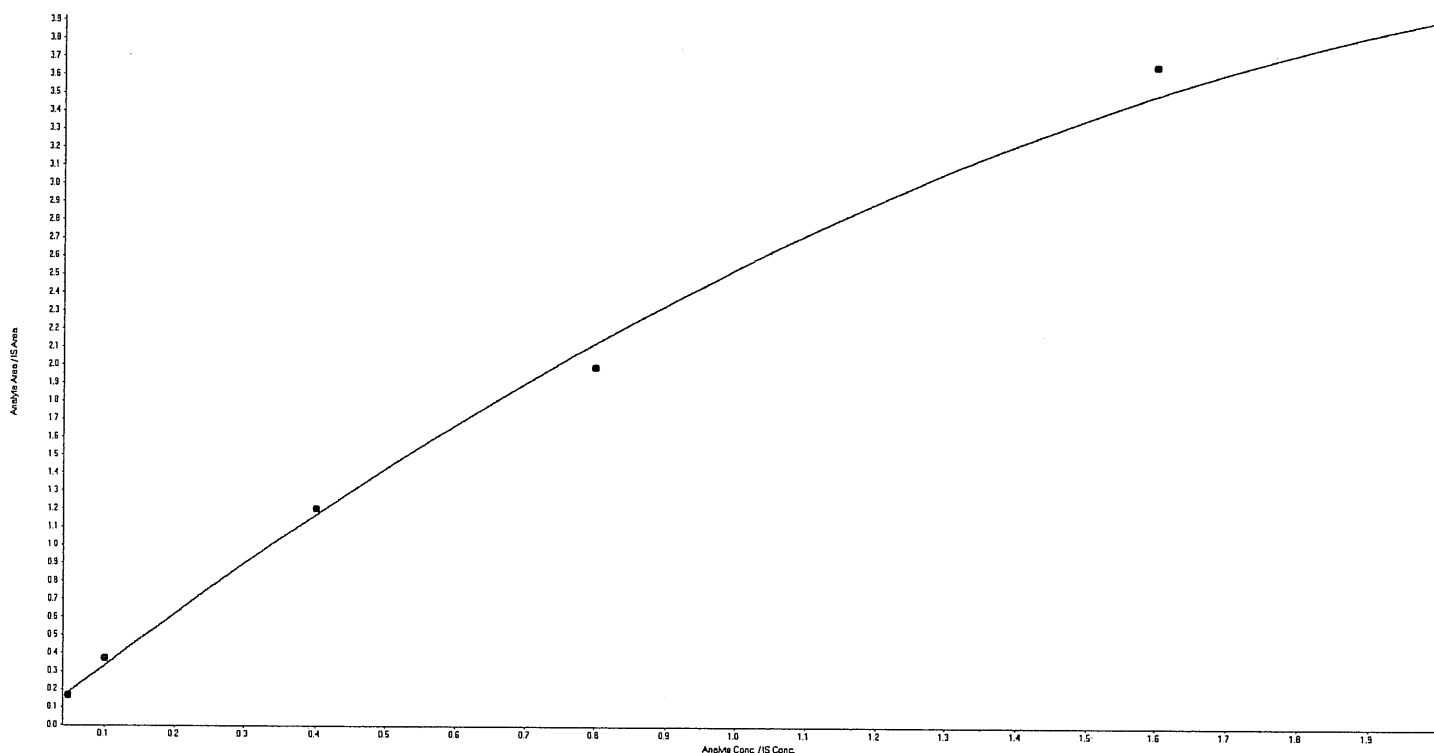
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Printed: 27/03/2010 1:31:00 PM  
 LCMSMS#3

Analyte Name: 246-Trinitrotoluene

Regression Equation:  $y = -0.564 x^2 + 3.07 x + 0.029$  ( $r = 0.9979$ )

Expected Concentration	Calculated Concentration	% Accuracy
25	22.16	88.6
50	56.76	113.5
200	206.79	103.4
400	369.28	92.3
800	866.39	108.3
1000	953.30	95.3



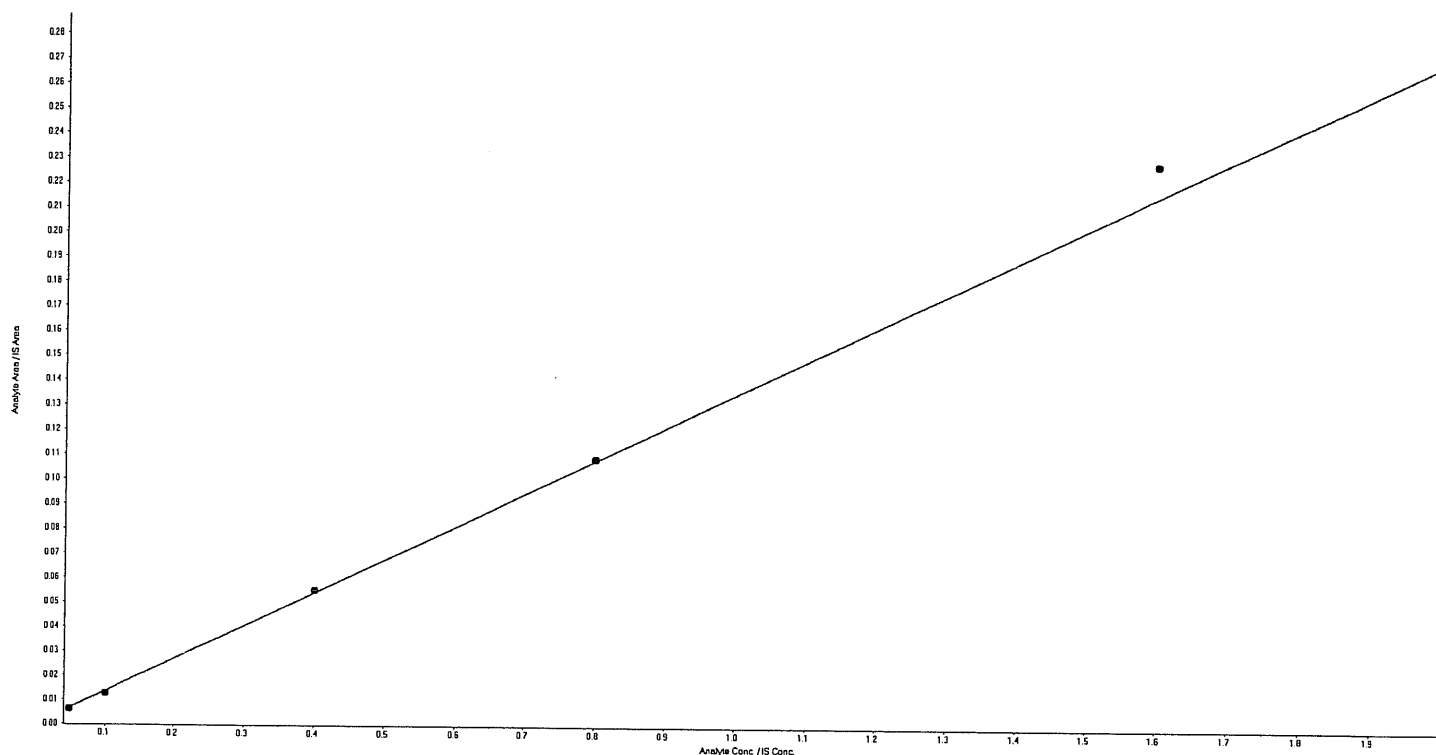
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Printed: 27/03/2010 1:31:00 PM  
LCMSMS#3

Analyte Name: Nitrobenzene

Regression Equation:  $y = 0.135 x$  (std. dev. = 0.00826)

Expected Concentration	Calculated Concentration	% Accuracy
25	23.08	92.3
50	46.47	92.9
200	204.02	102.0
400	402.37	100.6
800	847.42	105.9
1000	1061.98	106.2



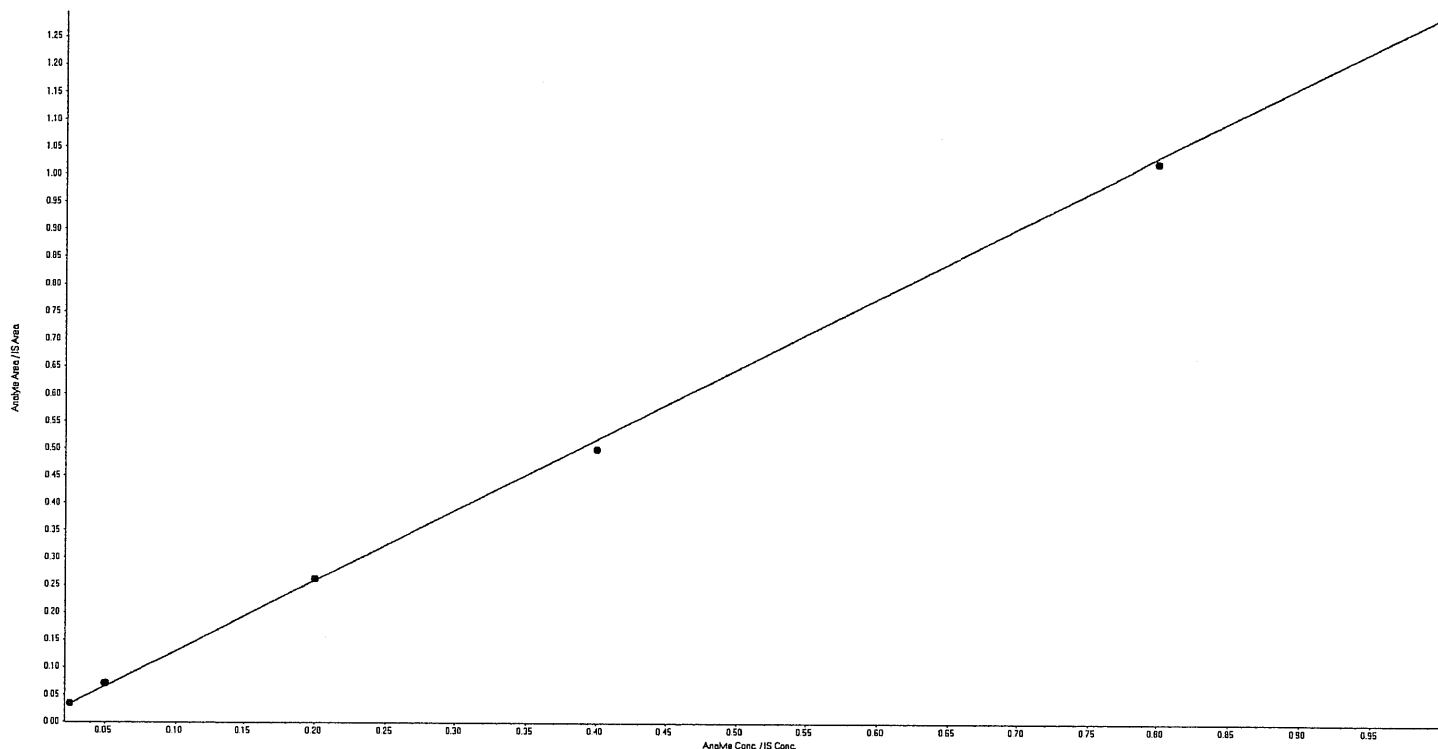
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LCMSMS#3

Analyte Name: 34-dinitrotoluene

Regression Equation:  $y = 1.29x$  (std. dev. = 0.0962)

Expected Concentration	Calculated Concentration	% Accuracy
12.5	13.12	104.9
25	27.51	110.0
100	101.29	101.3
200	192.98	96.5
400	395.66	98.9
500	441.68	88.3



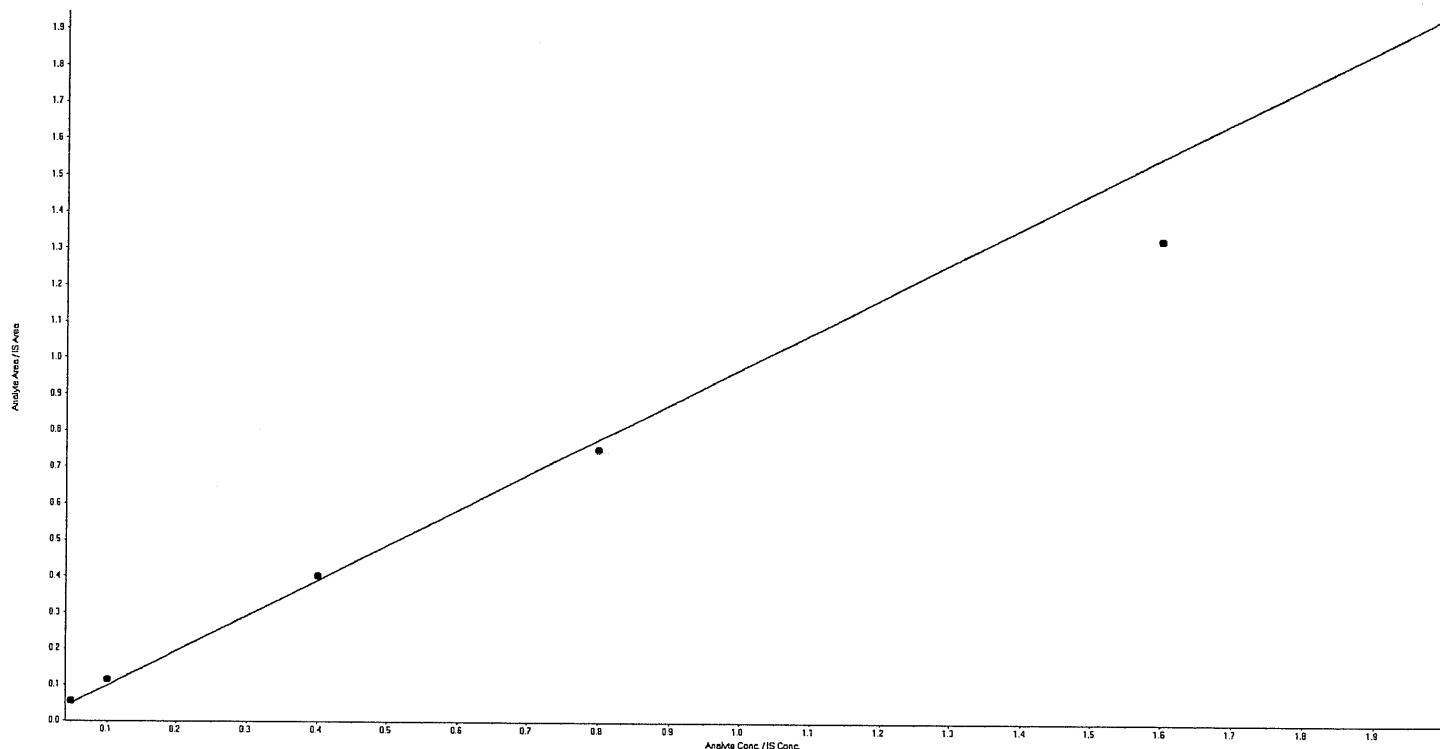
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Printed: 27/03/2010 1:31:00 PM  
 LCMSMS#3

Analyte Name: 26-dinitrotoluene

Regression Equation:  $y = 0.972 x$  (std. dev. = 0.143)

Expected Concentration	Calculated Concentration	% Accuracy
25	28.54	114.2
50	59.03	118.1
200	207.17	103.6
400	385.41	96.4
800	683.74	85.5
1000	823.74	82.4



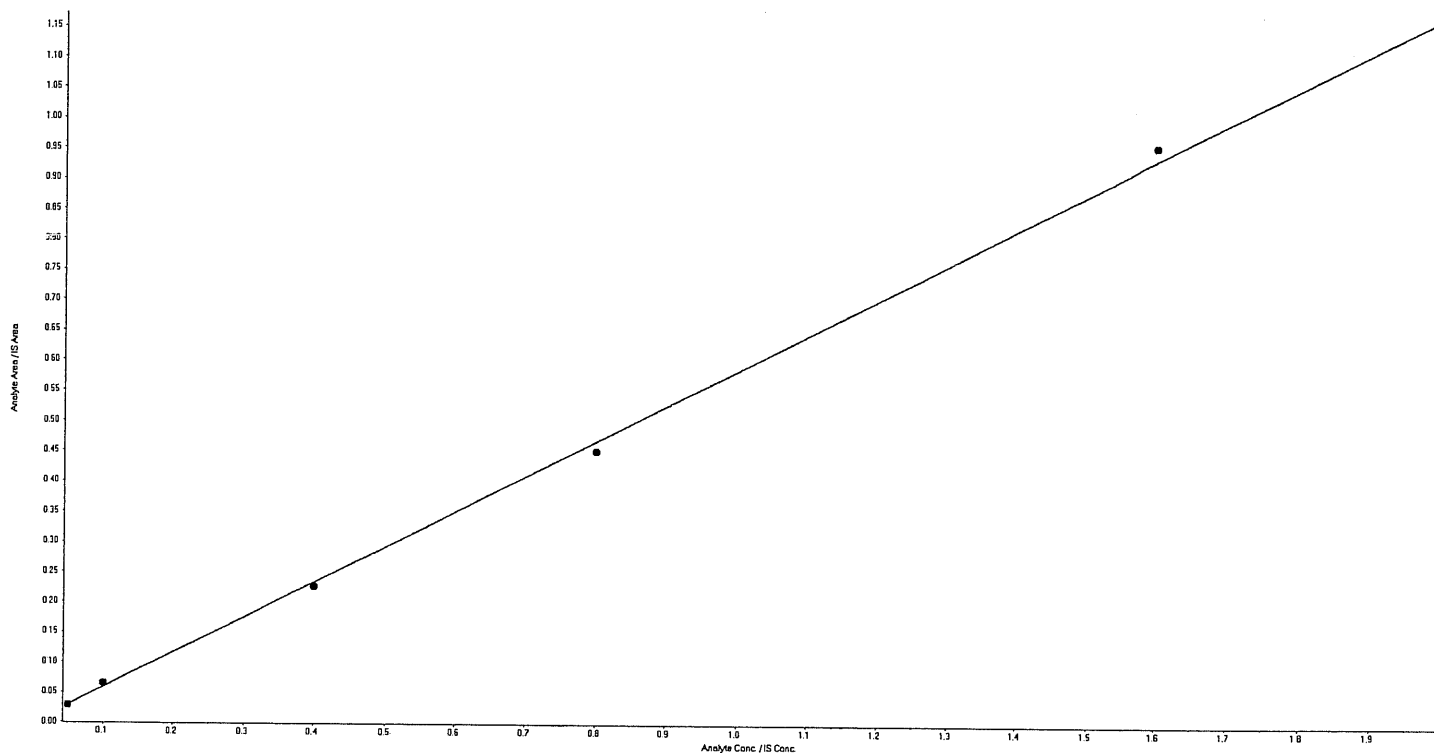
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 LCMSMS#3

Analyte Name: 24-dinitrotoluene

Regression Equation:  $y = 0.585 x$  (std. dev. = 0.0352)

Expected Concentration	Calculated Concentration	% Accuracy
25	24.36	97.4
50	55.65	111.3
200	193.35	96.7
400	385.77	96.4
800	818.76	102.3
1000	957.97	95.8





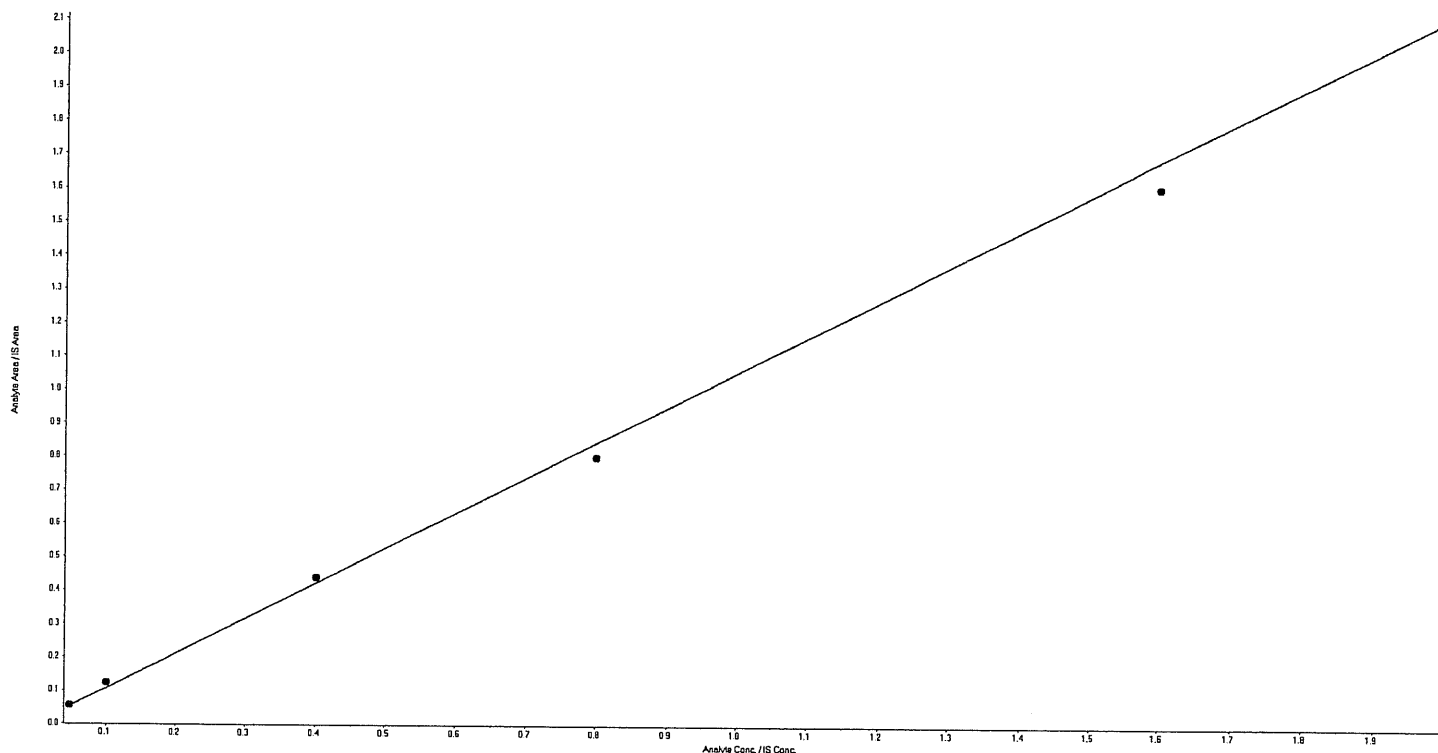
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 LCMSMS#3

Analyte Name: 4-Amino-2,6-dinitrotoluene

Regression Equation:  $y = 1.06x$  (std. dev. = 0.121)

Expected Concentration	Calculated Concentration	% Accuracy
25	26.53	106.1
50	58.36	116.7
200	207.65	103.8
400	379.08	94.8
800	762.25	95.3
1000	832.96	83.3



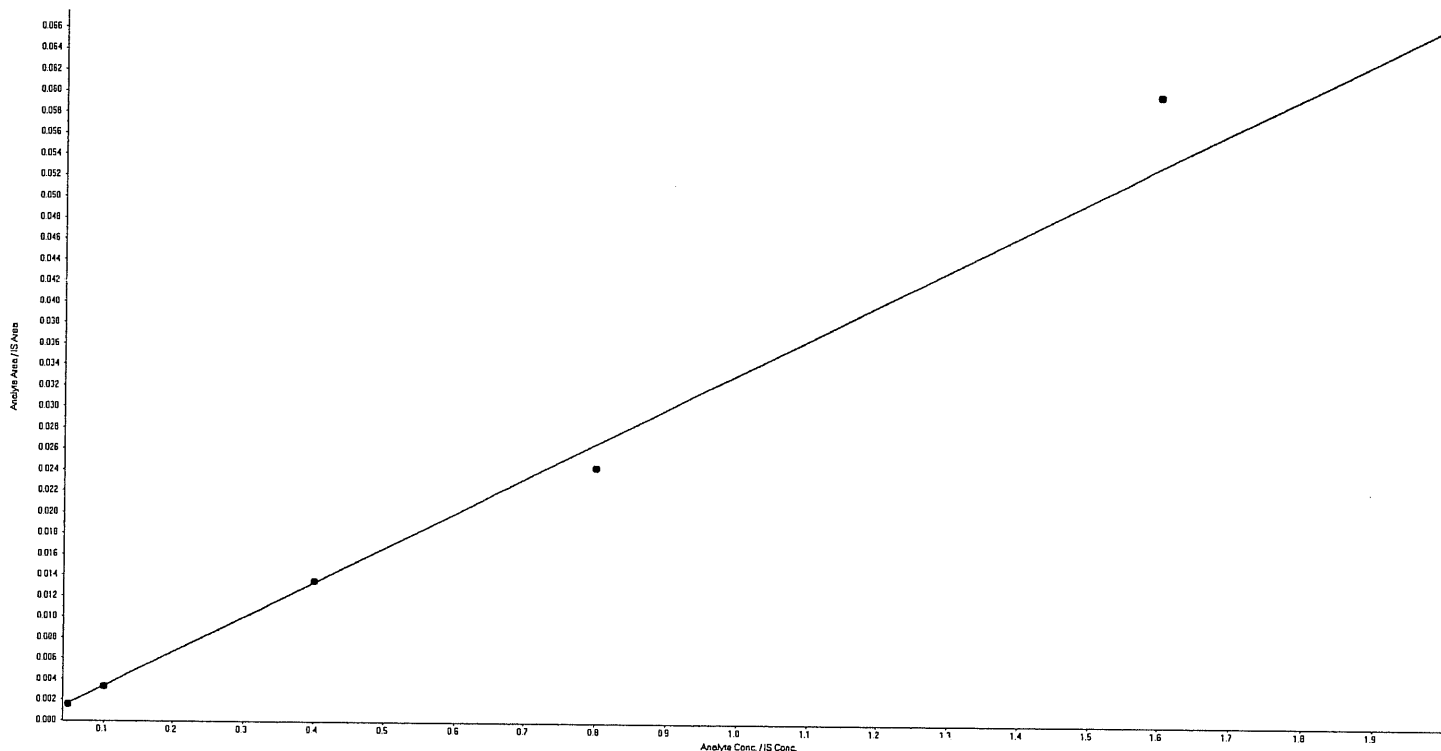
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LCMSMS#3

Analyte Name: 2-Amino-4,6-dinitrotoluene

Regression Equation:  $y = 0.0333 x$  (std. dev. = 0.00244)

Expected Concentration	Calculated Concentration	% Accuracy
25	23.60	94.4
50	49.60	99.2
200	201.96	101.0
400	366.01	91.5
800	901.45	112.7
1000	1012.46	101.2



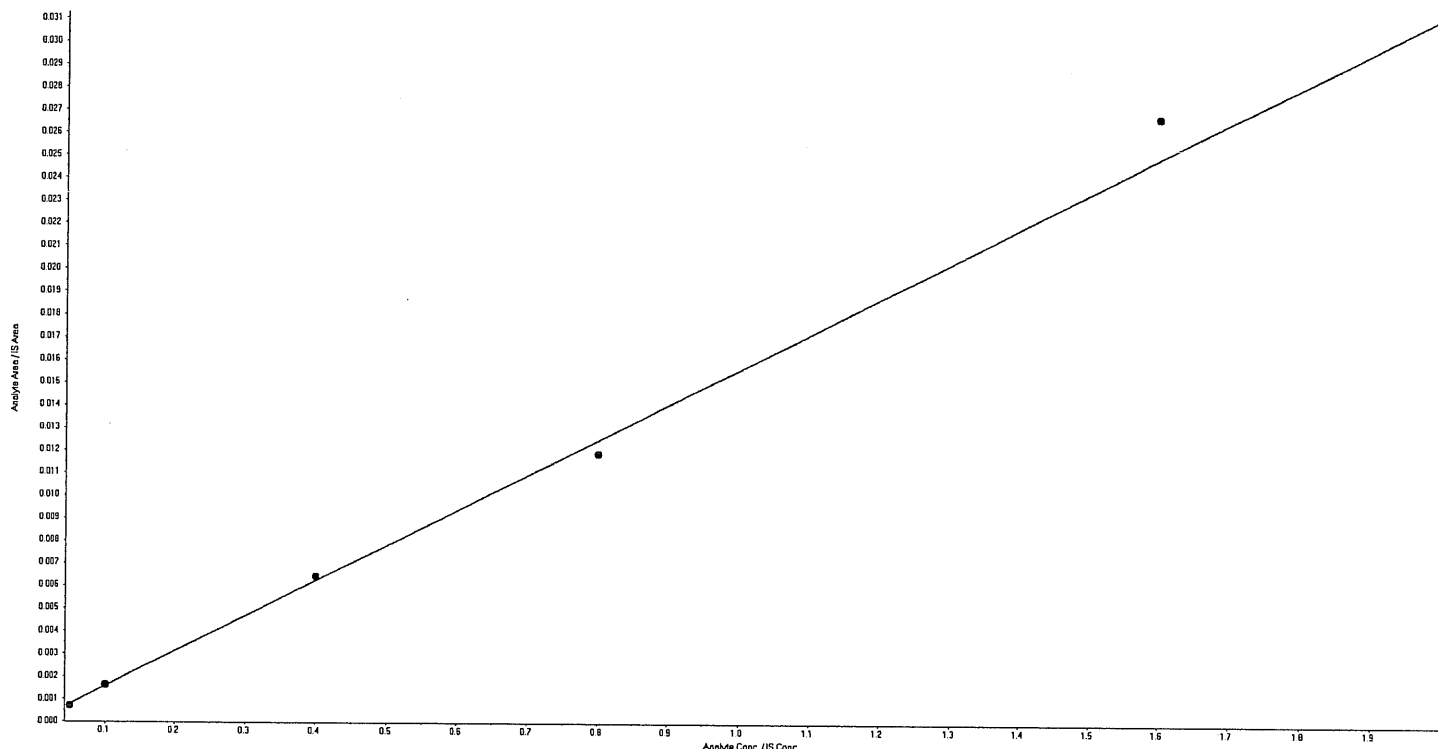
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LCMSMS#3

Analyte Name: 2-Nitrotoluene

Regression Equation:  $y = 0.0156x$  (std. dev. = 0.000896)

Expected Concentration	Calculated Concentration	% Accuracy
25	22.95	91.8
50	51.85	103.7
200	206.35	103.2
400	381.16	95.3
800	856.88	107.1
1000	989.18	98.9



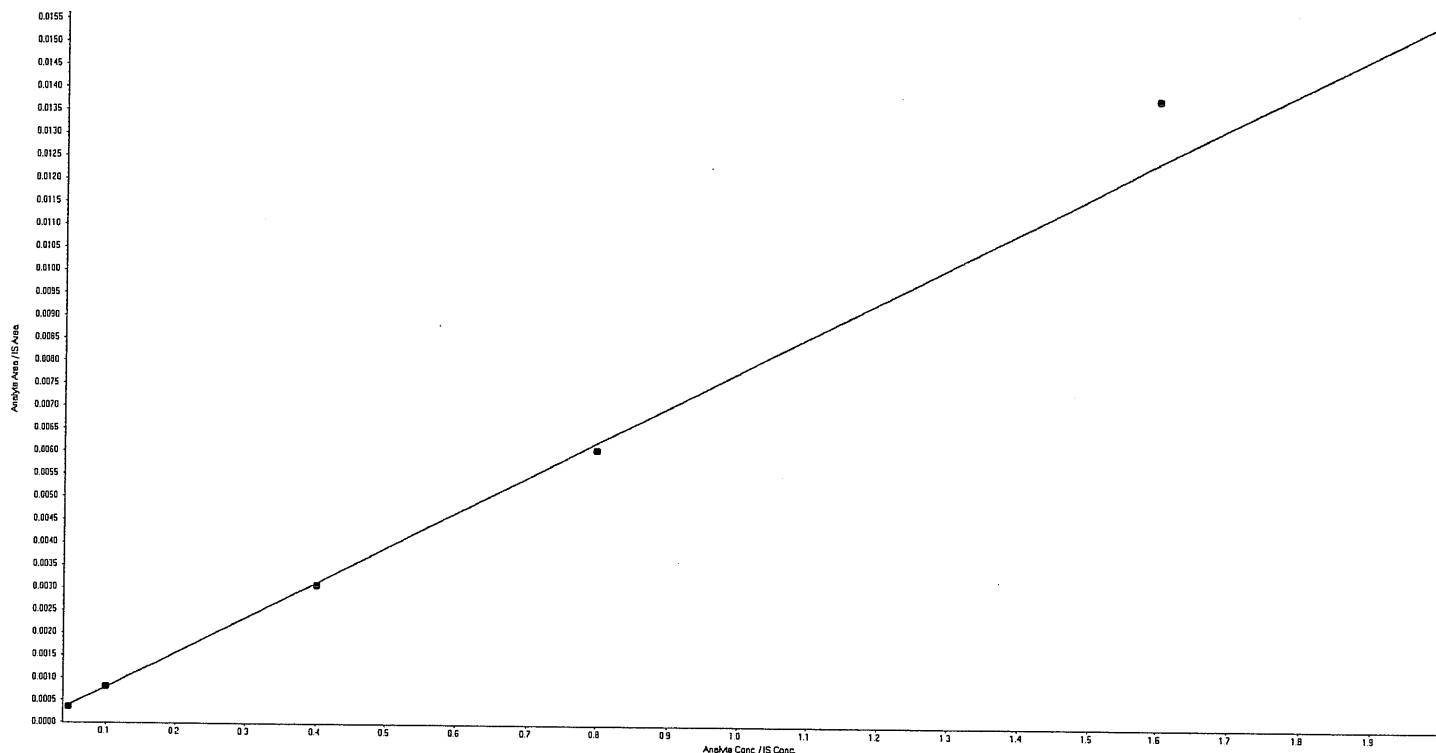
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Printed: 27/03/2010 1:31:00 PM  
 LCMSMS#3

Analyte Name: 4-Nitrotoluene

Regression Equation:  $y = 0.0078 x$  (std. dev. = 0.000535)

Expected Concentration	Calculated Concentration	% Accuracy
25	22.70	90.8
50	52.10	104.2
200	197.04	98.5
400	389.79	97.4
800	887.73	111.0
1000	980.90	98.1



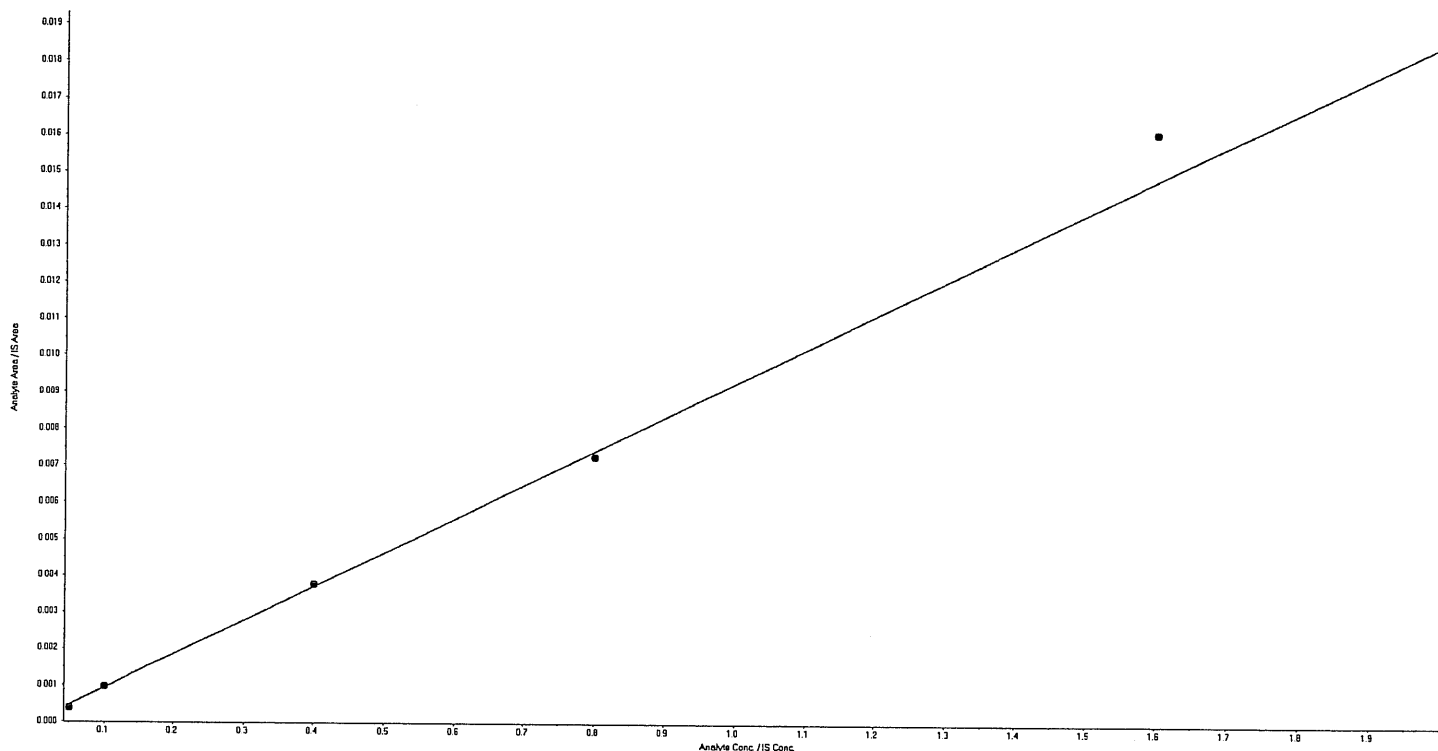
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Printed: 27/03/2010 1:31:00 PM  
LCMSMS#3

Analyte Name: 3-Nitrotoluene

Regression Equation:  $y = 0.00928 x$  (std. dev. = 0.0008)

Expected Concentration	Calculated Concentration	% Accuracy
25	20.97	83.9
50	51.99	104.0
200	203.43	101.7
400	391.41	97.9
800	868.43	108.6
1000	1040.03	104.0



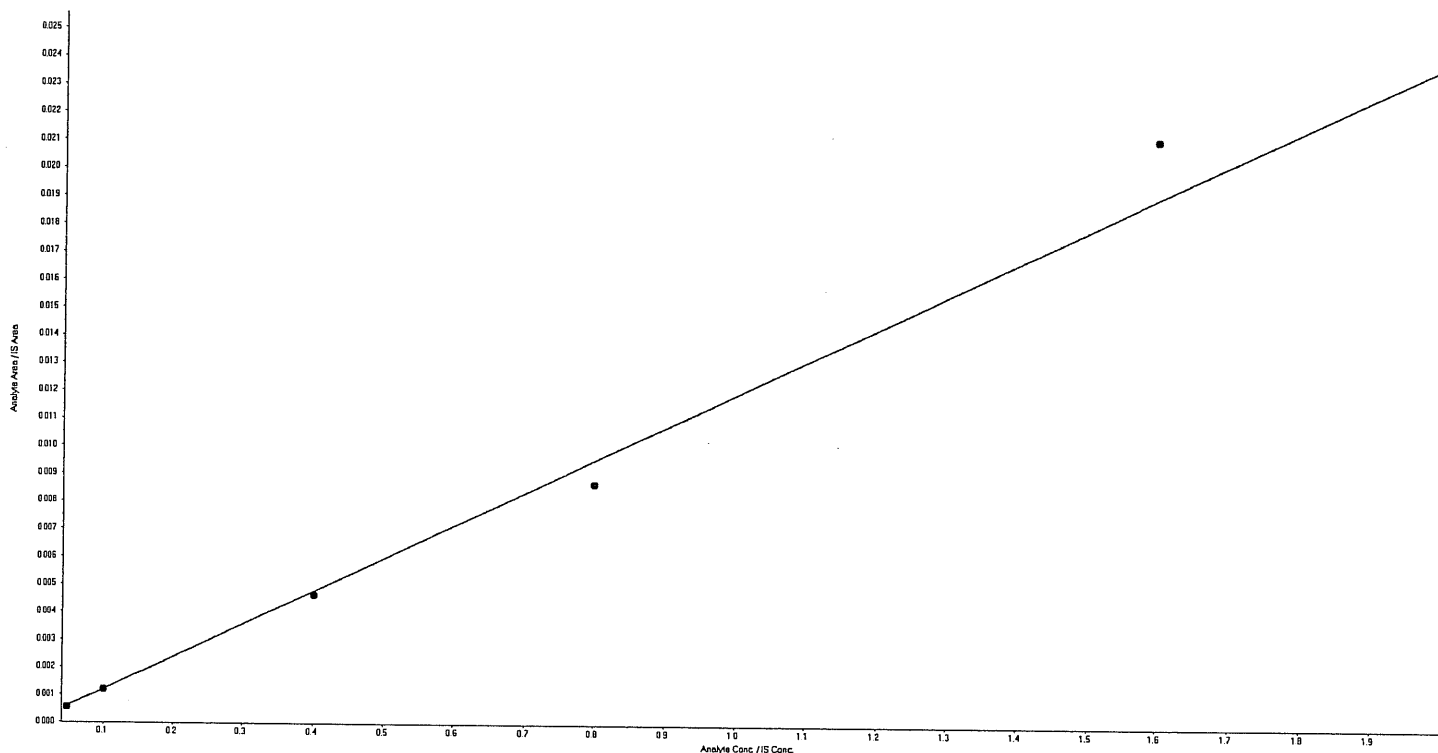
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Printed: 27/03/2010 1:31:00 PM  
LCMSMS#3

Analyte Name: PETN

Regression Equation:  $y = 0.0119x$  (std. dev. = 0.000925)

Expected Concentration	Calculated Concentration	% Accuracy
25	23.35	93.4
50	50.44	100.9
200	194.08	97.0
400	363.79	90.9
800	886.90	110.9
1000	1068.61	106.9



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Printed: 27/03/2010 1:31:00 PM  
LCMSMS#3

Explosives Initial Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1758

Lab Code: GEL

GEL Sample ID: WXXICV

GEL Data File EXP0322010.wiff

Analysis Date: 22-MAR-10 19:30

LCMSMS ID: 1189

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	600	514	86	
2,4,6-Trinitrotoluene	600	517	86	
2,4-Dinitrotoluene	600	571	95	
2,6-Dinitrotoluene	600	492	82	
2-Amino-4,6-dinitrotoluene	600	570	95	
3,4-Dinitrotoluene	300	265	88	
4-Amino-2,6-dinitrotoluene	600	540	90	
HMX	600	521	87	
Nitrobenzene	600	595	99	
PETN	600	570	95	
RDX	600	578	96	
Tetryl	600	571	95	
m-Dinitrobenzene	600	559	93	
m-Nitrotoluene	600	588	98	
o-Nitrotoluene	600	563	94	
p-Nitrotoluene	600	571	95	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,  
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

# Column used to flag Recovery outside of Limits

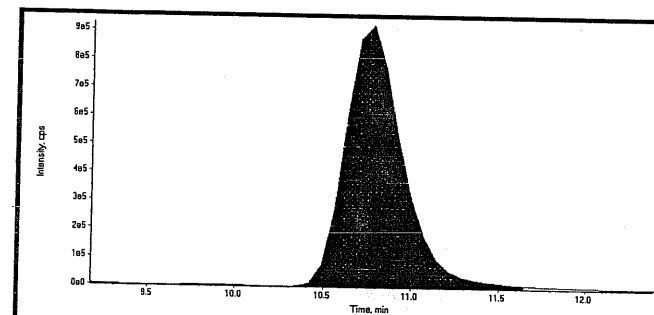
\* Value outside of Recovery Limits



GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

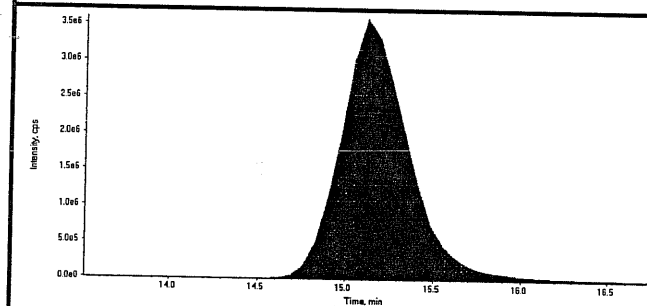
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LCMSMS#3

Data File	EXP0322010.wiff	Acquisition Date	3/22/2010 7:30:24 PM
Sample Name	WXX100322-56ICV	Acquisition Method	8321_pntx.dam
Batch Dilution Analyst	1 LER	Result Table	032210.rdb
Procedure Code	LCMSEXP_C	Sample Type	Quality Control



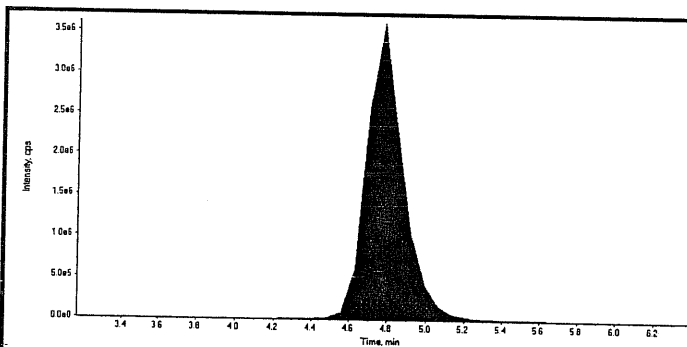
Compound Name:	13-Dinitrobenzene-d4 (172.1/46.1 amu)
Expected RT:	10.80
Actual RT:	10.80
Area Counts:	21000000.00
Manual Modification	No
Amount:	500.00(ng/mL)

Please refer to Form 8 for a list of Internal Standard Recoveries

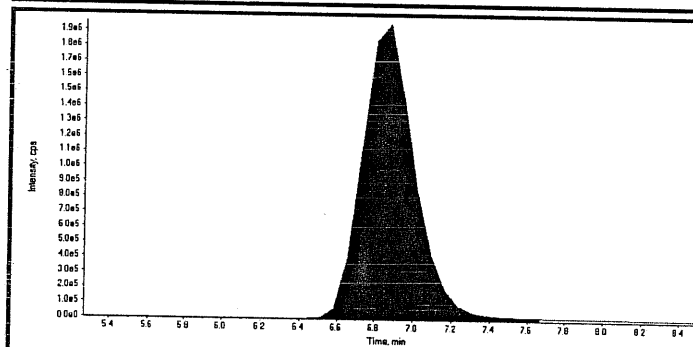


Compound Name:	26-Dinitrotoluene-d3 (185.0/155.0 amu)
Expected RT:	15.10
Actual RT:	15.10
Area Counts:	96500000.00
Manual Modification	No
Amount:	500.00(ng/mL)

Please refer to Form 8 for a list of Internal Standard Recoveries



Compound Name:	HMX (341.2/46.0 amu)
Expected RT:	4.77
Actual RT:	4.77
Area Counts:	4.77e+007
Manual Modification	No
Amount:	521. (ng/mL)
% Accuracy:	86.90



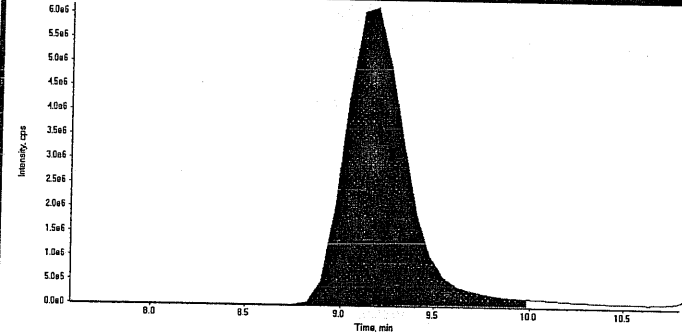
Compound Name:	RDX (267.0/46.1 amu)
Expected RT:	6.87
Actual RT:	6.87
Area Counts:	3.72e+007
Manual Modification	No
Amount:	578. (ng/mL)
% Accuracy:	96.30

*Scan 3/28/10*

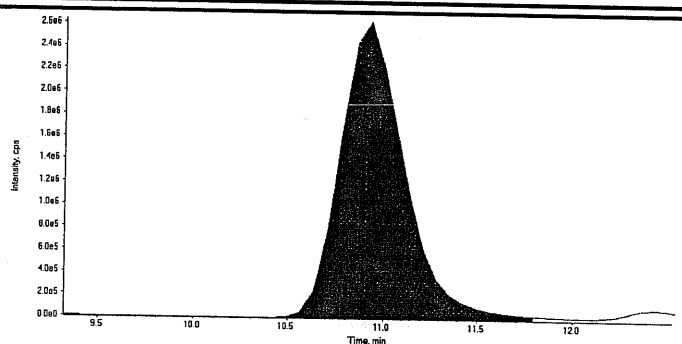
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

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LCMSMS#3

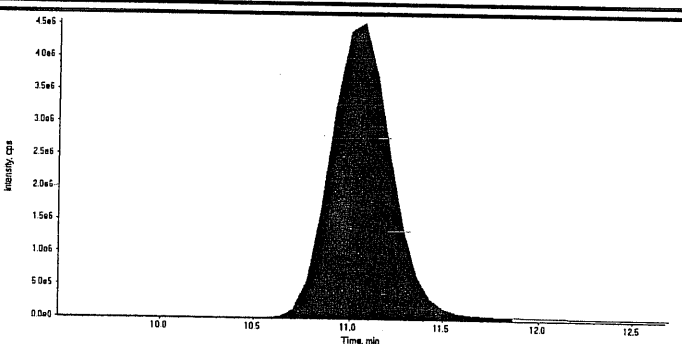
Data File	EXP0322010.wiff	Acquisition Date	3/22/2010 7:30:24 PM
Sample Name	WXX100322-56ICV	Acquisition Method	8321_pntx.dam
Batch Dilution Analyst	1 LER	Result Table	032210.rdb
Procedure Code	LCMSEXP_C	Sample Type	Quality Control



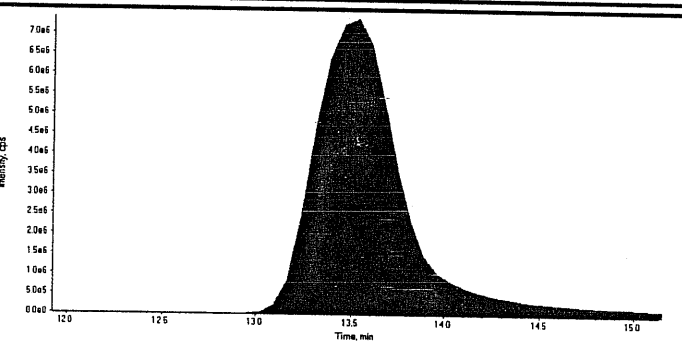
Compound Name:	135-Trinitrobenzene (213.0/182.8 amu)
Expected RT:	9.19
Actual RT:	9.19
Area Counts:	1.40e+008
Manual Modification	No
Amount:	514. (ng/mL)
% Accuracy:	85.60



Compound Name:	13-Dinitrobenzene (168.0/137.9 amu)
Expected RT:	10.9
Actual RT:	10.9
Area Counts:	6.25e+007
Manual Modification	No
Amount:	559. (ng/mL)
% Accuracy:	93.10



Compound Name:	Tetryl (241.0/180.8 amu)
Expected RT:	11.1
Actual RT:	11.1
Area Counts:	1.03e+008
Manual Modification	No
Amount:	571. (ng/mL)
% Accuracy:	95.10



Compound Name:	246-Trinitrotoluene (227.1/209.8 amu)
Expected RT:	13.5
Actual RT:	13.5
Area Counts:	2.51e+008
Manual Modification	No
Amount:	517. (ng/mL)
% Accuracy:	86.20

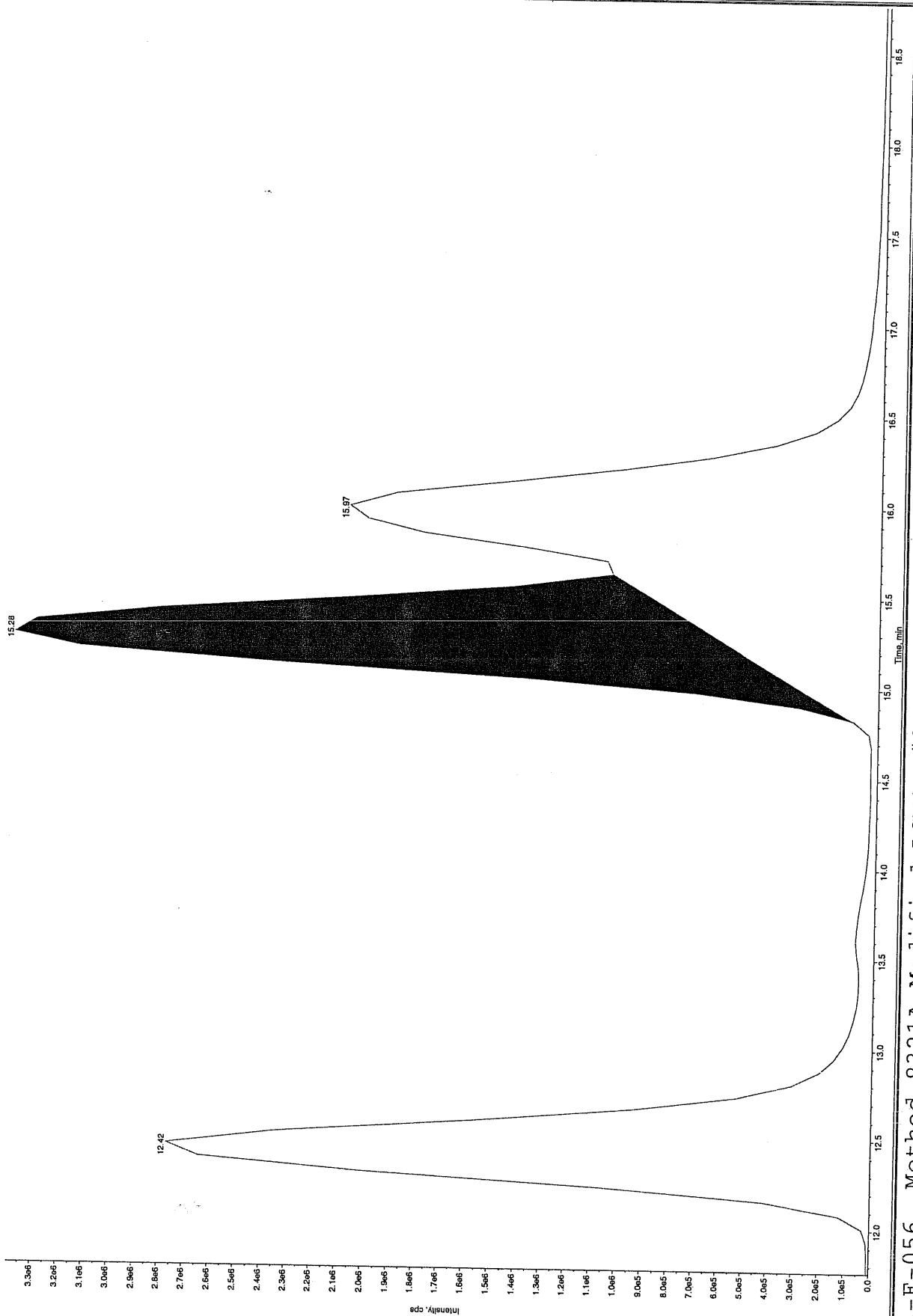
Before Jan 3/28/10

Sample Name: WXX10322560V Sample ID: TILLER  
Peak Name: 26-dinitrochlorobenzene Mass: 182.0460 amu  
Comment: LCMS-EXP\_C Annabain

File Index: 1 QC  
Concentration: 600. ng/mL  
Injection Conc: 3/22/2010  
Date: 7:30:24 PM

ified: No  
Peak Width: 15.3 min  
Peak Height: 1.00 sec  
Peak Width: 3.00 points  
Window: 30.0 sec  
Ret RT: 15.3 min  
Relative RT: No

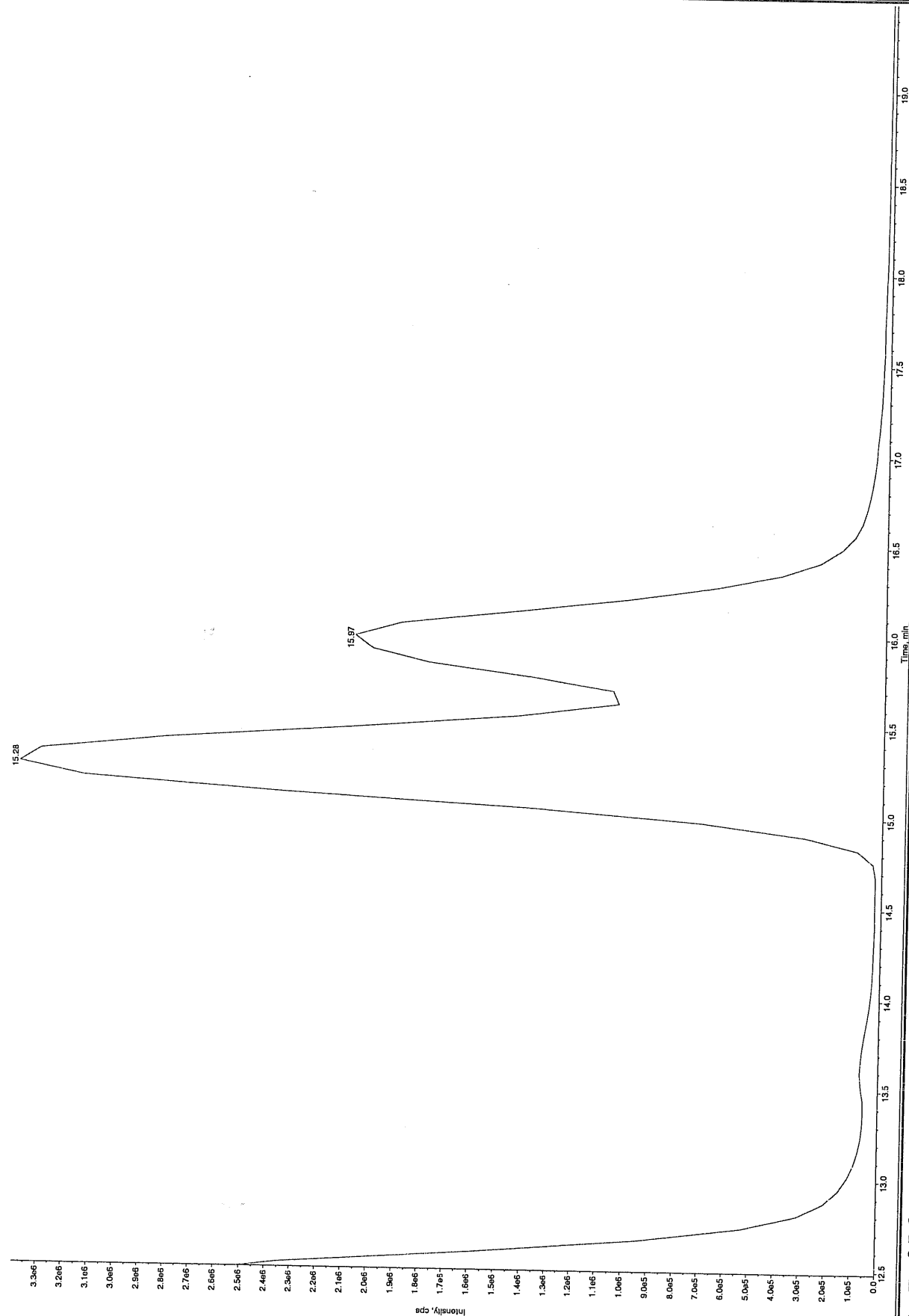
Type: Valley  
Retention Time: 15.3 min  
Height: 6.51e+007 counts  
Area: 2.78e+006 cps  
Time: 15.6 min



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Before Jan 3/28/10

Sample Name: "WXX100322-561C" Sample ID: "11LEF" File: "EXP0322010.wif"  
Peak Name: "24-dinitrochloroene" Mass(es): "182.046.0 amu"  
Comment: "LCMSEXP\_C" Annotation: "  
Sample Index: 1  
Concentration: 600 ng/mL  
Calculated Conc: 0.00 ng/mL  
Date: 3/22/2010  
Time: 7:10:24 PM  
ified: No

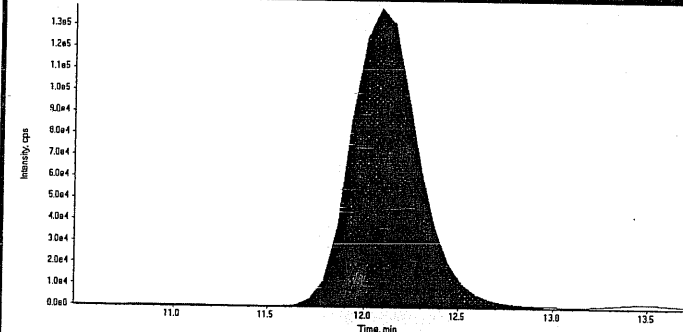


EL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#3

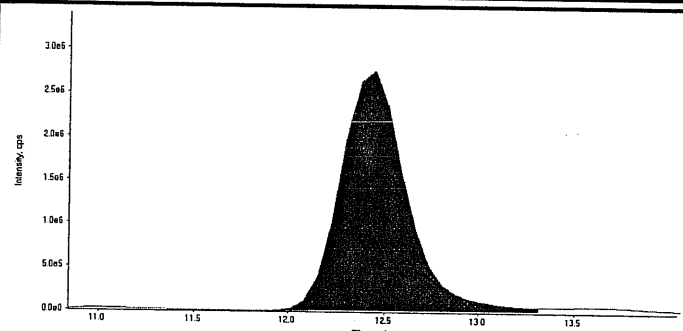
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GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 27/03/2010 1:31:00 PM  
LCMSMS#3

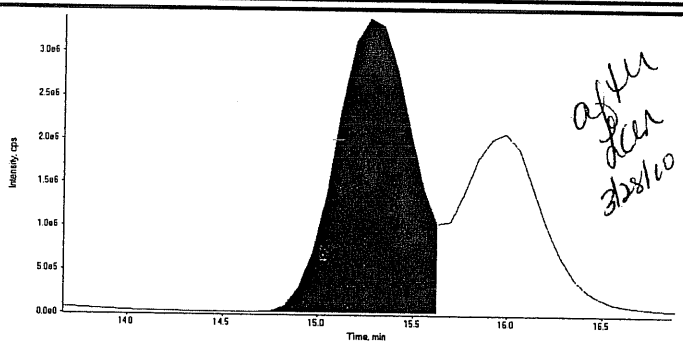
Data File	EXP0322010.wiff	Acquisition Date	3/22/2010 7:30:24 PM
Sample Name	WXX100322-56ICV	Acquisition Method	8321_pntx.dam
Batch Dilution Analyst	1 LER	Result Table	032210.rdb
Procedure Code	LCMSEXP_C	Sample Type	Quality Control



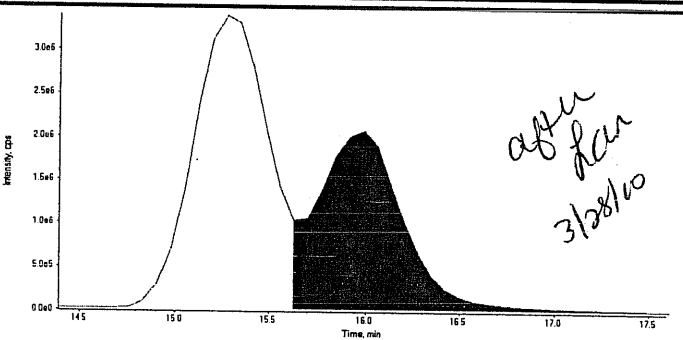
Compound Name:	Nitrobenzene (123.0/46.0 amu)
Expected RT:	12.1
Actual RT:	12.1
Area Counts:	3.39e+006
Manual Modification	No
Amount:	595. (ng/mL)
% Accuracy:	99.20



Compound Name:	34-dinitrotoluene (182.0/46.0 amu)
Expected RT:	12.4
Actual RT:	12.4
Area Counts:	6.61e+007
Manual Modification	No
Amount:	265. (ng/mL)
% Accuracy:	88.30



Compound Name:	26-dinitrotoluene (182.0/46.0 amu)
Expected RT:	15.3
Actual RT:	15.3
Area Counts:	9.23e+007
Manual Modification	Yes
Amount:	492. (ng/mL)
% Accuracy:	82.10



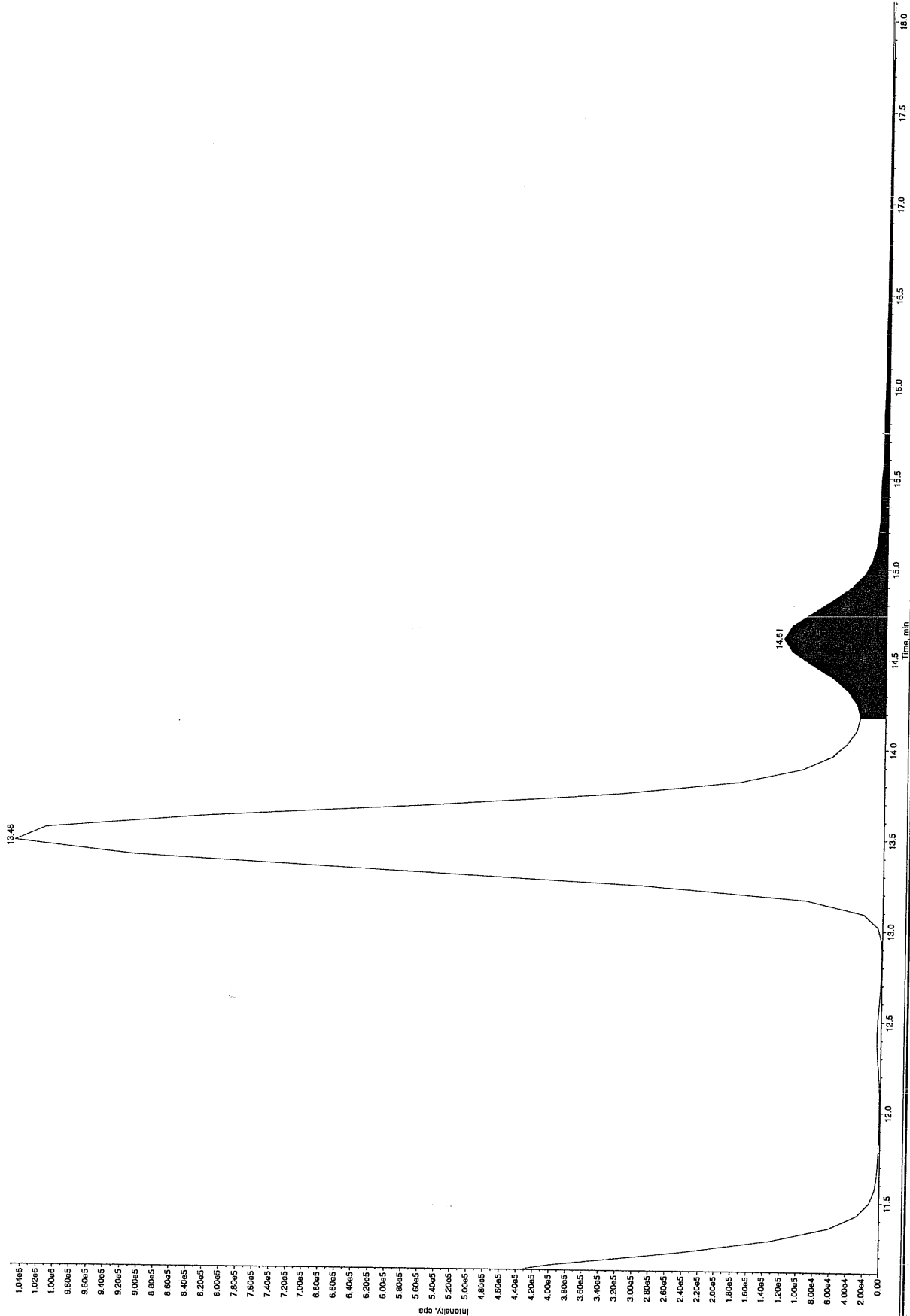
Compound Name:	24-dinitrotoluene (182.0/46.0 amu)
Expected RT:	16.0
Actual RT:	16.0
Area Counts:	6.45e+007
Manual Modification	Yes
Amount:	571. (ng/mL)
% Accuracy:	95.20

Before Jan 3/28/10

File Name: "NXX1032258(CV" Sample ID: "JLIER" File: "EXP0322010.wif"  
 File Name: "NXX1032258(CV" Sample ID: "JLIER" File: "EXP0322010.wif"  
 Comment: "LCMSEXP\_C" Annotation: "Mass(es): 197.0/180.0 amu"

1e Index: 1 QC  
 Entration: 600. ng/mL  
 Date: 3/22/2010  
 Time: 7:30:24 PM

1e Index: 1 QC  
 Entration: 600. ng/mL  
 Date: 3/22/2010  
 Time: 7:30:24 PM  
 Method: 8321A-Modified LCMSMS#3

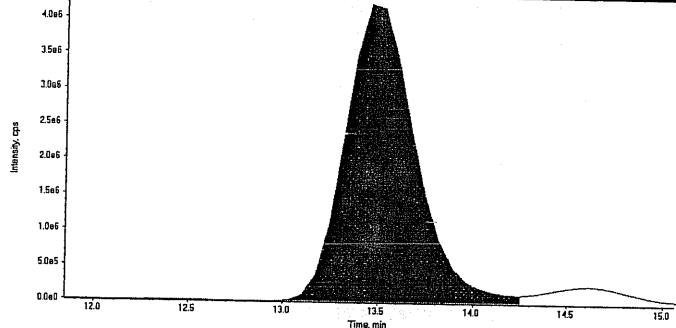


Method 8321A-Modified LCMSMS#3

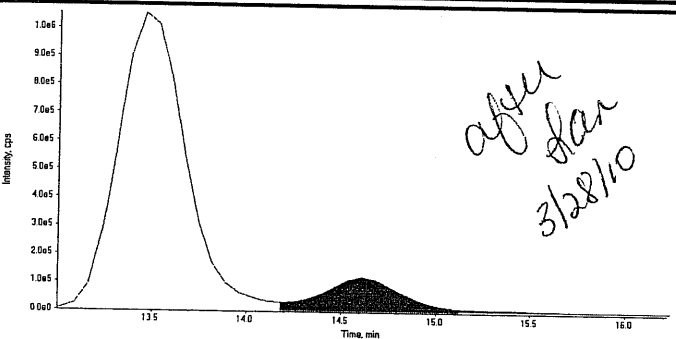
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 27/03/2010 1:31:00 PM  
LCMSMS#3

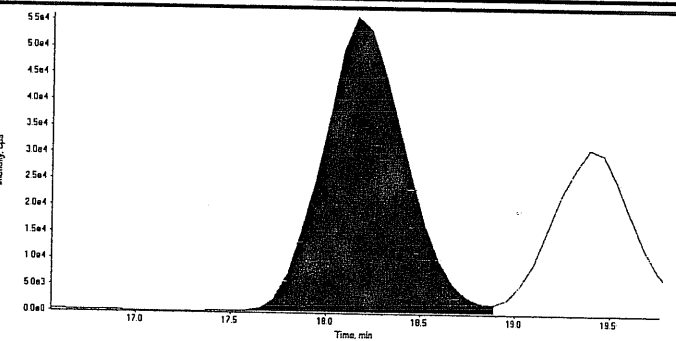
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Sample Name	WXX100322-56ICV	Acquisition Method	8321_pntx.dam
Batch Dilution Analyst	1 LER	Result Table	032210.rdb
Procedure Code	LCMSEXP_C	Sample Type	Quality Control



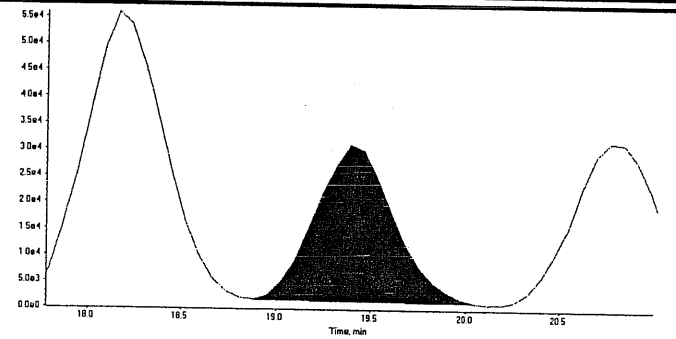
Compound Name:	4-Amino-26-dinitrotoluene (197.0/167.0 amu)
Expected RT:	13.5
Actual RT:	13.5
Area Counts:	1.10e+008
Manual Modification	No
Amount:	540. (ng/mL)
% Accuracy:	90.00



Compound Name:	2-Amino-46-dinitrotoluene (197.0/180.0 amu)
Expected RT:	14.6
Actual RT:	14.6
Area Counts:	3.66e+006
Manual Modification	Yes
Amount:	570. (ng/mL)
% Accuracy:	95.00



Compound Name:	2-Nitrotoluene (137.0/46.0 amu)
Expected RT:	18.2
Actual RT:	18.2
Area Counts:	1.70e+006
Manual Modification	No
Amount:	563. (ng/mL)
% Accuracy:	93.90

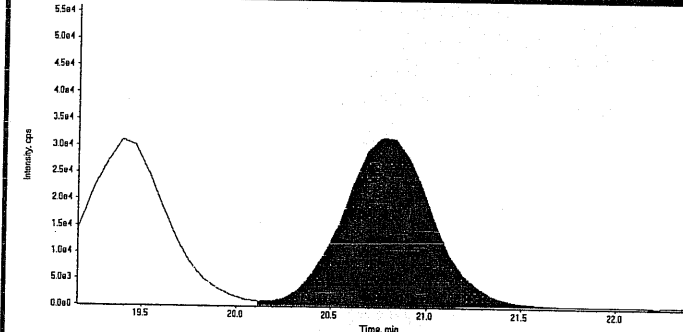


Compound Name:	4-Nitrotoluene (137.0/46.0 amu)
Expected RT:	19.4
Actual RT:	19.4
Area Counts:	8.60e+005
Manual Modification	No
Amount:	571. (ng/mL)
% Accuracy:	95.20

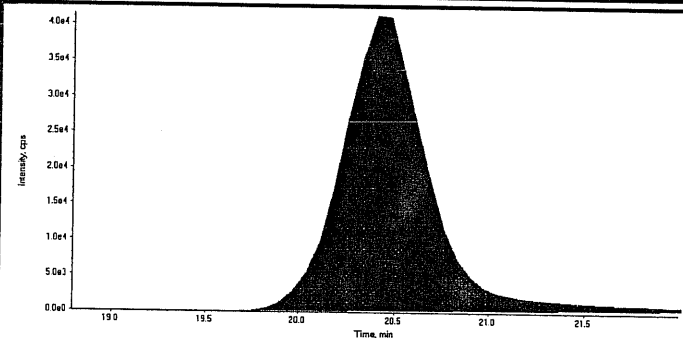
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GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 27/03/2010 1:31:00 PM  
LCMSMS#3

Data File	EXP0322010.wiff	Acquisition Date	3/22/2010 7:30:24 PM
Sample Name	WXX100322-56ICV	Acquisition Method	8321_pntx.dam
Batch Dilution Analyst	1 LER	Result Table	032210.rdb
Procedure Code	LCMSEXP_C	Sample Type	Quality Control



Compound Name:	3-Nitrotoluene (137.0/46.0 amu)
Expected RT:	20.8
Actual RT:	20.8
Area Counts:	1.05e+006
Manual Modification	No
Amount:	588. (ng/mL)
% Accuracy:	97.90



Compound Name:	PETN (361.1/62.0 amu)
Expected RT:	20.4
Actual RT:	20.4
Area Counts:	1.31e+006
Manual Modification	No
Amount:	570. (ng/mL)
% Accuracy:	95.00



GRAND MEAN AVERAGE

Vendor: Restek  
 Date of Analysis 03/22/10  
 Time of Injection 1930  
 Standard Number WXX100322-56ICV  
 Data File EXP0322010a

HMX	86.9
RDX	96.3
135-Trinitrobenzene	85.6
13-Dinitrobenzene	93.1
Tetryl	95.1
246-Trinitrotoluene	86.2
Nitrobenzene	99.2
34-dinitrotoluene	88.3
26-dinitrotoluene	82.1
24-dinitrotoluene	95.2
4-Amino-26-dinitrotoluene	90.0
2-Amino-46-dinitrotoluene	95.0
2-Nitrotoluene	93.9
4-Nitrotoluene	95.2
3-Nitrotoluene	97.9
PETN	95.0

TOTAL

1475.0

*HAM 03/28/10*

AVERAGE

✓ 92.2

ICV Limits 85-115%

CRI Limits 70-130%

CCV Limits 85-115%

No single analyte > +/- 60%

*Lan 3/28/10*

# Explosives Initial Calibration

Lab Name: GEL Laboratories LLC

GEL Job No: 10-1758

Lab Code: GEL

Run Date: 05-MAR-10 22-MAR-10 30-MAR-10

LCMSMS Instrument ID: LCMSMS3

Method: 8321A Modified

HPLC Column: Phenomenex Ultracarb 5 ODS(20)

Calibration Type: Average RF

Parname	50	51	52	53	54	55	Ave RF	RSD	Q
Calibration Level:	EXP0330003.wi	EXP0330004.wi	EXP0330005.wi	EXP0330006.wi	EXP0330007.wi	EXP0330008.wi			
Data File:									
1,3,5-Trinitrobenzene	7.79	7.46	7.86	6.7	5.21	6.07	6.848	15.4	
2,4-Dinitrotoluene	.55	.539	.561	.571	.489	.593	0.551	6.46	
2,6-Dinitrotoluene	1.02	.905	.948	.902	.854	.788	0.903	8.91	
2-Amino-4,6-dinitrotoluene	.039	.032	.039	.039	.04	.038	0.038	7.56	
3,4-Dinitrotoluene	1.23	1.15	1.3	1.04	1.11	1.15	1.163	7.66	
4-Amino-2,6-dinitrotoluene	1.14	.916	1.19	.967	.932	.905	1.008	12.4	
HMX	2.42	2.3	2.22	2.06	1.68	2.1	2.130	12.1	
Nitrobenzene	.111	.137	.156	.127	.12	.153	0.134	13.6	
PETN	.016	.012	.014	.013	.013	.016	0.014	11.3	
RDX	1.33	1.4	1.49	1.27	1.17	1.56	1.370	10.5	
Tetryl	5.66	4.9	5.34	4.62	3.73	4.42	4.778	14.3	
m-Dinitrobenzene	2.83	2.79	3.07	2.83	2.49	2.81	2.803	6.6	
m-Nitrotoluene	.009	.009	.009	.009	.009	.01	0.009	5.63	
o-Nitrotoluene	.012	.011	.013	.012	.014	.015	0.013	10.8	
p-Nitrotoluene	.007	.007	.008	.007	.008	.008	0.008	8.49	

Q column used to flag RSD values outside of Limit (>20%)

\* Values outside of QC Limit

Explosives Initial Calibration

Lab Name: GEL Laboratories LLC

GEL Job No: 10-1758

Lab Code: GEL

Run Date: 05-MAR-10.22-MAR-10.30-MAR-10

LCMSMS Instrument ID: LCMSMS3

Method: 8321A Modified

HPLC Column: Phenomenex Ultracarb 5 ODS(20)

Calibration Type: 2nd Order

Calibration Level:	50	51	52	53	54	55	X	X^2	Intercept	COD	Q
Data File:	EXP0330003.wiff	EXP0330004.wiff	EXP0330005.wiff	EXP0330006.wiff	EXP0330007.wiff	EXP0330008.wiff					
Parname:											
2,4,6-Trinitrotoluene	14000000	27700000	109000000	181000000	303000000	337000000	.079	2.97	-.401	.9986	

Quadratic Fit:  $y = Ax^2 + Bx + C$   
where  $X^2$  column above is coefficient A  
X column above is coefficient B  
intercept is C

COD is Coefficient of Determination

Q column used to flag COD outside of Limit (<0.990)

\* Values outside of QC Limit

033010ICAL

Peak Name: 13-Dinitrobenzene-d4  
 Use as Internal Standard  
 Q1/Q3 Masses: 172.05/46.10 amu  
 Peak Name: 26-Dinitrotoluene-d3  
 Use as Internal Standard  
 Q1/Q3 Masses: 184.99/155.00 amu

Peak Name: HMX  
 Internal Standard: 13-Dinitrobenzene-d4  
 Q1/Q3 Masses: 341.20/46.00 amu

Fit Factor	Mean Response Factor	Weighting	None	Iterate No
2.13				
Standard deviation	0.258			
%RSD	12.1			
Use Area				

Peak Name: RDX  
 Internal Standard: 13-Dinitrobenzene-d4  
 Q1/Q3 Masses: 267.01/46.10 amu

Fit Factor	Mean Response Factor	Weighting	None	Iterate No
1.37				
Standard deviation	0.143			
%RSD	10.5			
Use Area				

Peak Name: 135-Trinitrobenzene  
 Internal Standard: 13-Dinitrobenzene-d4  
 Q1/Q3 Masses: 212.97/182.80 amu

Fit Factor	Mean Response Factor	Weighting	None	Iterate No
6.85				
Standard deviation	1.06			
%RSD	15.4			
Use Area				

Peak Name: 13-Dinitrobenzene  
 Internal Standard: 13-Dinitrobenzene-d4  
 Q1/Q3 Masses: 167.95/137.90 amu

Fit Factor	Mean Response Factor	Weighting	None	Iterate No
2.81				
Standard deviation	0.185			

Page 1 *dhm 04/02/10*

*fur 4/11/10*

033010ICAL

%RSD 6.6  
Use Area

Peak Name: Tetra[  
Internal Standard: 13-Dinitrobenzene-d4  
Q1/Q3 Masses: 240.95/180.80 amu

Fit	Mean Response Factor	Weighting	None	Iterate No
Factor	4.78			
Standard deviation	0.685			
%RSD	14.3			
Use Area				

Peak Name: 246-Trinitroto[luene  
Internal Standard: 26-Dinitroto[luene-d3  
Q1/Q3 Masses: 227.12/209.80 amu

Fit	Quadratic	Weighting	None	Iterate No
a0	0.0793			
a1	2.97			
a2	-0.401			
Correlation coefficient	0.9986			
Use Area				

Peak Name: Nitrobenzene  
Internal Standard: 13-Dinitrobenzene-d4  
Q1/Q3 Masses: 123.04/46.00 amu

Fit	Mean Response Factor	Weighting	None	Iterate No
Factor	0.134			
Standard deviation	0.0182			
%RSD	13.6			
Use Area				

Peak Name: 34-dinitroto[luene  
Internal Standard: 26-Dinitroto[luene-d3  
Q1/Q3 Masses: 182.00/46.00 amu

Fit	Mean Response Factor	Weighting	None	Iterate No
Factor	1.16			
Standard deviation	0.0891			
%RSD	7.66			
Use Area				

033010ICAL

Peak Name: 26-dinitrotoluene  
Internal Standard: 26-Dinitrotoluene-d3  
Q1/Q3 Masses: 182.00/46.00 amu

Fit Mean Response Factor Weighting  
Factor 0.904  
Standard deviation 0.0805  
%RSD 8.91  
Use Area

None Iterate No

Peak Name: 24-dinitrotoluene  
Internal Standard: 26-Dinitrotoluene-d3  
Q1/Q3 Masses: 182.00/46.00 amu

Fit Mean Response Factor Weighting  
Factor 0.551  
Standard deviation 0.0356  
%RSD 6.46  
Use Area

None Iterate No

Peak Name: 4-Amino-26-dinitrotoluene  
Internal Standard: 26-Dinitrotoluene-d3  
Q1/Q3 Masses: 197.02/167.00 amu

Fit Mean Response Factor Weighting  
Factor 1.01  
Standard deviation 0.125  
%RSD 12.4  
Use Area

None Iterate No

Peak Name: 2-Amino-46-dinitrotoluene  
Internal Standard: 26-Dinitrotoluene-d3  
Q1/Q3 Masses: 197.02/180.00 amu

Fit Mean Response Factor Weighting  
Factor 0.0378  
Standard deviation 0.00286  
%RSD 7.56  
Use Area

None Iterate No

Peak Name: 2-Nitrotoluene  
Internal Standard: 26-Dinitrotoluene-d3  
Q1/Q3 Masses: 137.00/46.00 amu

033010ICAL  
None Iterate No

Fit Mean Response Factor weighting  
Factor 0.013  
Standard deviation 0.0014  
%RSD 10.8  
Use Area

Peak Name: 4-Nitrotoluene  
Internal Standard: 26-Dinitrotoluene-d3  
Q1/Q3 Masses: 137.00/46.00 amu

Fit Mean Response Factor weighting  
Factor 0.00731  
Standard deviation 0.000621  
%RSD 8.49  
Use Area  
None Iterate No

Peak Name: 3-Nitrotoluene  
Internal Standard: 26-Dinitrotoluene-d3  
Q1/Q3 Masses: 137.00/46.00 amu

Fit Mean Response Factor weighting  
Factor 0.00905  
Standard deviation 0.00051  
%RSD 5.63  
Use Area  
None Iterate No

Peak Name: PETN  
Internal Standard: 26-Dinitrotoluene-d3  
Q1/Q3 Masses: 361.06/62.00 amu

Fit Mean Response Factor weighting  
Factor 0.0142  
Standard deviation 0.0016  
%RSD 11.3  
Use Area  
None Iterate No

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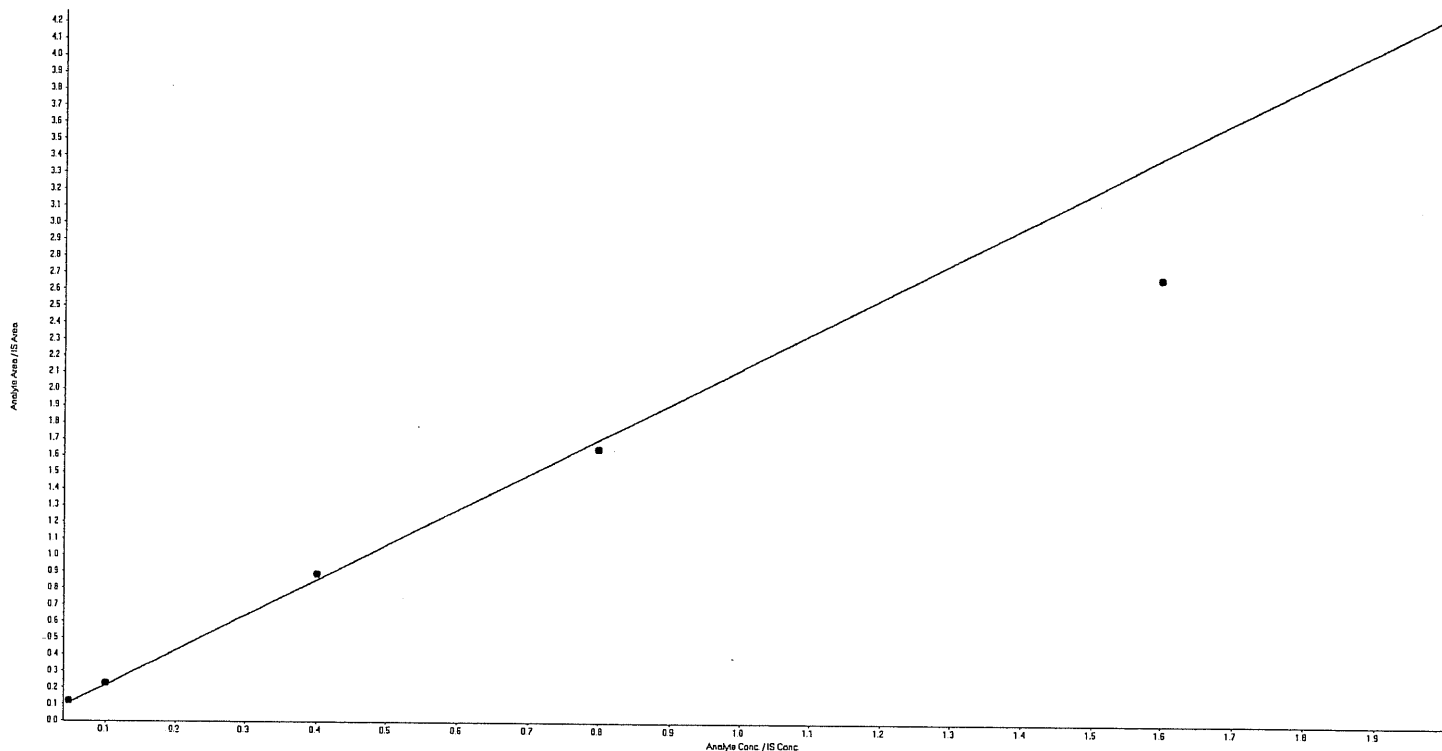
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LCMSMS#3

033010.rdb

Analyte Name: HMX

Regression Equation:  $y = 2.13 x$  (std. dev. = 0.258)

Expected Concentration	Calculated Concentration	% Accuracy
25	28.38	113.5
50	54.03	108.1
200	208.96	104.5
400	386.76	96.7
800	630.06	78.8
1000	984.84	98.5





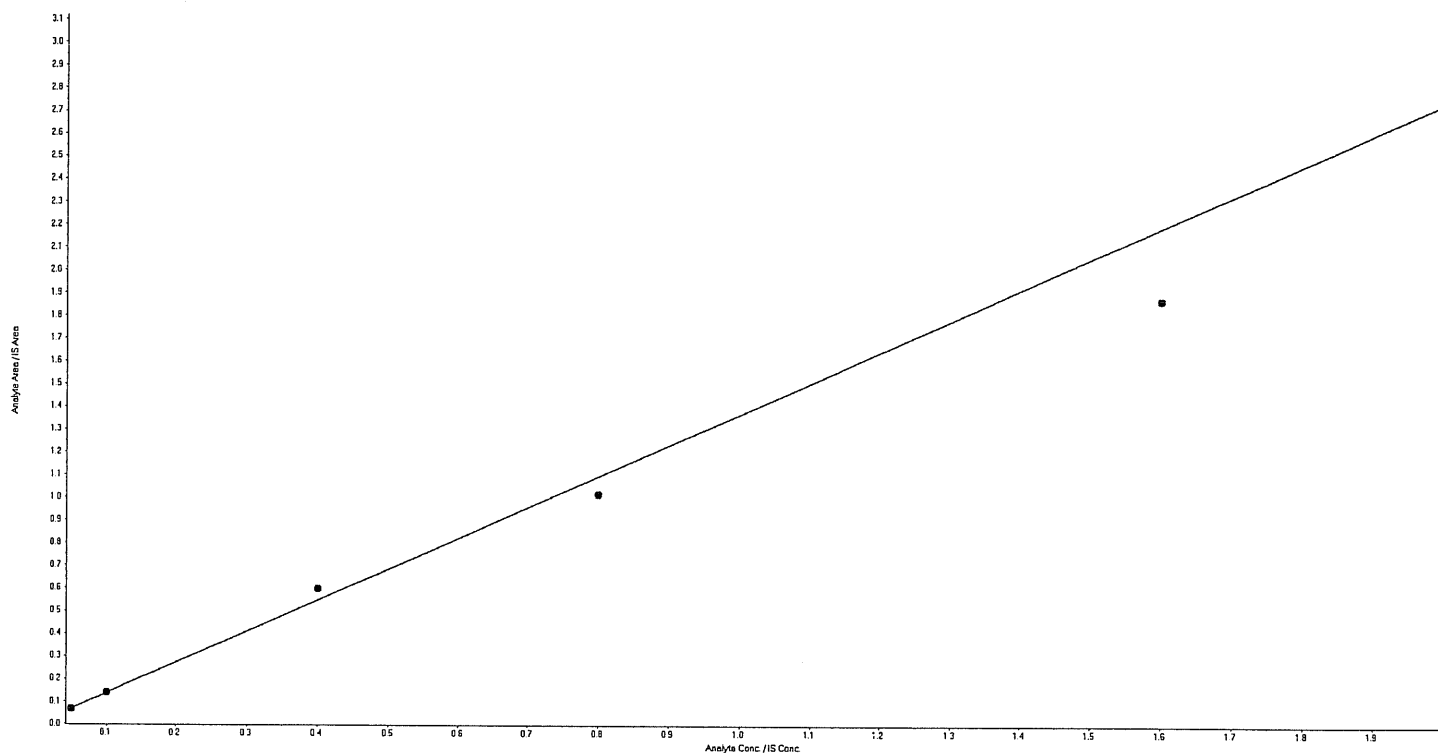
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 LCMSMS#3

Analyte Name: RDX

Regression Equation:  $y = 1.37x$  (std. dev. = 0.143)

Expected Concentration	Calculated Concentration	% Accuracy
25	24.24	97.0
50	51.04	102.1
200	217.88	108.9
400	371.47	92.9
800	683.21	85.4
1000	1137.35	113.7



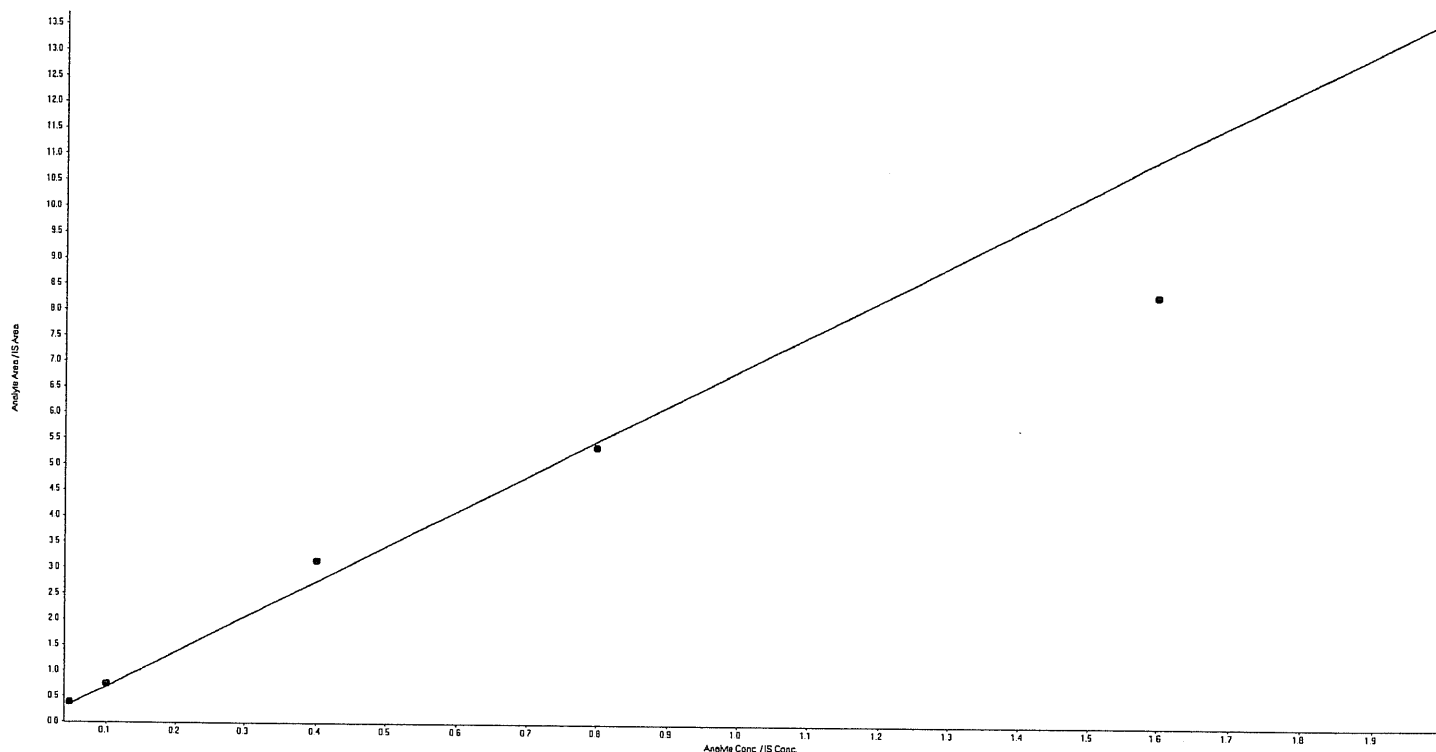
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Printed: 31/03/2010 4:24:00 PM  
LCMSMS#3

Analyte Name: 135-Trinitrobenzene

Regression Equation:  $y = 6.85x$  (std. dev. = 1.06)

Expected Concentration	Calculated Concentration	% Accuracy
25	28.43	113.7
50	54.48	109.0
200	229.46	114.7
400	391.28	97.8
800	609.13	76.1
1000	886.29	88.6



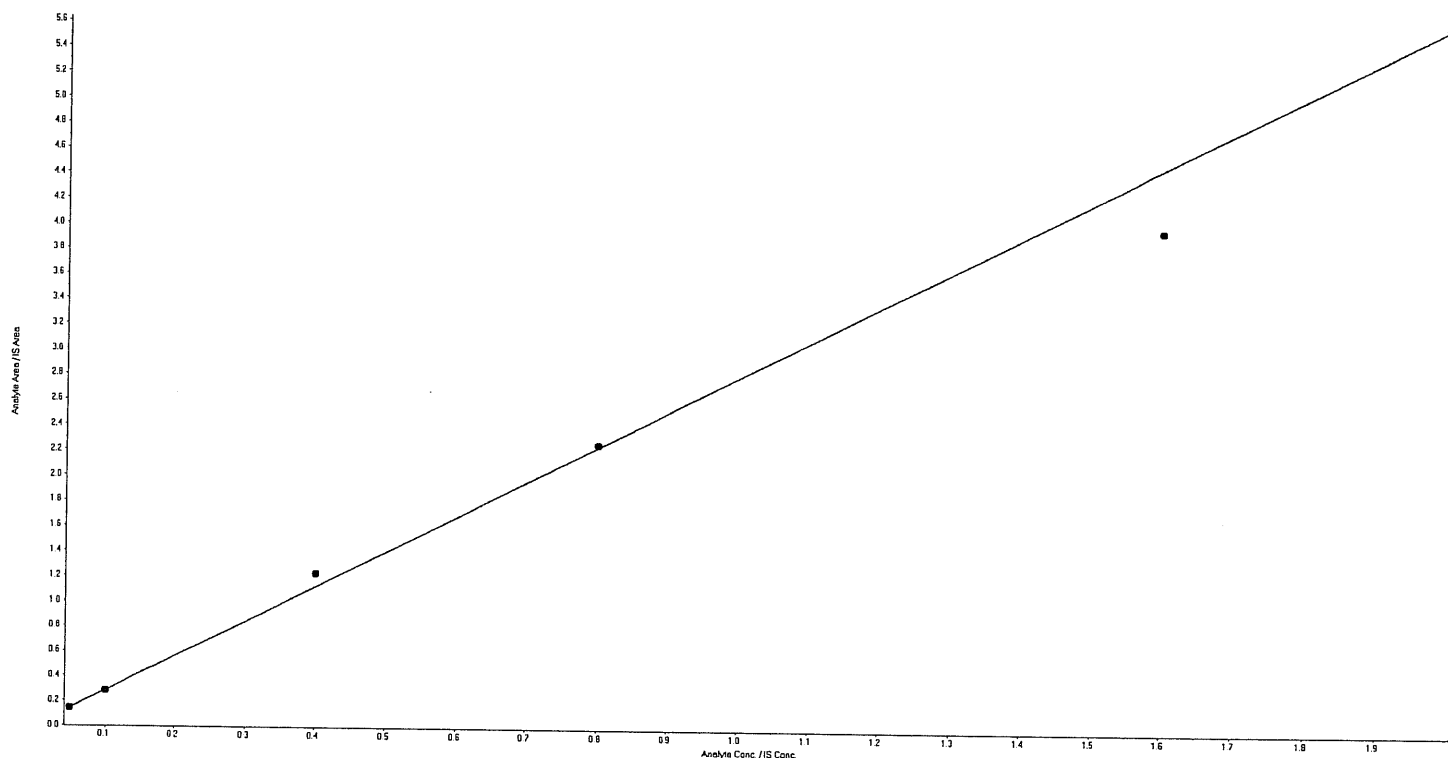
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 31/03/2010 4:24:00 PM  
LCMSMS#3

Analyte Name: 13-Dinitrobenzene

Regression Equation:  $y = 2.81 x$  (std. dev. = 0.185)

Expected Concentration	Calculated Concentration	% Accuracy
25	25.25	101.0
50	49.76	99.5
200	219.17	109.6
400	403.25	100.8
800	710.82	88.9
1000	1002.43	100.2



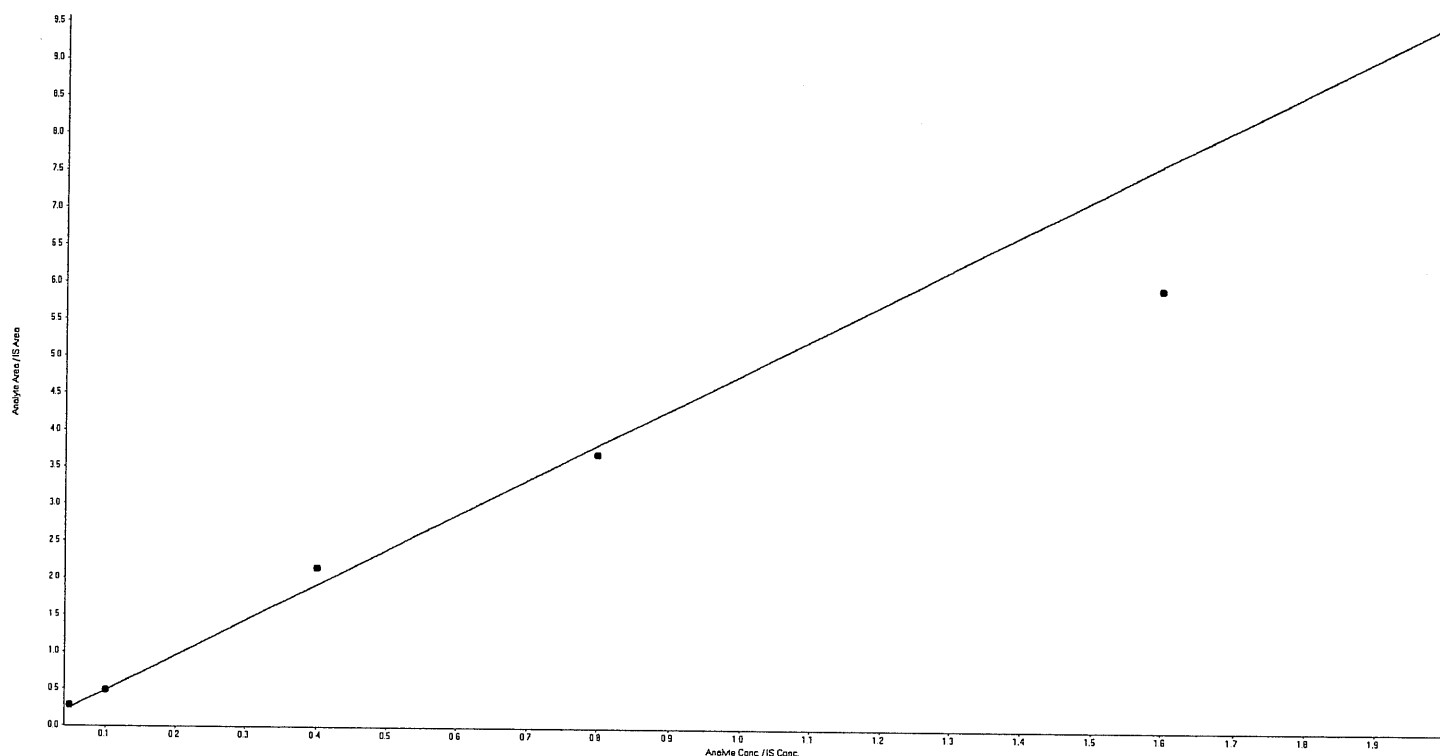
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 31/03/2010 4:24:00 PM  
LCMSMS#3

Analyte Name: Tetryl

Regression Equation:  $y = 4.78 x$  (std. dev. = 0.685)

Expected Concentration	Calculated Concentration	% Accuracy
25	29.59	118.4
50	51.23	102.5
200	223.60	111.8
400	386.62	96.7
800	625.12	78.1
1000	925.81	92.6



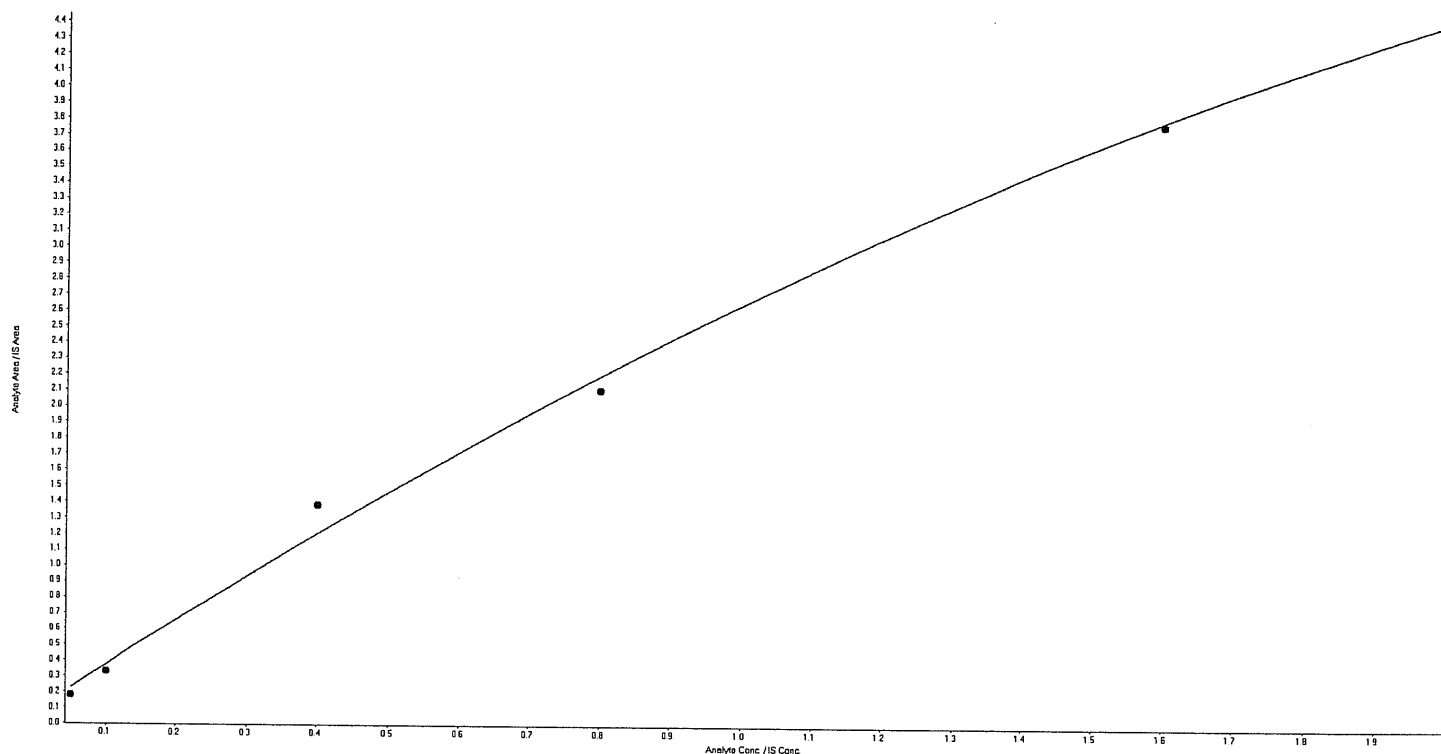
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GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 31/03/2010 4:24:00 PM  
LCMSMS#3

Analyte Name: 246-Trinitrotoluene

Regression Equation:  $y = -0.401 x^2 + 2.97 x + 0.0793$  ( $r = 0.9986$ )

Expected Concentration	Calculated Concentration	% Accuracy
25	17.25	69.0
50	42.81	85.6
200	233.89	116.9
400	381.07	95.3
800	792.52	99.1
1000	1008.61	100.9



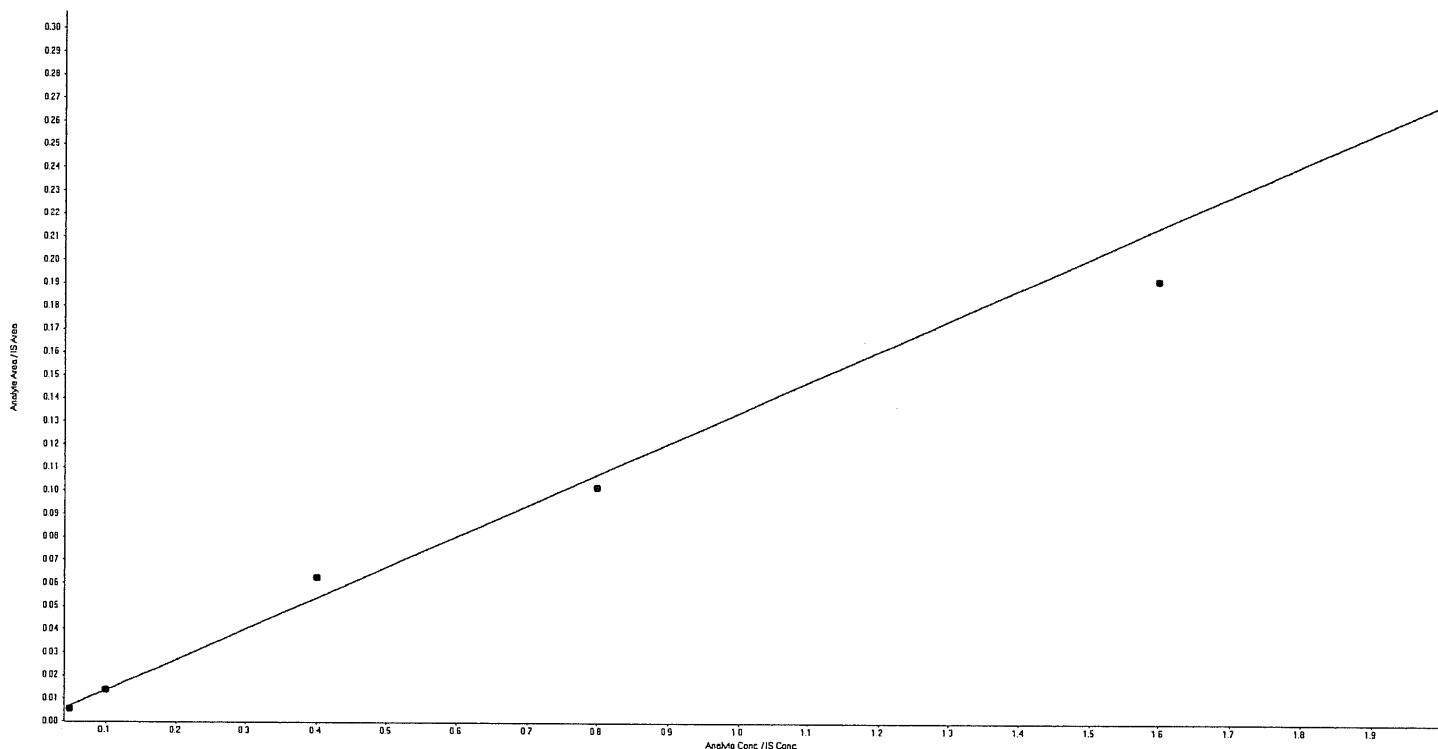
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 31/03/2010 4:24:00 PM  
LCMSMS#3

Analyte Name: Nitrobenzene

Regression Equation:  $y = 0.134 x$  (std. dev. = 0.0182)

Expected Concentration	Calculated Concentration	% Accuracy
25	20.65	82.6
50	51.17	102.3
200	232.94	116.5
400	379.76	94.9
800	715.24	89.4
1000	1142.49	114.2



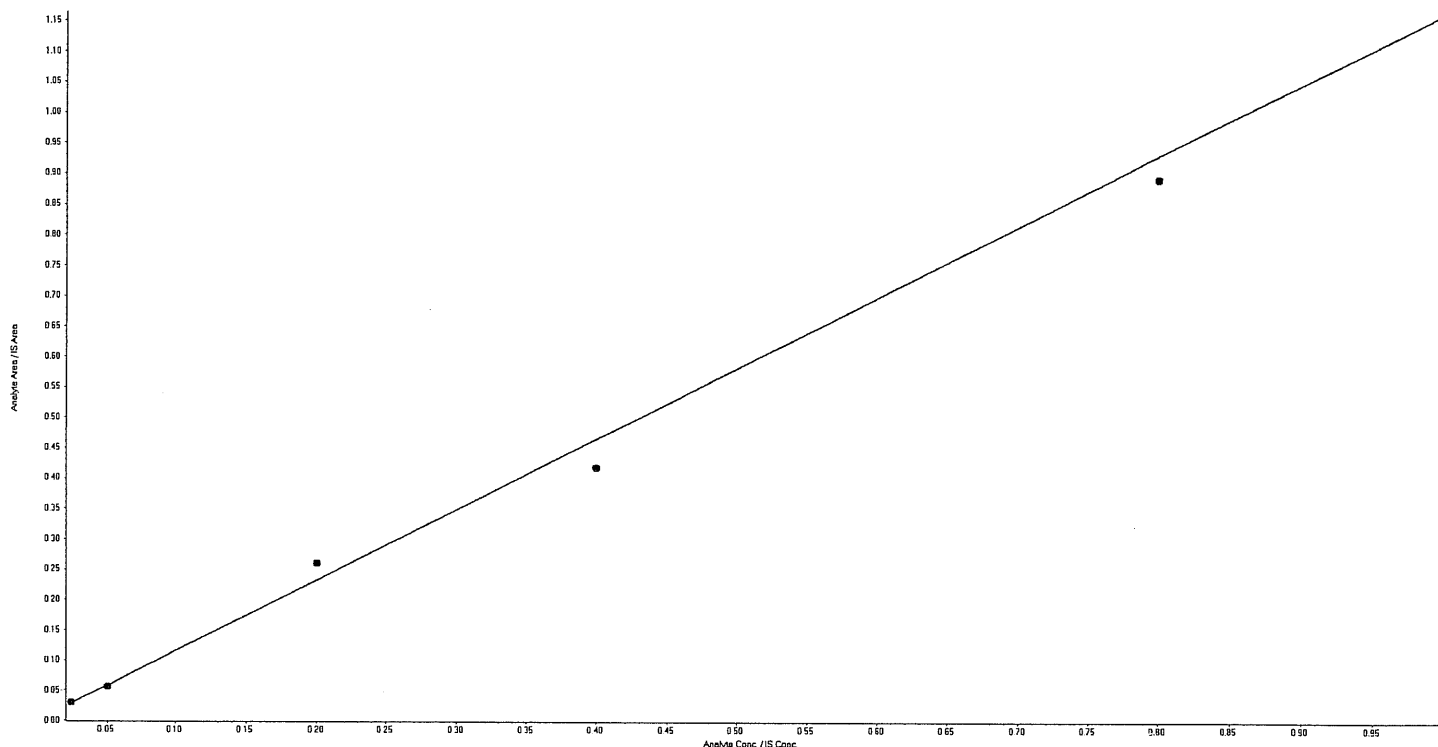
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 31/03/2010 4:24:00 PM  
LCMSMS#3

Analyte Name: 34-dinitrotoluene

Regression Equation:  $y = 1.16x$  (std. dev. = 0.0891)

Expected Concentration	Calculated Concentration	% Accuracy
12.5	13.16	105.3
25	24.67	98.7
100	111.82	111.8
200	179.58	89.8
400	383.20	95.8
500	493.05	98.6



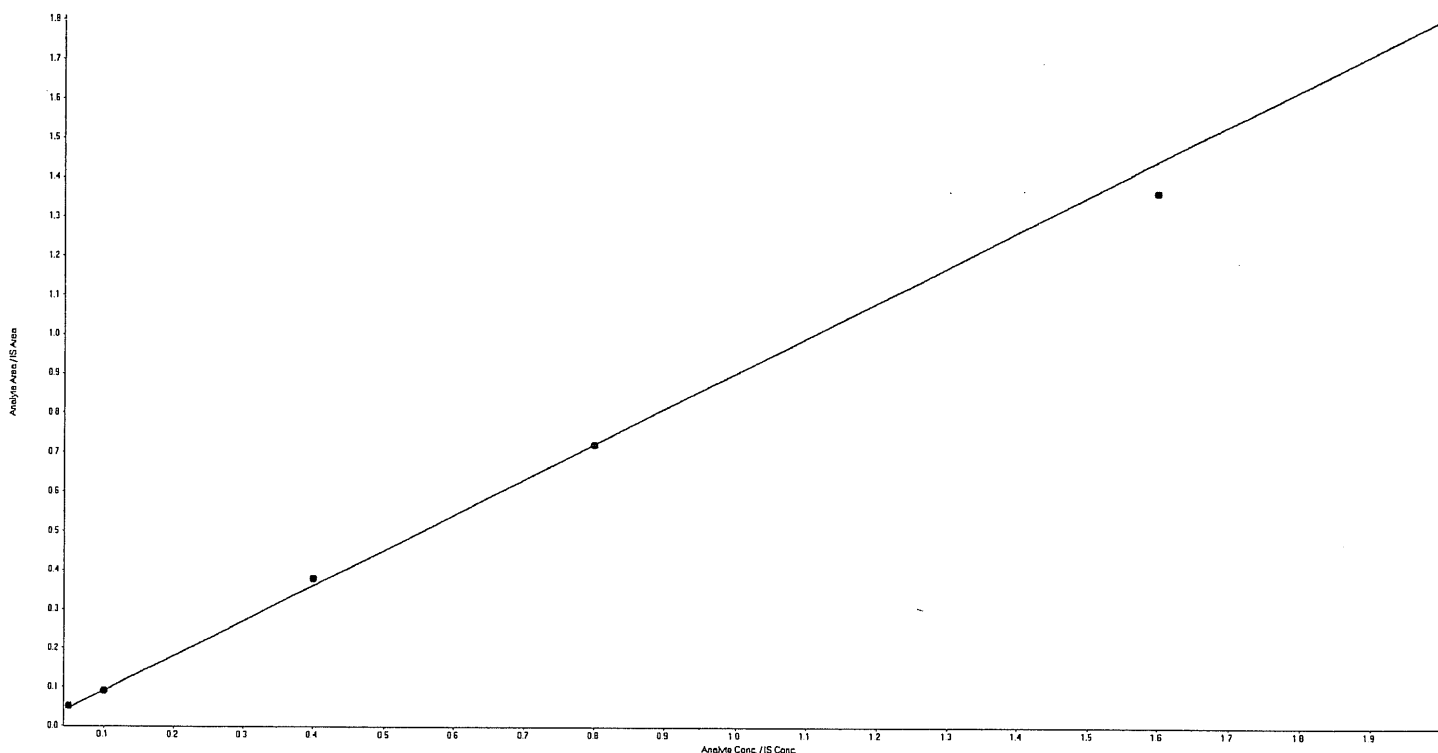
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 31/03/2010 4:24:00 PM  
LCMSMS#3

Analyte Name: 26-dinitrotoluene

Regression Equation:  $y = 0.904 x$  (std. dev. = 0.0805)

Expected Concentration	Calculated Concentration	% Accuracy
25	28.35	113.4
50	50.06	100.1
200	209.92	105.0
400	399.32	99.8
800	755.64	94.5
1000	872.44	87.2





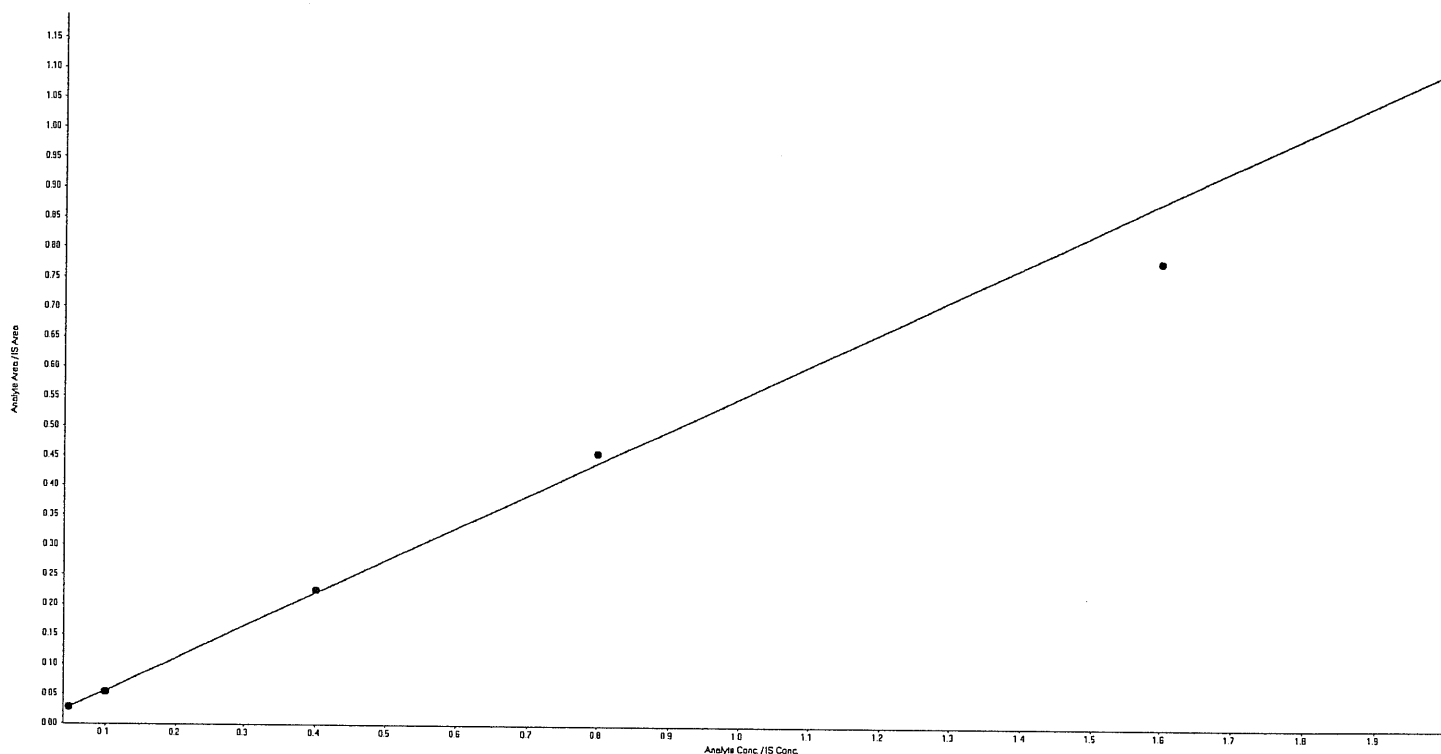
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 31/03/2010 4:24:00 PM  
LCMSMS#3

Analyte Name: 24-dinitrotoluene

Regression Equation:  $y = 0.551 x$  (std. dev. = 0.0356)

Expected Concentration	Calculated Concentration	% Accuracy
25	24.97	99.9
50	48.98	98.0
200	203.75	101.9
400	415.08	103.8
800	710.10	88.8
1000	1077.62	107.8



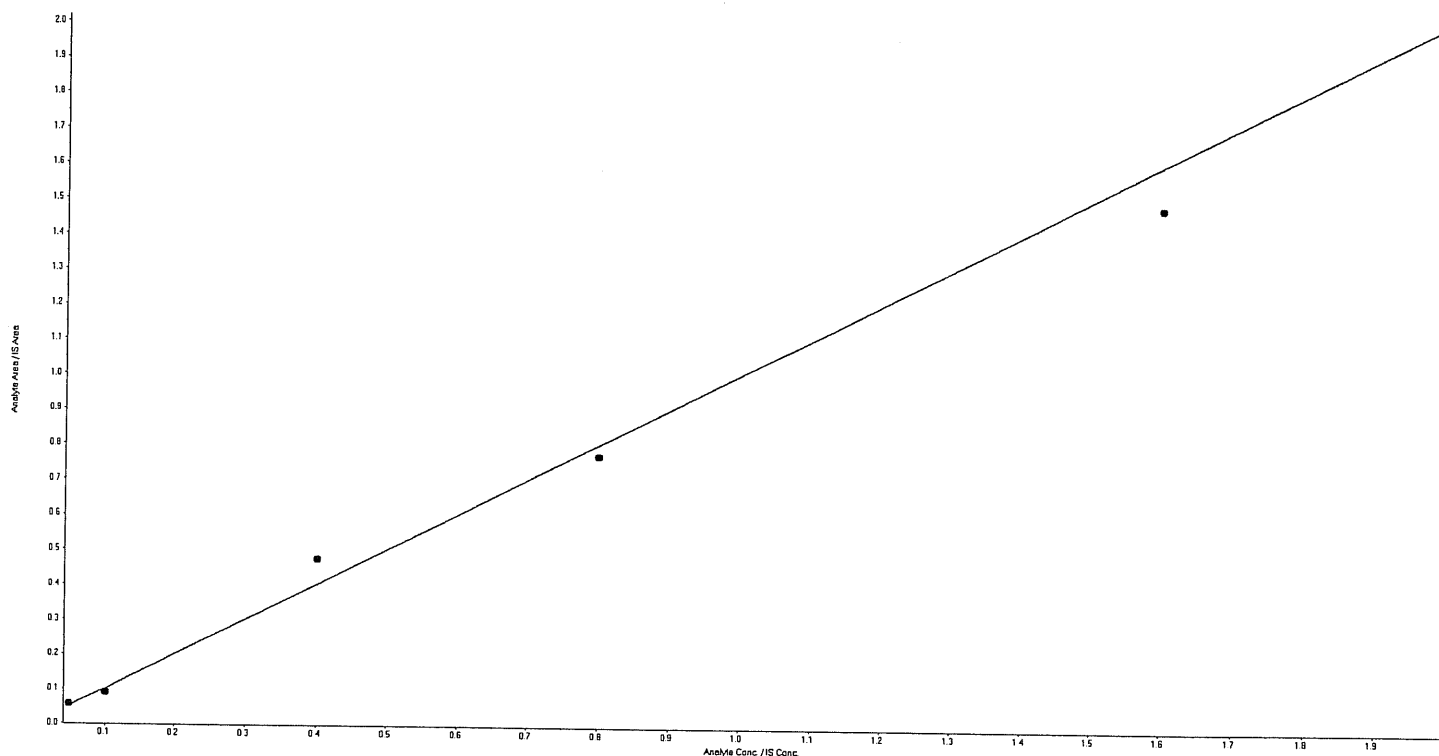
GEL Laboratories, LLC  
 GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 31/03/2010 4:24:00 PM  
 LCMSMS#3

Analyte Name: 4-Amino-2,6-dinitrotoluene

Regression Equation:  $y = 1.01 x$  (std. dev. = 0.125)

Expected Concentration	Calculated Concentration	% Accuracy
25	28.26	113.0
50	45.39	90.8
200	236.28	118.1
400	383.50	95.9
800	739.59	92.4
1000	897.34	89.7



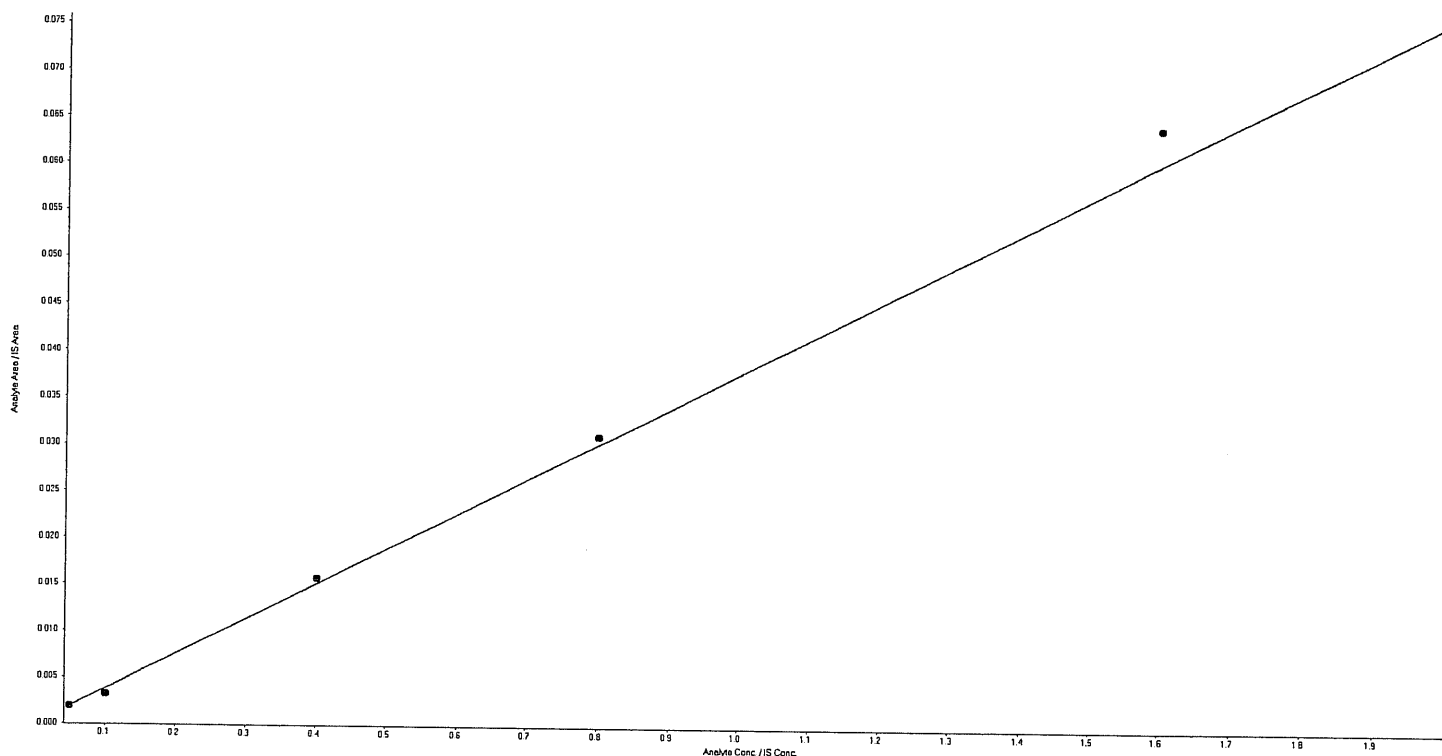
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 31/03/2010 4:24:00 PM  
LCMSMS#3

Analyte Name: 2-Amino-4,6-dinitrotoluene

Regression Equation:  $y = 0.0378 x$  (std. dev. = 0.00286)

Expected Concentration	Calculated Concentration	% Accuracy
25	25.52	102.1
50	42.63	85.3
200	207.98	104.0
400	411.29	102.8
800	850.72	106.3
1000	995.09	99.5



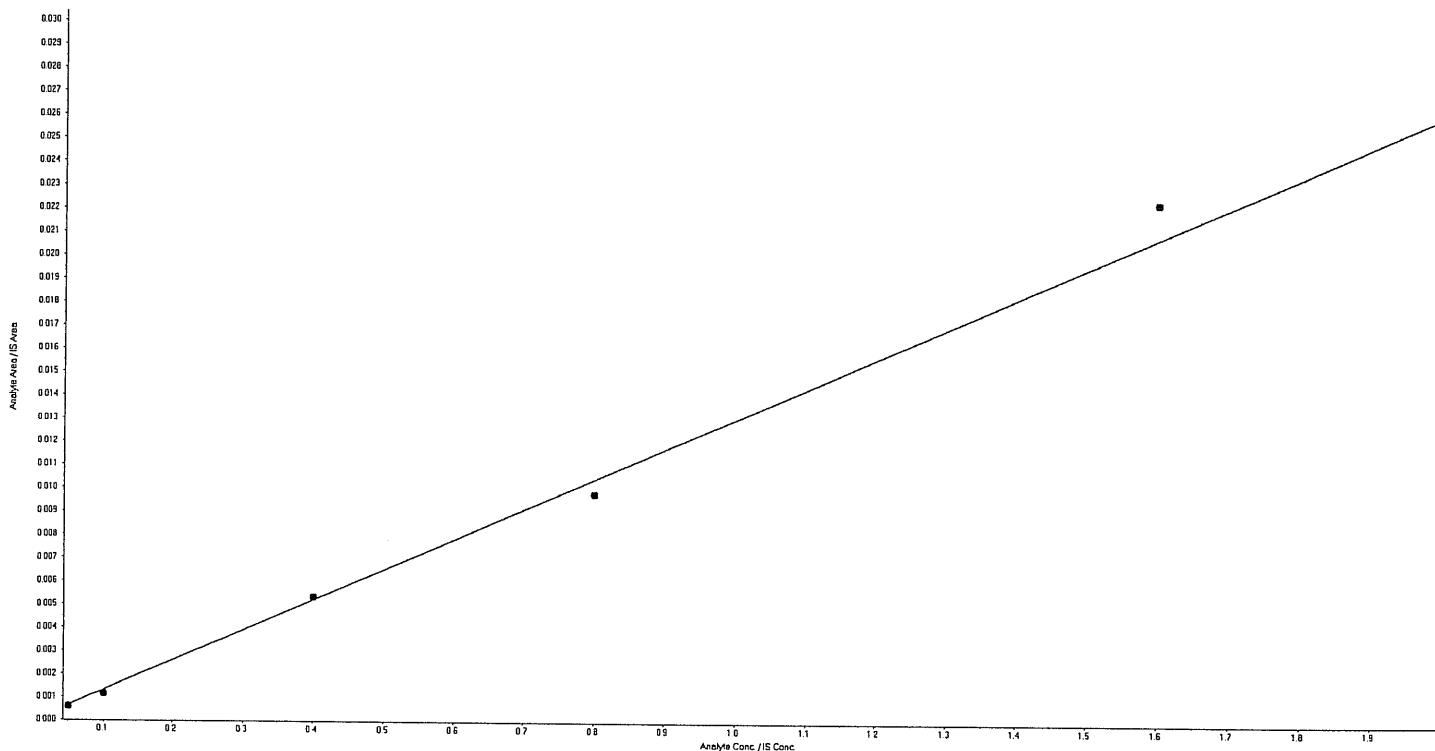
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 31/03/2010 4:24:00 PM  
LCMSMS#3

Analyte Name: 2-Nitrotoluene

Regression Equation:  $y = 0.013 x$  (std. dev. = 0.0014)

Expected Concentration	Calculated Concentration	% Accuracy
25	23.00	92.0
50	43.88	87.8
200	205.28	102.6
400	375.91	94.0
800	857.51	107.2
1000	1164.27	116.4



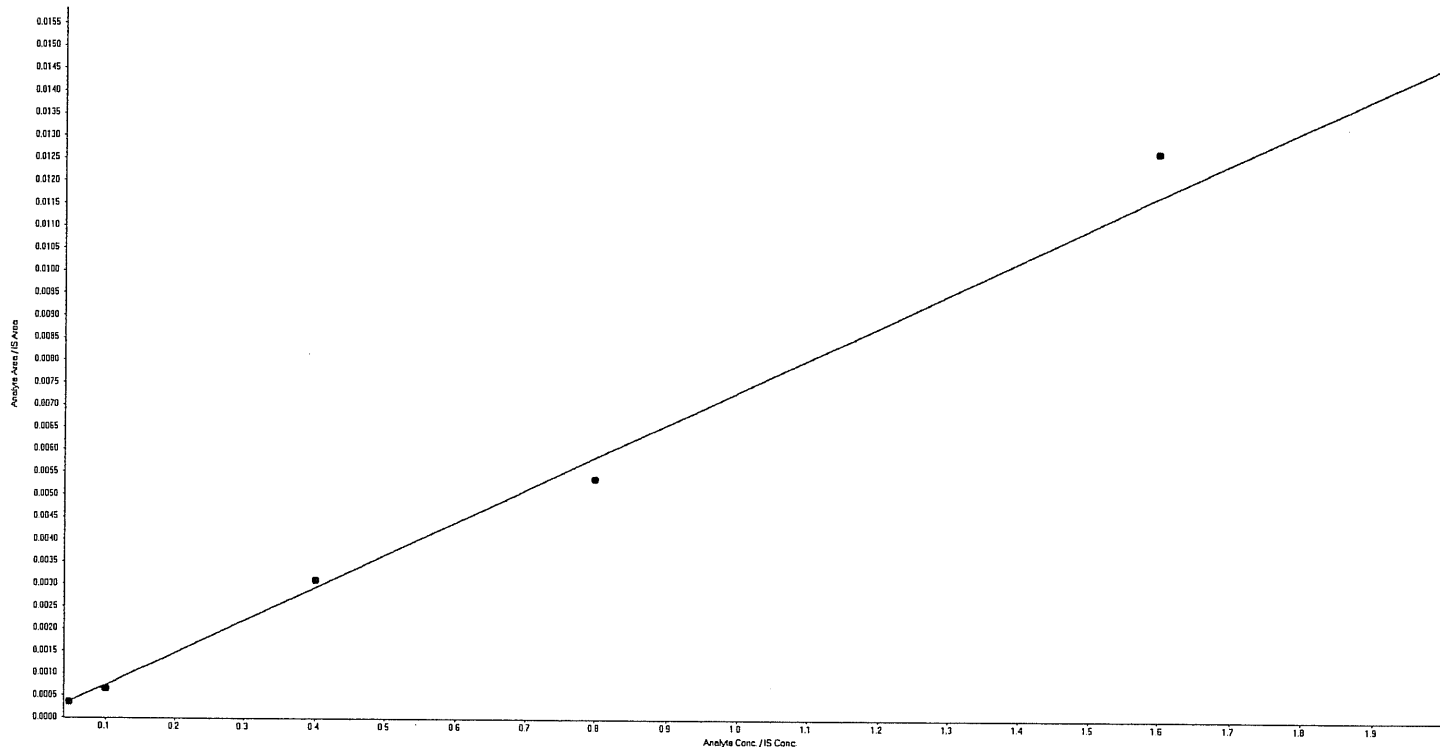
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 31/03/2010 4:24:00 PM  
LCMSMS#3

Analyte Name: 4-Nitrotoluene

Regression Equation:  $y = 0.00731 x$  (std. dev. = 0.000621)

Expected Concentration	Calculated Concentration	% Accuracy
25	24.07	96.3
50	44.81	89.6
200	212.01	106.0
400	366.88	91.7
800	866.02	108.3
1000	1081.11	108.1



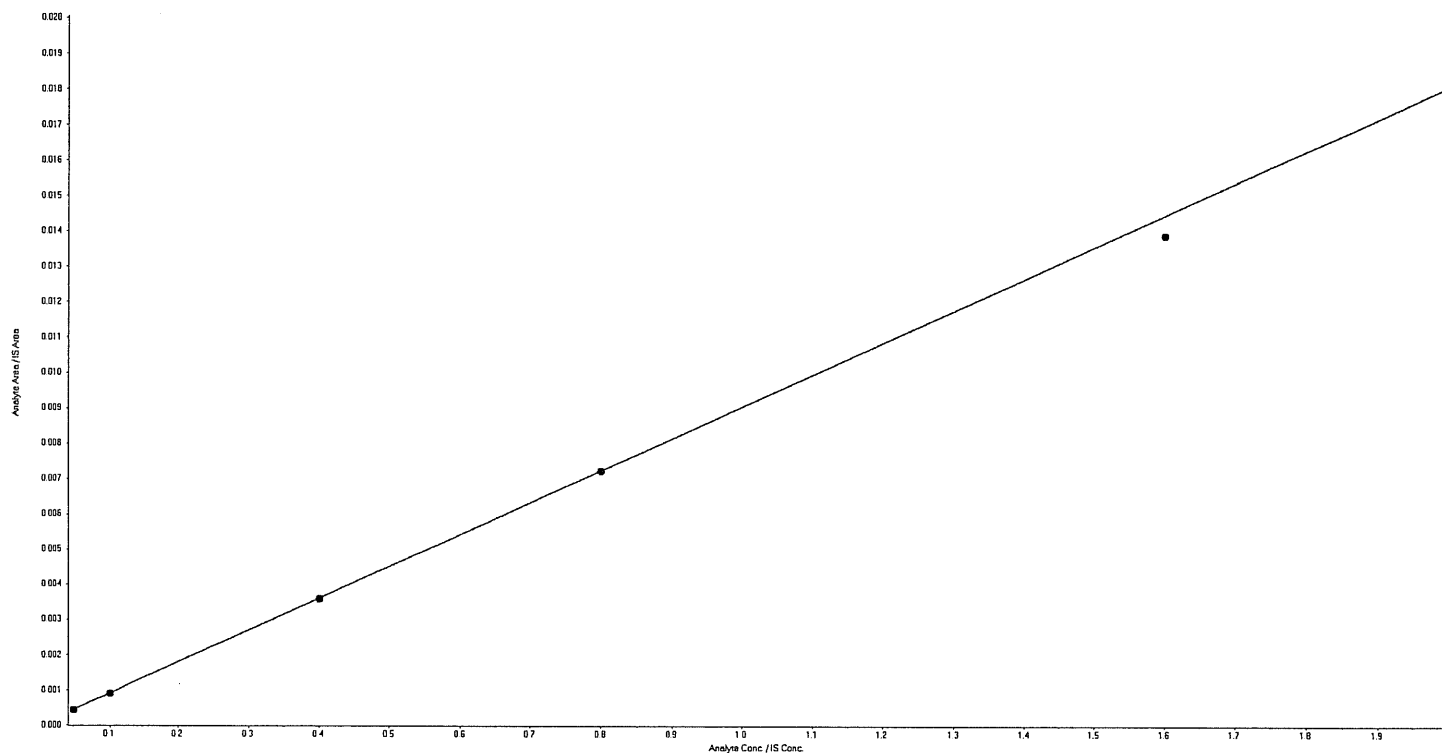
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 31/03/2010 4:24:00 PM  
LCMSMS#3

Analyte Name: 3-Nitrotoluene

Regression Equation:  $y = 0.00905 x$  (std. dev. = 0.00051)

Expected Concentration	Calculated Concentration	% Accuracy
25	23.72	94.9
50	49.58	99.2
200	198.94	99.5
400	398.92	99.7
800	768.05	96.0
1000	1107.49	110.7



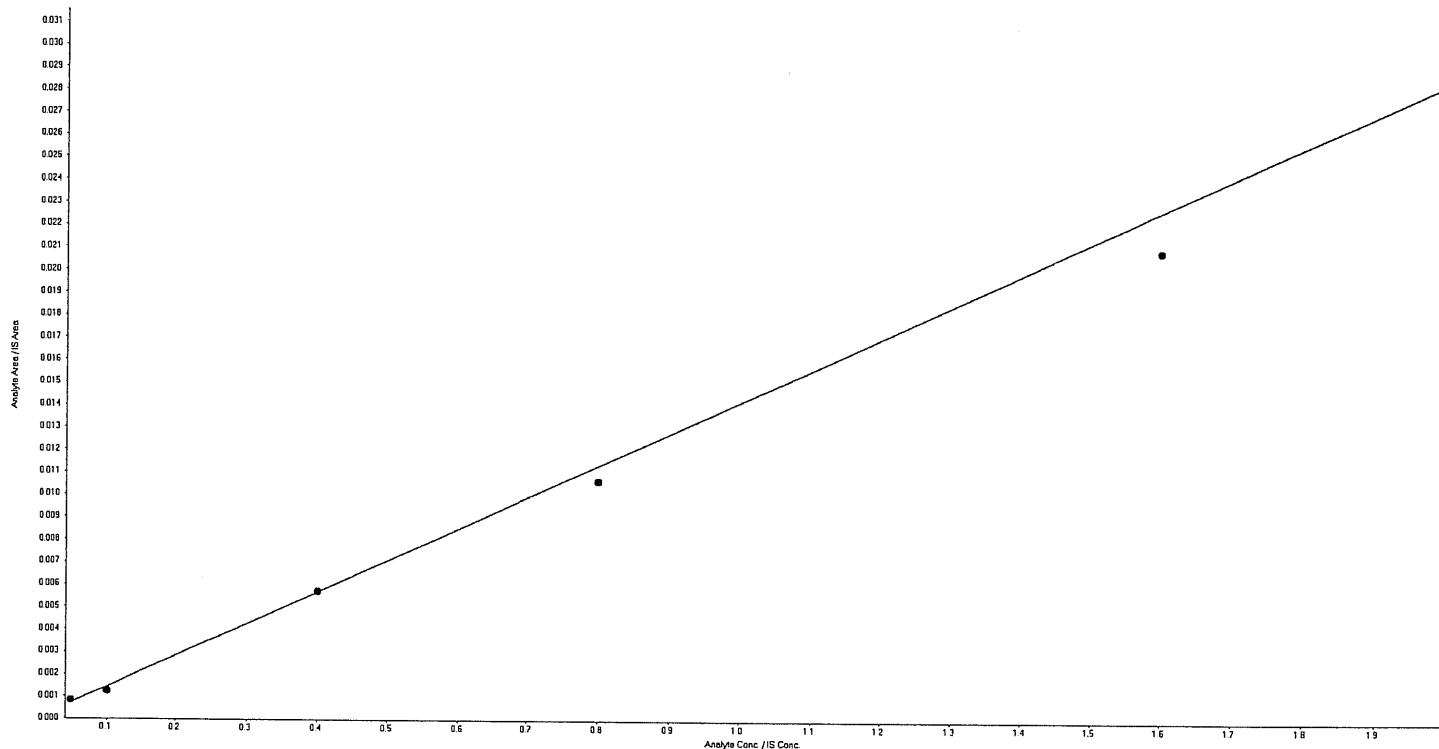
GEL Laboratories, LLC  
 GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 31/03/2010 4:24:00 PM  
 LCMSMS#3

Analyte Name: PETN

Regression Equation:  $y = 0.0142 x$  (std. dev. = 0.0016)

Expected Concentration	Calculated Concentration	% Accuracy
25	28.90	115.6
50	43.48	87.0
200	201.08	100.5
400	375.40	93.9
800	736.85	92.1
1000	1109.50	110.9



GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 31/03/2010 4:24:00 PM  
LCMSMS#3



Explosives Initial Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1758

Lab Code: GEL

GEL Sample ID: WXXICV

GEL Data File EXP0330010.wiff

Analysis Date: 30-MAR-10 12:34

LCMSMS ID: 1189

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	600	562	94	
2,4,6-Trinitrotoluene	600	610	102	
2,4-Dinitrotoluene	600	663	111	
2,6-Dinitrotoluene	600	537	90	
2-Amino-4,6-dinitrotoluene	600	513	86	
3,4-Dinitrotoluene	300	309	103	
4-Amino-2,6-dinitrotoluene	600	607	101	
HMX	600	503	84	
Nitrobenzene	600	703	117	
PETN	600	569	95	
RDX	600	649	108	
Tetryl	600	604	101	
m-Dinitrobenzene	600	593	99	
m-Nitrotoluene	600	591	99	
o-Nitrotoluene	600	651	108	
p-Nitrotoluene	600	686	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 70-130%

Other Target Analytes 80-120%

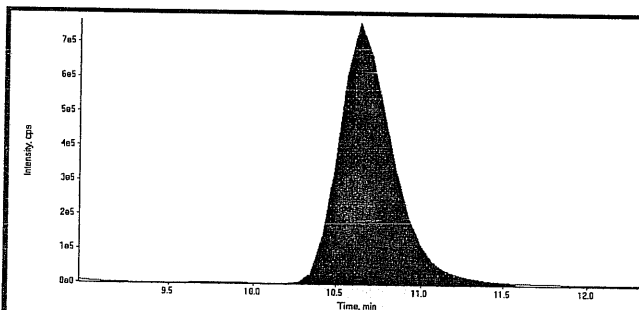
# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

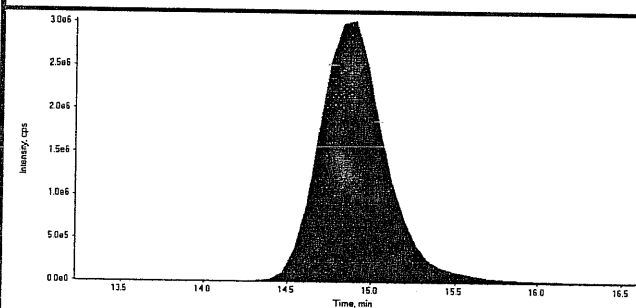
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 31/03/2010 4:24:00 PM  
LCMSMS#3

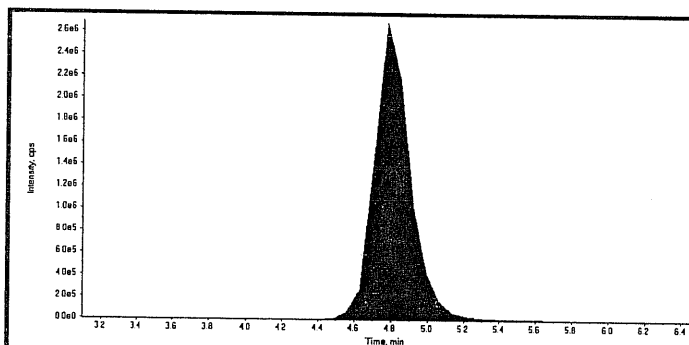
Data File	EXP0330010.wiff	Acquisition Date	3/30/2010 12:34:33 PM
Sample Name	WXX100330-56ICV	Acquisition Method	8321_pntx.dam
Batch Dilution Analyst	1 LER	Result Table	033010.rdb
Procedure Code	LCMSEXP_C	Sample Type	Quality Control



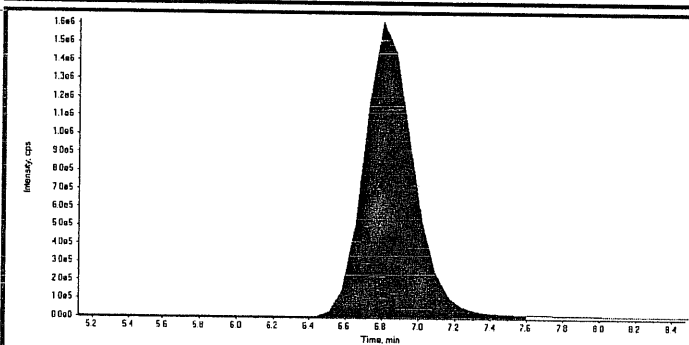
Compound Name:	13-Dinitrobenzene-d4 (172.1/46.1 amu)
Expected RT:	10.60
Actual RT:	10.60
Area Counts:	16900000.00
Manual Modification	No
Amount:	500.00(ng/mL)
Please refer to Form 8 for a list of Internal Standard Recoveries	



Compound Name:	26-Dinitrotoluene-d3 (185.0/155.0 amu)
Expected RT:	14.90
Actual RT:	14.90
Area Counts:	83700000.00
Manual Modification	No
Amount:	500.00(ng/mL)
Please refer to Form 8 for a list of Internal Standard Recoveries	



Compound Name:	HMX (341.2/46.0 amu)
Expected RT:	4.77
Actual RT:	4.77
Area Counts:	3.63e+007
Manual Modification	No
Amount:	503. (ng/mL)
% Accuracy:	83.90



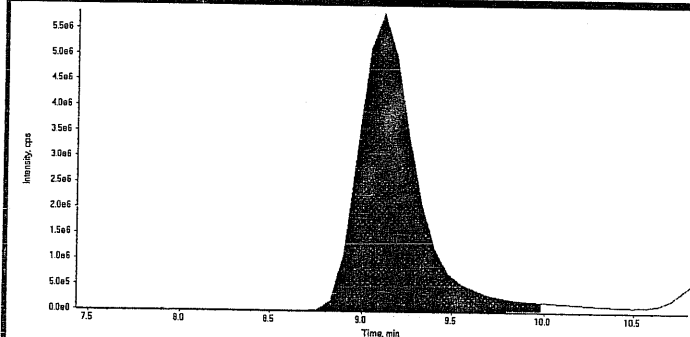
Compound Name:	RDX (267.0/46.1 amu)
Expected RT:	6.80
Actual RT:	6.80
Area Counts:	3.01e+007
Manual Modification	No
Amount:	649. (ng/mL)
% Accuracy:	108.00

*Handwritten signatures and dates:*  
*Star 4/2/10*  
*Hume 04/02/10*

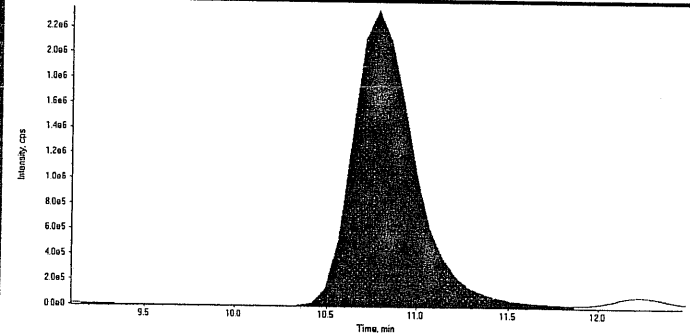
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 31/03/2010 4:24:00 PM  
LCMSMS#3

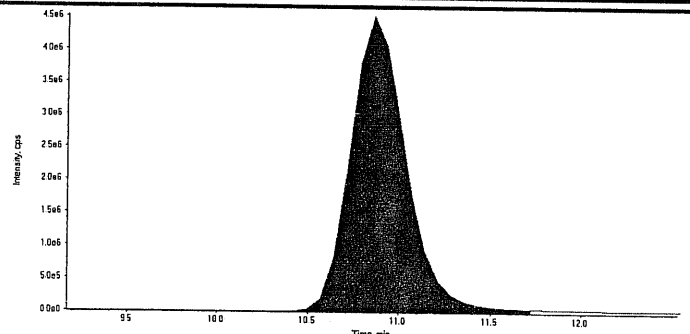
Data File	EXP0330010.wiff	Acquisition Date	3/30/2010 12:34:33 PM
Sample Name	WXX100330-56ICV	Acquisition Method	8321_pntx.dam
Batch Dilution Analyst	1 LER	Result Table	033010.rdb
Procedure Code	LCMSEXP_C	Sample Type	Quality Control



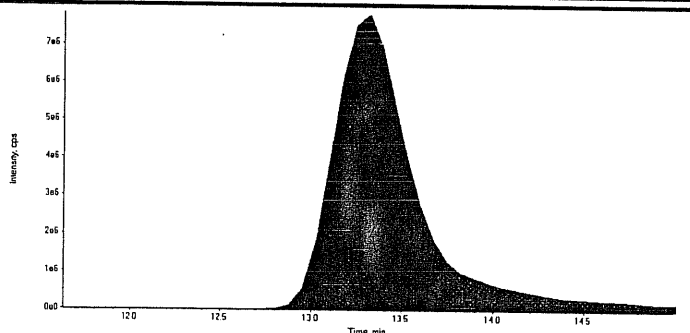
Compound Name:	135-Trinitrobenzene (213.0/182.8 amu)
Expected RT:	9.12
Actual RT:	9.12
Area Counts:	1.30e+008
Manual Modification	No
Amount:	562. (ng/mL)
% Accuracy:	93.70



Compound Name:	13-Dinitrobenzene (168.0/137.9 amu)
Expected RT:	10.8
Actual RT:	10.8
Area Counts:	5.63e+007
Manual Modification	No
Amount:	593. (ng/mL)
% Accuracy:	98.80



Compound Name:	Tetryl (241.0/180.8 amu)
Expected RT:	10.9
Actual RT:	10.9
Area Counts:	9.77e+007
Manual Modification	No
Amount:	604. (ng/mL)
% Accuracy:	101.00



Compound Name:	246-Trinitrotoluene (227.1/209.8 amu)
Expected RT:	13.3
Actual RT:	13.3
Area Counts:	2.60e+008
Manual Modification	No
Amount:	610. (ng/mL)
% Accuracy:	102.00

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 31/03/2010 4:24:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0330010.wiff	<b>Acquisition Date</b>	3/30/2010 12:34:33 PM
<b>Sample Name</b>	WXX100330-56ICV	<b>Acquisition Method</b>	8321_pntx.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	033010.rdb
<b>Procedure Code</b>	LCMSEXP_C	<b>Sample Type</b>	Quality Control

	<b>Compound Name:</b>	Nitrobenzene (123.0/46.0 amu)
	Expected RT:	11.9
	Actual RT:	11.9
	Area Counts:	3.20e+006
	Manual Modification	No
	Amount:	703. (ng/mL)
	% Accuracy:	117.00

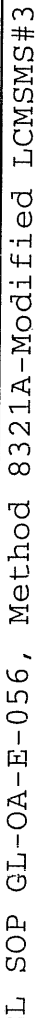
	<b>Compound Name:</b>	34-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	12.2
	Actual RT:	12.2
	Area Counts:	6.03e+007
	Manual Modification	No
	Amount:	309. (ng/mL)
	% Accuracy:	103.00

	<b>Compound Name:</b>	26-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	15.0
	Actual RT:	15.0
	Area Counts:	8.12e+007
	Manual Modification	No
	Amount:	537. (ng/mL)
	% Accuracy:	89.50

	<b>Compound Name:</b>	24-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	15.6
	Actual RT:	15.6
	Area Counts:	6.12e+007
	Manual Modification	No
	Amount:	663. (ng/mL)
	% Accuracy:	111.00

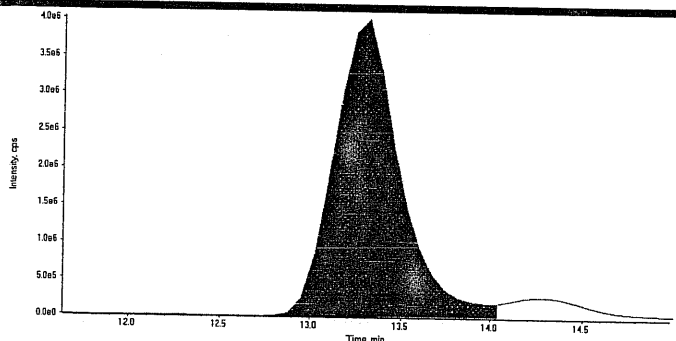


GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

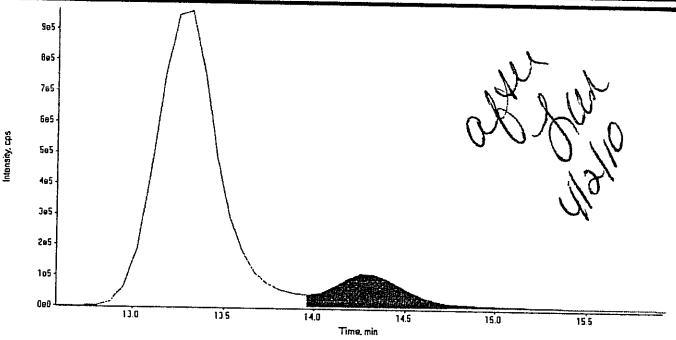
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LCMSMS#3

<b>Data File</b>	EXP0330010.wiff	<b>Acquisition Date</b>	3/30/2010 12:34:33 PM
<b>Sample Name</b>	WXX100330-56ICV	<b>Acquisition Method</b>	8321_pntx.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	033010.rdb
<b>Procedure Code</b>	LCMSEXP_C	<b>Sample Type</b>	Quality Control

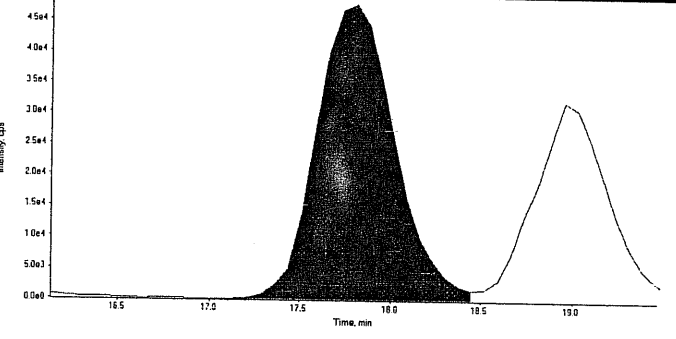
  

	<b>Compound Name:</b>	4-Amino-26-dinitrotoluene (197.0/167.0 amu)
	Expected RT:	13.3
	Actual RT:	13.3
	Area Counts:	1.02e+008
	Manual Modification	No
	Amount:	607. (ng/mL)
	% Accuracy:	101.00

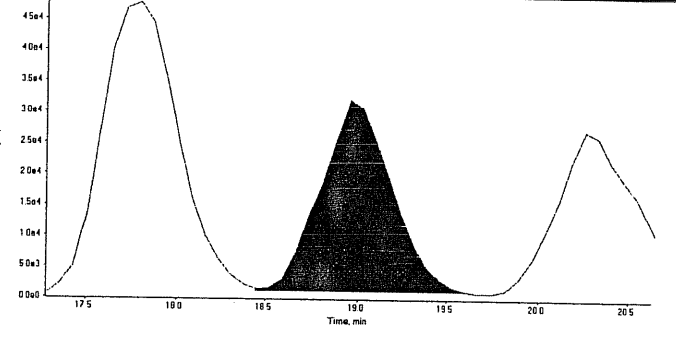
  

	<b>Compound Name:</b>	2-Amino-46-dinitrotoluene (197.0/180.0 amu)
	Expected RT:	14.3
	Actual RT:	14.3
	Area Counts:	3.25e+006
	Manual Modification	Yes
	Amount:	513. (ng/mL)
	% Accuracy:	85.50

	<b>Compound Name:</b>	2-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	17.8
	Actual RT:	17.8
	Area Counts:	1.42e+006
	Manual Modification	No
	Amount:	651. (ng/mL)
	% Accuracy:	108.00

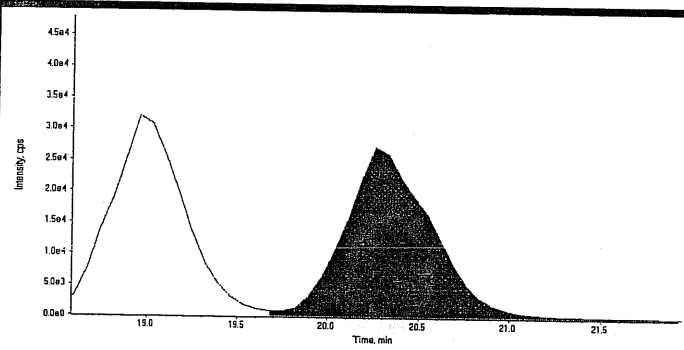
	<b>Compound Name:</b>	4-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	19.0
	Actual RT:	19.0
	Area Counts:	8.40e+005
	Manual Modification	No
	Amount:	686. (ng/mL)
	% Accuracy:	114.00

GEL Laboratories, LLC  
 GEL SOP GL-OA-E-056, Method 8321A-Modified

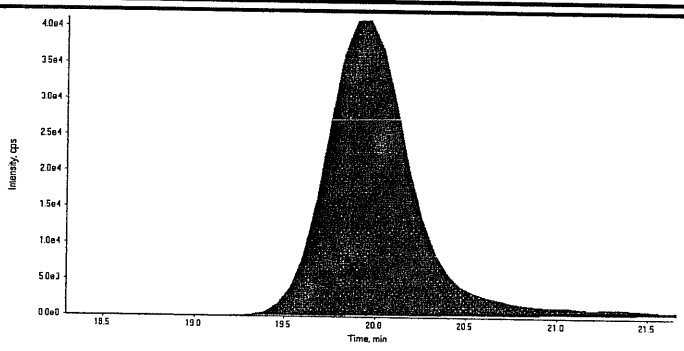
Printed: 31/03/2010 4:24:00 PM  
 LCMSMS#3

<b>Data File</b>	EXP0330010.wiff	<b>Acquisition Date</b>	3/30/2010 12:34:33 PM
<b>Sample Name</b>	WXX100330-56ICV	<b>Acquisition Method</b>	8321_pntx.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	033010.rdb
<b>Procedure Code</b>	LCMSEXP_C	<b>Sample Type</b>	Quality Control

	<b>Compound Name:</b>	3-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	20.3
	Actual RT:	20.3
	Area Counts:	8.95e+005
	Manual Modification	No
	Amount:	591. (ng/mL)
	% Accuracy:	98.50

	<b>Compound Name:</b>	PETN (361.1/62.0 amu)
	Expected RT:	20.0
	Actual RT:	20.0
	Area Counts:	1.35e+006
	Manual Modification	No
	Amount:	569. (ng/mL)
	% Accuracy:	94.90

# GRAND MEAN AVERAGE

Vendor: Restek  
 Date of Analysis 03/30/10  
 Time of Injection 1234  
 Standard Number WXX100330-56ICV  
 Data File EXP0330010a

HMX	83.9
RDX	108.0
135-Trinitrobenzene	93.7
13-Dinitrobenzene	98.8
Tetryl	101.0
246-Trinitrotoluene	102.0
Nitrobenzene	117.0
34-dinitrotoluene	103.0
26-dinitrotoluene	89.5
24-dinitrotoluene	111.0
4-Amino-26-dinitrotoluene	101.0
2-Amino-46-dinitrotoluene	85.5
2-Nitrotoluene	108.0
4-Nitrotoluene	114.0
3-Nitrotoluene	98.5
PETN	94.9

TOTAL

1609.8

*Handwritten: Hm 04/02/10*

AVERAGE

✓ 100.6

ICV Limits 85-115%

CRI Limits 70-130%

CCV Limits 85-115%

No single analyte > +/- 60%

*Handwritten: Lar 3/31/10*



Explosives Initial Calibration

Lab Name: GEL Laboratories LLC

GEL Job No: 10-1758

Lab Code: GEL

Run Date: 05-MAR-10.22-MAR-10.30-MAR-10

LCMSMS Instrument ID: LCMSMS4

Method: 8321A Modified

HPLC Column: YMC J-Sphere ODS-H8Q

Calibration Type: 2nd Order

Calibration Level:	19	20	21	22	23	24	25	X	X^2	Intercept	COD	Q
Data File:	EXS03050003.wiff	EXS03050004.wiff	EXS03050005.wiff	EXS03050006.wiff	EXS03050007.wiff	EXS03050008.wiff	EXS03050009.wiff					
Parname:												
2,4-Diamino-6-nitrotoluene	85600	188000	436000	918000	1500000	1790000	3780000	-5040	1860	.016	.9992	
2,6-Diamino-4-nitrotoluene	126000	257000	638000	1300000	2090000	2570000	5220000	-13200	2690	-.037	.9996	
3,4-Dinitrotoluene	307000	593000	1470000	2930000	4500000	5680000	10400000	-66800	13500	-3.11	.9976	
3,5-Dinitroaniline	462000	868000	2040000	4020000	6030000	7500000	12600000	-18600	8840	-1.27	.9999	
TATB	63200	132000	333000	729000	1100000	1480000	3120000	-13200	1430	.069	1	
tris(o-cresyl) phosphate	950000	1920000	4370000	8500000	12200000	15100000	25100000	123000	17900	-2.71	.9999	

Quadratic Fit:  $y = Ax^2 + Bx + C$   
 where  $X^2$  column above is coefficient A  
 X column above is coefficient B  
 intercept is C

COD is Coefficient of Determination

Q column used to flag COD outside of Limit (<0.990)

\* Values outside of QC Limit

030510ICAL

Peak Name: TATB  
No Internal Standard  
Q1/Q3 Masses: 257.20/204.90 amu

Fit	Quadratic	Weighting	None	Iterate No
a0	-1.32e+004			
a1	1.43e+003			
a2	0.0686			
Correlation coefficient 1.0000				
Use Area				

Peak Name: 35-Dinitroaniline  
No Internal Standard  
Q1/Q3 Masses: 182.00/46.00 amu

Fit	Quadratic	Weighting	None	Iterate No
a0	-1.86e+004			
a1	8.84e+003			
a2	-1.27			
Correlation coefficient 0.9999				
Use Area				

Peak Name: 34-Dinitrotoluene  
No Internal Standard  
Q1/Q3 Masses: 182.08/151.90 amu

Fit	Quadratic	Weighting	None	Iterate No
a0	-6.68e+004			
a1	1.35e+004			
a2	-3.11			
Correlation coefficient 0.9976				
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	-1.32e+004			
a1	2.69e+003			
a2	-0.0366			
Correlation coefficient 0.9996				
Use Area				

Don 3/9/10

41112/10  
03/09/10

030510ICAL

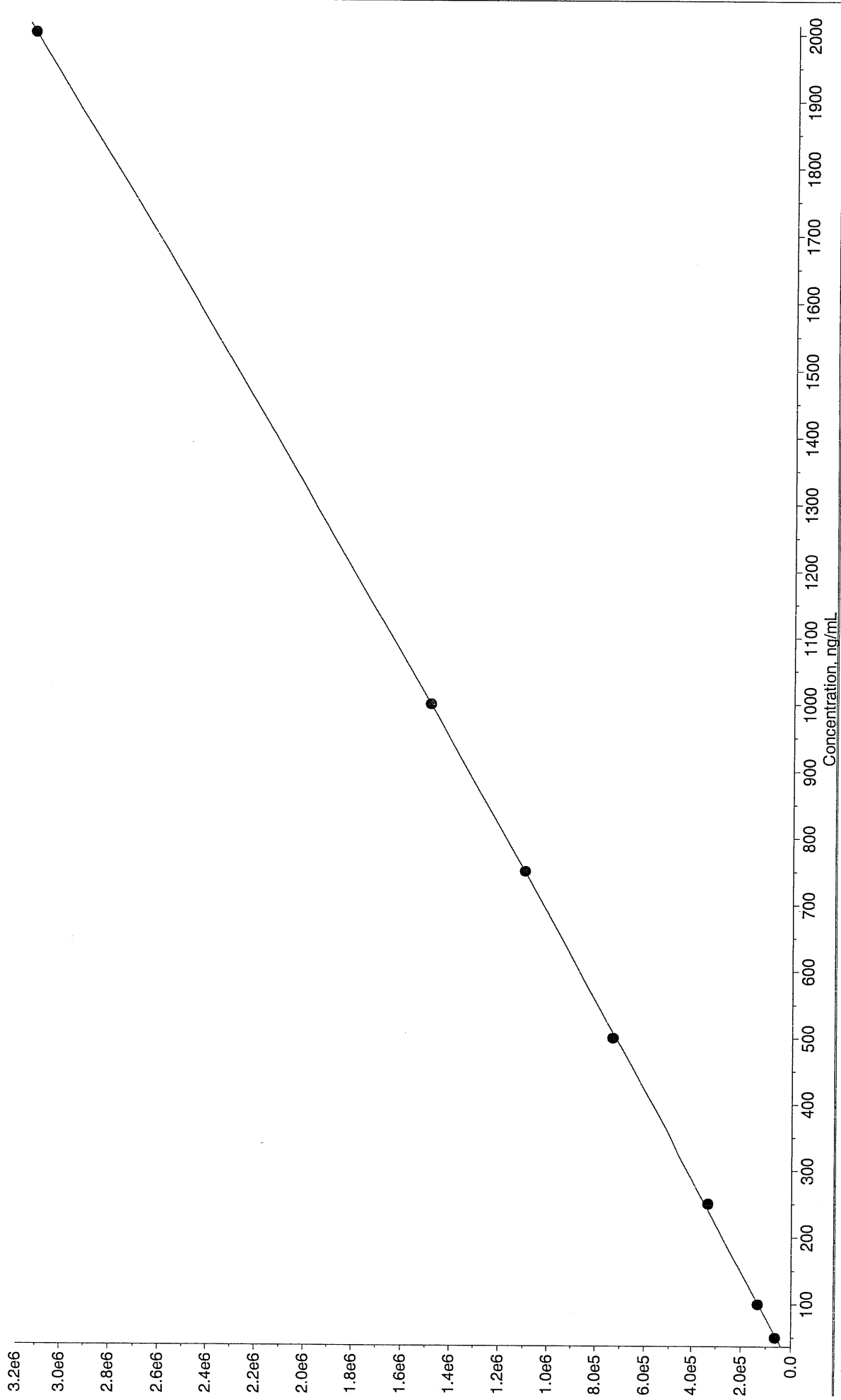
Peak Name: 24-Diamino-6-nitrotoluene  
No Internal Standard  
Q1/Q3 Masses: 165.97/46.00 amu

Fit	Quadratic	Weighting	None	Iterate No
a0	-5.04e+003			
a1	1.86e+003			
a2	0.0157			
Correlation coefficient 0.9992				
Use Area				

Peak Name: tris(o-cresyl) phosphate  
No Internal Standard  
Q1/Q3 Masses: 369.15/91.00 amu

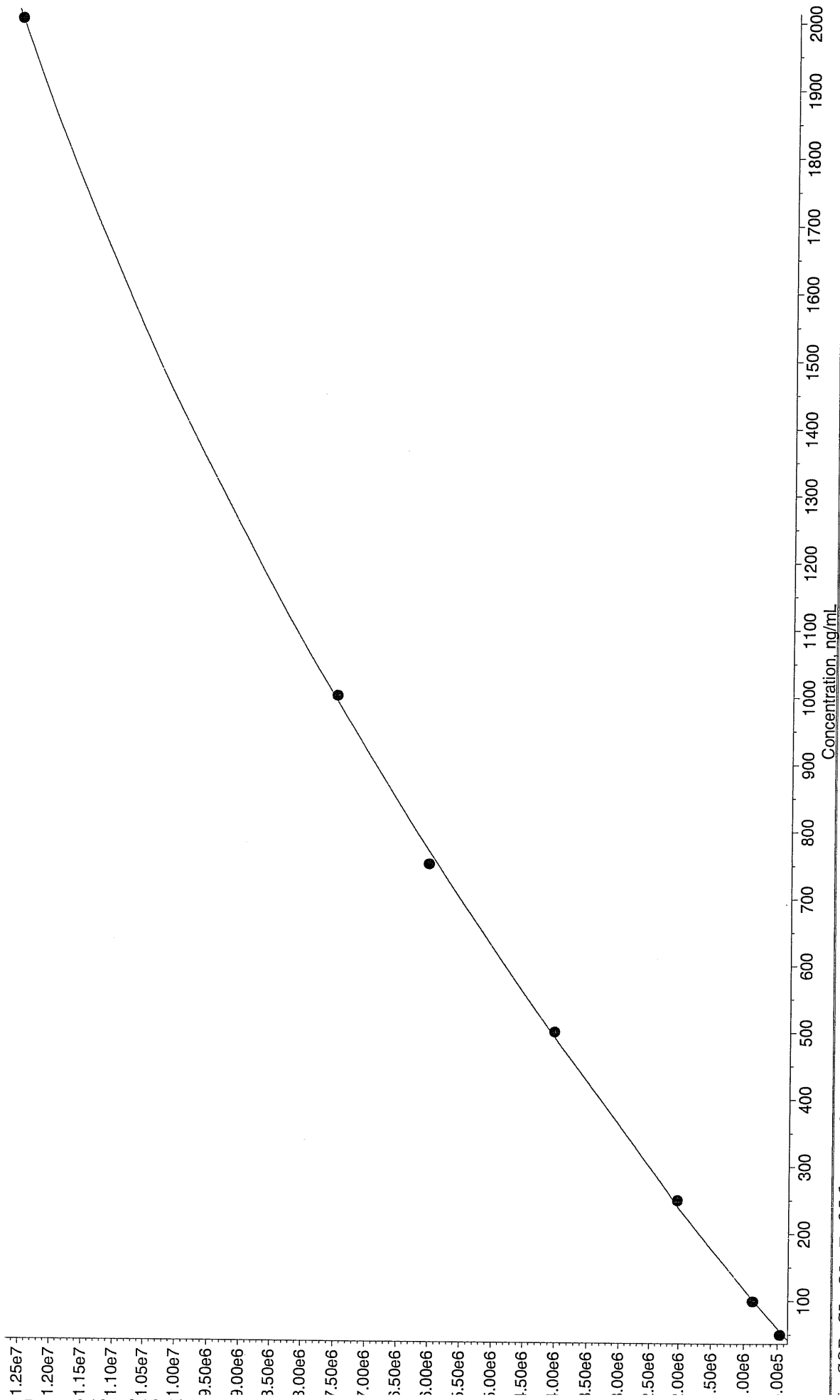
Fit	Quadratic	Weighting	None	Iterate No
a0	1.23e+005			
a1	1.79e+004			
a2	-2.71			
Correlation coefficient 0.9999				
Use Area				

J30510.rdb (TATB): "Quadratic" Regression ("No" weighting):  $y = 0.0686 x^2 + 1.43e+003 x + -1.32e+004$  ( $r = 1.0000$ )



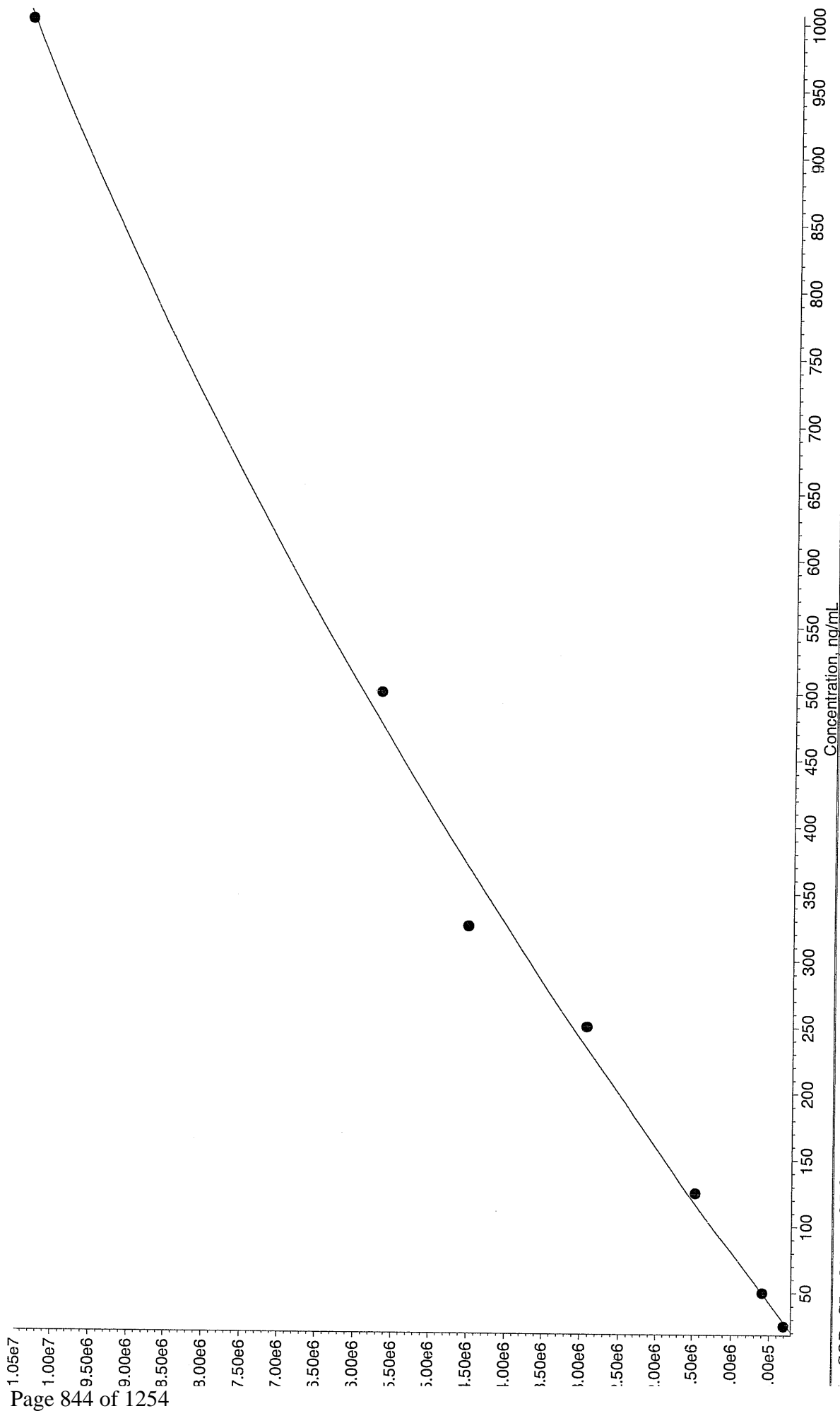
J SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

030510.rdb (35-Dinitroaniline): "Quadratic" Regression ("No" weighting):  $y = -1.27 x^2 + 8.84e+003 x + -1.86e+004$  ( $r = 0.9999$ )

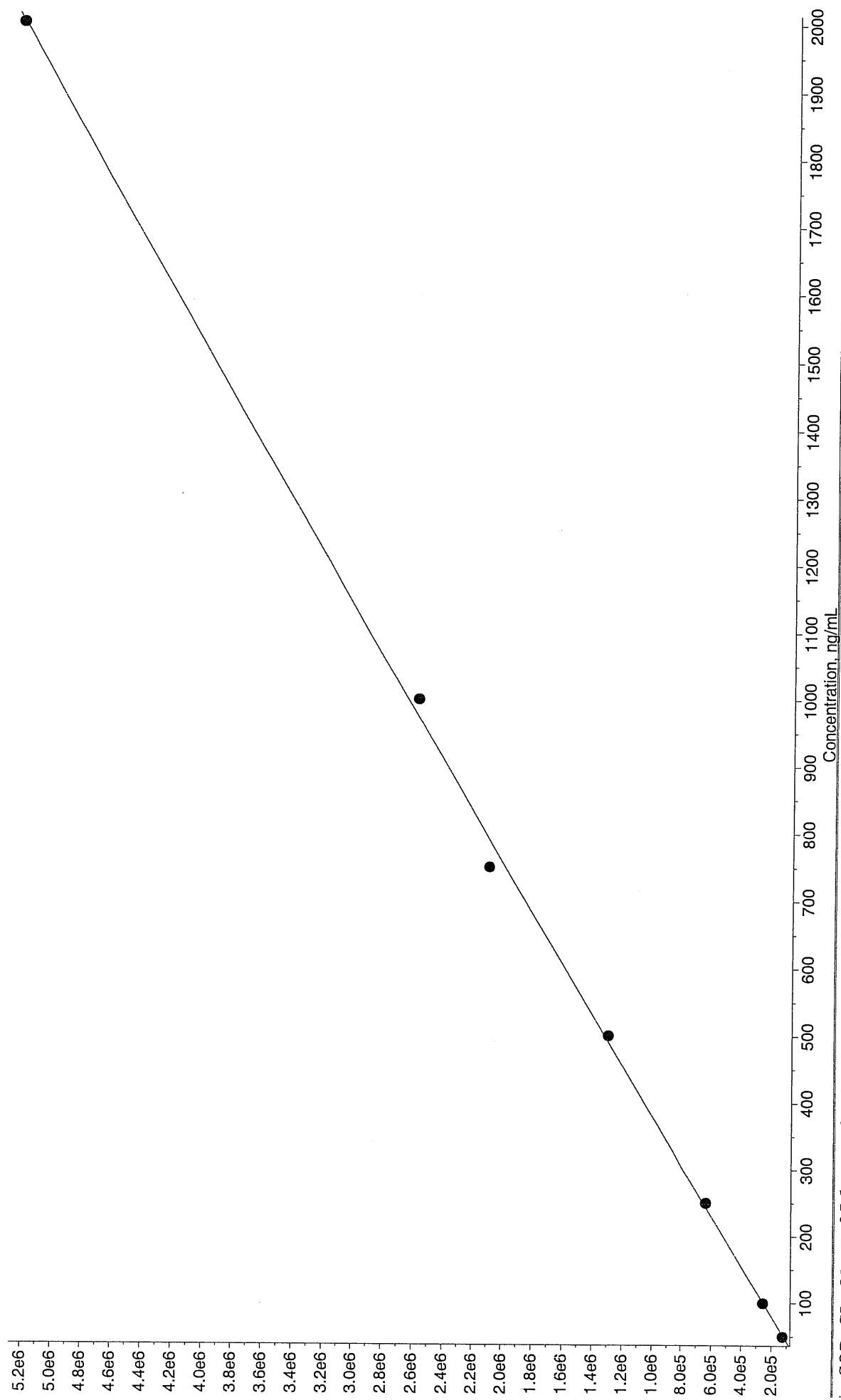


J SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

030510.rdb (34-Dinitrotoluene): "Quadratic" Regression ("No" weighting):  $y = -3.11 x^2 + 1.35e+004 x + -6.68e+004$  ( $r = 0.9976$ )

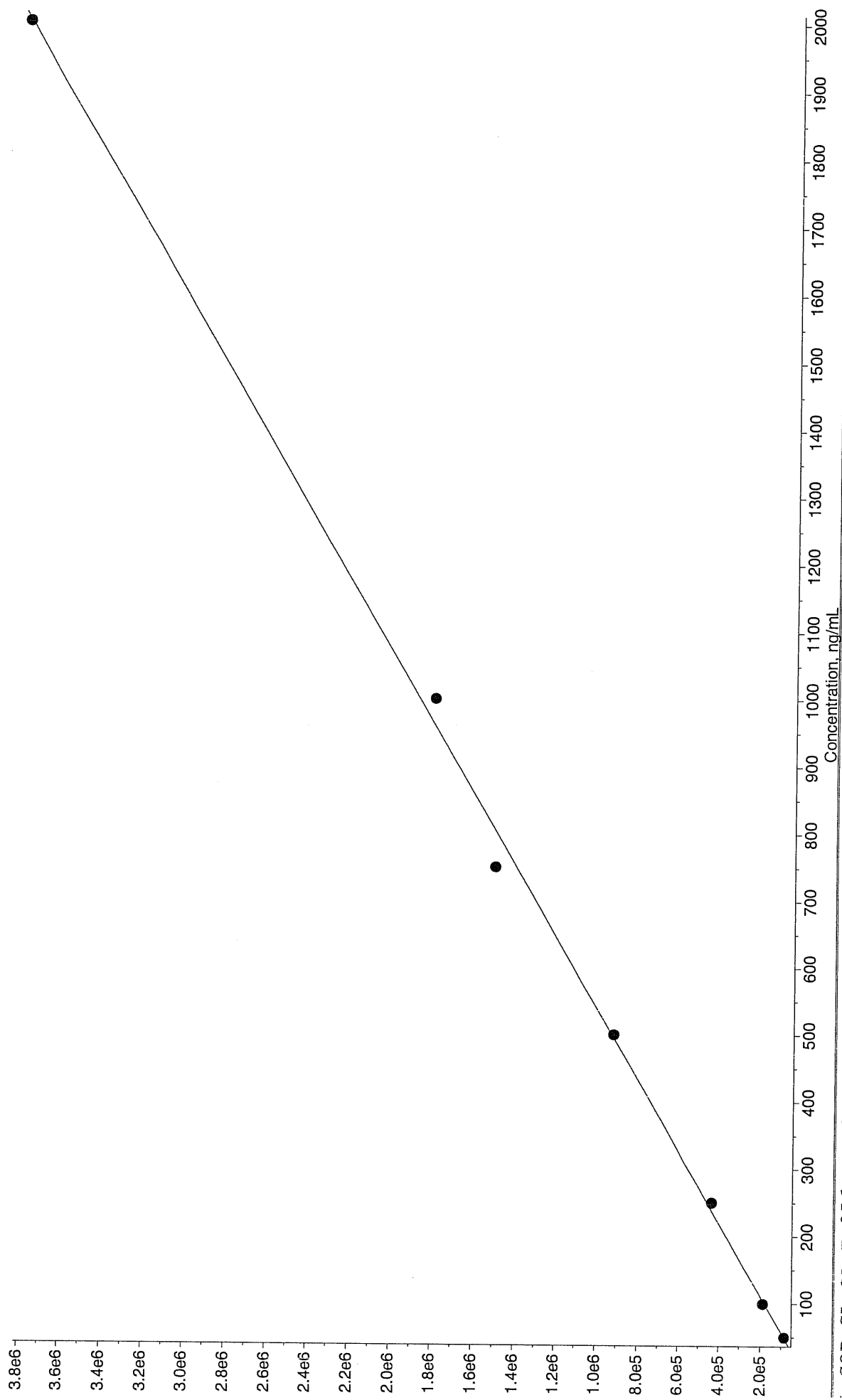


030510.rdb (26-Diamino-4-nitrotoluene): "Quadratic" Regression ("No" weighting):  $y = -0.0366 x^2 + 2.69e+003 x + -1.32e+004$  ( $r = 0.9996$ )



SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

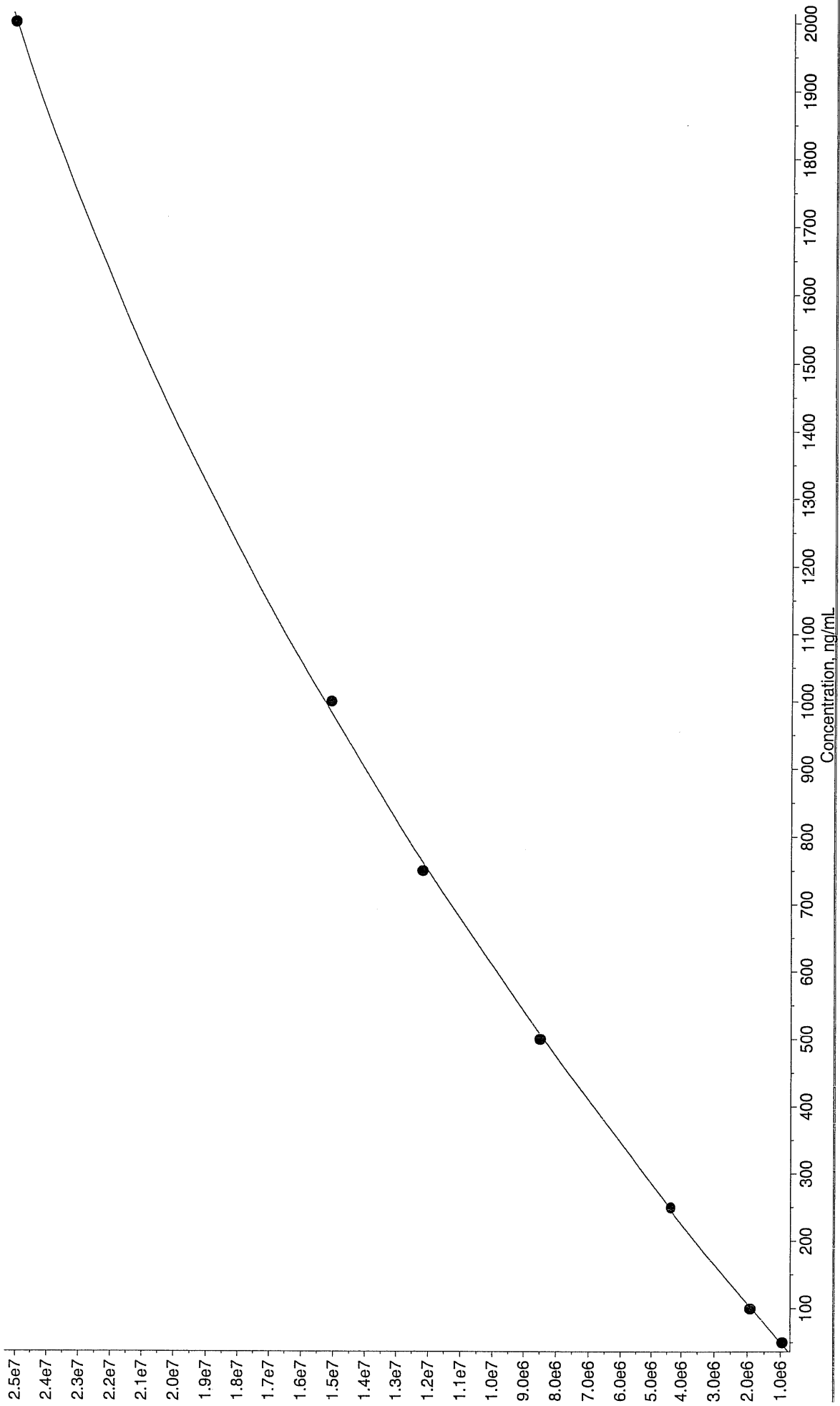
030510.rdb (24-Diamino-6-nitrotoluene): "Quadratic" Regression ("No" weighting):  $y = 0.0157 x^2 + 1.86e+003 x + -5.04e+003$  ( $r = 0.9992$ )



J SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



30510.rdb (tris(o-cresyl) phosphate): "Quadratic" Regression ("No" weighting):  $y = -2.71 x^2 + 1.79e+004 x + 1.23e+005$  ( $r = 0.9999$ )



J SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

# Explosives Initial Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1758

Lab Code: GEL

GEL Sample ID: WXXICV

GEL Data File EXS03050011.wiff

Analysis Date: 05-MAR-10 19:44

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
tris(o-cresyl) phosphate	500	506	101	
2,4-Diamino-6-nitrotoluene	500	484	97	
2,6-Diamino-4-nitrotoluene	500	507	101	
3,4-Dinitrotoluene	250	230	92	
3,5-Dinitroaniline	500	502	100	
TATB	500	503	101	

## Recovery Limits:

3,4-Dinitrotoluene (Surrogate),TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,  
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

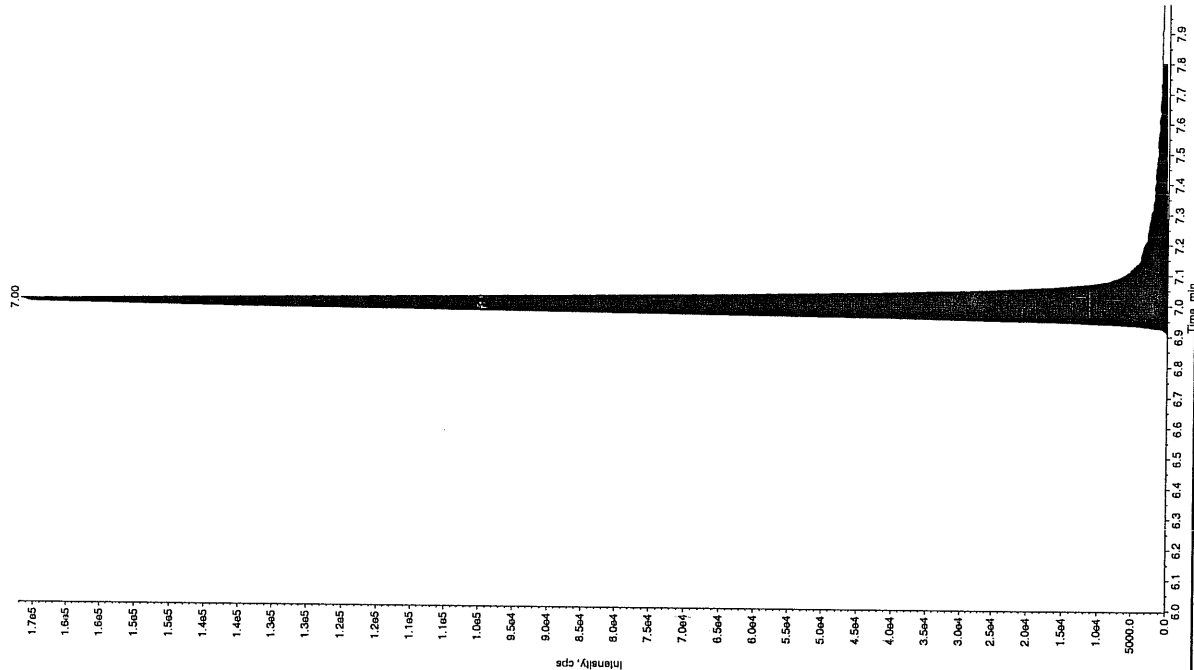
# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

Before Jan 31/9/10

Sample Name: WXX100305-26(CV) Sample ID: J11LER File: EXS03050011.wiff  
 Peak Name: '35-Dinitroaniline' Mass(es): 257.2204.9 amu  
 Comment: 'LCMSEXP\_C' Annotation: ''

Sample Index: 1 QC  
 Sample Type: 1 QC  
 Concentration: 500. ng/mL  
 Calculated Conc: 487. ng/mL  
 Acq. Date: 3/5/2010  
 Acq. Time: 7:44:43 PM  
 Modified: Yes  
 Proc. Algorithm: IntelliQuan - IQA  
 Min. Peak Height: 2000.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 30.0 sec  
 Expected RT: 7.00 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 7.00 min  
 Area: 7.23e+005 counts  
 Height: 166922.193 cps  
 Start Time: 6.89 min  
 End Time: 7.80 min



Sample Name: WXX100305-26(CV) Sample ID: J11LER File: EXS03050011.wiff  
 Peak Name: '35-Dinitroaniline' Mass(es): 182.046.0 amu  
 Comment: 'LCMSEXP\_C' Annotation: ''

Sample Index: 1 QC  
 Sample Type: 1 QC  
 Concentration: 500. ng/mL  
 Calculated Conc: 487. ng/mL  
 Acq. Date: 3/5/2010  
 Acq. Time: 7:44:43 PM  
 Modified: Yes  
 Proc. Algorithm: IntelliQuan - IQA  
 Min. Peak Height: 2000.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 15.0 sec  
 Expected RT: 8.17 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 8.23 min  
 Area: 3.99e+006 counts  
 Height: 1121243.164 cps  
 Start Time: 8.15 min  
 End Time: 8.33 min



Ann 02/09/10

after Jan 31/2010

Sample Name: "WXX100305-261CV" Sample ID: "111ER" File: "EXS03050011.wif"

Peak Name: "TATB" Mass(es): "257.2/204.9 amu"

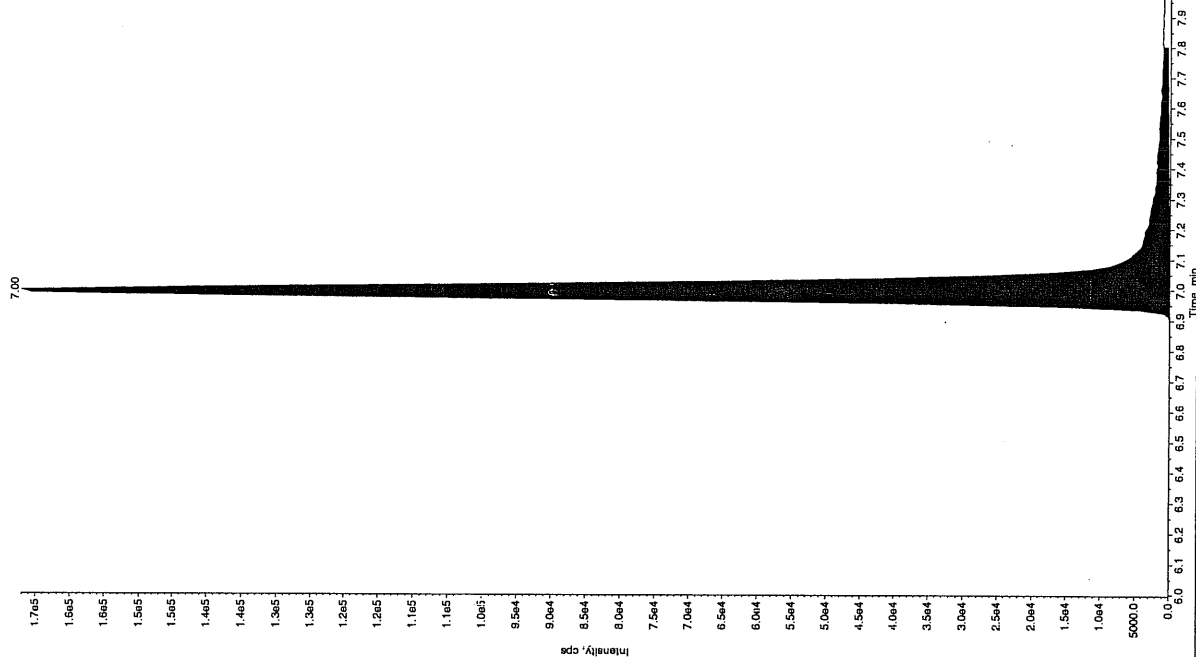
Comment: "LCMSEXP\_C" Annotation: ""

Sample Index: 1

Sample Type: QC  
Concentration: 500. ng/mL  
Calculated Conc: 503. ng/mL  
Acq. Date: 3/5/2010  
Acq. Time: 7:44:43 PM

Modified: No  
RT Window: 15.0 sec  
Expected RT: 8.17 min  
Use Relative RT: No  
Int. Type: Manual  
Retention Time: 8.23 min  
Area: 4.10e+006 counts  
Height: 1140995.391 cps  
Start Time: 8.15 min  
End Time: 8.33 min

Type: Valley  
Retention Time: 7.00 min  
Area: 7.23e+005 counts  
Height: 166982.193 cps  
Start Time: 6.89 min  
End Time: 7.80 min



Sample Name: "WXX100305-261CV" Sample ID: "111ER" File: "EXS03050011.wif"

Peak Name: "35-Dinitroaniline" Mass(es): "182.0/46.0 amu"

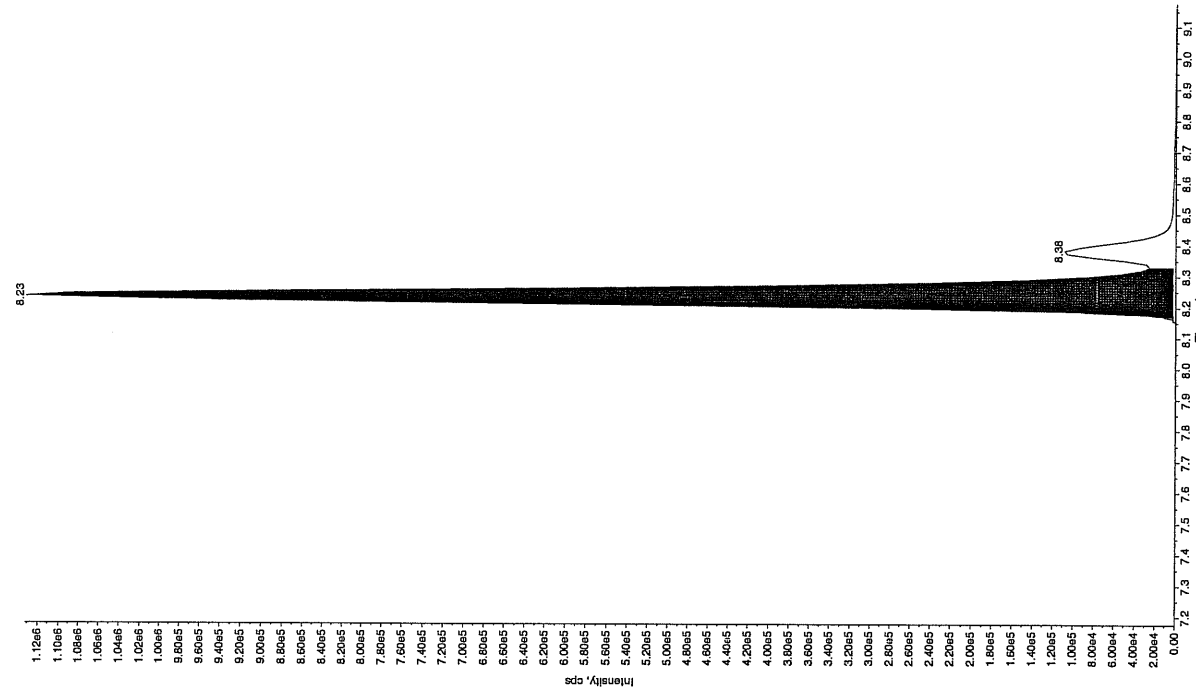
Comment: "LCMSEXP\_C" Annotation: ""

Sample Index: 1

Sample Type: QC  
Concentration: 500. ng/mL  
Calculated Conc: 502. ng/mL  
Acq. Date: 3/5/2010  
Acq. Time: 7:44:43 PM

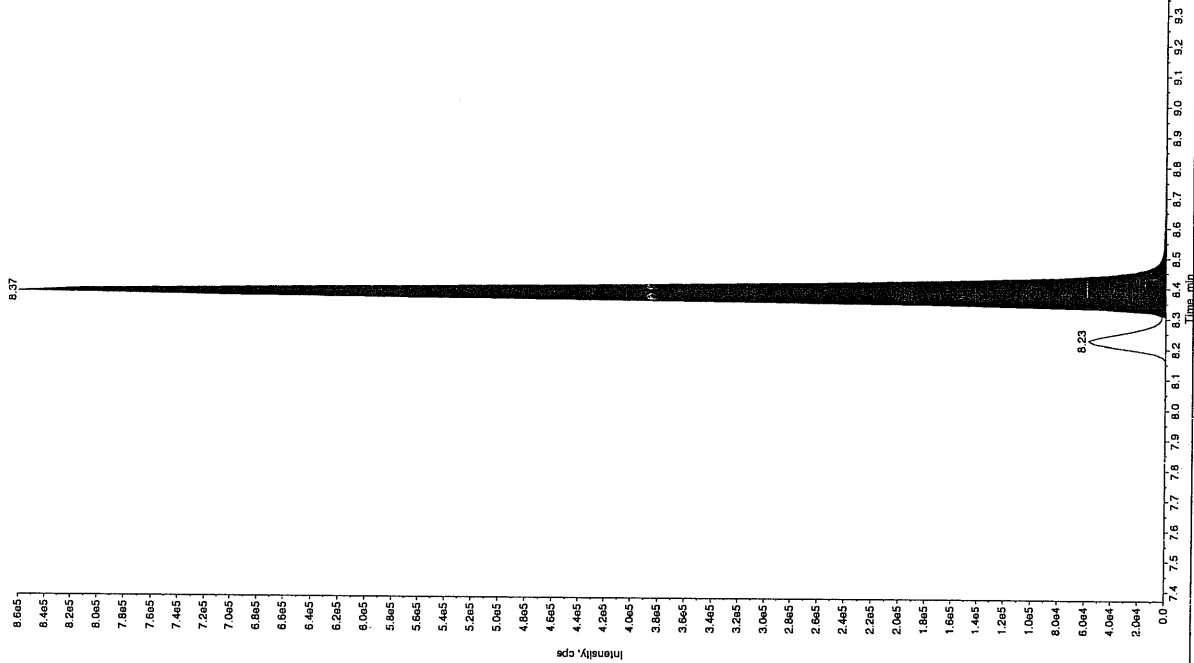
Modified: Yes  
RT Window: 15.0 sec  
Expected RT: 8.17 min  
Use Relative RT: No  
Int. Type: Manual  
Retention Time: 8.23 min  
Area: 4.10e+006 counts  
Height: 1140995.391 cps  
Start Time: 8.15 min  
End Time: 8.33 min

Type: Valley  
Retention Time: 7.00 min  
Area: 7.23e+005 counts  
Height: 166982.193 cps  
Start Time: 6.89 min  
End Time: 7.80 min



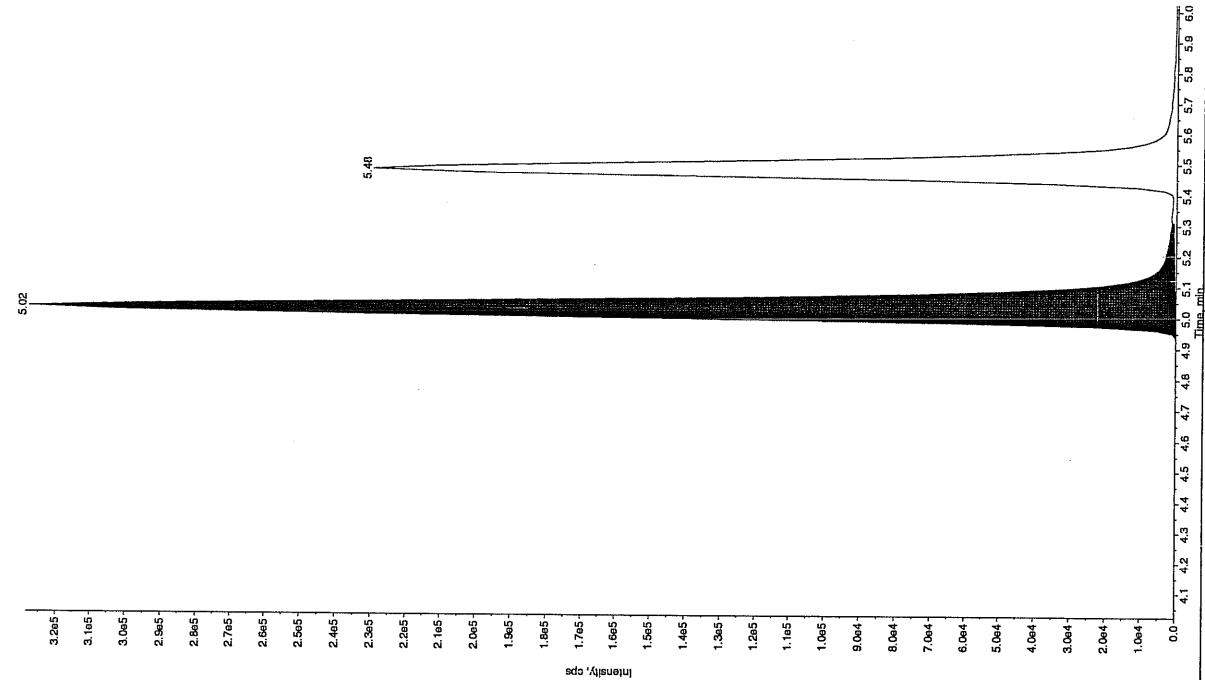
File Name: "WXX100305-28(CV" Sample ID: "11LER" File: "EXS03050011.wif"  
 Peak Name: "26-Diamino-4-nitrotoluene" Mass(es): "182.17/151.9 amu"  
 Comment: "LCMSEXP\_C" Annotation: ""

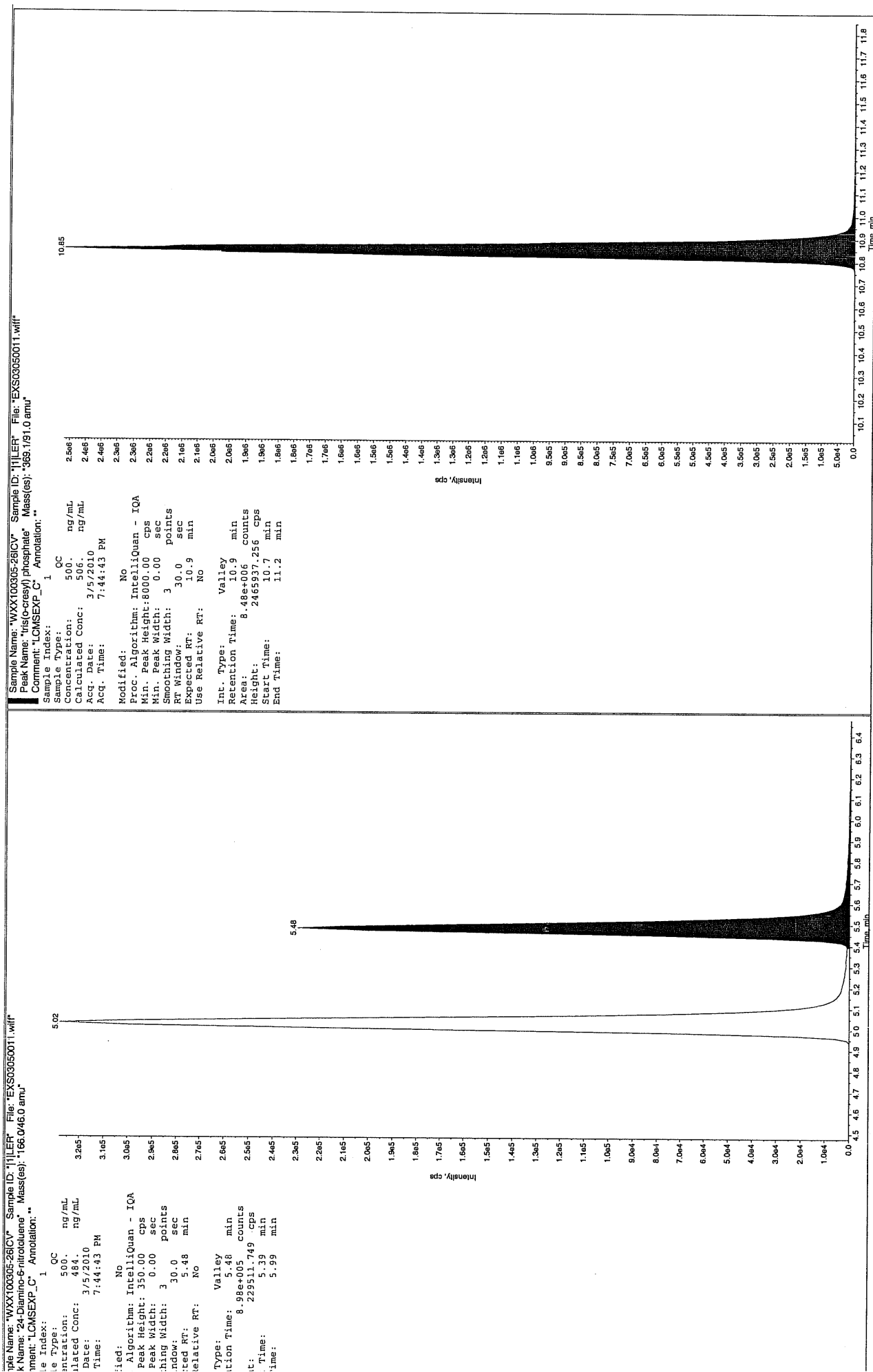
Sample Index: 1  
 Sample Type: QC  
 Concentration: 250. ng/mL  
 Calculated Conc: 230. ng/mL  
 Acq. Date: 3/5/2010  
 Acq. Time: 7:44:43 PM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IQA  
 Min. Peak Height: 1460.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 30.0 sec  
 Expected RT: 8.37 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 8.37 min  
 Area: 2.89e+006 counts  
 Height: 860204.163 cps  
 Start Time: 8.31 min  
 End Time: 8.71 min



File Name: "WXX100305-28(CV" Sample ID: "11LER" File: "EXS03050011.wif"  
 Peak Name: "26-Diamino-4-nitrotoluene" Mass(es): "166.046.0 amu"  
 Comment: "LCMSEXP\_C" Annotation: ""

Sample Index: 1  
 Sample Type: QC  
 Concentration: 500. ng/mL  
 Calculated Conc: 507. ng/mL  
 Acq. Date: 3/5/2010  
 Acq. Time: 7:44:43 PM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IQA  
 Min. Peak Height: 450.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 30.0 sec  
 Expected RT: 5.02 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 5.02 min  
 Area: 1.34e+006 counts  
 Height: 328203.613 cps  
 Start Time: 4.93 min  
 End Time: 5.31 min





7B  
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1758

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0322012.wiff

Analysis Date: 22-MAR-10 20:23

LCMSMS ID: 1189

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	40	44.6	112	
2,4,6-Trinitrotoluene	40	37.6	94	
2,4-Dinitrotoluene	40	45.1	113	
2,6-Dinitrotoluene	40	44.6	112	
2-Amino-4,6-dinitrotoluene	40	41.8	104	
3,4-Dinitrotoluene	20	22	110	
4-Amino-2,6-dinitrotoluene	40	45.4	113	
HMX	40	47.1	118	
Nitrobenzene	40	39.5	99	
PETN	40	40.6	102	
RDX	40	42	105	
Tetryl	40	33.7	84	
m-Dinitrobenzene	40	44.7	112	
m-Nitrotoluene	40	37.6	94	
o-Nitrotoluene	40	40.8	102	
p-Nitrotoluene	40	35.6	89	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,  
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

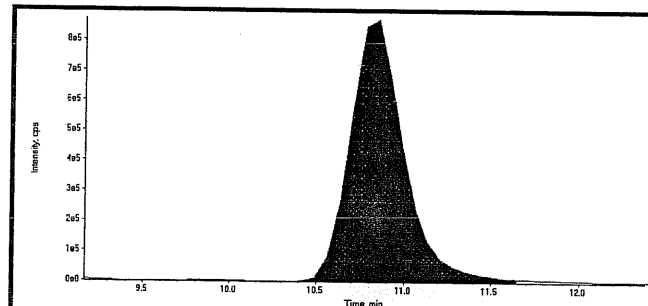
# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

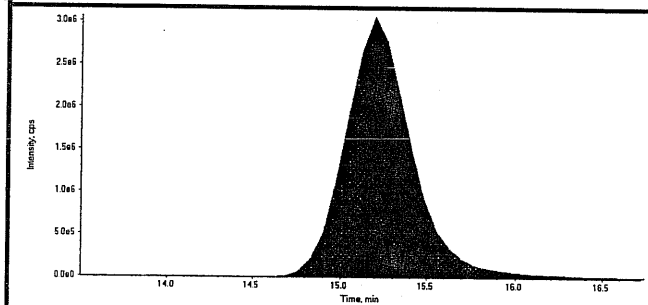
Printed: 27/03/2010 1:31:00 PM  
LCMSMS#3

Data File	EXP0322012.wiff	Acquisition Date	3/22/2010 8:23:14 PM
Sample Name	WXX100322-57CRI	Acquisition Method	8321_pntx.dam
Batch Dilution Analyst	1 LER	Result Table	032210.rdb
Procedure Code	LCMSEXP_C	Sample Type	Quality Control



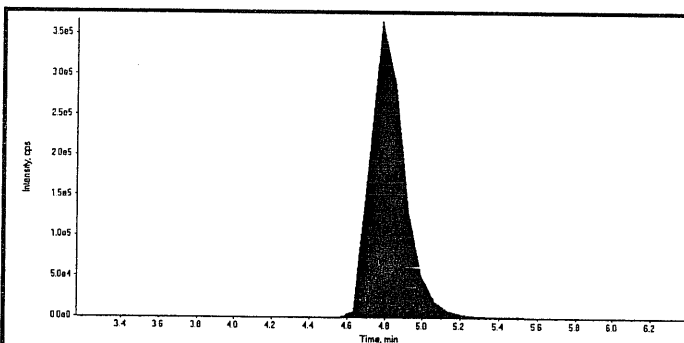
Compound Name:	13-Dinitrobenzene-d4 (172.1/46.1 amu)
Expected RT:	10.80
Actual RT:	10.90
Area Counts:	18800000.00
Manual Modification	No
Amount:	500.00(ng/mL)

Please refer to Form 8 for a list of Internal Standard Recoveries

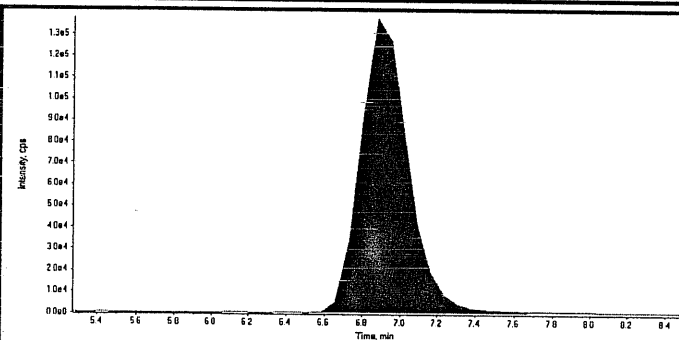


Compound Name:	26-Dinitrotoluene-d3 (185.0/155.0 amu)
Expected RT:	15.10
Actual RT:	15.20
Area Counts:	81200000.00
Manual Modification	No
Amount:	500.00(ng/mL)

Please refer to Form 8 for a list of Internal Standard Recoveries



Compound Name:	HMX (341.2/46.0 amu)
Expected RT:	4.77
Actual RT:	4.77
Area Counts:	4.58e+006
Manual Modification	No
Amount:	47.1 (ng/mL)
% Accuracy:	118.00



Compound Name:	RDX (267.0/46.1 amu)
Expected RT:	6.87
Actual RT:	6.87
Area Counts:	2.42e+006
Manual Modification	No
Amount:	42.0 (ng/mL)
% Accuracy:	105.00

*Handwritten:*  
Time 03/25/10  
Lar  
3/28/10



GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 27/03/2010 1:31:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0322012.wiff	<b>Acquisition Date</b>	3/22/2010 8:23:14 PM
<b>Sample Name</b>	WXX100322-57CRI	<b>Acquisition Method</b>	8321_pntx.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	032210.rdb
<b>Procedure Code</b>	LCMSEXP_C	<b>Sample Type</b>	Quality Control

	<b>Compound Name:</b>	135-Trinitrobenzene (213.0/182.8 amu)
	Expected RT:	9.19
	Actual RT:	9.19
	Area Counts:	1.09e+007
	Manual Modification	No
	Amount:	44.6 (ng/mL)
	% Accuracy:	112.00

	<b>Compound Name:</b>	13-Dinitrobenzene (168.0/137.9 amu)
	Expected RT:	10.9
	Actual RT:	11.0
	Area Counts:	4.47e+006
	Manual Modification	No
	Amount:	44.7 (ng/mL)
	% Accuracy:	112.00

	<b>Compound Name:</b>	Tetryl (241.0/180.8 amu)
	Expected RT:	11.1
	Actual RT:	11.1
	Area Counts:	5.43e+006
	Manual Modification	No
	Amount:	33.7 (ng/mL)
	% Accuracy:	84.30

	<b>Compound Name:</b>	246-Trinitrotoluene (227.1/209.8 amu)
	Expected RT:	13.5
	Actual RT:	13.5
	Area Counts:	2.08e+007
	Manual Modification	No
	Amount:	37.6 (ng/mL)
	% Accuracy:	93.90

Before Jan 3/28/10

File Name: "WXX100322-57.CRI" Sample ID: "111ER" File: "EXP0322012.wif"

Sample Name: "24-dinitrotoluene" Mass(es): "182.046.0 amu"

Sample ID: "111ER" Annotation: "

Sample Type: "OC"

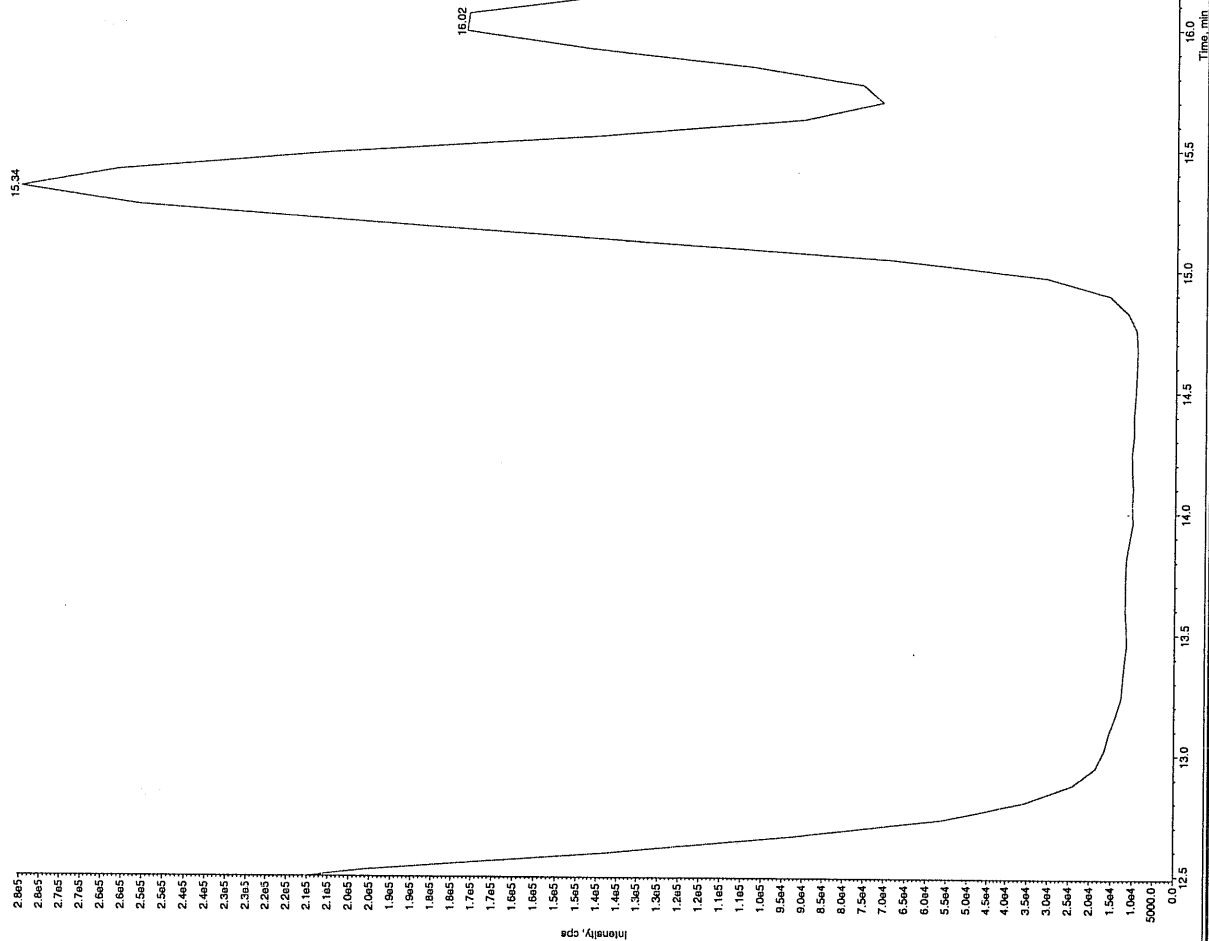
Concentration: "40.0 ng/mL"

Intake Conc: "0.00 ng/mL"

Date: "3/22/2010"

Time: "8:13:14 PM"

Id: "No"



IL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#3

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 27/03/2010 1:31:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0322012.wiff	<b>Acquisition Date</b>	3/22/2010 8:23:14 PM
<b>Sample Name</b>	WXX100322-57CRI	<b>Acquisition Method</b>	8321_pntx.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	032210.rdb
<b>Procedure Code</b>	LCMSEXP_C	<b>Sample Type</b>	Quality Control

	<b>Compound Name:</b>	Nitrobenzene (123.0/46.0 amu)
	Expected RT:	12.1
	Actual RT:	12.2
	Area Counts:	2.01e+005
	Manual Modification	No
	Amount:	39.5 (ng/mL)
	% Accuracy:	98.60

	<b>Compound Name:</b>	34-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	12.4
	Actual RT:	12.4
	Area Counts:	4.62e+006
	Manual Modification	No
	Amount:	22.0 (ng/mL)
	% Accuracy:	110.00

	<b>Compound Name:</b>	26-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	15.3
	Actual RT:	15.3
	Area Counts:	7.05e+006
	Manual Modification	No
	Amount:	44.6 (ng/mL)
	% Accuracy:	112.00

	<b>Compound Name:</b>	24-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	16.0
	Actual RT:	16.0
	Area Counts:	4.28e+006
	Manual Modification	Yes
	Amount:	45.1 (ng/mL)
	% Accuracy:	113.00

Before Dec 3/28/10

File Name: "WXX100322-57.CHI" Sample ID: "TILER" File: "EXP0322012.MIT"

Method: "LCMS-EXP\_C" Acquisition: "197.0/180.0 amu"

Sample Name: "TILER"

Sample Type: "1" OC

Concentration: 40.0 ng/mL

Dated Conc: 99.1 ng/mL

Date: 3/22/2010

Time: 8:23:14 PM

Method: "LCMS-EXP\_C"

Acquisition: "197.0/180.0 amu"

Sample Name: "TILER"

Sample Type: "1" OC

Concentration: 40.0 ng/mL

Dated Conc: 99.1 ng/mL

Date: 3/22/2010

Time: 8:23:14 PM

Method: "LCMS-EXP\_C"

Acquisition: "197.0/180.0 amu"

Sample Name: "TILER"

Sample Type: "1" OC

Concentration: 40.0 ng/mL

Dated Conc: 99.1 ng/mL

Date: 3/22/2010

Time: 8:23:14 PM

Method: "LCMS-EXP\_C"

Acquisition: "197.0/180.0 amu"

Sample Name: "TILER"

Sample Type: "1" OC

Concentration: 40.0 ng/mL

Dated Conc: 99.1 ng/mL

Date: 3/22/2010

Time: 8:23:14 PM

Method: "LCMS-EXP\_C"

Acquisition: "197.0/180.0 amu"

Sample Name: "TILER"

Sample Type: "1" OC

Concentration: 40.0 ng/mL

Dated Conc: 99.1 ng/mL

Date: 3/22/2010

Time: 8:23:14 PM

Method: "LCMS-EXP\_C"

Acquisition: "197.0/180.0 amu"

Sample Name: "TILER"

Sample Type: "1" OC

Concentration: 40.0 ng/mL

Dated Conc: 99.1 ng/mL

Date: 3/22/2010

Time: 8:23:14 PM

Method: "LCMS-EXP\_C"

Acquisition: "197.0/180.0 amu"

Sample Name: "TILER"

Sample Type: "1" OC

Concentration: 40.0 ng/mL

Dated Conc: 99.1 ng/mL

Date: 3/22/2010

Time: 8:23:14 PM

Method: "LCMS-EXP\_C"

Acquisition: "197.0/180.0 amu"

Sample Name: "TILER"

Sample Type: "1" OC

Concentration: 40.0 ng/mL

Dated Conc: 99.1 ng/mL

Date: 3/22/2010

Time: 8:23:14 PM

Method: "LCMS-EXP\_C"

Acquisition: "197.0/180.0 amu"

Sample Name: "TILER"

Sample Type: "1" OC

Concentration: 40.0 ng/mL

Dated Conc: 99.1 ng/mL

Date: 3/22/2010

Time: 8:23:14 PM

Method: "LCMS-EXP\_C"

Acquisition: "197.0/180.0 amu"

Sample Name: "TILER"

Sample Type: "1" OC

Concentration: 40.0 ng/mL

Dated Conc: 99.1 ng/mL

Date: 3/22/2010

Time: 8:23:14 PM

Method: "LCMS-EXP\_C"

Acquisition: "197.0/180.0 amu"

Sample Name: "TILER"

Sample Type: "1" OC

Concentration: 40.0 ng/mL

Dated Conc: 99.1 ng/mL

Date: 3/22/2010

Time: 8:23:14 PM

Method: "LCMS-EXP\_C"

Acquisition: "197.0/180.0 amu"

Sample Name: "TILER"

Sample Type: "1" OC

Concentration: 40.0 ng/mL

Dated Conc: 99.1 ng/mL

Date: 3/22/2010

Time: 8:23:14 PM

Method: "LCMS-EXP\_C"

Acquisition: "197.0/180.0 amu"

13.52

7.6e4

7.4e4

7.2e4

7.0e4

6.8e4

6.6e4

6.4e4

6.2e4

6.0e4

5.8e4

5.6e4

5.4e4

5.2e4

5.0e4

4.8e4

4.6e4

4.4e4

4.2e4

4.0e4

3.8e4

3.6e4

3.4e4

3.2e4

3.0e4

2.8e4

2.6e4

2.4e4

2.2e4

2.0e4

1.8e4

1.6e4

1.4e4

1.2e4

1.0e4

8000.0

6000.0

4000.0

2000.0

0.0

Intensity, cps

11.11

14.67

14.5

14.0

13.5

13.0

12.5

12.0

11.5

Time, min

18.0

17.5

17.0

16.5

16.0

15.5

15.0

14.5

14.0

13.5

13.0

12.5

12.0

11.5

11.11

14.67

14.5

14.0

13.5

13.0

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12.5

12.0

11.5

11.11

14.67

14.5

14.0

13.5

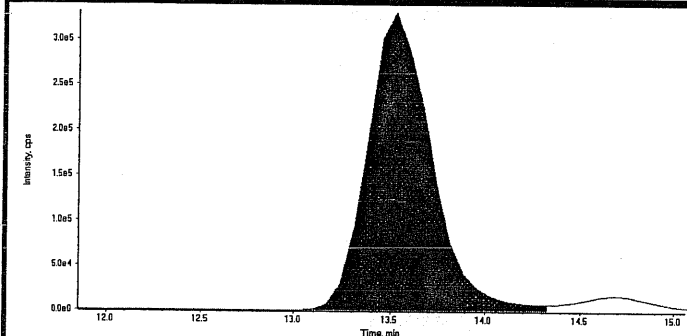
13.0

12.5

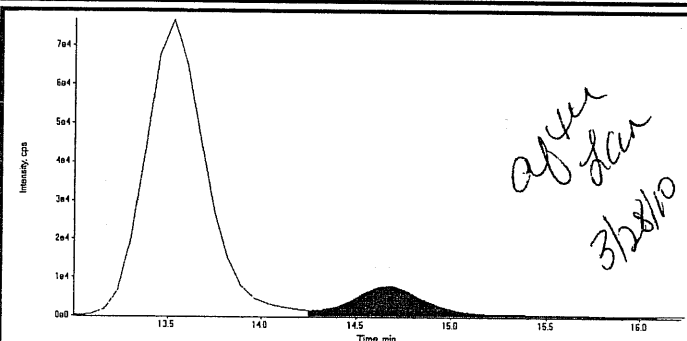
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 27/03/2010 1:31:00 PM  
LCMSMS#3

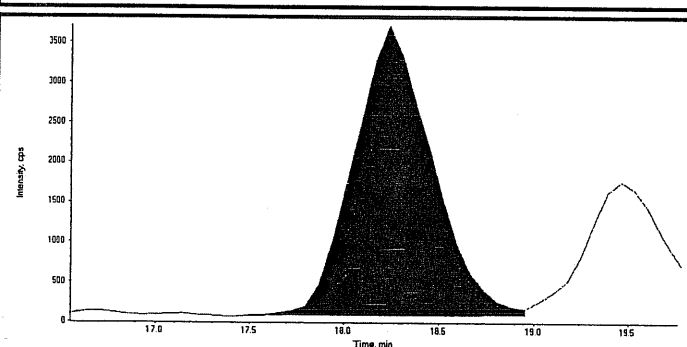
Data File	EXP0322012.wiff	Acquisition Date	3/22/2010 8:23:14 PM
Sample Name	WXX100322-57CRI	Acquisition Method	8321_pntx.dam
Batch Dilution Analyst	1 LER	Result Table	032210.rdb
Procedure Code	LCMSEXP_C	Sample Type	Quality Control



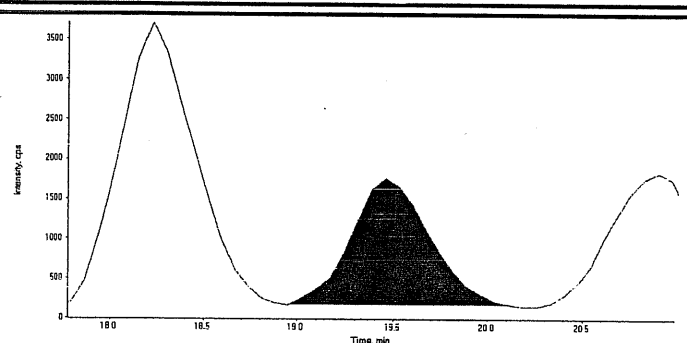
Compound Name:	4-Amino-26-dinitrotoluene (197.0/167.0 amu)
Expected RT:	13.5
Actual RT:	13.5
Area Counts:	7.78e+006
Manual Modification	No
Amount:	45.4 (ng/mL)
% Accuracy:	113.00



Compound Name:	2-Amino-46-dinitrotoluene (197.0/180.0 amu)
Expected RT:	14.6
Actual RT:	14.7
Area Counts:	2.26e+005
Manual Modification	Yes
Amount:	41.8 (ng/mL)
% Accuracy:	104.00



Compound Name:	2-Nitrotoluene (137.0/46.0 amu)
Expected RT:	18.2
Actual RT:	18.2
Area Counts:	1.04e+005
Manual Modification	No
Amount:	40.8 (ng/mL)
% Accuracy:	102.00

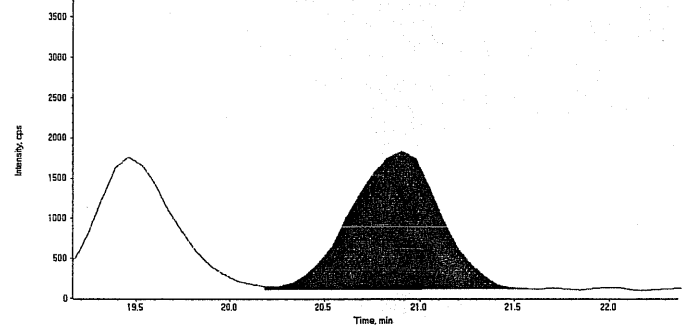


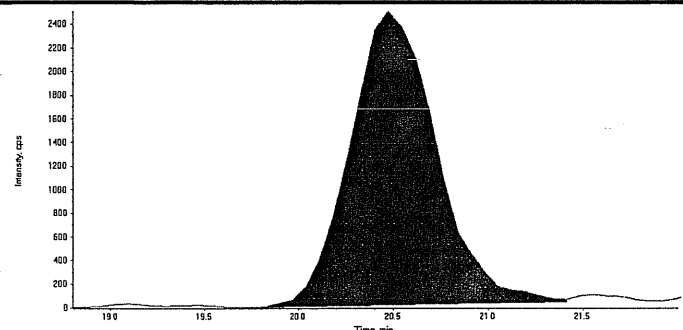
Compound Name:	4-Nitrotoluene (137.0/46.0 amu)
Expected RT:	19.4
Actual RT:	19.5
Area Counts:	4.51e+004
Manual Modification	No
Amount:	35.6 (ng/mL)
% Accuracy:	89.10

GEL Laboratories, LLC  
 GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 27/03/2010 1:31:00 PM  
 LCMSMS#3

Data File	EXP0322012.wiff	Acquisition Date	3/22/2010 8:23:14 PM
Sample Name	WXX100322-57CRI	Acquisition Method	8321_pntx.dam
Batch Dilution Analyst	1 LER	Result Table	032210.rdb
Procedure Code	LCMSEXP_C	Sample Type	Quality Control

	Compound Name:	3-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	20.8
	Actual RT:	20.9
	Area Counts:	5.66e+004
	Manual Modification	No
	Amount:	37.6 (ng/mL)
	% Accuracy:	93.90

	Compound Name:	PETN (361.1/62.0 amu)
	Expected RT:	20.4
	Actual RT:	20.5
	Area Counts:	7.88e+004
	Manual Modification	No
	Amount:	40.6 (ng/mL)
	% Accuracy:	102.00

GRAND MEAN AVERAGE

Vendor: Restek  
 Date of Analysis 03/22/10  
 Time of Injection 2023  
 Standard Number WXX100322-57CRI  
 Data File EXP0322012a

HMX	118.0	✓
RDX	105.0	✓
135-Trinitrobenzene	112.0	
13-Dinitrobenzene	112.0	
Tetryl	84.3	
246-Trinitrotoluene	93.9	
Nitrobenzene	98.6	
34-dinitrotoluene	110.0	
26-dinitrotoluene	112.0	
24-dinitrotoluene	113.0	
4-Amino-26-dinitrotoluene	113.0	
2-Amino-46-dinitrotoluene	104.0	
2-Nitrotoluene	102.0	
4-Nitrotoluene	89.1	
3-Nitrotoluene	93.9	
PETN	102.0	

TOTAL

1662.8

*Ann 03/28/10*

AVERAGE

✓ 103.9

ICV Limits 85-115%

CRI Limits 70-130%

CCV Limits 85-115%

No single analyte > +/- 60%

*See 3/28/10*

7A

Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1758

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0322018.wiff

Analysis Date: 22-MAR-10 23:01

LCMSMS ID: 1189

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	600	571	95	
2,4,6-Trinitrotoluene	600	550	92	
2,4-Dinitrotoluene	600	626	104	
2,6-Dinitrotoluene	600	530	88	
2-Amino-4,6-dinitrotoluene	600	633	105	
3,4-Dinitrotoluene	300	278	93	
4-Amino-2,6-dinitrotoluene	600	583	97	
HMX	600	582	97	
Nitrobenzene	600	648	108	
PETN	600	697	116	
RDX	600	617	103	
Tetryl	600	666	111	
m-Dinitrobenzene	600	595	99	
m-Nitrotoluene	600	647	108	
o-Nitrotoluene	600	619	103	
p-Nitrotoluene	600	676	113	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,  
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

# Column used to flag Recovery outside of Limits

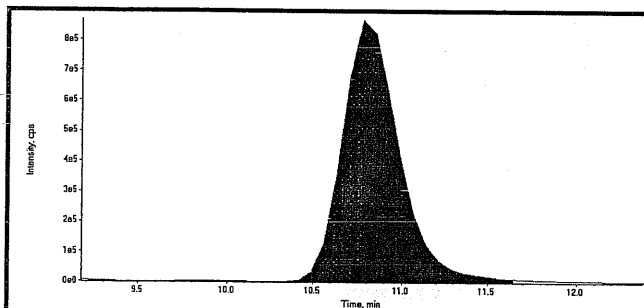
\* Value outside of Recovery Limits



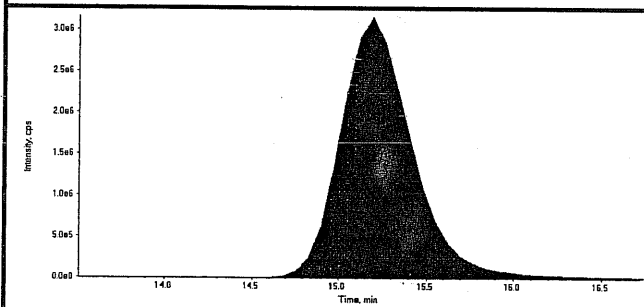
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 27/03/2010 1:31:00 PM  
LCMSMS#3

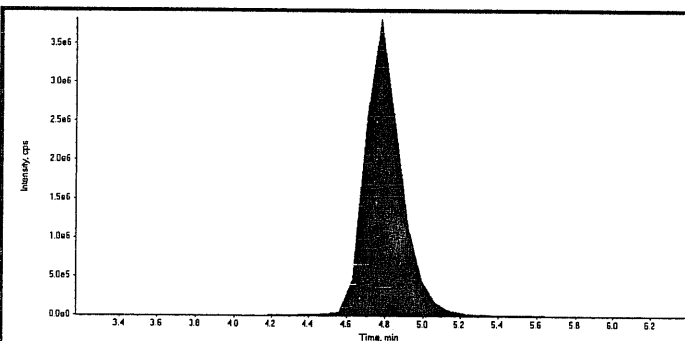
Data File	EXP0322018.wiff	Acquisition Date	3/22/2010 11:01:27 PM
Sample Name	WXX100322-56CCV	Acquisition Method	8321_pntx.dam
Batch Dilution Analyst	1 LER	Result Table	032210.rdb
Procedure Code	LCMSEXP_C	Sample Type	Quality Control



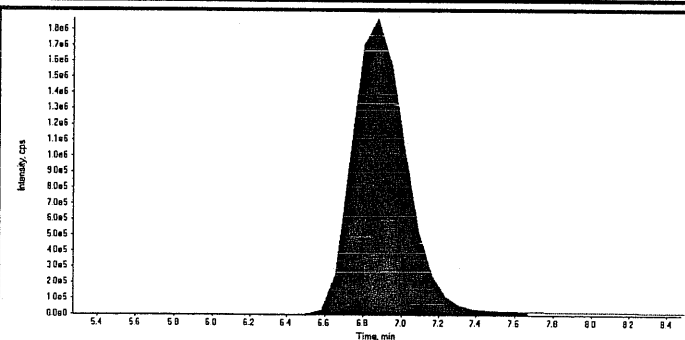
Compound Name:	13-Dinitrobenzene-d4 (172.1/46.1 amu)
Expected RT:	10.80
Actual RT:	10.80
Area Counts:	19500000.00
Manual Modification	No
Amount:	500.00(ng/mL)
Please refer to Form 8 for a list of Internal Standard Recoveries	



Compound Name:	26-Dinitrotoluene-d3 (185.0/155.0 amu)
Expected RT:	15.10
Actual RT:	15.20
Area Counts:	89700000.00
Manual Modification	No
Amount:	500.00(ng/mL)
Please refer to Form 8 for a list of Internal Standard Recoveries	



Compound Name:	HMX (341.2/46.0 amu)
Expected RT:	4.77
Actual RT:	4.77
Area Counts:	4.92e+007
Manual Modification	No
Amount:	582. (ng/mL)
% Accuracy:	97.00



Compound Name:	RDX (267.0/46.1 amu)
Expected RT:	6.87
Actual RT:	6.87
Area Counts:	3.68e+007
Manual Modification	No
Amount:	617. (ng/mL)
% Accuracy:	103.00

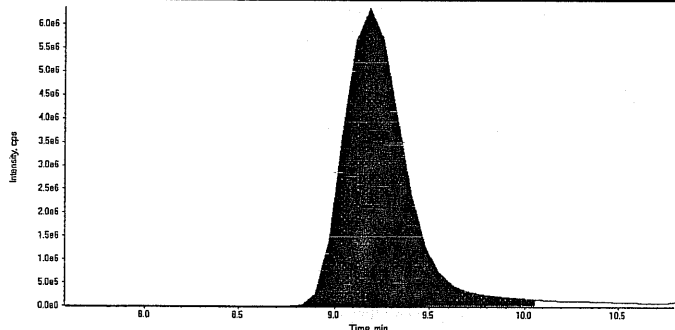
*lar*  
3/28/10

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

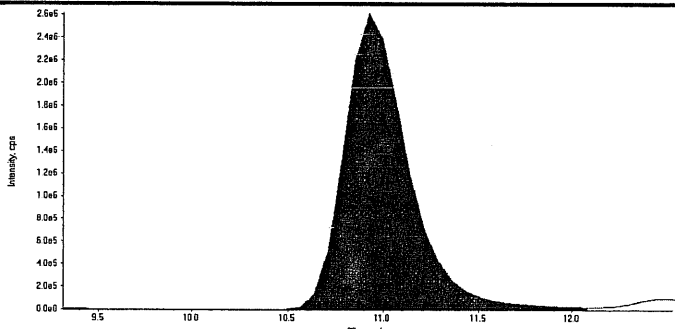
Printed: 27/03/2010 1:31:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0322018.wiff	<b>Acquisition Date</b>	3/22/2010 11:01:27 PM
<b>Sample Name</b>	WXX100322-56CCV	<b>Acquisition Method</b>	8321_pntx.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	032210.rdb
<b>Procedure Code</b>	LCMSEXP_C	<b>Sample Type</b>	Quality Control

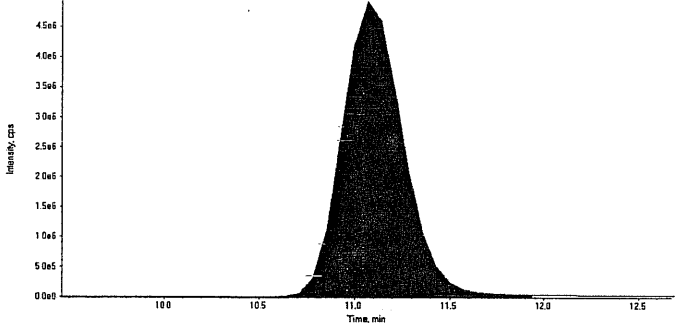
  

	<b>Compound Name:</b>	135-Trinitrobenzene (213.0/182.8 amu)
	Expected RT:	9.19
	Actual RT:	9.19
	Area Counts:	1.44e+008
	Manual Modification	No
	Amount:	571. (ng/mL)
	% Accuracy:	95.20

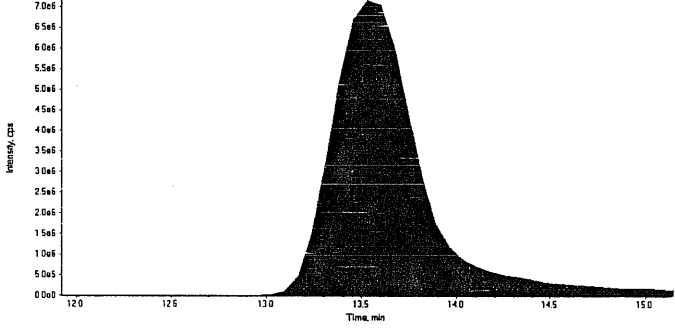
  

	<b>Compound Name:</b>	13-Dinitrobenzene (168.0/137.9 amu)
	Expected RT:	10.9
	Actual RT:	10.9
	Area Counts:	6.16e+007
	Manual Modification	No
	Amount:	595. (ng/mL)
	% Accuracy:	99.10

	<b>Compound Name:</b>	Tetryl (241.0/180.8 amu)
	Expected RT:	11.1
	Actual RT:	11.1
	Area Counts:	1.11e+008
	Manual Modification	No
	Amount:	666. (ng/mL)
	% Accuracy:	111.00

	<b>Compound Name:</b>	246-Trinitrotoluene (227.1/209.8 amu)
	Expected RT:	13.5
	Actual RT:	13.5
	Area Counts:	2.45e+008
	Manual Modification	No
	Amount:	550. (ng/mL)
	% Accuracy:	91.70

Before Ran 3/28/10

Sample Name: "WXX100322-35CCV" Sample ID: "111ER" File: "EXP0322018.wif"

Peak Name: "28-dinitrotoluene" Mass(es): "182.046.0 amu"

Comment: "LCMSEXP\_C" Annotation: "

1 CC

Concentration: 600. ng/mL

Calculated Conc: 365. ng/mL

Date: 3/22/2010

Time: 11:01:27 PM

1. Algorithm: IntelliQuan - IQA

Peak Height: 1.00e4 cps

Peak Width: 0.00 sec

Integration Width: 30.0 points

Integration Time: 30.0 sec

Integrated RT: 15.3 min

Relative RT: No

Type: Valley

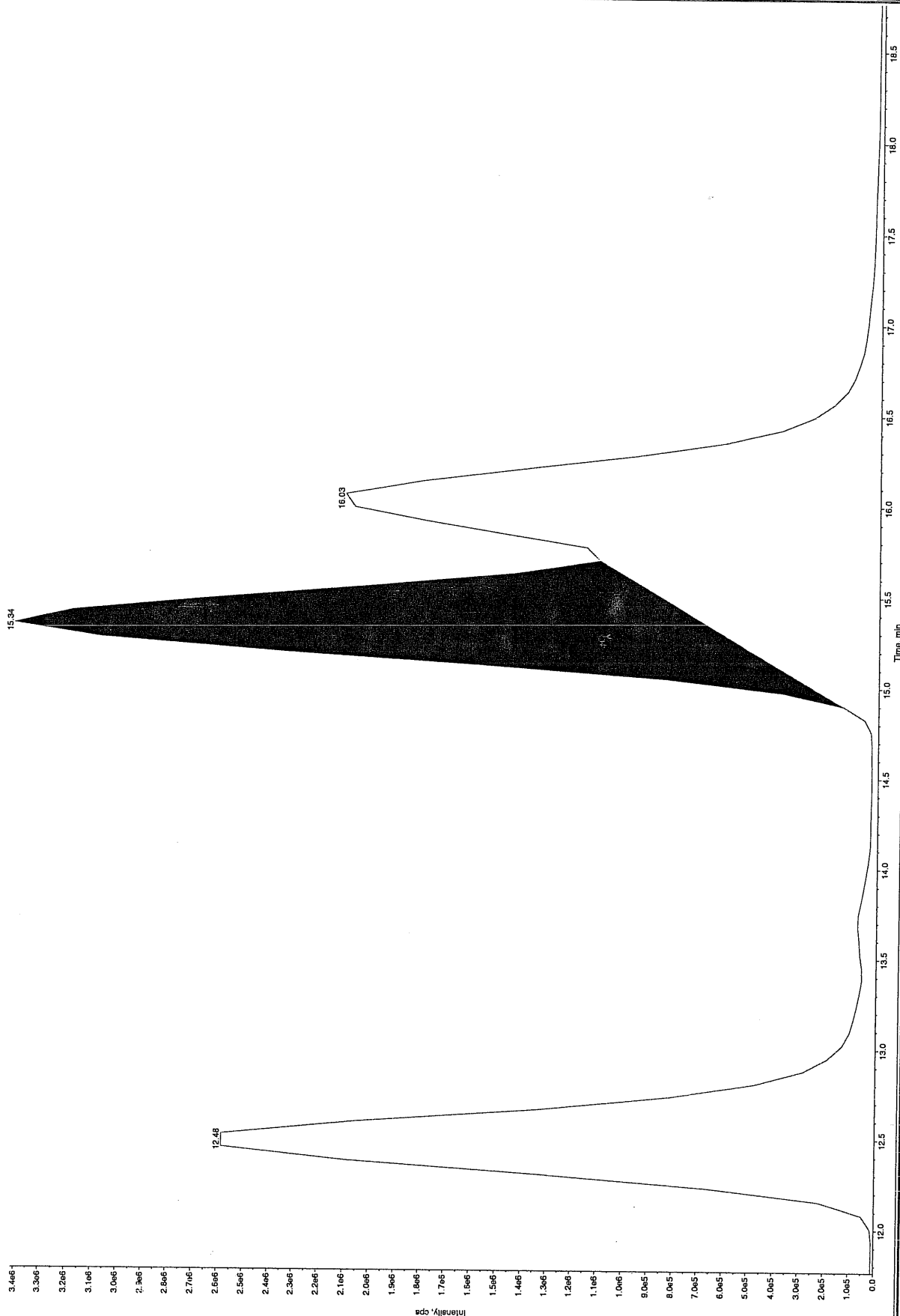
Retention Time: 15.3 min

Height: 6.37e+007 counts

ht: 2.74e+006 cps

Time: 14.9 min

Time: 15.7 min



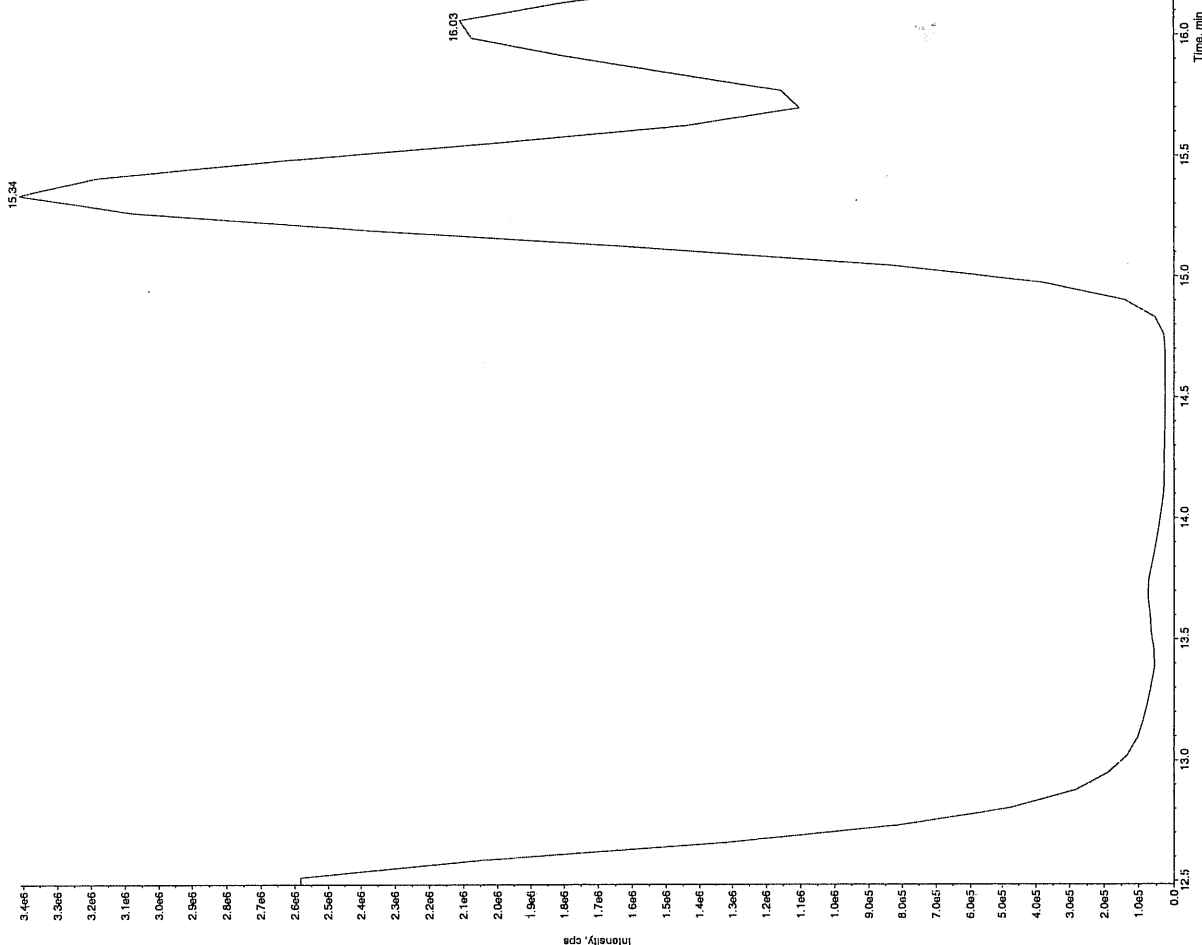
EL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#3

Before Scan 3128110

File: EXP0322018.wif

Sample ID: 1111111  
 Name: LCMSEXP\_C  
 Annotation: 1

Index: 1  
 Type: QC  
 Location: 600  
 Date: 3/22/2010  
 Time: 11:01:27 PM  
 Unit: ng/mL

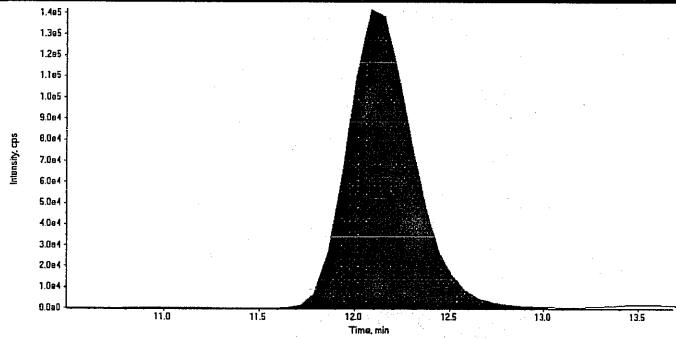


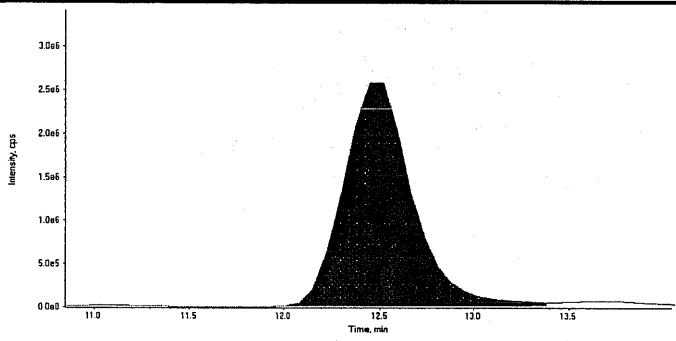
EL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#3

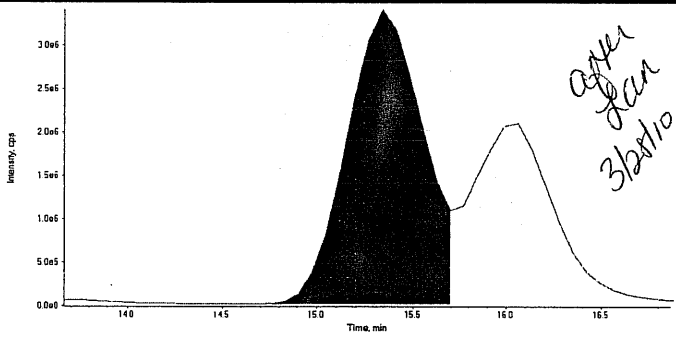
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

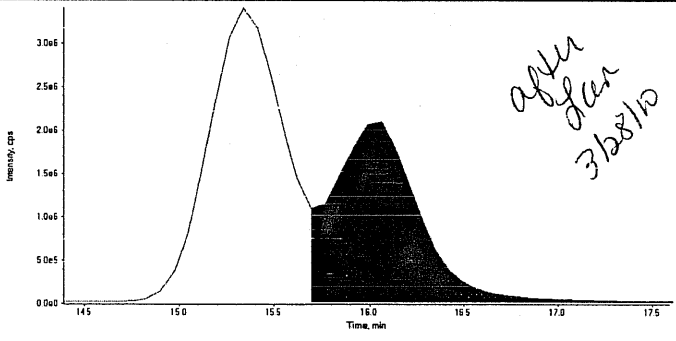
Printed: 27/03/2010 1:31:00 PM  
LCMSMS#3

Data File	EXP0322018.wiff	Acquisition Date	3/22/2010 11:01:27 PM
Sample Name	WXX100322-56CCV	Acquisition Method	8321_pntx.dam
Batch Dilution Analyst	1 LER	Result Table	032210.rdb
Procedure Code	LCMSEXP_C	Sample Type	Quality Control

	Compound Name:	Nitrobenzene (123.0/46.0 amu)
	Expected RT:	12.1
	Actual RT:	12.1
	Area Counts:	3.42e+006
	Manual Modification	No
	Amount:	648. (ng/mL)
	% Accuracy:	108.00

	Compound Name:	34-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	12.4
	Actual RT:	12.4
	Area Counts:	6.44e+007
	Manual Modification	No
	Amount:	278. (ng/mL)
	% Accuracy:	92.60

	Compound Name:	26-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	15.3
	Actual RT:	15.3
	Area Counts:	9.24e+007
	Manual Modification	Yes
	Amount:	530. (ng/mL)
	% Accuracy:	88.30

	Compound Name:	24-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	16.0
	Actual RT:	16.0
	Area Counts:	6.58e+007
	Manual Modification	Yes
	Amount:	626. (ng/mL)
	% Accuracy:	104.00

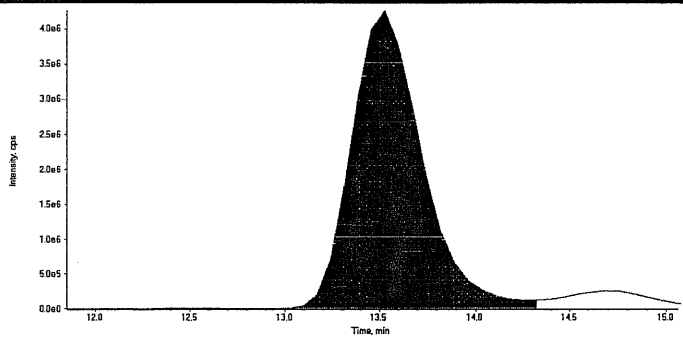


GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

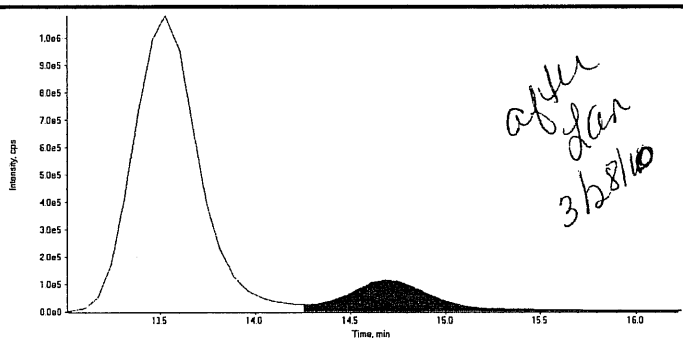
Printed: 27/03/2010 1:31:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0322018.wiff	<b>Acquisition Date</b>	3/22/2010 11:01:27 PM
<b>Sample Name</b>	WXX100322-56CCV	<b>Acquisition Method</b>	8321_pntx.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	032210.rdb
<b>Procedure Code</b>	LCMSEXP_C	<b>Sample Type</b>	Quality Control

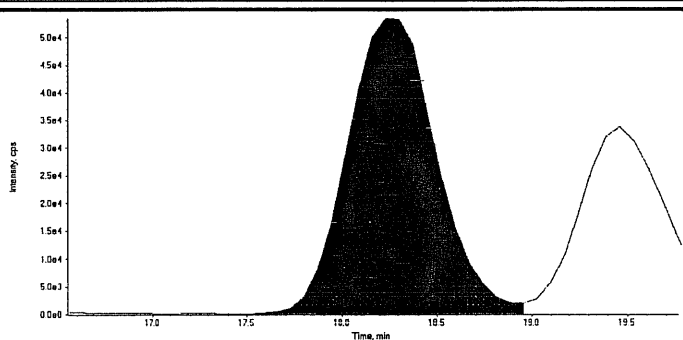
  

	<b>Compound Name:</b>	4-Amino-26-dinitrotoluene (197.0/167.0 amu)
	Expected RT:	13.5
	Actual RT:	13.5
	Area Counts:	1.10e+008
	Manual Modification	No
	Amount:	583. (ng/mL)
	% Accuracy:	97.20

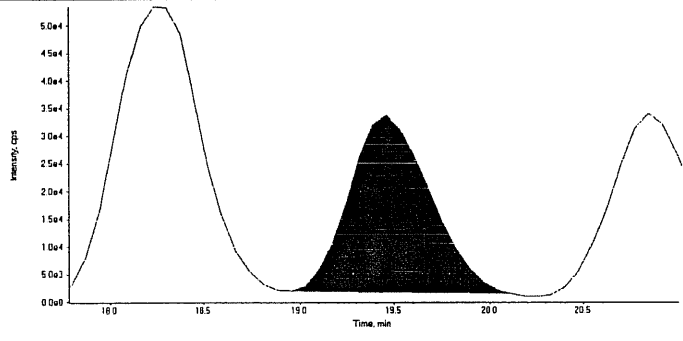
  

	<b>Compound Name:</b>	2-Amino-46-dinitrotoluene (197.0/180.0 amu)
	Expected RT:	14.6
	Actual RT:	14.7
	Area Counts:	3.78e+006
	Manual Modification	Yes
	Amount:	633. (ng/mL)
	% Accuracy:	105.00

	<b>Compound Name:</b>	2-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	18.2
	Actual RT:	18.2
	Area Counts:	1.74e+006
	Manual Modification	No
	Amount:	619. (ng/mL)
	% Accuracy:	103.00

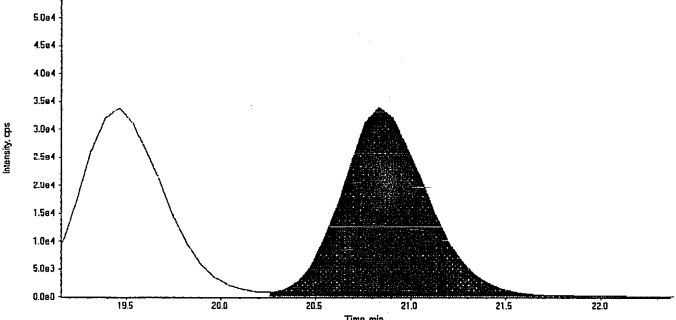
  

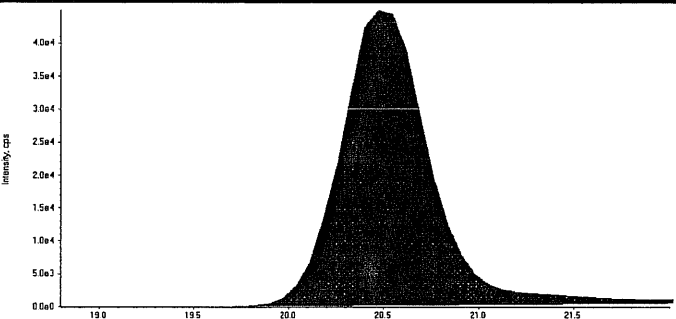
	<b>Compound Name:</b>	4-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	19.4
	Actual RT:	19.5
	Area Counts:	9.46e+005
	Manual Modification	No
	Amount:	676. (ng/mL)
	% Accuracy:	113.00

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 27/03/2010 1:31:00 PM  
LCMSMS#3

Data File	EXP0322018.wiff	Acquisition Date	3/22/2010 11:01:27 PM
Sample Name	WXX100322-56CCV	Acquisition Method	8321_pntx.dam
Batch Dilution Analyst	1 LER	Result Table	032210.rdb
Procedure Code	LCMSEXP_C	Sample Type	Quality Control

	Compound Name:	3-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	20.8
	Actual RT:	20.8
	Area Counts:	1.08e+006
	Manual Modification	No
	Amount:	647. (ng/mL)
	% Accuracy:	108.00

	Compound Name:	PETN (361.1/62.0 amu)
	Expected RT:	20.4
	Actual RT:	20.5
	Area Counts:	1.49e+006
	Manual Modification	No
	Amount:	697. (ng/mL)
	% Accuracy:	116.00



GRAND MEAN AVERAGE

Vendor: Restek  
 Date of Analysis 03/22/10  
 Time of Injection 2301  
 Standard Number WXX100322-56CCV  
 Data File EXP0322018a

HMX	97.0	✓
RDX	103.0	✓
135-Trinitrobenzene	95.2	
13-Dinitrobenzene	99.1	
Tetryl	111.0	
246-Trinitrotoluene	91.7	
Nitrobenzene	108.0	
34-dinitrotoluene	92.6	
26-dinitrotoluene	88.3	
24-dinitrotoluene	104.0	
4-Amino-26-dinitrotoluene	97.2	
2-Amino-46-dinitrotoluene	105.0	
2-Nitrotoluene	103.0	
4-Nitrotoluene	113.0	
3-Nitrotoluene	108.0	
PETN	116.0	
	✓	
TOTAL	1632.1	<i>1632.1</i>
		ICV Limits 85-115%
AVERAGE	✓ 102.0	CRI Limits 70-130%
		CCV Limits 85-115%
		No single analyte > +/- 60%

*Lcr 3/28/10*

7B  
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1758

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0322020.wiff

Analysis Date: 22-MAR-10 23:54

LCMSMS ID: 1189

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4,6-Trinitrotoluene	40	33.9	85	
2,4-Dinitrotoluene	40	42.4	106	
2,6-Dinitrotoluene	40	43.5	109	
2-Amino-4,6-dinitrotoluene	40	35.7	89	
3,4-Dinitrotoluene	20	19.9	100	
4-Amino-2,6-dinitrotoluene	40	40.7	102	
HMX	40	36.7	92	
Nitrobenzene	40	40.2	100	
PETN	40	37.3	93	
RDX	40	39	97	
Tetryl	40	27.5	69	
m-Dinitrobenzene	40	42.2	106	
m-Nitrotoluene	40	36.3	91	
o-Nitrotoluene	40	35.8	90	
p-Nitrotoluene	40	38.3	96	
1,3,5-Trinitrobenzene	40	42.3	106	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,  
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

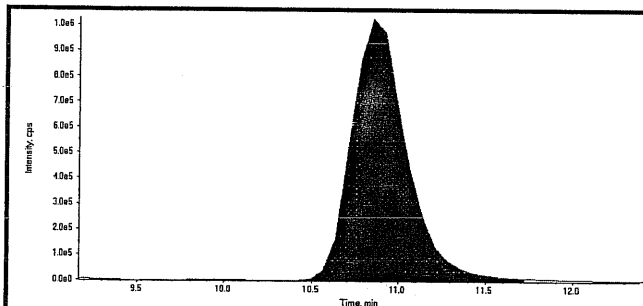
# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

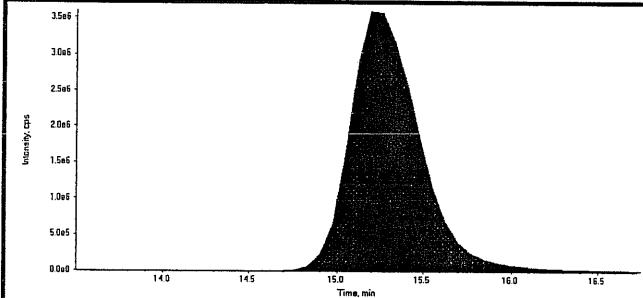
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 27/03/2010 1:31:00 PM  
LCMSMS#3

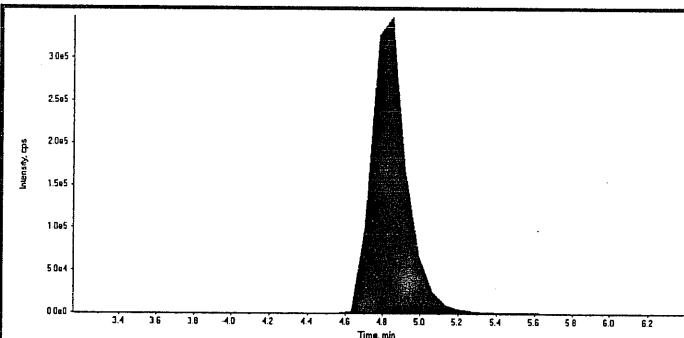
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<b>Sample Name</b>	WXX100322-57CRI	<b>Acquisition Method</b>	8321_pntx.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	032210.rdb
<b>Procedure Code</b>	LCMSEXP_C	<b>Sample Type</b>	Quality Control



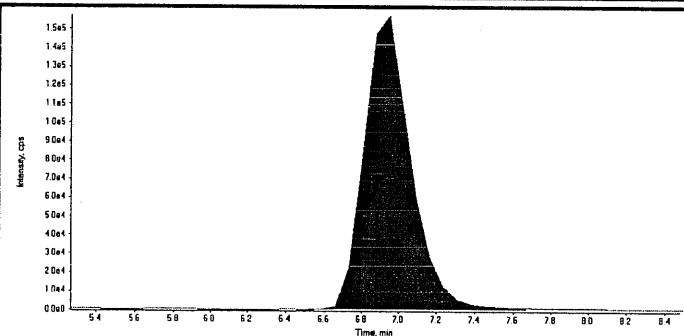
<b>Compound Name:</b>	13-Dinitrobenzene-d4 (172.1/46.1 amu)
Expected RT:	10.80
Actual RT:	10.90
Area Counts:	23000000.00
Manual Modification	No
Amount:	500.00(ng/mL)
Please refer to Form 8 for a list of Internal Standard Recoveries	



<b>Compound Name:</b>	26-Dinitrotoluene-d3 (185.0/155.0 amu)
Expected RT:	15.10
Actual RT:	15.20
Area Counts:	102000000.00
Manual Modification	Yes
Amount:	500.00(ng/mL)
Please refer to Form 8 for a list of Internal Standard Recoveries	



<b>Compound Name:</b>	HMX (341.2/46.0 amu)
Expected RT:	4.77
Actual RT:	4.85
Area Counts:	4.58e+006
Manual Modification	No
Amount:	36.7 (ng/mL)
% Accuracy:	91.70



<b>Compound Name:</b>	RDX (267.0/46.1 amu)
Expected RT:	6.87
Actual RT:	6.94
Area Counts:	2.74e+006
Manual Modification	No
Amount:	39.0 (ng/mL)
% Accuracy:	97.40

*Handwritten:*  
HMX  
03/28/10  
Jen  
3/28/10

Before Jan 3/28/10

File Name: "WXX100322-57.CRI" Sample ID: "111111" File: "EXP022020.wif"  
 Name: "246-1-Trihydrocortisolone" Mask: "227.1209.8 amu"

Instrument: "LCMS-EXP\_C" Annotation: ""

Index: 1

Type: QC

Sample Name: 246-1-Trihydrocortisolone

Label: 32.6 ng/mL

Date: 3/22/2010

Time: 11:54:20 PM

Method: 8321A-Modified LCMSMS#3

Acquisition: 9.065

Peak Height: 1.00e4 cps

Peak Width: 0.00 sec

Integration Width: 3 points

Integration Time: 60.0 sec

Integration Delay: 13.5 min

Integration Offset: 8.465

Integration Slope: 8.265

Integration Type: Valley

Integration Time: 13.6 min

Integration Delay: 2.22e+00705 counts

Integration Offset: 7.865

Integration Slope: 7.665

Integration Type: Valley

Integration Time: 14.5 min

Integration Delay: 7.465

Integration Offset: 7.265

Integration Slope: 7.065

Integration Type: Valley

Integration Time: 14.5 min

Integration Delay: 6.865

Integration Offset: 6.665

Integration Slope: 6.465

Integration Type: Valley

Integration Time: 14.5 min

Integration Delay: 6.265

Integration Offset: 6.065

Integration Slope: 5.865

Integration Type: Valley

Integration Time: 14.5 min

Integration Delay: 5.665

Integration Offset: 5.465

Integration Slope: 5.265

Integration Type: Valley

Integration Time: 14.5 min

Integration Delay: 5.065

Integration Offset: 4.865

Integration Slope: 4.665

Integration Type: Valley

Integration Time: 14.5 min

Integration Delay: 4.465

Integration Offset: 4.265

Integration Slope: 4.065

Integration Type: Valley

Integration Time: 14.5 min

Integration Delay: 3.865

Integration Offset: 3.665

Integration Slope: 3.465

Integration Type: Valley

Integration Time: 14.5 min

Integration Delay: 3.265

Integration Offset: 3.065

Integration Slope: 2.865

Integration Type: Valley

Integration Time: 14.5 min

Integration Delay: 2.665

Integration Offset: 2.465

Integration Slope: 2.265

Integration Type: Valley

Integration Time: 14.5 min

Integration Delay: 2.065

Integration Offset: 1.865

Integration Slope: 1.665

Integration Type: Valley

Integration Time: 14.5 min

Integration Delay: 1.465

Integration Offset: 1.265

Integration Slope: 1.065

Integration Type: Valley

Integration Time: 14.5 min

Integration Delay: 8.064

Integration Offset: 6.064

Integration Slope: 4.064

Integration Type: Valley

Integration Time: 14.5 min

Integration Delay: 2.064

Integration Offset: 0.0

13.60

13.5

13.0

12.5

12.0

11.5

11.0

10.5

10.0

9.5

9.0

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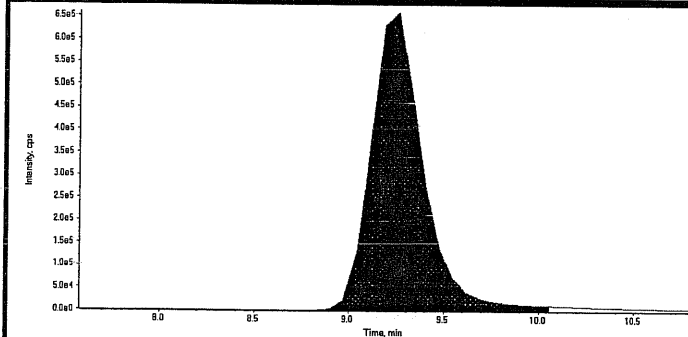
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LCMSMS#3

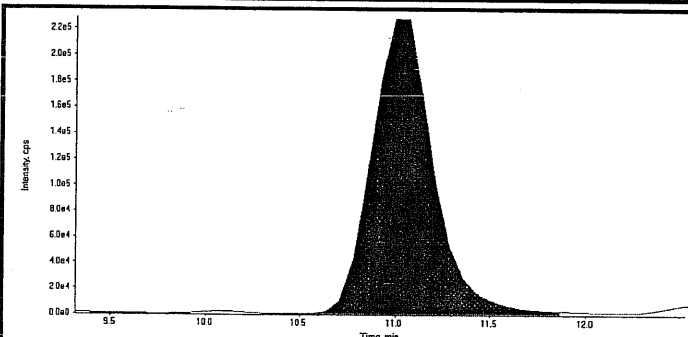
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 27/03/2010 1:31:00 PM  
LCMSMS#3

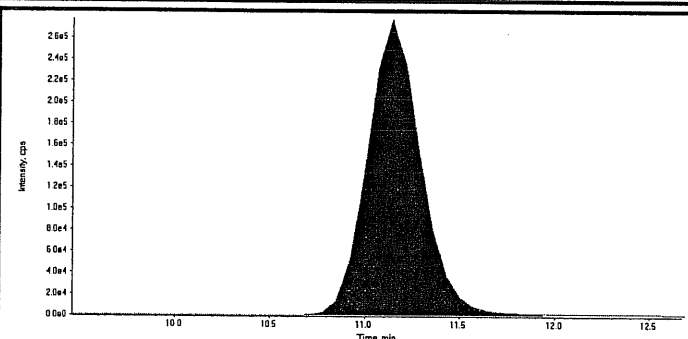
Data File	EXP0322020.wiff	Acquisition Date	3/22/2010 11:54:20 PM
Sample Name	WXX100322-57CRI	Acquisition Method	8321_pntx.dam
Batch Dilution Analyst	1 LER	Result Table	032210.rdb
Procedure Code	LCMSEXP_C	Sample Type	Quality Control



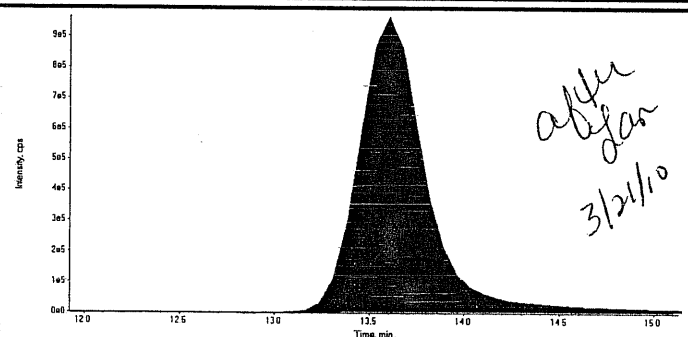
Compound Name:	135-Trinitrobenzene (213.0/182.8 amu)
Expected RT:	9.19
Actual RT:	9.26
Area Counts:	1.26e+007
Manual Modification	No
Amount:	42.3 (ng/mL)
% Accuracy:	106.00



Compound Name:	13-Dinitrobenzene (168.0/137.9 amu)
Expected RT:	10.9
Actual RT:	11.0
Area Counts:	5.17e+006
Manual Modification	No
Amount:	42.2 (ng/mL)
% Accuracy:	106.00



Compound Name:	Tetryl (241.0/180.8 amu)
Expected RT:	11.1
Actual RT:	11.1
Area Counts:	5.41e+006
Manual Modification	No
Amount:	27.5 (ng/mL)
% Accuracy:	68.70

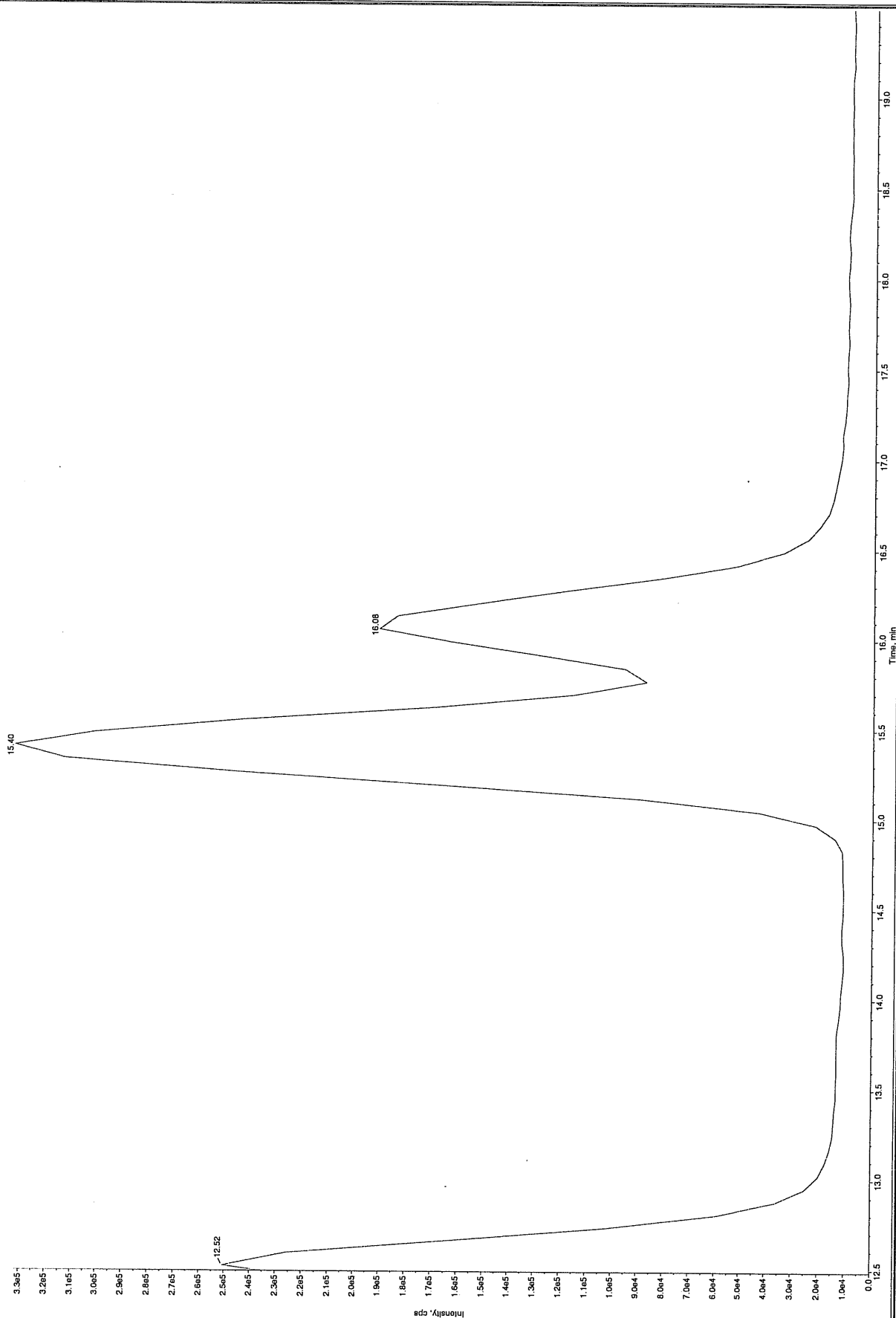


Compound Name:	246-Trinitrotoluene (227.1/209.8 amu)
Expected RT:	13.5
Actual RT:	13.6
Area Counts:	2.40e+007
Manual Modification	Yes
Amount:	33.9 (ng/mL)
% Accuracy:	84.80

Before Jan 3/28/10

File Name: "WXX100322-57.CHI" Sample ID: "JLIER" File: "EXP03222020.wif"  
 Instrument: "LC/MS/MS" Acquisition: "102.046.0 amu"

QC Index: 1  
 Concentration: 40.0 ng/mL  
 Injected Conc: 0.00 ng/mL  
 Date: 3/25/10  
 Time: 11:54:20 PM  
 Labeled: No

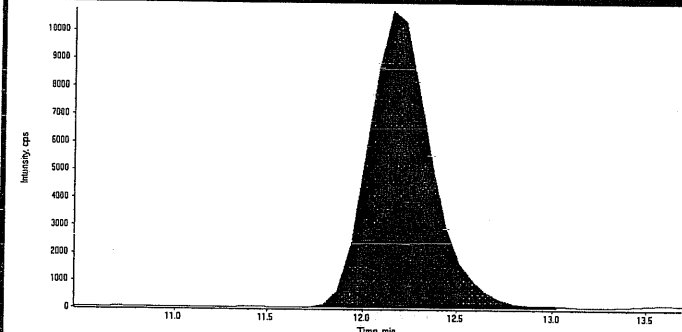


JL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#3

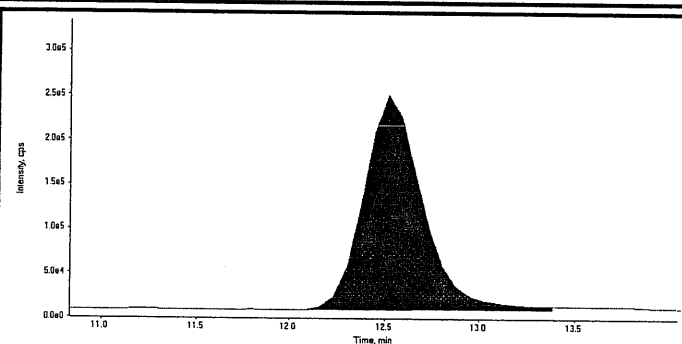
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 27/03/2010 1:31:00 PM  
LCMSMS#3

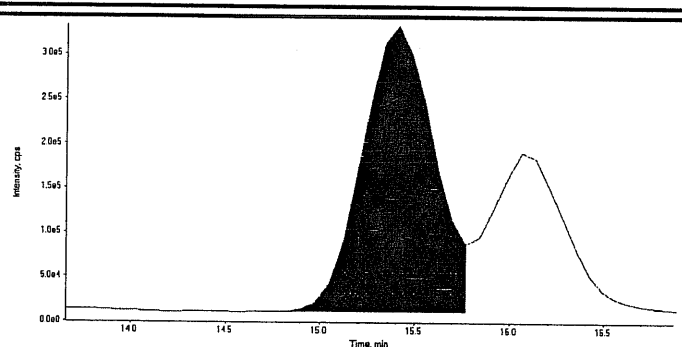
Data File	EXP0322020.wiff	Acquisition Date	3/22/2010 11:54:20 PM
Sample Name	WXX100322-57CRI	Acquisition Method	8321_pntx.dam
Batch Dilution Analyst	1 LER	Result Table	032210.rdb
Procedure Code	LCMSEXP_C	Sample Type	Quality Control



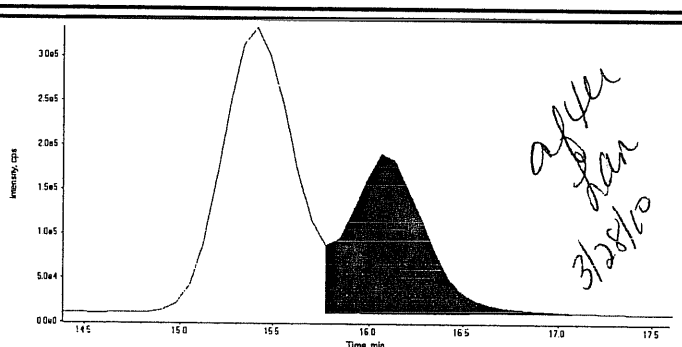
Compound Name:	Nitrobenzene (123.0/46.0 amu)
Expected RT:	12.1
Actual RT:	12.2
Area Counts:	2.50e+005
Manual Modification	No
Amount:	40.2 (ng/mL)
% Accuracy:	100.00



Compound Name:	34-dinitrotoluene (182.0/46.0 amu)
Expected RT:	12.4
Actual RT:	12.5
Area Counts:	5.27e+006
Manual Modification	No
Amount:	19.9 (ng/mL)
% Accuracy:	99.60



Compound Name:	26-dinitrotoluene (182.0/46.0 amu)
Expected RT:	15.3
Actual RT:	15.4
Area Counts:	8.66e+006
Manual Modification	No
Amount:	43.5 (ng/mL)
% Accuracy:	109.00



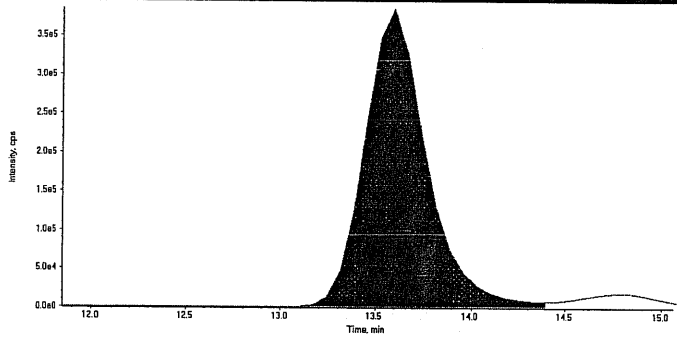
Compound Name:	24-dinitrotoluene (182.0/46.0 amu)
Expected RT:	16.0
Actual RT:	16.1
Area Counts:	5.07e+006
Manual Modification	Yes
Amount:	42.4 (ng/mL)
% Accuracy:	106.00

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

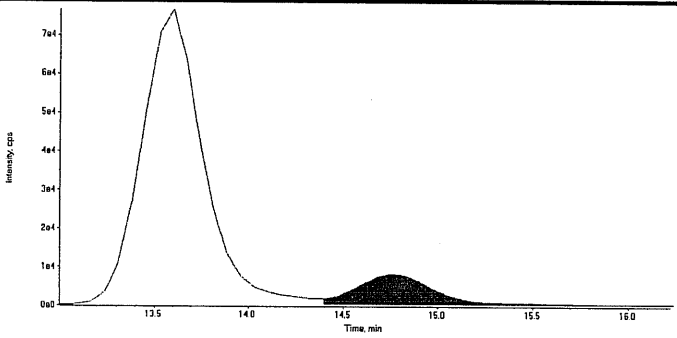
Printed: 27/03/2010 1:31:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0322020.wiff	<b>Acquisition Date</b>	3/22/2010 11:54:20 PM
<b>Sample Name</b>	WXX100322-57CRI	<b>Acquisition Method</b>	8321_pntx.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	032210.rdb
<b>Procedure Code</b>	LCMSEXP_C	<b>Sample Type</b>	Quality Control

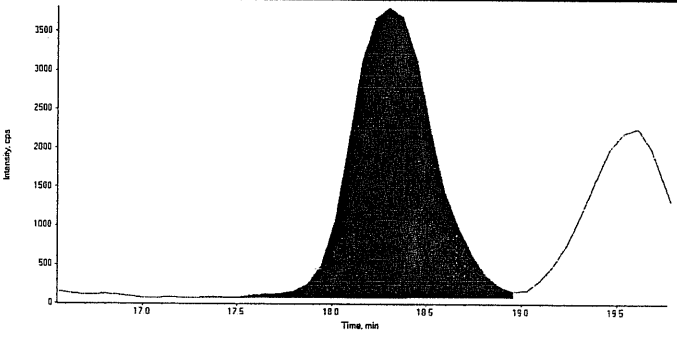
  

	<b>Compound Name:</b>	4-Amino-26-dinitrotoluene (197.0/167.0 amu)
	Expected RT:	13.5
	Actual RT:	13.6
	Area Counts:	8.80e+006
	Manual Modification	No
	Amount:	40.7 (ng/mL)
	% Accuracy:	102.00

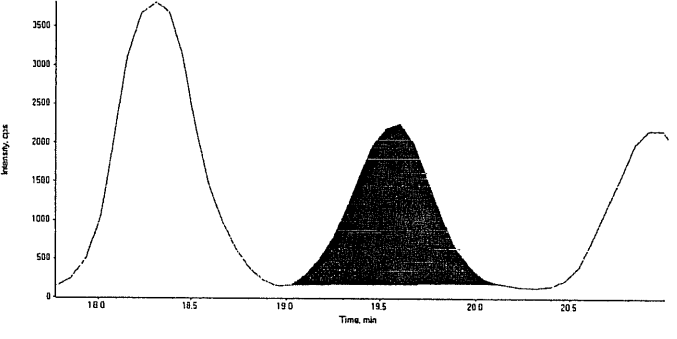
  

	<b>Compound Name:</b>	2-Amino-46-dinitrotoluene (197.0/180.0 amu)
	Expected RT:	14.6
	Actual RT:	14.8
	Area Counts:	2.44e+005
	Manual Modification	No
	Amount:	35.7 (ng/mL)
	% Accuracy:	89.30

	<b>Compound Name:</b>	2-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	18.2
	Actual RT:	18.3
	Area Counts:	1.15e+005
	Manual Modification	No
	Amount:	35.8 (ng/mL)
	% Accuracy:	89.50

	<b>Compound Name:</b>	4-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	19.4
	Actual RT:	19.6
	Area Counts:	6.12e+004
	Manual Modification	No
	Amount:	38.3 (ng/mL)
	% Accuracy:	95.80

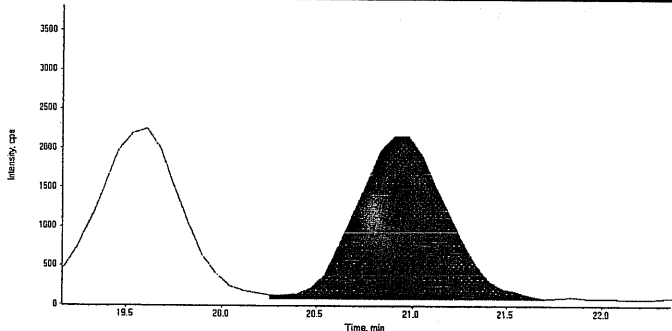


GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

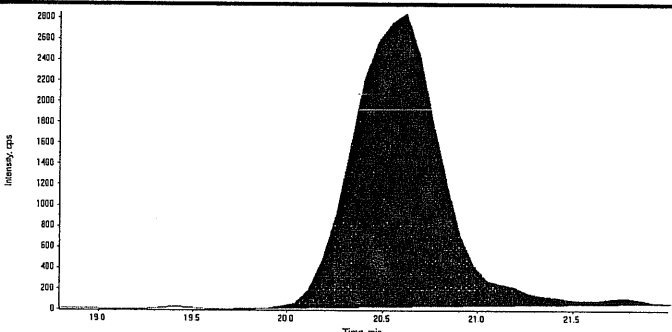
Printed: 27/03/2010 1:31:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0322020.wiff	<b>Acquisition Date</b>	3/22/2010 11:54:20 PM
<b>Sample Name</b>	WXX100322-57CRI	<b>Acquisition Method</b>	8321_pntx.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	032210.rdb
<b>Procedure Code</b>	LCMSEXP_C	<b>Sample Type</b>	Quality Control

	<b>Compound Name:</b>	3-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	20.8
	Actual RT:	21.0
	Area Counts:	6.89e+004
	Manual Modification	No
	Amount:	36.3 (ng/mL)
	% Accuracy:	90.70

	<b>Compound Name:</b>	PETN (361.1/62.0 amu)
	Expected RT:	20.4
	Actual RT:	20.6
	Area Counts:	9.12e+004
	Manual Modification	No
	Amount:	37.3 (ng/mL)
	% Accuracy:	93.40

# GRAND MEAN AVERAGE

Vendor: Restek  
 Date of Analysis 03/22/10  
 Time of Injection 2354  
 Standard Number WXX100322-57CRI  
 Data File EXP0322020a

HMX	91.7
RDX	97.4
135-Trinitrobenzene	106.0
13-Dinitrobenzene	106.0
Tetryl	68.7
246-Trinitrotoluene	84.8
Nitrobenzene	100.0
34-dinitrotoluene	99.6
26-dinitrotoluene	109.0
24-dinitrotoluene	106.0
4-Amino-26-dinitrotoluene	102.0
2-Amino-46-dinitrotoluene	89.3
2-Nitrotoluene	89.5
4-Nitrotoluene	95.8
3-Nitrotoluene	90.7
PETN	93.4

TOTAL

1529.9

AVERAGE

95.6

ICV Limits 85-115%

CRI Limits 70-130%

CCV Limits 85-115%

No single analyte > +/- 60%

LCR 3/28/10

7A

Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1758

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0322030.wiff

Analysis Date: 23-MAR-10 04:18

LCMSMS ID: 1189

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
Tetryl	600	635	106	
m-Dinitrobenzene	600	595	99	
m-Nitrotoluene	600	586	98	
o-Nitrotoluene	600	593	99	
p-Nitrotoluene	600	603	101	
1,3,5-Trinitrobenzene	600	569	95	
2,4,6-Trinitrotoluene	600	595	99	
2,4-Dinitrotoluene	600	606	101	
2,6-Dinitrotoluene	600	522	87	
2-Amino-4,6-dinitrotoluene	600	601	100	
3,4-Dinitrotoluene	300	273	91	
4-Amino-2,6-dinitrotoluene	600	594	99	
HMX	600	636	106	
Nitrobenzene	600	630	105	
PETN	600	673	112	
RDX	600	665	111	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,  
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

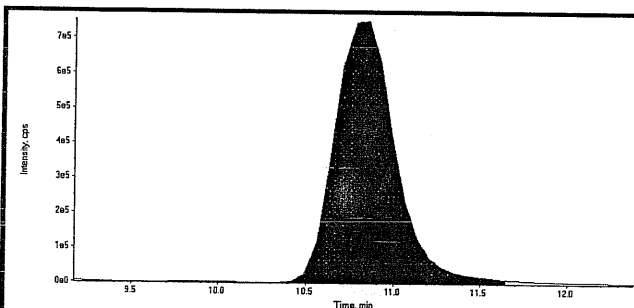
# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

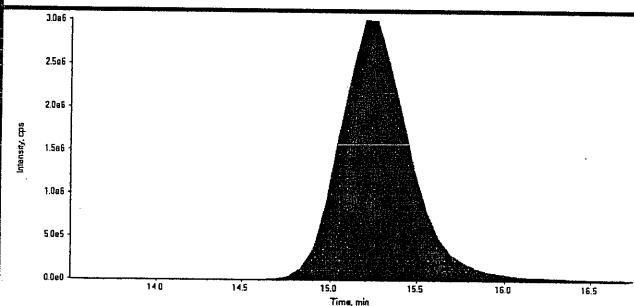
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 27/03/2010 1:31:00 PM  
LCMSMS#3

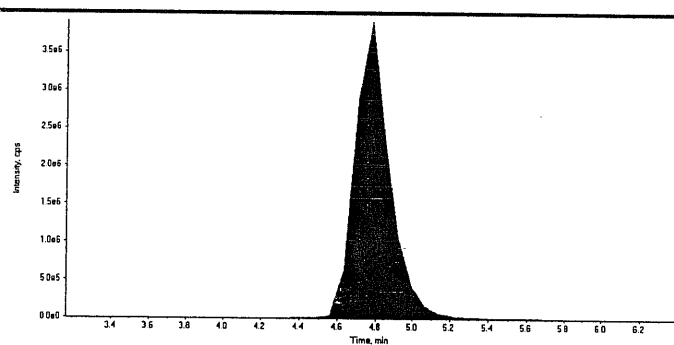
Data File	EXP0322030.wiff	Acquisition Date	3/23/2010 4:18:30 AM
Sample Name	WXX100322-56CCV	Acquisition Method	8321_pntx.dam
Batch Dilution Analyst	1 LER	Result Table	032210.rdb
Procedure Code	LCMSEXP_C	Sample Type	Quality Control



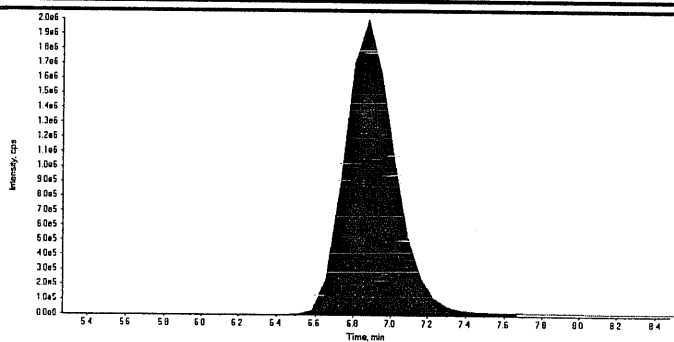
Compound Name:	13-Dinitrobenzene-d4 (172.1/46.1 amu)
Expected RT:	10.80
Actual RT:	10.90
Area Counts:	18300000.00
Manual Modification	No
Amount:	500.00(ng/mL)
Please refer to Form 8 for a list of Internal Standard Recoveries	



Compound Name:	26-Dinitrotoluene-d3 (185.0/155.0 amu)
Expected RT:	15.10
Actual RT:	15.20
Area Counts:	85800000.00
Manual Modification	No
Amount:	500.00(ng/mL)
Please refer to Form 8 for a list of Internal Standard Recoveries	



Compound Name:	HMX (341.2/46.0 amu)
Expected RT:	4.77
Actual RT:	4.77
Area Counts:	5.05e+007
Manual Modification	No
Amount:	636. (ng/mL)
% Accuracy:	106.00



Compound Name:	RDX (267.0/46.1 amu)
Expected RT:	6.87
Actual RT:	6.87
Area Counts:	3.73e+007
Manual Modification	No
Amount:	665. (ng/mL)
% Accuracy:	111.00

*thru 03/26/10*

*LER 3/28/10*

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 27/03/2010 1:31:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0322030.wiff	<b>Acquisition Date</b>	3/23/2010 4:18:30 AM
<b>Sample Name</b>	WXX100322-56CCV	<b>Acquisition Method</b>	8321_pntx.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	032210.rdb
<b>Procedure Code</b>	LCMSEXP_C	<b>Sample Type</b>	Quality Control

	<b>Compound Name:</b>	135-Trinitrobenzene (213.0/182.8 amu)
	Expected RT:	9.19
	Actual RT:	9.19
	Area Counts:	1.35e+008
	Manual Modification	No
	Amount:	569. (ng/mL)
	% Accuracy:	94.80

	<b>Compound Name:</b>	13-Dinitrobenzene (168.0/137.9 amu)
	Expected RT:	10.9
	Actual RT:	10.9
	Area Counts:	5.80e+007
	Manual Modification	No
	Amount:	595. (ng/mL)
	% Accuracy:	99.20

	<b>Compound Name:</b>	Tetryl (241.0/180.8 amu)
	Expected RT:	11.1
	Actual RT:	11.1
	Area Counts:	9.93e+007
	Manual Modification	No
	Amount:	635. (ng/mL)
	% Accuracy:	106.00

	<b>Compound Name:</b>	246-Trinitrotoluene (227.1/209.8 amu)
	Expected RT:	13.5
	Actual RT:	13.6
	Area Counts:	2.48e+008
	Manual Modification	No
	Amount:	595. (ng/mL)
	% Accuracy:	99.20

Before Jan 31/28/10

File Name: WXX10322-56CCV, Sample ID: JILER, File: EXP0322030.will  
 Method: LCMSMS, Acquisition Method: 102.046.0 amu  
 e Index: 1

QC  
 Iteration: 600 ng/mL  
 Date: 3/23/2010  
 Time: 4:18:30 AM  
 2.866  
 2.766  
 2.666  
 2.566  
 2.466  
 2.366  
 2.266  
 2.166  
 2.066  
 1.966  
 1.866  
 1.766  
 1.666  
 1.566  
 1.466  
 1.366  
 1.266  
 1.166  
 1.066  
 9.0e5  
 8.0e5  
 7.0e5  
 6.0e5  
 5.0e5  
 4.0e5  
 3.0e5  
 2.0e5  
 1.0e5  
 0.0

Intensity, cps

Time, min

12.0 12.5 13.0 13.5 14.0 14.5 15.0 15.5 16.0 16.5 17.0 17.5 18.0 18.5

12.48 16.05 15.37

Algorithm: IntelliQuan - IOA  
 Peak Width: 1.000 sec  
 Peak Width: 3.000 points  
 Window: 30.0 sec  
 Method: 15.3 min  
 Relative RT: No  
 Type: Valley  
 Retention Time: 15.3 min  
 Count: 5.87e+007  
 Time: 2.36e+006 cps  
 Time: 15.0 min  
 Time: 15.8 min

IL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#3

Before Dec 31/8110

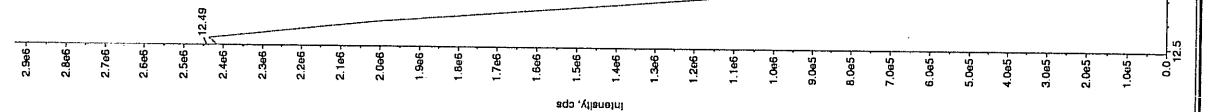
File Name: "WXX10032256C01" Sample ID: "11111" File: "EXP0322030.will"

ik Name: "24-dinitrophenol" Mass(es): "182.046.0 amu"

ment: "LCMS-EXP-C" Annotation: "

e Index: 1

QC  
 e Type: 600 ng/mL  
 Injection: 500 ng/mL  
 Date: 3/23/2010  
 Time: 4:18:10 AM  
 led: No



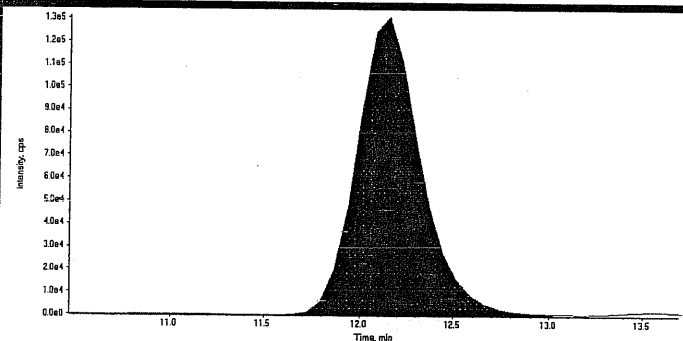
IL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#3

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

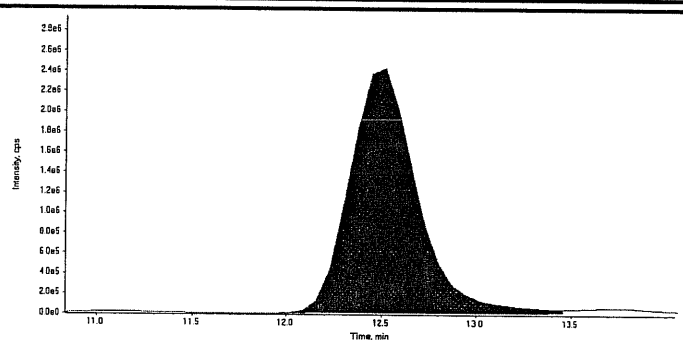
Printed: 27/03/2010 1:31:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0322030.wiff	<b>Acquisition Date</b>	3/23/2010 4:18:30 AM
<b>Sample Name</b>	WXX100322-56CCV	<b>Acquisition Method</b>	8321_pntx.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	032210.rdb
<b>Procedure Code</b>	LCMSEXP_C	<b>Sample Type</b>	Quality Control

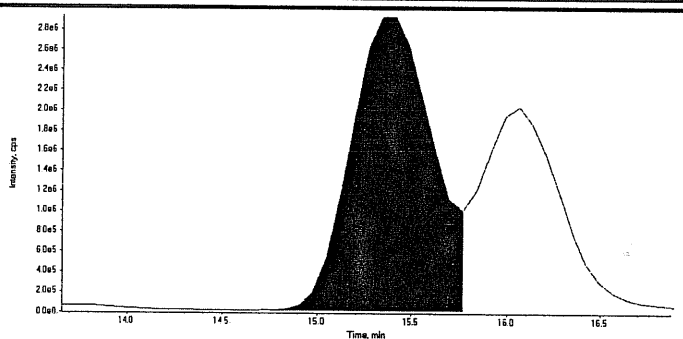
  

	<b>Compound Name:</b>	Nitrobenzene (123.0/46.0 amu)
	Expected RT:	12.1
	Actual RT:	12.2
	Area Counts:	3.12e+006
	Manual Modification	No
	Amount:	630. (ng/mL)
	% Accuracy:	105.00

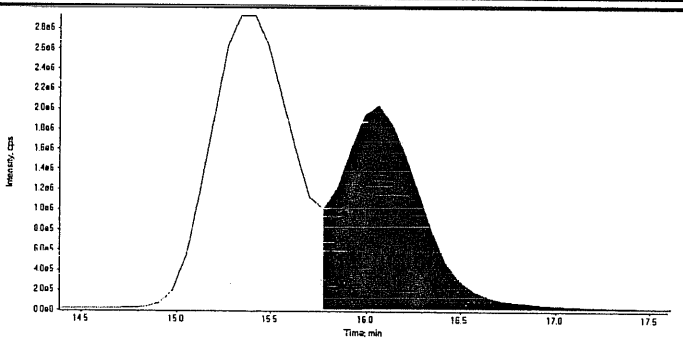
  

	<b>Compound Name:</b>	34-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	12.4
	Actual RT:	12.5
	Area Counts:	6.07e+007
	Manual Modification	No
	Amount:	273. (ng/mL)
	% Accuracy:	91.10

	<b>Compound Name:</b>	26-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	15.3
	Actual RT:	15.4
	Area Counts:	8.72e+007
	Manual Modification	Yes
	Amount:	522. (ng/mL)
	% Accuracy:	87.10

	<b>Compound Name:</b>	24-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	16.0
	Actual RT:	16.0
	Area Counts:	6.08e+007
	Manual Modification	Yes
	Amount:	606. (ng/mL)
	% Accuracy:	101.00



Before Jan 3/28/10

File Name: "WXX100322-560V" Sample ID: "TILIER" File: "EXP0322030.wif"

Sample Name: "2-Amino-46-dinitrofluorene" Mass(es): "197.07180.0 amu"

File Index: 1

Injection: 600. ng/mL

Diluted Conc: 2160. ng/mL

Date: 3/23/2010

Time: 4:18:30 AM

Method: LC/MS/MS

Algorithm: IntelliQuan - IQA

Peak Height: 1000.00 cps

Peak Width: 0.00 sec

Ring Width: 3 points

Integration: 30.0 sec

Retention RT: 14.6 min

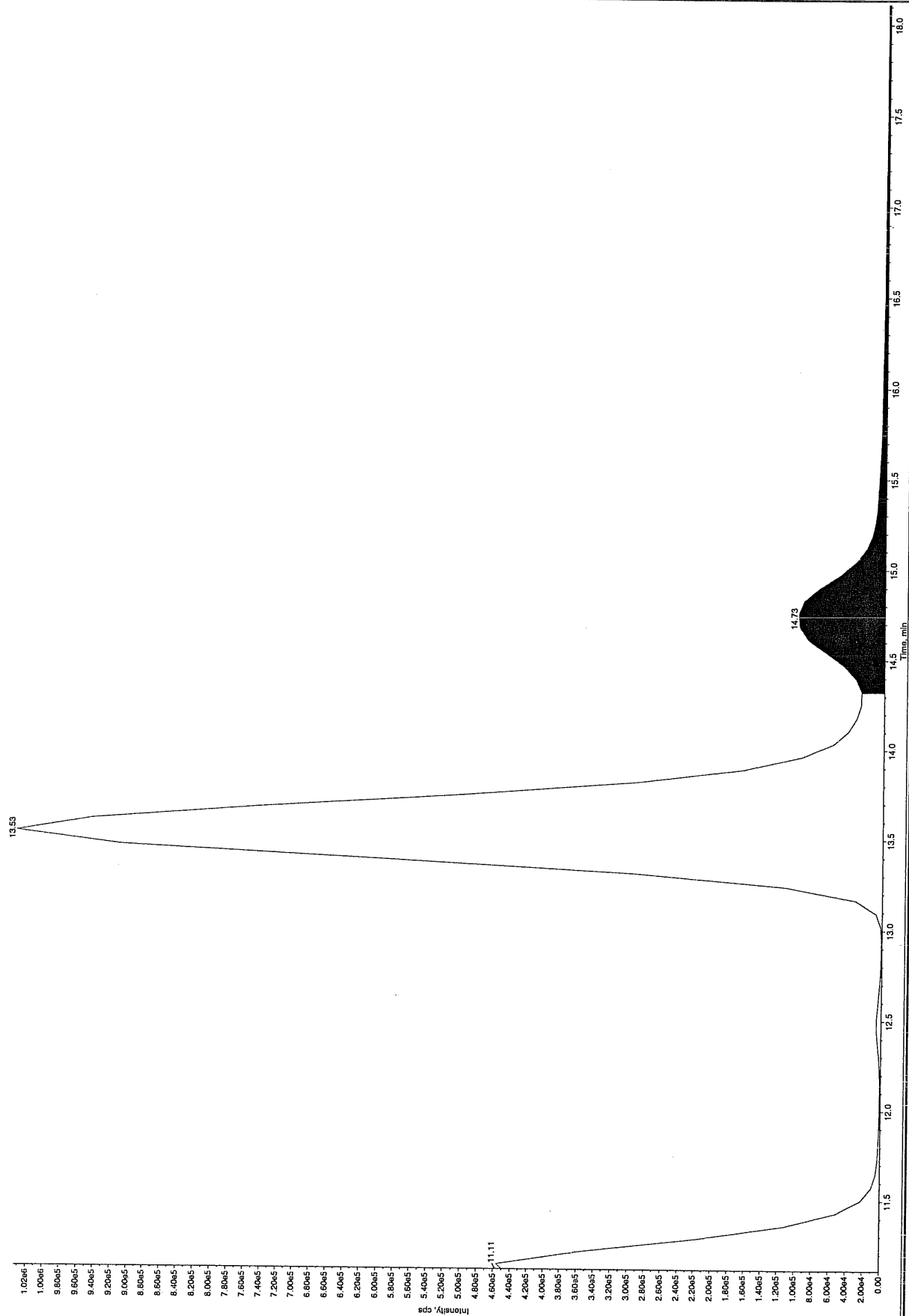
Relative RT: No

Type: Valley

Count Rate: 1.35e+005 counts

Time: 14.3 min

Time: 18.2 min

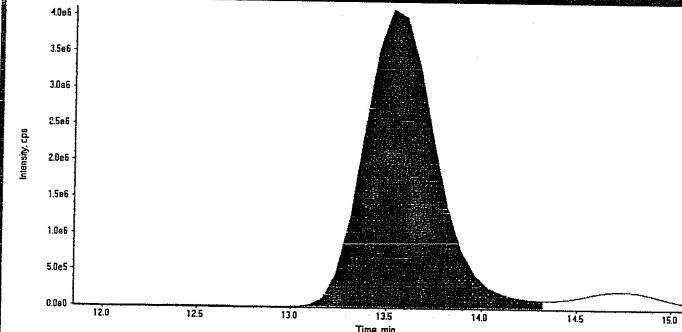


File Name: "WXX100322-560V" Sample ID: "TILIER" File: "EXP0322030.wif"

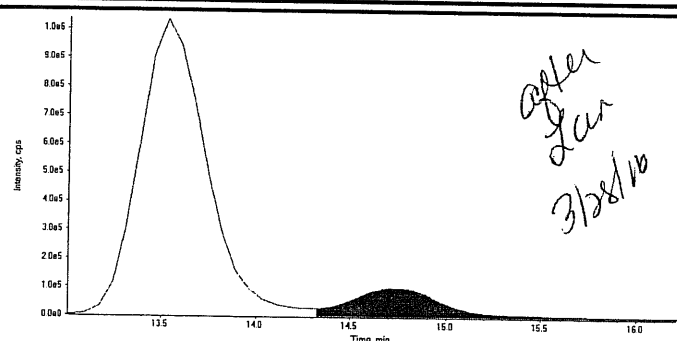
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 27/03/2010 1:31:00 PM  
LCMSMS#3

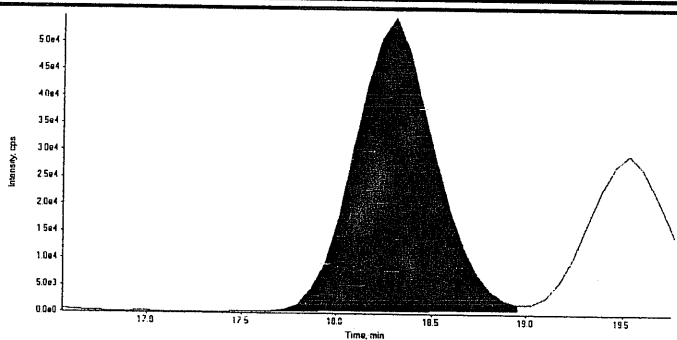
Data File	EXP0322030.wiff	Acquisition Date	3/23/2010 4:18:30 AM
Sample Name	WXX100322-56CCV	Acquisition Method	8321_pntx.dam
Batch Dilution Analyst	1 LER	Result Table	032210.rdb
Procedure Code	LCMSEXP_C	Sample Type	Quality Control



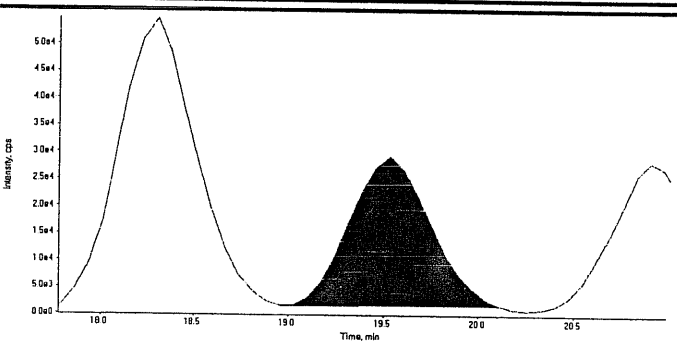
Compound Name:	4-Amino-26-dinitrotoluene (197.0/167.0 amu)
Expected RT:	13.5
Actual RT:	13.5
Area Counts:	1.08e+008
Manual Modification	No
Amount:	594. (ng/mL)
% Accuracy:	99.00



Compound Name:	2-Amino-46-dinitrotoluene (197.0/180.0 amu)
Expected RT:	14.6
Actual RT:	14.7
Area Counts:	3.43e+006
Manual Modification	Yes
Amount:	601. (ng/mL)
% Accuracy:	100.00



Compound Name:	2-Nitrotoluene (137.0/46.0 amu)
Expected RT:	18.2
Actual RT:	18.3
Area Counts:	1.59e+006
Manual Modification	No
Amount:	593. (ng/mL)
% Accuracy:	98.90



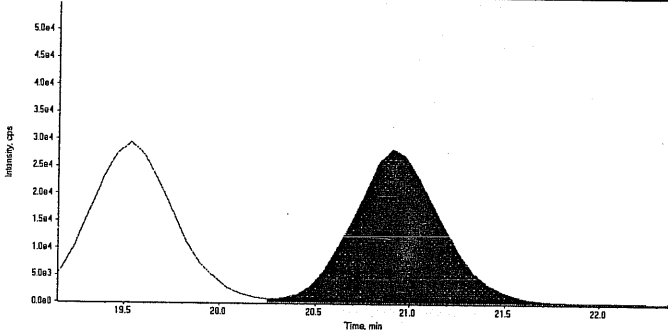
Compound Name:	4-Nitrotoluene (137.0/46.0 amu)
Expected RT:	19.4
Actual RT:	19.5
Area Counts:	8.08e+005
Manual Modification	No
Amount:	603. (ng/mL)
% Accuracy:	101.00

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

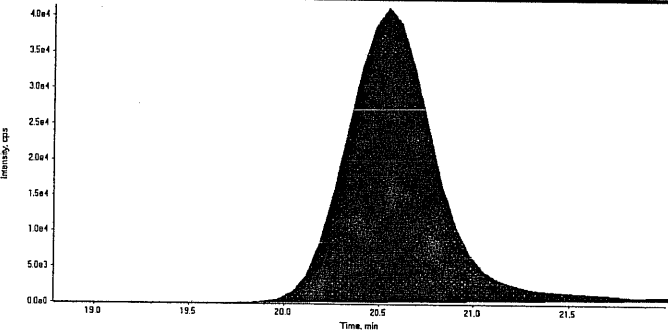
Printed: 27/03/2010 1:31:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0322030.wiff	<b>Acquisition Date</b>	3/23/2010 4:18:30 AM
<b>Sample Name</b>	WXX100322-56CCV	<b>Acquisition Method</b>	8321_pntx.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	032210.rdb
<b>Procedure Code</b>	LCMSEXP_C	<b>Sample Type</b>	Quality Control

	<b>Compound Name:</b>	3-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	20.8
	Actual RT:	20.9
	Area Counts:	9.34e+005
	Manual Modification	No
	Amount:	586. (ng/mL)
	% Accuracy:	97.70

	<b>Compound Name:</b>	PETN (361.1/62.0 amu)
	Expected RT:	20.4
	Actual RT:	20.5
	Area Counts:	1.38e+006
	Manual Modification	No
	Amount:	673. (ng/mL)
	% Accuracy:	112.00

GRAND MEAN AVERAGE

Vendor: Restek  
 Date of Analysis 03/23/10  
 Time of Injection 0418  
 Standard Number WXX100322-56CCV  
 Data File EXP0322030a

HMX	106.0
RDX	111.0
135-Trinitrobenzene	94.8
13-Dinitrobenzene	99.2
Tetryl	106.0
246-Trinitrotoluene	99.2
Nitrobenzene	105.0
34-dinitrotoluene	91.1
26-dinitrotoluene	87.1
24-dinitrotoluene	101.0
4-Amino-26-dinitrotoluene	99.0
2-Amino-46-dinitrotoluene	100.0
2-Nitrotoluene	98.9
4-Nitrotoluene	101.0
3-Nitrotoluene	97.7
PETN	112.0

TOTAL

1609.0

*Handwritten: 03/28/10*

AVERAGE

100.6

ICV Limits 85-115%

CRI Limits 70-130%

CCV Limits 85-115%

No single analyte > +/- 60%

*Handwritten: Run 3/28/10*

7B  
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1758

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0322032.wiff

Analysis Date: 23-MAR-10 05:11

LCMSMS ID: 1189

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	40	44.9	112	
2,4,6-Trinitrotoluene	40	37	93	
2,4-Dinitrotoluene	40	42.9	107	
2,6-Dinitrotoluene	40	46.6	116	
2-Amino-4,6-dinitrotoluene	40	37.6	94	
3,4-Dinitrotoluene	20	19.9	99	
4-Amino-2,6-dinitrotoluene	40	44.2	110	
HMX	40	46.2	116	
Nitrobenzene	40	42.5	106	
PETN	40	44.7	112	
RDX	40	43.9	110	
Tetryl	40	25.4	64	
m-Dinitrobenzene	40	42.8	107	
m-Nitrotoluene	40	44.2	111	
o-Nitrotoluene	40	41	102	
p-Nitrotoluene	40	41.3	103	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,  
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

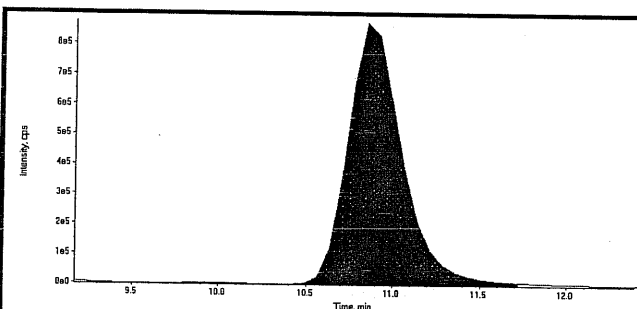
# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

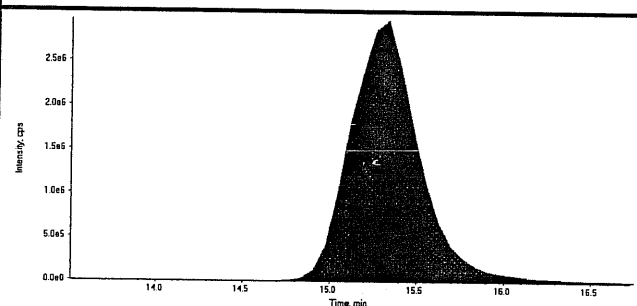
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 27/03/2010 1:31:00 PM  
LCMSMS#3

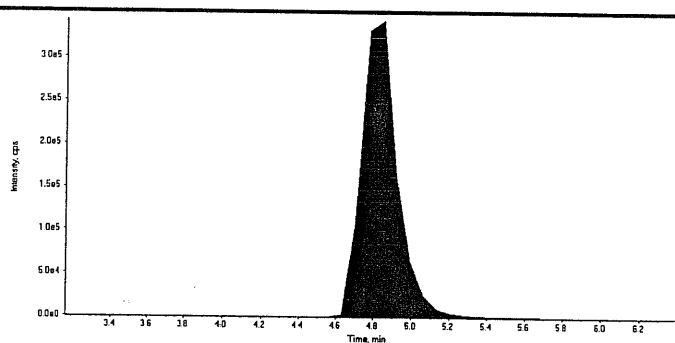
Data File	EXP0322032.wiff	Acquisition Date	3/23/2010 5:11:16 AM
Sample Name	WXX100322-57CRI	Acquisition Method	8321_pntx.dam
Batch Dilution Analyst	1 LER	Result Table	032210.rdb
Procedure Code	LCMSEXP_C	Sample Type	Quality Control



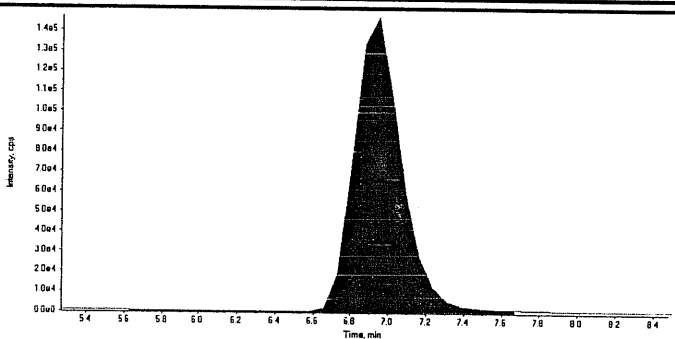
Compound Name:	13-Dinitrobenzene-d4 (172.1/46.1 amu)
Expected RT:	10.80
Actual RT:	10.90
Area Counts:	19000000.00
Manual Modification	No
Amount:	500.00(ng/mL)
Please refer to Form 8 for a list of Internal Standard Recoveries	



Compound Name:	26-Dinitrotoluene-d3 (185.0/155.0 amu)
Expected RT:	15.10
Actual RT:	15.30
Area Counts:	82000000.00
Manual Modification	No
Amount:	500.00(ng/mL)
Please refer to Form 8 for a list of Internal Standard Recoveries	



Compound Name:	HMX (341.2/46.0 amu)
Expected RT:	4.77
Actual RT:	4.85
Area Counts:	4.56e+006
Manual Modification	No
Amount:	46.2 (ng/mL)
% Accuracy:	116.00



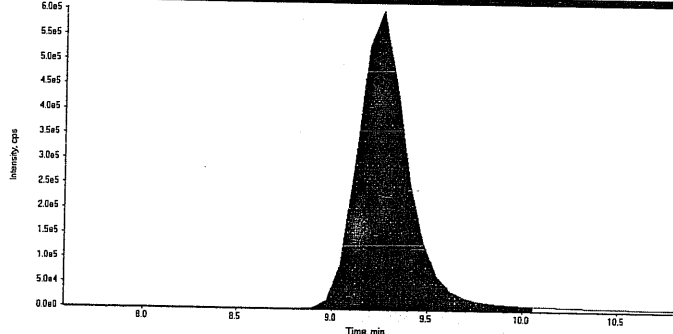
Compound Name:	RDX (267.0/46.1 amu)
Expected RT:	6.87
Actual RT:	6.94
Area Counts:	2.56e+006
Manual Modification	No
Amount:	43.9 (ng/mL)
% Accuracy:	110.00

*Rec 3/28/10* *thru 03/28/10*

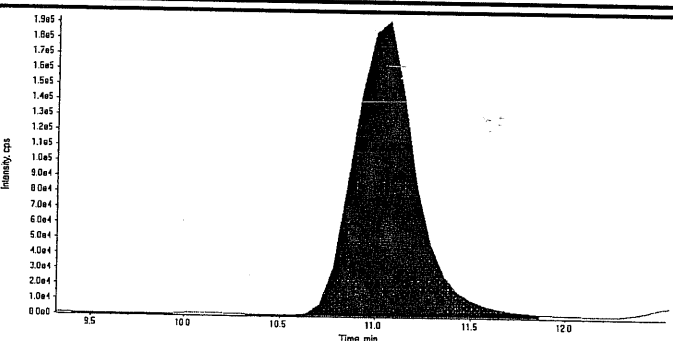
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 27/03/2010 1:31:00 PM  
LCMSMS#3

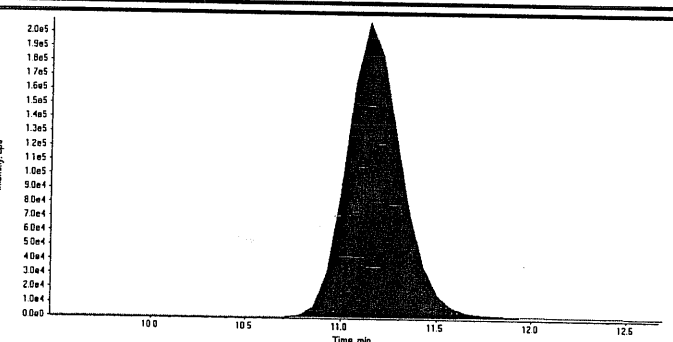
Data File	EXP0322032.wiff	Acquisition Date	3/23/2010 5:11:16 AM
Sample Name	WXX100322-57CRI	Acquisition Method	8321_pntx.dam
Batch Dilution Analyst	1 LER	Result Table	032210.rdb
Procedure Code	LCMSEXP_C	Sample Type	Quality Control



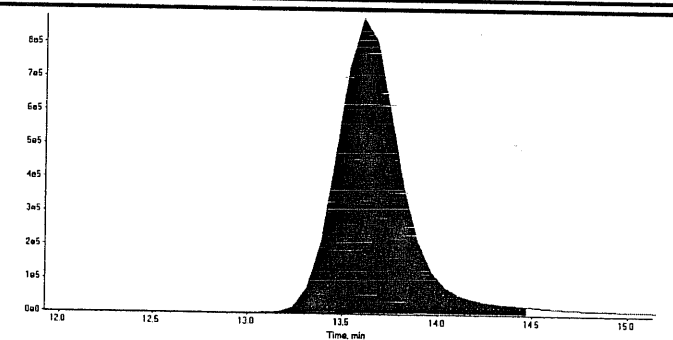
Compound Name:	135-Trinitrobenzene (213.0/182.8 amu)
Expected RT:	9.19
Actual RT:	9.26
Area Counts:	1.11e+007
Manual Modification	No
Amount:	44.9 (ng/mL)
% Accuracy:	112.00



Compound Name:	13-Dinitrobenzene (168.0/137.9 amu)
Expected RT:	10.9
Actual RT:	11.1
Area Counts:	4.33e+006
Manual Modification	No
Amount:	42.8 (ng/mL)
% Accuracy:	107.00



Compound Name:	Tetryl (241.0/180.8 amu)
Expected RT:	11.1
Actual RT:	11.1
Area Counts:	4.13e+006
Manual Modification	No
Amount:	25.4 (ng/mL)
% Accuracy:	63.50



Compound Name:	246-Trinitrotoluene (227.1/209.8 amu)
Expected RT:	13.5
Actual RT:	13.6
Area Counts:	2.08e+007
Manual Modification	No
Amount:	37.0 (ng/mL)
% Accuracy:	92.50

Before Scan 3/28/10

Sample Name: "WXX100322-57CR1" Sample ID: "JTLER" File: "EXP0322032.wif"

AK Name: "24-Orthodolone" Mass (g): "162.046.0 amu"

ie Index: 1

ie Type: CC

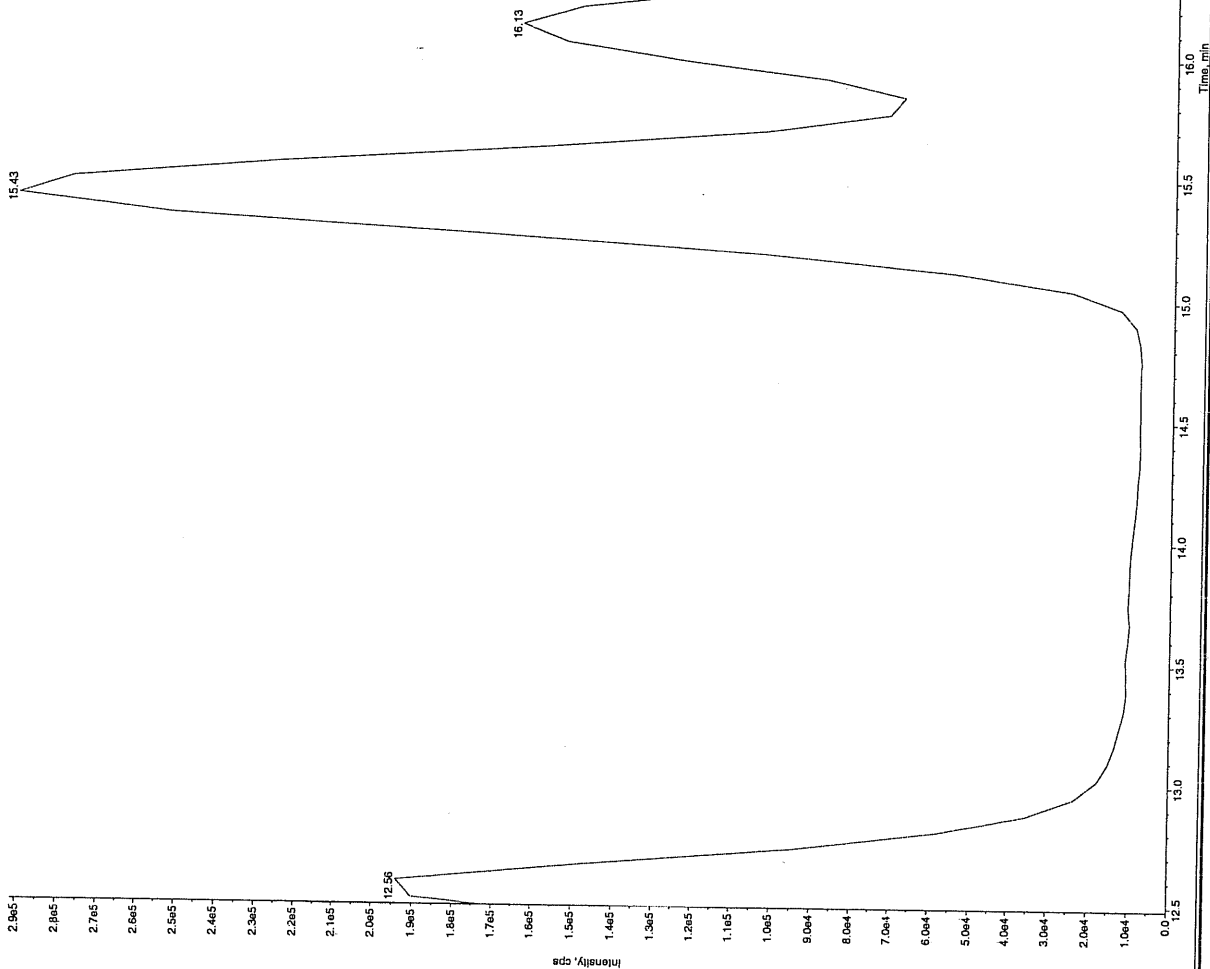
Injection: 40.0 ng/mL

Injection: 0.00 ng/mL

Sample: 3/23/2010

Time: 5:11:16 AM

ied: No



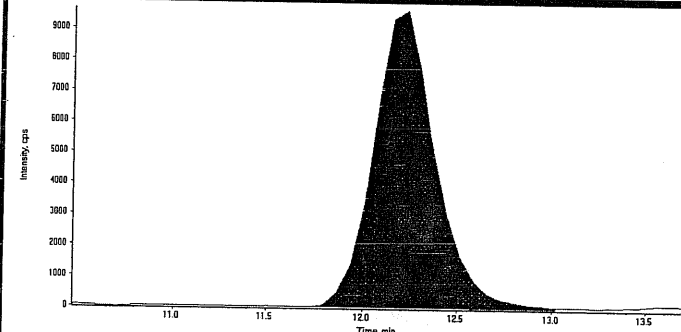
L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#3



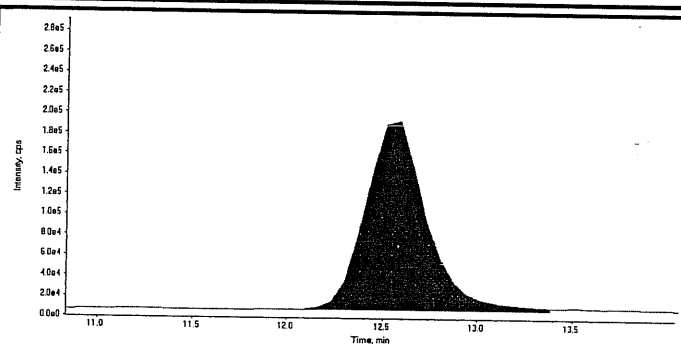
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 27/03/2010 1:31:00 PM  
LCMSMS#3

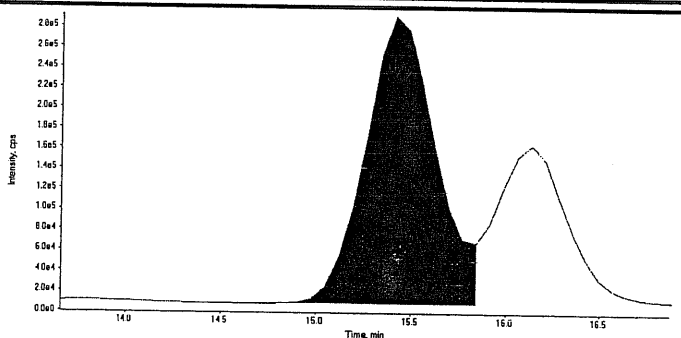
Data File	EXP0322032.wiff	Acquisition Date	3/23/2010 5:11:16 AM
Sample Name	WXX100322-57CRI	Acquisition Method	8321_pntx.dam
Batch Dilution Analyst	1 LER	Result Table	032210.rdb
Procedure Code	LCMSEXP_C	Sample Type	Quality Control



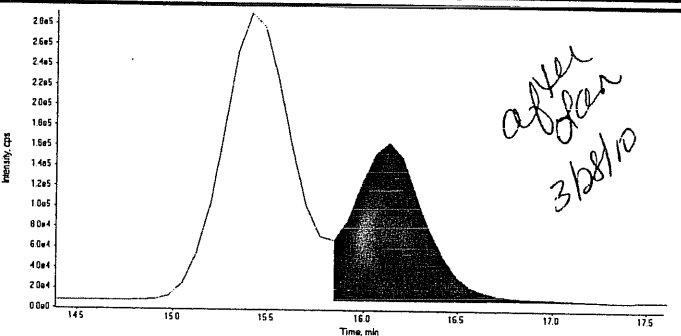
Compound Name:	Nitrobenzene (123.0/46.0 amu)
Expected RT:	12.1
Actual RT:	12.2
Area Counts:	2.19e+005
Manual Modification	No
Amount:	42.5 (ng/mL)
% Accuracy:	106.00



Compound Name:	34-dinitrotoluene (182.0/46.0 amu)
Expected RT:	12.4
Actual RT:	12.6
Area Counts:	4.21e+006
Manual Modification	No
Amount:	19.9 (ng/mL)
% Accuracy:	99.40



Compound Name:	26-dinitrotoluene (182.0/46.0 amu)
Expected RT:	15.3
Actual RT:	15.4
Area Counts:	7.43e+006
Manual Modification	No
Amount:	46.6 (ng/mL)
% Accuracy:	116.00



Compound Name:	24-dinitrotoluene (182.0/46.0 amu)
Expected RT:	16.0
Actual RT:	16.1
Area Counts:	4.11e+006
Manual Modification	Yes
Amount:	42.9 (ng/mL)
% Accuracy:	107.00

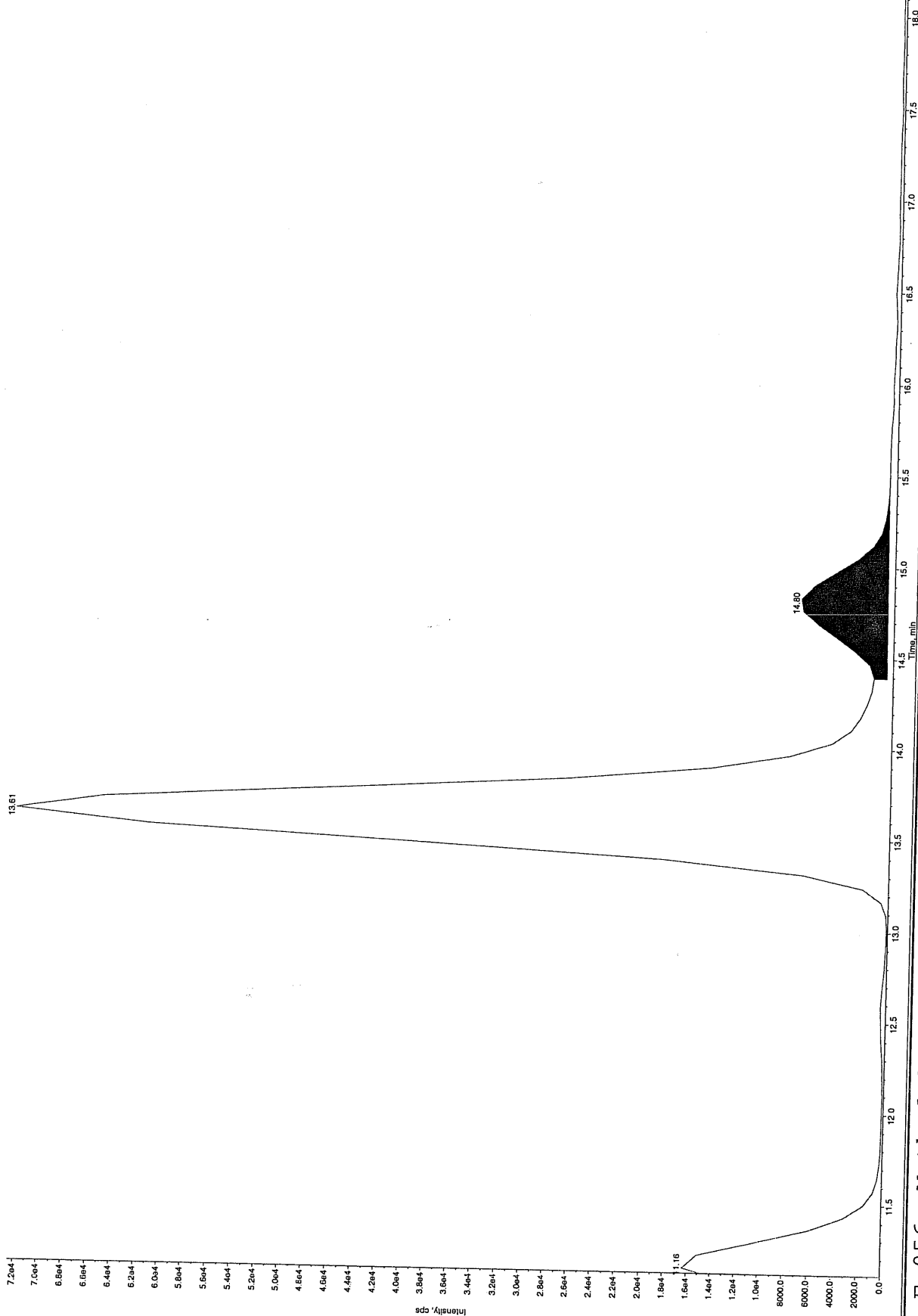
Before Lca 3/28/10

Sample Name: "WXX10322-57CRH" Sample ID: "TILLER" File: "EXP0322032.wif"  
 Peak Name: "2-Amino-46-dimethylamine - Mass(es): 197.0/180.0 amu"  
 Comment: "LCMS-EXP-C" Acquisition:

File Index: 1 QC  
 Concentration: 40.0 ng/mL  
 Date: 3/23/2010  
 Time: 5:11:16 AM

ified: No  
 Peak Height: 1000.0  
 Peak Width: 0.00  
 Window: 30.0  
 Retention: 14.6 min  
 Relative RT: No

Type: Valley  
 Retention Time: 14.8 min  
 Height: 1.87e+005 counts  
 Width: 7.05e+003 cps  
 Time: 15.4 min

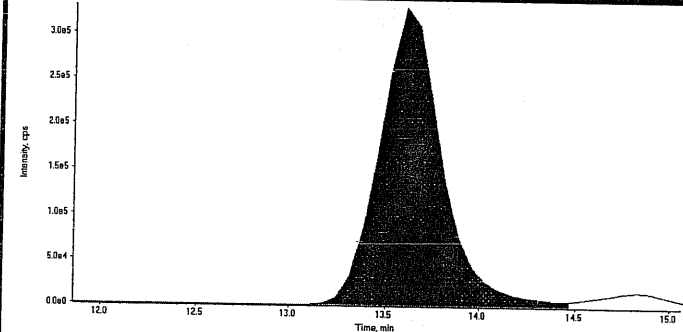


L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#3

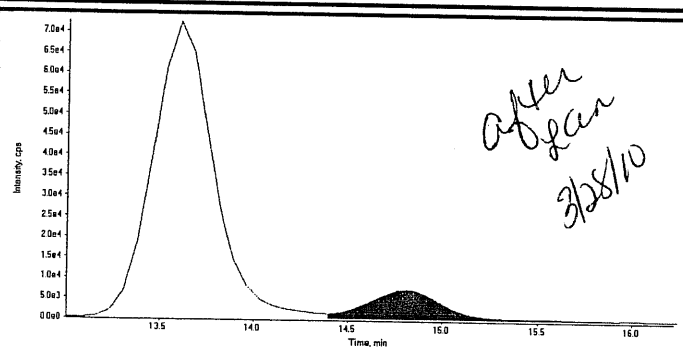
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 27/03/2010 1:31:00 PM  
LCMSMS#3

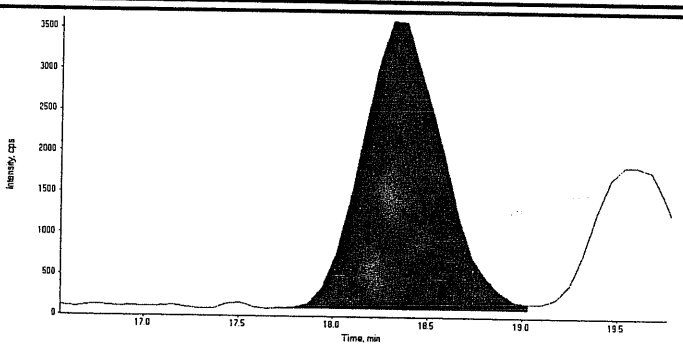
Data File	EXP0322032.wiff	Acquisition Date	3/23/2010 5:11:16 AM
Sample Name	WXX100322-57CRI	Acquisition Method	8321_pntx.dam
Batch Dilution Analyst	1 LER	Result Table	032210.rdb
Procedure Code	LCMSEXP_C	Sample Type	Quality Control



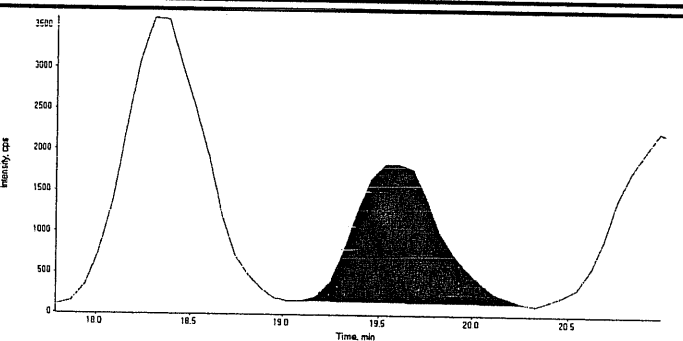
Compound Name:	4-Amino-26-dinitrotoluene (197.0/167.0 amu)
Expected RT:	13.5
Actual RT:	13.6
Area Counts:	7.64e+006
Manual Modification	No
Amount:	44.2 (ng/mL)
% Accuracy:	110.00



Compound Name:	2-Amino-46-dinitrotoluene (197.0/180.0 amu)
Expected RT:	14.6
Actual RT:	14.8
Area Counts:	2.06e+005
Manual Modification	Yes
Amount:	37.6 (ng/mL)
% Accuracy:	94.10



Compound Name:	2-Nitrotoluene (137.0/46.0 amu)
Expected RT:	18.2
Actual RT:	18.3
Area Counts:	1.05e+005
Manual Modification	No
Amount:	41.0 (ng/mL)
% Accuracy:	102.00

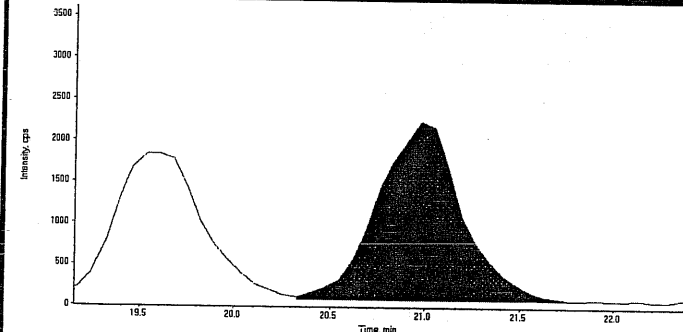


Compound Name:	4-Nitrotoluene (137.0/46.0 amu)
Expected RT:	19.4
Actual RT:	19.6
Area Counts:	5.28e+004
Manual Modification	No
Amount:	41.3 (ng/mL)
% Accuracy:	103.00

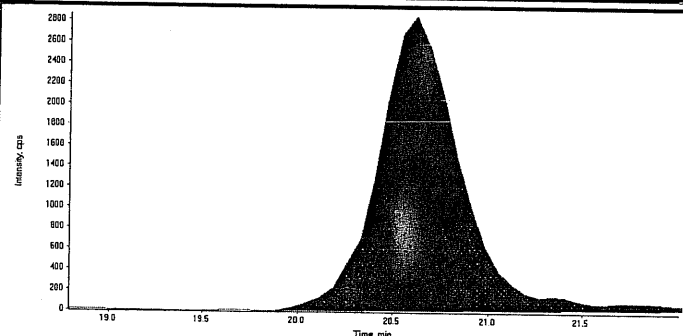
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 27/03/2010 1:31:00 PM  
LCMSMS#3

Data File	EXP0322032.wiff	Acquisition Date	3/23/2010 5:11:16 AM
Sample Name	WXX100322-57CRI	Acquisition Method	8321_pntx.dam
Batch Dilution Analyst	1 LER	Result Table	032210.rdb
Procedure Code	LCMSEXP_C	Sample Type	Quality Control



Compound Name:	3-Nitrotoluene (137.0/46.0 amu)
Expected RT:	20.8
Actual RT:	21.0
Area Counts:	6.73e+004
Manual Modification	No
Amount:	44.2 (ng/mL)
% Accuracy:	111.00



Compound Name:	PETN (361.1/62.0 amu)
Expected RT:	20.4
Actual RT:	20.6
Area Counts:	8.75e+004
Manual Modification	No
Amount:	44.7 (ng/mL)
% Accuracy:	112.00

GRAND MEAN AVERAGE

Vendor: Restek  
 Date of Analysis 03/23/10  
 Time of Injection 0511  
 Standard Number WXX100322-57CRI  
 Data File EXP0322032a

HMX	116.0
RDX	110.0
135-Trinitrobenzene	112.0
13-Dinitrobenzene	107.0
Tetryl	63.5
246-Trinitrotoluene	92.5
Nitrobenzene	106.0
34-dinitrotoluene	99.4
26-dinitrotoluene	116.0
24-dinitrotoluene	107.0
4-Amino-26-dinitrotoluene	110.0
2-Amino-46-dinitrotoluene	94.1
2-Nitrotoluene	102.0
4-Nitrotoluene	103.0
3-Nitrotoluene	111.0
PETN	112.0

TOTAL

✓  
1661.5

*hmc 03/25/10*

AVERAGE

✓ 103.8

ICV Limits 85-115%

CRI Limits 70-130%

CCV Limits 85-115%

No single analyte > +/- 60%

*RCA 3/28/10*

7A

Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1758

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0322041.wiff

Analysis Date: 23-MAR-10 09:09

LCMSMS ID: 1189

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	600	524	87	
2,4,6-Trinitrotoluene	600	621	104	
2,4-Dinitrotoluene	600	649	108	
2,6-Dinitrotoluene	600	547	91	
2-Amino-4,6-dinitrotoluene	600	672	112	
3,4-Dinitrotoluene	300	277	92	
4-Amino-2,6-dinitrotoluene	600	636	106	
HMX	600	666	111	
Nitrobenzene	600	573	96	
PETN	600	954	159	*
RDX	600	634	106	
Tetryl	600	674	112	
m-Dinitrobenzene	600	566	94	
m-Nitrotoluene	600	632	105	
o-Nitrotoluene	600	646	108	
p-Nitrotoluene	600	676	113	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,  
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

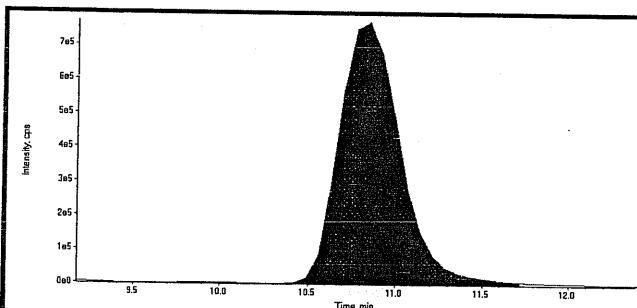
# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

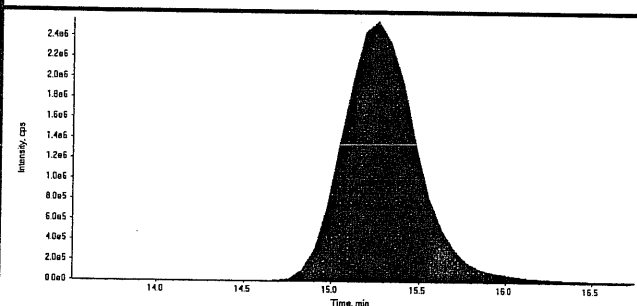
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 27/03/2010 1:31:00 PM  
LCMSMS#3

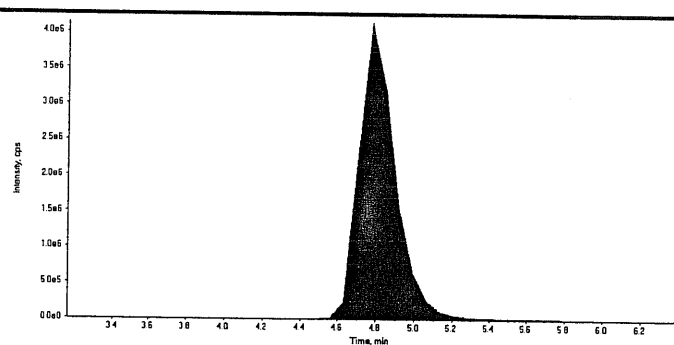
Data File	EXP0322041.wiff	Acquisition Date	3/23/2010 9:09:10 AM
Sample Name	WXX100322-56CCV	Acquisition Method	8321_pntx.dam
Batch Dilution Analyst	1 LER	Result Table	032210.rdb
Procedure Code	LCMSEXP_C	Sample Type	Quality Control



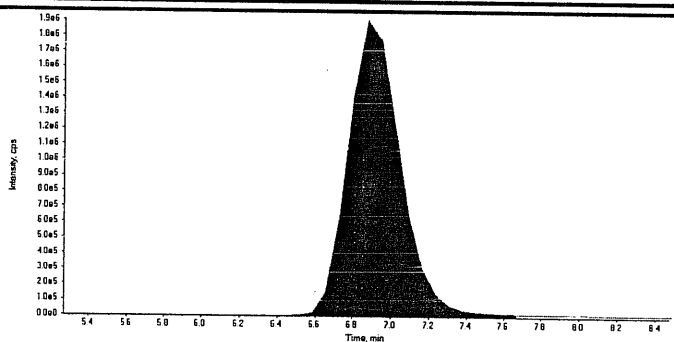
Compound Name:	13-Dinitrobenzene-d4 (172.1/46.1 amu)
Expected RT:	10.80
Actual RT:	10.90
Area Counts:	18800000.00
Manual Modification	No
Amount:	500.00(ng/mL)
Please refer to Form 8 for a list of Internal Standard Recoveries	



Compound Name:	26-Dinitrotoluene-d3 (185.0/155.0 amu)
Expected RT:	15.10
Actual RT:	15.30
Area Counts:	76500000.00
Manual Modification	No
Amount:	500.00(ng/mL)
Please refer to Form 8 for a list of Internal Standard Recoveries	



Compound Name:	HMX (341.2/46.0 amu)
Expected RT:	4.77
Actual RT:	4.77
Area Counts:	5.41e+007
Manual Modification	No
Amount:	666. (ng/mL)
% Accuracy:	111.00



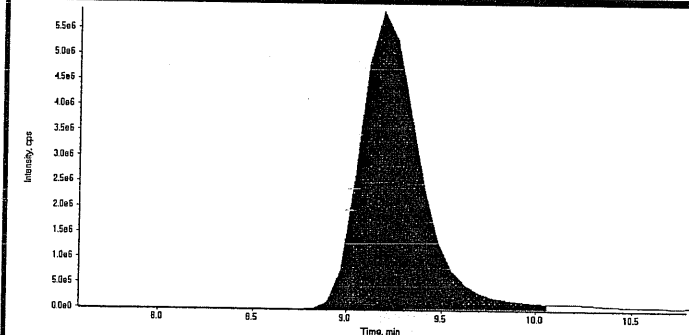
Compound Name:	RDX (267.0/46.1 amu)
Expected RT:	6.87
Actual RT:	6.87
Area Counts:	3.64e+007
Manual Modification	No
Amount:	634. (ng/mL)
% Accuracy:	106.00

*Handwritten signature and date:*  
3/28/10  
3/28/10

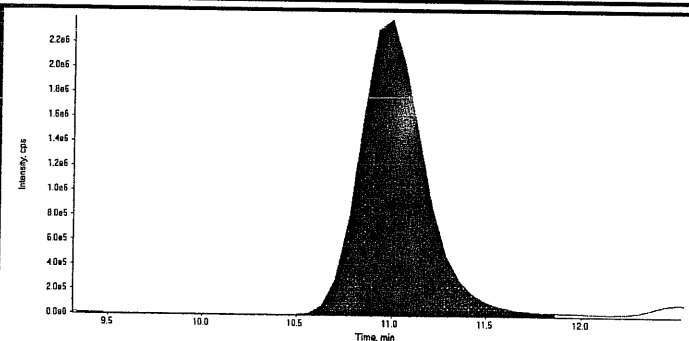
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 27/03/2010 1:31:00 PM  
LCMSMS#3

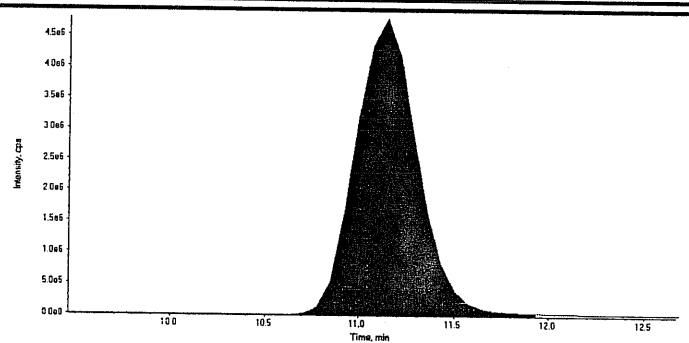
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Sample Name	WXX100322-56CCV	Acquisition Method	8321_pntx.dam
Batch Dilution Analyst	1 LER	Result Table	032210.rdb
Procedure Code	LCMSEXP_C	Sample Type	Quality Control



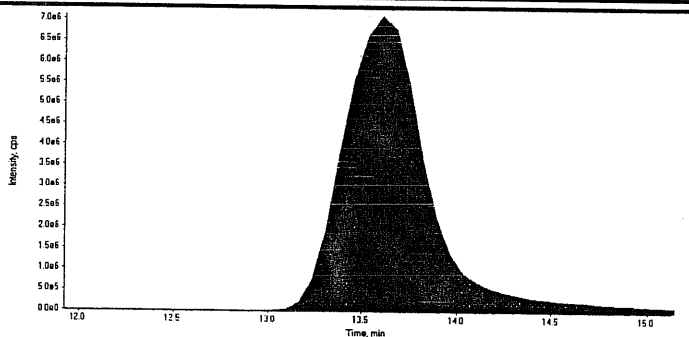
Compound Name:	135-Trinitrobenzene (213.0/182.8 amu)
Expected RT:	9.19
Actual RT:	9.19
Area Counts:	1.28e+008
Manual Modification	No
Amount:	524. (ng/mL)
% Accuracy:	87.40



Compound Name:	13-Dinitrobenzene (168.0/137.9 amu)
Expected RT:	10.9
Actual RT:	11.0
Area Counts:	5.64e+007
Manual Modification	No
Amount:	566. (ng/mL)
% Accuracy:	94.30



Compound Name:	Tetryl (241.0/180.8 amu)
Expected RT:	11.1
Actual RT:	11.1
Area Counts:	1.08e+008
Manual Modification	No
Amount:	674. (ng/mL)
% Accuracy:	112.00



Compound Name:	246-Trinitrotoluene (227.1/209.8 amu)
Expected RT:	13.5
Actual RT:	13.6
Area Counts:	2.28e+008
Manual Modification	No
Amount:	621. (ng/mL)
% Accuracy:	104.00



Before Lcr 3/28/10

File Name: "WXX10322-SEG.D" Sample ID: "111111" File: "EXP0322041.wif"

Sample Name: "24-dinitrotoluene" Mass(es): "182.046.0 and"

Method: "LCMSEXP\_C" Annotation: ""

1e Index: 1

Ac Type: GC

Ac Volume: 50.00

Ac Concent: 0.00

Date: 3/23/2010

Time: 9:09:10 AM

File: No

Unit: ng/mL

Unit: ng/mL

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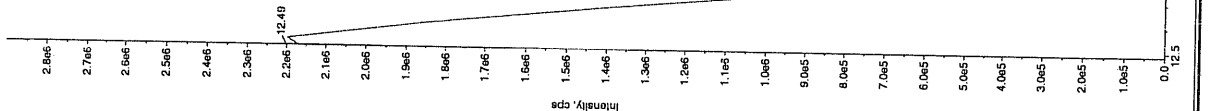
Unit: ng/mL

Unit: ng/mL

Unit: ng/mL

Unit: ng/mL

Unit: ng/mL

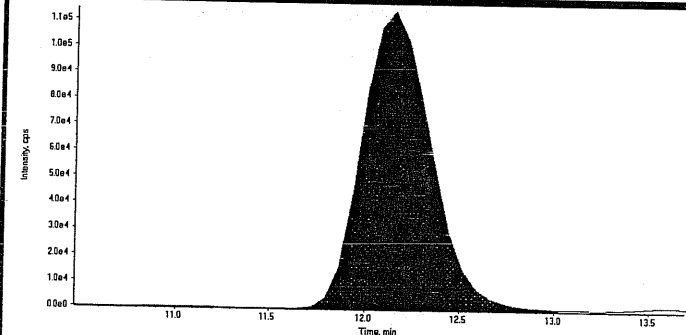


L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#3

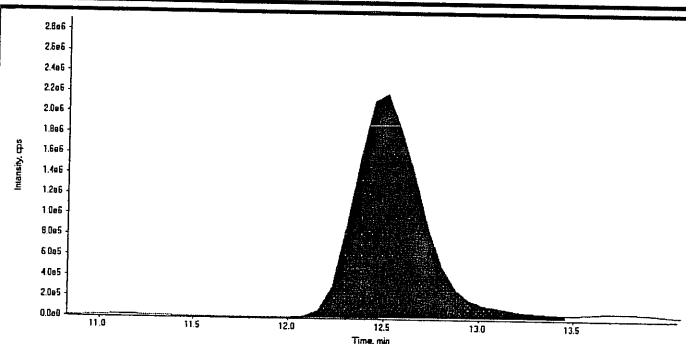
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 27/03/2010 1:31:00 PM  
LCMSMS#3

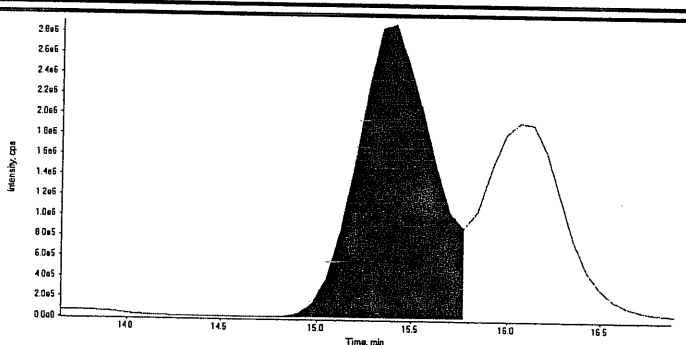
Data File	EXP0322041.wiff	Acquisition Date	3/23/2010 9:09:10 AM
Sample Name	WXX100322-56CCV	Acquisition Method	8321_pntx.dam
Batch Dilution Analyst	1 LER	Result Table	032210.rdb
Procedure Code	LCMSEXP_C	Sample Type	Quality Control



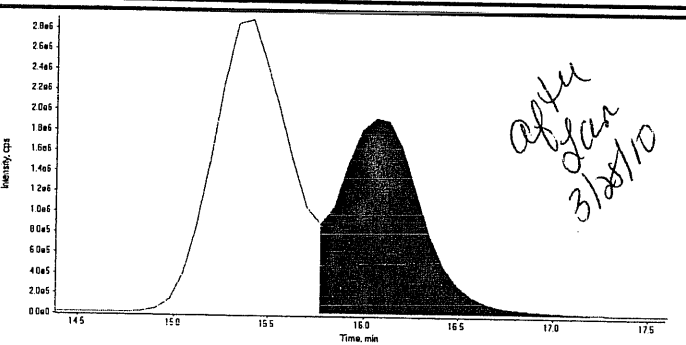
Compound Name:	Nitrobenzene (123.0/46.0 amu)
Expected RT:	12.1
Actual RT:	12.2
Area Counts:	2.91e+006
Manual Modification	No
Amount:	573. (ng/mL)
% Accuracy:	95.60



Compound Name:	34-dinitrotoluene (182.0/46.0 amu)
Expected RT:	12.4
Actual RT:	12.5
Area Counts:	5.47e+007
Manual Modification	No
Amount:	277. (ng/mL)
% Accuracy:	92.20



Compound Name:	26-dinitrotoluene (182.0/46.0 amu)
Expected RT:	15.3
Actual RT:	15.4
Area Counts:	8.13e+007
Manual Modification	No
Amount:	547. (ng/mL)
% Accuracy:	91.10

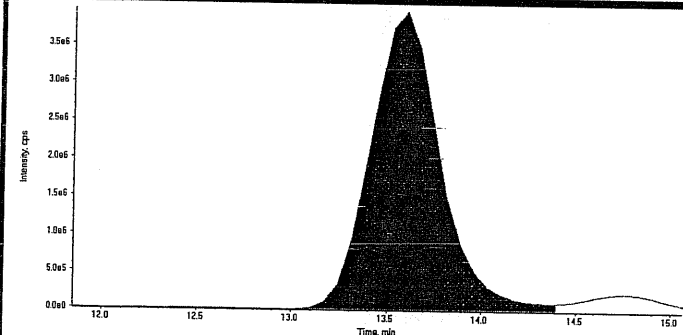


Compound Name:	24-dinitrotoluene (182.0/46.0 amu)
Expected RT:	16.0
Actual RT:	16.1
Area Counts:	5.80e+007
Manual Modification	Yes
Amount:	649. (ng/mL)
% Accuracy:	108.00

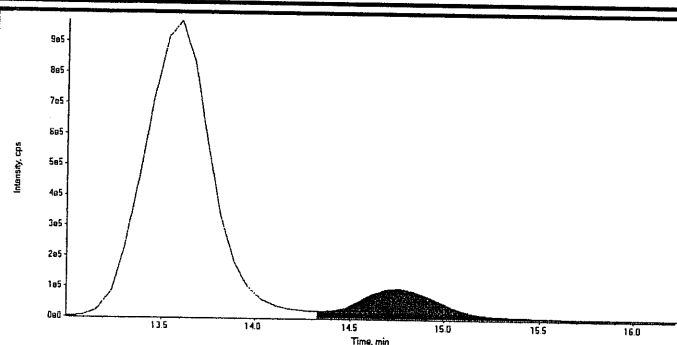
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 27/03/2010 1:31:00 PM  
LCMSMS#3

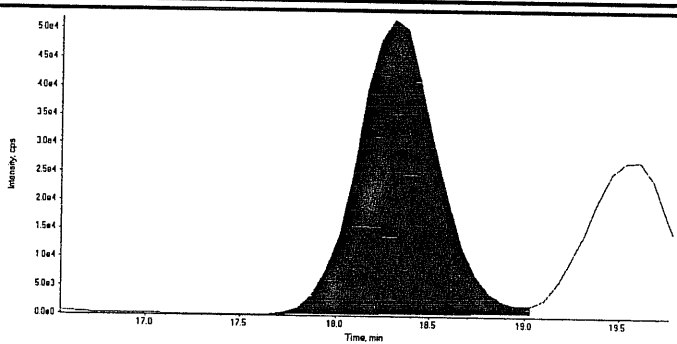
Data File	EXP0322041.wiff	Acquisition Date	3/23/2010 9:09:10 AM
Sample Name	WXX100322-56CCV	Acquisition Method	8321_pntx.dam
Batch Dilution Analyst	1 LER	Result Table	032210.rdb
Procedure Code	LCMSEXP_C	Sample Type	Quality Control



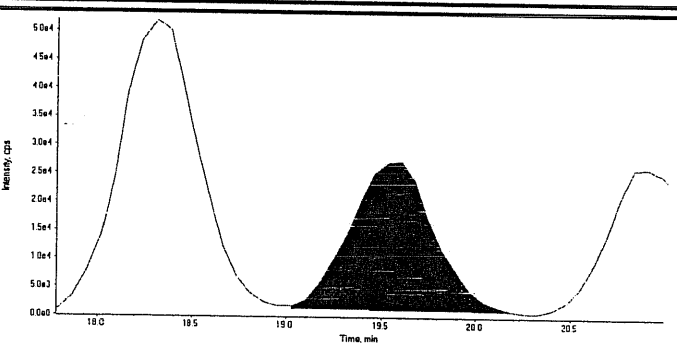
Compound Name:	4-Amino-26-dinitrotoluene (197.0/167.0 amu)
Expected RT:	13.5
Actual RT:	13.6
Area Counts:	1.03e+008
Manual Modification	No
Amount:	636. (ng/mL)
% Accuracy:	106.00



Compound Name:	2-Amino-46-dinitrotoluene (197.0/180.0 amu)
Expected RT:	14.6
Actual RT:	14.8
Area Counts:	3.43e+006
Manual Modification	No
Amount:	672. (ng/mL)
% Accuracy:	112.00



Compound Name:	2-Nitrotoluene (137.0/46.0 amu)
Expected RT:	18.2
Actual RT:	18.3
Area Counts:	1.54e+006
Manual Modification	No
Amount:	646. (ng/mL)
% Accuracy:	108.00

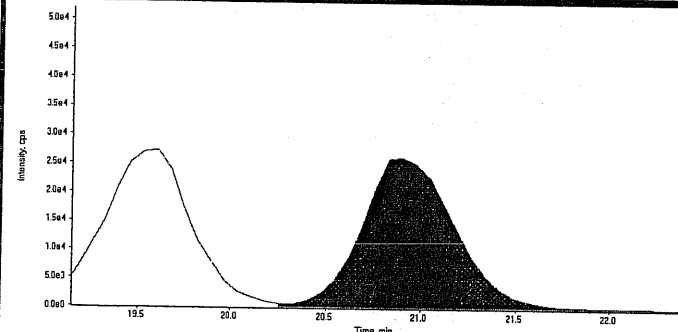


Compound Name:	4-Nitrotoluene (137.0/46.0 amu)
Expected RT:	19.4
Actual RT:	19.6
Area Counts:	8.06e+005
Manual Modification	No
Amount:	676. (ng/mL)
% Accuracy:	113.00

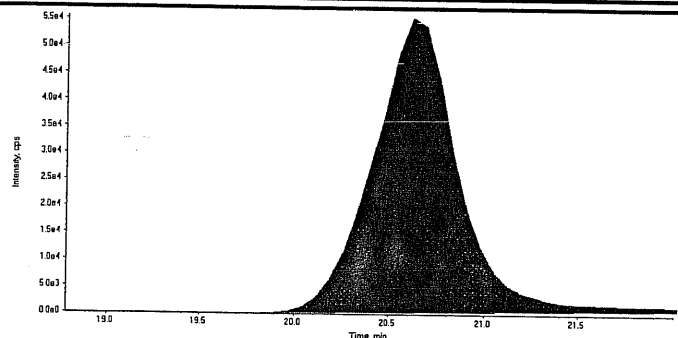
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 27/03/2010 1:31:00 PM  
LCMSMS#3

Data File	EXP0322041.wiff	Acquisition Date	3/23/2010 9:09:10 AM
Sample Name	WXX100322-56CCV	Acquisition Method	8321_pntx.dam
Batch Dilution Analyst	1 LER	Result Table	032210.rdb
Procedure Code	LCMSEXP_C	Sample Type	Quality Control



Compound Name:	3-Nitrotoluene (137.0/46.0 amu)
Expected RT:	20.8
Actual RT:	20.9
Area Counts:	8.97e+005
Manual Modification	No
Amount:	632. (ng/mL)
% Accuracy:	105.00



Compound Name:	PETN (361.1/62.0 amu)
Expected RT:	20.4
Actual RT:	20.6
Area Counts:	1.74e+006
Manual Modification	No
Amount:	954. (ng/mL)
% Accuracy:	159.00

GRAND MEAN AVERAGE

Vendor: Restek  
 Date of Analysis 03/23/10  
 Time of Injection 0909  
 Standard Number WXX100322-56CCV  
 Data File EXP0322041a

HMX	111.0	✓
RDX	106.0	✓
135-Trinitrobenzene	87.4	
13-Dinitrobenzene	94.3	
Tetryl	112.0	
246-Trinitrotoluene	104.0	
Nitrobenzene	95.6	
34-dinitrotoluene	92.2	
26-dinitrotoluene	91.1	
24-dinitrotoluene	108.0	
4-Amino-26-dinitrotoluene	106.0	
2-Amino-46-dinitrotoluene	112.0	
2-Nitrotoluene	108.0	
4-Nitrotoluene	113.0	
3-Nitrotoluene	105.0	
PETN	159.0	✓
	✓	
TOTAL	1704.6	<i>Hand 03/28/10</i>
		ICV Limits 85-115%
AVERAGE	✓ 106.5	CRI Limits 70-130%
		CCV Limits 85-115%
		No single analyte > +/- 60%

*for 3/28/10*

7B  
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1758

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0322043.wiff

Analysis Date: 23-MAR-10 10:02

LCMSMS ID: 1189

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Dinitrotoluene	40	48.4	121	
2,6-Dinitrotoluene	40	50.7	127	
2-Amino-4,6-dinitrotoluene	40	38	95	
3,4-Dinitrotoluene	20	20.4	102	
4-Amino-2,6-dinitrotoluene	40	47	117	
HMX	40	59.2	148	
Nitrobenzene	40	42.7	107	
PETN	40	54.8	137	
RDX	40	44.7	112	
Tetryl	40	24.1	60	
m-Dinitrobenzene	40	45.1	113	
m-Nitrotoluene	40	43.5	109	
o-Nitrotoluene	40	39.5	99	
p-Nitrotoluene	40	41.4	104	
1,3,5-Trinitrobenzene	40	41.9	105	
2,4,6-Trinitrotoluene	40	39.7	99	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,  
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

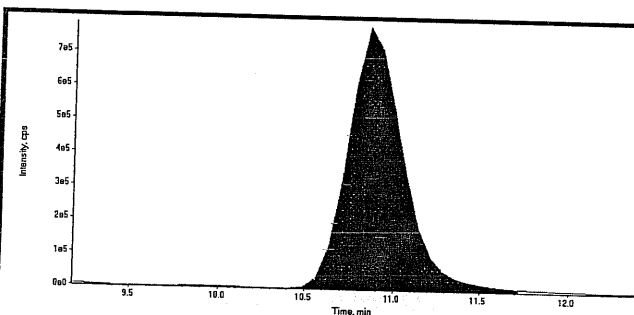
# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

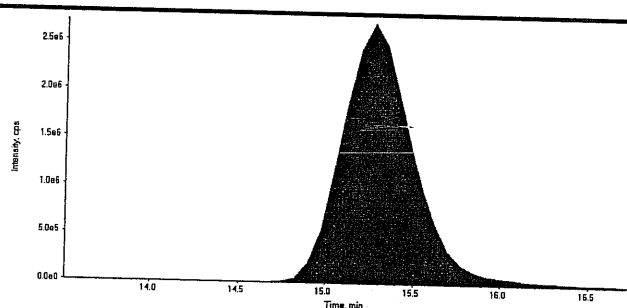
Printed: 27/03/2010 1:31:00 PM  
LCMSMS#3

Data File	EXP0322043.wiff	Acquisition Date	3/23/2010 10:02:00 AM
Sample Name	WXX100322-57CRI	Acquisition Method	8321_pntx.dam
Batch Dilution Analyst	1 LER	Result Table	032210.rdb
Procedure Code	LCMSEXP_C	Sample Type	Quality Control



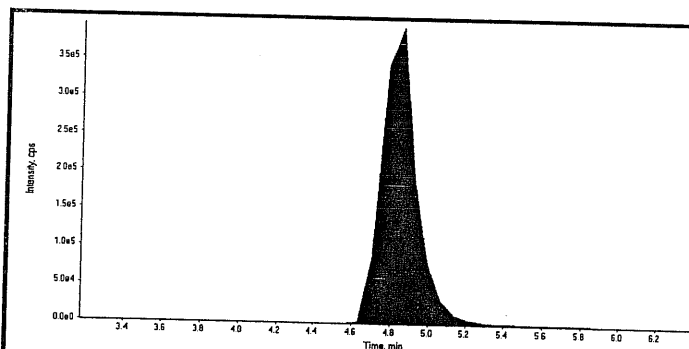
Compound Name:	13-Dinitrobenzene-d4 (172.1/46.1 amu)
Expected RT:	10.80
Actual RT:	10.90
Area Counts:	17100000.00
Manual Modification	No
Amount:	500.00(ng/mL)

Please refer to Form 8 for a list of Internal Standard Recoveries

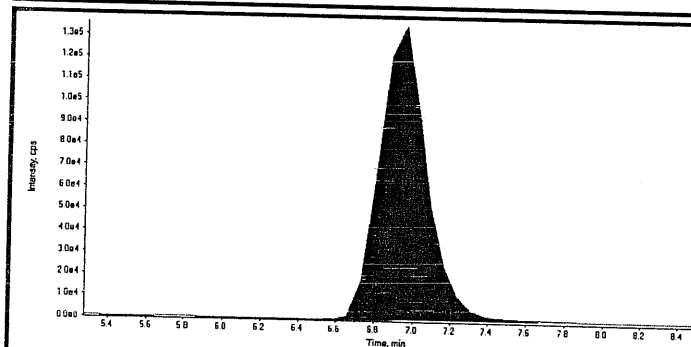


Compound Name:	26-Dinitrotoluene-d3 (185.0/155.0 amu)
Expected RT:	15.10
Actual RT:	15.30
Area Counts:	76800000.00
Manual Modification	Yes
Amount:	500.00(ng/mL)

Please refer to Form 8 for a list of Internal Standard Recoveries



Compound Name:	HMX (341.2/46.0 amu)
Expected RT:	4.77
Actual RT:	4.85
Area Counts:	5.04e+006
Manual Modification	No
Amount:	59.2 (ng/mL)
% Accuracy:	148.00



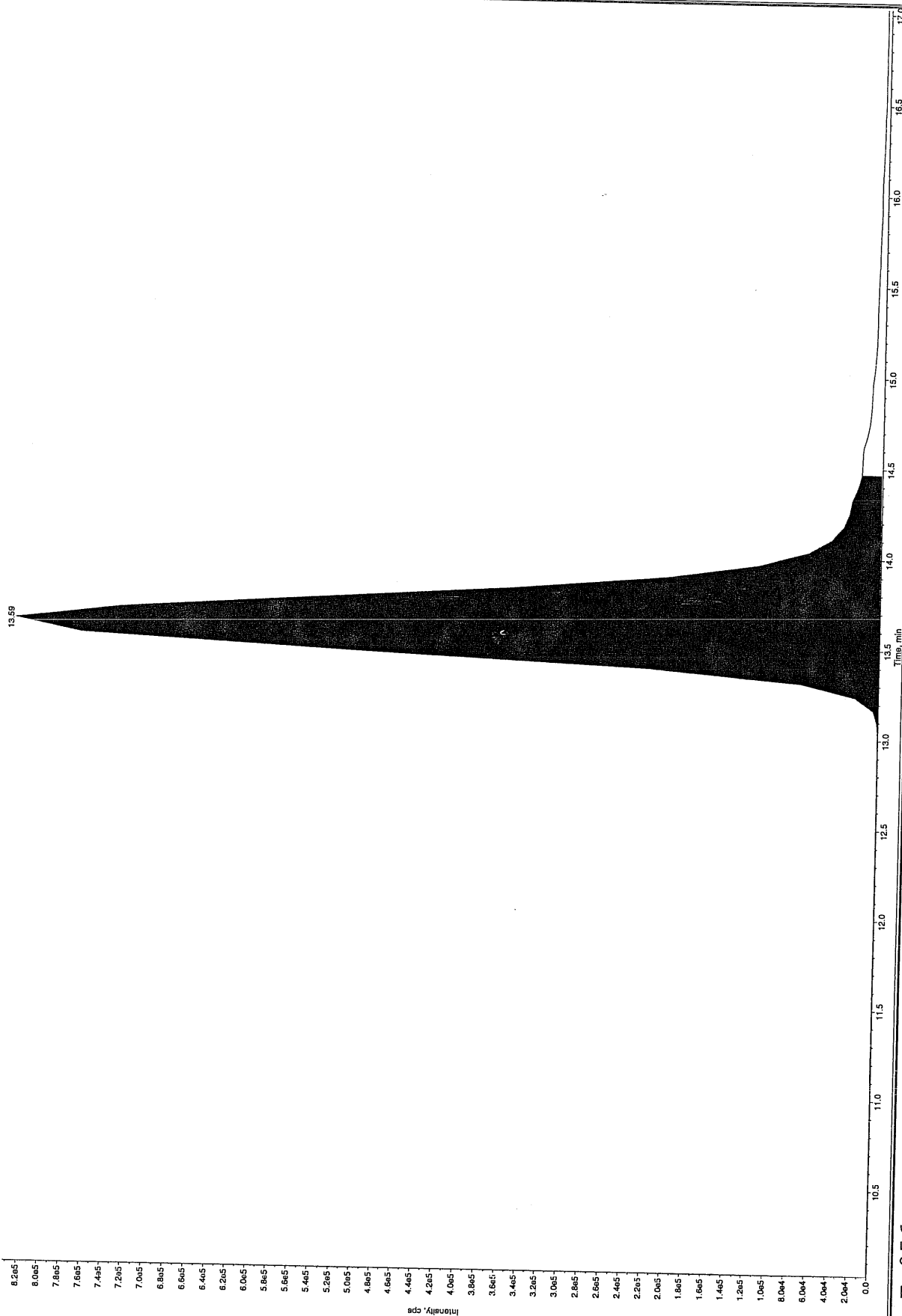
Compound Name:	RDX (267.0/46.1 amu)
Expected RT:	6.87
Actual RT:	6.94
Area Counts:	2.34e+006
Manual Modification	No
Amount:	44.7 (ng/mL)
% Accuracy:	112.00

*Handwritten signature: Amr... 3/28/10*

Before Jan 3/28/10

Sample Name: "WXX100322-57.CRI" Sample ID: "111.EP" File: "EXP022043.wif"  
 Peak Name: "246-Trinitrofluorene" Mass(es): 227.12058 amu  
 Comment: "LCMSEXP\_C" Annotation: "

File Index: 1  
 Integration: 40.0 pg/mL  
 Dilution: 38.3 pg/mL  
 Date: 3/23/2010  
 Time: 10:02:00 AM  
 File: No  
 Peak Height: 1.00e4 cps  
 Peak Width: 0.00 sec  
 Peak Area: 69.0 points  
 Peak RT: 13.5 min  
 Relative RT: No  
 Type: Valley  
 Retention Time: 01e-13.6 min  
 Counts: 68e5  
 Height: 8.31e005  
 Retention Time: 13.0 min  
 Time: 14.5 min



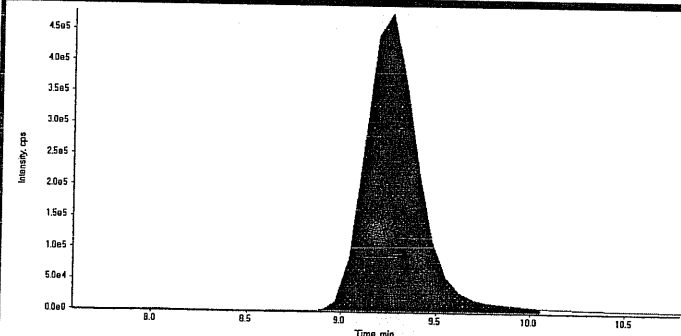
L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#3



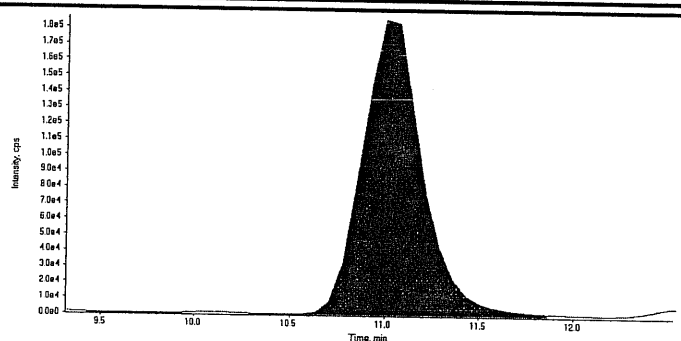
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 27/03/2010 1:31:00 PM  
LCMSMS#3

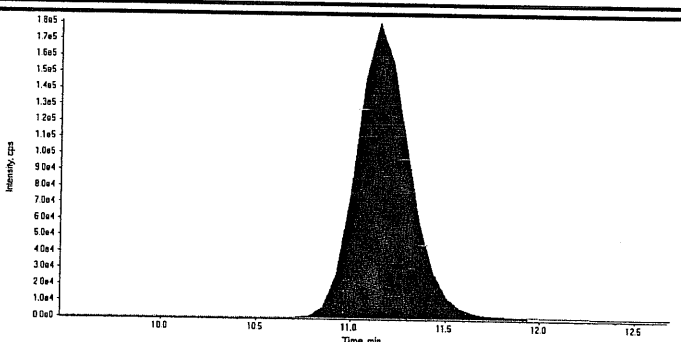
Data File	EXP0322043.wiff	Acquisition Date	3/23/2010 10:02:00 AM
Sample Name	WXX100322-57CRI	Acquisition Method	8321_pntx.dam
Batch Dilution Analyst	1 LER	Result Table	032210.rdb
Procedure Code	LCMSEXP_C	Sample Type	Quality Control



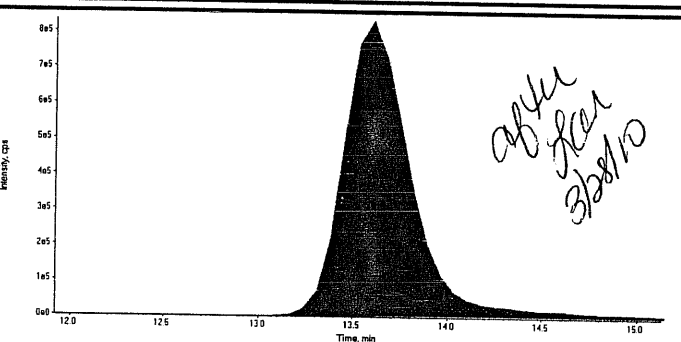
Compound Name:	135-Trinitrobenzene (213.0/182.8 amu)
Expected RT:	9.19
Actual RT:	9.26
Area Counts:	9.29e+006
Manual Modification	No
Amount:	41.9 (ng/mL)
% Accuracy:	105.00



Compound Name:	13-Dinitrobenzene (168.0/137.9 amu)
Expected RT:	10.9
Actual RT:	11.0
Area Counts:	4.10e+006
Manual Modification	No
Amount:	45.1 (ng/mL)
% Accuracy:	113.00



Compound Name:	Tetryl (241.0/180.8 amu)
Expected RT:	11.1
Actual RT:	11.1
Area Counts:	3.52e+006
Manual Modification	No
Amount:	24.1 (ng/mL)
% Accuracy:	60.30

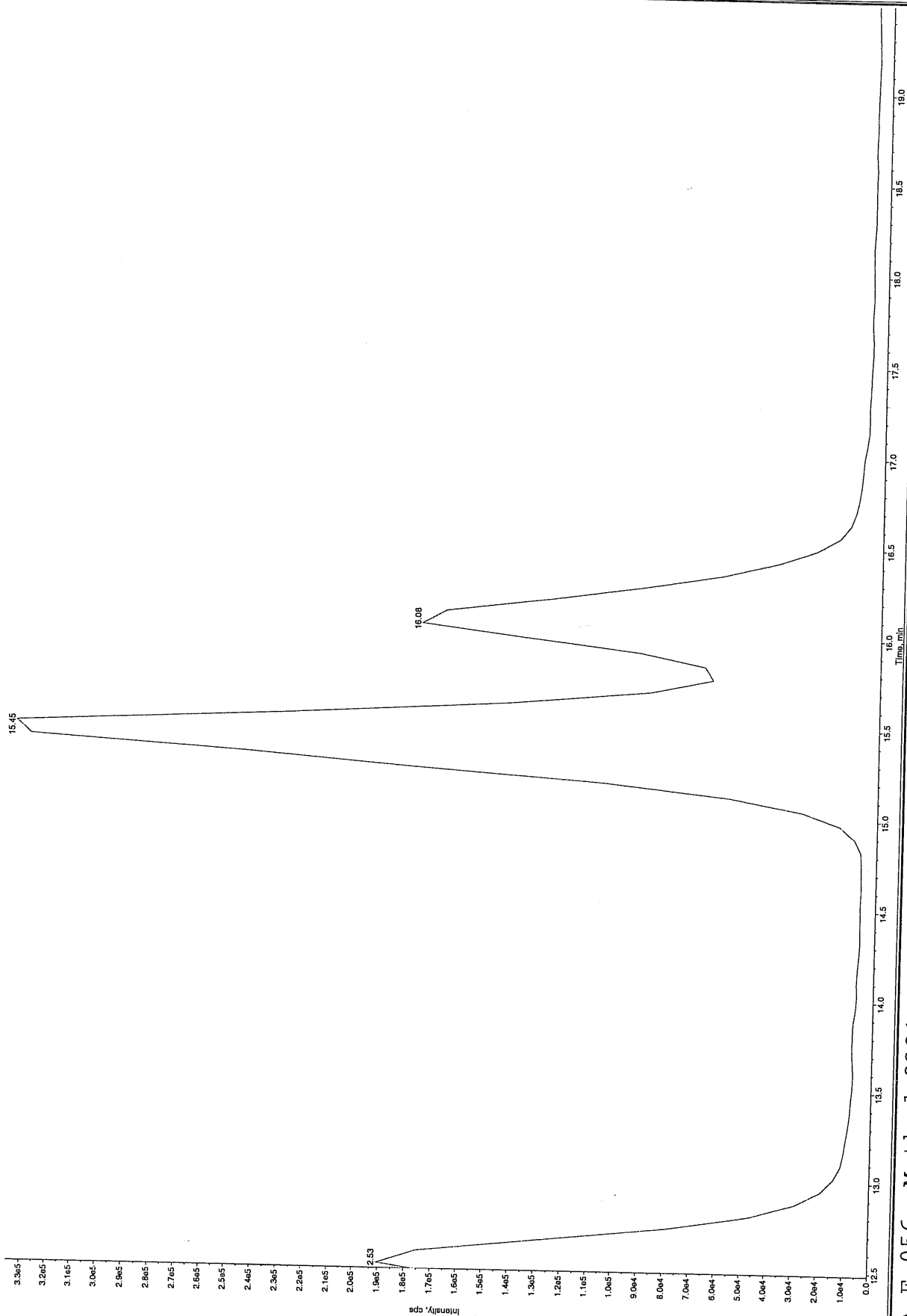


Compound Name:	246-Trinitrotoluene (227.1/209.8 amu)
Expected RT:	13.5
Actual RT:	13.6
Area Counts:	2.07e+007
Manual Modification	Yes
Amount:	39.7 (ng/mL)
% Accuracy:	99.30

Before Scan 3128110

Sample Name: "WXX100322-57011" Sample ID: "111157" File: "EXP0322043.wif"  
 Task Name: "24-dinitrofluorene" Mass(es): "182.046.0 amu"  
 Instrument: "LCMS-EXP\_C" Annotation: ""

1e Index: 1  
 Type: OC  
 Amount: 40.0 ng/mL  
 Diluted Conc: 0.00 ng/mL  
 Date: 3/23/2010  
 Time: 10:02:00 AM  
 Fixed: No

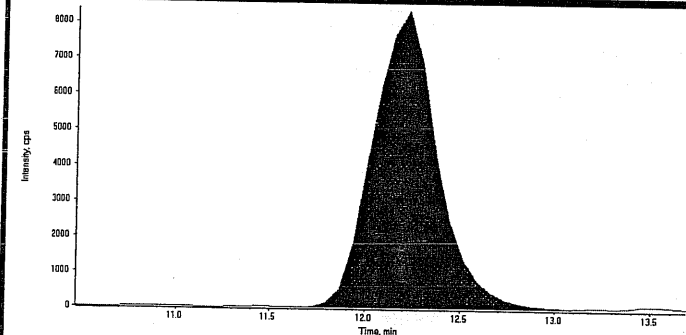


L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#3

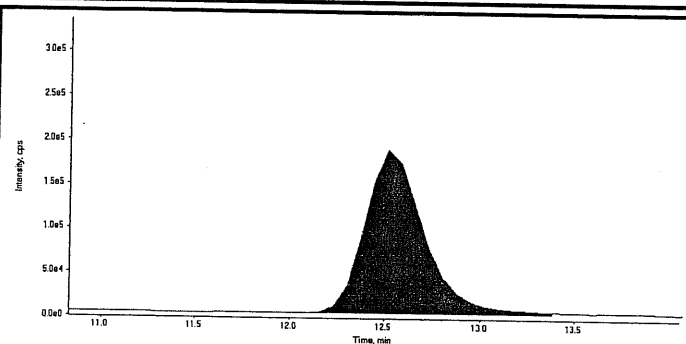
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 27/03/2010 1:31:00 PM  
LCMSMS#3

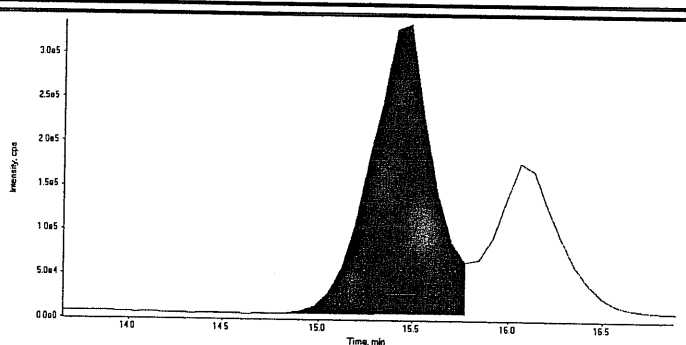
Data File	EXP0322043.wiff	Acquisition Date	3/23/2010 10:02:00 AM
Sample Name	WXX100322-57CRI	Acquisition Method	8321_pntx.dam
Batch Dilution Analyst	1 LER	Result Table	032210.rdb
Procedure Code	LCMSEXP_C	Sample Type	Quality Control



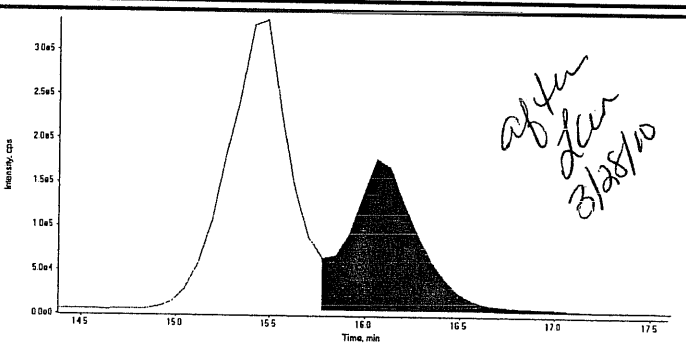
Compound Name:	Nitrobenzene (123.0/46.0 amu)
Expected RT:	12.1
Actual RT:	12.2
Area Counts:	1.97e+005
Manual Modification	No
Amount:	42.7 (ng/mL)
% Accuracy:	107.00



Compound Name:	34-dinitrotoluene (182.0/46.0 amu)
Expected RT:	12.4
Actual RT:	12.5
Area Counts:	4.05e+006
Manual Modification	No
Amount:	20.4 (ng/mL)
% Accuracy:	102.00



Compound Name:	26-dinitrotoluene (182.0/46.0 amu)
Expected RT:	15.3
Actual RT:	15.5
Area Counts:	7.58e+006
Manual Modification	No
Amount:	50.7 (ng/mL)
% Accuracy:	127.00



Compound Name:	24-dinitrotoluene (182.0/46.0 amu)
Expected RT:	16.0
Actual RT:	16.1
Area Counts:	4.36e+006
Manual Modification	Yes
Amount:	48.4 (ng/mL)
% Accuracy:	121.00

Before 8/28/10

Sample Name: "WXX100322-57CR1" Sample ID: "JILLER" File: "EXP0322043.M"   
 Path: "C:\MSDCHEM\DATA\EXP\0322043.M"   
 Acquisition Date: "3/23/2010" Acquisition Time: "10:02:00 AM"   
 Sample Index: 1   
 Sample Type: 1   
 Concentration: 40.0 ng/mL   
 Diluted Conc: 26.1 ng/mL   
 Date: 3/23/2010   
 Time: 10:02:00 AM

Method: "LCMSMS"   
 Injection Volume: 10.0   
 Injection Speed: 10.0   
 Injection Pressure: 10.0   
 Injection Temperature: 10.0   
 Injection Time: 10.0   
 Injection Volume: 10.0   
 Injection Speed: 10.0   
 Injection Pressure: 10.0   
 Injection Temperature: 10.0   
 Injection Time: 10.0

Peak Data:   
 Peak Number: 1   
 Peak Retention Time: 14.76   
 Peak Height: 1000.00 cps   
 Peak Width: 0.00 sec   
 Peak Area: 1000.00 cps   
 Peak Intensity: 1000.00 cps   
 Peak Signal-to-Noise: 10.0   
 Peak Quality: 10.0   
 Peak Integration: 10.0   
 Peak Identification: 10.0   
 Peak Confirmation: 10.0   
 Peak Validation: 10.0   
 Peak Reporting: 10.0

Method Parameters:   
 Method Name: "LCMSMS"   
 Method Version: 1.0   
 Method Author: "JILLER"   
 Method Date: "3/23/2010"   
 Method Time: "10:02:00 AM"   
 Method Volume: 10.0   
 Method Speed: 10.0   
 Method Pressure: 10.0   
 Method Temperature: 10.0   
 Method Time: 10.0

Sample Parameters:   
 Sample Name: "WXX100322-57CR1"   
 Sample ID: "JILLER"   
 Sample File: "EXP0322043.M"   
 Sample Path: "C:\MSDCHEM\DATA\EXP\0322043.M"   
 Sample Acquisition Date: "3/23/2010"   
 Sample Acquisition Time: "10:02:00 AM"   
 Sample Index: 1   
 Sample Type: 1

Peak Data:   
 Peak Number: 1   
 Peak Retention Time: 14.76   
 Peak Height: 1000.00 cps   
 Peak Width: 0.00 sec   
 Peak Area: 1000.00 cps   
 Peak Intensity: 1000.00 cps   
 Peak Signal-to-Noise: 10.0   
 Peak Quality: 10.0   
 Peak Integration: 10.0   
 Peak Identification: 10.0   
 Peak Confirmation: 10.0   
 Peak Validation: 10.0   
 Peak Reporting: 10.0

Method Parameters:   
 Method Name: "LCMSMS"   
 Method Version: 1.0   
 Method Author: "JILLER"   
 Method Date: "3/23/2010"   
 Method Time: "10:02:00 AM"   
 Method Volume: 10.0   
 Method Speed: 10.0   
 Method Pressure: 10.0   
 Method Temperature: 10.0   
 Method Time: 10.0

Sample Parameters:   
 Sample Name: "WXX100322-57CR1"   
 Sample ID: "JILLER"   
 Sample File: "EXP0322043.M"   
 Sample Path: "C:\MSDCHEM\DATA\EXP\0322043.M"   
 Sample Acquisition Date: "3/23/2010"   
 Sample Acquisition Time: "10:02:00 AM"   
 Sample Index: 1   
 Sample Type: 1

Peak Data:   
 Peak Number: 1   
 Peak Retention Time: 14.76   
 Peak Height: 1000.00 cps   
 Peak Width: 0.00 sec   
 Peak Area: 1000.00 cps   
 Peak Intensity: 1000.00 cps   
 Peak Signal-to-Noise: 10.0   
 Peak Quality: 10.0   
 Peak Integration: 10.0   
 Peak Identification: 10.0   
 Peak Confirmation: 10.0   
 Peak Validation: 10.0   
 Peak Reporting: 10.0

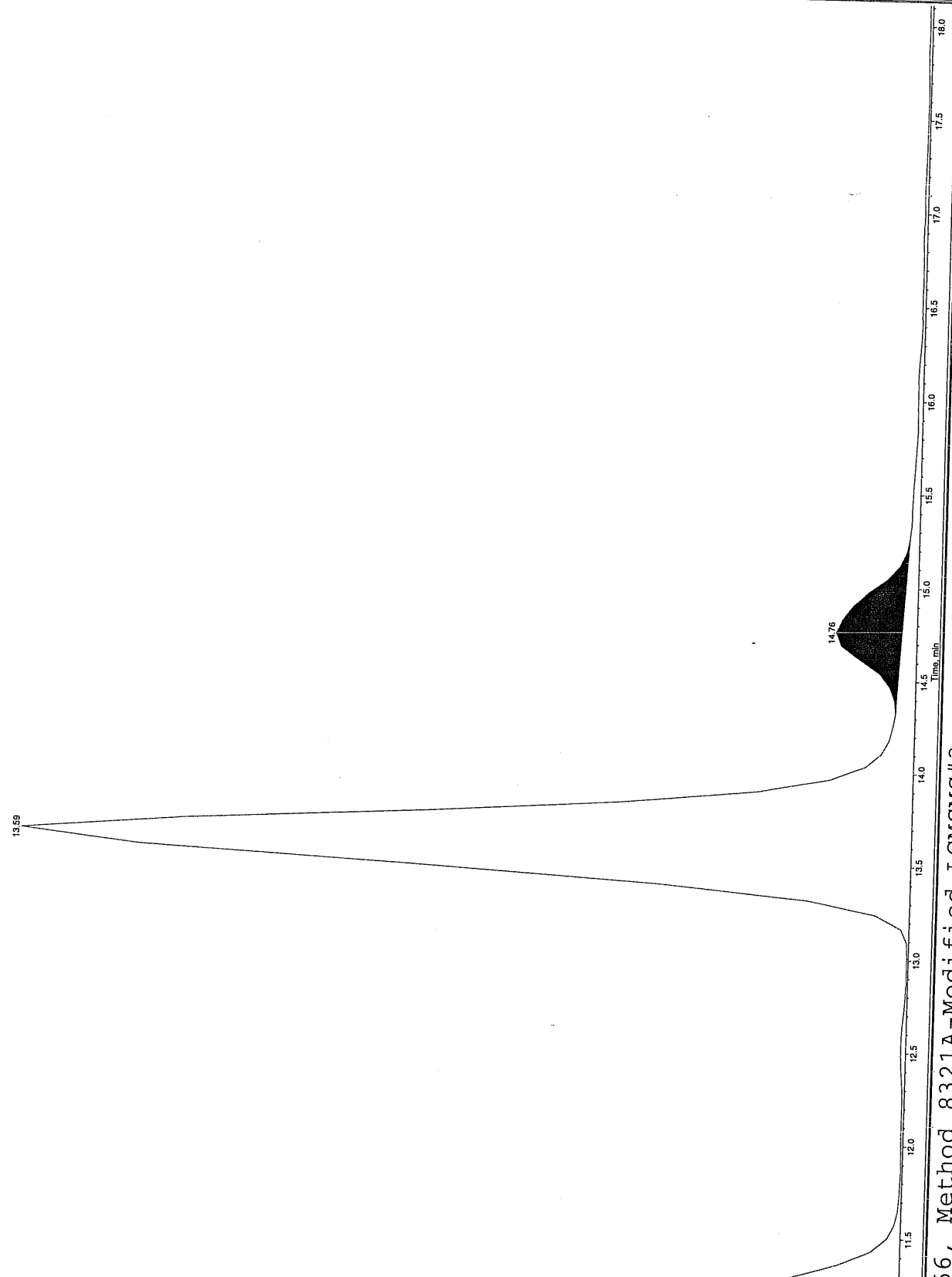
Method Parameters:   
 Method Name: "LCMSMS"   
 Method Version: 1.0   
 Method Author: "JILLER"   
 Method Date: "3/23/2010"   
 Method Time: "10:02:00 AM"   
 Method Volume: 10.0   
 Method Speed: 10.0   
 Method Pressure: 10.0   
 Method Temperature: 10.0   
 Method Time: 10.0

Sample Parameters:   
 Sample Name: "WXX100322-57CR1"   
 Sample ID: "JILLER"   
 Sample File: "EXP0322043.M"   
 Sample Path: "C:\MSDCHEM\DATA\EXP\0322043.M"   
 Sample Acquisition Date: "3/23/2010"   
 Sample Acquisition Time: "10:02:00 AM"   
 Sample Index: 1   
 Sample Type: 1

Peak Data:   
 Peak Number: 1   
 Peak Retention Time: 14.76   
 Peak Height: 1000.00 cps   
 Peak Width: 0.00 sec   
 Peak Area: 1000.00 cps   
 Peak Intensity: 1000.00 cps   
 Peak Signal-to-Noise: 10.0   
 Peak Quality: 10.0   
 Peak Integration: 10.0   
 Peak Identification: 10.0   
 Peak Confirmation: 10.0   
 Peak Validation: 10.0   
 Peak Reporting: 10.0

Method Parameters:   
 Method Name: "LCMSMS"   
 Method Version: 1.0   
 Method Author: "JILLER"   
 Method Date: "3/23/2010"   
 Method Time: "10:02:00 AM"   
 Method Volume: 10.0   
 Method Speed: 10.0   
 Method Pressure: 10.0   
 Method Temperature: 10.0   
 Method Time: 10.0

Sample Parameters:   
 Sample Name: "WXX100322-57CR1"   
 Sample ID: "JILLER"   
 Sample File: "EXP0322043.M"   
 Sample Path: "C:\MSDCHEM\DATA\EXP\0322043.M"   
 Sample Acquisition Date: "3/23/2010"   
 Sample Acquisition Time: "10:02:00 AM"   
 Sample Index: 1   
 Sample Type: 1

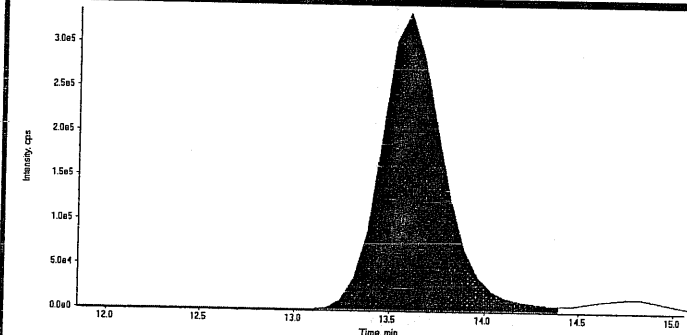


L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#3

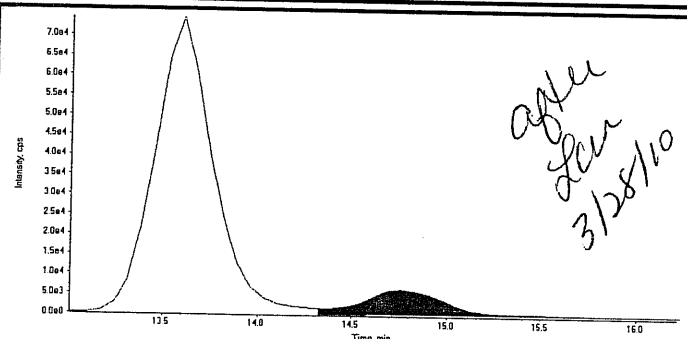
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 27/03/2010 1:31:00 PM  
LCMSMS#3

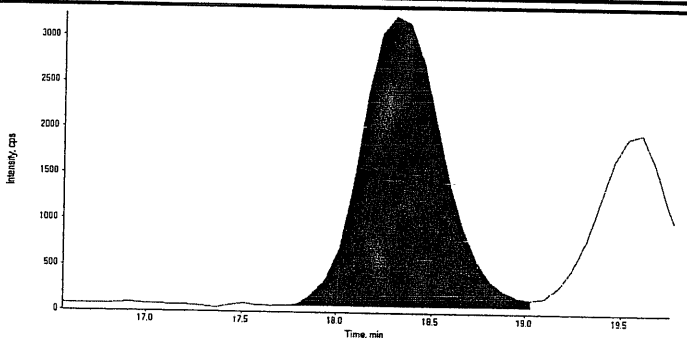
Data File	EXP0322043.wiff	Acquisition Date	3/23/2010 10:02:00 AM
Sample Name	WXX100322-57CRI	Acquisition Method	8321_pntx.dam
Batch Dilution Analyst	1 LER	Result Table	032210.rdb
Procedure Code	LCMSEXP_C	Sample Type	Quality Control



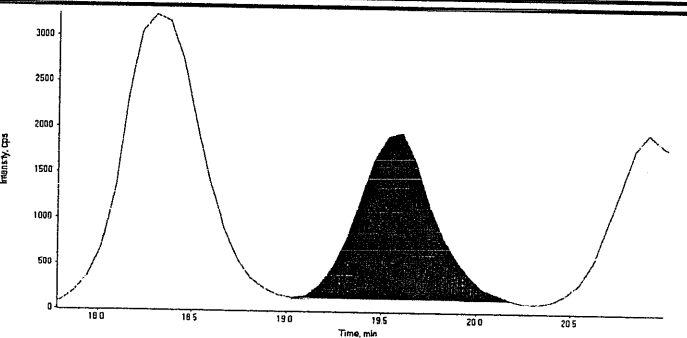
Compound Name:	4-Amino-26-dinitrotoluene (197.0/167.0 amu)
Expected RT:	13.5
Actual RT:	13.6
Area Counts:	7.62e+006
Manual Modification	No
Amount:	47.0 (ng/mL)
% Accuracy:	117.00



Compound Name:	2-Amino-46-dinitrotoluene (197.0/180.0 amu)
Expected RT:	14.6
Actual RT:	14.8
Area Counts:	1.94e+005
Manual Modification	Yes
Amount:	38.0 (ng/mL)
% Accuracy:	94.90



Compound Name:	2-Nitrotoluene (137.0/46.0 amu)
Expected RT:	18.2
Actual RT:	18.3
Area Counts:	9.49e+004
Manual Modification	No
Amount:	39.5 (ng/mL)
% Accuracy:	98.90



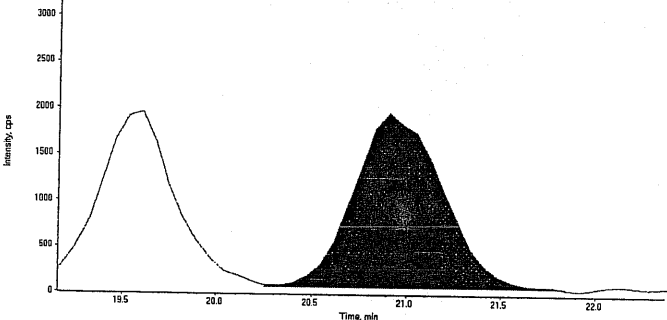
Compound Name:	4-Nitrotoluene (137.0/46.0 amu)
Expected RT:	19.4
Actual RT:	19.6
Area Counts:	4.97e+004
Manual Modification	No
Amount:	41.4 (ng/mL)
% Accuracy:	104.00

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

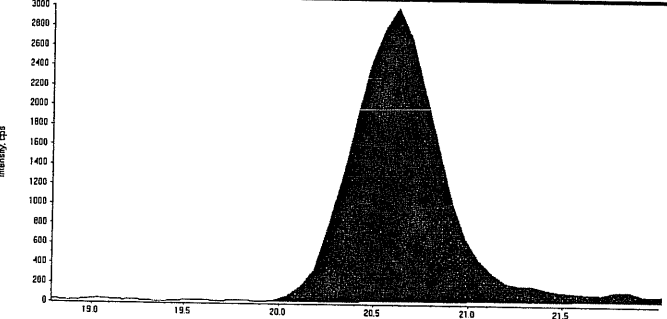
Printed: 27/03/2010 1:31:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0322043.wiff	<b>Acquisition Date</b>	3/23/2010 10:02:00 AM
<b>Sample Name</b>	WXX100322-57CRI	<b>Acquisition Method</b>	8321_pntx.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	032210.rdb
<b>Procedure Code</b>	LCMSEXP_C	<b>Sample Type</b>	Quality Control

	<b>Compound Name:</b>	3-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	20.8
	Actual RT:	20.9
	Area Counts:	6.20e+004
	Manual Modification	No
	Amount:	43.5 (ng/mL)
	% Accuracy:	109.00

	<b>Compound Name:</b>	PETN (361.1/62.0 amu)
	Expected RT:	20.4
	Actual RT:	20.6
	Area Counts:	1.00e+005
	Manual Modification	No
	Amount:	54.8 (ng/mL)
	% Accuracy:	137.00

GRAND MEAN AVERAGE

Vendor: Restek  
 Date of Analysis 03/23/10  
 Time of Injection 1002  
 Standard Number WXX100322-57CRI  
 Data File EXP0322043a

HMX	148.0
RDX	112.0
135-Trinitrobenzene	105.0
13-Dinitrobenzene	113.0
Tetryl	60.3
246-Trinitrotoluene	99.3
Nitrobenzene	107.0
34-dinitrotoluene	102.0
26-dinitrotoluene	127.0
24-dinitrotoluene	121.0
4-Amino-26-dinitrotoluene	117.0
2-Amino-46-dinitrotoluene	94.9
2-Nitrotoluene	98.9
4-Nitrotoluene	104.0
3-Nitrotoluene	109.0
PETN	137.0

TOTAL

1755.4

AVERAGE

✓ 109.7

*hmm 03/28/10*

ICV Limits 85-115%

CRI Limits 70-130%

CCV Limits 85-115%

No single analyte > +/- 60%

*Lcr 3/28/10*

7A

Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1758

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0322045.wiff

Analysis Date: 23-MAR-10 12:02

LCMSMS ID: 1189

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
m-Dinitrobenzene	600	576	96	
m-Nitrotoluene	600	637	106	
o-Nitrotoluene	600	575	96	
p-Nitrotoluene	600	597	99	
1,3,5-Trinitrobenzene	600	561	94	
2,4,6-Trinitrotoluene	600	611	102	
2,4-Dinitrotoluene	600	637	106	
2,6-Dinitrotoluene	600	566	94	
2-Amino-4,6-dinitrotoluene	600	569	95	
3,4-Dinitrotoluene	300	264	88	
4-Amino-2,6-dinitrotoluene	600	609	102	
HMX	600	589	98	
Nitrobenzene	600	565	94	
PETN	600	688	115	
RDX	600	592	99	
Tetryl	600	706	118	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate),TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,  
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

# Column used to flag Recovery outside of Limits

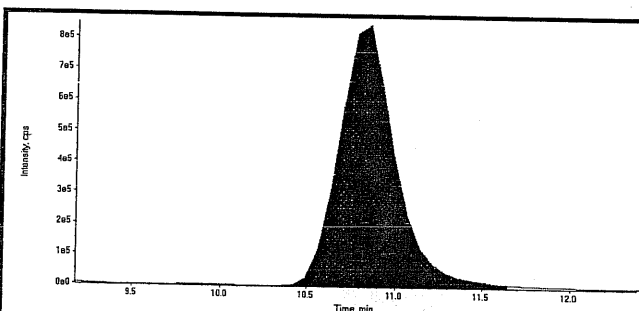
\* Value outside of Recovery Limits



GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

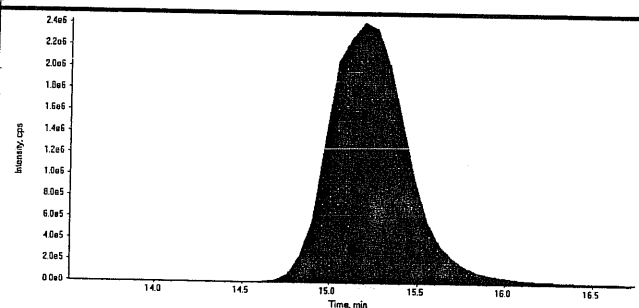
Printed: 27/03/2010 1:31:00 PM  
LCMSMS#3

Data File	EXP0322045.wiff	Acquisition Date	3/23/2010 12:02:45 PM
Sample Name	WXX100322-56CCV	Acquisition Method	8321_pntx.dam
Batch Dilution Analyst	1 LER	Result Table	032210.rdb
Procedure Code	LCMSEXP_C	Sample Type	Quality Control



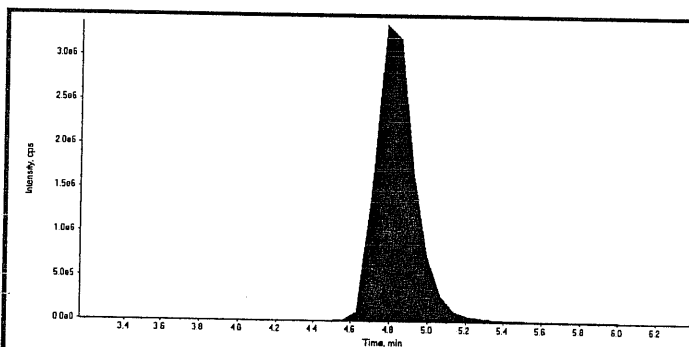
Compound Name:	13-Dinitrobenzene-d4 (172.1/46.1 amu)
Expected RT:	10.80
Actual RT:	10.90
Area Counts:	18700000.00
Manual Modification	No
Amount:	500.00(ng/mL)

Please refer to Form 8 for a list of Internal Standard Recoveries

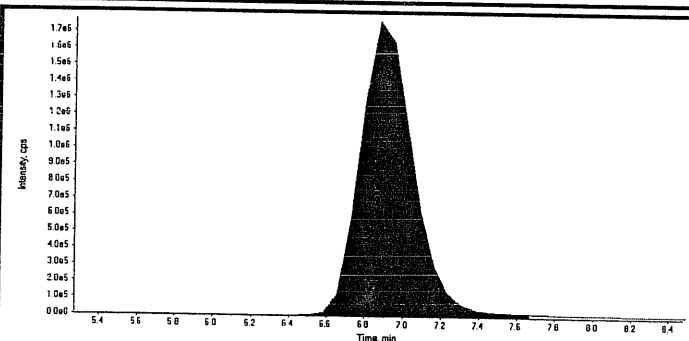


Compound Name:	26-Dinitrotoluene-d3 (185.0/155.0 amu)
Expected RT:	15.10
Actual RT:	15.20
Area Counts:	76700000.00
Manual Modification	No
Amount:	500.00(ng/mL)

Please refer to Form 8 for a list of Internal Standard Recoveries



Compound Name:	HMX (341.2/46.0 amu)
Expected RT:	4.77
Actual RT:	4.77
Area Counts:	4.80e+007
Manual Modification	No
Amount:	589. (ng/mL)
% Accuracy:	98.20



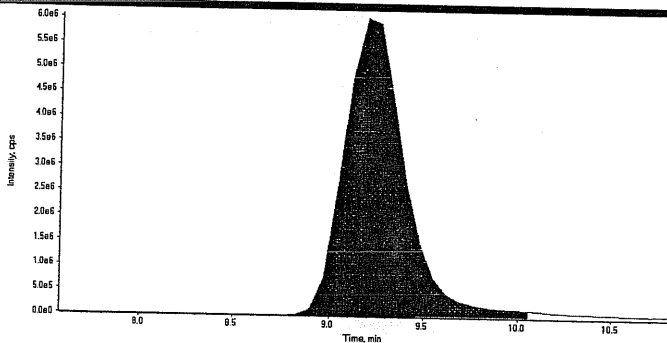
Compound Name:	RDY (267.0/46.1 amu)
Expected RT:	6.87
Actual RT:	6.87
Area Counts:	3.40e+007
Manual Modification	No
Amount:	592. (ng/mL)
% Accuracy:	98.60

*Handwritten:*  
HMX 03/28/10  
RDY 3/28/10

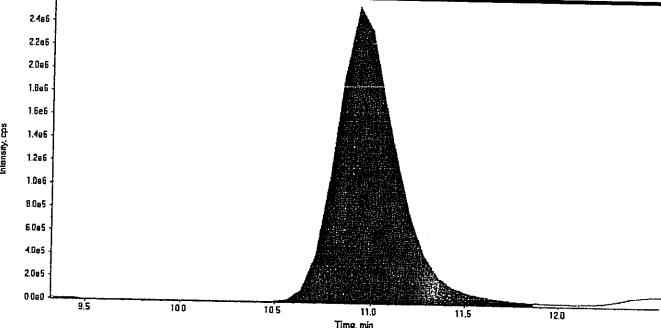
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 27/03/2010 1:31:00 PM  
LCMSMS#3

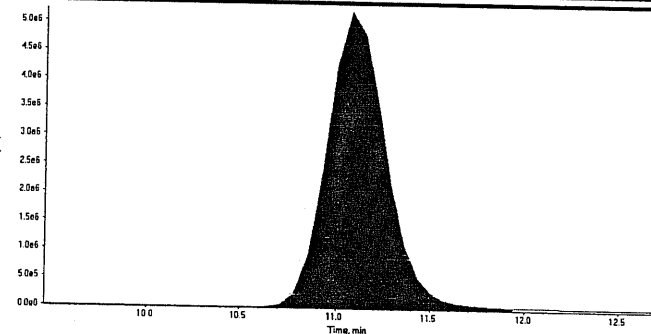
Data File	EXP0322045.wiff	Acquisition Date	3/23/2010 12:02:45 PM
Sample Name	WXX100322-56CCV	Acquisition Method	8321_pntx.dam
Batch Dilution Analyst	1 LER	Result Table	032210.rdb
Procedure Code	LCMSEXP_C	Sample Type	Quality Control



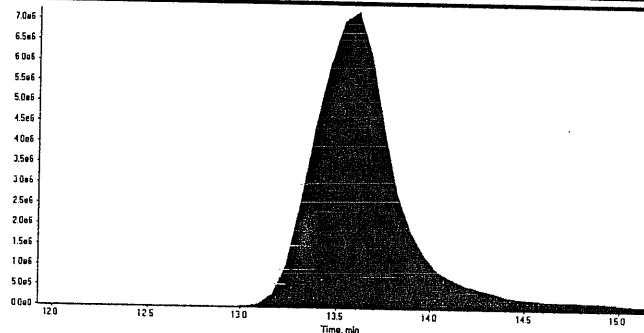
Compound Name:	135-Trinitrobenzene (213.0/182.8 amu)
Expected RT:	9.19
Actual RT:	9.19
Area Counts:	1.37e+008
Manual Modification	No
Amount:	561. (ng/mL)
% Accuracy:	93.60



Compound Name:	13-Dinitrobenzene (168.0/137.9 amu)
Expected RT:	10.9
Actual RT:	10.9
Area Counts:	5.74e+007
Manual Modification	No
Amount:	576. (ng/mL)
% Accuracy:	95.90



Compound Name:	Tetryl (241.0/180.8 amu)
Expected RT:	11.1
Actual RT:	11.1
Area Counts:	1.13e+008
Manual Modification	No
Amount:	706. (ng/mL)
% Accuracy:	118.00



Compound Name:	246-Trinitrotoluene (227.1/209.8 amu)
Expected RT:	13.5
Actual RT:	13.6
Area Counts:	2.26e+008
Manual Modification	No
Amount:	611. (ng/mL)
% Accuracy:	102.00

Before Dec 3/28/10

Sample Name: "XX10022-56CV" Sample ID: "111ER" File: "EXP032015.wif"

Peak Name: "214.4" Retention Time: 162.046.0 min

Amount: "LCMSXP\_C" Annotation:

1e Index: 1 QC

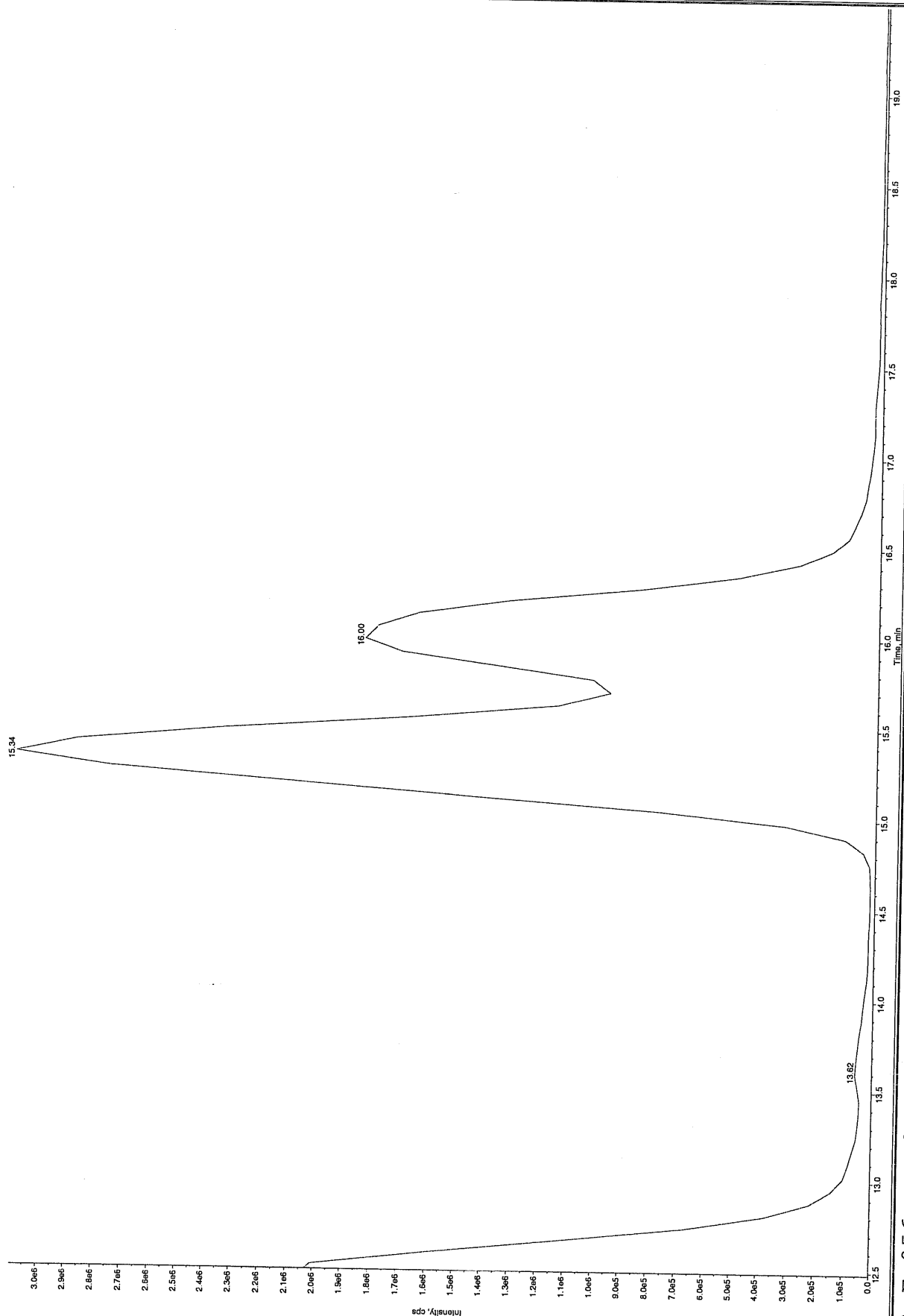
Concentration: 600. ng/mL

Diluted Conc: 0.00 ng/mL

Date: 3/2/2010

Time: 12:02:45 PM

Find: No

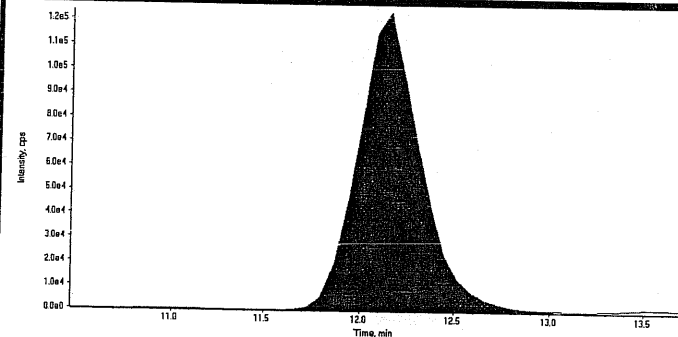


L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#3

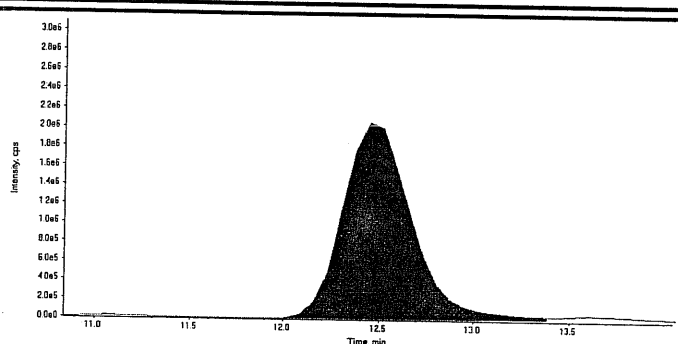
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 27/03/2010 1:31:00 PM  
LCMSMS#3

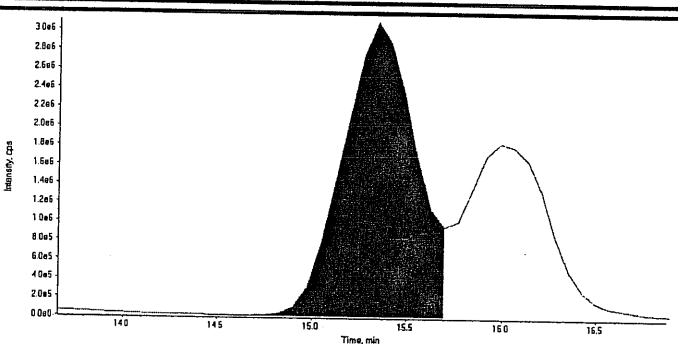
Data File	EXP0322045.wiff	Acquisition Date	3/23/2010 12:02:45 PM
Sample Name	WXX100322-56CCV	Acquisition Method	8321_pntx.dam
Batch Dilution Analyst	1 LER	Result Table	032210.rdb
Procedure Code	LCMSEXP_C	Sample Type	Quality Control



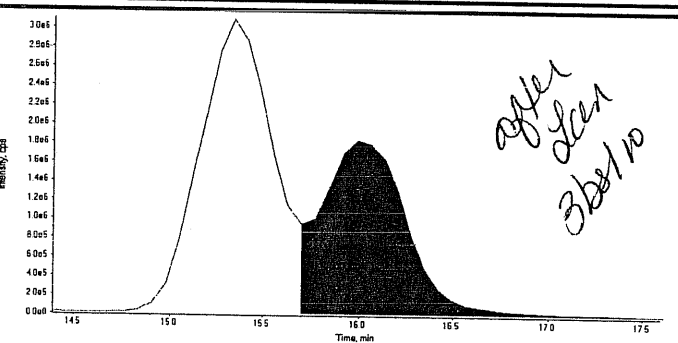
Compound Name:	Nitrobenzene (123.0/46.0 amu)
Expected RT:	12.1
Actual RT:	12.2
Area Counts:	2.87e+006
Manual Modification	No
Amount:	565. (ng/mL)
% Accuracy:	94.20



Compound Name:	34-dinitrotoluene (182.0/46.0 amu)
Expected RT:	12.4
Actual RT:	12.4
Area Counts:	5.24e+007
Manual Modification	No
Amount:	264. (ng/mL)
% Accuracy:	88.10



Compound Name:	26-dinitrotoluene (182.0/46.0 amu)
Expected RT:	15.3
Actual RT:	15.3
Area Counts:	8.44e+007
Manual Modification	No
Amount:	566. (ng/mL)
% Accuracy:	94.30



Compound Name:	24-dinitrotoluene (182.0/46.0 amu)
Expected RT:	16.0
Actual RT:	16.0
Area Counts:	5.72e+007
Manual Modification	Yes
Amount:	637. (ng/mL)
% Accuracy:	106.00

Before day 3/28/10

mpa Name: "WXX100322-56CCY" Sample ID: "TJLIER" File: "EXP0322045.wif"  
 Name: "Xmms-46-dinitrofluorene" File: "LCMSMS\_E-C" Annotation: "Mass(es): 197.0/180.0 amu"

le Index: 1 QC

Injection: 600. ng/mL  
 Sample Conc: 851.0 ng/mL  
 Date: 3/28/2010  
 Time: 12:02:45 PM

Method: No

Algorithm: IntelliQuan - 10A

Peak Height: 100.00 cps

Peak Width: 3.00 points

Window: 30.0 sec

Retained RT: 14.6 min

Relative RT: No

Type: Valley

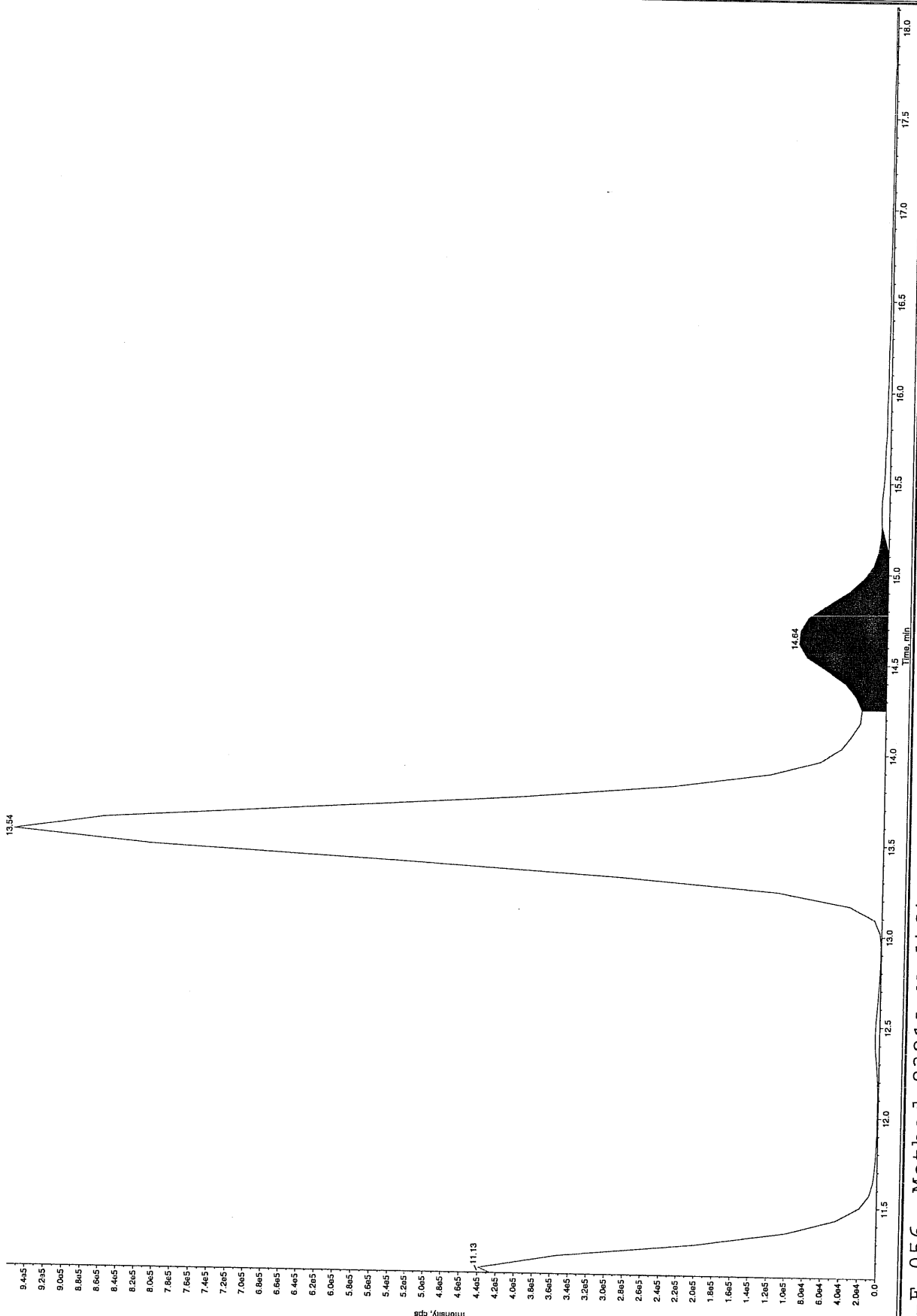
Retention Time: 14.6 min

Counts: 4.37e+006 counts

Time: 1.23e+005 cps

Time: 14.3 min

Time: 15.3 min



L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#3

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 27/03/2010 1:31:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0322045.wiff	<b>Acquisition Date</b>	3/23/2010 12:02:45 PM
<b>Sample Name</b>	WXX100322-56CCV	<b>Acquisition Method</b>	8321_pntx.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	032210.rdb
<b>Procedure Code</b>	LCMSEXP_C	<b>Sample Type</b>	Quality Control

	<b>Compound Name:</b>	4-Amino-26-dinitrotoluene (197.0/167.0 amu)
	Expected RT:	13.5
	Actual RT:	13.5
	Area Counts:	9.87e+007
	Manual Modification	No
	Amount:	609. (ng/mL)
	% Accuracy:	102.00

	<b>Compound Name:</b>	2-Amino-46-dinitrotoluene (197.0/180.0 amu)
	Expected RT:	14.6
	Actual RT:	14.6
	Area Counts:	2.91e+006
	Manual Modification	Yes
	Amount:	569. (ng/mL)
	% Accuracy:	94.80

	<b>Compound Name:</b>	2-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	18.2
	Actual RT:	18.2
	Area Counts:	1.38e+006
	Manual Modification	No
	Amount:	575. (ng/mL)
	% Accuracy:	95.80

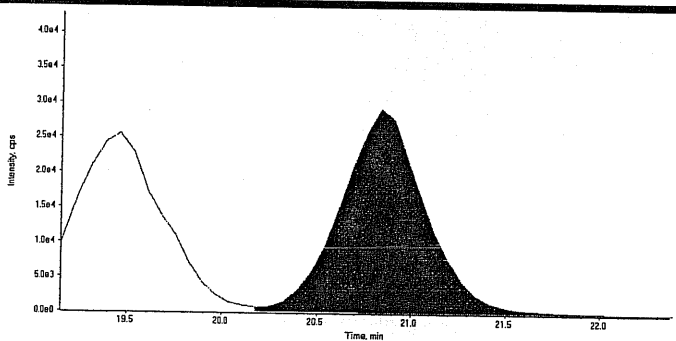
	<b>Compound Name:</b>	4-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	19.4
	Actual RT:	19.5
	Area Counts:	7.15e+005
	Manual Modification	No
	Amount:	597. (ng/mL)
	% Accuracy:	99.40

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

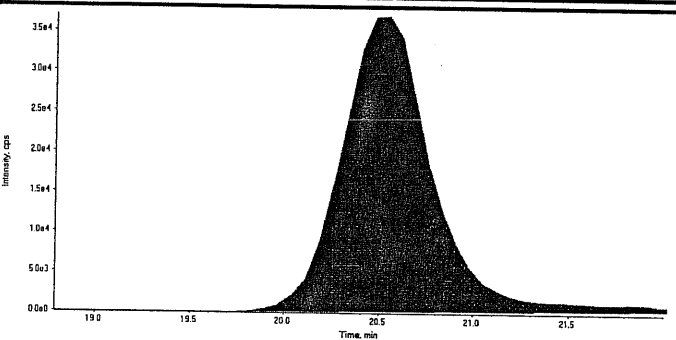
Printed: 27/03/2010 1:31:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0322045.wiff	<b>Acquisition Date</b>	3/23/2010 12:02:45 PM
<b>Sample Name</b>	WXX100322-56CCV	<b>Acquisition Method</b>	8321_pntx.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	032210.rdb
<b>Procedure Code</b>	LCMSEXP_C	<b>Sample Type</b>	Quality Control

	<b>Compound Name:</b>	3-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	20.8
	Actual RT:	20.8
	Area Counts:	9.07e+005
	Manual Modification	No
	Amount:	637. (ng/mL)
	% Accuracy:	106.00

	<b>Compound Name:</b>	PETN (361.1/62.0 amu)
	Expected RT:	20.4
	Actual RT:	20.5
	Area Counts:	1.26e+006
	Manual Modification	No
	Amount:	688. (ng/mL)
	% Accuracy:	115.00

GRAND MEAN AVERAGE

Vendor: Restek  
 Date of Analysis 03/23/10  
 Time of Injection 1202  
 Standard Number WXX100322-56CCV  
 Data File EXP0322045a

HMX	98.2
RDX	98.6
135-Trinitrobenzene	93.6
13-Dinitrobenzene	95.9
Tetryl	118.0
246-Trinitrotoluene	102.0
Nitrobenzene	94.2
34-dinitrotoluene	88.1
26-dinitrotoluene	94.3
24-dinitrotoluene	106.0
4-Amino-26-dinitrotoluene	102.0
2-Amino-46-dinitrotoluene	94.8
2-Nitrotoluene	95.8
4-Nitrotoluene	99.4
3-Nitrotoluene	106.0
PETN	115.0

TOTAL

✓  
1601.9

AVERAGE

✓ 100.1

ICV Limits 85-115%

CRI Limits 70-130%

CCV Limits 85-115%

No single analyte > +/- 60%

*LCR 3/28/10*



7B  
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1758

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0322047.wiff

Analysis Date: 23-MAR-10 12:55

LCMSMS ID: 1189

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	40	39.9	100	
2,4,6-Trinitrotoluene	40	37	92	
2,4-Dinitrotoluene	40	40	100	
2,6-Dinitrotoluene	40	45.8	115	
2-Amino-4,6-dinitrotoluene	40	32.3	81	
3,4-Dinitrotoluene	20	19.5	98	
4-Amino-2,6-dinitrotoluene	40	40.6	101	
HMX	40	43	108	
Nitrobenzene	40	39.1	98	
PETN	40	36.5	91	
RDX	40	37.7	94	
Tetryl	40	25.3	63	
m-Dinitrobenzene	40	41.4	103	
m-Nitrotoluene	40	38.1	95	
o-Nitrotoluene	40	37.6	94	
p-Nitrotoluene	40	37.2	93	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,  
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

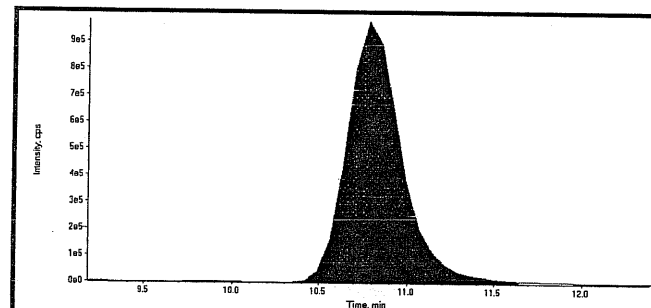
# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

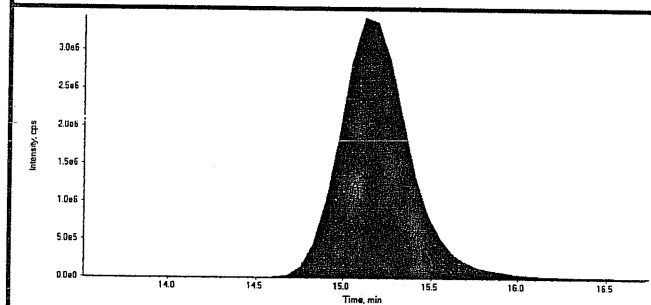
Printed: 27/03/2010 1:31:00 PM  
LCMSMS#3

Data File	EXP0322047.wiff	Acquisition Date	3/23/2010 12:55:41 PM
Sample Name	WXX100322-57CRI	Acquisition Method	8321_pntx.dam
Batch Dilution Analyst	1 LER	Result Table	032210.rdb
Procedure Code	LCMSEXP_C	Sample Type	Quality Control



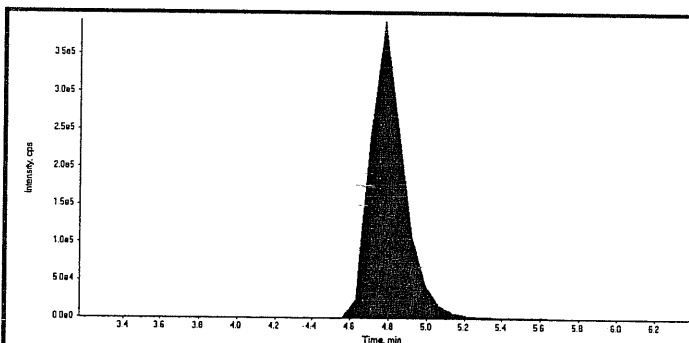
Compound Name:	13-Dinitrobenzene-d4 (172.1/46.1 amu)
Expected RT:	10.80
Actual RT:	10.80
Area Counts:	21000000.00
Manual Modification	No
Amount:	500.00(ng/mL)

Please refer to Form 8 for a list of Internal Standard Recoveries

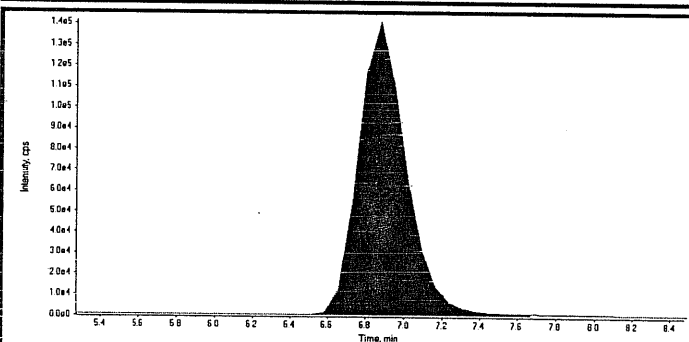


Compound Name:	26-Dinitrotoluene-d3 (185.0/155.0 amu)
Expected RT:	15.10
Actual RT:	15.10
Area Counts:	95100000.00
Manual Modification	Yes
Amount:	500.00(ng/mL)

Please refer to Form 8 for a list of Internal Standard Recoveries



Compound Name:	HMX (341.2/46.0 amu)
Expected RT:	4.77
Actual RT:	4.77
Area Counts:	4.74e+006
Manual Modification	No
Amount:	43.0 (ng/mL)
% Accuracy:	108.00



Compound Name:	RDX (267.0/46.1 amu)
Expected RT:	6.87
Actual RT:	6.87
Area Counts:	2.42e+006
Manual Modification	No
Amount:	37.7 (ng/mL)
% Accuracy:	94.30

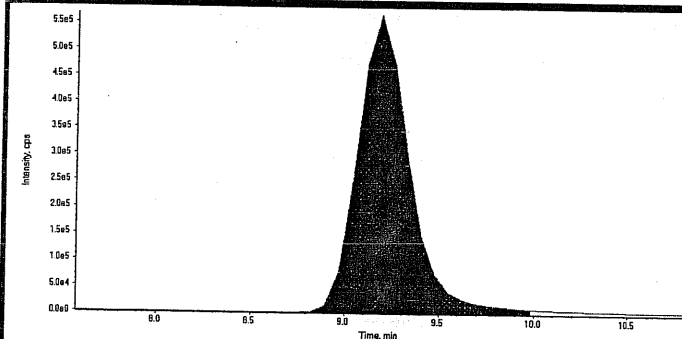
*LER*  
*3/28/10*  
*done 03/26/10*



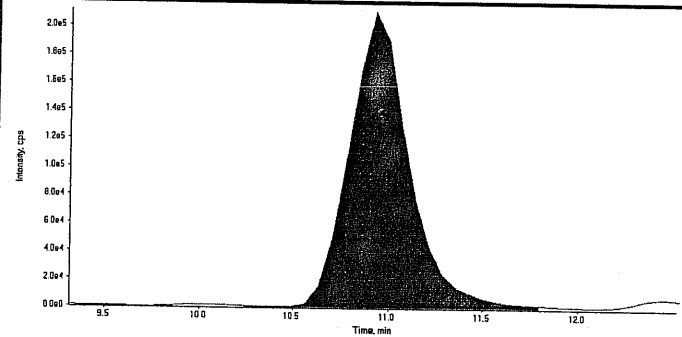
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 27/03/2010 1:31:00 PM  
LCMSMS#3

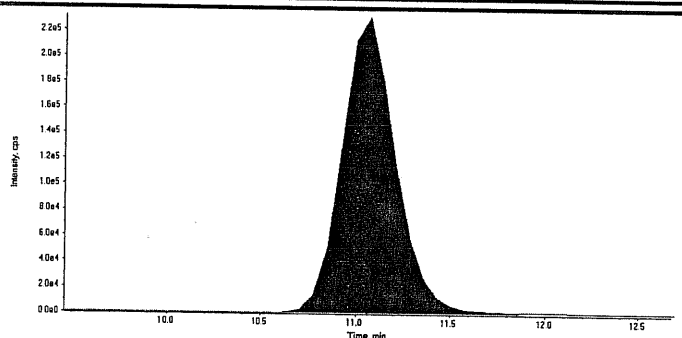
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Sample Name	WXX100322-57CRI	Acquisition Method	8321_pntx.dam
Batch Dilution Analyst	1 LER	Result Table	032210.rdb
Procedure Code	LCMSEXP_C	Sample Type	Quality Control



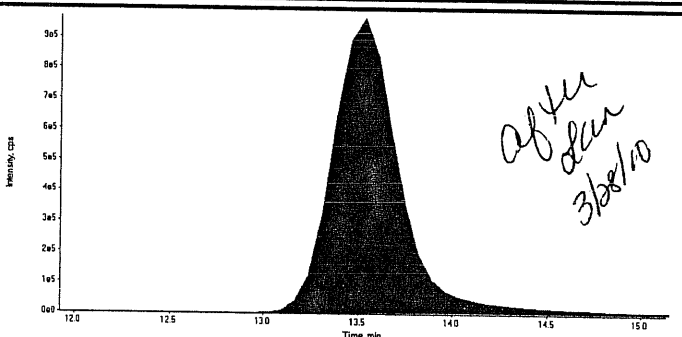
Compound Name:	135-Trinitrobenzene (213.0/182.8 amu)
Expected RT:	9.19
Actual RT:	9.19
Area Counts:	1.09e+007
Manual Modification	No
Amount:	39.9 (ng/mL)
% Accuracy:	99.70



Compound Name:	13-Dinitrobenzene (168.0/137.9 amu)
Expected RT:	10.9
Actual RT:	10.9
Area Counts:	4.62e+006
Manual Modification	No
Amount:	41.4 (ng/mL)
% Accuracy:	103.00



Compound Name:	Tetryl (241.0/180.8 amu)
Expected RT:	11.1
Actual RT:	11.1
Area Counts:	4.54e+006
Manual Modification	No
Amount:	25.3 (ng/mL)
% Accuracy:	63.30



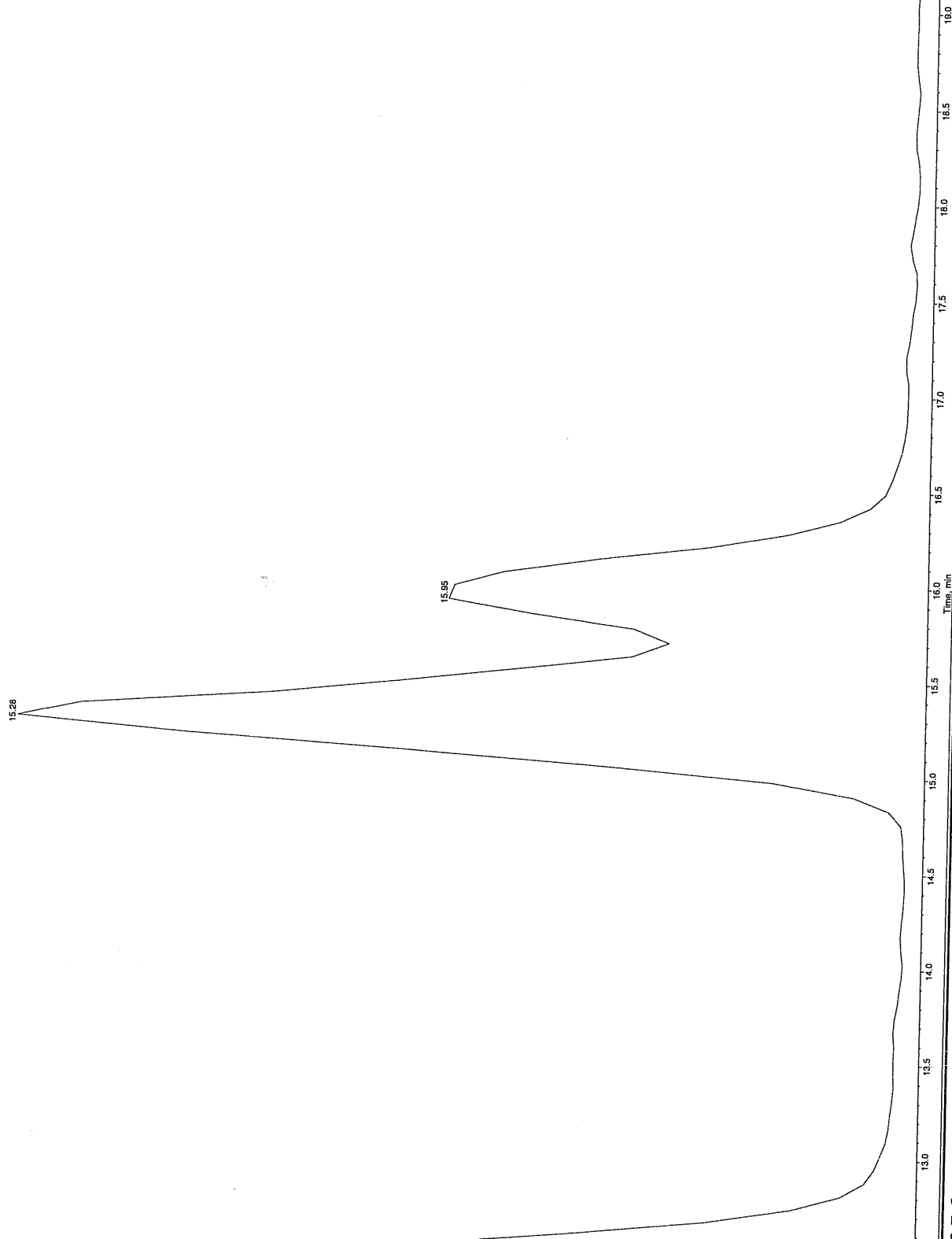
Compound Name:	246-Trinitrotoluene (227.1/209.8 amu)
Expected RT:	13.5
Actual RT:	13.5
Area Counts:	2.41e+007
Manual Modification	Yes
Amount:	37.0 (ng/mL)
% Accuracy:	92.40

Before Jan 3/28/10

File Name: \\XX1032257\CR1 Sample ID: TILER File: EXP0322047.mlf  
 File Name: \\XX1032257\CR1 Sample ID: TILER File: EXP0322047.mlf  
 File Name: \\XX1032257\CR1 Sample ID: TILER File: EXP0322047.mlf

ie Index: 1  
 ie Type: OC  
 Integration: 40.0 ng/mL  
 Date: 3/23/2010  
 Time: 12:55:41 PM  
 ied: No

Intensity, cps  
 3.2e5  
 3.1e5  
 3.0e5  
 2.9e5  
 2.8e5  
 2.7e5  
 2.6e5  
 2.5e5  
 2.4e5  
 2.3e5  
 2.2e5  
 2.1e5  
 2.0e5  
 1.9e5  
 1.8e5  
 1.7e5  
 1.6e5  
 1.5e5  
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 1.3e5  
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 0.0

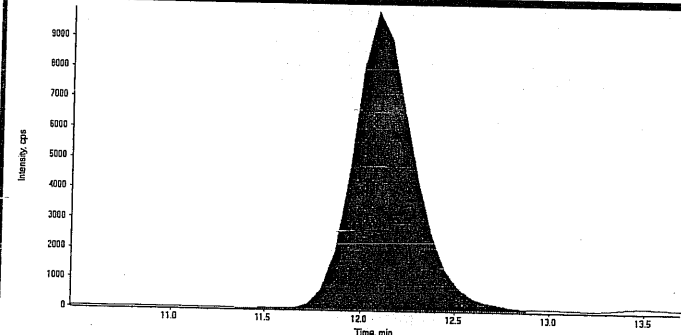


L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#3

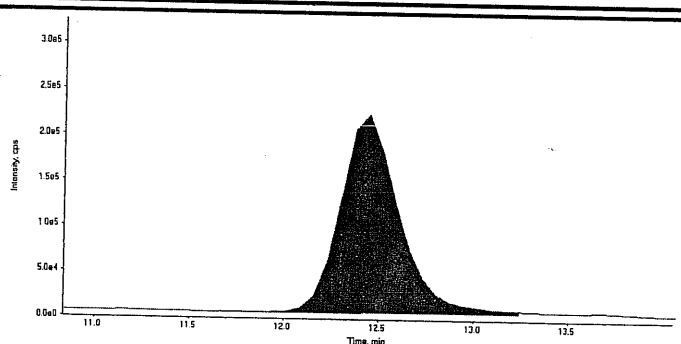
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 27/03/2010 1:31:00 PM  
LCMSMS#3

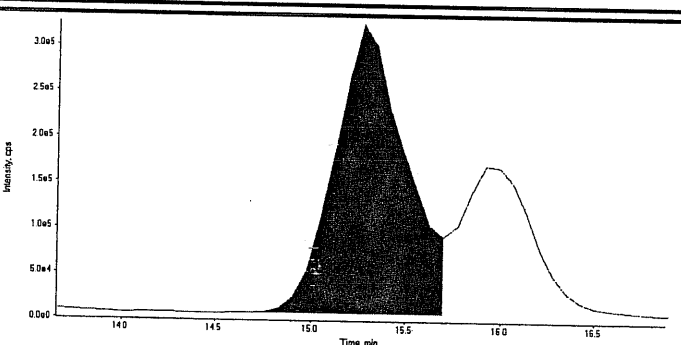
Data File	EXP0322047.wiff	Acquisition Date	3/23/2010 12:55:41 PM
Sample Name	WXX100322-57CRI	Acquisition Method	8321_pntx.dam
Batch Dilution Analyst	1 LER	Result Table	032210.rdb
Procedure Code	LCMSEXP_C	Sample Type	Quality Control



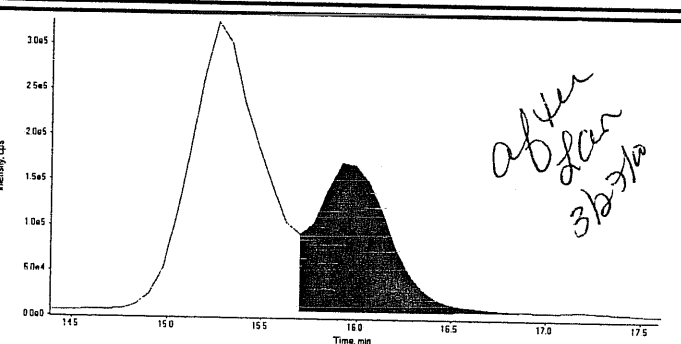
Compound Name:	Nitrobenzene (123.0/46.0 amu)
Expected RT:	12.1
Actual RT:	12.1
Area Counts:	2.22e+005
Manual Modification	No
Amount:	39.1 (ng/mL)
% Accuracy:	97.70



Compound Name:	34-dinitrotoluene (182.0/46.0 amu)
Expected RT:	12.4
Actual RT:	12.4
Area Counts:	4.80e+006
Manual Modification	No
Amount:	19.5 (ng/mL)
% Accuracy:	97.50



Compound Name:	26-dinitrotoluene (182.0/46.0 amu)
Expected RT:	15.3
Actual RT:	15.3
Area Counts:	8.48e+006
Manual Modification	No
Amount:	45.8 (ng/mL)
% Accuracy:	115.00



Compound Name:	24-dinitrotoluene (182.0/46.0 amu)
Expected RT:	16.0
Actual RT:	15.9
Area Counts:	4.45e+006
Manual Modification	Yes
Amount:	40.0 (ng/mL)
% Accuracy:	100.00

Before Lca 3/28/10

File Name: "WXX10032257CR1" Sample ID: "111157" File: "EXP0322047.wif"  
 Sample Name: "2-Amino-4,6-dimethyloluan" Mass(es): "157.0760.0 and  
 Internal: "LCMS-EXP\_C" Annotation: "

File Index: 1

File Type: OC

Retention Time: 14.6 min

Concentration: 40.0 ng/mL

Date: 3/23/2010

Time: 12:55:41 PM

Method: MS

Algorithm: InletQuan - TOA

Peak Height: 1000.00 cps

Peak Width: 0.00 sec

Integration: 3 points

Integration: 30.0 sec

Integration: 14.6 min

Integration: 6.604

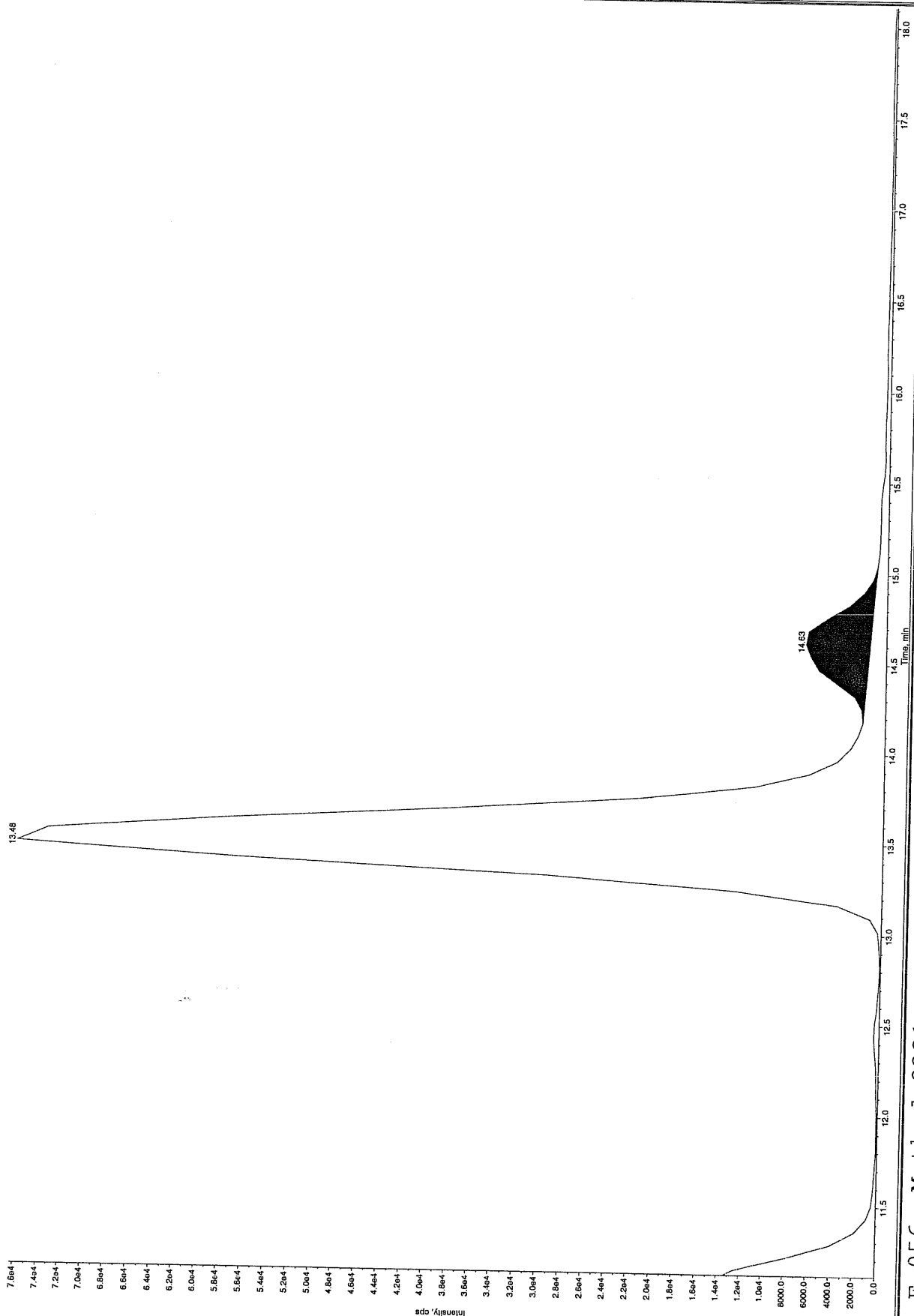
Type: Valley

Retention Time: 14.6 min

Counts: 1.35e+005

Time: 14.2 min

Time: 15.0 min



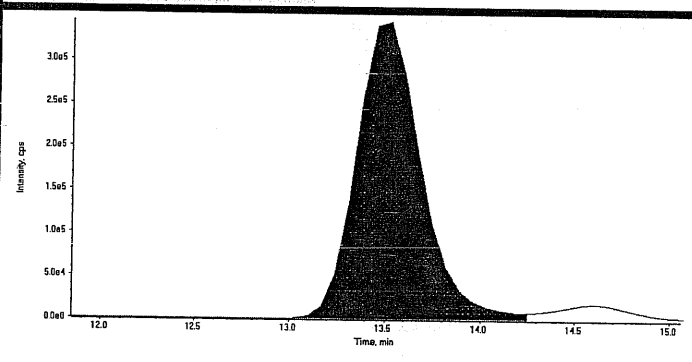
L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#3

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

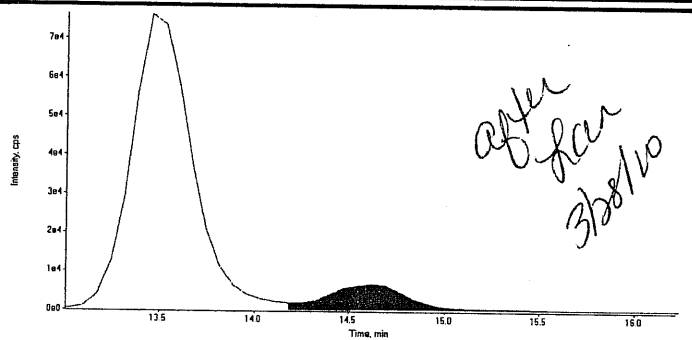
Printed: 27/03/2010 1:31:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0322047.wiff	<b>Acquisition Date</b>	3/23/2010 12:55:41 PM
<b>Sample Name</b>	WXX100322-57CRI	<b>Acquisition Method</b>	8321_pntx.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	032210.rdb
<b>Procedure Code</b>	LCMSEXP_C	<b>Sample Type</b>	Quality Control

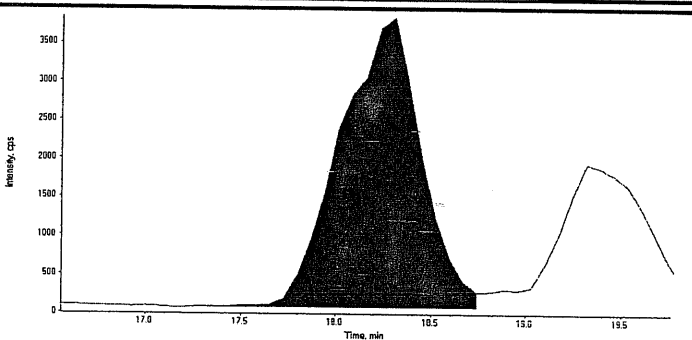
  

	<b>Compound Name:</b>	4-Amino-26-dinitrotoluene (197.0/167.0 amu)
	Expected RT:	13.5
	Actual RT:	13.5
	Area Counts:	8.15e+006
	Manual Modification	No
	Amount:	40.6 (ng/mL)
	% Accuracy:	101.00

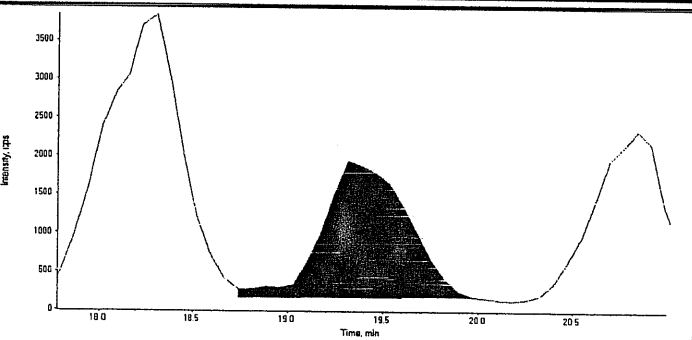
  

	<b>Compound Name:</b>	2-Amino-46-dinitrotoluene (197.0/180.0 amu)
	Expected RT:	14.6
	Actual RT:	14.6
	Area Counts:	2.05e+005
	Manual Modification	Yes
	Amount:	32.3 (ng/mL)
	% Accuracy:	80.80

	<b>Compound Name:</b>	2-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	18.2
	Actual RT:	18.3
	Area Counts:	1.12e+005
	Manual Modification	No
	Amount:	37.6 (ng/mL)
	% Accuracy:	94.00

	<b>Compound Name:</b>	4-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	19.4
	Actual RT:	19.3
	Area Counts:	5.52e+004
	Manual Modification	No
	Amount:	37.2 (ng/mL)
	% Accuracy:	92.90

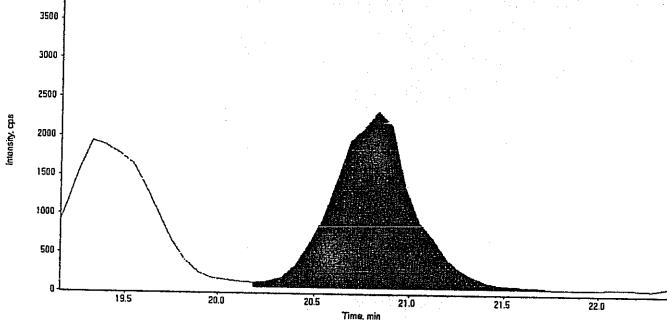


GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

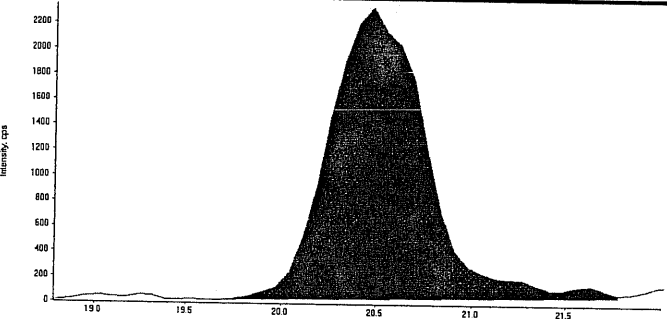
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LCMSMS#3

<b>Data File</b>	EXP0322047.wiff	<b>Acquisition Date</b>	3/23/2010 12:55:41 PM
<b>Sample Name</b>	WXX100322-57CRI	<b>Acquisition Method</b>	8321_pntx.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	032210.rdb
<b>Procedure Code</b>	LCMSEXP_C	<b>Sample Type</b>	Quality Control

	<b>Compound Name:</b>	3-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	20.8
	Actual RT:	20.8
	Area Counts:	6.73e+004
	Manual Modification	No
	Amount:	38.1 (ng/mL)
	% Accuracy:	95.40

	<b>Compound Name:</b>	PETN (361.1/62.0 amu)
	Expected RT:	20.4
	Actual RT:	20.5
	Area Counts:	8.28e+004
	Manual Modification	No
	Amount:	36.5 (ng/mL)
	% Accuracy:	91.20

GRAND MEAN AVERAGE

Vendor: Restek  
 Date of Analysis 03/23/10  
 Time of Injection 1255  
 Standard Number WXX100322-57CRI  
 Data File EXP0322047a

HMX	108.0	✓
RDX	94.3	✓
135-Trinitrobenzene	99.7	
13-Dinitrobenzene	103.0	
Tetryl	63.3	✓
246-Trinitrotoluene	92.4	
Nitrobenzene	97.7	
34-dinitrotoluene	97.5	
26-dinitrotoluene	115.0	
24-dinitrotoluene	100.0	
4-Amino-26-dinitrotoluene	101.0	
2-Amino-46-dinitrotoluene	80.8	
2-Nitrotoluene	94.0	
4-Nitrotoluene	92.9	
3-Nitrotoluene	95.4	
PETN	91.2	

TOTAL

1526.2

*Ann 03/28/10*

AVERAGE

✓ 95.4

ICV Limits 85-115%

CRI Limits 70-130%

CCV Limits 85-115%

No single analyte > +/- 60%

*LCR 3/28/10*

7A

Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1758

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0322058.wiff

Analysis Date: 23-MAR-10 17:46

LCMSMS ID: 1189

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	600	518	86	
2,4,6-Trinitrotoluene	600	596	99	
2,4-Dinitrotoluene	600	603	101	
2,6-Dinitrotoluene	600	553	92	
2-Amino-4,6-dinitrotoluene	600	600	100	
3,4-Dinitrotoluene	300	280	93	
4-Amino-2,6-dinitrotoluene	600	572	95	
HMX	600	538	90	
Nitrobenzene	600	619	103	
PETN	600	653	109	
RDX	600	602	100	
Tetryl	600	588	98	
m-Dinitrobenzene	600	566	94	
m-Nitrotoluene	600	612	102	
o-Nitrotoluene	600	598	100	
p-Nitrotoluene	600	622	104	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,  
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

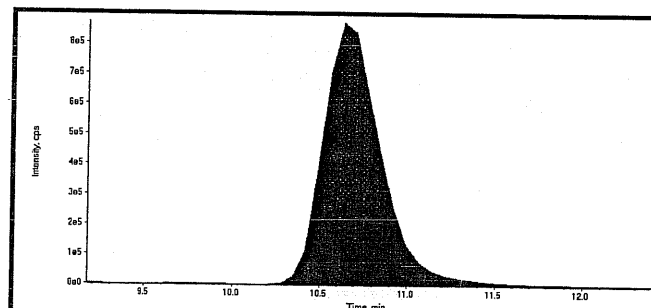
# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

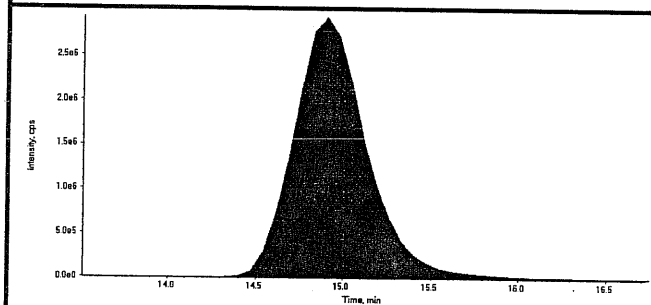
Printed: 27/03/2010 1:31:00 PM  
LCMSMS#3

Data File	EXP0322058.wiff	Acquisition Date	3/23/2010 5:46:14 PM
Sample Name	WXX100322-56CCV	Acquisition Method	8321_pntx.dam
Batch Dilution Analyst	1 LER	Result Table	032210.rdb
Procedure Code	LCMSEXP_C	Sample Type	Quality Control



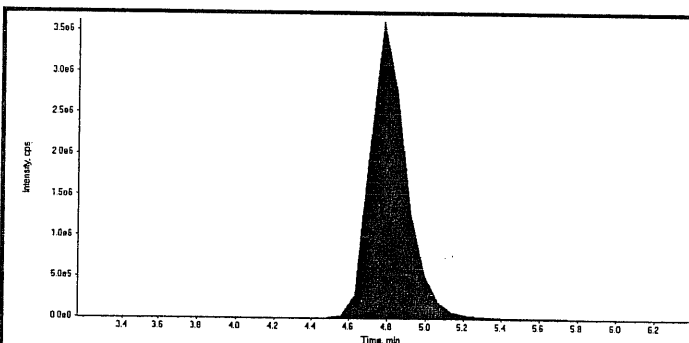
Compound Name:	13-Dinitrobenzene-d4 (172.1/46.1 amu)
Expected RT:	10.80
Actual RT:	10.60
Area Counts:	20200000.00
Manual Modification	No
Amount:	500.00(ng/mL)

Please refer to Form 8 for a list of Internal Standard Recoveries

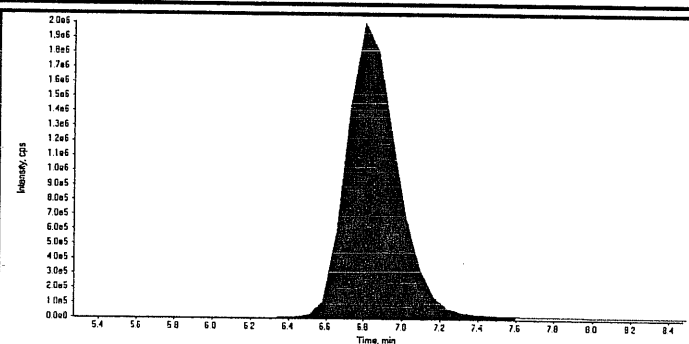


Compound Name:	26-Dinitrotoluene-d3 (185.0/155.0 amu)
Expected RT:	15.10
Actual RT:	14.90
Area Counts:	86300000.00
Manual Modification	No
Amount:	500.00(ng/mL)

Please refer to Form 8 for a list of Internal Standard Recoveries



Compound Name:	HMX (341.2/46.0 amu)
Expected RT:	4.77
Actual RT:	4.77
Area Counts:	4.73e+007
Manual Modification	No
Amount:	538. (ng/mL)
% Accuracy:	89.70



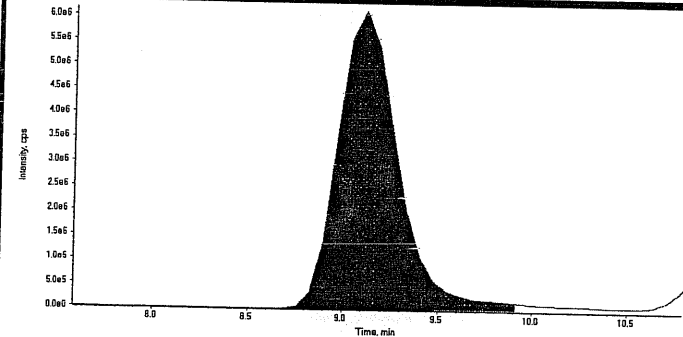
Compound Name:	RDX (267.0/46.1 amu)
Expected RT:	6.87
Actual RT:	6.80
Area Counts:	3.73e+007
Manual Modification	No
Amount:	602. (ng/mL)
% Accuracy:	100.00

*LER*  
*3/28/10*  
*atmlc 03/28/10*

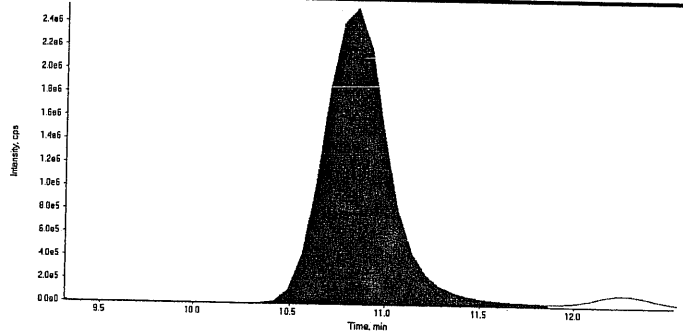
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 27/03/2010 1:31:00 PM  
LCMSMS#3

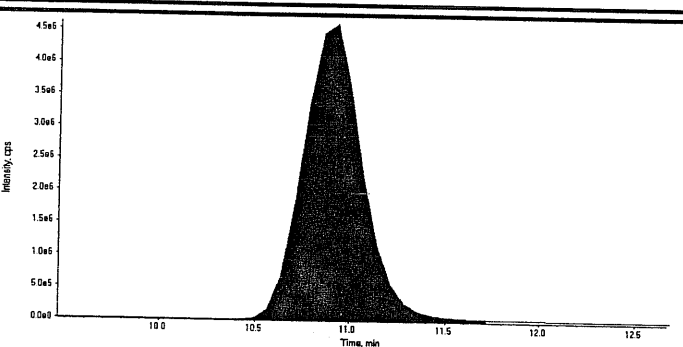
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Sample Name	WXX100322-56CCV	Acquisition Method	8321_pntx.dam
Batch Dilution Analyst	1 LER	Result Table	032210.rdb
Procedure Code	LCMSEXP_C	Sample Type	Quality Control



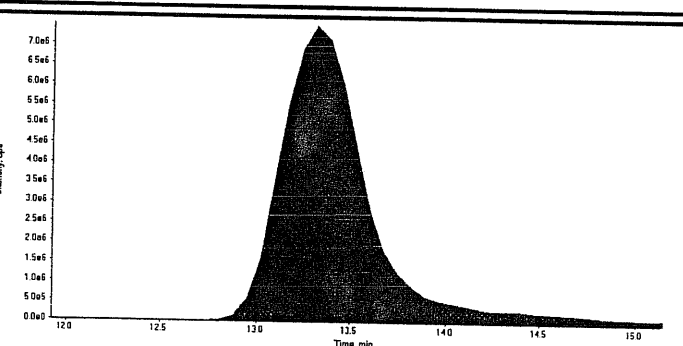
Compound Name:	135-Trinitrobenzene (213.0/182.8 amu)
Expected RT:	9.19
Actual RT:	9.12
Area Counts:	1.36e+008
Manual Modification	No
Amount:	518. (ng/mL)
% Accuracy:	86.30



Compound Name:	13-Dinitrobenzene (168.0/137.9 amu)
Expected RT:	10.9
Actual RT:	10.9
Area Counts:	6.08e+007
Manual Modification	No
Amount:	566. (ng/mL)
% Accuracy:	94.30



Compound Name:	Tetryl (241.0/180.8 amu)
Expected RT:	11.1
Actual RT:	10.9
Area Counts:	1.02e+008
Manual Modification	No
Amount:	588. (ng/mL)
% Accuracy:	98.00



Compound Name:	246-Trinitrotoluene (227.1/209.8 amu)
Expected RT:	13.5
Actual RT:	13.3
Area Counts:	2.49e+008
Manual Modification	No
Amount:	596. (ng/mL)
% Accuracy:	99.30

Before Jan 3/28/10

Sample Name: "WXX100322-56CCV" Sample ID: "111ER" File: "EXP0322058.wml"

ak Name: "24-dinitrotoluene" Mass(es): "192.046.0 amu"

ie Name: "LCMSXP\_C" Annotation:

ie Type: 1 QC

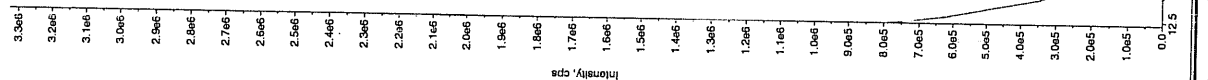
introduction: 600. ng/mL

iluted Conc: 0.00 ng/mL

Date: 3/23/2010

Time: 5:46:14 PM

ited: No

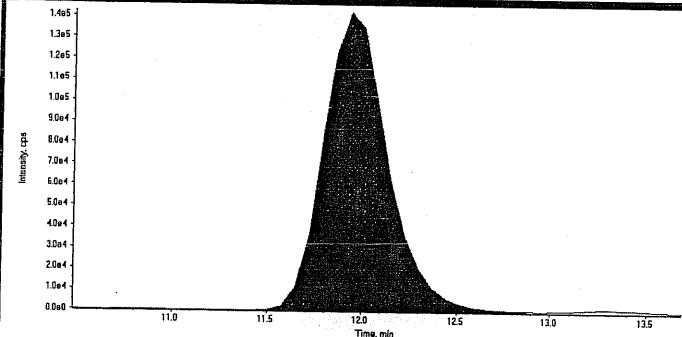


L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#3

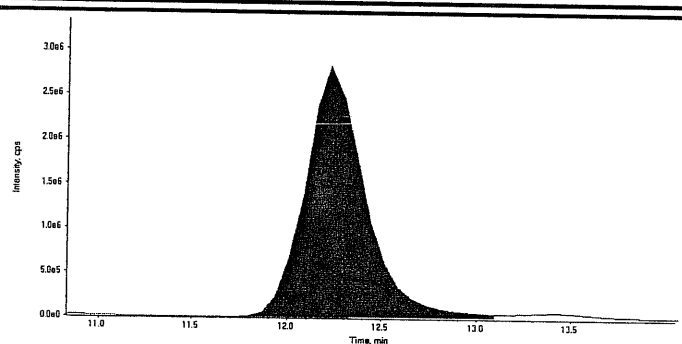
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 27/03/2010 1:31:00 PM  
LCMSMS#3

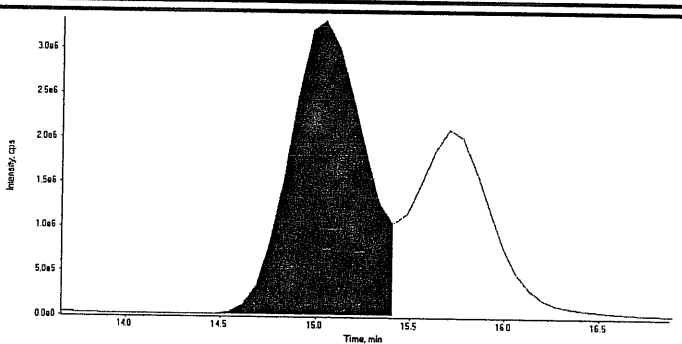
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Sample Name	WXX100322-56CCV	Acquisition Method	8321_pntx.dam
Batch Dilution Analyst	1 LER	Result Table	032210.rdb
Procedure Code	LCMSEXP_C	Sample Type	Quality Control



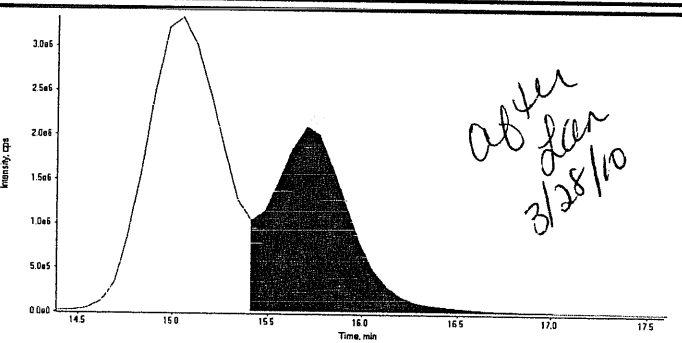
Compound Name:	Nitrobenzene (123.0/46.0 amu)
Expected RT:	12.1
Actual RT:	11.9
Area Counts:	3.39e+006
Manual Modification	No
Amount:	619. (ng/mL)
% Accuracy:	103.00



Compound Name:	34-dinitrotoluene (182.0/46.0 amu)
Expected RT:	12.4
Actual RT:	12.2
Area Counts:	6.25e+007
Manual Modification	No
Amount:	280. (ng/mL)
% Accuracy:	93.40



Compound Name:	26-dinitrotoluene (182.0/46.0 amu)
Expected RT:	15.3
Actual RT:	15.0
Area Counts:	9.28e+007
Manual Modification	No
Amount:	553. (ng/mL)
% Accuracy:	92.10



Compound Name:	24-dinitrotoluene (182.0/46.0 amu)
Expected RT:	16.0
Actual RT:	15.7
Area Counts:	6.09e+007
Manual Modification	Yes
Amount:	603. (ng/mL)
% Accuracy:	101.00

Before Jan 3/28/10

File Name: "WXX100322-560V" Sample ID: "JULIER" File: "EXP0322058.mpl"

Sample Name: "2-Amino-46-dinitrotoluene" Mass(es): "197.0/180.0 amu"

Method: "LCMS-EXP-C" Annotation: "

Index: 1  
 Date: 3/23/2010  
 Time: 5:46:14 PM  
 Inj: No

Concentration: 600 ng/mL  
 Inj Volume: 0.00 ng/mL  
 Inj Rate: 0.00 ng/mL

Intensity, cps

1.02e5  
 1.00e5  
 9.80e4  
 9.60e4  
 9.40e4  
 9.20e4  
 9.00e4  
 8.80e4  
 8.60e4  
 8.40e4  
 8.20e4  
 8.00e4  
 7.80e4  
 7.60e4  
 7.40e4  
 7.20e4  
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 5.80e4  
 5.60e4  
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 5.20e4  
 5.00e4  
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 2.40e4  
 2.20e4  
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 1.80e4  
 1.60e4  
 1.40e4  
 1.20e4  
 1.00e4  
 8.00e3  
 6.00e3  
 4.00e3  
 2.00e3

Time, min

11.5 12.0 12.5 13.0 13.5 14.0 14.5 15.0 15.5 16.0 16.5 17.0 17.5 18.0

13.29

14.35

IL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#3

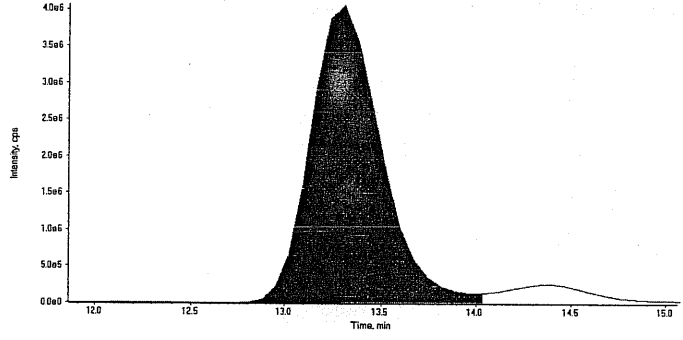


GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

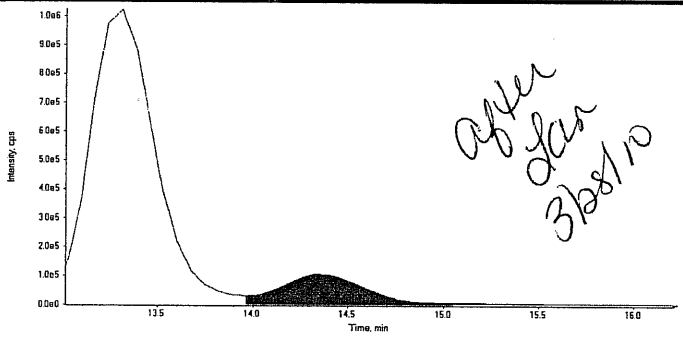
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LCMSMS#3

<b>Data File</b>	EXP0322058.wiff	<b>Acquisition Date</b>	3/23/2010 5:46:14 PM
<b>Sample Name</b>	WXX100322-56CCV	<b>Acquisition Method</b>	8321_pntx.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	032210.rdb
<b>Procedure Code</b>	LCMSEXP_C	<b>Sample Type</b>	Quality Control

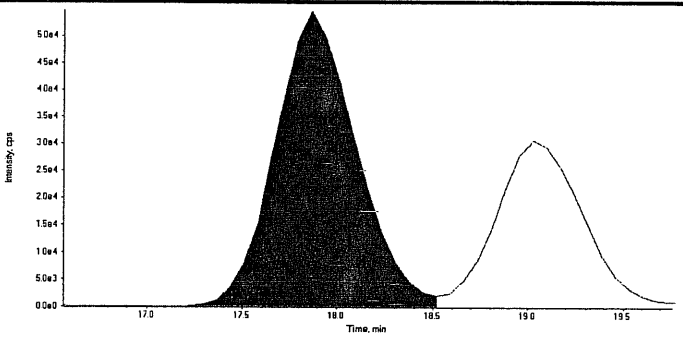
  

	<b>Compound Name:</b>	4-Amino-26-dinitrotoluene (197.0/167.0 amu)
	Expected RT:	13.5
	Actual RT:	13.3
	Area Counts:	1.04e+008
	Manual Modification	No
	Amount:	572. (ng/mL)
	% Accuracy:	95.30

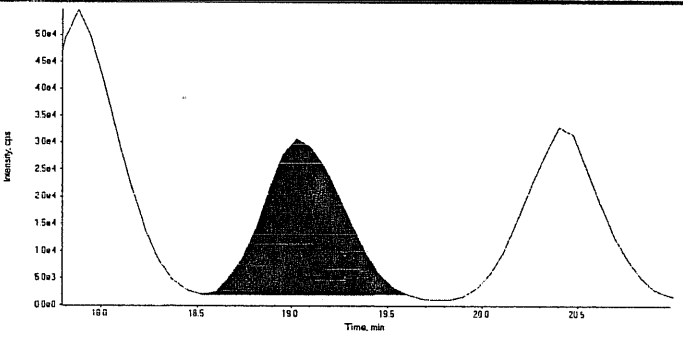
  

	<b>Compound Name:</b>	2-Amino-46-dinitrotoluene (197.0/180.0 amu)
	Expected RT:	14.6
	Actual RT:	14.4
	Area Counts:	3.45e+006
	Manual Modification	Yes
	Amount:	600. (ng/mL)
	% Accuracy:	99.90

	<b>Compound Name:</b>	2-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	18.2
	Actual RT:	17.9
	Area Counts:	1.61e+006
	Manual Modification	No
	Amount:	598. (ng/mL)
	% Accuracy:	99.70

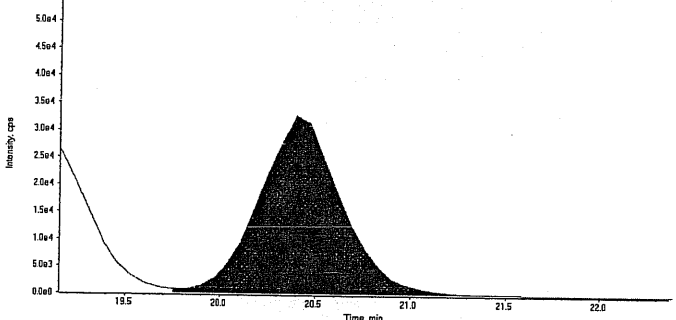
	<b>Compound Name:</b>	4-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	19.4
	Actual RT:	19.0
	Area Counts:	8.38e+005
	Manual Modification	No
	Amount:	622. (ng/mL)
	% Accuracy:	104.00

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

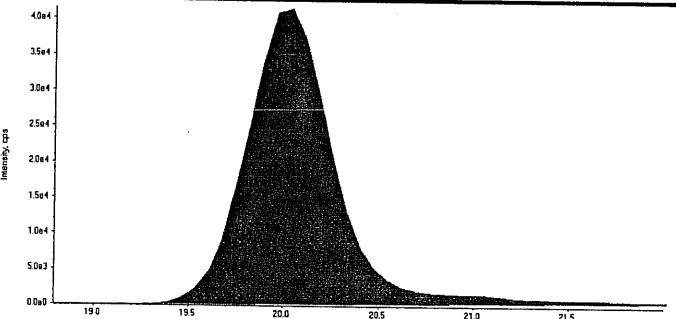
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LCMSMS#3

<b>Data File</b>	EXP0322058.wiff	<b>Acquisition Date</b>	3/23/2010 5:46:14 PM
<b>Sample Name</b>	WXX100322-56CCV	<b>Acquisition Method</b>	8321_pntx.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	032210.rdb
<b>Procedure Code</b>	LCMSEXP_C	<b>Sample Type</b>	Quality Control

	<b>Compound Name:</b>	3-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	20.8
	Actual RT:	20.4
	Area Counts:	9.79e+005
	Manual Modification	No
	Amount:	612. (ng/mL)
	% Accuracy:	102.00

	<b>Compound Name:</b>	PETN (361.1/62.0 amu)
	Expected RT:	20.4
	Actual RT:	20.0
	Area Counts:	1.34e+006
	Manual Modification	No
	Amount:	653. (ng/mL)
	% Accuracy:	109.00

GRAND MEAN AVERAGE

Vendor: Restek  
 Date of Analysis 03/23/10  
 Time of Injection 1746  
 Standard Number WXX100322-56CCV  
 Data File EXP0322058a

HMX	89.7
RDX	100.0
135-Trinitrobenzene	86.3
13-Dinitrobenzene	94.3
Tetryl	98.0
246-Trinitrotoluene	99.3
Nitrobenzene	103.0
34-dinitrotoluene	93.4
26-dinitrotoluene	92.1
24-dinitrotoluene	101.0
4-Amino-26-dinitrotoluene	95.3
2-Amino-46-dinitrotoluene	99.9
2-Nitrotoluene	99.7
4-Nitrotoluene	104.0
3-Nitrotoluene	102.0
PETN	109.0

TOTAL

1567.0

*HPM 03/28/10*

AVERAGE

97.9

ICV Limits 85-115%

CRI Limits 70-130%

CCV Limits 85-115%

No single analyte > +/- 60%

*Lcn 3/28/10*

7B  
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1758

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0322060.wiff

Analysis Date: 23-MAR-10 18:39

LCMSMS ID: 1189

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,6-Dinitrotoluene	40	41.6	104	
2-Amino-4,6-dinitrotoluene	40	39.9	100	
3,4-Dinitrotoluene	20	19.5	98	
4-Amino-2,6-dinitrotoluene	40	42	105	
HMX	40	45.2	113	
Nitrobenzene	40	40.2	101	
PETN	40	41.9	105	
RDX	40	41.4	104	
Tetryl	40	18.5	46	*
m-Dinitrobenzene	40	42.9	107	
m-Nitrotoluene	40	40.1	100	
o-Nitrotoluene	40	39.7	99	
p-Nitrotoluene	40	37.4	94	
1,3,5-Trinitrobenzene	40	37.7	94	
2,4,6-Trinitrotoluene	40	38.5	96	
2,4-Dinitrotoluene	40	47	118	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,  
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

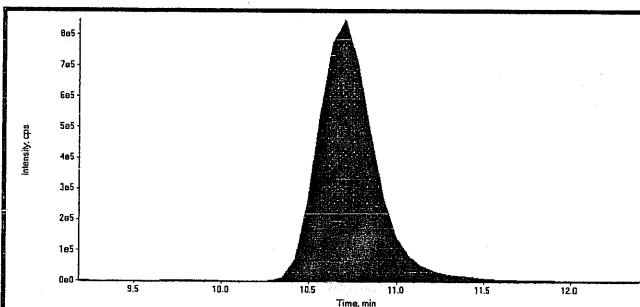
# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

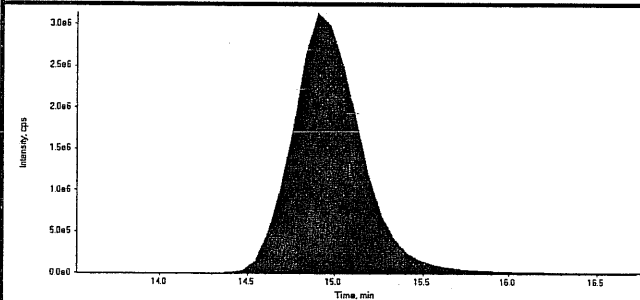
Printed: 27/03/2010 1:31:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0322060.wiff	<b>Acquisition Date</b>	3/23/2010 6:39:04 PM
<b>Sample Name</b>	WXX100322-57CRI	<b>Acquisition Method</b>	8321_pntx.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	032210.rdb
<b>Procedure Code</b>	LCMSEXP_C	<b>Sample Type</b>	Quality Control



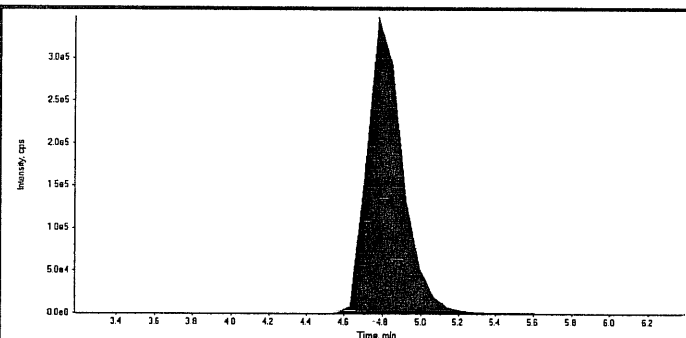
<b>Compound Name:</b>	13-Dinitrobenzene-d4 (172.1/46.1 amu)
Expected RT:	10.80
Actual RT:	10.70
Area Counts:	18900000.00
Manual Modification	No
Amount:	500.00(ng/mL)

Please refer to Form 8 for a list of Internal Standard Recoveries

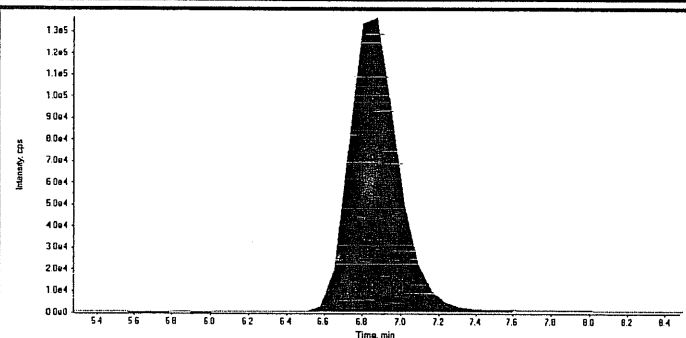


<b>Compound Name:</b>	26-Dinitrotoluene-d3 (185.0/155.0 amu)
Expected RT:	15.10
Actual RT:	14.90
Area Counts:	85500000.00
Manual Modification	No
Amount:	500.00(ng/mL)

Please refer to Form 8 for a list of Internal Standard Recoveries



<b>Compound Name:</b>	HMX (341.2/46.0 amu)
Expected RT:	4.77
Actual RT:	4.77
Area Counts:	4.46e+006
Manual Modification	No
Amount:	45.2 (ng/mL)
% Accuracy:	113.00



<b>Compound Name:</b>	RDX (267.0/46.1 amu)
Expected RT:	6.87
Actual RT:	6.87
Area Counts:	2.40e+006
Manual Modification	No
Amount:	41.4 (ng/mL)
% Accuracy:	104.00

*LER 3/28/10* *WXX100322-57CRI*

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 27/03/2010 1:31:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0322060.wiff	<b>Acquisition Date</b>	3/23/2010 6:39:04 PM
<b>Sample Name</b>	WXX100322-57CRI	<b>Acquisition Method</b>	8321_pntx.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	032210.rdb
<b>Procedure Code</b>	LCMSEXP_C	<b>Sample Type</b>	Quality Control

	<b>Compound Name:</b>	135-Trinitrobenzene (213.0/182.8 amu)
	Expected RT:	9.19
	Actual RT:	9.12
	Area Counts:	9.27e+006
	Manual Modification	No
	Amount:	37.7 (ng/mL)
	% Accuracy:	94.30

	<b>Compound Name:</b>	13-Dinitrobenzene (168.0/137.9 amu)
	Expected RT:	10.9
	Actual RT:	10.9
	Area Counts:	4.32e+006
	Manual Modification	No
	Amount:	42.9 (ng/mL)
	% Accuracy:	107.00

	<b>Compound Name:</b>	Tetryl (241.0/180.8 amu)
	Expected RT:	11.1
	Actual RT:	10.9
	Area Counts:	2.99e+006
	Manual Modification	No
	Amount:	18.5 (ng/mL)
	% Accuracy:	46.20

	<b>Compound Name:</b>	246-Trinitrotoiuene (227.1/209.8 amu)
	Expected RT:	13.5
	Actual RT:	13.3
	Area Counts:	2.24e+007
	Manual Modification	No
	Amount:	38.5 (ng/mL)
	% Accuracy:	96.30

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 27/03/2010 1:31:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0322060.wiff	<b>Acquisition Date</b>	3/23/2010 6:39:04 PM
<b>Sample Name</b>	WXX100322-57CRI	<b>Acquisition Method</b>	8321_pntx.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	032210.rdb
<b>Procedure Code</b>	LCMSEXP_C	<b>Sample Type</b>	Quality Control

	<b>Compound Name:</b>	Nitrobenzene (123.0/46.0 amu)
	Expected RT:	12.1
	Actual RT:	11.9
	Area Counts:	2.06e+005
	Manual Modification	No
	Amount:	40.2 (ng/mL)
	% Accuracy:	101.00

	<b>Compound Name:</b>	34-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	12.4
	Actual RT:	12.2
	Area Counts:	4.32e+006
	Manual Modification	No
	Amount:	19.5 (ng/mL)
	% Accuracy:	97.60

	<b>Compound Name:</b>	26-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	15.3
	Actual RT:	15.0
	Area Counts:	6.92e+006
	Manual Modification	No
	Amount:	41.6 (ng/mL)
	% Accuracy:	104.00

	<b>Compound Name:</b>	24-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	16.0
	Actual RT:	15.7
	Area Counts:	4.71e+006
	Manual Modification	No
	Amount:	47.0 (ng/mL)
	% Accuracy:	118.00





GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 27/03/2010 1:31:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0322060.wiff	<b>Acquisition Date</b>	3/23/2010 6:39:04 PM
<b>Sample Name</b>	WXX100322-57CRI	<b>Acquisition Method</b>	8321_pntx.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	032210.rdb
<b>Procedure Code</b>	LCMSEXP_C	<b>Sample Type</b>	Quality Control

	<b>Compound Name:</b>	4-Amino-26-dinitrotoluene (197.0/167.0 amu)
	Expected RT:	13.5
	Actual RT:	13.3
	Area Counts:	7.59e+006
	Manual Modification	No
	Amount:	42.0 (ng/mL)
	% Accuracy:	105.00

	<b>Compound Name:</b>	2-Amino-46-dinitrotoluene (197.0/180.0 amu)
	Expected RT:	14.6
	Actual RT:	14.4
	Area Counts:	2.27e+005
	Manual Modification	Yes
	Amount:	39.9 (ng/mL)
	% Accuracy:	99.70

	<b>Compound Name:</b>	2-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	18.2
	Actual RT:	17.9
	Area Counts:	1.06e+005
	Manual Modification	No
	Amount:	39.7 (ng/mL)
	% Accuracy:	99.30

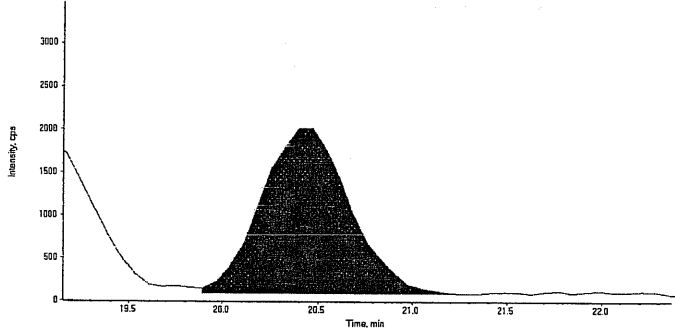
	<b>Compound Name:</b>	4-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	19.4
	Actual RT:	19.0
	Area Counts:	4.99e+004
	Manual Modification	No
	Amount:	37.4 (ng/mL)
	% Accuracy:	93.50

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

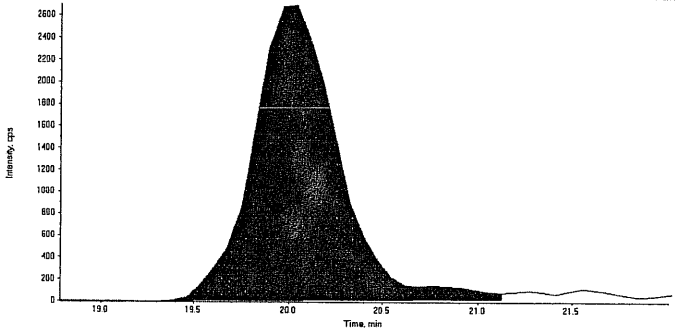
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LCMSMS#3

<b>Data File</b>	EXP0322060.wiff	<b>Acquisition Date</b>	3/23/2010 6:39:04 PM
<b>Sample Name</b>	WXX100322-57CRI	<b>Acquisition Method</b>	8321_pntx.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	032210.rdb
<b>Procedure Code</b>	LCMSEXP_C	<b>Sample Type</b>	Quality Control

	<b>Compound Name:</b>	3-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	20.8
	Actual RT:	20.4
	Area Counts:	6.36e+004
	Manual Modification	No
	Amount:	40.1 (ng/mL)
	% Accuracy:	100.00

	<b>Compound Name:</b>	PETN (361.1/62.0 amu)
	Expected RT:	20.4
	Actual RT:	20.0
	Area Counts:	8.56e+004
	Manual Modification	No
	Amount:	41.9 (ng/mL)
	% Accuracy:	105.00

GRAND MEAN AVERAGE

Vendor: Restek  
 Date of Analysis 03/23/10  
 Time of Injection 1839  
 Standard Number WXX100322-57CRI  
 Data File EXP0322060a

HMX	113.0
RDX	104.0
135-Trinitrobenzene	94.3
13-Dinitrobenzene	107.0
Tetryl	46.2
246-Trinitrotoluene	96.3
Nitrobenzene	101.0
34-dinitrotoluene	97.6
26-dinitrotoluene	104.0
24-dinitrotoluene	118.0
4-Amino-26-dinitrotoluene	105.0
2-Amino-46-dinitrotoluene	99.7
2-Nitrotoluene	99.3
4-Nitrotoluene	93.5
3-Nitrotoluene	100.0
PETN	105.0

TOTAL

1583.9

AVERAGE

✓ 99.0

ICV Limits 85-115%

CRI Limits 70-130%

CCV Limits 85-115%

No single analyte > +/- 60%

LCR 3/28/10

7A

Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1758

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0322063.wiff

Analysis Date: 23-MAR-10 19:58

LCMSMS ID: 1189

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
m-Nitrotoluene	600	617	103	
o-Nitrotoluene	600	596	99	
p-Nitrotoluene	600	637	106	
1,3,5-Trinitrobenzene	600	597	100	
2,4,6-Trinitrotoluene	600	582	97	
2,4-Dinitrotoluene	600	601	100	
2,6-Dinitrotoluene	600	547	91	
2-Amino-4,6-dinitrotoluene	600	653	109	
3,4-Dinitrotoluene	300	267	89	
4-Amino-2,6-dinitrotoluene	600	578	96	
HMX	600	633	106	
Nitrobenzene	600	674	112	
PETN	600	643	107	
RDX	600	684	114	
Tetryl	600	652	109	
m-Dinitrobenzene	600	638	106	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,  
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

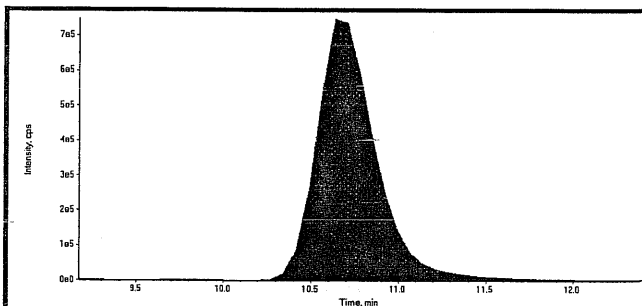
# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

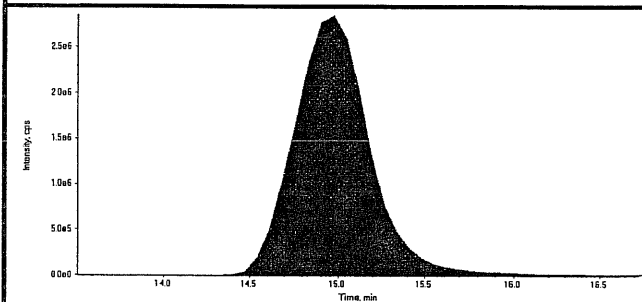
Printed: 27/03/2010 1:31:00 PM  
LCMSMS#3

Data File	EXP0322063.wiff	Acquisition Date	3/23/2010 7:58:15 PM
Sample Name	WXX100322-56CCV	Acquisition Method	8321_pntx.dam
Batch Dilution Analyst	1 LER	Result Table	032210.rdb
Procedure Code	LCMSEXP_C	Sample Type	Quality Control



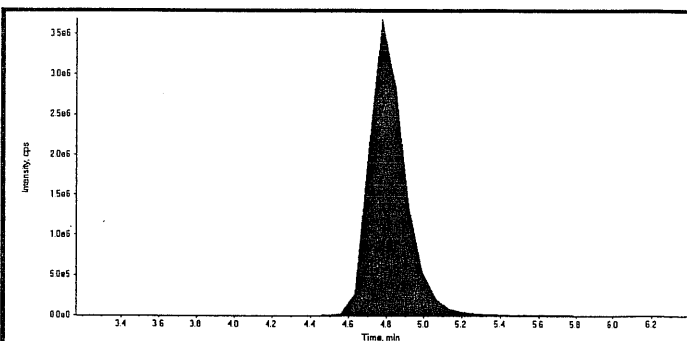
Compound Name:	13-Dinitrobenzene-d4 (172.1/46.1 amu)
Expected RT:	10.80
Actual RT:	10.60
Area Counts:	17600000.00
Manual Modification	No
Amount:	500.00(ng/mL)

Please refer to Form 8 for a list of Internal Standard Recoveries

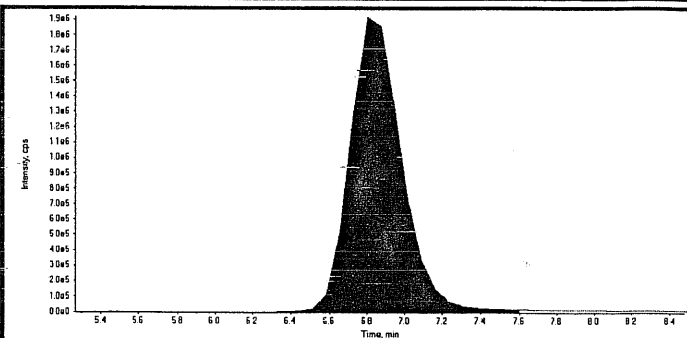


Compound Name:	26-Dinitrotoluene-d3 (185.0/155.0 amu)
Expected RT:	15.10
Actual RT:	15.00
Area Counts:	85300000.00
Manual Modification	No
Amount:	500.00(ng/mL)

Please refer to Form 8 for a list of Internal Standard Recoveries



Compound Name:	HMX (341.2/46.0 amu)
Expected RT:	4.77
Actual RT:	4.77
Area Counts:	4.83e+007
Manual Modification	No
Amount:	633. (ng/mL)
% Accuracy:	106.00



Compound Name:	RDX (267.0/46.1 amu)
Expected RT:	6.87
Actual RT:	6.80
Area Counts:	3.68e+007
Manual Modification	No
Amount:	684. (ng/mL)
% Accuracy:	114.00

*San*  
*3/28/10*  
*thru*  
*03/28/10*

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 27/03/2010 1:31:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0322063.wiff	<b>Acquisition Date</b>	3/23/2010 7:58:15 PM
<b>Sample Name</b>	WXX100322-56CCV	<b>Acquisition Method</b>	8321_pntx.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	032210.rdb
<b>Procedure Code</b>	LCMSEXP_C	<b>Sample Type</b>	Quality Control

	<b>Compound Name:</b>	135-Trinitrobenzene (213.0/182.8 amu)
	Expected RT:	9.19
	Actual RT:	9.12
	Area Counts:	1.36e+008
	Manual Modification	No
	Amount:	597. (ng/mL)
	% Accuracy:	99.50

	<b>Compound Name:</b>	13-Dinitrobenzene (168.0/137.9 amu)
	Expected RT:	10.9
	Actual RT:	10.9
	Area Counts:	5.97e+007
	Manual Modification	No
	Amount:	638. (ng/mL)
	% Accuracy:	106.00

	<b>Compound Name:</b>	Tetryl (241.0/180.8 amu)
	Expected RT:	11.1
	Actual RT:	10.9
	Area Counts:	9.81e+007
	Manual Modification	No
	Amount:	652. (ng/mL)
	% Accuracy:	109.00

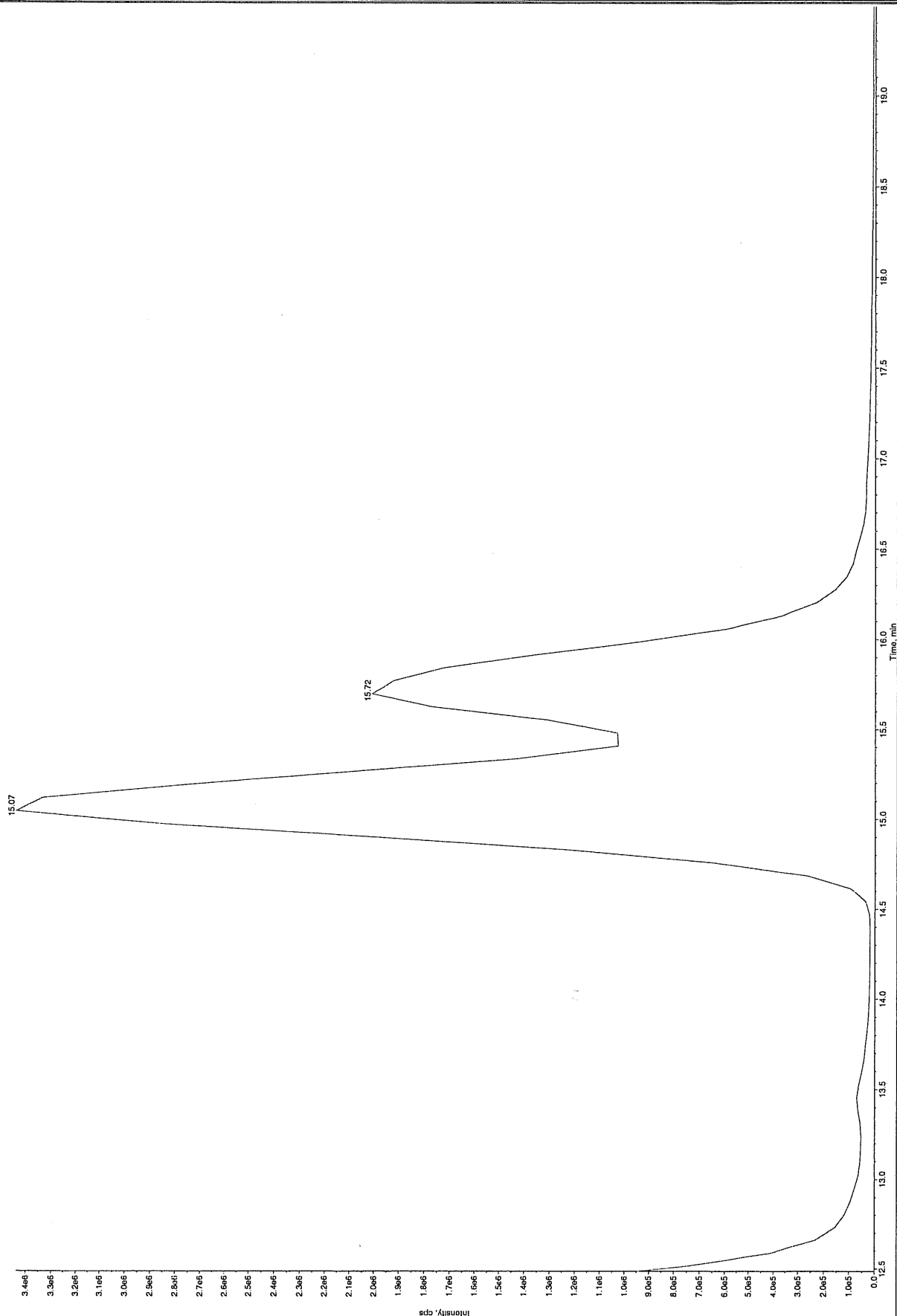
  

	<b>Compound Name:</b>	246-Trinitrotoluene (227.1/209.8 amu)
	Expected RT:	13.5
	Actual RT:	13.4
	Area Counts:	2.42e+008
	Manual Modification	No
	Amount:	582. (ng/mL)
	% Accuracy:	96.90

Before Lex 3/28/10

File Name: "WAX100322-560V" Sample ID: "111ER" File: "EXP0322083.wif"

Sample Name: "24-dinitrofluorene" Mass(es): "182.046.0 amu"  
 Instrument: "LCMS-EXP-C" Acquisition: "1"  
 e Index: "1"  
 Concentration: "600" ng/mL  
 Diluted Conc: "0.00" ng/mL  
 Date: "3/23/2010"  
 Time: "7:58:15 PM"  
 Inj: "No"



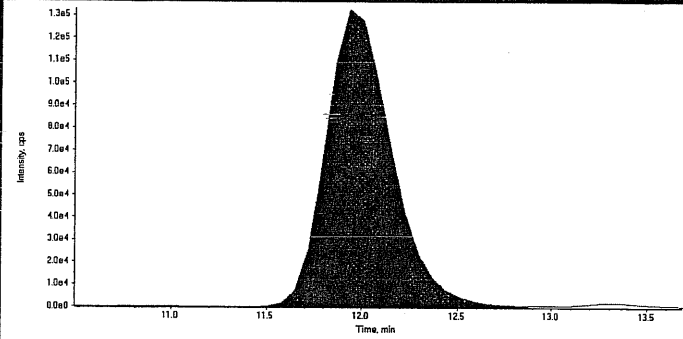
EL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#3

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

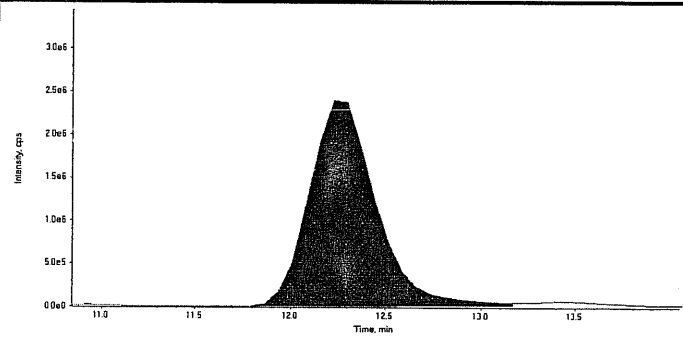
Printed: 27/03/2010 1:31:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0322063.wiff	<b>Acquisition Date</b>	3/23/2010 7:58:15 PM
<b>Sample Name</b>	WXX100322-56CCV	<b>Acquisition Method</b>	8321_pntx.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	032210.rdb
<b>Procedure Code</b>	LCMSEXP_C	<b>Sample Type</b>	Quality Control

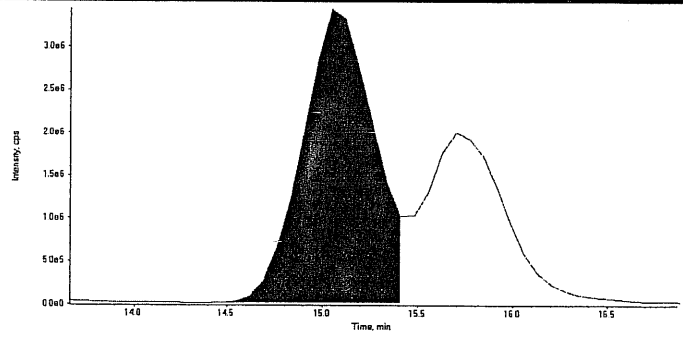
  

	<b>Compound Name:</b>	Nitrobenzene (123.0/46.0 amu)
	Expected RT:	12.1
	Actual RT:	11.9
	Area Counts:	3.21e+006
	Manual Modification	No
	Amount:	674. (ng/mL)
	% Accuracy:	112.00

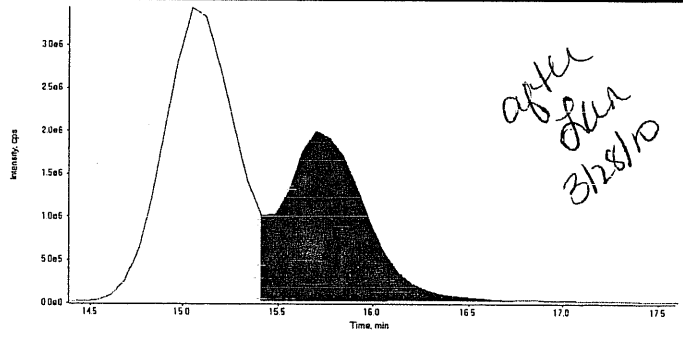
  

	<b>Compound Name:</b>	34-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	12.4
	Actual RT:	12.2
	Area Counts:	5.89e+007
	Manual Modification	No
	Amount:	267. (ng/mL)
	% Accuracy:	89.00

	<b>Compound Name:</b>	26-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	15.3
	Actual RT:	15.0
	Area Counts:	9.07e+007
	Manual Modification	No
	Amount:	547. (ng/mL)
	% Accuracy:	91.10

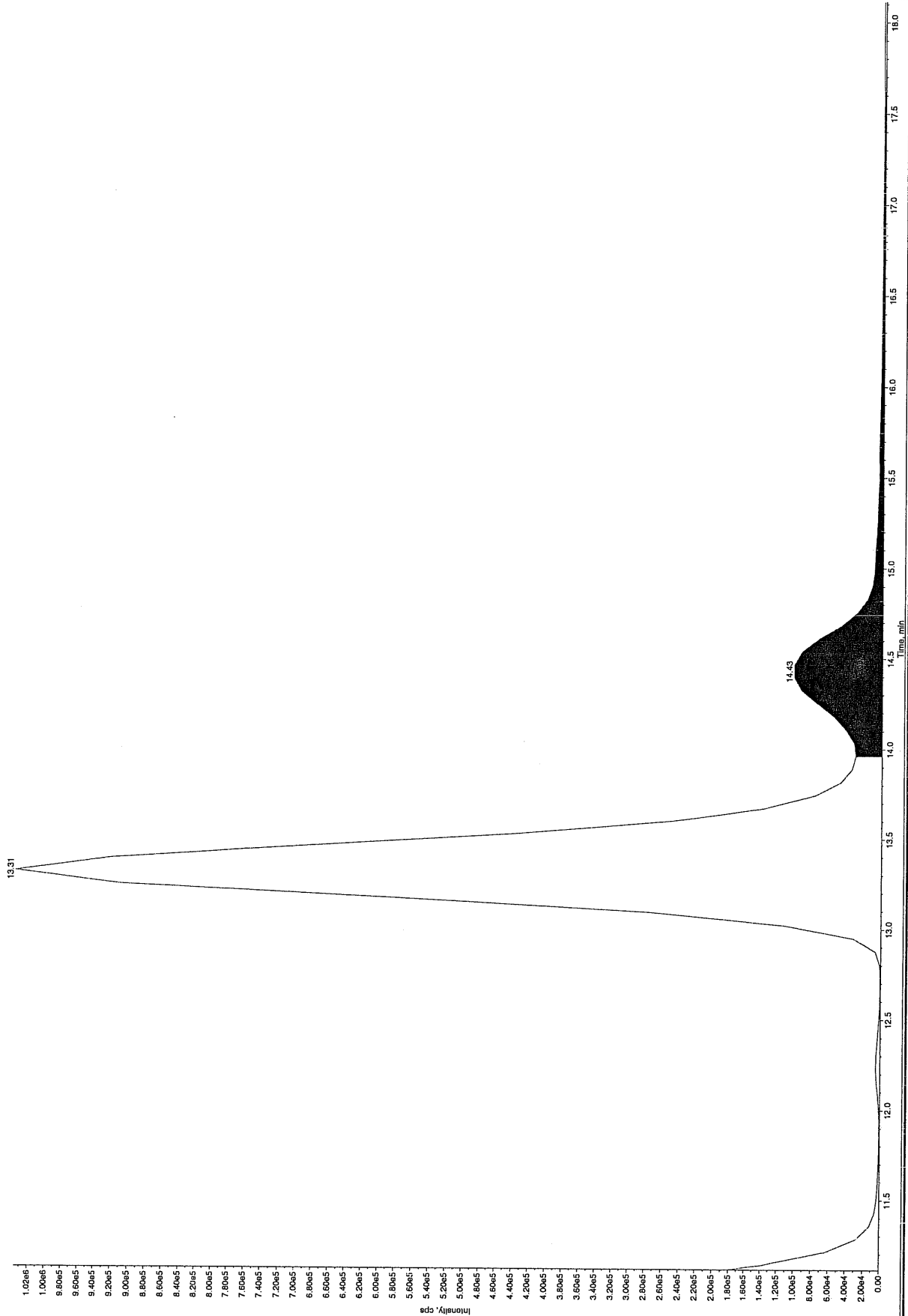
	<b>Compound Name:</b>	24-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	16.0
	Actual RT:	15.7
	Area Counts:	6.00e+007
	Manual Modification	Yes
	Amount:	601. (ng/mL)
	% Accuracy:	100.00



Before Jan 31/10

File Name: "WXX100322-560CV" Sample ID: "JILR" File: "EXP0322083.wif"  
 X Name: "Zaloxo-48-dinitrofluorene" Mass(es): "197.0/180.0 amu"

Acquisition: "Zaloxo-48-dinitrofluorene" Acquisition: "Zaloxo-48-dinitrofluorene"  
 e Index: 1  
 e Type: QC  
 ntration: 600. ng/mL  
 lated Conc: 1890. ng/mL  
 Date: 3/23/2010  
 Time: 7:58:15 PM  
 led: No  
 Algorithm: IntelliQuan - IQA  
 Peak Height: 1000.00 cps  
 Peak Width: 0.00 sec  
 Peak Area: 30.0 sec  
 ndow: 30.0 sec  
 led RT: 14.6 min  
 elative RT: No  
 Type: Valley  
 ion Time: 14.4 min  
 ct: 1.07e+007 counts  
 Time: 1.55e+005 cps  
 Time: 14.0 min  
 Time: 17.7 min



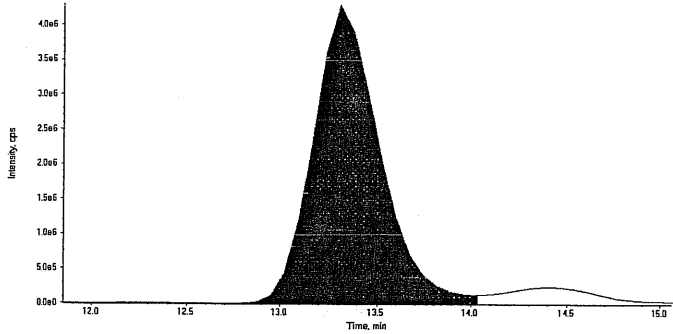
JL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#3

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

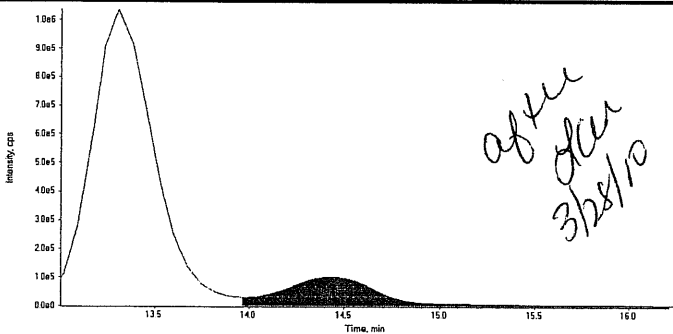
Printed: 27/03/2010 1:31:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0322063.wiff	<b>Acquisition Date</b>	3/23/2010 7:58:15 PM
<b>Sample Name</b>	WXX100322-56CCV	<b>Acquisition Method</b>	8321_pntx.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	032210.rdb
<b>Procedure Code</b>	LCMSEXP_C	<b>Sample Type</b>	Quality Control

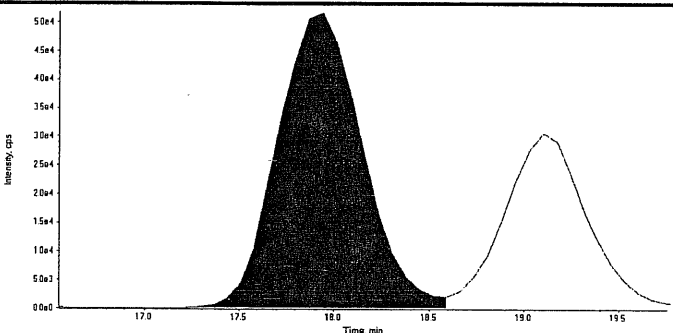
  

	<b>Compound Name:</b>	4-Amino-26-dinitrotoluene (197.0/167.0 amu)
	Expected RT:	13.5
	Actual RT:	13.3
	Area Counts:	1.04e+008
	Manual Modification	No
	Amount:	578. (ng/mL)
	% Accuracy:	96.30

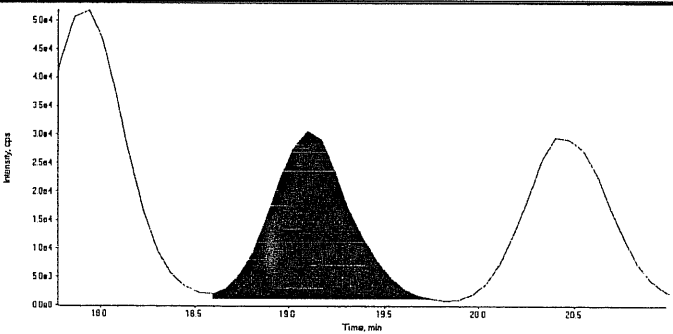
  

	<b>Compound Name:</b>	2-Amino-46-dinitrotoluene (197.0/180.0 amu)
	Expected RT:	14.6
	Actual RT:	14.4
	Area Counts:	3.71e+006
	Manual Modification	Yes
	Amount:	653. (ng/mL)
	% Accuracy:	109.00

	<b>Compound Name:</b>	2-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	18.2
	Actual RT:	17.9
	Area Counts:	1.59e+006
	Manual Modification	No
	Amount:	596. (ng/mL)
	% Accuracy:	99.30

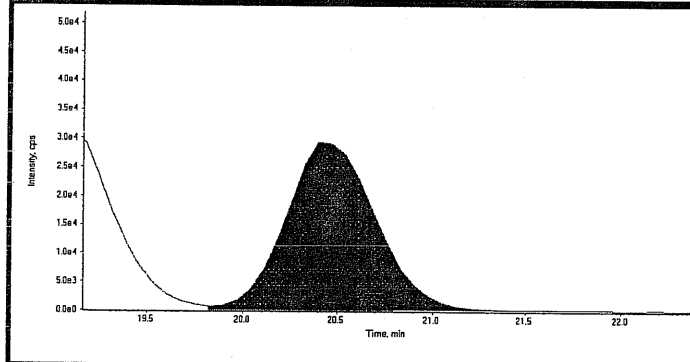
  

	<b>Compound Name:</b>	4-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	19.4
	Actual RT:	19.1
	Area Counts:	8.48e+005
	Manual Modification	No
	Amount:	637. (ng/mL)
	% Accuracy:	106.00

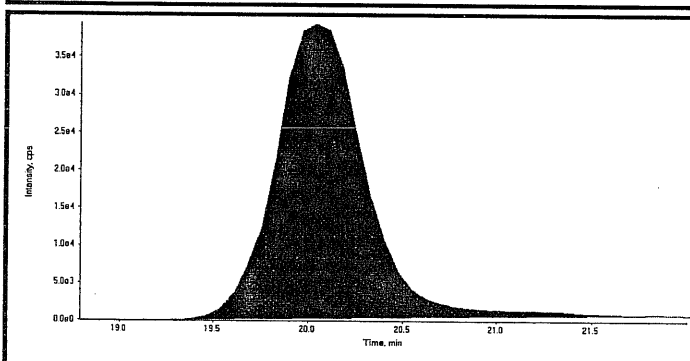
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 27/03/2010 1:31:00 PM  
LCMSMS#3

Data File	EXP0322063.wiff	Acquisition Date	3/23/2010 7:58:15 PM
Sample Name	WXX100322-56CCV	Acquisition Method	8321_pntx.dam
Batch Dilution Analyst	1 LER	Result Table	032210.rdb
Procedure Code	LCMSEXP_C	Sample Type	Quality Control



Compound Name:	3-Nitrotoluene (137.0/46.0 amu)
Expected RT:	20.8
Actual RT:	20.4
Area Counts:	9.76e+005
Manual Modification	No
Amount:	617. (ng/mL)
% Accuracy:	103.00



Compound Name:	PETN (361.1/62.0 amu)
Expected RT:	20.4
Actual RT:	20.0
Area Counts:	1.31e+006
Manual Modification	No
Amount:	643. (ng/mL)
% Accuracy:	107.00

# GRAND MEAN AVERAGE

Vendor: Restek  
 Date of Analysis 03/23/10  
 Time of Injection 1958  
 Standard Number WXX100322-56CCV  
 Data File EXP0322063a

HMX	106.0
RDX	114.0
135-Trinitrobenzene	99.5
13-Dinitrobenzene	106.0
Tetryl	109.0
246-Trinitrotoluene	96.9
Nitrobenzene	112.0
34-dinitrotoluene	89.0
26-dinitrotoluene	91.1
24-dinitrotoluene	100.0
4-Amino-26-dinitrotoluene	96.3
2-Amino-46-dinitrotoluene	109.0
2-Nitrotoluene	99.3
4-Nitrotoluene	106.0
3-Nitrotoluene	103.0
PETN	107.0

TOTAL

1644.1

AVERAGE

✓ 102.8

ICV Limits 85-115%

CRI Limits 70-130%

CCV Limits 85-115%

No single analyte > +/- 60%

for 3/28/10

7B  
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1758

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0322065.wiff

Analysis Date: 23-MAR-10 20:51

LCMSMS ID: 1189

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	40	43.3	108	
2,4,6-Trinitrotoluene	40	36.3	91	
2,4-Dinitrotoluene	40	41.6	104	
2,6-Dinitrotoluene	40	43.8	110	
2-Amino-4,6-dinitrotoluene	40	38.2	96	
3,4-Dinitrotoluene	20	19.7	98	
4-Amino-2,6-dinitrotoluene	40	38.9	97	
HMX	40	39.7	99	
Nitrobenzene	40	39.5	99	
PETN	40	36.2	90	
RDX	40	40.6	102	
Tetryl	40	17.3	43	*
m-Dinitrobenzene	40	44.4	111	
m-Nitrotoluene	40	40.2	101	
o-Nitrotoluene	40	37.5	94	
p-Nitrotoluene	40	35.4	89	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,  
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

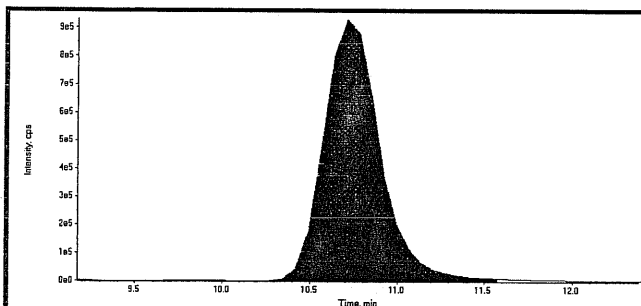
# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

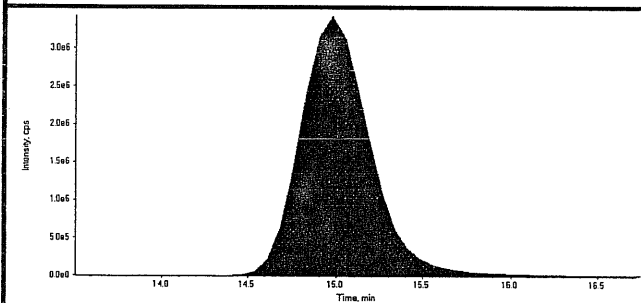
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 27/03/2010 1:31:00 PM  
LCMSMS#3

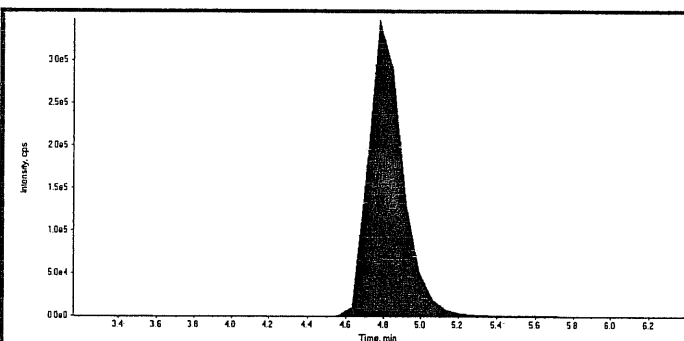
Data File	EXP0322065.wiff	Acquisition Date	3/23/2010 8:51:07 PM
Sample Name	WXX100322-57CRI	Acquisition Method	8321_pntx.dam
Batch Dilution Analyst	1 LER	Result Table	032210.rdb
Procedure Code	LCMSEXP_C	Sample Type	Quality Control



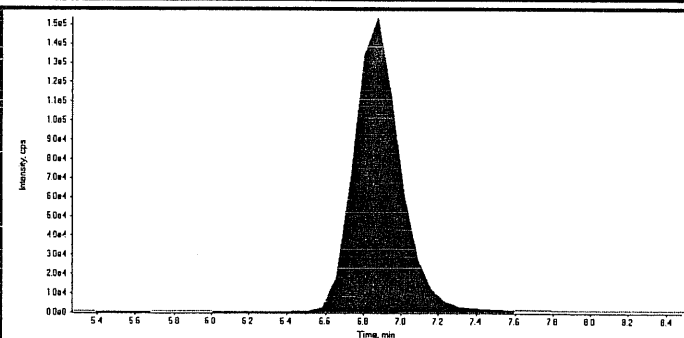
Compound Name:	13-Dinitrobenzene-d4 (172.1/46.1 amu)
Expected RT:	10.80
Actual RT:	10.70
Area Counts:	21000000.00
Manual Modification	No
Amount:	500.00(ng/mL)
Please refer to Form 8 for a list of Internal Standard Recoveries	



Compound Name:	26-Dinitrotoluene-d3 (185.0/155.0 amu)
Expected RT:	15.10
Actual RT:	15.00
Area Counts:	94300000.00
Manual Modification	No
Amount:	500.00(ng/mL)
Please refer to Form 8 for a list of Internal Standard Recoveries	



Compound Name:	HMX (341.2/46.0 amu)
Expected RT:	4.77
Actual RT:	4.77
Area Counts:	4.45e+006
Manual Modification	No
Amount:	39.7 (ng/mL)
% Accuracy:	99.20



Compound Name:	RDX (267.0/46.1 amu)
Expected RT:	6.87
Actual RT:	6.87
Area Counts:	2.61e+006
Manual Modification	No
Amount:	40.6 (ng/mL)
% Accuracy:	102.00

*LER*  
*3/28/10* *hmm*  
*03/28/10*

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 27/03/2010 1:31:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0322065.wiff	<b>Acquisition Date</b>	3/23/2010 8:51:07 PM
<b>Sample Name</b>	WXX100322-57CRI	<b>Acquisition Method</b>	8321_pntx.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	032210.rdb
<b>Procedure Code</b>	LCMSEXP_C	<b>Sample Type</b>	Quality Control

	<b>Compound Name:</b>	135-Trinitrobenzene (213.0/182.8 amu)
	Expected RT:	9.19
	Actual RT:	9.12
	Area Counts:	1.18e+007
	Manual Modification	No
	Amount:	43.3 (ng/mL)
	% Accuracy:	108.00

	<b>Compound Name:</b>	13-Dinitrobenzene (168.0/137.9 amu)
	Expected RT:	10.9
	Actual RT:	10.9
	Area Counts:	4.95e+006
	Manual Modification	No
	Amount:	44.4 (ng/mL)
	% Accuracy:	111.00

	<b>Compound Name:</b>	Tetryl (241.0/180.8 amu)
	Expected RT:	11.1
	Actual RT:	10.9
	Area Counts:	3.10e+006
	Manual Modification	No
	Amount:	17.3 (ng/mL)
	% Accuracy:	43.20

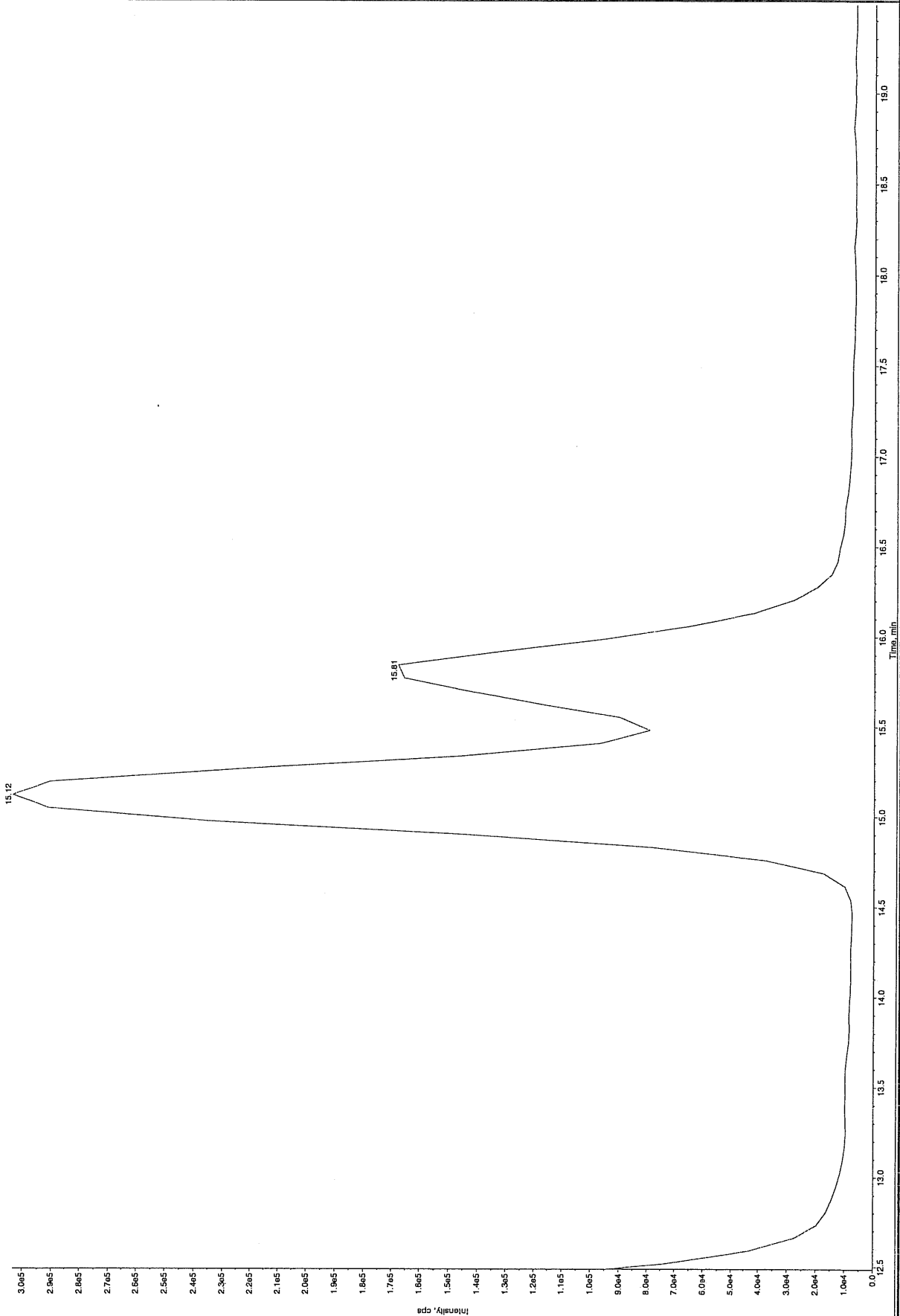
	<b>Compound Name:</b>	246-Trinitrotoluene (227.1/209.8 amu)
	Expected RT:	13.5
	Actual RT:	13.3
	Area Counts:	2.35e+007
	Manual Modification	No
	Amount:	36.3 (ng/mL)
	% Accuracy:	90.60

Before Jan 3/28/10

File Name: "WYX100322-57.GRF" Sample ID: "11LEF" File: "EXP0322065.wif"  
 Name: "24-dinitrofluorene" Mass (g): "182.0460 amu"

Method: "LCMS-EXP-C" Annotation: ""

Index: 1  
 Type: 400C  
 Inlet: 0.00 ng/mL  
 Date: 3/23/2010  
 Time: 8:51:07 PM  
 Inlet: No



FL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#3



GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 27/03/2010 1:31:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0322065.wiff	<b>Acquisition Date</b>	3/23/2010 8:51:07 PM
<b>Sample Name</b>	WXX100322-57CRI	<b>Acquisition Method</b>	8321_pntx.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	032210.rdb
<b>Procedure Code</b>	LCMSEXP_C	<b>Sample Type</b>	Quality Control

	<b>Compound Name:</b>	Nitrobenzene (123.0/46.0 amu)
	Expected RT:	12.1
	Actual RT:	12.0
	Area Counts:	2.24e+005
	Manual Modification	No
	Amount:	39.5 (ng/mL)
	% Accuracy:	98.70

	<b>Compound Name:</b>	34-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	12.4
	Actual RT:	12.3
	Area Counts:	4.80e+006
	Manual Modification	No
	Amount:	19.7 (ng/mL)
	% Accuracy:	98.40

	<b>Compound Name:</b>	26-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	15.3
	Actual RT:	15.1
	Area Counts:	8.03e+006
	Manual Modification	No
	Amount:	43.8 (ng/mL)
	% Accuracy:	110.00

	<b>Compound Name:</b>	24-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	16.0
	Actual RT:	15.8
	Area Counts:	4.59e+006
	Manual Modification	Yes
	Amount:	41.6 (ng/mL)
	% Accuracy:	104.00

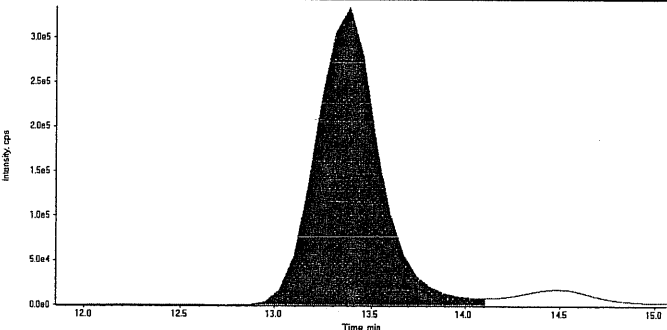


GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

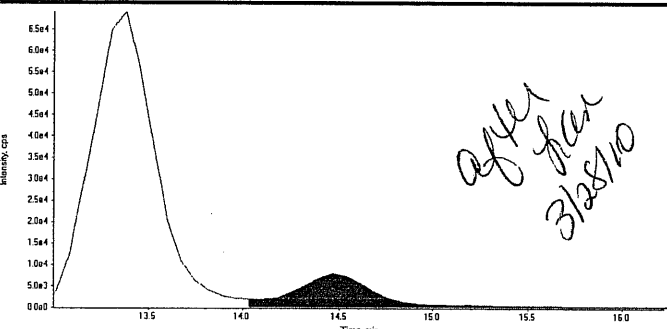
Printed: 27/03/2010 1:31:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0322065.wiff	<b>Acquisition Date</b>	3/23/2010 8:51:07 PM
<b>Sample Name</b>	WXX100322-57CRI	<b>Acquisition Method</b>	8321_pntx.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	032210.rdb
<b>Procedure Code</b>	LCMSEXP_C	<b>Sample Type</b>	Quality Control

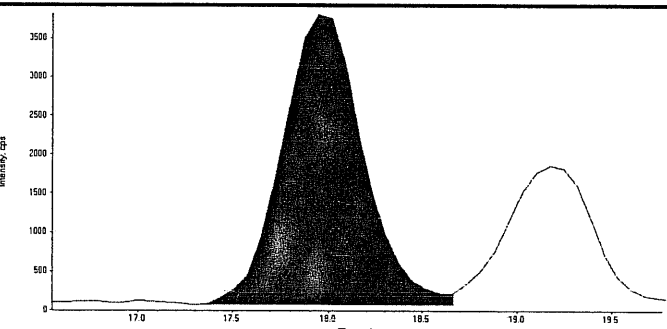
  

	<b>Compound Name:</b>	4-Amino-26-dinitrotoluene (197.0/167.0 amu)
	Expected RT:	13.5
	Actual RT:	13.4
	Area Counts:	7.75e+006
	Manual Modification	No
	Amount:	38.9 (ng/mL)
	% Accuracy:	97.30

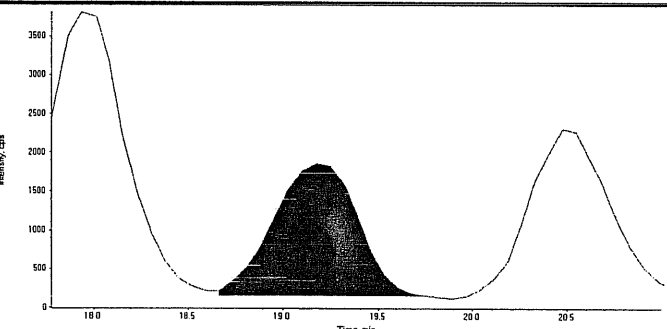
  

	<b>Compound Name:</b>	2-Amino-46-dinitrotoluene (197.0/180.0 amu)
	Expected RT:	14.6
	Actual RT:	14.5
	Area Counts:	2.40e+005
	Manual Modification	Yes
	Amount:	38.2 (ng/mL)
	% Accuracy:	95.50

	<b>Compound Name:</b>	2-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	18.2
	Actual RT:	17.9
	Area Counts:	1.10e+005
	Manual Modification	No
	Amount:	37.5 (ng/mL)
	% Accuracy:	93.70

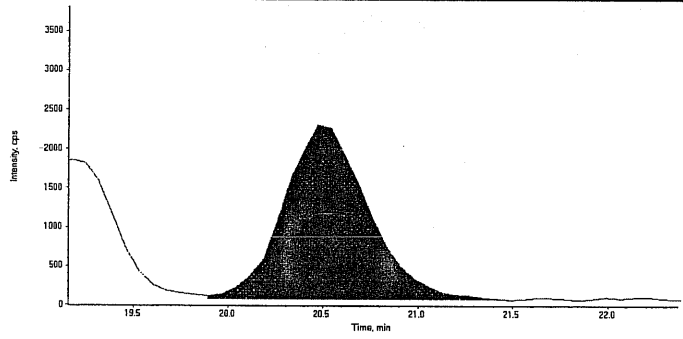
	<b>Compound Name:</b>	4-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	19.4
	Actual RT:	19.2
	Area Counts:	5.21e+004
	Manual Modification	No
	Amount:	35.4 (ng/mL)
	% Accuracy:	88.50

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

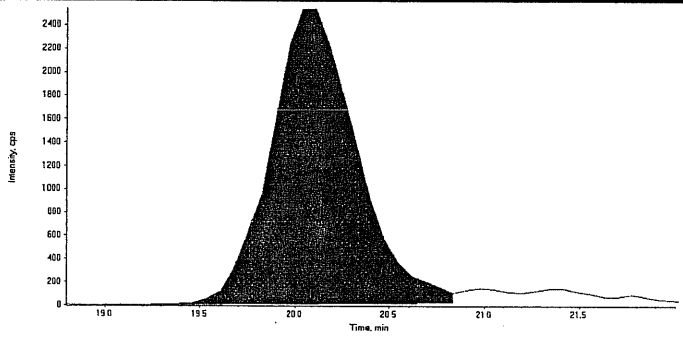
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LCMSMS#3

<b>Data File</b>	EXP0322065.wiff	<b>Acquisition Date</b>	3/23/2010 8:51:07 PM
<b>Sample Name</b>	WXX100322-57CRI	<b>Acquisition Method</b>	8321_pntx.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	032210.rdb
<b>Procedure Code</b>	LCMSEXP_C	<b>Sample Type</b>	Quality Control

	<b>Compound Name:</b>	3-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	20.8
	Actual RT:	20.5
	Area Counts:	7.04e+004
	Manual Modification	No
	Amount:	40.2 (ng/mL)
	% Accuracy:	101.00

	<b>Compound Name:</b>	PETN (361.1/62.0 amu)
	Expected RT:	20.4
	Actual RT:	20.1
	Area Counts:	8.14e+004
	Manual Modification	No
	Amount:	36.2 (ng/mL)
	% Accuracy:	90.40

GRAND MEAN AVERAGE

Vendor: Restek  
 Date of Analysis 03/23/10  
 Time of Injection 2051  
 Standard Number WXX100322-57CRI  
 Data File EXP0322065a

HMX	99.2	✓
RDX	102.0	✓
135-Trinitrobenzene	108.0	
13-Dinitrobenzene	111.0	✓
Tetryl	43.2	✓
246-Trinitrotoluene	90.6	
Nitrobenzene	98.7	
34-dinitrotoluene	98.4	
26-dinitrotoluene	110.0	
24-dinitrotoluene	104.0	
4-Amino-26-dinitrotoluene	97.3	
2-Amino-46-dinitrotoluene	95.5	
2-Nitrotoluene	93.7	
4-Nitrotoluene	88.5	
3-Nitrotoluene	101.0	
PETN	90.4	
	✓	
TOTAL	1531.5	<i>HNW 03/28/10</i>
		ICV Limits 85-115%
AVERAGE	✓ 95.7	CRI Limits 70-130%
		CCV Limits 85-115%
		No single analyte > +/- 60%

*han 3/28/10*

7B  
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1758

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0330012.wiff

Analysis Date: 30-MAR-10 13:27

LCMSMS ID: 1189

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2-Amino-4,6-dinitrotoluene	40	34	85	
3,4-Dinitrotoluene	20	20	100	
4-Amino-2,6-dinitrotoluene	40	40.2	100	
HMX	40	34.5	86	
Nitrobenzene	40	32.4	81	
PETN	40	28.8	72	
RDX	40	32.5	81	
Tetryl	40	37.1	93	
m-Dinitrobenzene	40	41	102	
m-Nitrotoluene	40	42.9	107	
o-Nitrotoluene	40	41	102	
p-Nitrotoluene	40	41.4	103	
1,3,5-Trinitrobenzene	40	37.2	93	
2,4,6-Trinitrotoluene	40	29.9	75	
2,4-Dinitrotoluene	40	35.4	89	
2,6-Dinitrotoluene	40	40.4	101	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,  
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

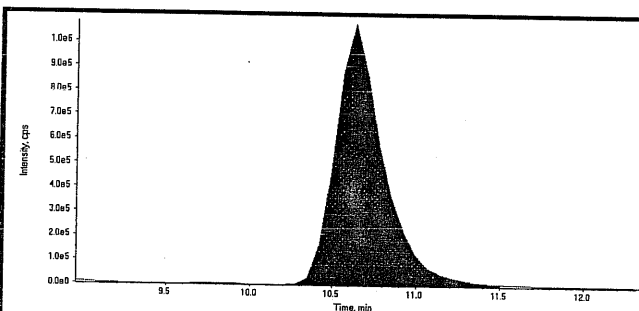
# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

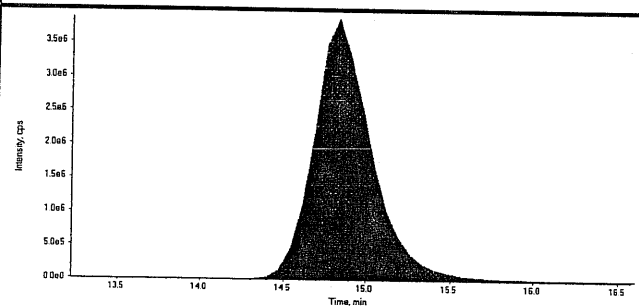
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 31/03/2010 4:24:00 PM  
LCMSMS#3

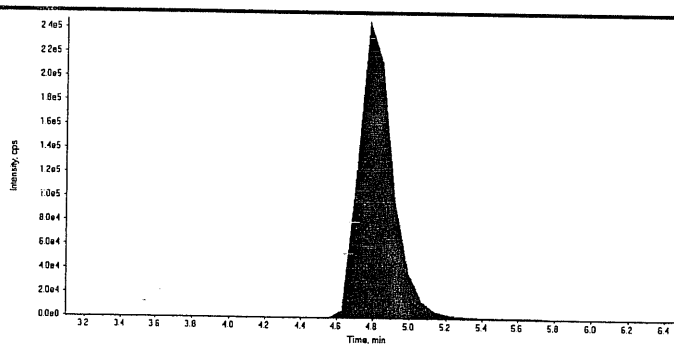
Data File	EXP0330012.wiff	Acquisition Date	3/30/2010 1:27:19 PM
Sample Name	WXX100330-57CRI	Acquisition Method	8321_pntx.dam
Batch Dilution Analyst	1 LER	Result Table	033010.rdb
Procedure Code	LCMSEXP_C	Sample Type	Quality Control



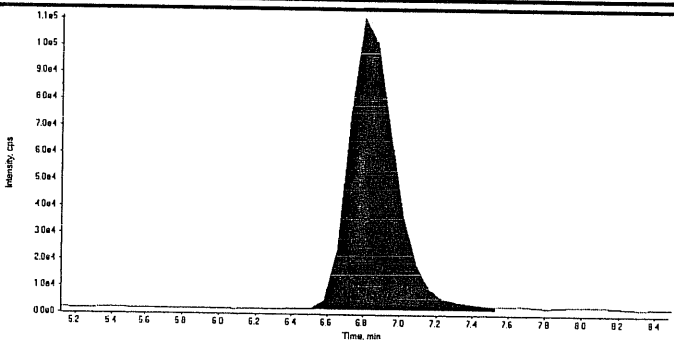
Compound Name:	13-Dinitrobenzene-d4 (172.1/46.1 amu)
Expected RT:	10.60
Actual RT:	10.60
Area Counts:	21600000.00
Manual Modification	No
Amount:	500.00(ng/mL)
Please refer to Form 8 for a list of Internal Standard Recoveries	



Compound Name:	26-Dinitrotoluene-d3 (185.0/155.0 amu)
Expected RT:	14.90
Actual RT:	14.80
Area Counts:	93900000.00
Manual Modification	No
Amount:	500.00(ng/mL)
Please refer to Form 8 for a list of Internal Standard Recoveries	



Compound Name:	HMX (341.2/46.0 amu)
Expected RT:	4.77
Actual RT:	4.77
Area Counts:	3.18e+006
Manual Modification	No
Amount:	34.5 (ng/mL)
% Accuracy:	86.30



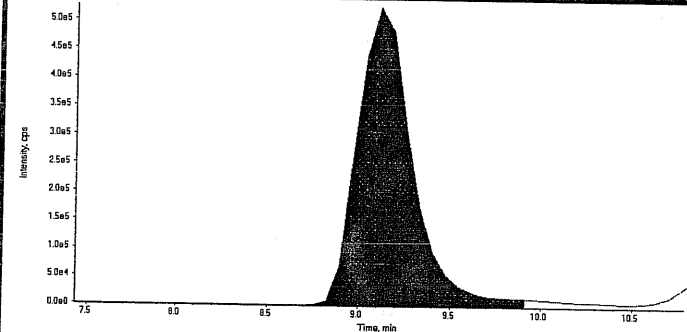
Compound Name:	RDX (267.0/46.1 amu)
Expected RT:	6.80
Actual RT:	6.80
Area Counts:	1.93e+006
Manual Modification	No
Amount:	32.5 (ng/mL)
% Accuracy:	81.30

*LER 4/2/10* *Am 5/4/2010*

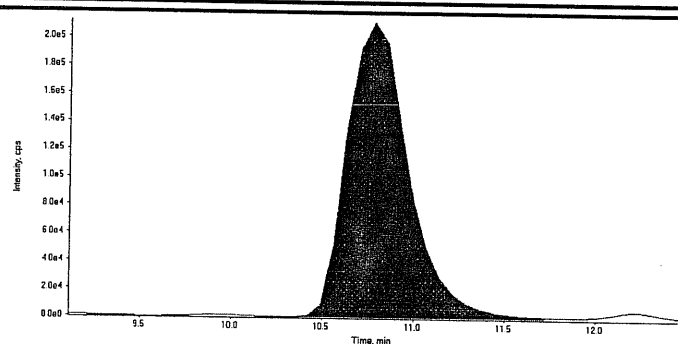
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 31/03/2010 4:24:00 PM  
LCMSMS#3

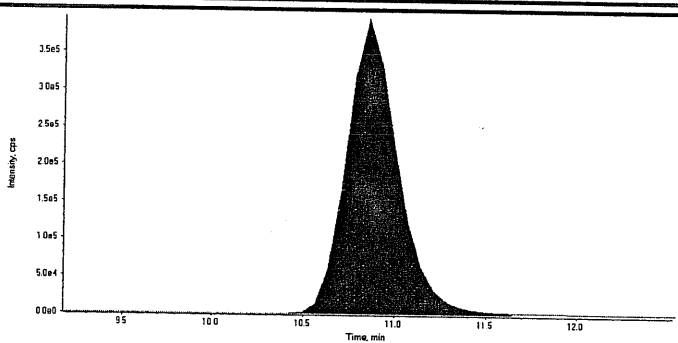
Data File	EXP0330012.wiff	Acquisition Date	3/30/2010 1:27:19 PM
Sample Name	WXX100330-57CRI	Acquisition Method	8321_pntx.dam
Batch Dilution Analyst	1 LER	Result Table	033010.rdb
Procedure Code	LCMSEXP_C	Sample Type	Quality Control



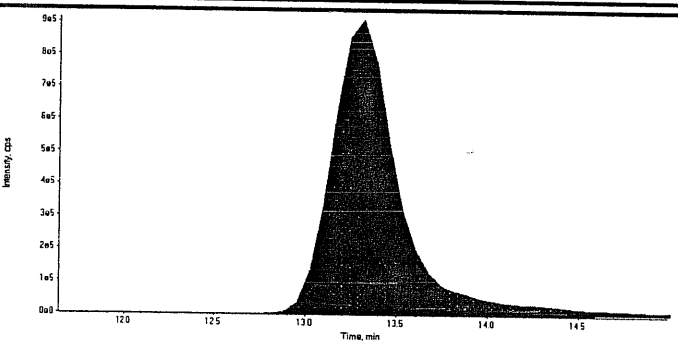
Compound Name:	135-Trinitrobenzene (213.0/182.8 amu)
Expected RT:	9.12
Actual RT:	9.12
Area Counts:	1.10e+007
Manual Modification	No
Amount:	37.2 (ng/mL)
% Accuracy:	93.10



Compound Name:	13-Dinitrobenzene (168.0/137.9 amu)
Expected RT:	10.8
Actual RT:	10.8
Area Counts:	4.97e+006
Manual Modification	No
Amount:	41.0 (ng/mL)
% Accuracy:	102.00



Compound Name:	Tetryl (241.0/180.8 amu)
Expected RT:	10.9
Actual RT:	10.9
Area Counts:	7.66e+006
Manual Modification	No
Amount:	37.1 (ng/mL)
% Accuracy:	92.80



Compound Name:	246-Trinitrotoluene (227.1/209.8 amu)
Expected RT:	13.3
Actual RT:	13.3
Area Counts:	2.40e+007
Manual Modification	No
Amount:	29.9 (ng/mL)
% Accuracy:	74.90



Before Jan 4/1/10

Sample Name: "WXX100330-57.C" Sample ID: "111ER" File: "E:\P0330012.wif"

Comment: "LCMS-EXP\_C" Association: "

File Type: 1 QC

Concentration: 40.0 ng/mL

Calculated Conc: 16.8 ng/mL

Date: 3/30/2010

Time: 1:27:19 PM

Found: No

Algorithm: IntelliQuan - IQA

Peak Height: 1.00e4 cps

Peak Width: 0.00 sec

Signal Width: 30.0 points

Window: 25.00 sec

Detected RT: 15.6 min

Relative RT: No

Type: Valley

Retention Time: 15.6 min

Height: 1.74e+006 cps

Width: 8.85e+004 cps

Retention Time: 15.3 min

Retention Time: 16.0 min

14.96

15.64

12.19

Intensity, cps

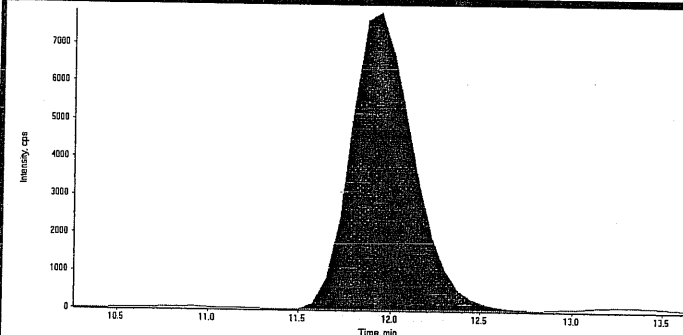
Time, min

EL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#3

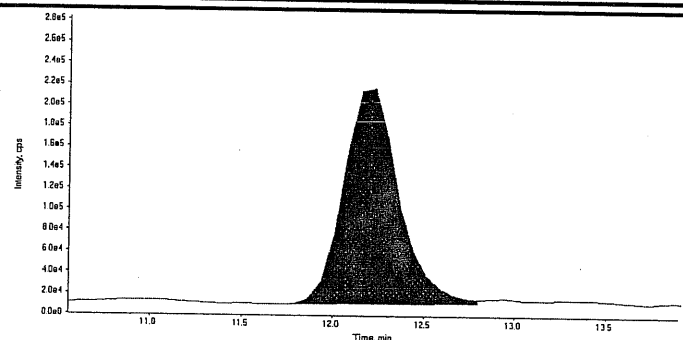
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 31/03/2010 4:24:00 PM  
LCMSMS#3

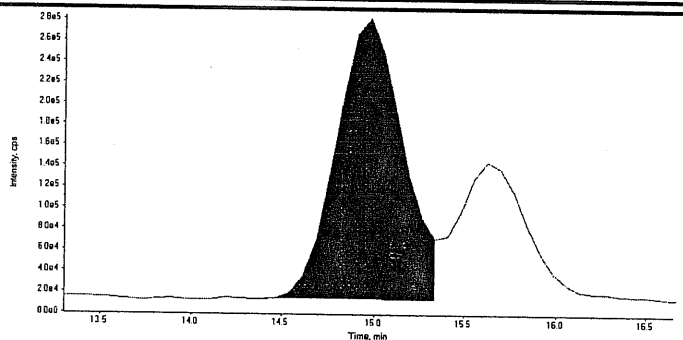
Data File	EXP0330012.wiff	Acquisition Date	3/30/2010 1:27:19 PM
Sample Name	WXX100330-57CRI	Acquisition Method	8321_pntx.dam
Batch Dilution Analyst	1 LER	Result Table	033010.rdb
Procedure Code	LCMSEXP_C	Sample Type	Quality Control



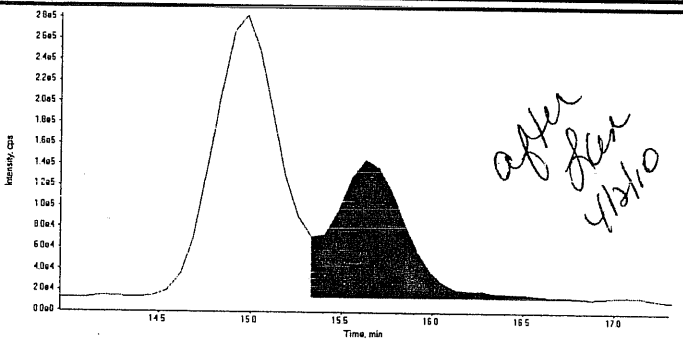
Compound Name:	Nitrobenzene (123.0/46.0 amu)
Expected RT:	11.9
Actual RT:	11.9
Area Counts:	1.88e+005
Manual Modification	No
Amount:	32.4 (ng/mL)
% Accuracy:	81.10



Compound Name:	34-dinitrotoluene (182.0/46.0 amu)
Expected RT:	12.2
Actual RT:	12.2
Area Counts:	4.38e+006
Manual Modification	No
Amount:	20.0 (ng/mL)
% Accuracy:	100.00



Compound Name:	26-dinitrotoluene (182.0/46.0 amu)
Expected RT:	15.0
Actual RT:	15.0
Area Counts:	6.86e+006
Manual Modification	No
Amount:	40.4 (ng/mL)
% Accuracy:	101.00

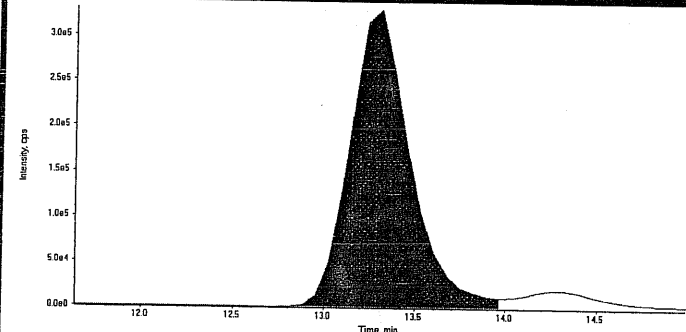


Compound Name:	24-dinitrotoluene (182.0/46.0 amu)
Expected RT:	15.6
Actual RT:	15.6
Area Counts:	3.66e+006
Manual Modification	Yes
Amount:	35.4 (ng/mL)
% Accuracy:	88.50

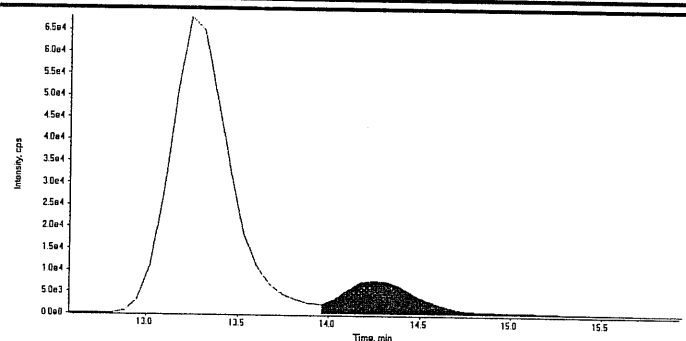
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 31/03/2010 4:24:00 PM  
LCMSMS#3

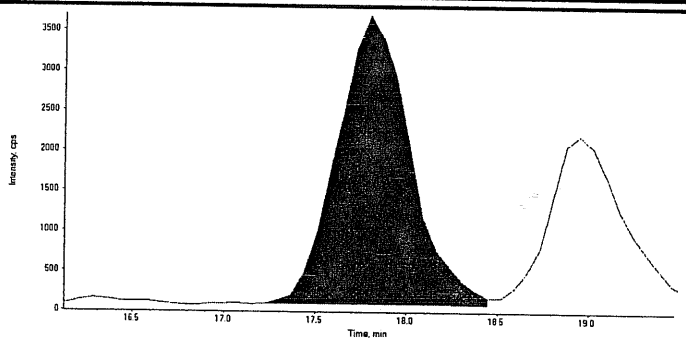
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Sample Name	WXX100330-57CRI	Acquisition Method	8321_pntx.dam
Batch Dilution Analyst	1 LER	Result Table	033010.rdb
Procedure Code	LCMSEXP_C	Sample Type	Quality Control



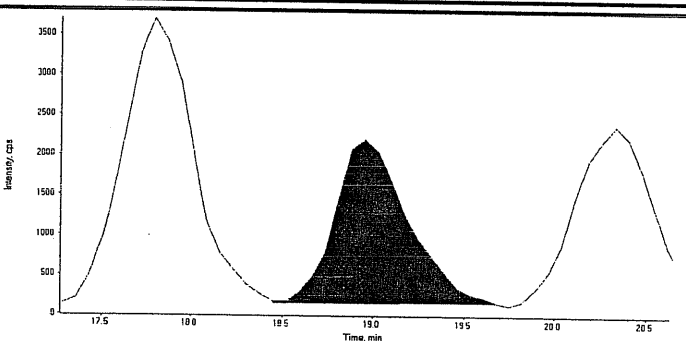
Compound Name:	4-Amino-26-dinitrotoluene (197.0/167.0 amu)
Expected RT:	13.3
Actual RT:	13.3
Area Counts:	7.61e+006
Manual Modification	No
Amount:	40.2 (ng/mL)
% Accuracy:	100.00



Compound Name:	2-Amino-46-dinitrotoluene (197.0/180.0 amu)
Expected RT:	14.3
Actual RT:	14.3
Area Counts:	2.41e+005
Manual Modification	No
Amount:	34.0 (ng/mL)
% Accuracy:	84.90



Compound Name:	2-Nitrotoluene (137.0/46.0 amu)
Expected RT:	17.8
Actual RT:	17.8
Area Counts:	1.00e+005
Manual Modification	No
Amount:	41.0 (ng/mL)
% Accuracy:	102.00

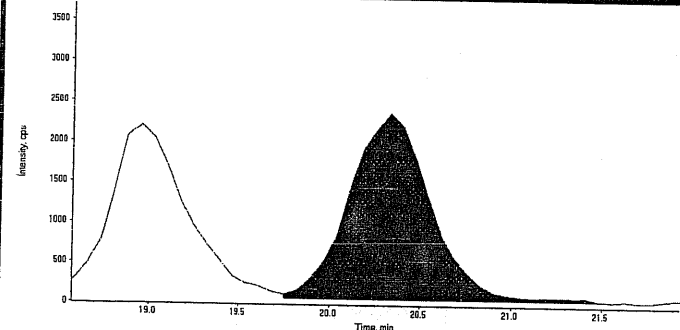


Compound Name:	4-Nitrotoluene (137.0/46.0 amu)
Expected RT:	19.0
Actual RT:	19.0
Area Counts:	5.68e+004
Manual Modification	No
Amount:	41.4 (ng/mL)
% Accuracy:	103.00

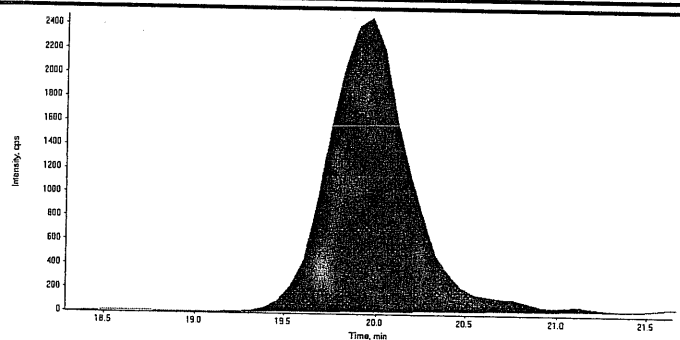
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 31/03/2010 4:24:00 PM  
LCMSMS#3

Data File	EXP0330012.wiff	Acquisition Date	3/30/2010 1:27:19 PM
Sample Name	WXX100330-57CRI	Acquisition Method	8321_pntx.dam
Batch Dilution Analyst	1 LER	Result Table	033010.rdb
Procedure Code	LCMSEXP_C	Sample Type	Quality Control



Compound Name:	3-Nitrotoluene (137.0/46.0 amu)
Expected RT:	20.3
Actual RT:	20.3
Area Counts:	7.29e+004
Manual Modification	No
Amount:	42.9 (ng/mL)
% Accuracy:	107.00



Compound Name:	PETN (361.1/62.0 amu)
Expected RT:	20.0
Actual RT:	20.0
Area Counts:	7.69e+004
Manual Modification	No
Amount:	28.8 (ng/mL)
% Accuracy:	72.10

GRAND MEAN AVERAGE

Vendor: Restek  
 Date of Analysis 03/30/10  
 Time of Injection 1327  
 Standard Number WXX100330-57CRI  
 Data File EXP0330012a

HMX	86.3
RDX	81.3
135-Trinitrobenzene	93.1
13-Dinitrobenzene	102.0
Tetryl	92.8
246-Trinitrotoluene	74.9
Nitrobenzene	81.1
34-dinitrotoluene	100.0
26-dinitrotoluene	101.0
24-dinitrotoluene	88.5
4-Amino-26-dinitrotoluene	100.0
2-Amino-46-dinitrotoluene	84.9
2-Nitrotoluene	102.0
4-Nitrotoluene	103.0
3-Nitrotoluene	107.0
PETN	72.1

TOTAL

1470.0

*Ann 04/02/10*

AVERAGE

✓ 91.9

ICV Limits 85-115%

CRI Limits 70-130%

CCV Limits 85-115%

No single analyte > +/- 60%

*See  
4/1/10*

7A

Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1758

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0330023.wiff

Analysis Date: 30-MAR-10 18:17

LCMSMS ID: 1189

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	600	539	90	
2,4,6-Trinitrotoluene	600	626	104	
2,4-Dinitrotoluene	600	621	104	
2,6-Dinitrotoluene	600	565	94	
2-Amino-4,6-dinitrotoluene	600	649	108	
3,4-Dinitrotoluene	300	287	96	
4-Amino-2,6-dinitrotoluene	600	583	97	
HMX	600	598	100	
Nitrobenzene	600	631	105	
PETN	600	778	130	
RDX	600	649	108	
Tetryl	600	553	92	
m-Dinitrobenzene	600	559	93	
m-Nitrotoluene	600	620	103	
o-Nitrotoluene	600	718	120	
p-Nitrotoluene	600	713	119	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,  
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

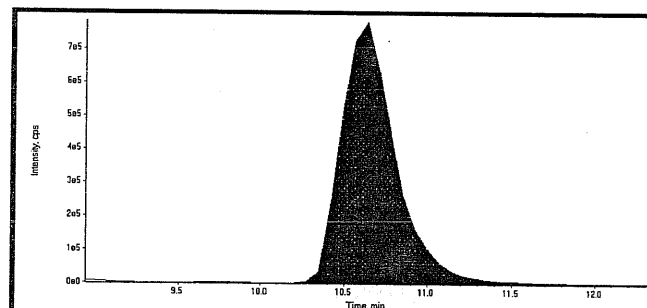
# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

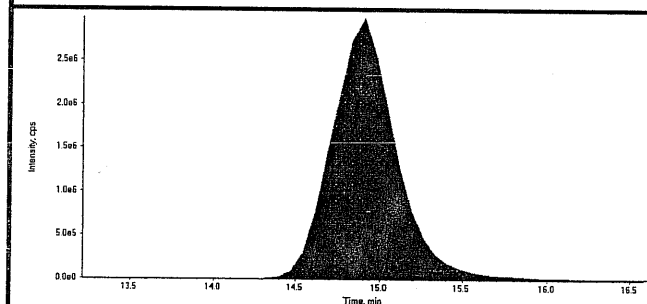
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 31/03/2010 4:24:00 PM  
LCMSMS#3

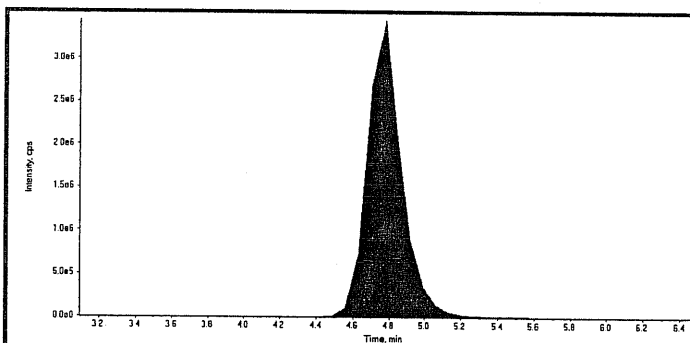
Data File	EXP0330023.wiff	Acquisition Date	3/30/2010 6:17:49 PM
Sample Name	WXX100330-56CCV	Acquisition Method	8321_pntx.dam
Batch Dilution Analyst	1 LER	Result Table	033010.rdb
Procedure Code	LCMSEXP_C	Sample Type	Quality Control



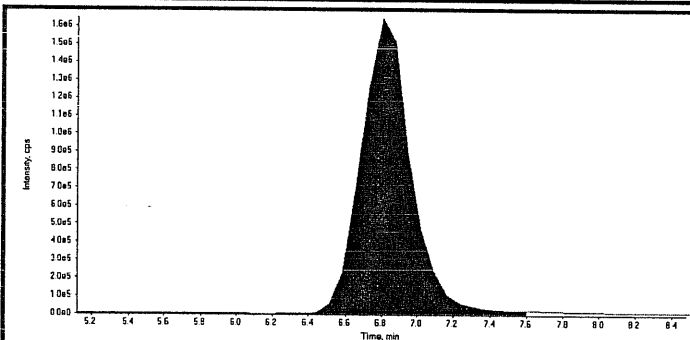
Compound Name:	13-Dinitrobenzene-d4 (172.1/46.1 amu)
Expected RT:	10.60
Actual RT:	10.60
Area Counts:	17800000.00
Manual Modification	No
Amount:	500.00(ng/mL)
Please refer to Form 8 for a list of Internal Standard Recoveries	



Compound Name:	26-Dinitrotoluene-d3 (185.0/155.0 amu)
Expected RT:	14.90
Actual RT:	14.90
Area Counts:	79800000.00
Manual Modification	No
Amount:	500.00(ng/mL)
Please refer to Form 8 for a list of Internal Standard Recoveries	



Compound Name:	HMX (341.2/46.0 amu)
Expected RT:	4.77
Actual RT:	4.77
Area Counts:	4.54e+007
Manual Modification	No
Amount:	598. (ng/mL)
% Accuracy:	99.70



Compound Name:	RDX (267.0/46.1 amu)
Expected RT:	6.80
Actual RT:	6.80
Area Counts:	3.17e+007
Manual Modification	No
Amount:	649. (ng/mL)
% Accuracy:	108.00

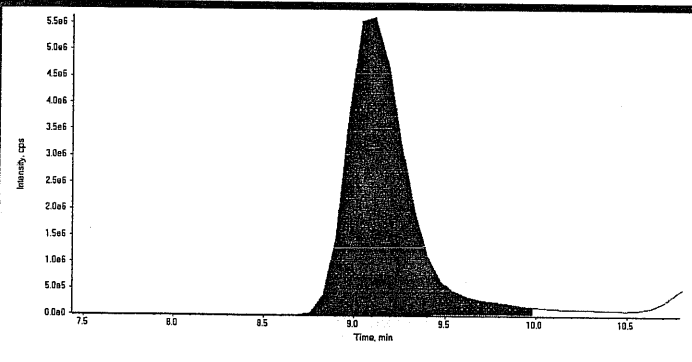
*See 4/12/10  
4/12/10*

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

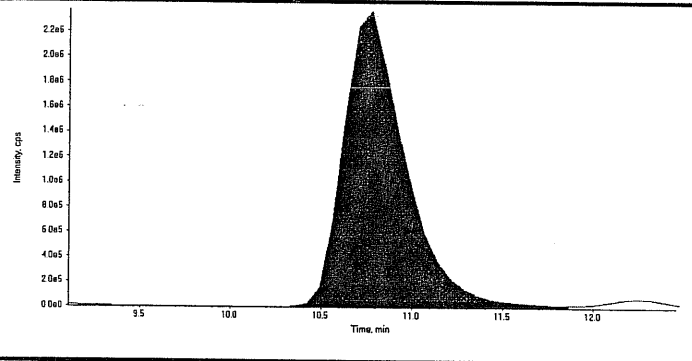
Printed: 31/03/2010 4:24:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0330023.wiff	<b>Acquisition Date</b>	3/30/2010 6:17:49 PM
<b>Sample Name</b>	WXX100330-56CCV	<b>Acquisition Method</b>	8321_pntx.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	033010.rdb
<b>Procedure Code</b>	LCMSEXP_C	<b>Sample Type</b>	Quality Control

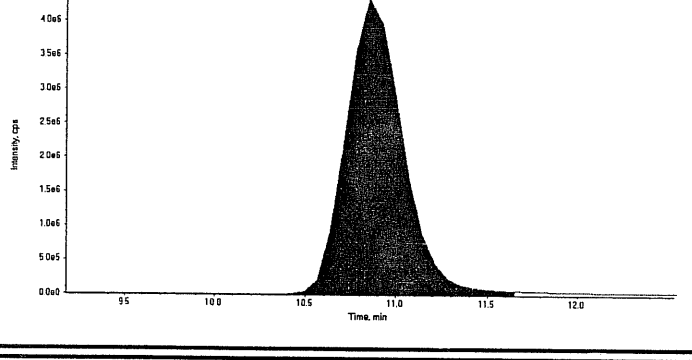
  

	<b>Compound Name:</b>	135-Trinitrobenzene (213.0/182.8 amu)
	Expected RT:	9.12
	Actual RT:	9.12
	Area Counts:	1.32e+008
	Manual Modification	No
	Amount:	539. (ng/mL)
	% Accuracy:	89.80

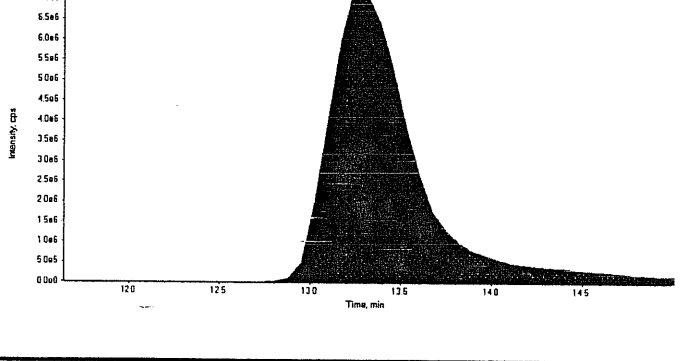
  

	<b>Compound Name:</b>	13-Dinitrobenzene (168.0/137.9 amu)
	Expected RT:	10.8
	Actual RT:	10.8
	Area Counts:	5.60e+007
	Manual Modification	No
	Amount:	559. (ng/mL)
	% Accuracy:	93.20

	<b>Compound Name:</b>	Tetryl (241.0/180.8 amu)
	Expected RT:	10.9
	Actual RT:	10.9
	Area Counts:	9.43e+007
	Manual Modification	No
	Amount:	553. (ng/mL)
	% Accuracy:	92.20

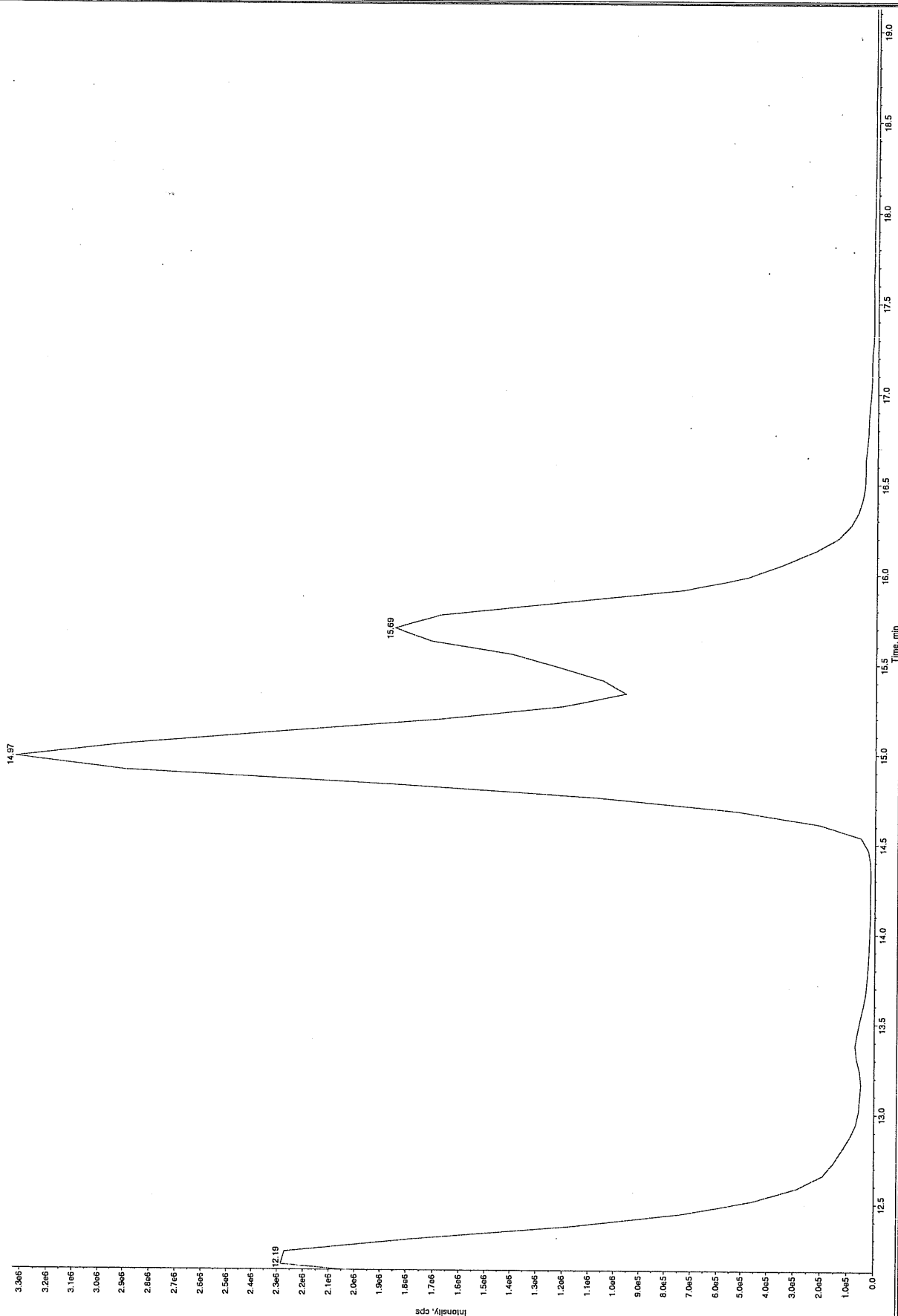
	<b>Compound Name:</b>	246-Trinitrotoluene (227.1/209.8 amu)
	Expected RT:	13.3
	Actual RT:	13.2
	Area Counts:	2.53e+008
	Manual Modification	No
	Amount:	626. (ng/mL)
	% Accuracy:	104.00



Before Jan 4/11/10

File Name: "WXX100330-562CV" Sample ID: "111ER" File: "EXP0330023.wif"

Sample Name: "24-dinitrotoluene" Mass(es): "182.046.0 amu"  
 Instrument: "LCMSMS\_C" Annotation: ""  
 Date: 3/10/2010  
 Time: 6:17:49 PM  
 Method: "No"



IL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#3

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 31/03/2010 4:24:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0330023.wiff	<b>Acquisition Date</b>	3/30/2010 6:17:49 PM
<b>Sample Name</b>	WXX100330-56CCV	<b>Acquisition Method</b>	8321_pntx.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	033010.rdb
<b>Procedure Code</b>	LCMSEXP_C	<b>Sample Type</b>	Quality Control

	<b>Compound Name:</b>	Nitrobenzene (123.0/46.0 amu)
	Expected RT:	11.9
	Actual RT:	11.9
	Area Counts:	3.02e+006
	Manual Modification	No
	Amount:	631. (ng/mL)
	% Accuracy:	105.00

	<b>Compound Name:</b>	34-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	12.2
	Actual RT:	12.2
	Area Counts:	5.34e+007
	Manual Modification	No
	Amount:	287. (ng/mL)
	% Accuracy:	95.80

	<b>Compound Name:</b>	26-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	15.0
	Actual RT:	15.0
	Area Counts:	8.15e+007
	Manual Modification	No
	Amount:	565. (ng/mL)
	% Accuracy:	94.20

	<b>Compound Name:</b>	24-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	15.6
	Actual RT:	15.7
	Area Counts:	5.46e+007
	Manual Modification	Yes
	Amount:	621. (ng/mL)
	% Accuracy:	104.00

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 31/03/2010 4:24:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0330023.wiff	<b>Acquisition Date</b>	3/30/2010 6:17:49 PM
<b>Sample Name</b>	WXX100330-56CCV	<b>Acquisition Method</b>	8321_pntx.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	033010.rdb
<b>Procedure Code</b>	LCMSEXP_C	<b>Sample Type</b>	Quality Control

	<b>Compound Name:</b>	4-Amino-26-dinitrotoluene (197.0/167.0 amu)
	Expected RT:	13.3
	Actual RT:	13.3
	Area Counts:	9.38e+007
	Manual Modification	No
	Amount:	583. (ng/mL)
	% Accuracy:	97.10

	<b>Compound Name:</b>	2-Amino-46-dinitrotoluene (197.0/180.0 amu)
	Expected RT:	14.3
	Actual RT:	14.3
	Area Counts:	3.92e+006
	Manual Modification	No
	Amount:	649. (ng/mL)
	% Accuracy:	108.00

	<b>Compound Name:</b>	2-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	17.8
	Actual RT:	17.8
	Area Counts:	1.49e+006
	Manual Modification	No
	Amount:	718. (ng/mL)
	% Accuracy:	120.00

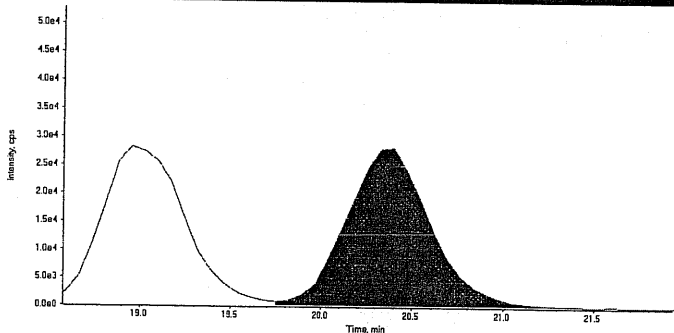
	<b>Compound Name:</b>	4-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	19.0
	Actual RT:	19.0
	Area Counts:	8.33e+005
	Manual Modification	No
	Amount:	713. (ng/mL)
	% Accuracy:	119.00

GEL Laboratories, LLC  
 GEL SOP GL-OA-E-056, Method 8321A-Modified

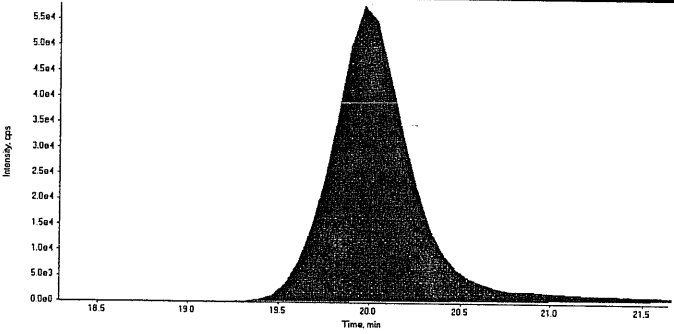
Printed: 31/03/2010 4:24:00 PM  
 LCMSMS#3

<b>Data File</b>	EXP0330023.wiff	<b>Acquisition Date</b>	3/30/2010 6:17:49 PM
<b>Sample Name</b>	WXX100330-56CCV	<b>Acquisition Method</b>	8321_pntx.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	033010.rdb
<b>Procedure Code</b>	LCMSEXP_C	<b>Sample Type</b>	Quality Control

	<b>Compound Name:</b>	3-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	20.3
	Actual RT:	20.4
	Area Counts:	8.95e+005
	Manual Modification	No
	Amount:	620. (ng/mL)
	% Accuracy:	103.00

	<b>Compound Name:</b>	PETN (361.1/62.0 amu)
	Expected RT:	20.0
	Actual RT:	20.0
	Area Counts:	1.76e+006
	Manual Modification	No
	Amount:	778. (ng/mL)
	% Accuracy:	130.00

GRAND MEAN AVERAGE

Vendor: Restek  
 Date of Analysis 03/30/10  
 Time of Injection 1817  
 Standard Number WXX100330-56CCV  
 Data File EXP0330023a

HMX	99.7
RDX	108.0
135-Trinitrobenzene	89.8
13-Dinitrobenzene	93.2
Tetryl	92.2
246-Trinitrotoluene	104.0
Nitrobenzene	105.0
34-dinitrotoluene	95.8
26-dinitrotoluene	94.2
24-dinitrotoluene	104.0
4-Amino-26-dinitrotoluene	97.1
2-Amino-46-dinitrotoluene	108.0
2-Nitrotoluene	120.0
4-Nitrotoluene	119.0
3-Nitrotoluene	103.0
PETN	130.0

TOTAL

✓  
1663.0

*Hum 04/02/10*

AVERAGE

✓ 103.9

ICV Limits 85-115%

CRI Limits 70-130%

CCV Limits 85-115%

No single analyte > +/- 60%

*dar  
4/11/10*

7B  
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1758

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0330025.wiff

Analysis Date: 30-MAR-10 19:10

LCMSMS ID: 1189

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	40	38.7	97	
2,4,6-Trinitrotoluene	40	35.3	88	
2,4-Dinitrotoluene	40	44	110	
2,6-Dinitrotoluene	40	48.3	121	
2-Amino-4,6-dinitrotoluene	40	35.9	90	
3,4-Dinitrotoluene	20	23.3	117	
4-Amino-2,6-dinitrotoluene	40	50.4	126	
HMX	40	38.9	97	
Nitrobenzene	40	35.6	89	
PETN	40	52.7	132	
RDX	40	41	103	
Tetryl	40	39.3	98	
m-Dinitrobenzene	40	36.6	92	
m-Nitrotoluene	40	38.1	95	
o-Nitrotoluene	40	47.7	119	
p-Nitrotoluene	40	45.5	114	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,  
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

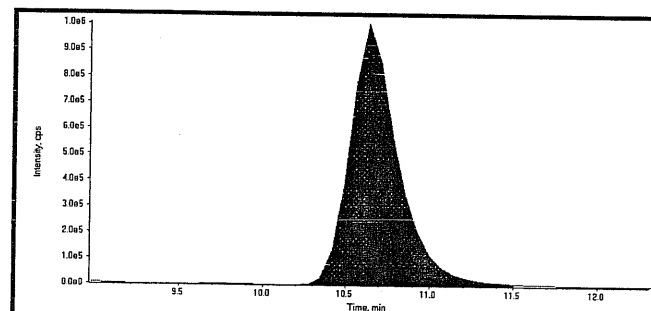
# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

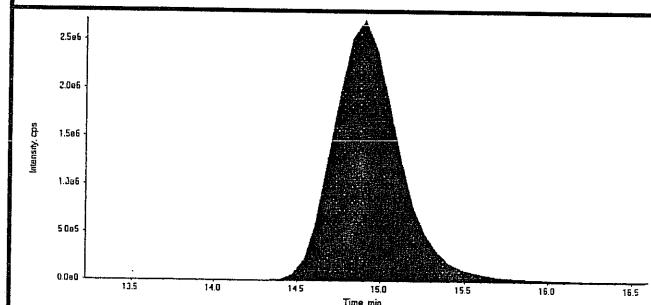
Printed: 31/03/2010 4:24:00 PM  
LCMSMS#3

Data File	EXP0330025.wiff	Acquisition Date	3/30/2010 7:10:35 PM
Sample Name	WXX100330-57CRI	Acquisition Method	8321_pntx.dam
Batch Dilution Analyst	1 LER	Result Table	033010.rdb
Procedure Code	LCMSEXP_C	Sample Type	Quality Control



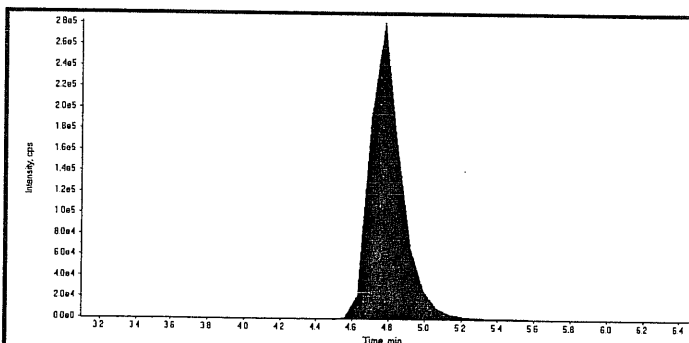
Compound Name:	13-Dinitrobenzene-d4 (172.1/46.1 amu)
Expected RT:	10.60
Actual RT:	10.60
Area Counts:	20100000.00
Manual Modification	No
Amount:	500.00(ng/mL)

Please refer to Form 8 for a list of Internal Standard Recoveries

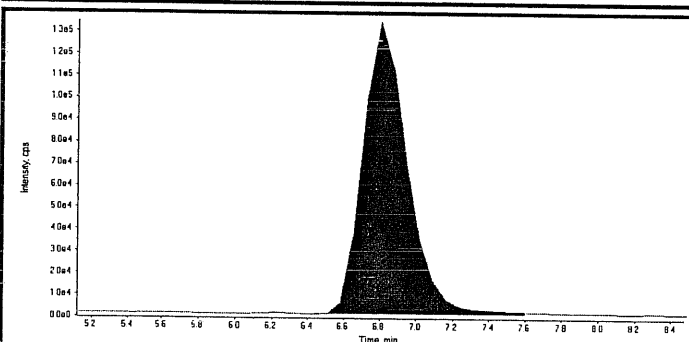


Compound Name:	26-Dinitrotoluene-d3 (185.0/155.0 amu)
Expected RT:	14.90
Actual RT:	14.90
Area Counts:	74600000.00
Manual Modification	No
Amount:	500.00(ng/mL)

Please refer to Form 8 for a list of Internal Standard Recoveries



Compound Name:	HMX (341.2/46.0 amu)
Expected RT:	4.77
Actual RT:	4.77
Area Counts:	3.33e+006
Manual Modification	No
Amount:	38.9 (ng/mL)
% Accuracy:	97.30



Compound Name:	RDX (267.0/46.1 amu)
Expected RT:	6.80
Actual RT:	6.80
Area Counts:	2.26e+006
Manual Modification	No
Amount:	41.0 (ng/mL)
% Accuracy:	103.00

*LER 4/2/10*

*Hmw 4/6/10*

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 31/03/2010 4:24:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0330025.wiff	<b>Acquisition Date</b>	3/30/2010 7:10:35 PM
<b>Sample Name</b>	WXX100330-57CRI	<b>Acquisition Method</b>	8321_pntx.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	033010.rdb
<b>Procedure Code</b>	LCMSEXP_C	<b>Sample Type</b>	Quality Control

	<b>Compound Name:</b>	135-Trinitrobenzene (213.0/182.8 amu)
	Expected RT:	9.12
	Actual RT:	9.12
	Area Counts:	1.07e+007
	Manual Modification	No
	Amount:	38.7 (ng/mL)
	% Accuracy:	96.80

	<b>Compound Name:</b>	13-Dinitrobenzene (168.0/137.9 amu)
	Expected RT:	10.8
	Actual RT:	10.8
	Area Counts:	4.13e+006
	Manual Modification	No
	Amount:	36.6 (ng/mL)
	% Accuracy:	91.50

	<b>Compound Name:</b>	Tetryl (241.0/180.8 amu)
	Expected RT:	10.9
	Actual RT:	10.9
	Area Counts:	7.56e+006
	Manual Modification	No
	Amount:	39.3 (ng/mL)
	% Accuracy:	98.30

	<b>Compound Name:</b>	246-Trinitrotoluene (227.1/209.8 amu)
	Expected RT:	13.3
	Actual RT:	13.3
	Area Counts:	2.14e+007
	Manual Modification	No
	Amount:	35.3 (ng/mL)
	% Accuracy:	88.20



Before Jan 4/1/10

File Name: WXYZ003047001 Sample ID: 111111 File: EXP0300025.wit  
 & Name: "24-dinitrophenol" Mass: 102.0460 amu  
 Inlet: "LCMS-EXP\_C" Annotation: "

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QC

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GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 31/03/2010 4:24:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0330025.wiff	<b>Acquisition Date</b>	3/30/2010 7:10:35 PM
<b>Sample Name</b>	WXX100330-57CRI	<b>Acquisition Method</b>	8321_pntx.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	033010.rdb
<b>Procedure Code</b>	LCMSEXP_C	<b>Sample Type</b>	Quality Control

	<b>Compound Name:</b>	Nitrobenzene (123.0/46.0 amu)
	Expected RT:	11.9
	Actual RT:	11.9
	Area Counts:	1.92e+005
	Manual Modification	No
	Amount:	35.6 (ng/mL)
	% Accuracy:	89.00

	<b>Compound Name:</b>	34-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	12.2
	Actual RT:	12.2
	Area Counts:	4.05e+006
	Manual Modification	No
	Amount:	23.3 (ng/mL)
	% Accuracy:	117.00

	<b>Compound Name:</b>	26-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	15.0
	Actual RT:	15.0
	Area Counts:	6.51e+006
	Manual Modification	No
	Amount:	48.3 (ng/mL)
	% Accuracy:	121.00

	<b>Compound Name:</b>	24-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	15.6
	Actual RT:	15.7
	Area Counts:	3.61e+006
	Manual Modification	Yes
	Amount:	44.0 (ng/mL)
	% Accuracy:	110.00

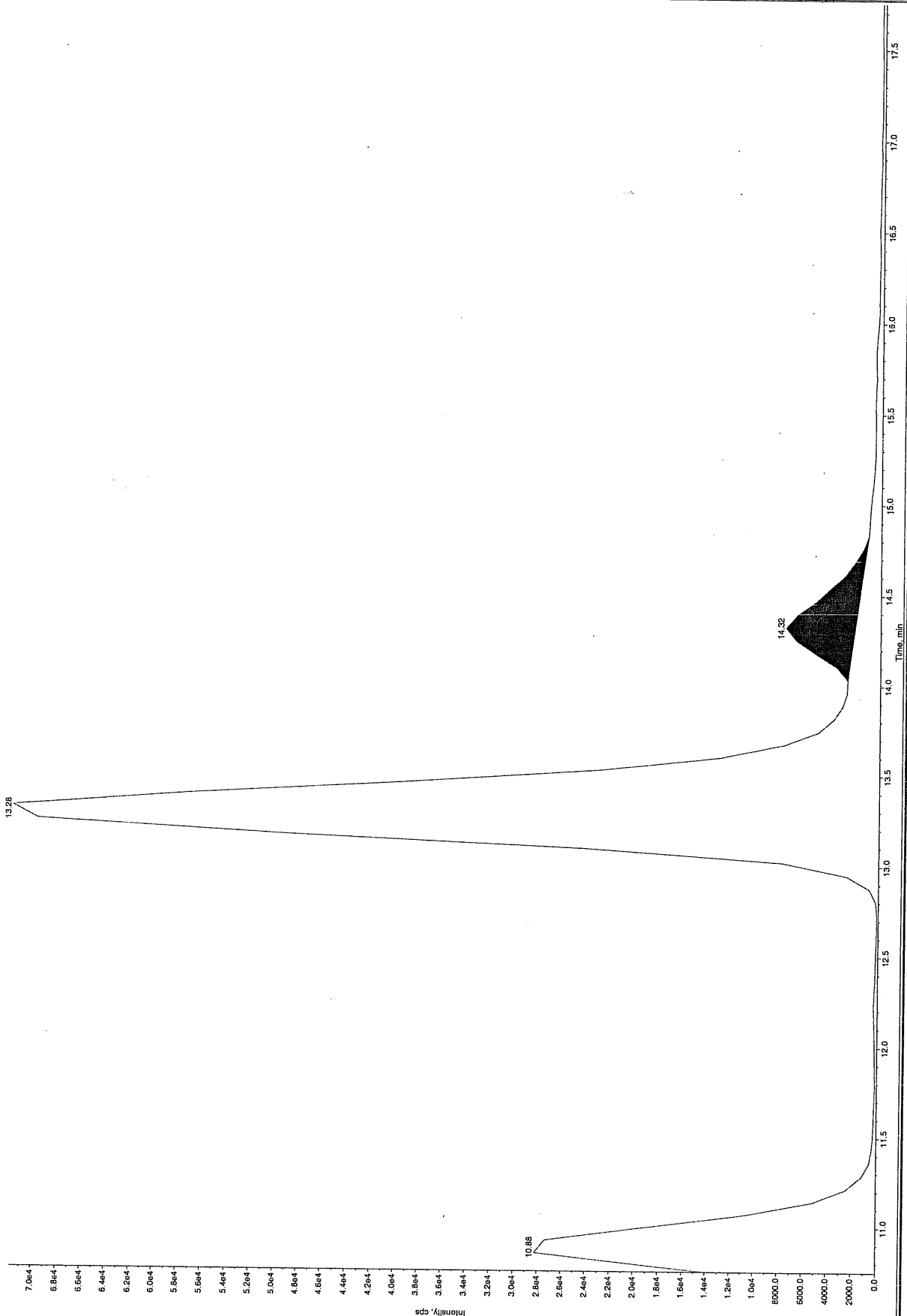
Before Jan 4/11/10

File Name: "WXX100300-57.CRI" Sample ID: "JILER" File: "EXP03030025.wif"  
 Unit: "LCMSSEXP\_C" Annotation: "197.0/180.0 amu"

QC  
 e Type: 40.0 ng/mL  
 ncentration: 40.0 ng/mL  
 Date: 3/30/2010  
 Time: 7:10:35 PM

Algorithm: IntelliQuan - IOL  
 Peak Width: 0.00 cps  
 Peak Width: 30.0 points  
 Window: 30.0 sec  
 Peak RT: 14.3 min  
 Peak RT: 14.3 min

Type: Valley  
 Peak Time: 14.3 min  
 Peak Time: 1.19e+005 counts  
 Peak Time: 5.61e+003 cps  
 Peak Time: 14.8 min



L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#3

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 31/03/2010 4:24:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0330025.wiff	<b>Acquisition Date</b>	3/30/2010 7:10:35 PM
<b>Sample Name</b>	WXX100330-57CRI	<b>Acquisition Method</b>	8321_pntx.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	033010.rdb
<b>Procedure Code</b>	LCMSEXP_C	<b>Sample Type</b>	Quality Control

	<b>Compound Name:</b>	4-Amino-26-dinitrotoluene (197.0/167.0 amu)
	Expected RT:	13.3
	Actual RT:	13.3
	Area Counts:	7.58e+006
	Manual Modification	No
	Amount:	50.4 (ng/mL)
	% Accuracy:	126.00

	<b>Compound Name:</b>	2-Amino-46-dinitrotoluene (197.0/180.0 amu)
	Expected RT:	14.3
	Actual RT:	14.3
	Area Counts:	2.02e+005
	Manual Modification	Yes
	Amount:	35.9 (ng/mL)
	% Accuracy:	89.60

	<b>Compound Name:</b>	2-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	17.8
	Actual RT:	17.8
	Area Counts:	9.29e+004
	Manual Modification	No
	Amount:	47.7 (ng/mL)
	% Accuracy:	119.00

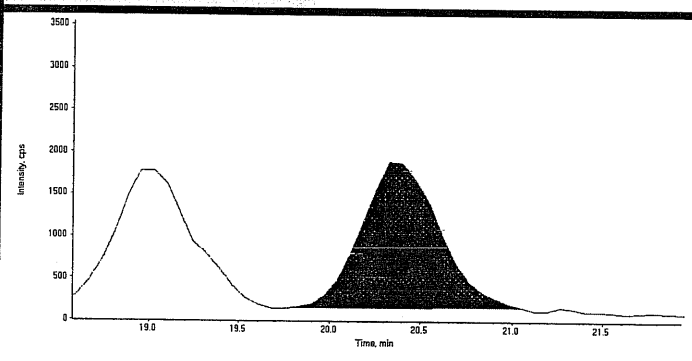
	<b>Compound Name:</b>	4-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	19.0
	Actual RT:	19.0
	Area Counts:	4.96e+004
	Manual Modification	No
	Amount:	45.5 (ng/mL)
	% Accuracy:	114.00

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

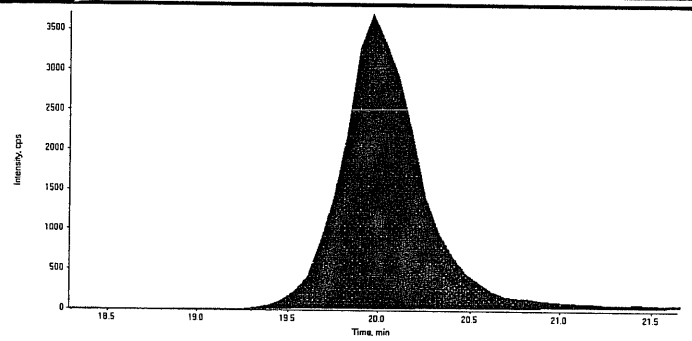
Printed: 31/03/2010 4:24:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0330025.wiff	<b>Acquisition Date</b>	3/30/2010 7:10:35 PM
<b>Sample Name</b>	WXX100330-57CRI	<b>Acquisition Method</b>	8321_pntx.dam
<b>Batch Dilution Analyst</b>	1 LER	<b>Result Table</b>	033010.rdb
<b>Procedure Code</b>	LCMSEXP_C	<b>Sample Type</b>	Quality Control

	<b>Compound Name:</b>	3-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	20.3
	Actual RT:	20.3
	Area Counts:	5.15e+004
	Manual Modification	No
	Amount:	38.1 (ng/mL)
	% Accuracy:	95.40

	<b>Compound Name:</b>	PETN (361.1/62.0 amu)
	Expected RT:	20.0
	Actual RT:	20.0
	Area Counts:	1.12e+005
	Manual Modification	No
	Amount:	52.7 (ng/mL)
	% Accuracy:	132.00

GRAND MEAN AVERAGE

Vendor: Restek  
 Date of Analysis 03/30/10  
 Time of Injection 1910  
 Standard Number WXX100330-57CRI  
 Data File EXP0330025a

HMX	97.3
RDX	103.0
135-Trinitrobenzene	96.8
13-Dinitrobenzene	91.5
Tetryl	98.3
246-Trinitrotoluene	88.2
Nitrobenzene	89.0
34-dinitrotoluene	117.0
26-dinitrotoluene	121.0
24-dinitrotoluene	110.0
4-Amino-26-dinitrotoluene	126.0
2-Amino-46-dinitrotoluene	89.6
2-Nitrotoluene	119.0
4-Nitrotoluene	114.0
3-Nitrotoluene	95.4
PETN	132.0

TOTAL

1688.1

*Ann 04/02/10*

AVERAGE

✓ 105.5

ICV Limits 85-115%

CRI Limits 70-130%

CCV Limits 85-115%

No single analyte > +/- 60%

*Jan 4/1/10*

7B  
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1758

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXS03050013.wiff

Analysis Date: 05-MAR-10 20:16

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
3,4-Dinitrotoluene	50	52	104	
3,5-Dinitroaniline	100	104	104	
TATB	100	108	108	
tris(o-cresyl) phosphate	100	100	100	
2,4-Diamino-6-nitrotoluene	100	102	102	
2,6-Diamino-4-nitrotoluene	100	104	104	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,  
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

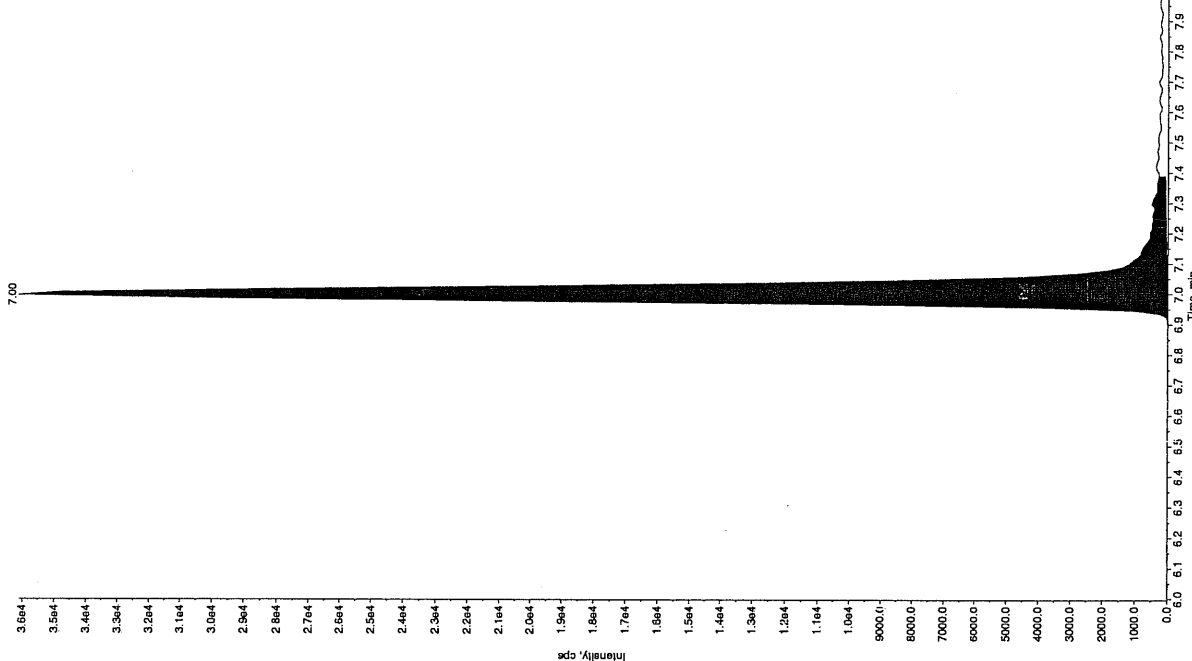
# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

GLA 3/9/10

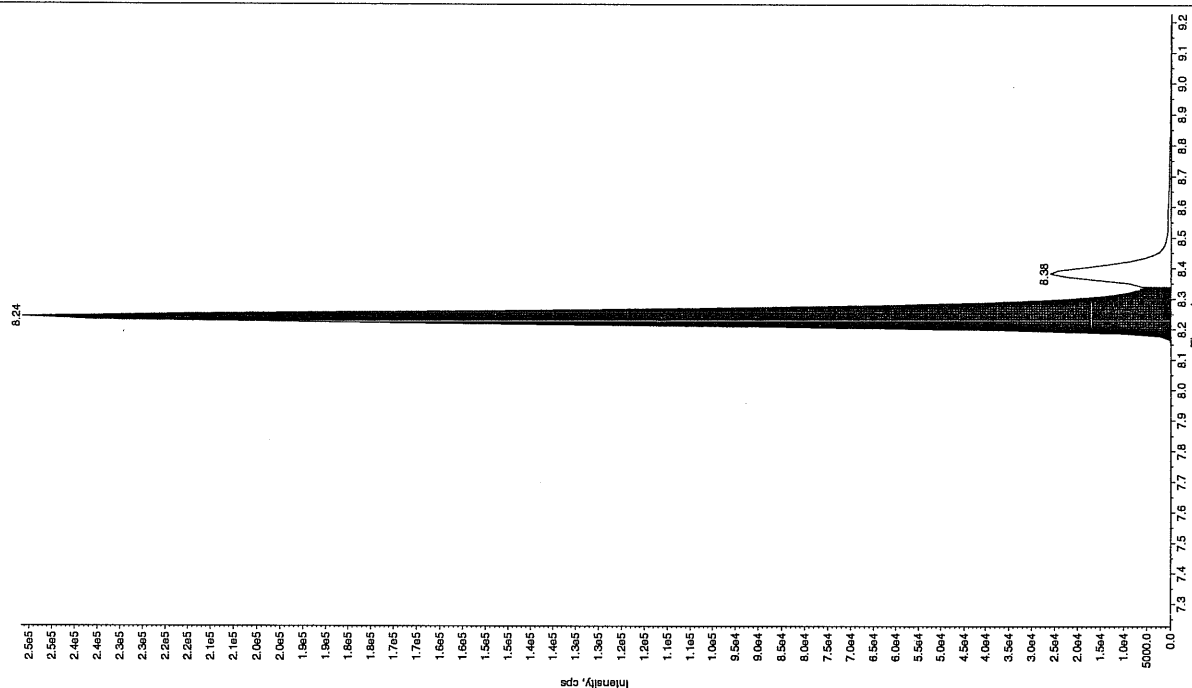
Sample Name: "WXX10005-27091" Sample ID: "111LER" File: "EXS03050013.wif"  
 Name: "TATB" Mass(es): "257.2204.9 amu"  
 Comment: "LCMSEXP\_C" Annotation: ""

Sample Index: 1 QC  
 Sample Type: 100. ng/mL  
 Concentration: 108. ng/mL  
 Calculated Conc: 3/5/2010  
 Acq. Date: 8:16:04 PM  
 Acq. Time: 8:16:04 PM  
 Modified: No  
 Proc Algorithm: IntelliQuan - IQA  
 Min. Peak Height: 2500.00 cps  
 Min. Peak Width: 3.00 points  
 Smoothing Width: 30.0 sec  
 RT Window: 7.00 min  
 Expected RT: No  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 7.00 min  
 Area: 1.42e+005 counts  
 Height: 36071.091 cps  
 Start Time: 6.89 min  
 End Time: 7.33 min



Sample Name: "WXX10005-27091" Sample ID: "111LER" File: "EXS03050013.wif"  
 Name: "TATB" Mass(es): "182.046.0 amu"  
 Comment: "LCMSEXP\_C" Annotation: ""

Sample Index: 1 QC  
 Sample Type: 100. ng/mL  
 Concentration: 104. ng/mL  
 Calculated Conc: 3/5/2010  
 Acq. Date: 8:16:04 PM  
 Acq. Time: 8:16:04 PM  
 Modified: No  
 Proc Algorithm: IntelliQuan - IQA  
 Min. Peak Height: 2000.00 cps  
 Min. Peak Width: 3.00 points  
 Smoothing Width: 15.0 sec  
 RT Window: 8.23 min  
 Expected RT: No  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 8.24 min  
 Area: 8.89e+005 counts  
 Height: 251687.103 cps  
 Start Time: 8.14 min  
 End Time: 8.34 min

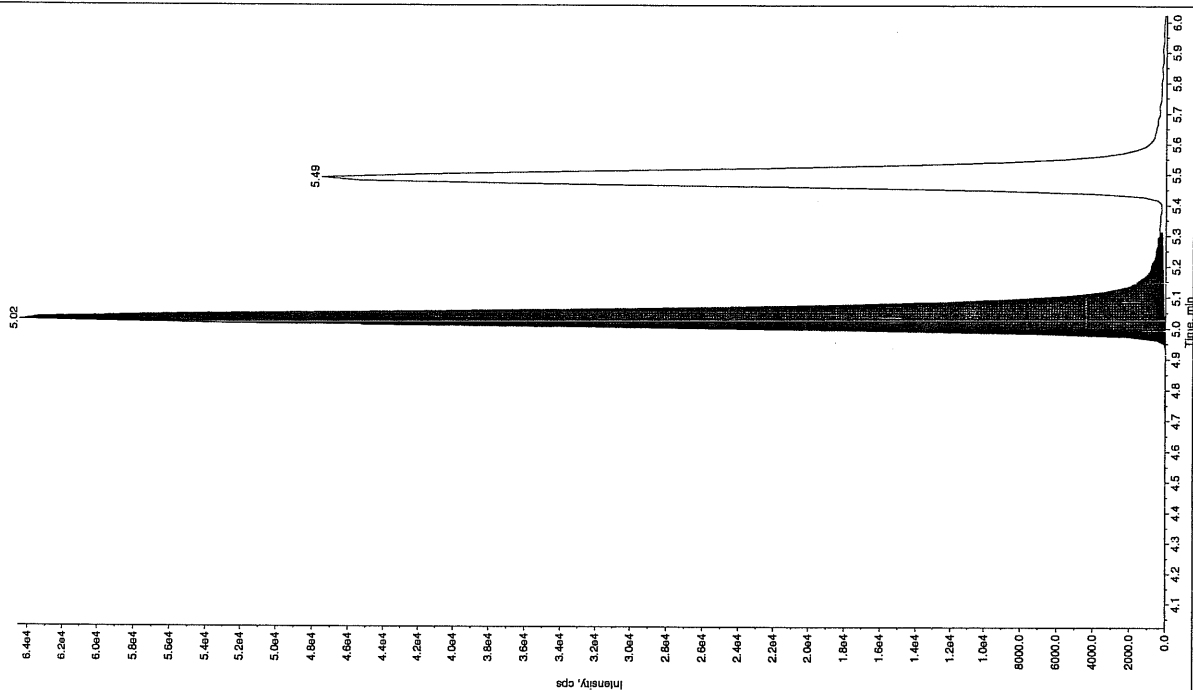


Hum 03/09/10



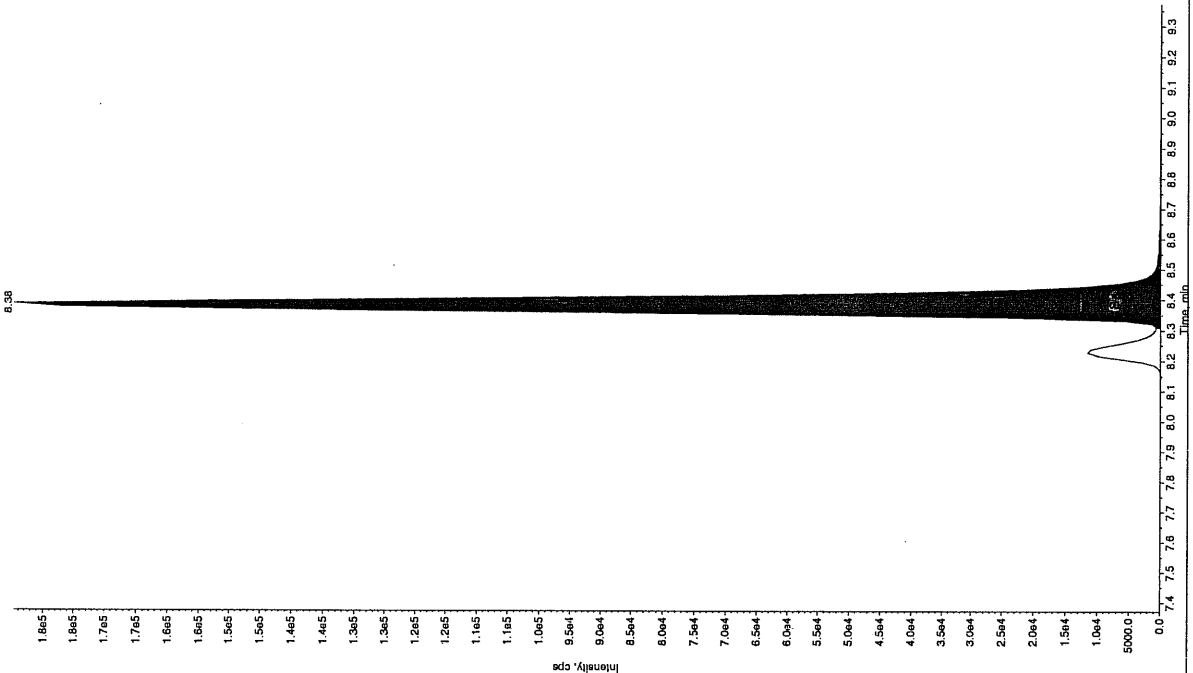
Sample Name: "WXX100305-270R1" Sample ID: "111LER" File: "EXS03050013.wif"  
 Peak Name: "26-Diamino-4-nitrofluorene" Mass(es): "166.0/46.0 amu"  
 Comment: "LCMSEXP\_C" Annotation: ""

Sample Index: 1  
 Sample Type: QC  
 Concentration: 100. ng/mL  
 Calculated Conc: 104. ng/mL  
 Acq. Date: 3/5/2010  
 Acq. Time: 8:16:04 PM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IQA  
 Min. Peak Height: 450.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 30.0 sec  
 Expected RT: 5.02 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 5.02 min  
 Area: 2.66e+005 counts  
 Height: 64472.961 cps  
 Start Time: 4.93 min  
 End Time: 5.31 min



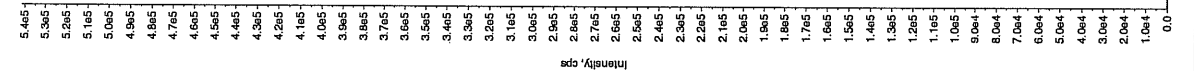
Sample Name: "WXX100305-270R1" Sample ID: "111LER" File: "EXS03050013.wif"  
 Peak Name: "34-Dinitrofluorene" Mass(es): "182.1/151.9 amu"  
 Comment: "LCMSEXP\_C" Annotation: ""

Sample Index: 1  
 Sample Type: QC  
 Concentration: 50.0 ng/mL  
 Calculated Conc: 52.0 ng/mL  
 Acq. Date: 3/5/2010  
 Acq. Time: 8:16:04 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: 30.0 sec  
 Expected RT: 8.37 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 8.38 min  
 Area: 6.29e+005 counts  
 Height: 184661.255 cps  
 Start Time: 8.31 min  
 End Time: 8.69 min



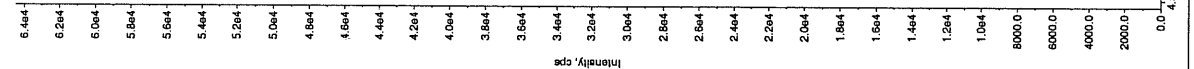
Sample Name: "WXX100305-27QRI" Sample ID: "111LER" File: "EXS0050013.wif"  
 Peak Name: "tris(o-cresyl) phosphate" Mass(es): "369.1/91.0 amu"  
 Comment: "LCMSEXP\_C" Annotation: ""

Sample Index: 1  
 Sample Type: QC  
 Concentration: 100. ng/mL  
 Calculated Conc: 100. ng/mL  
 Acq. Date: 3/5/2010  
 Acq. Time: 8:16:04 PM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IQA  
 Min. Peak Height: 8000.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 30.0 sec  
 Expected RT: 10.9 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 10.9 min  
 Area: 1.89e+006 counts  
 Height: 541194.153 cps  
 Start Time: 10.8 min  
 End Time: 11.1 min



Sample Name: "WXX100305-27QRI" Sample ID: "111LER" File: "EXS0050013.wif"  
 Peak Name: "24,24,24-trinitrophenol" Mass(es): "166.0/66.0 amu"  
 Comment: "LCMSEXP\_C" Annotation: ""

Sample Index: 1  
 Sample Type: QC  
 Concentration: 100. ng/mL  
 Calculated Conc: 100. ng/mL  
 Acq. Date: 3/5/2010  
 Acq. Time: 8:16:04 PM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IQA  
 Min. Peak Height: 350.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 30.0 sec  
 Expected RT: 5.48 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 5.49 min  
 Area: 1.85e+005 counts  
 Height: 47318.394 cps  
 Start Time: 5.38 min  
 End Time: 5.83 min



7A  
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1758

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXS03050024.wiff

Analysis Date: 05-MAR-10 23:08

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	500	507	101	
2,6-Diamino-4-nitrotoluene	500	520	104	
3,4-Dinitrotoluene	250	237	95	
3,5-Dinitroaniline	500	509	102	
TATB	500	506	101	
tris(o-cresyl) phosphate	500	505	101	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,  
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

Before Jan 31/10

Sample Name: "WXX100305-260CV" Sample ID: "J1LER" File: "EXS03050024.wif"

Peak Name: "35-Dinitroaniline" Mass(es): "182.046.0 amu"

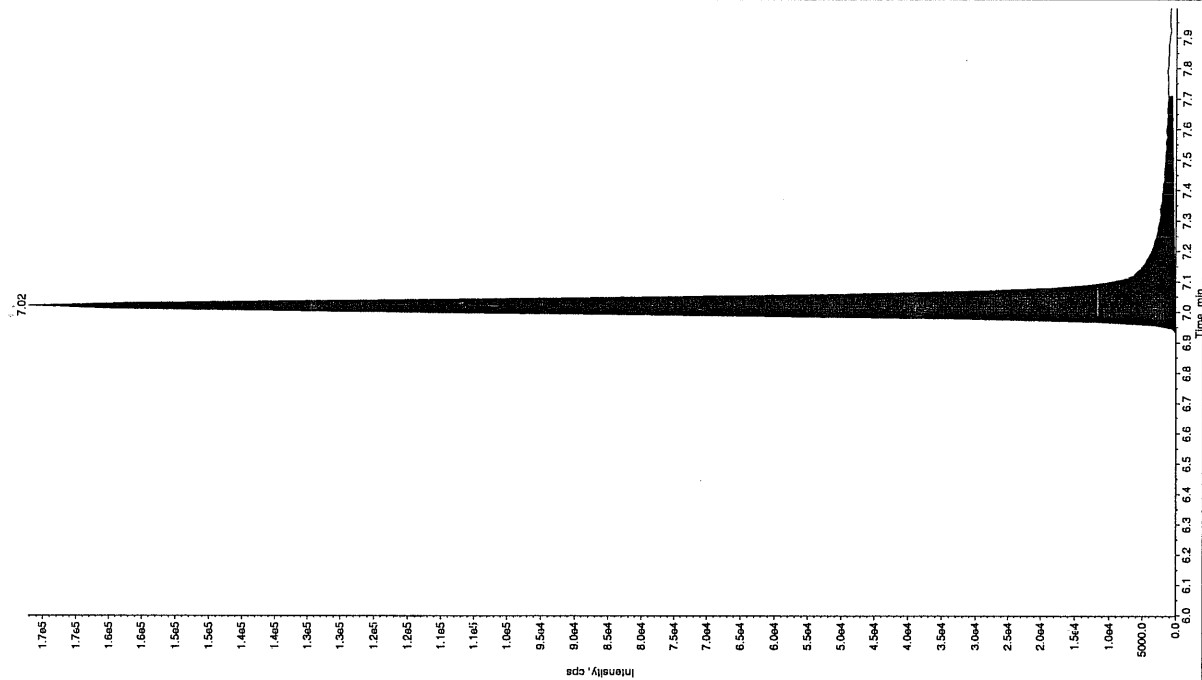
Comment: "LCMSEXP\_C" Annotation: ""

Sample Index: 1

Sample Type: QC  
Concentration: 500. ng/mL  
Calculated Conc: 489. ng/mL  
Acq. Date: 3/5/2010  
Acq. Time: 11:08:44 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: 8.23 min  
Use Relative RT: No

Int. Type: Valley  
Retention Time: 8.25 min  
Area: 4.00e+006 counts  
Height: 1103983.643 cps  
Start Time: 8.19 min  
End Time: 8.35 min



Sample Name: "WXX100305-260CV" Sample ID: "J1LER" File: "EXS03050024.wif"

Peak Name: "35-Dinitroaniline" Mass(es): "182.046.0 amu"

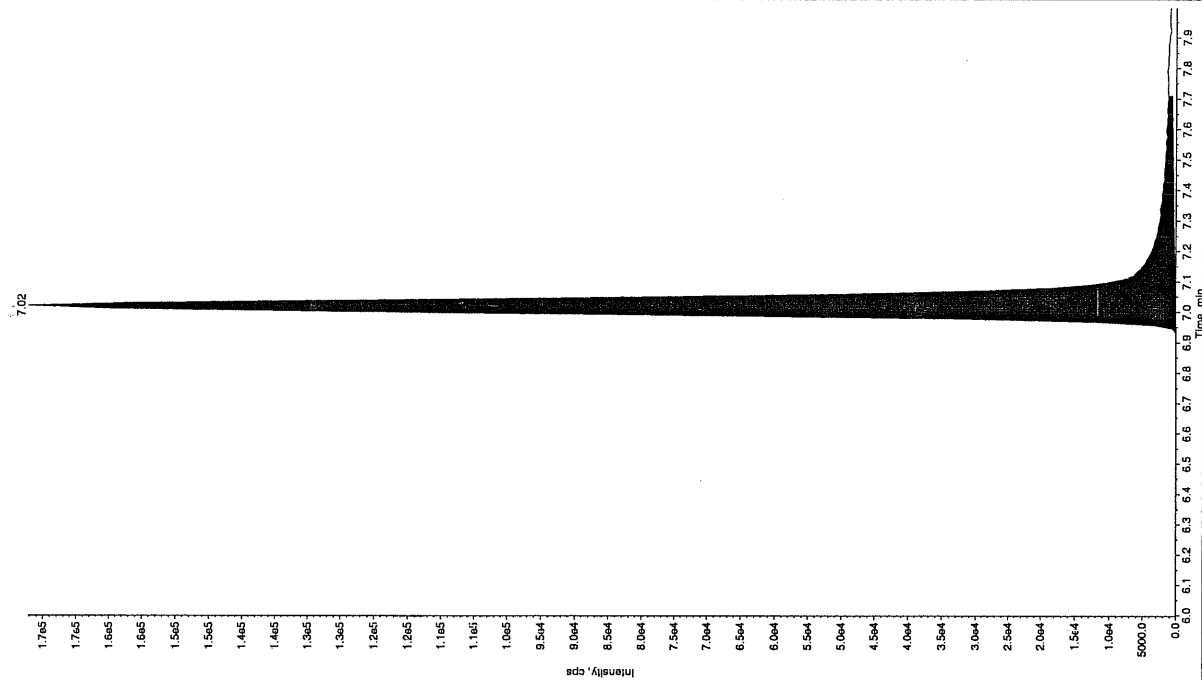
Comment: "LCMSEXP\_C" Annotation: ""

Sample Index: 1

Sample Type: QC  
Concentration: 500. ng/mL  
Calculated Conc: 506. ng/mL  
Acq. Date: 3/5/2010  
Acq. Time: 11:08:44 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: 7.00 min  
Use Relative RT: No

Int. Type: Valley  
Retention Time: 7.02 min  
Area: 7.28e+005 counts  
Height: 172189.423 cps  
Start Time: 6.92 min  
End Time: 7.71 min



J SOP GL-OA-E-056, Method 8321A-Modified LCM SMS#4

after Jan 3/9/10

File Name: "WXX100305-265CV" Sample ID: "11LER" File: "EXS03050024.wif"  
 Peak Name: "TATB" Mass(es): "257.2/204.9 amu"  
 Comment: "LCMSEXP\_C" Annotation: "

Sample Index: 1  
 Sample Type: QC  
 Concentration: 500. ng/mL  
 Calculated Conc: 509. ng/mL  
 Acq. Date: 3/5/2010  
 Acq. Time: 11:08:44 PM  
 Modified: Yes  
 RT Window: 15.0 sec  
 Expected RT: 8.23 min  
 Use Relative RT: No  
 Int. Type: Manual  
 Retention Time: 8.25 min  
 Area: 4.15e+006 counts  
 Height: 1137952.652 cps  
 Start Time: 8.19 min  
 End Time: 8.35 min

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: 506. ng/mL  
 Date: 3/5/2010  
 Time: 11:08:44 PM  
 Modified: No  
 Algorithm: IntelliQuan - IQA  
 Peak Height: 2500.00 cps  
 Peak Width: 0.00 sec  
 Peak Width: 3.00 points  
 Window: 30.0 sec  
 Retention Time: 7.00 min  
 Relative RT: No  
 Type: Valley  
 Retention Time: 7.02 min  
 Area: 7.28e+005 counts  
 Height: 172189.423 cps  
 Start Time: 6.92 min  
 End Time: 7.71 min



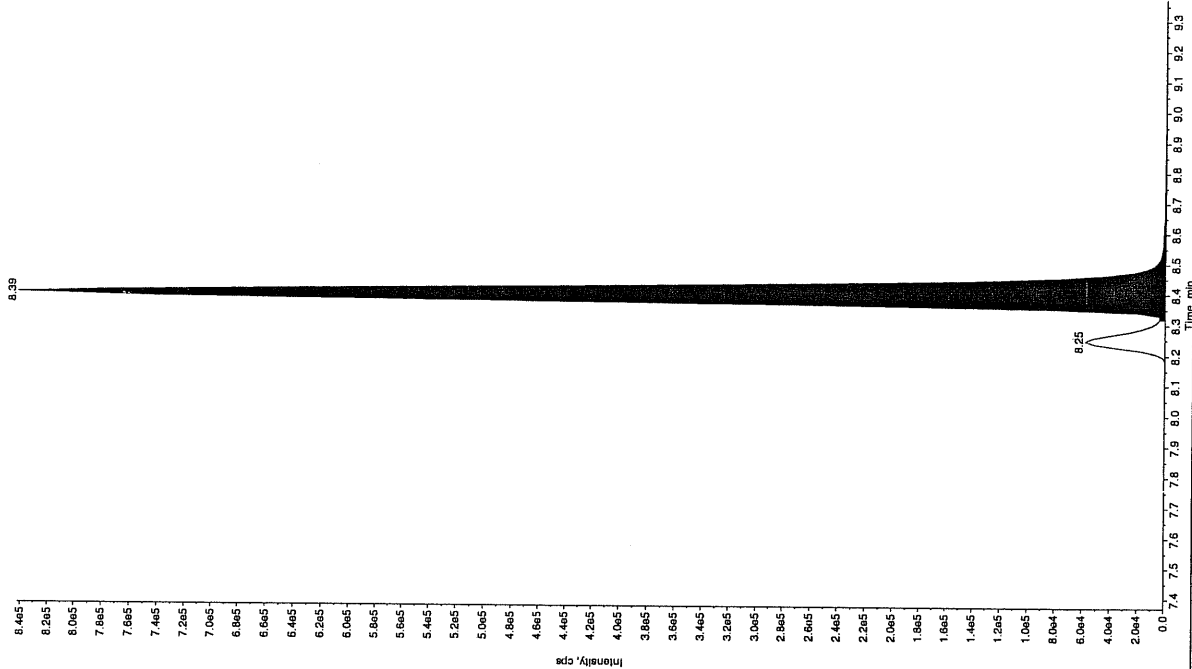
File Name: "WXX100305-265CV" Sample ID: "11LER" File: "EXS03050024.wif"  
 Peak Name: "35-Dinitroaniline" Mass(es): "182.0/46.0 amu"  
 Comment: "LCMSEXP\_C" Annotation: "

Sample Index: 1  
 Sample Type: QC  
 Concentration: 500. ng/mL  
 Calculated Conc: 509. ng/mL  
 Acq. Date: 3/5/2010  
 Acq. Time: 11:08:44 PM  
 Modified: Yes  
 RT Window: 15.0 sec  
 Expected RT: 8.23 min  
 Use Relative RT: No  
 Int. Type: Manual  
 Retention Time: 8.25 min  
 Area: 4.15e+006 counts  
 Height: 1137952.652 cps  
 Start Time: 8.19 min  
 End Time: 8.35 min



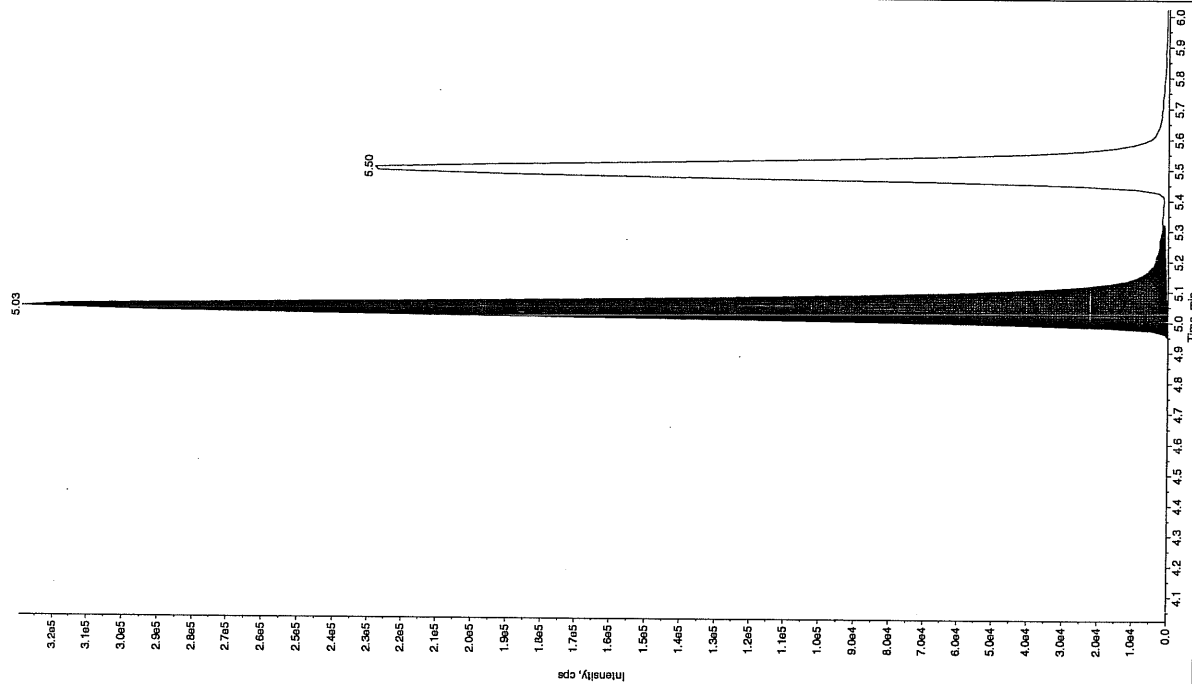
File Name: "WXX100305-26COV" Sample ID: "111ER" File: "EXS03050024.wif"  
 Name: "34-Diamino-4-nitrobenzene" Mass(es): "182.17619 amu"  
 Comment: "LCMSEXP\_C" Annotation: ""

Sample Index: 1  
 Sample Type: QC  
 Concentration: 250. ng/mL  
 Calculated Conc: 237. ng/mL  
 Acq. Date: 3/5/2010  
 Acq. Time: 11:08:44 PM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IQA  
 Peak Height: 1460.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 30.0 sec  
 Expected RT: 8.37 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 8.39 min  
 Area: 2.96e+006 counts  
 Height: 841921.204 cps  
 Start Time: 8.32 min  
 End Time: 8.74 min



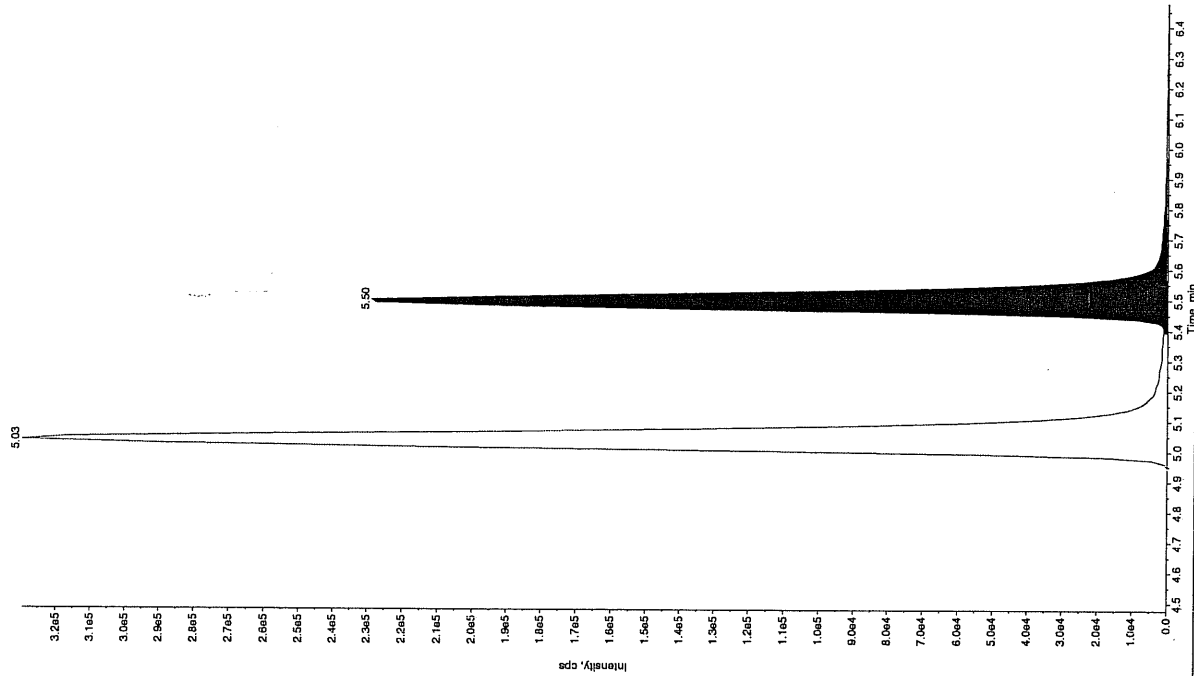
Sample Name: "WXX100305-26COV" Sample ID: "111ER" File: "EXS03050024.wif"  
 Peak Name: "26-Diamino-4-nitrobenzene" Mass(es): "166.0460 amu"  
 Comment: "LCMSEXP\_C" Annotation: ""

Sample Index: 1  
 Sample Type: QC  
 Concentration: 500. ng/mL  
 Calculated Conc: 520. ng/mL  
 Acq. Date: 3/5/2010  
 Acq. Time: 11:08:44 PM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IQA  
 Peak Height: 450.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 30.0 sec  
 Expected RT: 5.02 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 5.03 min  
 Area: 1.37e+006 counts  
 Height: 329270.813 cps  
 Start Time: 4.94 min  
 End Time: 5.32 min



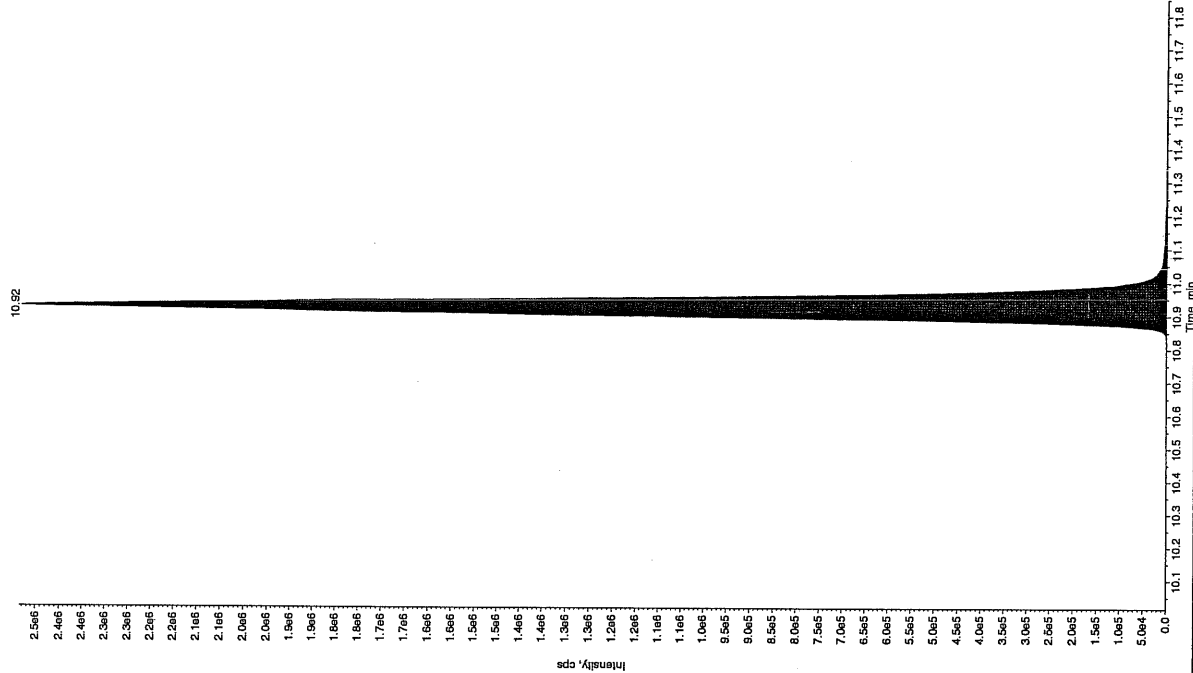
Sample Name: "WXX100305-260CV" Sample ID: "JILER" File: "EXS03050024.wif"  
 Peak Name: "24-Diamino-6-nitrotoluene" Mass(es): "166.046.0 amu"  
 Comment: "LCMSEXP\_C" Annotation: ""

Sample Index: 1 QC  
 Sample Type: 500. ng/mL  
 Concentration: 507. ng/mL  
 Calculated Conc: 3/5/2010  
 Acq. Date: 11:08:44 PM  
 Acq. Time: 11:08:44 PM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IQA  
 Min. Peak Height: 350.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 Xi Window: 30.0 sec  
 Expected RT: 5.48 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 5.50 min  
 Area: 9.40e+005 counts  
 Height: 228285.080 cps  
 Start Time: 5.39 min  
 End Time: 6.00 min



Sample Name: "WXX100305-260CV" Sample ID: "JILER" File: "EXS03050024.wif"  
 Peak Name: "tris(Cresyl) phosphate" Mass(es): "369.191.0 amu"  
 Comment: "LCMSEXP\_C" Annotation: ""

Sample Index: 1 QC  
 Sample Type: 500. ng/mL  
 Concentration: 505. ng/mL  
 Calculated Conc: 3/5/2010  
 Acq. Date: 11:08:44 PM  
 Acq. Time: 11:08:44 PM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IQA  
 Min. Peak Height: 8000.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 Xi Window: 30.0 sec  
 Expected RT: 10.9 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 10.9 min  
 Area: 8.48e+006 counts  
 Height: 2484763.184 cps  
 Start Time: 10.8 min  
 End Time: 11.3 min



**7B**  
**Explosives CRI Standard**

**Lab Name:** GEL Laboratories LLC

**GEL Job No (SDG):** 10-1758

**Lab Code:** GEL

**GEL Sample ID:** WXXCRI

**GEL Data File** EXS03050026.wiff

**Analysis Date:** 05-MAR-10 23:40

**LCMSMS ID:** 1358

**Column ID:** JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	100	102	102	
2,6-Diamino-4-nitrotoluene	100	109	109	
3,4-Dinitrotoluene	50	51.8	104	
3,5-Dinitroaniline	100	105	105	
TATB	100	112	112	
tris(o-cresyl) phosphate	100	103	103	

**Recovery Limits:**

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,  
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits



Run 3/9/10

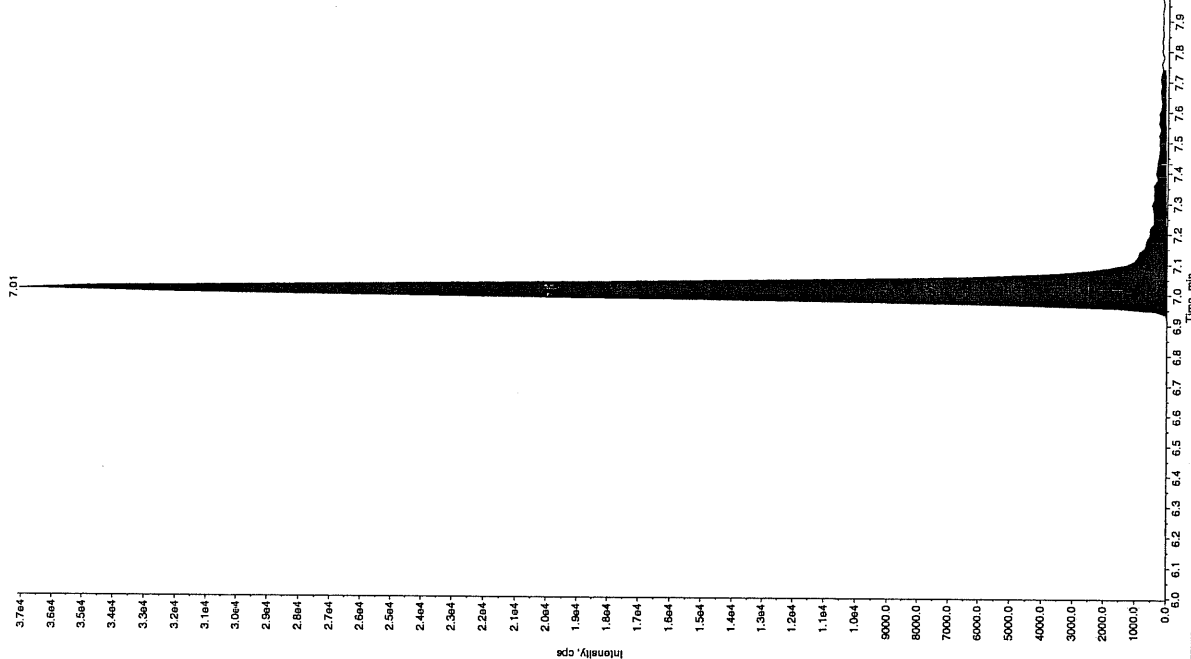
Sample Name: "WXX100305-27CR1" Sample ID: "1111ER" File: "EXS03050026.wif"  
 Peak Name: "TATB" Mass(es): "257.2/204.9 amu"  
 Comment: "LCMSEXP\_C" Annotation: ""

Sample Index: 1

Sample Type: QC  
 Concentration: 100. ng/mL  
 Calculated Conc: 112. ng/mL  
 Acq. Date: 3/5/2010  
 Acq. Time: 11:40:09 PM

Modified: No  
 Proc. Algorithm: IntelliQuan - IQA  
 Min. Peak Height: 2500.00 cps  
 Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 30.0 sec  
 Expected RT: 7.00 min  
 Use Relative RT: No

Int. Type: Valley  
 Retention Time: 7.01 min  
 Area: 1.47e+005 counts  
 Height: 37090.164 cps  
 Start Time: 6.90 min  
 End Time: 7.74 min



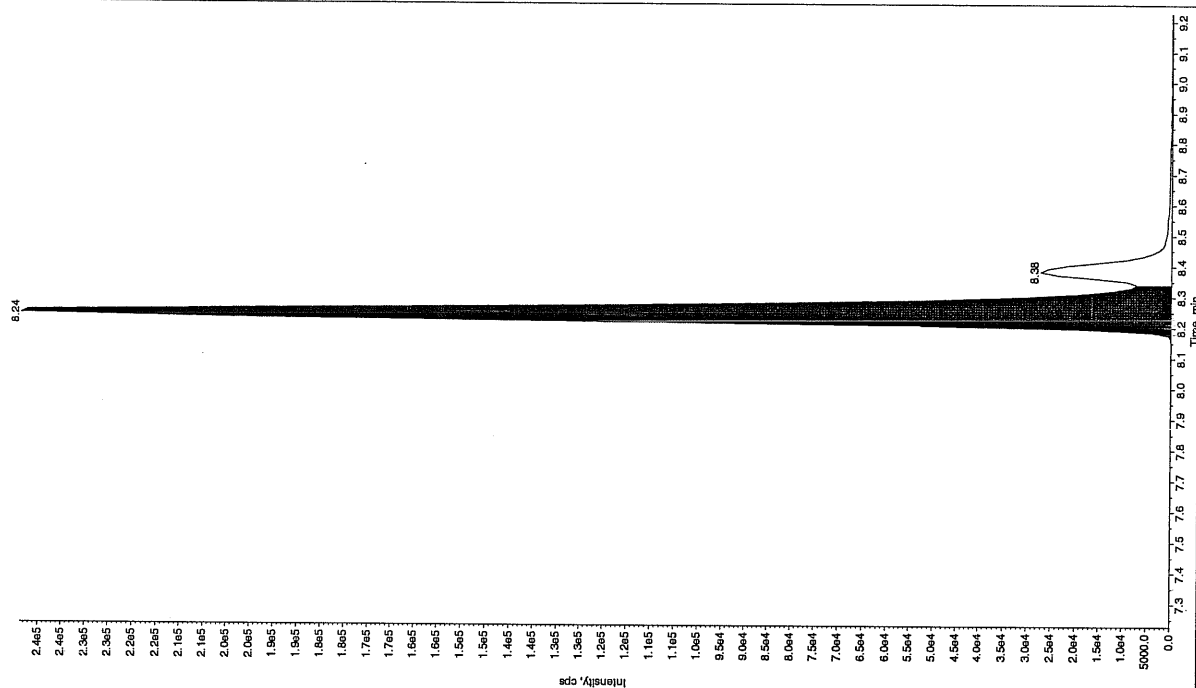
Sample Name: "WXX100305-27CR1" Sample ID: "1111ER" File: "EXS03050026.wif"  
 Peak Name: "3S-Dimircaniline" Mass(es): "182.0/46.0 amu"  
 Comment: "LCMSEXP\_C" Annotation: ""

Sample Index: 1

Sample Type: QC  
 Concentration: 100. ng/mL  
 Calculated Conc: 105. ng/mL  
 Acq. Date: 3/5/2010  
 Acq. Time: 11:40:09 PM

Modified: No  
 Proc. Algorithm: IntelliQuan - IQA  
 Min. Peak Height: 2000.00 cps  
 Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 15.0 sec  
 Expected RT: 8.23 min  
 Use Relative RT: No

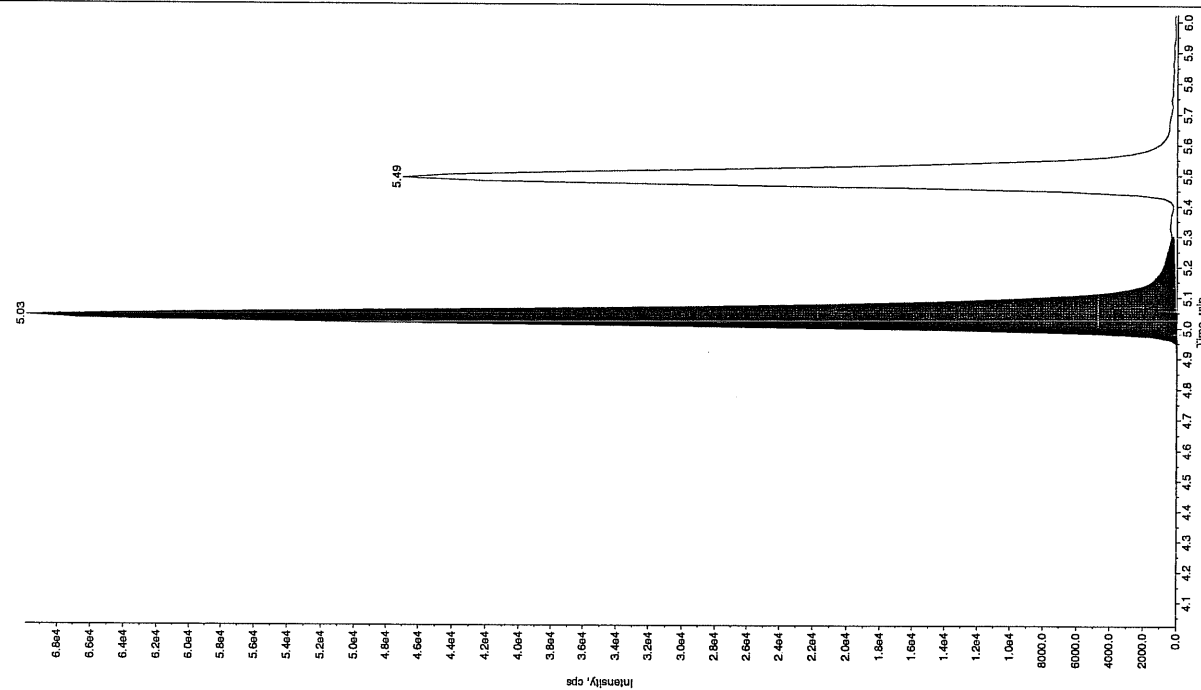
Int. Type: Valley  
 Retention Time: 8.24 min  
 Area: 8.94e+005 counts  
 Height: 243688.553 cps  
 Start Time: 8.13 min  
 End Time: 8.34 min



4/10/09/10

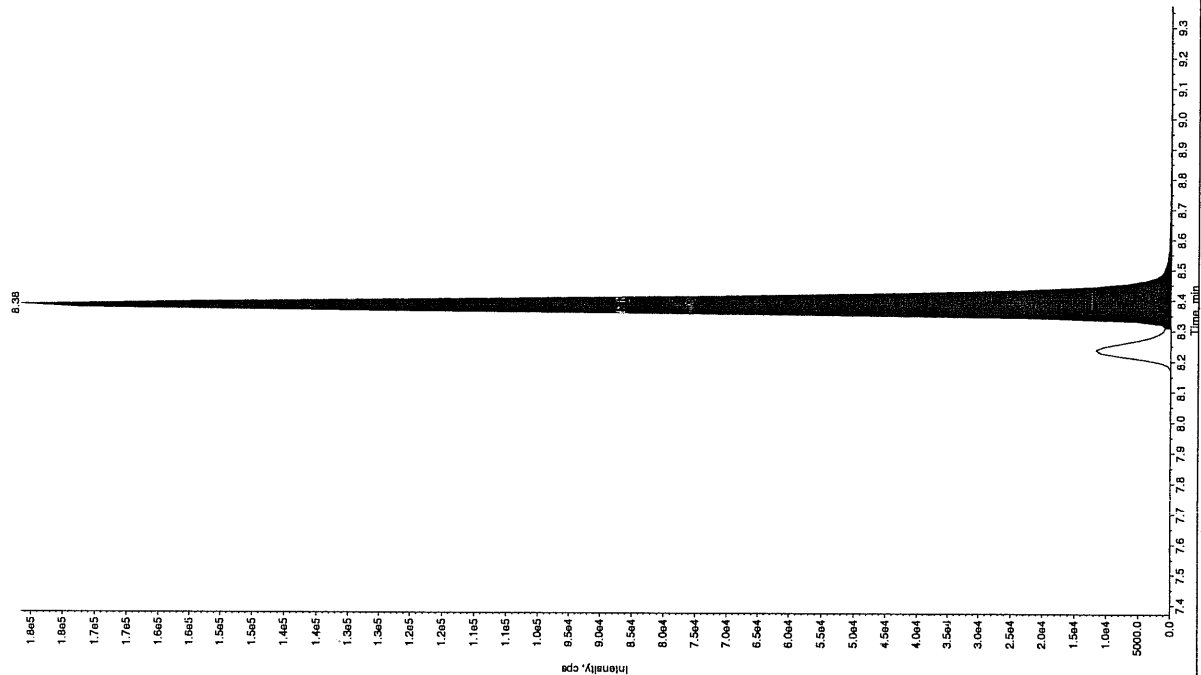
File Name: "WXX100305-270RI" Sample ID: "11JLER" File: "EXS03050026.wif"  
 Peak Name: "34-Dinitrotoluene" Mass(es): "182.1/151.9 amu"  
 Comment: "LCMSEXP\_C" Annotation: ""

Sample Index: 1  
 Sample Type: QC  
 Concentration: 100. ng/mL  
 Calculated Conc: 109. ng/mL  
 Acq. Date: 3/5/2010  
 Acq. Time: 11:40:09 PM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IOA  
 Min. Peak Height: 450.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 30.0 sec  
 Expected RT: 5.02 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 5.03 min  
 Area: 2.80e+005 counts  
 Height: 69851.128 cps  
 Start Time: 4.94 min  
 End Time: 5.30 min



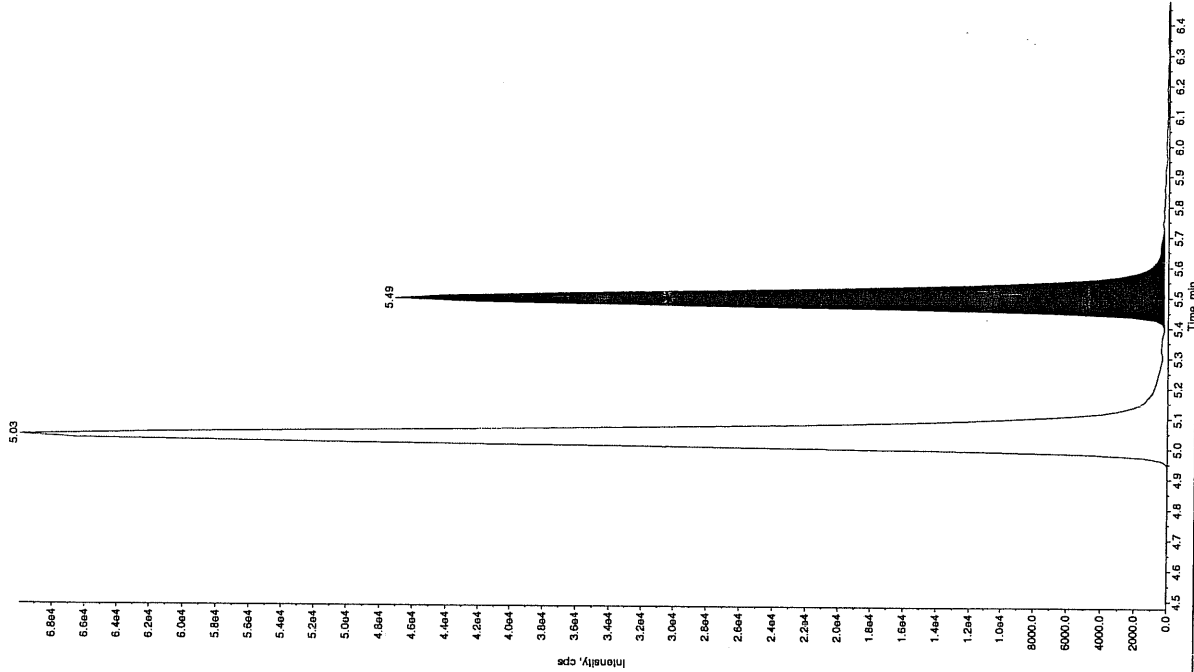
File Name: "WXX100305-270RI" Sample ID: "11JLER" File: "EXS03050026.wif"  
 Peak Name: "34-Dinitrotoluene" Mass(es): "182.1/151.9 amu"  
 Comment: "LCMSEXP\_C" Annotation: ""

Sample Index: 1  
 Sample Type: QC  
 Concentration: 50.0 ng/mL  
 Calculated Conc: 51.8 ng/mL  
 Acq. Date: 3/5/2010  
 Acq. Time: 11:40:09 PM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IOA  
 Min. Peak Height: 1460.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 30.0 sec  
 Expected RT: 8.37 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 8.38 min  
 Area: 6.26e+005 counts  
 Height: 181524.170 cps  
 Start Time: 8.31 min  
 End Time: 8.73 min



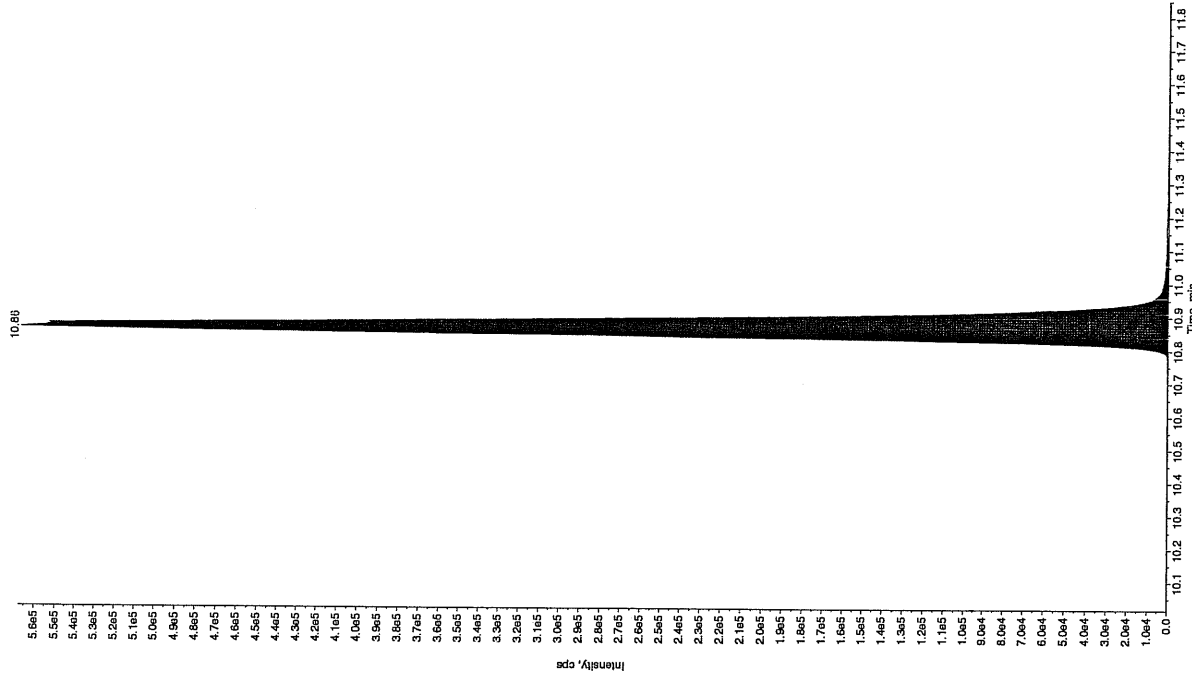
Sample Name: "WXX100305-270RI" Sample ID: "111LER" File: "EXS03050026.wif"  
 Name: "24-Diamino-6-nitrotoluene" Mass(es): "166.046.0 amu"  
 Comment: "LCMSEXP\_C" Annotation: ""

Sample Index: 1  
 Sample Type: QC  
 Concentration: 100. ng/mL  
 Calculated Conc: 102. ng/mL  
 Acq. Date: 3/5/2010  
 Acq. Time: 11:40:09 PM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IQA  
 Min. Peak Height: 350.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 30.0 sec  
 Expected RT: 5.48 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 5.49 min  
 Area: 1.85e+005 counts  
 Height: 46813.030 cps  
 Start Time: 5.39 min  
 End Time: 5.73 min



Sample Name: "WXX100305-270RI" Sample ID: "111LER" File: "EXS03050026.wif"  
 Name: "tris(o-cresyl) phosphate" Mass(es): "369.191.0 amu"  
 Comment: "LCMSEXP\_C" Annotation: ""

Sample Index: 1  
 Sample Type: QC  
 Concentration: 100. ng/mL  
 Calculated Conc: 103. ng/mL  
 Acq. Date: 3/5/2010  
 Acq. Time: 11:40:09 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: 10.9 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 10.9 min  
 Area: 1.95e+006 counts  
 Height: 56713.281 cps  
 Start Time: 10.8 min  
 End Time: 11.1 min



7A  
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1758

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXS03050035.wiff

Analysis Date: 06-MAR-10 02:01

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	500	509	102	
2,6-Diamino-4-nitrotoluene	500	531	106	
3,4-Dinitrotoluene	250	246	98	
3,5-Dinitroaniline	500	529	106	
TATB	500	534	107	
tris(o-cresyl) phosphate	500	503	101	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,  
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

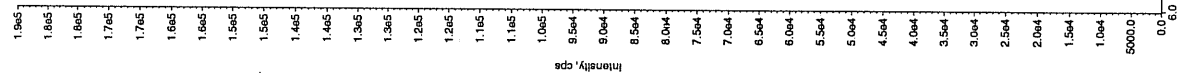
Before Jan 31/10

File Name: "WXX100305-260CV" Sample ID: "11LRF" File: "EXS03050035.wif"  
 Name: "TATB" Mass(es): "257.2/201.9 amu"  
 Comment: "LCMSEXP\_C" Annotation: ""

Sample Index: 1  
 Sample Type: QC  
 Concentration: 500. ng/mL  
 Calculated Conc: 507. ng/mL  
 Acq. Date: 3/6/2010  
 Acq. Time: 2:01:27 AM

Modified: No  
 Proc. Algorithm: IntelliQuan - IQA  
 Min. Peak Height: 2500.00 cps  
 Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 30.0 sec  
 Expected RT: 7.00 min  
 Use Relative RT: No

Int. Type: Valley  
 Retention Time: 7.01 min  
 Area: 7.70e+005 counts  
 Height: 184983.658 cps  
 Start Time: 6.91 min  
 End Time: 7.77 min

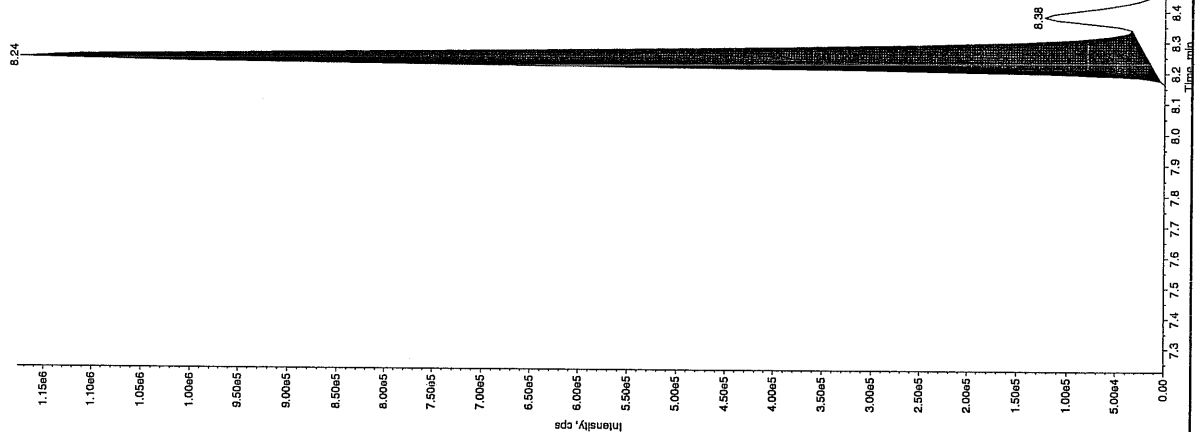


File Name: "WXX100305-260CV" Sample ID: "11LRF" File: "EXS03050035.wif"  
 Name: "TATB" Mass(es): "182.0/46.0 amu"  
 Comment: "LCMSEXP\_C" Annotation: ""

Sample Index: 1  
 Sample Type: QC  
 Concentration: 500. ng/mL  
 Calculated Conc: 507. ng/mL  
 Acq. Date: 3/6/2010  
 Acq. Time: 2:01:27 AM

Modified: No  
 Proc. Algorithm: IntelliQuan - IQA  
 Min. Peak Height: 2000.00 cps  
 Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 15.0 sec  
 Expected RT: 8.23 min  
 Use Relative RT: No

Int. Type: Valley  
 Retention Time: 8.24 min  
 Area: 4.14e+006 counts  
 Height: 1161526.001 cps  
 Start Time: 8.17 min  
 End Time: 8.34 min



After 03/04/10

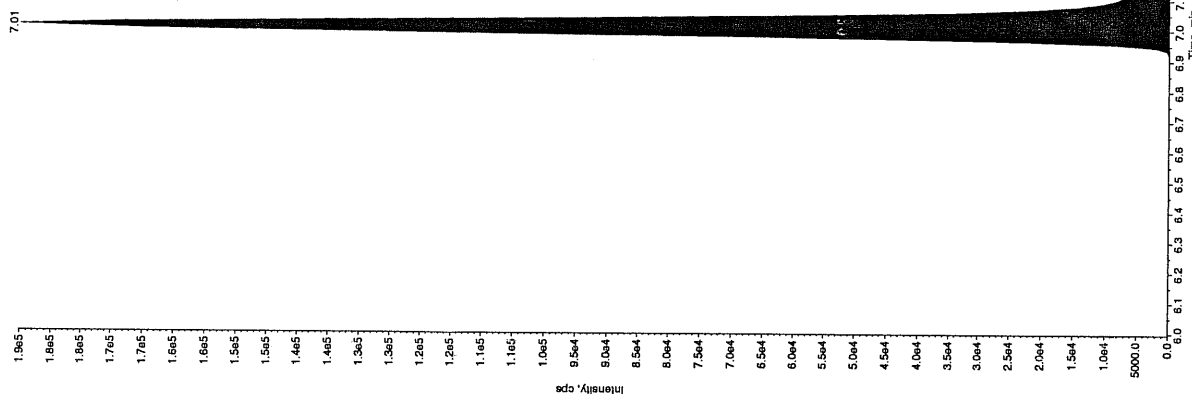
SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

after scan 3/9/10

Sample Name: "WXX100305-260CV" Sample ID: "111LER" File: "EXS03050035.wif"  
 Peak Name: "TATB" Mass(es): "257.2204.9 amu"  
 Comment: "LCMSEXP\_C" Annotation: ""

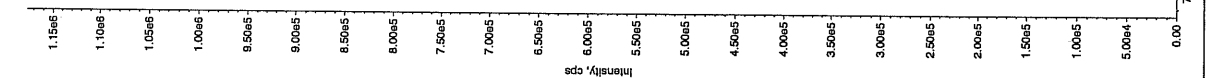
Sample Index: 1 QC  
 Sample Type: 500. ng/mL  
 Concentration: 534. ng/mL  
 Calculated Conc: 3/6/2010  
 Acq. Date: 2:01:27 AM  
 Acq. Time: 2:01:27 AM  
 Modified: Yes  
 RT Window: 15.0 sec  
 Expected RT: 8.23 min  
 Use Relative RT: No  
 Int. Type: Manual  
 Retention Time: 8.24 min  
 Area: 4.30e+006 counts  
 Height: 1181932.758 cps  
 Start Time: 8.16 min  
 End Time: 8.34 min

Sample Index: 1 QC  
 Sample Type: 500. ng/mL  
 Concentration: 534. ng/mL  
 Calculated Conc: 3/6/2010  
 Acq. Date: 2:01:27 AM  
 Acq. Time: 2:01:27 AM  
 Modified: No  
 RT Window: 15.0 sec  
 Expected RT: 8.23 min  
 Use Relative RT: No  
 Int. Type: Manual  
 Retention Time: 8.24 min  
 Area: 4.30e+006 counts  
 Height: 1181932.758 cps  
 Start Time: 8.16 min  
 End Time: 8.34 min



Sample Name: "WXX100305-260CV" Sample ID: "111LER" File: "EXS03050035.wif"  
 Peak Name: "3S-Dinitroaniline" Mass(es): "182.046.0 amu"  
 Comment: "LCMSEXP\_C" Annotation: ""

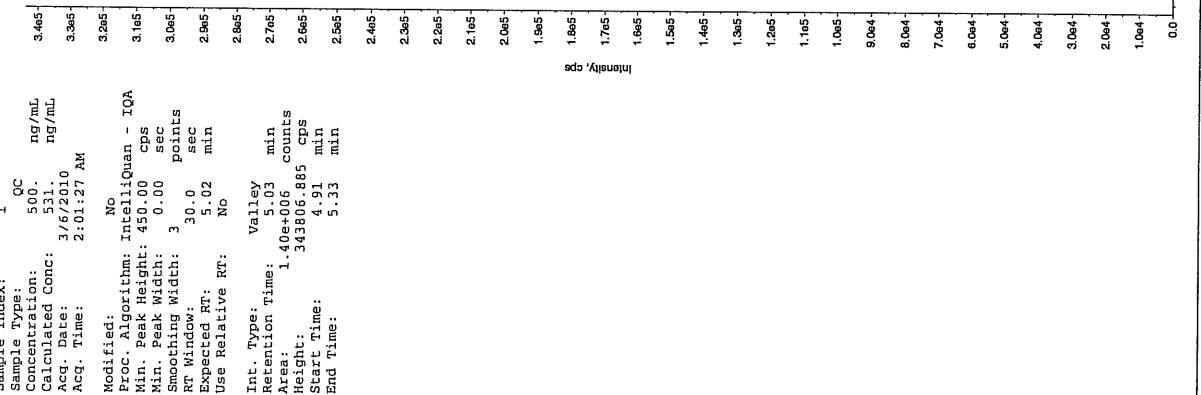
Sample Index: 1 QC  
 Sample Type: 500. ng/mL  
 Concentration: 529. ng/mL  
 Calculated Conc: 3/6/2010  
 Acq. Date: 2:01:27 AM  
 Acq. Time: 2:01:27 AM  
 Modified: Yes  
 RT Window: 15.0 sec  
 Expected RT: 8.23 min  
 Use Relative RT: No  
 Int. Type: Manual  
 Retention Time: 8.24 min  
 Area: 4.30e+006 counts  
 Height: 1181932.758 cps  
 Start Time: 8.16 min  
 End Time: 8.34 min



J, SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

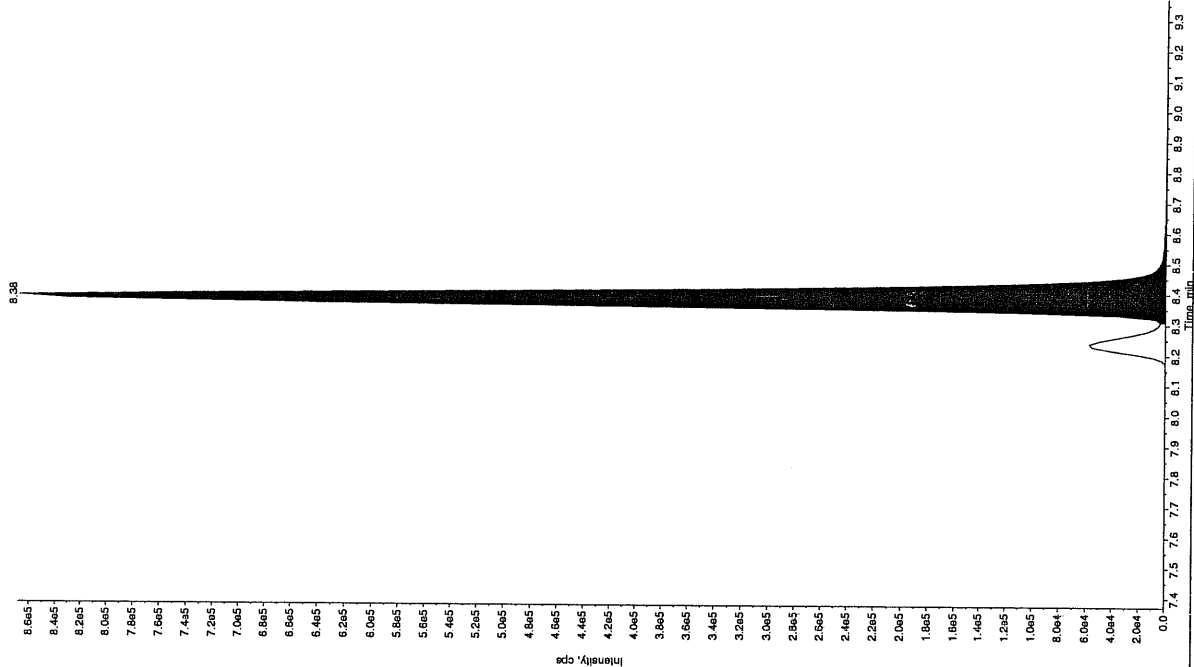
File Name: "WXX100305-260CV" Sample ID: "111ER" File: "EXS03050035.wif"  
 Peak Name: "26-Diamino-4-nitrotoluene" Mass(es): "182.1/181.9 amu"  
 Comment: "LCMSEXP\_C" Annotation: ""

Sample Index: 1  
 Sample Type: QC  
 Concentration: 500. ng/mL  
 Calculated Conc: 531. ng/mL  
 Acq. Date: 3/6/2010  
 Acq. Time: 2:01:27 AM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IOA  
 Min. Peak Height: 450.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 30.0 sec  
 Expected RT: 5.02 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 5.03 min  
 Area: 1.40e+006 counts  
 Height: 343806.885 cps  
 Start Time: 4.91 min  
 End Time: 5.33 min



File Name: "WXX100305-260CV" Sample ID: "111ER" File: "EXS03050035.wif"  
 Peak Name: "26-Diamino-4-nitrotoluene" Mass(es): "182.1/181.9 amu"  
 Comment: "LCMSEXP\_C" Annotation: ""

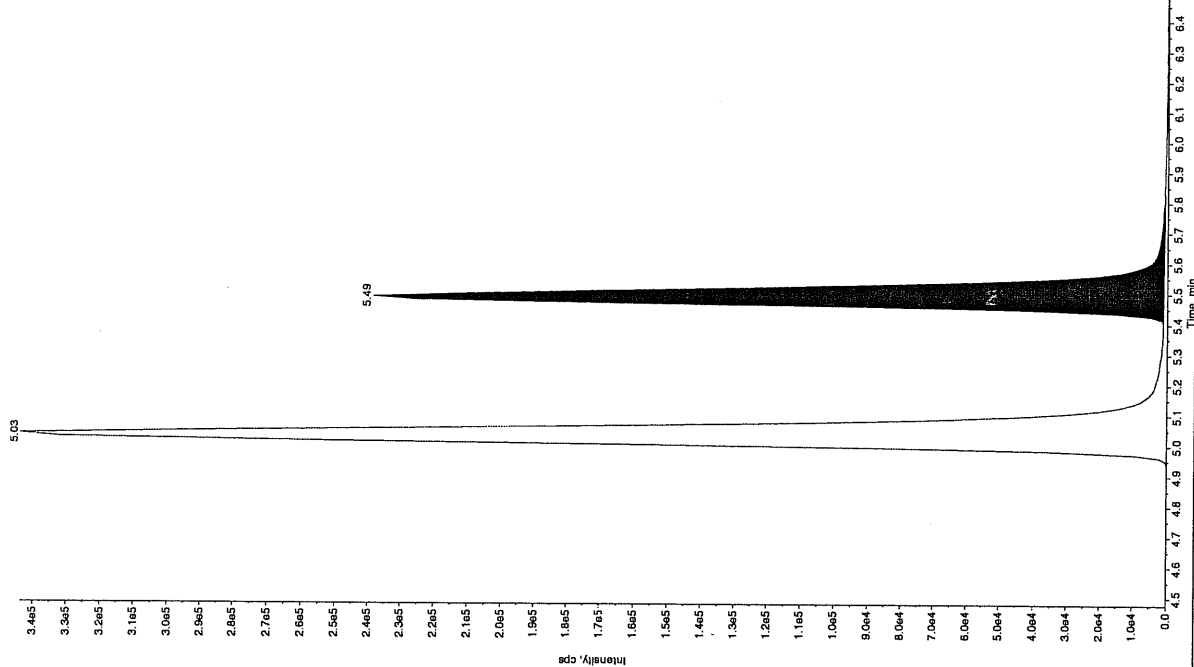
Sample Index: 1  
 Sample Type: QC  
 Concentration: 250. ng/mL  
 Calculated Conc: 246. ng/mL  
 Acq. Date: 3/6/2010  
 Acq. Time: 2:01:27 AM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IOA  
 Min. Peak Height: 1400.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 30.0 sec  
 Expected RT: 8.37 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 8.38 min  
 Area: 3.07e+006 counts  
 Height: 867922.485 cps  
 Start Time: 8.31 min  
 End Time: 8.71 min



, SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

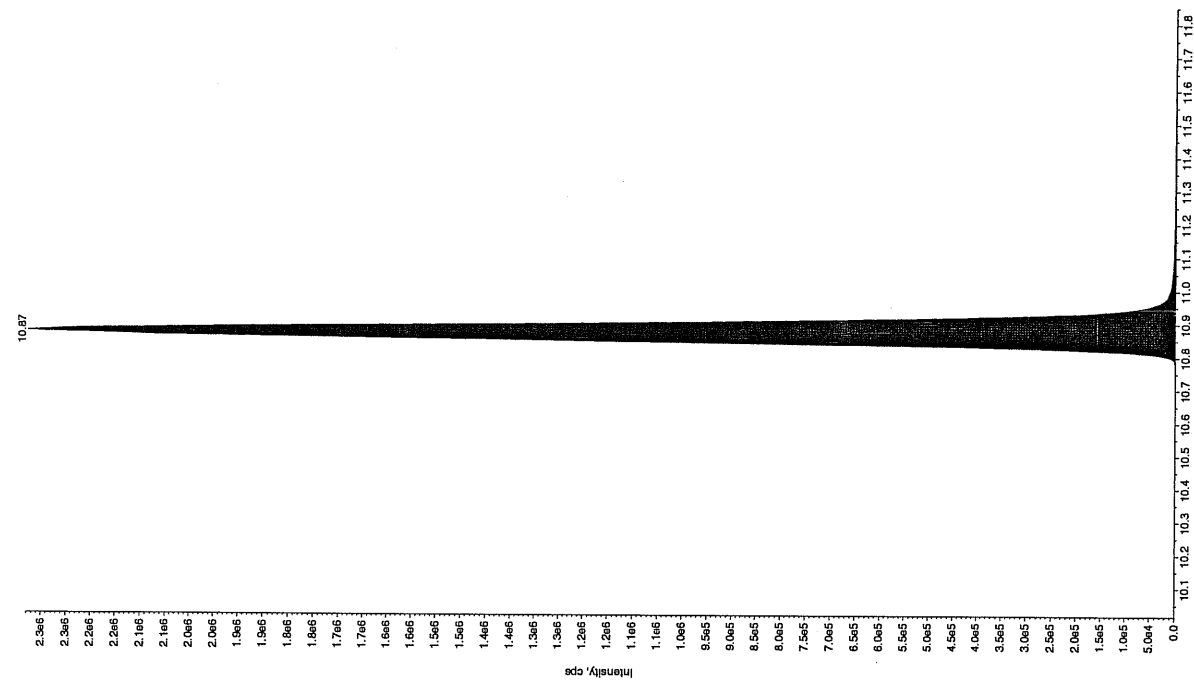
Sample Name: "WXX100305-26CCV" Sample ID: "111ER" File: "EXS03050035.wif"  
 Peak Name: "24-Diamino-6-nitrotoluene" Mass(es): "166.046.0 amu"  
 Comment: "LCMSEXP\_C" Annotation: ""

Sample Index: 1  
 Sample Type: QC  
 Concentration: 500. ng/mL  
 Calculated Conc: 509. ng/mL  
 Acq. Date: 3/6/2010  
 Acq. Time: 2:01:27 AM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IQA  
 Min. Peak Height: 350.00 cps  
 Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 30.0 sec  
 Expected RT: 5.48 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 5.49 min  
 Area: 9.45e+005 counts  
 Height: 237291.595 cps  
 Start Time: 5.41 min  
 End Time: 5.81 min



Sample Name: "WXX100305-26CCV" Sample ID: "111ER" File: "EXS03050035.wif"  
 Peak Name: "tris(2-chloroethyl) phosphate" Mass(es): "369.191.0 amu"  
 Comment: "LCMSEXP\_C" Annotation: ""

Sample Index: 1  
 Sample Type: QC  
 Concentration: 500. ng/mL  
 Calculated Conc: 503. ng/mL  
 Acq. Date: 3/6/2010  
 Acq. Time: 2:01:27 AM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IQA  
 Min. Peak Height: 8000.00 cps  
 Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 30.0 sec  
 Expected RT: 10.9 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 10.9 min  
 Area: 8.44e+006 counts  
 Height: 232935.791 cps  
 Start Time: 10.8 min  
 End Time: 11.2 min





7B  
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1758

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXS03050037.wiff

Analysis Date: 06-MAR-10 02:32

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	100	110	110	
2,6-Diamino-4-nitrotoluene	100	113	113	
3,4-Dinitrotoluene	50	52.5	105	
3,5-Dinitroaniline	100	110	110	
TATB	100	112	112	
tris(o-cresyl) phosphate	100	97.2	97	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,  
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

Before Jan 31/10

Sample Name: "WXX100305-270R1" Sample ID: "111ER" File: "EXS03050037.wif"  
 Name: "TATB" Mass(es): "257.2/204.9 amu"  
 Comment: "LCMSEXP\_C" Annotation: ""

Sample Index: 1 QC

Concentration: 100. ng/mL  
 Calculated Conc: 112. ng/mL  
 Acq. Date: 3/6/2010  
 Acq. Time: 2:32:52 AM

Modified: No

Proc. Algorithm: IntelliQuan - IQA

Min. Peak Height: 2500.00 cps

Min. Peak Width: 0.00 sec

Smoothing Width: 3 points

RT Window: 30.0 sec

Expected RT: 7.00 min

Use Relative RT: No

Int. Type: Valley

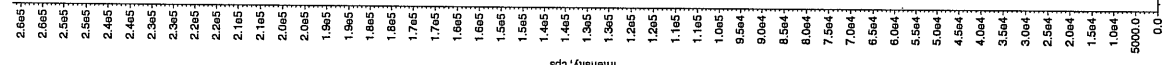
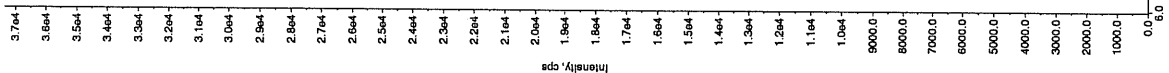
Retention Time: 7.01 min

Area: 1.47e+005 counts

Height: 37346.008 cps

Start Time: 6.91 min

End Time: 7.43 min

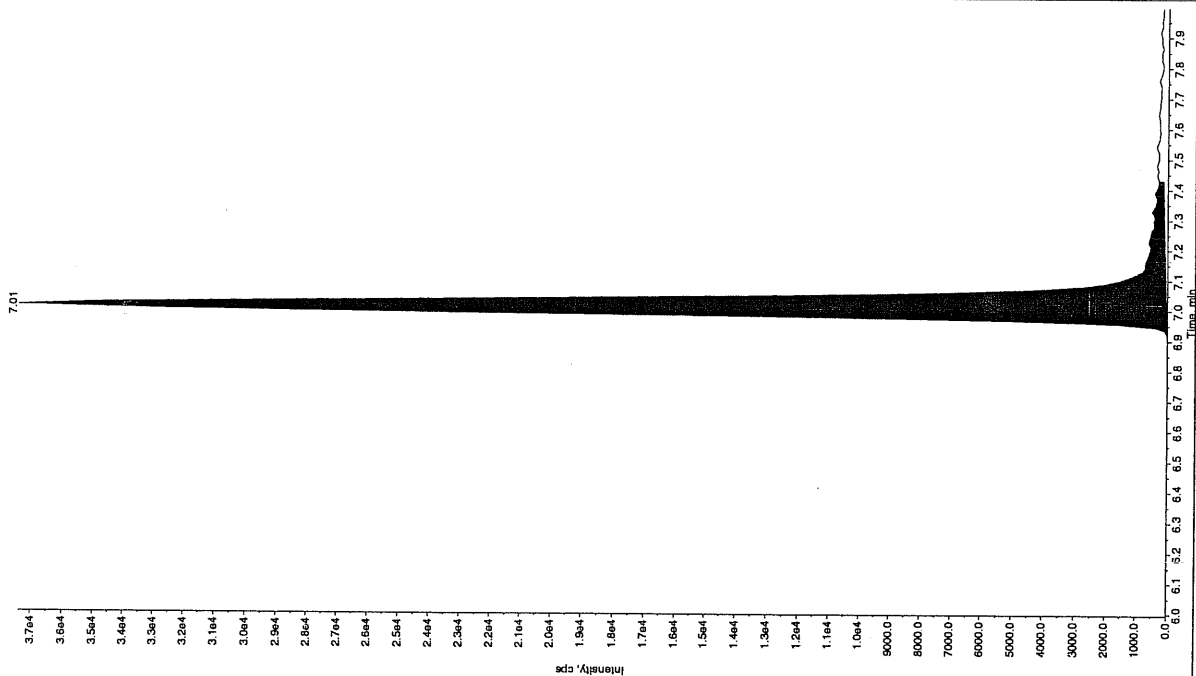


Jan 31/10

after den 3/9/10

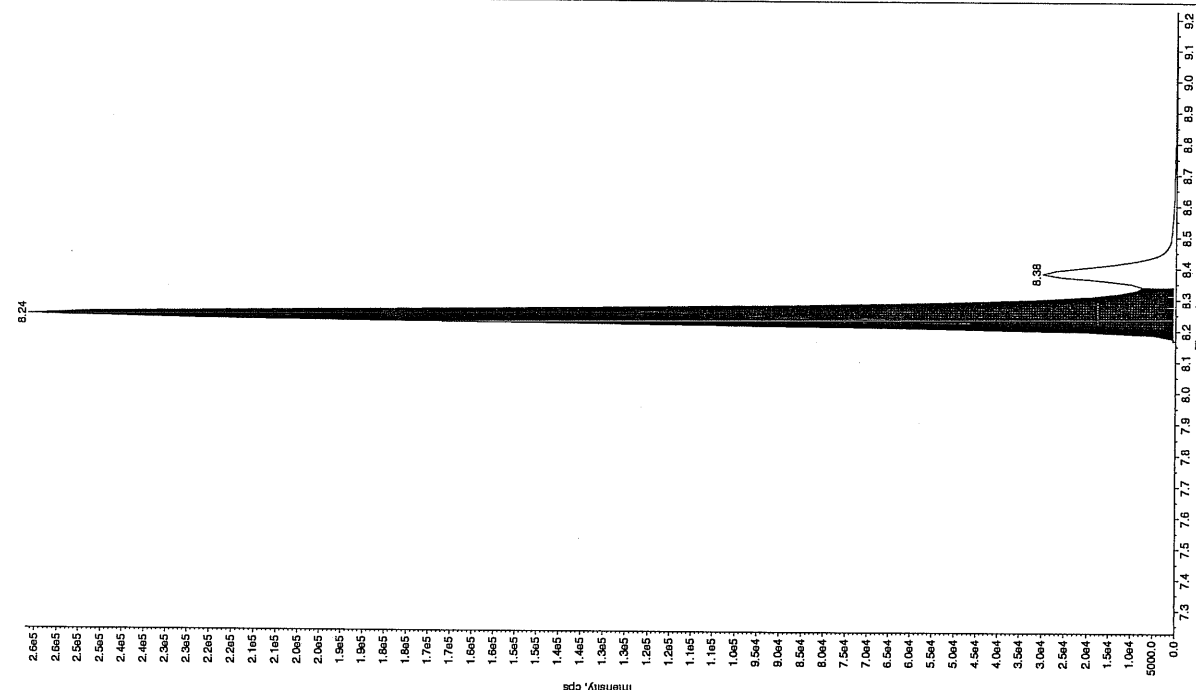
Sample Name: "WXX100305-27C91" Sample ID: "J1LER" File: "EXS03050037.wif"  
 Peak Name: "TATB" Mass(es): "257.2204.9 amu"  
 Comment: "LCMSEXP\_C" Annotation: ""

Sample Index: 1  
 Sample Type: QC  
 Concentration: 100. ng/mL  
 Calculated Conc: 112. ng/mL  
 Date: 3/6/2010  
 Acq. Time: 2:32:52 AM  
 Modified: No  
 RT Window: 15.0 sec  
 Expected RT: 8.23 min  
 Use Relative RT: No  
 Int. Type: Manual  
 Retention Time: 8.24 min  
 Area: 9.35e+005 counts  
 Height: 263004.667 cps  
 Start Time: 8.16 min  
 End Time: 8.34 min  
 Algorithm: IntelliQuan - IQA  
 Peak Height: 2500.00 cps  
 Peak Width: 0.00 sec  
 Window: 30.0 sec  
 Ret. Time: 7.00 min  
 Relative RT: No  
 Type: Valley  
 Retention Time: 7.01 min  
 t: 1.47e+005 counts  
 Time: 37346.008 cps  
 Time: 2864 min  
 Time: 2764 min  
 Time: 2664 min  
 Time: 2564 min  
 Time: 2464 min  
 Time: 2364 min  
 Time: 2264 min  
 Time: 2164 min  
 Time: 2064 min  
 Time: 1964 min  
 Time: 1864 min  
 Time: 1764 min  
 Time: 1664 min  
 Time: 1564 min  
 Time: 1464 min  
 Time: 1364 min  
 Time: 1264 min  
 Time: 1164 min  
 Time: 1064 min  
 Time: 9000.0  
 Time: 8000.0  
 Time: 7000.0  
 Time: 6000.0  
 Time: 5000.0  
 Time: 4000.0  
 Time: 3000.0  
 Time: 2000.0  
 Time: 1000.0



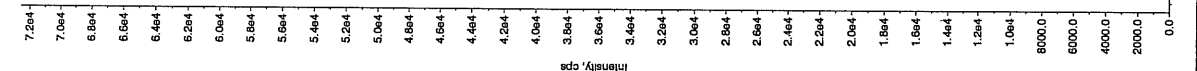
Sample Name: "WXX100305-27C91" Sample ID: "J1LER" File: "EXS03050037.wif"  
 Peak Name: "3S-Dinitrophenol" Mass(es): "182.046.0 amu"  
 Comment: "LCMSEXP\_C" Annotation: ""

Sample Index: 1  
 Sample Type: QC  
 Concentration: 100. ng/mL  
 Calculated Conc: 110. ng/mL  
 Date: 3/6/2010  
 Acq. Time: 2:32:52 AM  
 Modified: Yes  
 RT Window: 15.0 sec  
 Expected RT: 8.23 min  
 Use Relative RT: No  
 Int. Type: Manual  
 Retention Time: 8.24 min  
 Area: 9.35e+005 counts  
 Height: 263004.667 cps  
 Start Time: 8.16 min  
 End Time: 8.34 min



Sample Name: "WXX100305-27ORI" Sample ID: "11LER" File: "EXS03050037.wif"  
 Peak Name: "34-Dinitrofluorene" Mass(es): "182.1/151.9 amu"  
 Comment: "LCMSEXP\_C" Annotation: ""

Sample Index: 1  
 Sample Type: QC  
 Concentration: 100. ng/mL  
 Calculated Conc: 113. ng/mL  
 Acq. Date: 3/6/2010  
 Acq. Time: 2:32:52 AM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IQA  
 Min. Peak Height: 450.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 30.0 sec  
 Expected RT: 5.02 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 5.03 min  
 Area: 2.89e+005 counts  
 Height: 72523.758 cps  
 Start Time: 4.94 min  
 End Time: 5.31 min



Sample Name: "WXX100305-27ORI" Sample ID: "11LER" File: "EXS03050037.wif"  
 Peak Name: "34-Dinitrofluorene" Mass(es): "182.1/151.9 amu"  
 Comment: "LCMSEXP\_C" Annotation: ""

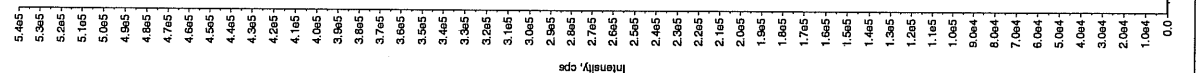
Sample Index: 1  
 Sample Type: QC  
 Concentration: 50.0 ng/mL  
 Calculated Conc: 52.5 ng/mL  
 Acq. Date: 3/6/2010  
 Acq. Time: 2:32:52 AM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IQA  
 Min. Peak Height: 1460.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 30.0 sec  
 Expected RT: 8.37 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 8.38 min  
 Area: 6.35e+005 counts  
 Height: 189075.043 cps  
 Start Time: 8.31 min  
 End Time: 8.59 min



SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

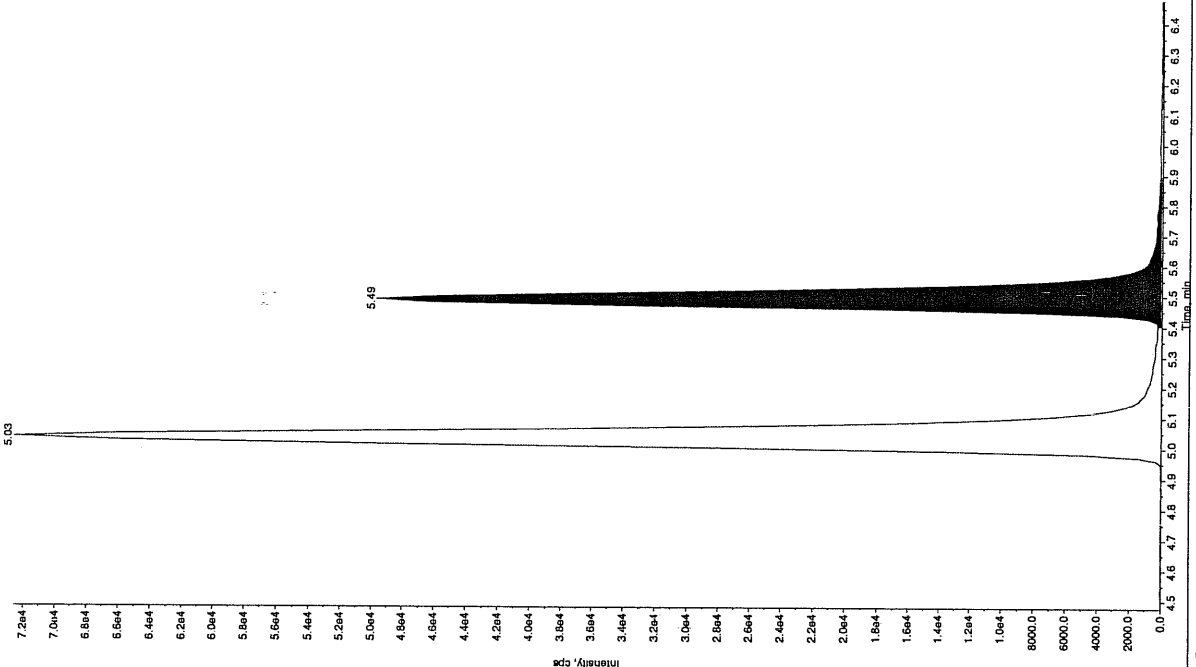
Sample Name: "WXX100305-27ORI" Sample ID: "11LER" File: "EXS03050037.wif"  
 Peak Name: "tris(O-cresyl) phosphate" Mass(es): "369.1/91.0 amu"  
 Comment: "LCMSEXP\_C" Annotation: ""

Sample Index: 1  
 Sample Type: QC  
 Concentration: 100. ng/mL  
 Calculated Conc: 97.2 ng/mL  
 Acq. Date: 3/6/2010  
 Acq. Time: 2:32:52 AM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IQA  
 Min. Peak Height: 8000.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 30.0 sec  
 Expected RT: 10.9 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 10.9 min  
 Area: 1.84e+006 counts  
 Height: 539893.494 cps  
 Start Time: 10.8 min  
 End Time: 11.2 min



Sample Name: "WXX100305-27ORI" Sample ID: "11LER" File: "EXS03050037.wif"  
 Peak Name: "24-Diamino-6-nitroourea" Mass(es): "166.0/46.0 amu"  
 Comment: "LCMSEXP\_C" Annotation: ""

Sample Index: 1  
 Sample Type: QC  
 Concentration: 100. ng/mL  
 Calculated Conc: 110. ng/mL  
 Acq. Date: 3/6/2010  
 Acq. Time: 2:32:52 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: 5.48 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 5.49 min  
 Area: 1.99e+005 counts  
 Height: 49546.009 cps  
 Start Time: 5.41 min  
 End Time: 5.94 min



7A

Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1758

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXS03050048.wiff

Analysis Date: 06-MAR-10 05:25

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,6-Diamino-4-nitrotoluene	500	545	109	
3,4-Dinitrotoluene	250	237	95	
3,5-Dinitroaniline	500	507	101	
TATB	500	532	106	
tris(o-cresyl) phosphate	500	501	100	
2,4-Diamino-6-nitrotoluene	500	541	108	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,

2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

Before Jan 31/10

Sample Name: "WXX100305-26CCV" Sample ID: "J1LER" File: "EXS03050048.wif"

Peak Name: "35-Dihydrocannabim" Mass(es): "182.046.0 amu"

Comment: "LCMSEXP\_C" Annotation: ""

Sample Index: 1

Sample Type: QC

Concentration: 500. ng/mL

Calculated Conc: 487. ng/mL

Acq. Date: 3/6/2010

Acq. Time: 5:23:35 AM

Modified: No

Proc. Algorithm: IntelliQuan - IOA

Min. Peak Height: 2000.00 cps

Min. Peak Width: 0.00 sec

Smoothing Width: 3 points

RT Window: 15.0 sec

Expected RT: 8.23 min

Use Relative RT: No

Int. Type: Valley

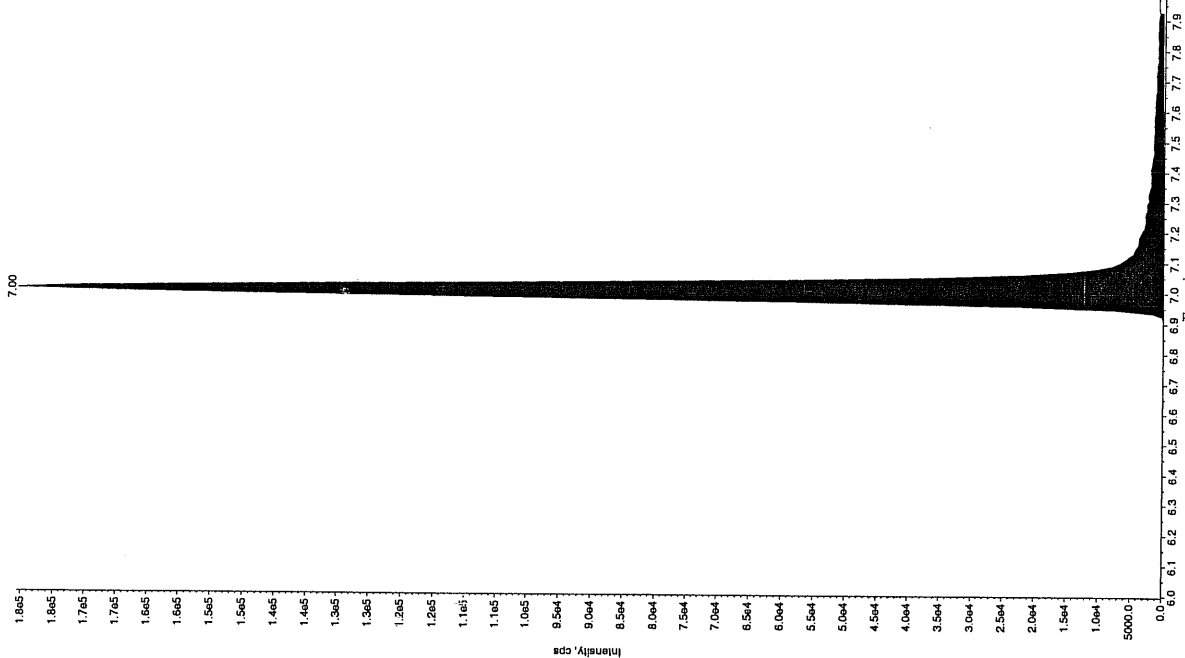
Retention Time: 8.23 min

Area: 3.99e+006 counts

Height: 1116178.101 cps

Start Time: 8.16 min

End Time: 8.33 min



Sample Name: "WXX100305-26CCV" Sample ID: "J1LER" File: "EXS03050048.wif"

Peak Name: "TATB" Mass(es): "257.2204.9 amu"

Comment: "LCMSEXP\_C" Annotation: ""

Sample Index: 1

Sample Type: QC

Concentration: 500. ng/mL

Calculated Conc: 532. ng/mL

Acq. Date: 3/6/2010

Acq. Time: 5:25:35 AM

Modified: No

Proc. Algorithm: IntelliQuan - IOA

Min. Peak Height: 2500.00 cps

Min. Peak Width: 0.00 sec

Smoothing Width: 3 points

RT Window: 30.0 sec

Expected RT: 7.00 min

Use Relative RT: No

Int. Type: Valley

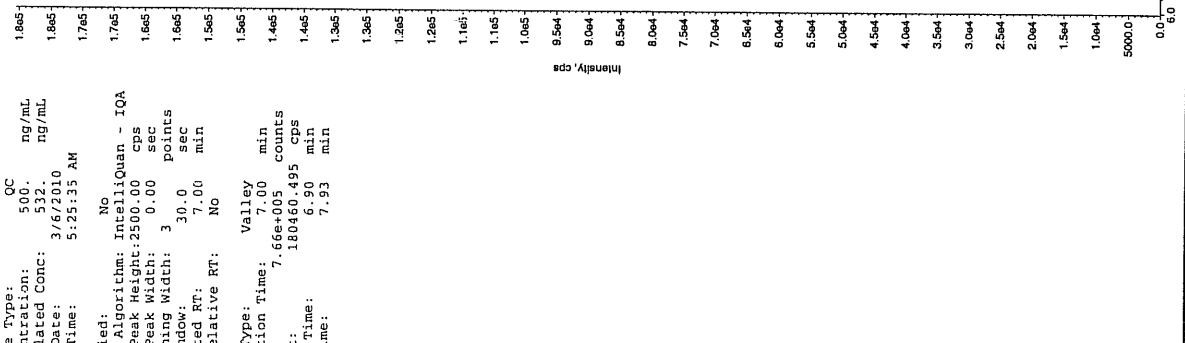
Retention Time: 7.00 min

Area: 7.66e+005 counts

Height: 180460.495 cps

Start Time: 6.90 min

End Time: 7.93 min



After 03/09/10

after Jan 30/10

File Name: "WXX10305-26CCV" Sample ID: "111ER" File: "EXS05050048.wif"

Peak Name: "TATB" Mass(es): "257.2204.9 amu" Annotation: ""

Sample Index: 1

Sample Type: QC

Concentration: 500. ng/mL

Calculated Conc: 532. ng/mL

Date: 3/6/2010

Acq. Time: 5:25:35 AM

Modified: No

Algorithm: IntelliQuan - IQA

Peak Height: 2500.00 cps

Peak Width: 0.00 sec

Ching Width: 3 points

Window: 30.0 sec

Start RT: 7.00 min

Relative RT: No

Type: Valley

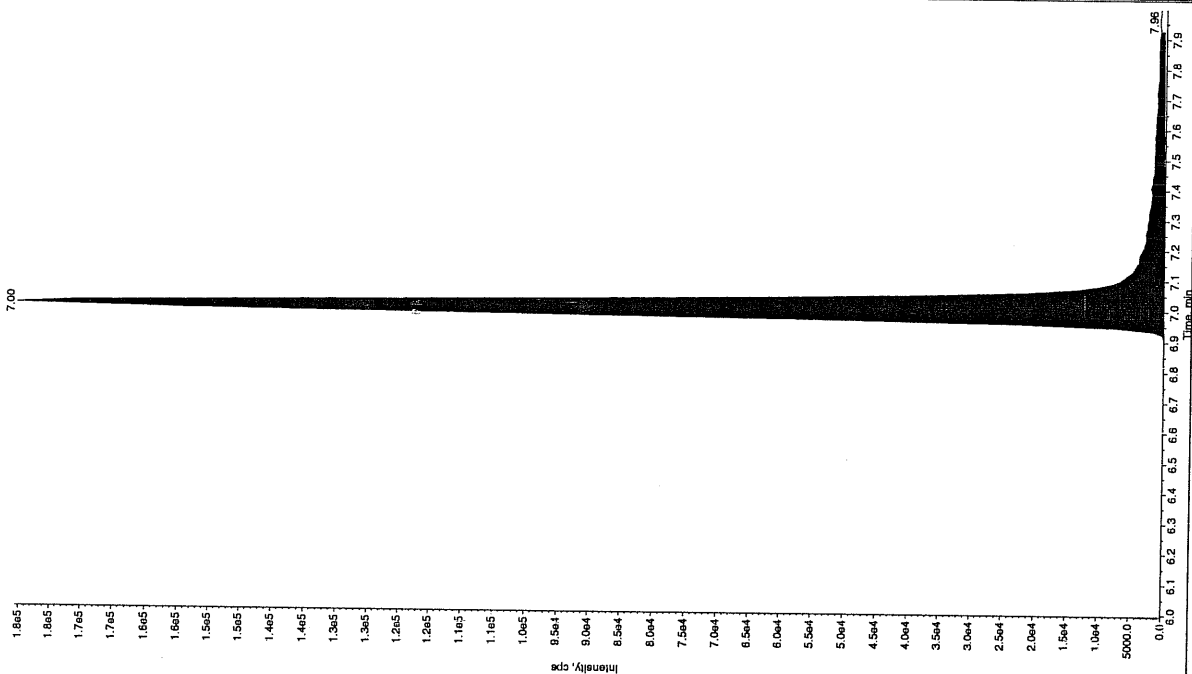
Retention Time: 7.00 min

Area: 7.66e+005 counts

Height: 180460.495 cps

Start Time: 6.90 min

End Time: 7.93 min



File Name: "WXX10305-26CCV" Sample ID: "111ER" File: "EXS05050048.wif"

Peak Name: "95-Dibenzotriazolin" Mass(es): "182.046.0 amu" Annotation: ""

Sample Index: 1

Sample Type: QC

Concentration: 500. ng/mL

Calculated Conc: 500. ng/mL

Date: 3/6/2010

Acq. Time: 5:25:35 AM

Modified: Yes

Algorithm: Manual

Peak Height: 8.23 min

Peak Width: 4.13e+006 counts

Ching Width: 1147840.356 cps

Window: 8.16 min

Start RT: 8.33 min

Relative RT: No

Type: Manual

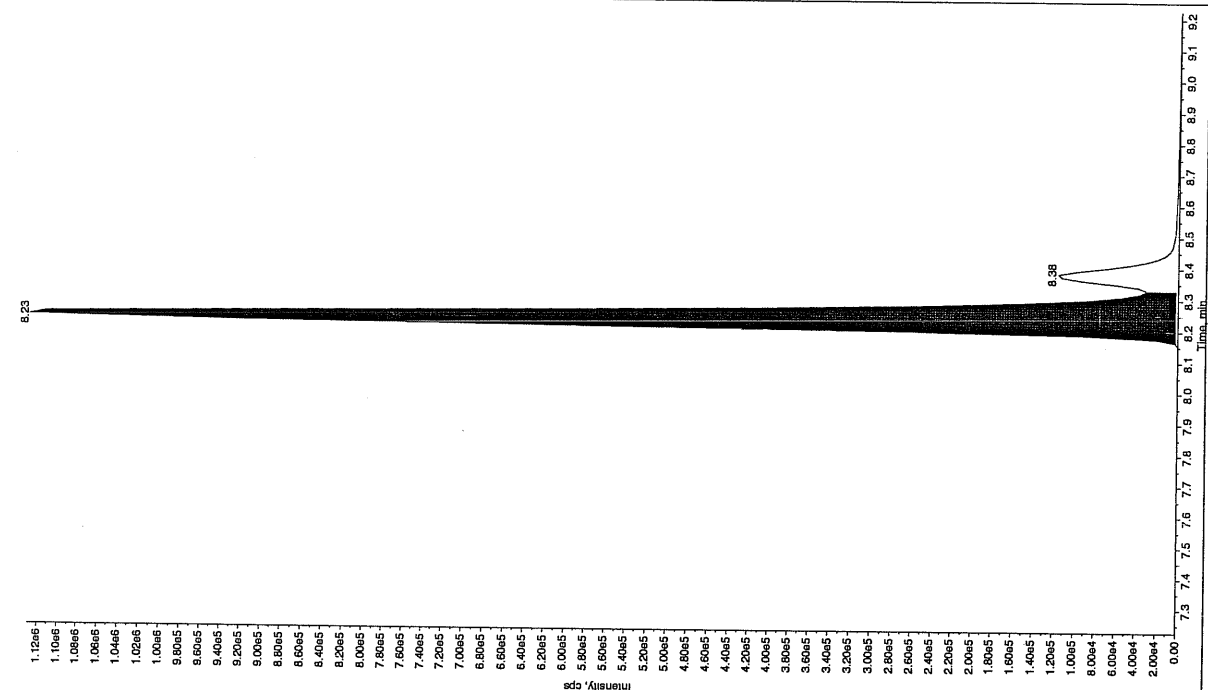
Retention Time: 8.23 min

Area: 4.13e+006 counts

Height: 1147840.356 cps

Start Time: 8.16 min

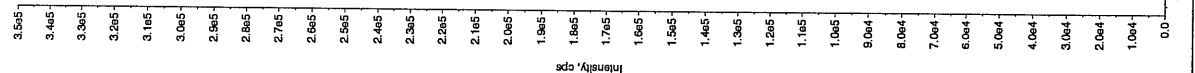
End Time: 8.33 min





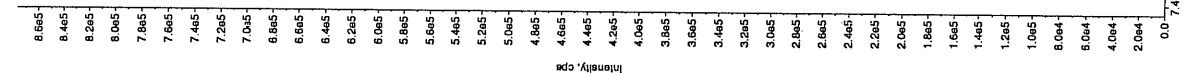
Sample Name: "WXX100305-26CCV" Sample ID: "JILER" File: "EXS03050048.wif"  
 Peak Name: "26-Dinitro-4-nitrofluorene" Mass(es): "166.0/46.0 amu"  
 Comment: "LCMSEXP\_C" Annotation: ""

Sample Index: 1  
 Sample Type: QC  
 Concentration: 500. ng/mL  
 Calculated Conc: 545. ng/mL  
 Acq. Date: 3/6/2010  
 Acq. Time: 5:25:35 AM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IQA  
 Min. Peak Height: 450.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 30.0 sec  
 Expected RT: 5.02 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 5.02 min  
 Area: 1.44e+006 counts  
 Height: 349995.575 cps  
 Start Time: 4.93 min  
 End Time: 5.32 min



Sample Name: "WXX100305-26CCV" Sample ID: "JILER" File: "EXS03050048.wif"  
 Peak Name: "34-Dinitrofluorene" Mass(es): "182.1/151.9 amu"  
 Comment: "LCMSEXP\_C" Annotation: ""

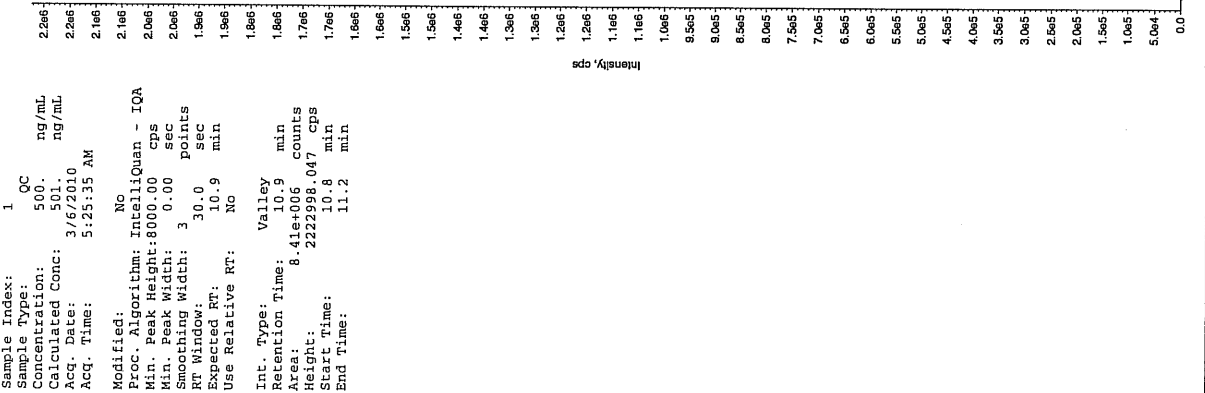
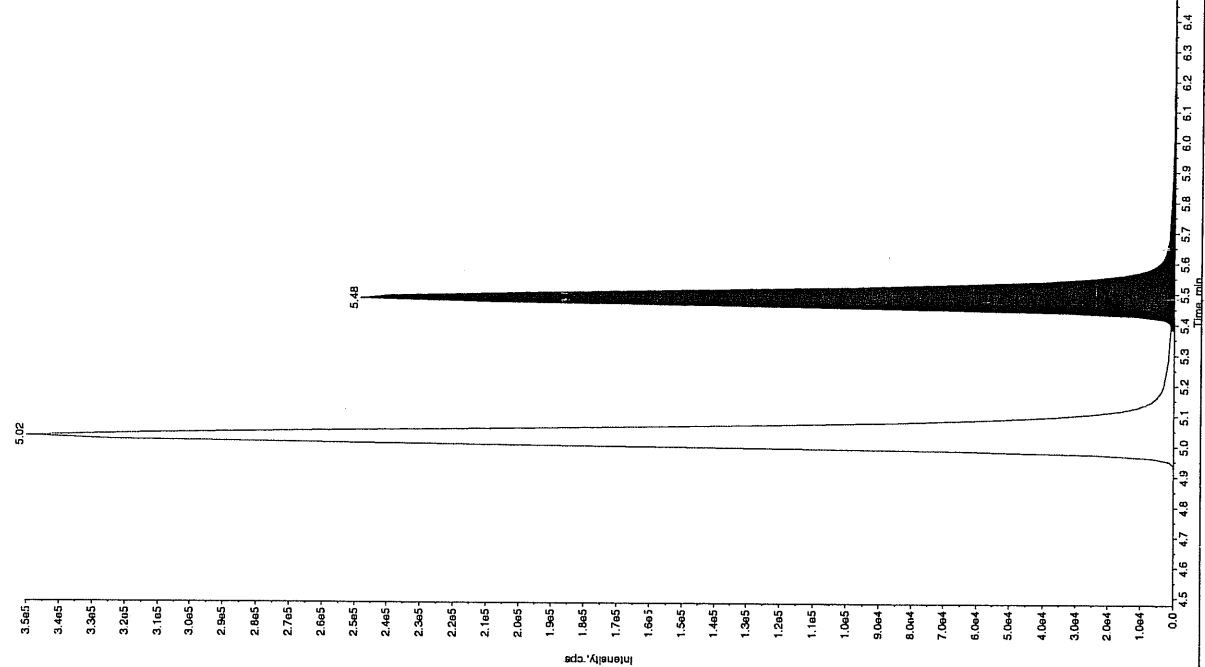
Sample Index: 1  
 Sample Type: QC  
 Concentration: 250. ng/mL  
 Calculated Conc: 237. ng/mL  
 Acq. Date: 3/6/2010  
 Acq. Time: 5:25:35 AM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IQA  
 Min. Peak Height: 1460.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 30.0 sec  
 Expected RT: 8.37 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 8.37 min  
 Area: 2.97e+006 counts  
 Height: 876499.268 cps  
 Start Time: 8.30 min  
 End Time: 8.72 min



SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

File Name: "WXX100305-26CCV" Sample ID: "J1LER" File: "EXS03050048.wif" Sample Name: "WXX100305-26CCV" Sample ID: "J1LER" File: "EXS03050048.wif"  
 Name: "24-Diamino-6-nitrofluorene" Mass(es): "166.046.0 amu" Peak Name: "Iris(o-cresyl) phosphate" Mass(es): "369.191.0 amu"  
 ment: "LCMSEXP\_C" Annotation: "" Comment: "LCMSEXP\_C" Annotation: ""

Sample Index: 1  
 Sample Type: QC  
 Concentration: 500. ng/mL  
 Calculated Conc: 501. ng/mL  
 Acq. Date: 3/6/2010  
 Acq. Time: 5:25:35 AM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IQA  
 Min. Peak Height: 8000.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 30.0 sec  
 Expected RT: 10.9 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 10.9 min  
 Area: 8.41e+006 counts  
 Height: 2222998.047 cps  
 Start Time: 10.8 min  
 End Time: 11.2 min



7B  
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1758

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXS03050050.wiff

Analysis Date: 06-MAR-10 05:56

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	111	111	
3,4-Dinitrotoluene	50	51.4	103	
3,5-Dinitroaniline	100	108	108	
TATB	100	110	110	
tris(o-cresyl) phosphate	100	101	101	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,  
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

Scan 31a10

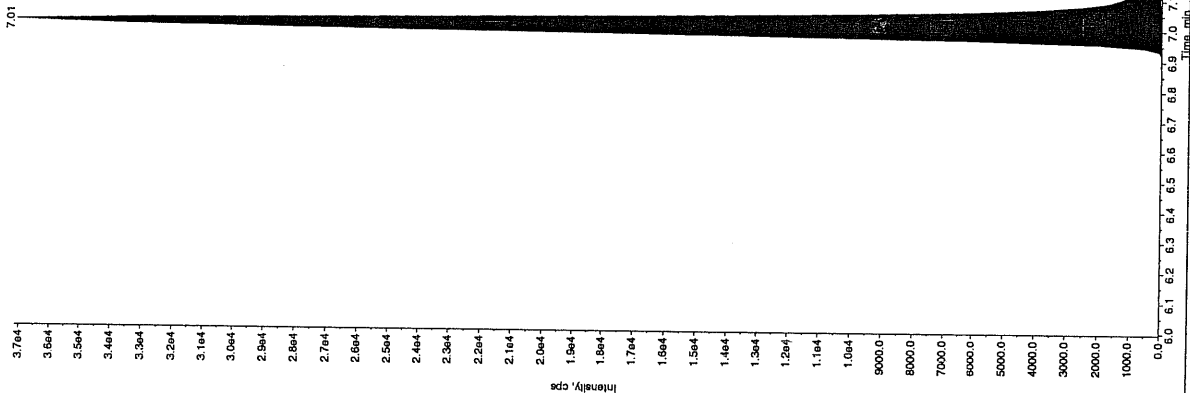
Sample Name: "WXX100305-27CR1" Sample ID: "11JLER" File: "EXS03050050.wif"  
 Peak Name: "TATB" Mass(es): "257.2/204.9 amu"  
 Comment: "LCMSEXP\_C" Annotation: ""

Sample Index: 1

Sample Type: QC  
 Concentration: 100. ng/mL  
 Calculated Conc: 110. ng/mL  
 Acq. Date: 3/6/2010  
 Acq. Time: 5:56:58 AM

Modified: No  
 Proc. Algorithm: IntelliQuan - IOA  
 Min. Peak Height: 2500.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 Rt Window: 30.0 sec  
 Expected RT: 7.00 min  
 Use Relative RT: No

Int. Type: Valley  
 Retention Time: 7.01 min  
 Area: 1.45e+005 counts  
 Height: 37100.952 cps  
 Start Time: 6.90 min  
 End Time: 7.59 min



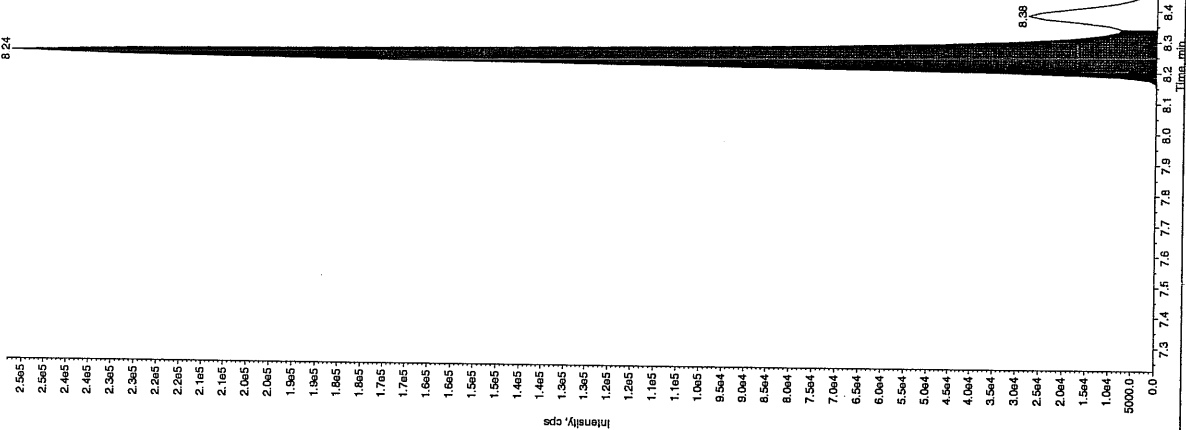
Sample Name: "WXX100305-27CR1" Sample ID: "11JLER" File: "EXS03050050.wif"  
 Peak Name: "35-Dinitroaniline" Mass(es): "182.0/46.0 amu"  
 Comment: "LCMSEXP\_C" Annotation: ""

Sample Index: 1

Sample Type: QC  
 Concentration: 100. ng/mL  
 Calculated Conc: 108. ng/mL  
 Acq. Date: 3/6/2010  
 Acq. Time: 5:56:58 AM

Modified: No  
 Proc. Algorithm: IntelliQuan - IOA  
 Min. Peak Height: 2000.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 Rt Window: 15.0 sec  
 Expected RT: 8.23 min  
 Use Relative RT: No

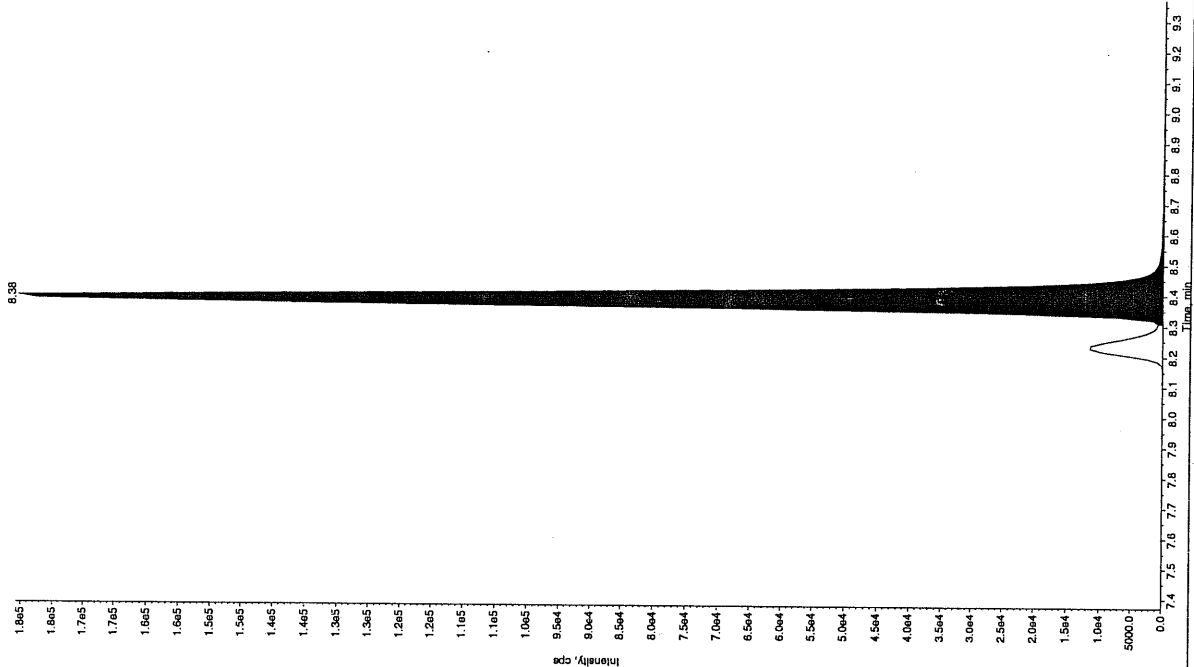
Int. Type: Valley  
 Retention Time: 8.24 min  
 Area: 9.18e+005 counts  
 Height: 252990.845 cps  
 Start Time: 8.10 min  
 End Time: 8.34 min



SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

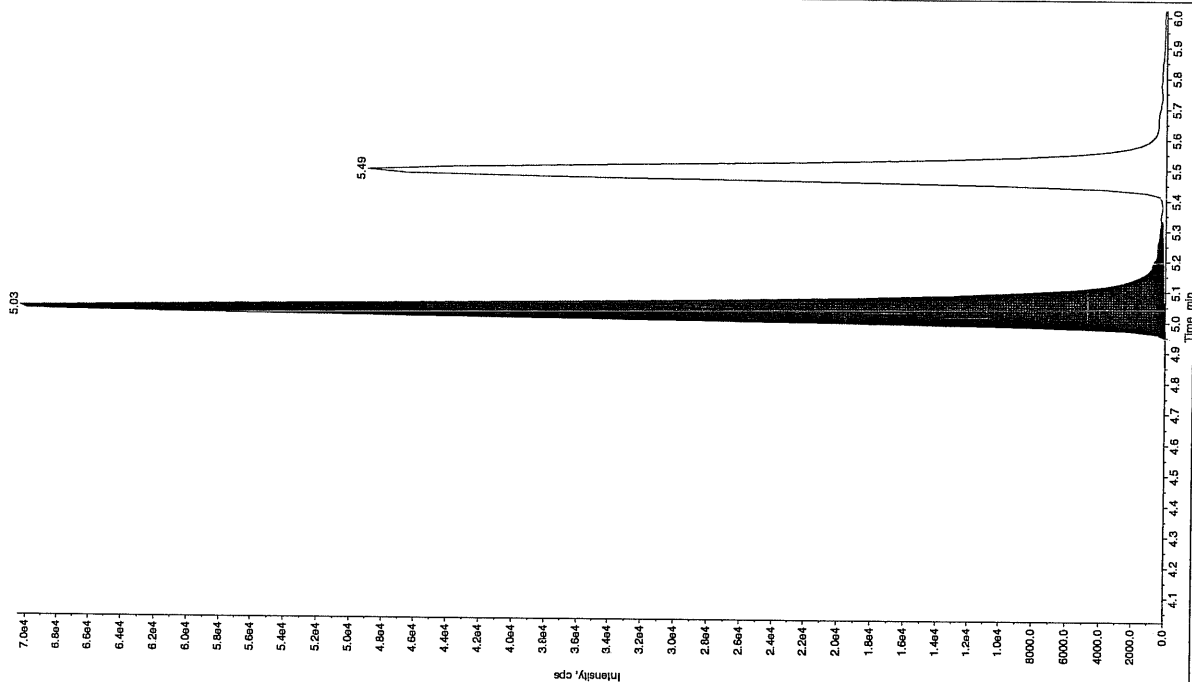
File Name: "WXX100305-2701" Sample ID: "111ER" File: "EX303050050.wif"  
 Name: "34-Dinitrofluorene" Mass(es): "182.1151.9 amu"  
 Comment: "LCMSEXP\_C" Annotation: ""

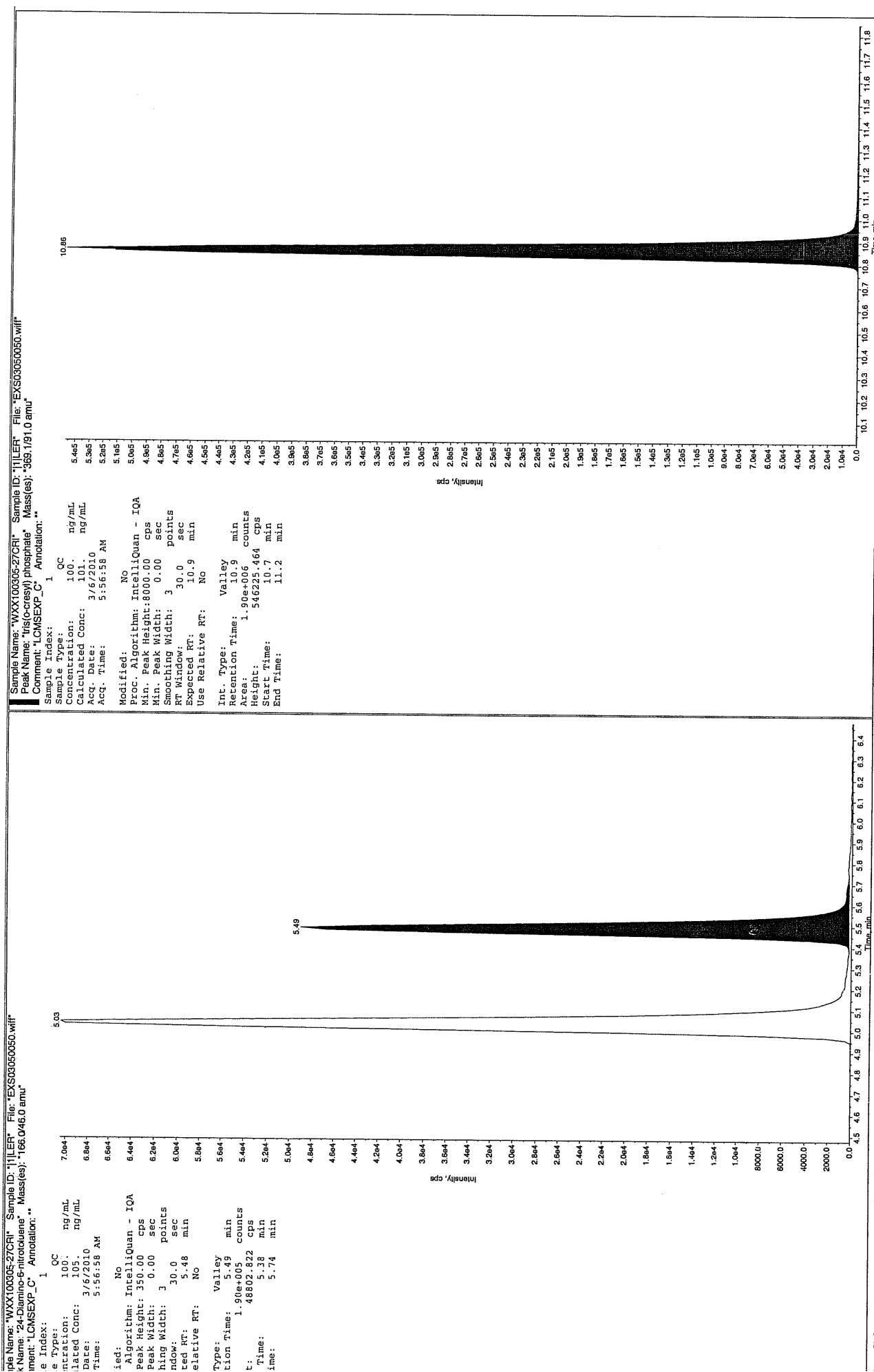
Sample Index: 1  
 Sample Type: QC  
 Concentration: 50.0 ng/mL  
 Calculated Conc: 51.1 ng/mL  
 Acq. Date: 3/6/2010  
 Acq. Time: 5:56:58 AM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IQA  
 Min. Peak Height: 1460.00 cps  
 Min. Peak Width: 3.00 sec  
 Smoothing Width: 3.00 points  
 RT Window: 30.0 sec  
 Expected RT: 8.37 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 8.38 min  
 Area: 6.21e+005 counts  
 Height: 180589.249 cps  
 Start Time: 8.31 min  
 End Time: 8.70 min



Sample Name: "WXX100305-2701" Sample ID: "111ER" File: "EX303050050.wif"  
 Peak Name: "26-Diamino-4-nitrofluorene" Mass(es): "166.046.0 amu"  
 Comment: "LCMSEXP\_C" Annotation: ""

Sample Index: 1  
 Sample Type: QC  
 Concentration: 100. ng/mL  
 Calculated Conc: 111. ng/mL  
 Acq. Date: 3/6/2010  
 Acq. Time: 5:56:58 AM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IQA  
 Min. Peak Height: 450.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3.00 points  
 RT Window: 30.0 sec  
 Expected RT: 5.02 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 5.03 min  
 Area: 2.86e+005 counts  
 Height: 70368.240 cps  
 Start Time: 4.94 min  
 End Time: 5.33 min





7A

Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1758

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXS03050060.wiff

Analysis Date: 06-MAR-10 08:34

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	500	492	99	
2,6-Diamino-4-nitrotoluene	500	499	100	
3,4-Dinitrotoluene	250	247	99	
3,5-Dinitroaniline	500	554	111	
TATB	500	557	111	
tris(o-cresyl) phosphate	500	498	100	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,  
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

Before Jan 31/10

Sample Name: "WXX100305-26CCV" Sample ID: "111ER" File: "EXS03050060.wif"

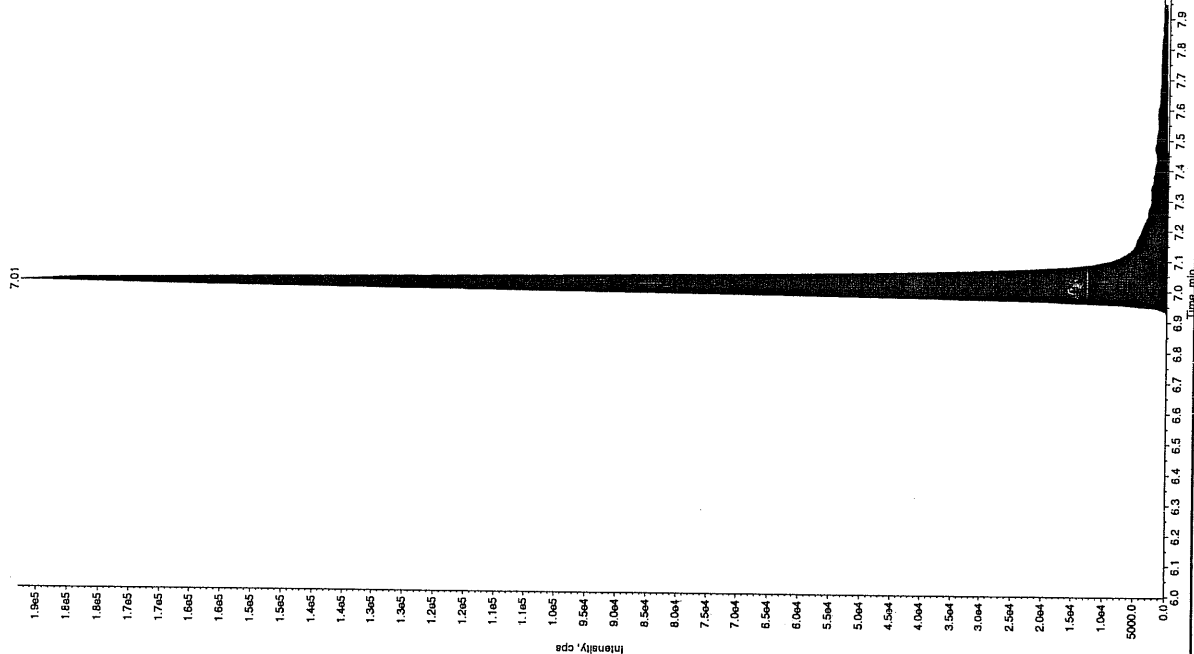
Peak Name: "TATB" Mass(es): "257.2/204.9 amu"

Comment: "LCMSEXP\_C" Annotation: ""

Sample Index: 1  
 Sample Type: QC  
 Concentration: 500. ng/mL  
 Calculated Conc: 557. ng/mL  
 Date: 3/6/2010  
 Acq. Time: 8:34:01 AM

Modified: No  
 Proc. Algorithm: IntelliQuan - IQA  
 Min. Peak Height: 2500.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 30.0 sec  
 Expected RT: 7.00 min  
 Use Relative RT: No

Int. Type: Valley  
 Retention Time: 7.01 min  
 Area: 8.03e+005 counts  
 Height: 187849.228 cps  
 Start Time: 6.91 min  
 End Time: 7.95 min



Sample Name: "WXX100305-26CCV" Sample ID: "111ER" File: "EXS03050060.wif"

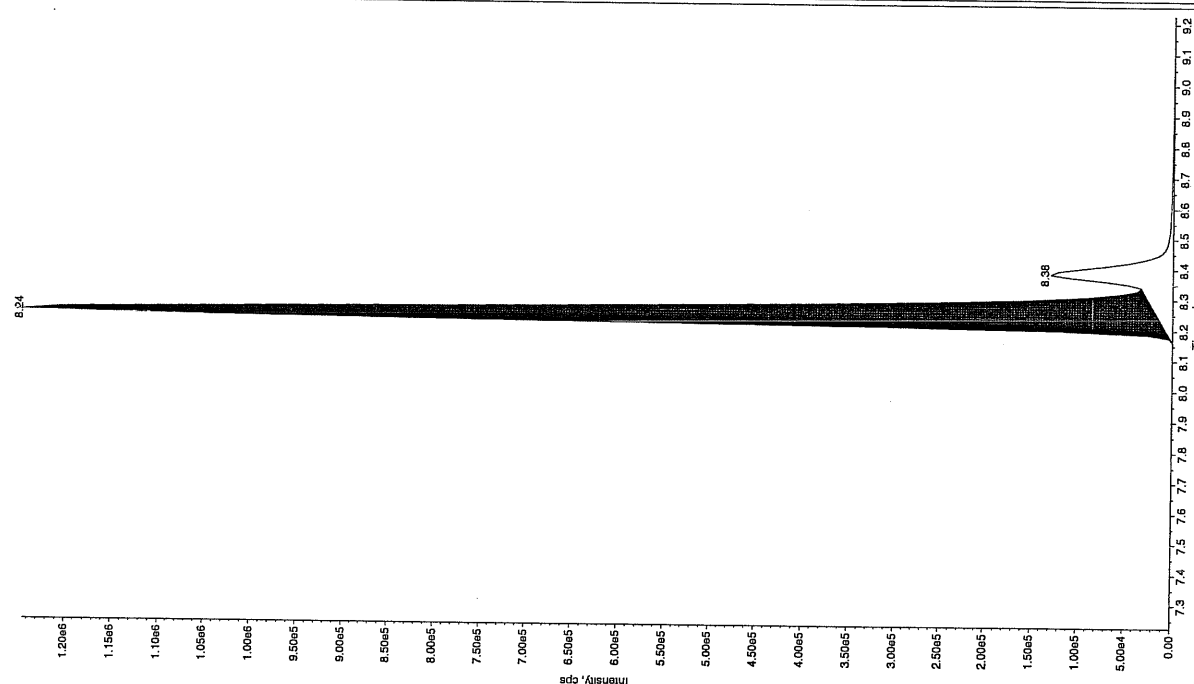
Peak Name: "35-Dinitroaniline" Mass(es): "182.0/46.0 amu"

Comment: "LCMSEXP\_C" Annotation: ""

Sample Index: 1  
 Sample Type: QC  
 Concentration: 500. ng/mL  
 Calculated Conc: 534. ng/mL  
 Date: 3/6/2010  
 Acq. Time: 8:34:01 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: 8.23 min  
 Use Relative RT: No

Int. Type: Valley  
 Retention Time: 8.24 min  
 Area: 4.34e+006 counts  
 Height: 1230289.185 cps  
 Start Time: 8.16 min  
 End Time: 8.34 min



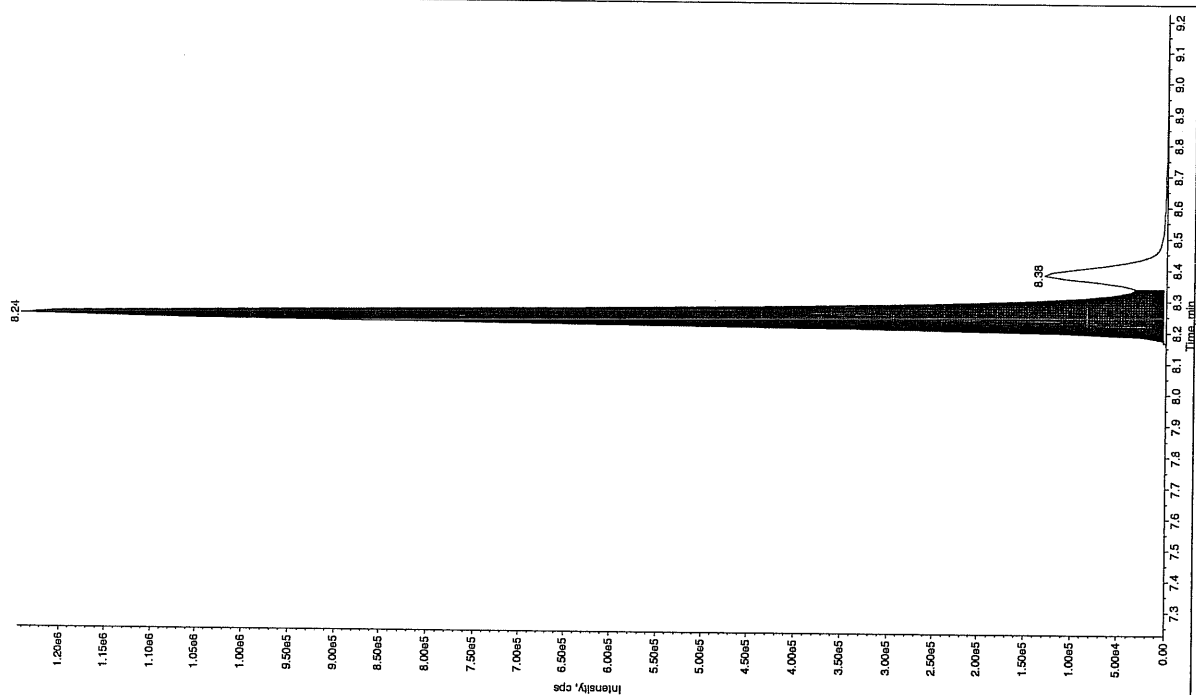
After Jan 31/10

SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



Sample Name: "WXX100305-26CCV" Sample ID: "11LER" File: "EXS03050060.wiff"  
Peak Name: "35-Dinitroaniline" Mass(es): "182.0/46.0 amu"  
Comment: "LCMSEXP\_C" Annotation: ""

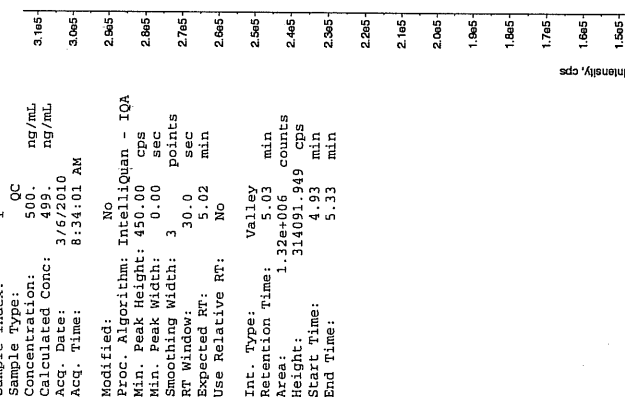
Sample Index:	1	QC
Concentration:	500.	ng/mL
Calculated Conc:	554.	ng/mL
Acq. Date:	3/6/2010	
Acq. Time:	8:34:01 AM	
Modified:	Yes	
RT Window:	15.0	sec
Expected RT:	8.23	min
Use Relative RT:	No	
Int. Type:	Manual	
Retention Time:	8.24	min
Area:	4.49e+006	counts
Height:	1254370.754	cps
Start Time:	8.16	min
End Time:	8.34	min



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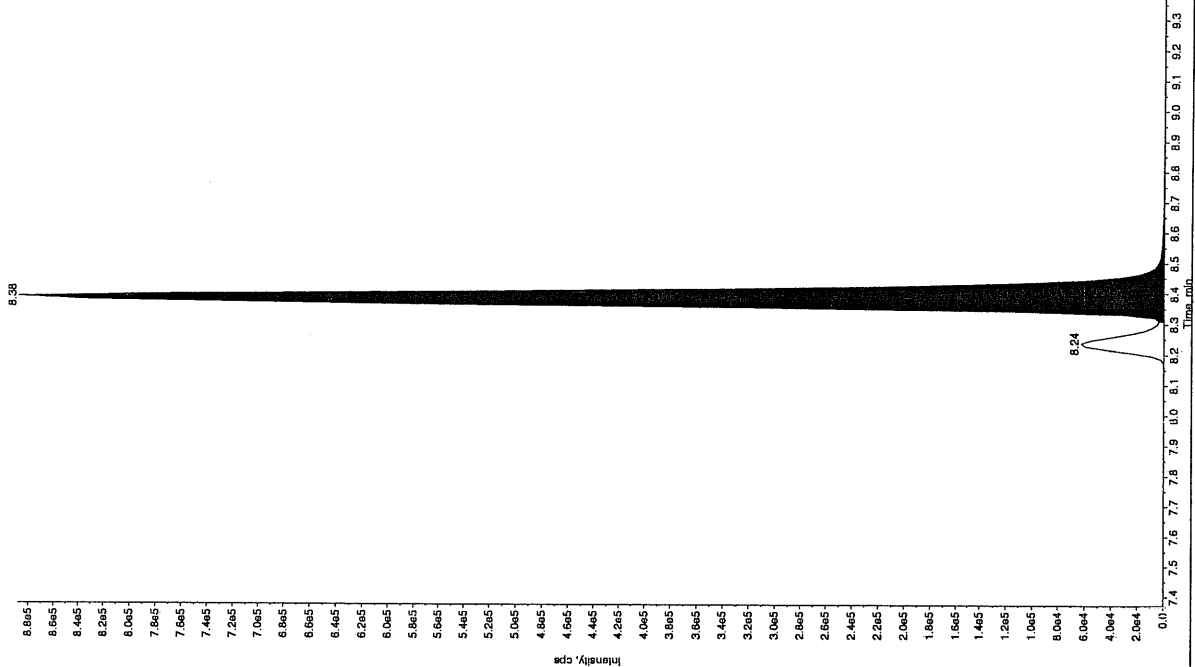
File Name: "WXX100305-26CCV" Sample ID: "11LER" File: "EXS03050060.wif"  
 Name: "26-Diamino-4-nitrofluorene" Mass(es): "182.1/151.9 amu"  
 Comment: "LCMSEXP\_C" Annotation: ""

Sample Index: 1  
 Sample Type: QC  
 Concentration: 500. ng/mL  
 Calculated Conc: 499. ng/mL  
 Acq. Date: 3/6/2010  
 Acq. Time: 8:34:01 AM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IQA  
 Min. Peak Height: 450.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 30.0 sec  
 Expected RT: 5.02 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 5.03 min  
 Area: 1.32e+006 counts  
 Height: 314091.949 cps  
 Start Time: 4.93 min  
 End Time: 5.33 min



File Name: "WXX100305-26CCV" Sample ID: "11LER" File: "EXS03050060.wif"  
 Name: "26-Diamino-4-nitrofluorene" Mass(es): "182.1/151.9 amu"  
 Comment: "LCMSEXP\_C" Annotation: ""

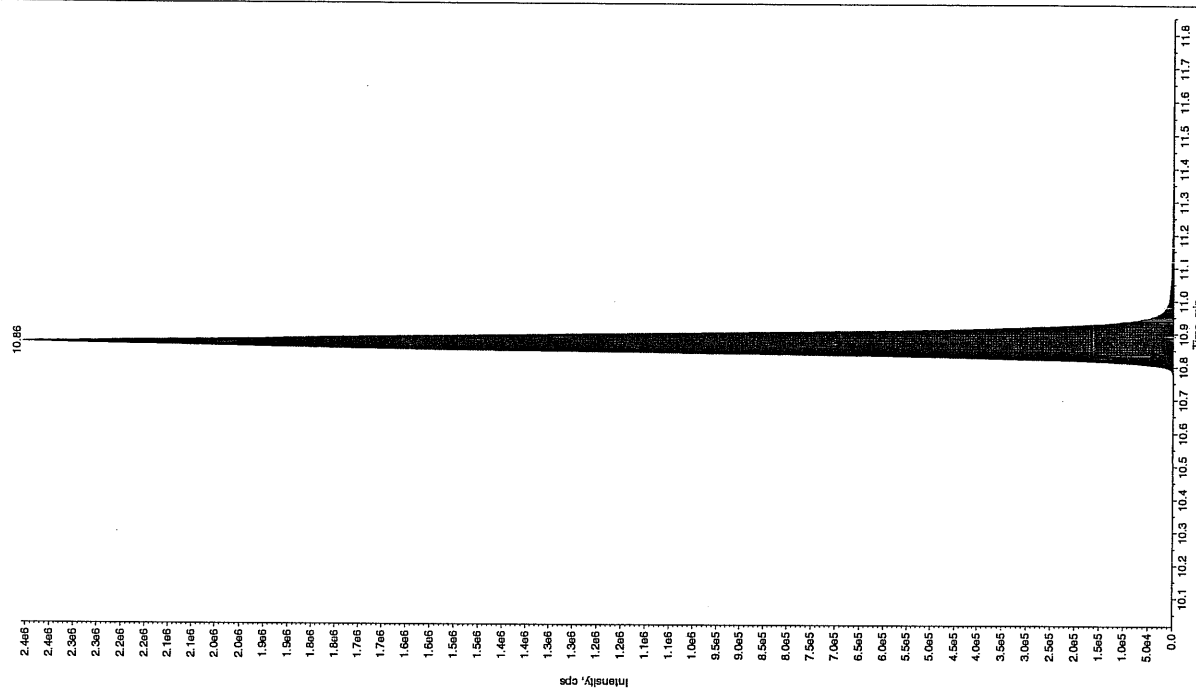
Sample Index: 1  
 Sample Type: QC  
 Concentration: 250. ng/mL  
 Calculated Conc: 247. ng/mL  
 Acq. Date: 3/6/2010  
 Acq. Time: 8:34:01 AM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IQA  
 Min. Peak Height: 1460.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 30.0 sec  
 Expected RT: 8.37 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 8.38 min  
 Area: 3.08e+006 counts  
 Height: 887903.992 cps  
 Start Time: 8.31 min  
 End Time: 8.72 min



J SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

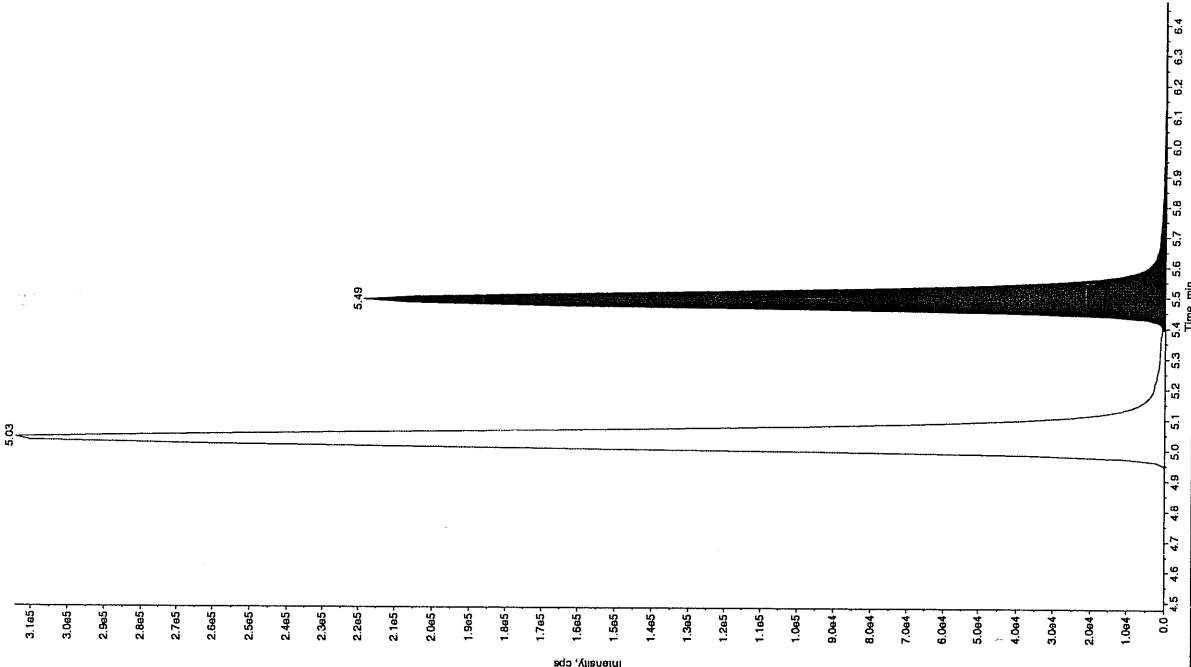
File Name: "WXX100305-26CCV" Sample ID: "J1LER" File: "EXS03050060.wif"  
 Peak Name: "24-Diamino-6-nitrofluorene" Mass(es): "166.046.0 amu"  
 Comment: "LCMSEXP\_C" Annotation: ""

Sample Index: 1  
 Sample Type: QC  
 Concentration: 500. ng/mL  
 Calculated Conc: 498. ng/mL  
 Acq. Date: 3/6/2010  
 Acq. Time: 8:34:01 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: 10.9 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 10.9 min  
 Area: 8.36e+006 counts  
 Height: 2407232.422 cps  
 Start Time: 10.8 min  
 End Time: 11.2 min



File Name: "WXX100305-26CCV" Sample ID: "J1LER" File: "EXS03050060.wif"  
 Peak Name: "24-Diamino-6-nitrofluorene" Mass(es): "166.046.0 amu"  
 Comment: "LCMSEXP\_C" Annotation: ""

Sample Index: 1  
 Sample Type: QC  
 Concentration: 500. ng/mL  
 Calculated Conc: 492. ng/mL  
 Acq. Date: 3/6/2010  
 Acq. Time: 8:34:01 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: 5.48 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 5.49 min  
 Area: 9.13e+005 counts  
 Height: 218423.599 cps  
 Start Time: 5.39 min  
 End Time: 6.14 min



7B  
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1758

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXS03050062.wiff

Analysis Date: 06-MAR-10 09:05

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	103	103	
3,4-Dinitrotoluene	50	51.1	102	
3,5-Dinitroaniline	100	111	111	
TATB	100	116	116	
tris(o-cresyl) phosphate	100	100	100	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,  
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

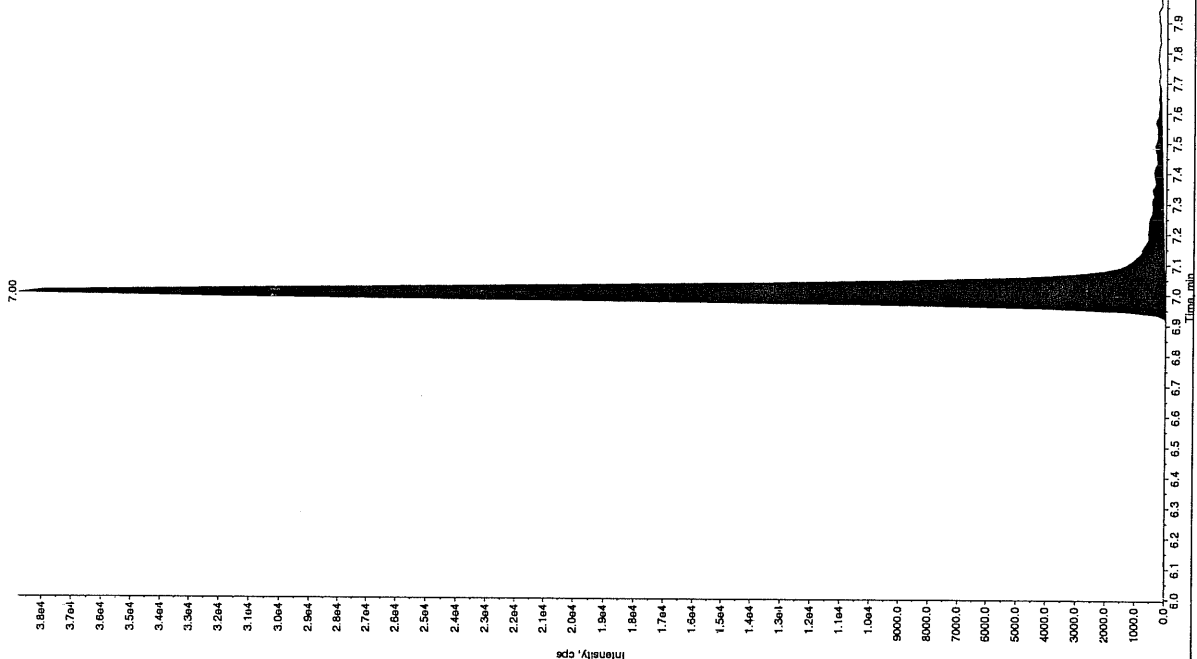
Ren 3/9/10

Sample Name: "WXX100305-270R1" Sample ID: "H1LER" File: "EXS03050062.wif"  
 Name: "TATB" Mass(es): "257.22019 amu"  
 ment: "LCMSEXP\_C" Annotation: "

Sample Index: 1  
 Sample Type: QC  
 Concentration: 100. ng/mL  
 Calculated Conc: 111. ng/mL  
 Acq. Date: 3/6/2010  
 Acq. Time: 9:05:25 AM

Modified: Yes  
 Proc. Algorithm: IntelliQuan - IQA  
 Min. Peak Height: 2500.00 cps  
 Min. Peak Width: 3 0.00 sec  
 Smoothing Width: 30.0 points  
 RT Window: 7.00 min  
 Expected RT: No  
 Use Relative RT: No

Int. Type: Valley  
 Retention Time: 7.00 min  
 Area: 1.54e+005 counts  
 Height: 38752.625 cps  
 Start Time: 6.91 min  
 End Time: 7.69 min

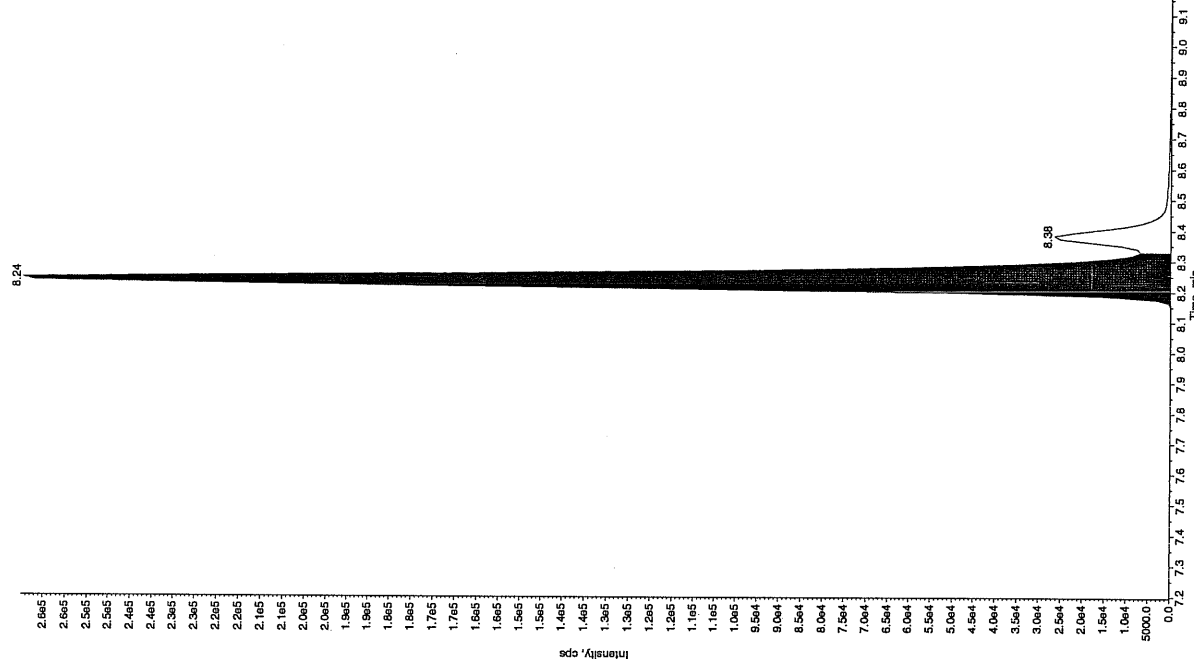


Sample Name: "WXX100305-270R1" Sample ID: "H1LER" File: "EXS03050062.wif"  
 Peak Name: "35-Dinitroaniline" Mass(es): "182.046.0 amu"  
 Comment: "LCMSEXP\_C" Annotation: "

Sample Index: 1  
 Sample Type: QC  
 Concentration: 100. ng/mL  
 Calculated Conc: 111. ng/mL  
 Acq. Date: 3/6/2010  
 Acq. Time: 9:05:25 AM

Modified: Yes  
 Proc. Algorithm: IntelliQuan - IQA  
 Min. Peak Height: 2000.00 cps  
 Min. Peak Width: 3 0.00 sec  
 Smoothing Width: 30.0 points  
 RT Window: 15.0 sec  
 Expected RT: 8.20 min  
 Use Relative RT: No

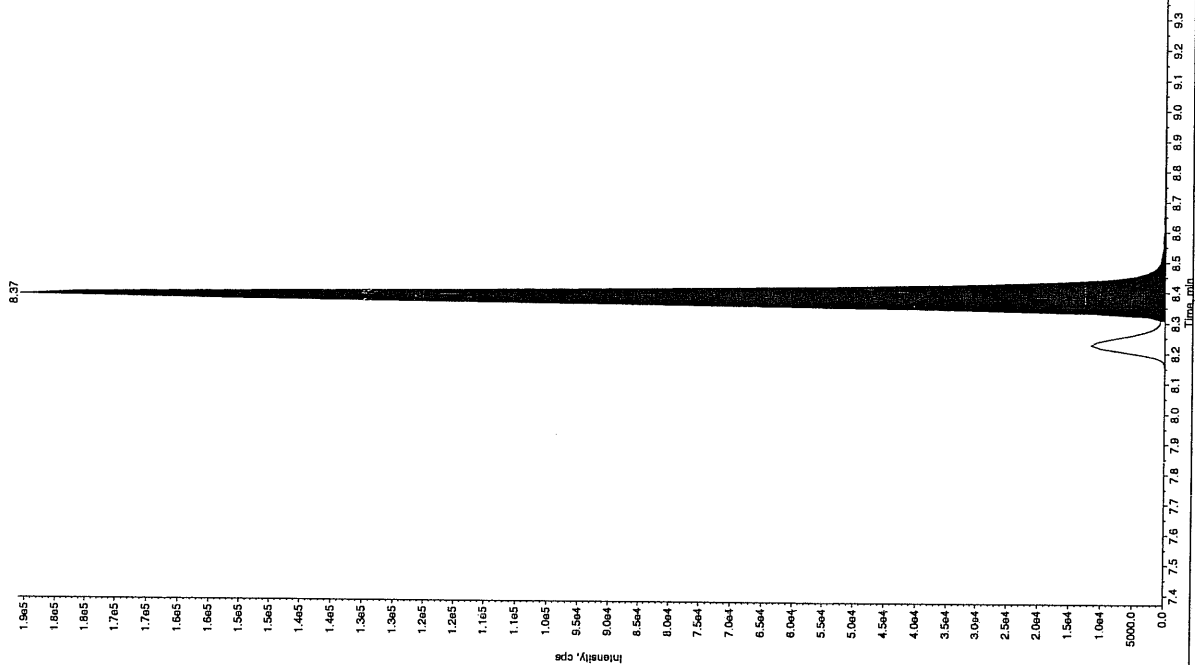
Int. Type: Valley  
 Retention Time: 8.24 min  
 Area: 9.46e+005 counts  
 Height: 264936.615 cps  
 Start Time: 8.14 min  
 End Time: 8.33 min



Ren 3/9/10

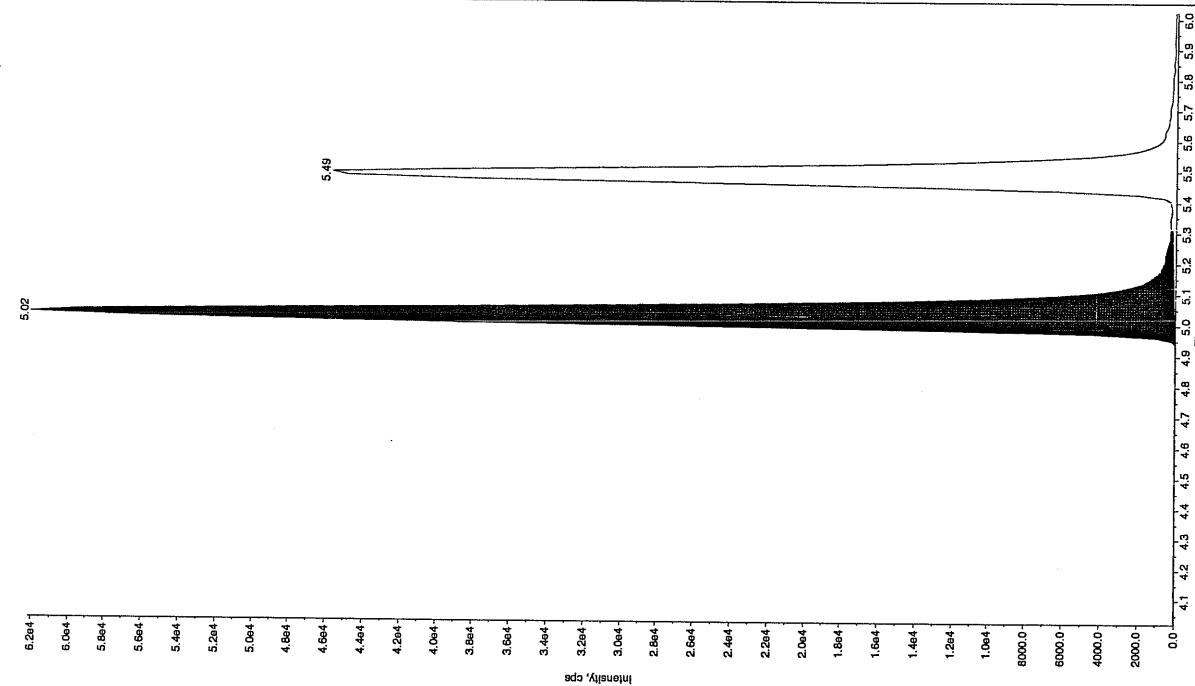
File Name: "WXX100305-27C.R" Sample ID: "111ER" File: "EXS03050082.wif"  
 Peak Name: "34-Dinitrofluorene" Mass(es): "182.1715.9 amu"  
 Comment: "LCMSEXP\_C" Annotation: ""

Sample Index: 1  
 Sample Type: QC  
 Concentration: 50.0 ng/mL  
 Calculated Conc: 51.1 ng/mL  
 Acq. Date: 3/6/2010  
 Acq. Time: 9:05:25 AM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IQA  
 Min. Peak Height: 1450.00 cps  
 Min. Peak Width: 3.00 sec  
 Smoothing Width: 30.0 points  
 RT Window: 30.0 sec  
 Expected RT: 8.37 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 8.37 min  
 Area: 6.16e+005 counts  
 Height: 185975.763 cps  
 Start Time: 8.31 min  
 End Time: 8.69 min



Sample Name: "WXX100305-27C.R" Sample ID: "111ER" File: "EXS03050082.wif"  
 Peak Name: "26-Diamino-4-nitrofluorene" Mass(es): "166.0460.0 amu"  
 Comment: "LCMSEXP\_C" Annotation: ""

Sample Index: 1  
 Sample Type: QC  
 Concentration: 100. ng/mL  
 Calculated Conc: 103. ng/mL  
 Acq. Date: 3/6/2010  
 Acq. Time: 9:05:25 AM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IQA  
 Min. Peak Height: 450.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 30.0 points  
 RT Window: 30.0 sec  
 Expected RT: 5.02 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 5.02 min  
 Area: 2.64e+005 counts  
 Height: 62094.765 cps  
 Start Time: 4.93 min  
 End Time: 5.31 min



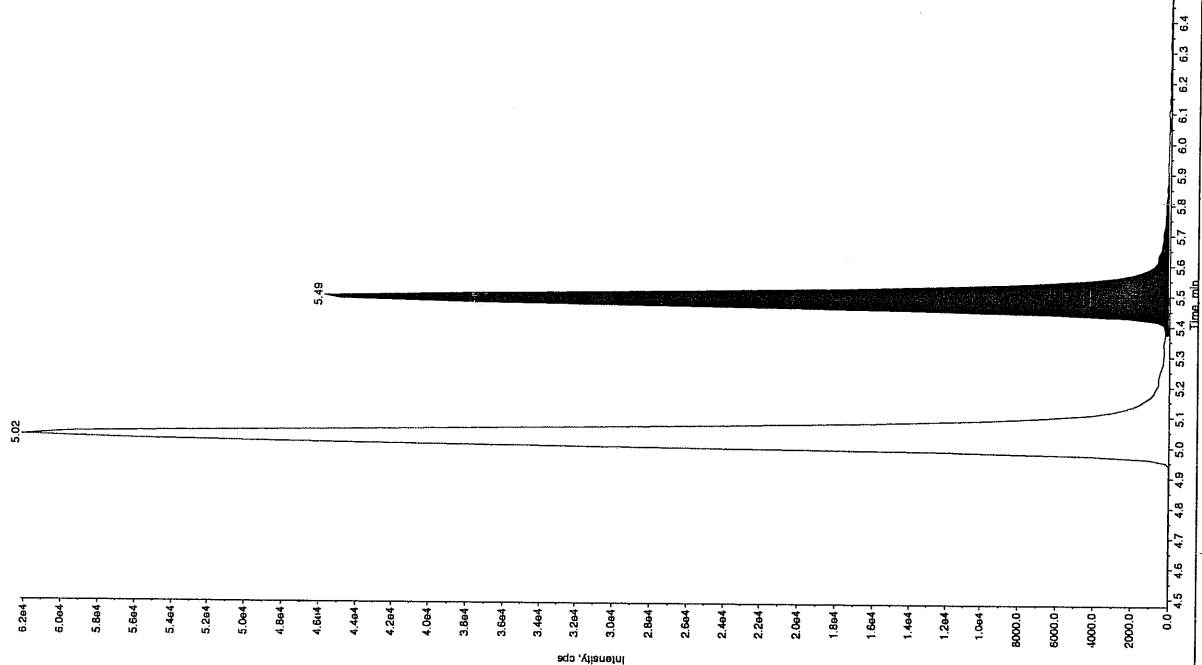
e Index: 1 QC  
 e Type: 100.  
 ncentration: 101.  
 elated Conc: 3/6/2010  
 Date: 9:05:25 AM  
 Time:

ried:	No
Algorithm:	IntelliQuan - IQA
Peak Height:	350.00 cps
Peak Width:	0.00 sec
hing Width:	3 points
ndow:	30.0 sec
ted RT:	5.48 min
relative RT:	No

```

Type:          Valley
tion Time:    5.49      min
              1.83e+005 counts
t:            45674.507 cps
Time:         5.37      min
ime:          5.90      min

```

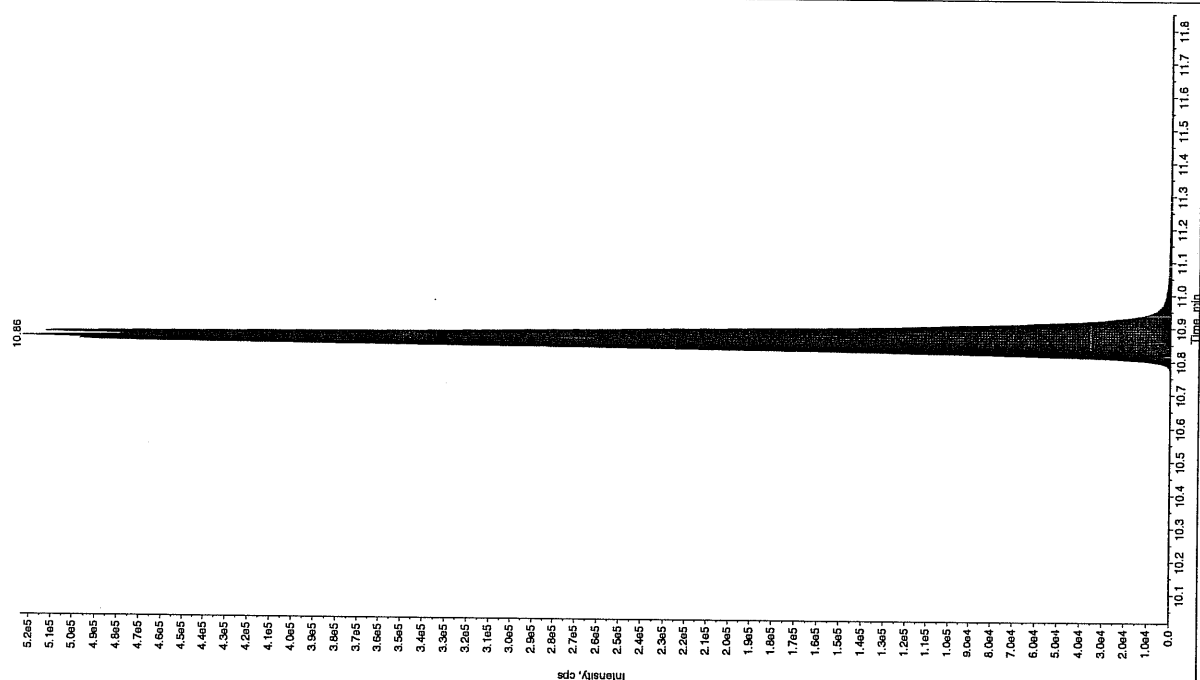


Sample Name: "WXX100305-270r1" Sample ID: "11JLr" File: "EXS03050062.wif"  
Peak Name: "tris(o-cresyl) phosphate" Mass(es): "369.1/91.0 amu"  
Comment: "LCMSEXP\_C" Annotation: ""

Sample Index:	1	QC
Sample Type:		
Concentration:	100.	ng/mL
Calculated Conc:	100.	ng/mL
Acq. Date:	3/6/2010	
Acq. Time:	9:05:25 AM	

Modified:	No
Proc. Algorithm:	IntelliQuan - IQA
Min. Peak Height:	8000.00 cps
Min. Peak Width:	0.00 sec
Smoothing Width:	3 points
RT Window:	30.0 sec
Expected RT:	10.9 min
Use Relative RT:	No

Int. Type:	Valley
Retention Time:	10.9 min
Area:	1.89e+006 counts
Height:	52379.785 cps
Start Time:	10.8 min
End Time:	11.3 min



7A  
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1758

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXS03050066.wiff

Analysis Date: 06-MAR-10 10:08

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	500	456	91	
2,6-Diamino-4-nitrotoluene	500	476	95	
3,4-Dinitrotoluene	250	247	99	
3,5-Dinitroaniline	500	535	107	
TATB	500	549	110	
tris(o-cresyl) phosphate	500	507	101	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,  
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits



Before Jan 31/10

Sample Name: "WXX100305-26CCV" Sample ID: "JILLER" File: "EXS03050066.wif"

Peak Name: "35-Dinitroaniline" Mass(es): "182.046.0 amu"

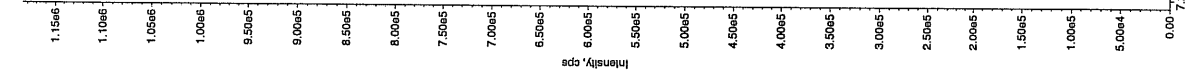
Comment: "LCMSEXP\_C" Annotation: ""

Sample Index: 1

Sample Type: QC  
Concentration: 500. ng/mL  
Calculated Conc: 518. ng/mL  
Acq. Date: 3/6/2010  
Acq. Time: 10:08:15 AM

Modified: Yes  
Proc. Algorithm: IntelliQuan - IOA  
Min. Peak Height: 2000.00 cps  
Min. Peak Width: 0.00 sec  
Smoothing Width: 3 points  
RT Window: 15.0 sec  
Expected RT: 8.17 min  
Use Relative RT: No

Int. Type: Valley  
Retention Time: 8.22 min  
Area: 4.22e+006 counts  
Height: 1172567.749 cps  
Start Time: 8.14 min  
End Time: 8.32 min



Sample Name: "WXX100305-26CCV" Sample ID: "JILLER" File: "EXS03050066.wif"

Peak Name: "35-Dinitroaniline" Mass(es): "182.046.0 amu"

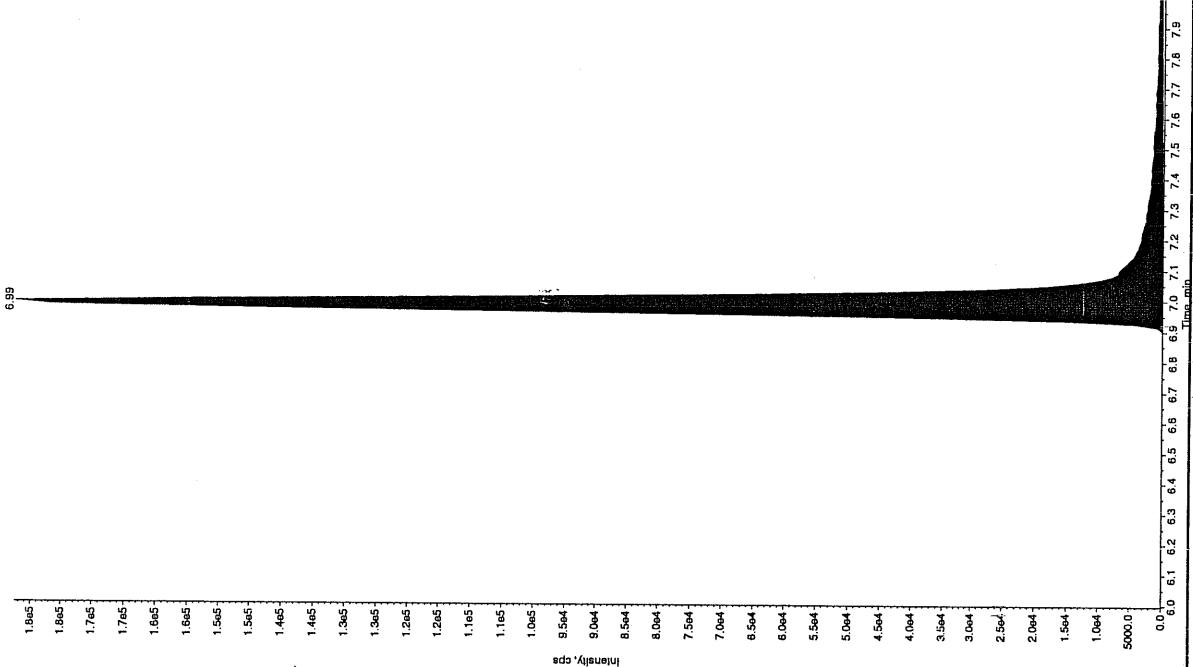
Comment: "LCMSEXP\_C" Annotation: ""

Sample Index: 1

Sample Type: QC  
Concentration: 500. ng/mL  
Calculated Conc: 549. ng/mL  
Acq. Date: 3/6/2010  
Acq. Time: 10:08:15 AM

Modified: No  
Proc. Algorithm: IntelliQuan - IOA  
Min. Peak Height: 2500.00 cps  
Min. Peak Width: 0.00 sec  
Smoothing Width: 3 points  
RT Window: 30.0 sec  
Expected RT: 7.00 min  
Use Relative RT: No

Int. Type: Valley  
Retention Time: 6.99 min  
Area: 7.92e+005 counts  
Height: 182468.521 cps  
Start Time: 6.87 min  
End Time: 7.09 min

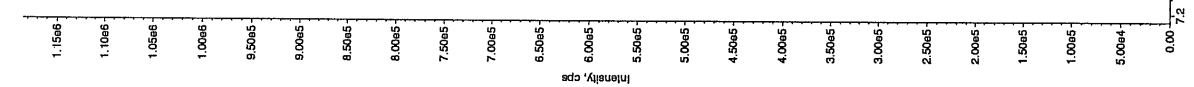
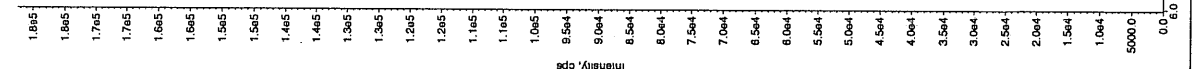


After Jan 31/10

after Jan 3/9/10

File Name: "WXX100305-26CCV" Sample ID: "111LER" File: "EXS03050066.wif"  
 Peak Name: "35-Dinitroaniline" Mass(es): "182.046.0 amu"  
 Comment: "LCMSEXP\_C" Annotation: ""

Sample Index: 1  
 Sample Type: QC  
 Concentration: 500. ng/mL  
 Calculated Conc: 535. ng/mL  
 Acq. Date: 3/6/2010  
 Acq. Time: 10:08:15 AM  
 Modified: Yes  
 RT Window: 15.0 sec  
 Expected RT: 8.17 min  
 Use Relative RT: No  
 Int. Type: Manual  
 Retention Time: 8.22 min  
 Area: 4.35e+006 counts  
 Height: 1183019.493 cps  
 Start Time: 8.14 min  
 End Time: 8.32 min



J. SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

Sample Name: "WXX100305-26CCV" Sample ID: "JLER" File: "EX503050066.wif"

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: 476. ng/mL

Acq. Date: 3/6/2010

Acq. Time: 10:08:15 AM

Modified: No

Proc. Algorithm: IntelliQuan - IQA

Min. Peak Height: 450.00 cps

Min. Peak Width: 0.00 sec

Smoothing Width: 3 points

RT Window: 30.0 sec

Expected RT: 5.02 min

Use Relative RT: No

Int. Type: Valley

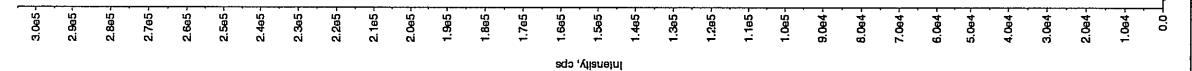
Retention Time: 5.01 min

Area: 1.26e+006 counts

Height: 304854.767 cps

Start Time: 4.92 min

End Time: 5.30 min



Sample Name: "WXX100305-26CCV" Sample ID: "JLER" File: "EX503050066.wif"

Peak Name: "34-Dinitrotoluene" Mass(es): "182.1/151.9 amu"

Comment: "LCMSEXP\_C" Annotation: ""

Sample Index: 1

Sample Type: QC

Concentration: 250. ng/mL

Calculated Conc: 247. ng/mL

Acq. Date: 3/6/2010

Acq. Time: 10:08:15 AM

Modified: No

Proc. Algorithm: IntelliQuan - IQA

Min. Peak Height: 1460.00 cps

Min. Peak Width: 0.00 sec

Smoothing Width: 3 points

RT Window: 30.0 sec

Expected RT: 8.37 min

Use Relative RT: No

Int. Type: Valley

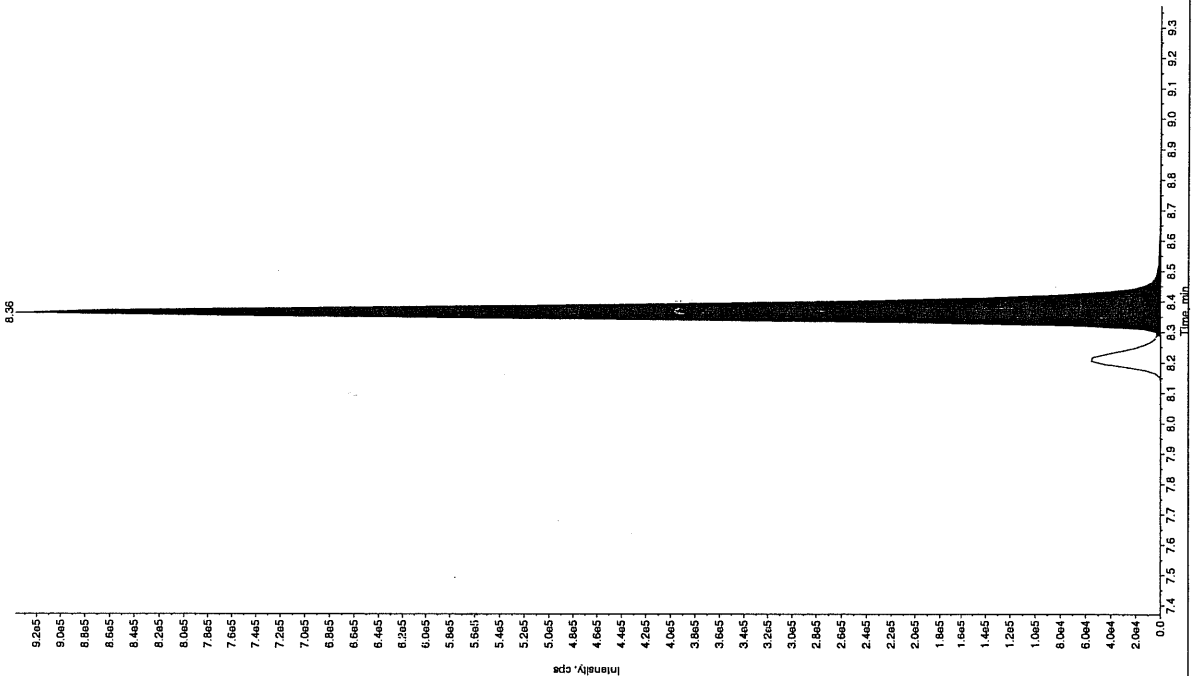
Retention Time: 8.36 min

Area: 3.08e+006 counts

Height: 937779.907 cps

Start Time: 8.29 min

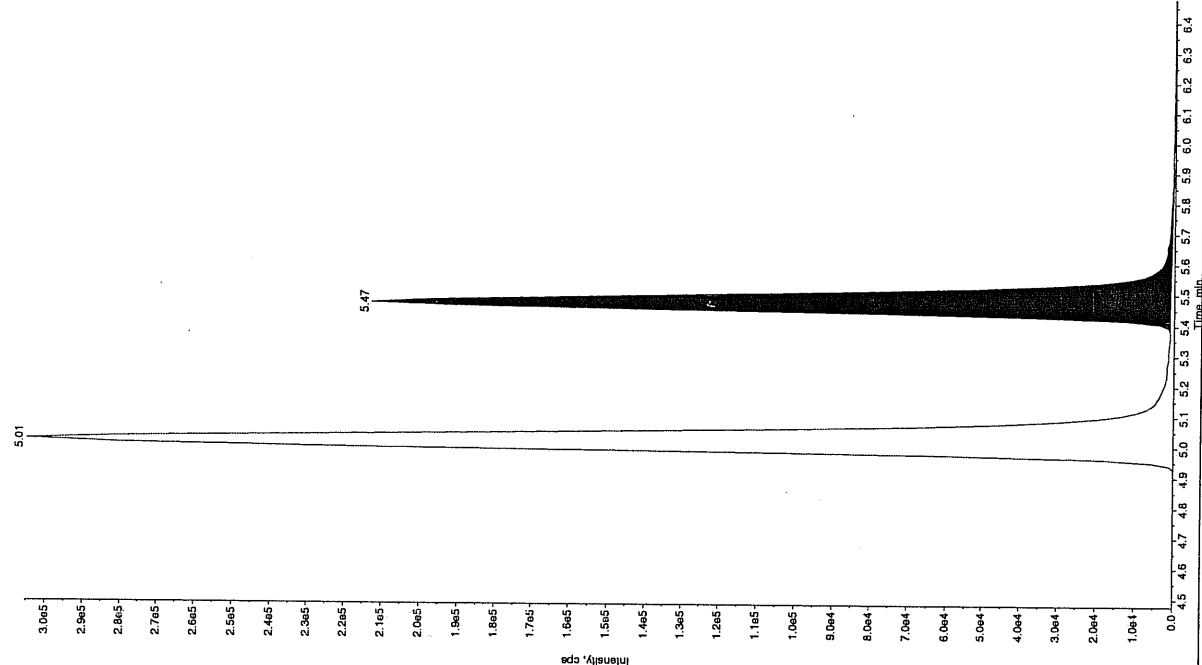
End Time: 8.69 min



SOP GL-OA-E-056, Method 8321A-Modified LCM SMS#4

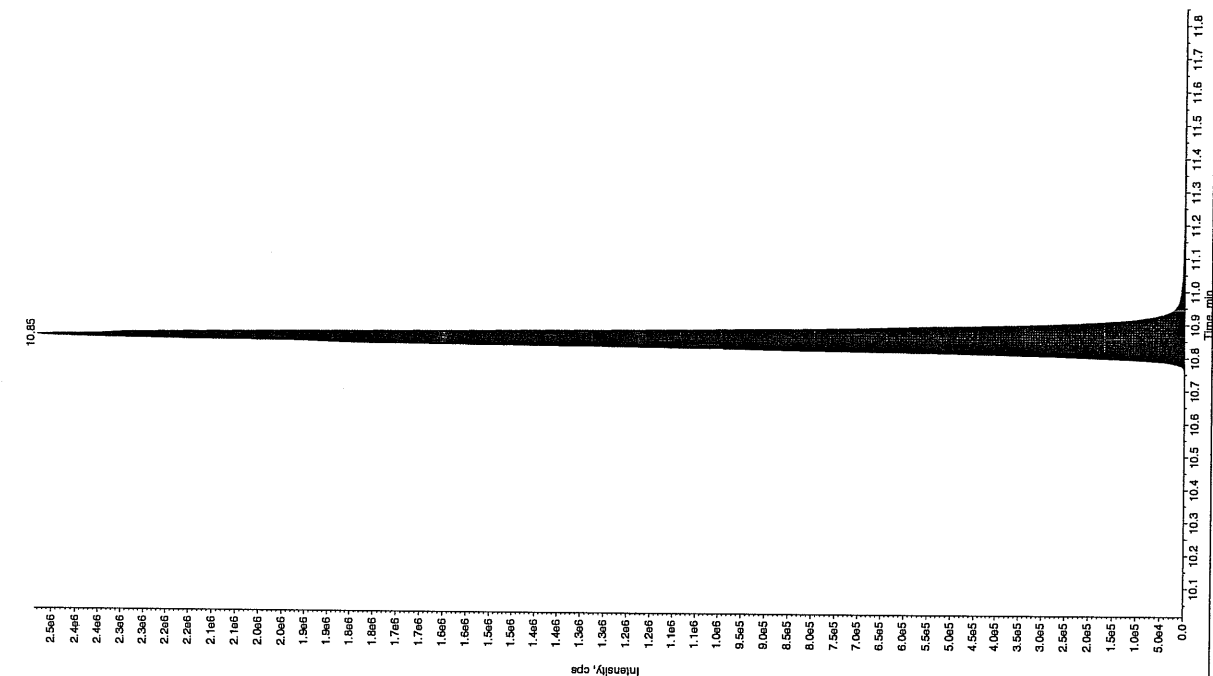
File Name: "WXX100305-26CCV" Sample ID: "111ER" File: "EXS03050066.wif"  
 Peak Name: "24-Diamine-Enitrololone" Mass(es): "166.046.0 amu"  
 Comment: "LCMSEXP\_C" Annotation: ""

Sample Index: 1  
 Sample Type: QC  
 Concentration: 500. ng/mL  
 Calculated Conc: 507. ng/mL  
 Acq. Date: 3/6/2010  
 Acq. Time: 10:08:15 AM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IQA  
 Min. Peak Height: 350.00 cps  
 Min. Peak Width: 3 0.00 sec  
 Smoothing Width: 30.0 points  
 RT Window: 30.0 sec  
 Expected RT: 5.48 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 5.47 min  
 Area: 8.46e+005 counts  
 Height: 211996.352 cps  
 Start Time: 5.36 min  
 End Time: 5.51 min



Sample Name: "WXX100305-26CCV" Sample ID: "111ER" File: "EXS03050066.wif"  
 Peak Name: "tris(o-cresyl) phosphate" Mass(es): "369.191.0 amu"  
 Comment: "LCMSEXP\_C" Annotation: ""

Sample Index: 1  
 Sample Type: QC  
 Concentration: 500. ng/mL  
 Calculated Conc: 507. ng/mL  
 Acq. Date: 3/6/2010  
 Acq. Time: 10:08:15 AM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IQA  
 Min. Peak Height: 8000.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 30.0 points  
 RT Window: 30.0 sec  
 Expected RT: 10.9 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 10.8 min  
 Area: 8.50e+006 counts  
 Height: 2485842.529 cps  
 Start Time: 10.8 min  
 End Time: 11.2 min



7B  
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1758

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXS03050068.wiff

Analysis Date: 06-MAR-10 10:39

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
3,5-Dinitroaniline	100	105	105	
TATB	100	111	111	
tris(o-cresyl) phosphate	100	99	99	
2,4-Diamino-6-nitrotoluene	100	94.8	95	
2,6-Diamino-4-nitrotoluene	100	101	101	
3,4-Dinitrotoluene	50	51.1	102	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,

2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

See 3/9/10

Sample Name: "WXX100305-27QRI" Sample ID: "11LER" File: "EXS03050068.wif"

Peak Name: "35-Dinitroaniline" Mass(es): "182.046.0 amu"

Comment: "LCMSEXP\_C" Annotation: "

Sample Index: 1 QC

Sample Type: 100. ng/mL

Concentration: 105. ng/mL

Acq. Date: 3/6/2010

Acq. Time: 10:39:19 AM

Modified: Yes

Proc. Algorithm: IntelliQuan - IOA

Min. Peak Height: 2000.00 cps

Min. Peak Width: 0.00 sec

Smoothing Width: 3 points

RT Window: 15.0 sec

Expected RT: 8.15 min

Use Relative RT: No

Int. Type: Valley

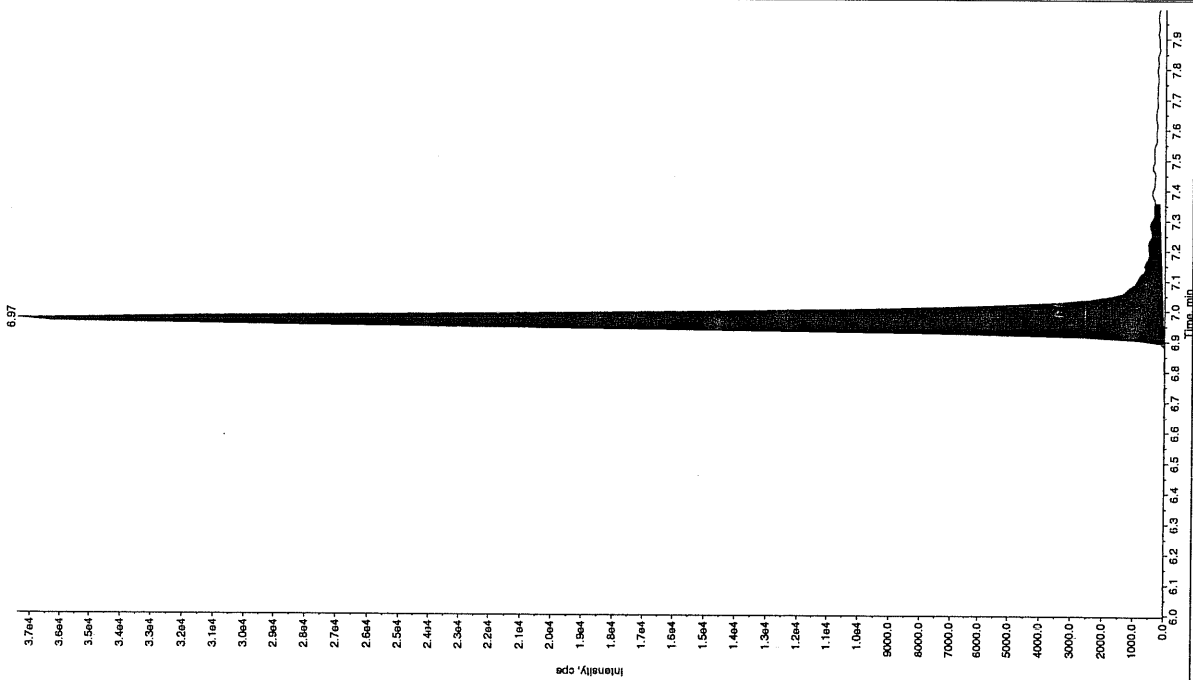
Retention Time: 8.20 min

Area: 8.93e+005 counts

Height: 238822.998 cps

Start Time: 8.11 min

End Time: 8.31 min



4111003050068

Sample Name: "WXX100305-27QRI" Sample ID: "11LER" File: "EXS03050068.wif"

Peak Name: "35-Dinitroaniline" Mass(es): "257.2204.9 amu"

Comment: "LCMSEXP\_C" Annotation: "

Sample Index: 1 QC

Sample Type: 100. ng/mL

Concentration: 111. ng/mL

Acq. Date: 3/6/2010

Acq. Time: 10:39:39 AM

Modified: No

Proc. Algorithm: IntelliQuan - IOA

Min. Peak Height: 2500.00 cps

Min. Peak Width: 0.00 sec

Smoothing Width: 3 points

RT Window: 30.0 sec

Expected RT: 7.00 min

Use Relative RT: No

Int. Type: Valley

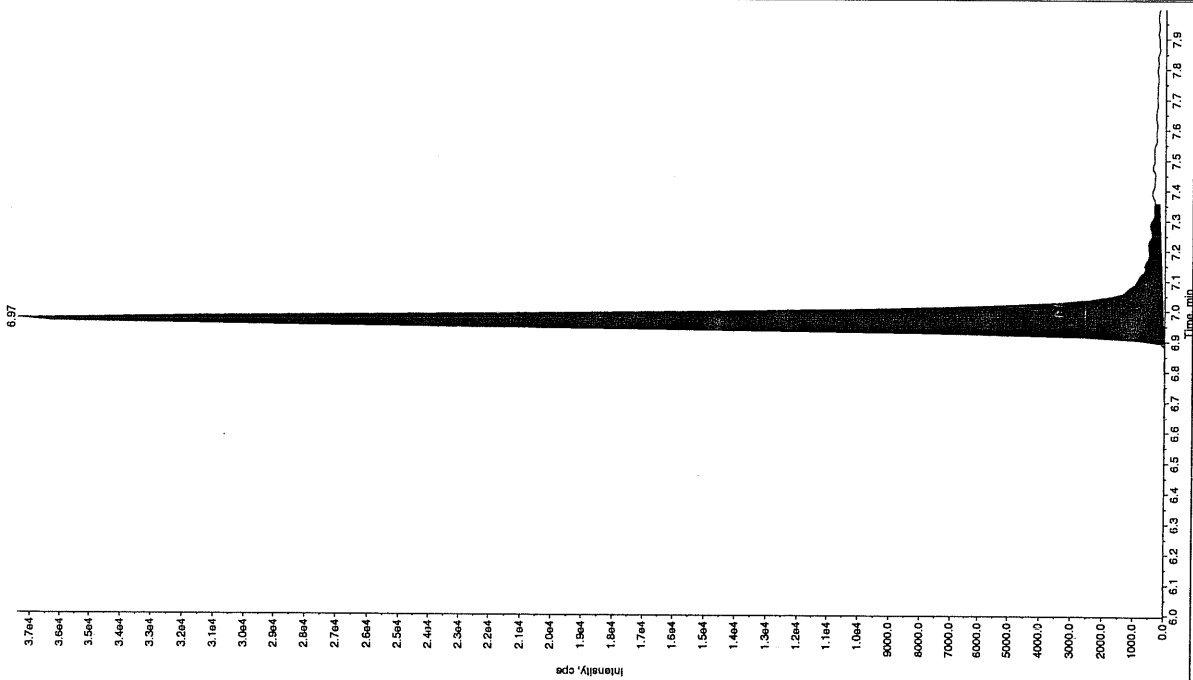
Retention Time: 6.97 min

Area: 1.46e+005 counts

Height: 37338.898 cps

Start Time: 6.87 min

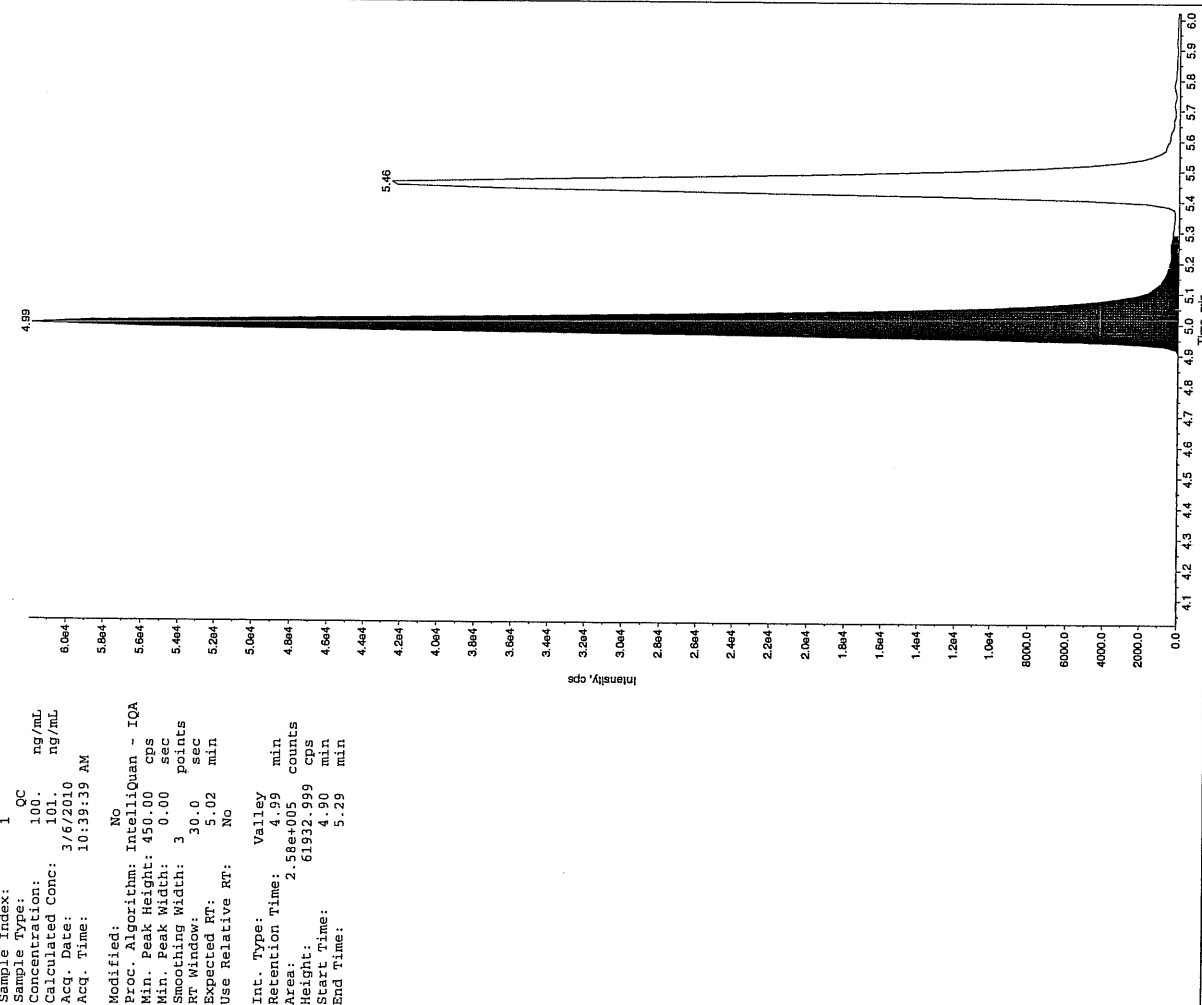
End Time: 7.36 min



SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

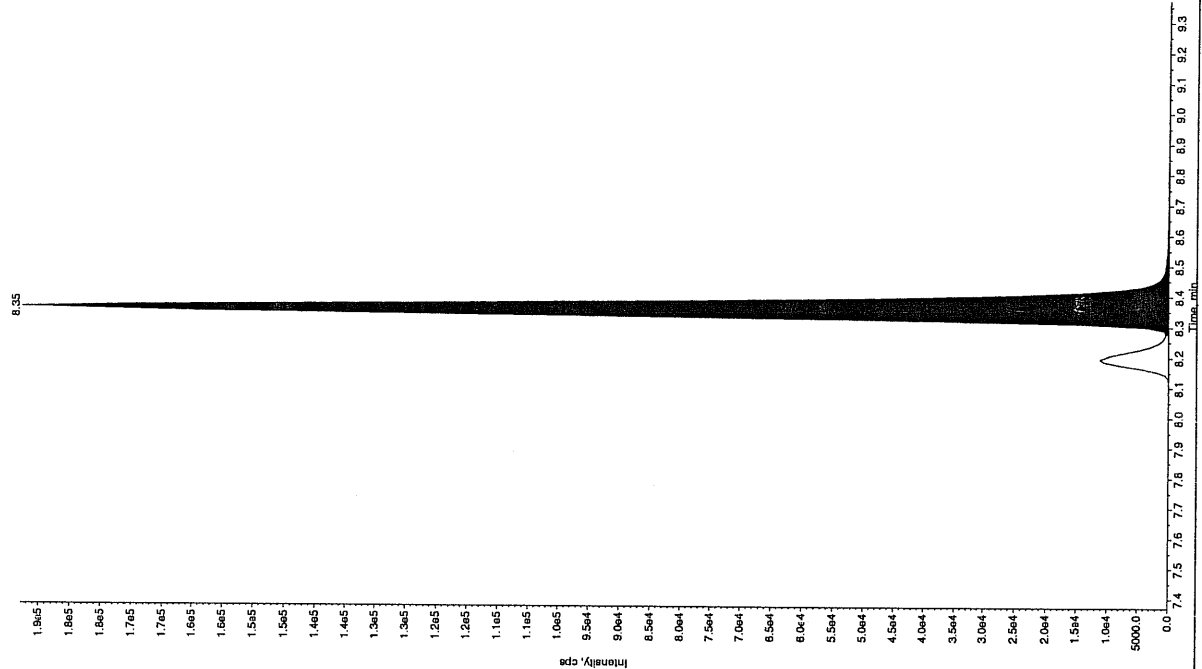
Sample Name: "WXX100305-27CRI" Sample ID: "JILER" File: "EXS03050068.wif"  
 Peak Name: "34-Dinitrotoluene" Mass(es): "162.1/151.9 amu"  
 Comment: "LCMSEXP\_C" Annotation: ""

Sample Index: 1  
 Sample Type: QC  
 Concentration: 100. ng/mL  
 Calculated Conc: 101. ng/mL  
 Acq. Date: 3/6/2010  
 Acq. Time: 10:39:39 AM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IQA  
 Min. Peak Height: 450.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 30.0 sec  
 Expected RT: 5.02 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 4.99 min  
 Area: 2.58e+005 counts  
 Height: 61932.999 cps  
 Start Time: 4.90 min  
 End Time: 5.29 min



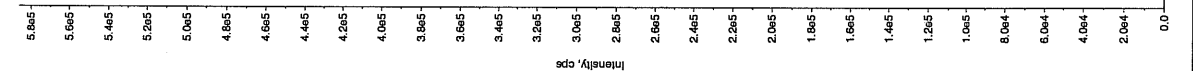
Sample Name: "WXX100305-27CRI" Sample ID: "JILER" File: "EXS03050068.wif"  
 Peak Name: "34-Dinitrotoluene" Mass(es): "162.1/151.9 amu"  
 Comment: "LCMSEXP\_C" Annotation: ""

Sample Index: 1  
 Sample Type: QC  
 Concentration: 50.0 ng/mL  
 Calculated Conc: 51.1 ng/mL  
 Acq. Date: 3/6/2010  
 Acq. Time: 10:39:39 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: 30.0 sec  
 Expected RT: 8.37 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 8.35 min  
 Area: 6.17e+005 counts  
 Height: 187936.569 cps  
 Start Time: 8.28 min  
 End Time: 8.69 min



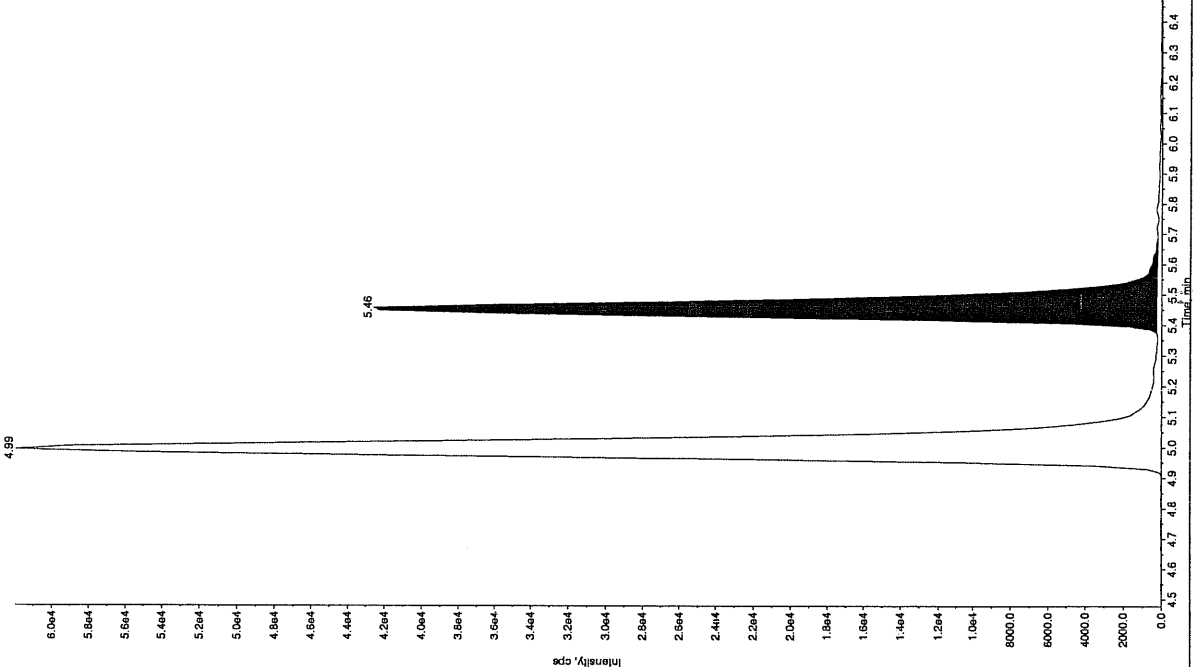
Sample Name: "WXX100305-27CRI" Sample ID: "111LER" File: "EXS03050068.wif"  
 Peak Name: "24-Diamino-6-nitrotoluene" Mass(es): "166.046.0 amu"  
 Comment: "LCMSEXP\_C" Annotation: ""

Sample Index: 1  
 Sample Type: QC  
 Concentration: 100. ng/mL  
 Calculated Conc: 99.0 ng/mL  
 Acq. Date: 3/6/2010  
 Acq. Time: 10:39:39 AM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IQA  
 Min. Peak Height: 8000.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 30.0 sec  
 Expected RT: 10.9 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 10.8 min  
 Area: 1.87e+006 counts  
 Height: 585983.887 cps  
 Start Time: 10.7 min  
 End Time: 11.1 min



Sample Name: "WXX100305-27CRI" Sample ID: "111LER" File: "EXS03050068.wif"  
 Peak Name: "24-Diamino-6-nitrotoluene" Mass(es): "166.046.0 amu"  
 Comment: "LCMSEXP\_C" Annotation: ""

Sample Index: 1  
 Sample Type: QC  
 Concentration: 100. ng/mL  
 Calculated Conc: 94.8 ng/mL  
 Acq. Date: 3/6/2010  
 Acq. Time: 10:39:39 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: 5.48 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 5.46 min  
 Area: 1.71e+005 counts  
 Height: 42302.734 cps  
 Start Time: 5.37 min  
 End Time: 5.68 min



SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



7A  
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1758

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXS03050079.wiff

Analysis Date: 06-MAR-10 13:32

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	500	443	89	
2,6-Diamino-4-nitrotoluene	500	460	92	
3,4-Dinitrotoluene	250	235	94	
3,5-Dinitroaniline	500	506	101	
TATB	500	522	104	
tris(o-cresyl) phosphate	500	475	95	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,  
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

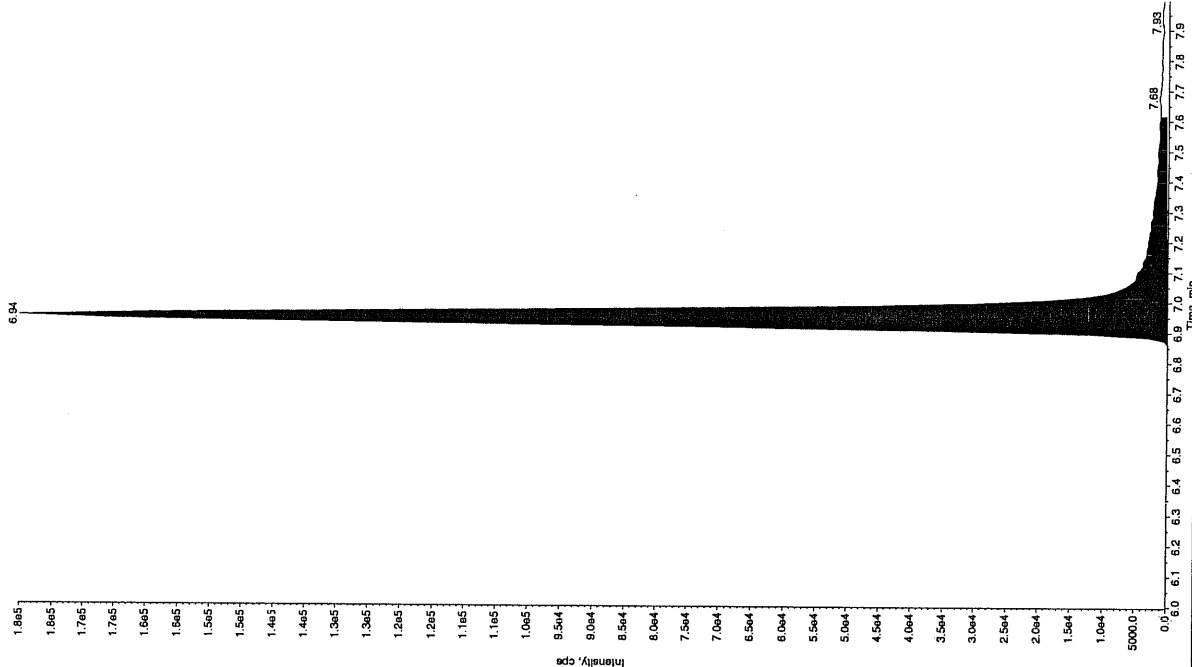
# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

San 3/9/10

File Name: "WXX100306-260CV" Sample ID: "J1LER" File: "EXS03050079.wif"  
 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: 506. ng/mL  
 Acq. Date: 3/6/2010  
 Acq. Time: 1:32:28 PM  
 Modified: Yes  
 Proc. Algorithm: IntelliQuan - IOA  
 Min. Peak Height: 2000.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 30.0 sec  
 Expected RT: 7.00 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 6.94 min  
 Area: 7.51e+005 counts  
 Height: 179990.768 cps  
 Start Time: 6.84 min  
 End Time: 7.62 min



Sample Name: "WXX100306-260CV" Sample ID: "J1LER" File: "EXS03050079.wif"  
 Peak Name: "35-Dinitroaniline" Mass(es): "182.0/146.0 amu"  
 Comment: "LCMSEXP\_C" Annotation: ""

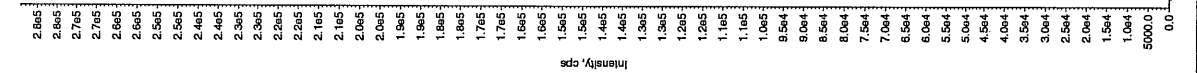
Sample Index: 1  
 Sample Type: QC  
 Concentration: 500. ng/mL  
 Calculated Conc: 506. ng/mL  
 Acq. Date: 3/6/2010  
 Acq. Time: 1:32:28 PM  
 Modified: Yes  
 Proc. Algorithm: IntelliQuan - IOA  
 Min. Peak Height: 2000.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 15.0 sec  
 Expected RT: 8.13 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 8.19 min  
 Area: 4.13e+006 counts  
 Height: 1098335.205 cps  
 Start Time: 8.09 min  
 End Time: 8.30 min



San 03/09/10

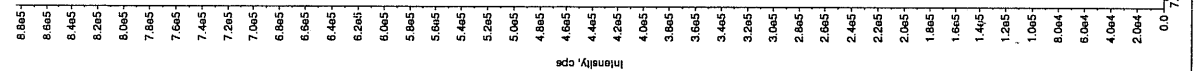
Sample Name: "WXX100306-260CV" Sample ID: "111ER" File: "EXS03050079.wif"  
 Peak Name: "26-Diamino-4-nitrotoluene" Mass(es): "166.0/46.0 amu"  
 Comment: "LCMSEXP\_C" Annotation: ""

Sample Index: 1 QC  
 Sample Type: 2885  
 Concentration: 500. ng/mL  
 Calculated Conc: 460. ng/mL  
 Acq. Date: 3/6/2010  
 Acq. Time: 1:32:28 PM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IQA  
 Min. Peak Height: 450.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 Peak Window: 30.0 sec  
 Expected RT: 5.02 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 4.97 min  
 Area: 1.22e+006 counts  
 Height: 283994.751 cps  
 Start Time: 4.88 min  
 End Time: 5.28 min

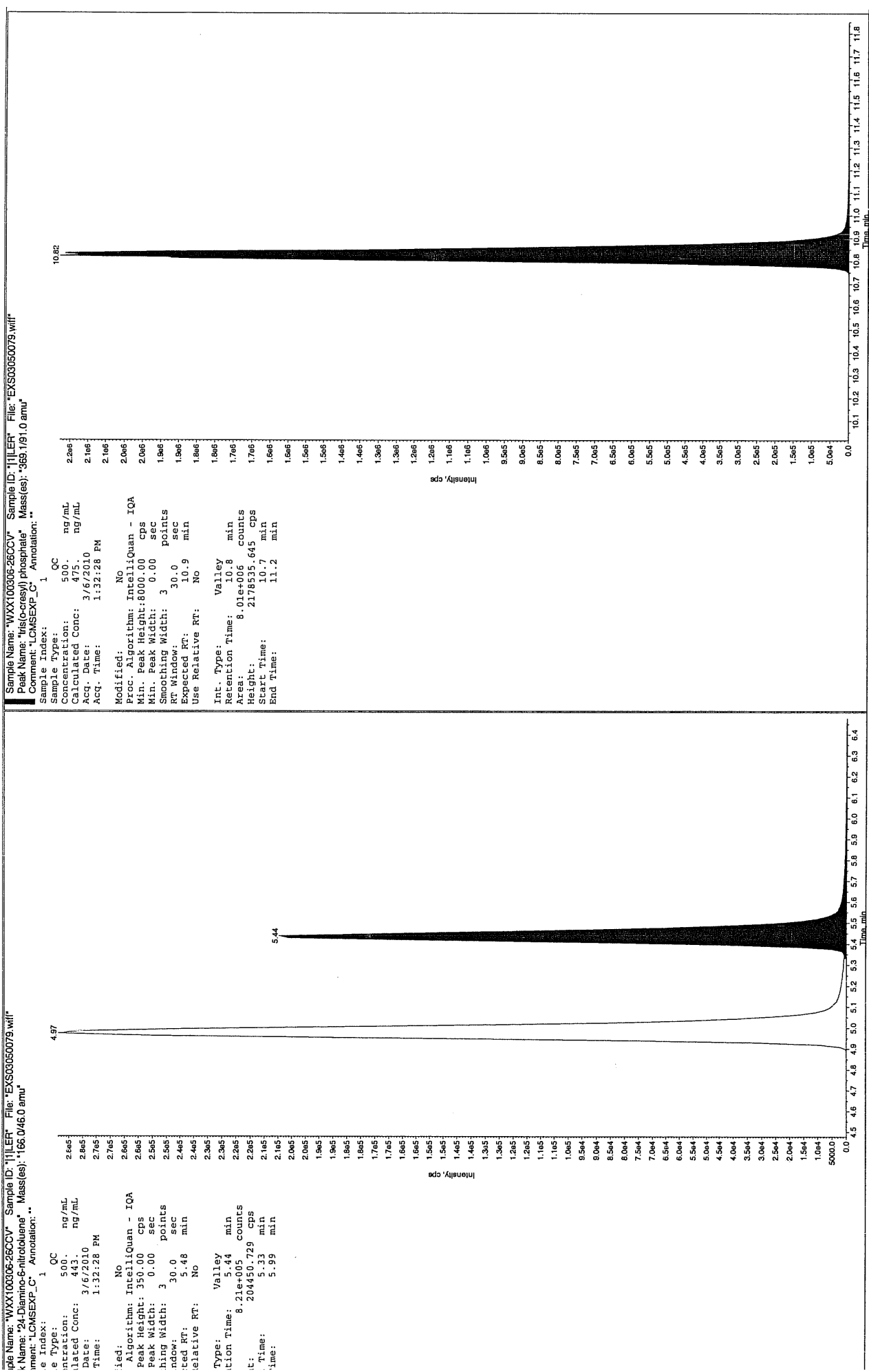


Sample Name: "WXX100306-250CV" Sample ID: "111ER" File: "EXS03050079.wif"  
 Peak Name: "34-Dinitrotoluene" Mass(es): "182.1/151.9 amu"  
 Comment: "LCMSEXP\_C" Annotation: ""

Sample Index: 1 QC  
 Sample Type: 8885  
 Concentration: 250. ng/mL  
 Calculated Conc: 235. ng/mL  
 Acq. Date: 3/6/2010  
 Acq. Time: 1:32:28 PM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IQA  
 Min. Peak Height: 1460.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 Peak Window: 30.0 sec  
 Expected RT: 8.37 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 8.34 min  
 Area: 2.94e+006 counts  
 Height: 883458.557 cps  
 Start Time: 8.27 min  
 End Time: 8.66 min



J. SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

7B  
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1758

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXS03050081.wiff

Analysis Date: 06-MAR-10 14:03

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	100	96.5	97	
2,6-Diamino-4-nitrotoluene	100	99.1	99	
3,4-Dinitrotoluene	50	50.4	101	
3,5-Dinitroaniline	100	109	109	
TATB	100	114	114	
tris(o-cresyl) phosphate	100	95.1	95	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,

2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

Jan 3/9/10

Sample Name: "WXX100306-27C1" Sample ID: "11JLER" File: "EXS03050081.wif"

Peak Name: "35-Dinitroaniline" Mass(es): "182.046.0 amu"

Comment: "LCMSEXP\_C" Annotation: ""

Sample Index: 1

Sample Type: QC

Concentration: 100. ng/mL

Calculated Conc: 109. ng/mL

Acq. Date: 3/6/2010

Acq. Time: 2:03:52 PM

Modified: Yes

Proc. Algorithm: IntelliQuan - IOA

Min. Peak Height: 2000.00 cps

Min. Peak Width: 0.00 sec

Smoothing Width: 3 points

RT Window: 15.0 sec

Expected RT: 8.16 min

Use Relative RT: No

Int. Type: Valley

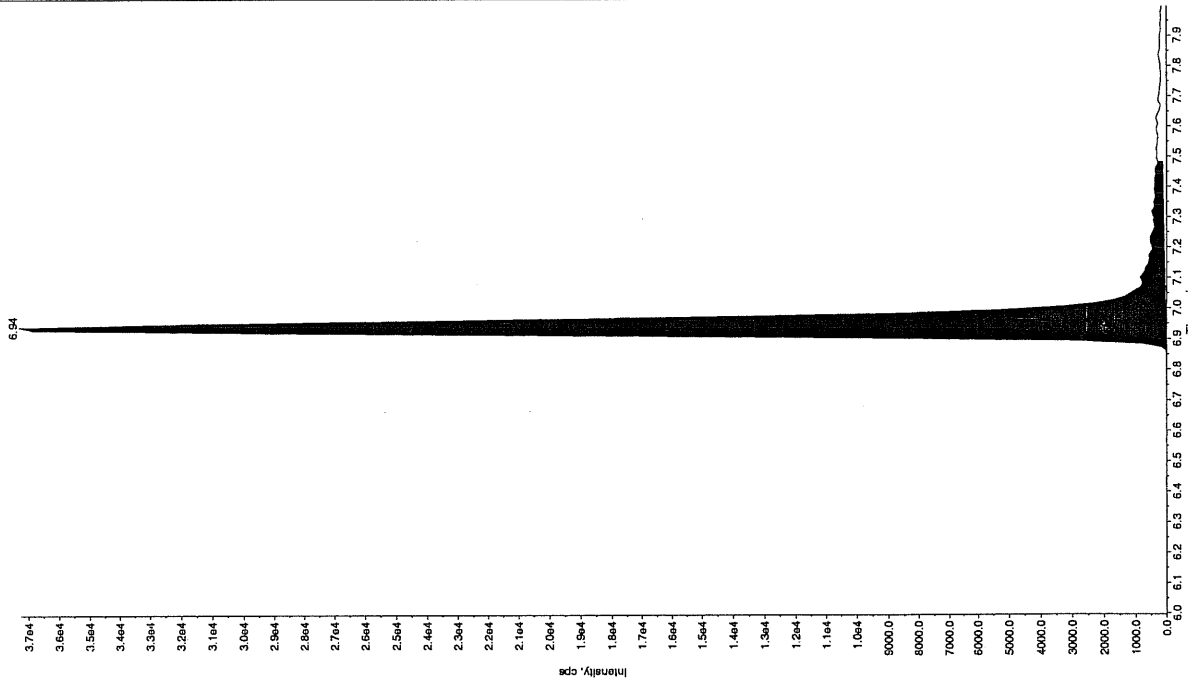
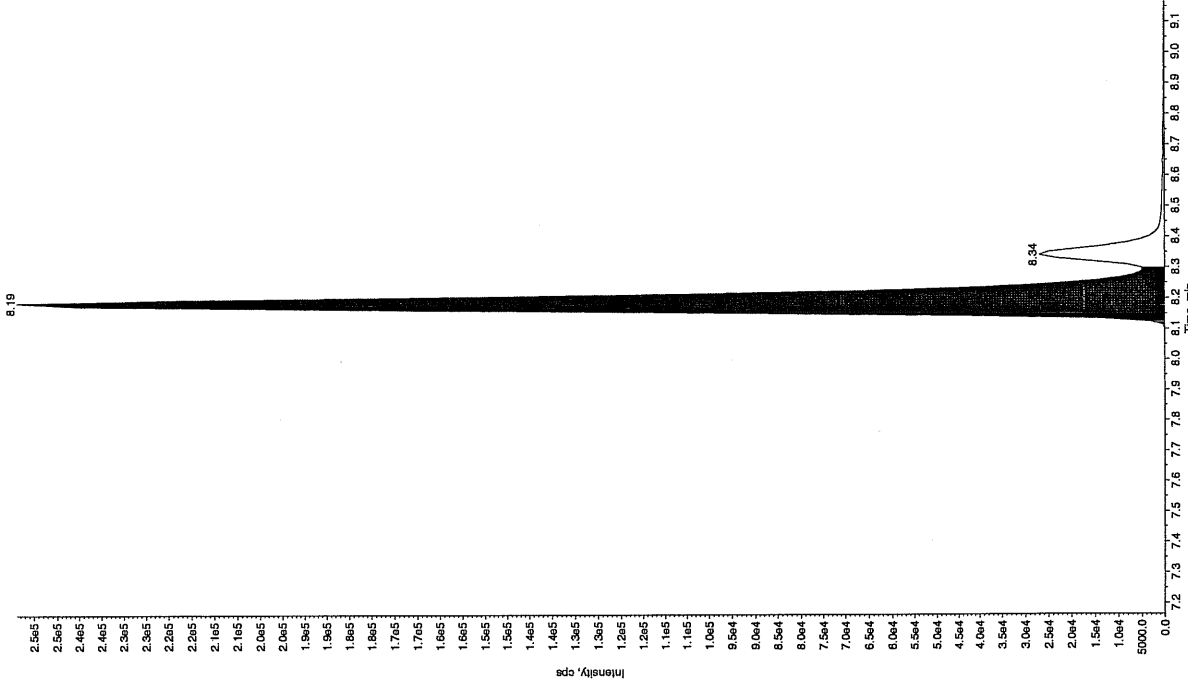
Retention Time: 8.19 min

Area: 9.28e+005 counts

Height: 253832.703 cps

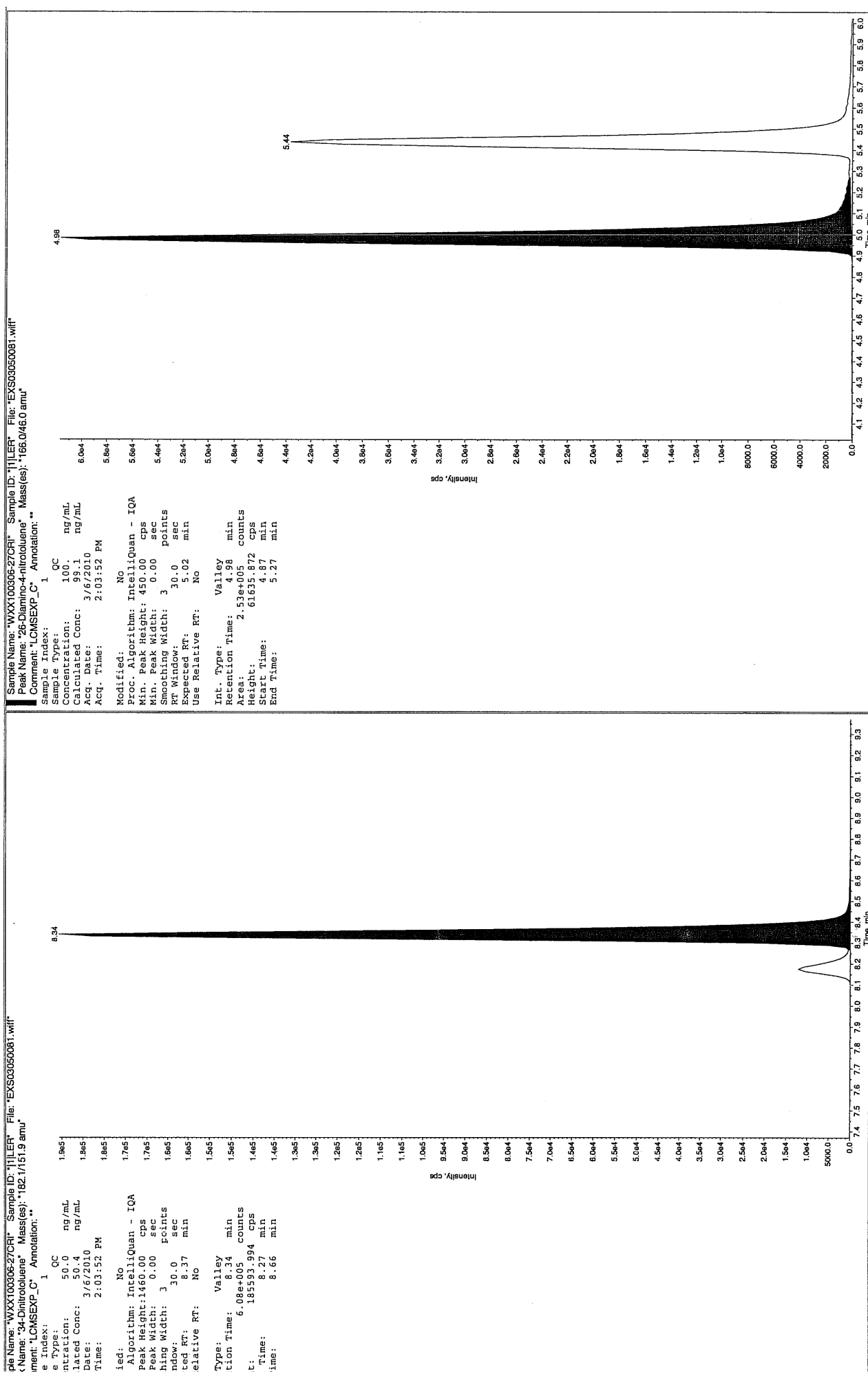
Start Time: 8.09 min

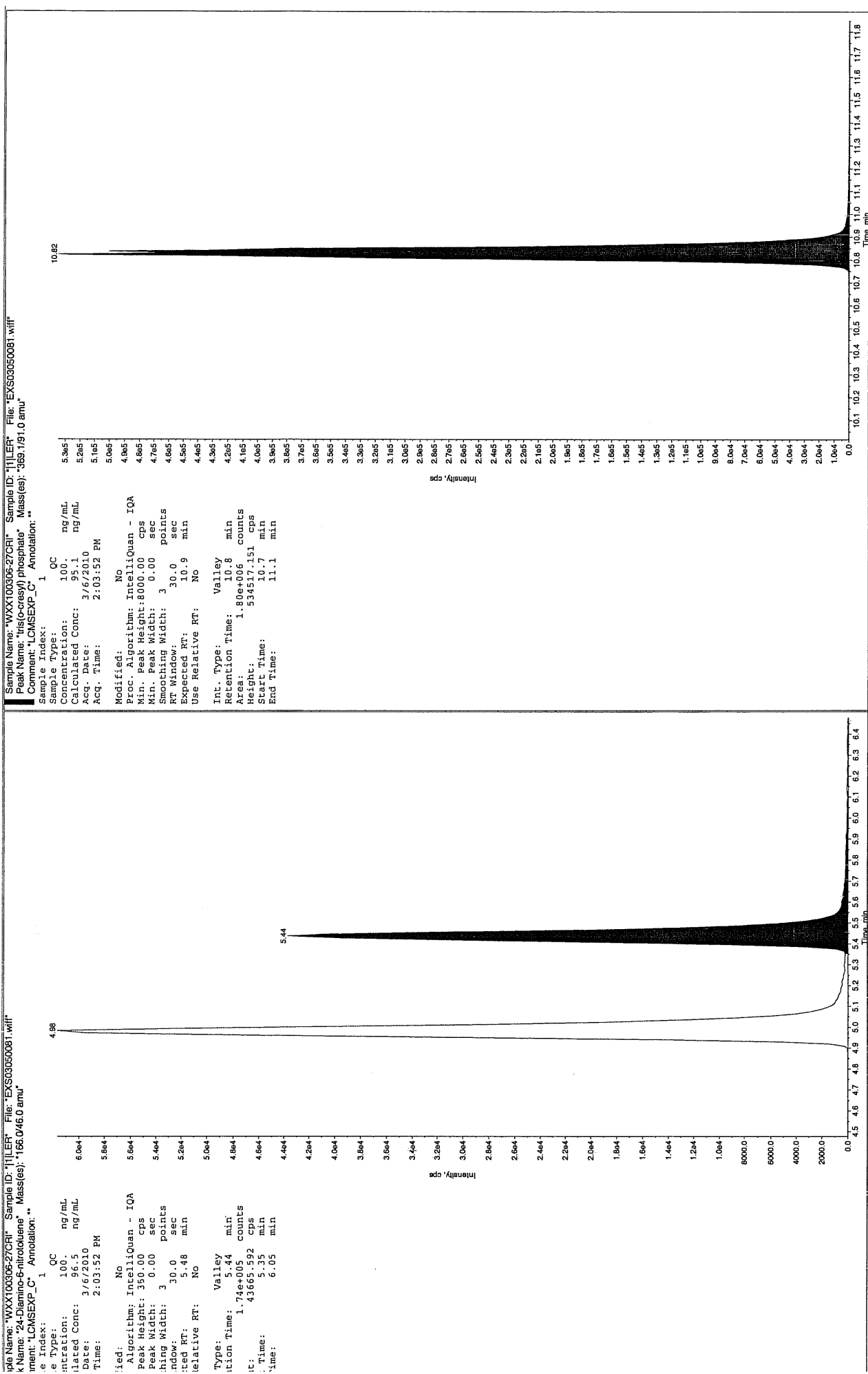
End Time: 8.30 min



Jan 3/9/10

IL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4





L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



7A  
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1758

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXS03050084.wiff

Analysis Date: 06-MAR-10 14:50

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	500	464	93	
2,6-Diamino-4-nitrotoluene	500	505	101	
3,4-Dinitrotoluene	250	235	94	
3,5-Dinitroaniline	500	499	100	
TATB	500	535	107	
tris(o-cresyl) phosphate	500	486	97	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,  
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

LCen 3/9/10

Sample Name: "WXX100306-26CCV" Sample ID: "111LER" File: "EXS03050084.wif"

Peak Name: "35-Dinitroaniline" Mass(es): "182.046.0 amu" Comment: "LCMSEXP\_C" Annotation: ""

Sample Index: 1  
 Sample Type: QC  
 Concentration: 500. ng/mL  
 Calculated Conc: 499. ng/mL  
 Acq. Date: 3/6/2010  
 Acq. Time: 2:50:57 PM  
 Modified: Yes  
 Proc. Algorithm: IntelliQuan - IOA  
 Min. Peak Height: 2000.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 15.0 sec  
 Expected RT: 8.17 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 8.17 min  
 Area: 4.08e+006 counts  
 Height: 1117327.026 cps  
 Start Time: 8.08 min  
 End Time: 8.29 min

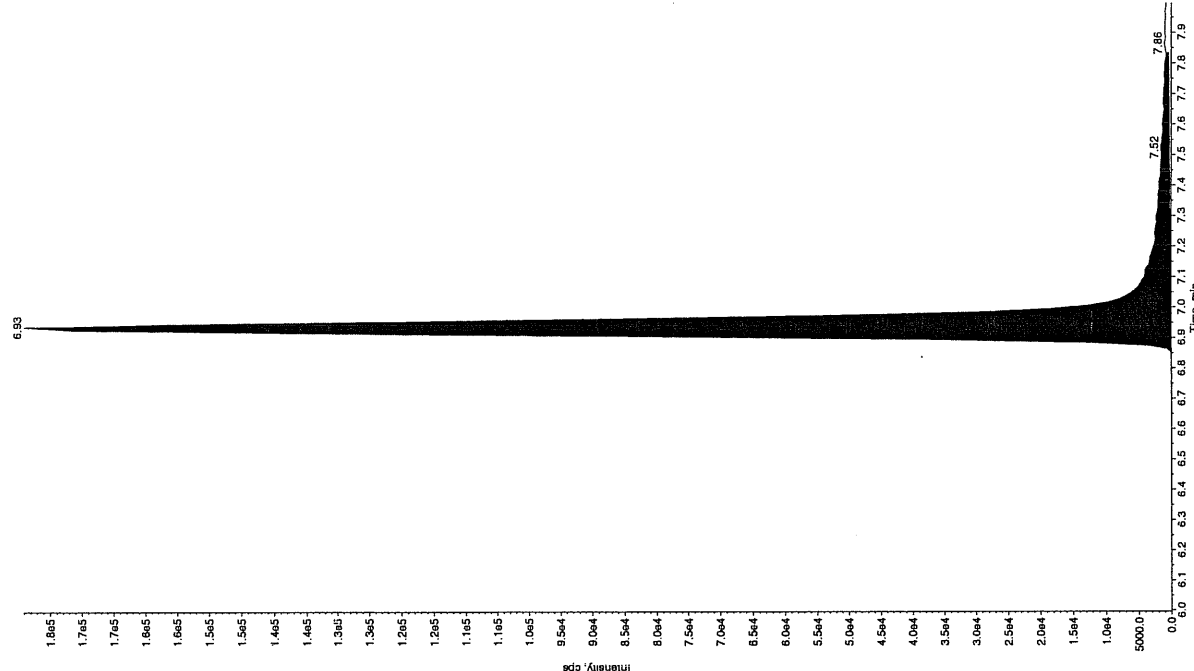


4mm 0.269/10

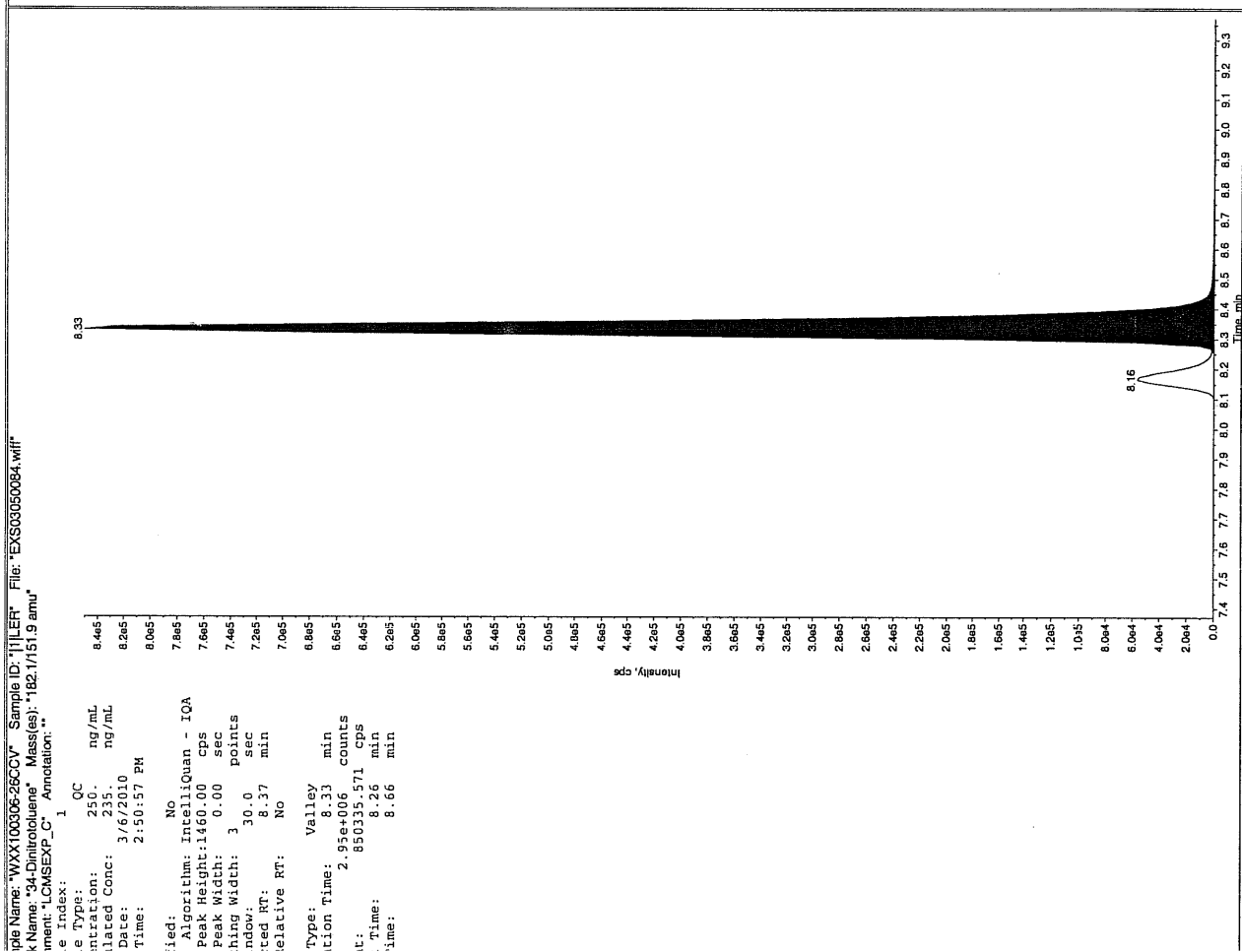
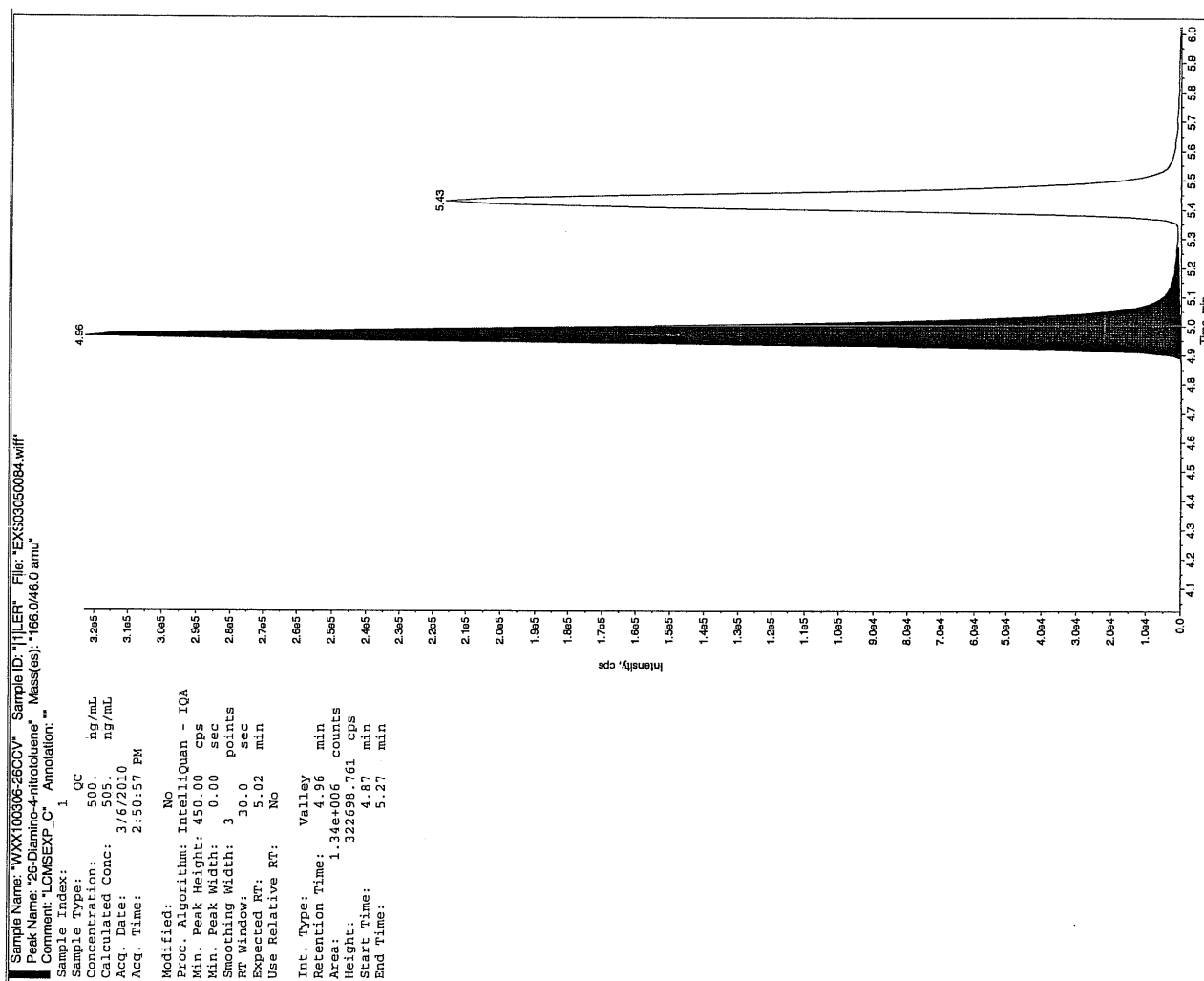
Sample Name: "WXX100306-26CCV" Sample ID: "111LER" File: "EXS03050084.wif"

Peak Name: "TATB" Mass(es): "257.2/204.9 amu" Comment: "LCMSEXP\_C" Annotation: ""

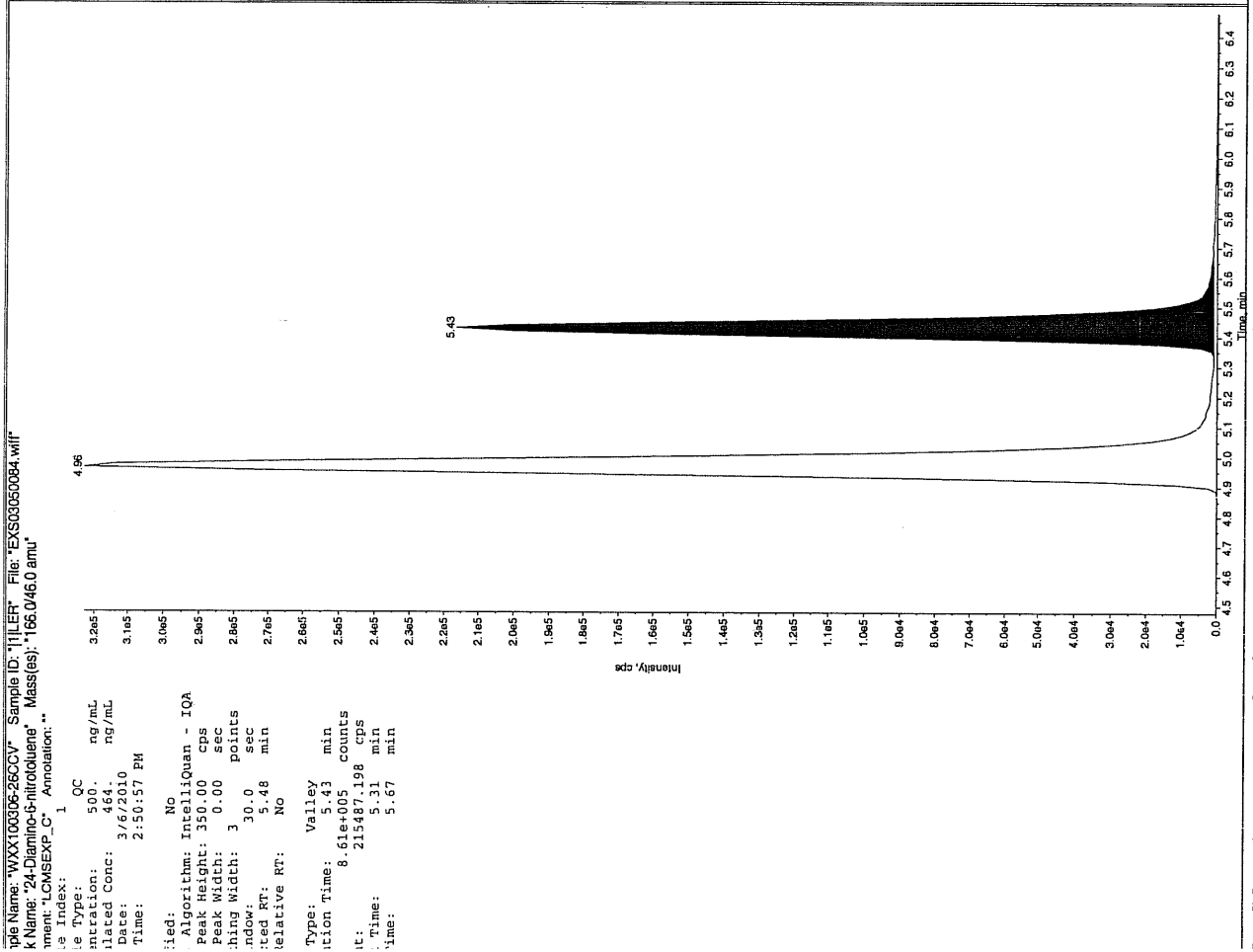
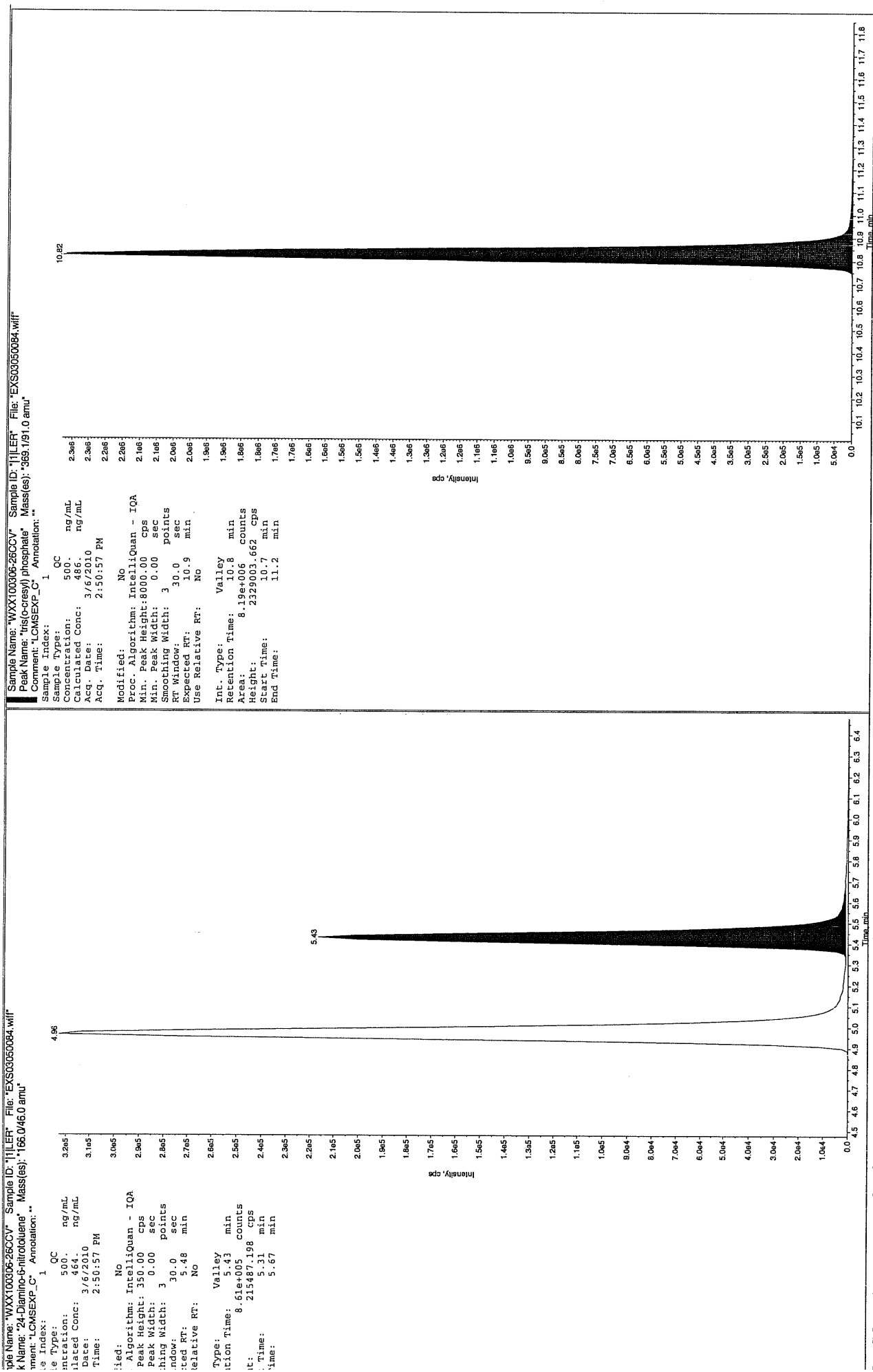
Sample Index: 1  
 Sample Type: QC  
 Concentration: 500. ng/mL  
 Calculated Conc: 535. ng/mL  
 Acq. Date: 3/6/2010  
 Acq. Time: 2:50:57 PM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IOA  
 Min. Peak Height: 2500.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 30.0 sec  
 Expected RT: 7.00 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 6.93 min  
 Area: 7.71e+005 counts  
 Height: 179050.583 cps  
 Start Time: 6.84 min  
 End Time: 7.03 min



IL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

7B  
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1758

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXS03050086.wiff

Analysis Date: 06-MAR-10 15:22

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	100	99.7	100	
2,6-Diamino-4-nitrotoluene	100	96.4	96	
3,4-Dinitrotoluene	50	50	100	
3,5-Dinitroaniline	100	107	107	
TATB	100	112	112	
tris(o-cresyl) phosphate	100	93.5	94	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,  
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

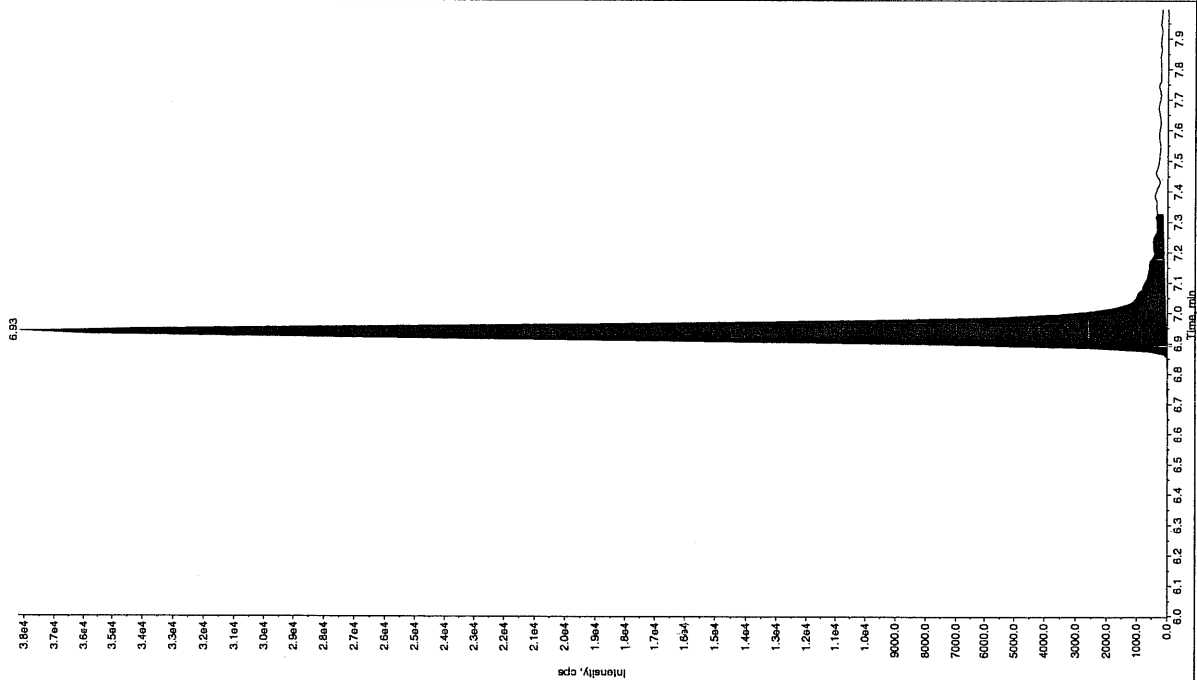
# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

Jan 3/9/10

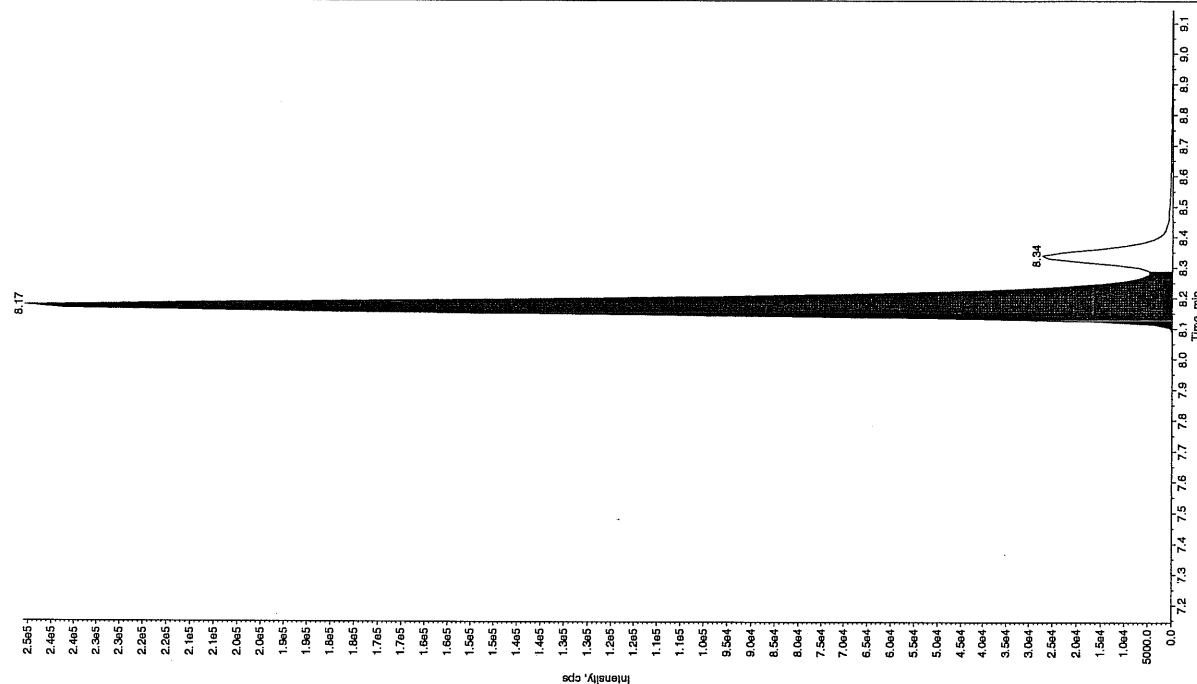
File Name: "WXX100306-27CH1" Sample ID: "1111ER" File: "EXS03050086.wif"  
 (Name: "TATB" Mass(es): "257.2/204.9 amu"  
 ment: "LCMSEXP\_C" Annotation: "

Sample Index: 1 QC  
 Sample Type: 100. ng/mL  
 Concentration: 107. ng/mL  
 Calculated Conc: 3/6/2010  
 Acq. Date: 3:22:21 PM  
 Acq. Time: 3:22:21 PM  
 Modified: Yes  
 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: 7.00 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 6.93 min  
 Area: 1.48e+003 counts  
 Height: 38156.437 cps  
 Start Time: 6.84 min  
 End Time: 7.33 min



File Name: "WXX100306-27CH1" Sample ID: "1111ER" File: "EXS03050086.wif"  
 (Name: "TATB" Mass(es): "182.0/46.0 amu"  
 ment: "LCMSEXP\_C" Annotation: "

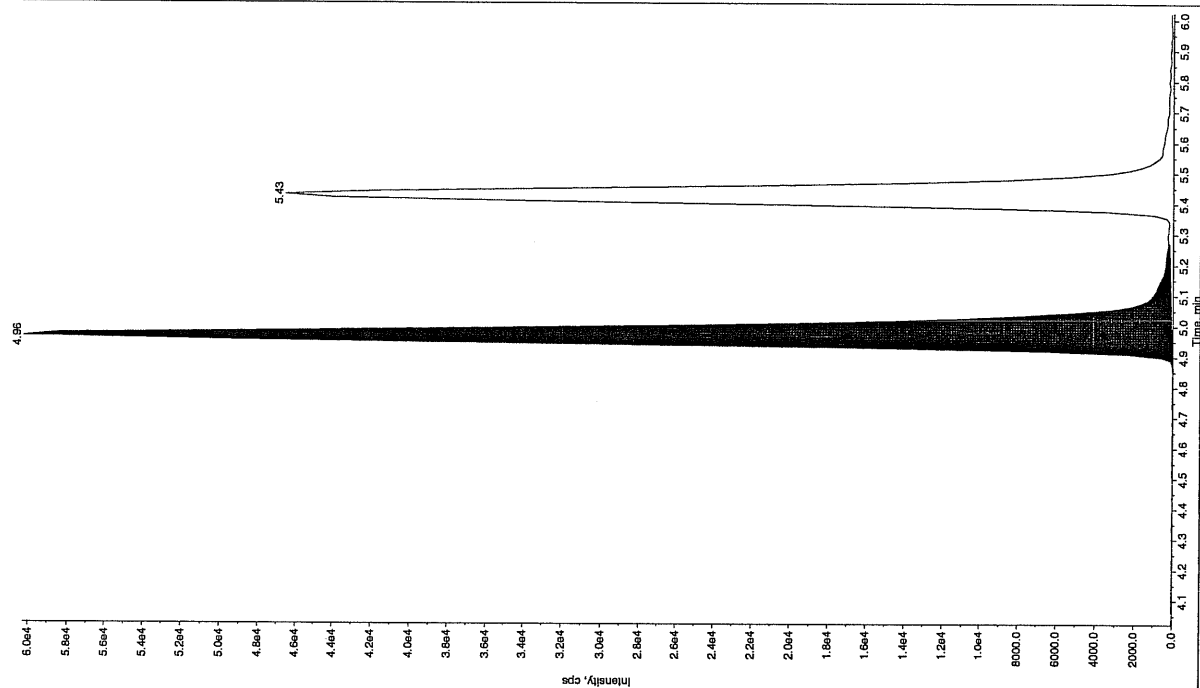
Sample Index: 1 QC  
 Sample Type: 100. ng/mL  
 Concentration: 107. ng/mL  
 Calculated Conc: 3/6/2010  
 Acq. Date: 3:22:21 PM  
 Acq. Time: 3:22:21 PM  
 Modified: Yes  
 Proc. Algorithm: IntelliQuan - IQA  
 Min. Peak Height: 2000.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 15.0 sec  
 Expected RT: 8.14 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 8.17 min  
 Area: 9.12e+005 counts  
 Height: 245857.513 cps  
 Start Time: 8.07 min  
 End Time: 8.29 min



Jan 3/9/10

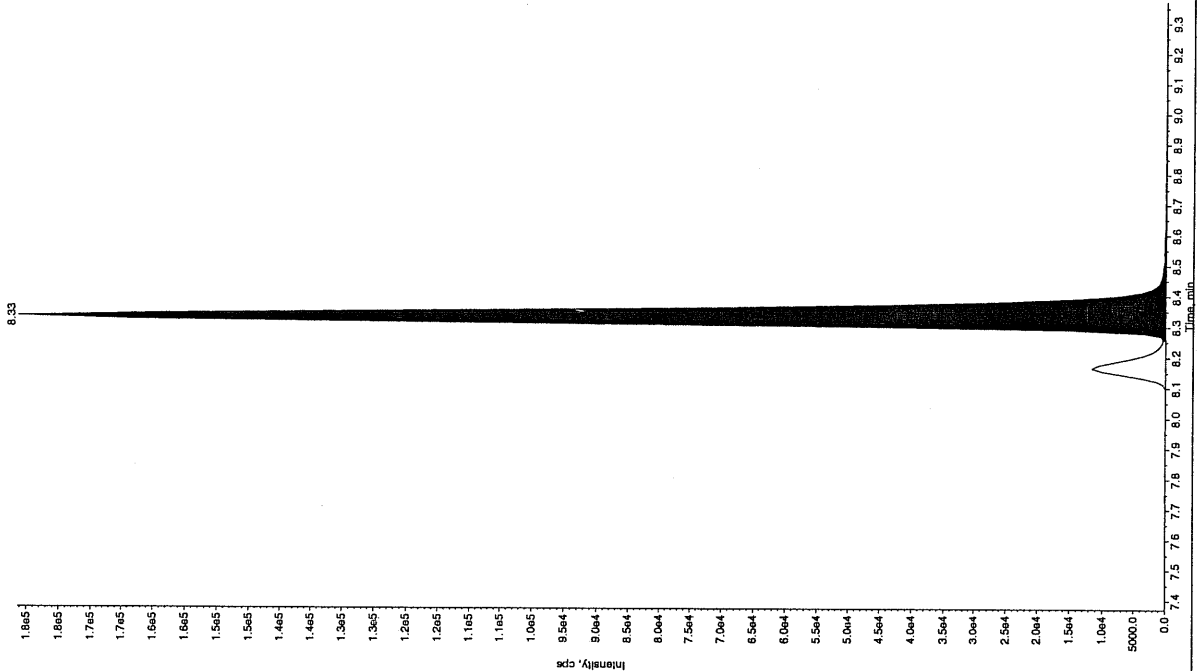
Sample Name: "WXX100305-27ORI" Sample ID: "11JLER" File: "EXS03050086.wif"  
 Peak Name: "26-Diamino-4-nitrofluorene" Mass(es): "182.1/181.9 amu"  
 Comment: "LCMSEXP\_C" Annotation: ""

Sample Index: 1  
 Sample Type: QC  
 Concentration: 100. ng/mL  
 Calculated Conc: 96.4 ng/mL  
 Acq. Date: 3/6/2010  
 Acq. Time: 3:22:21 PM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IOA  
 Min. Peak Height: 450.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 30.0 sec  
 Expected RT: 5.02 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 4.96 min  
 Area: 2.46e+005 counts  
 Height: 60187.717 cps  
 Start Time: 4.85 min  
 End Time: 5.27 min

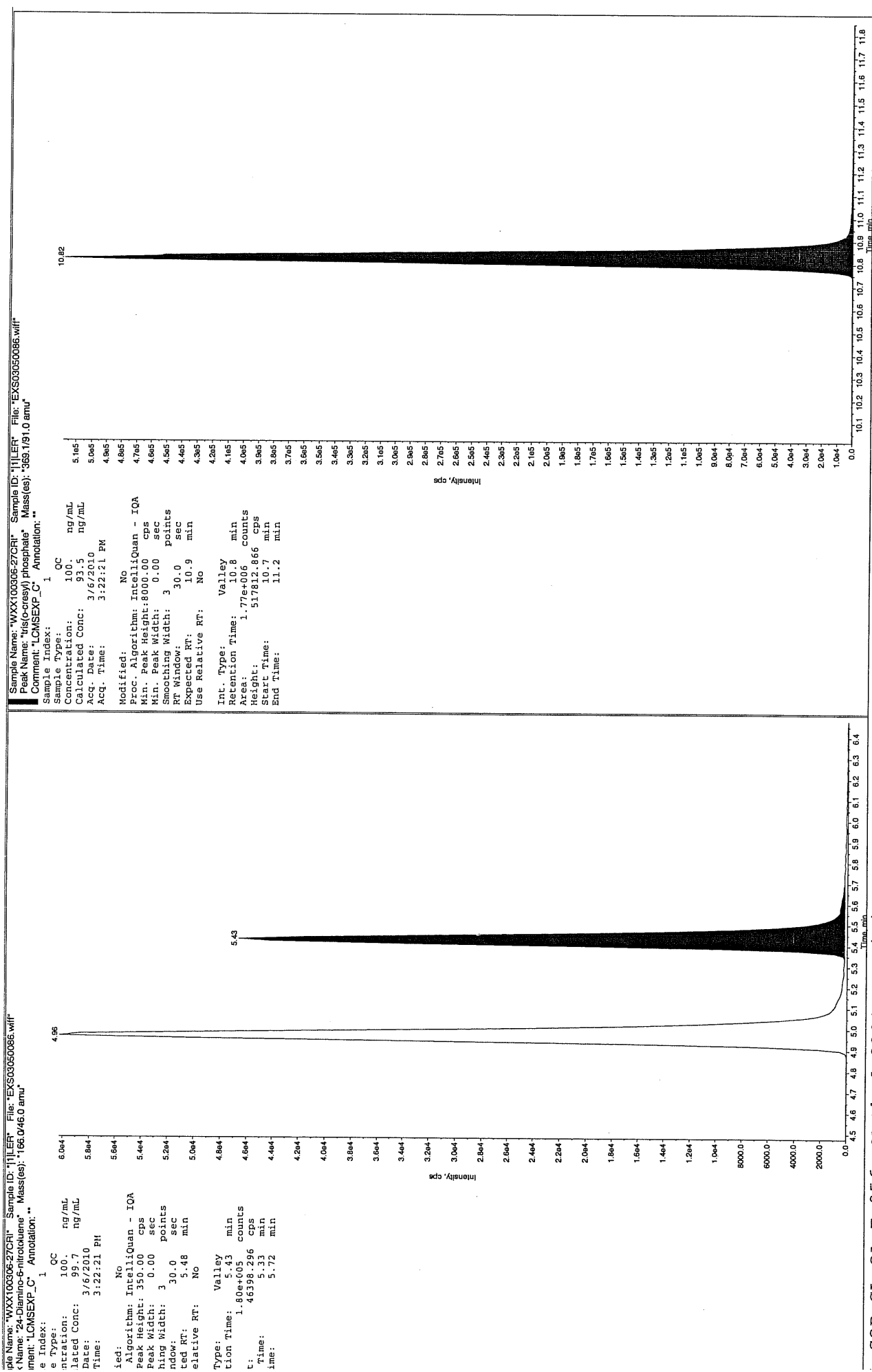


Sample Name: "WXX100305-27ORI" Sample ID: "11JLER" File: "EXS03050086.wif"  
 Peak Name: "26-Diamino-4-nitrofluorene" Mass(es): "182.1/181.9 amu"  
 Comment: "LCMSEXP\_C" Annotation: ""

Sample Index: 1  
 Sample Type: QC  
 Concentration: 50.0 ng/mL  
 Calculated Conc: 50.0 ng/mL  
 Acq. Date: 3/6/2010  
 Acq. Time: 3:22:21 PM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IOA  
 Min. Peak Height: 1460.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 30.0 sec  
 Expected RT: 8.37 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 8.33 min  
 Area: 6.02e+005 counts  
 Height: 181269.333 cps  
 Start Time: 8.26 min  
 End Time: 8.67 min



J SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4





# QUALITY CONTROL DATA

1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: MB for batch 952704

Lab Code: GEL

GEL Job No (SDG) 10-1758

Matrix: SOIL

GEL Sample ID: 1202041953

Sample Amount 2

Moisture:

Amount Units g

Date Received: 12-FEB-10

Extraction Type Sonication

Extraction Batch ID: 952704

Concentrated Extract Volume (mL) 10

Date Extracted: 18-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0322048.wiff

Date Analyzed: 23-MAR-10 13:22

Units: ug/kg

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

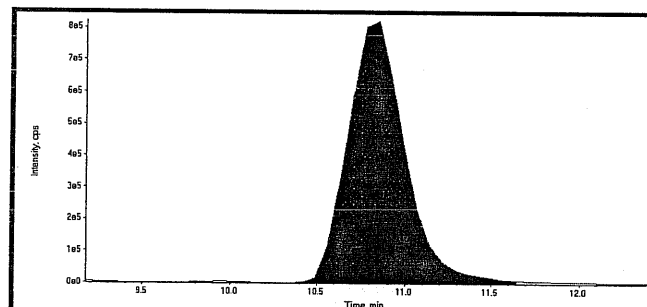
\*Concentration =

Instrument	X	<u>Concentrated Extract Volume</u>	X	Dilution
Value		<u>Sample Amoun</u>		Factor

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

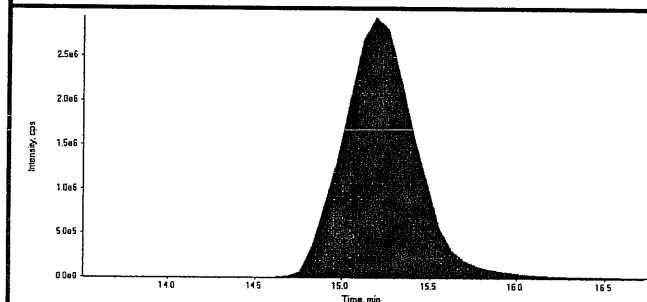
Printed: 27/03/2010 1:31:00 PM  
LCMSMS#3

Data File	EXP0322048.wiff	Acquisition Date	3/23/2010 1:22:13 PM
Sample Name	1202041953	Acquisition Method	8321_pntx.dam
Batch Dilution Analyst	952706 2 LER	Result Table	032210.rdb
Procedure Code	LCX8321_S	Sample Type	Unknown



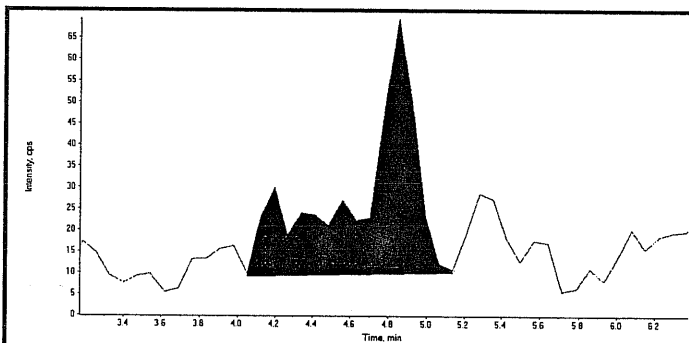
Compound Name:	13-Dinitrobenzene-d4 (172.1/46.1 amu)
Expected RT:	10.80
Actual RT:	10.90
Area Counts:	18600000.00
Manual Modification	No
Amount:	500.00(ng/mL)

Please refer to Form 8 for a list of Internal Standard Recoveries

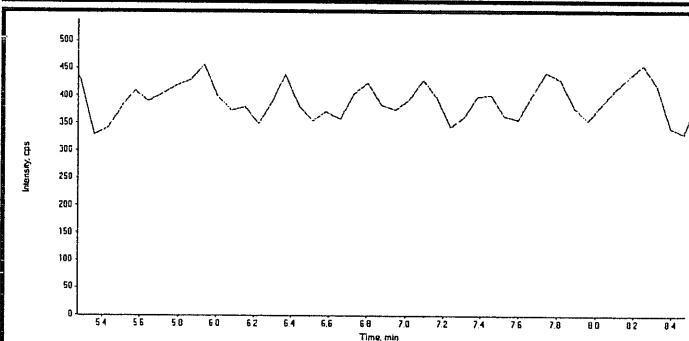


Compound Name:	26-Dinitrotoluene-d3 (185.0/155.0 amu)
Expected RT:	15.10
Actual RT:	15.20
Area Counts:	85200000.00
Manual Modification	No
Amount:	500.00(ng/mL)

Please refer to Form 8 for a list of Internal Standard Recoveries



Compound Name:	HMX (341.2/46.0 amu)
Expected RT:	4.77
Actual RT:	4.85
Area Counts:	1.20e+003
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A



Compound Name:	RDX (267.0/46.1 amu)
Expected RT:	6.87
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A

Time  
04/02/10

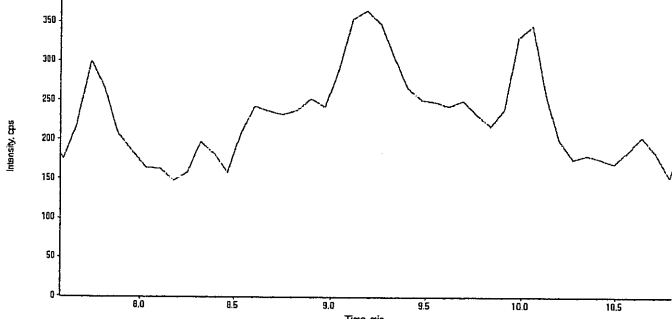
LER  
2/28/10

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

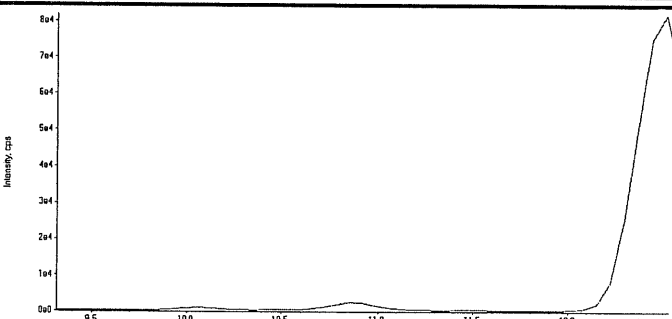
Printed: 27/03/2010 1:31:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0322048.wiff	<b>Acquisition Date</b>	3/23/2010 1:22:13 PM
<b>Sample Name</b>	1202041953	<b>Acquisition Method</b>	8321_pntx.dam
<b>Batch Dilution Analyst</b>	952706 2 LER	<b>Result Table</b>	032210.rdb
<b>Procedure Code</b>	LCX8321_S	<b>Sample Type</b>	Unknown

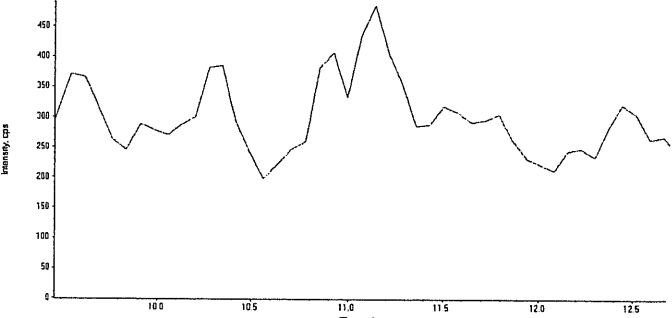
  

	<b>Compound Name:</b>	135-Trinitrobenzene (213.0/182.8 amu)
	Expected RT:	9.19
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

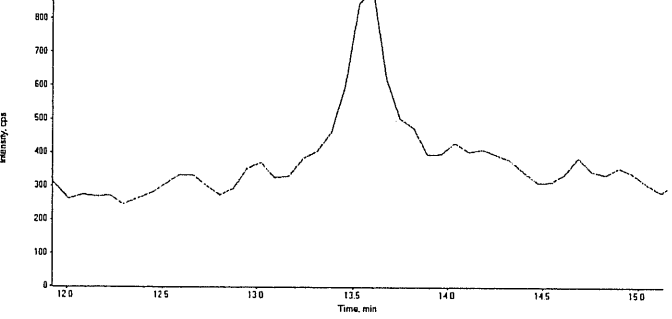
  

	<b>Compound Name:</b>	13-Dinitrobenzene (168.0/137.9 amu)
	Expected RT:	10.9
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	Tetryl (241.0/180.8 amu)
	Expected RT:	11.1
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

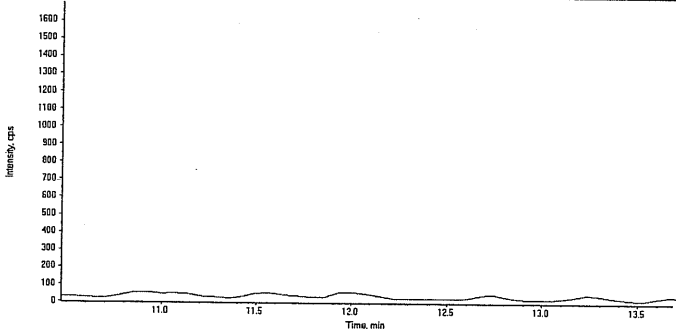
	<b>Compound Name:</b>	246-Trinitrotoluene (227.1/209.8 amu)
	Expected RT:	13.5
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

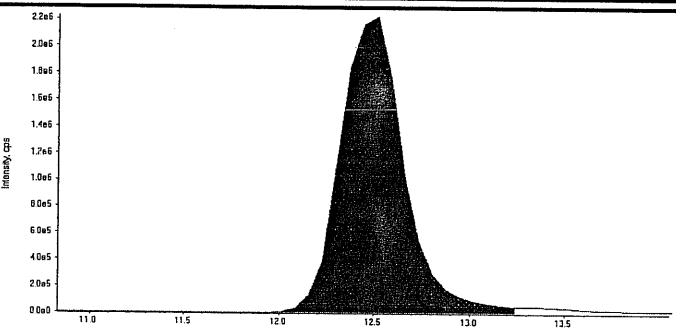
Printed: 27/03/2010 1:31:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0322048.wiff	<b>Acquisition Date</b>	3/23/2010 1:22:13 PM
<b>Sample Name</b>	1202041953	<b>Acquisition Method</b>	8321_pntx.dam
<b>Batch Dilution Analyst</b>	952706 2 LER	<b>Result Table</b>	032210.rdb
<b>Procedure Code</b>	LCX8321_S	<b>Sample Type</b>	Unknown

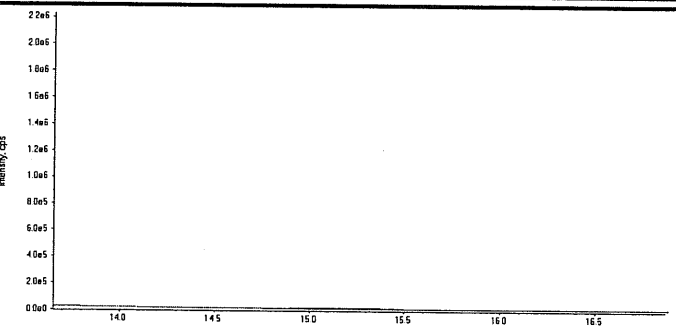
  

	<b>Compound Name:</b>	Nitrobenzene (123.0/46.0 amu)
	Expected RT:	12.1
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

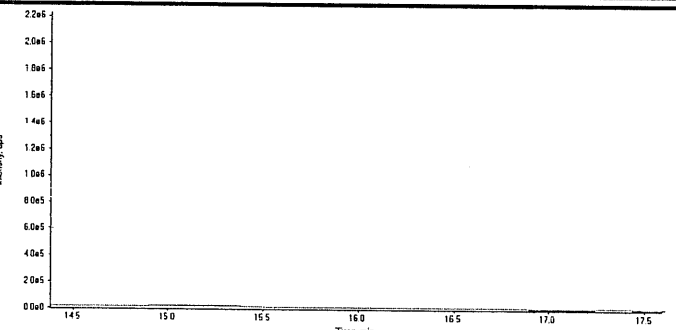
  

	<b>Compound Name:</b>	34-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	12.4
	Actual RT:	12.5
	Area Counts:	5.22e+007
	Manual Modification	No
	Amount:	237. (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	26-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	15.3
	Actual RT:	15.0
	Area Counts:	5.08e+005
	Manual Modification	No
	Amount:	3.07 (ng/mL)
	% Accuracy:	N/A

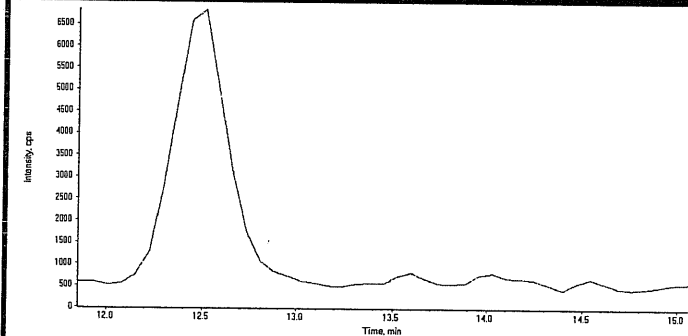
  

	<b>Compound Name:</b>	24-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	16.0
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

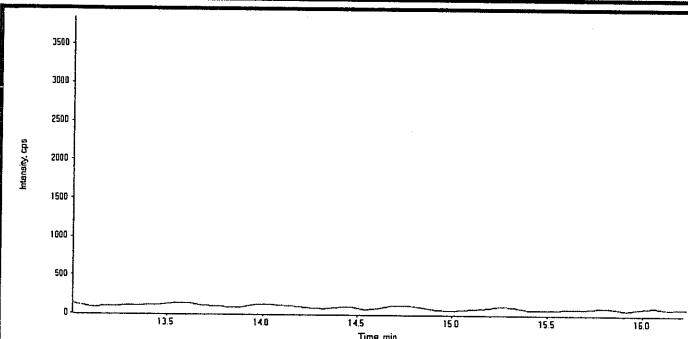
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 27/03/2010 1:31:00 PM  
LCMSMS#3

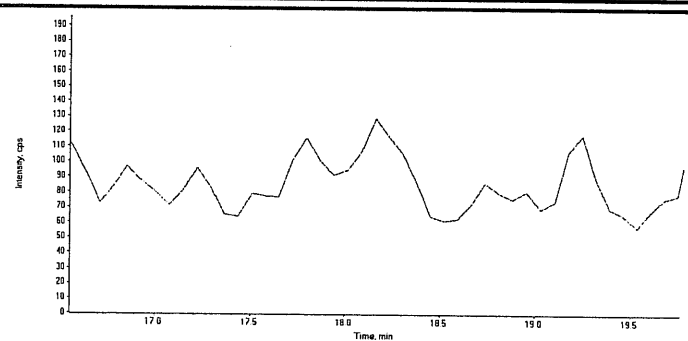
Data File	EXP0322048.wiff	Acquisition Date	3/23/2010 1:22:13 PM
Sample Name	1202041953	Acquisition Method	8321_pntx.dam
Batch Dilution Analyst	952706 2 LER	Result Table	032210.rdb
Procedure Code	LCX8321_S	Sample Type	Unknown



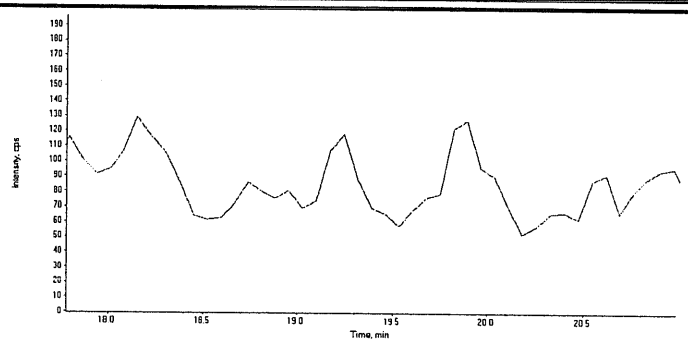
Compound Name:	4-Amino-26-dinitrotoluene (197.0/167.0 amu)
Expected RT:	13.5
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A



Compound Name:	2-Amino-46-dinitrotoluene (197.0/180.0 amu)
Expected RT:	14.6
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A



Compound Name:	2-Nitrotoluene (137.0/46.0 amu)
Expected RT:	18.2
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A



Compound Name:	4-Nitrotoluene (137.0/46.0 amu)
Expected RT:	19.4
Actual RT:	0.00
Area Counts:	0.00e+000
Manual Modification	No
Amount:	N/A (ng/mL)
% Accuracy:	N/A

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 27/03/2010 1:31:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0322048.wiff	<b>Acquisition Date</b>	3/23/2010 1:22:13 PM
<b>Sample Name</b>	1202041953	<b>Acquisition Method</b>	8321_pntx.dam
<b>Batch Dilution Analyst</b>	952706 2 LER	<b>Result Table</b>	032210.rdb
<b>Procedure Code</b>	LCX8321_S	<b>Sample Type</b>	Unknown

	<b>Compound Name:</b>	3-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	20.8
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	PETN (361.1/62.0 amu)
	Expected RT:	20.4
	Actual RT:	0.00
	Area Counts:	0.00e+000
	Manual Modification	No
	Amount:	N/A (ng/mL)
	% Accuracy:	N/A

1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: MB for batch 952704

Lab Code: GEL

GEL Job No (SDG) 10-1758

Matrix: SOIL

GEL Sample ID: 1202041953

Sample Amount 2

Moisture:

Amount Units g

Date Received: 12-FEB-10

Extraction Type Sonication

Extraction Batch ID: 952704

Concentrated Extract Volume (mL) 10

Date Extracted: 18-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS03050069.wiff

Date Analyzed: 06-MAR-10 10:55

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 =

Instrument	X	<u>Concentrated Extract Volume</u>	X	Dilution
Value		<u>Sample Amoun</u>		Factor



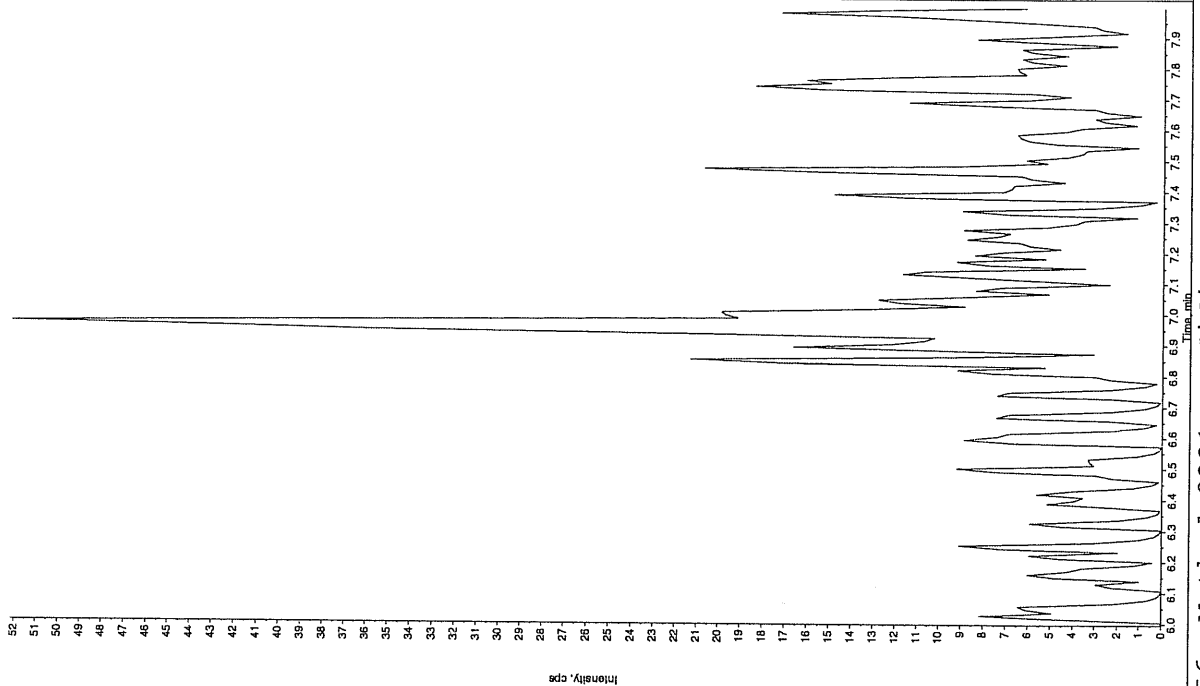
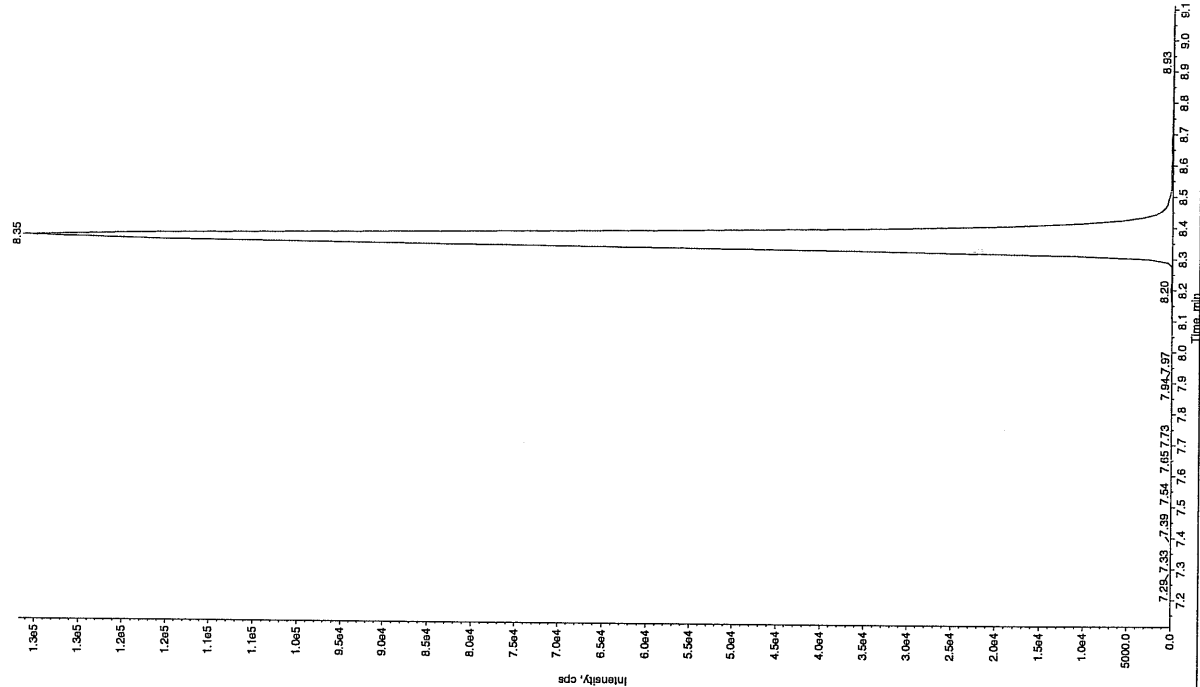
San 3/9/10

Sample Name: "1202041953" Sample ID: "9527062JLER" File: "EXS03050069.wif"

Peak Name: "35-Dinitroaniline" Mass(es): "182.046.0 amu"

Comment: "LCX83212S" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 3/6/2010  
 Acq. Time: 10:55:21 AM  
 Modified: Yes



Sample Name: "1202041953" Sample ID: "9527062JLER" File: "EXS03050069.wif"

Peak Name: "TATB" Mass(es): "257.2/204.9 amu"

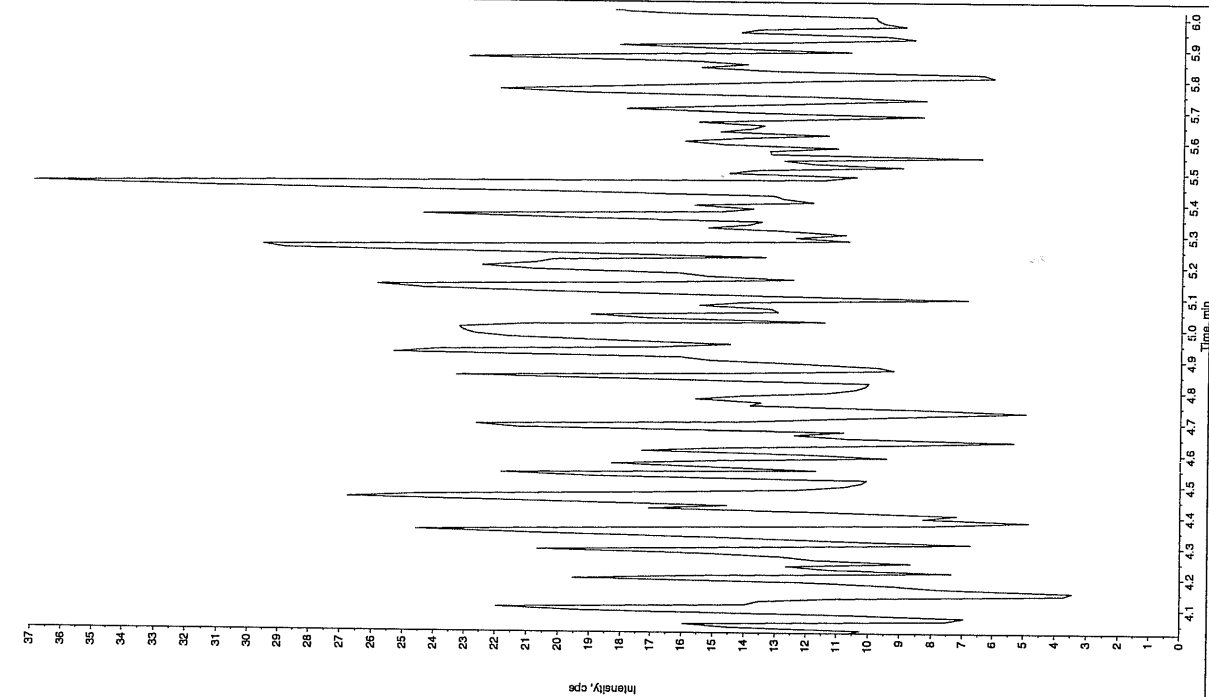
Comment: "LCX83212S" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 3/6/2010  
 Acq. Time: 10:55:21 AM  
 Modified: No

San 3/9/10

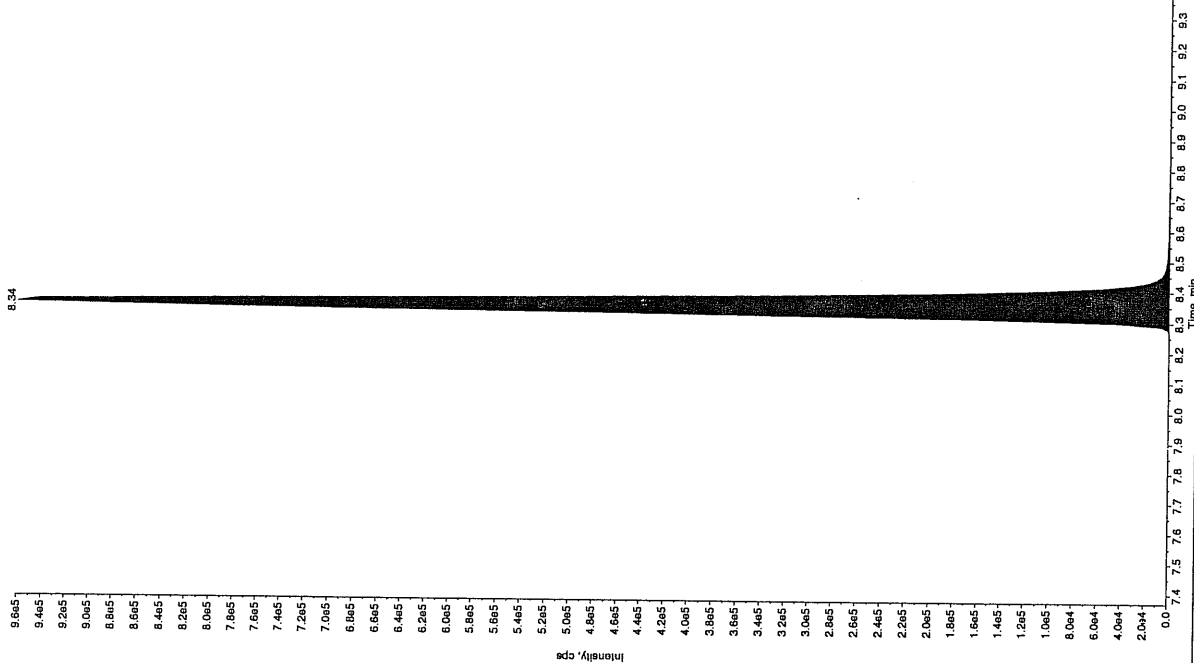
Sample Name: "1202041953" Sample ID: "95270621ER" File: "EXS03050069.wif"  
 Peak Name: "34-Dinitrofluorene" Mass(es): "182.17/151.9 amu"  
 Comment: "LCX83212S" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 3/6/2010  
 Acq. Time: 10:55:21 AM  
 Modified: No



Sample Name: "1202041953" Sample ID: "95270621ER" File: "EXS03050069.wif"  
 Peak Name: "34-Dinitrofluorene" Mass(es): "182.17/151.9 amu"  
 Comment: "LCX83212S" Annotation: ""

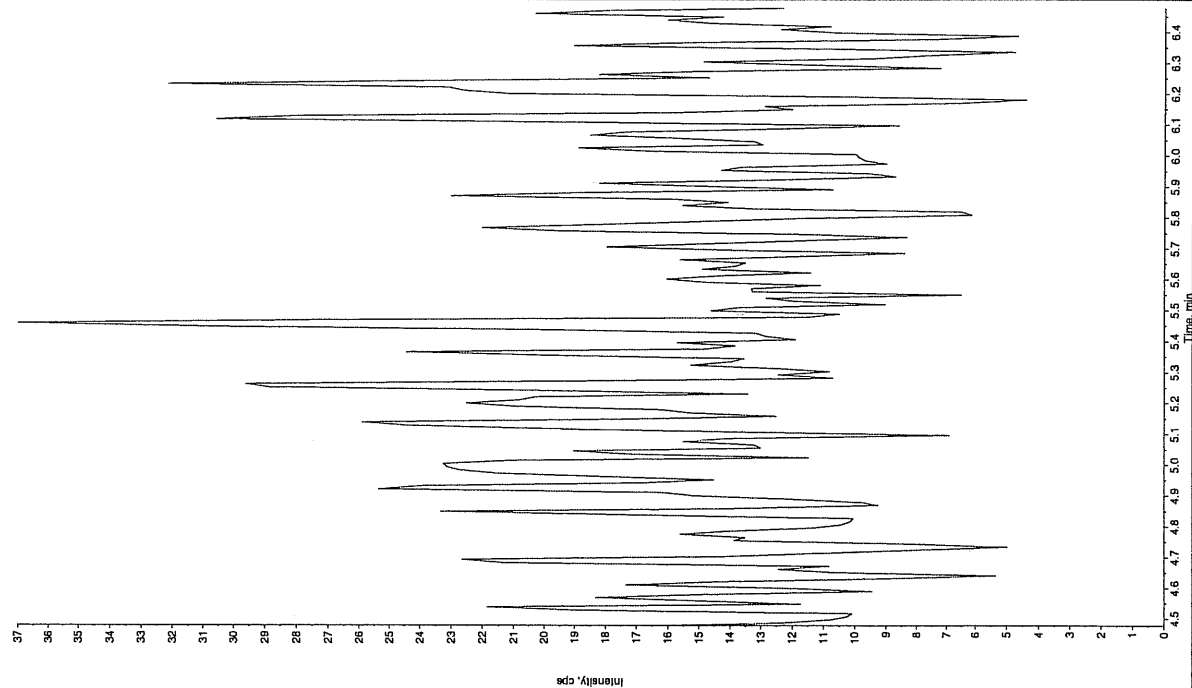
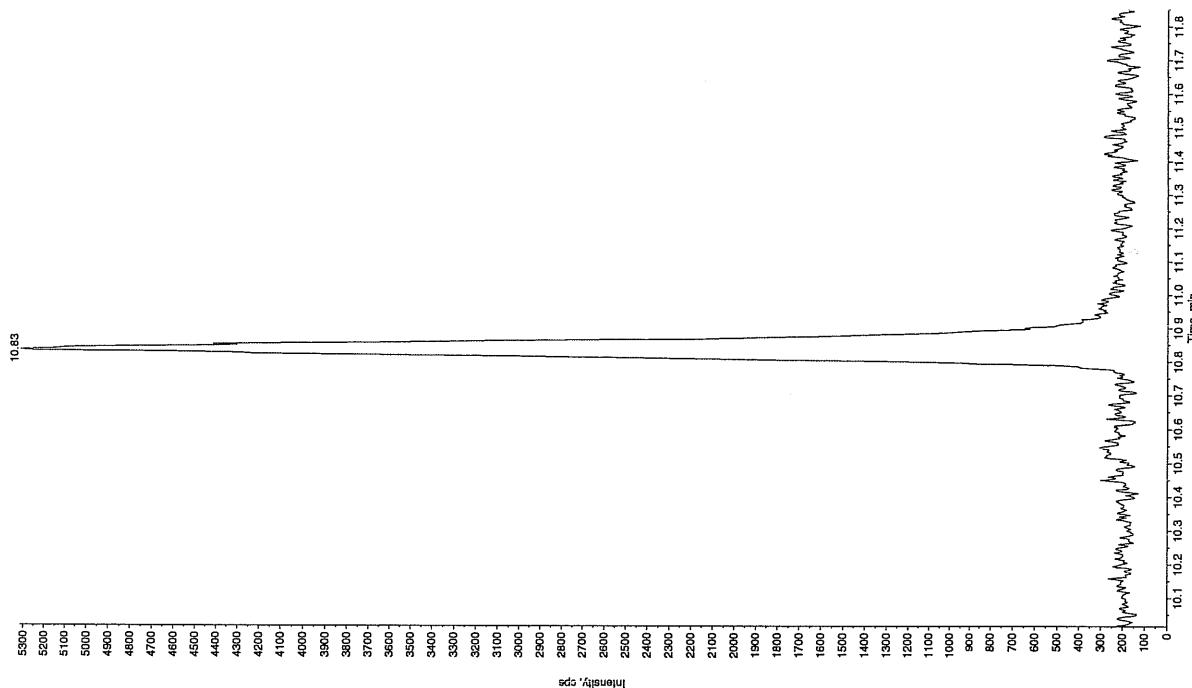
Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 268. ng/mL  
 Acq. Date: 3/6/2010  
 Acq. Time: 10:55:21 AM  
 Modified: No  
 Algorithm: IntelliQuan - IQA  
 Peak Height: 1460.00 cps  
 Peak Width: 0.00 sec  
 Window: 3 points  
 Window: 30.0 sec  
 Retention Time: 8.37 min  
 Relative RT: No  
 Type: Valley  
 Retention Time: 8.34 min  
 Counts: 3.33e+006 counts  
 Time: 960355.103 cps  
 Time: 8.25 min  
 Time: 8.71 min



SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

Sample Name: "1202041953" Sample ID: "952706121ER" File: "EXS03050069.wif"  
 Peak Name: "tris(2-cresyl) phosphate" Mass(es): "369.1791.0 amu"  
 Comment: "LCX83212S" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ug/mL  
 Acq. Date: 3/6/2010  
 Acq. Time: 10:55:21 AM  
 Modified: No



Sample Name: "1202041953" Sample ID: "952706121ER" File: "EXS03050069.wif"  
 Peak Name: "2,4-Diamino-6-Nitrofluorene" Mass(es): "166.046.0 amu"  
 Comment: "LCX83212S" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ug/mL  
 Acq. Date: 3/6/2010  
 Acq. Time: 10:55:21 AM  
 Modified: No

L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: LCS for batch 952704

Lab Code: GEL

GEL Job No (SDG) 10-1758

Matrix: SOIL

GEL Sample ID: 1202041954

Sample Amount 2

Moisture:

Amount Units g

Date Received: 12-FEB-10

Extraction Type Sonication

Extraction Batch ID: 952704

Concentrated Extract Volume (mL) 10

Date Extracted: 18-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0330015.wiff

Date Analyzed: 30-MAR-10 14:46

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	5210	
121-14-2	2,4-Dinitrotoluene	5240	
121-82-4	RDX	5600	
19406-51-0	4-Amino-2,6-dinitrotoluene	5210	
2691-41-0	HMX	4560	
35572-78-2	2-Amino-4,6-dinitrotoluene	5730	
479-45-8	Tetryl	2760	
606-20-2	2,6-Dinitrotoluene	4580	
78-11-5	PETN	6460	
88-72-2	o-Nitrotoluene	5620	
98-95-3	Nitrobenzene	5600	
99-08-1	m-Nitrotoluene	5060	
99-35-4	1,3,5-Trinitrobenzene	4680	
99-65-0	m-Dinitrobenzene	5200	
99-99-0	p-Nitrotoluene	5910	

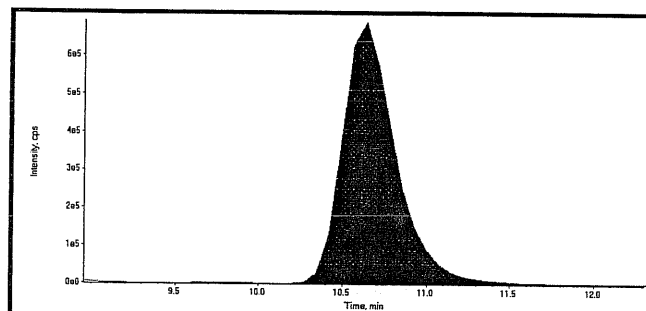
\*Concentration =

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

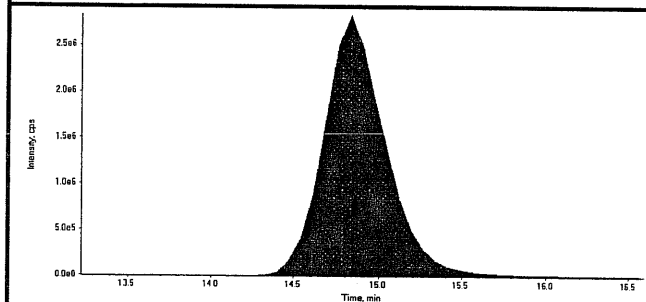
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 31/03/2010 4:24:00 PM  
LCMSMS#3

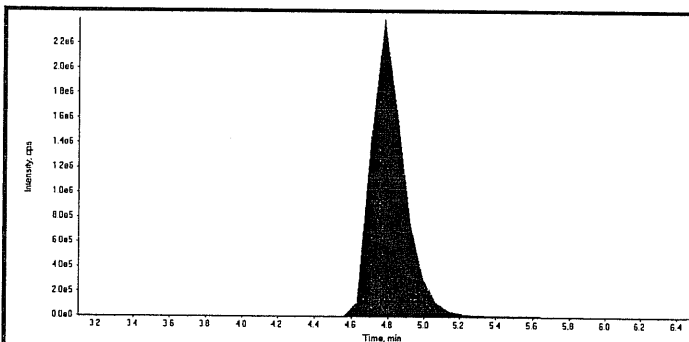
Data File	EXP0330015.wiff	Acquisition Date	3/30/2010 2:46:28 PM
Sample Name	1202041954	Acquisition Method	8321_pntx.dam
Batch Dilution Analyst	952706 2 LER	Result Table	033010.rdb
Procedure Code	LCX8321_S	Sample Type	Unknown



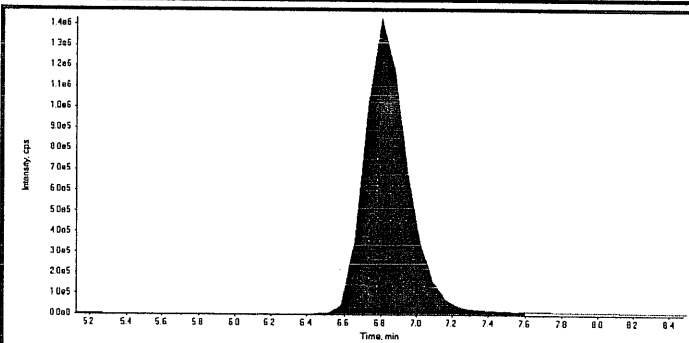
Compound Name:	13-Dinitrobenzene-d4 (172.1/46.1 amu)
Expected RT:	10.60
Actual RT:	10.60
Area Counts:	15200000.00
Manual Modification	No
Amount:	500.00(ng/mL)
Please refer to Form 8 for a list of Internal Standard Recoveries	



Compound Name:	26-Dinitrotoluene-d3 (185.0/155.0 amu)
Expected RT:	14.90
Actual RT:	14.80
Area Counts:	71700000.00
Manual Modification	No
Amount:	500.00(ng/mL)
Please refer to Form 8 for a list of Internal Standard Recoveries	



Compound Name:	HMX (341.2/46.0 amu)
Expected RT:	4.77
Actual RT:	4.77
Area Counts:	2.95e+007
Manual Modification	No
Amount:	456. (ng/mL)
% Accuracy:	N/A



Compound Name:	RDX (267.0/46.1 amu)
Expected RT:	6.80
Actual RT:	6.80
Area Counts:	2.33e+007
Manual Modification	No
Amount:	560. (ng/mL)
% Accuracy:	N/A

*Handwritten signatures and dates:*  
 4/2/10  
 04/02/10

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 31/03/2010 4:24:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0330015.wiff	<b>Acquisition Date</b>	3/30/2010 2:46:28 PM
<b>Sample Name</b>	1202041954	<b>Acquisition Method</b>	8321_pntx.dam
<b>Batch Dilution Analyst</b>	952706 2 LER	<b>Result Table</b>	033010.rdb
<b>Procedure Code</b>	LCX8321_S	<b>Sample Type</b>	Unknown

	<b>Compound Name:</b>	135-Trinitrobenzene (213.0/182.8 amu)
	Expected RT:	9.12
	Actual RT:	9.12
	Area Counts:	9.74e+007
	Manual Modification	No
	Amount:	468. (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	13-Dinitrobenzene (168.0/137.9 amu)
	Expected RT:	10.8
	Actual RT:	10.8
	Area Counts:	4.43e+007
	Manual Modification	No
	Amount:	520. (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	Tetryl (241.0/180.8 amu)
	Expected RT:	10.9
	Actual RT:	10.9
	Area Counts:	4.00e+007
	Manual Modification	No
	Amount:	276. (ng/mL)
	% Accuracy:	N/A

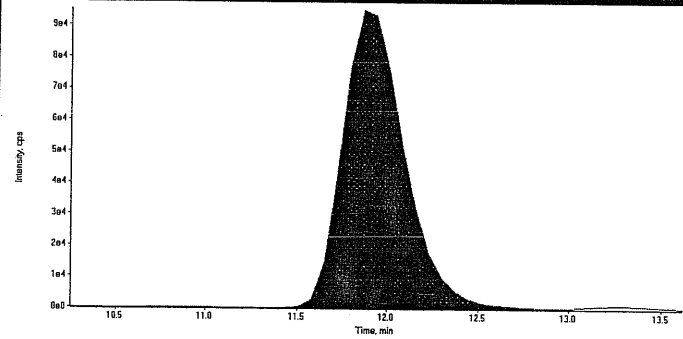
	<b>Compound Name:</b>	246-Trinitrotoluene (227.1/209.8 amu)
	Expected RT:	13.3
	Actual RT:	13.3
	Area Counts:	1.96e+008
	Manual Modification	No
	Amount:	521. (ng/mL)
	% Accuracy:	N/A

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GEL SOP GL-OA-E-056, Method 8321A-Modified

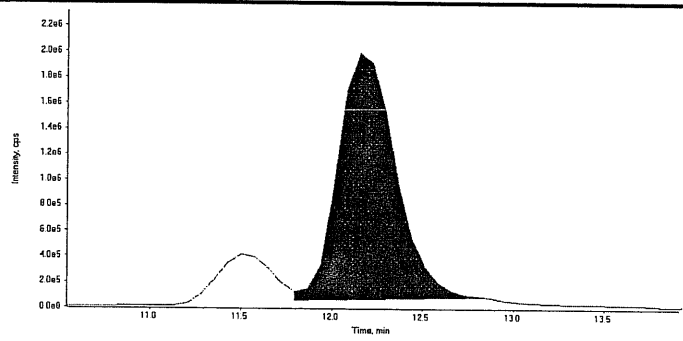
Printed: 31/03/2010 4:24:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0330015.wiff	<b>Acquisition Date</b>	3/30/2010 2:46:28 PM
<b>Sample Name</b>	1202041954	<b>Acquisition Method</b>	8321_pntx.dam
<b>Batch Dilution Analyst</b>	952706 2 LER	<b>Result Table</b>	033010.rdb
<b>Procedure Code</b>	LCX8321_S	<b>Sample Type</b>	Unknown

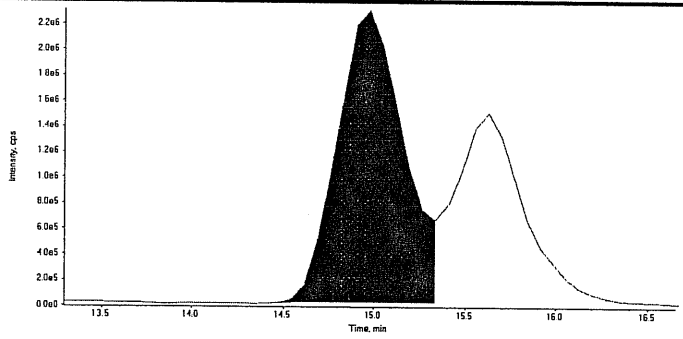
  

	<b>Compound Name:</b>	Nitrobenzene (123.0/46.0 amu)
	Expected RT:	11.9
	Actual RT:	11.9
	Area Counts:	2.28e+006
	Manual Modification	No
	Amount:	560. (ng/mL)
	% Accuracy:	N/A

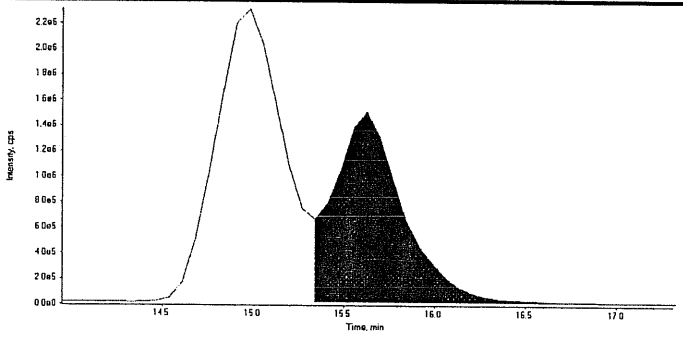
  

	<b>Compound Name:</b>	34-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	12.2
	Actual RT:	12.2
	Area Counts:	4.36e+007
	Manual Modification	No
	Amount:	261. (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	26-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	15.0
	Actual RT:	15.0
	Area Counts:	5.94e+007
	Manual Modification	No
	Amount:	458. (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	24-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	15.6
	Actual RT:	15.6
	Area Counts:	4.13e+007
	Manual Modification	No
	Amount:	524. (ng/mL)
	% Accuracy:	N/A

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 31/03/2010 4:24:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0330015.wiff	<b>Acquisition Date</b>	3/30/2010 2:46:28 PM
<b>Sample Name</b>	1202041954	<b>Acquisition Method</b>	8321_pntx.dam
<b>Batch Dilution Analyst</b>	952706 2 LER	<b>Result Table</b>	033010.rdb
<b>Procedure Code</b>	LCX8321_S	<b>Sample Type</b>	Unknown

	<b>Compound Name:</b>	4-Amino-26-dinitrotoluene (197.0/167.0 amu)
	Expected RT:	13.3
	Actual RT:	13.3
	Area Counts:	7.53e+007
	Manual Modification	No
	Amount:	521. (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	2-Amino-46-dinitrotoluene (197.0/180.0 amu)
	Expected RT:	14.3
	Actual RT:	14.3
	Area Counts:	3.11e+006
	Manual Modification	No
	Amount:	573. (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	2-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	17.8
	Actual RT:	17.8
	Area Counts:	1.05e+006
	Manual Modification	No
	Amount:	562. (ng/mL)
	% Accuracy:	N/A

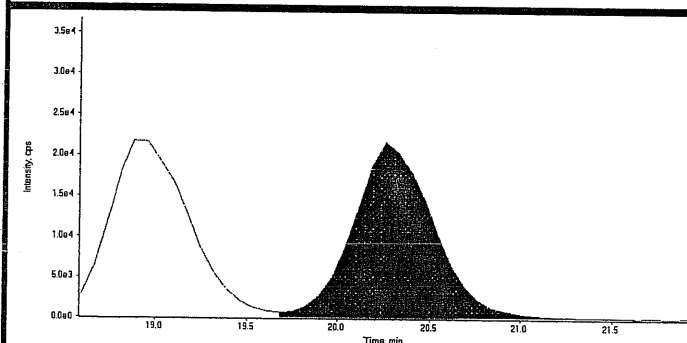
	<b>Compound Name:</b>	4-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	19.0
	Actual RT:	18.9
	Area Counts:	6.19e+005
	Manual Modification	No
	Amount:	591. (ng/mL)
	% Accuracy:	N/A



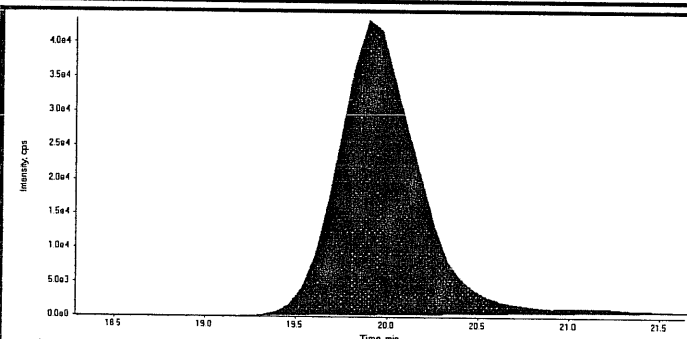
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 31/03/2010 4:24:00 PM  
LCMSMS#3

Data File	EXP0330015.wiff	Acquisition Date	3/30/2010 2:46:28 PM
Sample Name	1202041954	Acquisition Method	8321_pntx.dam
Batch Dilution Analyst	952706 2 LER	Result Table	033010.rdb
Procedure Code	LCX8321_S	Sample Type	Unknown



Compound Name:	3-Nitrotoluene (137.0/46.0 amu)
Expected RT:	20.3
Actual RT:	20.3
Area Counts:	6.56e+005
Manual Modification	No
Amount:	506. (ng/mL)
% Accuracy:	N/A



Compound Name:	PETN (361.1/62.0 amu)
Expected RT:	20.0
Actual RT:	19.9
Area Counts:	1.31e+006
Manual Modification	No
Amount:	646. (ng/mL)
% Accuracy:	N/A

1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: LCS for batch 952704

Lab Code: GEL

GEL Job No (SDG) 10-1758

Matrix: SOIL

GEL Sample ID: 1202041954

Sample Amount 2

Moisture:

Amount Units g

Date Received: 12-FEB-10

Extraction Type Sonication

Extraction Batch ID: 952704

Concentrated Extract Volume (mL) 10

Date Extracted: 18-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS03050070.wiff

Date Analyzed: 06-MAR-10 11:11

Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	6260	
59229-75-3	2,6-Diamino-4-nitrotoluene	4790	
618-87-1	3,5-Dinitroaniline	5120	
6629-29-4	2,4-Diamino-6-nitrotoluene	4590	
78-30-8	tris(o-cresyl) phosphate	5010	

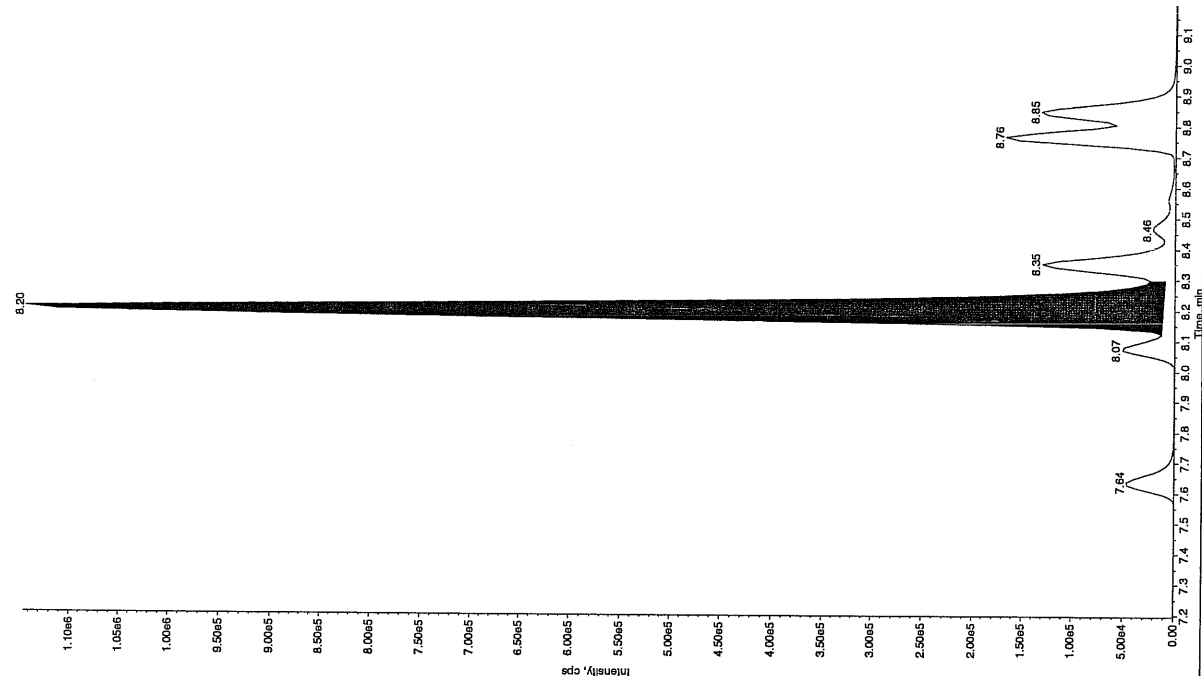
\*Concentration =

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

Scan 3/9/10

Sample Name: "1202041954" Sample ID: "95270621LER" File: "EXS03050070.wif"  
 Peak Name: "35-Dinitroaniline" Mass(es): "182.0460 amu"  
 Comment: "LCX83212S" Annotation: ""

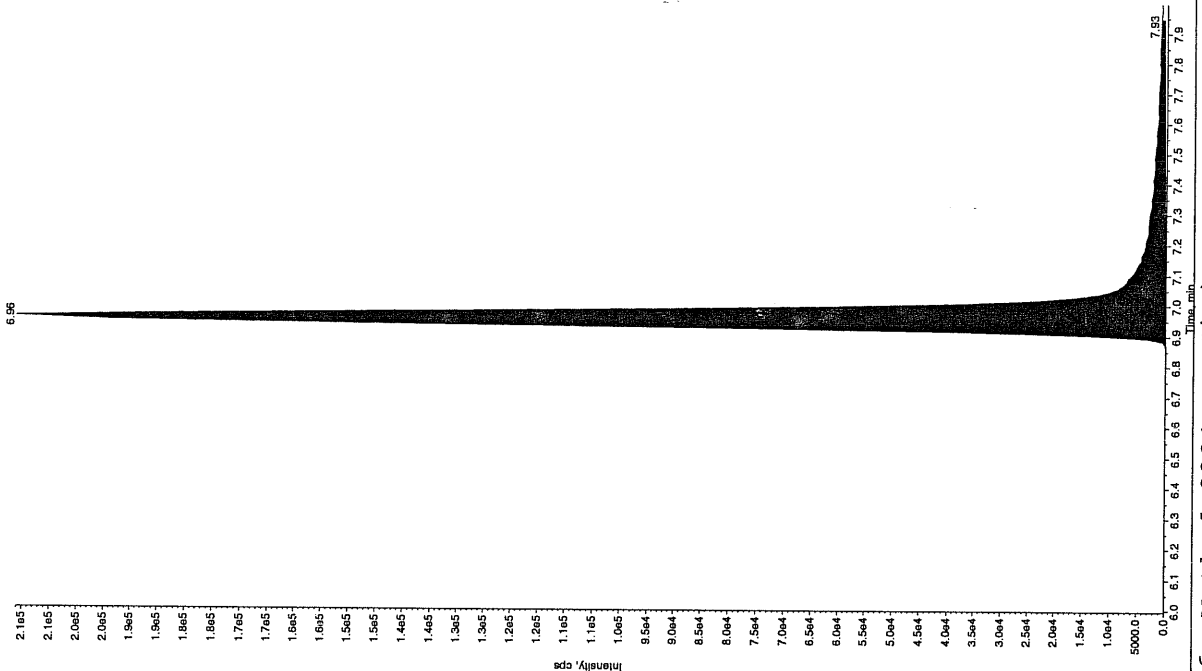
Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 512 ng/mL  
 Acq. Date: 3/6/2010  
 Acq. Time: 11:11:09 AM  
 Modified: Yes  
 Proc. Algorithm: IntelliQuan - IOA  
 Win. Peak Height: 2000.00 cps  
 Win. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 15.0 sec  
 Expected RT: 8.20 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 8.20 min  
 Peak Height: 4.18e+06 counts  
 Peak Area: 113378.906 cps  
 Start Time: 8.12 min  
 End Time: 8.30 min



Amc 03/09/10

Sample Name: "1202041954" Sample ID: "95270621LER" File: "EXS03050070.wif"  
 Peak Name: "35-Dinitroaniline" Mass(es): "257.22049 amu"  
 Comment: "LCX83212S" Annotation: ""

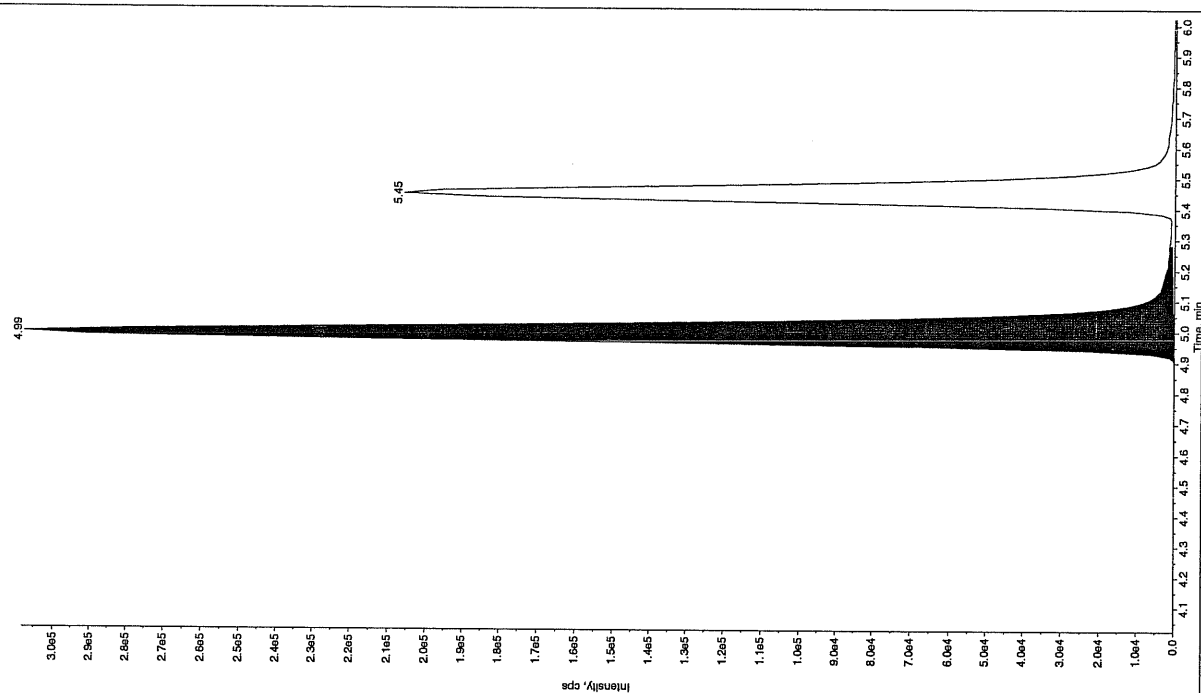
Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 626. ng/mL  
 Acq. Date: 3/6/2010  
 Acq. Time: 11:11:09 AM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IOA  
 Win. Peak Height: 2500.00 cps  
 Win. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 30.0 sec  
 Expected RT: 7.00 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 6.96 min  
 Peak Height: 9.08e+005 counts  
 Peak Area: 211005.997 cps  
 Start Time: 6.85 min  
 End Time: 7.95 min



Method 8321A-Modified LCMSMS#4

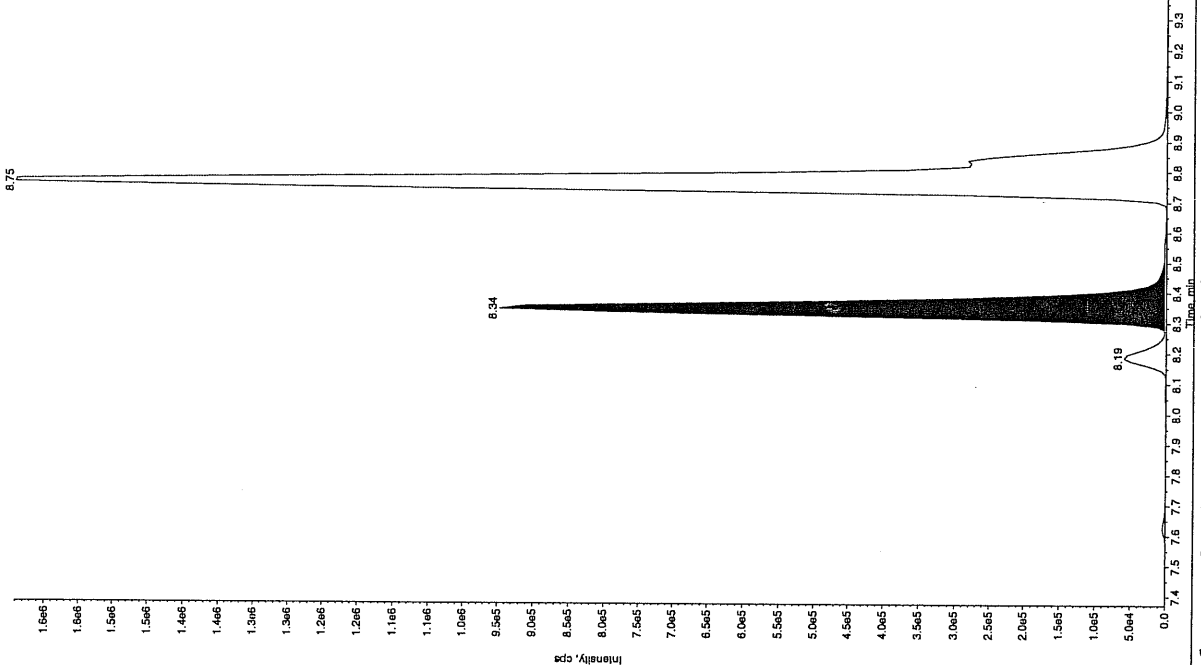
Sample Name: "1202041954" Sample ID: "9527056JLER" File: "EXS03050070.wif"  
 Peak Name: "34-Dinitrofluorene" Mass(es): "182.1/151.9 amu"  
 Comment: "LCX83212S" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 479. ng/mL  
 Acq. Date: 3/6/2010  
 Acq. Time: 11:11:09 AM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IQA  
 Min. Peak Height: 450.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 30.0 sec  
 Expected RT: 5.02 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 4.99 min  
 Area: 1.27e+006 counts  
 Height: 307718.109 cps  
 Start Time: 4.90 min  
 End Time: 5.28 min

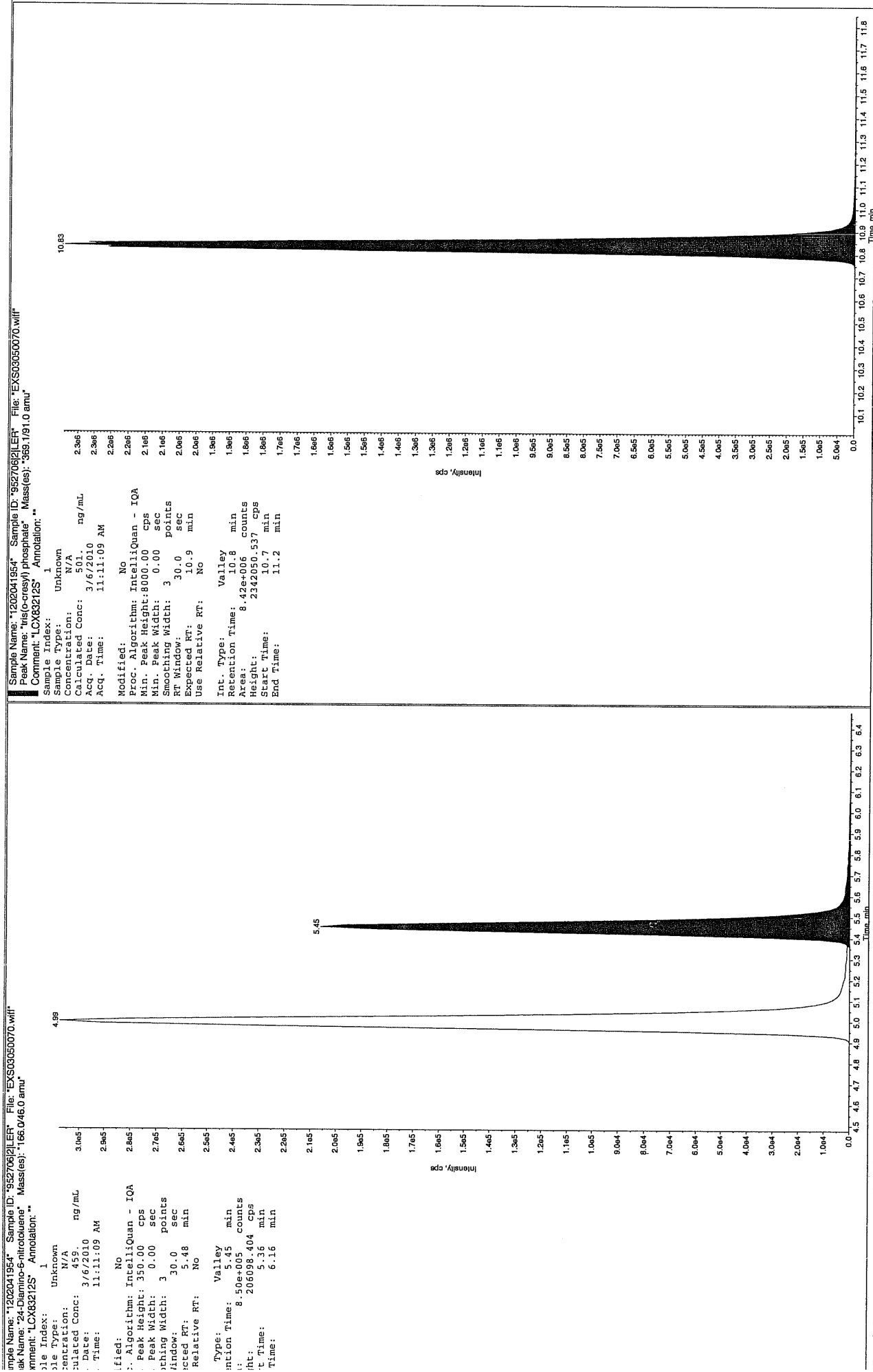


Sample Name: "1202041954" Sample ID: "9527056JLER" File: "EXS03050070.wif"  
 Peak Name: "34-Dinitrofluorene" Mass(es): "182.1/151.9 amu"  
 Comment: "LCX83212S" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 259. ng/mL  
 Acq. Date: 3/6/2010  
 Acq. Time: 11:11:09 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: 30.0 sec  
 Expected RT: 8.37 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 8.34 min  
 Area: 3.23e+006 counts  
 Height: 945727.051 cps  
 Start Time: 8.27 min  
 End Time: 8.53 min



IL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8366(246866002MS)

Lab Code: GEL

GEL Job No (SDG) 10-1758

Matrix: SOIL

GEL Sample ID: 1202041955

Sample Amount 2

Moisture: 18.0

Amount Units g

Date Received: 11-FEB-10

Extraction Type Sonication

Extraction Batch ID: 952704

Concentrated Extract Volume (mL) 10

Date Extracted: 18-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0322051.wiff

Date Analyzed: 23-MAR-10 14:41

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	4100	
121-14-2	2,4-Dinitrotoluene	4850	
121-82-4	RDX	4670	
19406-51-0	4-Amino-2,6-dinitrotoluene	4280	
2691-41-0	HMX	5460	
35572-78-2	2-Amino-4,6-dinitrotoluene	4340	
479-45-8	Tetryl	1950	
606-20-2	2,6-Dinitrotoluene	4490	
78-11-5	PETN	4670	
88-72-2	o-Nitrotoluene	4580	
98-95-3	Nitrobenzene	5020	
99-08-1	m-Nitrotoluene	5150	
99-35-4	1,3,5-Trinitrobenzene	4560	
99-65-0	m-Dinitrobenzene	5160	
99-99-0	p-Nitrotoluene	4730	

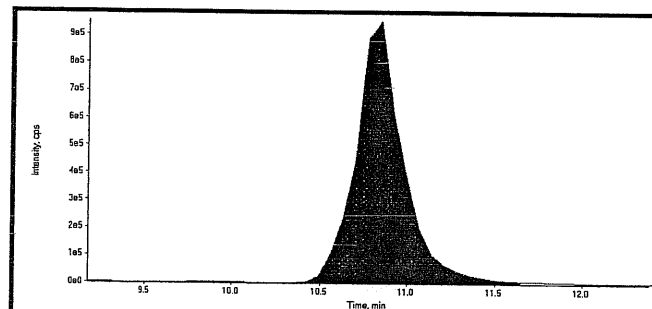
\*Concentration =

Instrument	X	<u>Concentrated Extract Volume</u>	X	Dilution
Value		<u>Sample Amount</u>		Factor

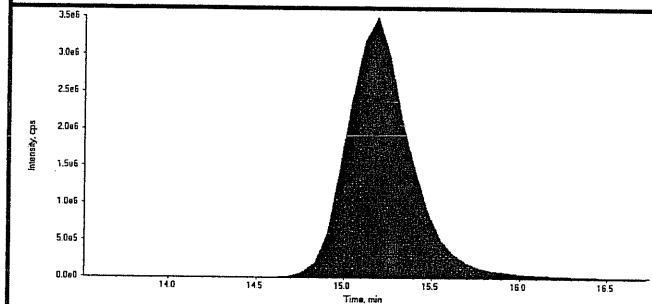
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 27/03/2010 1:31:00 PM  
LCMSMS#3

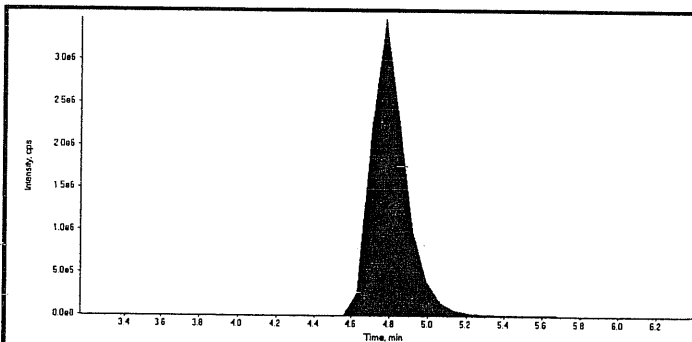
Data File	EXP0322051.wiff	Acquisition Date	3/23/2010 2:41:15 PM
Sample Name	1202041955	Acquisition Method	8321_pntx.dam
Batch Dilution Analyst	952706 2 LER	Result Table	032210.rdb
Procedure Code	LCX8321_S	Sample Type	Unknown



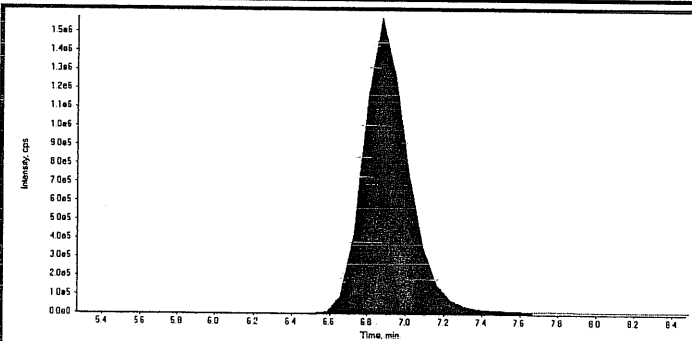
Compound Name:	13-Dinitrobenzene-d4 (172.1/46.1 amu)
Expected RT:	10.80
Actual RT:	10.90
Area Counts:	18000000.00
Manual Modification	No
Amount:	500.00(ng/mL)
Please refer to Form 8 for a list of Internal Standard Recoveries	



Compound Name:	26-Dinitrotoluene-d3 (185.0/155.0 amu)
Expected RT:	15.10
Actual RT:	15.20
Area Counts:	88400000.00
Manual Modification	No
Amount:	500.00(ng/mL)
Please refer to Form 8 for a list of Internal Standard Recoveries	



Compound Name:	HMX (341.2/46.0 amu)
Expected RT:	4.77
Actual RT:	4.77
Area Counts:	4.27e+007
Manual Modification	No
Amount:	546. (ng/mL)
% Accuracy:	N/A



Compound Name:	RDX (267.0/46.1 amu)
Expected RT:	6.87
Actual RT:	6.87
Area Counts:	2.57e+007
Manual Modification	No
Amount:	467. (ng/mL)
% Accuracy:	N/A

*LER 3/28/10 HMX 04/02/10*

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 27/03/2010 1:31:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0322051.wiff	<b>Acquisition Date</b>	3/23/2010 2:41:15 PM
<b>Sample Name</b>	1202041955	<b>Acquisition Method</b>	8321_pntx.dam
<b>Batch Dilution Analyst</b>	952706 2 LER	<b>Result Table</b>	032210.rdb
<b>Procedure Code</b>	LCX8321_S	<b>Sample Type</b>	Unknown

	<b>Compound Name:</b>	135-Trinitrobenzene (213.0/182.8 amu)
	Expected RT:	9.19
	Actual RT:	9.19
	Area Counts:	1.07e+008
	Manual Modification	No
	Amount:	456. (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	13-Dinitrobenzene (168.0/137.9 amu)
	Expected RT:	10.9
	Actual RT:	10.9
	Area Counts:	4.94e+007
	Manual Modification	No
	Amount:	516. (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	Tetryl (241.0/180.8 amu)
	Expected RT:	11.1
	Actual RT:	11.1
	Area Counts:	3.00e+007
	Manual Modification	No
	Amount:	195. (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	246-Trinitrotoluene (227.1/209.8 amu)
	Expected RT:	13.5
	Actual RT:	13.5
	Area Counts:	1.92e+008
	Manual Modification	No
	Amount:	410. (ng/mL)
	% Accuracy:	N/A



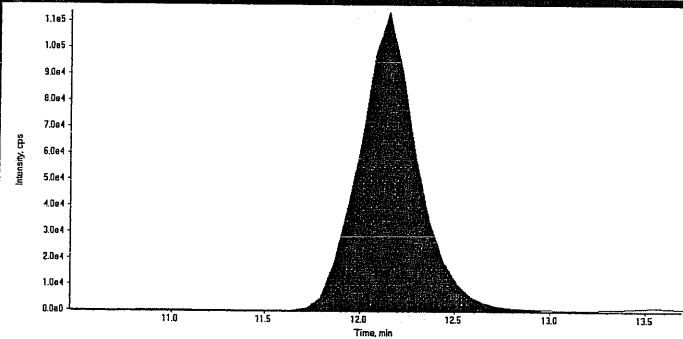
Page 1087 of 1254

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

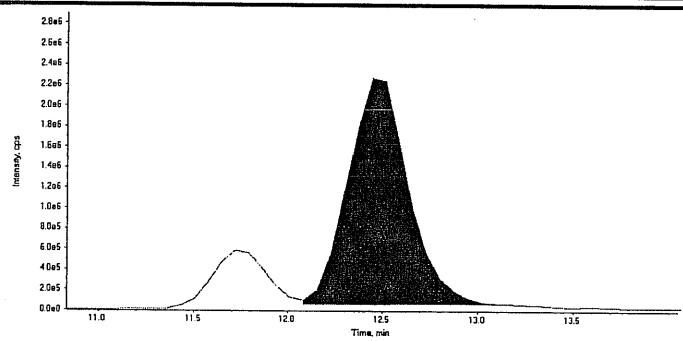
Printed: 27/03/2010 1:31:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0322051.wiff	<b>Acquisition Date</b>	3/23/2010 2:41:15 PM
<b>Sample Name</b>	1202041955	<b>Acquisition Method</b>	8321_pntx.dam
<b>Batch Dilution Analyst</b>	952706 2 LER	<b>Result Table</b>	032210.rdb
<b>Procedure Code</b>	LCX8321_S	<b>Sample Type</b>	Unknown

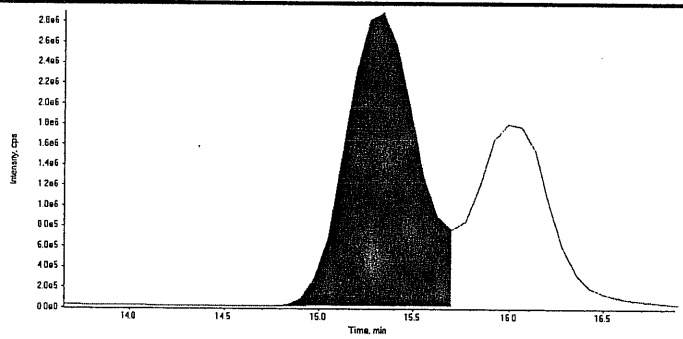
  

	<b>Compound Name:</b>	Nitrobenzene (123.0/46.0 amu)
	Expected RT:	12.1
	Actual RT:	12.2
	Area Counts:	2.44e+006
	Manual Modification	No
	Amount:	502. (ng/mL)
	% Accuracy:	N/A

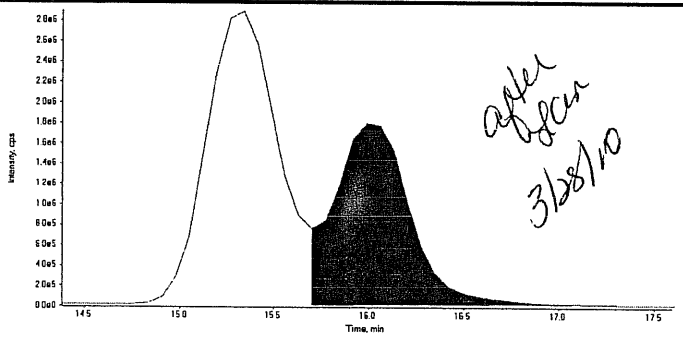
  

	<b>Compound Name:</b>	34-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	12.4
	Actual RT:	12.4
	Area Counts:	4.93e+007
	Manual Modification	No
	Amount:	216. (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	26-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	15.3
	Actual RT:	15.3
	Area Counts:	7.72e+007
	Manual Modification	No
	Amount:	449. (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	24-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	16.0
	Actual RT:	16.0
	Area Counts:	5.01e+007
	Manual Modification	Yes
	Amount:	485. (ng/mL)
	% Accuracy:	N/A

Before Lca 3/28/10

File Name: "1202041855" Sample ID: "55270821" File: "EXP0322051.wif"  
 Name: "2-Amino-46-dinitrotoluene" Mass(es): "197.0/180.0 amu"

Index: 1

Type: Unknown

Detected: 611

Dated Conc: 611 ng/mL

Date: 3/23/2010

Time: 2:41:15 PM

Id: No

Algorithm: IntelliQuan - ICA

Peak Height: 1000.00 cps

Peak Width: 0.00 sec

Integration: 3 points

Integration: 30.0 sec

Integration: 14.6 min

Integration: No

Integration: 72.85

Type: Valley

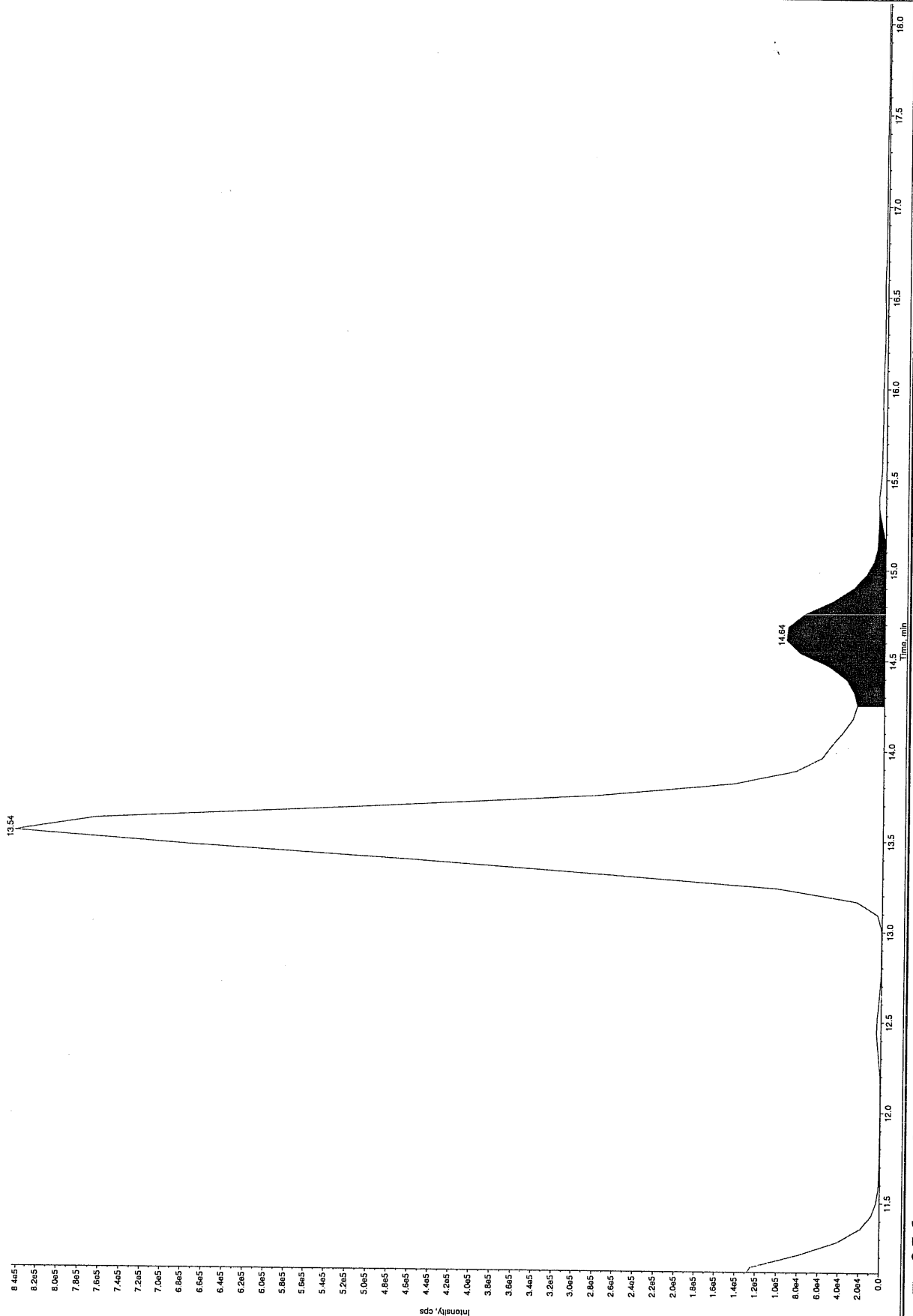
Integration: 14.6 min

Integration: 3.60 counts

Integration: 1.14E-005

Integration: 14.3 min

Integration: 15.3 min

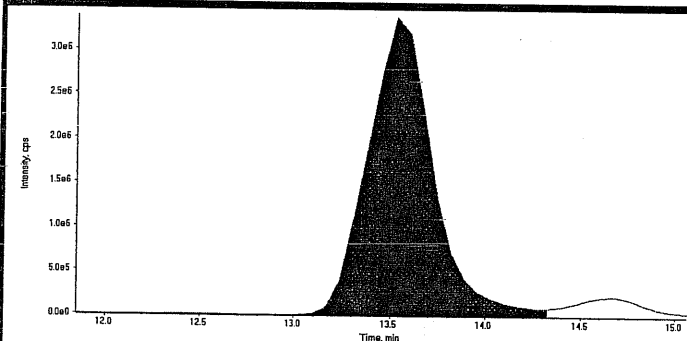


L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#3

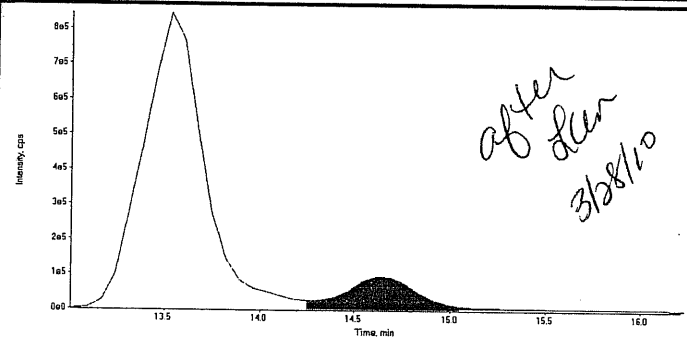
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 27/03/2010 1:31:00 PM  
LCMSMS#3

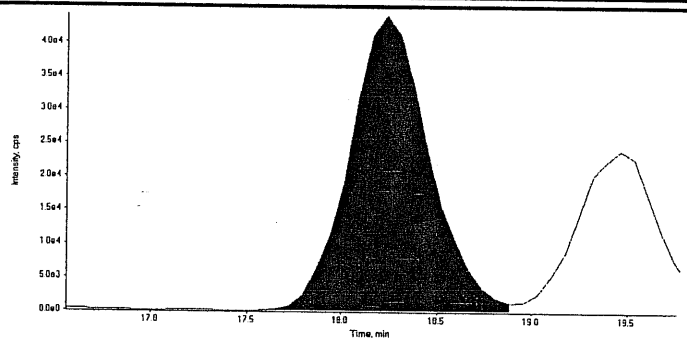
<b>Data File</b>	EXP0322051.wiff	<b>Acquisition Date</b>	3/23/2010 2:41:15 PM
<b>Sample Name</b>	1202041955	<b>Acquisition Method</b>	8321_pntx.dam
<b>Batch Dilution Analyst</b>	952706 2 LER	<b>Result Table</b>	032210.rdb
<b>Procedure Code</b>	LCX8321_S	<b>Sample Type</b>	Unknown



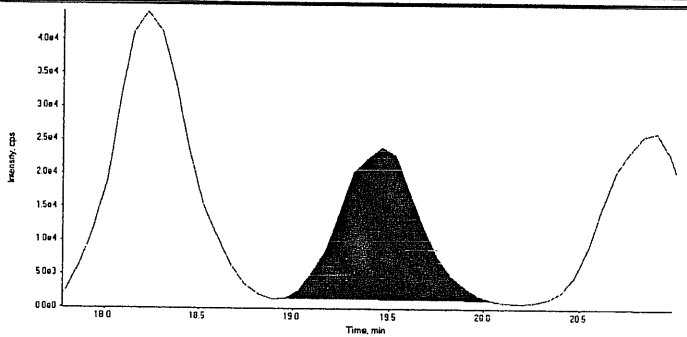
<b>Compound Name:</b>	4-Amino-26-dinitrotoluene (197.0/167.0 amu)
Expected RT:	13.5
Actual RT:	13.5
Area Counts:	7.98e+007
Manual Modification	No
Amount:	428. (ng/mL)
% Accuracy:	N/A



<b>Compound Name:</b>	2-Amino-46-dinitrotoluene (197.0/180.0 amu)
Expected RT:	14.6
Actual RT:	14.6
Area Counts:	2.56e+006
Manual Modification	Yes
Amount:	434. (ng/mL)
% Accuracy:	N/A



<b>Compound Name:</b>	2-Nitrotoluene (137.0/46.0 amu)
Expected RT:	18.2
Actual RT:	18.2
Area Counts:	1.27e+006
Manual Modification	No
Amount:	458. (ng/mL)
% Accuracy:	N/A



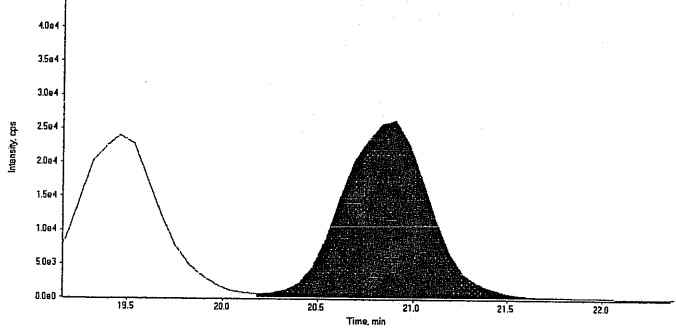
<b>Compound Name:</b>	4-Nitrotoluene (137.0/46.0 amu)
Expected RT:	19.4
Actual RT:	19.5
Area Counts:	6.52e+005
Manual Modification	No
Amount:	473. (ng/mL)
% Accuracy:	N/A

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

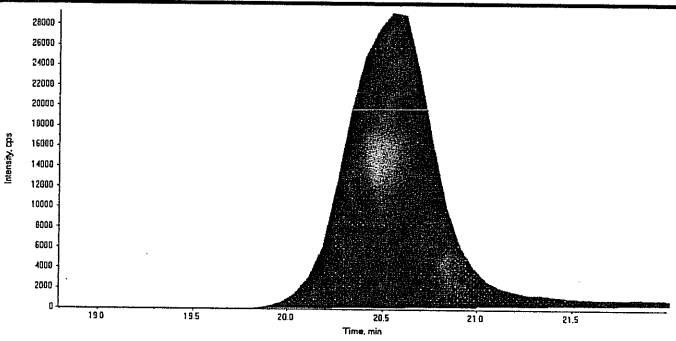
Printed: 27/03/2010 1:31:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0322051.wiff	<b>Acquisition Date</b>	3/23/2010 2:41:15 PM
<b>Sample Name</b>	1202041955	<b>Acquisition Method</b>	8321_pntx.dam
<b>Batch Dilution Analyst</b>	952706 2 LER	<b>Result Table</b>	032210.rdb
<b>Procedure Code</b>	LCX8321_S	<b>Sample Type</b>	Unknown

	<b>Compound Name:</b>	3-Nitrotoluene (137.0/46.0 amu)
	Expected RT:	20.8
	Actual RT:	20.9
	Area Counts:	8.44e+005
	Manual Modification	No
	Amount:	515. (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	PETN (361.1/62.0 amu)
	Expected RT:	20.4
	Actual RT:	20.5
	Area Counts:	9.86e+005
	Manual Modification	No
	Amount:	467. (ng/mL)
	% Accuracy:	N/A

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8366(246866002MS)

Lab Code: GEL

GEL Job No (SDG) 10-1758

Matrix: SOIL

GEL Sample ID: 1202041955

Sample Amount 2

Moisture: 18.0

Amount Units g

Date Received: 11-FEB-10

Extraction Type Sonication

Extraction Batch ID: 952704

Concentrated Extract Volume (mL) 10

Date Extracted: 18-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS03050072.wiff

Date Analyzed: 06-MAR-10 11:42

Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	10600	
59229-75-3	2,6-Diamino-4-nitrotoluene	4470	
618-87-1	3,5-Dinitroaniline	5160	
6629-29-4	2,4-Diamino-6-nitrotoluene	3570	
78-30-8	tris(o-cresyl) phosphate	4930	

\*Concentration =

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

San 3/9/10

Sample Name: "1202041955" Sample ID: "95270621LER" File: "EXS03050072.wif"

Peak Name: "TATB" Mass(es): "257.2/204.9 amu"

Comment: "LCX83212S" Annotation: ""

Sample Index: 1

Sample Type: Unknown

Concentration: N/A

Calculated Conc: 1060. ng/mL

Acq. Date: 3/6/2010

Acq. Time: 11:42:35 AM

Modified: No

Proc. Algorithm: IntelliQuan - IQA

Min. Peak Height: 2500.00 cps

Min. Peak Width: 0.00 sec

Smoothing Width: 3 points

RT Window: 30.0 sec

Expected RT: 7.00 min

Use Relative RT: No

Type: Valley

Retention Time: 6.94 min

Area: 1.58e+006 counts

Height: 360284.180 cps

Start Time: 6.85 min

End Time: 7.53 min

6.94

3.6e5

3.5e5

3.4e5

3.3e5

3.2e5

3.1e5

3.0e5

2.9e5

2.8e5

2.7e5

2.6e5

2.5e5

2.4e5

2.3e5

2.2e5

2.1e5

2.0e5

1.9e5

1.8e5

1.7e5

1.6e5

1.5e5

1.4e5

1.3e5

1.2e5

1.1e5

1.0e5

9.0e4

8.0e4

7.0e4

6.0e4

5.0e4

4.0e4

3.0e4

2.0e4

1.0e4

0.0

Intensity, cps

6.0

6.1

6.2

6.3

6.4

6.5

6.6

6.7

6.8

6.9

7.0

7.1

7.2

7.3

7.4

7.5

7.6

7.7

7.8

7.9

8.0

8.1

8.2

8.3

8.4

8.5

8.6

8.7

8.8

8.9

9.0

9.1

Time, min

7.837.92

7.8

7.9

8.0

8.1

8.2

8.3

8.4

8.5

8.6

8.7

8.8

8.9

9.0

9.1

Sample Name: "1202041955" Sample ID: "95270621LER" File: "EXS03050072.wif"

Peak Name: "35-Dinitroaniline" Mass(es): "182.0/166.0 amu"

Comment: "LCX83212S" Annotation: ""

Sample Index: 1

Sample Type: Unknown

Concentration: N/A

Calculated Conc: 516. ng/mL

Acq. Date: 3/6/2010

Acq. Time: 11:42:35 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: 8.19 min

Use Relative RT: No

Int. Type: Valley

Retention Time: 8.19 min

Area: 4.20e+006 counts

Height: 1150432.373 cps

Start Time: 8.12 min

End Time: 8.30 min

8.19

1.5e6

1.0e6

1.0e6

1.0e6

1.0e6

1.0e6

1.0e6

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1.0e6

1.0e6

1.0e6

1.0e6

1.0e6

1.0e6

Intensity, cps

8.07

8.35

8.46

8.76

8.85

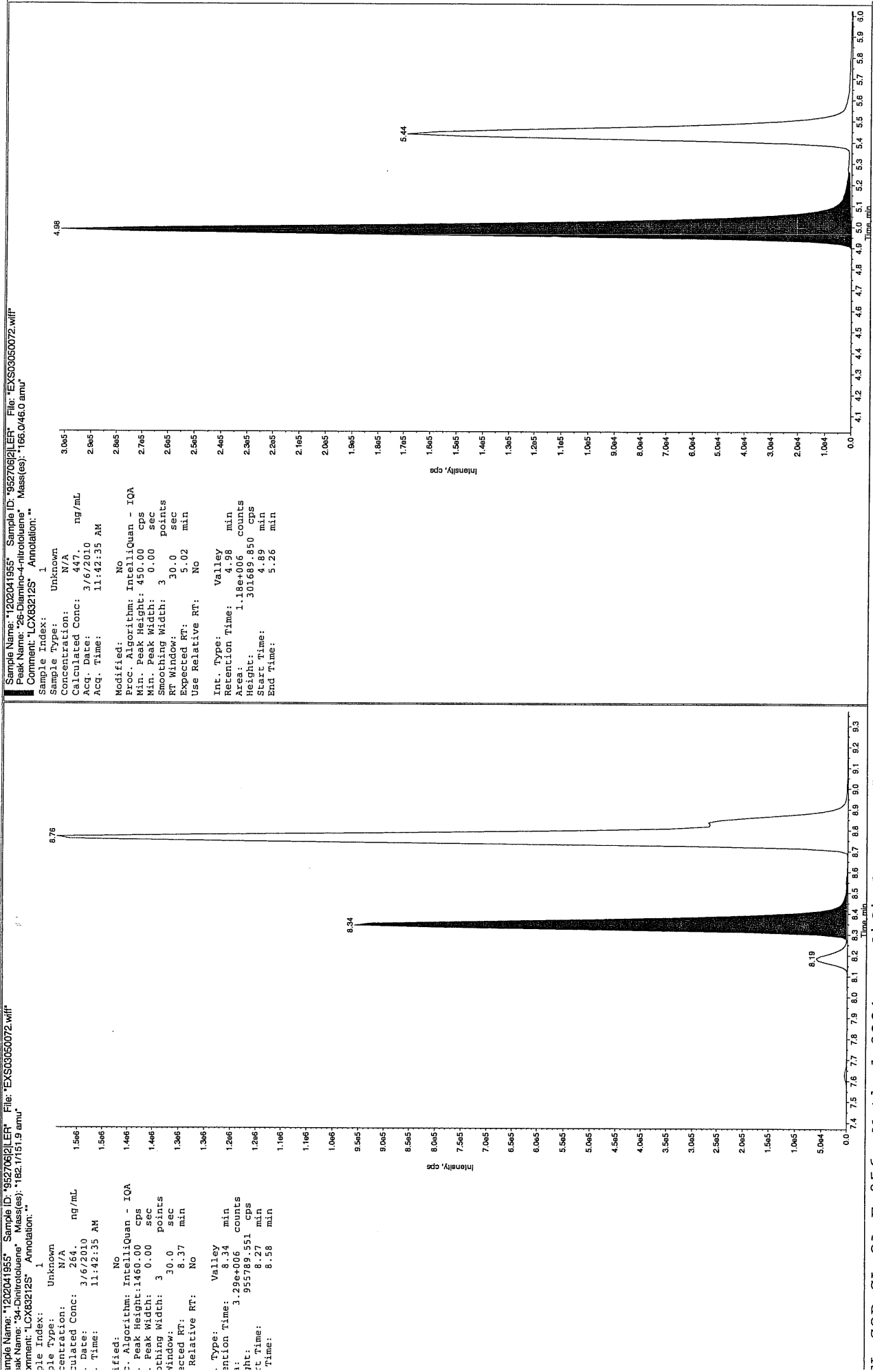
8.9

9.0

9.1

Time, min

San 03/09/10

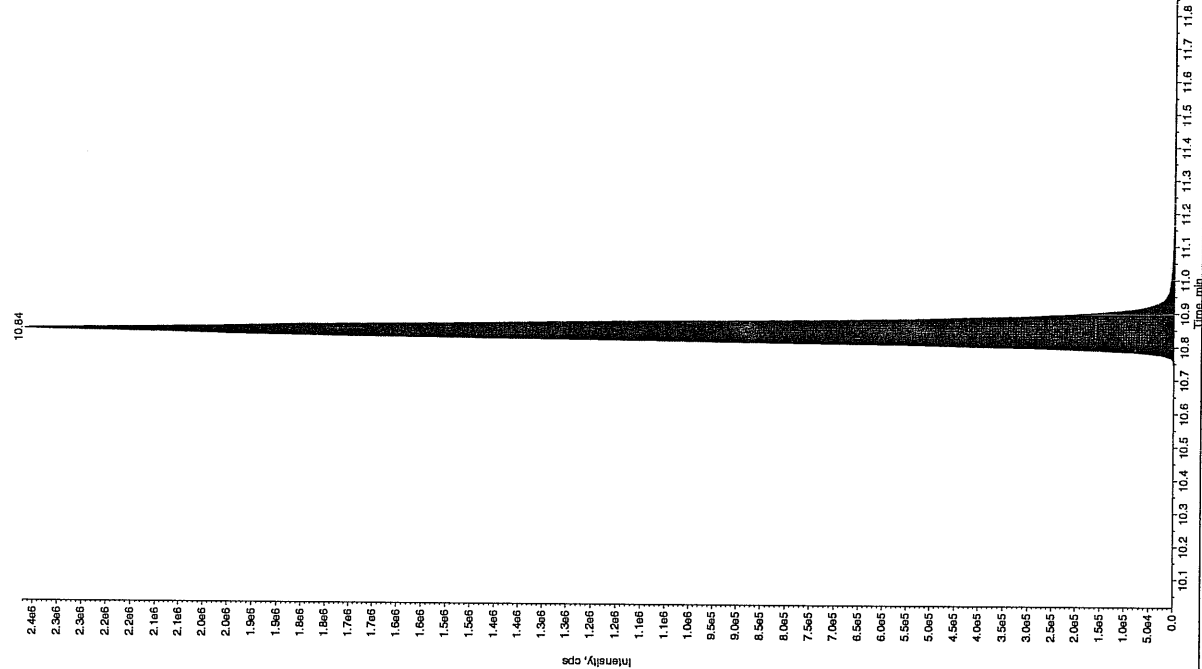


EL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



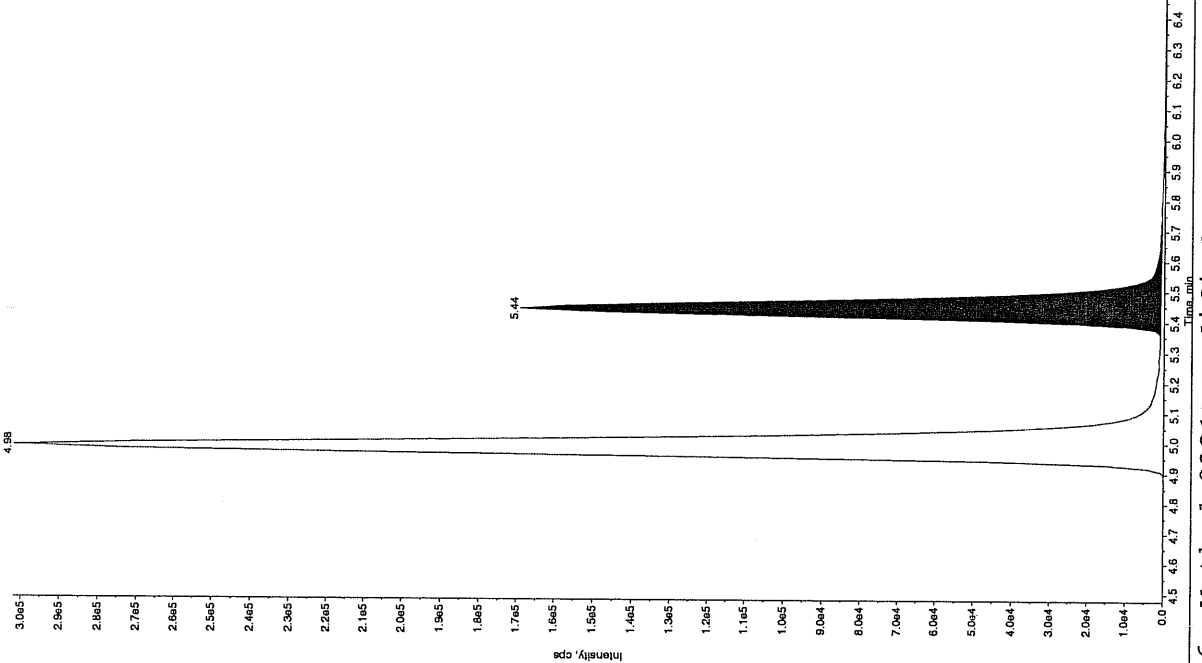
Sample Name: "1202041955" Sample ID: "952706[2]LER" File: "EXS030050072.wif"  
 Peak Name: "tris(o-cresyl) phosphate" Mass(es): "359.1/91.0 amu"  
 Comment: "LCX83212S" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 493. ng/mL  
 Acq. Date: 3/6/2010  
 Acq. Time: 11:42:35 AM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IQA  
 Min. Peak Height: 8000.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 30.0 sec  
 Expected RT: 10.9 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 10.8 min  
 Area: 8.29e+006 counts  
 Height: 2370222.900 cps  
 Start Time: 10.7 min  
 End Time: 11.2 min



Sample Name: "1202041955" Sample ID: "952706[2]LER" File: "EXS030050072.wif"  
 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: 357. ng/mL  
 Acq. Date: 3/6/2010  
 Acq. Time: 11:42:35 AM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IQA  
 Min. Peak Height: 350.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 30.0 sec  
 Expected RT: 5.48 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 5.44 min  
 Area: 6.60e+005 counts  
 Height: 168246.384 cps  
 Start Time: 5.34 min  
 End Time: 5.75 min



LC SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8366(246866002MSD)

Lab Code: GEL

GEL Job No (SDG) 10-1758

Matrix: SOIL

GEL Sample ID: 1202041956

Sample Amount 2

Moisture: 18.0

Amount Units g

Date Received: 11-FEB-10

Extraction Type Sonication

Extraction Batch ID: 952704

Concentrated Extract Volume (mL) 10

Date Extracted: 18-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0322052.wiff

Date Analyzed: 23-MAR-10 15:07

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	3950	
121-14-2	2,4-Dinitrotoluene	5060	
121-82-4	RDX	4500	
19406-51-0	4-Amino-2,6-dinitrotoluene	4100	
2691-41-0	HMX	5070	
35572-78-2	2-Amino-4,6-dinitrotoluene	4150	
479-45-8	Tetryl	1710	
606-20-2	2,6-Dinitrotoluene	4330	
78-11-5	PETN	4470	
88-72-2	o-Nitrotoluene	4530	
98-95-3	Nitrobenzene	4980	
99-08-1	m-Nitrotoluene	4920	
99-35-4	1,3,5-Trinitrobenzene	4320	
99-65-0	m-Dinitrobenzene	5010	
99-99-0	p-Nitrotoluene	4940	

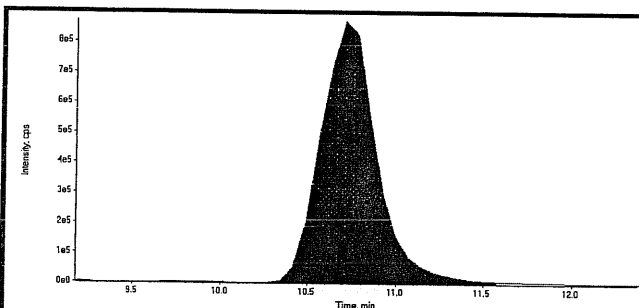
\*Concentration =

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

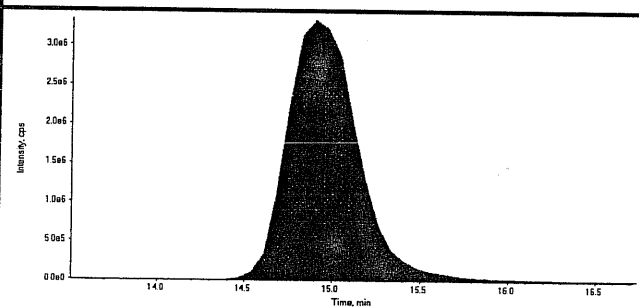
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 27/03/2010 1:31:00 PM  
LCMSMS#3

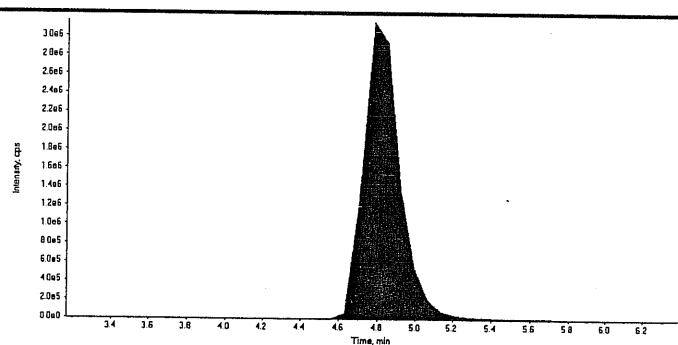
Data File	EXP0322052.wiff	Acquisition Date	3/23/2010 3:07:38 PM
Sample Name	1202041956	Acquisition Method	8321_pntx.dam
Batch Dilution Analyst	952706 2 LER	Result Table	032210.rdb
Procedure Code	LCX8321_S	Sample Type	Unknown



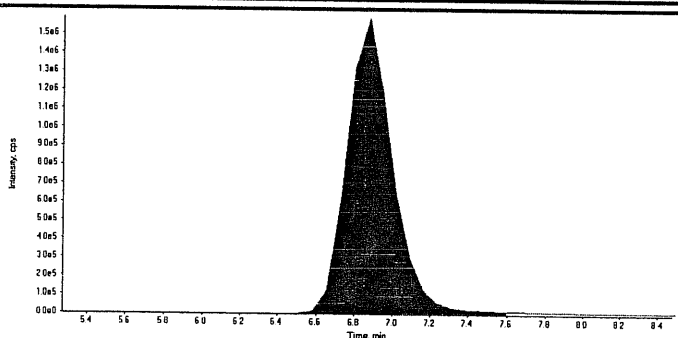
Compound Name:	13-Dinitrobenzene-d4 (172.1/46.1 amu)
Expected RT:	10.80
Actual RT:	10.70
Area Counts:	19100000.00
Manual Modification	No
Amount:	500.00(ng/mL)
Please refer to Form 8 for a list of Internal Standard Recoveries	



Compound Name:	26-Dinitrotoluene-d3 (185.0/155.0 amu)
Expected RT:	15.10
Actual RT:	14.90
Area Counts:	93500000.00
Manual Modification	No
Amount:	500.00(ng/mL)
Please refer to Form 8 for a list of Internal Standard Recoveries	



Compound Name:	HMX (341.2/46.0 amu)
Expected RT:	4.77
Actual RT:	4.77
Area Counts:	4.21e+007
Manual Modification	No
Amount:	507. (ng/mL)
% Accuracy:	N/A



Compound Name:	RDX (267.0/46.1 amu)
Expected RT:	6.87
Actual RT:	6.87
Area Counts:	2.63e+007
Manual Modification	No
Amount:	450. (ng/mL)
% Accuracy:	N/A

*See 3/28/10*

*Amc 04/02/10*

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 27/03/2010 1:31:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0322052.wiff	<b>Acquisition Date</b>	3/23/2010 3:07:38 PM
<b>Sample Name</b>	1202041956	<b>Acquisition Method</b>	8321_pntx.dam
<b>Batch Dilution Analyst</b>	952706 2 LER	<b>Result Table</b>	032210.rdb
<b>Procedure Code</b>	LCX8321_S	<b>Sample Type</b>	Unknown

	<b>Compound Name:</b>	135-Trinitrobenzene (213.0/182.8 amu)
	Expected RT:	9.19
	Actual RT:	9.12
	Area Counts:	1.07e+008
	Manual Modification	No
	Amount:	432. (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	13-Dinitrobenzene (168.0/137.9 amu)
	Expected RT:	10.9
	Actual RT:	10.9
	Area Counts:	5.08e+007
	Manual Modification	No
	Amount:	501. (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	Tetryl (241.0/180.8 amu)
	Expected RT:	11.1
	Actual RT:	10.9
	Area Counts:	2.79e+007
	Manual Modification	No
	Amount:	171. (ng/mL)
	% Accuracy:	N/A

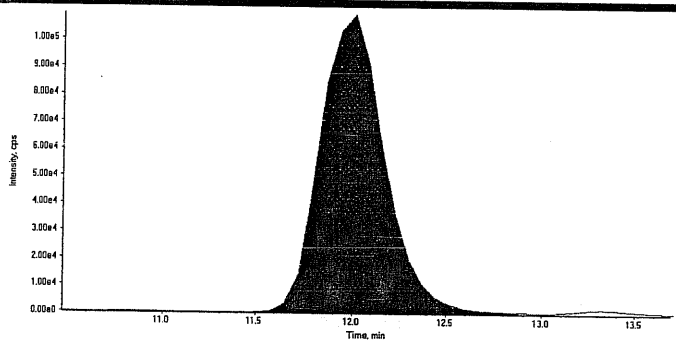
	<b>Compound Name:</b>	246-Trinitrotoluene (227.1/209.8 amu)
	Expected RT:	13.5
	Actual RT:	13.4
	Area Counts:	1.97e+008
	Manual Modification	No
	Amount:	395. (ng/mL)
	% Accuracy:	N/A

GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

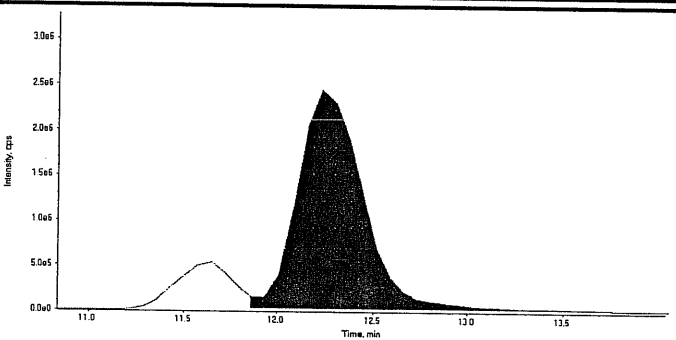
Printed: 27/03/2010 1:31:00 PM  
LCMSMS#3

<b>Data File</b>	EXP0322052.wiff	<b>Acquisition Date</b>	3/23/2010 3:07:38 PM
<b>Sample Name</b>	1202041956	<b>Acquisition Method</b>	8321_pntx.dam
<b>Batch Dilution Analyst</b>	952706 2 LER	<b>Result Table</b>	032210.rdb
<b>Procedure Code</b>	LCX8321_S	<b>Sample Type</b>	Unknown

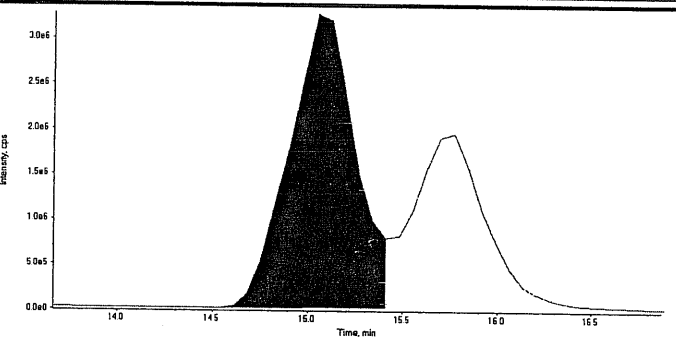
  

	<b>Compound Name:</b>	Nitrobenzene (123.0/46.0 amu)
	Expected RT:	12.1
	Actual RT:	12.0
	Area Counts:	2.57e+006
	Manual Modification	No
	Amount:	498. (ng/mL)
	% Accuracy:	N/A

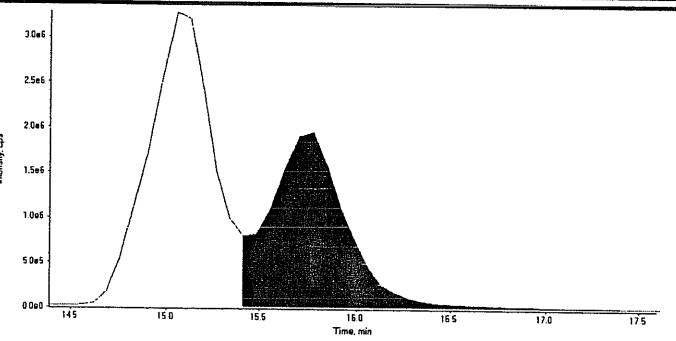
  

	<b>Compound Name:</b>	34-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	12.4
	Actual RT:	12.2
	Area Counts:	5.75e+007
	Manual Modification	No
	Amount:	238. (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	26-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	15.3
	Actual RT:	15.0
	Area Counts:	7.87e+007
	Manual Modification	No
	Amount:	433. (ng/mL)
	% Accuracy:	N/A

	<b>Compound Name:</b>	24-dinitrotoluene (182.0/46.0 amu)
	Expected RT:	16.0
	Actual RT:	15.8
	Area Counts:	5.54e+007
	Manual Modification	No
	Amount:	506. (ng/mL)
	% Accuracy:	N/A

Before Lcu 3/28/10

Sample Name: "1202041956" Sample ID: "552706JLER" File: "EXP032032.wit"

Peak Name: "2-Amino-46-dihydroquinone" Mass(es): "197.0/180.0 amu"

File Index: "8321A\_1" Annotation: "

File Type: Unknown

Related Conc: N/A ng/mL

Acq Date: 3/23/2010

Time: 11:07:25 PM

Method: No

Algorithm: IntelliQuan - IQA

Peak Weight: 1000.00 cps

Resolution: 3.00 points

Window: 30.0 sec

Ret RT: 14.6 min

Relative RT: No

Type: Valley

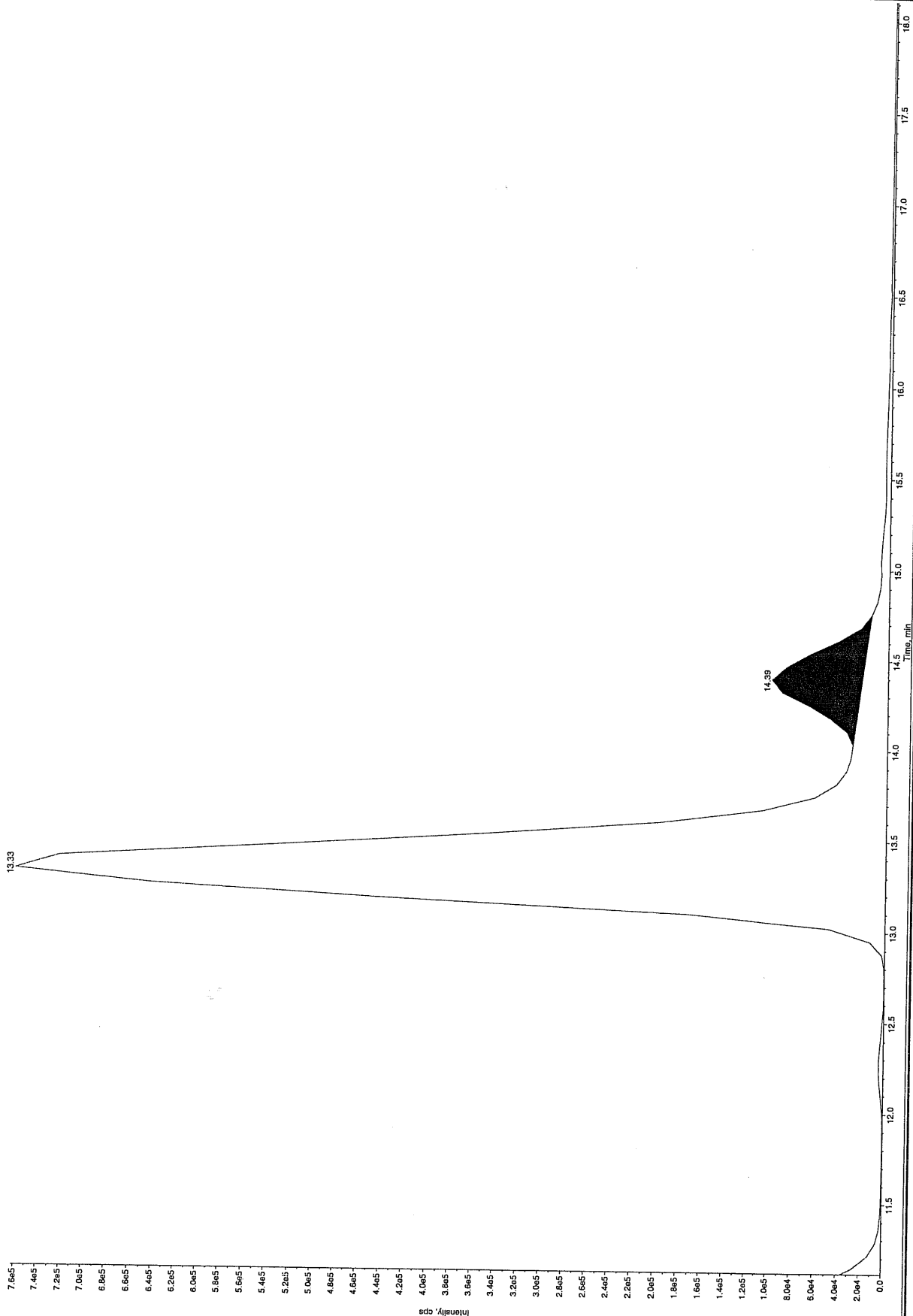
Retention Time: 14.24 min

Count: 1.58e+006 counts

Time: 7.77e+004 cps

Time: 14.0 min

Time: 14.8 min

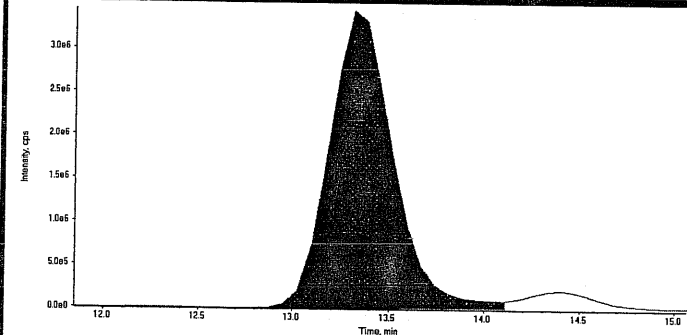


L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#3

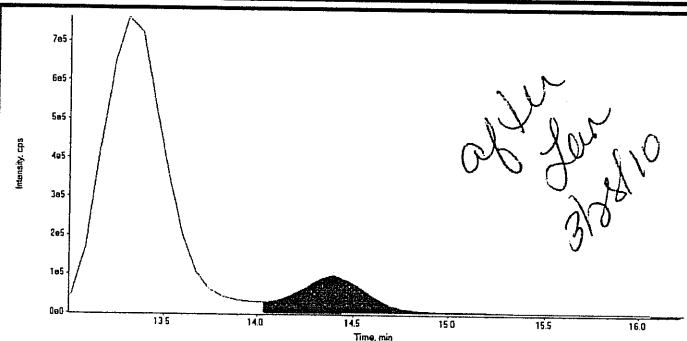
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 27/03/2010 1:31:00 PM  
LCMSMS#3

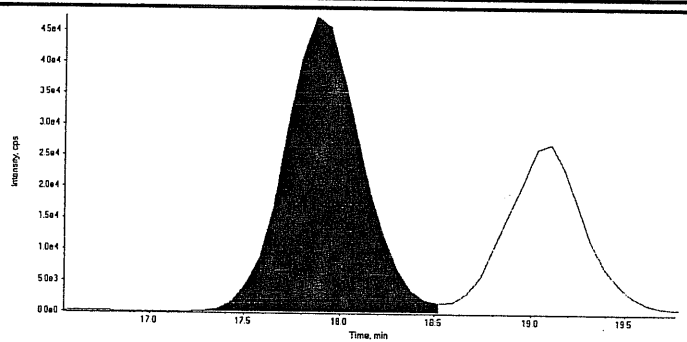
Data File	EXP0322052.wiff	Acquisition Date	3/23/2010 3:07:38 PM
Sample Name	1202041956	Acquisition Method	8321_pntx.dam
Batch Dilution Analyst	952706 2 LER	Result Table	032210.rdb
Procedure Code	LCX8321_S	Sample Type	Unknown



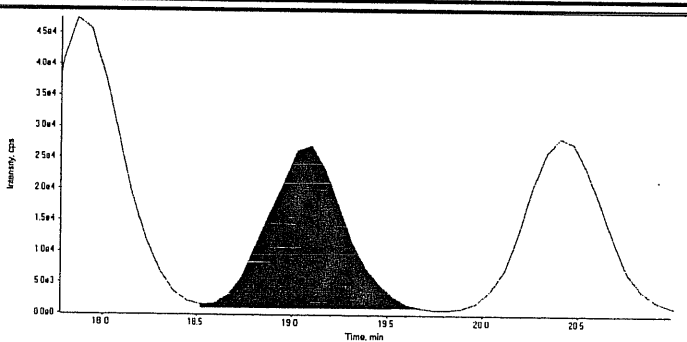
Compound Name:	4-Amino-26-dinitrotoluene (197.0/167.0 amu)
Expected RT:	13.5
Actual RT:	13.3
Area Counts:	8.09e+007
Manual Modification	No
Amount:	410. (ng/mL)
% Accuracy:	N/A



Compound Name:	2-Amino-46-dinitrotoluene (197.0/180.0 amu)
Expected RT:	14.6
Actual RT:	14.4
Area Counts:	2.59e+006
Manual Modification	Yes
Amount:	415. (ng/mL)
% Accuracy:	N/A



Compound Name:	2-Nitrotoluene (137.0/46.0 amu)
Expected RT:	18.2
Actual RT:	17.9
Area Counts:	1.32e+006
Manual Modification	No
Amount:	453. (ng/mL)
% Accuracy:	N/A

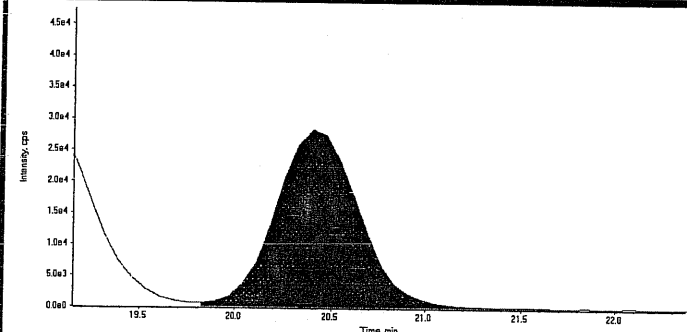


Compound Name:	4-Nitrotoluene (137.0/46.0 amu)
Expected RT:	19.4
Actual RT:	19.1
Area Counts:	7.21e+005
Manual Modification	No
Amount:	494. (ng/mL)
% Accuracy:	N/A

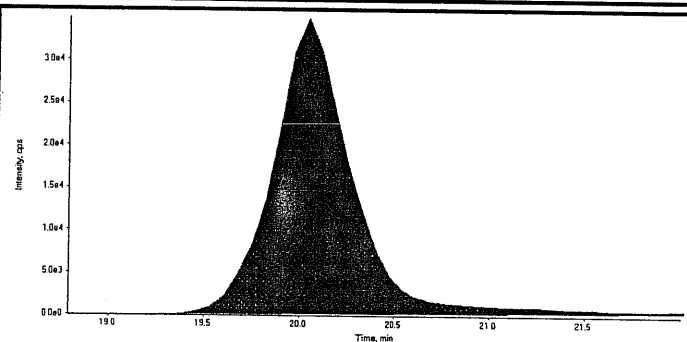
GEL Laboratories, LLC  
GEL SOP GL-OA-E-056, Method 8321A-Modified

Printed: 27/03/2010 1:31:00 PM  
LCMSMS#3

Data File	EXP0322052.wiff	Acquisition Date	3/23/2010 3:07:38 PM
Sample Name	1202041956	Acquisition Method	8321_pntx.dam
Batch Dilution Analyst	952706 2 LER	Result Table	032210.rdb
Procedure Code	LCX8321_S	Sample Type	Unknown



Compound Name:	3-Nitrotoluene (137.0/46.0 amu)
Expected RT:	20.8
Actual RT:	20.4
Area Counts:	8.54e+005
Manual Modification	No
Amount:	492. (ng/mL)
% Accuracy:	N/A



Compound Name:	PETN (361.1/62.0 amu)
Expected RT:	20.4
Actual RT:	20.0
Area Counts:	9.97e+005
Manual Modification	No
Amount:	447. (ng/mL)
% Accuracy:	N/A



1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8366(246866002MSD)

Lab Code: GEL

GEL Job No (SDG) 10-1758

Matrix: SOIL

GEL Sample ID: 1202041956

Sample Amount 2

Moisture: 18.0

Amount Units g

Date Received: 11-FEB-10

Extraction Type Sonication

Extraction Batch ID: 952704

Concentrated Extract Volume (mL) 10

Date Extracted: 18-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS03050073.wiff

Date Analyzed: 06-MAR-10 11:58

Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	8590	
59229-75-3	2,6-Diamino-4-nitrotoluene	4240	
618-87-1	3,5-Dinitroaniline	5080	
6629-29-4	2,4-Diamino-6-nitrotoluene	3720	
78-30-8	tris(o-cresyl) phosphate	4930	

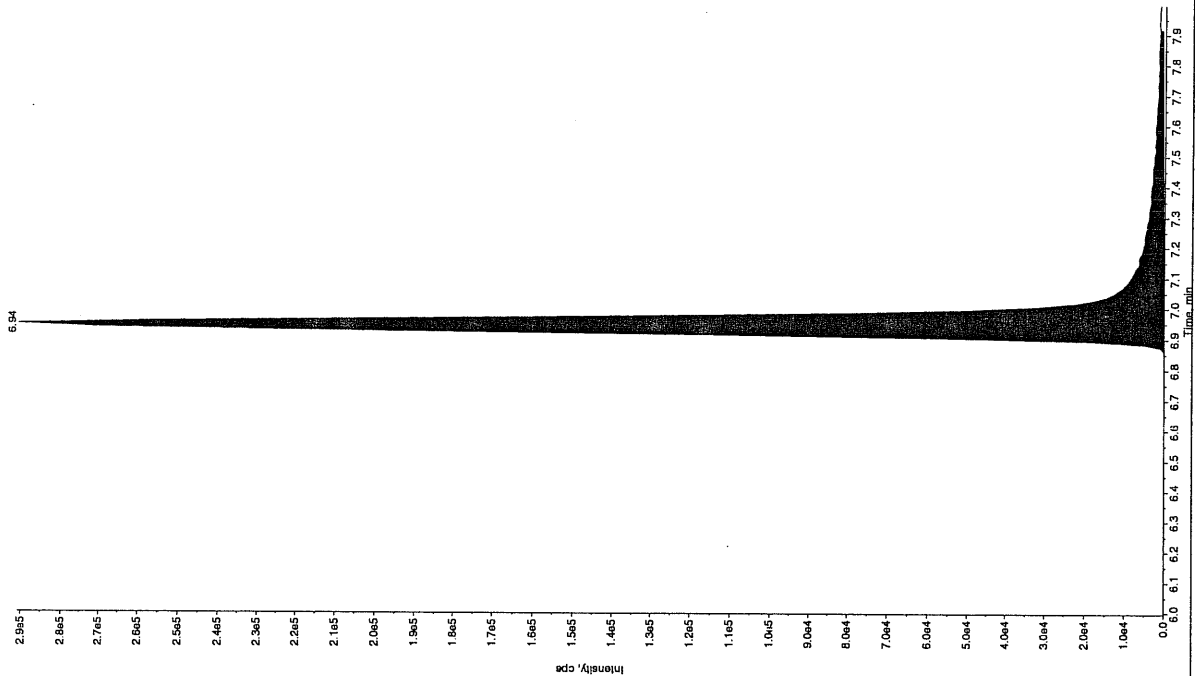
\*Concentration =

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

Jan 3/9/10

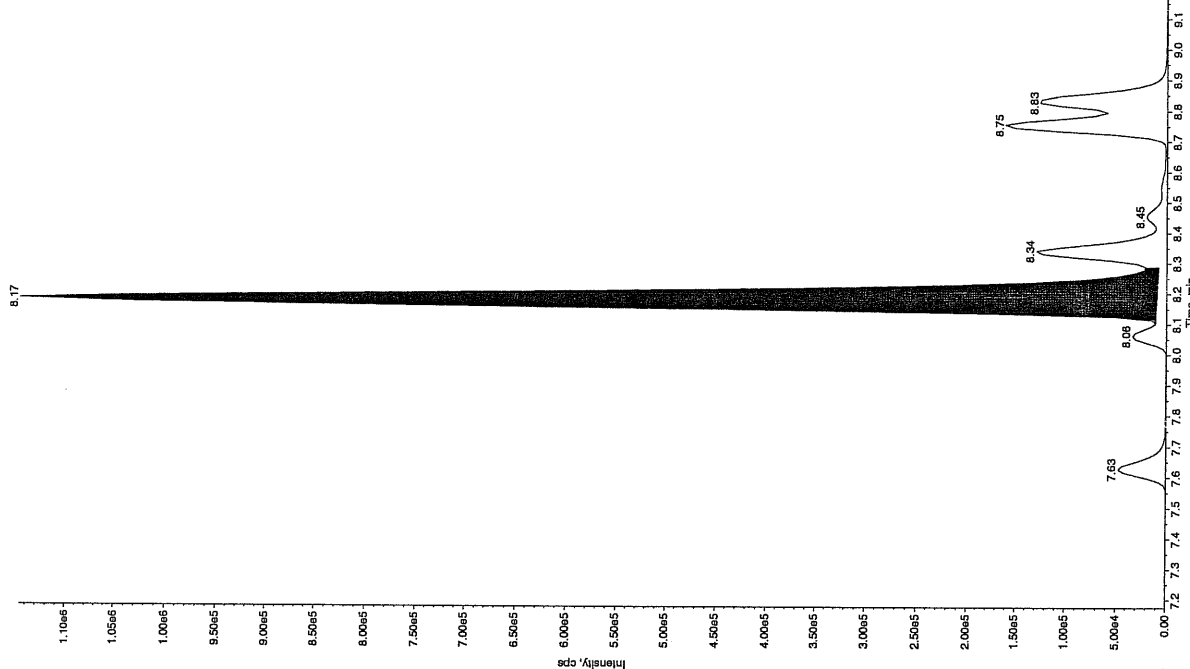
Sample Name: "1202041956" Sample ID: "952706" File: "EXS03050073.wiff"  
 Peak Name: "TATB" Mass(es): "257.2204.9 amu"  
 Comment: "LCX83212S" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A ng/mL  
 Acq. Date: 3/6/2010  
 Acq. Time: 11:58:17 AM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IQA  
 Min. Peak Height: 2500.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 30.0 points  
 RT Window: 30.0 sec  
 Expected RT: 7.00 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 6.94 min  
 Area: 1.26e+006 counts  
 Height: 250657.806 cps  
 Start Time: 6.84 min  
 End Time: 7.92 min



Sample Name: "1202041956" Sample ID: "952706" File: "EXS03050073.wiff"  
 Peak Name: "35-Dinitroaniline" Mass(es): "182.046.0 amu"  
 Comment: "LCX83212S" Annotation: ""

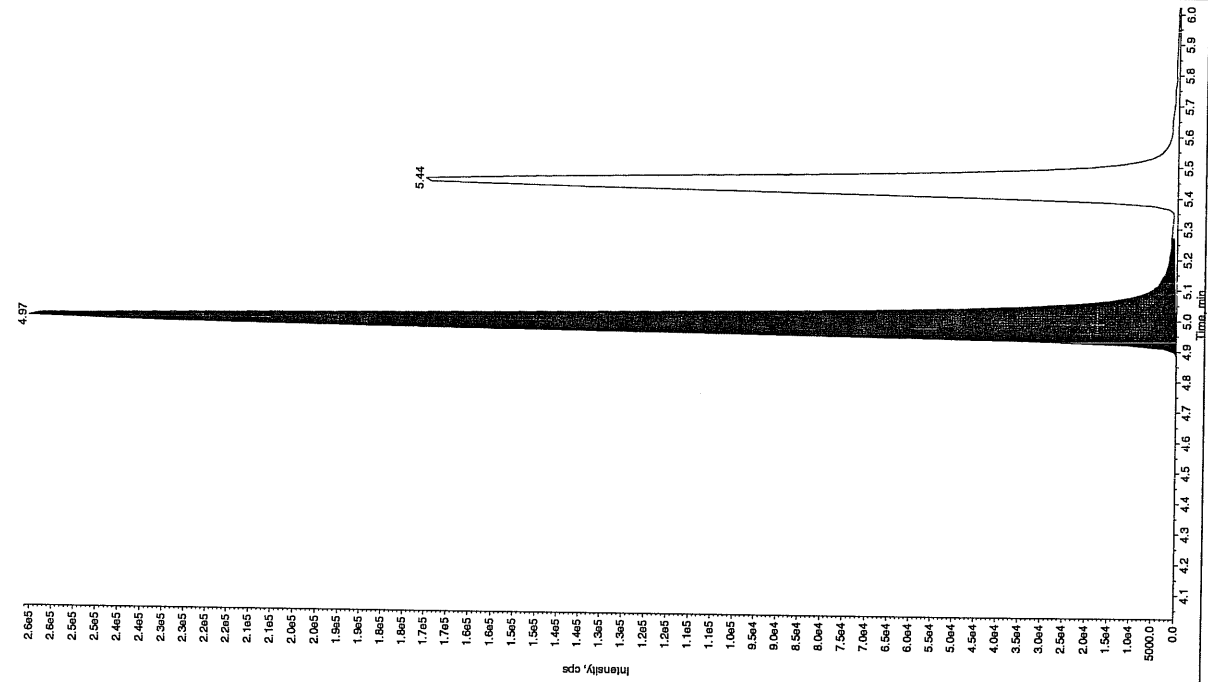
Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A ng/mL  
 Acq. Date: 3/6/2010  
 Acq. Time: 11:58:17 AM  
 Modified: Yes  
 Proc. Algorithm: IntelliQuan - IQA  
 Min. Peak Height: 2000.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 15.0 sec  
 Expected RT: 8.17 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 8.17 min  
 Area: 4.14e+006 counts  
 Height: 1135468.994 cps  
 Start Time: 8.10 min  
 End Time: 8.29 min



Jan 03/09/10

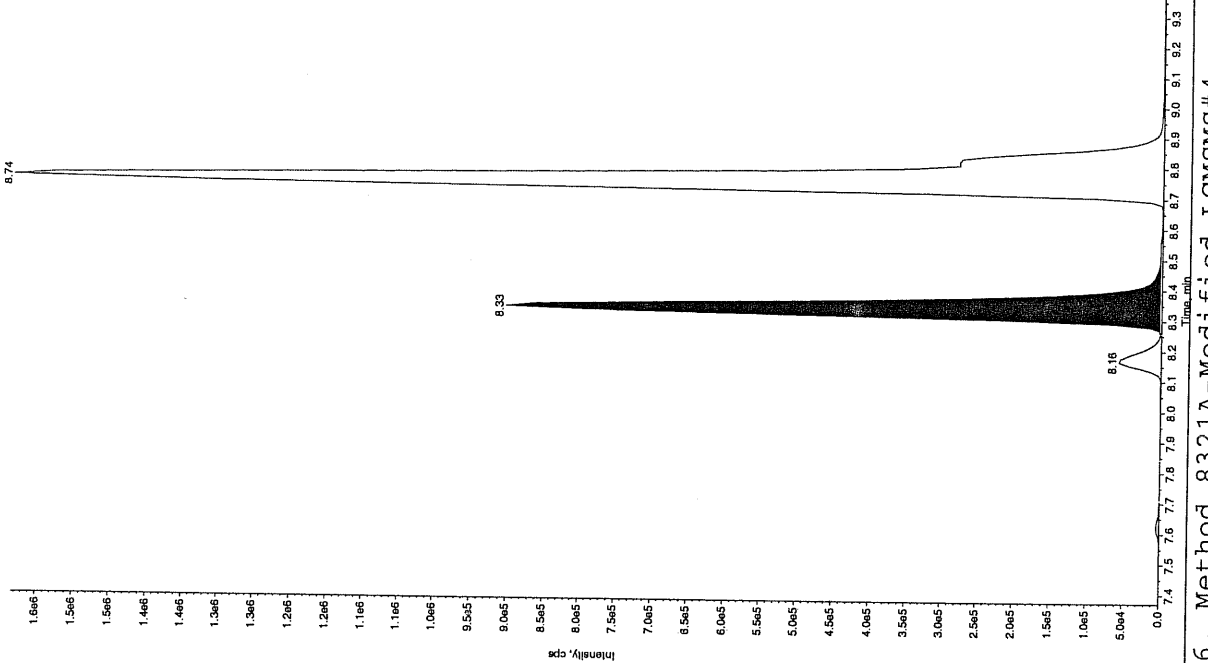
Sample Name: "1202041956" Sample ID: "95270621ER" File: "EXS03050073.wif"  
 Peak Name: "26-Diamino-4-nitrotoluene" Mass(es): "165.046.0 amu"  
 Comment: "LCX83212S" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 424 ng/mL  
 Acq. Date: 3/6/2010  
 Acq. Time: 11:58:17 AM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IQA  
 Min. Peak Height: 450.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 30.0 points  
 RT Window: 30.0 sec  
 Expected RT: 5.02 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 4.97 min  
 Area: 1.12e+006 counts  
 Height: 260865.021 cps  
 Start Time: 4.88 min  
 End Time: 5.27 min



Sample Name: "1202041956" Sample ID: "95270621ER" File: "EXS03050073.wif"  
 Peak Name: "34-Dinitrotoluene" Mass(es): "182.17151.9 amu"  
 Comment: "LCX83212S" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 245 ng/mL  
 Acq. Date: 3/6/2010  
 Acq. Time: 11:58:17 AM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IQA  
 Min. Peak Height: 1460.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 30.0 points  
 RT Window: 30.0 sec  
 Expected RT: 8.37 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 8.33 min  
 Area: 3.07e+006 counts  
 Height: 900281.250 cps  
 Start Time: 8.26 min  
 End Time: 8.51 min



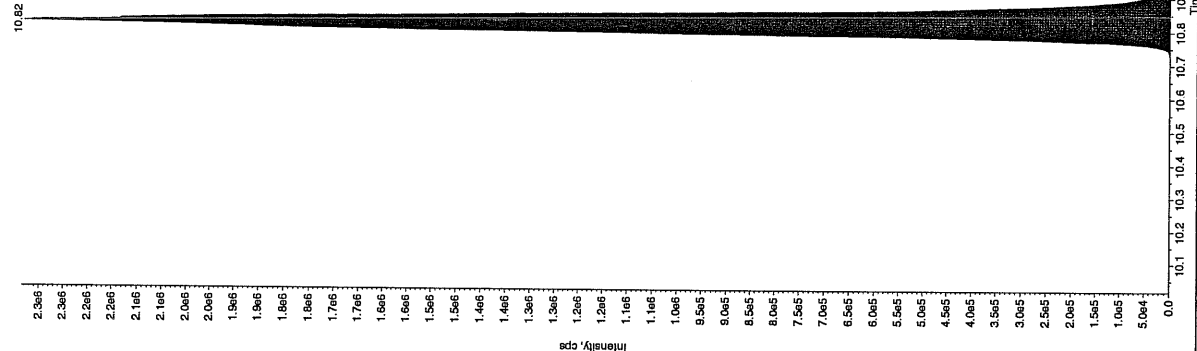
Sample Name: "1202041956" Sample ID: "95270621ER" File: "EXS03050073.wif"  
 Peak Name: "1202041956" Sample ID: "95270621ER" File: "EXS03050073.wif"  
 Comment: "LCX83212S" Annotation: ""  
 Mass(es): "359.1/91.0 amu"

Sample Index: 1

Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 372. ng/mL  
 Acq. Date: 3/6/2010  
 Acq. Time: 11:58:17 AM

Modified: No  
 Proc. Algorithm: IntelliQuan - IQA  
 Min. Peak Height: 8000.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 30.0 sec  
 Expected RT: 10.9 min  
 Use Relative RT: No

Int. Type: Valley  
 Retention Time: 10.8 min  
 Area: 8.29e+006 counts  
 Height: 2334899.414 cps  
 Start Time: 10.7 min  
 End Time: 11.2 min



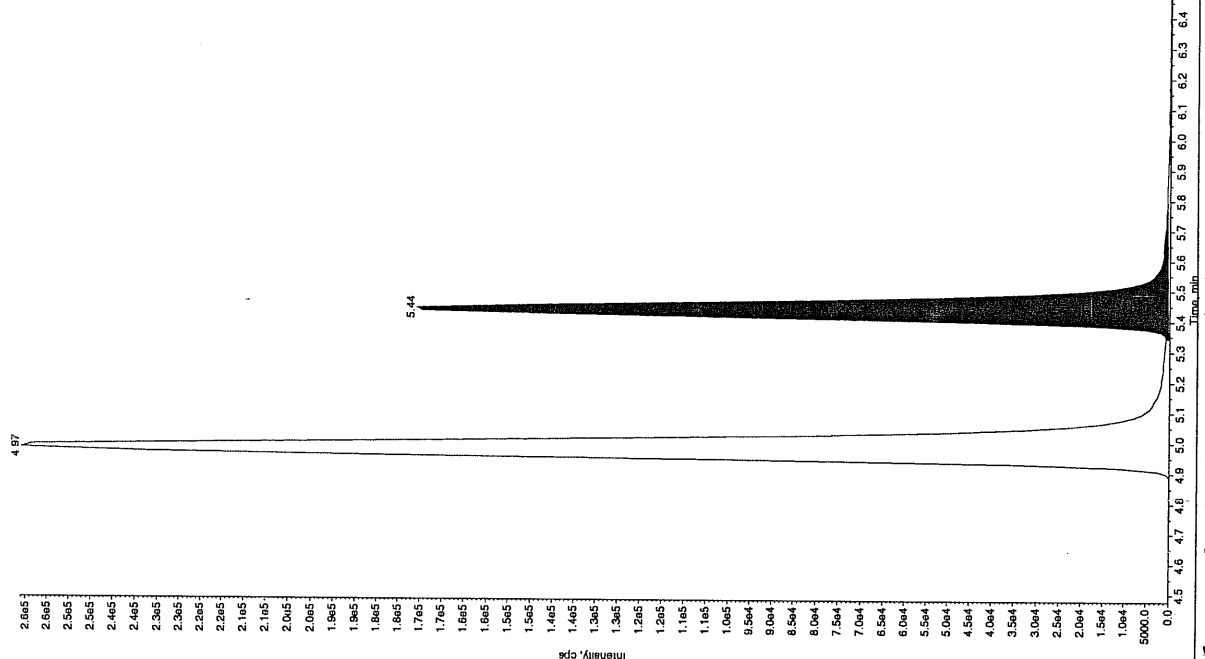
Sample Name: "1202041956" Sample ID: "95270621ER" File: "EXS03050073.wif"  
 Peak Name: "24-Diamino-6-nitrotoluene" Sample ID: "95270621ER" File: "EXS03050073.wif"  
 Comment: "LCX83212S" Annotation: ""  
 Mass(es): "166.0/46.0 amu"

Sample Index: 1

Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 372. ng/mL  
 Acq. Date: 3/6/2010  
 Acq. Time: 11:58:17 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: 5.48 min  
 Use Relative RT: No

Int. Type: Valley  
 Retention Time: 5.44 min  
 Area: 6.88e+005 counts  
 Height: 170481.583 cps  
 Start Time: 5.34 min  
 End Time: 5.79 min



EL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

# MISCELLANEOUS DATA

# Prep Logbook

## Nitroaromatics and Nitramines by High Performance Liquid Chromatography (HPLC)

Batch ID: 952704      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)
1202041953 MB	18-FEB-2010 14:24:00	2	10	5
1202041954 LCS	18-FEB-2010 14:24:00	2	10	5
246866002	18-FEB-2010 14:24:00	2	10	5
1202041955 MS (246866002)	18-FEB-2010 14:24:00	2	10	5
1202041956 MSD (246866002)	18-FEB-2010 14:24:00	2	10	5
246866003	18-FEB-2010 14:24:00	2	10	5
246866004	18-FEB-2010 14:24:00	2	10	5
246866005	18-FEB-2010 14:24:00	2	10	5
246866006	18-FEB-2010 14:24:00	2	10	5
246866007	18-FEB-2010 14:24:00	2	10	5
246866008	18-FEB-2010 14:24:00	2	10	5
246866009	18-FEB-2010 14:24:00	2	10	5

Type	Sample Id	Description	Serial Number	Spike Amt	Units	Comments:
LCS	1202041954	8321 Explosives LCS	IXX100208-03	.1	mL	Final Solvent: ACN
LCS	1202041954	8321 LANL Explosives Mix 10mg/L	UXX100210-02.2	1	mL	
MS	1202041955	8321 Explosives LCS	IXX100208-03	.1	mL	
MS	1202041955	8321 LANL Explosives Mix 10mg/L	UXX100210-02.2	1	mL	
MSD	1202041956	8321 Explosives LCS	IXX100208-03	.1	mL	
MSD	1202041956	8321 LANL Explosives Mix 10mg/L	UXX100210-02.2	1	mL	
SURR	All	3,4-Dinitrotoluene (8330 Sur.) 100ppm	IXP100215-02	.05	mL	

GEL ORGANIC RUN LOG

INSTRUMENT ID: LCMSMS#3

Date: 03/22/10

Extr. Injection Volume: 10uL

Sequence Number: 032210

Initial Calibration Date: 032210

Method: 8321A-Modified

Int. Std.: UXX1003090-01.3

Mobile Phase Lot#: 1290941, 1281642

Standard-Samp Reagent Lot#: 1284736, 1283379

Reviewed BY: *hnm*  
Date: *24/2/10*  
SOP: GL-OA-E-056 Rev.12  
Alt Check Std. ID: WXX100322-56

DataFile	Sample	Analyst	Injection Date	Batch	SDG	Dilution	Client	Comments	QC Flag
EXP0322001.wiff	XIBLK01	LER	3/22/2010 15:33			1		USE	B
EXP0322002.wiff	XIBLK01	LER	3/22/2010 15:59			1		USE	B
EXP0322003.wiff	WXXICAL-50	LER	3/22/2010 16:25			1		USE	I
EXP0322004.wiff	WXXICAL-51	LER	3/22/2010 16:52			1		USE	I
EXP0322005.wiff	WXXICAL-52	LER	3/22/2010 17:18			1		USE	I
EXP0322006.wiff	WXXICAL-53	LER	3/22/2010 17:44			1		USE	I
EXP0322007.wiff	WXXICAL-54	LER	3/22/2010 18:11			1		USE	I
EXP0322008.wiff	WXXICAL-55	LER	3/22/2010 18:37			1		USE	I
EXP0322009.wiff	XIBLK02	LER	3/22/2010 19:04			1		USE	B
EXP0322010.wiff	WXXICV	LER	3/22/2010 19:30			1		USE	C
EXP0322011.wiff	XIBLK03	LER	3/22/2010 19:56			1		USE	B
EXP0322012.wiff	WXXCRI	LER	3/22/2010 20:23			1		USE	C
EXP0322013.wiff	1202047270	LER	3/22/2010 20:49	954941	10-1886	2	LANL	USE	S
EXP0322014.wiff	1202047271	LER	3/22/2010 21:16	954941	10-1886	2	LANL	USE	S
EXP0322015.wiff	247261003	LER	3/22/2010 21:42	954941	10-1886	2	LANL	USE	S
EXP0322016.wiff	1202047272	LER	3/22/2010 22:08	954941	10-1886	2	LANL	USE	S
EXP0322017.wiff	1202047273	LER	3/22/2010 22:35	954941	10-1886	2	LANL	USE	S
EXP0322018.wiff	WXXCCV	LER	3/22/2010 23:01			1		USE	C
EXP0322019.wiff	XIBLK04	LER	3/22/2010 23:27			1		USE	B
EXP0322020.wiff	WXXCRI	LER	3/22/2010 23:54			1		USE	C
EXP0322021.wiff	1202052389	LER	3/23/2010 0:20	957192	VARIOUS	2	LANL	USE	S
EXP0322022.wiff	1202052390	LER	3/23/2010 0:47	957192	VARIOUS	2	LANL	USE	S
EXP0322023.wiff	247824003	LER	3/23/2010 1:13	957192	10-2005	2	LANL	USE	S
EXP0322024.wiff	247828003	LER	3/23/2010 1:40	957192	10-2000	2	LANL	USE	S
EXP0322025.wiff	1202052393	LER	3/23/2010 2:06	957192	10-2000	2	LANL	USE	S
EXP0322026.wiff	1202052394	LER	3/23/2010 2:32	957192	10-2000	2	LANL	USE	S
EXP0322027.wiff	247830002	LER	3/23/2010 2:59	957192	10-2007	2	LANL	DUSE-RA	S
EXP0322028.wiff	1202052391	LER	3/23/2010 3:25	957192	10-2007	2	LANL	USE	S
EXP0322029.wiff	1202052392	LER	3/23/2010 3:52	957192	10-2007	2	LANL	USE	S

EXP0322030.wiff	WXXCCV	LER	3/23/2010 4:18				1		USE	C
EXP0322031.wiff	XIBLK05	LER	3/23/2010 4:44				1		USE	B
EXP0322032.wiff	WXXCRI	LER	3/23/2010 5:11				1		USE	C
EXP0322033.wiff	1202073689	LER	3/23/2010 5:37		VARIOUS		2	LANL	USE	S
EXP0322034.wiff	1202073690	LER	3/23/2010 6:04		VARIOUS		2	LANL	USE	S
EXP0322035.wiff	249327010	LER	3/23/2010 6:30		10-2428		2	LANL	USE	S
EXP0322036.wiff	1202073691	LER	3/23/2010 6:57		10-2428		2	LANL	DUSE-RA	S
EXP0322037.wiff	1202073692	LER	3/23/2010 7:23		10-2428		2	LANL	USE	S
EXP0322038.wiff	249373002	LER	3/23/2010 7:49		10-2453		2	LANL	USE	S
EXP0322039.wiff	249375003	LER	3/23/2010 8:16		10-2445		2	LANL	USE	S
EXP0322040.wiff	249375009	LER	3/23/2010 8:42		10-2445		2	LANL	USE	S
EXP0322041.wiff	WXXCCV	LER	3/23/2010 9:09				1		USE	C
EXP0322042.wiff	XIBLK06	LER	3/23/2010 9:35				1		USE	B
EXP0322043.wiff	WXXCRI	LER	3/23/2010 10:02				1		USE	C
EXP0322044.wiff	XIBLK07	LER	3/23/2010 11:36				1		USE	B
EXP0322045.wiff	WXXCCV	LER	3/23/2010 12:02				1		USE	C
EXP0322046.wiff	XIBLK08	LER	3/23/2010 12:29				1		USE	B
EXP0322047.wiff	WXXCRI	LER	3/23/2010 12:55				1		USE	C
EXP0322048.wiff	1202041953	LER	3/23/2010 13:22		10-1758	952706	2	LANL	USE	S
EXP0322049.wiff	1202041954	LER	3/23/2010 13:48		10-1758	952706	2	LANL	DUSE-RA	S
EXP0322050.wiff	246866002	LER	3/23/2010 14:14		10-1758	952706	2	LANL	USE	S
EXP0322051.wiff	1202041955	LER	3/23/2010 14:41		10-1758	952706	2	LANL	USE	S
EXP0322052.wiff	1202041956	LER	3/23/2010 15:07		10-1758	952706	2	LANL	USE	S
EXP0322053.wiff	246866003	LER	3/23/2010 15:33		10-1758	952706	2	LANL	USE	S
EXP0322054.wiff	246866004	LER	3/23/2010 16:00		10-1758	952706	2	LANL	USE	S
EXP0322055.wiff	246866005	LER	3/23/2010 16:26		10-1758	952706	2	LANL	USE	S
EXP0322056.wiff	246866006	LER	3/23/2010 16:53		10-1758	952706	2	LANL	USE	S
EXP0322057.wiff	246866007	LER	3/23/2010 17:19		10-1758	952706	2	LANL	USE	S
EXP0322058.wiff	WXXCCV	LER	3/23/2010 17:46				1		USE	C
EXP0322059.wiff	XIBLK09	LER	3/23/2010 18:12				1		USE	B
EXP0322060.wiff	WXXCRI	LER	3/23/2010 18:39				1		USE	C
EXP0322061.wiff	246866008	LER	3/23/2010 19:05		10-1758	952706	2	LANL	USE	S
EXP0322062.wiff	246866009	LER	3/23/2010 19:31		10-1758	952706	2	LANL	USE	S
EXP0322063.wiff	WXXCCV	LER	3/23/2010 19:58				1		USE	C
EXP0322064.wiff	XIBLK10	LER	3/23/2010 20:24				1		USE	B
EXP0322065.wiff	WXXCRI	LER	3/23/2010 20:51				1		USE	C
EXP0322066.wiff	1202045643	LER	3/23/2010 21:17		VARIOUS	954271	2	LANL	DUSE-RA	S



EXP0322067.wiff	1202045644	LER	3/23/2010 21:43	954271	VARIOUS	2	LANL	DUSE-RA	S
EXP0322068.wiff	247172001	LER	3/23/2010 22:10	954271	10-1866	2	LANL	DUSE-RA	S
EXP0322069.wiff	247172002	LER	3/23/2010 22:36	954271	10-1866	2	LANL	DUSE-RA	S
EXP0322070.wiff	247175001	LER	3/23/2010 23:03	954271	10-1870-1	2	LANL	DUSE-RA	S
EXP0322071.wiff	247175002	LER	3/23/2010 23:29	954271	10-1870-1	2	LANL	DUSE-RA	S
EXP0322072.wiff	247175003	LER	3/23/2010 23:56	954271	10-1870-1	2	LANL	DUSE-RA	S
EXP0322073.wiff	247175004	LER	3/24/2010 0:22	954271	10-1870-1	2	LANL	DUSE-RA	S
EXP0322074.wiff	247175005	LER	3/24/2010 0:48	954271	10-1870-1	2	LANL	DUSE-RA	S
EXP0322075.wiff	247175006	LER	3/24/2010 1:15	954271	10-1870-1	2	LANL	DUSE-RA	S
EXP0322076.wiff	WXXCCV	LER	3/24/2010 1:41			1		DUSE	C
EXP0322077.wiff	XIBLK11	LER	3/24/2010 2:08			1		DUSE	B
EXP0322078.wiff	WXXCRI	LER	3/24/2010 2:34			1		DUSE	C
EXP0322079.wiff	247175007	LER	3/24/2010 3:01	954271	10-1870-1	2	LANL	DUSE-RA	S
EXP0322080.wiff	247175008	LER	3/24/2010 3:27	954271	10-1870-1	2	LANL	DUSE-RA	S
EXP0322081.wiff	247175009	LER	3/24/2010 3:54	954271	10-1870-1	2	LANL	DUSE-RA	S
EXP0322082.wiff	247175010	LER	3/24/2010 4:20	954271	10-1870-1	2	LANL	DUSE-RA	S
EXP0322083.wiff	247181001	LER	3/24/2010 4:46	954271	10-1871-1	2	LANL	DUSE-RA	S
EXP0322084.wiff	247181002	LER	3/24/2010 5:13	954271	10-1871-1	2	LANL	DUSE-RA	S
EXP0322085.wiff	247187001	LER	3/24/2010 5:39	954271	10-1867	2	LANL	DUSE-RA	S
EXP0322086.wiff	247187002	LER	3/24/2010 6:06	954271	10-1867	2	LANL	DUSE-RA	S
EXP0322087.wiff	247187003	LER	3/24/2010 6:32	954271	10-1867	2	LANL	DUSE-RA	S
EXP0322088.wiff	WXXCCV	LER	3/24/2010 6:59			1		DUSE	C
EXP0322089.wiff	XIBLK12	LER	3/24/2010 7:25			1		DUSE	B
EXP0322090.wiff	WXXCRI	LER	3/24/2010 7:52			1		DUSE	C

GEL ORGANIC RUN LOG

INSTRUMENT ID: LCMSMS#3

Date: 03/30/10  
 Extr. Injection Volume: 10ul  
 Sequence Number: 033010  
 Initial Calibration Date: 033010  
 Method: 8321A-Modified  
 Int. Std.: UXX1003090-01.4  
 Mobile Phase Lot#:1290941, 1289686  
 Standard-Samp Reagent Lot#:1284736, 1292884  
 Reviewed By: *dhm*  
 Date: *04/02/10*  
 SOP: GL-OA-E-056 Rev.12  
 Alt Check Std. ID: WXX100330-56

DataFile	Sample	Analyst	Injection Date	Batch	SDG	Dilution	Client	Comments	QC Flag
EXP0330001.wiff	XIBLK01	LER	3/30/2010 8:37			1		USE	B
EXP0330002.wiff	XIBLK01	LER	3/30/2010 9:03			1		USE	B
EXP0330003.wiff	WXXICAL-50	LER	3/30/2010 9:29			1		USE	I
EXP0330004.wiff	WXXICAL-51	LER	3/30/2010 9:56			1		USE	I
EXP0330005.wiff	WXXICAL-52	LER	3/30/2010 10:22			1		USE	I
EXP0330006.wiff	WXXICAL-53	LER	3/30/2010 10:48			1		USE	I
EXP0330007.wiff	WXXICAL-54	LER	3/30/2010 11:15			1		USE	I
EXP0330008.wiff	WXXICAL-55	LER	3/30/2010 11:41			1		USE	I
EXP0330009.wiff	XIBLK02	LER	3/30/2010 12:08			1		USE	B
EXP0330010.wiff	WXXICV	LER	3/30/2010 12:34			1		USE	C
EXP0330011.wiff	XIBLK03	LER	3/30/2010 13:00			1		USE	B
EXP0330012.wiff	WXXCRI	LER	3/30/2010 13:27			1		USE	C
EXP0330013.wiff	247830002	LER	3/30/2010 13:53	957192	10-2007	2	LANL	DUSE	S
EXP0330014.wiff	1202073691	LER	3/30/2010 14:20	966289	10-2428	2	LANL	USE	S
EXP0330015.wiff	1202041954	LER	3/30/2010 14:46	952706	10-1758	2	LANL	USE	S
EXP0330016.wiff	XIBLK04	LER	3/30/2010 15:12			1		USE	B
EXP0330017.wiff	1202045748	LER	3/30/2010 15:39	954328	10-1864	2	LANL	USE	S
EXP0330018.wiff	1202045749	LER	3/30/2010 16:05	954328	10-1864	2	LANL	USE	S
EXP0330019.wiff	247193001	LER	3/30/2010 16:32	954328	10-1864	2	LANL	USE	S
EXP0330020.wiff	1202045750	LER	3/30/2010 16:58	954328	10-1864	2	LANL	USE	S
EXP0330021.wiff	1202045751	LER	3/30/2010 17:25	954328	10-1864	2	LANL	USE	S
EXP0330022.wiff	247193002	LER	3/30/2010 17:51	954328	10-1864	2	LANL	USE	S
EXP0330023.wiff	WXXCCV	LER	3/30/2010 18:17			1		USE	C
EXP0330024.wiff	XIBLK05	LER	3/30/2010 18:44			1		USE	B
EXP0330025.wiff	WXXCRI	LER	3/30/2010 19:10			1		USE	C
EXP0330026.wiff	247193003	LER	3/30/2010 19:37	954328	10-1864	2	LANL	USE	S
EXP0330027.wiff	247193004	LER	3/30/2010 20:03	954328	10-1864	2	LANL	USE	S
EXP0330028.wiff	247193005	LER	3/30/2010 20:29	954328	10-1864	2	LANL	USE	S
EXP0330029.wiff	247193006	LER	3/30/2010 20:56	954328	10-1864	2	LANL	USE	S

EXP0330030.wiff	247193007	LER	3/30/2010 21:22	954328	10-1864	2	LANL	USE	S
EXP0330031.wiff	247193008	LER	3/30/2010 21:49	954328	10-1864	2	LANL	USE	S
EXP0330032.wiff	247193009	LER	3/30/2010 22:15	954328	10-1864	2	LANL	USE	S
EXP0330033.wiff	247193010	LER	3/30/2010 22:41	954328	10-1864	2	LANL	USE	S
EXP0330034.wiff	247193011	LER	3/30/2010 23:08	954328	10-1864	2	LANL	USE	S
EXP0330035.wiff	247193012	LER	3/30/2010 23:34	954328	10-1864	2	LANL	USE	S
EXP0330036.wiff	WXXCCV	LER	3/31/2010 0:01			1		USE	C
EXP0330037.wiff	XIBLK06	LER	3/31/2010 0:27			1		USE	B
EXP0330038.wiff	WXXCRI	LER	3/31/2010 0:53			1		USE	C
EXP0330039.wiff	247193013	LER	3/31/2010 1:20	954328	10-1864	2	LANL	DUSE-RA	S
EXP0330040.wiff	247193014	LER	3/31/2010 1:46	954328	10-1864	2	LANL	DUSE-RA	S
EXP0330041.wiff	XIBLK07	LER	3/31/2010 2:13			1		DUSE	B
EXP0330042.wiff	1202045643	LER	3/31/2010 2:39	954271	VARIOUS	2	LANL	DUSE-RA	S
EXP0330043.wiff	1202045644	LER	3/31/2010 3:05	954271	VARIOUS	2	LANL	DUSE-RA	S
EXP0330044.wiff	247172001	LER	3/31/2010 3:32	954271	10-1866	2	LANL	DUSE-RA	S
EXP0330045.wiff	247172002	LER	3/31/2010 3:58	954271	10-1866	2	LANL	DUSE-RA	S
EXP0330046.wiff	247175001	LER	3/31/2010 4:24	954271	10-1870-1	2	LANL	DUSE-RA	S
EXP0330047.wiff	247175002	LER	3/31/2010 4:51	954271	10-1870-1	2	LANL	DUSE-RA	S
EXP0330048.wiff	247175003	LER	3/31/2010 5:17	954271	10-1870-1	2	LANL	DUSE-RA	S
EXP0330049.wiff	WXXCCV	LER	3/31/2010 5:44			1		DUSE	C
EXP0330050.wiff	XIBLK08	LER	3/31/2010 6:10			1		DUSE	B
EXP0330051.wiff	WXXCRI	LER	3/31/2010 6:36			1		DUSE	C
EXP0330052.wiff	247175004	LER	3/31/2010 7:03	954271	10-1870-1	2	LANL	DUSE-RA	S
EXP0330053.wiff	247175005	LER	3/31/2010 7:29	954271	10-1870-1	2	LANL	DUSE-RA	S
EXP0330054.wiff	247175006	LER	3/31/2010 7:56	954271	10-1870-1	2	LANL	DUSE-RA	S
EXP0330055.wiff	XIBLK09	LER	3/31/2010 8:22			1		DUSE	B
EXP0330056.wiff	1202045806	LER	3/31/2010 8:49	954365	10-1872	2	LANL	DUSE-RA	S
EXP0330057.wiff	1202045807	LER	3/31/2010 9:15	954365	10-1872	2	LANL	DUSE-RA	S
EXP0330058.wiff	247200001	LER	3/31/2010 9:42	954365	10-1872	2	LANL	DUSE-RA	S
EXP0330059.wiff	1202045808	LER	3/31/2010 10:08	954365	10-1872	2	LANL	DUSE-RA	S
EXP0330060.wiff	1202045809	LER	3/31/2010 10:35	954365	10-1872	2	LANL	DUSE-RA	S
EXP0330061.wiff	247200002	LER	3/31/2010 11:01	954365	10-1872	2	LANL	DUSE-RA	S
EXP0330062.wiff	WXXCCV	LER	3/31/2010 11:27			1		DUSE	C
EXP0330063.wiff	XIBLK10	LER	3/31/2010 11:54			1		DUSE	B
EXP0330064.wiff	WXXCRI	LER	3/31/2010 12:20			1		DUSE	C

GEL ORGANIC RUN LOG INSTRUMENT ID: LCMSMS4

Date: 03/05/10  
 Extr. Injection Volume: 10uL  
 Sequence Number: 030510exs  
 Initial Calibration Date: 030510  
 Method: 8321A-Modified  
 Int. Std.: N/A  
 Mobile Phase Lot#: 1268566, 1268568  
 Standard-Samp Reagent Lot#: 1274562, 1261217  
 Reviewed By: *John*  
 Date: *03/09/10*  
 SOP: GL-OA-E-056 Rev.12  
 Alt Check Std. ID: WXX100305-26

DataFile	Sample	Analyst	Injection Date	Batch	SDG	Dilution	Client	Comments	QC Flag
EXS03050001.wiff	XIBLK01	LER	3/5/2010 17:07			1		USE	B
EXS03050002.wiff	XIBLK01	LER	3/5/2010 17:23			1		USE	B
EXS03050003.wiff	WXXICAL-19	LER	3/5/2010 17:39			1		USE	I
EXS03050004.wiff	WXXICAL-20	LER	3/5/2010 17:54			1		USE	I
EXS03050005.wiff	WXXICAL-21	LER	3/5/2010 18:10			1		USE	I
EXS03050006.wiff	WXXICAL-22	LER	3/5/2010 18:26			1		USE	I
EXS03050007.wiff	WXXICAL-23	LER	3/5/2010 18:41			1		USE	I
EXS03050008.wiff	WXXICAL-24	LER	3/5/2010 18:57			1		USE	I
EXS03050009.wiff	WXXICAL-25	LER	3/5/2010 19:13			1		USE	I
EXS03050010.wiff	XIBLK02	LER	3/5/2010 19:29			1		USE	B
EXS03050011.wiff	WXXICV	LER	3/5/2010 19:44			1		USE	C
EXS03050012.wiff	XIBLK03	LER	3/5/2010 20:00			1		USE	B
EXS03050013.wiff	WXXCRI	LER	3/5/2010 20:16			1		USE	C
EXS03050014.wiff	1202045735	LER	3/5/2010 20:31	954321	VARIOUS	2	LANL	USE	S
EXS03050015.wiff	1202045736	LER	3/5/2010 20:47	954321	VARIOUS	2	LANL	USE	S
EXS03050016.wiff	247126001	LER	3/5/2010 21:03	954321	10-1849	2	LANL	USE	S
EXS03050017.wiff	1202045737	LER	3/5/2010 21:18	954321	10-1849	2	LANL	USE	S
EXS03050018.wiff	1202045738	LER	3/5/2010 21:34	954321	10-1849	2	LANL	USE	S
EXS03050019.wiff	247126002	LER	3/5/2010 21:50	954321	10-1849	2	LANL	USE	S
EXS03050020.wiff	247126003	LER	3/5/2010 22:05	954321	10-1849	2	LANL	USE	S
EXS03050021.wiff	247178001	LER	3/5/2010 22:21	954321	10-1861	2	LANL	USE	S
EXS03050022.wiff	247178002	LER	3/5/2010 22:37	954321	10-1861	2	LANL	USE	S
EXS03050023.wiff	247178003	LER	3/5/2010 22:53	954321	10-1861	2	LANL	USE	S
EXS03050024.wiff	WXXCCV	LER	3/5/2010 23:08			1		USE	C
EXS03050025.wiff	XIBLK04	LER	3/5/2010 23:24			1		USE	B
EXS03050026.wiff	WXXCRI	LER	3/5/2010 23:40			1		USE	C
EXS03050027.wiff	247178004	LER	3/5/2010 23:55	954321	10-1861	2	LANL	USE	S
EXS03050028.wiff	247178005	LER	3/6/2010 0:11	954321	10-1861	2	LANL	USE	S
EXS03050029.wiff	247178006	LER	3/6/2010 0:27	954321	10-1861	2	LANL	USE	S
EXS03050030.wiff	247178007	LER	3/6/2010 0:42	954321	10-1861	2	LANL	USE	S

EXS03050031.wiff	247178008	LER	3/6/2010 0:58	954321	10-1861	2	LANL	USE	S
EXS03050032.wiff	247178009	LER	3/6/2010 1:14	954321	10-1861	2	LANL	USE	S
EXS03050033.wiff	247178010	LER	3/6/2010 1:30	954321	10-1861	2	LANL	USE	S
EXS03050034.wiff	247178011	LER	3/6/2010 1:45	954321	10-1861	2	LANL	USE	S
EXS03050035.wiff	WXXCCV	LER	3/6/2010 2:01			1		USE	C
EXS03050036.wiff	XIBLK05	LER	3/6/2010 2:17			1		USE	B
EXS03050037.wiff	WXXCRI	LER	3/6/2010 2:32			1		USE	C
EXS03050038.wiff	1202052406	LER	3/6/2010 2:48	957200	VARIOUS	2	LANL	USE	S
EXS03050039.wiff	1202052407	LER	3/6/2010 3:04	957200	VARIOUS	2	LANL	USE	S
EXS03050040.wiff	247784002	LER	3/6/2010 3:19	957200	10-1979	2	LANL	USE	S
EXS03050041.wiff	247790002	LER	3/6/2010 3:35	957200	10-1981	2	LANL	USE	S
EXS03050042.wiff	247790003	LER	3/6/2010 3:51	957200	10-1981	2	LANL	USE	S
EXS03050043.wiff	247791002	LER	3/6/2010 4:07	957200	10-1982	2	LANL	USE	S
EXS03050044.wiff	247791003	LER	3/6/2010 4:22	957200	10-1982	2	LANL	USE	S
EXS03050045.wiff	247791004	LER	3/6/2010 4:38	957200	10-1982	2	LANL	USE	S
EXS03050046.wiff	247791005	LER	3/6/2010 4:54	957200	10-1982	2	LANL	USE	S
EXS03050047.wiff	247791006	LER	3/6/2010 5:09	957200	10-1982	2	LANL	USE	S
EXS03050048.wiff	WXXCCV	LER	3/6/2010 5:25			1		USE	C
EXS03050049.wiff	XIBLK06	LER	3/6/2010 5:41			1		USE	B
EXS03050050.wiff	WXXCRI	LER	3/6/2010 5:56			1		USE	C
EXS03050051.wiff	247799001	LER	3/6/2010 6:12	957200	10-1990	2	LANL	USE	S
EXS03050052.wiff	1202052408	LER	3/6/2010 6:28	957200	10-1990	2	LANL	USE	S
EXS03050053.wiff	1202052409	LER	3/6/2010 6:44	957200	10-1990	2	LANL	USE	S
EXS03050054.wiff	247799002	LER	3/6/2010 6:59	957200	10-1990	2	LANL	USE	S
EXS03050055.wiff	247799003	LER	3/6/2010 7:15	957200	10-1990	2	LANL	USE	S
EXS03050056.wiff	247799004	LER	3/6/2010 7:31	957200	10-1990	2	LANL	USE	S
EXS03050057.wiff	247799005	LER	3/6/2010 7:46	957200	10-1990	2	LANL	USE	S
EXS03050058.wiff	247799006	LER	3/6/2010 8:02	957200	10-1990	2	LANL	USE	S
EXS03050059.wiff	247799007	LER	3/6/2010 8:18	957200	10-1990	2	LANL	USE	S
EXS03050060.wiff	WXXCCV	LER	3/6/2010 8:34			1		USE	C
EXS03050061.wiff	XIBLK07	LER	3/6/2010 8:49			1		USE	B
EXS03050062.wiff	WXXCRI	LER	3/6/2010 9:05			1		USE	C
EXS03050063.wiff	247799008	LER	3/6/2010 9:21	957200	10-1990	2	LANL	USE	S
EXS03050064.wiff	247799009	LER	3/6/2010 9:36	957200	10-1990	2	LANL	USE	S
EXS03050065.wiff	247799010	LER	3/6/2010 9:52	957200	10-1990	2	LANL	USE	S
EXS03050066.wiff	WXXCCV	LER	3/6/2010 10:08			1		USE	C
EXS03050067.wiff	XIBLK08	LER	3/6/2010 10:23			1		USE	B

EXS03050068.wiff	WXXCRI	LER	3/6/2010 10:39	952706	10-1758	1	USE
EXS03050069.wiff	1202041953	LER	3/6/2010 10:55	952706	10-1758	2	USE
EXS03050070.wiff	1202041954	LER	3/6/2010 11:11	952706	10-1758	2	USE
EXS03050071.wiff	246866002	LER	3/6/2010 11:26	952706	10-1758	2	USE
EXS03050072.wiff	1202041955	LER	3/6/2010 11:42	952706	10-1758	2	USE
EXS03050073.wiff	1202041956	LER	3/6/2010 11:58	952706	10-1758	2	USE
EXS03050074.wiff	246866003	LER	3/6/2010 12:14	952706	10-1758	2	USE
EXS03050075.wiff	246866004	LER	3/6/2010 12:29	952706	10-1758	2	USE
EXS03050076.wiff	246866005	LER	3/6/2010 12:45	952706	10-1758	2	USE
EXS03050077.wiff	246866006	LER	3/6/2010 13:01	952706	10-1758	2	USE
EXS03050078.wiff	246866007	LER	3/6/2010 13:16	952706	10-1758	2	USE
EXS03050079.wiff	WXXCCV	LER	3/6/2010 13:32			1	USE
EXS03050080.wiff	XIBLK09	LER	3/6/2010 13:48			1	USE
EXS03050081.wiff	WXXCRI	LER	3/6/2010 14:03			1	USE
EXS03050082.wiff	246866008	LER	3/6/2010 14:19	952706	10-1758	2	USE
EXS03050083.wiff	246866009	LER	3/6/2010 14:35	952706	10-1758	2	USE
EXS03050084.wiff	WXXCCV	LER	3/6/2010 14:50			1	USE
EXS03050085.wiff	XIBLK10	LER	3/6/2010 15:06			1	USE
EXS03050086.wiff	WXXCRI	LER	3/6/2010 15:22			1	USE
EXS03050087.wiff	1202055082	LER	3/6/2010 15:38	958286	VARIOUS	2	USE
EXS03050088.wiff	1202055083	LER	3/6/2010 15:53	958286	VARIOUS	2	USE
EXS03050089.wiff	248040007	LER	3/6/2010 16:09	958286	10-2051	2	USE
EXS03050090.wiff	1202055084	LER	3/6/2010 16:25	958286	10-2051	2	USE
EXS03050091.wiff	1202055085	LER	3/6/2010 16:40	958286	10-2051	2	USE
EXS03050092.wiff	248259006	LER	3/6/2010 16:56	958286	10-2148	2	USE
EXS03050093.wiff	WXXCCV	LER	3/6/2010 17:12			1	USE
EXS03050094.wiff	XIBLK11	LER	3/6/2010 17:28			1	USE
EXS03050095.wiff	WXXCRI	LER	3/6/2010 17:43			1	USE
EXS03050096.wiff	UXX100210-02.4	LER	3/6/2010 17:59	SCREEN	SOLID	2	USE
EXS03050097.wiff	XIBLK12	LER	3/6/2010 18:15			1	USE
EXS03050098.wiff	1202047529	LER	3/6/2010 18:30	955065	VARIOUS	2	USE
EXS03050099.wiff	1202047530	LER	3/6/2010 18:46	955065	VARIOUS	2	USE
EXS03050100.wiff	247327002	LER	3/6/2010 19:02	955065	10-1898	2	USE
EXS03050101.wiff	1202047531	LER	3/6/2010 19:17	955065	10-1898	2	USE
EXS03050102.wiff	1202047532	LER	3/6/2010 19:33	955065	10-1898	2	USE
EXS03050103.wiff	247346001	LER	3/6/2010 19:49	955065	10-1911	2	USE
EXS03050104.wiff	247346002	LER	3/6/2010 20:04	955065	10-1911	2	USE

EXS03050105.wiff	247346003	LER	3/6/2010 20:20	955065	10-1911	2	LANL	USE	S
EXS03050106.wiff	WXXCVC	LER	3/6/2010 20:36			1		USE	C
EXS03050107.wiff	XIBLK13	LER	3/6/2010 20:52			1		USE	B
EXS03050108.wiff	WXXCRI	LER	3/6/2010 21:07			1		USE	C
EXS03050109.wiff	247346004	LER	3/6/2010 21:23	955065	10-1911	2	LANL	USE	S
EXS03050110.wiff	247346005	LER	3/6/2010 21:39	955065	10-1911	2	LANL	USE	S
EXS03050111.wiff	247346006	LER	3/6/2010 21:54	955065	10-1911	2	LANL	USE	S
EXS03050112.wiff	247346007	LER	3/6/2010 22:10	955065	10-1911	2	LANL	USE	S
EXS03050113.wiff	247346008	LER	3/6/2010 22:26	955065	10-1911	2	LANL	USE	S
EXS03050114.wiff	247358001	LER	3/6/2010 22:41	955065	10-1914	2	LANL	USE	S
EXS03050115.wiff	247358002	LER	3/6/2010 22:57	955065	10-1914	2	LANL	USE	S
EXS03050116.wiff	247358003	LER	3/6/2010 23:13	955065	10-1914	2	LANL	USE	S
EXS03050117.wiff	247358004	LER	3/6/2010 23:29	955065	10-1914	2	LANL	USE	S
EXS03050118.wiff	WXXCVC	LER	3/6/2010 23:44			1		USE	C
EXS03050119.wiff	XIBLK14	LER	3/7/2010 0:00			1		USE	B
EXS03050120.wiff	WXXCRI	LER	3/7/2010 0:16			1		USE	C

GEL Laboratories LLC  
Form GEL-DER

DER Report No.: 813179

Revision No.: 2

### DATA EXCEPTION REPORT

<b>Mo.Day Yr.</b> 02-APR-10	<b>Division:</b> Industrial	<b>Quality Criteria:</b> Specifications	<b>Type:</b> Process
<b>Instrument Type:</b> LC-MS/MS	<b>Test / Method:</b> SW846 8321A Modified	<b>Matrix Type:</b> Solid	<b>Client Code:</b> LANL
<b>Batch ID:</b> 952706	<b>Sample Numbers:</b> See Below		
<b>Potentially affected work order(s)(SDG): 246866(10-1758)</b> <b>Application Issues:</b> Failed Recovery for MSD/PSD Failed Recovery for MS/PS			
<b>Specification and Requirements</b> <b>Exception Description:</b>		<b>DER Disposition:</b>	
1. The MS(1202041955) did not meet acceptance criteria for the recovery of 2,6-Dinitrotoluene at 89% with limits of 90-118% and for the recovery of TATB at 212% with limits of 29-155%.  2. The MSD(1202041956) did not meet acceptance criteria for the recovery of 2,6-Dinitrotoluene at 85.8% with limits of 90-118%, for the recovery of 2-Amino-4,6-dinitrotoluene at 83% with limits of 85-137% and for the recovery of TATB at 172% with limits of 29-155%.		1. The MSD(1202041956) confirmed the failures at 85.8% for 2,6-Dinitrotoluene and 172% for TATB. The failures may be attributed to matrix interference in the samples. Target analytes were not detected in the parent sample(246866002). The data are reported.  2. The MS(1202041955) confirmed the failures at 89% for 2,6-Dinitrotoluene and 212% for TATB. The failures may be attributed to matrix interference in the samples. Target analytes were not detected in the parent sample(246866002). The data are reported.	

**Originator's Name:**

Lynne Russell

02-APR-10

**Data Validator/Group Leader:**

Herbert Maier

05-APR-10



# GC SEMIVOLATILE PCB ANALYSIS

**PCB Case Narrative  
Los Alamos National Laboratory (LANL)  
SDG 10-1758**

**Method/Analysis Information**

**Procedure:** Analysis of Polychlorinated Biphenyls by ECD  
**Analytical Method:** SW846 8082  
**Prep Method:** SW846 3550B  
**Analytical Batch Number:** 953960  
**Prep Batch Number:** 953958

**Sample Analysis**

The following samples were analyzed using the analytical protocol as established in SW846 8082:

<b>Sample ID</b>	<b>Client ID</b>
246866007	RE15-10-8340
246866008	RE15-10-8341
246866009	RE15-10-8376
1202045061	Method Blank (MB)
1202045062	Laboratory Control Sample (LCS)
1202045063	246866007(RE15-10-8340) Matrix Spike (MS)
1202045064	246866007(RE15-10-8340) 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.

## **Quality Control (QC) Information**

### **Method Blank (MB) Statement**

The MB(s) analyzed with this SDG met the acceptance criteria.

### **Surrogate Recoveries**

All surrogate recoveries were within the established acceptance criteria for this SDG.

### **Laboratory Control Sample (LCS) Recovery**

The LCS spike recoveries met the acceptance limits.

### **QC Sample Designation**

Sample 246866007 (RE15-10-8340) was selected for the matrix spike and matrix spike duplicate analysis.

### **Matrix Spike (MS) Recovery Statement**

The MS recoveries for this SDG were within the established acceptance limits.

### **Matrix Spike Duplicate (MSD) Recovery Statement**

The MSD recoveries for this SDG 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.

## **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.

### **Sample Dilutions**

The samples in this SDG did not require dilutions.

### **Sample Re-extraction/Re-analysis**

Re-extractions or re-analyses were not required in this SDG.

## **Miscellaneous Information**

### **Electronic Package Comment**

The following package was generated using an electronic data processing program referred to as "virtual packaging". In an effort to increase quality and efficiency, the laboratory is developing systems to eventually generate all data packages electronically. The following change from "traditional" packages should be noted:

Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. An electronic signature page inserted after the case narrative of each electronic package will indicate the analyst, reviewer, and report specialist names associated with the generation of the data and package. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

### **Data Exception (DER) Documentation**

Data exception 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 for the MS and MSD are from the same analytical column as the parent sample.

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:

<b>Instrument ID</b>	<b>Instrument</b>	<b>System Configuration</b>	<b>Column ID</b>	<b>Column Description</b>
ECD8A.I_1	HP Gas Chromatograph	HP6890 Series ECD	Rtx-CLP I	30m x 0.25mm, 0.25um (Rtx-CLPesticide I)
ECD8A.I_2	HP Gas Chromatograph	HP6890 Series ECD	Rtx-CLP II	30m x 0.25mm, 0.20um (Rtx-CLPesticide II)

### **Certification Statement**

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

**Review Validation**

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

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

Reviewer: Amy Whitlock

Date: 3-9-2010

## Roadmap for LANL 10-1758 PCB

This roadmap was analyzed by jen01212 on 02-19-2010, 10:57.

This roadmap was reviewed by rob01090 on 02-22-2010, 18:33.

This roadmap was packaged by yml on 03-09-2010, 16:51.

Front Sample Column

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	prebatchid	comment
<input type="checkbox"/>	N	/chem/ecd8a.i/021810.b/051f5101.d	246866007	sample	18-FEB-2010	16:26	10-1758.sub	RE15-10-8340	1.00000	953960	UPLOAD BOTH, USE HIGHER
<input type="checkbox"/>	N	/chem/ecd8a.i/021810.b/054f5401.d	246866008	sample	18-FEB-2010	17:04	10-1758.sub	RE15-10-8341	1.00000	953960	UPLOAD BOTH, USE HIGHER
<input type="checkbox"/>	N	/chem/ecd8a.i/021810.b/055f5501.d	246866009	sample	18-FEB-2010	17:16	10-1758.sub	RE15-10-8376	1.00000	953960	UPLOAD BOTH, USE HIGHER

Back Sample Column

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	prebatchid	comment
<input type="checkbox"/>	N	/chem/ecd8a.i/021810.b/051b5101.d	246866007	sample	18-FEB-2010	16:26	10-1758.sub	RE15-10-8340	1.00000	953960	UPLOAD BOTH, USE HIGHER
<input type="checkbox"/>	N	/chem/ecd8a.i/021810.b/054b5401.d	246866008	sample	18-FEB-2010	17:04	10-1758.sub	RE15-10-8341	1.00000	953960	UPLOAD BOTH, USE HIGHER
<input type="checkbox"/>	N	/chem/ecd8a.i/021810.b/055b5501.d	246866009	sample	18-FEB-2010	17:16	10-1758.sub	RE15-10-8376	1.00000	953960	UPLOAD BOTH, USE HIGHER

Front QC Sample Column

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	prebatchid	comment
<input type="checkbox"/>	N	/chem/ecd8a.i/021810.b/036f3601-1.d	1202045061	mb	18-FEB-2010	13:21	10-1758.sub	PBLK01	1.00000	953960	
<input type="checkbox"/>	N	/chem/ecd8a.i/021810.b/037f3701-1.d	1202045062	lcs	18-FEB-2010	13:33	10-1758.sub	PBLK01LCS	1.00000	953960	
<input type="checkbox"/>	N	/chem/ecd8a.i/021810.b/052f5201.d	1202045063	ms	18-FEB-2010	16:39	10-1758.sub	RE15-10-8340MS	1.00000	953960	UPLOAD BOTH, USE HIGHER
<input type="checkbox"/>	N	/chem/ecd8a.i/021810.b/053f5301.d	1202045064	msd	18-FEB-2010	16:51	10-1758.sub	RE15-10-8340MSD	1.00000	953960	UPLOAD BOTH, USE HIGHER

Back QC Sample Column

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	prebatchid	comment
<input type="checkbox"/>	N	/chem/ecd8a.i/021810.b/036b3601-1.d	1202045061	mb	18-FEB-2010	13:21	10-1758.sub	PBLK01	1.00000	953960	
<input type="checkbox"/>	N	/chem/ecd8a.i/021810.b/037b3701-1.d	1202045062	lcs	18-FEB-2010	13:33	10-1758.sub	PBLK01LCS	1.00000	953960	
<input type="checkbox"/>	N	/chem/ecd8a.i/021810.b/052b5201.d	1202045063	ms	18-FEB-2010	16:39	10-1758.sub	RE15-10-8340MS	1.00000	953960	UPLOAD BOTH, USE HIGHER
<input type="checkbox"/>	N	/chem/ecd8a.i/021810.b/053b5301.d	1202045064	msd	18-FEB-2010	16:51	10-1758.sub	RE15-10-8340MSD	1.00000	953960	UPLOAD BOTH, USE HIGHER

# SAMPLE DATA SUMMARY

**PCB**  
**Certificate of Analysis**  
**Sample Summary**

**SDG Number:** 10-1758  
**Lab Sample ID:** 246866007

**Date Collected:** 02/09/2010 12:00  
**Date Received:** 02/11/2010 09:20  
**Client:** LANL010  
**Method:** SW846 8082  
**Inst:** ECD8A.I  
**Analyst:** JAOC  
**Aliquot:** 30.02 g  
**Column:** 1 CLP1  
2 CLP2

**Matrix:** R  
**%Moisture:** 24.2  
**Project:** LANL01004  
**SOP Ref:** GL-OA-E-040  
**Dilution:** 1  
**Inj. Vol:** 1 uL  
**Final Volume:** 1 mL  
**Level:** LOW

**Client ID:** RE15-10-8340  
**Batch ID:** 953960  
**Run Date:** 02/18/2010 16:26  
**Prep Date:** 02/17/2010 13:09  
**Data File:** 051f5101.d  
051b5101.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	4.39	ug/kg	1.46	4.39	1
11104-28-2	Aroclor-1221	U	4.39	ug/kg	1.46	4.39	1
11141-16-5	Aroclor-1232	U	4.39	ug/kg	1.46	4.39	1
53469-21-9	Aroclor-1242	U	4.39	ug/kg	1.46	4.39	1
12672-29-6	Aroclor-1248	U	4.39	ug/kg	1.46	4.39	1
11097-69-1	Aroclor-1254	U	4.39	ug/kg	1.46	4.39	1
11096-82-5	Aroclor-1260	U	4.39	ug/kg	1.46	4.39	1



**PCB**  
**Certificate of Analysis**  
**Sample Summary**

<b>SDG Number:</b>	<b>10-1758</b>	<b>Date Collected:</b>	<b>02/09/2010 12:00</b>	<b>Matrix:</b>	<b>R</b>
<b>Lab Sample ID:</b>	<b>246866008</b>	<b>Date Received:</b>	<b>02/11/2010 09:20</b>	<b>%Moisture:</b>	<b>7.6</b>
<b>Client ID:</b>	<b>RE15-10-8341</b>	<b>Client:</b>	<b>LANL010</b>	<b>Project:</b>	<b>LANL01004</b>
<b>Batch ID:</b>	<b>953960</b>	<b>Method:</b>	<b>SW846 8082</b>	<b>SOP Ref:</b>	<b>GL-OA-E-040</b>
<b>Run Date:</b>	<b>02/18/2010 17:04</b>	<b>Inst:</b>	<b>ECD8A.I</b>	<b>Dilution:</b>	<b>1</b>
<b>Prep Date:</b>	<b>02/17/2010 13:09</b>	<b>Analyst:</b>	<b>JAOC</b>	<b>Inj. Vol:</b>	<b>1 uL</b>
<b>Data File:</b>	<b>054f5401.d</b>	<b>Aliquot:</b>	<b>30.01 g</b>	<b>Final Volume:</b>	<b>1 mL</b>
	<b>054b5401.d</b>	<b>Column:</b>	<b>1 CLP1</b>	<b>Level:</b>	<b>LOW</b>
			<b>2 CLP2</b>		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.60	ug/kg	1.20	3.60	1
11104-28-2	Aroclor-1221	U	3.60	ug/kg	1.20	3.60	1
11141-16-5	Aroclor-1232	U	3.60	ug/kg	1.20	3.60	1
53469-21-9	Aroclor-1242	U	3.60	ug/kg	1.20	3.60	1
12672-29-6	Aroclor-1248	U	3.60	ug/kg	1.20	3.60	1
11097-69-1	Aroclor-1254	U	3.60	ug/kg	1.20	3.60	1
11096-82-5	Aroclor-1260	U	3.60	ug/kg	1.20	3.60	1

**PCB**  
**Certificate of Analysis**  
**Sample Summary**

**SDG Number:** 10-1758  
**Lab Sample ID:** 246866009

**Date Collected:** 02/09/2010 12:00  
**Date Received:** 02/11/2010 09:20  
**Client:** LANL010  
**Method:** SW846 8082  
**Inst:** ECD8A.I  
**Analyst:** JAOC  
**Aliquot:** 30 g  
**Column:** 1 CLP1  
2 CLP2

**Matrix:** R  
**%Moisture:** 24.2  
**Project:** LANL01004  
**SOP Ref:** GL-OA-E-040  
**Dilution:** 1  
**Inj. Vol:** 1 uL  
**Final Volume:** 1 mL  
**Level:** LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	4.40	ug/kg	1.46	4.40	1
11104-28-2	Aroclor-1221	U	4.40	ug/kg	1.46	4.40	1
11141-16-5	Aroclor-1232	U	4.40	ug/kg	1.46	4.40	1
53469-21-9	Aroclor-1242	U	4.40	ug/kg	1.46	4.40	1
12672-29-6	Aroclor-1248	U	4.40	ug/kg	1.46	4.40	1
11097-69-1	Aroclor-1254	U	4.40	ug/kg	1.46	4.40	1
11096-82-5	Aroclor-1260	U	4.40	ug/kg	1.46	4.40	1

# QUALITY CONTROL SUMMARY

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**PCB**  
**Surrogate Recovery Report**

Page 1 of 1

**SDG Number: 10-1758****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 #
1202045061	MB for batch 953958	68	70	70	77
1202045062	LCS for batch 953958	66	66	66	72
246866007	RE15-10-8340	39	36	44	47
1202045063	RE15-10-8340MS	48	48	57	62
1202045064	RE15-10-8340MSD	48	51	59	62
246866008	RE15-10-8341	62	57	65	70
246866009	RE15-10-8376	45	42	58	63

**Surrogate****Acceptance Limits**

4CMX = 4cmx

(32%-120%)

DCB = Decachlorobiphenyl

(30%-116%)

\* Recovery outside Acceptance Limits

# Column to be used to flag recovery values

D Sample Diluted

PCB

Page 1 of 1

**Quality Control Summary  
Spike Recovery Report****SDG Number: 10-1758****Sample Type: Laboratory Control Sample****Client ID: LCS for batch 953958****Matrix: SOIL****Lab Sample ID:1202045062****Instrument: ECD8A.I****Analysis Date: 02/18/2010 13:33****Dilution: 1****Analyst: JAOC****Prep Batch ID: 953958****Inj. Vol: 1 uL****Batch ID: 953960**

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
12674-11-2	LCS Aroclor-1016	33.3	0.0	19.5	59	39-102
11096-82-5	LCS Aroclor-1260	33.3	0.0	23.2	70	45-118

## PCB

Page 1 of 2

Quality Control Summary  
Spike Recovery Report

SDG Number: 10-1758

Sample Type: Matrix Spike

Client ID: RE15-10-8340MS

Matrix: R

Lab Sample ID:1202045063

%Moisture: 24.2

Instrument: ECD8A.I

Analysis Date: 02/18/2010 16:39

Dilution: 1

Analyst: JAOC

Prep Batch ID: 953958

Inj. Vol: 1 uL

Batch ID: 953960

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
12674-11-2	MS Aroclor-1016	43.9	0.00 U	21.0	48	23-119
11096-82-5	MS Aroclor-1260	43.9	0.00 U	26.0	59	28-124

## PCB

Page 2 of 2

Quality Control Summary  
Spike Recovery Report

SDG Number: 10-1758

Sample Type: Matrix Spike Duplicate

Client ID: RE15-10-8340MSD

Matrix: R

Lab Sample ID:1202045064

%Moisture: 24.2

Instrument: ECD8A.I

Analysis Date: 02/18/2010 16:51

Dilution: 1

Analyst: JAOC

Prep Batch ID: 953958

Inj. Vol: 1 uL

Batch ID: 953960

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	43.9	0.00 U	19.4	44	23-119	8	0-28
11096-82-5	MSD Aroclor-1260	43.9	0.00 U	25.4	58	28-124	2	0-30

## Method Blank Summary

Page 1 of 1

SDG Number:	10-1758	Client:	LANL010	Matrix:	SOIL
Client ID:	MB for batch 953958	Instrument ID:	ECD8A.I_2	Data File:	036b3601-1.d
Lab Sample ID:	1202045061		ECD8A.I_1		036f3601-1.d
Column:	CLP2	Prep Date:	02/17/2010 13:09	Analyzed:	02/18/10 13:21
	CLP1	Level:	LOW		

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

Client Sample ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
01 LCS for batch 953958	1202045062	037f3701-1.d 037b3701-1.d	02/18/10	1333
02 RE15-10-8340	246866007	051f5101.d 051b5101.d	02/18/10	1626
03 RE15-10-8340MS	1202045063	052f5201.d 052b5201.d	02/18/10	1639
04 RE15-10-8340MSD	1202045064	053f5301.d 053b5301.d	02/18/10	1651
05 RE15-10-8341	246866008	054f5401.d 054b5401.d	02/18/10	1704
06 RE15-10-8376	246866009	055f5501.d 055b5501.d	02/18/10	1716



# SAMPLE DATA

**PCB**  
**Certificate of Analysis**  
**Sample Summary**

**SDG Number:** 10-1758  
**Lab Sample ID:** 246866007

**Date Collected:** 02/09/2010 12:00  
**Date Received:** 02/11/2010 09:20  
**Client:** LANL010  
**Method:** SW846 8082  
**Inst:** ECD8A.I  
**Analyst:** JAOC  
**Aliquot:** 30.02 g  
**Column:** 1 CLP1  
2 CLP2

**Matrix:** R  
**%Moisture:** 24.2  
**Project:** LANL01004  
**SOP Ref:** GL-OA-E-040  
**Dilution:** 1  
**Inj. Vol:** 1 uL  
**Final Volume:** 1 mL  
**Level:** LOW

**Client ID:** RE15-10-8340  
**Batch ID:** 953960  
**Run Date:** 02/18/2010 16:26  
**Prep Date:** 02/17/2010 13:09  
**Data File:** 051f5101.d  
051b5101.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	4.39	ug/kg	1.46	4.39	1
11104-28-2	Aroclor-1221	U	4.39	ug/kg	1.46	4.39	1
11141-16-5	Aroclor-1232	U	4.39	ug/kg	1.46	4.39	1
53469-21-9	Aroclor-1242	U	4.39	ug/kg	1.46	4.39	1
12672-29-6	Aroclor-1248	U	4.39	ug/kg	1.46	4.39	1
11097-69-1	Aroclor-1254	U	4.39	ug/kg	1.46	4.39	1
11096-82-5	Aroclor-1260	U	4.39	ug/kg	1.46	4.39	1

Data File: /chem/ecd8a.i/021810.b/051f5101.d  
Report Date: 19-Feb-2010 08:07

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GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd8a.i/021810.b/051f5101.d  
Lab Smp Id: 246866007 Client Smp ID: RE15-10-8340  
Inj Date : 18-FEB-2010 16:26  
Operator : JAOC Inst ID: ecd8a.i  
Smp Info : |246866007|1|  
Misc Info : |ECD82P\_1S|953960|SVA|LANL|SOIL|RE15-10-8340|||  
Comment :  
Method : /chem/ecd8a.i/021810.b/ECD8-F-8082-020310a.m  
Meth Date : 19-Feb-2010 07:33 jen01212 Quant Type: ESTD  
Cal Date : 03-FEB-2010 17:25 Cal File: 036f3601.d  
Als bottle: 51  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: 10-1758.sub  
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt \* DF \* Uf \* Vt/(Vi \* Ws \* (100 - M)/100) \* CpndVariable

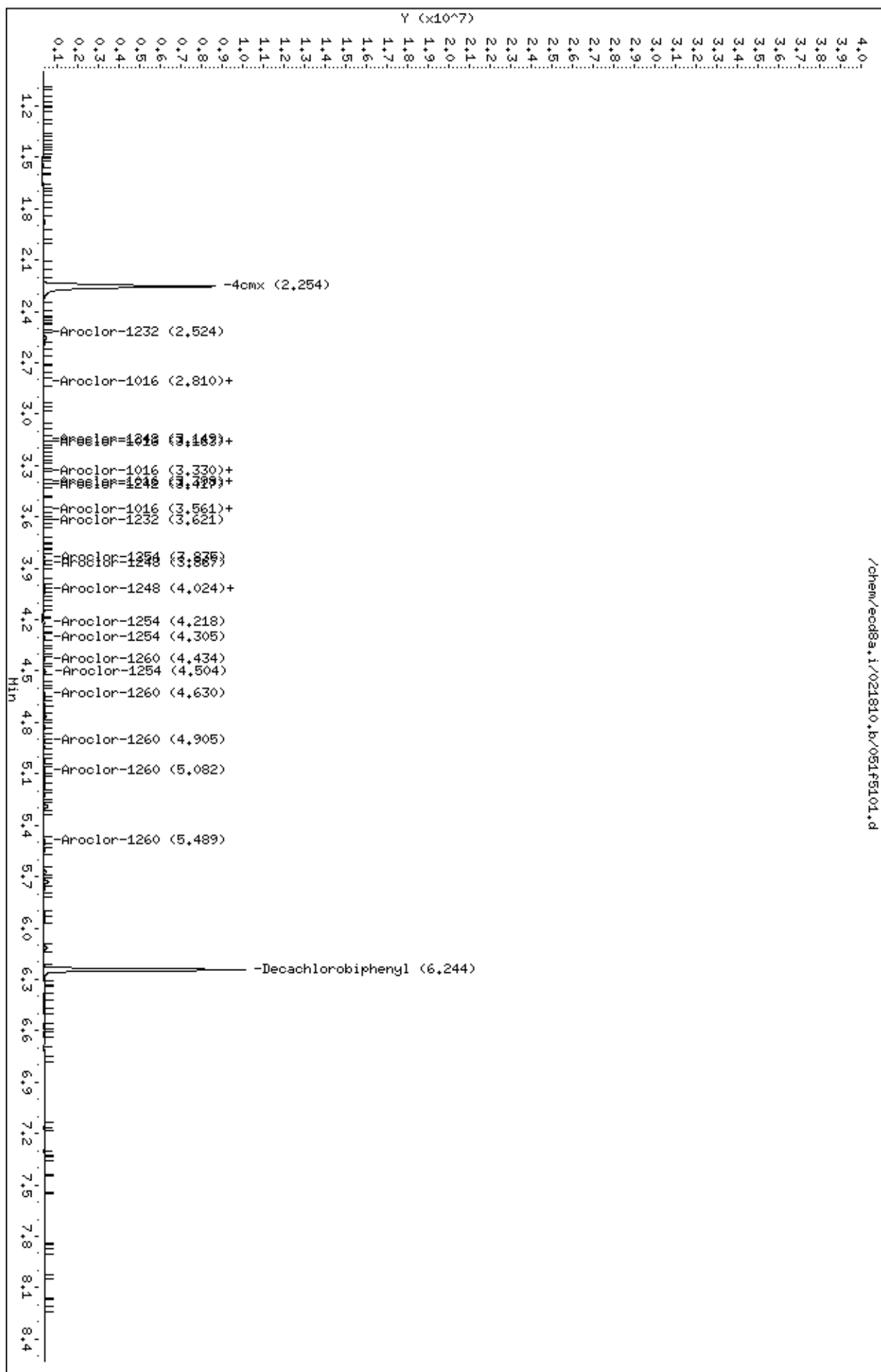
Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.02000	Weight of sample extracted (g)
M	24.17840	% Moisture

Cpnd Variable Local Compound Variable

CONCENTRATIONS									
			ON-COL		FINAL				
RT	EXP RT	DLT RT	RESPONSE	( ug/L)	(ug/Kg)	TARGET	RANGE	RATIO	
==	=====	=====	=====	=====	=====	=====	=====	=====	
\$ 11 4cmx						CAS #:	877-09-8		
2.254	2.253	0.001	10138648	77.1551	3.4	80.00-	120.00	100.00	
-----									
\$ 12 Decachlorobiphenyl						CAS #:	2051-24-3		
6.244	6.246	-0.002	8808743	88.1039	3.9	80.00-	120.00	100.00	
-----									

Data File: /chem/ecd8a.i/021810.b/051f5101.d  
 Date : 18-FEB-2010 16:26  
 Client ID: RE15-10-8340  
 Sample Info: 12468660711  
 Volume Injected (uL): 1.0  
 Column phase: CLP1

Instrument: ecd8a.i  
 Operator: JAOC  
 Column diameter: 0.25



Data File: /chem/ecd8a.i/021810.b/051b5101.d  
Report Date: 19-Feb-2010 07:48

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GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd8a.i/021810.b/051b5101.d  
Lab Smp Id: 246866007 Client Smp ID: RE15-10-8340  
Inj Date : 18-FEB-2010 16:26  
Operator : JAOC Inst ID: ecd8a.i  
Smp Info : |246866007|1|  
Misc Info : |ECD82P\_1S|953960|SVA|LANL|SOIL|RE15-10-8340|||  
Comment :  
Method : /chem/ecd8a.i/021810.b/ECD8-B-8082-020310a.m  
Meth Date : 19-Feb-2010 07:39 jen01212 Quant Type: ESTD  
Cal Date : 03-FEB-2010 17:25 Cal File: 036b3601.d  
Als bottle: 51  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: 10-1758.sub  
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt \* DF \* Uf \* Vt/(Vi \* Ws \* (100 - M)/100) \* CpndVariable

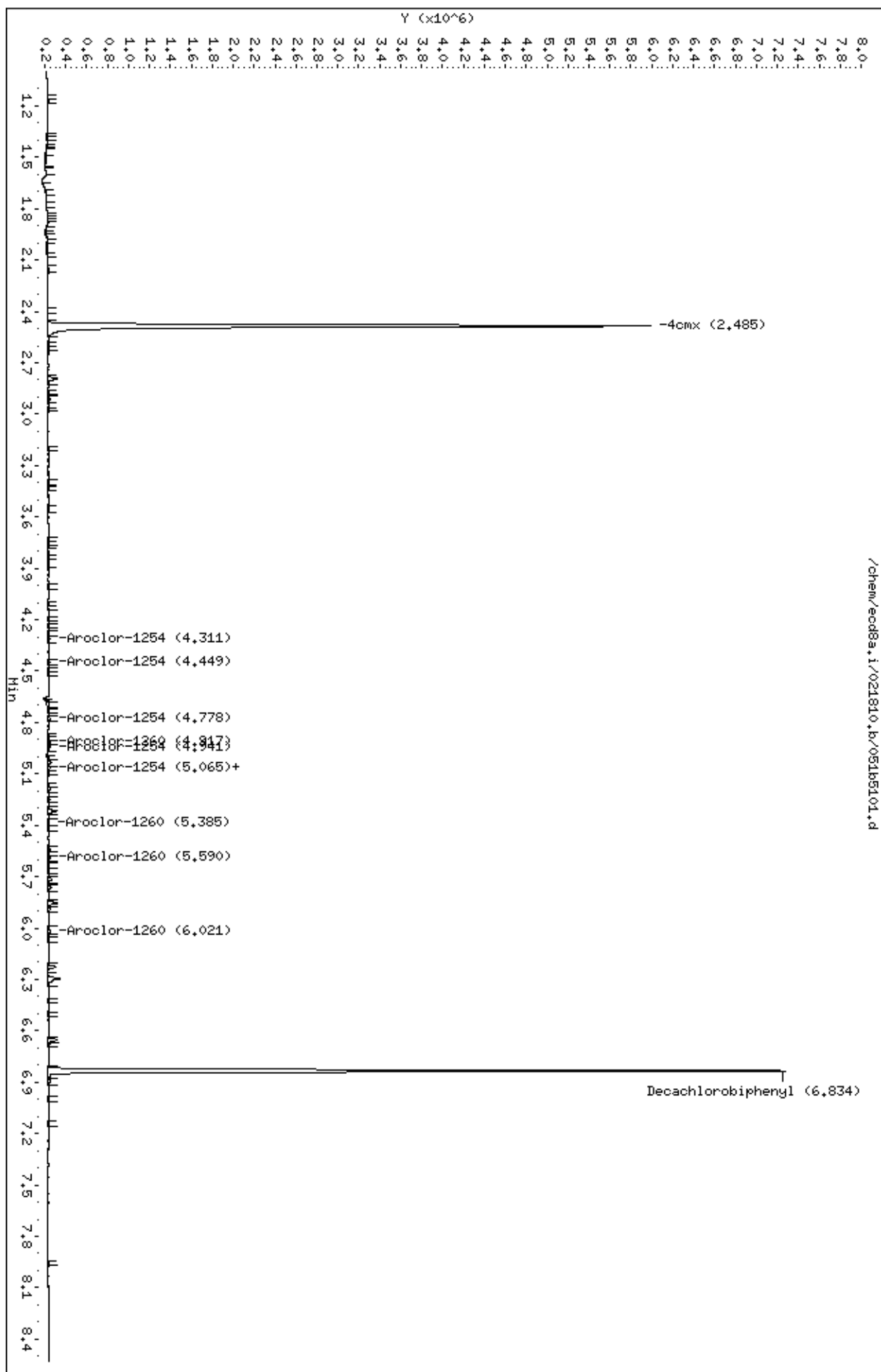
Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.02000	Weight of sample extracted (g)
M	24.17840	% Moisture

Cpnd Variable Local Compound Variable

CONCENTRATIONS							
			ON-COL	FINAL			
RT	EXP RT	DLT RT	RESPONSE ( ug/L)	(ug/Kg)	TARGET RANGE	RATIO	
==	=====	=====	=====	=====	=====	=====	
\$ 11 4cmx					CAS #: 877-09-8		
2.485	2.484	0.001	6258905 72.0712	3.2	80.00- 120.00	100.00	
-----							
\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.834	6.835	-0.001	6157792 94.9635	4.2	80.00- 120.00	100.00	
-----							

Data File: /chem/ecod8a.i/021810.b/051b5101.d  
 Date : 18-FEB-2010 16:26  
 Client ID: RE15-10-8340  
 Sample Info: 124686600711  
 Volume Injected (uL): 1.0  
 Column phase: CLP2

Instrument: ecod8a.i  
 Operator: JAOC  
 Column diameter: 0.25



**PCB**  
**Certificate of Analysis**  
**Sample Summary**

**SDG Number:** 10-1758  
**Lab Sample ID:** 246866008

**Date Collected:** 02/09/2010 12:00  
**Date Received:** 02/11/2010 09:20  
**Client:** LANL010  
**Method:** SW846 8082  
**Inst:** ECD8A.I  
**Analyst:** JAOC  
**Aliquot:** 30.01 g  
**Column:** 1 CLP1  
2 CLP2

**Matrix:** R  
**%Moisture:** 7.6  
**Project:** LANL01004  
**SOP Ref:** GL-OA-E-040  
**Dilution:** 1  
**Inj. Vol:** 1 uL  
**Final Volume:** 1 mL  
**Level:** LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.60	ug/kg	1.20	3.60	1
11104-28-2	Aroclor-1221	U	3.60	ug/kg	1.20	3.60	1
11141-16-5	Aroclor-1232	U	3.60	ug/kg	1.20	3.60	1
53469-21-9	Aroclor-1242	U	3.60	ug/kg	1.20	3.60	1
12672-29-6	Aroclor-1248	U	3.60	ug/kg	1.20	3.60	1
11097-69-1	Aroclor-1254	U	3.60	ug/kg	1.20	3.60	1
11096-82-5	Aroclor-1260	U	3.60	ug/kg	1.20	3.60	1

Data File: /chem/ecd8a.i/021810.b/054f5401.d  
Report Date: 19-Feb-2010 08:08

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GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd8a.i/021810.b/054f5401.d  
Lab Smp Id: 246866008 Client Smp ID: RE15-10-8341  
Inj Date : 18-FEB-2010 17:04  
Operator : JAOC Inst ID: ecd8a.i  
Smp Info : |246866008|1|  
Misc Info : |ECD82P\_1S|953960|SVA|LANL|SOIL|RE15-10-8341|||  
Comment :  
Method : /chem/ecd8a.i/021810.b/ECD8-F-8082-020310a.m  
Meth Date : 19-Feb-2010 07:33 jen01212 Quant Type: ESTD  
Cal Date : 03-FEB-2010 17:25 Cal File: 036f3601.d  
Als bottle: 54  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: 10-1758.sub  
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt \* DF \* Uf \* Vt/(Vi \* Ws \* (100 - M)/100) \* CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.01000	Weight of sample extracted (g)
M	7.55700	% Moisture

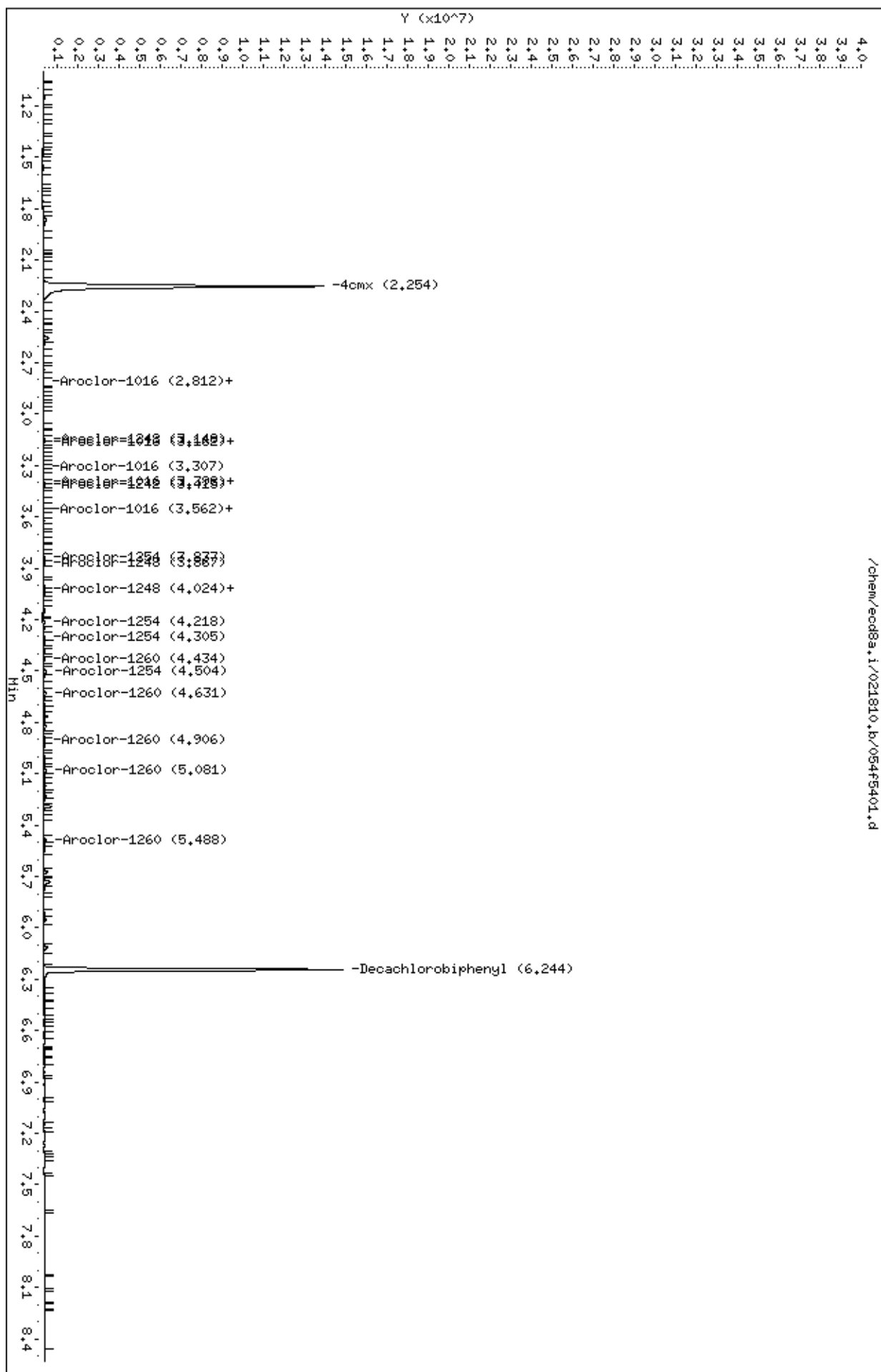
Cpnd Variable Local Compound Variable

CONCENTRATIONS							
			ON-COL	FINAL			
RT	EXP RT	DLT RT	RESPONSE ( ug/L)	(ug/Kg)	TARGET RANGE	RATIO	
==	=====	=====	=====	=====	=====	=====	
\$ 11 4cmx					CAS #: 877-09-8		
2.254	2.253	0.001	16386018	124.698	4.5 80.00- 120.00	100.00	
-----							
\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.244	6.246	-0.002	12953473	129.559	4.7 80.00- 120.00	100.00	
-----							



Data File: /chem/ecd8a.i/021810.b/054f5401.d  
 Date : 18-FEB-2010 17:04  
 Client ID: RE15-10-8341  
 Sample Info: 124686600811  
 Volume Injected (uL): 1.0  
 Column phase: CLP1

Instrument: ecd8a.i  
 Operator: JAOC  
 Column diameter: 0.25



Data File: /chem/ecd8a.i/021810.b/054b5401.d  
Report Date: 19-Feb-2010 07:49

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GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd8a.i/021810.b/054b5401.d  
Lab Smp Id: 246866008 Client Smp ID: RE15-10-8341  
Inj Date : 18-FEB-2010 17:04  
Operator : JAOC Inst ID: ecd8a.i  
Smp Info : |246866008|1|  
Misc Info : |ECD82P\_1S|953960|SVA|LANL|SOIL|RE15-10-8341|||  
Comment :  
Method : /chem/ecd8a.i/021810.b/ECD8-B-8082-020310a.m  
Meth Date : 19-Feb-2010 07:39 jen01212 Quant Type: ESTD  
Cal Date : 03-FEB-2010 17:25 Cal File: 036b3601.d  
Als bottle: 54  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: 10-1758.sub  
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt \* DF \* Uf \* Vt/(Vi \* Ws \* (100 - M)/100) \* CpndVariable

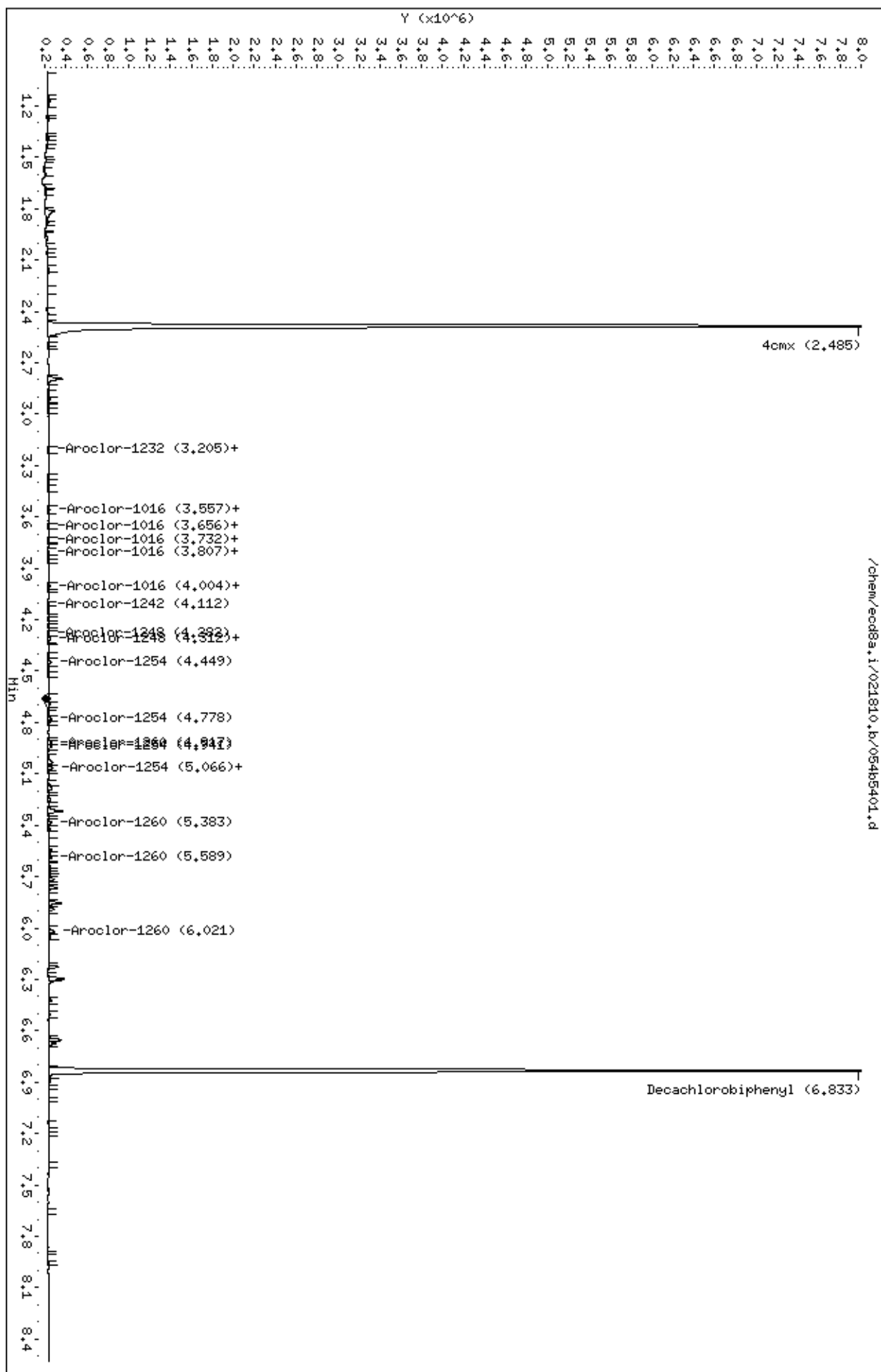
Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.01000	Weight of sample extracted (g)
M	7.55700	% Moisture

Cpnd Variable Local Compound Variable

CONCENTRATIONS							
			ON-COL	FINAL			
RT	EXP RT	DLT RT	RESPONSE ( ug/L)	(ug/Kg)	TARGET RANGE	RATIO	
==	=====	=====	=====	=====	=====	=====	
\$ 11 4cmx					CAS #: 877-09-8		
2.485	2.484	0.001	9893005 113.918	4.1	80.00- 120.00	100.00	
-----							
\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.833	6.835	-0.002	9083939 140.090	5.0	80.00- 120.00	100.00	
-----							

Data File: /chem/ecd8a.i/021810.b/054b5401.d  
Date : 18-FEB-2010 17:04  
Client ID: RE15-10-8341  
Sample Info: 124686600811  
Volume Injected (uL): 1.0  
Column phase: CLP2

Instrument: ecd8a.i  
Operator: JAO  
Column diameter: 0.25



**PCB**  
**Certificate of Analysis**  
**Sample Summary**

**SDG Number:** 10-1758  
**Lab Sample ID:** 246866009

**Date Collected:** 02/09/2010 12:00  
**Date Received:** 02/11/2010 09:20  
**Client:** LANL010  
**Method:** SW846 8082  
**Inst:** ECD8A.I  
**Analyst:** JAOC  
**Aliquot:** 30 g  
**Column:** 1 CLP1  
2 CLP2

**Matrix:** R  
**%Moisture:** 24.2  
**Project:** LANL01004  
**SOP Ref:** GL-OA-E-040  
**Dilution:** 1  
**Inj. Vol:** 1 uL  
**Final Volume:** 1 mL  
**Level:** LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	4.40	ug/kg	1.46	4.40	1
11104-28-2	Aroclor-1221	U	4.40	ug/kg	1.46	4.40	1
11141-16-5	Aroclor-1232	U	4.40	ug/kg	1.46	4.40	1
53469-21-9	Aroclor-1242	U	4.40	ug/kg	1.46	4.40	1
12672-29-6	Aroclor-1248	U	4.40	ug/kg	1.46	4.40	1
11097-69-1	Aroclor-1254	U	4.40	ug/kg	1.46	4.40	1
11096-82-5	Aroclor-1260	U	4.40	ug/kg	1.46	4.40	1

Data File: /chem/ecd8a.i/021810.b/055f5501.d  
Report Date: 19-Feb-2010 08:08

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GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd8a.i/021810.b/055f5501.d  
Lab Smp Id: 246866009 Client Smp ID: RE15-10-8376  
Inj Date : 18-FEB-2010 17:16  
Operator : JAOC Inst ID: ecd8a.i  
Smp Info : |246866009|1|  
Misc Info : |ECD82P\_1S|953960|SVA|LANL|SOIL|RE15-10-8376|||  
Comment :  
Method : /chem/ecd8a.i/021810.b/ECD8-F-8082-020310a.m  
Meth Date : 19-Feb-2010 07:33 jen01212 Quant Type: ESTD  
Cal Date : 03-FEB-2010 17:25 Cal File: 036f3601.d  
Als bottle: 55  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: 10-1758.sub  
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt \* DF \* Uf \* Vt/(Vi \* Ws \* (100 - M)/100) \* CpndVariable

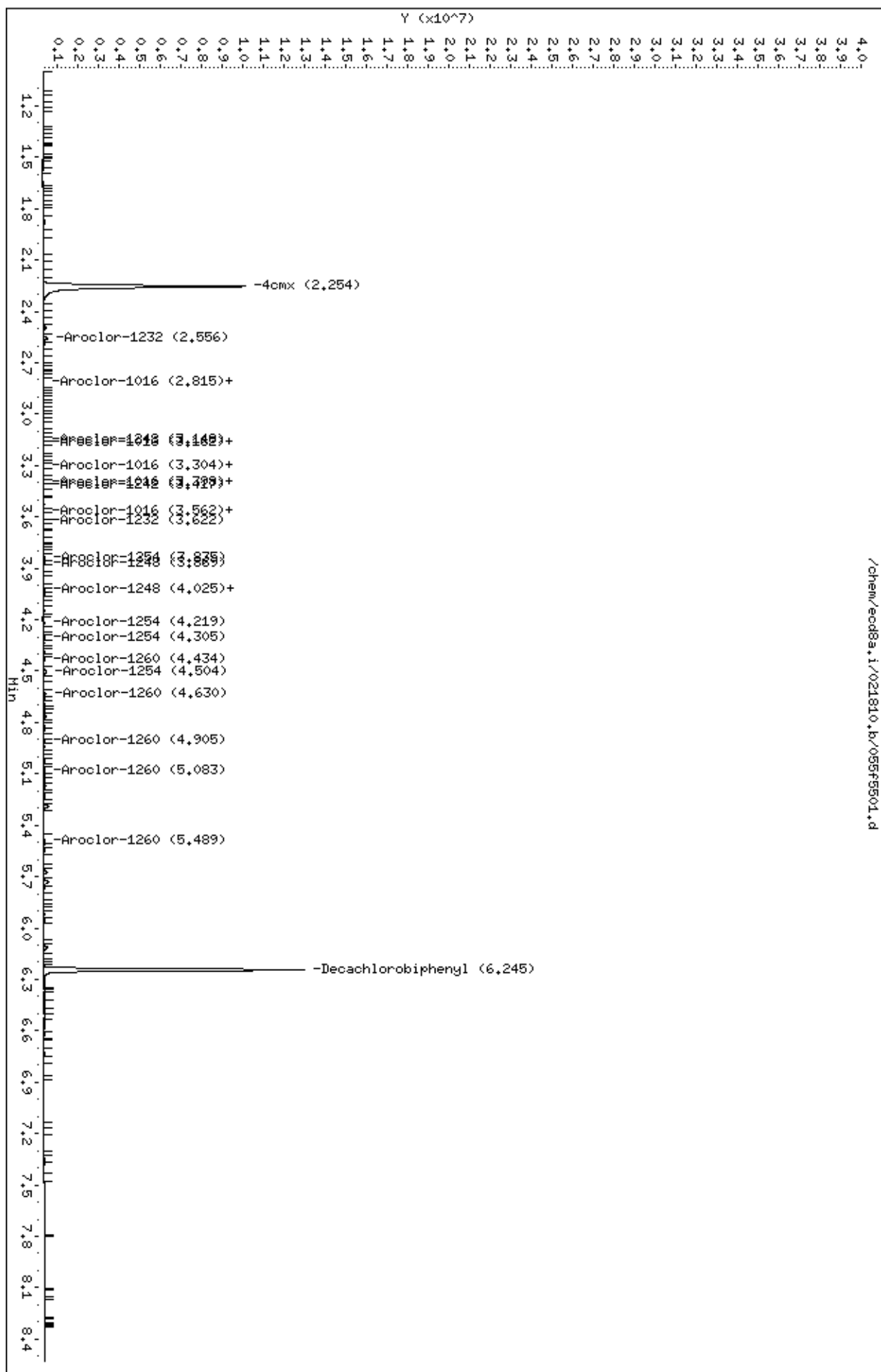
Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weight of sample extracted (g)
M	24.16580	% Moisture

Cpnd Variable Local Compound Variable

CONCENTRATIONS							
			ON-COL	FINAL			
RT	EXP RT	DLT RT	RESPONSE ( ug/L)	(ug/Kg)	TARGET RANGE	RATIO	
==	=====	=====	=====	=====	=====	=====	
\$ 11 4cmx					CAS #: 877-09-8		
2.254	2.253	0.001	11850210 90.1801	4.0	80.00- 120.00	100.00	
-----							
\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.245	6.246	-0.001	11612781 116.149	5.1	80.00- 120.00	100.00	
-----							

Data File: /chem/ecd8a.i/021810.b/055f5501.d  
 Date : 18-FEB-2010 17:16  
 Client ID: RE15-10-8376  
 Sample Info: 12468660911  
 Volume Injected (uL): 1.0  
 Column phase: CLP1

Instrument: ecd8a.i  
 Operator: JAOC  
 Column diameter: 0.25



Data File: /chem/ecd8a.i/021810.b/055b5501.d  
Report Date: 19-Feb-2010 07:49

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GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd8a.i/021810.b/055b5501.d  
Lab Smp Id: 246866009 Client Smp ID: RE15-10-8376  
Inj Date : 18-FEB-2010 17:16  
Operator : JAOC Inst ID: ecd8a.i  
Smp Info : |246866009|1|  
Misc Info : |ECD82P\_1S|953960|SVA|LANL|SOIL|RE15-10-8376|||  
Comment :  
Method : /chem/ecd8a.i/021810.b/ECD8-B-8082-020310a.m  
Meth Date : 19-Feb-2010 07:39 jen01212 Quant Type: ESTD  
Cal Date : 03-FEB-2010 17:25 Cal File: 036b3601.d  
Als bottle: 55  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: 10-1758.sub  
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt \* DF \* Uf \* Vt/(Vi \* Ws \* (100 - M)/100) \* CpndVariable

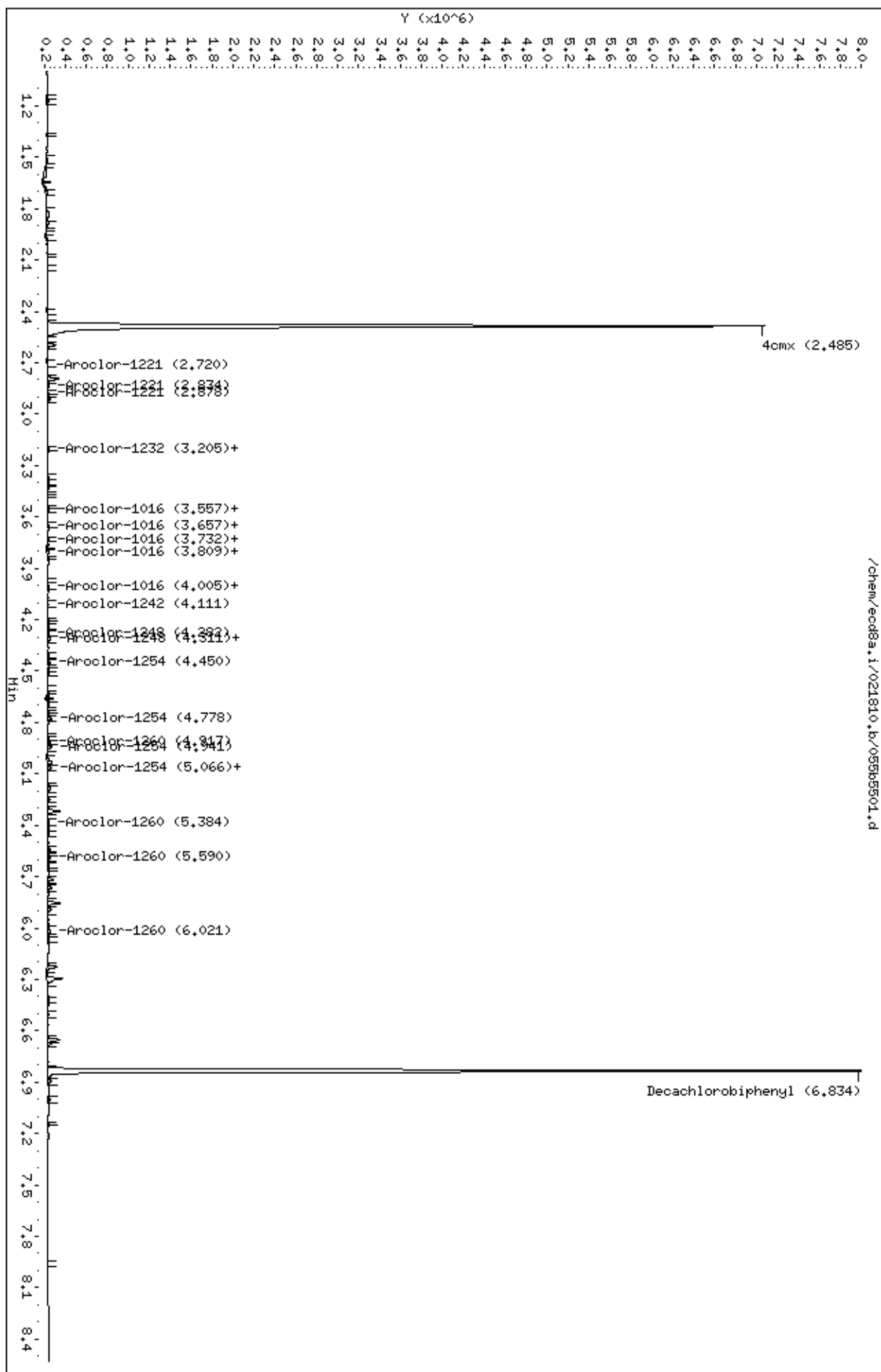
Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weight of sample extracted (g)
M	24.16580	% Moisture

Cpnd Variable Local Compound Variable

CONCENTRATIONS							
			ON-COL	FINAL			
RT	EXP RT	DLT RT	RESPONSE ( ug/L)	(ug/Kg)	TARGET RANGE	RATIO	
==	=====	=====	=====	=====	=====	=====	
\$ 11 4cmx					CAS #: 877-09-8		
2.485	2.484	0.001	7217427 83.1086	3.6	80.00- 120.00	100.00	
-----							
\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.834	6.835	-0.001	8226870 126.872	5.6	80.00- 120.00	100.00	
-----							

Data File: /chem/ecd8a.i/021810.b/055b5501.d  
 Date : 18-FEB-2010 17:16  
 Client ID: RE15-10-8376  
 Sample Info: 12468660911  
 Volume Injected (uL): 1.0  
 Column phase: CLP2

Instrument: ecd8a.i  
 Operator: JAOC  
 Column diameter: 0.25





# STANDARDS DATA

Report Date: 18-Feb-2010 11:47

### Calibration History

Method : /chem/ecd8a.i/021810.b/ECD8-F-8082-020310a.m  
Start Cal Date: 03-FEB-2010 10:24  
End Cal Date : 03-FEB-2010 17:25

#### Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 100.00000		
03-FEB-2010 15:46	AR1262	/chem/ecd8a.i/020310a.b/028f2801.d
03-FEB-2010 14:07	AR1248	/chem/ecd8a.i/020310a.b/020f2001.d
03-FEB-2010 12:53	AR1242	/chem/ecd8a.i/020310a.b/014f1401.d
03-FEB-2010 11:39	AR1254	/chem/ecd8a.i/020310a.b/008f0801.d
03-FEB-2010 10:24	AR1660	/chem/ecd8a.i/020310a.b/002f0201.d

Cal Level: 2 , Cal Amount: 250.00000		
03-FEB-2010 15:58	AR1262	/chem/ecd8a.i/020310a.b/029f2901.d
03-FEB-2010 14:19	AR1248	/chem/ecd8a.i/020310a.b/021f2101.d
03-FEB-2010 13:05	AR1242	/chem/ecd8a.i/020310a.b/015f1501.d
03-FEB-2010 11:51	AR1254	/chem/ecd8a.i/020310a.b/009f0901.d
03-FEB-2010 10:37	AR1660	/chem/ecd8a.i/020310a.b/003f0301.d

Cal Level: 3 , Cal Amount: 500.00000		
03-FEB-2010 16:11	AR1262	/chem/ecd8a.i/020310a.b/030f3001.d
03-FEB-2010 14:32	AR1248	/chem/ecd8a.i/020310a.b/022f2201.d
03-FEB-2010 13:18	AR1242	/chem/ecd8a.i/020310a.b/016f1601.d
03-FEB-2010 12:03	AR1254	/chem/ecd8a.i/020310a.b/010f1001.d
03-FEB-2010 10:49	AR1660	/chem/ecd8a.i/020310a.b/004f0401.d

Cal Level: 4 , Cal Amount: 1000.00000		
03-FEB-2010 17:25	DDT	/chem/ecd8a.i/020310a.b/036f3601.d
03-FEB-2010 17:00	AR1268	/chem/ecd8a.i/020310a.b/034f3401.d
03-FEB-2010 16:23	AR1262	/chem/ecd8a.i/020310a.b/031f3101.d
03-FEB-2010 15:34	AR1221	/chem/ecd8a.i/020310a.b/027f2701.d
03-FEB-2010 15:21	AR1232	/chem/ecd8a.i/020310a.b/026f2601.d
03-FEB-2010 14:44	AR1248	/chem/ecd8a.i/020310a.b/023f2301.d
03-FEB-2010 13:30	AR1242	/chem/ecd8a.i/020310a.b/017f1701.d
03-FEB-2010 12:16	AR1254	/chem/ecd8a.i/020310a.b/011f1101.d
03-FEB-2010 11:01	AR1660	/chem/ecd8a.i/020310a.b/005f0501.d

Cal Level: 5 , Cal Amount: 4000.00000		
03-FEB-2010 16:36	AR1262	/chem/ecd8a.i/020310a.b/032f3201.d
03-FEB-2010 14:57	AR1248	/chem/ecd8a.i/020310a.b/024f2401.d
03-FEB-2010 13:42	AR1242	/chem/ecd8a.i/020310a.b/018f1801.d
03-FEB-2010 12:28	AR1254	/chem/ecd8a.i/020310a.b/012f1201.d
03-FEB-2010 11:14	AR1660	/chem/ecd8a.i/020310a.b/006f0601.d

Continuing Calibration  
Ccal Level Mode: GLOBAL LEVEL 4

Ccal Level: 4 , Ccal Amount: 1000		
18-FEB-2010 11:30	AR1660	/chem/ecd8a.i/021810.b/027f2701.d
Ccal Level: 4 , Ccal Amount: 1000		
18-FEB-2010 09:38	AR1660	/chem/ecd8a.i/021810.b/018f1801.d
Ccal Level: 4 , Ccal Amount: 1000		
18-FEB-2010 07:44	AR1268	/chem/ecd8a.i/021810.b/009f0901.d
Ccal Level: 4 , Ccal Amount: 1000		
18-FEB-2010 07:31	AR1262	/chem/ecd8a.i/021810.b/008f0801.d
Ccal Level: 4 , Ccal Amount: 1000		
18-FEB-2010 07:19	AR1221	/chem/ecd8a.i/021810.b/007f0701.d
Ccal Level: 4 , Ccal Amount: 1000		
18-FEB-2010 07:07	AR1232	/chem/ecd8a.i/021810.b/006f0601.d
Ccal Level: 4 , Ccal Amount: 1000		
18-FEB-2010 06:54	AR1248	/chem/ecd8a.i/021810.b/005f0501.d
Ccal Level: 4 , Ccal Amount: 1000		
18-FEB-2010 06:42	AR1242	/chem/ecd8a.i/021810.b/004f0401.d
Ccal Level: 4 , Ccal Amount: 1000		
18-FEB-2010 06:30	AR1254	/chem/ecd8a.i/021810.b/003f0301.d
Ccal Level: 4 , Ccal Amount: 1000		
18-FEB-2010 06:17	AR1660	/chem/ecd8a.i/021810.b/002f0201.d

Report Date: 18-Feb-2010 11:47

### Calibration History

Method : /chem/ecd8a.i/021810.b/ECD8-B-8082-020310a.m  
Start Cal Date: 03-FEB-2010 10:24  
End Cal Date : 03-FEB-2010 17:25

#### Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 100.00000		
03-FEB-2010 15:46	AR1262	/chem/ecd8a.i/020310a.b/028b2801.d
03-FEB-2010 14:07	AR1248	/chem/ecd8a.i/020310a.b/020b2001.d
03-FEB-2010 12:53	AR1242	/chem/ecd8a.i/020310a.b/014b1401.d
03-FEB-2010 11:39	AR1254	/chem/ecd8a.i/020310a.b/008b0801.d
03-FEB-2010 10:24	AR1660	/chem/ecd8a.i/020310a.b/002b0201.d

Cal Level: 2 , Cal Amount: 250.00000		
03-FEB-2010 15:58	AR1262	/chem/ecd8a.i/020310a.b/029b2901.d
03-FEB-2010 14:19	AR1248	/chem/ecd8a.i/020310a.b/021b2101.d
03-FEB-2010 13:05	AR1242	/chem/ecd8a.i/020310a.b/015b1501.d
03-FEB-2010 11:51	AR1254	/chem/ecd8a.i/020310a.b/009b0901.d
03-FEB-2010 10:37	AR1660	/chem/ecd8a.i/020310a.b/003b0301.d

Cal Level: 3 , Cal Amount: 500.00000		
03-FEB-2010 16:11	AR1262	/chem/ecd8a.i/020310a.b/030b3001.d
03-FEB-2010 14:32	AR1248	/chem/ecd8a.i/020310a.b/022b2201.d
03-FEB-2010 13:18	AR1242	/chem/ecd8a.i/020310a.b/016b1601.d
03-FEB-2010 12:03	AR1254	/chem/ecd8a.i/020310a.b/010b1001.d
03-FEB-2010 10:49	AR1660	/chem/ecd8a.i/020310a.b/004b0401.d

Cal Level: 4 , Cal Amount: 1000.00000		
03-FEB-2010 17:25	DDT	/chem/ecd8a.i/020310a.b/036b3601.d
03-FEB-2010 17:00	AR1268	/chem/ecd8a.i/020310a.b/034b3401.d
03-FEB-2010 16:23	AR1262	/chem/ecd8a.i/020310a.b/031b3101.d
03-FEB-2010 15:34	AR1221	/chem/ecd8a.i/020310a.b/027b2701.d
03-FEB-2010 15:21	AR1232	/chem/ecd8a.i/020310a.b/026b2601.d
03-FEB-2010 14:44	AR1248	/chem/ecd8a.i/020310a.b/023b2301.d
03-FEB-2010 13:30	AR1242	/chem/ecd8a.i/020310a.b/017b1701.d
03-FEB-2010 12:16	AR1254	/chem/ecd8a.i/020310a.b/011b1101.d
03-FEB-2010 11:01	AR1660	/chem/ecd8a.i/020310a.b/005b0501.d

Cal Level: 5 , Cal Amount: 4000.00000		
03-FEB-2010 16:36	AR1262	/chem/ecd8a.i/020310a.b/032b3201.d
03-FEB-2010 14:57	AR1248	/chem/ecd8a.i/020310a.b/024b2401.d
03-FEB-2010 13:42	AR1242	/chem/ecd8a.i/020310a.b/018b1801.d
03-FEB-2010 12:28	AR1254	/chem/ecd8a.i/020310a.b/012b1201.d
03-FEB-2010 11:14	AR1660	/chem/ecd8a.i/020310a.b/006b0601.d

Continuing Calibration  
Ccal Level Mode: GLOBAL LEVEL 4

Ccal Level: 4 , Ccal Amount: 1000		
18-FEB-2010 11:30	AR1660	/chem/ecd8a.i/021810.b/027b2701.d
Ccal Level: 4 , Ccal Amount: 1000		
18-FEB-2010 09:38	AR1660	/chem/ecd8a.i/021810.b/018b1801.d
Ccal Level: 4 , Ccal Amount: 1000		
18-FEB-2010 07:44	AR1268	/chem/ecd8a.i/021810.b/009b0901.d
Ccal Level: 4 , Ccal Amount: 1000		
18-FEB-2010 07:31	AR1262	/chem/ecd8a.i/021810.b/008b0801.d
Ccal Level: 4 , Ccal Amount: 1000		
18-FEB-2010 07:19	AR1221	/chem/ecd8a.i/021810.b/007b0701.d
Ccal Level: 4 , Ccal Amount: 1000		
18-FEB-2010 07:07	AR1232	/chem/ecd8a.i/021810.b/006b0601.d
Ccal Level: 4 , Ccal Amount: 1000		
18-FEB-2010 06:54	AR1248	/chem/ecd8a.i/021810.b/005b0501.d
Ccal Level: 4 , Ccal Amount: 1000		
18-FEB-2010 06:42	AR1242	/chem/ecd8a.i/021810.b/004b0401.d
Ccal Level: 4 , Ccal Amount: 1000		
18-FEB-2010 06:30	AR1254	/chem/ecd8a.i/021810.b/003b0301.d
Ccal Level: 4 , Ccal Amount: 1000		
18-FEB-2010 06:17	AR1660	/chem/ecd8a.i/021810.b/002b0201.d

## GEL Laboratories LLC

## COMPOUND LISTING

Method file : /chem/ecd8a.i/021810.b/ECD8-F-8082-020310a.m  
 Quant Method : ESTD Target Version : 3.50  
 Last Update : 18-Feb-2010 11:40 Number of Cpnds : 15  
 Data Type : GC MULTI COMP

Global Integrator : Falcon

Chromat Events Values

```

-----
Initial:Start Threshold 758.000000
Initial:End Threshold   379.000000
Initial:Area Threshold  734.000000
Initial:P-P Resolution   1.000000
Initial:Bunch Factor     2.000000
Initial:Negative Peaks   OFF
Initial:Tension          1.500000
   6.500:Bunch Factor    2.000000
  
```

Compound	RT	RT Window	RF
1 Aroclor-1016	2.811	2.781-2.841	4.665e+03
	3.163	3.133-3.193	5.770e+03
	3.306	3.276-3.336	2.454e+03
	3.399	3.369-3.429	2.198e+03
	3.561	3.531-3.591	3.142e+03
2 Aroclor-1221	1.855	1.825-1.885	1.100e+03
	2.394	2.364-2.424	1.460e+03
	2.540	2.510-2.570	3.385e+03
3 Aroclor-1232	2.540	2.510-2.570	2.601e+03
	2.812	2.782-2.842	2.261e+03
	3.307	3.277-3.337	1.243e+03
	3.562	3.532-3.592	1.479e+03
4 Aroclor-1242	3.622	3.592-3.652	9.227e+02
	2.811	2.781-2.841	3.974e+03
	3.163	3.133-3.193	4.796e+03
	3.399	3.369-3.429	1.805e+03
	3.416	3.386-3.446	1.889e+03
5 Aroclor-1248	3.561	3.531-3.591	2.645e+03
	3.148	3.118-3.178	2.990e+03
	3.399	3.369-3.429	3.823e+03
	3.561	3.531-3.591	5.000e+03
	3.867	3.837-3.897	5.990e+03
	4.026	3.996-4.056	4.826e+03

## GEL Laboratories LLC

## COMPOUND LISTING

Method file : /chem/ecd8a.i/021810.b/ECD8-F-8082-020310a.m

Compound		RT	RT Window	RF
6	Aroclor-1254	3.837	3.807-3.867	4.785e+03
		4.024	3.994-4.054	6.569e+03
		4.220	4.189-4.250	5.138e+03
		4.306	4.276-4.336	8.797e+03
		4.502	4.472-4.532	6.914e+03
7	Aroclor-1260	4.435	4.405-4.465	6.739e+03
		4.631	4.601-4.661	1.026e+04
		4.907	4.877-4.937	6.130e+03
		5.079	5.049-5.109	6.386e+03
		5.490	5.460-5.520	6.860e+03
8	Aroclor-1262	4.336	4.306-4.366	3.367e+03
		4.435	4.405-4.465	5.243e+03
		4.630	4.600-4.660	7.103e+03
		4.906	4.876-4.936	8.580e+03
		5.078	5.048-5.108	7.966e+03
9	Aroclor-1268	5.514	5.484-5.544	1.632e+04
		5.540	5.510-5.570	1.572e+04
		5.674	5.644-5.704	1.207e+04
		5.919	5.889-5.949	6.023e+03
		6.115	6.085-6.145	3.601e+04
M	10 Aroclor-Total	1.000	0.980-1.020	
\$	11 4cmx	2.253	2.223-2.283	1.314e+05
\$	12 Decachlorobiphenyl	6.246	6.216-6.276	9.998e+04
	13 4,4'-DDT	4.852	4.832-4.872	2.393e+04
	14 4,4'-DDD	4.658	4.638-4.678	1.570e+05
	15 4,4'-DDE	4.234	4.214-4.254	1.340e+05

## GEL Laboratories LLC

## COMPOUND LISTING

Method file : /chem/ecd8a.i/021810.b/ECD8-B-8082-020310a.m  
Quant Method : ESTD Target Version : 3.50  
Last Update : 18-Feb-2010 11:39 Number of Cpnds : 15  
Data Type : GC MULTI COMP

Global Integrator : Falcon

Chromat Events	Values
Initial:Start Threshold	733.000000
Initial:End Threshold	366.500000
Initial:Area Threshold	522.000000
Initial:P-P Resolution	0.000000
Initial:Bunch Factor	2.000000
Initial:Negative Peaks	OFF
Initial:Tension	2.000000
9.000:Bunch Factor	2.000000

Compound	RT	RT Window	RF
1 Aroclor-1016	3.558	3.528-3.588	3.766e+03
	3.657	3.627-3.687	2.494e+03
	3.733	3.703-3.763	1.515e+03
	3.808	3.778-3.838	1.493e+03
	4.005	3.975-4.035	2.036e+03
2 Aroclor-1221	2.725	2.695-2.755	8.949e+02
	2.838	2.808-2.868	5.569e+02
	2.886	2.856-2.916	2.060e+03
3 Aroclor-1232	3.205	3.175-3.235	1.515e+03
	3.558	3.528-3.588	1.744e+03
	3.657	3.627-3.687	1.176e+03
	3.733	3.703-3.763	7.101e+02
4 Aroclor-1242	3.808	3.778-3.838	6.182e+02
	3.205	3.175-3.235	2.677e+03
	3.558	3.528-3.588	3.126e+03
	3.657	3.627-3.687	2.127e+03
	4.005	3.975-4.035	1.703e+03
5 Aroclor-1248	4.095	4.065-4.125	1.567e+03
	3.656	3.626-3.686	1.427e+03
	3.808	3.778-3.838	2.467e+03
	4.005	3.975-4.035	3.089e+03
	4.283	4.253-4.313	3.647e+03
	4.315	4.285-4.345	4.004e+03



## GEL Laboratories LLC

## COMPOUND LISTING

Method file : /chem/ecd8a.i/021810.b/ECD8-B-8082-020310a.m

Compound		RT	RT Window	RF
6	Aroclor-1254	4.312	4.282-4.342	3.450e+03
		4.450	4.420-4.480	3.910e+03
		4.779	4.750-4.809	5.500e+03
		4.941	4.911-4.971	4.011e+03
		5.067	5.037-5.097	2.549e+03
7	Aroclor-1260	4.918	4.888-4.948	4.084e+03
		5.067	5.037-5.097	4.969e+03
		5.384	5.354-5.414	3.788e+03
		5.591	5.561-5.621	3.953e+03
		6.022	5.992-6.052	6.227e+03
8	Aroclor-1262	4.918	4.888-4.948	3.276e+03
		5.066	5.036-5.096	3.827e+03
		5.384	5.354-5.414	5.446e+03
		5.590	5.560-5.620	5.047e+03
		6.020	5.990-6.050	7.196e+03
9	Aroclor-1268	6.017	5.987-6.047	1.138e+04
		6.050	6.020-6.080	1.041e+04
		6.228	6.198-6.258	8.192e+03
		6.425	6.395-6.455	4.057e+03
		6.654	6.624-6.684	2.464e+04
M	10 Aroclor-Total	1.000	0.980-1.020	
\$	11 4cmx	2.484	2.454-2.514	8.684e+04
\$	12 Decachlorobiphenyl	6.835	6.805-6.865	6.484e+04
	13 4,4'-DDT	5.323	5.303-5.343	1.460e+04
	14 4,4'-DDD	5.102	5.082-5.122	1.001e+05
	15 4,4'-DDE	4.691	4.671-4.711	8.898e+04

GEL Laboratories LLC  
INITIAL CALIBRATION DATA

Start Cal Date : 03-FEB-2010 10:24  
 End Cal Date : 03-FEB-2010 17:25  
 Quant Method : ESTD  
 Origin : Disabled  
 Target Version : 3.50  
 Integrator : Falcon  
 Method file : /chem/ecd8a.i/021810.b/ECD8-F-8082-020310a.m  
 Cal Date : 18-Feb-2010 11:40 jen01212  
 Curve Type : Average

## Calibration File Names:

Level 1: /chem/ecd8a.i/020310a.b/028f2801.d  
 Level 2: /chem/ecd8a.i/020310a.b/029f2901.d  
 Level 3: /chem/ecd8a.i/020310a.b/030f3001.d  
 Level 4: /chem/ecd8a.i/020310a.b/036f3601.d  
 Level 5: /chem/ecd8a.i/020310a.b/032f3201.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)	5614	5138	4704	4321	3545	4665	16.943
(2)	6383	6264	5935	5475	4791	5770	11.275
(3)	2817	2639	2454	2319	2042	2454	12.124
(4)	2629	2406	2216	2019	1720	2198	15.914
(5)	3708	3411	3117	2938	2537	3142	14.248
2 Aroclor-1221(1)	+++++	+++++	+++++	1100	+++++	1100	0.000
(2)	+++++	+++++	+++++	1460	+++++	1460	0.000
(3)	+++++	+++++	+++++	3385	+++++	3385	0.000
3 Aroclor-1232(1)	+++++	+++++	+++++	2601	+++++	2601	0.000
(2)	+++++	+++++	+++++	2261	+++++	2261	0.000
(3)	+++++	+++++	+++++	1243	+++++	1243	0.000
(4)	+++++	+++++	+++++	1479	+++++	1479	0.000
(5)	+++++	+++++	+++++	923	+++++	923	0.000
4 Aroclor-1242(1)	4726	4372	4070	3706	2998	3974	16.680
(2)	5172	5152	4949	4680	4027	4796	9.873
(3)	2139	1968	1820	1683	1417	1805	15.251
(4)	2229	2050	1908	1759	1500	1889	14.735
(5)	3065	2855	2678	2500	2127	2645	13.507
5 Aroclor-1248(1)	3599	3150	2999	2805	2397	2990	14.793
(2)	4688	4030	3804	3549	3043	3823	15.884
(3)	6028	5281	4903	4737	4053	5000	14.533
(4)	7068	6330	5909	5676	4965	5990	13.024
(5)	5743	5075	4737	4591	3986	4826	13.394
6 Aroclor-1254(1)	5857	5096	4715	4450	3806	4785	15.921
(2)	7961	7038	6468	6172	5208	6569	15.558
(3)	6032	5571	5105	4741	4242	5138	13.582
(4)	10107	9649	8877	8173	7180	8797	13.271
(5)	7953	7619	6996	6322	5678	6914	13.452

GEL Laboratories LLC  
INITIAL CALIBRATION DATA

Start Cal Date : 03-FEB-2010 10:24  
 End Cal Date : 03-FEB-2010 17:25  
 Quant Method : ESTD  
 Origin : Disabled  
 Target Version : 3.50  
 Integrator : Falcon  
 Method file : /chem/ecd8a.i/021810.b/ECD8-F-8082-020310a.m  
 Cal Date : 18-Feb-2010 11:40 jen01212  
 Curve Type : Average

Compound	100.000 Level 1	250.000 Level 2	500.000 Level 3	1000.000 Level 4	4000.000 Level 5	RRF	% RSD
=====	=====	=====	=====	=====	=====	=====	=====
7 Aroclor-1260(1)	7706	7225	6868	6425	5470	6739	12.628
(2)	11735	10983	10481	9771	8329	10260	12.630
(3)	7075	6577	6171	5792	5035	6130	12.657
(4)	7317	6857	6397	6058	5301	6386	12.066
(5)	7655	7335	6855	6540	5914	6860	9.924
8 Aroclor-1262(1)	3851	3558	3311	3256	2859	3367	10.954
(2)	5935	5551	5239	5102	4386	5243	10.995
(3)	7996	7523	7022	6963	6012	7103	10.414
(4)	9555	9028	8567	8433	7318	8580	9.694
(5)	8875	8357	7946	7802	6850	7966	9.421
9 Aroclor-1268(1)	+++++	+++++	+++++	16324	+++++	16324	0.000
(2)	+++++	+++++	+++++	15723	+++++	15723	0.000
(3)	+++++	+++++	+++++	12075	+++++	12075	0.000
(4)	+++++	+++++	+++++	6023	+++++	6023	0.000
(5)	+++++	+++++	+++++	36012	+++++	36012	0.000
M 10 Aroclor-Total	+++++	+++++	+++++	+++++	+++++	+++++	+++++
13 4,4'-DDT	+++++	+++++	+++++	23929	+++++	23929	0.000
14 4,4'-DDD	+++++	+++++	+++++	157020	+++++	157020	0.000
15 4,4'-DDE	+++++	+++++	+++++	133975	+++++	133975	0.000
=====	=====	=====	=====	=====	=====	=====	=====
\$ 11 4cmx	141196	137660	133177	129355	115643	131406	7.521
\$ 12 Decachlorobiphenyl	111693	106508	99006	96244	86457	99981	9.718

GEL Laboratories LLC  
INITIAL CALIBRATION DATA

Start Cal Date : 03-FEB-2010 10:24  
 End Cal Date : 03-FEB-2010 17:25  
 Quant Method : ESTD  
 Origin : Disabled  
 Target Version : 3.50  
 Integrator : Falcon  
 Method file : /chem/ecd8a.i/021810.b/ECD8-B-8082-020310a.m  
 Cal Date : 19-Feb-2010 07:39 jen01212  
 Curve Type : Average

## Calibration File Names:

Level 1: /chem/ecd8a.i/020310a.b/028b2801.d  
 Level 2: /chem/ecd8a.i/020310a.b/029b2901.d  
 Level 3: /chem/ecd8a.i/020310a.b/030b3001.d  
 Level 4: /chem/ecd8a.i/020310a.b/036b3601.d  
 Level 5: /chem/ecd8a.i/020310a.b/032b3201.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)	3955	3879	3768	3829	3401	3766	5.726
(2)	2683	2623	2522	2463	2181	2494	7.814
(3)	1588	1565	1522	1510	1392	1515	5.000
(4)	1644	1573	1498	1453	1297	1493	8.812
(5)	2161	2107	2068	2025	1817	2036	6.473
2 Aroclor-1221(1)	+++++	+++++	+++++	895	+++++	895	0.000
(2)	+++++	+++++	+++++	557	+++++	557	0.000
(3)	+++++	+++++	+++++	2060	+++++	2060	0.000
3 Aroclor-1232(1)	+++++	+++++	+++++	1515	+++++	1515	0.000
(2)	+++++	+++++	+++++	1744	+++++	1744	0.000
(3)	+++++	+++++	+++++	1176	+++++	1176	0.000
(4)	+++++	+++++	+++++	710	+++++	710	0.000
(5)	+++++	+++++	+++++	618	+++++	618	0.000
4 Aroclor-1242(1)	2949	2857	2758	2609	2213	2677	10.779
(2)	3213	3196	3180	3232	2808	3126	5.721
(3)	2287	2232	2178	2099	1842	2127	8.178
(4)	1820	1782	1741	1678	1497	1703	7.463
(5)	1675	1595	1607	1522	1434	1567	5.872
5 Aroclor-1248(1)	1621	1511	1422	1366	1213	1427	10.773
(2)	2779	2594	2491	2383	2090	2467	10.392
(3)	3403	3233	3131	3022	2657	3089	9.043
(4)	3964	3788	3692	3588	3204	3647	7.785
(5)	4333	4155	4060	3948	3526	4004	7.553
6 Aroclor-1254(1)	3700	3695	3475	3389	2993	3450	8.395
(2)	4204	4194	3940	3836	3377	3910	8.648
(3)	5766	5885	5570	5452	4827	5500	7.494
(4)	4254	4252	4044	3942	3562	4011	7.104
(5)	2775	2711	2546	2462	2250	2549	8.187

GEL Laboratories LLC  
INITIAL CALIBRATION DATA

Start Cal Date : 03-FEB-2010 10:24  
 End Cal Date : 03-FEB-2010 17:25  
 Quant Method : ESTD  
 Origin : Disabled  
 Target Version : 3.50  
 Integrator : Falcon  
 Method file : /chem/ecd8a.i/021810.b/ECD8-B-8082-020310a.m  
 Cal Date : 19-Feb-2010 07:39 jen01212  
 Curve Type : Average

Compound	100.000 Level 1	250.000 Level 2	500.000 Level 3	1000.000 Level 4	4000.000 Level 5	RRF	% RSD
=====							
7 Aroclor-1260(1)	4328	4278	4140	4064	3611	4084	6.976
(2)	5221	5198	5036	4963	4428	4969	6.467
(3)	3970	3947	3809	3790	3427	3788	5.744
(4)	4121	4108	3975	3957	3605	3953	5.268
(5)	6395	6455	6249	6250	5789	6227	4.190
8 Aroclor-1262(1)	3545	3367	3269	3249	2948	3276	6.635
(2)	4038	3929	3844	3825	3498	3827	5.277
(3)	5683	5613	5515	5463	4958	5446	5.255
(4)	5266	5178	5090	5067	4633	5047	4.838
(5)	7327	7356	7286	7270	6740	7196	3.572
9 Aroclor-1268(1)	+++++	+++++	+++++	11384	+++++	11384	0.000
(2)	+++++	+++++	+++++	10412	+++++	10412	0.000
(3)	+++++	+++++	+++++	8192	+++++	8192	0.000
(4)	+++++	+++++	+++++	4057	+++++	4057	0.000
(5)	+++++	+++++	+++++	24640	+++++	24640	0.000
M 10 Aroclor-Total	+++++	+++++	+++++	+++++	+++++	+++++	+++++
13 4,4'-DDT	+++++	+++++	+++++	14596	+++++	14596	0.000
14 4,4'-DDD	+++++	+++++	+++++	100145	+++++	100145	0.000
15 4,4'-DDE	+++++	+++++	+++++	88982	+++++	88982	0.000
=====							
\$ 11 4cmx	86244	88409	88291	88885	82388	86843	3.097
\$ 12 Decachlorobiphenyl	68541	67257	64616	64263	59541	64844	5.342

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.: 10-1758  
 Instrument ID: ECD8A Calibration Date: 02/18/10 Time: 0617  
 Lab File ID: 002F0201 Init. Calib. Date(s): 02/03/10 02/03/10  
 Heated Purge: (Y/N) N Init. Calib. Times: 1024 1114  
 GC Column: CLP1 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
=====	=====	=====	=====	=====	=====
Aroclor-1016	4664.624	4754.361	0.01	1.9	15.0
(2)	5769.588	5964.139	0.01	3.4	15.0
(3)	2454.201	2554.222	0.01	4.1	15.0
(4)	2198.179	2273.820	0.01	3.4	15.0
(5)	3142.156	3326.077	0.01	5.8	15.0
Aroclor-1260	6738.969	7580.042	0.01	12.5	15.0
(2)	10259.796	11168.973	0.01	8.9	15.0
(3)	6129.851	6417.185	0.01	4.7	15.0
(4)	6385.867	6618.066	0.01	3.6	15.0
(5)	6859.759	6913.603	0.01	0.8	15.0
=====	=====	=====	=====	=====	=====
4cmx	131406.10	140798.47	0.01	7.1	15.0
Decachlorobiphenyl	99981.358	93609.530	0.01	-6.4	15.0
=====	=====	=====	=====	=====	=====

FORM VII PEST

FORM 7  
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A  
 Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-1758  
 Instrument ID: ECD8A Calibration Date: 02/18/10 Time: 0617  
 Lab File ID: 002B0201 Init. Calib. Date(s): 02/03/10 02/03/10  
 Heated Purge: (Y/N) N Init. Calib. Times: 1024 1114  
 GC Column: CLP2 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
=====	=====	=====	=====	=====	=====
Aroclor-1016	3766.401	3838.805	0.01	1.9	15.0
(2)	2494.427	2617.250	0.01	4.9	15.0
(3)	1515.492	1542.860	0.01	1.8	15.0
(4)	1493.163	1497.828	0.01	0.3	15.0
(5)	2035.618	2103.662	0.01	3.3	15.0
Aroclor-1260	4084.417	4566.768	0.01	11.8	15.0
(2)	4968.902	5487.641	0.01	10.4	15.0
(3)	3788.418	4193.507	0.01	10.7	15.0
(4)	3953.106	4362.230	0.01	10.3	15.0
(5)	6227.437	6796.325	0.01	9.1	15.0
=====	=====	=====	=====	=====	=====
4cmx	86843.352	94512.860	0.01	8.8	15.0
Decachlorobiphenyl	64843.758	65449.600	0.01	0.9	15.0
=====	=====	=====	=====	=====	=====

FORM VII PEST

FORM 7  
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A  
 Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-1758  
 Instrument ID: ECD8A Calibration Date: 02/18/10 Time: 1256  
 Lab File ID: 034F3401 Init. Calib. Date(s): 02/03/10 02/03/10  
 Heated Purge: (Y/N) N Init. Calib. Times: 1024 1114  
 GC Column: CLP1 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
=====	=====	=====	=====	=====	=====
Aroclor-1016	4664.624	4393.579	0.01	-5.8	15.0
(2)	5769.588	5284.832	0.01	-8.4	15.0
(3)	2454.201	2293.702	0.01	-6.5	15.0
(4)	2198.179	2009.919	0.01	-8.6	15.0
(5)	3142.156	2953.015	0.01	-6.0	15.0
Aroclor-1260	6738.969	6833.763	0.01	1.4	15.0
(2)	10259.796	10103.403	0.01	-1.5	15.0
(3)	6129.851	5910.229	0.01	-3.6	15.0
(4)	6385.867	6163.586	0.01	-3.5	15.0
(5)	6859.759	6695.762	0.01	-2.4	15.0
=====	=====	=====	=====	=====	=====
4cmx	131406.10	132022.51	0.01	0.5	15.0
Decachlorobiphenyl	99981.358	92131.900	0.01	-7.8	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.: 10-1758  
 Instrument ID: ECD8A Calibration Date: 02/18/10 Time: 1256  
 Lab File ID: 034B3401 Init. Calib. Date(s): 02/03/10 02/03/10  
 Heated Purge: (Y/N) N Init. Calib. Times: 1024 1114  
 GC Column: CLP2 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
=====	=====	=====	=====	=====	=====
Aroclor-1016	3766.401	3733.137	0.01	-0.9	15.0
(2)	2494.427	2560.386	0.01	2.6	15.0
(3)	1515.492	1507.419	0.01	-0.5	15.0
(4)	1493.163	1459.677	0.01	-2.2	15.0
(5)	2035.618	2049.358	0.01	0.7	15.0
Aroclor-1260	4084.417	4478.260	0.01	9.6	15.0
(2)	4968.902	5369.399	0.01	8.1	15.0
(3)	3788.418	3705.320	0.01	-2.2	15.0
(4)	3953.106	4122.852	0.01	4.3	15.0
(5)	6227.437	6716.102	0.01	7.8	15.0
=====	=====	=====	=====	=====	=====
4cmx	86843.352	92717.540	0.01	6.8	15.0
Decachlorobiphenyl	64843.758	64709.630	0.01	-0.2	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.: 10-1758  
 Instrument ID: ECD8A Calibration Date: 02/18/10 Time: 1525  
 Lab File ID: 046F4601 Init. Calib. Date(s): 02/03/10 02/03/10  
 Heated Purge: (Y/N) N Init. Calib. Times: 1024 1114  
 GC Column: CLP1 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
=====	=====	=====	=====	=====	=====
Aroclor-1016	4664.624	4811.889	0.01	3.2	15.0
(2)	5769.588	6081.261	0.01	5.4	15.0
(3)	2454.201	2601.144	0.01	6.0	15.0
(4)	2198.179	2303.137	0.01	4.8	15.0
(5)	3142.156	3366.713	0.01	7.1	15.0
Aroclor-1260	6738.969	7618.246	0.01	13.0	15.0
(2)	10259.796	11239.950	0.01	9.6	15.0
(3)	6129.851	6491.593	0.01	5.9	15.0
(4)	6385.867	6716.272	0.01	5.2	15.0
(5)	6859.759	7122.073	0.01	3.8	15.0
=====	=====	=====	=====	=====	=====
4cmx	131406.10	142876.62	0.01	8.7	15.0
Decachlorobiphenyl	99981.358	94455.090	0.01	-5.5	15.0
=====	=====	=====	=====	=====	=====

FORM VII PEST

FORM 7  
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A  
 Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-1758  
 Instrument ID: ECD8A Calibration Date: 02/18/10 Time: 1525  
 Lab File ID: 046B4601 Init. Calib. Date(s): 02/03/10 02/03/10  
 Heated Purge: (Y/N) N Init. Calib. Times: 1024 1114  
 GC Column: CLP2 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
=====	=====	=====	=====	=====	=====
Aroclor-1016	3766.401	3944.024	0.01	4.7	15.0
(2)	2494.427	2602.109	0.01	4.3	15.0
(3)	1515.492	1560.657	0.01	3.0	15.0
(4)	1493.163	1507.760	0.01	1.0	15.0
(5)	2035.618	2106.723	0.01	3.5	15.0
Aroclor-1260	4084.417	4565.131	0.01	11.8	15.0
(2)	4968.902	5496.671	0.01	10.6	15.0
(3)	3788.418	4199.750	0.01	10.8	15.0
(4)	3953.106	4375.188	0.01	10.7	15.0
(5)	6227.437	6895.100	0.01	10.7	15.0
=====	=====	=====	=====	=====	=====
4cmx	86843.352	93732.910	0.01	7.9	15.0
Decachlorobiphenyl	64843.758	66025.290	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.: 10-1758  
 Instrument ID: ECD8A Calibration Date: 02/18/10 Time: 1728  
 Lab File ID: 056F5601 Init. Calib. Date(s): 02/03/10 02/03/10  
 Heated Purge: (Y/N) N Init. Calib. Times: 1024 1114  
 GC Column: CLP1 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
=====	=====	=====	=====	=====	=====
Aroclor-1016	4664.624	4661.484	0.01	-0.1	15.0
(2)	5769.588	5982.480	0.01	3.7	15.0
(3)	2454.201	2500.489	0.01	1.9	15.0
(4)	2198.179	2237.114	0.01	1.8	15.0
(5)	3142.156	3211.326	0.01	2.2	15.0
Aroclor-1260	6738.969	7337.478	0.01	8.9	15.0
(2)	10259.796	10896.796	0.01	6.2	15.0
(3)	6129.851	6348.986	0.01	3.6	15.0
(4)	6385.867	6608.605	0.01	3.5	15.0
(5)	6859.759	6956.626	0.01	1.4	15.0
=====	=====	=====	=====	=====	=====
4cmx	131406.10	139331.52	0.01	6.0	15.0
Decachlorobiphenyl	99981.358	92696.450	0.01	-7.3	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.: 10-1758  
 Instrument ID: ECD8A Calibration Date: 02/18/10 Time: 1728  
 Lab File ID: 056B5601 Init. Calib. Date(s): 02/03/10 02/03/10  
 Heated Purge: (Y/N) N Init. Calib. Times: 1024 1114  
 GC Column: CLP2 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
=====	=====	=====	=====	=====	=====
Aroclor-1016	3766.401	3727.061	0.01	-1.0	15.0
(2)	2494.427	2496.847	0.01	0.1	15.0
(3)	1515.492	1488.903	0.01	-1.8	15.0
(4)	1493.163	1441.602	0.01	-3.4	15.0
(5)	2035.618	2022.065	0.01	-0.7	15.0
Aroclor-1260	4084.417	4409.572	0.01	8.0	15.0
(2)	4968.902	5334.647	0.01	7.4	15.0
(3)	3788.418	4089.798	0.01	8.0	15.0
(4)	3953.106	4266.276	0.01	7.9	15.0
(5)	6227.437	6716.730	0.01	7.8	15.0
=====	=====	=====	=====	=====	=====
4cmx	86843.352	89948.400	0.01	3.6	15.0
Decachlorobiphenyl	64843.758	64920.680	0.01	0.1	15.0
=====	=====	=====	=====	=====	=====

FORM VII PEST

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd8a.i/021810.b/002f0201.d  
Lab Smp Id: WAR100203-60 01 Client Smp ID: AR166001  
Inj Date : 18-FEB-2010 06:17  
Operator : JAOC Inst ID: ecd8a.i  
Smp Info : |WAR100203-60 01  
Misc Info : |1660  
Comment :  
Method : /chem/ecd8a.i/021810.b/ECD8-F-8082-020310a.m  
Meth Date : 18-Feb-2010 09:47 jen01212 Quant Type: ESTD  
Cal Date : 03-FEB-2010 17:25 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

AMOUNTS

			CAL-AMT		ON-COL			
RT	EXP RT	DLT RT	RESPONSE	( ug/L)	( ug/L)	TARGET	RANGE	RATIO
==	=====	=====	=====	=====	=====	=====	=====	=====
\$ 11 4cmx					CAS #: 877-09-8			
2.253	2.253	0.000	14079847	100.000	107	80.00-	120.00	100.00
-----								
\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3			
6.246	6.246	0.000	9360953	100.000	93.6	80.00-	120.00	100.00
-----								
1 Aroclor-1016					CAS #: 12674-11-2			
2.811	2.811	0.000	4754361	1000.00	1020	80.00-	120.00	100.00
3.163	3.163	0.000	5964138	1000.00	1030	104.86-	144.86	125.45
3.306	3.306	0.000	2554222	1000.00	1040	32.99-	72.99	53.72
3.399	3.399	0.000	2273820	1000.00	1030	26.55-	66.55	47.83
3.561	3.561	0.000	3326077	1000.00	1060	48.81-	88.81	69.96
Average of Peak Amounts =					1.04e+03			
-----								
7 Aroclor-1260					CAS #: 11096-82-5			
4.435	4.435	0.000	7580041	1000.00	1120	80.00-	120.00	100.00
4.631	4.631	0.000	11168972	1000.00	1090	129.67-	169.67	147.35
4.907	4.907	0.000	6417184	1000.00	1050	65.33-	105.33	84.66
5.079	5.079	0.000	6618065	1000.00	1040	68.32-	108.32	87.31
5.490	5.490	0.000	6913602	1000.00	1010	72.71-	112.71	91.21
Average of Peak Amounts =					1.06e+03			

Data File: /chem/ecd8a.i/021810.b/002f0201.d

Date : 18-FEB-2010 06:17

Client ID: AR166001

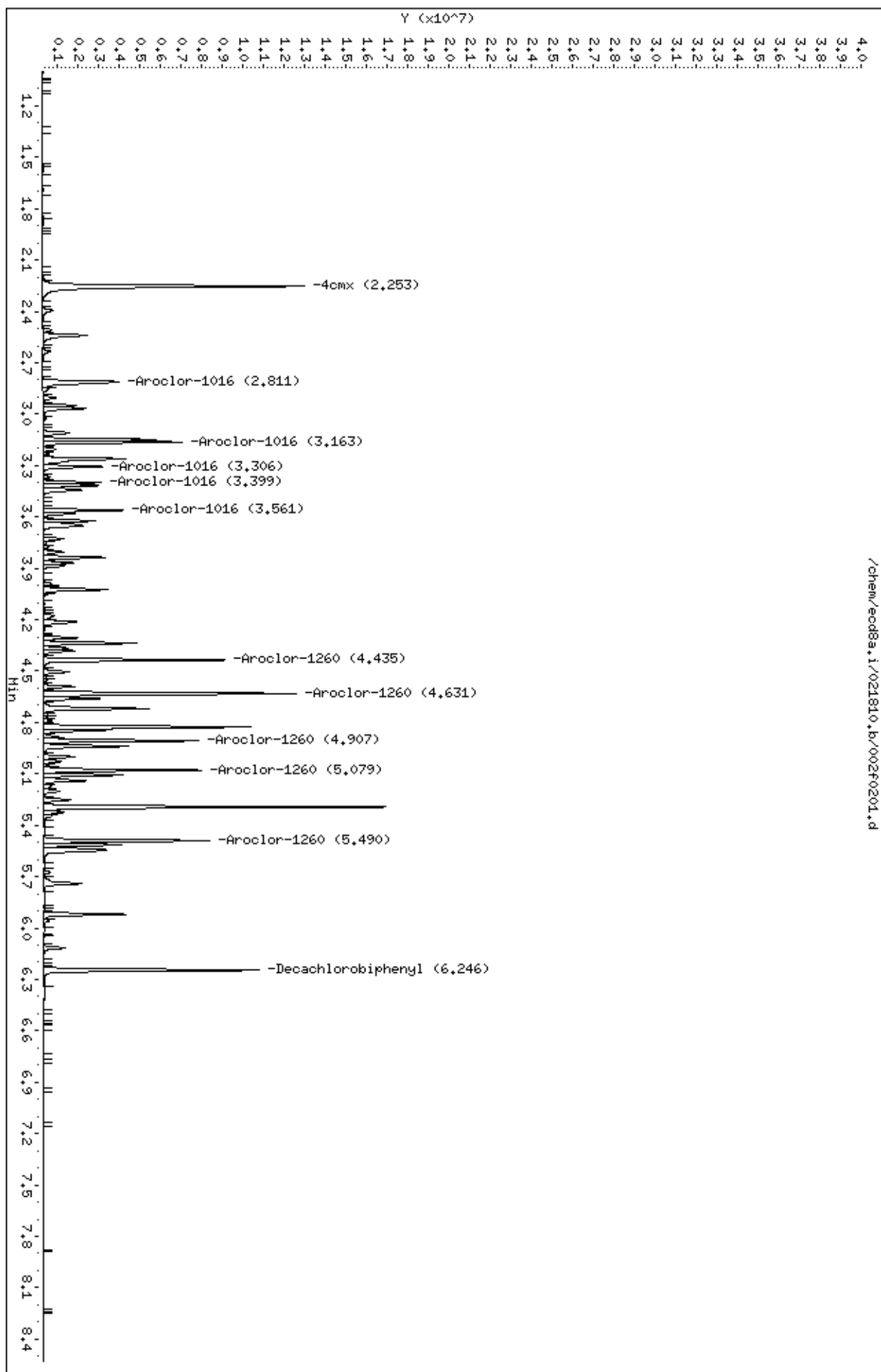
Sample Info: IMR100203-60 01

Column phase: CLP1

Instrument: ecd8a.i

Operator: JAOC

Column diameter: 0.25



GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd8a.i/021810.b/002b0201.d  
Lab Smp Id: WAR100203-60 01 Client Smp ID: AR166001  
Inj Date : 18-FEB-2010 06:17  
Operator : JAOC Inst ID: ecd8a.i  
Smp Info : |WAR100203-60 01  
Misc Info : |1660  
Comment :  
Method : /chem/ecd8a.i/021810.b/ECD8-B-8082-020310a.m  
Meth Date : 18-Feb-2010 09:48 jen01212 Quant Type: ESTD  
Cal Date : 03-FEB-2010 17:25 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

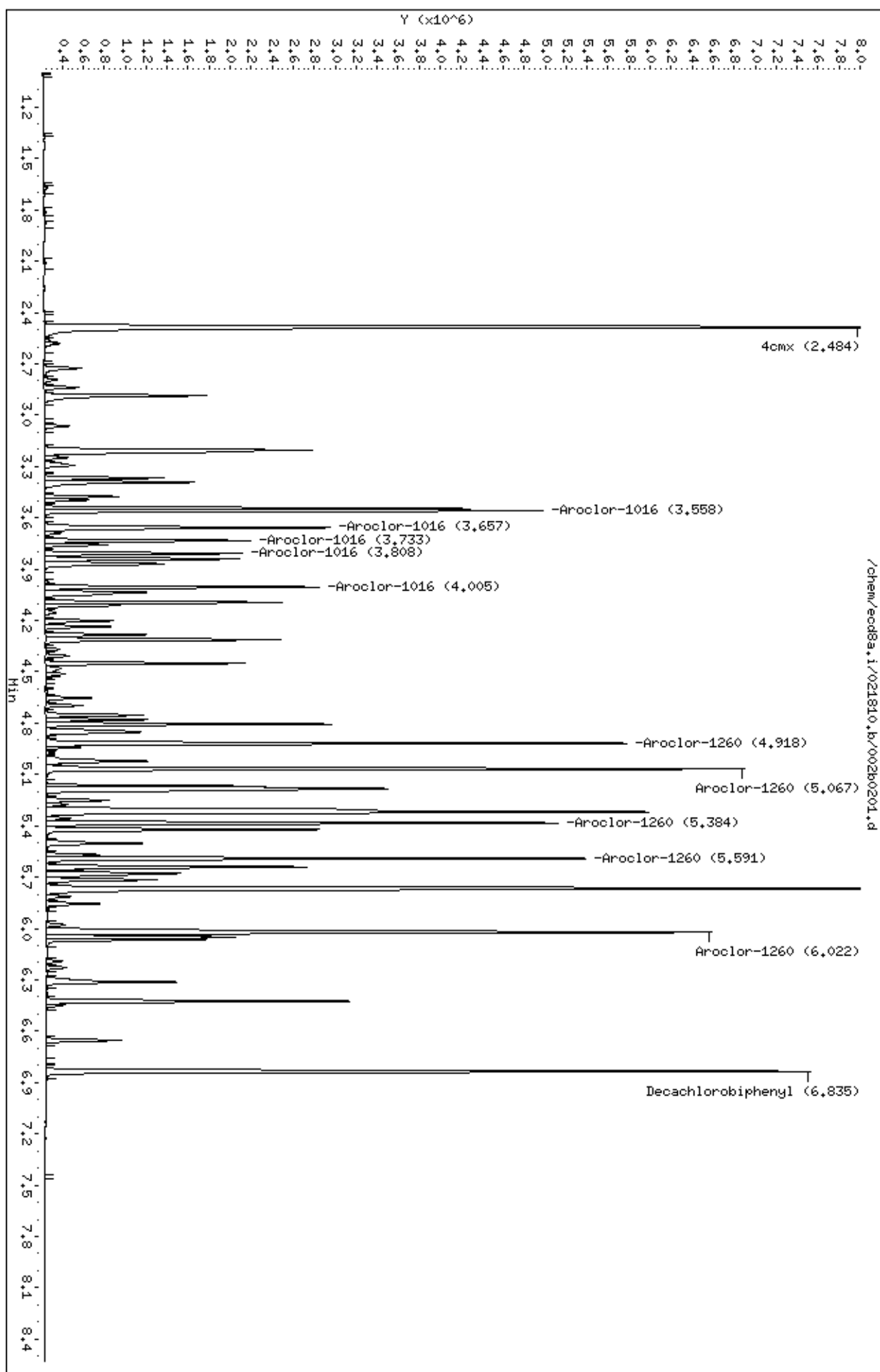
AMOUNTS

			CAL-AMT		ON-COL			
RT	EXP RT	DLT RT	RESPONSE	( ug/L)	( ug/L)	TARGET	RANGE	RATIO
==	=====	=====	=====	=====	=====	=====	=====	=====
\$ 11 4cmx					CAS #: 877-09-8			
2.484	2.484	0.000	9451286	100.000	109	80.00-	120.00	100.00
-----								
\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3			
6.835	6.835	0.000	6544960	100.000	101	80.00-	120.00	100.00
-----								
1 Aroclor-1016					CAS #: 12674-11-2			
3.558	3.558	0.000	3838804	1000.00	1020	80.00-	120.00	100.00
3.657	3.657	0.000	2617249	1000.00	1050	47.24-	87.24	68.18
3.733	3.733	0.000	1542859	1000.00	1020	19.69-	59.69	40.19
3.808	3.808	0.000	1497828	1000.00	1000	18.49-	58.49	39.02
4.005	4.005	0.000	2103662	1000.00	1030	33.80-	73.80	54.80
Average of Peak Amounts =					1.02e+03			
-----								
7 Aroclor-1260					CAS #: 11096-82-5			
4.918	4.918	0.000	4566767	1000.00	1120	80.00-	120.00	100.00
5.067	5.067	0.000	5487641	1000.00	1100	100.49-	140.49	120.16
5.384	5.384	0.000	4193506	1000.00	1110	71.37-	111.37	91.83
5.591	5.591	0.000	4362230	1000.00	1100	74.64-	114.64	95.52
6.022	6.022	0.000	6796325	1000.00	1090	127.73-	167.73	148.82
Average of Peak Amounts =					1.1e+03			



Data File: /chem/ecd8a.i/021810.b/002b0201.d  
Date : 18-FEB-2010 06:17  
Client ID: AR166001  
Sample Info: IMR100203-60 01  
Column phase: CLP2

Instrument: ecd8a.i  
Operator: JAOC  
Column diameter: 0.25



GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd8a.i/021810.b/003f0301.d  
Lab Smp Id: WAR100201-54 Client Smp ID: AR125401  
Inj Date : 18-FEB-2010 06:30  
Operator : JAOC Inst ID: ecd8a.i  
Smp Info : |WAR100201-54  
Misc Info : |1254  
Comment :  
Method : /chem/ecd8a.i/021810.b/ECD8-F-8082-020310a.m  
Meth Date : 18-Feb-2010 09:47 jen01212 Quant Type: ESTD  
Cal Date : 03-FEB-2010 17:25 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

AMOUNTS

CAL-AMT ON-COL

RT	EXP RT	DLT RT	RESPONSE ( ug/L)	( ug/L)	TARGET RANGE	RATIO
----	--------	--------	------------------	---------	--------------	-------

6 Aroclor-1254			CAS #: 11097-69-1			
3.837	3.837	0.000	5066363 1000.00	1060 80.00-	120.00	100.00
4.024	4.024	0.000	6906905 1000.00	1050 116.33-	156.33	136.33
4.220	4.220	0.000	5482849 1000.00	1070 88.22-	128.22	108.22
4.306	4.306	0.000	9592860 1000.00	1090 169.34-	209.34	189.34
4.502	4.502	0.000	7409539 1000.00	1070 126.25-	166.25	146.25

Average of Peak Amounts = 1.07e+03

Data File: /chem/ecd8a.i/021810.b/003f0301.d

Page 1

Date : 18-FEB-2010 06:30

Client ID: AR125401

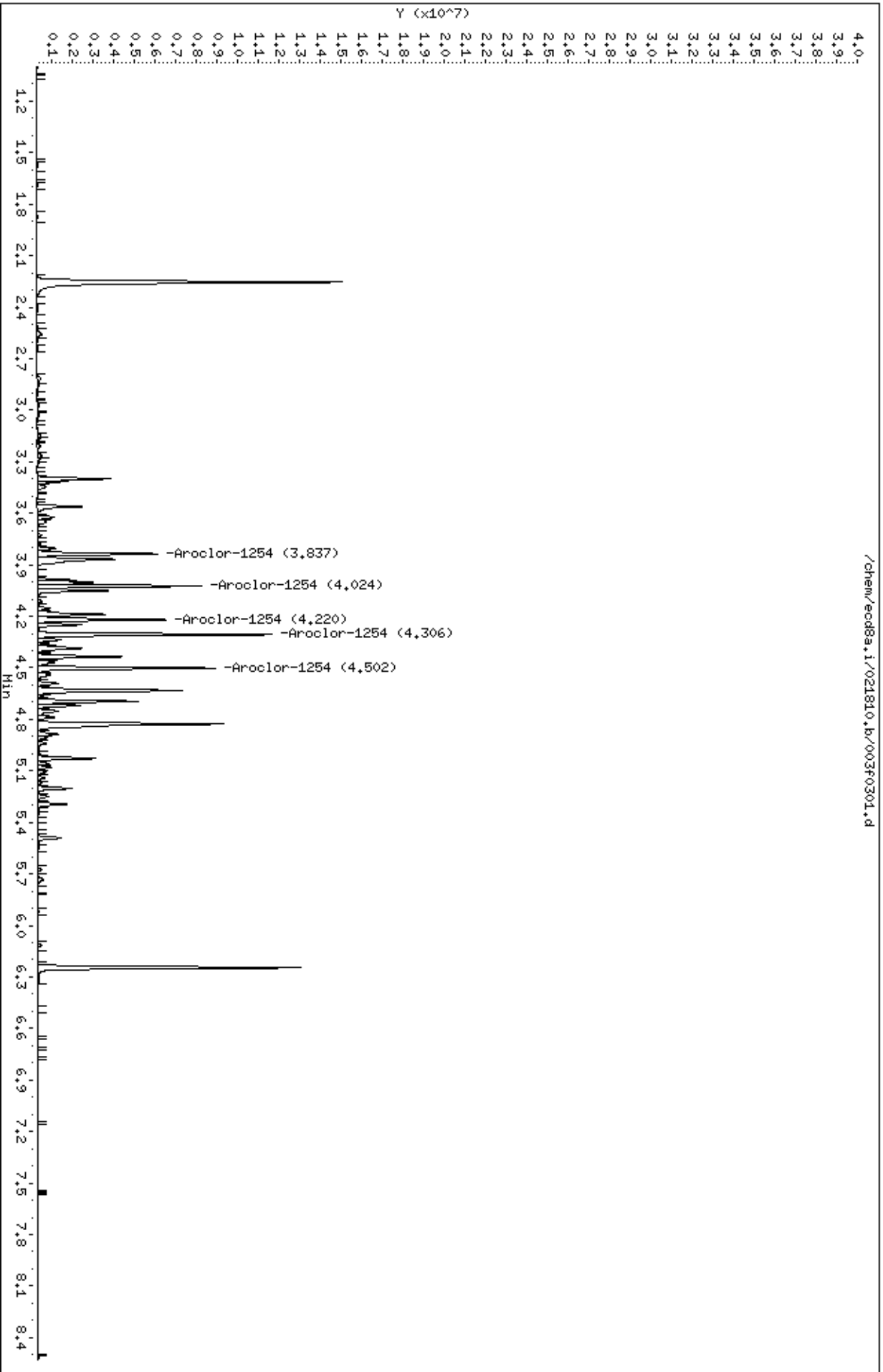
Sample Info: IMR100201-54

Instrument: ecd8a.i

Operator: JAOC

Column diameter: 0.25

Column phase: CLP1



Data File: /chem/ecd8a.i/021810.b/003b0301.d  
Report Date: 18-Feb-2010 09:50

Page 1

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd8a.i/021810.b/003b0301.d  
Lab Smp Id: WAR100201-54 Client Smp ID: AR125401  
Inj Date : 18-FEB-2010 06:30  
Operator : JAOC Inst ID: ecd8a.i  
Smp Info : |WAR100201-54  
Misc Info : |1254  
Comment :  
Method : /chem/ecd8a.i/021810.b/ECD8-B-8082-020310a.m  
Meth Date : 18-Feb-2010 09:48 jen01212 Quant Type: ESTD  
Cal Date : 03-FEB-2010 17:25 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

AMOUNTS

CAL-AMT ON-COL

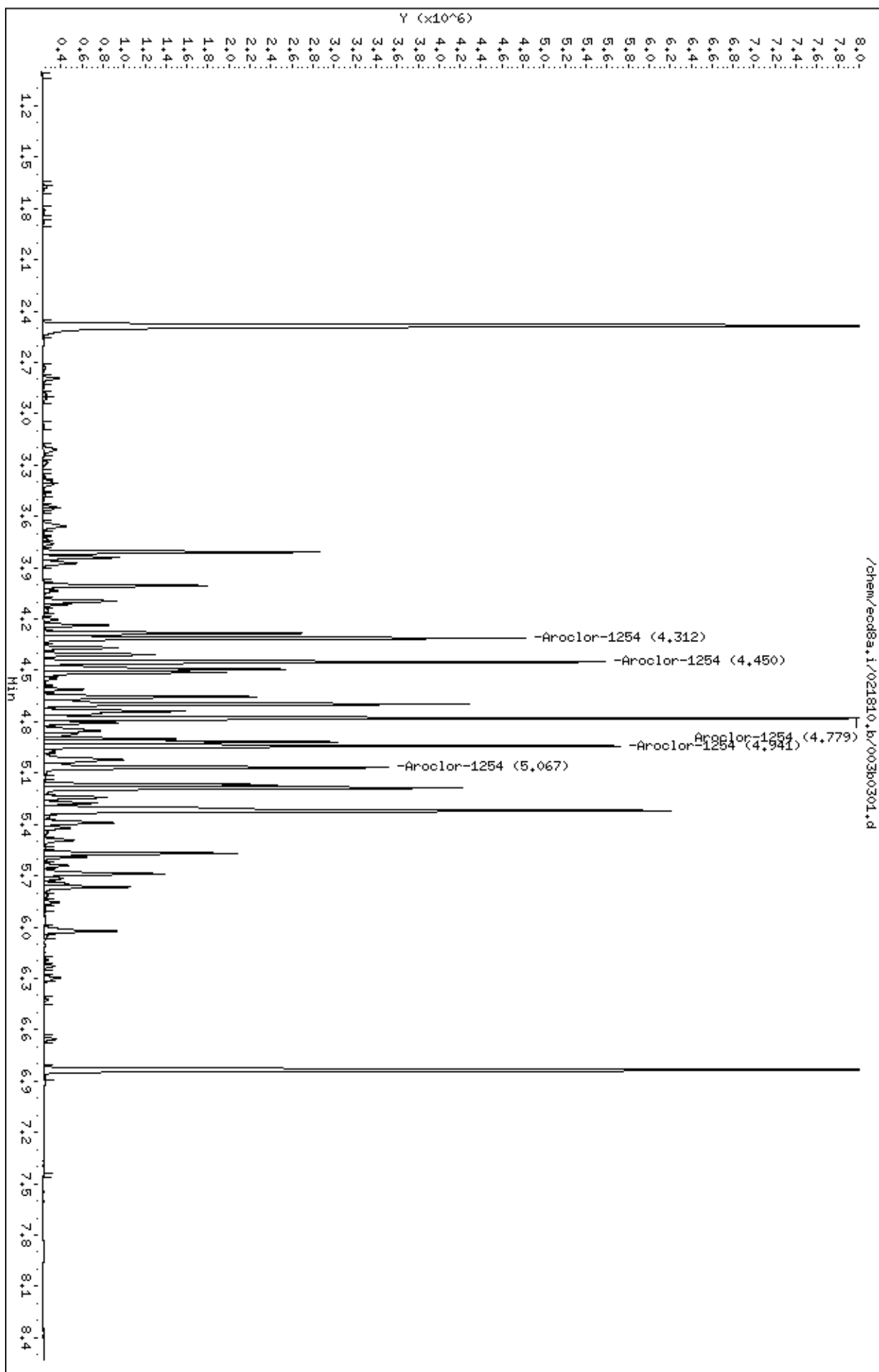
RT	EXP RT	DLT RT	RESPONSE ( ug/L)	( ug/L)	TARGET RANGE	RATIO
----	--------	--------	------------------	---------	--------------	-------

6 Aroclor-1254			CAS #: 11097-69-1			
4.312	4.312	0.000	3957886	1000.00	1150 80.00- 120.00	100.00
4.450	4.450	0.000	4430204	1000.00	1130 91.93- 131.93	111.93
4.779	4.779	0.000	6314835	1000.00	1150 139.55- 179.55	159.55
4.941	4.941	0.000	4520199	1000.00	1130 94.21- 134.21	114.21
5.067	5.067	0.000	2878190	1000.00	1130 52.72- 92.72	72.72

Average of Peak Amounts = 1.14e+03

Data File: /chem/ecd8a.i/021810.b/003b0301.d  
Date : 18-FEB-2010 06:30  
Client ID: AR125401  
Sample Info: IMR100201-54  
Column phase: CLP2

Instrument: ecd8a.i  
Operator: JAOC  
Column diameter: 0.25



GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd8a.i/021810.b/004f0401.d  
Lab Smp Id: WAR091217-42 Client Smp ID: AR124201  
Inj Date : 18-FEB-2010 06:42  
Operator : JAOC Inst ID: ecd8a.i  
Smp Info : |WAR091217-42  
Misc Info : |1242  
Comment :  
Method : /chem/ecd8a.i/021810.b/ECD8-F-8082-020310a.m  
Meth Date : 18-Feb-2010 09:47 jen01212 Quant Type: ESTD  
Cal Date : 03-FEB-2010 17:25 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

AMOUNTS

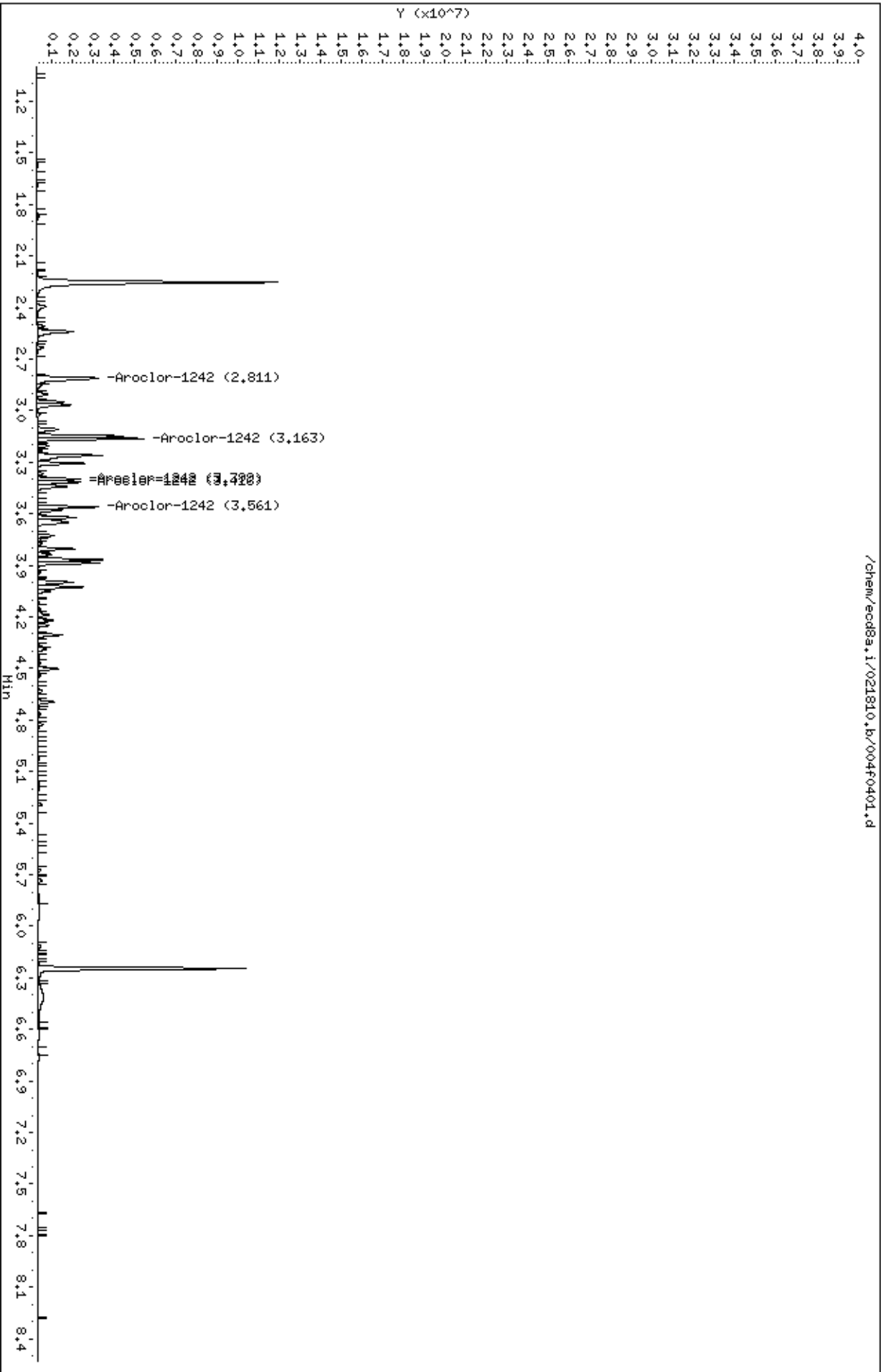
CAL-AMT ON-COL

RT	EXP RT	DLT RT	RESPONSE ( ug/L)	( ug/L)	TARGET RANGE	RATIO
----	--------	--------	------------------	---------	--------------	-------

4 Aroclor-1242			CAS #: 53469-21-9			
2.811	2.811	0.000	3794693	1000.00	955 80.00- 120.00	100.00
3.163	3.163	0.000	4540161	1000.00	947 99.65- 139.65	119.65
3.399	3.399	0.000	1699879	1000.00	942 24.80- 64.80	44.80
3.416	3.416	0.000	1791678	1000.00	948 27.22- 67.22	47.22
3.561	3.561	0.000	2518913	1000.00	952 46.38- 86.38	66.38

Average of Peak Amounts = 949

Data File: /chem/ecod8a.i/021810.b/004f0401.d  
 Date : 18-FEB-2010 06:42  
 Client ID: AR124201  
 Sample Info: IMR091217-42  
 Column phase: CLP1  
 Instrument: ecod8a.i  
 Operator: JAOC  
 Column diameter: 0.25



GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd8a.i/021810.b/004b0401.d  
Lab Smp Id: WAR091217-42 Client Smp ID: AR124201  
Inj Date : 18-FEB-2010 06:42  
Operator : JAOC Inst ID: ecd8a.i  
Smp Info : |WAR091217-42  
Misc Info : |1242  
Comment :  
Method : /chem/ecd8a.i/021810.b/ECD8-B-8082-020310a.m  
Meth Date : 18-Feb-2010 09:48 jen01212 Quant Type: ESTD  
Cal Date : 03-FEB-2010 17:25 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

AMOUNTS

CAL-AMT ON-COL

RT	EXP RT	DLT RT	RESPONSE ( ug/L)	( ug/L)	TARGET RANGE	RATIO
----	--------	--------	------------------	---------	--------------	-------

4 Aroclor-1242			CAS #: 53469-21-9			
3.205	3.205	0.000	2679364 1000.00	1000	80.00- 120.00	100.00
3.558	3.558	0.000	3079113 1000.00	985	94.92- 134.92	114.92
3.657	3.657	0.000	2167468 1000.00	1020	60.89- 100.89	80.89
4.005	4.005	0.000	1677009 1000.00	984	42.59- 82.59	62.59
4.095	4.095	0.000	1587708 1000.00	1010	39.26- 79.26	59.26

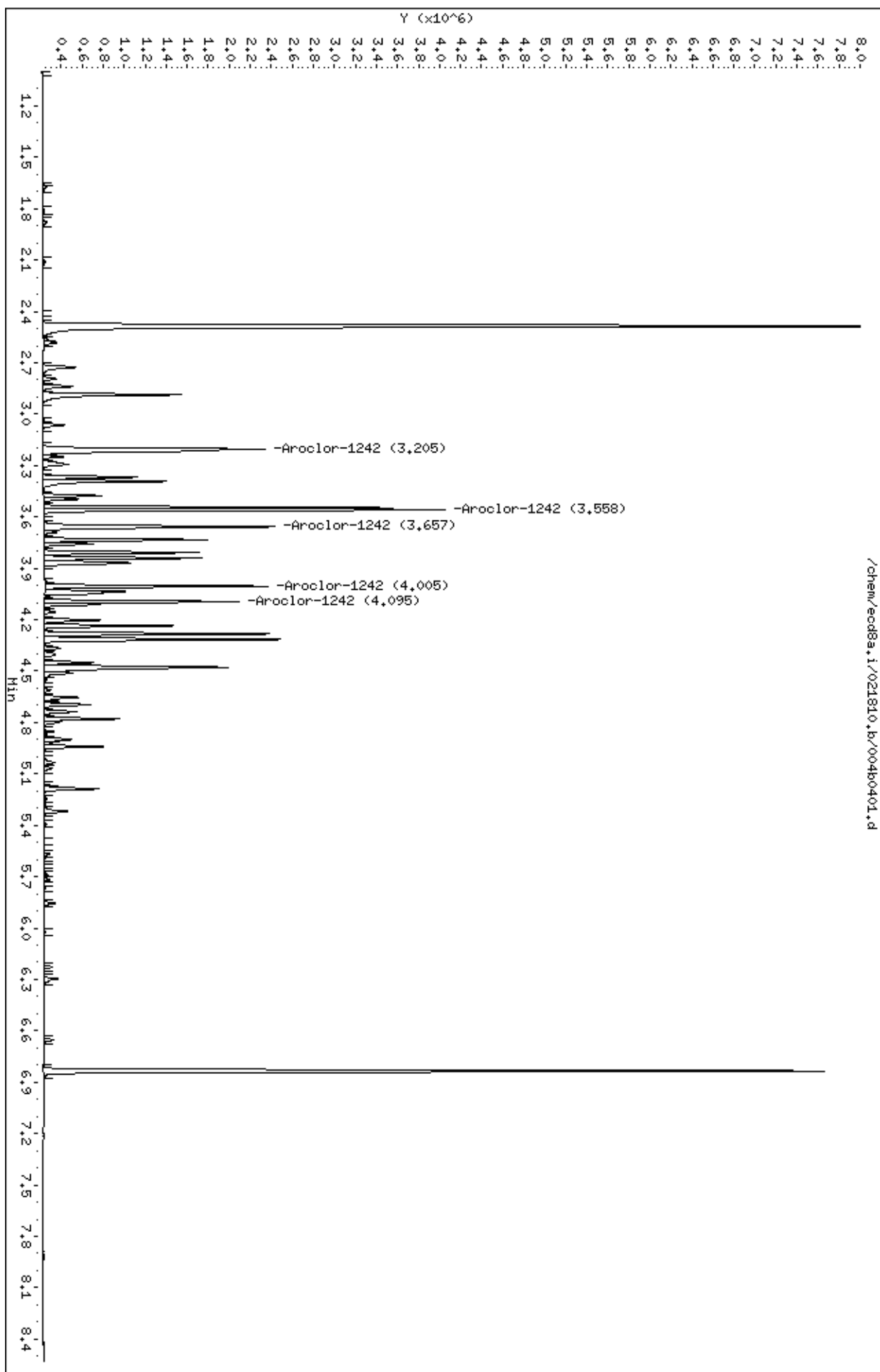
Average of Peak Amounts = 1e+03



Data File: /chem/ecd8a.i/021810.b/004b0401.d  
Date : 18-FEB-2010 06:42  
Client ID: AR124201  
Sample Info: IMR091217-42  
Column phase: CLP2

Instrument: ecd8a.i  
Operator: JAOC  
Column diameter: 0.25

Page 1



GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd8a.i/021810.b/005f0501.d

Lab Smp Id: WAR091217-48

Client Smp ID: AR124801

Inj Date : 18-FEB-2010 06:54

Operator : JAOC

Inst ID: ecd8a.i

Smp Info : |WAR091217-48

Misc Info : |1248

Comment :

Method : /chem/ecd8a.i/021810.b/ECD8-F-8082-020310a.m

Meth Date : 18-Feb-2010 09:47 jen01212 Quant Type: ESTD

Cal Date : 03-FEB-2010 17:25 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

AMOUNTS

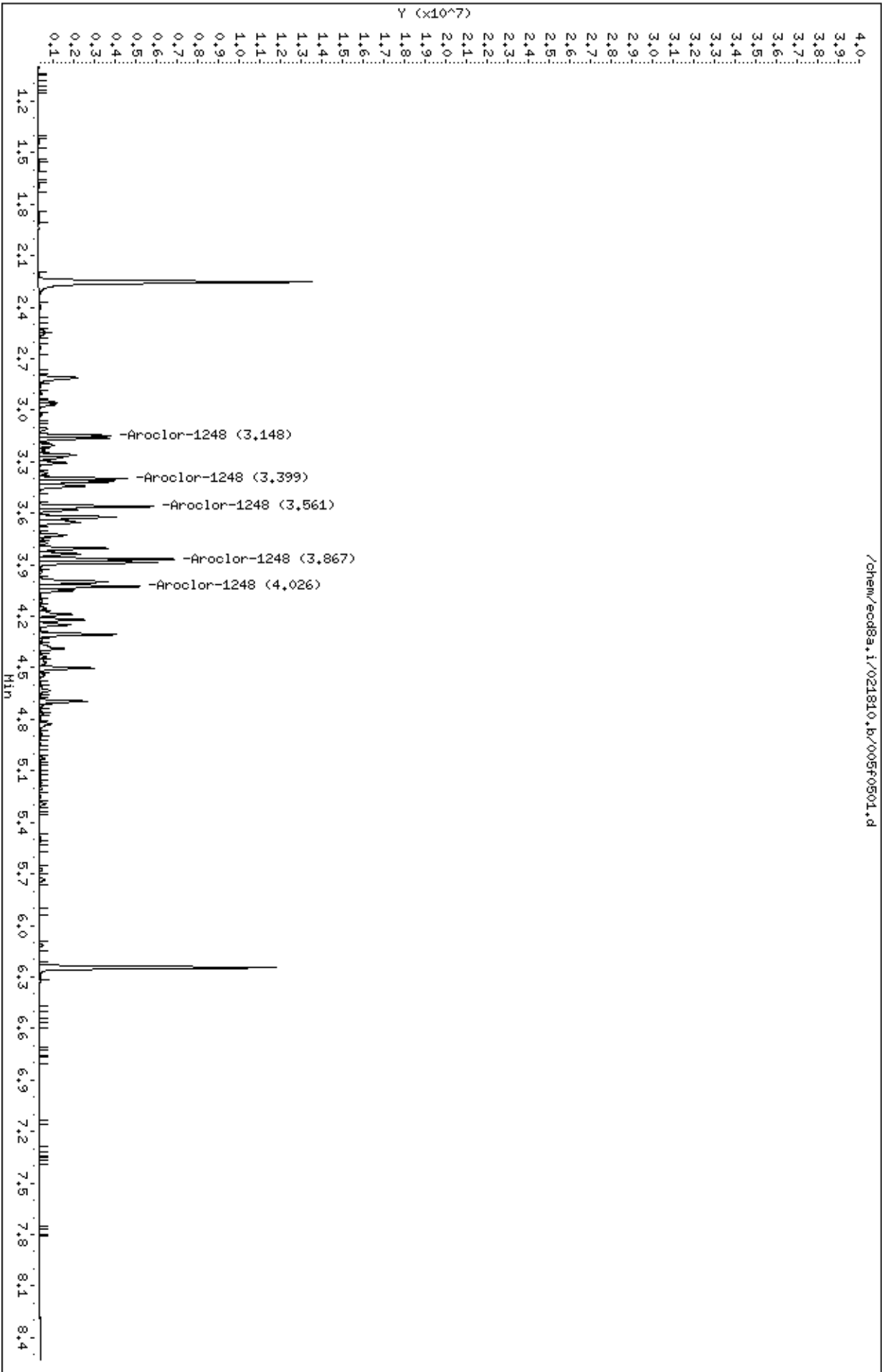
CAL-AMT ON-COL

RT	EXP RT	DLT RT	RESPONSE ( ug/L)	( ug/L)	TARGET RANGE	RATIO
----	--------	--------	------------------	---------	--------------	-------

5 Aroclor-1248					CAS #: 12672-29-6	
3.148	3.148	0.000	2729296	1000.00	913 80.00- 120.00	100.00
3.399	3.399	0.000	3546219	1000.00	928 109.93- 149.93	129.93
3.561	3.561	0.000	4623034	1000.00	924 149.39- 189.39	169.39
3.867	3.867	0.000	5510724	1000.00	920 181.91- 221.91	201.91
4.026	4.026	0.000	4508798	1000.00	934 145.20- 185.20	165.20

Average of Peak Amounts = 924

Data File: /chem/ecd8a.i/021810.b/005f0501.d  
 Date : 18-FEB-2010 06:54  
 Client ID: AR124801  
 Sample Info: IMR091217-48  
 Column phase: CLP1  
 Instrument: ecd8a.i  
 Operator: JAOC  
 Column diameter: 0.25



GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd8a.i/021810.b/005b0501.d  
Lab Smp Id: WAR091217-48 Client Smp ID: AR124801  
Inj Date : 18-FEB-2010 06:54  
Operator : JAOC Inst ID: ecd8a.i  
Smp Info : |WAR091217-48  
Misc Info : |1248  
Comment :  
Method : /chem/ecd8a.i/021810.b/ECD8-B-8082-020310a.m  
Meth Date : 18-Feb-2010 09:48 jen01212 Quant Type: ESTD  
Cal Date : 03-FEB-2010 17:25 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

AMOUNTS

CAL-AMT ON-COL

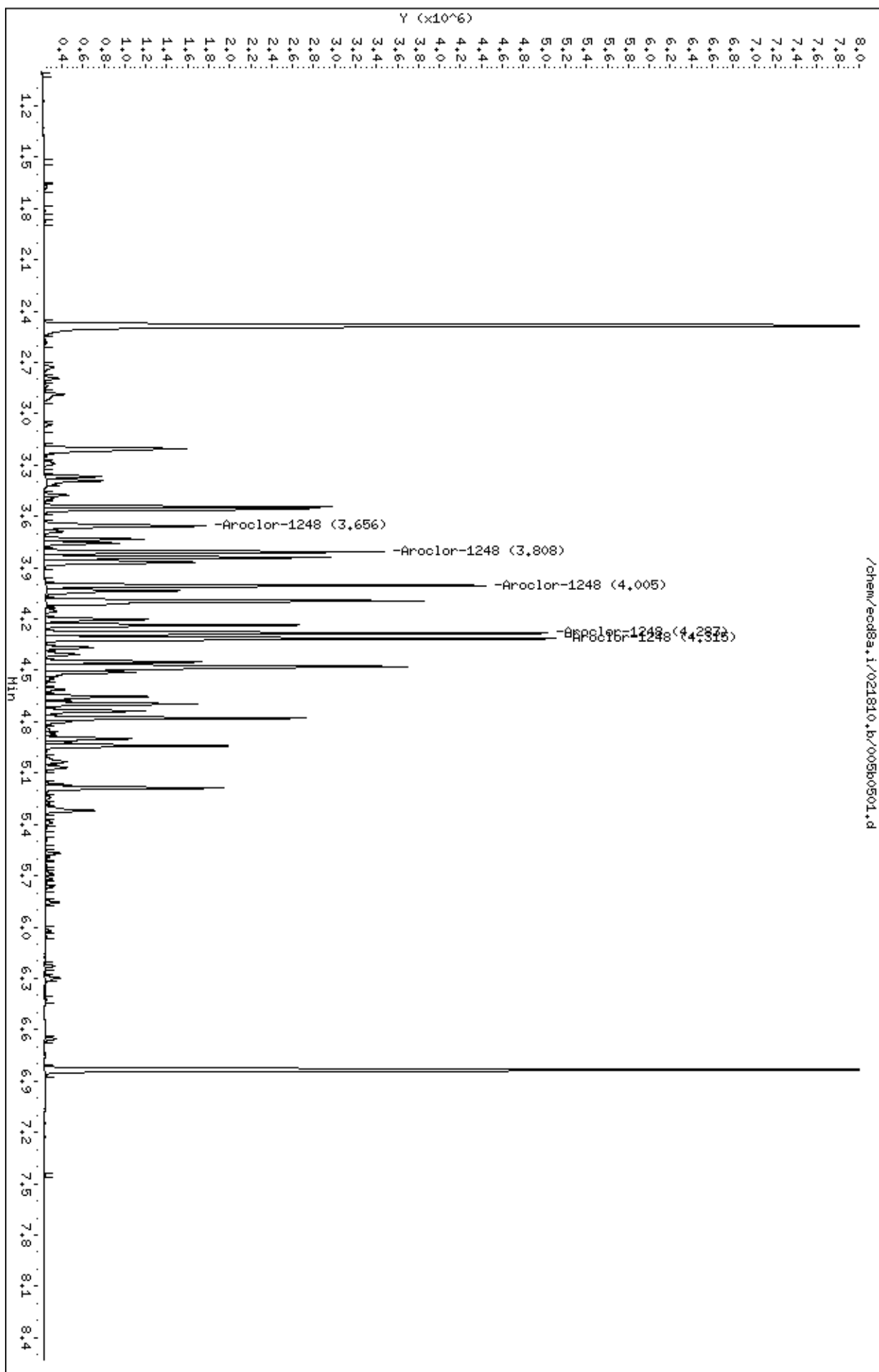
RT	EXP RT	DLT RT	RESPONSE ( ug/L)	( ug/L)	TARGET RANGE	RATIO
----	--------	--------	------------------	---------	--------------	-------

5 Aroclor-1248			CAS #: 12672-29-6			
3.656	3.656	0.000	1597521	1000.00	1120 80.00- 120.00	100.00
3.808	3.808	0.000	2611915	1000.00	1060 143.50- 183.50	163.50
4.005	4.005	0.000	3292962	1000.00	1060 186.13- 226.13	206.13
4.283	4.283	0.000	3855710	1000.00	1060 221.36- 261.36	241.36
4.315	4.315	0.000	4237596	1000.00	1060 245.26- 285.26	265.26

Average of Peak Amounts = 1.07e+03

Data File: /chem/ecd8a.i/021810.b/005b0501.d  
Date : 18-FEB-2010 06:54  
Client ID: AR124801  
Sample Info: IMR091217-48  
Column phase: CLP2

Instrument: ecd8a.i  
Operator: JAOC  
Column diameter: 0.25



GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd8a.i/021810.b/006f0601.d  
Lab Smp Id: WAR100104-32 Client Smp ID: AR123201  
Inj Date : 18-FEB-2010 07:07  
Operator : JAOC Inst ID: ecd8a.i  
Smp Info : |WAR100104-32  
Misc Info : |1232  
Comment :  
Method : /chem/ecd8a.i/021810.b/ECD8-F-8082-020310a.m  
Meth Date : 18-Feb-2010 09:47 jen01212 Quant Type: ESTD  
Cal Date : 03-FEB-2010 17:25 Cal File: 036f3601.d  
Als bottle: 6 Continuing Calibration Sample  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: AR1232.sub  
Target Version: 3.50 Sample Matrix: None

AMOUNTS

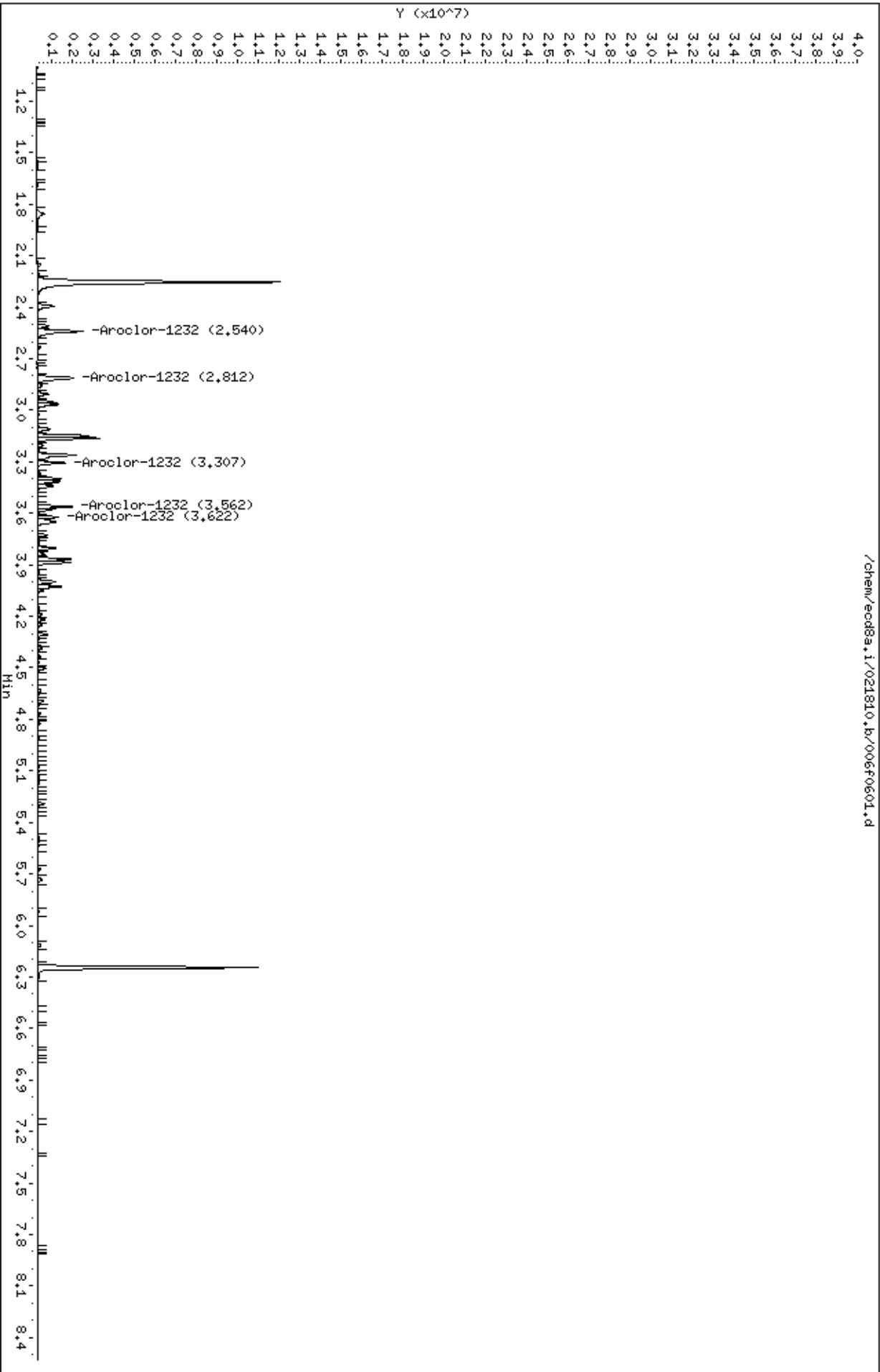
CAL-AMT ON-COL

RT	EXP RT	DLT RT	RESPONSE ( ug/L)	( ug/L)	TARGET RANGE	RATIO
----	--------	--------	------------------	---------	--------------	-------

3 Aroclor-1232			CAS #: 11141-16-5			
2.540	2.540	0.000	2586841	1000.00	995 80.00- 120.00	100.00
2.812	2.812	0.000	2266026	1000.00	1000 67.60- 107.60	87.60
3.307	3.307	0.000	1189167	1000.00	956 25.97- 65.97	45.97
3.562	3.562	0.000	1431510	1000.00	968 35.34- 75.34	55.34
3.622	3.622	0.000	884410	1000.00	958 14.19- 54.19	34.19

Average of Peak Amounts = 976

Data File: /chem/ecd8a.i/021810.b/006f0601.d  
 Date : 18-FEB-2010 07:07  
 Client ID: AR123201  
 Sample Info: IMR100104-32  
 Column phase: CLP1  
 Instrument: ecd8a.i  
 Operator: JAOC  
 Column diameter: 0.25



GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd8a.i/021810.b/006b0601.d  
Lab Smp Id: WAR100104-32 Client Smp ID: AR123201  
Inj Date : 18-FEB-2010 07:07  
Operator : JAOC Inst ID: ecd8a.i  
Smp Info : |WAR100104-32  
Misc Info : |1232  
Comment :  
Method : /chem/ecd8a.i/021810.b/ECD8-B-8082-020310a.m  
Meth Date : 18-Feb-2010 09:48 jen01212 Quant Type: ESTD  
Cal Date : 03-FEB-2010 17:25 Cal File: 036b3601.d  
Als bottle: 6 Continuing Calibration Sample  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: AR1232.sub  
Target Version: 3.50 Sample Matrix: None

AMOUNTS

CAL-AMT ON-COL

RT	EXP RT	DLT RT	RESPONSE ( ug/L)	( ug/L)	TARGET RANGE	RATIO
----	--------	--------	------------------	---------	--------------	-------

3 Aroclor-1232			CAS #: 11141-16-5			
3.205	3.205	0.000	1686223	1000.00	1110 80.00- 120.00	100.00
3.558	3.558	0.000	1855439	1000.00	1060 90.04- 130.04	110.04
3.657	3.657	0.000	1322391	1000.00	1120 58.42- 98.42	78.42
3.733	3.733	0.000	765468	1000.00	1080 25.40- 65.40	45.40
3.808	3.808	0.000	667287	1000.00	1080 19.57- 59.57	39.57

Average of Peak Amounts = 1.09e+03



Data File: /chem/ecd8a.i/021810.b/006b0601.d

Date : 18-FEB-2010 07:07

Client ID: AR123201

Sample Info: IMR100104-32

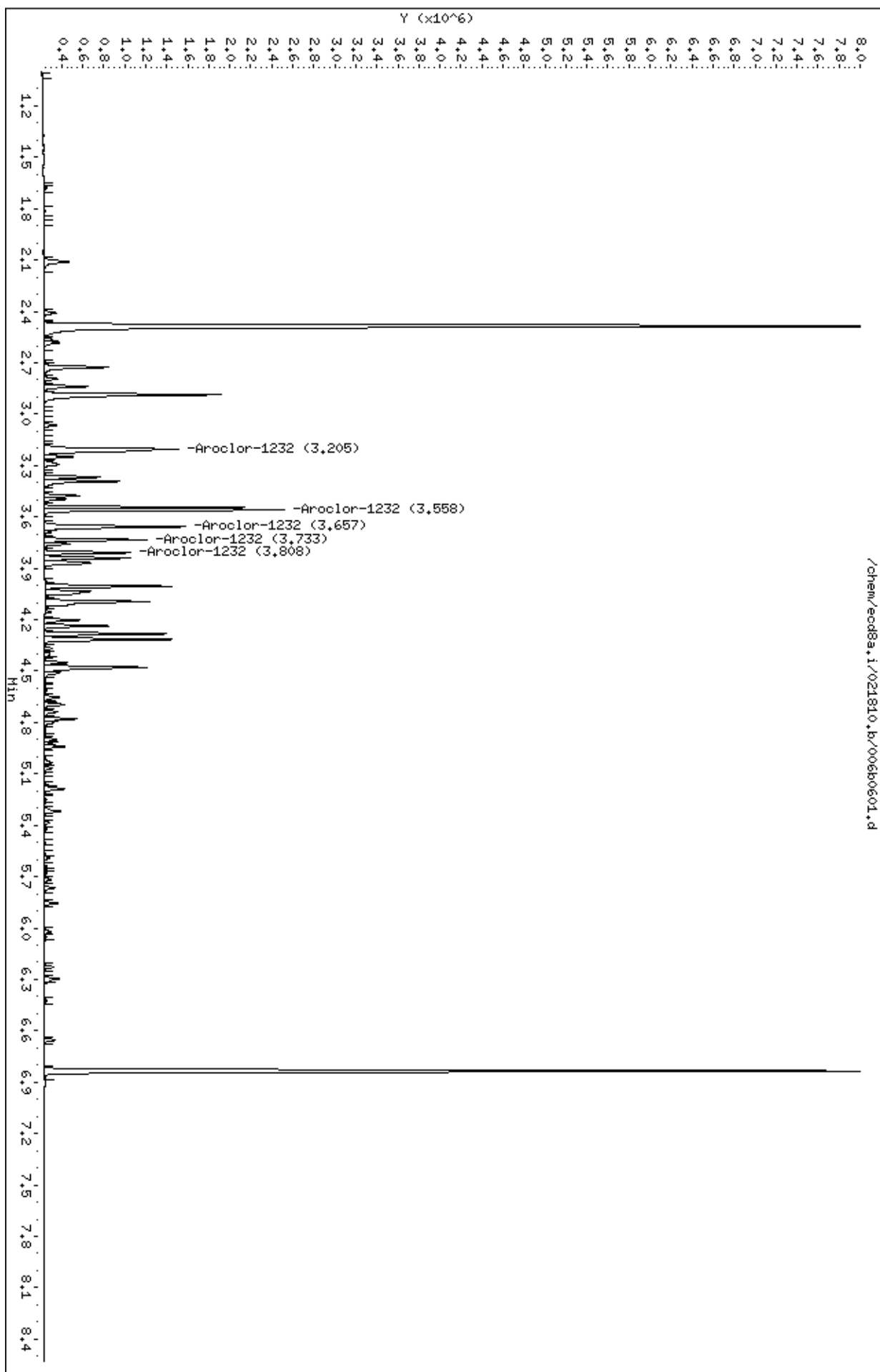
Column phase: CLP2

Instrument: ecd8a.i

Operator: JAOC

Column diameter: 0.25

Page 1



Data File: /chem/ecd8a.i/021810.b/007f0701.d  
Report Date: 18-Feb-2010 09:51

Page 1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd8a.i/021810.b/007f0701.d  
Lab Smp Id: WAR100104-21 Client Smp ID: AR122101  
Inj Date : 18-FEB-2010 07:19  
Operator : JAOC Inst ID: ecd8a.i  
Smp Info : |WAR100104-21  
Misc Info : |1221  
Comment :  
Method : /chem/ecd8a.i/021810.b/ECD8-F-8082-020310a.m  
Meth Date : 18-Feb-2010 09:47 jen01212 Quant Type: ESTD  
Cal Date : 03-FEB-2010 17:25 Cal File: 036f3601.d  
Als bottle: 7 Continuing Calibration Sample  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: AR1221.sub  
Target Version: 3.50 Sample Matrix: None

AMOUNTS

CAL-AMT ON-COL

RT	EXP RT	DLT RT	RESPONSE ( ug/L)	( ug/L)	TARGET RANGE	RATIO
----	--------	--------	------------------	---------	--------------	-------

2 Aroclor-1221			CAS #: 11104-28-2			
1.855	1.855	0.000	1193234 1000.00	1080	80.00- 120.00	100.00
2.394	2.394	0.000	1562931 1000.00	1070	110.98- 150.98	130.98
2.540	2.540	0.000	3540019 1000.00	1040	276.67- 316.67	296.67

Average of Peak Amounts = 1.07e+03

Data File: /chem/ecod8a.i/021810.b/007f0701.d

Page 1

Date : 18-FEB-2010 07:19

Client ID: AR122101

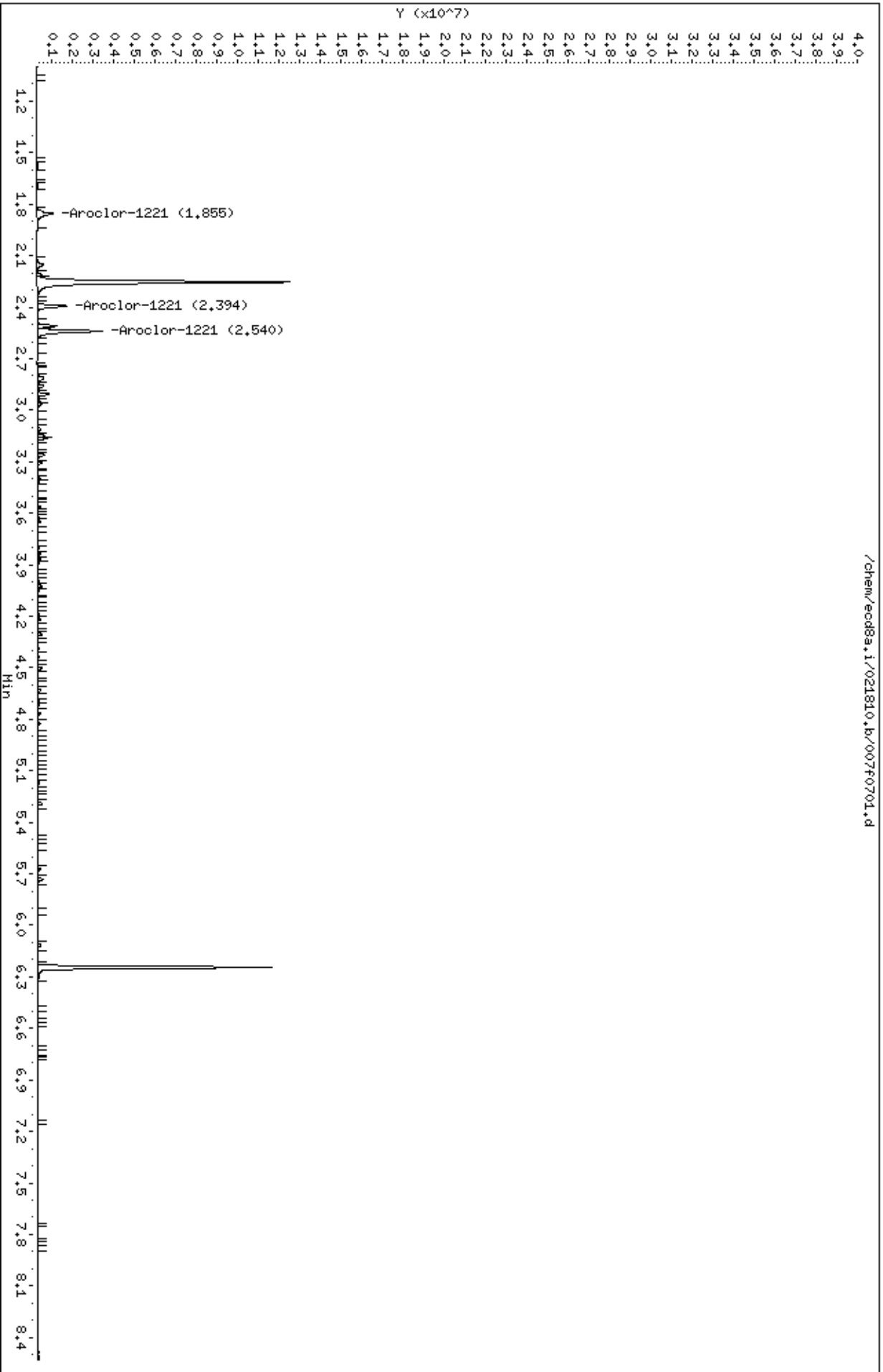
Sample Info: IMR100104-21

Instrument: ecod8a.i

Operator: JAOC

Column diameter: 0.25

Column phase: CLP1



Data File: /chem/ecd8a.i/021810.b/007b0701.d  
Report Date: 18-Feb-2010 09:51

Page 1

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd8a.i/021810.b/007b0701.d  
Lab Smp Id: WAR100104-21 Client Smp ID: AR122101  
Inj Date : 18-FEB-2010 07:19  
Operator : JAOC Inst ID: ecd8a.i  
Smp Info : |WAR100104-21  
Misc Info : |1221  
Comment :  
Method : /chem/ecd8a.i/021810.b/ECD8-B-8082-020310a.m  
Meth Date : 18-Feb-2010 09:48 jen01212 Quant Type: ESTD  
Cal Date : 03-FEB-2010 17:25 Cal File: 036b3601.d  
Als bottle: 7 Continuing Calibration Sample  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: AR1221.sub  
Target Version: 3.50 Sample Matrix: None

AMOUNTS

CAL-AMT ON-COL

RT	EXP RT	DLT RT	RESPONSE ( ug/L)	( ug/L)	TARGET RANGE	RATIO
----	--------	--------	------------------	---------	--------------	-------

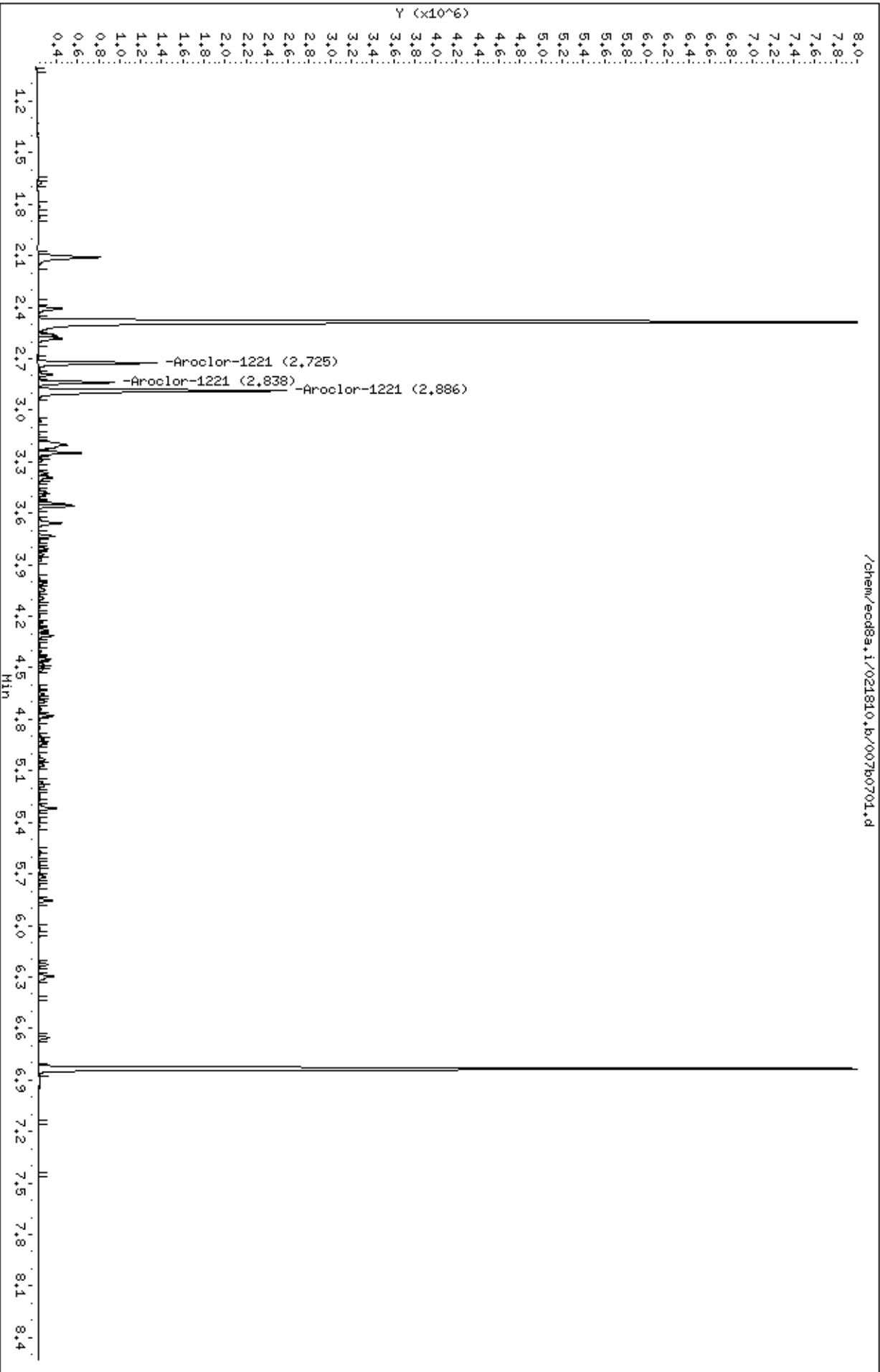
2	Aroclor-1221			CAS #:	11104-28-2	
2.725	2.725	0.000	1055221	1000.00	1180 80.00- 120.00	100.00
2.838	2.838	0.000	645148	1000.00	1160 41.14- 81.14	61.14
2.886	2.886	0.000	2371870	1000.00	1150 204.77- 244.77	224.77

Average of Peak Amounts = 1.16e+03

Data File: /chem/ecod8a.i/021810.b/007b0701.d  
 Date : 18-FEB-2010 07:19  
 Client ID: AR122101  
 Sample Info: IMR100104-21

Column phase: CLP2

Instrument: ecod8a.i  
 Operator: JAOC  
 Column diameter: 0.25



GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd8a.i/021810.b/034f3401.d  
Lab Smp Id: WAR100203-60 04 Client Smp ID: AR166004  
Inj Date : 18-FEB-2010 12:56  
Operator : JAOC Inst ID: ecd8a.i  
Smp Info : |WAR100203-60 04  
Misc Info : |1660  
Comment :  
Method : /chem/ecd8a.i/021810.b/ECD8-F-8082-020310a.m  
Meth Date : 18-Feb-2010 13:12 jen01212 Quant Type: ESTD  
Cal Date : 03-FEB-2010 17:25 Cal File: 036f3601.d  
Als bottle: 34 Continuing Calibration Sample  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: AR1660.sub  
Target Version: 3.50 Sample Matrix: None

AMOUNTS

			CAL-AMT		ON-COL		
RT	EXP RT	DLT RT	RESPONSE	( ug/L)	( ug/L)	TARGET RANGE	RATIO
==	=====	=====	=====	=====	=====	=====	=====
\$ 11 4cmx					CAS #: 877-09-8		
2.254	2.253	0.001	13202251	100.000	100	80.00- 120.00	100.00
-----							
\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.245	6.246	-0.001	9213190	100.000	92.1	80.00- 120.00	100.00
-----							
1 Aroclor-1016					CAS #: 12674-11-2		
2.811	2.811	0.000	4393579	1000.00	942	80.00- 120.00	100.00
3.162	3.163	-0.001	5284832	1000.00	916	100.29- 140.29	120.29
3.306	3.306	0.000	2293701	1000.00	935	32.21- 72.21	52.21
3.399	3.399	0.000	2009918	1000.00	914	25.75- 65.75	45.75
3.561	3.561	0.000	2953014	1000.00	940	47.21- 87.21	67.21
Average of Peak Amounts =					929		
-----							
7 Aroclor-1260					CAS #: 11096-82-5		
4.434	4.435	-0.001	6833762	1000.00	1010	80.00- 120.00	100.00
4.630	4.631	-0.001	10103402	1000.00	985	127.85- 167.85	147.85
4.905	4.907	-0.002	5910228	1000.00	964	66.49- 106.49	86.49
5.078	5.079	-0.001	6163586	1000.00	965	70.19- 110.19	90.19
5.489	5.490	-0.001	6695762	1000.00	976	77.98- 117.98	97.98
Average of Peak Amounts =					981		

Data File: /chem/ecd8a.i/021810.b/034f3401.d

Date : 18-FEB-2010 12:56

Client ID: AR166004

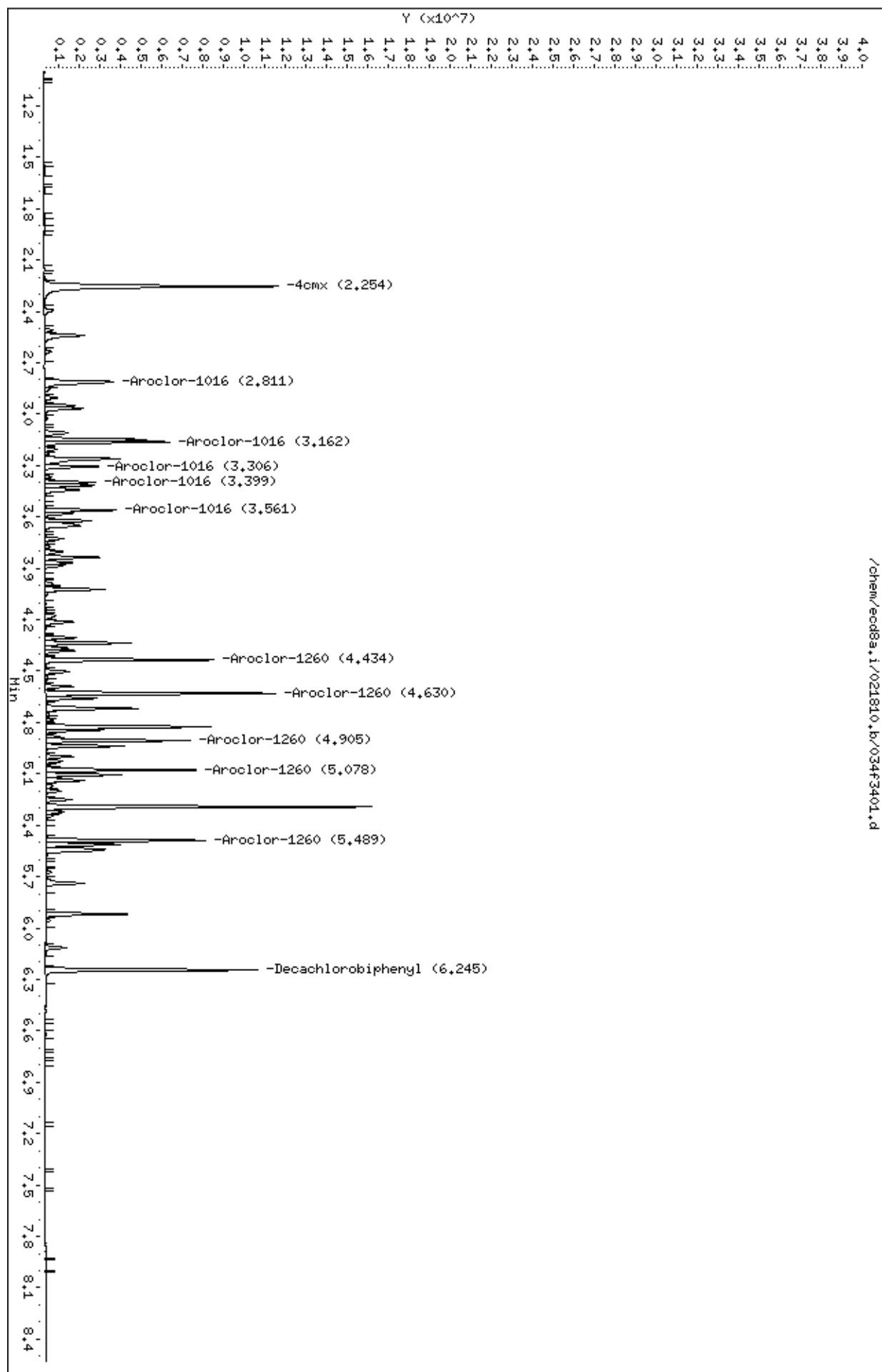
Sample Info: IMR100203-60 04

Column phase: CLP1

Instrument: ecd8a.i

Operator: JAOC

Column diameter: 0.25



GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd8a.i/021810.b/034b3401.d  
Lab Smp Id: WAR100203-60 04 Client Smp ID: AR166004  
Inj Date : 18-FEB-2010 12:56  
Operator : JAOC Inst ID: ecd8a.i  
Smp Info : |WAR100203-60 04  
Misc Info : |1660  
Comment :  
Method : /chem/ecd8a.i/021810.b/ECD8-B-8082-020310a.m  
Meth Date : 18-Feb-2010 13:11 jen01212 Quant Type: ESTD  
Cal Date : 03-FEB-2010 17:25 Cal File: 036b3601.d  
Als bottle: 34 Continuing Calibration Sample  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: AR1660.sub  
Target Version: 3.50 Sample Matrix: None

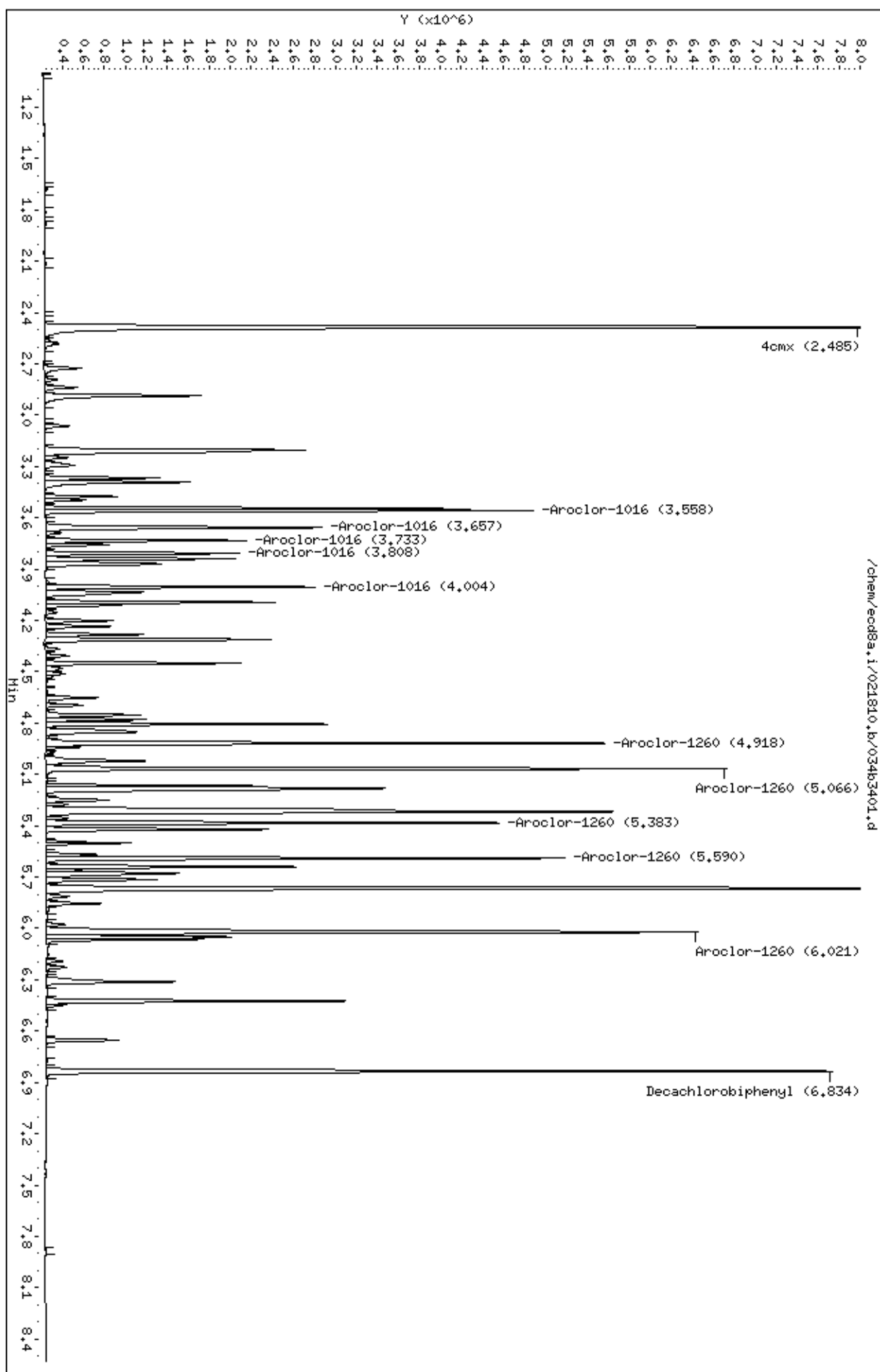
AMOUNTS

			CAL-AMT		ON-COL		
RT	EXP RT	DLT RT	RESPONSE ( ug/L)		( ug/L)	TARGET RANGE	RATIO
==	=====	=====	=====	=====	=====	=====	=====
\$ 11 4cmx					CAS #: 877-09-8		
2.485	2.484	0.001	9271754	100.000	107	80.00- 120.00	100.00
-----							
\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.834	6.835	-0.001	6470963	100.000	99.8	80.00- 120.00	100.00
-----							
1 Aroclor-1016					CAS #: 12674-11-2		
3.558	3.558	0.000	3733137	1000.00	991	80.00- 120.00	100.00
3.657	3.657	0.000	2560385	1000.00	1030	48.59- 88.59	68.59
3.733	3.733	0.000	1507418	1000.00	995	20.38- 60.38	40.38
3.808	3.808	0.000	1459677	1000.00	978	19.10- 59.10	39.10
4.004	4.005	-0.001	2049357	1000.00	1010	34.90- 74.90	54.90
Average of Peak Amounts =					999		
-----							
7 Aroclor-1260					CAS #: 11096-82-5		
4.918	4.918	0.000	4478260	1000.00	1100	80.00- 120.00	100.00
5.066	5.067	-0.001	5369399	1000.00	1080	99.90- 139.90	119.90
5.383	5.384	-0.001	3705319	1000.00	978	62.74- 102.74	82.74
5.590	5.591	-0.001	4122851	1000.00	1040	72.06- 112.06	92.06
6.021	6.022	-0.001	6716102	1000.00	1080	129.97- 169.97	149.97
Average of Peak Amounts =					1.06e+03		



Data File: /chem/ecd8a.i/021810.b/034b3401.d  
Date: 18-FEB-2010 12:56  
Client ID: AR166004  
Sample Info: IMR100203-60 04  
Column phase: CLP2

Instrument: ecd8a.i  
Operator: JAOC  
Column diameter: 0.25



GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

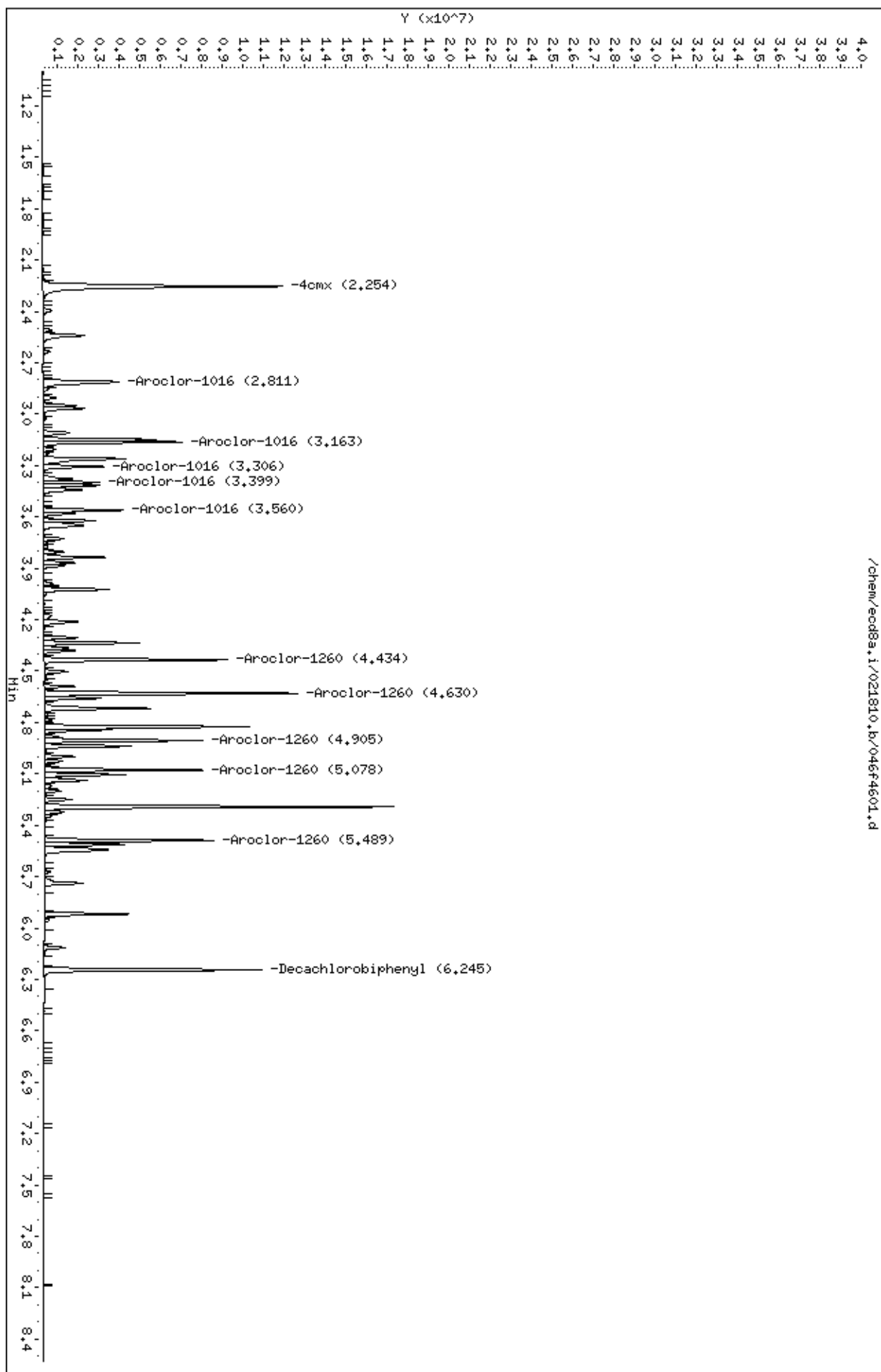
Data file : /chem/ecd8a.i/021810.b/046f4601.d  
Lab Smp Id: WAR100203-60 05 Client Smp ID: AR166005  
Inj Date : 18-FEB-2010 15:25  
Operator : JAOC Inst ID: ecd8a.i  
Smp Info : |WAR100203-60 05  
Misc Info : |1660  
Comment :  
Method : /chem/ecd8a.i/021810.b/ECD8-F-8082-020310a.m  
Meth Date : 19-Feb-2010 07:33 jen01212 Quant Type: ESTD  
Cal Date : 03-FEB-2010 17:25 Cal File: 036f3601.d  
Als bottle: 46 Continuing Calibration Sample  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: AR1660.sub  
Target Version: 3.50 Sample Matrix: None

AMOUNTS

			CAL-AMT		ON-COL			
RT	EXP RT	DLT RT	RESPONSE	( ug/L)	( ug/L)	TARGET	RANGE	RATIO
==	=====	=====	=====	=====	=====	=====	=====	=====
\$ 11 4cmx					CAS #: 877-09-8			
2.254	2.253	0.001	14287662	100.000	109	80.00-	120.00	100.00
-----								
\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3			
6.245	6.246	-0.001	9445509	100.000	94.5	80.00-	120.00	100.00
-----								
1 Aroclor-1016					CAS #: 12674-11-2			
2.811	2.811	0.000	4811889	1000.00	1030	80.00-	120.00	100.00
3.163	3.163	0.000	6081261	1000.00	1050	103.93-	143.93	126.38
3.306	3.306	0.000	2601144	1000.00	1060	33.02-	73.02	54.06
3.399	3.399	0.000	2303136	1000.00	1050	26.15-	66.15	47.86
3.560	3.561	-0.001	3366713	1000.00	1070	48.07-	88.07	69.97
Average of Peak Amounts =					1.05e+03			
-----								
7 Aroclor-1260					CAS #: 11096-82-5			
4.434	4.435	-0.001	7618245	1000.00	1130	80.00-	120.00	100.00
4.630	4.631	-0.001	11239950	1000.00	1100	127.54-	167.54	147.54
4.905	4.907	-0.002	6491593	1000.00	1060	66.72-	106.72	85.21
5.078	5.079	-0.001	6716272	1000.00	1050	70.27-	110.27	88.16
5.489	5.490	-0.001	7122072	1000.00	1040	75.79-	115.79	93.49
Average of Peak Amounts =					1.08e+03			

Data File: /chem/ecd8a.i/021810.b/046f4601.d  
Date : 18-FEB-2010 15:25  
Client ID: AR166005  
Sample Info: IMR100203-60 05  
Column phase: CLP1

Instrument: ecd8a.i  
Operator: JAOC  
Column diameter: 0.25



GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

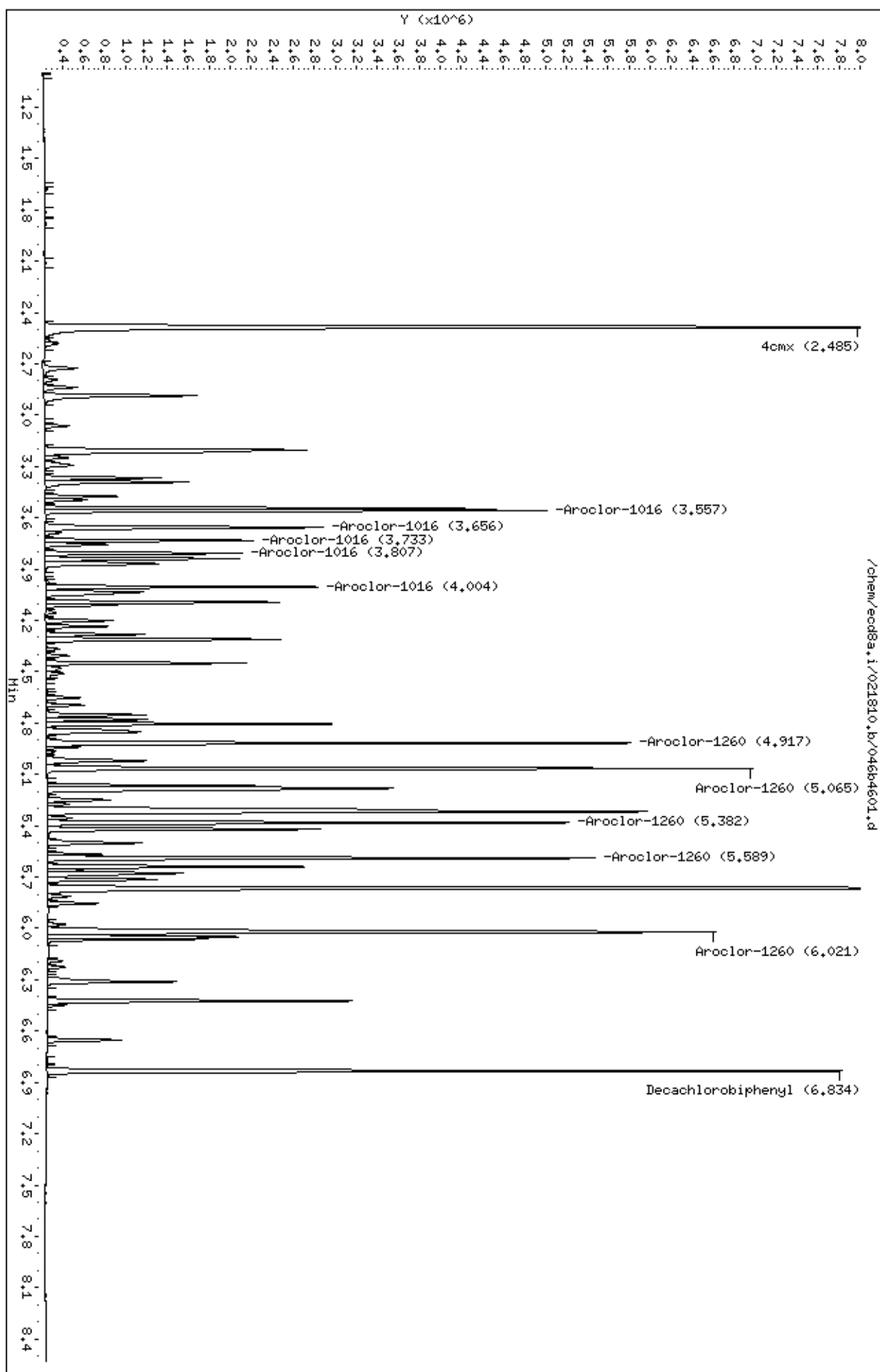
Data file : /chem/ecd8a.i/021810.b/046b4601.d  
Lab Smp Id: WAR100203-60 05 Client Smp ID: AR166005  
Inj Date : 18-FEB-2010 15:25  
Operator : JAOC Inst ID: ecd8a.i  
Smp Info : |WAR100203-60 05  
Misc Info : |1660  
Comment :  
Method : /chem/ecd8a.i/021810.b/ECD8-B-8082-020310a.m  
Meth Date : 19-Feb-2010 07:39 jen01212 Quant Type: ESTD  
Cal Date : 03-FEB-2010 17:25 Cal File: 036b3601.d  
Als bottle: 46 Continuing Calibration Sample  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: AR1660.sub  
Target Version: 3.50 Sample Matrix: None

AMOUNTS

			CAL-AMT		ON-COL			
RT	EXP RT	DLT RT	RESPONSE	( ug/L)	( ug/L)	TARGET	RANGE	RATIO
==	=====	=====	=====	=====	=====	=====	=====	=====
\$ 11 4cmx					CAS #: 877-09-8			
2.485	2.484	0.001	9373291	100.000	108	80.00-	120.00	100.00
-----								
\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3			
6.834	6.835	-0.001	6602529	100.000	102	80.00-	120.00	100.00
-----								
1 Aroclor-1016					CAS #: 12674-11-2			
3.557	3.558	-0.001	3944024	1000.00	1050	80.00-	120.00	100.00
3.656	3.657	-0.001	2602109	1000.00	1040	47.95-	87.95	65.98
3.733	3.733	0.000	1560657	1000.00	1030	20.49-	60.49	39.57
3.807	3.808	-0.001	1507760	1000.00	1010	19.20-	59.20	38.23
4.004	4.005	-0.001	2106723	1000.00	1030	34.84-	74.84	53.42
Average of Peak Amounts =					1.03e+03			
-----								
7 Aroclor-1260					CAS #: 11096-82-5			
4.917	4.918	-0.001	4565131	1000.00	1120	80.00-	120.00	100.00
5.065	5.067	-0.002	5496671	1000.00	1110	99.85-	139.85	120.41
5.382	5.384	-0.002	4199750	1000.00	1110	72.04-	112.04	92.00
5.589	5.591	-0.002	4375187	1000.00	1110	76.08-	116.08	95.84
6.021	6.022	-0.001	6895100	1000.00	1110	130.64-	170.64	151.04
Average of Peak Amounts =					1.11e+03			

Data File: /chem/ecd8a.i/021810.b/046b4601.d  
Date: 18-FEB-2010 15:25  
Client ID: AR166005  
Sample Info: IMR100203-60 05  
Column phase: CLP2

Instrument: ecd8a.i  
Operator: JAOC  
Column diameter: 0.25



GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd8a.i/021810.b/056f5601.d  
Lab Smp Id: WAR100203-60 06 Client Smp ID: AR166006  
Inj Date : 18-FEB-2010 17:28  
Operator : JAOC Inst ID: ecd8a.i  
Smp Info : |WAR100203-60 06  
Misc Info : |1660  
Comment :  
Method : /chem/ecd8a.i/021810.b/ECD8-F-8082-020310a.m  
Meth Date : 19-Feb-2010 07:33 jen01212 Quant Type: ESTD  
Cal Date : 03-FEB-2010 17:25 Cal File: 036f3601.d  
Als bottle: 56 Continuing Calibration Sample  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: AR1660.sub  
Target Version: 3.50 Sample Matrix: None

AMOUNTS

			CAL-AMT		ON-COL		
RT	EXP RT	DLT RT	RESPONSE ( ug/L)		( ug/L)	TARGET RANGE	RATIO
==	=====	=====	=====	=====	=====	=====	=====
\$ 11 4cmx					CAS #: 877-09-8		
2.253	2.253	0.000	13933152	100.000	106	80.00- 120.00	100.00
-----							
\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.245	6.246	-0.001	9269645	100.000	92.7	80.00- 120.00	100.00
-----							
1 Aroclor-1016					CAS #: 12674-11-2		
2.812	2.811	0.001	4661483	1000.00	999	80.00- 120.00	100.00
3.163	3.163	0.000	5982480	1000.00	1040	103.93- 143.93	128.34
3.307	3.306	0.001	2500488	1000.00	1020	33.02- 73.02	53.64
3.398	3.399	-0.001	2237114	1000.00	1020	26.15- 66.15	47.99
3.561	3.561	0.000	3211326	1000.00	1020	48.07- 88.07	68.89
Average of Peak Amounts =					1.02e+03		
-----							
7 Aroclor-1260					CAS #: 11096-82-5		
4.434	4.435	-0.001	7337477	1000.00	1090	80.00- 120.00	100.00
4.631	4.631	0.000	10896795	1000.00	1060	127.54- 167.54	148.51
4.906	4.907	-0.001	6348986	1000.00	1040	66.72- 106.72	86.53
5.078	5.079	-0.001	6608604	1000.00	1030	70.27- 110.27	90.07
5.489	5.490	-0.001	6956625	1000.00	1010	75.79- 115.79	94.81
Average of Peak Amounts =					1.05e+03		

Data File: /chem/ecd8a.i/021810.b/056f5601.d

Date : 18-FEB-2010 17:28

Client ID: AR166006

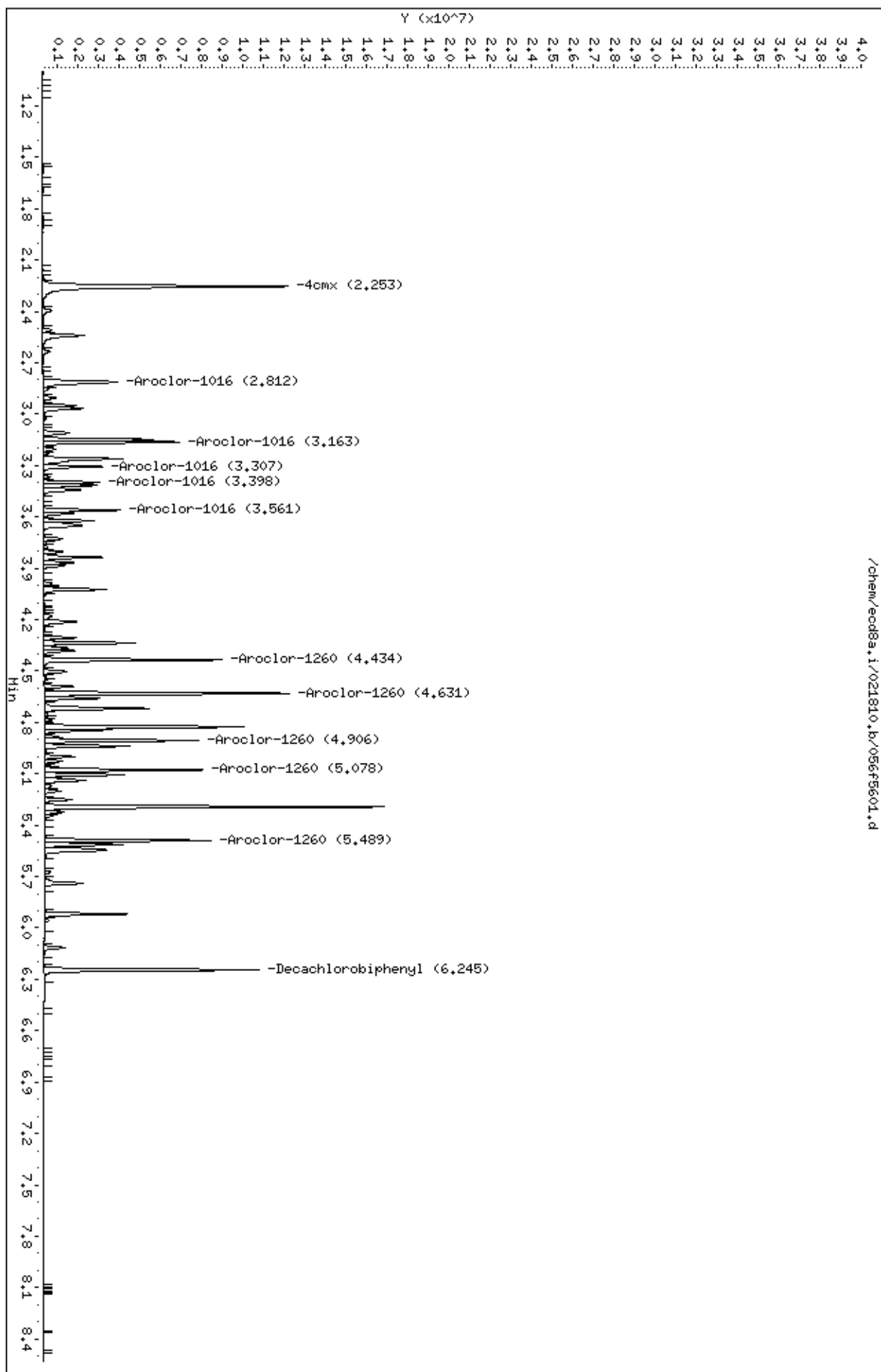
Sample Info: IMR100203-60 06

Column phase: CLP1

Instrument: ecd8a.i

Operator: JAOC

Column diameter: 0.25



GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd8a.i/021810.b/056b5601.d  
Lab Smp Id: WAR100203-60 06 Client Smp ID: AR166006  
Inj Date : 18-FEB-2010 17:28  
Operator : JAOC Inst ID: ecd8a.i  
Smp Info : |WAR100203-60 06  
Misc Info : |1660  
Comment :  
Method : /chem/ecd8a.i/021810.b/ECD8-B-8082-020310a.m  
Meth Date : 19-Feb-2010 07:39 jen01212 Quant Type: ESTD  
Cal Date : 03-FEB-2010 17:25 Cal File: 036b3601.d  
Als bottle: 56 Continuing Calibration Sample  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: AR1660.sub  
Target Version: 3.50 Sample Matrix: None

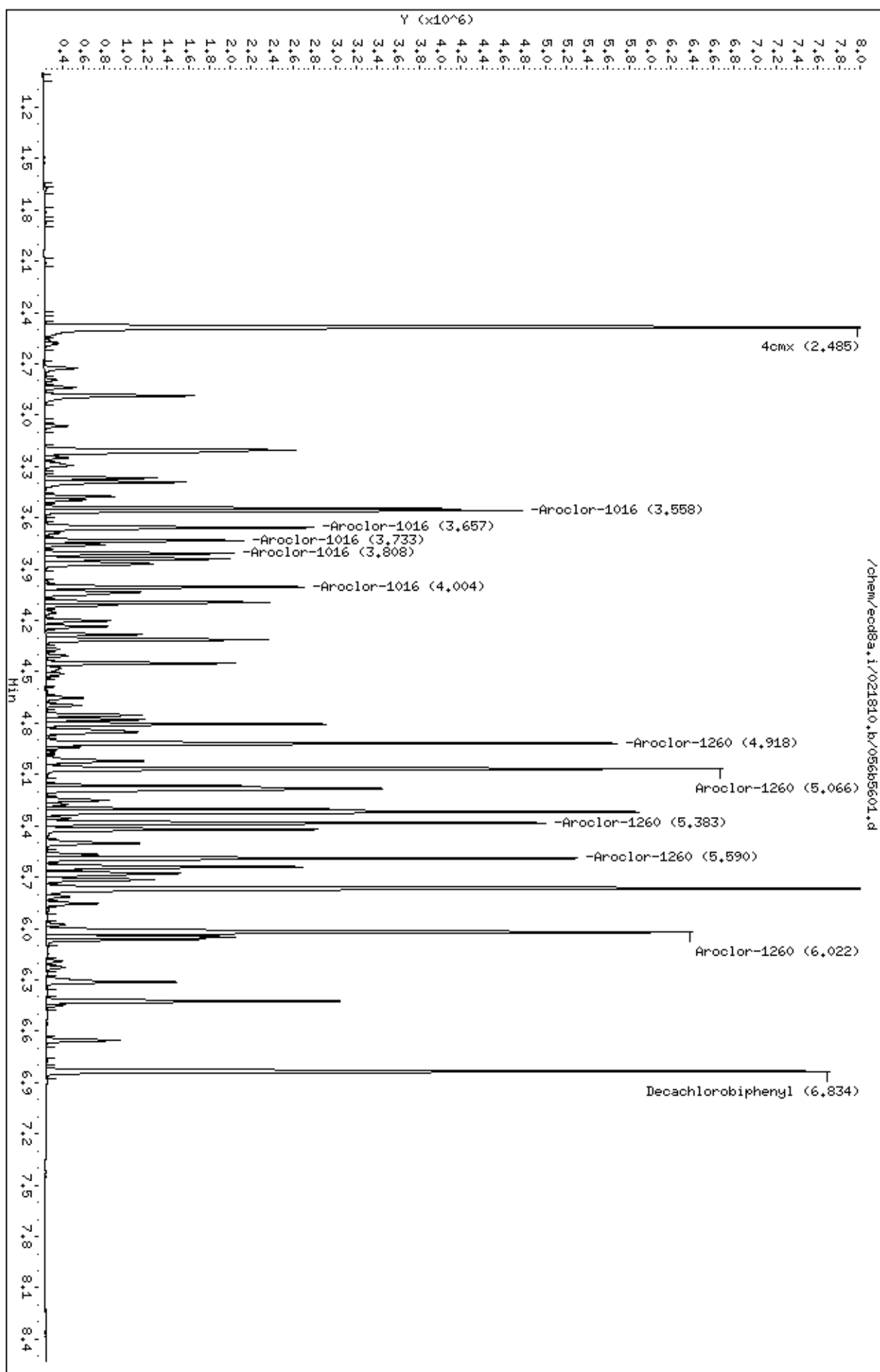
AMOUNTS

			CAL-AMT		ON-COL		
RT	EXP RT	DLT RT	RESPONSE ( ug/L)		( ug/L)	TARGET RANGE	RATIO
==	=====	=====	=====	=====	=====	=====	=====
\$ 11 4cmx					CAS #: 877-09-8		
2.485	2.484	0.001	8994840	100.000	104	80.00- 120.00	100.00
-----							
\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.834	6.835	-0.001	6492068	100.000	100	80.00- 120.00	100.00
-----							
1 Aroclor-1016					CAS #: 12674-11-2		
3.558	3.558	0.000	3727061	1000.00	990	80.00- 120.00	100.00
3.657	3.657	0.000	2496847	1000.00	1000	47.95- 87.95	66.99
3.733	3.733	0.000	1488903	1000.00	982	20.49- 60.49	39.95
3.808	3.808	0.000	1441602	1000.00	965	19.20- 59.20	38.68
4.004	4.005	-0.001	2022065	1000.00	993	34.84- 74.84	54.25
Average of Peak Amounts =					986		
-----							
7 Aroclor-1260					CAS #: 11096-82-5		
4.918	4.918	0.000	4409571	1000.00	1080	80.00- 120.00	100.00
5.066	5.067	-0.001	5334646	1000.00	1070	99.85- 139.85	120.98
5.383	5.384	-0.001	4089798	1000.00	1080	72.04- 112.04	92.75
5.590	5.591	-0.001	4266275	1000.00	1080	76.08- 116.08	96.75
6.022	6.022	0.000	6716729	1000.00	1080	130.64- 170.64	152.32
Average of Peak Amounts =					1.08e+03		



Data File: /chem/ecd8a.i/021810.b/056b5601.d  
Date: 18-FEB-2010 17:28  
Client ID: AR166006  
Sample Info: IMR100203-60 06  
Column phase: CLP2

Instrument: ecd8a.i  
Operator: JAOC  
Column diameter: 0.25



8D  
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-1758

GC Column: CLP1 ID: 0.25 (mm) Init. Calib. Date(s): 02/03/10 02/03/10

Instrument ID: ECD8A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS,  
SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION					
S1 : 2.26		DCB: 6.25			
EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
=====	=====	=====	=====	=====	=====
01	PIBLK01	WAR091130-99	02/03/10	1012	2.25 6.24
02	AR166001	WAR100203-01	02/03/10	1024	2.26 6.25
03	AR166002	WAR100203-02	02/03/10	1037	2.26 6.25
04	AR166003	WAR100203-03	02/03/10	1049	2.26 6.25
05	AR166004	WAR100203-04	02/03/10	1101	2.26 6.25
06	AR166005	IAR100104-01	02/03/10	1114	2.26 6.25
07	AR166001	WAR100203-60	02/03/10	1126	2.26 6.25
08	AR125401	WAR100203-05	02/03/10	1139	
09	AR125402	WAR100203-06	02/03/10	1151	
10	AR125403	WAR100203-07	02/03/10	1203	
11	AR125404	WAR100203-08	02/03/10	1216	
12	AR125405	IAR091027-01	02/03/10	1228	
13	AR125401	WAR091216-54	02/03/10	1240	
14	AR124201	WAR100203-09	02/03/10	1253	
15	AR124202	WAR100203-10	02/03/10	1305	
16	AR124203	WAR100203-11	02/03/10	1318	
17	AR124204	WAR100203-12	02/03/10	1330	
18	AR124205	IAR091111-01	02/03/10	1342	
19	AR124201	WAR091217-42	02/03/10	1355	
20	AR124801	WAR100203-13	02/03/10	1407	
21	AR124802	WAR100203-14	02/03/10	1419	
22	AR124803	WAR100203-15	02/03/10	1432	
23	AR124804	WAR100203-16	02/03/10	1444	
24	AR124805	IAR091027-02	02/03/10	1457	
25	AR124801	WAR091217-48	02/03/10	1509	
26	AR123201	WAR100104-32	02/03/10	1521	
27	AR122101	WAR100104-21	02/03/10	1534	
28	AR126201	WAR100203-17	02/03/10	1546	
29	AR126202	WAR100203-18	02/03/10	1558	
30	AR126203	WAR100203-19	02/03/10	1611	
31	AR126204	WAR100203-20	02/03/10	1623	
32	AR126205	IAR100104-04	02/03/10	1636	

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.: 10-1758

GC Column: CLP1 ID: 0.25 (mm) Init. Calib. Date(s): 02/03/10 02/03/10

Instrument ID: ECD8A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS,  
SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION					
S1 : 2.26		DCB: 6.25			
EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
=====	=====	=====	=====	=====	=====
01	AR126201	WAR100104-62	02/03/10 1648		
02	AR126801	WAR091107-68	02/03/10 1700		
03	AR124801	WAR091217-48	02/03/10 1713		
04	DDTANALOGSTD	WAR091219-DD	02/03/10 1725		
05	PIBLK02	WAR091130-99	02/03/10 1738	2.26	6.25
06	ZZZZZ	ZZZZZ	02/03/10 1750	2.26	6.25
07	ZZZZZ	ZZZZZ	02/03/10 1802	2.26	6.25
08	ZZZZZ	ZZZZZ	02/03/10 1815	2.26	6.25
09	ZZZZZ	ZZZZZ	02/03/10 1827	2.26	6.25
10	ZZZZZ	ZZZZZ	02/03/10 1839	2.26	6.25
11	ZZZZZ	ZZZZZ	02/03/10 1852	2.26	6.25
12	ZZZZZ	ZZZZZ	02/03/10 1904	2.26	6.25
13	ZZZZZ	ZZZZZ	02/03/10 1916	2.26	6.25
14	ZZZZZ	ZZZZZ	02/03/10 1929	2.26	6.25
15	ZZZZZ	ZZZZZ	02/03/10 1941	2.26	6.25
16	AR166002	WAR100203-60	02/03/10 1954	2.26	6.25
17	PIBLK03	WAR091130-99	02/03/10 2006	2.26	6.25
18	ZZZZZ	ZZZZZ	02/03/10 2018	2.26	6.25
19	ZZZZZ	ZZZZZ	02/03/10 2031	2.26	6.25
20	ZZZZZ	ZZZZZ	02/03/10 2043	2.26	6.25
21	ZZZZZ	ZZZZZ	02/03/10 2055	2.26	6.25
22	AR166003	WAR100203-60	02/03/10 2108	2.26	6.25
23	PIBLK04	WAR091130-99	02/03/10 2120	2.26	6.25
24	ZZZZZ	ZZZZZ	02/03/10 2133	2.26	6.25
25	ZZZZZ	ZZZZZ	02/03/10 2145	2.26	6.25
26	ZZZZZ	ZZZZZ	02/03/10 2157	2.26	6.25
27	AR166004	WAR100203-60	02/03/10 2210	2.26	6.25
28	PIBLK05	WAR091130-99	02/03/10 2222	2.26	6.25
29	ZZZZZ	ZZZZZ	02/03/10 2234	2.26	6.25
30	ZZZZZ	ZZZZZ	02/03/10 2247	2.26	6.25
31	ZZZZZ	ZZZZZ	02/03/10 2259		
32	ZZZZZ	ZZZZZ	02/03/10 2312		

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.: 10-1758

GC Column: CLP2 ID: 0.25 (mm) Init. Calib. Date(s): 02/03/10 02/03/10

Instrument ID: ECD8A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS,  
SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION					
S1 : 2.49		DCB: 6.84			
EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
=====	=====	=====	=====	=====	=====
01	PIBLK01	WAR091130-99	02/03/10	1012	2.49 6.84
02	AR166001	WAR100203-01	02/03/10	1024	2.49 6.84
03	AR166002	WAR100203-02	02/03/10	1037	2.49 6.84
04	AR166003	WAR100203-03	02/03/10	1049	2.49 6.84
05	AR166004	WAR100203-04	02/03/10	1101	2.49 6.84
06	AR166005	IAR100104-01	02/03/10	1114	2.49 6.84
07	AR166001	WAR100203-60	02/03/10	1126	2.49 6.84
08	AR125401	WAR100203-05	02/03/10	1139	
09	AR125402	WAR100203-06	02/03/10	1151	
10	AR125403	WAR100203-07	02/03/10	1203	
11	AR125404	WAR100203-08	02/03/10	1216	
12	AR125405	IAR091027-01	02/03/10	1228	
13	AR125401	WAR091216-54	02/03/10	1240	
14	AR124201	WAR100203-09	02/03/10	1253	
15	AR124202	WAR100203-10	02/03/10	1305	
16	AR124203	WAR100203-11	02/03/10	1318	
17	AR124204	WAR100203-12	02/03/10	1330	
18	AR124205	IAR091111-01	02/03/10	1342	
19	AR124201	WAR091217-42	02/03/10	1355	
20	AR124801	WAR100203-13	02/03/10	1407	
21	AR124802	WAR100203-14	02/03/10	1419	
22	AR124803	WAR100203-15	02/03/10	1432	
23	AR124804	WAR100203-16	02/03/10	1444	
24	AR124805	IAR091027-02	02/03/10	1457	
25	AR124801	WAR091217-48	02/03/10	1509	
26	AR123201	WAR100104-32	02/03/10	1521	
27	AR122101	WAR100104-21	02/03/10	1534	
28	AR126201	WAR100203-17	02/03/10	1546	
29	AR126202	WAR100203-18	02/03/10	1558	
30	AR126203	WAR100203-19	02/03/10	1611	
31	AR126204	WAR100203-20	02/03/10	1623	
32	AR126205	IAR100104-04	02/03/10	1636	

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.: 10-1758

GC Column: CLP2 ID: 0.25 (mm) Init. Calib. Date(s): 02/03/10 02/03/10

Instrument ID: ECD8A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS,  
SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION					
S1 : 2.49		DCB: 6.84			
EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
=====	=====	=====	=====	=====	=====
01	AR126201	WAR100104-62	02/03/10 1648		
02	AR126801	WAR091107-68	02/03/10 1700		
03	AR124801	WAR091217-48	02/03/10 1713		
04	DDTANALOGSTD	WAR091219-DD	02/03/10 1725		
05	PIBLK02	WAR091130-99	02/03/10 1738	2.49	6.84
06	ZZZZZ	ZZZZZ	02/03/10 1750	2.49	6.84
07	ZZZZZ	ZZZZZ	02/03/10 1802	2.49	6.84
08	ZZZZZ	ZZZZZ	02/03/10 1815	2.49	6.84
09	ZZZZZ	ZZZZZ	02/03/10 1827	2.49	6.84
10	ZZZZZ	ZZZZZ	02/03/10 1839	2.49	6.84
11	ZZZZZ	ZZZZZ	02/03/10 1852	2.49	6.84
12	ZZZZZ	ZZZZZ	02/03/10 1904	2.49	6.84
13	ZZZZZ	ZZZZZ	02/03/10 1916	2.49	6.84
14	ZZZZZ	ZZZZZ	02/03/10 1929	2.49	6.84
15	ZZZZZ	ZZZZZ	02/03/10 1941	2.49	6.84
16	AR166002	WAR100203-60	02/03/10 1954	2.49	6.84
17	PIBLK03	WAR091130-99	02/03/10 2006	2.49	6.84
18	ZZZZZ	ZZZZZ	02/03/10 2018	2.49	6.84
19	ZZZZZ	ZZZZZ	02/03/10 2031	2.49	6.84
20	ZZZZZ	ZZZZZ	02/03/10 2043	2.49	6.84
21	ZZZZZ	ZZZZZ	02/03/10 2055	2.49	6.84
22	AR166003	WAR100203-60	02/03/10 2108	2.49	6.84
23	PIBLK04	WAR091130-99	02/03/10 2120	2.49	6.84
24	ZZZZZ	ZZZZZ	02/03/10 2133	2.49	6.84
25	ZZZZZ	ZZZZZ	02/03/10 2145	2.49	6.84
26	ZZZZZ	ZZZZZ	02/03/10 2157	2.49	6.84
27	AR166004	WAR100203-60	02/03/10 2210	2.49	6.84
28	PIBLK05	WAR091130-99	02/03/10 2222	2.49	6.84
29	ZZZZZ	ZZZZZ	02/03/10 2234	2.49	6.84
30	ZZZZZ	ZZZZZ	02/03/10 2247	2.49	6.84
31	ZZZZZ	ZZZZZ	02/03/10 2259		
32	ZZZZZ	ZZZZZ	02/03/10 2312		

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.: 10-1758

GC Column: CLP1 ID: 0.25 (mm) Init. Calib. Date(s): 02/03/10 02/03/10

Instrument ID: ECD8A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS,  
SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION					
S1 : 2.25		DCB: 6.25			
EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
=====	=====	=====	=====	=====	=====
01 PIBLK01	WAR100105-99	02/18/10	0605	2.25	6.24
02 AR166001	WAR100203-60	02/18/10	0617	2.25	6.25
03 AR125401	WAR100201-54	02/18/10	0630		
04 AR124201	WAR091217-42	02/18/10	0642		
05 AR124801	WAR091217-48	02/18/10	0654		
06 AR123201	WAR100104-32	02/18/10	0707		
07 AR122101	WAR100104-21	02/18/10	0719		
08 AR126201	WAR100104-62	02/18/10	0731		
09 AR126801	WAR100107-68	02/18/10	0744		
10 DDTANALOGSTD	WAR091219-DD	02/18/10	0756		
11 PIBLK02	WAR100105-99	02/18/10	0812	2.26	6.25
12 ZZZZZ	ZZZZZ	02/18/10	0824	2.25	6.25
13 ZZZZZ	ZZZZZ	02/18/10	0837	2.25	6.24
14 ZZZZZ	ZZZZZ	02/18/10	0849	2.25	6.24
15 ZZZZZ	ZZZZZ	02/18/10	0901	2.25	6.24
16 ZZZZZ	ZZZZZ	02/18/10	0914	2.25	6.24
17 ZZZZZ	ZZZZZ	02/18/10	0926	2.25	6.24
18 AR166002	WAR100203-60	02/18/10	0938	2.25	6.24
19 PIBLK03	WAR100105-99	02/18/10	0951	2.25	6.24
20 ZZZZZ	ZZZZZ	02/18/10	1003	2.26	6.25
21 ZZZZZ	ZZZZZ	02/18/10	1015	2.26	6.25
22 ZZZZZ	ZZZZZ	02/18/10	1028	2.26	6.24
23 ZZZZZ	ZZZZZ	02/18/10	1040	2.26	6.24
24 ZZZZZ	ZZZZZ	02/18/10	1052	2.25	6.24
25 ZZZZZ	ZZZZZ	02/18/10	1105	2.26	6.24
26 ZZZZZ	ZZZZZ	02/18/10	1117	2.26	6.24
27 AR166003	WAR100203-60	02/18/10	1130	2.25	6.24
28 PIBLK04	WAR100105-99	02/18/10	1142	2.25	6.24
29 ZZZZZ	ZZZZZ	02/18/10	1154	2.25	6.24
30 ZZZZZ	ZZZZZ	02/18/10	1207	2.25	6.24
31 ZZZZZ	ZZZZZ	02/18/10	1219	2.25	6.24
32 ZZZZZ	ZZZZZ	02/18/10	1231	2.25	6.24

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.: 10-1758

GC Column: CLP1 ID: 0.25 (mm) Init. Calib. Date(s): 02/03/10 02/03/10

Instrument ID: ECD8A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS,  
SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION					
S1 : 2.25		DCB: 6.25			
EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
=====	=====	=====	=====	=====	=====
01	ZZZZZ	02/18/10	1244	2.25	6.24
02	AR166004	WAR100203-60	02/18/10	1256	6.25
03	PIBLK05	WAR100105-99	02/18/10	1308	6.24
04	PBLK01	1202045061	02/18/10	1321	6.24
05	PBLK01LCS	1202045062	02/18/10	1333	6.24
06	ZZZZZ	ZZZZZ	02/18/10	1346	6.24
07	ZZZZZ	ZZZZZ	02/18/10	1358	6.24
08	ZZZZZ	ZZZZZ	02/18/10	1410	6.24
09	ZZZZZ	ZZZZZ	02/18/10	1423	6.24
10	ZZZZZ	ZZZZZ	02/18/10	1435	6.24
11	ZZZZZ	ZZZZZ	02/18/10	1447	6.24
12	ZZZZZ	ZZZZZ	02/18/10	1500	6.24
13	ZZZZZ	ZZZZZ	02/18/10	1512	6.24
14	AR166005	WAR100203-60	02/18/10	1525	6.24
15	PIBLK06	WAR100105-99	02/18/10	1537	6.24
16	ZZZZZ	ZZZZZ	02/18/10	1549	6.24
17	ZZZZZ	ZZZZZ	02/18/10	1602	6.24
18	ZZZZZ	ZZZZZ	02/18/10	1614	6.24
19	RE15-10-8340	246866007	02/18/10	1626	6.24
20	RE15-10-8340MS	1202045063	02/18/10	1639	6.24
21	RE15-10-8340MSD	1202045064	02/18/10	1651	6.24
22	RE15-10-8341	246866008	02/18/10	1704	6.24
23	RE15-10-8376	246866009	02/18/10	1716	6.24
24	AR166006	WAR100203-60	02/18/10	1728	6.25
25	PIBLK07	WAR100105-99	02/18/10	1741	6.24
26	ZZZZZ	ZZZZZ	02/18/10	1927	6.25
27	AR166007	WAR100203-60	02/18/10	1940	6.25
28	PIBLK08	WAR100105-99	02/18/10	1952	6.24
29					
30					
31					
32					

QC LIMITS

S1 = 4cmx (+/- 0.03 MINUTES)

DCB = Decachlorobiphenyl (+/- 0.03 MINUTES)

# Column used to flag retention time values with an asterisk.  
\* Values outside of QC limits.

8D  
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-1758

GC Column: CLP2 ID: 0.25 (mm) Init. Calib. Date(s): 02/03/10 02/03/10

Instrument ID: ECD8A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS,  
SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION					
S1 : 2.48		DCB: 6.84			
EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
=====	=====	=====	=====	=====	=====
01 PIBLK01	WAR100105-99	02/18/10	0605	2.48	6.83
02 AR166001	WAR100203-60	02/18/10	0617	2.48	6.84
03 AR125401	WAR100201-54	02/18/10	0630		
04 AR124201	WAR091217-42	02/18/10	0642		
05 AR124801	WAR091217-48	02/18/10	0654		
06 AR123201	WAR100104-32	02/18/10	0707		
07 AR122101	WAR100104-21	02/18/10	0719		
08 AR126201	WAR100104-62	02/18/10	0731		
09 AR126801	WAR100107-68	02/18/10	0744		
10 DDTANALOGSTD	WAR091219-DD	02/18/10	0756		
11 PIBLK02	WAR100105-99	02/18/10	0812	2.49	6.84
12 ZZZZZ	ZZZZZ	02/18/10	0824	2.49	6.84
13 ZZZZZ	ZZZZZ	02/18/10	0837	2.48	6.83
14 ZZZZZ	ZZZZZ	02/18/10	0849	2.48	6.83
15 ZZZZZ	ZZZZZ	02/18/10	0901	2.48	6.83
16 ZZZZZ	ZZZZZ	02/18/10	0914	2.48	6.83
17 ZZZZZ	ZZZZZ	02/18/10	0926	2.48	6.83
18 AR166002	WAR100203-60	02/18/10	0938	2.48	6.83
19 PIBLK03	WAR100105-99	02/18/10	0951	2.49	6.83
20 ZZZZZ	ZZZZZ	02/18/10	1003	2.49	6.83
21 ZZZZZ	ZZZZZ	02/18/10	1015	2.49	6.83
22 ZZZZZ	ZZZZZ	02/18/10	1028	2.49	6.83
23 ZZZZZ	ZZZZZ	02/18/10	1040	2.49	6.83
24 ZZZZZ	ZZZZZ	02/18/10	1052	2.49	6.83
25 ZZZZZ	ZZZZZ	02/18/10	1105	2.49	6.83
26 ZZZZZ	ZZZZZ	02/18/10	1117	2.49	6.83
27 AR166003	WAR100203-60	02/18/10	1130	2.48	6.83
28 PIBLK04	WAR100105-99	02/18/10	1142	2.48	6.83
29 ZZZZZ	ZZZZZ	02/18/10	1154	2.49	6.83
30 ZZZZZ	ZZZZZ	02/18/10	1207	2.49	6.83
31 ZZZZZ	ZZZZZ	02/18/10	1219	2.48	6.83
32 ZZZZZ	ZZZZZ	02/18/10	1231	2.48	6.83

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.: 10-1758

GC Column: CLP2 ID: 0.25 (mm) Init. Calib. Date(s): 02/03/10 02/03/10

Instrument ID: ECD8A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS,  
SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION						
S1 : 2.48			DCB: 6.84			
	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
	=====	=====	=====	=====	=====	=====
01	ZZZZZ	ZZZZZ	02/18/10	1244	2.49	6.83
02	AR166004	WAR100203-60	02/18/10	1256	2.49	6.83
03	PIBLK05	WAR100105-99	02/18/10	1308	2.49	6.83
04	PBLK01	1202045061	02/18/10	1321	2.48	6.83
05	PBLK01LCS	1202045062	02/18/10	1333	2.49	6.83
06	ZZZZZ	ZZZZZ	02/18/10	1346	2.48	6.83
07	ZZZZZ	ZZZZZ	02/18/10	1358	2.48	6.83
08	ZZZZZ	ZZZZZ	02/18/10	1410	2.48	6.83
09	ZZZZZ	ZZZZZ	02/18/10	1423	2.49	6.83
10	ZZZZZ	ZZZZZ	02/18/10	1435	2.49	6.83
11	ZZZZZ	ZZZZZ	02/18/10	1447	2.48	6.83
12	ZZZZZ	ZZZZZ	02/18/10	1500	2.49	6.83
13	ZZZZZ	ZZZZZ	02/18/10	1512	2.49	6.83
14	AR166005	WAR100203-60	02/18/10	1525	2.49	6.83
15	PIBLK06	WAR100105-99	02/18/10	1537	2.48	6.83
16	ZZZZZ	ZZZZZ	02/18/10	1549	2.48	6.83
17	ZZZZZ	ZZZZZ	02/18/10	1602	2.48	6.83
18	ZZZZZ	ZZZZZ	02/18/10	1614	2.48	6.83
19	RE15-10-8340	246866007	02/18/10	1626	2.48	6.83
20	RE15-10-8340MS	1202045063	02/18/10	1639	2.49	6.83
21	RE15-10-8340MSD	1202045064	02/18/10	1651	2.48	6.83
22	RE15-10-8341	246866008	02/18/10	1704	2.48	6.83
23	RE15-10-8376	246866009	02/18/10	1716	2.49	6.83
24	AR166006	WAR100203-60	02/18/10	1728	2.49	6.83
25	PIBLK07	WAR100105-99	02/18/10	1741	2.48	6.83
26	ZZZZZ	ZZZZZ	02/18/10	1927	2.49	6.84
27	AR166007	WAR100203-60	02/18/10	1940	2.48	6.83
28	PIBLK08	WAR100105-99	02/18/10	1952	2.48	6.83
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.

## Identification Summary

Page 1 of 1

SDG Number: 10-1758

Client ID: LCS for batch 953958

Lab Sample ID: 1202045062

Data File: 037f3701.d

Data File: 037b3701.d

Inst: ECD8A.I\_1

Inst: ECD8A.I\_2

Column: CLP1

Column: CLP2

Analyzed: 18-FEB-10 13:33

Analyzed: 18-FEB-10 13:33

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
<b>Aroclor-1016</b>							5.98
<i>Column 1</i>	1	2.81	2.78 – 2.84	19.3		ug/kg	
	2	3.16	3.13 – 3.19	19.4		ug/kg	
	3	3.31	3.28 – 3.34	18.6		ug/kg	
	4	3.4	3.37 – 3.43	20.3		ug/kg	
	5	3.56	3.53 – 3.59	19.9		ug/kg	
					19.5		
<i>Column 2</i>	1	3.56	3.53 – 3.59	18.2		ug/kg	
	2	3.66	3.63 – 3.69	18.9		ug/kg	
	3	3.73	3.7 – 3.76	17.3		ug/kg	
	4	3.81	3.78 – 3.84	18.9		ug/kg	
	5	4	3.98 – 4.04	18.5		ug/kg	
					18.4		
<b>Aroclor-1260</b>							1.59
<i>Column 1</i>	1	4.43	4.41 – 4.47	23.1		ug/kg	
	2	4.63	4.6 – 4.66	23.2		ug/kg	
	3	4.91	4.88 – 4.94	23.2		ug/kg	
	4	5.08	5.05 – 5.11	22.2		ug/kg	
	5	5.49	5.46 – 5.52	22.3		ug/kg	
					22.8		
<i>Column 2</i>	1	4.92	4.89 – 4.95	22.4		ug/kg	
	2	5.07	5.04 – 5.1	23.5		ug/kg	
	3	5.38	5.35 – 5.41	23.8		ug/kg	
	4	5.59	5.56 – 5.62	22.7		ug/kg	
	5	6.02	5.99 – 6.05	23.5		ug/kg	
					23.2		

## Identification Summary

Page 1 of 1

SDG Number: 10-1758

Client ID: RE15-10-8340MS

Lab Sample ID: 1202045063

Data File: 052f5201.d

Data File: 052b5201.d

Inst: ECD8A.I\_1

Inst: ECD8A.I\_2

Column: CLP1

Column: CLP2

Analyzed: 18-FEB-10 16:39

Analyzed: 18-FEB-10 16:39

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
<b>Aroclor-1016</b>							1.84
<i>Column 1</i>	1	2.81	2.78 – 2.84	20.4		ug/kg	
	2	3.16	3.13 – 3.19	21.4		ug/kg	
	3	3.31	3.28 – 3.34	20.4		ug/kg	
	4	3.4	3.37 – 3.43	21.4		ug/kg	
	5	3.56	3.53 – 3.59	21.3		ug/kg	
					21		
<i>Column 2</i>	1	3.56	3.53 – 3.59	20.4		ug/kg	
	2	3.66	3.63 – 3.69	20.8		ug/kg	
	3	3.73	3.7 – 3.76	19.9		ug/kg	
	4	3.81	3.78 – 3.84	20.9		ug/kg	
	5	4	3.98 – 4.04	20.9		ug/kg	
					20.6		
<b>Aroclor-1260</b>							1.52
<i>Column 1</i>	1	4.43	4.41 – 4.47	26.2		ug/kg	
	2	4.63	4.6 – 4.66	26.1		ug/kg	
	3	4.91	4.88 – 4.94	26.2		ug/kg	
	4	5.08	5.05 – 5.11	25.7		ug/kg	
	5	5.49	5.46 – 5.52	25.7		ug/kg	
					26		
<i>Column 2</i>	1	4.92	4.89 – 4.95	25.8		ug/kg	
	2	5.07	5.04 – 5.1	26.5		ug/kg	
	3	5.38	5.35 – 5.41	26.7		ug/kg	
	4	5.59	5.56 – 5.62	26.2		ug/kg	
	5	6.02	5.99 – 6.05	26.6		ug/kg	
					26.4		

## Identification Summary

Page 1 of 1

SDG Number: 10-1758

Client ID: RE15-10-8340MSD

Lab Sample ID: 1202045064

Data File: 053f5301.d

Data File: 053b5301.d

Inst: ECD8A.I\_1

Inst: ECD8A.I\_2

Column: CLP1

Column: CLP2

Analyzed: 18-FEB-10 16:51

Analyzed: 18-FEB-10 16:51

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
<b>Aroclor-1016</b>							13.9
<i>Column 1</i>	1	2.81	2.78 – 2.84	20.1		ug/kg	
	2	3.16	3.13 – 3.19	19.9		ug/kg	
	3	3.31	3.28 – 3.34	17.7		ug/kg	
	4	3.4	3.37 – 3.43	20.2		ug/kg	
	5	3.56	3.53 – 3.59	19.3		ug/kg	
					19.4		
<i>Column 2</i>	1	3.56	3.53 – 3.59	22.3		ug/kg	
	2	3.66	3.63 – 3.69	22.6		ug/kg	
	3	3.73	3.7 – 3.76	20.7		ug/kg	
	4	3.81	3.78 – 3.84	22.9		ug/kg	
	5	4	3.98 – 4.04	23.3		ug/kg	
					22.3		
<b>Aroclor-1260</b>							8.63
<i>Column 1</i>	1	4.43	4.41 – 4.47	24.9		ug/kg	
	2	4.63	4.6 – 4.66	25.3		ug/kg	
	3	4.9	4.88 – 4.94	25.4		ug/kg	
	4	5.08	5.05 – 5.11	25.4		ug/kg	
	5	5.49	5.46 – 5.52	25.8		ug/kg	
					25.4		
<i>Column 2</i>	1	4.92	4.89 – 4.95	27.1		ug/kg	
	2	5.06	5.04 – 5.1	28.1		ug/kg	
	3	5.38	5.35 – 5.41	28		ug/kg	
	4	5.59	5.56 – 5.62	27.2		ug/kg	
	5	6.02	5.99 – 6.05	27.7		ug/kg	
					27.6		

# QUALITY CONTROL DATA

**PCB**  
**Certificate of Analysis**  
**Sample Summary**

<b>SDG Number:</b>	<b>10-1758</b>	<b>Matrix:</b>	<b>SOIL</b>
<b>Lab Sample ID:</b>	<b>1202045061</b>		
<b>Client Sample:</b>	<b>QC for batch 953958</b>	<b>Client:</b>	<b>LANL010</b>
<b>Client ID:</b>	<b>MB for batch 953958</b>	<b>Method:</b>	<b>SW846 8082</b>
<b>Batch ID:</b>	<b>953960</b>	<b>Inst:</b>	<b>ECD8A.I</b>
<b>Run Date:</b>	<b>02/18/2010 13:21</b>	<b>Analyst:</b>	<b>JAOC</b>
<b>Prep Date:</b>	<b>02/17/2010 13:09</b>	<b>Aliquot:</b>	<b>30 g</b>
<b>Data File:</b>	<b>036f3601-1.d</b>	<b>Column:</b>	<b>1 CLP1</b>
	<b>036b3601-1.d</b>		<b>2 CLP2</b>
		<b>Project:</b>	<b>QC</b>
		<b>SOP Ref:</b>	<b>GL-OA-E-040</b>
		<b>Dilution:</b>	<b>1</b>
		<b>Inj. Vol:</b>	<b>1 uL</b>
		<b>Final Volume:</b>	<b>1 mL</b>
		<b>Level:</b>	<b>LOW</b>

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.33	ug/kg	1.11	3.33	1
11104-28-2	Aroclor-1221	U	3.33	ug/kg	1.11	3.33	1
11141-16-5	Aroclor-1232	U	3.33	ug/kg	1.11	3.33	1
53469-21-9	Aroclor-1242	U	3.33	ug/kg	1.11	3.33	1
12672-29-6	Aroclor-1248	U	3.33	ug/kg	1.11	3.33	1
11097-69-1	Aroclor-1254	U	3.33	ug/kg	1.11	3.33	1
11096-82-5	Aroclor-1260	U	3.33	ug/kg	1.11	3.33	1

Data File: /chem/ecd8a.i/021810.b/036f3601-1.d  
Report Date: 19-Feb-2010 08:49

Page 1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd8a.i/021810.b/036f3601-1.d  
Lab Smp Id: 1202045061 Client Smp ID: PBLK01  
Inj Date : 18-FEB-2010 13:21  
Operator : JAOC Inst ID: ecd8a.i  
Smp Info : |1202045061|1|  
Misc Info : |ECD82P\_1S|953960|SVA|QC A|SOIL|MB||  
Comment :  
Method : /chem/ecd8a.i/021810.b/ECD8-F-8082-020310a.m  
Meth Date : 19-Feb-2010 07:33 jen01212 Quant Type: ESTD  
Cal Date : 03-FEB-2010 17:25 Cal File: 036f3601.d  
Als bottle: 36 QC Sample: BLANK  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: 10-1758.sub  
Target Version: 3.50 Sample Matrix: Soil  
Processing Host: hpc1p1

Concentration Formula: Amt \* DF \* Uf \* Vt/(Vi \* Ws \* (100 - M)/100) \* CpndVariable

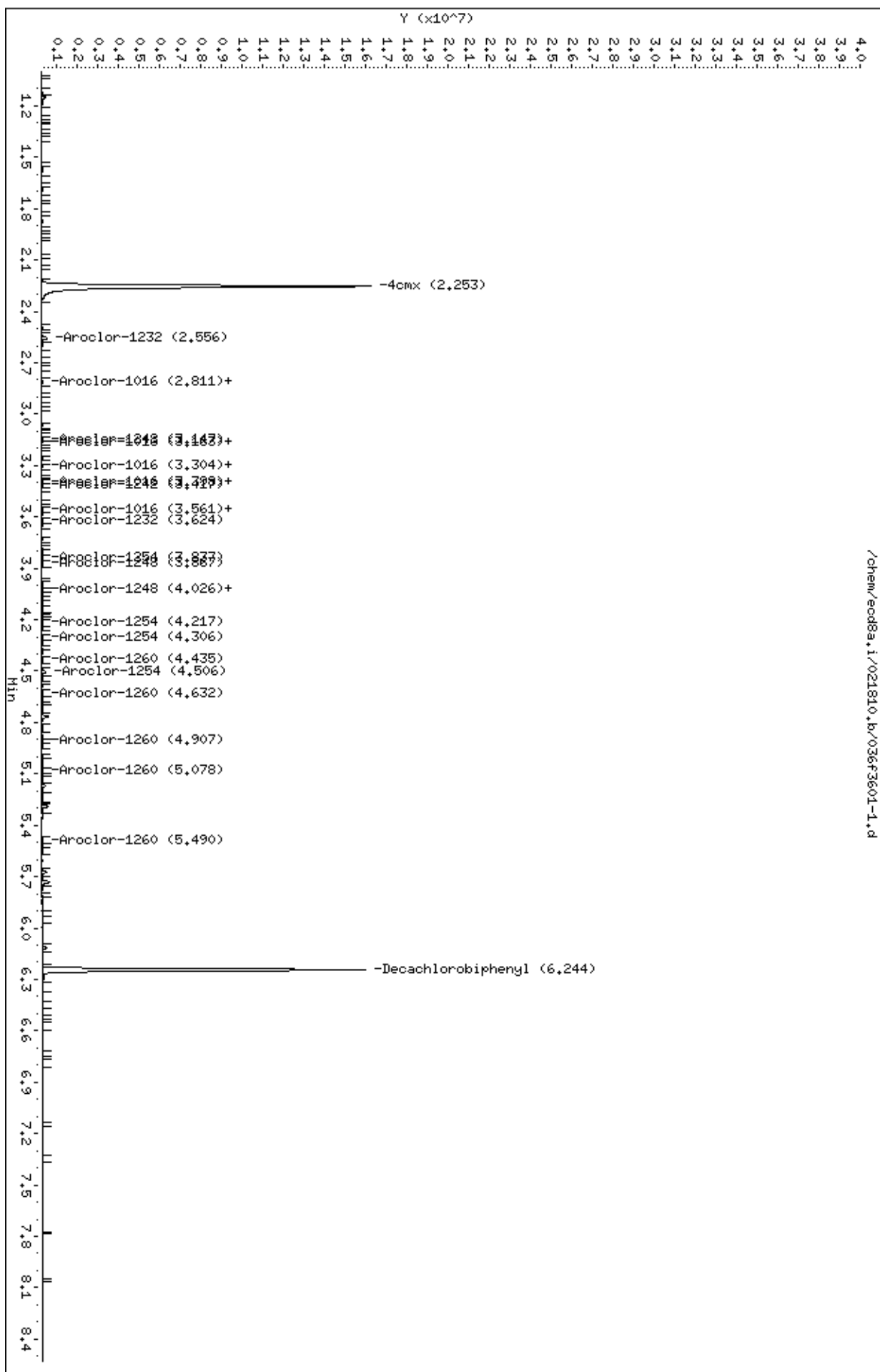
Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

		CONCENTRATIONS							
		ON-COL	FINAL						
RT	EXP RT	DLT RT	RESPONSE ( ug/L)	(ug/Kg)	TARGET RANGE	RATIO			
==	=====	=====	=====	=====	=====	=====		=====	
-----									
\$ 11 4cmx					CAS #: 877-09-8				
2.253	2.253	0.000	17985380	136.869	4.6 80.00- 120.00	100.00			
-----									
\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3				
6.244	6.246	-0.002	14016027	140.186	4.7 80.00- 120.00	100.00			
-----									

Data File: /chem/ecod8a.i/021810.b/036f3601-1.d  
 Date : 18-FEB-2010 13:21  
 Client ID: PBLK01  
 Sample Info: 1120204506111  
 Volume Injected (uL): 1.0  
 Column phase: CLP1

Instrument: ecod8a.i  
 Operator: JAO  
 Column diameter: 0.25





Data File: /chem/ecd8a.i/021810.b/036b3601-1.d  
Report Date: 19-Feb-2010 08:48

Page 1

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd8a.i/021810.b/036b3601-1.d  
Lab Smp Id: 1202045061 Client Smp ID: PBLK01  
Inj Date : 18-FEB-2010 13:21  
Operator : JAOC Inst ID: ecd8a.i  
Smp Info : |1202045061|1|  
Misc Info : |ECD82P\_1S|953960|SVA|QC A|SOIL|MB|||  
Comment :  
Method : /chem/ecd8a.i/021810.b/ECD8-B-8082-020310a.m  
Meth Date : 19-Feb-2010 07:39 jen01212 Quant Type: ESTD  
Cal Date : 03-FEB-2010 17:25 Cal File: 036b3601.d  
Als bottle: 36 QC Sample: BLANK  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: 10-1758.sub  
Target Version: 3.50 Sample Matrix: Soil  
Processing Host: hpclp1

Concentration Formula:  $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vi} * \text{Ws} * (100 - \text{M}) / 100) * \text{CpndVariable}$

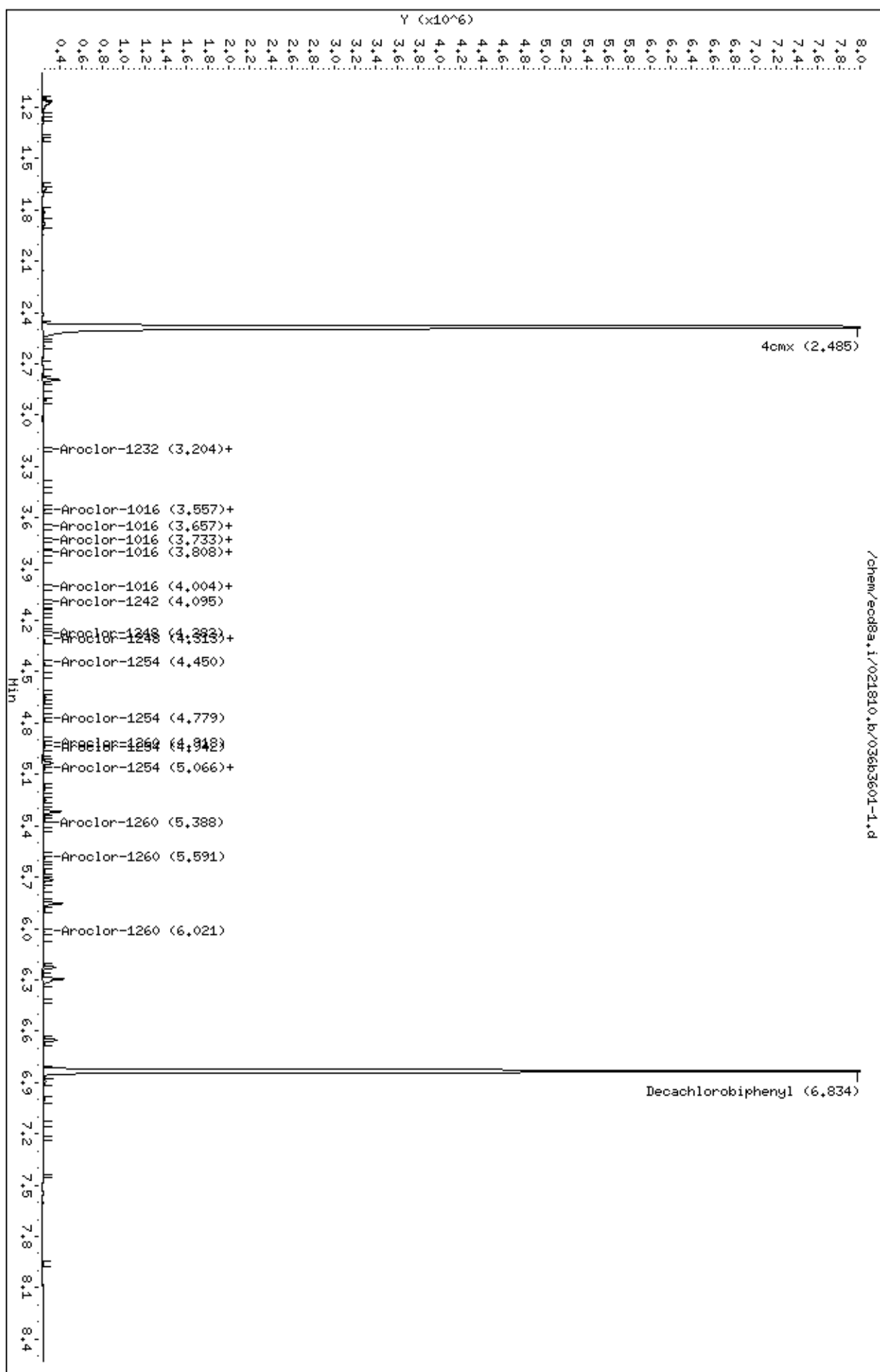
Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

CONCENTRATIONS						
			ON-COL	FINAL		
RT	EXP RT	DLT RT	RESPONSE ( ug/L)	(ug/Kg)	TARGET RANGE	RATIO
==	=====	=====	=====	=====	=====	=====
\$ 11 4cmx					CAS #: 877-09-8	
2.485	2.484	0.001	12176917 140.217	4.7	80.00- 120.00	100.00
-----						
\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3	
6.834	6.835	-0.001	9942858 153.336	5.1	80.00- 120.00	100.00
-----						

Data File: /chem/ecd8a.i/021810.b/036b3601-1.d  
Date : 18-FEB-2010 13:21  
Client ID: PBLK01  
Sample Info: 1120204506111  
Volume Injected (uL): 1.0  
Column phase: CLP2

Instrument: ecd8a.i  
Operator: JAO  
Column diameter: 0.25



**PCB**  
**Certificate of Analysis**  
**Sample Summary**

<b>SDG Number:</b>	<b>10-1758</b>	<b>Matrix:</b>	<b>SOIL</b>
<b>Lab Sample ID:</b>	<b>1202045062</b>		
<b>Client Sample:</b>	<b>QC for batch 953958</b>	<b>Client:</b>	<b>LANL010</b>
<b>Client ID:</b>	<b>LCS for batch 953958</b>	<b>Method:</b>	<b>SW846 8082</b>
<b>Batch ID:</b>	<b>953960</b>	<b>Inst:</b>	<b>ECD8A.I</b>
<b>Run Date:</b>	<b>02/18/2010 13:33</b>	<b>Analyst:</b>	<b>JAOC</b>
<b>Prep Date:</b>	<b>02/17/2010 13:09</b>	<b>Aliquot:</b>	<b>30 g</b>
<b>Data File:</b>	<b>037f3701-1.d</b>	<b>Column:</b>	<b>1 CLP1</b>
	<b>037b3701-1.d</b>		<b>2 CLP2</b>

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016		19.5	ug/kg	1.11	3.33	1
11104-28-2	Aroclor-1221	U	3.33	ug/kg	1.11	3.33	1
11141-16-5	Aroclor-1232	U	3.33	ug/kg	1.11	3.33	1
53469-21-9	Aroclor-1242	U	3.33	ug/kg	1.11	3.33	1
12672-29-6	Aroclor-1248	U	3.33	ug/kg	1.11	3.33	1
11097-69-1	Aroclor-1254	U	3.33	ug/kg	1.11	3.33	1
11096-82-5	Aroclor-1260		23.2	ug/kg	1.11	3.33	2

Data File: /chem/ecd8a.i/021810.b/037f3701-1.d  
Report Date: 19-Feb-2010 08:49

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GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd8a.i/021810.b/037f3701-1.d  
Lab Smp Id: 1202045062 Client Smp ID: PBLK01LCS  
Inj Date : 18-FEB-2010 13:33  
Operator : JAOC Inst ID: ecd8a.i  
Smp Info : |1202045062|1|  
Misc Info : |ECD82P\_1S|953960|SVA|QC A|SOIL|LCS|||  
Comment :  
Method : /chem/ecd8a.i/021810.b/ECD8-F-8082-020310a.m  
Meth Date : 19-Feb-2010 07:33 jen01212 Quant Type: ESTD  
Cal Date : 03-FEB-2010 17:25 Cal File: 036f3601.d  
Als bottle: 37 QC Sample: LCS  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: 10-1758.sub  
Target Version: 3.50 Sample Matrix: Soil  
Processing Host: hpc1p1

Concentration Formula: Amt \* DF \* Uf \* Vt/(Vi \* Ws \* (100 - M)/100) \* CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

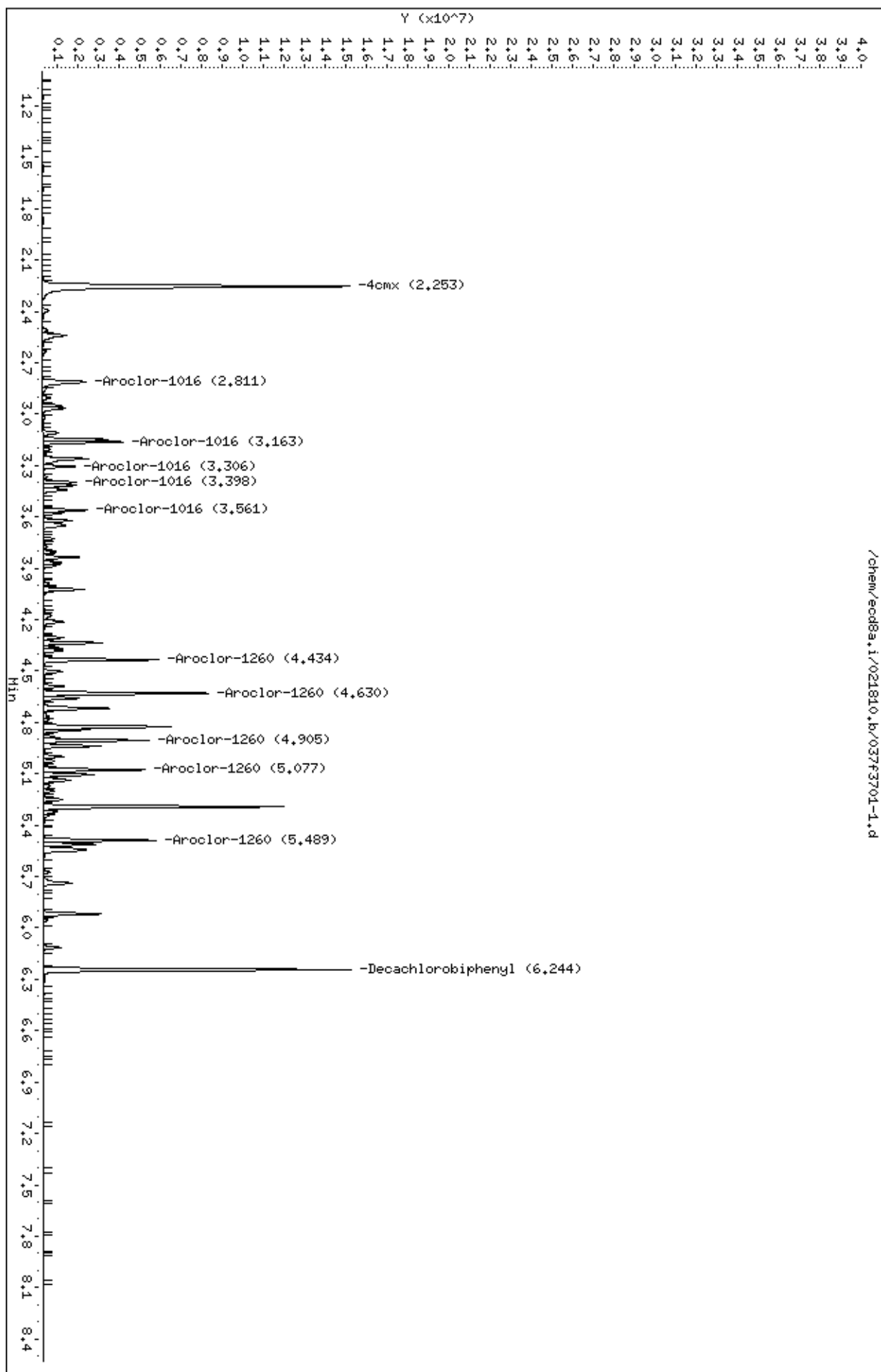
Cpnd Variable Local Compound Variable

CONCENTRATIONS								
			ON-COL		FINAL			
RT	EXP RT	DLT RT	RESPONSE	( ug/L)	(ug/Kg)	TARGET RANGE	RATIO	
==	=====	=====	=====	=====	=====	=====	=====	
\$ 11 4cmx CAS #: 877-09-8								
2.253	2.253	0.000	17354126	132.065	4.4	80.00- 120.00	100.00	
-----								
\$ 12 Decachlorobiphenyl CAS #: 2051-24-3								
6.244	6.246	-0.002	13169713	131.722	4.4	80.00- 120.00	100.00	
-----								
1 Aroclor-1016 CAS #: 12674-11-2								
2.811	2.811	0.000	2703067	579.482	19.3	80.00- 120.00	100.00	
3.163	3.163	0.000	3353122	581.172	19.4	103.93- 143.93	124.05	
3.306	3.306	0.000	1373019	559.457	18.6	33.02- 73.02	50.79	
3.398	3.399	-0.001	1339009	609.145	20.3	26.15- 66.15	49.54	

CONCENTRATIONS								
			ON-COL		FINAL			
RT	EXP RT	DLT RT	RT	RESPONSE	( ug/L)	(ug/Kg)	TARGET RANGE	RATIO
==	=====	=====		=====	=====	=====	=====	=====
1 Aroclor-1016 (continued)								
3.561	3.561	0.000		1874829	596.670	19.9	48.07- 88.07	69.36
Average of Peak Concentrations =					19.5			
-----								
7 Aroclor-1260					CAS #: 11096-82-5			
4.434	4.435	-0.001		4664581	692.180	23.1	80.00- 120.00	100.00
4.630	4.631	-0.001		7156138	697.493	23.2	127.54- 167.54	153.41
4.905	4.907	-0.002		4272524	697.003	23.2	66.72- 106.72	91.60
5.077	5.079	-0.002		4259321	666.992	22.2	70.27- 110.27	91.31
5.489	5.490	-0.001		4593738	669.665	22.3	75.79- 115.79	98.48
Average of Peak Concentrations =					22.8			
-----								

Data File: /chem/ecd8a.i/021810.b/037f3701-1.d  
Date : 18-FEB-2010 13:33  
Client ID: PBLK01LCS  
Sample Info: 1120204506211  
Volume Injected (uL): 1.0  
Column phase: CLP1

Instrument: ecd8a.i  
Operator: JAO  
Column diameter: 0.25



Data File: /chem/ecd8a.i/021810.b/037b3701-1.d  
Report Date: 19-Feb-2010 08:49

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GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd8a.i/021810.b/037b3701-1.d  
Lab Smp Id: 1202045062 Client Smp ID: PBLK01LCS  
Inj Date : 18-FEB-2010 13:33  
Operator : JAOC Inst ID: ecd8a.i  
Smp Info : |1202045062|1|  
Misc Info : |ECD82P\_1S|953960|SVA|QC A|SOIL|LCS|||  
Comment :  
Method : /chem/ecd8a.i/021810.b/ECD8-B-8082-020310a.m  
Meth Date : 19-Feb-2010 07:39 jen01212 Quant Type: ESTD  
Cal Date : 03-FEB-2010 17:25 Cal File: 036b3601.d  
Als bottle: 37 QC Sample: LCS  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: 10-1758.sub  
Target Version: 3.50 Sample Matrix: Soil  
Processing Host: hpclp1

Concentration Formula:  $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vi} * \text{Ws} * (100 - \text{M}) / 100) * \text{CpndVariable}$

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

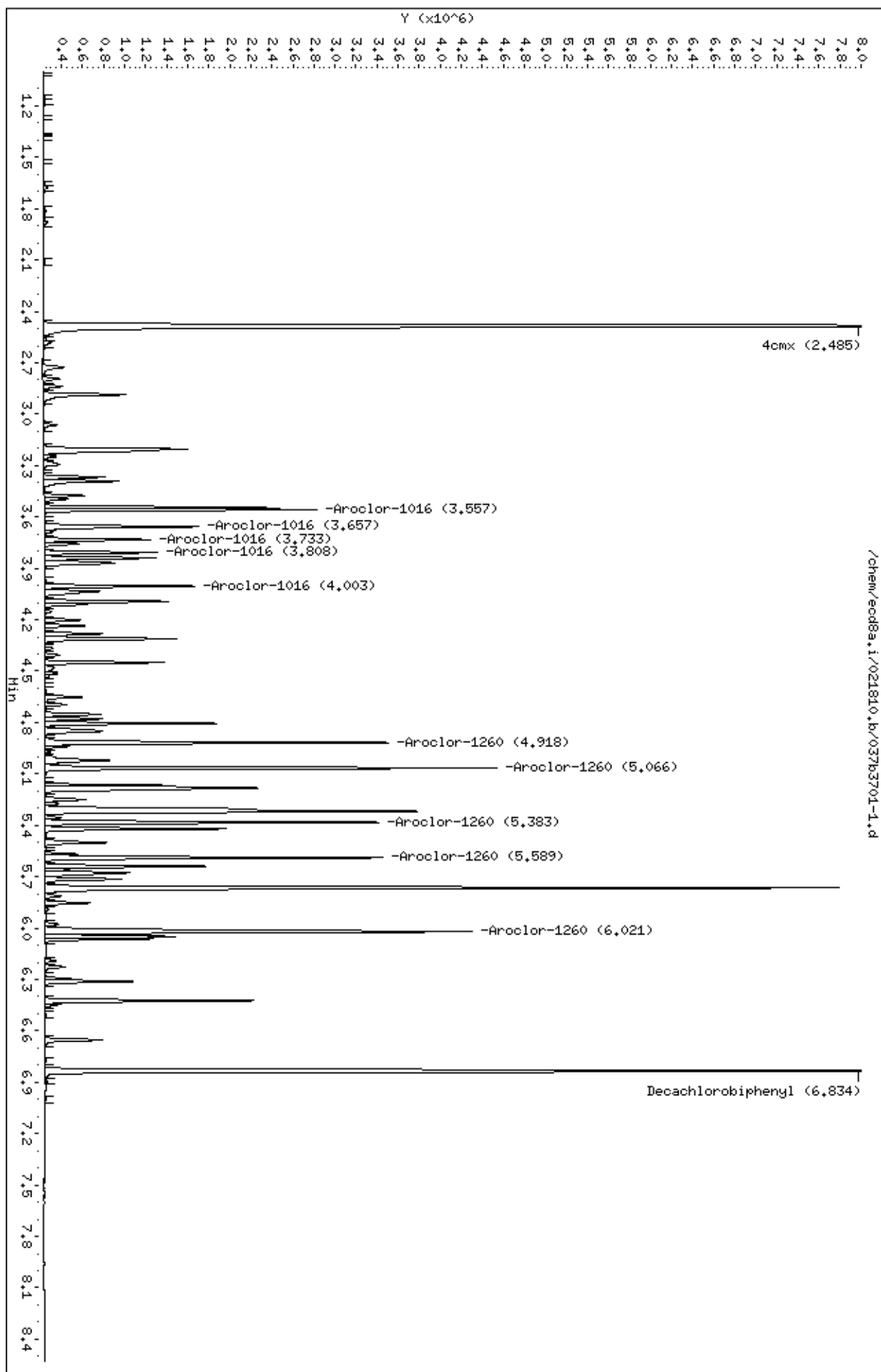
CONCENTRATIONS							
		ON-COL		FINAL			
RT	EXP RT	DLT RT	RESPONSE ( ug/L)	(ug/Kg)	TARGET RANGE	RATIO	
==	=====	=====	=====	=====	=====	=====	
\$ 11 4cmx CAS #: 877-09-8							
2.485	2.484	0.001	11499727 132.419	4.4	80.00- 120.00	100.00	
-----							
\$ 12 Decachlorobiphenyl CAS #: 2051-24-3							
6.834	6.835	-0.001	9306434 143.521	4.8	80.00- 120.00	100.00	
-----							
1 Aroclor-1016 CAS #: 12674-11-2							
3.557	3.558	-0.001	2060318 547.026	18.2	80.00- 120.00	100.00	
3.657	3.657	0.000	1416502 567.867	18.9	47.95- 87.95	68.75	
3.733	3.733	0.000	785916 518.588	17.3	20.49- 60.49	38.15	
3.808	3.808	0.000	846584 566.974	18.9	19.20- 59.20	41.09	

				CONCENTRATIONS					
				ON-COL		FINAL			
RT	EXP RT	DLT RT	RT	RESPONSE	( ug/L)	(ug/Kg)	TARGET	RANGE	RATIO
==	=====	=====		=====	=====	=====	=====		=====
1 Aroclor-1016 (continued)									
4.003	4.005	-0.002		1130730	555.473	18.5	34.84-	74.84	54.88
Average of Peak Concentrations =						18.4			
-----									
7 Aroclor-1260						CAS #: 11096-82-5			
4.918	4.918	0.000		2748757	672.986	22.4	80.00-	120.00	100.00
5.066	5.067	-0.001		3496011	703.578	23.4	99.85-	139.85	127.19
5.383	5.384	-0.001		2710227	715.398	23.8	72.04-	112.04	98.60
5.589	5.591	-0.002		2690563	680.620	22.7	76.08-	116.08	97.88
6.021	6.022	-0.001		4394512	705.669	23.5	130.64-	170.64	159.87
Average of Peak Concentrations =						23.2			



Data File: /chem/ecd8a.i/021810.b/037b3701-1.d  
Date : 18-FEB-2010 13:33  
Client ID: PBLK01LCS  
Sample Info: 1120204506211  
Volume Injected (uL): 1.0  
Column phase: CLP2

Instrument: ecd8a.i  
Operator: JAOC  
Column diameter: 0.25



**PCB**  
**Certificate of Analysis**  
**Sample Summary**

<b>SDG Number:</b>	<b>10-1758</b>	<b>Date Collected:</b>	<b>02/09/2010 12:00</b>	<b>Matrix:</b>	<b>R</b>
<b>Lab Sample ID:</b>	<b>1202045063</b>	<b>Date Received:</b>	<b>02/11/2010 09:20</b>	<b>%Moisture:</b>	<b>24.2</b>
<b>Client Sample:</b>	<b>QC for batch 953958</b>	<b>Client:</b>	<b>LANL010</b>	<b>Project:</b>	<b>QC</b>
<b>Client ID:</b>	<b>RE15-10-8340MS</b>	<b>Method:</b>	<b>SW846 8082</b>	<b>SOP Ref:</b>	<b>GL-OA-E-040</b>
<b>Batch ID:</b>	<b>953960</b>	<b>Inst:</b>	<b>ECD8A.I</b>	<b>Dilution:</b>	<b>1</b>
<b>Run Date:</b>	<b>02/18/2010 16:39</b>	<b>Analyst:</b>	<b>JAOC</b>	<b>Inj. Vol:</b>	<b>1 uL</b>
<b>Prep Date:</b>	<b>02/17/2010 13:09</b>	<b>Aliquot:</b>	<b>30.06 g</b>	<b>Final Volume:</b>	<b>1 mL</b>
<b>Data File:</b>	<b>052f5201.d</b>	<b>Column:</b>	<b>1 CLP1</b>	<b>Level:</b>	<b>LOW</b>
	<b>052b5201.d</b>		<b>2 CLP2</b>		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016		21.0	ug/kg	1.46	4.39	1
11104-28-2	Aroclor-1221	U	4.39	ug/kg	1.46	4.39	1
11141-16-5	Aroclor-1232	U	4.39	ug/kg	1.46	4.39	1
53469-21-9	Aroclor-1242	U	4.39	ug/kg	1.46	4.39	1
12672-29-6	Aroclor-1248	U	4.39	ug/kg	1.46	4.39	1
11097-69-1	Aroclor-1254	U	4.39	ug/kg	1.46	4.39	1
11096-82-5	Aroclor-1260		26.0	ug/kg	1.46	4.39	1

Data File: /chem/ecd8a.i/021810.b/052f5201.d  
Report Date: 19-Feb-2010 08:07

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RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd8a.i/021810.b/052f5201.d

Lab Smp Id: 1202045063

Client Smp ID: RE15-10-8340MS

Inj Date : 18-FEB-2010 16:39

Operator : JAOC

Inst ID: ecd8a.i

Smp Info : |1202045063|1|

Misc Info : |ECD82P\_1S|953960|SVA|QC A|SOIL|MS| |

Comment :

Method : /chem/ecd8a.i/021810.b/ECD8-F-8082-020310a.m

Meth Date : 19-Feb-2010 07:33 jen01212 Quant Type: ESTD

Cal Date : 03-FEB-2010 17:25

Cal File: 036f3601.d

Als bottle: 52

QC Sample: MS

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: 10-1758.sub

Target Version: 3.50

Sample Matrix: Soil

Concentration Formula: Amt \* DF \* Uf \* Vt/(Vi \* Ws \* (100 - M)/100) \* CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.06000	Weight of sample extracted (g)
M	24.17840	% Moisture

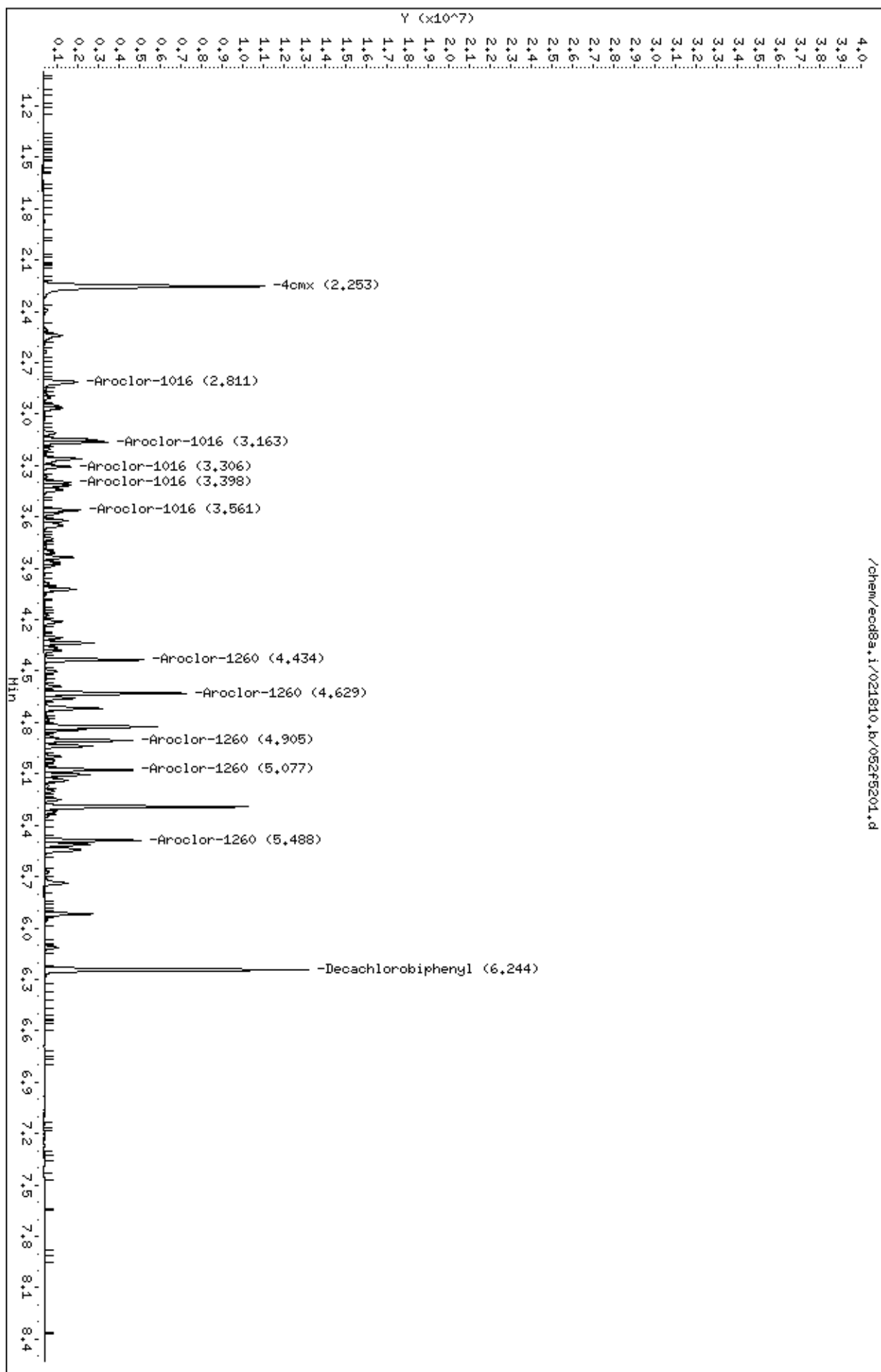
Cpnd Variable Local Compound Variable

CONCENTRATIONS								
			ON-COL		FINAL			
RT	EXP RT	DLT RT	RESPONSE ( ug/L)		(ug/Kg)		TARGET RANGE	RATIO
==	=====	=====	=====	=====	=====	=====	=====	=====
\$ 11 4cmx CAS #: 877-09-8								
2.253	2.253	0.000	12593464	95.8362	4.2	80.00-	120.00	100.00
\$ 12 Decachlorobiphenyl CAS #: 2051-24-3								
6.244	6.246	-0.002	11391288	113.934	5.0	80.00-	120.00	100.00
1 Aroclor-1016 CAS #: 12674-11-2								
2.811	2.811	0.000	2165015	464.135	20.4	80.00-	120.00	100.00
3.163	3.163	0.000	2812829	487.527	21.4	103.93-	143.93	129.92
3.306	3.306	0.000	1140134	464.564	20.4	33.02-	73.02	52.66
3.398	3.399	-0.001	1072033	487.691	21.4	26.15-	66.15	49.52
3.561	3.561	0.000	1524914	485.308	21.3	48.07-	88.07	70.43
Average of Peak Concentrations =					21.0			

CONCENTRATIONS								
			ON-COL		FINAL			
RT	EXP RT	DLT RT	RT	RESPONSE	( ug/L)	(ug/Kg)	TARGET RANGE	RATIO
==	=====	=====		=====	=====	=====	=====	=====
7 Aroclor-1260				CAS #: 11096-82-5				
4.434	4.435	-0.001		4022628	596.920	26.2	80.00- 120.00	100.00
4.629	4.631	-0.002		6103738	594.918	26.1	127.54- 167.54	151.74
4.905	4.907	-0.002		3660625	597.180	26.2	66.72- 106.72	91.00
5.077	5.079	-0.002		3743190	586.168	25.7	70.27- 110.27	93.05
5.488	5.490	-0.002		4009934	584.559	25.6	75.79- 115.79	99.68
Average of Peak Concentrations =				26.0				

Data File: /chem/ecd8a.i/021810.b/052f5201.d  
Date : 18-FEB-2010 16:39  
Client ID: RE15-10-8340HS  
Sample Info: 11202045063141  
Volume Injected (uL): 1.0  
Column phase: CLP1

Instrument: ecd8a.i  
Operator: JAOC  
Column diameter: 0.25



Data File: /chem/ecd8a.i/021810.b/052b5201.d  
Report Date: 19-Feb-2010 08:07

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RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd8a.i/021810.b/052b5201.d  
Lab Smp Id: 1202045063 Client Smp ID: RE15-10-8340MS  
Inj Date : 18-FEB-2010 16:39  
Operator : JAOC Inst ID: ecd8a.i  
Smp Info : |1202045063|1|  
Misc Info : |ECD82P\_1S|953960|SVA|QC A|SOIL|MS|||  
Comment :  
Method : /chem/ecd8a.i/021810.b/ECD8-B-8082-020310a.m  
Meth Date : 19-Feb-2010 07:39 jen01212 Quant Type: ESTD  
Cal Date : 03-FEB-2010 17:25 Cal File: 036b3601.d  
Als bottle: 52 QC Sample: MS  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: 10-1758.sub  
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula:  $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vi} * \text{Ws} * (100 - \text{M}) / 100) * \text{CpndVariable}$

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.06000	Weight of sample extracted (g)
M	24.17840	% Moisture

Cpnd Variable Local Compound Variable

CONCENTRATIONS							
			ON-COL	FINAL			
RT	EXP RT	DLT RT	RESPONSE ( ug/L)	(ug/Kg)	TARGET RANGE	RATIO	
==	=====	=====	=====	=====	=====	=====	
-----							
\$ 11 4cmx				CAS #: 877-09-8			
2.485	2.484	0.001	8250338 95.0025	4.2	80.00- 120.00	100.00	
-----							
\$ 12 Decachlorobiphenyl				CAS #: 2051-24-3			
6.833	6.835	-0.002	8011344 123.548	5.4	80.00- 120.00	100.00	
-----							
1 Aroclor-1016				CAS #: 12674-11-2			
3.558	3.558	0.000	1747420 463.950	20.4	80.00- 120.00	100.00	
3.657	3.657	0.000	1181455 473.638	20.8	47.95- 87.95	67.61	
3.733	3.733	0.000	688276 454.160	19.9	20.49- 60.49	39.39	
3.808	3.808	0.000	711613 476.581	20.9	19.20- 59.20	40.72	
4.003	4.005	-0.002	971457 477.230	20.9	34.84- 74.84	55.59	
Average of Peak Concentrations =				20.6			
-----							

CONCENTRATIONS

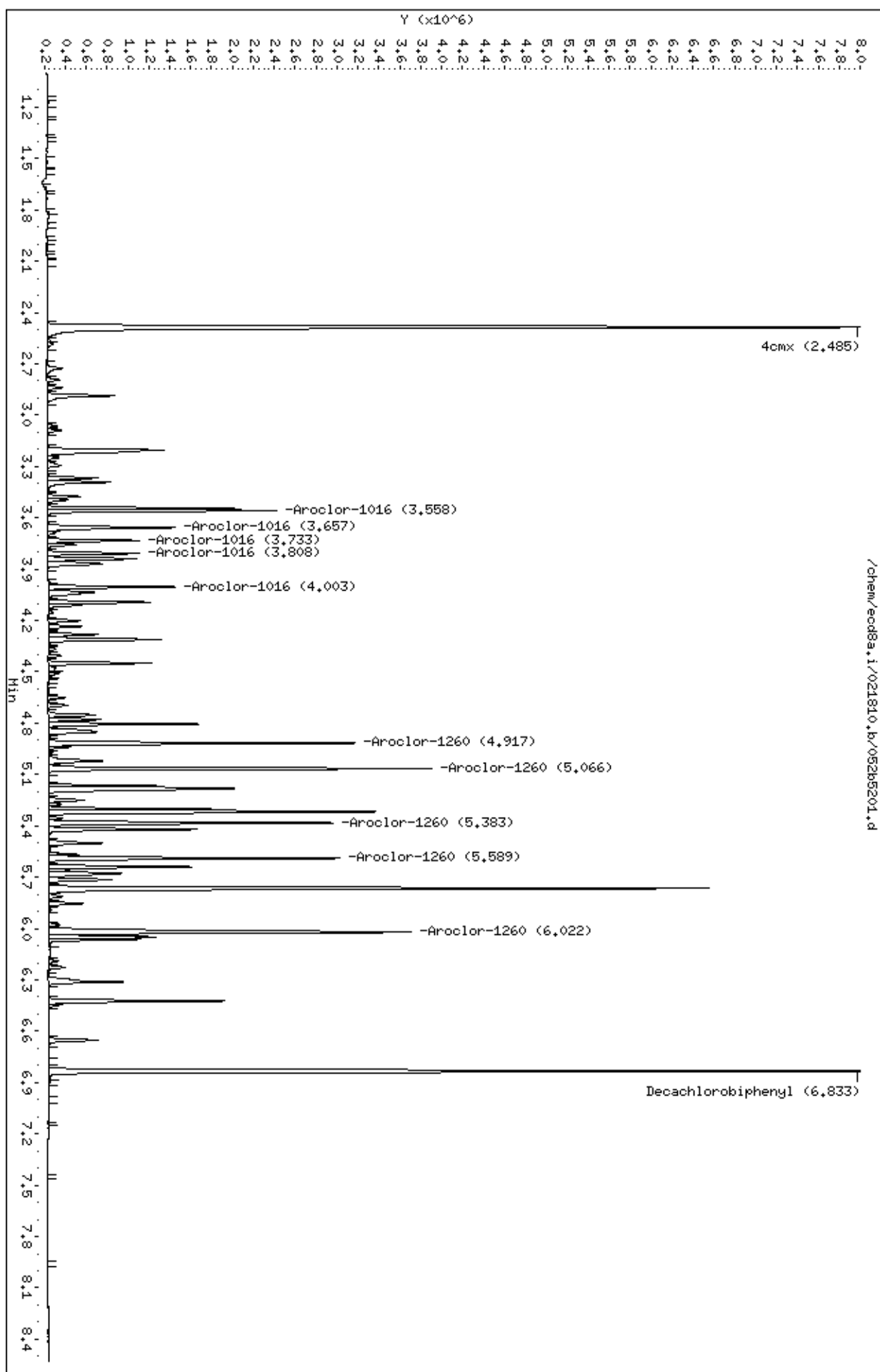
ON-COL FINAL

RT	EXP RT	DLT RT	RT	RESPONSE ( ug/L)	(ug/Kg)	TARGET RANGE	RATIO
----	--------	--------	----	------------------	---------	--------------	-------

7 Aroclor-1260				CAS #: 11096-82-5			
4.917	4.918	-0.001		2401546 587.978	25.8	80.00- 120.00	100.00
5.066	5.067	-0.001		3003999 604.560	26.5	99.85- 139.85	125.09
5.383	5.384	-0.001		2306790 608.906	26.7	72.04- 112.04	96.05
5.589	5.591	-0.002		2358731 596.678	26.2	76.08- 116.08	98.22
6.022	6.022	0.000		3780152 607.016	26.6	130.64- 170.64	157.40
Average of Peak Concentrations =				26.4			

Data File: /chem/ecd8a.i/021810.b/052b5201.d  
Date: 18-FEB-2010 16:39  
Client ID: RE15-10-8340HS  
Sample Info: 11202045063141  
Volume Injected (uL): 1.0  
Column phase: CLP2

Instrument: ecd8a.i  
Operator: JAOC  
Column diameter: 0.25





**PCB**  
**Certificate of Analysis**  
**Sample Summary**

<b>SDG Number:</b>	<b>10-1758</b>	<b>Date Collected:</b>	<b>02/09/2010 12:00</b>	<b>Matrix:</b>	<b>R</b>
<b>Lab Sample ID:</b>	<b>1202045064</b>	<b>Date Received:</b>	<b>02/11/2010 09:20</b>	<b>%Moisture:</b>	<b>24.2</b>
<b>Client Sample:</b>	<b>QC for batch 953958</b>	<b>Client:</b>	<b>LANL010</b>	<b>Project:</b>	<b>QC</b>
<b>Client ID:</b>	<b>RE15-10-8340MSD</b>	<b>Method:</b>	<b>SW846 8082</b>	<b>SOP Ref:</b>	<b>GL-OA-E-040</b>
<b>Batch ID:</b>	<b>953960</b>	<b>Inst:</b>	<b>ECD8A.I</b>	<b>Dilution:</b>	<b>1</b>
<b>Run Date:</b>	<b>02/18/2010 16:51</b>	<b>Analyst:</b>	<b>JAOC</b>	<b>Inj. Vol:</b>	<b>1 uL</b>
<b>Prep Date:</b>	<b>02/17/2010 13:09</b>	<b>Aliquot:</b>	<b>30.02 g</b>	<b>Final Volume:</b>	<b>1 mL</b>
<b>Data File:</b>	<b>053f5301.d</b>	<b>Column:</b>	<b>1 CLP1</b>	<b>Level:</b>	<b>LOW</b>
	<b>053b5301.d</b>		<b>2 CLP2</b>		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016		19.4	ug/kg	1.46	4.39	1
11104-28-2	Aroclor-1221	U	4.39	ug/kg	1.46	4.39	1
11141-16-5	Aroclor-1232	U	4.39	ug/kg	1.46	4.39	1
53469-21-9	Aroclor-1242	U	4.39	ug/kg	1.46	4.39	1
12672-29-6	Aroclor-1248	U	4.39	ug/kg	1.46	4.39	1
11097-69-1	Aroclor-1254	U	4.39	ug/kg	1.46	4.39	1
11096-82-5	Aroclor-1260		25.4	ug/kg	1.46	4.39	1

Data File: /chem/ecd8a.i/021810.b/053f5301.d  
Report Date: 19-Feb-2010 08:08

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GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd8a.i/021810.b/053f5301.d  
Lab Smp Id: 1202045064 Client Smp ID: RE15-10-8340MSD  
Inj Date : 18-FEB-2010 16:51  
Operator : JAOC Inst ID: ecd8a.i  
Smp Info : |1202045064|1|  
Misc Info : |ECD82P\_1S|953960|SVA|QC A|SOIL|MSD|||  
Comment :  
Method : /chem/ecd8a.i/021810.b/ECD8-F-8082-020310a.m  
Meth Date : 19-Feb-2010 07:33 jen01212 Quant Type: ESTD  
Cal Date : 03-FEB-2010 17:25 Cal File: 036f3601.d  
Als bottle: 53 QC Sample: MSD  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: 10-1758.sub  
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt \* DF \* Uf \* Vt/(Vi \* Ws \* (100 - M)/100) \* CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.02000	Weight of sample extracted (g)
M	24.17840	% Moisture

Cpnd Variable Local Compound Variable

CONCENTRATIONS								
			ON-COL		FINAL			
RT	EXP RT	DLT RT	RESPONSE	( ug/L)	(ug/Kg)	TARGET RANGE	RATIO	
==	=====	=====	=====	=====	=====	=====	=====	
\$ 11 4cmx CAS #: 877-09-8								
2.254	2.253	0.001	12560290	95.5838	4.2	80.00- 120.00	100.00	
\$ 12 Decachlorobiphenyl CAS #: 2051-24-3								
6.244	6.246	-0.002	11777419	117.796	5.2	80.00- 120.00	100.00	
1 Aroclor-1016 CAS #: 12674-11-2								
2.811	2.811	0.000	2137759	458.292	20.1	80.00- 120.00	100.00	
3.163	3.163	0.000	2612619	452.826	19.9	103.93- 143.93	122.21	
3.305	3.306	-0.001	986926	402.137	17.7	33.02- 73.02	46.17	
3.398	3.399	-0.001	1011103	459.973	20.2	26.15- 66.15	47.30	
3.561	3.561	0.000	1378299	438.648	19.3	48.07- 88.07	64.47	
Average of Peak Concentrations =					19.4			

CONCENTRATIONS

ON-COL FINAL

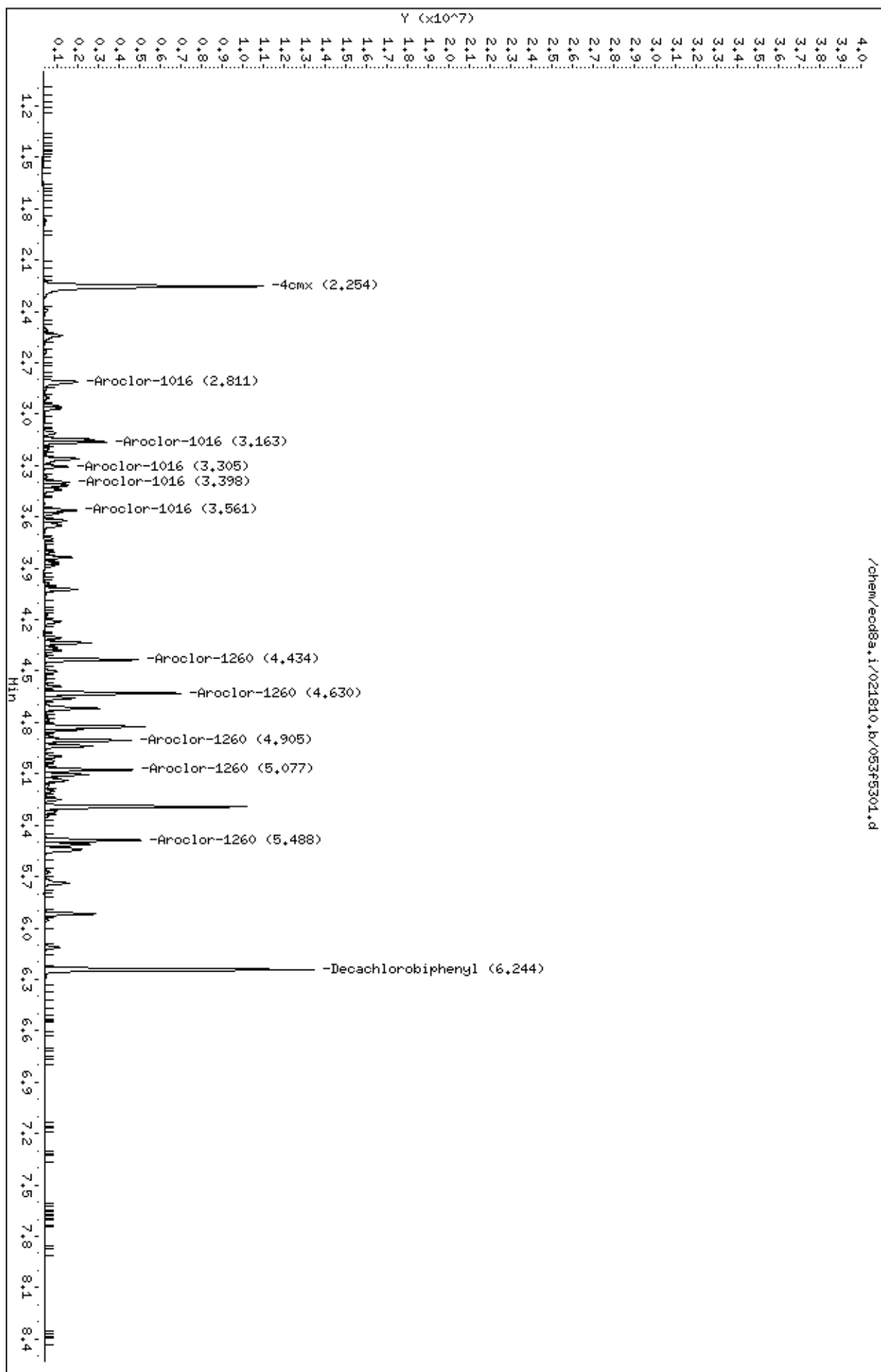
RT	EXP RT	DLT RT	RT	RESPONSE ( ug/L)	(ug/Kg)	TARGET RANGE	RATIO
----	--------	--------	----	------------------	---------	--------------	-------

7	Aroclor-1260				CAS #: 11096-82-5		
4.434	4.435	-0.001		3813804	565.933	24.9 80.00- 120.00	100.00
4.630	4.631	-0.001		5912484	576.277	25.3 127.54- 167.54	155.03
4.905	4.907	-0.002		3540124	577.522	25.4 66.72- 106.72	92.82
5.077	5.079	-0.002		3697764	579.054	25.4 70.27- 110.27	96.96
5.488	5.490	-0.002		4022605	586.406	25.8 75.79- 115.79	105.47

Average of Peak Concentrations = 25.4

Data File: /chem/ecd8a.i/021810.b/053f5301.d  
Date : 18-FEB-2010 16:51  
Client ID: RE15-10-8340HSD  
Sample Info: 1120204506411  
Volume Injected (uL): 1.0  
Column phase: CLP1

Instrument: ecd8a.i  
Operator: JAOC  
Column diameter: 0.25



Data File: /chem/ecd8a.i/021810.b/053b5301.d  
Report Date: 19-Feb-2010 08:08

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GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd8a.i/021810.b/053b5301.d  
Lab Smp Id: 1202045064 Client Smp ID: RE15-10-8340MSD  
Inj Date : 18-FEB-2010 16:51  
Operator : JAOC Inst ID: ecd8a.i  
Smp Info : |1202045064|1|  
Misc Info : |ECD82P\_1S|953960|SVA|QC A|SOIL|MSD|||  
Comment :  
Method : /chem/ecd8a.i/021810.b/ECD8-B-8082-020310a.m  
Meth Date : 19-Feb-2010 07:39 jen01212 Quant Type: ESTD  
Cal Date : 03-FEB-2010 17:25 Cal File: 036b3601.d  
Als bottle: 53 QC Sample: MSD  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: 10-1758.sub  
Target Version: 3.50 Sample Matrix: Soil

Concentration Formula: Amt \* DF \* Uf \* Vt/(Vi \* Ws \* (100 - M)/100) \* CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.02000	Weight of sample extracted (g)
M	24.17840	% Moisture

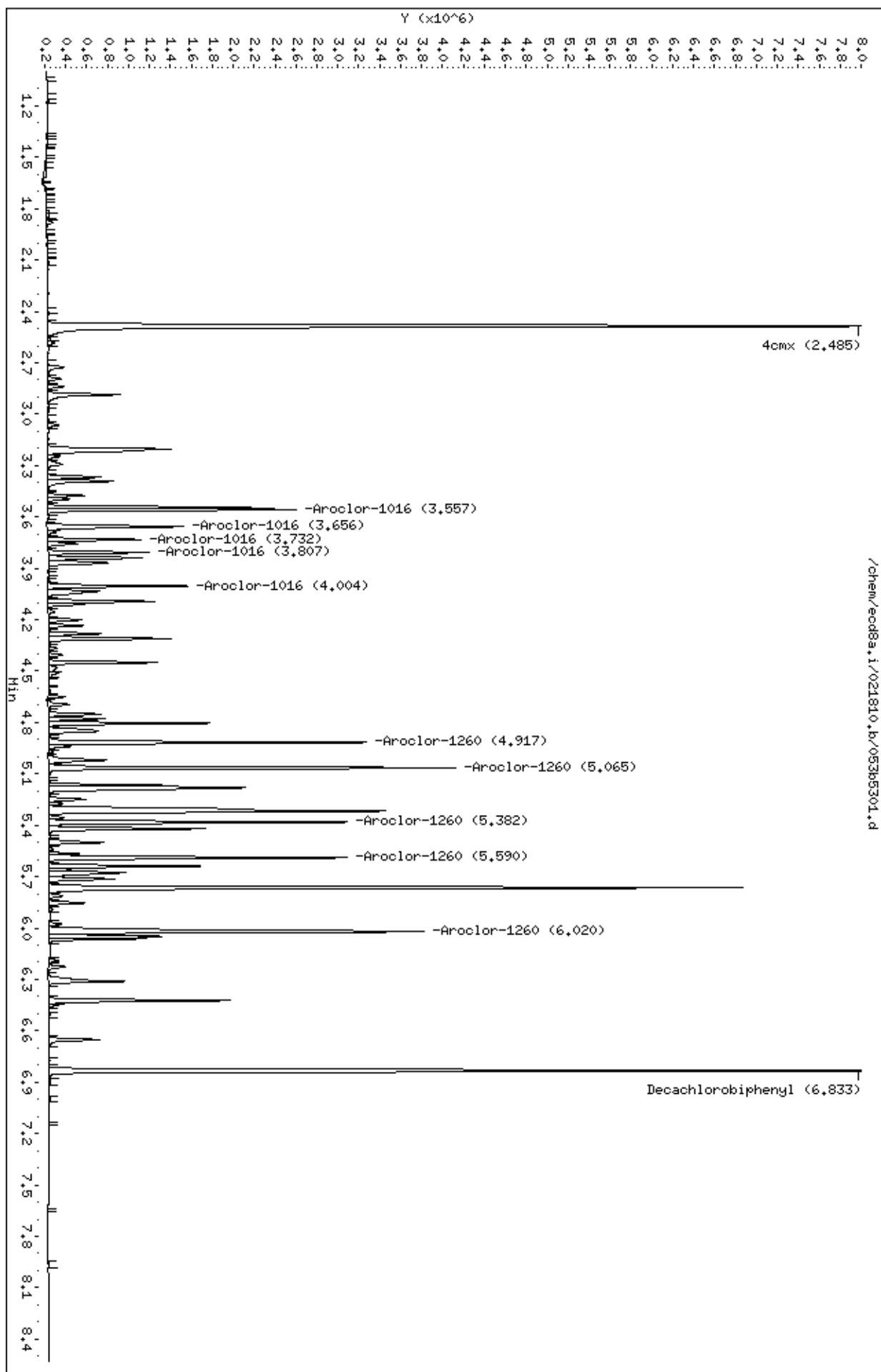
Cpnd Variable Local Compound Variable

CONCENTRATIONS							
			ON-COL	FINAL			
RT	EXP RT	DLT RT	RESPONSE ( ug/L)	(ug/Kg)	TARGET RANGE	RATIO	
==	=====	=====	=====	=====	=====	=====	
-----							
\$ 11 4cmx				CAS #: 877-09-8			
2.485	2.484	0.001	8785807 101.168	4.4	80.00- 120.00	100.00	
-----							
\$ 12 Decachlorobiphenyl				CAS #: 2051-24-3			
6.833	6.835	-0.002	8099894 124.914	5.5	80.00- 120.00	100.00	
-----							
1 Aroclor-1016				CAS #: 12674-11-2			
3.557	3.558	-0.001	1908598 506.743	22.3	80.00- 120.00	100.00	
3.656	3.657	-0.001	1281561 513.770	22.6	47.95- 87.95	67.15	
3.732	3.733	-0.001	712578 470.196	20.6	20.49- 60.49	37.34	
3.807	3.808	-0.001	778488 521.368	22.9	19.20- 59.20	40.79	
4.004	4.005	-0.001	1078821 529.972	23.3	34.84- 74.84	56.52	
Average of Peak Concentrations =				22.3			
-----							

CONCENTRATIONS							
			ON-COL		FINAL		
RT	EXP RT	DLT RT	RESPONSE ( ug/L)		(ug/Kg)	TARGET RANGE	RATIO
==	=====	=====	=====	=====	=====	=====	=====
7 Aroclor-1260					CAS #: 11096-82-5		
4.917	4.918	-0.001	2517451	616.355	27.1	80.00- 120.00	100.00
5.065	5.067	-0.002	3179672	639.914	28.1	99.85- 139.85	126.31
5.382	5.384	-0.002	2416685	637.914	28.0	72.04- 112.04	96.00
5.590	5.591	-0.001	2451995	620.270	27.2	76.08- 116.08	97.40
6.020	6.022	-0.002	3928810	630.887	27.7	130.64- 170.64	156.06
Average of Peak Concentrations =					27.6		

Data File: /chem/ecd8a.i/021810.b/053b5301.d  
Date : 18-FEB-2010 16:51  
Client ID: RE15-10-8340HSD  
Sample Info: 1120204506411  
Volume Injected (uL): 1.0  
Column phase: CLP2

Instrument: ecd8a.i  
Operator: JAOC  
Column diameter: 0.25



# MISCELLANEOUS DATA



DATE: 02/04/2010

METHOD: ECD8-F-8082-020310a.m

OPERATOR:JAOC

REVIEWED BY: \_\_\_\_\_

DATE: \_\_\_\_\_

HARDWARE CONFIGURATION &amp; METHOD SUMMARY: No. 1 on pg. 1

SOLVENT LOT DA699

ALUMINA LOT 1240553-A

COPPER LOT 236547-A

## Calibration &amp; QC Information

Initial Calibration Dates: See Calibration History and Standards Log

Initial Calibration Std ID's: See Calibration History and Standards Log

GEL SOP GL-OA-E-040

EPA Method: 8082 Polychlorinated Biphenyls PCBs by Gas Chromatography

Sequence Number: /chem/ecd8a.i/020310a.b

Injection Volume: 1.0 ul

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
001f0101.d	WAR091130-99 01	JAOC	03-FEB-2010 10:12		020310a	1.0	CLEAN	
002f0201.d	WAR100203-01 60	JAOC	03-FEB-2010 10:24		020310a	1.0	1660 LEVEL 1	
003f0301.d	WAR100203-02 60	JAOC	03-FEB-2010 10:37		020310a	1.0	1660 LEVEL 2	
004f0401.d	WAR100203-03 60	JAOC	03-FEB-2010 10:49		020310a	1.0	1660 LEVEL 3	
005f0501.d	WAR100203-04 60	JAOC	03-FEB-2010 11:01		020310a	1.0	1660 LEVEL 4	
006f0601.d	IAR100104-01 60	JAOC	03-FEB-2010 11:14		020310a	1.0	1660 LEVEL 5	
007f0701.d	WAR100203-60 01	JAOC	03-FEB-2010 11:26		020310a	1.0	PASSES BOTH COLUMNS	
008f0801.d	WAR100203-05 54	JAOC	03-FEB-2010 11:39		020310a	1.0	1254 LEVEL 1	
009f0901.d	WAR100203-06 54	JAOC	03-FEB-2010 11:51		020310a	1.0	1254 LEVEL 2	
010f1001.d	WAR100203-07 54	JAOC	03-FEB-2010 12:03		020310a	1.0	1254 LEVEL 3	
011f1101.d	WAR100203-08 54	JAOC	03-FEB-2010 12:16		020310a	1.0	1254 LEVEL 4	
012f1201.d	IAR091027-01 54	JAOC	03-FEB-2010 12:28		020310a	1.0	1254 LEVEL 5	
013f1301.d	WAR100201-54	JAOC	03-FEB-2010 12:40		020310a	1.0	PASSES BOTH COLUMNS	
014f1401.d	WAR100203-09 42	JAOC	03-FEB-2010 12:53		020310a	1.0	1242 LEVEL 1	
015f1501.d	WAR100203-10 42	JAOC	03-FEB-2010 13:05		020310a	1.0	1242 LEVEL 2	

Instrument Batch: /chem/ecd8a.i/020310a.b

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Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
016f1601.d	WAR100203-11 42	JAOC	03-FEB-2010 13:18		020310a	1.0	1242 LEVEL 3	
017f1701.d	WAR100203-12 42	JAOC	03-FEB-2010 13:30		020310a	1.0	1242 LEVEL 4	

018f1801.d	IAR091111-01 42	JAOC	03-FEB-2010 13:42		020310a	1.0	1242 LEVEL 5
019f1901.d	WAR091217-42	JAOC	03-FEB-2010 13:55		020310a	1.0	PASSES BOTH COLUMNS
020f2001.d	WAR100203-13 48	JAOC	03-FEB-2010 14:07		020310a	1.0	1248 LEVEL 1
021f2101.d	WAR100203-14 48	JAOC	03-FEB-2010 14:19		020310a	1.0	1248 LEVEL 2
022f2201.d	WAR100203-15 48	JAOC	03-FEB-2010 14:32		020310a	1.0	1248 LEVEL 3
023f2301.d	WAR100203-16 48	JAOC	03-FEB-2010 14:44		020310a	1.0	1248 LEVEL 4
024f2401.d	IAR091027-02 48	JAOC	03-FEB-2010 14:57		020310a	1.0	1248 LEVEL 5
025f2501.d	WAR091217-48	JAOC	03-FEB-2010 15:09		020310a	1.0	DUSE RE-RUN
026f2601.d	WAR100104-32	JAOC	03-FEB-2010 15:21		020310a	1.0	PATTERN ONLY
027f2701.d	WAR100104-21	JAOC	03-FEB-2010 15:34		020310a	1.0	PATTERN ONLY
028f2801.d	WAR100203-17 62	JAOC	03-FEB-2010 15:46		020310a	1.0	1262 LEVEL 1
029f2901.d	WAR100203-18 62	JAOC	03-FEB-2010 15:58		020310a	1.0	1262 LEVEL 2
030f3001.d	WAR100203-19 62	JAOC	03-FEB-2010 16:11		020310a	1.0	1262 LEVEL 3
031f3101.d	WAR100203-20 62	JAOC	03-FEB-2010 16:23		020310a	1.0	1262 LEVEL 4
032f3201.d	IAR100104-04 62	JAOC	03-FEB-2010 16:36		020310a	1.0	1262 LEVEL 5
033f3301.d	WAR100104-62	JAOC	03-FEB-2010 16:48		020310a	1.0	PASSES BOTH COLUMNS
034f3401.d	WAR091107-68	JAOC	03-FEB-2010 17:00		020310a	1.0	PATTERN ONLY
035f3501.d	WAR091217-48	JAOC	03-FEB-2010 17:13		020310a	1.0	PASSES BOTH COLUMNS

Instrument Batch: /chem/ecd8a.i/020310a.b

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Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
036f3601.d	WAR091219-DDT	JAOC	03-FEB-2010 17:25		020310a	1.0	DDT	
037f3701.d	WAR091130-99 02	JAOC	03-FEB-2010 17:38		020310a	1.0	CLEAN	
038f3801.d	1202026314	JAOC	03-FEB-2010 17:50	946047	2010AR1262MDL-L	1.0 QC A		UPLOAD BOTH, USE BOTH
039f3901.d	1202026315	JAOC	03-FEB-2010 18:02	946047	2010AR1262MDL-L	1.0 QC A		UPLOAD BOTH, USE BOTH
040f4001.d	243859001	JAOC	03-FEB-2010 18:15	946047	2010AR1262MDL-L	1.0 QCQA		UPLOAD BOTH, USE BOTH
041f4101.d	243859002	JAOC	03-FEB-2010 18:27	946047	2010AR1262MDL-L	1.0 QCQA		UPLOAD BOTH, USE BOTH

042f4201.d	243859003	JAOC	03-FEB-2010 18:39	946047	2010AR1262MDL-L	1.0 QCQA	UPLOAD BOTH, USE BOTH
043f4301.d	243859004	JAOC	03-FEB-2010 18:52	946047	2010AR1262MDL-L	1.0 QCQA	UPLOAD BOTH, USE BOTH
044f4401.d	243859005	JAOC	03-FEB-2010 19:04	946047	2010AR1262MDL-L	1.0 QCQA	UPLOAD BOTH, USE BOTH
045f4501.d	243859006	JAOC	03-FEB-2010 19:16	946047	2010AR1262MDL-L	1.0 QCQA	UPLOAD BOTH, USE BOTH
046f4601.d	243859007	JAOC	03-FEB-2010 19:29	946047	2010AR1262MDL-L	1.0 QCQA	UPLOAD BOTH, USE BOTH
047f4701.d	243859008	JAOC	03-FEB-2010 19:41	946047	2010AR1262MDL-L	1.0 QCQA	UPLOAD BOTH, USE BOTH
048f4801.d	WAR100203-60 02	JAOC	03-FEB-2010 19:54		020310a	1.0	PASSES BOTH COLUMNS
049f4901.d	WAR091130-99 03	JAOC	03-FEB-2010 20:06		020310a	1.0	CLEAN
050f5001.d	243865001	JAOC	03-FEB-2010 20:18	946047	2010MDLVECD81262-L	1.0 QCQA	UPLOAD BOTH, USE BOTH
051f5101.d	243865002	JAOC	03-FEB-2010 20:31	946047	2010MDLVECD81262-L	1.0 QCQA	UPLOAD BOTH, USE BOTH
052f5201.d	243865003	JAOC	03-FEB-2010 20:43	946047	2010MDLVECD81262-L	1.0 QCQA	UPLOAD BOTH, USE BOTH
053f5301.d	243865004	JAOC	03-FEB-2010 20:55	946047	2010MDLVECD81262-L	1.0 QCQA	UPLOAD BOTH, USE BOTH
054f5401.d	WAR100203-60 03	JAOC	03-FEB-2010 21:08		020310a	1.0	PASSES BOTH COLUMNS
055f5501.d	WAR091130-99 04	JAOC	03-FEB-2010 21:20		020310a	1.0	CLEAN

Instrument Batch: /chem/ecd8a.i/020310a.b

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Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client		Comments
056f5601.d	245679008	JAOC	03-FEB-2010 21:33	947574	10-1449	5.0	LANL		UPLOAD BOTH, USE HIGHER
057f5701.d	245679011	JAOC	03-FEB-2010 21:45	947574	10-1449	10.0	LANL		UPLOAD BOTH, USE HIGHER
058f5801.d	245686001	JAOC	03-FEB-2010 21:57	947574	10-1432	1.0	LANL		UPLOAD BOTH, USE HIGHER
059f5901.d	WAR100203-60 04	JAOC	03-FEB-2010 22:10		020310a	1.0			PASSES BOTH COLUMNS
060f6001.d	WAR091130-99 05	JAOC	03-FEB-2010 22:22		020310a	1.0			CLEAN
061f6101.d	1202030643	JAOC	03-FEB-2010 22:34	947944	245873	1.0	QC A		UPLOAD BOTH, USE HIGHER
062f6201.d	1202030644	JAOC	03-FEB-2010 22:47	947944	245873	1.0	QC A		UPLOAD BOTH, USE HIGHER
063f6301.d	245873001	JAOC	03-FEB-2010 22:59	947944	245873	50.0	GEEL		UPLOAD BOTH, USE HIGHER
064f6401.d	1202030645	JAOC	03-FEB-2010 23:12	947944	245873	50.0	QC A		UPLOAD BOTH, USE HIGHER
065f6501.d	1202030646	JAOC	03-FEB-2010 23:24	947944	245873	50.0	QC A		UPLOAD BOTH, USE HIGHER
066f6601.d	245873002	JAOC	03-FEB-2010 23:36	947944	245873	1.0	GEEL		UPLOAD BOTH, USE HIGHER

+-----+									
067f6701.d	WAR100203-60 05	JAOC	03-FEB-2010 23:49		020310a		1.0	PASSES BOTH COLUMNS	
+-----+									
068f6801.d	WAR091130-99 06	JAOC	04-FEB-2010 00:01		020310a		1.0	CLEAN	
+-----+									

DATE: 02/19/2010

METHOD: ECD8-F-8082-020310a.m

OPERATOR:JAOC

REVIEWED BY: \_\_\_\_\_

DATE: \_\_\_\_\_

HARDWARE CONFIGURATION &amp; METHOD SUMMARY: No. 1 on pg. 1

SOLVENT LOT DA699

ALUMINA LOT 1240553-A

COPPER LOT 236547-A

## Calibration &amp; QC Information

Initial Calibration Dates: See Calibration History and Standards Log

Initial Calibration Std ID's: See Calibration History and Standards Log

GEL SOP GL-OA-E-040

EPA Method: 8082 Polychlorinated Biphenyls PCBs by Gas Chromatography

Sequence Number: /chem/ecd8a.i/021810.b

Injection Volume: 1.0 ul

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
001f0101.d	WAR100105-99 01	JAOC	18-FEB-2010 06:05		021810	1.0	CLEAN	
002f0201.d	WAR100203-60 01	JAOC	18-FEB-2010 06:17		021810	1.0	PASSES BOTH COLUMNS	
003f0301.d	WAR100201-54	JAOC	18-FEB-2010 06:30		021810	1.0	PASSES BOTH COLUMNS	
004f0401.d	WAR091217-42	JAOC	18-FEB-2010 06:42		021810	1.0	PASSES BOTH COLUMNS	
005f0501.d	WAR091217-48	JAOC	18-FEB-2010 06:54		021810	1.0	PASSES BOTH COLUMNS	
006f0601.d	WAR100104-32	JAOC	18-FEB-2010 07:07		021810	1.0	PATTERN ONLY	
007f0701.d	WAR100104-21	JAOC	18-FEB-2010 07:19		021810	1.0	PATTERN ONLY	
008f0801.d	WAR100104-62	JAOC	18-FEB-2010 07:31		021810	1.0	PATTERN ONLY	
009f0901.d	WAR100107-68	JAOC	18-FEB-2010 07:44		021810	1.0	PATTERN ONLY	
010f1001.d	WAR091219-DDT	JAOC	18-FEB-2010 07:56		021810	1.0	DDT	
011f1101.d	WAR100105-99 02	JAOC	18-FEB-2010 08:12		021810	1.0	CLEAN	
012f1201.d	1202045072	JAOC	18-FEB-2010 08:24	953964	246832	1.0 QC A	UPLOAD BOTH, USE HIGHER	
013f1301.d	1202045073	JAOC	18-FEB-2010 08:37	953964	246832	1.0 QC A	UPLOAD BOTH, USE HIGHER	
014f1401.d	1202045590	JAOC	18-FEB-2010 08:49	953964	246832	1.0 QC A	UPLOAD BOTH, USE HIGHER	
015f1501.d	246832001	JAOC	18-FEB-2010 09:01	953964	246832	5.0 CH2M	UPLOAD BOTH, USE HIGHER	

Instrument Batch: /chem/ecd8a.i/021810.b

Page: 1

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
016f1601.d	246832002	JAOC	18-FEB-2010 09:14	953964	246832	5.0 CH2M	UPLOAD BOTH, USE HIGHER	
017f1701.d	246832003	JAOC	18-FEB-2010 09:26	953964	246832	1.0 CH2M	UPLOAD BOTH, USE HIGHER	

018f1801.d	WAR100203-60 02	JAOC	18-FEB-2010 09:38		021810		1.0		PASSES BOTH COLUMNS
019f1901.d	WAR100105-99 03	JAOC	18-FEB-2010 09:51		021810		1.0		CLEAN
020f2001.d	1202045947	JAOC	18-FEB-2010 10:03	954420	247057		1.0 QC A		UPLOAD BOTH, USE HIGHER
021f2101.d	1202045948	JAOC	18-FEB-2010 10:15	954420	247057		1.0 QC A		UPLOAD BOTH, USE HIGHER
022f2201.d	1202045949	JAOC	18-FEB-2010 10:28	954420	247057		1.0 QC A		UPLOAD BOTH, USE HIGHER
023f2301.d	247057003	JAOC	18-FEB-2010 10:40	954420	247057		1.0 CLSS		UPLOAD BOTH, USE HIGHER
024f2401.d	247057004	JAOC	18-FEB-2010 10:52	954420	247057		1.0 CLSS		UPLOAD BOTH, USE HIGHER
025f2501.d	247060001	JAOC	18-FEB-2010 11:05	954420	247060		1.0 CLSS		UPLOAD BOTH, USE HIGHER
026f2601.d	247060002	JAOC	18-FEB-2010 11:17	954420	247060		1.0 CLSS		UPLOAD BOTH, USE HIGHER
027f2701.d	WAR100203-60 03	JAOC	18-FEB-2010 11:30		021810		1.0		PASSES BOTH COLUMNS
028f2801.d	WAR100105-99 04	JAOC	18-FEB-2010 11:42		021810		1.0		CLEAN
029f2901.d	1202045086	JAOC	18-FEB-2010 11:54	953970	247104		1.0 QC A		UPLOAD BOTH, USE FRONT
030f3001.d	1202045087	JAOC	18-FEB-2010 12:07	953970	247104		1.0 QC A		UPLOAD BOTH, USE FRONT
031f3101.d	247104028	JAOC	18-FEB-2010 12:19	953970	247104		1.0 BY12		UPLOAD BOTH, USE FRONT
032f3201.d	1202045088	JAOC	18-FEB-2010 12:31	953970	247104		1.0 QC A		UPLOAD BOTH, USE FRONT
033f3301.d	1202045089	JAOC	18-FEB-2010 12:44	953970	247104		1.0 QC A		UPLOAD BOTH, USE FRONT
034f3401.d	WAR100203-60 04	JAOC	18-FEB-2010 12:56		021810		1.0		PASSES BOTH COLUMNS
035f3501.d	WAR100105-99 05	JAOC	18-FEB-2010 13:08		021810		1.0		CLEAN

Instrument Batch: /chem/ecd8a.i/021810.b

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Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client		Comments
036f3601.d	1202045061	JAOC	18-FEB-2010 13:21	953960	10-1713		1.0 QC A		UPLOAD BOTH, USE HIGHER
037f3701.d	1202045062	JAOC	18-FEB-2010 13:33	953960	10-1713		1.0 QC A		UPLOAD BOTH, USE HIGHER
038f3801.d	246749001	JAOC	18-FEB-2010 13:46	953960	10-1713		1.0 LANL		UPLOAD BOTH, USE HIGHER
039f3901.d	246749002	JAOC	18-FEB-2010 13:58	953960	10-1713		1.0 LANL		UPLOAD BOTH, USE HIGHER
040f4001.d	246749003	JAOC	18-FEB-2010 14:10	953960	10-1713		1.0 LANL		UPLOAD BOTH, USE HIGHER
041f4101.d	246749004	JAOC	18-FEB-2010 14:23	953960	10-1713		1.0 LANL		UPLOAD BOTH, USE HIGHER

042f4201.d	246749005	JAOC	18-FEB-2010 14:35	953960	10-1713		1.0 LANL		UPLOAD BOTH, USE HIGHER
043f4301.d	246749006	JAOC	18-FEB-2010 14:47	953960	10-1713		1.0 LANL		UPLOAD BOTH, USE HIGHER
044f4401.d	246749007	JAOC	18-FEB-2010 15:00	953960	10-1713		1.0 LANL		UPLOAD BOTH, USE HIGHER
045f4501.d	246749008	JAOC	18-FEB-2010 15:12	953960	10-1713		1.0 LANL		UPLOAD BOTH, USE HIGHER
046f4601.d	WAR100203-60 05	JAOC	18-FEB-2010 15:25		021810		1.0		PASSES BOTH COLUMNS
047f4701.d	WAR100105-99 06	JAOC	18-FEB-2010 15:37		021810		1.0		CLEAN
048f4801.d	246749009	JAOC	18-FEB-2010 15:49	953960	10-1713		1.0 LANL		UPLOAD BOTH, USE HIGHER
049f4901.d	246749010	JAOC	18-FEB-2010 16:02	953960	10-1713		1.0 LANL		UPLOAD BOTH, USE HIGHER
050f5001.d	246749011	JAOC	18-FEB-2010 16:14	953960	10-1713		1.0 LANL		UPLOAD BOTH, USE HIGHER
051f5101.d	246866007	JAOC	18-FEB-2010 16:26	953960	10-1758		1.0 LANL		UPLOAD BOTH, USE HIGHER
052f5201.d	1202045063	JAOC	18-FEB-2010 16:39	953960	10-1758		1.0 QC A		UPLOAD BOTH, USE HIGHER
053f5301.d	1202045064	JAOC	18-FEB-2010 16:51	953960	10-1758		1.0 QC A		UPLOAD BOTH, USE HIGHER
054f5401.d	246866008	JAOC	18-FEB-2010 17:04	953960	10-1758		1.0 LANL		UPLOAD BOTH, USE HIGHER
055f5501.d	246866009	JAOC	18-FEB-2010 17:16	953960	10-1758		1.0 LANL		UPLOAD BOTH, USE HIGHER

Instrument Batch: /chem/ecd8a.i/021810.b

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Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch		SDG	Dilution	Client		Comments
056f5601.d	WAR100203-60 06	JAOC	18-FEB-2010 17:28			021810		1.0		PASSES BOTH COLUMNS
057f5701.d	WAR100105-99 07	JAOC	18-FEB-2010 17:41			021810		1.0		CLEAN
058f5801.d	ALUMINASCREEN	JAOC	18-FEB-2010 19:27			021810		1.0		DUSE
059f5901.d	WAR100203-60 07	JAOC	18-FEB-2010 19:40			021810		1.0		PASSES BOTH COLUMNS
060f6001.d	WAR100105-99 08	JAOC	18-FEB-2010 19:52			021810		1.0		CLEAN

Prep Logbook

Extraction of Semivolatile and Nonvolatile Organic Compounds from Soil, Sludge, and Other Miscellaneous Solid Samples

Batch ID: 953958  
Analyst: Robin Hunt  
Method: SW846 3550B

Verified by: \_\_\_\_\_

Lab SOP: GL-OA-E-010 REV# 18  
Instrument: Semi-Volatiles Manual

Sample ID	Run Date	Aliquot (g)	Clean Up	Prior to Clean up (mL)	Amount Cleaned (mL)	After Clean up (mL)	Prepped Aliquot (mL)	Prepped Factor (mL/g)
1202045061 MB	17-FEB-2010 13:09:00	30	H2SO4/KMnI	1	8	1	0.03333	
1202045062 LCS	17-FEB-2010 13:09:00	30	H2SO4/KMnI	1	8	1	0.03333	
246749001	17-FEB-2010 13:09:00	30.01	H2SO4/KMnI	1	8	1	0.03332	
246749002	17-FEB-2010 13:09:00	30	H2SO4/KMnI	1	8	1	0.03333	
246749003	17-FEB-2010 13:09:00	30.02	H2SO4/KMnI	1	8	1	0.03331	
246749004	17-FEB-2010 13:09:00	30.05	H2SO4/KMnI	1	8	1	0.03328	
246749005	17-FEB-2010 13:09:00	30	H2SO4/KMnI	1	8	1	0.03333	
246749006	17-FEB-2010 13:09:00	30	H2SO4/KMnI	1	8	1	0.03333	
246749007	17-FEB-2010 13:09:00	30	H2SO4/KMnI	1	8	1	0.03333	
246749008	17-FEB-2010 13:09:00	30	H2SO4/KMnI	1	8	1	0.03333	
246749009	17-FEB-2010 13:09:00	30.01	H2SO4/KMnI	1	8	1	0.03332	
246749010	17-FEB-2010 13:09:00	30	H2SO4/KMnI	1	8	1	0.03333	
246749011	17-FEB-2010 13:09:00	30	H2SO4/KMnI	1	8	1	0.03333	
246866007	17-FEB-2010 13:09:00	30.02	H2SO4/KMnI	1	8	1	0.03331	
1202045063 MS (246866007)	17-FEB-2010 13:09:00	30.06	H2SO4/KMnI	1	8	1	0.03327	
1202045064 MSD (246866007)	17-FEB-2010 13:09:00	30.02	H2SO4/KMnI	1	8	1	0.03331	
246866008	17-FEB-2010 13:09:00	30.01	H2SO4/KMnI	1	8	1	0.03332	
246866009	17-FEB-2010 13:09:00	30	H2SO4/KMnI	1	8	1	0.03333	

Type	Sample Id	Description	Serial Number	Spike Amt	Units	Comments:
LCS	1202045062	PCB Laboratory Control	WEI00210-07	1	mL	Clean up Date: 02/17/2010
MS	1202045063	PCB Laboratory Control	WEI00210-07	1	mL	Clean up Initials: RWH
MSD	1202045064	PCB Laboratory Control	WEI00210-07	1	mL	Verified By: JAM
SURR	ALL	PEST LOW LEVEL SURROGATE 200 UG/L	UEI000203-15	1	mL	Final Solvent: Hexane
REGNT	ALL	Acetone	100211-B1	150	mL	Clean Up SOP: GL-OA-E-037
REGNT	ALL	Hexane	100211-B2	150	mL	
REGNT	ALL	1:1 sulfuric acid	1260695a	5	mL	
REGNT	ALL	5% Potassium Permanganate	B1202457-F	5	mL	
SOURC	ALL	SODIUM SULFATE	1269268	30	g	