



## GC/MS Semivolatiles Case Narrative

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### Colorado Oil & Gas Conservation Commission TBAL

Work Order Number: 1309217

1. This report consists of 1 water sample. The sample was received cool and intact by ALS on 09/17/13.
2. The sample was prepared and analyzed according to SW-846, 3rd Edition procedures. Specifically, the water sample was extracted using continuous liquid-liquid extractors, according to SW-846 Method 3520C, utilizing the current revision of SOP 617.
3. The extracts were analyzed using GC/MS with a DB-5MS capillary column according to the current revision of SOP 506 based on SW-846 Method 8270D. All positive results were quantitated against the initial calibration standards using the internal standard technique. The identification of positive results was achieved by a comparison of the retention time and mass spectrum of the sample versus the daily calibration standard.
4. All initial calibration criteria were met. If average response factors were used in the initial calibration, %RSD was  $\leq 20\%$ . If linear or higher order regression calibrations were used in the initial calibration, the coefficient of determination ( $r^2$ )  $\geq 0.99$ .
5. All initial calibration standards are verified by comparing a second source standard initial calibration verification (ICV) against the calibration curve. All target compounds in the second source verification had a %D  $\leq 30\%$ .
6. All compounds in each of the daily (continuing) calibration verifications were within 20%D with the exceptions of 4-bromophenyl phenyl ether and benzo(g,h,i)perylene which were low. These compounds were not detected in the associated sample.
7. All method blank criteria were met.
8. All laboratory control sample and laboratory control sample duplicate recoveries and RPDs were within the acceptance criteria.



9. A matrix spike and matrix spike duplicate were not performed because of insufficient sample. A laboratory control sample and laboratory control sample duplicate were performed instead.
10. The sample was extracted and analyzed within the established holding times.
11. All surrogate recoveries were within acceptance criteria.
12. All internal standard recoveries were within acceptance criteria.
13. Manual integrations are performed when needed to provide consistent and defensible data following the guidelines in the current revision of SOP 939. Whenever manual integrations are performed, before and after chromatograms of the peak that was manually integrated are included in the report along with the reason why the re-integration was necessary.

The data contained in the following report have been reviewed and approved by the personnel listed below. In addition, ALS certifies that the analyses reported herein are true, complete and correct within the limits of the methods employed.

Emily Lyons  
Emily Lyons  
Organics Primary Data Reviewer

9/23/13  
Date

Mindy Norton  
Mindy Norton  
Organics Final Data Reviewer

9.23.13  
Date



**ALS**  
**Data Qualifier Flags**  
**Chromatography and Mass Spectrometry**

- U or ND:** This flag indicates that the compound was analyzed for but not detected.
- J:** This flag indicates an estimated value. This flag is used as follows: (1) when estimating a concentration for tentatively identified compounds (TICs) where a 1:1 response is assumed; (2) when the mass spectral and retention time data indicate the presence of a compound that meets the volatile and semivolatile GC/MS identification criteria, and the result is less than the reporting limit (RL) but greater than the method detection limit (MDL); (3) when the retention time data indicate the presence of a compound that meets the GC identification criteria, and the result is less than the RL but greater than the MDL; and (4) the reported value is estimated.
- B:** This flag is used when the analyte is detected in the associated method blank as well as in the sample. It indicates probable blank contamination and warns the data user. This flag shall be used for a tentatively identified compound (TIC) as well as for a positively identified target compound.
- E:** This flag identifies compounds whose concentration exceeds the upper level of the calibration range.
- A:** This flag indicates that a tentatively identified compound is a suspected aldol-condensation product.
- X:** This flag indicates that the analyte was diluted below an accurate quantitation level.
- \*:** This flag indicates that a spike recovery is equal to or outside the control criteria used.
- +:** This flag indicates that the relative percent difference (RPD) equals or exceeds the control criteria.



## Chain of Custody

# ALS Environmental -- FC

## Sample Number(s) Cross-Reference Table

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**OrderNum:** 1309217

**Client Name:** Colorado Oil & Gas Conservation Commission

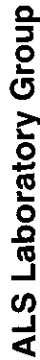
**Client Project Name:** TBAL

**Client Project Number:**

**Client PO Number:** PHA 14-22

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Client Sample Number	Lab Sample Number	COC Number	Matrix	Date Collected	Time Collected
Trip Blank	1309217-1		WATER	16-Sep-13	6:00
752778 Nelson	1309217-2		WATER	16-Sep-13	9:56



## Chain-of-Custody

Form 202r8

Time Zone (Circle):	EST	CST	MST	PST	Matrix:	O = oil	S = soil	NS = non-soil solid	W = water	L = liquid	E = extract	F = filter
<p><b>For metals or anions, please detail analytes below.</b></p> <p><b>Comments:</b> Anions = Br, Cl, F, NO<sub>3</sub>, NO<sub>2</sub>, SO<sub>4</sub>            dissolved metals = filter and preserve at lab</p>												
<p><b>QC PACKAGE (check below)</b></p> <p>LEVEL II (Standard QC)</p> <p>LEVEL III (Std QC + forms)</p> <p>LEVEL IV (Std QC + forms + raw data)</p>						<p><input checked="" type="checkbox"/> <i>only</i></p>						
<p><b>Preservative Key:</b> 1-HCl 2-HNO<sub>3</sub> 3-H<sub>2</sub>SO<sub>4</sub> 4-NaOH 5-NaHSO<sub>4</sub> 7-Other 8-4 degrees C 9-5035</p>												

For metals or anions, please detail analytes below.

Comments:

Comments: Areas = Br, Cl, F, Na, Ni, S, Zn  
of discarded metals = filter and pressure of lab

**OC PACKAGE (check below)**

EVEI II (Standard QC)

LEVEL III (Std OC + forms)

LEVEL IV (8tdoc + forms + raw data)

**Discriminative Key:**

1-HCl	2-HNO <sub>3</sub>	3-H <sub>2</sub> SO <sub>4</sub>	4-NaOH	5-NaHSO <sub>4</sub>	7-Other	8-4 degrees C	9-5035
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ALS Environmental - Fort Collins  
CONDITION OF SAMPLE UPON RECEIPT FORM

Client: COGCC  
Project Manager: ARW

Workorder No: 1309217  
Initials: LAS Date: 9/17/13

1. Does this project require any special handling in addition to standard ALS procedures?		YES	<input checked="" type="radio"/> NO
2. Are custody seals on shipping containers intact?	NONE	<input checked="" type="radio"/> YES	NO
3. Are Custody seals on sample containers intact?	<input checked="" type="radio"/> NONE	YES	NO
4. Is there a COC (Chain-of-Custody) present or other representative documents?		<input checked="" type="radio"/> YES	NO
5. Are the COC and bottle labels complete and legible?		<input checked="" type="radio"/> YES	NO
6. Is the COC in agreement with samples received? (IDs, dates, times, no. of samples, no. of containers, matrix, requested analyses, etc.)		<input checked="" type="radio"/> YES	NO
7. Were airbills / shipping documents present and/or removable?	DROP OFF	<input checked="" type="radio"/> YES	NO
8. Are all aqueous samples requiring preservation preserved correctly? (excluding volatiles)	N/A	<input checked="" type="radio"/> YES	NO
9. Are all aqueous non-preserved samples pH 4-9?	N/A	<input checked="" type="radio"/> YES	NO
10. Is there sufficient sample for the requested analyses?		<input checked="" type="radio"/> YES	NO
11. Were all samples placed in the proper containers for the requested analyses?		<input checked="" type="radio"/> YES	NO
12. Are all samples within holding times for the requested analyses?		<input checked="" type="radio"/> YES	NO
13. Were all sample containers received intact? (not broken or leaking, etc.)		<input checked="" type="radio"/> YES	NO
14. Are all samples requiring no headspace (VOC, GRO, RSK/MEE, Rx CN/S, radon) headspace free? Size of bubble: ____ < green pea ____ > green pea	N/A	<input checked="" type="radio"/> YES	NO
15. Do any water samples contain sediment? Amount Amount of sediment: ____ dusting ____ moderate ____ heavy	N/A	YES	<input checked="" type="radio"/> NO
16. Were the samples shipped on ice?		<input checked="" type="radio"/> YES	NO
17. Were cooler temperatures measured at 0.1-6.0°C? IR gun used*: <input checked="" type="radio"/> #2 #4	RAD ONLY	<input checked="" type="radio"/> YES	NO
Cooler #: <u>1</u>			
Temperature (°C): <u>2.0</u>			
No. of custody seals on cooler: <u>1</u>			
External µR/hr reading: <u>11</u>			
Background µR/hr reading: <u>10</u>			
Were external µR/hr readings ≤ two times background and within DOT acceptance criteria? <input checked="" type="radio"/> YES / NO / NA (If no, see Form 008.)			

**Additional Information:** PROVIDE DETAILS BELOW FOR A NO RESPONSE TO ANY QUESTION ABOVE, EXCEPT #1 AND #16.

If applicable, was the client contacted? YES / NO / NA Contact: Cubby Date/Time: 9/17/13

Project Manager Signature / Date: Cubby 9/17/13

1309217

From: (719) 846-3091  
Peller Centauros  
Celo, Oil & Gas Cons. Comm.  
213 Conundrum RD

Trinidad, CO 81082

Origin ID: PUBA



J13021300280326

SHIP TO: (970) 496-1511

BILL SENDER

Amy Wolf  
ALS Laboratory Group  
225 COMMERCE DR

FORT COLLINS, CO 80524

Ship Date: 16SEP13  
ActWgt: 19.0 LB  
CAD: 4076443INET3430

Delivery Address Bar Code

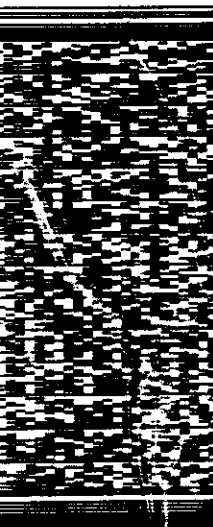


Ref # Special Project TBAL  
Invoice #  
PO #  
Dept #

TUE - 17 SEP 10:30A  
PRIORITY OVERNIGHT

TRK# 7966 9512 4219

8281



2.0

72 FTCA  
80524  
CO-US  
DEN



51AG182561A8E





## Analytical Results

# GC/MS Semi-volatiles

Method SW8270D

Method Blank

Lab Name: ALS Environmental -- FC

Work Order Number: 1309217

Client Name: Colorado Oil & Gas Conservation Commission

ClientProject ID: TBAL

Lab ID: EX130917-9MB

Sample Matrix: WATER

% Moisture: N/A

Date Collected: N/A

Date Extracted: 17-Sep-13

Date Analyzed: 19-Sep-13

Prep Batch: EX130917-9

QCBatchID: EX130917-9-2

Run ID: SV130919-1

Cleanup: NONE

Basis: N/A

File Name: N8424

Sample Aliquot: 1000 ml

Final Volume: 1 ml

Result Units: UG/L

Clean DF: 1

CASNO	Target Analyte	DF	Result	RptLimit LOD/LOQ	MDL	Result Qualifier	EPA Qualifier
123-91-1	1,4-DIOXANE	1	10	10	0.55	U	
110-86-1	PYRIDINE	1	10	10	3	U	
62-75-9	N-NITROSODIMETHYLAMINE	1	10	10	3	U	
62-53-3	ANILINE	1	10	10	3	U	
108-95-2	PHENOL	1	10	10	3	U	
111-44-4	BIS(2-CHLOROETHYL)ETHER	1	10	10	3	U	
95-57-8	2-CHLOROPHENOL	1	10	10	3	U	
541-73-1	1,3-DICHLOROBENZENE	1	10	10	3	U	
106-46-7	1,4-DICHLOROBENZENE	1	10	10	3	U	
95-50-1	1,2-DICHLOROBENZENE	1	10	10	3	U	
100-51-6	BENZYL ALCOHOL	1	10	10	3	U	
108-60-1	BIS(2-CHLOROISOPROPYL)ETHER	1	10	10	3	U	
95-48-7	2-METHYLPHENOL	1	10	10	3	U	
621-64-7	N-NITROSO-DI-N-PROPYLAMINE	1	10	10	3	U	
108-39-4	3+4-METHYLPHENOL	1	10	10	3	U	
67-72-1	HEXACHLOROETHANE	1	10	10	3	U	
98-95-3	NITROBENZENE	1	10	10	3	U	
78-59-1	ISOPHORONE	1	10	10	3	U	
88-75-5	2-NITROPHENOL	1	10	10	3	U	
105-67-9	2,4-DIMETHYLPHENOL	1	10	10	3	U	
111-91-1	BIS(2-CHLOROETHOXY)METHANE	1	10	10	3	U	
120-83-2	2,4-DICHLOROPHENOL	1	10	10	3	U	
65-85-0	BENZOIC ACID	1	50	50	27	U	
120-82-1	1,2,4-TRICHLOROBENZENE	1	10	10	3	U	
91-20-3	NAPHTHALENE	1	10	10	3	U	
106-47-8	4-CHLOROANILINE	1	10	10	3	U	
87-68-3	HEXACHLOROBUTADIENE	1	10	10	3	U	
59-50-7	4-CHLORO-3-METHYLPHENOL	1	10	10	3	U	

Data Package ID: SV1309217-1

# GC/MS Semi-volatiles

Method SW8270D

Method Blank

Lab Name: ALS Environmental -- FC

Work Order Number: 1309217

Client Name: Colorado Oil & Gas Conservation Commission

ClientProject ID: TBAL

Lab ID: EX130917-9MB

Sample Matrix: WATER

% Moisture: N/A

Date Collected: N/A

Date Extracted: 17-Sep-13

Date Analyzed: 19-Sep-13

Prep Batch: EX130917-9

QCBatchID: EX130917-9-2

Run ID: SV130919-1

Cleanup: NONE

Basis: N/A

File Name: N8424

Sample Aliquot: 1000 ml

Final Volume: 1 ml

Result Units: UG/L

Clean DF: 1

CASNO	Target Analyte	DF	Result	RptLimit LOD/LOQ	MDL	Result Qualifier	EPA Qualifier
91-57-6	2-METHYLNAPHTHALENE	1	10	10	3	U	
90-12-0	1-METHYLNAPHTHALENE	1	10	10	3	U	
77-47-4	HEXACHLOROCYCLOPENTADIENE	1	10	10	3	U	
88-06-2	2,4,6-TRICHLOROPHENOL	1	10	10	3	U	
95-95-4	2,4,5-TRICHLOROPHENOL	1	10	10	3	U	
91-58-7	2-CHLORONAPHTHALENE	1	10	10	3	U	
88-74-4	2-NITROANILINE	1	20	20	6	U	
131-11-3	DIMETHYL PHTHALATE	1	10	10	3	U	
606-20-2	2,6-DINITROTOLUENE	1	10	10	3	U	
208-96-8	ACENAPHTHYLENE	1	10	10	3	U	
99-09-2	3-NITROANILINE	1	20	20	6	U	
83-32-9	ACENAPHTHENE	1	10	10	3	U	
51-28-5	2,4-DINITROPHENOL	1	20	20	4.9	U	
100-02-7	4-NITROPHENOL	1	20	20	6	U	
132-64-9	DIBENZOFURAN	1	10	10	3	U	
121-14-2	2,4-DINITROTOLUENE	1	10	10	3	U	
84-66-2	DIETHYL PHTHALATE	1	10	10	3	U	
86-73-7	FLUORENE	1	10	10	3	U	
7005-72-3	4-CHLOROPHENYL PHENYL ETHER	1	10	10	3	U	
100-01-6	4-NITROANILINE	1	20	20	6	U	
103-33-3	AZOBENZENE	1	10	10	3	U	
534-52-1	4,6-DINITRO-2-METHYLPHENOL	1	20	20	6	U	
86-30-6	N-NITROSODIPHENYLAMINE	1	10	10	3	U	
101-55-3	4-BROMOPHENYL PHENYL ETHER	1	10	10	3	U	
118-74-1	HEXACHLORO BENZENE	1	10	10	3	U	
58-90-2	2,3,4,6-TETRACHLOROPHENOL	1	10	10	3	U	
87-86-5	PENTACHLOROPHENOL	1	20	20	6	U	
85-01-8	PHENANTHRENE	1	10	10	3	U	

Data Package ID: SV1309217-1

# GC/MS Semi-volatiles

Method SW8270D

Method Blank

Lab Name: ALS Environmental -- FC

Work Order Number: 1309217

Client Name: Colorado Oil & Gas Conservation Commission

ClientProject ID: TBAL

Lab ID: EX130917-9MB

Sample Matrix: WATER

% Moisture: N/A

Date Collected: N/A

Date Extracted: 17-Sep-13

Date Analyzed: 19-Sep-13

Prep Batch: EX130917-9

QCBatchID: EX130917-9-2

Run ID: SV130919-1

Cleanup: NONE

Basis: N/A

File Name: N8424

Sample Aliquot: 1000 ml

Final Volume: 1 ml

Result Units: UG/L

Clean DF: 1

CASNO	Target Analyte	DF	Result	RptLimit LOD/LOQ	MDL	Result Qualifier	EPA Qualifier
120-12-7	ANTHRACENE	1	10	10	3	U	
86-74-8	CARBAZOLE	1	10	10	3	U	
84-74-2	DI-N-BUTYL PHTHALATE	1	10	10	3	U	
206-44-0	FLUORANTHENE	1	10	10	3	U	
129-00-0	PYRENE	1	10	10	3	U	
85-68-7	BUTYL BENZYL PHTHALATE	1	10	10	3	U	
56-55-3	BENZO(A)ANTHRACENE	1	10	10	3	U	
91-94-1	3,3'-DICHLOROBENZIDINE	1	10	10	3	U	
218-01-9	CHRYSENE	1	10	10	3	U	
117-81-7	BIS(2-ETHYLHEXYL)PHTHALATE	1	10	10	3	U	
117-84-0	DI-N-OCTYL PHTHALATE	1	10	10	3	U	
205-99-2	BENZO(B)FLUORANTHENE	1	10	10	3	U	
207-08-9	BENZO(K)FLUORANTHENE	1	10	10	3	U	
50-32-8	BENZO(A)PYRENE	1	10	10	3	U	
193-39-5	INDENO(1,2,3-CD)PYRENE	1	10	10	3	U	
53-70-3	DIBENZO(A,H)ANTHRACENE	1	10	10	3	U	
191-24-2	BENZO(G,H,I)PERYLENE	1	10	10	3	U	

Data Package ID: SV1309217-1

Date Printed: Saturday, September 21, 2013

ALS Environmental -- FC

LIMS Version: 6.670

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# GC/MS Semi-volatiles

Method SW8270D

Method Blank

Lab Name: ALS Environmental -- FC

Work Order Number: 1309217

Client Name: Colorado Oil & Gas Conservation Commission

ClientProject ID: TBAL

Lab ID: EX130917-9MB

Sample Matrix: WATER

% Moisture: N/A

Date Collected: N/A

Date Extracted: 17-Sep-13

Date Analyzed: 19-Sep-13

Prep Batch: EX130917-9

QCBatchID: EX130917-9-2

Run ID: SV130919-1

Cleanup: NONE

Basis: N/A

File Name: N8424

Sample Aliquot: 1000 ml

Final Volume: 1 ml

Result Units: UG/L

Clean DF: 1

CASNO	Target Analyte	DF	Result	RptLimit LOD/LOQ	MDL	Result Qualifier	EPA Qualifier
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## Surrogate Recovery

CASNO	Surrogate Analyte	Result	Flag	Spike Amount	Percent Recovery	Control Limits
118-79-6	2,4,6-TRIBROMOPHENOL	53.3		75	71	42 - 117
321-60-8	2-FLUOROBIPHENYL	37.7		50	75	55 - 108
367-12-4	2-FLUOROPHENOL	59.7		75	80	46 - 105
4165-60-0	NITROBENZENE-D5	33.3		50	67	53 - 111
4165-62-2	PHENOL-D5	59		75	79	50 - 109
1718-51-0	TERPHENYL-D14	38.9		50	78	34 - 139

Data Package ID: SV1309217-1

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# GC/MS Semi-volatiles

Method SW8270

## Tentatively Identified Compounds

Lab Name: ALS Environmental -- FC

Work Order Number: 1309217

Client Name: Colorado Oil & Gas Conservation Commission

ClientProject ID: TBAL

Field ID:	
Lab ID:	EX130917-9MB

Sample Matrix: WATER

% Moisture: N/A

Date Collected: N/A

Date Extracted: 17-Sep-13

Date Analyzed: 19-Sep-13

Prep Batch: EX130917-9

QCBatchID: EX130917-9-2

Run ID: SV130919-1

Cleanup: NONE

Basis: As Received

Sample Aliquot: 1000 ml

Final Volume: 1 ml

Clean DF: 1

File Name: N8424

CASNO	Retention Time	Target Analyte	Dilution Factor	Result	Units	Qualifier
		NONE DETECTED	1			U

Data Package ID: SV1309217-1

# GC/MS Semi-volatiles

Method SW8270D

## Sample Results

Lab Name: ALS Environmental -- FC

Work Order Number: 1309217

Client Name: Colorado Oil & Gas Conservation Commission

ClientProject ID: TBAL

Field ID: 752778 Nelson

Lab ID: 1309217-2

Sample Matrix: WATER

% Moisture: N/A

Date Collected: 16-Sep-13

Date Extracted: 17-Sep-13

Date Analyzed: 19-Sep-13

Prep Method: SW3520 Rev C

Prep Batch: EX130917-9

QCBatchID: EX130917-9-2

Run ID: SV130919-1

Cleanup: NONE

Basis: As Received

File Name: N8431

Analyst: Joe Kostelnik

Sample Aliquot: 1060 ml

Final Volume: 1 ml

Result Units: UG/L

Clean DF: 1

CASNO	Target Analyte	Dilution Factor	Result	RptLimit\ LOD\LOQ	MDL/DL	Result Qualifier	EPA Qualifier
123-91-1	1,4-DIOXANE	1	9.4	9.4	0.52	U	
110-86-1	PYRIDINE	1	9.4	9.4	2.8	U	
62-75-9	N-NITROSODIMETHYLAMINE	1	9.4	9.4	2.8	U	
62-53-3	ANILINE	1	9.4	9.4	2.8	U	
108-95-2	PHENOL	1	9.4	9.4	2.8	U	
111-44-4	BIS(2-CHLOROETHYL)ETHER	1	9.4	9.4	2.8	U	
95-57-8	2-CHLOROPHENOL	1	9.4	9.4	2.8	U	
541-73-1	1,3-DICHLOROBENZENE	1	9.4	9.4	2.8	U	
106-46-7	1,4-DICHLOROBENZENE	1	9.4	9.4	2.8	U	
95-50-1	1,2-DICHLOROBENZENE	1	9.4	9.4	2.8	U	
100-51-6	BENZYL ALCOHOL	1	9.4	9.4	2.8	U	
108-60-1	BIS(2-CHLOROISOPROPYL)ETHER	1	9.4	9.4	2.8	U	
95-48-7	2-METHYLPHENOL	1	9.4	9.4	2.8	U	
621-64-7	N-NITROSO-DI-N-PROPYLAMINE	1	9.4	9.4	2.8	U	
108-39-4	3+4-METHYLPHENOL	1	9.4	9.4	2.8	U	
67-72-1	HEXACHLOROETHANE	1	9.4	9.4	2.8	U	
98-95-3	NITROBENZENE	1	9.4	9.4	2.8	U	
78-59-1	ISOPHORONE	1	9.4	9.4	2.8	U	
88-75-5	2-NITROPHENOL	1	9.4	9.4	2.8	U	
105-67-9	2,4-DIMETHYLPHENOL	1	9.4	9.4	2.8	U	
111-91-1	BIS(2-CHLOROETHOXY)METHANE	1	9.4	9.4	2.8	U	
120-83-2	2,4-DICHLOROPHENOL	1	9.4	9.4	2.8	U	
65-85-0	BENZOIC ACID	1	47	47	25	U	
120-82-1	1,2,4-TRICHLOROBENZENE	1	9.4	9.4	2.8	U	
91-20-3	NAPHTHALENE	1	9.4	9.4	2.8	U	
106-47-8	4-CHLOROANILINE	1	9.4	9.4	2.8	U	

Data Package ID: SV1309217-1

Date Printed: Saturday, September 21, 2013

ALS Environmental -- FC

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# GC/MS Semi-volatiles

Method SW8270D

## Sample Results

Lab Name: ALS Environmental -- FC

Work Order Number: 1309217

Client Name: Colorado Oil & Gas Conservation Commission

ClientProject ID: TBAL

Field ID: 752778 Nelson

Lab ID: 1309217-2

Sample Matrix: WATER

% Moisture: N/A

Date Collected: 16-Sep-13

Date Extracted: 17-Sep-13

Date Analyzed: 19-Sep-13

Prep Method: SW3520 Rev C

Prep Batch: EX130917-9

QCBatchID: EX130917-9-2

Run ID: SV130919-1

Cleanup: NONE

Basis: As Received

File Name: N8431

Analyst: Joe Kostelnik

Sample Aliquot: 1060 ml

Final Volume: 1 ml

Result Units: UG/L

Clean DF: 1

CASNO	Target Analyte	Dilution Factor	Result	RptLimit\ LOD\LOQ	MDL/DL	Result Qualifier	EPA Qualifier
87-68-3	HEXACHLOROBUTADIENE	1	9.4	9.4	2.8	U	
59-50-7	4-CHLORO-3-METHYLPHENOL	1	9.4	9.4	2.8	U	
91-57-6	2-METHYLNAPHTHALENE	1	9.4	9.4	2.8	U	
90-12-0	1-METHYLNAPHTHALENE	1	9.4	9.4	2.8	U	
77-47-4	HEXACHLOROCYCLOPENTADIENE	1	9.4	9.4	2.8	U	
88-06-2	2,4,6-TRICHLOROPHENOL	1	9.4	9.4	2.8	U	
95-95-4	2,4,5-TRICHLOROPHENOL	1	9.4	9.4	2.8	U	
91-58-7	2-CHLORONAPHTHALENE	1	9.4	9.4	2.8	U	
88-74-4	2-NITROANILINE	1	19	19	5.7	U	
131-11-3	DIMETHYL PHTHALATE	1	9.4	9.4	2.8	U	
606-20-2	2,6-DINITROTOLUENE	1	9.4	9.4	2.8	U	
208-96-8	ACENAPHTHYLENE	1	9.4	9.4	2.8	U	
99-09-2	3-NITROANILINE	1	19	19	5.7	U	
83-32-9	ACENAPHTHENE	1	9.4	9.4	2.8	U	
51-28-5	2,4-DINITROPHENOL	1	19	19	4.6	U	
100-02-7	4-NITROPHENOL	1	19	19	5.7	U	
132-64-9	DIBENZOFURAN	1	9.4	9.4	2.8	U	
121-14-2	2,4-DINITROTOLUENE	1	9.4	9.4	2.8	U	
84-66-2	DIETHYL PHTHALATE	1	9.4	9.4	2.8	U	
86-73-7	FLUORENE	1	9.4	9.4	2.8	U	
7005-72-3	4-CHLOROPHENYL PHENYL ETHER	1	9.4	9.4	2.8	U	
100-01-6	4-NITROANILINE	1	19	19	5.7	U	
103-33-3	AZOBENZENE	1	9.4	9.4	2.8	U	
534-52-1	4,6-DINITRO-2-METHYLPHENOL	1	19	19	5.7	U	
86-30-6	N-NITROSODIPHENYLAMINE	1	9.4	9.4	2.8	U	
101-55-3	4-BROMOPHENYL PHENYL ETHER	1	9.4	9.4	2.8	U	

Data Package ID: SV1309217-1



# GC/MS Semi-volatiles

Method SW8270D

## Sample Results

Lab Name: ALS Environmental -- FC

Work Order Number: 1309217

Client Name: Colorado Oil & Gas Conservation Commission

ClientProject ID: TBAL

Field ID: 752778 Nelson

Lab ID: 1309217-2

Sample Matrix: WATER

% Moisture: N/A

Date Collected: 16-Sep-13

Date Extracted: 17-Sep-13

Date Analyzed: 19-Sep-13

Prep Method: SW3520 Rev C

Prep Batch: EX130917-9

QCBatchID: EX130917-9-2

Run ID: SV130919-1

Cleanup: NONE

Basis: As Received

File Name: N8431

Analyst: Joe Kostelnik

Sample Aliquot: 1060 ml

Final Volume: 1 ml

Result Units: UG/L

Clean DF: 1

CASNO	Target Analyte	Dilution Factor	Result	RptLimit\ LOD\LOQ	MDL/DL	Result Qualifier	EPA Qualifier
118-74-1	HEXACHLOROBENZENE	1	9.4	9.4	2.8	U	
58-90-2	2,3,4,6-TETRACHLOROPHENOL	1	9.4	9.4	2.8	U	
87-86-5	PENTACHLOROPHENOL	1	19	19	5.7	U	
85-01-8	PHENANTHRENE	1	9.4	9.4	2.8	U	
120-12-7	ANTHRACENE	1	9.4	9.4	2.8	U	
86-74-8	CARBAZOLE	1	9.4	9.4	2.8	U	
84-74-2	DI-N-BUTYL PHTHALATE	1	9.4	9.4	2.8	U	
206-44-0	FLUORANTHENE	1	9.4	9.4	2.8	U	
129-00-0	PYRENE	1	9.4	9.4	2.8	U	
85-68-7	BUTYL BENZYL PHTHALATE	1	9.4	9.4	2.8	U	
56-55-3	BENZO(A)ANTHRACENE	1	9.4	9.4	2.8	U	
91-94-1	3,3'-DICHLOROBENZIDINE	1	9.4	9.4	2.8	U	
218-01-9	CHRYSENE	1	9.4	9.4	2.8	U	
117-81-7	BIS(2-ETHYLHEXYL)PHTHALATE	1	9.4	9.4	2.8	U	
117-84-0	DI-N-OCTYL PHTHALATE	1	9.4	9.4	2.8	U	
205-99-2	BENZO(B)FLUORANTHENE	1	9.4	9.4	2.8	U	
207-08-9	BENZO(K)FLUORANTHENE	1	9.4	9.4	2.8	U	
50-32-8	BENZO(A)PYRENE	1	9.4	9.4	2.8	U	
193-39-5	INDENO(1,2,3-CD)PYRENE	1	9.4	9.4	2.8	U	
53-70-3	DIBENZO(A,H)ANTHRACENE	1	9.4	9.4	2.8	U	
191-24-2	BENZO(G,H,I)PERYLENE	1	9.4	9.4	2.8	U	

Data Package ID: SV1309217-1

Date Printed: Saturday, September 21, 2013

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# GC/MS Semi-volatiles

Method SW8270D

## Sample Results

Lab Name: ALS Environmental -- FC

Work Order Number: 1309217

Client Name: Colorado Oil & Gas Conservation Commission

ClientProject ID: TBAL

Field ID: 752778 Nelson

Lab ID: 1309217-2

Sample Matrix: WATER

% Moisture: N/A

Date Collected: 16-Sep-13

Date Extracted: 17-Sep-13

Date Analyzed: 19-Sep-13

Prep Method: SW3520 Rev C

Prep Batch: EX130917-9

QCBatchID: EX130917-9-2

Run ID: SV130919-1

Cleanup: NONE

Basis: As Received

File Name: N8431

Analyst: Joe Kostelnik

Sample Aliquot: 1060 ml

Final Volume: 1 ml

Result Units: UG/L

Clean DF: 1

CASNO	Target Analyte	Dilution Factor	Result	RptLimit\ LOD\LOQ	MDL/DL	Result Qualifier	EPA Qualifier
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## Surrogate Recovery

CASNO	Surrogate Analyte	Result	Flag	Spike Amount	Percent Recovery	Control Limits
118-79-6	2,4,6-TRIBROMOPHENOL	58.6		70.8	83	42 - 117
321-60-8	2-FLUOROBIPHENYL	37.6		47.2	80	55 - 108
367-12-4	2-FLUOROPHENOL	58.9		70.8	83	46 - 105
4165-60-0	NITROBENZENE-D5	34.4		47.2	73	53 - 111
4165-62-2	PHENOL-D5	59.1		70.8	83	50 - 109
1718-51-0	TERPHENYL-D14	38.5		47.2	82	34 - 139

Data Package ID: SV1309217-1

Date Printed: Saturday, September 21, 2013

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# GC/MS Semi-volatiles

Method SW8270

## Tentatively Identified Compounds

Lab Name: ALS Environmental -- FC

Work Order Number: 1309217

Client Name: Colorado Oil & Gas Conservation Commission

ClientProject ID: TBAL

Field ID: 752778 Nelson

Lab ID: 1309217-2

Sample Matrix: WATER

% Moisture: N/A

Date Collected: 16-Sep-13

Date Extracted: 17-Sep-13

Date Analyzed: 19-Sep-13

Prep Batch: EX130917-9

QCBatchID: EX130917-9-2

Run ID: SV130919-1

Cleanup: NONE

Basis: As Received

Sample Aliquot: 1060 ml

Final Volume: 1 ml

Clean DF: 1

File Name: N8431

CASNO	Retention Time	Target Analyte	Dilution Factor	Result	Units	Qualifier
		NONE DETECTED	1			U

Data Package ID: SV1309217-1



## **Supporting QA/QC Data**

# Surrogate Summary for GC/MS Semi-volatiles

Method SW8270D

Lab Name: ALS Environmental -- FC

Work Order Number: 1309217

Client Name: Colorado Oil & Gas Conservation Commission

ClientProject ID: TBAL

PrepBatchID: EX130917-9

QC Batch ID: EX130917-9-2

Date Extracted: 9/17/2013

Surrogate Compound	Control Limits	
	Lower	Upper
2,4,6-Tribromophenol	42	117
2-Fluorobiphenyl	55	108
2-Fluorophenol	46	105
Nitrobenzene-d5	53	111
Phenol-d5	50	109
Terphenyl-d14	34	139

Lab ID	Client Sample ID	Date Collected	Date Received	246TB % Recovery	2FBP % Recovery	2FP % Recovery	ND5 % Recovery	PD5 % Recovery	TD14 % Recovery
EX130917-9MB	XXXXXXX	NA	XXXXXXX	71	75	80	67	79	78
EX130917-9LCS	XXXXXXX	NA	XXXXXXX	87	79	87	75	90	78
EX130917-9LCSD	XXXXXXX	NA	XXXXXXX	89	79	90	82	93	77
1309217-2	752778 Nelson	9/16/2013	9/17/2013	83	80	83	73	83	82

Data Package ID: SV1309217-1

Date Printed: Saturday, September 21, 2013

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Shaded values exceed established control limits.

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# GC/MS Semi-volatiles

## Method SW8270D

### Laboratory Control Sample and Laboratory Control Sample Duplicate

Lab Name: ALS Environmental -- FC

Work Order Number: 1309217

Client Name: Colorado Oil & Gas Conservation Commission

ClientProject ID: TBAL

Lab ID: EX130917-9LCS

Sample Matrix: WATER

% Moisture: N/A

Date Collected: N/A

Date Extracted: 09/17/2013

Date Analyzed: 09/19/2013

Prep Method: SW3520C

Prep Batch: EX130917-9

QCBatchID: EX130917-9-2

Run ID: SV130919-1

Cleanup: NONE

Basis: N/A

File Name: N8425

Sample Aliquot: 1000 ml

Final Volume: 1 ml

Result Units: UG/L

Clean DF: 1

CASNO	Target Analyte	Spike Added	LCS Result	Reporting Limit	Result Qualifier	LCS % Rec.	Control Limits
123-91-1	1,4-DIOXANE	60	44.2	10		74	30 - 130%
110-86-1	PYRIDINE	60	37.9	10		63	10 - 101%
62-75-9	N-NITROSODIMETHYLAMINE	60	51.9	10		86	57 - 119%
62-53-3	ANILINE	60	51.2	10		85	38 - 116%
108-95-2	PHENOL	60	52.1	10		87	60 - 102%
111-44-4	BIS(2-CHLOROETHYL)ETHER	60	49.7	10		83	62 - 103%
95-57-8	2-CHLOROPHENOL	60	52.4	10		87	64 - 100%
541-73-1	1,3-DICHLOROBENZENE	60	47.8	10		80	49 - 95%
106-46-7	1,4-DICHLOROBENZENE	60	48.3	10		80	54 - 94%
95-50-1	1,2-DICHLOROBENZENE	60	49.8	10		83	54 - 97%
100-51-6	BENZYL ALCOHOL	60	55.6	10		93	66 - 105%
108-60-1	BIS(2-CHLOROISOPROPYL)ETHER	60	59.4	10		99	60 - 107%
95-48-7	2-METHYLPHENOL	60	54.6	10		91	63 - 103%
621-64-7	N-NITROSO-DI-N-PROPYLAMINE	60	57.3	10		95	62 - 113%
108-39-4	3+4-METHYLPHENOL	60	56.3	10		94	54 - 106%
67-72-1	HEXACHLOROETHANE	60	49.7	10		83	47 - 95%
98-95-3	NITROBENZENE	60	36.4	10		61	36 - 107%
78-59-1	ISOPHORONE	60	54.7	10		91	58 - 102%
88-75-5	2-NITROPHENOL	60	55.5	10		93	69 - 108%
105-67-9	2,4-DIMETHYLPHENOL	60	49.8	10		83	57 - 101%
111-91-1	BIS(2-CHLOROETHOXY)METHANE	60	50.3	10		84	59 - 97%
120-83-2	2,4-DICHLOROPHENOL	60	51.6	10		86	61 - 99%
65-85-0	BENZOIC ACID	100	60.8	50		61	28 - 87%
120-82-1	1,2,4-TRICHLOROBENZENE	60	43.1	10		72	47 - 92%
91-20-3	NAPHTHALENE	60	46.3	10		77	58 - 92%
106-47-8	4-CHLOROANILINE	60	53.2	10		89	37 - 119%

Data Package ID: SV1309217-1

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# GC/MS Semi-volatiles

## Method SW8270D

### Laboratory Control Sample and Laboratory Control Sample Duplicate

Lab Name: ALS Environmental -- FC

Work Order Number: 1309217

Client Name: Colorado Oil & Gas Conservation Commission

ClientProject ID: TBAL

Lab ID: EX130917-9LCS

Sample Matrix: WATER

% Moisture: N/A

Date Collected: N/A

Date Extracted: 09/17/2013

Date Analyzed: 09/19/2013

Prep Method: SW3520C

Prep Batch: EX130917-9

QCBatchID: EX130917-9-2

Run ID: SV130919-1

Cleanup: NONE

Basis: N/A

File Name: N8425

Sample Aliquot: 1000 ml

Final Volume: 1 ml

Result Units: UG/L

Clean DF: 1

CASNO	Target Analyte	Spike Added	LCS Result	Reporting Limit	Result Qualifier	LCS % Rec.	Control Limits
87-68-3	HEXACHLOROBUTADIENE	60	40.4	10		67	43 - 93%
59-50-7	4-CHLORO-3-METHYLPHENOL	60	57.6	10		96	61 - 105%
91-57-6	2-METHYLNAPHTHALENE	60	48.2	10		80	57 - 97%
90-12-0	1-METHYLNAPHTHALENE	60	43.6	10		73	58 - 101%
77-47-4	HEXACHLOROCYCLOPENTADIENE	60	13.8	10		23	3 - 56%
88-06-2	2,4,6-TRICHLOROPHENOL	60	50.2	10		84	61 - 110%
95-95-4	2,4,5-TRICHLOROPHENOL	60	51.3	10		86	62 - 109%
91-58-7	2-CHLORONAPHTHALENE	60	47.2	10		79	67 - 101%
88-74-4	2-NITROANILINE	60	50.4	20		84	68 - 120%
131-11-3	DIMETHYL PHTHALATE	60	47	10		78	70 - 109%
606-20-2	2,6-DINITROTOLUENE	60	50.5	10		84	69 - 111%
208-96-8	ACENAPHTHYLENE	60	45.6	10		76	67 - 108%
99-09-2	3-NITROANILINE	60	55.3	20		92	60 - 124%
83-32-9	ACENAPHTHENE	60	51.8	10		86	60 - 108%
51-28-5	2,4-DINITROPHENOL	60	55.6	20		93	55 - 126%
100-02-7	4-NITROPHENOL	60	47.3	20		79	24 - 128%
132-64-9	DIBENZOFURAN	60	51.3	10		85	67 - 107%
121-14-2	2,4-DINITROTOLUENE	60	58.1	10		97	46 - 114%
84-66-2	DIETHYL PHTHALATE	60	52.7	10		88	71 - 113%
86-73-7	FLUORENE	60	48.7	10		81	72 - 106%
7005-72-3	4-CHLOROPHENYL PHENYL ETHER	60	49.9	10		83	69 - 107%
100-01-6	4-NITROANILINE	60	59	20		98	64 - 122%
103-33-3	AZO BENZENE	60	48.1	10		80	71 - 110%
534-52-1	4,6-DINITRO-2-METHYLPHENOL	60	62.9	20		105	63 - 123%
86-30-6	N-NITROSODIPHENYLAMINE	60	48.4	10		81	57 - 102%
101-55-3	4-BROMOPHENYL PHENYL ETHER	60	53.6	10		89	67 - 108%
118-74-1	HEXACHLOROBENZENE	60	56.3	10		94	48 - 115%

Data Package ID: SV1309217-1

# GC/MS Semi-volatiles

## Method SW8270D

### Laboratory Control Sample and Laboratory Control Sample Duplicate

Lab Name: ALS Environmental -- FC

Work Order Number: 1309217

Client Name: Colorado Oil & Gas Conservation Commission

ClientProject ID: TBAL

Lab ID: EX130917-9LCS

Sample Matrix: WATER

% Moisture: N/A

Date Collected: N/A

Date Extracted: 09/17/2013

Date Analyzed: 09/19/2013

Prep Method: SW3520C

Prep Batch: EX130917-9

QCBatchID: EX130917-9-2

Run ID: SV130919-1

Cleanup: NONE

Basis: N/A

File Name: N8425

Sample Aliquot: 1000 ml

Final Volume: 1 ml

Result Units: UG/L

Clean DF: 1

CASNO	Target Analyte	Spike Added	LCS Result	Reporting Limit	Result Qualifier	LCS % Rec.	Control Limits
58-90-2	2,3,4,6-TETRACHLOROPHENOL	100	78.7	10		79	67 - 116%
87-86-5	PENTACHLOROPHENOL	60	47	20		78	40 - 114%
85-01-8	PHENANTHRENE	60	51.7	10		86	73 - 108%
120-12-7	ANTHRACENE	60	51.1	10		85	72 - 108%
86-74-8	CARBAZOLE	60	52	10		87	68 - 112%
84-74-2	DI-N-BUTYL PHTHALATE	60	55.5	10		92	71 - 114%
206-44-0	FLUORANTHENE	60	52.7	10		88	71 - 111%
129-00-0	PYRENE	60	48.5	10		81	60 - 113%
85-68-7	BUTYL BENZYL PHTHALATE	60	55.2	10		92	66 - 115%
56-55-3	BENZO(A)ANTHRACENE	60	49.1	10		82	69 - 107%
91-94-1	3,3'-DICHLOROBENZIDINE	60	48.9	10		82	-8 - 136%
218-01-9	CHRYSENE	60	49.6	10		83	69 - 111%
117-81-7	BIS(2-ETHYLHEXYL)PHTHALATE	60	48.3	10		81	61 - 121%
117-84-0	DI-N-OCTYL PHTHALATE	60	57.4	10		96	66 - 119%
205-99-2	BENZO(B)FLUORANTHENE	60	53.7	10		90	68 - 110%
207-08-9	BENZO(K)FLUORANTHENE	60	51.3	10		86	68 - 110%
50-32-8	BENZO(A)PYRENE	60	48.2	10		80	62 - 104%
193-39-5	INDENO(1,2,3-CD)PYRENE	60	44.2	10		74	57 - 121%
53-70-3	DIBENZO(A,H)ANTHRACENE	60	46.6	10		78	60 - 124%
191-24-2	BENZO(G,H,I)PERYLENE	60	40	10		67	52 - 124%

Data Package ID: SV1309217-1

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# GC/MS Semi-volatiles

## Method SW8270D

### Laboratory Control Sample and Laboratory Control Sample Duplicate

Lab Name: ALS Environmental -- FC

Work Order Number: 1309217

Client Name: Colorado Oil & Gas Conservation Commission

ClientProject ID: TBAL

Lab ID: EX130917-9LCSD

Sample Matrix: WATER

% Moisture: N/A

Date Collected: N/A

Date Extracted: 09/17/2013

Date Analyzed: 09/19/2013

Prep Method: SW3520C

Prep Batch: EX130917-9

QCBatchID: EX130917-9-2

Run ID: SV130919-1

Cleanup: NONE

Basis: N/A

File Name: N8426

Sample Aliquot: 1000 ml

Final Volume: 1 ml

Result Units: UG/L

Clean DF: 1

CASNO	Target Analyte	Spike Added	LCSD Result	Reporting Limit	Result Qualifier	LCSD % Rec.	RPD Limit	RPD
123-91-1	1,4-DIOXANE	60	46.1	10		77	50	4
110-86-1	PYRIDINE	60	39.5	10		66	20	4
62-75-9	N-NITROSODIMETHYLAMINE	60	51.4	10		86	20	1
62-53-3	ANILINE	60	54.6	10		91	20	6
108-95-2	PHENOL	60	55	10		92	20	5
111-44-4	BIS(2-CHLOROETHYL)ETHER	60	52.5	10		88	20	5
95-57-8	2-CHLOROPHENOL	60	55	10		92	20	5
541-73-1	1,3-DICHLOROBENZENE	60	50	10		83	20	4
106-46-7	1,4-DICHLOROBENZENE	60	50.5	10		84	20	5
95-50-1	1,2-DICHLOROBENZENE	60	51.8	10		86	20	4
100-51-6	BENZYL ALCOHOL	60	57	10		95	20	2
108-60-1	BIS(2-CHLOROISOPROPYL)ETHER	60	62.6	10		104	20	5
95-48-7	2-METHYLPHENOL	60	55.8	10		93	20	2
621-64-7	N-NITROSO-DI-N-PROPYLAMINE	60	57.3	10		96	20	0
108-39-4	3+4-METHYLPHENOL	60	56.2	10		94	20	0
67-72-1	HEXACHLOROETHANE	60	51	10		85	20	3
98-95-3	NITROBENZENE	60	37	10		62	20	2
78-59-1	ISOPHORONE	60	52.8	10		88	20	4
88-75-5	2-NITROPHENOL	60	56.3	10		94	20	1
105-67-9	2,4-DIMETHYLPHENOL	60	46.1	10		77	20	8
111-91-1	BIS(2-CHLOROETHOXY)METHANE	60	49.9	10		83	20	1
120-83-2	2,4-DICHLOROPHENOL	60	51.3	10		85	20	1
65-85-0	BENZOIC ACID	100	64.3	50		64	20	6
120-82-1	1,2,4-TRICHLOROBENZENE	60	44.9	10		75	20	4
91-20-3	NAPHTHALENE	60	48.6	10		81	20	5
106-47-8	4-CHLOROANILINE	60	54.6	10		91	20	3
87-68-3	HEXACHLOROBUTADIENE	60	43.1	10		72	20	6

Data Package ID: SV1309217-1

# GC/MS Semi-volatiles

## Method SW8270D

### Laboratory Control Sample and Laboratory Control Sample Duplicate

Lab Name: ALS Environmental -- FC

Work Order Number: 1309217

Client Name: Colorado Oil & Gas Conservation Commission

ClientProject ID: TBAL

Lab ID: EX130917-9LCSD

Sample Matrix: WATER

% Moisture: N/A

Date Collected: N/A

Date Extracted: 09/17/2013

Date Analyzed: 09/19/2013

Prep Method: SW3520C

Prep Batch: EX130917-9

QCBatchID: EX130917-9-2

Run ID: SV130919-1

Cleanup: NONE

Basis: N/A

File Name: N8426

Sample Aliquot: 1000 ml

Final Volume: 1 ml

Result Units: UG/L

Clean DF: 1

CASNO	Target Analyte	Spike Added	LCSD Result	Reporting Limit	Result Qualifier	LCSD % Rec.	RPD Limit	RPD
59-50-7	4-CHLORO-3-METHYLPHENOL	60	59.1	10		99	20	3
91-57-6	2-METHYLNAPHTHALENE	60	50.4	10		84	20	5
90-12-0	1-METHYLNAPHTHALENE	60	46.1	10		77	20	5
77-47-4	HEXACHLOROCYCLOPENTADIENE	60	14.3	10		24	20	4
88-06-2	2,4,6-TRICHLOROPHENOL	60	51.3	10		86	20	2
95-95-4	2,4,5-TRICHLOROPHENOL	60	54.1	10		90	20	5
91-58-7	2-CHLORONAPHTHALENE	60	49.5	10		83	20	5
88-74-4	2-NITROANILINE	60	55	20		92	20	9
131-11-3	DIMETHYL PHTHALATE	60	49.6	10		83	20	5
606-20-2	2,6-DINITROTOLUENE	60	52.8	10		88	20	4
208-96-8	ACENAPHTHYLENE	60	48.9	10		81	20	7
99-09-2	3-NITROANILINE	60	56.5	20		94	20	2
83-32-9	ACENAPHTHENE	60	51.1	10		85	20	1
51-28-5	2,4-DINITROPHENOL	60	55.9	20		93	20	1
100-02-7	4-NITROPHENOL	60	50.7	20		84	20	7
132-64-9	DIBENZOFURAN	60	50.5	10		84	20	1
121-14-2	2,4-DINITROTOLUENE	60	58.5	10		97	20	1
84-66-2	DIETHYL PHTHALATE	60	52.5	10		88	20	0
86-73-7	FLUORENE	60	50.1	10		84	20	3
7005-72-3	4-CHLOROPHENYL PHENYL ETHER	60	51.1	10		85	20	2
100-01-6	4-NITROANILINE	60	61.8	20		103	20	5
103-33-3	AZOENZENE	60	50.8	10		85	20	5
534-52-1	4,6-DINITRO-2-METHYLPHENOL	60	59.6	20		99	20	5
86-30-6	N-NITROSODIPHENYLAMINE	60	45.8	10		76	20	6
101-55-3	4-BROMOPHENYL PHENYL ETHER	60	50.2	10		84	20	7
118-74-1	HEXACHLOROBENZENE	60	51.3	10		86	20	9
58-90-2	2,3,4,6-TETRACHLOROPHENOL	100	79.8	10		80	20	1

Data Package ID: SV1309217-1

# GC/MS Semi-volatiles

## Method SW8270D

### Laboratory Control Sample and Laboratory Control Sample Duplicate

Lab Name: ALS Environmental -- FC

Work Order Number: 1309217

Client Name: Colorado Oil & Gas Conservation Commission

ClientProject ID: TBAL

Lab ID: EX130917-9LCSD

Sample Matrix: WATER

% Moisture: N/A

Date Collected: N/A

Date Extracted: 09/17/2013

Date Analyzed: 09/19/2013

Prep Method: SW3520C

Prep Batch: EX130917-9

QCBatchID: EX130917-9-2

Run ID: SV130919-1

Cleanup: NONE

Basis: N/A

File Name: N8426

Sample Aliquot: 1000 ml

Final Volume: 1 ml

Result Units: UG/L

Clean DF: 1

CASNO	Target Analyte	Spike Added	LCSD Result	Reporting Limit	Result Qualifier	LCSD % Rec.	RPD Limit	RPD
87-86-5	PENTACHLOROPHENOL	60	47.9	20		80	20	2
85-01-8	PHENANTHRENE	60	52.3	10		87	20	1
120-12-7	ANTHRACENE	60	51	10		85	20	0
86-74-8	CARBAZOLE	60	53.2	10		89	20	2
84-74-2	DI-N-BUTYL PHTHALATE	60	53.6	10		89	20	3
206-44-0	FLUORANTHENE	60	50.6	10		84	20	4
129-00-0	PYRENE	60	48	10		80	20	1
85-68-7	BUTYL BENZYL PHTHALATE	60	54.8	10		91	20	1
56-55-3	BENZO(A)ANTHRACENE	60	49.9	10		83	20	2
91-94-1	3,3'-DICHLOROBENZIDINE	60	51.2	10		85	20	5
218-01-9	CHRYSENE	60	49.8	10		83	20	0
117-81-7	BIS(2-ETHYLHEXYL)PHTHALATE	60	51.3	10		85	20	6
117-84-0	DI-N-OCTYL PHTHALATE	60	51.1	10		85	20	12
205-99-2	BENZO(B)FLUORANTHENE	60	54.7	10		91	20	2
207-08-9	BENZO(K)FLUORANTHENE	60	51.5	10		86	20	0
50-32-8	BENZO(A)PYRENE	60	52.5	10		88	20	9
193-39-5	INDENO(1,2,3-CD)PYRENE	60	48.6	10		81	20	9
53-70-3	DIBENZO(A,H)ANTHRACENE	60	50.4	10		84	20	8
191-24-2	BENZO(G,H,I)PERYLENE	60	44.4	10		74	20	11

Data Package ID: SV1309217-1

Date Printed: Saturday, September 21, 2013

ALS Environmental -- FC

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# GC/MS Semi-volatiles

Method SW8270D

## Laboratory Control Sample and Laboratory Control Sample Duplicate

Lab Name: ALS Environmental -- FC

Work Order Number: 1309217

Client Name: Colorado Oil & Gas Conservation Commission

ClientProject ID: TBAL

### Surrogate Recovery LCS/LCSD

CASNO	Target Analyte	Spike Added	LCS % Rec.	LCS Flag	LCSD % Rec.	LCSD Flag	Control Limits
118-79-6	2,4,6-TRIBROMOPHENOL	75	87		89		42 - 117
321-60-8	2-FLUOROBIPHENYL	50	79		79		55 - 108
367-12-4	2-FLUOROPHENOL	75	87		90		46 - 105
4165-60-0	NITROBENZENE-D5	50	75		82		53 - 111
4165-62-2	PHENOL-D5	75	90		93		50 - 109
1718-51-0	TERPHENYL-D14	50	78		77		34 - 139

Data Package ID: SV1309217-1

Date Printed: Saturday, September 21, 2013

ALS Environmental -- FC

LIMS Version: 6.670

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# Prep Batch ID: EX130917-9

Start Date: 09/17/13

End Date: 09/19/13

Concentration Method: CKIS

Batch Created By: tlb

Start Time: 18:40

End Time: 9:30

Extract Method: SW3520C

Date Created: 09/17/13

Prep Analyst: Brendon Howard

Initial Volume Units: ml

Time Created: 18:14

Comments:

Final Volume Units: ml

Validated By: tlb

Date Validated: 09/19/13

Time Validated: 14:55

QC Batch ID: EX130917-9-2

Lab ID	QC Type	Field ID	Matrix	Date Collected	Initial Wt/Vol	Final Wt/Vol	Cleanup Method	Cleanup DF	Order Number
EX130917-9	MB	XXXXXX	WATER	XXXXXX	1000	1	NONE	1	1309158
EX130917-9	LCS	XXXXXX	WATER	XXXXXX	1000	1	NONE	1	1309158
EX130917-9	LCSD	XXXXXX	WATER	XXXXXX	1000	1	NONE	1	1309158
1309158-1	SMP	XXXXXX	WATER	XXXXXX	1060	1	NONE	1	1309158
1309217-2	SMP	752778 Nelson	WATER	9/16/2013	1060	1	NONE	1	1309217

In generating this benchsheet, prep analyst states that all aspects of sample preparation as set forth in the appropriate SOP's (including Kuderna-Danish temperatures, proper flow settings on the N-evap, and final volumes) were properly adhered to (unless otherwise noted herein).

QC Types

CAR	Carrier reference sample	DUP	Laboratory Duplicate
LCS	Laboratory Control Sample	LCSD	Laboratory Control Sample Duplicat
MB	Method Blank	MS	Laboratory Matrix Spike
MSD	Laboratory Matrix Spike Duplicate	REP	Sample replicate
RVS	Reporting Level Verification Standar	SMP	Field Sample
SYS	Sample Yield Spike		

# 5B

## Semi-Volatile Organic GC/MS Tuning And Mass Calibration--Decafluorotriphenylphosphine (DFTPP)

Lab Name: ALS Environmental -- FC  
 Work Order Number: 1309217  
 Client Name: Colorado Oil & Gas Conservation Commission  
 ClientProject ID: TBAL

DFTPP Injection Date: 9/4/2013  
 DFTPP Injection Time: 11:37  
 Instrument ID: HPSV1

Reported on: Saturday, September 21, 2013

FileID: N8217

m/e	Ion Abundance Criteria SW8270D	% Relative Abundance
51	30.0 - 60.0 percent of mass 198	54.6
68	Less than 2.0 percent of mass 69	0
69	Mass 69 relative abundance of mass 198	49.4
70	Less than 2.0 percent of mass 69	0.6
127	40.0 - 60.0 percent of mass 198	45.1
197	Less than 1.0 percent of mass 198	0
198	Base peak, 100 percent of relative abundance	100
199	5.0 - 9.0 percent of mass 198	7
275	10.0 - 30.0 percent of mass 198	28.3
365	Greater than 1.00 percent of mass 198	3.2
441	Present, but less than mass 443 (percent of 443)	96.4
442	Greater than 40.0 percent of mass 198	84.4
443	17.0 - 23.0 percent of mass 442	18.8

THIS TUNE APPLIES TO THE FOLLOWING SAMPLES, MS/MSD, BLANKS, AND STANDARDS:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	QC BatchID
XXXXXXX	ICALSVSTD060CSTD	N8218	9/4/2013	11:53	SV130904-1
XXXXXXX	ICALSVSTD001CSTD	N8219	9/4/2013	12:17	SV130904-1
XXXXXXX	ICALSVSTD005CSTD	N8220	9/4/2013	12:41	SV130904-1
XXXXXXX	ICALSVSTD010CSTD	N8221	9/4/2013	13:06	SV130904-1
XXXXXXX	ICALSVSTD020CSTD	N8222	9/4/2013	13:30	SV130904-1
XXXXXXX	ICALSVSTD040CSTD	N8223	9/4/2013	13:55	SV130904-1
XXXXXXX	ICALSVSTD080CSTD	N8224	9/4/2013	14:19	SV130904-1
XXXXXXX	ICALSVSTD100CSTD	N8225	9/4/2013	14:44	SV130904-1
XXXXXXX	ICALSVSTD120CSTD	N8226	9/4/2013	15:09	SV130904-1
XXXXXXX	ICVSVSTD050ICV	N8227	9/4/2013	15:33	SV130904-1
XXXXXXX	CCVCCV	N8227	9/4/2013	16:23	SV130904-1
XXXXXXX	EX130823-1MB	N8233	9/4/2013	18:27	EX130823-1-3
XXXXXXX	EX130823-1MB	N8233	9/4/2013	18:27	EX130823-1-2

Data Package ID: SV1309217-1

# 5B

## Semi-Volatile Organic GC/MS Tuning And Mass Calibration--Decafluorotriphenylphosphine (DFTPP)

Lab Name: ALS Environmental -- FC  
Work Order Number: 1309217  
Client Name: Colorado Oil & Gas Conservation Commission  
ClientProject ID: TBAL

DFTPP Injection Date: 9/19/2013  
DFTPP Injection Time: 14:00  
Instrument ID: HPSV1

Reported on: Saturday, September 21, 2013

FileID: N8422

m/e	Ion Abundance Criteria SW8270D	% Relative Abundance
51	30.0 - 60.0 percent of mass 198	58.3
68	Less than 2.0 percent of mass 69	0
69	Mass 69 relative abundance of mass 198	48
70	Less than 2.0 percent of mass 69	0.2
127	40.0 - 60.0 percent of mass 198	44.3
197	Less than 1.0 percent of mass 198	0
198	Base peak, 100 percent of relative abundance	100
199	5.0 - 9.0 percent of mass 198	7
275	10.0 - 30.0 percent of mass 198	28.1
365	Greater than 1.00 percent of mass 198	3.2
441	Present, but less than mass 443 (percent of 443)	55
442	Greater than 40.0 percent of mass 198	97.8
443	17.0 - 23.0 percent of mass 442	19.4

THIS TUNE APPLIES TO THE FOLLOWING SAMPLES, MS/MSD, BLANKS, AND STANDARDS:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	QC BatchID
XXXXXXX	CCV1CCV	N8423	9/19/2013	14:16	SV130919-1
XXXXXXX	EX130917-9MB	N8424	9/19/2013	14:58	EX130917-9-1
XXXXXXX	EX130917-9MB	N8424	9/19/2013	14:58	EX130917-9-2
XXXXXXX	EX130917-9MB	N8424	9/19/2013	14:58	EX130917-9-3
XXXXXXX	EX130917-9LCS	N8425	9/19/2013	15:23	EX130917-9-3
XXXXXXX	EX130917-9LCS	N8425	9/19/2013	15:23	EX130917-9-1
XXXXXXX	EX130917-9LCS	N8425	9/19/2013	15:23	EX130917-9-2
XXXXXXX	EX130917-9LCSD	N8426	9/19/2013	15:47	EX130917-9-2
XXXXXXX	EX130917-9LCSD	N8426	9/19/2013	15:47	EX130917-9-3
XXXXXXX	EX130917-9LCSD	N8426	9/19/2013	15:47	EX130917-9-1
XXXXXXX	1308537-3	N8428	9/19/2013	16:36	EX130917-9-1
XXXXXXX	1308537-3RR1	N8429	9/19/2013	17:00	EX130917-9-1
XXXXXXX	1309158-1	N8430	9/19/2013	17:24	EX130917-9-2

Data Package ID: SV1309217-1

# 5B

## Semi-Volatile Organic GC/MS Tuning And Mass Calibration--Decafluorotriphenylphosphine (DFTPP)

Lab Name: ALS Environmental -- FC  
Work Order Number: 1309217  
Client Name: Colorado Oil & Gas Conservation Commission  
ClientProject ID: TBAL

DFTPP Injection Date: 9/19/2013  
DFTPP Injection Time: 14:00  
Instrument ID: HPSV1

Reported on: Saturday, September 21, 2013

FileID: N8422

m/e	Ion Abundance Criteria SW8270D	% Relative Abundance
51	30.0 - 60.0 percent of mass 198	58.3
68	Less than 2.0 percent of mass 69	0
69	Mass 69 relative abundance of mass 198	48
70	Less than 2.0 percent of mass 69	0.2
127	40.0 - 60.0 percent of mass 198	44.3
197	Less than 1.0 percent of mass 198	0
198	Base peak, 100 percent of relative abundance	100
199	5.0 - 9.0 percent of mass 198	7
275	10.0 - 30.0 percent of mass 198	28.1
365	Greater than 1.00 percent of mass 198	3.2
441	Present, but less than mass 443 (percent of 443)	55
442	Greater than 40.0 percent of mass 198	97.8
443	17.0 - 23.0 percent of mass 442	19.4

THIS TUNE APPLIES TO THE FOLLOWING SAMPLES, MS/MSD, BLANKS, AND STANDARDS:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	QC BatchID
752778 Nelson	1309217-2	N8431	9/19/2013	17:48	EX130917-9-2
XXXXXXX	1309221-2	N8432	9/19/2013	18:13	EX130917-9-3
XXXXXXX	1309221-3	N8433	9/19/2013	18:37	EX130917-9-3

Data Package ID: SV1309217-1



HPSV1  
090413S1

## FORM 6

	N8226.D 120	N8225.D 100	N8224.D 80	N8218.D 60	N8223.D 40	N8222.D 20	N8221.D 10	N8220.D 5,000	N8219.D 1,000	Average	%RSD	Curve type	Corr (r2)	Higher order equation quad term linear term const term
1,4-Dichlorobenzene-d4														
1,4-Dioxane	0.676	0.746	0.655	0.694	0.703	0.612	0.645	0.610	0.643	0.665	6.677	Ave RF	n/a	
n-Nitrosodimethylamine	0.985	1.074	0.965	0.989	1.046	0.991	1.025	0.870	0.968	0.990	5.854	Ave RF	n/a	
Pyridine	1.610	1.726	1.583	1.710	1.747	1.656	1.765	1.599		1.675	4.275	Ave RF	n/a	
2-Fluorophenol	1.319	1.443	1.347	1.474	1.317	1.345	1.498	1.198		1.368	7.258	Ave RF	n/a	
2-Chlorophenol-d4	1.101	1.127	1.131	1.189	1.152	1.195	1.188	1.158		1.155	2.942	Ave RF	n/a	
Aniline	2.215	2.044	2.143	2.170	2.041	2.101	1.963	2.046		2.080	3.942	Ave RF	n/a	
Phenol-d5	1.751	1.816	1.812	1.891	1.796	1.799	1.828	1.604		1.787	4.682	Ave RF	n/a	
Phenol	1.708	1.722	1.867	1.781	1.746	1.717	1.730	1.682		1.719	2.076 CCC	Ave RF	n/a	
Tetramethylurea	2.227	2.223	2.289	2.392	2.364	2.414	2.418	2.455		2.348	3.832	Ave RF	n/a	
Bis(2-chloroethyl)ether	1.221	1.265	1.178	1.378	1.358	1.428	1.408	1.361		1.325	6.916	Ave RF	n/a	
2-Chlorophenol	1.178	1.200	1.192	1.252	1.222	1.295	1.278	1.277		1.237	3.614	Ave RF	n/a	
1,3-Dichlorobenzene	1.407	1.437	1.445	1.516	1.479	1.522	1.521	1.492		1.477	2.943	Ave RF	n/a	
1,4-Dichlorobenzene	1.321	1.366	1.349	1.448	1.373	1.413	1.409	1.333		1.376	3.168 CCC	Ave RF	n/a	
1,2-Dichlorobenzene-d4	0.767	0.855	0.864	0.940	0.890	0.931	1.004	1.058		0.916	9.437	Ave RF	n/a	
1,2-Dichlorobenzene	1.110	1.247	1.235	1.339	1.280	1.354	1.352	1.310		1.278	6.403	Ave RF	n/a	
Benzyl Alcohol	0.855	0.836	0.829	0.849	0.850	0.842	0.855	0.765		0.834	3.966	Ave RF	n/a	
2-Methylphenol	0.984	1.011	1.009	1.041	1.032	1.057	1.020	1.033		1.021	2.740	Ave RF	n/a	
Bis(2-chloroisopropyl)ether	2.079	2.259	2.228	2.173	2.277	2.384	2.354	2.285		2.255	4.313	Ave RF	n/a	
n-Nitroso-di-n-propylamine	0.824	0.829	0.930	0.988	0.998	1.026	1.080	1.039		0.976	8.234 SPCC	Ave RF	n/a	
3+4-Methylphenol	1.110	1.289	1.312	1.358	1.284	1.283	1.194	1.193		1.254	6.452	Ave RF	n/a	
N-Methylaniline	1.599	1.808	1.775	1.877	1.804	1.896	1.836	1.940		1.817	5.695	Ave RF	n/a	
Hexachloroethane	0.506	0.578	0.575	0.609	0.598	0.612	0.584	0.554		0.579	5.898	Ave RF	n/a	
Naphthalene-d8														
Nitrobenzene-d5	0.417	0.438	0.439	0.456	0.468	0.468	0.465	0.483		0.454	4.722	Ave RF	n/a	
N,N-Dimethylaniline	0.481	0.488	0.496	0.547	0.518	0.542	0.516	0.559		0.518	5.633	Ave RF	n/a	
Nitrobenzene	0.487	0.498	0.499	0.529	0.543	0.562	0.571	0.596		0.536	7.332	Ave RF	n/a	
Isophorone	0.547	0.658	0.682	0.700	0.715	0.760	0.712	0.712		0.698	5.118	Ave RF	n/a	
N-Ethylaniline	0.581	0.589	0.597	0.670	0.619	0.676	0.654	0.690		0.634	6.801	Ave RF	n/a	
2-Nitrophenol	0.171	0.170	0.168	0.176	0.168	0.172	0.154	0.151		0.166	5.343 CCC	Ave RF	n/a	
2,4-Dimethylphenol	0.310	0.317	0.326	0.349	0.357	0.379	0.381	0.357		0.344	7.041	Ave RF	n/a	
Bis(2-chloroethoxy)methane	0.410	0.411	0.408	0.405	0.412	0.434	0.418	0.414		0.414	2.192	Ave RF	n/a	
Benzoic acid	0.226	0.187	0.181	0.165	0.149	0.144				0.175	17.157 CCC	Ave RF	n/a	
2,4-Dichlorophenol	0.284	0.284	0.292	0.310	0.304	0.319	0.299	0.295		0.298	4.129	Ave RF	n/a	
1,2,4-Trichlorobenzene	0.342	0.349	0.354	0.377	0.369	0.389	0.372	0.383		0.367	4.560	Ave RF	n/a	
Naphthalene	0.988	0.990	0.993	1.026	0.993	1.016	0.962	0.949		0.990	2.542	Ave RF	n/a	
4-Chloroaniline	0.311	0.337	0.353	0.371	0.345	0.385	0.396	0.364		0.358	7.591	Ave RF	n/a	
Hexachlorobutadiene	0.212	0.218	0.222	0.239	0.236	0.251	0.253	0.236		0.233	6.415 CCC	Ave RF	n/a	
4-Chloro-3-methylphenol	0.299	0.294	0.291	0.302	0.299	0.312	0.286	0.278		0.295	3.568 CCC	Ave RF	n/a	
2-Methylnaphthalene	0.698	0.695	0.712	0.692	0.713	0.747	0.711	0.703		0.709	2.470	Ave RF	n/a	
Acenaphthene-d10														
1-Methylnaphthalene	1.123	1.090	1.136	1.217	1.189	1.248	1.107	1.201		1.164	4.937	Ave RF	n/a	
Hexachlorocyclopentadiene	0.315	0.340	0.352	0.427	0.382	0.351	0.331	0.351		0.356	9.644 SPCC	Ave RF	n/a	
2,4,6-Trichlorophenol	0.419	0.413	0.421	0.435	0.435	0.441	0.383	0.416		0.420	4.324 CCC	Ave RF	n/a	
2,4,5-Trichlorophenol	0.378	0.371	0.382	0.414	0.401	0.424	0.378	0.405		0.394	4.965	Ave RF	n/a	
2-Fluorobiphenyl	1.230	1.270	1.296	1.396	1.381	1.379	1.343	1.481		1.347	5.946	Ave RF	n/a	
2-Chloronaphthalene	1.133	1.116	1.143	1.199	1.179	1.234	1.151	1.217		1.172	3.604	Ave RF	n/a	
2-Nitroaniline	0.412	0.402	0.395	0.398	0.401	0.401	0.376	0.364		0.394	3.994	Ave RF	n/a	
1,4-Dinitrobenzene	0.202	0.192	0.191	0.186	0.176	0.174	0.149	0.136		0.176	12.853	Ave RF	n/a	
Dimethylphthalate	1.240	1.204	1.196	1.224	1.193	1.202	1.187	1.189		1.205	1.549	Ave RF	n/a	
1,3-Dinitrobenzene	0.219	0.213	0.211	0.204	0.201	0.203	0.177	0.174		0.200	8.147	Ave RF	n/a	
2,6-Dinitrotoluene	0.280	0.272	0.274	0.282	0.281	0.287	0.262	0.279		0.277	2.724	Ave RF	n/a	
1,2-Dinitrobenzene	0.142	0.134	0.139	0.137	0.134	0.134	0.121	0.107		0.131	8.844	Ave RF	n/a	
Acenaphthylene	1.688	1.677	1.707	1.738	1.727	1.771	1.752	1.738		1.725	1.848	Ave RF	n/a	
3-Nitroaniline	0.292	0.280	0.275	0.270	0.253	0.247	0.228	0.229		0.259	9.130	Ave RF	n/a	
Acenaphthene	1.030	1.028	1.033	1.064	1.034	1.065	1.008	1.028		1.036	1.855 CCC	Ave RF	n/a	
2,4-Dinitrophenol	0.196	0.185	0.170	0.147	0.139	0.112				0.158	19.825 SPCC	quadratic	0.999	0.02645 0.12139 -0.01193
4-Nitrophenol	0.164	0.162	0.155	0.178	0.175	0.157				0.165	5.654 SPCC	Ave RF	n/a	
Dibenzofuran	1.451	1.464	1.473	1.528	1.523	1.586	1.655	1.544		1.528	4.488	Ave RF	n/a	
2,4-Dinitrotoluene	0.409	0.407	0.402	0.393	0.380	0.362	0.311	0.304		0.371	11.326	Ave RF	n/a	
2,3,5,6-Tetrachlorophenol	0.398	0.391	0.382	0.384	0.386	0.377	0.329			0.378	6.049	Ave RF	n/a	
2,3,4,6-Tetrachlorophenol	0.376	0.374	0.363	0.360	0.369	0.369	0.338			0.364	3.504	Ave RF	n/a	
Diethylphthalate	1.113	1.109	1.121	1.151	1.106	1.080	1.064	1.080		1.103	2.514	Ave RF	n/a	
4-Chlorophenyl phenyl ether	0.672	0.671	0.667	0.702	0.695	0.716	0.692	0.712		0.691	2.745	Ave RF	n/a	
4-Nitroaniline	0.226	0.246	0.244	0.273	0.254	0.236	0.197	0.189		0.233	12.196	Ave RF	n/a	
Fluorene	1.161	1.153	1.137	1.187	1.178	1.204	1.222	1.244		1.186	3.046	Ave RF	n/a	
Azobenzene	1.278	1.252	1.131	1.267	1.263	1.278	1.219	1.243		1.241	3.908	Ave RF	n/a	
2,4,6-Tribromophenol	0.211	0.218	0.199	0.209	0.210	0.207	0.184			0.205	5.372	Ave RF	n/a	
Phenanthrene-d10														
4,6-Dinitro-2-methylphenol	0.115	0.114	0.114	0.110	0.106	0.100				0.110	5.251	Ave RF	n/a	
n-Nitrosodiphenylamine	0.493	0.489	0.495	0.554	0.509	0.555	0.551	0.586		0.529	6.931 CCC	Ave RF	n/a	
4-Bromophenyl phenyl ether	0.203	0.205	0.217	0.234	0.226	0.250	0.242	0.244		0.228	7.896	Ave RF	n/a	
Hexachlorobenzene	0.212	0.215	0.228	0.254	0.241	0.265	0.260	0.258		0.242	8.693	Ave RF	n/a	
Pentachlorophenol	0.163	0.165	0.169	0.173	0.168	0.160				0.166	2.949 CCC	Ave RF	n/a	
Phenanthrene	0.856	0.877	0.909	1.010	0.928	0.952	0.921	0.925		0.922	5.047	Ave RF	n/a	
Anthracene	0.878	0.902	0.925	1.049	0.966	1.021	0.984	0.954		0.961	6.037	Ave RF	n/a	
Carbazole	0.774	0.816	0.845	0.993	0.917	1.010	0.922	0.861		0.892	9.318	Ave RF	n/a	
Di-n-butylphthalate	0.852	0.934	0.974	1.183	1.118	1.250	1.182	1.166		1.083	13.199	Ave RF	n/a	
Fluoranthene	1.024	1.111	1.172	1.325	1.323	1.453	1.412	1.388		1.276	12.164 CCC	Ave RF	n/a	
Chrysene-d12														
Benzidine	0.593	0.584	0.562	0.648	0.548	0.776	0.579	0.552		0.605	12.526	Ave RF	n/a	
Pyrene	1.284	1.206	1.222	1.261	1.252	1.319	1.402	1.289		1.274	4.839	Ave RF	n/a	
p-Terphenyl-d14	0.942	0.918	0.910	0.934	0.889	0.909	1.043	0.927		0.934	5.038	Ave RF	n/a	
Butylbenzylphthalate	0.393	0.400	0.397	0.420	0.411	0.425	0.449	0.395		0.411	4.721	Ave RF	n/a	
Bis(2-ethylhexyl) adipate	0.336	0.331	0.334	0.361	0.341	0.359	0.377	0.340		0.347	4.713	Ave RF	n/a	
Bis(2-ethylhexyl)phthalate	0.539	0.543	0.533	0.566	0.529	0.539	0.523	0.508		0.535	3.134	Ave RF	n/a	
3,3'-Dichlorobenzidine	0.336	0.361	0.362	0.368	0.383	0.358	0.325	0.331		0.353	5.735	Ave RF	n/a	
Benzo[a]anthracene	1.077	1.088	1.075	1.129	1.071	1.109	1.060	1.041		1.081	2.548	Ave RF	n/a	
Chrysene	0.957	0.980	0.970	1.038	0.985	1.017	0.972	0.975		0.987	2.729	Ave RF	n/a	
Di-n-o														

FORM 7  
Continuing Calibration Verification Report

Data File : D:\HPCHEM\1\DATA\090413W8227.D  
Acq On: 9/4/2013 15:33  
Sample: ICVSVSTD050  
Misc: ST130520-1  
  
Method: 090413S1  
Title: GC-MS Semivolatiles SOP no. 506  
Last Upd: Fri Sep 06 16:39:44 2013

Vial: 11  
Operator: jk SOP 506 Rev. 12  
Inst: GC/MS Ins  
Multiplier: 1

		Compound	AvgRF	CCRF	Expt Conc	Found Conc	% Dev or % Drift	Area % Difference	R.T. Dev (min)	Curve Fit Type
1)	ISTD	1,4-Dichlorobenzene-d4	1.000	1.000				149	0.00	Ave RF
2)		1,4-Dioxane	0.665	0.726			9.2	130	0.01	Ave RF
3)		n-Nitrosodimethylamine	0.990	1.141			15.2	143	0.00	Ave RF
4)		Pyridine	1.675	1.851			10.5	135	0.01	Ave RF
7)		Aniline	2.090	2.040			-2.4	117	0.01	Ave RF
9)	CCC	Phenol	1.719	1.990			15.8	139	0.00	Ave RF
10)		Tetramethylurea	2.348	2.310			-1.6	120	0.01	Ave RF
11)		Bis(2-chloroethyl)ether	1.325	1.454			9.8	131	0.00	Ave RF
12)		2-Chlorophenol	1.237	1.350			9.1	134	0.00	Ave RF
13)		1,3-Dichlorobenzene	1.477	1.544			4.5	127	0.00	Ave RF
14)	CCC	1,4-Dichlorobenzene	1.376	1.479			7.4	127	0.00	Ave RF
16)		1,2-Dichlorobenzene	1.278	1.394			9.0	129	0.00	Ave RF
17)		Benzyl Alcohol	0.834	0.854			3.6	127	0.00	Ave RF
18)		2-Methylphenol	1.021	1.094			7.2	131	0.00	Ave RF
19)		Bis(2-chloroisopropyl)ether	2.255	2.528			12.1	145	0.00	Ave RF
20)	SPCC	n-Nitroso-di-n-propylamine	0.976	1.004			2.9	127	0.00	Ave RF
21)		3+4-Methylphenol	1.254	1.319			5.1	121	0.00	Ave RF
22)		N-Methylaniline	1.817	1.717			-5.5	114	0.00	Ave RF
23)		Hexachloroethane	0.579	0.618			6.3	126	0.00	Ave RF
24)	ISTD	Naphthalene-d8	1.000	1.000				156	0.00	Ave RF
26)		N,N-Dimethylaniline	0.518	0.511			-1.4	121	0.00	Ave RF
27)		Nitrobenzene	0.536	0.534			-0.4	131	0.00	Ave RF
28)		Isophorone	0.698	0.691			-1.1	128	0.00	Ave RF
29)		N-Ethylaniline	0.634	0.595			-6.2	115	0.00	Ave RF
30)	CCC	2-Nitrophenol	0.166	0.169			1.8	125	0.00	Ave RF
31)		2,4-Dimethylphenol	0.344	0.352			2.2	131	0.00	Ave RF
32)		Bis(2-chloroethoxy)methane	0.414	0.416			0.5	133	0.00	Ave RF
33)	CCC	Benzoic acid	0.175	0.166			-5.3	131	-0.01	Ave RF
34)		2,4-Dichlorophenol	0.298	0.295			-1.0	124	0.00	Ave RF
35)		1,2,4-Trichlorobenzene	0.367	0.348			-5.3	120	0.00	Ave RF
36)		Naphthalene	0.990	1.102			11.4	139	0.00	Ave RF
37)		4-Chloroaniline	0.358	0.325			-9.1	114	0.00	Ave RF
38)	CCC	Hexachlorobutadiene	0.233	0.244			4.5	133	0.00	Ave RF
39)	CCC	4-Chloro-3-methylphenol	0.295	0.289			-2.2	124	0.00	Ave RF
40)		2-Methylnaphthalene	0.709	0.677			-4.4	127	0.00	Ave RF
41)	ISTD	Acenaphthene-d10	1.000	1.000				155	0.00	Ave RF
42)		1-Methylnaphthalene	1.164	1.134			-2.5	120	0.00	Ave RF
43)	SPCC	Hexachlorocyclopentadiene	0.356	0.329			-7.6	100	0.00	Ave RF
44)	CCC	2,4,6-Trichlorophenol	0.420	0.408			-3.1	121	0.00	Ave RF
45)		2,4,5-Trichlorophenol	0.394	0.395			0.3	123	0.00	Ave RF
47)		2-Chloronaphthalene	1.172	1.166			-0.5	126	0.00	Ave RF
48)		2-Nitroaniline	0.394	0.410			4.2	133	0.00	Ave RF
49)		1,4-Dinitrobenzene	0.176	0.179			1.8	124	0.00	Ave RF
50)		Dimethylphthalate	1.205	1.140			-5.4	120	0.00	Ave RF
51)		1,3-Dinitrobenzene	0.200	0.182			-9.3	115	0.00	Ave RF
52)		2,6-Dinitrotoluene	0.277	0.275			-0.7	126	0.00	Ave RF
53)		1,2-Dinitrobenzene	0.131	0.132			0.5	125	0.00	Ave RF
54)		Acenaphthylene	1.725	1.793			3.9	133	0.00	Ave RF
55)		3-Nitroaniline	0.259	0.259			-0.2	124	0.00	Ave RF
56)	CCC	Acenaphthene	1.036	1.031			-0.5	125	0.00	Ave RF
57)	SPCC	2,4-Dinitrophenol	n/a	n/a	50	55.78602727	11.6	147	0.00	quadratic
58)	SPCC	4-Nitrophenol	0.165	0.156			-5.7	113	0.00	Ave RF
59)		Dibenzofuran	1.528	1.465			-4.1	124	0.00	Ave RF
60)		2,4-Dinitrotoluene	0.371	0.389			4.8	128	0.00	Ave RF
61)		2,3,5,6-Tetrachlorophenol	0.378	0.380			0.3	128	0.00	Ave RF
62)		2,3,4,6-Tetrachlorophenol	0.364	0.339			-7.0	122	0.00	Ave RF
63)		Diethylphthalate	1.103	1.107			0.4	124	0.00	Ave RF
64)		4-Chlorophenyl phenyl ether	0.691	0.671			-2.9	124	0.00	Ave RF
65)		4-Nitroaniline	0.233	0.271			16.1	128	0.00	Ave RF
66)		Fluorene	1.186	1.149			-3.1	125	0.00	Ave RF
67)		Azobenzene	1.241	1.268			2.2	129	0.00	Ave RF
69)	ISTD	Phenanthrene-d10	1.000	1.000				154	0.00	Ave RF
70)		4,6-Dinitro-2-methylphenol	0.110	0.122			11.5	143	0.00	Ave RF
71)	CCC	n-Nitrosodiphenylamine	0.529	0.515			-2.8	119	0.00	Ave RF
72)		4-Bromophenyl phenyl ether	0.228	0.230			1.0	127	0.00	Ave RF
73)		Hexachlorobenzene	0.242	0.240			-0.8	121	0.00	Ave RF
74)	CCC	Pentachlorophenol	0.166	0.189			13.8	141	0.00	Ave RF
75)		Phenanthrene	0.922	0.966			4.8	123	0.00	Ave RF
76)		Anthracene	0.961	0.981			2.1	120	0.00	Ave RF
77)		Carbazole	0.892	0.911			2.1	118	0.00	Ave RF
78)		Di-n-butylphthalate	1.083	1.082			-0.1	118	0.00	Ave RF
79)	CCC	Fluoranthene	1.278	1.294			1.5	126	0.00	Ave RF
80)	ISTD	Chrysene-d12	1.000	1.000				142	0.01	Ave RF
81)		Benzidine	0.605	1.011			67.0	185	0.00	Ave RF
82)		Pyrene	1.274	1.335			4.8	125	0.00	Ave RF
84)		Butylbenzylphthalate	0.411	0.449			9.2	127	0.01	Ave RF
85)		Bis(2-ethylhexyl) adipate	0.347	0.354			1.8	116	0.00	Ave RF
86)		Bis(2-ethylhexyl)phthalate	0.535	0.575			7.4	120	0.01	Ave RF
87)		3,3'-Dichlorobenzidine	0.353	0.366			3.8	118	0.01	Ave RF
88)		Benzo[a]anthracene	1.081	1.134			4.9	119	0.01	Ave RF
89)		Chrysene	0.987	1.049			6.3	120	0.01	Ave RF
90)	CCC	Di-n-octylphthalate	0.727	0.775			6.6	116	0.01	Ave RF
91)	ISTD	Perylene-d12	1.000	1.000				122	0.01	Ave RF
92)		Benzo[b]fluoranthene	1.289	1.469			14.0	112	0.02	Ave RF
93)		Benzo[k]fluoranthene	1.253	1.380			10.2	107	0.01	Ave RF
94)	CCC	Benzo[a]pyrene	1.063	1.093			2.8	103	0.02	Ave RF
95)		Indeno(1,2,3-c,d)pyrene	0.837	0.811			-3.2	86	0.02	Ave RF
96)		Dibenzo[a,h]anthracene	0.735	0.708			-3.7	84	0.02	Ave RF
97)		Benzo[g,h,i]perylene	0.655	0.607			-7.2	82	0.03	Ave RF

Average of absolute value = 5.9

94  
9-6-17

**FORM 7**  
Continuing Calibration Verification Report

Data File : D:\HPCHEM\1\DATA\091913\W8423.D  
Acq On: 9/19/2013 14:16  
Sample: CCV  
Misc: ST130S12-2 60 PPM  
  
Method: 090413S1  
Title: GC-MS Semivolatiles SOP no. 506  
Last Upd: Thu Sep 19 14:34:02 2013

Vial: 2  
Operator: Jk SOP 506 Rev. 12  
Inst: GC/MS Ins  
Multiplier: 1

		Compound	AvgRF	CCRF	Expt Conc	Found Conc	% Dev or % Drift	Area % Difference	R.T. Dev (min)	Curve Fit Type	
1)	ISTD	1,4-Dichlorobenzene-d4	1.000	1.000				115	0.00	Ave RF	
2)		1,4-Dioxane	0.665	0.666			0.1	111	0.00	Ave RF	
3)		n-Nitrosodimethylamine	0.990	0.975			-1.5	114	0.00	Ave RF	
4)		Pyridine	1.675	1.592			-4.9	107	0.00	Ave RF	
5)		2-Fluorophenol	1.368	1.539			12.5	120	0.00	Ave RF	
6)		2-Chlorophenol-d4	1.155	1.243			7.6	120	0.00	Ave RF	
7)		Aniline	2.090	2.095			0.2	111	0.00	Ave RF	
8)		Phenol-d5	1.787	1.913			7.0	117	0.00	Ave RF	
9)	CCC	Phenol	1.719	1.787			3.9	116	0.00	Ave RF	
10)		Tetramethylurea	2.348	2.428			3.4	117	0.00	Ave RF	
11)		Bis(2-chloroethyl)ether	1.325	1.338			1.0	112	0.00	Ave RF	
12)		2-Chlorophenol	1.237	1.285			3.9	118	0.00	Ave RF	
13)		1,3-Dichlorobenzene	1.477	1.581			7.0	120	0.00	Ave RF	
14)	CCC	1,4-Dichlorobenzene	1.376	1.473			7.0	117	0.00	Ave RF	
15)		1,2-Dichlorobenzene-d4	0.916	0.906			-1.1	111	0.00	Ave RF	
16)		1,2-Dichlorobenzene	1.278	1.384			8.3	119	0.00	Ave RF	
17)		Benzyl Alcohol	0.834	0.898			7.7	122	0.00	Ave RF	
18)		2-Methylphenol	1.021	1.100			7.7	122	0.00	Ave RF	
19)		Bis(2-chloroisopropyl)ether	2.255	2.623			16.3	139	0.00	Ave RF	
20)	SPCC	n-Nitroso-di-n-propylamine	0.976	1.032			5.7	121	0.00	Ave RF	
21)		3,4-Methylphenol	1.254	1.346			7.3	114	0.00	Ave RF	
22)		N-Methylaniline	1.817	1.951			7.4	120	0.00	Ave RF	
23)		Hexachloroethane	0.579	0.644			11.2	122	0.00	Ave RF	
24)	ISTD	Naphthalene-d8	1.000	1.000				131	0.00	Ave RF	
25)		Nitrobenzene-d5	0.454	0.364			-19.8	105	0.00	Ave RF	
26)		N,N-Dimethylaniline	0.518	0.486			-6.2	116	0.00	Ave RF	
27)		Nitrobenzene	0.536	0.474			-11.6	117	0.00	Ave RF	
28)		Isophorone	0.698	0.676			-3.2	127	0.00	Ave RF	
29)		N-Ethylaniline	0.634	0.588			-7.3	115	0.00	Ave RF	
30)	CCC	2-Nitrophenol	0.166	0.170			2.5	127	0.00	Ave RF	
31)		2,4-Dimethylphenol	0.344	0.325			-5.7	122	0.00	Ave RF	
32)		Bis(2-chloroethoxy)methane	0.414	0.375			-9.3	121	0.00	Ave RF	
33)	CCC	Benzoic acid	0.175	0.162			-7.9	128	0.00	Ave RF	
34)		2,4-Dichlorophenol	0.288	0.283			-5.3	119	0.00	Ave RF	
35)		1,2,4-Trichlorobenzene	0.367	0.339			-7.5	118	0.00	Ave RF	
36)		Naphthalene	0.990	0.901			-9.0	115	0.00	Ave RF	
37)		4-Chloroaniline	0.358	0.339			-5.1	120	0.00	Ave RF	
38)	CCC	Hexachlorobutadiene	0.233	0.202			-13.3	111	0.00	Ave RF	
39)	CCC	4-Chloro-3-methylphenol	0.295	0.282			-4.4	122	0.00	Ave RF	
40)		2-Methylnaphthalene	0.709	0.592			-16.5	112	0.00	Ave RF	
41)	ISTD	Acenaphthene-d10	1.000	1.000				121	0.00	Ave RF	
42)		1-Methylnaphthalene	1.164	1.107			-4.8	110	0.00	Ave RF	
43)	SPCC	Hexachlorocyclopentadiene	0.356	0.350			-1.7	99	0.00	Ave RF	
44)	CCC	2,4,6-Trichlorophenol	0.420	0.392			-6.8	109	0.00	Ave RF	
45)		2,4,5-Trichlorophenol	0.394	0.370			-6.0	108	0.00	Ave RF	
46)		2-Fluorobiphenyl	1.347	1.210			-10.2	105	0.00	Ave RF	
47)		2-Chloronaphthalene	1.172	1.076			-8.1	108	0.00	Ave RF	
48)		2-Nitroaniline	0.394	0.369			-6.3	112	0.00	Ave RF	
49)		1,4-Dinitrobenzene	0.176	0.187			6.4	121	0.00	Ave RF	
50)		Dimethylphthalate	1.205	1.045			-13.3	103	0.00	Ave RF	
51)		1,3-Dinitrobenzene	0.200	0.203			1.2	120	0.00	Ave RF	
52)		2,6-Dinitrotoluene	0.277	0.263			-5.3	113	0.00	Ave RF	
53)		1,2-Dinitrobenzene	0.131	0.126			-4.2	111	0.00	Ave RF	
54)		Acenaphthylene	1.725	1.421			-17.6	99	0.00	Ave RF	
55)		3-Nitroaniline	0.259	0.262			1.2	117	0.00	Ave RF	
56)	CCC	Acenaphthene	1.036	0.985			-4.9	112	0.00	Ave RF	
57)	SPCC	2,4-Dinitrophenol	n/a	n/a	60	61.19518753		2.0	129	0.00	quadratic
58)	SPCC	4-Nitrophenol	0.165	0.146			-11.7	99	0.00	Ave RF	
59)		Dibenzofuran	1.528	1.471			-3.7	116	0.00	Ave RF	
60)		2,4-Dinitrotoluene	0.371	0.391			5.4	120	0.00	Ave RF	
61)		2,3,5,6-Tetrachlorophenol	0.378	0.343			-9.4	108	0.00	Ave RF	
62)		2,3,4,6-Tetrachlorophenol	0.364	0.331			-9.1	111	0.00	Ave RF	
63)		Diethylphthalate	1.103	1.073			-2.7	113	0.00	Ave RF	
64)		4-Chlorophenyl phenyl ether	0.691	0.654			-5.3	113	0.00	Ave RF	
65)		4-Nitroaniline	0.233	0.251			7.7	111	0.00	Ave RF	
66)		Fluorene	1.186	1.079			-9.0	110	0.00	Ave RF	
67)		Azobenzene	1.241	1.111			-10.5	106	0.00	Ave RF	
68)		2,4,6-Tribromophenol	0.205	0.197			-4.2	114	0.00	Ave RF	
69)	ISTD	Phenanthrene-d10	1.000	1.000				135	0.00	Ave RF	
70)		4,6-Dinitro-2-methylphenol	0.110	0.105			-4.2	129	0.00	Ave RF	
71)	CCC	n-Nitrosodiphenylamine	0.529	0.441			-16.6	108	0.00	Ave RF	
72)		4-Bromophenyl phenyl ether	0.228	0.177			-22.1	102	0.00	Ave RF	
73)		Hexachlorobenzene	0.242	0.219			-9.4	116	0.00	Ave RF	
74)	CCC	Pentachlorophenol	0.166	0.144			-13.5	112	0.00	Ave RF	
75)		Phenanthrene	0.922	0.858			-7.0	115	0.00	Ave RF	
76)		Anthracene	0.961	0.893			-7.1	115	0.00	Ave RF	
77)		Carbazole	0.892	0.843			-5.5	115	0.00	Ave RF	
78)		Di-n-butylphthalate	1.083	1.038			-4.1	119	0.00	Ave RF	
79)	CCC	Fluoranthene	1.276	1.106			-13.3	113	0.00	Ave RF	
80)	ISTD	Chrysene-d12	1.000	1.000				125	0.00	Ave RF	
81)		Benzidine	0.605	0.588			-2.8	113	0.00	Ave RF	
82)		Pyrene	1.274	1.056			-17.2	105	0.00	Ave RF	
83)		p-Terphenyl-d14	0.934	0.799			-14.4	107	0.00	Ave RF	
84)		Butylbenzylphthalate	0.411	0.402			-2.3	119	0.00	Ave RF	
85)		Bis(2-ethylhexyl) adipate	0.347	0.335			-3.5	116	0.00	Ave RF	
86)		Bis(2-ethylhexyl)phthalate	0.535	0.501			-6.4	111	0.00	Ave RF	
87)		3,3'-Dichlorobenzidine	0.353	0.411			16.5	139	0.00	Ave RF	
88)		Benzo[a]anthracene	1.081	1.004			-7.1	111	0.00	Ave RF	
89)		Chrysene	0.987	0.888			-10.0	107	0.00	Ave RF	
90)	CCC	Di-n-octylphthalate	0.727	0.727			0.0	115	0.00	Ave RF	
91)	ISTD	Perylene-d12	1.000	1.000				102	0.00	Ave RF	
92)		Benzo[b]fluoranthene	1.269	1.272			-1.4	98	0.00	Ave RF	
93)		Benzo[k]fluoranthene	1.253	1.248			-0.4	97	0.00	Ave RF	
94)	CCC	Benzo[a]pyrene	1.063	1.102			3.7	104	0.00	Ave RF	
95)		Indeno(1,2,3-c,d)pyrene	0.837	0.720			-14.1	76	0.00	Ave RF	
96)		Dibenzo[a,h]anthracene	0.735	0.652			-11.3	78	0.00	Ave RF	
97)		Benzo[g,h,i]perylene	0.655	0.488			-25.4	66	0.00	Ave RF	

Average of absolute value =

7.5

74  
9-20-17

# 8B

## Semi-Volatile Internal Standard Area Summary

Lab Name: ALS Environmental -- FC  
 Work Order Number: 1309217  
 Client Name: Colorado Oil & Gas Conservation Commission  
 ClientProject ID: TBAL

Date Analyzed: 9/19/2013  
 Time Analyzed: 14:16

Reported on: Saturday, September 21, 2013

Instrument ID: HPSV1

Lab File ID: N8423

	IS1		IS2		IS3		IS4		IS5		IS6	
	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
12 Hour STD	419027	5.93	1717262	7.13	864426	8.68	1856483	9.96	1782321	12.24	871575	13.76
Upper Limit	838054	6.43	3434524	7.63	1728852	9.18	3712966	10.5	3564642	12.7	1743150	14.3
Lower Limit	209514	5.43	858631	6.63	432213	8.18	928242	9.46	891161	11.7	435788	13.3
Lab Sample ID												
EX130917-9MB	480743	5.92	2082988	7.12	1136119	8.67	1971104	9.95	2216653	12.23	1421414	13.75
EX130917-9LCS	437173	5.92	1712645	7.13	950191	8.68	1720769	9.96	1807551	12.24	932554	13.76
EX130917-9LCSD	457423	5.92	1867997	7.13	1053382	8.67	2090601	9.96	2138033	12.24	938984	13.76
1309158-1	506313	5.92	2154931	7.12	1153616	8.67	2038179	9.95	2362074	12.23	1394739	13.76
1309217-2	497800	5.92	2085757	7.12	1146580	8.67	2023937	9.95	2357037	12.23	1474187	13.76

Shaded values exceed established area count limits.

LIMS Version: 6.670

Upper Limit = + 100 percent of internal standard area.

Lower Limit = - 50 percent of internal standard area.



## Supporting Raw Data

GCMS Semivolatle Instrument Run Log  
ALS Laboratory Group

Sequence Name: D:\HPCHEM\1\SEQUENCE\090413S.S  
Comment: HPSV-1 5973 MSDMS Serial Number US80210987  
Data Path: D:\HPCHEM\1\DATA\090413\  
Operator:jk SOP 506 Rev. 12  
IS Amount and ID 40 µl ST130531-3  
Logbook Number: 2985

Analysis Date: September 7, 2013 JK

Line Type	Vial	DataFile	Method	Sample Name	Dil.	RA?	Comment
1 DFTPP	1	N8217	DFTPP	50 ppm dftpp+PC	1		ST130605-1
2 Sample	2	N8218	090413S1	ICALSVSTD060			ST130704-1
3 Sample	3	N8219	090413S1	ICALSVSTD001			ST130531-2
4 Sample	4	N8220	090413S1	ICALSVSTD005			ST130531-3
5 Sample	5	N8221	090413S1	ICALSVSTD010			ST130531-4
6 Sample	6	N8222	090413S1	ICALSVSTD020			ST130531-5
7 Sample	7	N8223	090413S1	ICALSVSTD040			ST130531-6
8 Sample	8	N8224	090413S1	ICALSVSTD080			ST130531-7
9 Sample	9	N8225	090413S1	ICALSVSTD100			ST130531-8
10 Sample	10	N8226	090413S1	ICALSVSTD120			ST130531-9
11 Sample	11	N8227	090413S1	ICVSVSTD050			ST130520-10
12 Sample	12	N8228	090413S1	CCV			ST130520-10
13 Sample	13	N8229	090413S1	EX130827-15MB			ST130520-10
14 Sample	14	N8230	090413S1	EX130827-15LCS			ST130520-10
15 Sample	15	N8231	090413S1	1308412-11			ST130520-10
16 Sample	16	N8232	090413S1	1308412-11MS			ST130520-10
17 Sample	17	N8233	090413S1	EX130823-1MB			ST130520-10
18 Sample	18	N8234	090413S1	EX130823-1LCS			ST130520-10
19 Sample	19	N8235	090413S1	EX130823-1LCSD			ST130520-10
20 Sample	20	N8236	090413S1	1308412-1			ST130520-10
21 Sample	21	N8237	090413S1	1308412-2			ST130520-10
22 Sample	22	N8238	090413S1	1308412-3			ST130520-10
23 Sample	23	N8239	090413S1	1308412-4			ST130520-10
24 Sample	24	N8240	090413S1	1308412-5			ST130520-10
25 Sample	25	N8241	090413S1	1308412-6			ST130520-10
26 Sample	26	N8242	090413S1	1308412-7			ST130520-10
27 Sample	27	N8243	090413S1	INSTRUMENT BLANK			ST130520-10

GCMS Semivolatile Instrument Run Log  
ALS Laboratory Group

Sequence Name: D:\HPCHEM\1\SEQUENCE\091913S.S

Comment: HPSV-1 5973 MSDMS Serial Number US80210987

Data Path: D:\HPCHEM\1\DATA\091913\

Operator:jk SOP 506 Rev. 12

IS Amount and ID 40 P/A ST-10501-3 Analysis Date: September 13, 2013 716

Logbook Number: 2985

Line Type	Vial	DataFile	Method	Sample Name	Dil.	RA?	Comment
1 DFTPP	1	N8422	DFTPP	50 ppm dftpp+PC	1		
2 Sample	2	N8423	090413S1	CCV	1		14:00
3 Sample	3	N8424	090413S1	EX130917-9MB T	1		13:05:12-2
4 Sample	4	N8425	090413S1	EX130917-9LCS	1		
5 Sample	5	N8426	090413S1	EX130917-9LCSD	1		
6 Sample	6	N8427	090413S1	1308537-3 5X	5X		
7 Sample	7	N8428	090413S1	1308537-3 2X	2X		
8 Sample	8	N8429	090413S1	1308537-3	1		
9 Sample	9	N8430	090413S1	1309158-1 T	1		
10 Sample	10	N8431	090413S1	1309217-2 T	1		
11 Sample	11	N8432	090413S1	1309221-2	1		
12 Sample	12	N8433	090413S1	1309221-3	1		
13 Sample	13	N8434	090413S1	INSTRUMENT BLANK	1		18:57
14							



## Calibration Raw Data



## DFTPP

Data File : D:\HPCHEM\1\DATA\090413\N8217.D

Acq On : 4 Sep 2013 11:37

Sample : 50 ppm dftpp+PCP+DDT+benzidine

Misc : ST130605-1

MS Integration Params: rteint.p

Method : D:\HPCHEM\1\METHODS\DFTPP.M (RTE Integrator)

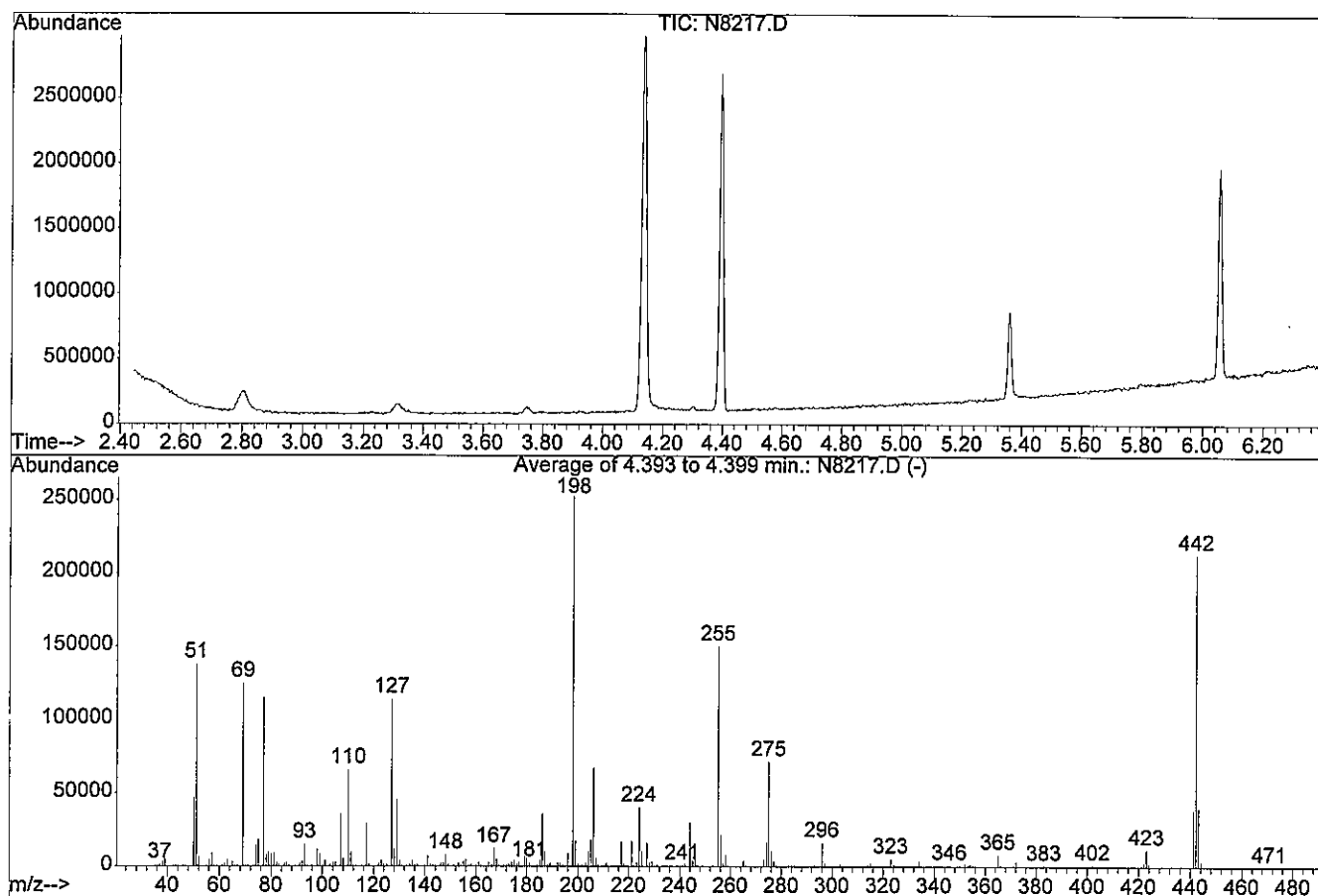
Title : DFTPP

Vial: 1

Operator: jk SOP 50

Inst : GC/MS Ins

Multiplr: 1.00



AutoFind: Scans 688, 689, 690; Background Corrected with Scan 677

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	54.6	137758	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	49.4	124568	PASS
70	69	0.00	2	0.6	771	PASS
127	198	40	60	45.1	113936	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	252395	PASS
199	198	5	9	7.0	17545	PASS
275	198	10	30	28.3	71341	PASS
365	198	1	100	3.2	8118	PASS
441	443	0.01	100	96.4	38669	PASS
442	198	40	100	84.4	213077	PASS
443	442	17	23	18.8	40117	PASS

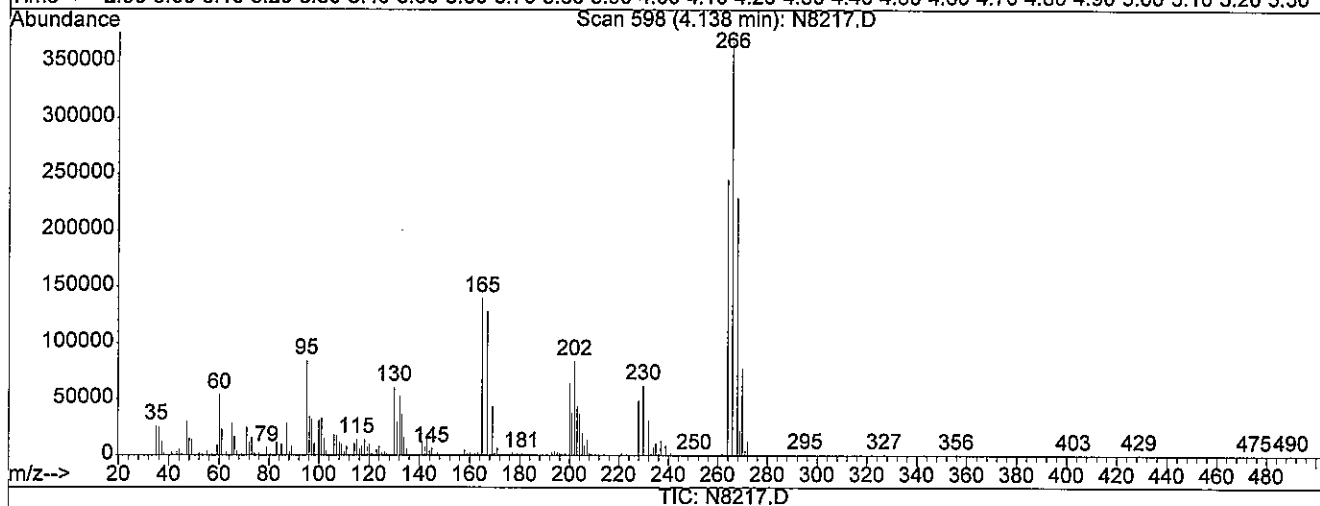
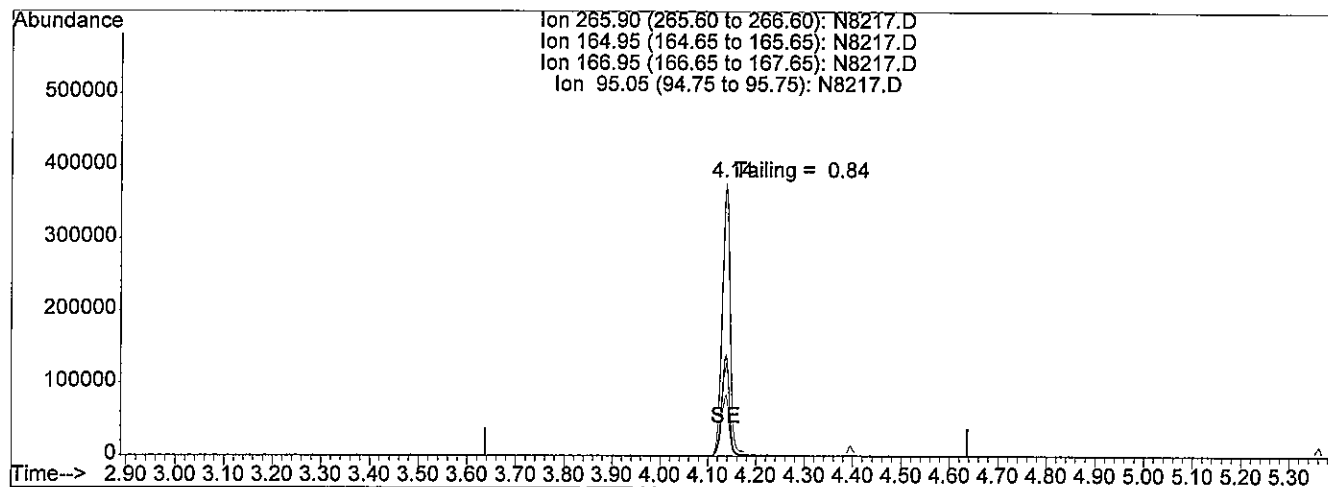
# Quantitation Report (Qedit)

Data File : D:\HPCHEM\1\DATA\090413\N8217.D  
 Acq On : 4 Sep 2013 11:37  
 Sample : 50 ppm dftpp+PCP+DDT+benzidine  
 Misc : ST130605-1  
 MS Integration Params: rteint.p  
 Quant Time: Sep 4 11:46 2013

Vial: 1  
 Operator: jk SOP 50  
 Inst : GC/MS Ins  
 Multiplr: 1.00

Quant Results File: temp.res

Method : D:\HPCHEM\1\METHODS\DFTPP.M (RTE Integrator)  
 Title : DFTPP  
 Last Update : Wed Sep 04 11:46:35 2013  
 Response via : Single Level Calibration



(1) Pentachlorophenol

4.14min 48.74

response 432117

Ion	Exp%	Act%
265.90	100	100
164.95	0.00	36.35#
166.95	0.00	33.51#
95.05	0.00	21.80#

*JK*  
*9-5-13*

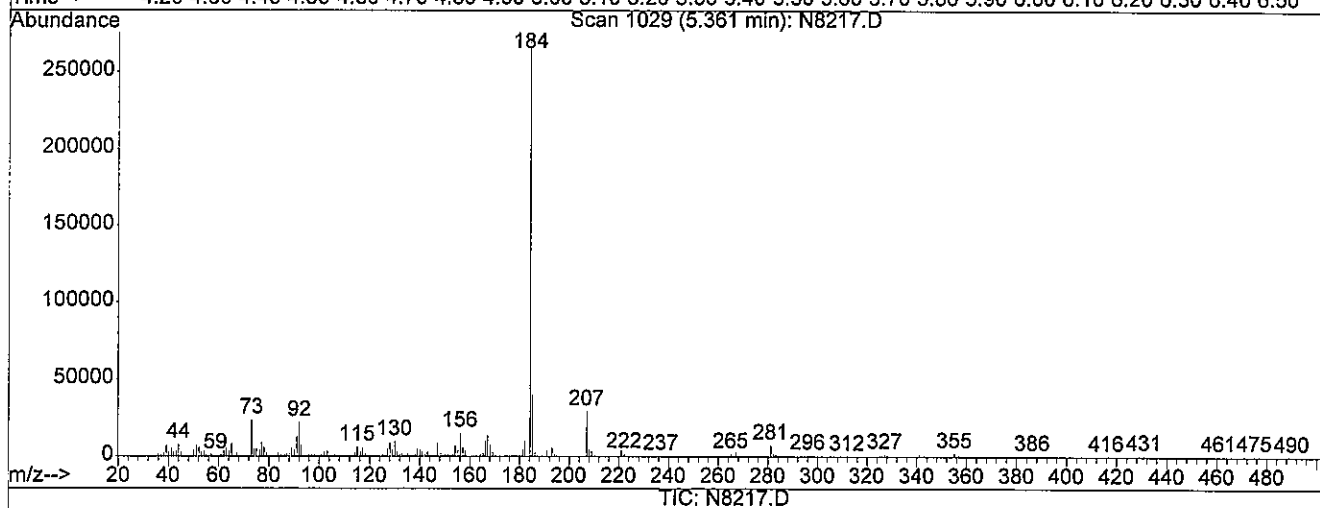
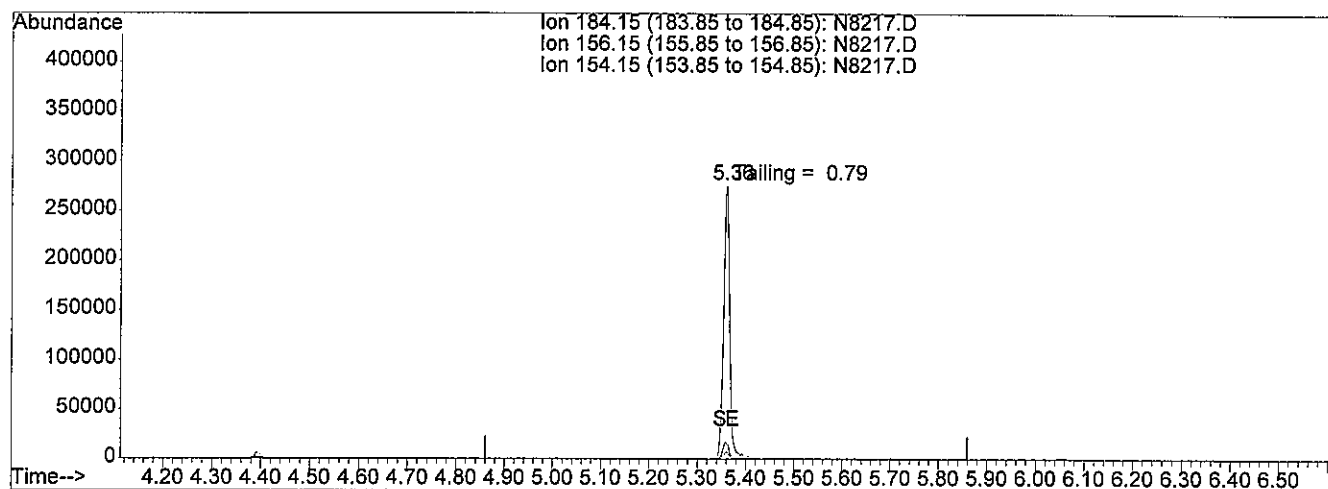
# Quantitation Report (Qedit)

Data File : D:\HPCHEM\1\DATA\090413\N8217.D  
 Acq On : 4 Sep 2013 11:37  
 Sample : 50 ppm dftpp+PCP+DDT+benzidine  
 Misc : ST130605-1  
 MS Integration Params: rteint.p  
 Quant Time: Sep 4 11:46 2013

Vial: 1  
 Operator: jk SOP 50  
 Inst : GC/MS Ins  
 Multiplr: 1.00

Quant Results File: temp.res

Method : D:\HPCHEM\1\METHODS\DFTPP.M (RTE Integrator)  
 Title : DFTPP  
 Last Update : Wed Sep 04 11:46:35 2013  
 Response via : Single Level Calibration



(3) Benzidine

5.36min 49.22

response 244625

Ion	Exp%	Act%
184.15	100	100
156.15	0.00	6.32#
154.15	0.00	2.59#
0.00	0.00	0.00

94  
95

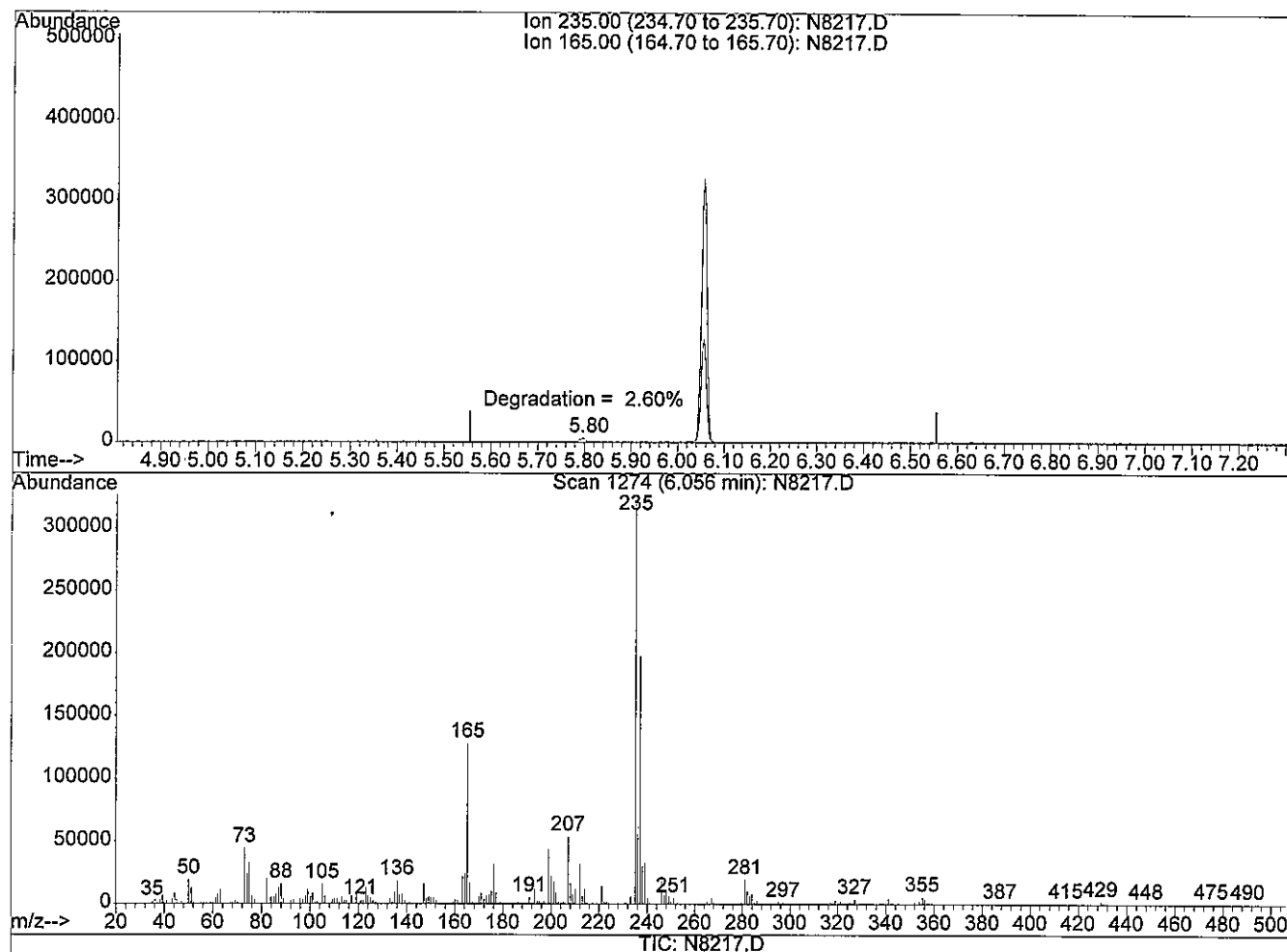
# Quantitation Report (Qedit)

Data File : D:\HPCHEM\1\DATA\090413\N8217.D  
 Acq On : 4 Sep 2013 11:37  
 Sample : 50 ppm dftpp+PCP+DDT+benzidine  
 Misc : ST130605-1  
 MS Integration Params: rteint.p  
 Quant Time: Sep 4 11:46 2013

Vial: 1  
 Operator: jk SOP 50  
 Inst : GC/MS Ins  
 Multiplr: 1.00

Quant Results File: temp.res

Method : D:\HPCHEM\1\METHODS\DFTPP.M (RTE Integrator)  
 Title : DFTPP  
 Last Update : Wed Sep 04 11:46:35 2013  
 Response via : Single Level Calibration



(4) DDT

6.06min 48.2350

response 272914

Ion	Exp%	Act%
235.00	100	100
165.00	0.00	38.63#
0.00	0.00	0.00
0.00	0.00	0.00

*Handwritten:* 9-5-13

Data File : D:\HPCHEM\1\DATA\090413\N8218.D

Vial: 2

Acq On : 4 Sep 2013 11:53

Operator: jk SOP 506 Rev

Sample : ICALSVSTD060

Inst : GC/MS Ins

Misc : ST130904-1 60 PPM

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Sep 4 13:11 2013

Quant Results File: 090413S1.RES

Quant Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)

Title : GC-MS Semivolatiles SOP no. 506

Last Update : Wed Sep 04 13:10:35 2013

Response via : Initial Calibration

DataAcq Meth : 090413S1

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	6.00	152	363494	40.00	ng/uL	0.00
24) Naphthalene-d8	7.20	136	1311199	40.00	ng/uL	0.00
41) Acenaphthene-d10	8.74	164	715018	40.00	ng/uL	0.00
69) Phenanthrene-d10	10.02	188	1374172	40.00	ng/uL	0.00
80) Chrysene-d12	12.32	240	1427067	40.00	ng/uL	0.00
91) Perylene-d12	13.88	264	853433	40.00	ng/uL	0.00

## System Monitoring Compounds

5) 2-Fluorophenol	4.62	112	803956m	63.05	ng/uL	0.00
Spiked Amount 75.000	Range 46 - 105		Recovery =	84.07%		
6) 2-Chlorophenol-d4	5.78	132	648552	60.00	ng/uL	0.00
Spiked Amount 75.000	Range 33 - 110		Recovery =	80.00%		
8) Phenol-d5	5.58	99	1031016	60.00	ng/uL	0.00
Spiked Amount 75.000	Range 50 - 109		Recovery =	80.00%		
15) 1,2-Dichlorobenzene-d4	6.16	152	512649	60.00	ng/uL	0.00
Spiked Amount 50.000	Range 16 - 110		Recovery =	120.00%#		
25) Nitrobenzene-d5	6.53	82	896629	60.00	ng/uL	0.00
Spiked Amount 50.000	Range 53 - 111		Recovery =	120.00%#		
46) 2-Fluorobiphenyl	8.12	172	1497507	60.00	ng/uL	0.00
Spiked Amount 50.000	Range 55 - 108		Recovery =	120.00%#		
68) 2,4,6-Tribromophenol	9.42	330	224036	60.00	ng/uL	0.00
Spiked Amount 75.000	Range 42 - 117		Recovery =	80.00%		
83) p-Terphenyl-d14	11.34	244	1998451	60.00	ng/uL	0.00
Spiked Amount 50.000	Range 34 - 139		Recovery =	120.00%		

## Target Compounds

					Qvalue
2) 1,4-Dioxane	2.63	88	378577m	63.26	ng/uL
3) n-Nitrosodimethylamine	3.01	74	539212m	63.66	ng/uL
4) Pyridine	3.10	79	932300m	63.75	ng/uL
7) Aniline	5.67	93	1183039	60.00	ng/uL 100
9) Phenol	5.60	94	971327	60.00	ng/uL 100
10) Tetramethylurea	5.74	72	1304056	60.00	ng/uL 100
11) Bis(2-chloroethyl) ether	5.70	93	751500	60.00	ng/uL 100
12) 2-Chlorophenol	5.80	128	682754	60.00	ng/uL 100
13) 1,3-Dichlorobenzene	5.95	146	826639	60.00	ng/uL 100
14) 1,4-Dichlorobenzene	6.02	146	789564	60.00	ng/uL 100
16) 1,2-Dichlorobenzene	6.17	146	730276	60.00	ng/uL 100
17) Benzyl Alcohol	6.11	108	463050	60.00	ng/uL 100
18) 2-Methylphenol	6.20	107	567625	60.00	ng/uL 100
19) Bis(2-chloroisopropyl) ethe	6.23	45	1184815	60.00	ng/uL 100
20) n-Nitroso-di-n-propylamine	6.36	70	537406	60.00	ng/uL 100
21) 3+4-Methylphenol	6.34	108	740231	60.00	ng/uL 100

(#)= qualifier out of range (m) = manual integration

N8218.D 090413S1.M Wed Sep 04 13:12:32 2013

95-1)

Page 1

45 of 236

Data File : D:\HPCHEM\1\DATA\090413\N8218.D

Vial: 2

Acq On : 4 Sep 2013 11:53

Operator: jk SOP 506 Rev

Sample : ICALSVSTD060

Inst : GC/MS Ins

Misc : ST130904-1 60 PPM

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Sep 4 13:11 2013

Quant Results File: 090413S1.RES

Quant Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)

Title : GC-MS Semivolatiles SOP no. 506

Last Update : Wed Sep 04 13:10:35 2013

Response via : Initial Calibration

DataAcq Meth : 090413S1

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
22) N-Methylaniline	6.36	106	1023313	60.00	ng/uL	100
23) Hexachloroethane	6.50	117	331835	60.00	ng/uL	100
26) N,N-Dimethylaniline	6.54	120	1076271	60.00	ng/uL	100
27) Nitrobenzene	6.54	77	1040983	60.00	ng/uL	100
28) Isophorone	6.76	82	1376544	60.00	ng/uL	100
29) N-Ethylaniline	6.77	106	1317572	60.00	ng/uL	100
30) 2-Nitrophenol	6.84	139	345517	60.00	ng/uL	100
31) 2,4-Dimethylphenol	6.83	107	686210	60.00	ng/uL	100
32) Bis(2-chloroethoxy)methane	6.92	93	796323	60.00	ng/uL	100
33) Benzoic acid	6.91	105	324137m	63.62	ng/uL	
34) 2,4-Dichlorophenol	7.05	162	609613	60.00	ng/uL	100
35) 1,2,4-Trichlorobenzene	7.14	180	740907	60.00	ng/uL	100
36) Naphthalene	7.22	128	2017997	60.00	ng/uL	100
37) 4-Chloroaniline	7.24	127	728706	60.00	ng/uL	100
38) Hexachlorobutadiene	7.31	225	469288	60.00	ng/uL	100
39) 4-Chloro-3-methylphenol	7.63	107	594518	60.00	ng/uL	100
40) 2-Methylnaphthalene	7.82	142	1361305	60.00	ng/uL	100
42) 1-Methylnaphthalene	7.92	142	1305578	60.00	ng/uL	100
43) Hexachlorocyclopentadiene	7.96	237	457566	60.00	ng/uL	100
44) 2,4,6-Trichlorophenol	8.05	196	466107	60.00	ng/uL	100
45) 2,4,5-Trichlorophenol	8.09	196	444209	60.00	ng/uL	100
47) 2-Chloronaphthalene	8.26	162	1286278	60.00	ng/uL	100
48) 2-Nitroaniline	8.32	65	426363	60.00	ng/uL	100
49) 1,4-Dinitrobenzene	8.42	168	200020	60.00	ng/uL	100
50) Dimethylphthalate	8.45	163	1313220	60.00	ng/uL	100
51) 1,3-Dinitrobenzene	8.49	168	218871	60.00	ng/uL	100
52) 2,6-Dinitrotoluene	8.51	165	301927	60.00	ng/uL	100
53) 1,2-Dinitrobenzene	8.57	168	146592	60.00	ng/uL	100
54) Acenaphthylene	8.63	152	1863690	60.00	ng/uL	100
55) 3-Nitroaniline	8.67	138	289948	60.00	ng/uL	100
56) Acenaphthene	8.77	154	1140949	60.00	ng/uL	100
57) 2,4-Dinitrophenol	8.75	184	157942	60.00	ng/uL#	100
58) 4-Nitrophenol	8.77	109	191200	60.00	ng/uL	100
59) Dibenzofuran	8.92	168	1638990	60.00	ng/uL	100
60) 2,4-Dinitrotoluene	8.86	165	421966	60.00	ng/uL	100
61) 2,3,5,6-Tetrachlorophenol	8.97	232	412105	60.00	ng/uL	100
62) 2,3,4,6-Tetrachlorophenol	9.01	232	386047	60.00	ng/uL	100
63) Diethylphthalate	9.04	149	1234288	60.00	ng/uL	100
64) 4-Chlorophenyl phenyl ethe	9.18	204	752879	60.00	ng/uL	100
65) 4-Nitroaniline	9.21	138	293266	60.00	ng/uL	100
66) Fluorene	9.21	166	1272938	60.00	ng/uL	100

(#)= qualifier out of range (m) = manual integration

N8218.D 090413S1.M Wed Sep 04 13:12:32 2013

Page 2

Data File : D:\HPCHEM\1\DATA\090413\N8218.D

Vial: 2

Acq On : 4 Sep 2013 11:53

Operator: jk SOP 506 Rev

Sample : ICALSVSTD060

Inst : GC/MS Ins

Misc : ST130904-1 60 PPM

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Sep 4 13:11 2013

Quant Results File: 090413S1.RES

Quant Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)

Title : GC-MS Semivolatiles SOP no. 506

Last Update : Wed Sep 04 13:10:35 2013

Response via : Initial Calibration

DataAcq Meth : 090413S1

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
67) Azobenzene	9.32	77	1358620	60.00	ng/uL	100
70) 4,6-Dinitro-2-methylphenol	9.22	198	227346	60.00	ng/uL	100
71) n-Nitrosodiphenylamine	9.27	169	1142769	60.00	ng/uL	100
72) 4-Bromophenyl phenyl ether	9.60	248	481650	60.00	ng/uL	100
73) Hexachlorobenzene	9.70	284	523636	60.00	ng/uL	100
74) Pentachlorophenol	9.85	266	357593	60.00	ng/uL	100
75) Phenanthrene	10.05	178	2081519	60.00	ng/uL	100
76) Anthracene	10.09	178	2162325	60.00	ng/uL	100
77) Carbazole	10.20	167	2046236	60.00	ng/uL	100
78) Di-n-butylphthalate	10.41	149	2438933	60.00	ng/uL	100
79) Fluoranthene	11.07	202	2730199	60.00	ng/uL	100
81) Benzidine	11.13	184	1386402	60.00	ng/uL	100
82) Pyrene	11.27	202	2698941	60.00	ng/uL	100
84) Butylbenzylphthalate	11.71	149	899930	60.00	ng/uL	100
85) Bis(2-ethylhexyl) adipate	11.71	129	772990	60.00	ng/uL	100
86) Bis(2-ethylhexyl)phthalate	12.16	149	1211215	60.00	ng/uL	100
87) 3,3'-Dichlorobenzidine	12.23	252	788753	60.00	ng/uL	100
88) Benzo[a]anthracene	12.31	228	2416542	60.00	ng/uL	100
89) Chrysene	12.34	228	2222667	60.00	ng/uL	100
90) Di-n-octylphthalate	12.75	149	1692328	60.00	ng/uL	100
92) Benzo[b]fluoranthene	13.41	252	1704048	60.00	ng/uL	100
93) Benzo[k]fluoranthene	13.44	252	1685415	60.00	ng/uL	100
94) Benzo[a]pyrene	13.82	252	1386605	60.00	ng/uL	100
95) Indeno(1,2,3-c,d)pyrene	15.46	276	1231222	60.00	ng/uL	100
96) Dibenzo[a,h]anthracene	15.45	278	1092027	60.00	ng/uL	100
97) Benzo[g,h,i]perylene	15.95	276	968603	60.00	ng/uL	100

-----  
(#) = qualifier out of range (m) = manual integration

N8218.D 090413S1.M Wed Sep 04 13:12:32 2013

Page 3

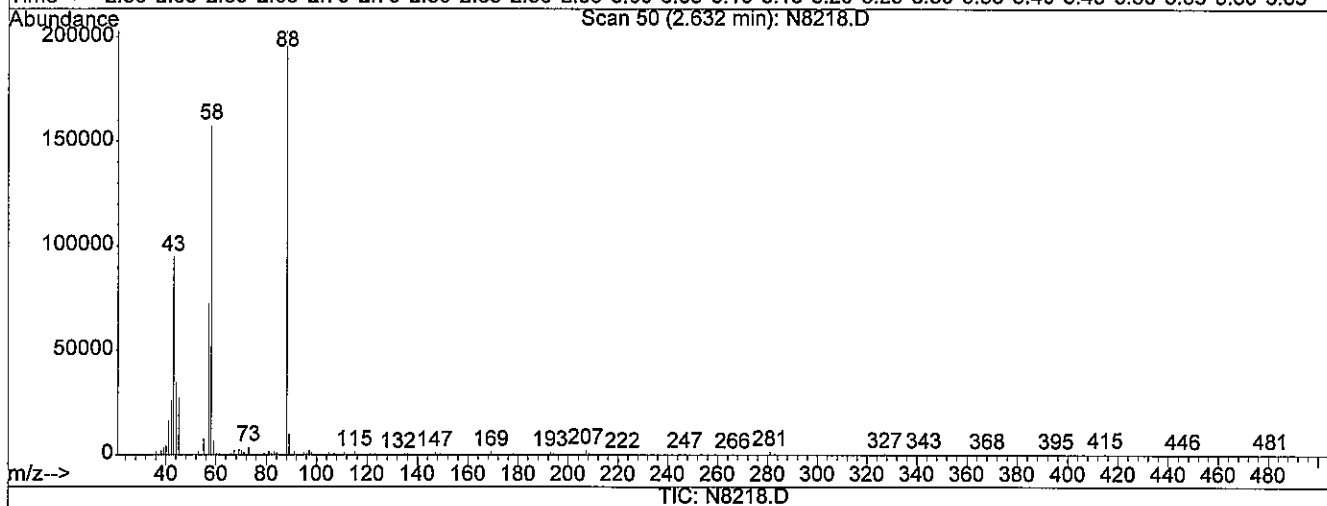
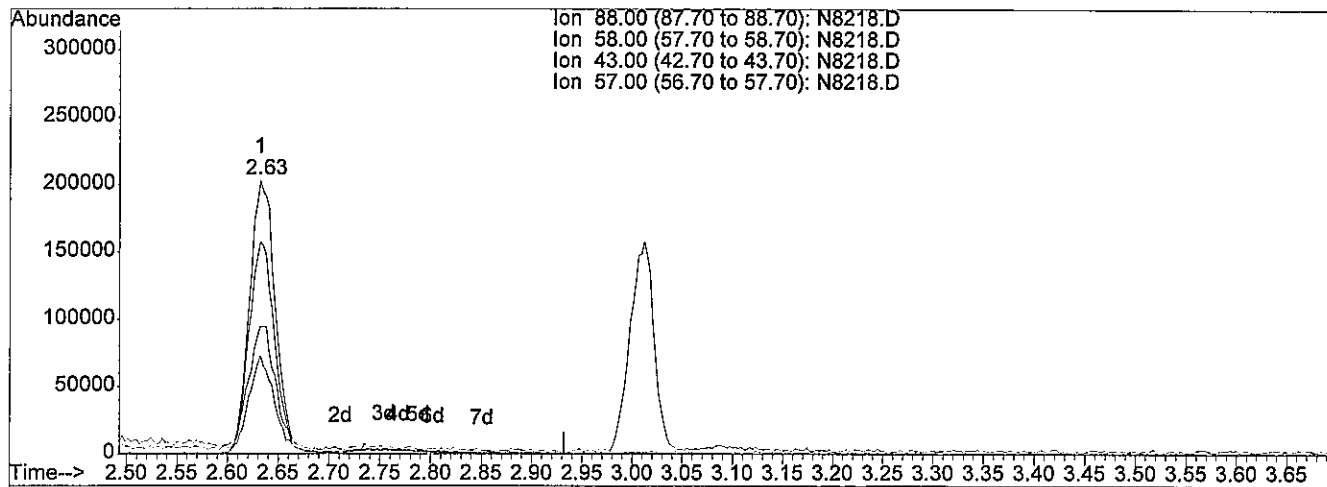
# Quantitation Report (Qedit)

Data File : D:\HPCHEM\1\DATA\090413\N8218.D  
 Acq On : 4 Sep 2013 11:53  
 Sample : ICALSVSTD060  
 Misc : ST130904-1 60 PPM  
 MS Integration Params: RTEINT.P  
 Quant Time: Sep 4 13:10 2013

Vial: 2  
 Operator: jk SOP 50  
 Inst : GC/MS Ins  
 Multiplr: 1.00

Quant Results File: temp.res

Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)  
 Title : GC-MS Semivolatiles SOP no. 506  
 Last Update : Wed Sep 04 13:10:35 2013  
 Response via : Multiple Level Calibration



(2) 1,4-Dioxane (t)

2.63min 60.00ng/uL

response 359069

Ion	Exp%	Act%
88.00	100	100
58.00	77.90	77.91
43.00	47.90	47.94
57.00	33.00	32.99

*3402*



# Quantitation Report (Qedit)

Data File : D:\HPCHEM\1\DATA\090413\N8218.D

Acq On : 4 Sep 2013 11:53

Sample : ICALSVSTD060

Misc : ST130904-1 60 PPM

MS Integration Params: RTEINT.P

Quant Time: Sep 4 13:10 2013

Vial: 2

Operator: jk SOP 50

Inst : GC/MS Ins

Multiplr: 1.00

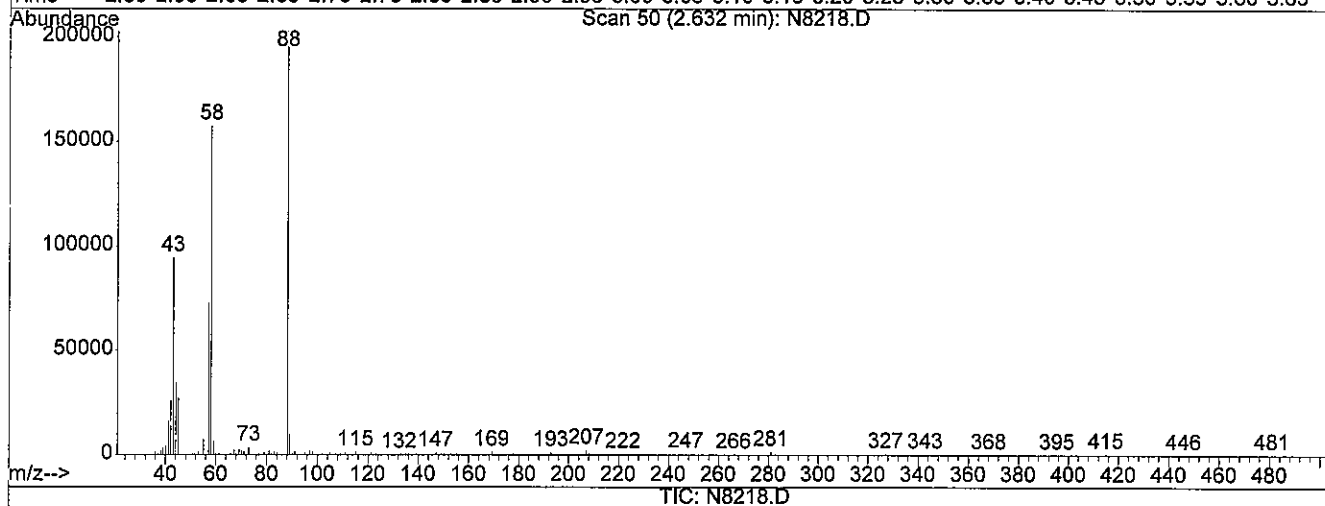
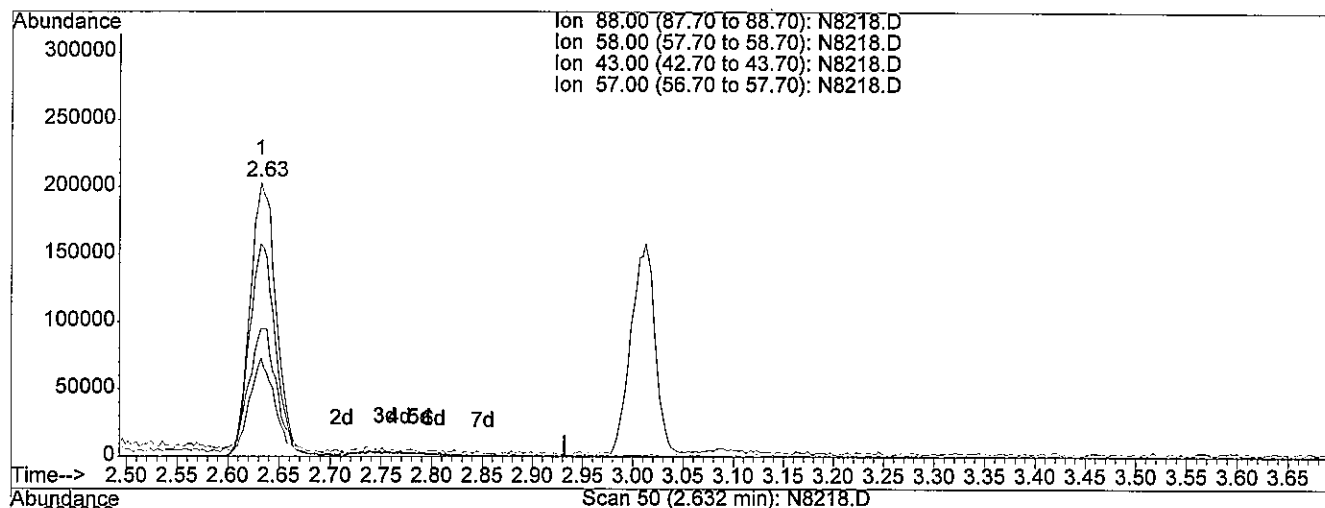
Quant Results File: temp.res

Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)

Title : GC-MS Semivolatiles SOP no. 506

Last Update : Wed Sep 04 13:10:35 2013

Response via : Multiple Level Calibration



(2) 1,4-Dioxane (t)

2.63min 63.26ng/uL m

response 378577

Ion	Exp%	Act%
88.00	100	100
58.00	77.90	73.89
43.00	47.90	45.47
57.00	33.00	31.29

## MANUAL RE-INTEGRATION

- ☐ missed peak assignment
- ☐ assigned incorrect name to peak
- ☐ over-integrated peak's area
- ☒ under-integrated peak's area
- ☐ other \_\_\_\_\_

initials JK date 9-5-17

# Quantitation Report (Qedit)

Data File : D:\HPCHEM\1\DATA\090413\N8218.D

Vial: 2

Acq On : 4 Sep 2013 11:53

Operator: jk SOP 50

Sample : ICALSVSTD060

Inst : GC/MS Ins

Misc : ST130904-1 60 PPM

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Sep 4 13:10 2013

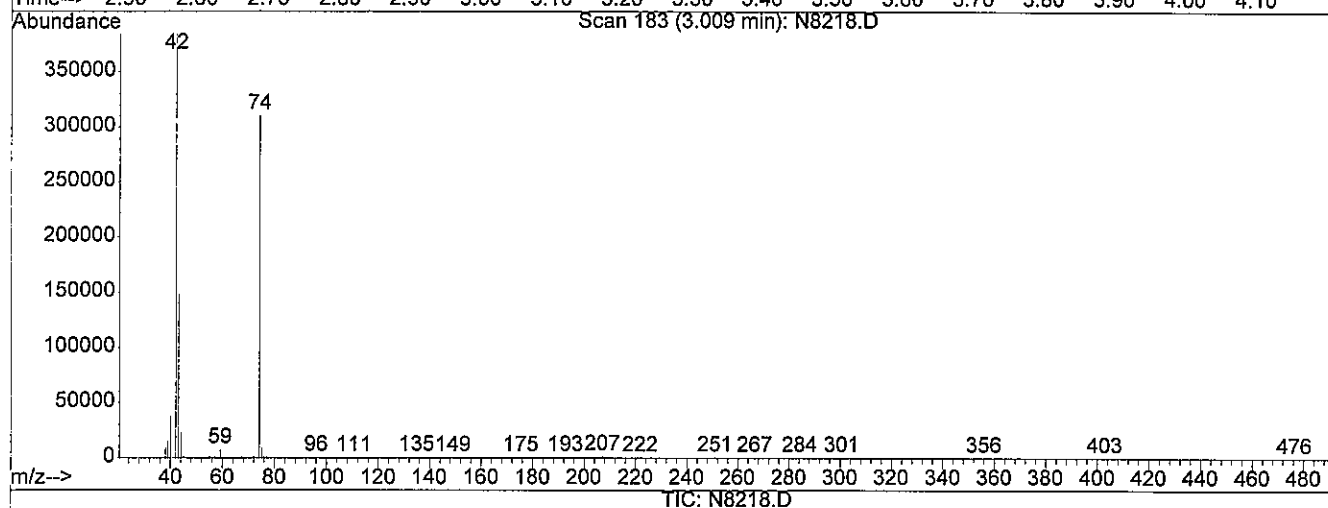
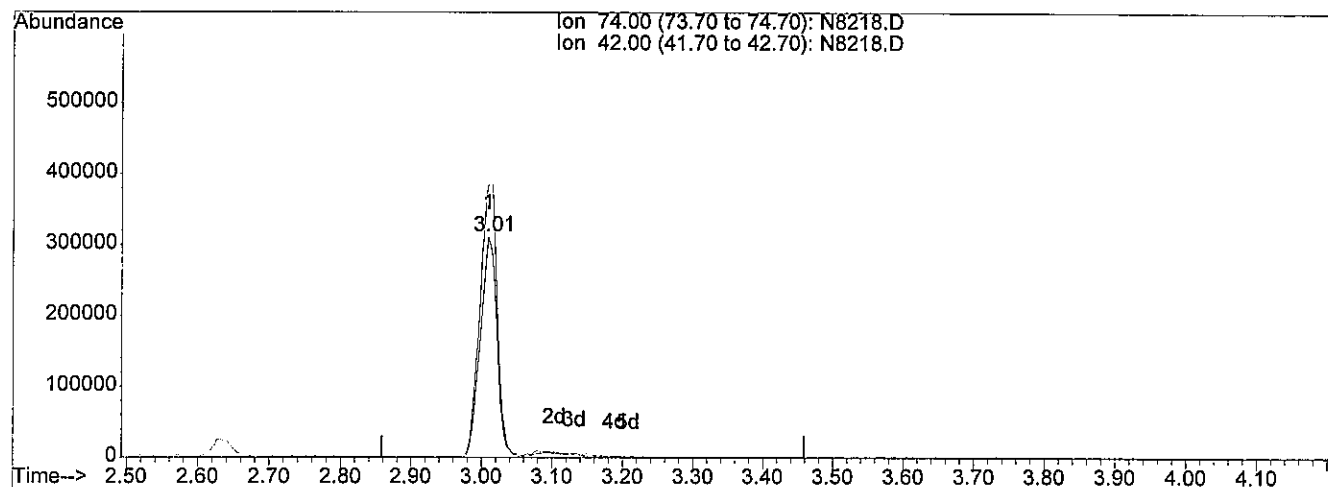
Quant Results File: temp.res

Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)

Title : GC-MS Semivolatiles SOP no. 506

Last Update : Wed Sep 04 13:10:35 2013

Response via : Multiple Level Calibration



(3) n-Nitrosodimethylamine (T)

3.01min 60.00ng/uL

response 508218

Ion	Exp%	Act%
74.00	100	100
42.00	129.50	129.47
0.00	0.00	0.00
0.00	0.00	0.00

*Sefer*

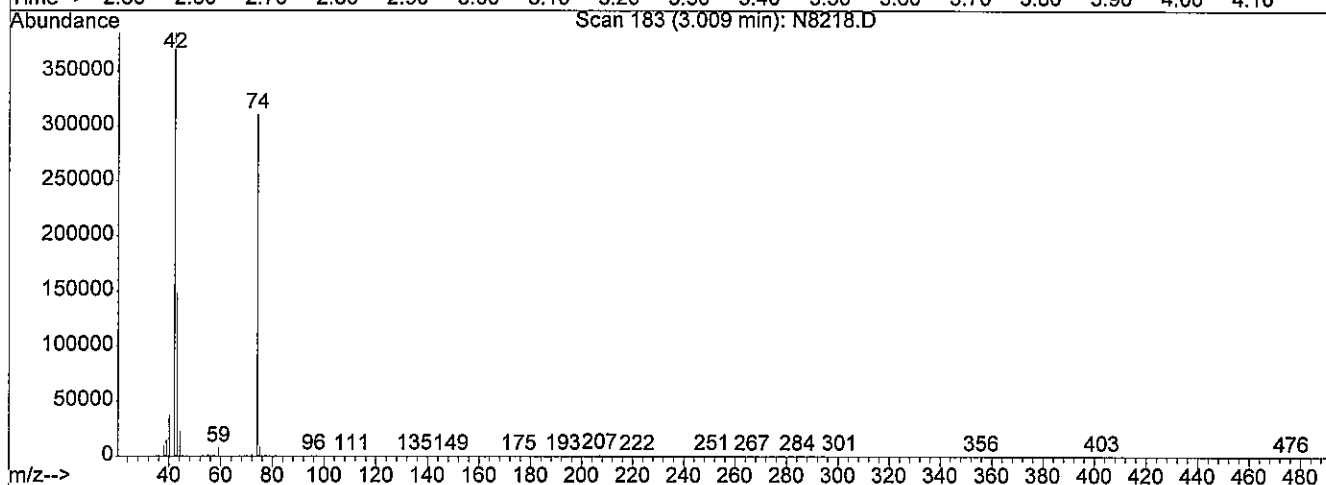
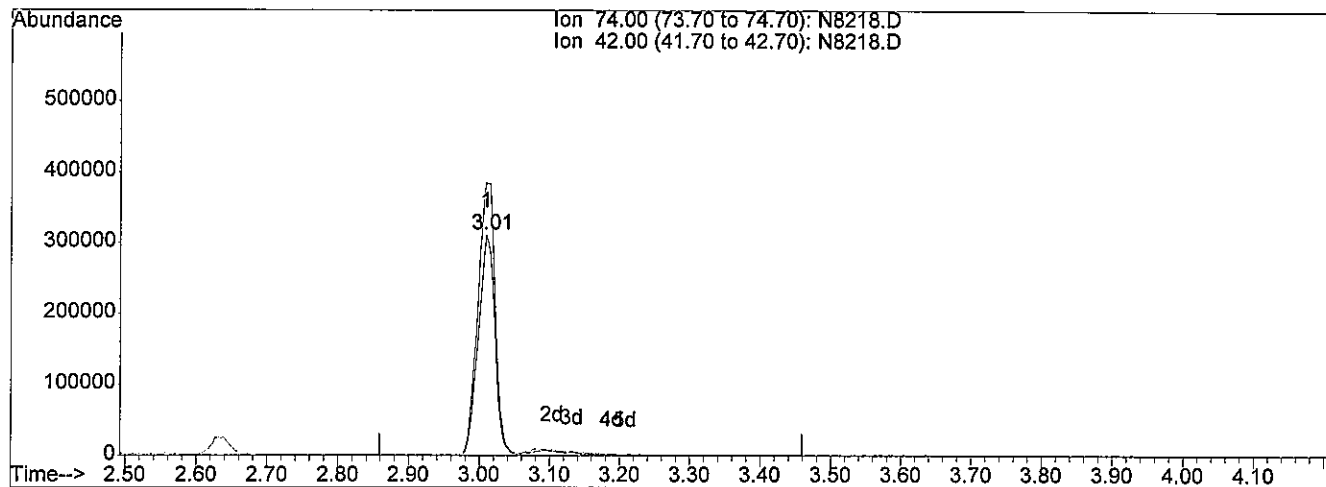
# Quantitation Report (Qedit)

Data File : D:\HPCHEM\1\DATA\090413\N8218.D  
 Acq On : 4 Sep 2013 11:53  
 Sample : ICALSVSTD060  
 Misc : ST130904-1 60 PPM  
 MS Integration Params: RTEINT.P  
 Quant Time: Sep 4 13:11 2013

Vial: 2  
 Operator: jk SOP 50  
 Inst : GC/MS Ins  
 Multiplr: 1.00

Quant Results File: temp.res

Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)  
 Title : GC-MS Semivolatiles SOP no. 506  
 Last Update : Wed Sep 04 13:10:35 2013  
 Response via : Multiple Level Calibration



TIC: N8218.D

(3) n-Nitrosodimethylamine (T)

3.01min 63.66ng/uL m

response 539212

Ion	Exp%	Act%
74.00	100	100
42.00	129.50	122.02
0.00	0.00	0.00
0.00	0.00	0.00

## MANUAL RE-INTEGRATION

- ☐ missed peak assignment
- ☐ assigned incorrect name to peak
- ☐ over-integrated peak's area
- ☒ under-integrated peak's area
- ☐ other \_\_\_\_\_

initials jk date 9-5-13

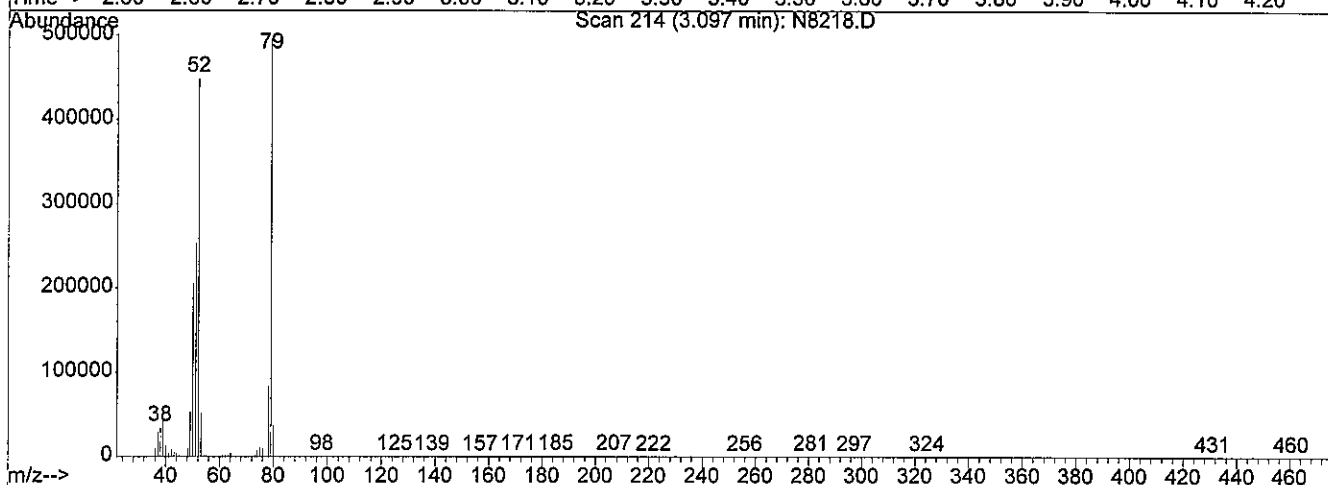
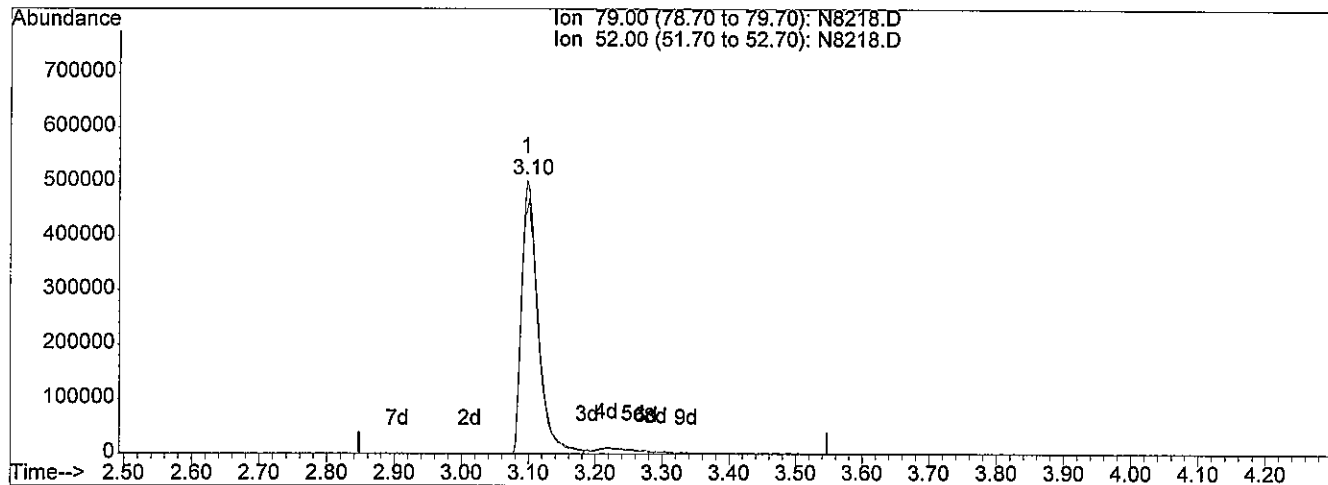
# Quantitation Report (Qedit)

Data File : D:\HPCHEM\1\DATA\090413\N8218.D  
 Acq On : 4 Sep 2013 11:53  
 Sample : ICALSVSTD060  
 Misc : ST130904-1 60 PPM  
 MS Integration Params: RTEINT.P  
 Quant Time: Sep 4 13:11 2013

Vial: 2  
 Operator: jk SOP 50  
 Inst : GC/MS Ins  
 Multiplr: 1.00

Quant Results File: temp.res

Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)  
 Title : GC-MS Semivolatiles SOP no. 506  
 Last Update : Wed Sep 04 13:10:35 2013  
 Response via : Multiple Level Calibration



(4) Pyridine (T)

3.10min 60.00ng/uL

response 877460

Ion	Exp%	Act%
79.00	100	100
52.00	93.60	93.60
0.00	0.00	0.00
0.00	0.00	0.00

*3-f*

# Quantitation Report (Qedit)

Data File : D:\HPCHEM\1\DATA\090413\N8218.D

Vial: 2

Acq On : 4 Sep 2013 11:53

Operator: jk SOP 50

Sample : ICALSVSTD060

Inst : GC/MS Ins

Misc : ST130904-1 60 PPM

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Sep 4 13:11 2013

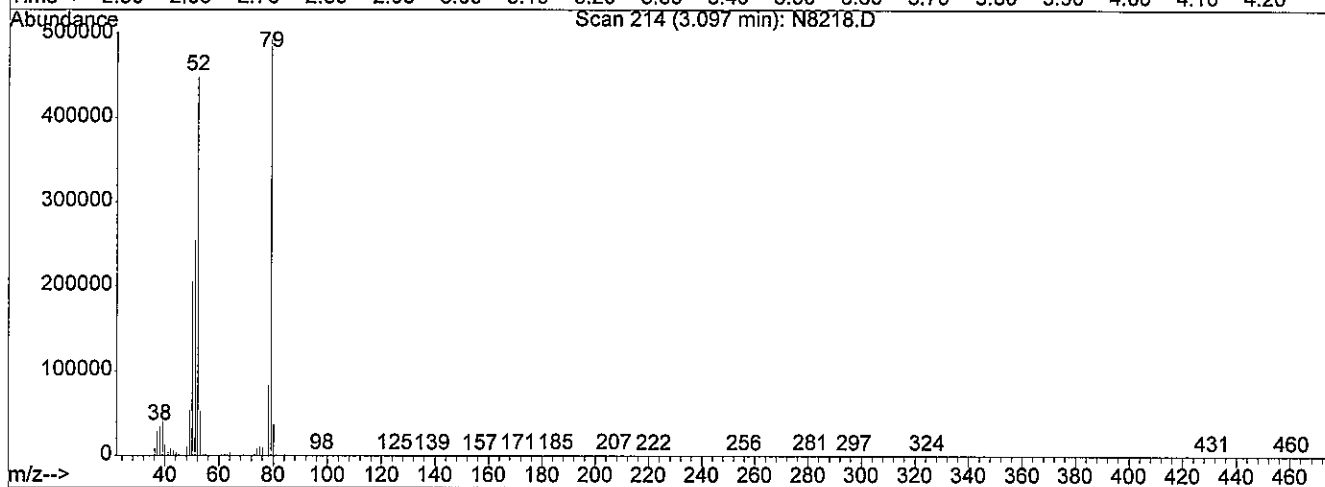
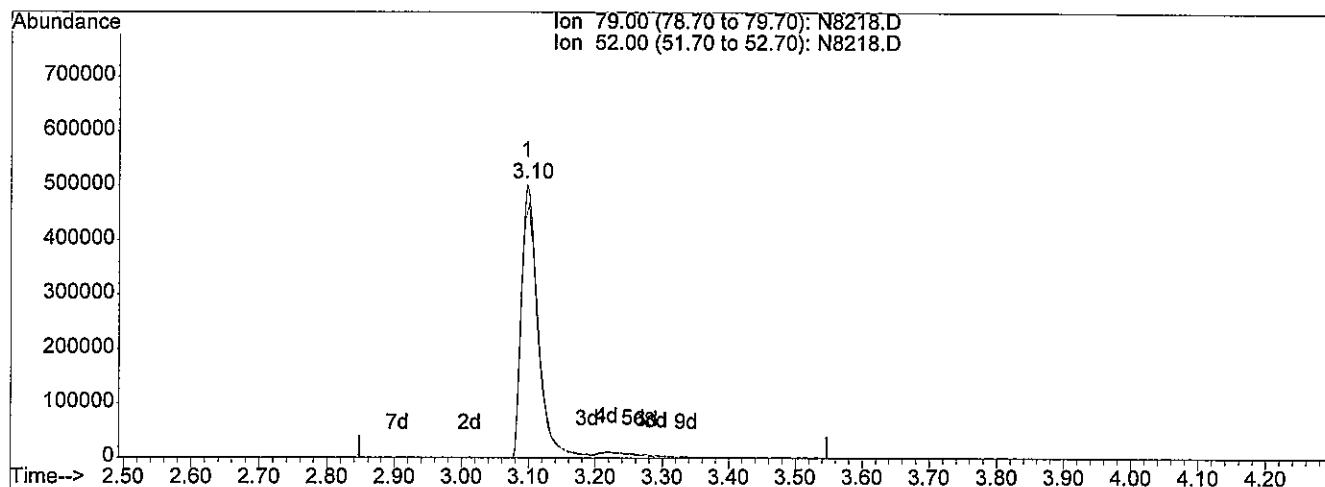
Quant Results File: temp.res

Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)

Title : GC-MS Semivolatiles SOP no. 506

Last Update : Wed Sep 04 13:10:35 2013

Response via : Multiple Level Calibration



(4) Pyridine (T)

3.10min 63.75ng/uL m

response 932300

Ion	Exp%	Act%
79.00	100	100
52.00	93.60	88.09
0.00	0.00	0.00
0.00	0.00	0.00

## MANUAL RE-INTEGRATION

- ☐ missed peak assignment
- ☐ assigned incorrect name to peak
- ☐ over-integrated peak's area
- ☒ under-integrated peak's area
- ☐ other \_\_\_\_\_

initials jk date 9-5-13

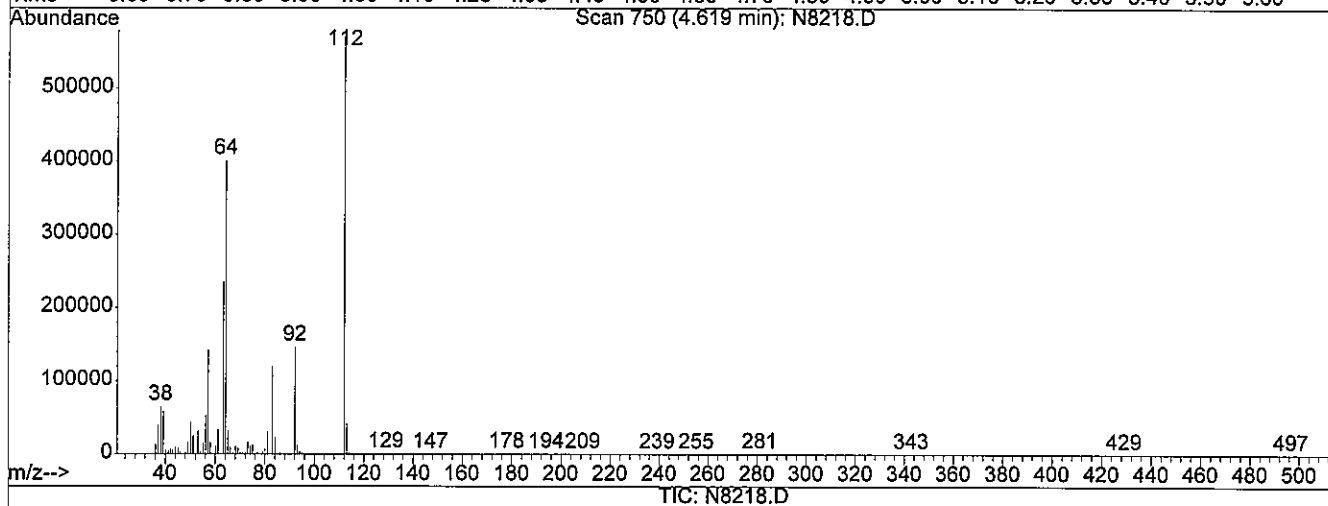
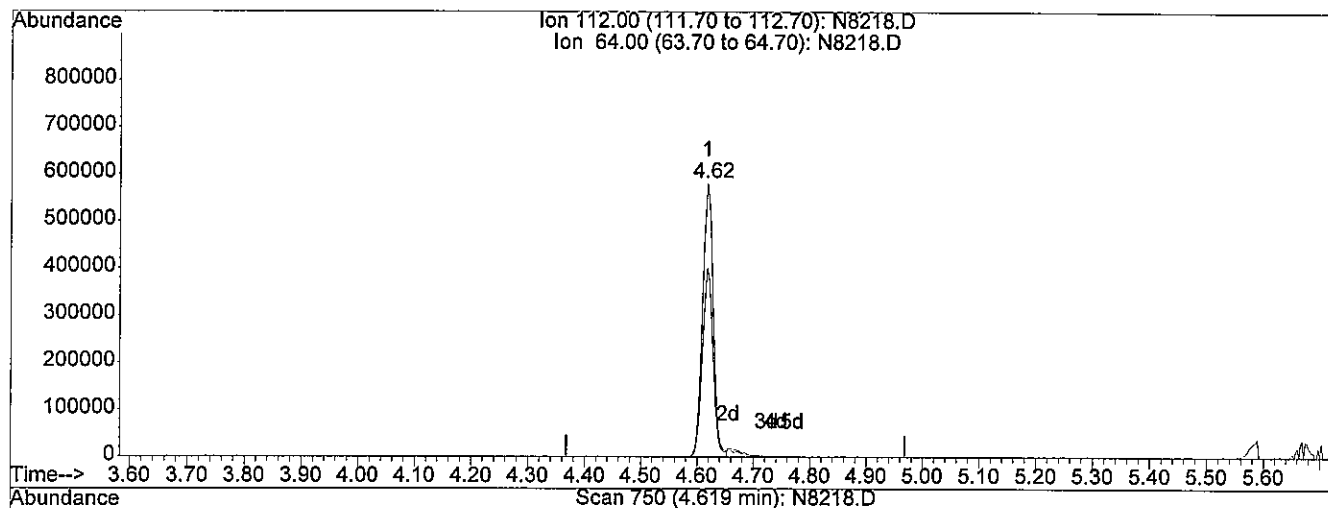
# Quantitation Report (Qedit)

Data File : D:\HPCHEM\1\DATA\090413\N8218.D  
 Acq On : 4 Sep 2013 11:53  
 Sample : ICALSVSTD060  
 Misc : ST130904-1 60 PPM  
 MS Integration Params: RTEINT.P  
 Quant Time: Sep 4 13:11 2013

Vial: 2  
 Operator: jk SOP 50  
 Inst : GC/MS Ins  
 Multiplr: 1.00

Quant Results File: temp.res

Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)  
 Title : GC-MS Semivolatiles SOP no. 506  
 Last Update : Wed Sep 04 13:10:35 2013  
 Response via : Multiple Level Calibration



(5) 2-Fluorophenol (S)

4.62min 60.00ng/uL

response 765115

Ion	Exp%	Act%
112.00	100	100
64.00	68.70	68.71
0.00	0.00	0.00
0.00	0.00	0.00

*Sefer*

# Quantitation Report (Qedit)

Data File : D:\HPCHEM\1\DATA\090413\N8218.D

Vial: 2

Acq On : 4 Sep 2013 11:53

Operator: jk SOP 50

Sample : ICALSVSTD060

Inst : GC/MS Ins

Misc : ST130904-1 60 PPM

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Sep 4 13:11 2013

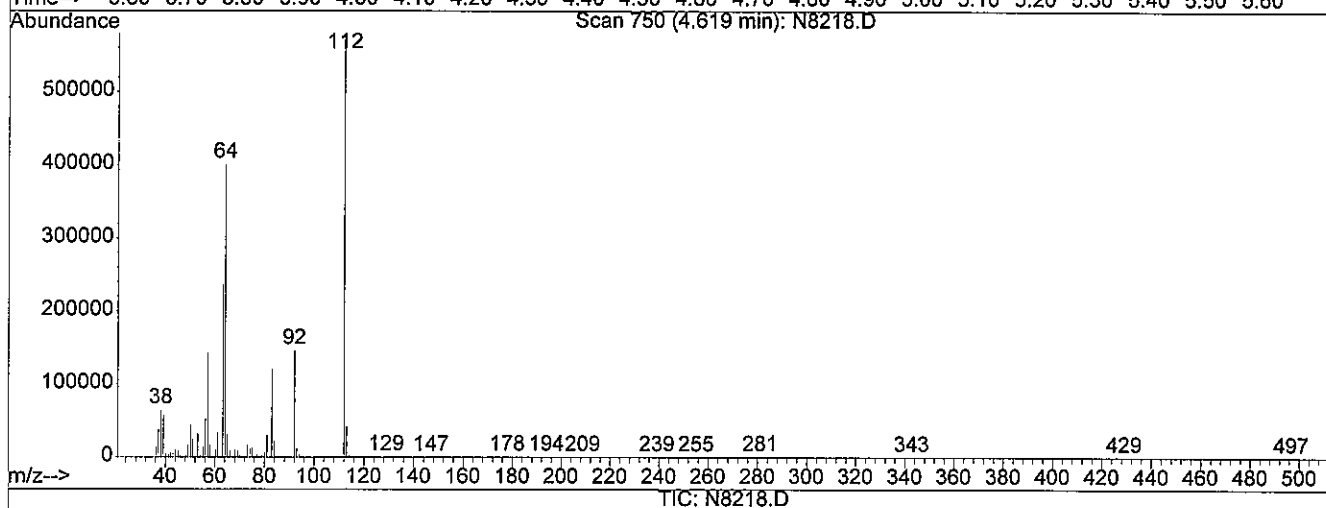
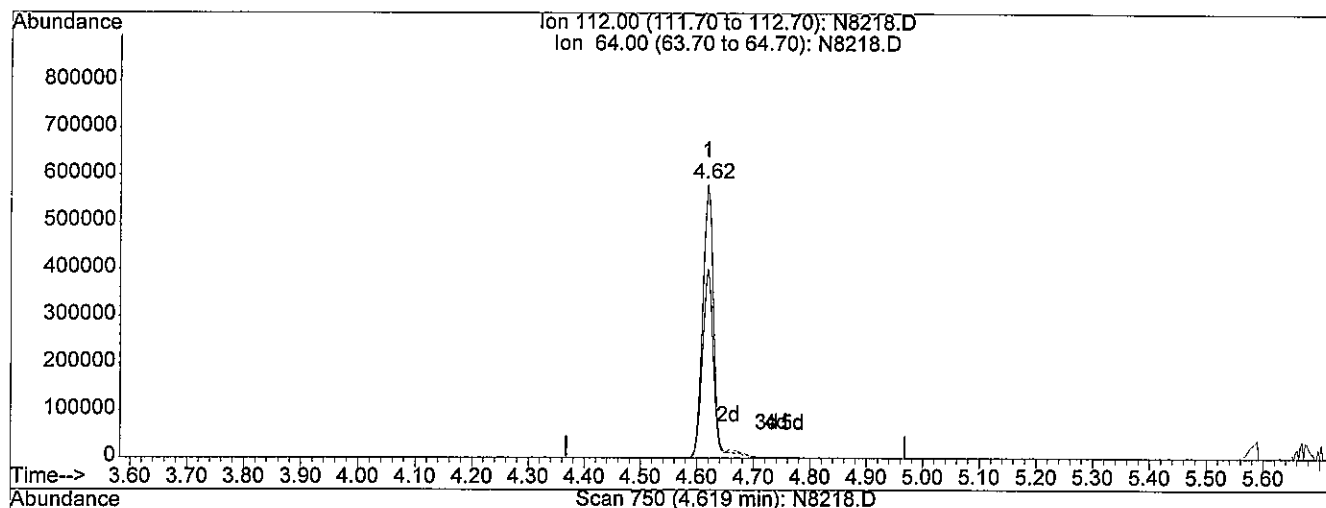
Quant Results File: temp.res

Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)

Title : GC-MS Semivolatiles SOP no. 506

Last Update : Wed Sep 04 13:10:35 2013

Response via : Multiple Level Calibration



(5) 2-Fluorophenol (S)

4.62min 63.05ng/uL m

response 803956

Ion	Exp%	Act%
112.00	100	100
64.00	68.70	65.39
0.00	0.00	0.00
0.00	0.00	0.00

## MANUAL RE-INTEGRATION

- ☐ missed peak assignment
- ☐ assigned incorrect name to peak
- ☐ over-integrated peak's area
- ☒ under-integrated peak's area
- ☐ other \_\_\_\_\_

initials jk date 9-5-13

# Quantitation Report (Qedit)

Data File : D:\HPCHEM\1\DATA\090413\N8218.D

Vial: 2

Acq On : 4 Sep 2013 11:53

Operator: jk SOP 50

Sample : ICALSVSTD060

Inst : GC/MS Ins

Misc : ST130904-1 60 PPM

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Sep 4 13:11 2013

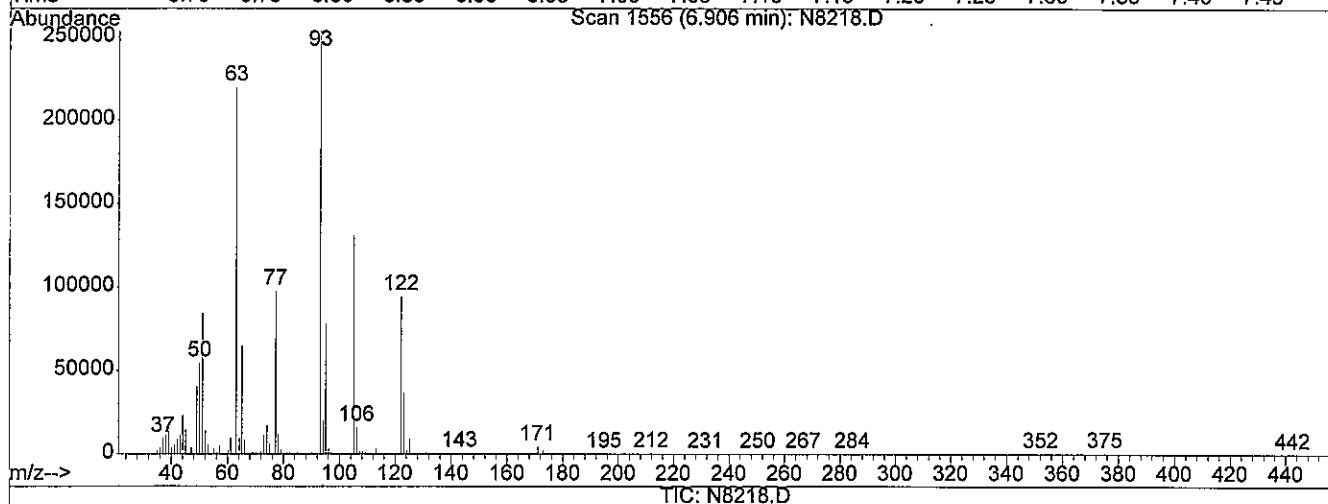
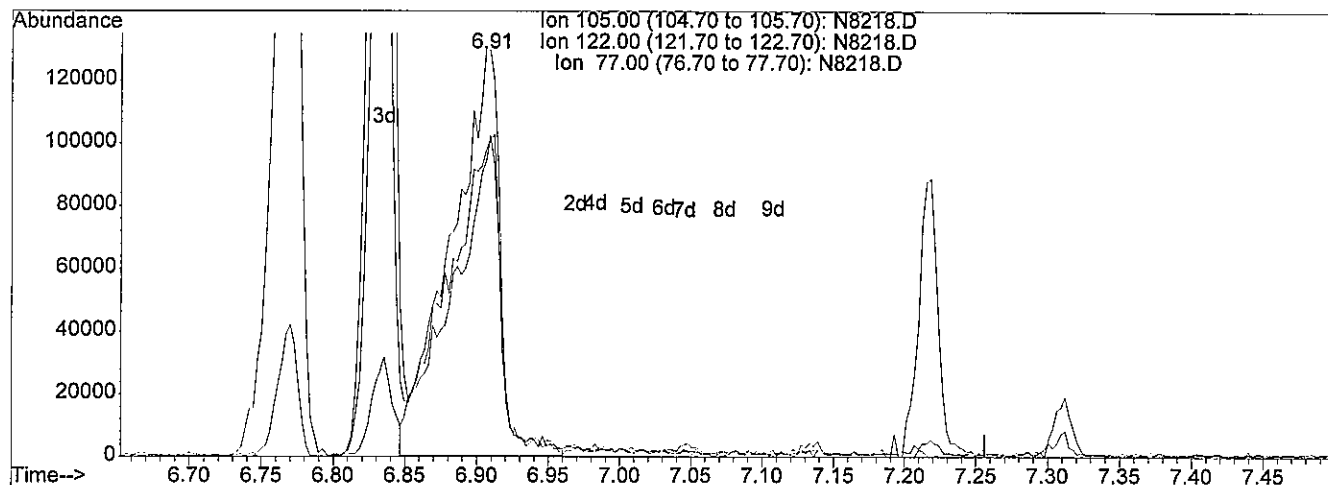
Quant Results File: temp.res

Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)

Title : GC-MS Semivolatiles SOP no. 506

Last Update : Wed Sep 04 13:10:35 2013

Response via : Multiple Level Calibration



(33) Benzoic acid (T)

6.91min 60.00ng/uL

response 305679

Ion	Exp%	Act%
105.00	100	100
122.00	73.60	73.59
77.00	82.40	82.43
0.00	0.00	0.00

*3-6-12*



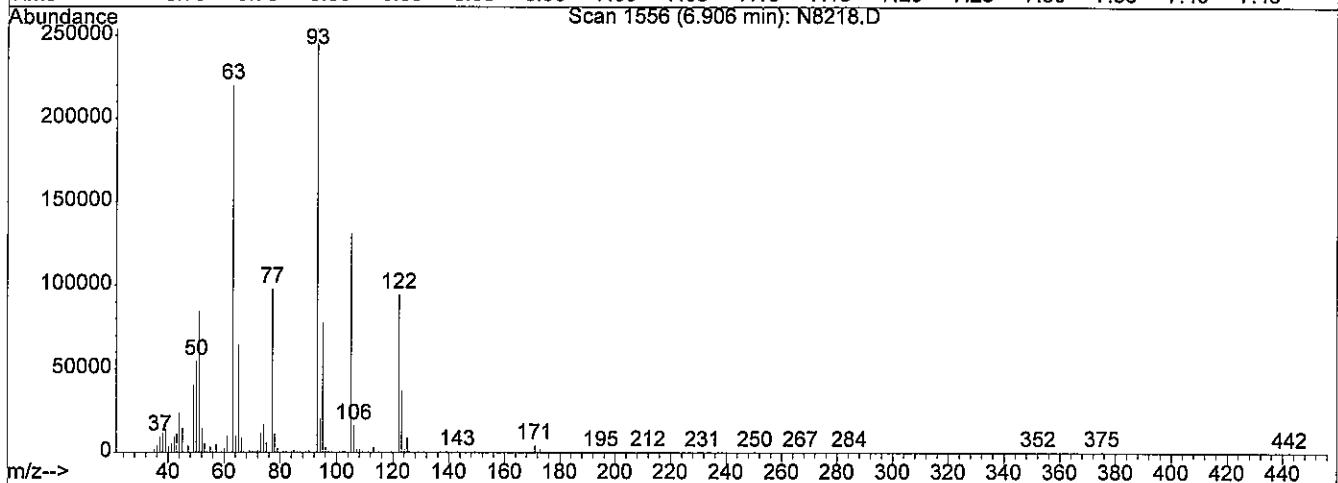
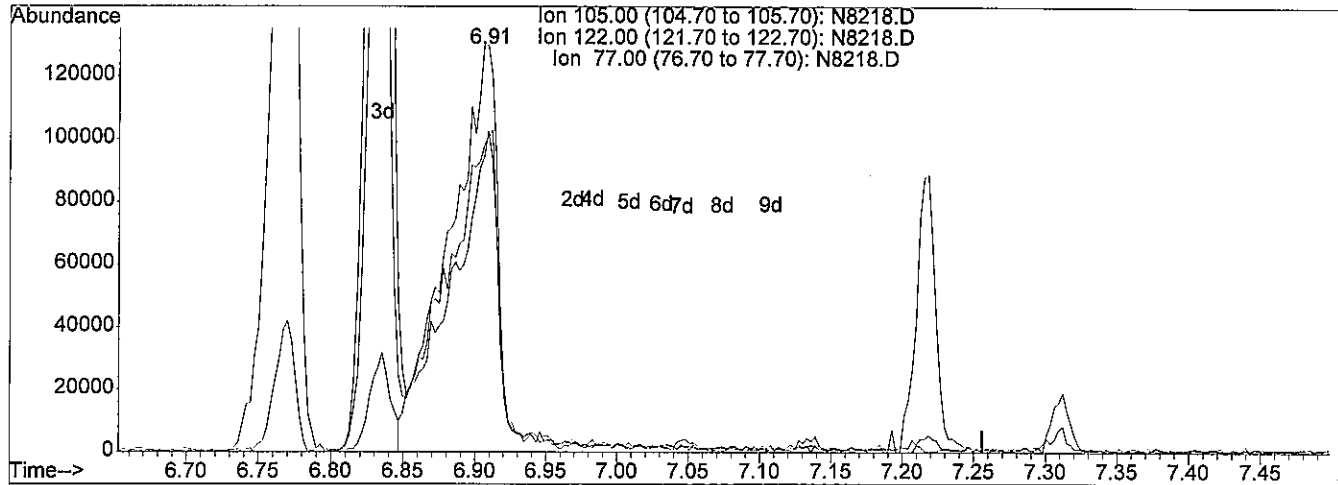
# Quantitation Report (Qedit)

Data File : D:\HPCHEM\1\DATA\090413\N8218.D  
 Acq On : 4 Sep 2013 11:53  
 Sample : ICALSVSTD060  
 Misc : ST130904-1 60 PPM  
 MS Integration Params: RTEINT.P  
 Quant Time: Sep 4 13:11 2013

Vial: 2  
 Operator: jk SOP 50  
 Inst : GC/MS Ins  
 Multiplr: 1.00

Quant Results File: temp.res

Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)  
 Title : GC-MS Semivolatiles SOP no. 506  
 Last Update : Wed Sep 04 13:10:35 2013  
 Response via : Multiple Level Calibration



(33) Benzoic acid (T)

6.91min 63.62ng/uL m

response 324137

Ion	Exp%	Act%
105.00	100	100
122.00	73.60	69.40
77.00	82.40	77.74
0.00	0.00	0.00

## MANUAL RE-INTEGRATION

- ☐ missed peak assignment
- ☐ assigned incorrect name to peak
- ☐ over-integrated peak's area
- ☒ under-integrated peak's area
- ☐ other \_\_\_\_\_

initials JK date 9-5-13



Data File : D:\HPCHEM\1\DATA\090413\N8219.D

Vial: 3

Acq On : 4 Sep 2013 12:17

Operator: jk SOP 506 Rev

Sample : ICALSVSTD001

Inst : GC/MS Ins

Misc : ST130531-2

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Sep 4 13:13 2013

Quant Results File: 090413S1.RES

Quant Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)

Title : GC-MS Semivolatiles SOP no. 506

Last Update : Wed Sep 04 13:10:35 2013

Response via : Initial Calibration

DataAcq Meth : 090413S1

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	6.00	152	498301	40.00	ng/uL	0.00
24) Naphthalene-d8	7.19	136	1733562	40.00	ng/uL	0.00
41) Acenaphthene-d10	8.74	164	848317	40.00	ng/uL	0.00
69) Phenanthrene-d10	10.02	188	1477291	40.00	ng/uL	0.00
80) Chrysene-d12	12.31	240	1570941	40.00	ng/uL	0.00
91) Perylene-d12	13.88	264	1240667	40.00	ng/uL	0.00

## System Monitoring Compounds

5) 2-Fluorophenol	4.61	112	15600	0.89	ng/uL	0.00
Spiked Amount 75.000	Range 46	- 105	Recovery	=	1.19%#	
6) 2-Chlorophenol-d4	5.77	132	15240	1.03	ng/uL	-0.01
Spiked Amount 75.000	Range 33	- 110	Recovery	=	1.37%#	
8) Phenol-d5	5.56	99	23929	1.02	ng/uL	-0.02
Spiked Amount 75.000	Range 50	- 109	Recovery	=	1.36%#	
15) 1,2-Dichlorobenzene-d4	6.15	152	21010	1.79	ng/uL	0.00
Spiked Amount 50.000	Range 16	- 110	Recovery	=	3.58%#	
25) Nitrobenzene-d5	6.51	82	22880	1.16	ng/uL	-0.01
Spiked Amount 50.000	Range 53	- 111	Recovery	=	2.32%#	
46) 2-Fluorobiphenyl	8.12	172	37996	1.28	ng/uL	0.00
Spiked Amount 50.000	Range 55	- 108	Recovery	=	2.56%#	
68) 2,4,6-Tribromophenol	9.41	330	3885	0.88	ng/uL	-0.01
Spiked Amount 75.000	Range 42	- 117	Recovery	=	1.17%#	
83) p-Terphenyl-d14	11.33	244	40917	1.12	ng/uL	0.00
Spiked Amount 50.000	Range 34	- 139	Recovery	=	2.24%#	

## Target Compounds

					Qvalue
2) 1,4-Dioxane	2.64	88	8012m	0.98	ng/uL
3) n-Nitrosodimethylamine	3.00	74	12054m	1.04	ng/uL
4) Pyridine	3.11	79	16400	0.82	ng/uL 83
7) Aniline	5.66	93	26286	0.97	ng/uL 95
9) Phenol	5.58	94	22985	1.04	ng/uL 91
10) Tetramethylurea	5.71	72	32117	1.08	ng/uL 87
11) Bis(2-chloroethyl) ether	5.69	93	17323	1.01	ng/uL 95
12) 2-Chlorophenol	5.79	128	14939	0.96	ng/uL 90
13) 1,3-Dichlorobenzene	5.94	146	17914	0.95	ng/uL 94
14) 1,4-Dichlorobenzene	6.01	146	18667	1.03	ng/uL 98
16) 1,2-Dichlorobenzene	6.16	146	17101	1.02	ng/uL 97
17) Benzyl Alcohol	6.09	108	9709	0.92	ng/uL 91
18) 2-Methylphenol	6.18	107	14018	1.08	ng/uL 93
19) Bis(2-chloroisopropyl) ethe	6.22	45	29658	1.10	ng/uL 100
20) n-Nitroso-di-n-propylamine	6.34	70	12377	1.01	ng/uL# 92
21) 3+4-Methylphenol	6.35	108	1323	0.08	ng/uL# 1

(#)= qualifier out of range (m) = manual integration

N8219.D 090413S1.M Wed Sep 04 13:14:05 2013

Data File : D:\HPCHEM\1\DATA\090413\N8219.D

Vial: 3

Acq On : 4 Sep 2013 12:17

Operator: jk SOP 506 Rev

Sample : ICALSVSTD001

Inst : GC/MS Ins

Misc : ST130531-2

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Sep 4 13:13 2013

Quant Results File: 090413S1.RES

Quant Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)

Title : GC-MS Semivolatiles SOP no. 506

Last Update : Wed Sep 04 13:10:35 2013

Response via : Initial Calibration

DataAcq Meth : 090413S1

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
22) N-Methylaniline	6.35	106	28609	1.22	ng/uL#	46
23) Hexachloroethane	6.49	117	7375	0.97	ng/uL	98
26) N,N-Dimethylaniline	6.53	120	27142	1.14	ng/uL	96
27) Nitrobenzene	6.53	77	26935	1.17	ng/uL#	51
28) Isophorone	6.74	82	32325	1.07	ng/uL#	97
29) N-Ethylaniline	6.76	106	35172	1.21	ng/uL	95
30) 2-Nitrophenol	6.82	139	6795	0.89	ng/uL	82
31) 2,4-Dimethylphenol	6.82	107	16178	1.07	ng/uL	95
32) Bis(2-chloroethoxy)methane	6.91	93	19097	1.09	ng/uL	94
33) Benzoic acid	6.84	105	1063	0.16	ng/uL#	78
34) 2,4-Dichlorophenol	7.04	162	13767	1.02	ng/uL	92
35) 1,2,4-Trichlorobenzene	7.13	180	18407	1.13	ng/uL	87
36) Naphthalene	7.21	128	44027	0.99	ng/uL#	84
37) 4-Chloroaniline	7.23	127	21165	1.32	ng/uL	93
38) Hexachlorobutadiene	7.30	225	10873	1.05	ng/uL	97
39) 4-Chloro-3-methylphenol	7.63	107	12779	0.98	ng/uL	98
40) 2-Methylnaphthalene	7.82	142	32023	1.07	ng/uL	94
42) 1-Methylnaphthalene	7.91	142	26455	1.02	ng/uL#	93
43) Hexachlorocyclopentadiene	7.96	237	6784	0.75	ng/uL#	89
44) 2,4,6-Trichlorophenol	8.05	196	8748	0.95	ng/uL	92
45) 2,4,5-Trichlorophenol	8.08	196	8685	0.99	ng/uL#	87
47) 2-Chloronaphthalene	8.25	162	25703	1.01	ng/uL	98
48) 2-Nitroaniline	8.31	65	9379	1.11	ng/uL#	83
49) 1,4-Dinitrobenzene	8.41	168	2678	0.68	ng/uL	83
50) Dimethylphthalate	8.43	163	26630	1.03	ng/uL#	97
51) 1,3-Dinitrobenzene	8.48	168	3346	0.77	ng/uL	90
52) 2,6-Dinitrotoluene	8.50	165	6191	1.04	ng/uL#	79
53) 1,2-Dinitrobenzene	8.56	168	2437	0.84	ng/uL#	84
54) Acenaphthylene	8.62	152	35405	0.96	ng/uL	97
55) 3-Nitroaniline	8.66	138	4108	0.72	ng/uL#	84
56) Acenaphthene	8.76	154	23200	1.03	ng/uL	99
57) 2,4-Dinitrophenol	0.00	184	0	N.D.		
58) 4-Nitrophenol	8.75	109	1875	0.50	ng/uL#	85
59) Dibenzofuran	8.91	168	41835	1.29	ng/uL	98
60) 2,4-Dinitrotoluene	8.85	165	5924	0.71	ng/uL	88
61) 2,3,5,6-Tetrachlorophenol	8.96	232	5114	0.63	ng/uL#	93
62) 2,3,4,6-Tetrachlorophenol	9.00	232	4779	0.63	ng/uL#	79
63) Diethylphthalate	9.03	149	25581	1.05	ng/uL	97
64) 4-Chlorophenyl phenyl ethe	9.17	204	14445	0.97	ng/uL	91
65) 4-Nitroaniline	9.20	138	626	0.11	ng/uL#	1
66) Fluorene	9.20	166	26654	1.06	ng/uL	91

(#)=qualifier out of range (m)=manual integration

N8219.D 090413S1.M Wed Sep 04 13:14:06 2013

Page 2

Data File : D:\HPCHEM\1\DATA\090413\N8219.D

Vial: 3

Acq On : 4 Sep 2013 12:17

Operator: jk SOP 506 Rev

Sample : ICALSVSTD001

Inst : GC/MS Ins

Misc : ST130531-2

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Sep 4 13:13 2013

Quant Results File: 090413S1.RES

Quant Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)

Title : GC-MS Semivolatiles SOP no. 506

Last Update : Wed Sep 04 13:10:35 2013

Response via : Initial Calibration

DataAcq Meth : 090413S1

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
67) Azobenzene	9.31	77	26800	1.00	ng/uL	90
70) 4,6-Dinitro-2-methylphenol	9.21	198	955	0.23	ng/uL#	1
71) n-Nitrosodiphenylamine	9.26	169	22198	1.08	ng/uL	98
72) 4-Bromophenyl phenyl ether	9.59	248	9364	1.09	ng/uL	98
73) Hexachlorobenzene	9.69	284	10238	1.09	ng/uL	93
74) Pentachlorophenol	9.84	266	3628	0.57	ng/uL#	43
75) Phenanthrene	10.04	178	34310	0.92	ng/uL#	89
76) Anthracene	10.08	178	35501	0.92	ng/uL	98
77) Carbazole	10.19	167	32933	0.90	ng/uL#	93
78) Di-n-butylphthalate	10.40	149	44384	1.02	ng/uL#	98
79) Fluoranthene	11.06	202	50424	1.03	ng/uL	97
81) Benzidine	11.12	184	19100	0.75	ng/uL	96
82) Pyrene	11.26	202	53507	1.08	ng/uL	97
84) Butylbenzylphthalate	11.70	149	17801	1.08	ng/uL#	93
85) Bis(2-ethylhexyl) adipate	11.71	129	13611	0.96	ng/uL#	83
86) Bis(2-ethylhexyl)phthalate	12.15	149	19875	0.89	ng/uL#	95
87) 3,3'-Dichlorobenzidine	12.22	252	13160	0.91	ng/uL#	94
88) Benzo[a]anthracene	12.30	228	45788	1.03	ng/uL	96
89) Chrysene	12.33	228	37554	0.92	ng/uL	99
90) Di-n-octylphthalate	12.74	149	27799	0.90	ng/uL#	68
92) Benzo[b]fluoranthene	13.40	252	33523	0.81	ng/uL	90
93) Benzo[k]fluoranthene	13.42	252	32058	0.79	ng/uL	96
94) Benzo[a]pyrene	13.80	252	29920	0.89	ng/uL	90
95) Indeno(1,2,3-c,d)pyrene	15.43	276	26353	0.88	ng/uL#	63
96) Dibenzo[a,h]anthracene	15.43	278	20921	0.79	ng/uL#	86
97) Benzo[g,h,i]perylene	15.93	276	12398	0.53	ng/uL#	70

-----  
(#) = qualifier out of range (m) = manual integration

N8219.D 090413S1.M Wed Sep 04 13:14:06 2013

Page 3

# Quantitation Report (Qedit)

Data File : D:\HPCHEM\1\DATA\090413\N8219.D

Vial: 3

Acq On : 4 Sep 2013 12:17

Operator: jk SOP 50

Sample : ICALSVSTD001

Inst : GC/MS Ins

Misc : ST130531-2

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Sep 4 13:13 2013

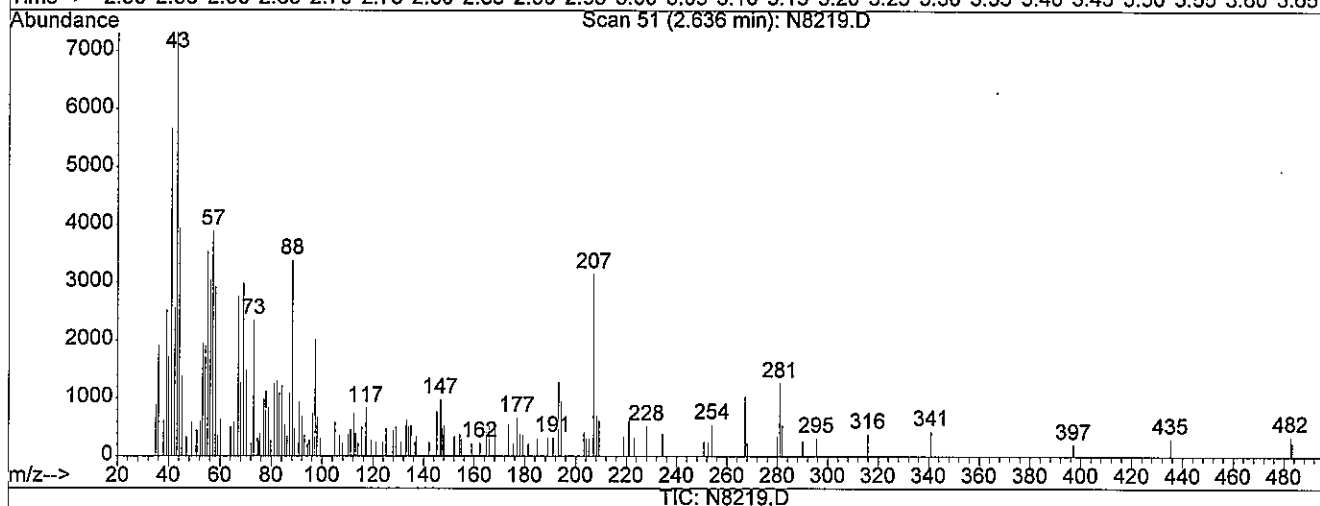
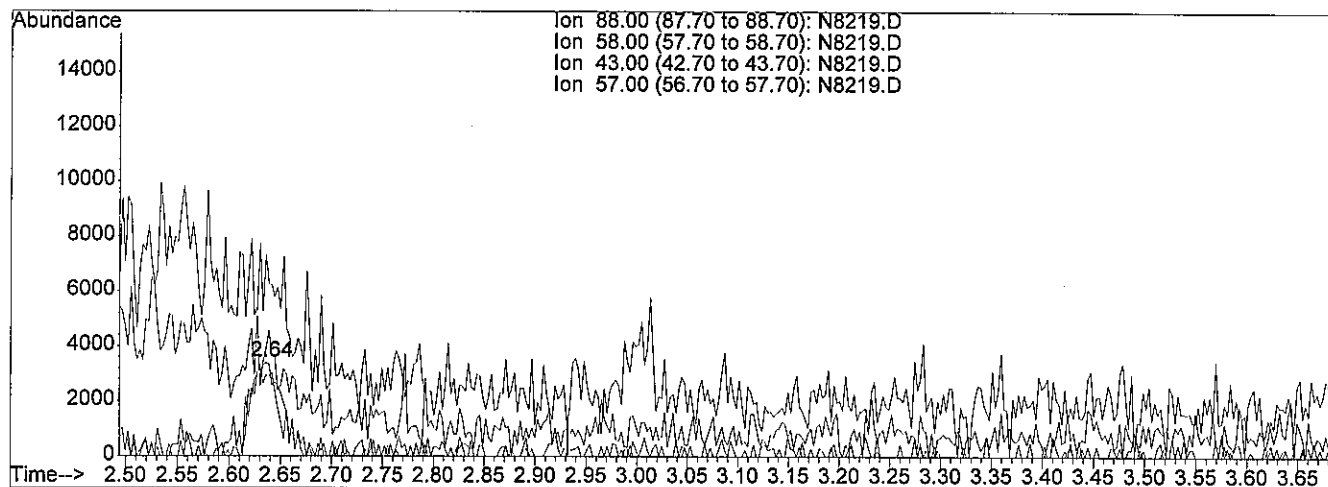
Quant Results File: temp.res

Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)

Title : GC-MS Semivolatiles SOP no. 506

Last Update : Wed Sep 04 13:10:35 2013

Response via : Multiple Level Calibration



(2) 1,4-Dioxane (t)

2.64min 0.85ng/uL

response 6955

Ion	Exp%	Act%
88.00	100	100
58.00	77.90	0.00#
43.00	47.90	0.00#
57.00	33.00	42.33#

*3e for*

# Quantitation Report (Qedit)

Data File : D:\HPCHEM\1\DATA\090413\N8219.D

Vial: 3

Acq On : 4 Sep 2013 12:17

Operator: jk SOP 50

Sample : ICALSVSTD001

Inst : GC/MS Ins

Misc : ST130531-2

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Sep 4 13:13 2013

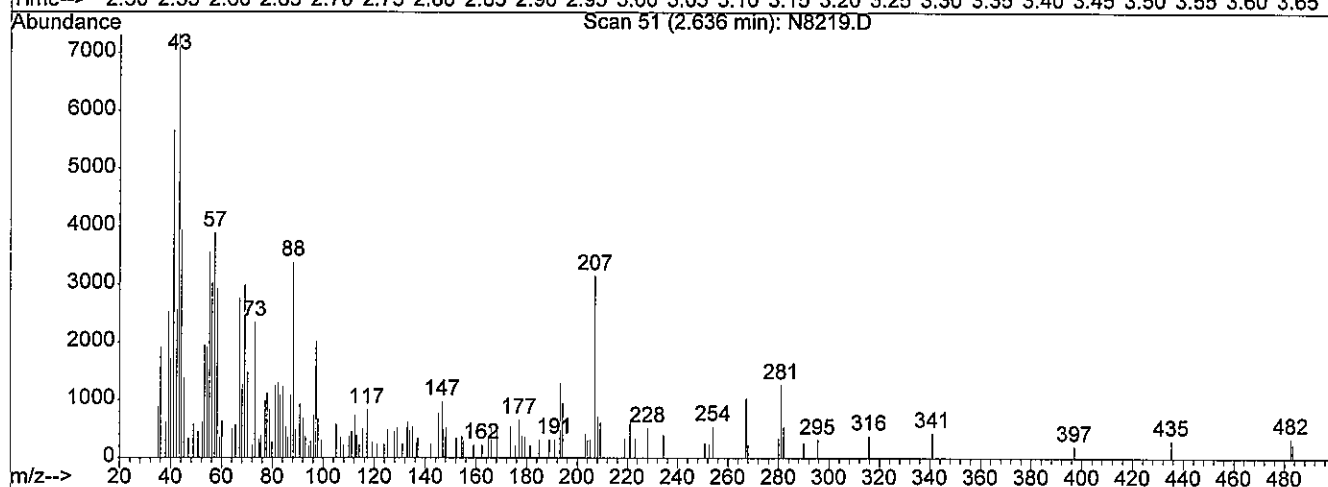
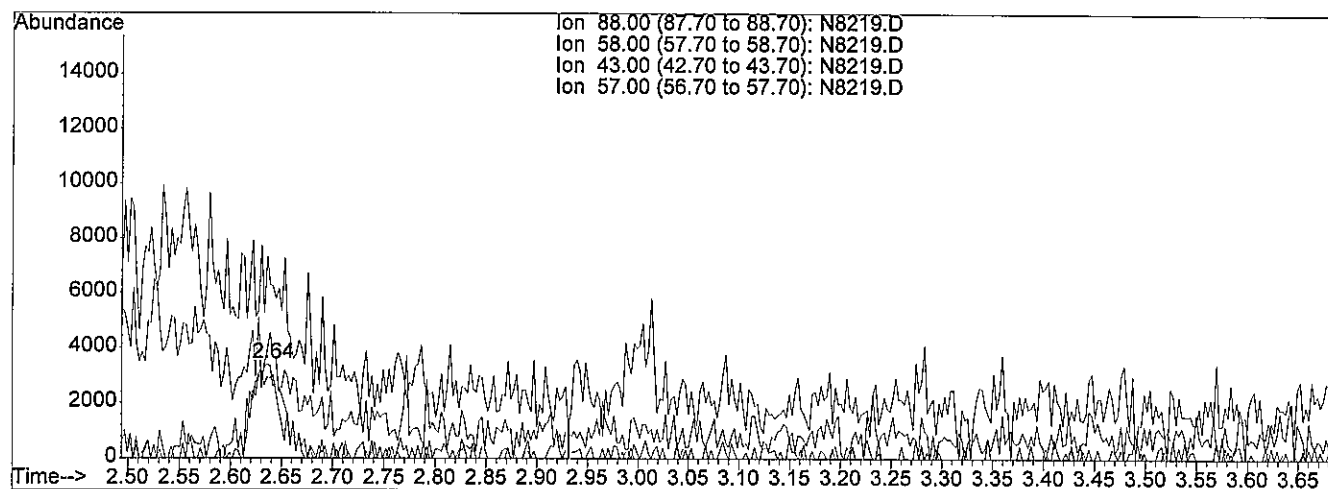
Quant Results File: temp.res

Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)

Title : GC-MS Semivolatiles SOP no. 506

Last Update : Wed Sep 04 13:10:35 2013

Response via : Multiple Level Calibration



(2) 1,4-Dioxane (t)

2.64min 0.98ng/uL m

response 8012

Ion	Exp%	Act%
88.00	100	100
58.00	77.90	0.00#
43.00	47.90	0.00#
57.00	33.00	36.74

## MANUAL RE-INTEGRATION

- ☐ missed peak assignment
- ☐ assigned incorrect name to peak
- ☐ over-integrated peak's area
- ☒ under-integrated peak's area
- ☐ other \_\_\_\_\_

initials ja date 9-5-0

# Quantitation Report (Qedit)

Data File : D:\HPCHEM\1\DATA\090413\N8219.D

Vial: 3

Acq On : 4 Sep 2013 12:17

Operator: jk SOP 50

Sample : ICALSVSTD001

Inst : GC/MS Ins

Misc : ST130531-2

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Sep 4 13:13 2013

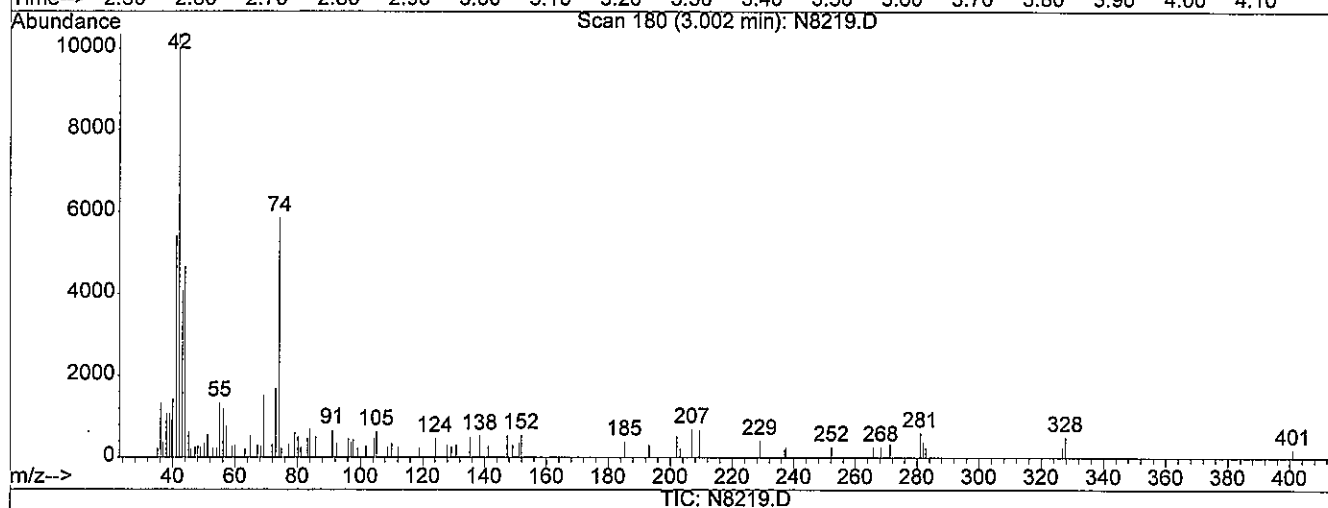
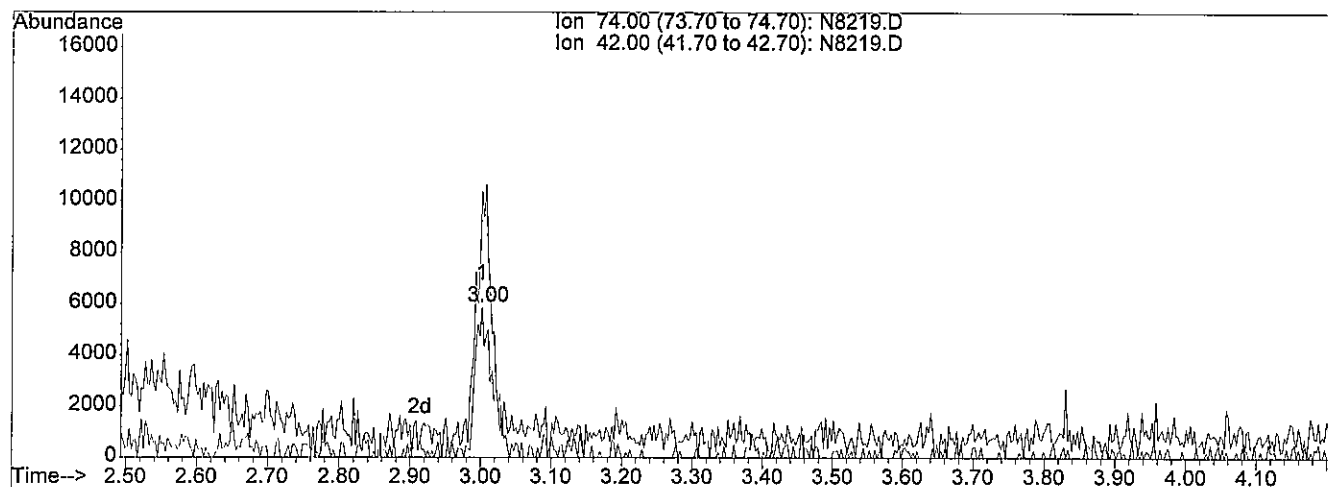
Quant Results File: temp.res

Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)

Title : GC-MS Semivolatiles SOP no. 506

Last Update : Wed Sep 04 13:10:35 2013

Response via : Multiple Level Calibration



(3) n-Nitrosodimethylamine (T)

3.00min 0.83ng/uL

response 9688

Ion	Exp%	Act%
74.00	100	100
42.00	129.50	153.29
0.00	0.00	0.00
0.00	0.00	0.00

*3.00*



# Quantitation Report (Qedit)

Data File : D:\HPCHEM\1\DATA\090413\N8219.D

Vial: 3

Acq On : 4 Sep 2013 12:17

Operator: jk SOP 50

Sample : ICALSVSTD001

Inst : GC/MS Ins

Misc : ST130531-2

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Sep 4 13:13 2013

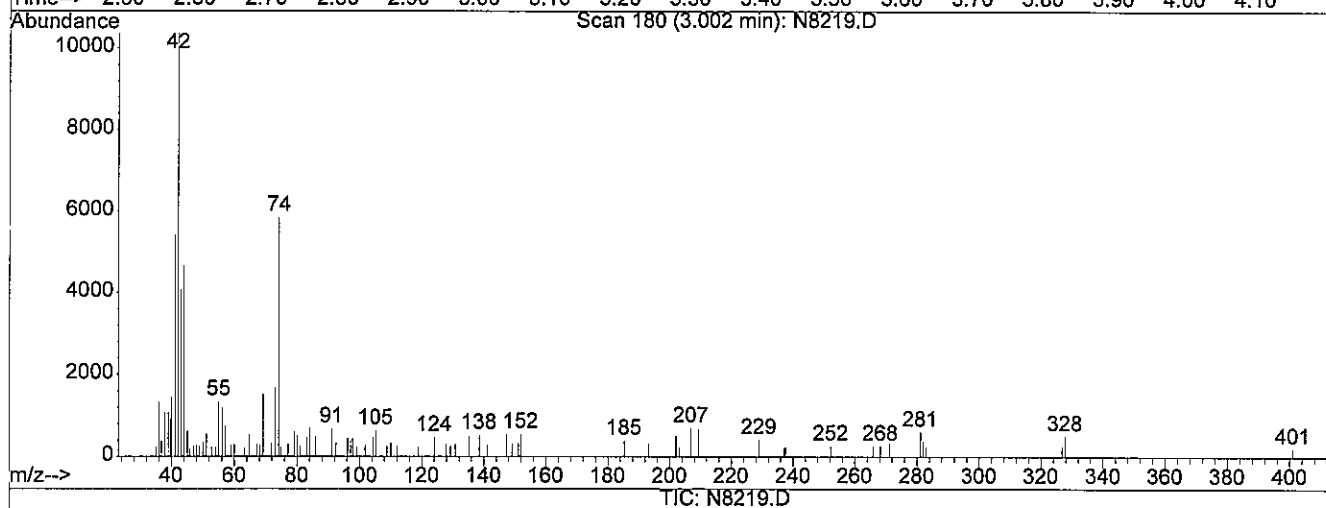
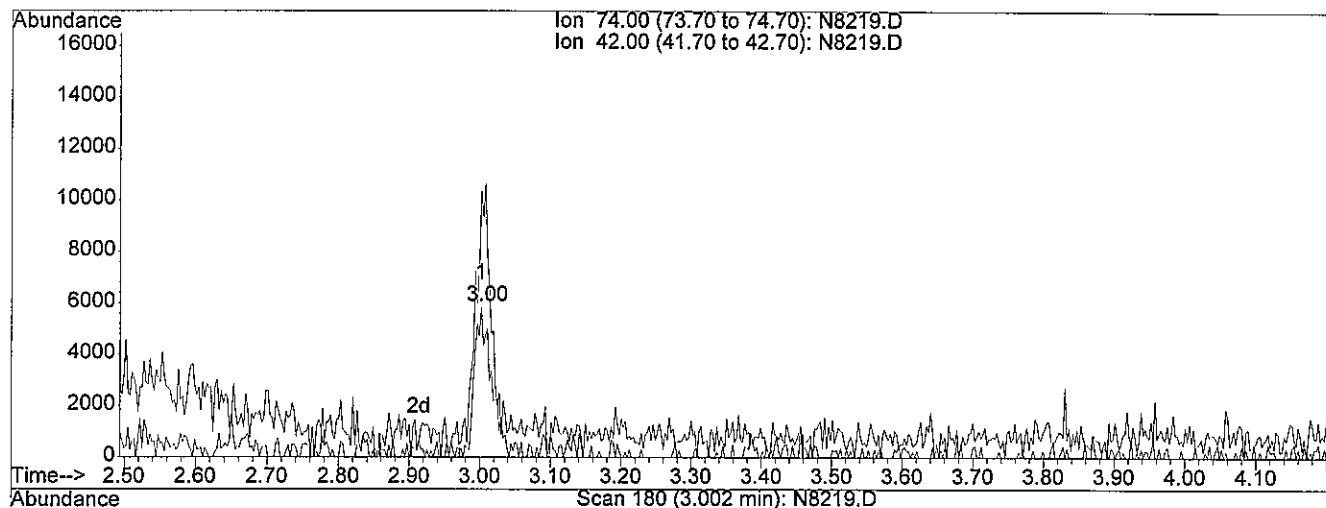
Quant Results File: temp.res

Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)

Title : GC-MS Semivolatiles SOP no. 506

Last Update : Wed Sep 04 13:10:35 2013

Response via : Multiple Level Calibration



(3) n-Nitrosodimethylamine (T)

3.00min 1.04ng/uL m

response 12054

Ion	Exp%	Act%
74.00	100	100
42.00	129.50	123.20
0.00	0.00	0.00
0.00	0.00	0.00

## MANUAL RE-INTEGRATION

- ☐ missed peak assignment
- ☐ assigned incorrect name to peak
- ☐ over-integrated peak's area
- ☒ under-integrated peak's area
- ☐ other \_\_\_\_\_

initials ju date 9-5-13

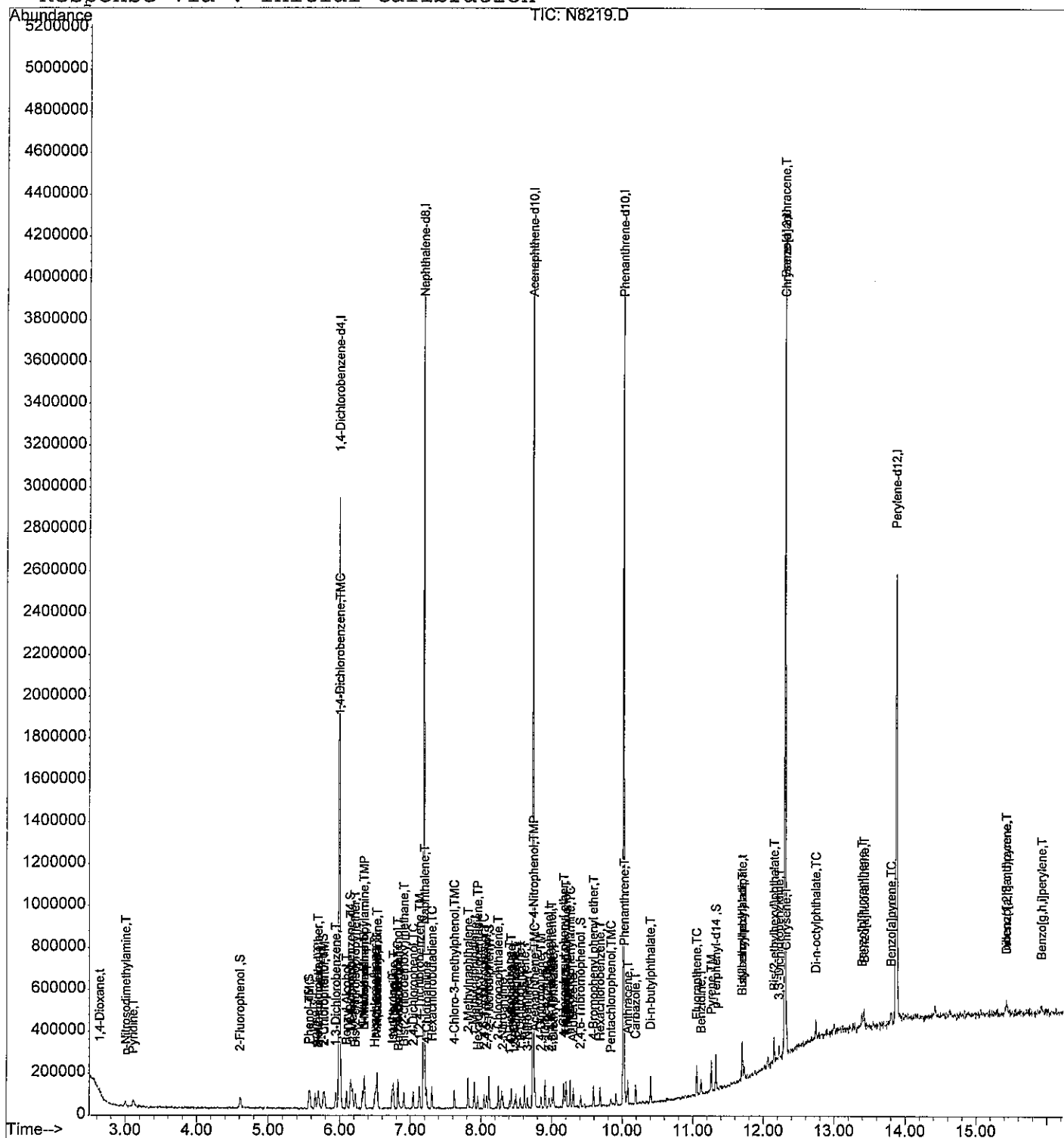
# Quantitation Report

Data File : D:\HPCHEM\1\DATA\090413\N8219.D  
 Acq On : 4 Sep 2013 12:17  
 Sample : ICALSVSTD001  
 Misc : ST130531-2  
 MS Integration Params: RTEINT.P  
 Quant Time: Sep 4 13:13 2013

Vial: 3  
 Operator: jk SOP 506  
 Inst : GC/MS Ins  
 Multiplr: 1.00

Quant Results File: 090413S1.RES

Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)  
 Title : GC-MS Semivolatiles SOP no. 506  
 Last Update : Wed Sep 04 13:10:35 2013  
 Response via : Initial Calibration



Data File : D:\HPCHEM\1\DATA\090413\N8220.D

Vial: 4

Acq On : 4 Sep 2013 12:41

Operator: jk SOP 506 Rev

Sample : ICALSVSTD005

Inst : GC/MS Ins

Misc : ST130531-3

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Sep 4 13:18 2013

Quant Results File: 090413S1.RES

Quant Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)

Title : GC-MS Semivolatiles SOP no. 506

Last Update : Wed Sep 04 13:14:49 2013

Response via : Initial Calibration

DataAcq Meth : 090413S1

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	5.99	152	510229	40.00	ng/uL	0.00
24) Naphthalene-d8	7.19	136	1773050	40.00	ng/uL	0.00
41) Acenaphthene-d10	8.74	164	918928	40.00	ng/uL	0.00
69) Phenanthrene-d10	10.02	188	1631469	40.00	ng/uL	0.00
80) Chrysene-d12	12.31	240	1775103	40.00	ng/uL	-0.01
91) Perylene-d12	13.87	264	1189287	40.00	ng/uL	0.00

## System Monitoring Compounds

5) 2-Fluorophenol	4.62	112	76378	4.60	ng/uL	0.00
Spiked Amount 75.000	Range 46	- 105	Recovery	=	6.13%#	
6) 2-Chlorophenol-d4	5.77	132	73829	4.93	ng/uL	-0.01
Spiked Amount 75.000	Range 33	- 110	Recovery	=	6.57%#	
8) Phenol-d5	5.57	99	102290	4.59	ng/uL	-0.01
Spiked Amount 75.000	Range 50	- 109	Recovery	=	6.12%#	
15) 1,2-Dichlorobenzene-d4	6.16	152	67453	5.29	ng/uL	0.00
Spiked Amount 50.000	Range 16	- 110	Recovery	=	10.58%#	
25) Nitrobenzene-d5	6.51	82	107134	5.15	ng/uL	-0.01
Spiked Amount 50.000	Range 53	- 111	Recovery	=	10.30%#	
46) 2-Fluorobiphenyl	8.11	172	170101	5.15	ng/uL	0.00
Spiked Amount 50.000	Range 55	- 108	Recovery	=	10.30%#	
68) 2,4,6-Tribromophenol	9.41	330	20422	4.60	ng/uL	0.00
Spiked Amount 75.000	Range 42	- 117	Recovery	=	6.13%#	
83) p-Terphenyl-d14	11.33	244	205583	4.98	ng/uL	0.00
Spiked Amount 50.000	Range 34	- 139	Recovery	=	9.96%#	

## Target Compounds

					Qvalue
2) 1,4-Dioxane	2.64	88	38909m	4.93	ng/uL
3) n-Nitrosodimethylamine	3.01	74	55492m	4.86	ng/uL
4) Pyridine	3.11	79	101984m	5.22	ng/uL
7) Aniline	5.66	93	130490	4.85	ng/uL 98
9) Phenol	5.58	94	107281	4.86	ng/uL 96
10) Tetramethylurea	5.70	72	156608	5.07	ng/uL 94
11) Bis(2-chloroethyl) ether	5.70	93	86808	4.97	ng/uL 99
12) 2-Chlorophenol	5.79	128	81463	5.05	ng/uL 99
13) 1,3-Dichlorobenzene	5.95	146	95136	4.96	ng/uL 100
14) 1,4-Dichlorobenzene	6.01	146	85046	4.79	ng/uL 92
16) 1,2-Dichlorobenzene	6.17	146	83575	4.95	ng/uL 98
17) Benzyl Alcohol	6.10	108	48183	4.71	ng/uL 92
18) 2-Methylphenol	6.18	107	65852	4.98	ng/uL 99
19) Bis(2-chloroisopropyl) ethe	6.22	45	145729	5.13	ng/uL 99
20) n-Nitroso-di-n-propylamine	6.34	70	66265	5.13	ng/uL 96
21) 3+4-Methylphenol	6.32	108	76102m	4.50	ng/uL

(#)=qualifier out of range (m)=manual integration

N8220.D 090413S1.M Wed Sep 04 13:18:48 2013

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Data File : D:\HPCHEM\1\DATA\090413\N8220.D

Vial: 4

Acq On : 4 Sep 2013 12:41

Operator: jk SOP 506 Rev

Sample : ICALSVSTD005

Inst : GC/MS Ins

Misc : ST130531-3

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Sep 4 13:18 2013

Quant Results File: 090413S1.RES

Quant Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)

Title : GC-MS Semivolatiles SOP no. 506

Last Update : Wed Sep 04 13:14:49 2013

Response via : Initial Calibration

DataAcq Meth : 090413S1

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
22) N-Methylaniline	6.35	106	123755	5.08	ng/uL#	47
23) Hexachloroethane	6.50	117	36001	4.81	ng/uL	99
26) N,N-Dimethylaniline	6.53	120	123932	5.05	ng/uL	94
27) Nitrobenzene	6.53	77	132103	5.30	ng/uL	96
28) Isophorone	6.74	82	157758	5.04	ng/uL	99
29) N-Ethylaniline	6.76	106	152861	5.07	ng/uL	97
30) 2-Nitrophenol	6.83	139	33454	4.62	ng/uL	84
31) 2,4-Dimethylphenol	6.82	107	79102	5.06	ng/uL	97
32) Bis(2-chloroethoxy)methane	6.91	93	91791	5.06	ng/uL	98
33) Benzoic acid	6.85	105	18020	3.43	ng/uL	94
34) 2,4-Dichlorophenol	7.04	162	65425	4.88	ng/uL	98
35) 1,2,4-Trichlorobenzene	7.13	180	84856	5.04	ng/uL	100
36) Naphthalene	7.21	128	210366	4.81	ng/uL	97
37) 4-Chloroaniline	7.23	127	80592	4.95	ng/uL	97
38) Hexachlorobutadiene	7.31	225	52256	4.97	ng/uL	99
39) 4-Chloro-3-methylphenol	7.62	107	61504	4.79	ng/uL	100
40) 2-Methylnaphthalene	7.82	142	155746	5.04	ng/uL	97
42) 1-Methylnaphthalene	7.91	142	137986	4.97	ng/uL	96
43) Hexachlorocyclopentadiene	7.96	237	40328	4.51	ng/uL	98
44) 2,4,6-Trichlorophenol	8.05	196	47813	4.89	ng/uL	99
45) 2,4,5-Trichlorophenol	8.08	196	46481	4.94	ng/uL	98
47) 2-Chloronaphthalene	8.25	162	139750	5.04	ng/uL	100
48) 2-Nitroaniline	8.31	65	41841	4.78	ng/uL	94
49) 1,4-Dinitrobenzene	8.41	168	15633	4.22	ng/uL	95
50) Dimethylphthalate	8.44	163	136597	4.93	ng/uL	100
51) 1,3-Dinitrobenzene	8.48	168	19982	4.60	ng/uL	84
52) 2,6-Dinitrotoluene	8.50	165	32077	4.98	ng/uL	85
53) 1,2-Dinitrobenzene	8.56	168	12296	4.39	ng/uL#	80
54) Acenaphthylene	8.62	152	199652	5.00	ng/uL	99
55) 3-Nitroaniline	8.66	138	26320	4.59	ng/uL	95
56) Acenaphthene	8.76	154	118052	4.91	ng/uL	96
57) 2,4-Dinitrophenol	8.74	184	5174	2.34	ng/uL#	69
58) 4-Nitrophenol	8.76	109	14050	4.07	ng/uL	93
59) Dibenzofuran	8.91	168	177313	5.03	ng/uL	98
60) 2,4-Dinitrotoluene	8.85	165	34935	4.36	ng/uL	97
61) 2,3,5,6-Tetrachlorophenol	8.96	232	33711	4.33	ng/uL	97
62) 2,3,4,6-Tetrachlorophenol	9.00	232	38549	4.83	ng/uL	98
63) Diethylphthalate	9.03	149	124083	4.84	ng/uL	97
64) 4-Chlorophenyl phenyl ethe	9.17	204	81818	5.04	ng/uL	99
65) 4-Nitroaniline	9.18	138	21746m	6.61	ng/uL	
66) Fluorene	9.20	166	142886	5.12	ng/uL	99

(#)=qualifier out of range (m)=manual integration

N8220.D 090413S1.M Wed Sep 04 13:18:49 2013

Page 2

Data File : D:\HPCHEM\1\DATA\090413\N8220.D

Vial: 4

Acq On : 4 Sep 2013 12:41

Operator: jk SOP 506 Rev

Sample : ICALSVSTD005

Inst : GC/MS Ins

Misc : ST130531-3

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Sep 4 13:18 2013

Quant Results File: 090413S1.RES

Quant Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)

Title : GC-MS Semivolatiles SOP no. 506

Last Update : Wed Sep 04 13:14:49 2013

Response via : Initial Calibration

DataAcq Meth : 090413S1

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
67) Azobenzene	9.31	77	142774	4.95	ng/uL	99
70) 4,6-Dinitro-2-methylphenol	9.21	198	10761	3.24	ng/uL	86
71) n-Nitrosodiphenylamine	9.26	169	119426	5.14	ng/uL	97
72) 4-Bromophenyl phenyl ether	9.59	248	49770	5.11	ng/uL	99
73) Hexachlorobenzene	9.69	284	52666	5.04	ng/uL	99
74) Pentachlorophenol	9.84	266	21547	3.79	ng/uL	96
75) Phenanthrene	10.04	178	188634	4.78	ng/uL	98
76) Anthracene	10.08	178	196517	4.79	ng/uL	99
77) Carbazole	10.19	167	175650	4.65	ng/uL	98
78) Di-n-butylphthalate	10.40	149	237763	4.96	ng/uL	98
79) Fluoranthene	11.06	202	282646	5.11	ng/uL	98
81) Benzidine	11.12	184	122500	4.60	ng/uL	99
82) Pyrene	11.26	202	281489	5.02	ng/uL	99
84) Butylbenzylphthalate	11.70	149	87633	4.84	ng/uL	95
85) Bis(2-ethylhexyl) adipate	11.70	129	75372	4.85	ng/uL	89
86) Bis(2-ethylhexyl)phthalate	12.15	149	112678	4.73	ng/uL	99
87) 3,3'-Dichlorobenzidine	12.22	252	73474	4.73	ng/uL	98
88) Benzo[a]anthracene	12.29	228	230931	4.80	ng/uL	96
89) Chrysene	12.33	228	216411	4.84	ng/uL	100
90) Di-n-octylphthalate	12.74	149	148079	4.58	ng/uL	95
92) Benzo[b]fluoranthene	13.39	252	172198	4.65	ng/uL	98
93) Benzo[k]fluoranthene	13.42	252	159616	4.49	ng/uL	98
94) Benzo[a]pyrene	13.80	252	149165	4.81	ng/uL	96
95) Indeno(1,2,3-c,d)pyrene	15.43	276	122225	4.61	ng/uL	89
96) Dibenzo[a,h]anthracene	15.42	278	101737	4.45	ng/uL	95
97) Benzo[g,h,i]perylene	15.92	276	98453	4.67	ng/uL#	88

-----

(#) = qualifier out of range (m) = manual integration

N8220.D 090413S1.M

Wed Sep 04 13:18:49 2013

Page 3

# Quantitation Report (Qedit)

Data File : D:\HPCHEM\1\DATA\090413\N8220.D

Vial: 4

Acq On : 4 Sep 2013 12:41

Operator: jk SOP 50

Sample : ICALSVSTD005

Inst : GC/MS Ins

Misc : ST130531-3

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Sep 4 13:14 2013

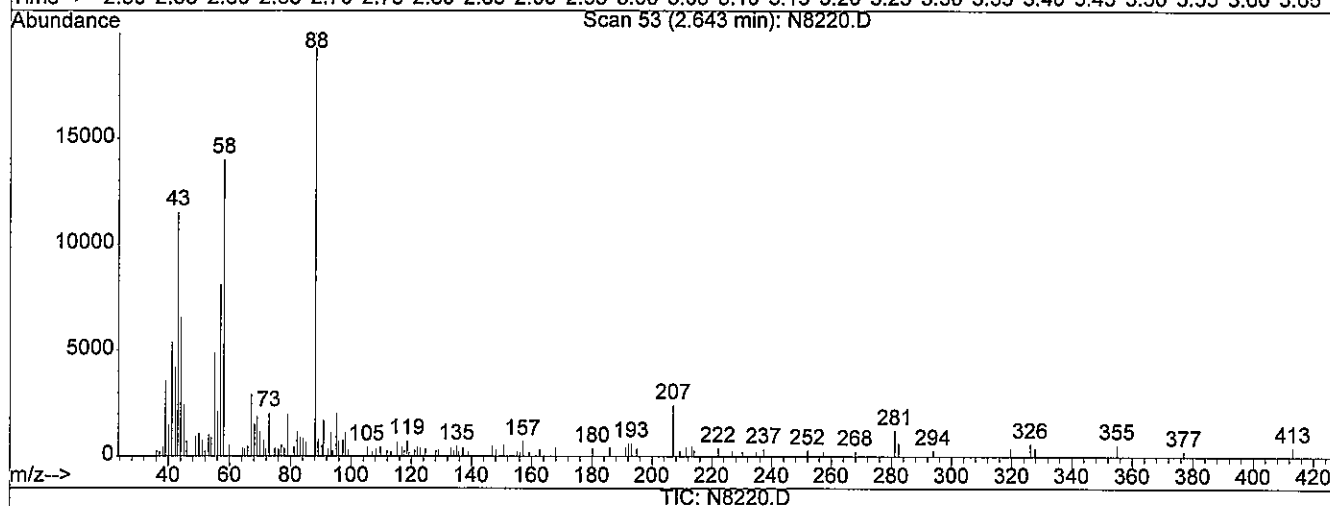
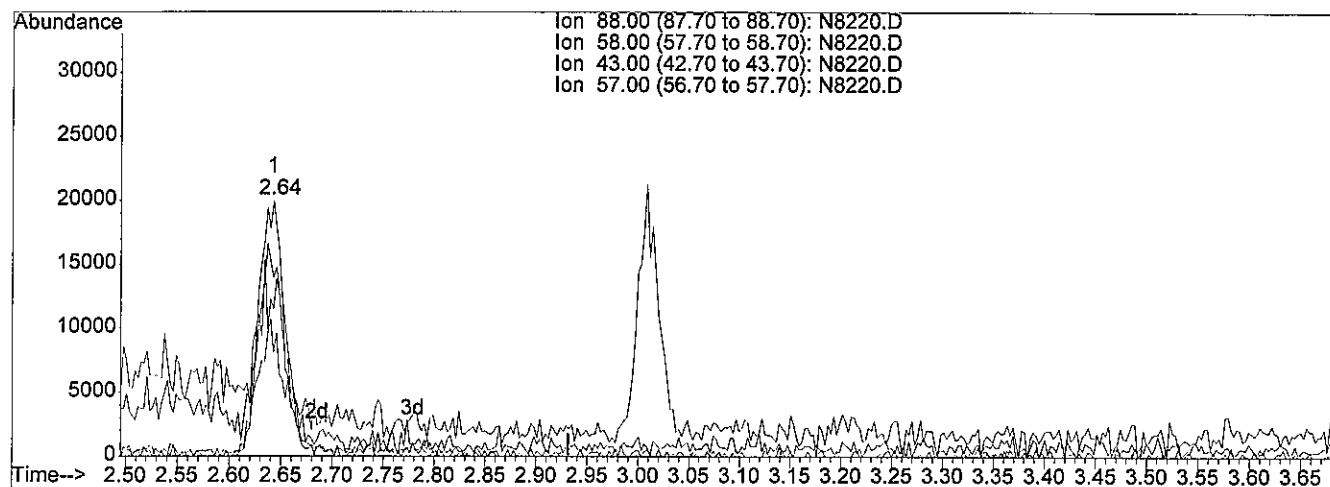
Quant Results File: temp.res

Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)

Title : GC-MS Semivolatiles SOP no. 506

Last Update : Wed Sep 04 13:14:49 2013

Response via : Multiple Level Calibration



(2) 1,4-Dioxane (t)

2.64min 4.48ng/uL

response 35342

Ion	Exp%	Act%
88.00	100	100
58.00	77.90	81.36
43.00	47.90	53.50
57.00	33.00	49.28#

*360*

# Quantitation Report (Qedit)

Data File : D:\HPCHEM\1\DATA\090413\N8220.D

Vial: 4

Acq On : 4 Sep 2013 12:41

Operator: jk SOP 50

Sample : ICALSVSTD005

Inst : GC/MS Ins

Misc : ST130531-3

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Sep 4 13:16 2013

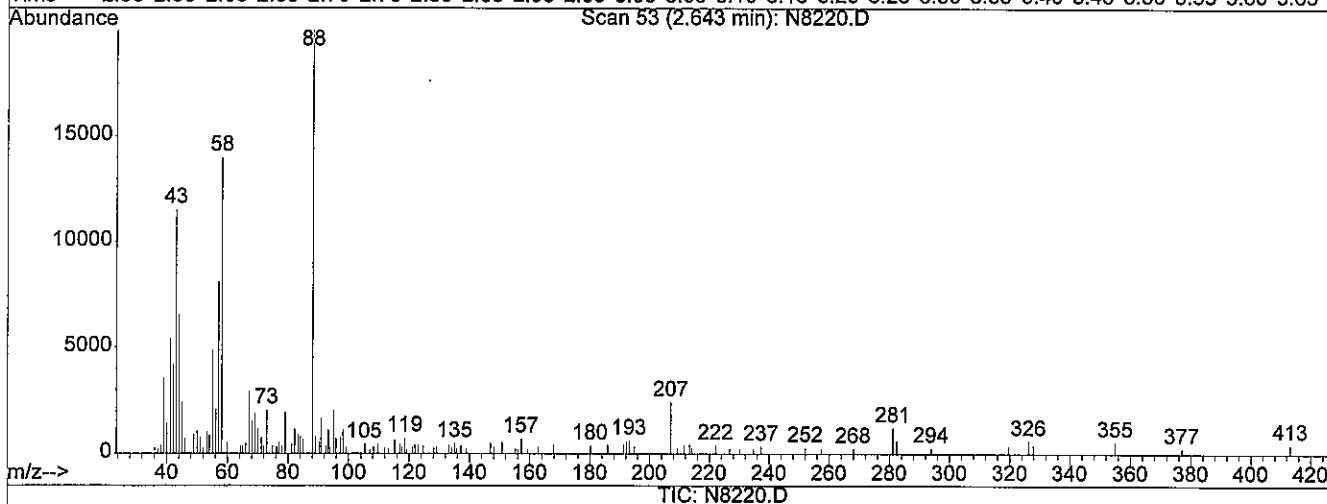
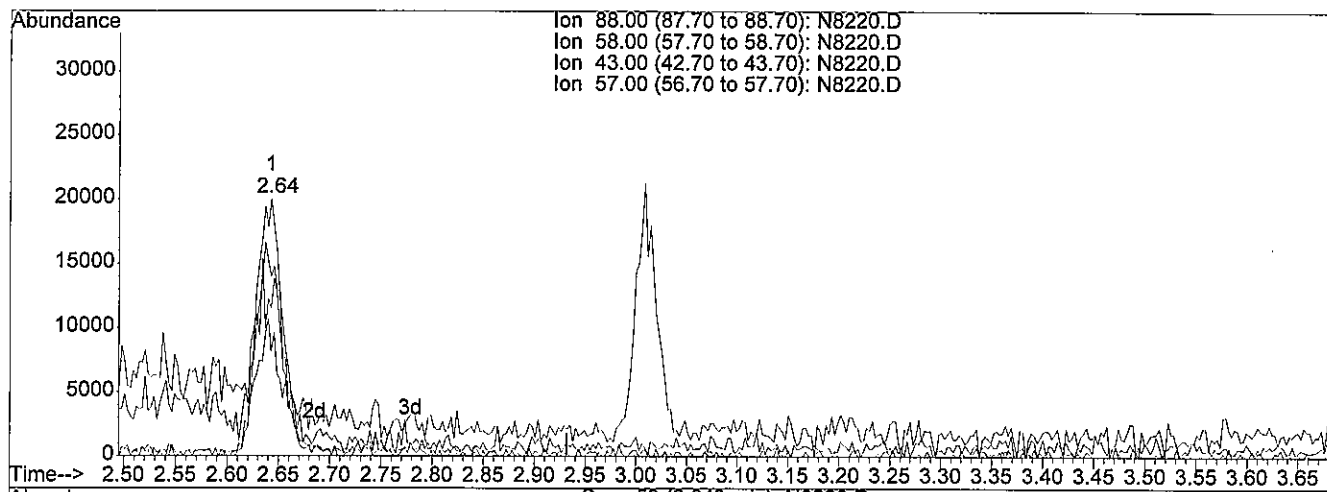
Quant Results File: temp.res

Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)

Title : GC-MS Semivolatiles SOP no. 506

Last Update : Wed Sep 04 13:14:49 2013

Response via : Multiple Level Calibration



(2) 1,4-Dioxane (t)

2.64min 4.93ng/uL m

response 38909

Ion	Exp%	Act%
88.00	100	100
58.00	77.90	73.90
43.00	47.90	48.59
57.00	33.00	44.76#

## MANUAL RE-INTEGRATION

- ☐ missed peak assignment
- ☐ assigned incorrect name to peak
- ☐ over-integrated peak's area
- ☒ under-integrated peak's area
- ☐ other \_\_\_\_\_

initials JK date 9-5-13

# Quantitation Report (Qedit)

Data File : D:\HPCHEM\1\DATA\090413\N8220.D

Acq On : 4 Sep 2013 12:41

Sample : ICALSVSTD005

Misc : ST130531-3

MS Integration Params: RTEINT.P

Quant Time: Sep 4 13:16 2013

Vial: 4

Operator: jk SOP 50

Inst : GC/MS Ins

Multiplr: 1.00

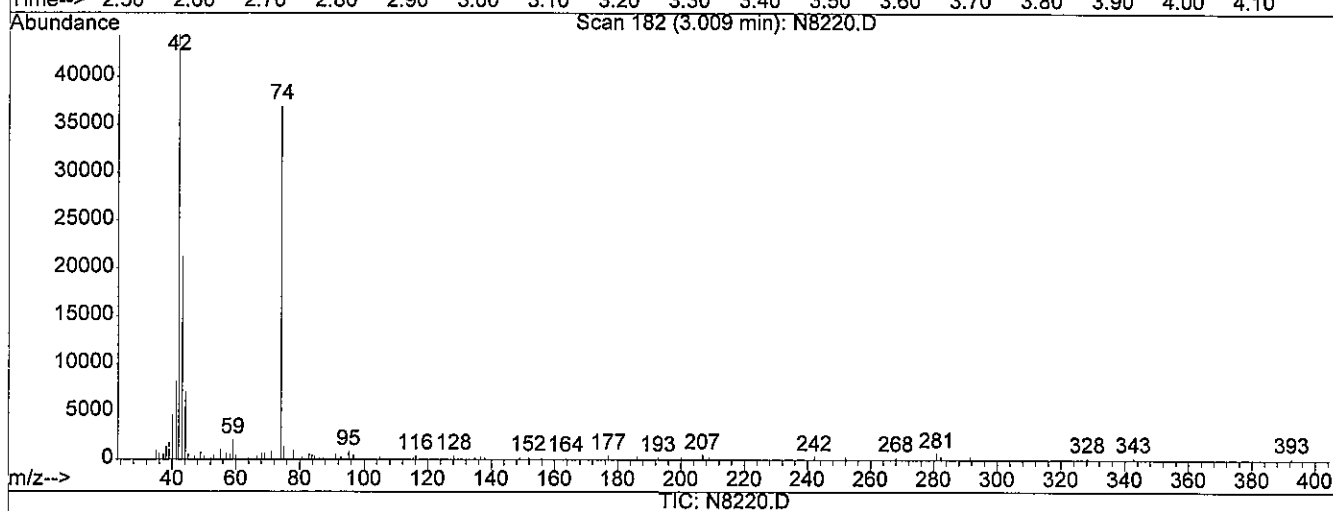
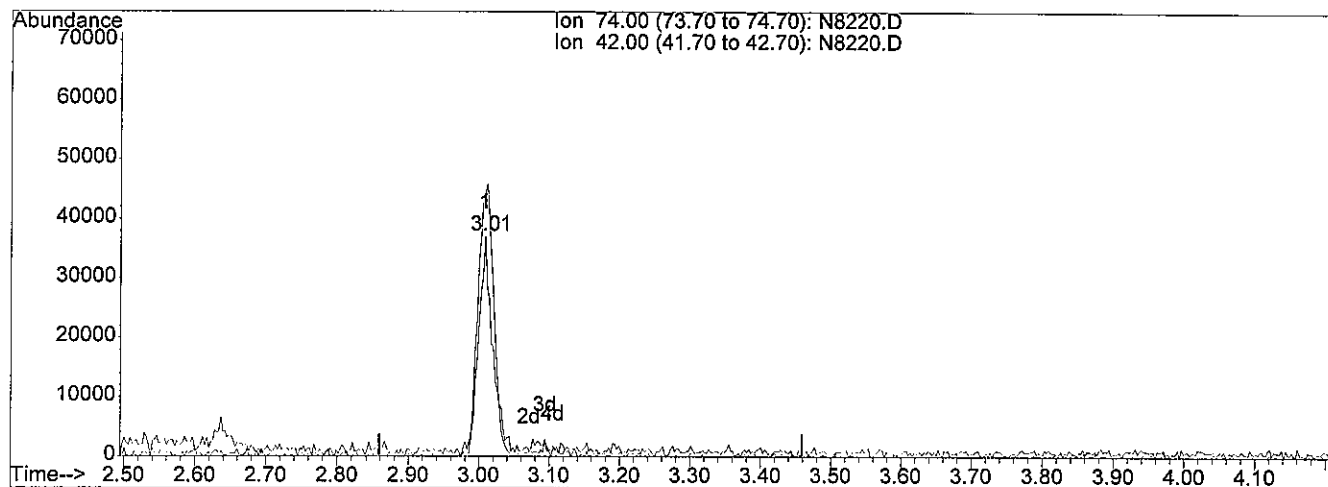
Quant Results File: temp.res

Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)

Title : GC-MS Semivolatiles SOP no. 506

Last Update : Wed Sep 04 13:14:49 2013

Response via : Multiple Level Calibration



(3) n-Nitrosodimethylamine (T)

3.01min 4.39ng/uL

response 50120

Ion	Exp%	Act%
74.00	100	100
42.00	129.50	147.11
0.00	0.00	0.00
0.00	0.00	0.00

*3.01*



# Quantitation Report (Qedit)

Data File : D:\HPCHEM\1\DATA\090413\N8220.D

Vial: 4

Acq On : 4 Sep 2013 12:41

Operator: jk SOP 50

Sample : ICALSVSTD005

Inst : GC/MS Ins

Misc : ST130531-3

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Sep 4 13:16 2013

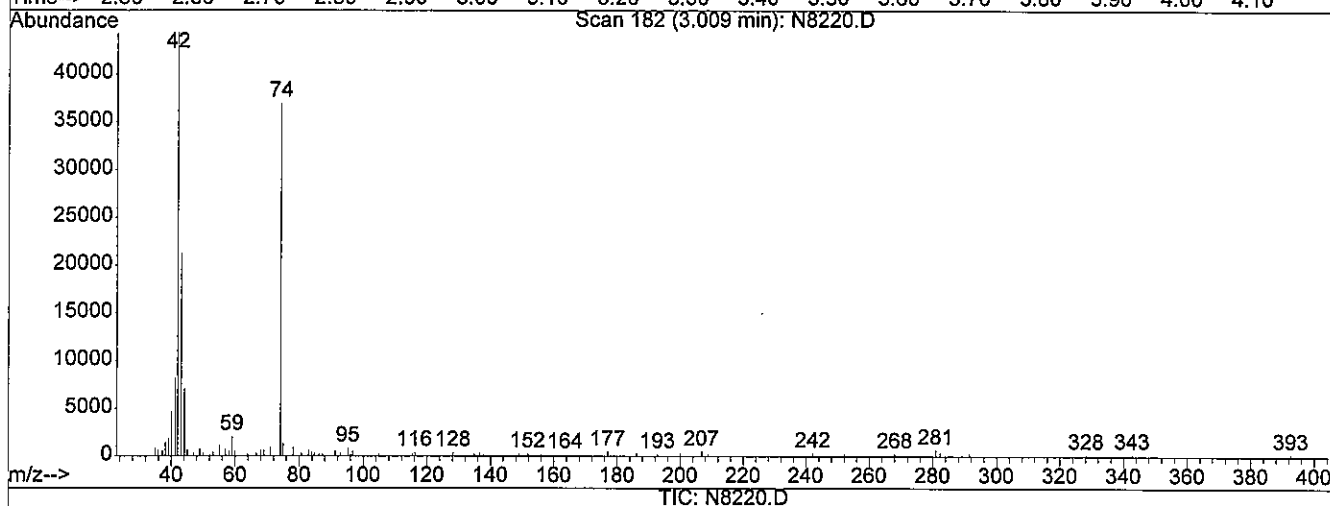
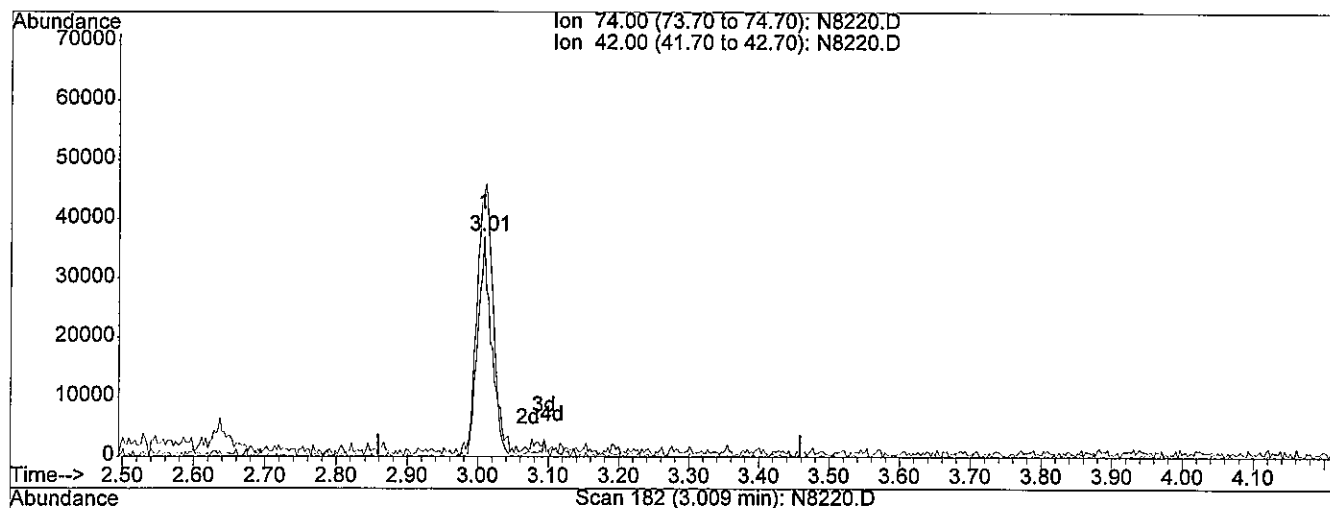
Quant Results File: temp.res

Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)

Title : GC-MS Semivolatiles SOP no. 506

Last Update : Wed Sep 04 13:14:49 2013

Response via : Multiple Level Calibration



(3) n-Nitrosodimethylamine (T)

3.01min 4.86ng/uL m

response 55492

Ion	Exp%	Act%
74.00	100	100
42.00	129.50	132.87
0.00	0.00	0.00
0.00	0.00	0.00

## MANUAL RE-INTEGRATION

- ☐ missed peak assignment
- ☐ assigned incorrect name to peak
- ☐ over-integrated peak's area
- ☒ under-integrated peak's area
- ☐ other \_\_\_\_\_

initials jk date 9-5-13

# Quantitation Report (Qedit)

Data File : D:\HPCHEM\1\DATA\090413\N8220.D

Acq On : 4 Sep 2013 12:41

Sample : ICALSVSTD005

Misc : ST130531-3

MS Integration Params: RTEINT.P

Quant Time: Sep 4 13:16 2013

Vial: 4

Operator: jk SOP 50

Inst : GC/MS Ins

Multiplr: 1.00

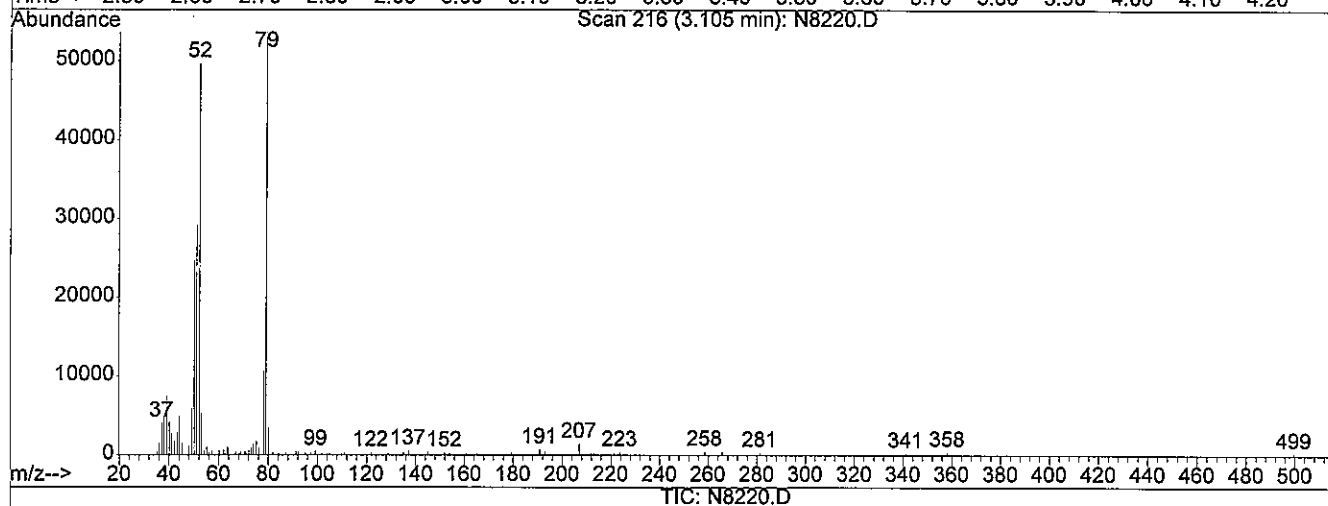
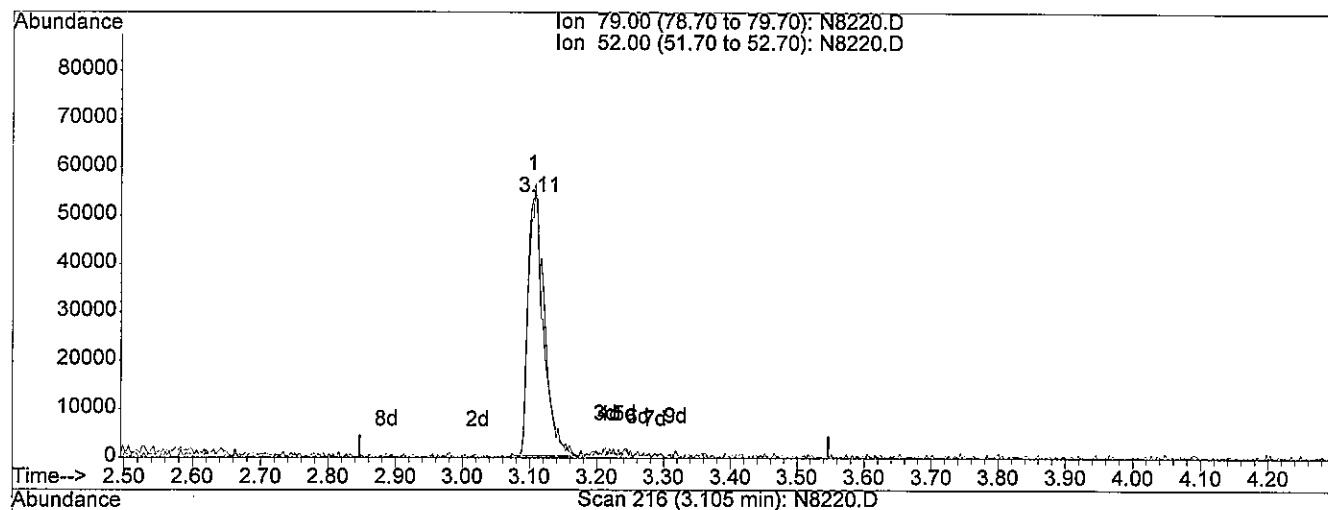
Quant Results File: temp.res

Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)

Title : GC-MS Semivolatiles SOP no. 506

Last Update : Wed Sep 04 13:14:49 2013

Response via : Multiple Level Calibration



(4) Pyridine (T)

3.11min 4.74ng/uL

response 92642

Ion	Exp%	Act%
79.00	100	100
52.00	93.60	94.58
0.00	0.00	0.00
0.00	0.00	0.00

*36*

# Quantitation Report (Qedit)

Data File : D:\HPCHEM\1\DATA\090413\N8220.D

Vial: 4

Acq On : 4 Sep 2013 12:41

Operator: jk SOP 50

Sample : ICALSVSTD005

Inst : GC/MS Ins

Misc : ST130531-3

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Sep 4 13:16 2013

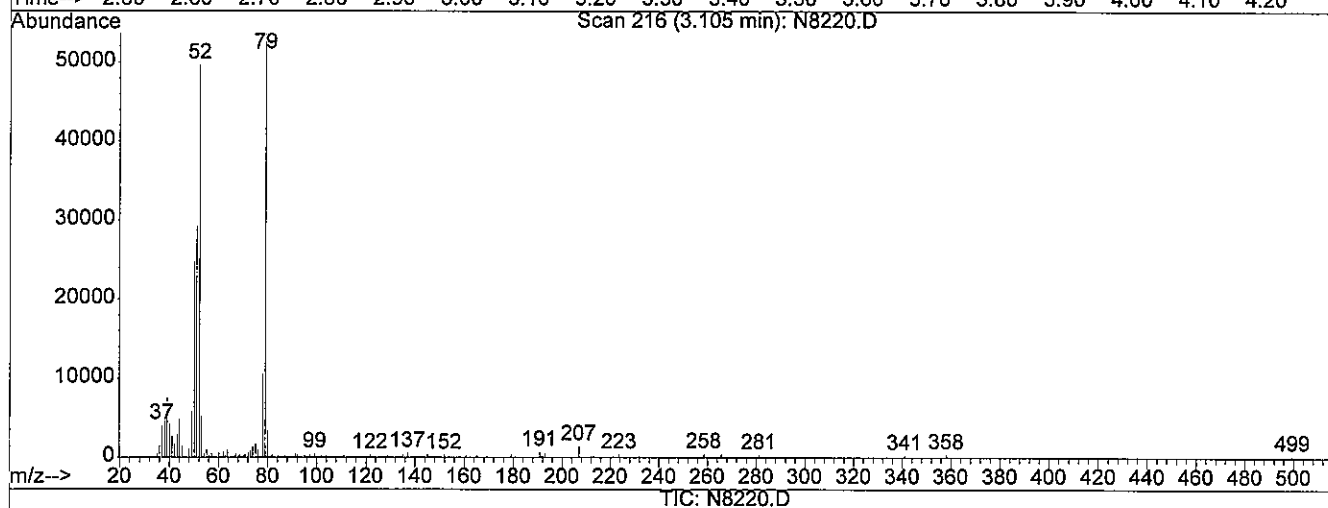
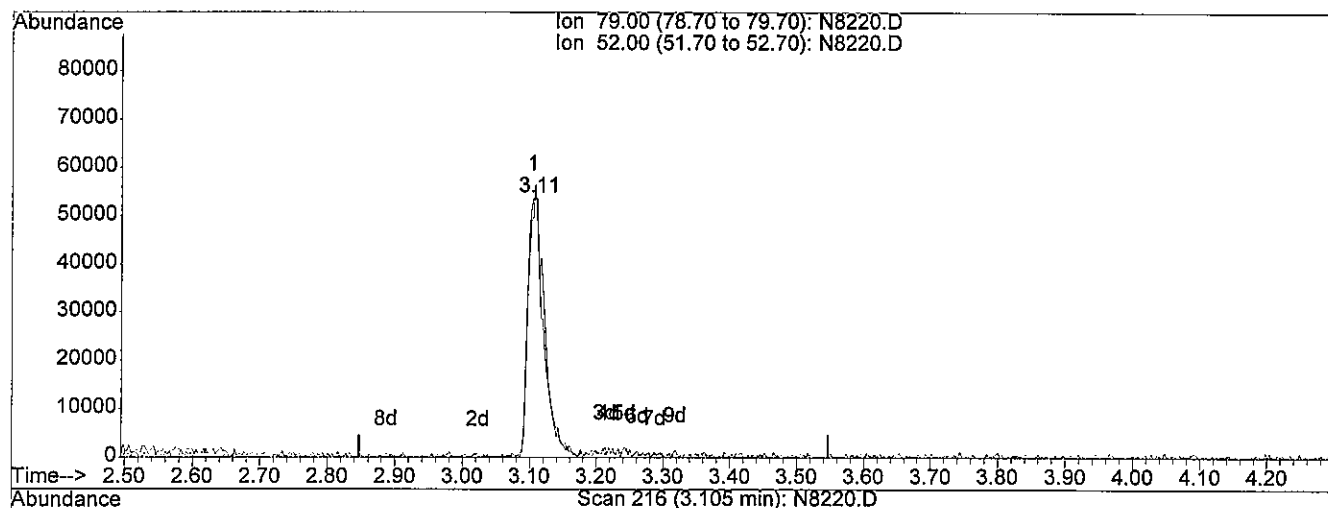
Quant Results File: temp.res

Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)

Title : GC-MS Semivolatiles SOP no. 506

Last Update : Wed Sep 04 13:14:49 2013

Response via : Multiple Level Calibration



(4) Pyridine (T)

3.11min 5.22ng/uL m

response 101984

Ion	Exp%	Act%
79.00	100	100
52.00	93.60	85.92
0.00	0.00	0.00
0.00	0.00	0.00

## MANUAL RE-INTEGRATION

- ☐ missed peak assignment
- ☐ assigned incorrect name to peak
- ☐ over-integrated peak's area
- ☒ under-integrated peak's area
- ☐ other \_\_\_\_\_

initials JK date 9-5-13

# Quantitation Report (Qedit)

Data File : D:\HPCHEM\1\DATA\090413\N8220.D

Vial: 4

Acq On : 4 Sep 2013 12:41

Operator: jk SOP 50

Sample : ICALSVSTD005

Inst : GC/MS Ins

Misc : ST130531-3

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Sep 4 13:16 2013

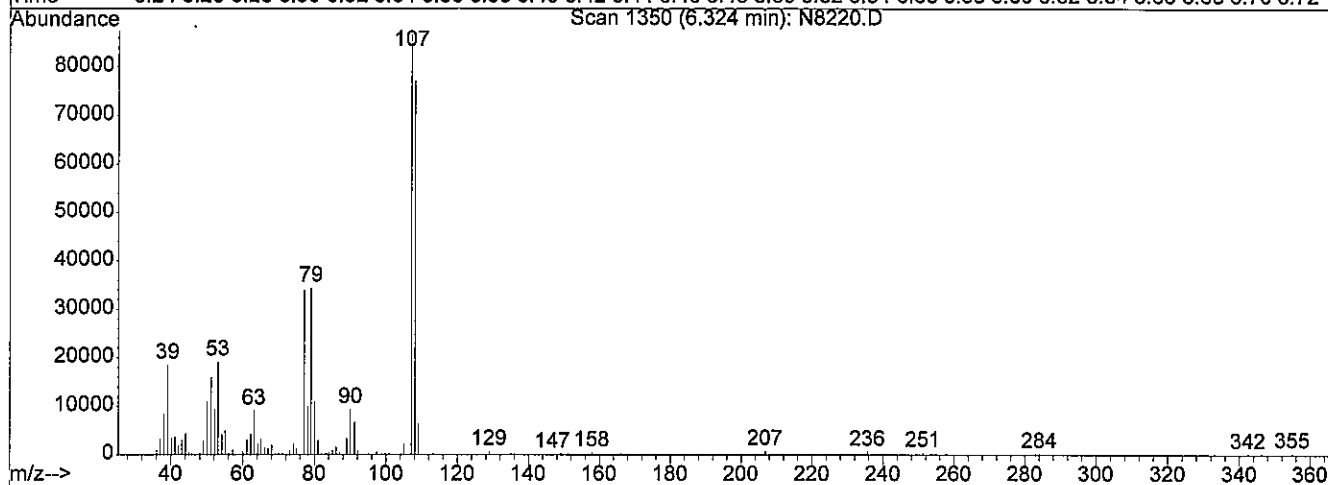
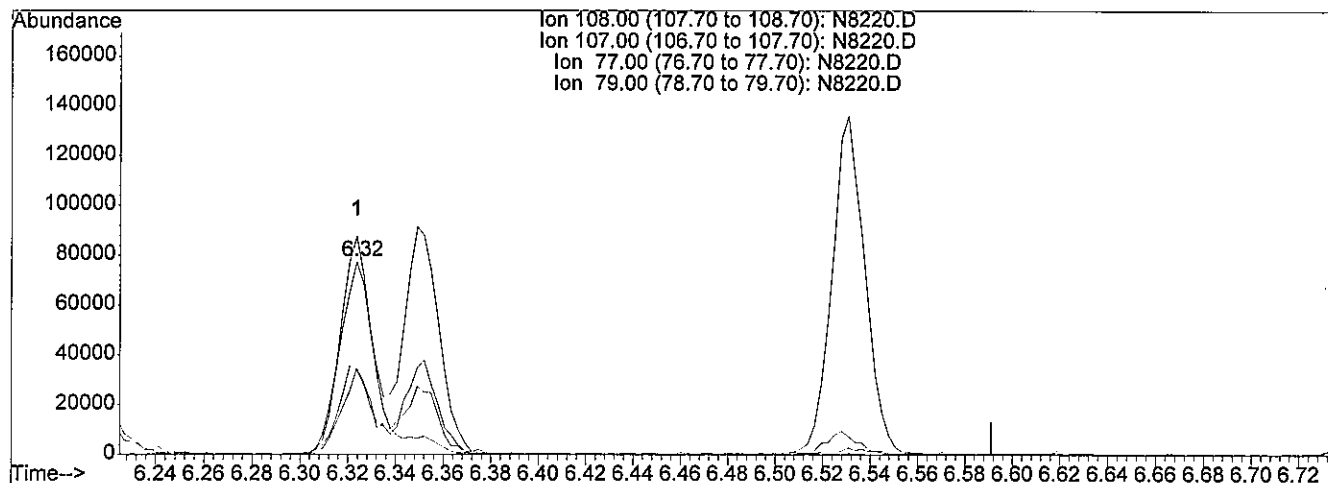
Quant Results File: temp.res

Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)

Title : GC-MS Semivolatiles SOP no. 506

Last Update : Wed Sep 04 13:14:49 2013

Response via : Multiple Level Calibration



(21) 3+4-Methylphenol (T)

6.32min 4.88ng/uL

response 82389

Ion	Exp%	Act%
108.00	100	100
107.00	210.50	96.90#
77.00	76.70	42.29#
79.00	63.20	38.69#

*3efu*

# Quantitation Report (Qedit)

Data File : D:\HPCHEM\1\DATA\090413\N8220.D

Vial: 4

Acq On : 4 Sep 2013 12:41

Operator: jk SOP 50

Sample : ICALSVSTD005

Inst : GC/MS Ins

Misc : ST130531-3

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Sep 4 13:16 2013

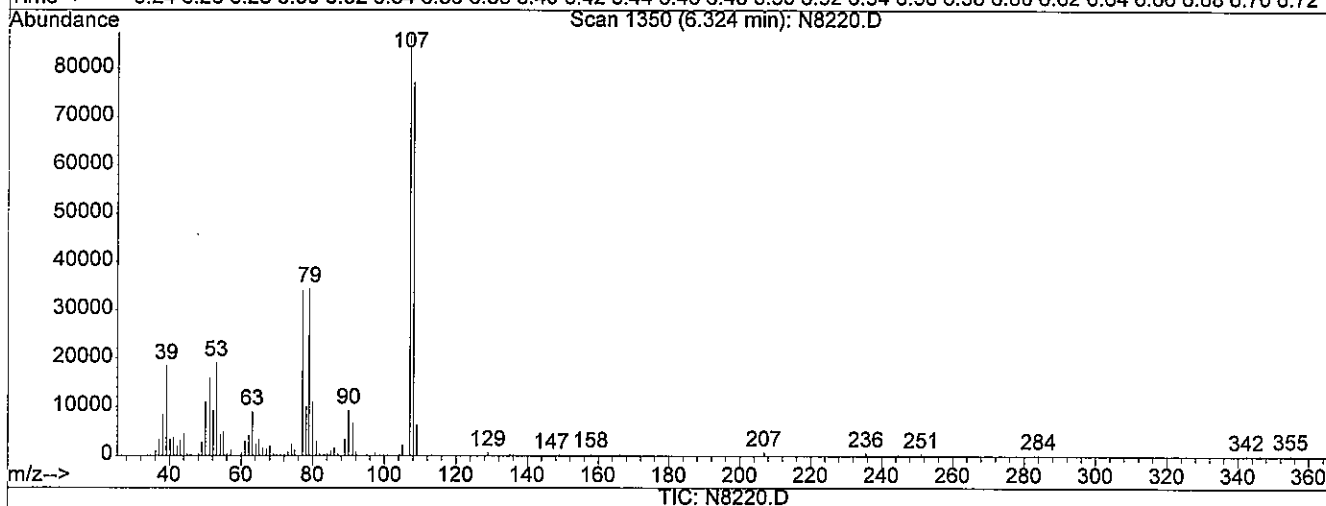
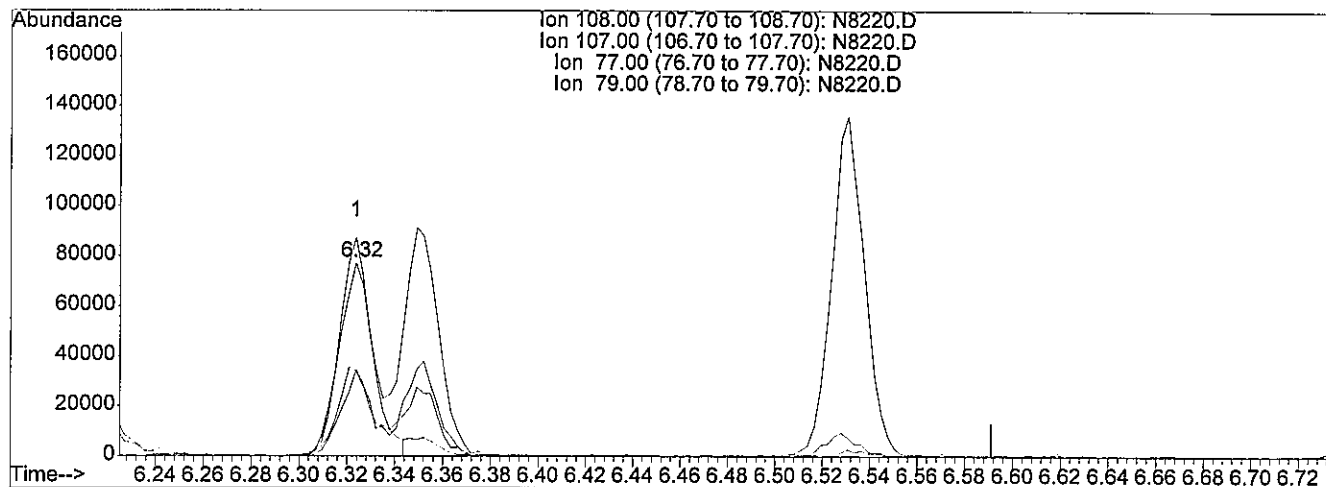
Quant Results File: temp.res

Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)

Title : GC-MS Semivolatiles SOP no. 506

Last Update : Wed Sep 04 13:14:49 2013

Response via : Multiple Level Calibration



(21) 3+4-Methylphenol (T)

6.32min 4.50ng/uL m

response 76102

Ion	Exp%	Act%
108.00	100	100
107.00	210.50	104.91#
77.00	76.70	45.78#
79.00	63.20	41.88#

## MANUAL RE-INTEGRATION

- ☐ missed peak assignment
- ☐ assigned incorrect name to peak
- ☒ over-integrated peak's area
- ☐ under-integrated peak's area
- ☐ other \_\_\_\_\_

initials JK date 9-5-13

Data File : D:\HPCHEM\1\DATA\090413\N8220.D

Acq On : 4 Sep 2013 12:41

Sample : ICALSVSTD005

Misc : ST130531-3

MS Integration Params: RTEINT.P

Quant Time: Sep 4 13:16 2013

Vial: 4

Operator: jk SOP 50

Inst : GC/MS Ins

Multiplr: 1.00

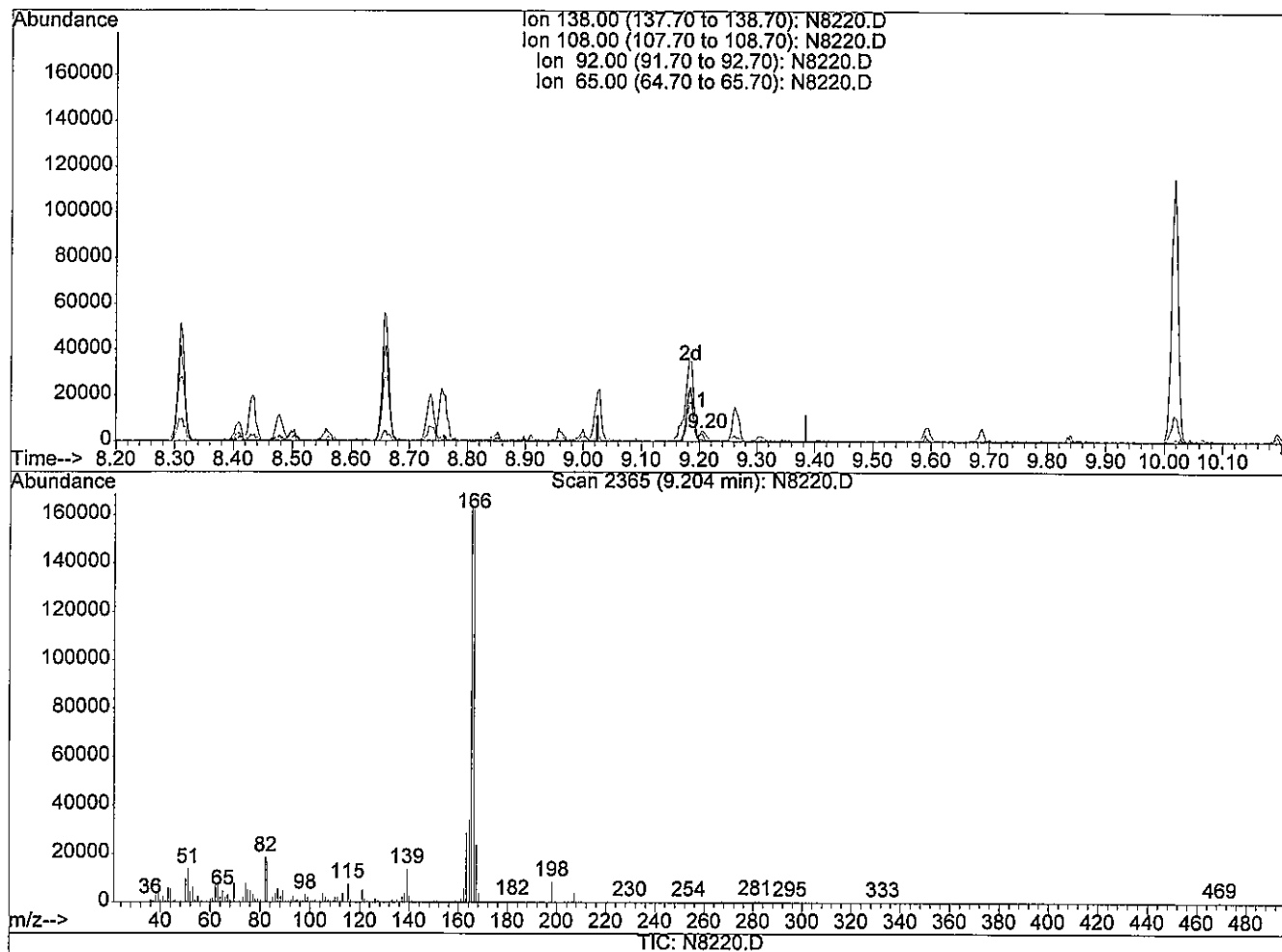
Quant Results File: temp.res

Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)

Title : GC-MS Semivolatiles SOP no. 506

Last Update : Wed Sep 04 13:14:49 2013

Response via : Multiple Level Calibration



(65) 4-Nitroaniline (T)

9.20min 0.45ng/uL

response 1486

Ion	Exp%	Act%
138.00	100	100
108.00	88.20	0.00#
92.00	59.10	0.00#
65.00	146.30	259.49#

3cFu

Data File : D:\HPCHEM\1\DATA\090413\N8220.D

Acq On : 4 Sep 2013 12:41

Sample : ICALSVSTD005

Misc : ST130531-3

MS Integration Params: RTEINT.P

Quant Time: Sep 4 13:18 2013

Vial: 4

Operator: jk SOP 50

Inst : GC/MS Ins

Multiplr: 1.00

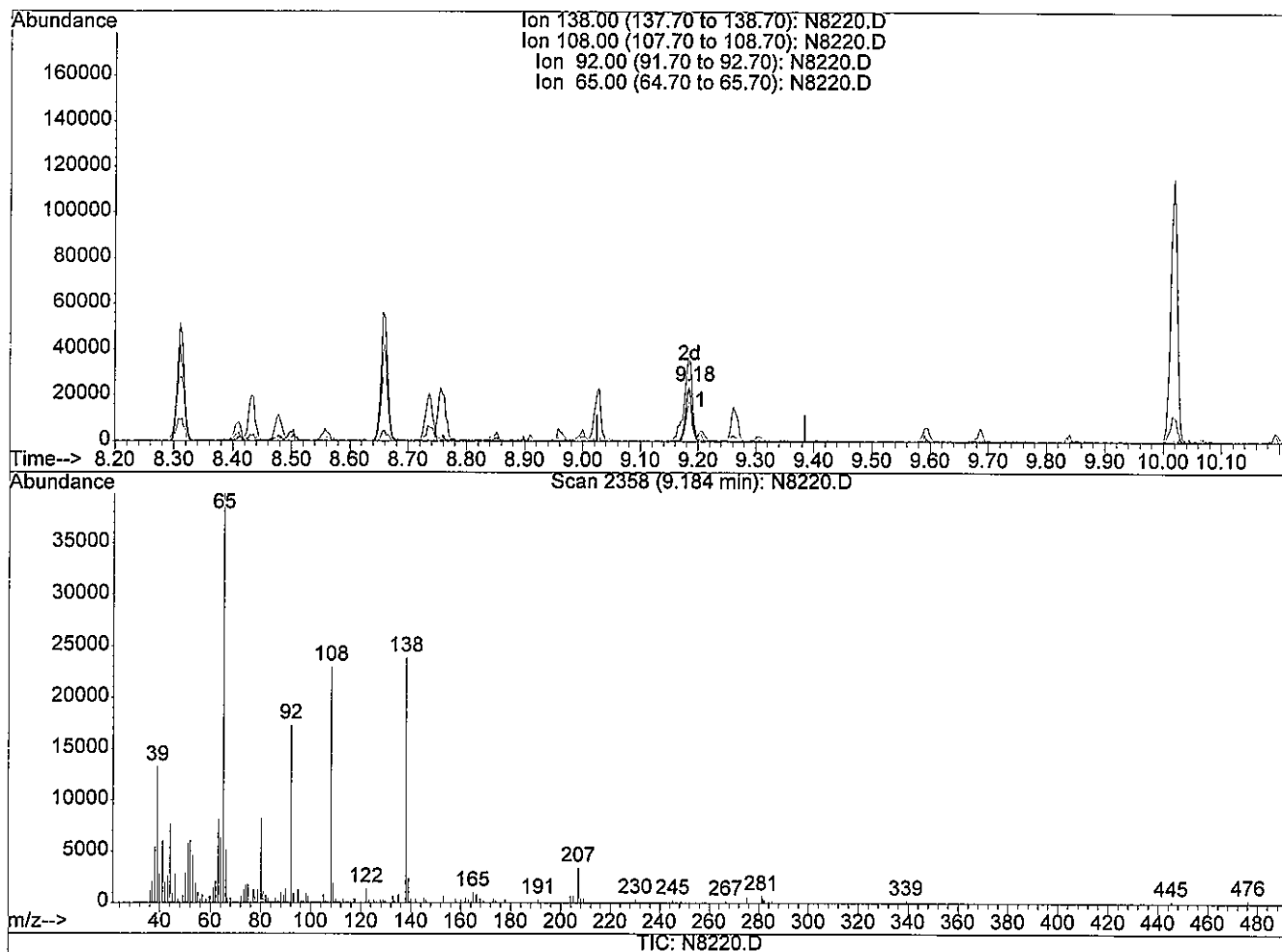
Quant Results File: temp.res

Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)

Title : GC-MS Semivolatiles SOP no. 506

Last Update : Wed Sep 04 13:14:49 2013

Response via : Multiple Level Calibration



(65) 4-Nitroaniline (T)

9.18min 6.61ng/uL m

response 21746

Ion	Exp%	Act%
138.00	100	100
108.00	88.20	0.00#
92.00	59.10	0.00#
65.00	146.30	17.73#

**MANUAL RE-INTEGRATION**

- ☒ missed peak assignment
- ☐ assigned incorrect name to peak
- ☐ over-integrated peak's area
- ☐ under-integrated peak's area
- ☐ other \_\_\_\_\_

initials jk date 9-5-13





Data File : D:\HPCHEM\1\DATA\090413\N8221.D

Vial: 5

Acq On : 4 Sep 2013 13:06

Operator: jk SOP 506 Rev

Sample : ICALSVSTD010

Inst : GC/MS Ins

Misc : ST130531-4

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Sep 4 13:26 2013

Quant Results File: 090413S1.RES

Quant Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)

Title : GC-MS Semivolatiles SOP no. 506

Last Update : Wed Sep 04 13:24:55 2013

Response via : Initial Calibration

DataAcq Meth : 090413S1

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	6.00	152	459964	40.00	ng/uL	0.00
24) Naphthalene-d8	7.19	136	1655187	40.00	ng/uL	0.00
41) Acenaphthene-d10	8.74	164	932038	40.00	ng/uL	0.00
69) Phenanthrene-d10	10.02	188	1693307	40.00	ng/uL	0.00
80) Chrysene-d12	12.30	240	1700292	40.00	ng/uL	-0.01
91) Perylene-d12	13.87	264	1202777	40.00	ng/uL	-0.01

## System Monitoring Compounds

5) 2-Fluorophenol	4.62	112	172295m	11.27	ng/uL	0.00
Spiked Amount 75.000	Range 46	- 105	Recovery	=	15.03%#	
6) 2-Chlorophenol-d4	5.77	132	136571	10.08	ng/uL	0.00
Spiked Amount 75.000	Range 33	- 110	Recovery	=	13.44%#	
8) Phenol-d5	5.57	99	210213	10.30	ng/uL	-0.01
Spiked Amount 75.000	Range 50	- 109	Recovery	=	13.73%#	
15) 1,2-Dichlorobenzene-d4	6.15	152	115433	10.03	ng/uL	0.00
Spiked Amount 50.000	Range 16	- 110	Recovery	=	20.06%	
25) Nitrobenzene-d5	6.51	82	192586	9.94	ng/uL	-0.01
Spiked Amount 50.000	Range 53	- 111	Recovery	=	19.88%#	
46) 2-Fluorobiphenyl	8.12	172	312868	9.55	ng/uL	0.00
Spiked Amount 50.000	Range 55	- 108	Recovery	=	19.10%#	
68) 2,4,6-Tribromophenol	9.41	330	42889	9.68	ng/uL	0.00
Spiked Amount 75.000	Range 42	- 117	Recovery	=	12.91%#	
83) p-Terphenyl-d14	11.33	244	443416	10.78	ng/uL	0.00
Spiked Amount 50.000	Range 34	- 139	Recovery	=	21.56%#	

## Target Compounds

						Qvalue
2) 1,4-Dioxane	2.63	88	74139m	10.29	ng/uL	
3) n-Nitrosodimethylamine	3.00	74	117895m	11.08	ng/uL	
4) Pyridine	3.10	79	202961m	10.94	ng/uL	
7) Aniline	5.66	93	225748	9.53	ng/uL	94
9) Phenol	5.58	94	198902	9.99	ng/uL	92
10) Tetramethylurea	5.71	72	278029	9.98	ng/uL	95
11) Bis(2-chloroethyl) ether	5.69	93	161947	10.19	ng/uL	99
12) 2-Chlorophenol	5.79	128	146923	10.07	ng/uL	97
13) 1,3-Dichlorobenzene	5.95	146	174858	10.07	ng/uL	99
14) 1,4-Dichlorobenzene	6.01	146	161998	10.09	ng/uL	95
16) 1,2-Dichlorobenzene	6.17	146	155435	10.13	ng/uL	99
17) Benzyl Alcohol	6.10	108	98345	10.43	ng/uL	98
18) 2-Methylphenol	6.19	107	117288	9.89	ng/uL	97
19) Bis(2-chloroisopropyl) ether	6.22	45	270646	10.37	ng/uL	97
20) n-Nitroso-di-n-propylamine	6.34	70	124186	10.44	ng/uL	99
21) 3+4-Methylphenol	6.32	108	137338m	9.37	ng/uL	

(#)=qualifier out of range (m)=manual integration

N8221.D 090413S1.M Wed Sep 04 13:26:50 2013

Page 1

Data File : D:\HPCHEM\1\DATA\090413\N8221.D

Vial: 5

Acq On : 4 Sep 2013 13:06

Operator: jk SOP 506 Rev

Sample : ICALSVSTD010

Inst : GC/MS Ins

Misc : ST130531-4

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Sep 4 13:26 2013

Quant Results File: 090413S1.RES

Quant Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)

Title : GC-MS Semivolatiles SOP no. 506

Last Update : Wed Sep 04 13:24:55 2013

Response via : Initial Calibration

DataAcq Meth : 090413S1

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
22) N-Methylaniline	6.35	106	211101	9.74	ng/uL#	45
23) Hexachloroethane	6.50	117	68270	10.08	ng/uL	99
26) N,N-Dimethylaniline	6.53	120	213696	9.55	ng/uL	89
27) Nitrobenzene	6.53	77	236114	10.09	ng/uL	95
28) Isophorone	6.74	82	294719	10.06	ng/uL	99
29) N-Ethylaniline	6.76	106	270621	9.74	ng/uL	98
30) 2-Nitrophenol	6.83	139	63626	9.60	ng/uL	84
31) 2,4-Dimethylphenol	6.83	107	149564	10.16	ng/uL	96
32) Bis(2-chloroethoxy)methane	6.91	93	172968	10.14	ng/uL	98
33) Benzoic acid	6.86	105	39918	8.69	ng/uL	93
34) 2,4-Dichlorophenol	7.04	162	123588	9.91	ng/uL	99
35) 1,2,4-Trichlorobenzene	7.13	180	154034	9.87	ng/uL	97
36) Naphthalene	7.21	128	398001	9.82	ng/uL#	80
37) 4-Chloroaniline	7.23	127	163867m	9.96	ng/uL	
38) Hexachlorobutadiene	7.31	225	104878	10.45	ng/uL	95
39) 4-Chloro-3-methylphenol	7.63	107	118540	9.92	ng/uL	98
40) 2-Methylnaphthalene	7.82	142	294014	10.12	ng/uL	98
42) 1-Methylnaphthalene	7.91	142	258004	9.42	ng/uL	98
43) Hexachlorocyclopentadiene	7.96	237	77233	8.97	ng/uL	99
44) 2,4,6-Trichlorophenol	8.05	196	89259	9.31	ng/uL	98
45) 2,4,5-Trichlorophenol	8.08	196	88088	9.48	ng/uL	99
47) 2-Chloronaphthalene	8.25	162	268152	9.68	ng/uL	99
48) 2-Nitroaniline	8.31	65	87496	9.91	ng/uL	95
49) 1,4-Dinitrobenzene	8.41	168	34778	9.49	ng/uL	98
50) Dimethylphthalate	8.44	163	276553	9.89	ng/uL	99
51) 1,3-Dinitrobenzene	8.48	168	41342	9.58	ng/uL	85
52) 2,6-Dinitrotoluene	8.50	165	61067	9.56	ng/uL	83
53) 1,2-Dinitrobenzene	8.56	168	28085	9.93	ng/uL	95
54) Acenaphthylene	8.62	152	408311	10.06	ng/uL	100
55) 3-Nitroaniline	8.66	138	53173	9.41	ng/uL#	95
56) Acenaphthene	8.77	154	234960	9.76	ng/uL	95
57) 2,4-Dinitrophenol	8.75	184	16674	8.14	ng/uL#	89
58) 4-Nitrophenol	8.76	109	32161	9.44	ng/uL	97
59) Dibenzofuran	8.91	168	385741	10.51	ng/uL	99
60) 2,4-Dinitrotoluene	8.85	165	72564	9.26	ng/uL	96
61) 2,3,5,6-Tetrachlorophenol	8.96	232	76620	9.80	ng/uL	98
62) 2,3,4,6-Tetrachlorophenol	9.00	232	78831	9.82	ng/uL	97
63) Diethylphthalate	9.03	149	247818	9.68	ng/uL	100
64) 4-Chlorophenyl phenyl ethe	9.17	204	161180	9.85	ng/uL	97
65) 4-Nitroaniline	9.19	138	45832	8.95	ng/uL#	82
66) Fluorene	9.21	166	284646	10.03	ng/uL	98

(#)=qualifier out of range (m)=manual integration

N8221.D 090413S1.M Wed Sep 04 13:26:50 2013

Page 2

Data File : D:\HPCHEM\1\DATA\090413\N8221.D

Vial: 5

Acq On : 4 Sep 2013 13:06

Operator: jk SOP 506 Rev

Sample : ICALSVSTD010

Inst : GC/MS Ins

Misc : ST130531-4

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Sep 4 13:26 2013

Quant Results File: 090413S1.RES

Quant Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)

Title : GC-MS Semivolatiles SOP no. 506

Last Update : Wed Sep 04 13:24:55 2013

Response via : Initial Calibration

DataAcq Meth : 090413S1

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
67) Azobenzene	9.31	77	284100	9.81	ng/uL	98
70) 4,6-Dinitro-2-methylphenol	9.21	198	27803	8.61	ng/uL	89
71) n-Nitrosodiphenylamine	9.26	169	233379	9.78	ng/uL	99
72) 4-Bromophenyl phenyl ether	9.59	248	102573	10.10	ng/uL	99
73) Hexachlorobenzene	9.69	284	110178	10.11	ng/uL	99
74) Pentachlorophenol	9.84	266	53442	9.34	ng/uL	100
75) Phenanthrene	10.04	178	389732	9.67	ng/uL	99
76) Anthracene	10.08	178	416669	9.85	ng/uL	99
77) Carbazole	10.20	167	390313	9.96	ng/uL	98
78) Di-n-butylphthalate	10.41	149	500475	10.04	ng/uL	99
79) Fluoranthene	11.06	202	597939	10.28	ng/uL	98
81) Benzidine	11.12	184	246121	9.77	ng/uL	99
82) Pyrene	11.27	202	595945	10.70	ng/uL	98
84) Butylbenzylphthalate	11.70	149	190920	10.66	ng/uL	94
85) Bis(2-ethylhexyl) adipate	11.71	129	160355	10.50	ng/uL	88
86) Bis(2-ethylhexyl)phthalate	12.15	149	222362	9.83	ng/uL	97
87) 3,3'-Dichlorobenzidine	12.22	252	138068	9.51	ng/uL	96
88) Benzo[a]anthracene	12.29	228	450612	9.85	ng/uL	99
89) Chrysene	12.33	228	413167	9.77	ng/uL	100
90) Di-n-octylphthalate	12.74	149	307894	9.96	ng/uL	91
92) Benzo[b]fluoranthene	13.39	252	347240	9.51	ng/uL	99
93) Benzo[k]fluoranthene	13.42	252	349999	9.82	ng/uL	98
94) Benzo[a]pyrene	13.80	252	308219	9.88	ng/uL	98
95) Indeno(1,2,3-c,d)pyrene	15.43	276	258112	9.75	ng/uL	94
96) Dibenzo[a,h]anthracene	15.42	278	220416	9.69	ng/uL	96
97) Benzo[g,h,i]perylene	15.92	276	231199	10.54	ng/uL	96

-----  
(#) = qualifier out of range (m) = manual integration

N8221.D 090413S1.M Wed Sep 04 13:26:50 2013

Page 3

# Quantitation Report (Qedit)

Data File : D:\HPCHEM\1\DATA\090413\N8221.D

Acq On : 4 Sep 2013 13:06

Sample : ICALSVSTD010

Misc : ST130531-4

MS Integration Params: RTEINT.P

Quant Time: Sep 4 13:25 2013

Vial: 5

Operator: jk SOP 50

Inst : GC/MS Ins

Multiplr: 1.00

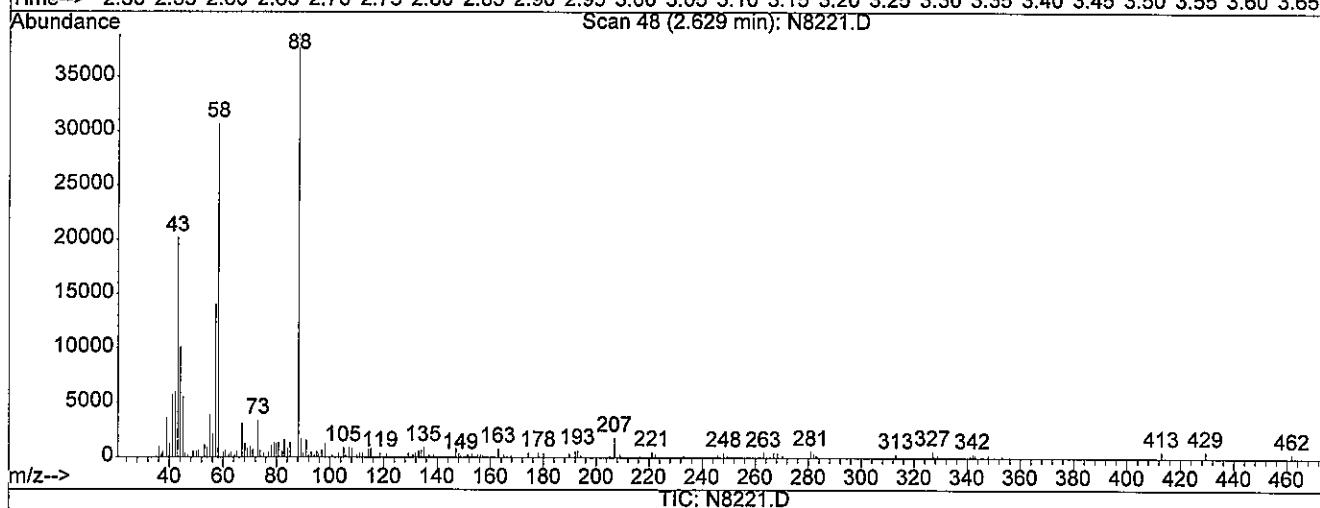
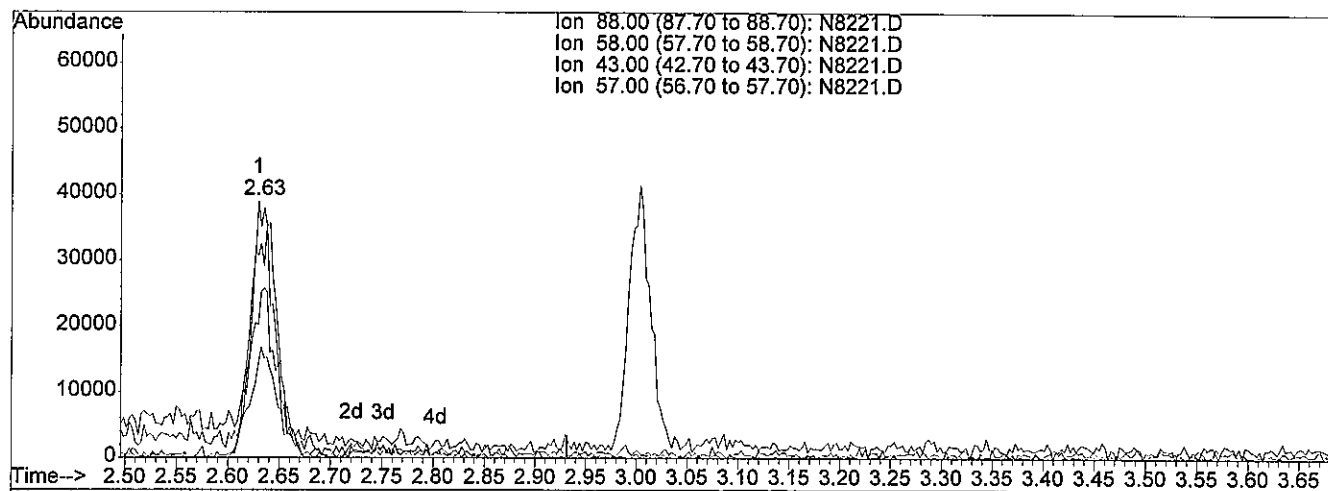
Quant Results File: temp.res

Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)

Title : GC-MS Semivolatiles SOP no. 506

Last Update : Wed Sep 04 13:24:55 2013

Response via : Multiple Level Calibration



(2) 1,4-Dioxane (t)

2.63min 9.49ng/uL

response 68358

Ion	Exp%	Act%
88.00	100	100
58.00	77.90	84.61
43.00	47.90	56.83
57.00	33.00	42.98#

*2.63min*

Data File : D:\HPCHEM\1\DATA\090413\N8221.D

Acq On : 4 Sep 2013 13:06

Sample : ICALSVSTD010

Misc : ST130531-4

MS Integration Params: RTEINT.P

Quant Time: Sep 4 13:25 2013

Vial: 5

Operator: jk SOP 50

Inst : GC/MS Ins

Multiplr: 1.00

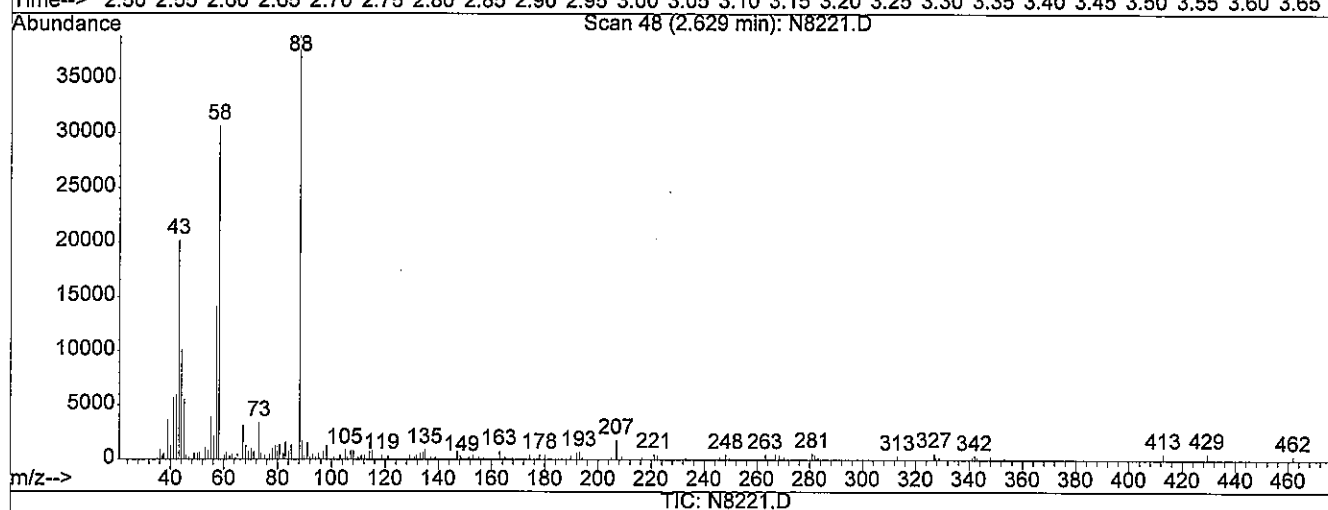
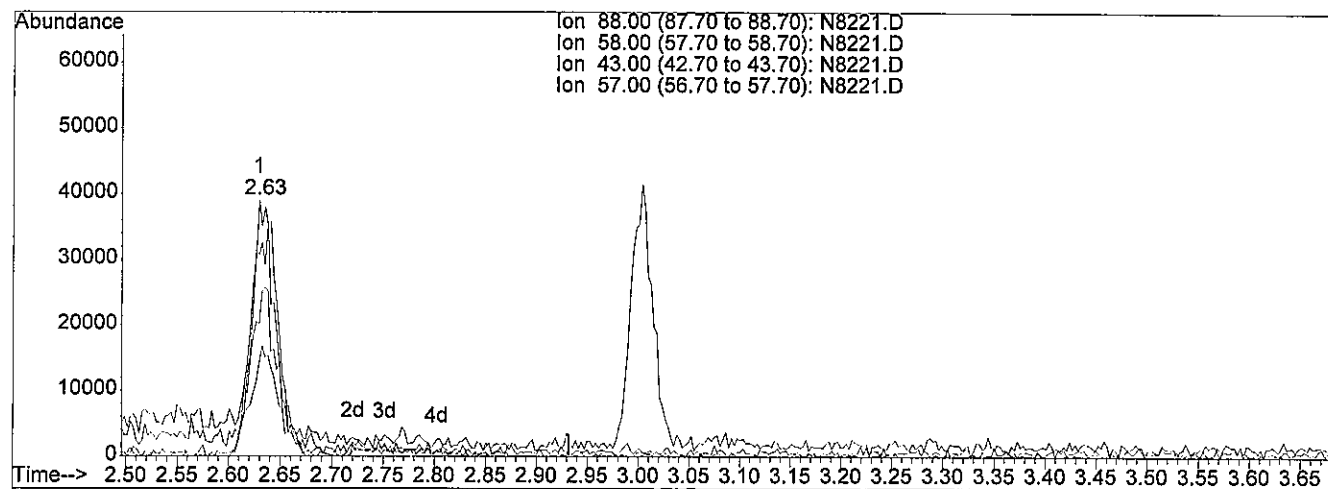
Quant Results File: temp.res

Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)

Title : GC-MS Semivolatiles SOP no. 506

Last Update : Wed Sep 04 13:24:55 2013

Response via : Multiple Level Calibration



(2) 1,4-Dioxane (t)

2.63min 10.29ng/uL m

response 74139

Ion	Exp%	Act%
88.00	100	100
58.00	77.90	78.01
43.00	47.90	52.40
57.00	33.00	39.63#

**MANUAL RE-INTEGRATION**

- ☐ missed peak assignment  
☐ assigned incorrect name to peak  
☐ over-integrated peak's area  
☒ under-integrated peak's area  
☐ other \_\_\_\_\_

initials jt date 9-5-13

# Quantitation Report (Qedit)

Data File : D:\HPCHEM\1\DATA\090413\N8221.D

Vial: 5

Acq On : 4 Sep 2013 13:06

Operator: jk SOP 50

Sample : ICALSVSTD010

Inst : GC/MS Ins

Misc : ST130531-4

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Sep 4 13:25 2013

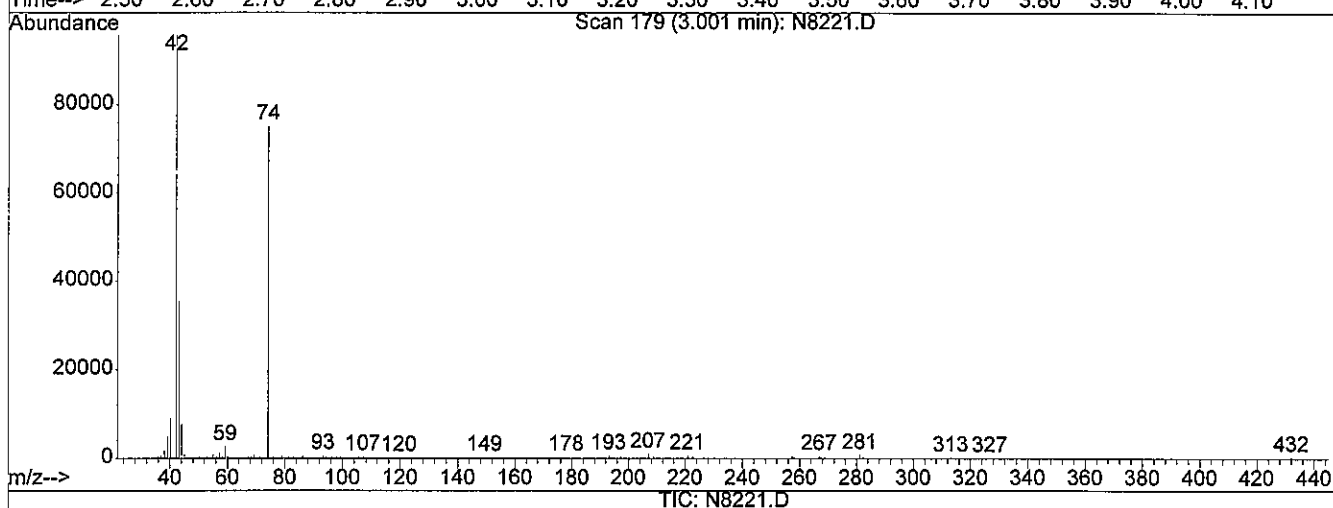
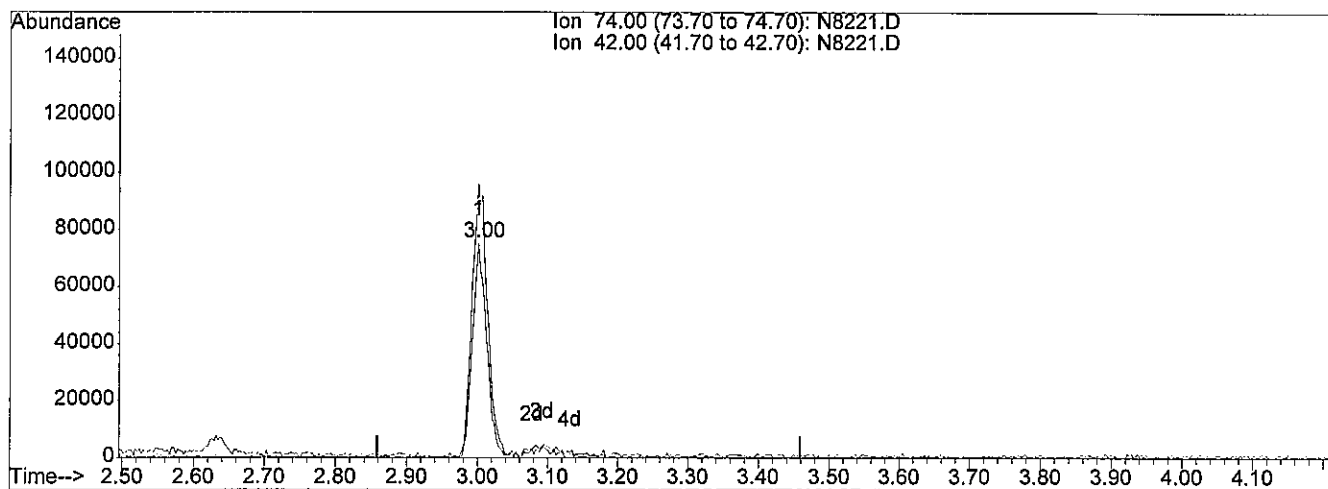
Quant Results File: temp.res

Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)

Title : GC-MS Semivolatiles SOP no. 506

Last Update : Wed Sep 04 13:24:55 2013

Response via : Multiple Level Calibration



(3) n-Nitrosodimethylamine (T)

3.00min 10.07ng/uL

response 107178

Ion	Exp%	Act%
74.00	100	100
42.00	129.50	137.54
0.00	0.00	0.00
0.00	0.00	0.00

*zhu*

# Quantitation Report (Qedit)

Data File : D:\HPCHEM\1\DATA\090413\N8221.D

Vial: 5

Acq On : 4 Sep 2013 13:06

Operator: jk SOP 50

Sample : ICALSVSTD010

Inst : GC/MS Ins

Misc : ST130531-4

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Sep 4 13:25 2013

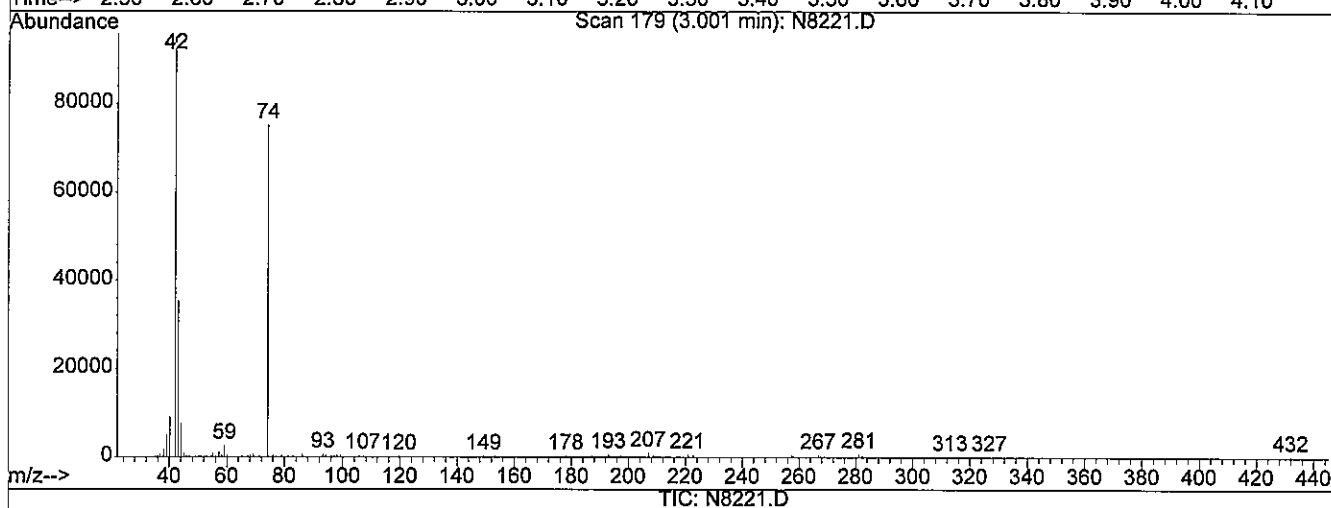
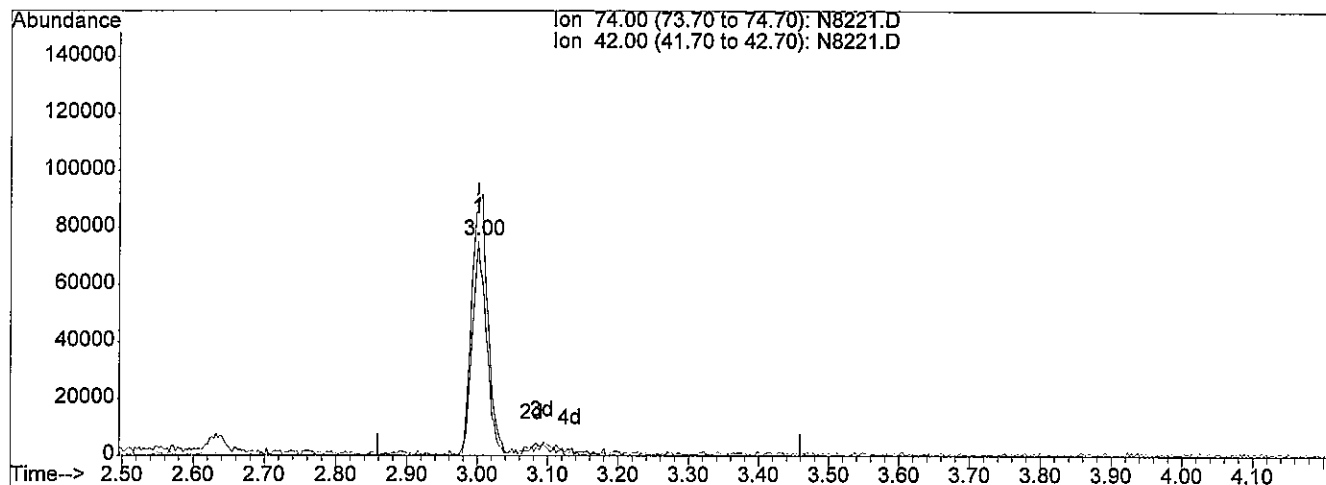
Quant Results File: temp.res

Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)

Title : GC-MS Semivolatiles SOP no. 506

Last Update : Wed Sep 04 13:24:55 2013

Response via : Multiple Level Calibration



(3) n-Nitrosodimethylamine (T)

3.00min 11.08ng/uL m

response 117895

Ion	Exp%	Act%
74.00	100	100
42.00	129.50	125.04
0.00	0.00	0.00
0.00	0.00	0.00

## MANUAL RE-INTEGRATION

- ☐ missed peak assignment
- ☐ assigned incorrect name to peak
- ☐ over-integrated peak's area
- ☒ under-integrated peak's area
- ☐ other \_\_\_\_\_

initials J.C. date 9-5-13

# Quantitation Report (Qedit)

Data File : D:\HPCHEM\1\DATA\090413\N8221.D

Acq On : 4 Sep 2013 13:06

Sample : ICALSVSTD010

Misc : ST130531-4

MS Integration Params: RTEINT.P

Quant Time: Sep 4 13:25 2013

Vial: 5

Operator: jk SOP 50

Inst : GC/MS Ins

Multiplr: 1.00

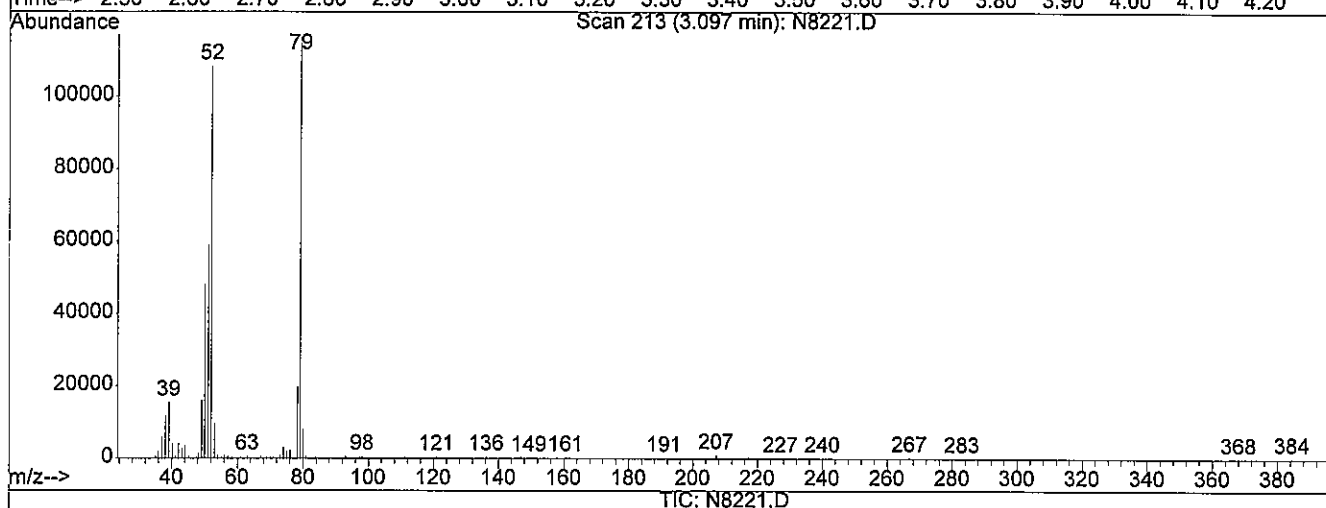
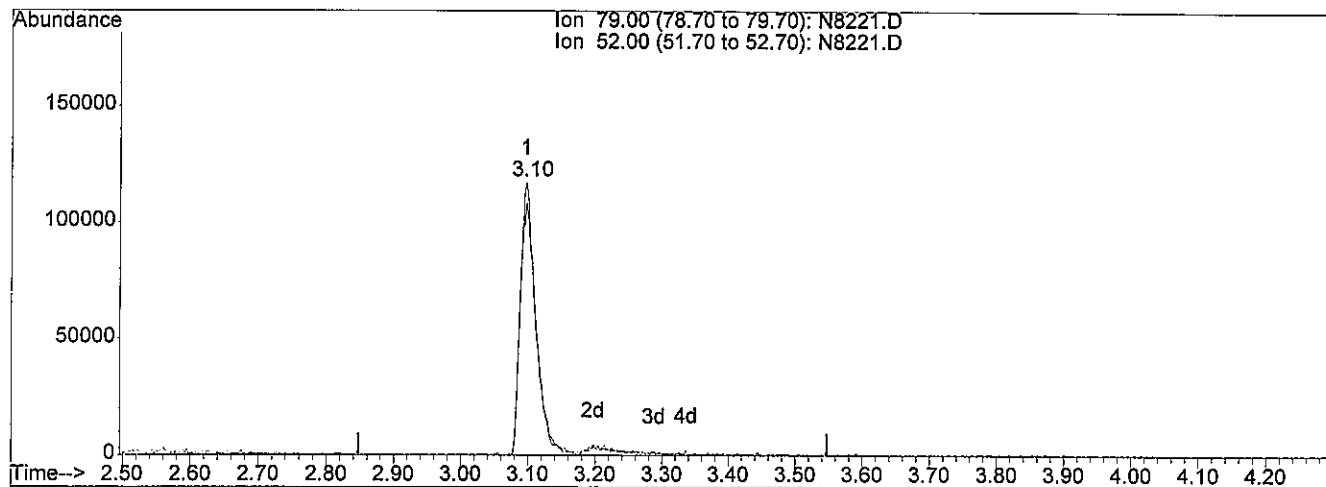
Quant Results File: temp.res

Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)

Title : GC-MS Semivolatiles SOP no. 506

Last Update : Wed Sep 04 13:24:55 2013

Response via : Multiple Level Calibration



(4) Pyridine (T)

3.10min 10.11ng/uL

response 187557

Ion	Exp%	Act%
79.00	100	100
52.00	93.60	95.92
0.00	0.00	0.00
0.00	0.00	0.00

*3e fm*



Data File : D:\HPCHEM\1\DATA\090413\N8221.D

Acq On : 4 Sep 2013 13:06

Sample : ICALSVSTD010

Misc : ST130531-4

MS Integration Params: RTEINT.P

Quant Time: Sep 4 13:25 2013

Vial: 5

Operator: jk SOP 50

Inst : GC/MS Ins

Multiplr: 1.00

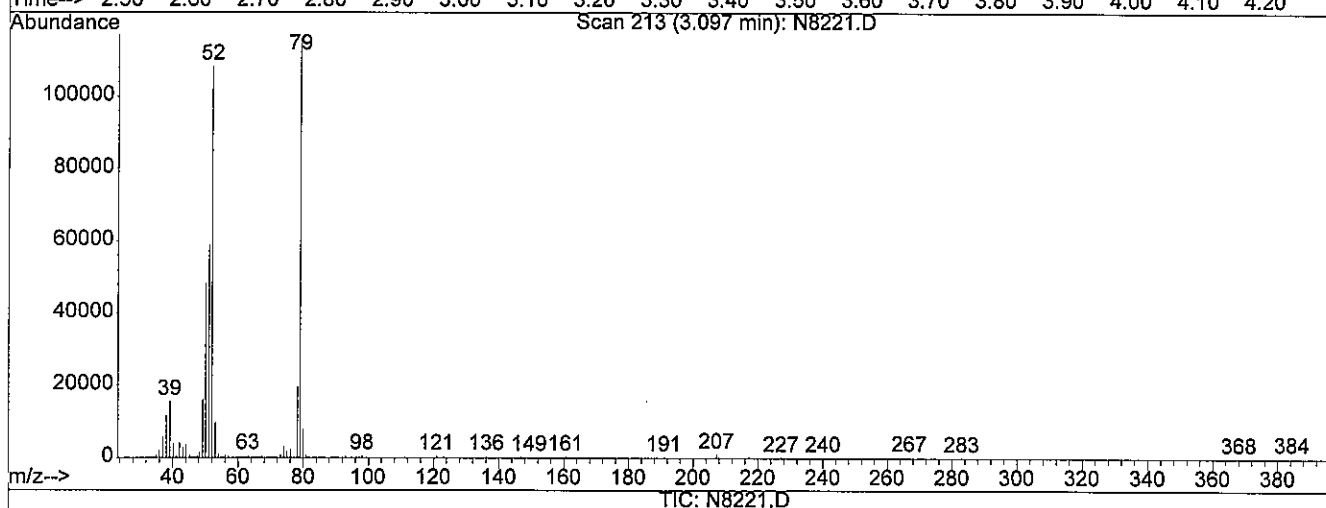
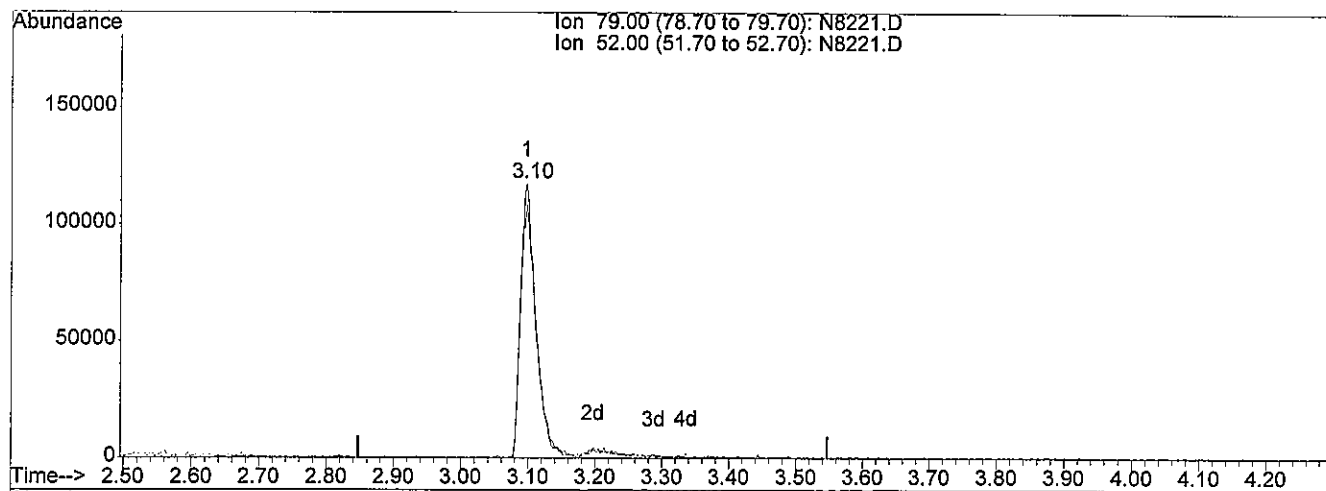
Quant Results File: temp.res

Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)

Title : GC-MS Semivolatiles SOP no. 506

Last Update : Wed Sep 04 13:24:55 2013

Response via : Multiple Level Calibration



(4) Pyridine (T)

3.10min 10.94ng/uL m

response 202961

Ion	Exp%	Act%
79.00	100	100
52.00	93.60	88.64
0.00	0.00	0.00
0.00	0.00	0.00

**MANUAL RE-INTEGRATION**

- ☐ missed peak assignment
- ☐ assigned incorrect name to peak
- ☐ over-integrated peak's area
- ☒ under-integrated peak's area
- ☐ other \_\_\_\_\_

initials JK date 9-5-13

Data File : D:\HPCHEM\1\DATA\090413\N8221.D

Acq On : 4 Sep 2013 13:06

Sample : ICALSVSTD010

Misc : ST130531-4

MS Integration Params: RTEINT.P

Quant Time: Sep 4 13:25 2013

Vial: 5

Operator: jk SOP 50

Inst : GC/MS Ins

Multiplr: 1.00

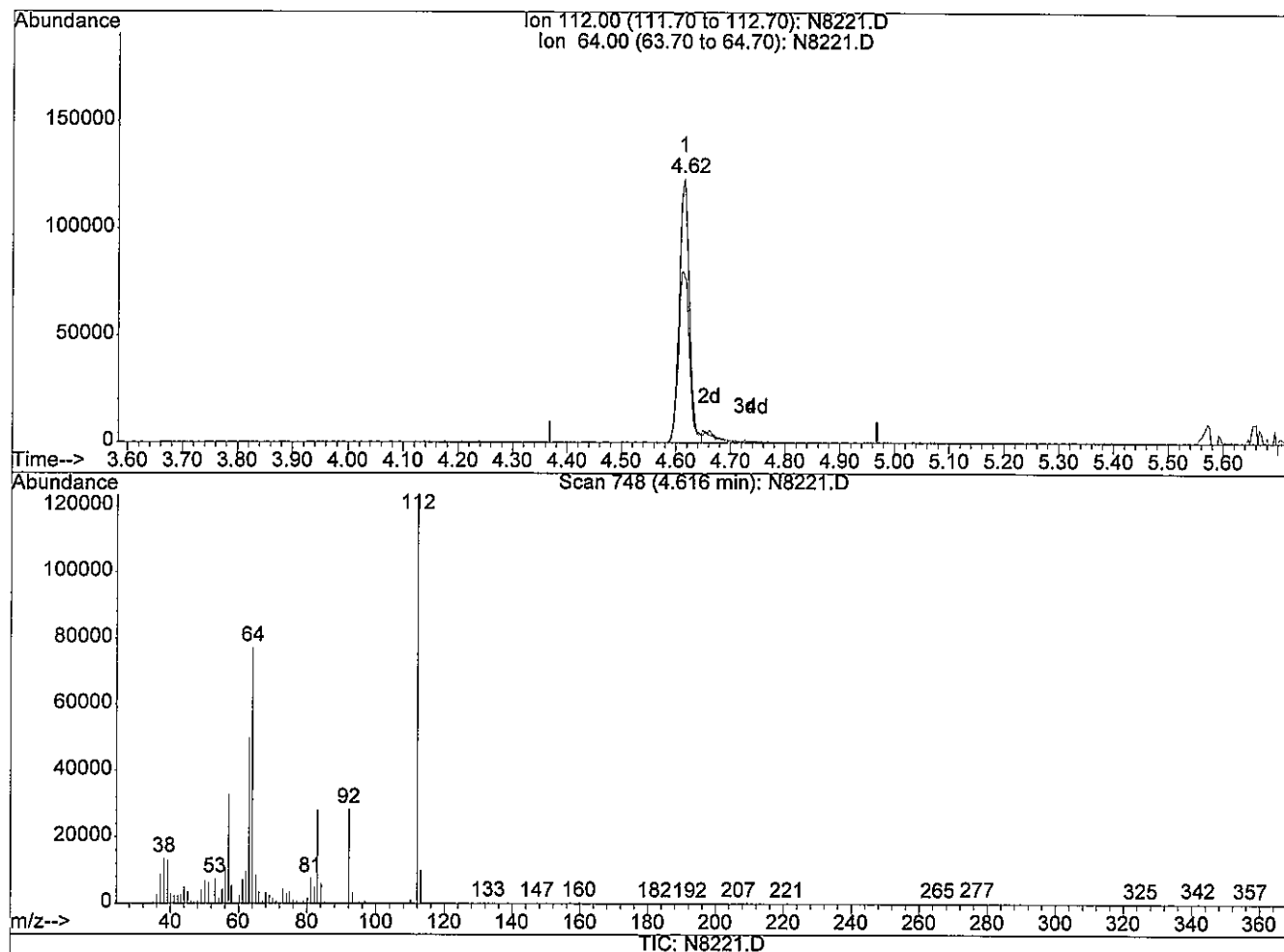
Quant Results File: temp.res

Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)

Title : GC-MS Semivolatiles SOP no. 506

Last Update : Wed Sep 04 13:24:55 2013

Response via : Multiple Level Calibration



(5) 2-Fluorophenol (S)

4.62min 10.44ng/uL

response 159585

Ion	Exp%	Act%
112.00	100	100
64.00	68.70	70.78
0.00	0.00	0.00
0.00	0.00	0.00

3.6u

# Quantitation Report (Qedit)

Data File : D:\HPCHEM\1\DATA\090413\N8221.D

Acq On : 4 Sep 2013 13:06

Sample : ICALSVSTD010

Misc : ST130531-4

MS Integration Params: RTEINT.P

Quant Time: Sep 4 13:25 2013

Vial: 5

Operator: jk SOP 50

Inst : GC/MS Ins

Multiplr: 1.00

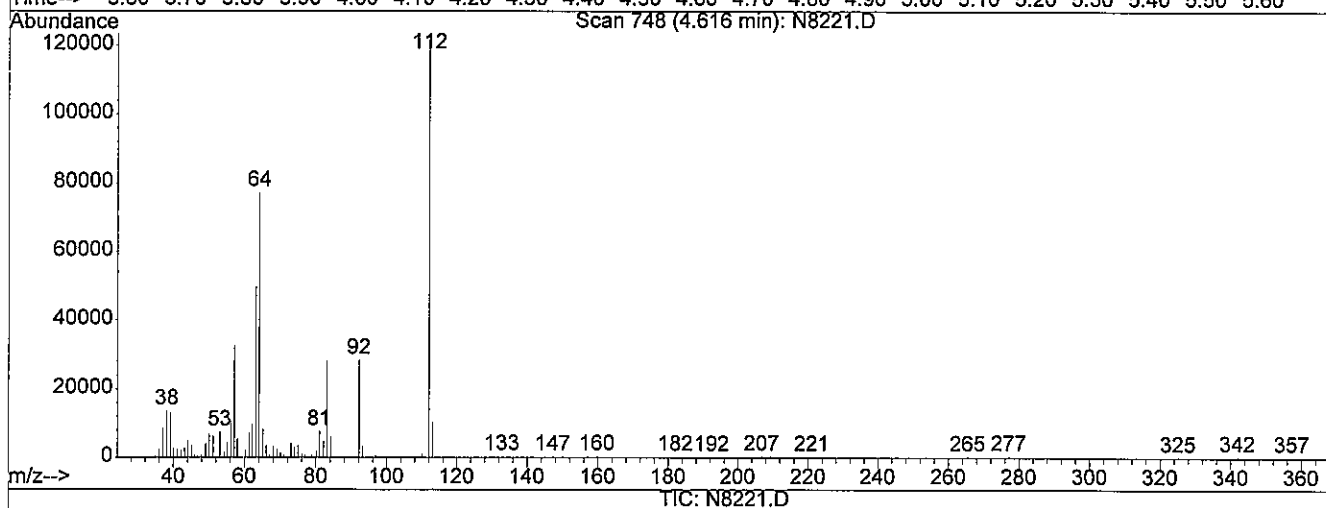
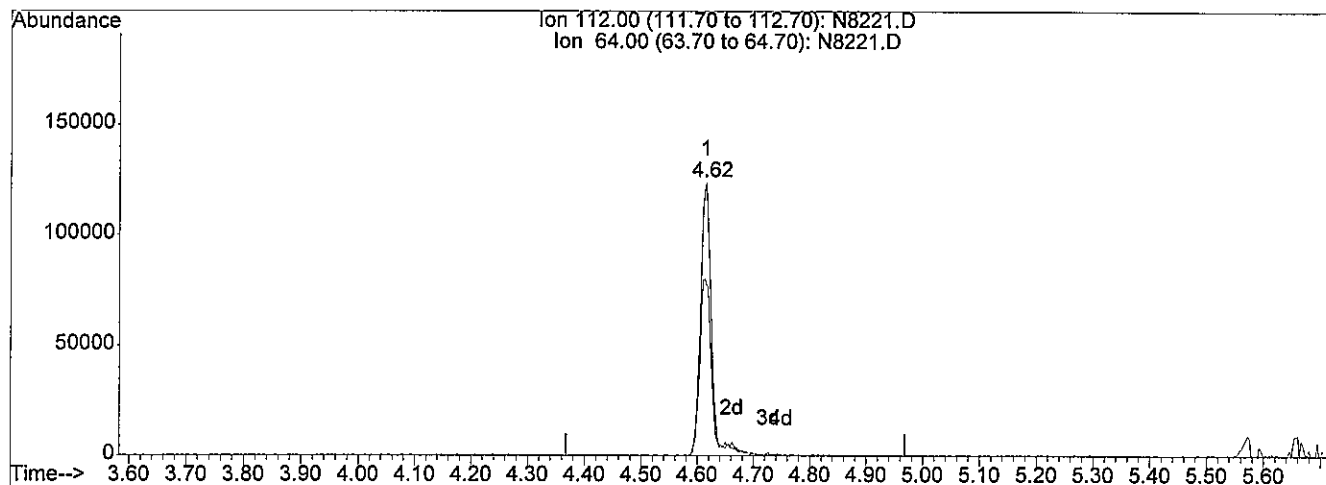
Quant Results File: temp.res

Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)

Title : GC-MS Semivolatiles SOP no. 506

Last Update : Wed Sep 04 13:24:55 2013

Response via : Multiple Level Calibration



(5) 2-Fluorophenol (S)

4.62min 11.27ng/uL m

response 172295

Ion	Exp%	Act%
112.00	100	100
64.00	68.70	65.56
0.00	0.00	0.00
0.00	0.00	0.00

## MANUAL RE-INTEGRATION

- ☐ missed peak assignment
- ☐ assigned incorrect name to peak
- ☐ over-integrated peak's area
- ☒ under-integrated peak's area
- ☐ other \_\_\_\_\_

initials jk date 9-5-13

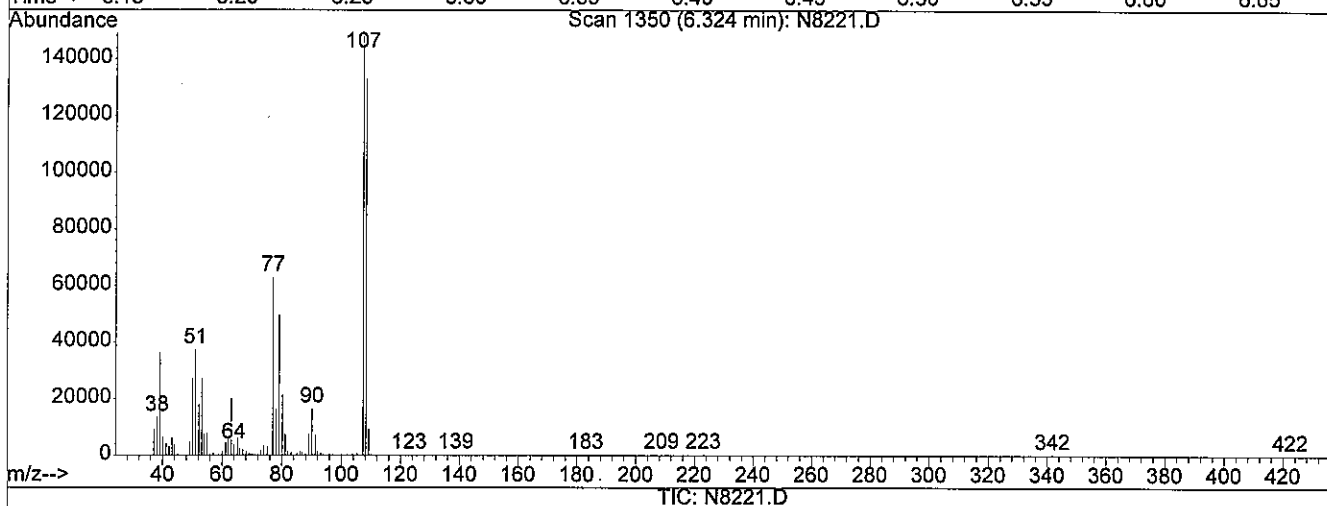
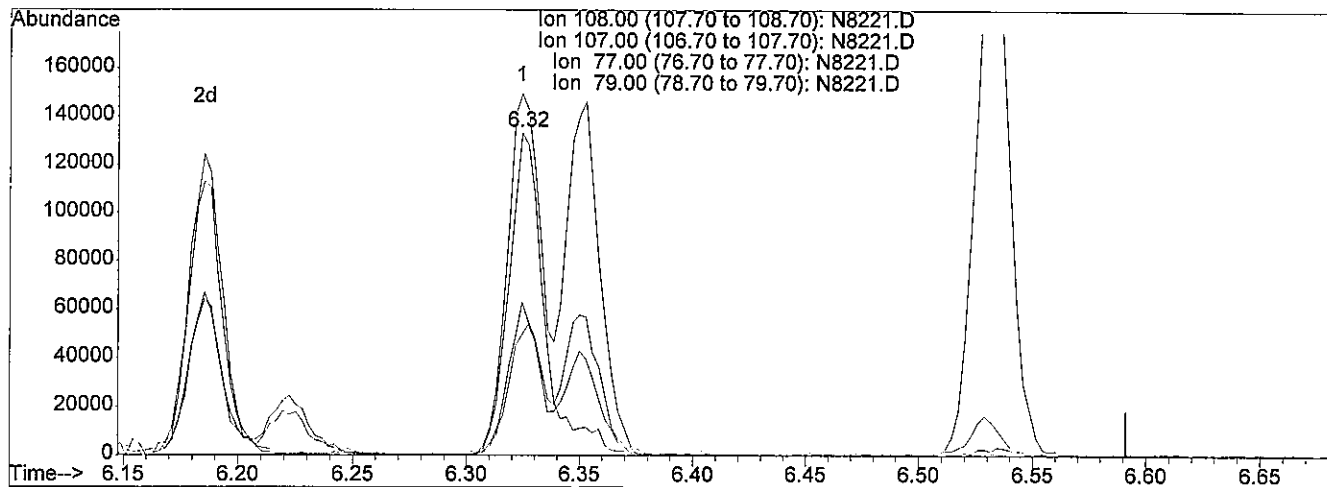
# Quantitation Report (Qedit)

Data File : D:\HPCHEM\1\DATA\090413\N8221.D  
 Acq On : 4 Sep 2013 13:06  
 Sample : ICALSVSTD010  
 Misc : ST130531-4  
 MS Integration Params: RTEINT.P  
 Quant Time: Sep 4 13:25 2013

Vial: 5  
 Operator: jk SOP 50  
 Inst : GC/MS Ins  
 Multiplr: 1.00

Quant Results File: temp.res

Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)  
 Title : GC-MS Semivolatiles SOP no. 506  
 Last Update : Wed Sep 04 13:24:55 2013  
 Response via : Multiple Level Calibration



(21) 3+4-Methylphenol (T)

6.32min 9.98ng/uL

response 146282

Ion	Exp%	Act%
108.00	100	100
107.00	210.50	108.47#
77.00	76.70	43.34#
79.00	63.20	38.20#

*3e6*

# Quantitation Report (Qedit)

Data File : D:\HPCHEM\1\DATA\090413\N8221.D

Acq On : 4 Sep 2013 13:06

Sample : ICALSVSTD010

Misc : ST130531-4

MS Integration Params: RTEINT.P

Quant Time: Sep 4 13:25 2013

Vial: 5

Operator: jk SOP 50

Inst : GC/MS Ins

Multiplr: 1.00

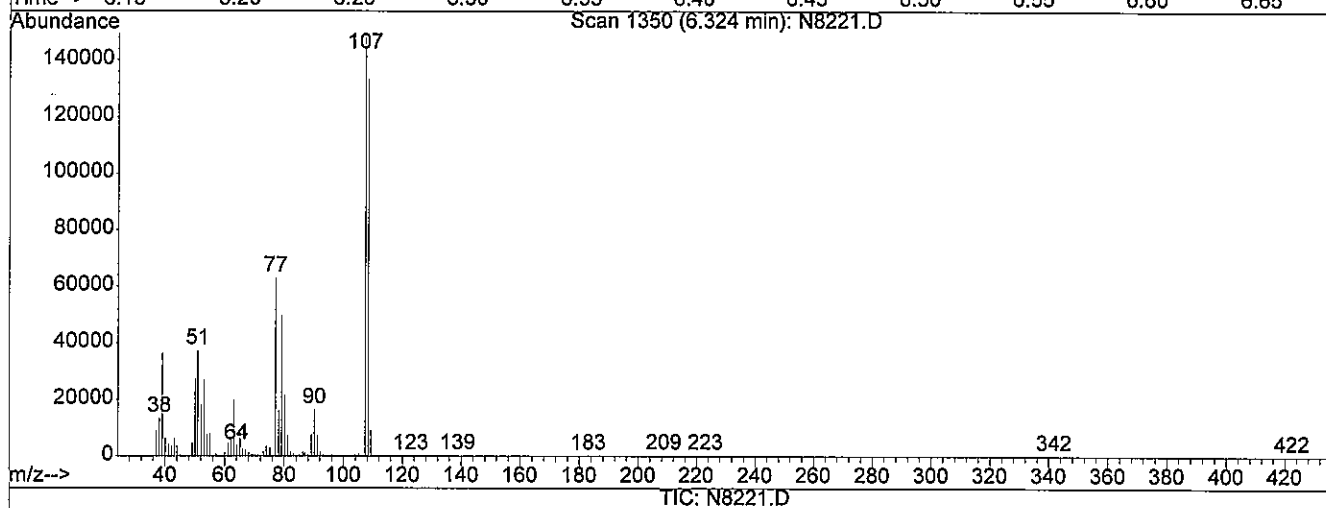
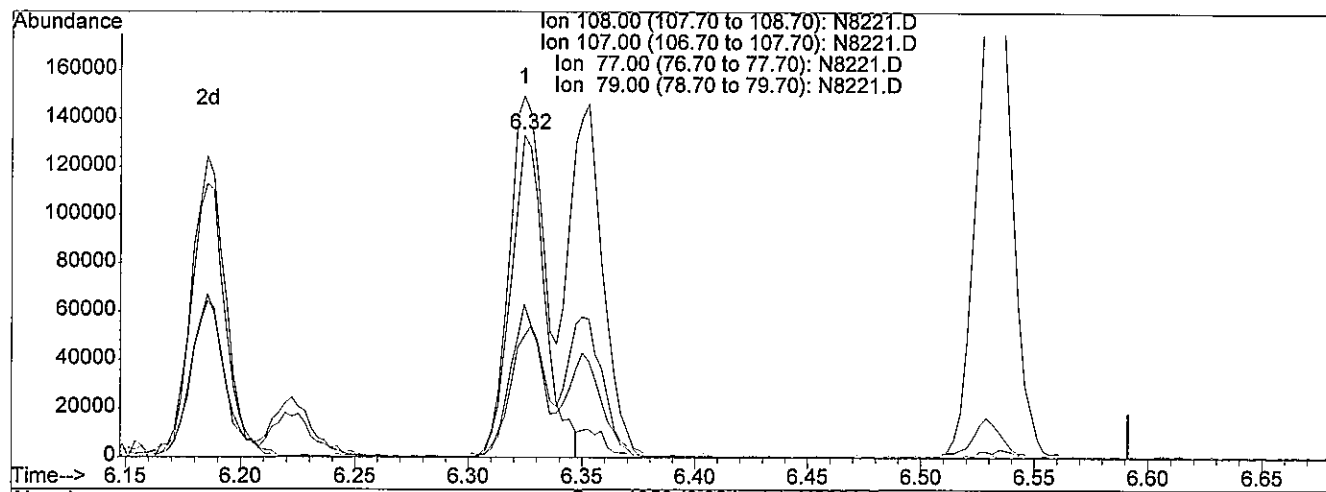
Quant Results File: temp.res

Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)

Title : GC-MS Semivolatiles SOP no. 506

Last Update : Wed Sep 04 13:24:55 2013

Response via : Multiple Level Calibration



(21) 3+4-Methylphenol (T)

6.32min 9.37ng/uL m

response 137338

Ion	Exp%	Act%
108.00	100	100
107.00	210.50	115.53#
77.00	76.70	46.17#
79.00	63.20	40.69#

## MANUAL RE-INTEGRATION

- ☐ missed peak assignment
- ☐ assigned incorrect name to peak
- ☒ over-integrated peak's area
- ☐ under-integrated peak's area
- ☐ other \_\_\_\_\_

initials jk date 9-5-13

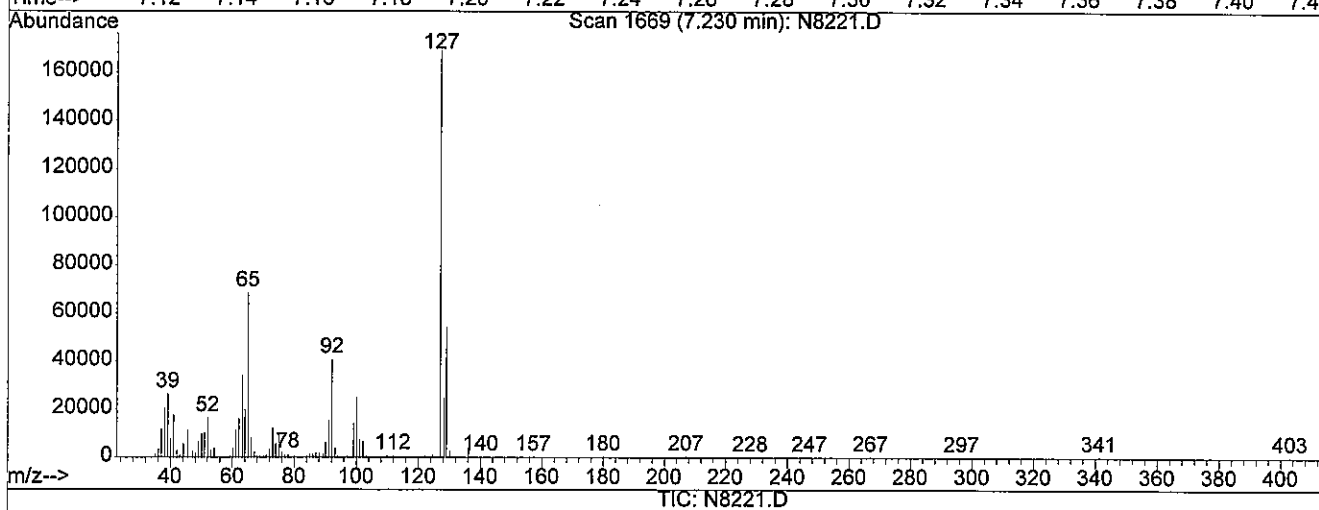
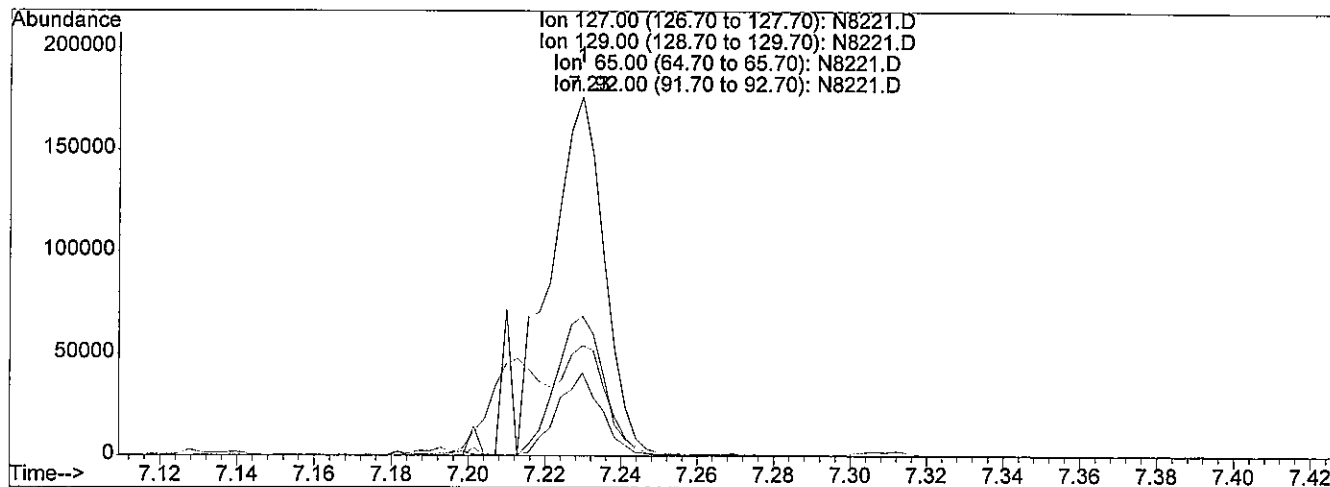
# Quantitation Report (Qedit)

Data File : D:\HPCHEM\1\DATA\090413\N8221.D  
 Acq On : 4 Sep 2013 13:06  
 Sample : ICALSVSTD010  
 Misc : ST130531-4  
 MS Integration Params: RTEINT.P  
 Quant Time: Sep 4 13:25 2013

Vial: 5  
 Operator: jk SOP 50  
 Inst : GC/MS Ins  
 Multiplr: 1.00

Quant Results File: temp.res

Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)  
 Title : GC-MS Semivolatiles SOP no. 506  
 Last Update : Wed Sep 04 13:24:55 2013  
 Response via : Multiple Level Calibration



(37) 4-Chloroaniline (T)

7.23min 11.54ng/uL

response 189969

Ion	Exp%	Act%
127.00	100	100
129.00	30.90	23.37
65.00	40.50	31.96#
92.00	21.70	17.52

*Refer*

Data File : D:\HPCHEM\1\DATA\090413\N8221.D

Acq On : 4 Sep 2013 13:06

Sample : ICALSVSTD010

Misc : ST130531-4

MS Integration Params: RTEINT.P

Quant Time: Sep 4 13:26 2013

Vial: 5

Operator: jk SOP 50

Inst : GC/MS Ins

Multiplr: 1.00

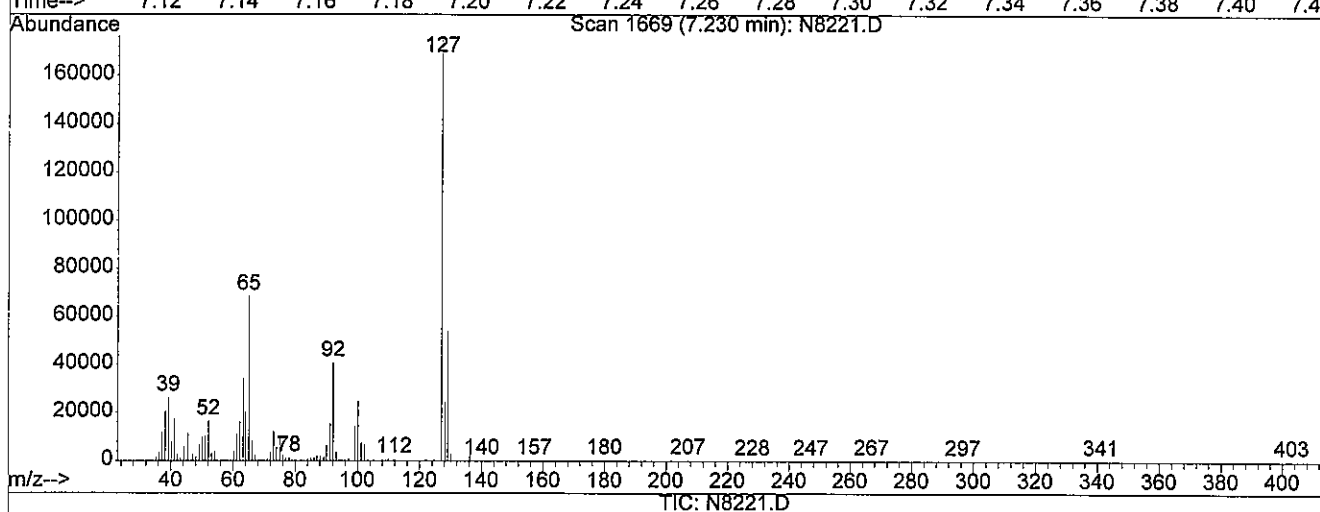
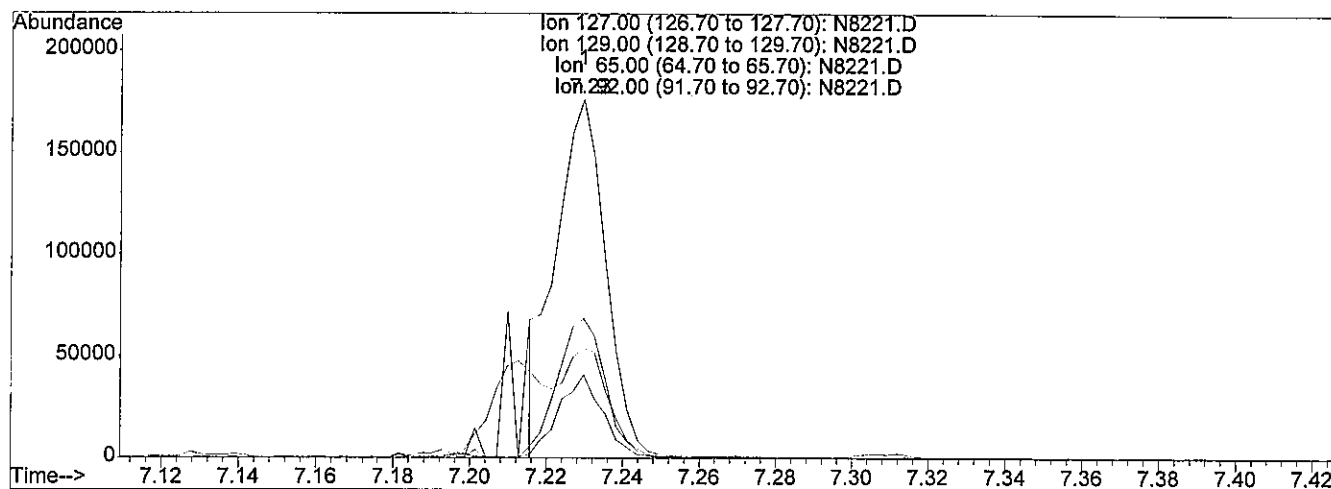
Quant Results File: temp.res

Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)

Title : GC-MS Semivolatiles SOP no. 506

Last Update : Wed Sep 04 13:24:55 2013

Response via : Multiple Level Calibration



(37) 4-Chloroaniline (T)

7.23min 9.96ng/uL m

response 163867

Ion	Exp%	Act%
127.00	100	100
129.00	30.90	27.09
65.00	40.50	37.05
92.00	21.70	20.31

**MANUAL RE-INTEGRATION**

- ☐ missed peak assignment
- ☐ assigned incorrect name to peak
- ☒ over-integrated peak's area
- ☐ under-integrated peak's area
- ☐ other \_\_\_\_\_

initials JK date 9-5-13

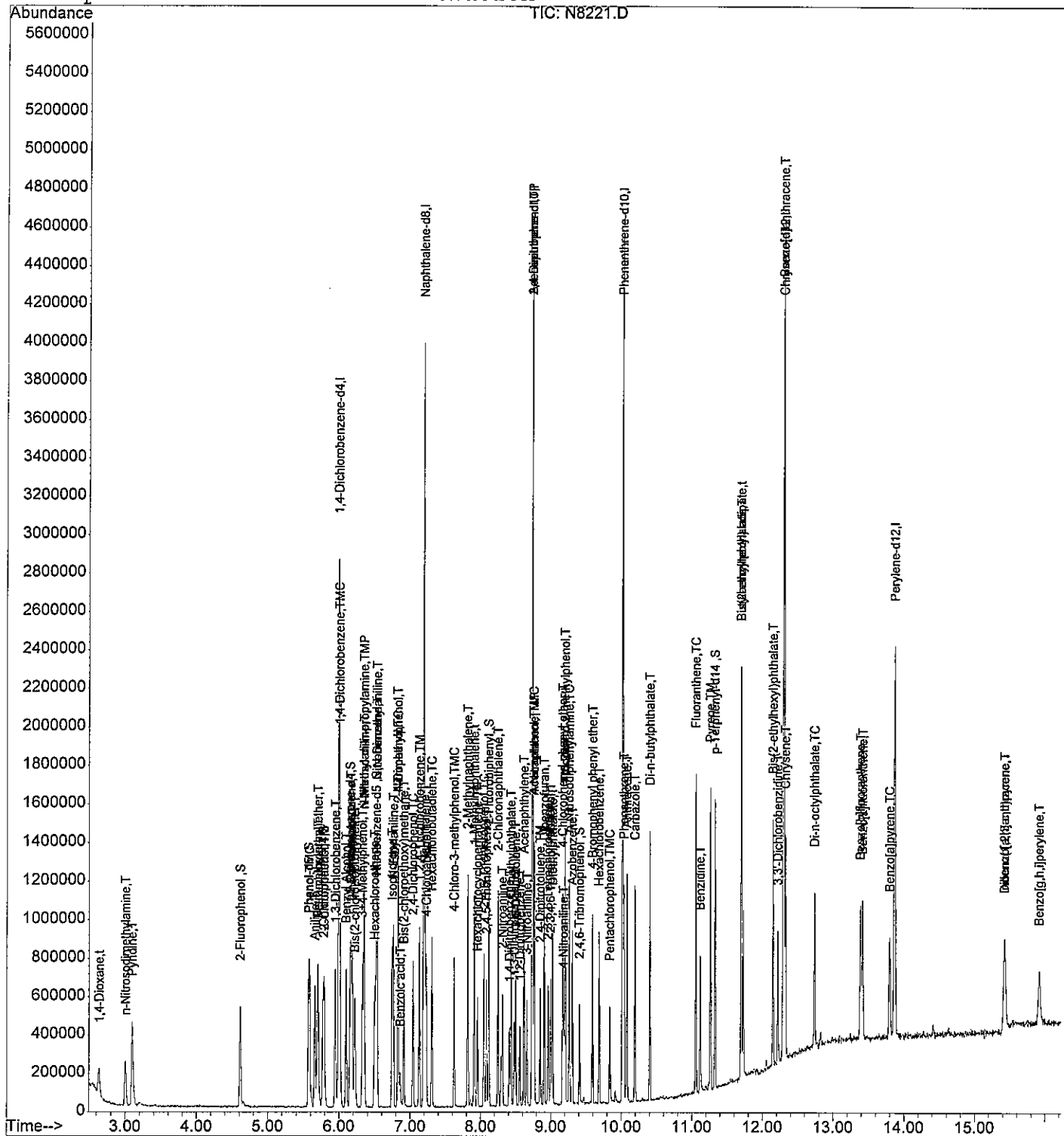
# Quantitation Report

Data File : D:\HPCHEM\1\DATA\090413\N8221.D  
Acq On : 4 Sep 2013 13:06  
Sample : ICALSVSTD010  
Misc : ST130531-4  
MS Integration Params: RTEINT.P  
Quant Time: Sep 4 13:26 2013

Vial: 5  
Operator: jk SOP 506  
Inst : GC/MS Ins  
Multiplr: 1.00

Quant Results File: 090413S1.RES

```
Method       : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)
Title        : GC-MS Semivolatiles      SOP no. 506
Last Update   : Wed Sep 04 13:24:55 2013
Response via  : Initial Calibration
```





Data File : D:\HPCHEM\1\DATA\090413\N8222.D

Vial: 6

Acq On : 4 Sep 2013 13:30

Operator: jk SOP 506 Rev

Sample : ICALSVSTD020

Inst : GC/MS Ins

Misc : ST130531-5

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Sep 4 13:49 2013

Quant Results File: 090413S1.RES

Quant Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)

Title : GC-MS Semivolatiles SOP no. 506

Last Update : Wed Sep 04 13:48:22 2013

Response via : Initial Calibration

DataAcq Meth : 090413S1

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	6.00	152	564163	40.00	ng/uL	0.00
24) Naphthalene-d8	7.19	136	1977704	40.00	ng/uL	0.00
41) Acenaphthene-d10	8.74	164	1054027	40.00	ng/uL	0.00
69) Phenanthrene-d10	10.02	188	1947796	40.00	ng/uL	0.00
80) Chrysene-d12	12.31	240	2173503	40.00	ng/uL	-0.01
91) Perylene-d12	13.87	264	1365651	40.00	ng/uL	-0.01

## System Monitoring Compounds

5) 2-Fluorophenol	4.62	112	379416m	20.07	ng/uL	0.00
Spiked Amount 75.000	Range 46 - 105		Recovery =	26.76%#		
6) 2-Chlorophenol-d4	5.78	132	337189	20.22	ng/uL	0.00
Spiked Amount 75.000	Range 33 - 110		Recovery =	26.96%#		
8) Phenol-d5	5.58	99	507563	20.21	ng/uL	0.00
Spiked Amount 75.000	Range 50 - 109		Recovery =	26.95%#		
15) 1,2-Dichlorobenzene-d4	6.15	152	262565	18.94	ng/uL	0.00
Spiked Amount 50.000	Range 16 - 110		Recovery =	37.88%		
25) Nitrobenzene-d5	6.52	82	462648	19.99	ng/uL	0.00
Spiked Amount 50.000	Range 53 - 111		Recovery =	39.98%#		
46) 2-Fluorobiphenyl	8.12	172	727010	19.71	ng/uL	0.00
Spiked Amount 50.000	Range 55 - 108		Recovery =	39.42%#		
68) 2,4,6-Tribromophenol	9.41	330	109304	21.32	ng/uL	0.00
Spiked Amount 75.000	Range 42 - 117		Recovery =	28.43%#		
83) p-Terphenyl-d14	11.33	244	987537	19.07	ng/uL	0.00
Spiked Amount 50.000	Range 34 - 139		Recovery =	38.14%		

## Target Compounds

						Qvalue
2) 1,4-Dioxane	2.63	88	172628m	19.59	ng/uL	
3) n-Nitrosodimethylamine	3.00	74	279549m	21.05	ng/uL	
4) Pyridine	3.09	79	467013m	20.30	ng/uL	
7) Aniline	5.66	93	592783	20.30	ng/uL	98
9) Phenol	5.59	94	484251	19.88	ng/uL	95
10) Tetramethylurea	5.71	72	680843	19.95	ng/uL	97
11) Bis(2-chloroethyl) ether	5.70	93	402779	20.49	ng/uL	99
12) 2-Chlorophenol	5.79	128	365231	20.30	ng/uL	98
13) 1,3-Dichlorobenzene	5.95	146	429353	20.13	ng/uL	98
14) 1,4-Dichlorobenzene	6.01	146	398481	20.17	ng/uL	97
16) 1,2-Dichlorobenzene	6.17	146	381852	20.22	ng/uL	99
17) Benzyl Alcohol	6.10	108	237530	20.40	ng/uL	96
18) 2-Methylphenol	6.19	107	298273	20.38	ng/uL	98
19) Bis(2-chloroisopropyl) ether	6.22	45	672382	20.74	ng/uL	98
20) n-Nitroso-di-n-propylamine	6.35	70	289280	19.86	ng/uL	97
21) 3+4-Methylphenol	6.33	108	361914m	20.09	ng/uL	

(#)=qualifier out of range (m)=manual integration

N8222.D 090413S1.M Wed Sep 04 13:50:15 2013

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Data File : D:\HPCHEM\1\DATA\090413\N8222.D

Vial: 6

Acq On : 4 Sep 2013 13:30

Operator: jk SOP 506 Rev

Sample : ICALSVSTD020

Inst : GC/MS Ins

Misc : ST130531-5

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Sep 4 13:49 2013

Quant Results File: 090413S1.RES

Quant Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)

Title : GC-MS Semivolatiles SOP no. 506

Last Update : Wed Sep 04 13:48:22 2013

Response via : Initial Calibration

DataAcq Meth : 090413S1

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
22) N-Methylaniline	6.36	106	534830	20.09	ng/uL#	45
23) Hexachloroethane	6.50	117	172616	20.58	ng/uL	98
26) N,N-Dimethylaniline	6.53	120	536420	20.04	ng/uL	95
27) Nitrobenzene	6.53	77	555242	19.90	ng/uL	99
28) Isophorone	6.75	82	751290	21.08	ng/uL	100
29) N-Ethylaniline	6.76	106	668363	20.10	ng/uL	99
30) 2-Nitrophenol	6.83	139	170571	21.14	ng/uL	95
31) 2,4-Dimethylphenol	6.83	107	374694	20.96	ng/uL	99
32) Bis(2-chloroethoxy)methane	6.91	93	429195	20.78	ng/uL	98
33) Benzoic acid	6.88	105	141989m	24.43	ng/uL	
34) 2,4-Dichlorophenol	7.04	162	315380	20.87	ng/uL	99
35) 1,2,4-Trichlorobenzene	7.13	180	384915	20.47	ng/uL	98
36) Naphthalene	7.21	128	1004182	20.55	ng/uL#	94
37) 4-Chloroaniline	7.23	127	380325	20.31	ng/uL	99
38) Hexachlorobutadiene	7.31	225	247984	20.50	ng/uL	98
39) 4-Chloro-3-methylphenol	7.63	107	308756	21.20	ng/uL	98
40) 2-Methylnaphthalene	7.82	142	739087	20.96	ng/uL	100
42) 1-Methylnaphthalene	7.91	142	657660	20.91	ng/uL	99
43) Hexachlorocyclopentadiene	7.96	237	184922	19.23	ng/uL	99
44) 2,4,6-Trichlorophenol	8.05	196	232523	21.07	ng/uL	99
45) 2,4,5-Trichlorophenol	8.08	196	223591	20.94	ng/uL	99
47) 2-Chloronaphthalene	8.25	162	650225	20.56	ng/uL	99
48) 2-Nitroaniline	8.31	65	211578	20.87	ng/uL	98
49) 1,4-Dinitrobenzene	8.41	168	91522	21.52	ng/uL	97
50) Dimethylphthalate	8.44	163	633522	20.02	ng/uL	99
51) 1,3-Dinitrobenzene	8.48	168	107001	21.41	ng/uL	86
52) 2,6-Dinitrotoluene	8.50	165	151067	20.67	ng/uL#	81
53) 1,2-Dinitrobenzene	8.56	168	70662	21.52	ng/uL	99
54) Acenaphthylene	8.62	152	933260	20.24	ng/uL	99
55) 3-Nitroaniline	8.66	138	130134	20.27	ng/uL	96
56) Acenaphthene	8.77	154	561529	20.46	ng/uL	99
57) 2,4-Dinitrophenol	8.75	184	58813	23.78	ng/uL#	95
58) 4-Nitrophenol	8.76	109	82922	21.12	ng/uL	96
59) Dibenzofuran	8.91	168	835821	20.10	ng/uL	100
60) 2,4-Dinitrotoluene	8.86	165	191015	21.14	ng/uL	99
61) 2,3,5,6-Tetrachlorophenol	8.97	232	198537	21.79	ng/uL	98
62) 2,3,4,6-Tetrachlorophenol	9.00	232	194313	21.03	ng/uL	98
63) Diethylphthalate	9.03	149	568938	19.74	ng/uL	99
64) 4-Chlorophenyl phenyl ethe	9.17	204	377232	20.29	ng/uL	100
65) 4-Nitroaniline	9.19	138	124334	21.08	ng/uL#	87
66) Fluorene	9.21	166	634588	19.84	ng/uL	99

(#)=qualifier out of range (m)=manual integration

N8222.D 090413S1.M Wed Sep 04 13:50:16 2013

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Data File : D:\HPCHEM\1\DATA\090413\N8222.D

Vial: 6

Acq On : 4 Sep 2013 13:30

Operator: jk SOP 506 Rev

Sample : ICALSVSTD020

Inst : GC/MS Ins

Misc : ST130531-5

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Sep 4 13:49 2013

Quant Results File: 090413S1.RES

Quant Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)

Title : GC-MS Semivolatiles SOP no. 506

Last Update : Wed Sep 04 13:48:22 2013

Response via : Initial Calibration

DataAcq Meth : 090413S1

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
67) Azobenzene	9.31	77	673572	20.42	ng/uL	99
70) 4,6-Dinitro-2-methylphenol	9.21	198	97521	24.36	ng/uL	95
71) n-Nitrosodiphenylamine	9.26	169	540544	19.77	ng/uL	99
72) 4-Bromophenyl phenyl ether	9.59	248	243390	20.61	ng/uL	97
73) Hexachlorobenzene	9.69	284	257879	20.42	ng/uL	99
74) Pentachlorophenol	9.84	266	155759	22.63	ng/uL	96
75) Phenanthrene	10.04	178	927418	20.01	ng/uL	99
76) Anthracene	10.08	178	994332	20.33	ng/uL	99
77) Carbazole	10.20	167	983347	21.34	ng/uL	99
78) Di-n-butylphthalate	10.41	149	1217092	20.91	ng/uL	99
79) Fluoranthene	11.06	202	1415328	20.85	ng/uL	99
81) Benzidine	11.12	184	843477	24.30	ng/uL	100
82) Pyrene	11.27	202	1433950	20.10	ng/uL	98
84) Butylbenzylphthalate	11.70	149	461954	20.13	ng/uL	98
85) Bis(2-ethylhexyl) adipate	11.70	129	389789	19.97	ng/uL	93
86) Bis(2-ethylhexyl)phthalate	12.15	149	585893	20.19	ng/uL	98
87) 3,3'-Dichlorobenzidine	12.22	252	389048	20.72	ng/uL	95
88) Benzo[a]anthracene	12.29	228	1204892	20.44	ng/uL	99
89) Chrysene	12.33	228	1104762	20.32	ng/uL	99
90) Di-n-octylphthalate	12.73	149	838949	20.90	ng/uL	95
92) Benzo[b]fluoranthene	13.39	252	929406	21.75	ng/uL	99
93) Benzo[k]fluoranthene	13.42	252	947513	22.46	ng/uL	98
94) Benzo[a]pyrene	13.80	252	743749	20.74	ng/uL	98
95) Indeno(1,2,3-c,d)pyrene	15.43	276	627779	20.65	ng/uL	97
96) Dibenzo[a,h]anthracene	15.42	278	544605	20.80	ng/uL	97
97) Benzo[g,h,i]perylene	15.92	276	501881	20.12	ng/uL	96

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(#) = qualifier out of range (m) = manual integration

N8222.D 090413S1.M Wed Sep 04 13:50:16 2013

Page 3

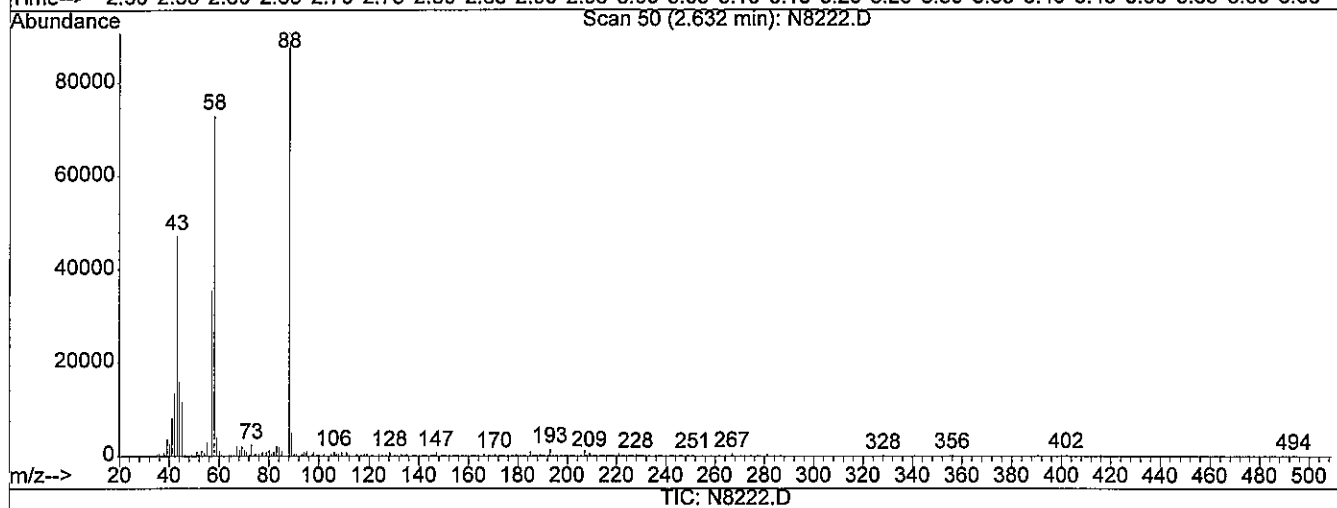
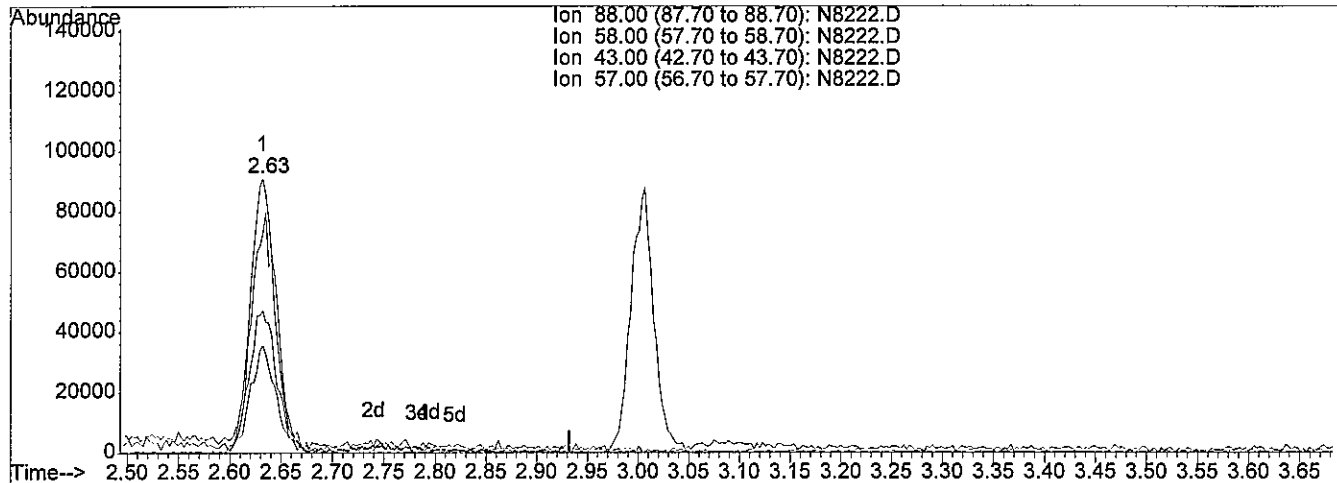
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Data File : D:\HPCHEM\1\DATA\090413\N8222.D  
 Acq On : 4 Sep 2013 13:30  
 Sample : ICALSVSTD020  
 Misc : ST130531-5  
 MS Integration Params: RTEINT.P  
 Quant Time: Sep 4 13:48 2013

Vial: 6  
 Operator: jk SOP 50  
 Inst : GC/MS Ins  
 Multiplr: 1.00

Quant Results File: temp.res

Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)  
 Title : GC-MS Semivolatiles SOP no. 506  
 Last Update : Wed Sep 04 13:48:22 2013  
 Response via : Multiple Level Calibration



(2) 1,4-Dioxane (t)

2.63min 18.16ng/uL

response 159990

Ion	Exp%	Act%
88.00	100	100
58.00	77.90	82.94
43.00	47.90	53.25
57.00	33.00	37.70

*3.63*

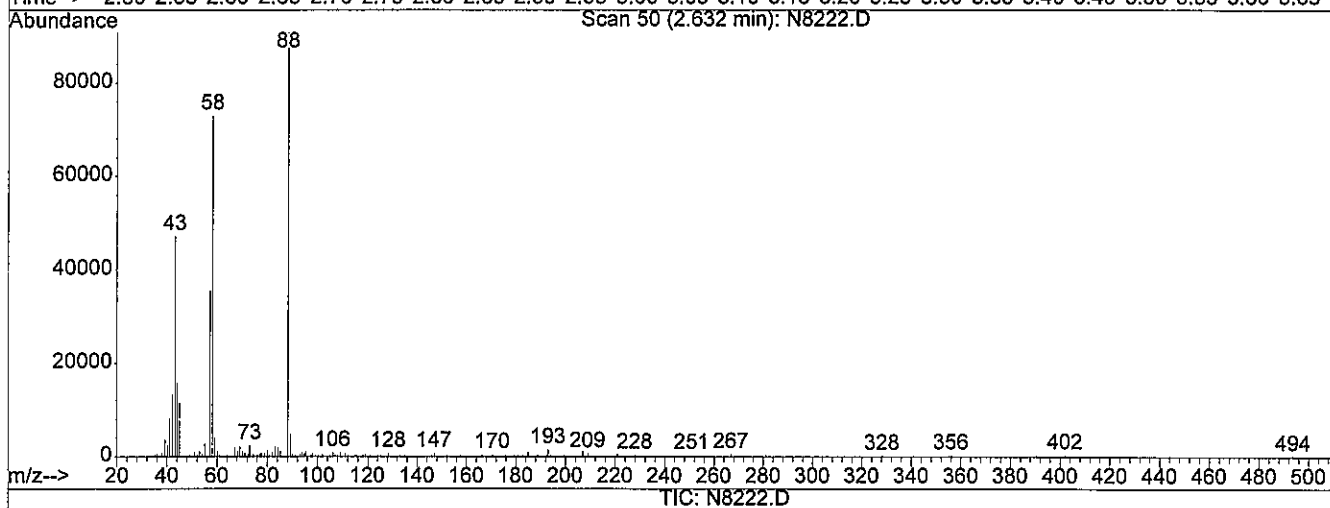
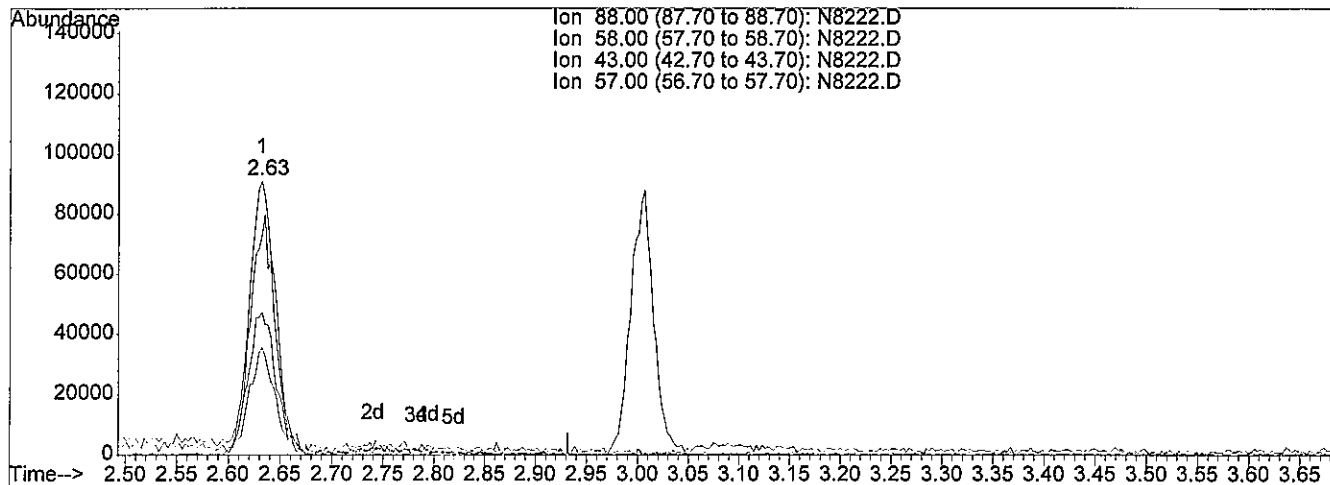
# Quantitation Report (Qedit)

Data File : D:\HPCHEM\1\DATA\090413\N8222.D  
 Acq On : 4 Sep 2013 13:30  
 Sample : ICALSVSTD020  
 Misc : ST130531-5  
 MS Integration Params: RTEINT.P  
 Quant Time: Sep 4 13:48 2013

Vial: 6  
 Operator: jk SOP 50  
 Inst : GC/MS Ins  
 Multiplr: 1.00

Quant Results File: temp.res

Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)  
 Title : GC-MS Semivolatiles SOP no. 506  
 Last Update : Wed Sep 04 13:48:22 2013  
 Response via : Multiple Level Calibration



(2) 1,4-Dioxane (t)

2.63min 19.59ng/uL m

response 172628

Ion	Exp%	Act%
88.00	100	100
58.00	77.90	76.87
43.00	47.90	49.35
57.00	33.00	34.94

## MANUAL RE-INTEGRATION

- ☐ missed peak assignment
- ☐ assigned incorrect name to peak
- ☐ over-integrated peak's area
- ☒ under-integrated peak's area
- ☐ other \_\_\_\_\_

initials JK date 9-5-13

# Quantitation Report (Qedit)

Data File : D:\HPCHEM\1\DATA\090413\N8222.D

Vial: 6

Acq On : 4 Sep 2013 13:30

Operator: jk SOP 50

Sample : ICALSVSTD020

Inst : GC/MS Ins

Misc : ST130531-5

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Sep 4 13:48 2013

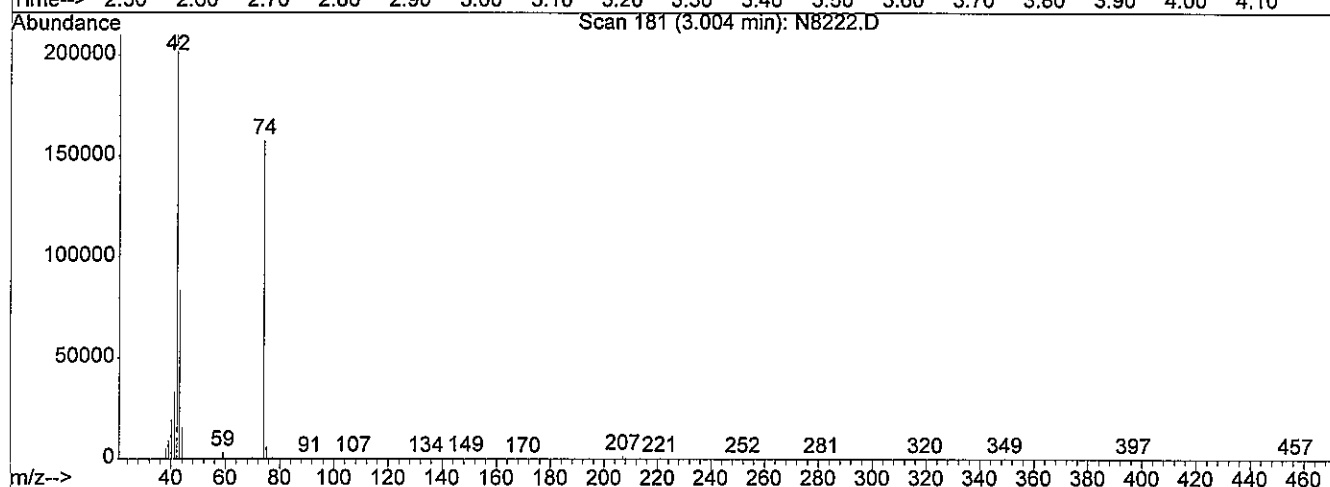
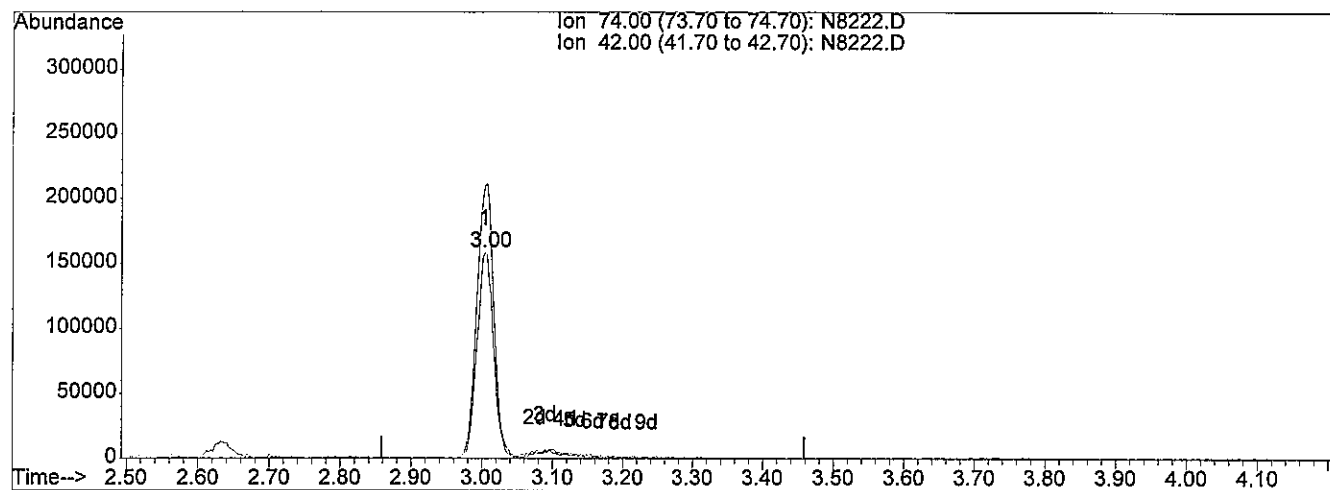
Quant Results File: temp.res

Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)

Title : GC-MS Semivolatiles SOP no. 506

Last Update : Wed Sep 04 13:48:22 2013

Response via : Multiple Level Calibration



(3) n-Nitrosodimethylamine (T)

3.00min 19.38ng/uL

response 257383

Ion	Exp%	Act%
74.00	100	100
42.00	129.50	136.16
0.00	0.00	0.00
0.00	0.00	0.00

*366*

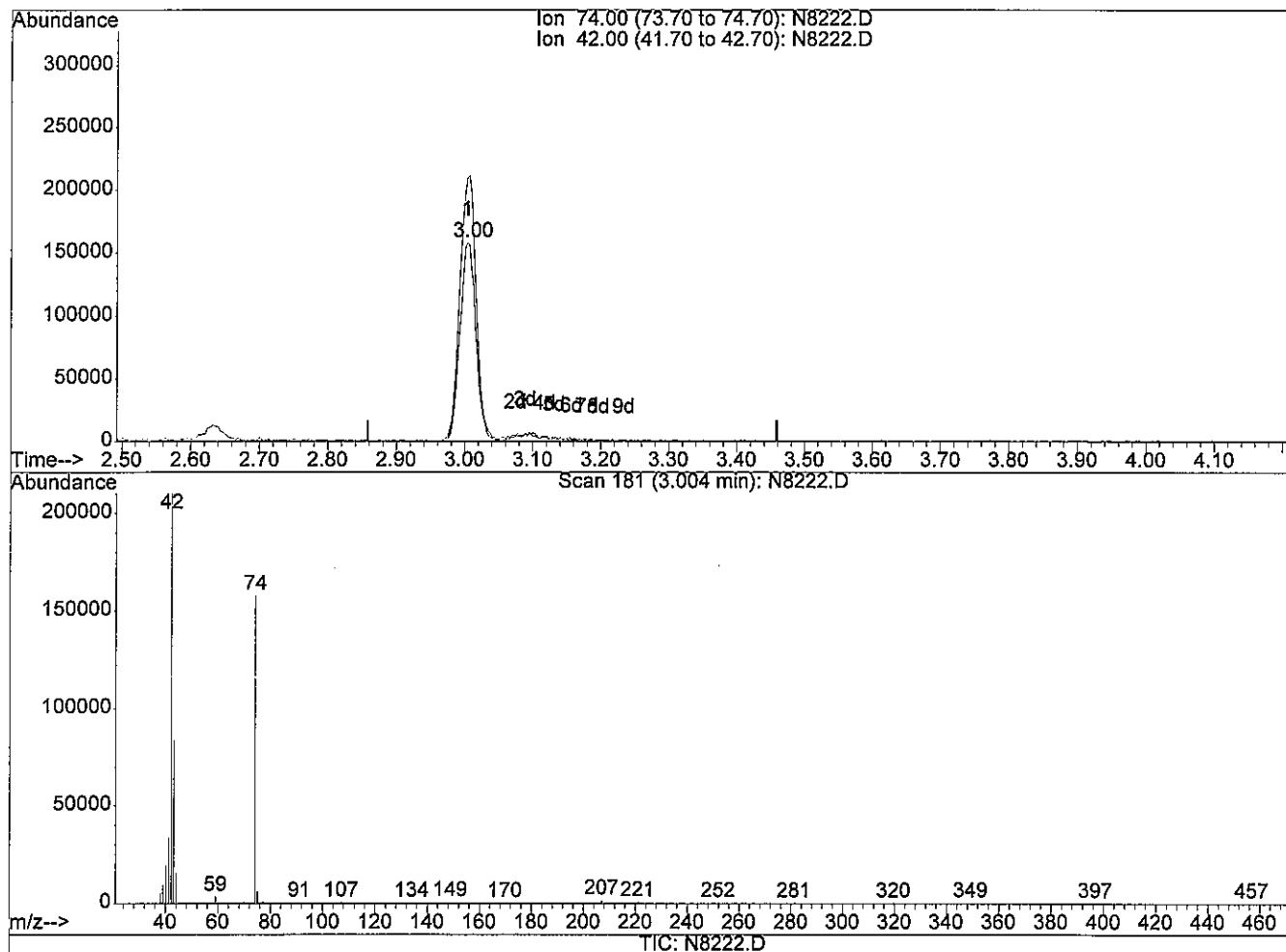
# Quantitation Report (Qedit)

Data File : D:\HPCHEM\1\DATA\090413\N8222.D  
 Acq On : 4 Sep 2013 13:30  
 Sample : ICALSVSTD020  
 Misc : ST130531-5  
 MS Integration Params: RTEINT.P  
 Quant Time: Sep 4 13:48 2013

Vial: 6  
 Operator: jk SOP 50  
 Inst : GC/MS Ins  
 Multiplr: 1.00

Quant Results File: temp.res

Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)  
 Title : GC-MS Semivolatiles SOP no. 506  
 Last Update : Wed Sep 04 13:48:22 2013  
 Response via : Multiple Level Calibration



(3) n-Nitrosodimethylamine (T)

3.00min 21.05ng/uL m

response 279549

Ion	Exp%	Act%
74.00	100	100
42.00	129.50	125.37
0.00	0.00	0.00
0.00	0.00	0.00

## MANUAL RE-INTEGRATION

- ☐ missed peak assignment
- ☐ assigned incorrect name to peak
- ☐ over-integrated peak's area
- ☒ under-integrated peak's area
- ☐ other \_\_\_\_\_

initials JK date 9-5-13

# Quantitation Report (Qedit)

Data File : D:\HPCHEM\1\DATA\090413\N8222.D

Vial: 6

Acq On : 4 Sep 2013 13:30

Operator: jk SOP 50

Sample : ICALSVSTD020

Inst : GC/MS Ins

Misc : ST130531-5

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Sep 4 13:48 2013

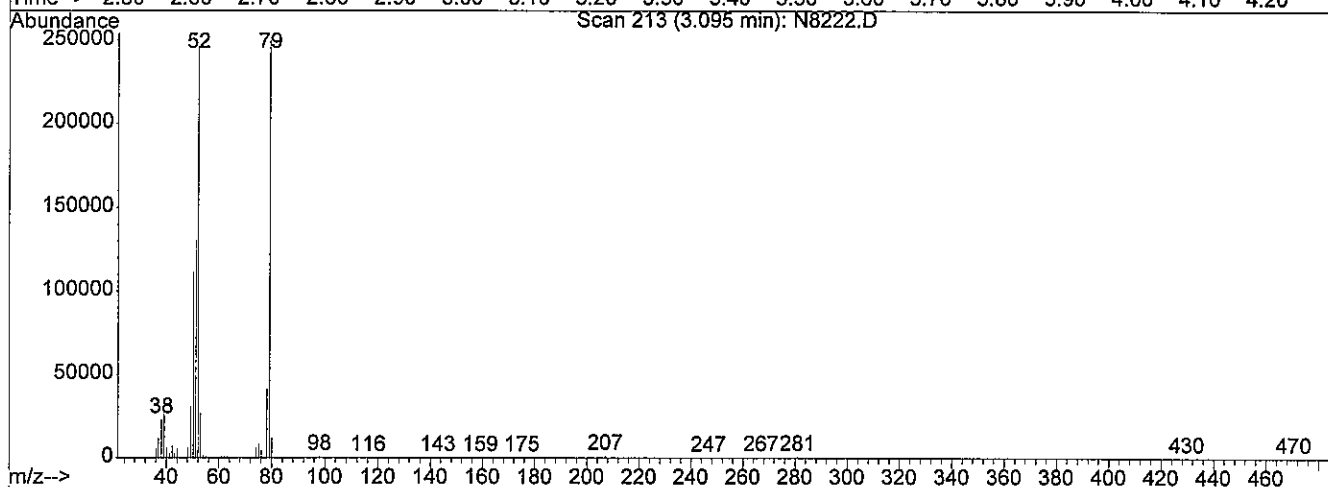
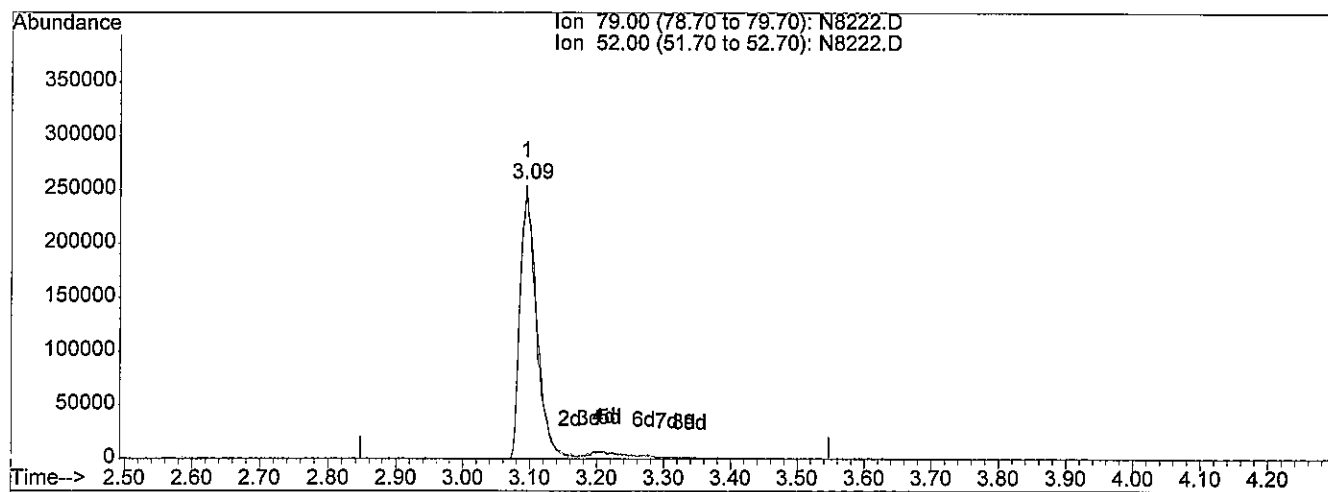
Quant Results File: temp.res

Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)

Title : GC-MS Semivolatiles SOP no. 506

Last Update : Wed Sep 04 13:48:22 2013

Response via : Multiple Level Calibration



(4) Pyridine (T)

3.09min 19.01ng/uL

response 437392

Ion	Exp%	Act%
79.00	100	100
52.00	93.60	96.14
0.00	0.00	0.00
0.00	0.00	0.00

*3.09*



# Quantitation Report (Qedit)

Data File : D:\HPCHEM\1\DATA\090413\N8222.D

Vial: 6

Acq On : 4 Sep 2013 13:30

Operator: jk SOP 50

Sample : ICALSVSTD020

Inst : GC/MS Ins

Misc : ST130531-5

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Sep 4 13:48 2013

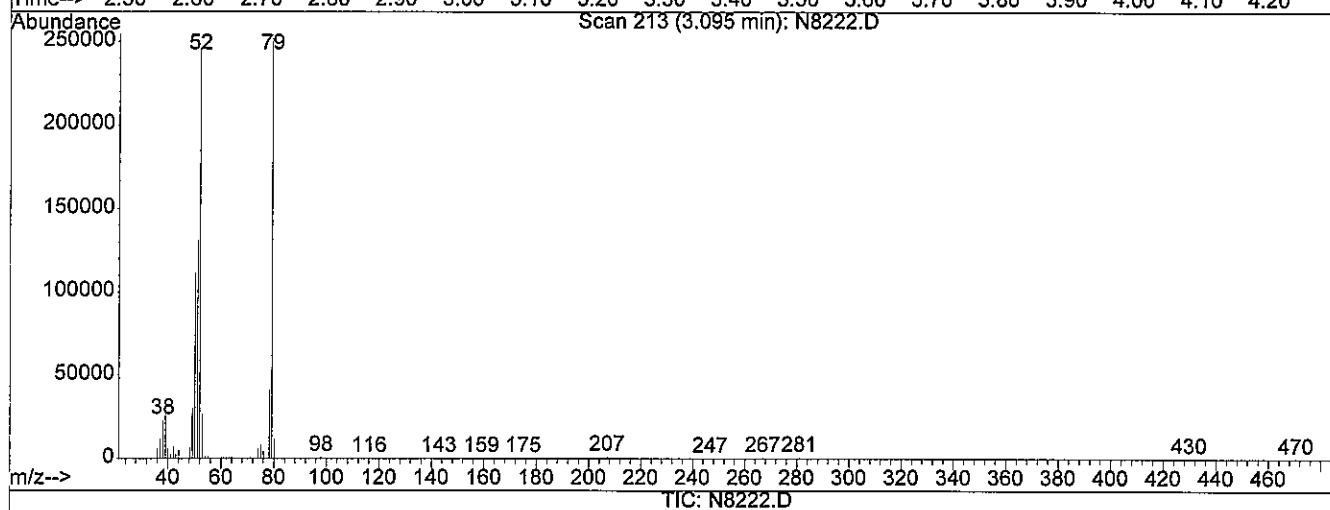
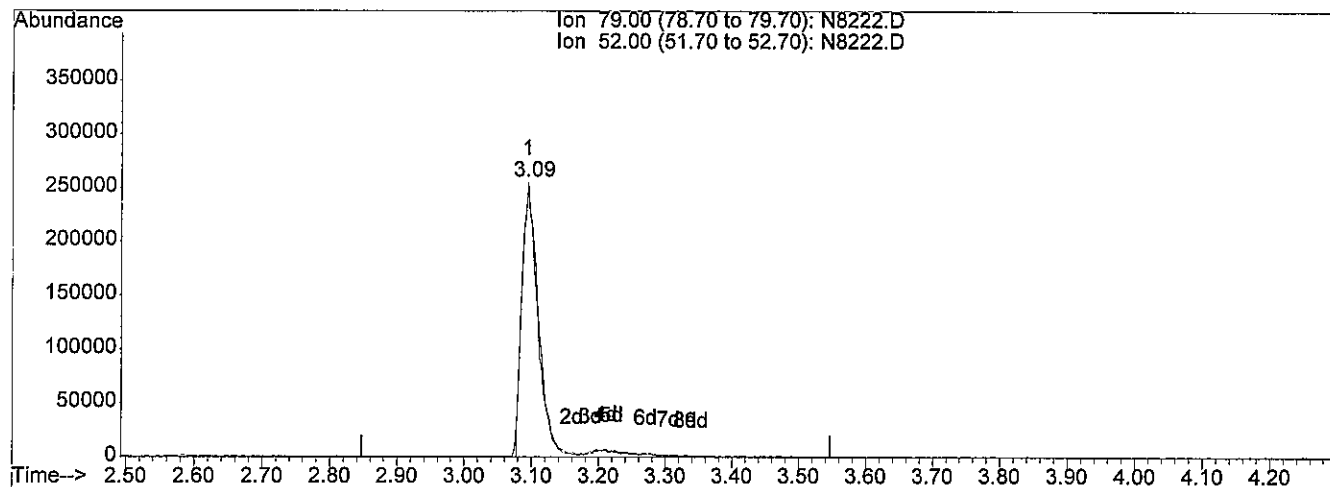
Quant Results File: temp.res

Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)

Title : GC-MS Semivolatiles SOP no. 506

Last Update : Wed Sep 04 13:48:22 2013

Response via : Multiple Level Calibration



(4) Pyridine (T)

3.09min 20.30ng/uL m

response 467013

Ion	Exp%	Act%
79.00	100	100
52.00	93.60	90.04
0.00	0.00	0.00
0.00	0.00	0.00

## MANUAL RE-INTEGRATION

- ☐ missed peak assignment
- ☐ assigned incorrect name to peak
- ☐ over-integrated peak's area
- ☒ under-integrated peak's area
- ☐ other \_\_\_\_\_

initials ju date 9-5-13

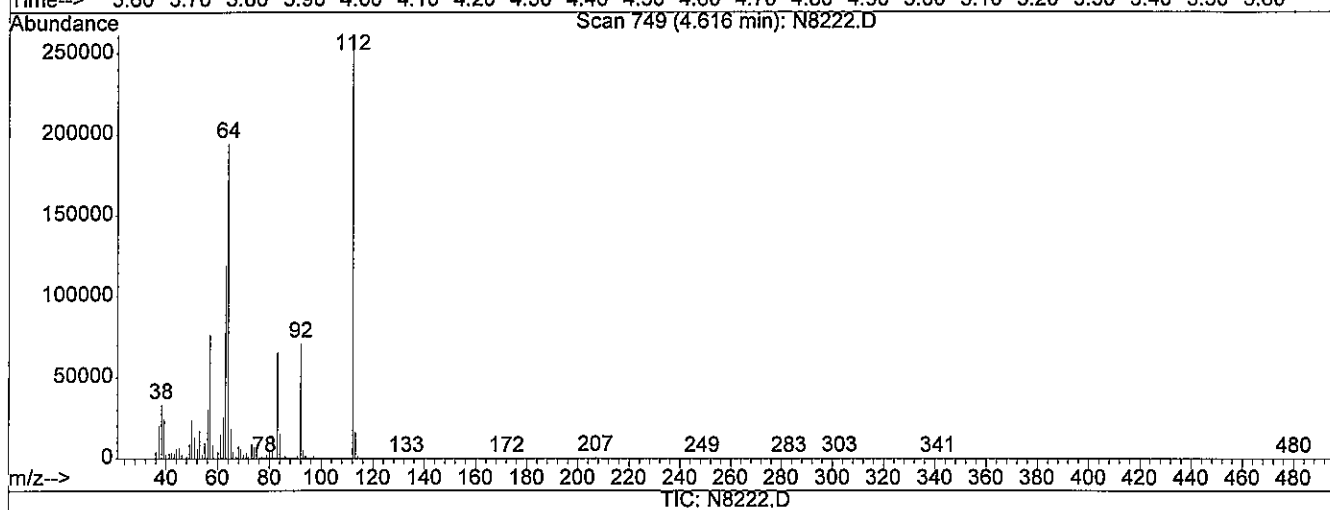
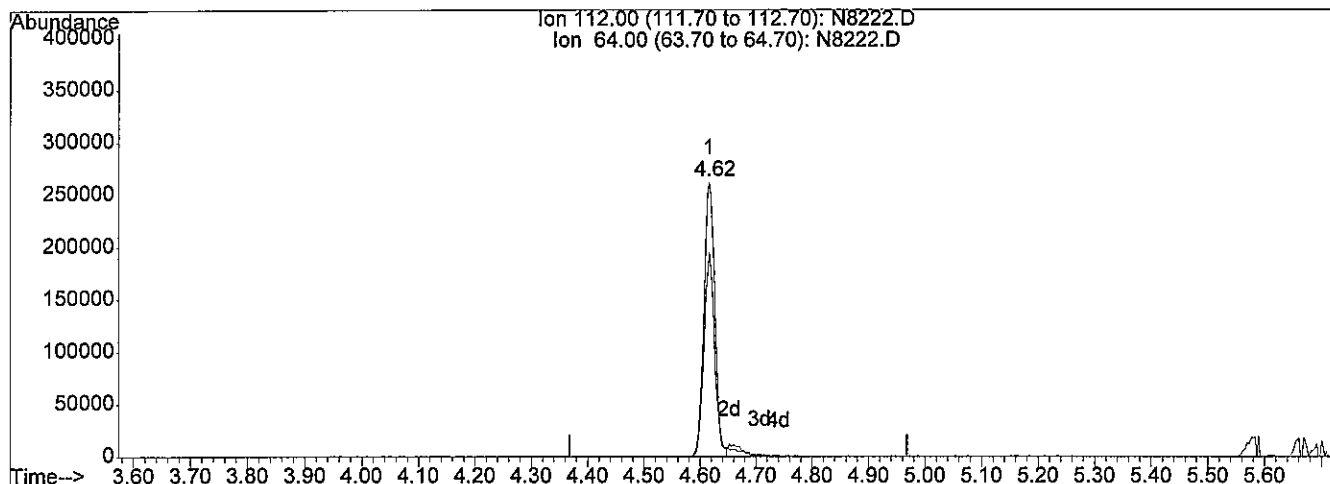
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Data File : D:\HPCHEM\1\DATA\090413\N8222.D  
 Acq On : 4 Sep 2013 13:30  
 Sample : ICALSVSTD020  
 Misc : ST130531-5  
 MS Integration Params: RTEINT.P  
 Quant Time: Sep 4 13:48 2013

Vial: 6  
 Operator: jk SOP 50  
 Inst : GC/MS Ins  
 Multiplr: 1.00

Quant Results File: temp.res

Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)  
 Title : GC-MS Semivolatiles SOP no. 506  
 Last Update : Wed Sep 04 13:48:22 2013  
 Response via : Multiple Level Calibration



(5) 2-Fluorophenol (S)

4.62min 18.82ng/uL

response 355734

Ion	Exp%	Act%
112.00	100	100
64.00	68.70	75.95
0.00	0.00	0.00
0.00	0.00	0.00

*36*

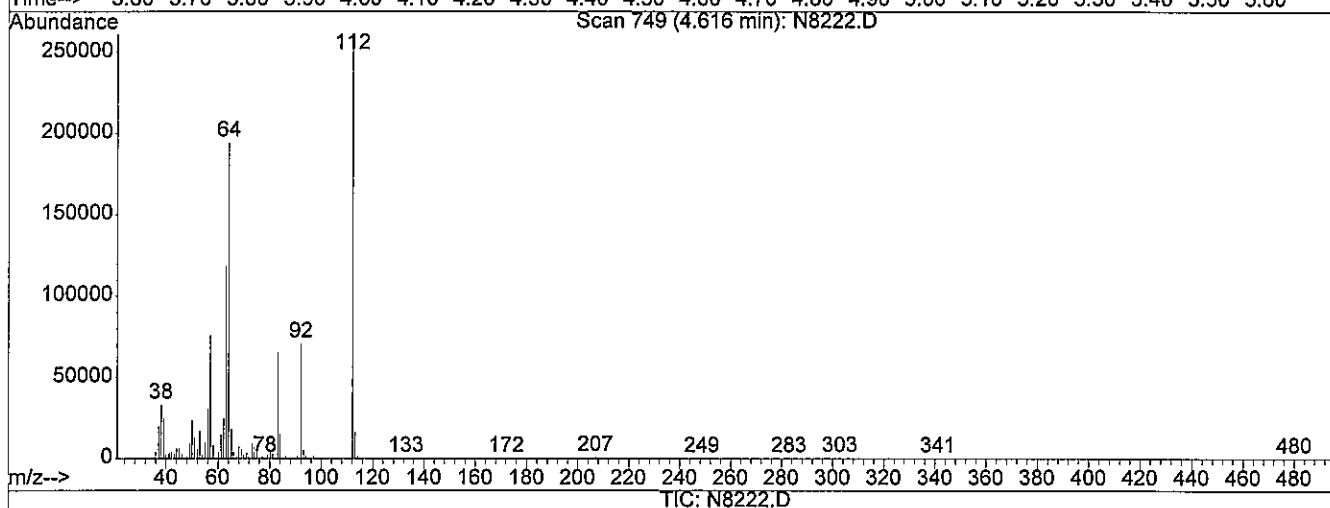
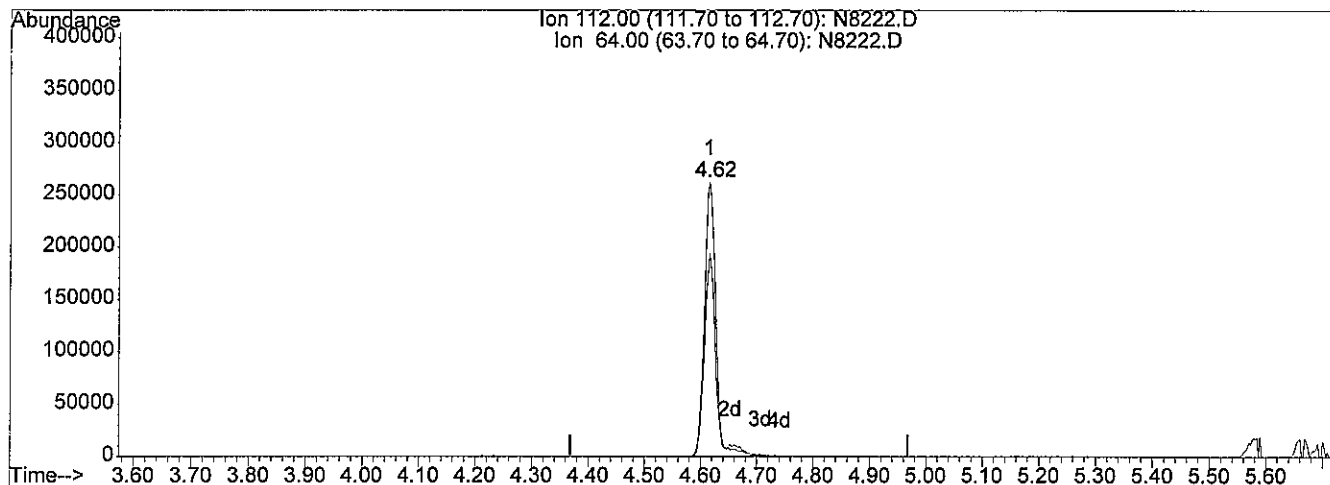
# Quantitation Report (Qedit)

Data File : D:\HPCHEM\1\DATA\090413\N8222.D  
 Acq On : 4 Sep 2013 13:30  
 Sample : ICALSVSTD020  
 Misc : ST130531-5  
 MS Integration Params: RTEINT.P  
 Quant Time: Sep 4 13:49 2013

Vial: 6  
 Operator: jk SOP 50  
 Inst : GC/MS Ins  
 Multiplr: 1.00

Quant Results File: temp.res

Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)  
 Title : GC-MS Semivolatiles SOP no. 506  
 Last Update : Wed Sep 04 13:48:22 2013  
 Response via : Multiple Level Calibration



(5) 2-Fluorophenol (S)

4.62min 20.07ng/uL m

response 379416

Ion	Exp%	Act%
112.00	100	100
64.00	68.70	71.21
0.00	0.00	0.00
0.00	0.00	0.00

## MANUAL RE-INTEGRATION

- ☐ missed peak assignment
- ☐ assigned incorrect name to peak
- ☐ over-integrated peak's area
- ☒ under-integrated peak's area
- ☐ other \_\_\_\_\_

initials JK date 9-5-13

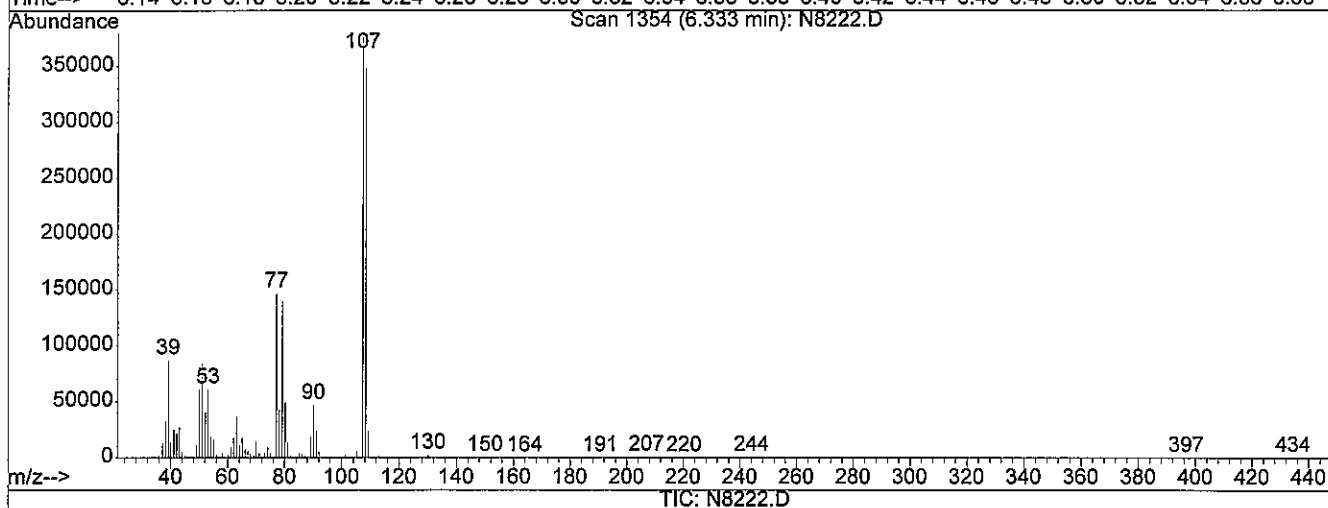
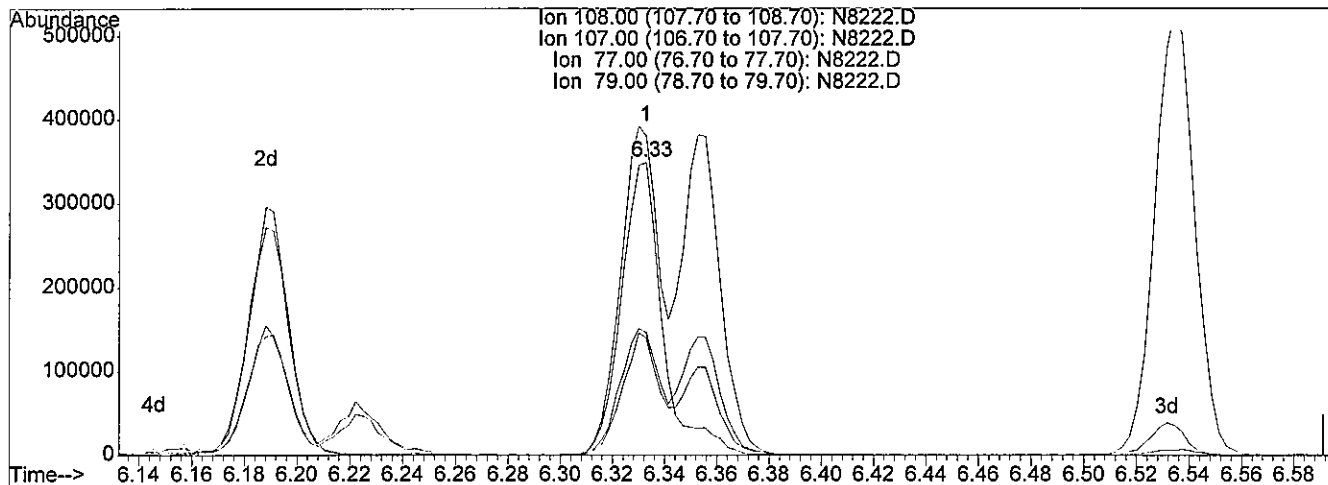
# Quantitation Report (Qedit)

Data File : D:\HPCHEM\1\DATA\090413\N8222.D  
 Acq On : 4 Sep 2013 13:30  
 Sample : ICALSVSTD020  
 Misc : ST130531-5  
 MS Integration Params: RTEINT.P  
 Quant Time: Sep 4 13:49 2013

Vial: 6  
 Operator: jk SOP 50  
 Inst : GC/MS Ins  
 Multiplr: 1.00

Quant Results File: temp.res

Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)  
 Title : GC-MS Semivolatiles SOP no. 506  
 Last Update : Wed Sep 04 13:48:22 2013  
 Response via : Multiple Level Calibration



(21) 3+4-Methylphenol (T)

6.33min 21.36ng/uL

response 384810

Ion	Exp%	Act%
108.00	100	100
107.00	210.50	105.36#
77.00	76.70	41.27#
79.00	63.20	39.49#

*John*

# Quantitation Report (Qedit)

Data File : D:\HPCHEM\1\DATA\090413\N8222.D

Vial: 6

Acq On : 4 Sep 2013 13:30

Operator: jk SOP 50

Sample : ICALSVSTD020

Inst : GC/MS Ins

Misc : ST130531-5

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Sep 4 13:49 2013

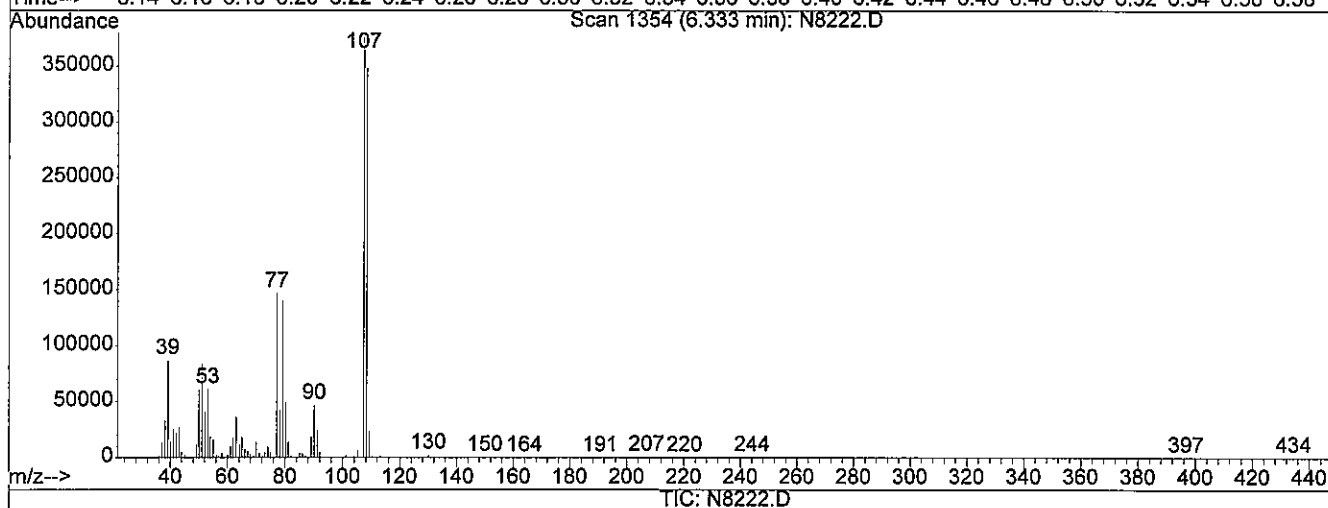
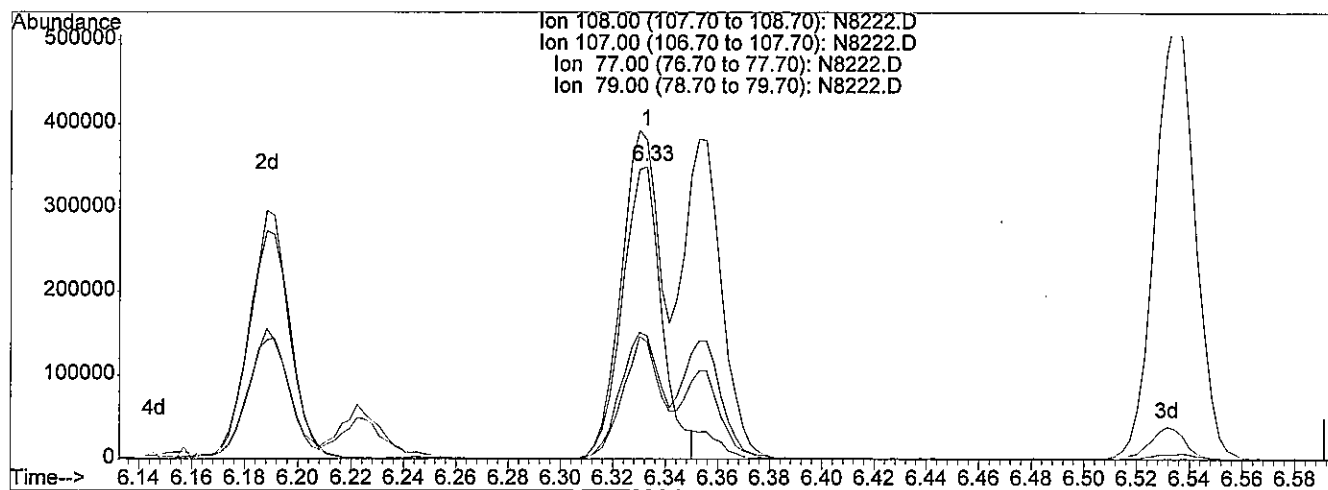
Quant Results File: temp.res

Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)

Title : GC-MS Semivolatiles SOP no. 506

Last Update : Wed Sep 04 13:48:22 2013

Response via : Multiple Level Calibration



(21) 3+4-Methylphenol (T)

6.33min 20.09ng/uL m

response 361914

Ion	Exp%	Act%
108.00	100	100
107.00	210.50	112.03#
77.00	76.70	43.88#
79.00	63.20	41.99#

## MANUAL RE-INTEGRATION

- ☐ missed peak assignment
- ☐ assigned incorrect name to peak
- ☒ over-integrated peak's area
- ☐ under-integrated peak's area
- ☐ other \_\_\_\_\_

initials X date 9-5-13

# Quantitation Report (Qedit)

Data File : D:\HPCHEM\1\DATA\090413\N8222.D

Vial: 6

Acq On : 4 Sep 2013 13:30

Operator: jk SOP 50

Sample : ICALSVSTD020

Inst : GC/MS Ins

Misc : ST130531-5

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Sep 4 13:49 2013

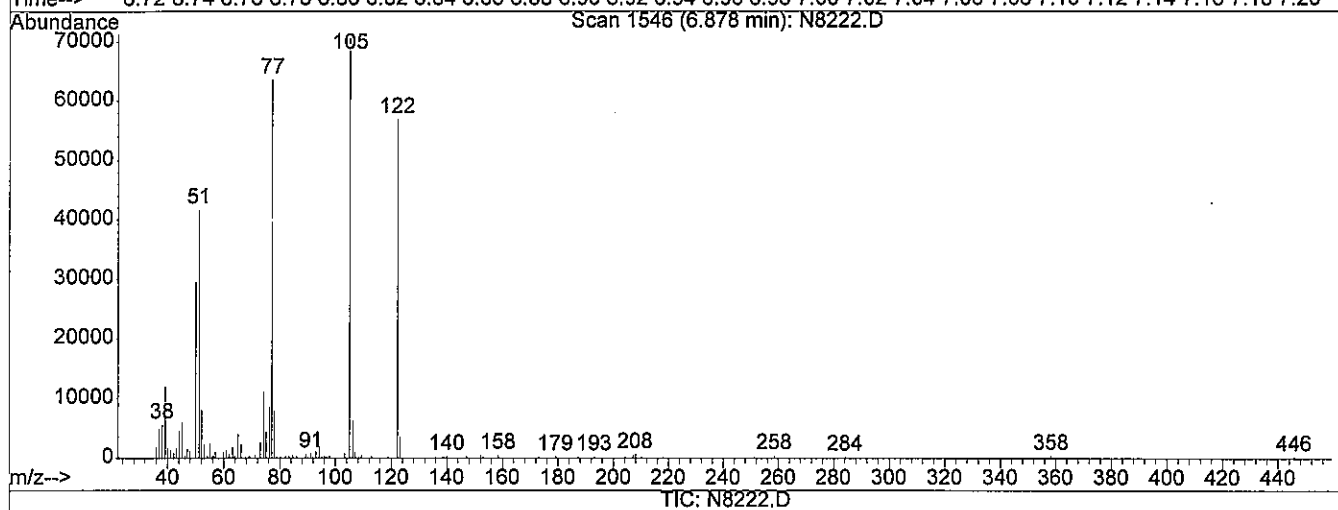
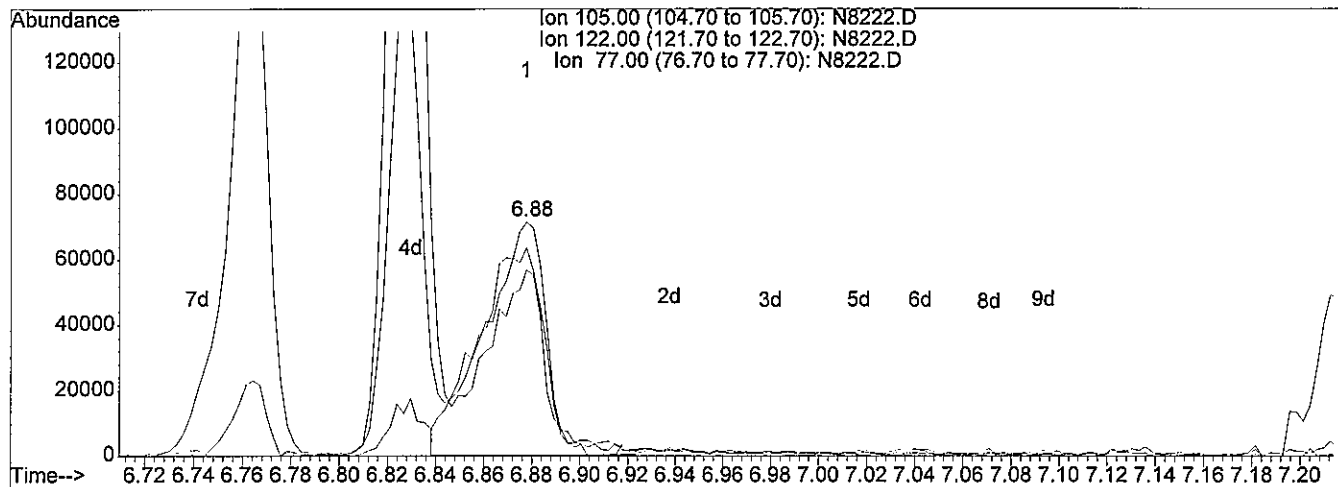
Quant Results File: temp.res

Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)

Title : GC-MS Semivolatiles SOP no. 506

Last Update : Wed Sep 04 13:48:22 2013

Response via : Multiple Level Calibration



(33) Benzoic acid (T)

6.88min 23.32ng/uL

response 135527

Ion	Exp%	Act%
105.00	100	100
122.00	73.60	63.88
77.00	82.40	78.25
0.00	0.00	0.00

*3fu*

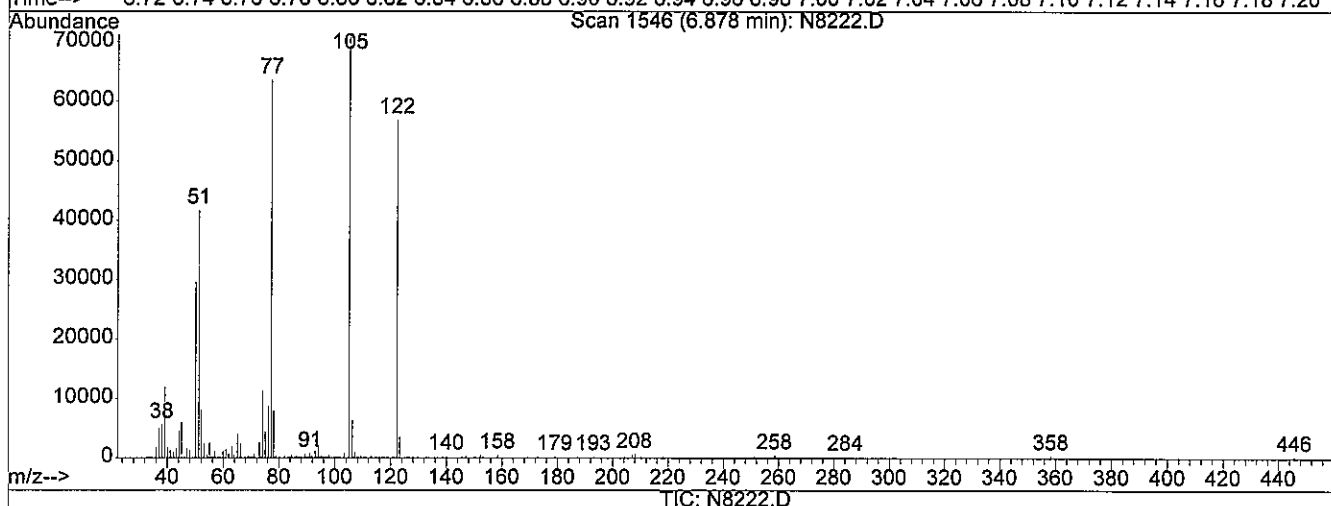
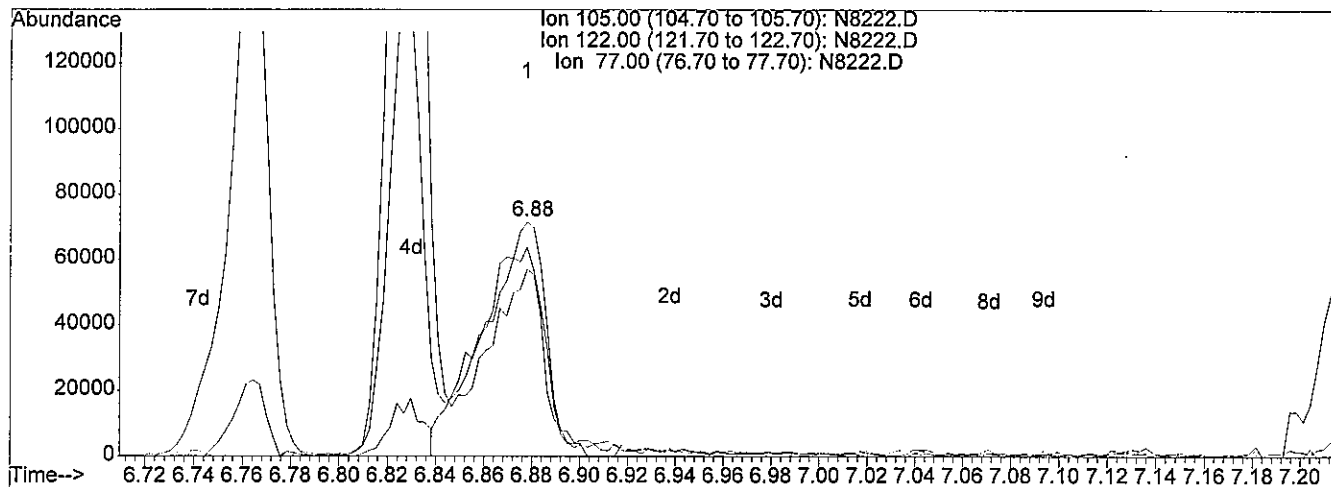
# Quantitation Report (Qedit)

Data File : D:\HPCHEM\1\DATA\090413\N8222.D  
 Acq On : 4 Sep 2013 13:30  
 Sample : ICALSVSTD020  
 Misc : ST130531-5  
 MS Integration Params: RTEINT.P  
 Quant Time: Sep 4 13:49 2013

Vial: 6  
 Operator: jk SOP 50  
 Inst : GC/MS Ins  
 Multiplr: 1.00

Quant Results File: temp.res

Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)  
 Title : GC-MS Semivolatiles SOP no. 506  
 Last Update : Wed Sep 04 13:48:22 2013  
 Response via : Multiple Level Calibration



(33) Benzoic acid (T)

6.88min 24.43ng/uL m

response 141989

Ion	Exp%	Act%
105.00	100	100
122.00	73.60	60.98
77.00	82.40	74.69
0.00	0.00	0.00

## MANUAL RE-INTEGRATION

- ☐ missed peak assignment
- ☐ assigned incorrect name to peak
- ☐ over-integrated peak's area
- ☒ under-integrated peak's area
- ☐ other \_\_\_\_\_

initials JK date 9-5-13

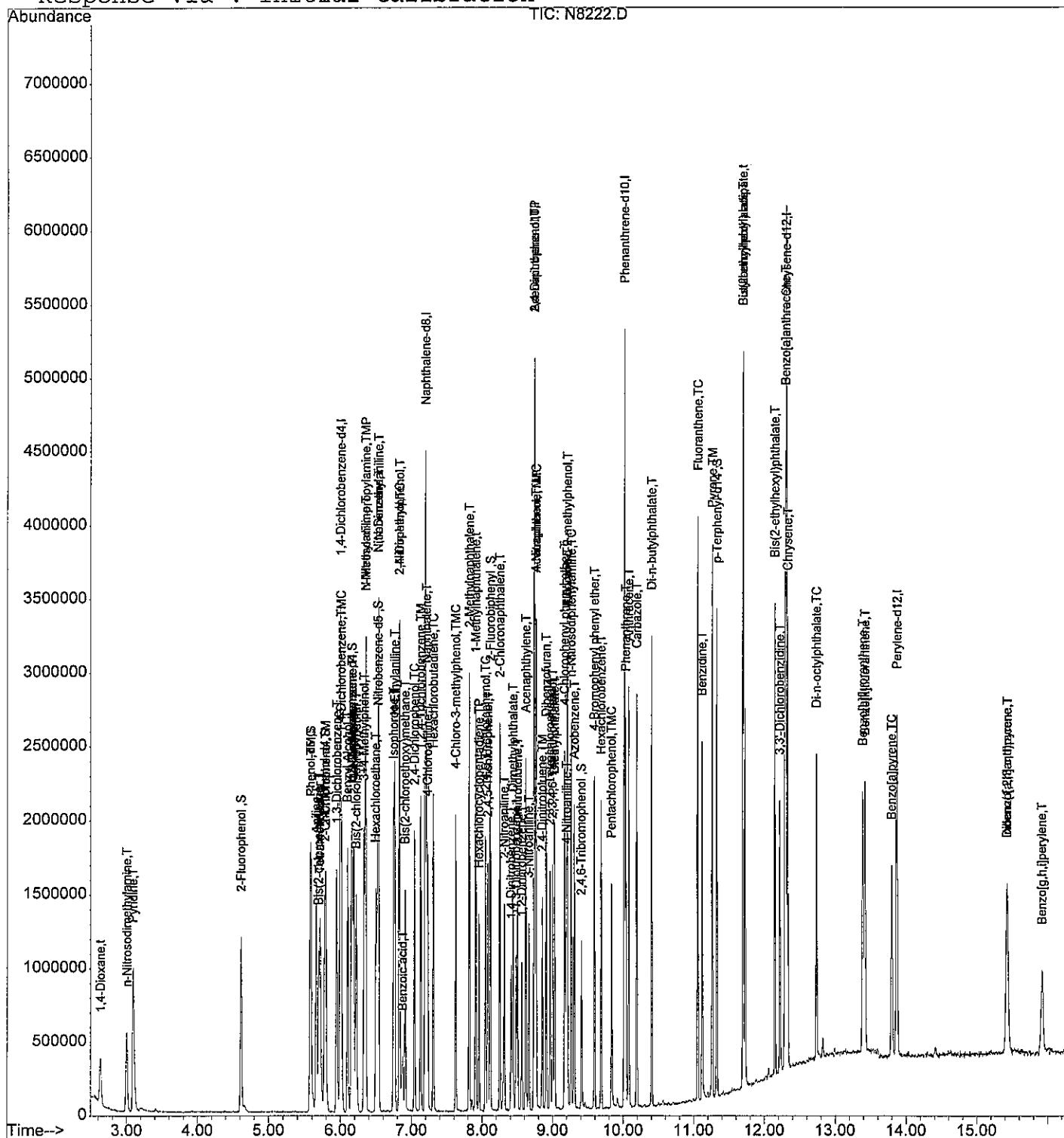
# Quantitation Report

Data File : D:\HPCHEM\1\DATA\090413\N8222.D  
Acq On : 4 Sep 2013 13:30  
Sample : ICALSVSTD020  
Misc : ST130531-5  
MS Integration Params: RTEINT.P  
Quant Time: Sep 4 13:49 2013

Vial: 6  
Operator: jk SOP 506  
Inst : GC/MS Ins  
Multiplr: 1.00

Quant Results File: 090413S1.RES

Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)  
Title : GC-MS Semivolatiles SOP no. 506  
Last Update : Wed Sep 04 13:48:22 2013  
Response via : Initial Calibration





Data File : D:\HPCHEM\1\DATA\090413\N8223.D

Vial: 7

Acq On : 4 Sep 2013 13:55

Operator: jk SOP 506 Rev

Sample : ICALSVSTD040

Inst : GC/MS Ins

Misc : ST130531-6

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Sep 4 14:13 2013

Quant Results File: 090413S1.RES

Quant Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)

Title : GC-MS Semivolatiles SOP no. 506

Last Update : Wed Sep 04 14:12:36 2013

Response via : Initial Calibration

DataAcq Meth : 090413S1

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) 1,4-Dichlorobenzene-d4	6.00	152	480328	40.00	ng/uL	0.00
24) Naphthalene-d8	7.19	136	1706237	40.00	ng/uL	0.00
41) Acenaphthene-d10	8.74	164	915486	40.00	ng/uL	0.00
69) Phenanthrene-d10	10.02	188	1814506	40.00	ng/uL	0.00
80) Chrysene-d12	12.31	240	1887817	40.00	ng/uL	0.00
91) Perylene-d12	13.87	264	1102282	40.00	ng/uL	-0.01

## System Monitoring Compounds

5) 2-Fluorophenol	4.62	112	632362	38.95	ng/uL	0.00
Spiked Amount 75.000	Range 46	- 105	Recovery	=	51.93%	
6) 2-Chlorophenol-d4	5.78	132	553371	39.17	ng/uL	0.00
Spiked Amount 75.000	Range 33	- 110	Recovery	=	52.23%	
8) Phenol-d5	5.58	99	862655	40.28	ng/uL	0.00
Spiked Amount 75.000	Range 50	- 109	Recovery	=	53.71%	
15) 1,2-Dichlorobenzene-d4	6.16	152	427699	36.92	ng/uL	0.00
Spiked Amount 50.000	Range 16	- 110	Recovery	=	73.84%	
25) Nitrobenzene-d5	6.52	82	797829	39.96	ng/uL	0.00
Spiked Amount 50.000	Range 53	- 111	Recovery	=	79.92%	
46) 2-Fluorobiphenyl	8.12	172	1264169	39.57	ng/uL	0.00
Spiked Amount 50.000	Range 55	- 108	Recovery	=	79.14%	
68) 2,4,6-Tribromophenol	9.41	330	192075	41.44	ng/uL	0.00
Spiked Amount 75.000	Range 42	- 117	Recovery	=	55.25%	
83) p-Terphenyl-d14	11.33	244	1679088	37.84	ng/uL	0.00
Spiked Amount 50.000	Range 34	- 139	Recovery	=	75.68%	

## Target Compounds

						Qvalue
2) 1,4-Dioxane	2.63	88	337700m	44.00	ng/uL	
3) n-Nitrosodimethylamine	3.01	74	502341m	43.50	ng/uL	
4) Pyridine	3.09	79	839340m	42.29	ng/uL	
7) Aniline	5.67	93	980234	39.55	ng/uL	95
9) Phenol	5.59	94	838460	40.33	ng/uL	97
10) Tetramethylurea	5.73	72	1135469	39.26	ng/uL	98
11) Bis(2-chloroethyl) ether	5.70	93	652439	39.18	ng/uL	98
12) 2-Chlorophenol	5.79	128	587148	38.66	ng/uL	97
13) 1,3-Dichlorobenzene	5.95	146	710585	39.29	ng/uL	99
14) 1,4-Dichlorobenzene	6.02	146	659338	39.36	ng/uL	98
16) 1,2-Dichlorobenzene	6.17	146	614980	38.59	ng/uL	99
17) Benzyl Alcohol	6.10	108	408312	40.95	ng/uL	100
18) 2-Methylphenol	6.19	107	495533	39.81	ng/uL	99
19) Bis(2-chloroisopropyl) ethe	6.23	45	1093855	39.70	ng/uL	98
20) n-Nitroso-di-n-propylamine	6.36	70	479182	38.91	ng/uL	98
21) 3+4-Methylphenol	6.34	108	621454m	40.61	ng/uL	

(#)=qualifier out of range (m)=manual integration

N8223.D 090413S1.M Wed Sep 04 14:14:28 2013

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9-5-13

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Data File : D:\HPCHEM\1\DATA\090413\N8223.D

Vial: 7

Acq On : 4 Sep 2013 13:55

Operator: jk SOP 506 Rev

Sample : ICALSVSTD040

Inst : GC/MS Ins

Misc : ST130531-6

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Sep 4 14:13 2013

Quant Results File: 090413S1.RES

Quant Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)

Title : GC-MS Semivolatiles SOP no. 506

Last Update : Wed Sep 04 14:12:36 2013

Response via : Initial Calibration

DataAcq Meth : 090413S1

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
22) N-Methylaniline	6.36	106	866700	38.58	ng/uL#	38
23) Hexachloroethane	6.50	117	287469	40.20	ng/uL	100
26) N,N-Dimethylaniline	6.54	120	883535	38.60	ng/uL	94
27) Nitrobenzene	6.54	77	927248	38.81	ng/uL	99
28) Isophorone	6.75	82	1220601	39.75	ng/uL	99
29) N-Ethylaniline	6.77	106	1056875	37.44	ng/uL	98
30) 2-Nitrophenol	6.83	139	285848	40.84	ng/uL	95
31) 2,4-Dimethylphenol	6.83	107	608765	39.58	ng/uL	98
32) Bis(2-chloroethoxy)methane	6.91	93	702741	39.55	ng/uL	99
33) Benzoic acid	6.90	105	255042	39.99	ng/uL	93
34) 2,4-Dichlorophenol	7.05	162	518317	39.80	ng/uL	98
35) 1,2,4-Trichlorobenzene	7.13	180	629372	39.03	ng/uL	98
36) Naphthalene	7.21	128	1693757	40.15	ng/uL	98
37) 4-Chloroaniline	7.23	127	588438	37.09	ng/uL	97
38) Hexachlorobutadiene	7.31	225	402448	38.84	ng/uL	99
39) 4-Chloro-3-methylphenol	7.63	107	509877	40.46	ng/uL	97
40) 2-Methylnaphthalene	7.82	142	1216100	39.98	ng/uL	98
42) 1-Methylnaphthalene	7.91	142	1088592	39.88	ng/uL	99
43) Hexachlorocyclopentadiene	7.96	237	349622	41.47	ng/uL	99
44) 2,4,6-Trichlorophenol	8.05	196	398067	41.22	ng/uL	99
45) 2,4,5-Trichlorophenol	8.09	196	367468	39.69	ng/uL	98
47) 2-Chloronaphthalene	8.25	162	1079348	39.43	ng/uL	99
48) 2-Nitroaniline	8.31	65	366824	41.32	ng/uL	98
49) 1,4-Dinitrobenzene	8.41	168	161212	42.87	ng/uL	95
50) Dimethylphthalate	8.44	163	1092504	39.81	ng/uL	100
51) 1,3-Dinitrobenzene	8.49	168	183712	41.84	ng/uL	92
52) 2,6-Dinitrotoluene	8.51	165	257384	40.43	ng/uL#	83
53) 1,2-Dinitrobenzene	8.57	168	122463	42.32	ng/uL	96
54) Acenaphthylene	8.62	152	1580836	39.58	ng/uL	99
55) 3-Nitroaniline	8.67	138	231720	41.23	ng/uL	94
56) Acenaphthene	8.77	154	946163	39.76	ng/uL	99
57) 2,4-Dinitrophenol	8.75	184	127361	41.95	ng/uL#	99
58) 4-Nitrophenol	8.77	109	160100	41.11	ng/uL	96
59) Dibenzofuran	8.91	168	1394420	38.87	ng/uL	99
60) 2,4-Dinitrotoluene	8.86	165	347992	43.40	ng/uL	98
61) 2,3,5,6-Tetrachlorophenol	8.97	232	353616	41.87	ng/uL	99
62) 2,3,4,6-Tetrachlorophenol	9.00	232	337917	41.12	ng/uL	98
63) Diethylphthalate	9.03	149	1012668	40.37	ng/uL	99
64) 4-Chlorophenyl phenyl ethe	9.17	204	636672	39.55	ng/uL	99
65) 4-Nitroaniline	9.20	138	232691	44.22	ng/uL	96
66) Fluorene	9.21	166	1078447	39.04	ng/uL	100

(#)=qualifier out of range (m)=manual integration

N8223.D 090413S1.M Wed Sep 04 14:14:29 2013

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Data File : D:\HPCHEM\1\DATA\090413\N8223.D

Vial: 7

Acq On : 4 Sep 2013 13:55

Operator: jk SOP 506 Rev

Sample : ICALSVSTD040

Inst : GC/MS Ins

Misc : ST130531-6

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Sep 4 14:13 2013

Quant Results File: 090413S1.RES

Quant Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)

Title : GC-MS Semivolatiles SOP no. 506

Last Update : Wed Sep 04 14:12:36 2013

Response via : Initial Calibration

DataAcq Meth : 090413S1

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
67) Azobenzene	9.31	77	1155833	40.27	ng/uL	99
70) 4,6-Dinitro-2-methylphenol	9.21	198	192448	40.21	ng/uL	95
71) n-Nitrosodiphenylamine	9.27	169	924216	36.97	ng/uL	100
72) 4-Bromophenyl phenyl ether	9.60	248	409563	37.76	ng/uL	99
73) Hexachlorobenzene	9.69	284	436676	37.66	ng/uL	99
74) Pentachlorophenol	9.84	266	305294	40.25	ng/uL	99
75) Phenanthrene	10.04	178	1683314	39.18	ng/uL	99
76) Anthracene	10.09	178	1752921	38.77	ng/uL	99
77) Carbazole	10.20	167	1664158	39.00	ng/uL	99
78) Di-n-butylphthalate	10.41	149	2029391	37.92	ng/uL	99
79) Fluoranthene	11.06	202	2399932	38.34	ng/uL	99
81) Benzidine	11.12	184	1034468	35.32	ng/uL	100
82) Pyrene	11.27	202	2363628	38.51	ng/uL	99
84) Butylbenzylphthalate	11.70	149	775500	39.12	ng/uL	97
85) Bis(2-ethylhexyl) adipate	11.71	129	644240	38.39	ng/uL	92
86) Bis(2-ethylhexyl)phthalate	12.15	149	999453	39.73	ng/uL	99
87) 3,3'-Dichlorobenzidine	12.23	252	722697	43.37	ng/uL	96
88) Benzo[a]anthracene	12.30	228	2022570	39.61	ng/uL	99
89) Chrysene	12.34	228	1860083	39.51	ng/uL	100
90) Di-n-octylphthalate	12.74	149	1396897	40.06	ng/uL	96
92) Benzo[b]fluoranthene	13.40	252	1447734	41.57	ng/uL	99
93) Benzo[k]fluoranthene	13.43	252	1435691	41.72	ng/uL	98
94) Benzo[a]pyrene	13.80	252	1186039	40.78	ng/uL	98
95) Indeno(1,2,3-c,d)pyrene	15.44	276	1036212	41.76	ng/uL	95
96) Dibenzo[a,h]anthracene	15.43	278	917771	42.69	ng/uL	97
97) Benzo[g,h,i]perylene	15.93	276	803286	39.91	ng/uL	97

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(#) = qualifier out of range (m) = manual integration

N8223.D 090413S1.M Wed Sep 04 14:14:29 2013

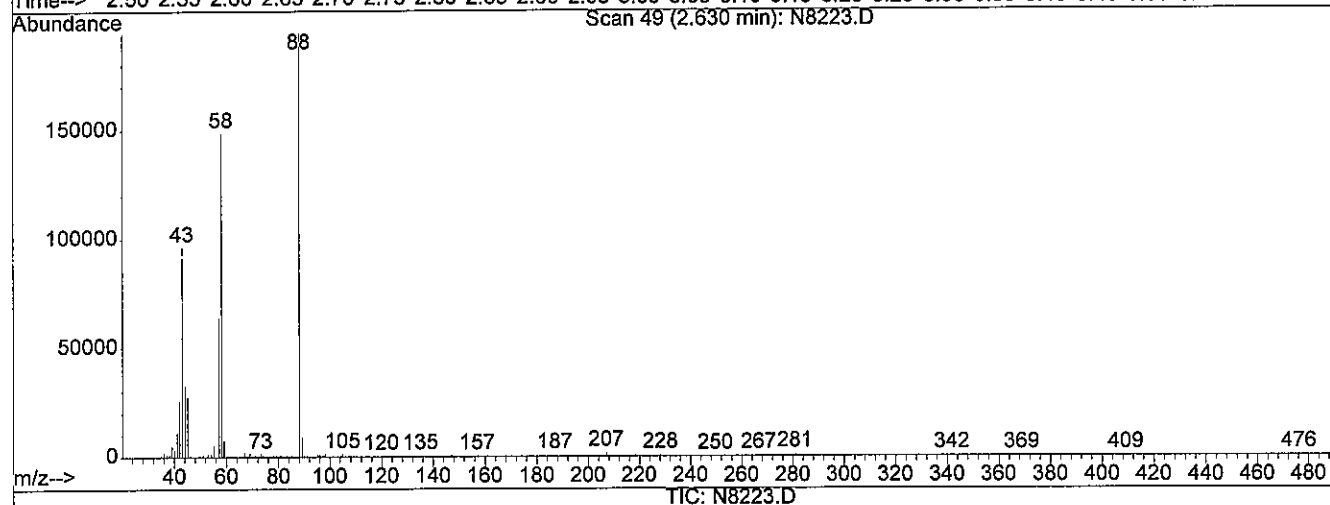
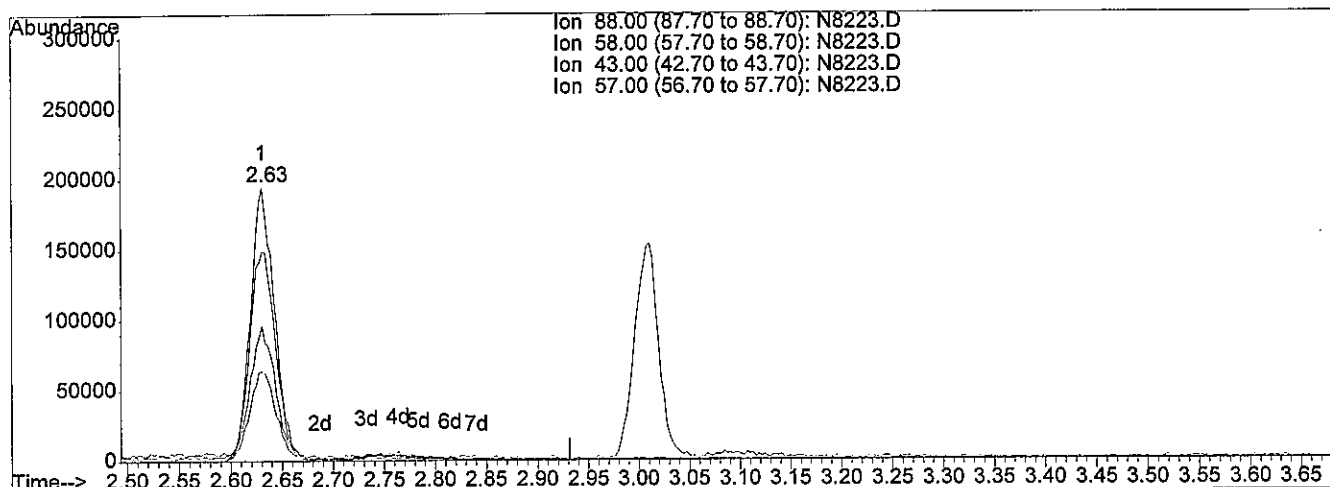
Page 3

Data File : D:\HPCHEM\1\DATA\090413\N8223.D  
 Acq On : 4 Sep 2013 13:55  
 Sample : ICALSVSTD040  
 Misc : ST130531-6  
 MS Integration Params: RTEINT.P  
 Quant Time: Sep 4 14:12 2013

Vial: 7  
 Operator: jk SOP 50  
 Inst : GC/MS Ins  
 Multiplr: 1.00

Quant Results File: temp.res

Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)  
 Title : GC-MS Semivolatiles SOP no. 506  
 Last Update : Wed Sep 04 14:12:36 2013  
 Response via : Multiple Level Calibration



(2) 1,4-Dioxane (t)

2.63min 41.73ng/uL

response 320276

Ion	Exp%	Act%
88.00	100	100
58.00	77.90	83.23
43.00	47.90	50.45
57.00	33.00	34.73

*EFM*

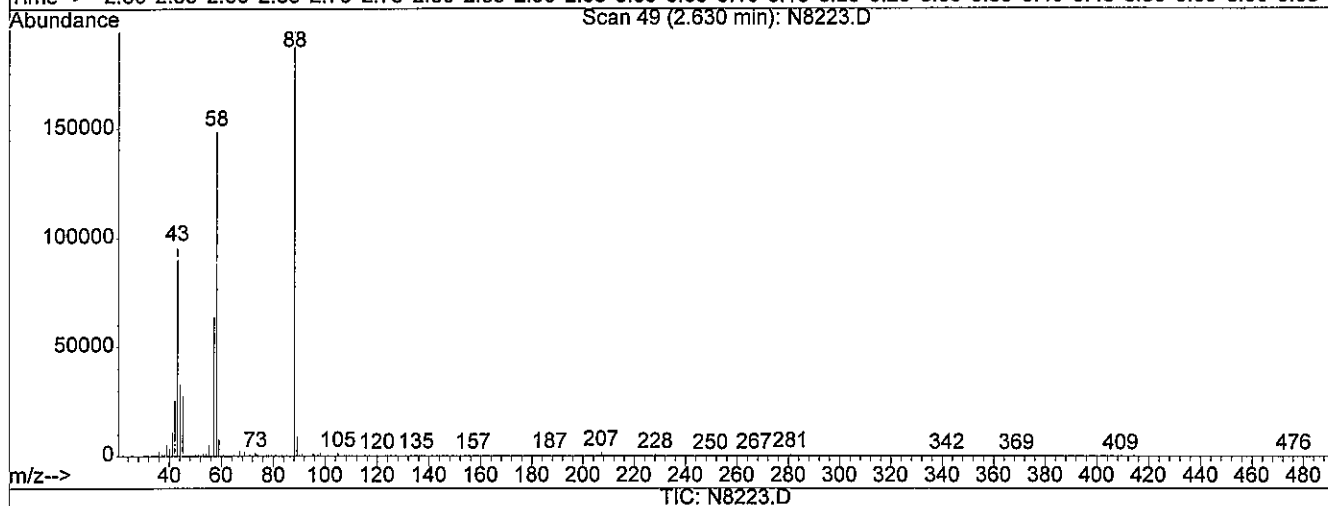
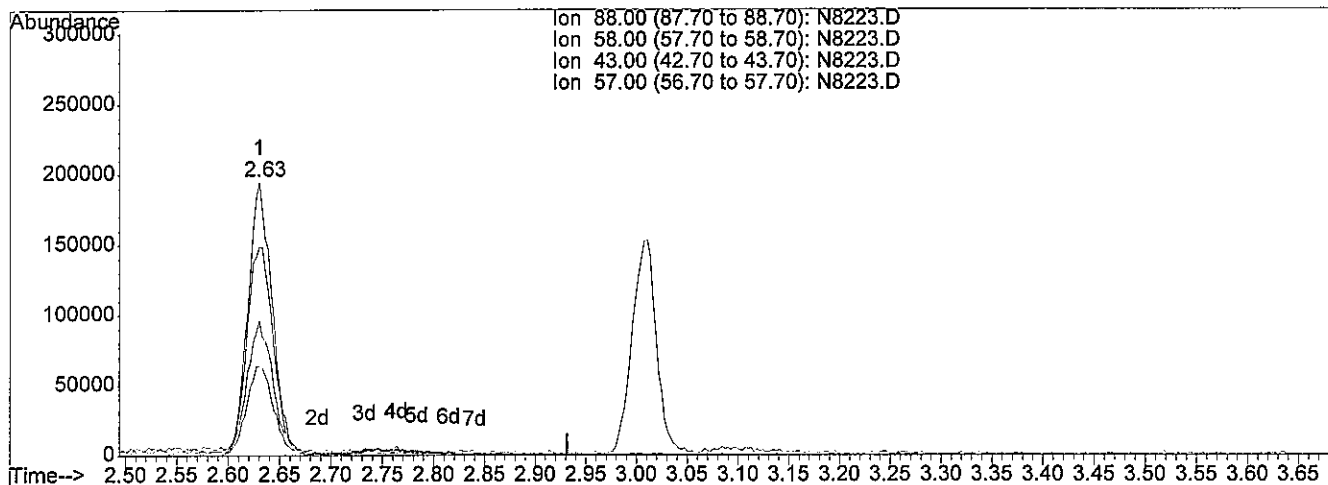
# Quantitation Report (Qedit)

Data File : D:\HPCHEM\1\DATA\090413\N8223.D  
 Acq On : 4 Sep 2013 13:55  
 Sample : ICALSVSTD040  
 Misc : ST130531-6  
 MS Integration Params: RTEINT.P  
 Quant Time: Sep 4 14:13 2013

Vial: 7  
 Operator: jk SOP 50  
 Inst : GC/MS Ins  
 Multiplr: 1.00

Quant Results File: temp.res

Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)  
 Title : GC-MS Semivolatiles SOP no. 506  
 Last Update : Wed Sep 04 14:12:36 2013  
 Response via : Multiple Level Calibration



(2) 1,4-Dioxane (t)

2.63min 44.00ng/uL m

response 337700

Ion	Exp%	Act%
88.00	100	100
58.00	77.90	78.94
43.00	47.90	47.85
57.00	33.00	32.94

## MANUAL RE-INTEGRATION

- ☐ missed peak assignment
- ☐ assigned incorrect name to peak
- ☐ over-integrated peak's area
- ☒ under-integrated peak's area
- ☐ other \_\_\_\_\_

initials jk date 9-6-13

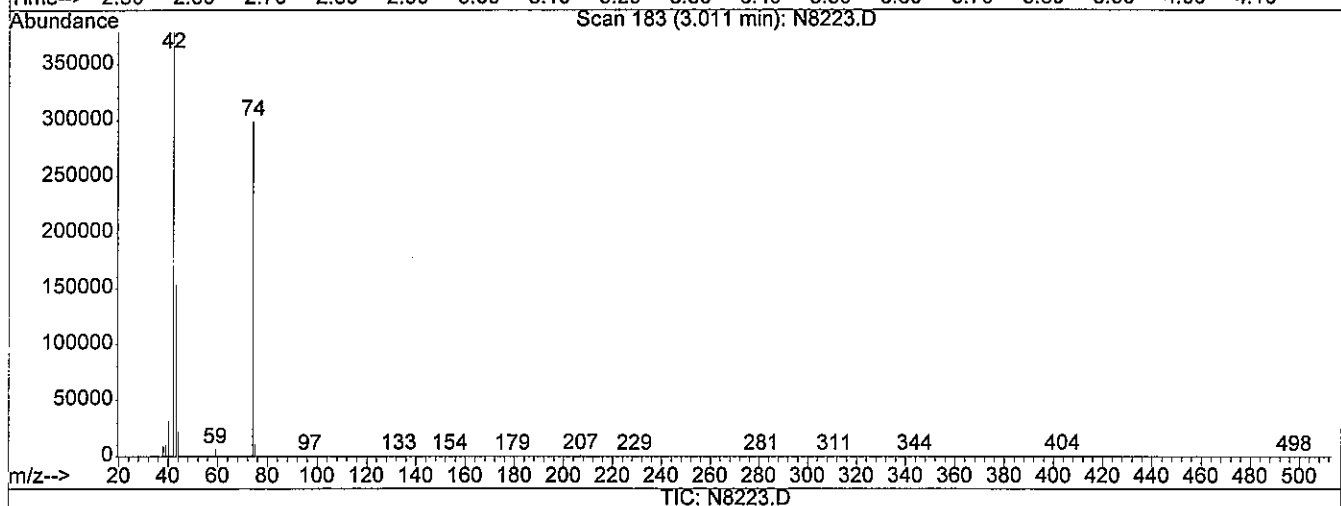
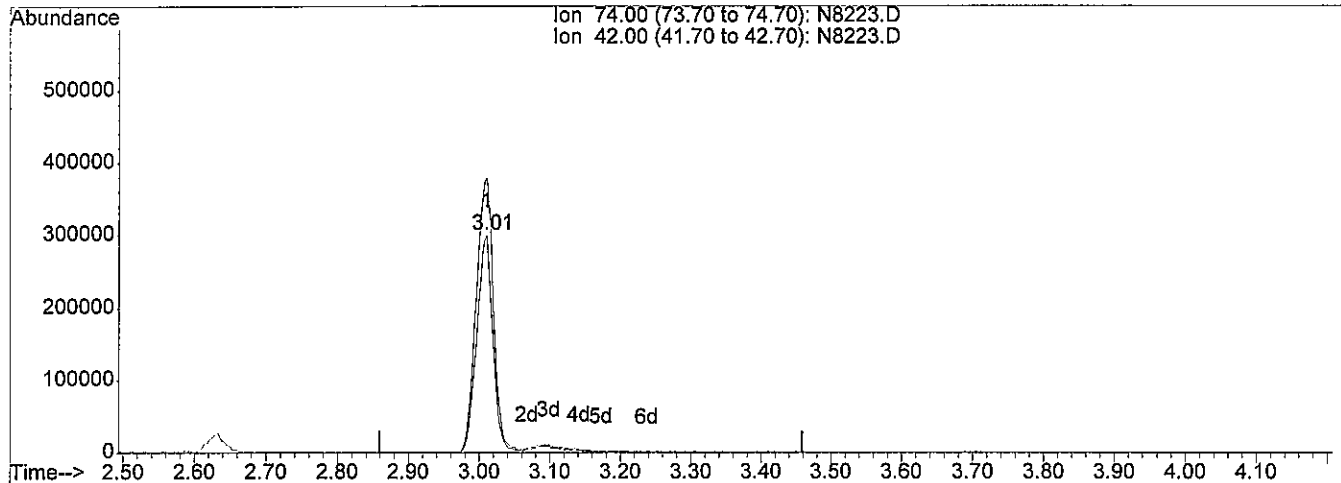
# Quantitation Report (Qedit)

Data File : D:\HPCHEM\1\DATA\090413\N8223.D  
 Acq On : 4 Sep 2013 13:55  
 Sample : ICALSVSTD040  
 Misc : ST130531-6  
 MS Integration Params: RTEINT.P  
 Quant Time: Sep 4 14:13 2013

Vial: 7  
 Operator: jk SOP 50  
 Inst : GC/MS Ins  
 Multiplr: 1.00

Quant Results File: temp.res

Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)  
 Title : GC-MS Semivolatiles SOP no. 506  
 Last Update : Wed Sep 04 14:12:36 2013  
 Response via : Multiple Level Calibration



(3) n-Nitrosodimethylamine (T)

3.01min 40.95ng/uL

response 472894

Ion	Exp%	Act%
74.00	100	100
42.00	129.50	135.31
0.00	0.00	0.00
0.00	0.00	0.00

*3efor*

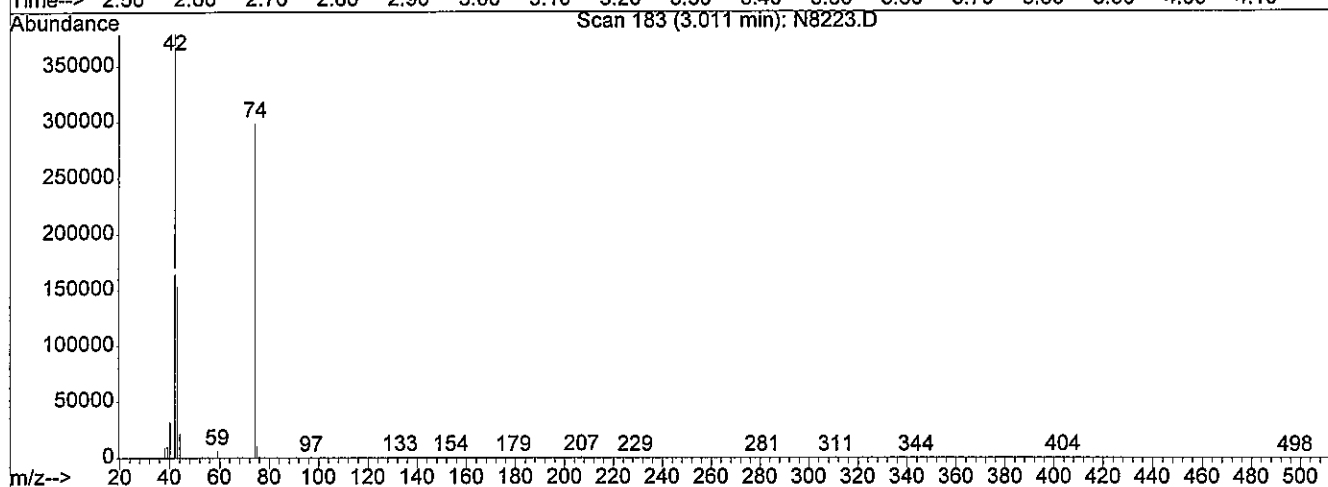
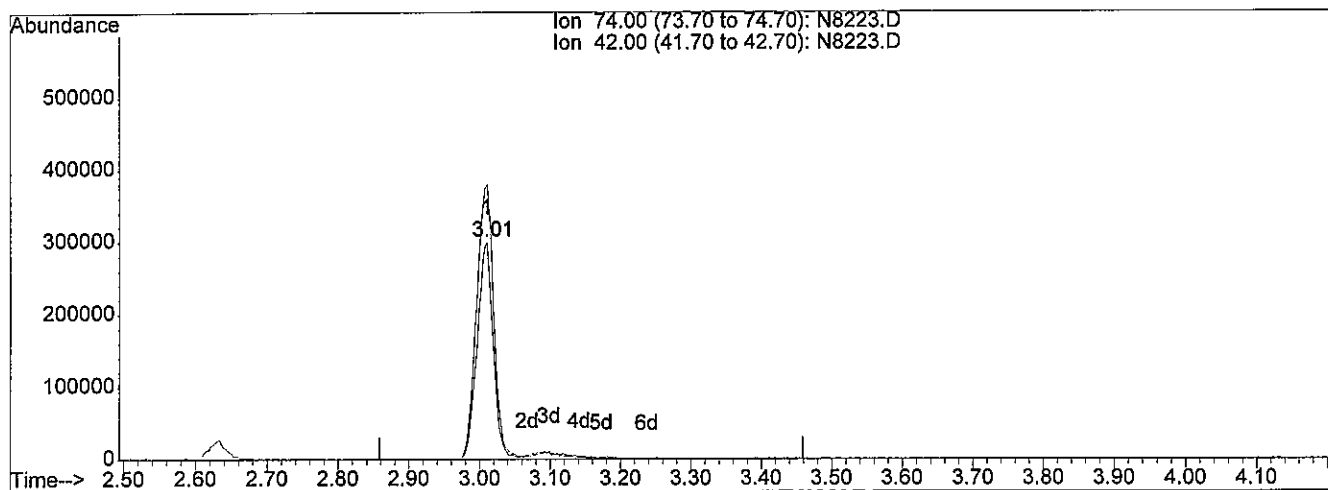
# Quantitation Report (Qedit)

Data File : D:\HPCHEM\1\DATA\090413\N8223.D  
 Acq On : 4 Sep 2013 13:55  
 Sample : ICALSVSTD040  
 Misc : ST130531-6  
 MS Integration Params: RTEINT.P  
 Quant Time: Sep 4 14:13 2013

Vial: 7  
 Operator: jk SOP 50  
 Inst : GC/MS Ins  
 Multiplr: 1.00

Quant Results File: temp.res

Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)  
 Title : GC-MS Semivolatiles SOP no. 506  
 Last Update : Wed Sep 04 14:12:36 2013  
 Response via : Multiple Level Calibration



(3) n-Nitrosodimethylamine (T)

3.01min 43.50ng/uL m

response 502341

Ion	Exp%	Act%
74.00	100	100
42.00	129.50	127.38
0.00	0.00	0.00
0.00	0.00	0.00

## MANUAL RE-INTEGRATION

- ☐ missed peak assignment
- ☐ assigned incorrect name to peak
- ☐ over-integrated peak's area
- ☒ under-integrated peak's area
- ☐ other \_\_\_\_\_

initials jk date 9-6-13

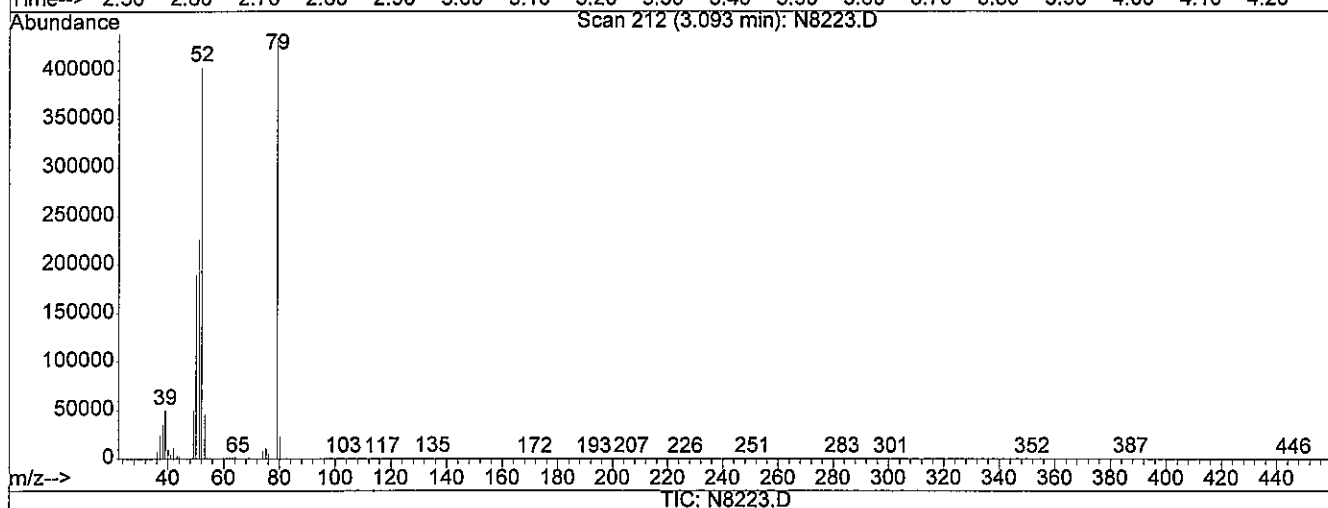
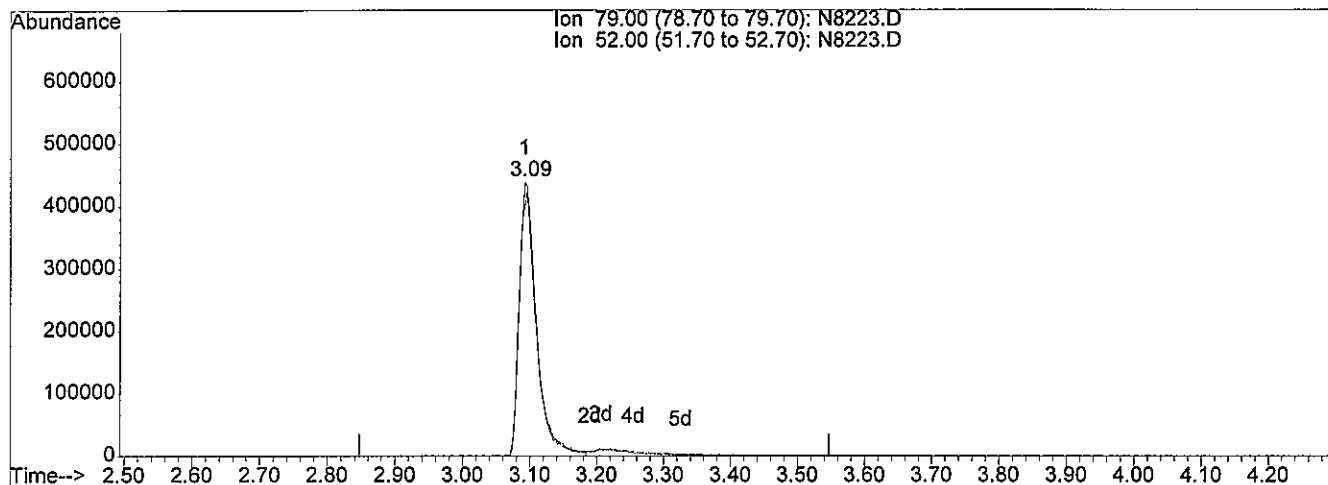
# Quantitation Report (Qedit)

Data File : D:\HPCHEM\1\DATA\090413\N8223.D  
 Acq On : 4 Sep 2013 13:55  
 Sample : ICALSVSTD040  
 Misc : ST130531-6  
 MS Integration Params: RTEINT.P  
 Quant Time: Sep 4 14:13 2013

Vial: 7  
 Operator: jk SOP 50  
 Inst : GC/MS Ins  
 Multiplr: 1.00

Quant Results File: temp.res

Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)  
 Title : GC-MS Semivolatiles SOP no. 506  
 Last Update : Wed Sep 04 14:12:36 2013  
 Response via : Multiple Level Calibration



(4) Pyridine (T)

3.09min 39.58ng/uL

response 785674

Ion	Exp%	Act%
79.00	100	100
52.00	93.60	96.21
0.00	0.00	0.00
0.00	0.00	0.00

*306m*



# Quantitation Report (Qedit)

Data File : D:\HPCHEM\1\DATA\090413\N8223.D

Vial: 7

Acq On : 4 Sep 2013 13:55

Operator: jk SOP 50

Sample : ICALSVSTD040

Inst : GC/MS Ins

Misc : ST130531-6

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Sep 4 14:13 2013

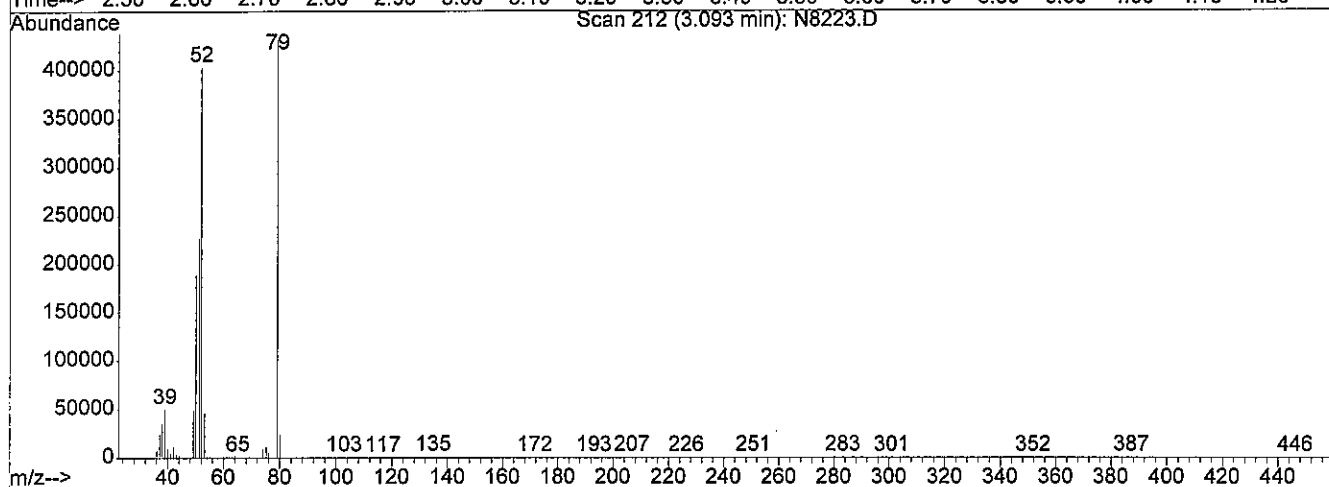
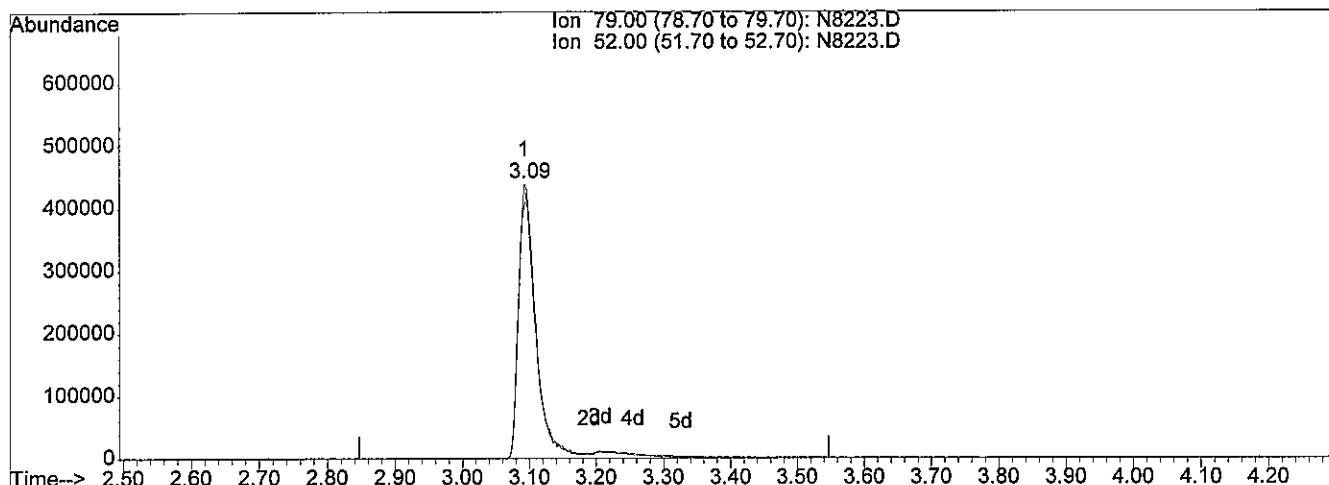
Quant Results File: temp.res

Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)

Title : GC-MS Semivolatiles SOP no. 506

Last Update : Wed Sep 04 14:12:36 2013

Response via : Multiple Level Calibration



(4) Pyridine (T)

3.09min 42.29ng/uL m

response 839340

Ion	Exp%	Act%
79.00	100	100
52.00	93.60	90.06
0.00	0.00	0.00
0.00	0.00	0.00

## MANUAL RE-INTEGRATION

- ☐ missed peak assignment
- ☐ assigned incorrect name to peak
- ☐ over-integrated peak's area
- ☒ under-integrated peak's area
- ☐ other \_\_\_\_\_

initials jk date 9-6-13

# Quantitation Report (Qedit)

Data File : D:\HPCHEM\1\DATA\090413\N8223.D

Vial: 7

Acq On : 4 Sep 2013 13:55

Operator: jk SOP 50

Sample : ICALSVSTD040

Inst : GC/MS Ins

Misc : ST130531-6

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Sep 4 14:13 2013

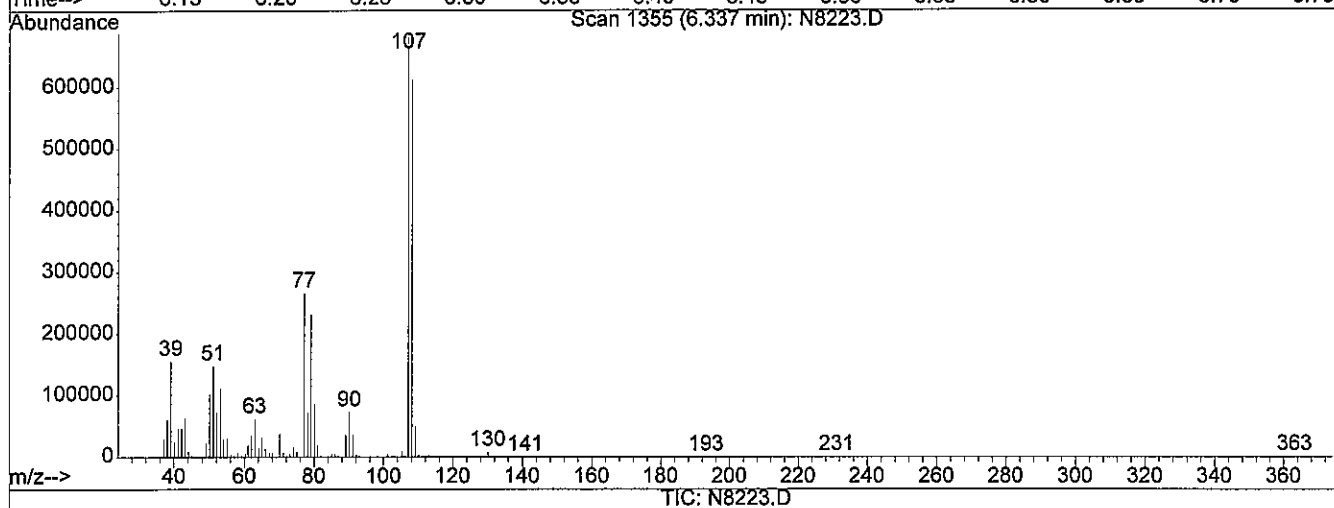
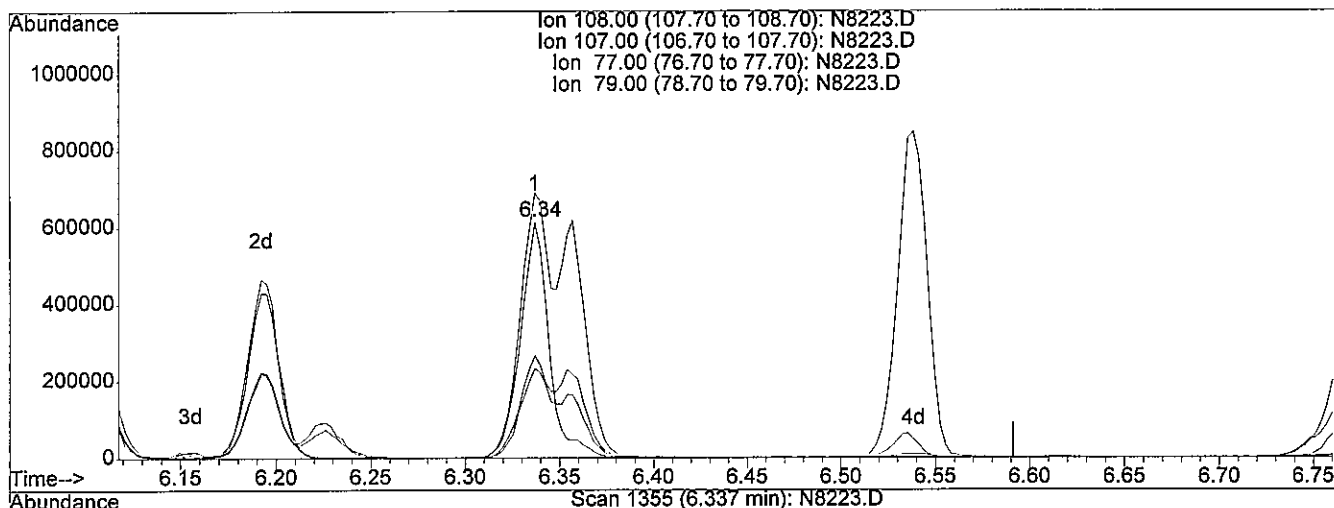
Quant Results File: temp.res

Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)

Title : GC-MS Semivolatiles SOP no. 506

Last Update : Wed Sep 04 14:12:36 2013

Response via : Multiple Level Calibration



(21) 3+4-Methylphenol (T)

6.34min 42.17ng/uL

response 645223

Ion	Exp%	Act%
108.00	100	100
107.00	210.50	122.26#
77.00	76.70	46.95#
79.00	63.20	64.22

*Se An*

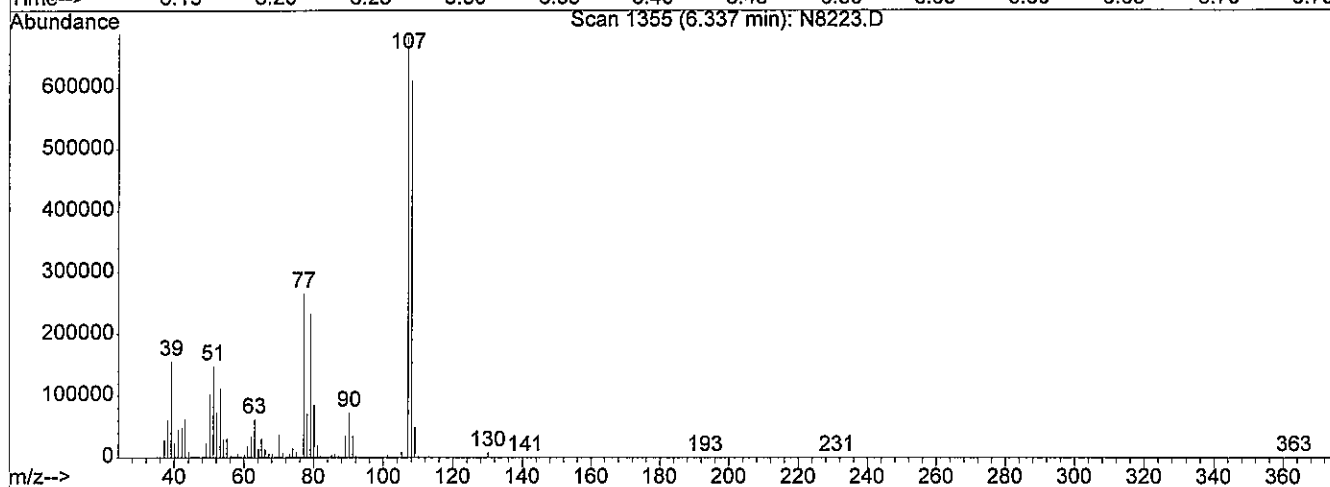
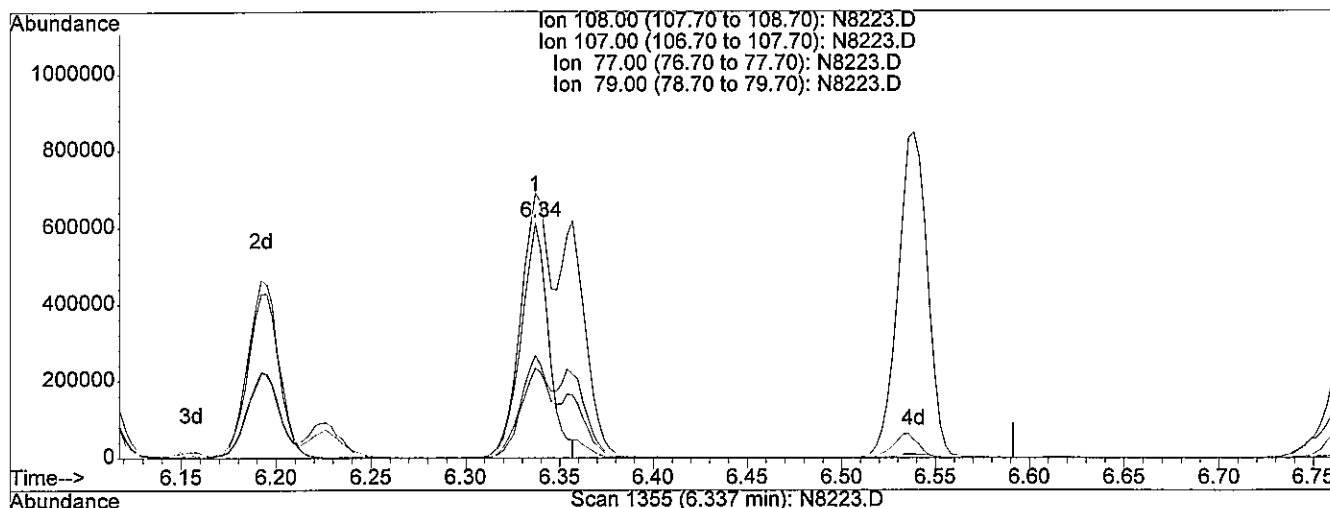
# Quantitation Report (Qedit)

Data File : D:\HPCHEM\1\DATA\090413\N8223.D  
 Acq On : 4 Sep 2013 13:55  
 Sample : ICALSVSTD040  
 Misc : ST130531-6  
 MS Integration Params: RTEINT.P  
 Quant Time: Sep 4 14:13 2013

Vial: 7  
 Operator: jk SOP 50  
 Inst : GC/MS Ins  
 Multiplr: 1.00

Quant Results File: temp.res

Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)  
 Title : GC-MS Semivolatiles SOP no. 506  
 Last Update : Wed Sep 04 14:12:36 2013  
 Response via : Multiple Level Calibration



(21) 3+4-Methylphenol (T)

6.34min 40.61ng/uL m

response 621454

Ion	Exp%	Act%
108.00	100	100
107.00	210.50	126.94#
77.00	76.70	48.75#
79.00	63.20	66.68

## MANUAL RE-INTEGRATION

- ☐ missed peak assignment
- ☐ assigned incorrect name to peak
- ☒ over-integrated peak's area
- ☐ under-integrated peak's area
- ☐ other \_\_\_\_\_

initials JK date 9-6-13

## 124 of 236

Data File : D:\HPCHEM\1\DATA\090413\N8224.D

Acq On : 4 Sep 2013 14:19

Sample : ICALSVSTD080

Misc : ST130531-7

MS Integration Params: RTEINT.P

Quant Time: Sep 4 14:42 2013

Vial: 8

Operator: jk SOP 506 Rev

Inst : GC/MS Ins

Multiplr: 1.00

Quant Results File: 090413S1.RES

Quant Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)

Title : GC-MS Semivolatiles SOP no. 506

Last Update : Wed Sep 04 14:41:18 2013

Response via : Initial Calibration

DataAcq Meth : 090413S1

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) 1,4-Dichlorobenzene-d4	6.00	152	528541	40.00	ng/uL	0.00
24) Naphthalene-d8	7.20	136	1866287	40.00	ng/uL	0.00
41) Acenaphthene-d10	8.74	164	1028662	40.00	ng/uL	0.00
69) Phenanthrene-d10	10.02	188	1948581	40.00	ng/uL	0.00
80) Chrysene-d12	12.31	240	1837972	40.00	ng/uL	0.00
91) Perylene-d12	13.87	264	817314	40.00	ng/uL	-0.02

## System Monitoring Compounds

5) 2-Fluorophenol	4.62	112	1423934	79.75	ng/uL	0.00
Spiked Amount	75.000	Range	46 - 105	Recovery	=	106.33%#
6) 2-Chlorophenol-d4	5.79	132	1195879	77.43	ng/uL	0.00
Spiked Amount	75.000	Range	33 - 110	Recovery	=	103.24%
8) Phenol-d5	5.59	99	1915302	81.05	ng/uL	0.00
Spiked Amount	75.000	Range	50 - 109	Recovery	=	108.07%
15) 1,2-Dichlorobenzene-d4	6.16	152	913783	72.96	ng/uL	0.00
Spiked Amount	50.000	Range	16 - 110	Recovery	=	145.92%#
25) Nitrobenzene-d5	6.53	82	1639555	75.86	ng/uL	0.00
Spiked Amount	50.000	Range	53 - 111	Recovery	=	151.72%#
46) 2-Fluorobiphenyl	8.12	172	2665414	75.14	ng/uL	0.00
Spiked Amount	50.000	Range	55 - 108	Recovery	=	150.28%#
68) 2,4,6-Tribromophenol	9.42	330	408381	78.72	ng/uL	0.00
Spiked Amount	75.000	Range	42 - 117	Recovery	=	104.96%
83) p-Terphenyl-d14	11.33	244	3344316	77.83	ng/uL	0.00
Spiked Amount	50.000	Range	34 - 139	Recovery	=	155.66%#

## Target Compounds

					Qvalue
2) 1,4-Dioxane	2.63	88	692176m	81.76	ng/uL
3) n-Nitrosodimethylamine	3.01	74	1020561m	80.28	ng/uL
4) Pyridine	3.10	79	1673746m	77.21	ng/uL
7) Aniline	5.68	93	2265490	82.53	ng/uL
9) Phenol	5.60	94	1762200	77.52	ng/uL
10) Tetramethylurea	5.75	72	2419449	76.66	ng/uL
11) Bis(2-chloroethyl) ether	5.71	93	1245487	69.72	ng/uL#
12) 2-Chlorophenol	5.80	128	1259556	76.10	ng/uL
13) 1,3-Dichlorobenzene	5.95	146	1527977	77.30	ng/uL
14) 1,4-Dichlorobenzene	6.02	146	1426296	77.80	ng/uL
16) 1,2-Dichlorobenzene	6.17	146	1305191	75.30	ng/uL
17) Benzyl Alcohol	6.11	108	875912	79.85	ng/uL
18) 2-Methylphenol	6.20	107	1067100	78.25	ng/uL#
19) Bis(2-chloroisopropyl) ethe	6.23	45	2355342	78.06	ng/uL#
20) n-Nitroso-di-n-propylamine	6.36	70	983061	73.69	ng/uL
21) 3+4-Methylphenol	6.35	108	1387236	82.51	ng/uL

(#)=qualifier out of range (m)=manual integration

N8224.D 090413S1.M Wed Sep 04 14:42:55 2013

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Data File : D:\HPCHEM\1\DATA\090413\N8224.D

Vial: 8

Acq On : 4 Sep 2013 14:19

Operator: jk SOP 506 Rev

Sample : ICALSVSTD080

Inst : GC/MS Ins

Misc : ST130531-7

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Results File: 090413S1.RES

Quant Time: Sep 4 14:42 2013

Quant Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)

Title : GC-MS Semivolatiles SOP no. 506

Last Update : Wed Sep 04 14:41:18 2013

Response via : Initial Calibration

DataAcq Meth : 090413S1

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
22) N-Methylaniline	6.36	106	1876036	76.55	ng/uL	99
23) Hexachloroethane	6.50	117	607674	77.68	ng/uL	99
26) N,N-Dimethylaniline	6.54	120	1851399	74.89	ng/uL	98
27) Nitrobenzene	6.55	77	1861655	72.55	ng/uL	99
28) Isophorone	6.76	82	2544193	76.43	ng/uL	99
29) N-Ethylaniline	6.77	106	2228803	73.38	ng/uL	99
30) 2-Nitrophenol	6.84	139	626587	81.53	ng/uL	96
31) 2,4-Dimethylphenol	6.84	107	1215057	73.41	ng/uL	97
32) Bis(2-chloroethoxy)methane	6.92	93	1521228	78.55	ng/uL	100
33) Benzoic acid	6.93	105	675829	92.03	ng/uL	97
34) 2,4-Dichlorophenol	7.05	162	1090368	77.10	ng/uL	100
35) 1,2,4-Trichlorobenzene	7.14	180	1322168	75.76	ng/uL	98
36) Naphthalene	7.22	128	3706847	80.27	ng/uL	98
37) 4-Chloroaniline	7.24	127	1318024	76.60	ng/uL	99
38) Hexachlorobutadiene	7.31	225	829412	74.24	ng/uL	98
39) 4-Chloro-3-methylphenol	7.63	107	1087354	79.06	ng/uL	99
40) 2-Methylnaphthalene	7.82	142	2657256	79.89	ng/uL	98
42) 1-Methylnaphthalene	7.91	142	2336220	76.79	ng/uL	97
43) Hexachlorocyclopentadiene	7.96	237	724038	77.00	ng/uL	99
44) 2,4,6-Trichlorophenol	8.05	196	866526	79.87	ng/uL	98
45) 2,4,5-Trichlorophenol	8.09	196	785812	76.25	ng/uL	99
47) 2-Chloronaphthalene	8.25	162	2352180	77.05	ng/uL	99
48) 2-Nitroaniline	8.32	65	812974	81.25	ng/uL	98
49) 1,4-Dinitrobenzene	8.42	168	392164	90.39	ng/uL	99
50) Dimethylphthalate	8.45	163	2459698	79.80	ng/uL	100
51) 1,3-Dinitrobenzene	8.50	168	434702	86.65	ng/uL	94
52) 2,6-Dinitrotoluene	8.52	165	563690	79.01	ng/uL	99
53) 1,2-Dinitrobenzene	8.58	168	286949	86.77	ng/uL	96
54) Acenaphthylene	8.63	152	3512587	78.55	ng/uL	99
55) 3-Nitroaniline	8.68	138	565255	87.78	ng/uL	97
56) Acenaphthene	8.77	154	2125984	79.59	ng/uL	98
57) 2,4-Dinitrophenol	8.76	184	349414	95.72	ng/uL#	97
58) 4-Nitrophenol	8.78	109	319259	74.60	ng/uL	87
59) Dibenzofuran	8.92	168	3030591	75.95	ng/uL	97
60) 2,4-Dinitrotoluene	8.87	165	827392	89.63	ng/uL	95
61) 2,3,5,6-Tetrachlorophenol	8.97	232	786494	82.29	ng/uL	99
62) 2,3,4,6-Tetrachlorophenol	9.01	232	746289	80.66	ng/uL	98
63) Diethylphthalate	9.04	149	2306015	81.50	ng/uL	99
64) 4-Chlorophenyl phenyl ethe	9.18	204	1372853	76.54	ng/uL	98
65) 4-Nitroaniline	9.21	138	502027	84.05	ng/uL	97
66) Fluorene	9.21	166	2338493	76.08	ng/uL	99

(#)=qualifier out of range (m)=manual integration

N8224.D 090413S1.M Wed Sep 04 14:42:55 2013

Page 2

Data File : D:\HPCHEM\1\DATA\090413\N8224.D

Vial: 8

Acq On : 4 Sep 2013 14:19

Operator: jk SOP 506 Rev

Sample : ICALSVSTD080

Inst : GC/MS Ins

Misc : ST130531-7

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Sep 4 14:42 2013

Quant Results File: 090413S1.RES

Quant Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)

Title : GC-MS Semivolatiles SOP no. 506

Last Update : Wed Sep 04 14:41:18 2013

Response via : Initial Calibration

DataAcq Meth : 090413S1

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
67) Azobenzene	9.32	77	2327827	73.38	ng/uL	99
70) 4,6-Dinitro-2-methylphenol	9.23	198	443615	84.65	ng/uL	99
71) n-Nitrosodiphenylamine	9.28	169	1930802	73.15	ng/uL	98
72) 4-Bromophenyl phenyl ether	9.60	248	844478	73.64	ng/uL	98
73) Hexachlorobenzene	9.70	284	889263	72.72	ng/uL	98
74) Pentachlorophenol	9.84	266	660320	80.79	ng/uL	99
75) Phenanthrene	10.05	178	3543933	77.33	ng/uL	99
76) Anthracene	10.09	178	3605875	75.16	ng/uL	99
77) Carbazole	10.20	167	3291247	73.07	ng/uL	100
78) Di-n-butylphthalate	10.41	149	3796317	68.03	ng/uL	99
79) Fluoranthene	11.07	202	4567181	69.70	ng/uL	99
81) Benzidine	11.13	184	2066910	73.64	ng/uL	99
82) Pyrene	11.27	202	4491630	75.93	ng/uL	99
84) Butylbenzylphthalate	11.70	149	1460022	76.33	ng/uL	98
85) Bis(2-ethylhexyl) adipate	11.71	129	1226659	75.85	ng/uL	97
86) Bis(2-ethylhexyl)phthalate	12.15	149	1960328	80.03	ng/uL	99
87) 3,3'-Dichlorobenzidine	12.23	252	1330286	81.66	ng/uL	98
88) Benzo[a]anthracene	12.30	228	3952193	79.58	ng/uL	99
89) Chrysene	12.34	228	3566132	78.16	ng/uL	99
90) Di-n-octylphthalate	12.74	149	2593207	76.96	ng/uL	97
92) Benzo[b]fluoranthene	13.39	252	2189834	83.96	ng/uL	99
93) Benzo[k]fluoranthene	13.42	252	2165382	84.01	ng/uL	98
94) Benzo[a]pyrene	13.80	252	1761022	81.38	ng/uL	99
95) Indeno(1,2,3-c,d)pyrene	15.44	276	1310154	72.54	ng/uL	98
96) Dibenzo[a,h]anthracene	15.43	278	1184325	75.19	ng/uL	98
97) Benzo[g,h,i]perylene	15.92	276	962177	66.63	ng/uL	96

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(#) = qualifier out of range (m) = manual integration

N8224.D 090413S1.M Wed Sep 04 14:42:55 2013

Page 3

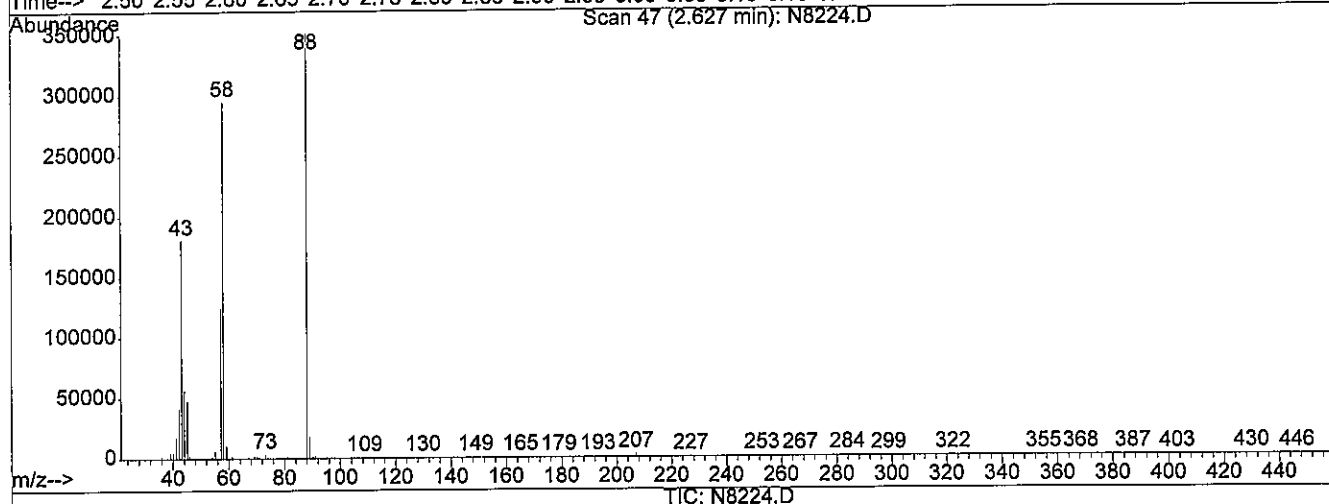
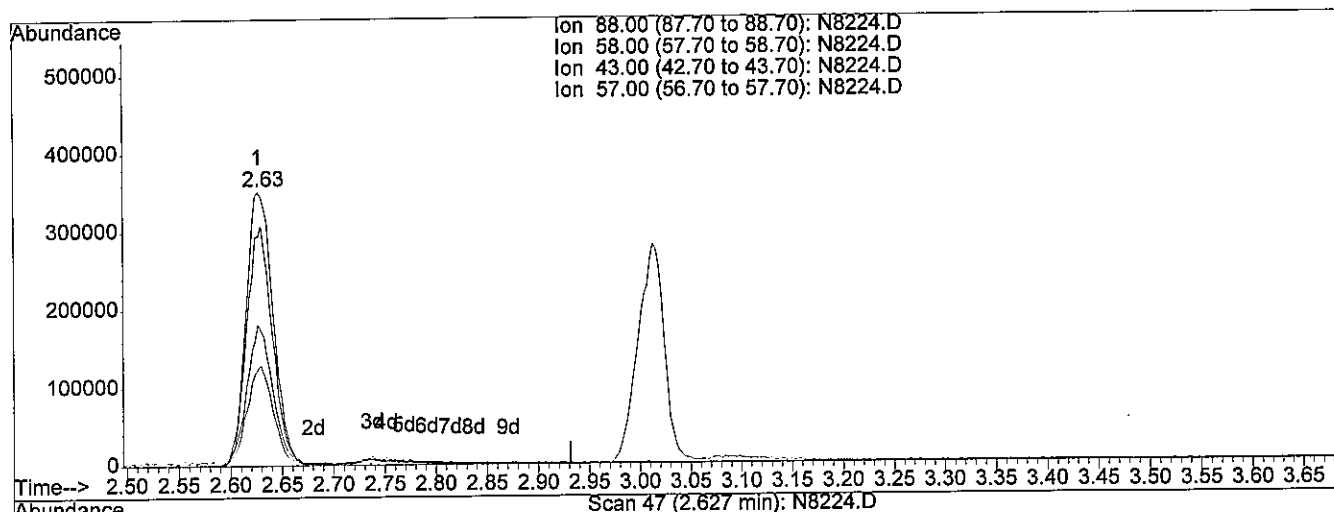
# Quantitation Report (Qedit)

Data File : D:\HPCHEM\1\DATA\090413\N8224.D  
 Acq On : 4 Sep 2013 14:19  
 Sample : ICALSVSTD080  
 Misc : ST130531-7  
 MS Integration Params: RTEINT.P  
 Quant Time: Sep 4 14:41 2013

Vial: 8  
 Operator: jk SOP 50  
 Inst : GC/MS Ins  
 Multiplr: 1.00

Quant Results File: temp.res

Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)  
 Title : GC-MS Semivolatiles SOP no. 506  
 Last Update : Wed Sep 04 14:41:18 2013  
 Response via : Multiple Level Calibration



(2) 1,4-Dioxane (t)

2.63min 76.61ng/uL

response 648642

Ion	Exp%	Act%
88.00	100	100
58.00	77.90	83.48
43.00	47.90	47.91
57.00	33.00	35.24

*3efm*



## Quantitation Report (Qedit)

Data File : D:\HPCHEM\1\DATA\090413\N8224.D

Vial: 8

Acq On : 4 Sep 2013 14:19

Operator: jk SOP 50

Sample : ICALSVSTD080

Inst : GC/MS Ins

Misc : ST130531-7

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Sep 4 14:41 2013

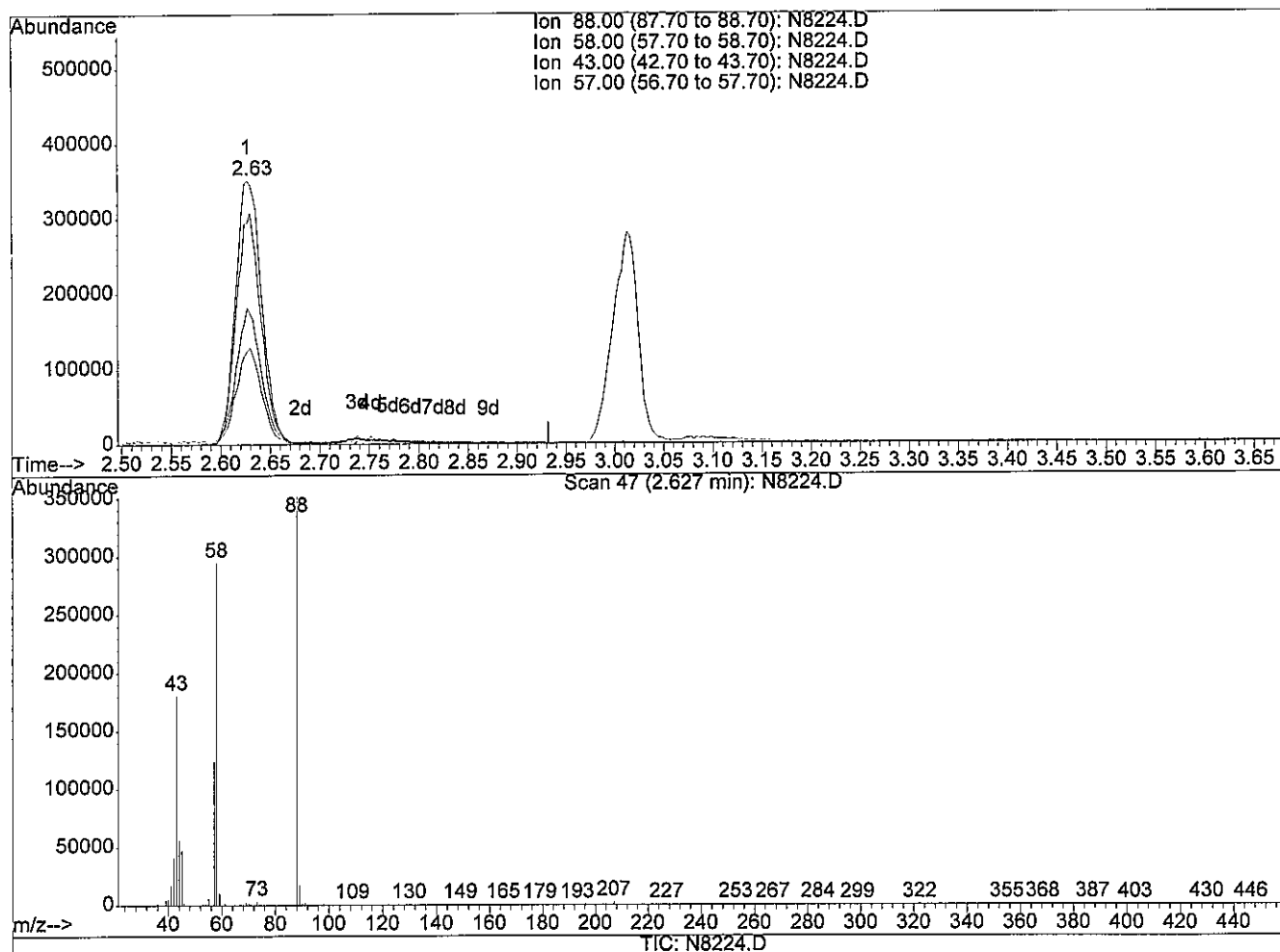
Quant Results File: temp.res

Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)

Title : GC-MS Semivolatiles SOP no. 506

Last Update : Wed Sep 04 14:41:18 2013

Response via : Multiple Level Calibration



(2) 1,4-Dioxane (t)

2.63min 81.76ng/uL m

response 692176

Ion	Exp%	Act%
88.00	100	100
58.00	77.90	78.23
43.00	47.90	44.90
57.00	33.00	33.02

## MANUAL RE-INTEGRATION

- ☐ missed peak assignment  
☐ assigned incorrect name to peak  
☐ over-integrated peak's area  
☒ under-integrated peak's area  
☐ other \_\_\_\_\_

initials JK date 9-6-13

# Quantitation Report (Qedit)

Data File : D:\HPCHEM\1\DATA\090413\N8224.D

Vial: 8

Acq On : 4 Sep 2013 14:19

Operator: jk SOP 50

Sample : ICALSVSTD080

Inst : GC/MS Ins

Misc : ST130531-7

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Sep 4 14:41 2013

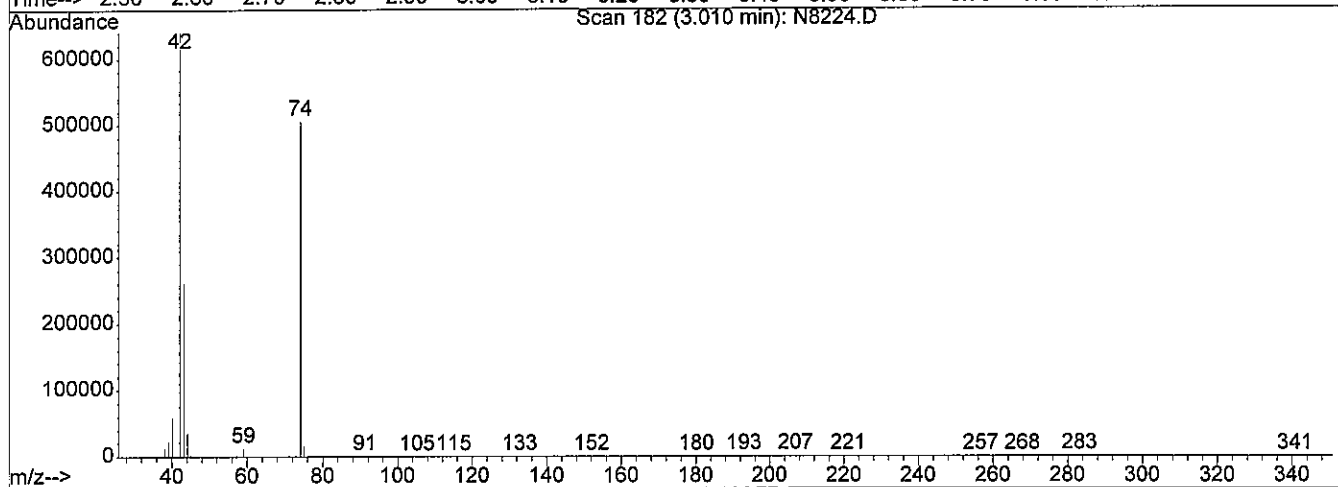
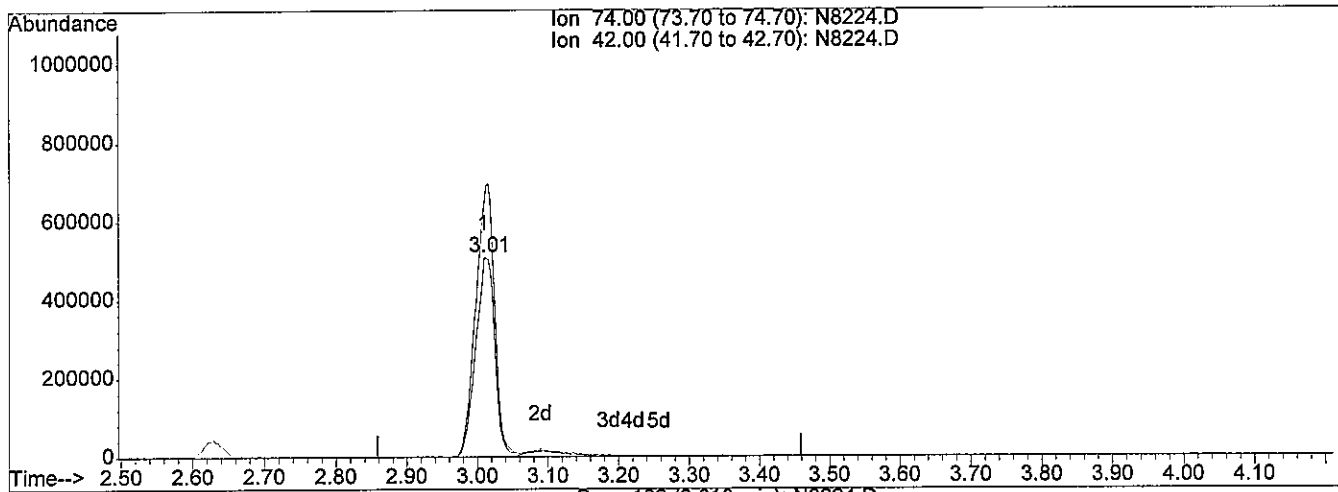
Quant Results File: temp.res

Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)

Title : GC-MS Semivolatiles SOP no. 506

Last Update : Wed Sep 04 14:41:18 2013

Response via : Multiple Level Calibration



(3) n-Nitrosodimethylamine (T)

3.01min 75.09ng/uL

response 954582

Ion	Exp%	Act%
74.00	100	100
42.00	129.50	135.37
0.00	0.00	0.00
0.00	0.00	0.00

*3efm*

# Quantitation Report (Qedit)

Data File : D:\HPCHEM\1\DATA\090413\N8224.D

Vial: 8

Acq On : 4 Sep 2013 14:19

Operator: jk SOP 50

Sample : ICALSVSTD080

Inst : GC/MS Ins

Misc : ST130531-7

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Sep 4 14:41 2013

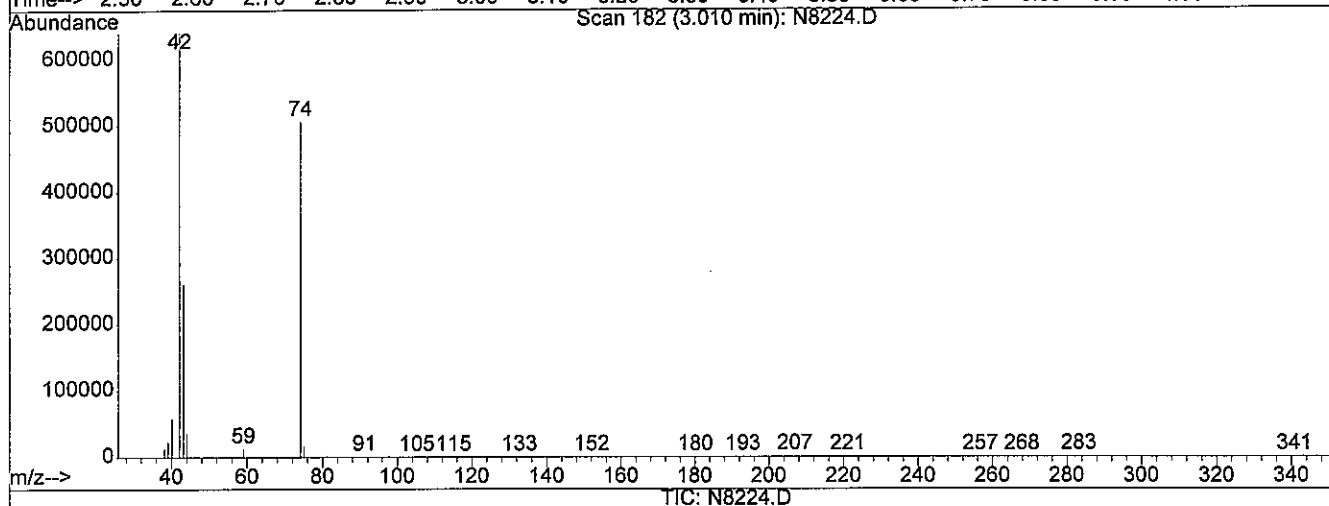
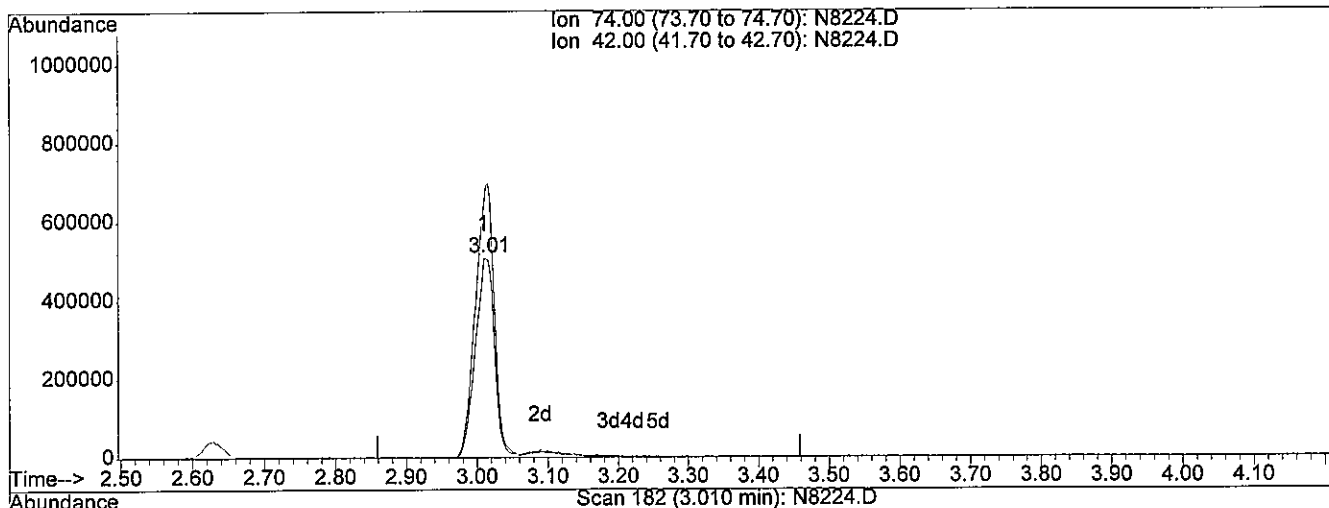
Quant Results File: temp.res

Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)

Title : GC-MS Semivolatiles SOP no. 506

Last Update : Wed Sep 04 14:41:18 2013

Response via : Multiple Level Calibration



(3) n-Nitrosodimethylamine (T)

3.01min 80.28ng/uL m

response 1020561

Ion	Exp%	Act%
74.00	100	100
42.00	129.50	126.62
0.00	0.00	0.00
0.00	0.00	0.00

## MANUAL RE-INTEGRATION

- ☐ missed peak assignment
- ☐ assigned incorrect name to peak
- ☐ over-integrated peak's area
- ☒ under-integrated peak's area
- ☐ other \_\_\_\_\_

initials jk date 9-4-13

# Quantitation Report (Qedit)

Data File : D:\HPCHEM\1\DATA\090413\N8224.D

Vial: 8

Acq On : 4 Sep 2013 14:19

Operator: jk SOP 50

Sample : ICALSVSTD080

Inst : GC/MS Ins

Misc : ST130531-7

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Sep 4 14:41 2013

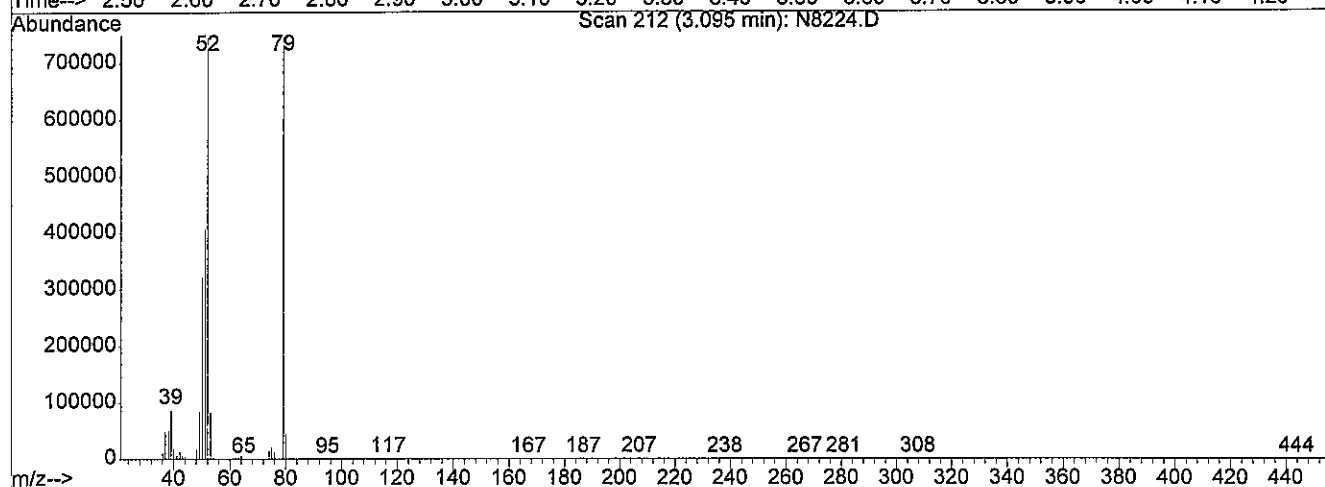
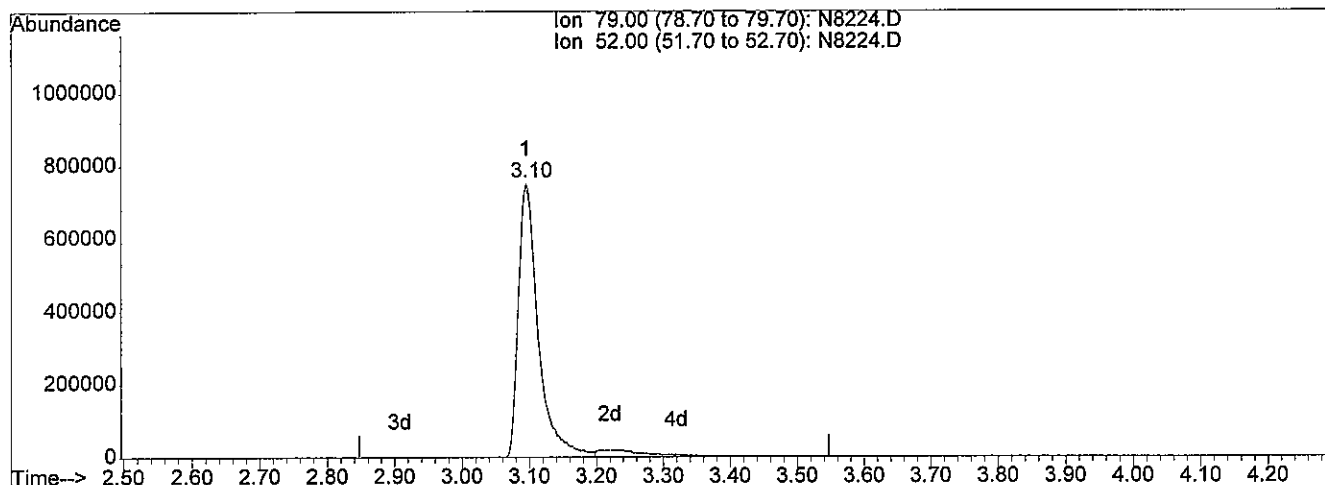
Quant Results File: temp.res

Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)

Title : GC-MS Semivolatiles SOP no. 506

Last Update : Wed Sep 04 14:41:18 2013

Response via : Multiple Level Calibration



(4) Pyridine (T)

3.10min 71.56ng/uL

response 1551424

Ion	Exp%	Act%
79.00	100	100
52.00	93.60	98.03
0.00	0.00	0.00
0.00	0.00	0.00

*Sefer*

# Quantitation Report (Qedit)

Data File : D:\HPCHEM\1\DATA\090413\N8224.D

Vial: 8

Acq On : 4 Sep 2013 14:19

Operator: jk SOP 50

Sample : ICALSVSTD080

Inst : GC/MS Ins

Misc : ST130531-7

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Sep 4 14:42 2013

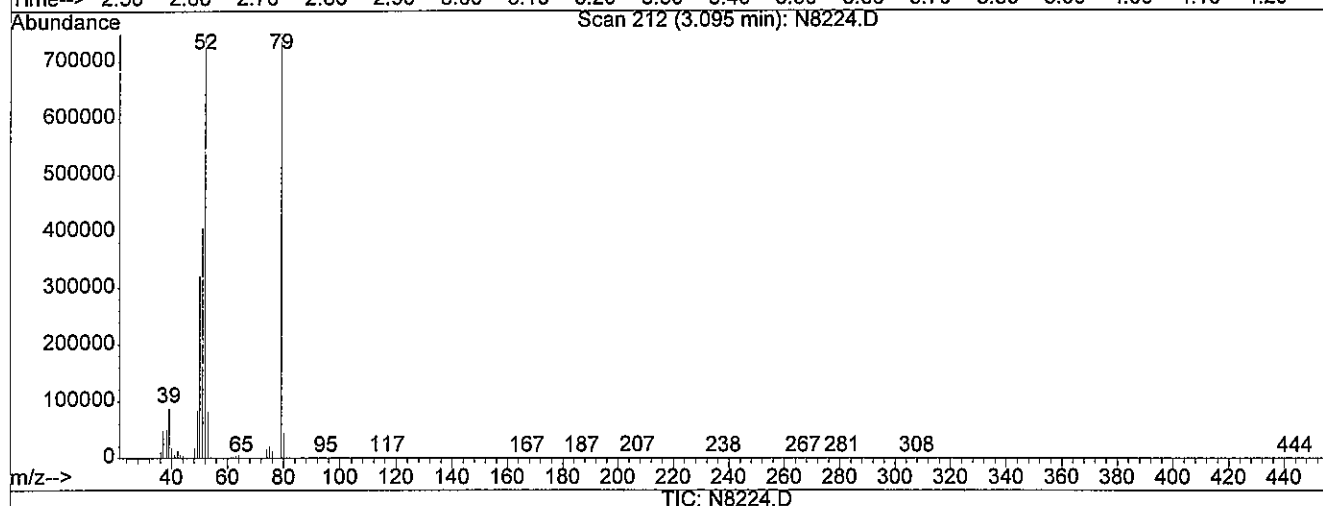
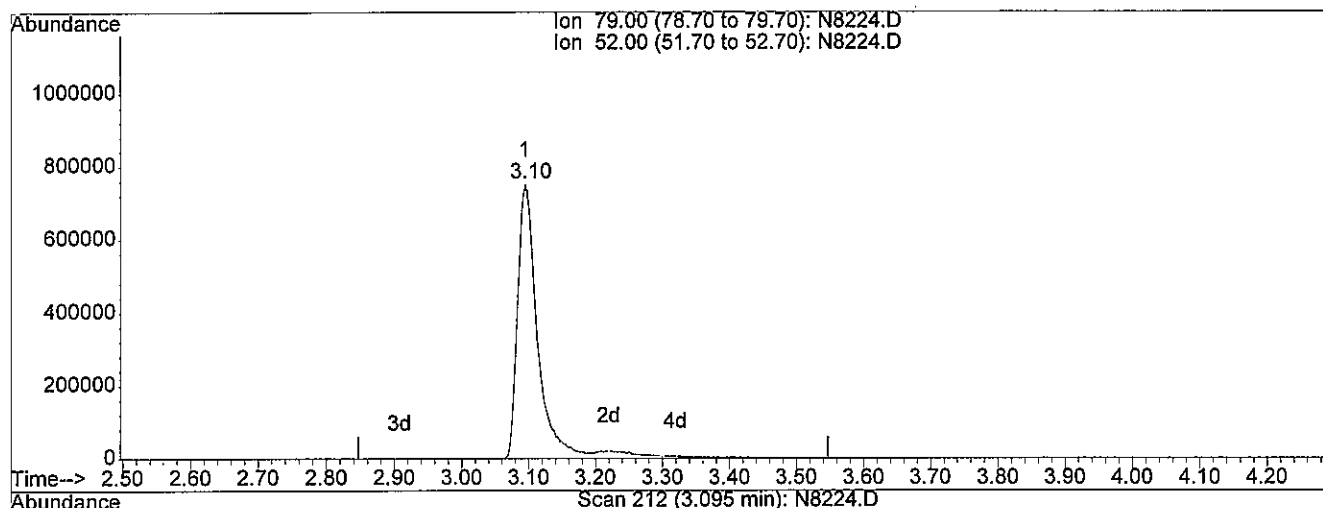
Quant Results File: temp.res

Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)

Title : GC-MS Semivolatiles SOP no. 506

Last Update : Wed Sep 04 14:41:18 2013

Response via : Multiple Level Calibration



(4) Pyridine (T)

3.10min 77.21ng/uL m

response 1673746

Ion	Exp%	Act%
79.00	100	100
52.00	93.60	90.87
0.00	0.00	0.00
0.00	0.00	0.00

## MANUAL RE-INTEGRATION

- ☐ missed peak assignment
- ☐ assigned incorrect name to peak
- ☐ over-integrated peak's area
- ☒ under-integrated peak's area
- ☐ other \_\_\_\_\_

initials JK date 9-6-13

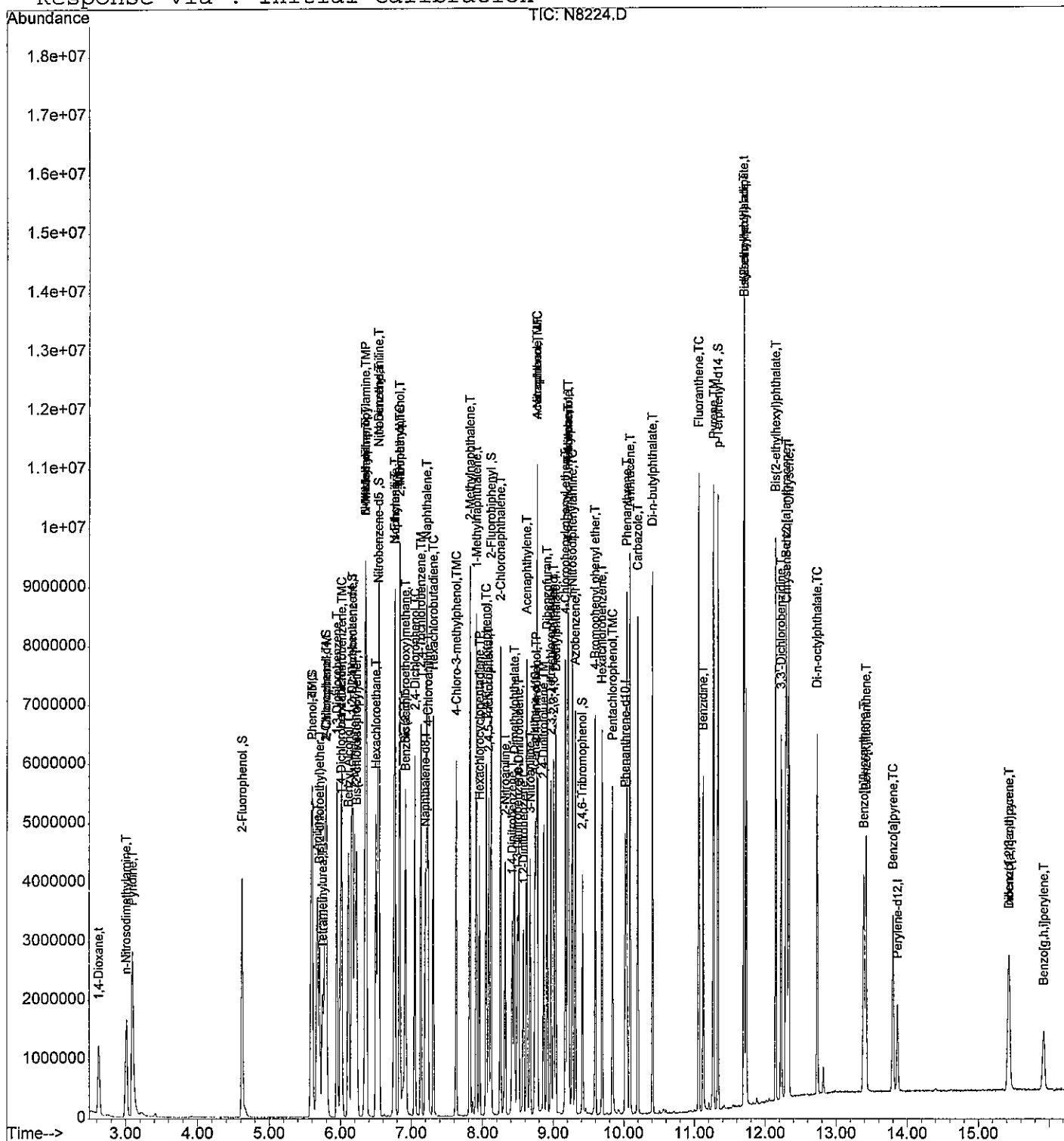
# Quantitation Report

Data File : D:\HPCHEM\1\DATA\090413\N8224.D  
Acq On : 4 Sep 2013 14:19  
Sample : ICALSVSTD080  
Misc : ST130531-7  
MS Integration Params: RTEINT.P  
Quant Time: Sep 4 14:42 2013

Vial: 8  
Operator: jk SOP 506  
Inst : GC/MS Ins  
Multiplr: 1.00

Quant Results File: 090413S1.RES

Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)  
Title : GC-MS Semivolatiles SOP no. 506  
Last Update : Wed Sep 04 14:41:18 2013  
Response via : Initial Calibration



Data File : D:\HPCHEM\1\DATA\090413\N8225.D

Vial: 9

Acq On : 4 Sep 2013 14:44

Operator: jk SOP 506 Rev

Sample : ICALSVSTD100

Inst : GC/MS Ins

Misc : ST130531-8

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Sep 4 15:04 2013

Quant Results File: 090413S1.RES

Quant Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)

Title : GC-MS Semivolatiles SOP no. 506

Last Update : Wed Sep 04 15:01:41 2013

Response via : Initial Calibration

DataAcq Meth : 090413S1

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	6.00	152	484074	40.00	ng/uL	0.00
24) Naphthalene-d8	7.20	136	1711636	40.00	ng/uL	0.00
41) Acenaphthene-d10	8.75	164	960751	40.00	ng/uL	0.00
69) Phenanthrene-d10	10.03	188	2034811	40.00	ng/uL	0.00
80) Chrysene-d12	12.32	240	1823955	40.00	ng/uL	0.00
91) Perylene-d12	13.87	264	794247	40.00	ng/uL	-0.01

## System Monitoring Compounds

5) 2-Fluorophenol	4.63	112	1746014	105.75	ng/uL	0.00
Spiked Amount 75.000	Range 46 - 105		Recovery = 141.00%#			
6) 2-Chlorophenol-d4	5.79	132	1364406	96.94	ng/uL	0.00
Spiked Amount 75.000	Range 33 - 110		Recovery = 129.25%#			
8) Phenol-d5	5.59	99	2198078	101.34	ng/uL	0.00
Spiked Amount 75.000	Range 50 - 109		Recovery = 135.12%#			
15) 1,2-Dichlorobenzene-d4	6.16	152	1034467	91.46	ng/uL	0.00
Spiked Amount 50.000	Range 16 - 110		Recovery = 182.92%#			
25) Nitrobenzene-d5	6.53	82	1874685	95.31	ng/uL	0.00
Spiked Amount 50.000	Range 53 - 111		Recovery = 190.62%#			
46) 2-Fluorobiphenyl	8.12	172	3050077	93.12	ng/uL	0.00
Spiked Amount 50.000	Range 55 - 108		Recovery = 186.24%#			
68) 2,4,6-Tribromophenol	9.42	330	523664	106.64	ng/uL	0.00
Spiked Amount 75.000	Range 42 - 117		Recovery = 142.19%#			
83) p-Terphenyl-d14	11.34	244	4187356	98.45	ng/uL	0.00
Spiked Amount 50.000	Range 34 - 139		Recovery = 196.90%#			

## Target Compounds

					Qvalue
2) 1,4-Dioxane	2.63	88	902484m	114.15	ng/uL
3) n-Nitrosodimethylamine	3.02	74	1299453	109.13	ng/uL 97
4) Pyridine	3.10	79	2088389	103.37	ng/uL 95
7) Aniline	5.68	93	2473763m	97.90	ng/uL
9) Phenol	5.61	94	2083478	100.06	ng/uL 99
10) Tetramethylurea	5.76	72	2690213	94.00	ng/uL 98
11) Bis(2-chloroethyl) ether	5.71	93	1531135m	95.54	ng/uL
12) 2-Chlorophenol	5.81	128	1451735	96.35	ng/uL 99
13) 1,3-Dichlorobenzene	5.95	146	1738916	96.60	ng/uL 98
14) 1,4-Dichlorobenzene	6.02	146	1653345	98.68	ng/uL 99
16) 1,2-Dichlorobenzene	6.18	146	1508897	95.73	ng/uL 99
17) Benzyl Alcohol	6.12	108	1011760	100.61	ng/uL 98
18) 2-Methylphenol	6.21	107	1223728	98.27	ng/uL# 87
19) Bis(2-chloroisopropyl) ethe	6.23	45	2733799	99.08	ng/uL# 75
20) n-Nitroso-di-n-propylamine	6.37	70	1124214	93.07	ng/uL 99
21) 3+4-Methylphenol	6.35	108	1559520	101.09	ng/uL 97

(#)=qualifier out of range (m)=manual integration

N8225.D 090413S1.M Wed Sep 04 15:04:55 2013

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Data File : D:\HPCHEM\1\DATA\090413\N8225.D

Vial: 9

Acq On : 4 Sep 2013 14:44

Operator: jk SOP 506 Rev

Sample : ICALSVSTD100

Inst : GC/MS Ins

Misc : ST130531-8

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Sep 4 15:04 2013

Quant Results File: 090413S1.RES

Quant Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)

Title : GC-MS Semivolatiles SOP no. 506

Last Update : Wed Sep 04 15:01:41 2013

Response via : Initial Calibration

DataAcq Meth : 090413S1

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
22) N-Methylaniline	6.37	106	2188541	97.85	ng/uL	97
23) Hexachloroethane	6.50	117	699952	98.02	ng/uL	100
26) N,N-Dimethylaniline	6.54	120	2086124	93.07	ng/uL	97
27) Nitrobenzene	6.55	77	2130100	91.76	ng/uL	99
28) Isophorone	6.77	82	2815409	93.26	ng/uL	100
29) N-Ethylaniline	6.78	106	2519005	91.68	ng/uL	99
30) 2-Nitrophenol	6.84	139	725463	102.50	ng/uL	96
31) 2,4-Dimethylphenol	6.84	107	1355409	90.68	ng/uL	97
32) Bis(2-chloroethoxy)methane	6.92	93	1757980	99.12	ng/uL	99
33) Benzoic acid	6.94	105	801149	114.61	ng/uL	98
34) 2,4-Dichlorophenol	7.05	162	1215190	94.54	ng/uL	99
35) 1,2,4-Trichlorobenzene	7.14	180	1495462	94.32	ng/uL	97
36) Naphthalene	7.22	128	4237421	100.05	ng/uL	96
37) 4-Chloroaniline	7.24	127	1442143	92.52	ng/uL	98
38) Hexachlorobutadiene	7.31	225	933223	92.26	ng/uL	98
39) 4-Chloro-3-methylphenol	7.64	107	1258008	99.77	ng/uL	100
40) 2-Methylnaphthalene	7.82	142	2974383	97.85	ng/uL	99
42) 1-Methylnaphthalene	7.92	142	2617758	93.17	ng/uL	98
43) Hexachlorocyclopentadiene	7.96	237	816039	93.87	ng/uL	99
44) 2,4,6-Trichlorophenol	8.06	196	991333	98.14	ng/uL	99
45) 2,4,5-Trichlorophenol	8.09	196	891140	93.57	ng/uL	99
47) 2-Chloronaphthalene	8.26	162	2681195	94.84	ng/uL	99
48) 2-Nitroaniline	8.33	65	965179	102.79	ng/uL	99
49) 1,4-Dinitrobenzene	8.43	168	461091	111.59	ng/uL	98
50) Dimethylphthalate	8.46	163	2892467	100.40	ng/uL	100
51) 1,3-Dinitrobenzene	8.50	168	512437	107.92	ng/uL	93
52) 2,6-Dinitrotoluene	8.52	165	653737	98.37	ng/uL	99
53) 1,2-Dinitrobenzene	8.58	168	321953	103.61	ng/uL	98
54) Acenaphthylene	8.63	152	4029039	96.96	ng/uL	99
55) 3-Nitroaniline	8.68	138	673705	110.12	ng/uL	98
56) Acenaphthene	8.78	154	2468353	99.09	ng/uL	98
57) 2,4-Dinitrophenol	8.76	184	444212	122.84	ng/uL#	90
58) 4-Nitrophenol	8.78	109	389929	98.03	ng/uL	88
59) Dibenzofuran	8.92	168	3516802	95.13	ng/uL	96
60) 2,4-Dinitrotoluene	8.87	165	977567	111.26	ng/uL	97
61) 2,3,5,6-Tetrachlorophenol	8.97	232	940277	104.40	ng/uL	99
62) 2,3,4,6-Tetrachlorophenol	9.01	232	898287	103.27	ng/uL	95
63) Diethylphthalate	9.04	149	2664748	100.72	ng/uL	99
64) 4-Chlorophenyl phenyl ethe	9.18	204	1611990	96.75	ng/uL	98
65) 4-Nitroaniline	9.22	138	590815	105.02	ng/uL	95
66) Fluorene	9.22	166	2770370	96.99	ng/uL	99

(#)= qualifier out of range (m)= manual integration

N8225.D 090413S1.M Wed Sep 04 15:04:55 2013

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Data File : D:\HPCHEM\1\DATA\090413\N8225.D

Vial: 9

Acq On : 4 Sep 2013 14:44

Operator: jk SOP 506 Rev

Sample : ICALSVSTD100

Inst : GC/MS Ins

Misc : ST130531-8

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Sep 4 15:04 2013

Quant Results File: 090413S1.RES

Quant Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)

Title : GC-MS Semivolatiles SOP no. 506

Last Update : Wed Sep 04 15:01:41 2013

Response via : Initial Calibration

DataAcq Meth : 090413S1

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
67) Azobenzene	9.32	77	3006267	101.26	ng/uL	97
70) 4,6-Dinitro-2-methylphenol	9.23	198	580995	104.87	ng/uL	97
71) n-Nitrosodiphenylamine	9.28	169	2489803	91.59	ng/uL	97
72) 4-Bromophenyl phenyl ether	9.60	248	1042931	88.73	ng/uL	96
73) Hexachlorobenzene	9.70	284	1092580	87.36	ng/uL	99
74) Pentachlorophenol	9.85	266	839563	98.69	ng/uL	98
75) Phenanthrene	10.05	178	4460982	94.12	ng/uL	99
76) Anthracene	10.09	178	4588410	92.70	ng/uL	99
77) Carbazole	10.21	167	4150430	89.75	ng/uL	100
78) Di-n-butylphthalate	10.41	149	4752970	83.76	ng/uL	100
79) Fluoranthene	11.07	202	5650353	84.68	ng/uL	99
81) Benzidine	11.13	184	2662485	96.19	ng/uL	99
82) Pyrene	11.28	202	5497533	94.50	ng/uL	98
84) Butylbenzylphthalate	11.71	149	1825077	96.68	ng/uL	100
85) Bis(2-ethylhexyl) adipate	11.71	129	1509802	94.88	ng/uL	100
86) Bis(2-ethylhexyl)phthalate	12.15	149	2477480	101.64	ng/uL	99
87) 3,3'-Dichlorobenzidine	12.23	252	1646897	101.60	ng/uL	99
88) Benzo[a]anthracene	12.30	228	4960588	100.56	ng/uL	100
89) Chrysene	12.34	228	4470375	98.91	ng/uL	98
90) Di-n-octylphthalate	12.74	149	3347492	100.10	ng/uL	98
92) Benzo[b]fluoranthene	13.40	252	2658005	104.15	ng/uL	98
93) Benzo[k]fluoranthene	13.43	252	2425871	97.28	ng/uL	99
94) Benzo[a]pyrene	13.81	252	2123144	100.83	ng/uL	98
95) Indeno(1,2,3-c,d)pyrene	15.45	276	1533241	88.97	ng/uL	93
96) Dibenzo[a,h]anthracene	15.44	278	1372250	91.00	ng/uL	99
97) Benzo[g,h,i]perylene	15.93	276	1123486m	82.68	ng/uL	

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(#) = qualifier out of range (m) = manual integration

N8225.D 090413S1.M Wed Sep 04 15:04:55 2013

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Data File : D:\HPCHEM\1\DATA\090413\N8225.D

Vial: 9

Acq On : 4 Sep 2013 14:44

Operator: jk SOP 50

Sample : ICALSVSTD100

Inst : GC/MS Ins

Misc : ST130531-8

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Sep 4 15:01 2013

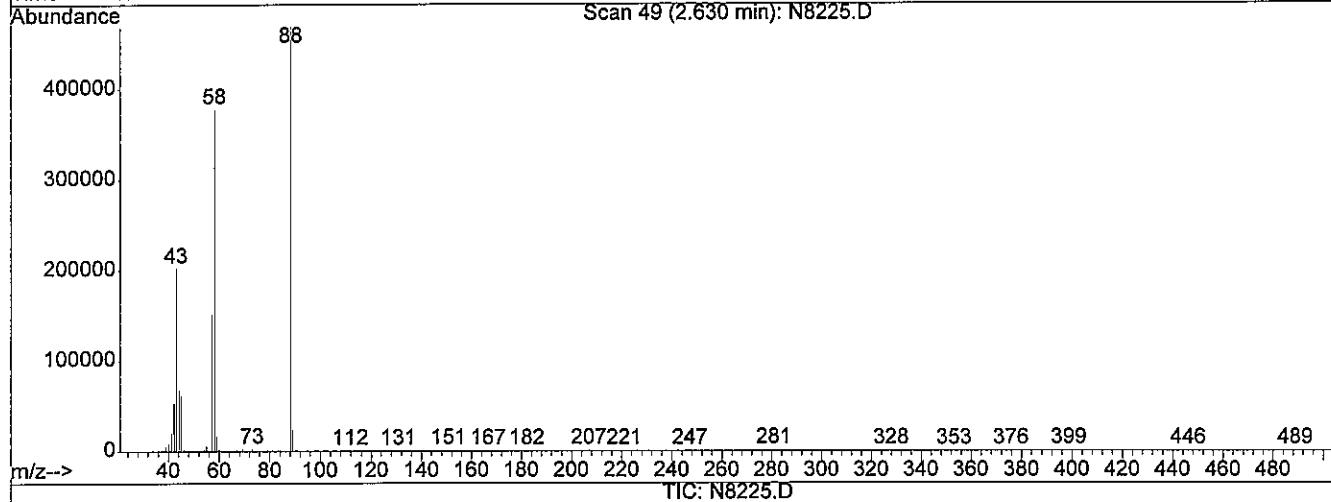
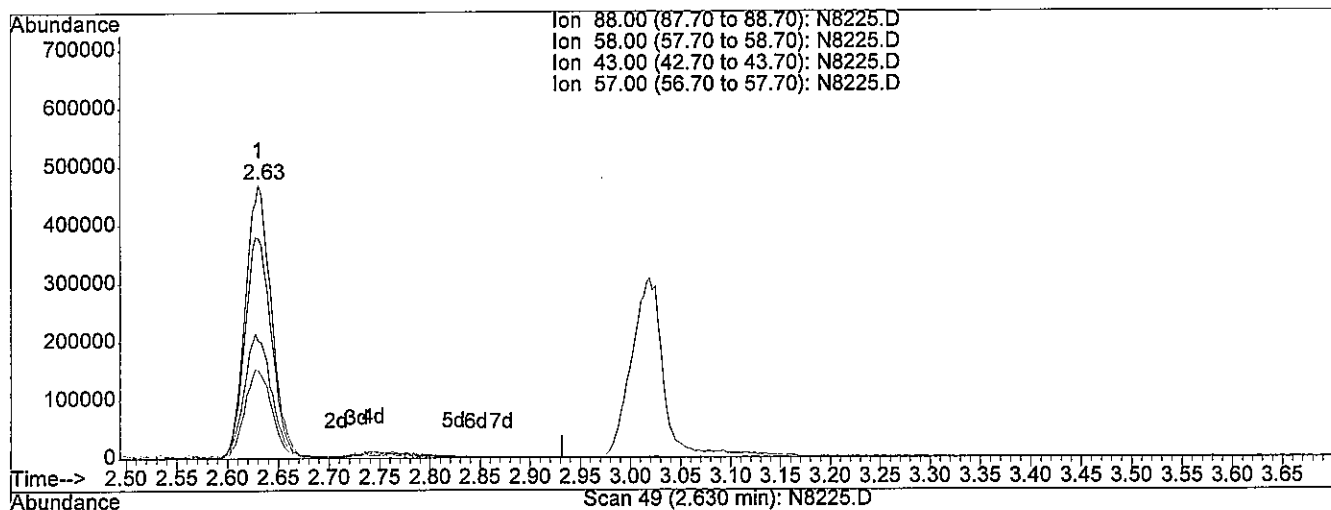
Quant Results File: temp.res

Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)

Title : GC-MS Semivolatiles SOP no. 506

Last Update : Wed Sep 04 15:01:41 2013

Response via : Multiple Level Calibration



(2) 1,4-Dioxane (t)

2.63min 107.16ng/uL

response 847189

Ion	Exp%	Act%
88.00	100	100
58.00	77.90	82.68
43.00	47.90	46.51
57.00	33.00	33.36

*3e6*

# Quantitation Report (Qedit)

Data File : D:\HPCHEM\1\DATA\090413\N8225.D

Acq On : 4 Sep 2013 14:44

Sample : ICALSVSTD100

Misc : ST130531-8

MS Integration Params: RTEINT.P

Quant Time: Sep 4 15:02 2013

Vial: 9

Operator: jk SOP 50

Inst : GC/MS Ins

Multiplr: 1.00

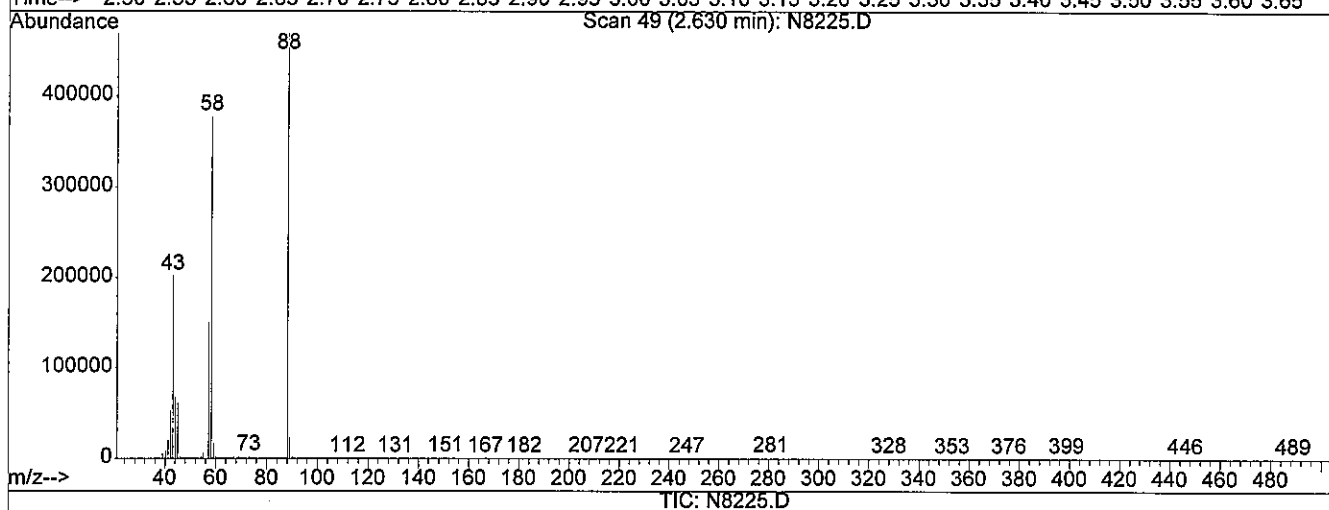
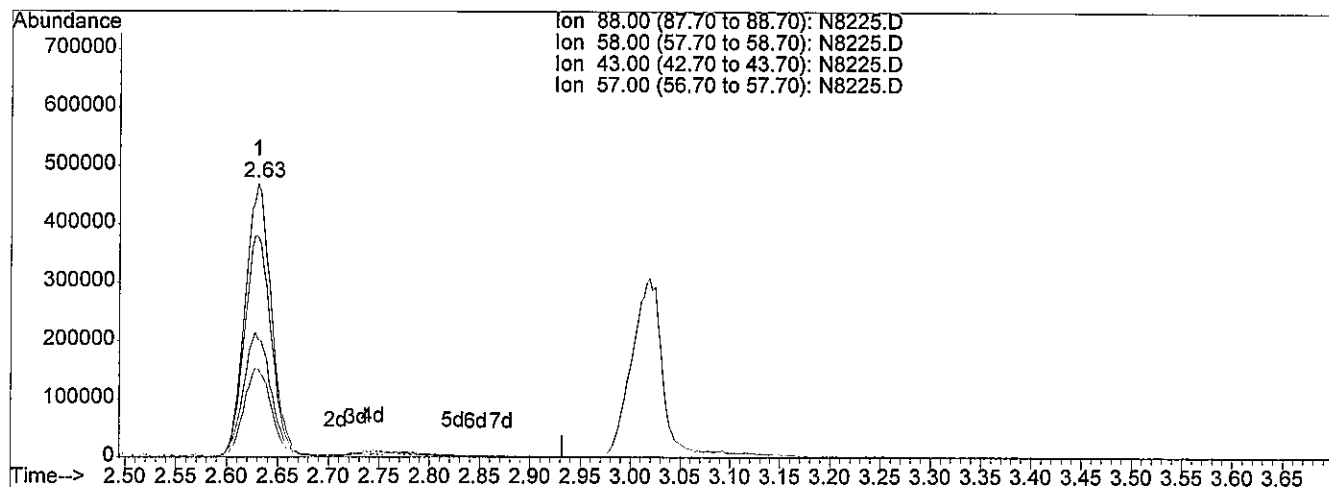
Quant Results File: temp.res

Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)

Title : GC-MS Semivolatiles SOP no. 506

Last Update : Wed Sep 04 15:01:41 2013

Response via : Multiple Level Calibration



(2) 1,4-Dioxane (t)

2.63min 114.15ng/uL m

response 902484

Ion	Exp%	Act%
88.00	100	100
58.00	77.90	77.61
43.00	47.90	43.66
57.00	33.00	31.31

## MANUAL RE-INTEGRATION

- ☐ missed peak assignment
- ☐ assigned incorrect name to peak
- ☐ over-integrated peak's area
- ☒ under-integrated peak's area
- ☐ other \_\_\_\_\_

initials jk date 9-6-0

# Quantitation Report (Qedit)

Data File : D:\HPCHEM\1\DATA\090413\N8225.D

Acq On : 4 Sep 2013 14:44

Sample : ICALSVSTD100

Misc : ST130531-8

MS Integration Params: RTEINT.P

Quant Time: Sep 4 15:02 2013

Vial: 9

Operator: jk SOP 50

Inst : GC/MS Ins

Multiplr: 1.00

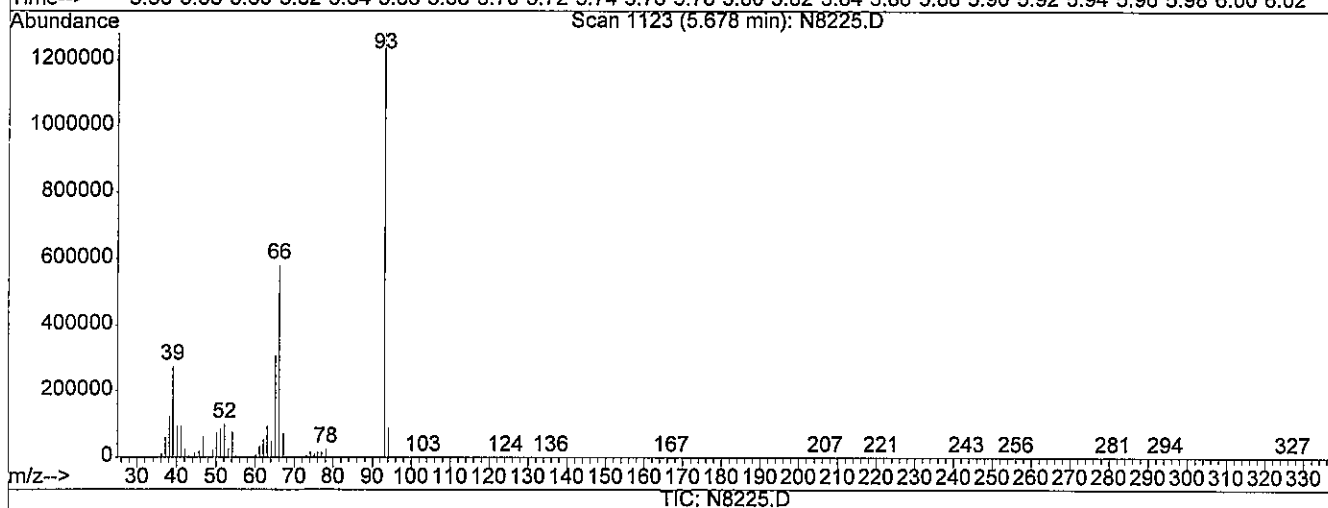
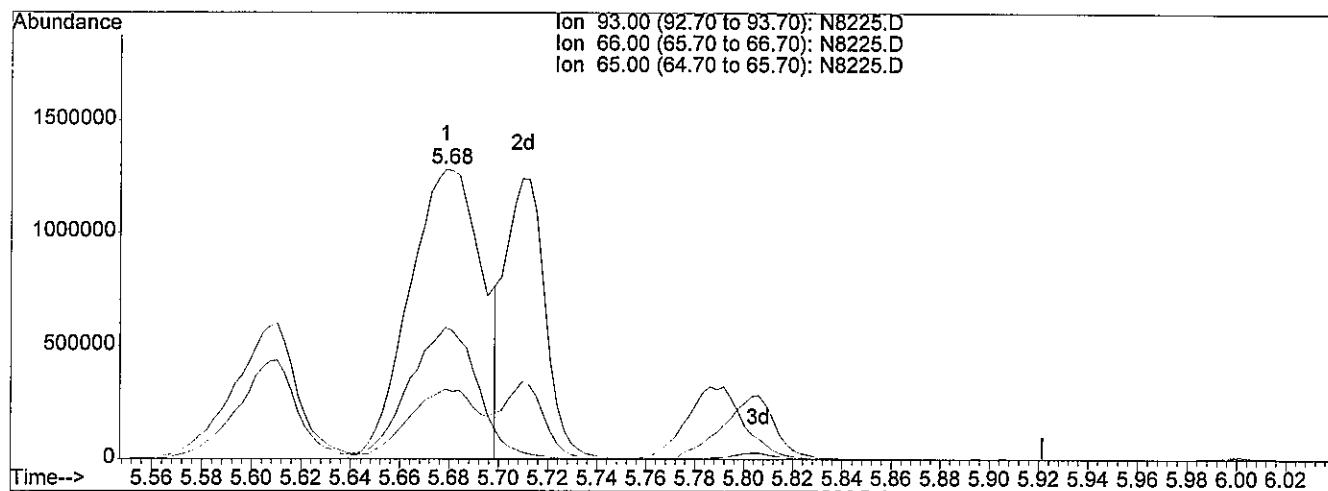
Quant Results File: temp.res

Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)

Title : GC-MS Semivolatiles SOP no. 506

Last Update : Wed Sep 04 15:01:41 2013

Response via : Multiple Level Calibration



(7) Aniline (T)

5.68min 103.05ng/uL

response 2604024

Ion	Exp%	Act%
93.00	100	100
66.00	45.60	43.37
65.00	23.80	24.42
0.00	0.00	0.00

*3.6m*

# Quantitation Report (Qedit)

Data File : D:\HPCHEM\1\DATA\090413\N8225.D

Acq On : 4 Sep 2013 14:44

Sample : ICALSVSTD100

Misc : ST130531-8

MS Integration Params: RTEINT.P

Quant Time: Sep 4 15:02 2013

Vial: 9

Operator: jk SOP 50

Inst : GC/MS Ins

Multiplr: 1.00

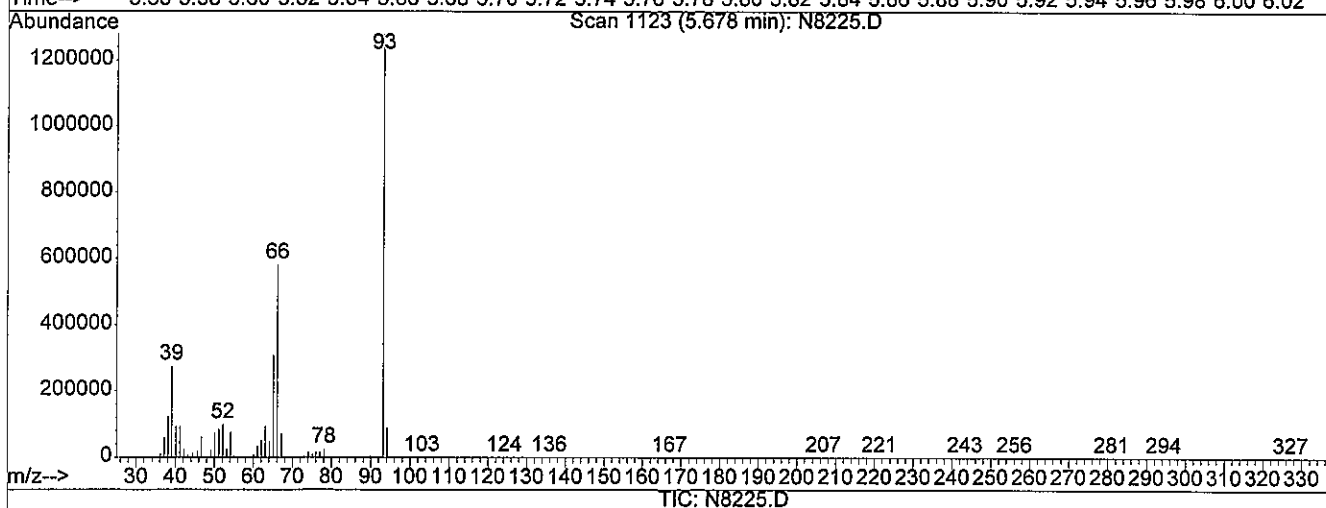
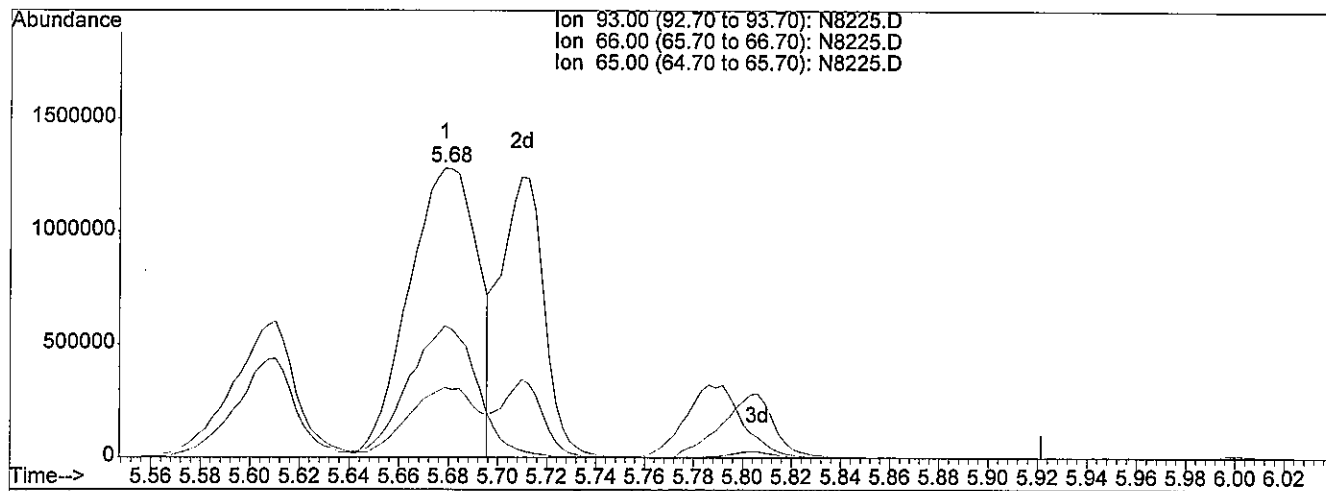
Quant Results File: temp.res

Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)

Title : GC-MS Semivolatiles SOP no. 506

Last Update : Wed Sep 04 15:01:41 2013

Response via : Multiple Level Calibration



(7) Aniline (T)

5.68min 97.90ng/uL m

response 2473763

Ion	Exp%	Act%
93.00	100	100
66.00	45.60	45.66
65.00	23.80	25.71
0.00	0.00	0.00

## MANUAL RE-INTEGRATION

- ☐ missed peak assignment
- ☐ assigned incorrect name to peak
- ☒ over-integrated peak's area
- ☐ under-integrated peak's area
- ☐ other \_\_\_\_\_

initials jk date 9-4-13

Data File : D:\HPCHEM\1\DATA\090413\N8225.D

Acq On : 4 Sep 2013 14:44

Sample : ICALSVSTD100

Misc : ST130531-8

MS Integration Params: RTEINT.P

Quant Time: Sep 4 15:02 2013

Vial: 9

Operator: jk SOP 50

Inst : GC/MS Ins

Multiplr: 1.00

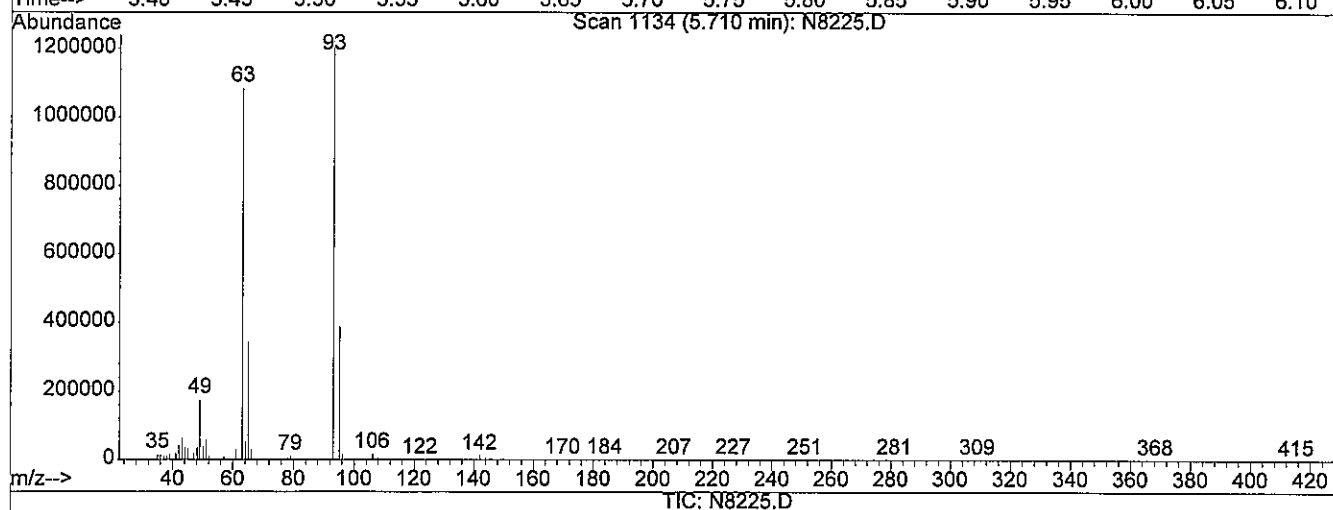
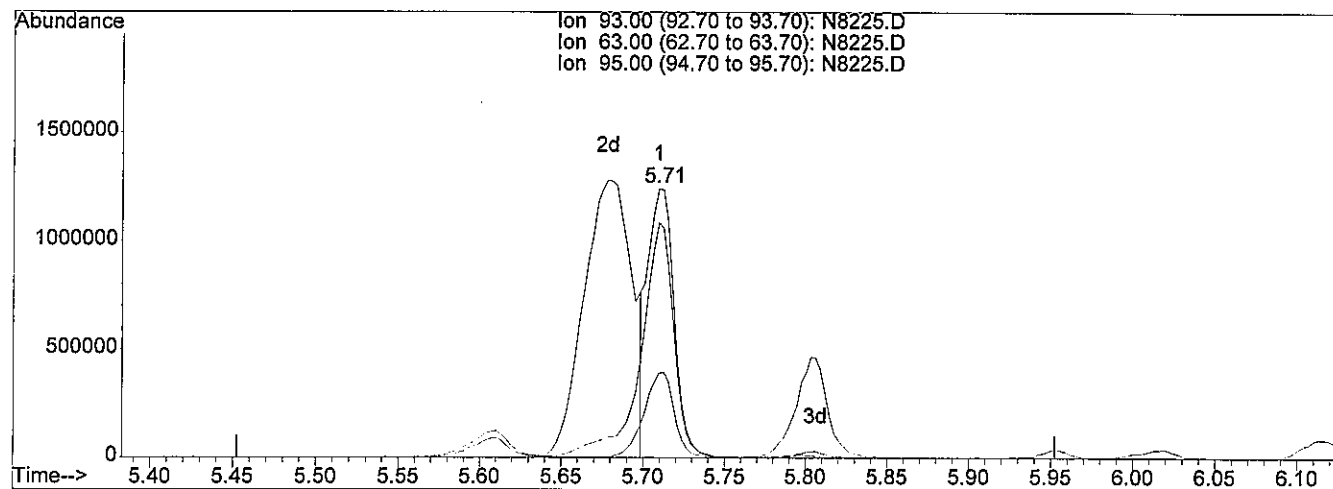
Quant Results File: temp.res

Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)

Title : GC-MS Semivolatiles SOP no. 506

Last Update : Wed Sep 04 15:01:41 2013

Response via : Multiple Level Calibration



(11) Bis(2-chloroethyl)ether (T)

5.71min 87.45ng/uL

response 1401597

Ion	Exp%	Act%
93.00	100	100
63.00	84.00	109.20#
95.00	31.80	36.16
0.00	0.00	0.00

3c for

Data File : D:\HPCHEM\1\DATA\090413\N8225.D

Vial: 9

Acq On : 4 Sep 2013 14:44

Operator: jk SOP 50

Sample : ICALSVSTD100

Inst : GC/MS Ins

Misc : ST130531-8

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Sep 4 15:02 2013

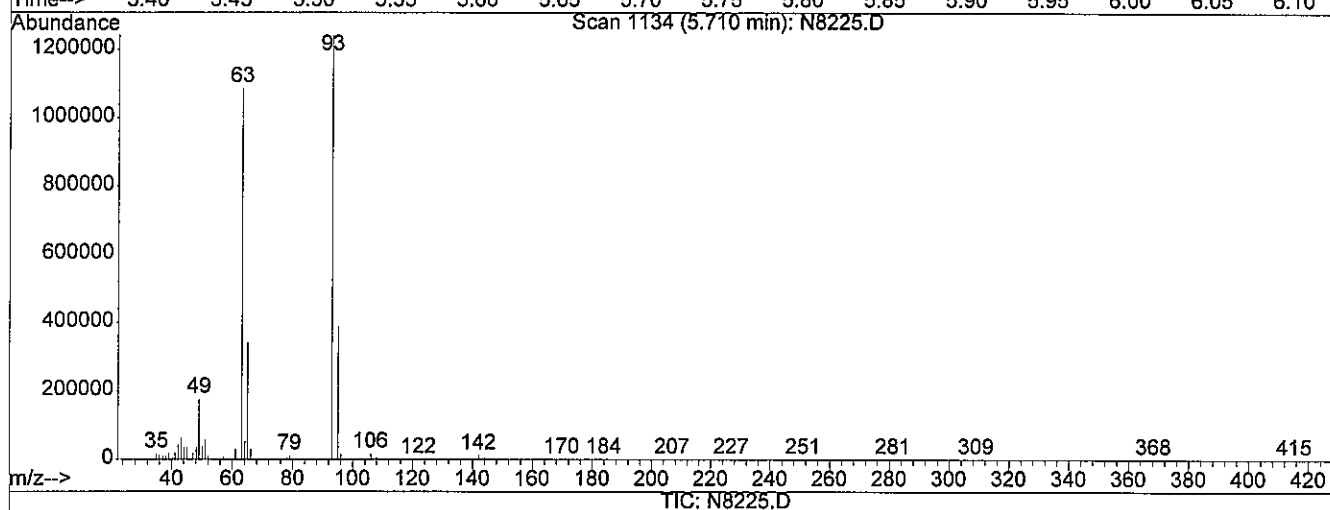
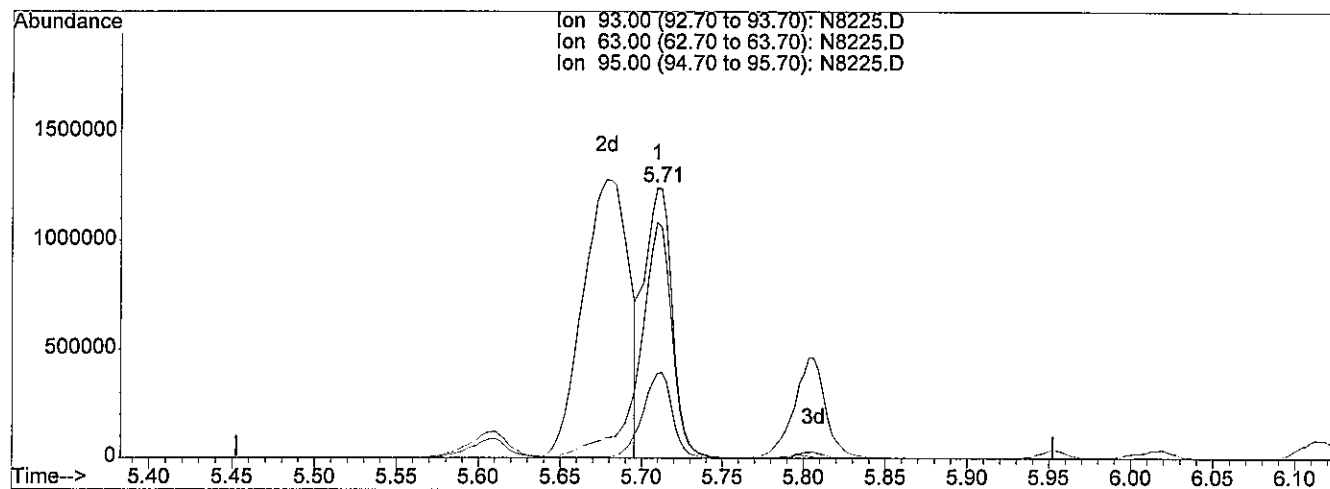
Quant Results File: temp.res

Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)

Title : GC-MS Semivolatiles SOP no. 506

Last Update : Wed Sep 04 15:01:41 2013

Response via : Multiple Level Calibration



(11) Bis(2-chloroethyl)ether (T)

5.71min 95.54ng/uL m

response 1531135

Ion	Exp%	Act%
93.00	100	100
63.00	84.00	99.96
95.00	31.80	33.10
0.00	0.00	0.00

**MANUAL RE-INTEGRATION**

- ☐ missed peak assignment
- ☐ assigned incorrect name to peak
- ☐ over-integrated peak's area
- ☒ under-integrated peak's area
- ☐ other \_\_\_\_\_

initials ja date 9-6-13

Data File : D:\HPCHEM\1\DATA\090413\N8225.D

Acq On : 4 Sep 2013 14:44

Sample : ICALSVSTD100

Misc : ST130531-8

MS Integration Params: RTEINT.P

Quant Time: Sep 4 15:02 2013

Vial: 9

Operator: jk SOP 50

Inst : GC/MS Ins

Multiplr: 1.00

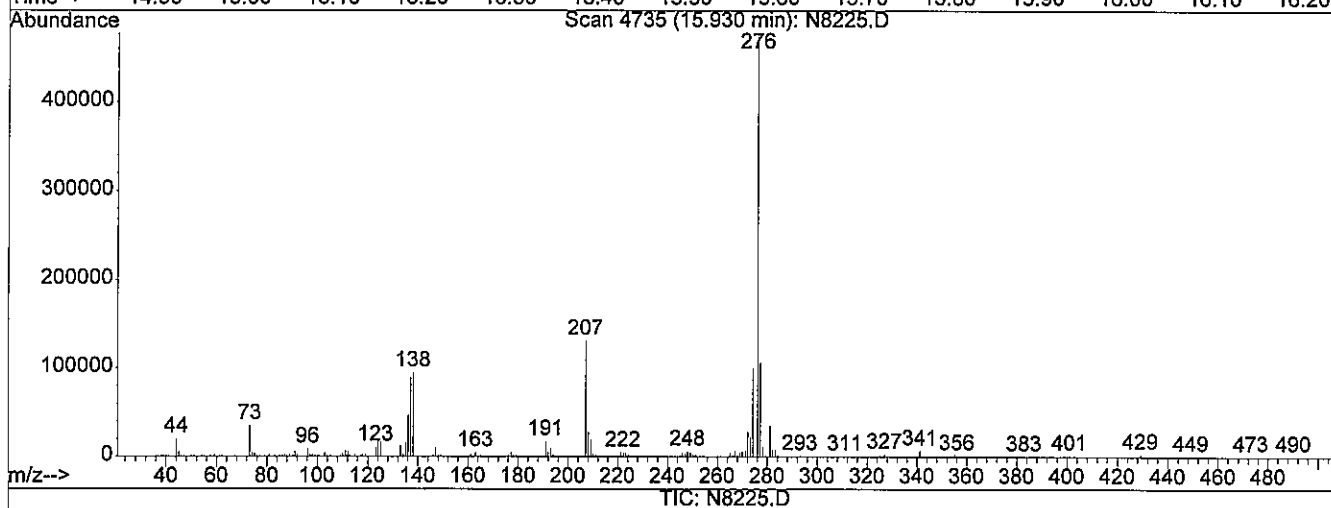
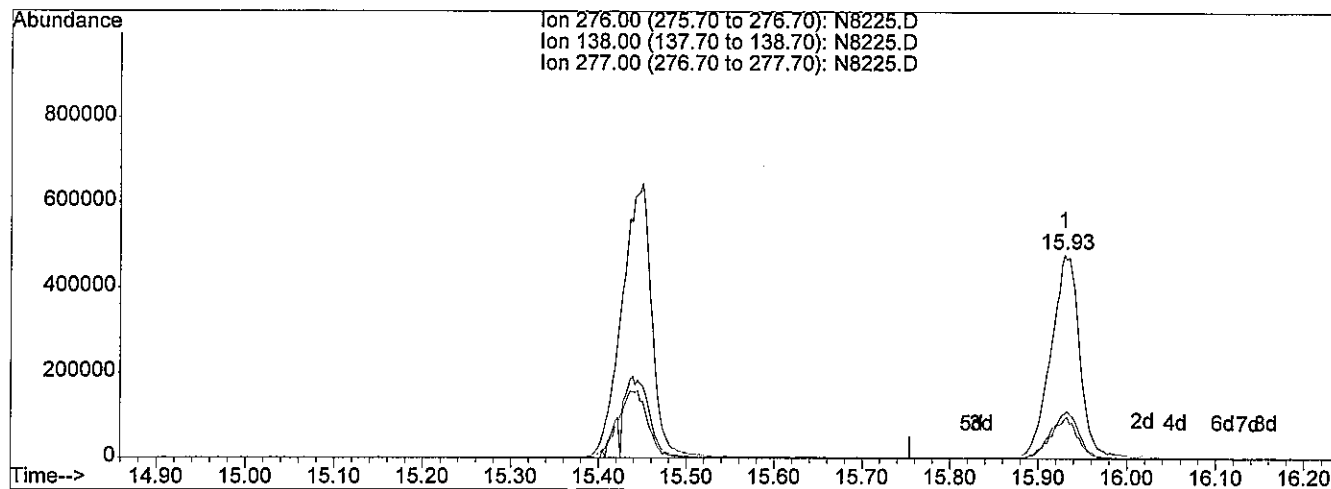
Quant Results File: temp.res

Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)

Title : GC-MS Semivolatiles SOP no. 506

Last Update : Wed Sep 04 15:01:41 2013

Response via : Multiple Level Calibration



(97) Benzo[g,h,i]perylene (T)

15.93min 80.43ng/uL

response 1092916

Ion	Exp%	Act%
276.00	100	100
138.00	21.90	19.55
277.00	24.10	23.53
0.00	0.00	0.00

3.64



Data File : D:\HPCHEM\1\DATA\090413\N8225.D

Acq On : 4 Sep 2013 14:44

Sample : ICALSVSTD100

Misc : ST130531-8

MS Integration Params: RTEINT.P

Quant Time: Sep 4 15:04 2013

Vial: 9

Operator: jk SOP 50

Inst : GC/MS Ins

Multiplr: 1.00

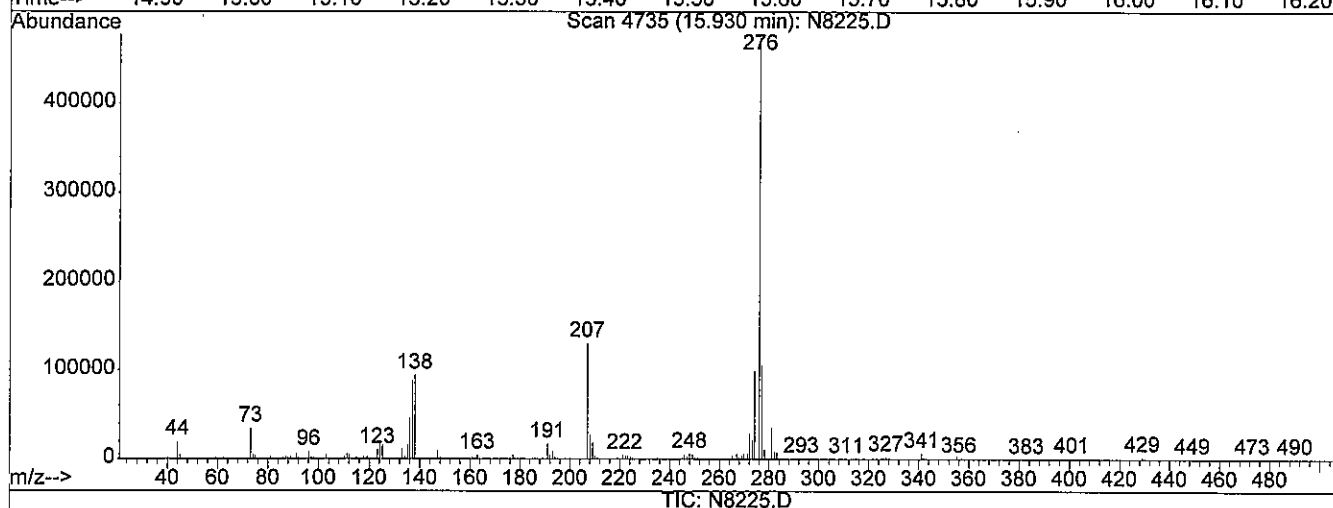
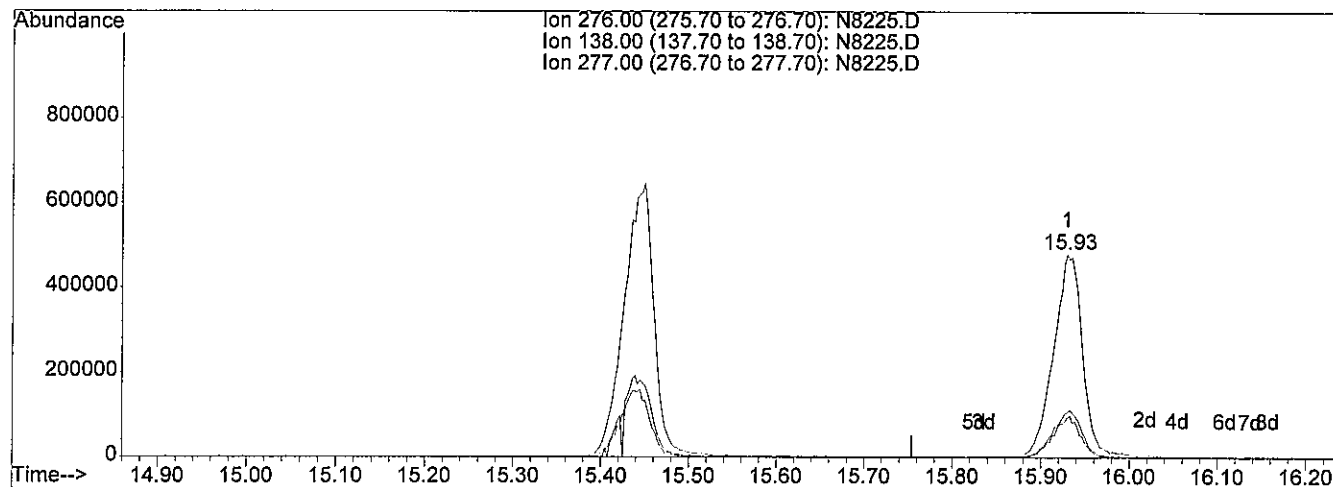
Quant Results File: temp.res

Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)

Title : GC-MS Semivolatiles SOP no. 506

Last Update : Wed Sep 04 15:01:41 2013

Response via : Multiple Level Calibration



(97) Benzo[g,h,i]perylene (T)

15.93min 82.68ng/uL m

response 1123486

Ion	Exp%	Act%
276.00	100	100
138.00	21.90	19.02
277.00	24.10	22.89
0.00	0.00	0.00

### MANUAL RE-INTEGRATION

- ☐ missed peak assignment
- ☐ assigned incorrect name to peak
- ☐ over-integrated peak's area
- ☒ under-integrated peak's area
- ☐ other \_\_\_\_\_

initials jk date 9-4-13



Data File : D:\HPCHEM\1\DATA\090413\N8226.D

Vial: 10

Acq On : 4 Sep 2013 15:09

Operator: jk SOP 506 Rev

Sample : ICALSVSTD120

Inst : GC/MS Ins

Misc : ST130531-9

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Sep 4 15:30 2013

Quant Results File: 090413S1.RES

Quant Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)

Title : GC-MS Semivolatiles SOP no. 506

Last Update : Wed Sep 04 15:28:17 2013

Response via : Initial Calibration

DataAcq Meth : 090413S1

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	6.00	152	636122	40.00	ng/uL	0.00
24) Naphthalene-d8	7.20	136	2042766	40.00	ng/uL	0.00
41) Acenaphthene-d10	8.75	164	1135062	40.00	ng/uL	0.00
69) Phenanthrene-d10	10.03	188	2448810	40.00	ng/uL	0.00
80) Chrysene-d12	12.32	240	2012799	40.00	ng/uL	0.00
91) Perylene-d12	13.87	264	759336	40.00	ng/uL	-0.02

## System Monitoring Compounds

5) 2-Fluorophenol	4.62	112	2517515	116.51	ng/uL	0.00
Spiked Amount 75.000	Range 46	- 105	Recovery	=	155.35%#	
6) 2-Chlorophenol-d4	5.79	132	2102009	114.41	ng/uL	0.01
Spiked Amount 75.000	Range 33	- 110	Recovery	=	152.55%#	
8) Phenol-d5	5.60	99	3342437	117.60	ng/uL	0.02
Spiked Amount 75.000	Range 50	- 109	Recovery	=	156.80%#	
15) 1,2-Dichlorobenzene-d4	6.16	152	1501511	103.06	ng/uL	0.00
Spiked Amount 50.000	Range 16	- 110	Recovery	=	206.12%#	
25) Nitrobenzene-d5	6.53	82	2554845	110.12	ng/uL	0.00
Spiked Amount 50.000	Range 53	- 111	Recovery	=	220.24%#	
46) 2-Fluorobiphenyl	8.13	172	4187685	109.56	ng/uL	0.00
Spiked Amount 50.000	Range 55	- 108	Recovery	=	219.12%#	
68) 2,4,6-Tribromophenol	9.43	330	718958	123.35	ng/uL	0.00
Spiked Amount 75.000	Range 42	- 117	Recovery	=	164.47%#	
83) p-Terphenyl-d14	11.34	244	5689297	121.06	ng/uL	0.00
Spiked Amount 50.000	Range 34	- 139	Recovery	=	242.12%#	

## Target Compounds

					Qvalue
2) 1,4-Dioxane	2.61	88	1289430m	123.42	ng/uL
3) n-Nitrosodimethylamine	3.01	74	1879835m	120.82	ng/uL
4) Pyridine	3.09	79	3073035m	117.00	ng/uL
7) Aniline	5.69	93	4227284m	126.22	ng/uL
9) Phenol	5.62	94	3259700	119.24	ng/uL
10) Tetramethylurea	5.78	72	4250205m	128.03	ng/uL
11) Bis(2-chloroethyl) ether	5.72	93	2329733m	113.23	ng/uL
12) 2-Chlorophenol	5.81	128	2248401	114.32	ng/uL
13) 1,3-Dichlorobenzene	5.95	146	2684465	114.26	ng/uL
14) 1,4-Dichlorobenzene	6.02	146	2520255	115.13	ng/uL
16) 1,2-Dichlorobenzene	6.18	146	2119087	104.23	ng/uL
17) Benzyl Alcohol	6.12	108	1632216	123.06	ng/uL
18) 2-Methylphenol	6.21	107	1839261	113.29	ng/uL#
19) Bis(2-chloroisopropyl) ether	6.23	45	3966887	110.63	ng/uL#
20) n-Nitroso-di-n-propylamine	6.38	70	1572364	101.27	ng/uL
21) 3+4-Methylphenol	6.36	108	2117795	106.19	ng/uL

(#)=qualifier out of range (m)=manual integration

N8226.D 090413S1.M Wed Sep 04 15:30:58 2013

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9-6-13

Page 1

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Data File : D:\HPCHEM\1\DATA\090413\N8226.D

Vial: 10

Acq On : 4 Sep 2013 15:09

Operator: jk SOP 506 Rev

Sample : ICALSVSTD120

Inst : GC/MS Ins

Misc : ST130531-9

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Sep 4 15:30 2013

Quant Results File: 090413S1.RES

Quant Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)

Title : GC-MS Semivolatiles SOP no. 506

Last Update : Wed Sep 04 15:28:17 2013

Response via : Initial Calibration

DataAcq Meth : 090413S1

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
22) N-Methylaniline	6.37	106	3051421	105.60	ng/uL	95
23) Hexachloroethane	6.50	117	964784	104.69	ng/uL	99
26) N,N-Dimethylaniline	6.55	120	2944663	111.23	ng/uL	98
27) Nitrobenzene	6.56	77	2984995	109.14	ng/uL	97
28) Isophorone	6.78	82	3967707	111.27	ng/uL	100
29) N-Ethylaniline	6.78	106	3557634	109.81	ng/uL	99
30) 2-Nitrophenol	6.85	139	1044997	123.24	ng/uL	93
31) 2,4-Dimethylphenol	6.85	107	1899716	108.01	ng/uL	96
32) Bis(2-chloroethoxy)methane	6.92	93	2510085	118.76	ng/uL	99
33) Benzoic acid	6.96	105	1384844m	189.71	ng/uL	
34) 2,4-Dichlorophenol	7.06	162	1737775	114.08	ng/uL	100
35) 1,2,4-Trichlorobenzene	7.14	180	2096802	111.88	ng/uL	97
36) Naphthalene	7.22	128	6055676	119.83	ng/uL#	91
37) 4-Chloroaniline	7.24	127	1907617	104.45	ng/uL	96
38) Hexachlorobutadiene	7.31	225	1298119	108.94	ng/uL	98
39) 4-Chloro-3-methylphenol	7.64	107	1834780	121.68	ng/uL	100
40) 2-Methylnaphthalene	7.83	142	4275618	118.12	ng/uL	97
42) 1-Methylnaphthalene	7.92	142	3823479	115.77	ng/uL	96
43) Hexachlorocyclopentadiene	7.96	237	1073298	106.21	ng/uL	100
44) 2,4,6-Trichlorophenol	8.06	196	1428082	119.71	ng/uL	98
45) 2,4,5-Trichlorophenol	8.10	196	1286445	115.02	ng/uL	98
47) 2-Chloronaphthalene	8.26	162	3858789	116.07	ng/uL	99
48) 2-Nitroaniline	8.33	65	1403410	125.66	ng/uL	99
49) 1,4-Dinitrobenzene	8.43	168	688226	137.97	ng/uL	96
50) Dimethylphthalate	8.47	163	4223565	123.57	ng/uL	100
51) 1,3-Dinitrobenzene	8.51	168	744283	130.95	ng/uL	93
52) 2,6-Dinitrotoluene	8.53	165	952968	121.20	ng/uL	96
53) 1,2-Dinitrobenzene	8.60	168	484207	130.28	ng/uL	99
54) Acenaphthylene	8.64	152	5748597	117.45	ng/uL	99
55) 3-Nitroaniline	8.69	138	993084	134.95	ng/uL	99
56) Acenaphthene	8.78	154	3509006	119.33	ng/uL	96
57) 2,4-Dinitrophenol	8.77	184	666308	148.55	ng/uL#	27
58) 4-Nitrophenol	8.79	109	557745	118.90	ng/uL	87
59) Dibenzofuran	8.92	168	4940315	113.93	ng/uL	96
60) 2,4-Dinitrotoluene	8.88	165	1391824	132.14	ng/uL	98
61) 2,3,5,6-Tetrachlorophenol	8.98	232	1356666	126.37	ng/uL	98
62) 2,3,4,6-Tetrachlorophenol	9.02	232	1281409	124.00	ng/uL	96
63) Diethylphthalate	9.05	149	3790226	121.10	ng/uL	99
64) 4-Chlorophenyl phenyl ethe	9.19	204	2288949	116.74	ng/uL	97
65) 4-Nitroaniline	9.23	138	768700	116.18	ng/uL	94
66) Fluorene	9.22	166	3953866	117.51	ng/uL	98

(#)=qualifier out of range (m)=manual integration

N8226.D 090413S1.M Wed Sep 04 15:30:58 2013

Page 2

Data File : D:\HPCHEM\1\DATA\090413\N8226.D

Vial: 10

Acq On : 4 Sep 2013 15:09

Operator: jk SOP 506 Rev

Sample : ICALSVSTD120

Inst : GC/MS Ins

Misc : ST130531-9

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Sep 4 15:30 2013

Quant Results File: 090413S1.RES

Quant Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)

Title : GC-MS Semivolatiles SOP no. 506

Last Update : Wed Sep 04 15:28:17 2013

Response via : Initial Calibration

DataAcq Meth : 090413S1

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
67) Azobenzene	9.32	77	4352962	123.57	ng/uL	96
70) 4,6-Dinitro-2-methylphenol	9.24	198	841893	125.18	ng/uL	94
71) n-Nitrosodiphenylamine	9.29	169	3620071	111.75	ng/uL	97
72) 4-Bromophenyl phenyl ether	9.61	248	1491268	107.05	ng/uL	96
73) Hexachlorobenzene	9.70	284	1558246	105.34	ng/uL	98
74) Pentachlorophenol	9.85	266	1194894	117.25	ng/uL	100
75) Phenanthrene	10.06	178	6291445	111.43	ng/uL	99
76) Anthracene	10.10	178	6450250	109.62	ng/uL	99
77) Carbazole	10.21	167	5688080	104.14	ng/uL	99
78) Di-n-butylphthalate	10.42	149	6262440	94.49	ng/uL	100
79) Fluoranthene	11.07	202	7519393	96.29	ng/uL	98
81) Benzidine	11.14	184	3583117	117.64	ng/uL	99
82) Pyrene	11.28	202	7634700	119.06	ng/uL	97
84) Butylbenzylphthalate	11.71	149	2371427	114.58	ng/uL	99
85) Bis(2-ethylhexyl) adipate	11.71	129	2031398	116.21	ng/uL	97
86) Bis(2-ethylhexyl)phthalate	12.15	149	3256047	120.92	ng/uL	99
87) 3,3'-Dichlorobenzidine	12.23	252	2027487	114.14	ng/uL	98
88) Benzo[a]anthracene	12.30	228	6501173	119.50	ng/uL	100
89) Chrysene	12.34	228	5781438	116.41	ng/uL	98
90) Di-n-octylphthalate	12.74	149	4121561	112.66	ng/uL	98
92) Benzo[b]fluoranthene	13.40	252	2997618	122.49	ng/uL	99
93) Benzo[k]fluoranthene	13.43	252	2801832	117.83	ng/uL	99
94) Benzo[a]pyrene	13.81	252	2460007	121.92	ng/uL	98
95) Indeno(1,2,3-c,d)pyrene	15.44	276	1419049	89.28	ng/uL	98
96) Dibenzo[a,h]anthracene	15.43	278	1283543	92.00	ng/uL	98
97) Benzo[g,h,i]perylene	15.93	276	985491	79.28	ng/uL	98

-----  
 (#) = qualifier out of range (m) = manual integration

N8226.D 090413S1.M Wed Sep 04 15:30:58 2013

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# Quantitation Report (Qedit)

Data File : D:\HPCHEM\1\DATA\090413\N8226.D

Vial: 10

Acq On : 4 Sep 2013 15:09

Operator: jk SOP 50

Sample : ICALSVSTD120

Inst : GC/MS Ins

Misc : ST130531-9

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Sep 4 15:28 2013

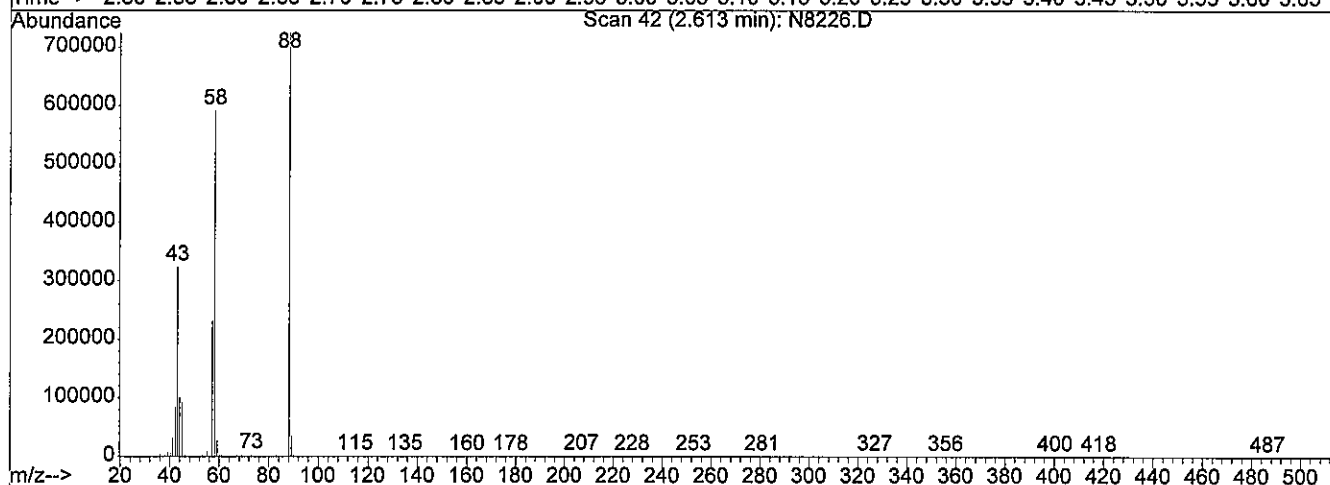
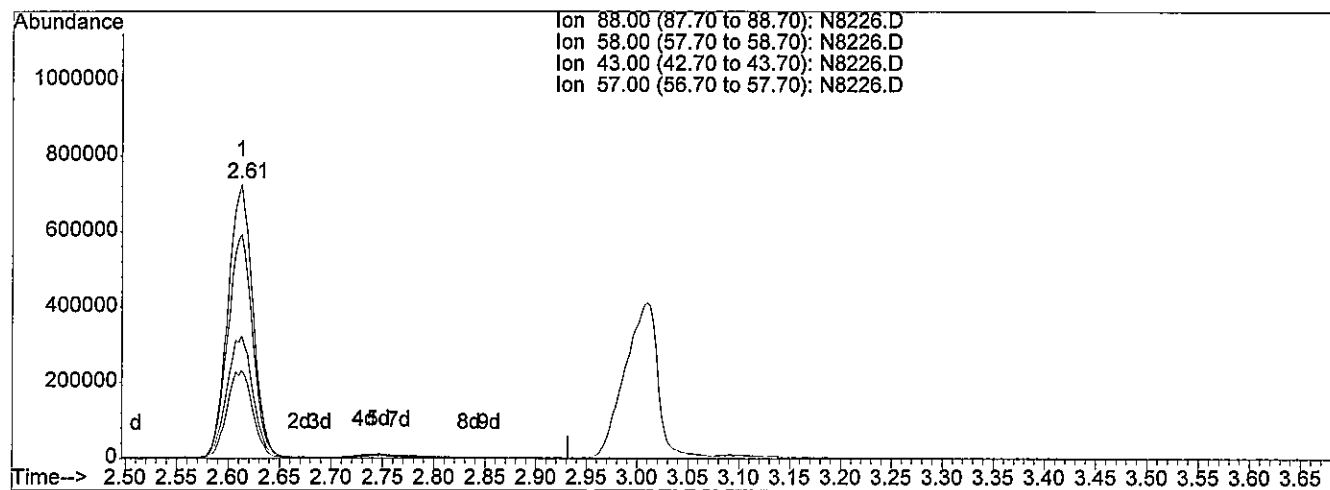
Quant Results File: temp.res

Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)

Title : GC-MS Semivolatiles SOP no. 506

Last Update : Wed Sep 04 15:28:17 2013

Response via : Multiple Level Calibration



(2) 1,4-Dioxane (t)

2.61min 116.97ng/uL

response 1221972

Ion	Exp%	Act%
88.00	100	100
58.00	77.90	82.06
43.00	47.90	46.06
57.00	33.00	33.06

*Se fore*

# Quantitation Report (Qedit)

Data File : D:\HPCHEM\1\DATA\090413\N8226.D

Vial: 10

Acq On : 4 Sep 2013 15:09

Operator: jk SOP 50

Sample : ICALSVSTD120

Inst : GC/MS Ins

Misc : ST130531-9

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Sep 4 15:28 2013

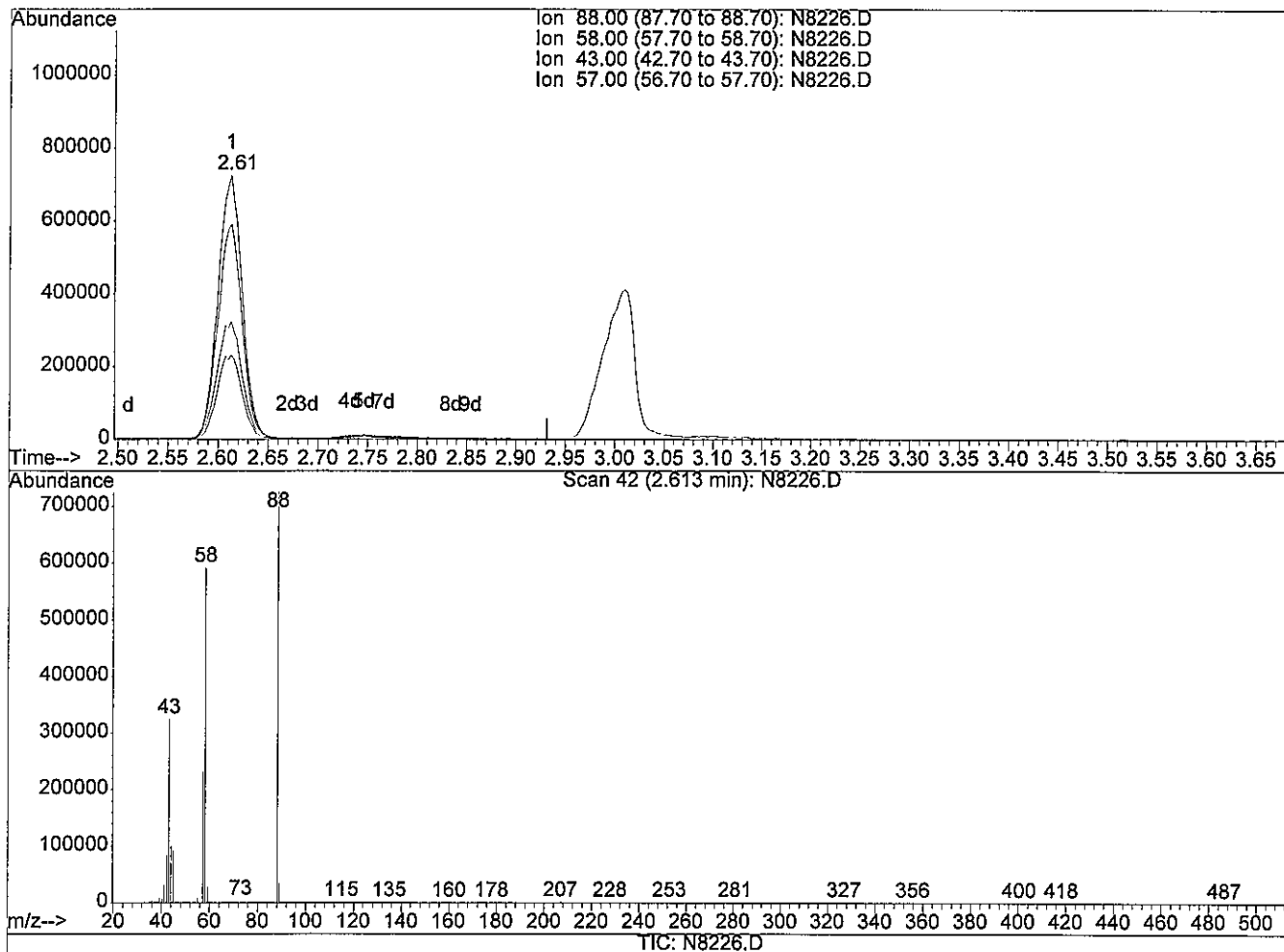
Quant Results File: temp.res

Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)

Title : GC-MS Semivolatiles SOP no. 506

Last Update : Wed Sep 04 15:28:17 2013

Response via : Multiple Level Calibration



(2) 1,4-Dioxane (t)

2.61min 123.42ng/uL m

response 1289430

Ion	Exp%	Act%
88.00	100	100
58.00	77.90	77.76
43.00	47.90	43.65
57.00	33.00	31.33

## MANUAL RE-INTEGRATION

- ☐ missed peak assignment
- ☐ assigned incorrect name to peak
- ☐ over-integrated peak's area
- ☒ under-integrated peak's area
- ☐ other \_\_\_\_\_

initials JK date 9-6-13

# Quantitation Report (Qedit)

Data File : D:\HPCHEM\1\DATA\090413\N8226.D

Vial: 10

Acq On : 4 Sep 2013 15:09

Operator: jk SOP 50

Sample : ICALSVSTD120

Inst : GC/MS Ins

Misc : ST130531-9

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Sep 4 15:28 2013

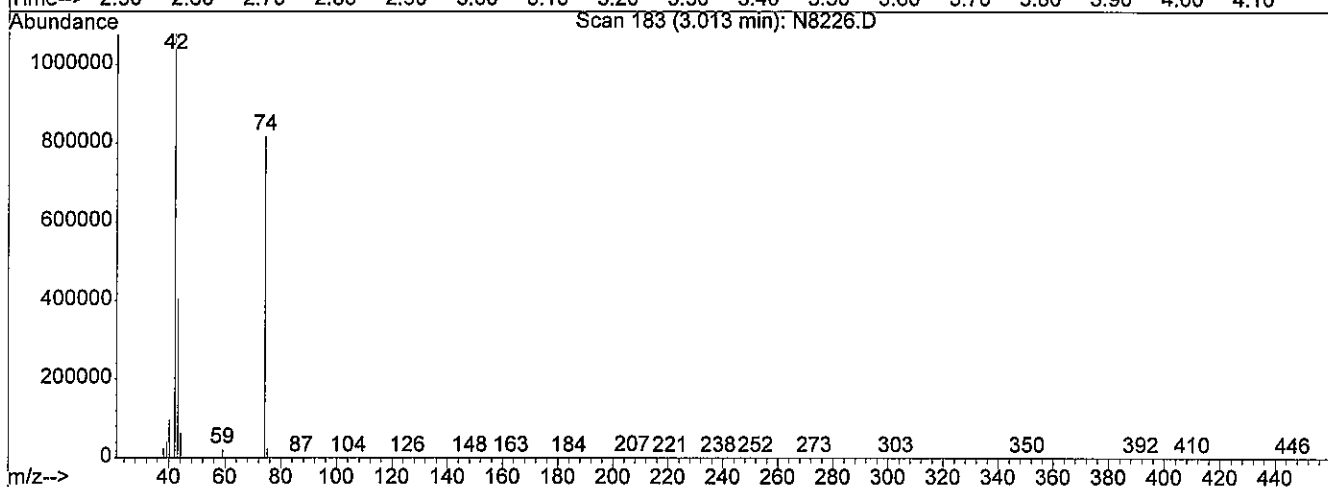
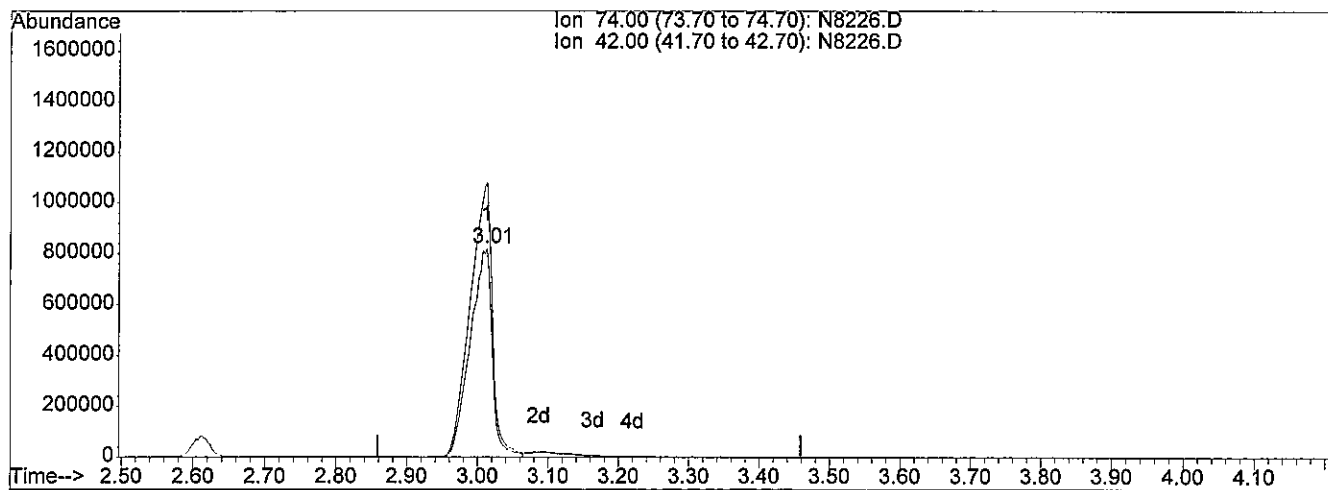
Quant Results File: temp.res

Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)

Title : GC-MS Semivolatiles SOP no. 506

Last Update : Wed Sep 04 15:28:17 2013

Response via : Multiple Level Calibration



(3) n-Nitrosodimethylamine (T)

3.01min 114.60ng/uL

response 1783037

Ion	Exp%	Act%
74.00	100	100
42.00	129.50	132.74
0.00	0.00	0.00
0.00	0.00	0.00

*3efu*



# Quantitation Report (Qedit)

Data File : D:\HPCHEM\1\DATA\090413\N8226.D

Vial: 10

Acq On : 4 Sep 2013 15:09

Operator: jk SOP 50

Sample : ICALSVSTD120

Inst : GC/MS Ins

Misc : ST130531-9

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Sep 4 15:28 2013

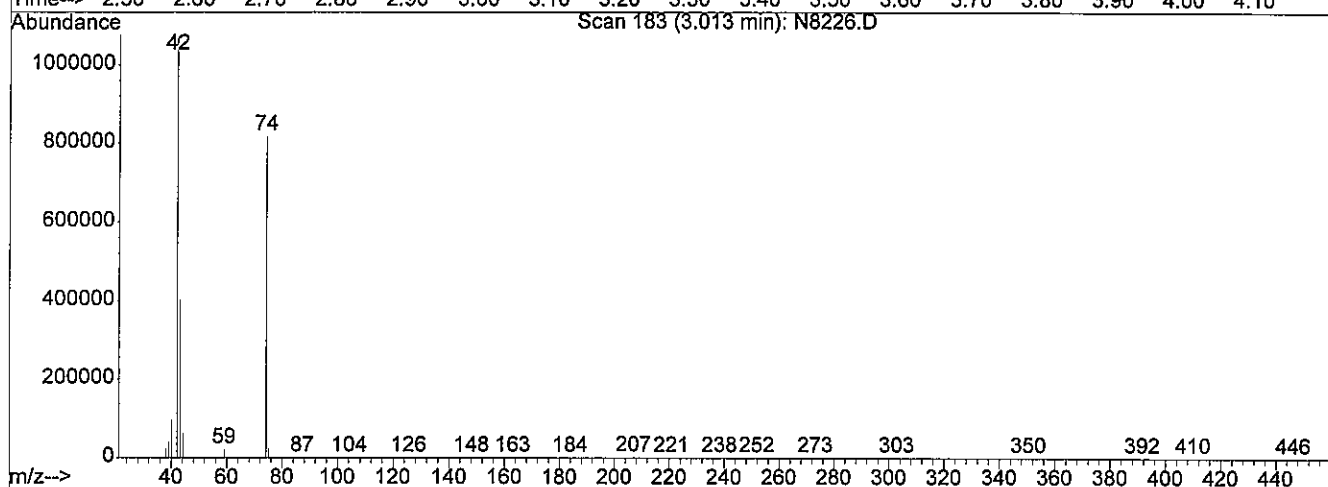
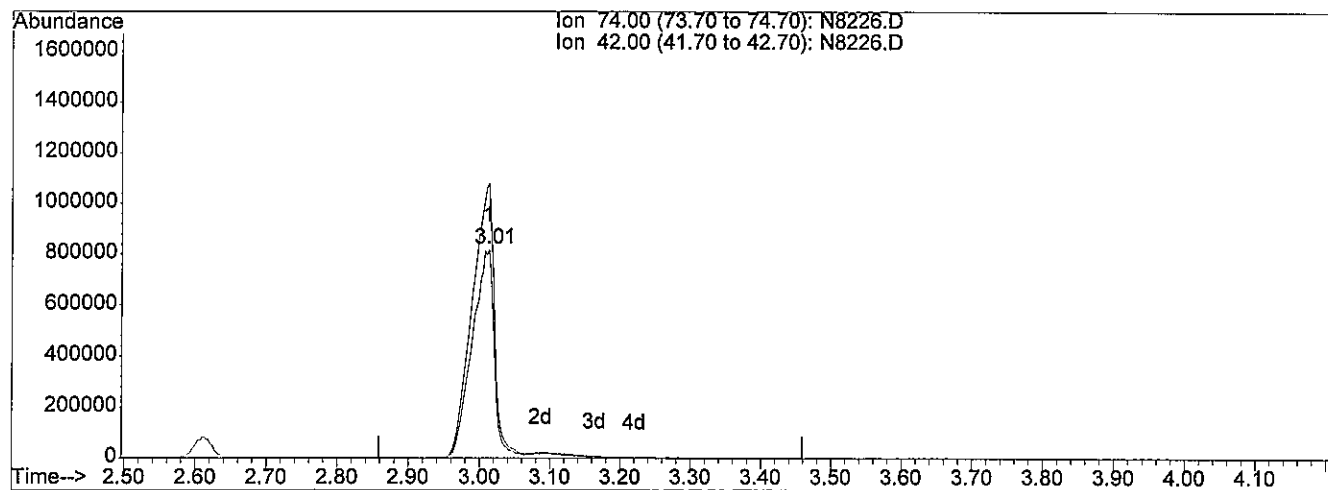
Quant Results File: temp.res

Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)

Title : GC-MS Semivolatiles SOP no. 506

Last Update : Wed Sep 04 15:28:17 2013

Response via : Multiple Level Calibration



(3) n-Nitrosodimethylamine (T)

3.01min 120.82ng/uL m

response 1879835

Ion	Exp%	Act%
74.00	100	100
42.00	129.50	125.91
0.00	0.00	0.00
0.00	0.00	0.00

## MANUAL RE-INTEGRATION

- ☐ missed peak assignment
- ☐ assigned incorrect name to peak
- ☐ over-integrated peak's area
- ☒ under-integrated peak's area
- ☐ other \_\_\_\_\_

initials JK date 9-6-13

# Quantitation Report (Qedit)

Data File : D:\HPCHEM\1\DATA\090413\N8226.D

Vial: 10

Acq On : 4 Sep 2013 15:09

Operator: jk SOP 50

Sample : ICALSVSTD120

Inst : GC/MS Ins

Misc : ST130531-9

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Sep 4 15:28 2013

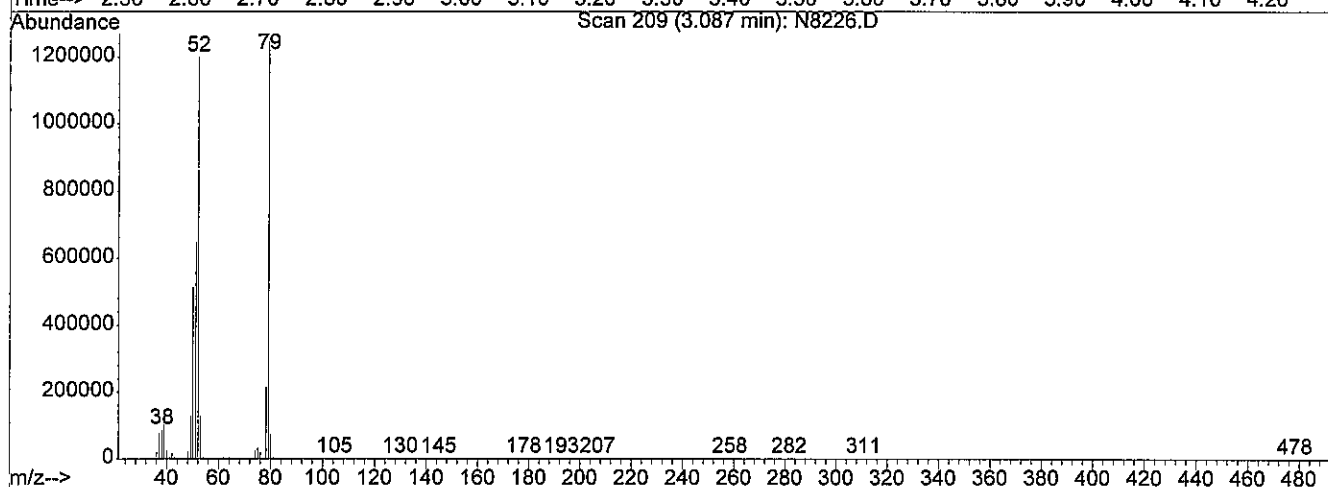
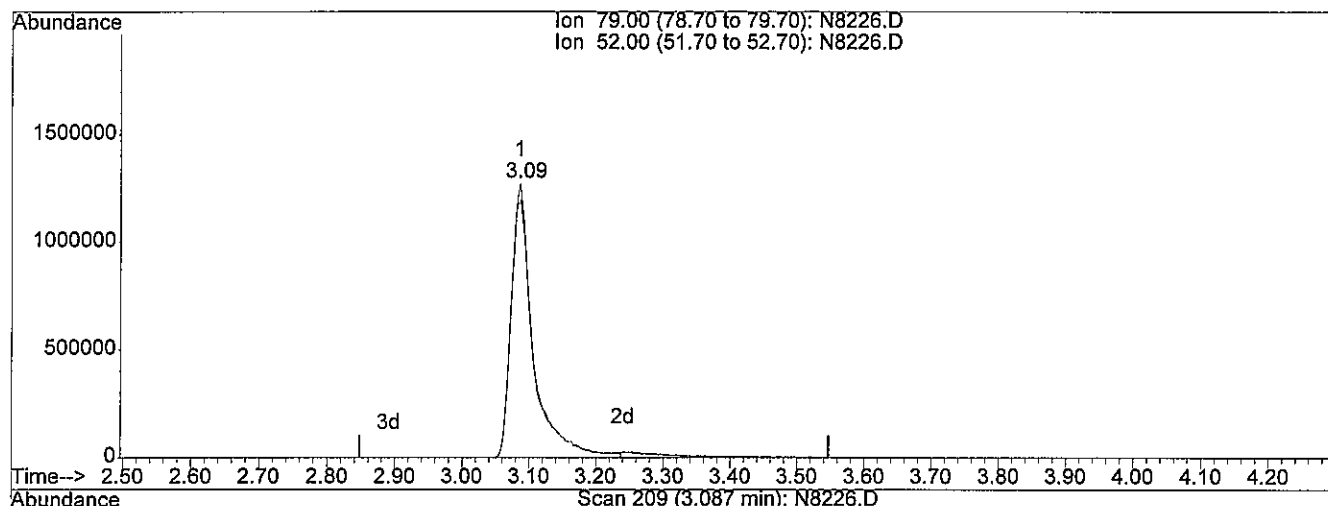
Quant Results File: temp.res

Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)

Title : GC-MS Semivolatiles SOP no. 506

Last Update : Wed Sep 04 15:28:17 2013

Response via : Multiple Level Calibration



(4) Pyridine (T)

3.09min 110.97ng/uL

response 2914573

Ion	Exp%	Act%
79.00	100	100
52.00	93.60	99.42
0.00	0.00	0.00
0.00	0.00	0.00

*3.09*

# Quantitation Report (Qedit)

Data File : D:\HPCHEM\1\DATA\090413\N8226.D

Vial: 10

Acq On : 4 Sep 2013 15:09

Operator: jk SOP 50

Sample : ICALSVSTD120

Inst : GC/MS Ins

Misc : ST130531-9

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Sep 4 15:29 2013

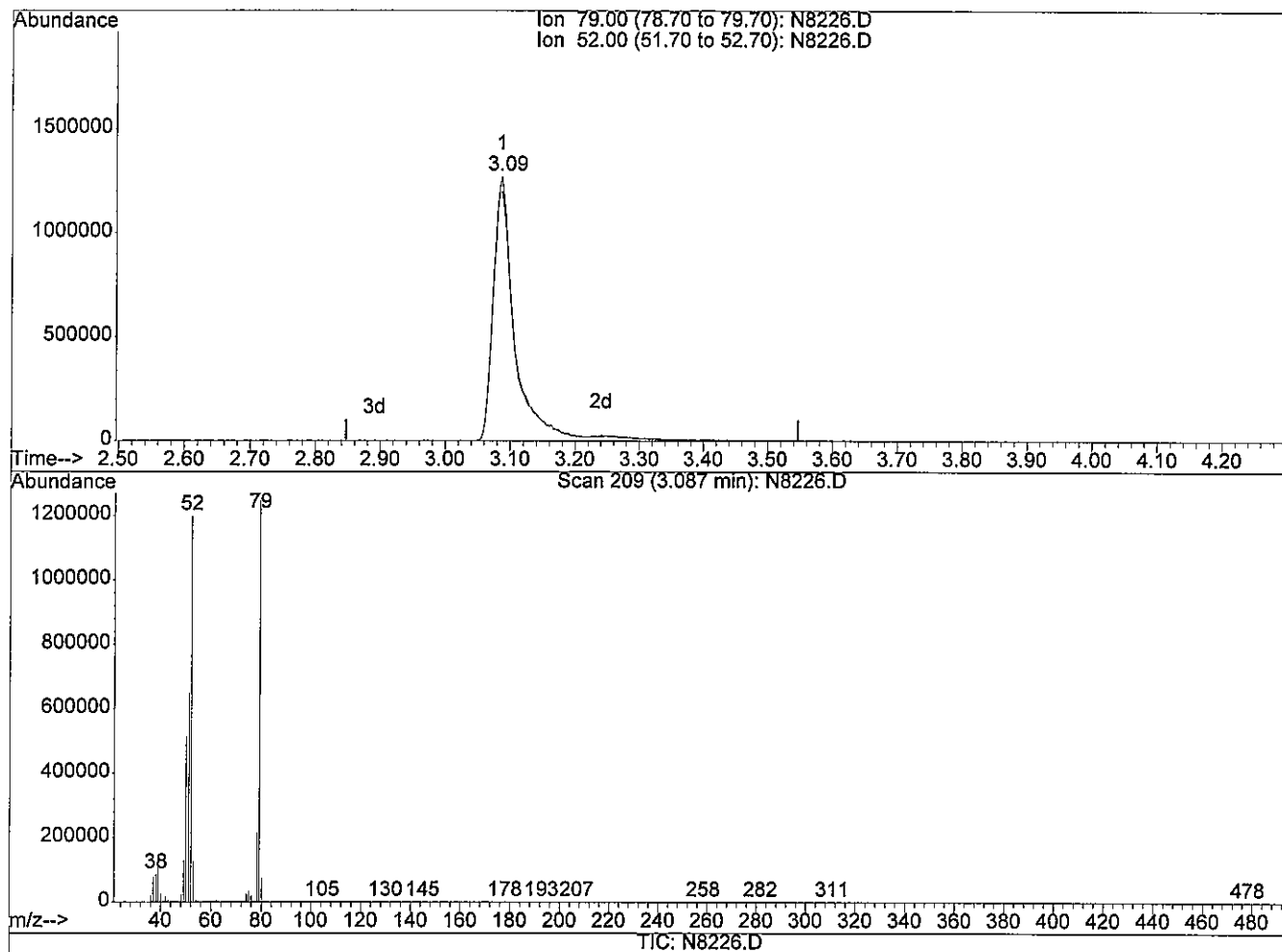
Quant Results File: temp.res

Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)

Title : GC-MS Semivolatiles SOP no. 506

Last Update : Wed Sep 04 15:28:17 2013

Response via : Multiple Level Calibration



(4) Pyridine (T)

3.09min 117.00ng/uL m

response 3073035

Ion	Exp%	Act%
79.00	100	100
52.00	93.60	94.29
0.00	0.00	0.00
0.00	0.00	0.00

## MANUAL RE-INTEGRATION

- ☐ missed peak assignment
- ☐ assigned incorrect name to peak
- ☐ over-integrated peak's area
- ☒ under-integrated peak's area
- ☐ other \_\_\_\_\_

initials ja date 9-6-13

# Quantitation Report (Qedit)

Data File : D:\HPCHEM\1\DATA\090413\N8226.D

Vial: 10

Acq On : 4 Sep 2013 15:09

Operator: jk SOP 50

Sample : ICALSVSTD120

Inst : GC/MS Ins

Misc : ST130531-9

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Sep 4 15:29 2013

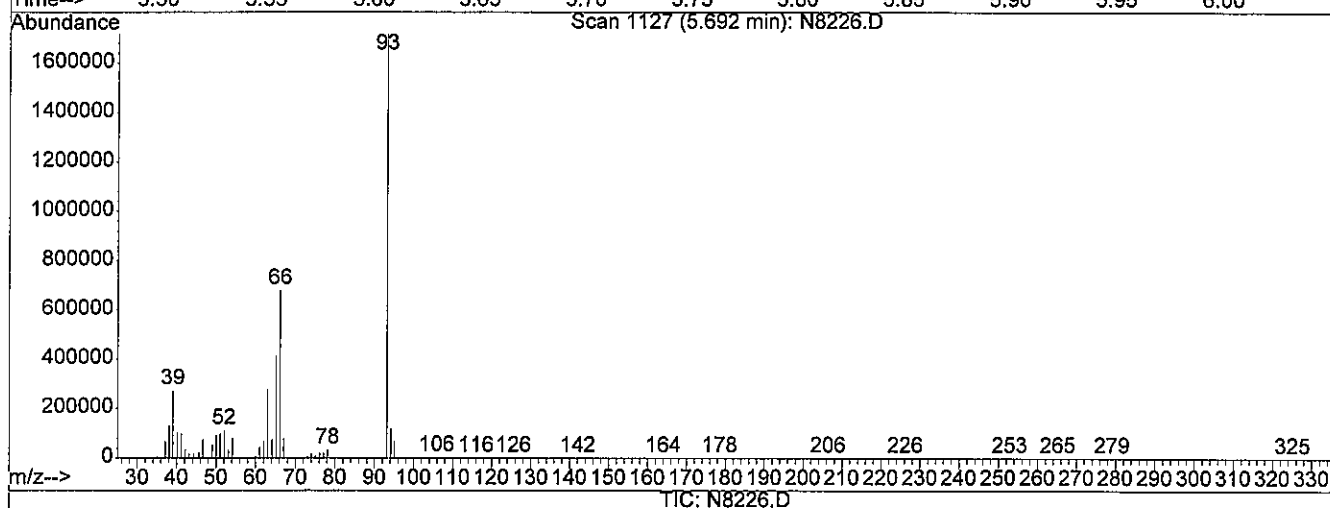
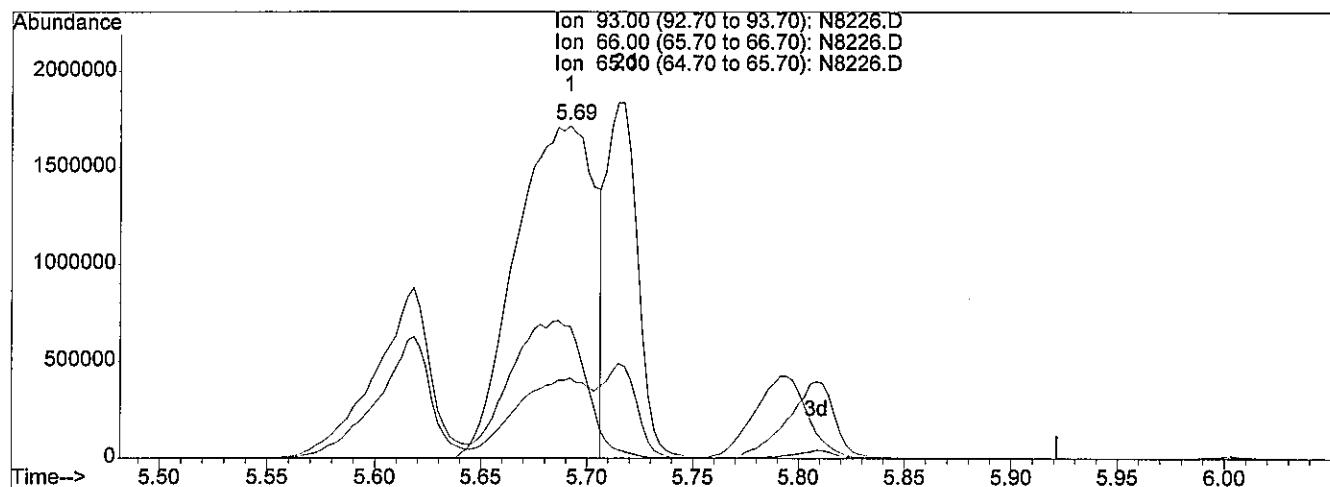
Quant Results File: temp.res

Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)

Title : GC-MS Semivolatiles SOP no. 506

Last Update : Wed Sep 04 15:28:17 2013

Response via : Multiple Level Calibration



(7) Aniline (T)

5.69min 133.28ng/uL

response 4463464

Ion	Exp%	Act%
93.00	100	100
66.00	45.60	39.08
65.00	23.80	24.10
0.00	0.00	0.00

*3 e for*

# Quantitation Report (Qedit)

Data File : D:\HPCHEM\1\DATA\090413\N8226.D

Vial: 10

Acq On : 4 Sep 2013 15:09

Operator: jk SOP 50

Sample : ICALSVSTD120

Inst : GC/MS Ins

Misc : ST130531-9

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Sep 4 15:29 2013

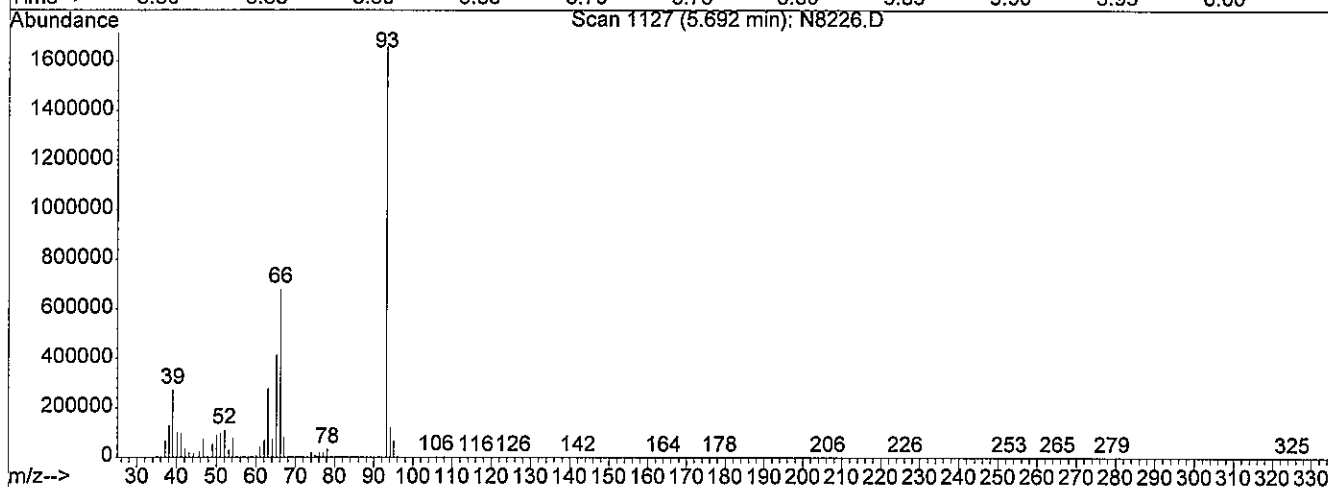
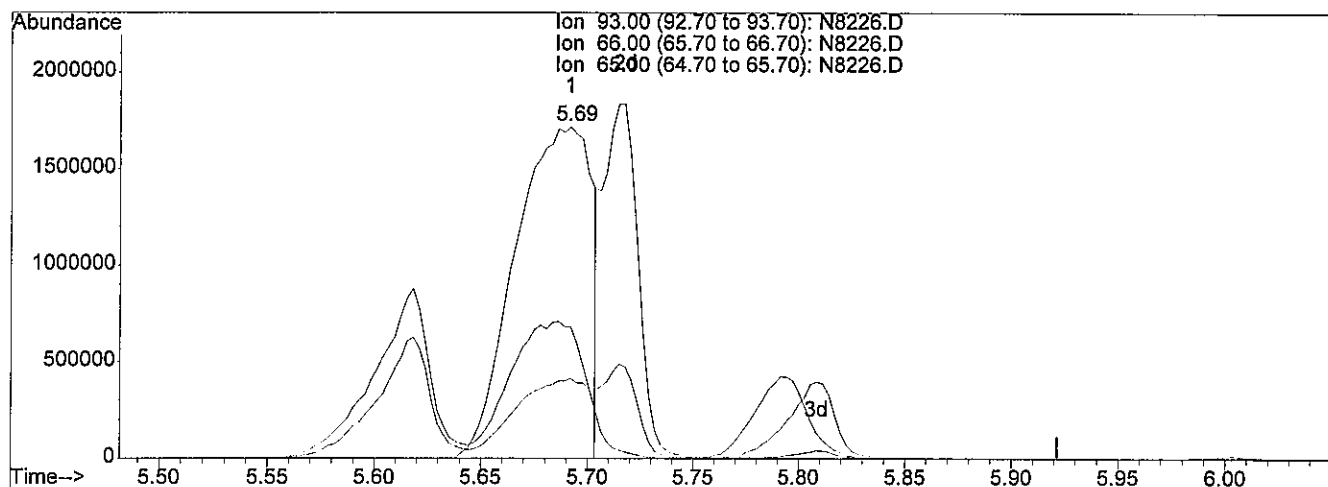
Quant Results File: temp.res

Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)

Title : GC-MS Semivolatiles SOP no. 506

Last Update : Wed Sep 04 15:28:17 2013

Response via : Multiple Level Calibration



(7) Aniline (T)

5.69min 126.22ng/uL m

response 4227284

Ion	Exp%	Act%
93.00	100	100
66.00	45.60	41.27
65.00	23.80	25.45
0.00	0.00	0.00

## MANUAL RE-INTEGRATION

- ☐ missed peak assignment
- ☐ assigned incorrect name to peak
- ☒ over-integrated peak's area
- ☐ under-integrated peak's area
- ☐ other \_\_\_\_\_

initials JK date 9-6-13

# Quantitation Report (Qedit)

Data File : D:\HPCHEM\1\DATA\090413\N8226.D

Vial: 10

Acq On : 4 Sep 2013 15:09

Operator: jk SOP 50

Sample : ICALSVSTD120

Inst : GC/MS Ins

Misc : ST130531-9

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Sep 4 15:29 2013

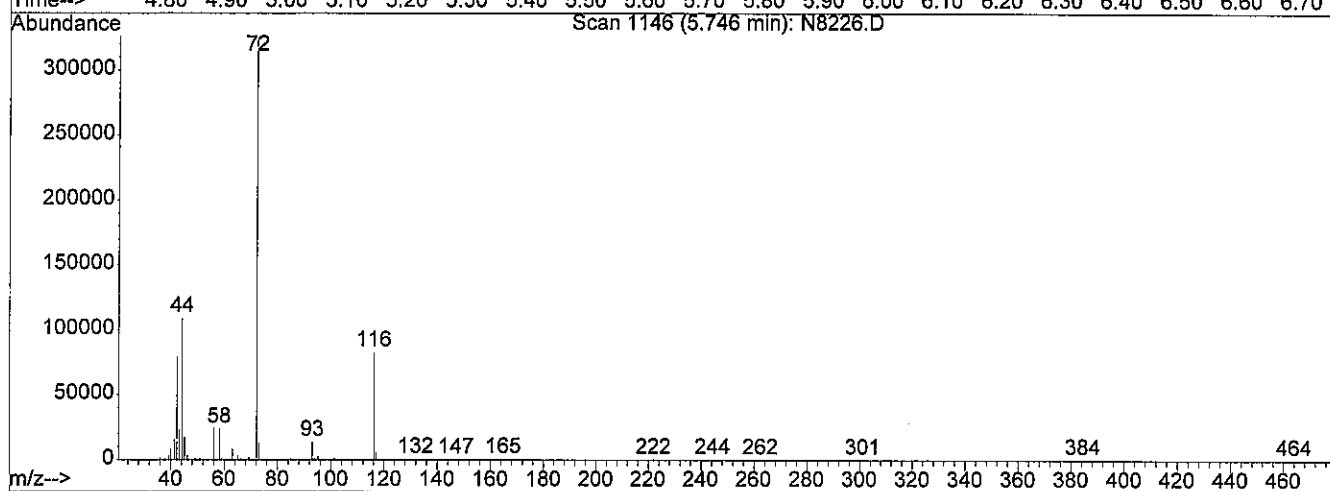
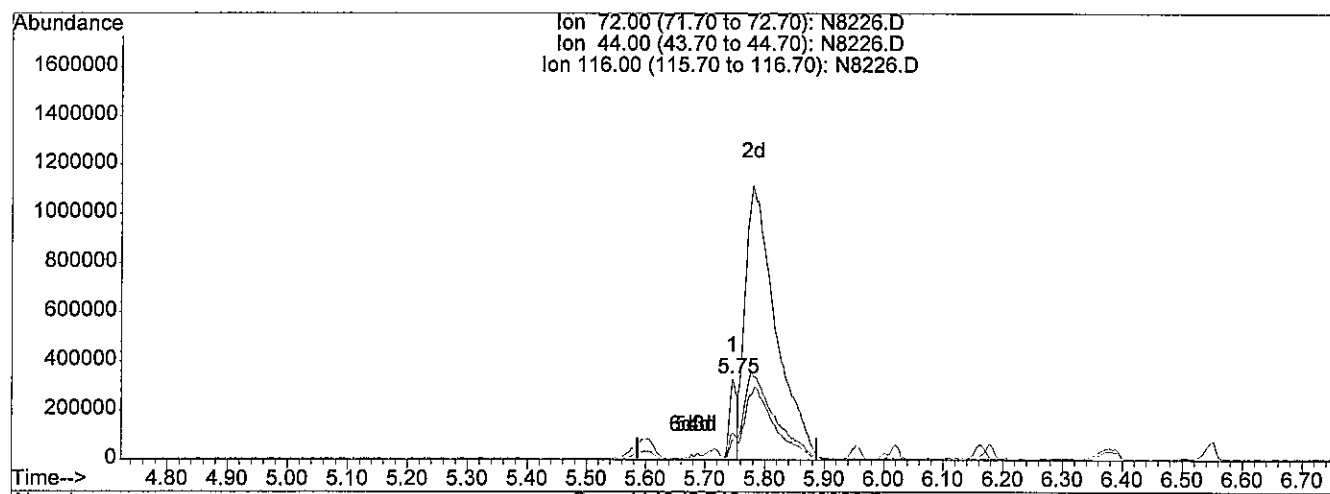
Quant Results File: temp.res

Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)

Title : GC-MS Semivolatiles SOP no. 506

Last Update : Wed Sep 04 15:28:17 2013

Response via : Multiple Level Calibration



(10) Tetramethylurea (T)

5.75min 8.37ng/uL

response 278014

Ion	Exp%	Act%
72.00	100	100
44.00	31.30	31.81
116.00	26.10	25.44
0.00	0.00	0.00

*3e for*

# Quantitation Report (Qedit)

Data File : D:\HPCHEM\1\DATA\090413\N8226.D

Vial: 10

Acq On : 4 Sep 2013 15:09

Operator: jk SOP 50

Sample : ICALSVSTD120

Inst : GC/MS Ins

Misc : ST130531-9

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Sep 4 15:29 2013

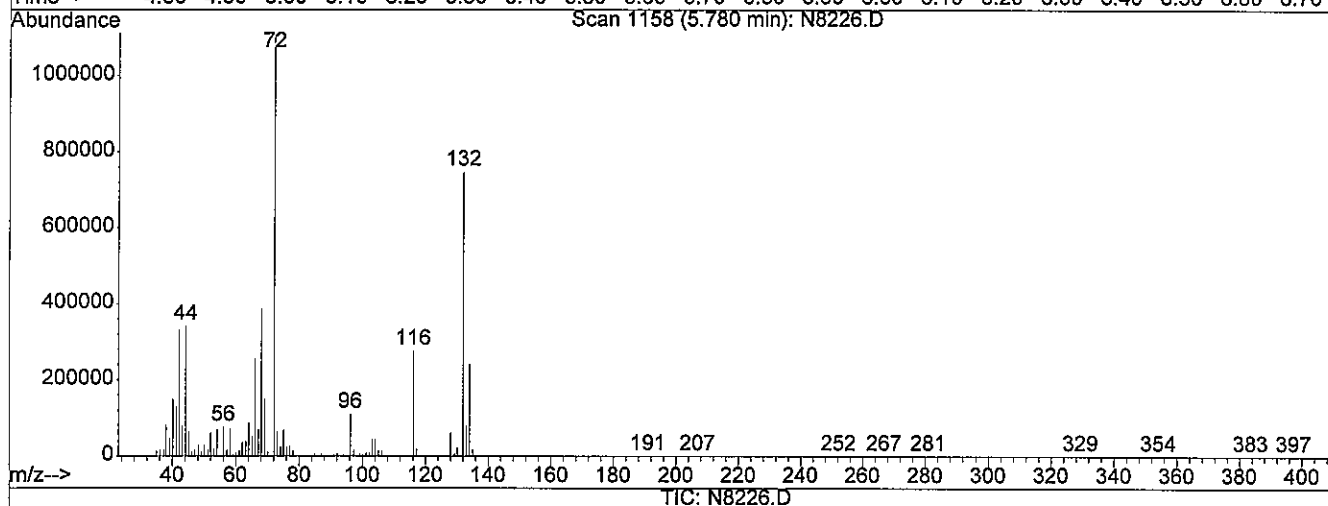
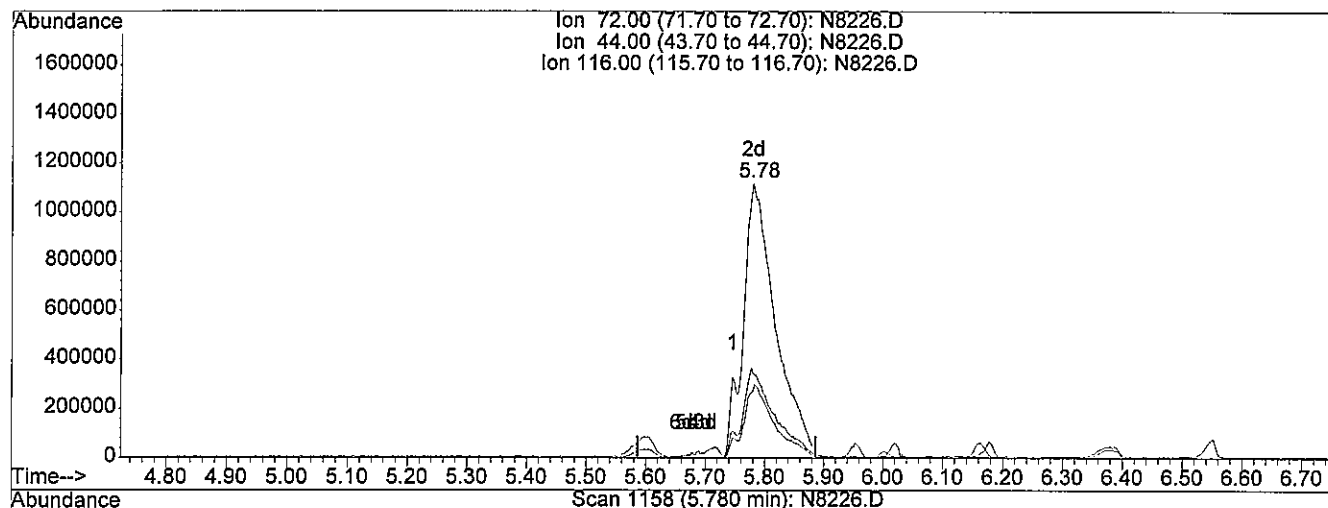
Quant Results File: temp.res

Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)

Title : GC-MS Semivolatiles SOP no. 506

Last Update : Wed Sep 04 15:28:17 2013

Response via : Multiple Level Calibration



(10) Tetramethylurea (T)

5.78min 128.03ng/uL m

response 4250205

Ion	Exp%	Act%
72.00	100	100
44.00	31.30	2.08#
116.00	26.10	1.66
0.00	0.00	0.00

## MANUAL RE-INTEGRATION

- ☒ missed peak assignment
- ☐ assigned incorrect name to peak
- ☐ over-integrated peak's area
- ☐ under-integrated peak's area
- ☐ other \_\_\_\_\_

initials JK date 9-6-13

# Quantitation Report (Qedit)

Data File : D:\HPCHEM\1\DATA\090413\N8226.D

Vial: 10

Acq On : 4 Sep 2013 15:09

Operator: jk SOP 50

Sample : ICALSVSTD120

Inst : GC/MS Ins

Misc : ST130531-9

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Sep 4 15:29 2013

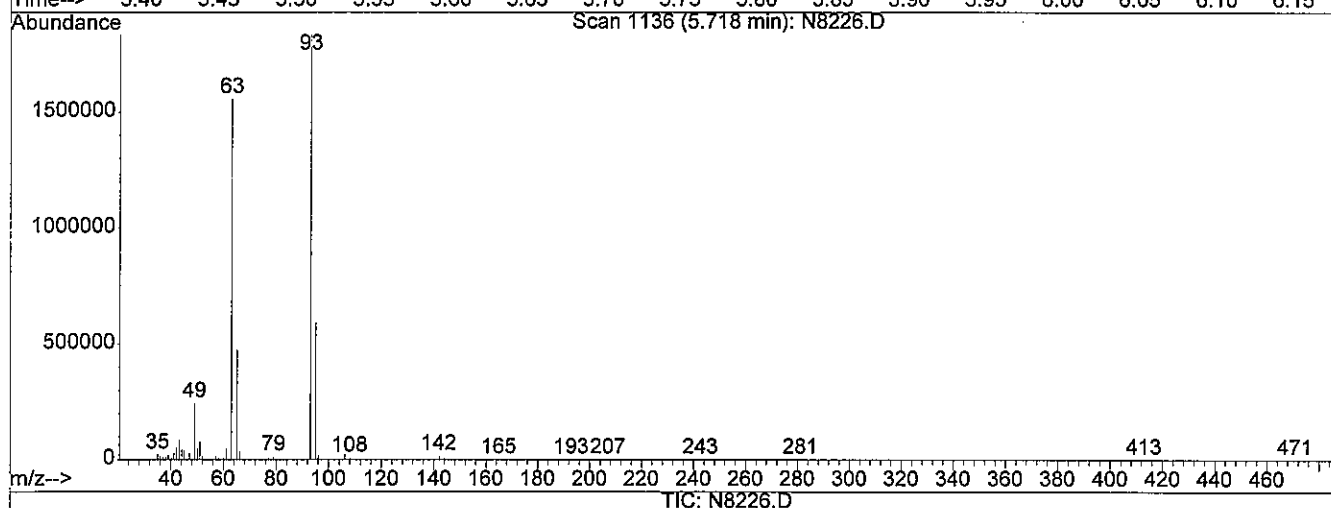
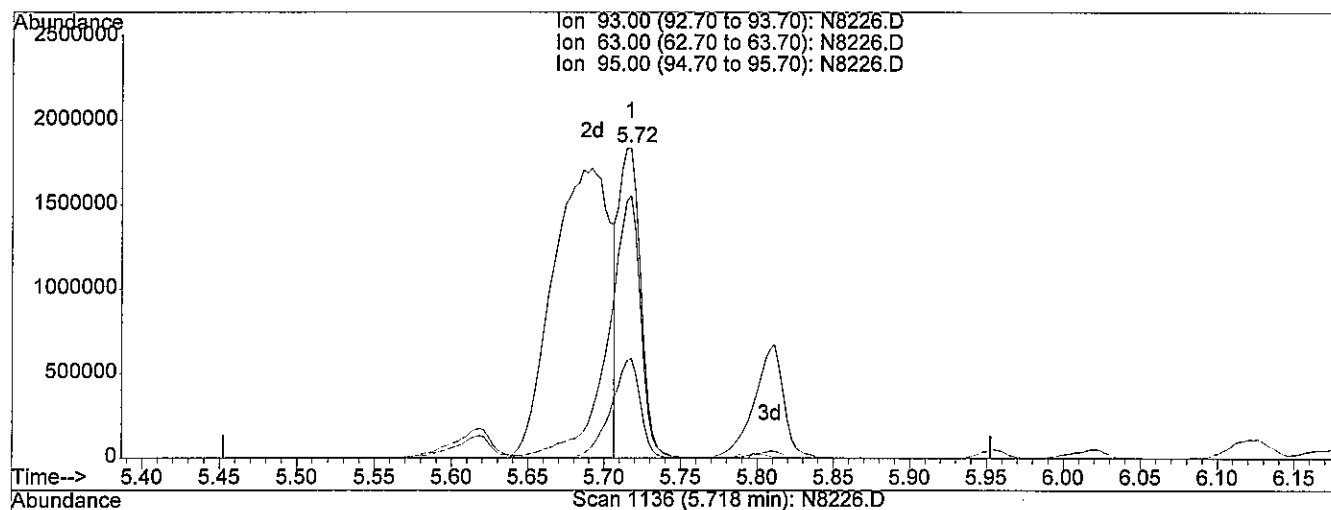
Quant Results File: temp.res

Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)

Title : GC-MS Semivolatiles SOP no. 506

Last Update : Wed Sep 04 15:28:17 2013

Response via : Multiple Level Calibration



(11) Bis(2-chloroethyl)ether (T)

5.72min 90.25ng/uL

response 1856913

Ion	Exp%	Act%
93.00	100	100
63.00	84.00	126.19#
95.00	31.80	42.28#
0.00	0.00	0.00

*sefer*



# Quantitation Report (Qedit)

Data File : D:\HPCHEM\1\DATA\090413\N8226.D

Vial: 10

Acq On : 4 Sep 2013 15:09

Operator: jk SOP 50

Sample : ICALSVSTD120

Inst : GC/MS Ins

Misc : ST130531-9

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Sep 4 15:29 2013

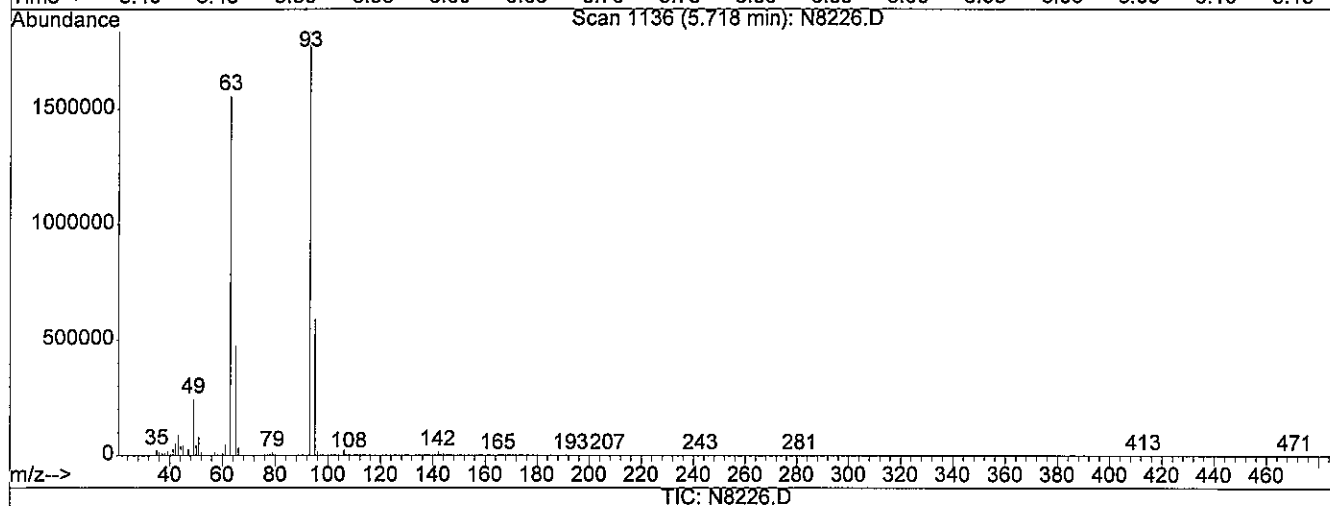
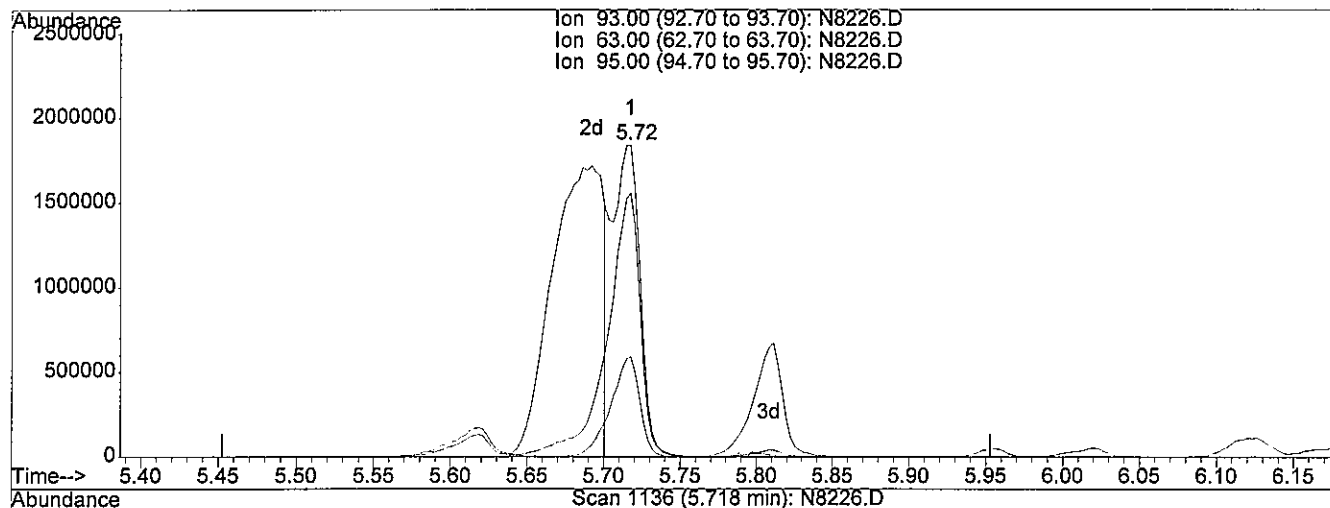
Quant Results File: temp.res

Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)

Title : GC-MS Semivolatiles SOP no. 506

Last Update : Wed Sep 04 15:28:17 2013

Response via : Multiple Level Calibration



(11) Bis(2-chloroethyl)ether (T)

5.72min 113.23ng/uL m

response 2329733

Ion	Exp%	Act%
93.00	100	100
63.00	84.00	100.58
95.00	31.80	33.70
0.00	0.00	0.00

## MANUAL RE-INTEGRATION

- ☐ missed peak assignment
- ☐ assigned incorrect name to peak
- ☐ over-integrated peak's area
- ☒ under-integrated peak's area
- ☐ other \_\_\_\_\_

initials ju date 9-6-13

# Quantitation Report (Qedit)

Data File : D:\HPCHEM\1\DATA\090413\N8226.D

Vial: 10

Acq On : 4 Sep 2013 15:09

Operator: jk SOP 50

Sample : ICALSVSTD120

Inst : GC/MS Ins

Misc : ST130531-9

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Sep 4 15:29 2013

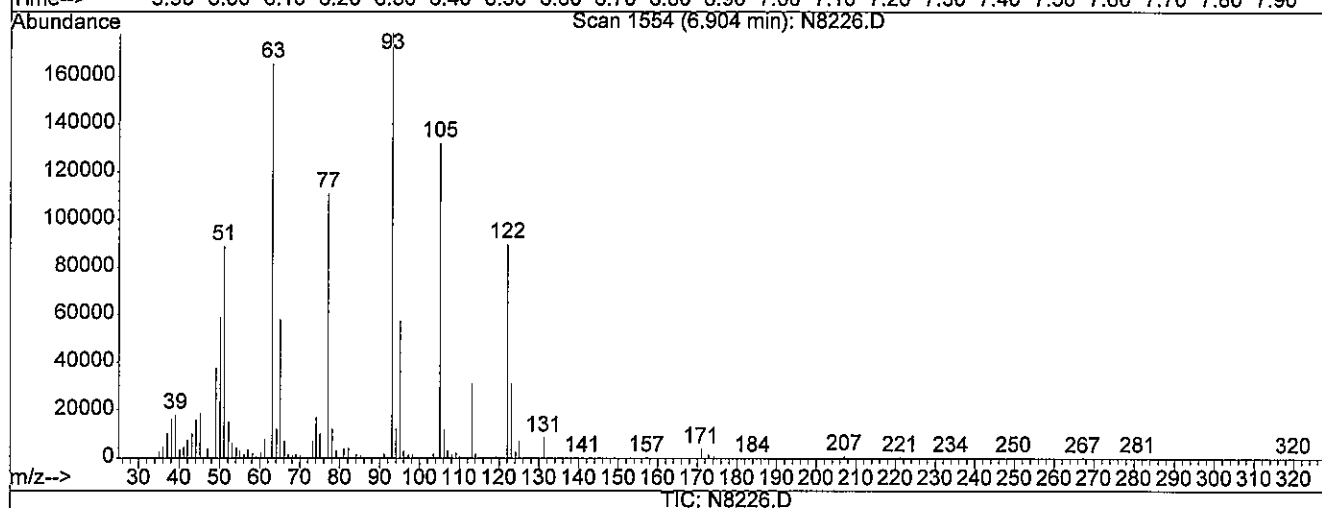
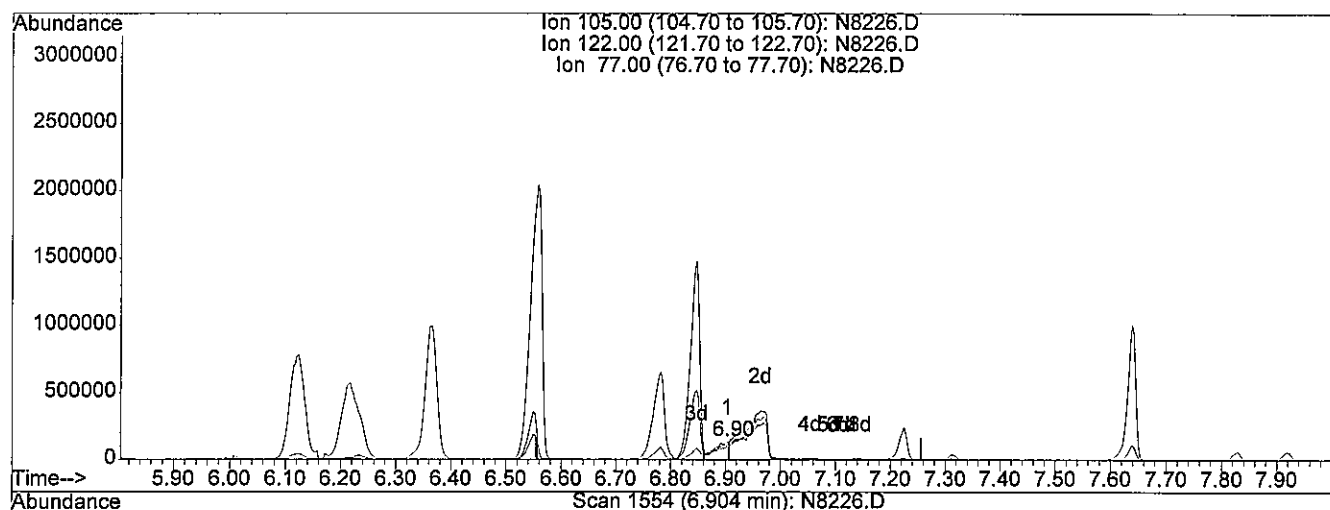
Quant Results File: temp.res

Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)

Title : GC-MS Semivolatiles SOP no. 506

Last Update : Wed Sep 04 15:28:17 2013

Response via : Multiple Level Calibration



(33) Benzoic acid (T)

6.90min 34.30ng/uL

response 250419

Ion	Exp%	Act%
105.00	100	100
122.00	73.60	174.12#
77.00	82.40	0.00#
0.00	0.00	0.00

*3cfen*

# Quantitation Report (Qedit)

Data File : D:\HPCHEM\1\DATA\090413\N8226.D

Vial: 10

Acq On : 4 Sep 2013 15:09

Operator: jk SOP 50

Sample : ICALSVSTD120

Inst : GC/MS Ins

Misc : ST130531-9

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Sep 4 15:30 2013

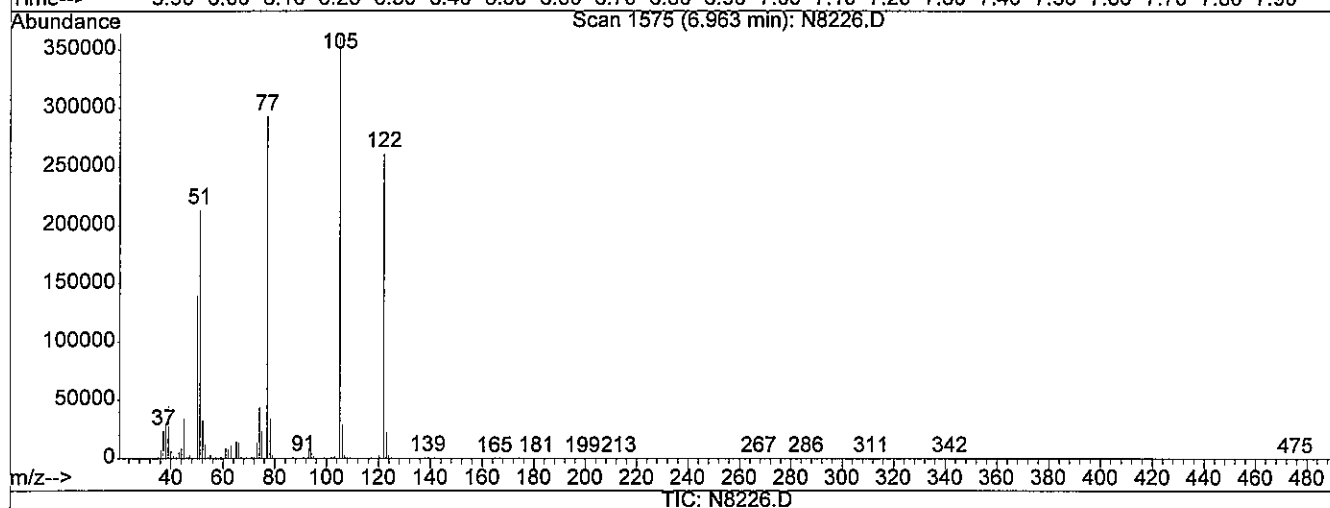
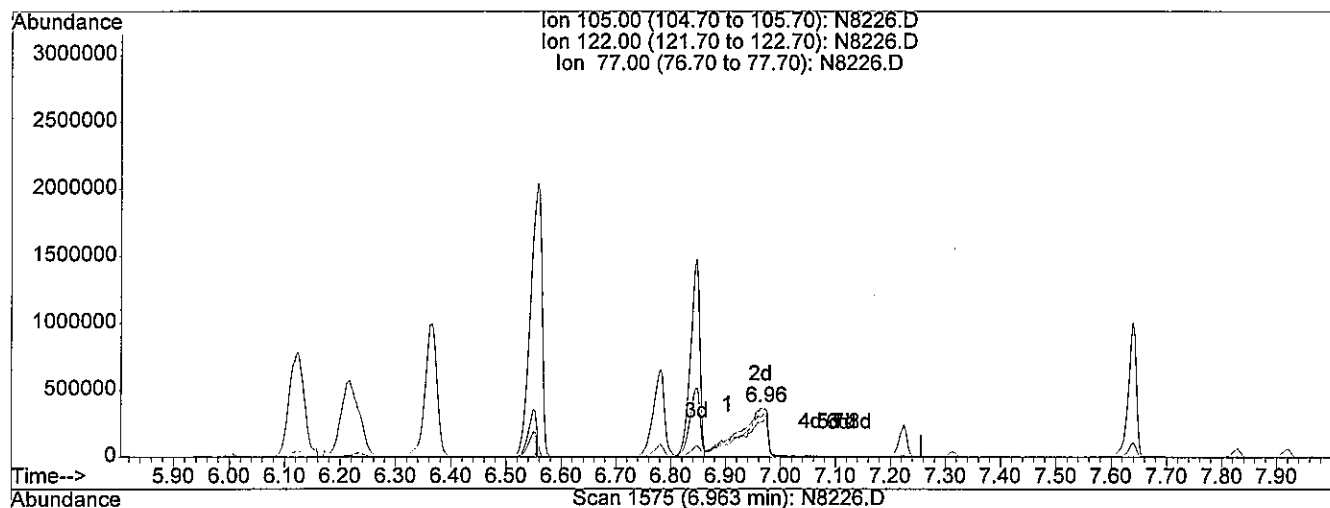
Quant Results File: temp.res

Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)

Title : GC-MS Semivolatiles SOP no. 506

Last Update : Wed Sep 04 15:28:17 2013

Response via : Multiple Level Calibration



(33) Benzoic acid (T)

6.96min 189.71ng/uL m

response 1384844

Ion	Exp%	Act%
105.00	100	100
122.00	73.60	31.49#
77.00	82.40	0.00#
0.00	0.00	0.00

## MANUAL RE-INTEGRATION

- ☐ missed peak assignment
- ☐ assigned incorrect name to peak
- ☐ over-integrated peak's area
- ☒ under-integrated peak's area
- ☐ other \_\_\_\_\_

initials jk date 9-6-13



Data File : D:\HPCHEM\1\DATA\090413\N8227.D

Vial: 11

Acq On : 4 Sep 2013 15:33

Operator: jk SOP 506 Rev

Sample : ICSVSTD050

Inst : GC/MS Ins

Misc : ST130520-1

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Sep 6 16:47 2013

Quant Results File: 090413S1.RES

Quant Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)

Title : GC-MS Semivolatiles SOP no. 506

Last Update : Fri Sep 06 16:39:44 2013

Response via : Initial Calibration

DataAcq Meth : 090413S1

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	6.00	152	542563	40.00	ng/uL	0.00
24) Naphthalene-d8	7.20	136	2040834	40.00	ng/uL	0.00
41) Acenaphthene-d10	8.75	164	1109490	40.00	ng/uL	0.00
69) Phenanthrene-d10	10.03	188	2122076	40.00	ng/uL	0.00
80) Chrysene-d12	12.31	240	2027973	40.00	ng/uL	0.00
91) Perylene-d12	13.87	264	1040994	40.00	ng/uL	-0.01

## System Monitoring Compounds

5) 2-Fluorophenol	0.00	112	0d	0.00	ng/uL	
Spiked Amount	75.000	Range	46 - 105	Recovery	=	0.00%#
6) 2-Chlorophenol-d4	0.00	132	0d	0.00	ng/uL	
Spiked Amount	75.000	Range	33 - 110	Recovery	=	0.00%#
8) Phenol-d5	0.00	99	0d	0.00	ng/uL	
Spiked Amount	75.000	Range	50 - 109	Recovery	=	0.00%#
15) 1,2-Dichlorobenzene-d4	0.00	152	0d	0.00	ng/uL	
Spiked Amount	50.000	Range	16 - 110	Recovery	=	0.00%#
25) Nitrobenzene-d5	0.00	82	0d	0.00	ng/uL	
Spiked Amount	50.000	Range	53 - 111	Recovery	=	0.00%#
46) 2-Fluorobiphenyl	0.00	172	0d	0.00	ng/uL	
Spiked Amount	50.000	Range	55 - 108	Recovery	=	0.00%#
68) 2,4,6-Tribromophenol	0.00	330	0	0.00	ng/uL	
Spiked Amount	75.000	Range	42 - 117	Recovery	=	0.00%#
83) p-Terphenyl-d14	0.00	244	0d	0.00	ng/uL	
Spiked Amount	50.000	Range	34 - 139	Recovery	=	0.00%#

## Target Compounds

						Qvalue
2) 1,4-Dioxane	2.63	88	492571m	54.62	ng/uL	
3) n-Nitrosodimethylamine	3.01	74	773592m	57.59	ng/uL	
4) Pyridine	3.09	79	1255225m	55.26	ng/uL	
7) Aniline	5.67	93	1383695	48.80	ng/uL	96
9) Phenol	5.60	94	1349785	57.89	ng/uL	95
10) Tetramethylurea	5.73	72	1566506	49.19	ng/uL	96
11) Bis(2-chloroethyl) ether	5.70	93	986446	54.90	ng/uL	98
12) 2-Chlorophenol	5.80	128	915299	54.56	ng/uL	96
13) 1,3-Dichlorobenzene	5.95	146	1046915	52.24	ng/uL	99
14) 1,4-Dichlorobenzene	6.02	146	1002790	53.71	ng/uL	99
16) 1,2-Dichlorobenzene	6.17	146	945088	54.50	ng/uL	99
17) Benzyl Alcohol	6.11	108	586217	51.82	ng/uL	99
18) 2-Methylphenol	6.20	107	741938	53.58	ng/uL	99
19) Bis(2-chloroisopropyl) ether	6.23	45	1714735	56.07	ng/uL	97
20) n-Nitroso-di-n-propylamine	6.36	70	681022	51.43	ng/uL	98
21) 3+4-Methylphenol	6.34	108	894287m	52.57	ng/uL	

(#)=qualifier out of range (m)=manual integration

N8227.D 090413S1.M Fri Sep 06 16:47:17 2013

96-4)

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Data File : D:\HPCHEM\1\DATA\090413\N8227.D

Vial: 11

Acq On : 4 Sep 2013 15:33

Operator: jk SOP 506 Rev

Sample : ICVSVSTD050

Inst : GC/MS Ins

Misc : ST130520-1

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Sep 6 16:47 2013

Quant Results File: 090413S1.RES

Quant Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)

Title : GC-MS Semivolatiles SOP no. 506

Last Update : Fri Sep 06 16:39:44 2013

Response via : Initial Calibration

DataAcq Meth : 090413S1

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
22) N-Methylaniline	6.36	106	1164227	47.24	ng/uL	92
23) Hexachloroethane	6.50	117	417957	53.17	ng/uL	99
26) N,N-Dimethylaniline	6.54	120	1303769	49.29	ng/uL	95
27) Nitrobenzene	6.54	77	1360982	49.81	ng/uL	99
28) Isophorone	6.76	82	1762576	49.47	ng/uL	100
29) N-Ethylaniline	6.77	106	1518675	46.92	ng/uL	99
30) 2-Nitrophenol	6.84	139	431270	50.91	ng/uL	95
31) 2,4-Dimethylphenol	6.84	107	897890	51.10	ng/uL	100
32) Bis(2-chloroethoxy)methane	6.92	93	1060731	50.23	ng/uL	100
33) Benzoic acid	6.92	105	423688m	47.36	ng/uL	
34) 2,4-Dichlorophenol	7.05	162	753328	49.50	ng/uL	99
35) 1,2,4-Trichlorobenzene	7.14	180	886608	47.35	ng/uL	97
36) Naphthalene	7.22	128	2812331	55.70	ng/uL	100
37) 4-Chloroaniline	7.24	127	829178	45.44	ng/uL	98
38) Hexachlorobutadiene	7.31	225	622176	52.26	ng/uL	99
39) 4-Chloro-3-methylphenol	7.63	107	736767	48.91	ng/uL	100
40) 2-Methylnaphthalene	7.83	142	1728080	47.79	ng/uL	99
42) 1-Methylnaphthalene	7.92	142	1572998	48.73	ng/uL	99
43) Hexachlorocyclopentadiene	7.96	237	456516	46.22	ng/uL	99
44) 2,4,6-Trichlorophenol	8.06	196	565240	48.47	ng/uL	99
45) 2,4,5-Trichlorophenol	8.09	196	548453	50.17	ng/uL	99
47) 2-Chloronaphthalene	8.26	162	1617021	49.76	ng/uL	99
48) 2-Nitroaniline	8.32	65	568736	52.10	ng/uL	98
49) 1,4-Dinitrobenzene	8.42	168	248138	50.89	ng/uL	95
50) Dimethylphthalate	8.45	163	1580566	47.31	ng/uL	99
51) 1,3-Dinitrobenzene	8.50	168	252037	45.37	ng/uL	95
52) 2,6-Dinitrotoluene	8.52	165	381762	49.67	ng/uL#	81
53) 1,2-Dinitrobenzene	8.58	168	182528	50.24	ng/uL	96
54) Acenaphthylene	8.63	152	2485965	51.96	ng/uL	99
55) 3-Nitroaniline	8.67	138	359079	49.92	ng/uL	96
56) Acenaphthene	8.78	154	1429515	49.73	ng/uL	99
57) 2,4-Dinitrophenol	8.76	184	231690	55.79	ng/uL#	100
58) 4-Nitrophenol	8.77	109	216121	47.14	ng/uL	89
59) Dibenzofuran	8.92	168	2032564	47.96	ng/uL	99
60) 2,4-Dinitrotoluene	8.87	165	539683	52.42	ng/uL	99
61) 2,3,5,6-Tetrachlorophenol	8.97	232	526417	50.17	ng/uL	99
62) 2,3,4,6-Tetrachlorophenol	9.01	232	469629	46.49	ng/uL	98
63) Diethylphthalate	9.04	149	1535696	50.20	ng/uL	99
64) 4-Chlorophenyl phenyl ethe	9.18	204	930528	48.55	ng/uL	100
65) 4-Nitroaniline	9.21	138	375483	58.06	ng/uL	96
66) Fluorene	9.21	166	1594030	48.47	ng/uL	99

(#)=qualifier out of range (m)=manual integration

N8227.D 090413S1.M Fri Sep 06 16:47:17 2013

Page 2

Data File : D:\HPCHEM\1\DATA\090413\N8227.D

Vial: 11

Acq On : 4 Sep 2013 15:33

Operator: jk SOP 506 Rev

Sample : ICSVSTD050

Inst : GC/MS Ins

Misc : ST130520-1

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Sep 6 16:47 2013

Quant Results File: 090413S1.RES

Quant Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)

Title : GC-MS Semivolatiles SOP no. 506

Last Update : Fri Sep 06 16:39:44 2013

Response via : Initial Calibration

DataAcq Meth : 090413S1

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
67) Azobenzene	9.32	77	1758842	51.08	ng/uL	98
70) 4,6-Dinitro-2-methylphenol	9.22	198	324907	55.75	ng/uL	99
71) n-Nitrosodiphenylamine	9.27	169	1364765	48.61	ng/uL	100
72) 4-Bromophenyl phenyl ether	9.60	248	609580	50.50	ng/uL	98
73) Hexachlorobenzene	9.70	284	635904	49.61	ng/uL	99
74) Pentachlorophenol	9.85	266	502611	56.91	ng/uL	99
75) Phenanthrene	10.05	178	2563472	52.39	ng/uL	99
76) Anthracene	10.09	178	2603000	51.05	ng/uL	99
77) Carbazole	10.20	167	2415846	51.04	ng/uL	100
78) Di-n-butylphthalate	10.41	149	2869580	49.97	ng/uL	100
79) Fluoranthene	11.07	202	3433556	50.74	ng/uL	100
81) Benzidine	11.13	184	2562071	83.49	ng/uL	100
82) Pyrene	11.27	202	3384405	52.38	ng/uL	99
84) Butylbenzylphthalate	11.70	149	1138784	54.61	ng/uL	97
85) Bis(2-ethylhexyl) adipate	11.71	129	896812	50.92	ng/uL	94
86) Bis(2-ethylhexyl)phthalate	12.15	149	1457146	53.71	ng/uL	100
87) 3,3'-Dichlorobenzidine	12.23	252	928795	51.90	ng/uL	98
88) Benzo[a]anthracene	12.30	228	2874497	52.44	ng/uL	100
89) Chrysene	12.34	228	2659797	53.16	ng/uL	100
90) Di-n-octylphthalate	12.74	149	1963867	53.28	ng/uL	95
92) Benzo[b]fluoranthene	13.39	252	1911864	56.99	ng/uL	99
93) Benzo[k]fluoranthene	13.43	252	1796008	55.09	ng/uL	98
94) Benzo[a]pyrene	13.80	252	1422002	51.41	ng/uL	99
95) Indeno(1,2,3-c,d)pyrene	15.44	276	1055186	48.42	ng/uL	97
96) Dibenzo[a,h]anthracene	15.43	278	921424	48.17	ng/uL	97
97) Benzo[g,h,i]perylene	15.93	276	790331	46.38	ng/uL	97

-----  
(#) = qualifier out of range (m) = manual integration

N8227.D 090413S1.M Fri Sep 06 16:47:17 2013

Page 3

Data File : D:\HPCHEM\1\DATA\090413\N8227.D

Vial: 11

Acq On : 4 Sep 2013 15:33

Operator: jk SOP 50

Sample : ICVSVSTD050

Inst : GC/MS Ins

Misc : ST130520-1

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Sep 6 16:39 2013

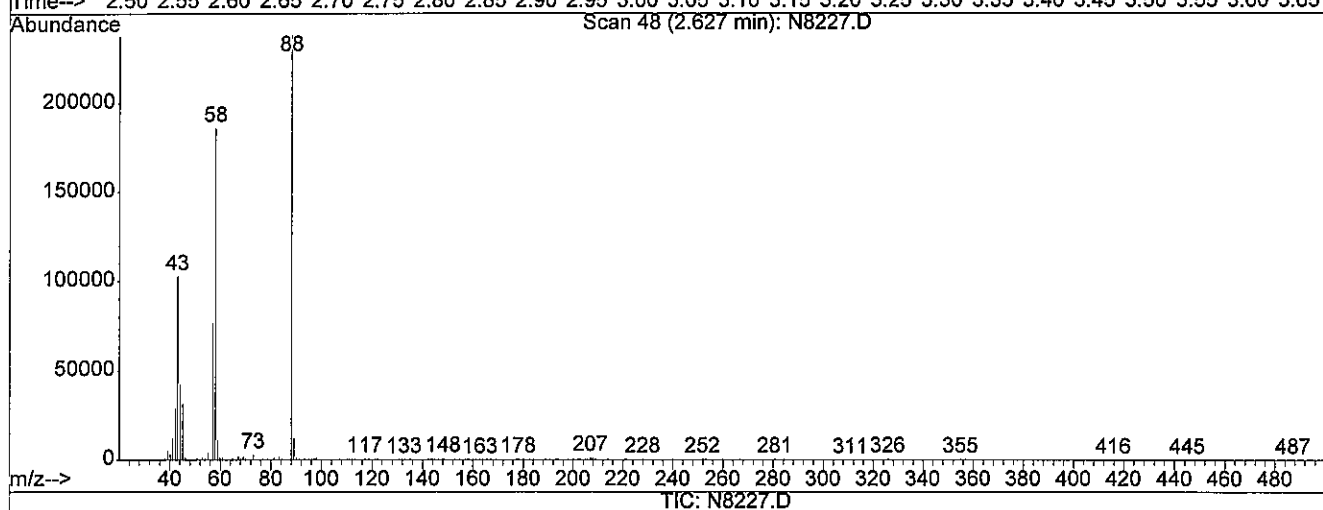
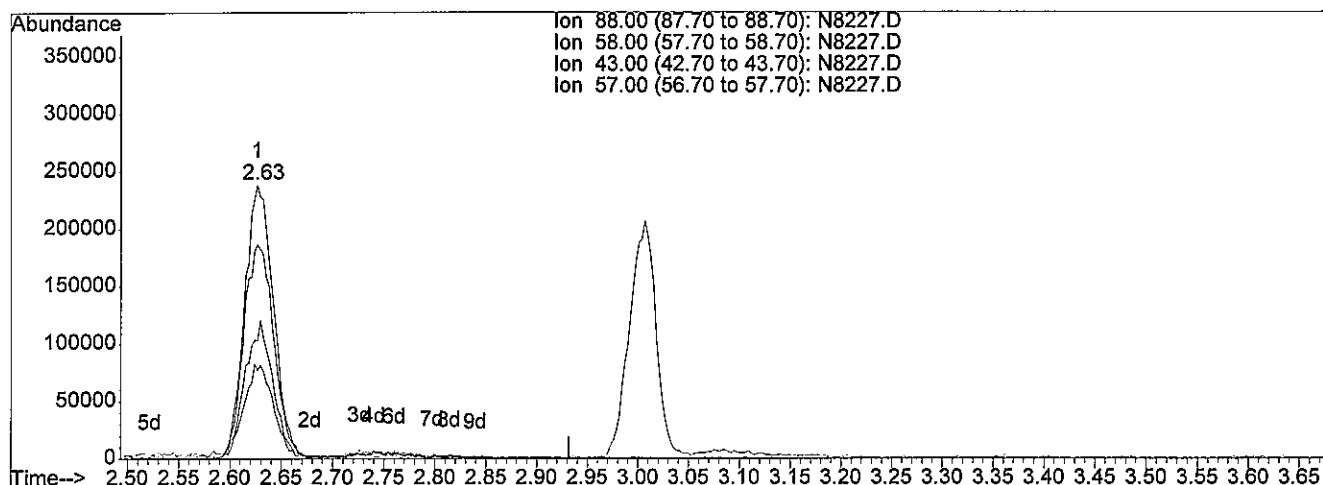
Quant Results File: temp.res

Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)

Title : GC-MS Semivolatiles SOP no. 506

Last Update : Fri Sep 06 16:39:44 2013

Response via : Multiple Level Calibration



(2) 1,4-Dioxane (t)

2.63min 51.59ng/uL

response 465246

Ion	Exp%	Act%
88.00	100	100
58.00	77.90	82.34
43.00	47.90	48.10
57.00	33.00	34.15

*Scfor*

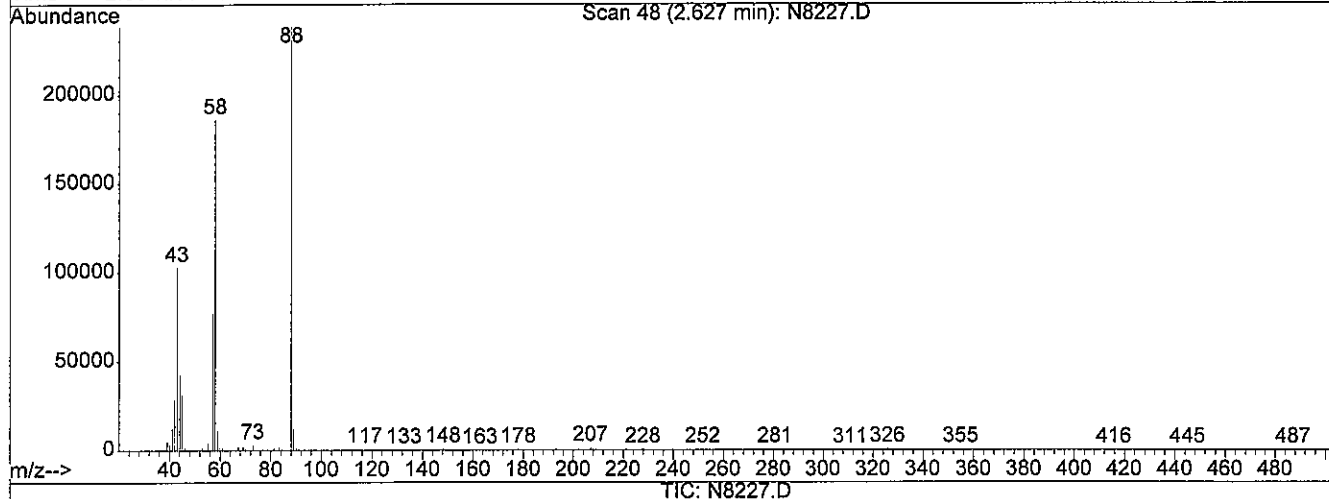
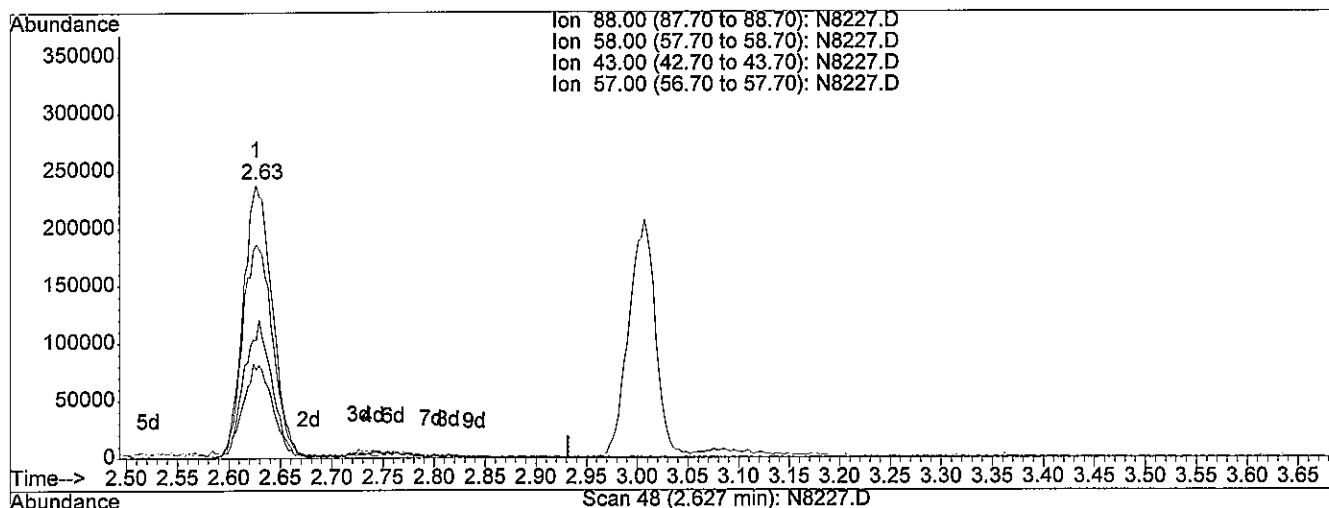


Data File : D:\HPCHEM\1\DATA\090413\N8227.D  
Acq On : 4 Sep 2013 15:33  
Sample : ICVSVSTD050  
Misc : ST130520-1  
MS Integration Params: RTEINT.P  
Quant Time: Sep 6 16:45 2013

Vial: 11  
Operator: jk SOP 50  
Inst : GC/MS Ins  
Multiplr: 1.00

Quant Results File: temp.res

Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)  
Title : GC-MS Semivolatiles SOP no. 506  
Last Update : Fri Sep 06 16:39:44 2013  
Response via : Multiple Level Calibration



(2) 1,4-Dioxane (t)

2.63min 54.62ng/uL m

response 492571

Ion	Exp%	Act%
88.00	100	100
58.00	77.90	77.77
43.00	47.90	45.43
57.00	33.00	32.26

**MANUAL RE-INTEGRATION**

- ☐ missed peak assignment
- ☐ assigned incorrect name to peak
- ☐ over-integrated peak's area
- ☒ under-integrated peak's area
- ☐ other \_\_\_\_\_

initials JK date 9-6-13

# Quantitation Report (Qedit)

Data File : D:\HPCHEM\1\DATA\090413\N8227.D

Vial: 11

Acq On : 4 Sep 2013 15:33

Operator: jk SOP 50

Sample : ICVSVSTD050

Inst : GC/MS Ins

Misc : ST130520-1

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Sep 6 16:45 2013

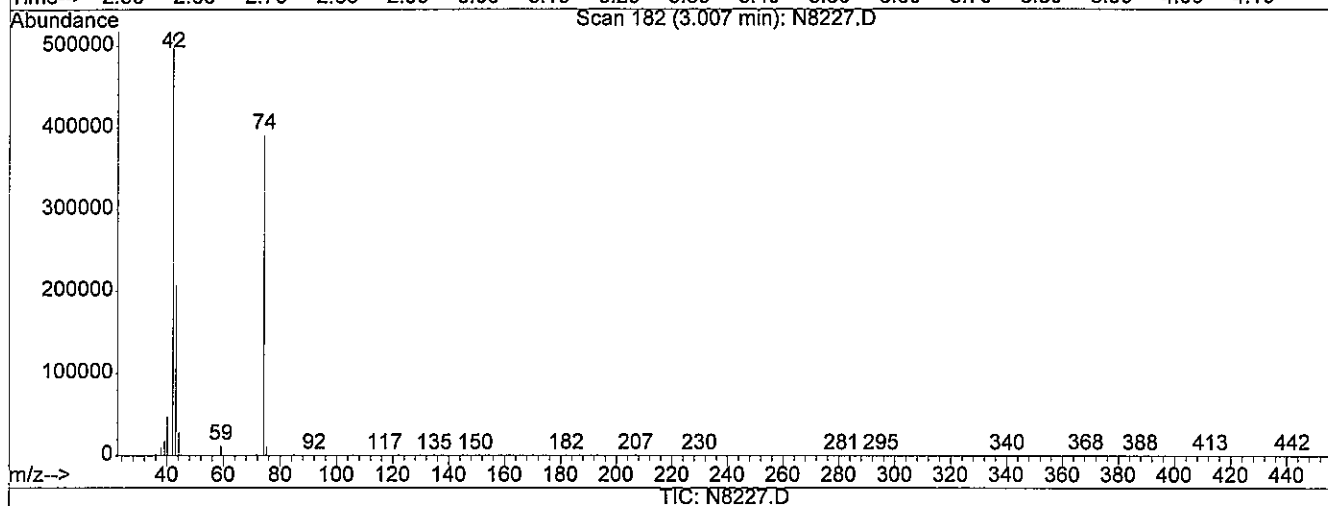
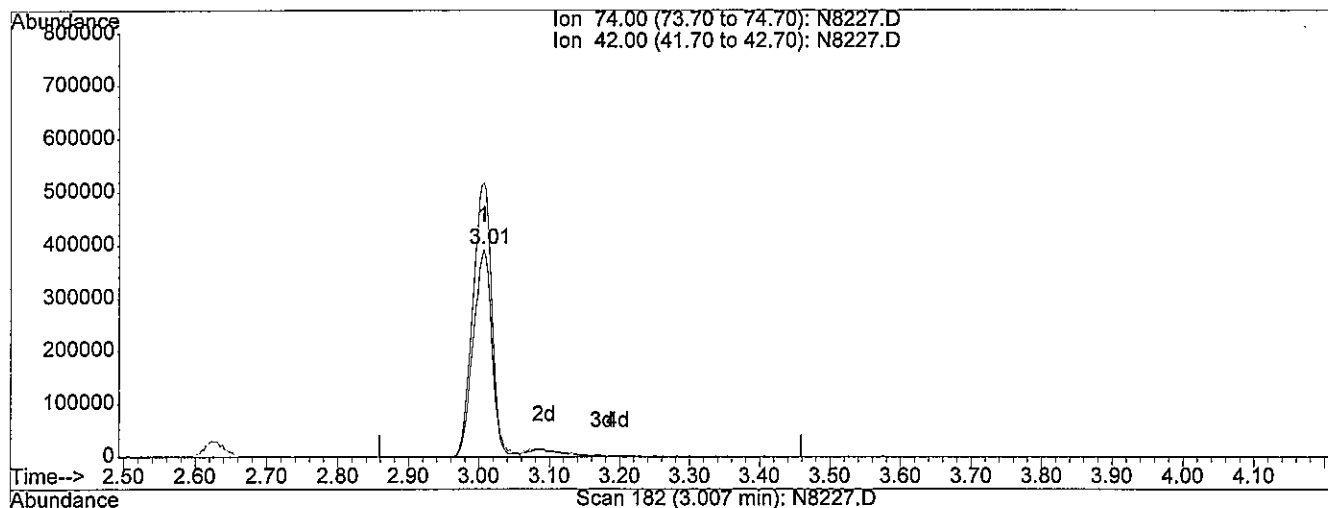
Quant Results File: temp.res

Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)

Title : GC-MS Semivolatiles SOP no. 506

Last Update : Fri Sep 06 16:39:44 2013

Response via : Multiple Level Calibration



(3) n-Nitrosodimethylamine (T)

3.01min 53.62ng/uL

response 720274

Ion	Exp%	Act%
74.00	100	100
42.00	129.50	134.44
0.00	0.00	0.00
0.00	0.00	0.00

*3.01*

Data File : D:\HPCHEM\1\DATA\090413\N8227.D

Vial: 11

Acq On : 4 Sep 2013 15:33

Operator: jk SOP 50

Sample : ICVSVSTD050

Inst : GC/MS Ins

Misc : ST130520-1

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Sep 6 16:45 2013

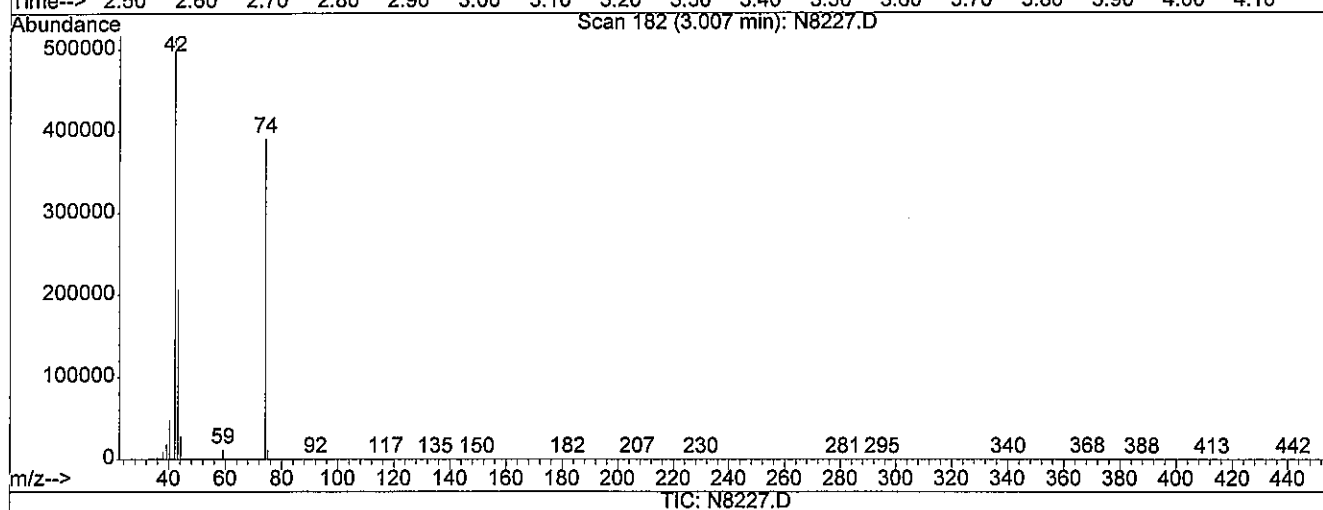
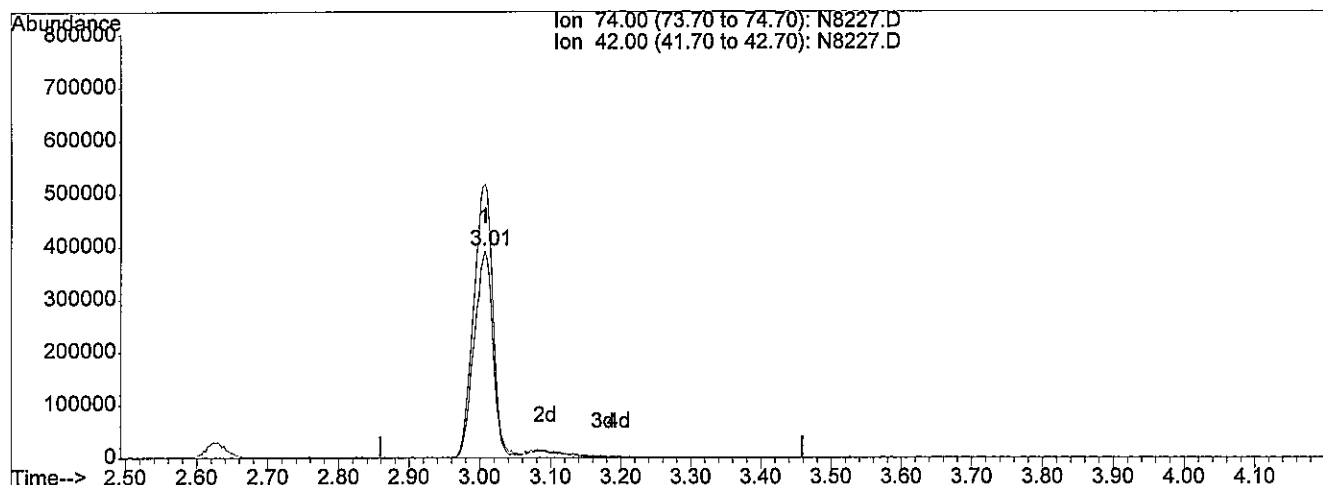
Quant Results File: temp.res

Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)

Title : GC-MS Semivolatiles SOP no. 506

Last Update : Fri Sep 06 16:39:44 2013

Response via : Multiple Level Calibration



(3) n-Nitrosodimethylamine (T)

3.01min 57.59ng/uL m

response 773592

Ion	Exp%	Act%
74.00	100	100
42.00	129.50	125.17
0.00	0.00	0.00
0.00	0.00	0.00

**MANUAL RE-INTEGRATION**

- ☐ missed peak assignment
- ☐ assigned incorrect name to peak
- ☐ over-integrated peak's area
- ☒ under-integrated peak's area
- ☐ other \_\_\_\_\_

initials jk date 9-6-13

Data File : D:\HPCHEM\1\DATA\090413\N8227.D

Vial: 11

Acq On : 4 Sep 2013 15:33

Operator: jk SOP 50

Sample : ICVSVSTD050

Inst : GC/MS Ins

Misc : ST130520-1

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Sep 6 16:45 2013

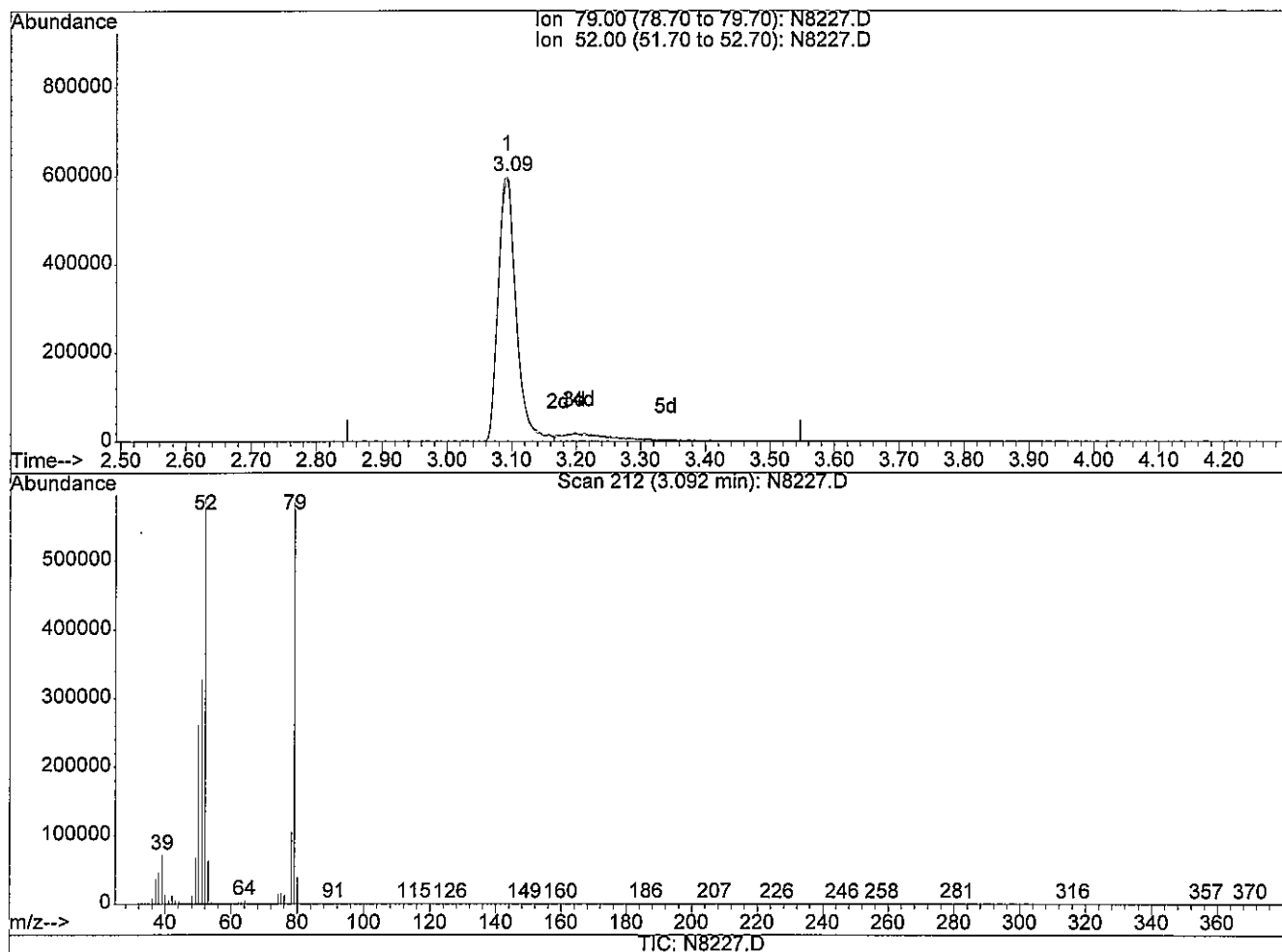
Quant Results File: temp.res

Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)

Title : GC-MS Semivolatiles SOP no. 506

Last Update : Fri Sep 06 16:39:44 2013

Response via : Multiple Level Calibration



(4) Pyridine (T)

3.09min 51.22ng/uL

response 1163405

Ion	Exp%	Act%
79.00	100	100
52.00	93.60	97.96
0.00	0.00	0.00
0.00	0.00	0.00

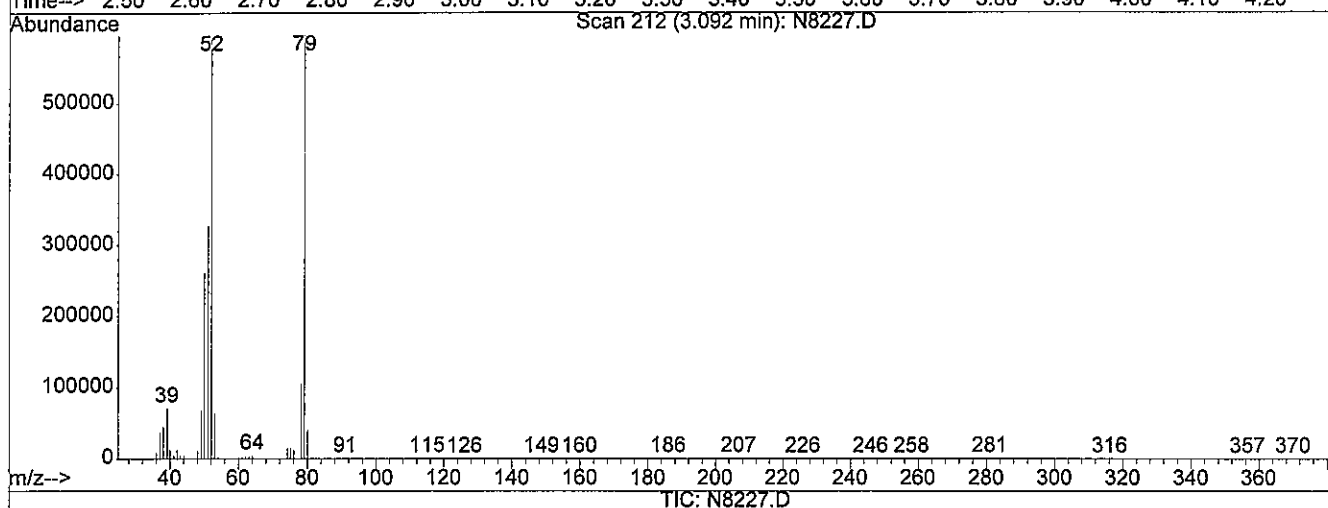
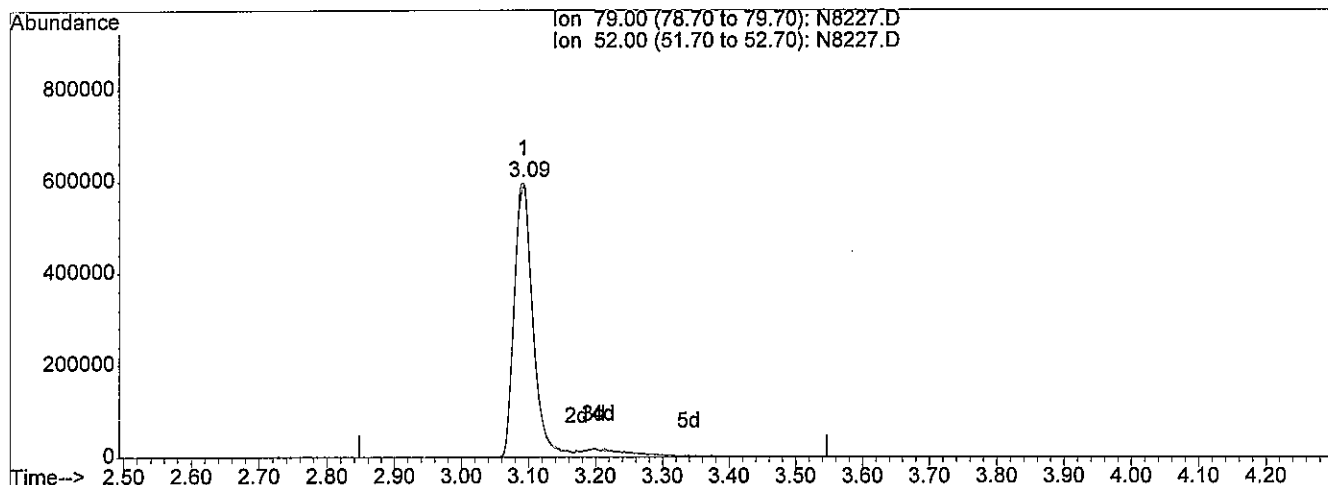
3e6

Data File : D:\HPCHEM\1\DATA\090413\N8227.D  
 Acq On : 4 Sep 2013 15:33  
 Sample : ICVSVSTD050  
 Misc : ST130520-1  
 MS Integration Params: RTEINT.P  
 Quant Time: Sep 6 16:45 2013

Vial: 11  
 Operator: jk SOP 50  
 Inst : GC/MS Ins  
 Multiplr: 1.00

Quant Results File: temp.res

Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)  
 Title : GC-MS Semivolatiles SOP no. 506  
 Last Update : Fri Sep 06 16:39:44 2013  
 Response via : Multiple Level Calibration



(4) Pyridine (T)

3.09min 55.26ng/uL m

response 1255225

Ion	Exp%	Act%
79.00	100	100
52.00	93.60	90.80
0.00	0.00	0.00
0.00	0.00	0.00

### MANUAL RE-INTEGRATION

- ☐ missed peak assignment
- ☐ assigned incorrect name to peak
- ☐ over-integrated peak's area
- ☒ under-integrated peak's area
- ☐ other \_\_\_\_\_

initials jk date 9-6-13

# Quantitation Report (Qedit)

Data File : D:\HPCHEM\1\DATA\090413\N8227.D

Vial: 11

Acq On : 4 Sep 2013 15:33

Operator: jk SOP 50

Sample : ICVSVSTD050

Inst : GC/MS Ins

Misc : ST130520-1

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Sep 6 16:45 2013

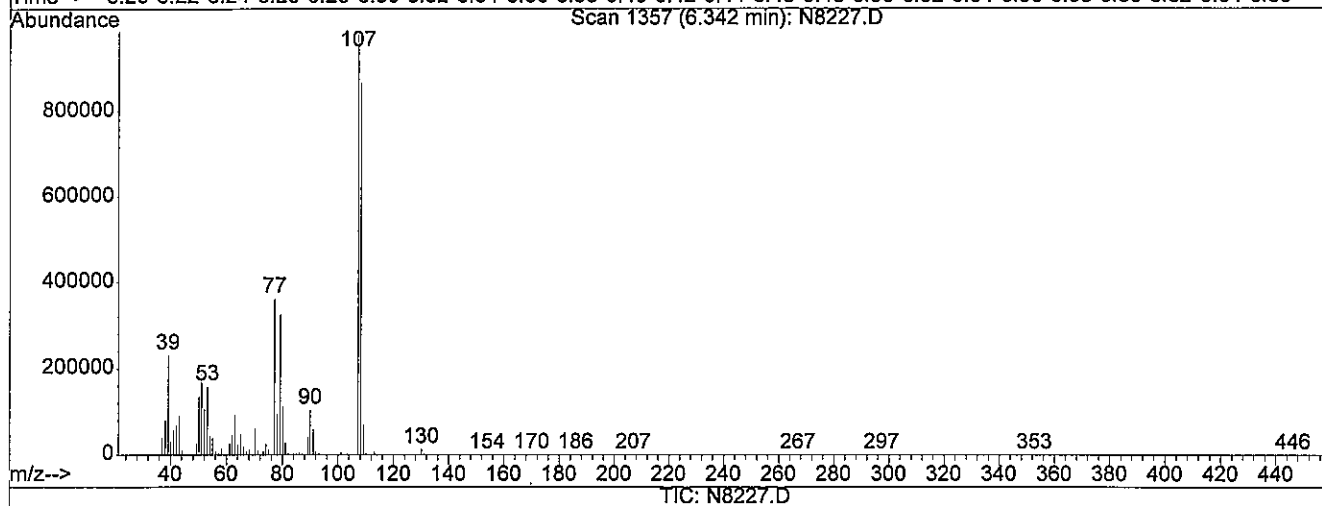
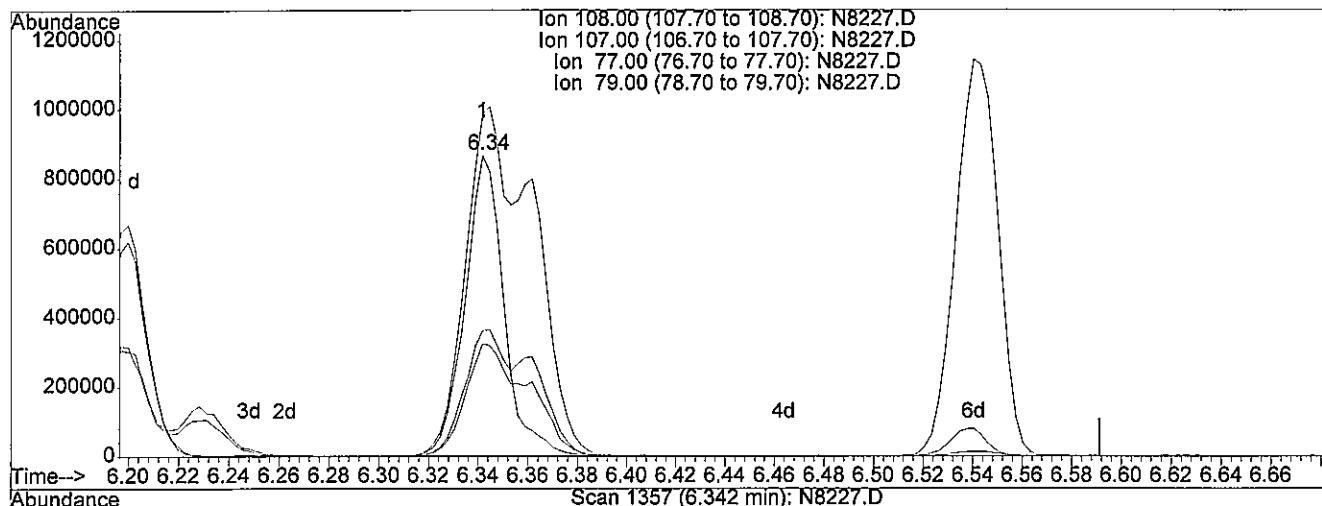
Quant Results File: temp.res

Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)

Title : GC-MS Semivolatiles SOP no. 506

Last Update : Fri Sep 06 16:39:44 2013

Response via : Multiple Level Calibration



(21) 3+4-Methylphenol (T)

6.34min 55.75ng/uL

response 948325

Ion	Exp%	Act%
108.00	100	100
107.00	210.50	200.24
77.00	76.70	72.96
79.00	63.20	60.03

*3.6m*

Data File : D:\HPCHEM\1\DATA\090413\N8227.D

Acq On : 4 Sep 2013 15:33

Sample : ICVSVSTD050

Misc : ST130520-1

MS Integration Params: RTEINT.P

Quant Time: Sep 6 16:46 2013

Vial: 11

Operator: jk SOP 50

Inst : GC/MS Ins

Multiplr: 1.00

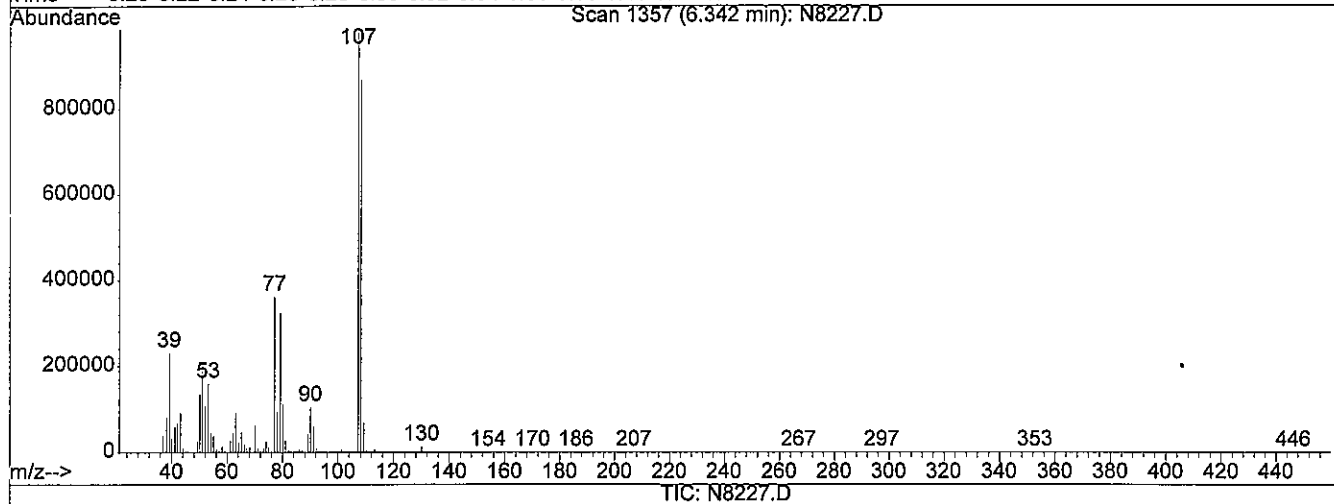
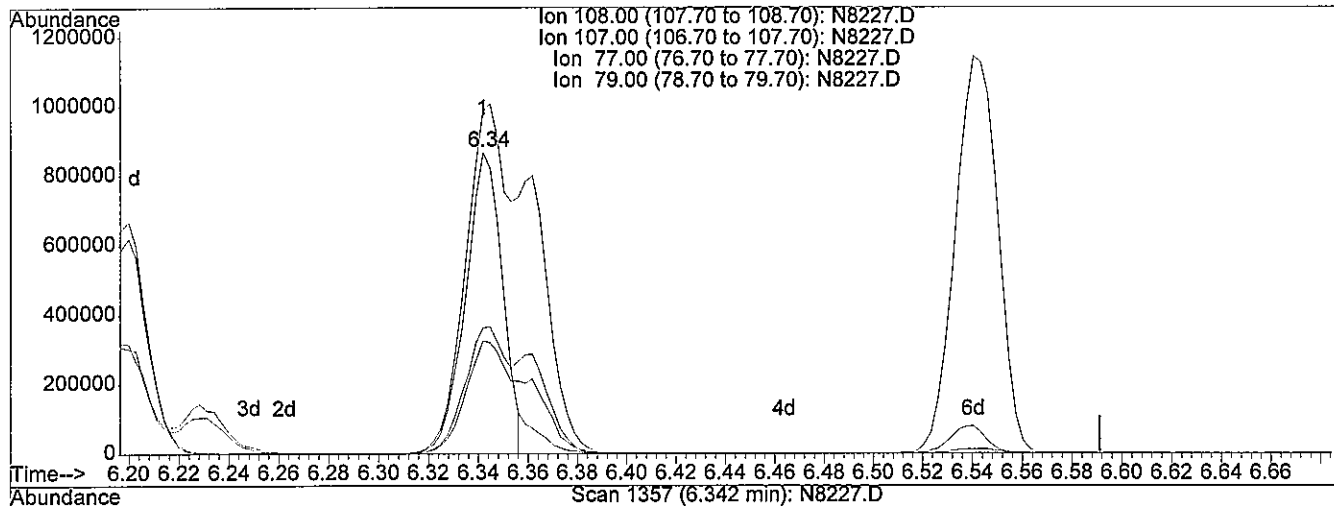
Quant Results File: temp.res

Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)

Title : GC-MS Semivolatiles SOP no. 506

Last Update : Fri Sep 06 16:39:44 2013

Response via : Multiple Level Calibration



(21) 3+4-Methylphenol (T)

6.34min 52.57ng/uL m

response 894287

Ion	Exp%	Act%
108.00	100	100
107.00	210.50	212.34
77.00	76.70	77.37
79.00	63.20	63.66

**MANUAL RE-INTEGRATION**

- ☐ missed peak assignment  
☐ assigned incorrect name to peak  
☒ over-integrated peak's area  
☐ under-integrated peak's area  
☐ other \_\_\_\_\_

initials JM date 9-6-13

Data File : D:\HPCHEM\1\DATA\090413\N8227.D

Vial: 11

Acq On : 4 Sep 2013 15:33

Operator: jk SOP 50

Sample : ICSVSTD050

Inst : GC/MS Ins

Misc : ST130520-1

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Sep 6 16:46 2013

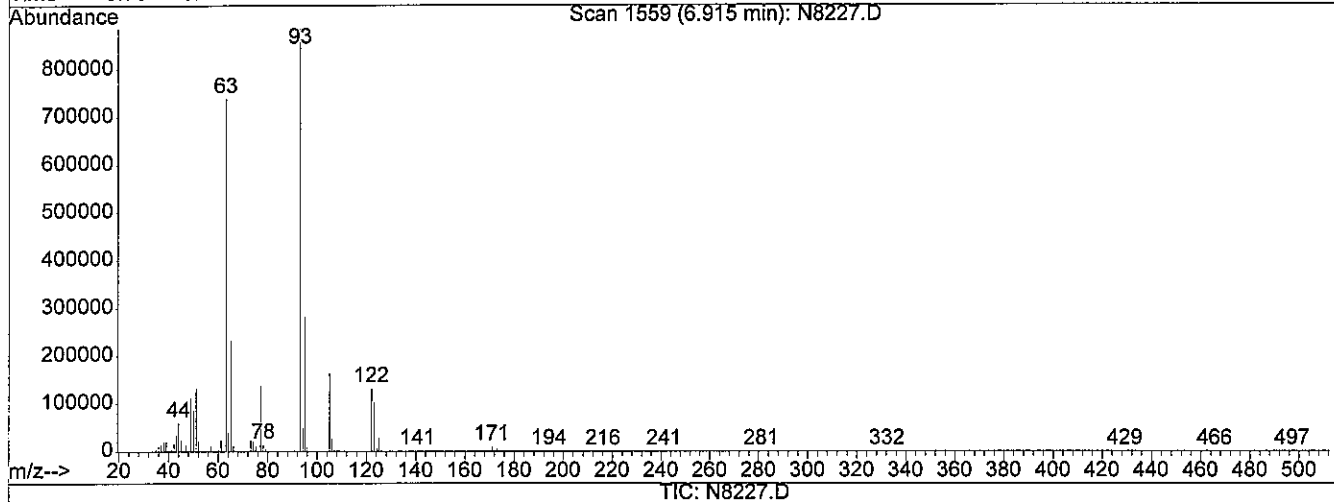
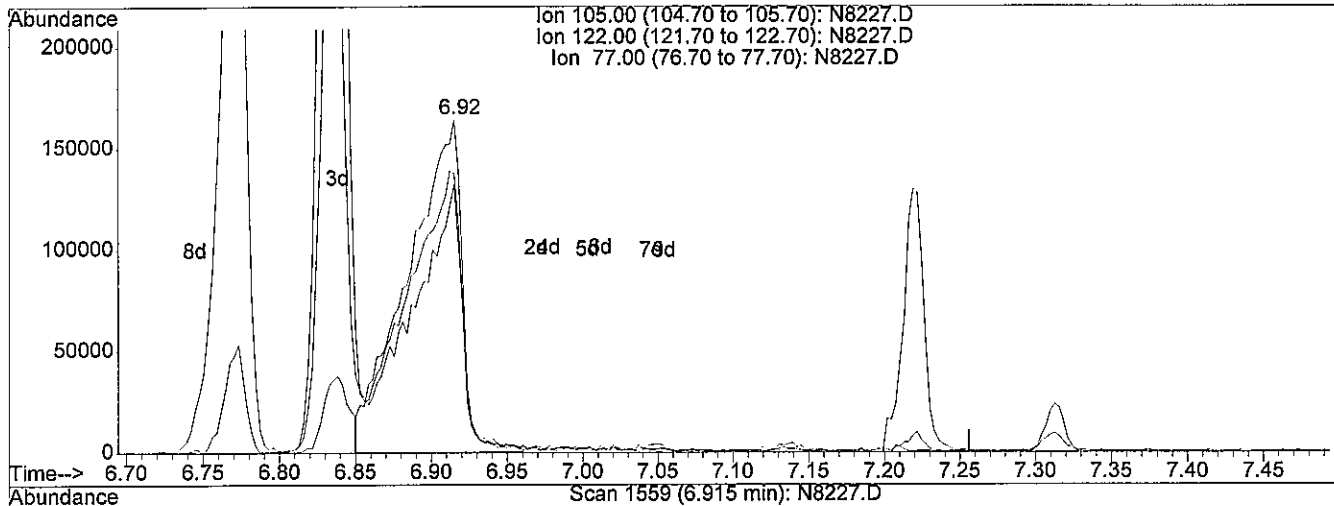
Quant Results File: temp.res

Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)

Title : GC-MS Semivolatiles SOP no. 506

Last Update : Fri Sep 06 16:39:44 2013

Response via : Multiple Level Calibration



(33) Benzoic acid (T)

6.92min 45.18ng/uL

response 404218

Ion	Exp%	Act%
105.00	100	100
122.00	73.60	72.66
77.00	82.40	84.91
0.00	0.00	0.00

*Zefer*



## Quantitation Report (Qedit)

Data File : D:\HPCHEM\1\DATA\090413\N8227.D

Vial: 11

Acq On : 4 Sep 2013 15:33

Operator: jk SOP 50

Sample : ICVSVSTD050

Inst : GC/MS Ins

Misc : ST130520-1

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Sep 6 16:46 2013

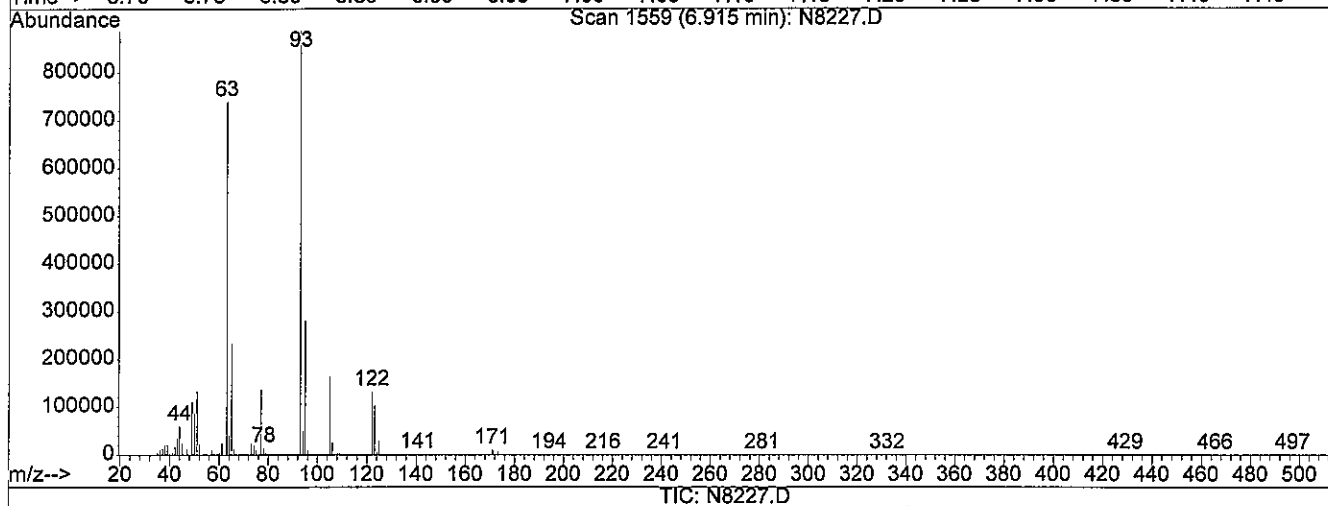
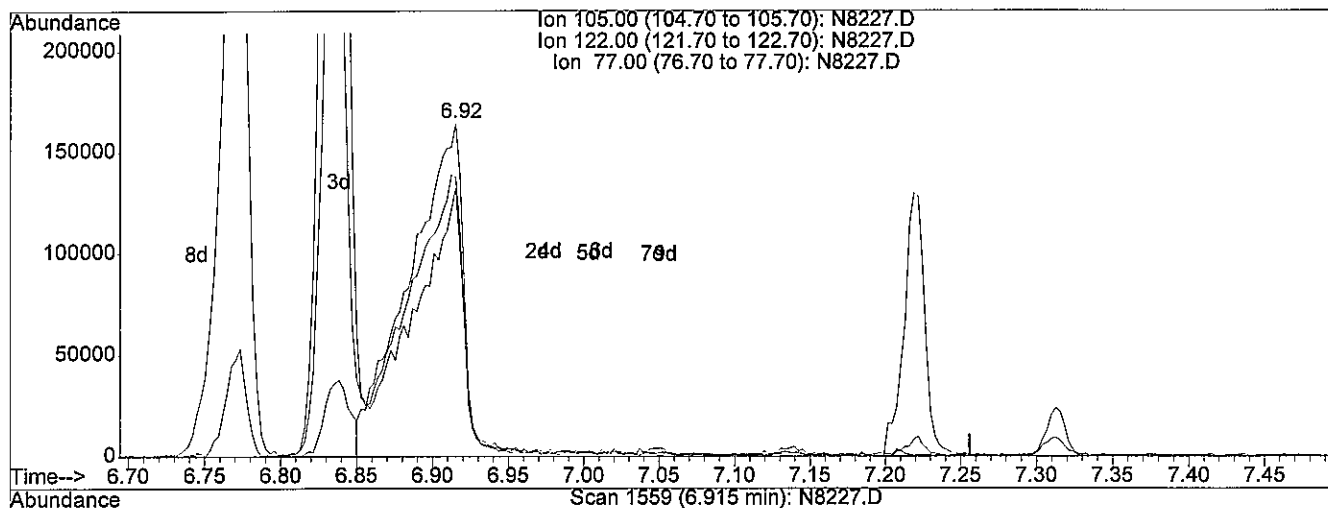
Quant Results File: temp.res

Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)

Title : GC-MS Semivolatiles SOP no. 506

Last Update : Fri Sep 06 16:39:44 2013

Response via : Multiple Level Calibration



(33) Benzoic acid (T)

6.92min 47.36ng/uL m

response 423688

Ion	Exp%	Act%
105.00	100	100
122.00	73.60	69.32
77.00	82.40	81.01
0.00	0.00	0.00

## MANUAL RE-INTEGRATION

- ☐ missed peak assignment
- ☐ assigned incorrect name to peak
- ☐ over-integrated peak's area
- ☒ under-integrated peak's area
- ☐ other \_\_\_\_\_

initials JK date 9-6-13

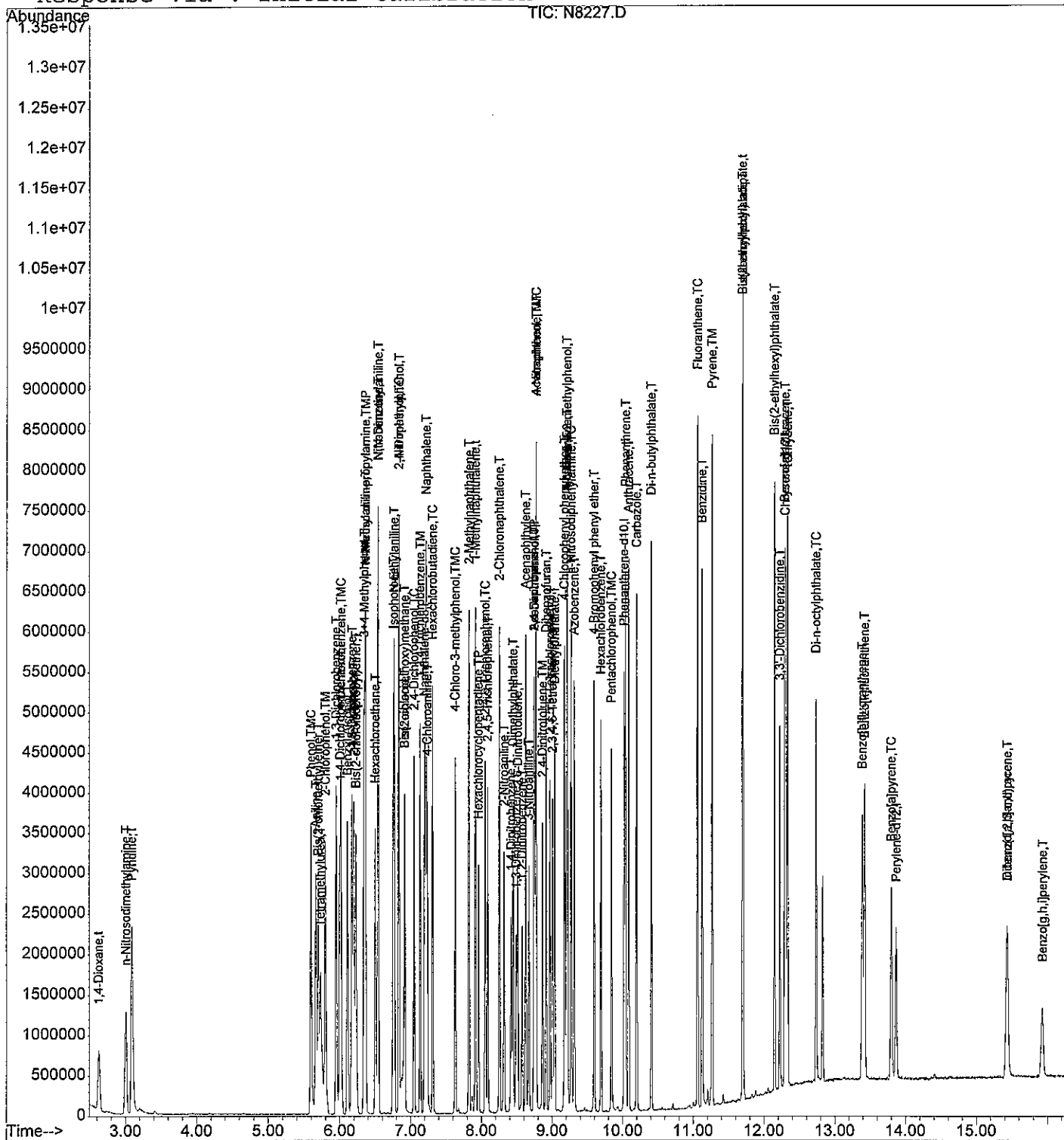
## Quantitation Report

Data File : D:\HPCHEM\1\DATA\090413\N8227.D  
Acq On : 4 Sep 2013 15:33  
Sample : ICVSVSTD050  
Misc : ST130520-1  
MS Integration Params: RTEINT.P  
Quant Time: Sep 6 16:47 2013

Vial: 11  
Operator: jk SOP 506  
Inst : GC/MS Ins  
Multiplr: 1.00

Quant Results File: 090413S1.RES

```
Method       : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)
Title        : GC-MS Semivolatiles      SOP no. 506
Last Update  : Fri Sep 06 16:39:44 2013
Response via : Initial Calibration
```



## DFTPP

Data File : D:\HPCHEM\1\DATA\091913\N8422.D

Acq On : 19 Sep 2013 14:00

Sample : 50 ppm dftpp+PCP+DDT+benzidine

Misc : ST130605-1

MS Integration Params: rteint.p

Method : D:\HPCHEM\1\METHODS\DFTPP.M (RTE Integrator)

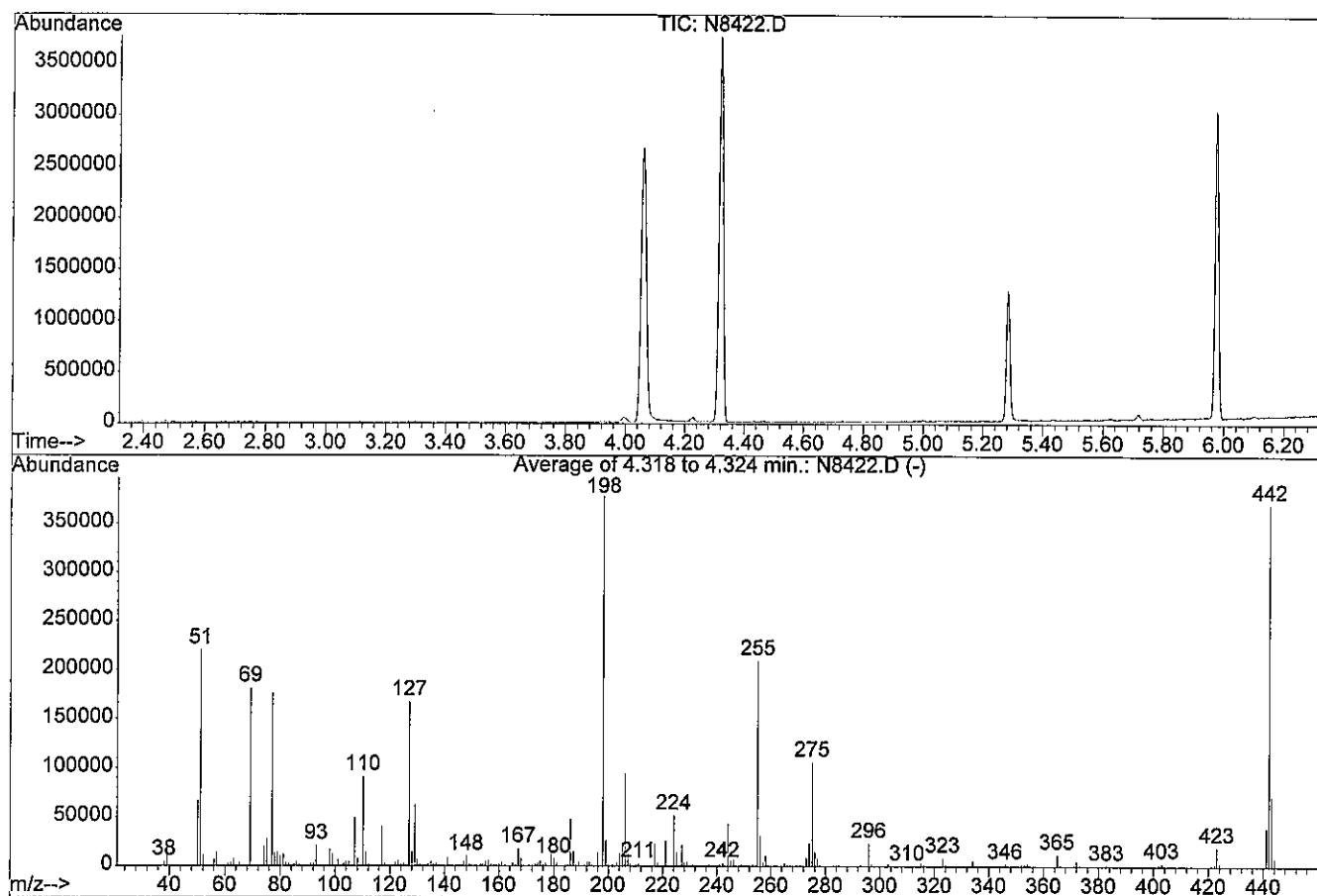
Title : DFTPP

Vial: 1

Operator: jk SOP 50

Inst : GC/MS Ins

Multiplr: 1.00



AutoFind: Scans 679, 680, 681; Background Corrected with Scan 669

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	58.3	220258	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	48.0	181440	PASS
70	69	0.00	2	0.2	317	PASS
127	198	40	60	44.3	167424	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	377963	PASS
199	198	5	9	7.0	26595	PASS
275	198	10	30	28.1	106037	PASS
365	198	1	100	3.2	12109	PASS
441	443	0.01	100	55.0	39459	PASS
442	198	40	100	97.8	369835	PASS
443	442	17	23	19.4	71715	PASS

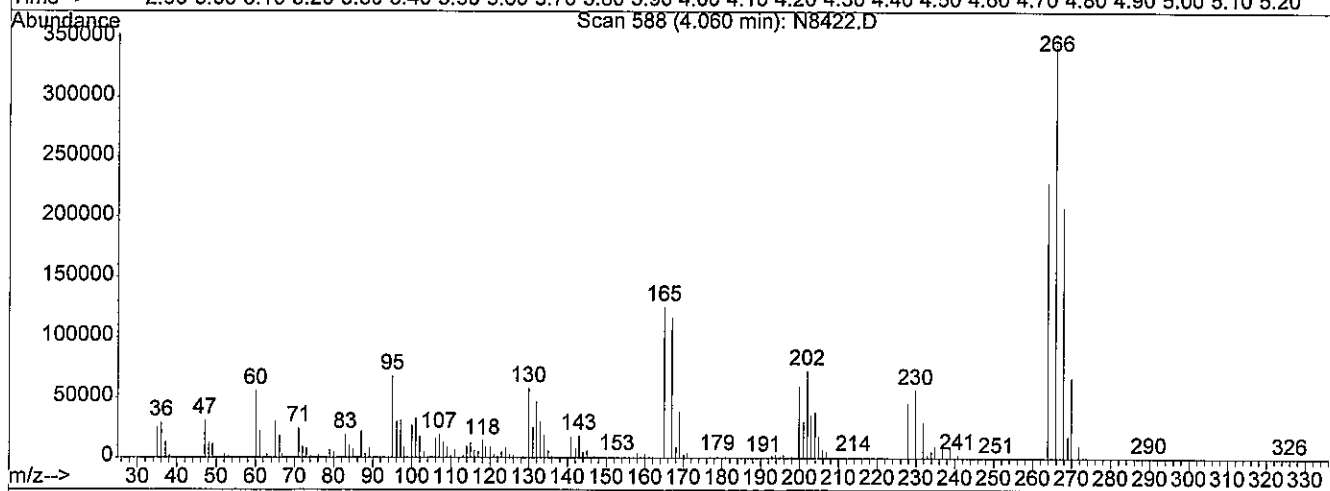
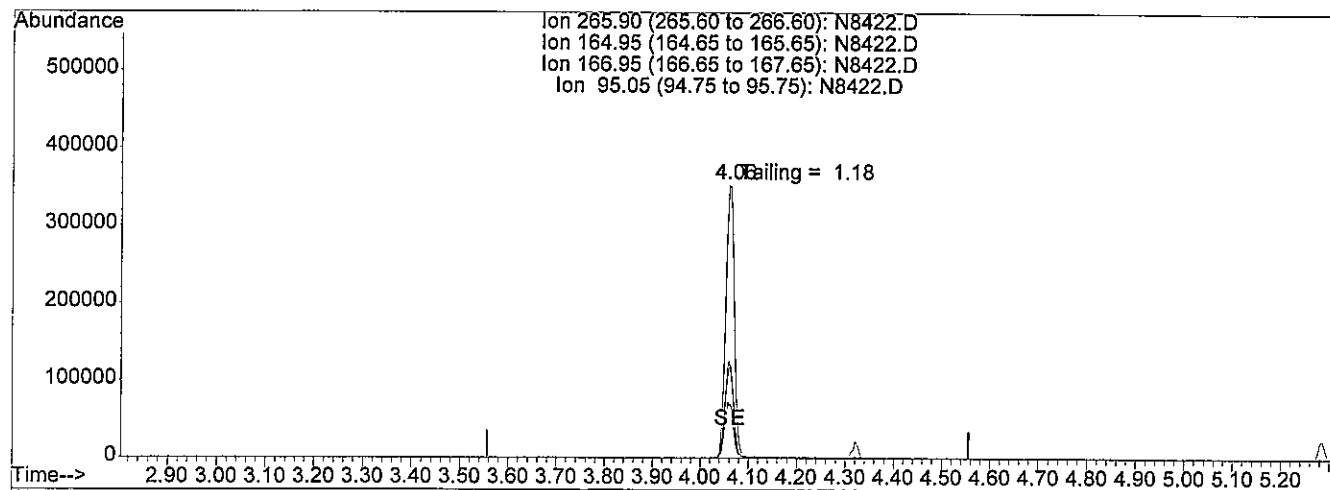
# Quantitation Report (Qedit)

Data File : D:\HPCHEM\1\DATA\091913\N8422.D  
 Acq On : 19 Sep 2013 14:00  
 Sample : 50 ppm dftpp+PCP+DDT+benzidine  
 Misc : ST130605-1  
 MS Integration Params: rteint.p  
 Quant Time: Sep 19 14:37 2013

Vial: 1  
 Operator: jk SOP 50  
 Inst : GC/MS Ins  
 Multiplr: 1.00

Quant Results File: temp.res

Method : D:\HPCHEM\1\METHODS\DFTPP.M (RTE Integrator)  
 Title : DFTPP  
 Last Update : Wed Sep 18 14:25:52 2013  
 Response via : Single Level Calibration



(1) Pentachlorophenol

4.06min 71.84

response 443837

Ion	Exp%	Act%
265.90	100	100
164.95	0.00	35.23#
166.95	0.00	33.73#
95.05	0.00	21.09#

SK  
9-20-13

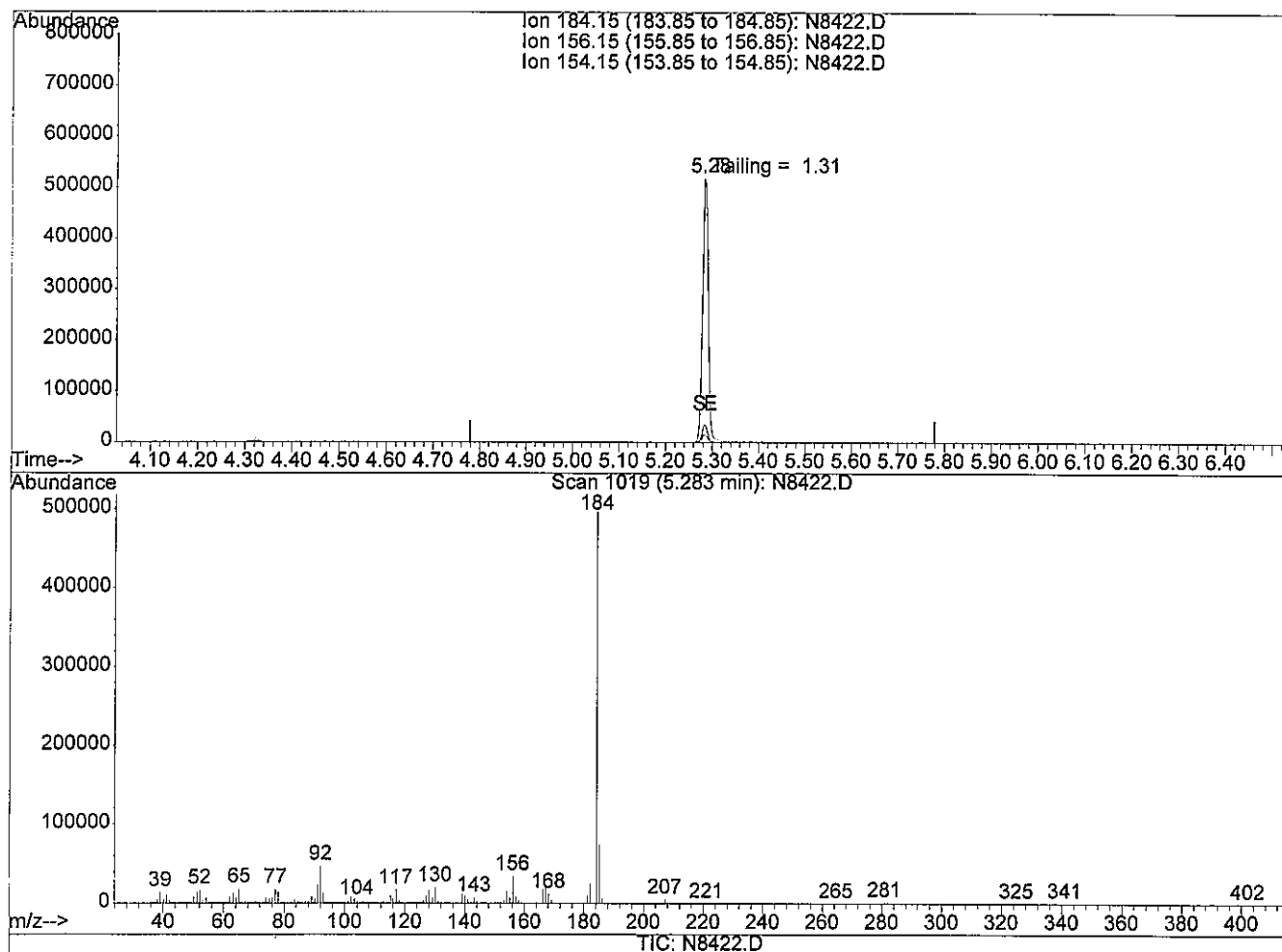
# Quantitation Report (Qedit)

Data File : D:\HPCHEM\1\DATA\091913\N8422.D  
 Acq On : 19 Sep 2013 14:00  
 Sample : 50 ppm dftpp+PCP+DDT+benzidine  
 Misc : ST130605-1  
 MS Integration Params: rteint.p  
 Quant Time: Sep 19 14:37 2013

Vial: 1  
 Operator: jk SOP 50  
 Inst : GC/MS Ins  
 Multiplr: 1.00

Quant Results File: temp.res

Method : D:\HPCHEM\1\METHODS\DFTPP.M (RTE Integrator)  
 Title : DFTPP  
 Last Update : Wed Sep 18 14:25:52 2013  
 Response via : Single Level Calibration



(3) Benzidine

5.28min 38.18

response 445507

Ion	Exp%	Act%
184.15	100	100
156.15	0.00	6.68#
154.15	0.00	3.01#
0.00	0.00	0.00

JK  
9-20-13

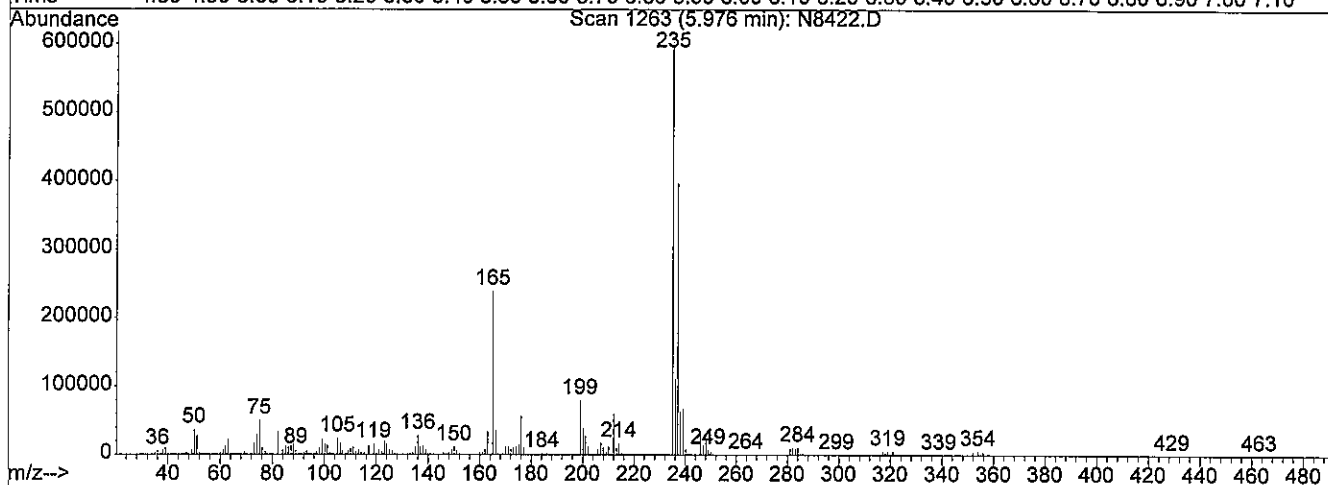
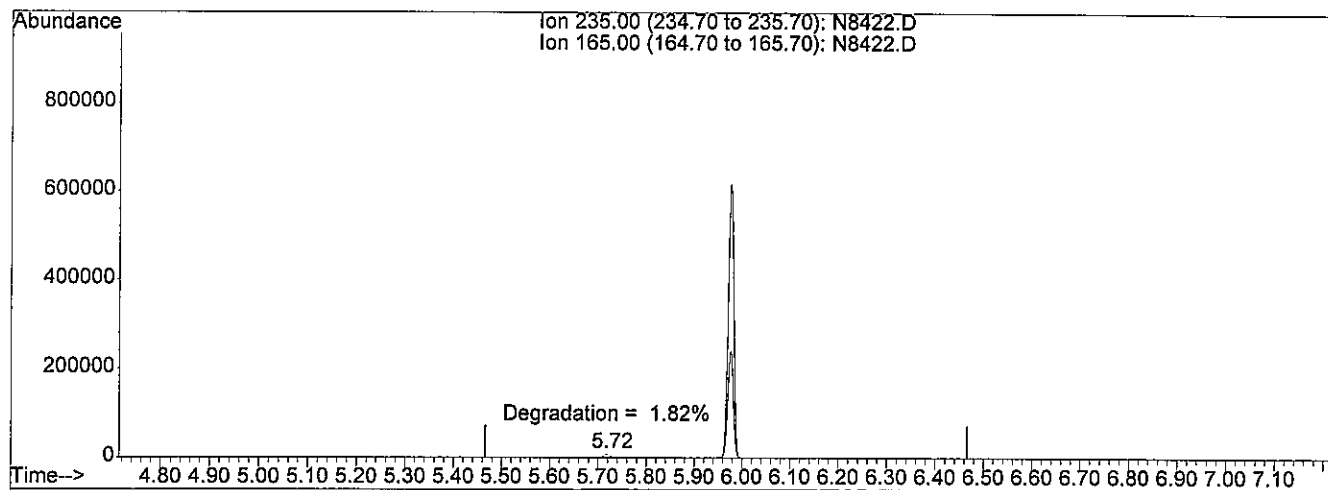
# Quantitation Report (Qedit)

Data File : D:\HPCHEM\1\DATA\091913\N8422.D  
 Acq On : 19 Sep 2013 14:00  
 Sample : 50 ppm dftpp+PCP+DDT+benzidine  
 Misc : ST130605-1  
 MS Integration Params: rteint.p  
 Quant Time: Sep 19 14:37 2013

Vial: 1  
 Operator: jk SOP 50  
 Inst : GC/MS Ins  
 Multiplr: 1.00

Quant Results File: temp.res

Method : D:\HPCHEM\1\METHODS\DFTPP.M (RTE Integrator)  
 Title : DFTPP  
 Last Update : Wed Sep 18 14:25:52 2013  
 Response via : Single Level Calibration



## (4) DDT

5.98min 55.1850

response 501657

Ion	Exp%	Act%
235.00	100	100
165.00	0.00	39.13#
0.00	0.00	0.00
0.00	0.00	0.00

21  
9-20-13

Data File : D:\HPCHEM\1\DATA\091913\N8423.D

Acq On : 19 Sep 2013 14:16

Sample : CCV

Misc : ST130912-2 60 PPM

MS Integration Params: RTEINT.P

Quant Time: Sep 19 14:36 2013

Vial: 2

Operator: jk SOP 506 Rev

Inst : GC/MS Ins

Multiplr: 1.00

Quant Results File: 090413S1.RES

Quant Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)

Title : GC-MS Semivolatiles SOP no. 506

Last Update : Thu Sep 19 14:34:02 2013

Response via : Initial Calibration

DataAcq Meth : 090413S1

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	5.93	152	419027	40.00	ng/uL	0.00
24) Naphthalene-d8	7.13	136	1717262	40.00	ng/uL	0.00
41) Acenaphthene-d10	8.68	164	864426	40.00	ng/uL	0.00
69) Phenanthrene-d10	9.96	188	1856483	40.00	ng/uL	0.00
80) Chrysene-d12	12.24	240	1782321	40.00	ng/uL	0.00
91) Perylene-d12	13.76	264	871575	40.00	ng/uL	0.00

## System Monitoring Compounds

5) 2-Fluorophenol	4.53	112	967081	67.50	ng/uL	0.00
Spiked Amount 75.000	Range 46 - 105		Recovery =	90.00%		
6) 2-Chlorophenol-d4	5.71	132	781359	64.56	ng/uL	0.00
Spiked Amount 75.000	Range 33 - 110		Recovery =	86.08%		
8) Phenol-d5	5.51	99	1202202	64.21	ng/uL	0.00
Spiked Amount 75.000	Range 50 - 109		Recovery =	85.61%		
15) 1,2-Dichlorobenzene-d4	6.08	152	569672	59.36	ng/uL	0.00
Spiked Amount 50.000	Range 16 - 110		Recovery =	118.72%#		
25) Nitrobenzene-d5	6.45	82	938138	48.10	ng/uL	0.00
Spiked Amount 50.000	Range 53 - 111		Recovery =	96.20%		
46) 2-Fluorobiphenyl	8.05	172	1568614	53.89	ng/uL	0.00
Spiked Amount 50.000	Range 55 - 108		Recovery =	107.78%		
68) 2,4,6-Tribromophenol	9.35	330	255033	57.45	ng/uL	0.00
Spiked Amount 75.000	Range 42 - 117		Recovery =	76.60%		
83) p-Terphenyl-d14	11.27	244	2137223	51.36	ng/uL	0.00
Spiked Amount 50.000	Range 34 - 139		Recovery =	102.72%		

## Target Compounds

						Qvalue
2) 1,4-Dioxane	2.51	88	418412m	60.08	ng/uL	
3) n-Nitrosodimethylamine	2.89	74	613099m	59.10	ng/uL	
4) Pyridine	2.97	79	1000568m	57.04	ng/uL	
7) Aniline	5.59	93	1316514	60.12	ng/uL	96
9) Phenol	5.53	94	1123004	62.36	ng/uL	99
10) Tetramethylurea	5.66	72	1525872	62.04	ng/uL	95
11) Bis(2-chloroethyl) ether	5.63	93	840975	60.60	ng/uL	95
12) 2-Chlorophenol	5.72	128	807538	62.33	ng/uL	99
13) 1,3-Dichlorobenzene	5.87	146	993714	64.21	ng/uL	99
14) 1,4-Dichlorobenzene	5.94	146	925615	64.19	ng/uL	100
16) 1,2-Dichlorobenzene	6.10	146	870028	64.96	ng/uL	99
17) Benzyl Alcohol	6.04	108	564626	64.63	ng/uL	93
18) 2-Methylphenol	6.13	107	691224	64.63	ng/uL#	90
19) Bis(2-chloroisopropyl) ethe	6.16	45	1648401	69.79	ng/uL#	77
20) n-Nitroso-di-n-propylamine	6.29	70	648571	63.41	ng/uL	99
21) 3+4-Methylphenol	6.28	108	845953m	64.39	ng/uL	

(#)=qualifier out of range (m)=manual integration

N8423.D 090413S1.M Thu Sep 19 14:36:28 2013

M  
9-20-13

Page 1

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Data File : D:\HPCHEM\1\DATA\091913\N8423.D

Vial: 2

Acq On : 19 Sep 2013 14:16

Operator: jk SOP 506 Rev

Sample : CCV

Inst : GC/MS Ins

Misc : ST130912-2 60 PPM

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Sep 19 14:36 2013

Quant Results File: 090413S1.RES

Quant Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)

Title : GC-MS Semivolatiles SOP no. 506

Last Update : Thu Sep 19 14:34:02 2013

Response via : Initial Calibration

DataAcq Meth : 090413S1

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
22) N-Methylaniline	6.29	106	1226255	64.43	ng/uL	98
23) Hexachloroethane	6.42	117	404891	66.70	ng/uL	98
26) N,N-Dimethylaniline	6.47	120	1252001	56.26	ng/uL	99
27) Nitrobenzene	6.47	77	1220154	53.07	ng/uL	98
28) Isophorone	6.69	82	1741723	58.10	ng/uL	98
29) N-Ethylaniline	6.70	106	1514725	55.61	ng/uL	99
30) 2-Nitrophenol	6.77	139	438277	61.48	ng/uL	91
31) 2,4-Dimethylphenol	6.77	107	836953	56.61	ng/uL	99
32) Bis(2-chloroethoxy)methane	6.85	93	966628	54.40	ng/uL	99
33) Benzoic acid	6.86	105	416234m	55.29	ng/uL	
34) 2,4-Dichlorophenol	6.98	162	727714	56.83	ng/uL	99
35) 1,2,4-Trichlorobenzene	7.07	180	874061	55.48	ng/uL	98
36) Naphthalene	7.15	128	2319831	54.60	ng/uL#	83
37) 4-Chloroaniline	7.17	127	873899m	56.92	ng/uL	
38) Hexachlorobutadiene	7.24	225	521081	52.02	ng/uL	99
39) 4-Chloro-3-methylphenol	7.57	107	726746	57.33	ng/uL	99
40) 2-Methylnaphthalene	7.75	142	1524864	50.11	ng/uL	94
42) 1-Methylnaphthalene	7.85	142	1435989	57.09	ng/uL	94
43) Hexachlorocyclopentadiene	7.89	237	453704	58.96	ng/uL	96
44) 2,4,6-Trichlorophenol	7.99	196	507965	55.91	ng/uL	94
45) 2,4,5-Trichlorophenol	8.03	196	480275	56.38	ng/uL	93
47) 2-Chloronaphthalene	8.19	162	1395481	55.12	ng/uL	100
48) 2-Nitroaniline	8.26	65	478085	56.21	ng/uL	96
49) 1,4-Dinitrobenzene	8.36	168	242452	63.82	ng/uL	89
50) Dimethylphthalate	8.38	163	1354483	52.03	ng/uL	100
51) 1,3-Dinitrobenzene	8.43	168	262810	60.72	ng/uL	87
52) 2,6-Dinitrotoluene	8.45	165	340389	56.85	ng/uL	90
53) 1,2-Dinitrobenzene	8.51	168	162738	57.49	ng/uL	88
54) Acenaphthylene	8.56	152	1841985	49.42	ng/uL#	98
55) 3-Nitroaniline	8.61	138	340207	60.71	ng/uL	95
56) Acenaphthene	8.71	154	1277606	57.05	ng/uL	96
57) 2,4-Dinitrophenol	8.69	184	203748	61.20	ng/uL#	5
58) 4-Nitrophenol	8.72	109	189229	52.97	ng/uL	85
59) Dibenzofuran	8.85	168	1907878	57.78	ng/uL	97
60) 2,4-Dinitrotoluene	8.80	165	507418	63.26	ng/uL	88
61) 2,3,5,6-Tetrachlorophenol	8.91	232	444617	54.38	ng/uL	99
62) 2,3,4,6-Tetrachlorophenol	8.94	232	429339	54.56	ng/uL	97
63) Diethylphthalate	8.97	149	1391650	58.38	ng/uL	99
64) 4-Chlorophenyl phenyl ethe	9.11	204	848362	56.81	ng/uL	94
65) 4-Nitroaniline	9.14	138	325666	64.63	ng/uL	91
66) Fluorene	9.14	166	1399006	54.60	ng/uL	100

(#)=qualifier out of range (m)=manual integration

N8423.D 090413S1.M Thu Sep 19 14:36:28 2013



Data File : D:\HPCHEM\1\DATA\091913\N8423.D  
 Acq On : 19 Sep 2013 14:16  
 Sample : CCV  
 Misc : ST130912-2 60 PPM  
 MS Integration Params: RTEINT.P  
 Quant Time: Sep 19 14:36 2013

Vial: 2  
 Operator: jk SOP 506 Rev  
 Inst : GC/MS Ins  
 Multiplr: 1.00

Quant Results File: 090413S1.RES

Quant Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)  
 Title : GC-MS Semivolatiles SOP no. 506  
 Last Update : Thu Sep 19 14:34:02 2013  
 Response via : Initial Calibration  
 DataAcq Meth : 090413S1

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
67) Azobenzene	9.25	77	1440998	53.71	ng/uL	97
70) 4,6-Dinitro-2-methylphenol	9.16	198	292944	57.46	ng/uL	94
71) n-Nitrosodiphenylamine	9.21	169	1228662	50.03	ng/uL	98
72) 4-Bromophenyl phenyl ether	9.53	248	493465	46.73	ng/uL	95
73) Hexachlorobenzene	9.63	284	609645	54.36	ng/uL	96
74) Pentachlorophenol	9.78	266	400975m	51.90	ng/uL	
75) Phenanthrene	9.98	178	2389323	55.82	ng/uL	99
76) Anthracene	10.02	178	2486270	55.73	ng/uL	99
77) Carbazole	10.14	167	2347425	56.69	ng/uL	100
78) Di-n-butylphthalate	10.34	149	2890759	57.54	ng/uL	100
79) Fluoranthene	11.00	202	3079490	52.01	ng/uL	98
81) Benzidine	11.06	184	1572446	58.30	ng/uL	99
82) Pyrene	11.20	202	2821916	49.70	ng/uL	98
84) Butylbenzylphthalate	11.64	149	1074781	58.64	ng/uL	99
85) Bis(2-ethylhexyl) adipate	11.64	129	895927	57.88	ng/uL	99
86) Bis(2-ethylhexyl)phthalate	12.09	149	1339742	56.19	ng/uL	99
87) 3,3'-Dichlorobenzidine	12.16	252	1099611	69.91	ng/uL	97
88) Benzo[a]anthracene	12.23	228	2684759	55.73	ng/uL	100
89) Chrysene	12.27	228	2373855	53.98	ng/uL	99
90) Di-n-octylphthalate	12.66	149	1943195	59.98	ng/uL	97
92) Benzo[b]fluoranthene	13.30	252	1662586	59.19	ng/uL	98
93) Benzo[k]fluoranthene	13.33	252	1631823	59.79	ng/uL	99
94) Benzo[a]pyrene	13.70	252	1441243	62.23	ng/uL	97
95) Indeno(1,2,3-c,d)pyrene	15.29	276	940827	51.57	ng/uL	93
96) Dibenzo[a,h]anthracene	15.27	278	852554	53.24	ng/uL	97
97) Benzo[g,h,i]perylene	15.76	276	638282	44.73	ng/uL	97

Data File : D:\HPCHEM\1\DATA\091913\N8423.D

Acq On : 19 Sep 2013 14:16

Sample : CCV

Misc : ST130912-2 60 PPM

MS Integration Params: RTEINT.P

Quant Time: Sep 19 14:34 2013

Vial: 2

Operator: jk SOP 50

Inst : GC/MS Ins

Multiplr: 1.00

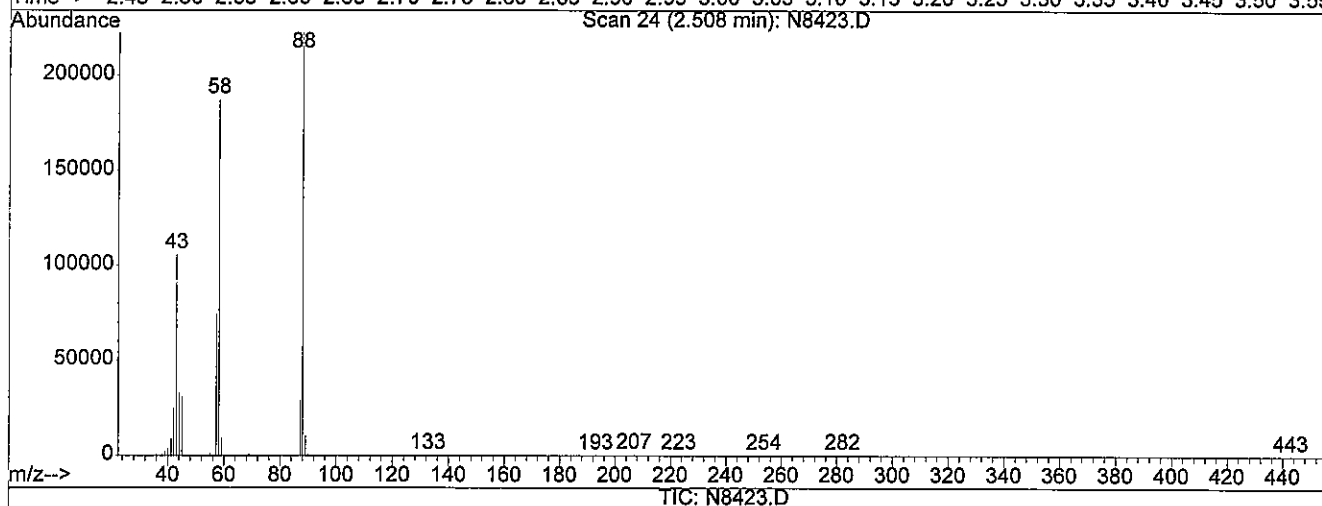
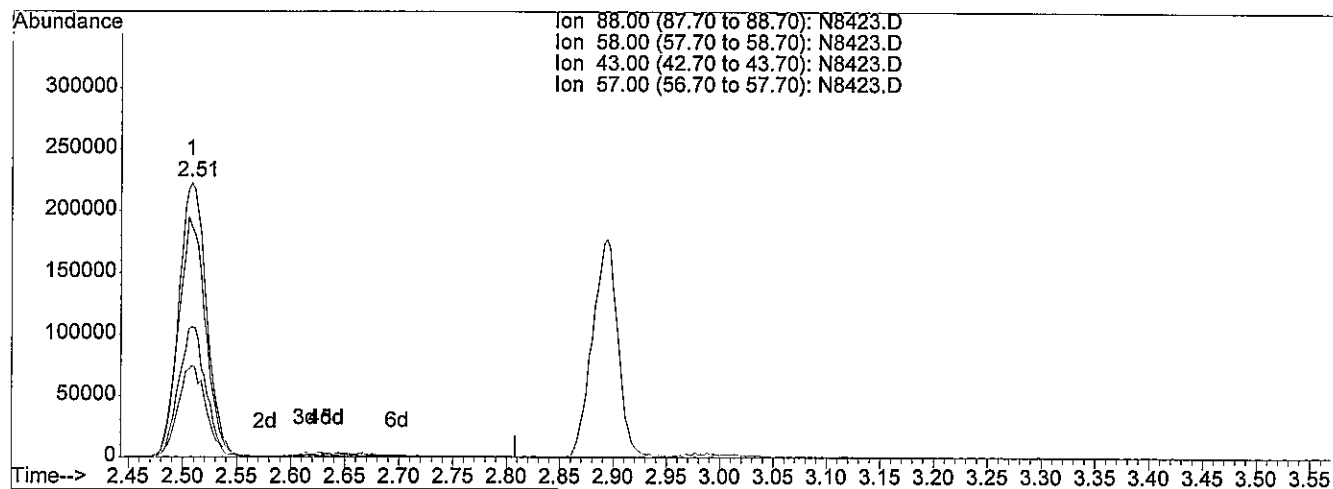
Quant Results File: temp.res

Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)

Title : GC-MS Semivolatiles SOP no. 506

Last Update : Thu Sep 19 14:34:02 2013

Response via : Multiple Level Calibration



(2) 1,4-Dioxane (t)

2.51min 57.30ng/uL

response 399051

Ion	Exp%	Act%
88.00	100	100
58.00	77.90	84.90
43.00	47.90	46.66
57.00	33.00	33.59

*3e fore*

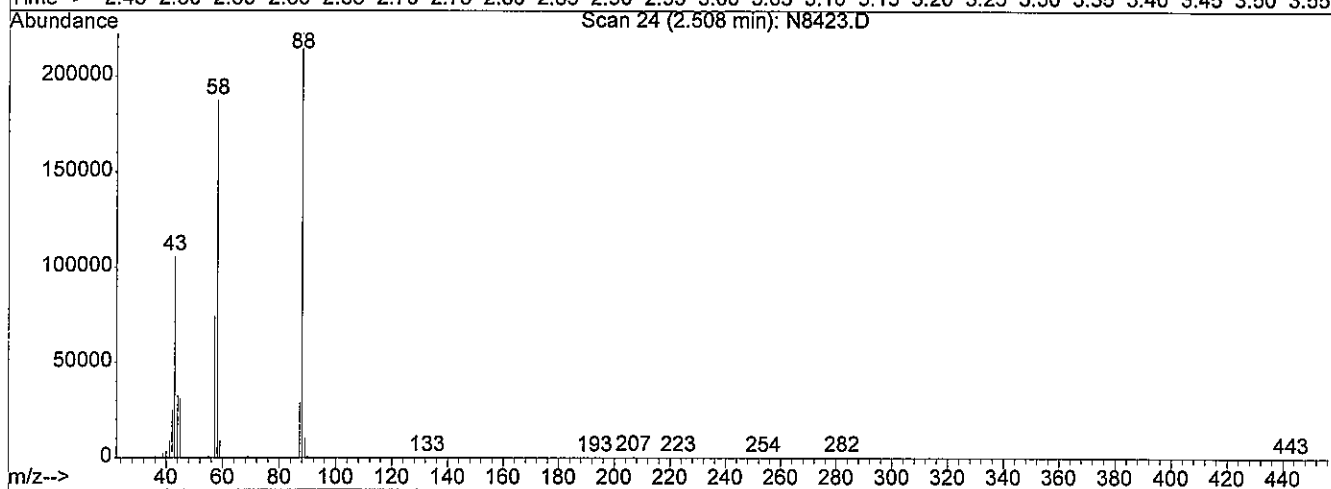
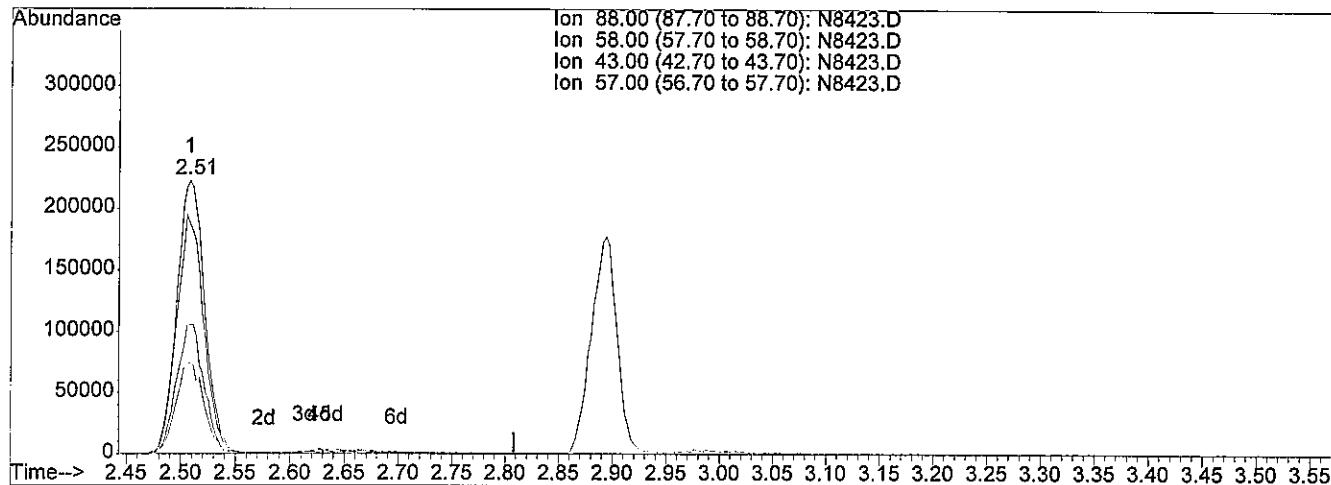
# Quantitation Report (Qedit)

Data File : D:\HPCHEM\1\DATA\091913\N8423.D  
 Acq On : 19 Sep 2013 14:16  
 Sample : CCV  
 Misc : ST130912-2 60 PPM  
 MS Integration Params: RTEINT.P  
 Quant Time: Sep 19 14:34 2013

Vial: 2  
 Operator: jk SOP 50  
 Inst : GC/MS Ins  
 Multiplr: 1.00

Quant Results File: temp.res

Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)  
 Title : GC-MS Semivolatiles SOP no. 506  
 Last Update : Thu Sep 19 14:34:02 2013  
 Response via : Multiple Level Calibration



(2) 1,4-Dioxane (t)

2.51min 60.08ng/uL m

response 418412

Ion	Exp%	Act%
88.00	100	100
58.00	77.90	80.97
43.00	47.90	44.50
57.00	33.00	32.03

## MANUAL RE-INTEGRATION

- ☐ missed peak assignment
- ☐ assigned incorrect name to peak
- ☐ over-integrated peak's area
- ☒ under-integrated peak's area
- ☐ other \_\_\_\_\_

initials JK date 7-20-13

# Quantitation Report (Qedit)

Data File : D:\HPCHEM\1\DATA\091913\N8423.D

Acq On : 19 Sep 2013 14:16

Sample : CCV

Misc : ST130912-2 60 PPM

MS Integration Params: RTEINT.P

Quant Time: Sep 19 14:34 2013

Vial: 2

Operator: jk SOP 50

Inst : GC/MS Ins

Multiplr: 1.00

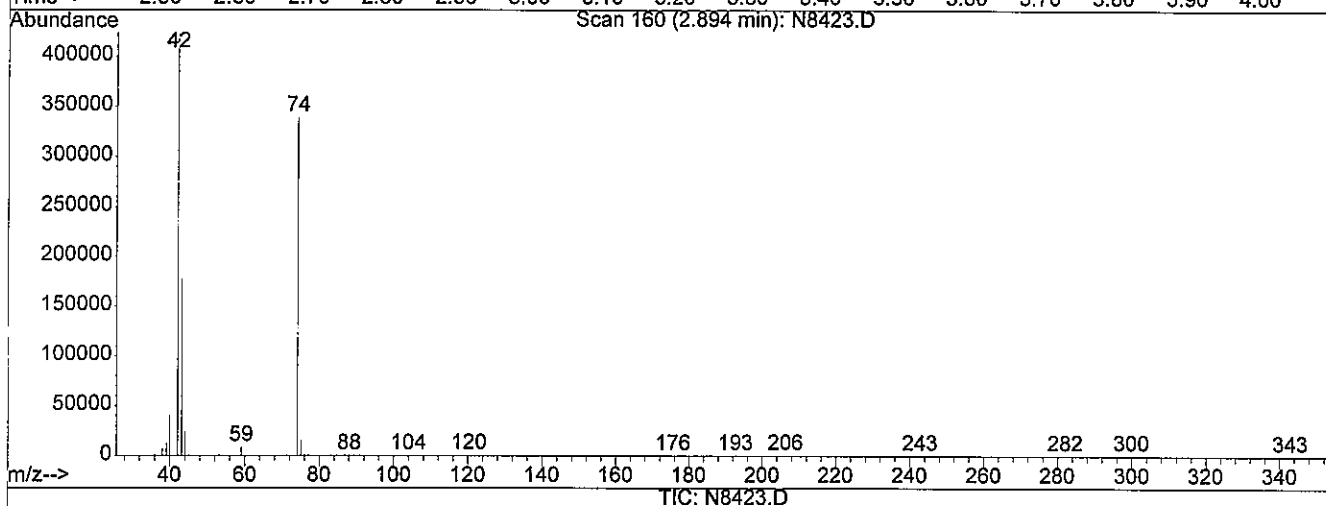
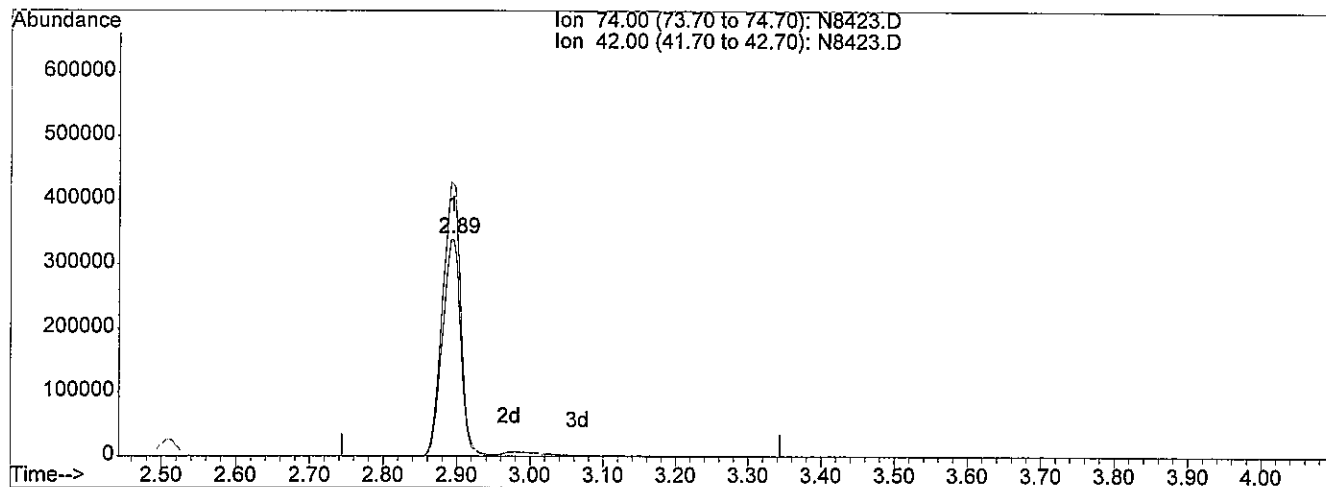
Quant Results File: temp.res

Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)

Title : GC-MS Semivolatiles SOP no. 506

Last Update : Thu Sep 19 14:34:02 2013

Response via : Multiple Level Calibration



(3) n-Nitrosodimethylamine (T)

2.89min 56.11ng/uL

response 582128

Ion	Exp%	Act%
74.00	100	100
42.00	129.50	126.00
0.00	0.00	0.00
0.00	0.00	0.00

*So fire*

# Quantitation Report (Qedit)

Data File : D:\HPCHEM\1\DATA\091913\N8423.D

Vial: 2

Acq On : 19 Sep 2013 14:16

Operator: jk SOP 50

Sample : CCV

Inst : GC/MS Ins

Misc : ST130912-2 60 PPM

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Sep 19 14:34 2013

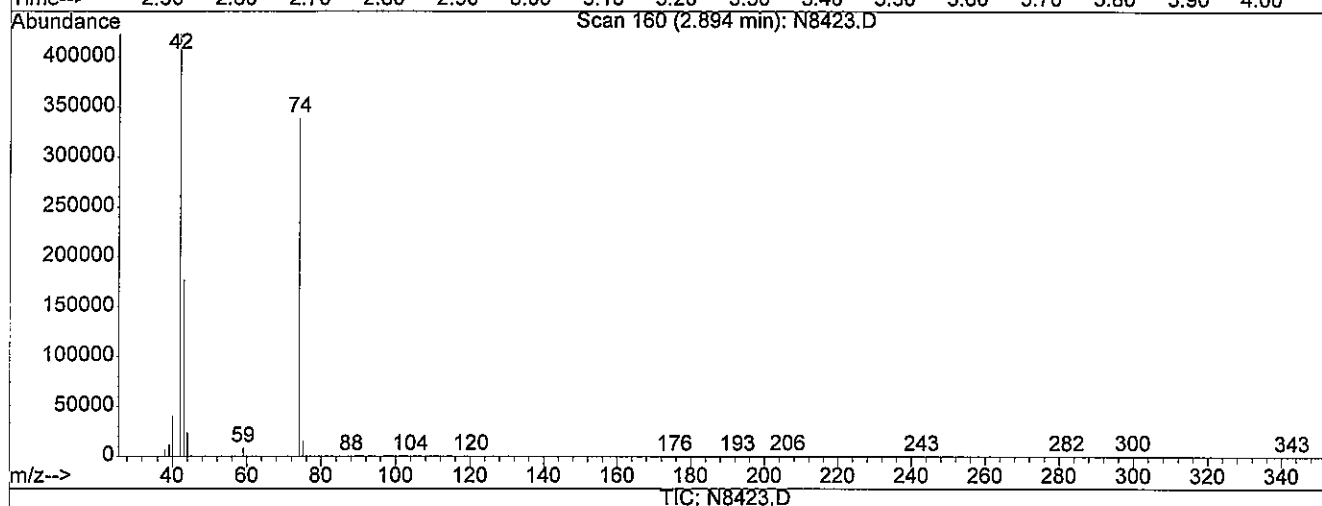
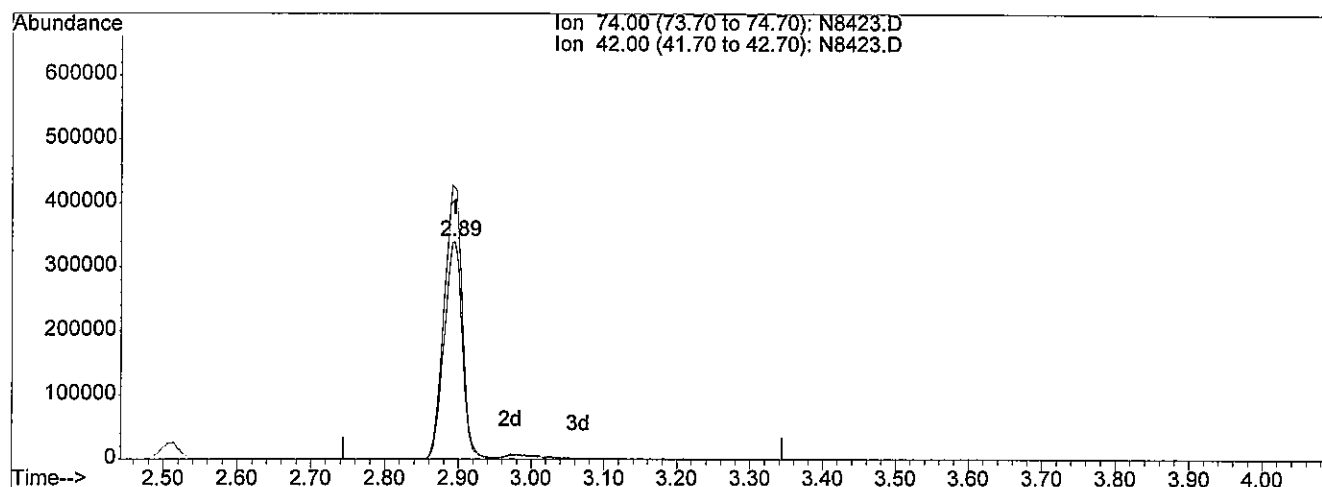
Quant Results File: temp.res

Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)

Title : GC-MS Semivolatiles SOP no. 506

Last Update : Thu Sep 19 14:34:02 2013

Response via : Multiple Level Calibration



(3) n-Nitrosodimethylamine (T)

2.89min 59.10ng/uL m

response 613099

Ion	Exp%	Act%
74.00	100	100
42.00	129.50	119.64
0.00	0.00	0.00
0.00	0.00	0.00

## MANUAL RE-INTEGRATION

- ☐ missed peak assignment
- ☐ assigned incorrect name to peak
- ☐ over-integrated peak's area
- ☒ under-integrated peak's area
- ☐ other \_\_\_\_\_

initials ji date 9-10-13

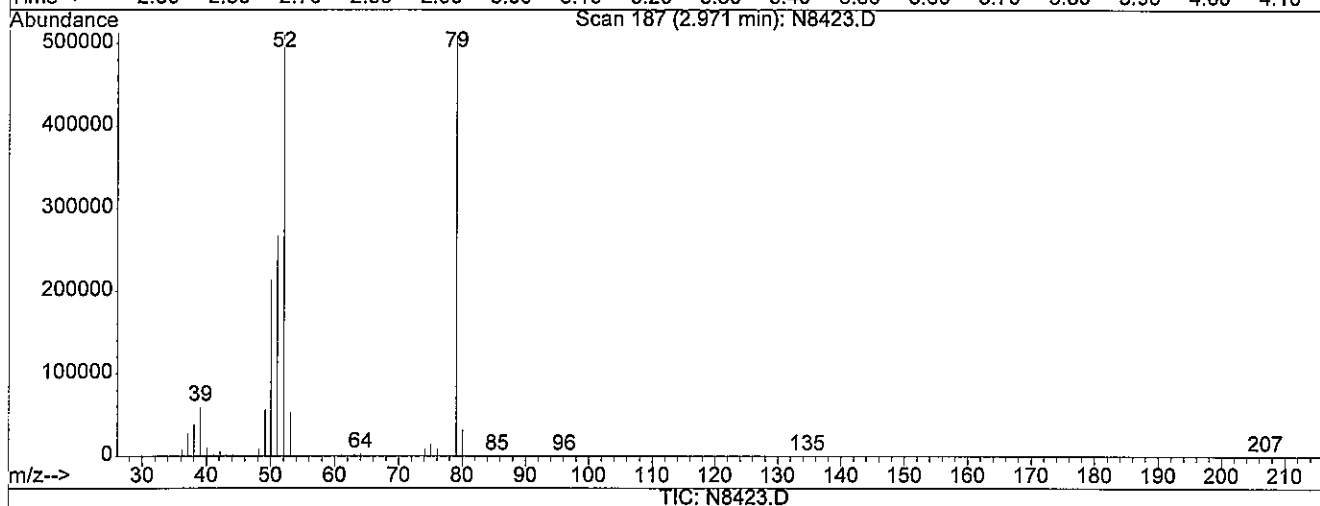
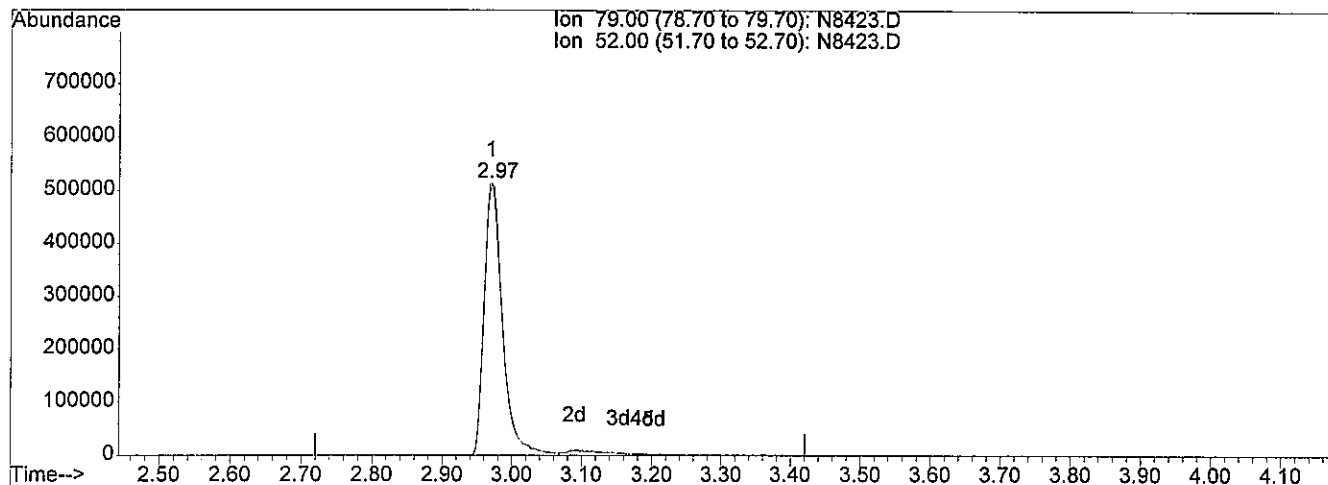
# Quantitation Report (Qedit)

Data File : D:\HPCHEM\1\DATA\091913\N8423.D  
 Acq On : 19 Sep 2013 14:16  
 Sample : CCV  
 Misc : ST130912-2 60 PPM  
 MS Integration Params: RTEINT.P  
 Quant Time: Sep 19 14:34 2013

Vial: 2  
 Operator: jk SOP 50  
 Inst : GC/MS Ins  
 Multiplr: 1.00

Quant Results File: temp.res

Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)  
 Title : GC-MS Semivolatiles SOP no. 506  
 Last Update : Thu Sep 19 14:34:02 2013  
 Response via : Multiple Level Calibration



(4) Pyridine (T)

2.97min 53.76ng/uL

response 943124

Ion	Exp%	Act%
79.00	100	100
52.00	93.60	98.52
0.00	0.00	0.00
0.00	0.00	0.00

*John*

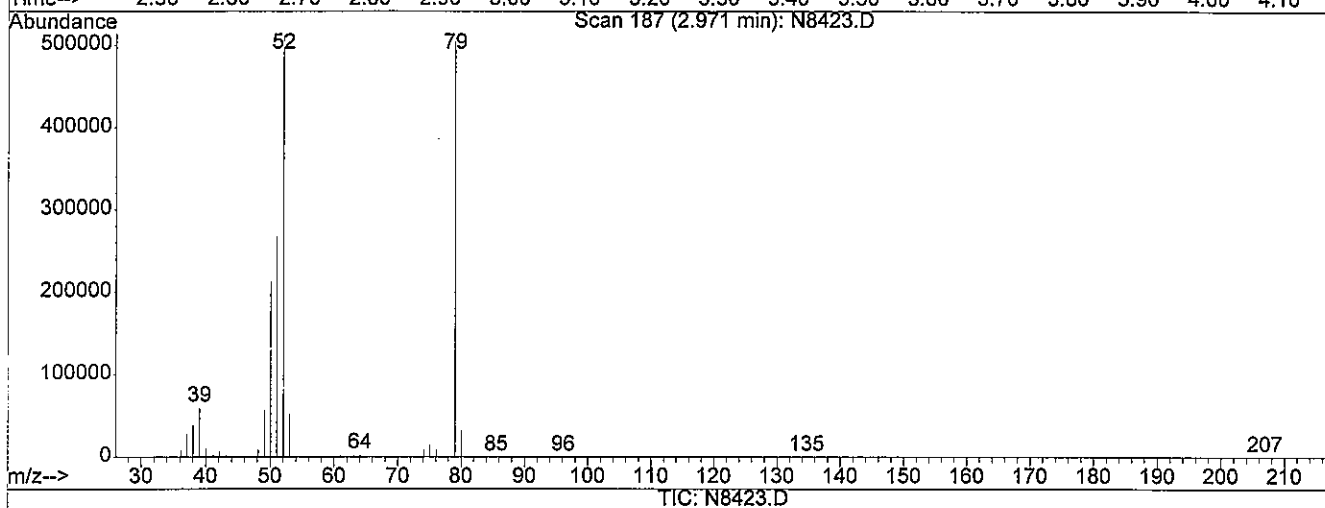
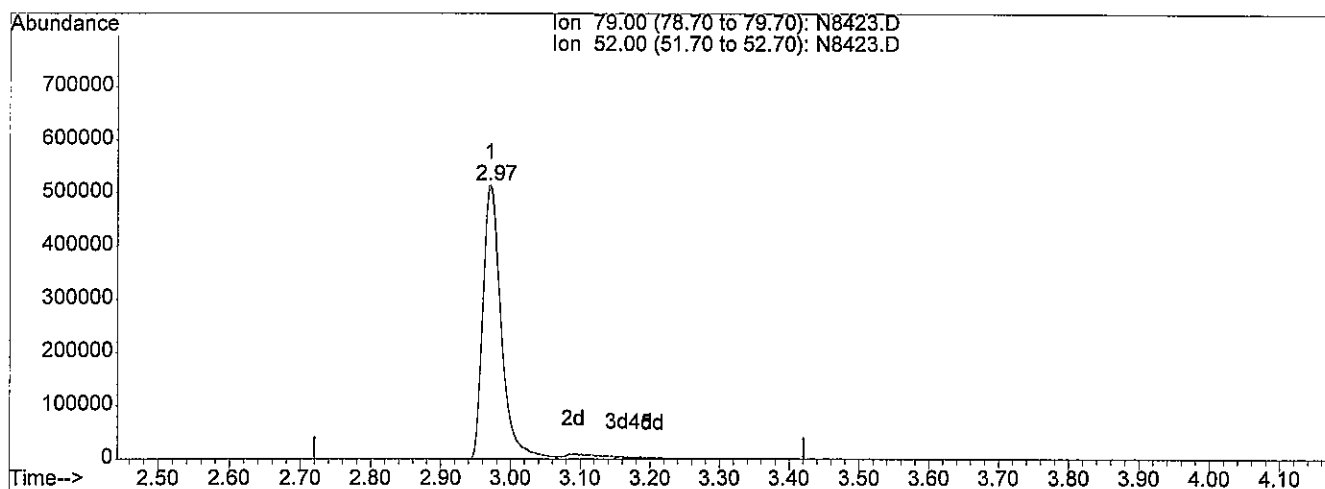
# Quantitation Report (Qedit)

Data File : D:\HPCHEM\1\DATA\091913\N8423.D  
 Acq On : 19 Sep 2013 14:16  
 Sample : CCV  
 Misc : ST130912-2 60 PPM  
 MS Integration Params: RTEINT.P  
 Quant Time: Sep 19 14:34 2013

Vial: 2  
 Operator: jk SOP 50  
 Inst : GC/MS Ins  
 Multiplr: 1.00

Quant Results File: temp.res

Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)  
 Title : GC-MS Semivolatiles SOP no. 506  
 Last Update : Thu Sep 19 14:34:02 2013  
 Response via : Multiple Level Calibration



(4) Pyridine (T)

2.97min 57.04ng/uL m

response 1000568

Ion	Exp%	Act%
79.00	100	100
52.00	93.60	92.86
0.00	0.00	0.00
0.00	0.00	0.00

## MANUAL RE-INTEGRATION

- ☐ missed peak assignment
- ☐ assigned incorrect name to peak
- ☐ over-integrated peak's area
- ☒ under-integrated peak's area
- ☐ other \_\_\_\_\_

initials ju date 9-20-13

# Quantitation Report (Qedit)

Data File : D:\HPCHEM\1\DATA\091913\N8423.D

Vial: 2

Acq On : 19 Sep 2013 14:16

Operator: jk SOP 50

Sample : CCV

Inst : GC/MS Ins

Misc : ST130912-2 60 PPM

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Sep 19 14:34 2013

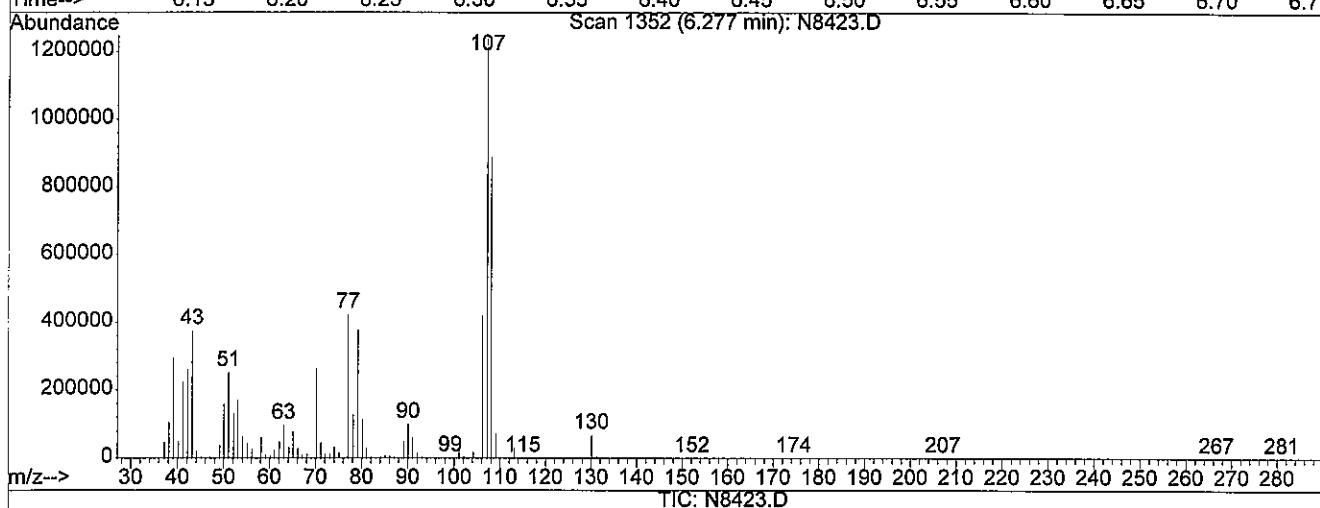
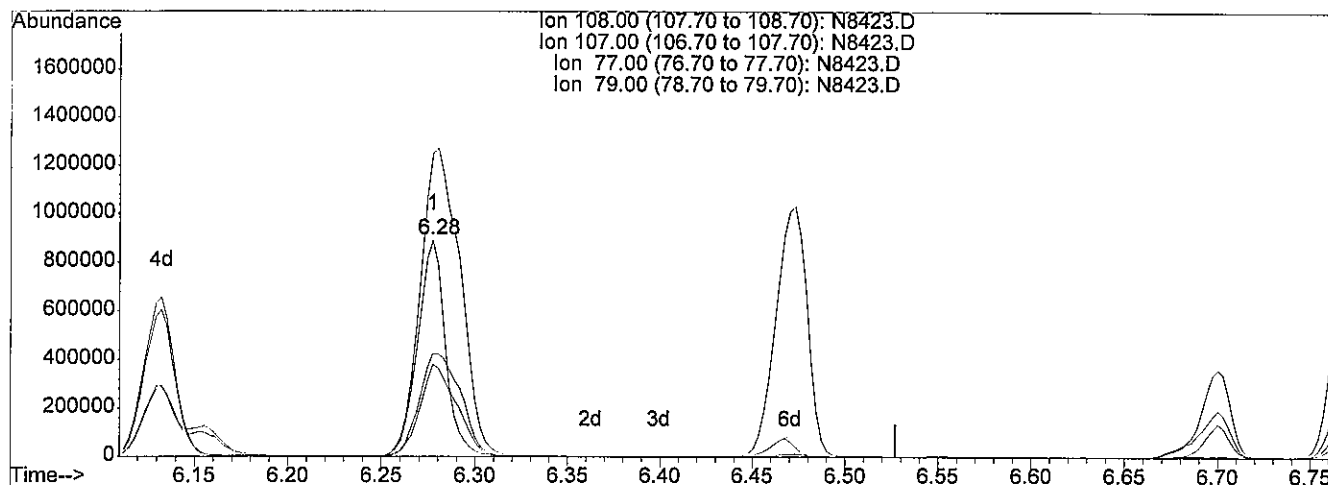
Quant Results File: temp.res

Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)

Title : GC-MS Semivolatiles SOP no. 506

Last Update : Thu Sep 19 14:34:02 2013

Response via : Multiple Level Calibration



(21) 3+4-Methylphenol (T)

6.28min 70.03ng/uL

response 920068

Ion	Exp%	Act%
108.00	100	100
107.00	210.50	204.36
77.00	76.70	70.48
79.00	63.20	56.33

*3068*



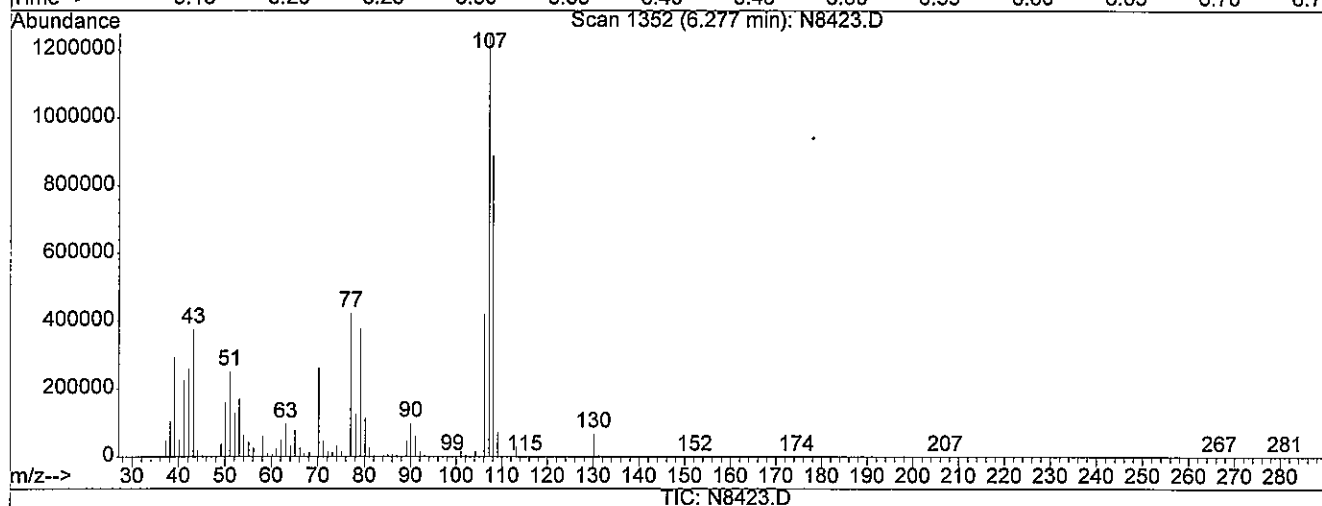
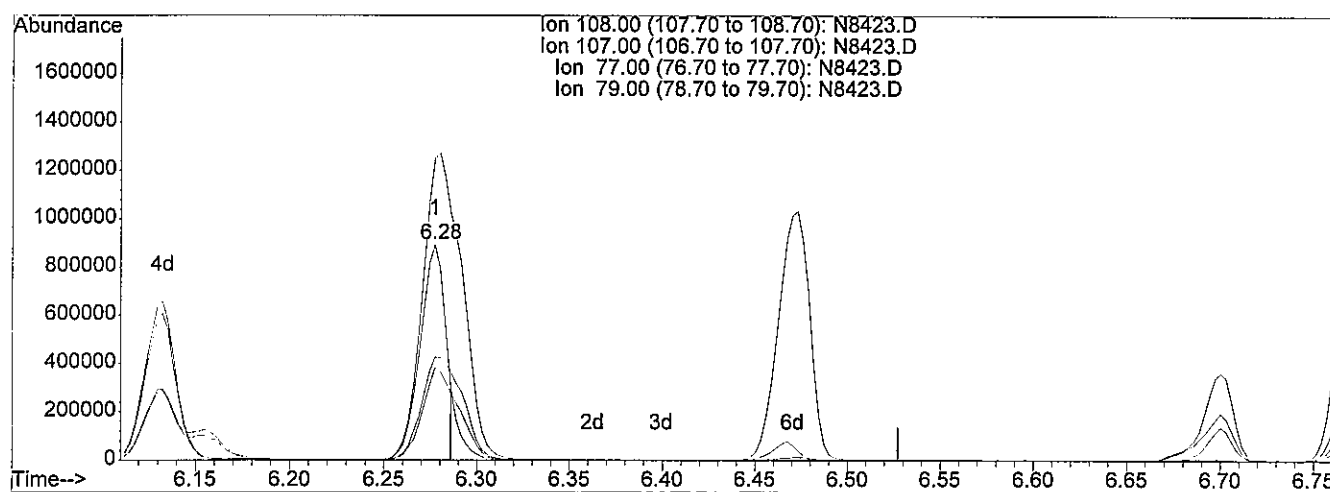
# Quantitation Report (Qedit)

Data File : D:\HPCHEM\1\DATA\091913\N8423.D  
 Acq On : 19 Sep 2013 14:16  
 Sample : CCV  
 Misc : ST130912-2 60 PPM  
 MS Integration Params: RTEINT.P  
 Quant Time: Sep 19 14:35 2013

Vial: 2  
 Operator: jk SOP 50  
 Inst : GC/MS Ins  
 Multiplr: 1.00

Quant Results File: temp.res

Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)  
 Title : GC-MS Semivolatiles SOP no. 506  
 Last Update : Thu Sep 19 14:34:02 2013  
 Response via : Multiple Level Calibration



(21) 3+4-Methylphenol (T)

6.28min 64.39ng/uL m

response 845953

Ion	Exp%	Act%
108.00	100	100
107.00	210.50	222.26
77.00	76.70	76.65
79.00	63.20	61.26

## MANUAL RE-INTEGRATION

- ☐ missed peak assignment
- ☐ assigned incorrect name to peak
- ☒ over-integrated peak's area
- ☐ under-integrated peak's area
- ☐ other \_\_\_\_\_

initials JK date 9-20-13

# Quantitation Report (Qedit)

Data File : D:\HPCHEM\1\DATA\091913\N8423.D

Vial: 2

Acq On : 19 Sep 2013 14:16

Operator: jk SOP 50

Sample : CCV

Inst : GC/MS Ins

Misc : ST130912-2 60 PPM

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Sep 19 14:35 2013

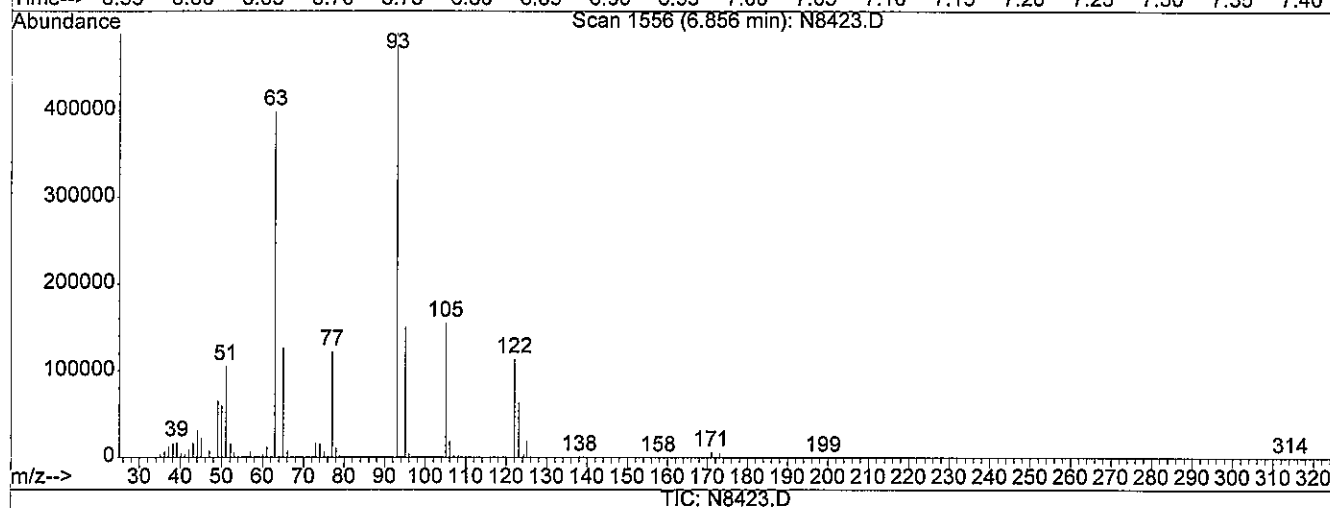
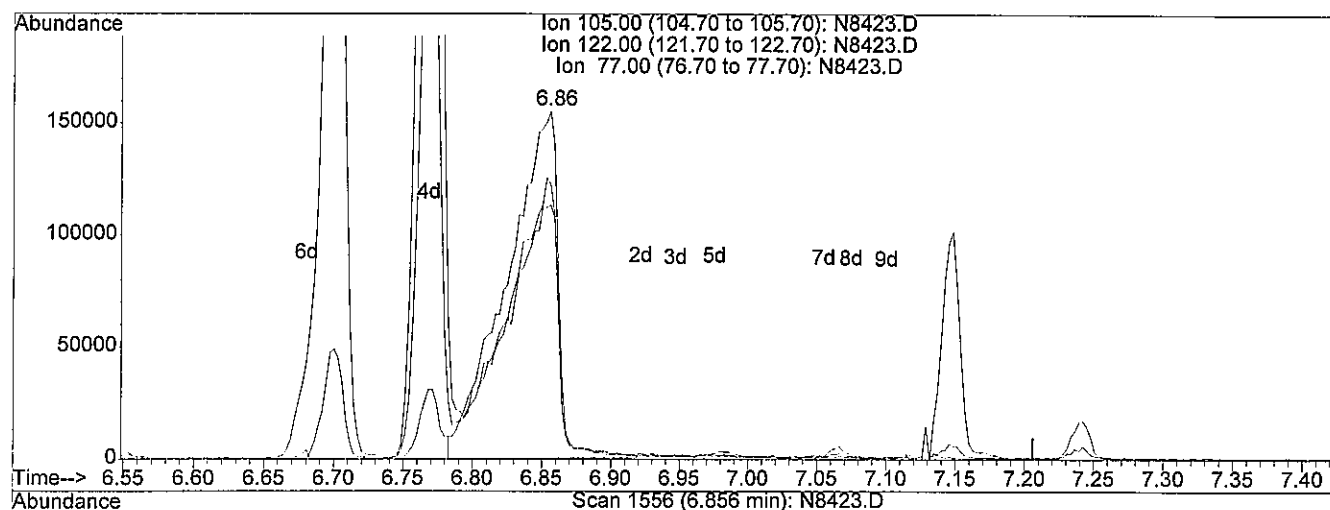
Quant Results File: temp.res

Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)

Title : GC-MS Semivolatiles SOP no. 506

Last Update : Thu Sep 19 14:34:02 2013

Response via : Multiple Level Calibration



(33) Benzoic acid (T)

6.86min 52.69ng/uL

response 396699

Ion	Exp%	Act%
105.00	100	100
122.00	73.60	74.73
77.00	82.40	78.56
0.00	0.00	0.00

*306a*

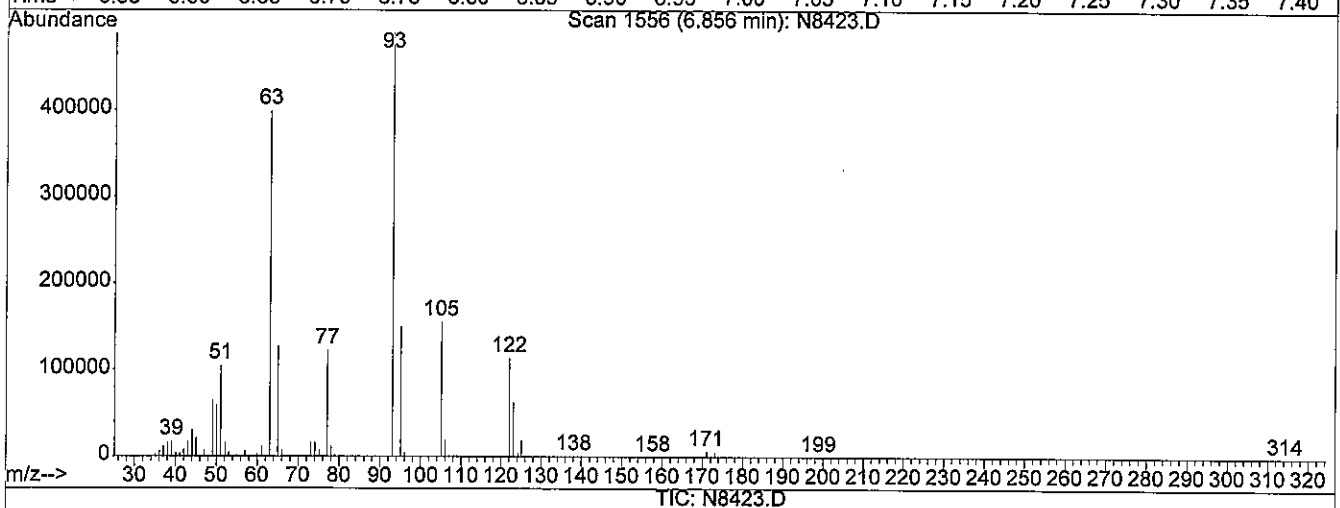
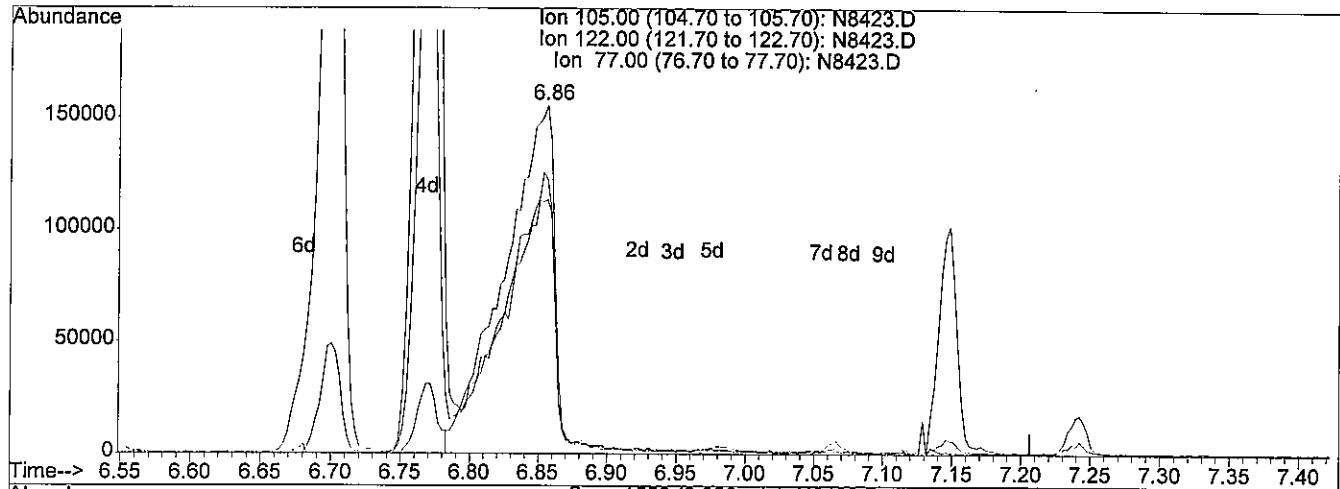
# Quantitation Report (Qedit)

Data File : D:\HPCHEM\1\DATA\091913\N8423.D  
 Acq On : 19 Sep 2013 14:16  
 Sample : CCV  
 Misc : ST130912-2 60 PPM  
 MS Integration Params: RTEINT.P  
 Quant Time: Sep 19 14:35 2013

Vial: 2  
 Operator: jk SOP 50  
 Inst : GC/MS Ins  
 Multiplr: 1.00

Quant Results File: temp.res

Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)  
 Title : GC-MS Semivolatiles SOP no. 506  
 Last Update : Thu Sep 19 14:34:02 2013  
 Response via : Multiple Level Calibration



(33) Benzoic acid (T)

6.86min 55.29ng/uL m

response 416234

Ion	Exp%	Act%
105.00	100	100
122.00	73.60	71.22
77.00	82.40	74.87
0.00	0.00	0.00

## MANUAL RE-INTEGRATION

- ☐ missed peak assignment
- ☐ assigned incorrect name to peak
- ☐ over-integrated peak's area
- ☒ under-integrated peak's area
- ☐ other \_\_\_\_\_

initials JK date 9-20-13

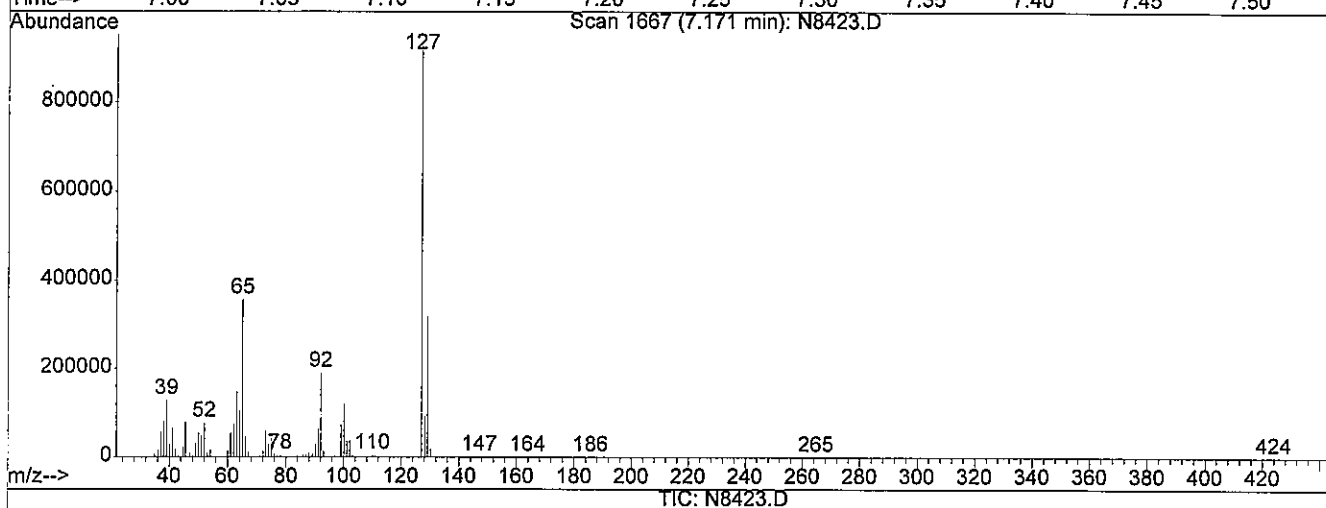
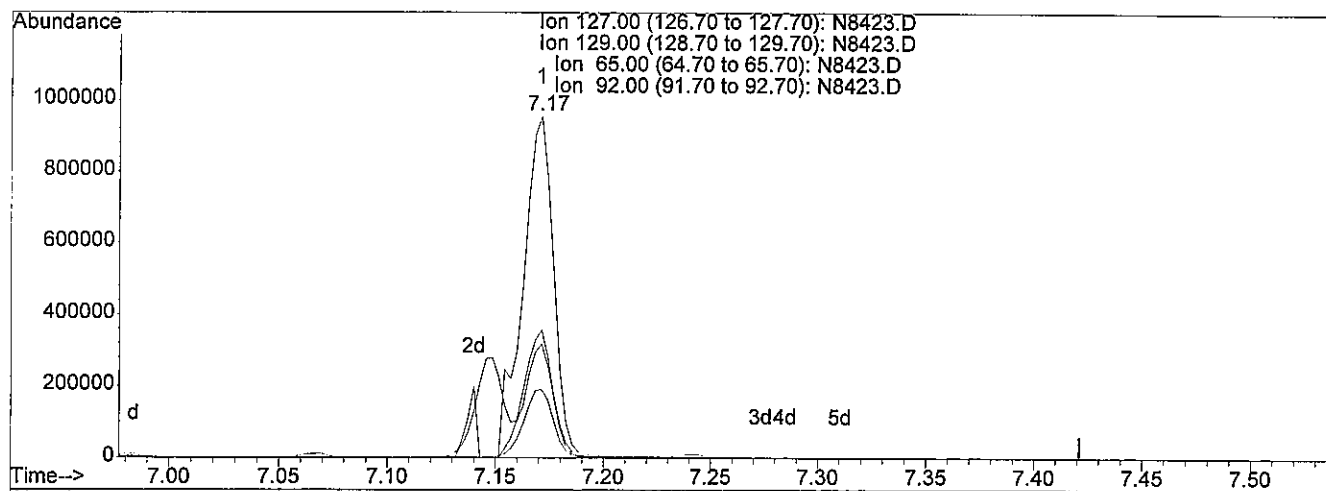
# Quantitation Report (Qedit)

Data File : D:\HPCHEM\1\DATA\091913\N8423.D  
 Acq On : 19 Sep 2013 14:16  
 Sample : CCV  
 Misc : ST130912-2 60 PPM  
 MS Integration Params: RTEINT.P  
 Quant Time: Sep 19 14:35 2013

Vial: 2  
 Operator: jk SOP 50  
 Inst : GC/MS Ins  
 Multiplr: 1.00

Quant Results File: temp.res

Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)  
 Title : GC-MS Semivolatiles SOP no. 506  
 Last Update : Thu Sep 19 14:34:02 2013  
 Response via : Multiple Level Calibration



(37) 4-Chloroaniline (T)

7.17min 62.03ng/uL

response 952321

Ion	Exp%	Act%
127.00	100	100
129.00	30.90	30.13
65.00	40.50	34.39
92.00	21.70	19.02

*366*

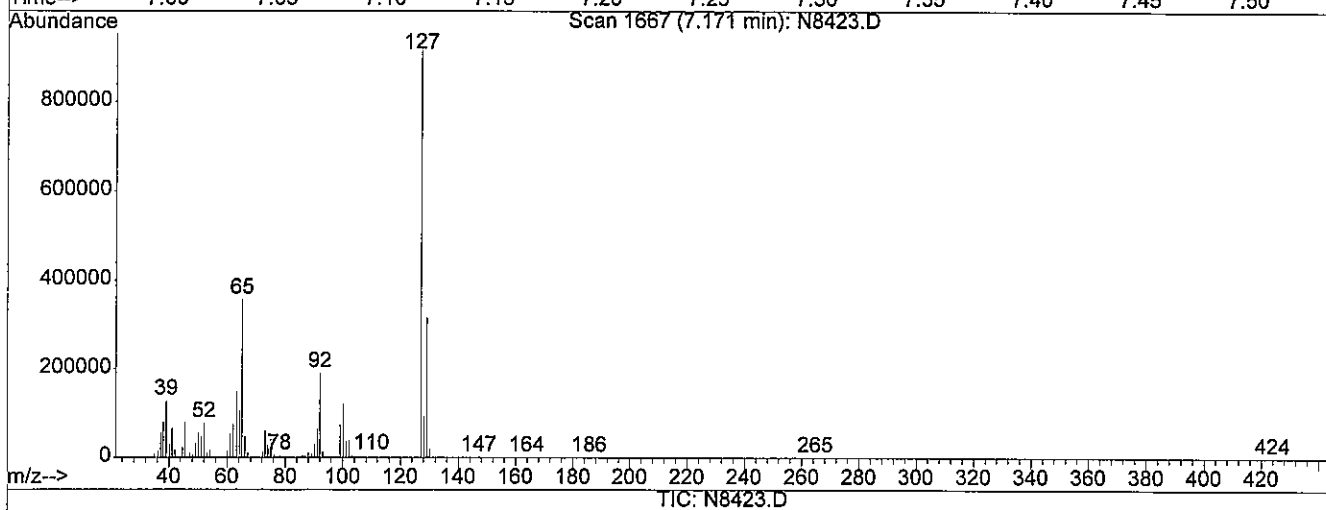
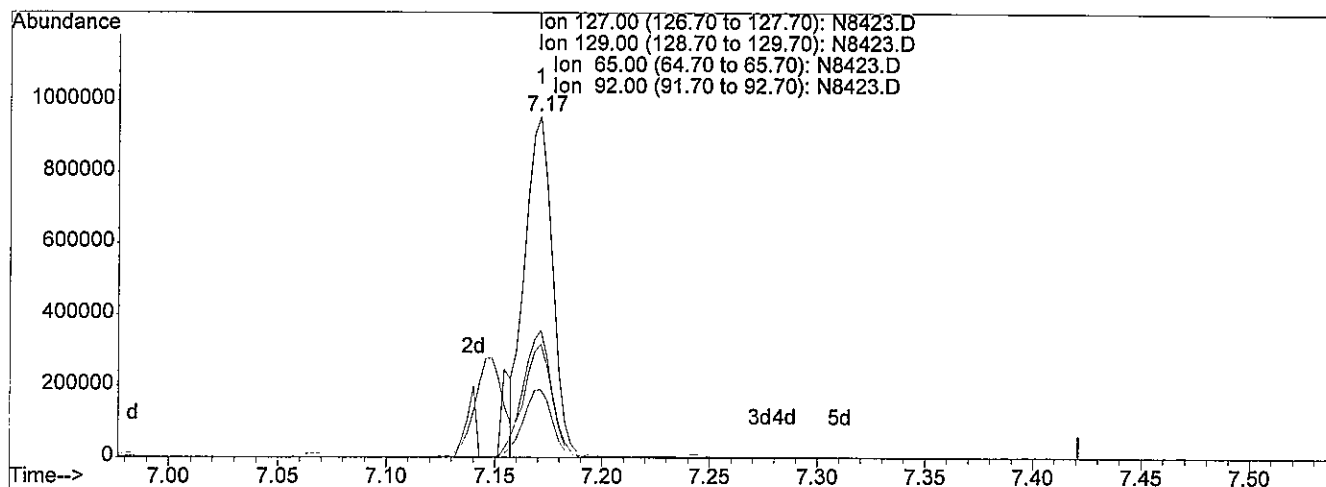
# Quantitation Report (Qedit)

Data File : D:\HPCHEM\1\DATA\091913\N8423.D  
 Acq On : 19 Sep 2013 14:16  
 Sample : CCV  
 Misc : ST130912-2 60 PPM  
 MS Integration Params: RTEINT.P  
 Quant Time: Sep 19 14:35 2013

Vial: 2  
 Operator: jk SOP 50  
 Inst : GC/MS Ins  
 Multiplr: 1.00

Quant Results File: temp.res

Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)  
 Title : GC-MS Semivolatiles SOP no. 506  
 Last Update : Thu Sep 19 14:34:02 2013  
 Response via : Multiple Level Calibration



(37) 4-Chloroaniline (T)

7.17min 56.92ng/uL m

response 873899

Ion	Exp%	Act%
127.00	100	100
129.00	30.90	32.83
65.00	40.50	37.47
92.00	21.70	20.73

## MANUAL RE-INTEGRATION

- ☐ missed peak assignment
- ☐ assigned incorrect name to peak
- ☒ over-integrated peak's area
- ☐ under-integrated peak's area
- ☐ other \_\_\_\_\_

initials JK date 9-20-13

Data File : D:\HPCHEM\1\DATA\091913\N8423.D

Acq On : 19 Sep 2013 14:16

Sample : CCV

Misc : ST130912-2 60 PPM

MS Integration Params: RTEINT.P

Quant Time: Sep 19 14:35 2013

Vial: 2

Operator: jk SOP 50

Inst : GC/MS Ins

Multiplr: 1.00

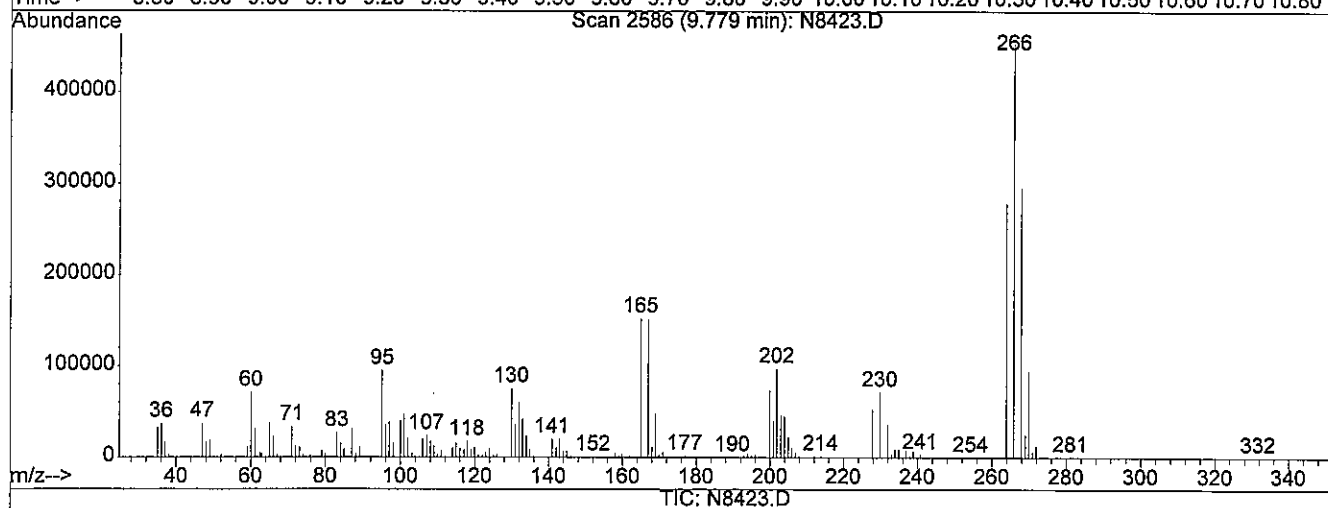
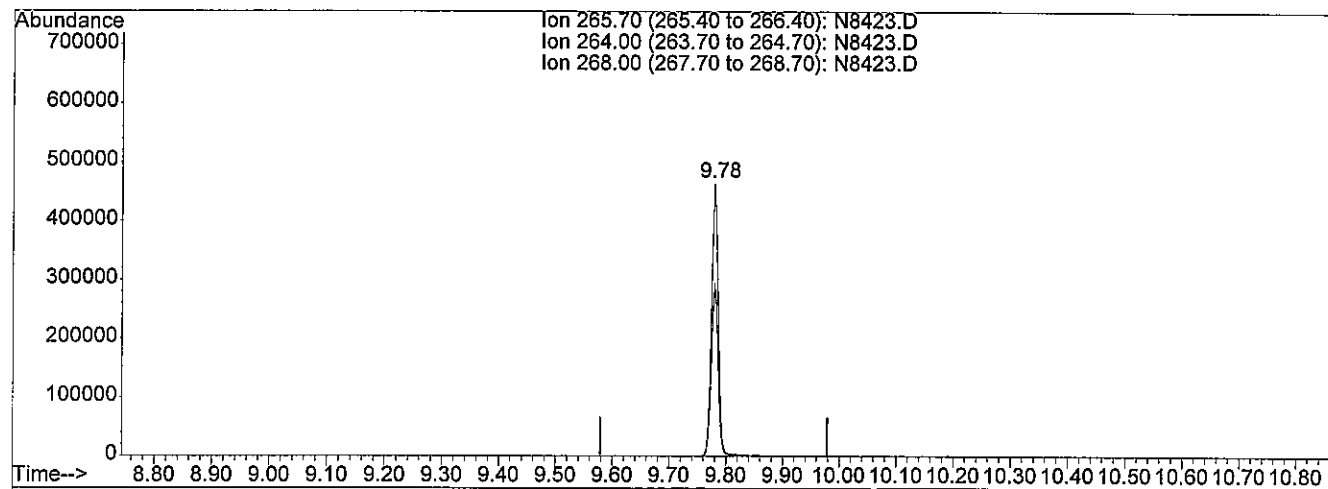
Quant Results File: temp.res

Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)

Title : GC-MS Semivolatiles SOP no. 506

Last Update : Thu Sep 19 14:34:02 2013

Response via : Multiple Level Calibration



(74) Pentachlorophenol (TMC)

9.78min 51.07ng/uL

response 394570

Ion	Exp%	Act%
265.70	100	100
264.00	63.90	62.76
268.00	62.50	62.97
0.00	0.00	0.00

306

# Quantitation Report (Qedit)

Data File : D:\HPCHEM\1\DATA\091913\N8423.D

Vial: 2

Acq On : 19 Sep 2013 14:16

Operator: jk SOP 50

Sample : CCV

Inst : GC/MS Ins

Misc : ST130912-2 60 PPM

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Sep 19 14:36 2013

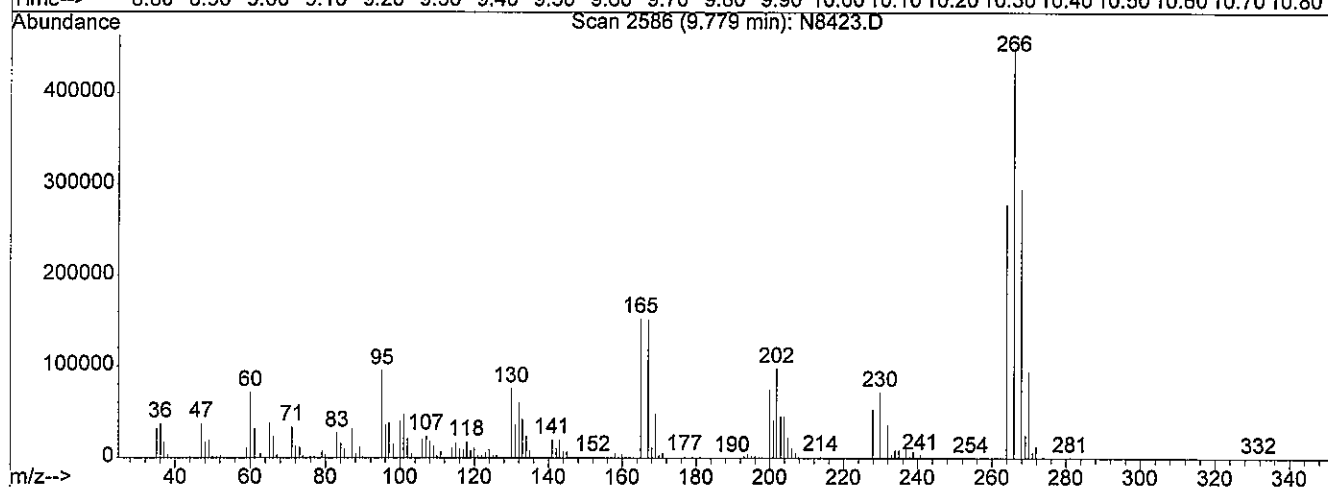
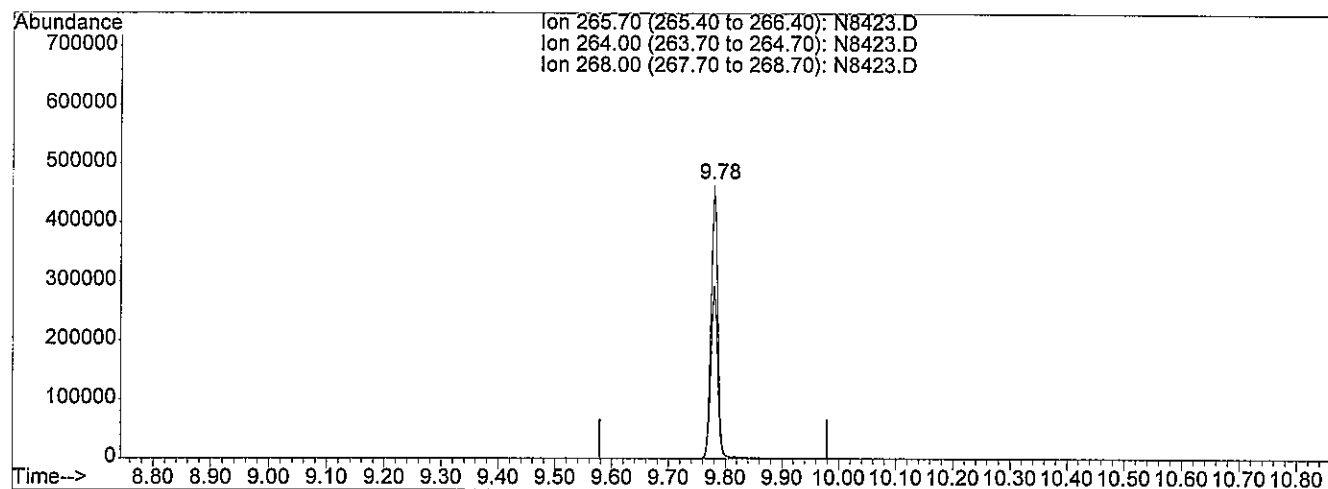
Quant Results File: temp.res

Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)

Title : GC-MS Semivolatiles SOP no. 506

Last Update : Thu Sep 19 14:34:02 2013

Response via : Multiple Level Calibration



(74) Pentachlorophenol (TMC)

9.78min 51.90ng/uL m

response 400975

Ion	Exp%	Act%
265.70	100	100
264.00	63.90	61.75
268.00	62.50	61.96
0.00	0.00	0.00

## MANUAL RE-INTEGRATION

- ☐ missed peak assignment
- ☐ assigned incorrect name to peak
- ☐ over-integrated peak's area
- ☒ under-integrated peak's area
- ☐ other \_\_\_\_\_

initials JK date 9-10-13

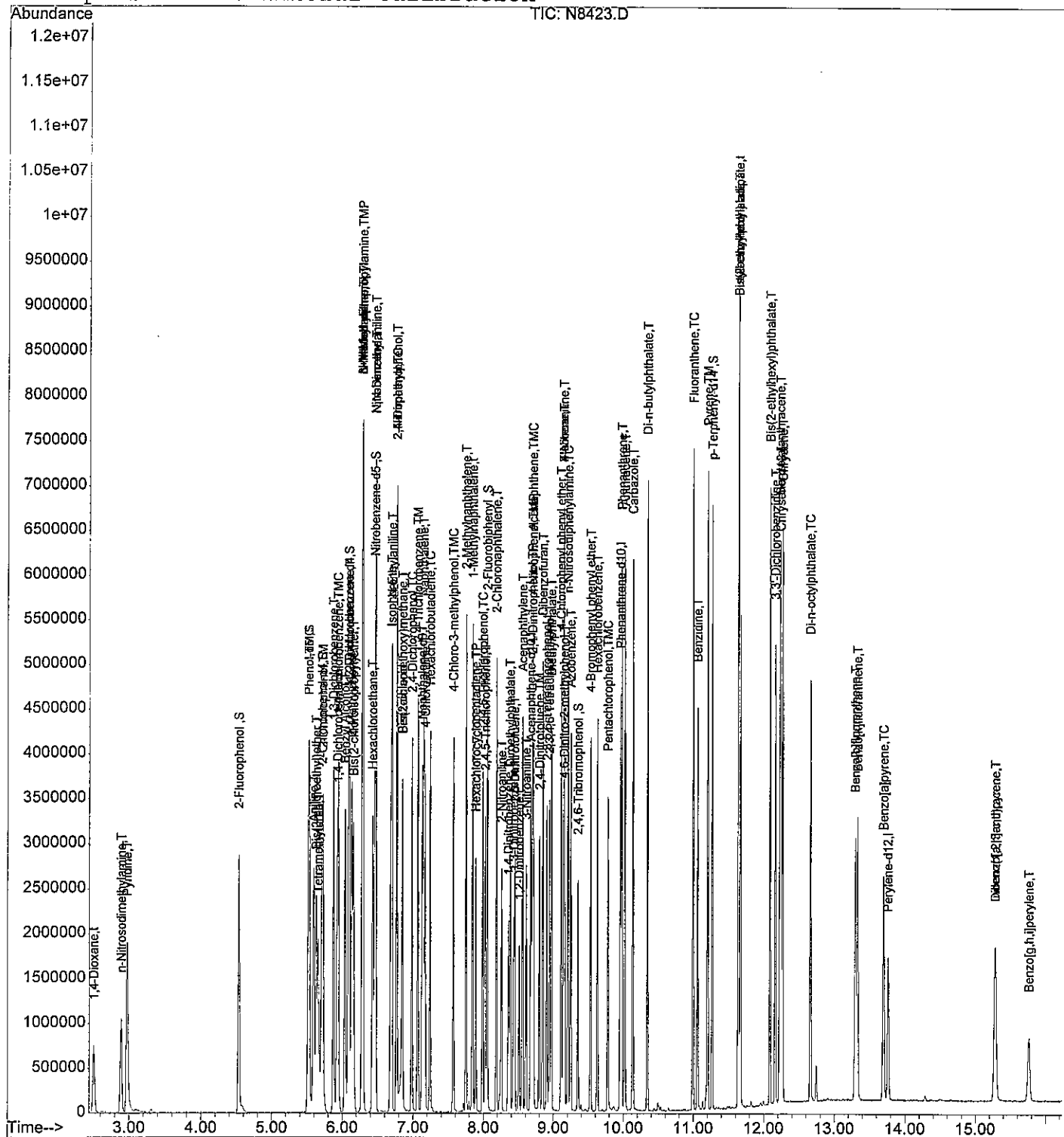
## Quantitation Report

Data File : D:\HPCHEM\1\DATA\091913\N8423.D  
Acq On : 19 Sep 2013 14:16  
Sample : CCV  
Misc : ST130912-2 60 PPM  
MS Integration Params: RTEINT.P  
Quant Time: Sep 19 14:36 2013

Vial: 2  
Operator: jk SOP 506  
Inst : GC/MS Ins  
Multiplr: 1.00

Quant Results File: 090413S1.RES

Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)  
Title : GC-MS Semivolatiles SOP no. 506  
Last Update : Thu Sep 19 14:34:02 2013  
Response via : Initial Calibration







## Sample Raw Data

Data File : D:\HPCHEM\1\DATA\091913\N8424.D

Vial: 3

Acq On : 19 Sep 2013 14:58

Operator: jk SOP 506 Rev

Sample : EX130917-9MB

Inst : GC/MS Ins

Misc : WATER EX130917-9

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Sep 20 12:03 2013

Quant Results File: 090413S1.RES

Quant Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)

Title : GC-MS Semivolatiles SOP no. 506

Last Update : Fri Sep 20 12:03:21 2013

Response via : Initial Calibration

DataAcq Meth : 090413S1

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	5.92	152	480743✓	40.00	ng/uL	0.00
24) Naphthalene-d8	7.12	136	2082988✓	40.00	ng/uL	0.00
41) Acenaphthene-d10	8.67	164	1136119✓	40.00	ng/uL	0.00
69) Phenanthrene-d10	9.95	188	1971104✓	40.00	ng/uL	0.00
80) Chrysene-d12	12.23	240	2216653✓	40.00	ng/uL	-0.02
91) Perylene-d12	13.75	264	1421414✓	40.00	ng/uL	0.00

## System Monitoring Compounds

5) 2-Fluorophenol	4.53	112	980755m	59.67	ng/uL	0.00
Spiked Amount 75.000	Range 46 - 105		Recovery =	79.56%	✓	
6) 2-Chlorophenol-d4	5.70	132	956204	68.87	ng/uL	0.00
Spiked Amount 75.000	Range 33 - 110		Recovery =	91.83%		
8) Phenol-d5	5.51	99	1266448	58.96	ng/uL	0.00
Spiked Amount 75.000	Range 50 - 109		Recovery =	78.61%	✓	
15) 1,2-Dichlorobenzene-d4	6.08	152	431150	39.16	ng/uL	0.00
Spiked Amount 50.000	Range 16 - 110		Recovery =	78.32%		
25) Nitrobenzene-d5	6.45	82	787724	33.30	ng/uL	0.00
Spiked Amount 50.000	Range 53 - 111		Recovery =	66.60%	✓	
46) 2-Fluorobiphenyl	8.05	172	1441776	37.69	ng/uL	0.00
Spiked Amount 50.000	Range 55 - 108		Recovery =	75.38%		
68) 2,4,6-Tribromophenol	9.35	330	310911	53.29	ng/uL	0.00
Spiked Amount 75.000	Range 42 - 117		Recovery =	71.05%	✓	
83) p-Terphenyl-d14	11.26	244	2013939	38.91	ng/uL	0.00
Spiked Amount 50.000	Range 34 - 139		Recovery =	77.82%	✓	

Target Compounds

Qvalue

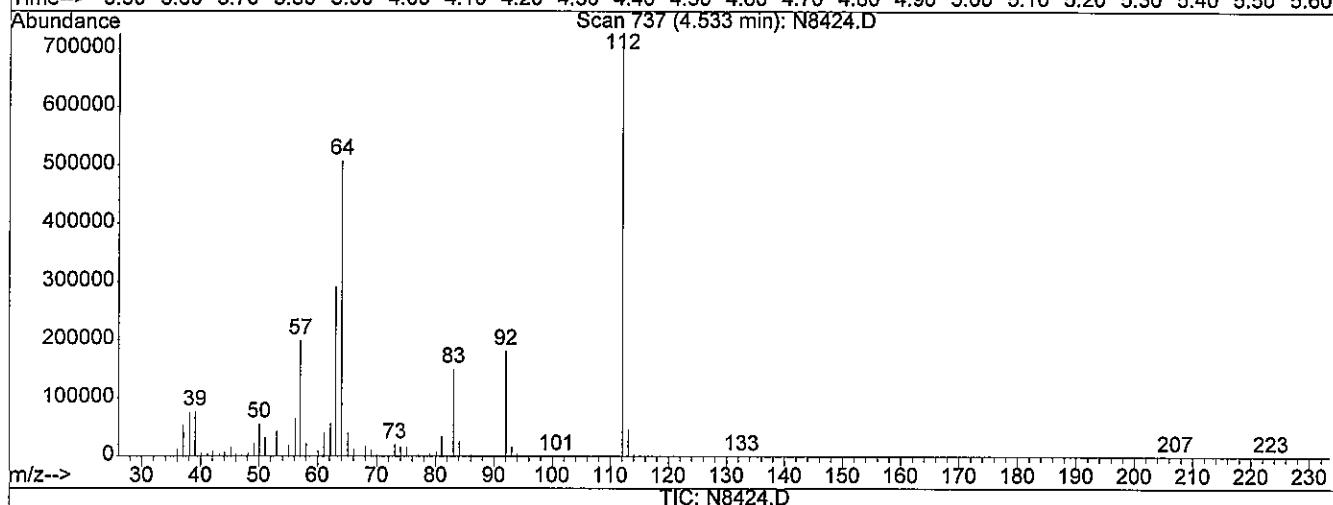
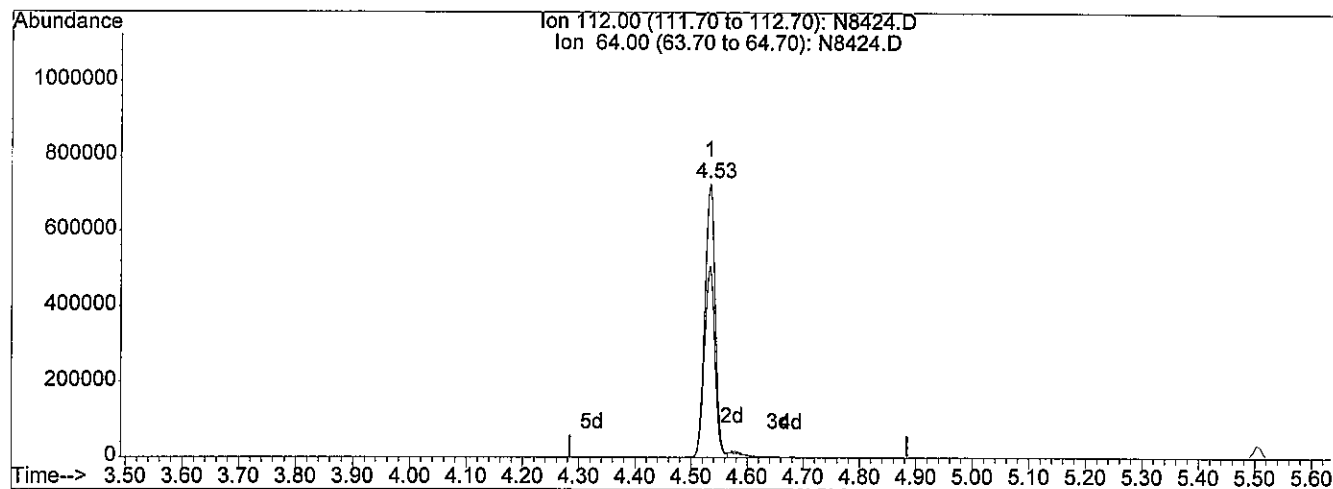
# Quantitation Report (Qedit)

Data File : D:\HPCHEM\1\DATA\091913\N8424.D  
 Acq On : 19 Sep 2013 14:58  
 Sample : EX130917-9MB  
 Misc : WATER EX130917-9  
 MS Integration Params: RTEINT.P  
 Quant Time: Sep 20 12:03 2013

Vial: 3  
 Operator: jk SOP 50  
 Inst : GC/MS Ins  
 Multiplr: 1.00

Quant Results File: temp.res

Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)  
 Title : GC-MS Semivolatiles SOP no. 506  
 Last Update : Fri Sep 20 12:03:21 2013  
 Response via : Multiple Level Calibration



(5) 2-Fluorophenol (S)

4.53min 57.10ng/uL

response 938492

Ion	Exp%	Act%
112.00	100	100
64.00	68.70	70.04
0.00	0.00	0.00
0.00	0.00	0.00

*3c for*

# Quantitation Report (Qedit)

Data File : D:\HPCHEM\1\DATA\091913\N8424.D

Vial: 3

Acq On : 19 Sep 2013 14:58

Operator: jk SOP 50

Sample : EX130917-9MB

Inst : GC/MS Ins

Misc : WATER EX130917-9

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Sep 20 12:03 2013

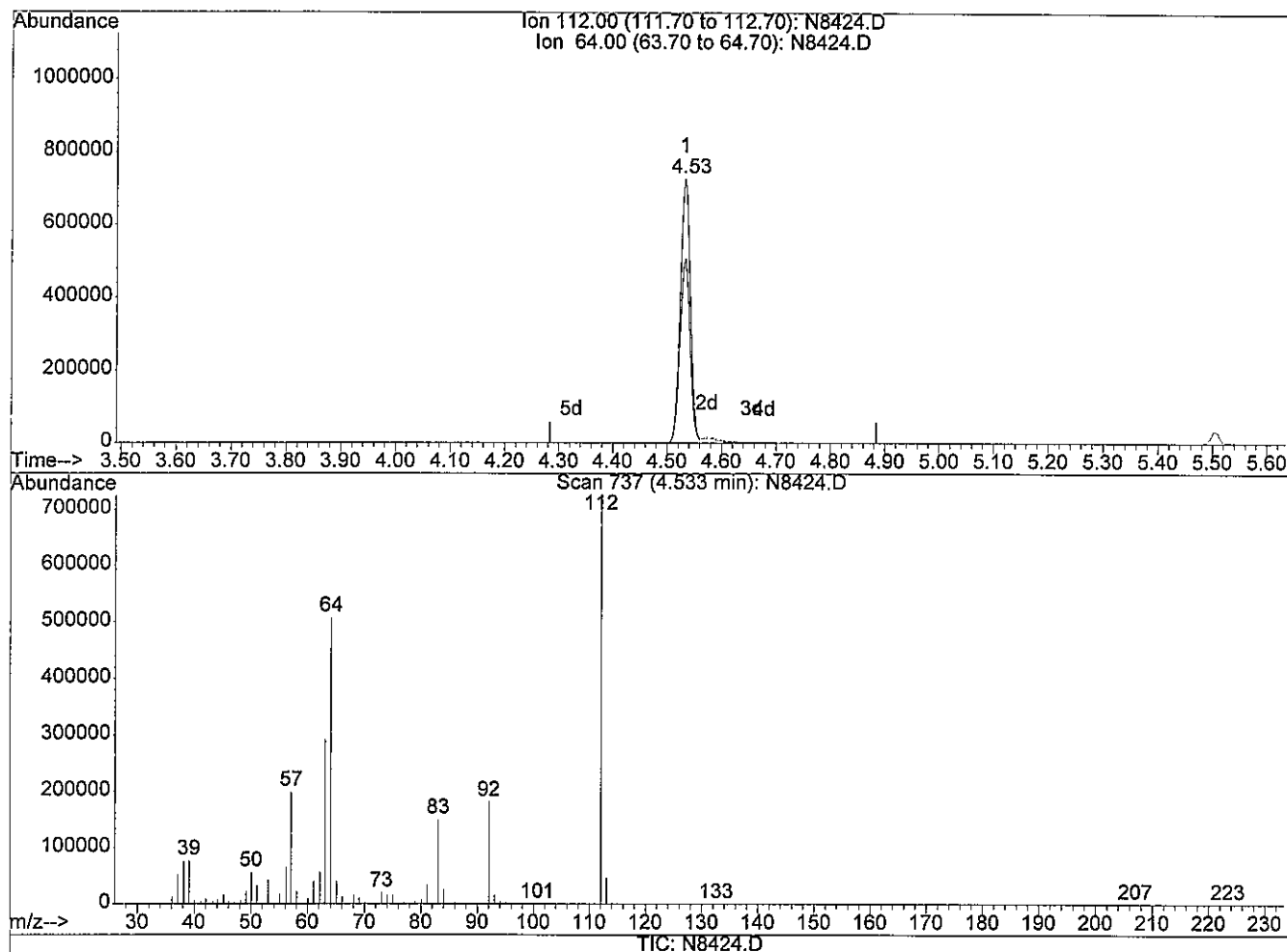
Quant Results File: temp.res

Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)

Title : GC-MS Semivolatiles SOP no. 506

Last Update : Fri Sep 20 12:03:21 2013

Response via : Multiple Level Calibration



(5) 2-Fluorophenol (S)

4.53min 59.67ng/uL m

response 980755

Ion	Exp%	Act%
112.00	100	100
64.00	68.70	67.02
0.00	0.00	0.00
0.00	0.00	0.00

## MANUAL RE-INTEGRATION

- ☐ missed peak assignment
- ☐ assigned incorrect name to peak
- ☐ over-integrated peak's area
- ☒ under-integrated peak's area
- ☐ other \_\_\_\_\_

initials Xc date 9-20-13

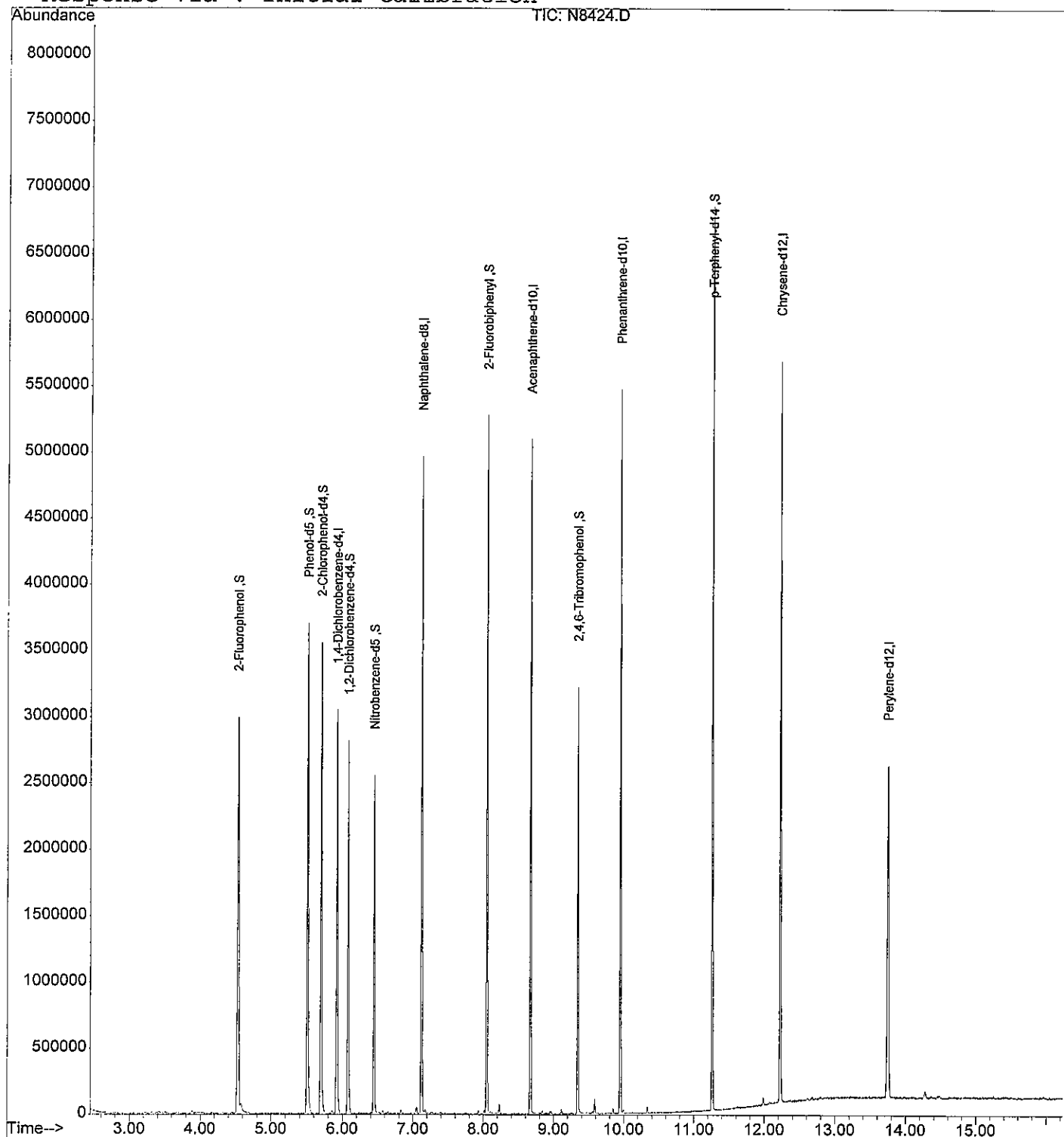
# Quantitation Report

Data File : D:\HPCHEM\1\DATA\091913\N8424.D  
 Acq On : 19 Sep 2013 14:58  
 Sample : EX130917-9MB  
 Misc : WATER EX130917-9  
 MS Integration Params: RTEINT.P  
 Quant Time: Sep 20 12:03 2013

Vial: 3  
 Operator: jk SOP 506  
 Inst : GC/MS Ins  
 Multiplr: 1.00

Quant Results File: 090413S1.RES

Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)  
 Title : GC-MS Semivolatiles SOP no. 506  
 Last Update : Fri Sep 20 12:03:21 2013  
 Response via : Initial Calibration



# Library Search Compound Report

Data File : D:\HPCHEM\1\DATA\091913\N8424.D Vial: 3  
Acq On : 19 Sep 2013 14:58 Operator: jk SOP 506 Rev  
Sample : EX130917-9MB Inst : GC/MS Ins  
Misc : WATER EX130917-9 Multiplr: 1.00  
MS Integration Params: LSCINT.P  
Quant Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)  
Title : GC-MS Semivolatiles SOP no. 506  
Library : D:\DATABASE\NIST98.L

No Library Search Compounds Detected

\*\*\*\*\*  
N8424.D 090413S1.M Fri Sep 20 12:29:19 2013

74  
7-20-17

Data File : D:\HPCHEM\1\DATA\091913\N8431.D

Vial: 10

Acq On : 19 Sep 2013 17:48

Operator: jk SOP 506 Rev

Sample : 1309217-2

Inst : GC/MS Ins

Misc : WATER EX130917-9

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Sep 20 12:11 2013

Quant Results File: 090413S1.RES

Quant Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)

Title : GC-MS Semivolatiles SOP no. 506

Last Update : Fri Sep 20 12:03:21 2013

Response via : Initial Calibration

DataAcq Meth : 090413S1

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	5.92	152	497800 ✓	40.00	ng/uL	0.00
24) Naphthalene-d8	7.12	136	2085757 ✓	40.00	ng/uL	0.00
41) Acenaphthene-d10	8.67	164	1146580 ✓	40.00	ng/uL	0.00
69) Phenanthrene-d10	9.95	188	2023937 ✓	40.00	ng/uL	0.00
80) Chrysene-d12	12.23	240	2357037 ✓	40.00	ng/uL	-0.01
91) Perylene-d12	13.76	264	1474187 ✓	40.00	ng/uL	0.00

## System Monitoring Compounds

5) 2-Fluorophenol	4.53	112	1063375m	62.48	ng/uL	0.00
Spiked Amount 75.000	Range 46 - 105		Recovery =	83.31%	✓	
6) 2-Chlorophenol-d4	5.70	132	1047343	72.85	ng/uL	0.00
Spiked Amount 75.000	Range 33 - 110		Recovery =	97.13%		
8) Phenol-d5	5.51	99	1392690	62.62	ng/uL	0.00
Spiked Amount 75.000	Range 50 - 109		Recovery =	83.49%	✓	
15) 1,2-Dichlorobenzene-d4	6.08	152	462927	40.60	ng/uL	0.00
Spiked Amount 50.000	Range 16 - 110		Recovery =	81.20%		
25) Nitrobenzene-d5	6.45	82	864368	36.49	ng/uL	0.00
Spiked Amount 50.000	Range 53 - 111		Recovery =	72.98%	✓	
46) 2-Fluorobiphenyl	8.05	172	1540550	39.90	ng/uL	0.00
Spiked Amount 50.000	Range 55 - 108		Recovery =	79.80%	✓	
68) 2,4,6-Tribromophenol	9.34	330	365538	62.08	ng/uL	0.00
Spiked Amount 75.000	Range 42 - 117		Recovery =	82.77%	✓	
83) p-Terphenyl-d14	11.26	244	2247848	40.84	ng/uL	0.00
Spiked Amount 50.000	Range 34 - 139		Recovery =	81.68%	✓	

## Target Compounds

Qvalue

-----  
(#) = qualifier out of range (m) = manual integration

N8431.D 090413S1.M Fri Sep 20 12:11:12 2013

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9-20-13

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# Quantitation Report (Qedit)

Data File : D:\HPCHEM\1\DATA\091913\N8431.D

Vial: 10

Acq On : 19 Sep 2013 17:48

Operator: jk SOP 50

Sample : 1309217-2

Inst : GC/MS Ins

Misc : WATER EX130917-9

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Sep 20 12:10 2013

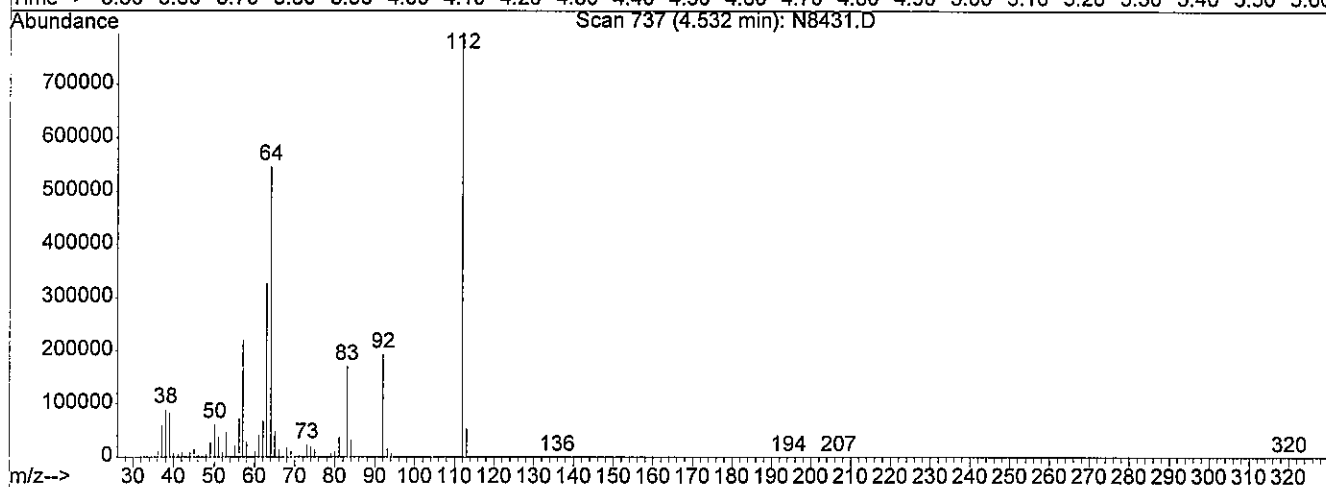
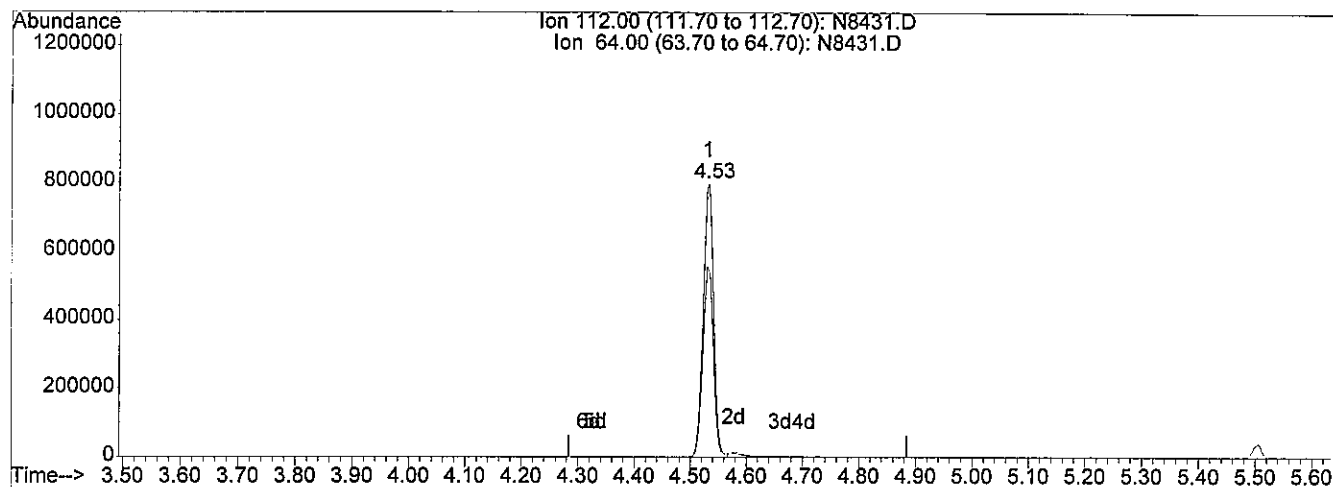
Quant Results File: temp.res

Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)

Title : GC-MS Semivolatiles SOP no. 506

Last Update : Fri Sep 20 12:03:21 2013

Response via : Multiple Level Calibration



(5) 2-Fluorophenol (S)

4.53min 60.46ng/uL

response 1028958

Ion	Exp%	Act%
112.00	100	100
64.00	68.70	71.44
0.00	0.00	0.00
0.00	0.00	0.00



# Quantitation Report (Qedit)

Data File : D:\HPCHEM\1\DATA\091913\N8431.D

Vial: 10

Acq On : 19 Sep 2013 17:48

Operator: jk SOP 50

Sample : 1309217-2

Inst : GC/MS Ins

Misc : WATER EX130917-9

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Sep 20 12:11 2013

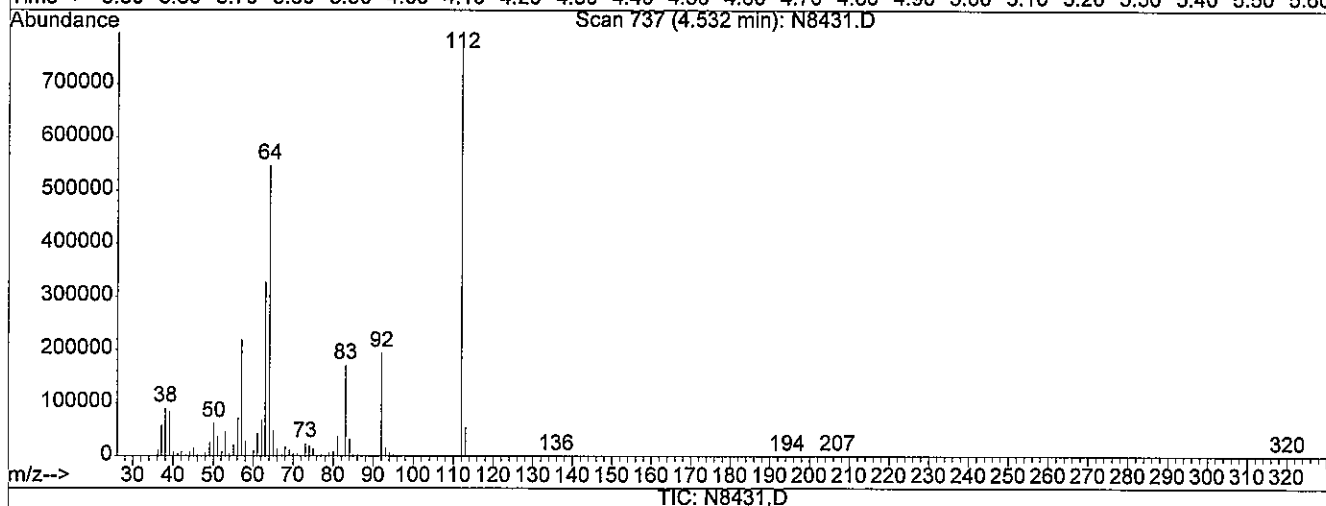
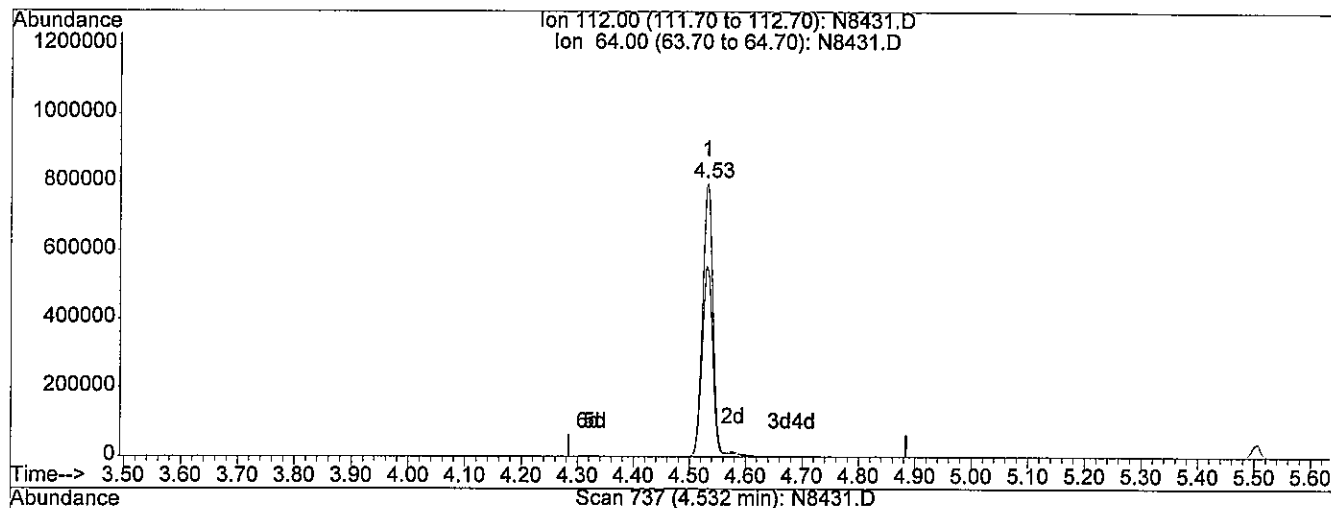
Quant Results File: temp.res

Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)

Title : GC-MS Semivolatiles SOP no. 506

Last Update : Fri Sep 20 12:03:21 2013

Response via : Multiple Level Calibration



(5) 2-Fluorophenol (S)

4.53min 62.48ng/uL m

response 1063375

Ion	Exp%	Act%
112.00	100	100
64.00	68.70	69.13
0.00	0.00	0.00
0.00	0.00	0.00

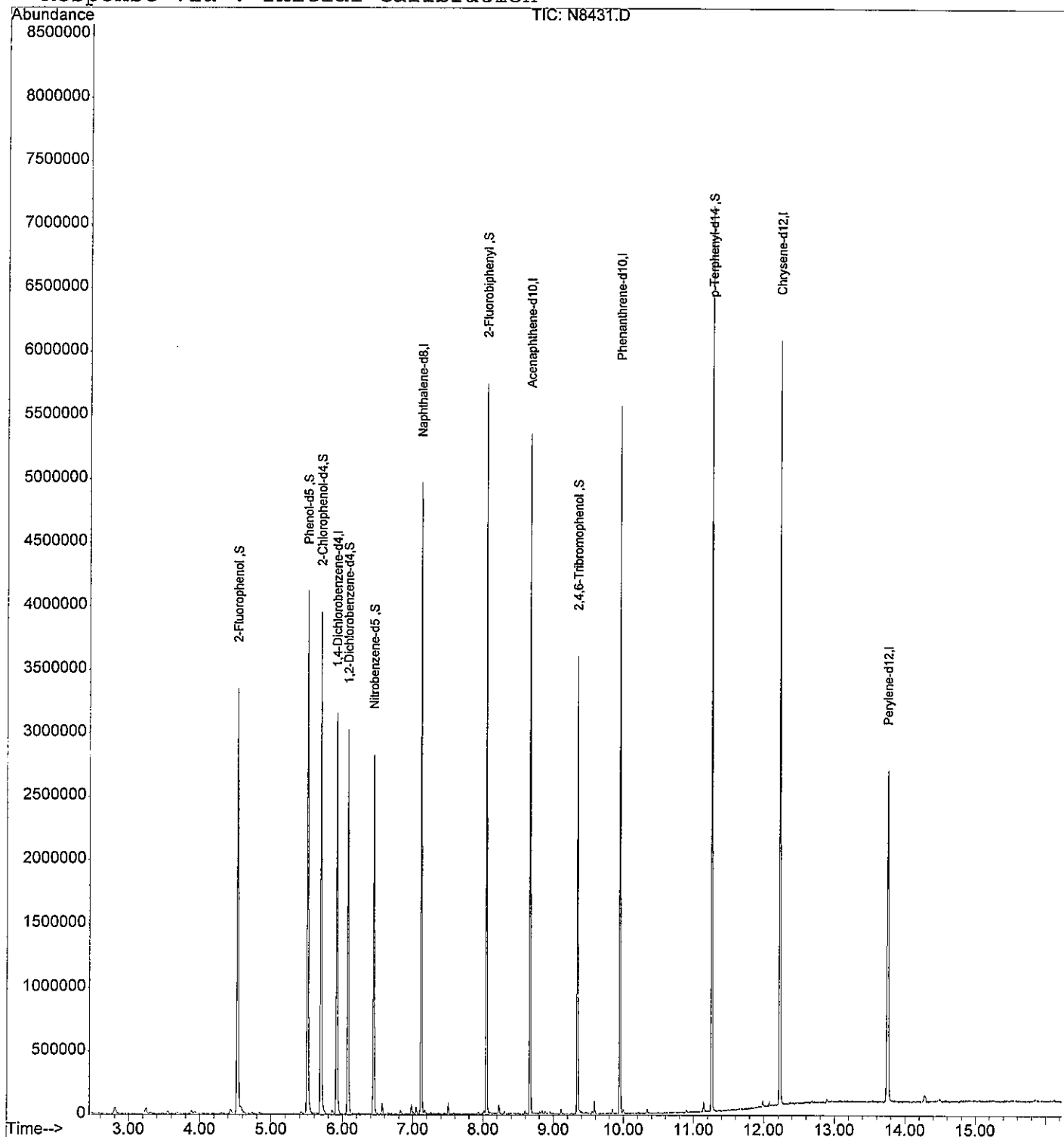
# Quantitation Report

Data File : D:\HPCHEM\1\DATA\091913\N8431.D  
 Acq On : 19 Sep 2013 17:48  
 Sample : 1309217-2  
 Misc : WATER EX130917-9  
 MS Integration Params: RTEINT.P  
 Quant Time: Sep 20 12:11 2013

Vial: 10  
 Operator: jk SOP 506  
 Inst : GC/MS Ins  
 Multiplr: 1.00

Quant Results File: 090413S1.RES

Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)  
 Title : GC-MS Semivolatiles SOP no. 506  
 Last Update : Fri Sep 20 12:03:21 2013  
 Response via : Initial Calibration



# Library Search Compound Report

Data File : D:\HPCHEM\1\DATA\091913\N8431.D Vial: 10  
Acq On : 19 Sep 2013 17:48 Operator: jk SOP 506 Rev  
Sample : 1309217-2 Inst : GC/MS Ins  
Misc : WATER EX130917-9 Multiplr: 1.00  
MS Integration Params: LSCINT.P  
Quant Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)  
Title : GC-MS Semivolatiles SOP no. 506  
Library : D:\DATABASE\NIST98.L

No Library Search Compounds Detected

\*\*\*\*\*  
N8431.D 090413S1.M Fri Sep 20 12:46:42 2013

JK  
9-20-11



## **Raw Data Quality Control Samples**

Data File : D:\HPCHEM\1\DATA\091913\N8425.D

Acq On : 19 Sep 2013 15:23

Sample : EX130917-9LCS

Misc : WATER EX130917-9

MS Integration Params: RTEINT.P

Quant Time: Sep 20 12:05 2013

Vial: 4

Operator: jk SOP 506 Rev

Inst : GC/MS Ins

Multiplr: 1.00

Quant Results File: 090413S1.RES

Quant Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)

Title : GC-MS Semivolatiles SOP no. 506

Last Update : Fri Sep 20 12:03:21 2013

Response via : Initial Calibration

DataAcq Meth : 090413S1

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) 1,4-Dichlorobenzene-d4	5.92	152	437173 ✓	40.00	ng/uL	0.00
24) Naphthalene-d8	7.13	136	1712645 ✓	40.00	ng/uL	0.00
41) Acenaphthene-d10	8.68	164	950191 ✓	40.00	ng/uL	0.00
69) Phenanthrene-d10	9.96	188	1720769 ✓	40.00	ng/uL	0.00
80) Chrysene-d12	12.24	240	1807551 ✓	40.00	ng/uL	0.00
91) Perylene-d12	13.76	264	932554 ✓	40.00	ng/uL	0.00

## System Monitoring Compounds

5) 2-Fluorophenol	4.54	112	970451	64.93	ng/uL	0.00
Spiked Amount 75.000	Range 46 - 105		Recovery =	86.57%	✓	
6) 2-Chlorophenol-d4	5.71	132	928084	73.50	ng/uL	0.00
Spiked Amount 75.000	Range 33 - 110		Recovery =	98.00%		
8) Phenol-d5	5.52	99	1320213	67.59	ng/uL	0.00
Spiked Amount 75.000	Range 50 - 109		Recovery =	90.12%	✓	
15) 1,2-Dichlorobenzene-d4	6.08	152	396934	39.64	ng/uL	0.00
Spiked Amount 50.000	Range 16 - 110		Recovery =	79.28%		
25) Nitrobenzene-d5	6.45	82	730314	37.55	ng/uL	0.00
Spiked Amount 50.000	Range 53 - 111		Recovery =	75.10%	✓	
46) 2-Fluorobiphenyl	8.05	172	1257838	39.31	ng/uL	0.00
Spiked Amount 50.000	Range 55 - 108		Recovery =	78.62%	✓	
68) 2,4,6-Tribromophenol	9.35	330	318014	65.18	ng/uL	0.00
Spiked Amount 75.000	Range 42 - 117		Recovery =	86.91%	✓	
83) p-Terphenyl-d14	11.27	244	1654565	39.20	ng/uL	0.00
Spiked Amount 50.000	Range 34 - 139		Recovery =	78.40%	✓	

## Target Compounds

						Qvalue
2) 1,4-Dioxane	2.52	88	321299m	44.22	ng/uL	
3) n-Nitrosodimethylamine	2.90	74	561732m	51.90	ng/uL	
4) Pyridine	2.98	79	693714m	37.90	ng/uL	
7) Aniline	5.60	93	1170617	51.24	ng/uL	97
9) Phenol	5.53	94	979579	52.14	ng/uL	99
10) Tetramethylurea	0.00	72	0	N.D. d		MA
11) Bis(2-chloroethyl) ether	5.63	93	720157	49.74	ng/uL	94
12) 2-Chlorophenol	5.72	128	707660	52.36	ng/uL	98
13) 1,3-Dichlorobenzene	5.88	146	772330	47.83	ng/uL	99
14) 1,4-Dichlorobenzene	5.94	146	726191	48.27	ng/uL	99
16) 1,2-Dichlorobenzene	6.10	146	696400	49.84	ng/uL	99
17) Benzyl Alcohol	6.04	108	506832	55.60	ng/uL	93
18) 2-Methylphenol	6.13	107	608956	54.58	ng/uL	95
19) Bis(2-chloroisopropyl) ether	6.16	45	1462861	59.36	ng/uL	96
20) n-Nitroso-di-n-propylamine	6.29	70	611147	57.27	ng/uL	97
21) 3+4-Methylphenol	6.27	108	772093	56.33	ng/uL#	46

(#)=qualifier out of range (m)=manual integration

N8425.D 090413S1.M Fri Sep 20 12:05:43 2013

7-2013

Data File : D:\HPCHEM\1\DATA\091913\N8425.D

Vial: 4

Acq On : 19 Sep 2013 15:23

Operator: jk SOP 506 Rev

Sample : EX130917-9LCS

Inst : GC/MS Ins

Misc : WATER EX130917-9

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Sep 20 12:05 2013

Quant Results File: 090413S1.RES

Quant Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)

Title : GC-MS Semivolatiles SOP no. 506

Last Update : Fri Sep 20 12:03:21 2013

Response via : Initial Calibration

DataAcq Meth : 090413S1

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
22) N-Methylaniline	0.00	106	0	N.D.	d	MA
23) Hexachloroethane	6.43	117	314636	49.68	ng/uL	98
26) N,N-Dimethylaniline	0.00	120	0	N.D.		MA
27) Nitrobenzene	6.47	77	834361	36.39	ng/uL	85
28) Isophorone	6.68	82	1636702	54.75	ng/uL	99
29) N-Ethylaniline	0.00	106	0	N.D.	d	MA
30) 2-Nitrophenol	6.76	139	394662	55.51	ng/uL	91
31) 2,4-Dimethylphenol	6.77	107	733917	49.77	ng/uL	99
32) Bis(2-chloroethoxy)methane	6.85	93	890854	50.27	ng/uL	98
33) Benzoic acid	6.86	105	456680	60.83	ng/uL	96
34) 2,4-Dichlorophenol	6.98	162	659141	51.61	ng/uL	99
35) 1,2,4-Trichlorobenzene	7.06	180	677877	43.14	ng/uL	99
36) Naphthalene	7.15	128	1959666	46.25	ng/uL#	89
37) 4-Chloroaniline	7.17	127	814342	53.18	ng/uL	98
38) Hexachlorobutadiene	7.24	225	403355	40.38	ng/uL	98
39) 4-Chloro-3-methylphenol	7.57	107	728015	57.59	ng/uL	99
40) 2-Methylnaphthalene	7.75	142	1461468	48.16	ng/uL	94
42) 1-Methylnaphthalene	7.85	142	1206095	43.62	ng/uL	96
43) Hexachlorocyclopentadiene	7.89	237	116539	13.78	ng/uL	98
44) 2,4,6-Trichlorophenol	7.99	196	501105	50.18	ng/uL	94
45) 2,4,5-Trichlorophenol	8.02	196	480661	51.34	ng/uL	94
47) 2-Chloronaphthalene	8.19	162	1314184	47.22	ng/uL	99
48) 2-Nitroaniline	8.26	65	470937	50.37	ng/uL	96
49) 1,4-Dinitrobenzene	8.36	168	228127	54.63	ng/uL	91
50) Dimethylphthalate	8.38	163	1344643	46.99	ng/uL	100
51) 1,3-Dinitrobenzene	8.43	168	252043	52.97	ng/uL	87
52) 2,6-Dinitrotoluene	8.45	165	332517	50.52	ng/uL	90
53) 1,2-Dinitrobenzene	8.52	168	156159	50.19	ng/uL	89
54) Acenaphthylene	8.56	152	1866534	45.55	ng/uL#	98
55) 3-Nitroaniline	8.61	138	340899	55.34	ng/uL	94
56) Acenaphthene	8.71	154	1274301	51.76	ng/uL	96
57) 2,4-Dinitrophenol	8.69	184	197483	55.58	ng/uL#	1
58) 4-Nitrophenol	8.72	109	185694	47.29	ng/uL	81
59) Dibenzofuran	8.85	168	1861166	51.27	ng/uL	96
60) 2,4-Dinitrotoluene	8.80	165	512111	58.08	ng/uL	90
61) 2,3,5,6-Tetrachlorophenol	8.91	232	708656	78.85	ng/uL	99
62) 2,3,4,6-Tetrachlorophenol	8.94	232	681023	78.73	ng/uL	96
63) Diethylphthalate	8.97	149	1379876	52.67	ng/uL	98
64) 4-Chlorophenyl phenyl ethe	9.11	204	818635	49.87	ng/uL	95
65) 4-Nitroaniline	9.14	138	326734	58.99	ng/uL	91
66) Fluorene	9.15	166	1372851	48.74	ng/uL	100

(#)=qualifier out of range (m)=manual integration

N8425.D 090413S1.M Fri Sep 20 12:05:44 2013

Data File : D:\HPCHEM\1\DATA\091913\N8425.D

Vial: 4

Acq On : 19 Sep 2013 15:23

Operator: jk SOP 506 Rev

Sample : EX130917-9LCS

Inst : GC/MS Ins

Misc : WATER EX130917-9

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Sep 20 12:05 2013

Quant Results File: 090413S1.RES

Quant Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)

Title : GC-MS Semivolatiles SOP no. 506

Last Update : Fri Sep 20 12:03:21 2013

Response via : Initial Calibration

DataAcq Meth : 090413S1

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
67) Azobenzene	9.25	77	1418804	48.11	ng/uL	97
70) 4,6-Dinitro-2-methylphenol	9.16	198	297240	62.90	ng/uL	92
71) n-Nitrosodiphenylamine	9.21	169	1102815	48.44	ng/uL	98
72) 4-Bromophenyl phenyl ether	9.53	248	524990	53.63	ng/uL	96
73) Hexachlorobenzene	9.63	284	585735	56.35	ng/uL	96
74) Pentachlorophenol	9.78	266	336510	46.99	ng/uL	98
75) Phenanthrene	9.98	178	2052490	51.73	ng/uL	99
76) Anthracene	10.02	178	2111220	51.06	ng/uL	99
77) Carbazole	10.14	167	1997367	52.04	ng/uL	100
78) Di-n-butylphthalate	10.35	149	2582852	55.46	ng/uL	99
79) Fluoranthene	11.00	202	2891775	52.70	ng/uL	98
81) Benzidine	11.06	184	1581187	57.81	ng/uL	98
82) Pyrene	11.20	202	2794412	48.53	ng/uL	98
84) Butylbenzylphthalate	11.63	149	1025161	55.16	ng/uL	96
85) Bis(2-ethylhexyl) adipate	11.64	129	828632	52.78	ng/uL	100
86) Bis(2-ethylhexyl)phthalate	12.09	149	1168540	48.32	ng/uL	99
87) 3,3'-Dichlorobenzidine	12.16	252	780816	48.95	ng/uL	97
88) Benzo[a]anthracene	12.23	228	2397548	49.07	ng/uL	100
89) Chrysene	12.27	228	2214110	49.65	ng/uL	99
90) Di-n-octylphthalate	12.66	149	1885413	57.39	ng/uL	99
92) Benzo[b]fluoranthene	13.30	252	1614748	53.73	ng/uL	99
93) Benzo[k]fluoranthene	13.33	252	1499351	51.34	ng/uL	98
94) Benzo[a]pyrene	13.70	252	1194572	48.21	ng/uL	97
95) Indeno(1,2,3-c,d)pyrene	15.29	276	863240	44.22	ng/uL	95
96) Dibenzo[a,h]anthracene	15.28	278	798324	46.59	ng/uL	97
97) Benzo[g,h,i]perylene	15.76	276	610419	39.98	ng/uL	96

-----

(#) = qualifier out of range (m) = manual integration

N8425.D 090413S1.M Fri Sep 20 12:05:44 2013

Page 3

Data File : D:\HPCHEM\1\DATA\091913\N8425.D

Acq On : 19 Sep 2013 15:23

Sample : EX130917-9LCS

Misc : WATER EX130917-9

MS Integration Params: RTEINT.P

Quant Time: Sep 20 12:04 2013

Vial: 4

Operator: jk SOP 50

Inst : GC/MS Ins

Multiplr: 1.00

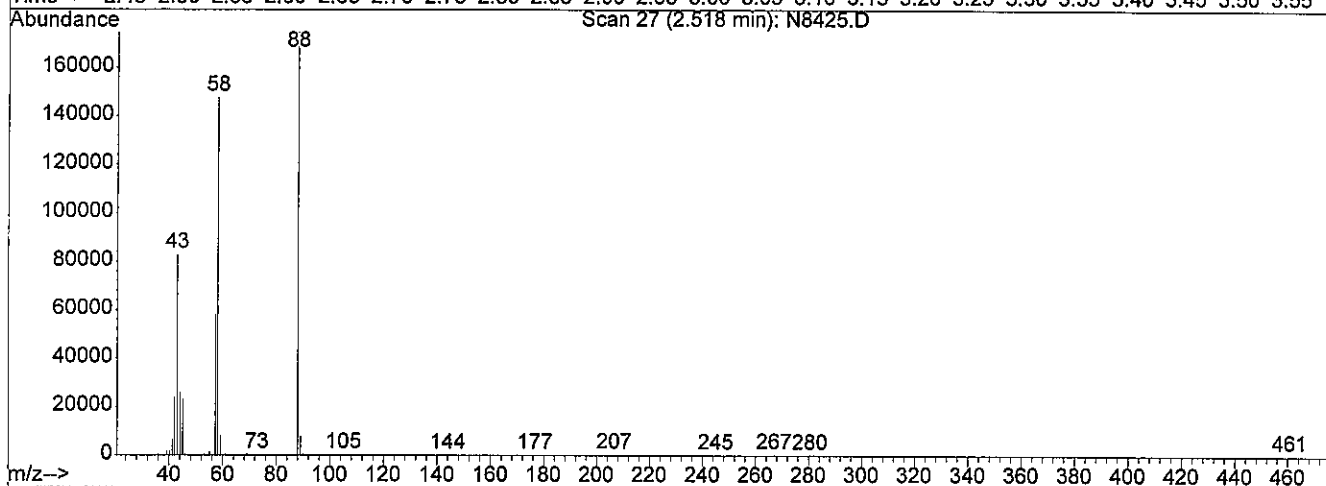
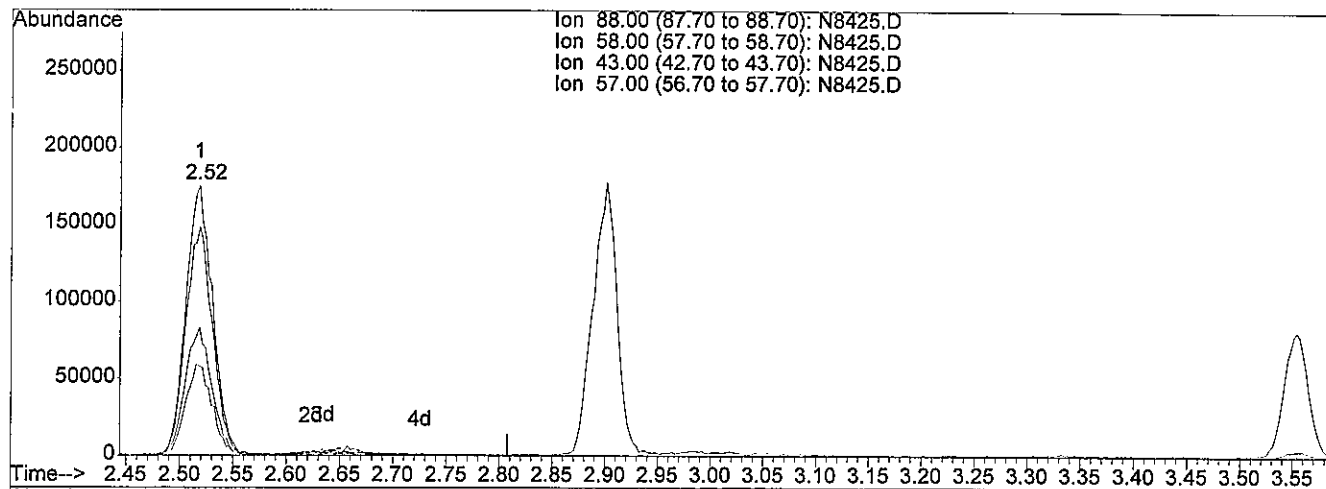
Quant Results File: temp.res

Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)

Title : GC-MS Semivolatiles SOP no. 506

Last Update : Fri Sep 20 12:03:21 2013

Response via : Multiple Level Calibration



(2) 1,4-Dioxane (t)

2.52min 42.01ng/uL

response 305220

Ion	Exp%	Act%
88.00	100	100
58.00	77.90	85.54
43.00	47.90	47.31
57.00	33.00	33.74

*Zefer*



Data File : D:\HPCHEM\1\DATA\091913\N8425.D

Acq On : 19 Sep 2013 15:23

Sample : EX130917-9LCS

Misc : WATER EX130917-9

MS Integration Params: RTEINT.P

Quant Time: Sep 20 12:04 2013

Vial: 4

Operator: jk SOP 50

Inst : GC/MS Ins

Multiplr: 1.00

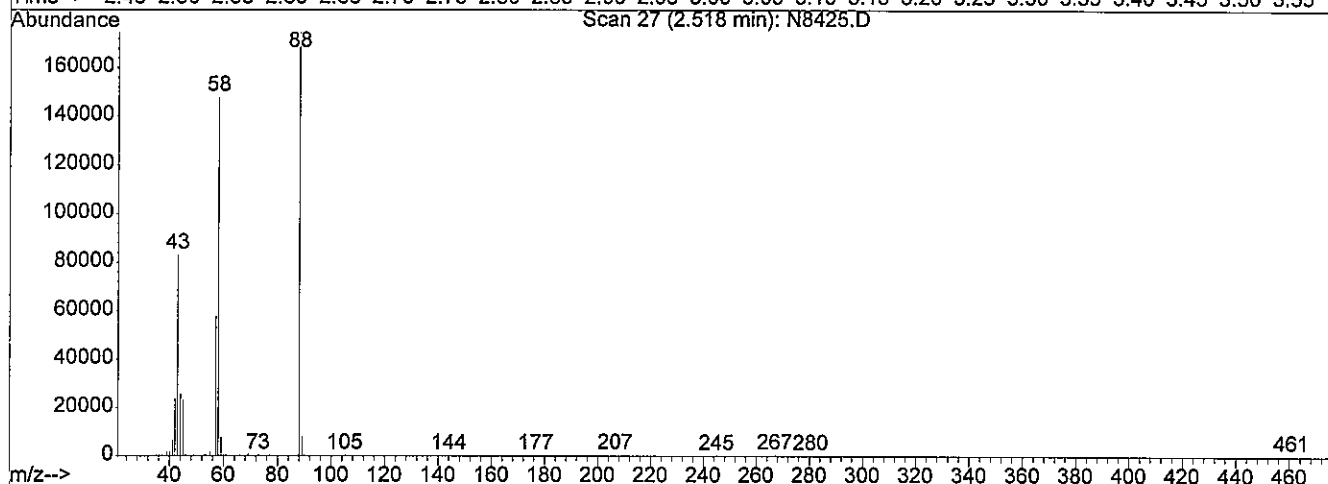
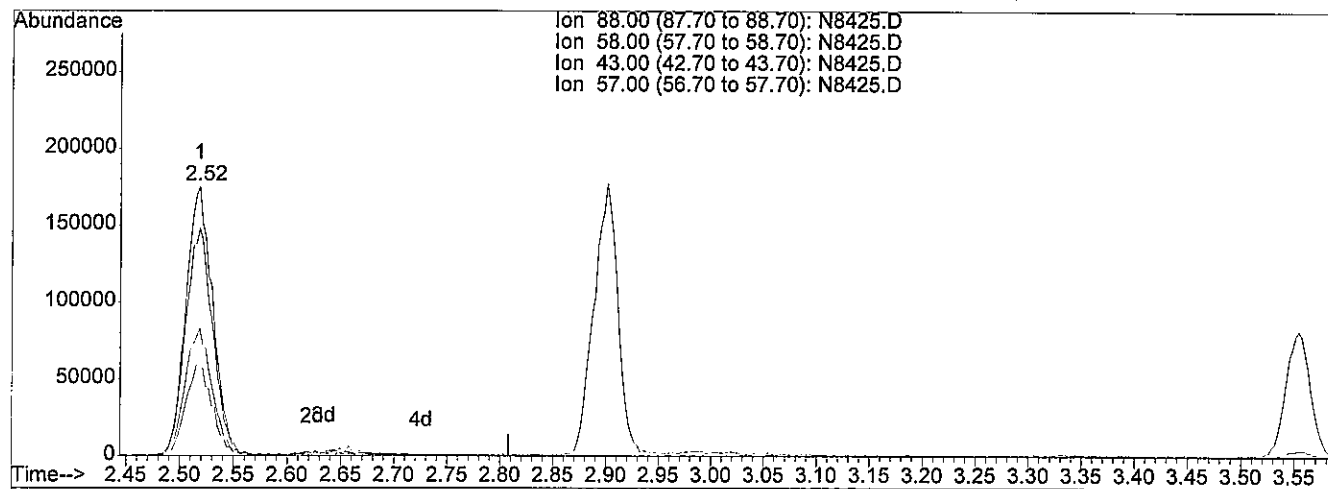
Quant Results File: temp.res

Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)

Title : GC-MS Semivolatiles SOP no. 506

Last Update : Fri Sep 20 12:03:21 2013

Response via : Multiple Level Calibration



(2) 1,4-Dioxane (t)

2.52min 44.22ng/uL m

response 321299

Ion	Exp%	Act%
88.00	100	100
58.00	77.90	81.26
43.00	47.90	44.94
57.00	33.00	32.05

### MANUAL RE-INTEGRATION

- ☐ missed peak assignment
- ☐ assigned incorrect name to peak
- ☐ over-integrated peak's area
- ☒ under-integrated peak's area
- ☐ other \_\_\_\_\_

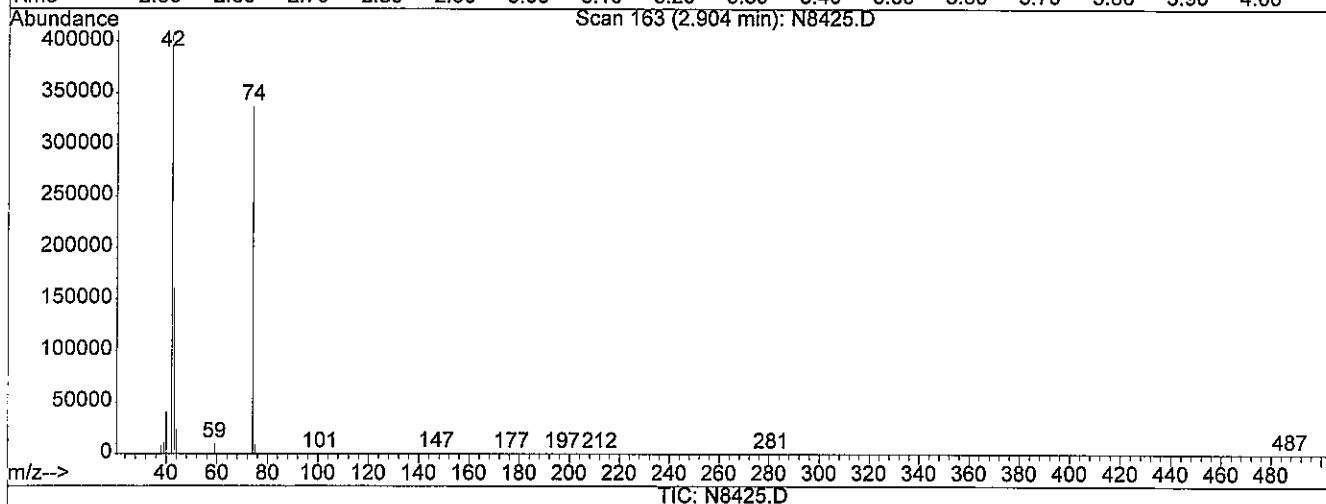
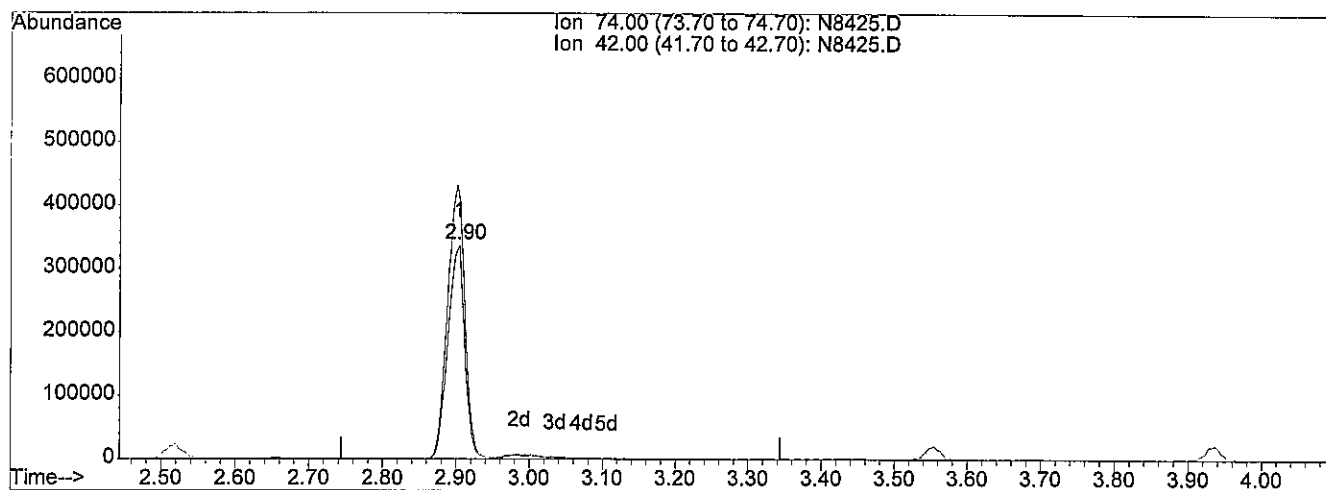
initials jk date 9-20-13

Data File : D:\HPCHEM\1\DATA\091913\N8425.D  
 Acq On : 19 Sep 2013 15:23  
 Sample : EX130917-9LCS  
 Misc : WATER EX130917-9  
 MS Integration Params: RTEINT.P  
 Quant Time: Sep 20 12:04 2013

Vial: 4  
 Operator: jk SOP 50  
 Inst : GC/MS Ins  
 Multiplr: 1.00

Quant Results File: temp.res

Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)  
 Title : GC-MS Semivolatiles SOP no. 506  
 Last Update : Fri Sep 20 12:03:21 2013  
 Response via : Multiple Level Calibration



(3) n-Nitrosodimethylamine (T)

2.90min 49.37ng/uL

response 534403

Ion	Exp%	Act%
74.00	100	100
42.00	129.50	132.39
0.00	0.00	0.00
0.00	0.00	0.00

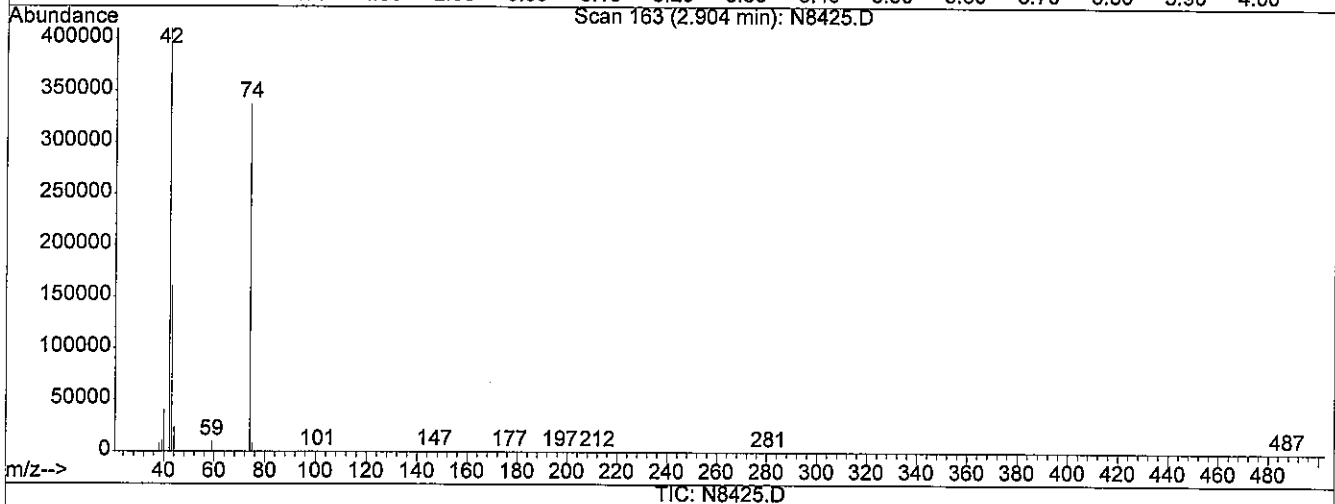
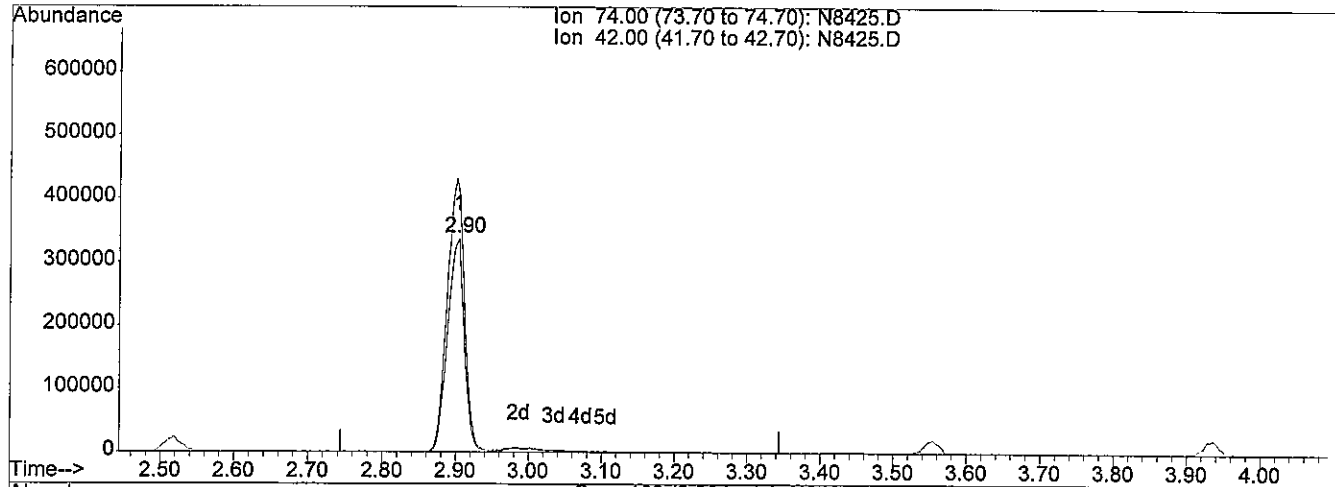
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Data File : D:\HPCHEM\1\DATA\091913\N8425.D  
 Acq On : 19 Sep 2013 15:23  
 Sample : EX130917-9LCS  
 Misc : WATER EX130917-9  
 MS Integration Params: RTEINT.P  
 Quant Time: Sep 20 12:04 2013

Vial: 4  
 Operator: jk SOP 50  
 Inst : GC/MS Ins  
 Multiplr: 1.00

Quant Results File: temp.res

Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)  
 Title : GC-MS Semivolatiles SOP no. 506  
 Last Update : Fri Sep 20 12:03:21 2013  
 Response via : Multiple Level Calibration



(3) n-Nitrosodimethylamine (T)

2.90min 51.90ng/uL m

response 561732

Ion	Exp%	Act%
74.00	100	100
42.00	129.50	125.95
0.00	0.00	0.00
0.00	0.00	0.00

### MANUAL RE-INTEGRATION

- ☐ missed peak assignment
- ☐ assigned incorrect name to peak
- ☐ over-integrated peak's area
- ☒ under-integrated peak's area
- ☐ other \_\_\_\_\_

initials JK date 9-20-13

Data File : D:\HPCHEM\1\DATA\091913\N8425.D

Acq On : 19 Sep 2013 15:23

Sample : EX130917-9LCS

Misc : WATER EX130917-9

MS Integration Params: RTEINT.P

Quant Time: Sep 20 12:04 2013

Vial: 4

Operator: jk SOP 50

Inst : GC/MS Ins

Multiplr: 1.00

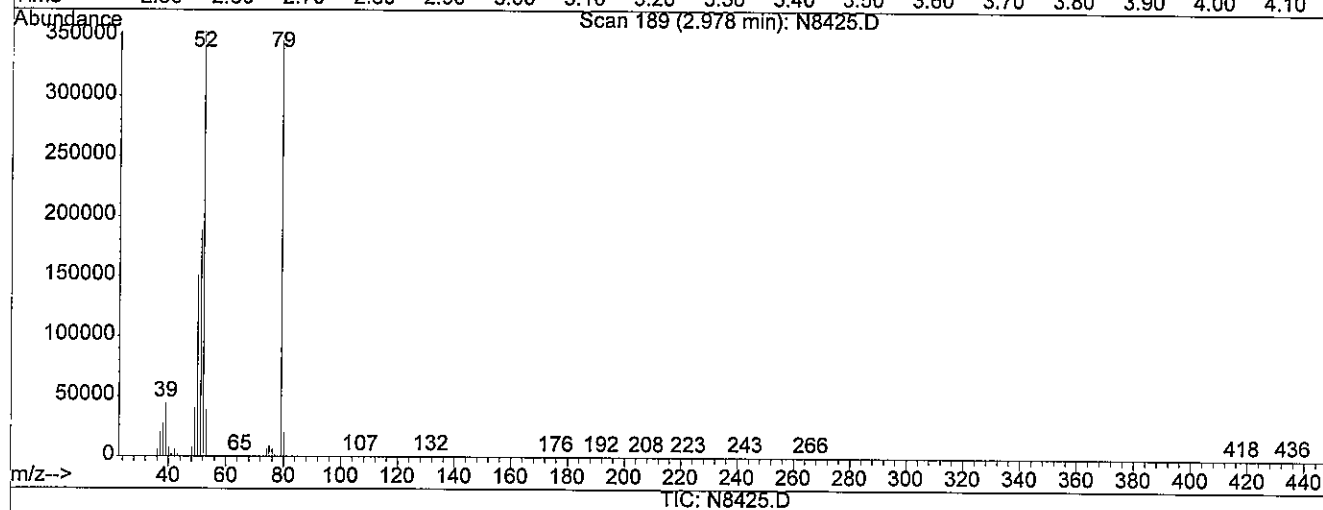
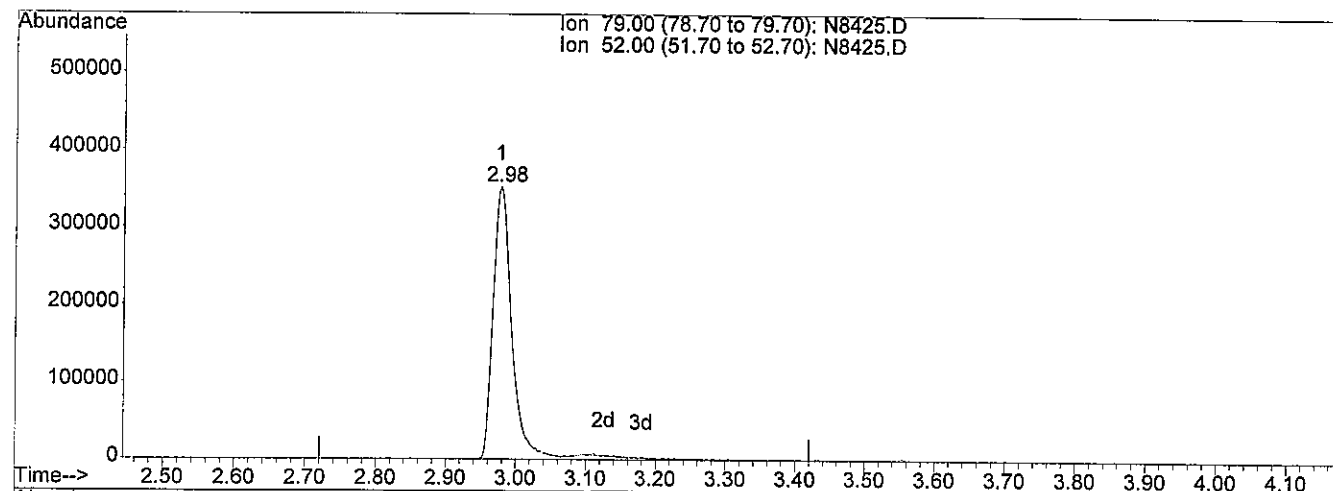
Quant Results File: temp.res

Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)

Title : GC-MS Semivolatiles SOP no. 506

Last Update : Fri Sep 20 12:03:21 2013

Response via : Multiple Level Calibration



(4) Pyridine (T)

2.98min 35.83ng/uL

response 655787

Ion	Exp%	Act%
79.00	100	100
52.00	93.60	100.70
0.00	0.00	0.00
0.00	0.00	0.00

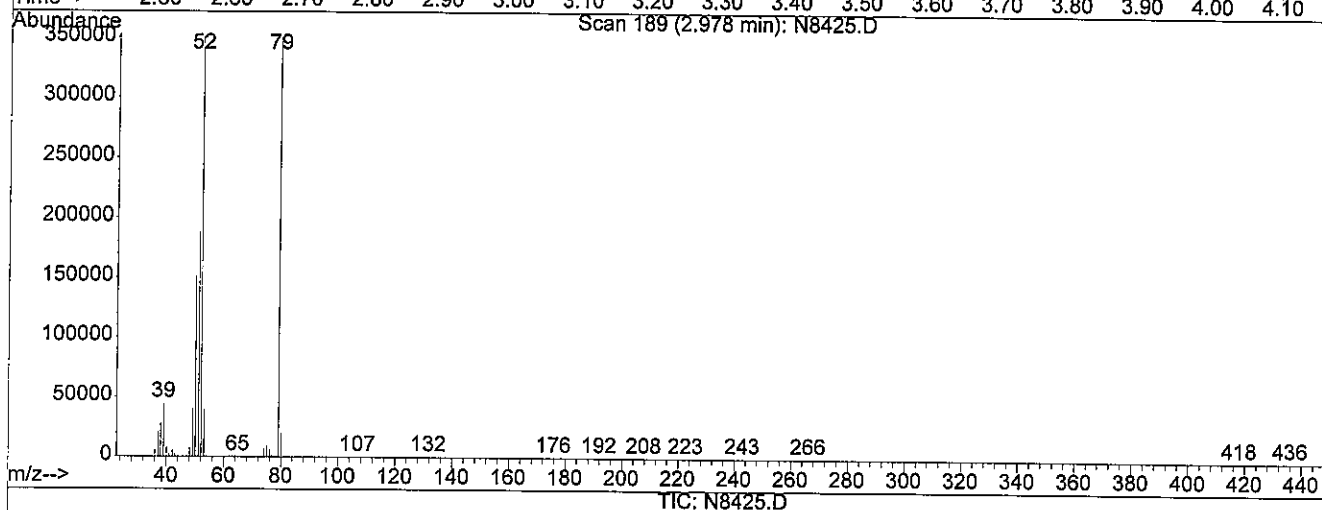
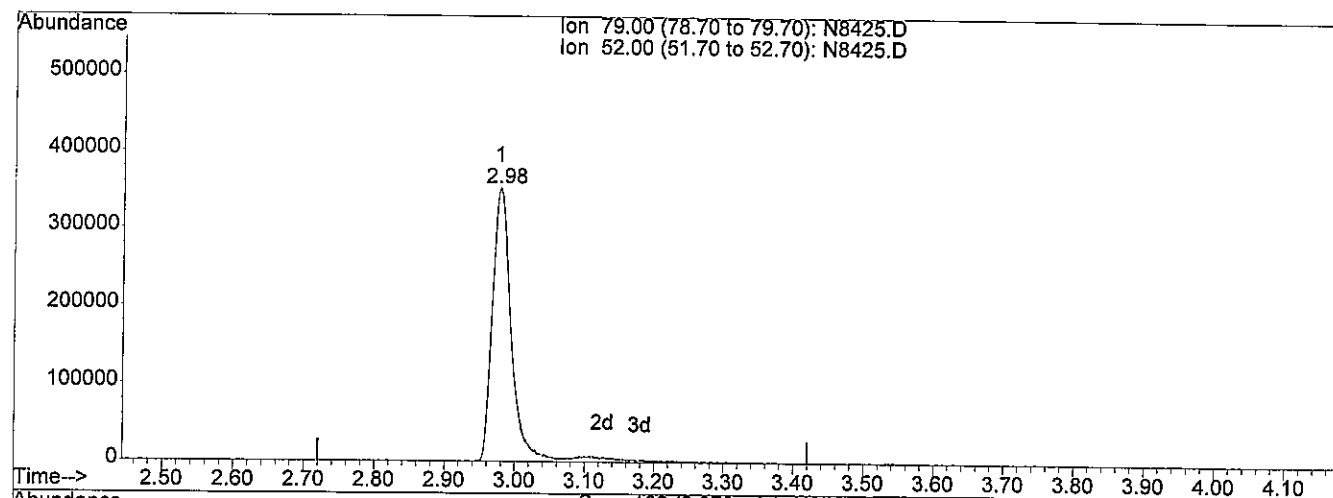
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Data File : D:\HPCHEM\1\DATA\091913\N8425.D  
 Acq On : 19 Sep 2013 15:23  
 Sample : EX130917-9LCS  
 Misc : WATER EX130917-9  
 MS Integration Params: RTEINT.P  
 Quant Time: Sep 20 12:04 2013

Vial: 4  
 Operator: jk SOP 50  
 Inst : GC/MS Ins  
 Multiplr: 1.00

Quant Results File: temp.res

Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)  
 Title : GC-MS Semivolatiles SOP no. 506  
 Last Update : Fri Sep 20 12:03:21 2013  
 Response via : Multiple Level Calibration



(4) Pyridine (T)

2.98min 37.90ng/uL m

response 693714

Ion	Exp%	Act%
79.00	100	100
52.00	93.60	95.20
0.00	0.00	0.00
0.00	0.00	0.00

### MANUAL RE-INTEGRATION

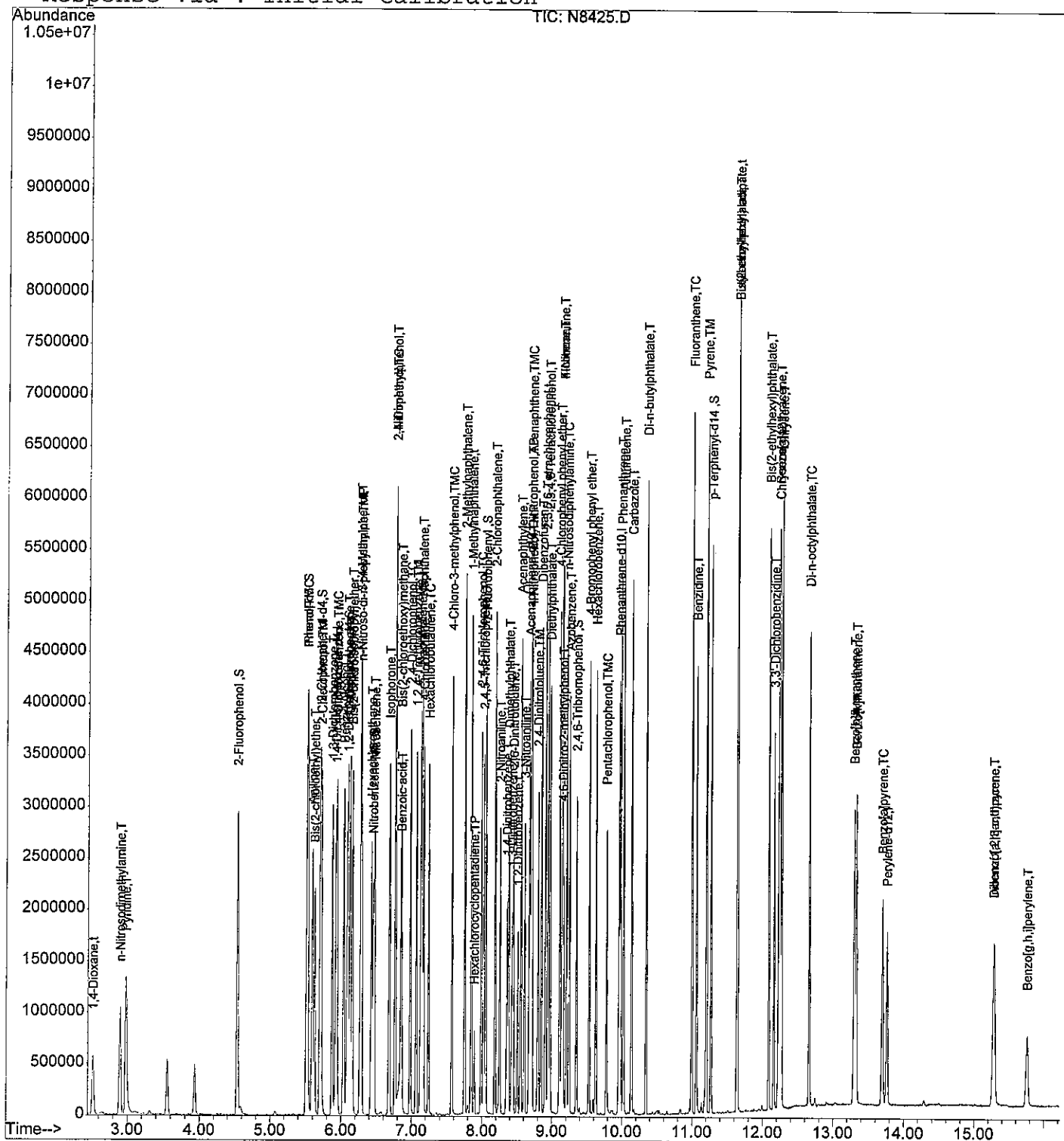
- ☐ missed peak assignment
- ☐ assigned incorrect name to peak
- ☐ over-integrated peak's area
- ☒ under-integrated peak's area
- ☐ other \_\_\_\_\_

initials JK date 9-20-13

Vial: 4  
Operator: jk SOP 506  
Inst : GC/MS Ins  
Multiplr: 1.00

Quant Results File: 090413S1.RES

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Method       : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)
Title        : GC-MS Semivolatiles      SOP no. 506
Last Update   : Fri Sep 20 12:03:21 2013
Response via  : Initial Calibration
```



Data File : D:\HPCHEM\1\DATA\091913\N8426.D

Acq On : 19 Sep 2013 15:47

Sample : EX130917-9LCSD

Misc : WATER EX130917-9

MS Integration Params: RTEINT.P

Quant Time: Sep 20 12:06 2013

Vial: 5

Operator: jk SOP 506 Rev

Inst : GC/MS Ins

Multiplr: 1.00

Quant Results File: 090413S1.RES

Quant Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)

Title : GC-MS Semivolatiles SOP no. 506

Last Update : Fri Sep 20 12:03:21 2013

Response via : Initial Calibration

DataAcq Meth : 090413S1

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	5.92	152	457423/	40.00	ng/uL	0.00
24) Naphthalene-d8	7.13	136	1867997/	40.00	ng/uL	0.00
41) Acenaphthene-d10	8.67	164	1053382/	40.00	ng/uL	0.00
69) Phenanthrene-d10	9.96	188	2090601/	40.00	ng/uL	0.00
80) Chrysene-d12	12.24	240	2138033/	40.00	ng/uL	0.00
91) Perylene-d12	13.76	264	938984/	40.00	ng/uL	0.00

## System Monitoring Compounds

5) 2-Fluorophenol	4.54	112	1051574m	67.24	ng/uL	0.00
Spiked Amount 75.000	Range 46 - 105		Recovery =	89.65%		/
6) 2-Chlorophenol-d4	5.70	132	1015954	76.90	ng/uL	0.00
Spiked Amount 75.000	Range 33 - 110		Recovery =	102.53%		/
8) Phenol-d5	5.51	99	1419148	69.44	ng/uL	0.00
Spiked Amount 75.000	Range 50 - 109		Recovery =	92.59%		/
15) 1,2-Dichlorobenzene-d4	6.08	152	428404	40.89	ng/uL	0.00
Spiked Amount 50.000	Range 16 - 110		Recovery =	81.78%		/
25) Nitrobenzene-d5	6.45	82	866778	40.86	ng/uL	0.00
Spiked Amount 50.000	Range 53 - 111		Recovery =	81.72%		/
46) 2-Fluorobiphenyl	8.05	172	1398196	39.42	ng/uL	0.00
Spiked Amount 50.000	Range 55 - 108		Recovery =	78.84%		/
68) 2,4,6-Tribromophenol	9.35	330	359430	66.45	ng/uL	0.00
Spiked Amount 75.000	Range 42 - 117		Recovery =	88.60%		/
83) p-Terphenyl-d14	11.26	244	1927063	38.60	ng/uL	0.00
Spiked Amount 50.000	Range 34 - 139		Recovery =	77.20%		/

## Target Compounds

						Qvalue
2) 1,4-Dioxane	2.52	88	350299m	46.08	ng/uL	
3) n-Nitrosodimethylamine	2.90	74	582232m	51.41	ng/uL	
4) Pyridine	2.97	79	756902m	39.53	ng/uL	
7) Aniline	5.60	93	1305024	54.59	ng/uL	97
9) Phenol	5.53	94	1082116	55.05	ng/uL	98
10) Tetramethylurea	0.00	72	0	N.D.	d	MA
11) Bis(2-chloroethyl)ether	5.63	93	796077	52.55	ng/uL	93
12) 2-Chlorophenol	5.72	128	778088	55.02	ng/uL	98
13) 1,3-Dichlorobenzene	5.87	146	844149	49.97	ng/uL	99
14) 1,4-Dichlorobenzene	5.94	146	795653	50.55	ng/uL	99
16) 1,2-Dichlorobenzene	6.10	146	756976	51.78	ng/uL	99
17) Benzyl Alcohol	6.04	108	543333	56.97	ng/uL	93
18) 2-Methylphenol	6.13	107	651225	55.78	ng/uL	95
19) Bis(2-chloroisopropyl)ethe	6.16	45	1612927	62.55	ng/uL	95
20) n-Nitroso-di-n-propylamine	6.29	70	639801	57.31	ng/uL	95
21) 3+4-Methylphenol	6.27	108	806116	56.21	ng/uL#	47

(#)=qualifier out of range (m)=manual integration

N8426.D 090413S1.M Fri Sep 20 12:07:27 2013

Page 1

Data File : D:\HPCHEM\1\DATA\091913\N8426.D

Vial: 5

Acq On : 19 Sep 2013 15:47

Operator: jk SOP 506 Rev

Sample : EX130917-9LCSD

Inst : GC/MS Ins

Misc : WATER EX130917-9

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Sep 20 12:06 2013

Quant Results File: 090413S1.RES

Quant Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)

Title : GC-MS Semivolatiles SOP no. 506

Last Update : Fri Sep 20 12:03:21 2013

Response via : Initial Calibration

DataAcq Meth : 090413S1

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
22) N-Methylaniline	0.00	106	0	N.D.	d	MA
23) Hexachloroethane	6.43	117	337683	50.96	ng/uL	98
26) N,N-Dimethylaniline	0.00	120	0	N.D.		MA
27) Nitrobenzene	6.47	77	926621	37.05	ng/uL	85
28) Isophorone	6.68	82	1720335	52.76	ng/uL	99
29) N-Ethylaniline	0.00	106	0	N.D.	d	MA
30) 2-Nitrophenol	6.76	139	436723	56.32	ng/uL	93
31) 2,4-Dimethylphenol	6.77	107	741506	46.10	ng/uL	99
32) Bis(2-chloroethoxy)methane	6.85	93	963547	49.85	ng/uL	98
33) Benzoic acid	6.87	105	526716	64.32	ng/uL	99
34) 2,4-Dichlorophenol	6.98	162	714575	51.30	ng/uL	99
35) 1,2,4-Trichlorobenzene	7.06	180	770060	44.93	ng/uL	100
36) Naphthalene	7.15	128	2247470	48.63	ng/uL#	88
37) 4-Chloroaniline	7.17	127	911174	54.56	ng/uL	98
38) Hexachlorobutadiene	7.24	225	469263	43.07	ng/uL	99
39) 4-Chloro-3-methylphenol	7.57	107	815136	59.12	ng/uL	99
40) 2-Methylnaphthalene	7.75	142	1669223	50.43	ng/uL	95
42) 1-Methylnaphthalene	7.84	142	1411700	46.06	ng/uL	94
43) Hexachlorocyclopentadiene	7.89	237	134036	14.29	ng/uL	98
44) 2,4,6-Trichlorophenol	7.99	196	568019	51.31	ng/uL	95
45) 2,4,5-Trichlorophenol	8.02	196	561557	54.10	ng/uL	95
47) 2-Chloronaphthalene	8.19	162	1528476	49.54	ng/uL	99
48) 2-Nitroaniline	8.26	65	570331	55.03	ng/uL	98
49) 1,4-Dinitrobenzene	8.36	168	270203	58.37	ng/uL	95
50) Dimethylphthalate	8.38	163	1572322	49.57	ng/uL	100
51) 1,3-Dinitrobenzene	8.43	168	293278	55.60	ng/uL	94
52) 2,6-Dinitrotoluene	8.45	165	385307	52.80	ng/uL	95
53) 1,2-Dinitrobenzene	8.51	168	191411	55.49	ng/uL	97
54) Acenaphthylene	8.56	152	2219738	48.87	ng/uL	98
55) 3-Nitroaniline	8.61	138	385619	56.47	ng/uL	95
56) Acenaphthene	8.70	154	1394031	51.08	ng/uL	97
57) 2,4-Dinitrophenol	8.69	184	220656	55.92	ng/uL#	1
58) 4-Nitrophenol	8.72	109	220504	50.65	ng/uL	86
59) Dibenzofuran	8.85	168	2034130	50.55	ng/uL	98
60) 2,4-Dinitrotoluene	8.80	165	571735	58.49	ng/uL	91
61) 2,3,5,6-Tetrachlorophenol	8.91	232	801778	80.48	ng/uL	99
62) 2,3,4,6-Tetrachlorophenol	8.94	232	764807	79.75	ng/uL	98
63) Diethylphthalate	8.97	149	1525357	52.52	ng/uL	99
64) 4-Chlorophenyl phenyl ethe	9.11	204	929262	51.07	ng/uL	95
65) 4-Nitroaniline	9.14	138	379412	61.79	ng/uL	93
66) Fluorene	9.14	166	1564914	50.12	ng/uL	100

(#)=qualifier out of range (m)=manual integration

N8426.D 090413S1.M Fri Sep 20 12:07:27 2013

Page 2



Data File : D:\HPCHEM\1\DATA\091913\N8426.D

Vial: 5

Acq On : 19 Sep 2013 15:47

Operator: jk SOP 506 Rev

Sample : EX130917-9LCSD

Inst : GC/MS Ins

Misc : WATER EX130917-9

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Sep 20 12:06 2013

Quant Results File: 090413S1.RES

Quant Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)

Title : GC-MS Semivolatiles SOP no. 506

Last Update : Fri Sep 20 12:03:21 2013

Response via : Initial Calibration

DataAcq Meth : 090413S1

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
67) Azobenzene	9.25	77	1659831	50.77	ng/uL	99
70) 4,6-Dinitro-2-methylphenol	9.16	198	342304	59.62	ng/uL	96
71) n-Nitrosodiphenylamine	9.21	169	1265906	45.77	ng/uL	98
72) 4-Bromophenyl phenyl ether	9.53	248	597139	50.21	ng/uL	96
73) Hexachlorobenzene	9.63	284	648178	51.32	ng/uL	95
74) Pentachlorophenol	9.78	266	416378	47.86	ng/uL	98
75) Phenanthrene	9.98	178	2520900	52.30	ng/uL	99
76) Anthracene	10.02	178	2563283	51.03	ng/uL	99
77) Carbazole	10.13	167	2481921	53.23	ng/uL	100
78) Di-n-butylphthalate	10.34	149	3033278	53.61	ng/uL	100
79) Fluoranthene	10.99	202	3375395	50.63	ng/uL	99
81) Benzidine	11.06	184	2103279	65.01	ng/uL	99
82) Pyrene	11.20	202	3266405	47.95	ng/uL	99
84) Butylbenzylphthalate	11.63	149	1204509	54.79	ng/uL	97
85) Bis(2-ethylhexyl) adipate	11.64	129	947712	51.04	ng/uL	98
86) Bis(2-ethylhexyl)phthalate	12.09	149	1466758	51.28	ng/uL	100
87) 3,3'-Dichlorobenzidine	12.16	252	966323	51.21	ng/uL	97
88) Benzo[a]anthracene	12.23	228	2882008	49.87	ng/uL	100
89) Chrysene	12.27	228	2626168	49.78	ng/uL	100
90) Di-n-octylphthalate	12.66	149	1985202	51.08	ng/uL	97
92) Benzo[b]fluoranthene	13.30	252	1653947	54.66	ng/uL	99
93) Benzo[k]fluoranthene	13.33	252	1515553	51.54	ng/uL	98
94) Benzo[a]pyrene	13.70	252	1310180	52.51	ng/uL	97
95) Indeno(1,2,3-c,d)pyrene	15.29	276	955425	48.61	ng/uL	95
96) Dibenzo[a,h]anthracene	15.27	278	869250	50.38	ng/uL	96
97) Benzo[g,h,i]perylene	15.76	276	682781	44.42	ng/uL	96

-----  
(#) = qualifier out of range (m) = manual integration

N8426.D 090413S1.M Fri Sep 20 12:07:27 2013

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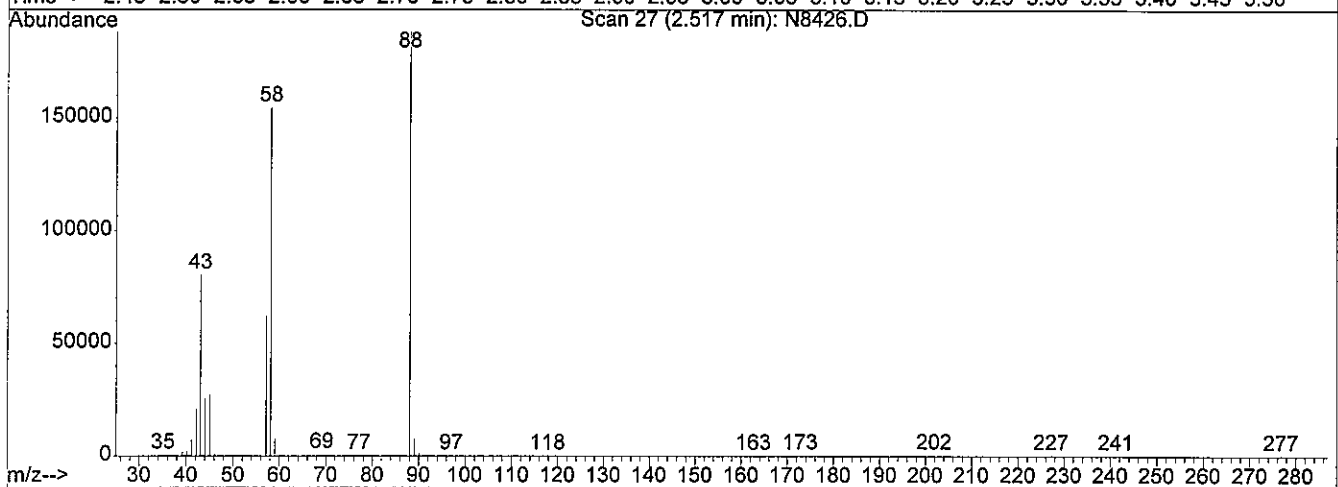
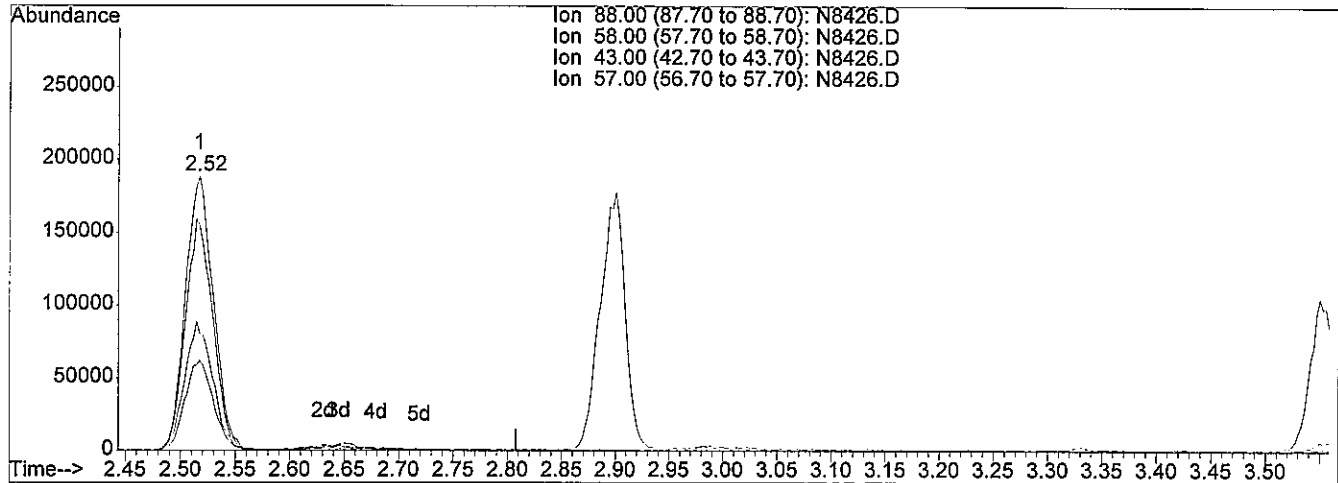
# Quantitation Report (Qedit)

Data File : D:\HPCHEM\1\DATA\091913\N8426.D  
 Acq On : 19 Sep 2013 15:47  
 Sample : EX130917-9LCSD  
 Misc : WATER EX130917-9  
 MS Integration Params: RTEINT.P  
 Quant Time: Sep 20 12:05 2013

Vial: 5  
 Operator: jk SOP 50  
 Inst : GC/MS Ins  
 Multiplr: 1.00

Quant Results File: temp.res

Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)  
 Title : GC-MS Semivolatiles SOP no. 506  
 Last Update : Fri Sep 20 12:03:21 2013  
 Response via : Multiple Level Calibration



(2) 1,4-Dioxane (t)

2.52min 43.67ng/uL

response 332038

Ion	Exp%	Act%
88.00	100	100
58.00	77.90	84.05
43.00	47.90	46.95
57.00	33.00	33.35

*2c Gove*

# Quantitation Report (Qedit)

Data File : D:\HPCHEM\1\DATA\091913\N8426.D

Acq On : 19 Sep 2013 15:47

Sample : EX130917-9LCSD

Misc : WATER EX130917-9

MS Integration Params: RTEINT.P

Quant Time: Sep 20 12:06 2013

Vial: 5

Operator: jk SOP 50

Inst : GC/MS Ins

Multiplr: 1.00

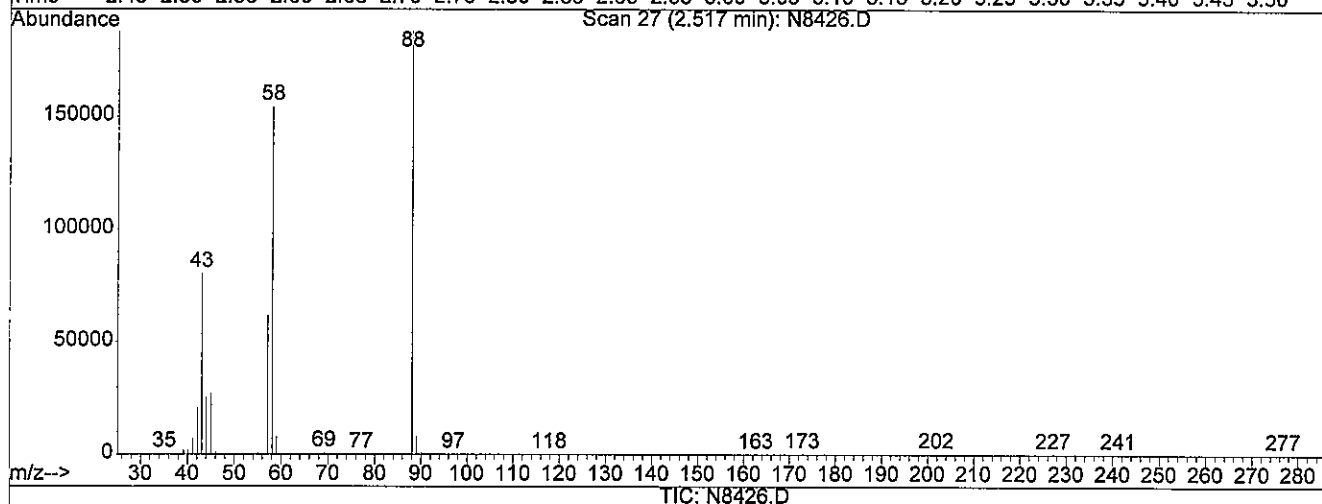
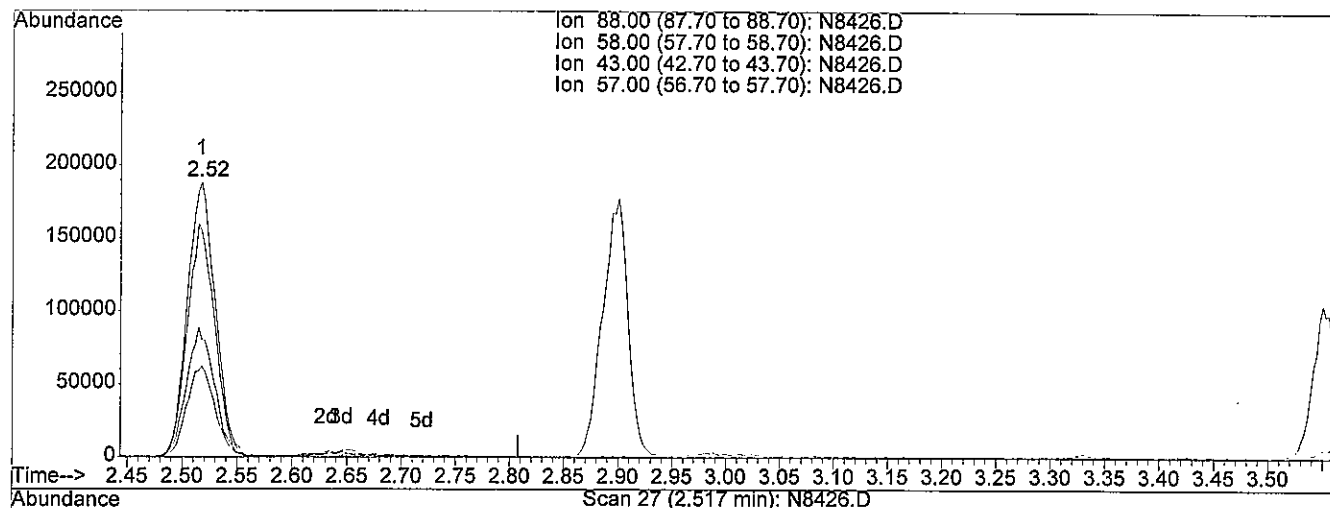
Quant Results File: temp.res

Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)

Title : GC-MS Semivolatiles SOP no. 506

Last Update : Fri Sep 20 12:03:21 2013

Response via : Multiple Level Calibration



(2) 1,4-Dioxane (t)

2.52min 46.08ng/uL m

response 350299

Ion	Exp%	Act%
88.00	100	100
58.00	77.90	79.67
43.00	47.90	44.50
57.00	33.00	31.61

## MANUAL RE-INTEGRATION

- ☐ missed peak assignment
- ☐ assigned incorrect name to peak
- ☐ over-integrated peak's area
- ☒ under-integrated peak's area
- ☐ other \_\_\_\_\_

initials JK date 9-20-13

# Quantitation Report (Qedit)

Data File : D:\HPCHEM\1\DATA\091913\N8426.D

Vial: 5

Acq On : 19 Sep 2013 15:47

Operator: jk SOP 50

Sample : EX130917-9LCSD

Inst : GC/MS Ins

Misc : WATER EX130917-9

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Sep 20 12:06 2013

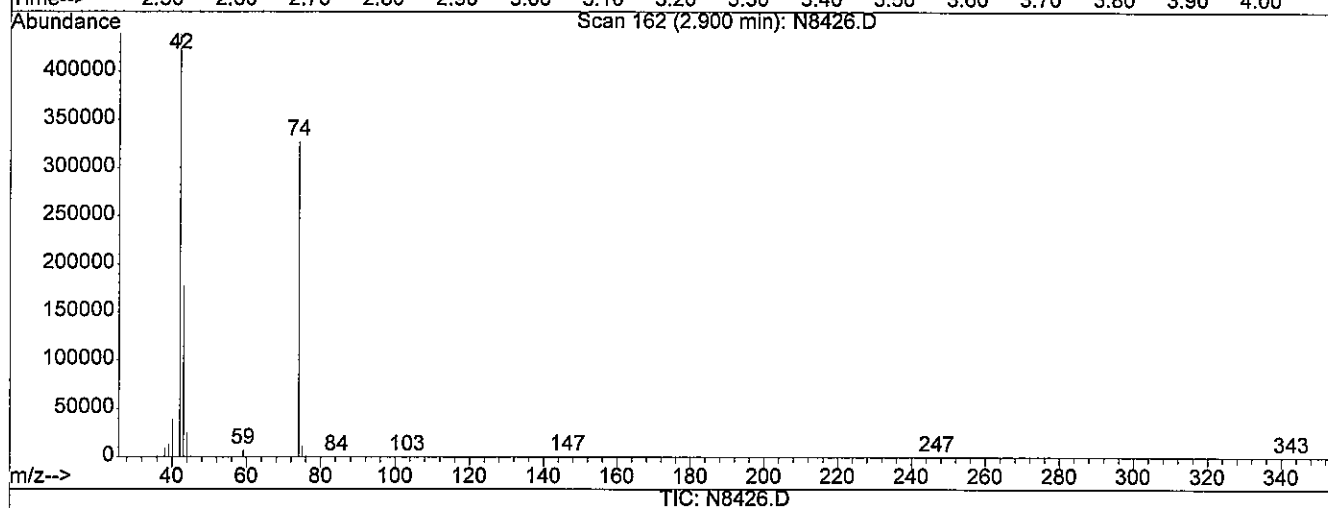
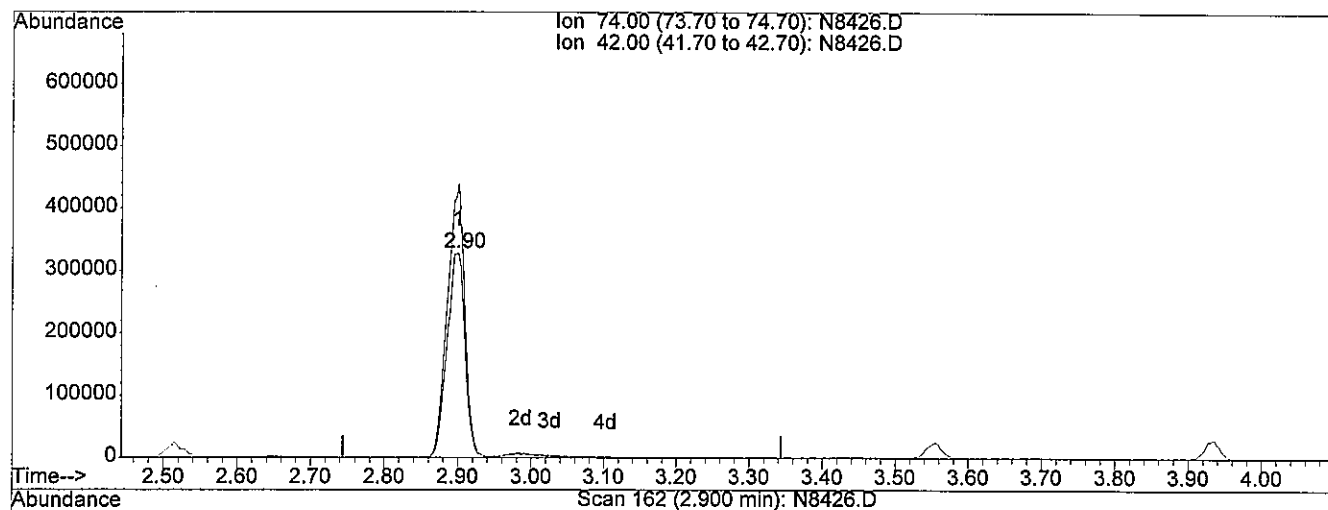
Quant Results File: temp.res

Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)

Title : GC-MS Semivolatiles SOP no. 506

Last Update : Fri Sep 20 12:03:21 2013

Response via : Multiple Level Calibration



(3) n-Nitrosodimethylamine (T)

2.90min 48.84ng/uL

response 553112

Ion	Exp%	Act%
74.00	100	100
42.00	129.50	130.23
0.00	0.00	0.00
0.00	0.00	0.00

*Refer*

# Quantitation Report (Qedit)

Data File : D:\HPCHEM\1\DATA\091913\N8426.D

Vial: 5

Acq On : 19 Sep 2013 15:47

Operator: jk SOP 50

Sample : EX130917-9LCSD

Inst : GC/MS Ins

Misc : WATER EX130917-9

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Sep 20 12:06 2013

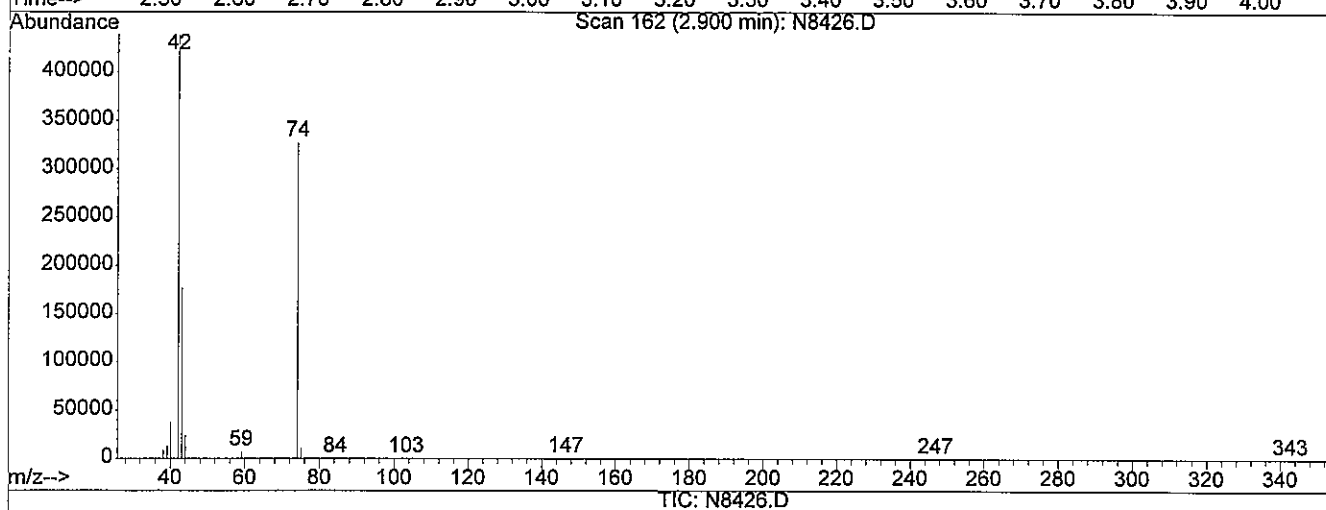
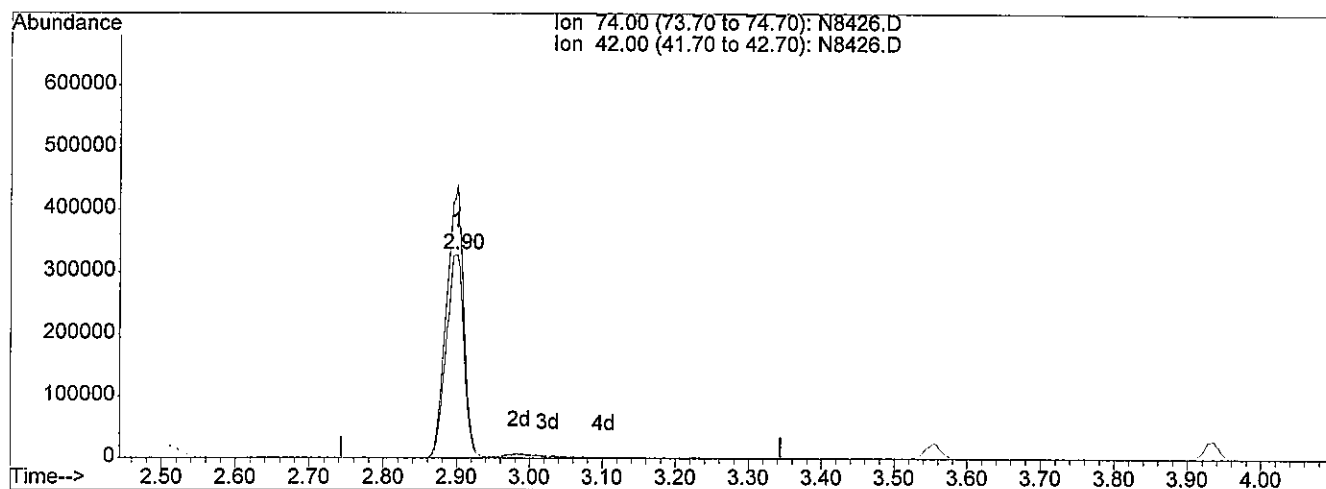
Quant Results File: temp.res

Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)

Title : GC-MS Semivolatiles SOP no. 506

Last Update : Fri Sep 20 12:03:21 2013

Response via : Multiple Level Calibration



(3) n-Nitrosodimethylamine (T)

2.90min 51.41ng/uL m

response 582232

Ion	Exp%	Act%
74.00	100	100
42.00	129.50	123.72
0.00	0.00	0.00
0.00	0.00	0.00

## MANUAL RE-INTEGRATION

- ☐ missed peak assignment
- ☐ assigned incorrect name to peak
- ☐ over-integrated peak's area
- ☒ under-integrated peak's area
- ☐ other \_\_\_\_\_

initials JK date 9-20-13

# Quantitation Report (Qedit)

Data File : D:\HPCHEM\1\DATA\091913\N8426.D

Acq On : 19 Sep 2013 15:47

Sample : EX130917-9LCSD

Misc : WATER EX130917-9

MS Integration Params: RTEINT.P

Quant Time: Sep 20 12:06 2013

Vial: 5

Operator: jk SOP 50

Inst : GC/MS Ins

Multiplr: 1.00

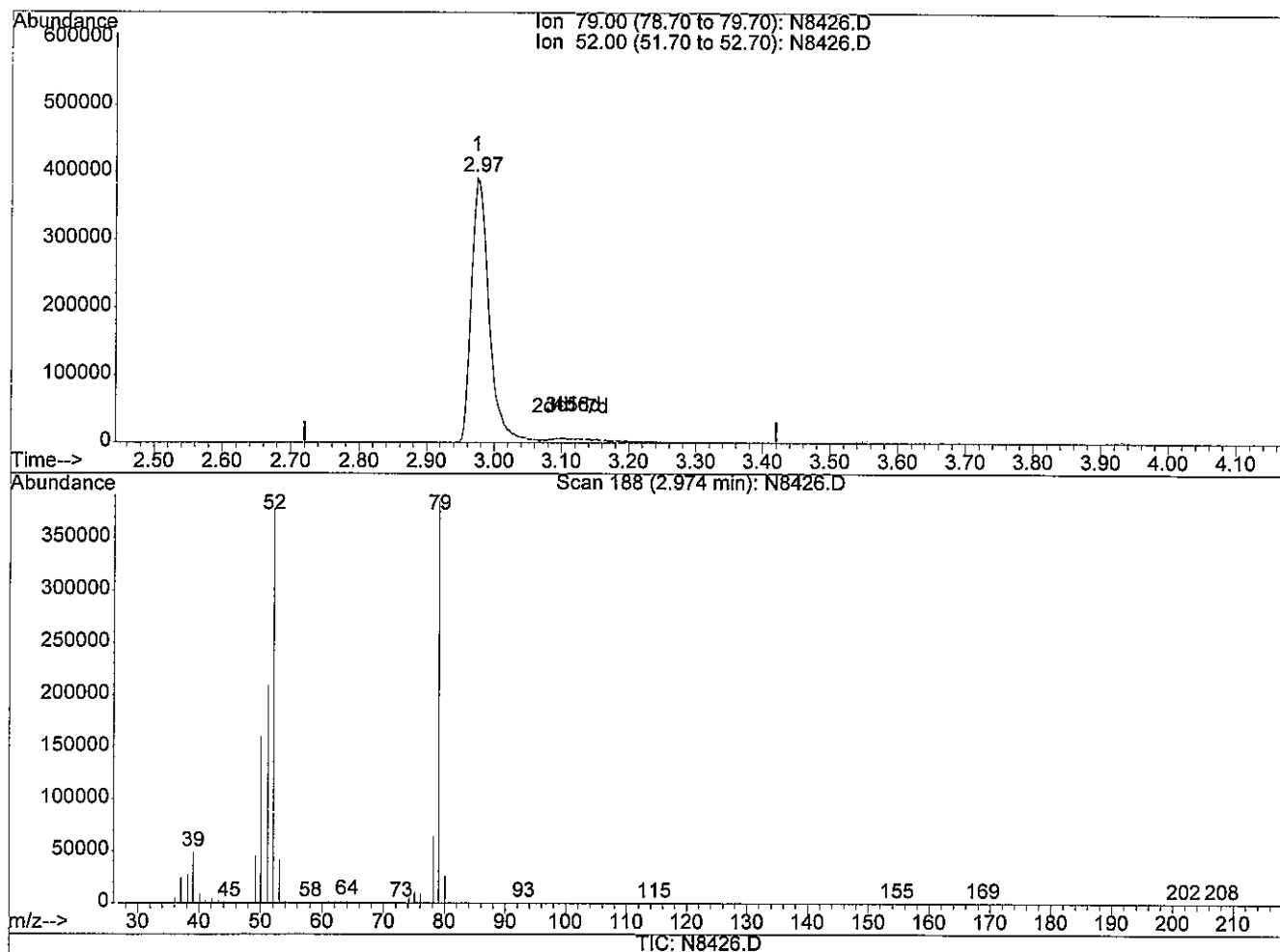
Quant Results File: temp.res

Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)

Title : GC-MS Semivolatiles SOP no. 506

Last Update : Fri Sep 20 12:03:21 2013

Response via : Multiple Level Calibration



(4) Pyridine (T)

2.97min 37.40ng/uL

response 716160

Ion	Exp%	Act%
79.00	100	100
52.00	93.60	101.31
0.00	0.00	0.00
0.00	0.00	0.00

*John*

# Quantitation Report (Qedit)

Data File : D:\HPCHEM\1\DATA\091913\N8426.D

Vial: 5

Acq On : 19 Sep 2013 15:47

Operator: jk SOP 50

Sample : EX130917-9LCSD

Inst : GC/MS Ins

Misc : WATER EX130917-9

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Sep 20 12:06 2013

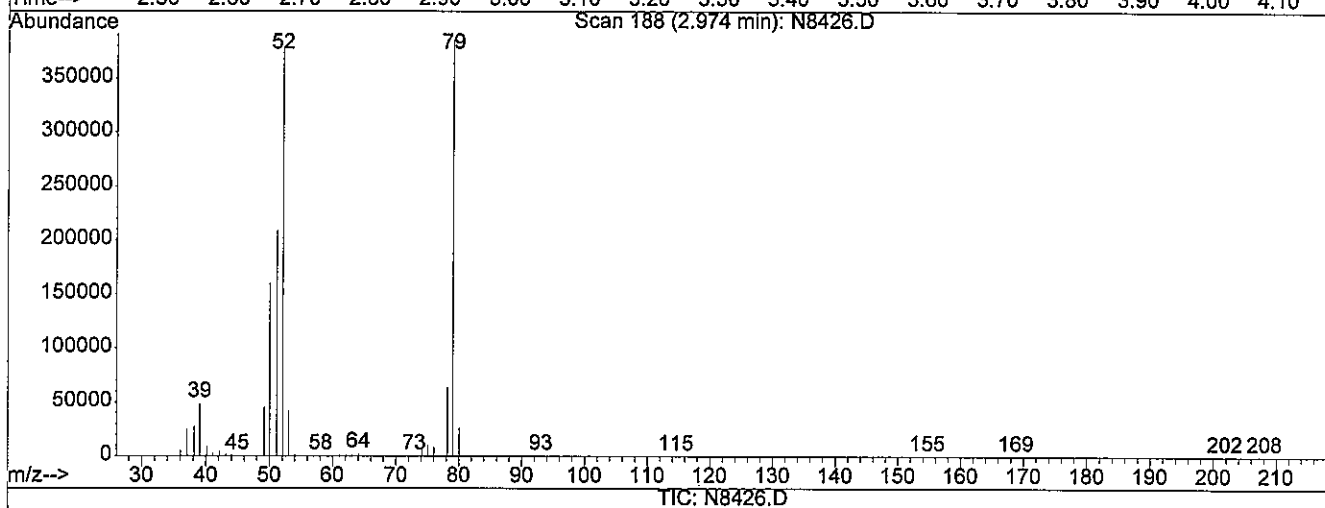
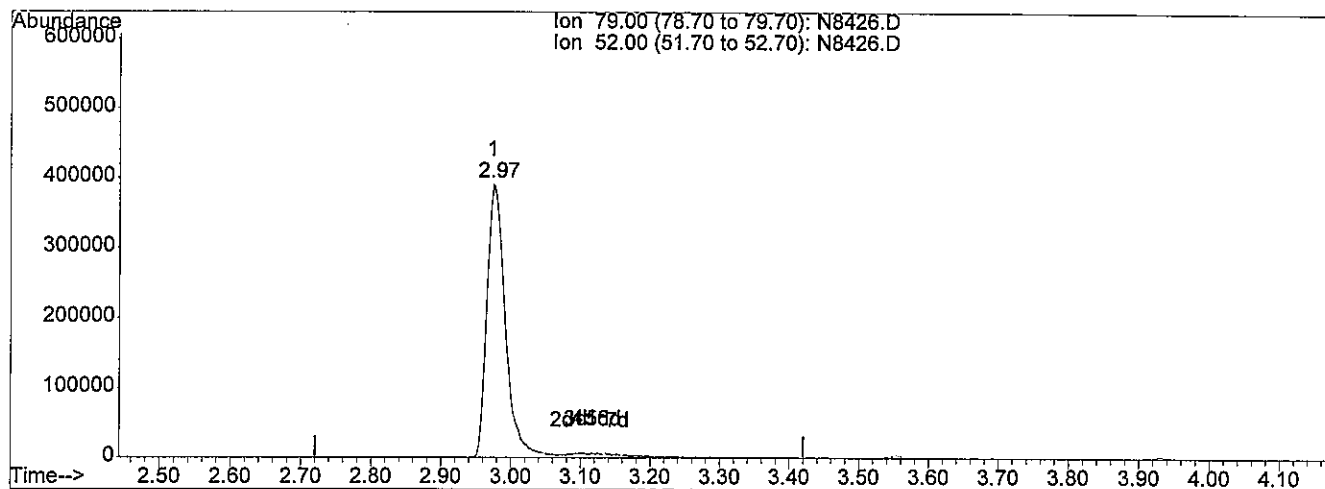
Quant Results File: temp.res

Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)

Title : GC-MS Semivolatiles SOP no. 506

Last Update : Fri Sep 20 12:03:21 2013

Response via : Multiple Level Calibration



(4) Pyridine (T)

2.97min 39.53ng/uL m

response 756902

Ion	Exp%	Act%
79.00	100	100
52.00	93.60	95.86
0.00	0.00	0.00
0.00	0.00	0.00

## MANUAL RE-INTEGRATION

- ☐ missed peak assignment
- ☐ assigned incorrect name to peak
- ☐ over-integrated peak's area
- ☒ under-integrated peak's area
- ☐ other \_\_\_\_\_

initials ju date 9-20-13

# Quantitation Report (Qedit)

Data File : D:\HPCHEM\1\DATA\091913\N8426.D

Vial: 5

Acq On : 19 Sep 2013 15:47

Operator: jk SOP 50

Sample : EX130917-9LCSD

Inst : GC/MS Ins

Misc : WATER EX130917-9

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Sep 20 12:06 2013

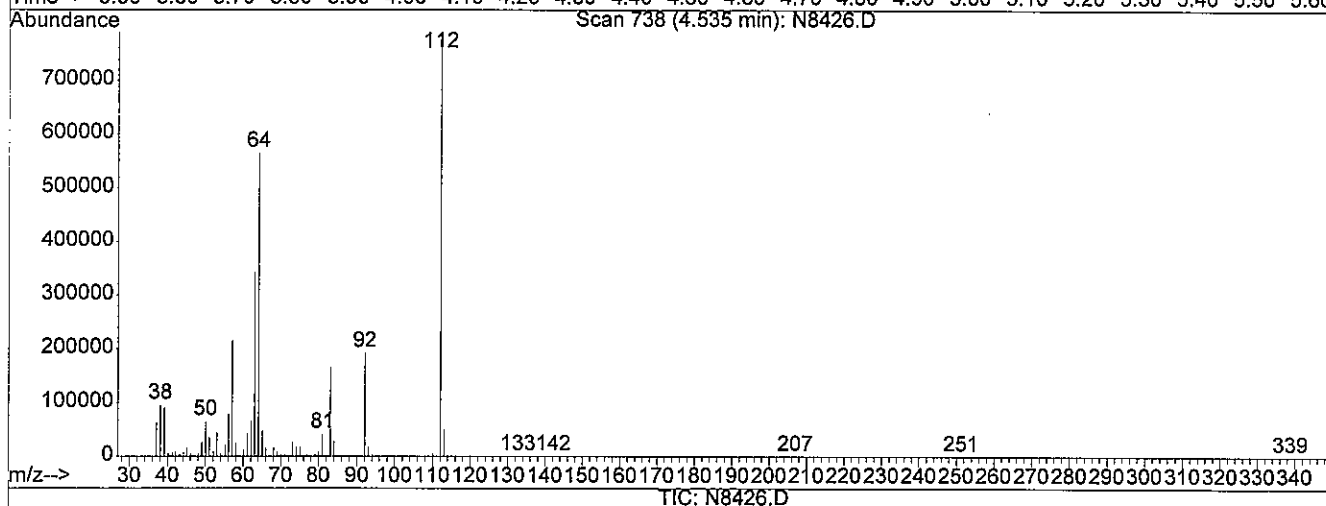
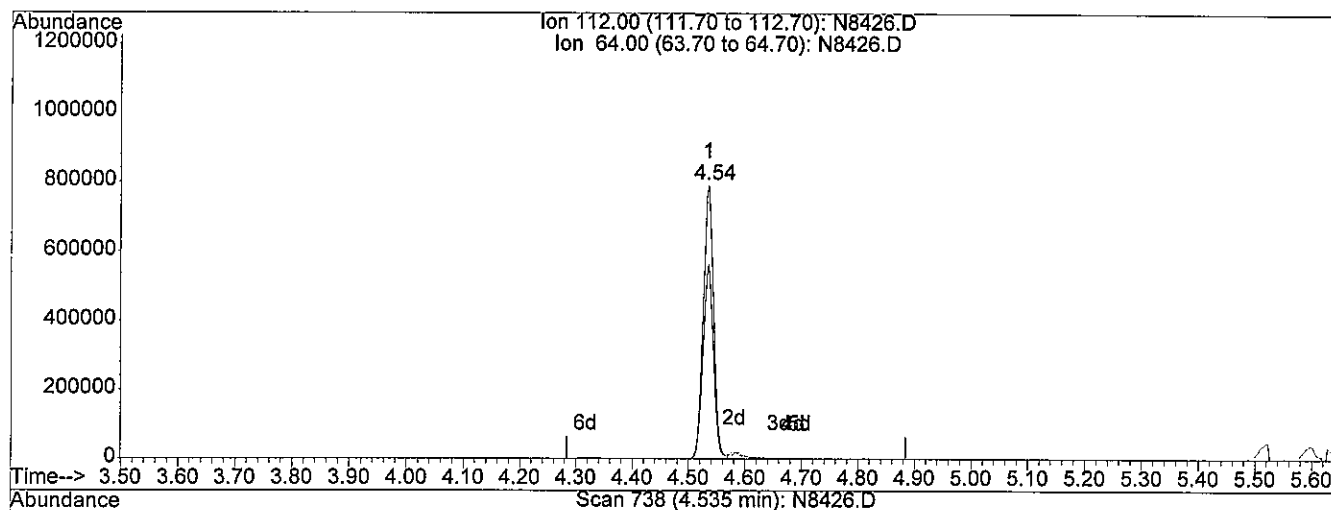
Quant Results File: temp.res

Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)

Title : GC-MS Semivolatiles SOP no. 506

Last Update : Fri Sep 20 12:03:21 2013

Response via : Multiple Level Calibration



(5) 2-Fluorophenol (S)

4.54min 64.68ng/uL

response 1011639

Ion	Exp%	Act%
112.00	100	100
64.00	68.70	71.20
0.00	0.00	0.00
0.00	0.00	0.00

*3c6on*



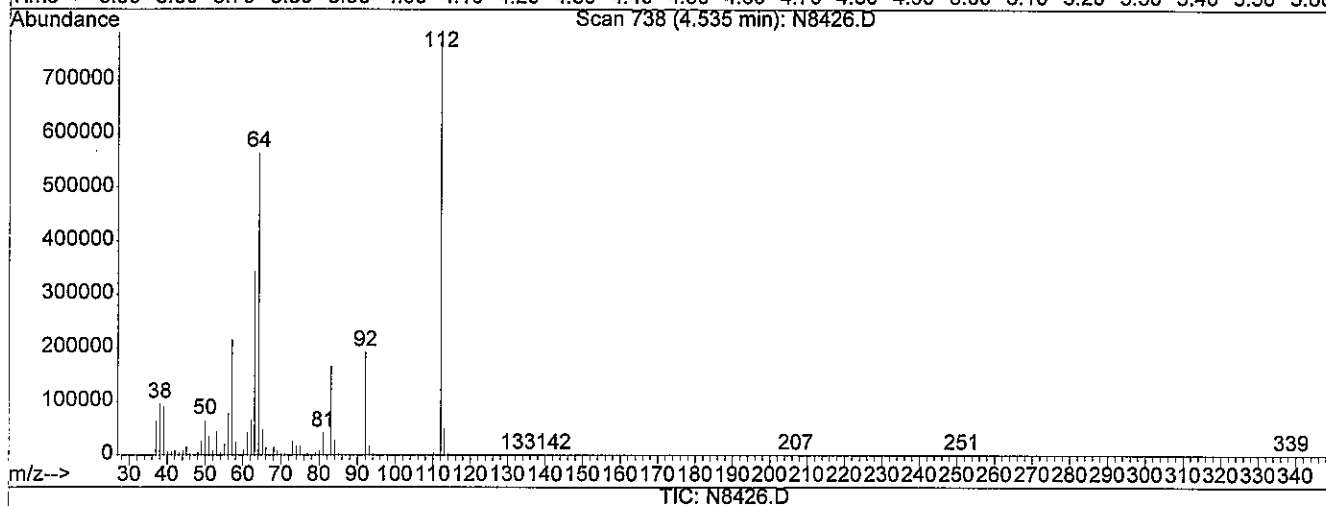
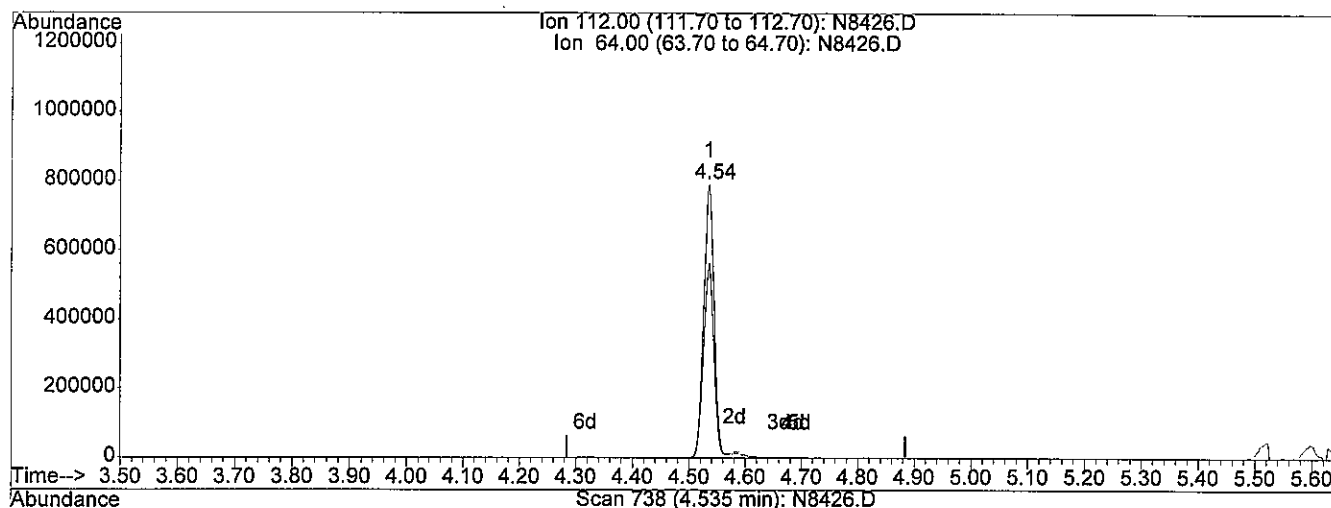
# Quantitation Report (Qedit)

Data File : D:\HPCHEM\1\DATA\091913\N8426.D  
 Acq On : 19 Sep 2013 15:47  
 Sample : EX130917-9LCSD  
 Misc : WATER EX130917-9  
 MS Integration Params: RTEINT.P  
 Quant Time: Sep 20 12:06 2013

Vial: 5  
 Operator: jk SOP 50  
 Inst : GC/MS Ins  
 Multiplr: 1.00

Quant Results File: temp.res

Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)  
 Title : GC-MS Semivolatiles SOP no. 506  
 Last Update : Fri Sep 20 12:03:21 2013  
 Response via : Multiple Level Calibration



(5) 2-Fluorophenol (S)

4.54min 67.24ng/uL m

response 1051574

Ion	Exp%	Act%
112.00	100	100
64.00	68.70	68.50
0.00	0.00	0.00
0.00	0.00	0.00

## MANUAL RE-INTEGRATION

- ☐ missed peak assignment
- ☐ assigned incorrect name to peak
- ☐ over-integrated peak's area
- ☒ under-integrated peak's area
- ☐ other \_\_\_\_\_

initials JK date 9-20-13





## Miscellaneous

