ALS Environmental

received 09/26/2013
Project 2130

GC/MS Semivolatiles

Case Narrative

Colorado Oil & Gas Conservation Commission

TBAL

Work Order Number: 1308515

1. This report consists of 3 water samples. These samples were received cool and intact by ALS on 08/29/13.

2. These samples were prepared and analyzed according to SW-846, 3rd Edition procedures. Specifically, the water samples were 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 ≤20%. If linear or higher order regression calibrations were used in the initial calibration, the coefficient of determination (r^2) ≥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 ≤30%.

6. All compounds in each of the daily (continuing) calibration verifications were within 20%D with the exception of 1,4-dioxane which was high. This compound was not detected in the associated samples.

7. All method blank criteria were met, with the exception of 1 TIC which was B flagged in any samples in which it occurred.

8. All laboratory control sample and laboratory control sample duplicate recoveries and RPDs were within the acceptance criteria with the following exceptions:

Spiked Compound	QC Sample	Direction
Pyridine	LCS & LCSD	RPD
Aniline	LCS & LCSD	RPD
Benzoic acid	LCS & LCSD	Low & RPD
3,3'-dichlorobenzidine	LCS & LCSD	RPD

Because of the large amount of analytes spiked in the LCS/LCSD sporadic failures are allowed. Compounds failing just the RPD have both the LCS/LCSD passing criteria, no corrective actions are necessary.

9. Since a sample from this order number was not the selected quality control (QC) sample, matrix specific QC results are not included in this report.

10. The samples were 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 — 9/23/13
Emily Lyons, Date
Organics Primary Data Reviewer

Joe Kwiatkowski — September 27, 2013
Organics Final Data Reviewer, 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

OrderNum: 1308515
Client Name: Colorado Oil & Gas Conservation Commission
Client Project Name: TBAL
Client Project Number:
Client PO Number: PHA 14-22

Client Sample Number	Lab Sample Number	COC Number	Matrix	Date Collected	Time Collected
McDonald 1	1308515-1		WATER	28-Aug-13	8:40
McDonald 2	1308515-2		WATER	28-Aug-13	9:10
752787 Earls	1308515-3		WATER	28-Aug-13	9:46

ALS Laboratory Group

225 Commerce Drive, Fort Collins, Colorado 80524
TF: (800) 443-1511 PH: (970) 490-1511 FX: (970) 490-1522

Chain-of-Custody

Form 202r8

WORKORDER # 1308515

PAGE 1 of 1

DISPOSAL By Lab, or Return to Client

PROJECT NAME	TBAL	SAMPLER	Gintautas
PROJECT No.		SITE ID	
		EDD FORMAT	
		PURCHASE ORDER	
COMPANY NAME	Colo. Oil & Gas Long Com.	BILL TO COMPANY	
SEND REPORT TO	Peter Gintautas	INVOICE ATTN TO	
ADDRESS	PO Box 106	ADDRESS	
CITY / STATE / ZIP	Trinidad Co 81082	CITY / STATE / ZIP	
PHONE	719-846-3091	PHONE	
FAX		FAX	
E-MAIL	peter.gintautas@state.co.us	E-MAIL	

DATE 28 Aug 2013

TURNAROUND 28 Day

Lab ID	Field ID	Matrix	Sample Date	Sample Time	# Bottles	Pres.	QC	Dissolved Gases	8270 + 1,4-dioxane (TIC)	300.7 Dissolved	300.0 Dissolved	Anions	pH	Headspace Gas	TDS	Alkalinity (Tot, HCO3)	SAR calc	Cation Anion Balance	TOC	
1	McDonald 1	W	28Aug13	08:40	6	8		X	X	X	X	X	X	X	X	X	X	X		
		W			1	3													X	
2	McDonald 2	W	28Aug13	09:10	6	8		X	X	X	X	X	X	X	X	X	X	X		
		W			1	3													X	
3	752787 Earls	W	28Aug13	09:40	8	8		X	X	X	X	X	X	X	X	X	X	X		Metals MS/D Water QC Volumes
		W			1	3													X	

*Time Zone (Circle): EST CST (MST) PST Matrix: O = oil S = soil NS = non-soil solid W = water L = liquid E = extract F = filter

For metals or anions, please detail analytes below.

Comments: Anions = Br, Cl, F, NO2, NO3, SO4
Dissolved = Filtered preserved at lab
Metals list as in other TBAL

QC PACKAGE (check below)

- LEVEL II (Standard QC)
- LEVEL III (Std QC + forms)
- X LEVEL IV (Std QC + forms + raw data) Wonly

Preservative Key: 1-HCl 2-HNO3 3-H2SO4 4-NaOH 5-NaHSO4 7-Other 8-4 degrees C 9-5035

	SIGNATURE	PRINTED NAME	DATE	TIME
RELINQUISHED BY				
RECEIVED BY		Jacob Roddy	8/28/13	0930
RELINQUISHED BY				
RECEIVED BY				
RELINQUISHED BY				
RECEIVED BY				

ALS Environmental - Fort Collins
CONDITION OF SAMPLE UPON RECEIPT FORM

Client: COGCC Workorder No: 1308515

Project Manager: ARW Initials: JLR Date: 8/29/13

1. Does this project require any special handling in addition to standard ALS procedures?		YES	(NO)
2. Are custody seals on shipping containers intact?	NONE	(YES)	NO
3. Are Custody seals on sample containers intact?	(NONE)	YES	NO
4. Is there a COC (Chain-of-Custody) present or other representative documents?		(YES)	NO
5. Are the COC and bottle labels complete and legible?		(YES)	NO
6. Is the COC in agreement with samples received? (IDs, dates, times, no. of samples, no. of containers, matrix, requested analyses, etc.)		(YES)	NO
7. Were airbills / shipping documents present and/or removable?	DROP OFF	(YES)	NO
8. Are all aqueous samples requiring preservation preserved correctly? (excluding volatiles)	N/A	(YES)	NO
9. Are all aqueous non-preserved samples pH 4-9?	N/A	(YES)	NO
10. Is there sufficient sample for the requested analyses?		(YES)	NO
11. Were all samples placed in the proper containers for the requested analyses?		(YES)	NO
12. Are all samples within holding times for the requested analyses?		(YES)	NO
13. Were all sample containers received intact? (not broken or leaking, etc.)		(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	(YES)	NO
15. Do any water samples contain sediment? Amount Amount of sediment: ____ dusting ____ moderate ____ heavy	N/A	YES	(NO)
16. Were the samples shipped on ice?		(YES)	NO
17. Were cooler temperatures measured at 0.1-6.0°C? IR gun used*: #2 (#4)	RAD ONLY	(YES)	NO

Cooler #:	1							
Temperature (°C):	4°C							
No. of custody seals on cooler:	2							
DOT Survey/ Acceptance Information — External µR/hr reading:	11							
Background µR/hr reading:	11							

Were external µR/hr readings ≤ two times background and within DOT acceptance criteria? (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: _____ Date/Time: _____

Project Manager Signature / Date: 8/29/13

*IR Gun #2: Oakton, SN 29922500201-0066
*IR Gun #4: Oakton, SN 2372220101-0002

1308515

From: (719) 846-3091
Peter Gintautas
Colo. Oil & Gas Cons. Comm.
213 Corundum RD

Trinidad, CO 81082

Origin ID: PUBA

FedEx Express

J13201306280326

Ship Date: 28AUG13
ActWgt: 46.0 LB
CAD: 4076443/INET3430

Delivery Address Bar Code

SHIP TO: (970) 490-1511

BILL SENDER

Amy Wolf
ALS Laboratory Group
225 COMMERCE DR

FORT COLLINS, CO 80524

Ref # Complaint 200247064
Invoice #
PO #
Dept #

THU - 29 AUG 10:30A
PRIORITY OVERNIGHT

TRK# 7965 6650 5752
0201

72 FTCA

80524
CO-US
DEN

51AG1/0989/1A9E

Analytical Results

GC/MS Semi-volatiles

Method SW8270D

Method Blank

Lab Name: ALS Environmental -- FC

Work Order Number: 1308515

Client Name: Colorado Oil & Gas Conservation Commission

ClientProject ID: TBAL

Lab ID: EX130903-2MB

Sample Matrix: WATER
% Moisture: N/A
Date Collected: N/A
Date Extracted: 03-Sep-13
Date Analyzed: 11-Sep-13

Prep Batch: EX130903-2
QCBatchID: EX130903-2-1
Run ID: SV130911-1
Cleanup: NONE
Basis: N/A
File Name: N8380

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: *SV1308515-1*

GC/MS Semi-volatiles

Method SW8270D

Method Blank

Lab Name: ALS Environmental -- FC

Work Order Number: 1308515

Client Name: Colorado Oil & Gas Conservation Commission

ClientProject ID: TBAL

Lab ID: EX130903-2MB

Sample Matrix: WATER
% Moisture: N/A
Date Collected: N/A
Date Extracted: 03-Sep-13
Date Analyzed: 11-Sep-13

Prep Batch: EX130903-2
QCBatchID: EX130903-2-1
Run ID: SV130911-1
Cleanup: NONE
Basis: N/A
File Name: N8380

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	HEXACHLOROBENZENE	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: *SV1308515-1*

GC/MS Semi-volatiles

Method SW8270D

Method Blank

Lab Name: ALS Environmental -- FC

Work Order Number: 1308515

Client Name: Colorado Oil & Gas Conservation Commission

ClientProject ID: TBAL

Lab ID: EX130903-2MB

Sample Matrix: WATER
% Moisture: N/A
Date Collected: N/A
Date Extracted: 03-Sep-13
Date Analyzed: 11-Sep-13

Prep Batch: EX130903-2
QCBatchID: EX130903-2-1
Run ID: SV130911-1
Cleanup: NONE
Basis: N/A
File Name: N8380

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: *SV1308515-1*

GC/MS Semi-volatiles

Method SW8270D

Method Blank

Lab Name: ALS Environmental -- FC

Work Order Number: 1308515

Client Name: Colorado Oil & Gas Conservation Commission

ClientProject ID: TBAL

Lab ID: EX130903-2MB

Sample Matrix: WATER
% Moisture: N/A
Date Collected: N/A
Date Extracted: 03-Sep-13
Date Analyzed: 11-Sep-13

Prep Batch: EX130903-2
QCBatchID: EX130903-2-1
Run ID: SV130911-1
Cleanup: NONE
Basis: N/A
File Name: N8380

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

Surrogate Recovery

CASNO	Surrogate Analyte	Result	Flag	Spike Amount	Percent Recovery	Control Limits
118-79-6	2,4,6-TRIBROMOPHENOL	54.4		75	73	42 - 117
321-60-8	2-FLUOROBIPHENYL	34.8		50	70	55 - 108
367-12-4	2-FLUOROPHENOL	49.3		75	66	46 - 105
4165-60-0	NITROBENZENE-D5	31.7		50	63	53 - 111
4165-62-2	PHENOL-D5	51.7		75	69	50 - 109
1718-51-0	TERPHENYL-D14	41.1		50	82	34 - 139

Data Package ID: *SV1308515-1*

GC/MS Semi-volatiles

Method SW8270

Tentatively Identified Compounds

Lab Name: ALS Environmental -- FC

Work Order Number: 1308515

Client Name: Colorado Oil & Gas Conservation Commission

ClientProject ID: TBAL

Field ID:

Lab ID: EX130903-2MB

Sample Matrix: WATER
% Moisture: N/A
Date Collected: N/A
Date Extracted: 03-Sep-13
Date Analyzed: 11-Sep-13

Prep Batch: EX130903-2
QCBatchID: EX130903-2-1
Run ID: SV130911-1
Cleanup: NONE
Basis: As Received

Sample Aliquot: 1000 ml
Final Volume: 1 ml
Clean DF: 1
File Name: N8380

CASNO	Retention Time	Target Analyte	Dilution Factor	Result	Units	Qualifier
108-90-7	4.36	CHLOROBENZENE	1	21	UG/L	J

Data Package ID: *SV1308515-1*

GC/MS Semi-volatiles

Method SW8270D

Sample Results

Lab Name: ALS Environmental -- FC

Work Order Number: 1308515

Client Name: Colorado Oil & Gas Conservation Commission

ClientProject ID: TBAL

Field ID: McDonald 1
Lab ID: 1308515-1

Sample Matrix: WATER
% Moisture: N/A
Date Collected: 28-Aug-13
Date Extracted: 03-Sep-13
Date Analyzed: 11-Sep-13
Prep Method: SW3520 Rev C

Prep Batch: EX130903-2
QCBatchID: EX130903-2-1
Run ID: SV130911-1
Cleanup: NONE
Basis: As Received
File Name: N8383

Analyst: Joe Kostelnik
Sample Aliquot: 1040 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	9.6	9.6	0.53	U	
110-86-1	PYRIDINE	1	9.6	9.6	2.9	U	
62-75-9	N-NITROSODIMETHYLAMINE	1	9.6	9.6	2.9	U	
62-53-3	ANILINE	1	9.6	9.6	2.9	U	
108-95-2	PHENOL	1	9.6	9.6	2.9	U	
111-44-4	BIS(2-CHLOROETHYL)ETHER	1	9.6	9.6	2.9	U	
95-57-8	2-CHLOROPHENOL	1	9.6	9.6	2.9	U	
541-73-1	1,3-DICHLOROBENZENE	1	9.6	9.6	2.9	U	
106-46-7	1,4-DICHLOROBENZENE	1	9.6	9.6	2.9	U	
95-50-1	1,2-DICHLOROBENZENE	1	9.6	9.6	2.9	U	
100-51-6	BENZYL ALCOHOL	1	9.6	9.6	2.9	U	
108-60-1	BIS(2-CHLOROISOPROPYL)ETHER	1	9.6	9.6	2.9	U	
95-48-7	2-METHYLPHENOL	1	9.6	9.6	2.9	U	
621-64-7	N-NITROSO-DI-N-PROPYLAMINE	1	9.6	9.6	2.9	U	
108-39-4	3+4-METHYLPHENOL	1	9.6	9.6	2.9	U	
67-72-1	HEXACHLOROETHANE	1	9.6	9.6	2.9	U	
98-95-3	NITROBENZENE	1	9.6	9.6	2.9	U	
78-59-1	ISOPHORONE	1	9.6	9.6	2.9	U	
88-75-5	2-NITROPHENOL	1	9.6	9.6	2.9	U	
105-67-9	2,4-DIMETHYLPHENOL	1	9.6	9.6	2.9	U	
111-91-1	BIS(2-CHLOROETHOXY)METHANE	1	9.6	9.6	2.9	U	
120-83-2	2,4-DICHLOROPHENOL	1	9.6	9.6	2.9	U	
65-85-0	BENZOIC ACID	1	48	48	26	U	
120-82-1	1,2,4-TRICHLOROBENZENE	1	9.6	9.6	2.9	U	
91-20-3	NAPHTHALENE	1	9.6	9.6	2.9	U	
106-47-8	4-CHLOROANILINE	1	9.6	9.6	2.9	U	

Data Package ID: *SV1308515-1*

GC/MS Semi-volatiles

Method SW8270D

Sample Results

Lab Name: ALS Environmental -- FC

Work Order Number: 1308515

Client Name: Colorado Oil & Gas Conservation Commission

ClientProject ID: TBAL

Field ID: McDonald 1
Lab ID: 1308515-1

Sample Matrix: WATER
% Moisture: N/A
Date Collected: 28-Aug-13
Date Extracted: 03-Sep-13
Date Analyzed: 11-Sep-13
Prep Method: SW3520 Rev C

Prep Batch: EX130903-2
QCBatchID: EX130903-2-1
Run ID: SV130911-1
Cleanup: NONE
Basis: As Received
File Name: N8383

Analyst: Joe Kostelnik
Sample Aliquot: 1040 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	9.6	9.6	2.9	U	
59-50-7	4-CHLORO-3-METHYLPHENOL	1	9.6	9.6	2.9	U	
91-57-6	2-METHYLNAPHTHALENE	1	9.6	9.6	2.9	U	
90-12-0	1-METHYLNAPHTHALENE	1	9.6	9.6	2.9	U	
77-47-4	HEXACHLOROCYCLOPENTADIENE	1	9.6	9.6	2.9	U	
88-06-2	2,4,6-TRICHLOROPHENOL	1	9.6	9.6	2.9	U	
95-95-4	2,4,5-TRICHLOROPHENOL	1	9.6	9.6	2.9	U	
91-58-7	2-CHLORONAPHTHALENE	1	9.6	9.6	2.9	U	
88-74-4	2-NITROANILINE	1	19	19	5.8	U	
131-11-3	DIMETHYL PHTHALATE	1	9.6	9.6	2.9	U	
606-20-2	2,6-DINITROTOLUENE	1	9.6	9.6	2.9	U	
208-96-8	ACENAPHTHYLENE	1	9.6	9.6	2.9	U	
99-09-2	3-NITROANILINE	1	19	19	5.8	U	
83-32-9	ACENAPHTHENE	1	9.6	9.6	2.9	U	
51-28-5	2,4-DINITROPHENOL	1	19	19	4.7	U	
100-02-7	4-NITROPHENOL	1	19	19	5.8	U	
132-64-9	DIBENZOFURAN	1	9.6	9.6	2.9	U	
121-14-2	2,4-DINITROTOLUENE	1	9.6	9.6	2.9	U	
84-66-2	DIETHYL PHTHALATE	1	9.6	9.6	2.9	U	
86-73-7	FLUORENE	1	9.6	9.6	2.9	U	
7005-72-3	4-CHLOROPHENYL PHENYL ETHER	1	9.6	9.6	2.9	U	
100-01-6	4-NITROANILINE	1	19	19	5.8	U	
103-33-3	AZOBENZENE	1	9.6	9.6	2.9	U	
534-52-1	4,6-DINITRO-2-METHYLPHENOL	1	19	19	5.8	U	
86-30-6	N-NITROSODIPHENYLAMINE	1	9.6	9.6	2.9	U	
101-55-3	4-BROMOPHENYL PHENYL ETHER	1	9.6	9.6	2.9	U	

Data Package ID: *SV1308515-1*

GC/MS Semi-volatiles

Method SW8270D

Sample Results

Lab Name: ALS Environmental -- FC

Work Order Number: 1308515

Client Name: Colorado Oil & Gas Conservation Commission

ClientProject ID: TBAL

Field ID: McDonald 1
Lab ID: 1308515-1

Sample Matrix: WATER
% Moisture: N/A
Date Collected: 28-Aug-13
Date Extracted: 03-Sep-13
Date Analyzed: 11-Sep-13
Prep Method: SW3520 Rev C

Prep Batch: EX130903-2
QCBatchID: EX130903-2-1
Run ID: SV130911-1
Cleanup: NONE
Basis: As Received
File Name: N8383

Analyst: Joe Kostelnik
Sample Aliquot: 1040 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	9.6	9.6	2.9	U	
58-90-2	2,3,4,6-TETRACHLOROPHENOL	1	9.6	9.6	2.9	U	
87-86-5	PENTACHLOROPHENOL	1	19	19	5.8	U	
85-01-8	PHENANTHRENE	1	9.6	9.6	2.9	U	
120-12-7	ANTHRACENE	1	9.6	9.6	2.9	U	
86-74-8	CARBAZOLE	1	9.6	9.6	2.9	U	
84-74-2	DI-N-BUTYL PHTHALATE	1	9.6	9.6	2.9	U	
206-44-0	FLUORANTHENE	1	9.6	9.6	2.9	U	
129-00-0	PYRENE	1	9.6	9.6	2.9	U	
85-68-7	BUTYL BENZYL PHTHALATE	1	9.6	9.6	2.9	U	
56-55-3	BENZO(A)ANTHRACENE	1	9.6	9.6	2.9	U	
91-94-1	3,3'-DICHLOROBENZIDINE	1	9.6	9.6	2.9	U	
218-01-9	CHRYSENE	1	9.6	9.6	2.9	U	
117-81-7	BIS(2-ETHYLHEXYL)PHTHALATE	1	9.6	9.6	2.9	U	
117-84-0	DI-N-OCTYL PHTHALATE	1	9.6	9.6	2.9	U	
205-99-2	BENZO(B)FLUORANTHENE	1	9.6	9.6	2.9	U	
207-08-9	BENZO(K)FLUORANTHENE	1	9.6	9.6	2.9	U	
50-32-8	BENZO(A)PYRENE	1	9.6	9.6	2.9	U	
193-39-5	INDENO(1,2,3-CD)PYRENE	1	9.6	9.6	2.9	U	
53-70-3	DIBENZO(A,H)ANTHRACENE	1	9.6	9.6	2.9	U	
191-24-2	BENZO(G,H,I)PERYLENE	1	9.6	9.6	2.9	U	

Data Package ID: *SV1308515-1*

GC/MS Semi-volatiles

Method SW8270D

Sample Results

Lab Name: ALS Environmental -- FC

Work Order Number: 1308515

Client Name: Colorado Oil & Gas Conservation Commission

ClientProject ID: TBAL

Field ID: McDonald 1
Lab ID: 1308515-1

Sample Matrix: WATER
% Moisture: N/A
Date Collected: 28-Aug-13
Date Extracted: 03-Sep-13
Date Analyzed: 11-Sep-13
Prep Method: SW3520 Rev C

Prep Batch: EX130903-2
QCBatchID: EX130903-2-1
Run ID: SV130911-1
Cleanup: NONE
Basis: As Received
File Name: N8383

Analyst: Joe Kostelnik
Sample Aliquot: 1040 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

Surrogate Recovery

CASNO	Surrogate Analyte	Result	Flag	Spike Amount	Percent Recovery	Control Limits
118-79-6	2,4,6-TRIBROMOPHENOL	53.6		72.1	74	42 - 117
321-60-8	2-FLUOROBIPHENYL	32.5		48.1	68	55 - 108
367-12-4	2-FLUOROPHENOL	44.8		72.1	62	46 - 105
4165-60-0	NITROBENZENE-D5	29.3		48.1	61	53 - 111
4165-62-2	PHENOL-D5	47.2		72.1	65	50 - 109
1718-51-0	TERPHENYL-D14	37.7		48.1	78	34 - 139

Data Package ID: *SV1308515-1*

GC/MS Semi-volatiles

Method SW8270

Tentatively Identified Compounds

Lab Name: ALS Environmental -- FC

Work Order Number: 1308515

Client Name: Colorado Oil & Gas Conservation Commission

ClientProject ID: TBAL

Field ID: McDonald 1
Lab ID: 1308515-1

Sample Matrix: WATER
% Moisture: N/A
Date Collected: 28-Aug-13
Date Extracted: 03-Sep-13
Date Analyzed: 11-Sep-13

Prep Batch: EX130903-2
QCBatchID: EX130903-2-1
Run ID: SV130911-1
Cleanup: NONE
Basis: As Received

Sample Aliquot: 1040 ml
Final Volume: 1 ml
Clean DF: 1
File Name: N8383

CASNO	Retention Time	Target Analyte	Dilution Factor	Result	Units	Qualifier
108-90-7	4.36	CHLOROBENZENE	1	19	UG/L	B,J
541-02-6	6.58	DECAMETHYLCYCLOPENTASILOXANE	1	4.4	UG/L	J

Data Package ID: *SV1308515-1*

GC/MS Semi-volatiles

Method SW8270D

Sample Results

Lab Name: ALS Environmental -- FC

Work Order Number: 1308515

Client Name: Colorado Oil & Gas Conservation Commission

ClientProject ID: TBAL

Field ID: McDonald 2
Lab ID: 1308515-2

Sample Matrix: WATER
% Moisture: N/A
Date Collected: 28-Aug-13
Date Extracted: 03-Sep-13
Date Analyzed: 11-Sep-13
Prep Method: SW3520 Rev C

Prep Batch: EX130903-2
QCBatchID: EX130903-2-1
Run ID: SV130911-1
Cleanup: NONE
Basis: As Received
File Name: N8384

Analyst: Joe Kostelnik
Sample Aliquot: 1055 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	9.5	9.5	0.52	U	
110-86-1	PYRIDINE	1	9.5	9.5	2.8	U	
62-75-9	N-NITROSODIMETHYLAMINE	1	9.5	9.5	2.8	U	
62-53-3	ANILINE	1	9.5	9.5	2.8	U	
108-95-2	PHENOL	1	9.5	9.5	2.8	U	
111-44-4	BIS(2-CHLOROETHYL)ETHER	1	9.5	9.5	2.8	U	
95-57-8	2-CHLOROPHENOL	1	9.5	9.5	2.8	U	
541-73-1	1,3-DICHLOROBENZENE	1	9.5	9.5	2.8	U	
106-46-7	1,4-DICHLOROBENZENE	1	9.5	9.5	2.8	U	
95-50-1	1,2-DICHLOROBENZENE	1	9.5	9.5	2.8	U	
100-51-6	BENZYL ALCOHOL	1	9.5	9.5	2.8	U	
108-60-1	BIS(2-CHLOROISOPROPYL)ETHER	1	9.5	9.5	2.8	U	
95-48-7	2-METHYLPHENOL	1	9.5	9.5	2.8	U	
621-64-7	N-NITROSO-DI-N-PROPYLAMINE	1	9.5	9.5	2.8	U	
108-39-4	3+4-METHYLPHENOL	1	9.5	9.5	2.8	U	
67-72-1	HEXACHLOROETHANE	1	9.5	9.5	2.8	U	
98-95-3	NITROBENZENE	1	9.5	9.5	2.8	U	
78-59-1	ISOPHORONE	1	9.5	9.5	2.8	U	
88-75-5	2-NITROPHENOL	1	9.5	9.5	2.8	U	
105-67-9	2,4-DIMETHYLPHENOL	1	9.5	9.5	2.8	U	
111-91-1	BIS(2-CHLOROETHOXY)METHANE	1	9.5	9.5	2.8	U	
120-83-2	2,4-DICHLOROPHENOL	1	9.5	9.5	2.8	U	
65-85-0	BENZOIC ACID	1	47	47	26	U	
120-82-1	1,2,4-TRICHLOROBENZENE	1	9.5	9.5	2.8	U	
91-20-3	NAPHTHALENE	1	9.5	9.5	2.8	U	
106-47-8	4-CHLOROANILINE	1	9.5	9.5	2.8	U	

Data Package ID: *SV1308515-1*

GC/MS Semi-volatiles

Method SW8270D

Sample Results

Lab Name: ALS Environmental -- FC

Work Order Number: 1308515

Client Name: Colorado Oil & Gas Conservation Commission

ClientProject ID: TBAL

Field ID: McDonald 2
Lab ID: 1308515-2

Sample Matrix: WATER
% Moisture: N/A
Date Collected: 28-Aug-13
Date Extracted: 03-Sep-13
Date Analyzed: 11-Sep-13
Prep Method: SW3520 Rev C

Prep Batch: EX130903-2
QCBatchID: EX130903-2-1
Run ID: SV130911-1
Cleanup: NONE
Basis: As Received
File Name: N8384

Analyst: Joe Kostelnik
Sample Aliquot: 1055 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	9.5	9.5	2.8	U	
59-50-7	4-CHLORO-3-METHYLPHENOL	1	9.5	9.5	2.8	U	
91-57-6	2-METHYLNAPHTHALENE	1	9.5	9.5	2.8	U	
90-12-0	1-METHYLNAPHTHALENE	1	9.5	9.5	2.8	U	
77-47-4	HEXACHLOROCYCLOPENTADIENE	1	9.5	9.5	2.8	U	
88-06-2	2,4,6-TRICHLOROPHENOL	1	9.5	9.5	2.8	U	
95-95-4	2,4,5-TRICHLOROPHENOL	1	9.5	9.5	2.8	U	
91-58-7	2-CHLORONAPHTHALENE	1	9.5	9.5	2.8	U	
88-74-4	2-NITROANILINE	1	19	19	5.7	U	
131-11-3	DIMETHYL PHTHALATE	1	9.5	9.5	2.8	U	
606-20-2	2,6-DINITROTOLUENE	1	9.5	9.5	2.8	U	
208-96-8	ACENAPHTHYLENE	1	9.5	9.5	2.8	U	
99-09-2	3-NITROANILINE	1	19	19	5.7	U	
83-32-9	ACENAPHTHENE	1	9.5	9.5	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	9.5	9.5	2.8	U	
121-14-2	2,4-DINITROTOLUENE	1	9.5	9.5	2.8	U	
84-66-2	DIETHYL PHTHALATE	1	9.5	9.5	2.8	U	
86-73-7	FLUORENE	1	9.5	9.5	2.8	U	
7005-72-3	4-CHLOROPHENYL PHENYL ETHER	1	9.5	9.5	2.8	U	
100-01-6	4-NITROANILINE	1	19	19	5.7	U	
103-33-3	AZOBENZENE	1	9.5	9.5	2.8	U	
534-52-1	4,6-DINITRO-2-METHYLPHENOL	1	19	19	5.7	U	
86-30-6	N-NITROSODIPHENYLAMINE	1	9.5	9.5	2.8	U	
101-55-3	4-BROMOPHENYL PHENYL ETHER	1	9.5	9.5	2.8	U	

Data Package ID: *SV1308515-1*

GC/MS Semi-volatiles

Method SW8270D

Sample Results

Lab Name: ALS Environmental -- FC

Work Order Number: 1308515

Client Name: Colorado Oil & Gas Conservation Commission

ClientProject ID: TBAL

Field ID: McDonald 2
Lab ID: 1308515-2

Sample Matrix: WATER
% Moisture: N/A
Date Collected: 28-Aug-13
Date Extracted: 03-Sep-13
Date Analyzed: 11-Sep-13
Prep Method: SW3520 Rev C

Prep Batch: EX130903-2
QCBatchID: EX130903-2-1
Run ID: SV130911-1
Cleanup: NONE
Basis: As Received
File Name: N8384

Analyst: Joe Kostelnik
Sample Aliquot: 1055 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	9.5	9.5	2.8	U	
58-90-2	2,3,4,6-TETRACHLOROPHENOL	1	9.5	9.5	2.8	U	
87-86-5	PENTACHLOROPHENOL	1	19	19	5.7	U	
85-01-8	PHENANTHRENE	1	9.5	9.5	2.8	U	
120-12-7	ANTHRACENE	1	9.5	9.5	2.8	U	
86-74-8	CARBAZOLE	1	9.5	9.5	2.8	U	
84-74-2	DI-N-BUTYL PHTHALATE	1	9.5	9.5	2.8	U	
206-44-0	FLUORANTHENE	1	9.5	9.5	2.8	U	
129-00-0	PYRENE	1	9.5	9.5	2.8	U	
85-68-7	BUTYL BENZYL PHTHALATE	1	9.5	9.5	2.8	U	
56-55-3	BENZO(A)ANTHRACENE	1	9.5	9.5	2.8	U	
91-94-1	3,3'-DICHLOROBENZIDINE	1	9.5	9.5	2.8	U	
218-01-9	CHRYSENE	1	9.5	9.5	2.8	U	
117-81-7	BIS(2-ETHYLHEXYL)PHTHALATE	1	9.5	9.5	2.8	U	
117-84-0	DI-N-OCTYL PHTHALATE	1	9.5	9.5	2.8	U	
205-99-2	BENZO(B)FLUORANTHENE	1	9.5	9.5	2.8	U	
207-08-9	BENZO(K)FLUORANTHENE	1	9.5	9.5	2.8	U	
50-32-8	BENZO(A)PYRENE	1	9.5	9.5	2.8	U	
193-39-5	INDENO(1,2,3-CD)PYRENE	1	9.5	9.5	2.8	U	
53-70-3	DIBENZO(A,H)ANTHRACENE	1	9.5	9.5	2.8	U	
191-24-2	BENZO(G,H,I)PERYLENE	1	9.5	9.5	2.8	U	

Data Package ID: *SV1308515-1*

GC/MS Semi-volatiles

Method SW8270D

Sample Results

Lab Name: ALS Environmental -- FC

Work Order Number: 1308515

Client Name: Colorado Oil & Gas Conservation Commission

ClientProject ID: TBAL

Field ID: McDonald 2
Lab ID: 1308515-2

Sample Matrix: WATER
% Moisture: N/A
Date Collected: 28-Aug-13
Date Extracted: 03-Sep-13
Date Analyzed: 11-Sep-13
Prep Method: SW3520 Rev C

Prep Batch: EX130903-2
QCBatchID: EX130903-2-1
Run ID: SV130911-1
Cleanup: NONE
Basis: As Received
File Name: N8384

Analyst: Joe Kostelnik
Sample Aliquot: 1055 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

Surrogate Recovery

CASNO	Surrogate Analyte	Result	Flag	Spike Amount	Percent Recovery	Control Limits
118-79-6	2,4,6-TRIBROMOPHENOL	55.3		71.1	78	42 - 117
321-60-8	2-FLUOROBIPHENYL	33.5		47.4	71	55 - 108
367-12-4	2-FLUOROPHENOL	48.6		71.1	68	46 - 105
4165-60-0	NITROBENZENE-D5	29.9		47.4	63	53 - 111
4165-62-2	PHENOL-D5	49.4		71.1	69	50 - 109
1718-51-0	TERPHENYL-D14	38.2		47.4	81	34 - 139

Data Package ID: *SV1308515-1*

GC/MS Semi-volatiles

Method SW8270

Tentatively Identified Compounds

Lab Name: ALS Environmental -- FC

Work Order Number: 1308515

Client Name: Colorado Oil & Gas Conservation Commission

ClientProject ID: TBAL

Field ID: McDonald 2
Lab ID: 1308515-2

Sample Matrix: WATER
% Moisture: N/A
Date Collected: 28-Aug-13
Date Extracted: 03-Sep-13
Date Analyzed: 11-Sep-13

Prep Batch: EX130903-2
QCBatchID: EX130903-2-1
Run ID: SV130911-1
Cleanup: NONE
Basis: As Received

Sample Aliquot: 1055 ml
Final Volume: 1 ml
Clean DF: 1
File Name: N8384

CASNO	Retention Time	Target Analyte	Dilution Factor	Result	Units	Qualifier
108-90-7	4.35	CHLOROBENZENE	1	20	UG/L	B,J
541-02-6	6.58	DECAMETHYLCYCLOPENTASILOXANE	1	4.6	UG/L	J

Data Package ID: *SV1308515-1*

GC/MS Semi-volatiles

Method SW8270D

Sample Results

Lab Name: ALS Environmental -- FC

Work Order Number: 1308515

Client Name: Colorado Oil & Gas Conservation Commission

ClientProject ID: TBAL

Field ID: 752787 Earls
Lab ID: 1308515-3

Sample Matrix: WATER
% Moisture: N/A
Date Collected: 28-Aug-13
Date Extracted: 03-Sep-13
Date Analyzed: 11-Sep-13
Prep Method: SW3520 Rev C

Prep Batch: EX130903-2
QCBatchID: EX130903-2-1
Run ID: SV130911-1
Cleanup: NONE
Basis: As Received
File Name: N8385

Analyst: Joe Kostelnik
Sample Aliquot: 1045 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	9.6	9.6	0.53	U	
110-86-1	PYRIDINE	1	9.6	9.6	2.9	U	
62-75-9	N-NITROSODIMETHYLAMINE	1	9.6	9.6	2.9	U	
62-53-3	ANILINE	1	9.6	9.6	2.9	U	
108-95-2	PHENOL	1	9.6	9.6	2.9	U	
111-44-4	BIS(2-CHLOROETHYL)ETHER	1	9.6	9.6	2.9	U	
95-57-8	2-CHLOROPHENOL	1	9.6	9.6	2.9	U	
541-73-1	1,3-DICHLOROBENZENE	1	9.6	9.6	2.9	U	
106-46-7	1,4-DICHLOROBENZENE	1	9.6	9.6	2.9	U	
95-50-1	1,2-DICHLOROBENZENE	1	9.6	9.6	2.9	U	
100-51-6	BENZYL ALCOHOL	1	9.6	9.6	2.9	U	
108-60-1	BIS(2-CHLOROISOPROPYL)ETHER	1	9.6	9.6	2.9	U	
95-48-7	2-METHYLPHENOL	1	9.6	9.6	2.9	U	
621-64-7	N-NITROSO-DI-N-PROPYLAMINE	1	9.6	9.6	2.9	U	
108-39-4	3+4-METHYLPHENOL	1	9.6	9.6	2.9	U	
67-72-1	HEXACHLOROETHANE	1	9.6	9.6	2.9	U	
98-95-3	NITROBENZENE	1	9.6	9.6	2.9	U	
78-59-1	ISOPHORONE	1	9.6	9.6	2.9	U	
88-75-5	2-NITROPHENOL	1	9.6	9.6	2.9	U	
105-67-9	2,4-DIMETHYLPHENOL	1	9.6	9.6	2.9	U	
111-91-1	BIS(2-CHLOROETHOXY)METHANE	1	9.6	9.6	2.9	U	
120-83-2	2,4-DICHLOROPHENOL	1	9.6	9.6	2.9	U	
65-85-0	BENZOIC ACID	1	48	48	26	U	
120-82-1	1,2,4-TRICHLOROBENZENE	1	9.6	9.6	2.9	U	
91-20-3	NAPHTHALENE	1	9.6	9.6	2.9	U	
106-47-8	4-CHLOROANILINE	1	9.6	9.6	2.9	U	

Data Package ID: *SV1308515-1*

GC/MS Semi-volatiles

Method SW8270D

Sample Results

Lab Name: ALS Environmental -- FC

Work Order Number: 1308515

Client Name: Colorado Oil & Gas Conservation Commission

ClientProject ID: TBAL

Field ID: 752787 Earls
Lab ID: 1308515-3

Sample Matrix: WATER
% Moisture: N/A
Date Collected: 28-Aug-13
Date Extracted: 03-Sep-13
Date Analyzed: 11-Sep-13
Prep Method: SW3520 Rev C

Prep Batch: EX130903-2
QCBatchID: EX130903-2-1
Run ID: SV130911-1
Cleanup: NONE
Basis: As Received
File Name: N8385

Analyst: Joe Kostelnik
Sample Aliquot: 1045 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	9.6	9.6	2.9	U	
59-50-7	4-CHLORO-3-METHYLPHENOL	1	9.6	9.6	2.9	U	
91-57-6	2-METHYLNAPHTHALENE	1	9.6	9.6	2.9	U	
90-12-0	1-METHYLNAPHTHALENE	1	9.6	9.6	2.9	U	
77-47-4	HEXACHLOROCYCLOPENTADIENE	1	9.6	9.6	2.9	U	
88-06-2	2,4,6-TRICHLOROPHENOL	1	9.6	9.6	2.9	U	
95-95-4	2,4,5-TRICHLOROPHENOL	1	9.6	9.6	2.9	U	
91-58-7	2-CHLORONAPHTHALENE	1	9.6	9.6	2.9	U	
88-74-4	2-NITROANILINE	1	19	19	5.7	U	
131-11-3	DIMETHYL PHTHALATE	1	9.6	9.6	2.9	U	
606-20-2	2,6-DINITROTOLUENE	1	9.6	9.6	2.9	U	
208-96-8	ACENAPHTHYLENE	1	9.6	9.6	2.9	U	
99-09-2	3-NITROANILINE	1	19	19	5.7	U	
83-32-9	ACENAPHTHENE	1	9.6	9.6	2.9	U	
51-28-5	2,4-DINITROPHENOL	1	19	19	4.7	U	
100-02-7	4-NITROPHENOL	1	19	19	5.7	U	
132-64-9	DIBENZOFURAN	1	9.6	9.6	2.9	U	
121-14-2	2,4-DINITROTOLUENE	1	9.6	9.6	2.9	U	
84-66-2	DIETHYL PHTHALATE	1	9.6	9.6	2.9	U	
86-73-7	FLUORENE	1	9.6	9.6	2.9	U	
7005-72-3	4-CHLOROPHENYL PHENYL ETHER	1	9.6	9.6	2.9	U	
100-01-6	4-NITROANILINE	1	19	19	5.7	U	
103-33-3	AZOBENZENE	1	9.6	9.6	2.9	U	
534-52-1	4,6-DINITRO-2-METHYLPHENOL	1	19	19	5.7	U	
86-30-6	N-NITROSODIPHENYLAMINE	1	9.6	9.6	2.9	U	
101-55-3	4-BROMOPHENYL PHENYL ETHER	1	9.6	9.6	2.9	U	

Data Package ID: *SV1308515-1*

GC/MS Semi-volatiles

Method SW8270D

Sample Results

Lab Name: ALS Environmental -- FC

Work Order Number: 1308515

Client Name: Colorado Oil & Gas Conservation Commission

ClientProject ID: TBAL

Field ID: 752787 Earls
Lab ID: 1308515-3

Sample Matrix: WATER
% Moisture: N/A
Date Collected: 28-Aug-13
Date Extracted: 03-Sep-13
Date Analyzed: 11-Sep-13
Prep Method: SW3520 Rev C

Prep Batch: EX130903-2
QCBatchID: EX130903-2-1
Run ID: SV130911-1
Cleanup: NONE
Basis: As Received
File Name: N8385

Analyst: Joe Kostelnik
Sample Aliquot: 1045 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	9.6	9.6	2.9	U	
58-90-2	2,3,4,6-TETRACHLOROPHENOL	1	9.6	9.6	2.9	U	
87-86-5	PENTACHLOROPHENOL	1	19	19	5.7	U	
85-01-8	PHENANTHRENE	1	9.6	9.6	2.9	U	
120-12-7	ANTHRACENE	1	9.6	9.6	2.9	U	
86-74-8	CARBAZOLE	1	9.6	9.6	2.9	U	
84-74-2	DI-N-BUTYL PHTHALATE	1	9.6	9.6	2.9	U	
206-44-0	FLUORANTHENE	1	9.6	9.6	2.9	U	
129-00-0	PYRENE	1	9.6	9.6	2.9	U	
85-68-7	BUTYL BENZYL PHTHALATE	1	9.6	9.6	2.9	U	
56-55-3	BENZO(A)ANTHRACENE	1	9.6	9.6	2.9	U	
91-94-1	3,3'-DICHLOROBENZIDINE	1	9.6	9.6	2.9	U	
218-01-9	CHRYSENE	1	9.6	9.6	2.9	U	
117-81-7	BIS(2-ETHYLHEXYL)PHTHALATE	1	9.6	9.6	2.9	U	
117-84-0	DI-N-OCTYL PHTHALATE	1	9.6	9.6	2.9	U	
205-99-2	BENZO(B)FLUORANTHENE	1	9.6	9.6	2.9	U	
207-08-9	BENZO(K)FLUORANTHENE	1	9.6	9.6	2.9	U	
50-32-8	BENZO(A)PYRENE	1	9.6	9.6	2.9	U	
193-39-5	INDENO(1,2,3-CD)PYRENE	1	9.6	9.6	2.9	U	
53-70-3	DIBENZO(A,H)ANTHRACENE	1	9.6	9.6	2.9	U	
191-24-2	BENZO(G,H,I)PERYLENE	1	9.6	9.6	2.9	U	

Data Package ID: *SV1308515-1*

GC/MS Semi-volatiles

Method SW8270D

Sample Results

Lab Name: ALS Environmental -- FC

Work Order Number: 1308515

Client Name: Colorado Oil & Gas Conservation Commission

ClientProject ID: TBAL

Field ID: 752787 Earls
Lab ID: 1308515-3

Sample Matrix: WATER
% Moisture: N/A
Date Collected: 28-Aug-13
Date Extracted: 03-Sep-13
Date Analyzed: 11-Sep-13
Prep Method: SW3520 Rev C

Prep Batch: EX130903-2
QCBatchID: EX130903-2-1
Run ID: SV130911-1
Cleanup: NONE
Basis: As Received
File Name: N8385

Analyst: Joe Kostelnik
Sample Aliquot: 1045 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

Surrogate Recovery

CASNO	Surrogate Analyte	Result	Flag	Spike Amount	Percent Recovery	Control Limits
118-79-6	2,4,6-TRIBROMOPHENOL	54.2		71.8	75	42 - 117
321-60-8	2-FLUOROBIPHENYL	31		47.8	65	55 - 108
367-12-4	2-FLUOROPHENOL	43.2		71.8	60	46 - 105
4165-60-0	NITROBENZENE-D5	27.5		47.8	57	53 - 111
4165-62-2	PHENOL-D5	45.3		71.8	63	50 - 109
1718-51-0	TERPHENYL-D14	39		47.8	82	34 - 139

Data Package ID: *SV1308515-1*

GC/MS Semi-volatiles

Method SW8270

Tentatively Identified Compounds

Lab Name: ALS Environmental -- FC

Work Order Number: 1308515

Client Name: Colorado Oil & Gas Conservation Commission

ClientProject ID: TBAL

Field ID: 752787 Earls
Lab ID: 1308515-3

Sample Matrix: WATER
% Moisture: N/A
Date Collected: 28-Aug-13
Date Extracted: 03-Sep-13
Date Analyzed: 11-Sep-13

Prep Batch: EX130903-2
QCBatchID: EX130903-2-1
Run ID: SV130911-1
Cleanup: NONE
Basis: As Received

Sample Aliquot: 1045 ml
Final Volume: 1 ml
Clean DF: 1
File Name: N8385

CASNO	Retention Time	Target Analyte	Dilution Factor	Result	Units	Qualifier
108-90-7	4.35	CHLORO-BENZENE	1	18	UG/L	B,J

Data Package ID: *SV1308515-1*

Supporting QA/QC Data

Surrogate Summary for GC/MS Semi-volatiles

Method SW8270D

Lab Name: ALS Environmental -- FC

Work Order Number: 1308515

Client Name: Colorado Oil & Gas Conservation Commission

ClientProject ID: TBAL

PrepBatchID: EX130903-2

QC Batch ID: EX130903-2-1

Date Extracted: 9/3/2013

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
EX130903-2MB	XXXXXXX	NA	XXXXXXX	73	70	66	63	69	82
EX130903-2LCS	XXXXXXX	NA	XXXXXXX	93	72	75	74	80	82
EX130903-2LCSD	XXXXXXX	NA	XXXXXXX	92	69	70	70	74	77
1308515-1	McDonald 1	8/28/2013	8/29/2013	74	68	62	61	65	78
1308515-2	McDonald 2	8/28/2013	8/29/2013	78	71	68	63	69	81
1308515-3	752787 Earls	8/28/2013	8/29/2013	75	65	60	57	63	82

Data Package ID: *SV1308515-1*

GC/MS Semi-volatiles

Method SW8270D

Laboratory Control Sample and Laboratory Control Sample Duplicate

Lab Name: ALS Environmental -- FC

Work Order Number: 1308515

Client Name: Colorado Oil & Gas Conservation Commission

ClientProject ID: TBAL

Lab ID: EX130903-2LCS

Sample Matrix: WATER
% Moisture: N/A
Date Collected: N/A
Date Extracted: 09/03/2013
Date Analyzed: 09/11/2013
Prep Method: SW3520C

Prep Batch: EX130903-2
QCBatchID: EX130903-2-1
Run ID: SV130911-1
Cleanup: NONE
Basis: N/A
File Name: N8381

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	27.7	10		46	30 - 130%
110-86-1	PYRIDINE	60	35.3	10		59	10 - 101%
62-75-9	N-NITROSODIMETHYLAMINE	60	47.4	10		79	57 - 119%
62-53-3	ANILINE	60	45.7	10		76	38 - 116%
108-95-2	PHENOL	60	47.3	10		79	60 - 102%
111-44-4	BIS(2-CHLOROETHYL)ETHER	60	45.8	10		76	62 - 103%
95-57-8	2-CHLOROPHENOL	60	46.2	10		77	64 - 100%
541-73-1	1,3-DICHLOROBENZENE	60	42.1	10		70	49 - 95%
106-46-7	1,4-DICHLOROBENZENE	60	42.6	10		71	54 - 94%
95-50-1	1,2-DICHLOROBENZENE	60	43.7	10		73	54 - 97%
100-51-6	BENZYL ALCOHOL	60	47.4	10		79	66 - 105%
108-60-1	BIS(2-CHLOROISOPROPYL)ETHER	60	46.9	10		78	60 - 107%
95-48-7	2-METHYLPHENOL	60	47	10		78	63 - 103%
621-64-7	N-NITROSO-DI-N-PROPYLAMINE	60	51.5	10		86	62 - 113%
108-39-4	3+4-METHYLPHENOL	60	47.5	10		79	54 - 106%
67-72-1	HEXACHLOROETHANE	60	42.9	10		72	47 - 95%
98-95-3	NITROBENZENE	60	36.3	10		61	36 - 107%
78-59-1	ISOPHORONE	60	49.4	10		82	58 - 102%
88-75-5	2-NITROPHENOL	60	50.2	10		84	69 - 108%
105-67-9	2,4-DIMETHYLPHENOL	60	44.7	10		74	57 - 101%
111-91-1	BIS(2-CHLOROETHOXY)METHANE	60	47.8	10		80	59 - 97%
120-83-2	2,4-DICHLOROPHENOL	60	48.3	10		80	61 - 99%
65-85-0	BENZOIC ACID	100	55.1	50		55	28 - 87%
120-82-1	1,2,4-TRICHLOROBENZENE	60	43.5	10		73	47 - 92%
91-20-3	NAPHTHALENE	60	45.4	10		76	58 - 92%
106-47-8	4-CHLOROANILINE	60	46.5	10		77	37 - 119%

Data Package ID: *SV1308515-1*

GC/MS Semi-volatiles

Method SW8270D

Laboratory Control Sample and Laboratory Control Sample Duplicate

Lab Name: ALS Environmental -- FC
Work Order Number: 1308515
Client Name: Colorado Oil & Gas Conservation Commission
ClientProject ID: TBAL

Lab ID: EX130903-2LCS

Sample Matrix: WATER
% Moisture: N/A
Date Collected: N/A
Date Extracted: 09/03/2013
Date Analyzed: 09/11/2013
Prep Method: SW3520C

Prep Batch: EX130903-2
QCBatchID: EX130903-2-1
Run ID: SV130911-1
Cleanup: NONE
Basis: N/A
File Name: N8381

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	43.6	10		73	43 - 93%
59-50-7	4-CHLORO-3-METHYLPHENOL	60	54.3	10		90	61 - 105%
91-57-6	2-METHYLNAPHTHALENE	60	47.1	10		79	57 - 97%
90-12-0	1-METHYLNAPHTHALENE	60	43	10		72	58 - 101%
77-47-4	HEXACHLOROCYCLOPENTADIENE	60	10.1	10		17	3 - 56%
88-06-2	2,4,6-TRICHLOROPHENOL	60	51.4	10		86	61 - 110%
95-95-4	2,4,5-TRICHLOROPHENOL	60	53.8	10		90	62 - 109%
91-58-7	2-CHLORONAPHTHALENE	60	47.4	10		79	67 - 101%
88-74-4	2-NITROANILINE	60	47.1	20		79	68 - 120%
131-11-3	DIMETHYL PHTHALATE	60	49.9	10		83	70 - 109%
606-20-2	2,6-DINITROTOLUENE	60	50	10		83	69 - 111%
208-96-8	ACENAPHTHYLENE	60	48.8	10		81	67 - 108%
99-09-2	3-NITROANILINE	60	51	20		85	60 - 124%
83-32-9	ACENAPHTHENE	60	47.9	10		80	60 - 108%
51-28-5	2,4-DINITROPHENOL	60	55.9	20		93	55 - 126%
100-02-7	4-NITROPHENOL	60	44.3	20		74	24 - 128%
132-64-9	DIBENZOFURAN	60	49.2	10		82	67 - 107%
121-14-2	2,4-DINITROTOLUENE	60	52.5	10		88	46 - 114%
84-66-2	DIETHYL PHTHALATE	60	52.4	10		87	71 - 113%
86-73-7	FLUORENE	60	47.5	10		79	72 - 106%
7005-72-3	4-CHLOROPHENYL PHENYL ETHER	60	52.4	10		87	69 - 107%
100-01-6	4-NITROANILINE	60	55.8	20		93	64 - 122%
103-33-3	AZOBENZENE	60	49.7	10		83	71 - 110%
534-52-1	4,6-DINITRO-2-METHYLPHENOL	60	54.2	20		90	63 - 123%
86-30-6	N-NITROSODIPHENYLAMINE	60	42	10		70	57 - 102%
101-55-3	4-BROMOPHENYL PHENYL ETHER	60	48.5	10		81	67 - 108%
118-74-1	HEXACHLOROBENZENE	60	47.5	10		79	48 - 115%

Data Package ID: *SV1308515-1*

GC/MS Semi-volatiles

Method SW8270D

Laboratory Control Sample and Laboratory Control Sample Duplicate

Lab Name: ALS Environmental -- FC
Work Order Number: 1308515
Client Name: Colorado Oil & Gas Conservation Commission
ClientProject ID: TBAL

Lab ID: EX130903-2LCS

Sample Matrix: WATER
% Moisture: N/A
Date Collected: N/A
Date Extracted: 09/03/2013
Date Analyzed: 09/11/2013
Prep Method: SW3520C

Prep Batch: EX130903-2
QCBatchID: EX130903-2-1
Run ID: SV130911-1
Cleanup: NONE
Basis: N/A
File Name: N8381

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	81.6	10		82	67 - 116%
87-86-5	PENTACHLOROPHENOL	60	48.5	20		81	40 - 114%
85-01-8	PHENANTHRENE	60	49.6	10		83	73 - 108%
120-12-7	ANTHRACENE	60	48.7	10		81	72 - 108%
86-74-8	CARBAZOLE	60	50.2	10		84	68 - 112%
84-74-2	DI-N-BUTYL PHTHALATE	60	51.5	10		86	71 - 114%
206-44-0	FLUORANTHENE	60	50.6	10		84	71 - 111%
129-00-0	PYRENE	60	54.3	10		90	60 - 113%
85-68-7	BUTYL BENZYL PHTHALATE	60	55.5	10		93	66 - 115%
56-55-3	BENZO(A)ANTHRACENE	60	52.4	10		87	69 - 107%
91-94-1	3,3'-DICHLOROBENZIDINE	60	44.6	10		74	-8 - 136%
218-01-9	CHRYSENE	60	51	10		85	69 - 111%
117-81-7	BIS(2-ETHYLHEXYL)PHTHALATE	60	52.1	10		87	61 - 121%
117-84-0	DI-N-OCTYL PHTHALATE	60	53.8	10		90	66 - 119%
205-99-2	BENZO(B)FLUORANTHENE	60	50.1	10		84	68 - 110%
207-08-9	BENZO(K)FLUORANTHENE	60	49.1	10		82	68 - 110%
50-32-8	BENZO(A)PYRENE	60	47.7	10		79	62 - 104%
193-39-5	INDENO(1,2,3-CD)PYRENE	60	42.6	10		71	57 - 121%
53-70-3	DIBENZO(A,H)ANTHRACENE	60	41.1	10		69	60 - 124%
191-24-2	BENZO(G,H,I)PERYLENE	60	39.1	10		65	52 - 124%

Data Package ID: *SV1308515-1*

GC/MS Semi-volatiles

Method SW8270D

Laboratory Control Sample and Laboratory Control Sample Duplicate

Lab Name: ALS Environmental -- FC
Work Order Number: 1308515
Client Name: Colorado Oil & Gas Conservation Commission
ClientProject ID: TBAL

Lab ID: EX130903-2LCSD

Sample Matrix: WATER
% Moisture: N/A
Date Collected: N/A
Date Extracted: 09/03/2013
Date Analyzed: 09/11/2013
Prep Method: SW3520C

Prep Batch: EX130903-2
QCBatchID: EX130903-2-1
Run ID: SV130911-1
Cleanup: NONE
Basis: N/A
File Name: N8382

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	24.9	10		42	50	11
110-86-1	PYRIDINE	60	21.2	10	+	35	20	50
62-75-9	N-NITROSODIMETHYLAMINE	60	40.1	10		67	20	16
62-53-3	ANILINE	60	36.2	10	+	60	20	23
108-95-2	PHENOL	60	44.5	10		74	20	6
111-44-4	BIS(2-CHLOROETHYL)ETHER	60	45.1	10		75	20	1
95-57-8	2-CHLOROPHENOL	60	43.7	10		73	20	6
541-73-1	1,3-DICHLOROBENZENE	60	40	10		67	20	5
106-46-7	1,4-DICHLOROBENZENE	60	40.4	10		67	20	5
95-50-1	1,2-DICHLOROBENZENE	60	41.4	10		69	20	5
100-51-6	BENZYL ALCOHOL	60	45.1	10		75	20	5
108-60-1	BIS(2-CHLOROISOPROPYL)ETHER	60	43.7	10		73	20	7
95-48-7	2-METHYLPHENOL	60	44.8	10		75	20	5
621-64-7	N-NITROSO-DI-N-PROPYLAMINE	60	48.6	10		81	20	6
108-39-4	3+4-METHYLPHENOL	60	44.8	10		75	20	6
67-72-1	HEXACHLOROETHANE	60	40.5	10		68	20	6
98-95-3	NITROBENZENE	60	33.5	10		56	20	8
78-59-1	ISOPHORONE	60	48.3	10		80	20	2
88-75-5	2-NITROPHENOL	60	47.6	10		79	20	5
105-67-9	2,4-DIMETHYLPHENOL	60	40	10		67	20	11
111-91-1	BIS(2-CHLOROETHOXY)METHANE	60	45.1	10		75	20	6
120-83-2	2,4-DICHLOROPHENOL	60	45.9	10		77	20	5
65-85-0	BENZOIC ACID	100	44.8	50	J+	45	20	21
120-82-1	1,2,4-TRICHLOROBENZENE	60	41	10		68	20	6
91-20-3	NAPHTHALENE	60	42.4	10		71	20	7
106-47-8	4-CHLOROANILINE	60	40	10		67	20	15
87-68-3	HEXACHLOROBUTADIENE	60	40.2	10		67	20	8

Data Package ID: *SV1308515-1*

GC/MS Semi-volatiles

Method SW8270D

Laboratory Control Sample and Laboratory Control Sample Duplicate

Lab Name: ALS Environmental -- FC
Work Order Number: 1308515
Client Name: Colorado Oil & Gas Conservation Commission
ClientProject ID: TBAL

Lab ID: EX130903-2LCSD

Sample Matrix: WATER
% Moisture: N/A
Date Collected: N/A
Date Extracted: 09/03/2013
Date Analyzed: 09/11/2013
Prep Method: SW3520C

Prep Batch: EX130903-2
QCBatchID: EX130903-2-1
Run ID: SV130911-1
Cleanup: NONE
Basis: N/A
File Name: N8382

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	53.3	10		89	20	2
91-57-6	2-METHYLNAPHTHALENE	60	45.2	10		75	20	4
90-12-0	1-METHYLNAPHTHALENE	60	40.6	10		68	20	6
77-47-4	HEXACHLOROCYCLOPENTADIENE	60	10.2	10		17	20	1
88-06-2	2,4,6-TRICHLOROPHENOL	60	49	10		82	20	5
95-95-4	2,4,5-TRICHLOROPHENOL	60	52.7	10		88	20	2
91-58-7	2-CHLORONAPHTHALENE	60	45.4	10		76	20	4
88-74-4	2-NITROANILINE	60	46.4	20		77	20	2
131-11-3	DIMETHYL PHTHALATE	60	49.3	10		82	20	1
606-20-2	2,6-DINITROTOLUENE	60	48.8	10		81	20	2
208-96-8	ACENAPHTHYLENE	60	47.1	10		79	20	3
99-09-2	3-NITROANILINE	60	49.1	20		82	20	4
83-32-9	ACENAPHTHENE	60	47	10		78	20	2
51-28-5	2,4-DINITROPHENOL	60	55.9	20		93	20	0
100-02-7	4-NITROPHENOL	60	43.9	20		73	20	1
132-64-9	DIBENZOFURAN	60	48	10		80	20	2
121-14-2	2,4-DINITROTOLUENE	60	52.8	10		88	20	1
84-66-2	DIETHYL PHTHALATE	60	51.4	10		86	20	2
86-73-7	FLUORENE	60	47	10		78	20	1
7005-72-3	4-CHLOROPHENYL PHENYL ETHER	60	51.6	10		86	20	2
100-01-6	4-NITROANILINE	60	53.1	20		88	20	5
103-33-3	AZOBENZENE	60	48.9	10		81	20	2
534-52-1	4,6-DINITRO-2-METHYLPHENOL	60	55.5	20		93	20	2
86-30-6	N-NITROSODIPHENYLAMINE	60	40.8	10		68	20	3
101-55-3	4-BROMOPHENYL PHENYL ETHER	60	47.2	10		79	20	3
118-74-1	HEXACHLOROBENZENE	60	46.7	10		78	20	2
58-90-2	2,3,4,6-TETRACHLOROPHENOL	100	79.9	10		80	20	2

Data Package ID: *SV1308515-1*

GC/MS Semi-volatiles

Method SW8270D

Laboratory Control Sample and Laboratory Control Sample Duplicate

Lab Name: ALS Environmental -- FC
Work Order Number: 1308515
Client Name: Colorado Oil & Gas Conservation Commission
ClientProject ID: TBAL

Lab ID: EX130903-2LCSD

Sample Matrix: WATER
% Moisture: N/A
Date Collected: N/A
Date Extracted: 09/03/2013
Date Analyzed: 09/11/2013
Prep Method: SW3520C

Prep Batch: EX130903-2
QCBatchID: EX130903-2-1
Run ID: SV130911-1
Cleanup: NONE
Basis: N/A
File Name: N8382

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	46.8	20		78	20	4
85-01-8	PHENANTHRENE	60	48.7	10		81	20	2
120-12-7	ANTHRACENE	60	47.3	10		79	20	3
86-74-8	CARBAZOLE	60	49	10		82	20	3
84-74-2	DI-N-BUTYL PHTHALATE	60	50.4	10		84	20	2
206-44-0	FLUORANTHENE	60	49.7	10		83	20	2
129-00-0	PYRENE	60	50.8	10		85	20	7
85-68-7	BUTYL BENZYL PHTHALATE	60	52.1	10		87	20	6
56-55-3	BENZO(A)ANTHRACENE	60	50.8	10		85	20	3
91-94-1	3,3'-DICHLOROBENZIDINE	60	10.1	10	+	17	20	126
218-01-9	CHRYSENE	60	50.3	10		84	20	1
117-81-7	BIS(2-ETHYLHEXYL)PHTHALATE	60	49.6	10		83	20	5
117-84-0	DI-N-OCTYL PHTHALATE	60	52.3	10		87	20	3
205-99-2	BENZO(B)FLUORANTHENE	60	50.6	10		84	20	1
207-08-9	BENZO(K)FLUORANTHENE	60	47.5	10		79	20	3
50-32-8	BENZO(A)PYRENE	60	47.6	10		79	20	0
193-39-5	INDENO(1,2,3-CD)PYRENE	60	39.3	10		65	20	8
53-70-3	DIBENZO(A,H)ANTHRACENE	60	38	10		63	20	8
191-24-2	BENZO(G,H,I)PERYLENE	60	35.2	10		59	20	10

Data Package ID: *SV1308515-1*

GC/MS Semi-volatiles

Method SW8270D

Laboratory Control Sample and Laboratory Control Sample Duplicate

Lab Name: **ALS Environmental -- FC**
Work Order Number: 1308515
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	93		92		42 - 117
321-60-8	2-FLUOROBIPHENYL	50	72		69		55 - 108
367-12-4	2-FLUOROPHENOL	75	75		70		46 - 105
4165-60-0	NITROBENZENE-D5	50	74		70		53 - 111
4165-62-2	PHENOL-D5	75	80		74		50 - 109
1718-51-0	TERPHENYL-D14	50	82		77		34 - 139

Data Package ID: *SV1308515-1*

Prep Batch ID: EX130903-2

Start Date: 09/03/13
Start Time: 15:10
Prep Analyst: Brendon Howard

End Date: 09/05/13
End Time: 8:35

Concentration Method: CKIS
Extract Method: SW3520C
Initial Volume Units: ml
Final Volume Units: ml

Batch Created By: bch
Date Created: 09/03/13
Time Created: 15:38
Validated By: BCH
Date Validated: 09/05/13
Time Validated: 13:54

Comments:

QC Batch ID: EX130903-2-1

Lab ID	QC Type	Field ID	Matrix	Date Collected	Initial Wt/Vol	Final Wt/Vol	Cleanup Method	Cleanup DF	Order Number
EX130903-2	MB	XXXXXX	WATER	XXXXXX	1000	1	NONE	1	1308515
EX130903-2	LCS	XXXXXX	WATER	XXXXXX	1000	1	NONE	1	1308515
EX130903-2	LCSD	XXXXXX	WATER	XXXXXX	1000	1	NONE	1	1308515
1308515-1	SMP	McDonald 1	WATER	8/28/2013	1040	1	NONE	1	1308515
1308515-2	SMP	McDonald 2	WATER	8/28/2013	1055	1	NONE	1	1308515
1308515-3	SMP	752787 Earls	WATER	8/28/2013	1045	1	NONE	1	1308515
1308545-1	SMP	XXXXXX	WATER	XXXXXX	1055	1	NONE	1	1308545
1308545-3	SMP	XXXXXX	WATER	XXXXXX	1040	1	NONE	1	1308545

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: 1308515
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: *SV1308515-1*

5B

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

Lab Name: ALS Environmental -- FC
Work Order Number: 1308515
Client Name: Colorado Oil & Gas Conservation Commission
ClientProject ID: TBAL

DFTPP Injection Date: 9/11/2013
DFTPP Injection Time: 13:03
Instrument ID: HPSV1

Reported on: Saturday, September 21, 2013

FileID: N8378

m/e	Ion Abundance Criteria SW8270D	% Relative Abundance
51	30.0 - 60.0 percent of mass 198	47.1
68	Less than 2.0 percent of mass 69	0
69	Mass 69 relative abundance of mass 198	44.1
70	Less than 2.0 percent of mass 69	0.2
127	40.0 - 60.0 percent of mass 198	41.2
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	7.1
275	10.0 - 30.0 percent of mass 198	29
365	Greater than 1.00 percent of mass 198	2.7
441	Present, but less than mass 443 (percent of 443)	88.5
442	Greater than 40.0 percent of mass 198	97.2
443	17.0 - 23.0 percent of mass 442	19.6

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	N8379	9/11/2013	13:20	SV130911-1
XXXXXXX	EX130903-2MB	N8380	9/11/2013	13:44	EX130903-2-1
XXXXXXX	EX130903-2LCS	N8381	9/11/2013	14:09	EX130903-2-1
XXXXXXX	EX130903-2LCSD	N8382	9/11/2013	14:33	EX130903-2-1
McDonald 1	1308515-1	N8383	9/11/2013	14:58	EX130903-2-1
McDonald 2	1308515-2	N8384	9/11/2013	15:22	EX130903-2-1
752787 Earls	1308515-3	N8385	9/11/2013	15:47	EX130903-2-1
XXXXXXX	1308545-1	N8386	9/11/2013	16:11	EX130903-2-1
XXXXXXX	1308545-3	N8387	9/11/2013	16:36	EX130903-2-1
XXXXXXX	1308456-7	N8388	9/11/2013	18:02	EX130830-2-1
XXXXXXX	1308456-11	N8389	9/11/2013	18:26	EX130830-2-1
XXXXXXX	1308456-16	N8390	9/11/2013	18:51	EX130830-2-1
XXXXXXX	1308456-10	N8391	9/11/2013	19:16	EX130830-2-1

Data Package ID: *SV1308515-1*

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 orde 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		2.090	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	1.667	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	0.787	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	0.755		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	0.929	0.930	0.986	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	1.294	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	0.594	0.564		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	0.647	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	0.361	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		0.226	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	0.964		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	1.386		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	1.264	1.206	1.222	1.261	1.252	1.319	1.402	1.269		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-octylphthalate	0.683	0.734	0.705	0.791	0.740	0.772	0.724	0.667		0.727	5.763 CCC	Ave RF	n/a			
Perylene-d12																
Benzo[b]fluoranthene	1.316	1.339	1.340	1.331	1.313	1.361	1.155	1.158		1.289	6.451	Ave RF	n/a			
Benzo[k]fluoranthene	1.230	1.222	1.325	1.317	1.302	1.388	1.164	1.074		1.253	8.060	Ave RF	n/a			
Benzo[a]pyrene	1.080	1.069	1.077	1.083	1.076	1.089	1.025	1.003		1.063	2.930 CCC	Ave RF	n/a			
Indeno(1,2,3-c,d)pyrene	0.623	0.772	0.801	0.962	0.940	0.919	0.858	0.822		0.837	13.156	Ave RF	n/a			
Dibenzo[a,h]anthracene	0.563	0.691	0.725	0.853	0.833	0.798	0.733	0.684		0.735	12.744	Ave RF	n/a			
Benzo[g,h,i]perylene	0.433	0.566	0.589	0.757	0.729	0.735	0.769	0.662		0.655	17.978	Ave RF	n/a			

AVG= 6.148

FORM 7
Continuing Calibration Verification Report

Data File : D:\HPCHEM\1\DATA\090413\N8227.D
Acq On: 9/4/2013 15:33
Sample: ICVSVSTD050
Misc: ST130520-1

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

Method: 090413S1
Title: GC-MS Semivolatiles SOP no. 506
Last Upd: Fri Sep 06 16:39:44 2013

		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	0.864			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	0.616			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	1.466			-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

JK
9-6-17

FORM 7
Continuing Calibration Verification Report

Data File : D:\HPCHEM\1\DATA\091113\N6379.D
Acq On: 9/11/2013 13:20
Sample: CCV
Misc: ST130904-1 60 PPM

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

Method: 090413S1
Title: GC-MS Semivolatiles SOP no. 506
Last Upd: Wed Sep 11 14:54:04 2013

		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				103	0.00	Ave RF
2)		1,4-Dioxane	0.665	0.485			-27.0	72	0.00	Ave RF
3)		n-Nitrosodimethylamine	0.990	1.019			2.9	106	0.00	Ave RF
4)		Pyridine	1.675	1.693			1.1	102	0.00	Ave RF
5)		2-Fluorophenol	1.368	1.563			14.3	109	0.00	Ave RF
6)		2-Chlorophenol-d4	1.155	1.238			7.2	107	0.00	Ave RF
7)		Aniline	2.090	2.110			0.9	100	0.00	Ave RF
8)		Phenol-d5	1.767	1.936			8.3	105	0.00	Ave RF
9)	CCC	Phenol	1.719	1.861			8.3	107	0.00	Ave RF
10)		Tetramethylurea	2.348	2.512			7.0	108	0.00	Ave RF
11)		Bis(2-chloroethyl)ether	1.325	1.380			4.2	103	0.00	Ave RF
12)		2-Chlorophenol	1.237	1.294			4.6	106	0.00	Ave RF
13)		1,3-Dichlorobenzene	1.477	1.533			3.8	104	0.00	Ave RF
14)	CCC	1,4-Dichlorobenzene	1.376	1.443			4.8	102	0.00	Ave RF
15)		1,2-Dichlorobenzene-d4	0.916	0.938			2.4	103	0.00	Ave RF
16)		1,2-Dichlorobenzene	1.278	1.319			3.2	101	0.00	Ave RF
17)		Benzyl Alcohol	0.834	0.892			7.0	108	0.00	Ave RF
18)		2-Methylphenol	1.021	1.077			5.5	106	0.00	Ave RF
19)		Bis(2-chloroisopropyl)ether	2.255	2.311			2.5	109	0.00	Ave RF
20)	SPCC	n-Nitroso-di-n-propylamine	0.976	1.071			9.7	112	0.00	Ave RF
21)		3+4-Methylphenol	1.254	1.439			14.7	109	0.00	Ave RF
22)		N-Methylaniline	1.817	2.029			11.7	111	0.00	Ave RF
23)		Hexachloroethane	0.579	0.616			6.4	104	0.00	Ave RF
24)	ISTD	Naphthalene-d8	1.000	1.000				106	0.00	Ave RF
25)		Nitrobenzene-d5	0.454	0.464			2.0	108	0.00	Ave RF
26)		N,N-Dimethylaniline	0.518	0.532			2.6	103	0.00	Ave RF
27)		Nitrobenzene	0.536	0.543			1.4	109	0.00	Ave RF
28)		Isophorone	0.698	0.749			7.2	113	0.00	Ave RF
29)		N-Ethylaniline	0.634	0.650			2.4	103	0.00	Ave RF
30)	CCC	2-Nitrophenol	0.166	0.176			6.2	106	0.00	Ave RF
31)		2,4-Dimethylphenol	0.344	0.355			3.1	108	0.00	Ave RF
32)		Bis(2-chloroethoxy)methane	0.414	0.427			3.3	112	0.00	Ave RF
33)	CCC	Benzoic acid	0.175	0.171			-2.2	110	0.00	Ave RF
34)		2,4-Dichlorophenol	0.298	0.310			3.8	106	0.00	Ave RF
35)		1,2,4-Trichlorobenzene	0.367	0.381			3.8	107	0.00	Ave RF
36)		Naphthalene	0.990	1.022			3.3	105	0.00	Ave RF
37)		4-Chloroaniline	0.358	0.382			6.8	109	0.00	Ave RF
38)	CCC	Hexachlorobutadiene	0.233	0.244			4.7	108	0.00	Ave RF
39)	CCC	4-Chloro-3-methylphenol	0.295	0.339			14.7	116	0.00	Ave RF
40)		2-Methylnaphthalene	0.709	0.711			0.3	109	0.00	Ave RF
41)	ISTD	Acenaphthene-d10	1.000	1.000				112	0.00	Ave RF
42)		1-Methylnaphthalene	1.164	1.168			0.3	108	0.00	Ave RF
43)	SPCC	Hexachlorocyclopentadiene	0.356	0.338			-5.1	89	0.00	Ave RF
44)	CCC	2,4,6-Trichlorophenol	0.420	0.457			8.8	118	0.00	Ave RF
45)		2,4,5-Trichlorophenol	0.394	0.433			9.9	117	0.00	Ave RF
46)		2-Fluorobiphenyl	1.347	1.317			-2.2	106	0.00	Ave RF
47)		2-Chloronaphthalene	1.172	1.171			-0.1	110	0.00	Ave RF
48)		2-Nitroaniline	0.394	0.380			-3.5	107	0.00	Ave RF
49)		1,4-Dinitrobenzene	0.176	0.204			16.3	123	0.00	Ave RF
50)		Dimethylphthalate	1.205	1.194			-0.8	109	0.00	Ave RF
51)		1,3-Dinitrobenzene	0.200	0.225			12.1	123	0.00	Ave RF
52)		2,6-Dinitrotoluene	0.277	0.271			-2.3	108	0.00	Ave RF
53)		1,2-Dinitrobenzene	0.131	0.146			11.8	120	0.00	Ave RF
54)		Acenaphthylene	1.725	1.701			-1.4	110	0.00	Ave RF
55)		3-Nitroaniline	0.259	0.272			4.7	113	0.00	Ave RF
56)	CCC	Acenaphthene	1.036	1.041			0.4	110	0.00	Ave RF
57)	SPCC	2,4-Dinitrophenol	n/a	n/a	60	71.31668476	18.9	147	0.00	quadratic
58)	SPCC	4-Nitrophenol	0.165	0.158			-4.5	99	0.00	Ave RF
59)		Dibenzofuran	1.528	1.594			4.3	117	0.00	Ave RF
60)		2,4-Dinitrotoluene	0.371	0.395			6.3	113	0.00	Ave RF
61)		2,3,5,6-Tetrachlorophenol	0.378	0.395			4.4	115	0.00	Ave RF
62)		2,3,4,6-Tetrachlorophenol	0.364	0.379			4.2	118	0.00	Ave RF
63)		Diethylphthalate	1.103	1.164			5.5	113	0.00	Ave RF
64)		4-Chlorophenyl phenyl ether	0.691	0.732			5.9	117	0.00	Ave RF
65)		4-Nitroaniline	0.233	0.264			13.1	108	0.00	Ave RF
66)		Fluorene	1.186	1.157			-2.4	109	0.00	Ave RF
67)		Azobenzene	1.241	1.263			1.8	112	0.00	Ave RF
68)		2,4,6-Tribromophenol	0.205	0.233			13.5	125	0.00	Ave RF
69)	ISTD	Phenanthrene-d10	1.000	1.000				123	0.00	Ave RF
70)		4,6-Dinitro-2-methylphenol	0.110	0.125			13.8	140	0.00	Ave RF
71)	CCC	n-Nitrosodiphenylamine	0.529	0.512			-3.2	114	0.00	Ave RF
72)		4-Bromophenyl phenyl ether	0.228	0.223			-2.0	118	0.00	Ave RF
73)		Hexachlorobenzene	0.242	0.228			-5.5	111	0.00	Ave RF
74)	CCC	Pentachlorophenol	0.166	0.168			0.7	119	0.00	Ave RF
75)		Phenanthrene	0.922	0.921			-0.1	112	0.00	Ave RF
76)		Anthracene	0.961	0.930			-3.3	109	0.00	Ave RF
77)		Carbazole	0.892	0.902			1.1	112	0.00	Ave RF
78)		Di-n-butylphthalate	1.083	1.091			0.8	114	0.00	Ave RF
79)	CCC	Fluoranthene	1.276	1.290			1.1	120	0.00	Ave RF
80)	ISTD	Chrysene-d12	1.000	1.000				106	0.00	Ave RF
81)		Benzidine	0.605	0.570			-5.8	94	0.00	Ave RF
82)		Pyrene	1.274	1.379			8.2	116	0.00	Ave RF
83)		p-Terphenyl-d14	0.934	1.009			8.0	115	0.00	Ave RF
84)		Butylbenzylphthalate	0.411	0.460			11.8	116	0.00	Ave RF
85)		Bis(2-ethylhexyl) adipate	0.347	0.359			3.2	106	0.00	Ave RF
86)		Bis(2-ethylhexyl)phthalate	0.535	0.559			4.5	105	0.00	Ave RF
87)		3,3'-Dichlorobenzidine	0.353	0.400			13.2	115	0.00	Ave RF
88)		Benzo[a]anthracene	1.081	1.155			6.8	109	0.00	Ave RF
89)		Chrysene	0.987	1.021			3.5	105	0.00	Ave RF
90)	CCC	Di-n-octylphthalate	0.727	0.803			10.5	108	0.00	Ave RF
91)	ISTD	Perylene-d12	1.000	1.000				97	0.00	Ave RF
92)		Benzo[b]fluoranthene	1.289	1.342			4.1	97	0.00	Ave RF
93)		Benzo[k]fluoranthene	1.253	1.306			4.2	96	0.00	Ave RF
94)	CCC	Benzo[a]pyrene	1.063	1.184			11.4	106	0.00	Ave RF
95)		Indeno(1,2,3-c,d)pyrene	0.837	0.794			-5.1	80	0.00	Ave RF
96)		Dibenzo[a,h]anthracene	0.735	0.677			-7.9	77	0.00	Ave RF
97)		Benzo[g,h,i]perylene	0.655	0.563			-14.0	72	0.00	Ave RF

Average of absolute value = 6.0

JK
9-13-13

8B

Semi-Volatile Internal Standard Area Summary

Lab Name: ALS Environmental -- FC
Work Order Number: 1308515
Client Name: Colorado Oil & Gas Conservation Commission
ClientProject ID: TBAL

Date Analyzed: 9/11/2013
Time Analyzed: 13:20
Reported on: Saturday, September 21, 2013

Instrument ID: HPSV1
Lab File ID: N8379

	IS1		IS2		IS3		IS4		IS5		IS6	
	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
12 Hour STD	373593	5.95	1386398	7.15	802076	8.69	1692981	9.97	1517752	12.24	824878	13.76
Upper Limit	747186	6.45	2772796	7.65	1604152	9.19	3385962	10.5	3035504	12.7	1649756	14.3
Lower Limit	186797	5.45	693199	6.65	401038	8.19	846491	9.47	758876	11.7	412439	13.3
Lab Sample ID												
EX130903-2MB	476321	5.94	1770272	7.14	977797	8.69	1711283	9.96	1720900	12.24	1115316	13.77
EX130903-2LCS	434503	5.95	1593599	7.14	899465	8.69	1857339	9.97	1688173	12.24	936798	13.77
EX130903-2LCSD	427572	5.95	1556618	7.14	889787	8.69	1874035	9.97	1809029	12.24	960756	13.77
1308515-1	486518	5.94	1781058	7.14	993968	8.68	1732338	9.96	1767373	12.24	1110763	13.77
1308515-2	466359	5.94	1750152	7.14	950115	8.68	1698164	9.96	1775324	12.24	1157339	13.77
1308515-3	463038	5.94	1726831	7.14	934582	8.68	1672618	9.96	1710778	12.23	1076756	13.76
1308545-1	393243	5.94	1496004	7.14	930512	8.68	1671652	9.96	1742206	12.23	1084725	13.76
1308545-3	488987	5.94	1830926	7.14	1020684	8.68	1857105	9.96	1970415	12.23	1158223	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 Semivolatile 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 Analysis Date: September 4, 2013 JK
IS Amount and ID 40 µg/mL ST130501-3
Logbook Number: 2985

Line	Type	Vial	DataFile	Method	Sample Name	Dil.	RA?	Comment
1	DFTPP	1	N8217	DFTPP	50 ppm dftpp+PC	1	NO	ST130605-1 11:37
2	Sample	2	N8218	090413S1	ICALSVSTD060			ST130904-1
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			ST130904MB- SKINNER
13	Sample	13	N8229	090413S1	EX130827-15MB		YES	N8332
14	Sample	14	N8230	090413S1	EX130827-15LCS			N8333 RA 9-4-13 40x01
15	Sample	15	N8231	090413S1	1308412-11			N8334
16	Sample	16	N8232	090413S1	1308412-11MS			(MSD not run) N8335
17	Sample	17	N8233	090413S1	EX130823-1MB		NO	
18	Sample	18	N8234	090413S1	EX130823-1LCS			
19	Sample	19	N8235	090413S1	EX130823-1LCSD			
20	Sample	20	N8236	090413S1	1308412-1			
21	Sample	21	N8237	090413S1	1308412-2			
22	Sample	22	N8238	090413S1	1308412-3			
23	Sample	23	N8239	090413S1	1308412-4			
24	Sample	24	N8240	090413S1	1308412-5			
25	Sample	25	N8241	090413S1	1308412-6			
26	Sample	26	N8242	090413S1	1308412-7			22:10
27	Sample	27	N8243	090413S1	INSTRUMENT BLANK			DC

GCMS Semivolatile Instrument Run Log
ALS Laboratory Group

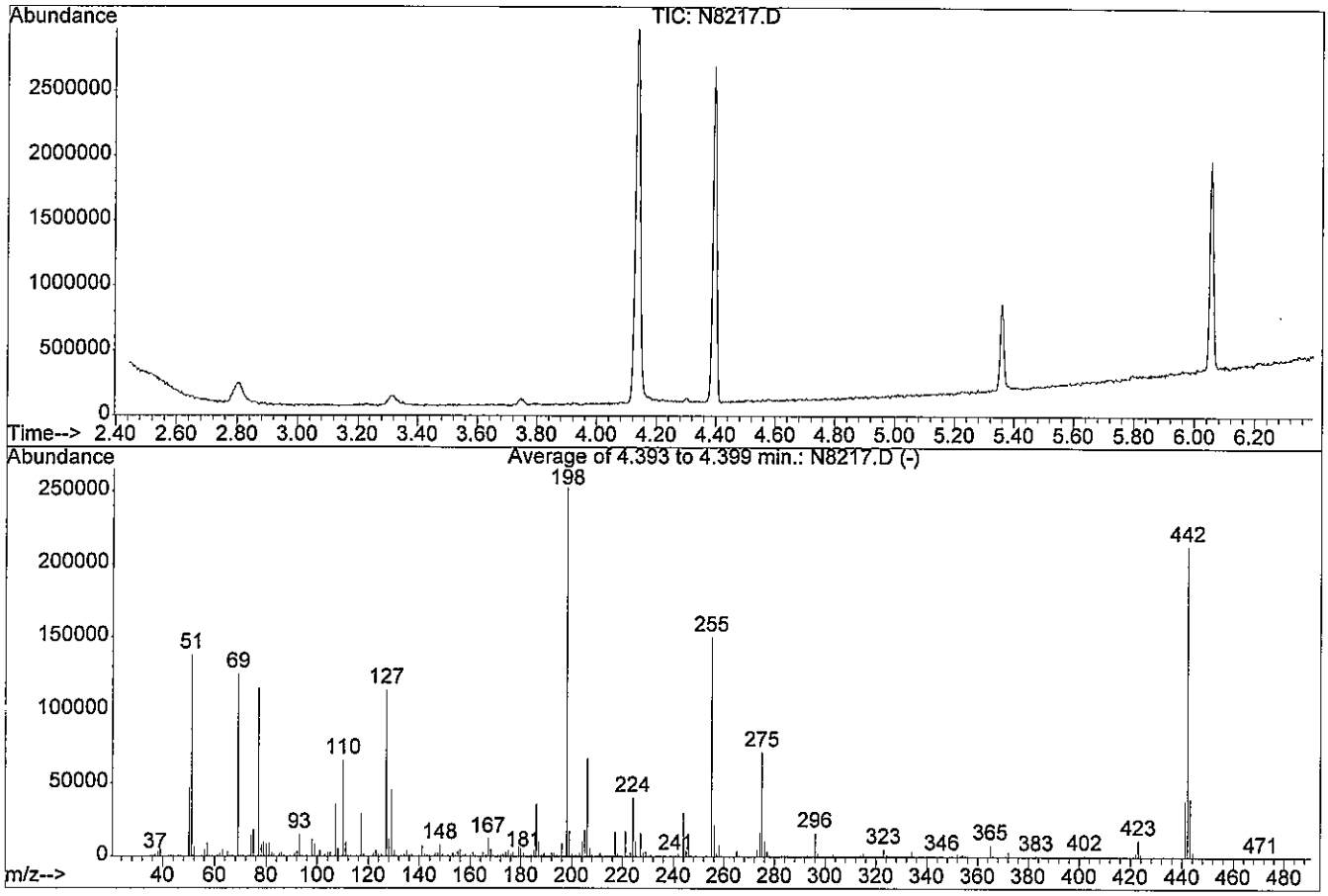
Sequence Name: D:\HPCHEM\1\SEQUENCE\091113S.S
Comment: HPSV-1 5973 MSDMS Serial Number US80210987
Data Path: D:\HPCHEM\1\DATA\091113\
Operator:jk SOP 506 Rev. 12 Analysis Date: September 11, 2013 JC
IS Amount and ID 40 ng/ml ST130501-3
Logbook Number: 2985

Line	Type	Vial	DataFile	Method	Sample Name	Dil.	RA?	Comment
1	DFTPP	1	N8378	DFTPP	50 ppm dftpp+PC	1	NO	ST130605-1 13:03
2	Sample	2	N8379	090413S1	CCV			ST130904-1
3	Sample	3	N8380	090413S1	EX130903-2MB T			
4	Sample	4	N8381	090413S1	EX130903-2LCS			
5	Sample	5	N8382	090413S1	EX130903-2LCSD			
6	Sample	6	N8383	090413S1	1308515-1 T			
7	Sample	7	N8384	090413S1	1308515-2 T			
8	Sample	8	N8385	090413S1	1308515-3 T			
9	Sample	9	N8386	090413S1	1308545-1 T			
10	Sample	10	N8387	090413S1	1308545-3 T			
11	Sample	11	N8388	090413S1	1308456-7			
12	Sample	12	N8389	090413S1	1308456-11			N8372
13	Sample	13	N8390	090413S1	1308456-16		Surr 8↓	N8375
14	Sample	14	N8391	090413S1	1308456-10		Surr 4,8↓	N8376
15	Sample	15	N8392	090413S1	1308456-12		IS 6↓ Surr 8↓	N8377
16	Sample	16	N8393	090413S1	1308456-3		Surr 6,7,8↓	N8362
17	Sample	17	N8394	090413S1	1308456-14		IS 6↓	N8364
18	Sample	18	N8395	090413S1	1308456-4		IS 6↓ Surr 6,7,8↓	N8368
19	Sample	19	N8396	090413S1	1308456-1		IS 6↓	N8366
20	Sample	20	N8397	090413S1	1308456-5		IS 6↓ Surr 4,3↓	N8365
21	Sample	21	N8398	090413S1	1308456-17		IS 6↓	N8367
22	Sample	22	N8399	090413S1	1308456-2		IS 6↓	N8369
23	Sample	23	N8400	090413S1	INSTRUMENT BLANK	↓	IS 6↓5 Surr 8↑	N8363 22:31
							IS 6↓	

Calibration Raw Data

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

N8217.D DFTPP.M Wed Sep 04 11:45:42 2013

9-5-13

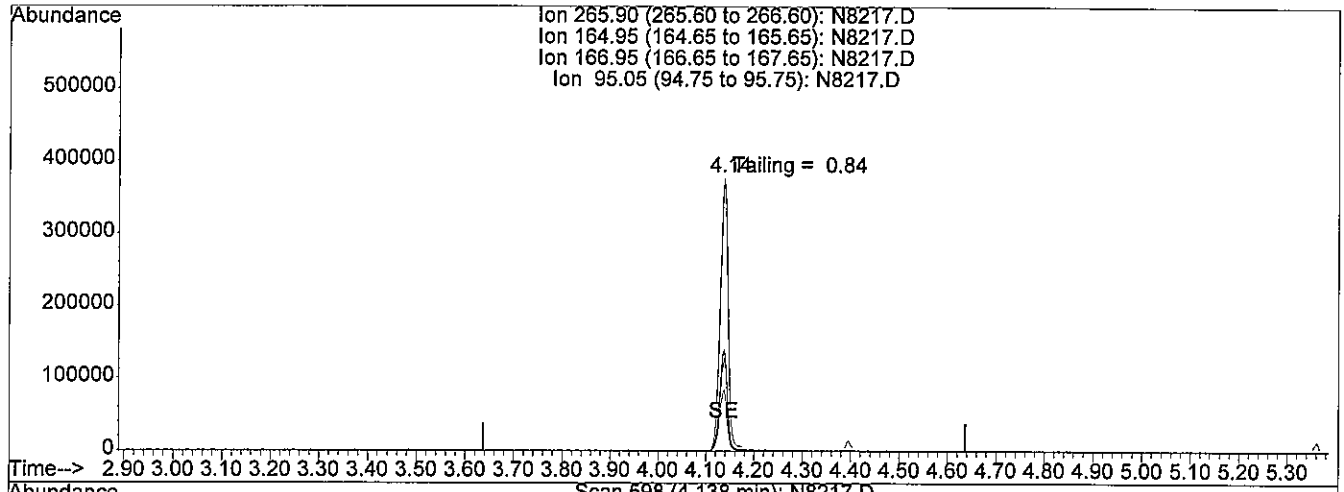
Quantitation Report (Qedit)

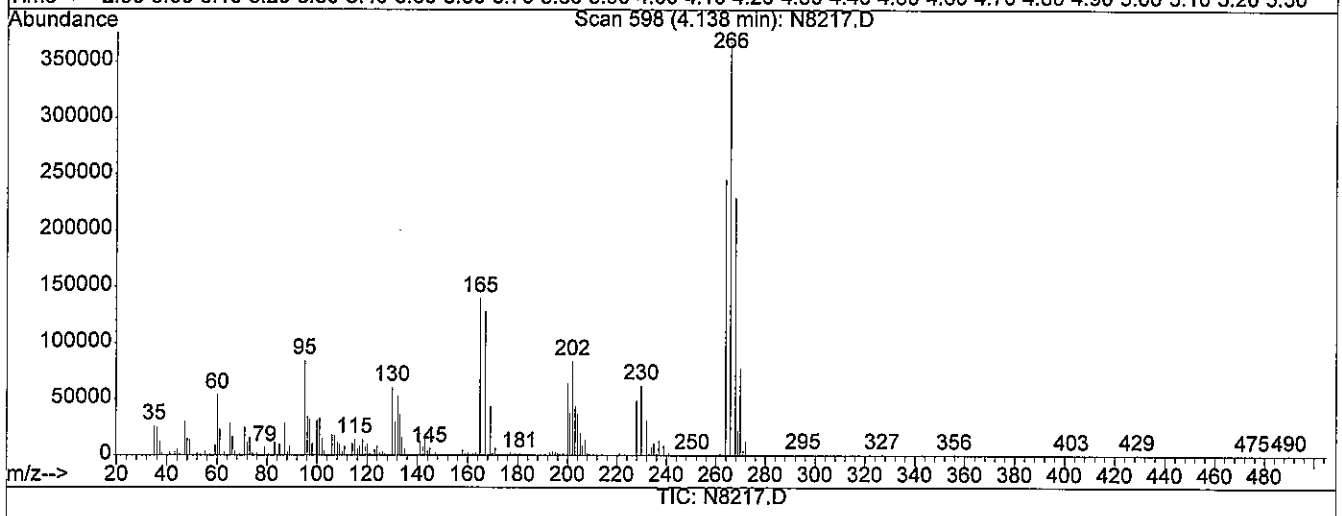
Data File : D:\HPCHEM\1\DATA\090413\N8217.D
Acq On : 4 Sep 2013 11:37
Sample : 50 ppm dftpp+PCP+DDT+benzidine
Misc : ST130605-1
MS Integration Params: rteint.p
Quant Time: Sep 4 11:46 2013

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





TIC: N8217.D

(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#

JH 9-5-13

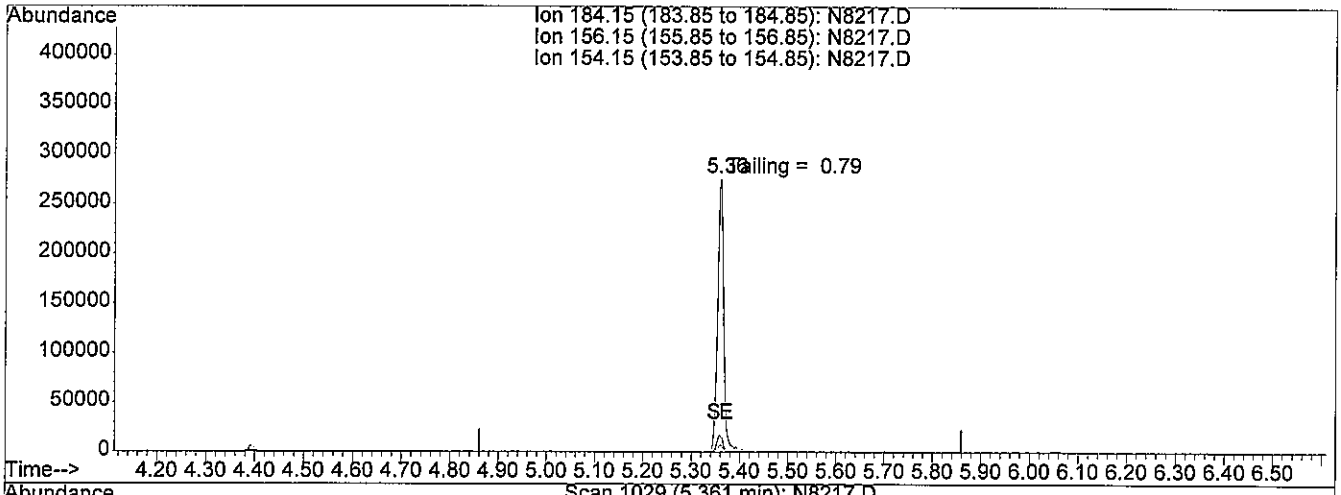
N8217.D DFTPP.M Wed Sep 04 11:46:50 2013

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

JH 9-5-13

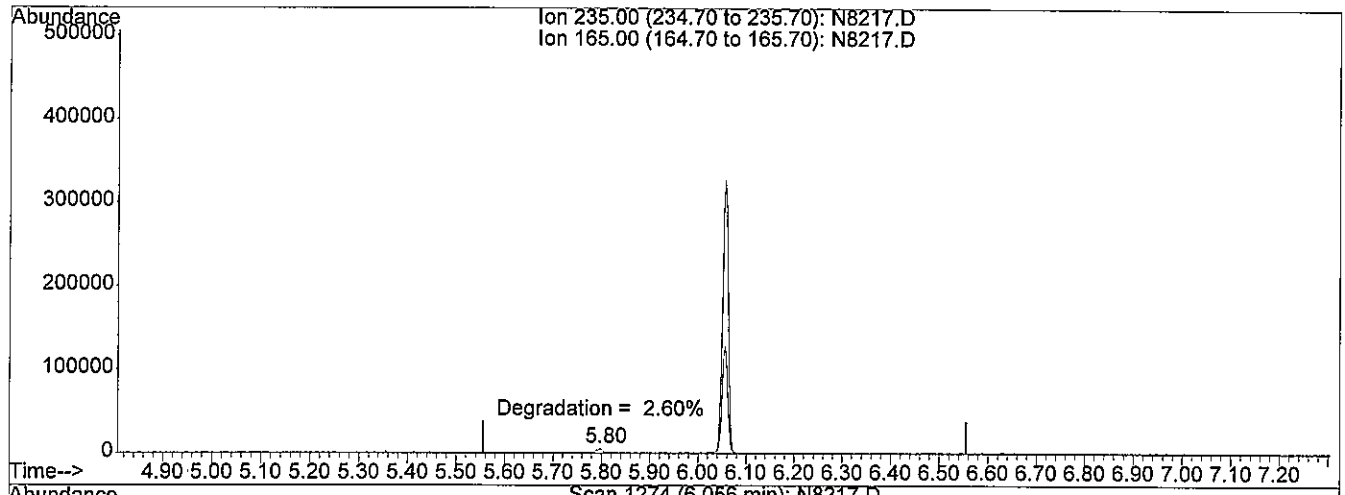
Quantitation Report (Qedit)

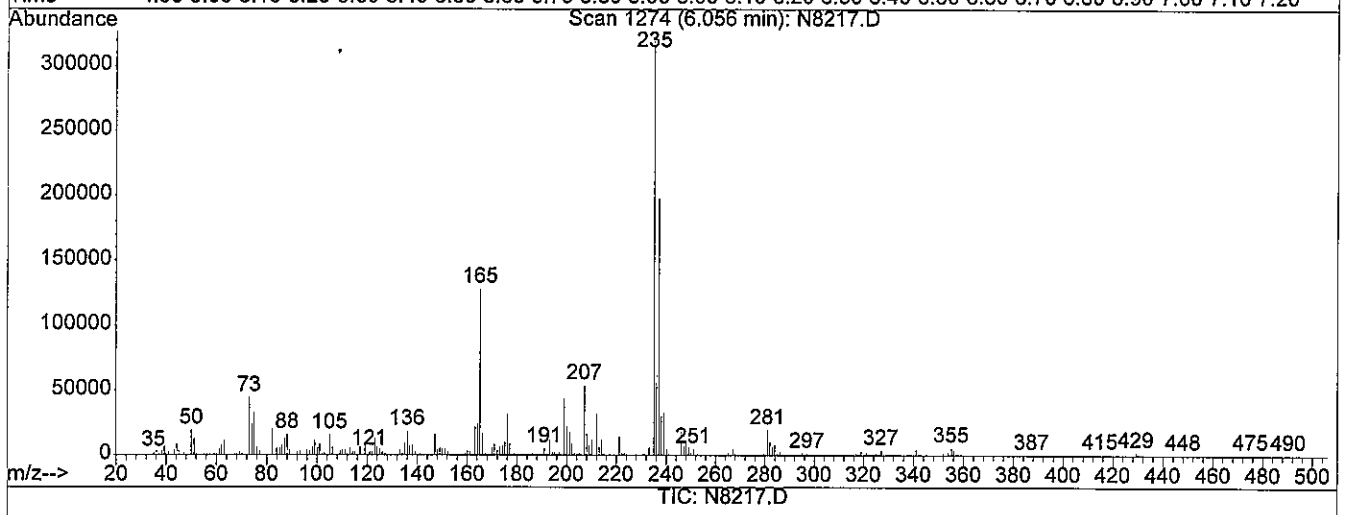
Data File : D:\HPCHEM\1\DATA\090413\N8217.D
Acq On : 4 Sep 2013 11:37
Sample : 50 ppm dftpp+PCP+DDT+benzidine
Misc : ST130605-1
MS Integration Params: rteint.p
Quant Time: Sep 4 11:46 2013

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





TIC: N8217.D

(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

9-5-13

N8217.D DFTPP.M Wed Sep 04 11:47:07 2013

Quantitation Report (QT Reviewed)

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 9/5/13 Page 1

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 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 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

Quantitation Report (QT Reviewed)

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

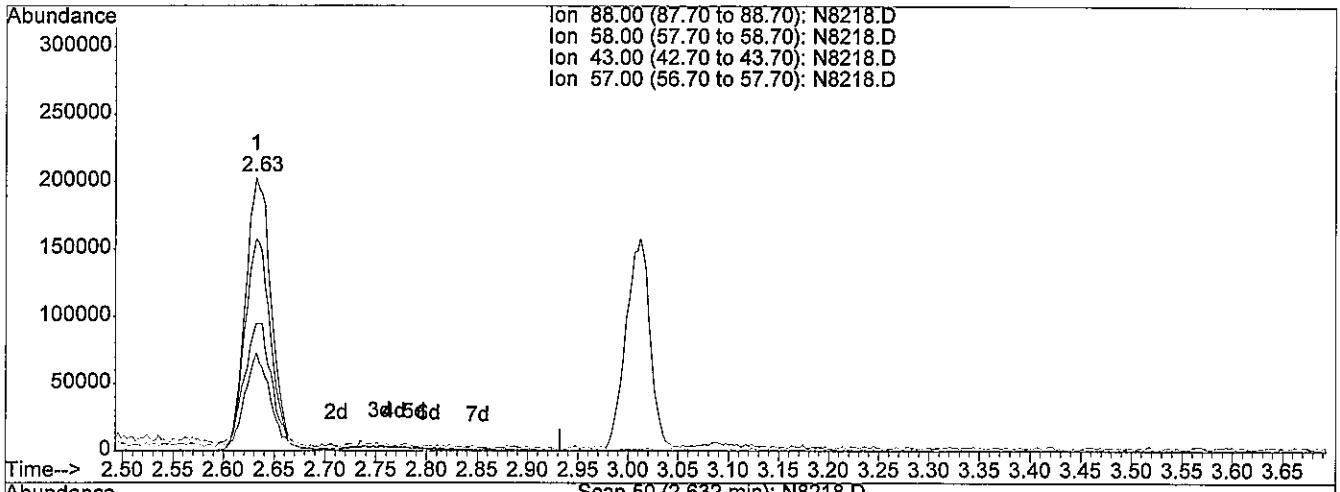
(#) = qualifier out of range (m) = manual integration

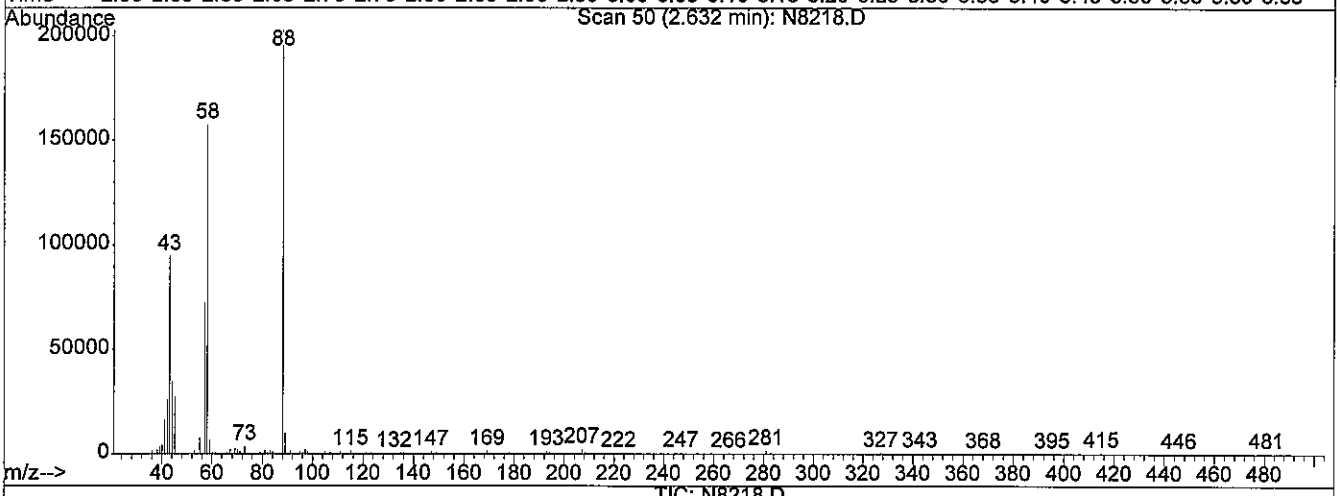
Quantitation Report (Qedit)

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





TIC: N8218.D

(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

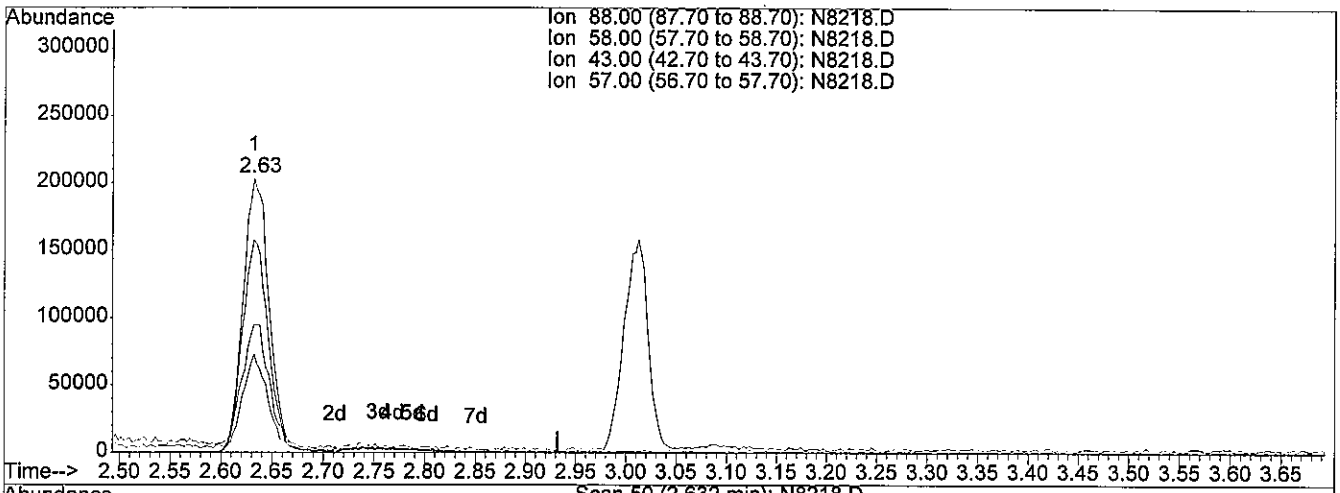
3 for

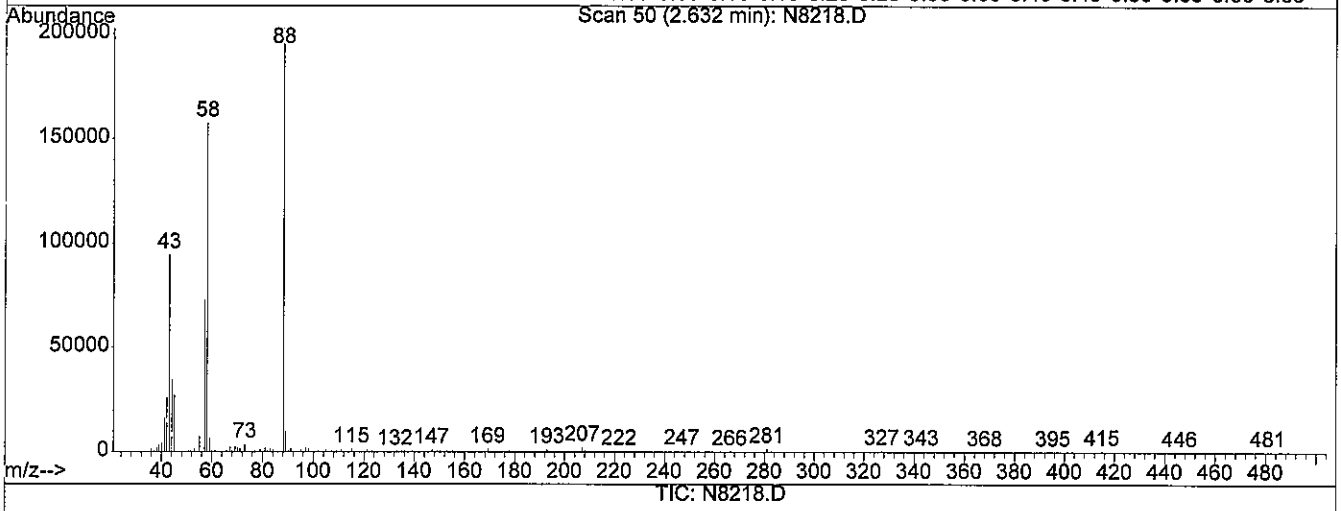
Quantitation Report (Qedit)

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





TIC: N8218.D

(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 YK *date* 9-5-17

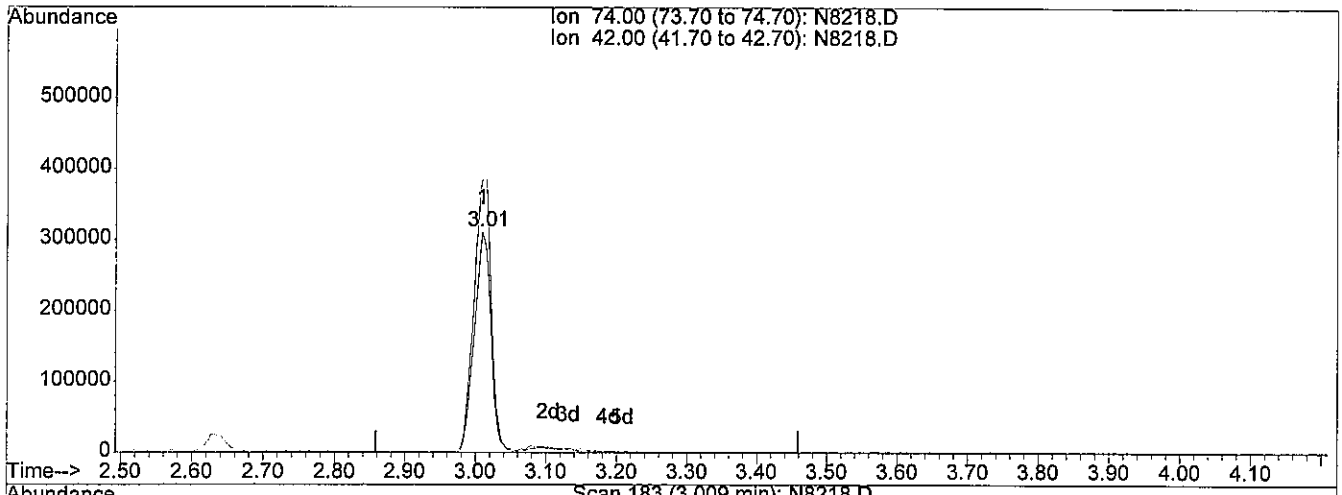
N8218.D 090413S1.M Wed Sep 04 13:10:57 2013

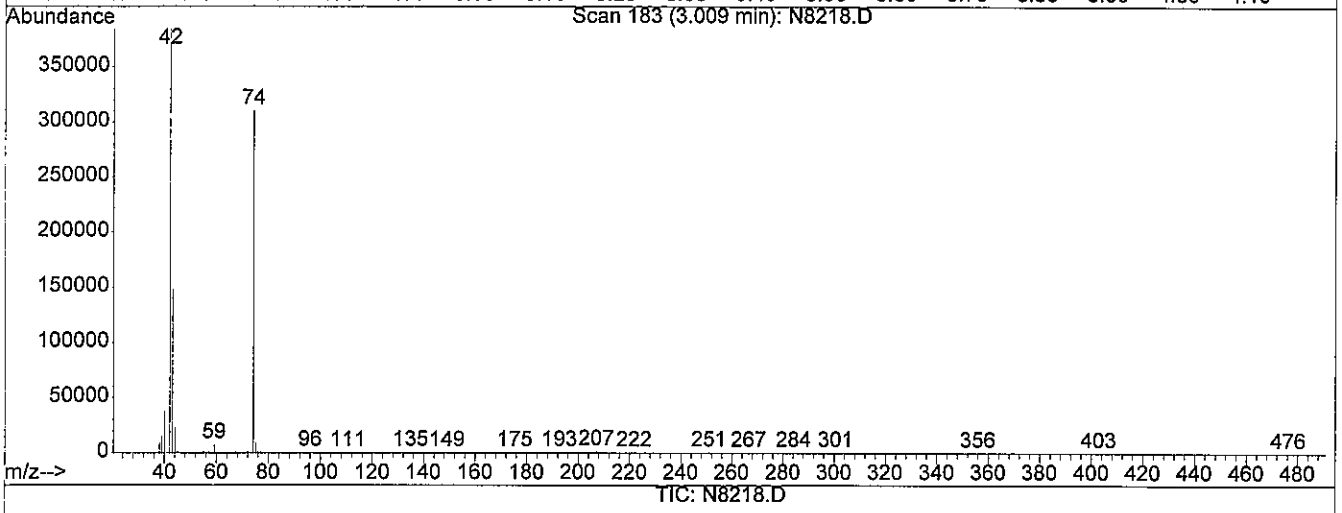
Quantitation Report (Qedit)

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





TIC: N8218.D

(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

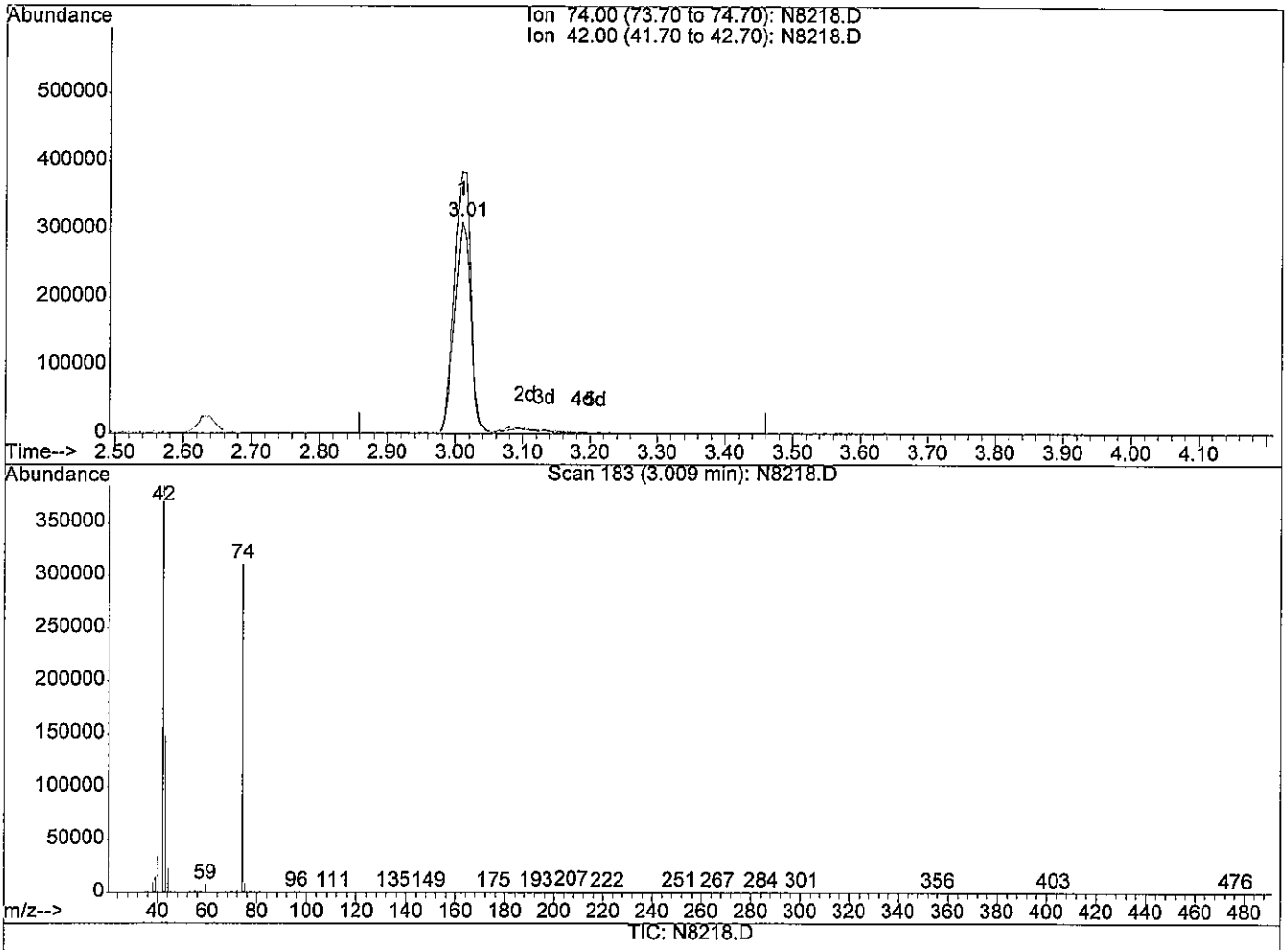
Sofa

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



(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 JL *date* 5-5-13

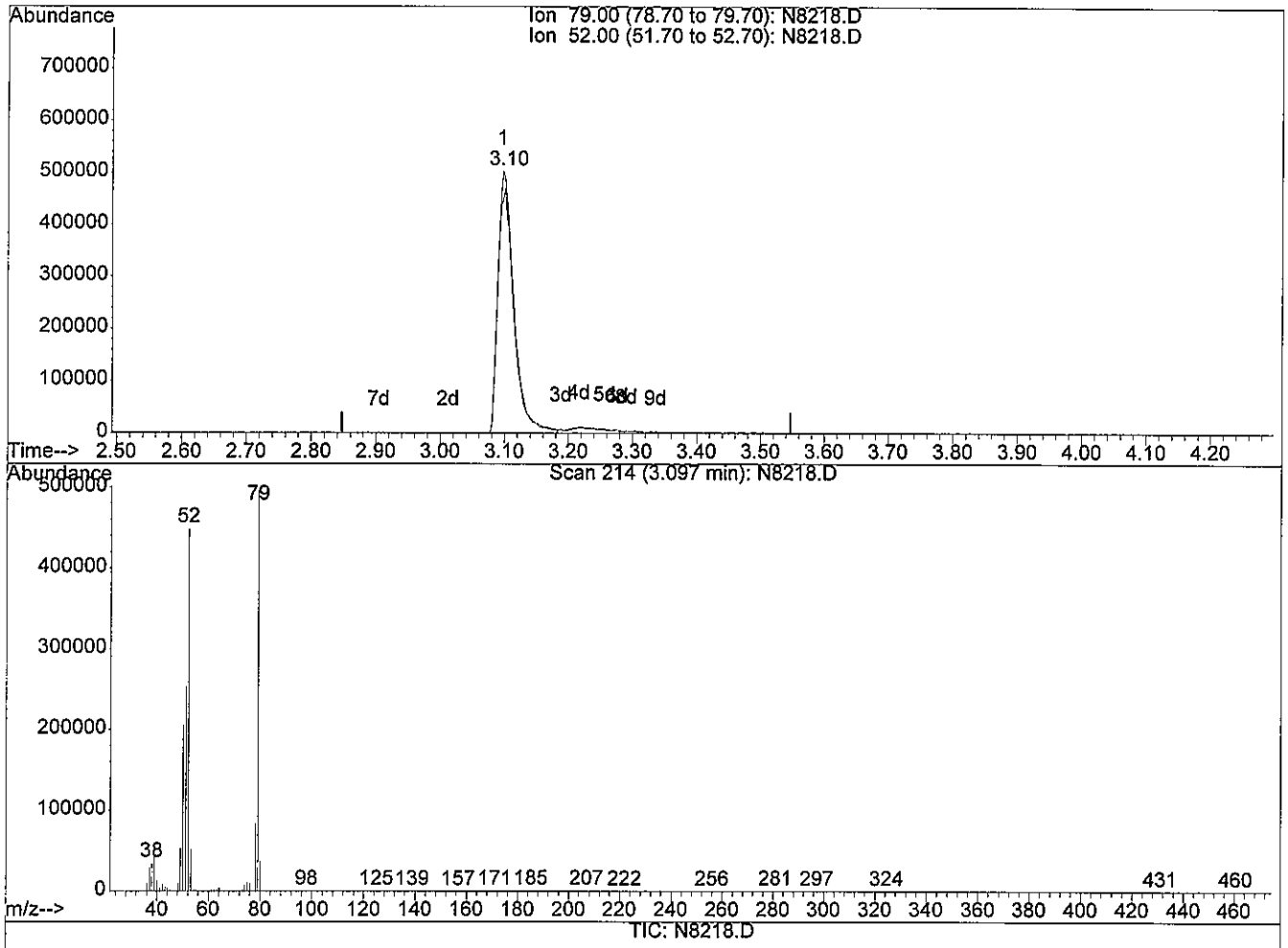
Quantitation Report (Qedit)

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

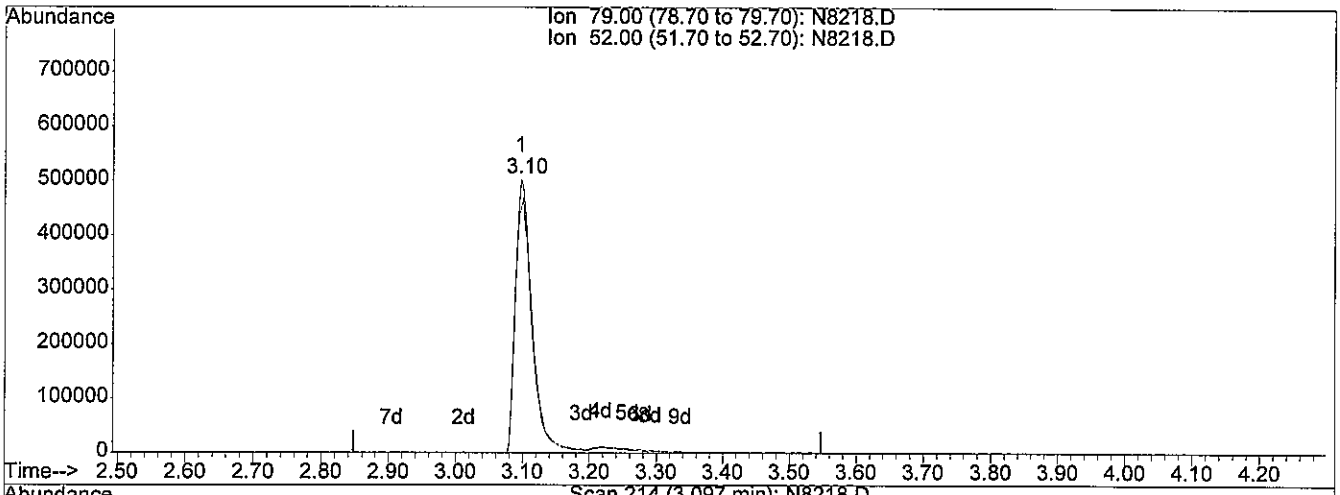
3-Fr

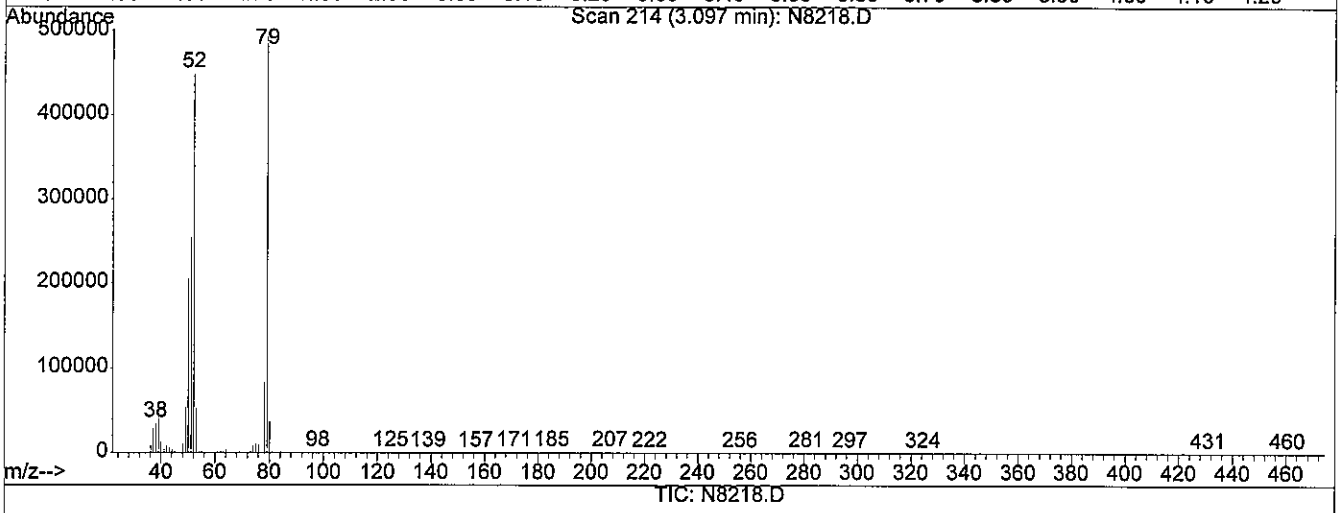
Quantitation Report (Qedit)

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

(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 JL *date* 9-5-13

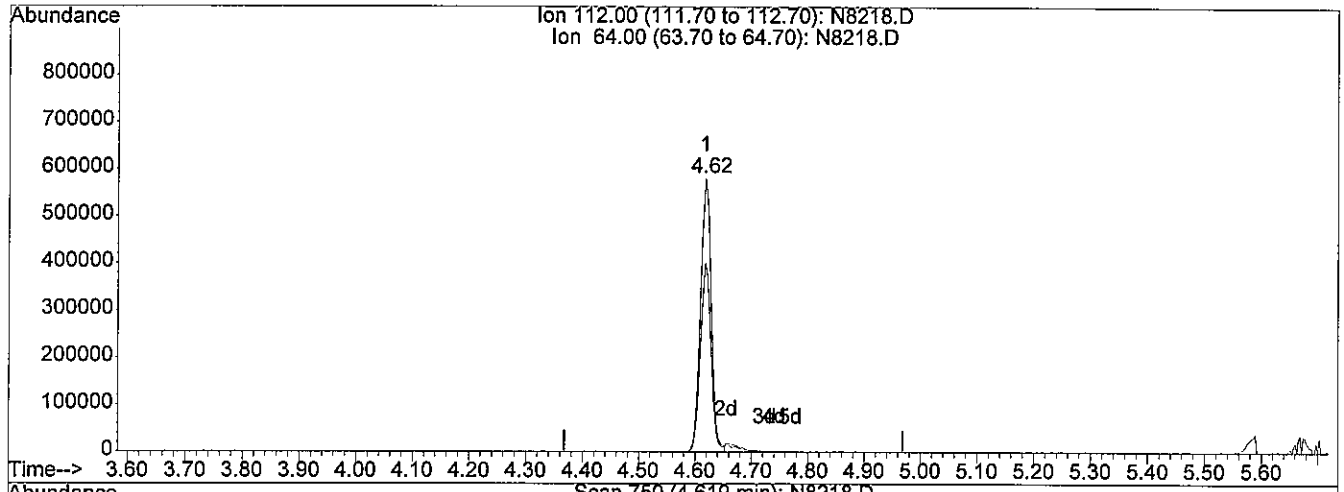
N8218.D 090413S1.M Wed Sep 04 13:11:17 2013

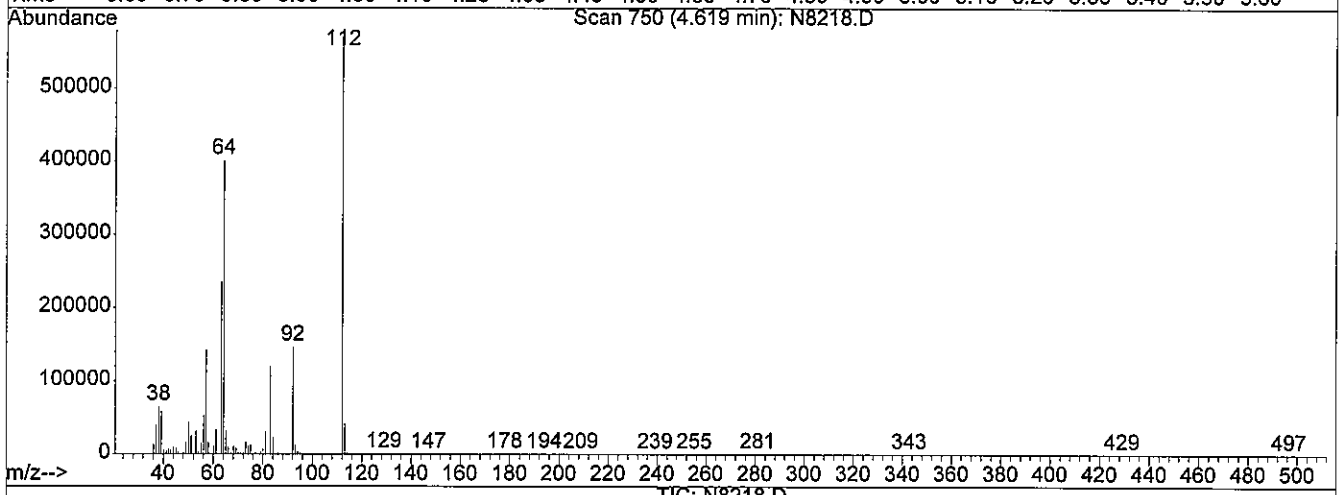
Quantitation Report (Qedit)

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

(5) 2-Fluorophenol (S)

4.62min 60.00ng/uL

response 765115

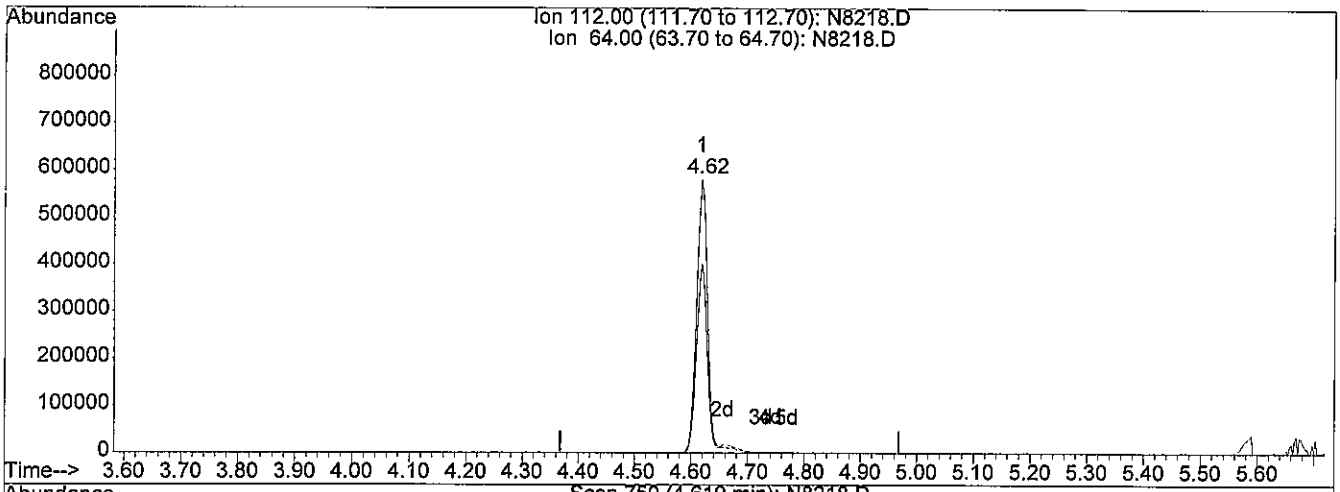
Ion	Exp%	Act%
112.00	100	100
64.00	68.70	68.71
0.00	0.00	0.00
0.00	0.00	0.00

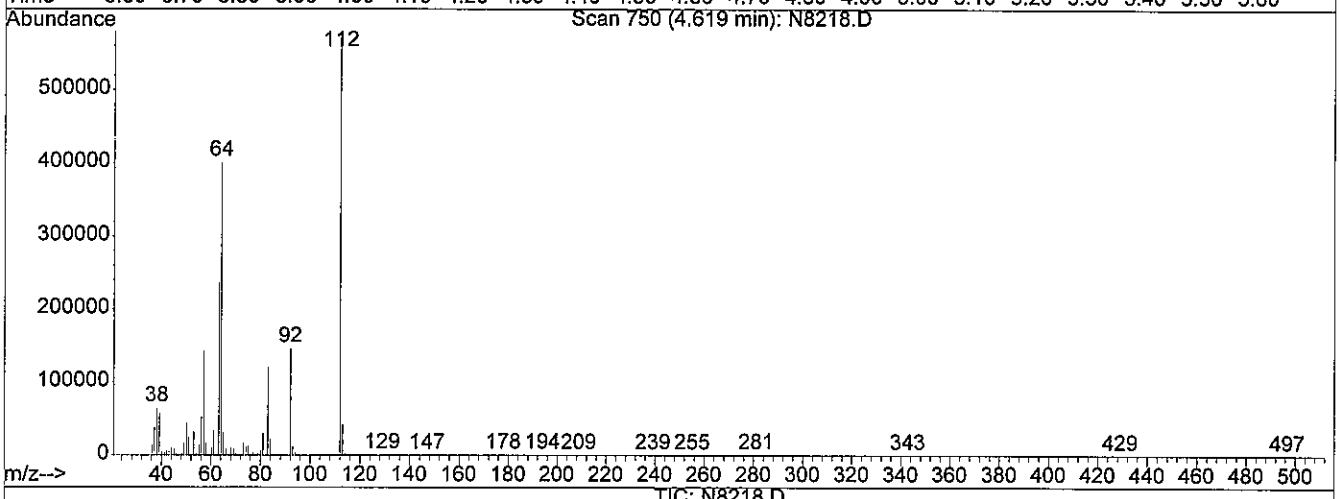
Quantitation Report (Qedit)

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

(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

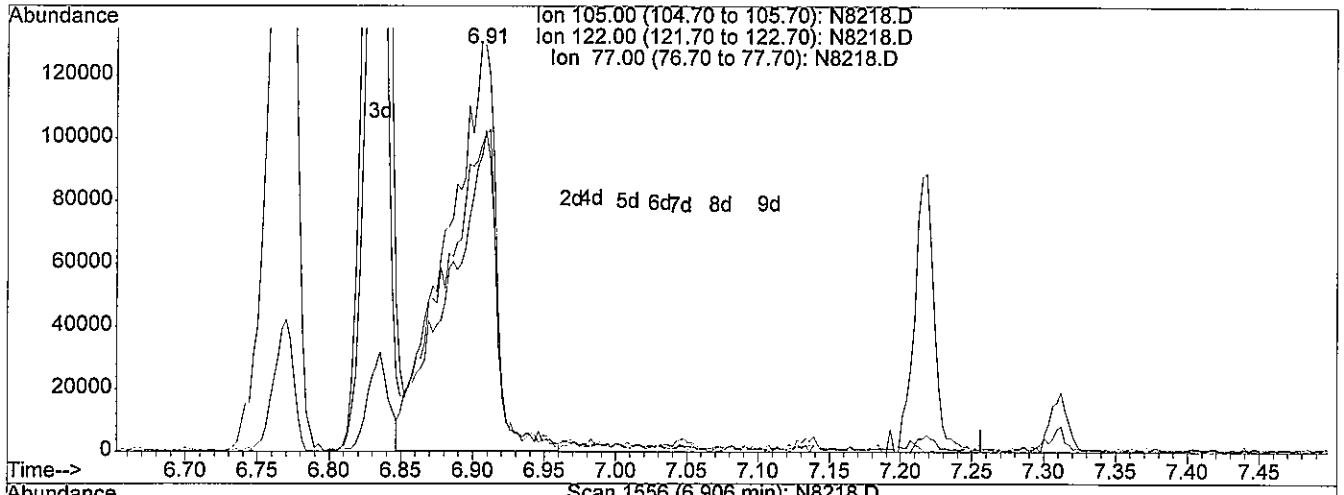
Quantitation Report (Qedit)

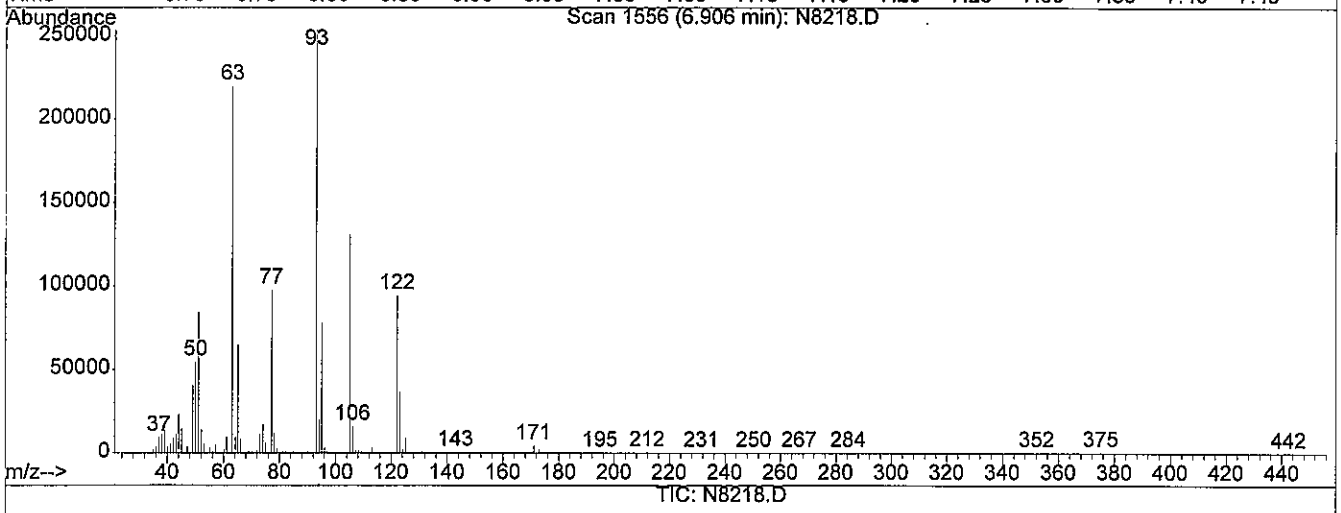
Data File : D:\HPCHEM\1\DATA\090413\N8218.D
Acq On : 4 Sep 2013 11:53
Sample : ICALSVSTD060
Misc : ST130904-1 60 PPM
MS Integration Params: RTEINT.P
Quant Time: Sep 4 13:11 2013

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

(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

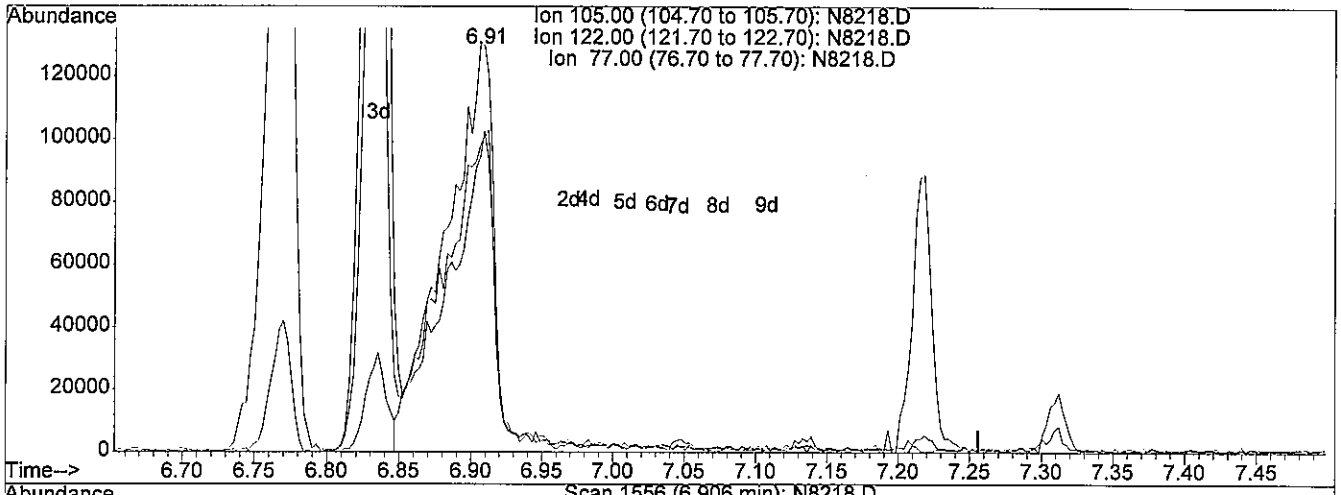
3 for

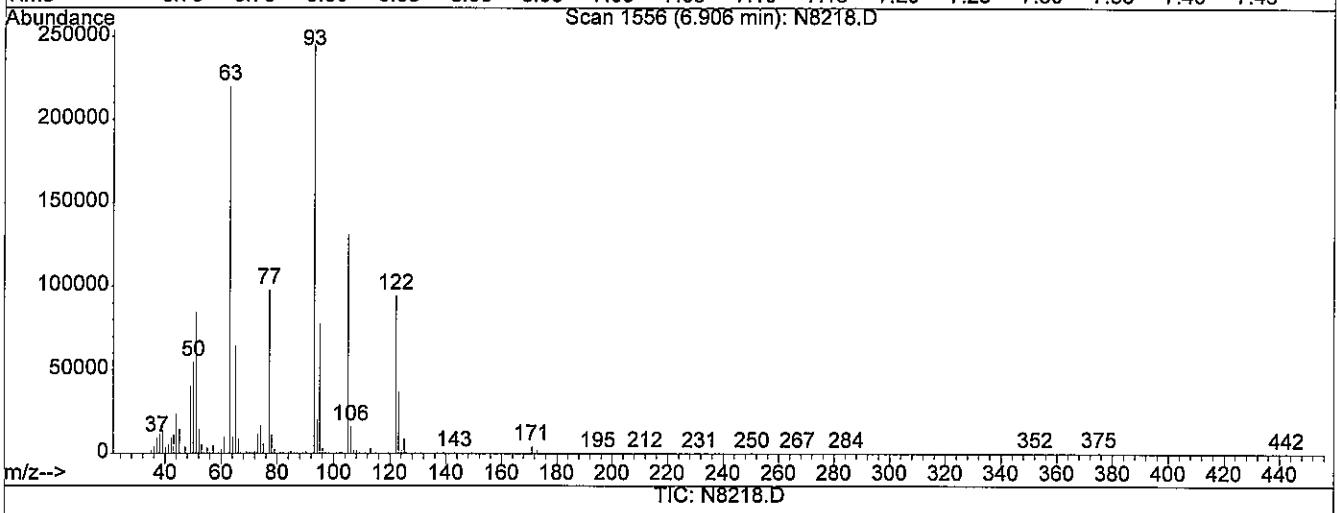
Quantitation Report (Qedit)

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

(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 JL *date* 9-5-13

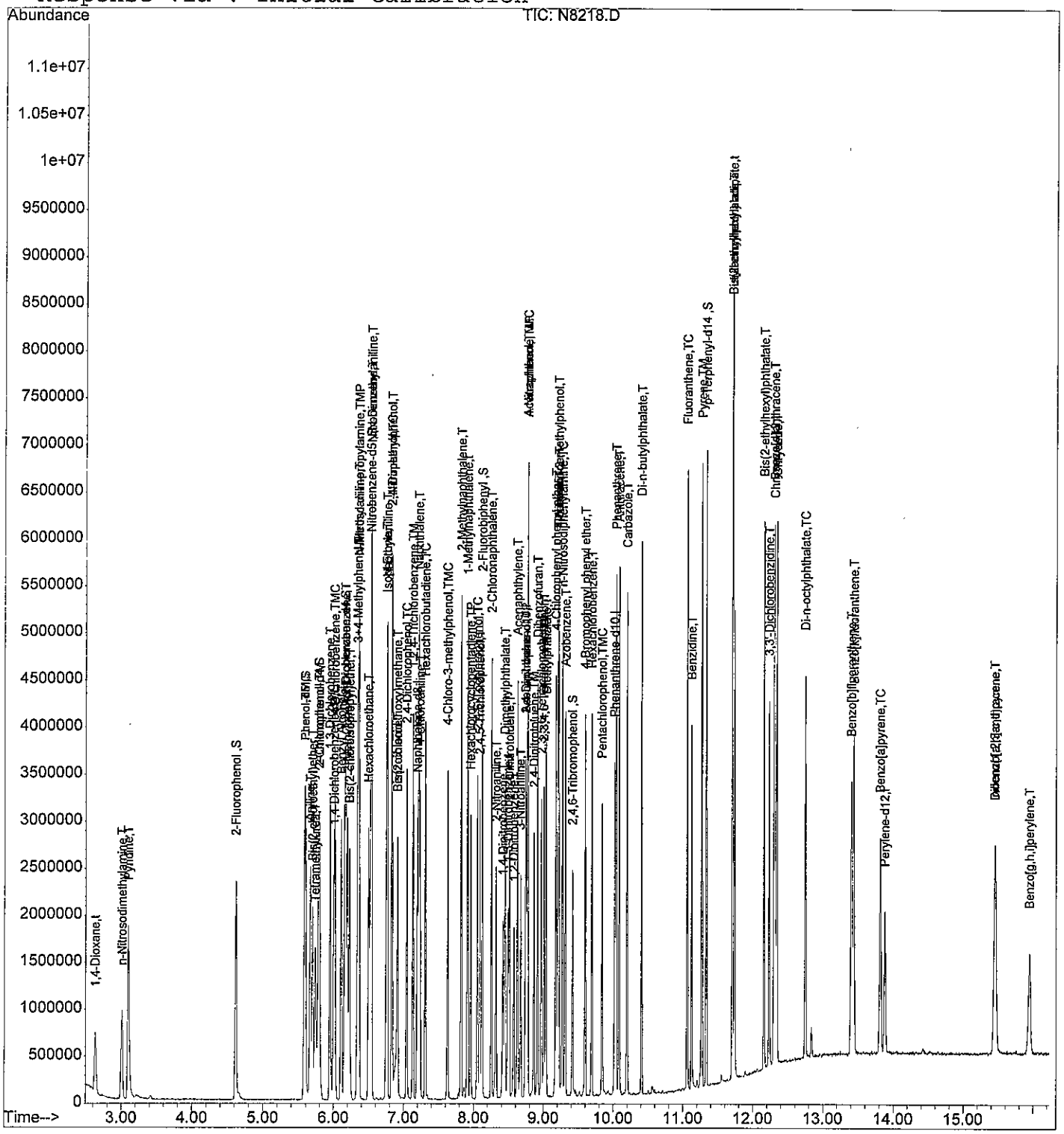
N8218.D 090413S1.M Wed Sep 04 13:11:54 2013

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 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



Quantitation Report (QT Reviewed)

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 JK 9-5-13 Page 1

Quantitation Report (QT Reviewed)

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

Quantitation Report (QT Reviewed)

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 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 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

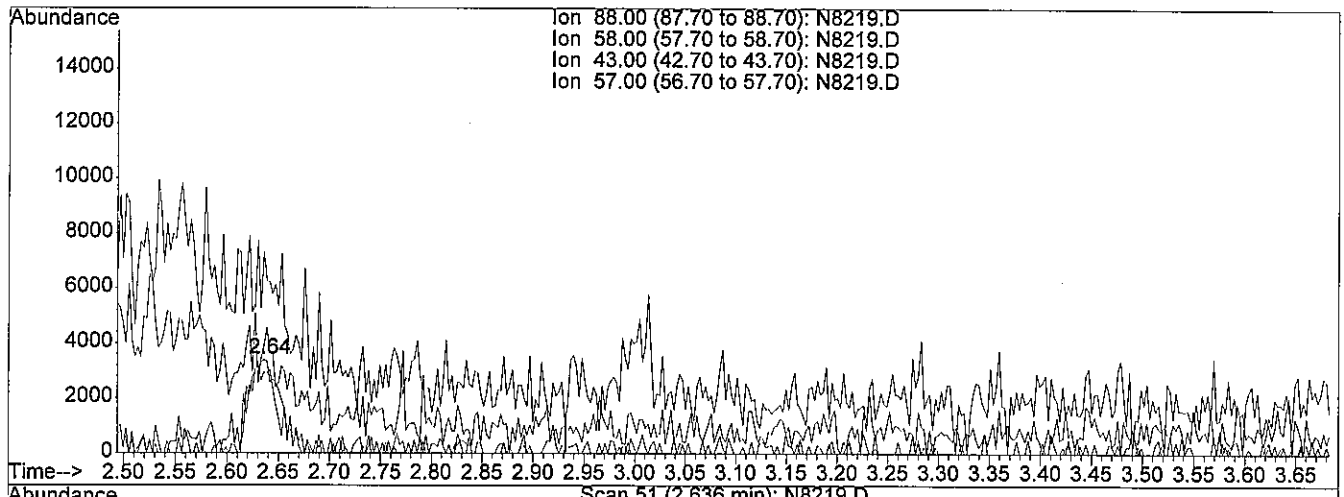
Quantitation Report (Qedit)

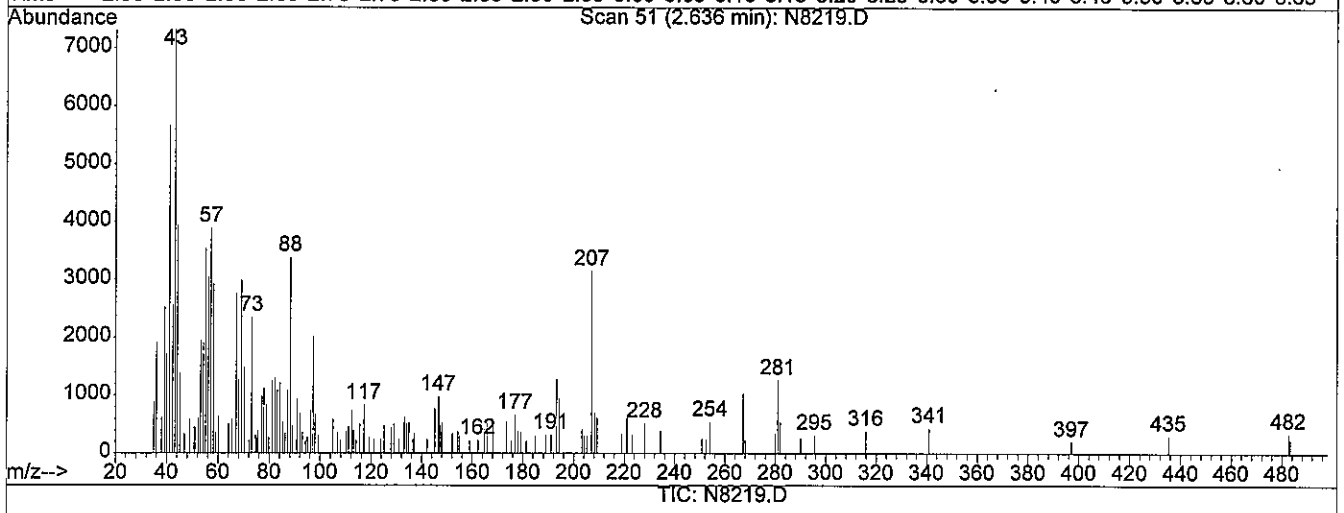
Data File : D:\HPCHEM\1\DATA\090413\N8219.D
Acq On : 4 Sep 2013 12:17
Sample : ICALSVSTD001
Misc : ST130531-2
MS Integration Params: RTEINT.P
Quant Time: Sep 4 13:13 2013

Vial: 3
Operator: jk SOP 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: N8219.D

(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

N8219.D 090413S1.M Wed Sep 04 13:13:41 2013

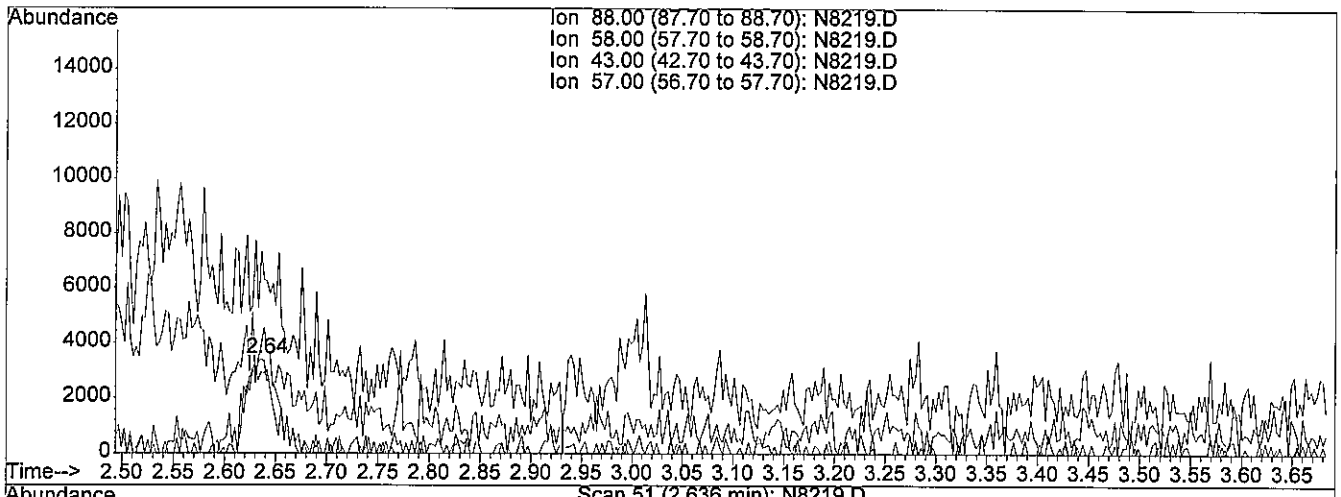
Quantitation Report (Qedit)

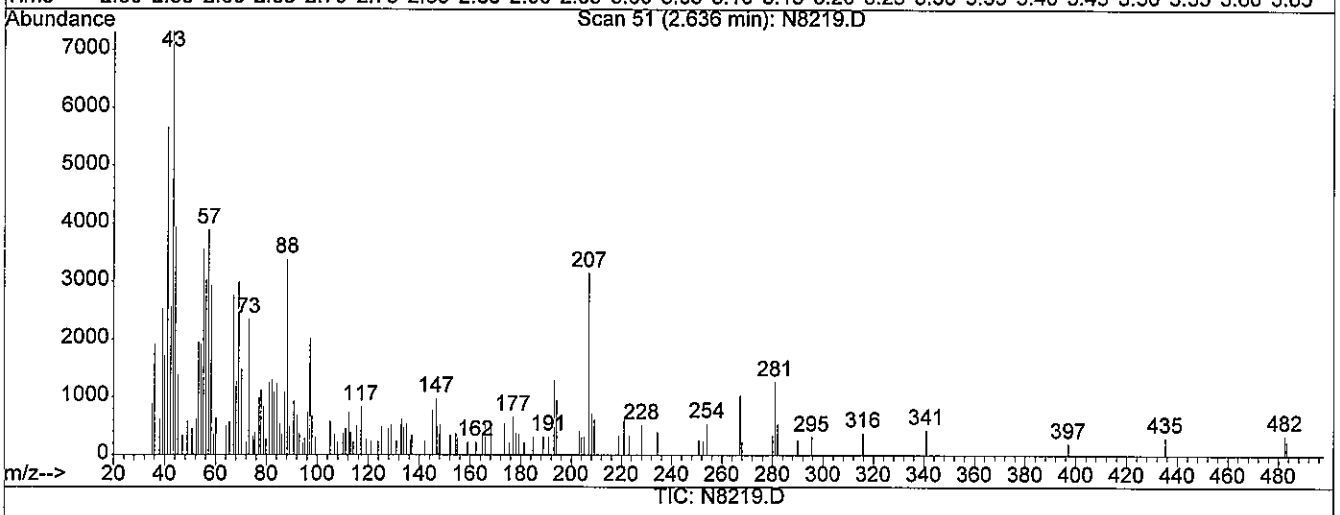
Data File : D:\HPCHEM\1\DATA\090413\N8219.D
Acq On : 4 Sep 2013 12:17
Sample : ICALSVSTD001
Misc : ST130531-2
MS Integration Params: RTEINT.P
Quant Time: Sep 4 13:13 2013

Vial: 3
Operator: jk SOP 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)

2.64min 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 JK *date* 9-5-0

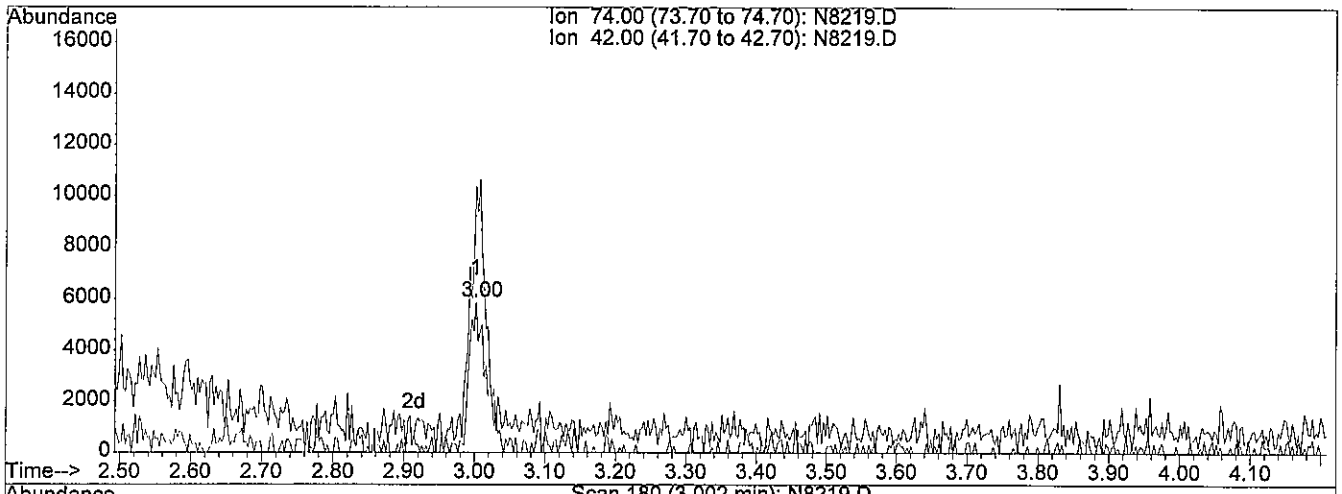
N8219.D 090413S1.M Wed Sep 04 13:13:45 2013

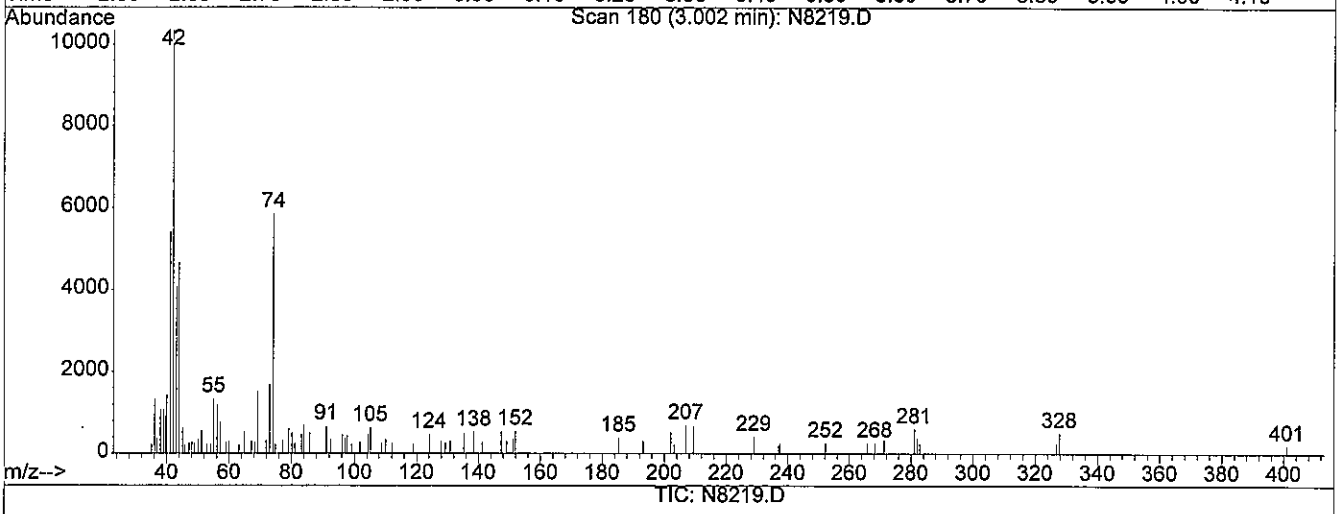
Quantitation Report (Qedit)

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 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: N8219.D

(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

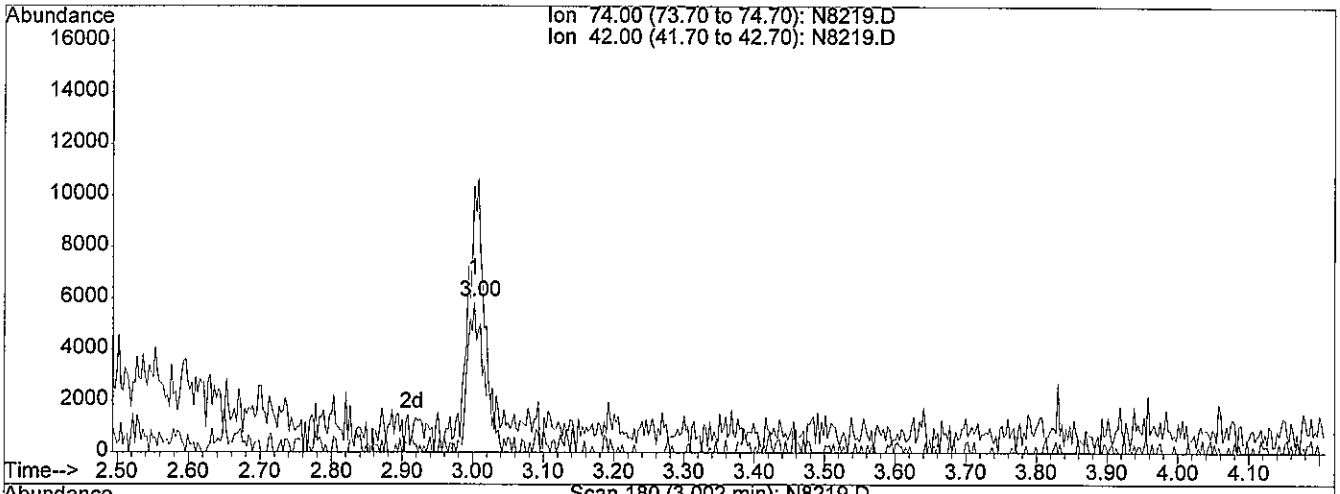
3 of 6

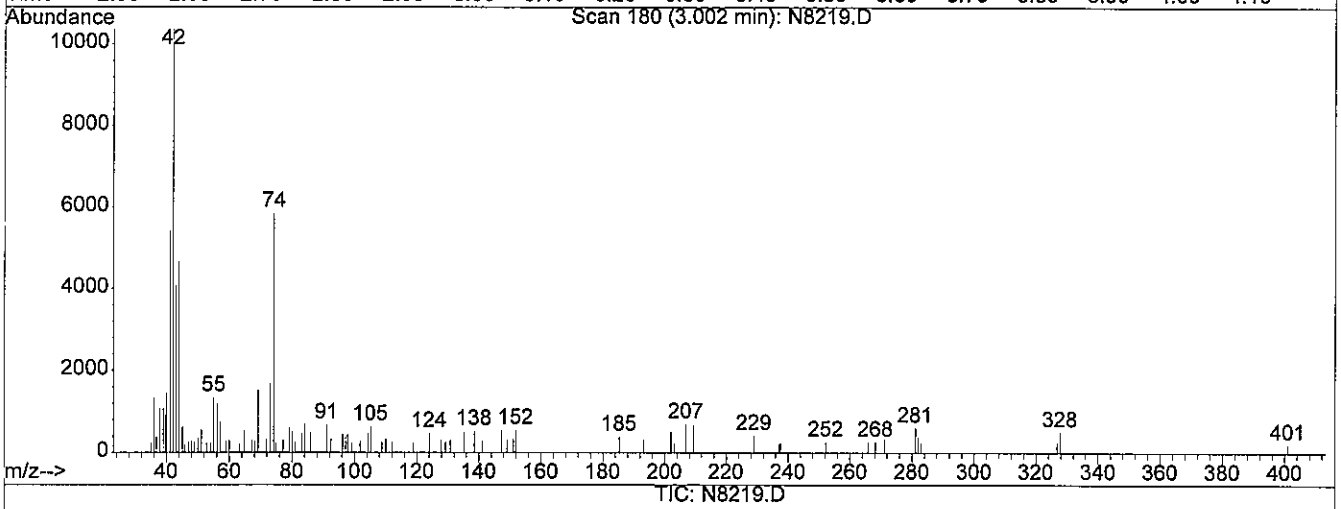
Quantitation Report (Qedit)

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 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: N8219.D

(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 _____

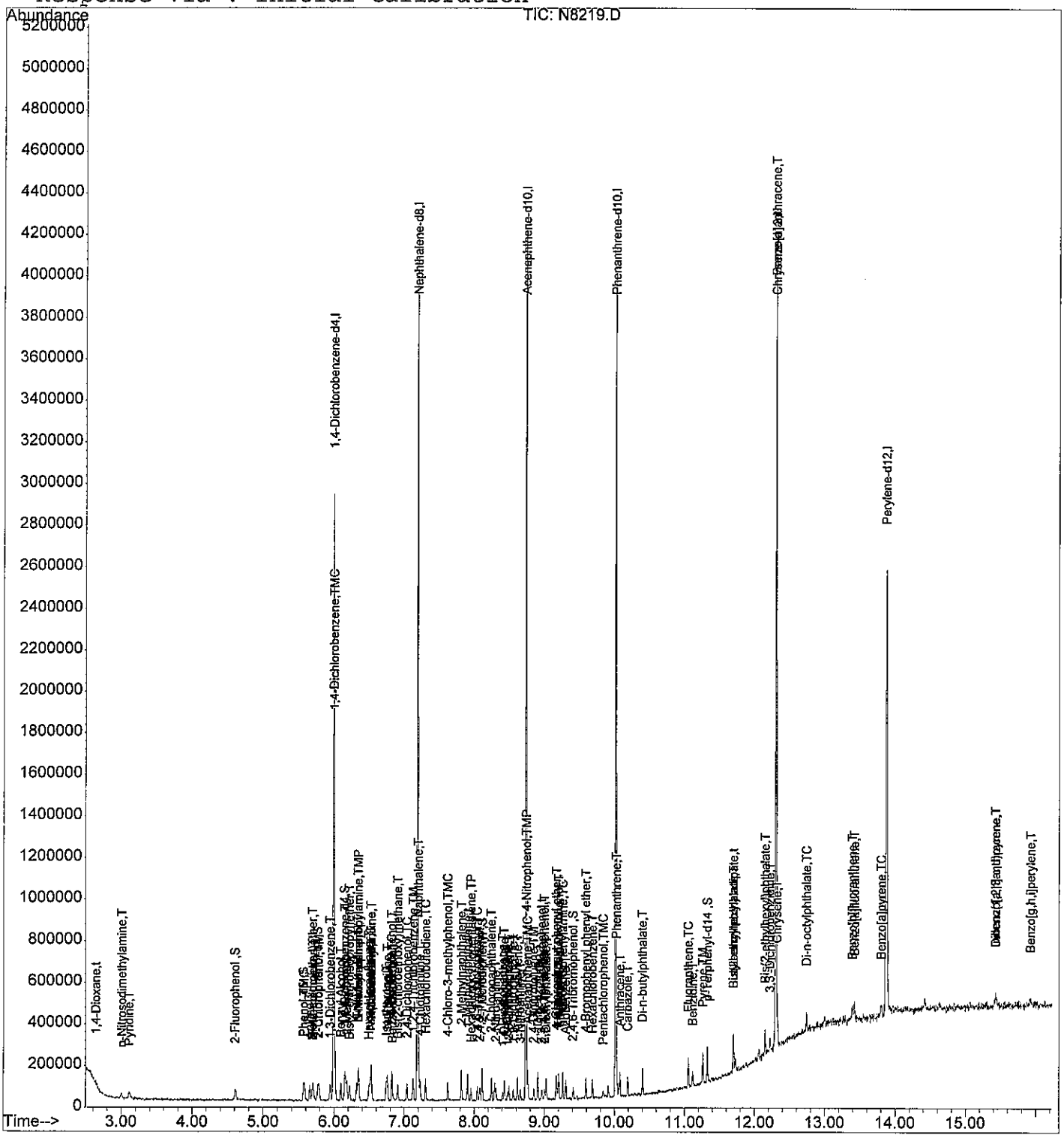
initials JK *date* 5-5-17

N8219.D 090413S1.M Wed Sep 04 13:13:58 2013

Quantitation Report

Data File : D:\HPCHEM\1\DATA\090413\N8219.D Vial: 3
Acq On : 4 Sep 2013 12:17 Operator: jk SOP 506
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

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



Quantitation Report (QT Reviewed)

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

Quantitation Report (QT Reviewed)

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

Quantitation Report (QT Reviewed)

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 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 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

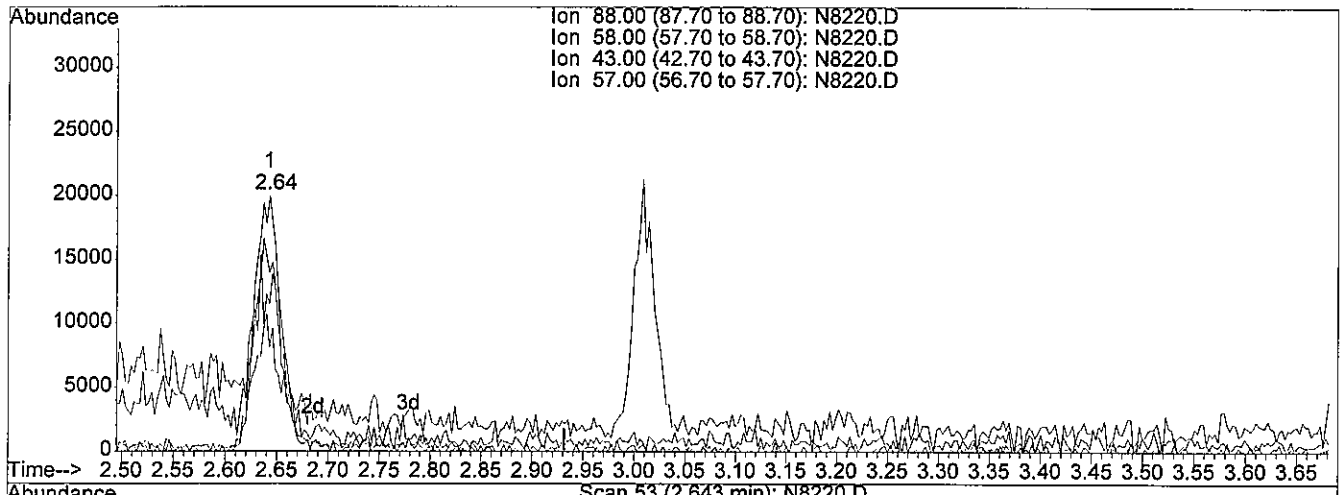
(#) = qualifier out of range (m) = manual integration

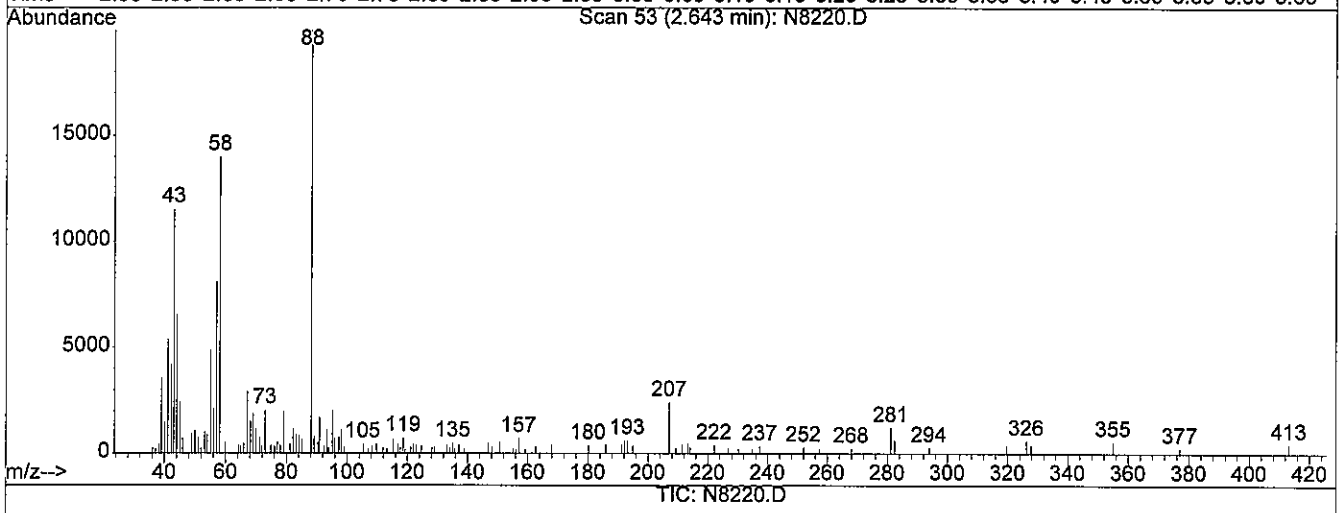
Quantitation Report (Qedit)

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 13:14 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





TIC: N8220.D

(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#

3 for

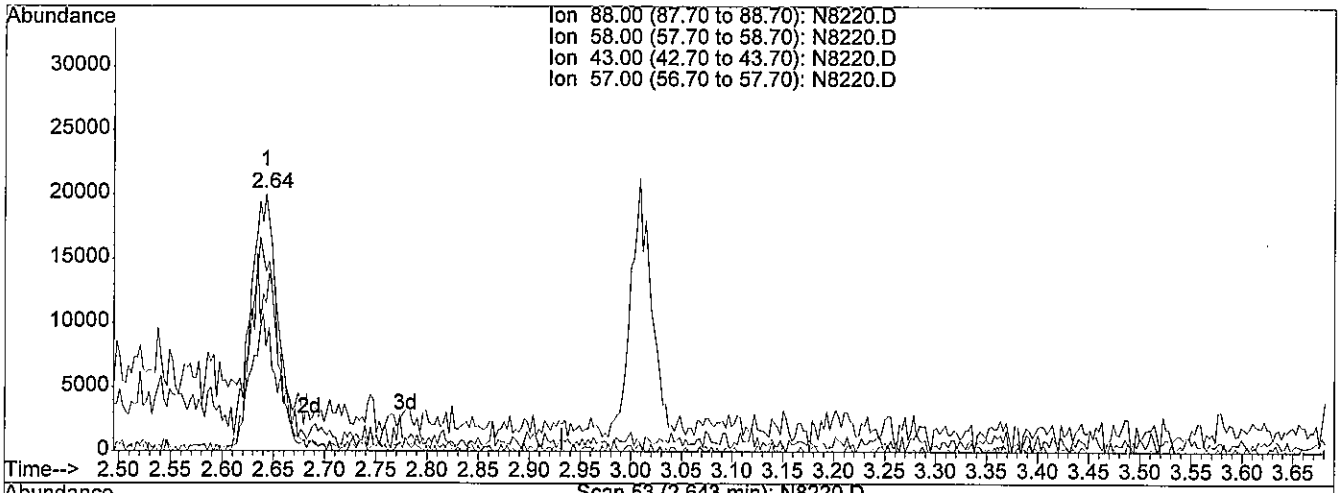
N8220.D 090413S1.M Wed Sep 04 13:16:06 2013

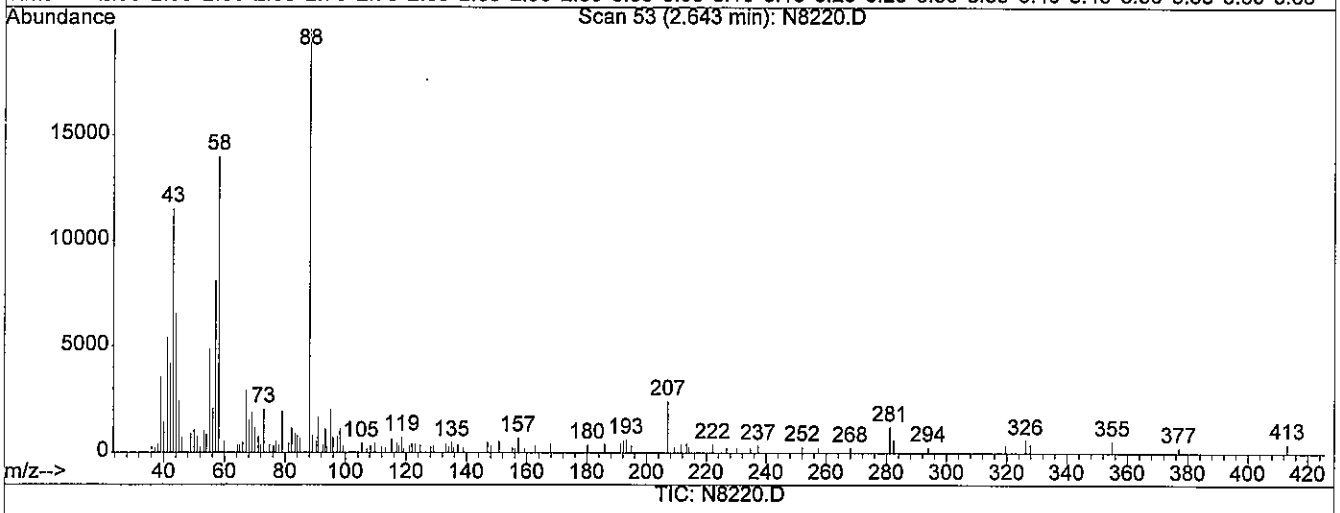
Quantitation Report (Qedit)

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





TIC: N8220.D

(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 JL *date* 9-5-13

N8220.D 090413S1.M Wed Sep 04 13:16:11 2013

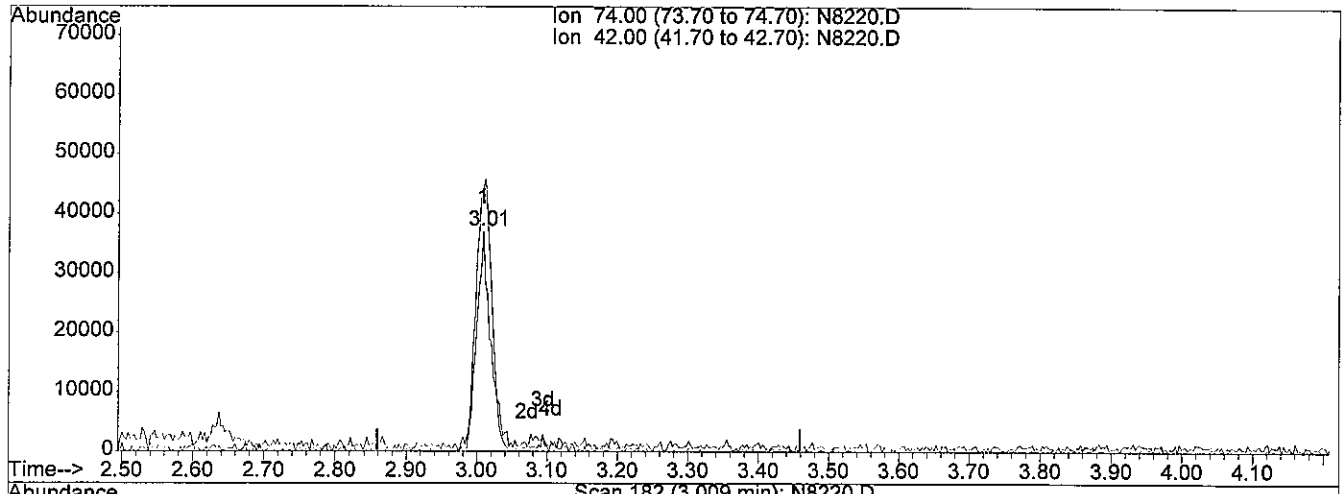
Quantitation Report (Qedit)

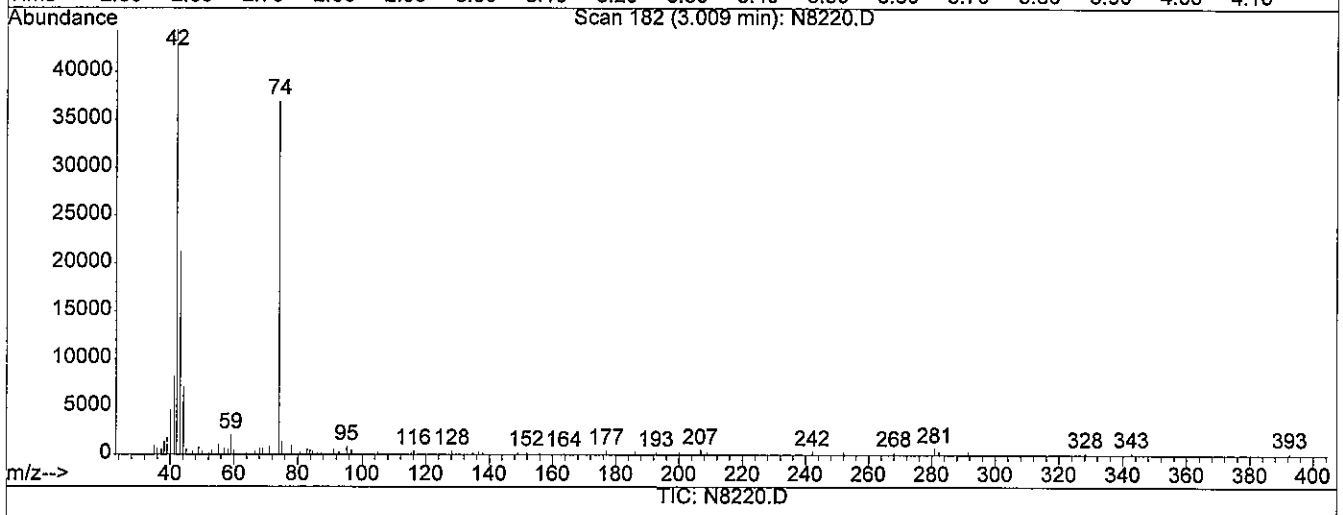
Data File : D:\HPCHEM\1\DATA\090413\N8220.D
Acq On : 4 Sep 2013 12:41
Sample : ICALSVSTD005
Misc : ST130531-3
MS Integration Params: RTEINT.P
Quant Time: Sep 4 13:16 2013

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





TIC: N8220.D

(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 of 5

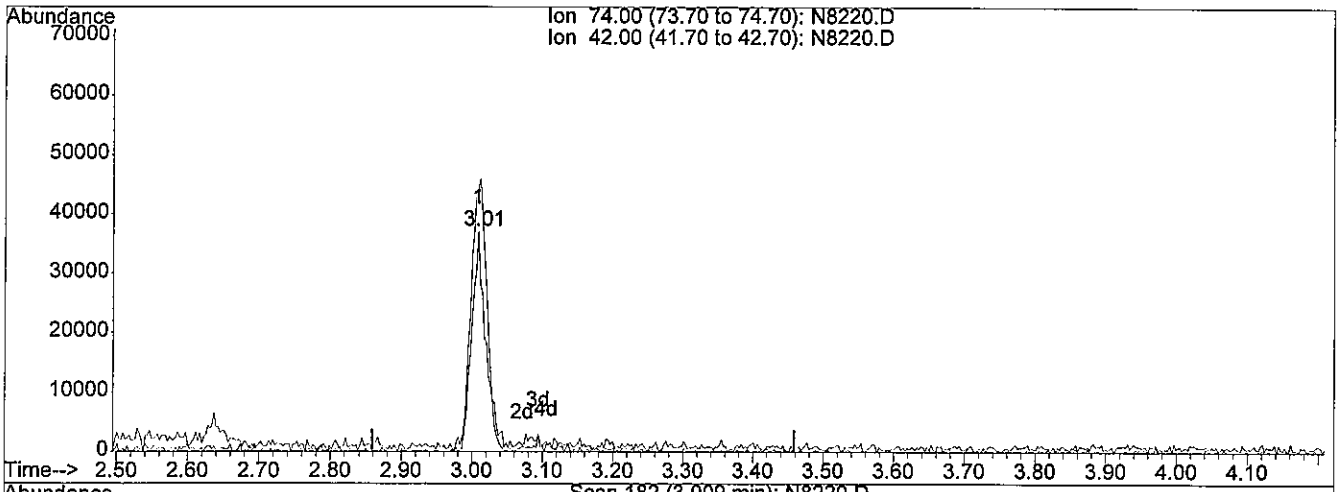
N8220.D 090413S1.M Wed Sep 04 13:16:15 2013

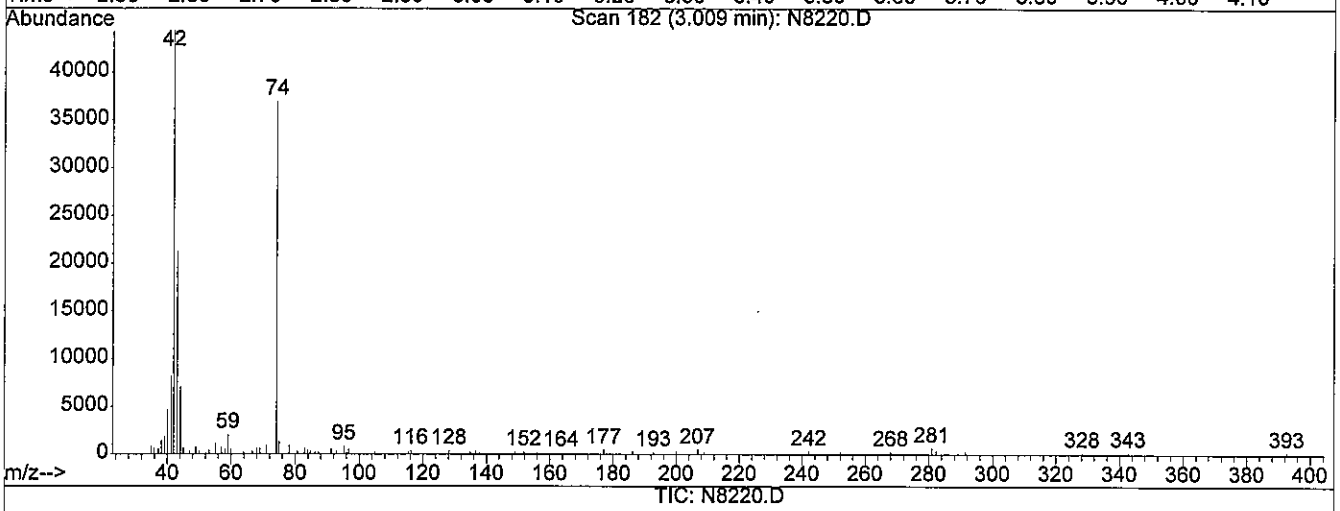
Quantitation Report (Qedit)

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





TIC: N8220.D

(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 KL *date* 9-5-13

N8220.D 090413S1.M Wed Sep 04 13:16:20 2013

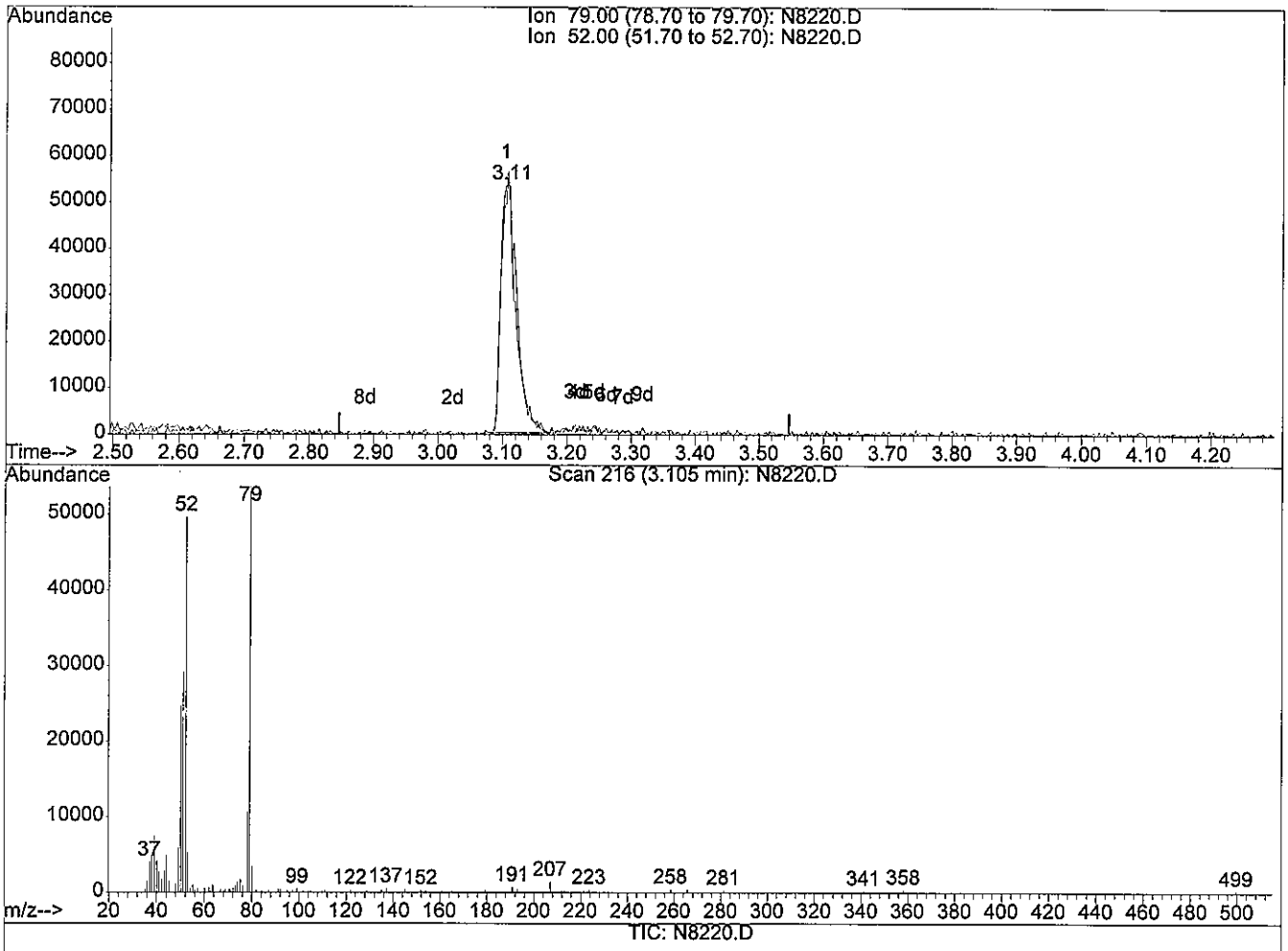
Quantitation Report (Qedit)

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



TIC: N8220.D

(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

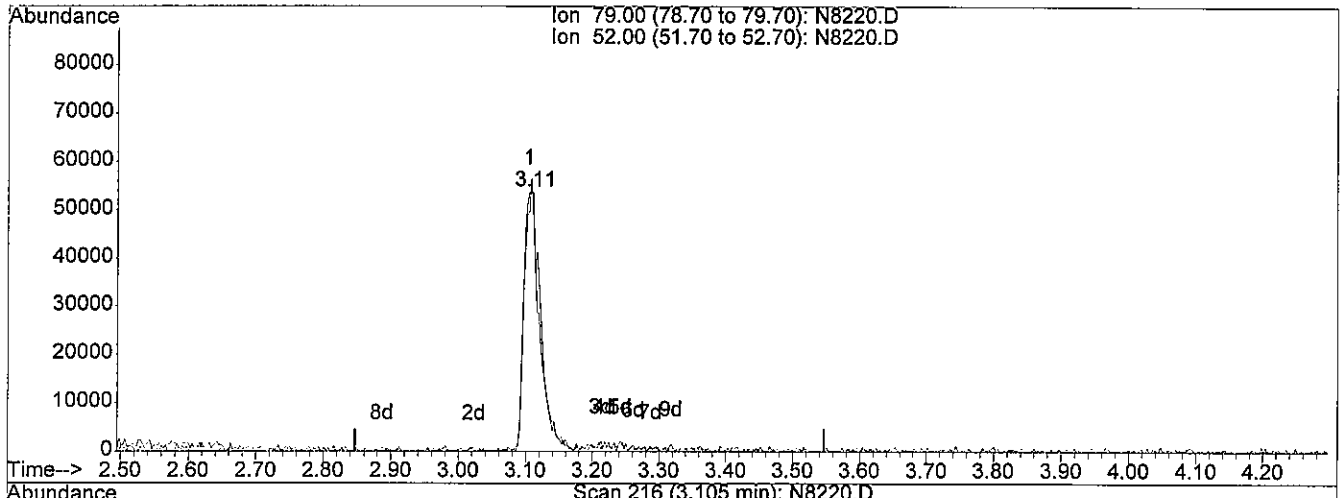
N8220.D 090413S1.M Wed Sep 04 13:16:24 2013

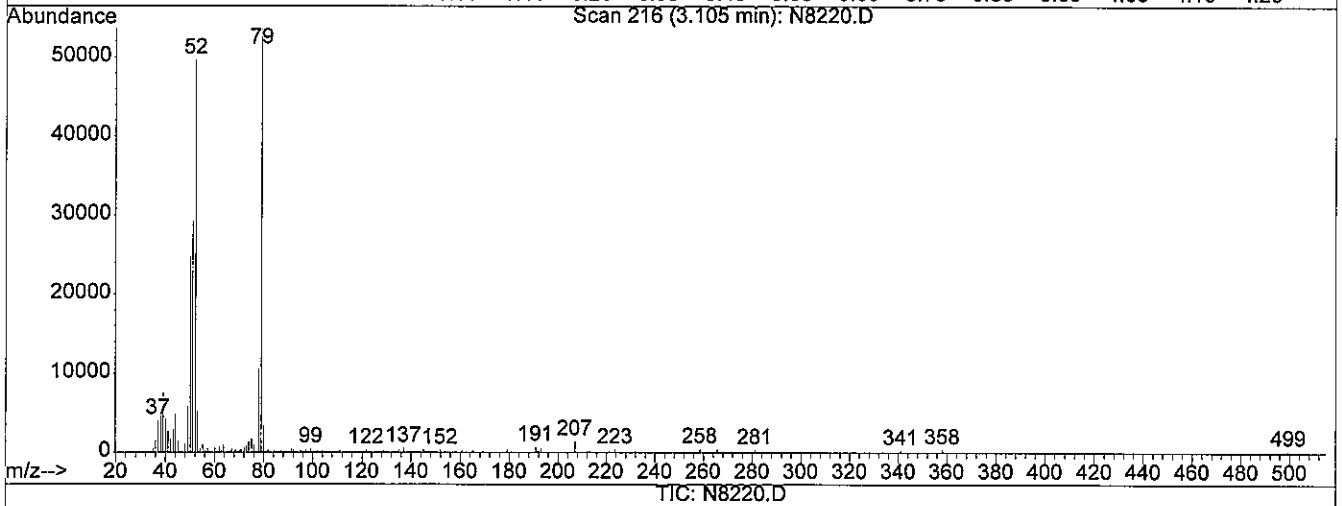
Quantitation Report (Qedit)

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





TIC: N8220.D

(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 _____

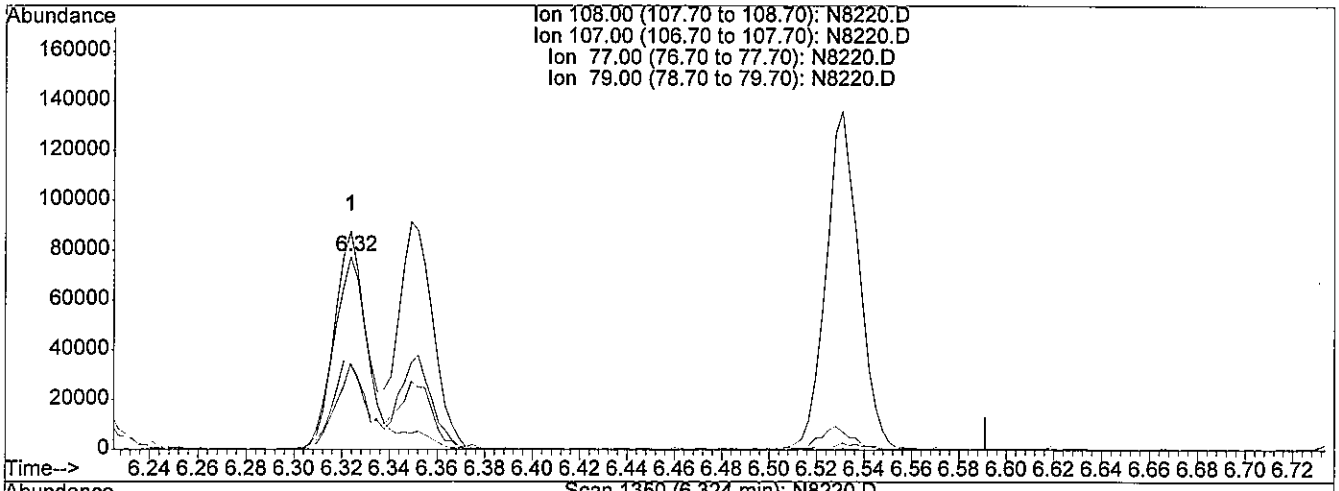
initials JL *date* 9-5-13

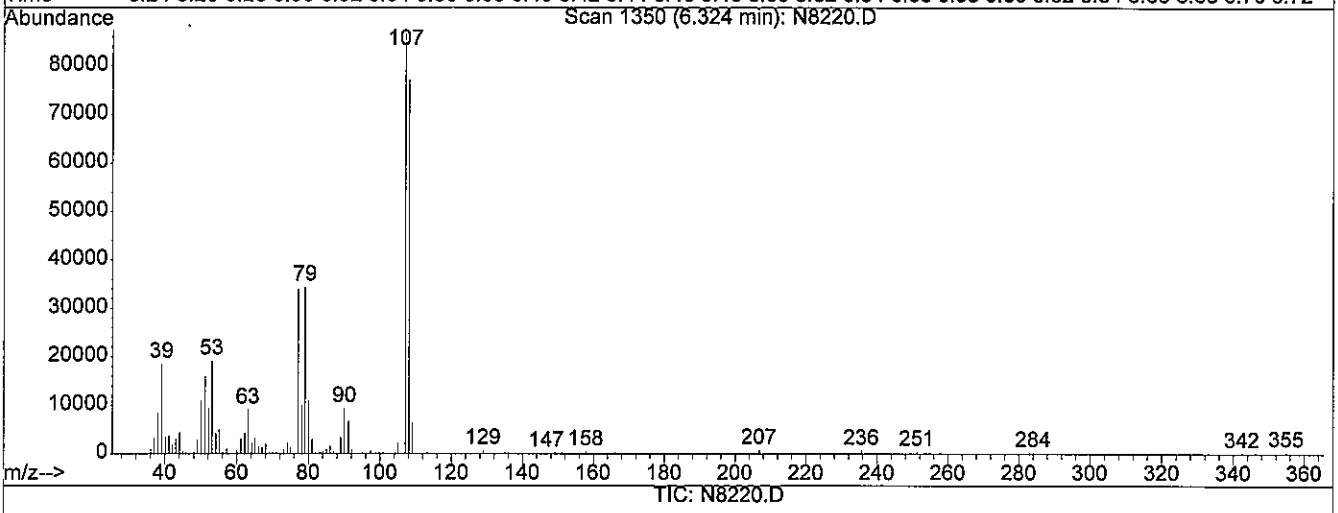
N8220.D 090413S1.M Wed Sep 04 13:16:28 2013

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





TIC: N8220.D

(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#

3 of 4

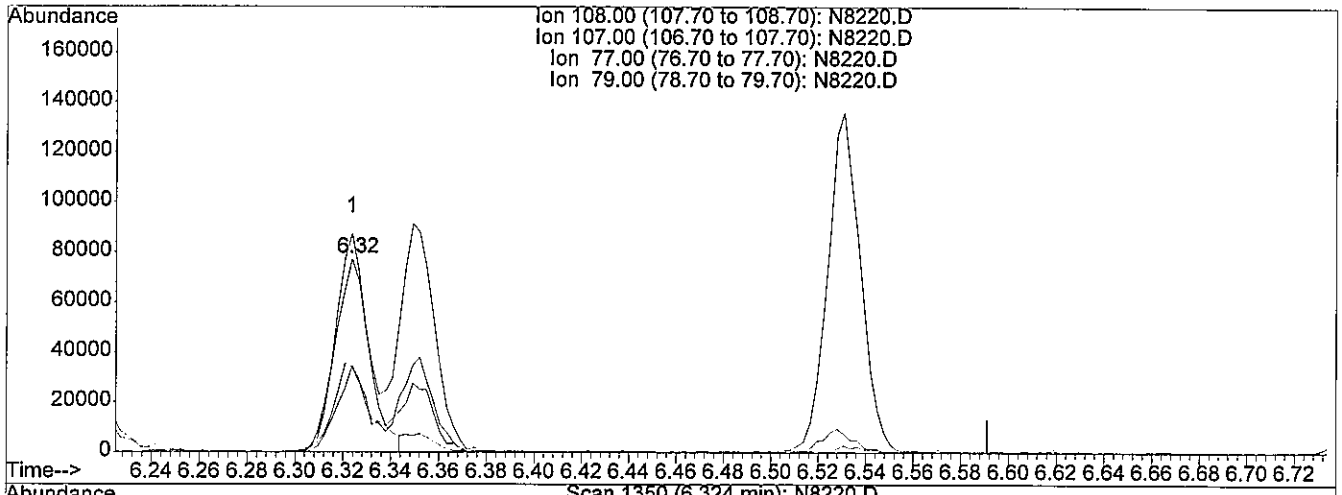
N8220.D 090413S1.M Wed Sep 04 13:16:43 2013

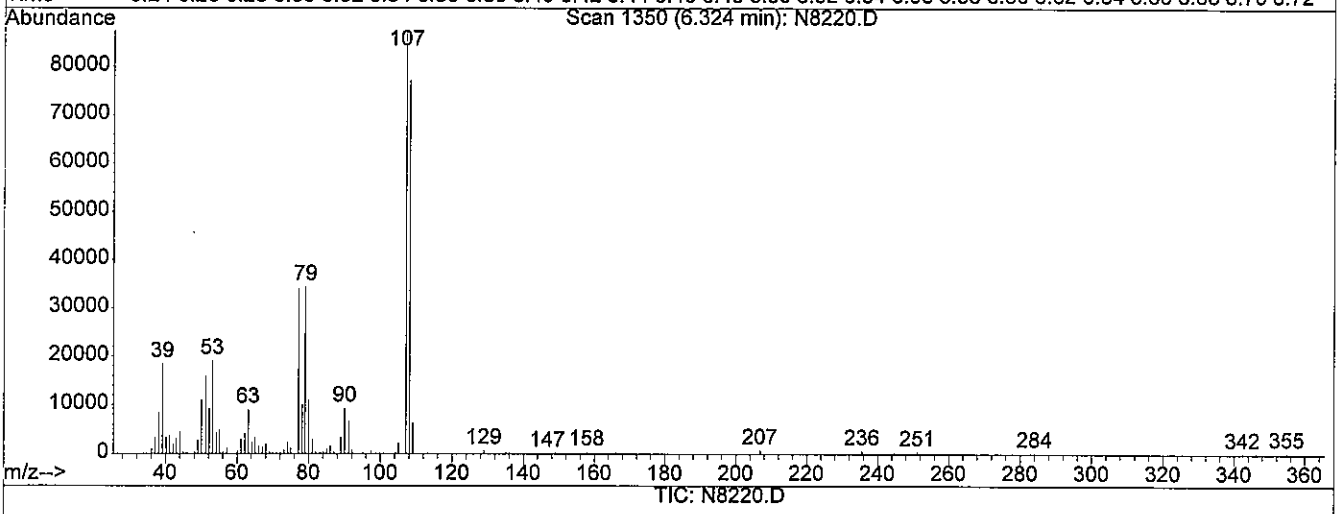
Quantitation Report (Qedit)

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





TIC: N8220.D

(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 JL *date* 9-5-13

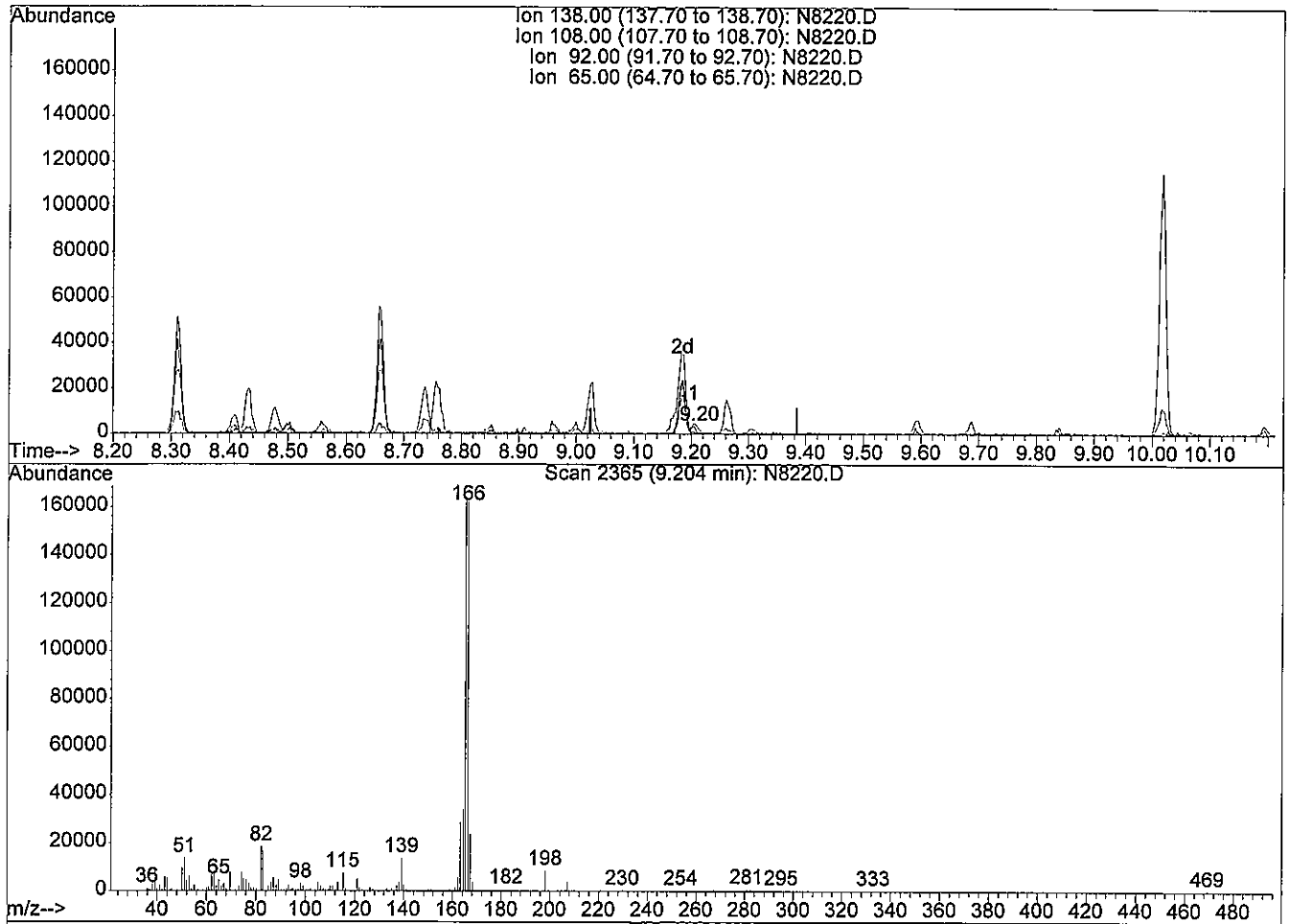
Quantitation Report (Qedit)

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



(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#

3cFeb

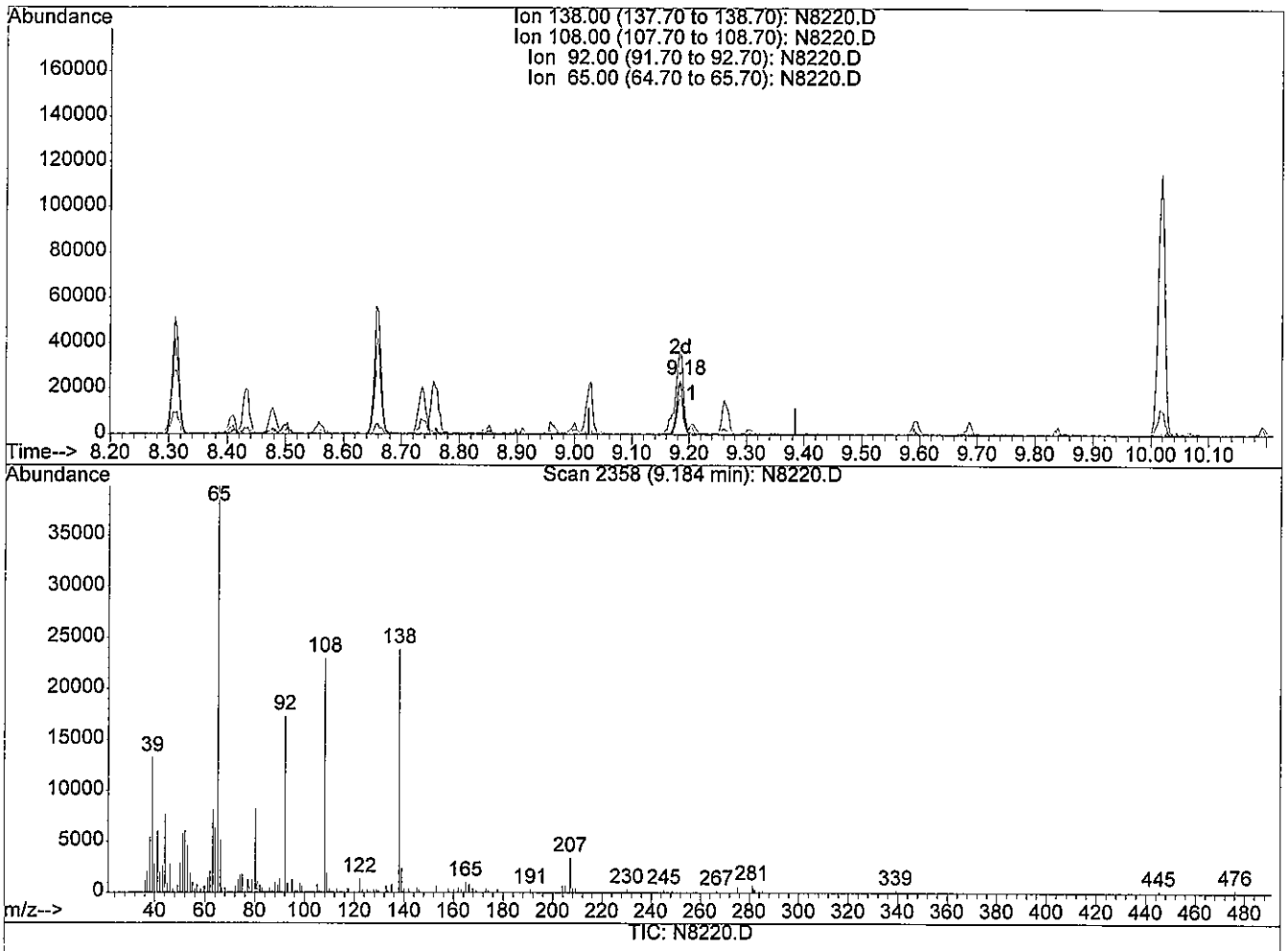
N8220.D 090413S1.M Wed Sep 04 13:18:11 2013

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 13:18 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 JCL *date* 5-5-1

N8220.D 090413S1.M Wed Sep 04 13:18:15 2013

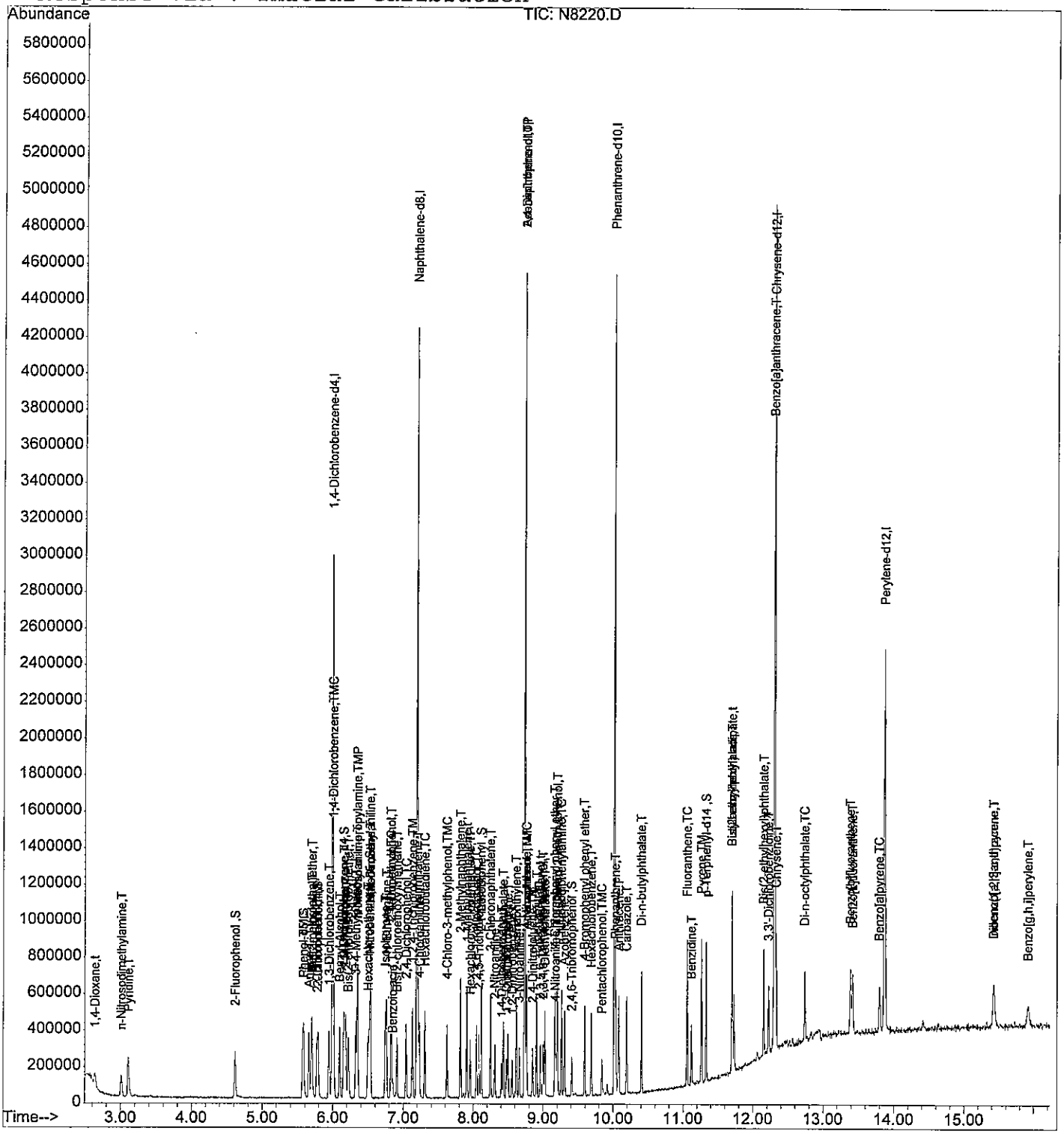
Quantitation Report

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 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 13:14:49 2013
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

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 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 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)ethe	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

9-5-13

Quantitation Report (QT Reviewed)

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 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 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

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 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 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

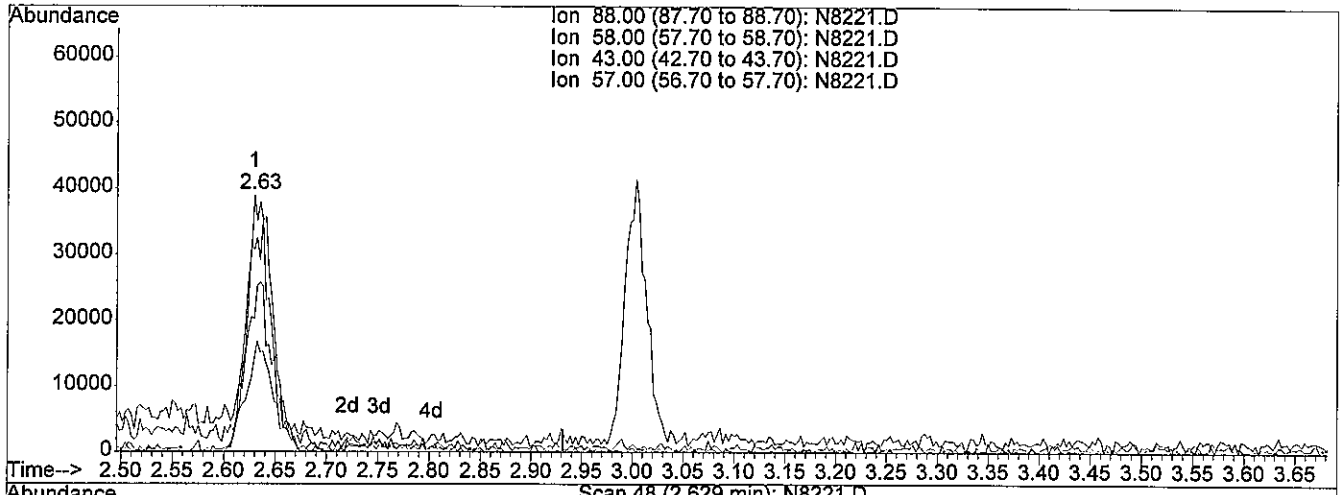
Quantitation Report (Qedit)

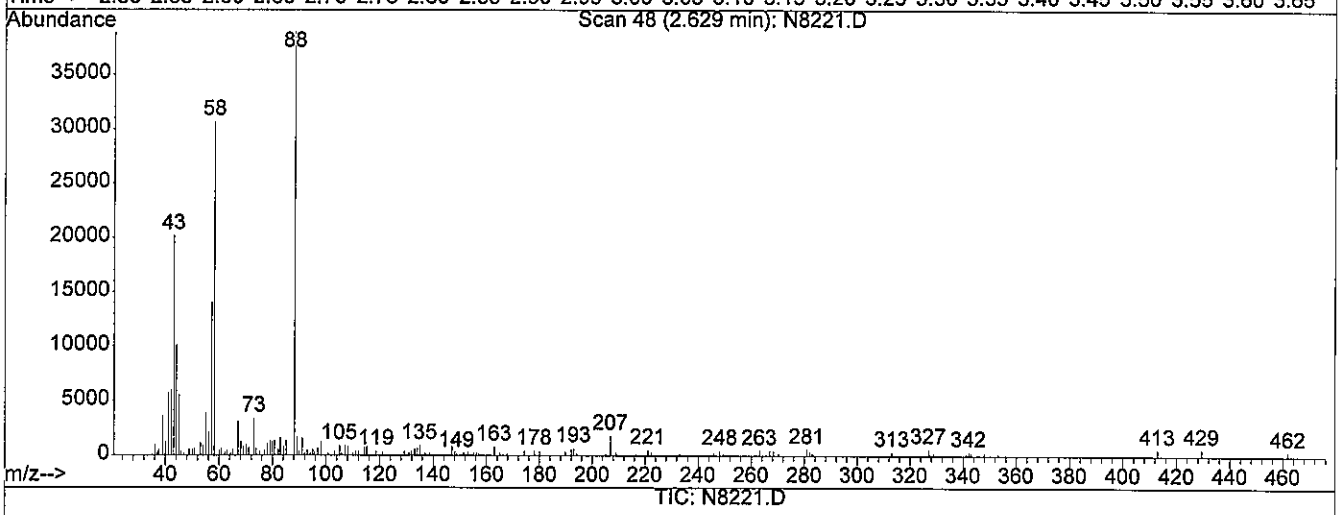
Data File : D:\HPCHEM\1\DATA\090413\N8221.D
Acq On : 4 Sep 2013 13:06
Sample : ICALSVSTD010
Misc : ST130531-4
MS Integration Params: RTEINT.P
Quant Time: Sep 4 13:25 2013

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





TIC: N8221.D

(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#

Zebra

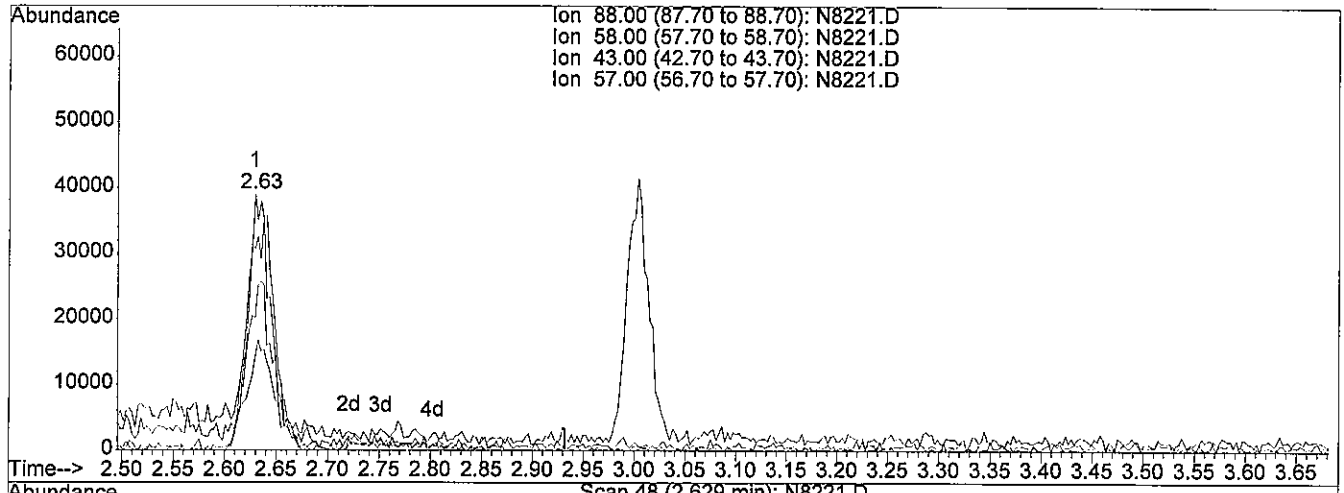
N8221.D 090413S1.M Wed Sep 04 13:25:12 2013

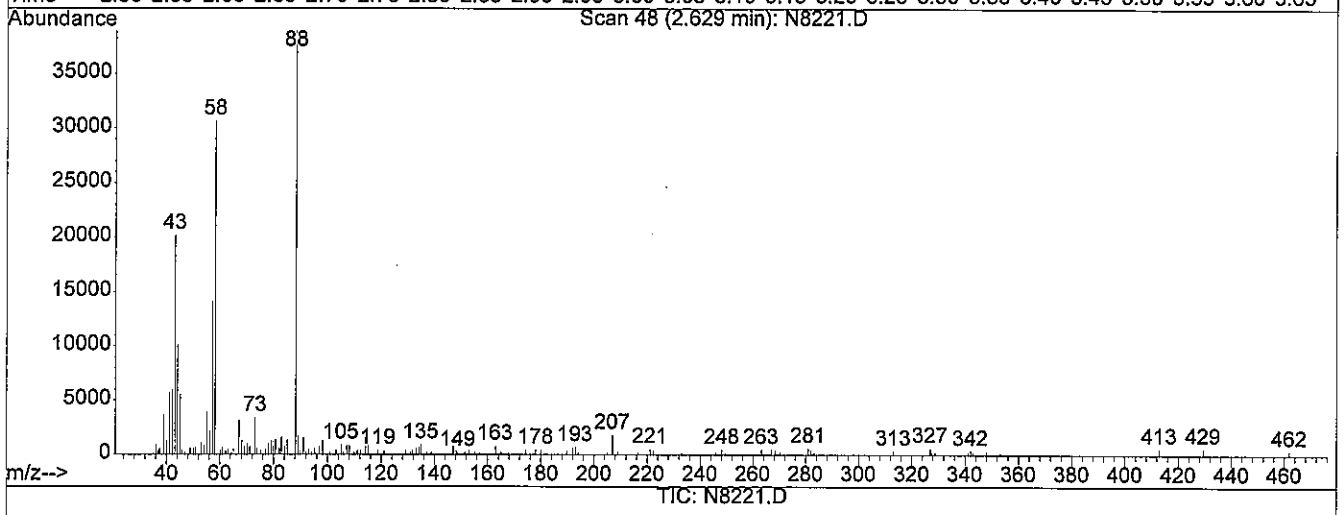
Quantitation Report (Qedit)

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





TIC: N8221.D

(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 ___ *date* 5-5-15

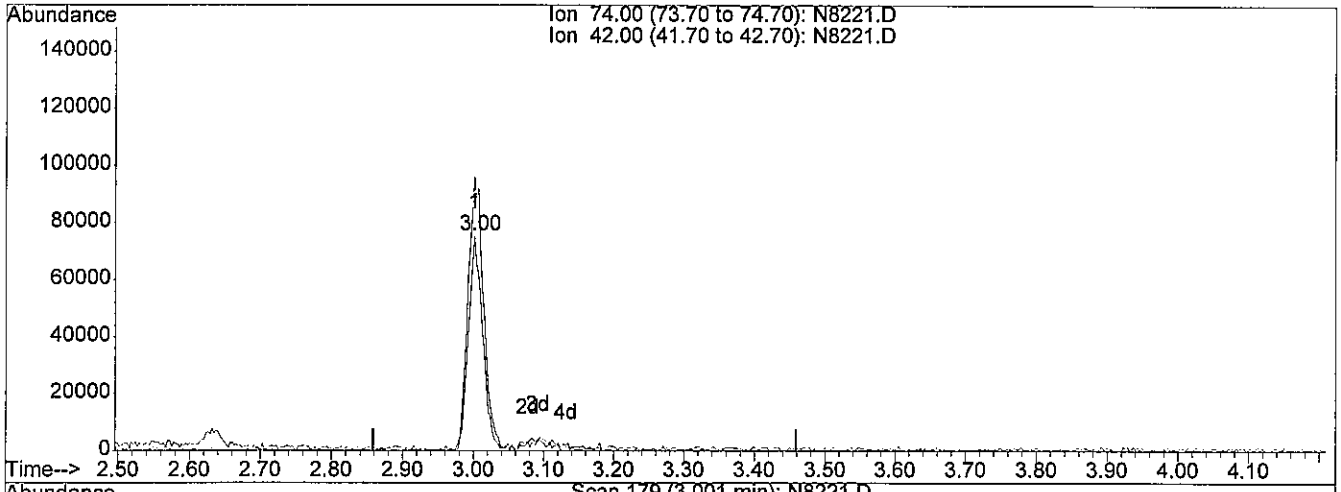
N8221.D 090413S1.M Wed Sep 04 13:25:16 2013

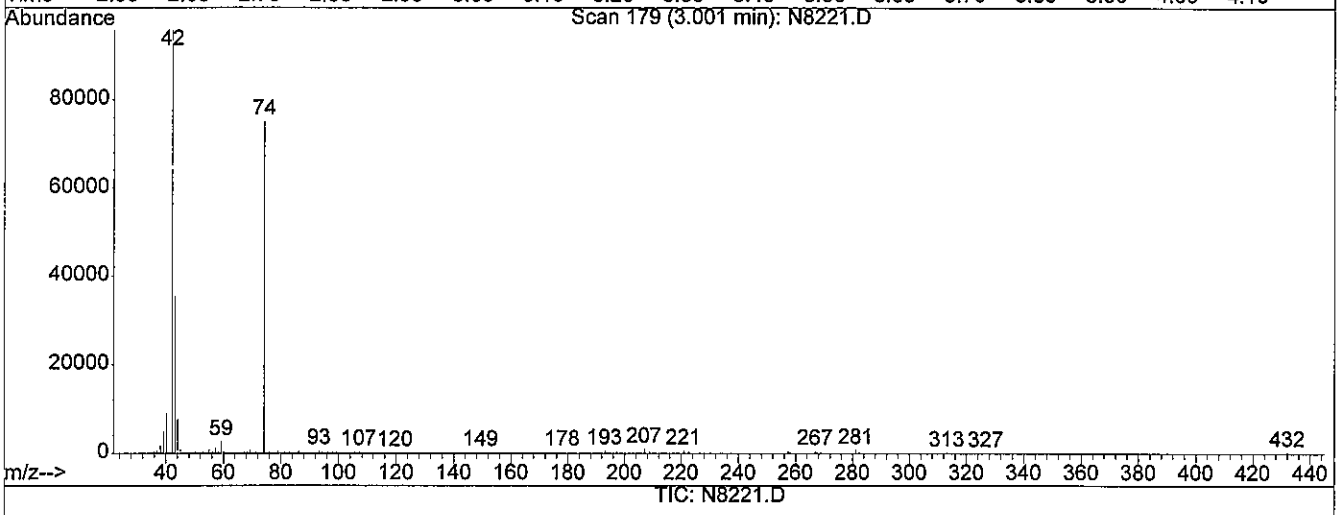
Quantitation Report (Qedit)

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





TIC: N8221.D

(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

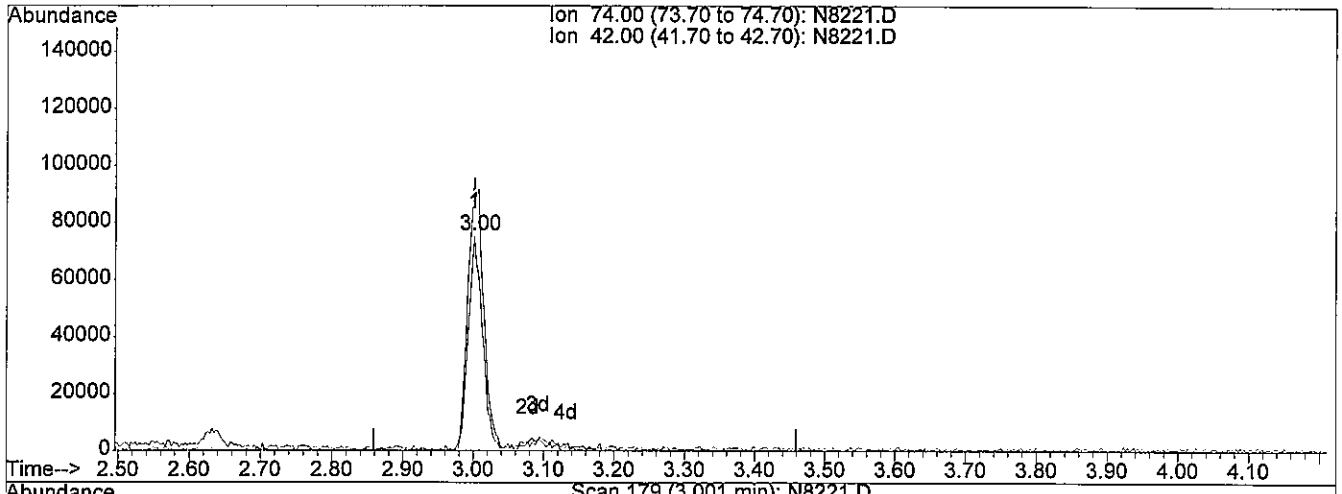
N8221.D 090413S1.M Wed Sep 04 13:25:20 2013

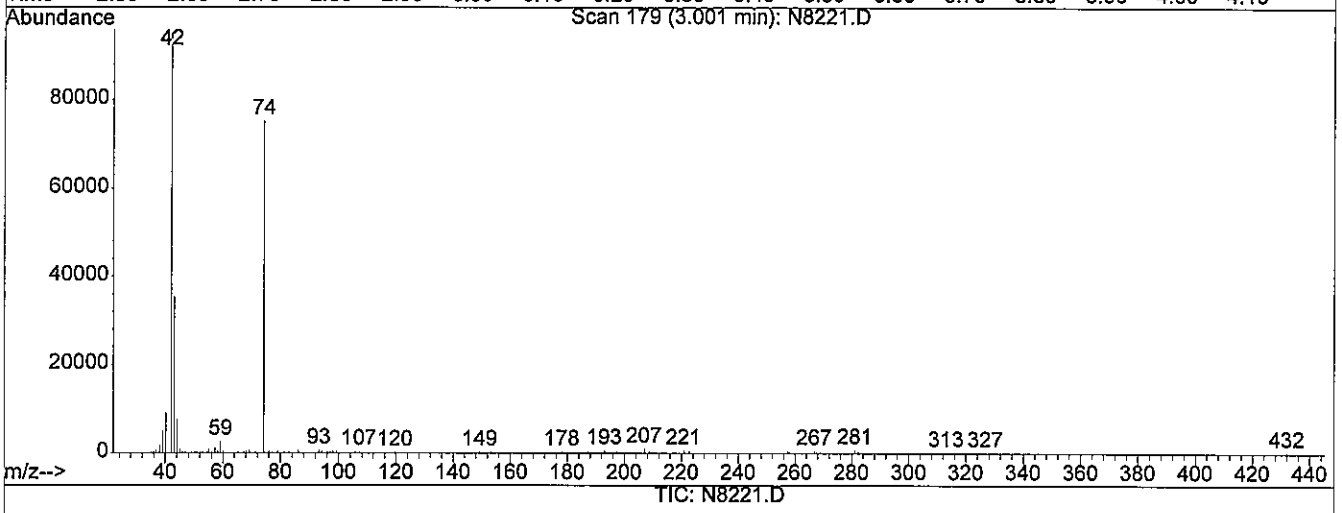
Quantitation Report (Qedit)

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





TIC: N8221.D

(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 JK *date* 9-5-13

N8221.D 090413S1.M Wed Sep 04 13:25:24 2013

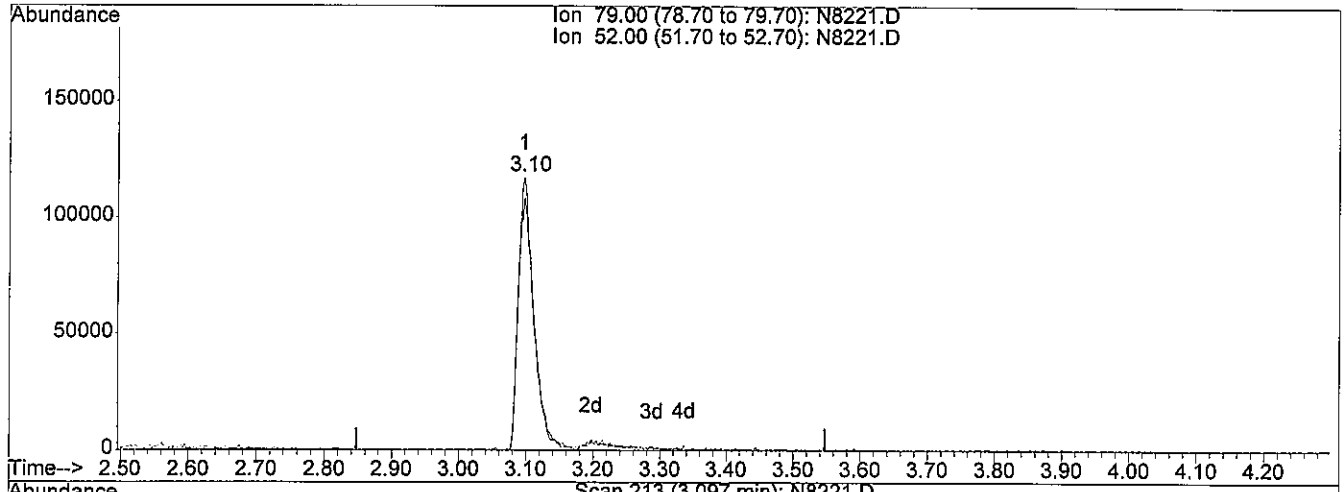
Quantitation Report (Qedit)

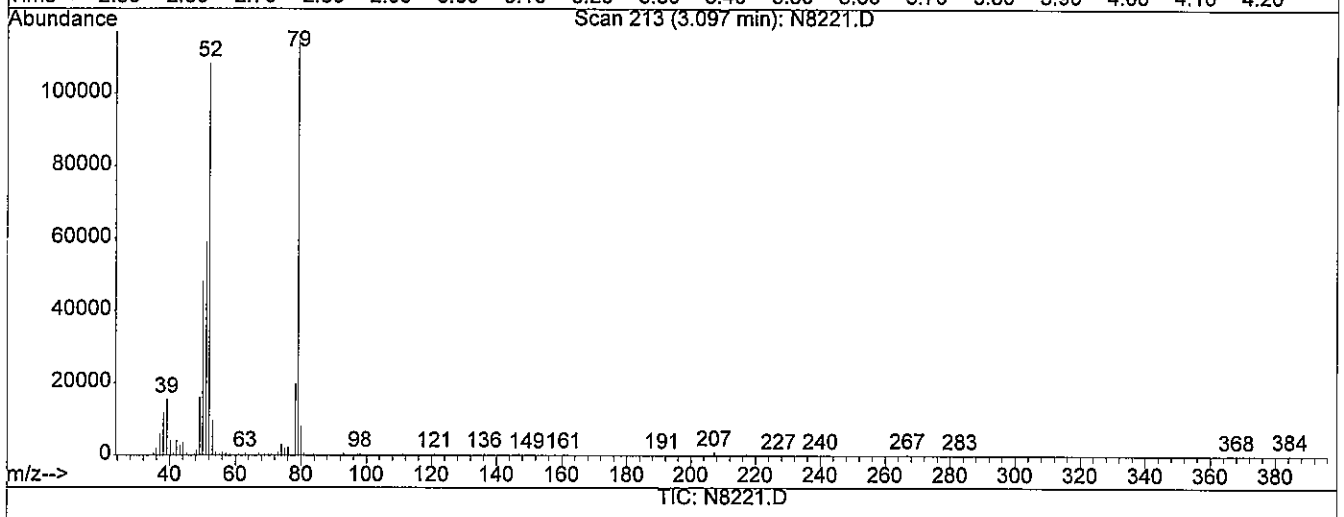
Data File : D:\HPCHEM\1\DATA\090413\N8221.D
Acq On : 4 Sep 2013 13:06
Sample : ICALSVSTD010
Misc : ST130531-4
MS Integration Params: RTEINT.P
Quant Time: Sep 4 13:25 2013

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

Before

N8221.D 090413S1.M Wed Sep 04 13:25:28 2013

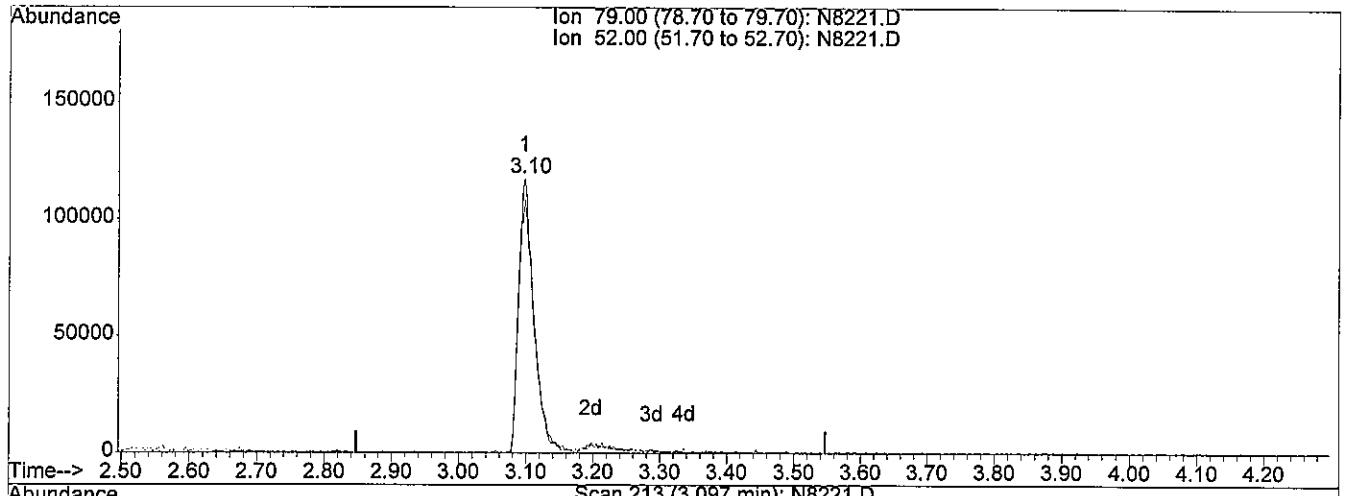
Quantitation Report (Qedit)

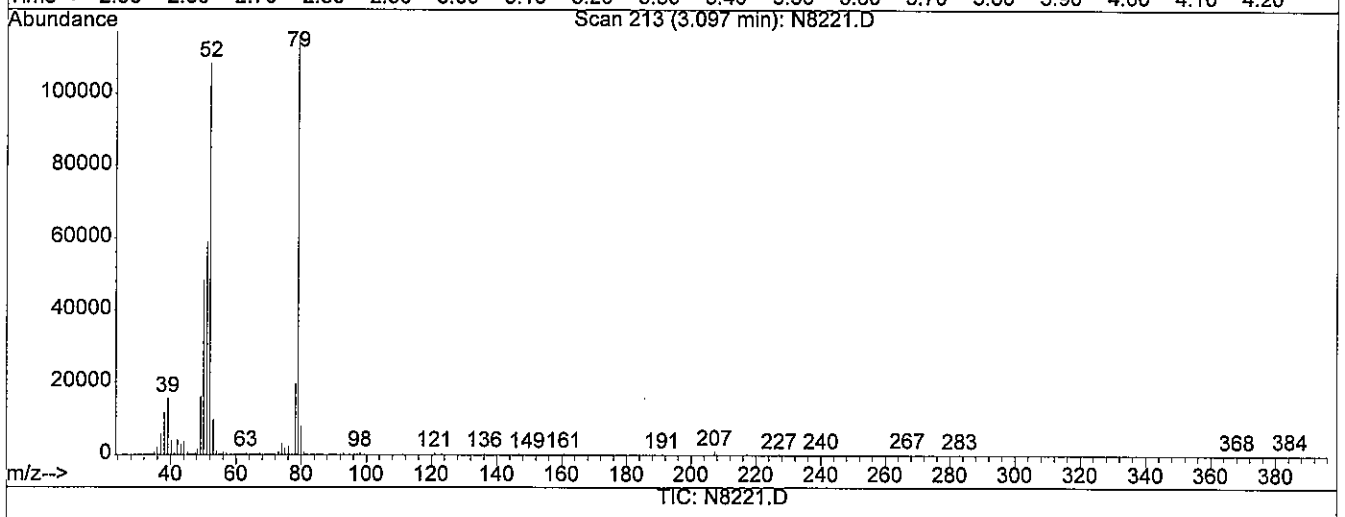
Data File : D:\HPCHEM\1\DATA\090413\N8221.D
Acq On : 4 Sep 2013 13:06
Sample : ICALSVSTD010
Misc : ST130531-4
MS Integration Params: RTEINT.P
Quant Time: Sep 4 13:25 2013

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 10.94ng/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 JCL *date* 9-5-13

N8221.D 090413S1.M Wed Sep 04 13:25:32 2013

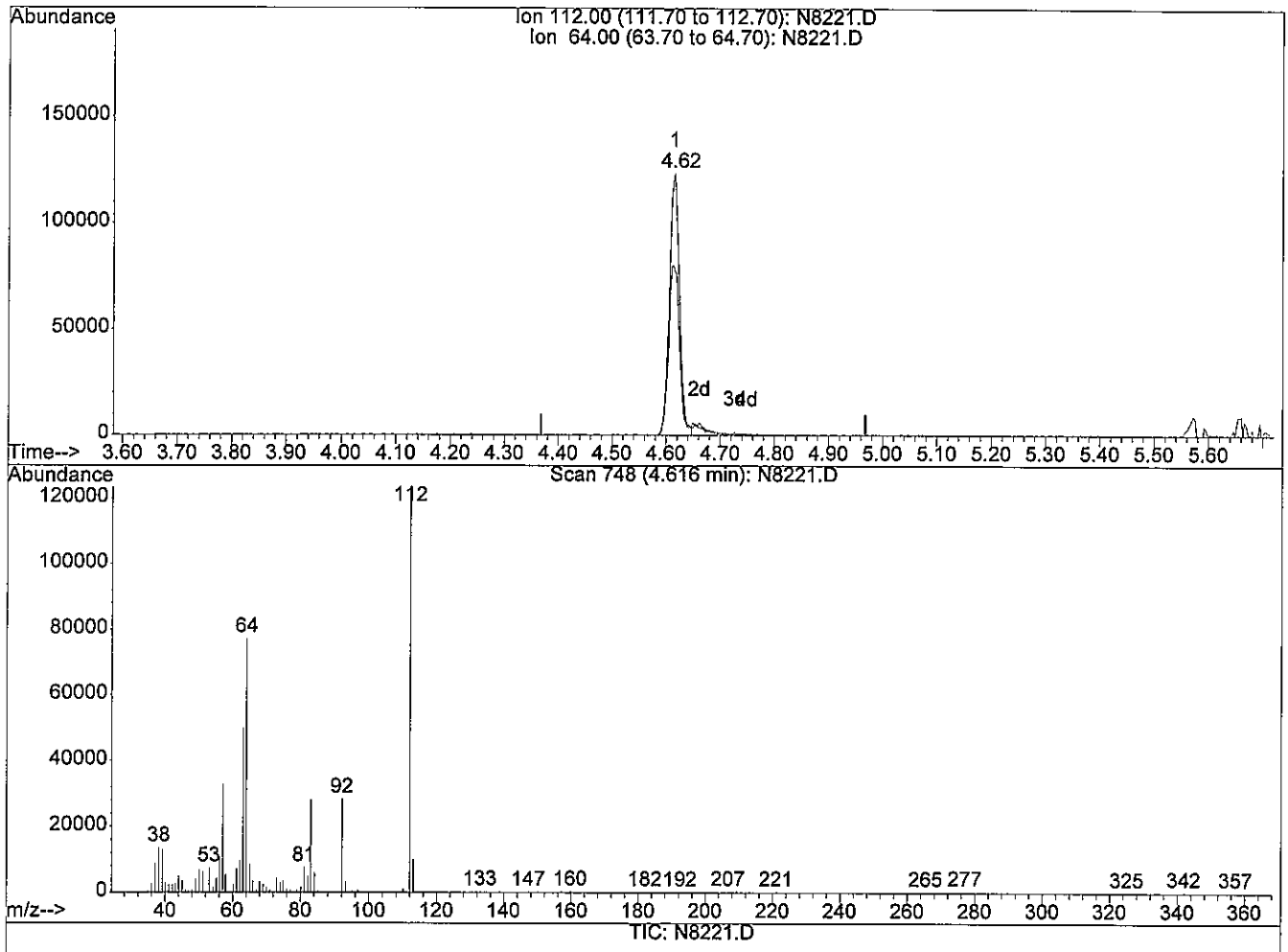
Quantitation Report (Qedit)

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 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

3.6%

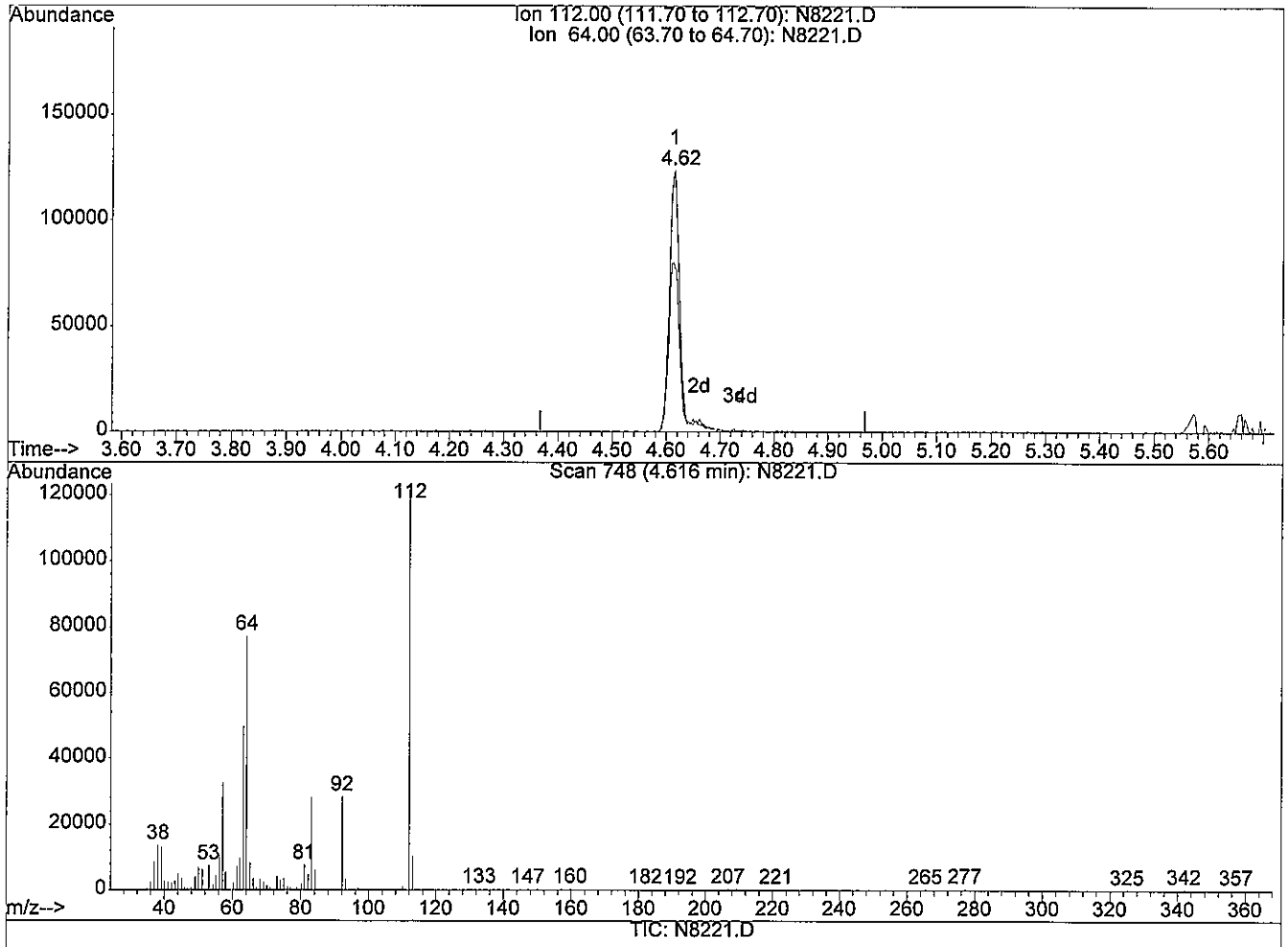
N8221.D 090413S1.M Wed Sep 04 13:25:36 2013

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

N8221.D 090413S1.M Wed Sep 04 13:25:39 2013

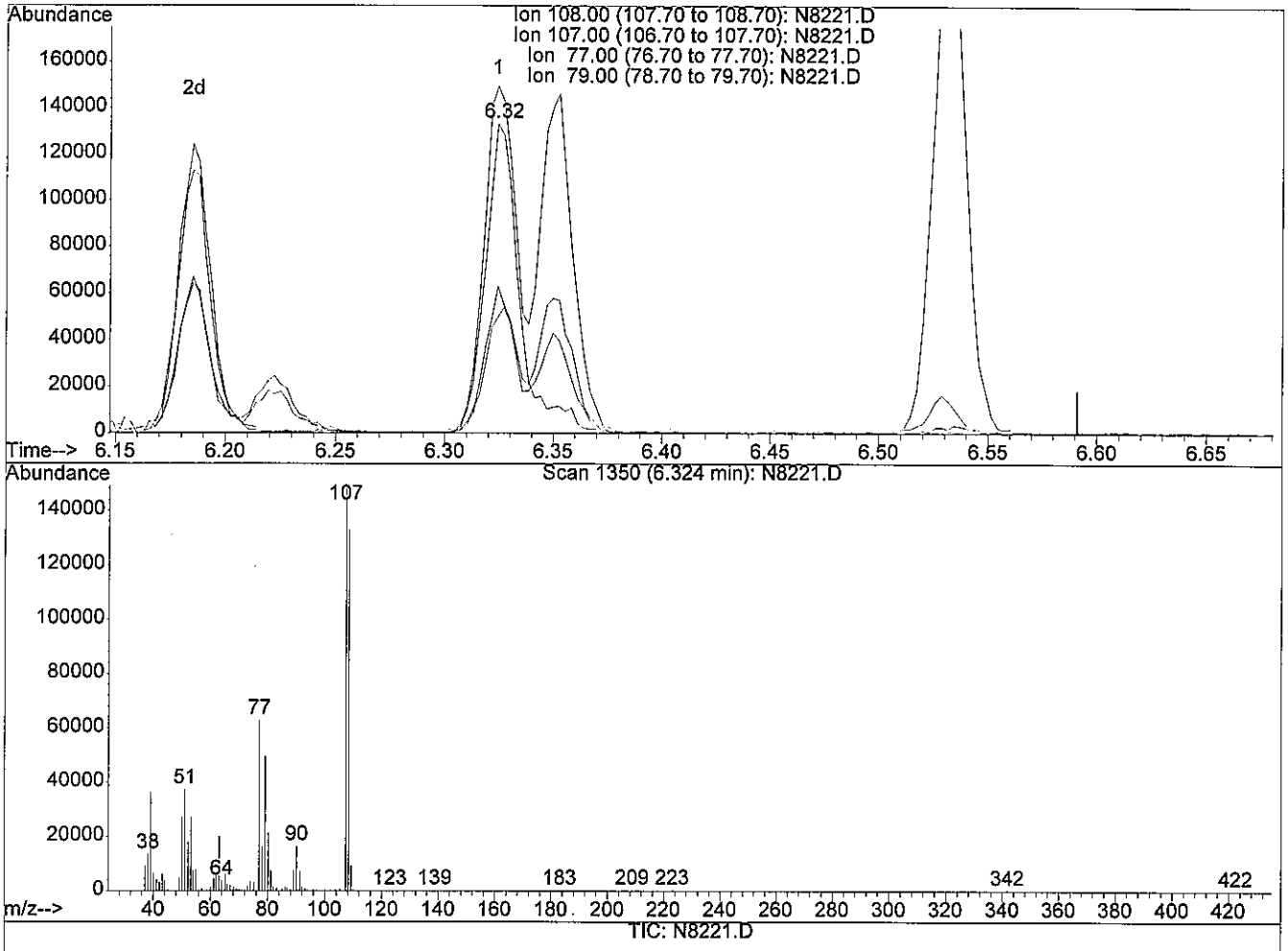
Quantitation Report (Qedit)

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#

3 for

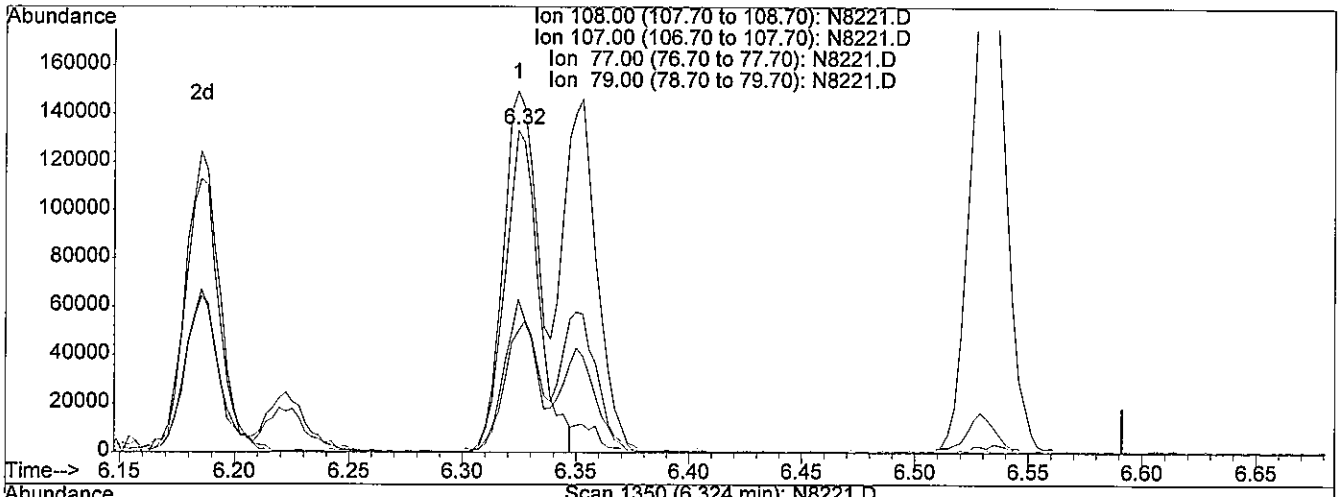
N8221.D 090413S1.M Wed Sep 04 13:25:51 2013

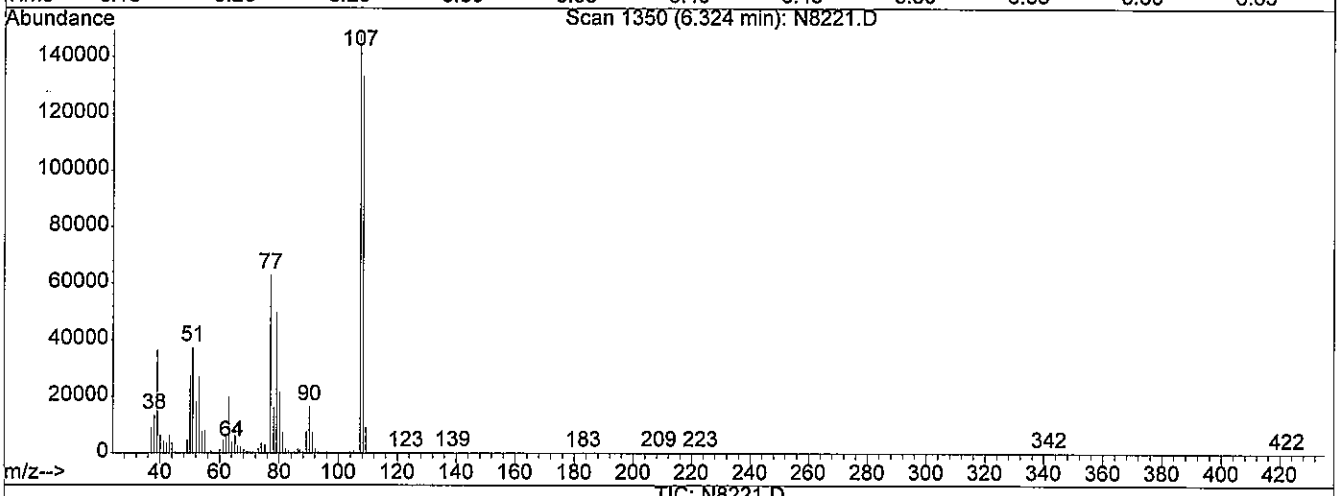
Quantitation Report (Qedit)

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





TIC: N8221.D

(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* 9-5-0

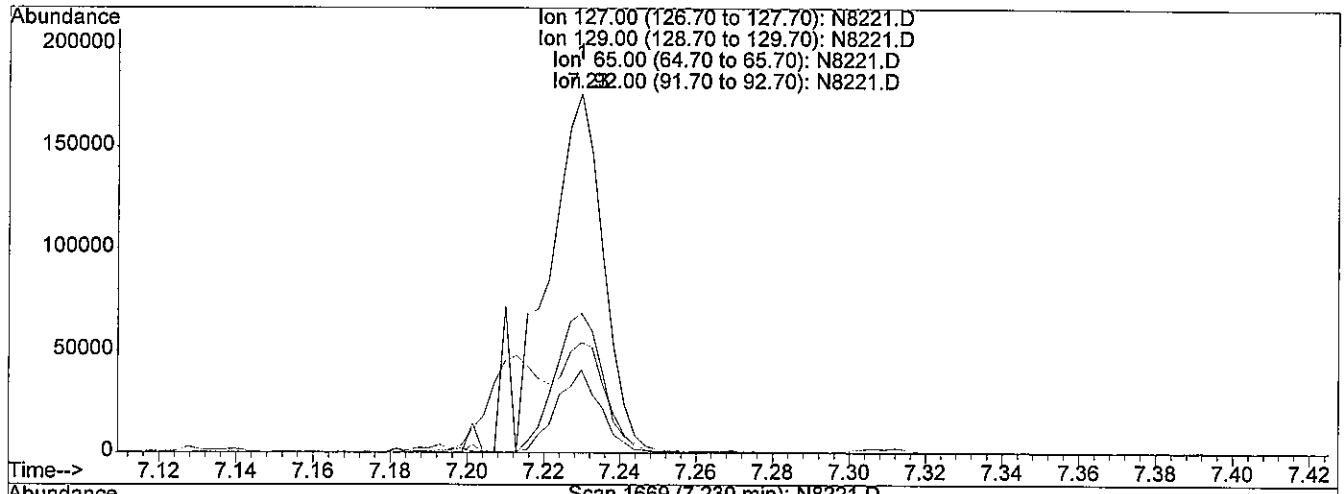
N8221.D 090413S1.M Wed Sep 04 13:25:57 2013

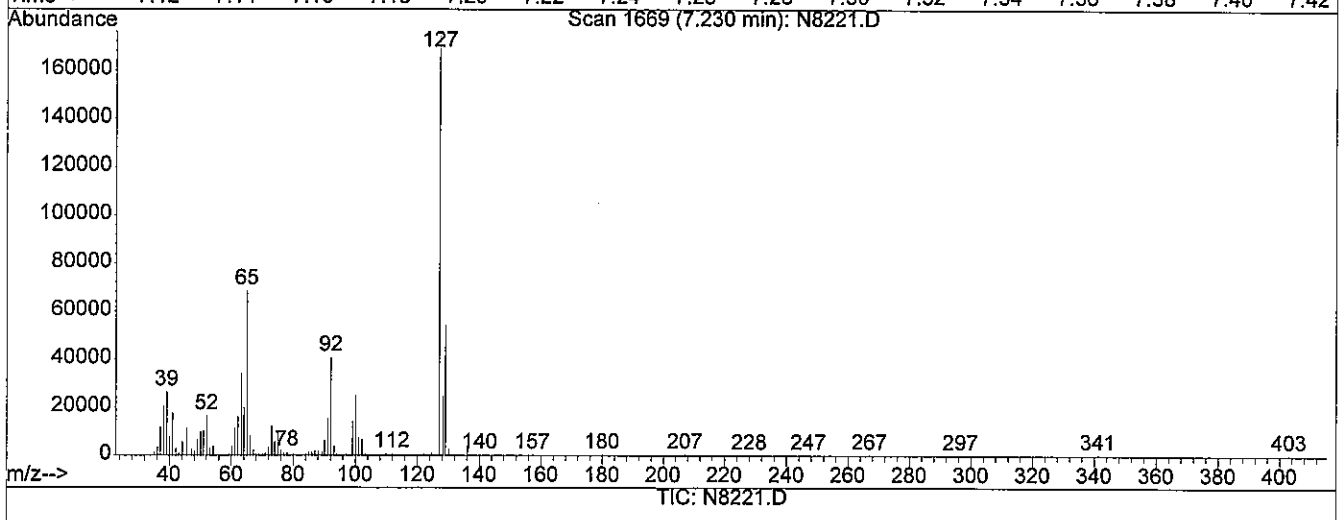
Quantitation Report (Qedit)

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





TIC: N8221.D

(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

Before

N8221.D 090413S1.M Wed Sep 04 13:26:10 2013

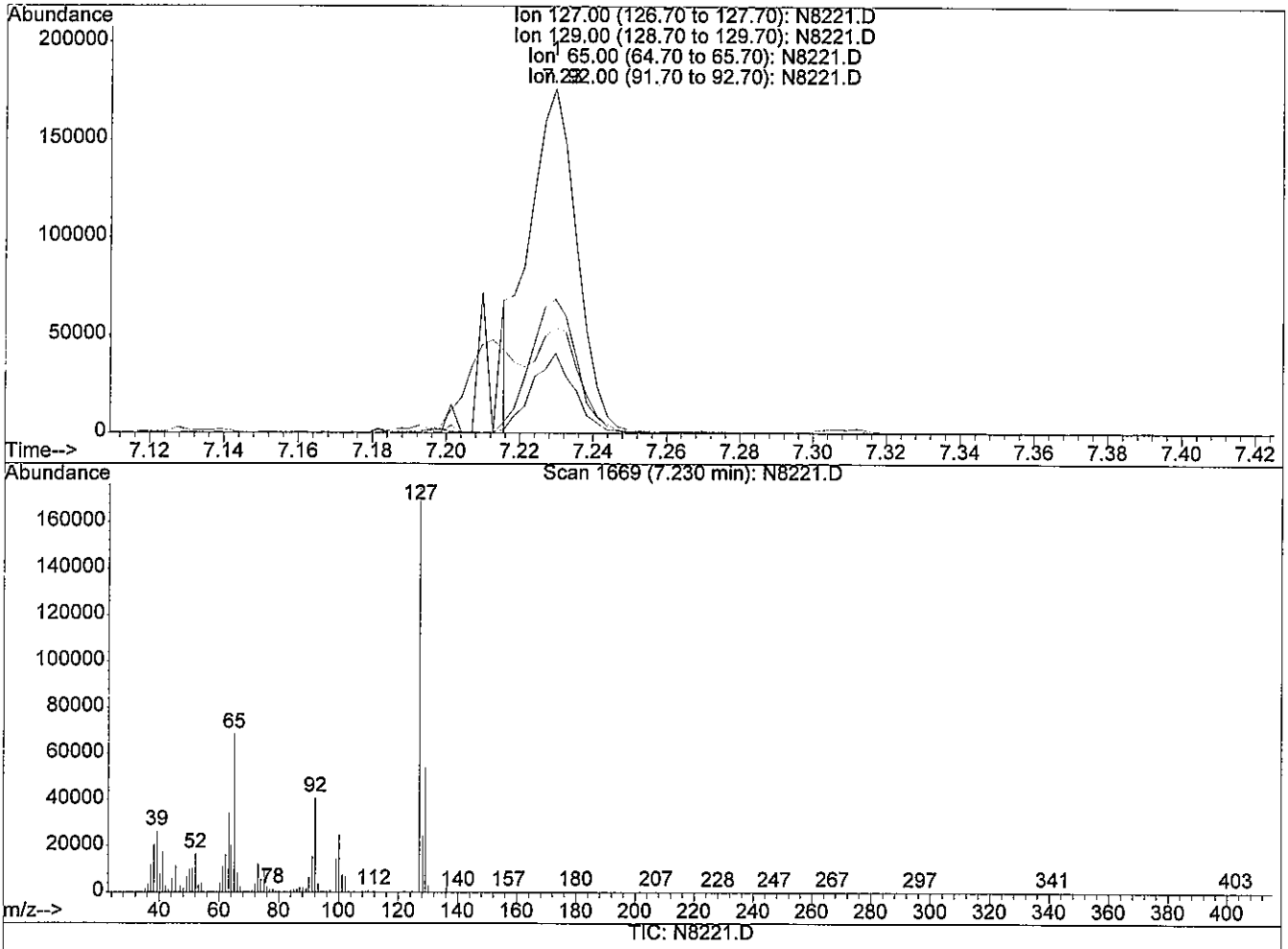
Quantitation Report (Qedit)

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 13:26 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 JL *date* 9-5-17

N8221.D 090413S1.M Wed Sep 04 13:26:17 2013

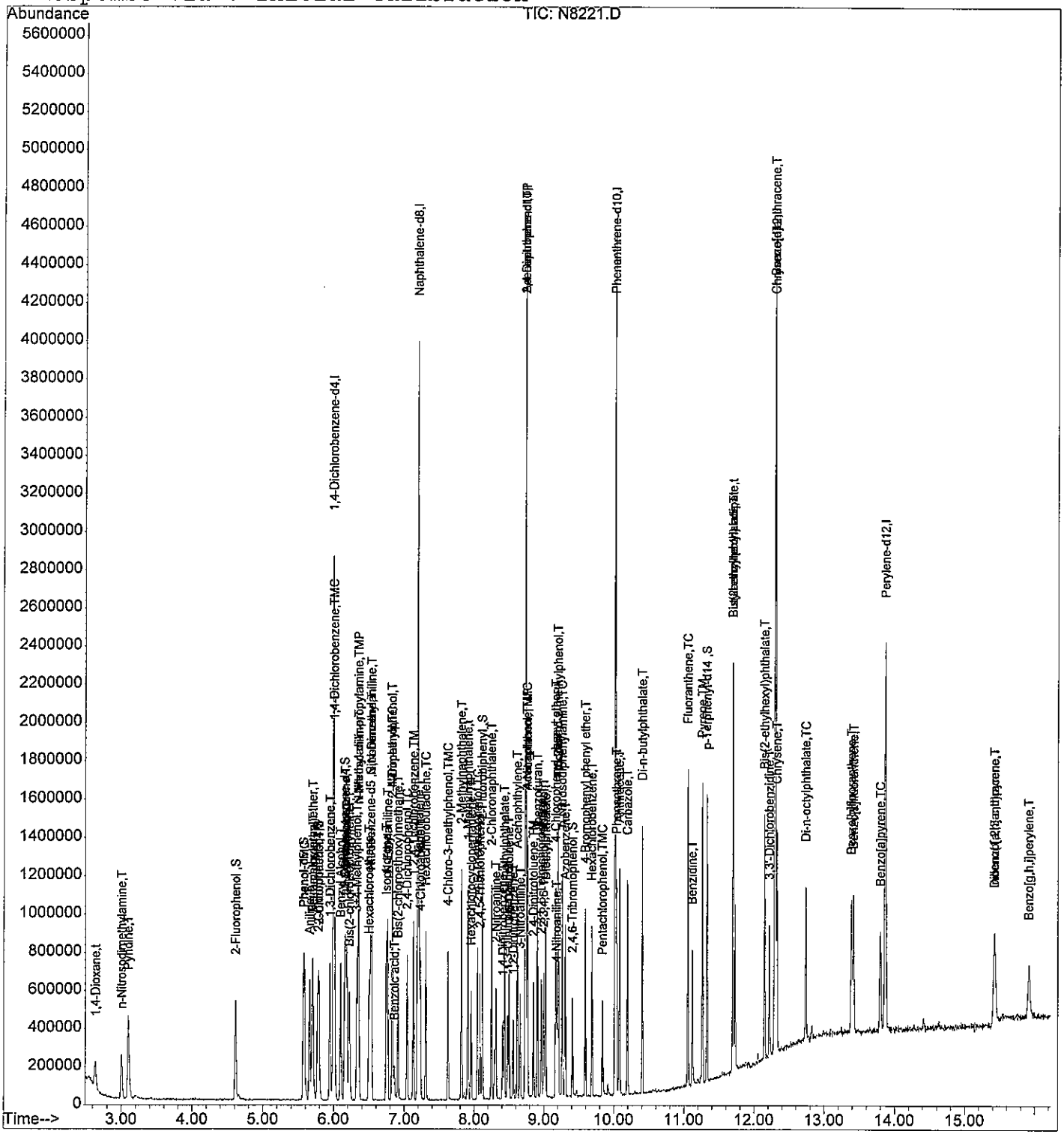
Quantitation Report

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



Quantitation Report (QT Reviewed)

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)ethe	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

Quantitation Report (QT Reviewed)

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

Quantitation Report (QT Reviewed)

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

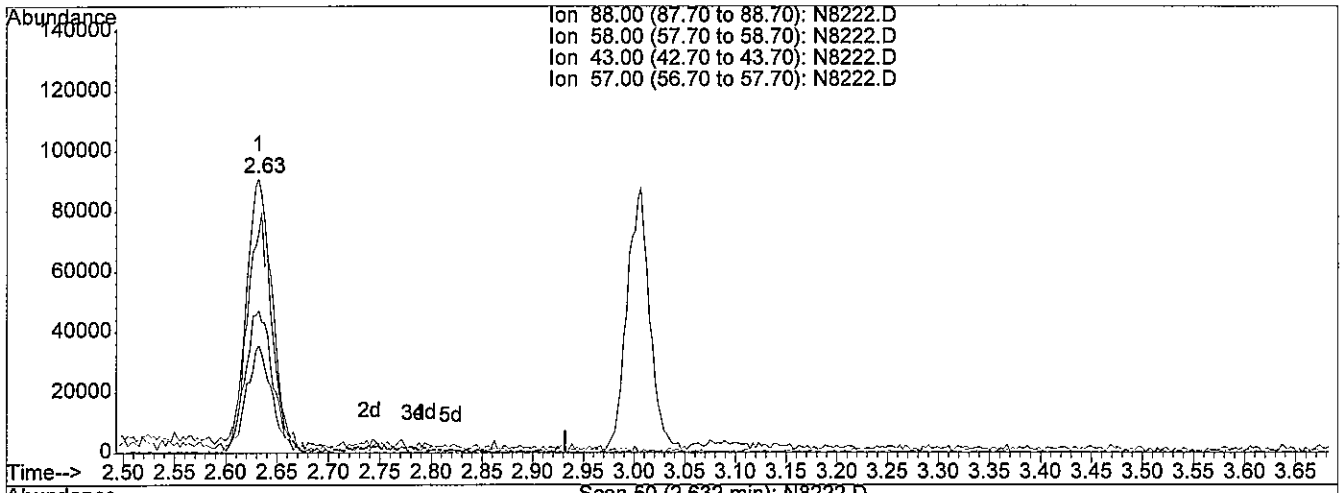
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
67)	Azobenzene	9.31	77	673572	20.42	ng/uL	99
70)	4,6-Dinitro-2-methylphenol	9.21	198	97521	24.36	ng/uL	95
71)	n-Nitrosodiphenylamine	9.26	169	540544	19.77	ng/uL	99
72)	4-Bromophenyl phenyl ether	9.59	248	243390	20.61	ng/uL	97
73)	Hexachlorobenzene	9.69	284	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

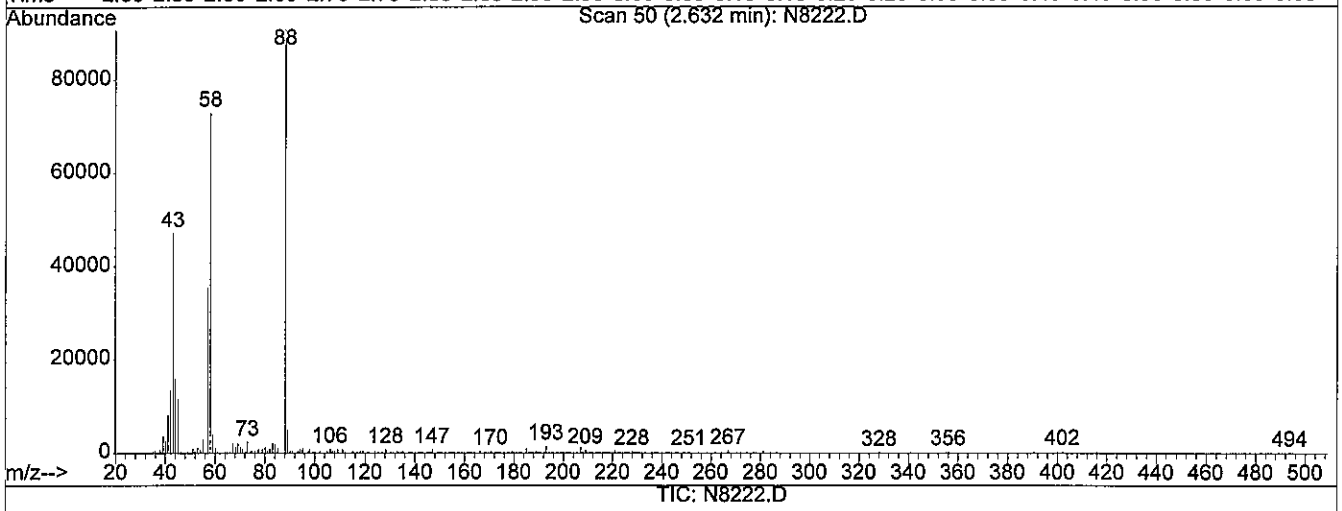
(#) = qualifier out of range (m) = manual integration

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





TIC: N8222.D

(2) 1,4-Dioxane (t)

2.63min 18.16ng/uL

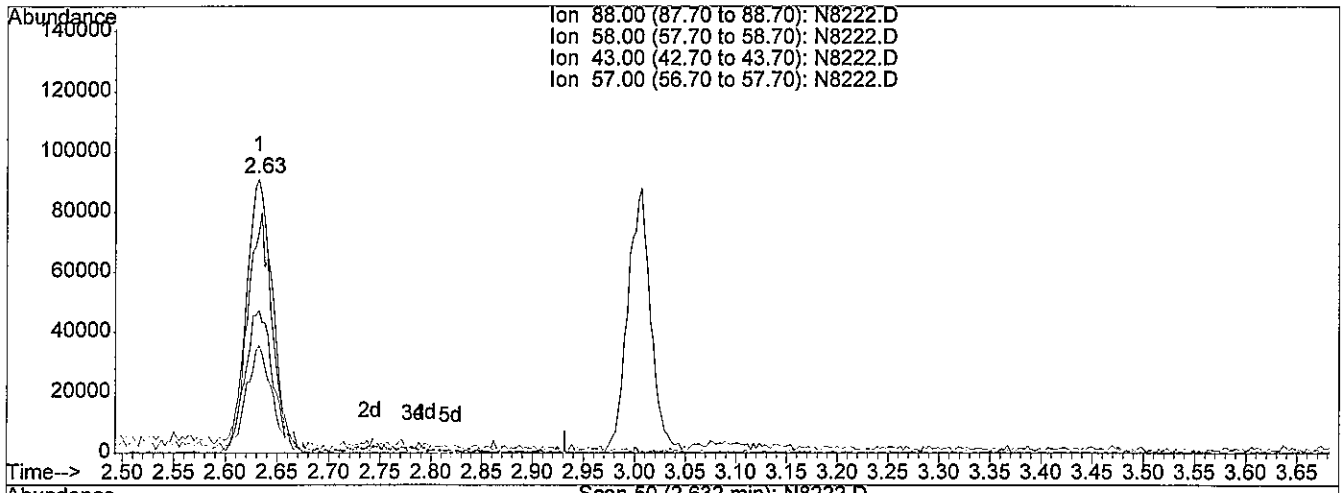
response 159990

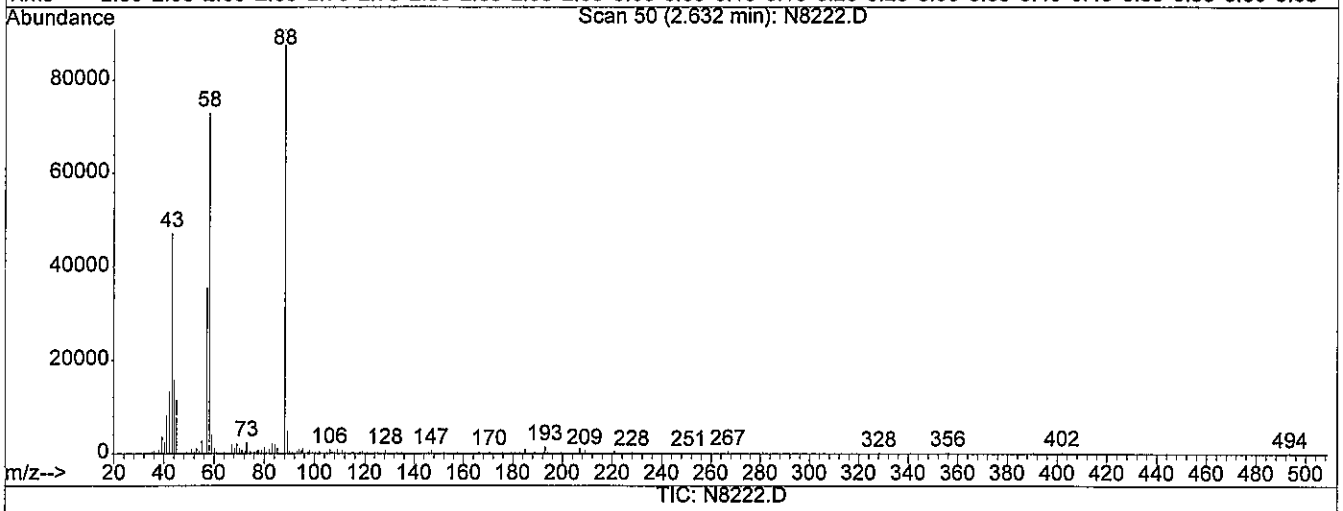
Ion	Exp%	Act%
88.00	100	100
58.00	77.90	82.94
43.00	47.90	53.25
57.00	33.00	37.70

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





TIC: N8222.D

(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 _____

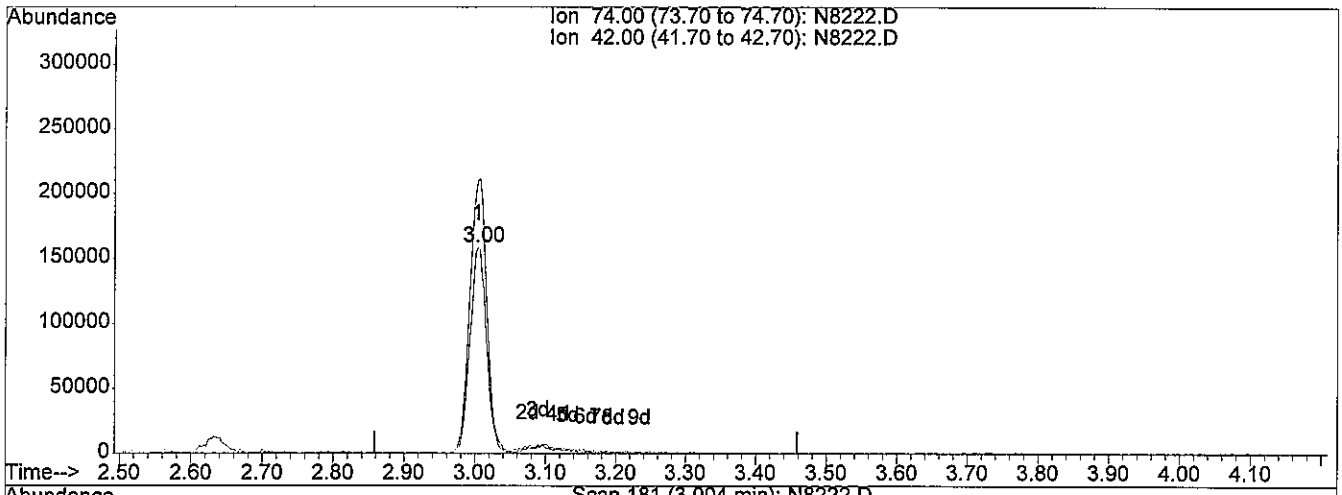
initials JH *date* 9-5-13

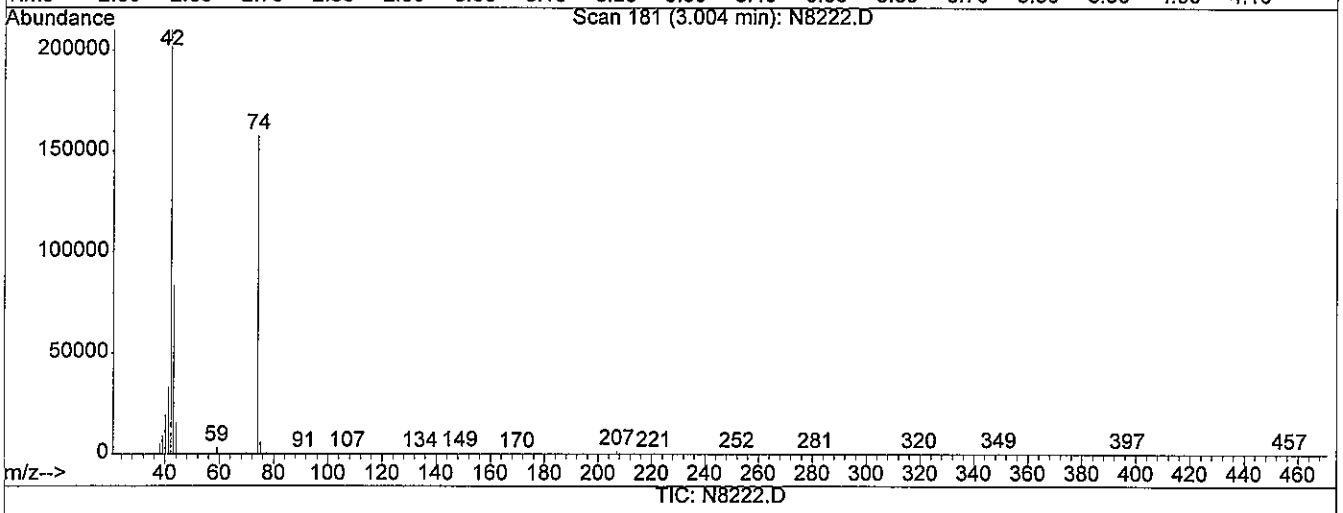
N8222.D 090413S1.M Wed Sep 04 13:48:47 2013

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





TIC: N8222.D

(3) n-Nitrosodimethylamine (T)

3.00min 19.38ng/uL

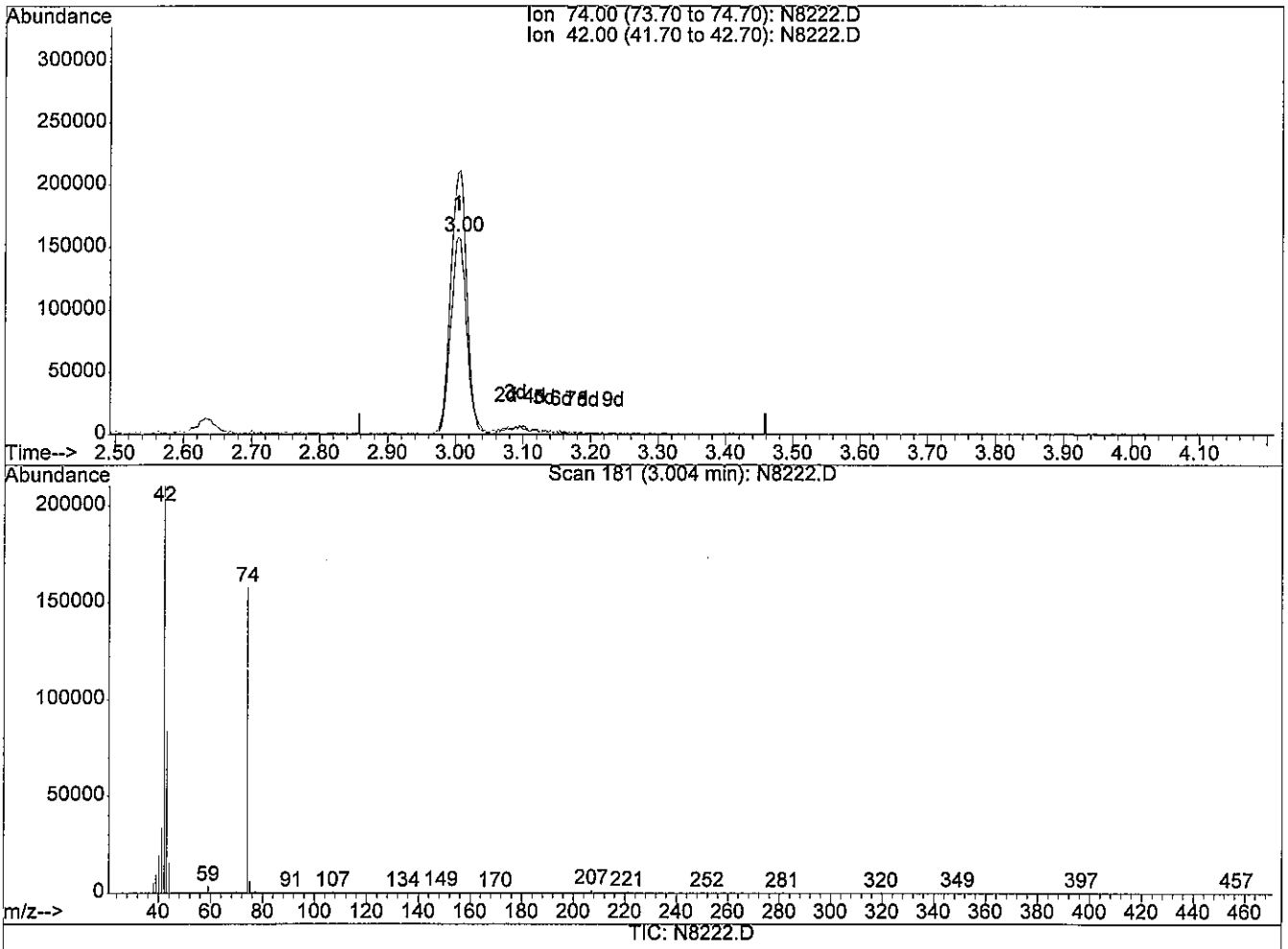
response 257383

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

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 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 JL *date* 9-5-13

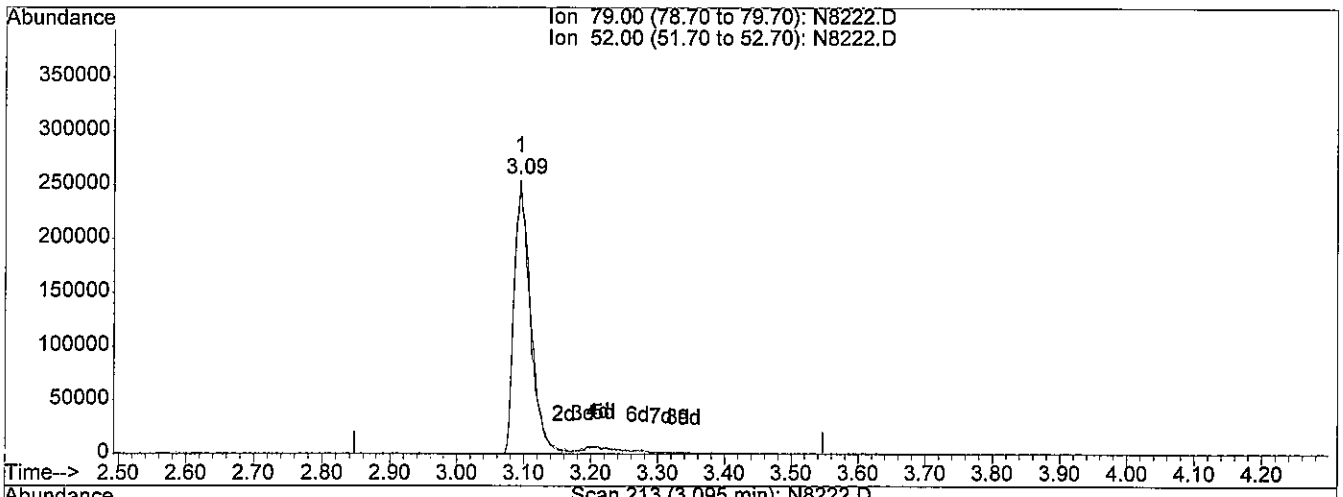
N8222.D 090413S1.M Wed Sep 04 13:48:54 2013

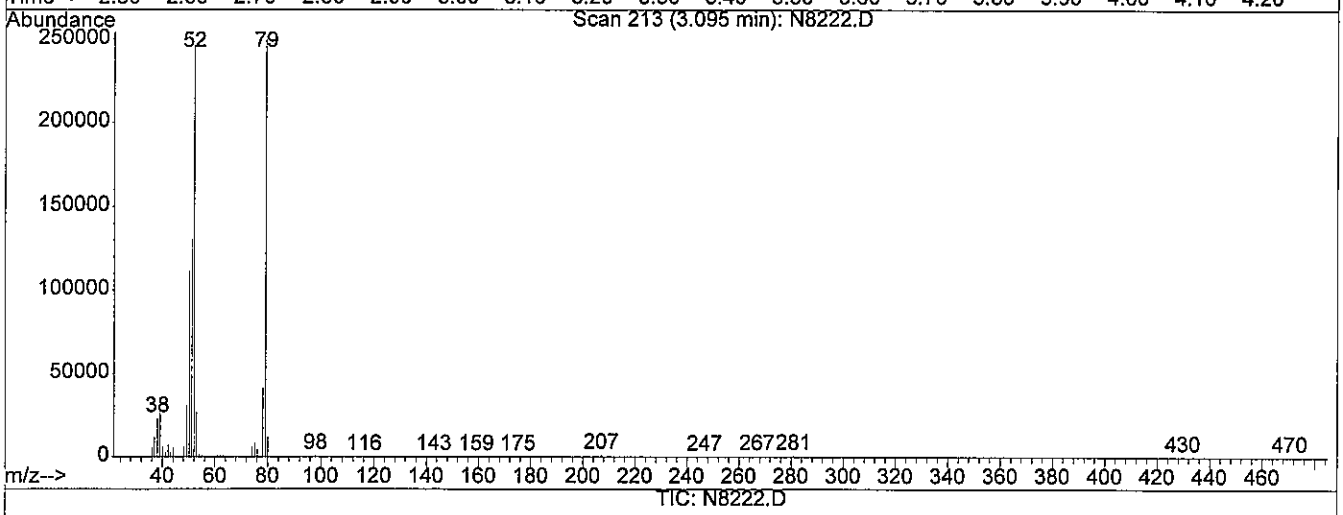
Quantitation Report (Qedit)

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





TIC: N8222.D

(4) Pyridine (T)

3.09min 19.01ng/uL

response 437392

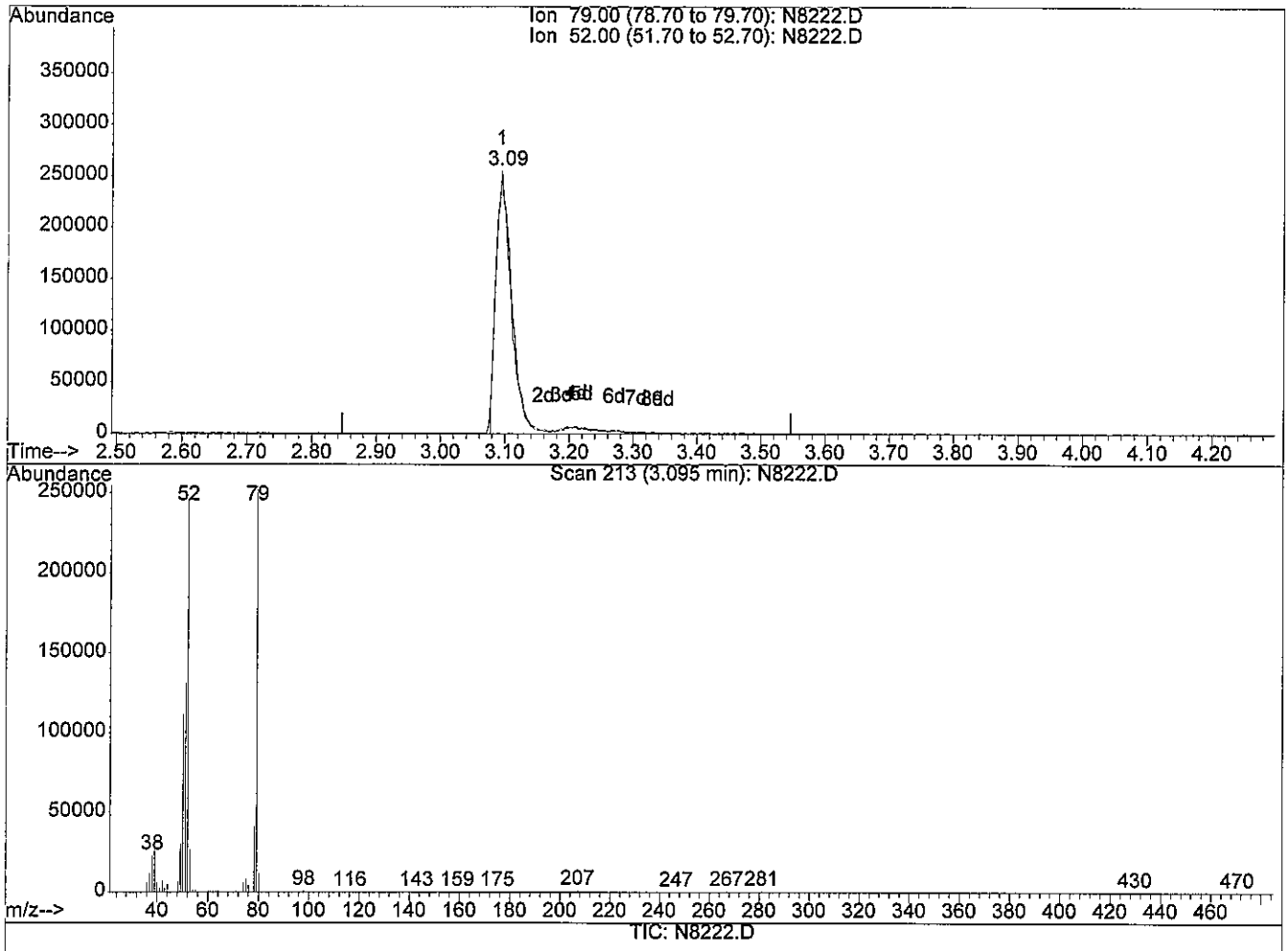
Ion	Exp%	Act%
79.00	100	100
52.00	93.60	96.14
0.00	0.00	0.00
0.00	0.00	0.00

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



(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

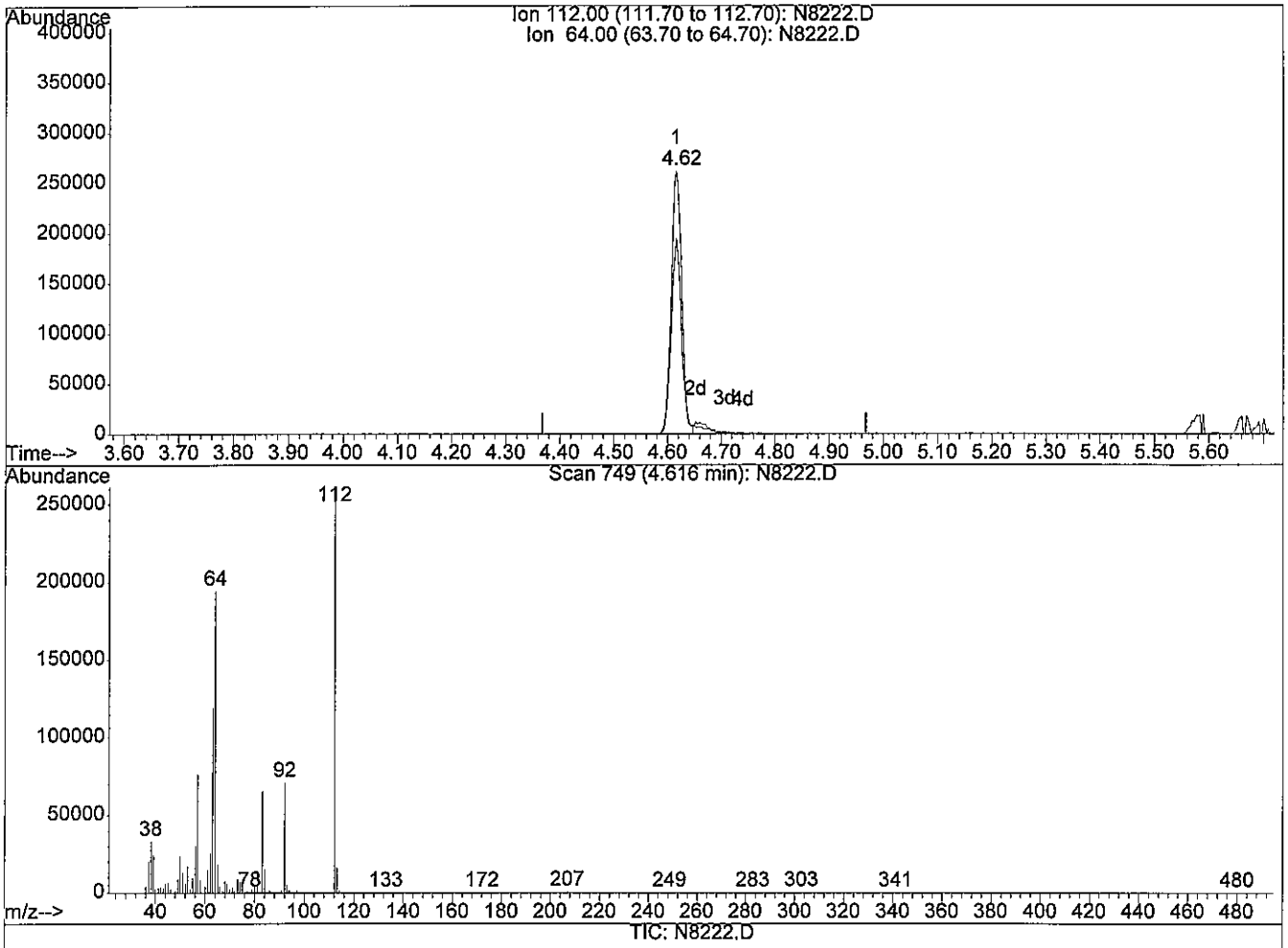
- ☐ missed peak assignment
- ☐ assigned incorrect name to peak
- ☐ over-integrated peak's area
- ☑ under-integrated peak's area
- ☐ other _____

initials JU *date* 9-5-13

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



(5) 2-Fluorophenol (S)

4.62min 18.82ng/uL

response 355734

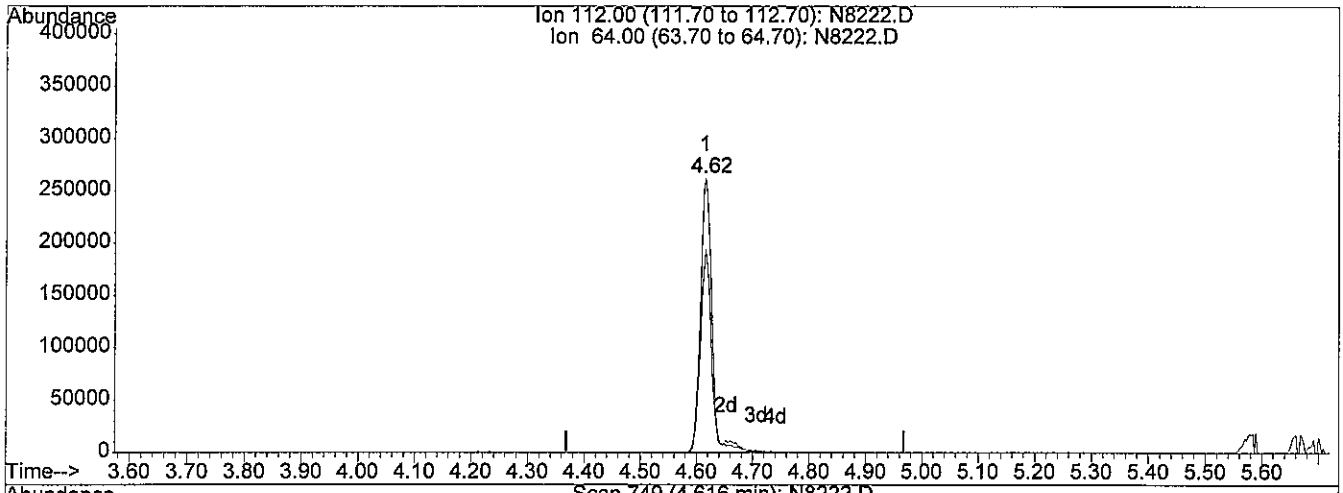
Ion	Exp%	Act%
112.00	100	100
64.00	68.70	75.95
0.00	0.00	0.00
0.00	0.00	0.00

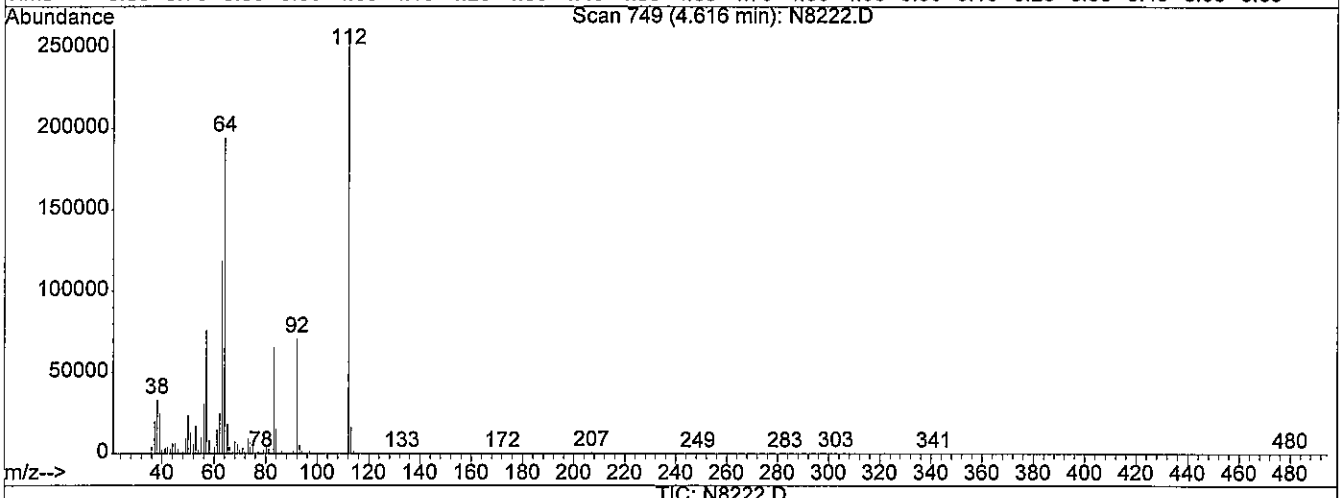
3 6a

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





TIC: N8222.D

(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 _____

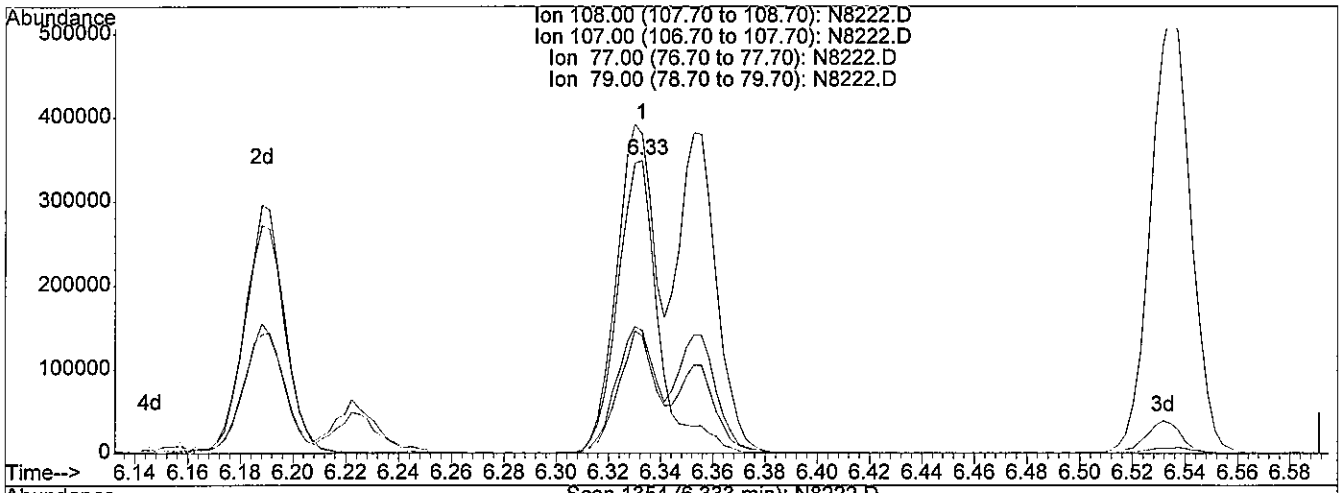
initials JK *date* 9-5-13

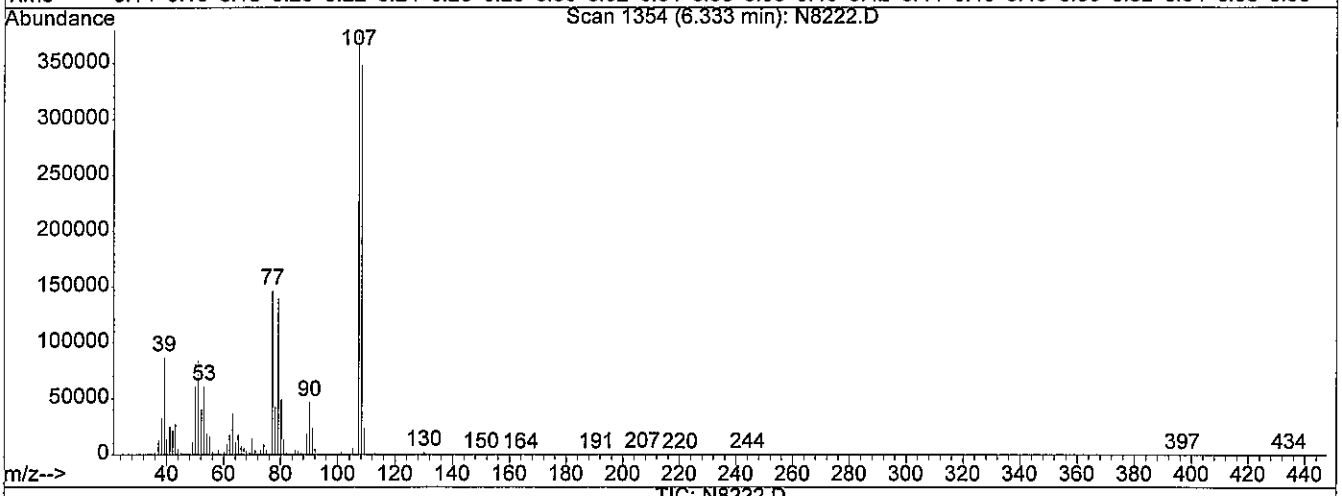
N8222.D 090413S1.M Wed Sep 04 13:49:09 2013

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





TIC: N8222.D

(21) 3+4-Methylphenol (T)

6.33min 21.36ng/uL

response 384810

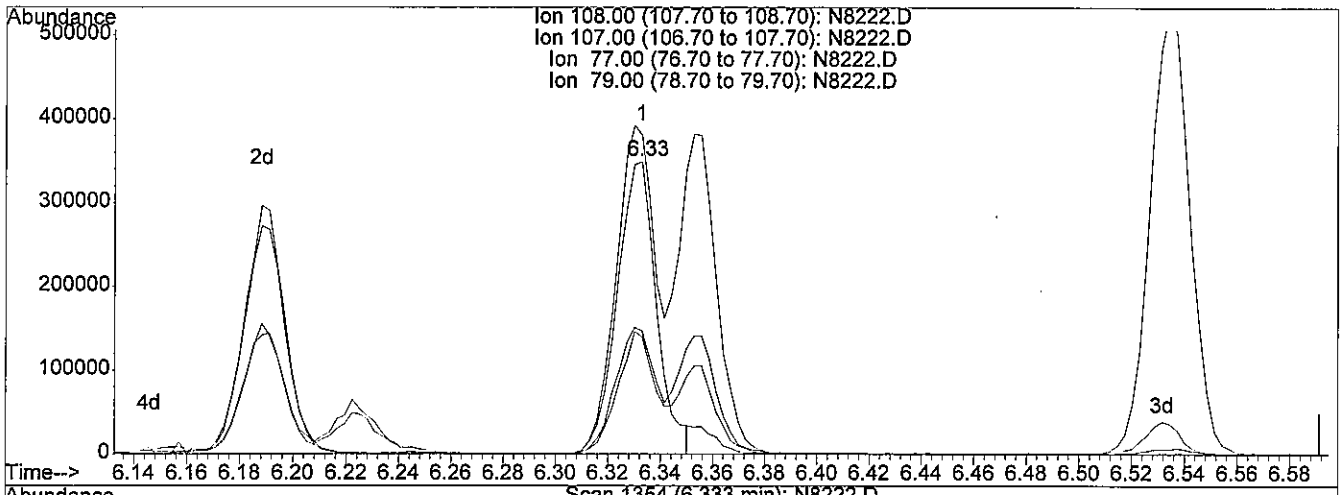
Ion	Exp%	Act%
108.00	100	100
107.00	210.50	105.36#
77.00	76.70	41.27#
79.00	63.20	39.49#

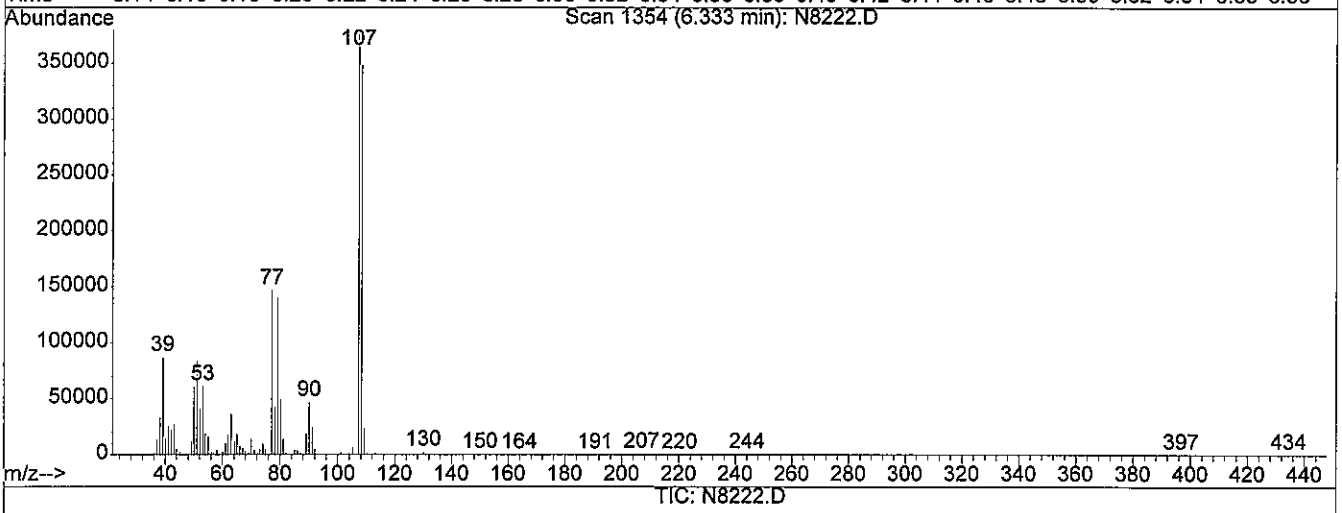
Quantitation Report (Qedit)

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





TIC: N8222.D

(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 _____

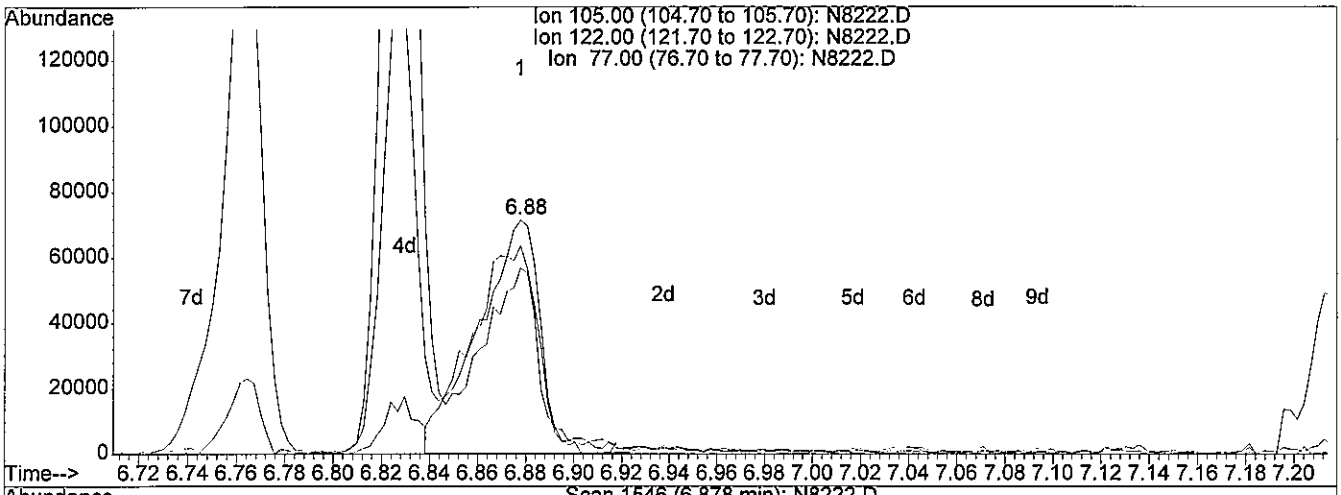
initials JH *date* 9-5-D

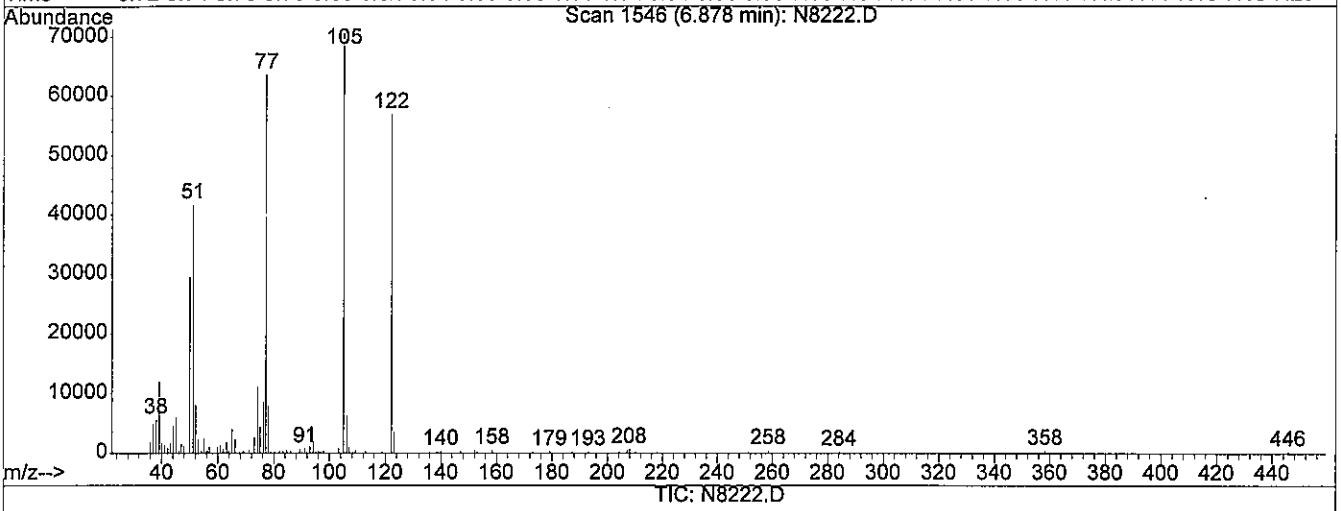
N8222.D 090413S1.M Wed Sep 04 13:49:25 2013

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





TIC: N8222.D

(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

3 of 4

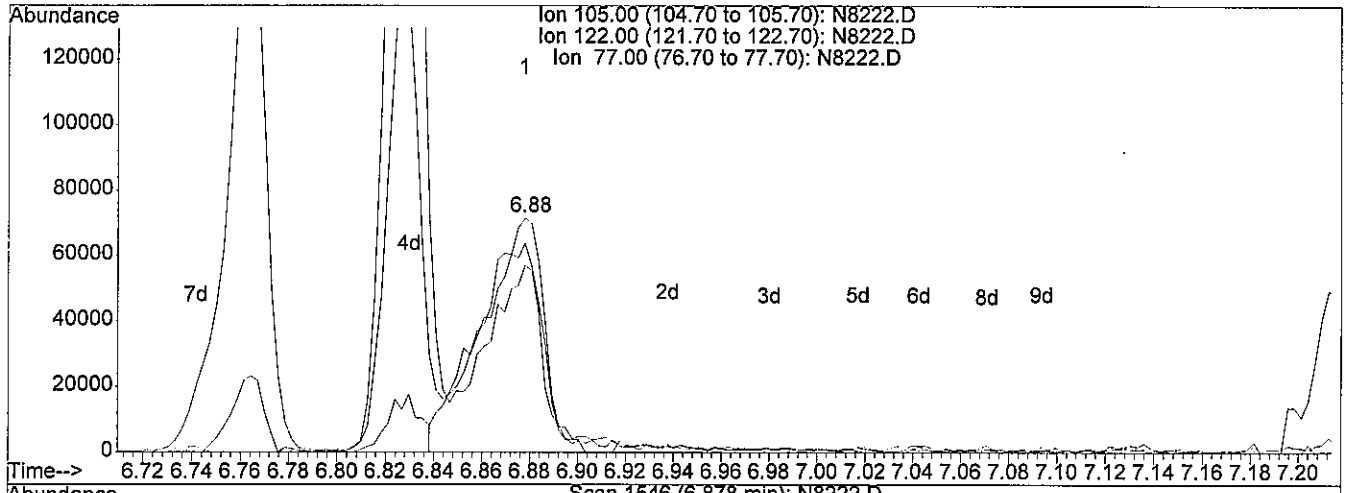
N8222.D 090413S1.M Wed Sep 04 13:49:38 2013

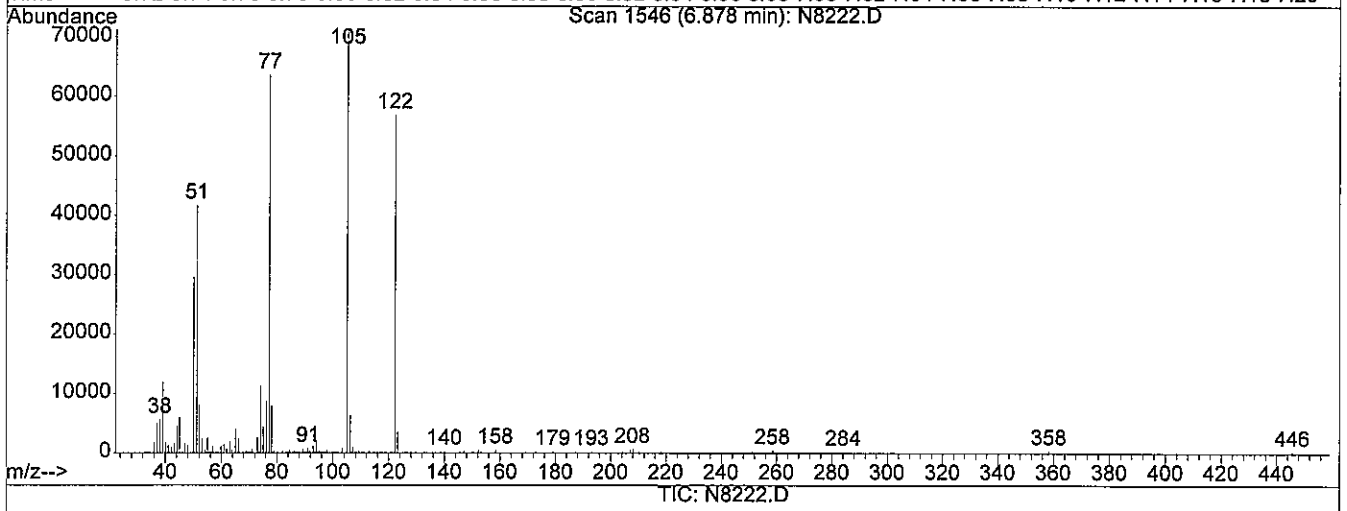
Quantitation Report (Qedit)

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





TIC: N8222.D

(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

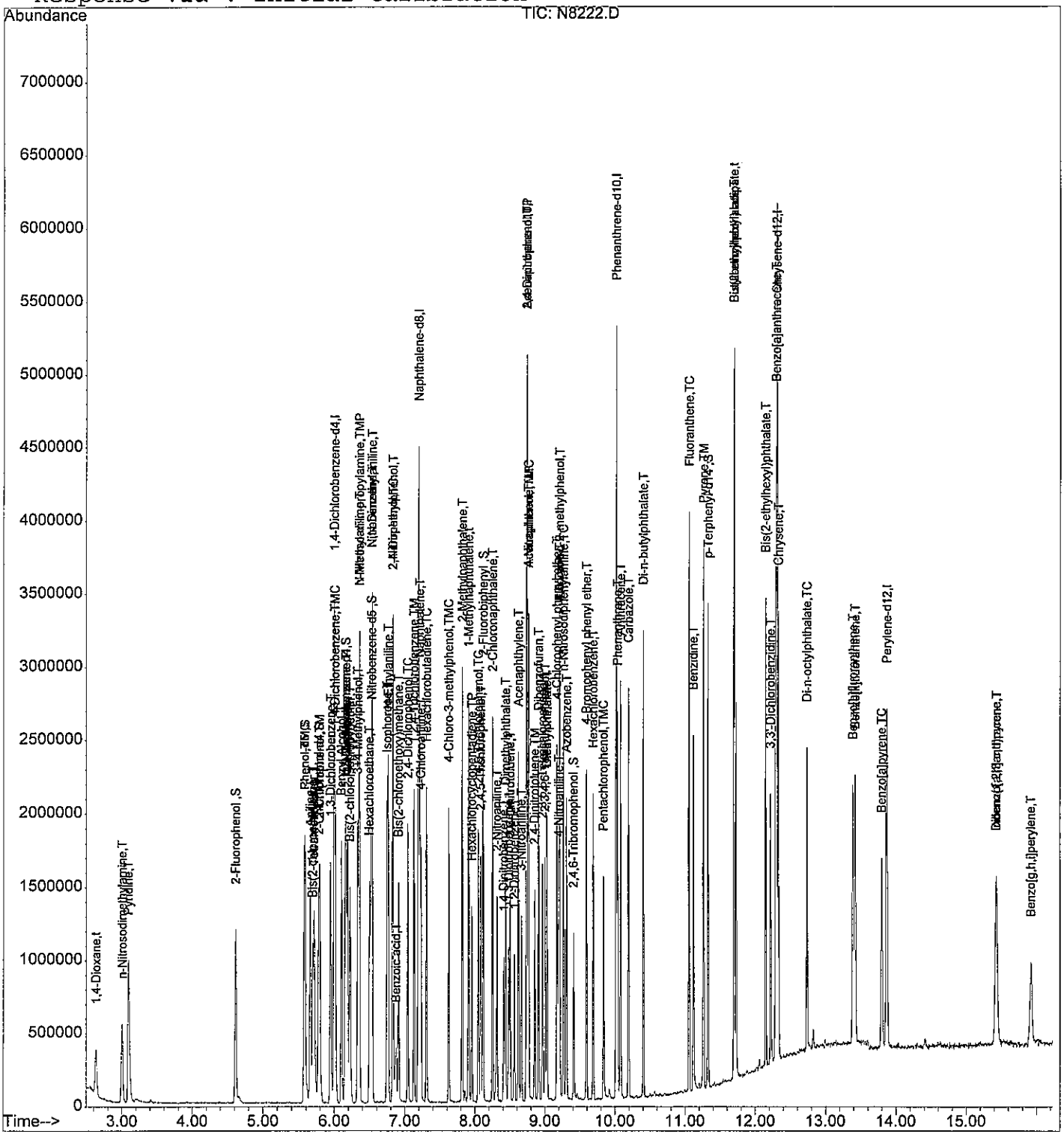
MANUAL RE-INTEGRATION

- ☐ missed peak assignment
- ☐ assigned incorrect name to peak
- ☐ over-integrated peak's area
- ☑ under-integrated peak's area
- ☐ other _____

initials JL *date* 9-5-13

Data File : D:\HPCHEM\1\DATA\090413\N8222.D Vial: 6
Acq On : 4 Sep 2013 13:30 Operator: jk SOP 506
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

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



Quantitation Report (QT Reviewed)

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 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 14:12:36 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

JH 9-5-13

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

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 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 14:12:36 2013
Response via : Initial Calibration
DataAcq Meth : 090413S1

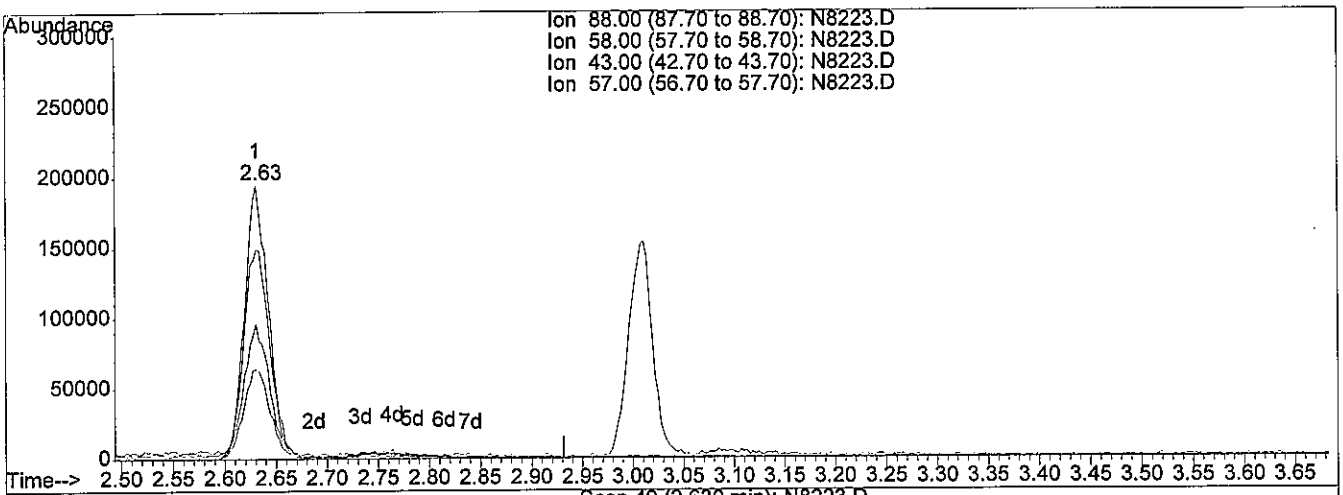
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
67)	Azobenzene	9.31	77	1155833	40.27	ng/uL	99
70)	4,6-Dinitro-2-methylphenol	9.21	198	192448	40.21	ng/uL	95
71)	n-Nitrosodiphenylamine	9.27	169	924216	36.97	ng/uL	100
72)	4-Bromophenyl phenyl ether	9.60	248	409563	37.76	ng/uL	99
73)	Hexachlorobenzene	9.69	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

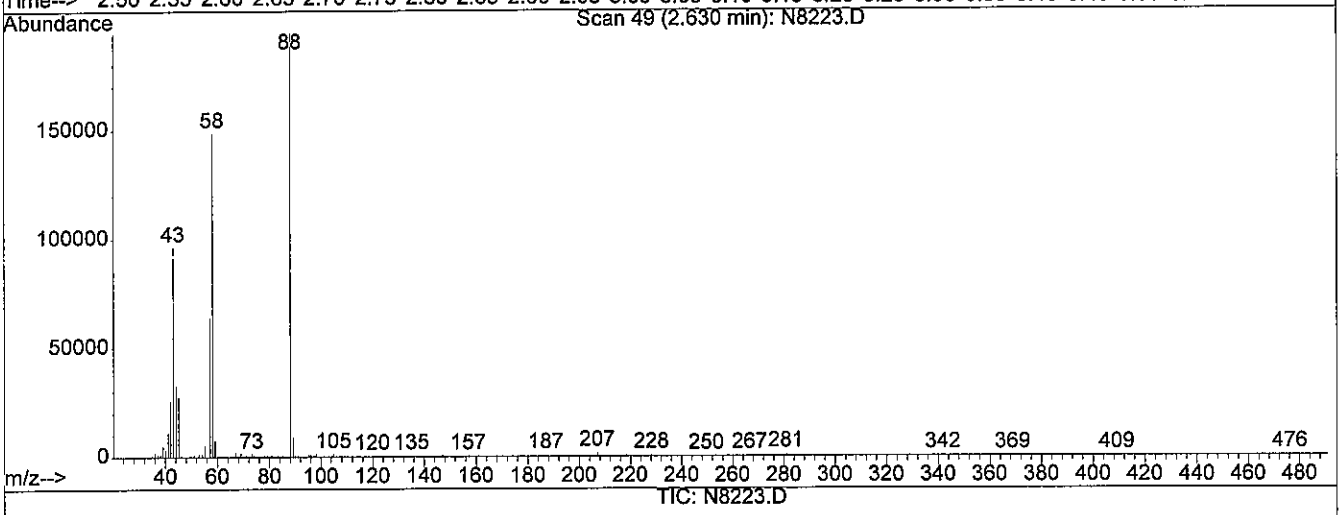
(#) = qualifier out of range (m) = manual integration

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





TIC: N8223.D

(2) 1,4-Dioxane (t)

2.63min 41.73ng/uL

response 320276

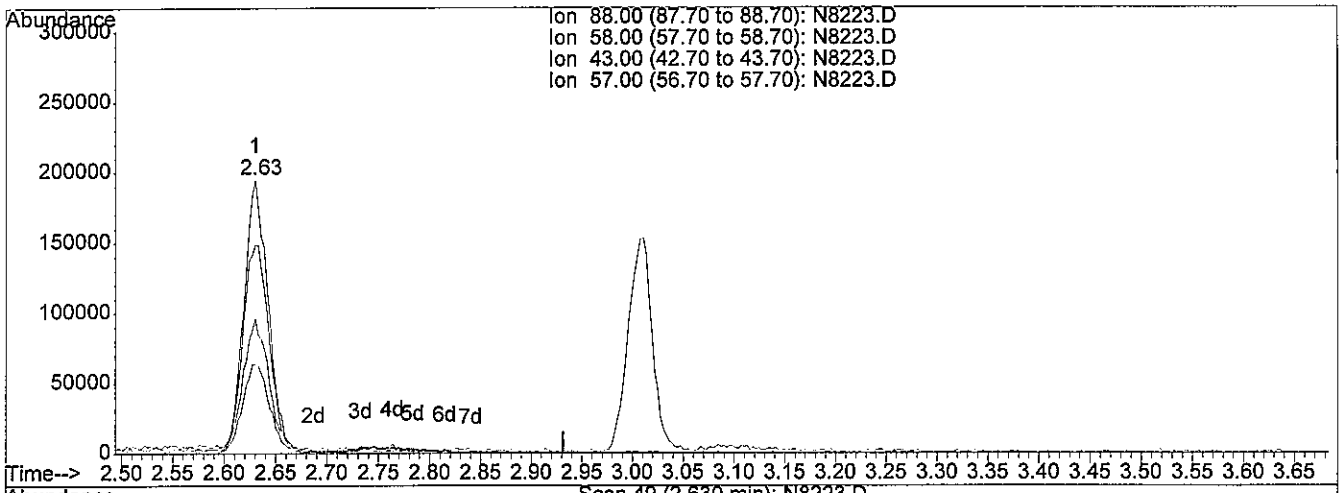
Ion	Exp%	Act%
88.00	100	100
58.00	77.90	83.23
43.00	47.90	50.45
57.00	33.00	34.73

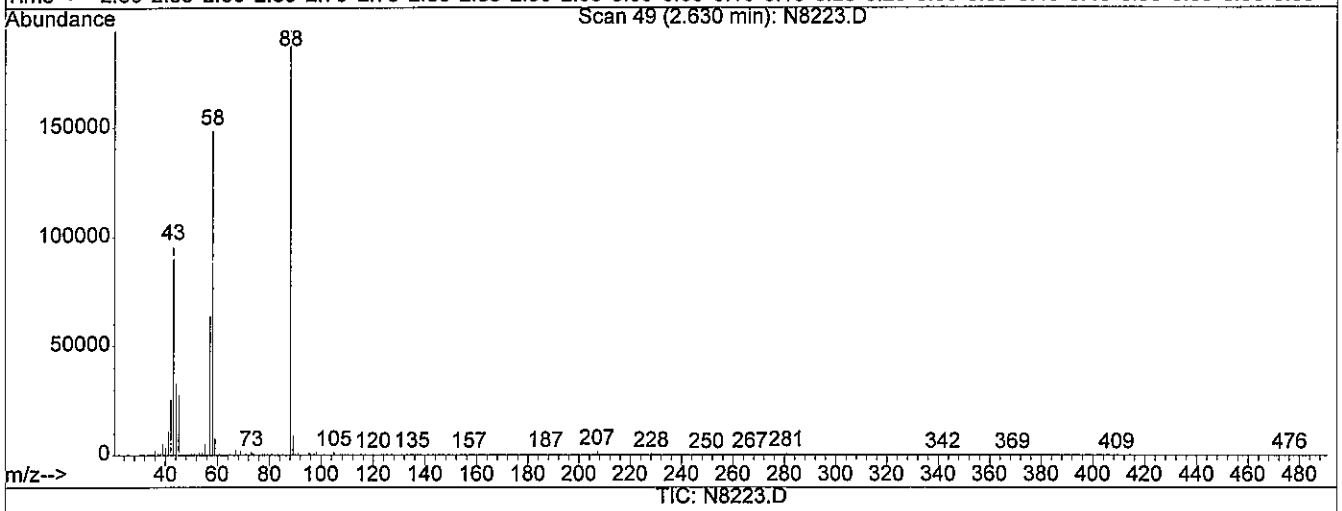
N8223.D 090413S1.M Wed Sep 04 14:12:58 2013

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





TIC: N8223.D

(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 _____

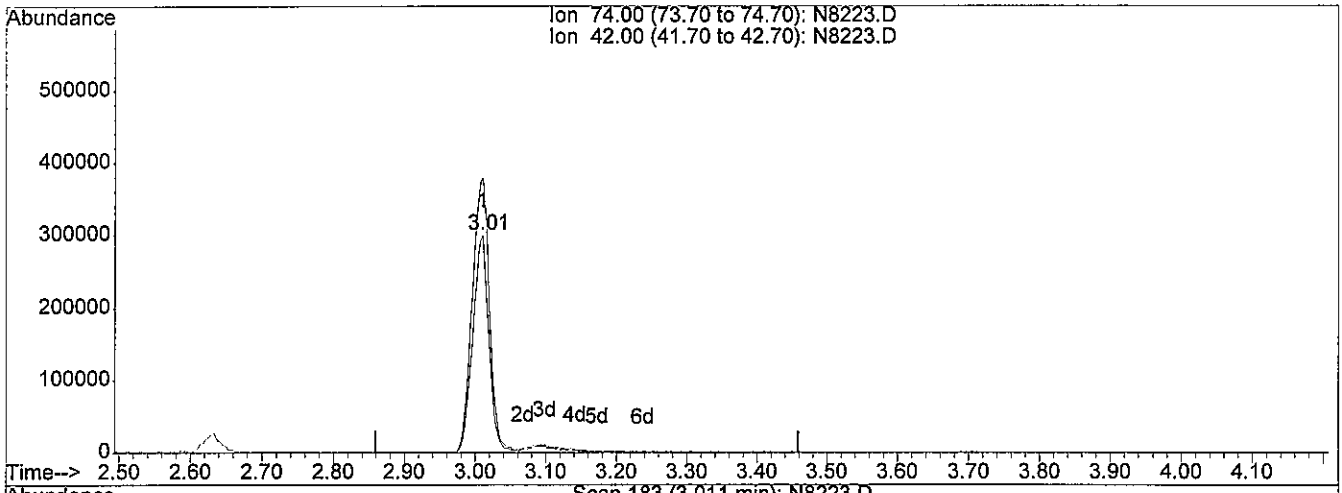
initials JL *date* 9-6-13

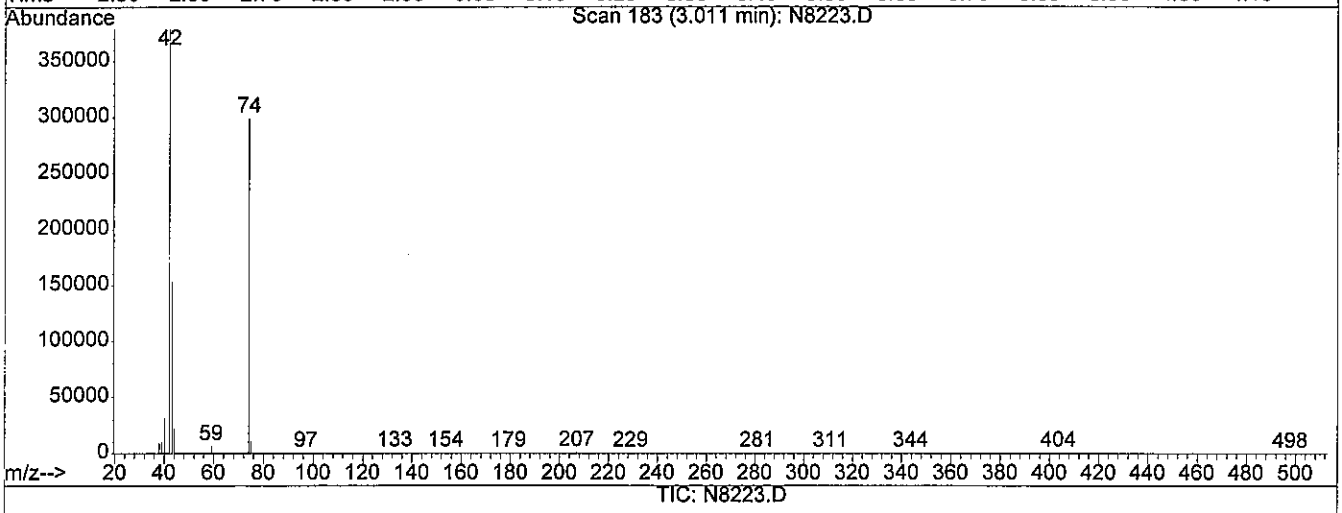
N8223.D 090413S1.M Wed Sep 04 14:13:05 2013

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





(3) n-Nitrosodimethylamine (T)

3.01min 40.95ng/uL

response 472894

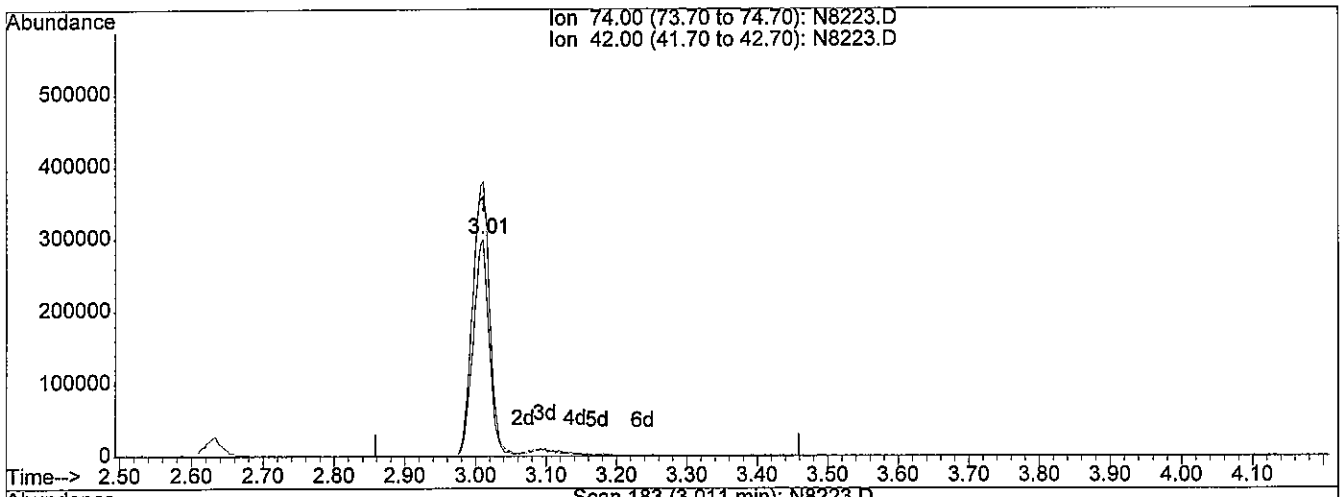
Ion	Exp%	Act%
74.00	100	100
42.00	129.50	135.31
0.00	0.00	0.00
0.00	0.00	0.00

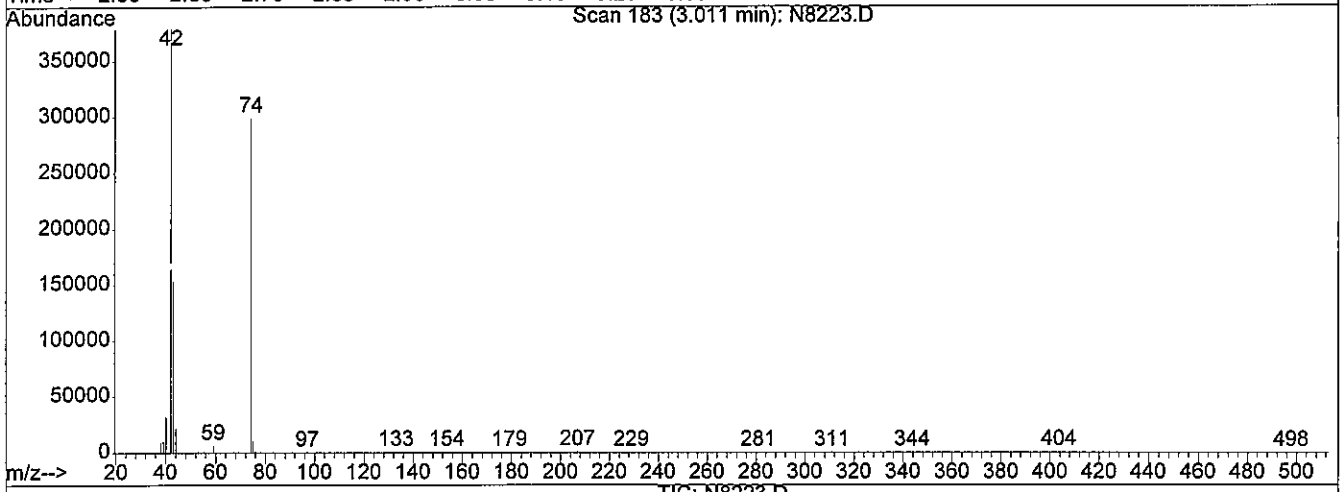
3efor

Quantitation Report (Qedit)

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





TIC: N8223.D

(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 _____

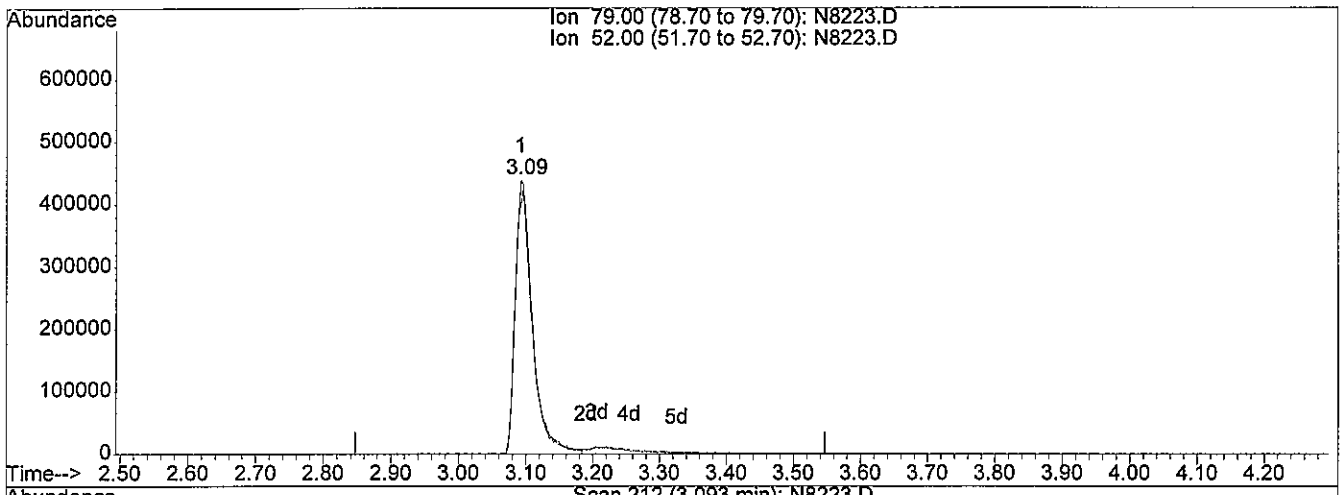
initials kl *date* 9-6-13

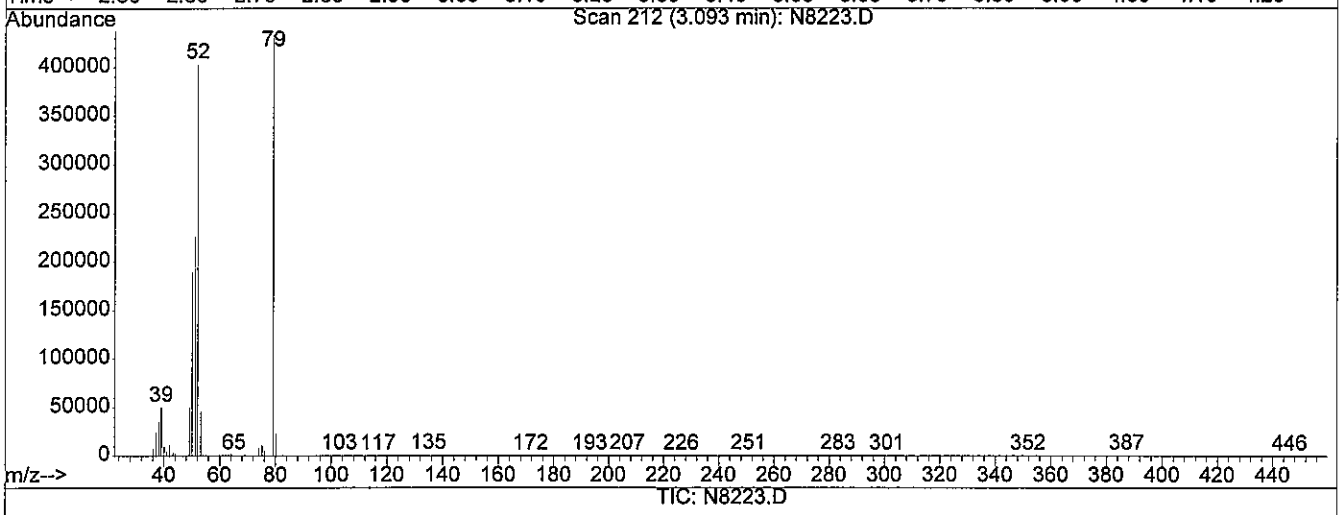
N8223.D 090413S1.M Wed Sep 04 14:13:12 2013

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





TIC: N8223.D

(4) Pyridine (T)

3.09min 39.58ng/uL

response 785674

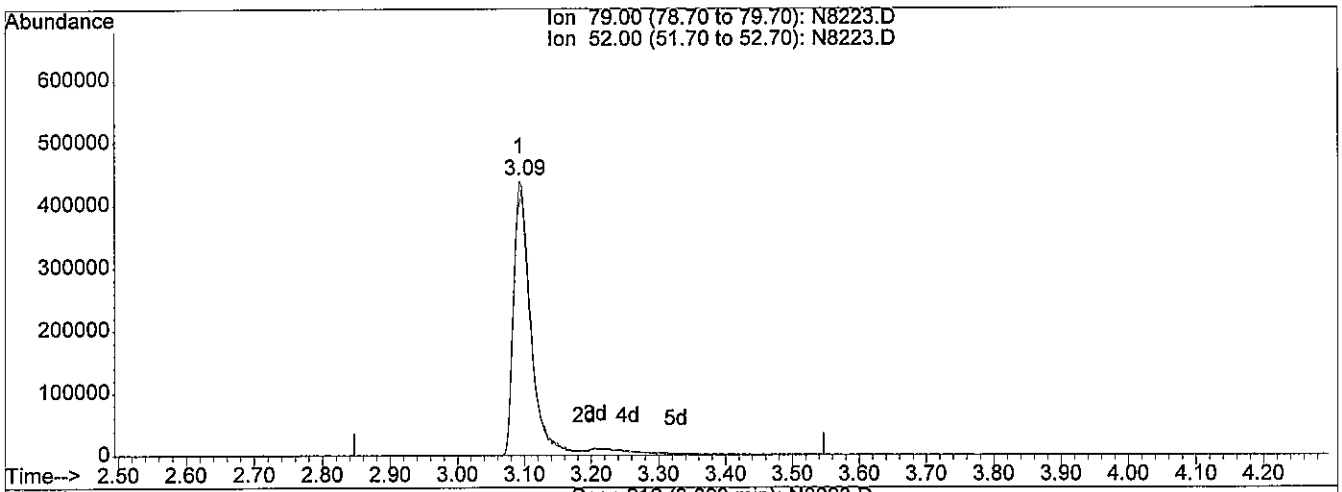
Ion	Exp%	Act%
79.00	100	100
52.00	93.60	96.21
0.00	0.00	0.00
0.00	0.00	0.00

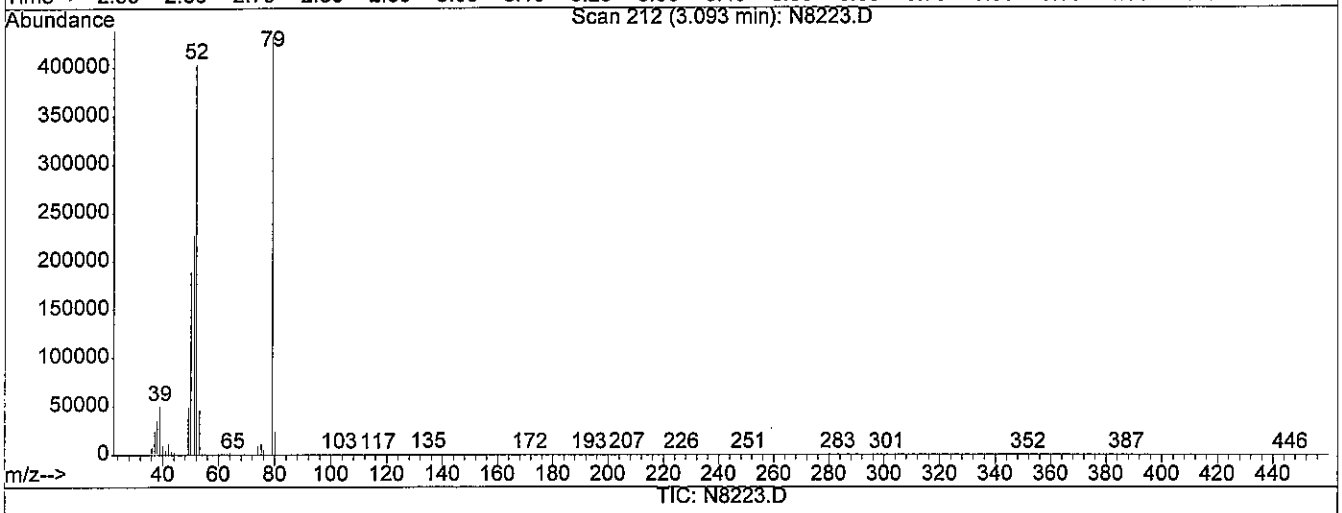
Before

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





TIC: N8223.D

(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 _____

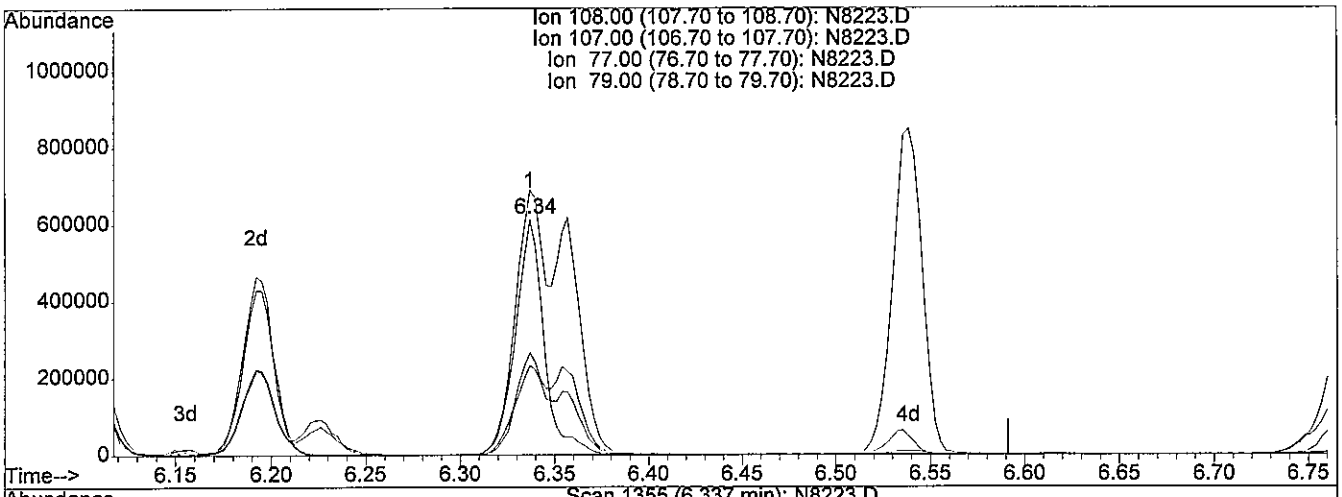
initials JL *date* 9-6-13

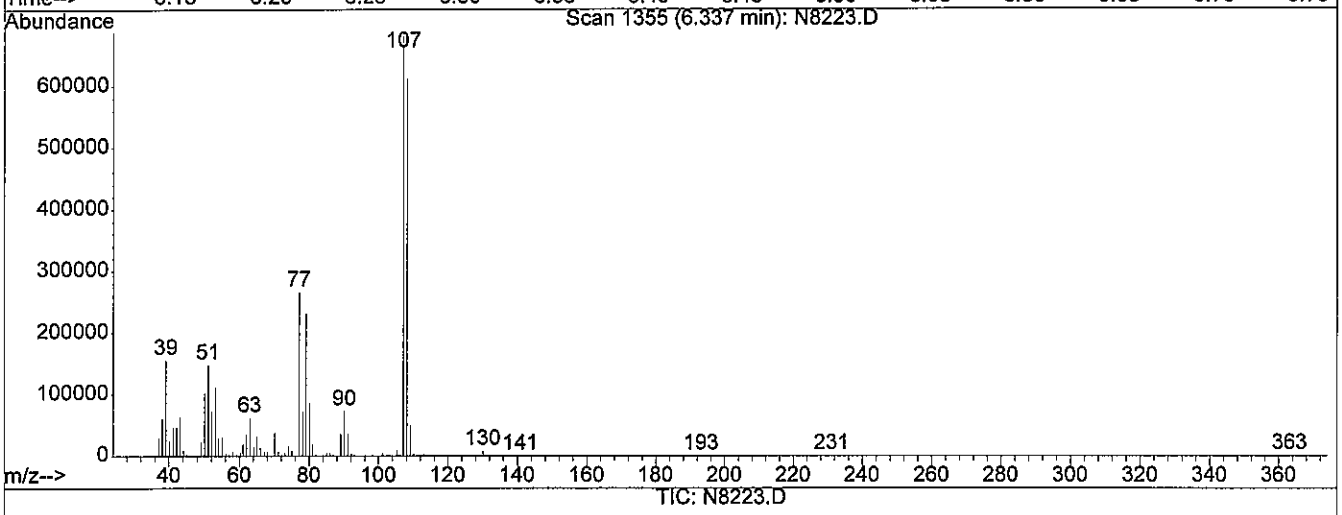
N8223.D 090413S1.M Wed Sep 04 14:13:23 2013

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

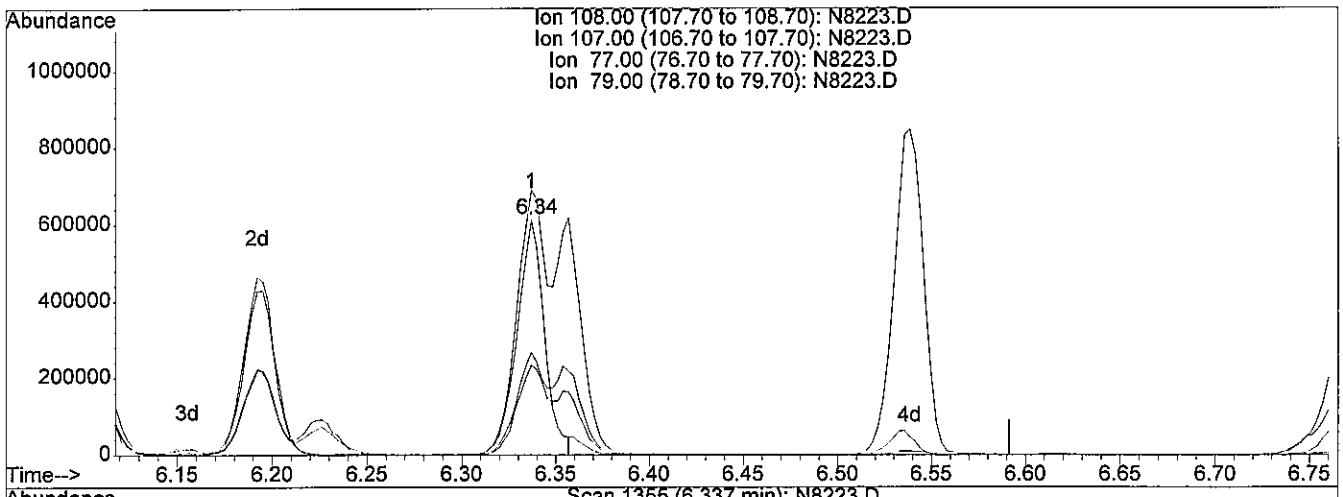
Before

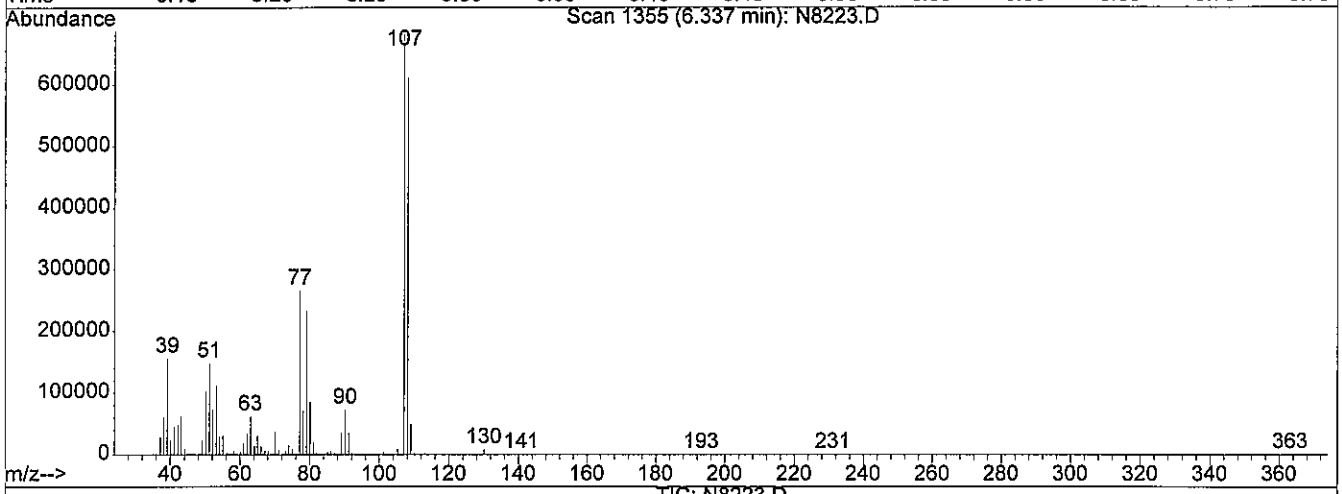
N8223.D 090413S1.M Wed Sep 04 14:13:37 2013

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





TIC: N8223.D

(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

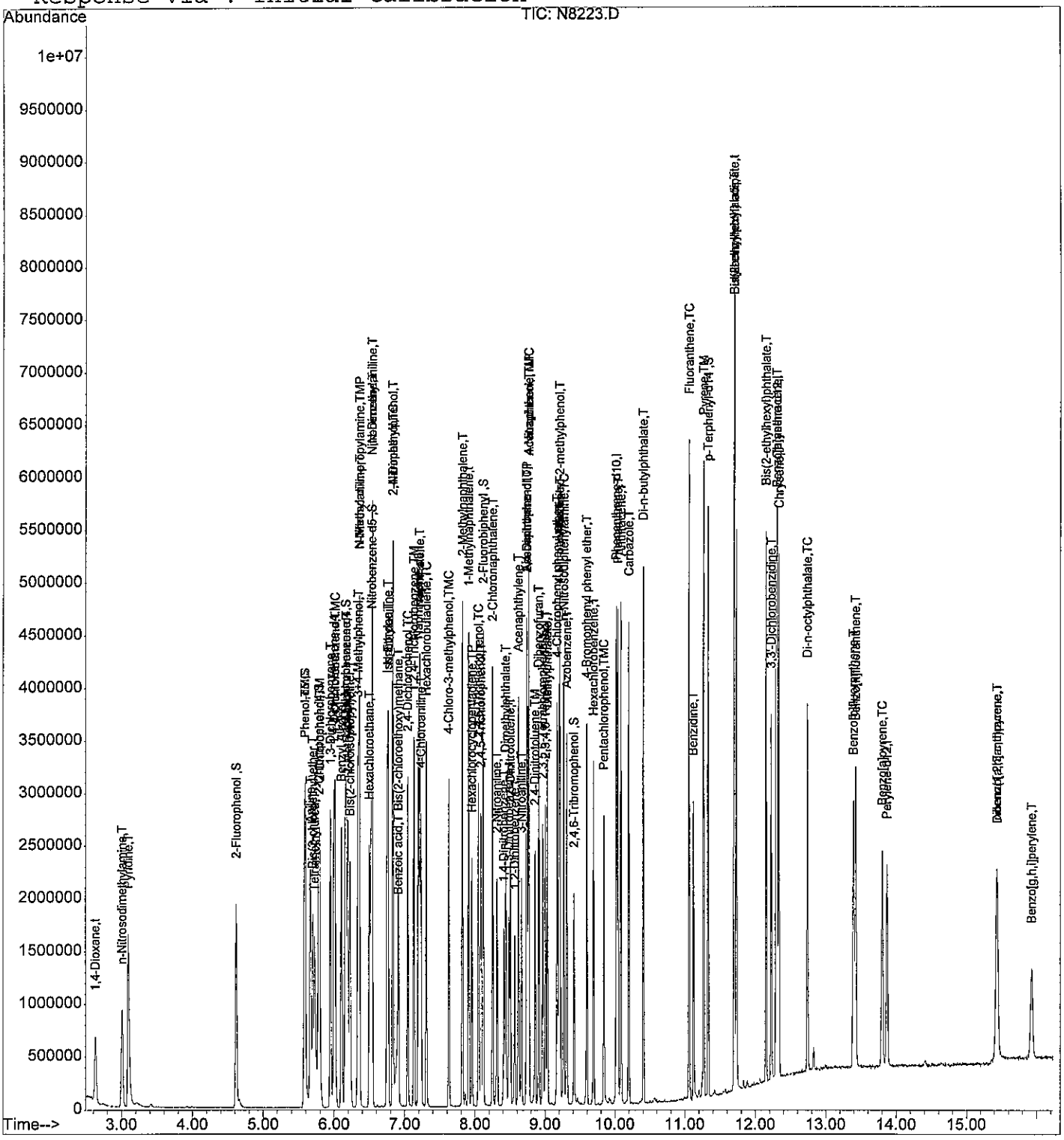
- ☐ missed peak assignment
- ☐ assigned incorrect name to peak
- ☑ over-integrated peak's area
- ☐ under-integrated peak's area
- ☐ other _____

initials JK *date* 9-6-13

N8223.D 090413S1.M Wed Sep 04 14:13:43 2013

Data File : D:\HPCHEM\1\DATA\090413\N8223.D Vial: 7
Acq On : 4 Sep 2013 13:55 Operator: jk SOP 506
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

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



Quantitation Report (QT Reviewed)

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	97
9) Phenol	5.60	94	1762200	77.52	ng/uL	100
10) Tetramethylurea	5.75	72	2419449	76.66	ng/uL	98
11) Bis(2-chloroethyl)ether	5.71	93	1245487	69.72	ng/uL#	81
12) 2-Chlorophenol	5.80	128	1259556	76.10	ng/uL	100
13) 1,3-Dichlorobenzene	5.95	146	1527977	77.30	ng/uL	100
14) 1,4-Dichlorobenzene	6.02	146	1426296	77.80	ng/ul	99
16) 1,2-Dichlorobenzene	6.17	146	1305191	75.30	ng/uL	99
17) Benzyl Alcohol	6.11	108	875912	79.85	ng/uL	98
18) 2-Methylphenol	6.20	107	1067100	78.25	ng/uL#	87
19) Bis(2-chloroisopropyl)ethe	6.23	45	2355342	78.06	ng/uL#	88
20) n-Nitroso-di-n-propylamine	6.36	70	983061	73.69	ng/uL	98
21) 3+4-Methylphenol	6.35	108	1387236	82.51	ng/uL	96

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

9K 9-6-13

Quantitation Report (QT Reviewed)

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

	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

Quantitation Report (QT Reviewed)

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

	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

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

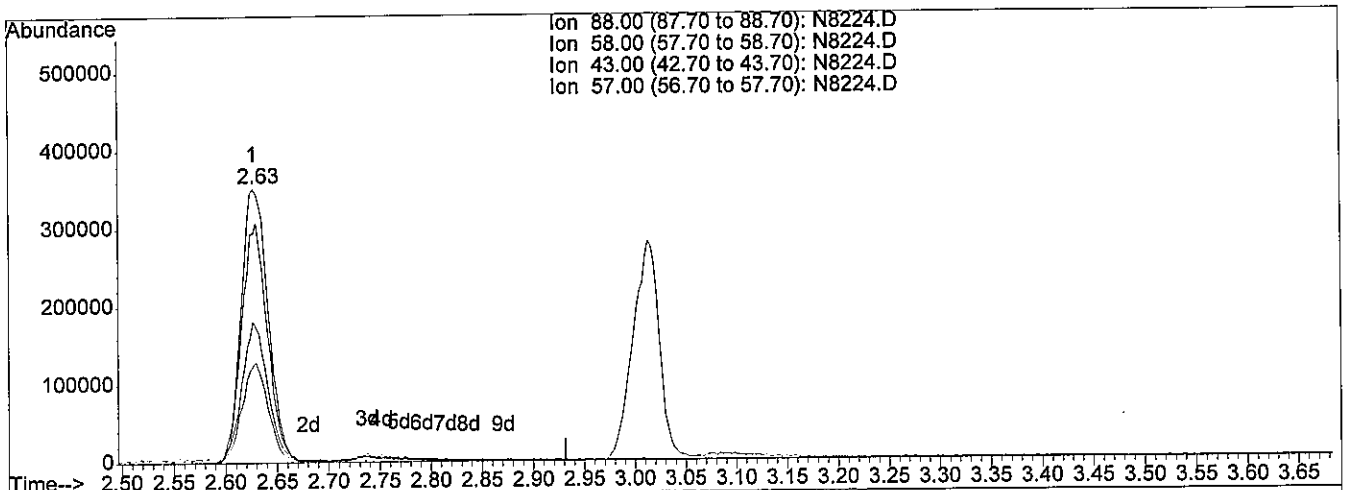
Quantitation Report (Qedit)

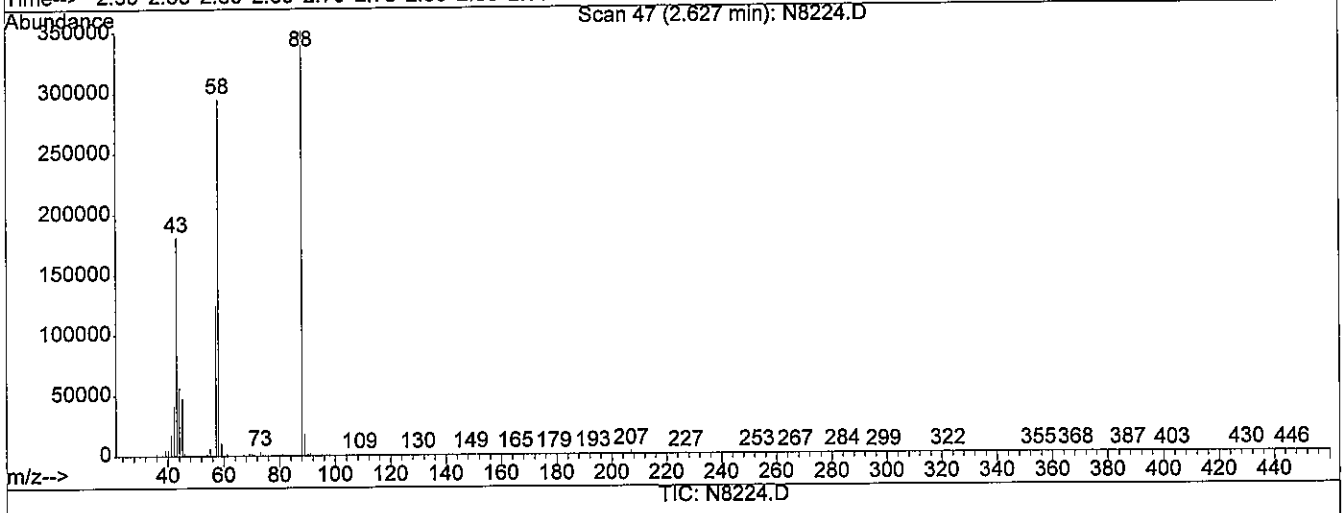
Data File : D:\HPCHEM\1\DATA\090413\N8224.D
Acq On : 4 Sep 2013 14:19
Sample : ICALSVSTD080
Misc : ST130531-7
MS Integration Params: RTEINT.P
Quant Time: Sep 4 14:41 2013

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





TIC: N8224.D

(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

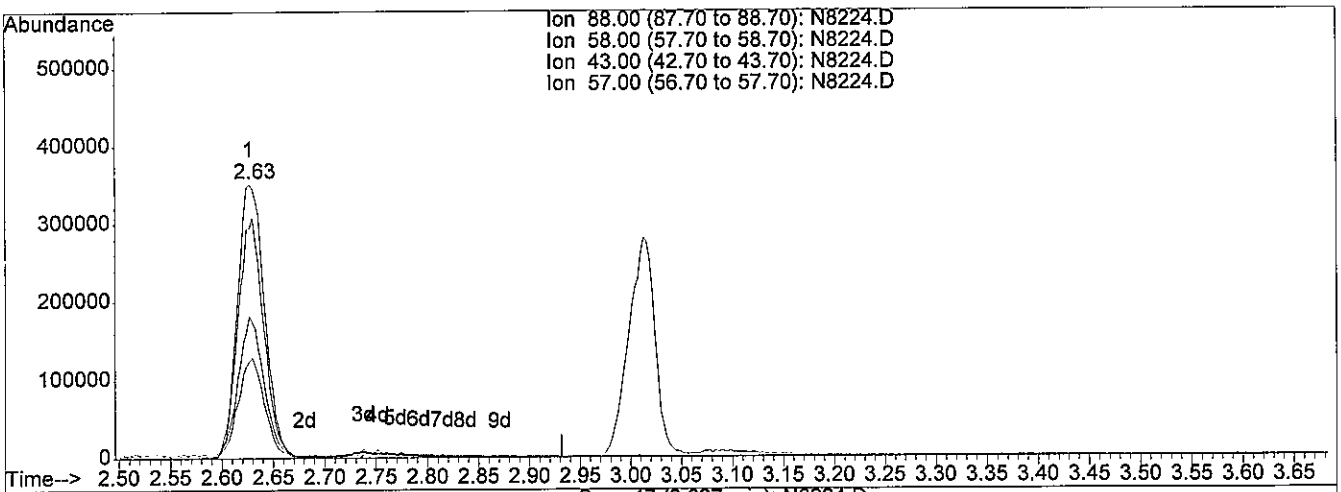
Before

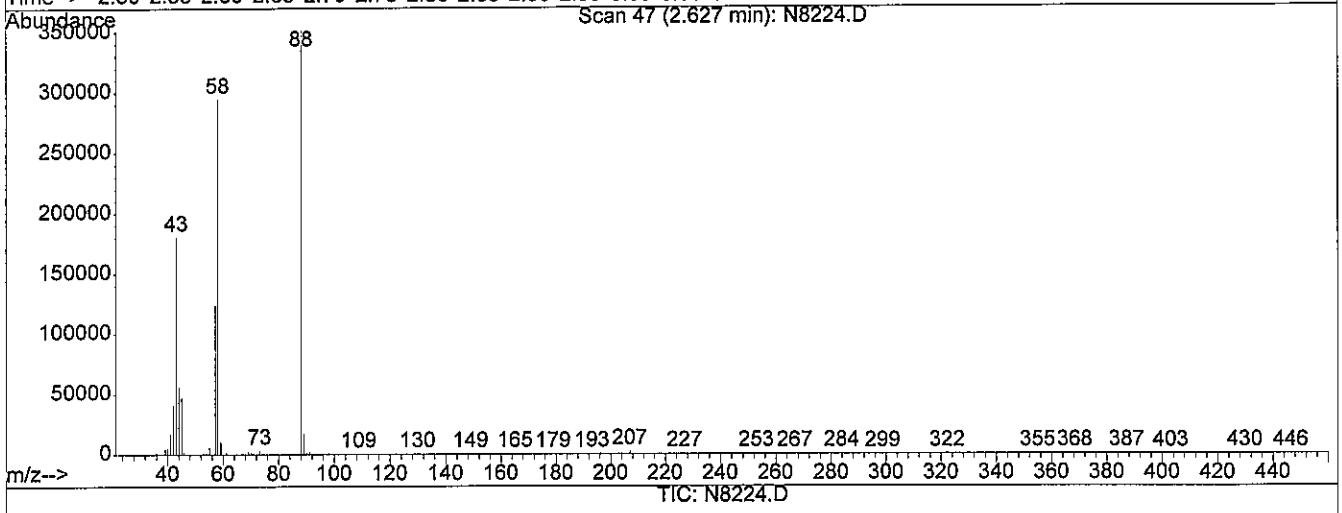
Quantitation Report (Qedit)

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





TIC: N8224.D

(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 _____

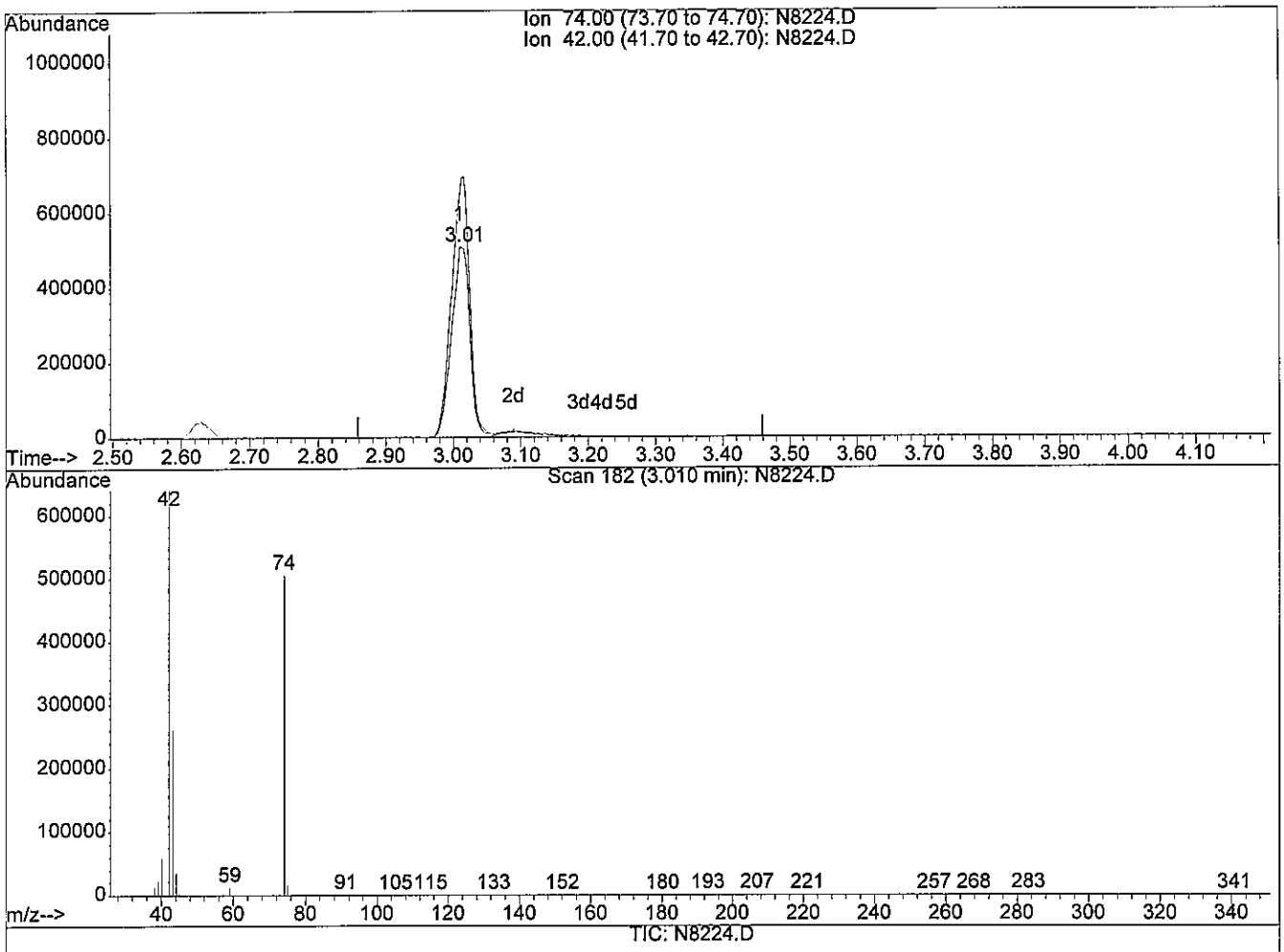
initials JM *date* 9-6-13

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



(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

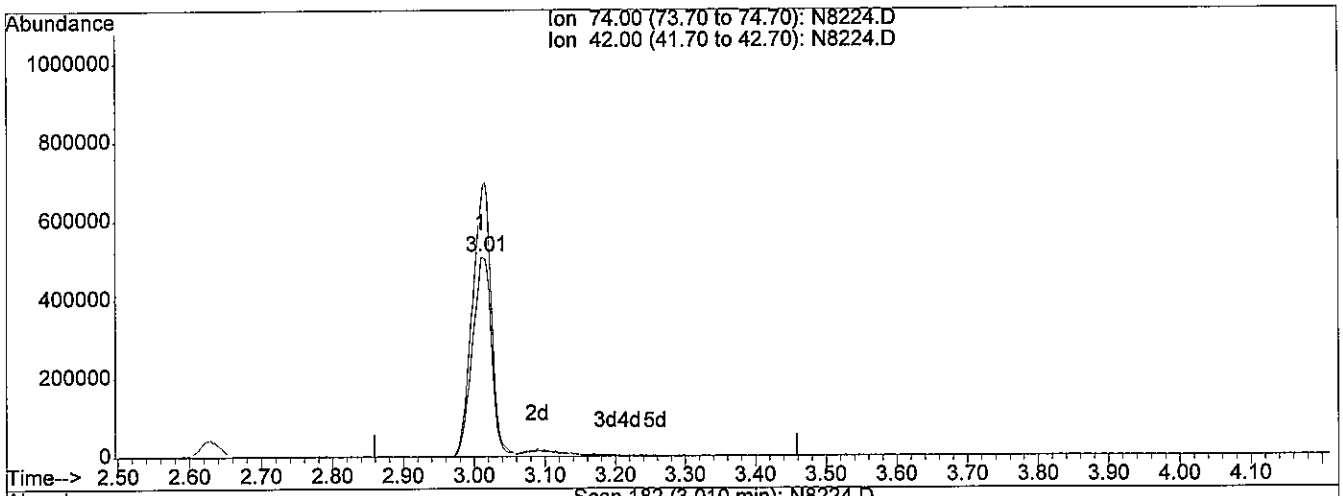
Before

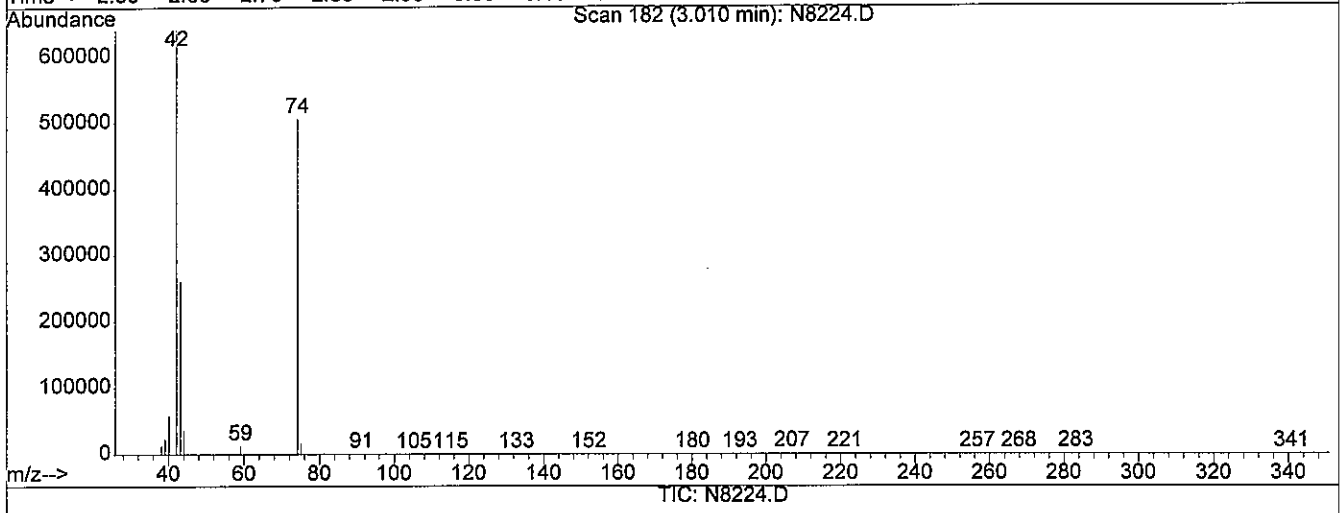
Quantitation Report (Qedit)

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





(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 _____

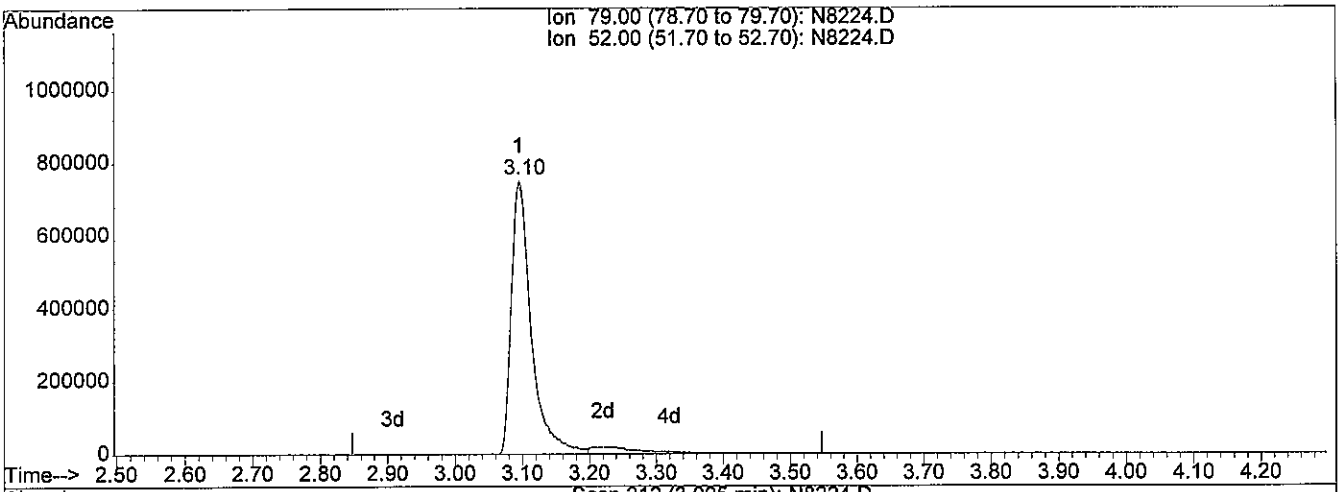
initials JK *date* 9-6-13

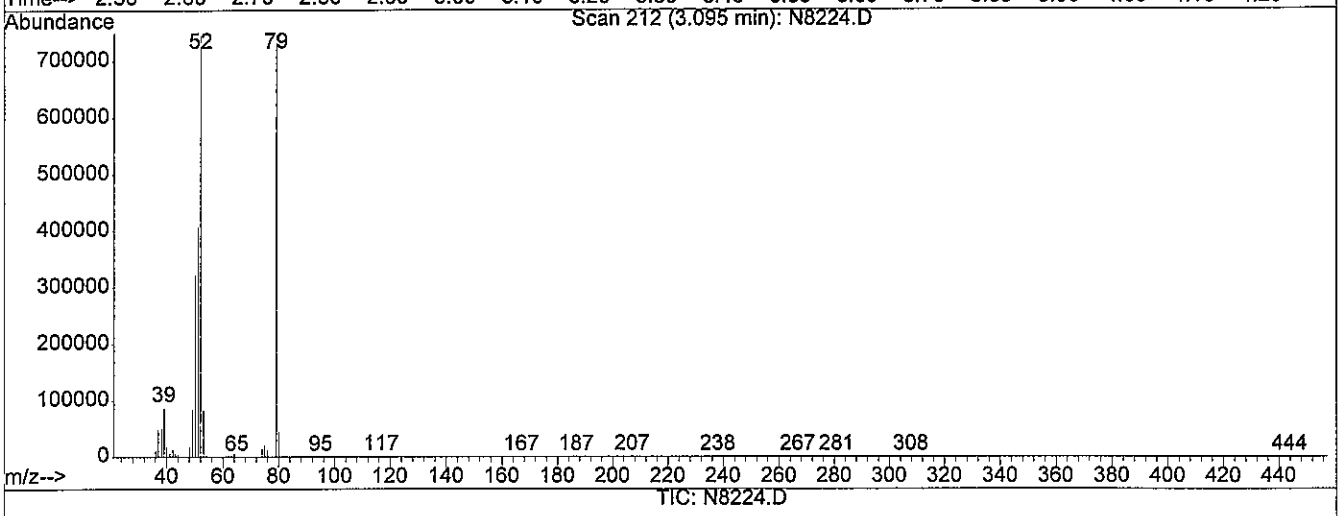
N8224.D 090413S1.M Wed Sep 04 14:41:55 2013

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





TIC: N8224.D

(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

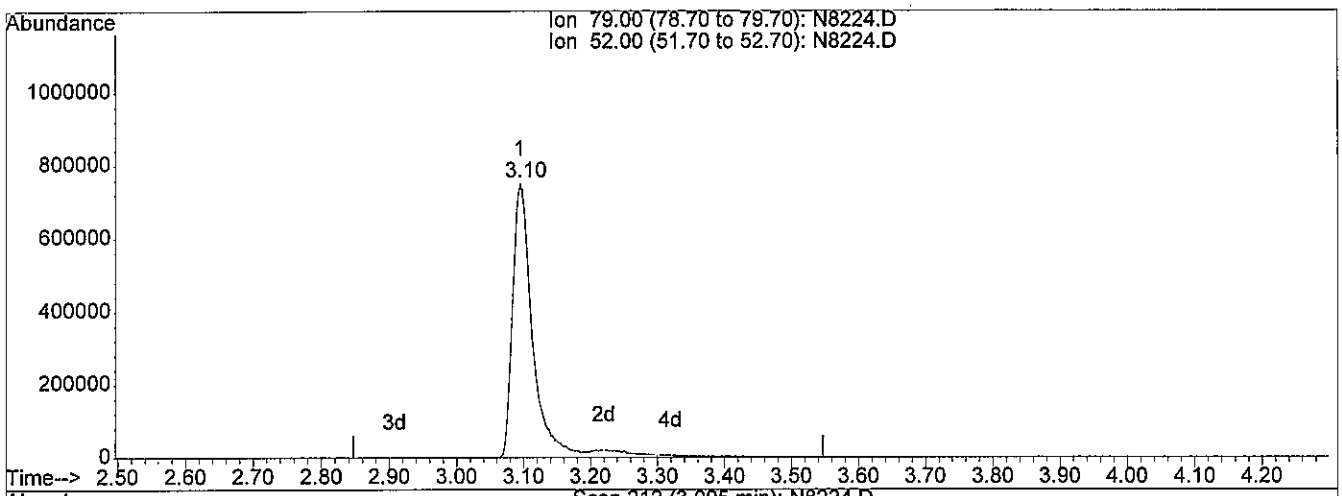
Befor

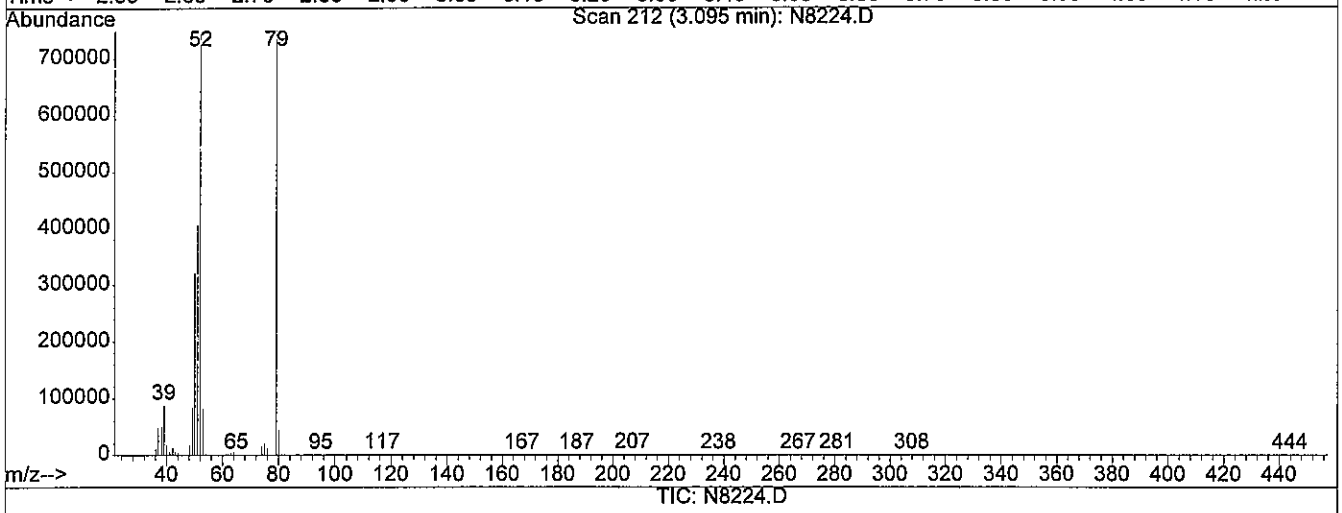
N8224.D 090413S1.M Wed Sep 04 14:41:59 2013

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





TIC: N8224.D

(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 _____

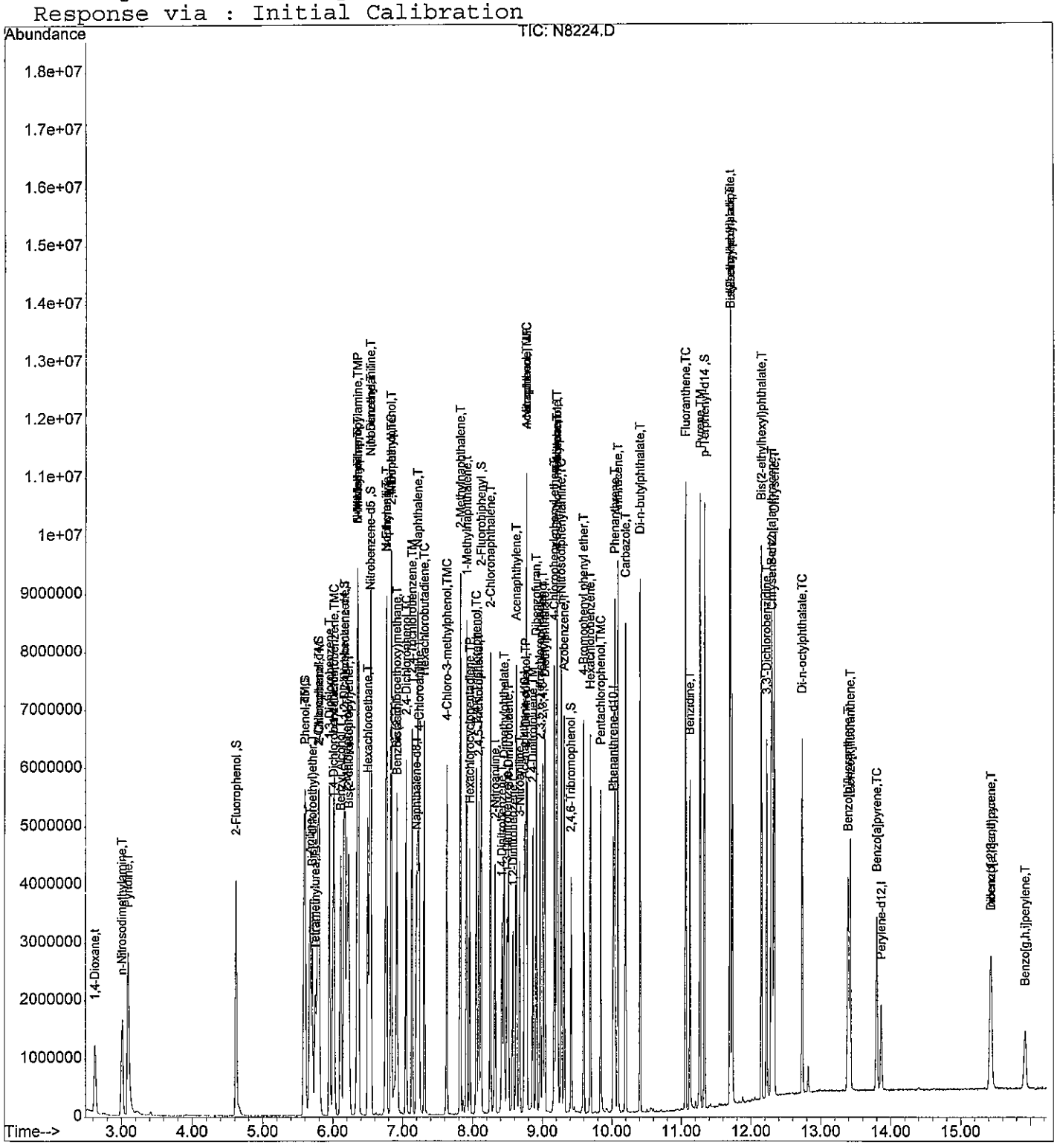
initials DL *date* 9-6-13

N8224.D 090413S1.M Wed Sep 04 14:42:03 2013

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



Quantitation Report (QT Reviewed)

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

Quantitation Report (QT Reviewed)

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

Quantitation Report (QT Reviewed)

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	

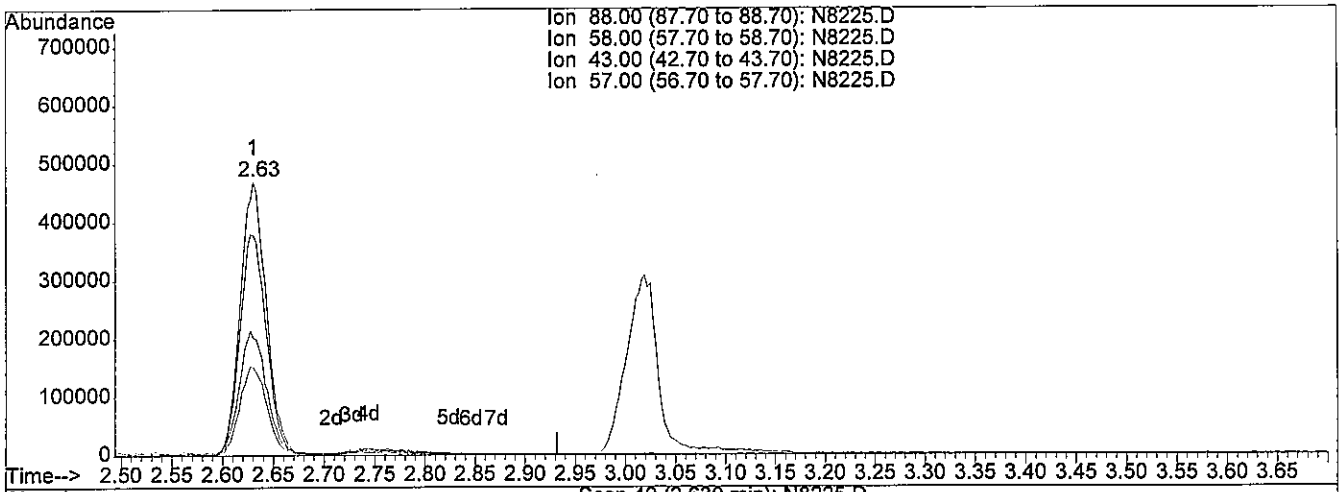
(#) = qualifier out of range (m) = manual integration

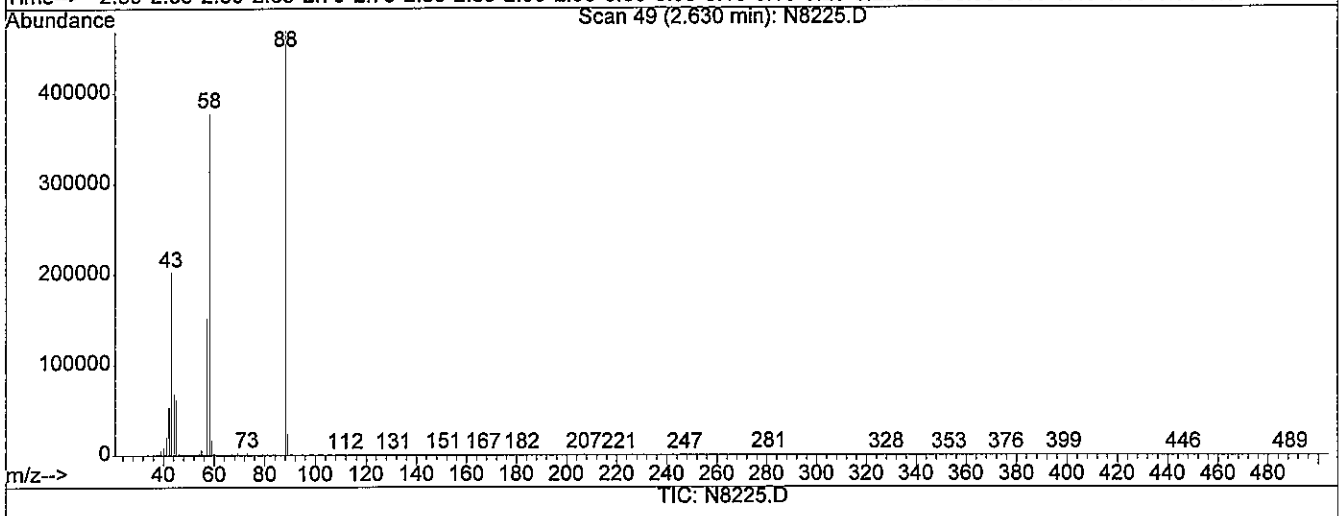
Quantitation Report (Qedit)

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 15:01 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





TIC: N8225.D

(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

3 for

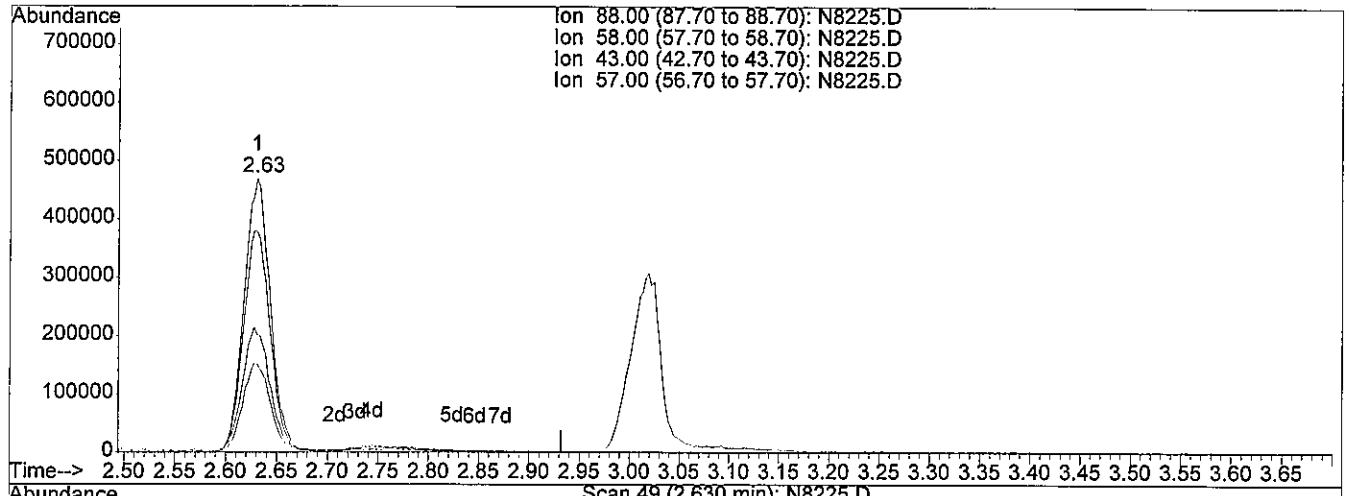
N8225.D 090413S1.M Wed Sep 04 15:01:58 2013

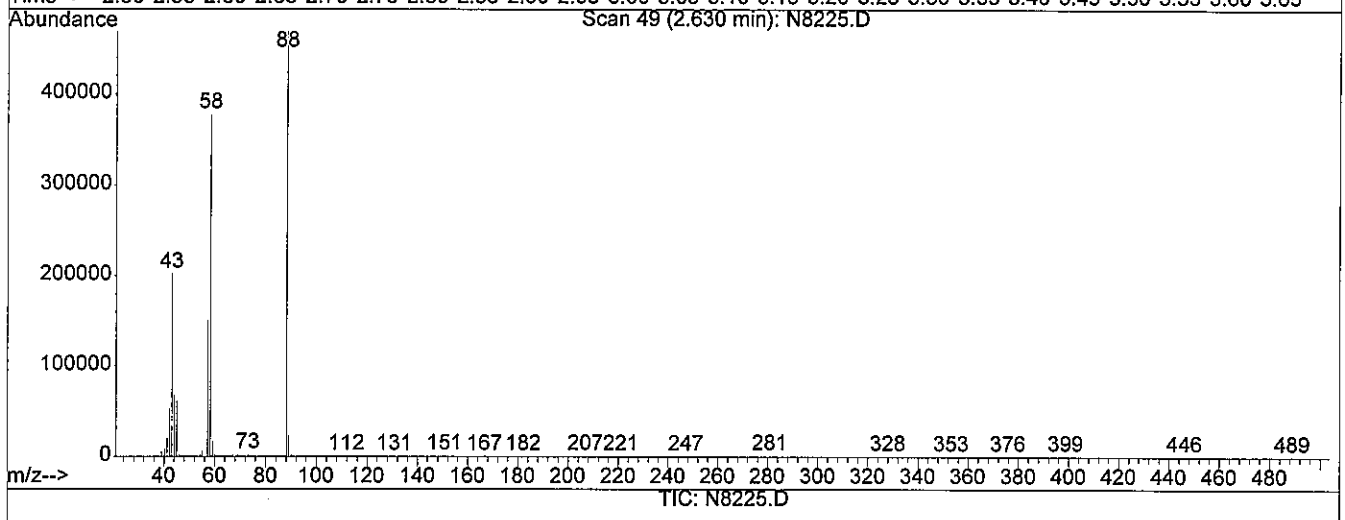
Quantitation Report (Qedit)

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





TIC: N8225.D

(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 JL *date* 9-6-0

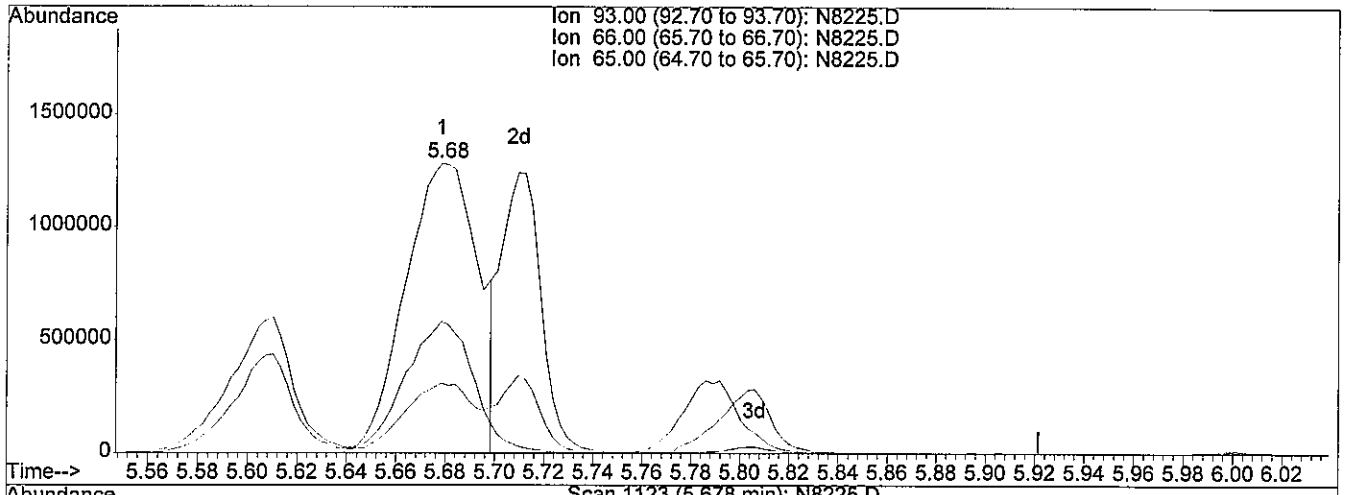
N8225.D 090413S1.M Wed Sep 04 15:02:03 2013

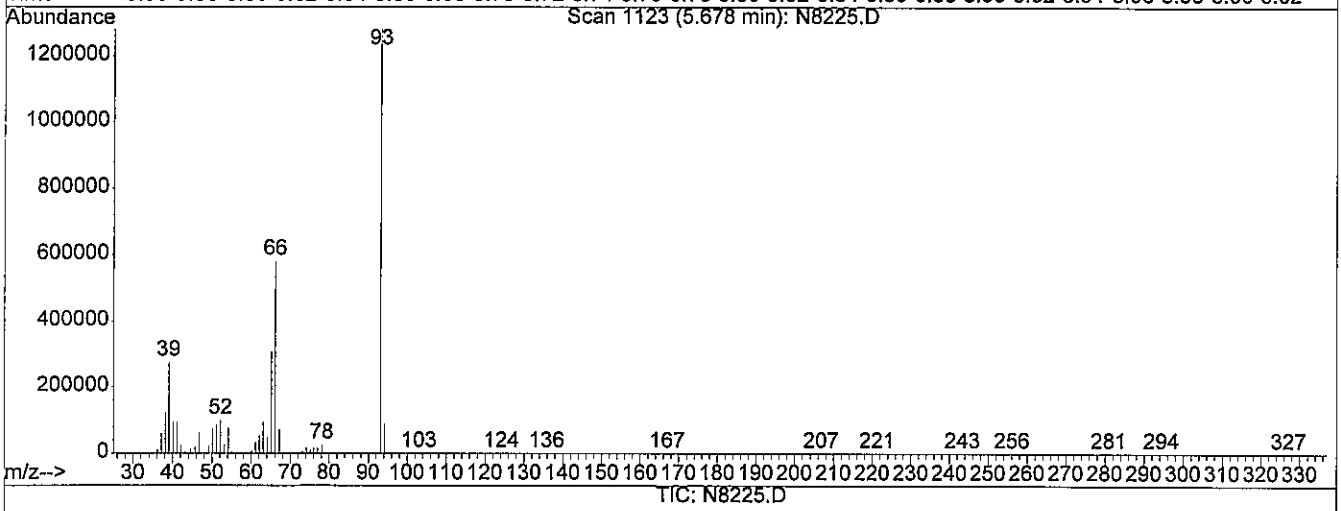
Quantitation Report (Qedit)

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





TIC: N8225.D

(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

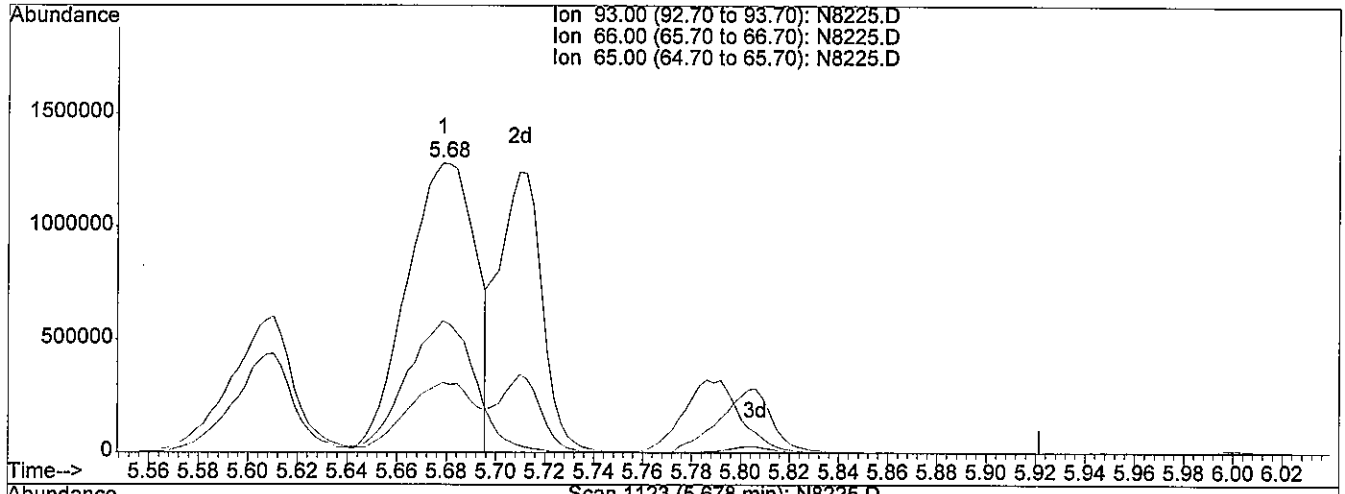
Bcfm

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 _____

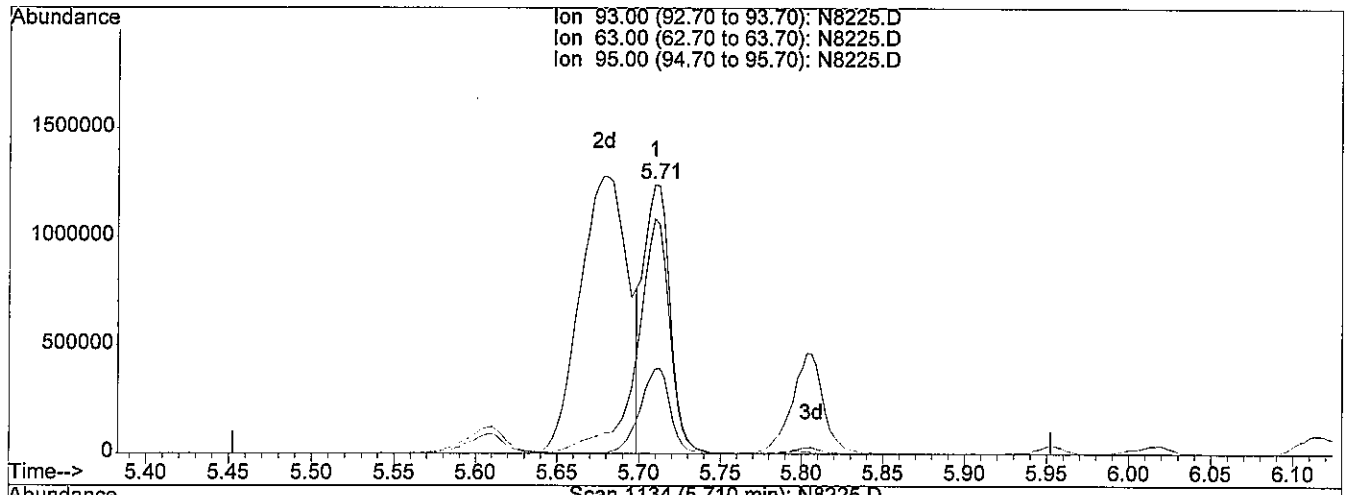
initials JK *date* 9-6-13

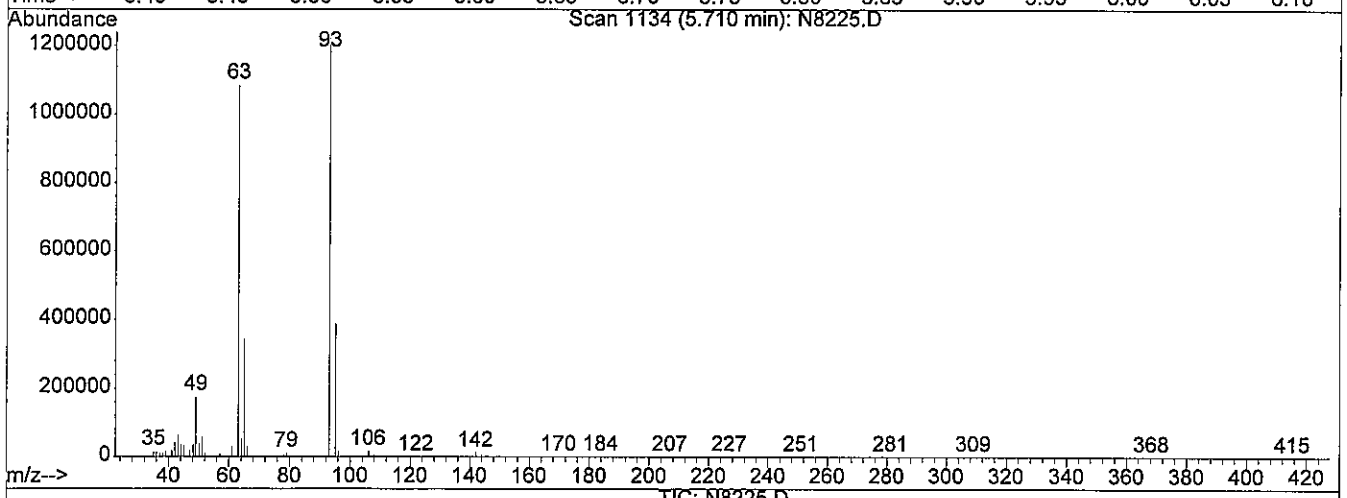
Quantitation Report (Qedit)

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





TIC: N8225.D

(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

3 for

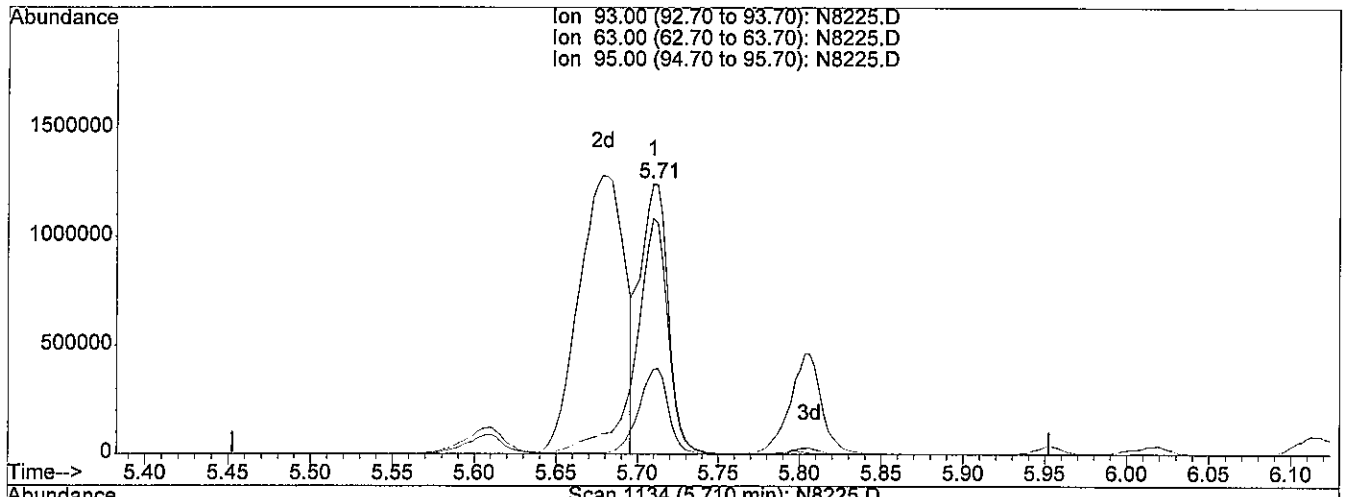
N8225.D 090413S1.M Wed Sep 04 15:02:32 2013

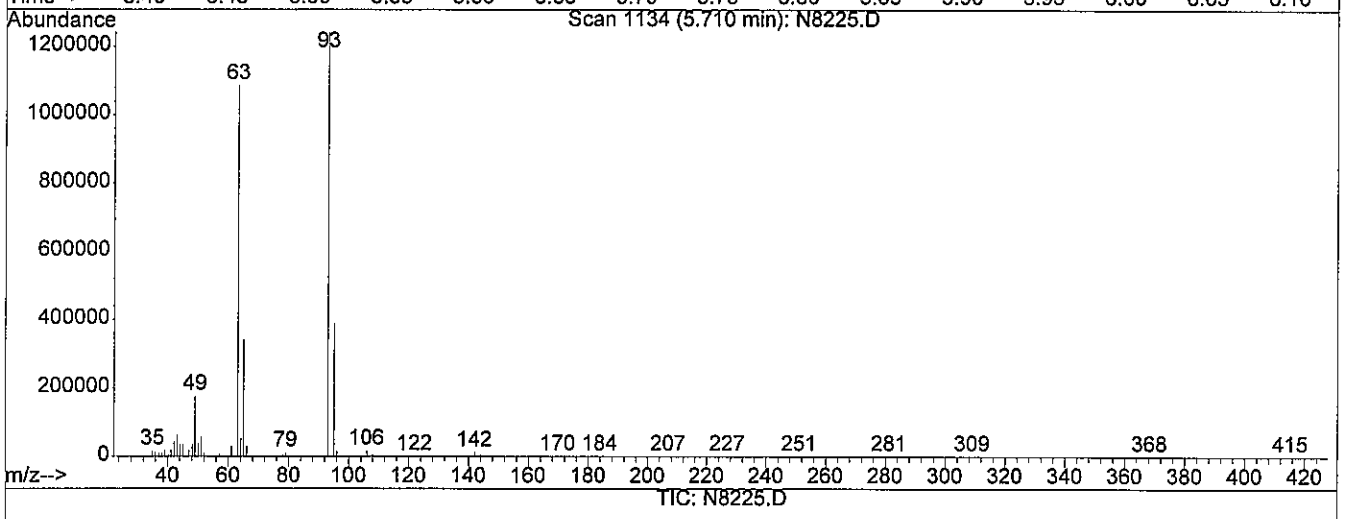
Quantitation Report (Qedit)

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





TIC: N8225.D

(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 _____

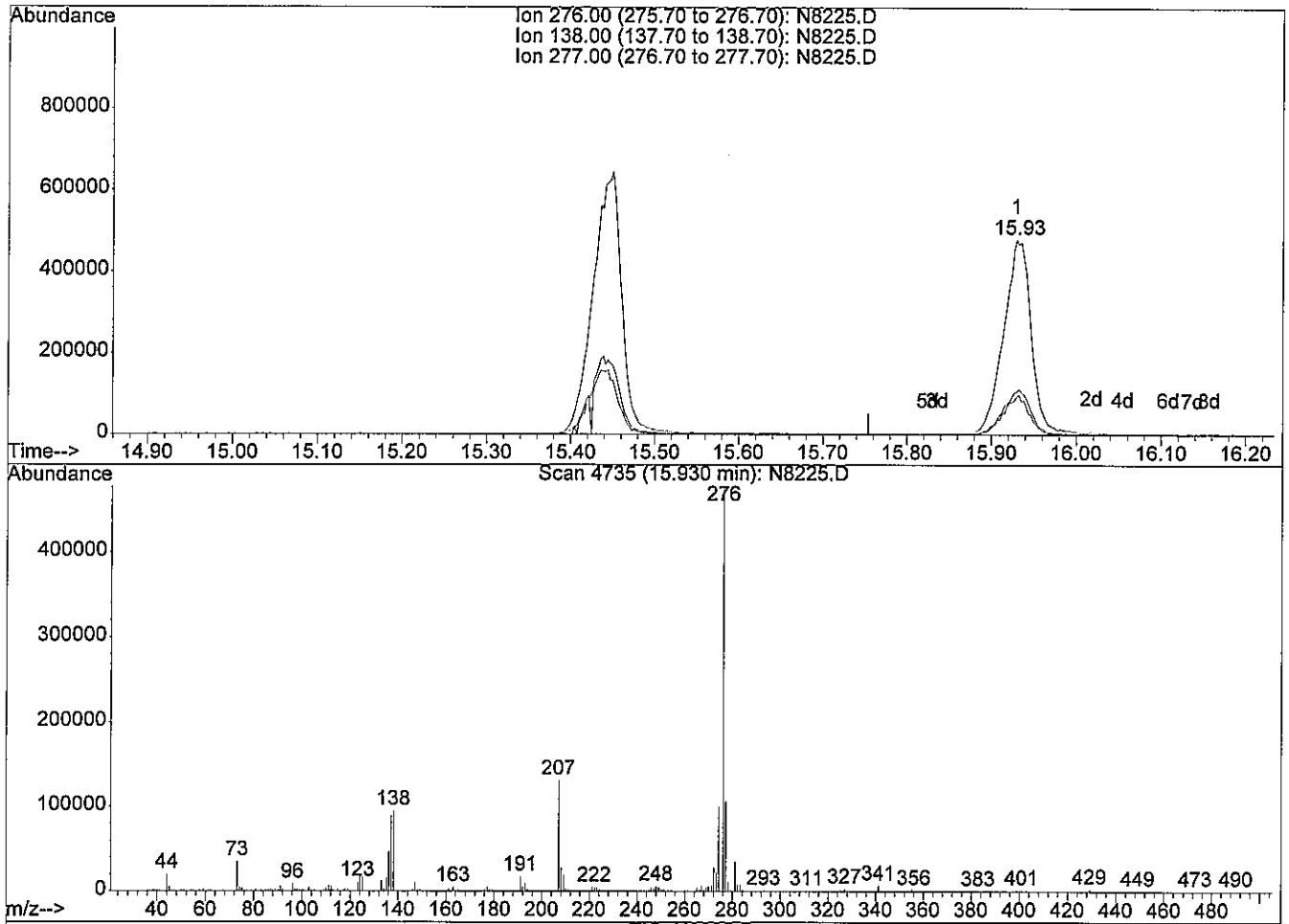
initials JA *date* 9-6-13

N8225.D 090413S1.M Wed Sep 04 15:02:44 2013

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

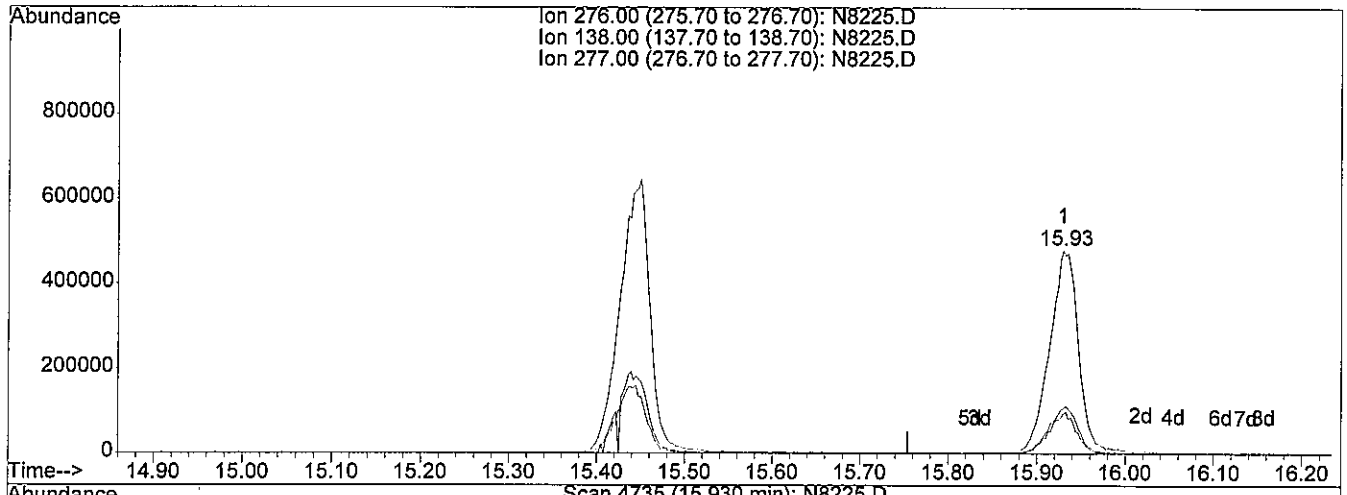
Ion	Exp%	Act%
276.00	100	100
138.00	21.90	19.55
277.00	24.10	23.53
0.00	0.00	0.00

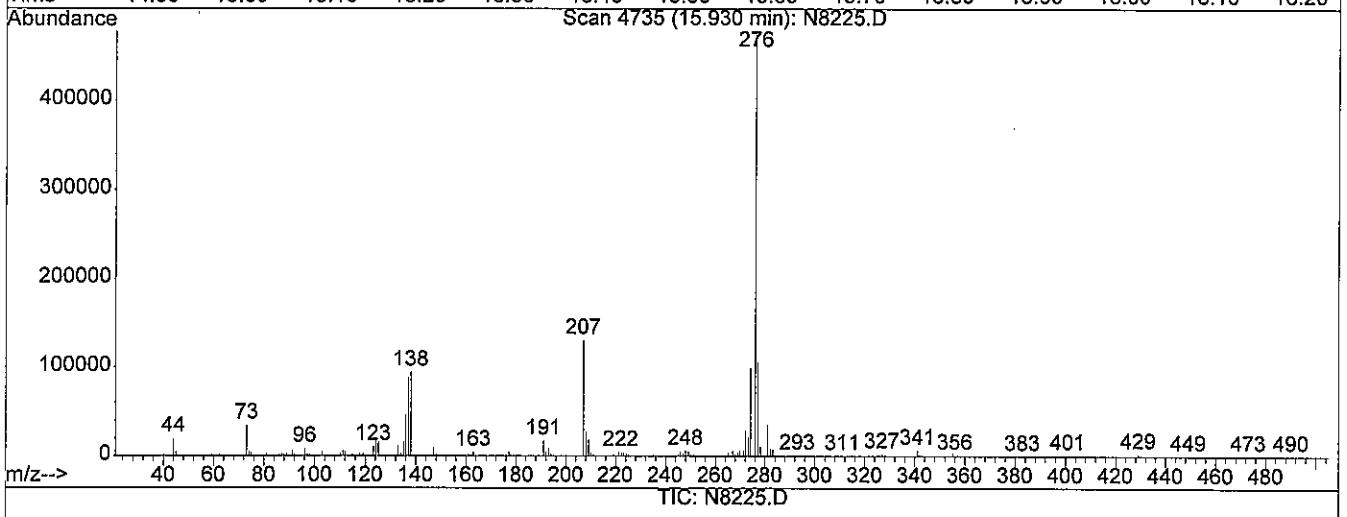
Before

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

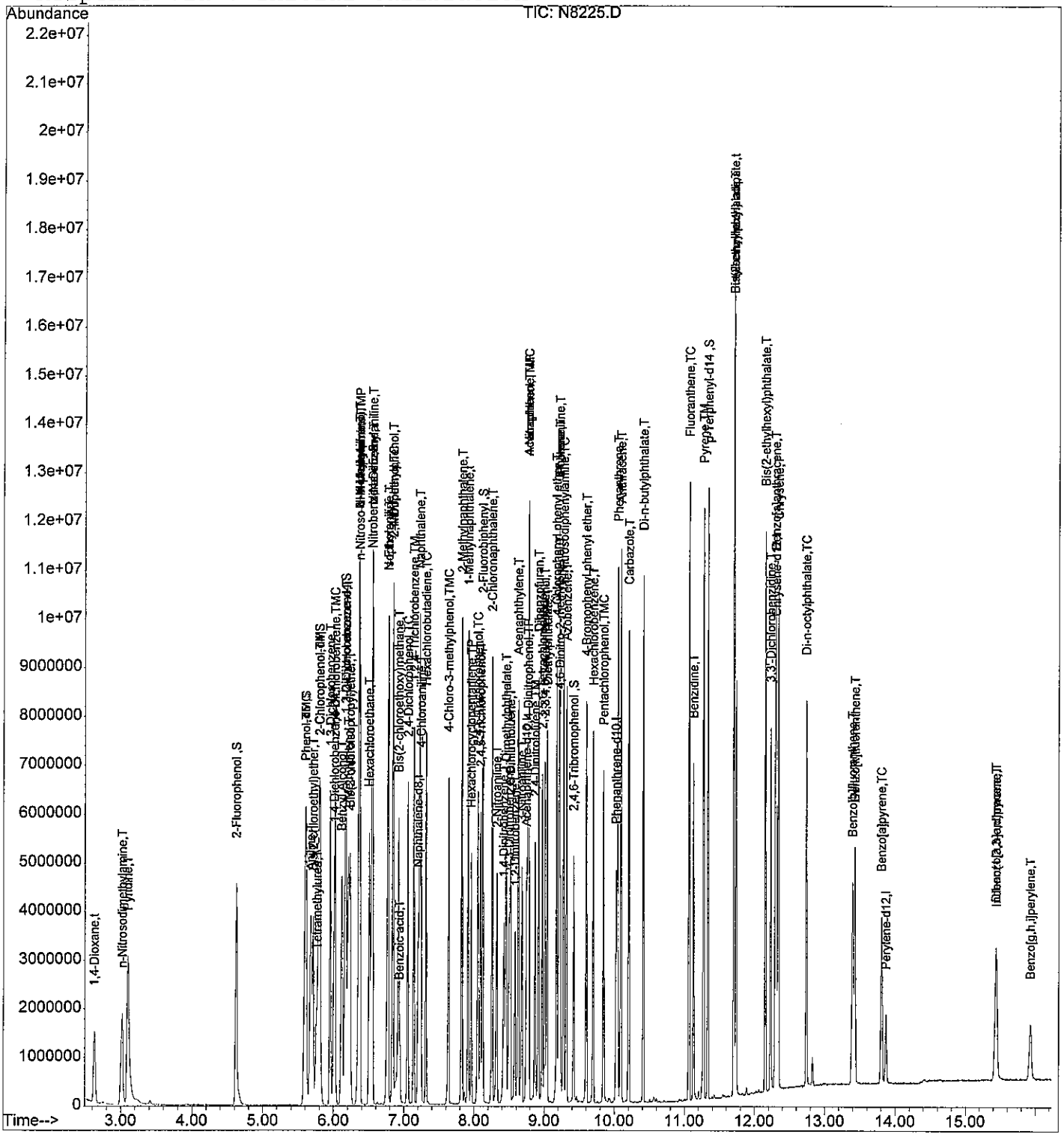
- ☐ missed peak assignment
- ☐ assigned incorrect name to peak
- ☐ over-integrated peak's area
- ☑ under-integrated peak's area
- ☐ other _____

initials JK *date* 9-6-13

N8225.D 090413S1.M Wed Sep 04 15:04:47 2013

Data File : D:\HPCHEM\1\DATA\090413\N8225.D Vial: 9
Acq On : 4 Sep 2013 14:44 Operator: jk SOP 506
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

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



Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\090413\N8226.D
Acq On : 4 Sep 2013 15:09
Sample : ICALSVSTD120
Misc : ST130531-9
MS Integration Params: RTEINT.P
Quant Time: Sep 4 15:30 2013

Vial: 10
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 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	96
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	98
13) 1,3-Dichlorobenzene	5.95	146	2684465	114.26	ng/uL	99
14) 1,4-Dichlorobenzene	6.02	146	2520255	115.13	ng/ul	99
16) 1,2-Dichlorobenzene	6.18	146	2119087	104.23	ng/uL	99
17) Benzyl Alcohol	6.12	108	1632216	123.06	ng/uL	96
18) 2-Methylphenol	6.21	107	1839261	113.29	ng/uL#	90
19) Bis(2-chloroisopropyl)ethe	6.23	45	3966887	110.63	ng/uL#	76
20) n-Nitroso-di-n-propylamine	6.38	70	1572364	101.27	ng/uL	97
21) 3+4-Methylphenol	6.36	108	2117795	106.19	ng/uL	97

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

JC 9-6-13

Quantitation Report (QT Reviewed)

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

Quantitation Report (QT Reviewed)

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

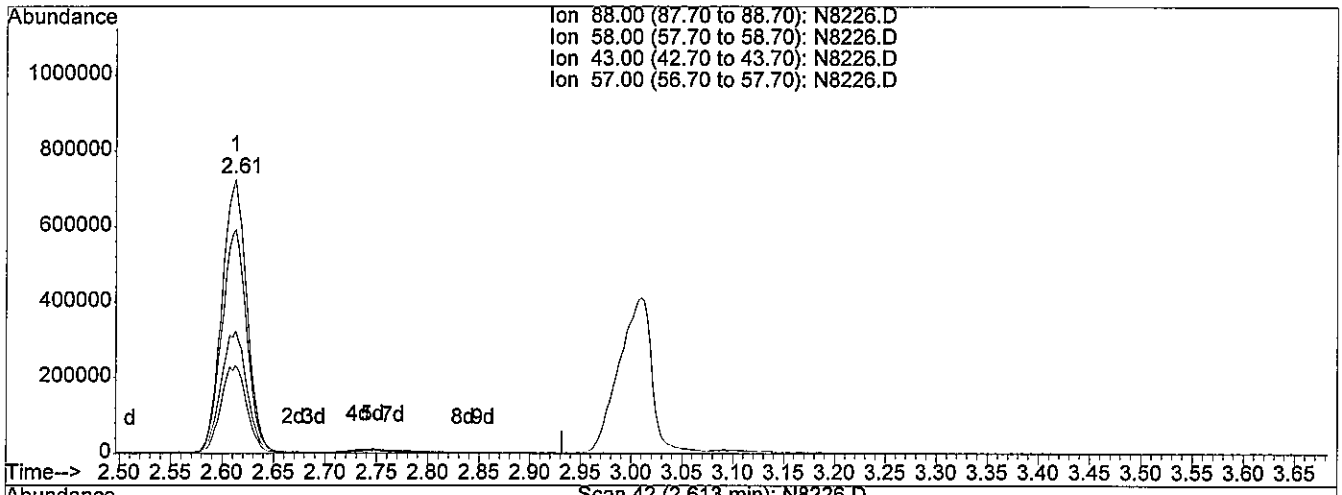
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
67)	Azobenzene	9.32	77	4352962	123.57	ng/uL	96
70)	4,6-Dinitro-2-methylphenol	9.24	198	841893	125.18	ng/uL	94
71)	n-Nitrosodiphenylamine	9.29	169	3620071	111.75	ng/uL	97
72)	4-Bromophenyl phenyl ether	9.61	248	1491268	107.05	ng/uL	96
73)	Hexachlorobenzene	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

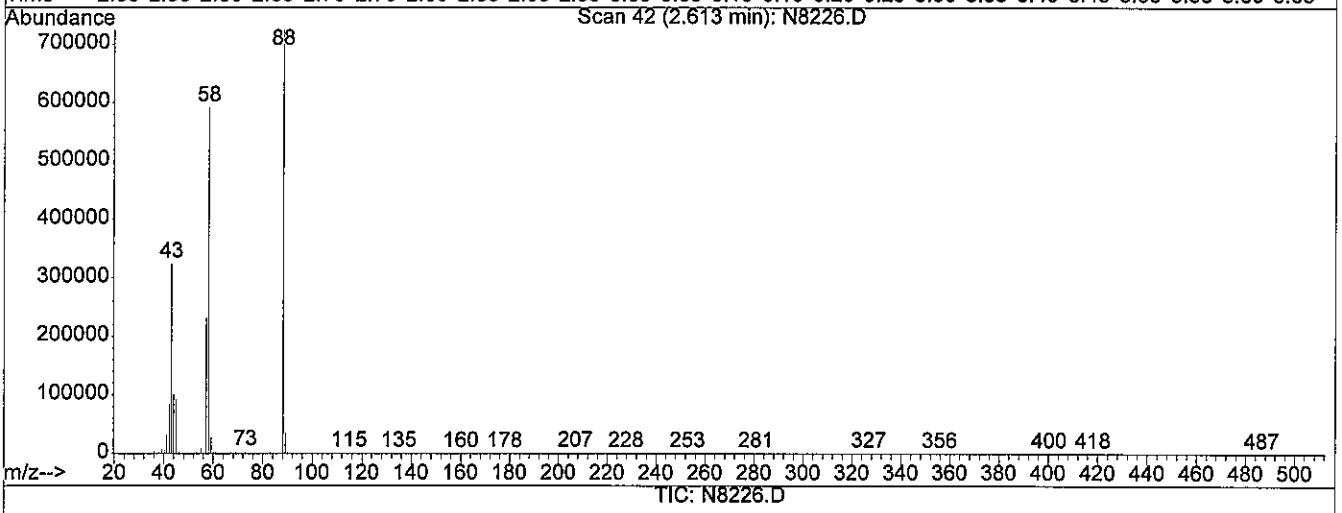
(#) = qualifier out of range (m) = manual integration

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





TIC: N8226.D

(2) 1,4-Dioxane (t)

2.61min 116.97ng/uL

response 1221972

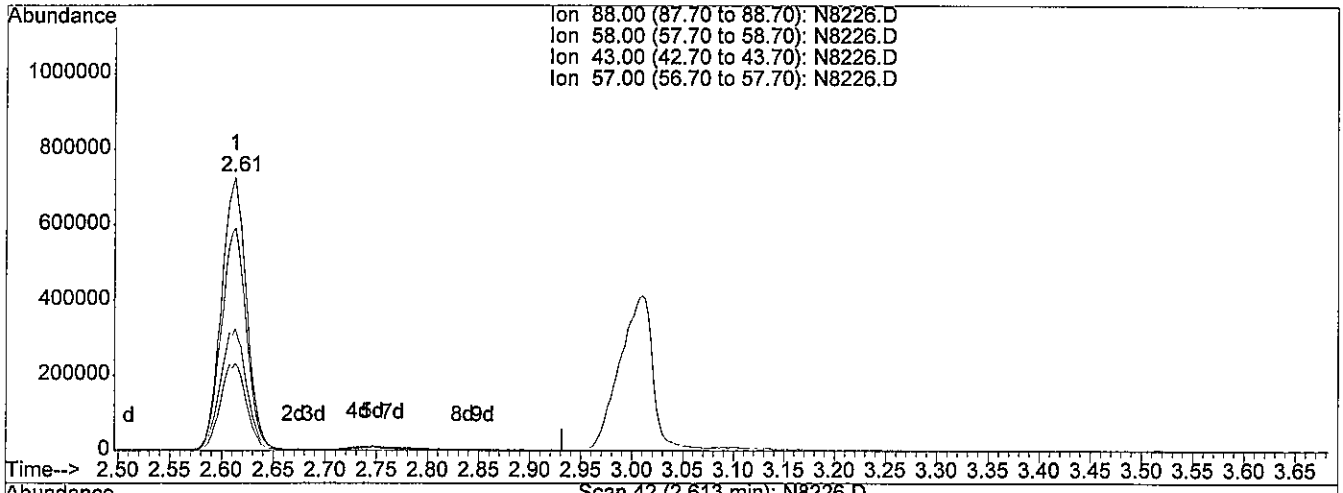
Ion	Exp%	Act%
88.00	100	100
58.00	77.90	82.06
43.00	47.90	46.06
57.00	33.00	33.06

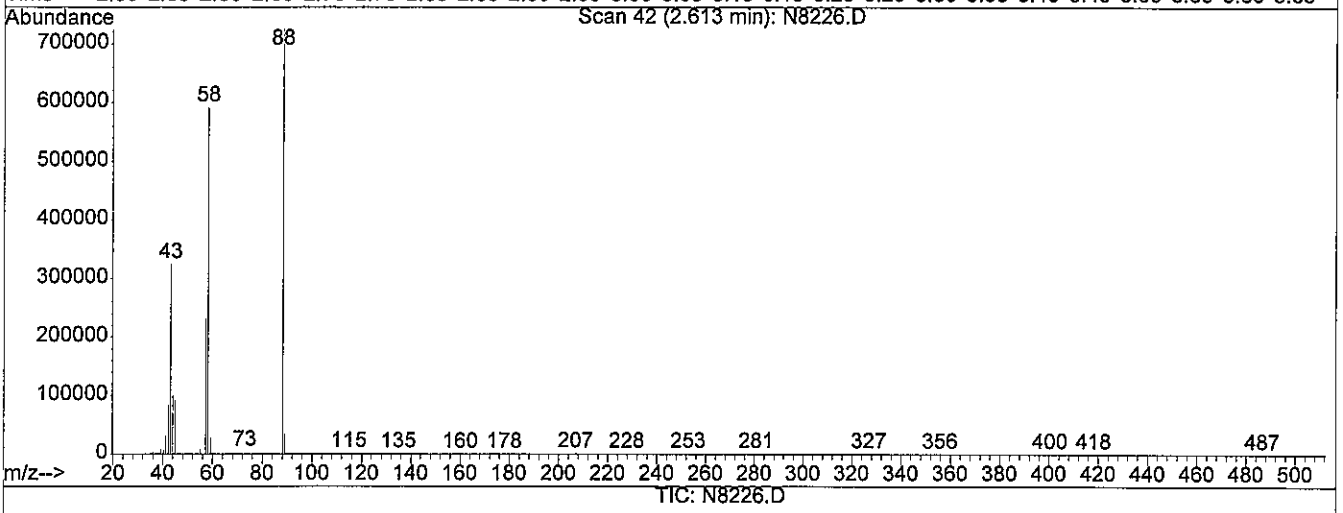
Before

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





TIC: N8226.D

(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 _____

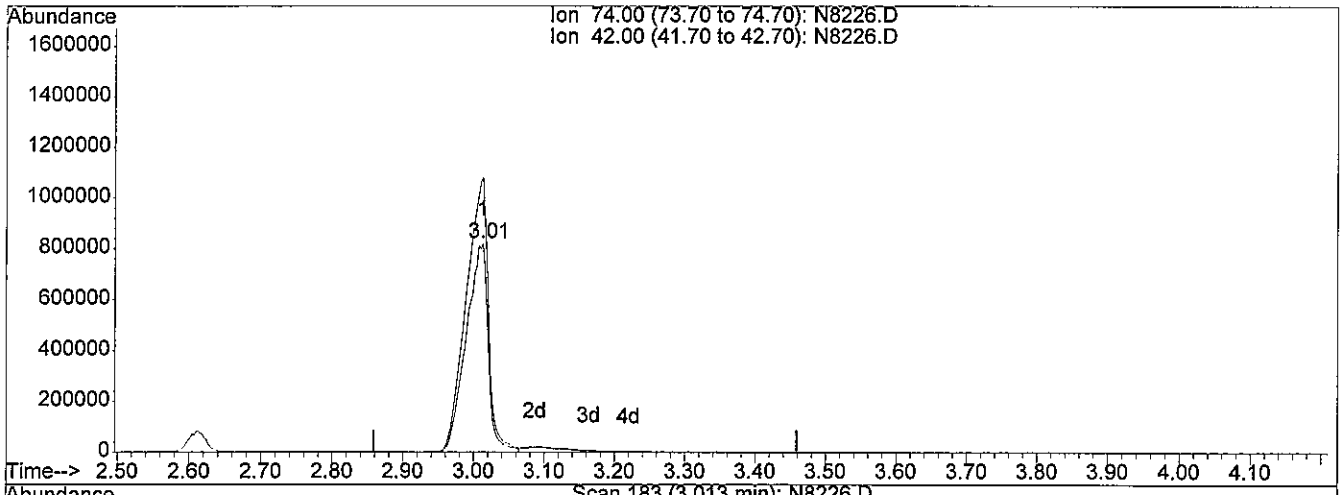
initials JK *date* 9-6-13

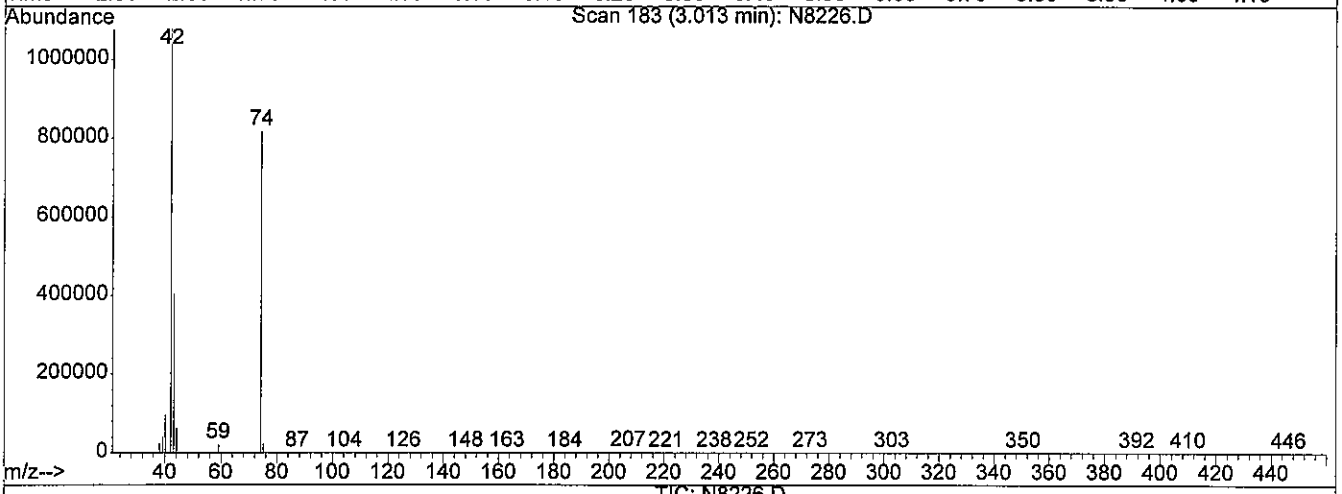
N8226.D 090413S1.M Wed Sep 04 15:28:53 2013

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





TIC: N8226.D

(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

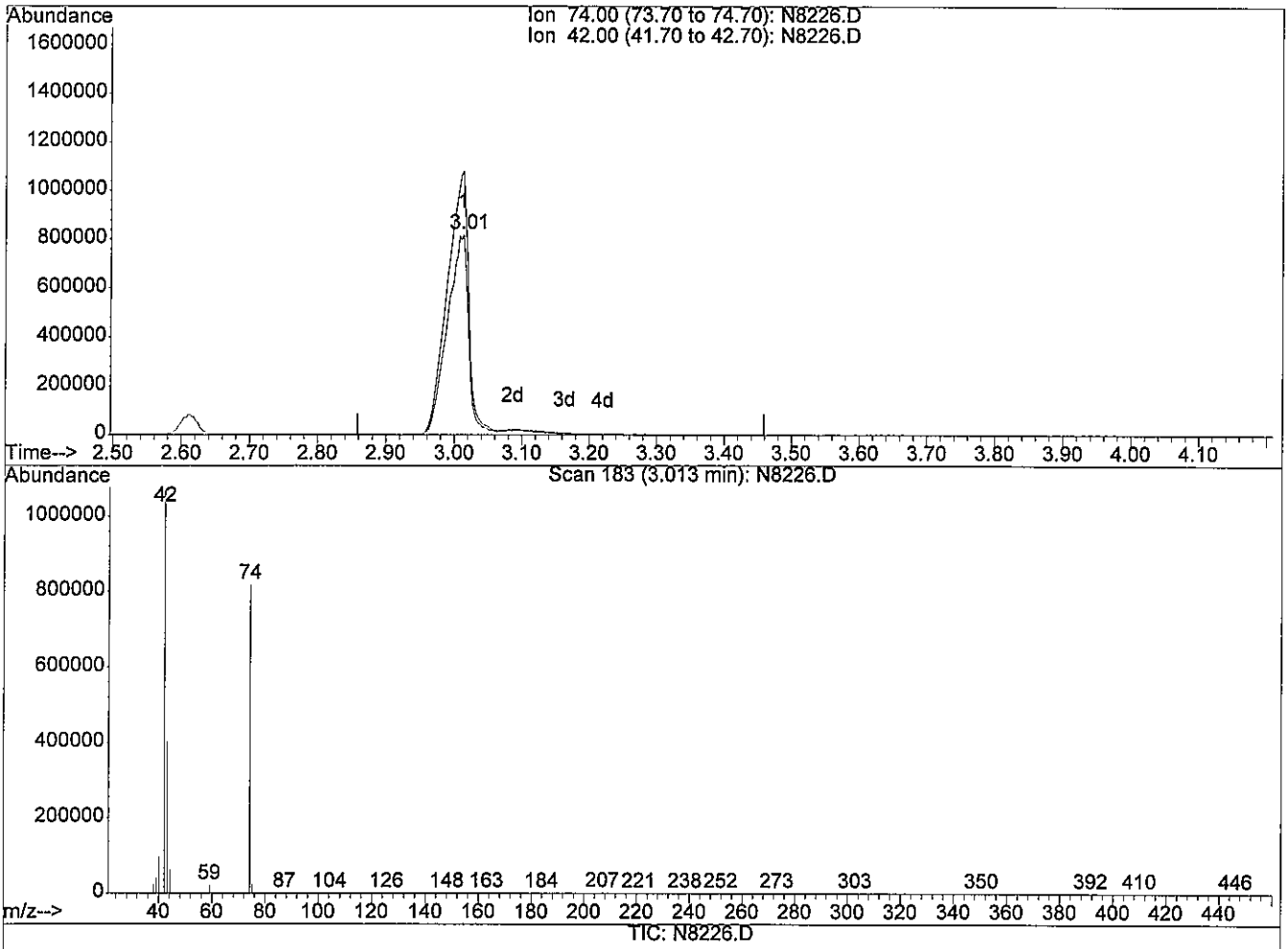
Before

Quantitation Report (Qedit)

Data File : D:\HPCHEM\1\DATA\090413\N8226.D
Acq On : 4 Sep 2013 15:09
Sample : ICALSVSTD120
Misc : ST130531-9
MS Integration Params: RTEINT.P
Quant Time: Sep 4 15:28 2013

Vial: 10
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 15:28:17 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

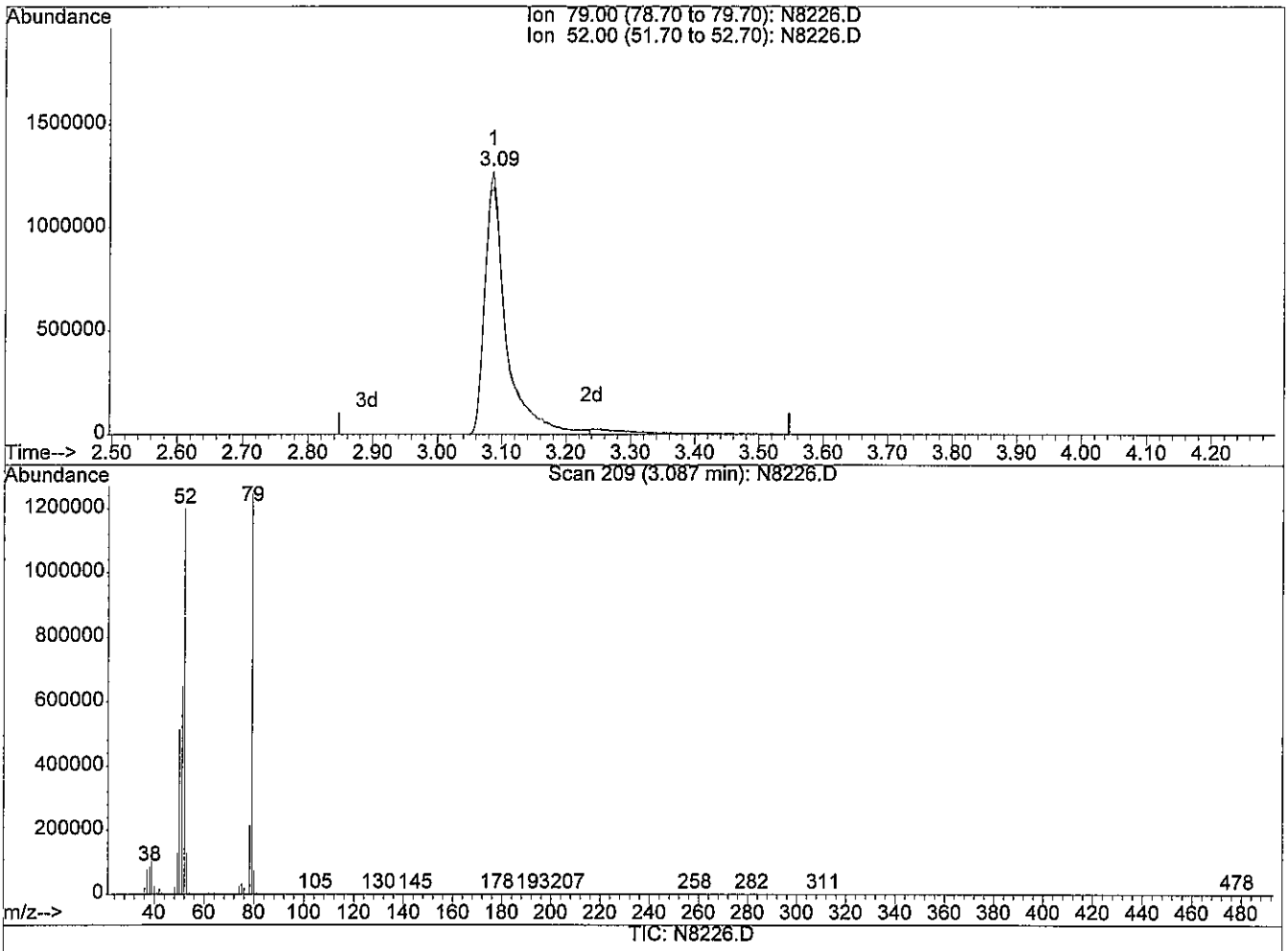
- ☐ missed peak assignment
- ☐ assigned incorrect name to peak
- ☐ over-integrated peak's area
- ☑ under-integrated peak's area
- ☐ other _____

initials YL *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

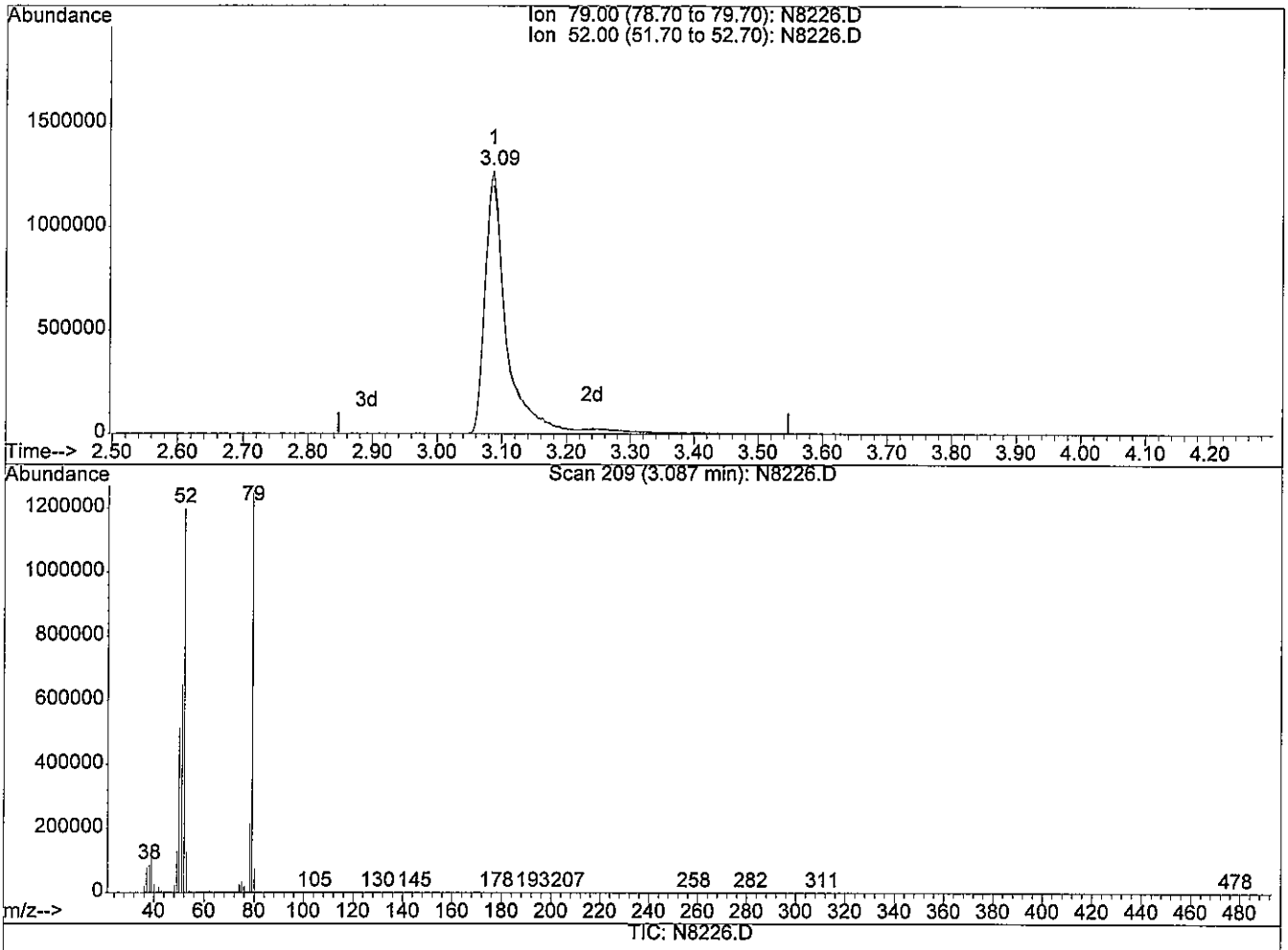
response 2914573

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

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 _____

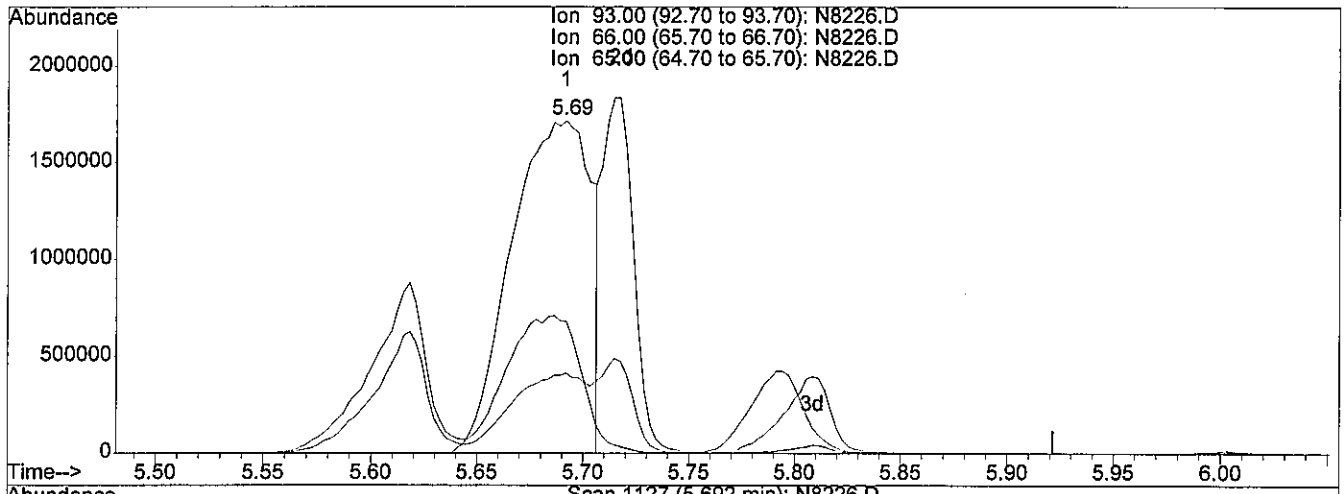
initials JL *date* 9-6-13

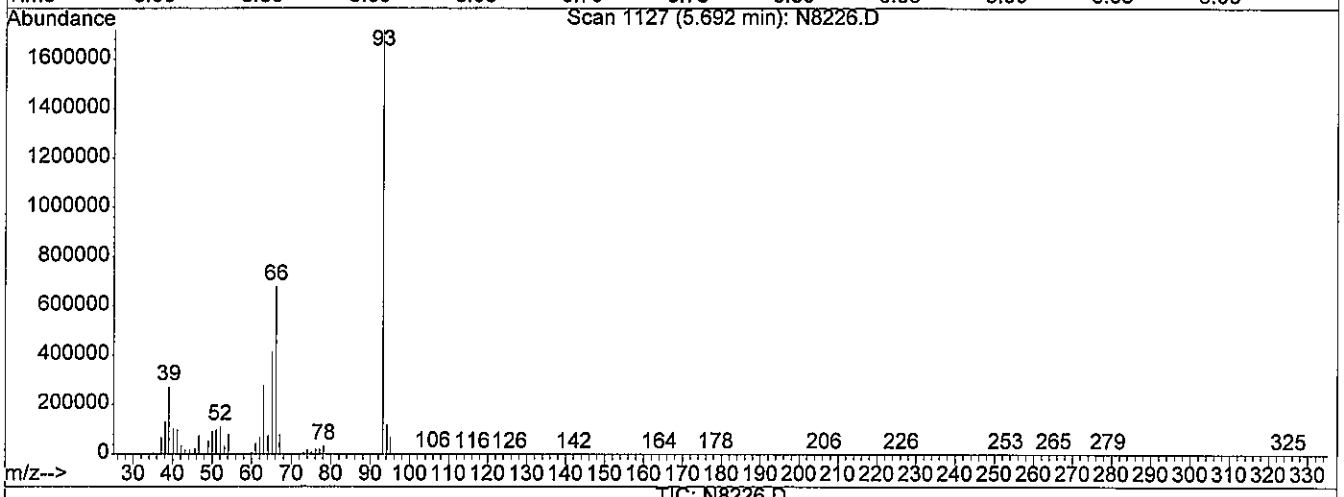
N8226.D 090413S1.M Wed Sep 04 15:29:10 2013

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





TIC: N8226.D

(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

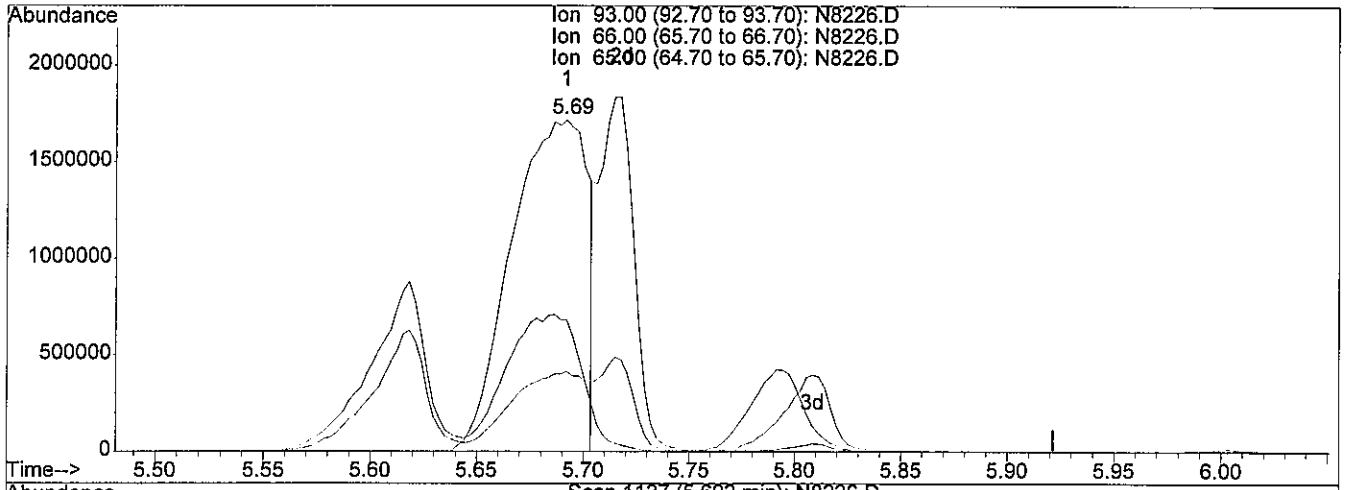
N8226.D 090413S1.M Wed Sep 04 15:29:18 2013

Quantitation Report (Qedit)

Data File : D:\HPCHEM\1\DATA\090413\N8226.D
Acq On : 4 Sep 2013 15:09
Sample : ICALSVSTD120
Misc : ST130531-9
MS Integration Params: RTEINT.P
Quant Time: Sep 4 15:29 2013

Vial: 10
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 15:28:17 2013
Response via : Multiple Level Calibration



TIC: N8226.D

(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 _____

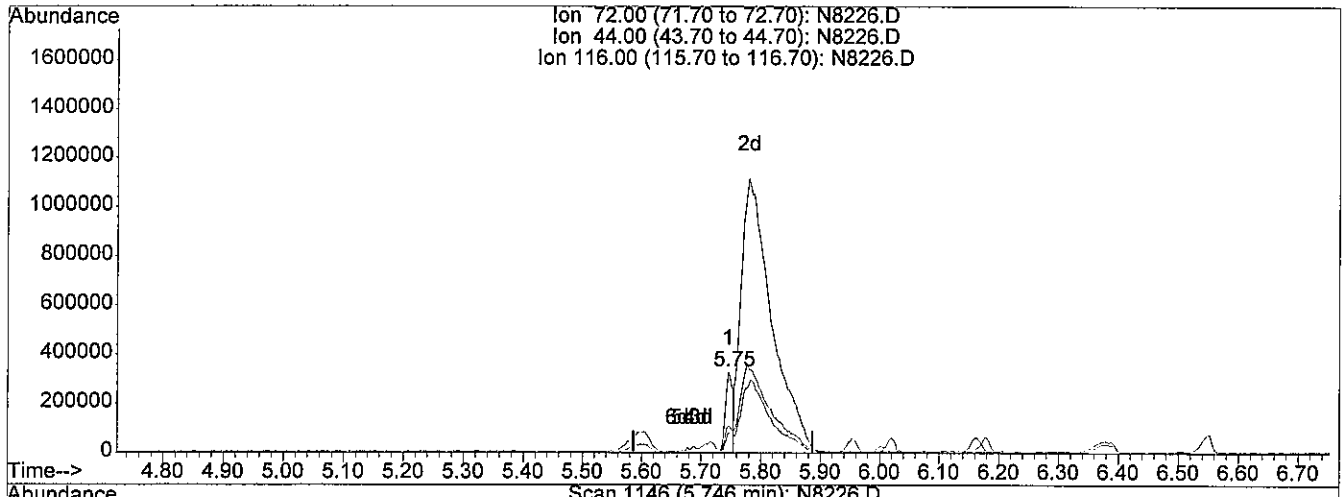
initials JU *date* 9-6-13

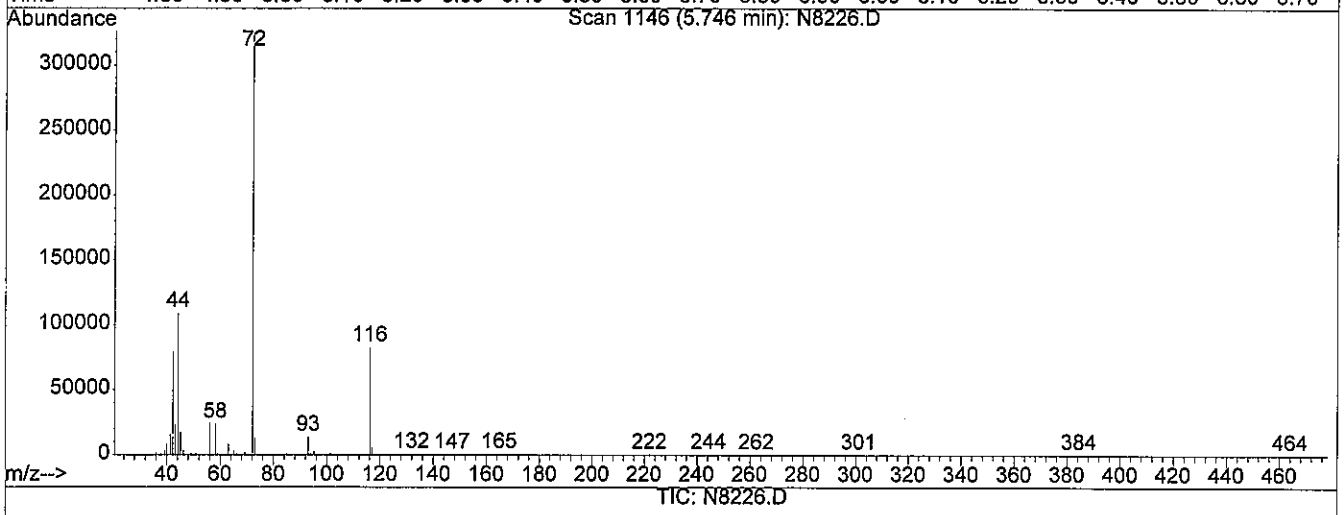
Quantitation Report (Qedit)

Data File : D:\HPCHEM\1\DATA\090413\N8226.D
Acq On : 4 Sep 2013 15:09
Sample : ICALSVSTD120
Misc : ST130531-9
MS Integration Params: RTEINT.P
Quant Time: Sep 4 15:29 2013

Vial: 10
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 15:28:17 2013
Response via : Multiple Level Calibration





TIC: N8226.D

(10) Tetramethylurea (T)

5.75min 8.37ng/uL

response 278014

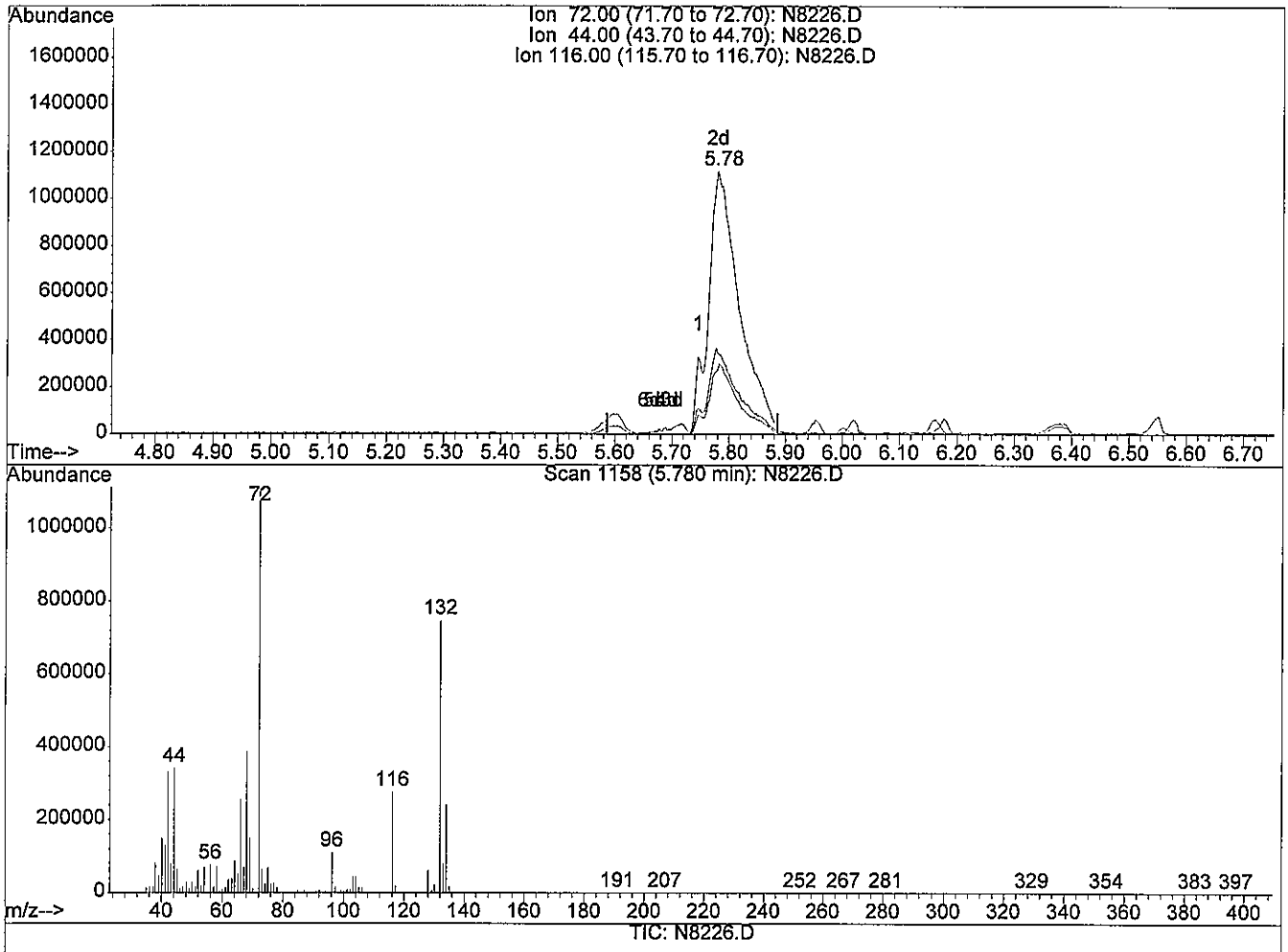
Ion	Exp%	Act%
72.00	100	100
44.00	31.30	31.81
116.00	26.10	25.44
0.00	0.00	0.00

Before

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 _____

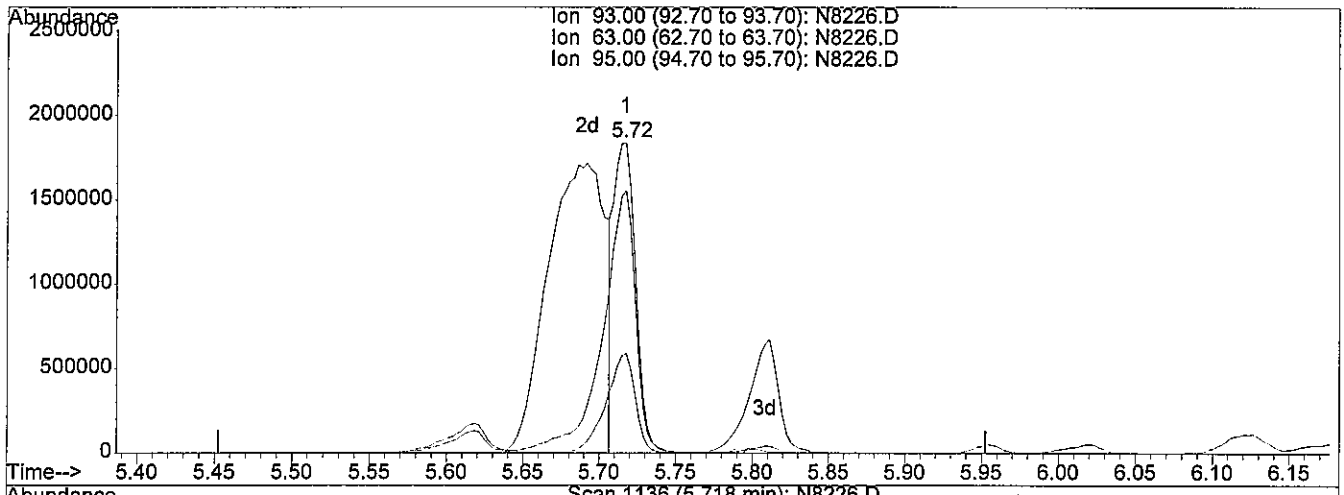
initials ___ *date* 9-6-13

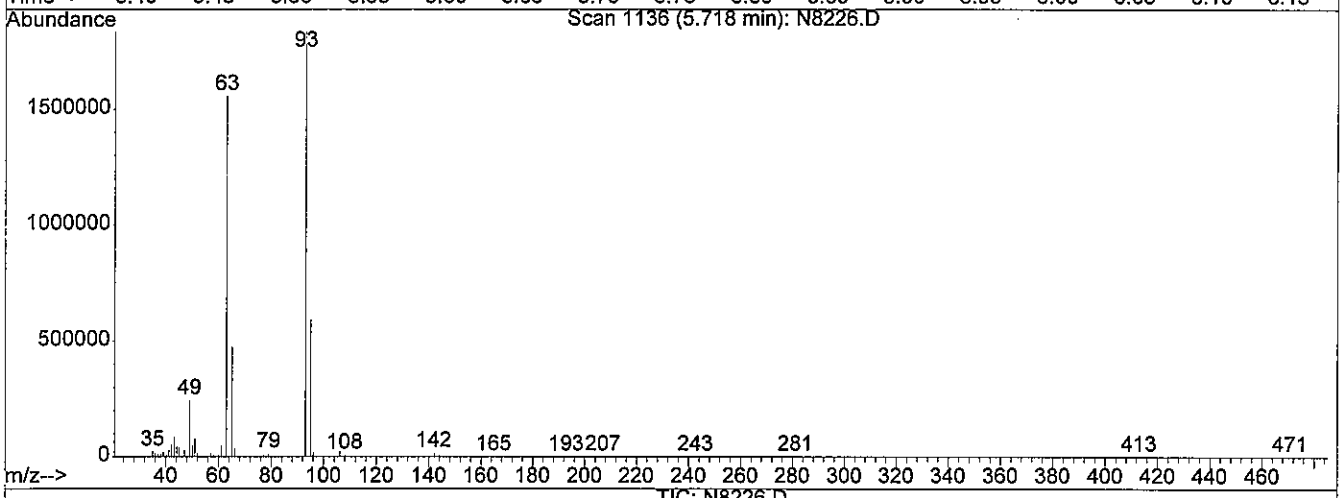
N8226.D 090413S1.M Wed Sep 04 15:29:36 2013

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





TIC: N8226.D

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

5.72min 90.25ng/uL

response 1856913

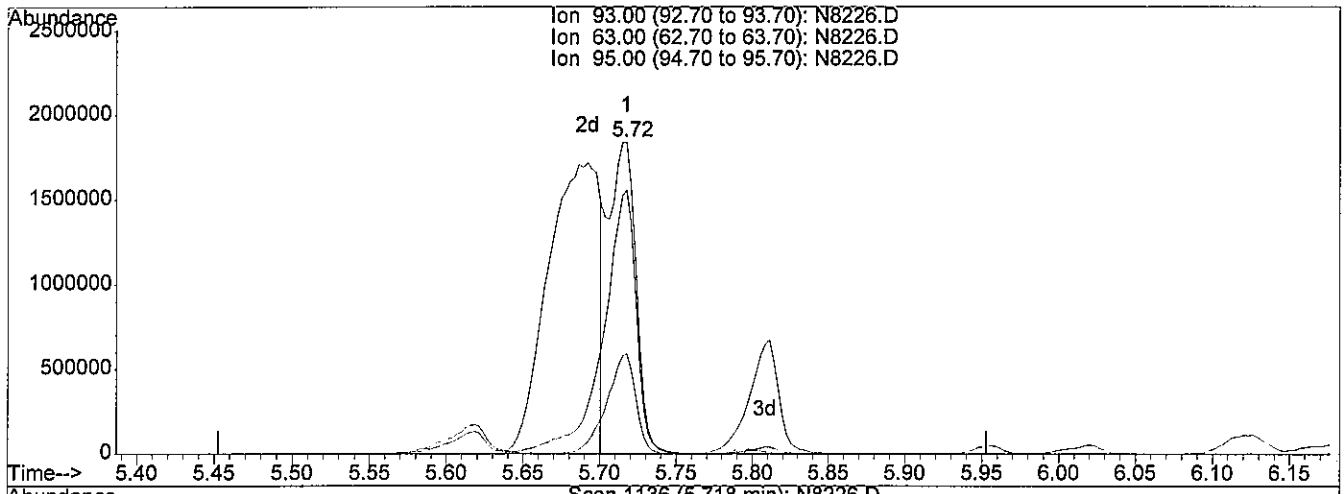
Ion	Exp%	Act%
93.00	100	100
63.00	84.00	126.19#
95.00	31.80	42.28#
0.00	0.00	0.00

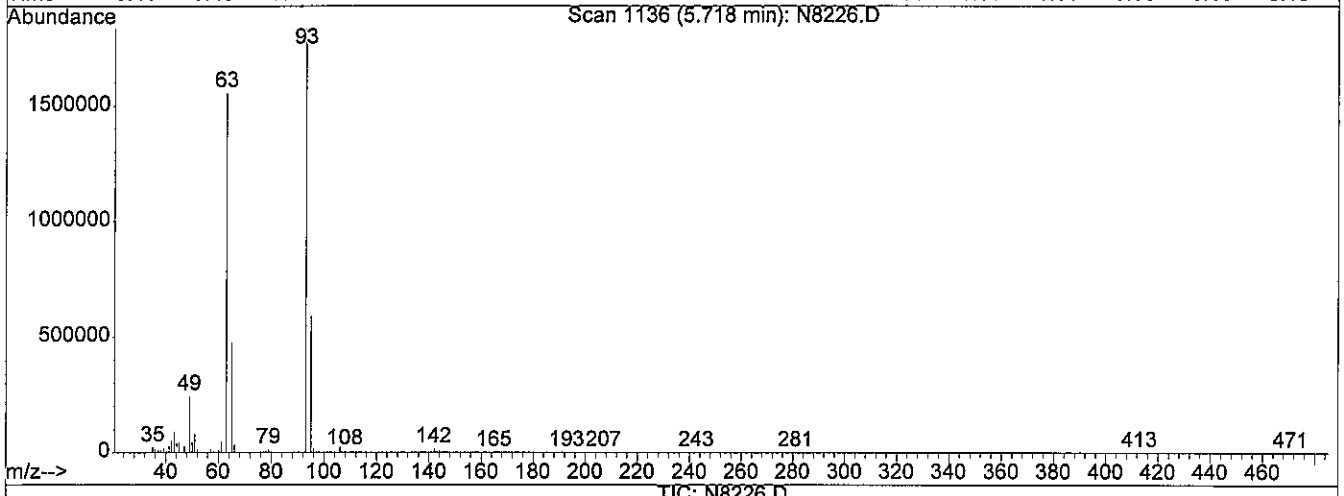
before

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





TIC: N8226.D

(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

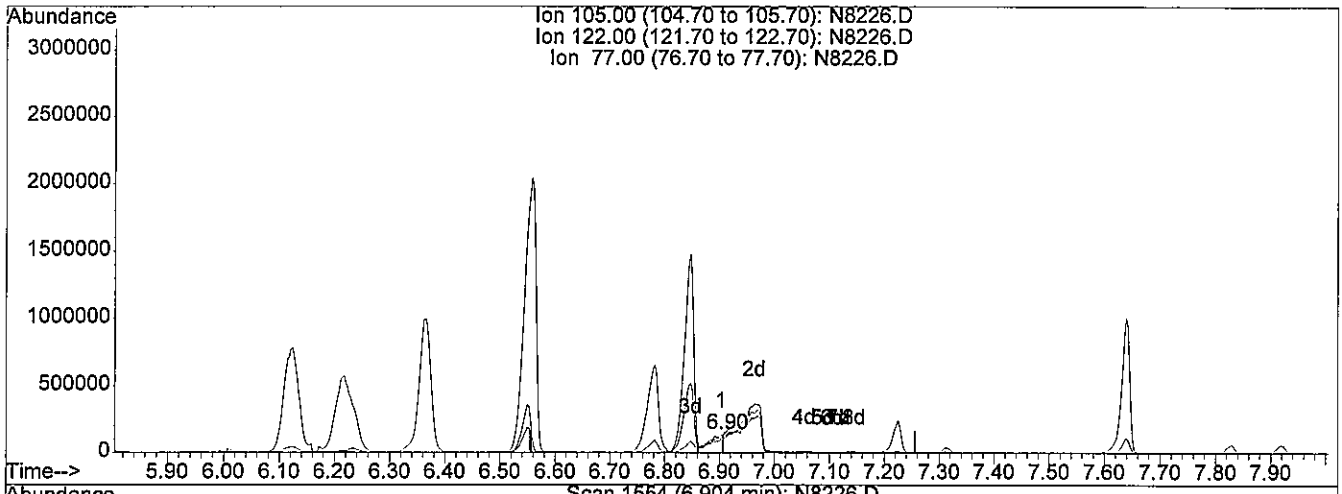
- ☐ missed peak assignment
- ☐ assigned incorrect name to peak
- ☐ over-integrated peak's area
- ☑ under-integrated peak's area
- ☐ other _____

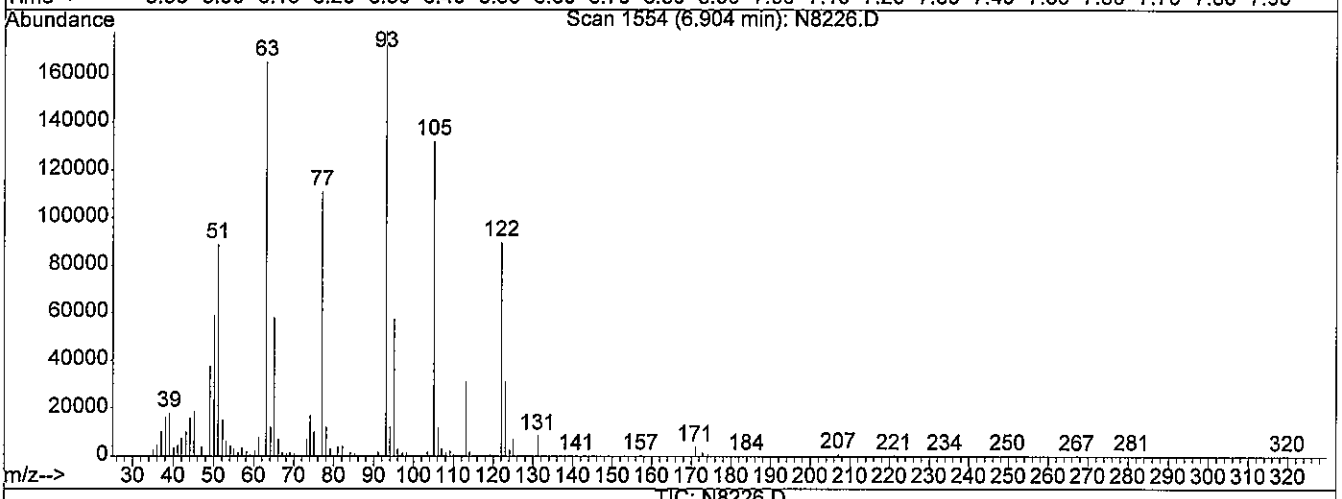
initials JA *date* 5-6-14

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





TIC: N8226.D

(33) Benzoic acid (T)

6.90min 34.30ng/uL

response 250419

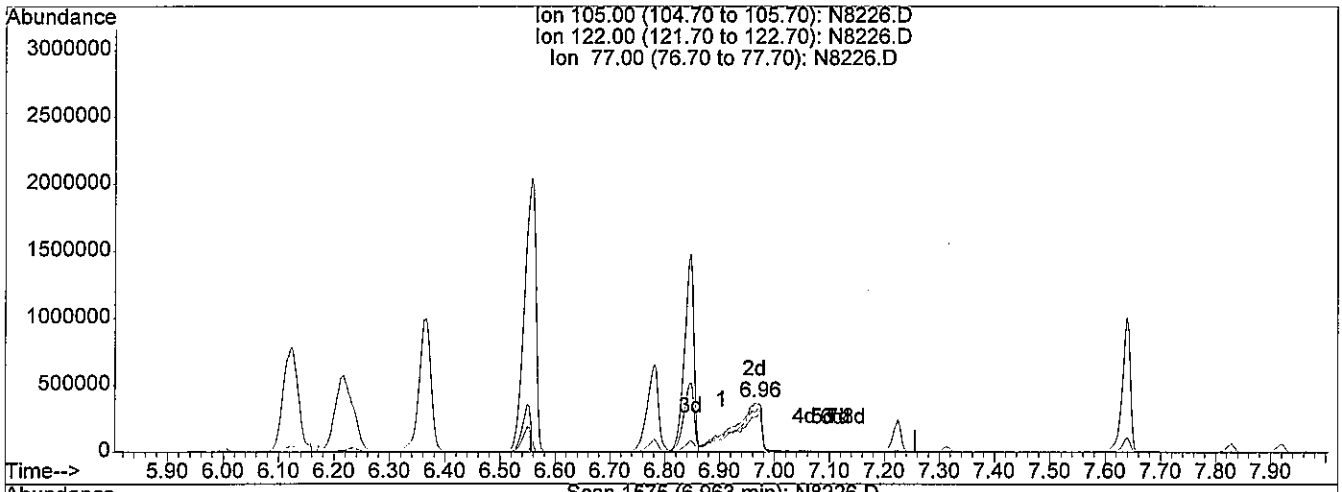
Ion	Exp%	Act%
105.00	100	100
122.00	73.60	174.12#
77.00	82.40	0.00#
0.00	0.00	0.00

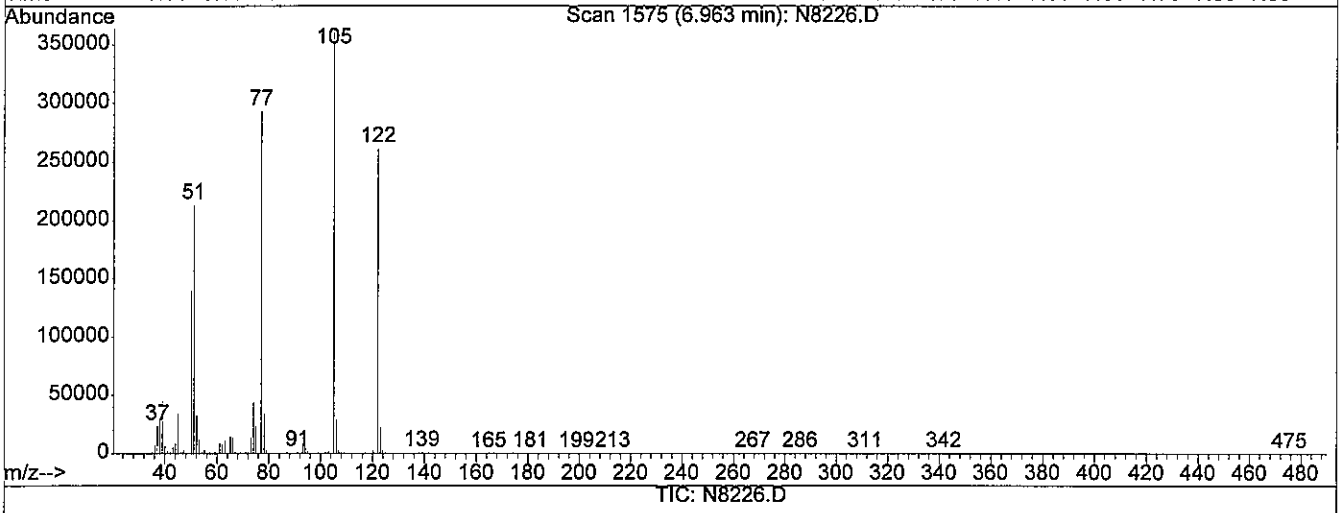
3 of 5

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





TIC: N8226.D

(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

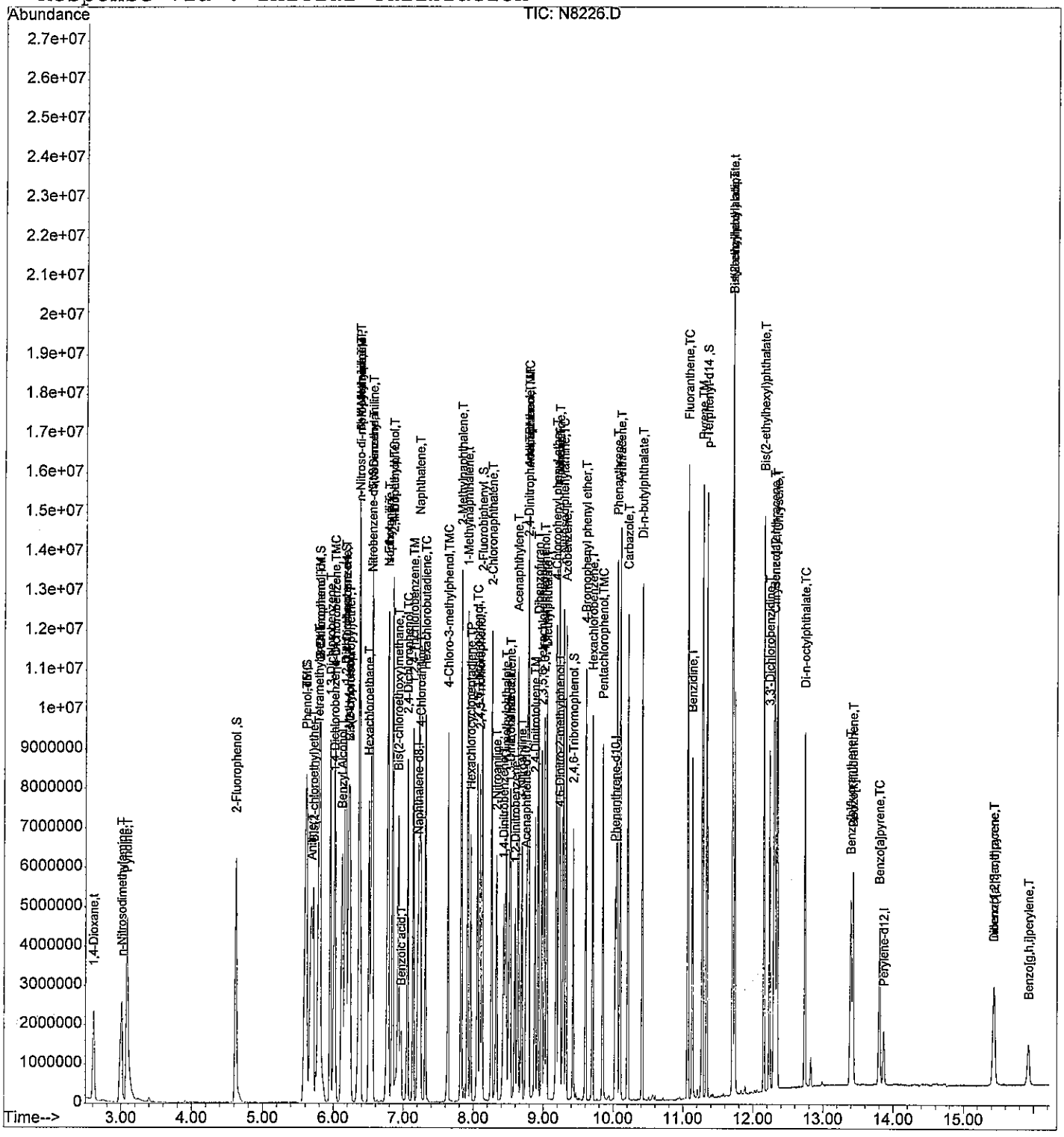
- ☐ missed peak assignment
- ☐ assigned incorrect name to peak
- ☐ over-integrated peak's area
- ☑ under-integrated peak's area
- ☐ other _____

initials JK *date* 9-6-13

Quantitation Report

Data File : D:\HPCHEM\1\DATA\090413\N8226.D Vial: 10
Acq On : 4 Sep 2013 15:09 Operator: jk SOP 506
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

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



Quantitation Report (QT Reviewed)

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

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)ethe	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 Page 1

9/11
9-6-13

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 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 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

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 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 06 16:39:44 2013
Response via : Initial Calibration
DataAcq Meth : 090413S1

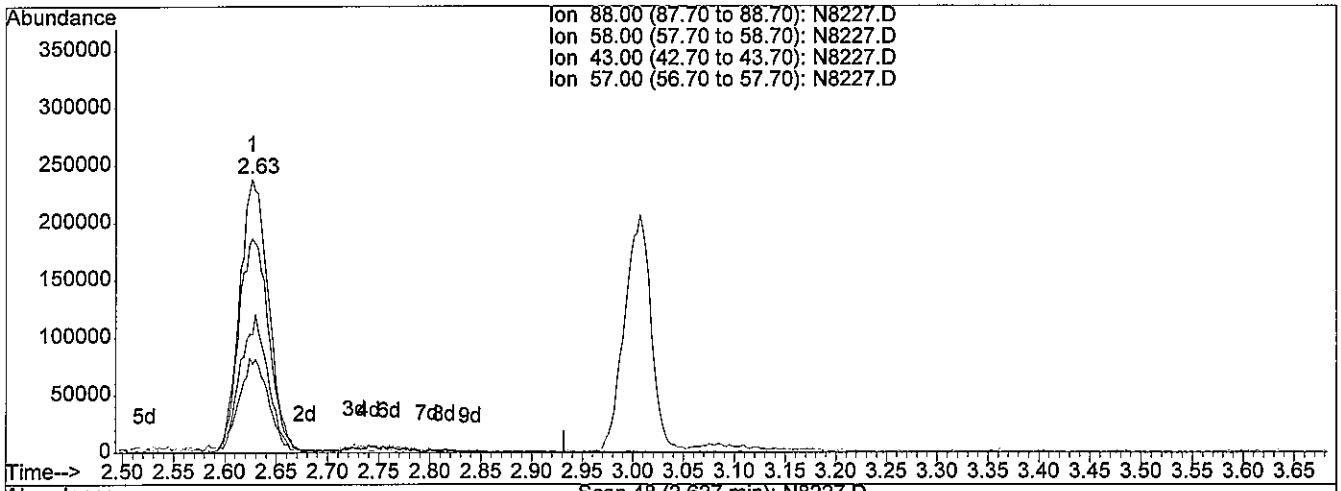
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
67)	Azobenzene	9.32	77	1758842	51.08	ng/uL	98
70)	4,6-Dinitro-2-methylphenol	9.22	198	324907	55.75	ng/uL	99
71)	n-Nitrosodiphenylamine	9.27	169	1364765	48.61	ng/uL	100
72)	4-Bromophenyl phenyl ether	9.60	248	609580	50.50	ng/uL	98
73)	Hexachlorobenzene	9.70	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

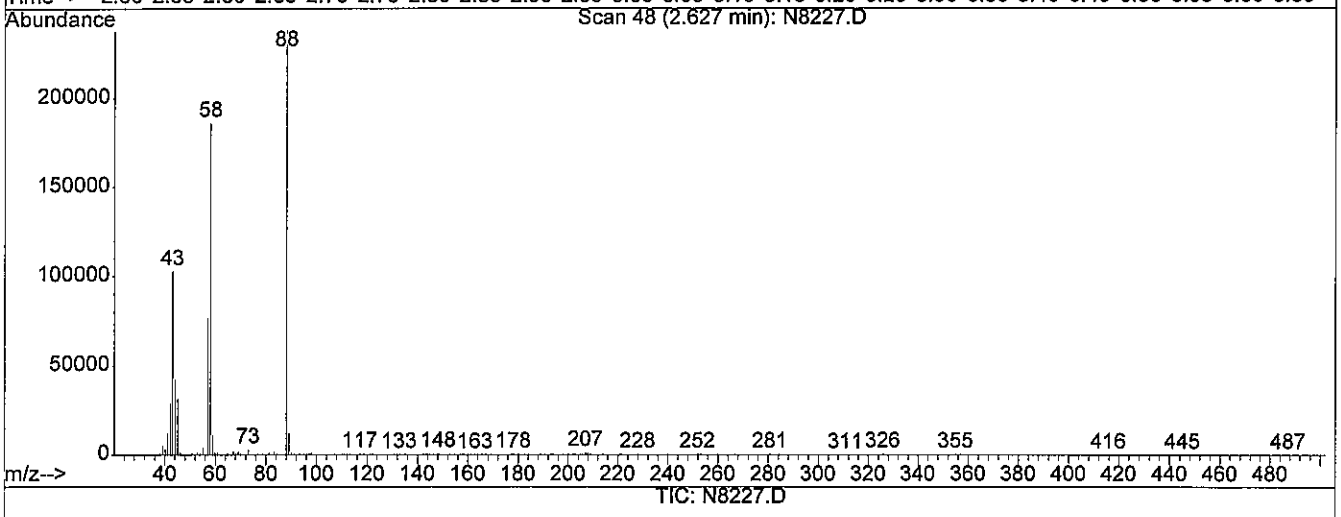
(#) = qualifier out of range (m) = manual integration

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 16:39 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





TIC: N8227.D

(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

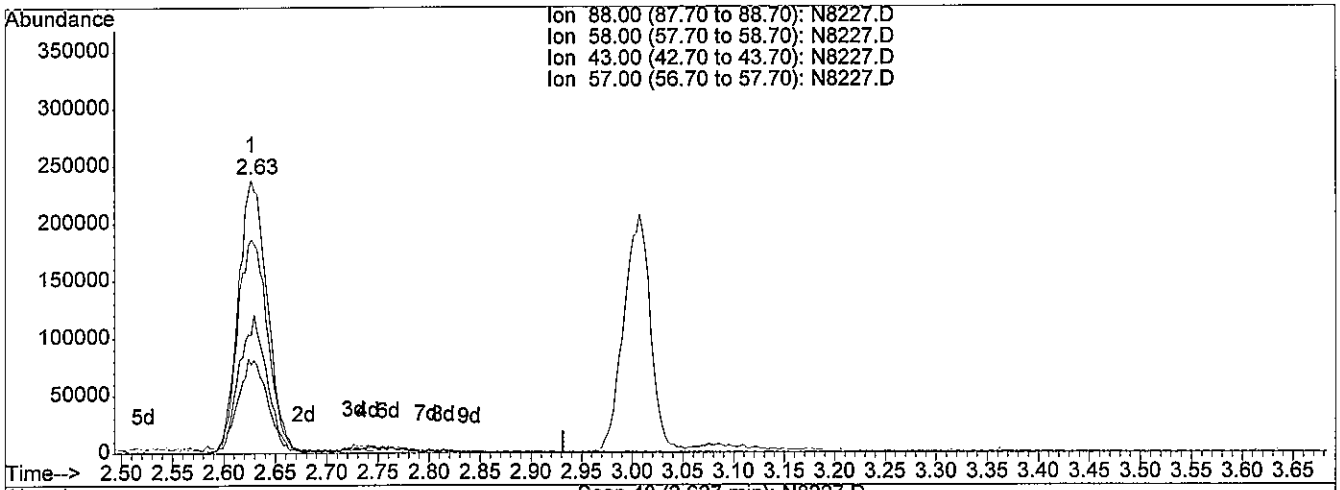
Sefar

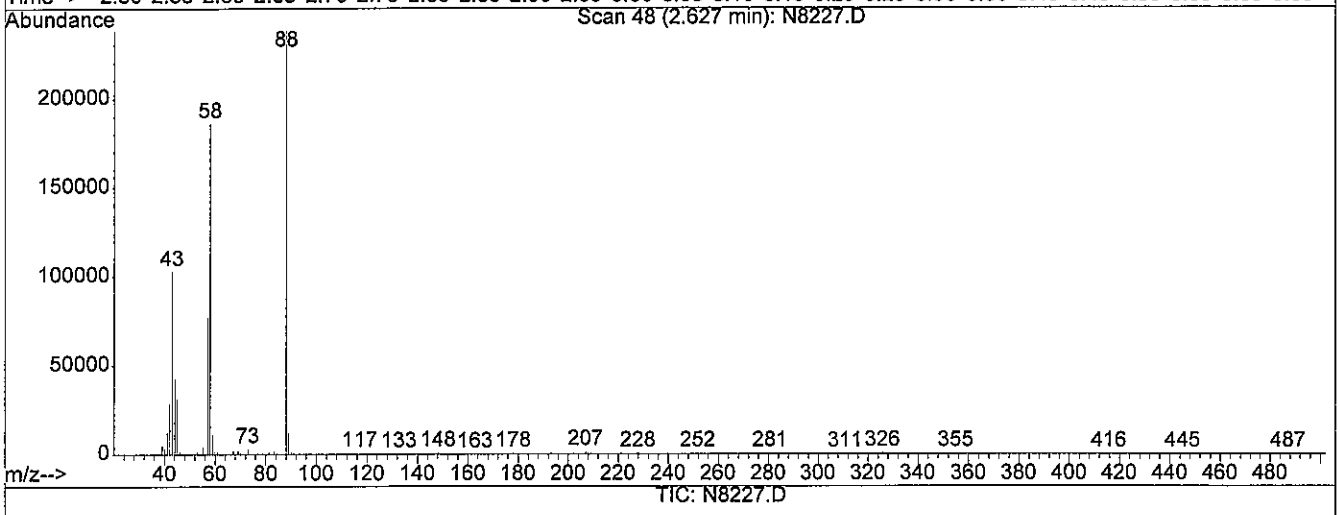
N8227.D 090413S1.M Fri Sep 06 16:45:01 2013

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





TIC: N8227.D

(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 _____

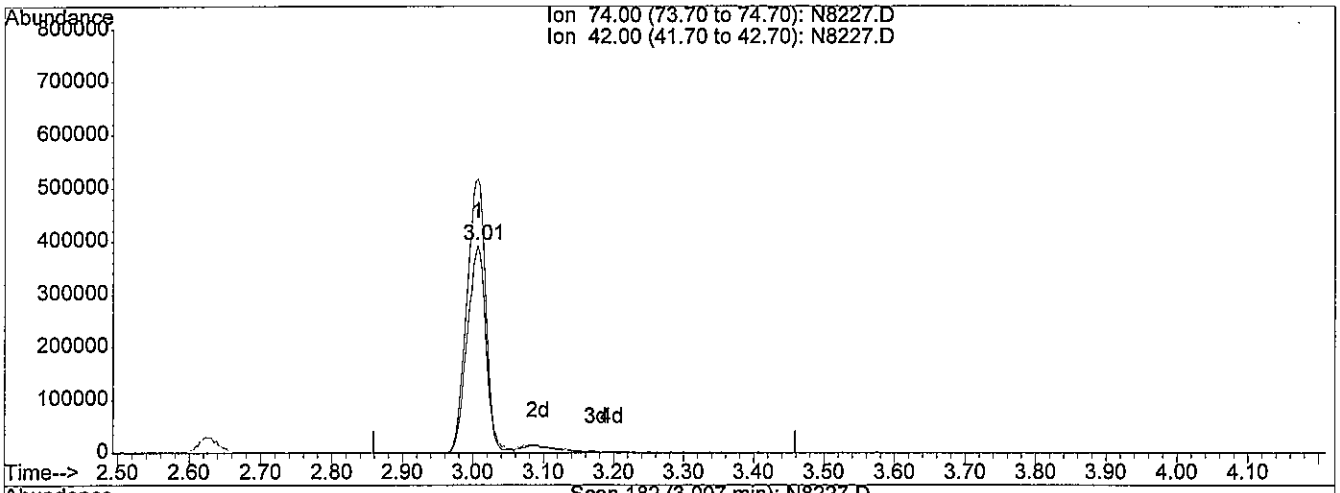
initials JK *date* 9-6-13

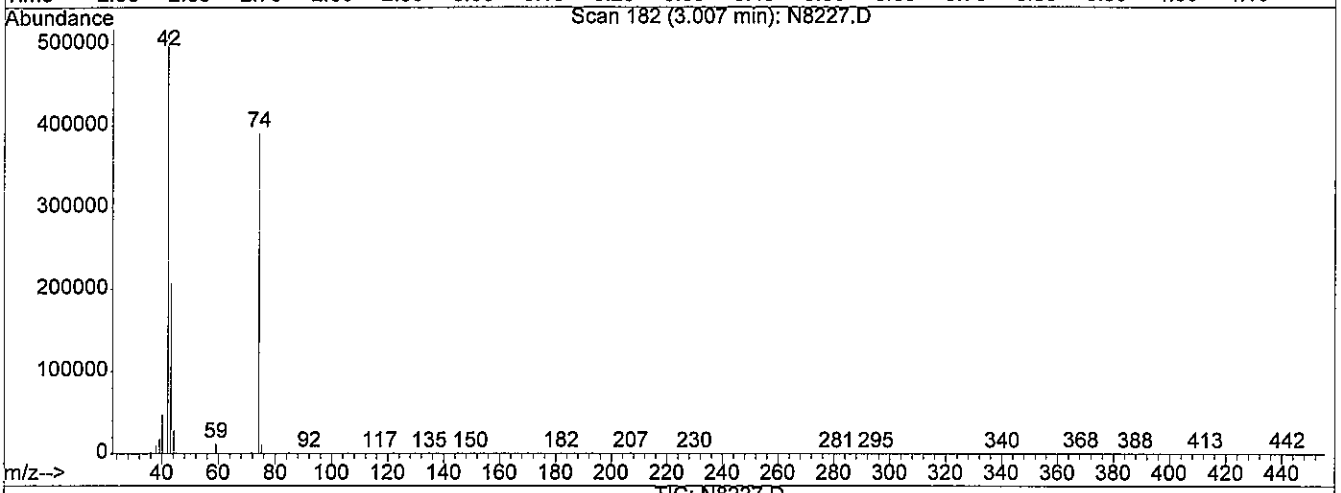
N8227.D 090413S1.M Fri Sep 06 16:45:09 2013

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





TIC: N8227.D

(3) n-Nitrosodimethylamine (T)

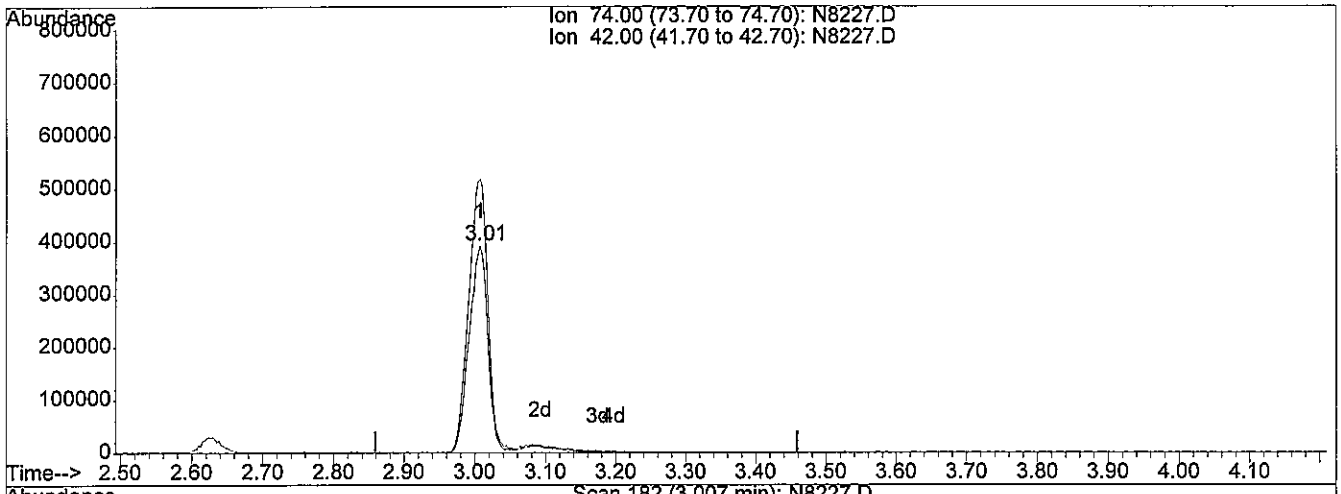
3.01min 53.62ng/uL

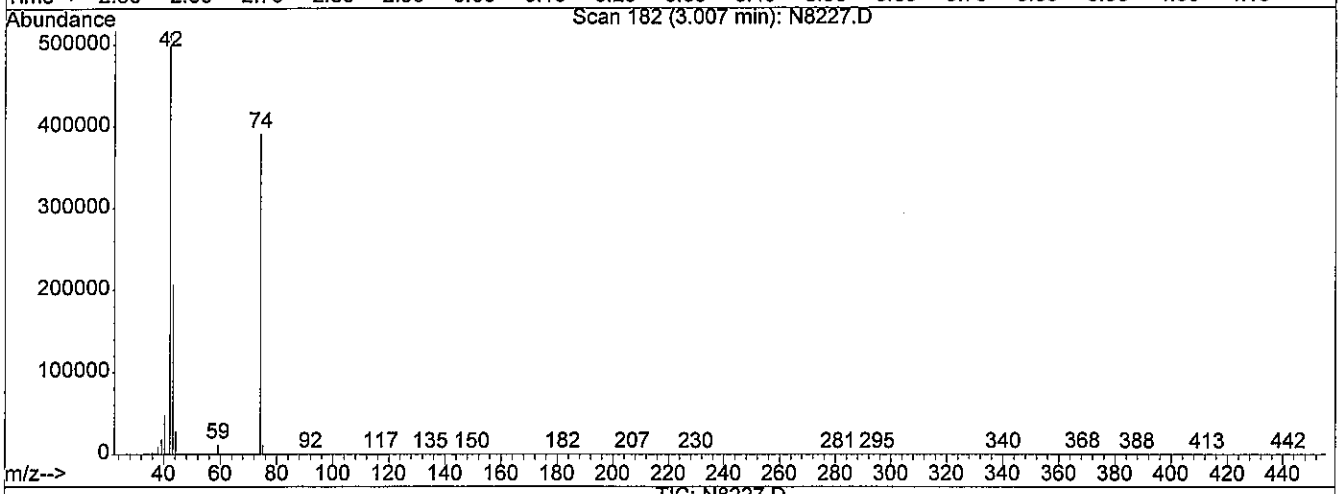
response 720274

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

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





TIC: N8227.D

(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 _____

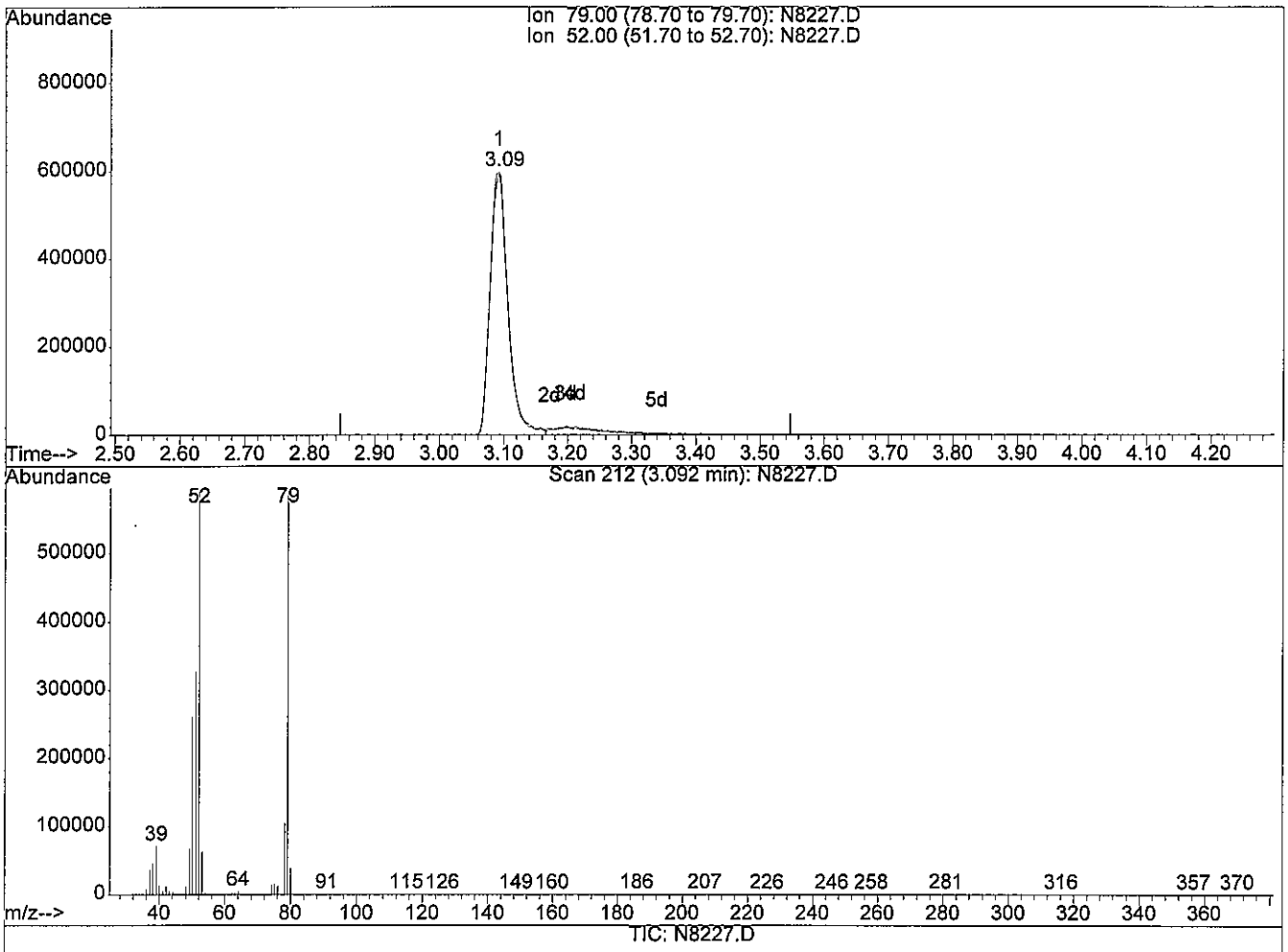
initials JL *date* 9-6-13

N8227.D 090413S1.M Fri Sep 06 16:45:16 2013

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



(4) Pyridine (T)

3.09min 51.22ng/uL

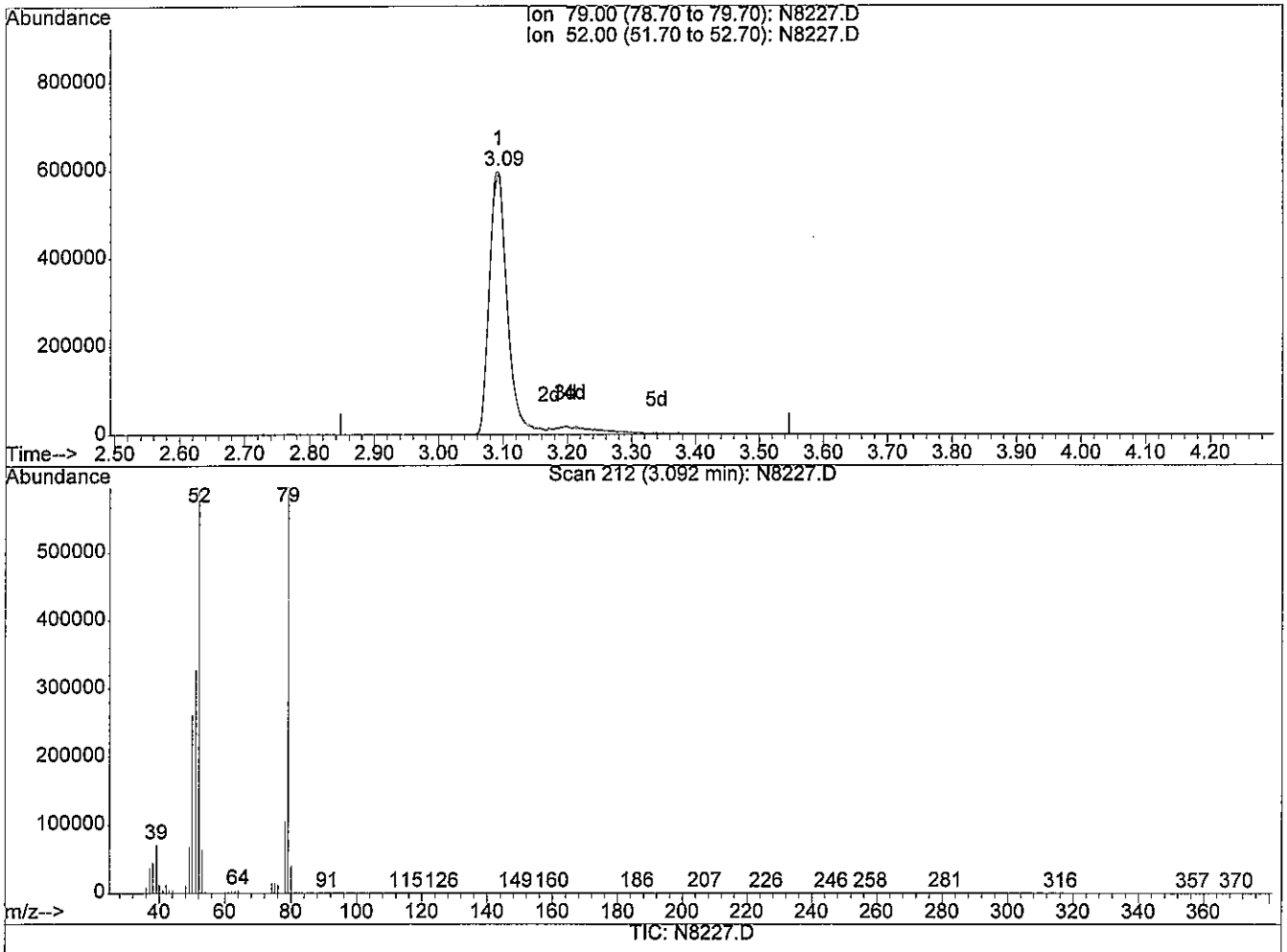
response 1163405

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

3eGn

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 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 _____

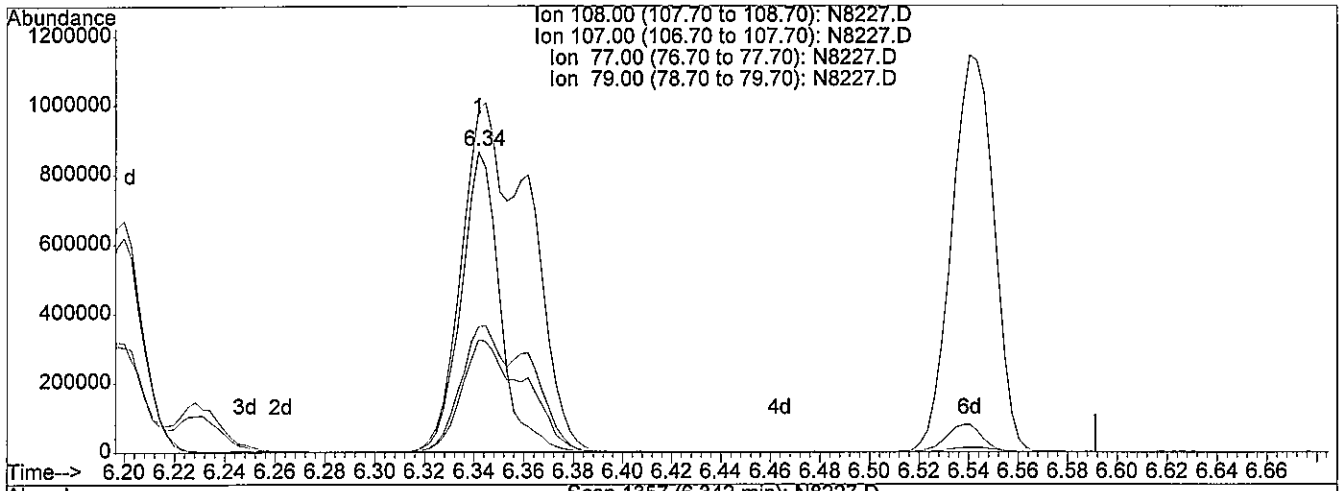
initials JH *date* 9-6-13

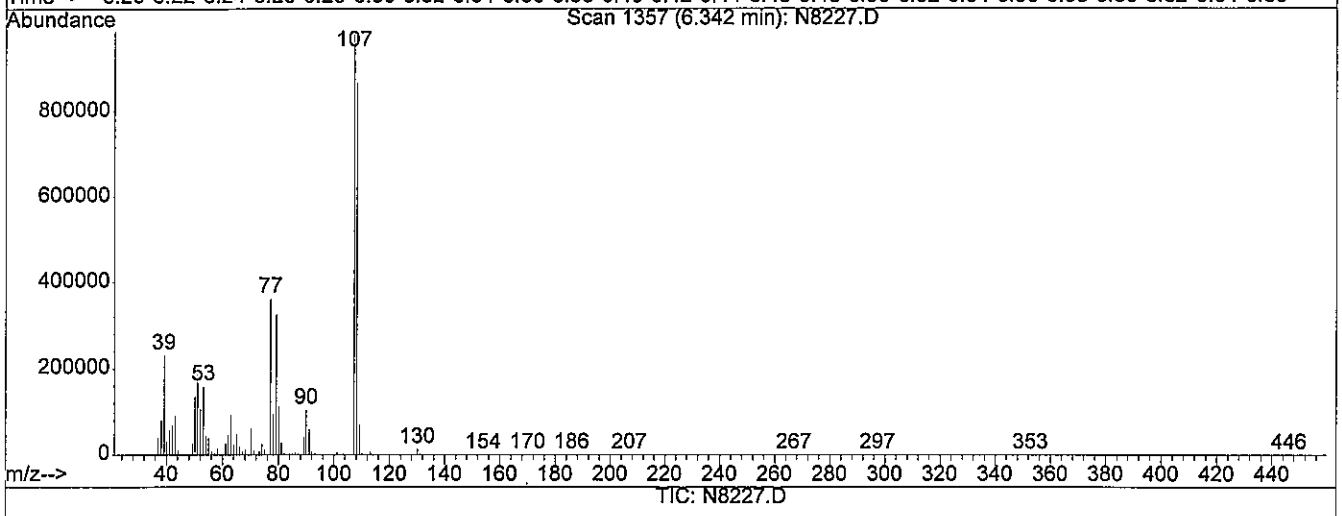
N8227.D 090413S1.M Fri Sep 06 16:45:25 2013

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





TIC: N8227.D

(21) 3+4-Methylphenol (T)

6.34min 55.75ng/uL

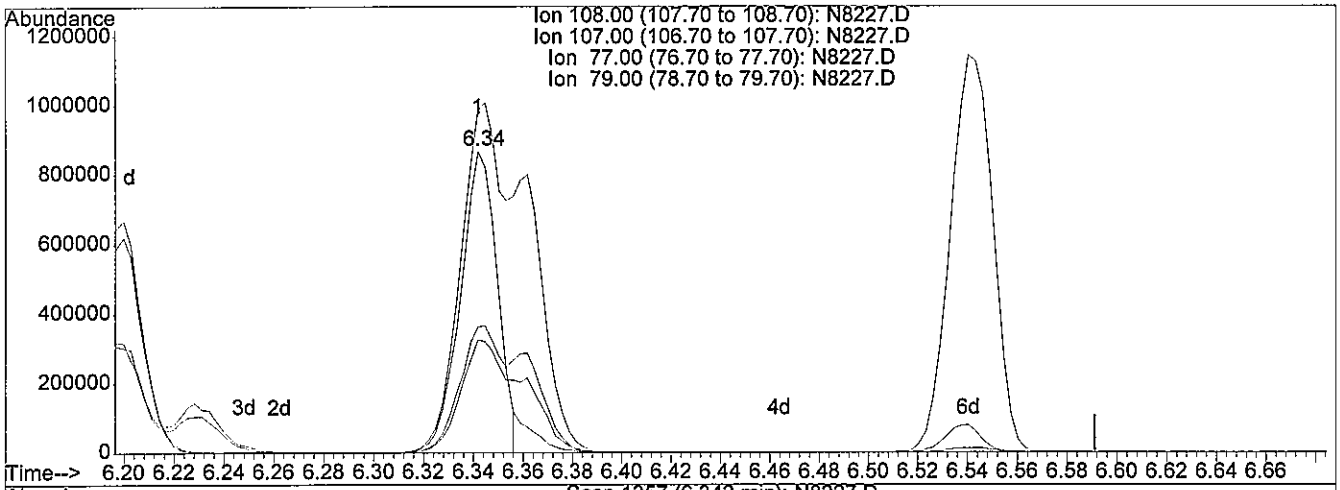
response 948325

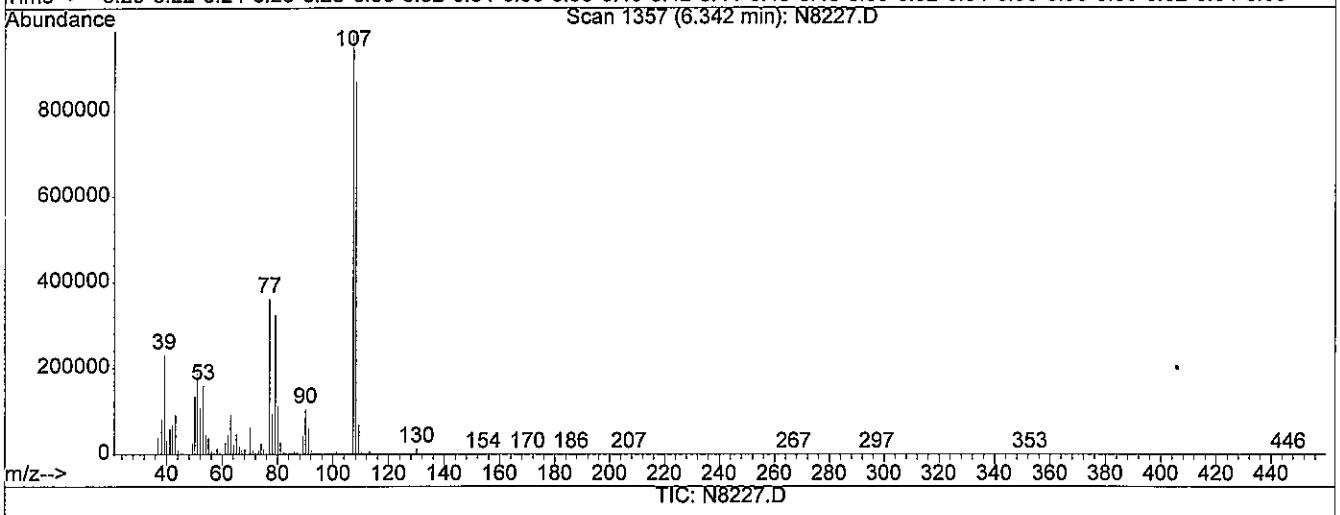
Ion	Exp%	Act%
108.00	100	100
107.00	210.50	200.24
77.00	76.70	72.96
79.00	63.20	60.03

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





TIC: N8227.D

(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 JH *date* 5-2-17

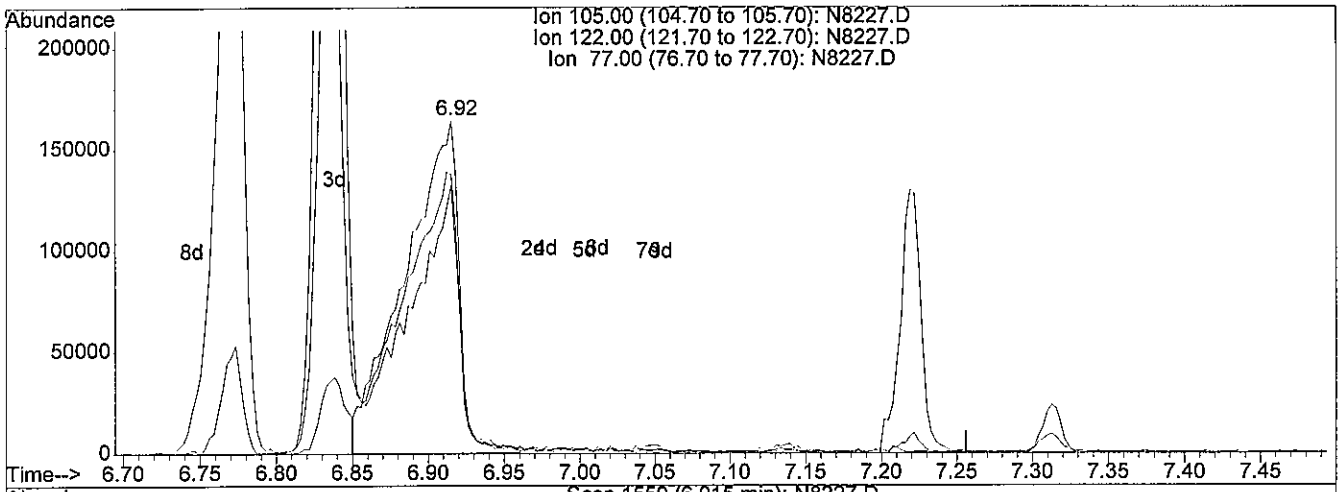
N8227.D 090413S1.M Fri Sep 06 16:46:11 2013

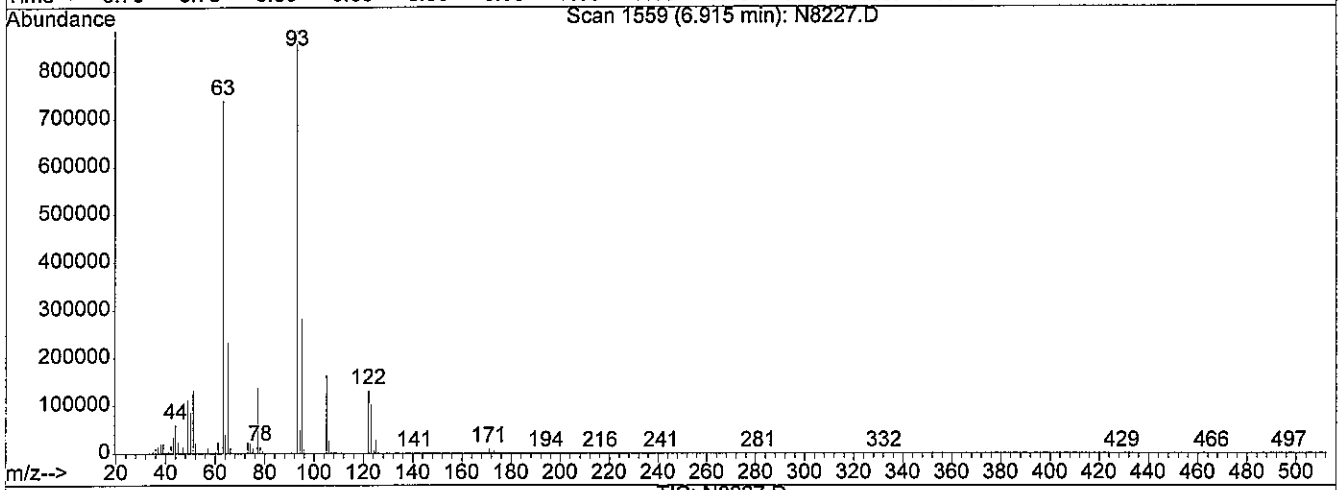
Quantitation Report (Qedit)

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





TIC: N8227.D

(33) Benzoic acid (T)

6.92min 45.18ng/uL

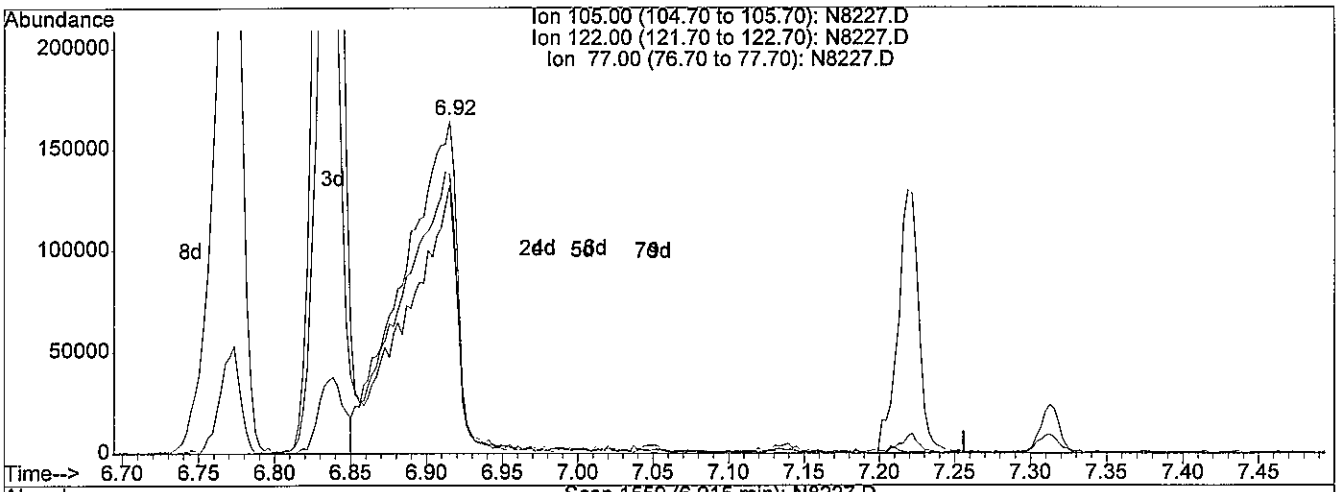
response 404218

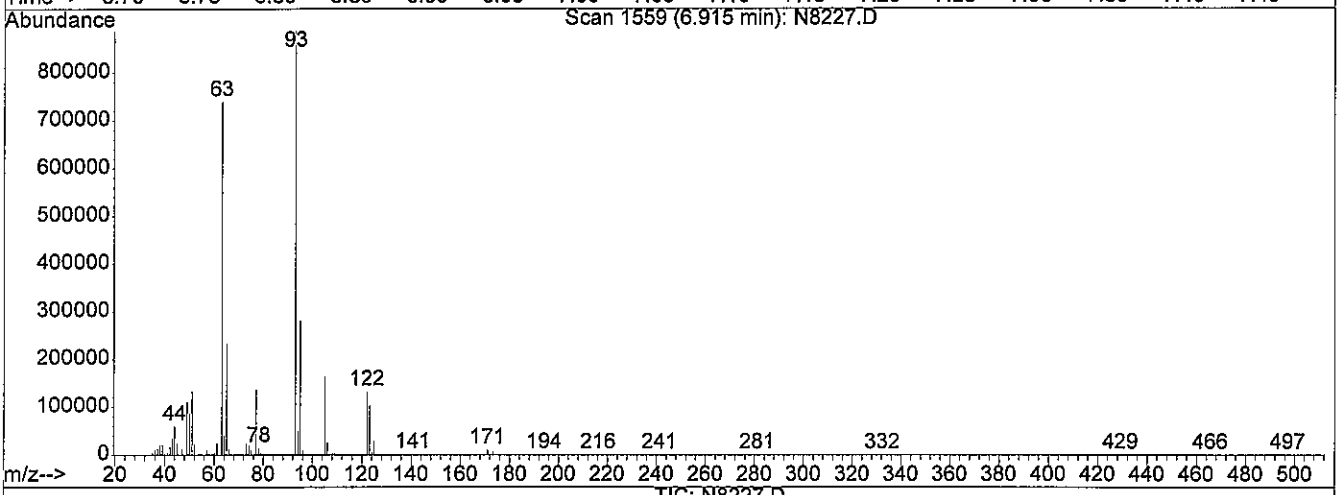
Ion	Exp%	Act%
105.00	100	100
122.00	73.60	72.66
77.00	82.40	84.91
0.00	0.00	0.00

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





TIC: N8227.D

(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 _____

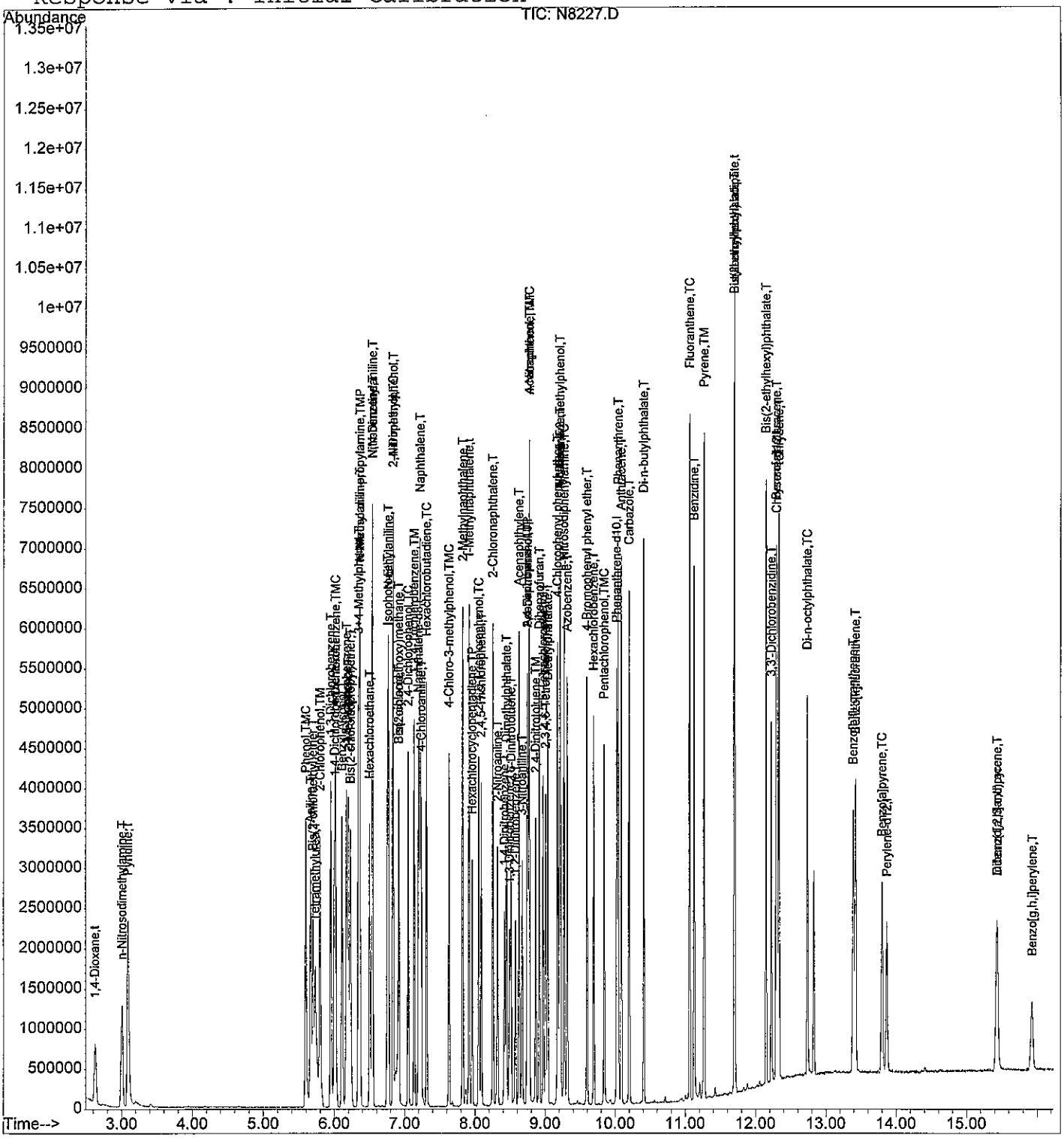
initials JY *date* 9-6-13

N8227.D 090413S1.M Fri Sep 06 16:46:31 2013

Quantitation Report

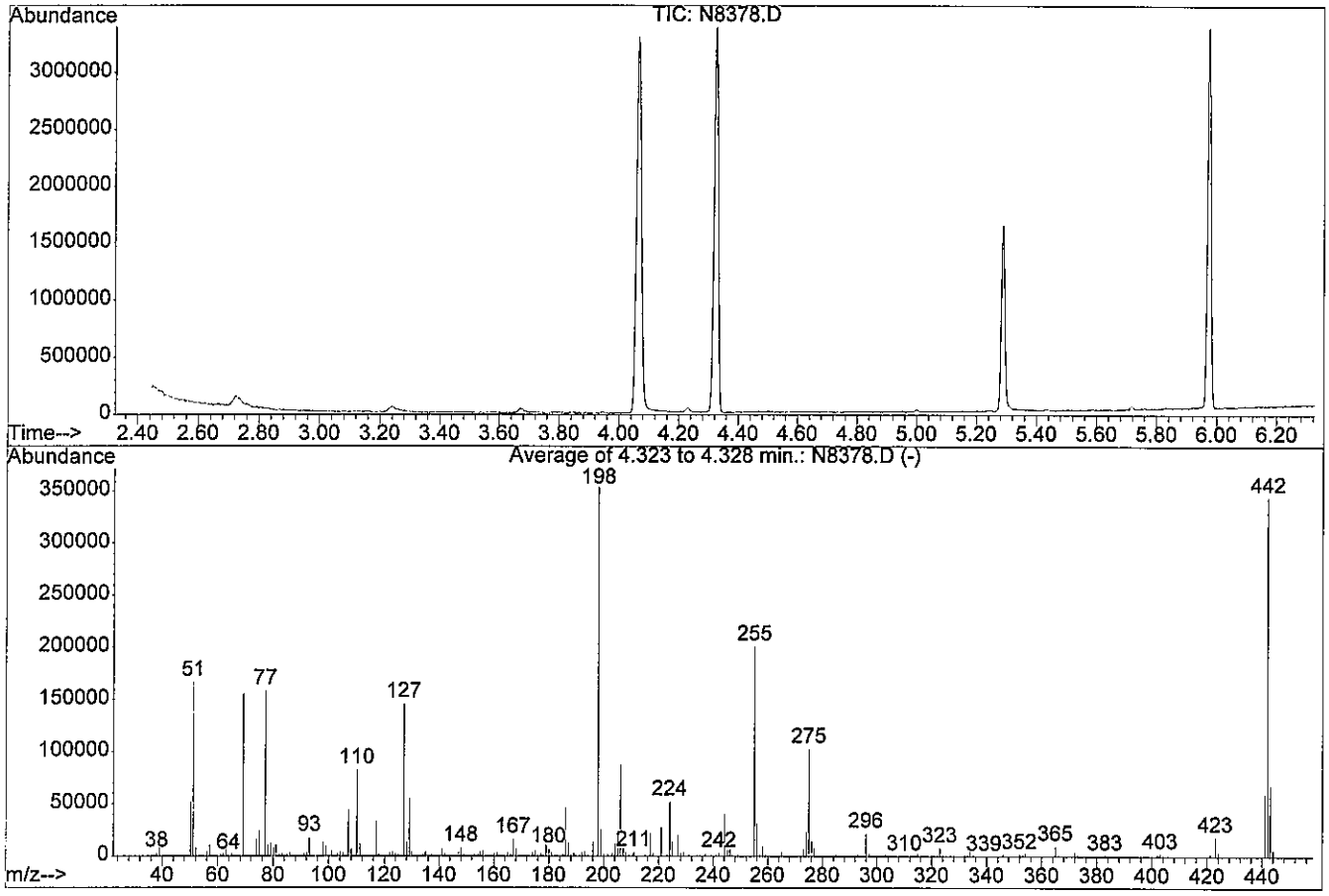
Data File : D:\HPCHEM\1\DATA\090413\N8227.D Vial: 11
Acq On : 4 Sep 2013 15:33 Operator: jk SOP 506
Sample : ICVSVSTD050 Inst : GC/MS Ins
Misc : ST130520-1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Sep 6 16:47 2013 Quant Results File: 090413S1.RES

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



Data File : D:\HPCHEM\1\DATA\091113\N8378.D
Acq On : 11 Sep 2013 13:03
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 663, 664, 665; Background Corrected with Scan 652

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	47.1	166681	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	44.1	156181	PASS
70	69	0.00	2	0.2	313	PASS
127	198	40	60	41.2	146048	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	354091	PASS
199	198	5	9	7.1	25288	PASS
275	198	10	30	29.0	102827	PASS
365	198	1	100	2.7	9726	PASS
441	443	0.01	100	88.5	59811	PASS
442	198	40	100	97.2	344213	PASS
443	442	17	23	19.6	67589	PASS

N8378.D DFTPP.M Wed Sep 11 13:11:41 2013

9-11-13

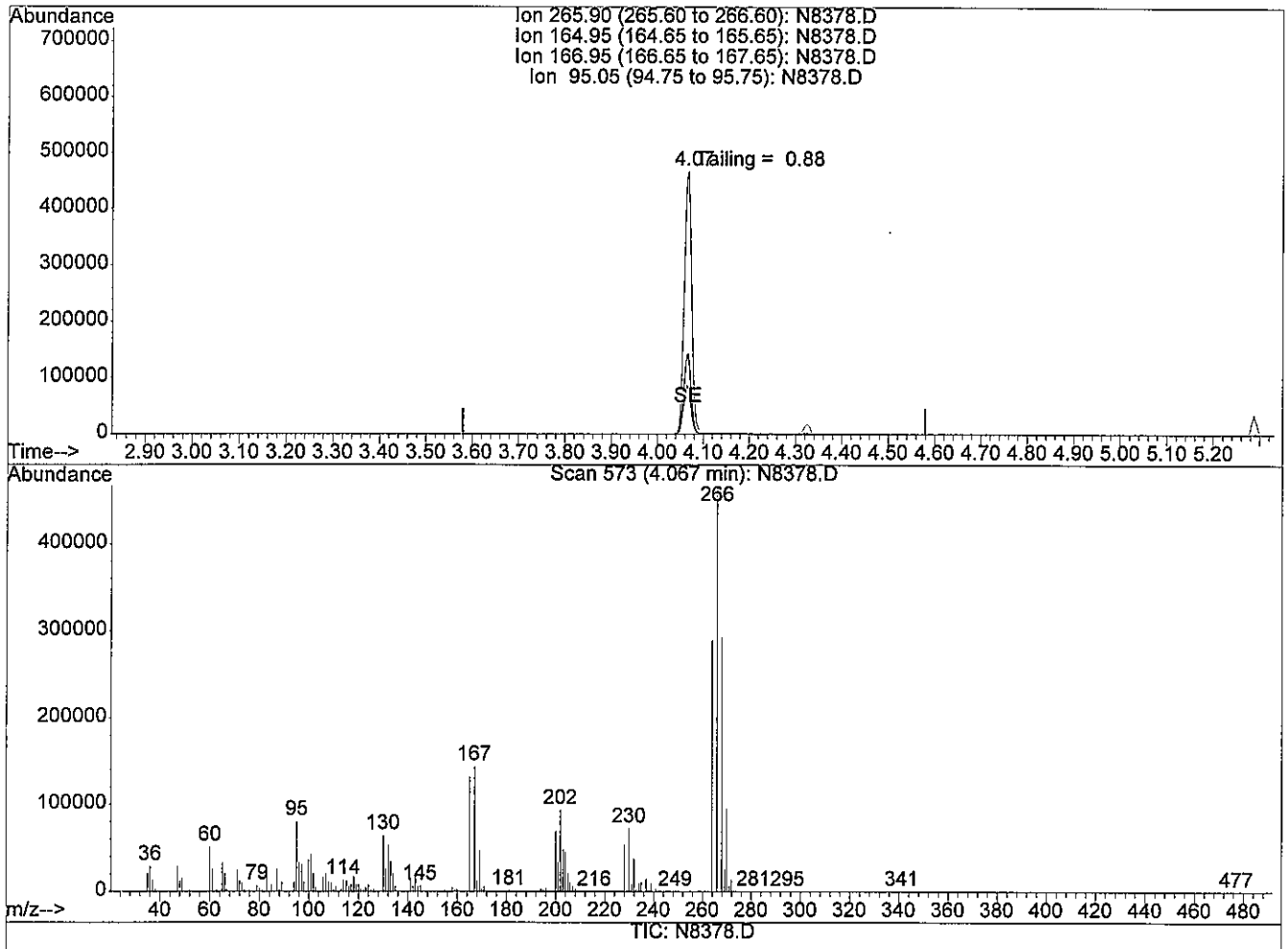
Quantitation Report (Qedit)

Data File : D:\HPCHEM\1\DATA\091113\N8378.D
Acq On : 11 Sep 2013 13:03
Sample : 50 ppm dftpp+PCP+DDT+benzidine
Misc : ST130605-1
MS Integration Params: rteint.p
Quant Time: Sep 11 13:12 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 11 10:51:19 2013
Response via : Single Level Calibration



(1) Pentachlorophenol

4.07min 59.76

response 529112

Ion	Exp%	Act%
265.90	100	100
164.95	0.00	30.47#
166.95	0.00	31.25#
95.05	0.00	18.83#

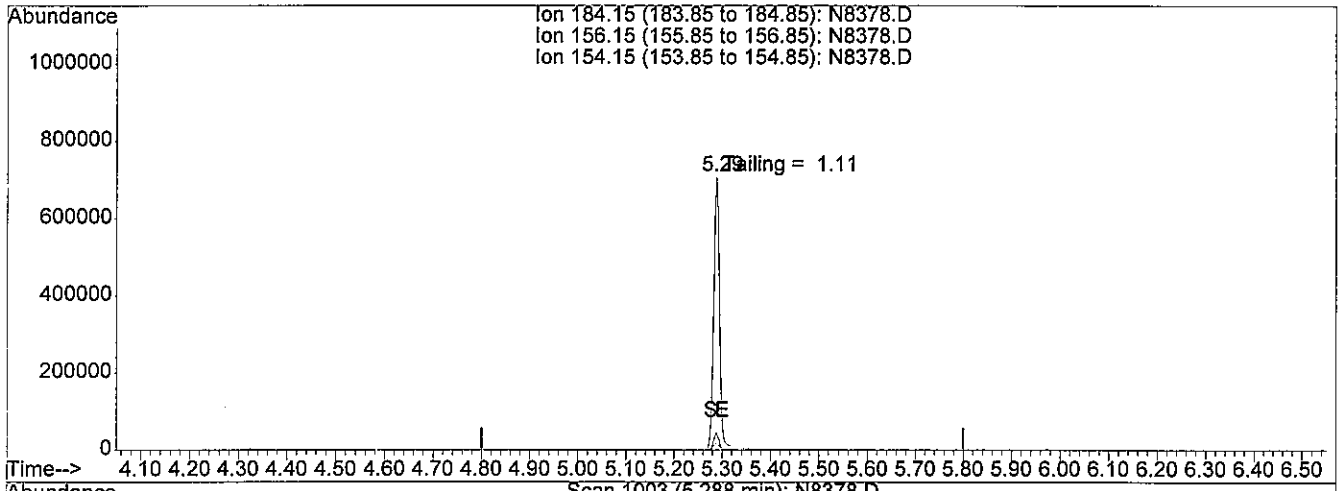
9/11/13

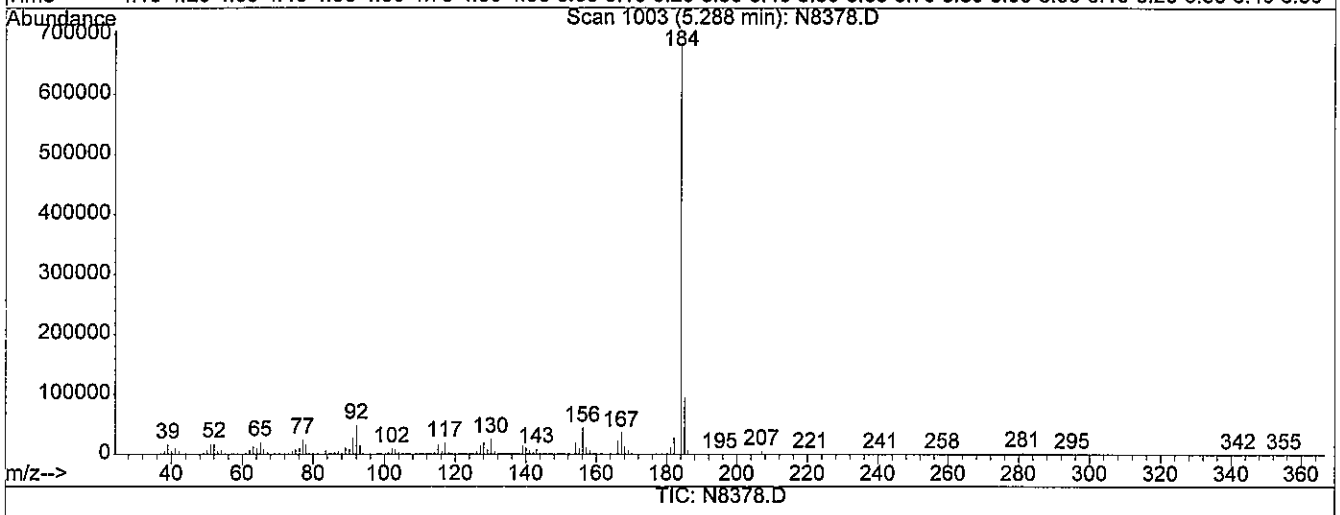
N8378.D DFTPP.M Wed Sep 11 13:12:32 2013

Quantitation Report (Qedit)

Data File : D:\HPCHEM\1\DATA\091113\N8378.D Vial: 1
Acq On : 11 Sep 2013 13:03 Operator: jk SOP 50
Sample : 50 ppm dftpp+PCP+DDT+benzidine Inst : GC/MS Ins
Misc : ST130605-1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Sep 11 13:12 2013 Quant Results File: temp.res

Method : D:\HPCHEM\1\METHODS\DFTPP.M (RTE Integrator)
Title : DFTPP
Last Update : Wed Sep 11 10:51:19 2013
Response via : Single Level Calibration





(3) Benzidine

5.29min 66.10

response 608018

Ion	Exp%	Act%
184.15	100	100
156.15	0.00	5.90#
154.15	0.00	2.61#
0.00	0.00	0.00

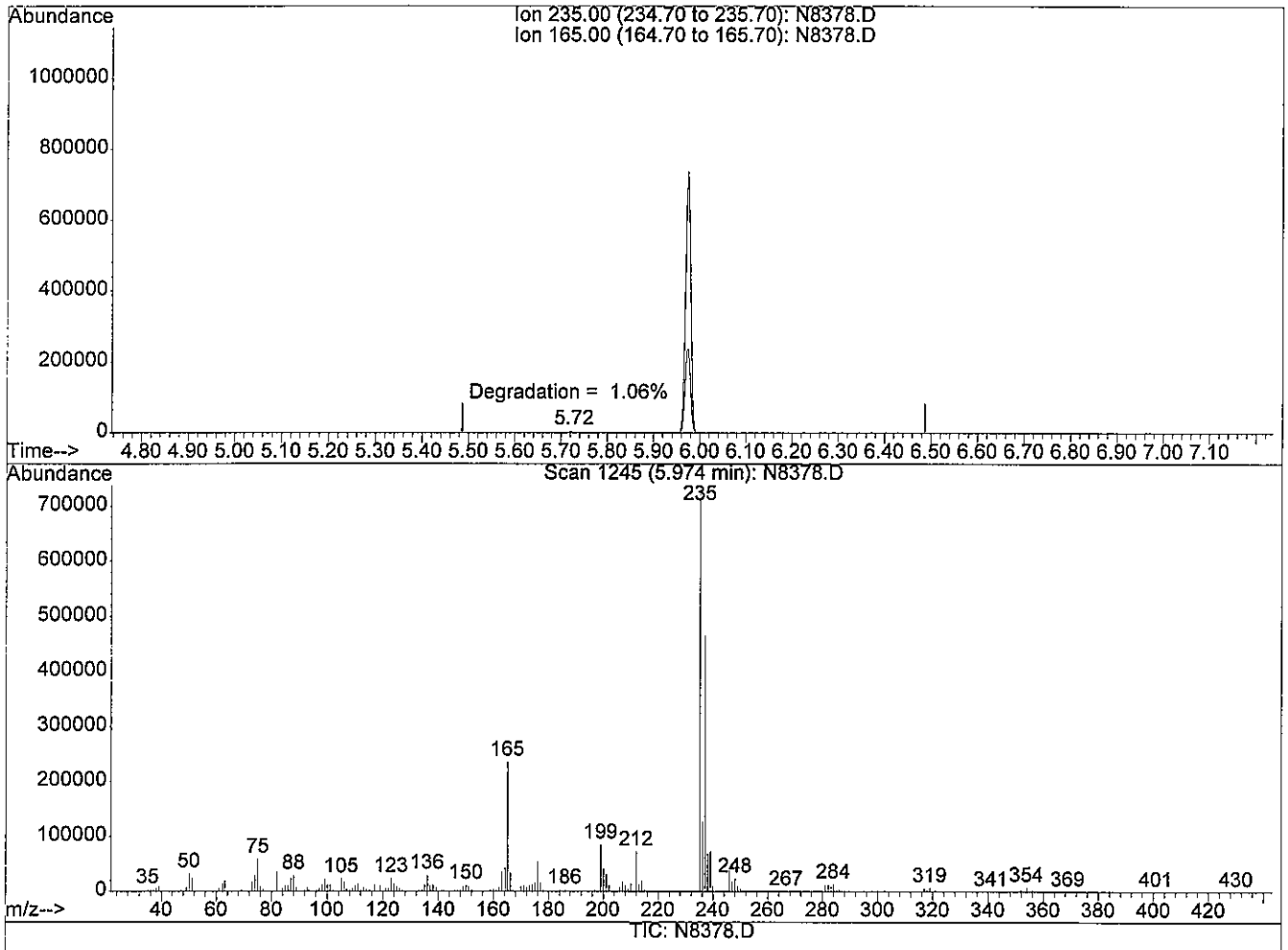
9-11-13

N8378.D DFTPP.M Wed Sep 11 13:12:41 2013

Quantitation Report (Qedit)

Data File : D:\HPCHEM\1\DATA\091113\N8378.D Vial: 1
Acq On : 11 Sep 2013 13:03 Operator: jk SOP 50
Sample : 50 ppm dftpp+PCP+DDT+benzidine Inst : GC/MS Ins
Misc : ST130605-1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Sep 11 13:12 2013 Quant Results File: temp.res

Method : D:\HPCHEM\1\METHODS\DFTPP.M (RTE Integrator)
Title : DFTPP
Last Update : Wed Sep 11 10:51:19 2013
Response via : Single Level Calibration



(4) DDT

5.97min 67.3950

response 567510

Ion	Exp%	Act%
235.00	100	100
165.00	0.00	34.12#
0.00	0.00	0.00
0.00	0.00	0.00

JK
9-11-13

N8378.D DFTPP.M Wed Sep 11 13:12:51 2013

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\091113\N8379.D Vial: 2
Acq On : 11 Sep 2013 13:20 Operator: jk SOP 506 Rev
Sample : CCV Inst : GC/MS Ins
Misc : ST130904-1 60 PPM Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Sep 11 14:55 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 11 14:54:04 2013
Response via : Initial Calibration
DataAcq Meth : 090413S1

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	5.95	152	373593	40.00	ng/uL	0.00
24) Naphthalene-d8	7.15	136	1386398	40.00	ng/uL	0.00
41) Acenaphthene-d10	8.69	164	802076	40.00	ng/uL	0.00
69) Phenanthrene-d10	9.97	188	1692981	40.00	ng/uL	0.00
80) Chrysene-d12	12.24	240	1517752	40.00	ng/uL	0.00
91) Perylene-d12	13.76	264	824878	40.00	ng/uL	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	4.57	112	875775m	68.56	ng/uL	0.00
Spiked Amount 75.000	Range 46 - 105		Recovery = 91.41%			
6) 2-Chlorophenol-d4	5.73	132	693736	64.29	ng/uL	0.00
Spiked Amount 75.000	Range 33 - 110		Recovery = 85.72%			
8) Phenol-d5	5.54	99	1085023	65.00	ng/uL	0.00
Spiked Amount 75.000	Range 50 - 109		Recovery = 86.67%			
15) 1,2-Dichlorobenzene-d4	6.11	152	525726	61.44	ng/uL	0.00
Spiked Amount 50.000	Range 16 - 110		Recovery = 122.88%#			
25) Nitrobenzene-d5	6.48	82	964003	61.22	ng/uL	0.00
Spiked Amount 50.000	Range 53 - 111		Recovery = 122.44%#			
46) 2-Fluorobiphenyl	8.07	172	1584844	58.68	ng/uL	0.00
Spiked Amount 50.000	Range 55 - 108		Recovery = 117.36%#			
68) 2,4,6-Tribromophenol	9.36	330	280593	68.13	ng/uL	0.00
Spiked Amount 75.000	Range 42 - 117		Recovery = 90.84%			
83) p-Terphenyl-d14	11.27	244	2296258	64.80	ng/uL	0.00
Spiked Amount 50.000	Range 34 - 139		Recovery = 129.60%			
Target Compounds						Qvalue
2) 1,4-Dioxane	2.56	88	272022m	43.81	ng/uL	
3) n-Nitrosodimethylamine	2.95	74	570901m	61.72	ng/uL	
4) Pyridine	3.02	79	948929m	60.67	ng/uL	
7) Aniline	5.62	93	1182263	60.55	ng/uL	98
9) Phenol	5.56	94	1042809	64.95	ng/uL	93
10) Tetramethylurea	5.68	72	1407424	64.19	ng/uL	99
11) Bis(2-chloroethyl)ether	5.66	93	773570	62.52	ng/uL	98
12) 2-Chlorophenol	5.75	128	725215	62.79	ng/uL	99
13) 1,3-Dichlorobenzene	5.90	146	859271	62.27	ng/uL	99
14) 1,4-Dichlorobenzene	5.96	146	808503	62.89	ng/ul	98
16) 1,2-Dichlorobenzene	6.12	146	739164	61.90	ng/uL	99
17) Benzyl Alcohol	6.06	108	500077	64.20	ng/uL	97
18) 2-Methylphenol	6.15	107	603703	63.32	ng/uL#	87
19) Bis(2-chloroisopropyl)ethe	6.18	45	1294837	61.49	ng/uL#	74
20) n-Nitroso-di-n-propylamine	6.31	70	600362	65.84	ng/uL	92
21) 3+4-Methylphenol	6.30	108	806388	68.85	ng/uL	97

(#) = qualifier out of range (m) = manual integration 94
N8379.D 090413S1.M Wed Sep 11 14:56:05 2013 9-17-13 Page 1

Data File : D:\HPCHEM\1\DATA\091113\N8379.D
Acq On : 11 Sep 2013 13:20
Sample : CCV
Misc : ST130904-1 60 PPM
MS Integration Params: RTEINT.P
Quant Time: Sep 11 14:55 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 : Wed Sep 11 14:54:04 2013
Response via : Initial Calibration
DataAcq Meth : 090413S1

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
22)	N-Methylaniline	6.31	106	1136919	67.00	ng/uL	96
23)	Hexachloroethane	6.45	117	345409	63.82	ng/uL	97
26)	N,N-Dimethylaniline	6.49	120	1106234	61.57	ng/uL	96
27)	Nitrobenzene	6.49	77	1129635	60.86	ng/uL	98
28)	Isophorone	6.71	82	1557180	64.34	ng/uL	98
29)	N-Ethylaniline	6.72	106	1351214	61.45	ng/uL	99
30)	2-Nitrophenol	6.79	139	366817	63.74	ng/uL	93
31)	2,4-Dimethylphenol	6.79	107	738486	61.87	ng/uL	99
32)	Bis(2-chloroethoxy)methane	6.87	93	888842	61.96	ng/uL	98
33)	Benzoic acid	6.87	105	356541m	58.66	ng/uL	
34)	2,4-Dichlorophenol	7.00	162	644021	62.30	ng/uL	100
35)	1,2,4-Trichlorobenzene	7.08	180	792306	62.29	ng/uL	99
36)	Naphthalene	7.17	128	2124862	61.95	ng/uL	98
37)	4-Chloroaniline	7.19	127	794355	64.08	ng/uL	96
38)	Hexachlorobutadiene	7.26	225	507821	62.79	ng/uL	98
39)	4-Chloro-3-methylphenol	7.59	107	704016	68.80	ng/uL	98
40)	2-Methylnaphthalene	7.77	142	1478840	60.20	ng/uL	98
42)	1-Methylnaphthalene	7.86	142	1404760	60.19	ng/uL	98
43)	Hexachlorocyclopentadiene	7.91	237	406749	56.96	ng/uL	97
44)	2,4,6-Trichlorophenol	8.01	196	549304	65.16	ng/uL	95
45)	2,4,5-Trichlorophenol	8.04	196	521185	65.94	ng/uL	96
47)	2-Chloronaphthalene	8.20	162	1408626	59.96	ng/uL	99
48)	2-Nitroaniline	8.27	65	457051	57.91	ng/uL	95
49)	1,4-Dinitrobenzene	8.37	168	245990	69.79	ng/uL	89
50)	Dimethylphthalate	8.40	163	1437050	59.50	ng/uL	100
51)	1,3-Dinitrobenzene	8.45	168	270225	67.28	ng/uL	86
52)	2,6-Dinitrotoluene	8.46	165	325801	58.64	ng/uL	96
53)	1,2-Dinitrobenzene	8.53	168	176170	67.08	ng/uL	83
54)	Acenaphthylene	8.57	152	2047066	59.19	ng/uL	99
55)	3-Nitroaniline	8.62	138	326686	62.82	ng/uL	100
56)	Acenaphthene	8.72	154	1251957	60.25	ng/uL	98
57)	2,4-Dinitrophenol	8.71	184	231475	71.32	ng/uL#	89
58)	4-Nitrophenol	8.73	109	190009	57.32	ng/uL	90
59)	Dibenzofuran	8.86	168	1917476	62.58	ng/uL	94
60)	2,4-Dinitrotoluene	8.81	165	474723	63.78	ng/uL	95
61)	2,3,5,6-Tetrachlorophenol	8.92	232	475203	62.64	ng/uL	98
62)	2,3,4,6-Tetrachlorophenol	8.95	232	456333	62.49	ng/uL	94
63)	Diethylphthalate	8.98	149	1399945	63.30	ng/uL	99
64)	4-Chlorophenyl phenyl ethe	9.12	204	880364	63.54	ng/uL	95
65)	4-Nitroaniline	9.15	138	317351	67.88	ng/uL	90
66)	Fluorene	9.16	166	1392400	58.56	ng/uL	97

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

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\091113\N8379.D
Acq On : 11 Sep 2013 13:20
Sample : CCV
Misc : ST130904-1 60 PPM
MS Integration Params: RTEINT.P
Quant Time: Sep 11 14:55 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 : Wed Sep 11 14:54:04 2013
Response via : Initial Calibration
DataAcq Meth : 090413S1

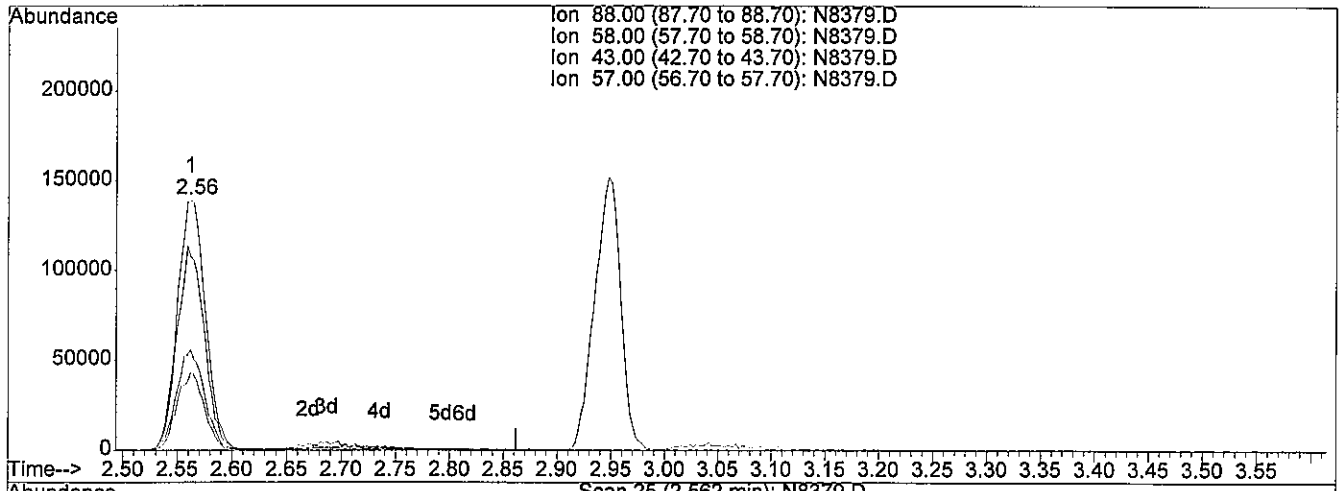
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
67)	Azobenzene	9.26	77	1519795	61.06	ng/uL	93
70)	4,6-Dinitro-2-methylphenol	9.17	198	317427	68.27	ng/uL	85
71)	n-Nitrosodiphenylamine	9.22	169	1301140	58.10	ng/uL	98
72)	4-Bromophenyl phenyl ether	9.54	248	566257	58.80	ng/uL	95
73)	Hexachlorobenzene	9.64	284	580038	56.72	ng/uL	97
74)	Pentachlorophenol	9.79	266	425634	60.41	ng/uL	98
75)	Phenanthrene	9.99	178	2339304	59.93	ng/uL	99
76)	Anthracene	10.03	178	2361434	58.05	ng/uL	100
77)	Carbazole	10.15	167	2290736	60.66	ng/uL	98
78)	Di-n-butylphthalate	10.35	149	2770013	60.46	ng/uL	100
79)	Fluoranthene	11.01	202	3276672	60.69	ng/uL	99
81)	Benzidine	11.07	184	1297615	56.50	ng/uL	100
82)	Pyrene	11.21	202	3140107	64.94	ng/uL	98
84)	Butylbenzylphthalate	11.64	149	1047171	67.10	ng/uL	96
85)	Bis(2-ethylhexyl) adipate	11.64	129	816589	61.95	ng/uL	96
86)	Bis(2-ethylhexyl)phthalate	12.08	149	1273067	62.70	ng/uL	99
87)	3,3'-Dichlorobenzidine	12.16	252	909805	67.92	ng/uL	97
88)	Benzo[a]anthracene	12.23	228	2628692	64.08	ng/uL	100
89)	Chrysene	12.27	228	2325238	62.09	ng/uL	99
90)	Di-n-octylphthalate	12.65	149	1828622	66.29	ng/uL	98
92)	Benzo[b]fluoranthene	13.30	252	1659899	62.44	ng/uL	98
93)	Benzo[k]fluoranthene	13.33	252	1615556	62.54	ng/uL	98
94)	Benzo[a]pyrene	13.70	252	1465051	66.84	ng/uL	98
95)	Indeno(1,2,3-c,d)pyrene	15.28	276	982666	56.91	ng/uL	93
96)	Dibenzo[a,h]anthracene	15.27	278	837094	55.23	ng/uL	96
97)	Benzo[g,h,i]perylene	15.76	276	696422	51.57	ng/uL	95

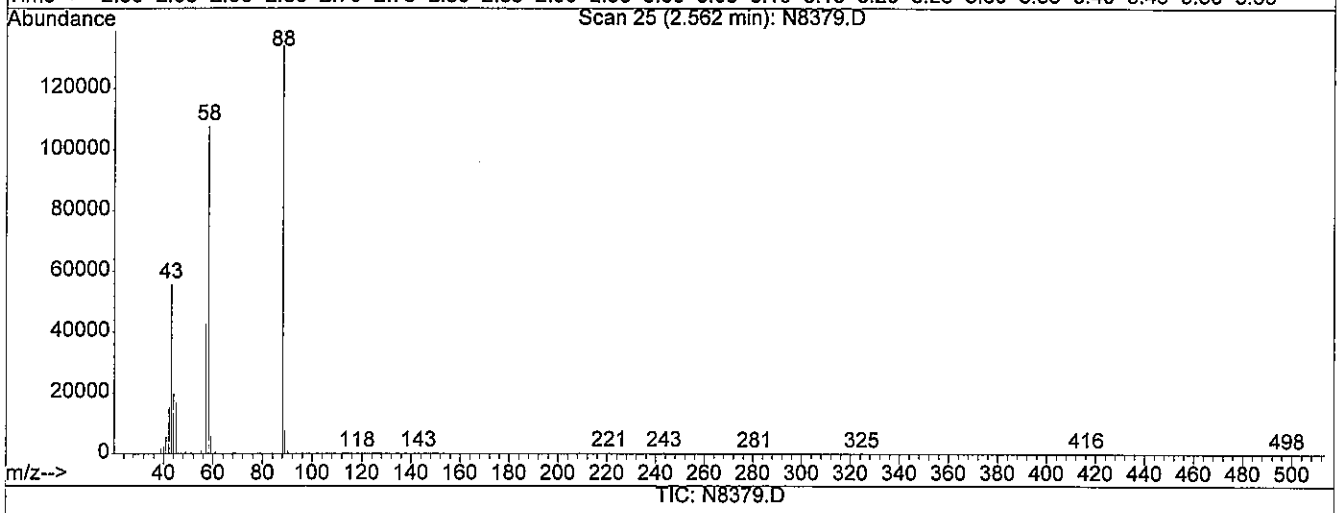
(#) = qualifier out of range (m) = manual integration

Quantitation Report (Qedit)

Data File : D:\HPCHEM\1\DATA\091113\N8379.D Vial: 2
Acq On : 11 Sep 2013 13:20 Operator: jk SOP 50
Sample : CCV Inst : GC/MS Ins
Misc : ST130904-1 60 PPM Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Sep 11 14:54 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 11 14:54:04 2013
Response via : Multiple Level Calibration





TIC: N8379.D

(2) 1,4-Dioxane (t)

2.56min 40.29ng/uL

response 250162

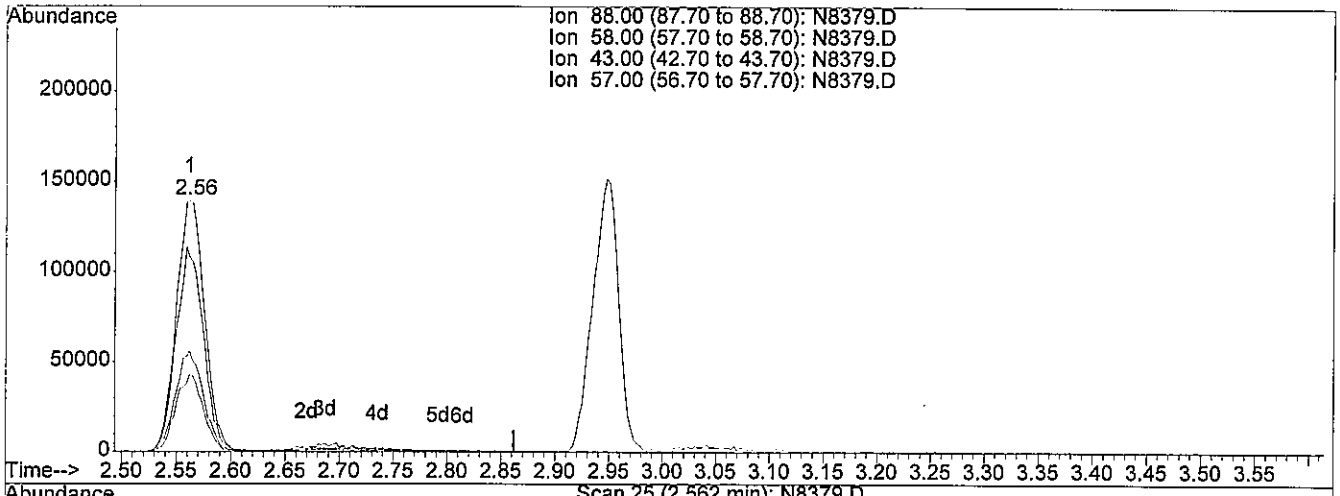
Ion	Exp%	Act%
88.00	100	100
58.00	77.90	79.24
43.00	47.90	39.93
57.00	33.00	30.35

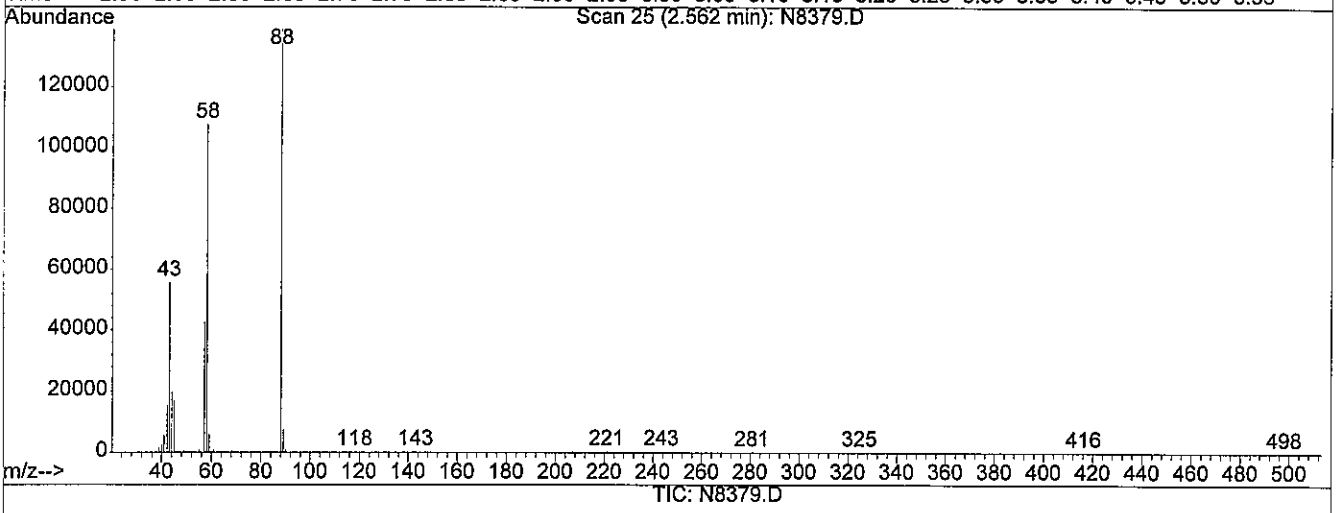
Quantitation Report (Qedit)

Data File : D:\HPCHEM\1\DATA\091113\N8379.D
Acq On : 11 Sep 2013 13:20
Sample : CCV
Misc : ST130904-1 60 PPM
MS Integration Params: RTEINT.P
Quant Time: Sep 11 14:54 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 11 14:54:04 2013
Response via : Multiple Level Calibration





TIC: N8379.D

(2) 1,4-Dioxane (t)

2.56min 43.81ng/uL m

response 272022

Ion	Exp%	Act%
88.00	100	100
58.00	77.90	72.88
43.00	47.90	36.72#
57.00	33.00	27.91

MANUAL RE-INTEGRATION

- ☐ missed peak assignment
- ☐ assigned incorrect name to peak
- ☐ over-integrated peak's area
- ☑ under-integrated peak's area
- ☐ other _____

initials JC *date* 5-11-17

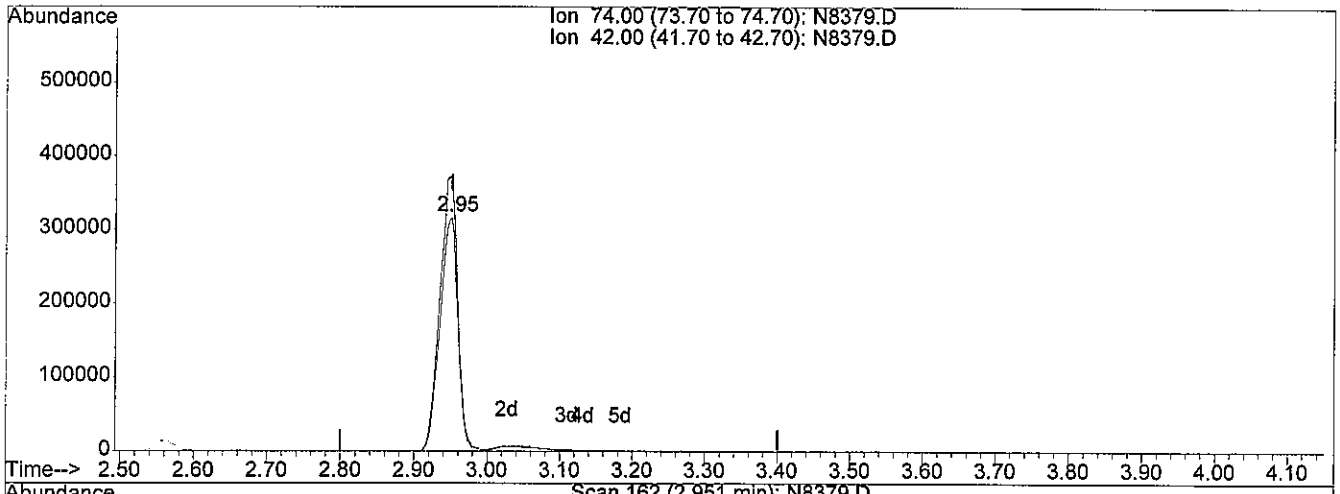
N8379.D 090413S1.M Wed Sep 11 14:54:32 2013

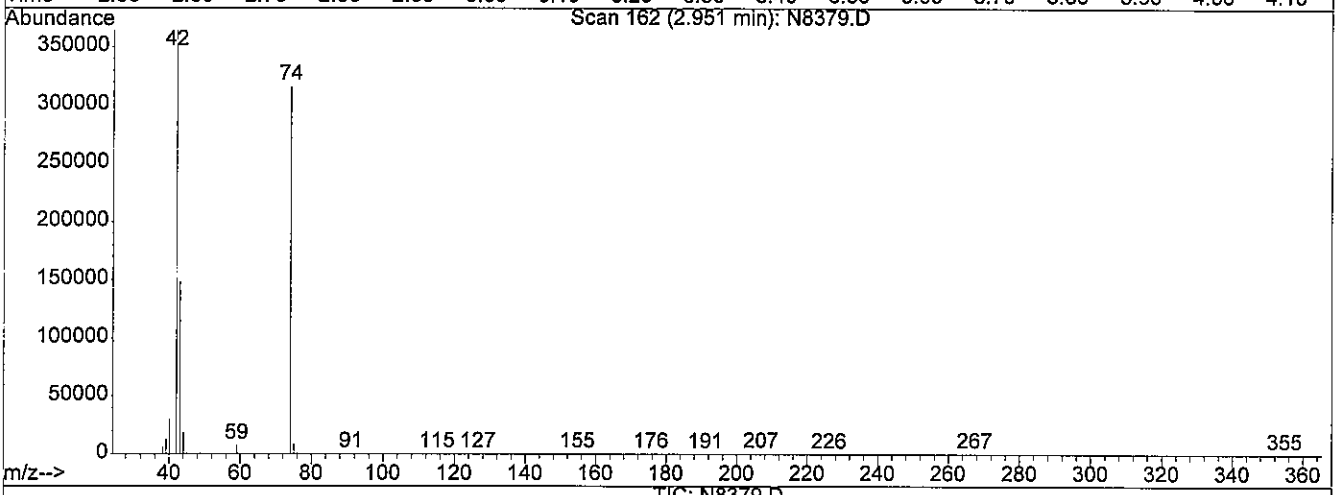
Quantitation Report (Qedit)

Data File : D:\HPCHEM\1\DATA\091113\N8379.D
Acq On : 11 Sep 2013 13:20
Sample : CCV
Misc : ST130904-1 60 PPM
MS Integration Params: RTEINT.P
Quant Time: Sep 11 14:54 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 11 14:54:04 2013
Response via : Multiple Level Calibration





TIC: N8379.D

(3) n-Nitrosodimethylamine (T)

2.95min 58.06ng/uL

response 536993

Ion	Exp%	Act%
74.00	100	100
42.00	129.50	117.96
0.00	0.00	0.00
0.00	0.00	0.00

SCfor

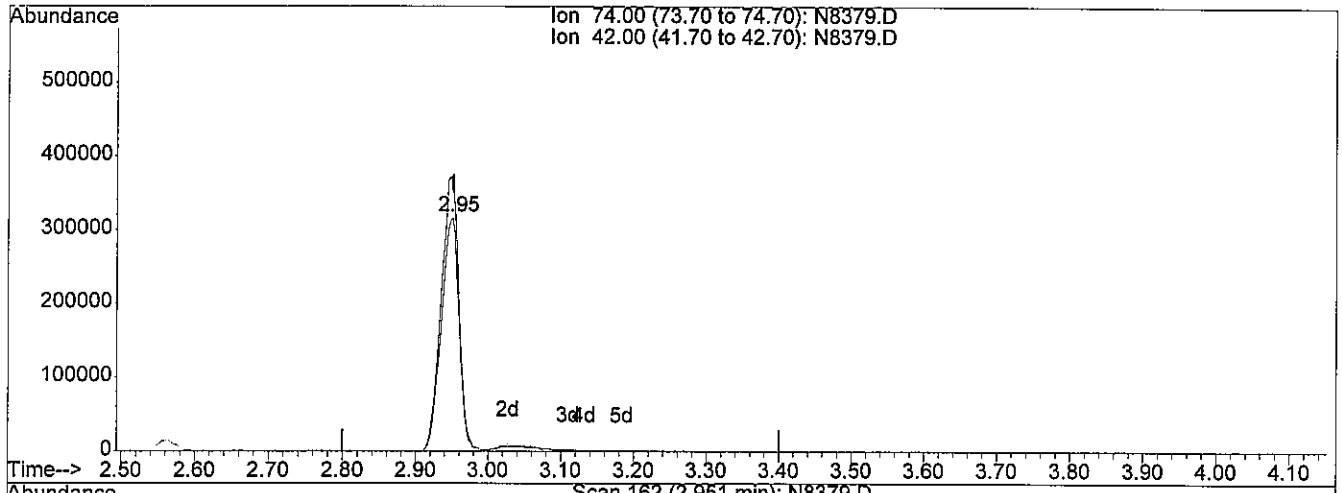
N8379.D 090413S1.M Wed Sep 11 14:54:35 2013

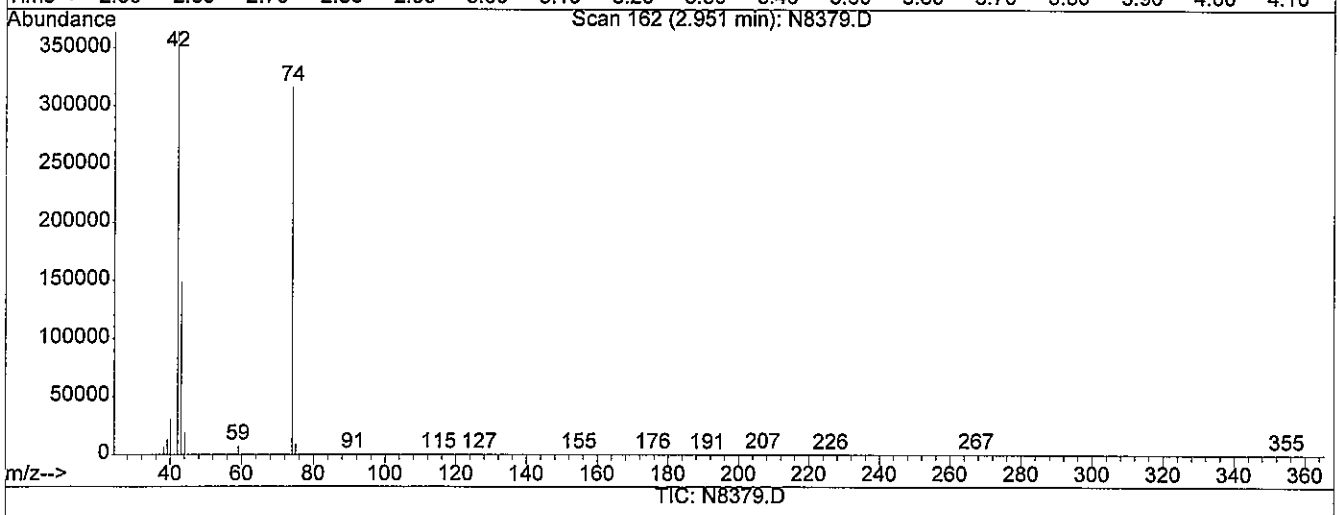
Quantitation Report (Qedit)

Data File : D:\HPCHEM\1\DATA\091113\N8379.D
Acq On : 11 Sep 2013 13:20
Sample : CCV
Misc : ST130904-1 60 PPM
MS Integration Params: RTEINT.P
Quant Time: Sep 11 14:54 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 11 14:54:04 2013
Response via : Multiple Level Calibration





TIC: N8379.D

(3) n-Nitrosodimethylamine (T)

2.95min 61.72ng/uL m

response 570901

Ion	Exp%	Act%
74.00	100	100
42.00	129.50	110.95
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 _____

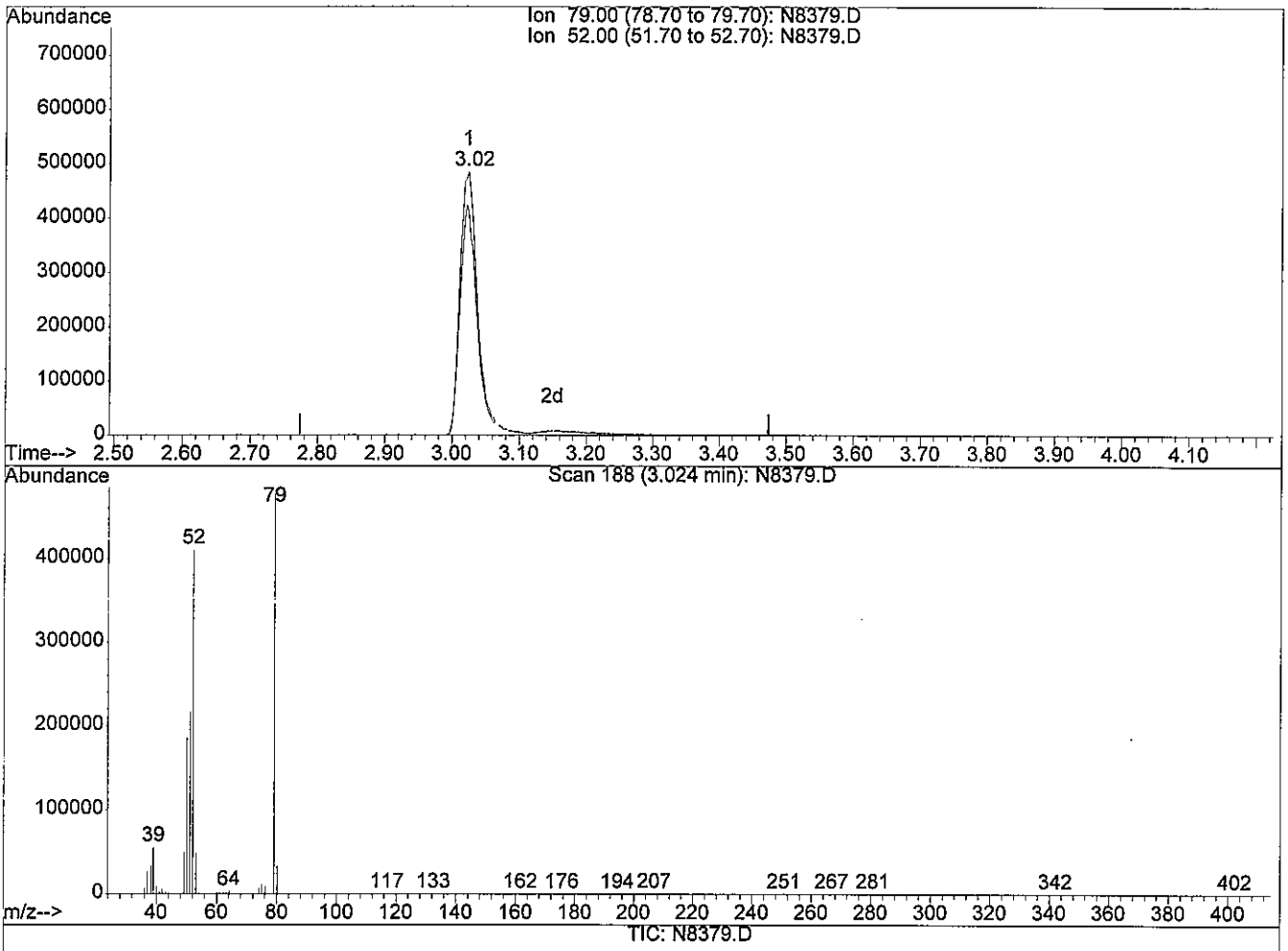
initials JL *date* 9-17-13

N8379.D 090413S1.M Wed Sep 11 14:54:39 2013

Quantitation Report (Qedit)

Data File : D:\HPCHEM\1\DATA\091113\N8379.D Vial: 2
Acq On : 11 Sep 2013 13:20 Operator: jk SOP 50
Sample : CCV Inst : GC/MS Ins
Misc : ST130904-1 60 PPM Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Sep 11 14:54 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 11 14:54:04 2013
Response via : Multiple Level Calibration



(4) Pyridine (T)

3.02min 57.09ng/uL

response 892841

Ion	Exp%	Act%
79.00	100	100
52.00	93.60	85.17
0.00	0.00	0.00
0.00	0.00	0.00

SeBar

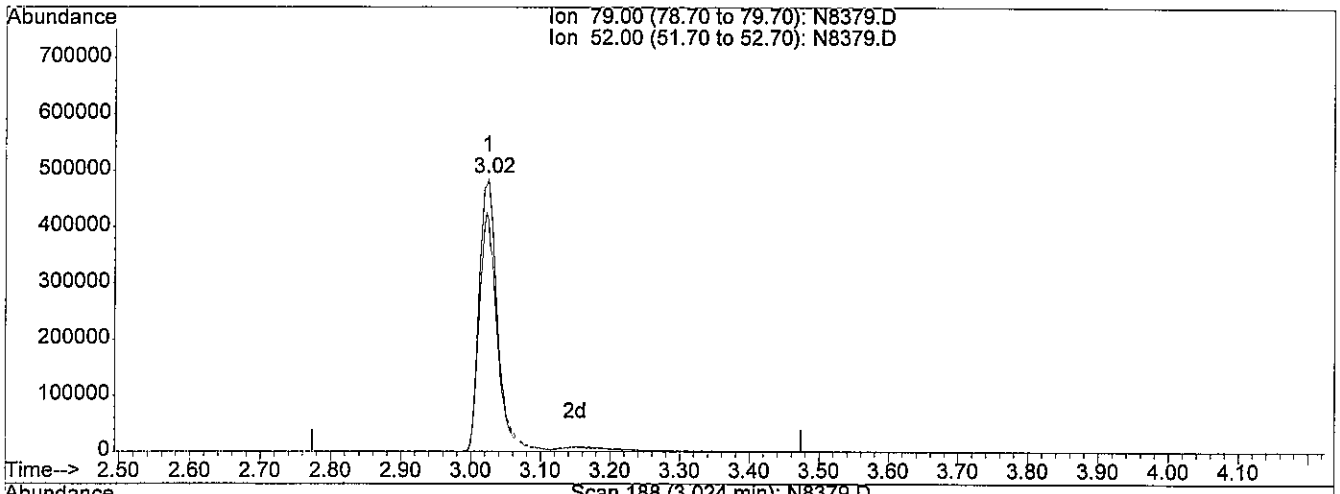
N8379.D 090413S1.M Wed Sep 11 14:54:43 2013

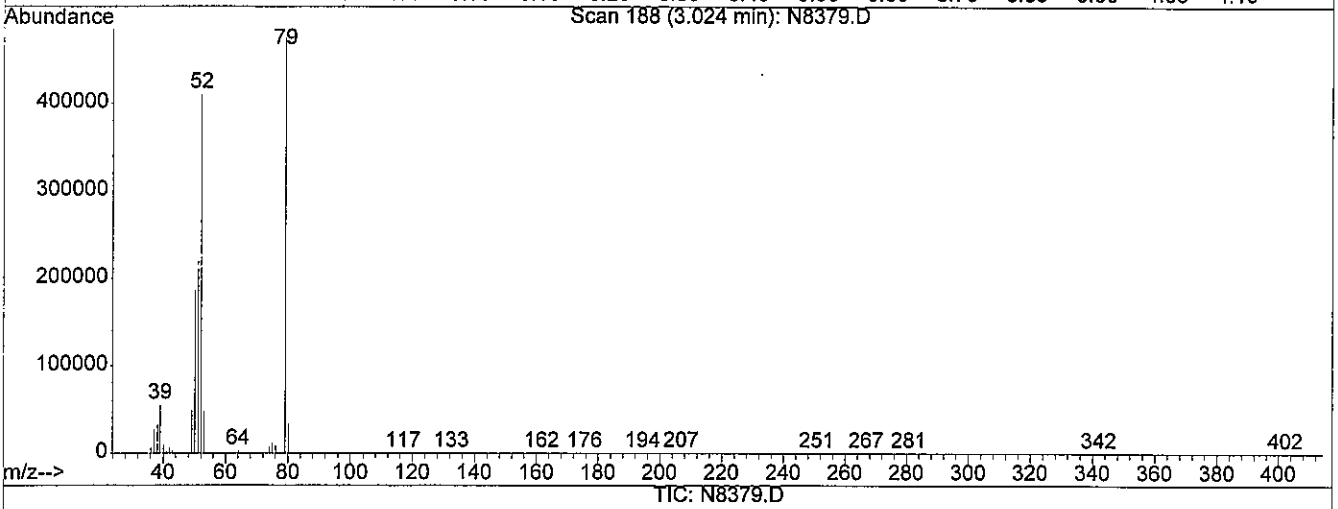
Quantitation Report (Qedit)

Data File : D:\HPCHEM\1\DATA\091113\N8379.D
Acq On : 11 Sep 2013 13:20
Sample : CCV
Misc : ST130904-1 60 PPM
MS Integration Params: RTEINT.P
Quant Time: Sep 11 14:54 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 11 14:54:04 2013
Response via : Multiple Level Calibration





TIC: N8379.D

(4) Pyridine (T)

3.02min 60.67ng/uL m

response 948929

Ion	Exp%	Act%
79.00	100	100
52.00	93.60	80.13
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* 5-19-13

N8379.D 090413S1.M Wed Sep 11 14:54:46 2013

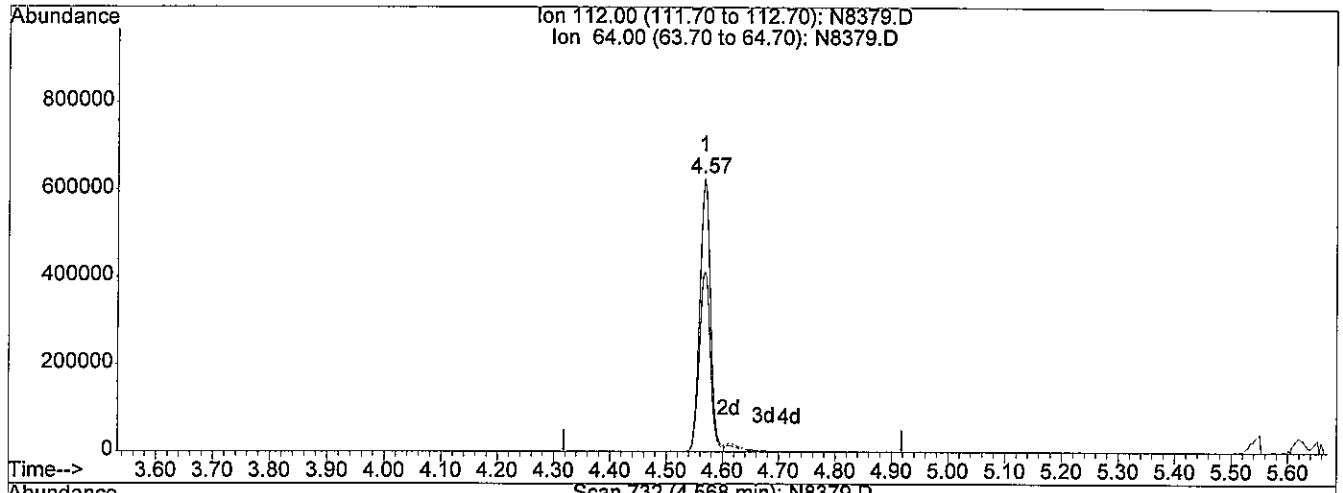
Quantitation Report (Qedit)

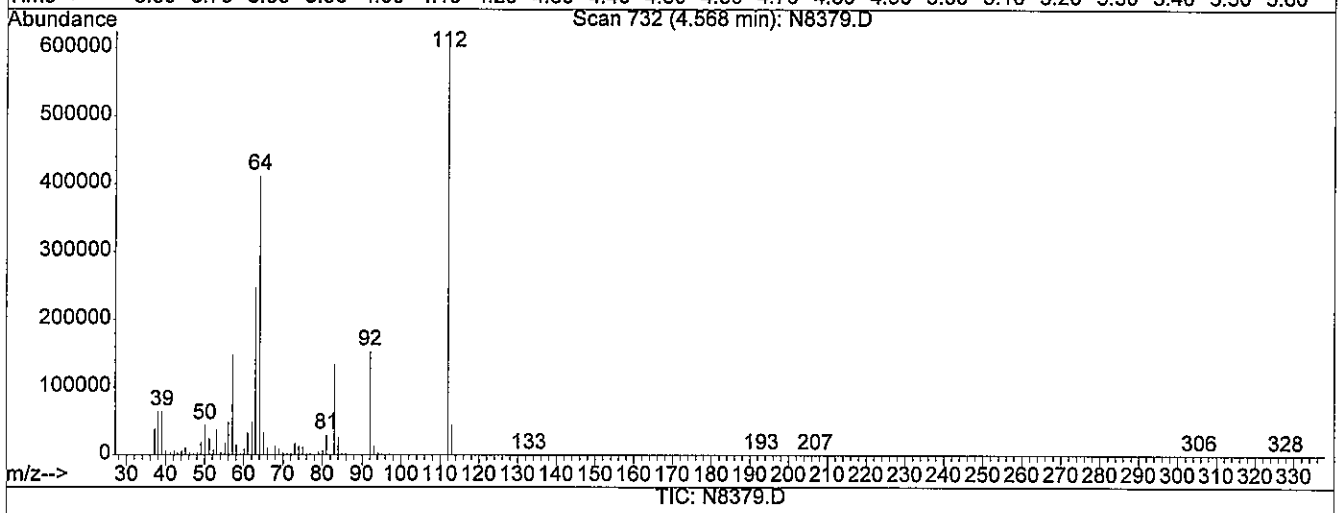
Data File : D:\HPCHEM\1\DATA\091113\N8379.D
Acq On : 11 Sep 2013 13:20
Sample : CCV
Misc : ST130904-1 60 PPM
MS Integration Params: RTEINT.P
Quant Time: Sep 11 14:54 2013

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 11 14:54:04 2013
Response via : Multiple Level Calibration





TIC: N8379.D

(5) 2-Fluorophenol (S)

4.57min 65.07ng/uL

response 831103

Ion	Exp%	Act%
112.00	100	100
64.00	68.70	68.12
0.00	0.00	0.00
0.00	0.00	0.00

3 for

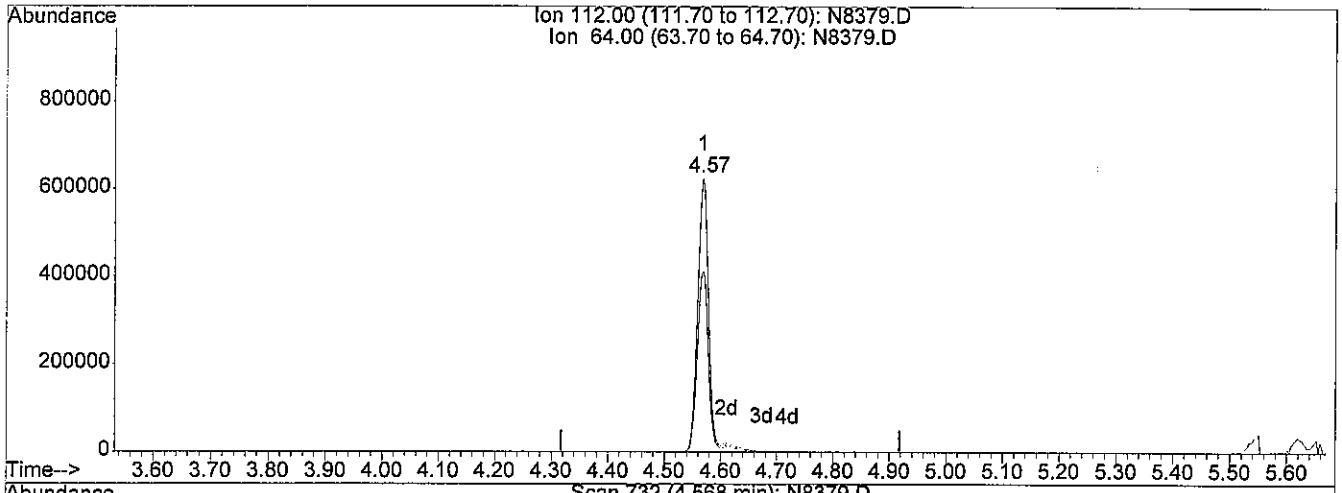
N8379.D 090413S1.M Wed Sep 11 14:54:51 2013

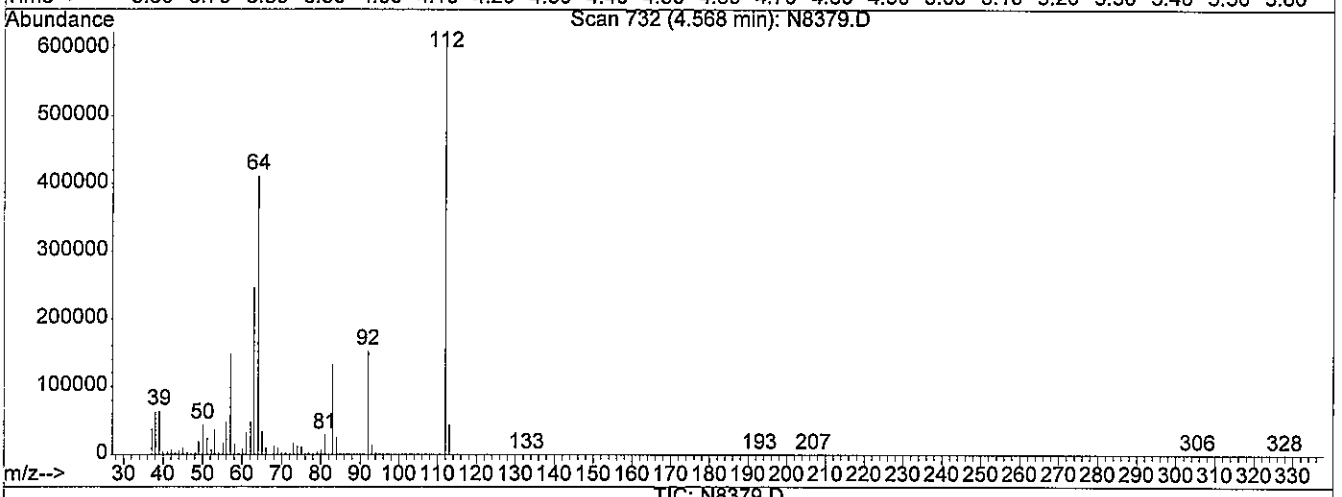
Quantitation Report (Qedit)

Data File : D:\HPCHEM\1\DATA\091113\N8379.D
Acq On : 11 Sep 2013 13:20
Sample : CCV
Misc : ST130904-1 60 PPM
MS Integration Params: RTEINT.P
Quant Time: Sep 11 14:54 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 11 14:54:04 2013
Response via : Multiple Level Calibration





TIC: N8379.D

(5) 2-Fluorophenol (S)

4.57min 68.56ng/uL m

response 875775

Ion	Exp%	Act%
112.00	100	100
64.00	68.70	64.64
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* 9-19-17

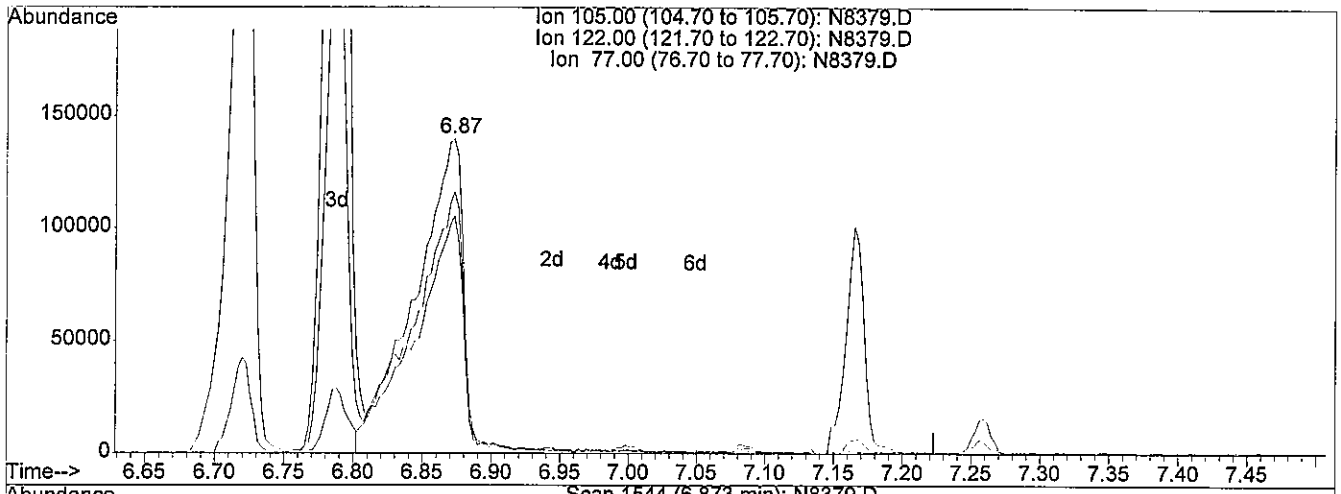
Quantitation Report (Qedit)

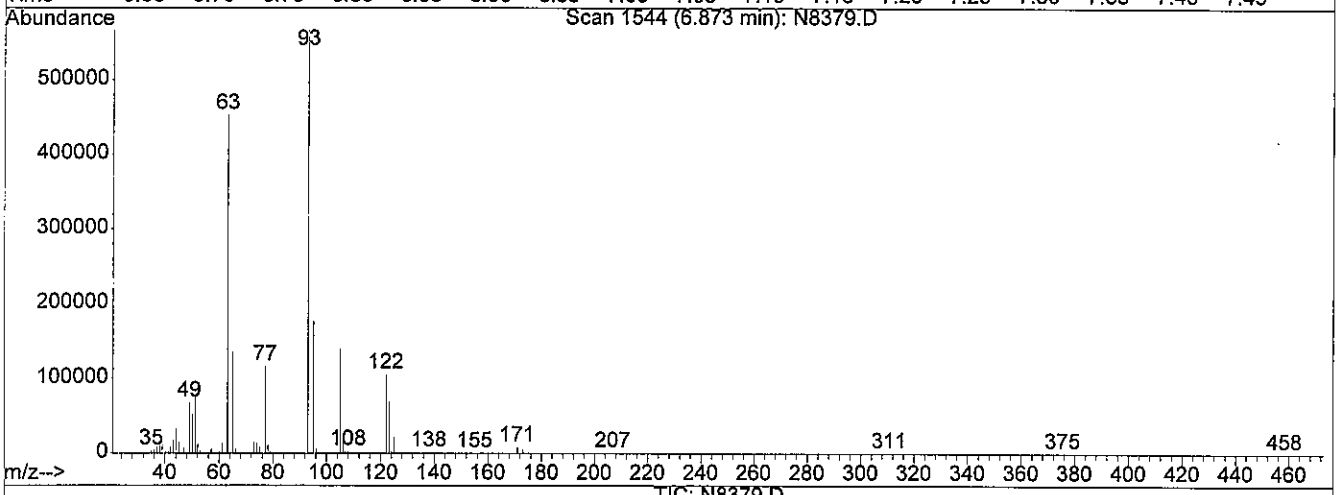
Data File : D:\HPCHEM\1\DATA\091113\N8379.D
Acq On : 11 Sep 2013 13:20
Sample : CCV
Misc : ST130904-1 60 PPM
MS Integration Params: RTEINT.P
Quant Time: Sep 11 14:54 2013

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 11 14:54:04 2013
Response via : Multiple Level Calibration





TIC: N8379.D

(33) Benzoic acid (T)

6.87min 56.51ng/uL

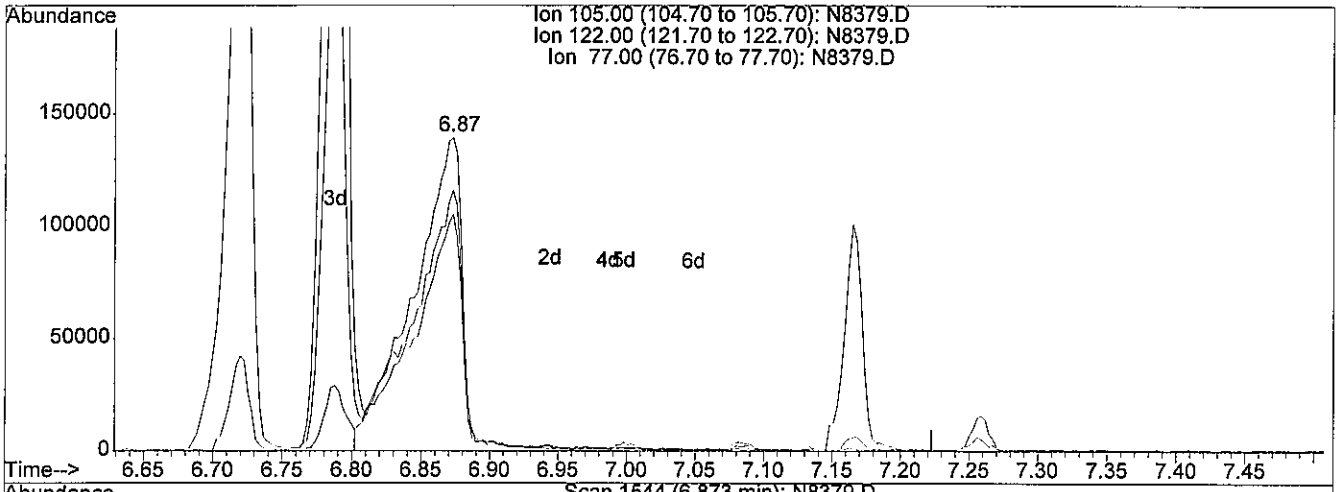
response 343443

Ion	Exp%	Act%
105.00	100	100
122.00	73.60	73.94
77.00	82.40	83.42
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : D:\HPCHEM\1\DATA\091113\N8379.D Vial: 2
Acq On : 11 Sep 2013 13:20 Operator: jk SOP 50
Sample : CCV Inst : GC/MS Ins
Misc : ST130904-1 60 PPM Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Sep 11 14:55 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 11 14:54:04 2013
Response via : Multiple Level Calibration



TIC: N8379.D

(33) Benzoic acid (T)

6.87min 58.66ng/uL m

response 356541

Ion	Exp%	Act%
105.00	100	100
122.00	73.60	71.23
77.00	82.40	80.35
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 JH *date* 5-19-14

N8379.D 090413S1.M Wed Sep 11 14:55:29 2013

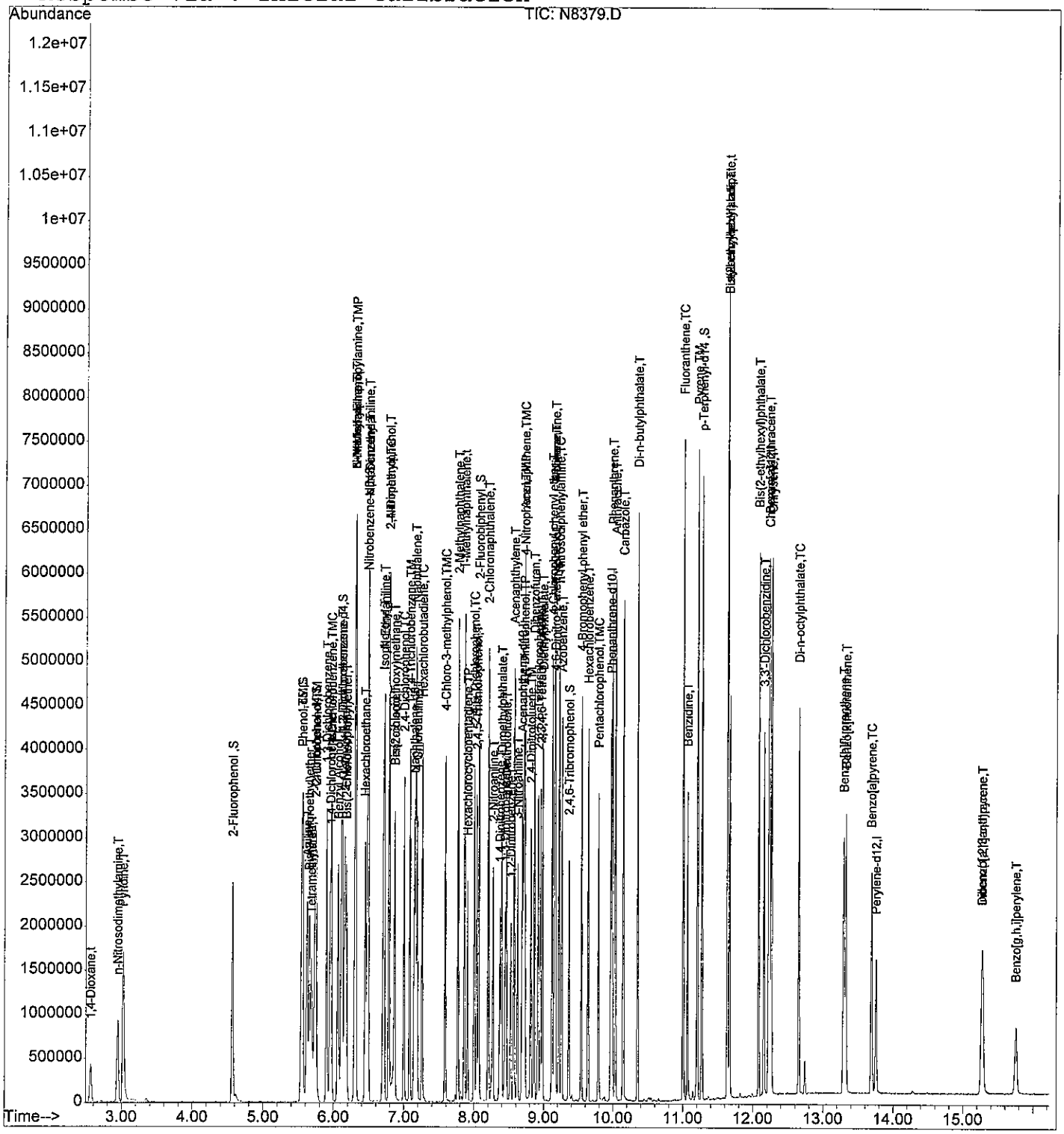
Quantitation Report

Data File : D:\HPCHEM\1\DATA\091113\N8379.D
Acq On : 11 Sep 2013 13:20
Sample : CCV
Misc : ST130904-1 60 PPM
MS Integration Params: RTEINT.P
Quant Time: Sep 11 14:55 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 : Wed Sep 11 14:54:04 2013
Response via : Initial Calibration



Sample Raw Data

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\091113\N8380.D
Acq On : 11 Sep 2013 13:44
Sample : EX130903-2MB
Misc : WATER EX130903-2
MS Integration Params: RTEINT.P
Quant Time: Sep 12 10:44 2013

Vial: 3
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 12 10:44:10 2013
Response via : Initial Calibration
DataAcq Meth : 090413S1

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	5.94	152	476321	40.00	ng/uL	0.00
24) Naphthalene-d8	7.14	136	1770272	40.00	ng/uL	0.00
41) Acenaphthene-d10	8.69	164	977797	40.00	ng/uL	0.00
69) Phenanthrene-d10	9.96	188	1711283	40.00	ng/uL	0.00
80) Chrysene-d12	12.24	240	1720900	40.00	ng/uL	0.00
91) Perylene-d12	13.77	264	1115316	40.00	ng/uL	0.01
System Monitoring Compounds						
5) 2-Fluorophenol	4.56	112	803513m	49.34	ng/uL	0.00
Spiked Amount 75.000	Range 46 - 105		Recovery = 65.79%			
6) 2-Chlorophenol-d4	5.72	132	768135	55.83	ng/uL	0.00
Spiked Amount 75.000	Range 33 - 110		Recovery = 74.44%			
8) Phenol-d5	5.53	99	1100342	51.70	ng/uL	-0.01
Spiked Amount 75.000	Range 50 - 109		Recovery = 68.93%			
15) 1,2-Dichlorobenzene-d4	6.10	152	350819	32.16	ng/uL	0.00
Spiked Amount 50.000	Range 16 - 110		Recovery = 64.32%			
25) Nitrobenzene-d5	6.47	82	636573	31.66	ng/uL	0.00
Spiked Amount 50.000	Range 53 - 111		Recovery = 63.32%			
46) 2-Fluorobiphenyl	8.07	172	1147123	34.84	ng/uL	0.00
Spiked Amount 50.000	Range 55 - 108		Recovery = 69.68%			
68) 2,4,6-Tribromophenol	9.36	330	273379	54.45	ng/uL	0.00
Spiked Amount 75.000	Range 42 - 117		Recovery = 72.60%			
83) p-Terphenyl-d14	11.27	244	1651912	41.11	ng/uL	0.00
Spiked Amount 50.000	Range 34 - 139		Recovery = 82.22%			

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration
N8380.D 090413S1.M Thu Sep 12 10:44:53 2013 Page 1

9-19-13

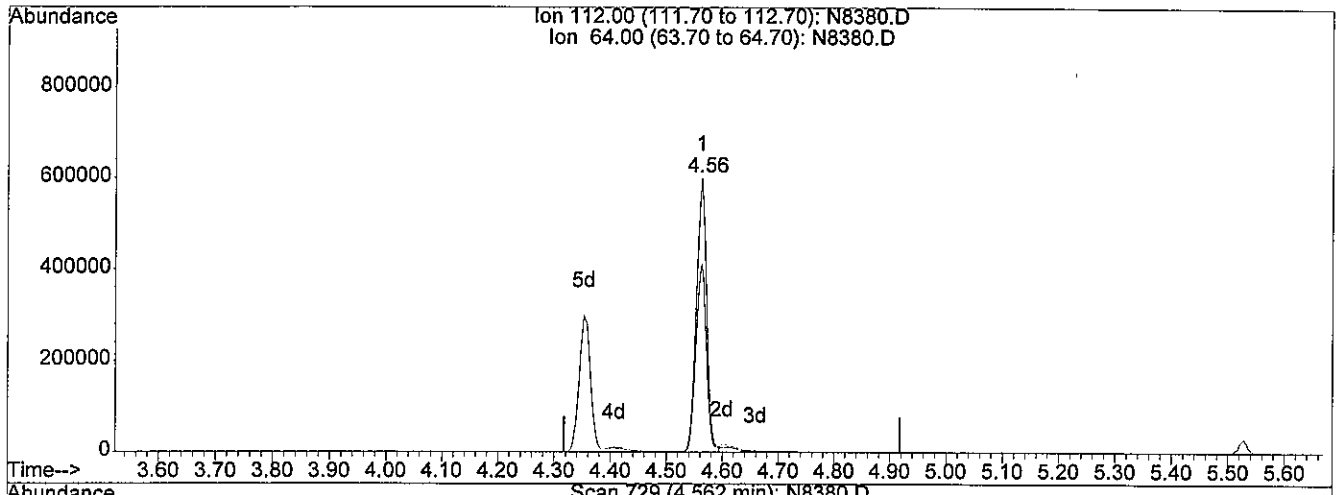
Quantitation Report (Qedit)

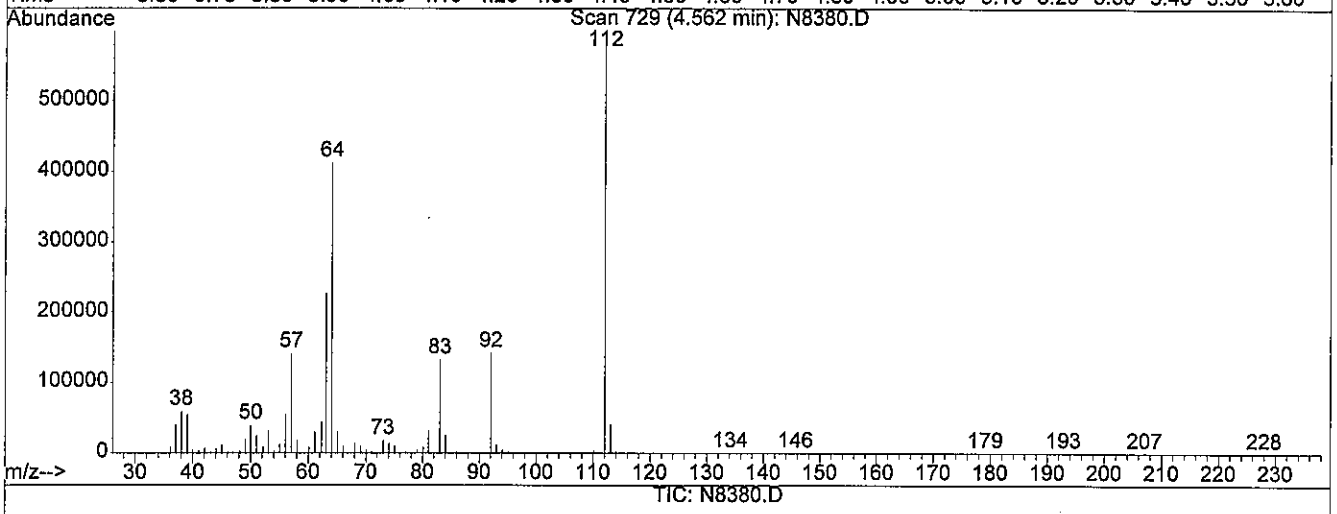
Data File : D:\HPCHEM\1\DATA\091113\N8380.D
Acq On : 11 Sep 2013 13:44
Sample : EX130903-2MB
Misc : WATER EX130903-2
MS Integration Params: RTEINT.P
Quant Time: Sep 12 10:44 2013

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 : Thu Sep 12 10:44:10 2013
Response via : Multiple Level Calibration





TIC: N8380.D

(5) 2-Fluorophenol (S)

4.56min 46.70ng/uL

response 760571

Ion	Exp%	Act%
112.00	100	100
64.00	68.70	74.36
0.00	0.00	0.00
0.00	0.00	0.00

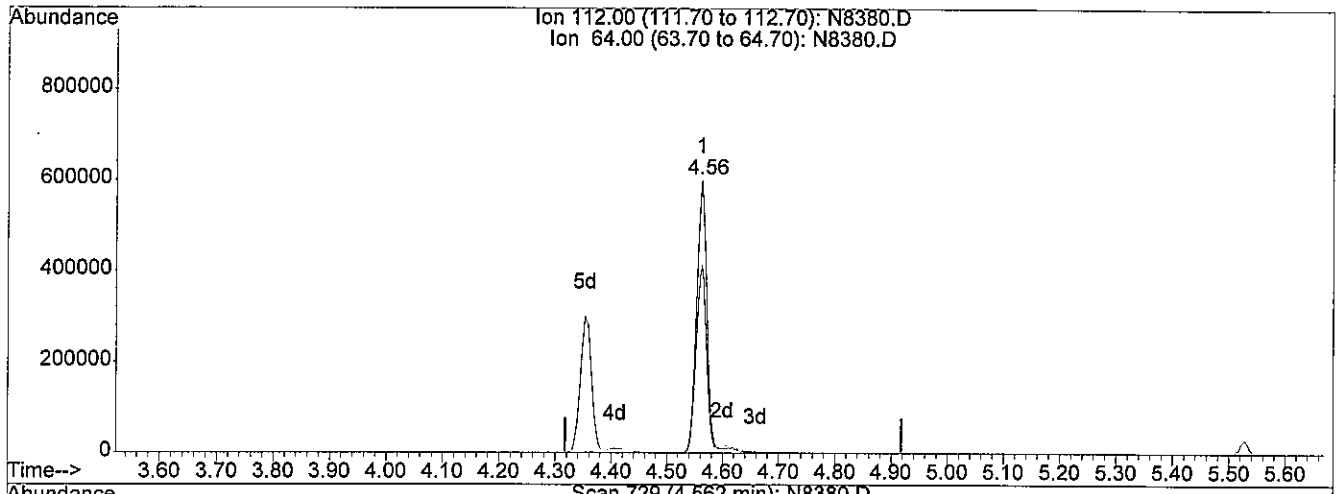
Before

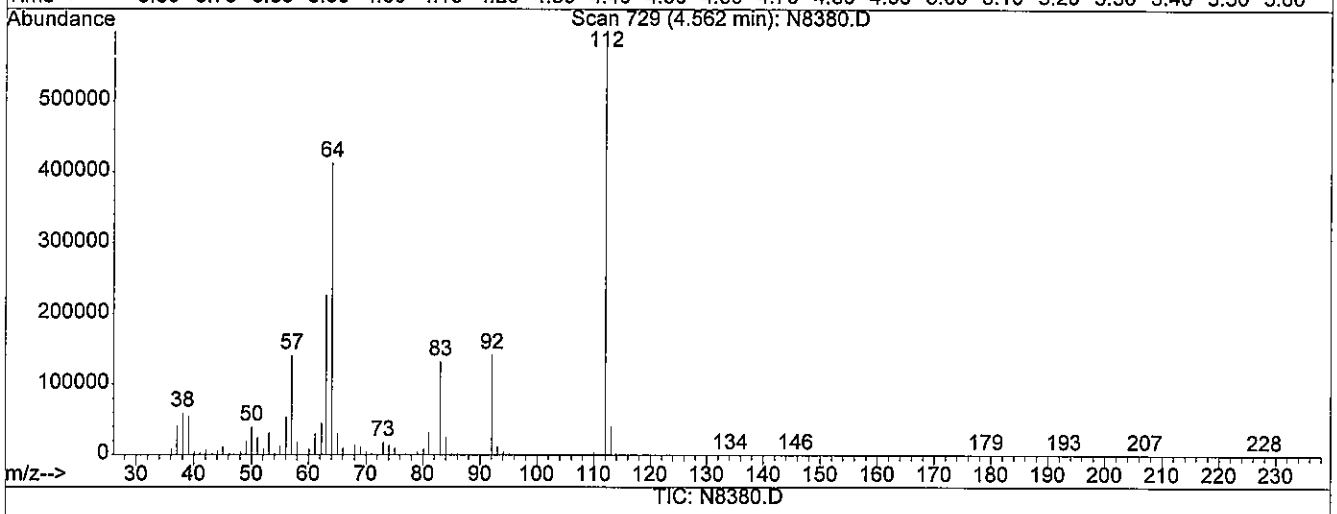
Quantitation Report (Qedit)

Data File : D:\HPCHEM\1\DATA\091113\N8380.D
Acq On : 11 Sep 2013 13:44
Sample : EX130903-2MB
Misc : WATER EX130903-2
MS Integration Params: RTEINT.P
Quant Time: Sep 12 10:44 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 : Thu Sep 12 10:44:10 2013
Response via : Multiple Level Calibration





(5) 2-Fluorophenol (S)

4.56min 49.34ng/uL m

response 803513

Ion	Exp%	Act%
112.00	100	100
64.00	68.70	70.39
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 JL *date* 9-19-13

N8380.D 090413S1.M Thu Sep 12 10:44:44 2013

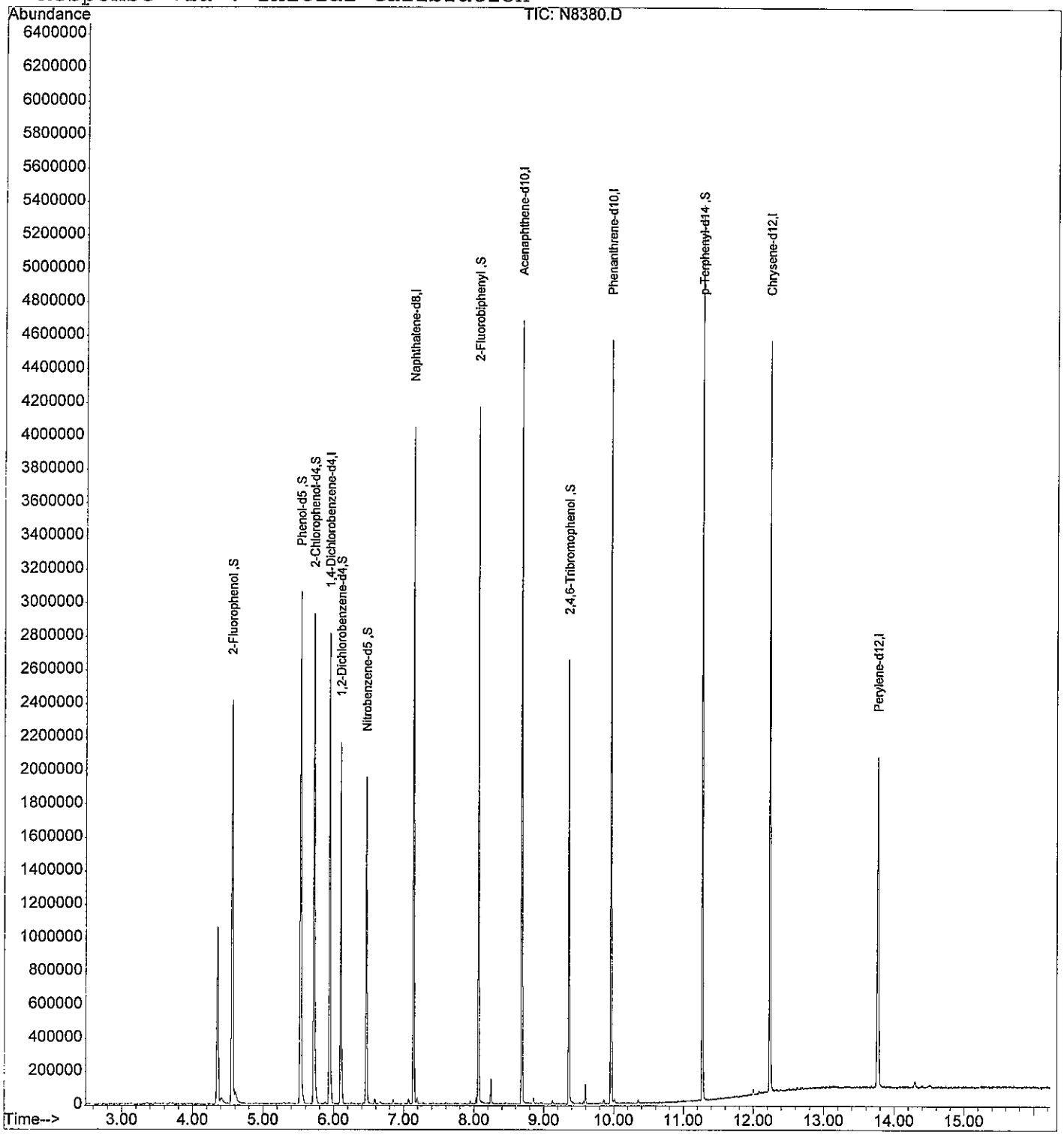
Quantitation Report

Data File : D:\HPCHEM\1\DATA\091113\N8380.D
Acq On : 11 Sep 2013 13:44
Sample : EX130903-2MB
Misc : WATER EX130903-2
MS Integration Params: RTEINT.P
Quant Time: Sep 12 10:44 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 : Thu Sep 12 10:44:10 2013
Response via : Initial Calibration



Library Search Compound Report

Data File : D:\HPCHEM\1\DATA\091113\N8380.D
Acq On : 11 Sep 2013 13:44
Sample : EX130903-2MB
Misc : WATER EX130903-2
MS Integration Params: LSCINT.P

Vial: 3
Operator: jk SOP 50
Inst : GC/MS Ins
Multiplr: 1.00

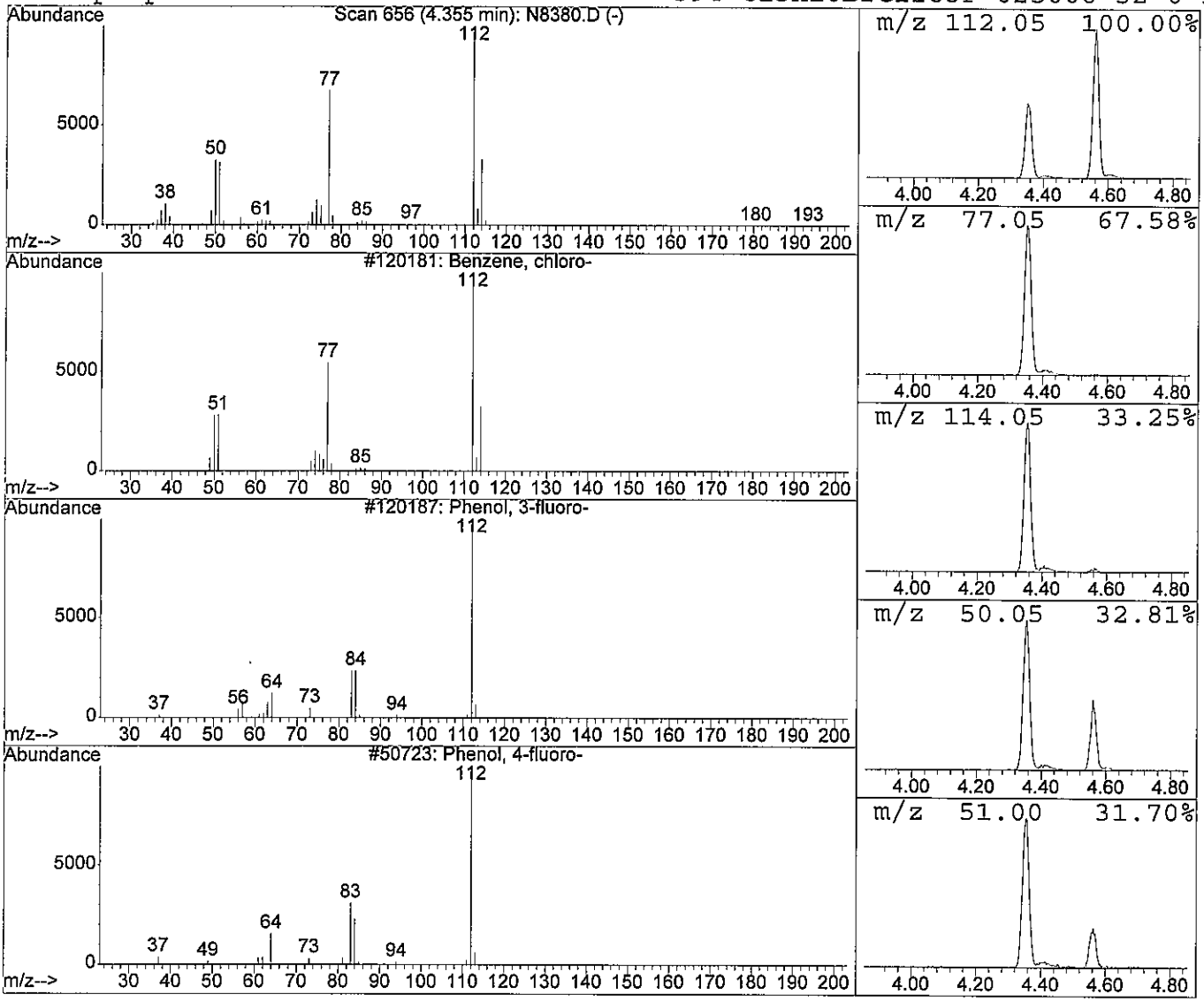
Quant Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)
Title : GC-MS Semivolatiles SOP no. 506
Library : D:\DATABASE\NIST98.L

****

Peak Number 1 Benzene, chloro- Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.36	21.42 ng/uL	1662420	1,4-Dichlorobenzene-d4	5.94

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, chloro-	112	C6H5Cl	000108-90-7	95
2	Phenol, 3-fluoro-	112	C6H5FO	000372-20-3	27
3	Phenol, 4-fluoro-	112	C6H5FO	000371-41-5	12
4	Leptophos oxon	394	C13H10BrCl2O3P	025006-32-0	12



Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\091113\N8383.D Vial: 6
Acq On : 11 Sep 2013 14:58 Operator: jk SOP 506 Rev
Sample : 1308515-1 Inst : GC/MS Ins
Misc : WATER EX130903-2 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Sep 12 10:48 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 12 10:44:10 2013
Response via : Initial Calibration
DataAcq Meth : 090413S1

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	5.94	152	486518	40.00	ng/uL	0.00
24) Naphthalene-d8	7.14	136	1781058	40.00	ng/uL	0.00
41) Acenaphthene-d10	8.68	164	993968	40.00	ng/uL	0.00
69) Phenanthrene-d10	9.96	188	1732338	40.00	ng/uL	0.00
80) Chrysene-d12	12.24	240	1767373	40.00	ng/uL	0.00
91) Perylene-d12	13.77	264	1110763	40.00	ng/uL	0.01
System Monitoring Compounds						
5) 2-Fluorophenol	4.56	112	774486	46.56	ng/uL	0.00
Spiked Amount 75.000	Range 46 - 105		Recovery = 62.08%			
6) 2-Chlorophenol-d4	5.72	132	764862	54.43	ng/uL	0.00
Spiked Amount 75.000	Range 33 - 110		Recovery = 72.57%			
8) Phenol-d5	5.53	99	1066572	49.06	ng/uL	-0.01
Spiked Amount 75.000	Range 50 - 109		Recovery = 65.41%			
15) 1,2-Dichlorobenzene-d4	6.10	152	350101	31.42	ng/uL	0.00
Spiked Amount 50.000	Range 16 - 110		Recovery = 62.84%			
25) Nitrobenzene-d5	6.46	82	616690	30.49	ng/uL	-0.01
Spiked Amount 50.000	Range 53 - 111		Recovery = 60.98%			
46) 2-Fluorobiphenyl	8.06	172	1131510	33.81	ng/uL	0.00
Spiked Amount 50.000	Range 55 - 108		Recovery = 67.62%			
68) 2,4,6-Tribromophenol	9.36	330	284685	55.78	ng/uL	0.00
Spiked Amount 75.000	Range 42 - 117		Recovery = 74.37%			
83) p-Terphenyl-d14	11.27	244	1619461	39.24	ng/uL	0.00
Spiked Amount 50.000	Range 34 - 139		Recovery = 78.48%			

Target Compounds Qvalue

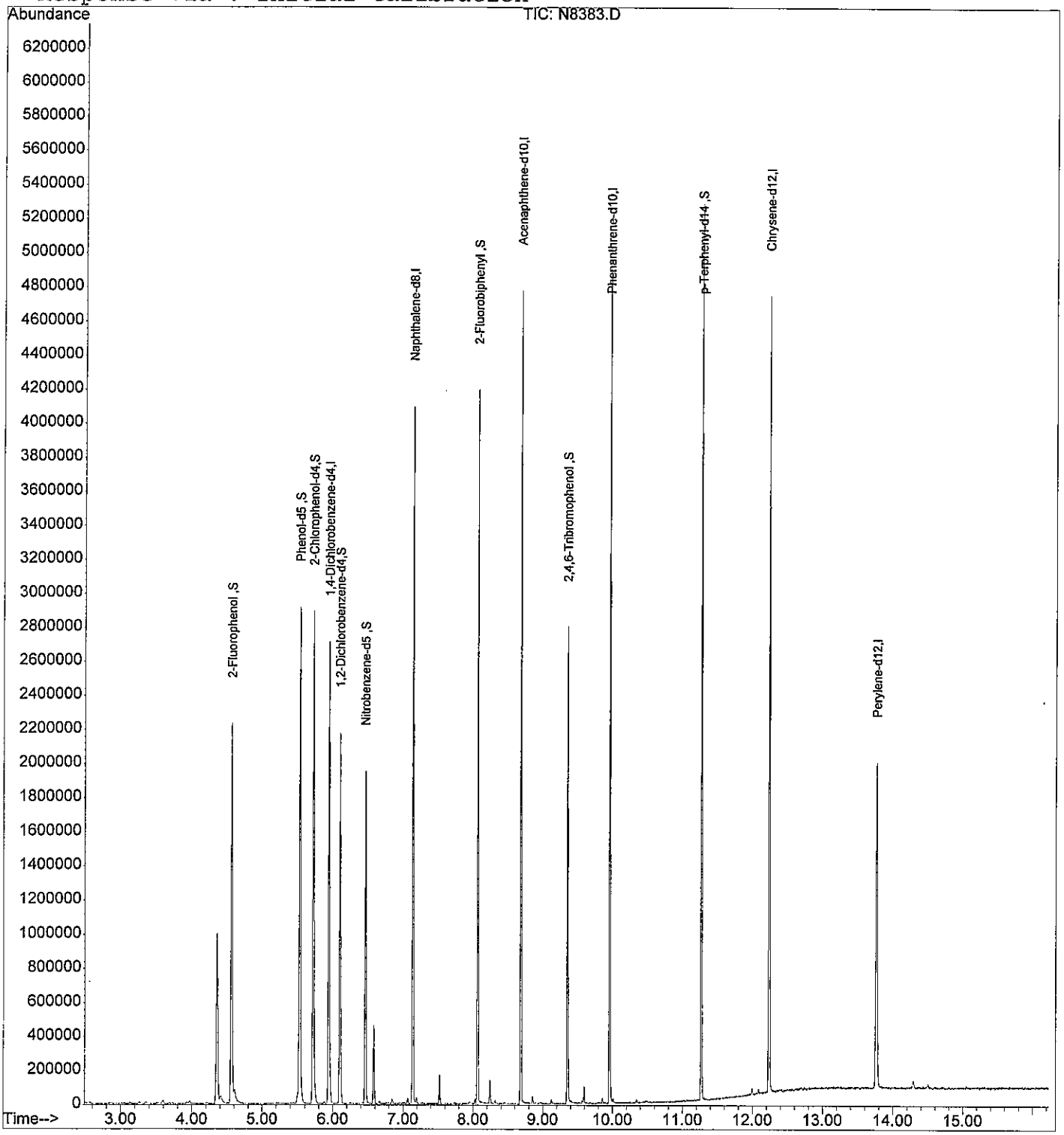
(#) = qualifier out of range (m) = manual integration
N8383.D 090413S1.M Thu Sep 12 10:48:54 2013 Page 1

Quantitation Report

Data File : D:\HPCHEM\1\DATA\091113\N8383.D
Acq On : 11 Sep 2013 14:58
Sample : 1308515-1
Misc : WATER EX130903-2
MS Integration Params: RTEINT.P
Quant Time: Sep 12 10:48 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 : Thu Sep 12 10:44:10 2013
Response via : Initial Calibration



Library Search Compound Report

Data File : D:\HPCHEM\1\DATA\091113\N8383.D
Acq On : 11 Sep 2013 14:58
Sample : 1308515-1
Misc : WATER EX130903-2
MS Integration Params: LSCINT.P

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

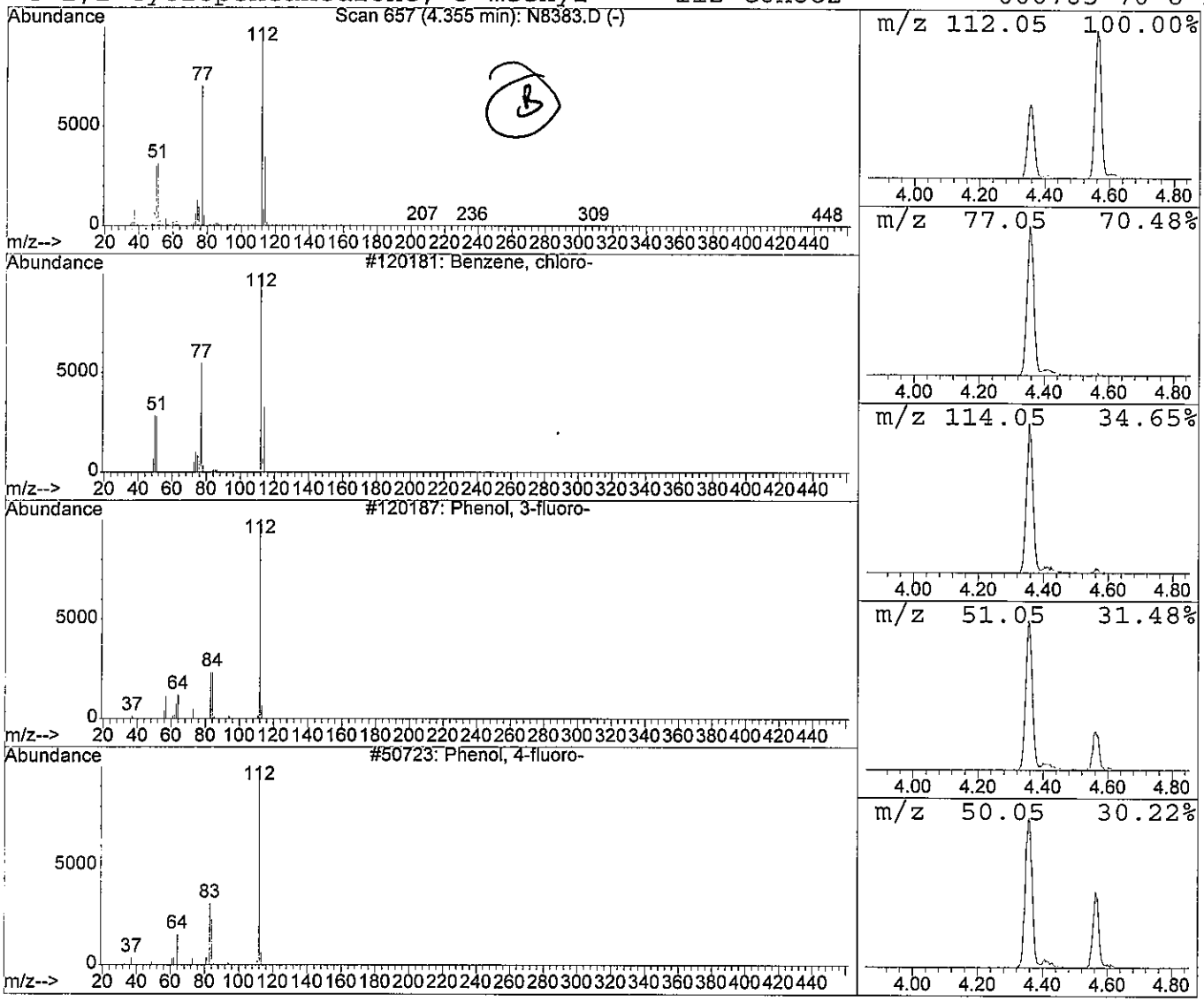
Quant Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)
Title : GC-MS Semivolatiles SOP no. 506
Library : D:\DATABASE\NIST98.L

****

Peak Number 1 Benzene, chloro- Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.36	20.20 ng/uL	1588340	1,4-Dichlorobenzene-d4	5.94

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, chloro-	112	C6H5Cl	000108-90-7	96
2	Phenol, 3-fluoro-	112	C6H5FO	000372-20-3	27
3	Phenol, 4-fluoro-	112	C6H5FO	000371-41-5	16
4	1,2-Cyclopentanedione, 3-methyl-	112	C6H8O2	000765-70-8	16



Data File : D:\HPCHEM\1\DATA\091113\N8383.D
Acq On : 11 Sep 2013 14:58
Sample : 1308515-1
Misc : WATER EX130903-2
MS Integration Params: LSCINT.P

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

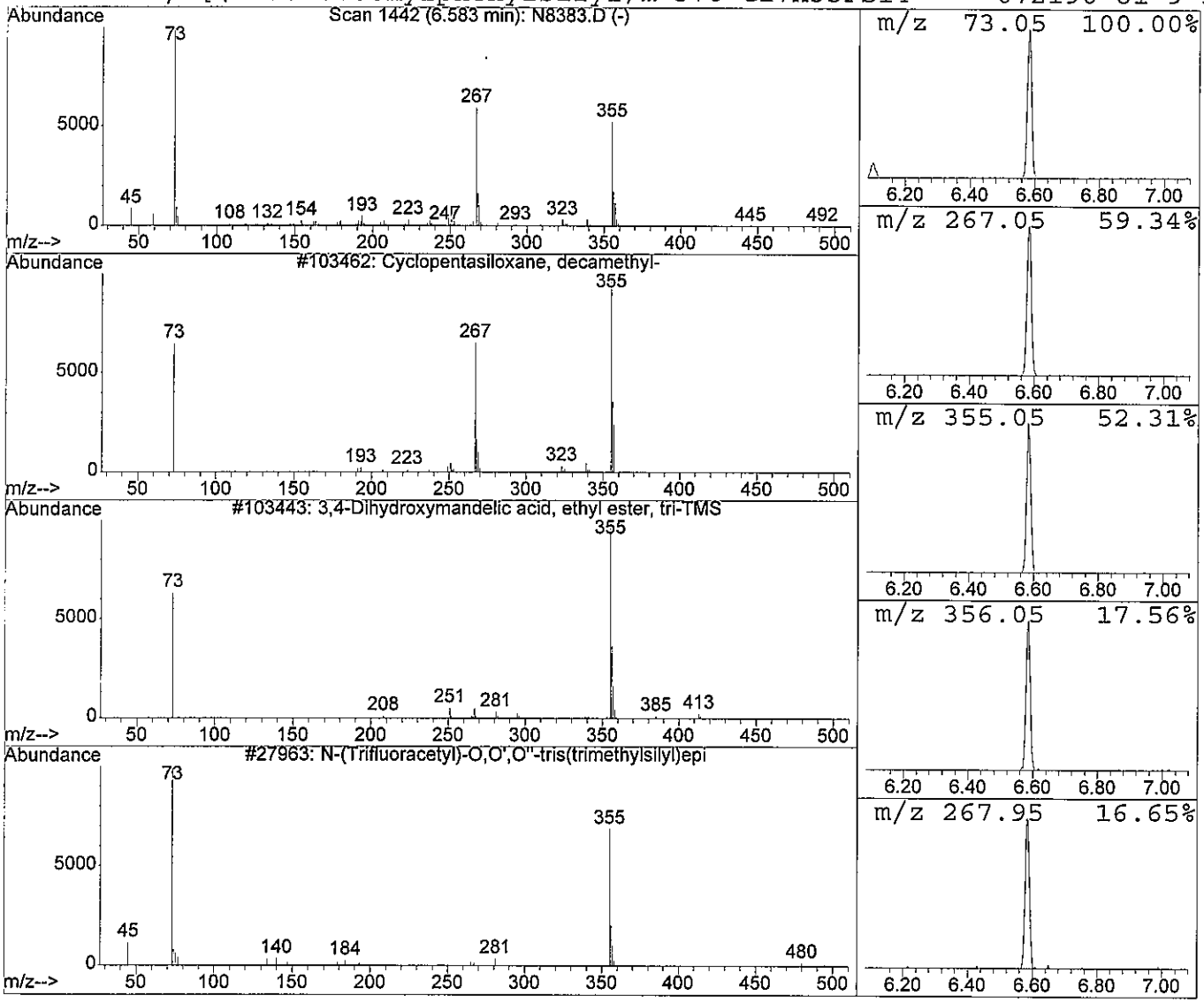
Quant Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)
Title : GC-MS Semivolatiles SOP no. 506
Library : D:\DATABASE\NIST98.L

****

Peak Number 2 Cyclopentasiloxane, decamethyl Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
6.58	4.55 ng/uL	438690	Naphthalene-d8	7.14

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclopentasiloxane, decamethyl-	370	C10H30O5Si5	000541-02-6	91
2	3,4-Dihydroxymandelic acid, ethyl e	428	C19H36O5Si3	1000071-70-2	38
3	N-(Trifluoracetyl)-O,O',O''-tris(tr	495	C20H36F3NO4Si3	054135-51-2	38
4	Silane, [(fluoromethylphenylsilyl)m	370	C17H35FSi4	072190-81-9	38



Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\091113\N8384.D Vial: 7
Acq On : 11 Sep 2013 15:22 Operator: jk SOP 506 Rev
Sample : 1308515-2 Inst : GC/MS Ins
Misc : WATER EX130903-2 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Sep 12 10:49 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 : Thu Sep 12 10:44:10 2013
Response via : Initial Calibration
DataAcq Meth : 090413S1

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	5.94	152	466359	40.00	ng/uL	0.00
24) Naphthalene-d8	7.14	136	1750152	40.00	ng/uL	0.00
41) Acenaphthene-d10	8.68	164	950115	40.00	ng/uL	0.00
69) Phenanthrene-d10	9.96	188	1698164	40.00	ng/uL	0.00
80) Chrysene-d12	12.24	240	1775324	40.00	ng/uL	0.00
91) Perylene-d12	13.77	264	1157339	40.00	ng/uL	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	4.56	112	816991m	51.24	ng/uL	0.00
Spiked Amount 75.000	Range 46 - 105		Recovery = 68.32%			
6) 2-Chlorophenol-d4	5.72	132	770426	57.20	ng/uL	0.00
Spiked Amount 75.000	Range 33 - 110		Recovery = 76.27%			
8) Phenol-d5	5.53	99	1085059	52.07	ng/uL	-0.02
Spiked Amount 75.000	Range 50 - 109		Recovery = 69.43%			
15) 1,2-Dichlorobenzene-d4	6.10	152	356794	33.40	ng/uL	0.00
Spiked Amount 50.000	Range 16 - 110		Recovery = 66.80%			
25) Nitrobenzene-d5	6.47	82	626716	31.53	ng/uL	0.00
Spiked Amount 50.000	Range 53 - 111		Recovery = 63.06%			
46) 2-Fluorobiphenyl	8.06	172	1131944	35.38	ng/uL	0.00
Spiked Amount 50.000	Range 55 - 108		Recovery = 70.76%			
68) 2,4,6-Tribromophenol	9.36	330	284621	58.34	ng/uL	0.00
Spiked Amount 75.000	Range 42 - 117		Recovery = 77.79%			
83) p-Terphenyl-d14	11.27	244	1669339	40.27	ng/uL	0.00
Spiked Amount 50.000	Range 34 - 139		Recovery = 80.54%			

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration
N8384.D 090413S1.M Thu Sep 12 10:49:29 2013 Page 1

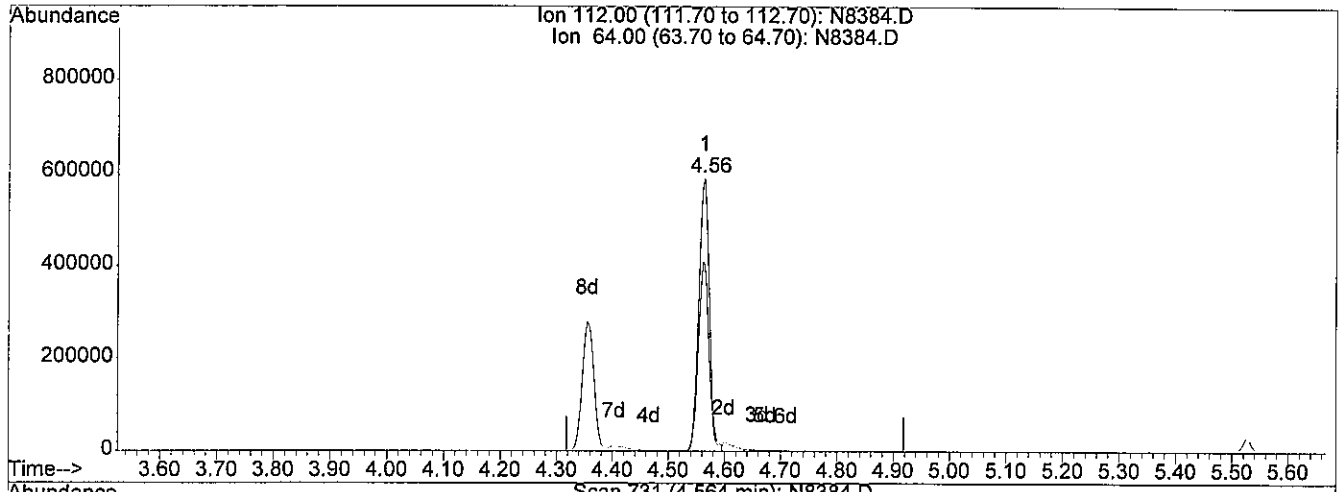
Quantitation Report (Qedit)

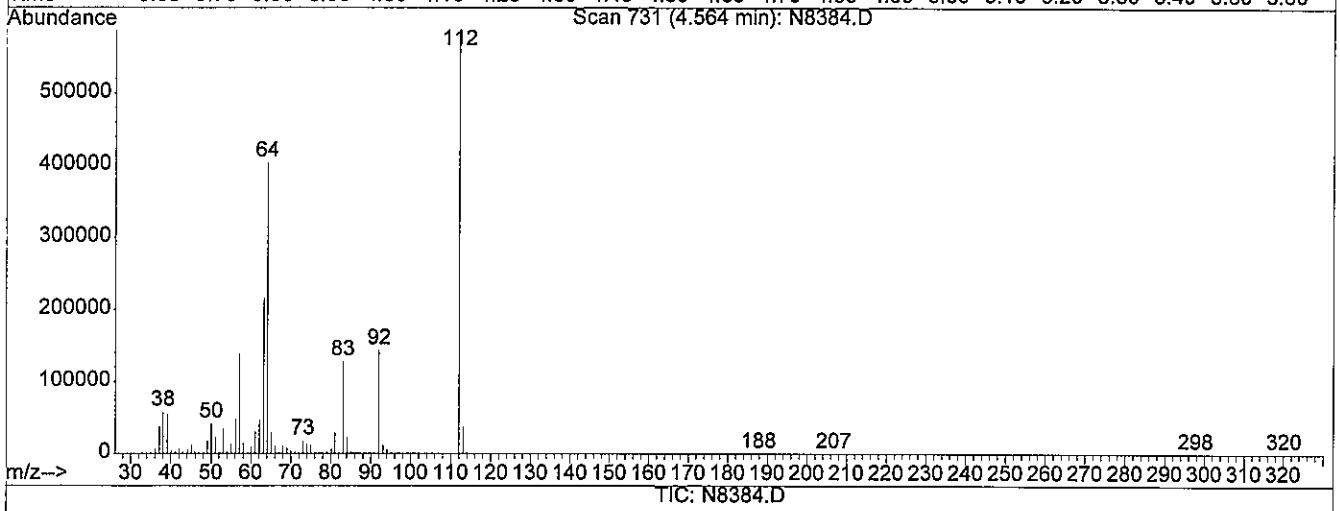
Data File : D:\HPCHEM\1\DATA\091113\N8384.D
Acq On : 11 Sep 2013 15:22
Sample : 1308515-2
Misc : WATER EX130903-2
MS Integration Params: RTEINT.P
Quant Time: Sep 12 10:49 2013

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 : Thu Sep 12 10:44:10 2013
Response via : Multiple Level Calibration





TIC: N8384.D

(5) 2-Fluorophenol (S)

4.56min 48.63ng/uL

response 775418

Ion	Exp%	Act%
112.00	100	100
64.00	68.70	73.00
0.00	0.00	0.00
0.00	0.00	0.00

3c Bor

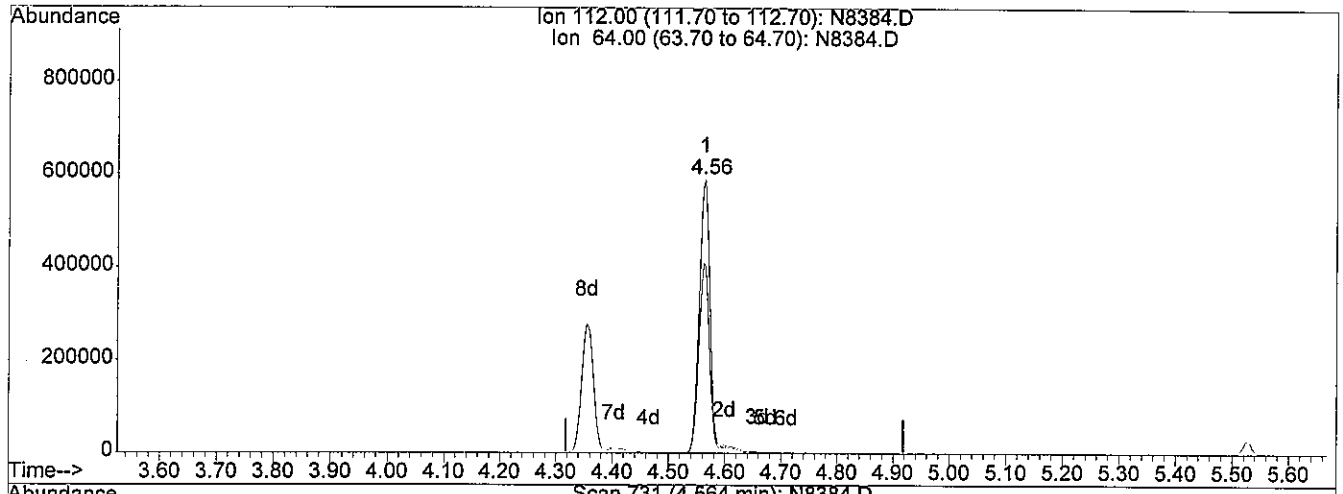
Quantitation Report (Qedit)

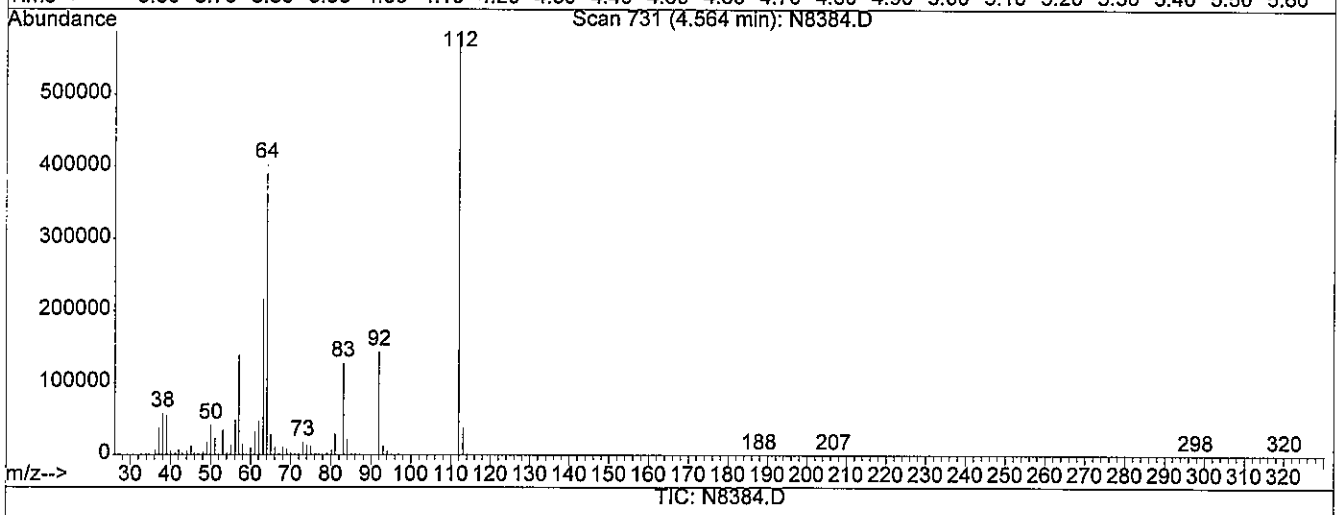
Data File : D:\HPCHEM\1\DATA\091113\N8384.D
Acq On : 11 Sep 2013 15:22
Sample : 1308515-2
Misc : WATER EX130903-2
MS Integration Params: RTEINT.P
Quant Time: Sep 12 10:49 2013

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 : Thu Sep 12 10:44:10 2013
Response via : Multiple Level Calibration





(5) 2-Fluorophenol (S)

4.56min 51.24ng/uL m

response 816991

Ion	Exp%	Act%
112.00	100	100
64.00	68.70	69.29
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 JL *date* 5-15-13

N8384.D 090413S1.M Thu Sep 12 10:49:19 2013

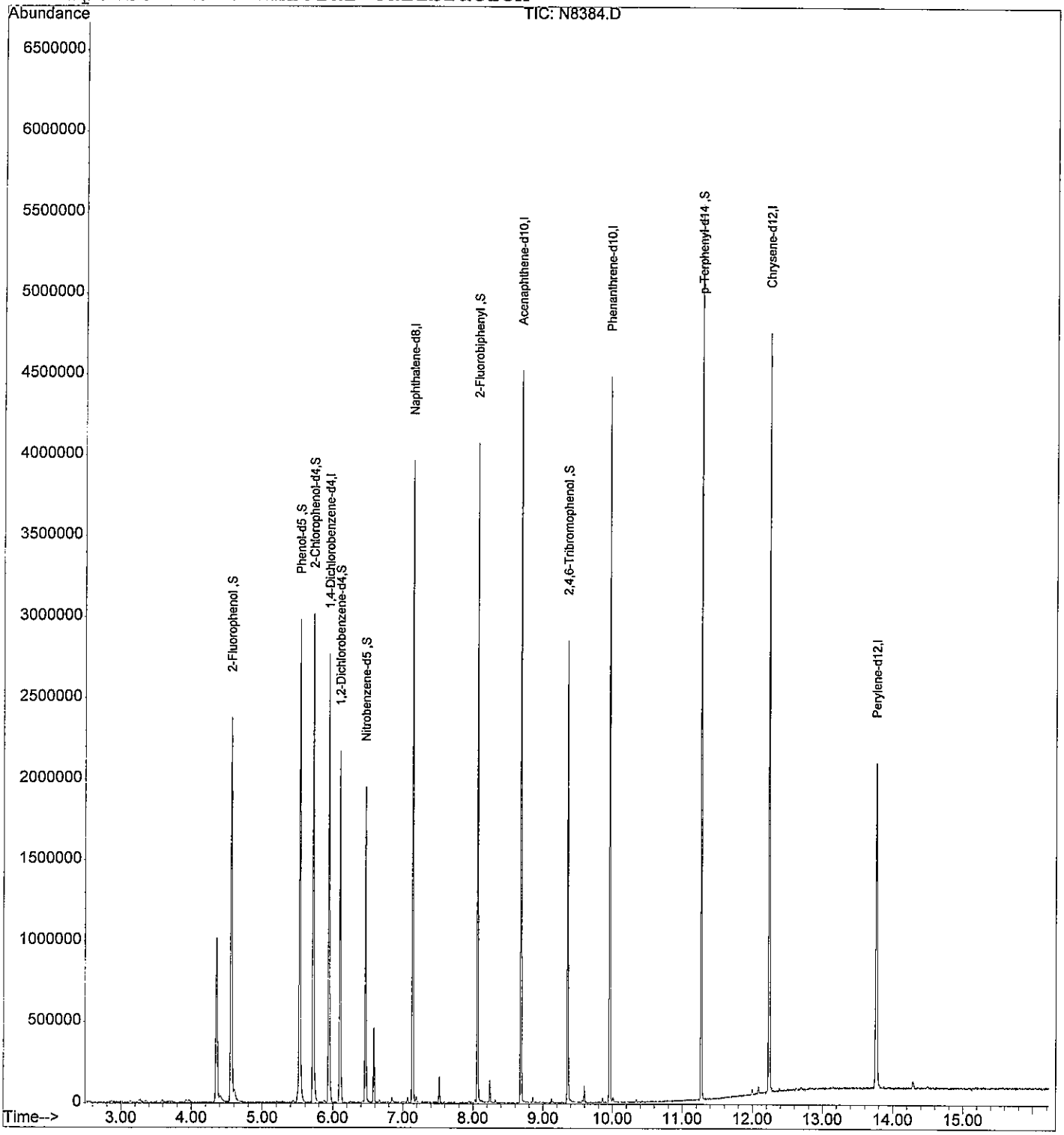
Quantitation Report

Data File : D:\HPCHEM\1\DATA\091113\N8384.D
Acq On : 11 Sep 2013 15:22
Sample : 1308515-2
Misc : WATER EX130903-2
MS Integration Params: RTEINT.P
Quant Time: Sep 12 10:49 2013

Vial: 7
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 12 10:44:10 2013
Response via : Initial Calibration



Library Search Compound Report

Data File : D:\HPCHEM\1\DATA\091113\N8384.D
Acq On : 11 Sep 2013 15:22
Sample : 1308515-2
Misc : WATER EX130903-2
MS Integration Params: LSCINT.P

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

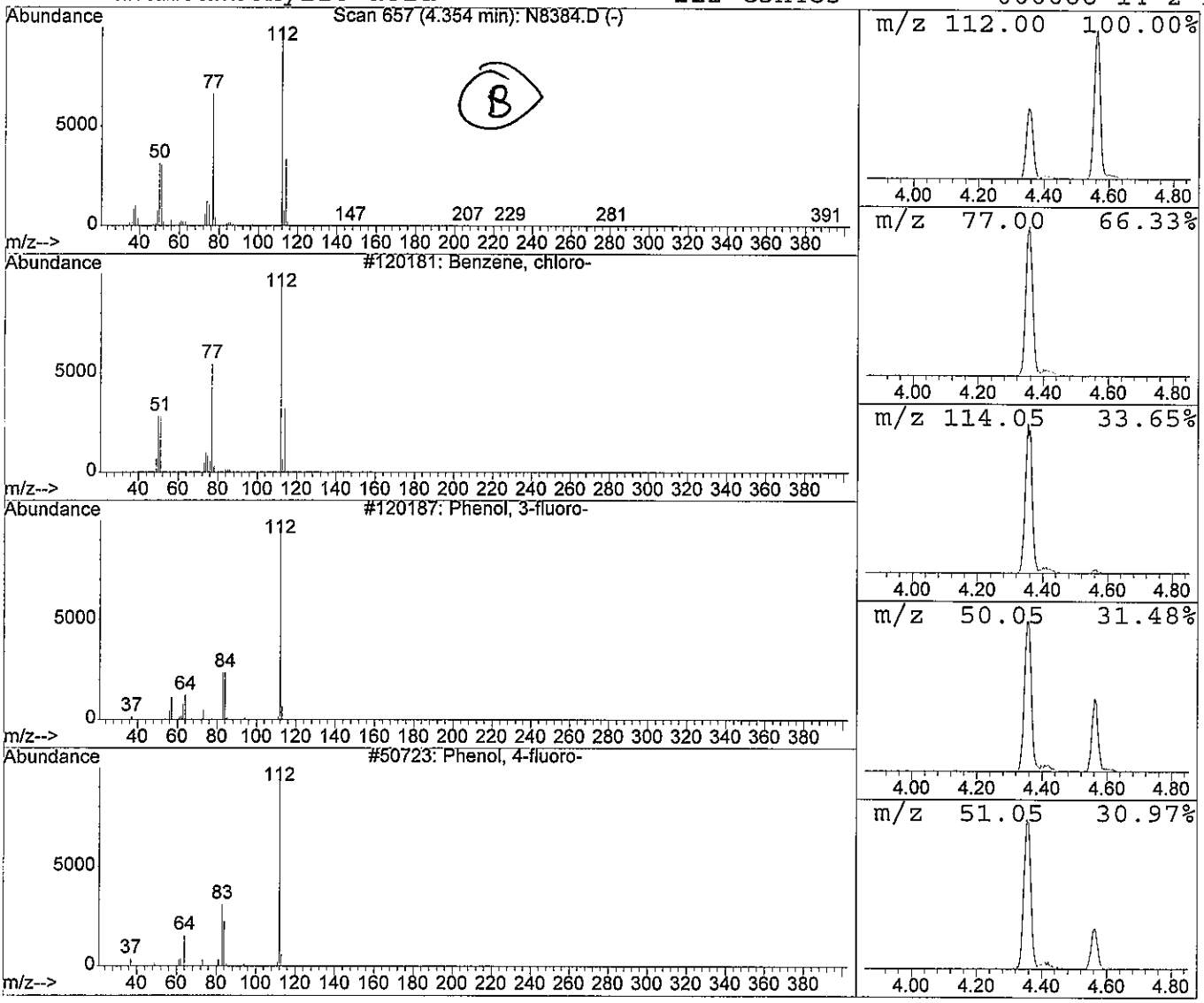
Quant Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)
Title : GC-MS Semivolatiles SOP no. 506
Library : D:\DATABASE\NIST98.L

****

Peak Number 1 Benzene, chloro- Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.35	21.27 ng/uL	1643130	1,4-Dichlorobenzene-d4	5.94

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, chloro-	112	C6H5Cl	000108-90-7	96
2	Phenol, 3-fluoro-	112	C6H5FO	000372-20-3	27
3	Phenol, 4-fluoro-	112	C6H5FO	000371-41-5	9
4	2-Furancarboxylic acid	112	C5H4O3	000088-14-2	9



Library Search Compound Report

Data File : D:\HPCHEM\1\DATA\091113\N8384.D
Acq On : 11 Sep 2013 15:22
Sample : 1308515-2
Misc : WATER EX130903-2
MS Integration Params: LSCINT.P

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

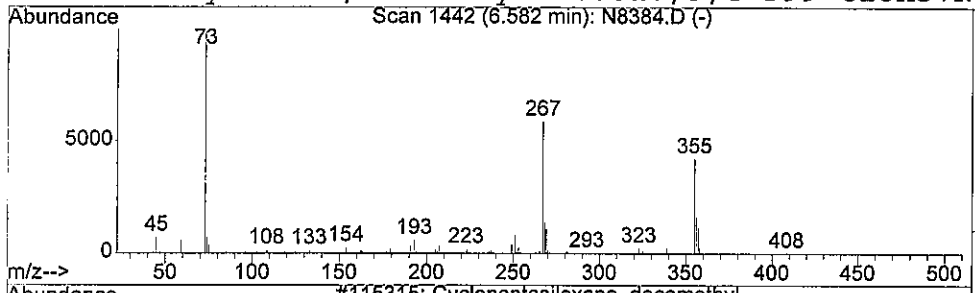
Quant Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)
Title : GC-MS Semivolatiles SOP no. 506
Library : D:\DATABASE\NIST98.L

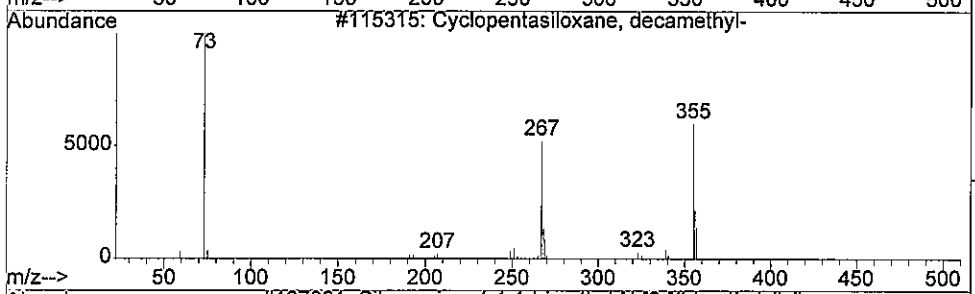
****

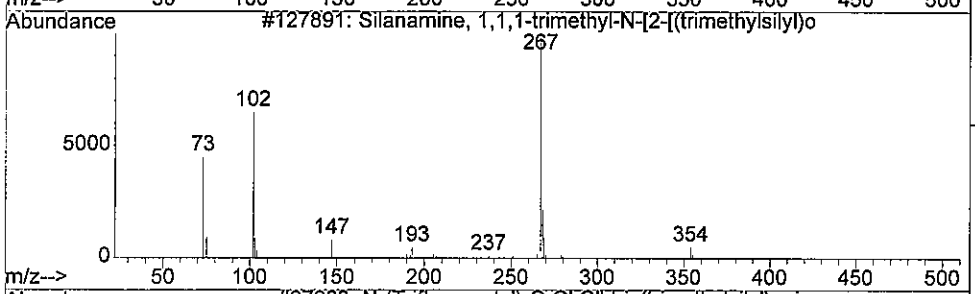
Peak Number 2 Cyclopentasiloxane, decamethyl Concentration Rank 2

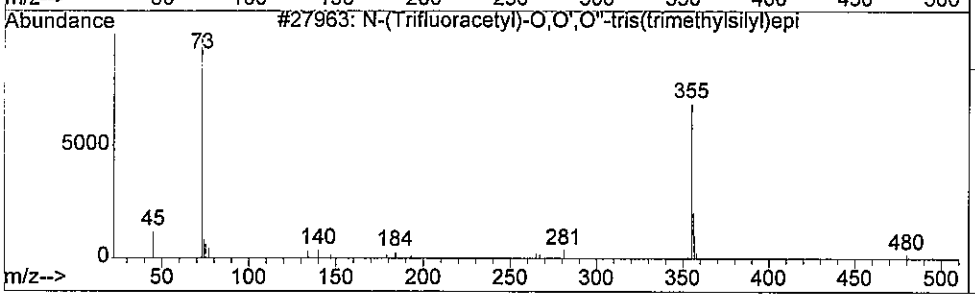
R.T.	EstConc	Area	Relative to ISTD	R.T.
6.58	4.84 ng/uL	450894	Naphthalene-d8	7.14

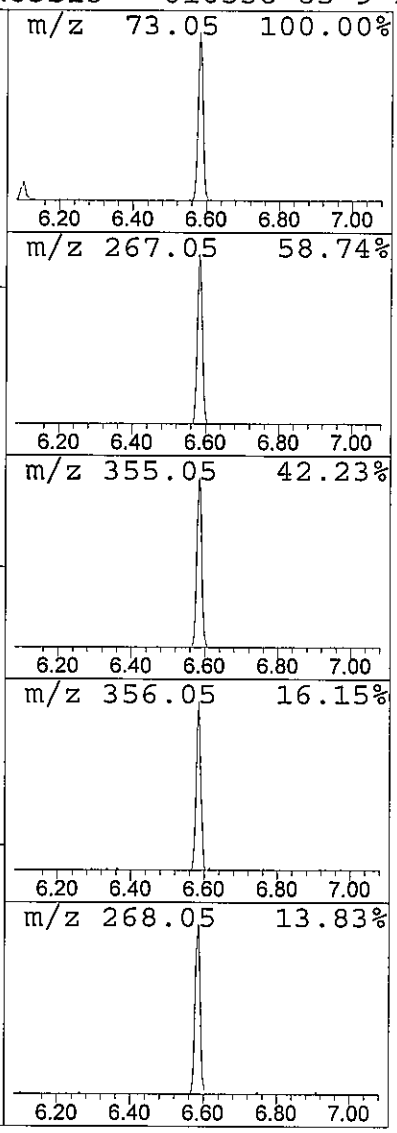
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclopentasiloxane, decamethyl-	370	C10H30O5Si5	000541-02-6	91
2	Silanamine, 1,1,1-trimethyl-N-[2-[(	369	C17H35NO2Si3	068595-60-8	38
3	N-(Trifluoracetyl)-O,O',O''-tris(tr	495	C20H36F3NO4Si3	054135-51-2	38
4	Phenethylamine, N-methyl-.beta.,3,4	399	C18H37NO3Si3	010538-85-9	37











Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\091113\N8385.D Vial: 8
Acq On : 11 Sep 2013 15:47 Operator: jk SOP 506 Rev
Sample : 1308515-3 Inst : GC/MS Ins
Misc : WATER EX130903-2 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Sep 12 10:49 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 : Thu Sep 12 10:44:10 2013
Response via : Initial Calibration
DataAcq Meth : 090413S1

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	5.94	152	463038	40.00	ng/uL	0.00
24) Naphthalene-d8	7.14	136	1726831	40.00	ng/uL	0.00
41) Acenaphthene-d10	8.68	164	934582	40.00	ng/uL	0.00
69) Phenanthrene-d10	9.96	188	1672618	40.00	ng/uL	0.00
80) Chrysene-d12	12.23	240	1710778	40.00	ng/uL	0.00
91) Perylene-d12	13.76	264	1076756	40.00	ng/uL	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	4.56	112	715160	45.17	ng/uL	0.00
Spiked Amount 75.000	Range 46 - 105		Recovery = 60.23%			
6) 2-Chlorophenol-d4	5.72	132	695436	52.00	ng/uL	-0.01
Spiked Amount 75.000	Range 33 - 110		Recovery = 69.33%			
8) Phenol-d5	5.52	99	978518	47.30	ng/uL	-0.02
Spiked Amount 75.000	Range 50 - 109		Recovery = 63.07%			
15) 1,2-Dichlorobenzene-d4	6.10	152	321775	30.34	ng/uL	0.00
Spiked Amount 50.000	Range 16 - 110		Recovery = 60.68%			
25) Nitrobenzene-d5	6.46	82	563276	28.72	ng/uL	-0.01
Spiked Amount 50.000	Range 53 - 111		Recovery = 57.44%			
46) 2-Fluorobiphenyl	8.06	172	1020807	32.44	ng/uL	0.00
Spiked Amount 50.000	Range 55 - 108		Recovery = 64.88%			
68) 2,4,6-Tribromophenol	9.36	330	271744	56.62	ng/uL	0.00
Spiked Amount 75.000	Range 42 - 117		Recovery = 75.49%			
83) p-Terphenyl-d14	11.27	244	1629009	40.78	ng/uL	0.00
Spiked Amount 50.000	Range 34 - 139		Recovery = 81.56%			

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration
N8385.D 090413S1.M Thu Sep 12 10:49:57 2013 Page 1

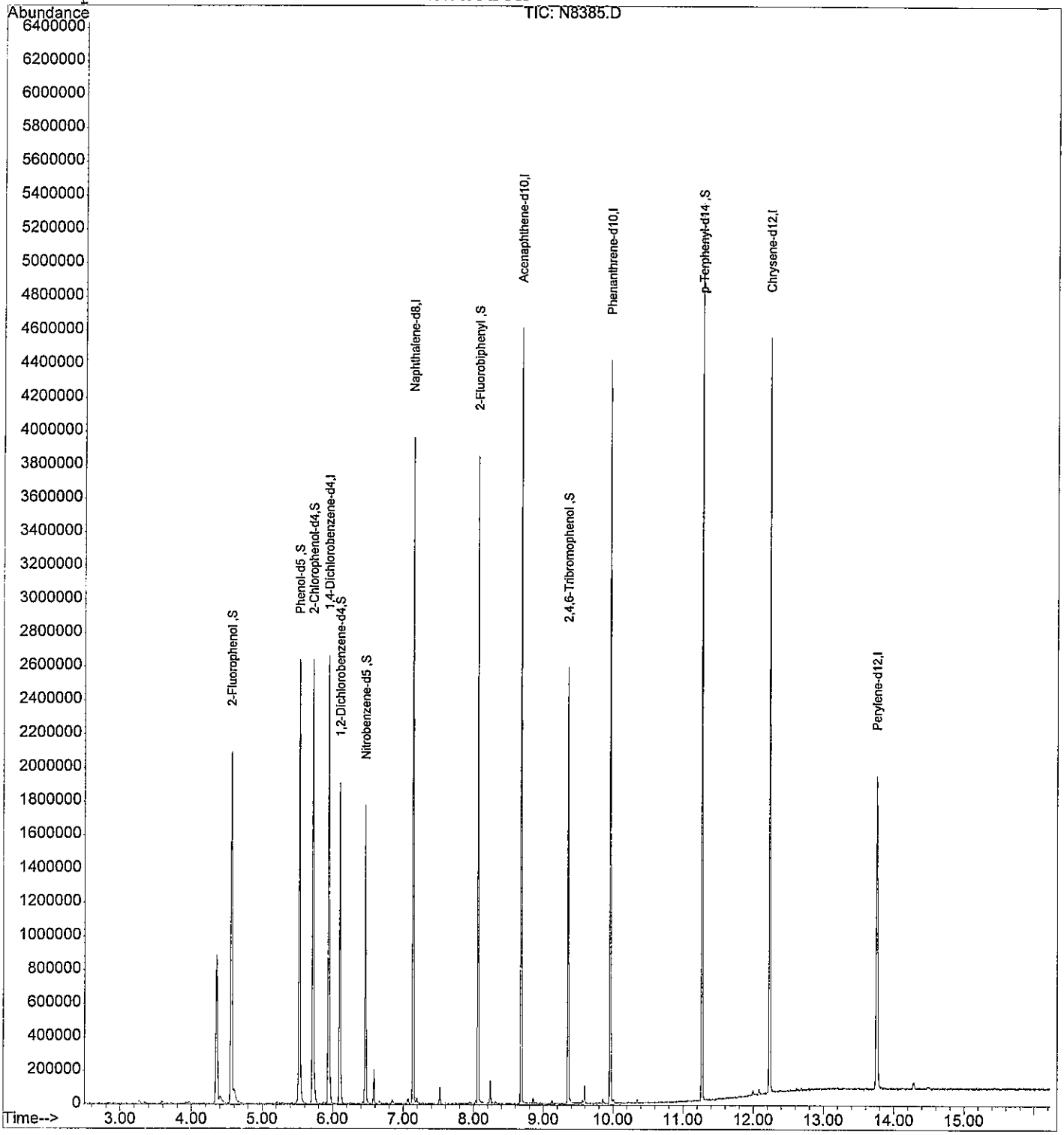
Quantitation Report

Data File : D:\HPCHEM\1\DATA\091113\N8385.D
Acq On : 11 Sep 2013 15:47
Sample : 1308515-3
Misc : WATER EX130903-2
MS Integration Params: RTEINT.P
Quant Time: Sep 12 10:49 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 : Thu Sep 12 10:44:10 2013
Response via : Initial Calibration



Data File : D:\HPCHEM\1\DATA\091113\N8385.D
Acq On : 11 Sep 2013 15:47
Sample : 1308515-3
Misc : WATER EX130903-2
MS Integration Params: LSCINT.P

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

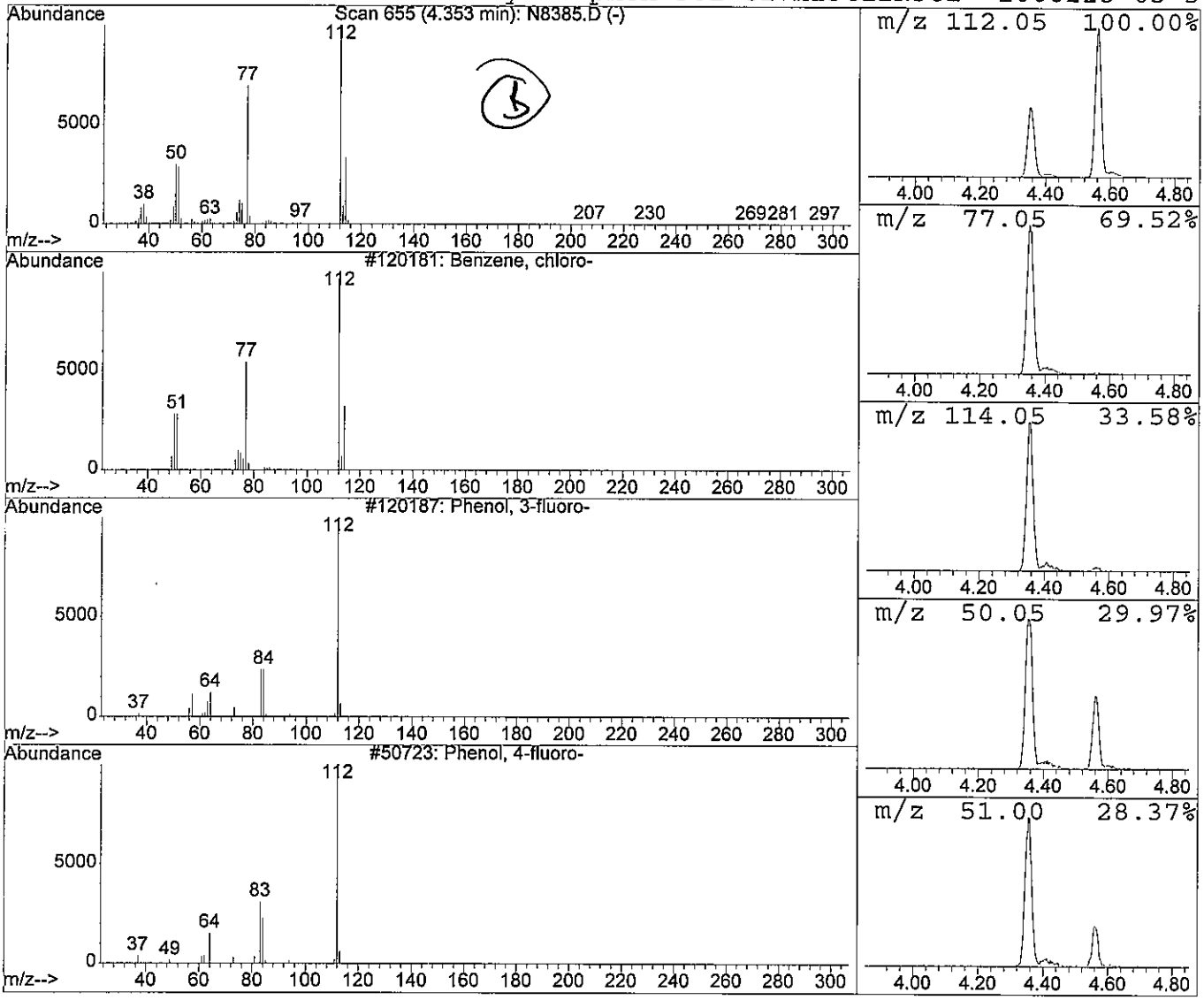
Quant Method : D:\HPCHEM\1\METHODS\090413S1.M (RTE Integrator)
Title : GC-MS Semivolatiles SOP no. 506
Library : D:\DATABASE\NIST98.L

****

Peak Number 1 Benzene, chloro- Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.35	19.04 ng/uL	1452400	1,4-Dichlorobenzene-d4	5.94

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, chloro-	112	C6H5Cl	000108-90-7	97
2	Phenol, 3-fluoro-	112	C6H5FO	000372-20-3	27
3	Phenol, 4-fluoro-	112	C6H5FO	000371-41-5	16
4	4-Benzamido-4-dichloromethyl-2-phen	361	C17H13Cl2N3O2	1000223-63-3	12



Raw Data Quality Control Samples

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\091113\N8381.D Vial: 4
Acq On : 11 Sep 2013 14:09 Operator: jk SOP 506 Rev
Sample : EX130903-2LCS Inst : GC/MS Ins
Misc : WATER EX130903-2 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Sep 12 10:46 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 12 10:44:10 2013
Response via : Initial Calibration
DataAcq Meth : 090413S1

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	5.95	152	434503	40.00	ng/uL	0.00
24) Naphthalene-d8	7.14	136	1593599	40.00	ng/uL	0.00
41) Acenaphthene-d10	8.69	164	899465	40.00	ng/uL	0.00
69) Phenanthrene-d10	9.97	188	1857339	40.00	ng/uL	0.00
80) Chrysene-d12	12.24	240	1688173	40.00	ng/uL	0.00
91) Perylene-d12	13.77	264	936798	40.00	ng/uL	0.01
System Monitoring Compounds						
5) 2-Fluorophenol	4.56	112	840858	56.60	ng/uL	0.00
Spiked Amount 75.000	Range 46 - 105		Recovery = 75.47%			
6) 2-Chlorophenol-d4	5.73	132	775819	61.82	ng/uL	0.00
Spiked Amount 75.000	Range 33 - 110		Recovery = 82.43%			
8) Phenol-d5	5.54	99	1172065	60.37	ng/uL	0.00
Spiked Amount 75.000	Range 50 - 109		Recovery = 80.49%			
15) 1,2-Dichlorobenzene-d4	6.10	152	339281	34.09	ng/uL	0.00
Spiked Amount 50.000	Range 16 - 110		Recovery = 68.18%			
25) Nitrobenzene-d5	6.47	82	673497	37.21	ng/uL	0.00
Spiked Amount 50.000	Range 53 - 111		Recovery = 74.42%			
46) 2-Fluorobiphenyl	8.07	172	1084034	35.79	ng/uL	0.00
Spiked Amount 50.000	Range 55 - 108		Recovery = 71.58%			
68) 2,4,6-Tribromophenol	9.36	330	322873	69.90	ng/uL	0.00
Spiked Amount 75.000	Range 42 - 117		Recovery = 93.20%			
83) p-Terphenyl-d14	11.27	244	1609879	40.84	ng/uL	0.00
Spiked Amount 50.000	Range 34 - 139		Recovery = 81.68%			
Target Compounds						Qvalue
2) 1,4-Dioxane	2.57	88	200026m	27.70	ng/uL	
3) n-Nitrosodimethylamine	2.95	74	509399m	47.35	ng/uL	
4) Pyridine	3.02	79	642879m	35.34	ng/uL	
7) Aniline	5.62	93	1036693	45.65	ng/uL	96
9) Phenol	5.55	94	883097	47.29	ng/uL	97
10) Tetramethylurea	0.00	72	0	N.D.	d	
11) Bis(2-chloroethyl)ether	5.65	93	659033	45.80	ng/uL	98
12) 2-Chlorophenol	5.75	128	620216	46.17	ng/uL	96
13) 1,3-Dichlorobenzene	5.90	146	676221	42.14	ng/uL	99
14) 1,4-Dichlorobenzene	5.96	146	637303	42.62	ng/ul	99
16) 1,2-Dichlorobenzene	6.12	146	606372	43.66	ng/uL	98
17) Benzyl Alcohol	6.06	108	429778	47.44	ng/uL	98
18) 2-Methylphenol	6.15	107	521756	47.05	ng/uL	97
19) Bis(2-chloroisopropyl)ethe	6.18	45	1148373	46.89	ng/uL	98
20) n-Nitroso-di-n-propylamine	6.31	70	546228	51.50	ng/uL	94
21) 3+4-Methylphenol	6.29	108	646801	47.48	ng/uL#	47

(#) = qualifier out of range (m) = manual integration
N8381.D 090413S1.M Thu Sep 12 10:46:37 2013 Page 1

9-15-17

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\091113\N8381.D Vial: 4
Acq On : 11 Sep 2013 14:09 Operator: jk SOP 506 Rev
Sample : EX130903-2LCS Inst : GC/MS Ins
Misc : WATER EX130903-2 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Sep 12 10:46 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 12 10:44:10 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.	
23)	Hexachloroethane	6.45	117	270253	42.93 ng/uL	96
26)	N,N-Dimethylaniline	0.00	120	0	N.D.	
27)	Nitrobenzene	6.49	77	774613	36.30 ng/uL	88
28)	Isophorone	6.70	82	1375524	49.45 ng/uL	98
29)	N-Ethylaniline	0.00	106	0	N.D. d	
30)	2-Nitrophenol	6.78	139	331787	50.16 ng/uL	93
31)	2,4-Dimethylphenol	6.78	107	613101	44.68 ng/uL	99
32)	Bis(2-chloroethoxy)methane	6.87	93	787821	47.78 ng/uL	98
33)	Benzoic acid	6.88	105	384882	55.09 ng/uL	99
34)	2,4-Dichlorophenol	7.00	162	573643	48.27 ng/uL	99
35)	1,2,4-Trichlorobenzene	7.08	180	636335	43.52 ng/uL	99
36)	Naphthalene	7.16	128	1790294	45.41 ng/uL#	81
37)	4-Chloroaniline	7.18	127	662044m	46.47 ng/uL	
38)	Hexachlorobutadiene	7.26	225	405407	43.61 ng/uL	98
39)	4-Chloro-3-methylphenol	7.58	107	638156	54.25 ng/uL	97
40)	2-Methylnaphthalene	7.77	142	1331204	47.14 ng/uL	99
42)	1-Methylnaphthalene	7.86	142	1125569	43.01 ng/uL	99
43)	Hexachlorocyclopentadiene	7.91	237	80544	10.06 ng/uL	96
44)	2,4,6-Trichlorophenol	8.00	196	486279	51.44 ng/uL	95
45)	2,4,5-Trichlorophenol	8.04	196	477102	53.83 ng/uL	96
47)	2-Chloronaphthalene	8.20	162	1248449	47.39 ng/uL	99
48)	2-Nitroaniline	8.27	65	417240	47.14 ng/uL	93
49)	1,4-Dinitrobenzene	8.37	168	225043	56.93 ng/uL	88
50)	Dimethylphthalate	8.40	163	1350684	49.87 ng/uL	99
51)	1,3-Dinitrobenzene	8.44	168	247100	54.86 ng/uL	86
52)	2,6-Dinitrotoluene	8.46	165	311634	50.02 ng/uL	93
53)	1,2-Dinitrobenzene	8.52	168	163361	55.47 ng/uL	82
54)	Acenaphthylene	8.57	152	1891670	48.77 ng/uL	99
55)	3-Nitroaniline	8.62	138	297621	51.04 ng/uL	100
56)	Acenaphthene	8.72	154	1116488	47.91 ng/uL	99
57)	2,4-Dinitrophenol	8.70	184	188358	55.91 ng/uL#	98
58)	4-Nitrophenol	8.73	109	164815	44.34 ng/uL	90
59)	Dibenzofuran	8.86	168	1691889	49.24 ng/uL	94
60)	2,4-Dinitrotoluene	8.81	165	438424	52.53 ng/uL	95
61)	2,3,5,6-Tetrachlorophenol	8.92	232	710624	83.53 ng/uL	96
62)	2,3,4,6-Tetrachlorophenol	8.96	232	668086	81.59 ng/uL	94
63)	Diethylphthalate	8.98	149	1300544	52.44 ng/uL	100
64)	4-Chlorophenyl phenyl ethe	9.12	204	813991	52.39 ng/uL	95
65)	4-Nitroaniline	9.15	138	292629	55.81 ng/uL	92
66)	Fluorene	9.16	166	1266371	47.50 ng/uL	97

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

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\091113\N8381.D
Acq On : 11 Sep 2013 14:09
Sample : EX130903-2LCS
Misc : WATER EX130903-2
MS Integration Params: RTEINT.P
Quant Time: Sep 12 10:46 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 : Thu Sep 12 10:44:10 2013
Response via : Initial Calibration
DataAcq Meth : 090413S1

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
67)	Azobenzene	9.26	77	1387334	49.70	ng/uL	93
70)	4,6-Dinitro-2-methylphenol	9.17	198	276708	54.25	ng/uL	89
71)	n-Nitrosodiphenylamine	9.22	169	1032408	42.02	ng/uL	98
72)	4-Bromophenyl phenyl ether	9.54	248	512529	48.51	ng/uL	95
73)	Hexachlorobenzene	9.64	284	532954	47.50	ng/uL	98
74)	Pentachlorophenol	9.79	266	374844	48.49	ng/uL	99
75)	Phenanthrene	9.99	178	2124239	49.60	ng/uL	99
76)	Anthracene	10.03	178	2171845	48.66	ng/uL	100
77)	Carbazole	10.14	167	2081650	50.25	ng/uL	99
78)	Di-n-butylphthalate	10.35	149	2590147	51.53	ng/uL	100
79)	Fluoranthene	11.00	202	2996987	50.60	ng/uL	99
81)	Benzidine	11.07	184	1182980	46.31	ng/uL	99
82)	Pyrene	11.21	202	2919794	54.29	ng/uL	98
84)	Butylbenzylphthalate	11.64	149	964118	55.54	ng/uL	97
85)	Bis(2-ethylhexyl) adipate	11.65	129	741306	50.56	ng/uL	96
86)	Bis(2-ethylhexyl)phthalate	12.09	149	1175997	52.07	ng/uL	99
87)	3,3'-Dichlorobenzidine	12.16	252	664254	44.59	ng/uL	99
88)	Benzo[a]anthracene	12.23	228	2393319	52.45	ng/uL	99
89)	Chrysene	12.27	228	2125531	51.03	ng/uL	100
90)	Di-n-octylphthalate	12.66	149	1651839	53.83	ng/uL	98
92)	Benzo[b]fluoranthene	13.31	252	1513533	50.13	ng/uL	98
93)	Benzo[k]fluoranthene	13.34	252	1441600	49.14	ng/uL	98
94)	Benzo[a]pyrene	13.71	252	1187079	47.69	ng/uL	97
95)	Indeno(1,2,3-c,d)pyrene	15.30	276	834884	42.58	ng/uL	93
96)	Dibenzo[a,h]anthracene	15.28	278	707699	41.11	ng/uL	96
97)	Benzo[g,h,i]perylene	15.77	276	599068	39.06	ng/uL	93

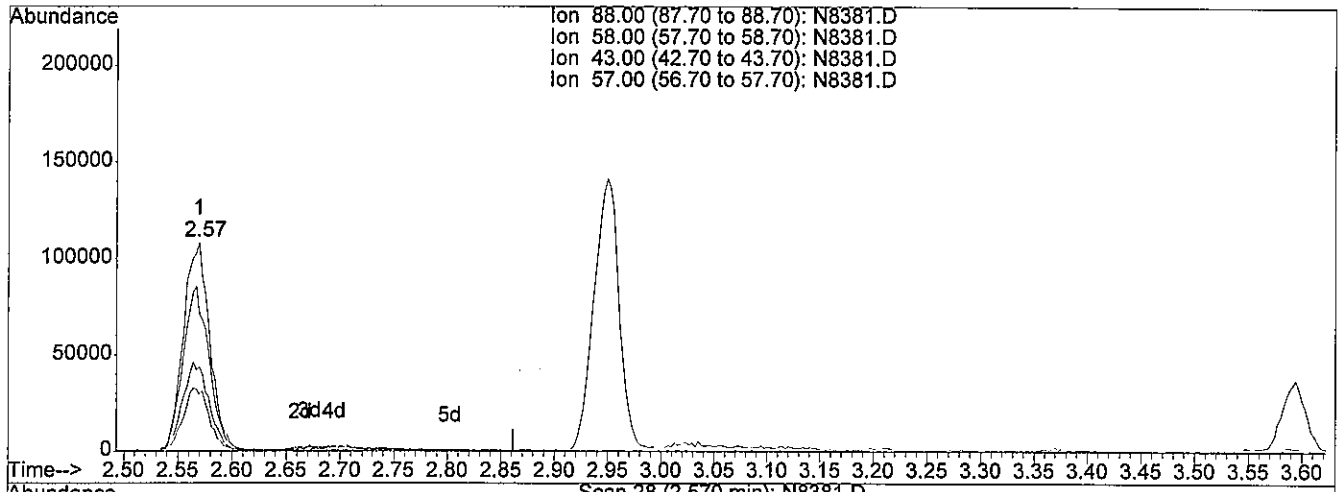
(#) = qualifier out of range (m) = manual integration

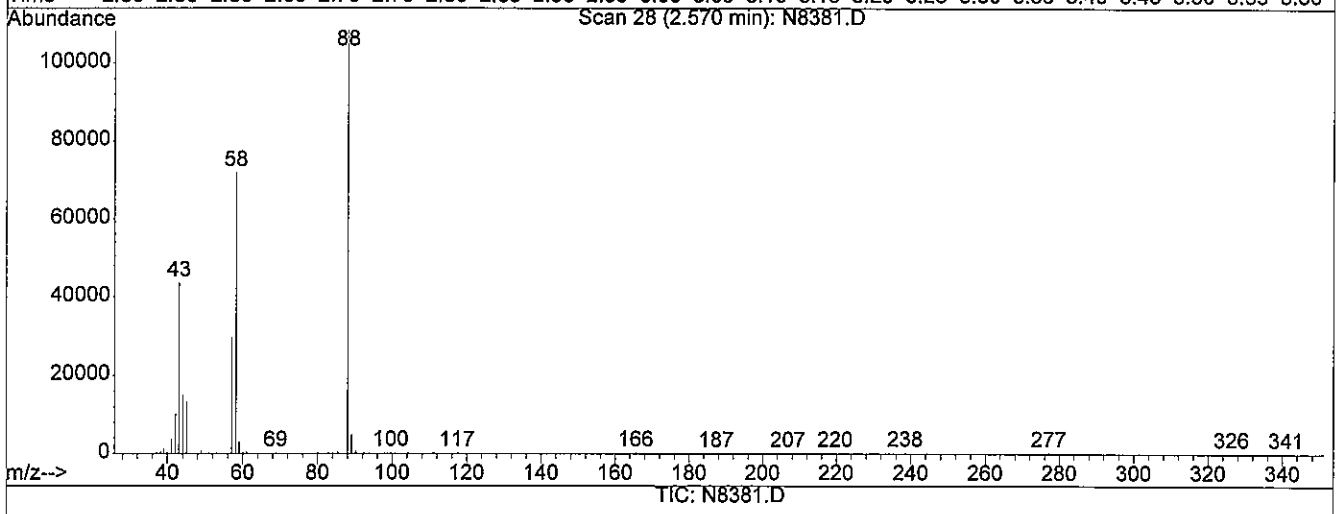
Quantitation Report (Qedit)

Data File : D:\HPCHEM\1\DATA\091113\N8381.D
Acq On : 11 Sep 2013 14:09
Sample : EX130903-2LCS
Misc : WATER EX130903-2
MS Integration Params: RTEINT.P
Quant Time: Sep 12 10:45 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 : Thu Sep 12 10:44:10 2013
Response via : Multiple Level Calibration





TIC: N8381.D

(2) 1,4-Dioxane (t)

2.57min 25.38ng/uL

response 183280

Ion	Exp%	Act%
88.00	100	100
58.00	77.90	78.36
43.00	47.90	42.98
57.00	33.00	30.35

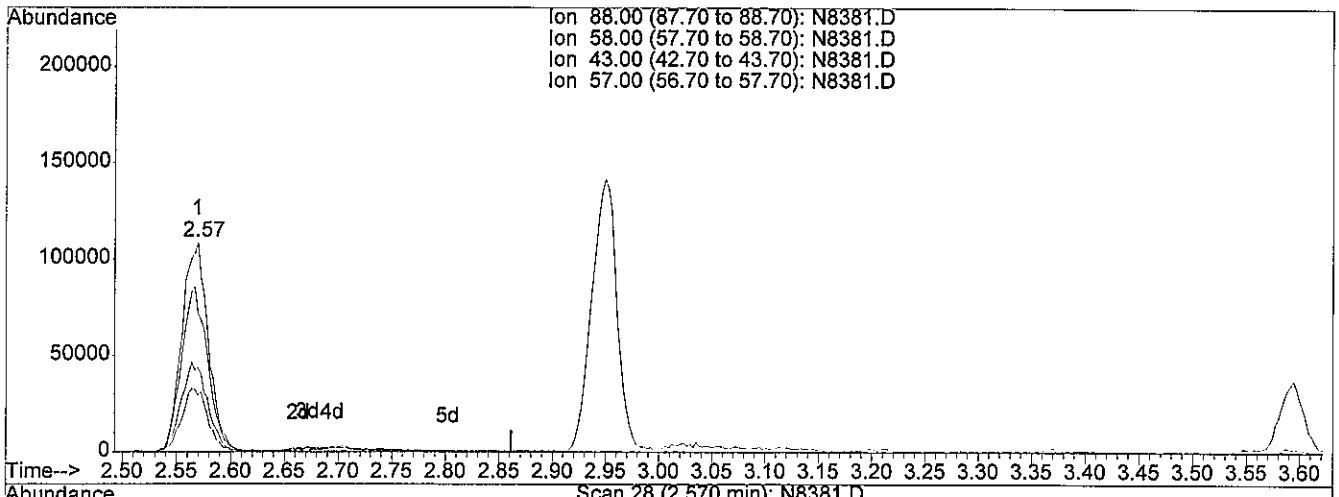
N8381.D 090413S1.M Thu Sep 12 10:45:19 2013

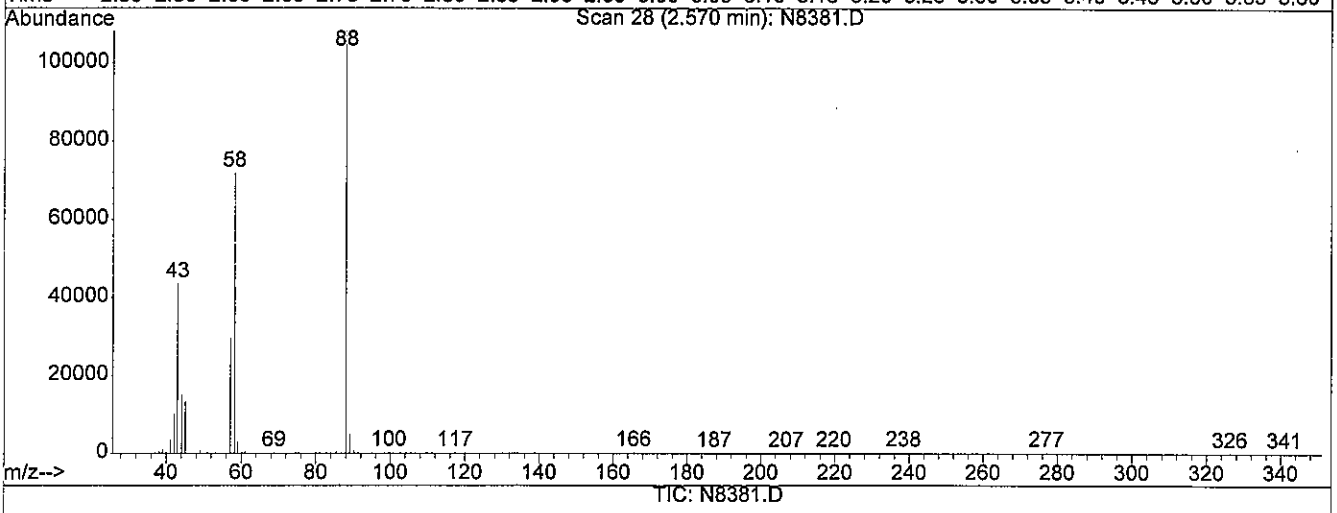
Quantitation Report (Qedit)

Data File : D:\HPCHEM\1\DATA\091113\N8381.D
Acq On : 11 Sep 2013 14:09
Sample : EX130903-2LCS
Misc : WATER EX130903-2
MS Integration Params: RTEINT.P
Quant Time: Sep 12 10:45 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 : Thu Sep 12 10:44:10 2013
Response via : Multiple Level Calibration





TIC: N8381.D

(2) 1,4-Dioxane (t)

2.57min 27.70ng/uL m

response 200026

Ion	Exp%	Act%
88.00	100	100
58.00	77.90	71.80
43.00	47.90	39.38
57.00	33.00	27.81

MANUAL RE-INTEGRATION

- ☐ missed peak assignment
- ☐ assigned incorrect name to peak
- ☐ over-integrated peak's area
- ☑ under-integrated peak's area
- ☐ other _____

initials JH *date* 9-12-13

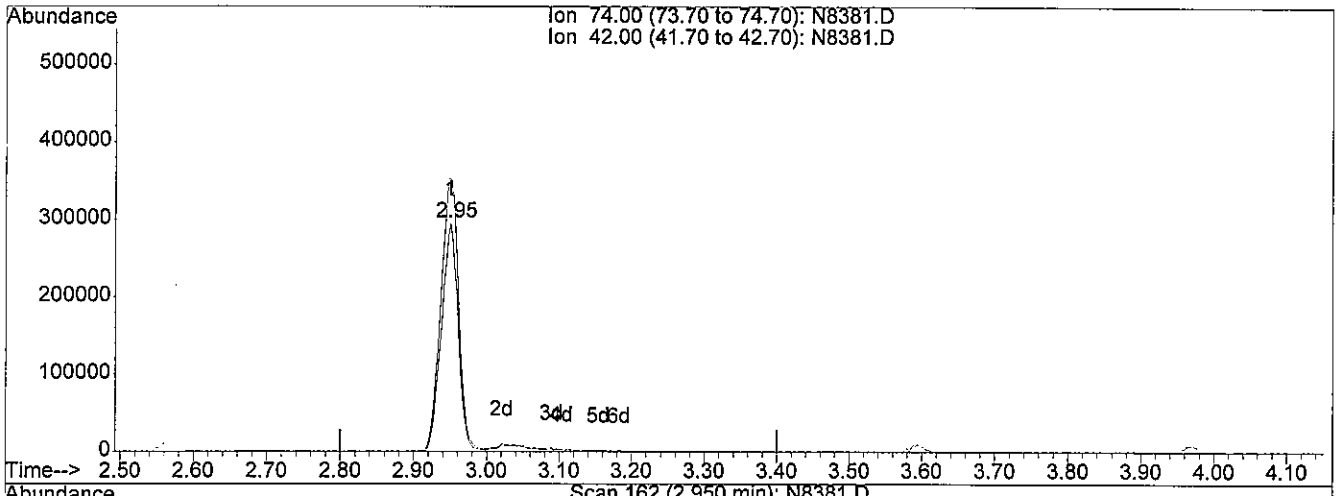
N8381.D 090413S1.M Thu Sep 12 10:45:22 2013

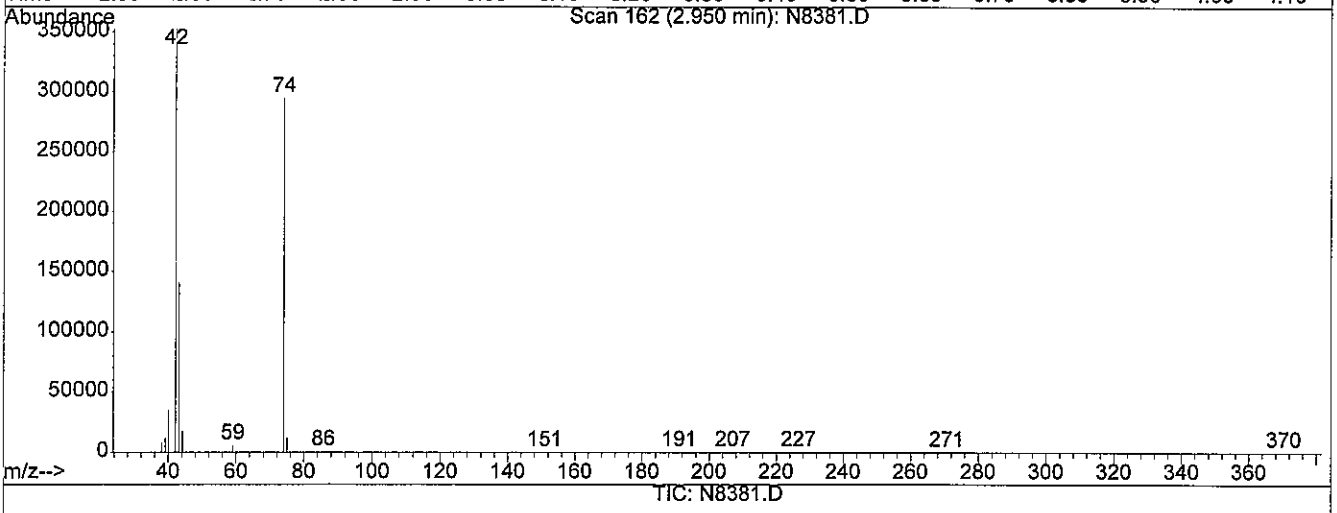
Quantitation Report (Qedit)

Data File : D:\HPCHEM\1\DATA\091113\N8381.D
Acq On : 11 Sep 2013 14:09
Sample : EX130903-2LCS
Misc : WATER EX130903-2
MS Integration Params: RTEINT.P
Quant Time: Sep 12 10:45 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 : Thu Sep 12 10:44:10 2013
Response via : Multiple Level Calibration





TIC: N8381.D

(3) n-Nitrosodimethylamine (T)

2.95min 43.70ng/uL

response 470101

Ion	Exp%	Act%
74.00	100	100
42.00	129.50	127.56
0.00	0.00	0.00
0.00	0.00	0.00

before

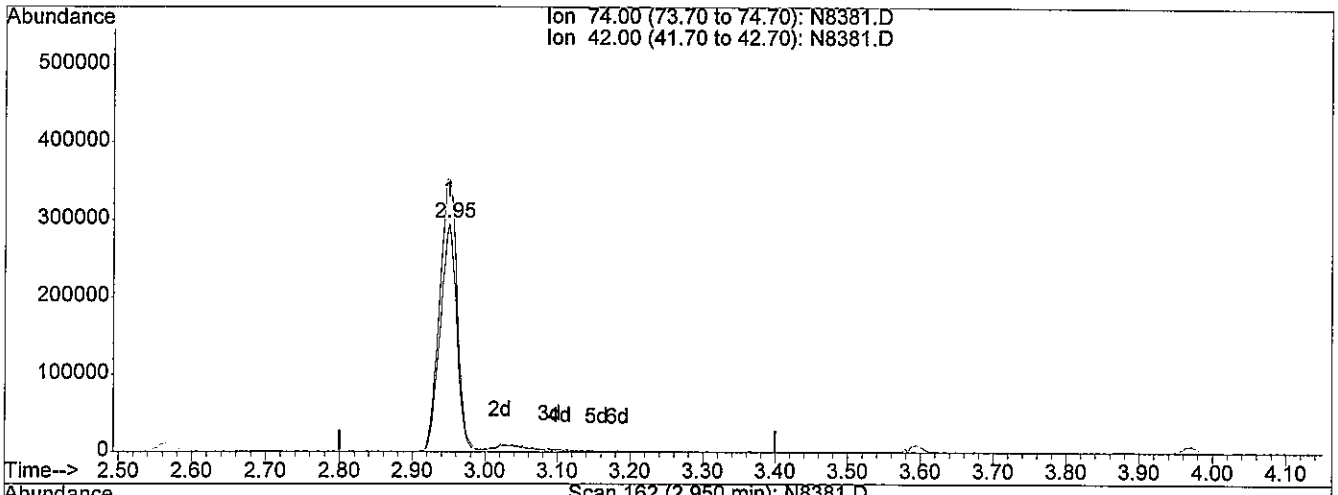
N8381.D 090413S1.M Thu Sep 12 10:45:26 2013

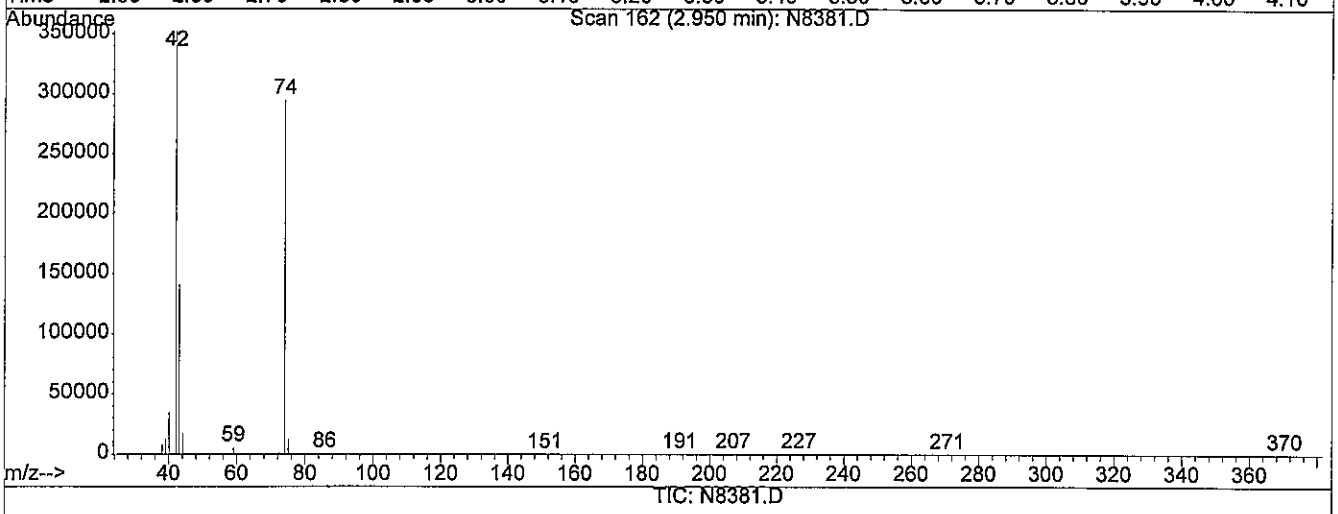
Quantitation Report (Qedit)

Data File : D:\HPCHEM\1\DATA\091113\N8381.D
Acq On : 11 Sep 2013 14:09
Sample : EX130903-2LCS
Misc : WATER EX130903-2
MS Integration Params: RTEINT.P
Quant Time: Sep 12 10:45 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 : Thu Sep 12 10:44:10 2013
Response via : Multiple Level Calibration





TIC: N8381.D

(3) n-Nitrosodimethylamine (T)

2.95min 47.35ng/uL m

response 509399

Ion	Exp%	Act%
74.00	100	100
42.00	129.50	117.72
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* 9-19-13

N8381.D 090413S1.M Thu Sep 12 10:45:29 2013

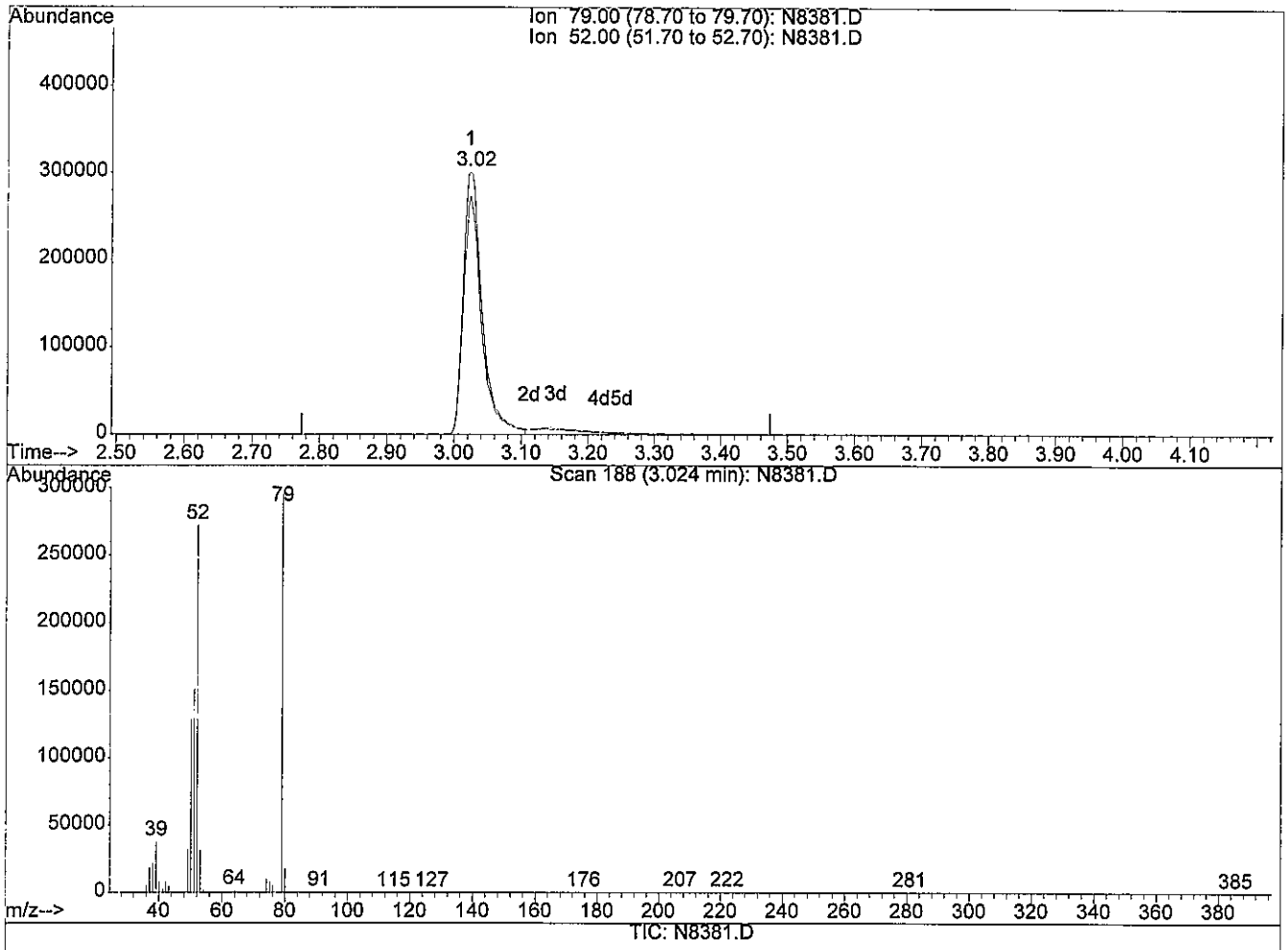
Quantitation Report (Qedit)

Data File : D:\HPCHEM\1\DATA\091113\N8381.D
Acq On : 11 Sep 2013 14:09
Sample : EX130903-2LCS
Misc : WATER EX130903-2
MS Integration Params: RTEINT.P
Quant Time: Sep 12 10:45 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 : Thu Sep 12 10:44:10 2013
Response via : Multiple Level Calibration



(4) Pyridine (T)

3.02min 32.50ng/uL

response 591168

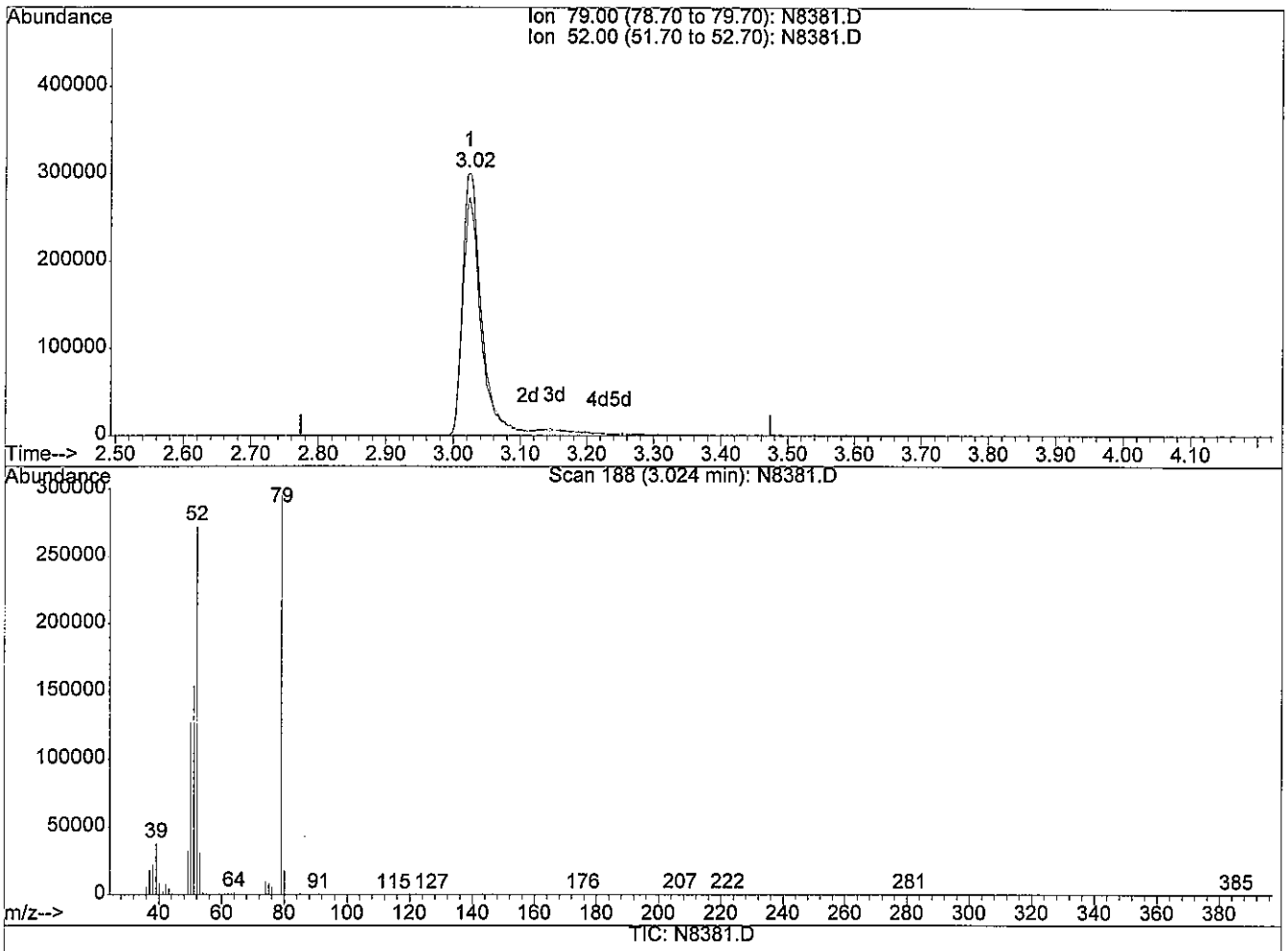
Ion	Exp%	Act%
79.00	100	100
52.00	93.60	87.92
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : D:\HPCHEM\1\DATA\091113\N8381.D
Acq On : 11 Sep 2013 14:09
Sample : EX130903-2LCS
Misc : WATER EX130903-2
MS Integration Params: RTEINT.P
Quant Time: Sep 12 10:45 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 : Thu Sep 12 10:44:10 2013
Response via : Multiple Level Calibration



(4) Pyridine (T)

3.02min 35.34ng/uL m

response 642879

Ion	Exp%	Act%
79.00	100	100
52.00	93.60	80.85
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 JM *date* 5-15-13

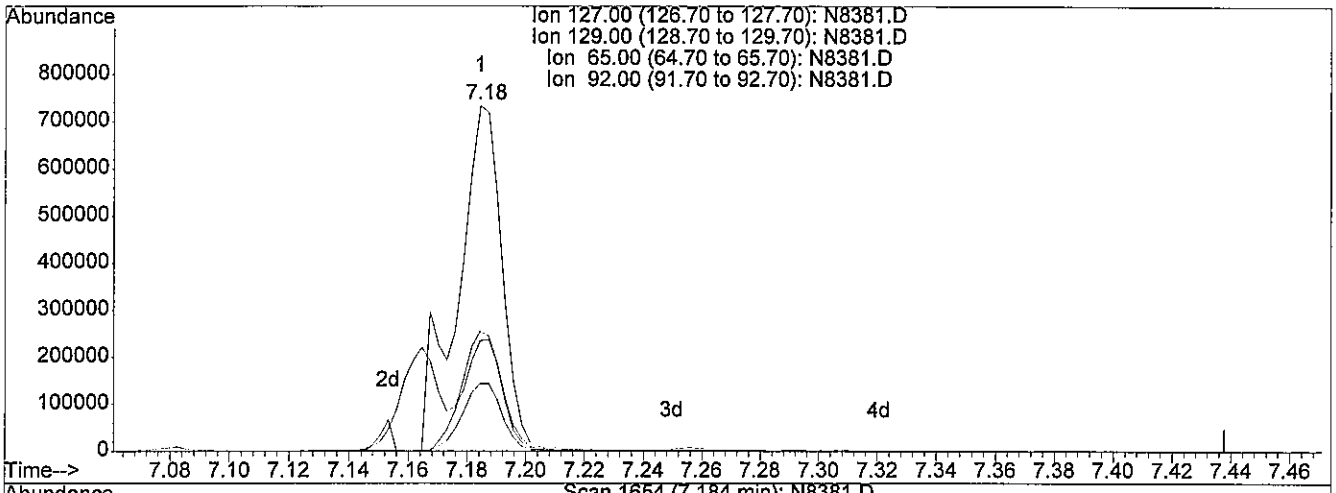
N8381.D 090413S1.M Thu Sep 12 10:45:36 2013

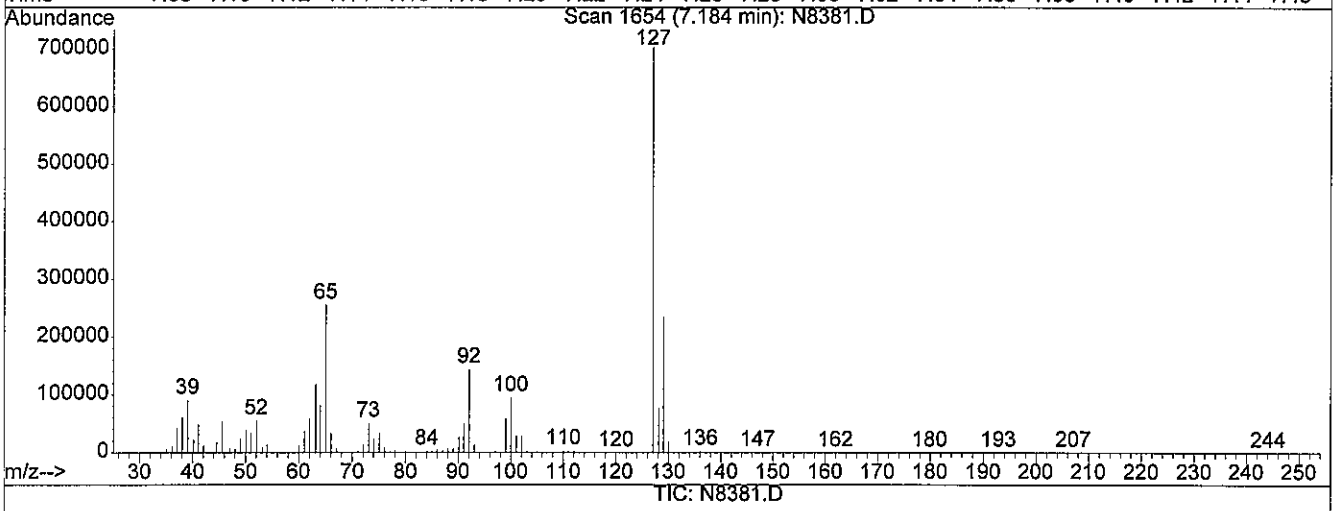
Quantitation Report (Qedit)

Data File : D:\HPCHEM\1\DATA\091113\N8381.D
Acq On : 11 Sep 2013 14:09
Sample : EX130903-2LCS
Misc : WATER EX130903-2
MS Integration Params: RTEINT.P
Quant Time: Sep 12 10:45 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 : Thu Sep 12 10:44:10 2013
Response via : Multiple Level Calibration





TIC: N8381.D

(37) 4-Chloroaniline (T)

7.18min 54.76ng/uL

response 780257

Ion	Exp%	Act%
127.00	100	100
129.00	30.90	28.50
65.00	40.50	30.87#
92.00	21.70	17.42

3 for

N8381.D 090413S1.M Thu Sep 12 10:46:00 2013

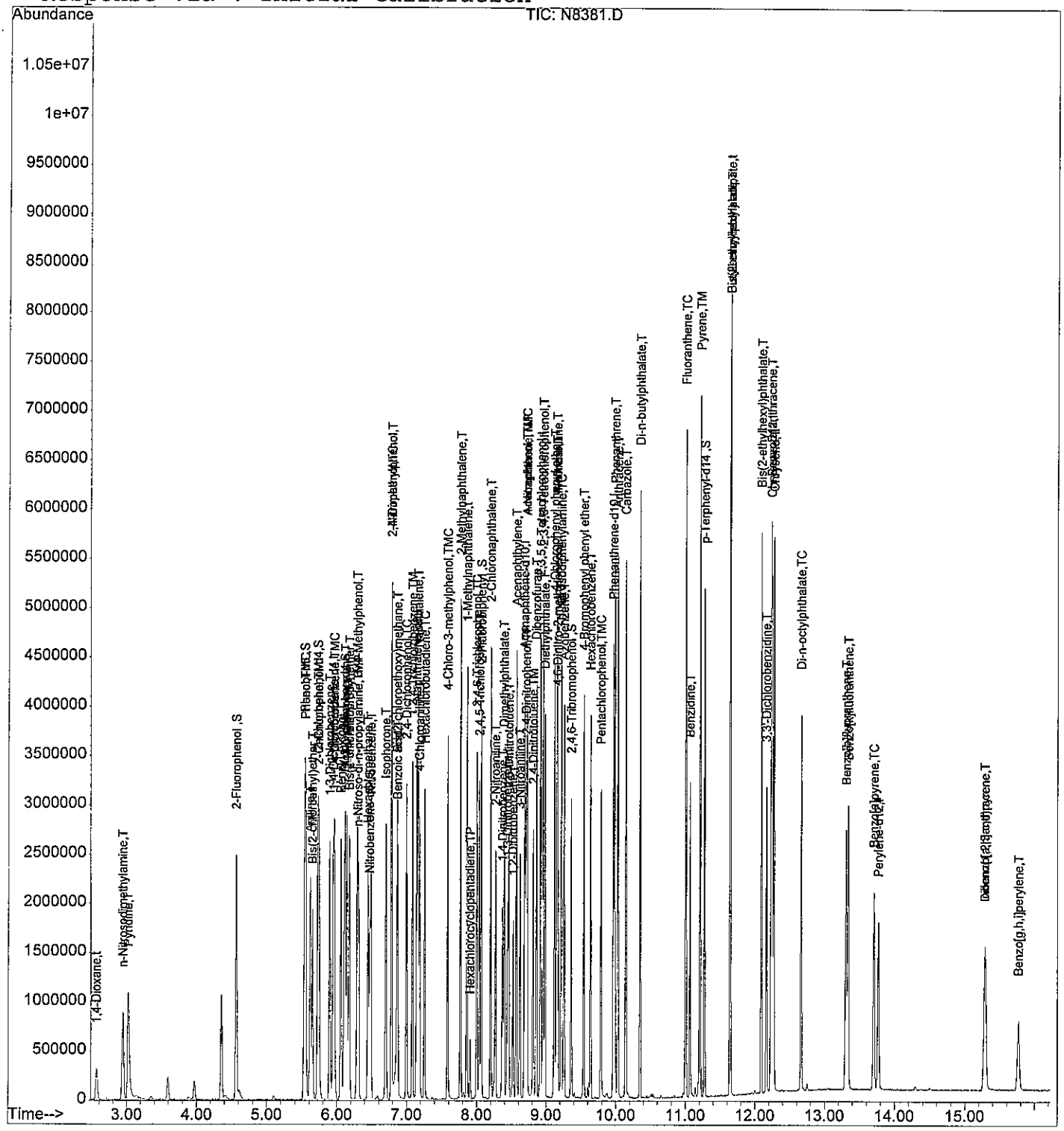
Quantitation Report

Data File : D:\HPCHEM\1\DATA\091113\N8381.D
Acq On : 11 Sep 2013 14:09
Sample : EX130903-2LCS
Misc : WATER EX130903-2
MS Integration Params: RTEINT.P
Quant Time: Sep 12 10:46 2013

Vial: 4
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 12 10:44:10 2013
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\091113\N8382.D Vial: 5
Acq On : 11 Sep 2013 14:33 Operator: jk SOP 506 Rev
Sample : EX130903-2LCSD Inst : GC/MS Ins
Misc : WATER EX130903-2 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Sep 12 10:47 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 : Thu Sep 12 10:44:10 2013
Response via : Initial Calibration
DataAcq Meth : 090413S1

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	5.95	152	427572	40.00	ng/uL	0.00
24) Naphthalene-d8	7.14	136	1556618	40.00	ng/uL	0.00
41) Acenaphthene-d10	8.69	164	889787	40.00	ng/uL	0.00
69) Phenanthrene-d10	9.97	188	1874035	40.00	ng/uL	0.00
80) Chrysene-d12	12.24	240	1809029	40.00	ng/uL	0.00
91) Perylene-d12	13.77	264	960756	40.00	ng/uL	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	4.56	112	770361m	52.70	ng/uL	0.00
Spiked Amount 75.000	Range 46 - 105		Recovery = 70.27%			
6) 2-Chlorophenol-d4	5.73	132	705993	57.17	ng/uL	0.00
Spiked Amount 75.000	Range 33 - 110		Recovery = 76.23%			
8) Phenol-d5	5.53	99	1062472	55.61	ng/uL	0.00
Spiked Amount 75.000	Range 50 - 109		Recovery = 74.15%			
15) 1,2-Dichlorobenzene-d4	6.11	152	312475	31.91	ng/uL	0.00
Spiked Amount 50.000	Range 16 - 110		Recovery = 63.82%			
25) Nitrobenzene-d5	6.47	82	619027	35.01	ng/uL	0.00
Spiked Amount 50.000	Range 53 - 111		Recovery = 70.02%			
46) 2-Fluorobiphenyl	8.07	172	1040250	34.72	ng/uL	0.00
Spiked Amount 50.000	Range 55 - 108		Recovery = 69.44%			
68) 2,4,6-Tribromophenol	9.36	330	313888	68.70	ng/uL	0.00
Spiked Amount 75.000	Range 42 - 117		Recovery = 91.60%			
83) p-Terphenyl-d14	11.27	244	1635616	38.72	ng/uL	0.00
Spiked Amount 50.000	Range 34 - 139		Recovery = 77.44%			
Target Compounds						Qvalue
2) 1,4-Dioxane	2.57	88	177088m	24.92	ng/uL	
3) n-Nitrosodimethylamine	2.95	74	424965m	40.14	ng/uL	
4) Pyridine	3.03	79	378824m	21.16	ng/uL	
7) Aniline	5.62	93	808130	36.17	ng/uL	100
9) Phenol	5.55	94	818601	44.55	ng/uL	95
10) Tetramethylurea	0.00	72	0	N.D.	d	
11) Bis(2-chloroethyl)ether	5.65	93	639197	45.14	ng/uL	99
12) 2-Chlorophenol	5.74	128	577346	43.67	ng/uL	98
13) 1,3-Dichlorobenzene	5.90	146	632122	40.03	ng/uL	98
14) 1,4-Dichlorobenzene	5.96	146	594253	40.39	ng/ul	99
16) 1,2-Dichlorobenzene	6.12	146	565461	41.38	ng/uL	99
17) Benzyl Alcohol	6.06	108	402320	45.13	ng/uL	98
18) 2-Methylphenol	6.14	107	488861	44.80	ng/uL	95
19) Bis(2-chloroisopropyl)ethe	6.18	45	1052386	43.66	ng/uL	98
20) n-Nitroso-di-n-propylamine	6.31	70	506697	48.55	ng/uL	93
21) 3+4-Methylphenol	6.29	108	600897	44.83	ng/uL#	47

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

N8382.D 090413S1.M Thu Sep 12 10:48:22 2013 Page 1

9-19-13

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\091113\N8382.D Vial: 5
Acq On : 11 Sep 2013 14:33 Operator: jk SOP 506 Rev
Sample : EX130903-2LCSD Inst : GC/MS Ins
Misc : WATER EX130903-2 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Sep 12 10:47 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 : Thu Sep 12 10:44:10 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.	
23)	Hexachloroethane	6.45	117	250966	40.51 ng/uL	96
26)	N,N-Dimethylaniline	0.00	120	0	N.D.	
27)	Nitrobenzene	6.49	77	698439	33.51 ng/uL	86
28)	Isophorone	6.70	82	1311839	48.28 ng/uL	98
29)	N-Ethylaniline	0.00	106	0	N.D. d	
30)	2-Nitrophenol	6.78	139	307862	47.64 ng/uL	90
31)	2,4-Dimethylphenol	6.78	107	535435	39.95 ng/uL	98
32)	Bis(2-chloroethoxy)methane	6.86	93	726802	45.13 ng/uL	99
33)	Benzoic acid	6.87	105	305735	44.80 ng/uL	99
34)	2,4-Dichlorophenol	7.00	162	533086	45.93 ng/uL	100
35)	1,2,4-Trichlorobenzene	7.08	180	586135	41.04 ng/uL	100
36)	Naphthalene	7.16	128	1632382	42.39 ng/uL#	90
37)	4-Chloroaniline	7.18	127	557015	40.02 ng/uL	97
38)	Hexachlorobutadiene	7.26	225	364964	40.19 ng/uL	99
39)	4-Chloro-3-methylphenol	7.58	107	612693	53.32 ng/uL	98
40)	2-Methylnaphthalene	7.77	142	1246984	45.21 ng/uL	98
42)	1-Methylnaphthalene	7.86	142	1050392	40.57 ng/uL	99
43)	Hexachlorocyclopentadiene	7.90	237	80446	10.16 ng/uL	98
44)	2,4,6-Trichlorophenol	8.00	196	458704	49.05 ng/uL	95
45)	2,4,5-Trichlorophenol	8.04	196	461793	52.67 ng/uL	97
47)	2-Chloronaphthalene	8.20	162	1183442	45.41 ng/uL	99
48)	2-Nitroaniline	8.27	65	405983	46.37 ng/uL	92
49)	1,4-Dinitrobenzene	8.37	168	224027	57.29 ng/uL	86
50)	Dimethylphthalate	8.40	163	1321100	49.31 ng/uL	100
51)	1,3-Dinitrobenzene	8.44	168	243056	54.55 ng/uL	86
52)	2,6-Dinitrotoluene	8.46	165	300758	48.80 ng/uL	95
53)	1,2-Dinitrobenzene	8.52	168	158174	54.29 ng/uL	83
54)	Acenaphthylene	8.57	152	1808943	47.15 ng/uL	99
55)	3-Nitroaniline	8.62	138	283428	49.13 ng/uL	99
56)	Acenaphthene	8.72	154	1083806	47.02 ng/uL	99
57)	2,4-Dinitrophenol	8.70	184	186260	55.89 ng/uL#	83
58)	4-Nitrophenol	8.73	109	161370	43.89 ng/uL	91
59)	Dibenzofuran	8.86	168	1632493	48.03 ng/uL	94
60)	2,4-Dinitrotoluene	8.81	165	435984	52.80 ng/uL	94
61)	2,3,5,6-Tetrachlorophenol	8.92	232	695779	82.68 ng/uL	96
62)	2,3,4,6-Tetrachlorophenol	8.95	232	646991	79.87 ng/uL	95
63)	Diethylphthalate	8.98	149	1260644	51.38 ng/uL	99
64)	4-Chlorophenyl phenyl ethe	9.12	204	793046	51.59 ng/uL	94
65)	4-Nitroaniline	9.15	138	275261	53.07 ng/uL	93
66)	Fluorene	9.16	166	1239298	46.99 ng/uL	98

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

Data File : D:\HPCHEM\1\DATA\091113\N8382.D
Acq On : 11 Sep 2013 14:33
Sample : EX130903-2LCSD
Misc : WATER EX130903-2
MS Integration Params: RTEINT.P
Quant Time: Sep 12 10:47 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 : Thu Sep 12 10:44:10 2013
Response via : Initial Calibration
DataAcq Meth : 090413S1

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
67)	Azobenzene	9.26	77	1349958	48.89 ng/uL	94
70)	4,6-Dinitro-2-methylphenol	9.17	198	285840	55.54 ng/uL	86
71)	n-Nitrosodiphenylamine	9.22	169	1012419	40.84 ng/uL	98
72)	4-Bromophenyl phenyl ether	9.54	248	503649	47.24 ng/uL	94
73)	Hexachlorobenzene	9.64	284	528844	46.71 ng/uL	98
74)	Pentachlorophenol	9.79	266	365128	46.82 ng/uL	99
75)	Phenanthrene	9.99	178	2102579	48.66 ng/uL	99
76)	Anthracene	10.03	178	2130544	47.31 ng/uL	100
77)	Carbazole	10.14	167	2047809	48.99 ng/uL	99
78)	Di-n-butylphthalate	10.35	149	2554937	50.37 ng/uL	100
79)	Fluoranthene	11.00	202	2973261	49.75 ng/uL	99
81)	Benzidine	0.00	184	0	N.D.	
82)	Pyrene	11.21	202	2927569	50.80 ng/uL	98
84)	Butylbenzylphthalate	11.64	149	969849	52.14 ng/uL	98
85)	Bis(2-ethylhexyl) adipate	11.64	129	734170	46.73 ng/uL	96
86)	Bis(2-ethylhexyl)phthalate	12.09	149	1200202	49.59 ng/uL	99
87)	3,3'-Dichlorobenzidine	12.16	252	161897	10.14 ng/uL	99
88)	Benzo[a]anthracene	12.23	228	2485343	50.83 ng/uL	100
89)	Chrysene	12.27	228	2246021	50.32 ng/uL	99
90)	Di-n-octylphthalate	12.66	149	1718486	52.26 ng/uL	98
92)	Benzo[b]fluoranthene	13.30	252	1566572	50.59 ng/uL	98
93)	Benzo[k]fluoranthene	13.33	252	1429200	47.50 ng/uL	98
94)	Benzo[a]pyrene	13.70	252	1216447	47.65 ng/uL	96
95)	Indeno(1,2,3-c,d)pyrene	15.29	276	790319	39.30 ng/uL	93
96)	Dibenzo[a,h]anthracene	15.28	278	671053	38.01 ng/uL	96
97)	Benzo[g,h,i]perylene	15.76	276	553869	35.22 ng/uL	94

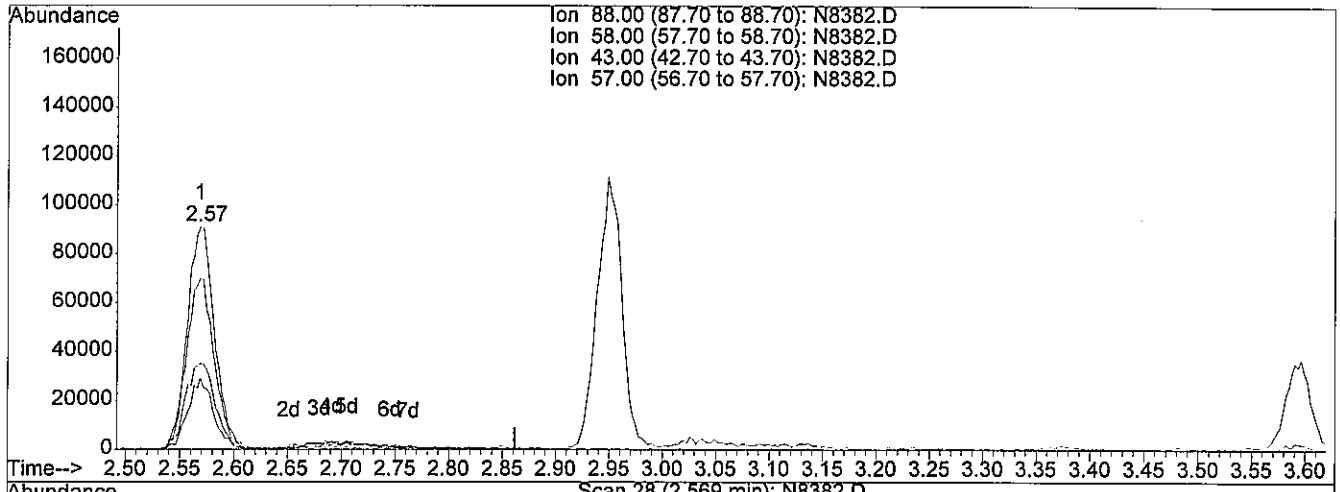
(#) = qualifier out of range (m) = manual integration

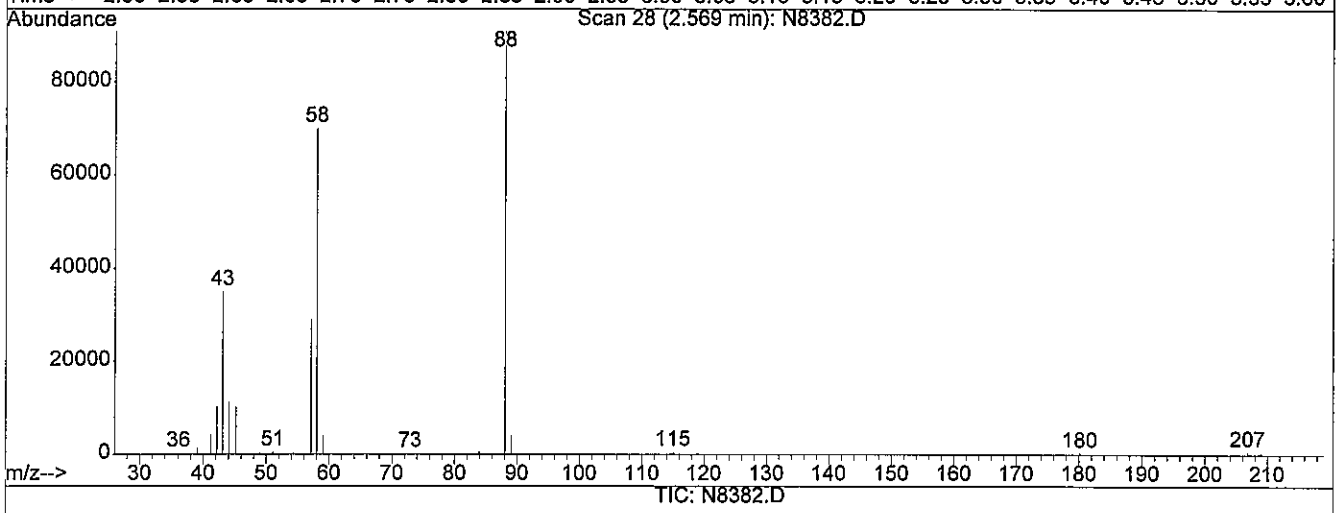
Quantitation Report (Qedit)

Data File : D:\HPCHEM\1\DATA\091113\N8382.D
Acq On : 11 Sep 2013 14:33
Sample : EX130903-2LCSD
Misc : WATER EX130903-2
MS Integration Params: RTEINT.P
Quant Time: Sep 12 10:46 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 : Thu Sep 12 10:44:10 2013
Response via : Multiple Level Calibration





TIC: N8382.D

(2) 1,4-Dioxane (t)

2.57min 22.36ng/uL

response 158876

Ion	Exp%	Act%
88.00	100	100
58.00	77.90	78.10
43.00	47.90	42.44
57.00	33.00	30.30

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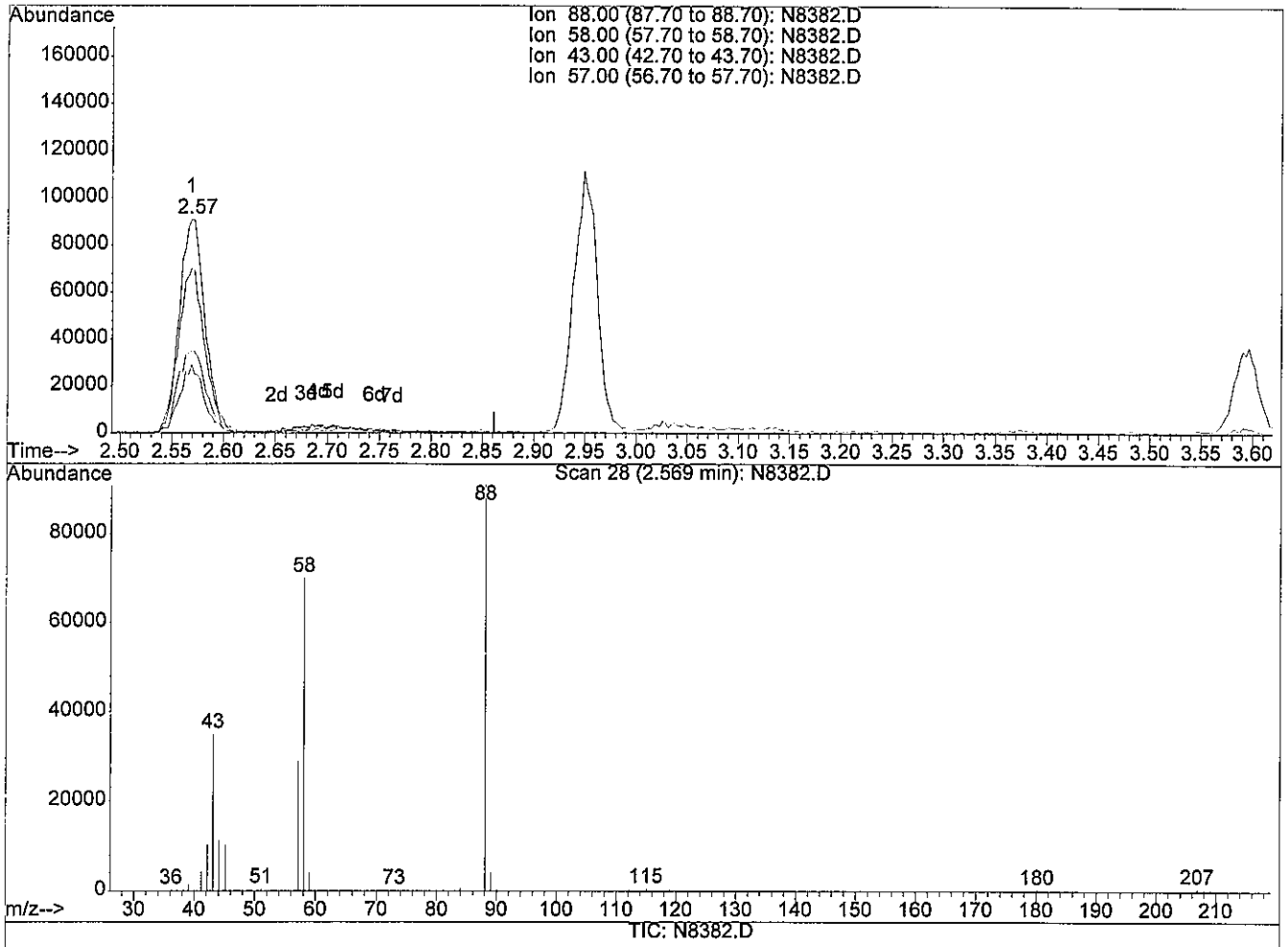
N8382.D 090413S1.M Thu Sep 12 10:47:08 2013

Quantitation Report (Qedit)

Data File : D:\HPCHEM\1\DATA\091113\N8382.D
Acq On : 11 Sep 2013 14:33
Sample : EX130903-2LCSD
Misc : WATER EX130903-2
MS Integration Params: RTEINT.P
Quant Time: Sep 12 10:47 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 : Thu Sep 12 10:44:10 2013
Response via : Multiple Level Calibration



TIC: N8382.D

(2) 1,4-Dioxane (t)

2.57min 24.92ng/uL m

response 177088

Ion	Exp%	Act%
88.00	100	100
58.00	77.90	70.06
43.00	47.90	38.08#
57.00	33.00	27.19

MANUAL RE-INTEGRATION

- ☐ missed peak assignment
- ☐ assigned incorrect name to peak
- ☐ over-integrated peak's area
- ☑ under-integrated peak's area
- ☐ other _____

initials JL *date* 5-6-13

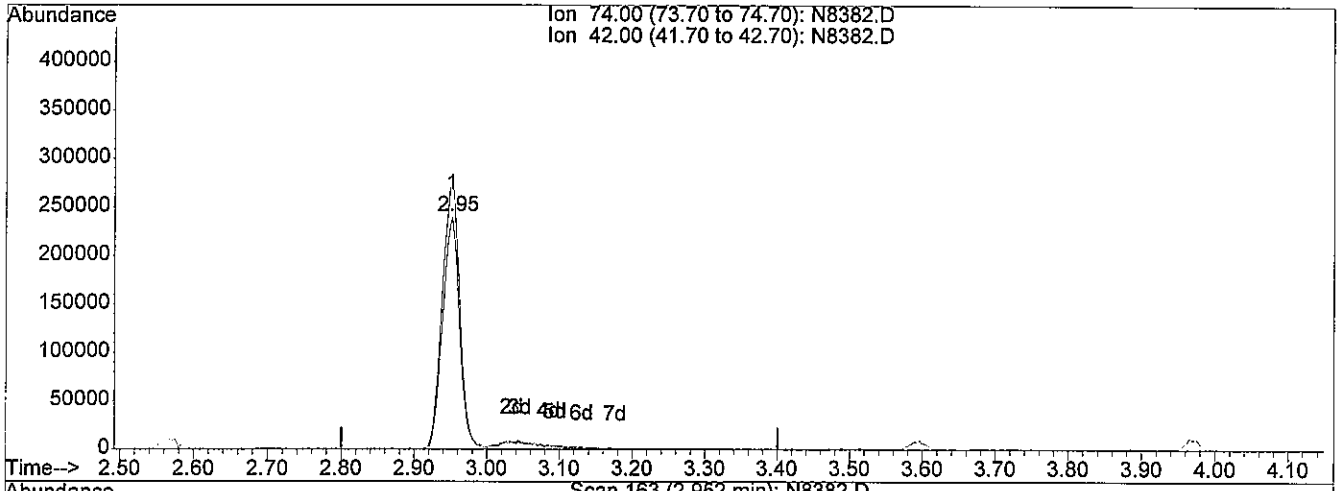
N8382.D 090413S1.M Thu Sep 12 10:47:11 2013

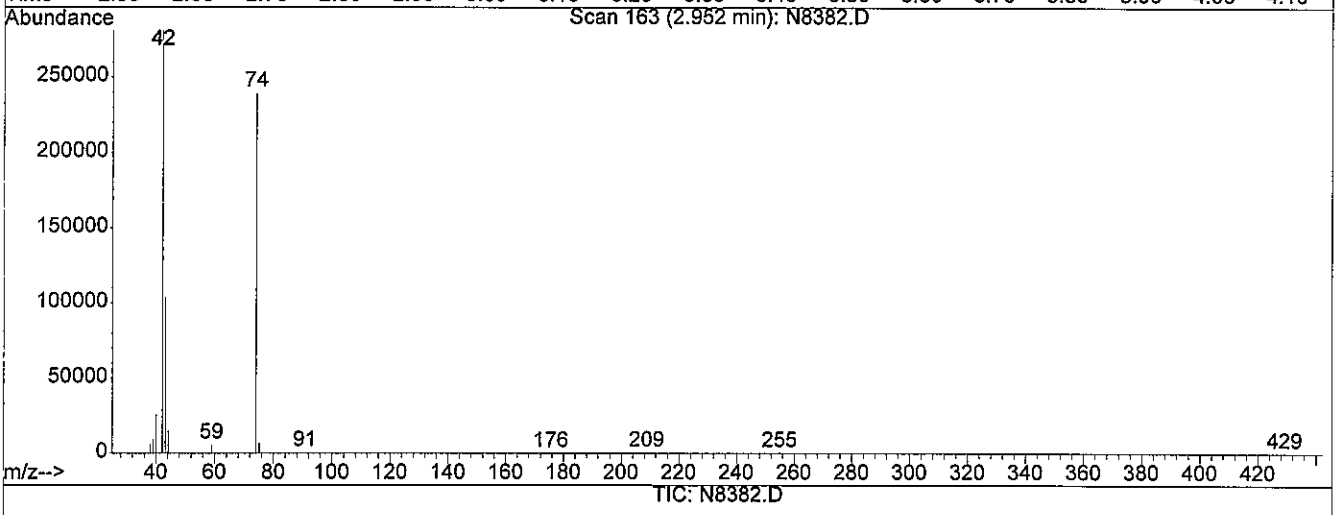
Quantitation Report (Qedit)

Data File : D:\HPCHEM\1\DATA\091113\N8382.D
Acq On : 11 Sep 2013 14:33
Sample : EX130903-2LCSD
Misc : WATER EX130903-2
MS Integration Params: RTEINT.P
Quant Time: Sep 12 10:47 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 : Thu Sep 12 10:44:10 2013
Response via : Multiple Level Calibration





TIC: N8382.D

(3) n-Nitrosodimethylamine (T)

2.95min 36.64ng/uL

response 387889

Ion	Exp%	Act%
74.00	100	100
42.00	129.50	119.58
0.00	0.00	0.00
0.00	0.00	0.00

N8382.D 090413S1.M Thu Sep 12 10:47:14 2013

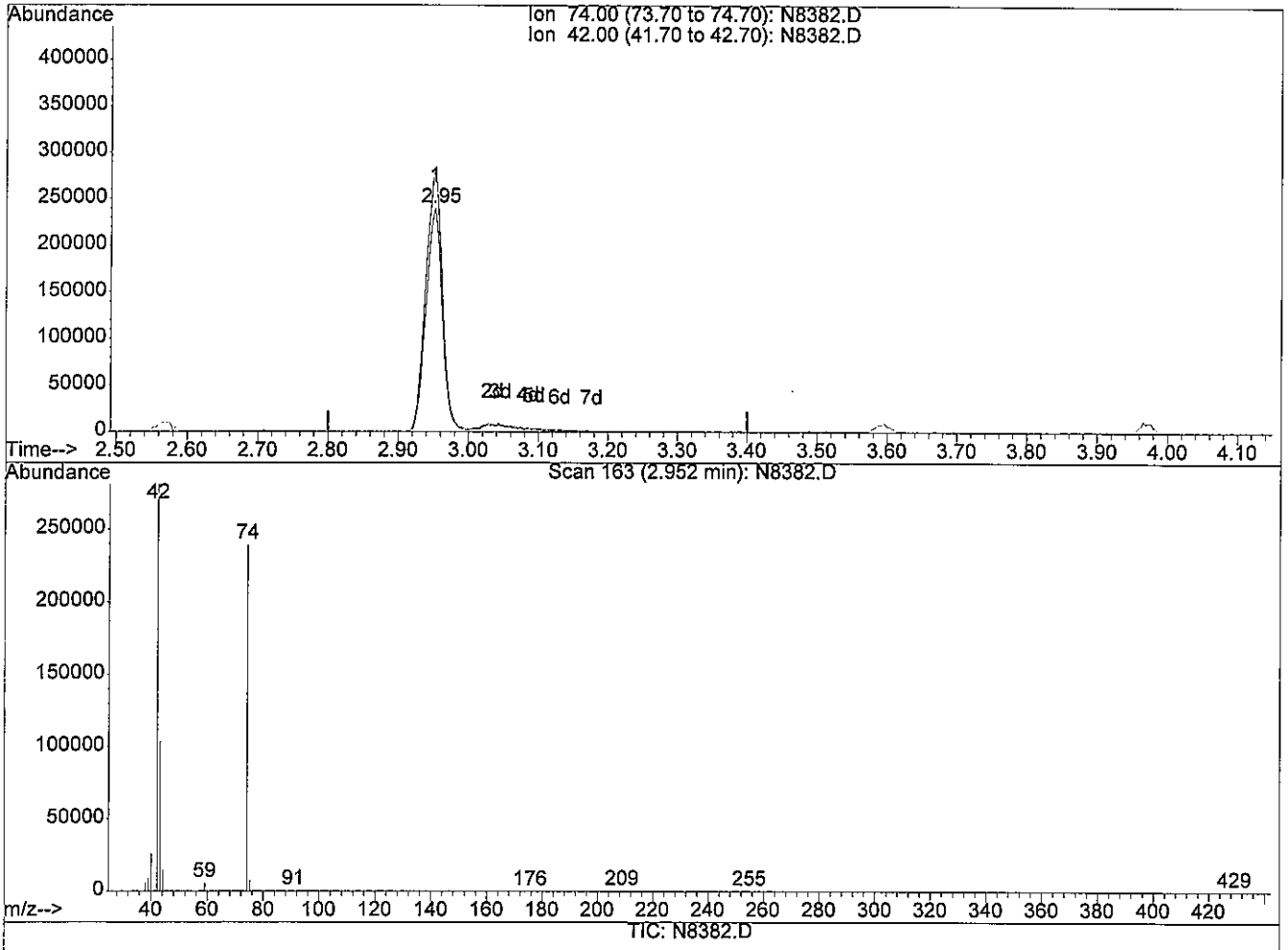
Quantitation Report (Qedit)

Data File : D:\HPCHEM\1\DATA\091113\N8382.D
Acq On : 11 Sep 2013 14:33
Sample : EX130903-2LCSD
Misc : WATER EX130903-2
MS Integration Params: RTEINT.P
Quant Time: Sep 12 10:47 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 : Thu Sep 12 10:44:10 2013
Response via : Multiple Level Calibration



(3) n-Nitrosodimethylamine (T)

2.95min 40.14ng/uL m

response 424965

Ion	Exp%	Act%
74.00	100	100
42.00	129.50	109.14
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 JC *date* 9-19-13

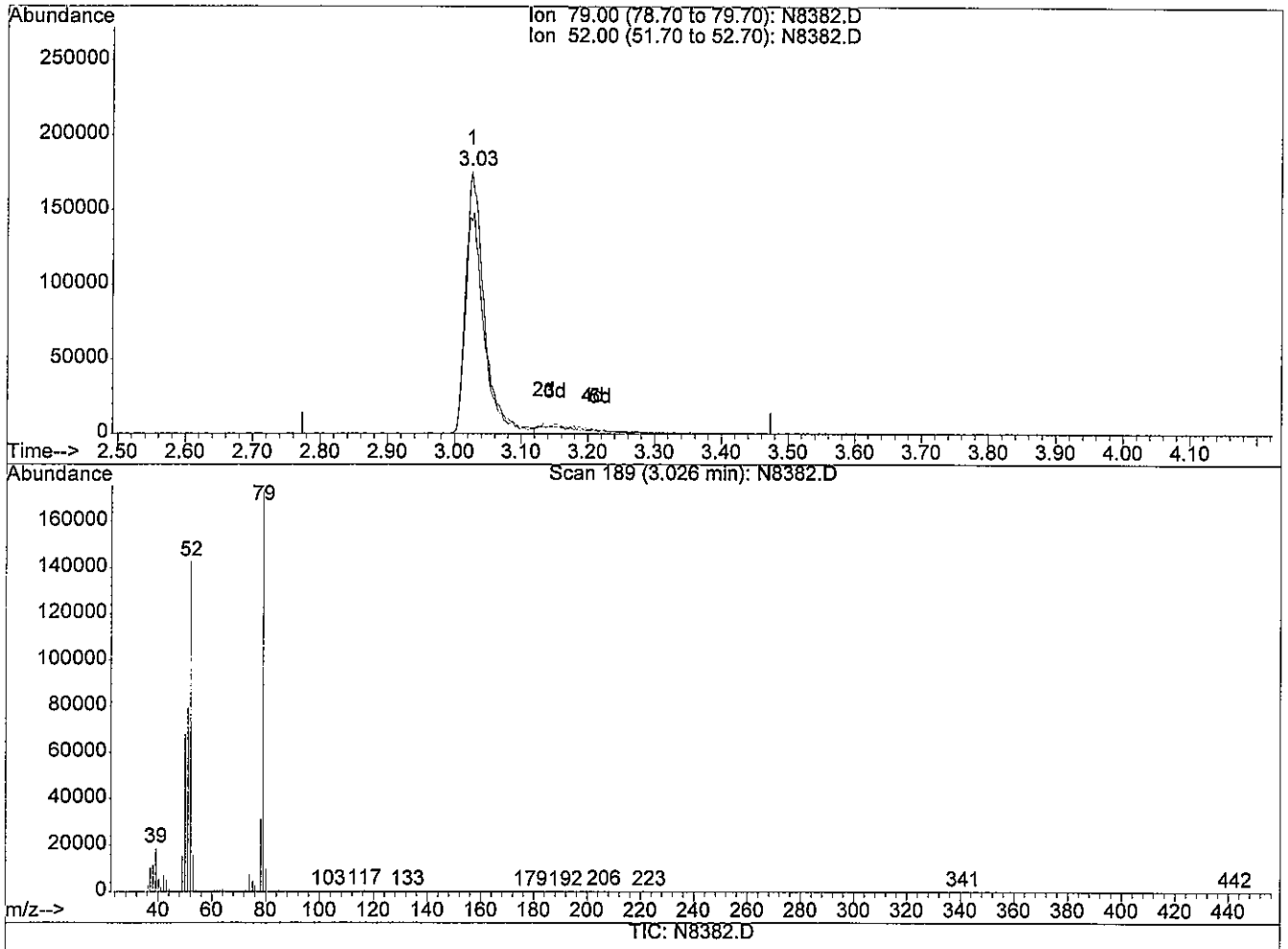
N8382.D 090413S1.M Thu Sep 12 10:47:18 2013

Quantitation Report (Qedit)

Data File : D:\HPCHEM\1\DATA\091113\N8382.D
Acq On : 11 Sep 2013 14:33
Sample : EX130903-2LCSD
Misc : WATER EX130903-2
MS Integration Params: RTEINT.P
Quant Time: Sep 12 10:47 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 : Thu Sep 12 10:44:10 2013
Response via : Multiple Level Calibration



(4) Pyridine (T)

3.03min 19.06ng/uL

response 341161

Ion	Exp%	Act%
79.00	100	100
52.00	93.60	84.19
0.00	0.00	0.00
0.00	0.00	0.00

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N8382.D 090413S1.M Thu Sep 12 10:47:21 2013

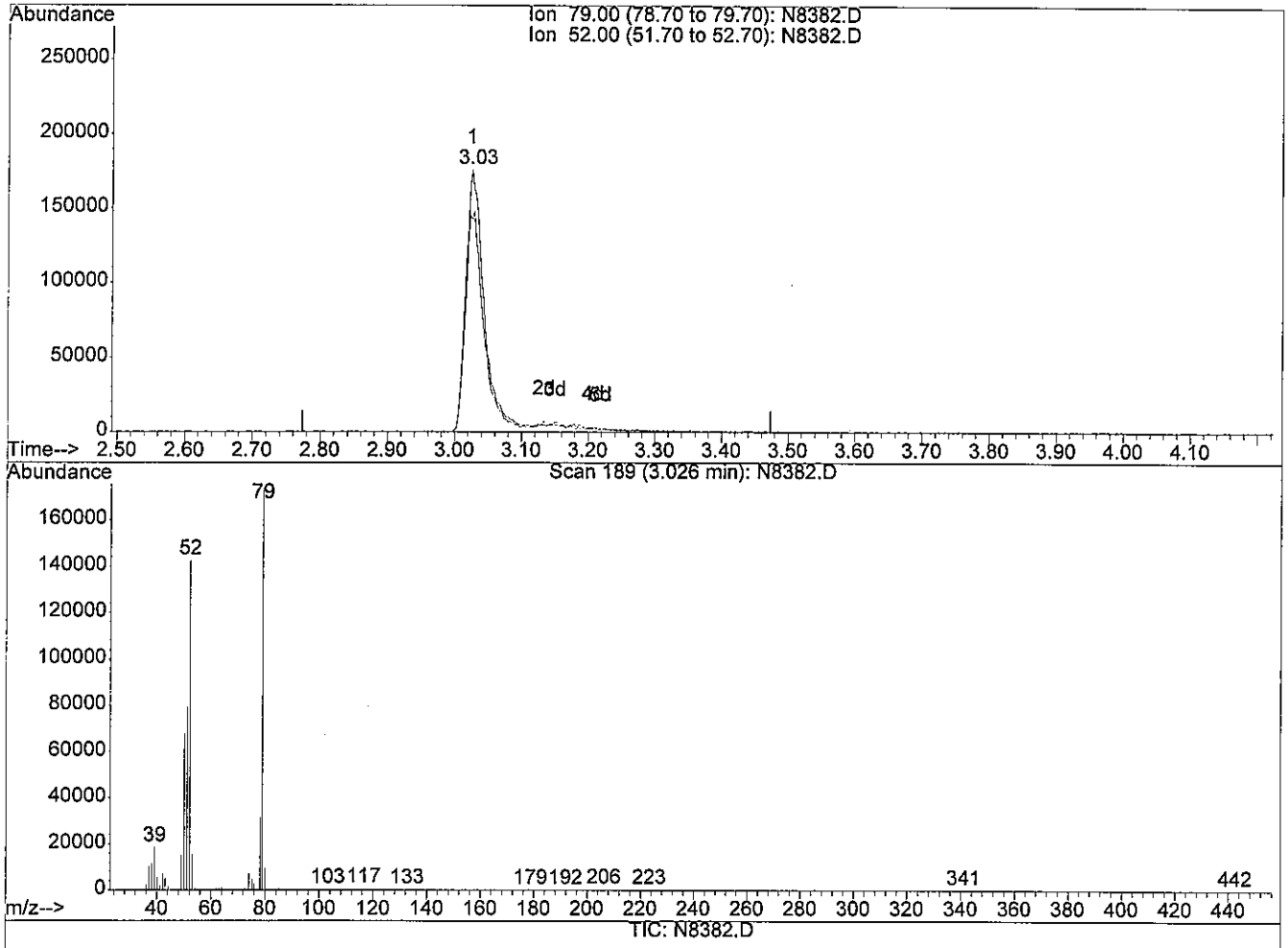
Quantitation Report (Qedit)

Data File : D:\HPCHEM\1\DATA\091113\N8382.D
Acq On : 11 Sep 2013 14:33
Sample : EX130903-2LCSD
Misc : WATER EX130903-2
MS Integration Params: RTEINT.P
Quant Time: Sep 12 10:47 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 : Thu Sep 12 10:44:10 2013
Response via : Multiple Level Calibration



(4) Pyridine (T)

3.03min 21.16ng/uL m

response 378824

Ion	Exp%	Act%
79.00	100	100
52.00	93.60	75.82
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* 9-6-17

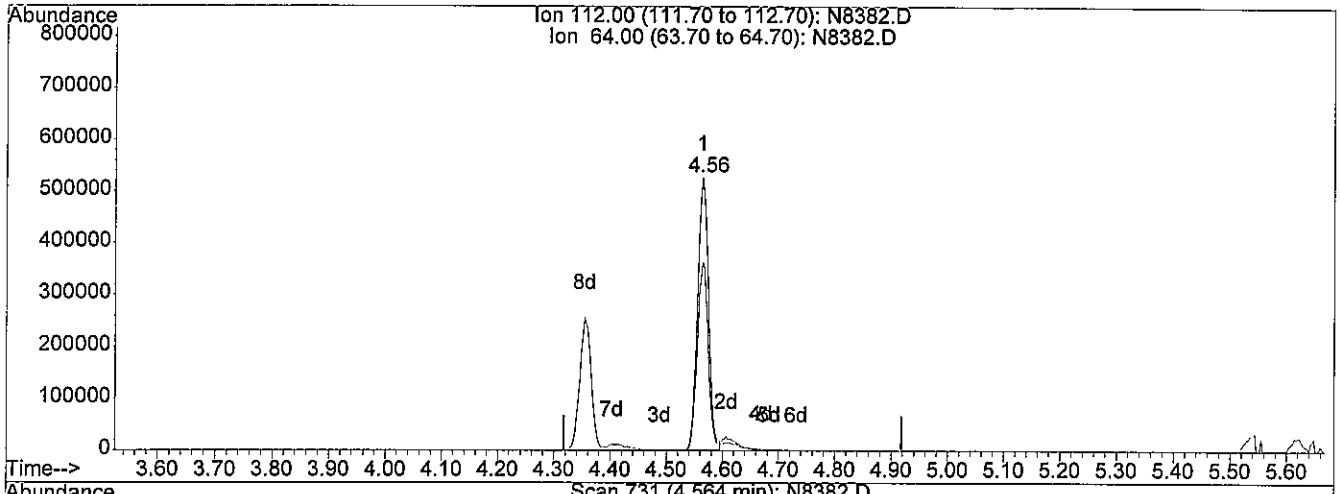
N8382.D 090413S1.M Thu Sep 12 10:47:24 2013

Quantitation Report (Qedit)

Data File : D:\HPCHEM\1\DATA\091113\N8382.D
Acq On : 11 Sep 2013 14:33
Sample : EX130903-2LCSD
Misc : WATER EX130903-2
MS Integration Params: RTEINT.P
Quant Time: Sep 12 10:47 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 : Thu Sep 12 10:44:10 2013
Response via : Multiple Level Calibration



TIC: N8382.D

(5) 2-Fluorophenol (S)

4.56min 48.57ng/uL

response 710087

Ion	Exp%	Act%
112.00	100	100
64.00	68.70	74.78
0.00	0.00	0.00
0.00	0.00	0.00

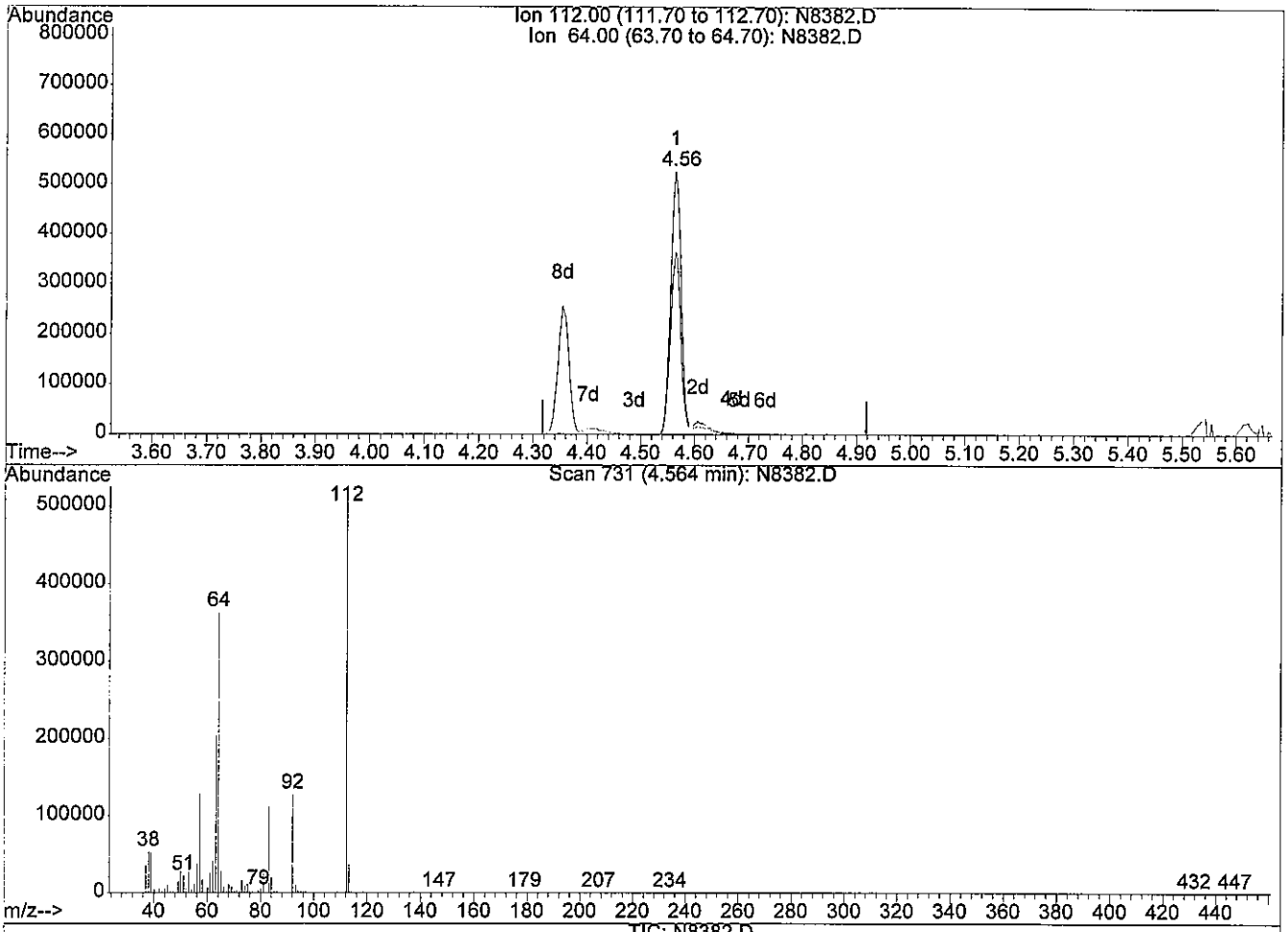
Quantitation Report (Qedit)

Data File : D:\HPCHEM\1\DATA\091113\N8382.D
Acq On : 11 Sep 2013 14:33
Sample : EX130903-2LCSD
Misc : WATER EX130903-2
MS Integration Params: RTEINT.P
Quant Time: Sep 12 10:47 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 : Thu Sep 12 10:44:10 2013
Response via : Multiple Level Calibration



(5) 2-Fluorophenol (S)

4.56min 52.70ng/uL m

response 770361

Ion	Exp%	Act%
112.00	100	100
64.00	68.70	68.93
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 JL *date* 9-15-17

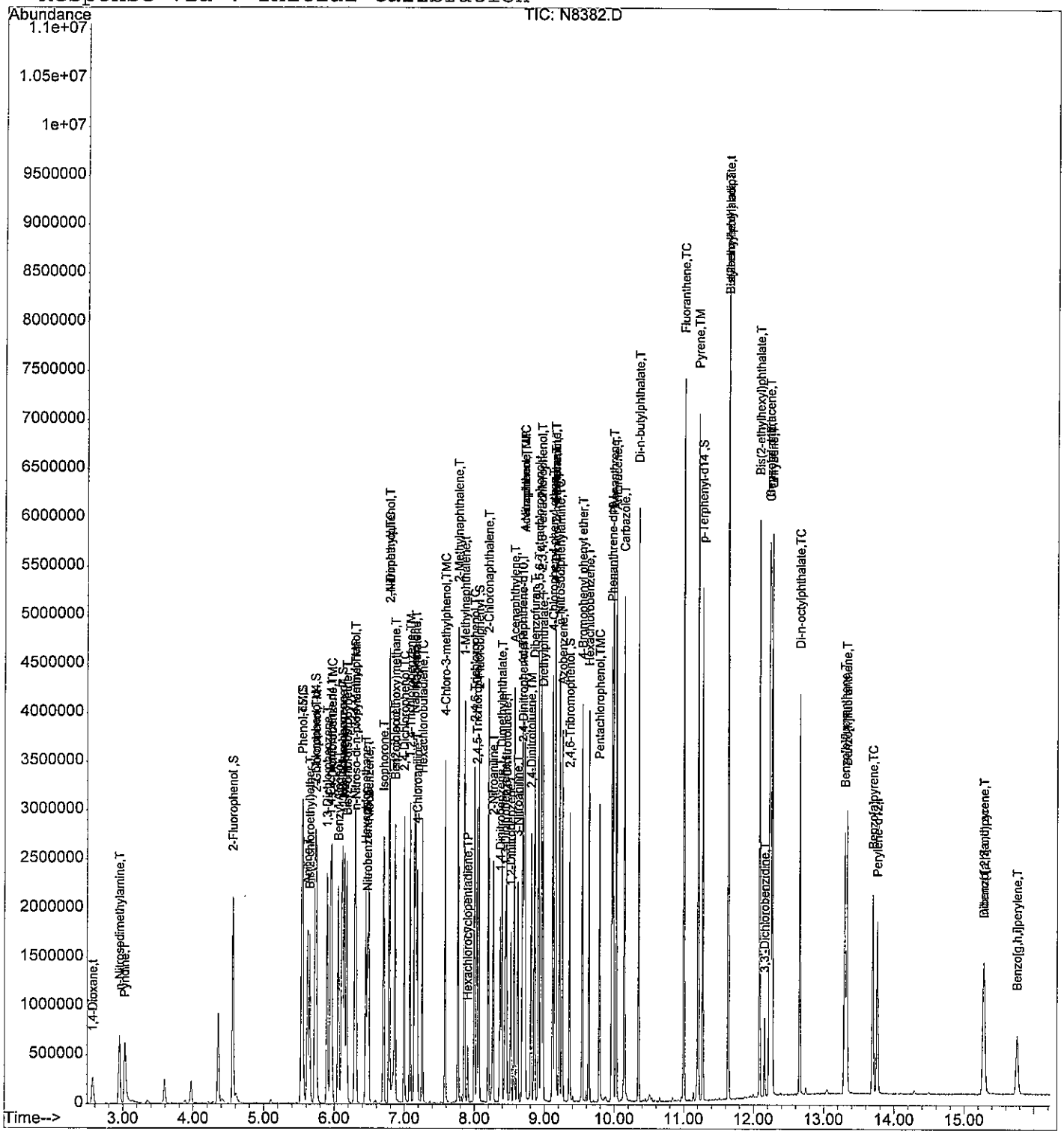
N8382.D 090413S1.M Thu Sep 12 10:47:30 2013

Data File : D:\HPCHEM\1\DATA\091113\N8382.D
Acq On : 11 Sep 2013 14:33
Sample : EX130903-2LCSD
Misc : WATER EX130903-2
MS Integration Params: RTEINT.P
Quant Time: Sep 12 10:47 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 : Thu Sep 12 10:44:10 2013
Response via : Initial Calibration



Miscellaneous

436119

ALS Laboratory Group

full + 1,4-D

SEMIVOLATILES EXTRACTION / CLEANUP WORKSHEET

WO #s 1308515, 545 Matrix AQ Batch ID EX130903-2 Sur Code ST130823-6 MSpike Code See comments Balance ID N/A Extr SOP/Rev 617/14 Extr Code: 8270D

EXTRACTION METHOD	Steam Bath: 60°C Proper N-Evap Station flow settings used? (Y)		CLEANUP CODE:	
(3520C) CLE (3510)SEP (3550)SONC (3540)SOX (3580A) Waste Dilution (3546(Microwave extraction (form 609r16.doc)	Extraction Start: Date/Time: 9/3/13 15:10 Extraction Stop: Date/Time: 9/5/13 0835 Initials ZH	LOTS: $MeCL_2$ DI823 H_2SO_4 36761 Hexane: N/A NaOH 31990 Acetone: ↓ Na_2SO_4 VL11A Florisil ↓ Silica Gel N/A	(3650B)Florisil Silica Gel (3640A GPC (see other forms) Cleanup SOP/Rev N/A Date/Time ↓ Initials ↓	Reviewed By JMB Date: 9-5-13 Each page is copied as completed and included with the workorder/run documentation; reviewed subsequently

Sample No.	Amount (g (mL))	Initial pH	pH (≤2)	pH (11-13)	Surrogate (mL)	Matrix Spike (mL)	Sur / Matrix Spike Witnessed	Date KD (Initial)	Cleanup Date	Date KD (Final)	Final Volume (mL)	Date Vialed	Comments
WMB	1000	5	1.3	12.8	1.0mL	N/A	ZH / JMB	9/5/13	N/A	N/A	1.0mL	9/5/13	not enough sample(s) provided
1308515-1	1040	7	1.3	12.8	↓	↓	↓	↓	↓	↓	↓	↓	to perform MS/MSD.
-2	1055	7	1.3	12.8									
-3	1045	7	1.3	12.8									
1308545-1	1055	7	1.3	12.8									
-3	1040	7	1.3	12.8		↓							
WLCS	1000	5	1.3	12.8		1.0mL							spiked 1.0ml of ST130530-4
WLCSD	1000	5	1.3	12.8	↓	↓	↓	↓	↓	↓	↓	↓	and ST130830-2

ZH 9/5/13