

**DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
INDIANAPOLIS**

OFFICE MEMORANDUM

Date: September 18, 2018

To: Kevin Davis
Remediation Program Branch

Thru: Steve Buckel / 9/1818

From: Kristy M. McIntire *KMM* 09/182018
Chemistry Services Section

Subject: Analytical Results for Franklin Site
Franklin, Johnson County, Indiana
Site # 0000794
Sampled: September 6, 2018
Sample Numbers: LA336 – LA340
Pace Analytical

The analytical results for the samples identified above have been validated according to the quality criteria contained in the Laboratory Services Contract (RFP 17-109) and Compendium of Methods for the Determination of Toxic Organic Compounds in the Ambient Air, Second Edition. Based on the evaluation, it has been determined that the results are acceptable for use. Reasons that data are qualified as estimated are explained below.

General Comments:

The purpose of this event was to collect soil gas samples to determine if chlorinated VOCs are present at the triangle property. The collected samples were analyzed for VOCs.

Sampling Quality Assurance/Quality Control:

Field documentation did allow for interpretation of the data. Although, the soil-gas ports were sealed completely, a leak test was not performed. The sample results are estimated.

The final canister pressures recorded in the field were zero for LA336 and LA337. However, upon receipt at the laboratory when the pressures were checked with a gauge the canisters had a negative pressure.

Field duplicate samples are used to establish the representativeness of field sampling (i.e., the homogeneity and sample variability). Field duplicates were collected from LA399 and LA340 (HSV-3, 2-2.5'). The soil-vapor duplicate samples for this study compared well with the exception of methyl ethyl ketone (MEK), carbon disulfide, ethanol, n-hexane, and propylene. Results for MEK, carbon disulfide, ethanol, n-hexane, and propylene in soil-vapor are estimated.

The information in this memorandum is based on documentation available at the time it was prepared.

Field blanks (trip and/or equipment) are used to identify sample contamination resulting from sampling equipment, sample containers, chemical preservatives, and the handling and transportation of samples. The trip blank was not collected nor required for air sampling. The equipment blank was not required since dedicated equipment was utilized. An ambient air sample was collected seventy-five feet north-northeast of HSV-1. Acetone @ 25.6 µg/m³, MEK @ 6.6 µg/m³, chloromethane @ 0.95 µg/m³, dichlorodifluoromethane @ 1.9 µg/m³, ethanol @ 8.8 µg/m³, n-hexane @ 1.4 µg/m³, propylene @ 0.63 µg/m³, tetrachloroethene @ 2.5 µg/m³, and naphthalene @ 5.0 µg/m³ were detected in the ambient air sample. Naphthalene was the only VOC detected above the Remediation Closure Guide (RCG) Residential Indoor Air Screening Level (RIASL) in the ambient air sample.

Laboratory Quality Assurance/Quality Control:

The laboratory performed all QA/QC measures necessary to validate the analytical results for this sampling event. The data was determined to be valid. Based on the validation of the analytical results, the following comments and/or qualifications are made regarding the data:

VOCs

Samples were analyzed for VOCs by EPA Method TO-15. All QA/QC criteria were satisfactory.

The Summa canisters were individually certified clean. The analytical documentation supporting the canister cleanliness was provided. All VOCs were non-detect indicating the canisters were sufficiently cleaned.

Results:

All detected VOCs were below the RCG Residential Soil Gas Screening Levels (RSGSLs) in all soil gas samples. Naphthalene was detected in the ambient air sample above RCG Residential and Commercial Indoor Air Screening Level (R/C IASL).

It should be noted that previously collected groundwater samples from these same locations were non-detect. Details regarding the groundwater sampling may be found in Chemistry Services Memorandum entitled “Analytical Results for Franklin Site” dated September 13, 2018 (VFC # 82614986).

Conclusions:

The data are usable for the overall project goal.

Attachment

cc: Michael Anderson, Risk Services
Scott Johanson, Geological Services

Volatile Organic Analysis

Site Name:	Franklin Site
Site Number:	0000794
Location:	Franklin, Johnson County, IN
Date Sampled:	6-Sep-18
Date Reported:	14-Sep-18
Sample Numbers:	LA336 - LA340
Lab:	Pace Analytical

AIR

UNITS: $\mu\text{g}/\text{m}^3$

Sample #		Type/ID#	2-Butanone (MEK)	Acetone	Benzene	Chloromethane	Carbon Disulfide	Dichlorodifluoro methane	Chloroform	Ethanol	Bromomethane	Ethylbenzene	4-Ethyltoluene
Lab	IDEM												
		RCG RIASL	5200	32000	3.6	94	730	100	1.2	NA	5.2	11	NA
		RCG CIASL	22000	140000	16	390	3100	440	5.3	NA	22	49	NA
		RCG SGSL	733333	4666666	533	13000	103333	14667	176	NA	733	1633	NA
10446892001	LA336	HSV-A, Ambient Air N-NE of HSV-1	6.6	25.6		0.95	7.9	1.9		8.8			
10446892002	LA337	HSV-1, Soil Vapor, 2-2.5' BGS, western most location on triangle property	32.6 J	56.2 J	0.57 J	3.3 J	5.8 J	1.9 J	2.9 J	11.8 J			
10446892003	LA338	HSV-2, Soil Vapor, 3.5-4' BGS, middle location on triangle property	7.2 J	45.3 J	0.8 J	J	1.5 J	J	J	4.4 J	J	3.3 J	4.6 J
10446892004	LA339**	HSV-3, Soil Vapor, 2-2.5' BGS, eastern most location on triangle property	21.5 J	64.9 J	J	2.3 J	6.2 J	J	3.8 J	24.8 J	2.8 J	1.9 J	J
10446892005	LA340**	HSV-4, Soil Vapor, 2-2.5' BGS, eastern most location on triangle property	13 J	51.8 J	J	J	3.6 J	1.8 J	3.9 J	4.7 J	J	1.7 J	J

* BLANK (Type indicated)

** FIELD DUPLICATE

J = estimated, soil gas samples were not leak tested

Empty Box indicates NON-DETECTABLE
NA=NOT AVAILABLE

RCG SGSLs have been adjusted using the 0.03 attenuation factor for subslab.
BOLD = Result exceeds RCG RIASL

Sample #		Type/ID#	n-Hexane	Methylene Chloride	Tetrahydrofuran	Propylene	Trichloroethene	Tetrachloroethene	Naphthalene	Toluene	1,2,4-Trimethyl benzene	1,3,5-Trimethyl benzene	Xylenes
Lab	IDEM												
		RCG RIASL	730	630	2100	3100	2.1	42	0.83	5200	63	63	100
		RCG CIASL	3100	2600	8800	13000	8.8	180	3.6	22000	260	260	440
		RCG SGSL	103333	86667	293333	433333	293	6000	120	733333	8667	8667	14667
10446892001	LA336	HSV-A, Ambient Air N-NE of HSV-1	1.4			0.63		2.5	5				
10446892002	LA337	HSV-1, Soil Vapor, 2-2.5' BGS, western most location on triangle property	2.1 J	7.1 J	J	3.1 J	J	J	7 J	3 J	4.5 J	2.4 J	5.3 J
10446892003	LA338	HSV-2, Soil Vapor, 3.5-4' BGS, middle location on triangle property	2.7 J	J	J	1.2 J	1.3 J	J	14.4 J	2.8 J	16.7 J	5.8 J	17.8 J
10446892004	LA339**	HSV-3, Soil Vapor, 2-2.5' BGS, eastern most location on triangle property	4.4 J	J	J	2.4 J	J	2 J	20.2 J	2.9 J	19.3 J	5.7 J	16 J
10446892005	LA340**	HSV-4, Soil Vapor, 2-2.5' BGS, eastern most location on triangle property	2.2 J	J	1.8 J	1.2 J	J	J	20.6 J	2.5 J	18.4 J	5.3 J	14.3 J

* BLANK (Type indicated)

** FIELD DUPLICATE

J = estimated, soil gas samples were not leak tested

Empty Box indicates NON-DETECTABLE
NA=NOT AVAILABLE

RCG SGSLs have been adjusted using the 0.03 attenuation factor for subslab.
BOLD = Result exceeds RCG RIASL

Site & Requestor Details	OLQ Sample Request		1. Date 8/31/2018	Sample Numbers LA 336 - LA 340			
	2. Site Name Franklin Contamination		3. Site ID Number 794		4. Grant Code 3-088-000		
	5. Street Address NA		6. City Franklin		7. County Johnson		
	8. Person Requesting Samples Tim Johnson		Branch/Section State Cleanup		Phone 317-234-3931		
	9. Sampler(s) Tim Johnson		Branch/Section State Cleanup		Phone 317-234-3931		
	10. Site Manager / Facility Contact NA				Phone		
	11. Reason for Sampling: Briefly describe the problem <u>sampling and analysis</u> should resolve. Electronic Copy <input type="checkbox"/> Yes 5 soil gas samples collected at the Triangle Property north of the Franklin Schools to determine if soil gas levels there are similar to the school.						
	12. Sampling Purpose RCG - ISC			13. Protocol: SAS - Air			
	14. Matrix Type: Air (Complete Section 16)			15. Dedicated Equipment? Yes			
	16. This section for Air Analysis only: 16 A. Six (6) Liter Summa Certification (Includes vacuum and pressure gauge): 16 B. Flow Controller:						
17. Analysis:		A - VOA (full list)					
18. Samples:		4					
Duplicates:		1					
Trip Blanks:							
Equipment Blanks:							
Total:		5					
Tracking	19. Projected Sample Date(s) 9/5-7/2018		20. Projected Date(s) to Lab 9/5-7/2018		21. Turnaround Time 7 Days		22. Cooler Arrival
	Lab Assigned Pace		Lab Contact C. Trout	Lab Contact Date 8/31/2018		Projected Cost \$1,217	
	Actual Date to Lab 9/10/18		Data Package Due	Preliminary Results Received		Package Received 9/19/18	
	Chemistry Gatekeeper David Harrison			Sampling Setup Chemist			
Signatures	Section Chief <i>D. E. Allen</i> 8/31/18		Branch Chief				
	Assistant Commissioner		Assistant Commissioner of OMBA				
	\$0-\$10,000 - Gatekeeper & Section Chief \$20,001-\$40,000 - Add Assistant Commissioner of OLQ		\$10,001-\$20,000 - Add Branch Chief Over \$40,000 - Add Assistant Commissioner of OMBA				

SITE INFORMATION *

IDEM Sample #s: LA 336 - LA 340 Sampling Date(s): 9/6/18
 Site Name: FRANKLIN CONTAMINATION Investigation Site ID #: 0000794
 Street Address: _____ City: FRANKLIN County: JOHNSON

Site Representative(s): _____ Company: IDEM
 IDEM Samplers: TIM JOHNSON STEVE MCINTIRE Laboratory: PACE

Weather Conditions: Sky CLOUDY Ground DRY Wind MILD Temp 90°F Humidity HIGH

Sample Types (check all applicable):
 Mon. Well Res. Well Creek Leachate Ditch
 Drainage Tile Lagoon Pond Sludge Sediment Industrial Waste
 Waste Pile Soil Truck Drummed Waste Waste Liquid Oil
 Solvent Sand Ash Other SOIL VAPOR
 Sample Choice (check): Grab Composite Statistical Random Judgmental

Sampling Equipment Used: SUMMA CANISTERS
 Decontamination Procedures: NA

Field Test Equipment Used: -
 Calibration Notes: -

Container Source: PACE Sample Preservative Source: -
 Blank Water Source: - Decontamination Water Source: -

Program Area (check): RCRA CERCLA Solid Waste DOD LUST/UST VRP
 State Cleanup Emergency Response Other _____
 Purpose (check): Complaint Compliance Enforcement Other _____
 Constituents Expected: PCE, TCE, BREAKDOWNS Handling Precaution: Yes No

Photos Taken? Yes No Send analytical data review to: DAVE HARRISON Phone: 317-232-8877
TIM JOHNSON 317-234-3931

Other Notes or Deviations from Sampling Plan:
TWO CANISTERS REACHED 0 PRESSURE

Revised 09-11-00 Sampler Signature: [Signature] Date: 9/6/18

* This form is for general use in OLQ sampling projects.

SAMPLE FIELD SHEET *

Site Name: FRANKLIN CONTAMINATION Investigation County: JOHNSON
IDEM/OLQ Sample #: HSV-A LA 336 Sample ID: _____
Collection Date: 9 / 6 / 18 Time: 2 : 28 AM / PM

- Sample Types (check all applicable): Mon. Well Res. Well Creek Leachate Ditch
 Drainage Tile Lagoon Pond Sludge Sediment Industrial Waste
 Waste Pile Soil Truck Solvent Oil Drummed Waste
 Waste Liquid Sand Ash Trip Blank Field Blank Equipment Blank
 Background MS/MSD Duplicate of _____ Other AMBIENT AIR

Containers:	Volume	Material	Quantity	Preservative	Analysis
	<u>1 liter</u>	<u>STAINLESS STEEL</u>	<u>1</u>	<u>-</u>	<u>VOA</u>

Sample Location Information: (location marker, depth taken, flow rate, vegetation damage, wildlife present, etc.)
Taken in open spot @ 75' N-NE of SAMPLE HSV1 AWAY FROM CANOPY -

For Well Samples: Well purged less than 1 2 4 6 12 24 48 hours prior to sampling.
Purged to dryness? Yes No Approx. 1 2 3 5 >5 well volumes.

Sampling Equipment Used: _____

Field Test Performed	Result	Field Test Performed	Result
<u>INITIAL PRESSURE</u>	<u>29</u>	<u>START TIME</u>	<u>2:28 pm</u>
<u>FINAL PRESSURE</u>	<u>0</u>	<u>END TIME</u>	<u>2:44 pm</u>

Sample Appearance and Observations: (color, odor, clarity, suspended solids, reaction to preservatives, etc.)
CAN # 2622

Deviations from Sampling Plan: NA CAN PRESSURE REACHED 0

Revision 09-11-00
Sampler Signature: [Signature] Date: 9/6/18

* This form is for general use in OLQ sampling projects.

SAMPLE FIELD SHEET *

Site Name: FRANKLIN CONTAMINATION Investigation County: JOHNSON
 IDEM/OLQ Sample #: HSV-1 LA 337 Sample ID: _____
 Collection Date: 9 / 6 / 18 Time: 2 : 38 AM / PM

- Sample Types (check all applicable): Mon. Well Res. Well Creek Leachate Ditch
 Drainage Tile Lagoon Pond Sludge Sediment Industrial Waste
 Waste Pile Soil Truck Solvent Oil Drummed Waste
 Waste Liquid Sand Ash Trip Blank Field Blank Equipment Blank
 Background MS/MSD Duplicate of _____ Other SOIL VAPOR

Containers:	Volume	Material	Quantity	Preservative	Analysis
	<u>1 liter</u>	<u>steel</u>	<u>1</u>	<u>-</u>	<u>VOA</u>

Sample Location Information: (location marker, depth taken, flow rate, vegetation damage, wildlife present, etc.)

TAKEN FROM SOIL VAPOR SAMPLE POINT FARTHEST WEST OF TRIANGLE PROPERTY NORTH OF SCHOOLS & HURRICANE CREEK) 2' - 2.5' BGS

For Well Samples: Well purged less than 1 2 4 6 12 24 48 hours prior to sampling.
 Purged to dryness? Yes No Approx. 1 2 3 5 >5 well volumes.

Sampling Equipment Used: _____

Field Test Performed	Result	Field Test Performed	Result
<u>INITIAL PRESSURE</u>	<u>-29</u>	<u>INITIAL TIME</u>	<u>2:38 PM</u>
<u>FINAL PRESSURE</u>	<u>0</u>	<u>FINAL TIME</u>	<u>2:46 PM</u>

Sample Appearance and Observations: (color, odor, clarity, suspended solids, reaction to preservatives, etc.)

CAN ID 2270

Deviations from Sampling Plan: NA CAN PRESSURE REACHED 0

SAMPLE FIELD SHEET *

Site Name: FRANKLIN CONTAMINATION Investigation County: JOHNSON
IDEM/OLQ Sample #: HSV2-LA338 Sample ID: _____
Collection Date: 9 / 6 / 18 Time: 3 : 11 AM / PM

- Sample Types (check all applicable): Mon. Well Res. Well Creek Leachate Ditch
 Drainage Tile Lagoon Pond Sludge Sediment Industrial Waste
 Waste Pile Soil Truck Solvent Oil Drummed Waste
 Waste Liquid Sand Ash Trip Blank Field Blank Equipment Blank
 Background MS/MSD Duplicate of _____ Other SOIL WATER

Containers:	Volume	Material	Quantity	Preservative	Analysis
	<u>1 liter</u>	<u>stainless steel</u>	<u>1</u>		<u>NOA</u>

Sample Location Information: (location marker, depth taken, flow rate, vegetation damage, wildlife present, etc.)
TAKEN FROM MIDDLE LOCATION, TRIANGLE PROPERTY NORTH OF SCHOOL + HURRICANE CREEK, 3.5' - 4' BGS

For Well Samples: Well purged less than 1 2 4 6 12 24 48 hours prior to sampling.
Purged to dryness? Yes No Approx. 1 2 3 5 >5 well volumes.

Sampling Equipment Used: _____

Field Test Performed	Result	Field Test Performed	Result
<u>BEGIN PRESSURE</u>	<u>-30</u>	<u>BEGIN TIME</u>	<u>3:11 pm</u>
<u>END PRESSURE</u>	<u>-2</u>	<u>END TIME</u>	<u>3:18 pm</u>

Sample Appearance and Observations: (color, odor, clarity, suspended solids, reaction to preservatives, etc.)
CANISTER # 2196

Deviations from Sampling Plan: NA

Revision 09-11-00
Sampler Signature: Timothy R. Johns Date: 9/6/18

* This form is for general use in OLQ sampling projects.

SAMPLE FIELD SHEET *

Site Name: FRANKLIN CONTAMINATION Investigation County: JOHNSON
 IDEM/OLQ Sample #: HSV-3 LA3389 Sample ID: _____
 Collection Date: 9 / 6 / 18 Time: 3 : 48 AM / PM

- Sample Types (check all applicable): Mon. Well Res. Well Creek Leachate Ditch
 Drainage Tile Lagoon Pond Sludge Sediment Industrial Waste
 Waste Pile Soil Truck Solvent Oil Drummed Waste
 Waste Liquid Sand Ash Trip Blank Field Blank Equipment Blank
 Background MS/MSD Duplicate of _____ Other SOIL VAPOR

Containers:	Volume	Material	Quantity	Preservative	Analysis
	<u>1 liter</u>	<u>stainless steel</u>	<u>1</u>		<u>VOA</u>

Sample Location Information: (location marker, depth taken, flow rate, vegetation damage, wildlife present, etc.)

Taken from Easternmost location triangular property north of schools + Hurricane Creek, 2'-2.5' BGS

For Well Samples: Well purged less than 1 2 4 6 12 24 48 hours prior to sampling.
 Purged to dryness? Yes No Approx. 1 2 3 5 >5 well volumes.

Sampling Equipment Used: _____

Field Test Performed	Result	Field Test Performed	Result
<u>Begin Pressure</u>	<u>-30</u>	<u>BEGIN TIME</u>	<u>3:48 pm</u>
<u>END Pressure</u>	<u>-2</u>	<u>END TIME</u>	<u>4:04 pm</u>

Sample Appearance and Observations: (color, odor, clarity, suspended solids, reaction to preservatives, etc.)

CAN # 899

Deviations from Sampling Plan: NA

Sampler Signature: J. R. Jones Date: 9/6/18

SAMPLE FIELD SHEET *

Site Name: FRANKLIN CONTAMINATION Investigation County: JOHNSON
IDEM/OLQ Sample #: HSV-4 LA 340 Sample ID: _____
Collection Date: 9 / 6 / 18 Time: 3 : 48 AM (PM)

- Sample Types (check all applicable): Mon. Well Res. Well Creek Leachate Ditch
 Drainage Tile Lagoon Pond Sludge Sediment Industrial Waste
 Waste Pile Soil Truck Solvent Oil Drummed Waste
 Waste Liquid Sand Ash Trip Blank Field Blank Equipment Blank
 Background MS/MSD Duplicate of LA 339 Other Soil VAPOR

Containers:	Volume	Material	Quantity	Preservative	Analysis
	<u>1 liter</u>	<u>stainless Steel</u>	<u>1</u>		<u>VOA</u>

Sample Location Information: (location marker, depth taken, flow rate, vegetation damage, wildlife present, etc.)
SEE SAMPLE SHEET HSV-3 - LA 339

For Well Samples: Well purged less than 1 2 4 6 12 24 48 hours prior to sampling.
Purged to dryness? Yes No Approx. 1 2 3 5 >5 well volumes.

Sampling Equipment Used: _____

Field Test Performed	Result	Field Test Performed	Result
<u>BEGIN PRESSURE</u>	<u>-30</u>	<u>BEGIN TIME</u>	<u>3:48 pm</u>
<u>END PRESSURE</u>	<u>-2</u>	<u>END TIME</u>	<u>4:04 pm</u>

Sample Appearance and Observations: (color, odor, clarity, suspended solids, reaction to preservatives, etc.)
CAN # 3095

Deviations from Sampling Plan: NA

Sampler Signature: Justin R. Johnson Date: 9/6/18

* This form is for general use in OLQ sampling projects.

September 14, 2018

David Harrison
IDEM
100 North Senate Ave.
Indianapolis, IN 462042251

RE: Project: FRANKLIN CONTAMIN.
Pace Project No.: 10446892

Dear David Harrison:

Enclosed are the analytical results for sample(s) received by the laboratory on September 10, 2018. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Carolynne Trout
carolynne.trout@pacelabs.com
1(612)607-6351
Project Manager

Enclosures

cc: Richard Ligman/Meganne Shickles, IDEM Finance and
Operations



REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

CERTIFICATIONS

Project: FRANKLIN CONTAMIN.

Pace Project No.: 10446892

Minnesota Certification IDs

1700 Elm Street SE, Minneapolis, MN 55414-2485

A2LA Certification #: 2926.01

Alabama Certification #: 40770

Alaska Contaminated Sites Certification #: 17-009

Alaska DW Certification #: MN00064

Arizona Certification #: AZ0014

Arkansas DW Certification #: MN00064

Arkansas WW Certification #: 88-0680

California Certification #: 2929

CNMI Saipan Certification #: MP0003

Colorado Certification #: MN00064

Connecticut Certification #: PH-0256

EPA Region 8+Wyoming DW Certification #: via MN 027-053-137

Florida Certification #: E87605

Georgia Certification #: 959

Guam EPA Certification #: MN00064

Hawaii Certification #: MN00064

Idaho Certification #: MN00064

Illinois Certification #: 200011

Indiana Certification #: C-MN-01

Iowa Certification #: 368

Kansas Certification #: E-10167

Kentucky DW Certification #: 90062

Kentucky WW Certification #: 90062

Louisiana DEQ Certification #: 03086

Louisiana DW Certification #: MN00064

Maine Certification #: MN00064

Maryland Certification #: 322

Massachusetts Certification #: M-MN064

Michigan Certification #: 9909

Minnesota Certification #: 027-053-137

Minnesota Dept of Ag Certification #: via MN 027-053-137

Minnesota Petrofund Certification #: 1240

Mississippi Certification #: MN00064

Montana Certification #: CERT0092

Nebraska Certification #: NE-OS-18-06

Nevada Certification #: MN00064

New Hampshire Certification #: 2081

New Jersey Certification #: MN002

New York Certification #: 11647

North Carolina DW Certification #: 27700

North Carolina WW Certification #: 530

North Dakota Certification #: R-036

Ohio DW Certification #: 41244

Ohio VAP Certification #: CL101

Oklahoma Certification #: 9507

Oregon NwTPH Certification #: MN300001

Oregon Secondary Certification #: MN200001

Pennsylvania Certification #: 68-00563

Puerto Rico Certification #: MN00064

South Carolina Certification #:74003001

Tennessee Certification #: TN02818

Texas Certification #: T104704192

Utah Certification #: MN00064

Virginia Certification #: 460163

Washington Certification #: C486

West Virginia DW Certification #: 9952 C

West Virginia DEP Certification #: 382

Wisconsin Certification #: 999407970

Wyoming UST Certification #: via A2LA 2926.01

REPORT OF LABORATORY ANALYSIS

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SAMPLE SUMMARY

Project: FRANKLIN CONTAMIN.

Pace Project No.: 10446892

Lab ID	Sample ID	Matrix	Date Collected	Date Received
10446892001	HSV-A LA 336	Air	09/06/18 14:44	09/10/18 13:40
10446892002	HSV-1 LA 337	Air	09/06/18 14:46	09/10/18 13:40
10446892003	HSV-2 LA 338	Air	09/06/18 15:18	09/10/18 13:40
10446892004	HSV-3 LA 339	Air	09/06/18 16:04	09/10/18 13:40
10446892005	HSV-4 LA 340	Air	09/06/18 16:04	09/10/18 13:40

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: FRANKLIN CONTAMIN.

Pace Project No.: 10446892

Lab ID	Sample ID	Method	Analysts	Analytes Reported
10446892001	HSV-A LA 336	TO-15	CH1	61
10446892002	HSV-1 LA 337	TO-15	CH1	61
10446892003	HSV-2 LA 338	TO-15	CH1	61
10446892004	HSV-3 LA 339	TO-15	CH1	61
10446892005	HSV-4 LA 340	TO-15	CH1	61

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: FRANKLIN CONTAMIN.

Pace Project No.: 10446892

Sample: HSV-A LA 336	Lab ID: 10446892001	Collected: 09/06/18 14:44	Received: 09/10/18 13:40	Matrix: Air				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR		Analytical Method: TO-15						
Acetone	25.6	ug/m3	4.2	1.74		09/13/18 21:03	67-64-1	
Benzene	ND	ug/m3	0.57	1.74		09/13/18 21:03	71-43-2	
Benzyl chloride	ND	ug/m3	4.6	1.74		09/13/18 21:03	100-44-7	
Bromodichloromethane	ND	ug/m3	2.4	1.74		09/13/18 21:03	75-27-4	
Bromoform	ND	ug/m3	9.1	1.74		09/13/18 21:03	75-25-2	
Bromomethane	ND	ug/m3	1.4	1.74		09/13/18 21:03	74-83-9	
1,3-Butadiene	ND	ug/m3	0.78	1.74		09/13/18 21:03	106-99-0	
2-Butanone (MEK)	6.6	ug/m3	5.2	1.74		09/13/18 21:03	78-93-3	
Carbon disulfide	7.9	ug/m3	1.1	1.74		09/13/18 21:03	75-15-0	
Carbon tetrachloride	ND	ug/m3	2.2	1.74		09/13/18 21:03	56-23-5	
Chlorobenzene	ND	ug/m3	1.6	1.74		09/13/18 21:03	108-90-7	
Chloroethane	ND	ug/m3	0.93	1.74		09/13/18 21:03	75-00-3	
Chloroform	ND	ug/m3	0.86	1.74		09/13/18 21:03	67-66-3	
Chloromethane	0.95	ug/m3	0.73	1.74		09/13/18 21:03	74-87-3	
Cyclohexane	ND	ug/m3	3.0	1.74		09/13/18 21:03	110-82-7	
Dibromochloromethane	ND	ug/m3	3.0	1.74		09/13/18 21:03	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/m3	1.4	1.74		09/13/18 21:03	106-93-4	
1,2-Dichlorobenzene	ND	ug/m3	5.3	1.74		09/13/18 21:03	95-50-1	
1,3-Dichlorobenzene	ND	ug/m3	2.1	1.74		09/13/18 21:03	541-73-1	
1,4-Dichlorobenzene	ND	ug/m3	5.3	1.74		09/13/18 21:03	106-46-7	
Dichlorodifluoromethane	1.9	ug/m3	1.8	1.74		09/13/18 21:03	75-71-8	
1,1-Dichloroethane	ND	ug/m3	1.4	1.74		09/13/18 21:03	75-34-3	
1,2-Dichloroethane	ND	ug/m3	0.72	1.74		09/13/18 21:03	107-06-2	
1,1-Dichloroethene	ND	ug/m3	1.4	1.74		09/13/18 21:03	75-35-4	
cis-1,2-Dichloroethene	ND	ug/m3	1.4	1.74		09/13/18 21:03	156-59-2	
trans-1,2-Dichloroethene	ND	ug/m3	1.4	1.74		09/13/18 21:03	156-60-5	
1,2-Dichloropropane	ND	ug/m3	1.6	1.74		09/13/18 21:03	78-87-5	
cis-1,3-Dichloropropene	ND	ug/m3	1.6	1.74		09/13/18 21:03	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/m3	4.0	1.74		09/13/18 21:03	10061-02-6	
Dichlorotetrafluoroethane	ND	ug/m3	2.5	1.74		09/13/18 21:03	76-14-2	
Ethanol	8.8	ug/m3	3.3	1.74		09/13/18 21:03	64-17-5	
Ethyl acetate	ND	ug/m3	1.3	1.74		09/13/18 21:03	141-78-6	
Ethylbenzene	ND	ug/m3	1.5	1.74		09/13/18 21:03	100-41-4	
4-Ethyltoluene	ND	ug/m3	4.4	1.74		09/13/18 21:03	622-96-8	
n-Heptane	ND	ug/m3	1.4	1.74		09/13/18 21:03	142-82-5	
Hexachloro-1,3-butadiene	ND	ug/m3	9.4	1.74		09/13/18 21:03	87-68-3	
n-Hexane	1.4	ug/m3	1.2	1.74		09/13/18 21:03	110-54-3	
2-Hexanone	ND	ug/m3	7.2	1.74		09/13/18 21:03	591-78-6	
Methylene Chloride	ND	ug/m3	6.1	1.74		09/13/18 21:03	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/m3	7.2	1.74		09/13/18 21:03	108-10-1	
Methyl-tert-butyl ether	ND	ug/m3	6.4	1.74		09/13/18 21:03	1634-04-4	
Naphthalene	5.0	ug/m3	4.6	1.74		09/13/18 21:03	91-20-3	
2-Propanol	ND	ug/m3	4.4	1.74		09/13/18 21:03	67-63-0	
Propylene	0.63	ug/m3	0.61	1.74		09/13/18 21:03	115-07-1	
Styrene	ND	ug/m3	3.8	1.74		09/13/18 21:03	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/m3	1.2	1.74		09/13/18 21:03	79-34-5	
Tetrachloroethene	2.5	ug/m3	1.2	1.74		09/13/18 21:03	127-18-4	

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ANALYTICAL RESULTS

Project: FRANKLIN CONTAMIN.

Pace Project No.: 10446892

Sample: HSV-A LA 336		Lab ID: 10446892001	Collected: 09/06/18 14:44	Received: 09/10/18 13:40	Matrix: Air				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual	
TO15 MSV AIR		Analytical Method: TO-15							
Tetrahydrofuran	ND	ug/m3	1.0	1.74		09/13/18 21:03	109-99-9		
Toluene	ND	ug/m3	1.3	1.74		09/13/18 21:03	108-88-3		
1,2,4-Trichlorobenzene	ND	ug/m3	13.1	1.74		09/13/18 21:03	120-82-1		
1,1,1-Trichloroethane	ND	ug/m3	1.9	1.74		09/13/18 21:03	71-55-6		
1,1,2-Trichloroethane	ND	ug/m3	0.97	1.74		09/13/18 21:03	79-00-5		
Trichloroethene	ND	ug/m3	0.95	1.74		09/13/18 21:03	79-01-6		
Trichlorofluoromethane	ND	ug/m3	2.0	1.74		09/13/18 21:03	75-69-4		
1,1,2-Trichlorotrifluoroethane	ND	ug/m3	2.7	1.74		09/13/18 21:03	76-13-1		
1,2,4-Trimethylbenzene	ND	ug/m3	1.7	1.74		09/13/18 21:03	95-63-6		
1,3,5-Trimethylbenzene	ND	ug/m3	1.7	1.74		09/13/18 21:03	108-67-8		
Vinyl acetate	ND	ug/m3	1.2	1.74		09/13/18 21:03	108-05-4		
Vinyl chloride	ND	ug/m3	0.45	1.74		09/13/18 21:03	75-01-4		
m&p-Xylene	ND	ug/m3	3.1	1.74		09/13/18 21:03	179601-23-1		
o-Xylene	ND	ug/m3	1.5	1.74		09/13/18 21:03	95-47-6		

Sample: HSV-1 LA 337		Lab ID: 10446892002	Collected: 09/06/18 14:46	Received: 09/10/18 13:40	Matrix: Air				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual	
TO15 MSV AIR		Analytical Method: TO-15							
Acetone	56.2	ug/m3	4.2	1.74		09/13/18 21:31	67-64-1		
Benzene	0.57	ug/m3	0.57	1.74		09/13/18 21:31	71-43-2		
Benzyl chloride	ND	ug/m3	4.6	1.74		09/13/18 21:31	100-44-7		
Bromodichloromethane	ND	ug/m3	2.4	1.74		09/13/18 21:31	75-27-4		
Bromoform	ND	ug/m3	9.1	1.74		09/13/18 21:31	75-25-2		
Bromomethane	ND	ug/m3	1.4	1.74		09/13/18 21:31	74-83-9		
1,3-Butadiene	ND	ug/m3	0.78	1.74		09/13/18 21:31	106-99-0		
2-Butanone (MEK)	32.6	ug/m3	5.2	1.74		09/13/18 21:31	78-93-3		
Carbon disulfide	5.8	ug/m3	1.1	1.74		09/13/18 21:31	75-15-0		
Carbon tetrachloride	ND	ug/m3	2.2	1.74		09/13/18 21:31	56-23-5		
Chlorobenzene	ND	ug/m3	1.6	1.74		09/13/18 21:31	108-90-7		
Chloroethane	ND	ug/m3	0.93	1.74		09/13/18 21:31	75-00-3		
Chloroform	2.9	ug/m3	0.86	1.74		09/13/18 21:31	67-66-3		
Chloromethane	3.3	ug/m3	0.73	1.74		09/13/18 21:31	74-87-3		
Cyclohexane	ND	ug/m3	3.0	1.74		09/13/18 21:31	110-82-7		
Dibromochloromethane	ND	ug/m3	3.0	1.74		09/13/18 21:31	124-48-1		
1,2-Dibromoethane (EDB)	ND	ug/m3	1.4	1.74		09/13/18 21:31	106-93-4		
1,2-Dichlorobenzene	ND	ug/m3	5.3	1.74		09/13/18 21:31	95-50-1		
1,3-Dichlorobenzene	ND	ug/m3	2.1	1.74		09/13/18 21:31	541-73-1		
1,4-Dichlorobenzene	ND	ug/m3	5.3	1.74		09/13/18 21:31	106-46-7		
Dichlorodifluoromethane	1.9	ug/m3	1.8	1.74		09/13/18 21:31	75-71-8		
1,1-Dichloroethane	ND	ug/m3	1.4	1.74		09/13/18 21:31	75-34-3		
1,2-Dichloroethane	ND	ug/m3	0.72	1.74		09/13/18 21:31	107-06-2		
1,1-Dichloroethene	ND	ug/m3	1.4	1.74		09/13/18 21:31	75-35-4		
cis-1,2-Dichloroethene	ND	ug/m3	1.4	1.74		09/13/18 21:31	156-59-2		
trans-1,2-Dichloroethene	ND	ug/m3	1.4	1.74		09/13/18 21:31	156-60-5		

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ANALYTICAL RESULTS

Project: FRANKLIN CONTAMIN.

Pace Project No.: 10446892

Sample: HSV-1 LA 337		Lab ID: 10446892002	Collected: 09/06/18 14:46	Received: 09/10/18 13:40	Matrix: Air				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual	
TO15 MSV AIR		Analytical Method: TO-15							
1,2-Dichloropropane	ND	ug/m3	1.6	1.74		09/13/18 21:31	78-87-5		
cis-1,3-Dichloropropene	ND	ug/m3	1.6	1.74		09/13/18 21:31	10061-01-5		
trans-1,3-Dichloropropene	ND	ug/m3	4.0	1.74		09/13/18 21:31	10061-02-6		
Dichlorotetrafluoroethane	ND	ug/m3	2.5	1.74		09/13/18 21:31	76-14-2		
Ethanol	11.8	ug/m3	3.3	1.74		09/13/18 21:31	64-17-5		
Ethyl acetate	ND	ug/m3	1.3	1.74		09/13/18 21:31	141-78-6		
Ethylbenzene	ND	ug/m3	1.5	1.74		09/13/18 21:31	100-41-4		
4-Ethyltoluene	ND	ug/m3	4.4	1.74		09/13/18 21:31	622-96-8		
n-Heptane	ND	ug/m3	1.4	1.74		09/13/18 21:31	142-82-5		
Hexachloro-1,3-butadiene	ND	ug/m3	9.4	1.74		09/13/18 21:31	87-68-3		
n-Hexane	2.1	ug/m3	1.2	1.74		09/13/18 21:31	110-54-3		
2-Hexanone	ND	ug/m3	7.2	1.74		09/13/18 21:31	591-78-6		
Methylene Chloride	7.1	ug/m3	6.1	1.74		09/13/18 21:31	75-09-2		
4-Methyl-2-pentanone (MIBK)	ND	ug/m3	7.2	1.74		09/13/18 21:31	108-10-1		
Methyl-tert-butyl ether	ND	ug/m3	6.4	1.74		09/13/18 21:31	1634-04-4		
Naphthalene	7.0	ug/m3	4.6	1.74		09/13/18 21:31	91-20-3		
2-Propanol	ND	ug/m3	4.4	1.74		09/13/18 21:31	67-63-0		
Propylene	3.1	ug/m3	0.61	1.74		09/13/18 21:31	115-07-1		
Styrene	ND	ug/m3	3.8	1.74		09/13/18 21:31	100-42-5		
1,1,2,2-Tetrachloroethane	ND	ug/m3	1.2	1.74		09/13/18 21:31	79-34-5		
Tetrachloroethene	ND	ug/m3	1.2	1.74		09/13/18 21:31	127-18-4		
Tetrahydrofuran	ND	ug/m3	1.0	1.74		09/13/18 21:31	109-99-9		
Toluene	3.0	ug/m3	1.3	1.74		09/13/18 21:31	108-88-3		
1,2,4-Trichlorobenzene	ND	ug/m3	13.1	1.74		09/13/18 21:31	120-82-1		
1,1,1-Trichloroethane	ND	ug/m3	1.9	1.74		09/13/18 21:31	71-55-6		
1,1,2-Trichloroethane	ND	ug/m3	0.97	1.74		09/13/18 21:31	79-00-5		
Trichloroethene	ND	ug/m3	0.95	1.74		09/13/18 21:31	79-01-6		
Trichlorofluoromethane	ND	ug/m3	2.0	1.74		09/13/18 21:31	75-69-4		
1,1,2-Trichlorotrifluoroethane	ND	ug/m3	2.7	1.74		09/13/18 21:31	76-13-1		
1,2,4-Trimethylbenzene	4.5	ug/m3	1.7	1.74		09/13/18 21:31	95-63-6		
1,3,5-Trimethylbenzene	2.4	ug/m3	1.7	1.74		09/13/18 21:31	108-67-8		
Vinyl acetate	ND	ug/m3	1.2	1.74		09/13/18 21:31	108-05-4		
Vinyl chloride	ND	ug/m3	0.45	1.74		09/13/18 21:31	75-01-4		
m&p-Xylene	3.7	ug/m3	3.1	1.74		09/13/18 21:31	179601-23-1		
o-Xylene	1.6	ug/m3	1.5	1.74		09/13/18 21:31	95-47-6		

Sample: HSV-2 LA 338		Lab ID: 10446892003	Collected: 09/06/18 15:18	Received: 09/10/18 13:40	Matrix: Air				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual	
TO15 MSV AIR		Analytical Method: TO-15							
Acetone	45.3	ug/m3	4.3	1.8		09/13/18 21:59	67-64-1		
Benzene	0.80	ug/m3	0.58	1.8		09/13/18 21:59	71-43-2		
Benzyl chloride	ND	ug/m3	4.7	1.8		09/13/18 21:59	100-44-7		
Bromodichloromethane	ND	ug/m3	2.4	1.8		09/13/18 21:59	75-27-4		
Bromoform	ND	ug/m3	9.4	1.8		09/13/18 21:59	75-25-2		

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ANALYTICAL RESULTS

Project: FRANKLIN CONTAMIN.

Pace Project No.: 10446892

Sample: HSV-2 LA 338	Lab ID: 10446892003	Collected: 09/06/18 15:18	Received: 09/10/18 13:40	Matrix: Air				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR		Analytical Method: TO-15						
Bromomethane	ND	ug/m3	1.4	1.8		09/13/18 21:59	74-83-9	
1,3-Butadiene	ND	ug/m3	0.81	1.8		09/13/18 21:59	106-99-0	
2-Butanone (MEK)	7.2	ug/m3	5.4	1.8		09/13/18 21:59	78-93-3	
Carbon disulfide	1.5	ug/m3	1.1	1.8		09/13/18 21:59	75-15-0	
Carbon tetrachloride	ND	ug/m3	2.3	1.8		09/13/18 21:59	56-23-5	
Chlorobenzene	ND	ug/m3	1.7	1.8		09/13/18 21:59	108-90-7	
Chloroethane	ND	ug/m3	0.96	1.8		09/13/18 21:59	75-00-3	
Chloroform	ND	ug/m3	0.89	1.8		09/13/18 21:59	67-66-3	
Chloromethane	ND	ug/m3	0.76	1.8		09/13/18 21:59	74-87-3	
Cyclohexane	ND	ug/m3	3.2	1.8		09/13/18 21:59	110-82-7	
Dibromochloromethane	ND	ug/m3	3.1	1.8		09/13/18 21:59	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/m3	1.4	1.8		09/13/18 21:59	106-93-4	
1,2-Dichlorobenzene	ND	ug/m3	5.5	1.8		09/13/18 21:59	95-50-1	
1,3-Dichlorobenzene	ND	ug/m3	2.2	1.8		09/13/18 21:59	541-73-1	
1,4-Dichlorobenzene	ND	ug/m3	5.5	1.8		09/13/18 21:59	106-46-7	
Dichlorodifluoromethane	ND	ug/m3	1.8	1.8		09/13/18 21:59	75-71-8	
1,1-Dichloroethane	ND	ug/m3	1.5	1.8		09/13/18 21:59	75-34-3	
1,2-Dichloroethane	ND	ug/m3	0.74	1.8		09/13/18 21:59	107-06-2	
1,1-Dichloroethene	ND	ug/m3	1.5	1.8		09/13/18 21:59	75-35-4	
cis-1,2-Dichloroethene	ND	ug/m3	1.5	1.8		09/13/18 21:59	156-59-2	
trans-1,2-Dichloroethene	ND	ug/m3	1.5	1.8		09/13/18 21:59	156-60-5	
1,2-Dichloropropane	ND	ug/m3	1.7	1.8		09/13/18 21:59	78-87-5	
cis-1,3-Dichloropropene	ND	ug/m3	1.7	1.8		09/13/18 21:59	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/m3	4.2	1.8		09/13/18 21:59	10061-02-6	
Dichlorotetrafluoroethane	ND	ug/m3	2.6	1.8		09/13/18 21:59	76-14-2	
Ethanol	4.4	ug/m3	3.5	1.8		09/13/18 21:59	64-17-5	
Ethyl acetate	ND	ug/m3	1.3	1.8		09/13/18 21:59	141-78-6	
Ethylbenzene	3.3	ug/m3	1.6	1.8		09/13/18 21:59	100-41-4	
4-Ethyltoluene	4.6	ug/m3	4.5	1.8		09/13/18 21:59	622-96-8	
n-Heptane	ND	ug/m3	1.5	1.8		09/13/18 21:59	142-82-5	
Hexachloro-1,3-butadiene	ND	ug/m3	9.8	1.8		09/13/18 21:59	87-68-3	
n-Hexane	2.7	ug/m3	1.3	1.8		09/13/18 21:59	110-54-3	
2-Hexanone	ND	ug/m3	7.5	1.8		09/13/18 21:59	591-78-6	
Methylene Chloride	ND	ug/m3	6.4	1.8		09/13/18 21:59	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/m3	7.5	1.8		09/13/18 21:59	108-10-1	
Methyl-tert-butyl ether	ND	ug/m3	6.6	1.8		09/13/18 21:59	1634-04-4	
Naphthalene	14.4	ug/m3	4.8	1.8		09/13/18 21:59	91-20-3	
2-Propanol	ND	ug/m3	4.5	1.8		09/13/18 21:59	67-63-0	
Propylene	1.2	ug/m3	0.63	1.8		09/13/18 21:59	115-07-1	
Styrene	ND	ug/m3	3.9	1.8		09/13/18 21:59	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/m3	1.3	1.8		09/13/18 21:59	79-34-5	
Tetrachloroethene	ND	ug/m3	1.2	1.8		09/13/18 21:59	127-18-4	
Tetrahydrofuran	ND	ug/m3	1.1	1.8		09/13/18 21:59	109-99-9	
Toluene	2.8	ug/m3	1.4	1.8		09/13/18 21:59	108-88-3	
1,2,4-Trichlorobenzene	ND	ug/m3	13.6	1.8		09/13/18 21:59	120-82-1	
1,1,1-Trichloroethane	ND	ug/m3	2.0	1.8		09/13/18 21:59	71-55-6	
1,1,2-Trichloroethane	ND	ug/m3	1.0	1.8		09/13/18 21:59	79-00-5	

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ANALYTICAL RESULTS

Project: FRANKLIN CONTAMIN.

Pace Project No.: 10446892

Sample: HSV-2 LA 338		Lab ID: 10446892003	Collected: 09/06/18 15:18	Received: 09/10/18 13:40	Matrix: Air				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual	
TO15 MSV AIR		Analytical Method: TO-15							
Trichloroethene	1.3	ug/m3	0.98	1.8		09/13/18 21:59	79-01-6		
Trichlorofluoromethane	ND	ug/m3	2.1	1.8		09/13/18 21:59	75-69-4		
1,1,2-Trichlorotrifluoroethane	ND	ug/m3	2.8	1.8		09/13/18 21:59	76-13-1		
1,2,4-Trimethylbenzene	16.7	ug/m3	1.8	1.8		09/13/18 21:59	95-63-6		
1,3,5-Trimethylbenzene	5.8	ug/m3	1.8	1.8		09/13/18 21:59	108-67-8		
Vinyl acetate	ND	ug/m3	1.3	1.8		09/13/18 21:59	108-05-4		
Vinyl chloride	ND	ug/m3	0.47	1.8		09/13/18 21:59	75-01-4		
m&p-Xylene	10.1	ug/m3	3.2	1.8		09/13/18 21:59	179601-23-1		
o-Xylene	7.7	ug/m3	1.6	1.8		09/13/18 21:59	95-47-6		

Sample: HSV-3 LA 339		Lab ID: 10446892004	Collected: 09/06/18 16:04	Received: 09/10/18 13:40	Matrix: Air				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual	
TO15 MSV AIR		Analytical Method: TO-15							
Acetone	64.9	ug/m3	4.3	1.77		09/13/18 22:27	67-64-1		
Benzene	ND	ug/m3	0.58	1.77		09/13/18 22:27	71-43-2		
Benzyl chloride	ND	ug/m3	4.7	1.77		09/13/18 22:27	100-44-7		
Bromodichloromethane	ND	ug/m3	2.4	1.77		09/13/18 22:27	75-27-4		
Bromoform	ND	ug/m3	9.3	1.77		09/13/18 22:27	75-25-2		
Bromomethane	2.8	ug/m3	1.4	1.77		09/13/18 22:27	74-83-9		
1,3-Butadiene	ND	ug/m3	0.80	1.77		09/13/18 22:27	106-99-0		
2-Butanone (MEK)	21.5	ug/m3	5.3	1.77		09/13/18 22:27	78-93-3		
Carbon disulfide	6.2	ug/m3	1.1	1.77		09/13/18 22:27	75-15-0		
Carbon tetrachloride	ND	ug/m3	2.3	1.77		09/13/18 22:27	56-23-5		
Chlorobenzene	ND	ug/m3	1.7	1.77		09/13/18 22:27	108-90-7		
Chloroethane	ND	ug/m3	0.95	1.77		09/13/18 22:27	75-00-3		
Chloroform	3.8	ug/m3	0.88	1.77		09/13/18 22:27	67-66-3		
Chloromethane	2.3	ug/m3	0.74	1.77		09/13/18 22:27	74-87-3		
Cyclohexane	ND	ug/m3	3.1	1.77		09/13/18 22:27	110-82-7		
Dibromochloromethane	ND	ug/m3	3.1	1.77		09/13/18 22:27	124-48-1		
1,2-Dibromoethane (EDB)	ND	ug/m3	1.4	1.77		09/13/18 22:27	106-93-4		
1,2-Dichlorobenzene	ND	ug/m3	5.4	1.77		09/13/18 22:27	95-50-1		
1,3-Dichlorobenzene	ND	ug/m3	2.2	1.77		09/13/18 22:27	541-73-1		
1,4-Dichlorobenzene	ND	ug/m3	5.4	1.77		09/13/18 22:27	106-46-7		
Dichlorodifluoromethane	ND	ug/m3	1.8	1.77		09/13/18 22:27	75-71-8		
1,1-Dichloroethane	ND	ug/m3	1.5	1.77		09/13/18 22:27	75-34-3		
1,2-Dichloroethane	ND	ug/m3	0.73	1.77		09/13/18 22:27	107-06-2		
1,1-Dichloroethene	ND	ug/m3	1.4	1.77		09/13/18 22:27	75-35-4		
cis-1,2-Dichloroethene	ND	ug/m3	1.4	1.77		09/13/18 22:27	156-59-2		
trans-1,2-Dichloroethene	ND	ug/m3	1.4	1.77		09/13/18 22:27	156-60-5		
1,2-Dichloropropane	ND	ug/m3	1.7	1.77		09/13/18 22:27	78-87-5		
cis-1,3-Dichloropropene	ND	ug/m3	1.6	1.77		09/13/18 22:27	10061-01-5		
trans-1,3-Dichloropropene	ND	ug/m3	4.1	1.77		09/13/18 22:27	10061-02-6		
Dichlorotetrafluoroethane	ND	ug/m3	2.5	1.77		09/13/18 22:27	76-14-2		
Ethanol	24.8	ug/m3	3.4	1.77		09/13/18 22:27	64-17-5		

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ANALYTICAL RESULTS

Project: FRANKLIN CONTAMIN.

Pace Project No.: 10446892

Sample: HSV-3 LA 339		Lab ID: 10446892004	Collected: 09/06/18 16:04	Received: 09/10/18 13:40	Matrix: Air				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual	
TO15 MSV AIR		Analytical Method: TO-15							
Ethyl acetate	ND	ug/m3	1.3	1.77		09/13/18 22:27	141-78-6		
Ethylbenzene	1.9	ug/m3	1.6	1.77		09/13/18 22:27	100-41-4		
4-Ethyltoluene	ND	ug/m3	4.4	1.77		09/13/18 22:27	622-96-8		
n-Heptane	ND	ug/m3	1.5	1.77		09/13/18 22:27	142-82-5		
Hexachloro-1,3-butadiene	ND	ug/m3	9.6	1.77		09/13/18 22:27	87-68-3		
n-Hexane	4.4	ug/m3	1.3	1.77		09/13/18 22:27	110-54-3		
2-Hexanone	ND	ug/m3	7.4	1.77		09/13/18 22:27	591-78-6		
Methylene Chloride	ND	ug/m3	6.2	1.77		09/13/18 22:27	75-09-2		
4-Methyl-2-pentanone (MIBK)	ND	ug/m3	7.4	1.77		09/13/18 22:27	108-10-1		
Methyl-tert-butyl ether	ND	ug/m3	6.5	1.77		09/13/18 22:27	1634-04-4		
Naphthalene	20.2	ug/m3	4.7	1.77		09/13/18 22:27	91-20-3		
2-Propanol	ND	ug/m3	4.4	1.77		09/13/18 22:27	67-63-0		
Propylene	2.4	ug/m3	0.62	1.77		09/13/18 22:27	115-07-1		
Styrene	ND	ug/m3	3.8	1.77		09/13/18 22:27	100-42-5		
1,1,2,2-Tetrachloroethane	ND	ug/m3	1.2	1.77		09/13/18 22:27	79-34-5		
Tetrachloroethene	2.0	ug/m3	1.2	1.77		09/13/18 22:27	127-18-4		
Tetrahydrofuran	ND	ug/m3	1.1	1.77		09/13/18 22:27	109-99-9		
Toluene	2.9	ug/m3	1.4	1.77		09/13/18 22:27	108-88-3		
1,2,4-Trichlorobenzene	ND	ug/m3	13.3	1.77		09/13/18 22:27	120-82-1		
1,1,1-Trichloroethane	ND	ug/m3	2.0	1.77		09/13/18 22:27	71-55-6		
1,1,2-Trichloroethane	ND	ug/m3	0.98	1.77		09/13/18 22:27	79-00-5		
Trichloroethene	ND	ug/m3	0.97	1.77		09/13/18 22:27	79-01-6		
Trichlorofluoromethane	ND	ug/m3	2.0	1.77		09/13/18 22:27	75-69-4		
1,1,2-Trichlorotrifluoroethane	ND	ug/m3	2.8	1.77		09/13/18 22:27	76-13-1		
1,2,4-Trimethylbenzene	19.3	ug/m3	1.8	1.77		09/13/18 22:27	95-63-6		
1,3,5-Trimethylbenzene	5.7	ug/m3	1.8	1.77		09/13/18 22:27	108-67-8		
Vinyl acetate	ND	ug/m3	1.3	1.77		09/13/18 22:27	108-05-4		
Vinyl chloride	ND	ug/m3	0.46	1.77		09/13/18 22:27	75-01-4		
m&p-Xylene	9.7	ug/m3	3.1	1.77		09/13/18 22:27	179601-23-1		
o-Xylene	6.3	ug/m3	1.6	1.77		09/13/18 22:27	95-47-6		

Sample: HSV-4 LA 340		Lab ID: 10446892005	Collected: 09/06/18 16:04	Received: 09/10/18 13:40	Matrix: Air				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual	
TO15 MSV AIR		Analytical Method: TO-15							
Acetone	51.8	ug/m3	4.3	1.77		09/13/18 22:55	67-64-1		
Benzene	ND	ug/m3	0.58	1.77		09/13/18 22:55	71-43-2		
Benzyl chloride	ND	ug/m3	4.7	1.77		09/13/18 22:55	100-44-7		
Bromodichloromethane	ND	ug/m3	2.4	1.77		09/13/18 22:55	75-27-4		
Bromoform	ND	ug/m3	9.3	1.77		09/13/18 22:55	75-25-2		
Bromomethane	ND	ug/m3	1.4	1.77		09/13/18 22:55	74-83-9		
1,3-Butadiene	ND	ug/m3	0.80	1.77		09/13/18 22:55	106-99-0		
2-Butanone (MEK)	13.0	ug/m3	5.3	1.77		09/13/18 22:55	78-93-3		
Carbon disulfide	3.6	ug/m3	1.1	1.77		09/13/18 22:55	75-15-0		
Carbon tetrachloride	ND	ug/m3	2.3	1.77		09/13/18 22:55	56-23-5		

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ANALYTICAL RESULTS

Project: FRANKLIN CONTAMIN.

Pace Project No.: 10446892

Sample: HSV-4 LA 340	Lab ID: 10446892005	Collected: 09/06/18 16:04	Received: 09/10/18 13:40	Matrix: Air				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR		Analytical Method: TO-15						
Chlorobenzene	ND	ug/m3	1.7	1.77		09/13/18 22:55	108-90-7	
Chloroethane	ND	ug/m3	0.95	1.77		09/13/18 22:55	75-00-3	
Chloroform	3.9	ug/m3	0.88	1.77		09/13/18 22:55	67-66-3	
Chloromethane	ND	ug/m3	0.74	1.77		09/13/18 22:55	74-87-3	
Cyclohexane	ND	ug/m3	3.1	1.77		09/13/18 22:55	110-82-7	
Dibromochloromethane	ND	ug/m3	3.1	1.77		09/13/18 22:55	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/m3	1.4	1.77		09/13/18 22:55	106-93-4	
1,2-Dichlorobenzene	ND	ug/m3	5.4	1.77		09/13/18 22:55	95-50-1	
1,3-Dichlorobenzene	ND	ug/m3	2.2	1.77		09/13/18 22:55	541-73-1	
1,4-Dichlorobenzene	ND	ug/m3	5.4	1.77		09/13/18 22:55	106-46-7	
Dichlorodifluoromethane	1.8	ug/m3	1.8	1.77		09/13/18 22:55	75-71-8	
1,1-Dichloroethane	ND	ug/m3	1.5	1.77		09/13/18 22:55	75-34-3	
1,2-Dichloroethane	ND	ug/m3	0.73	1.77		09/13/18 22:55	107-06-2	
1,1-Dichloroethene	ND	ug/m3	1.4	1.77		09/13/18 22:55	75-35-4	
cis-1,2-Dichloroethene	ND	ug/m3	1.4	1.77		09/13/18 22:55	156-59-2	
trans-1,2-Dichloroethene	ND	ug/m3	1.4	1.77		09/13/18 22:55	156-60-5	
1,2-Dichloropropane	ND	ug/m3	1.7	1.77		09/13/18 22:55	78-87-5	
cis-1,3-Dichloropropene	ND	ug/m3	1.6	1.77		09/13/18 22:55	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/m3	4.1	1.77		09/13/18 22:55	10061-02-6	
Dichlorotetrafluoroethane	ND	ug/m3	2.5	1.77		09/13/18 22:55	76-14-2	
Ethanol	4.7	ug/m3	3.4	1.77		09/13/18 22:55	64-17-5	
Ethyl acetate	ND	ug/m3	1.3	1.77		09/13/18 22:55	141-78-6	
Ethylbenzene	1.7	ug/m3	1.6	1.77		09/13/18 22:55	100-41-4	
4-Ethyltoluene	ND	ug/m3	4.4	1.77		09/13/18 22:55	622-96-8	
n-Heptane	ND	ug/m3	1.5	1.77		09/13/18 22:55	142-82-5	
Hexachloro-1,3-butadiene	ND	ug/m3	9.6	1.77		09/13/18 22:55	87-68-3	
n-Hexane	2.2	ug/m3	1.3	1.77		09/13/18 22:55	110-54-3	
2-Hexanone	ND	ug/m3	7.4	1.77		09/13/18 22:55	591-78-6	
Methylene Chloride	ND	ug/m3	6.2	1.77		09/13/18 22:55	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/m3	7.4	1.77		09/13/18 22:55	108-10-1	
Methyl-tert-butyl ether	ND	ug/m3	6.5	1.77		09/13/18 22:55	1634-04-4	
Naphthalene	20.6	ug/m3	4.7	1.77		09/13/18 22:55	91-20-3	
2-Propanol	ND	ug/m3	4.4	1.77		09/13/18 22:55	67-63-0	
Propylene	1.2	ug/m3	0.62	1.77		09/13/18 22:55	115-07-1	
Styrene	ND	ug/m3	3.8	1.77		09/13/18 22:55	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/m3	1.2	1.77		09/13/18 22:55	79-34-5	
Tetrachloroethene	ND	ug/m3	1.2	1.77		09/13/18 22:55	127-18-4	
Tetrahydrofuran	1.8	ug/m3	1.1	1.77		09/13/18 22:55	109-99-9	
Toluene	2.5	ug/m3	1.4	1.77		09/13/18 22:55	108-88-3	
1,2,4-Trichlorobenzene	ND	ug/m3	13.3	1.77		09/13/18 22:55	120-82-1	
1,1,1-Trichloroethane	ND	ug/m3	2.0	1.77		09/13/18 22:55	71-55-6	
1,1,2-Trichloroethane	ND	ug/m3	0.98	1.77		09/13/18 22:55	79-00-5	
Trichloroethene	ND	ug/m3	0.97	1.77		09/13/18 22:55	79-01-6	
Trichlorofluoromethane	ND	ug/m3	2.0	1.77		09/13/18 22:55	75-69-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/m3	2.8	1.77		09/13/18 22:55	76-13-1	
1,2,4-Trimethylbenzene	18.4	ug/m3	1.8	1.77		09/13/18 22:55	95-63-6	
1,3,5-Trimethylbenzene	5.3	ug/m3	1.8	1.77		09/13/18 22:55	108-67-8	

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ANALYTICAL RESULTS

Project: FRANKLIN CONTAMIN.

Pace Project No.: 10446892

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Sample: HSV-4 LA 340		Lab ID: 10446892005		Collected: 09/06/18 16:04	Received: 09/10/18 13:40	Matrix: Air		
TO15 MSV AIR								
		Analytical Method: TO-15						
Vinyl acetate	ND	ug/m3	1.3	1.77		09/13/18 22:55	108-05-4	
Vinyl chloride	ND	ug/m3	0.46	1.77		09/13/18 22:55	75-01-4	
m&p-Xylene	8.5	ug/m3	3.1	1.77		09/13/18 22:55	179601-23-1	
o-Xylene	5.8	ug/m3	1.6	1.77		09/13/18 22:55	95-47-6	

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QUALITY CONTROL DATA

Project: FRANKLIN CONTAMIN.

Pace Project No.: 10446892

QC Batch: 562618 Analysis Method: TO-15
QC Batch Method: TO-15 Analysis Description: TO15 MSV AIR Low Level
Associated Lab Samples: 10446892001, 10446892002, 10446892003, 10446892004, 10446892005

METHOD BLANK: 3053762 Matrix: Air
Associated Lab Samples: 10446892001, 10446892002, 10446892003, 10446892004, 10446892005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/m3	ND	0.56	09/13/18 10:47	
1,1,2,2-Tetrachloroethane	ug/m3	ND	0.35	09/13/18 10:47	
1,1,2-Trichloroethane	ug/m3	ND	0.28	09/13/18 10:47	
1,1,2-Trichlorotrifluoroethane	ug/m3	ND	0.78	09/13/18 10:47	
1,1-Dichloroethane	ug/m3	ND	0.41	09/13/18 10:47	
1,1-Dichloroethene	ug/m3	ND	0.40	09/13/18 10:47	
1,2,4-Trichlorobenzene	ug/m3	ND	3.8	09/13/18 10:47	
1,2,4-Trimethylbenzene	ug/m3	ND	0.50	09/13/18 10:47	
1,2-Dibromoethane (EDB)	ug/m3	ND	0.39	09/13/18 10:47	
1,2-Dichlorobenzene	ug/m3	ND	1.5	09/13/18 10:47	
1,2-Dichloroethane	ug/m3	ND	0.21	09/13/18 10:47	
1,2-Dichloropropane	ug/m3	ND	0.47	09/13/18 10:47	
1,3,5-Trimethylbenzene	ug/m3	ND	0.50	09/13/18 10:47	
1,3-Butadiene	ug/m3	ND	0.22	09/13/18 10:47	
1,3-Dichlorobenzene	ug/m3	ND	0.61	09/13/18 10:47	
1,4-Dichlorobenzene	ug/m3	ND	1.5	09/13/18 10:47	
2-Butanone (MEK)	ug/m3	ND	1.5	09/13/18 10:47	
2-Hexanone	ug/m3	ND	2.1	09/13/18 10:47	
2-Propanol	ug/m3	ND	1.2	09/13/18 10:47	
4-Ethyltoluene	ug/m3	ND	1.2	09/13/18 10:47	
4-Methyl-2-pentanone (MIBK)	ug/m3	ND	2.1	09/13/18 10:47	
Acetone	ug/m3	ND	1.2	09/13/18 10:47	
Benzene	ug/m3	ND	0.16	09/13/18 10:47	
Benzyl chloride	ug/m3	ND	1.3	09/13/18 10:47	
Bromodichloromethane	ug/m3	ND	0.68	09/13/18 10:47	
Bromoform	ug/m3	ND	2.6	09/13/18 10:47	
Bromomethane	ug/m3	ND	0.39	09/13/18 10:47	
Carbon disulfide	ug/m3	ND	0.32	09/13/18 10:47	
Carbon tetrachloride	ug/m3	ND	0.64	09/13/18 10:47	
Chlorobenzene	ug/m3	ND	0.47	09/13/18 10:47	
Chloroethane	ug/m3	ND	0.27	09/13/18 10:47	
Chloroform	ug/m3	ND	0.25	09/13/18 10:47	
Chloromethane	ug/m3	ND	0.21	09/13/18 10:47	
cis-1,2-Dichloroethene	ug/m3	ND	0.40	09/13/18 10:47	
cis-1,3-Dichloropropene	ug/m3	ND	0.46	09/13/18 10:47	
Cyclohexane	ug/m3	ND	0.88	09/13/18 10:47	
Dibromochloromethane	ug/m3	ND	0.86	09/13/18 10:47	
Dichlorodifluoromethane	ug/m3	ND	0.50	09/13/18 10:47	
Dichlorotetrafluoroethane	ug/m3	ND	0.71	09/13/18 10:47	
Ethanol	ug/m3	ND	0.96	09/13/18 10:47	
Ethyl acetate	ug/m3	ND	0.37	09/13/18 10:47	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

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QUALITY CONTROL DATA

Project: FRANKLIN CONTAMIN.

Pace Project No.: 10446892

METHOD BLANK: 3053762

Matrix: Air

Associated Lab Samples: 10446892001, 10446892002, 10446892003, 10446892004, 10446892005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Ethylbenzene	ug/m3	ND	0.44	09/13/18 10:47	
Hexachloro-1,3-butadiene	ug/m3	ND	2.7	09/13/18 10:47	
m&p-Xylene	ug/m3	ND	0.88	09/13/18 10:47	
Methyl-tert-butyl ether	ug/m3	ND	1.8	09/13/18 10:47	
Methylene Chloride	ug/m3	ND	1.8	09/13/18 10:47	
n-Heptane	ug/m3	ND	0.42	09/13/18 10:47	
n-Hexane	ug/m3	ND	0.36	09/13/18 10:47	
Naphthalene	ug/m3	ND	1.3	09/13/18 10:47	
o-Xylene	ug/m3	ND	0.44	09/13/18 10:47	
Propylene	ug/m3	ND	0.18	09/13/18 10:47	
Styrene	ug/m3	ND	1.1	09/13/18 10:47	
Tetrachloroethene	ug/m3	ND	0.34	09/13/18 10:47	
Tetrahydrofuran	ug/m3	ND	0.30	09/13/18 10:47	
Toluene	ug/m3	ND	0.38	09/13/18 10:47	
trans-1,2-Dichloroethene	ug/m3	ND	0.40	09/13/18 10:47	
trans-1,3-Dichloropropene	ug/m3	ND	1.2	09/13/18 10:47	
Trichloroethene	ug/m3	ND	0.27	09/13/18 10:47	
Trichlorofluoromethane	ug/m3	ND	0.57	09/13/18 10:47	
Vinyl acetate	ug/m3	ND	0.36	09/13/18 10:47	
Vinyl chloride	ug/m3	ND	0.13	09/13/18 10:47	

LABORATORY CONTROL SAMPLE: 3053763

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/m3	55.5	56.6	102	70-135	
1,1,2,2-Tetrachloroethane	ug/m3	69.8	76.9	110	70-146	
1,1,2-Trichloroethane	ug/m3	55.5	59.8	108	70-135	
1,1,2-Trichlorotrifluoroethane	ug/m3	77.9	76.2	98	63-139	
1,1-Dichloroethane	ug/m3	41.1	39.9	97	70-134	
1,1-Dichloroethene	ug/m3	40.3	39.5	98	70-137	
1,2,4-Trichlorobenzene	ug/m3	75.4	82.4	109	60-133	
1,2,4-Trimethylbenzene	ug/m3	50	54.5	109	70-137	
1,2-Dibromoethane (EDB)	ug/m3	78.1	88.2	113	70-140	
1,2-Dichlorobenzene	ug/m3	61.1	68.2	112	70-137	
1,2-Dichloroethane	ug/m3	41.1	40.9	99	70-136	
1,2-Dichloropropane	ug/m3	47	45.8	98	70-136	
1,3,5-Trimethylbenzene	ug/m3	50	54.4	109	70-133	
1,3-Butadiene	ug/m3	22.5	21.4	95	64-141	
1,3-Dichlorobenzene	ug/m3	61.1	80.8	132	70-137 CH	
1,4-Dichlorobenzene	ug/m3	61.1	67.3	110	70-134	
2-Butanone (MEK)	ug/m3	30	29.8	99	65-143	
2-Hexanone	ug/m3	41.6	51.8	124	60-148	
2-Propanol	ug/m3	125	110	88	65-135	
4-Ethyltoluene	ug/m3	50	54.5	109	70-132	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: FRANKLIN CONTAMIN.

Pace Project No.: 10446892

LABORATORY CONTROL SAMPLE: 3053763

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
4-Methyl-2-pentanone (MIBK)	ug/m3	41.6	46.5	112	70-135	
Acetone	ug/m3	121	104	86	59-132	
Benzene	ug/m3	32.5	34.7	107	70-134	
Benzyl chloride	ug/m3	52.6	55.4	105	56-150	
Bromodichloromethane	ug/m3	68.1	70.4	103	70-142	
Bromoform	ug/m3	105	124	118	69-150	
Bromomethane	ug/m3	39.5	35.7	91	61-141	
Carbon disulfide	ug/m3	31.6	33.9	107	66-134	
Carbon tetrachloride	ug/m3	64	67.4	105	60-145	
Chlorobenzene	ug/m3	46.8	50.6	108	70-130	
Chloroethane	ug/m3	26.8	24.4	91	65-143	
Chloroform	ug/m3	49.6	48.4	98	70-132	
Chloromethane	ug/m3	21	18.3	87	58-140	
cis-1,2-Dichloroethene	ug/m3	40.3	44.1	109	70-136	
cis-1,3-Dichloropropene	ug/m3	46.1	55.0	119	70-136	
Cyclohexane	ug/m3	35	40.8	117	70-133	
Dibromochloromethane	ug/m3	86.6	98.0	113	68-149	
Dichlorodifluoromethane	ug/m3	50.3	50.5	100	69-130	
Dichlorotetrafluoroethane	ug/m3	71	67.9	96	68-130	
Ethanol	ug/m3	91.6	88.8	97	65-146	
Ethyl acetate	ug/m3	36.6	36.3	99	68-136	
Ethylbenzene	ug/m3	44.1	56.2	127	70-133	
Hexachloro-1,3-butadiene	ug/m3	108	125	116	59-140	
m&p-Xylene	ug/m3	88.3	112	127	70-133	
Methyl-tert-butyl ether	ug/m3	36.6	42.1	115	70-132	
Methylene Chloride	ug/m3	177	168	95	67-132	
n-Heptane	ug/m3	41.6	43.1	104	64-136	
n-Hexane	ug/m3	35.8	35.3	98	70-130	
Naphthalene	ug/m3	53.3	55.8	105	55-136	
o-Xylene	ug/m3	44.1	53.3	121	70-132	
Propylene	ug/m3	17.5	16.6	95	37-150	
Styrene	ug/m3	43.3	47.2	109	70-139	
Tetrachloroethene	ug/m3	68.9	75.6	110	70-133	
Tetrahydrofuran	ug/m3	30	30.8	103	62-141	
Toluene	ug/m3	38.3	48.4	126	70-130	
trans-1,2-Dichloroethene	ug/m3	40.3	42.3	105	70-132	
trans-1,3-Dichloropropene	ug/m3	46.1	48.4	105	70-135	
Trichloroethene	ug/m3	54.6	61.9	113	70-135	
Trichlorofluoromethane	ug/m3	57.1	49.9	87	59-140	
Vinyl acetate	ug/m3	35.8	39.4	110	57-150	
Vinyl chloride	ug/m3	26	24.1	93	70-141	

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QUALITY CONTROL DATA

Project: FRANKLIN CONTAMIN.

Pace Project No.: 10446892

SAMPLE DUPLICATE: 3054972

Parameter	Units	10446586001 Result	Dup Result	RPD	Max RPD	Qualifiers
1,1,1-Trichloroethane	ug/m3	ND	ND		25	
1,1,2,2-Tetrachloroethane	ug/m3	ND	ND		25	
1,1,2-Trichloroethane	ug/m3	ND	ND		25	
1,1,2-Trichlorotrifluoroethane	ug/m3	ND	ND		25	
1,1-Dichloroethane	ug/m3	ND	ND		25	
1,1-Dichloroethene	ug/m3	ND	ND		25	
1,2,4-Trichlorobenzene	ug/m3	ND	ND		25	
1,2,4-Trimethylbenzene	ug/m3	5.3	5.3	0	25	
1,2-Dibromoethane (EDB)	ug/m3	ND	ND		25	
1,2-Dichlorobenzene	ug/m3	ND	ND		25	
1,2-Dichloroethane	ug/m3	ND	ND		25	
1,2-Dichloropropane	ug/m3	ND	ND		25	
1,3,5-Trimethylbenzene	ug/m3	2.8	2.8	1	25	
1,3-Butadiene	ug/m3	ND	ND		25	
1,3-Dichlorobenzene	ug/m3	ND	ND		25	
1,4-Dichlorobenzene	ug/m3	13.5	13.2	2	25	
2-Butanone (MEK)	ug/m3	71.2	66.4	7	25	
2-Hexanone	ug/m3	ND	ND		25	
2-Propanol	ug/m3	103	110	7	25	
4-Ethyltoluene	ug/m3	ND	4.5J		25	
4-Methyl-2-pentanone (MIBK)	ug/m3	8.2	5.7J		25	
Acetone	ug/m3	124	133	7	25	
Benzene	ug/m3	1.1	1.1	5	25	
Benzyl chloride	ug/m3	ND	ND		25	
Bromodichloromethane	ug/m3	ND	ND		25	
Bromoform	ug/m3	ND	ND		25	
Bromomethane	ug/m3	ND	ND		25	
Carbon disulfide	ug/m3	43.1	47.6	10	25	
Carbon tetrachloride	ug/m3	ND	ND		25	
Chlorobenzene	ug/m3	ND	ND		25	
Chloroethane	ug/m3	ND	ND		25	
Chloroform	ug/m3	7.9	8.3	5	25	
Chloromethane	ug/m3	ND	ND		25	
cis-1,2-Dichloroethene	ug/m3	ND	ND		25	
cis-1,3-Dichloropropene	ug/m3	ND	ND		25	
Cyclohexane	ug/m3	ND	22.9		25	
Dibromochloromethane	ug/m3	ND	ND		25	
Dichlorodifluoromethane	ug/m3	3.3	3.6	9	25	
Dichlorotetrafluoroethane	ug/m3	ND	ND		25	
Ethanol	ug/m3	291	286	2	25	
Ethyl acetate	ug/m3	16.2	ND		25	
Ethylbenzene	ug/m3	24.2	24.5	1	25	
Hexachloro-1,3-butadiene	ug/m3	ND	ND		25	
m&p-Xylene	ug/m3	35.4	35.7	1	25	
Methyl-tert-butyl ether	ug/m3	ND	ND		25	
Methylene Chloride	ug/m3	ND	ND		25	
n-Heptane	ug/m3	ND	4.7		25	

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QUALITY CONTROL DATA

Project: FRANKLIN CONTAMIN.

Pace Project No.: 10446892

SAMPLE DUPLICATE: 3054972

Parameter	Units	10446586001 Result	Dup Result	RPD	Max RPD	Qualifiers
n-Hexane	ug/m3	ND	ND		25	
Naphthalene	ug/m3	7.5	6.8	10	25	
o-Xylene	ug/m3	10.5	10.6	1	25	
Propylene	ug/m3	2.0	2.2	12	25	
Styrene	ug/m3	6.1	5.9	2	25	
Tetrachloroethene	ug/m3	34.7	36.4	5	25	
Tetrahydrofuran	ug/m3	13.7	13.0	6	25	
Toluene	ug/m3	34.2	36.2	6	25	
trans-1,2-Dichloroethene	ug/m3	ND	ND		25	
trans-1,3-Dichloropropene	ug/m3	ND	ND		25	
Trichloroethene	ug/m3	ND	ND		25	
Trichlorofluoromethane	ug/m3	3.5	3.8	8	25	
Vinyl acetate	ug/m3	ND	ND		25	
Vinyl chloride	ug/m3	ND	ND		25	

SAMPLE DUPLICATE: 3054977

Parameter	Units	92398793001 Result	Dup Result	RPD	Max RPD	Qualifiers
1,1,1-Trichloroethane	ug/m3	ND	ND		25	
1,1,2,2-Tetrachloroethane	ug/m3	ND	ND		25	
1,1,2-Trichloroethane	ug/m3	ND	ND		25	
1,1,2-Trichlorotrifluoroethane	ug/m3	ND	ND		25	
1,1-Dichloroethane	ug/m3	ND	ND		25	
1,1-Dichloroethene	ug/m3	ND	ND		25	
1,2,4-Trichlorobenzene	ug/m3	ND	ND		25	
1,2,4-Trimethylbenzene	ug/m3	24.8	26.9	8	25	
1,2-Dibromoethane (EDB)	ug/m3	ND	ND		25	
1,2-Dichlorobenzene	ug/m3	ND	ND		25	
1,2-Dichloroethane	ug/m3	ND	ND		25	
1,2-Dichloropropane	ug/m3	ND	ND		25	
1,3,5-Trimethylbenzene	ug/m3	6.8	7.4	9	25	
1,3-Butadiene	ug/m3	ND	ND		25	
1,3-Dichlorobenzene	ug/m3	ND	ND		25	
1,4-Dichlorobenzene	ug/m3	ND	ND		25	
2-Butanone (MEK)	ug/m3	4.3J	4.6		25	
2-Hexanone	ug/m3	ND	ND		25	
2-Propanol	ug/m3	2.4J	2.5J		25	
4-Ethyltoluene	ug/m3	8.0	8.6	7	25	
4-Methyl-2-pentanone (MIBK)	ug/m3	ND	ND		25	
Acetone	ug/m3	28.7	30.3	5	25	
Benzene	ug/m3	1.3	1.4	10	25	
Benzyl chloride	ug/m3	ND	ND		25	
Bromodichloromethane	ug/m3	ND	ND		25	
Bromoform	ug/m3	ND	ND		25	
Bromomethane	ug/m3	ND	ND		25	

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QUALITY CONTROL DATA

Project: FRANKLIN CONTAMIN.

Pace Project No.: 10446892

SAMPLE DUPLICATE: 3054977

Parameter	Units	92398793001 Result	Dup Result	RPD	Max RPD	Qualifiers
Carbon disulfide	ug/m3	0.35J	.38J		25	
Carbon tetrachloride	ug/m3	ND	ND		25	
Chlorobenzene	ug/m3	ND	ND		25	
Chloroethane	ug/m3	ND	ND		25	
Chloroform	ug/m3	1.6	1.7	8	25	
Chloromethane	ug/m3	ND	ND		25	
cis-1,2-Dichloroethene	ug/m3	ND	ND		25	
cis-1,3-Dichloropropene	ug/m3	ND	ND		25	
Cyclohexane	ug/m3	ND	ND		25	
Dibromochloromethane	ug/m3	ND	ND		25	
Dichlorodifluoromethane	ug/m3	1.7	1.9	8	25	
Dichlorotetrafluoroethane	ug/m3	ND	ND		25	
Ethanol	ug/m3	6.3	6.7	6	25	
Ethyl acetate	ug/m3	ND	ND		25	
Ethylbenzene	ug/m3	10.8	11.7	7	25	
Hexachloro-1,3-butadiene	ug/m3	ND	ND		25	
m&p-Xylene	ug/m3	41.3	44.6	8	25	
Methyl-tert-butyl ether	ug/m3	ND	ND		25	
Methylene Chloride	ug/m3	ND	ND		25	
n-Heptane	ug/m3	ND	2.6		25	
n-Hexane	ug/m3	1.9	2.1	10	25	
Naphthalene	ug/m3	9.2	9.8	6	25	
o-Xylene	ug/m3	18.7	20.3	8	25	
Propylene	ug/m3	0.39J	.45J		25	
Styrene	ug/m3	2.4J	2.5J		25	
Tetrachloroethene	ug/m3	ND	ND		25	
Tetrahydrofuran	ug/m3	4.0	4.4	9	25	
Toluene	ug/m3	22.3	24.2	8	25	
trans-1,2-Dichloroethene	ug/m3	ND	ND		25	
trans-1,3-Dichloropropene	ug/m3	ND	ND		25	
Trichloroethene	ug/m3	ND	ND		25	
Trichlorofluoromethane	ug/m3	1.1J	1.1J		25	
Vinyl acetate	ug/m3	ND	ND		25	
Vinyl chloride	ug/m3	ND	ND		25	

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REPORT OF LABORATORY ANALYSIS

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QUALIFIERS

Project: FRANKLIN CONTAMIN.

Pace Project No.: 10446892

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

CH The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased high.

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: FRANKLIN CONTAMIN.

Pace Project No.: 10446892

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
10446892001	HSV-A LA 336	TO-15	562618		
10446892002	HSV-1 LA 337	TO-15	562618		
10446892003	HSV-2 LA 338	TO-15	562618		
10446892004	HSV-3 LA 339	TO-15	562618		
10446892005	HSV-4 LA 340	TO-15	562618		

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NO#: 10446892

AIR: CHAIN-OF-CUSTODY

The Chain-of-Custody is a LEGAL DOCUMENT. All relev



Section A
Required Client Information:

Company: **EDM**
Address: **100 N. SOWTE AVE.**
INDPLS, IN.
Email To: **dharrison@idem.in.gov**
Phone: _____
Requested Due Date/TAT: _____

Section B
Required Project Information:

Report To: **DAVID HARRISON**
Copy To: **TIM JOHNSON**
Purchase Order No.: _____
Project Name: **FRANKLIN CONTAMIN.**
Project Number: _____

Section C
Invoice Information:

Attention: **CAROLYNNE TROUT**
Company Name: **PACE ANALYTICAL**
Address: _____
Pace Quote Reference: _____
Pace Project Manager/Sales Rep: **CAROLYNNE TROUT**
Pace Profile #: **33458**

Page: **36651** of _____

Program: _____
 UST Superfund Emissions Clean Air Act
 Voluntary Clean Up Dry Clean RCRA Other SC
 Reporting Units: _____
 Location of Sampling by State: **IN**
 Report Level: II. _____ III. _____ IV. _____ Other _____

ITEM #	AIR SAMPLE ID Sample IDs MUST BE UNIQUE	Valid Media Codes MEDIA TB 1 Liter Summa Can 6 Liter Summa Can Low Volume Puff High Volume Puff Other	COLLECTED		Canister Pressure (Initial Field - In Hg)	Canister Pressure (Final Field - In Hg)	Summa Can Number	Flow Control Number	Pace Lab ID
			DATE	TIME					
1	ASV-A LA 336		9/16/18	2:28	29	0	2622	001	
2	ASV-1 LA 337		9/16/18	2:38	29	0	2270	002	
3	ASV-2 LA 338		9/16/18	3:18	-30	-2	2194	003	
4	ASV-3 LA 339		9/16/18	4:04	-30	-2	899	004	
5	ASV-4 LA 340		9/16/18	4:04	-30	-2	3095	005	

RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Timothy R. Johnson IDEM	9/16/18	5:58 pm	Carolynne Trout Pace	9/10/18	1340	Temp in °C: _____ Received on Ice: Y/N Custody Sealed Cooler: Y/N Samples Intact: Y/N

SAMPLER NAME AND SIGNATURE
 PRINT NAME OF SAMPLER: **VIMOTHY R. JOHNSON**
 SIGNATURE OF SAMPLER: *[Signature]* DATE SIGNED: **9/16/18**

ORIGINAL

Air Sample Condition Upon Receipt

Client Name:

IDEM

Project #:

WO# : 10446892

PM: CT1

Due Date: 09/17/18

CLIENT: IDEM-OLQ

Courier: Fed Ex UPS Speedee Client
 Commercial Pace Other: _____

Tracking Number: 4545 9905 5945

Custody Seal on Cooler/Box Present? Yes No Seals Intact? Yes No

Optional: Proj. Due Date: _____ Proj. Name: _____

Packing Material: Bubble Wrap Bubble Bags Foam None Tin Can Other: _____

Temp Blank rec: Yes No

Temp. (TO17 and TO13 samples only) (°C): X Corrected Temp (°C): X

Thermom. Used:

G87A9170600254
 G87A9155100842

Temp should be above freezing to 6°C Correction Factor: X

Date & Initials of Person Examining Contents: 9-10-18 A

Type of ice Received Blue Wet None

Comments:

Chain of Custody Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	1.
Chain of Custody Filled Out?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	2.
Chain of Custody Relinquished?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	3.
Sampler Name and/or Signature on COC?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples Arrived within Hold Time?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	5.
Short Hold Time Analysis (<72 hr)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	6.
Rush Turn Around Time Requested?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	7.
Sufficient Volume?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	8.
Correct Containers Used?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	9.
-Pace Containers Used?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
Containers Intact?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	10.
Media: <u>Air Can</u> Airbag Filter TDT Passive		11. Individually Certified Cans Y <u>N</u> (list which samples)
Is sufficient information available to reconcile samples to the COC?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	12.

Samples Received: FFFT, IT-Sitting

Pressure Gauge # 10AIR26

Canisters					Canisters				
Sample Number	Can ID	Flow Controller	Initial Pressure	Final Pressure	Sample Number	Can ID	Flow Controller	Initial Pressure	Final Pressure
<u>HSA-A</u>			<u>-1</u>	<u>+10</u>					
<u>1</u>			<u>-1</u>	<u>11</u>					
<u>2</u>			<u>-2</u>	<u>11</u>					
<u>3</u>			<u>-1.5</u>	<u>11</u>					
<u>4</u>			<u>-1.5</u>	<u>11</u>					

CLIENT NOTIFICATION/RESOLUTION

Field Data Required? Yes No

Person Contacted: _____ Date/Time: _____

Comments/Resolution: _____

Project Manager Review:

[Signature]

Date: 09/10/18

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

SDG	Sample ID	Can No.	Pre (in Hg)	Post (in Hg)	Canister size
10446892	10446892001	2622	-30	-1	6L
10446892	10446892002	2270	-30	-1	6L
10446892	10446892003	2196	-30	-2	6L
10446892	10446892004	899	-30	-1.5	6L
10446892	10446892005	3095	-30	-1.5	6L

Canister Batch 16838

Leak Check 8/27/2018 1:50:00 PM

	Can ID	Initial Pressure	Final Pressure	Pass/Fail
1	PACE1000	30	30	Pass
2	PACE1108	30	30	Pass
→ 3	PACE2196	30	30	Pass
4	PACE2217	30	30	Pass
5	PACE2464	30	30	Pass
6	PACE2565	30	30	Pass
7	PACE3049	30	30	Pass
8	PACE3072	30	30	Pass
9	PACE3083	30	30	Pass
10	PACE3164	30	30	Pass
Acceptance Criteria +/- 2 psi change over a 24 hour period				

Can Cleaning Information

Start 8/29/2018 8:20:00 AM
End 8/30/2018 8:00:00 AM

Can ID for Certification	PACE1108
Data File	<i>an I</i> /24207
Certification Level	Low Level (0.1 - 0.2 ppbv)

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: 10airI.i
 Lab File ID: 24207.D
 Lab Smp Id: BC16838
 Analysis Type: VOA
 Quant Type: ISTD
 Operator: AFV
 Method File: \\192.168.10.12\chem\10airI.i\083018.b\TO15_241-18.m
 Misc Info:

Calibration Date: 30-AUG-2018
 Calibration Time: 09:00

Level: LOW
 Sample Type: AIR

Test Mode:

Use Initial Calibration Level 5.
 If Continuing Cal. use Initial Cal. Level 5

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
46 1,4-Difluorobenze	342358	205415	479301	278306	-18.71
66 Chlorobenzene - d	296241	177745	414737	234251	-20.93

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
46 1,4-Difluorobenze	5.63	5.30	5.96	5.63	-0.11
66 Chlorobenzene - d	8.70	8.37	9.03	8.70	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
 AREA LOWER LIMIT = - 40% of internal standard area.
 RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
 RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Pace Analytical Services, Inc.

TO15 Analysis (UNIX)

Data file : \\192.168.10.12\chem\10airI.i\083018.b\24207.D
 Lab Smp Id: BC16838
 Inj Date : 30-AUG-2018 10:37
 Operator : AFV Inst ID: 10airI.i
 Smp Info :
 Misc Info :
 Comment : Volatile Organic COMPOUNDS in Air
 Method : \\192.168.10.12\chem\10airI.i\083018.b\TO15 241-18.m
 Meth Date : 30-Aug-2018 09:19 avandenbro Quant Type: ISTD
 Cal Date : 29-AUG-2018 17:50 Cal File: 24108.D
 Als bottle: 7
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: all.sub
 Target Version: 4.14
 Processing Host: 10MNAIRWKS11

Concentration Formula: Amt * DF * Uf * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (ppbv)	FINAL (ppbv)
1 1,1-Difluoroethane	65				Compound Not Detected.		
2 Chlorodifluoromethane	67				Compound Not Detected.		
3 Propylene	41				Compound Not Detected.		
4 Dichlorodifluoromethane	85				Compound Not Detected.		
5 Dichlorotetrafluoroethane	85				Compound Not Detected.		
6 Chloromethane	50				Compound Not Detected.		
7 Vinyl chloride	62				Compound Not Detected.		
8 1,3-Butadiene	54				Compound Not Detected.		
9 Bromomethane	94				Compound Not Detected.		
10 Chloroethane	64				Compound Not Detected.		
11 Ethanol	45				Compound Not Detected.		
12 Vinyl Bromide	106				Compound Not Detected.		
13 Isopentane	43				Compound Not Detected.		
14 Freon 123	83				Compound Not Detected.		
15 Acrolein	56				Compound Not Detected.		
16 Trichlorofluoromethane	101				Compound Not Detected.		
17 Acetone	43				Compound Not Detected.		
18 Isopropyl Alcohol	45				Compound Not Detected.		
19 Tert Butyl Alcohol (TBA)	59				Compound Not Detected.		
20 Acrylonitrile	53				Compound Not Detected.		
21 1,1-Dichloroethene	61				Compound Not Detected.		
22 Methyl Acetate	43				Compound Not Detected.		
23 Freon 113	101				Compound Not Detected.		

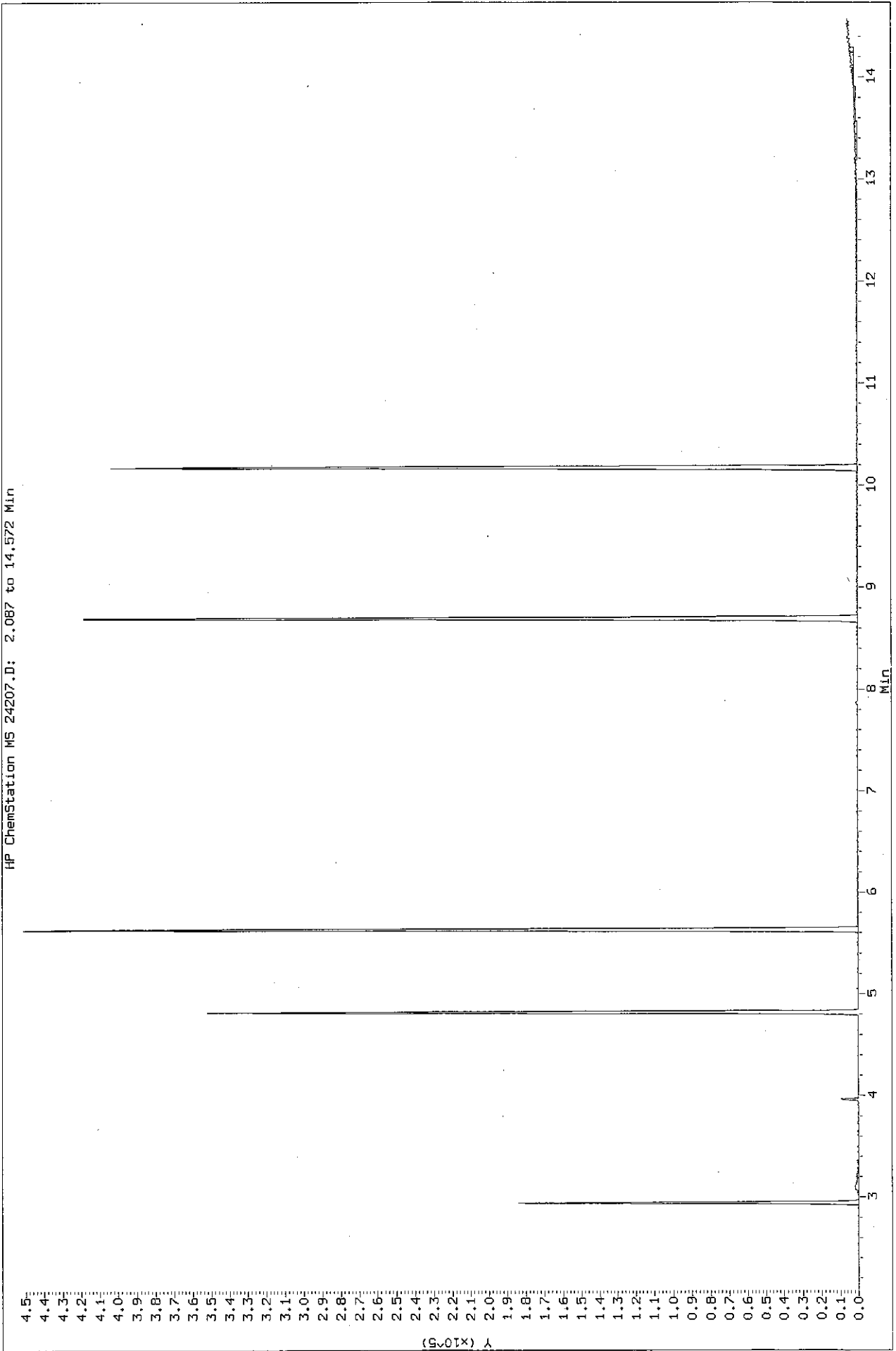
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (ppbv)	FINAL (ppbv)
24 Methylene chloride	49				Compound Not Detected.		
25 Allyl Chloride	76				Compound Not Detected.		
\$ 26 Hexane-d14(S)	66				Compound Not Detected.		
27 Carbon Disulfide	76				Compound Not Detected.		
28 trans-1,2-dichloroethene	96				Compound Not Detected.		
29 Methyl Tert Butyl Ether	73				Compound Not Detected.		
30 Vinyl Acetate	43				Compound Not Detected.		
31 1,1-Dichloroethane	63				Compound Not Detected.		
32 Methyl Ethyl Ketone	72				Compound Not Detected.		
33 n-Hexane	57				Compound Not Detected.		
34 Di-isopropyl Ether	45				Compound Not Detected.		
35 Ethyl Acetate	43				Compound Not Detected.		
36 cis-1,2-Dichloroethene	96				Compound Not Detected.		
37 Ethyl Tert-Butyl Ether	59				Compound Not Detected.		
38 Chloroform	83				Compound Not Detected.		
39 Tetrahydrofuran	42				Compound Not Detected.		
40 1,1,1-Trichloroethane	97				Compound Not Detected.		
41 1,2-Dichloroethane	62				Compound Not Detected.		
42 Benzene	78				Compound Not Detected.		
43 Carbon tetrachloride	117				Compound Not Detected.		
44 Cyclohexane	56				Compound Not Detected.		
45 Tert Amyl Methyl Ether	73				Compound Not Detected.		
* 46 1,4-Difluorobenzene	114	5.628	5.634	(1.000)	278306	10.0000	
47 2,2,4-Trimethylpentane	57				Compound Not Detected.		
48 Heptane	43				Compound Not Detected.		
49 1,2-Dichloropropane	63				Compound Not Detected.		
50 Trichloroethene	130				Compound Not Detected.		
51 Methyl methacrylate	69				Compound Not Detected.		
52 1,4-Dioxane	88				Compound Not Detected.		
53 Bromodichloromethane	83				Compound Not Detected.		
54 Methylcyclohexane	98				Compound Not Detected.		
55 Methyl Isobutyl Ketone	43				Compound Not Detected.		
56 cis-1,3-Dichloropropene	75				Compound Not Detected.		
\$ 57 Toluene-d8 (S)	98				Compound Not Detected.		
58 trans-1,3-Dichloropropene	75				Compound Not Detected.		
59 Toluene	91				Compound Not Detected.		
60 1,1,2-Trichloroethane	97				Compound Not Detected.		
61 Methyl Butyl Ketone	43				Compound Not Detected.		
62 n-Octane	43				Compound Not Detected.		
63 Dibromochloromethane	129				Compound Not Detected.		
64 1,2-Dibromoethane	107				Compound Not Detected.		
65 Tetrachloroethene	166				Compound Not Detected.		
* 66 Chlorobenzene - d5	117	8.695	8.695	(1.000)	234251	10.0000	
67 Chlorobenzene	112				Compound Not Detected.		
68 Ethyl Benzene	91				Compound Not Detected.		
69 m&p-Xylene	91				Compound Not Detected.		
70 n-Nonane	43				Compound Not Detected.		
71 Bromoform	173				Compound Not Detected.		
72 Styrene	104				Compound Not Detected.		
73 o-Xylene	91				Compound Not Detected.		
74 1,1,2,2-Tetrachloroethane	83				Compound Not Detected.		
75 Isopropylbenzene	105				Compound Not Detected.		
76 N-Propylbenzene	91				Compound Not Detected.		
77 4-Ethyltoluene	105				Compound Not Detected.		

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (ppbv)	FINAL (ppbv)
78 1,3,5-Trimethylbenzene	105				Compound Not Detected.		
§ 79 1,4-dichlorobenzene-d4 (S)	150				Compound Not Detected.		
80 n-Decane	57				Compound Not Detected.		
81 Tert-Butyl Benzene	119				Compound Not Detected.		
82 1,2,4-Trimethylbenzene	105				Compound Not Detected.		
83 Sec- Butylbenzene	105				Compound Not Detected.		
84 1,3-Dichlorobenzene	146				Compound Not Detected.		
85 Benzyl Chloride	91				Compound Not Detected.		
86 1,4-Dichlorobenzene	146				Compound Not Detected.		
87 p-Isopropyltoluene	119				Compound Not Detected.		
88 1,2,3-Trimethylbenzene	105				Compound Not Detected.		
89 1,2-Dichlorobenzene	146				Compound Not Detected.		
90 N-Butylbenzene	91				Compound Not Detected.		
91 1,2-Dibromo-3-Chloropropane	157				Compound Not Detected.		
92 1,2,4-Trichlorobenzene	180				Compound Not Detected.		
93 Naphthalene	128				Compound Not Detected.		
94 Hexachlorobutadiene	225				Compound Not Detected.		

QC Flag Legend

D - User disabled compound identification.

Data File: \\192.168.10.12\chem\10air1.1\083018.b\24207.D
Injection Date: 30-AUG-2018 10:37
Instrument: 10air1.1
Client Sample ID:



Canister Batch 16837

Leak Check 8/27/2018 1:50:00 PM

	Can ID	Initial Pressure	Final Pressure	Pass/Fail
→1	PACE0899	30	30	Pass
2	PACE1304	30	30	Pass
3	PACE2001	30	30	Pass
4	PACE2266	30	30	Pass
→5	PACE2270	30	30	Pass
→6	PACE2622	30	30	Pass
7	PACE2955	30	30	Pass
8	PACE3063	30	30	Pass
→9	PACE3095	30	30	Pass
10	PACE3302	30	30	Pass
<i>Acceptance Criteria +/- 2 psi change over a 24 hour period</i>				

Can Cleaning Information

Start 8/29/2018 8:19:00 AM

End 8/30/2018 8:00:00 AM

Can ID for Certification	PACE2266
Data File	10AIR0/242-7
Certification Level	Low Level (0.1 - 0.2 ppbv)

Data File: \\192.168.10.12\chem\10air0.i\083018.b\24207.D
 Report Date: 30-Aug-2018 11:21

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: 10air0.i
 Lab File ID: 24207.D
 Lab Smp Id: cert
 Analysis Type: VOA
 Quant Type: ISTD
 Operator: CH1
 Method File: \\192.168.10.12\chem\10air0.i\083018.b\TO15_239-18.m
 Misc Info:

Calibration Date: 30-AUG-2018
 Calibration Time: 07:50

Level: LOW
 Sample Type: AIR

Test Mode:

Use Initial Calibration Level 5.
 If Continuing Cal. use Initial Cal. Level 5

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
47 1,4-Difluorobenze	976573	585944	1367202	957279	-1.98
67 Chlorobenzene - d	788227	472936	1103518	757985	-3.84

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
47 1,4-Difluorobenze	5.33	5.00	5.66	5.32	-0.11
67 Chlorobenzene - d	8.39	8.06	8.72	8.38	-0.07

AREA UPPER LIMIT = + 40% of internal standard area.
 AREA LOWER LIMIT = - 40% of internal standard area.
 RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
 RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Pace Analytical Services, Inc.

TO15 Analysis (UNIX)

Data file : \\192.168.10.12\chem\10air0.i\083018.b\24207.D
 Lab Smp Id: cert
 Inj Date : 30-AUG-2018 10:49
 Operator : CH1 Inst ID: 10air0.i
 Smp Info :
 Misc Info :
 Comment : Volatile Organic COMPOUNDS in Air
 Method : \\192.168.10.12\chem\10air0.i\083018.b\TO15_239-18.m
 Meth Date : 30-Aug-2018 08:12 chazelroth Quant Type: ISTD
 Cal Date : 27-AUG-2018 11:33 Cal File: 23909.D
 Als bottle: 7
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: all.sub
 Target Version: 4.14
 Processing Host: 10MNAIRRC91

Concentration Formula: Amt * DF * Uf * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (ppbv)	FINAL (ppbv)
1 Chloropentafluoroethane	85						
2 1,1-Difluoroethane	65						
3 Chlorodifluoromethane	67						
4 Propylene	41						
6 Chloromethane	50						
8 Vinyl chloride	62						
9 1,3-Butadiene	54						
10 Bromomethane	94						
11 Chloroethane	64						
12 Ethanol	45						
13 Vinyl Bromide	106						
14 Isopentane	43	3.184	3.184	(0.598)	1121	0.06305	0.0631(QM)
15 Freon 123	83						
16 Acrolein	56						
17 Trichlorofluoromethane	101						
18 Acetone	43	3.300	3.281	(0.620)	898	0.03601	0.0360(aQM)
20 1,1-Dichloroethene	61						
21 Tert Butyl Alcohol (TBA)	59						
22 Acrylonitrile	53						
23 Freon 113	101						
24 Methyl Acetate	43						
25 Methylene chloride	49	3.598	3.604	(0.676)	786	0.04246	0.0425(aQM)
26 Allyl Chloride	76						

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (ppbv)	FINAL (ppbv)
27 Carbon Disulfide	76				Compound Not Detected.		
28 trans-1,2-dichloroethene	96				Compound Not Detected.		
29 Methyl Tert Butyl Ether	73				Compound Not Detected.		
30 Vinyl Acetate	43				Compound Not Detected.		
31 1,1-Dichloroethane	63				Compound Not Detected.		
32 Methyl Ethyl Ketone	72				Compound Not Detected.		
33 n-Hexane	57				Compound Not Detected.		
34 Di-isopropyl Ether	45				Compound Not Detected.		
\$ 35 Hexane-d14 (S)	66				Compound Not Detected.		
36 cis-1,2-Dichloroethene	96				Compound Not Detected.		
37 Ethyl Acetate	43				Compound Not Detected.		
38 Ethyl Tert-Butyl Ether	59				Compound Not Detected.		
39 Chloroform	83				Compound Not Detected.		
40 Tetrahydrofuran	42				Compound Not Detected.		
41 1,1,1-Trichloroethane	97				Compound Not Detected.		
42 1,2-Dichloroethane	62				Compound Not Detected.		
44 Carbon tetrachloride	117				Compound Not Detected.		
46 Tert Amyl Methyl Ether	73				Compound Not Detected.		(D)
* 47 1,4-Difluorobenzene	114	5.324	5.330	(1.000)	957279	10.0000	
48 2,2,4-Trimethylpentane	57	5.470	5.476	(1.027)	1009	0.01413	0.0141 (aQM)
49 Heptane	43				Compound Not Detected.		
50 1,2-Dichloropropane	63				Compound Not Detected.		
51 Trichloroethene	130				Compound Not Detected.		
52 Methyl methacrylate	69	5.799	5.799	(1.089)	358	0.01507	0.0151 (aQM)
53 1,4-Dioxane	88				Compound Not Detected.		
54 Bromodichloromethane	83				Compound Not Detected.		
55 Methylcyclohexane	98				Compound Not Detected.		
56 Methyl Isobutyl Ketone	43				Compound Not Detected.		
57 cis-1,3-Dichloropropene	75				Compound Not Detected.		
58 trans-1,3-Dichloropropene	75				Compound Not Detected.		
60 1,1,2-Trichloroethane	97				Compound Not Detected.		
\$ 61 Toluene-d8 (S)	98				Compound Not Detected.		
62 Methyl Butyl Ketone	43				Compound Not Detected.		
63 n-Octane	43				Compound Not Detected.		
64 Dibromochloromethane	129				Compound Not Detected.		
65 1,2-Dibromoethane	107				Compound Not Detected.		
* 67 Chlorobenzene - d5	117	8.384	8.390	(1.000)	757985	10.0000	
68 Chlorobenzene	112				Compound Not Detected.		
69 Ethyl Benzene	91				Compound Not Detected.		
71 n-Nonane	43				Compound Not Detected.		
72 Bromoform	173				Compound Not Detected.		
73 Styrene	104				Compound Not Detected.		
74 o-Xylene	91				Compound Not Detected.		
75 1,1,2,2-Tetrachloroethane	83				Compound Not Detected.		
77 N-Propylbenzene	91				Compound Not Detected.		
78 4-Ethyltoluene	105				Compound Not Detected.		(D)
80 n-Decane	57				Compound Not Detected.		
81 Tert-Butyl Benzene	119				Compound Not Detected.		
82 1,2,4-Trimethylbenzene	105				Compound Not Detected.		(D)
83 1,3-Dichlorobenzene	146				Compound Not Detected.		
84 Sec- Butylbenzene	105				Compound Not Detected.		
85 Benzyl Chloride	91				Compound Not Detected.		
87 p-Isopropyltoluene	119				Compound Not Detected.		
88 1,2,3-Trimethylbenzene	105				Compound Not Detected.		

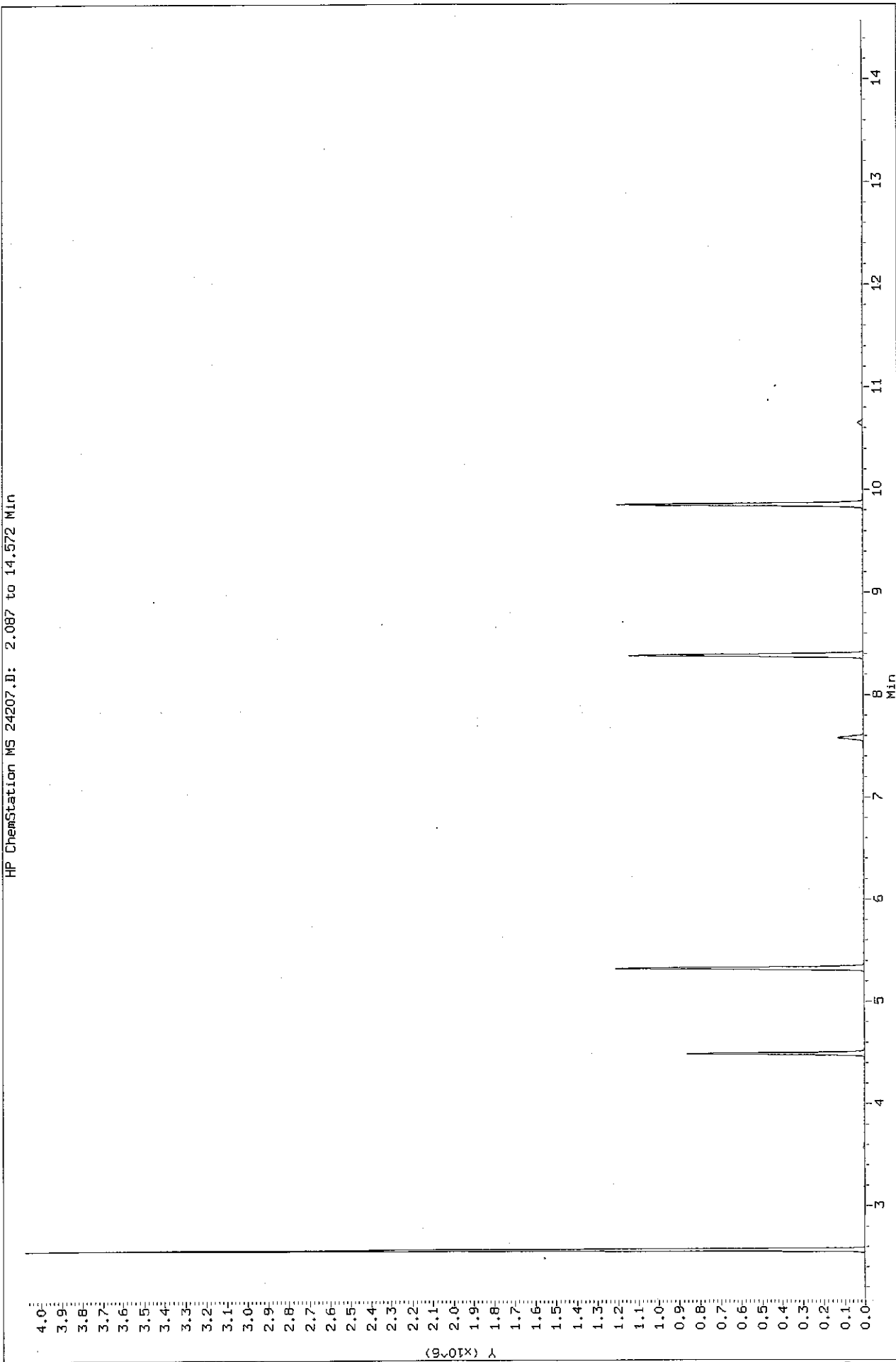
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS		
						ON-COLUMN (ppbv)	FINAL (ppbv)	
89 1,2-Dichlorobenzene	146							(D)
\$ 90 1,4-dichlorobenzene-d4 (S)	150							
91 N-Butylbenzene	91							
92 1,2-Dibromo-3-Chloropropane	157							
93 1,2,4-Trichlorobenzene	180							
94 Naphthalene	128							(D)
95 Hexachlorobutadiene	225							(D)

QC Flag Legend

- a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
- Q - Qualifier signal failed the ratio test.
- M - Compound response manually integrated.
- D - User disabled compound identification.

Data File: \\192.168.10.12\chem\10air0.1\083018.b\24207.D
Injection Date: 30-AUG-2018 10:49
Instrument: 10air0.1
Client Sample ID:

HP ChemStation MS 24207.D: 2.087 to 14.572 Min



Fraction: TO15

Instrument: 10AIRH Method:
 Column: ZB-5MSplus SN338857 0.32µm Tune Standard: 11312-65-16

 Misc. Prep. Info:
 ISTD Lot: 11312-65-16

 Surrogate Lot: 11312-65-16
 Cal. Standard: 12413-1-1/2

Path/File	Lab ID	Matrix/Batch	Type	DF	pH	Method	Date & Time	Oper.	Comments
25301BFB.D	BFB	L/	Tune	1		TUNE	9/10/18 10:04	AFV	
25302.D	0	G/	Sample	1		TO15_253-18	9/10/18 10:32	AFV	
25303.D	CAL1	G/	Ical	1		TO15_253-18	9/10/18 10:59	AFV	
25304.D	CAL2	G/	Ical	1		TO15_253-18	9/10/18 11:26	AFV	
25305.D	CAL3	G/	Ical	1		TO15_253-18	9/10/18 11:53	AFV	
25306.D	CAL4	G/	Ical	1		TO15_253-18	9/10/18 12:55	AFV	
25307.D	CAL5	G/	Ical	1		TO15_253-18	9/10/18 13:22	AFV	
25308.D	CAL6	G/	Ical	1		TO15_253-18	9/10/18 13:49	AFV	
25309.D	CAL7	G/	Ical	1		TO15_253-18	9/10/18 14:17	AFV	
25310.D	0	G/	Sample	1		TO15_253-18	9/10/18 14:43	EMC	
25311.D	ICV	G/	LCS	1		TO15_253-18	9/10/18 15:10	EMC	
25311_31689.D	3049647	G/31689	LCS	1		TO15_253-18	9/10/18 15:10	EMC	
25312.D	0	G/	Sample	1		TO15_253-18	9/10/18 15:46	EMC	
25313.D	IC	G/	Sample	1		TO15_253-18	9/10/18 16:14	EMC	
25314.D	IC	G/	Sample	0.5		TO15_253-18	9/10/18 16:43	MLS	
25314_31689.D	3049646	G/31689	Blank	0.5		TO15_253-18	9/10/18 16:43	MLS	
25315.D	10446258001	G/31689	Sample	1.83		TO15_253-18	9/10/18 17:11	MLS	
25316.D	3050276	G/31689	Duplicate	1.83		TO15_253-18	9/10/18 17:40	MLS	
25317.D	10446238011	G/31689	Sample	1.74		TO15_253-18	9/10/18 18:08	MLS	
25318.D	3050277	G/31689	Duplicate	1.75		TO15_253-18	9/10/18 18:36	MLS	
25319.D	10446238001	G/31689	Sample	1.75		TO15_253-18	9/10/18 19:04	MLS	
25320.D	10446238002	G/31689	Sample	1.75		TO15_253-18	9/10/18 19:32	MLS	
25321.D	10446238003	G/31689	Sample	1.71		TO15_253-18	9/10/18 20:00	MLS	
25322.D	10446238004	G/31689	Sample	1.75		TO15_253-18	9/10/18 20:28	MLS	
25323.D	10446238005	G/31689	Sample	1.75		TO15_253-18	9/10/18 20:56	MLS	
25324.D	10446238006	G/31689	Sample	1.75		TO15_253-18	9/10/18 21:24	MLS	
25325.D	10446238007	G/31689	Sample	1.75		TO15_253-18	9/10/18 21:53	MLS	
25326.D	10446238008	G/31689	Sample	1.75		TO15_253-18	9/10/18 22:21	MLS	
25327.D	10446238009	G/31689	Sample	1.75		TO15_253-18	9/10/18 22:49	MLS	
25328.D	10446238010	G/31689	Sample	1.75		TO15_253-18	9/10/18 23:17	MLS	
25329.D	10446252004	G/31689	Sample	1.8		TO15_253-18	9/10/18 23:45	MLS	
25330.D	10446252001	G/31689	Sample	1.83		TO15_253-18	9/11/18 00:13	MLS	
25331.D	10446252002	G/31689	Sample	1.83		TO15_253-18	9/11/18 00:40	MLS	
25332.D	10446252003	G/31689	Sample	1.77		TO15_253-18	9/11/18 01:08	MLS	
25333.D	10446211001	G/31689	Sample	1.71		TO15_253-18	9/11/18 01:36	MLS	
25334.D	35415016001	G/31689	Sample	2.826		TO15_253-18	9/11/18 02:04	MLS	
25335.D	35415016002	G/31689	Sample	2.983		TO15_253-18	9/11/18 02:32	MLS	
25336.D	35415016003	G/31689	Sample	2.936		TO15_253-18	9/11/18 03:00	MLS	

Instrument: 10AIRH Method: Misc. Prep. Info: Surrogate Lot: 11312-65-16
 Column: ZB-5MSplus SN338857 0.32µm Tune Standard: 11312-65-16 ISTD Lot: 11312-65-16 Cal. Standard: 12413-1-1/2

Path/File	Lab ID	Matrix/Batch	Type	DF	pH	Method	Date & Time	Oper.	Comments
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Check Maintenance Items Performed:

Changed septum	Clipped column	Changed column - Lot #
Cleaned liner	Changed trap - Lot #	Other minor parts replaced
Replaced/Cleaned gold seal	Cleaned MS Source	No maintenance performed today

Additional Comments:

File Path 1: U:\10AIRH\1091018.B\

Matrix Codes: [G]as, [L]iquid, [S]olid, [N]one

Run order verified:

Report Date: 09/14/2018 15:36

Reviewed By/Date:

Instrument: 10AIRH Method:
 Column: ZB-5MSplus SN338857 0.32µm Standard: 11312-65-16

 Misc. Prep. Info:
 ISTD Lot: 11312-65-16

 Surrogate Lot: 11312-65-16
 Cal. Standard: 11312-65-16

Path/File	Lab ID	Matrix/Batch	Type	DF	pH	Method	Date & Time	Oper.	Comments
25601BFB.D	BFB	L/	Tune	1		TUNE	9/13/18 08:02	NCK	
25602_31710.D	3053763	G/31710	LCS	1		TO15_253-18	9/13/18 08:29	CH1	
25602.D	CCV	G/	CCal	1		TO15_253-18	9/13/18 08:29	NCK	
25603.D	0	G/	Sample	1		TO15_253-18	9/13/18 09:49	NCK	
25604.D	CERT	G/	Sample	0.5		TO15_253-18	9/13/18 10:18	NCK	
25605.D	CERT	G/	Sample	0.5		TO15_253-18	9/13/18 10:47	NCK	
25605_31710.D	3053762	G/31710	Blank	0.5		TO15_253-18	9/13/18 10:47	CH1	
25606.D	10446427001	G/31703	Sample	7.75		TO15_253-18	9/13/18 11:14	NCK	
25607.D	10446595001	G/31703	Sample	57.702		TO15_253-18	9/13/18 11:41	NCK	
25608.D	10446586005	G/31703	Sample	1.68		TO15_253-18	9/13/18 12:09	NCK	
25609.D	10446586009	G/31703	Sample	1430		TO15_253-18	9/13/18 12:36	NCK	
25610.D	10446586003	G/31703	Sample	8755.2		TO15_253-18	9/13/18 13:03	NCK	
25611.D	10446586004	G/31703	Sample	18.3		TO15_253-18	9/13/18 13:38	NCK	
25612.D	10446586001	G/31710	Sample	1.87		TO15_253-18	9/13/18 14:55	CH1	
25613.D	3054972	G/31710	Duplicate	1.87		TO15_253-18	9/13/18 15:24	CH1	
25614.D	92398793001	G/31710	Sample	1.44		TO15_253-18	9/13/18 15:52	CH1	
25615.D	3054977	G/31710	Duplicate	1.44		TO15_253-18	9/13/18 16:20	CH1	
25616.D	92398793002	G/31710	Sample	1.46		TO15_253-18	9/13/18 16:48	CH1	
25617.D	92398793003	G/31710	Sample	1.55		TO15_253-18	9/13/18 17:17	CH1	
25618.D	92398793004	G/31710	Sample	1.41		TO15_253-18	9/13/18 17:45	CH1	
25619.D	92398793005	G/31710	Sample	1.46		TO15_253-18	9/13/18 18:14	CH1	
25620.D	40175141001	G/31710	Sample	1.98		TO15_253-18	9/13/18 18:42	CH1	
25621.D	40175141002	G/31710	Sample	1.94		TO15_253-18	9/13/18 19:10	CH1	
25622.D	40175141003	G/31710	Sample	2.02		TO15_253-18	9/13/18 19:38	CH1	
25623.D	40175141004	G/31710	Sample	2.06		TO15_253-18	9/13/18 20:06	CH1	
25624.D	40175141005	G/31710	Sample	1.9		TO15_253-18	9/13/18 20:34	CH1	
25625.D	10446892001	G/31710	Sample	1.74		TO15_253-18	9/13/18 21:03	CH1	
25626.D	10446892002	G/31710	Sample	1.74		TO15_253-18	9/13/18 21:31	CH1	
25627.D	10446892003	G/31710	Sample	1.8		TO15_253-18	9/13/18 21:59	CH1	
25628.D	10446892004	G/31710	Sample	1.77		TO15_253-18	9/13/18 22:27	CH1	
25629.D	10446892005	G/31710	Sample	1.77		TO15_253-18	9/13/18 22:55	CH1	
25630.D	35416859001	G/31710	Sample	1.74		TO15_253-18	9/13/18 23:23	CH1	
25631.D	35416859001	G/31710	Sample	34.8		TO15_253-18	9/13/18 23:50	CH1	
25632.D	35416866001	G/31710	Sample	1.87		TO15_253-18	9/14/18 00:18	CH1	
25633.D	35416866001	G/31710	Sample	56.1		TO15_253-18	9/14/18 00:45	CH1	
25634.D	10446896001	G/31710	Sample	1.83		TO15_253-18	9/14/18 01:13	CH1	
25635.D	10446896002	G/31710	Sample	1.87		TO15_253-18	9/14/18 01:41	CH1	
25636.D	0	G/	Sample	1		TO15_253-18	9/14/18 02:08	CH1	

Instrument: 10AIRH Method: Misc. Prep. Info: Surrogate Lot: 11312-65-16
 Column: ZB-5MSplus SN338857 0.32µm Tune Standard: 11312-65-16 ISTD Lot: 11312-65-16 Cal. Standard: 11312-65-16

Path/File	Lab ID	Matrix/Batch	Type	DF	pH	Method	Date & Time	Oper.	Comments
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Check Maintenance Items Performed:

Changed septum	Clipped column	Changed column - Lot #
Cleaned liner	Changed trap - Lot #	Other minor parts replaced
Replaced/Cleaned gold seal	Cleaned MS Source	No maintenance performed today

Additional Comments:

File Path 1: U:\10AIRH\1091318.B\
 Matrix Codes: [G]as, [L]iquid, [S]olid, [N]one

Run order verified:

Report Date: 09/14/2018 12:30
 Reviewed By/Date:

Pace Analytical Services, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 10-SEP-2018 10:59
 End Cal Date : 10-SEP-2018 14:17
 Quant Method : ISTD
 Target Version : 4.14
 Integrator : HP RTE
 Method file : \\192.168.10.12\chem\10airH.i\091018.B\T015_253-18.m
 Last Edit : 11-Sep-2018 09:17 10airH.i

Calibration File Names:

Level 01: all \\192.168.10.12\chem\10airH.i\091018.B\25303.D
 Level 02: all \\192.168.10.12\chem\10airH.i\091018.B\25304.D
 Level 03: all \\192.168.10.12\chem\10airH.i\091018.B\25305.D
 Level 04: all \\192.168.10.12\chem\10airH.i\091018.B\25306.D
 Level 05: all \\192.168.10.12\chem\10airH.i\091018.B\25307.D
 Level 06: all \\192.168.10.12\chem\10airH.i\091018.B\25308.D
 Level 07: all \\192.168.10.12\chem\10airH.i\091018.B\25309.D

Compound (all.sb)	0.1000000	0.2000000	0.5000000	1.0000	10.0000	20.0000	Curve	b	Coefficients		%RSD or R ²
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6			m1	m2	
	30.0000										
	Level 7										
1 1,1-Difluoroethane	0.24059	0.22660	0.19607	0.18882	0.19610	0.18868					
	0.17411						AVRG		0.20157		11.62187
2 Chlorodifluoromethane	0.10528	0.10798	0.09471	0.09987	0.09508	0.08853					
	0.08029						AVRG		0.09453		10.19319
3 Propylene	0.22157	0.18345	0.15512	0.15586	0.16908	0.15687					
	0.14069						AVRG		0.16895		15.81970
4 Dichlorodifluoromethane	1.17861	1.13598	1.00322	0.92348	0.95234	0.86431					
	0.77012						AVRG		0.97544		14.83045

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Compound (all.sb)	0.1000000	0.2000000	0.5000000	1.0000	10.0000	20.0000	Curve	b	Coefficients		%RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6			m1	m2	
	30.0000										
	Level 7										
5 Dichlorotetrafluoroethane	++++ 0.59434	0.94602	0.88335	0.76548	0.80246	0.65515	AVRG		0.77447		17.21084
6 Chloromethane	0.35353 0.18724	0.30404	0.27256	0.23640	0.24388	0.20620	AVRG		0.25769		22.29952
7 Vinyl chloride	0.33967 0.21721	0.29519	0.27744	0.24369	0.26242	0.22984	AVRG		0.26649		15.77783
8 1,3-Butadiene	0.21537 0.14177	0.19083	0.17503	0.15370	0.17227	0.15069	AVRG		0.17138		14.96160
9 Bromomethane	0.39614 0.24891	0.35552	0.33799	0.28971	0.30899	0.25976	AVRG		0.31386		16.87972
10 Chloroethane	0.15692 0.10081	0.14249	0.13547	0.11647	0.12487	0.10511	AVRG		0.12602		16.13441
11 Ethanol	0.10803 0.06215	0.09067	0.08097	0.07222	0.07847	0.06731	AVRG		0.07997		19.38988

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Compound (all.sb)	0.1000000	0.2000000	0.5000000	1.0000	10.0000	20.0000	Curve	b	Coefficients		%RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6			m1	m2	
	30.0000										
	Level 7										
12 Vinyl Bromide	0.38280 0.23992	0.35500	0.32919	0.27495	0.30674	0.25360	AVRG		0.30603		17.34923
13 Isopentane	0.27546 0.15860	0.23672	0.21453	0.18775	0.19930	0.17251	AVRG		0.20641		19.36524
14 Freon 123	0.87234 0.48581	0.76274	0.71731	0.61161	0.64948	0.53004	AVRG		0.66133		20.34299
15 Trichlorofluoromethane	0.92269 0.47342	0.81894	0.79978	0.64615	0.67244	0.52370	AVRG		0.69387		23.49826
16 Acrolein	0.11383 0.06776	0.10471	0.08980	0.07981	0.08956	0.07424	AVRG		0.08853		18.53773
17 Acetone	++++ 0.19978	0.41233	0.35290	0.31583	0.27324	0.22445	AVRG		0.29642		27.01384
18 Isopropyl Alcohol	0.44836 0.22211	0.39238	0.35542	0.31005	0.31161	0.25252	AVRG		0.32749		23.93973

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Compound (all.sb)	0.1000000	0.2000000	0.5000000	1.0000	10.0000	20.0000	Curve	b	Coefficients		%RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6			m1	m2	
	30.0000										
	Level 7										
19 1,1-Dichloroethene	0.58999 0.36086	0.53749	0.46918	0.41788	0.45968	0.39304	AVRG		0.46116		17.49713
20 Acrylonitrile	0.23731 0.15351	0.21522	0.18742	0.17155	0.19134	0.16855	AVRG		0.18927		15.26890
21 Tert Butyl Alcohol (TBA)	0.75708 0.43534	0.69023	0.58891	0.56873	0.59842	0.52097	AVRG		0.59424		17.78870
22 Methyl Acetate	0.70939 0.32891	0.61218	0.52823	0.48298	0.45652	0.38475	AVRG		0.50042		26.04919
23 Freon 113	0.99139 0.52684	0.93241	0.80739	0.74939	0.72486	0.62017	AVRG		0.76464		21.39804
24 Allyl Chloride	0.15030 0.10503	0.14079	0.12288	0.11725	0.14179	0.12403	AVRG		0.12887		12.39508
25 Methylene chloride	+++++ 2616485	49227	102999	189271	1364434	2076256	QUAD	0.02189	0.29261	-0.00758	0.99981

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Compound (all.sb)	0.1000000	0.2000000	0.5000000	1.0000	10.0000	20.0000	Curve	b	Coefficients		%RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6			m1	m2	
	30.0000										
	Level 7										
26 Carbon Disulfide	++++ 0.75064	1.04083	0.89904	0.85717	0.90946	0.82649	AVRG		0.88060		11.03478
27 Methyl Tert Butyl Ether	0.81690 0.68029	0.77566	0.69804	0.70997	0.80781	0.75409	AVRG		0.74897		7.24108
28 trans-1,2-dichloroethene	0.43686 0.28632	0.39291	0.34682	0.33725	0.35118	0.31746	AVRG		0.35268		13.99811
29 Vinyl Acetate	0.55109 0.51701	0.51585	0.48282	0.50140	0.61718	0.56928	AVRG		0.53638		8.58281
30 1,1-Dichloroethane	0.71085 0.44736	0.66319	0.57789	0.53726	0.54684	0.49536	AVRG		0.56839		16.18633
31 Methyl Ethyl Ketone	0.20892 0.13180	0.17726	0.15959	0.15833	0.15168	0.14299	AVRG		0.16151		15.64649
32 Di-isopropyl Ether	0.78479 0.57340	0.75664	0.69161	0.69234	0.74048	0.65743	AVRG		0.69953		10.10888

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Compound (all.sb)	0.1000000	0.2000000	0.5000000	1.0000	10.0000	20.0000	Curve	b	Coefficients		%RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6			m1	m2	
	30.0000										
	Level 7										
33 n-Hexane	0.47396 0.31108	0.41752	0.40042	0.40228	0.38963	0.34687	AVRG		0.39168		13.23992
34 Ethyl Acetate	0.58664 0.42601	0.53575	0.47043	0.46679	0.51624	0.47292	AVRG		0.49640		10.76785
35 cis-1,2-Dichloroethene	0.42791 0.30805	0.39108	0.35610	0.33983	0.37353	0.34024	AVRG		0.36239		10.82401
36 Ethyl Tert-Butyl Ether	0.78867 0.70222	0.73456	0.69386	0.70735	0.84232	0.77751	AVRG		0.74950		7.36155
37 Chloroform	1.00723 0.59314	0.92417	0.79540	0.73382	0.73507	0.65937	AVRG		0.77831		18.63772
38 Tetrahydrofuran	0.23388 0.18907	0.20627	0.19068	0.18775	0.22576	0.20751	AVRG		0.20585		8.92363
39 1,1,1-Trichloroethane	0.95256 0.61655	0.90061	0.76689	0.71929	0.75071	0.68410	AVRG		0.77010		15.38859

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Compound (all.sb)	0.1000000	0.2000000	0.5000000	1.0000	10.0000	20.0000	Curve	b	Coefficients		%RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6			m1	m2	
	30.0000										
	Level 7										
40 1,2-Dichloroethane	0.57140 0.37373	0.53933	0.45856	0.43357	0.45826	0.41328	AVRG		0.46402		14.96178
41 Benzene	1.13221 0.78978	1.02887	0.88691	0.86638	0.94408	0.86970	AVRG		0.93113		12.40553
42 Carbon tetrachloride	0.93199 0.62190	0.89035	0.78599	0.75309	0.80204	0.70848	AVRG		0.78483		13.41133
43 Cyclohexane	0.32280 0.31653	0.30718	0.30479	0.31930	0.38278	0.35044	AVRG		0.32912		8.50601
44 Tert Amyl Methyl Ether	0.65774 0.72386	0.64482	0.62902	0.65941	0.84070	0.78678	AVRG		0.70605		11.44207
46 2,2,4-Trimethylpentane	1.39037 1.02131	1.30094	1.15148	1.11038	1.24693	1.13229	AVRG		1.19339		10.55635
47 Heptane	0.37359 0.31024	0.35290	0.33406	0.34267	0.38198	0.34529	AVRG		0.34868		6.91329

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Compound (all.sb)	0.1000000	0.2000000	0.5000000	1.0000	10.0000	20.0000	Curve	b	Coefficients		%RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6			m1	m2	
	30.0000										
	Level 7										
48 Trichloroethene	0.59998 0.43631	0.55582	0.48444	0.46483	0.51411	0.47589	AVRG		0.50448		11.23871
49 1,2-Dichloropropane	0.41775 0.26353	0.39152	0.33739	0.32169	0.32893	0.29493	AVRG		0.33653		15.79746
50 Methyl methacrylate	0.36791 0.25966	0.32446	0.28478	0.29372	0.31369	0.28500	AVRG		0.30417		11.54424
51 1,4-Dioxane	0.21672 0.18815	0.21692	0.20857	0.20193	0.22683	0.20646	AVRG		0.20937		5.94901
52 Bromodichloromethane	0.89704 0.61275	0.85471	0.72830	0.69080	0.74596	0.67668	AVRG		0.74375		13.50329
53 Methylcyclohexane	2054 645019	3850	9961	21148	260421	460400	QUAD	-0.00411	0.27409	-0.01652	0.99991
54 Methyl Isobutyl Ketone	0.44658 0.44728	0.43693	0.41691	0.44617	0.54322	0.49427	AVRG		0.46162		9.27669

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Compound (all.sb)	0.1000000	0.2000000	0.5000000	1.0000	10.0000	20.0000	Curve	b	Coefficients		%RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6			m1	m2	
	30.0000										
	Level 7										
55 cis-1,3-Dichloropropene	0.47766 0.48556	0.48379	0.45735	0.46119	0.56366	0.52757			0.49383		7.77308
56 trans-1,3-Dichloropropene	4053 1338396	8145	18408	38692	532967	955301	QUAD	-0.01022	0.56450	-0.03256	0.99982
57 Toluene	0.95790 0.97325	0.90514	0.88095	0.92509	1.15133	1.06118			0.97926		9.76831
58 1,1,2-Trichloroethane	0.49651 0.36088	0.46599	0.41250	0.39223	0.42758	0.39341			0.42130		11.06687
59 Methyl Butyl Ketone	0.35803 0.47116	0.36541	0.37197	0.42326	0.57411	0.52249			0.44092		19.18790
60 n-Octane	0.34997 0.46704	0.38833	0.44114	0.50002	0.60278	0.52816			0.46821		18.25043
61 Dibromochloromethane	1.06158 0.78569	0.97162	0.85270	0.84278	0.96002	0.87268			0.90672		10.44803

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Compound (all.sb)	0.1000000	0.2000000	0.5000000	1.0000	10.0000	20.0000	Curve	b	Coefficients		%RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6			m1	m2	
	30.0000										
	Level 7										
62 Tetrachloroethene	0.97912 0.62663	0.92970	0.80117	0.74412	0.78106	0.69618	AVRG		0.79400		15.67770
63 1,2-Dibromoethane	0.86944 0.65755	0.82017	0.74211	0.72438	0.80190	0.72838	AVRG		0.76342		9.31700
65 Chlorobenzene	1.35197 0.92337	1.27236	1.09846	1.05461	1.10588	1.01199	AVRG		1.11695		13.29088
66 Ethyl Benzene	1.38617 1.35805	1.28357	1.24194	1.29753	1.65825	1.50124	AVRG		1.38954		10.47719
67 m&p-Xylene	0.95353 1.02087	0.94582	0.98755	1.07955	1.27414	1.13641	AVRG		1.05684		11.13984
68 n-Nonane	++++ 1207154	5488	15217	38545	533638	899844	QUAD	-0.01544	0.67480	-0.06906	0.99990
69 Styrene	++++ 2187304	9252	26975	63780	888985	1567962	QUAD	-0.02469	1.09842	-0.08381	0.99994

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	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6			m1	m2	
	30.0000										
	Level 7										
70 o-Xylene	0.97259 1.02290	1.06428	1.16385	1.21758	1.30129	1.14003	AVRG		1.12607		10.17159
71 Bromoform	0.71901 0.67871	0.69277	0.65373	0.67373	0.80943	0.74469	AVRG		0.71030		7.47804
72 1,1,2,2-Tetrachloroethane	0.98195 0.73084	0.89372	0.80988	0.78477	0.89193	0.80692	AVRG		0.84286		10.00228
73 Isopropylbenzene	++++ 3817532	19781	49539	112845	1621728	2778791	QUAD	-0.04393	2.01479	-0.17924	0.99988
74 N-Propylbenzene	12204 4287227	23530	60132	133091	1790615	3117164	QUAD	-0.03512	2.21555	-0.18653	0.99990
75 4-Ethyltoluene	++++ 3510388	15283	41372	97491	1449280	2542333	QUAD	-0.04459	1.80915	-0.14932	0.99991
76 1,3,5-Trimethylbenzene	7836 2969034	15240	44552	100932	1262493	2172106	QUAD	-0.02263	1.56411	-0.13946	0.99993

Pace Analytical Services, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 10-SEP-2018 10:59
 End Cal Date : 10-SEP-2018 14:17
 Quant Method : ISTD
 Target Version : 4.14
 Integrator : HP RTE
 Method file : \\192.168.10.12\chem\10airH.i\091018.B\TO15_253-18.m
 Last Edit : 11-Sep-2018 09:17 10airH.i

Compound (all.sb)	0.1000000	0.2000000	0.5000000	1.0000	10.0000	20.0000	Curve	Coefficients			%RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6		b	m1	m2	
	30.0000										
	Level 7										
77 n-Decane	1890 1386298	4135	11783	32116	568087	1037376	QUAD	-0.01904	0.64049	-0.05081	0.99925
78 Tert-Butyl Benzene	7020 2941156	14688	43034	97298	1242326	2154718	QUAD	-0.02411	1.54611	-0.13664	0.99993
79 1,2,4-Trimethylbenzene	6673 2800053	14253	43779	97489	1181971	2048125	QUAD	-0.02053	1.46640	-0.12856	0.99995
80 Sec- Butylbenzene	9192 4098087	19108	53503	122274	1735862	3018038	QUAD	-0.04081	2.17823	-0.19735	0.99987
81 1,3-Dichlorobenzene	0.64973 0.72948	0.66381	0.67207	0.68068	0.86660	0.80813	AVRG		0.72436		11.43336
82 Benzyl Chloride	++++ 2077385	6574	16959	36807	746363	1434200	QUAD	-0.03144	0.91861	-0.03643	0.99968
83 1,4-Dichlorobenzene	4570 1832059	9500	23241	48963	723163	1320809	QUAD	-0.01754	0.90232	-0.06403	0.99975

Pace Analytical Services, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 10-SEP-2018 10:59
 End Cal Date : 10-SEP-2018 14:17
 Quant Method : ISTD
 Target Version : 4.14
 Integrator : HP RTE
 Method file : \\192.168.10.12\chem\10airH.i\091018.B\TO15_253-18.m
 Last Edit : 11-Sep-2018 09:17 10airH.i

Compound (all.sb)	0.1000000	0.2000000	0.5000000	1.0000	10.0000	20.0000	Curve	Coefficients			%RSD or R^2	
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6		b	m1	m2		
	30.0000											
	Level 7											
84 p-Isopropyltoluene	++++ 3451833	15721	48195	112832	1495778	2571205	QUAD	-0.04163	1.89849	-0.18684	0.99994	
85 1,2,3-Trimethylbenzene	++++ 2662875	14756	46787	101977	1164287	1974893	QUAD	-0.02083	1.45515	-0.14258	0.99997	
86 1,2-Dichlorobenzene	++++ 1805091	10489	25869	52910	717454	1290828	QUAD	-0.01764	0.88630	-0.06248	0.99990	
87 N-Butylbenzene	++++ 2818760	9815	27450	65335	1121073	2019241	QUAD	-0.04178	1.40253	-0.10216	0.99985	
88 1,2-Dibromo-3-Chloropropane	++++ 777347	2785	6709	14558	267460	520946	QUAD	-0.00959	0.31805	-0.00539	0.99981	
89 1,2,4-Trichlorobenzene	246 749987	1026	3236	6545	218274	497657	QUAD	-0.01080	0.26816	0.00854	0.99820	
90 Naphthalene	633 1575201	1347	5157	10953	481656	1066223	QUAD	-0.02570	0.60401	0.00466	0.99820	

Pace Analytical Services, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 10-SEP-2018 10:59
 End Cal Date : 10-SEP-2018 14:17
 Quant Method : ISTD
 Target Version : 4.14
 Integrator : HP RTE
 Method file : \\192.168.10.12\chem\10airH.i\091018.B\TO15_253-18.m
 Last Edit : 11-Sep-2018 09:17 10airH.i

Compound (all.sb)	0.1000000	0.2000000	0.5000000	1.0000	10.0000	20.0000	Curve	Coefficients			%RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6		b	m1	m2	
	30.0000										
	Level 7										
91 Hexachlorobutadiene	2859 955822	5815	13445	27586	378273	719738	QUAD	-0.01047	0.49796	-0.04173	0.99885

Pace Analytical Services, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 10-SEP-2018 10:59
End Cal Date : 10-SEP-2018 14:17
Quant Method : ISTD
Target Version : 4.14
Integrator : HP RTE
Method file : \\192.168.10.12\chem\10airH.i\091018.B\TO15_253-18.m
Last Edit : 11-Sep-2018 09:17 10airH.i

```
|Average %RSD Results. |  
|=====|  
|Calculated Average %RSD = 14.00747 |  
|Maximum Average %RSD = 0.000e+000 |  
|* Failed Average %RSD Test. |  
|=====|
```

Curve	Formula	Units
Averaged	Amt = Rsp/ml	Response
Quad	Rep = b + m1*Amt + m2*Amt^2	Amount

Pace Analytical Services, Inc.

TO15 Analysis (UNIX)

Data file : \\192.168.10.12\chem\10airH.i\091018.B\25303.D
 Lab Smp Id: CA11
 Inj Date : 10-SEP-2018 10:59
 Operator : AFV Inst ID: 10airH.i
 Smp Info :
 Misc Info :
 Comment : Volatile Organic COMPOUNDS in Air
 Method : \\192.168.10.12\chem\10airH.i\091018.B\TO15_253-18.m
 Meth Date : 11-Sep-2018 09:17 10airH.i Quant Type: ISTD
 Cal Date : 10-SEP-2018 14:17 Cal File: 25309.D
 Als bottle: 3 Calibration Sample, Level: 1
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: all.sub
 Target Version: 4.14
 Processing Host: 10MNAIRWKS10

Concentration Formula: Amt * DF * Uf * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
							CAL-AMT (ppbv)	ON-COL (ppbv)
1 1,1-Difluoroethane	65		2.931	2.931	(0.538)	2795	0.10000	0.119(Q)
2 Chlorodifluoromethane	67		2.949	2.949	(0.541)	1223	0.10000	0.111(Q)
3 Propylene	41		2.956	2.956	(0.542)	2574	0.10000	0.131
4 Dichlorodifluoromethane	85		2.974	2.974	(0.545)	13692	0.10000	0.121
5 Dichlorotetrafluoroethane	85		3.046	3.046	(0.559)	12349	0.10000	0.137
6 Chloromethane	50		3.050	3.050	(0.559)	4107	0.10000	0.137
7 Vinyl chloride	62		3.117	3.117	(0.572)	3946	0.10000	0.127
8 1,3-Butadiene	54		3.151	3.151	(0.578)	2502	0.10000	0.126
9 Bromomethane	94		3.270	3.270	(0.600)	4602	0.10000	0.126
10 Chloroethane	64		3.314	3.314	(0.608)	1823	0.10000	0.125
11 Ethanol	45		3.334	3.334	(0.611)	6275	0.50000	0.675
12 Vinyl Bromide	106		3.417	3.417	(0.627)	4447	0.10000	0.125
13 Isopentane	43		3.432	3.432	(0.629)	3200	0.10000	0.133
14 Freon 123	83		3.469	3.469	(0.636)	10134	0.10000	0.132
15 Trichlorofluoromethane	101		3.495	3.495	(0.641)	10719	0.10000	0.133
16 Acrolein	56		3.499	3.499	(0.642)	3306	0.25000	0.321
17 Acetone	43		3.526	3.526	(0.647)	30164	0.50000	0.876
18 Isopropyl Alcohol	45		3.558	3.558	(0.652)	26043	0.50000	0.685
19 1,1-Dichloroethene	61		3.710	3.710	(0.680)	6854	0.10000	0.128
20 Acrylonitrile	53		3.719	3.719	(0.682)	6892	0.25000	0.313
21 Tert Butyl Alcohol (TBA)	59		3.763	3.763	(0.690)	8795	0.10000	0.127
22 Methyl Acetate	43		3.749	3.749	(0.688)	8241	0.10000	0.142(Q)
23 Freon 113	101		3.744	3.744	(0.687)	11517	0.10000	0.130

Compounds	QUANT SIG		AMOUNTS					
	MASS		RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ppbv)	ON-COL (ppbv)
24 Allyl Chloride	76		3.818	3.818	(0.700)	1746	0.10000	0.117 (Q)
25 Methylene chloride	49		3.820	3.820	(0.701)	27122	0.50000	0.0499(a)
26 Carbon Disulfide	76		3.928	3.928	(0.720)	13160	0.10000	0.129
27 Methyl Tert Butyl Ether	73		4.095	4.095	(0.751)	9490	0.10000	0.109
28 trans-1,2-dichloroethene	96		4.090	4.090	(0.750)	5075	0.10000	0.124
29 Vinyl Acetate	43		4.168	4.168	(0.764)	6402	0.10000	0.103
30 1,1-Dichloroethane	63		4.214	4.214	(0.773)	8258	0.10000	0.125
31 Methyl Ethyl Ketone	72		4.340	4.340	(0.796)	2427	0.10000	0.129 (Q)
32 Di-isopropyl Ether	45		4.369	4.369	(0.801)	9117	0.10000	0.112
33 n-Hexane	57		4.367	4.367	(0.801)	5506	0.10000	0.121 (Q)
34 Ethyl Acetate	43		4.502	4.502	(0.826)	6815	0.10000	0.118
35 cis-1,2-Dichloroethene	96		4.507	4.507	(0.827)	4971	0.10000	0.118
36 Ethyl Tert-Butyl Ether	59		4.594	4.594	(0.842)	9162	0.10000	0.105
37 Chloroform	83		4.685	4.685	(0.859)	11701	0.10000	0.129 (Q)
38 Tetrahydrofuran	42		4.773	4.773	(0.875)	2717	0.10000	0.114
39 1,1,1-Trichloroethane	97		4.999	4.999	(0.917)	11066	0.10000	0.124
40 1,2-Dichloroethane	62		5.080	5.080	(0.932)	6638	0.10000	0.123
41 Benzene	78		5.238	5.238	(0.961)	13153	0.10000	0.122
42 Carbon tetrachloride	117		5.256	5.256	(0.964)	10827	0.10000	0.119
43 Cyclohexane	56		5.283	5.283	(0.969)	3750	0.10000	0.0981 (Q)
44 Tert Amyl Methyl Ether	73		5.398	5.398	(0.990)	7641	0.10000	0.0932
* 45 1,4-Difluorobenzene	114		5.453	5.453	(1.000)	1161706	10.0000	
46 2,2,4-Trimethylpentane	57		5.549	5.549	(1.018)	16152	0.10000	0.117
47 Heptane	43		5.677	5.677	(1.041)	4340	0.10000	0.107
48 Trichloroethene	130		5.785	5.785	(1.061)	6970	0.10000	0.119
49 1,2-Dichloropropane	63		5.827	5.827	(1.069)	4853	0.10000	0.124
50 Methyl methacrylate	69		5.831	5.831	(1.069)	4274	0.10000	0.121
51 1,4-Dioxane	88		5.902	5.902	(1.082)	6294	0.25000	0.259
52 Bromodichloromethane	83		5.987	5.987	(1.098)	10421	0.10000	0.121
53 Methylcyclohexane	98		6.259	6.259	(1.148)	2054	0.10000	0.215 (Q)
54 Methyl Isobutyl Ketone	43		6.358	6.358	(1.166)	5188	0.10000	0.0967
55 cis-1,3-Dichloropropene	75		6.418	6.418	(1.177)	5549	0.10000	0.0967
56 trans-1,3-Dichloropropene	75		6.864	6.864	(1.259)	4053	0.10000	0.243
57 Toluene	91		6.962	6.962	(1.277)	11128	0.10000	0.0978
58 1,1,2-Trichloroethane	97		7.082	7.082	(1.299)	5768	0.10000	0.118
59 Methyl Butyl Ketone	43		7.205	7.205	(0.853)	3287	0.10000	0.0812 (M)
60 n-Octane	43		7.388	7.388	(0.874)	3213	0.10000	0.0747
61 Dibromochloromethane	129		7.622	7.622	(0.902)	9746	0.10000	0.117
62 Tetrachloroethene	166		7.705	7.705	(0.912)	8989	0.10000	0.123
63 1,2-Dibromoethane	107		7.822	7.822	(0.926)	7982	0.10000	0.114
* 64 Chlorobenzene - d5	117		8.451	8.451	(1.000)	918067	10.0000	
65 Chlorobenzene	112		8.497	8.497	(1.005)	12412	0.10000	0.121
66 Ethyl Benzene	91		8.711	8.711	(1.031)	12726	0.10000	0.0998
67 m&p-Xylene	91		8.868	8.868	(1.049)	17508	0.20000	0.180 (M)
68 n-Nonane	43		9.237	9.237	(1.093)	2387	0.10000	0.268
69 Styrene	104		9.302	9.302	(1.101)	4147	0.10000	0.266
70 o-Xylene	91		9.336	9.336	(1.105)	8929	0.10000	0.0864
71 Bromoform	173		9.407	9.407	(1.113)	6601	0.10000	0.101
72 1,1,2,2-Tetrachloroethane	83		9.752	9.752	(1.154)	9015	0.10000	0.117
73 Isopropylbenzene	105		9.888	9.888	(1.170)	10542	0.10000	0.276
74 N-Propylbenzene	91		10.454	10.454	(1.237)	12204	0.10000	0.219
75 4-Ethyltoluene	105		10.639	10.639	(1.259)	7727	0.10000	0.294
76 1,3,5-Trimethylbenzene	105		10.712	10.712	(1.268)	7836	0.10000	0.200
77 n-Decane	57		11.067	11.067	(2.029)	1890	0.10000	0.324 (Q)

Compounds	QUANT SIG		AMOUNTS				
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ppbv)	ON-COL (ppbv)
78 Tert-Butyl Benzene	119	11.164	11.164	(1.321)	7020	0.10000	0.206
79 1,2,4-Trimethylbenzene	105	11.205	11.205	(1.326)	6673	0.10000	0.190
80 Sec- Butylbenzene	105	11.464	11.464	(1.357)	9192	0.10000	0.234 (M)
81 1,3-Dichlorobenzene	146	11.496	11.496	(1.360)	5965	0.10000	0.0897
82 Benzyl Chloride	91	11.564	11.564	(1.368)	3132	0.10000	0.380
83 1,4-Dichlorobenzene	146	11.627	11.627	(1.376)	4570	0.10000	0.250
84 p-Isopropyltoluene	119	11.670	11.670	(1.381)	6998	0.10000	0.260
85 1,2,3-Trimethylbenzene	105	11.681	11.681	(1.382)	6679	0.10000	0.193
86 1,2-Dichlorobenzene	146	11.934	11.934	(1.412)	5549	0.10000	0.268
87 N-Butylbenzene	91	12.115	12.115	(1.434)	4730	0.10000	0.335
88 1,2-Dibromo-3-Chloropropane	157	12.630	12.630	(1.495)	1272	0.10000	0.345
89 1,2,4-Trichlorobenzene	180	13.576	13.576	(1.606)	246	0.10000	0.412 (QM)
90 Naphthalene	128	13.713	13.713	(1.623)	633	0.10000	0.437 (M)
91 Hexachlorobutadiene	225	13.826	13.826	(1.636)	2859	0.10000	0.273

QC Flag Legend

- a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
- Q - Qualifier signal failed the ratio test.
- M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10airH.i\091018.B\25303.D
Report Date: 11-Sep-2018 09:17

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10airH.i
Lab File ID: 25303.D
Lab Smp Id: CALL
Analysis Type: VOA
Quant Type: ISTD
Operator: AFV
Method File: \\192.168.10.12\chem\10airH.i\091018.B\TO15_253-18.m
Misc Info:

Calibration Date: 10-SEP-2018
Calibration Time: 13:22

Level: LOW
Sample Type: AIR

Test Mode:

Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

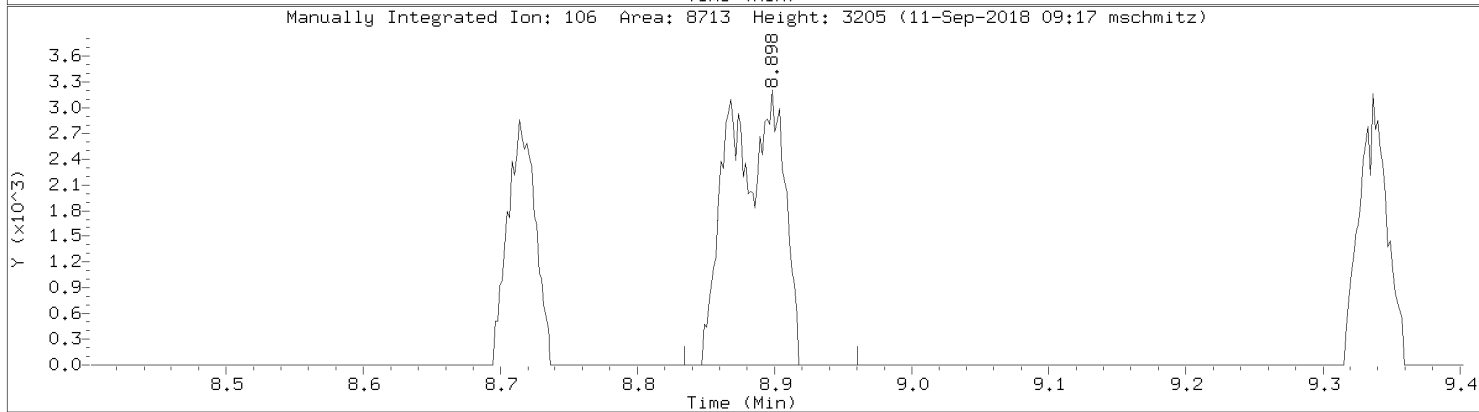
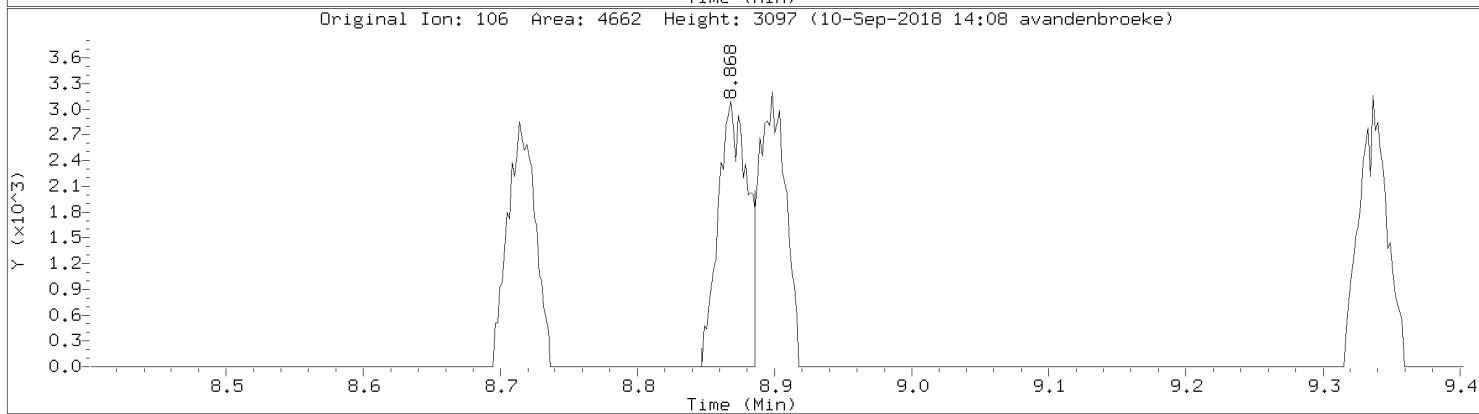
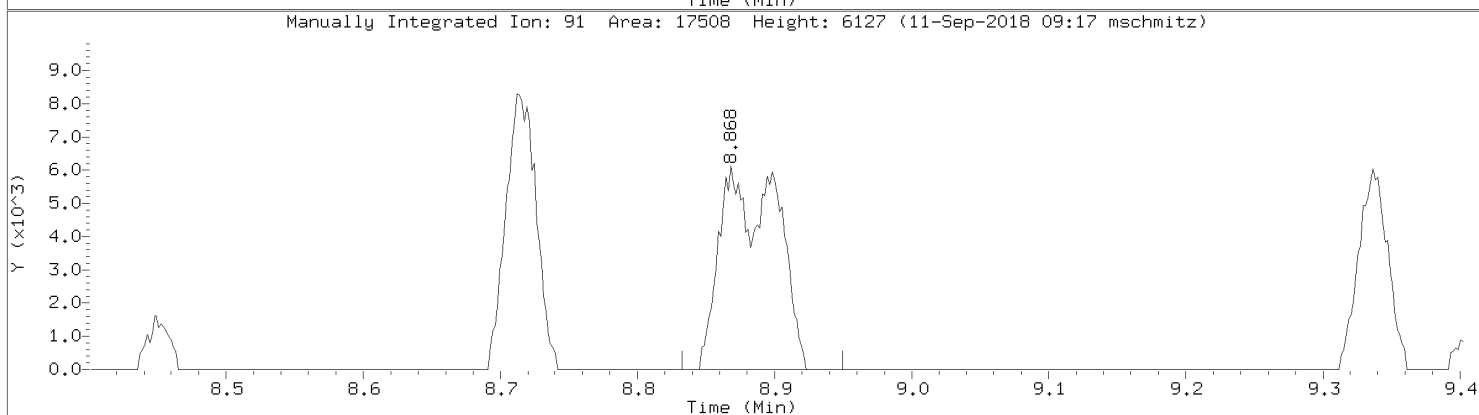
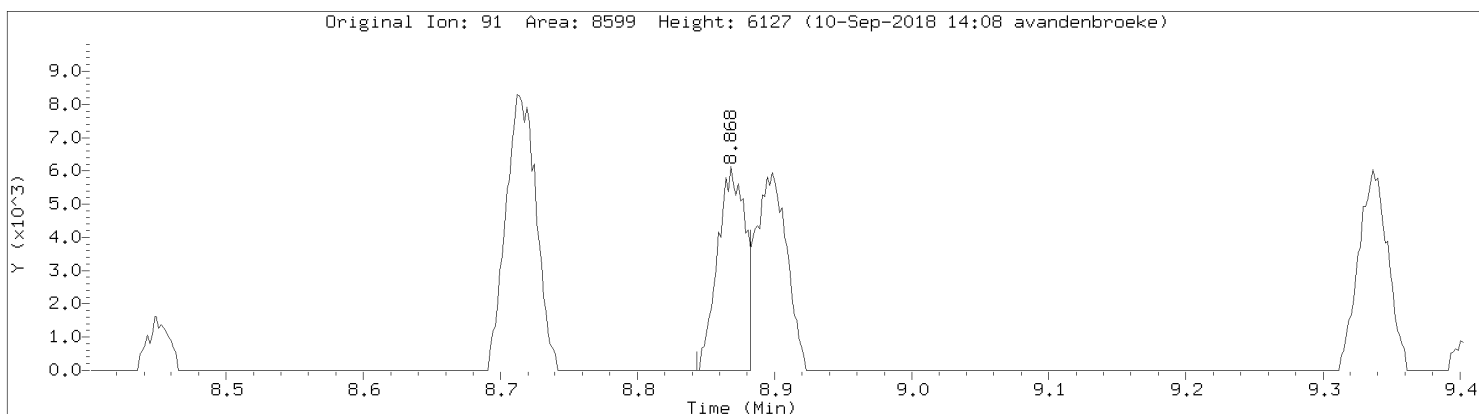
COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
45 1,4-Difluorobenze	1034069	620441	1447697	1161706	12.34
64 Chlorobenzene - d	896862	538117	1255607	918067	2.36

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
45 1,4-Difluorobenze	5.46	5.13	5.79	5.45	-0.03
64 Chlorobenzene - d	8.45	8.12	8.78	8.45	-0.02

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

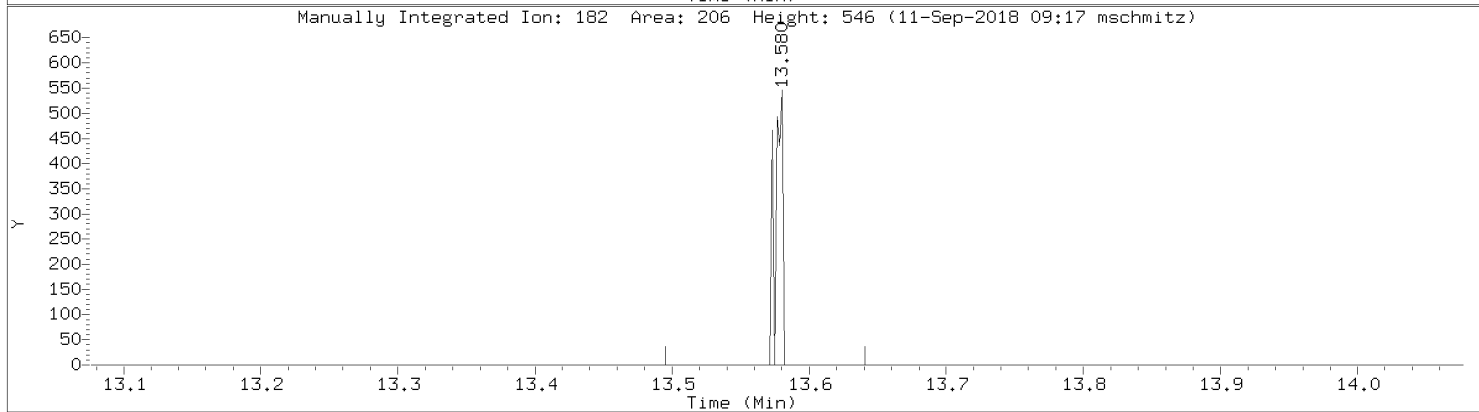
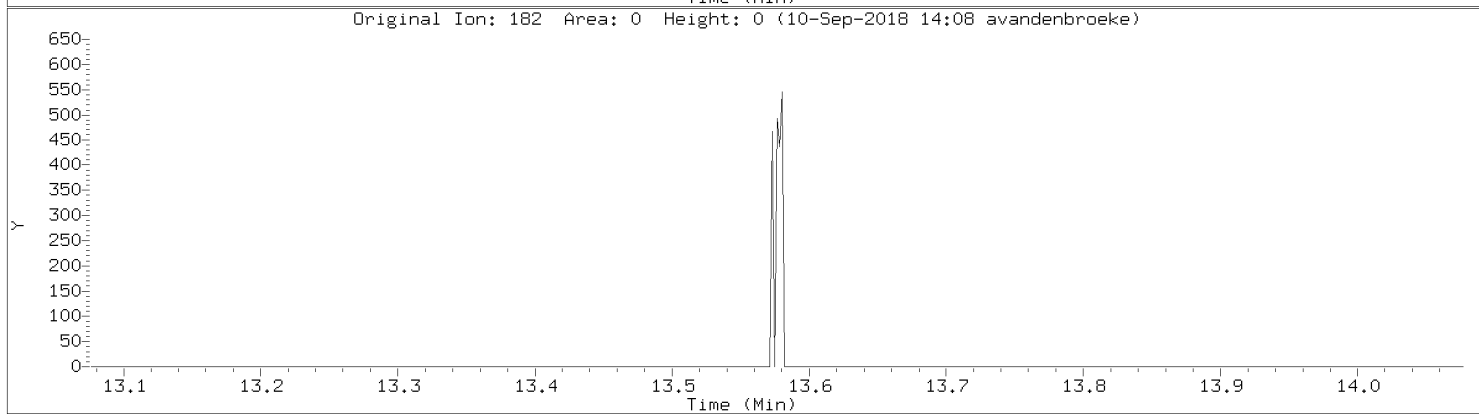
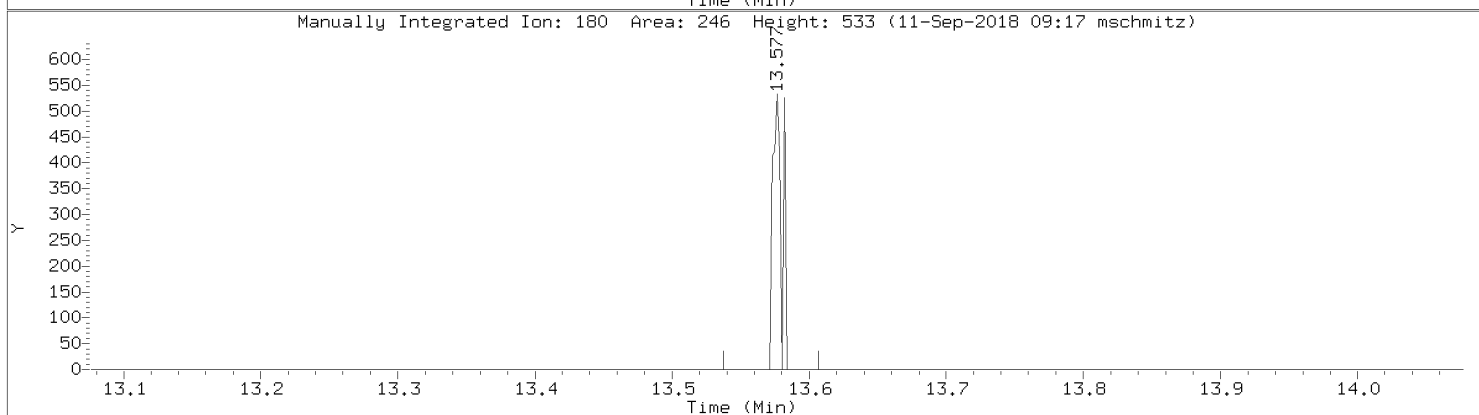
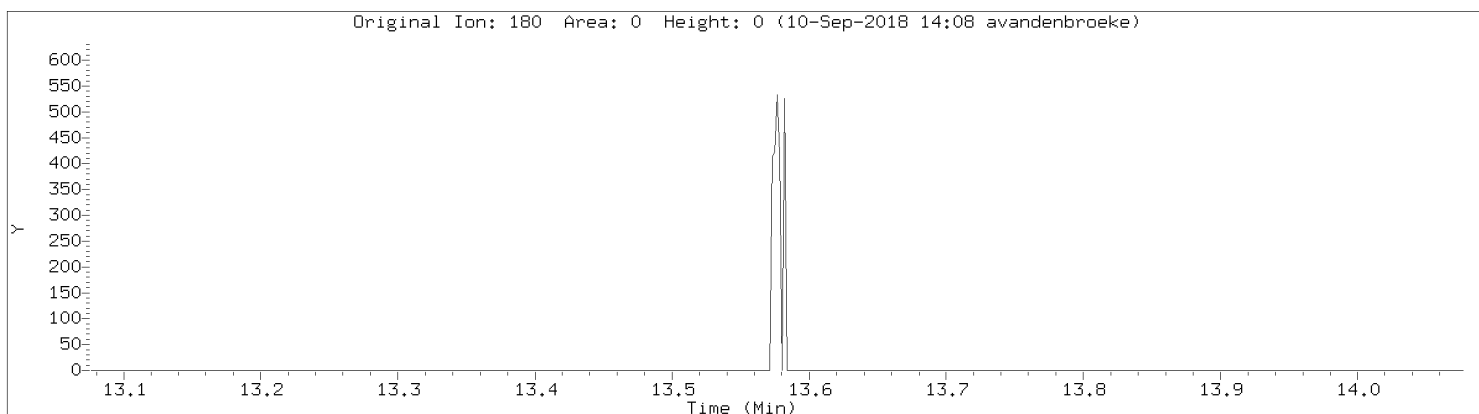
Data File: \\192.168.10.12\chem\10airH.i\091018.B\25303.D
Injection Date: 10-SEP-2018 10:59
Instrument: 10airH.i
Lab Sample ID: CA11

Compound: m&p-Xylene
CAS Number: 7816-60-0

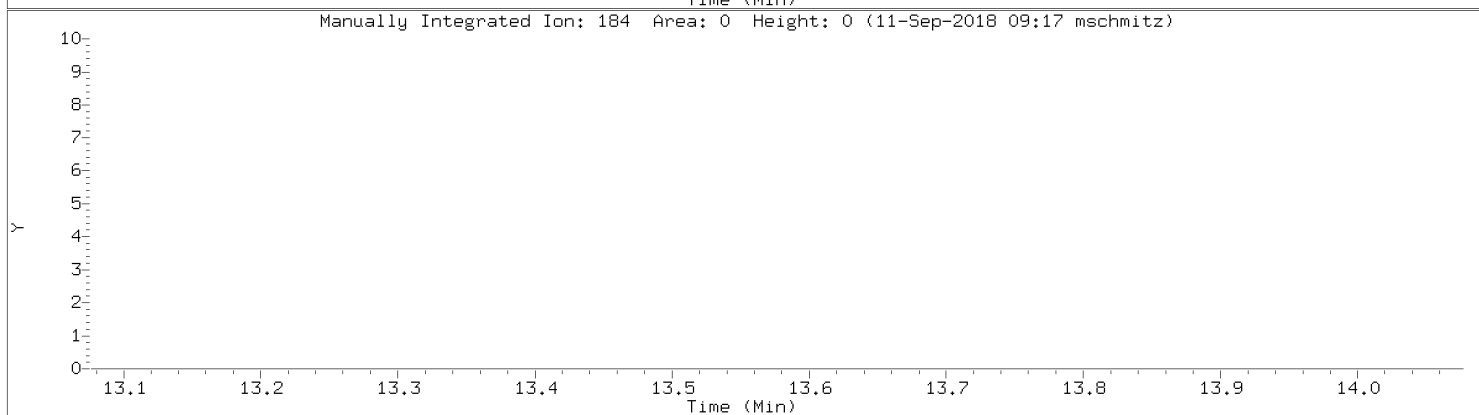
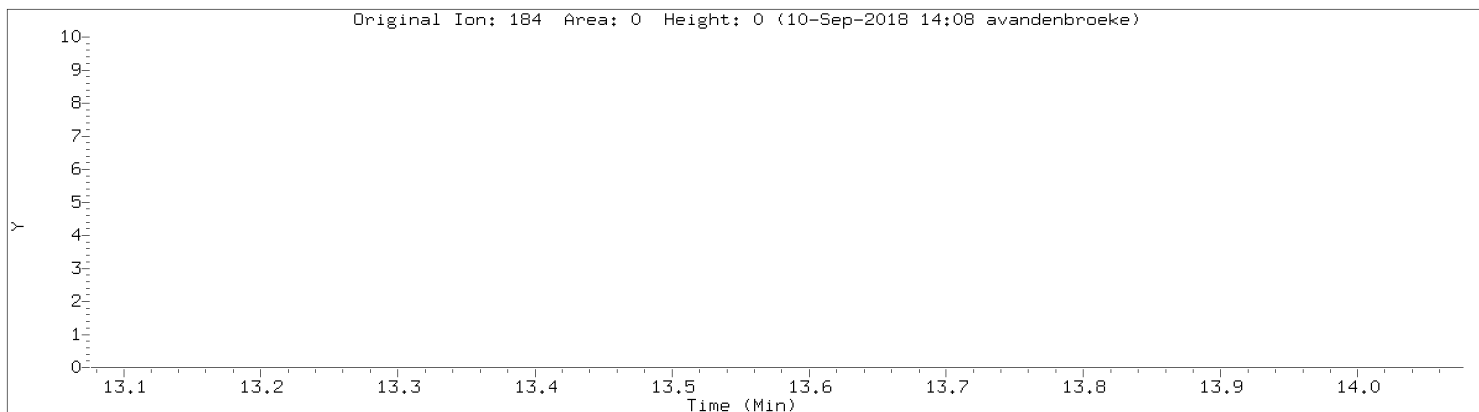


Data File: \\192.168.10.12\chem\10airH.i\091018.B\25303.D
Injection Date: 10-SEP-2018 10:59
Instrument: 10airH.i
Lab Sample ID: CA11

Compound: 1,2,4-Trichlorobenzene
CAS Number: 95-63-6

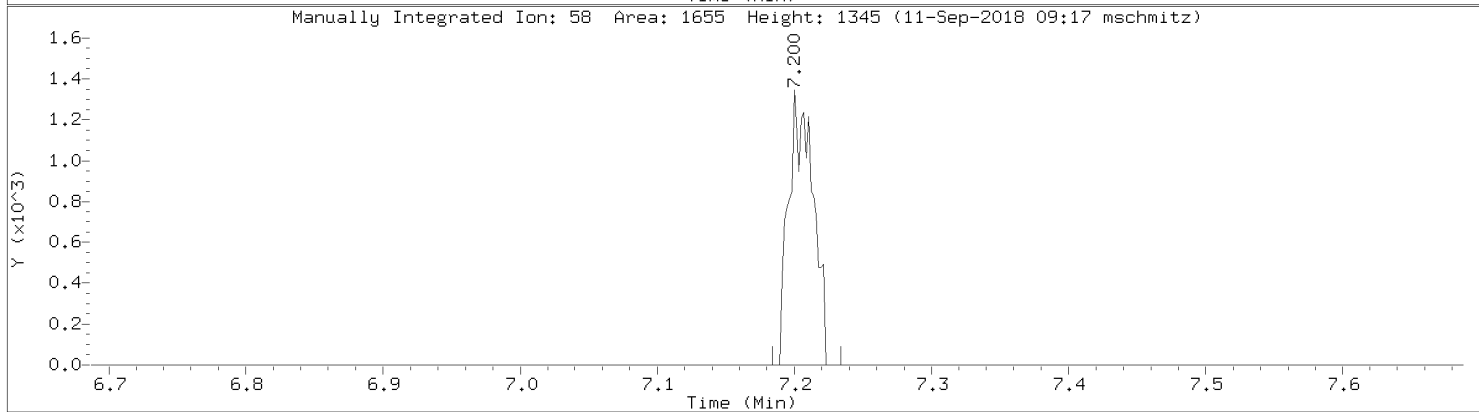
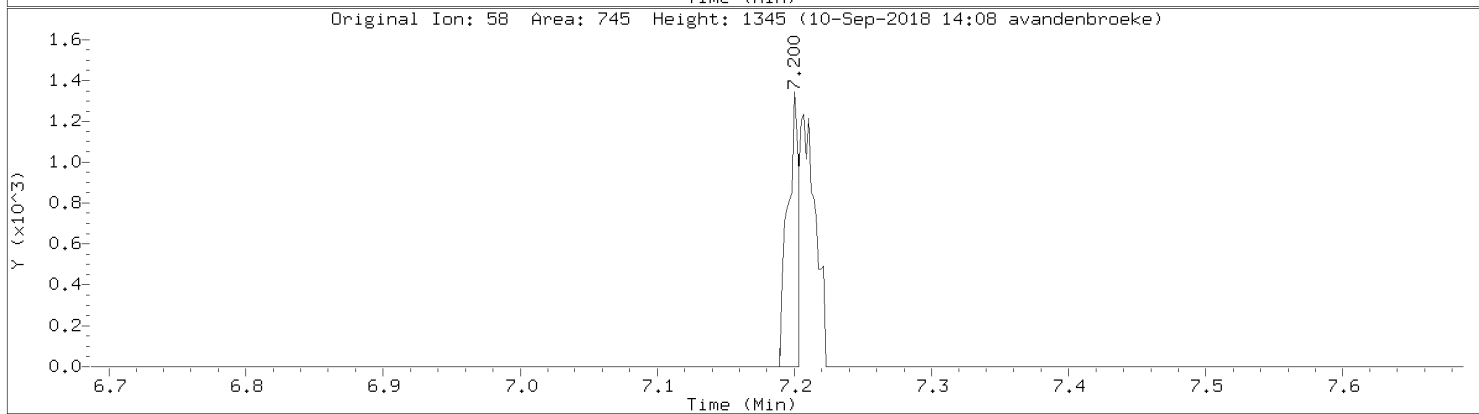
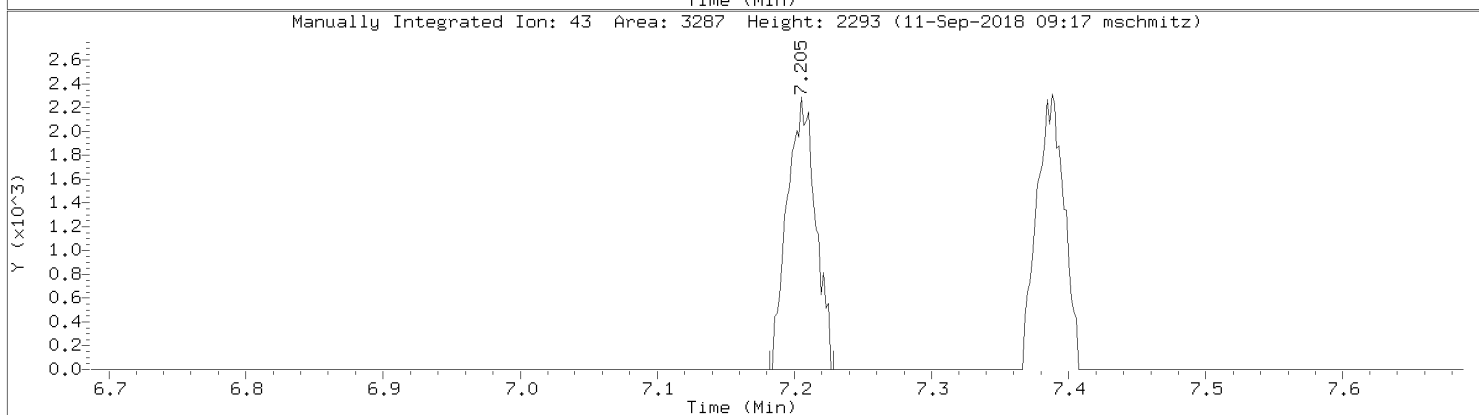
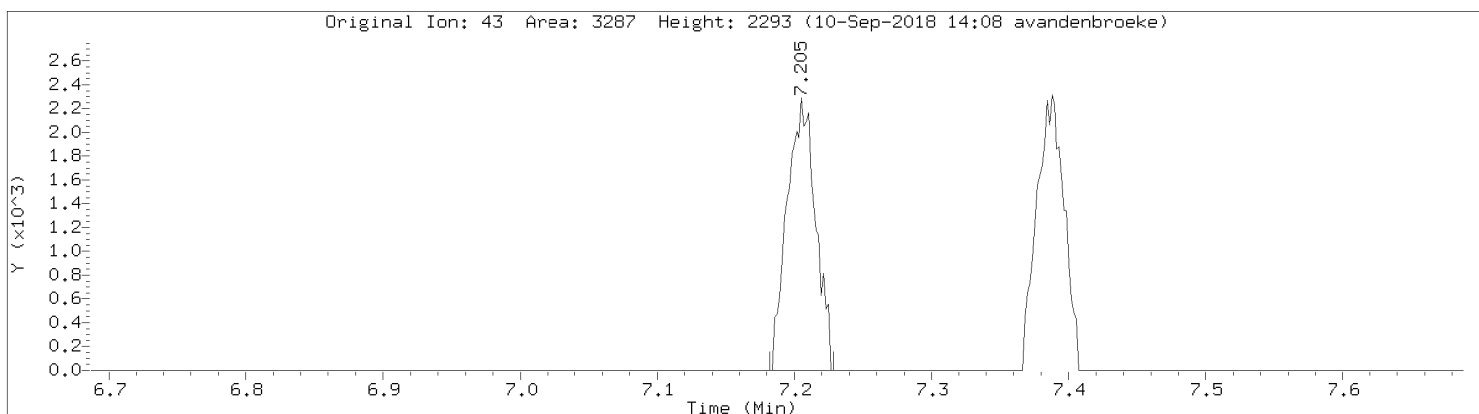


Data File: \\192.168.10.12\chem\10airH.i\091018.B\25303.D
Injection Date: 10-SEP-2018 10:59
Instrument: 10airH.i
Lab Sample ID: CA11



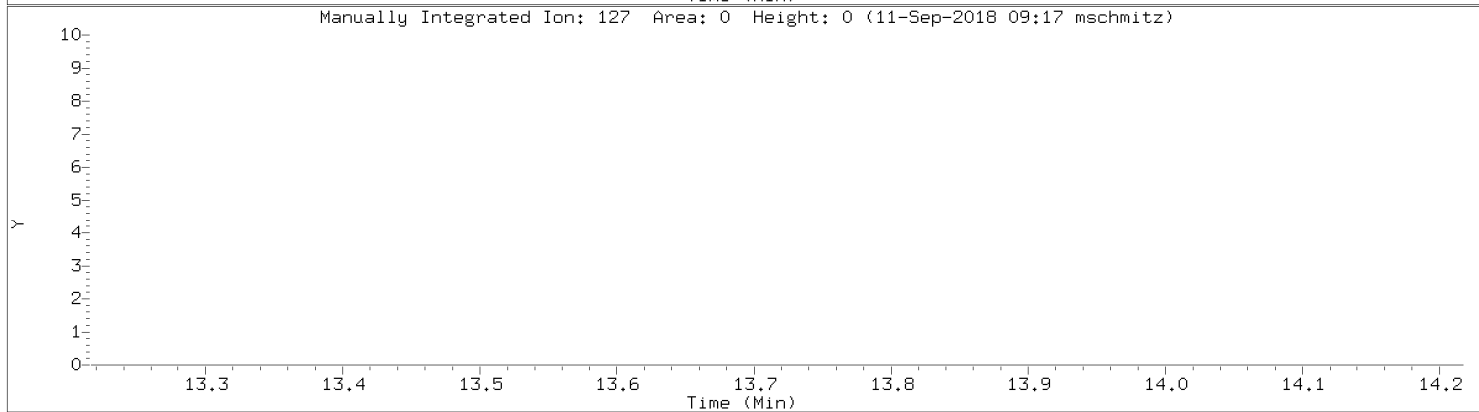
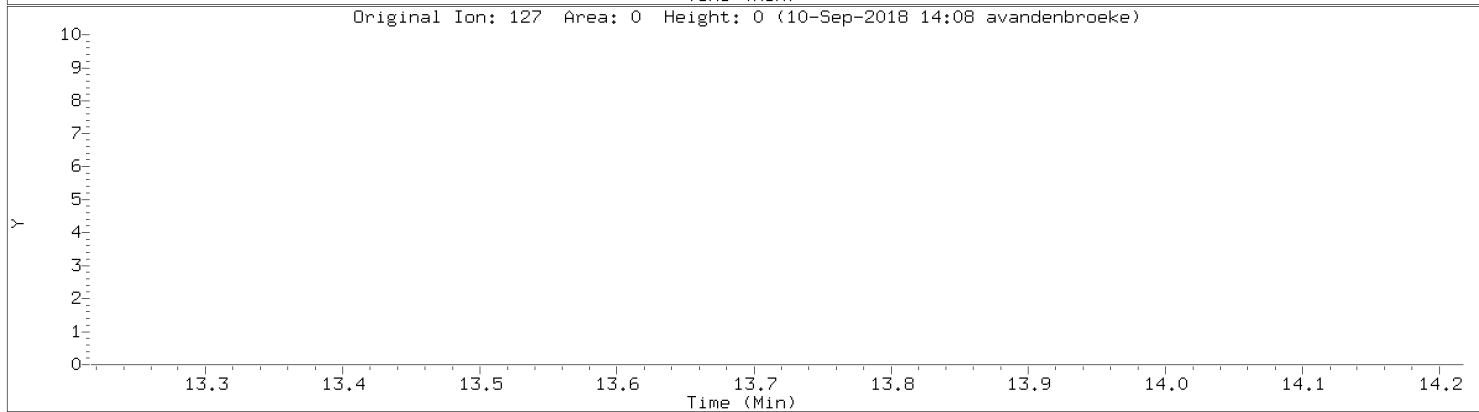
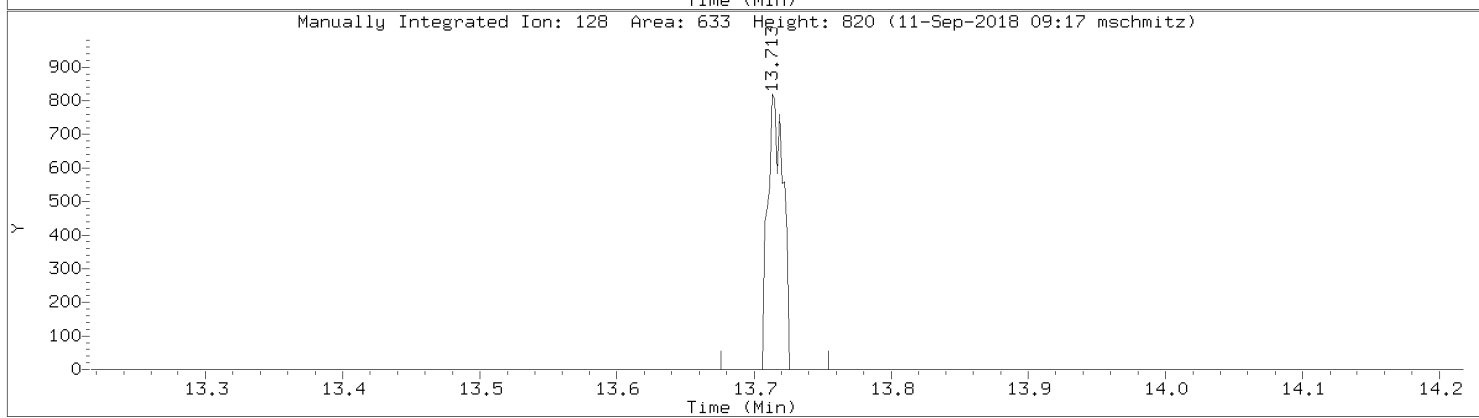
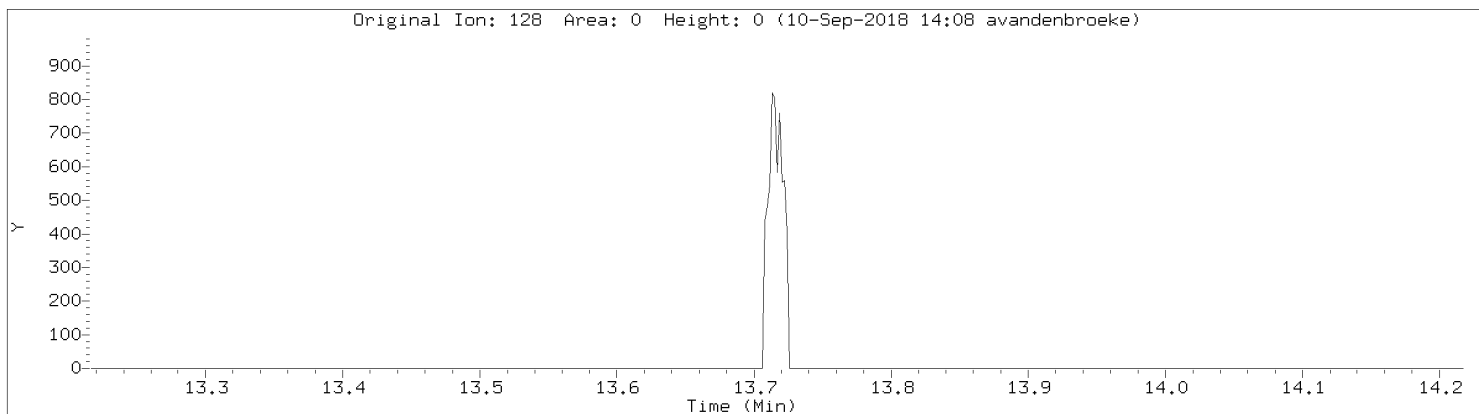
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Injection Date: 10-SEP-2018 10:59
Instrument: 10airH.i
Lab Sample ID: CA11

Compound: Methyl Butyl Ketone
CAS Number: 591-78-6



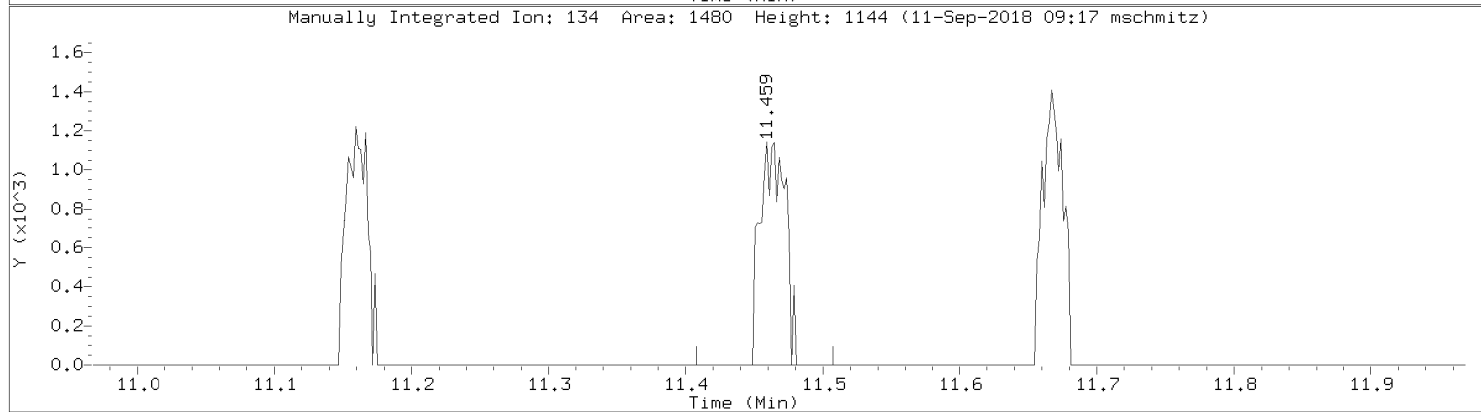
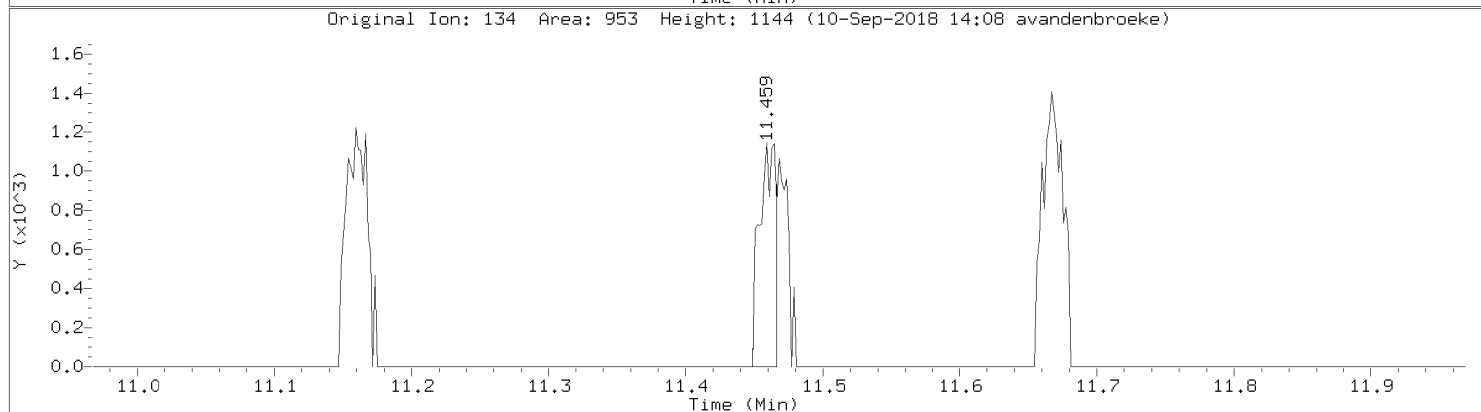
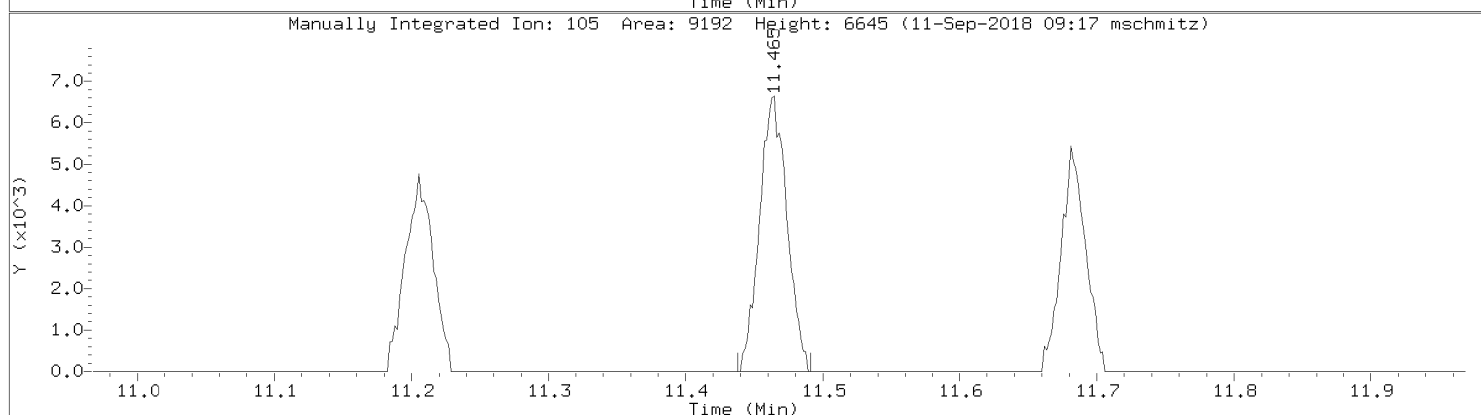
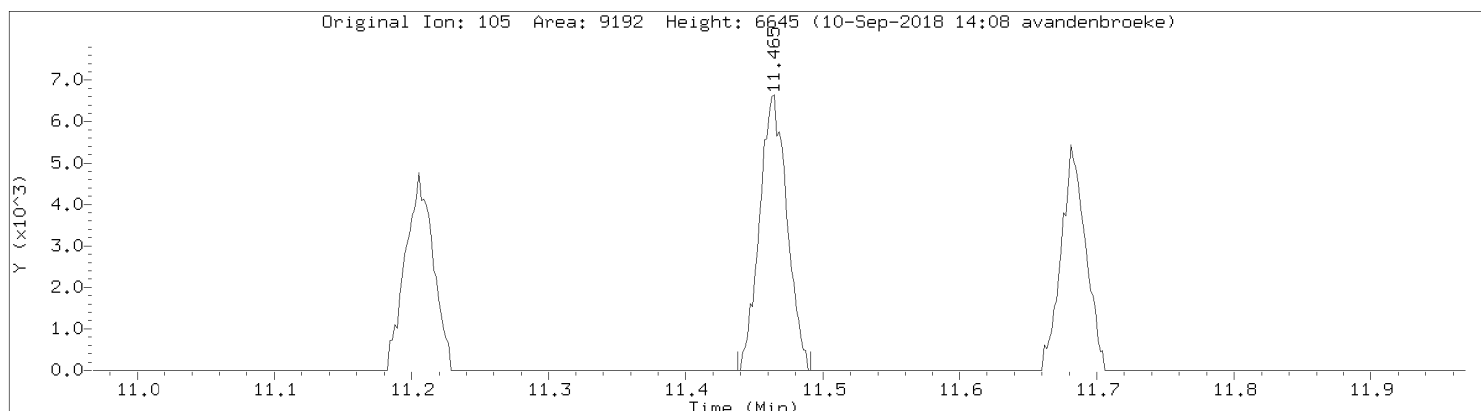
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Injection Date: 10-SEP-2018 10:59
Instrument: 10airH.i
Lab Sample ID: CA11

Compound: Naphthalene
CAS Number: 91-20-3



Data File: \\192.168.10.12\chem\10airH.i\091018.B\25303.D
Injection Date: 10-SEP-2018 10:59
Instrument: 10airH.i
Lab Sample ID: CA11

Compound: Sec- Butylbenzene
CAS Number: 135-98-8



Pace Analytical Services, Inc.

TO15 Analysis (UNIX)

Data file : \\192.168.10.12\chem\10airH.i\091018.B\25304.D
 Lab Smp Id: CAL2
 Inj Date : 10-SEP-2018 11:26
 Operator : AFV Inst ID: 10airH.i
 Smp Info :
 Misc Info :
 Comment : Volatile Organic COMPOUNDS in Air
 Method : \\192.168.10.12\chem\10airH.i\091018.B\TO15_253-18.m
 Meth Date : 11-Sep-2018 09:17 10airH.i Quant Type: ISTD
 Cal Date : 10-SEP-2018 10:59 Cal File: 25303.D
 Als bottle: 4 Calibration Sample, Level: 2
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: all.sub
 Target Version: 4.14
 Processing Host: 10MNAIRWKS10

Concentration Formula: Amt * DF * Uf * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
							CAL-AMT (ppbv)	ON-COL (ppbv)
1 1,1-Difluoroethane	65		2.929	2.929	(0.537)	5194	0.20000	0.225
2 Chlorodifluoromethane	67		2.947	2.947	(0.541)	2475	0.20000	0.228 (Q)
3 Propylene	41		2.953	2.953	(0.542)	4205	0.20000	0.217
4 Dichlorodifluoromethane	85		2.970	2.970	(0.545)	26038	0.20000	0.233
5 Dichlorotetrafluoroethane	85		3.043	3.043	(0.558)	21684	0.20000	0.244
6 Chloromethane	50		3.048	3.048	(0.559)	6969	0.20000	0.236
7 Vinyl chloride	62		3.114	3.114	(0.571)	6766	0.20000	0.222
8 1,3-Butadiene	54		3.148	3.148	(0.577)	4374	0.20000	0.223
9 Bromomethane	94		3.267	3.267	(0.599)	8149	0.20000	0.227
10 Chloroethane	64		3.311	3.311	(0.607)	3266	0.20000	0.226
11 Ethanol	45		3.323	3.323	(0.610)	10391	1.00000	1.13
12 Vinyl Bromide	106		3.418	3.418	(0.627)	8137	0.20000	0.232
13 Isopentane	43		3.434	3.434	(0.630)	5426	0.20000	0.229
14 Freon 123	83		3.467	3.467	(0.636)	17483	0.20000	0.231
15 Trichlorofluoromethane	101		3.494	3.494	(0.641)	18771	0.20000	0.236
16 Acrolein	56		3.496	3.496	(0.641)	6000	0.50000	0.591
17 Acetone	43		3.519	3.519	(0.645)	47256	1.00000	1.39
18 Isopropyl Alcohol	45		3.544	3.544	(0.650)	44969	1.00000	1.20
19 1,1-Dichloroethene	61		3.709	3.709	(0.680)	12320	0.20000	0.233
20 Acrylonitrile	53		3.714	3.714	(0.681)	12333	0.50000	0.569
21 Tert Butyl Alcohol (TBA)	59		3.746	3.746	(0.687)	15821	0.20000	0.232
22 Methyl Acetate	43		3.744	3.744	(0.687)	14032	0.20000	0.245
23 Freon 113	101		3.741	3.741	(0.686)	21372	0.20000	0.244

Compounds	QUANT	SIG						AMOUNTS	
			MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ppbv)	ON-COL (ppbv)
24 Allyl Chloride	76		3.817	3.817	(0.700)	3227	0.20000	0.218	
25 Methylene chloride	49		3.819	3.819	(0.701)	49227	1.00000	0.721	
26 Carbon Disulfide	76		3.925	3.925	(0.720)	23857	0.20000	0.236	
27 Methyl Tert Butyl Ether	73		4.085	4.085	(0.749)	17779	0.20000	0.207	
28 trans-1,2-dichloroethene	96		4.090	4.090	(0.750)	9006	0.20000	0.223	
29 Vinyl Acetate	43		4.163	4.163	(0.764)	11824	0.20000	0.192	
30 1,1-Dichloroethane	63		4.213	4.213	(0.773)	15201	0.20000	0.233	
31 Methyl Ethyl Ketone	72		4.335	4.335	(0.795)	4063	0.20000	0.220	
32 Di-isopropyl Ether	45		4.360	4.360	(0.800)	17343	0.20000	0.216	
33 n-Hexane	57		4.360	4.360	(0.800)	9570	0.20000	0.213 (M)	
34 Ethyl Acetate	43		4.491	4.491	(0.824)	12280	0.20000	0.216	
35 cis-1,2-Dichloroethene	96		4.498	4.498	(0.825)	8964	0.20000	0.216	
36 Ethyl Tert-Butyl Ether	59		4.585	4.585	(0.841)	16837	0.20000	0.196	
37 Chloroform	83		4.681	4.681	(0.859)	21183	0.20000	0.237 (Q)	
38 Tetrahydrofuran	42		4.765	4.765	(0.874)	4728	0.20000	0.200	
39 1,1,1-Trichloroethane	97		4.999	4.999	(0.917)	20643	0.20000	0.234	
40 1,2-Dichloroethane	62		5.077	5.077	(0.931)	12362	0.20000	0.232	
41 Benzene	78		5.237	5.237	(0.961)	23583	0.20000	0.221	
42 Carbon tetrachloride	117		5.254	5.254	(0.964)	20408	0.20000	0.227	
43 Cyclohexane	56		5.281	5.281	(0.969)	7041	0.20000	0.187	
44 Tert Amyl Methyl Ether	73		5.391	5.391	(0.989)	14780	0.20000	0.183	
* 45 1,4-Difluorobenzene	114		5.451	5.451	(1.000)	1146060	10.0000		
46 2,2,4-Trimethylpentane	57		5.545	5.545	(1.017)	29819	0.20000	0.218	
47 Heptane	43		5.677	5.677	(1.041)	8089	0.20000	0.202	
48 Trichloroethene	130		5.785	5.785	(1.061)	12740	0.20000	0.220	
49 1,2-Dichloropropane	63		5.829	5.829	(1.069)	8974	0.20000	0.233	
50 Methyl methacrylate	69		5.826	5.826	(1.069)	7437	0.20000	0.213	
51 1,4-Dioxane	88		5.892	5.892	(1.081)	12430	0.50000	0.518	
52 Bromodichloromethane	83		5.987	5.987	(1.098)	19591	0.20000	0.230	
53 Methylcyclohexane	98		6.257	6.257	(1.148)	3850	0.20000	0.273	
54 Methyl Isobutyl Ketone	43		6.346	6.346	(1.164)	10015	0.20000	0.189 (M)	
55 cis-1,3-Dichloropropene	75		6.417	6.417	(1.177)	11089	0.20000	0.196	
56 trans-1,3-Dichloropropene	75		6.861	6.861	(1.258)	8145	0.20000	0.308	
57 Toluene	91		6.958	6.958	(1.276)	20747	0.20000	0.185	
58 1,1,2-Trichloroethane	97		7.084	7.084	(1.299)	10681	0.20000	0.221	
59 Methyl Butyl Ketone	43		7.198	7.198	(0.852)	6712	0.20000	0.166	
60 n-Octane	43		7.386	7.386	(0.874)	7133	0.20000	0.166	
61 Dibromochloromethane	129		7.620	7.620	(0.902)	17847	0.20000	0.214	
62 Tetrachloroethene	166		7.704	7.704	(0.912)	17077	0.20000	0.234	
63 1,2-Dibromoethane	107		7.821	7.821	(0.926)	15065	0.20000	0.215	
* 64 Chlorobenzene - d5	117		8.449	8.449	(1.000)	918412	10.0000		
65 Chlorobenzene	112		8.495	8.495	(1.005)	23371	0.20000	0.228	
66 Ethyl Benzene	91		8.713	8.713	(1.031)	23577	0.20000	0.185	
67 m&p-Xylene	91		8.896	8.896	(1.053)	34746	0.40000	0.358 (M)	
68 n-Nonane	43		9.233	9.233	(1.093)	5488	0.20000	0.318	
69 Styrene	104		9.301	9.301	(1.101)	9252	0.20000	0.317	
70 o-Xylene	91		9.336	9.336	(1.105)	19549	0.20000	0.189	
71 Bromoform	173		9.409	9.409	(1.114)	12725	0.20000	0.195	
72 1,1,2,2-Tetrachloroethane	83		9.750	9.750	(1.154)	16416	0.20000	0.212	
73 Isopropylbenzene	105		9.883	9.883	(1.170)	19781	0.20000	0.326	
74 N-Propylbenzene	91		10.458	10.458	(1.238)	23530	0.20000	0.275	
75 4-Ethyltoluene	105		10.643	10.643	(1.260)	15283	0.20000	0.339	
76 1,3,5-Trimethylbenzene	105		10.712	10.712	(1.268)	15240	0.20000	0.251	
77 n-Decane	57		11.060	11.060	(2.029)	4135	0.20000	0.355 (Q)	

Compounds	QUANT SIG		AMOUNTS				
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ppbv)	ON-COL (ppbv)
78 Tert-Butyl Benzene	119	11.163	11.163	(1.321)	14688	0.20000	0.260
79 1,2,4-Trimethylbenzene	105	11.203	11.203	(1.326)	14253	0.20000	0.246
80 Sec- Butylbenzene	105	11.464	11.464	(1.357)	19108	0.20000	0.284
81 1,3-Dichlorobenzene	146	11.495	11.495	(1.360)	12193	0.20000	0.183
82 Benzyl Chloride	91	11.569	11.569	(1.369)	6574	0.20000	0.421
83 1,4-Dichlorobenzene	146	11.629	11.629	(1.376)	9500	0.20000	0.310
84 p-Isopropyltoluene	119	11.668	11.668	(1.381)	15721	0.20000	0.310
85 1,2,3-Trimethylbenzene	105	11.684	11.684	(1.383)	14756	0.20000	0.254
86 1,2-Dichlorobenzene	146	11.935	11.935	(1.413)	10489	0.20000	0.329
87 N-Butylbenzene	91	12.116	12.116	(1.434)	9815	0.20000	0.375
88 1,2-Dibromo-3-Chloropropane	157	12.629	12.629	(1.495)	2785	0.20000	0.397
89 1,2,4-Trichlorobenzene	180	13.573	13.573	(1.606)	1026	0.20000	0.444 (M)
90 Naphthalene	128	13.711	13.711	(1.623)	1347	0.20000	0.450 (M)
91 Hexachlorobutadiene	225	13.823	13.823	(1.636)	5815	0.20000	0.338

QC Flag Legend

- Q - Qualifier signal failed the ratio test.
- M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10airH.i\091018.B\25304.D
 Report Date: 11-Sep-2018 09:17

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: 10airH.i
 Lab File ID: 25304.D
 Lab Smp Id: CAL2
 Analysis Type: VOA
 Quant Type: ISTD
 Operator: AFV
 Method File: \\192.168.10.12\chem\10airH.i\091018.B\TO15_253-18.m
 Misc Info:

Calibration Date: 10-SEP-2018
 Calibration Time: 13:22
 Level: LOW
 Sample Type: AIR

Test Mode:
 Use Initial Calibration Level 5.
 If Continuing Cal. use Initial Cal. Level 5

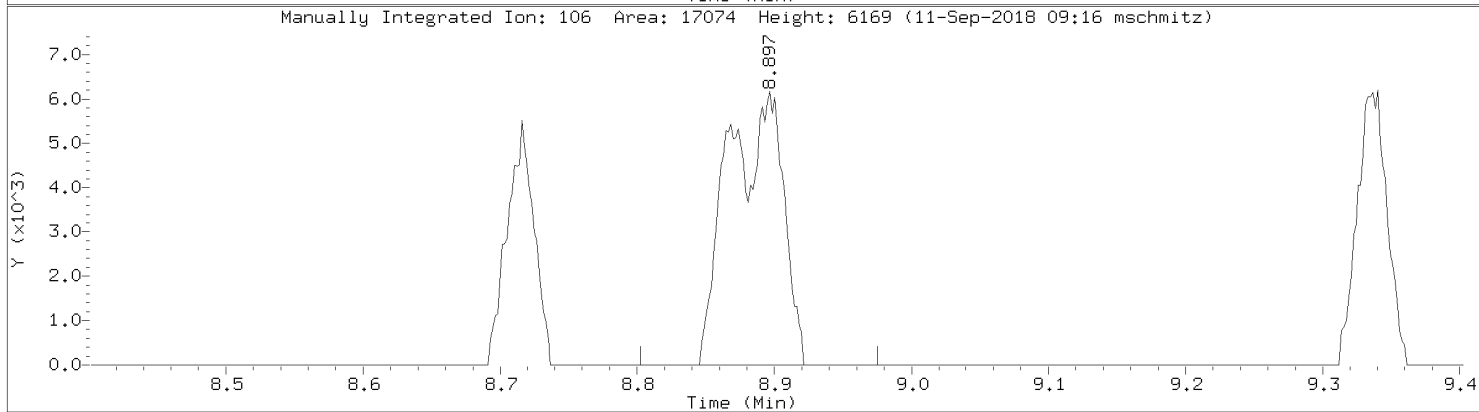
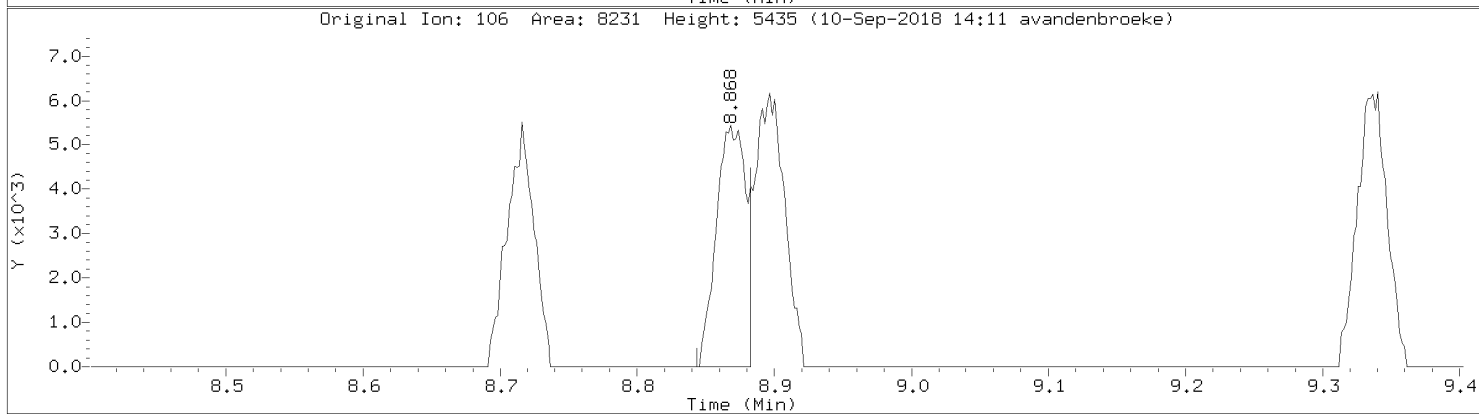
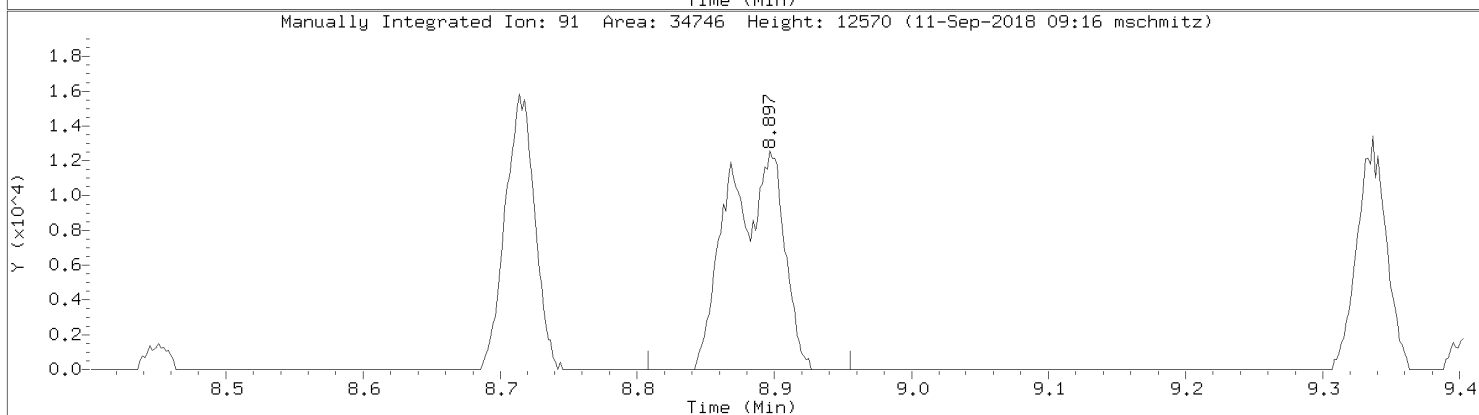
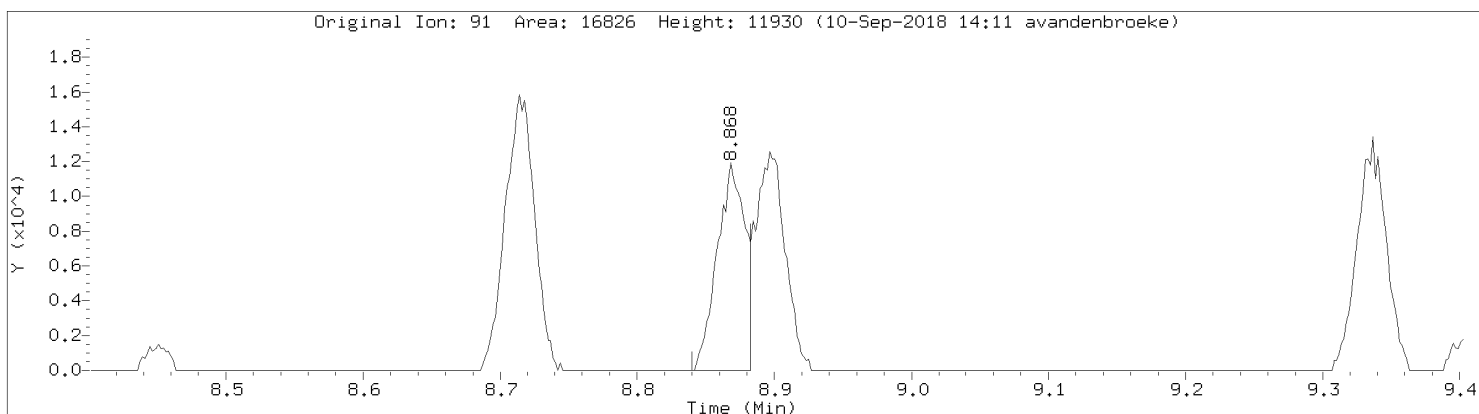
COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
45 1,4-Difluorobenze	1034069	620441	1447697	1146060	10.83
64 Chlorobenzene - d	896862	538117	1255607	918412	2.40

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
45 1,4-Difluorobenze	5.46	5.13	5.79	5.45	-0.06
64 Chlorobenzene - d	8.45	8.12	8.78	8.45	-0.04

AREA UPPER LIMIT = + 40% of internal standard area.
 AREA LOWER LIMIT = - 40% of internal standard area.
 RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
 RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

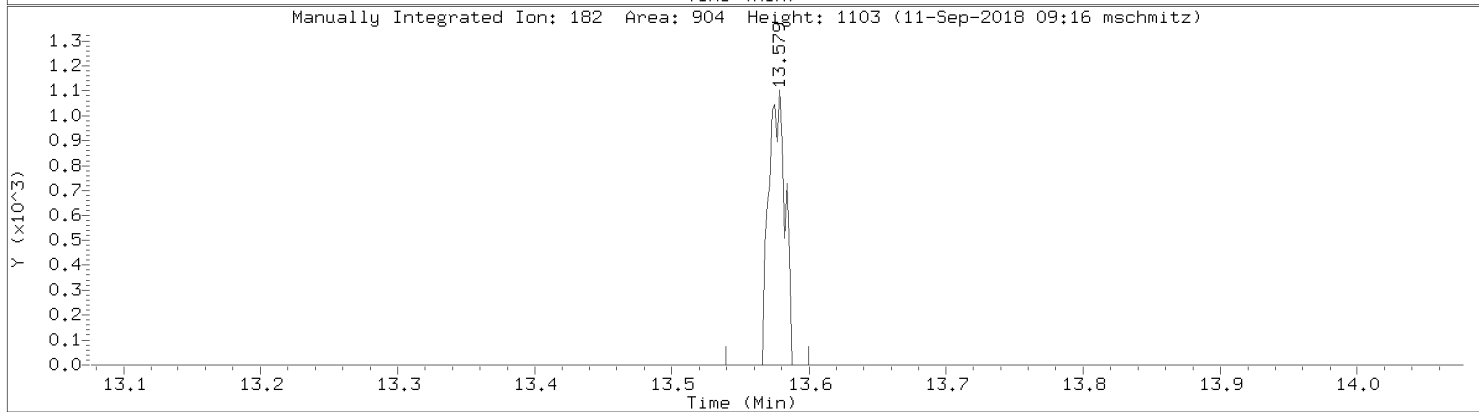
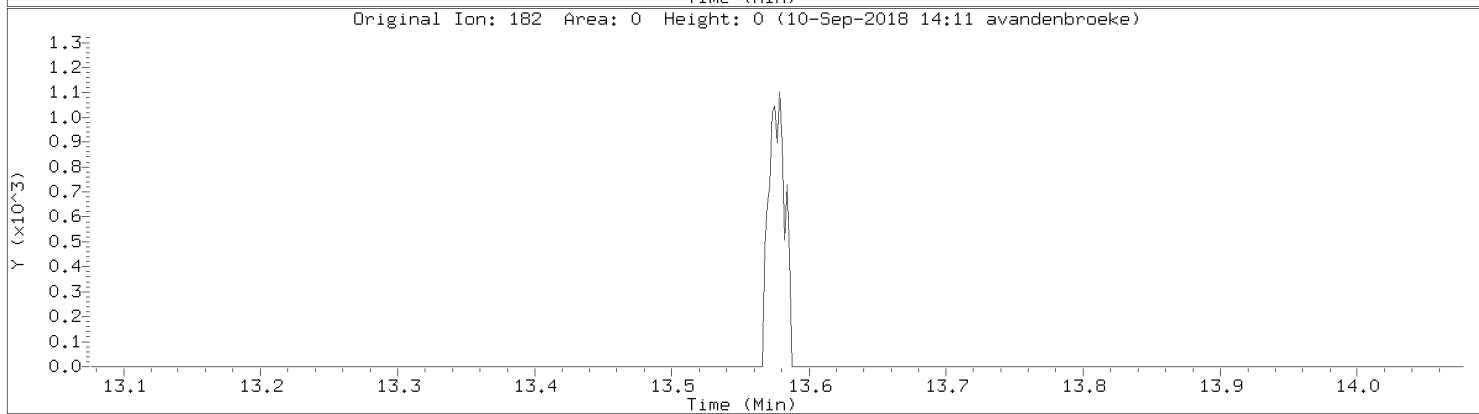
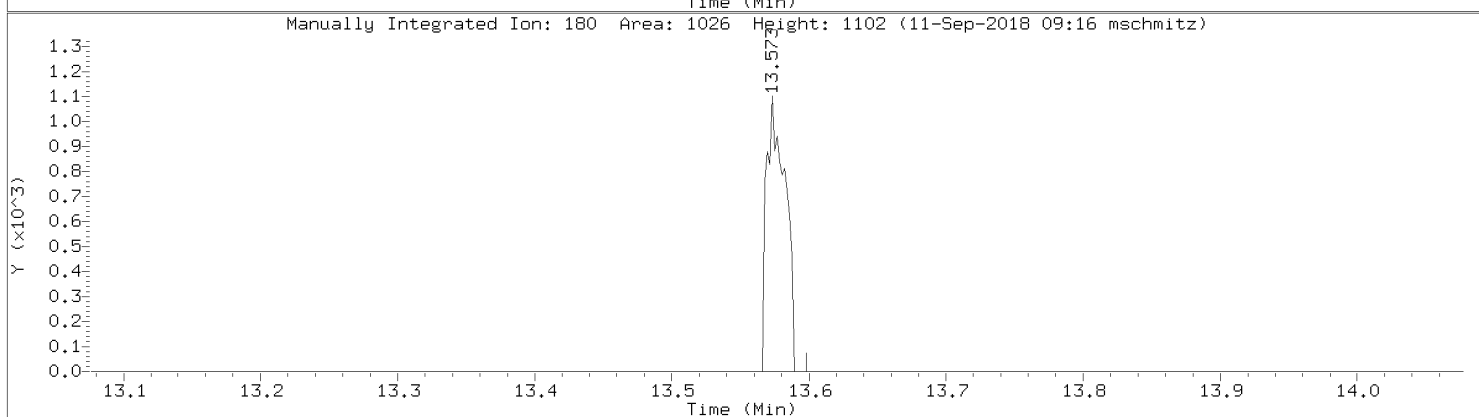
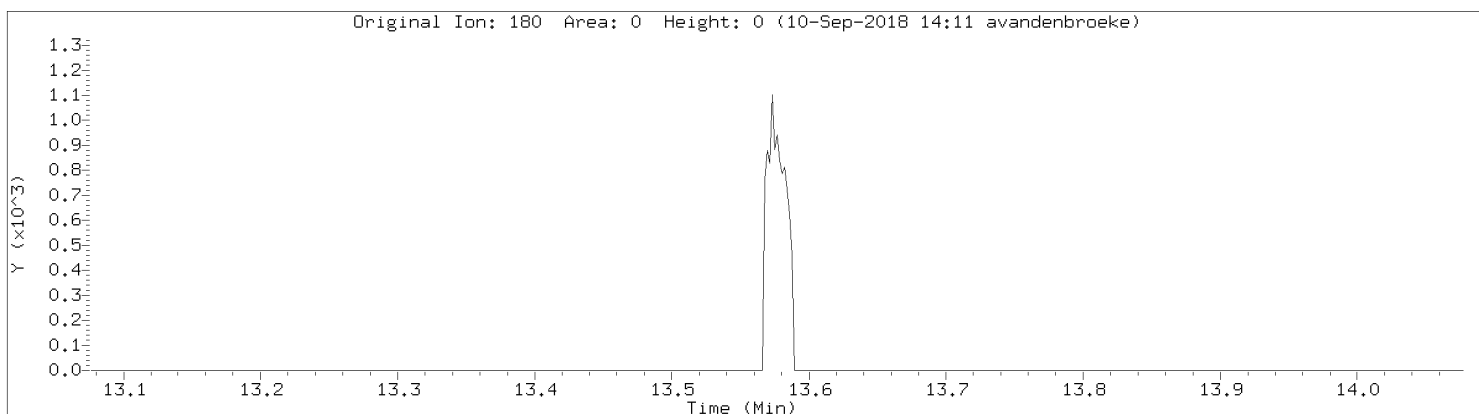
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Injection Date: 10-SEP-2018 11:26
Instrument: 10airH.i
Lab Sample ID: CAL2

Compound: m&p-Xylene
CAS Number: 7816-60-0

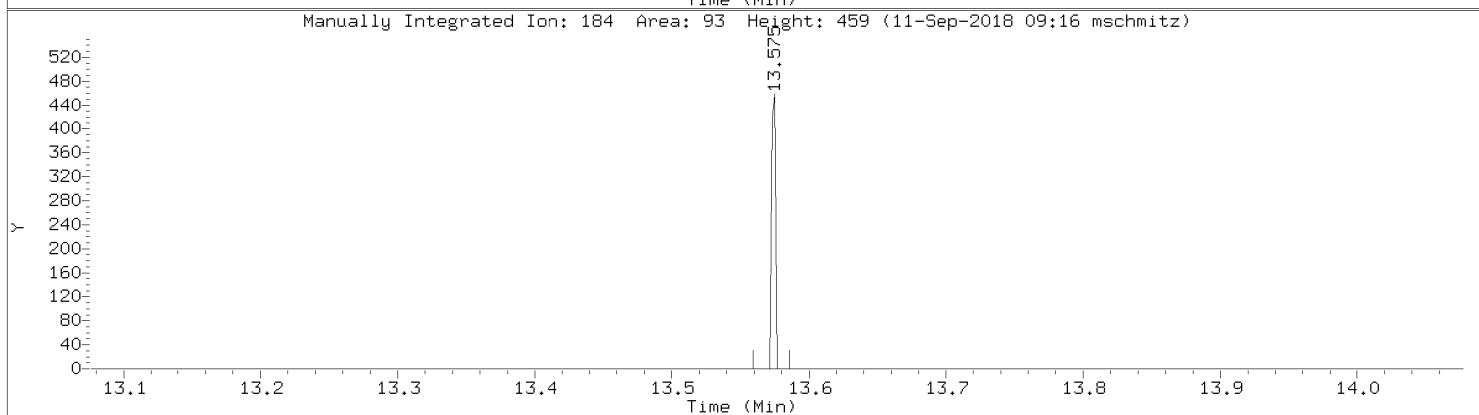
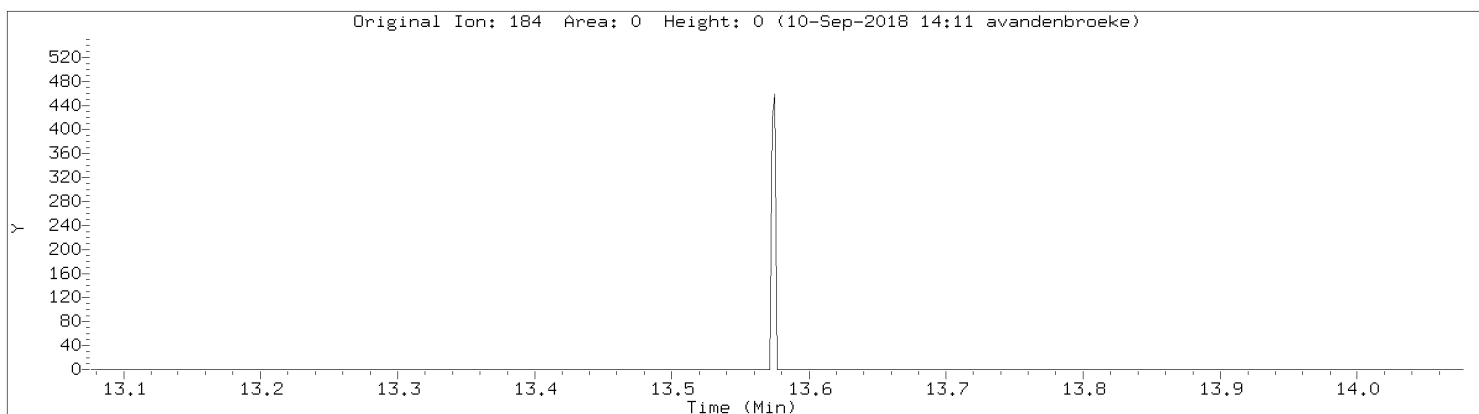


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Injection Date: 10-SEP-2018 11:26
Instrument: 10airH.i
Lab Sample ID: CAL2

Compound: 1,2,4-Trichlorobenzene
CAS Number: 95-63-6

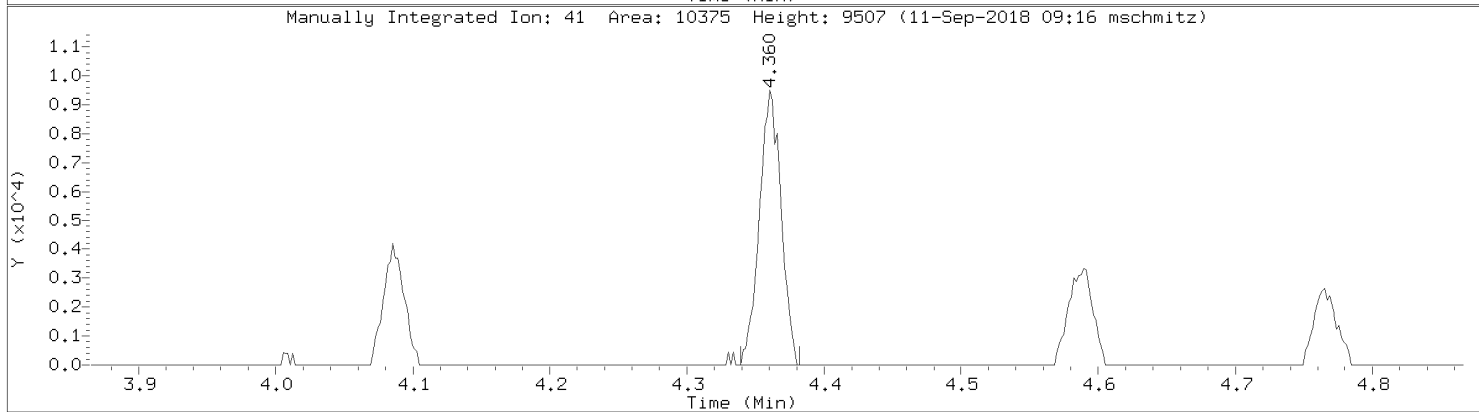
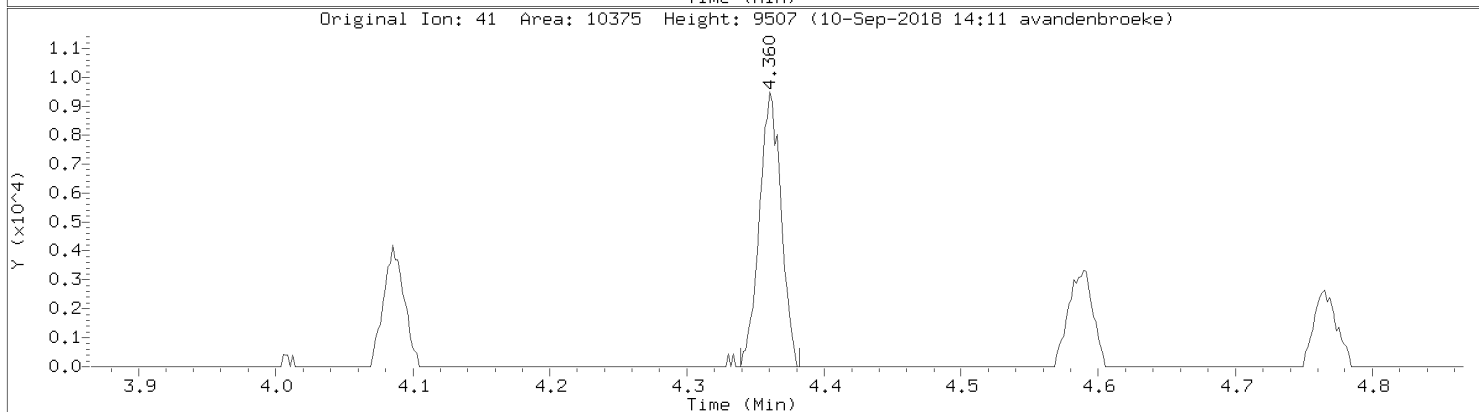
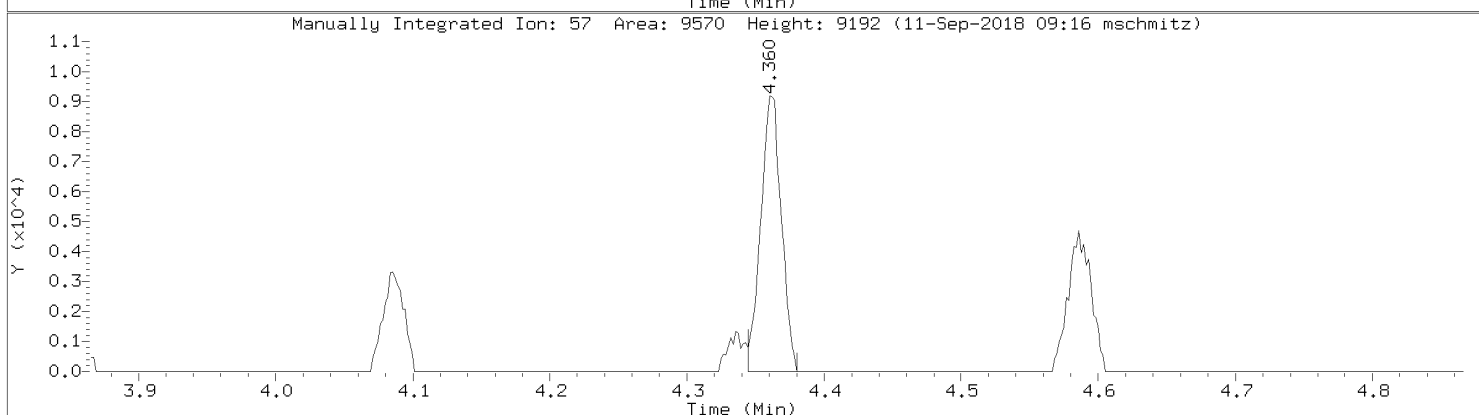
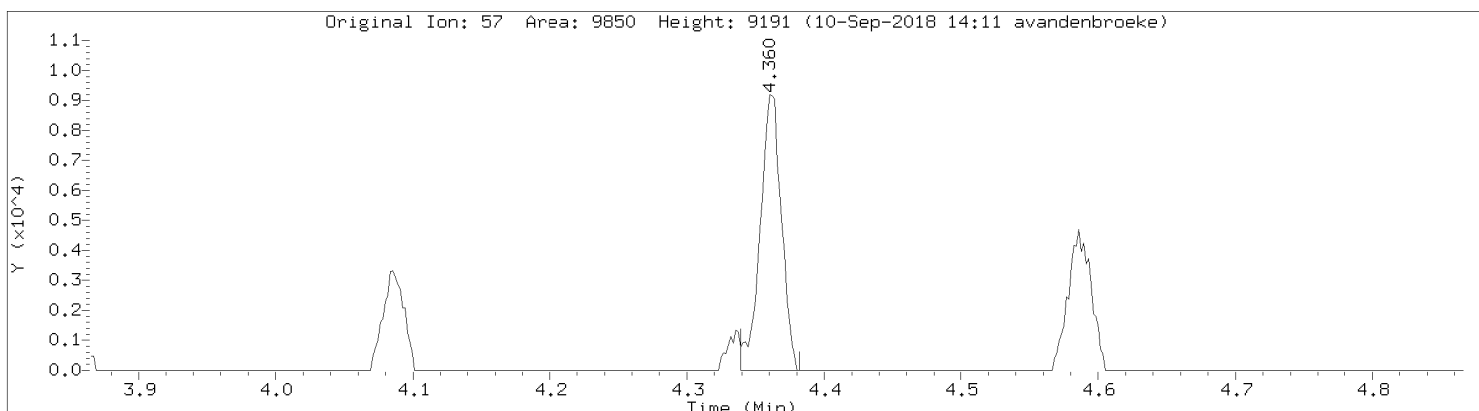


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Instrument: 10airH.i
Lab Sample ID: CAL2

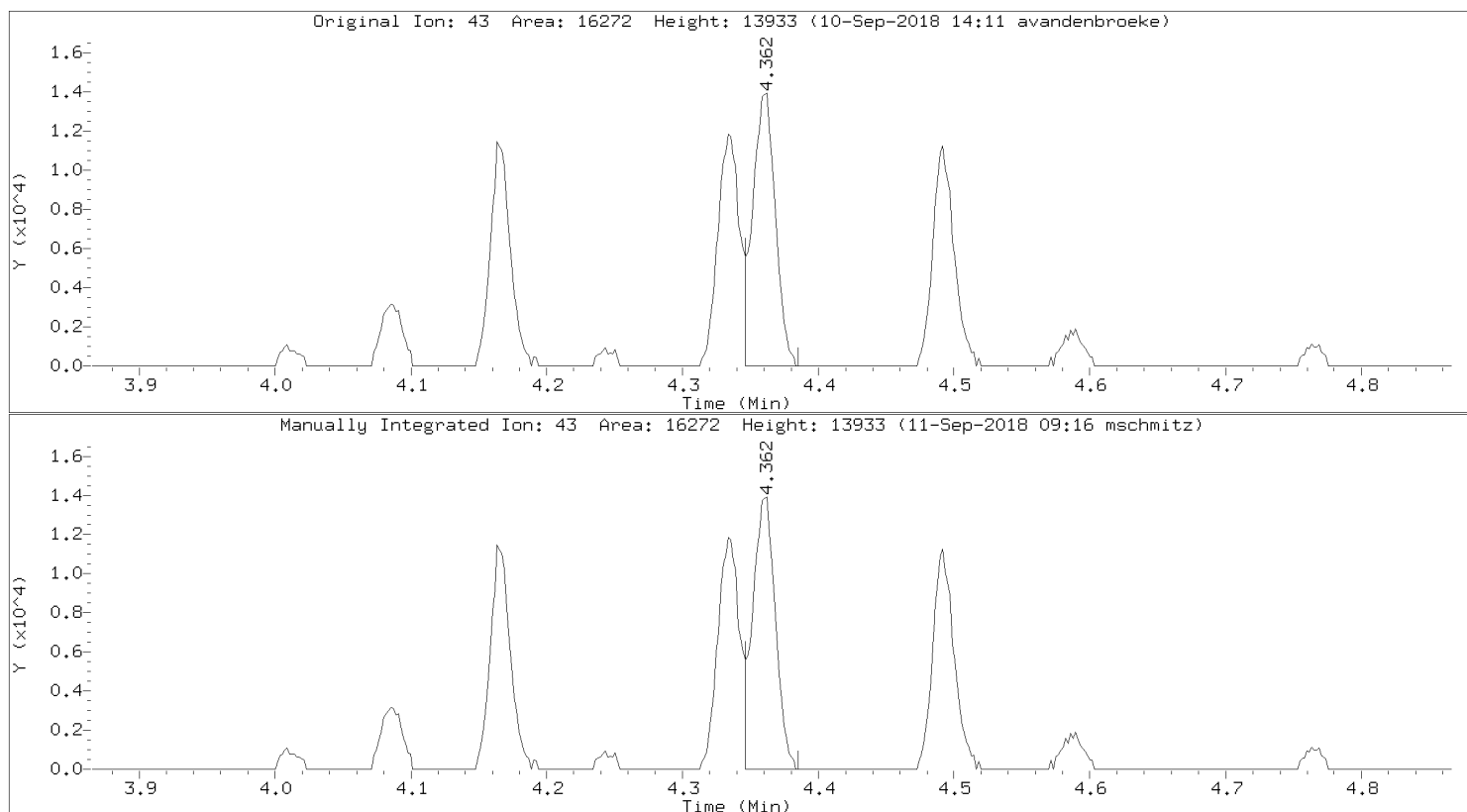


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Injection Date: 10-SEP-2018 11:26
Instrument: 10airH.i
Lab Sample ID: CAL2

Compound: n-Hexane
CAS Number: 110-54-3

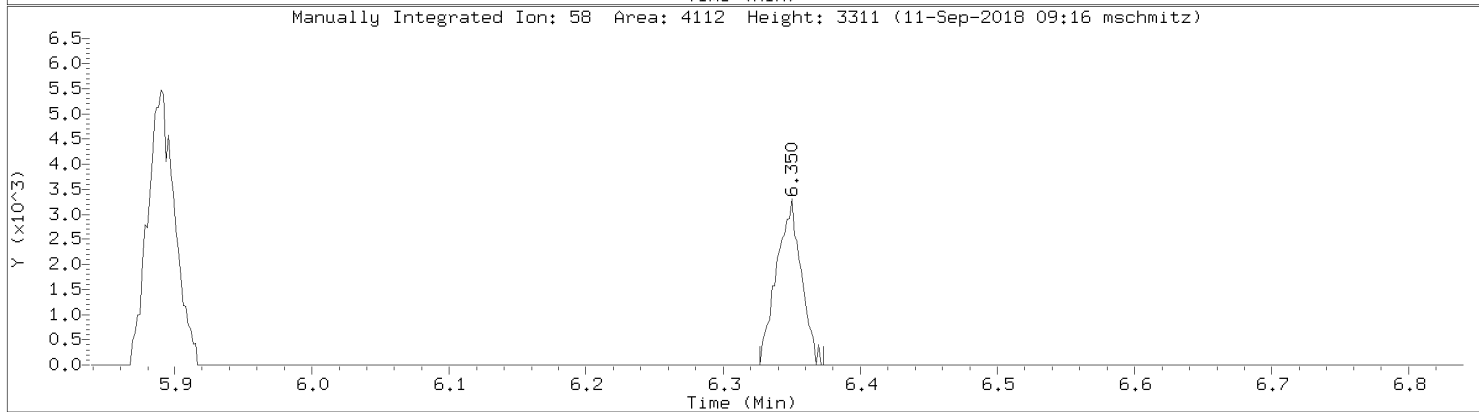
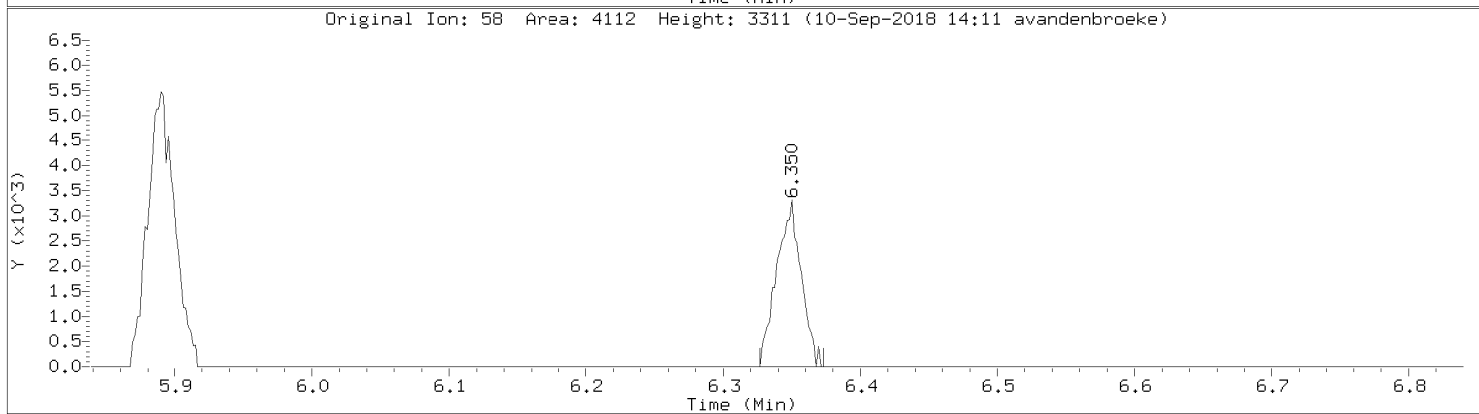
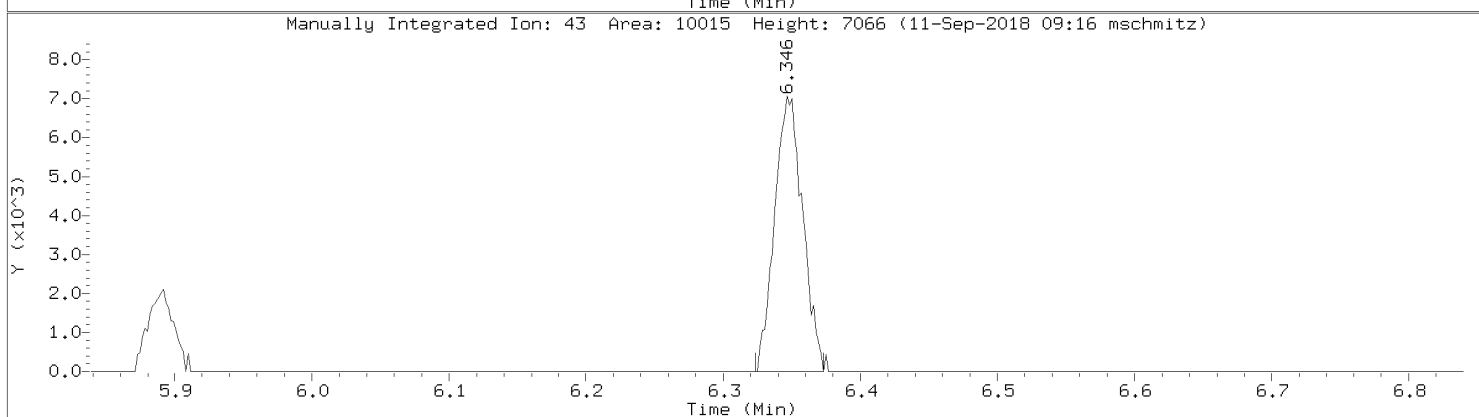
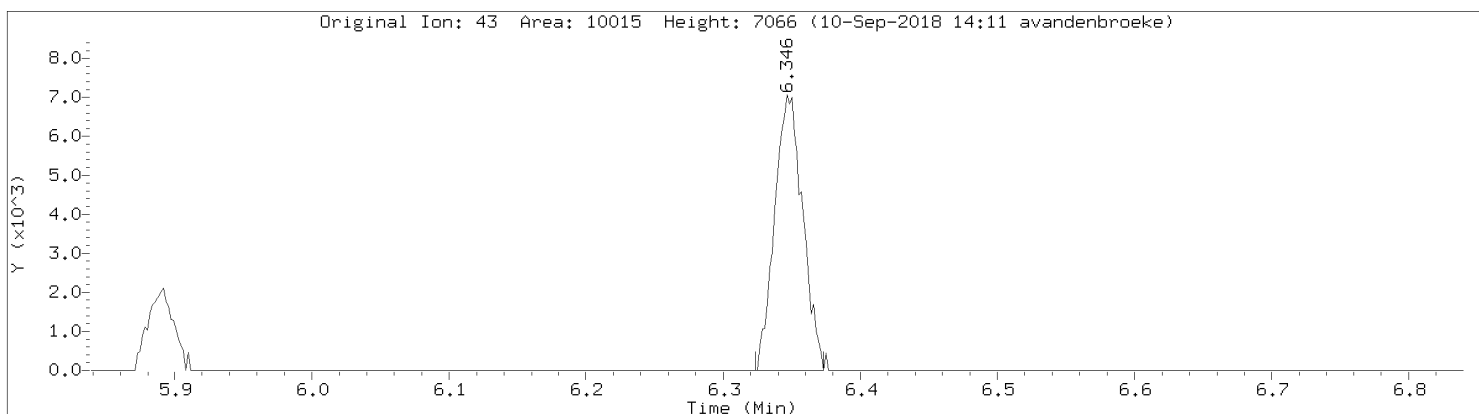


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Instrument: 10airH.i
Lab Sample ID: CAL2

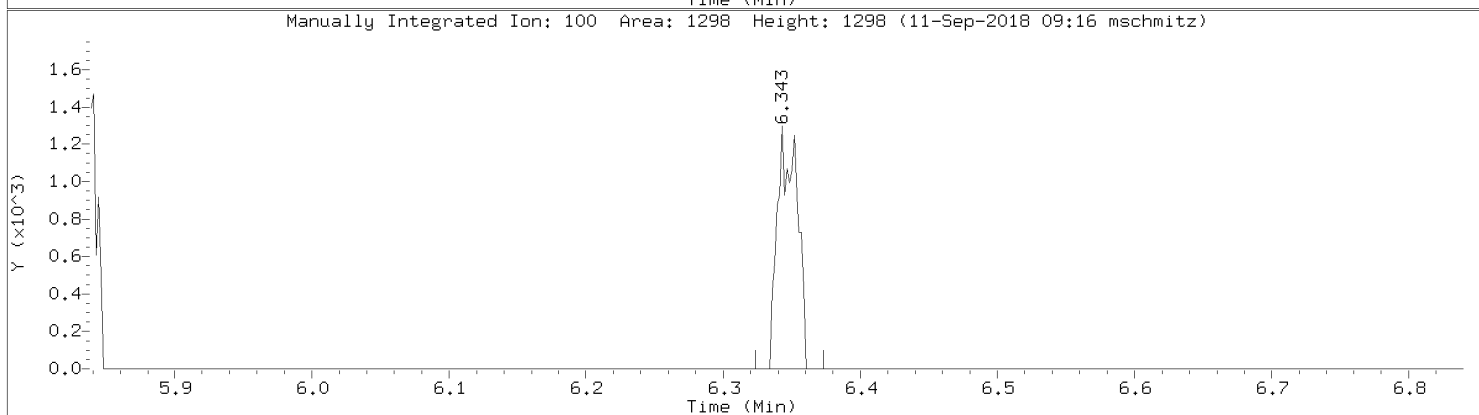
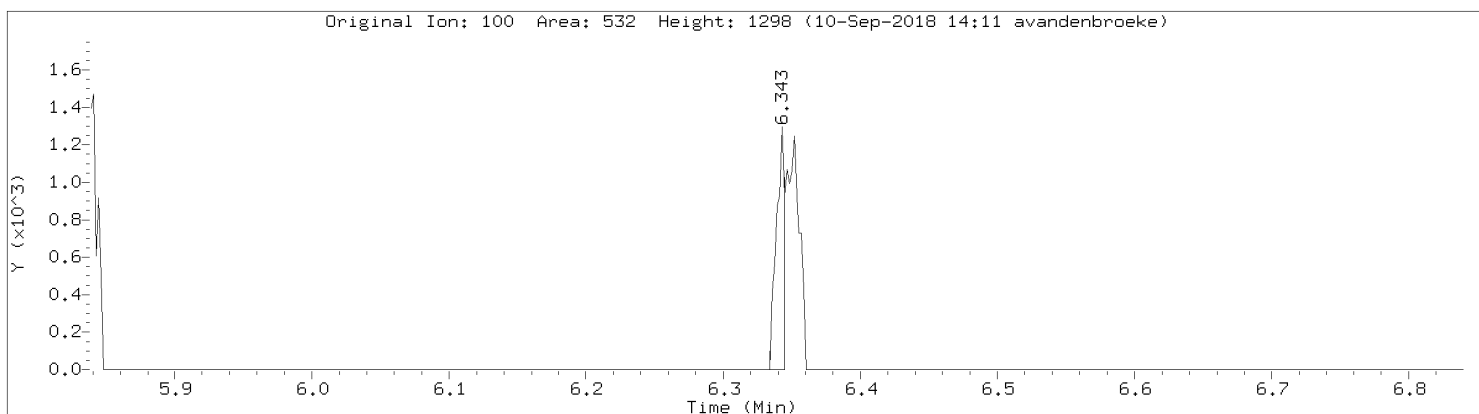


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Injection Date: 10-SEP-2018 11:26
Instrument: 10airH.i
Lab Sample ID: CAL2

Compound: Methyl Isobutyl Ketone
CAS Number: 108-10-1

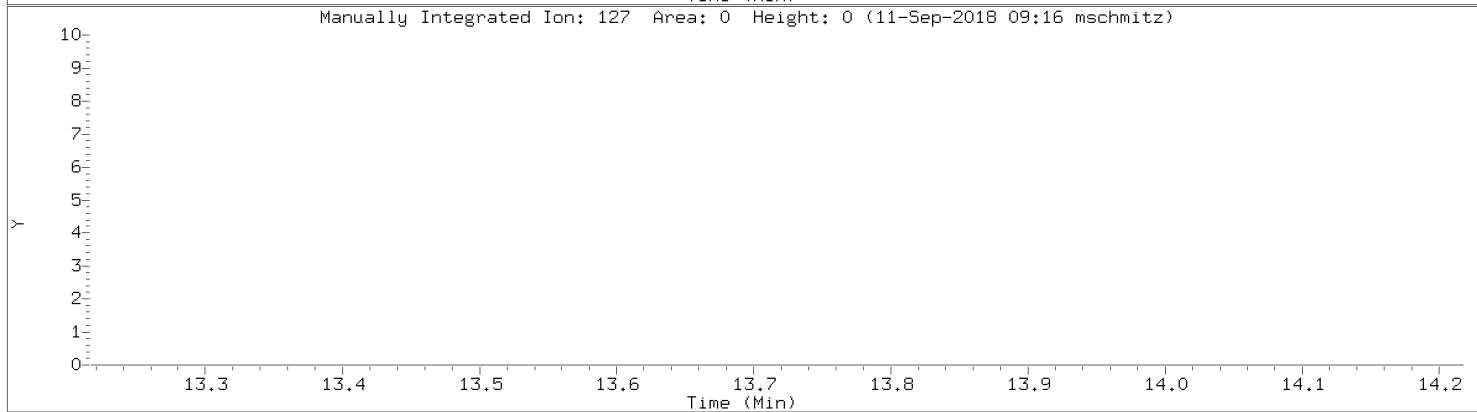
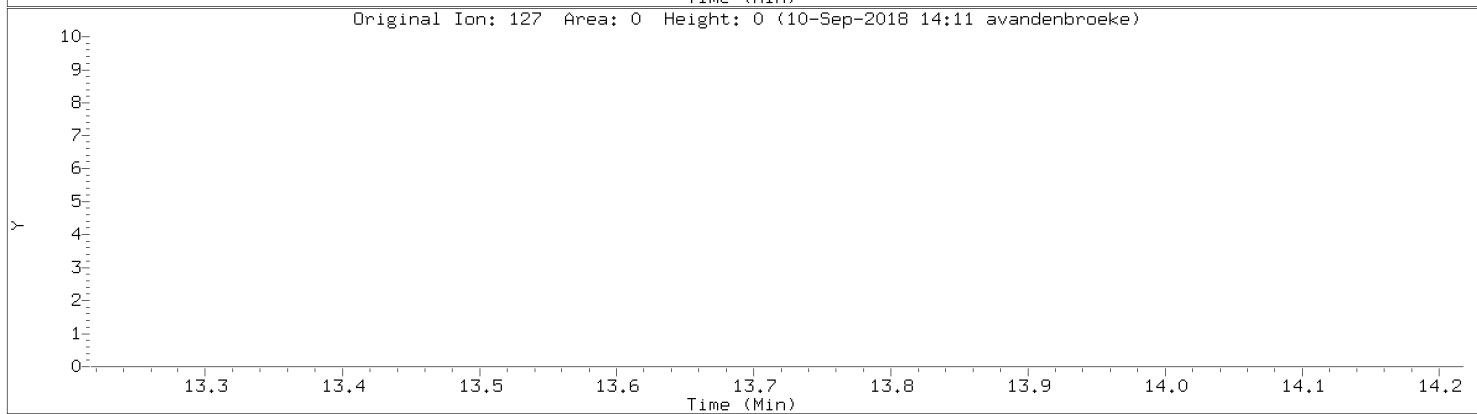
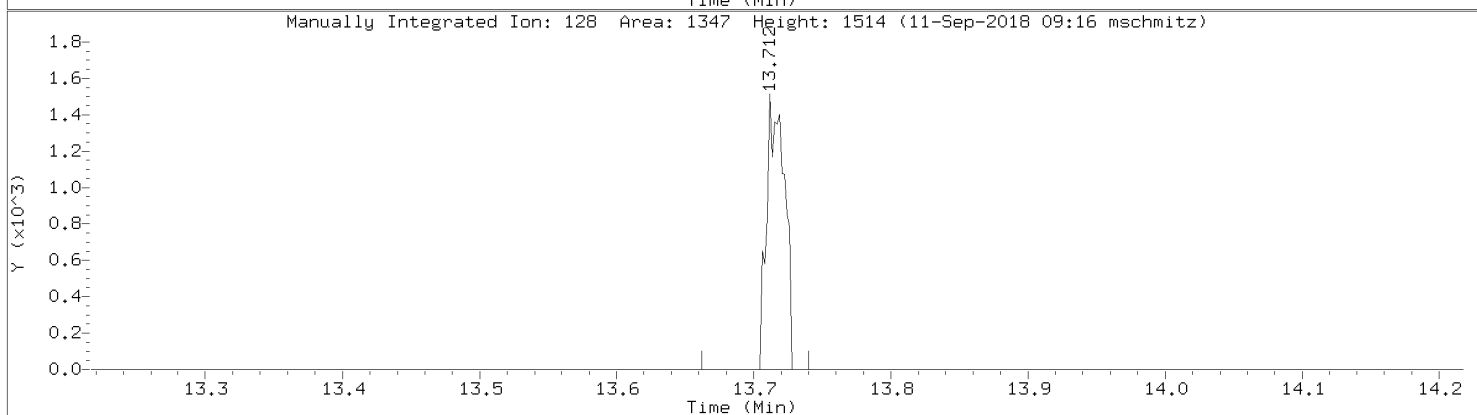
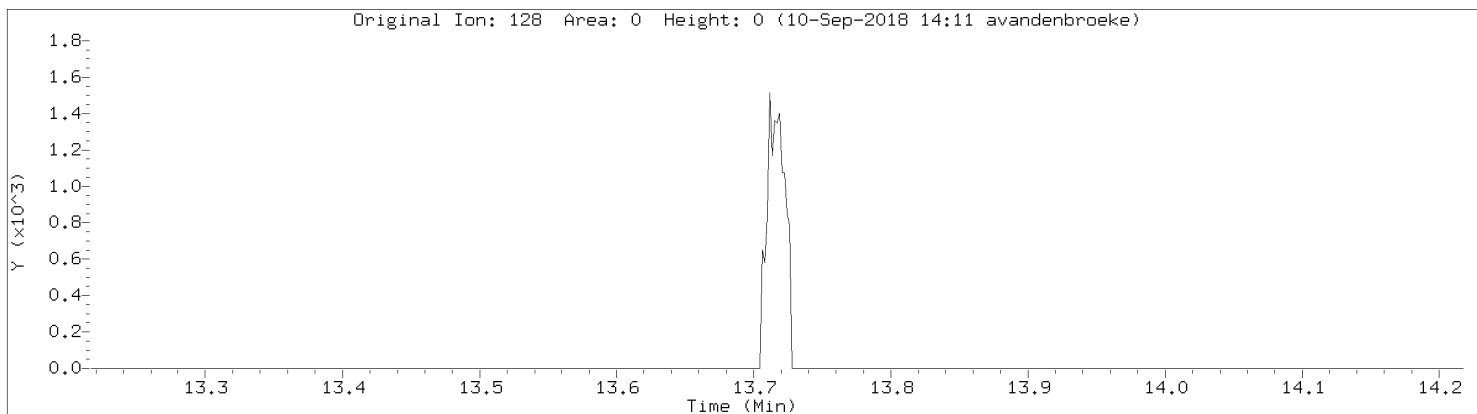


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Injection Date: 10-SEP-2018 11:26
Instrument: 10airH.i
Lab Sample ID: CAL2



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Injection Date: 10-SEP-2018 11:26
Instrument: 10airH.i
Lab Sample ID: CAL2

Compound: Naphthalene
CAS Number: 91-20-3



Pace Analytical Services, Inc.

TO15 Analysis (UNIX)

Data file : \\192.168.10.12\chem\10airH.i\091018.B\25305.D
 Lab Smp Id: CAL3
 Inj Date : 10-SEP-2018 11:53
 Operator : AFV Inst ID: 10airH.i
 Smp Info :
 Misc Info :
 Comment : Volatile Organic COMPOUNDS in Air
 Method : \\192.168.10.12\chem\10airH.i\091018.B\TO15_253-18.m
 Meth Date : 11-Sep-2018 09:17 10airH.i Quant Type: ISTD
 Cal Date : 10-SEP-2018 11:26 Cal File: 25304.D
 Als bottle: 5 Calibration Sample, Level: 3
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: all.sub
 Target Version: 4.14
 Processing Host: 10MNAIRWKS10

Concentration Formula: Amt * DF * Uf * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
							CAL-AMT (ppbv)	ON-COL (ppbv)
1 1,1-Difluoroethane	65		2.931	2.931	(0.538)	11024	0.50000	0.486(Q)
2 Chlorodifluoromethane	67		2.949	2.949	(0.541)	5325	0.50000	0.501(Q)
3 Propylene	41		2.954	2.954	(0.542)	8722	0.50000	0.459
4 Dichlorodifluoromethane	85		2.974	2.974	(0.545)	56407	0.50000	0.514
5 Dichlorotetrafluoroethane	85		3.046	3.046	(0.559)	49667	0.50000	0.570
6 Chloromethane	50		3.048	3.048	(0.559)	15325	0.50000	0.529
7 Vinyl chloride	62		3.117	3.117	(0.572)	15599	0.50000	0.521
8 1,3-Butadiene	54		3.151	3.151	(0.578)	9841	0.50000	0.511
9 Bromomethane	94		3.268	3.268	(0.599)	19004	0.50000	0.538
10 Chloroethane	64		3.313	3.313	(0.608)	7617	0.50000	0.537
11 Ethanol	45		3.329	3.329	(0.610)	22762	2.50000	2.53
12 Vinyl Bromide	106		3.419	3.419	(0.627)	18509	0.50000	0.538
13 Isopentane	43		3.433	3.433	(0.630)	12062	0.50000	0.520
14 Freon 123	83		3.471	3.471	(0.636)	40331	0.50000	0.542
15 Trichlorofluoromethane	101		3.495	3.495	(0.641)	44968	0.50000	0.576
16 Acrolein	56		3.499	3.499	(0.642)	12623	1.25000	1.27
17 Acetone	43		3.522	3.522	(0.646)	99211	2.50000	2.98
18 Isopropyl Alcohol	45		3.547	3.547	(0.650)	99919	2.50000	2.71
19 1,1-Dichloroethene	61		3.710	3.710	(0.680)	26380	0.50000	0.509
20 Acrylonitrile	53		3.719	3.719	(0.682)	26345	1.25000	1.24
21 Tert Butyl Alcohol (TBA)	59		3.749	3.749	(0.688)	33112	0.50000	0.496
22 Methyl Acetate	43		3.744	3.744	(0.687)	29700	0.50000	0.528
23 Freon 113	101		3.746	3.746	(0.687)	45396	0.50000	0.528

Compounds	QUANT SIG		AMOUNTS					
	MASS		RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ppbv)	ON-COL (ppbv)
24 Allyl Chloride	76		3.818	3.818	(0.700)	6909	0.50000	0.477
25 Methylene chloride	49		3.820	3.820	(0.701)	102999	2.50000	2.40
26 Carbon Disulfide	76		3.927	3.927	(0.720)	50549	0.50000	0.510
27 Methyl Tert Butyl Ether	73		4.088	4.088	(0.750)	39248	0.50000	0.466
28 trans-1,2-dichloroethene	96		4.092	4.092	(0.750)	19500	0.50000	0.492
29 Vinyl Acetate	43		4.168	4.168	(0.764)	27147	0.50000	0.450
30 1,1-Dichloroethane	63		4.214	4.214	(0.773)	32492	0.50000	0.508
31 Methyl Ethyl Ketone	72		4.335	4.335	(0.795)	8973	0.50000	0.494 (Q)
32 Di-isopropyl Ether	45		4.361	4.361	(0.800)	38886	0.50000	0.494
33 n-Hexane	57		4.363	4.363	(0.800)	22514	0.50000	0.511
34 Ethyl Acetate	43		4.493	4.493	(0.824)	26450	0.50000	0.474
35 cis-1,2-Dichloroethene	96		4.505	4.505	(0.826)	20022	0.50000	0.491
36 Ethyl Tert-Butyl Ether	59		4.589	4.589	(0.842)	39013	0.50000	0.463
37 Chloroform	83		4.684	4.684	(0.859)	44722	0.50000	0.511
38 Tetrahydrofuran	42		4.768	4.768	(0.874)	10721	0.50000	0.463
39 1,1,1-Trichloroethane	97		5.002	5.002	(0.917)	43119	0.50000	0.498
40 1,2-Dichloroethane	62		5.080	5.080	(0.932)	25783	0.50000	0.494
41 Benzene	78		5.236	5.236	(0.960)	49867	0.50000	0.476
42 Carbon tetrachloride	117		5.256	5.256	(0.964)	44193	0.50000	0.501
43 Cyclohexane	56		5.283	5.283	(0.969)	17137	0.50000	0.463
44 Tert Amyl Methyl Ether	73		5.394	5.394	(0.989)	35367	0.50000	0.445
* 45 1,4-Difluorobenzene	114		5.453	5.453	(1.000)	1124514	10.0000	
46 2,2,4-Trimethylpentane	57		5.549	5.549	(1.018)	64743	0.50000	0.482
47 Heptane	43		5.677	5.677	(1.041)	18783	0.50000	0.479
48 Trichloroethene	130		5.785	5.785	(1.061)	27238	0.50000	0.480
49 1,2-Dichloropropane	63		5.829	5.829	(1.069)	18970	0.50000	0.501
50 Methyl methacrylate	69		5.831	5.831	(1.069)	16012	0.50000	0.468
51 1,4-Dioxane	88		5.890	5.890	(1.080)	29317	1.25000	1.25
52 Bromodichloromethane	83		5.992	5.992	(1.099)	40949	0.50000	0.490
53 Methylcyclohexane	98		6.259	6.259	(1.148)	9961	0.50000	0.475
54 Methyl Isobutyl Ketone	43		6.349	6.349	(1.164)	23441	0.50000	0.452
55 cis-1,3-Dichloropropene	75		6.418	6.418	(1.177)	25715	0.50000	0.463
56 trans-1,3-Dichloropropene	75		6.864	6.864	(1.259)	18408	0.50000	0.472
57 Toluene	91		6.963	6.963	(1.277)	49532	0.50000	0.450
58 1,1,2-Trichloroethane	97		7.084	7.084	(1.299)	23193	0.50000	0.490
59 Methyl Butyl Ketone	43		7.198	7.198	(0.852)	16911	0.50000	0.422
60 n-Octane	43		7.387	7.387	(0.874)	20056	0.50000	0.471
61 Dibromochloromethane	129		7.622	7.622	(0.902)	38767	0.50000	0.470
62 Tetrachloroethene	166		7.709	7.709	(0.912)	36424	0.50000	0.505
63 1,2-Dibromoethane	107		7.824	7.824	(0.926)	33739	0.50000	0.486
* 64 Chlorobenzene - d5	117		8.451	8.451	(1.000)	909274	10.0000	
65 Chlorobenzene	112		8.497	8.497	(1.005)	49940	0.50000	0.492
66 Ethyl Benzene	91		8.715	8.715	(1.031)	56463	0.50000	0.447
67 m&p-Xylene	91		8.900	8.900	(1.053)	89795	1.00000	0.934 (M)
68 n-Nonane	43		9.240	9.240	(1.093)	15217	0.50000	0.479
69 Styrene	104		9.302	9.302	(1.101)	26975	0.50000	0.497
70 o-Xylene	91		9.336	9.336	(1.105)	52913	0.50000	0.517
71 Bromoform	173		9.407	9.407	(1.113)	29721	0.50000	0.460
72 1,1,2,2-Tetrachloroethane	83		9.751	9.751	(1.154)	36820	0.50000	0.480
73 Isopropylbenzene	105		9.888	9.888	(1.170)	49539	0.50000	0.491
74 N-Propylbenzene	91		10.458	10.458	(1.238)	60132	0.50000	0.459
75 4-Ethyltoluene	105		10.639	10.639	(1.259)	41372	0.50000	0.500
76 1,3,5-Trimethylbenzene	105		10.715	10.715	(1.268)	44552	0.50000	0.460
77 n-Decane	57		11.067	11.067	(2.029)	11783	0.50000	0.463

Compounds	QUANT SIG		AMOUNTS					
	MASS		RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ppbv)	ON-COL (ppbv)
78 Tert-Butyl Benzene	119		11.162	11.162	(1.321)	43034	0.50000	0.464
79 1,2,4-Trimethylbenzene	105		11.205	11.205	(1.326)	43779	0.50000	0.470
80 Sec- Butylbenzene	105		11.464	11.464	(1.357)	53503	0.50000	0.459
81 1,3-Dichlorobenzene	146		11.498	11.498	(1.361)	30555	0.50000	0.464
82 Benzyl Chloride	91		11.567	11.567	(1.369)	16959	0.50000	0.547
83 1,4-Dichlorobenzene	146		11.627	11.627	(1.376)	23241	0.50000	0.479
84 p-Isopropyltoluene	119		11.668	11.668	(1.381)	48195	0.50000	0.501
85 1,2,3-Trimethylbenzene	105		11.682	11.682	(1.382)	46787	0.50000	0.499
86 1,2-Dichlorobenzene	146		11.938	11.938	(1.413)	25869	0.50000	0.522
87 N-Butylbenzene	91		12.117	12.117	(1.434)	27450	0.50000	0.515
88 1,2-Dibromo-3-Chloropropane	157		12.630	12.630	(1.495)	6709	0.50000	0.534
89 1,2,4-Trichlorobenzene	180		13.576	13.576	(1.606)	3236	0.50000	0.535
90 Naphthalene	128		13.716	13.716	(1.623)	5157	0.50000	0.519
91 Hexachlorobutadiene	225		13.826	13.826	(1.636)	13445	0.50000	0.509

QC Flag Legend

- Q - Qualifier signal failed the ratio test.
- M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10airH.i\091018.B\25305.D
 Report Date: 11-Sep-2018 09:17

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: 10airH.i
 Lab File ID: 25305.D
 Lab Smp Id: CAL3
 Analysis Type: VOA
 Quant Type: ISTD
 Operator: AFV
 Method File: \\192.168.10.12\chem\10airH.i\091018.B\TO15_253-18.m
 Misc Info:

Calibration Date: 10-SEP-2018
 Calibration Time: 13:22
 Level: LOW
 Sample Type: AIR

Test Mode:
 Use Initial Calibration Level 5.
 If Continuing Cal. use Initial Cal. Level 5

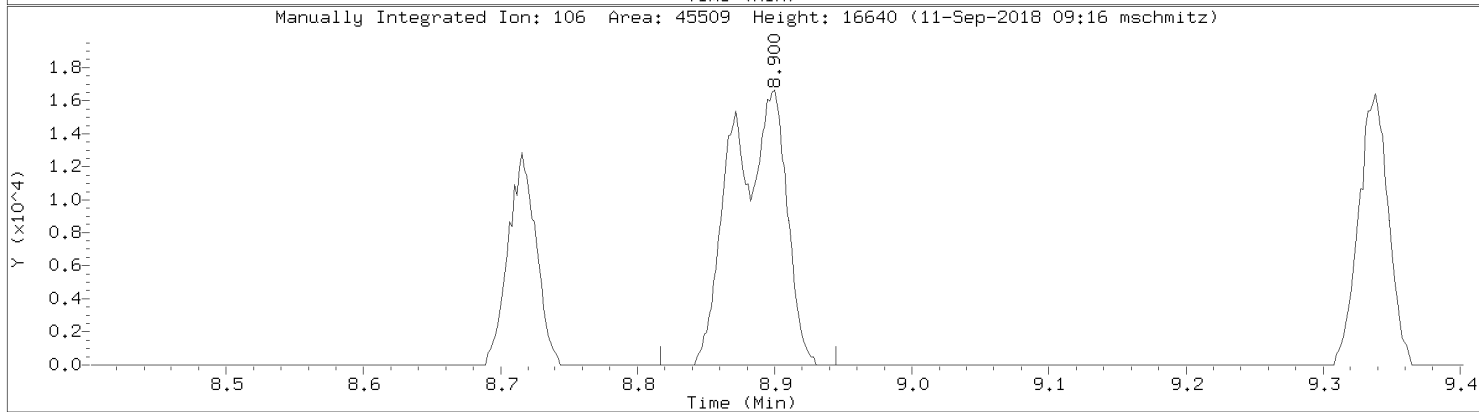
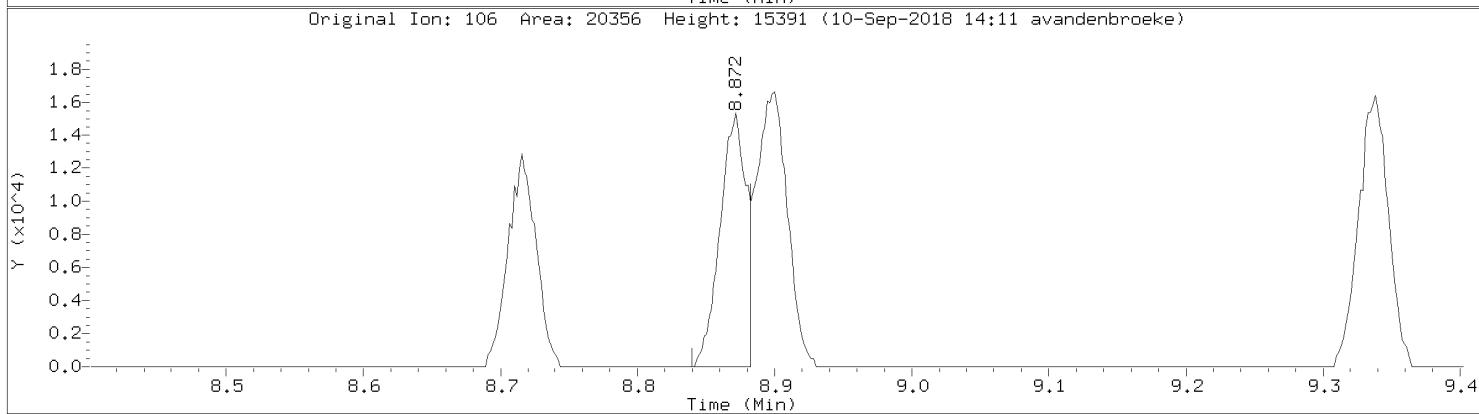
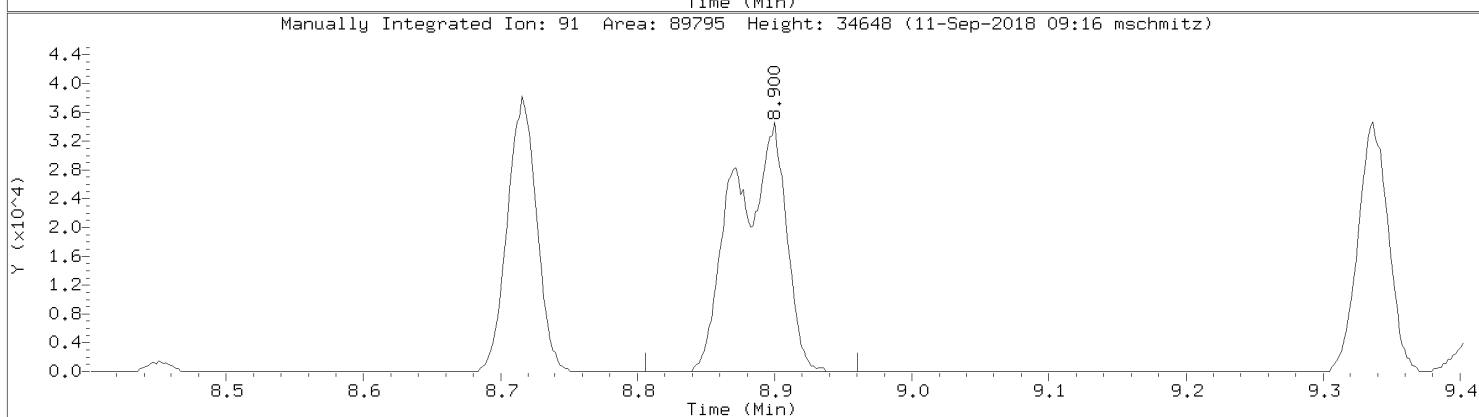
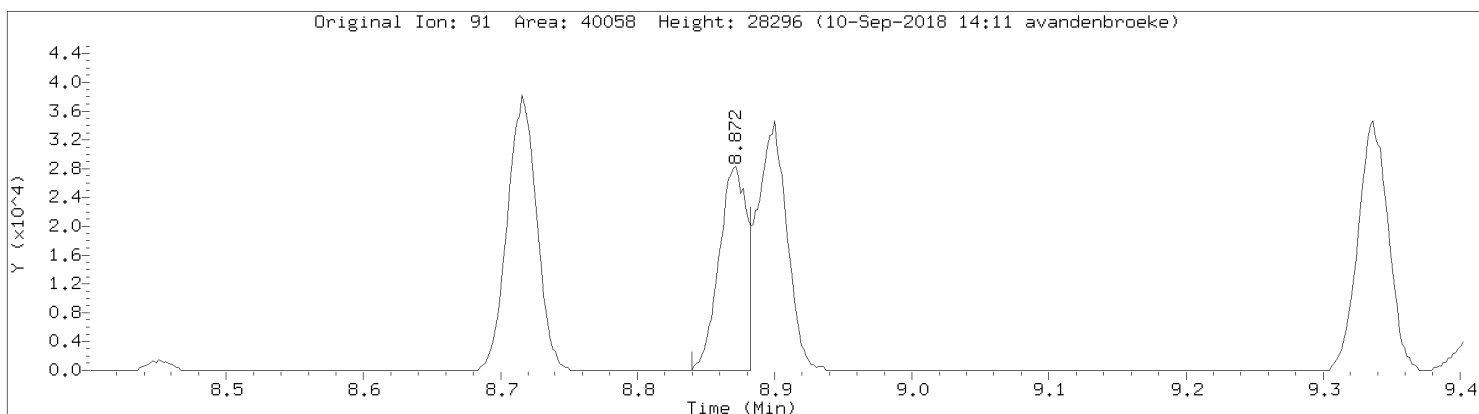
COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
45 1,4-Difluorobenze	1034069	620441	1447697	1124514	8.75
64 Chlorobenzene - d	896862	538117	1255607	909274	1.38

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
45 1,4-Difluorobenze	5.46	5.13	5.79	5.45	-0.03
64 Chlorobenzene - d	8.45	8.12	8.78	8.45	-0.02

AREA UPPER LIMIT = + 40% of internal standard area.
 AREA LOWER LIMIT = - 40% of internal standard area.
 RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
 RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: \\192.168.10.12\chem\10airH.i\091018.B\25305.D
Injection Date: 10-SEP-2018 11:53
Instrument: 10airH.i
Lab Sample ID: CAL3

Compound: m&p-Xylene
CAS Number: 7816-60-0



Pace Analytical Services, Inc.

TO15 Analysis (UNIX)

Data file : \\192.168.10.12\chem\10airH.i\091018.B\25306.D
 Lab Smp Id: CAL4
 Inj Date : 10-SEP-2018 12:55
 Operator : AFV Inst ID: 10airH.i
 Smp Info :
 Misc Info :
 Comment : Volatile Organic COMPOUNDS in Air
 Method : \\192.168.10.12\chem\10airH.i\091018.B\TO15_253-18.m
 Meth Date : 11-Sep-2018 09:17 10airH.i Quant Type: ISTD
 Cal Date : 10-SEP-2018 11:53 Cal File: 25305.D
 Als bottle: 6 Calibration Sample, Level: 4
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: all.sub
 Target Version: 4.14
 Processing Host: 10MNAIRWKS10

Concentration Formula: Amt * DF * Uf * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
							CAL-AMT (ppbv)	ON-COL (ppbv)
1 1,1-Difluoroethane	65		2.928	2.928	(0.537)	21105	1.00000	0.937 (Q)
2 Chlorodifluoromethane	67		2.944	2.944	(0.540)	10045	1.00000	0.951
3 Propylene	41		2.949	2.949	(0.541)	17421	1.00000	0.923
4 Dichlorodifluoromethane	85		2.969	2.969	(0.545)	103222	1.00000	0.947
5 Dichlorotetrafluoroethane	85		3.041	3.041	(0.558)	85561	1.00000	0.988
6 Chloromethane	50		3.045	3.045	(0.559)	26424	1.00000	0.917
7 Vinyl chloride	62		3.112	3.112	(0.571)	27238	1.00000	0.914
8 1,3-Butadiene	54		3.146	3.146	(0.577)	17180	1.00000	0.897
9 Bromomethane	94		3.265	3.265	(0.599)	32382	1.00000	0.923
10 Chloroethane	64		3.311	3.311	(0.608)	13018	1.00000	0.924
11 Ethanol	45		3.316	3.316	(0.609)	40363	5.00000	4.52
12 Vinyl Bromide	106		3.414	3.414	(0.626)	30733	1.00000	0.898
13 Isopentane	43		3.428	3.428	(0.629)	20986	1.00000	0.910
14 Freon 123	83		3.465	3.465	(0.636)	68363	1.00000	0.925
15 Trichlorofluoromethane	101		3.490	3.490	(0.640)	72223	1.00000	0.931
16 Acrolein	56		3.492	3.492	(0.641)	22302	2.50000	2.25
17 Acetone	43		3.513	3.513	(0.645)	176509	5.00000	5.33 (M)
18 Isopropyl Alcohol	45		3.535	3.535	(0.649)	173281	5.00000	4.73 (M)
19 1,1-Dichloroethene	61		3.707	3.707	(0.680)	46709	1.00000	0.906
20 Acrylonitrile	53		3.714	3.714	(0.682)	47937	2.50000	2.27 (M)
21 Tert Butyl Alcohol (TBA)	59		3.737	3.737	(0.686)	63570	1.00000	0.957
22 Methyl Acetate	43		3.739	3.739	(0.686)	53985	1.00000	0.965
23 Freon 113	101		3.741	3.741	(0.686)	83763	1.00000	0.980

Compounds	QUANT SIG		AMOUNTS					
	MASS		RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ppbv)	ON-COL (ppbv)
24 Allyl Chloride	76		3.815	3.815	(0.700)	13106	1.00000	0.910
25 Methylene chloride	49		3.819	3.819	(0.701)	189271	5.00000	5.11
26 Carbon Disulfide	76		3.923	3.923	(0.720)	95810	1.00000	0.973
27 Methyl Tert Butyl Ether	73		4.080	4.080	(0.749)	79357	1.00000	0.948
28 trans-1,2-dichloroethene	96		4.087	4.087	(0.750)	37696	1.00000	0.956
29 Vinyl Acetate	43		4.163	4.163	(0.764)	56044	1.00000	0.935
30 1,1-Dichloroethane	63		4.211	4.211	(0.773)	60052	1.00000	0.945
31 Methyl Ethyl Ketone	72		4.328	4.328	(0.794)	17697	1.00000	0.980
32 Di-isopropyl Ether	45		4.351	4.351	(0.798)	77386	1.00000	0.990
33 n-Hexane	57		4.360	4.360	(0.800)	44965	1.00000	1.03
34 Ethyl Acetate	43		4.486	4.486	(0.823)	52175	1.00000	0.940
35 cis-1,2-Dichloroethene	96		4.502	4.502	(0.826)	37984	1.00000	0.938
36 Ethyl Tert-Butyl Ether	59		4.580	4.580	(0.840)	79064	1.00000	0.944
37 Chloroform	83		4.681	4.681	(0.859)	82023	1.00000	0.943
38 Tetrahydrofuran	42		4.757	4.757	(0.873)	20986	1.00000	0.912
39 1,1,1-Trichloroethane	97		4.997	4.997	(0.917)	80399	1.00000	0.934
40 1,2-Dichloroethane	62		5.077	5.077	(0.932)	48462	1.00000	0.934
41 Benzene	78		5.237	5.237	(0.961)	96839	1.00000	0.930
42 Carbon tetrachloride	117		5.253	5.253	(0.964)	84177	1.00000	0.960
43 Cyclohexane	56		5.279	5.279	(0.969)	35690	1.00000	0.970
44 Tert Amyl Methyl Ether	73		5.384	5.384	(0.988)	73705	1.00000	0.934
* 45 1,4-Difluorobenzene	114		5.450	5.450	(1.000)	1117749	10.0000	
46 2,2,4-Trimethylpentane	57		5.545	5.545	(1.018)	124113	1.00000	0.930
47 Heptane	43		5.675	5.675	(1.041)	38302	1.00000	0.983
48 Trichloroethene	130		5.782	5.782	(1.061)	51956	1.00000	0.921
49 1,2-Dichloropropane	63		5.826	5.826	(1.069)	35957	1.00000	0.956
50 Methyl methacrylate	69		5.824	5.824	(1.069)	32830	1.00000	0.966
51 1,4-Dioxane	88		5.881	5.881	(1.079)	56426	2.50000	2.41
52 Bromodichloromethane	83		5.989	5.989	(1.099)	77214	1.00000	0.929
53 Methylcyclohexane	98		6.257	6.257	(1.148)	21148	1.00000	0.845
54 Methyl Isobutyl Ketone	43		6.344	6.344	(1.164)	49871	1.00000	0.967
55 cis-1,3-Dichloropropene	75		6.415	6.415	(1.177)	51550	1.00000	0.934
56 trans-1,3-Dichloropropene	75		6.861	6.861	(1.259)	38692	1.00000	0.798
57 Toluene	91		6.958	6.958	(1.277)	103402	1.00000	0.945
58 1,1,2-Trichloroethane	97		7.086	7.086	(1.300)	43842	1.00000	0.931
59 Methyl Butyl Ketone	43		7.192	7.192	(0.851)	38315	1.00000	0.960
60 n-Octane	43		7.386	7.386	(0.874)	45264	1.00000	1.07
61 Dibromochloromethane	129		7.622	7.622	(0.902)	76292	1.00000	0.929
62 Tetrachloroethene	166		7.705	7.705	(0.912)	67361	1.00000	0.937
63 1,2-Dibromoethane	107		7.824	7.824	(0.926)	65574	1.00000	0.949
* 64 Chlorobenzene - d5	117		8.449	8.449	(1.000)	905246	10.0000	
65 Chlorobenzene	112		8.493	8.493	(1.005)	95468	1.00000	0.944
66 Ethyl Benzene	91		8.715	8.715	(1.032)	117458	1.00000	0.934
67 m&p-Xylene	91		8.896	8.896	(1.053)	195451	2.00000	2.04 (M)
68 n-Nonane	43		9.242	9.242	(1.094)	38545	1.00000	0.868
69 Styrene	104		9.303	9.303	(1.101)	63780	1.00000	0.872
70 o-Xylene	91		9.336	9.336	(1.105)	110221	1.00000	1.08
71 Bromoform	173		9.407	9.407	(1.113)	60989	1.00000	0.949
72 1,1,2,2-Tetrachloroethane	83		9.750	9.750	(1.154)	71041	1.00000	0.931
73 Isopropylbenzene	105		9.890	9.890	(1.171)	112845	1.00000	0.843
74 N-Propylbenzene	91		10.458	10.458	(1.238)	133091	1.00000	0.828
75 4-Ethyltoluene	105		10.643	10.643	(1.260)	97491	1.00000	0.848
76 1,3,5-Trimethylbenzene	105		10.715	10.715	(1.268)	100932	1.00000	0.864
77 n-Decane	57		11.069	11.069	(2.031)	32116	1.00000	0.750

Compounds	QUANT SIG		AMOUNTS				
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ppbv)	ON-COL (ppbv)
78 Tert-Butyl Benzene	119	11.161	11.161	(1.321)	97298	1.00000	0.858
79 1,2,4-Trimethylbenzene	105	11.207	11.207	(1.326)	97489	1.00000	0.881
80 Sec- Butylbenzene	105	11.464	11.464	(1.357)	122274	1.00000	0.813
81 1,3-Dichlorobenzene	146	11.496	11.496	(1.361)	61618	1.00000	0.940
82 Benzyl Chloride	91	11.567	11.567	(1.369)	36807	1.00000	0.787
83 1,4-Dichlorobenzene	146	11.629	11.629	(1.376)	48963	1.00000	0.798
84 p-Isopropyltoluene	119	11.670	11.670	(1.381)	112832	1.00000	0.884
85 1,2,3-Trimethylbenzene	105	11.684	11.684	(1.383)	101977	1.00000	0.926
86 1,2-Dichlorobenzene	146	11.938	11.938	(1.413)	52910	1.00000	0.864
87 N-Butylbenzene	91	12.119	12.119	(1.434)	65335	1.00000	0.817
88 1,2-Dibromo-3-Chloropropane	157	12.634	12.634	(1.495)	14558	1.00000	0.808
89 1,2,4-Trichlorobenzene	180	13.578	13.578	(1.607)	6545	1.00000	0.671
90 Naphthalene	128	13.717	13.717	(1.623)	10953	1.00000	0.625
91 Hexachlorobutadiene	225	13.827	13.827	(1.636)	27586	1.00000	0.828

QC Flag Legend

- Q - Qualifier signal failed the ratio test.
- M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10airH.i\091018.B\25306.D
Report Date: 11-Sep-2018 09:17

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10airH.i
Lab File ID: 25306.D
Lab Smp Id: CAL4
Analysis Type: VOA
Quant Type: ISTD
Operator: AFV
Method File: \\192.168.10.12\chem\10airH.i\091018.B\TO15_253-18.m
Misc Info:

Calibration Date: 10-SEP-2018
Calibration Time: 13:22

Level: LOW
Sample Type: AIR

Test Mode:

Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
45 1,4-Difluorobenze	1034069	620441	1447697	1117749	8.09
64 Chlorobenzene - d	896862	538117	1255607	905246	0.93

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
45 1,4-Difluorobenze	5.46	5.13	5.79	5.45	-0.09
64 Chlorobenzene - d	8.45	8.12	8.78	8.45	-0.04

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: \\192.168.10.12\chem\10airH.i\091018.B\25306.D

Date : 10-SEP-2018 12:55

Client ID:

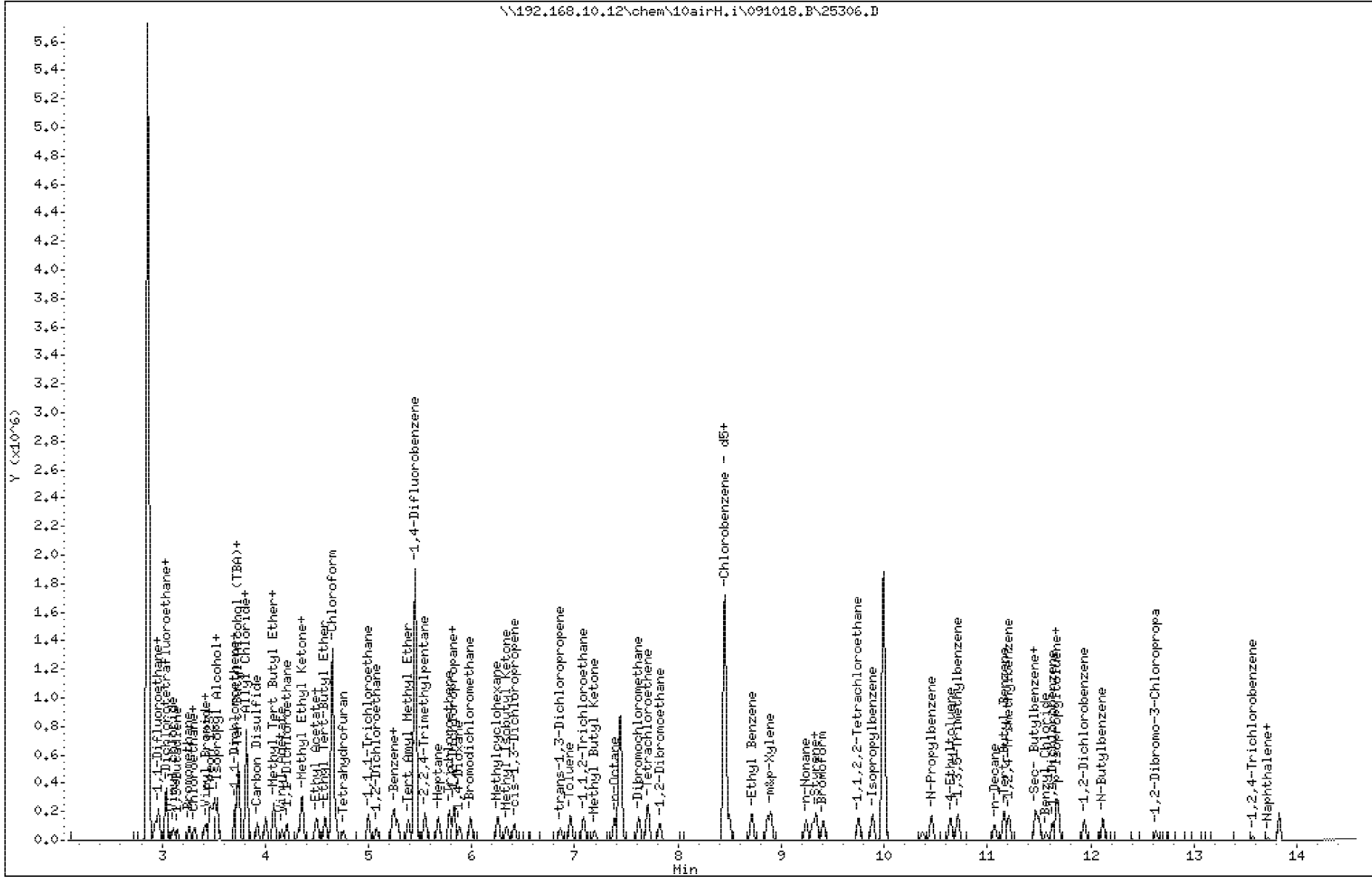
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Instrument: 10airH.i

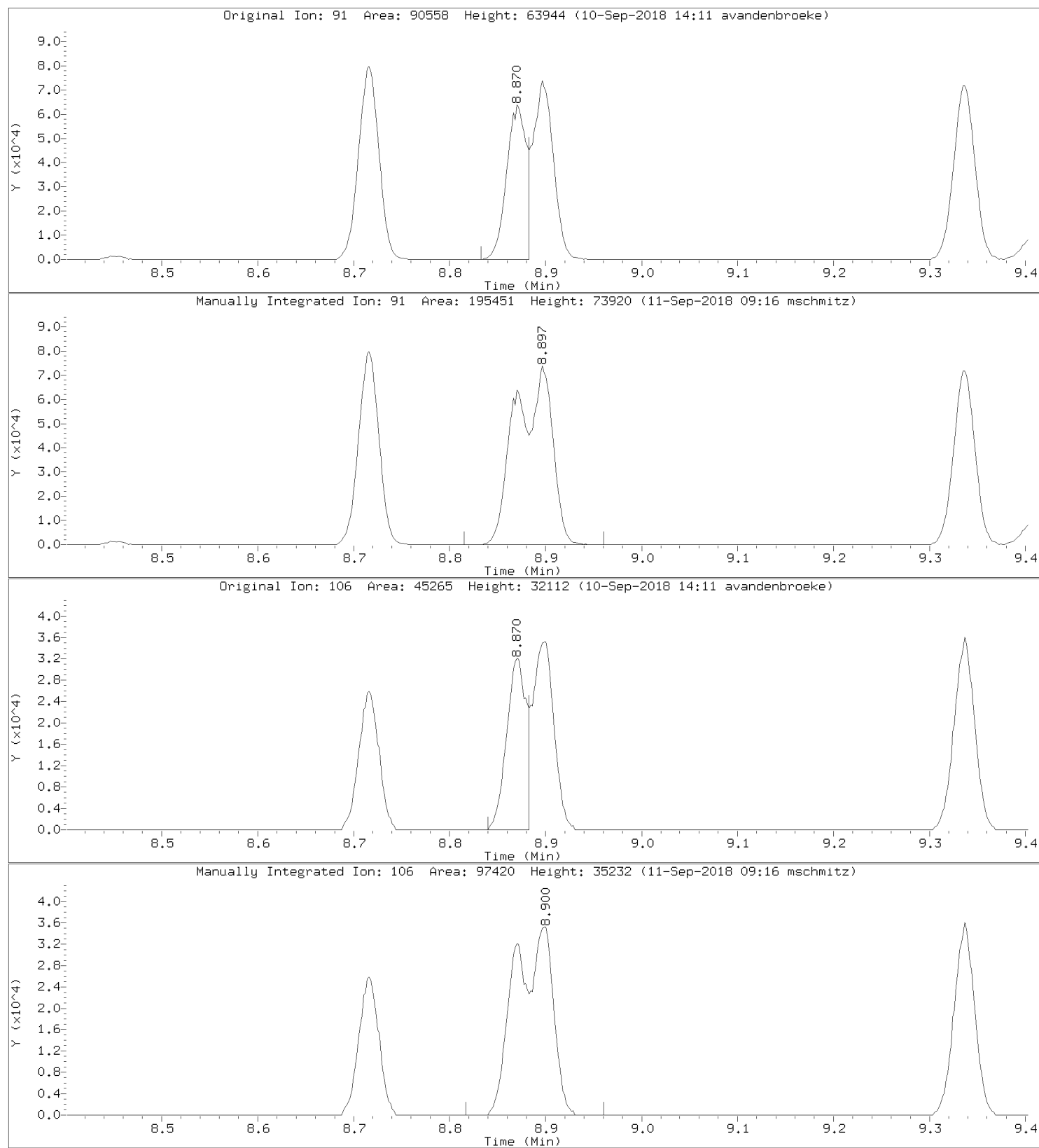
Operator: AFV

Column diameter: 0.32



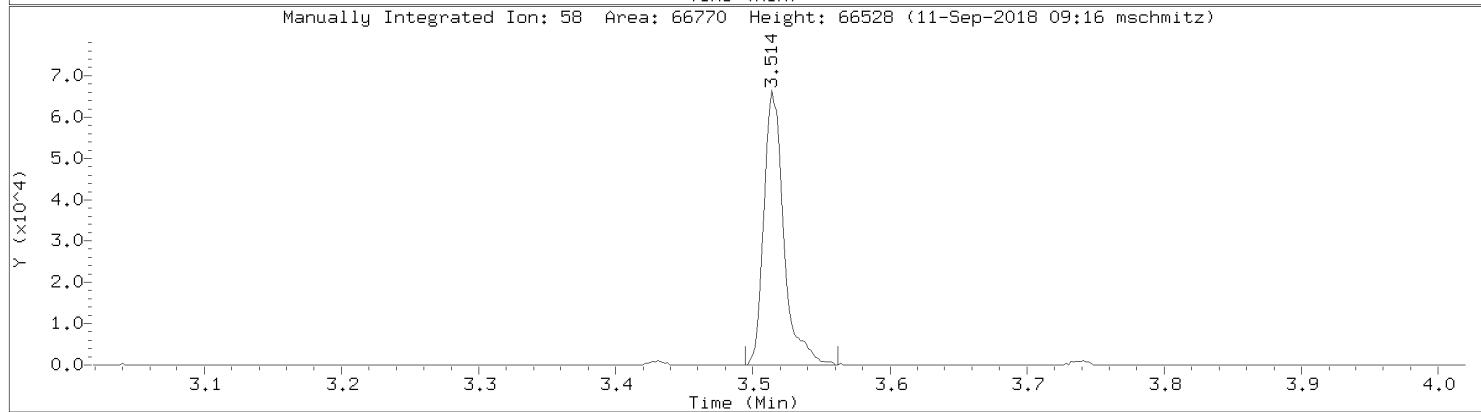
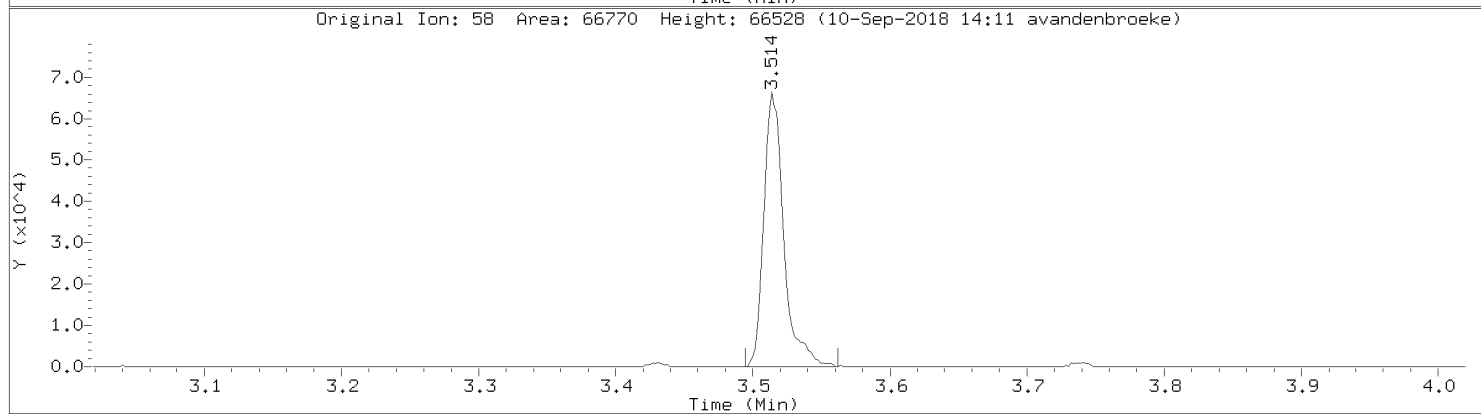
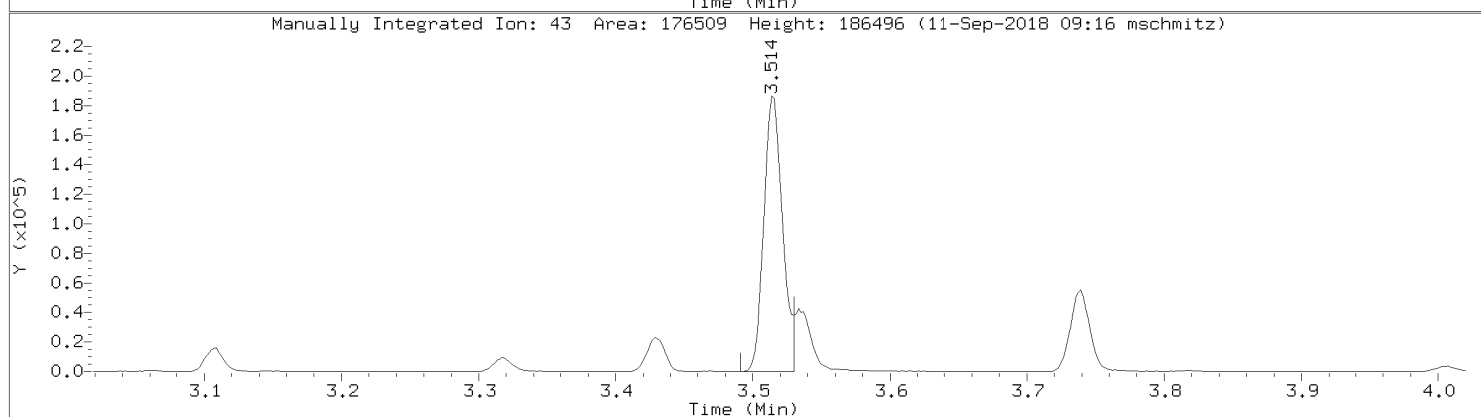
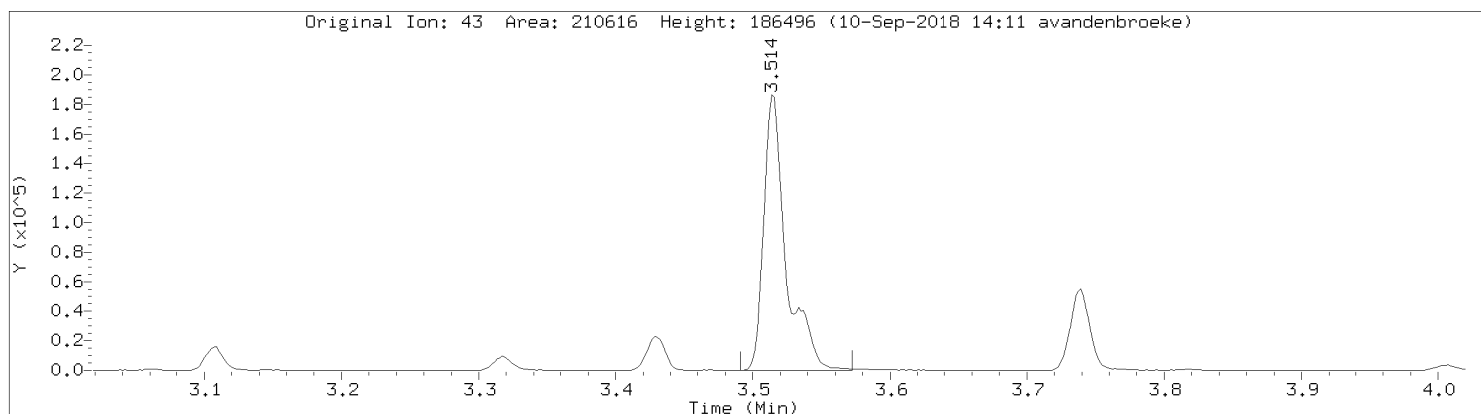
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Injection Date: 10-SEP-2018 12:55
Instrument: 10airH.i
Lab Sample ID: CAL4

Compound: m&p-Xylene
CAS Number: 7816-60-0



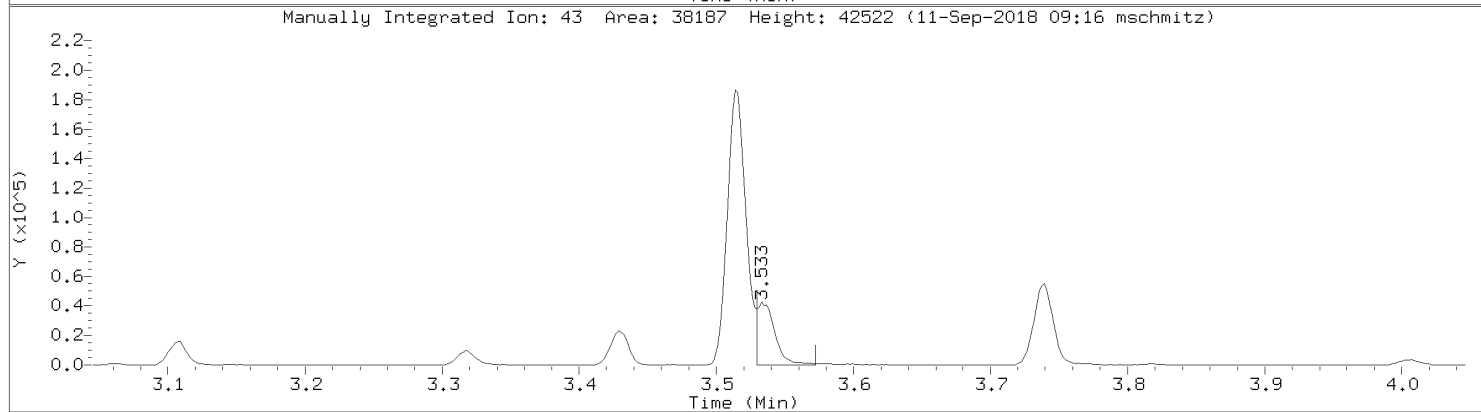
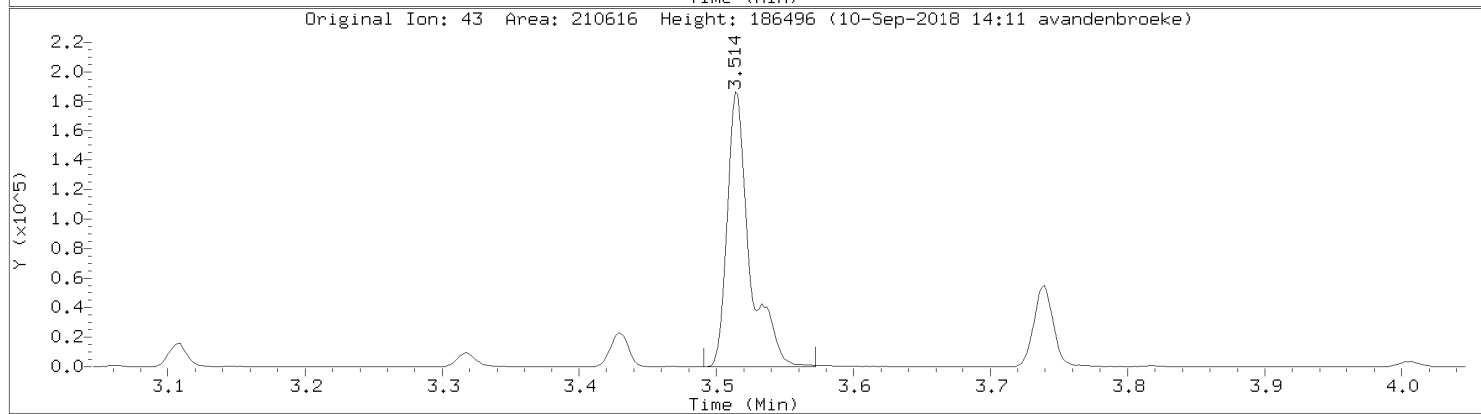
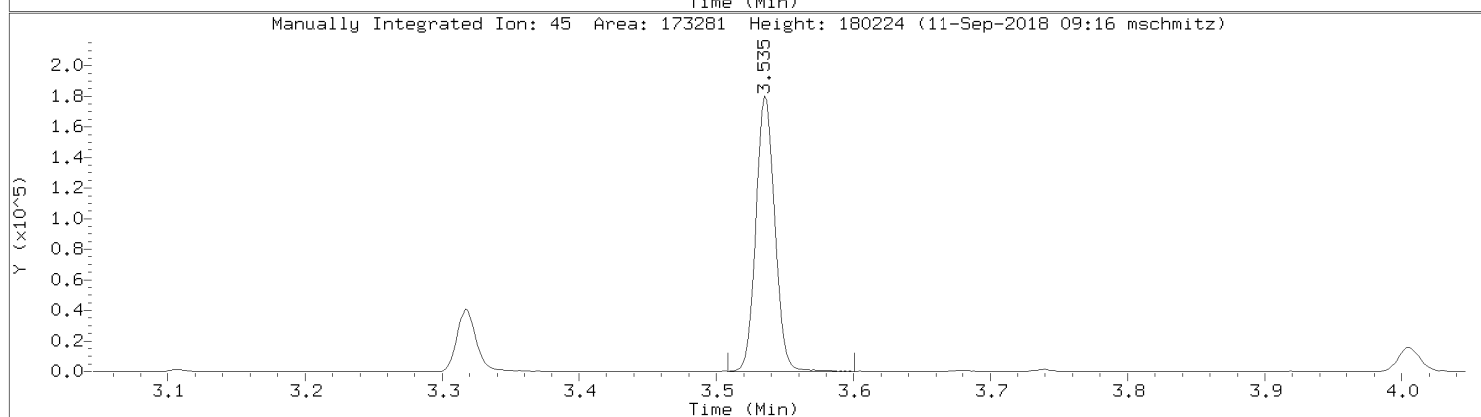
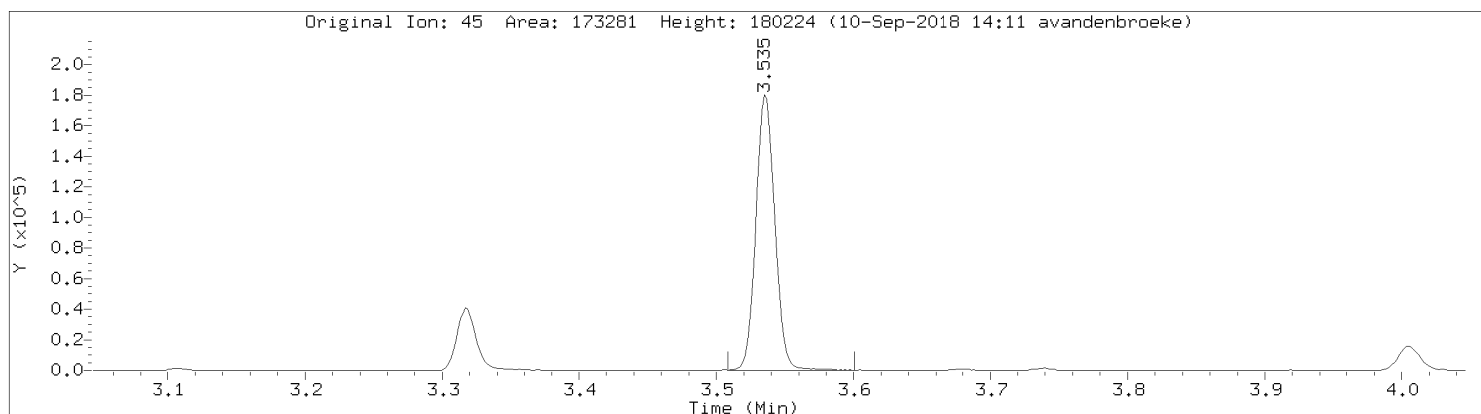
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Injection Date: 10-SEP-2018 12:55
Instrument: 10airH.i
Lab Sample ID: CAL4

Compound: Acetone
CAS Number: 67-64-1



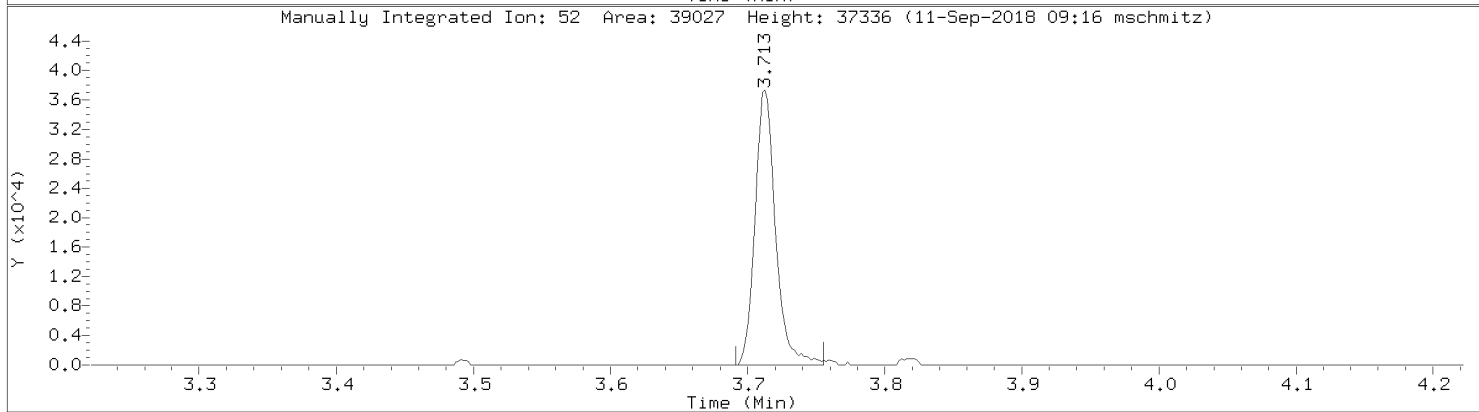
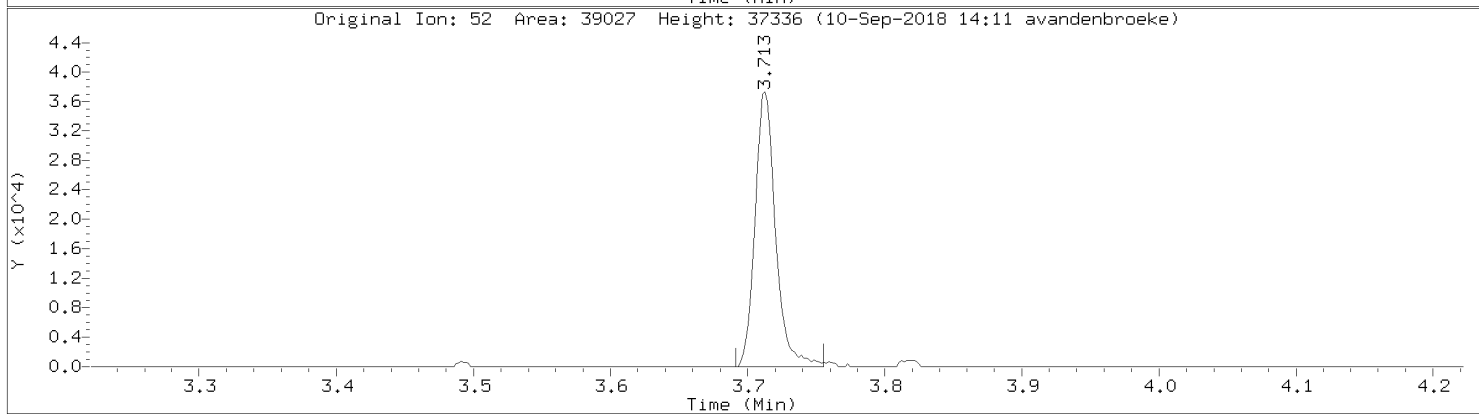
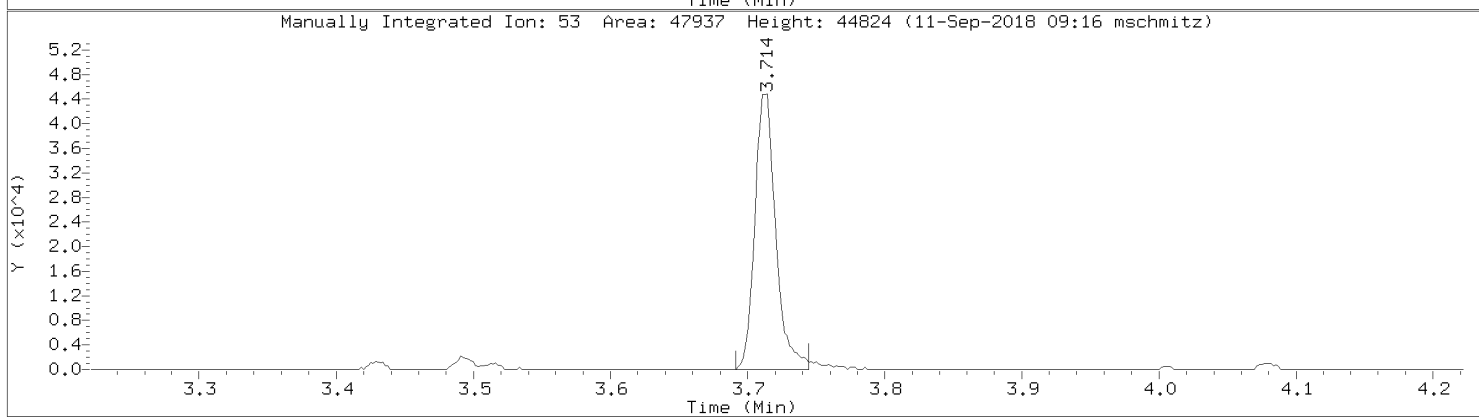
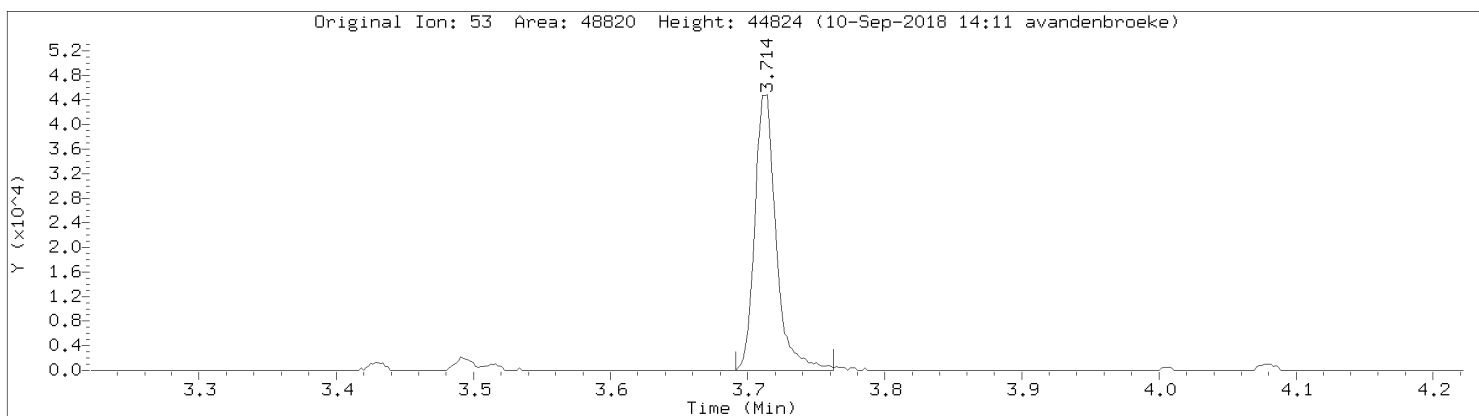
Data File: \\192.168.10.12\chem\10airH.i\091018.B\25306.D
Injection Date: 10-SEP-2018 12:55
Instrument: 10airH.i
Lab Sample ID: CAL4

Compound: Isopropyl Alcohol
CAS Number: 67-63-0



Data File: \\192.168.10.12\chem\10airH.i\091018.B\25306.D
Injection Date: 10-SEP-2018 12:55
Instrument: 10airH.i
Lab Sample ID: CAL4

Compound: Acrylonitrile
CAS Number: 107-13-1



Pace Analytical Services, Inc.

TO15 Analysis (UNIX)

Data file : \\192.168.10.12\chem\10airH.i\091018.B\25307.D
 Lab Smp Id: CAL5
 Inj Date : 10-SEP-2018 13:22
 Operator : AFV
 Smp Info :
 Misc Info :
 Comment : Volatile Organic COMPOUNDS in Air
 Method : \\192.168.10.12\chem\10airH.i\091018.B\TO15_253-18.m
 Meth Date : 11-Sep-2018 09:17 10airH.i Quant Type: ISTD
 Cal Date : 10-SEP-2018 12:55 Cal File: 25306.D
 Als bottle: 7 Calibration Sample, Level: 5
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: all.sub
 Target Version: 4.14
 Processing Host: 10MNAIRWKS10

Concentration Formula: Amt * DF * Uf * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
							CAL-AMT (ppbv)	ON-COL (ppbv)
1 1,1-Difluoroethane	65		2.931	2.931	(0.537)	202783	10.0000	9.73(Q)
2 Chlorodifluoromethane	67		2.947	2.947	(0.540)	98318	10.0000	10.1
3 Propylene	41		2.954	2.954	(0.542)	174837	10.0000	10.0
4 Dichlorodifluoromethane	85		2.974	2.974	(0.545)	984785	10.0000	9.76
5 Dichlorotetrafluoroethane	85		3.045	3.045	(0.558)	829795	10.0000	10.4
6 Chloromethane	50		3.048	3.048	(0.559)	252191	10.0000	9.46
7 Vinyl chloride	62		3.117	3.117	(0.572)	271358	10.0000	9.85
8 1,3-Butadiene	54		3.151	3.151	(0.578)	178139	10.0000	10.1
9 Bromomethane	94		3.270	3.270	(0.600)	319516	10.0000	9.84
10 Chloroethane	64		3.314	3.314	(0.608)	129128	10.0000	9.91
11 Ethanol	45		3.323	3.323	(0.609)	405722	50.0000	49.1
12 Vinyl Bromide	106		3.419	3.419	(0.627)	317187	10.0000	10.0
13 Isopentane	43		3.433	3.433	(0.629)	206088	10.0000	9.66
14 Freon 123	83		3.471	3.471	(0.636)	671610	10.0000	9.82
15 Trichlorofluoromethane	101		3.495	3.495	(0.641)	695347	10.0000	9.69
16 Acrolein	56		3.495	3.495	(0.641)	231536	25.0000	25.3
17 Acetone	43		3.517	3.517	(0.645)	1412739	50.0000	46.1
18 Isopropyl Alcohol	45		3.542	3.542	(0.649)	1611136	50.0000	47.6
19 1,1-Dichloroethene	61		3.712	3.712	(0.681)	475345	10.0000	9.97
20 Acrylonitrile	53		3.717	3.717	(0.681)	494644	25.0000	25.3
21 Tert Butyl Alcohol (TBA)	59		3.739	3.739	(0.685)	618806	10.0000	10.1
22 Methyl Acetate	43		3.740	3.740	(0.686)	472077	10.0000	9.12
23 Freon 113	101		3.744	3.744	(0.686)	749558	10.0000	9.48

Compounds	QUANT	SIG						AMOUNTS	
			MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ppbv)	ON-COL (ppbv)
24 Allyl Chloride	76		3.820	3.820	(0.700)	146624	10.0000	11.0(Q)	
25 Methylene chloride	49		3.822	3.822	(0.701)	1364434	50.0000	51.1	
26 Carbon Disulfide	76		3.929	3.929	(0.720)	940444	10.0000	10.3	
27 Methyl Tert Butyl Ether	73		4.078	4.078	(0.748)	835334	10.0000	10.8	
28 trans-1,2-dichloroethene	96		4.092	4.092	(0.750)	363144	10.0000	9.96	
29 Vinyl Acetate	43		4.168	4.168	(0.764)	638208	10.0000	11.5	
30 1,1-Dichloroethane	63		4.218	4.218	(0.773)	565469	10.0000	9.62	
31 Methyl Ethyl Ketone	72		4.330	4.330	(0.794)	156847	10.0000	9.39(Q)	
32 Di-isopropyl Ether	45		4.354	4.354	(0.798)	765709	10.0000	10.6	
33 n-Hexane	57		4.363	4.363	(0.800)	402901	10.0000	9.95	
34 Ethyl Acetate	43		4.488	4.488	(0.823)	533824	10.0000	10.4	
35 cis-1,2-Dichloroethene	96		4.507	4.507	(0.826)	386259	10.0000	10.3	
36 Ethyl Tert-Butyl Ether	59		4.582	4.582	(0.840)	871022	10.0000	11.2	
37 Chloroform	83		4.688	4.688	(0.859)	760109	10.0000	9.44	
38 Tetrahydrofuran	42		4.756	4.756	(0.872)	233455	10.0000	11.0	
39 1,1,1-Trichloroethane	97		5.004	5.004	(0.917)	776281	10.0000	9.75	
40 1,2-Dichloroethane	62		5.082	5.082	(0.932)	473871	10.0000	9.88	
41 Benzene	78		5.240	5.240	(0.961)	976246	10.0000	10.1	
42 Carbon tetrachloride	117		5.260	5.260	(0.964)	829363	10.0000	10.2	
43 Cyclohexane	56		5.284	5.284	(0.969)	395824	10.0000	11.6	
44 Tert Amyl Methyl Ether	73		5.384	5.384	(0.987)	869346	10.0000	11.9	
* 45 1,4-Difluorobenzene	114		5.455	5.455	(1.000)	1034069	10.0000		
46 2,2,4-Trimethylpentane	57		5.552	5.552	(1.018)	1289410	10.0000	10.4	
47 Heptane	43		5.680	5.680	(1.041)	394997	10.0000	11.0	
48 Trichloroethene	130		5.788	5.788	(1.061)	531627	10.0000	10.2	
49 1,2-Dichloropropane	63		5.831	5.831	(1.069)	340138	10.0000	9.77	
50 Methyl methacrylate	69		5.828	5.828	(1.068)	324374	10.0000	10.3	
51 1,4-Dioxane	88		5.879	5.879	(1.078)	586404	25.0000	27.1	
52 Bromodichloromethane	83		5.993	5.993	(1.099)	771372	10.0000	10.0	
53 Methylcyclohexane	98		6.259	6.259	(1.147)	260421	10.0000	9.93	
54 Methyl Isobutyl Ketone	43		6.339	6.339	(1.162)	561725	10.0000	11.8	
55 cis-1,3-Dichloropropene	75		6.420	6.420	(1.177)	582859	10.0000	11.4	
56 trans-1,3-Dichloropropene	75		6.866	6.866	(1.259)	532967	10.0000	9.87	
57 Toluene	91		6.963	6.963	(1.277)	1190551	10.0000	11.8	
58 1,1,2-Trichloroethane	97		7.089	7.089	(1.300)	442143	10.0000	10.1	
59 Methyl Butyl Ketone	43		7.185	7.185	(0.850)	514898	10.0000	13.0	
60 n-Octane	43		7.388	7.388	(0.874)	540613	10.0000	12.9	
61 Dibromochloromethane	129		7.625	7.625	(0.902)	861006	10.0000	10.6	
62 Tetrachloroethene	166		7.709	7.709	(0.912)	700502	10.0000	9.84	
63 1,2-Dibromoethane	107		7.828	7.828	(0.926)	719192	10.0000	10.5	
* 64 Chlorobenzene - d5	117		8.452	8.452	(1.000)	896862	10.0000		
65 Chlorobenzene	112		8.497	8.497	(1.005)	991818	10.0000	9.90	
66 Ethyl Benzene	91		8.715	8.715	(1.031)	1487225	10.0000	11.9	
67 m&p-Xylene	91		8.871	8.871	(1.050)	2285456	20.0000	24.1(M)	
68 n-Nonane	43		9.239	9.239	(1.093)	533638	10.0000	10.1	
69 Styrene	104		9.304	9.304	(1.101)	888985	10.0000	10.0	
70 o-Xylene	91		9.340	9.340	(1.105)	1167075	10.0000	11.6	
71 Bromoform	173		9.409	9.409	(1.113)	725946	10.0000	11.4	
72 1,1,2,2-Tetrachloroethane	83		9.752	9.752	(1.154)	799935	10.0000	10.6	
73 Isopropylbenzene	105		9.890	9.890	(1.170)	1621728	10.0000	10.1	
74 N-Propylbenzene	91		10.460	10.460	(1.237)	1790615	10.0000	10.0	
75 4-Ethyltoluene	105		10.642	10.642	(1.259)	1449280	10.0000	10.0	
76 1,3,5-Trimethylbenzene	105		10.715	10.715	(1.268)	1262493	10.0000	10.0	
77 n-Decane	57		11.070	11.070	(2.029)	568087	10.0000	9.61	

Compounds	QUANT SIG		AMOUNTS				
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ppbv)	ON-COL (ppbv)
78 Tert-Butyl Benzene	119	11.161	11.161	(1.320)	1242326	10.0000	10.0
79 1,2,4-Trimethylbenzene	105	11.207	11.207	(1.326)	1181971	10.0000	10.0
80 Sec- Butylbenzene	105	11.466	11.466	(1.357)	1735862	10.0000	9.97
81 1,3-Dichlorobenzene	146	11.496	11.496	(1.360)	777223	10.0000	12.0
82 Benzyl Chloride	91	11.571	11.571	(1.369)	746363	10.0000	9.78
83 1,4-Dichlorobenzene	146	11.631	11.631	(1.376)	723163	10.0000	9.81
84 p-Isopropyltoluene	119	11.670	11.670	(1.381)	1495778	10.0000	9.99
85 1,2,3-Trimethylbenzene	105	11.686	11.686	(1.383)	1164287	10.0000	10.1
86 1,2-Dichlorobenzene	146	11.936	11.936	(1.412)	717454	10.0000	9.92
87 N-Butylbenzene	91	12.117	12.117	(1.434)	1121073	10.0000	9.93
88 1,2-Dibromo-3-Chloropropane	157	12.632	12.632	(1.494)	267460	10.0000	9.84
89 1,2,4-Trichlorobenzene	180	13.576	13.576	(1.606)	218274	10.0000	9.21
90 Naphthalene	128	13.716	13.716	(1.623)	481656	10.0000	9.25
91 Hexachlorobutadiene	225	13.826	13.826	(1.636)	378273	10.0000	9.42

QC Flag Legend

Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10airH.i\091018.B\25307.D
Report Date: 11-Sep-2018 09:17

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10airH.i
Lab File ID: 25307.D
Lab Smp Id: CAL5
Analysis Type: VOA
Quant Type: ISTD
Operator: AFV
Method File: \\192.168.10.12\chem\10airH.i\091018.B\TO15_253-18.m
Misc Info:

Calibration Date: 10-SEP-2018
Calibration Time: 13:22

Level: LOW
Sample Type: AIR

Test Mode:

Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

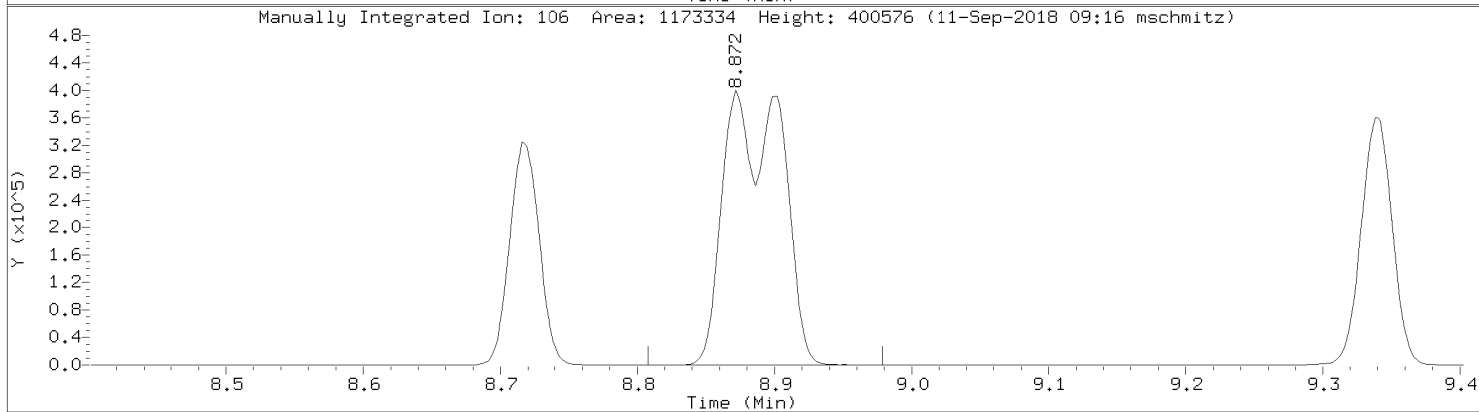
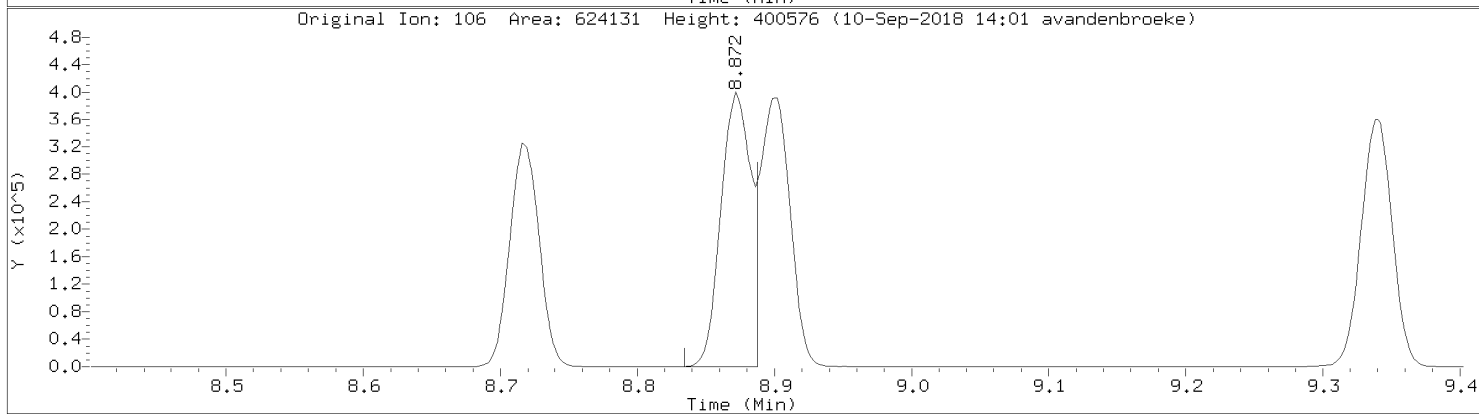
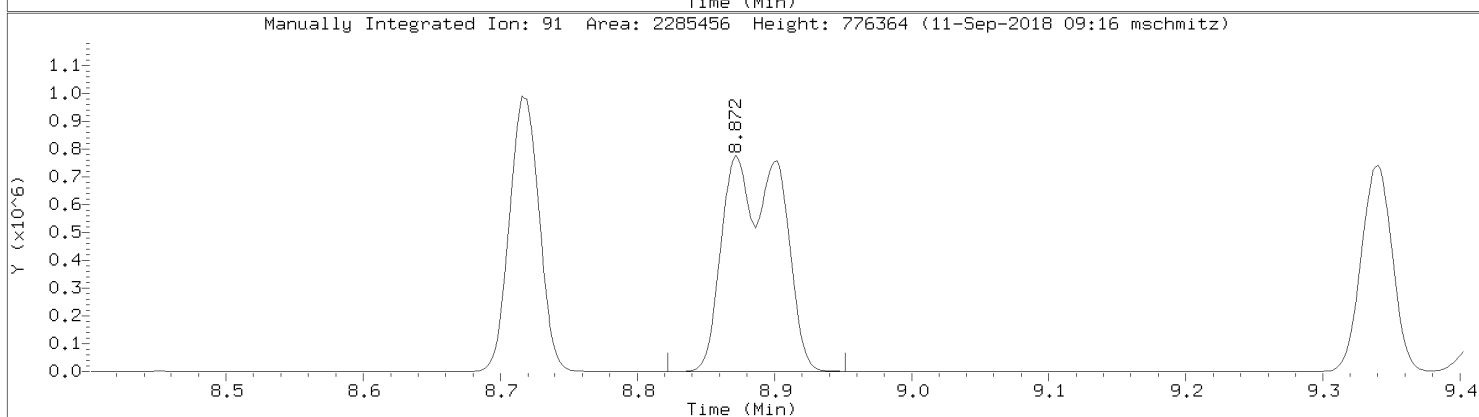
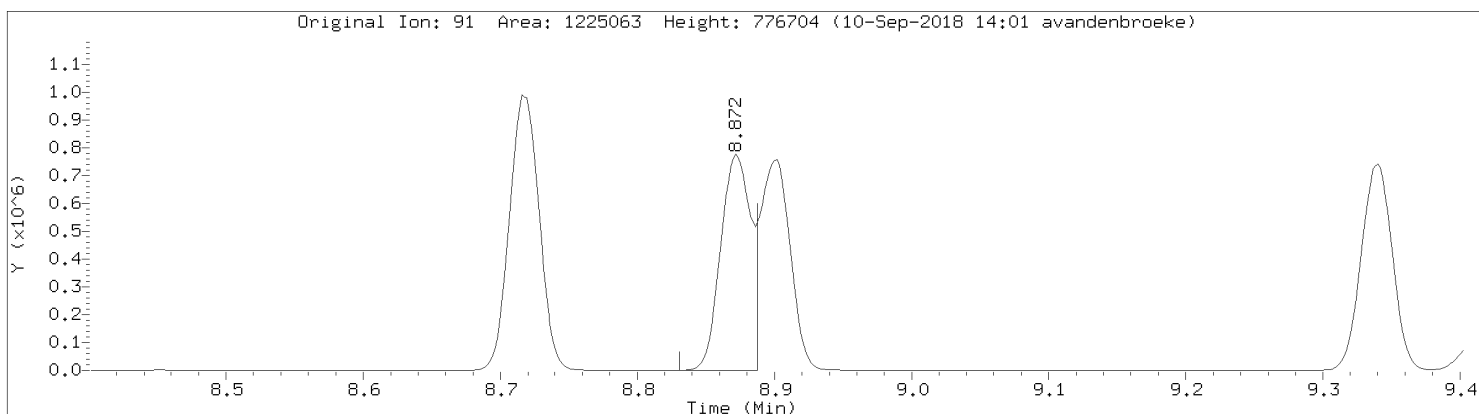
COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
45 1,4-Difluorobenze	1034069	620441	1447697	1034069	0.00
64 Chlorobenzene - d	896862	538117	1255607	896862	0.00

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
45 1,4-Difluorobenze	5.46	5.13	5.79	5.46	0.00
64 Chlorobenzene - d	8.45	8.12	8.78	8.45	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: \\192.168.10.12\chem\10airH.i\091018.B\25307.D
Injection Date: 10-SEP-2018 13:22
Instrument: 10airH.i
Lab Sample ID: CAL5

Compound: m&p-Xylene
CAS Number: 7816-60-0



Pace Analytical Services, Inc.

TO15 Analysis (UNIX)

Data file : \\192.168.10.12\chem\10airH.i\091018.B\25308.D
 Lab Smp Id: CAL6
 Inj Date : 10-SEP-2018 13:49
 Operator : AFV Inst ID: 10airH.i
 Smp Info :
 Misc Info :
 Comment : Volatile Organic COMPOUNDS in Air
 Method : \\192.168.10.12\chem\10airH.i\091018.B\TO15_253-18.m
 Meth Date : 11-Sep-2018 09:17 10airH.i Quant Type: ISTD
 Cal Date : 10-SEP-2018 13:22 Cal File: 25307.D
 Als bottle: 8 Calibration Sample, Level: 6
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: all.sub
 Target Version: 4.14
 Processing Host: 10MNAIRWKS10

Concentration Formula: Amt * DF * Uf * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
							CAL-AMT (ppbv)	ON-COL (ppbv)
1 1,1-Difluoroethane	65		2.931	2.931	(0.537)	361821	20.0000	18.7
2 Chlorodifluoromethane	67		2.947	2.947	(0.540)	169770	20.0000	18.7(Q)
3 Propylene	41		2.953	2.953	(0.541)	300827	20.0000	18.6
4 Dichlorodifluoromethane	85		2.974	2.974	(0.545)	1657430	20.0000	17.7
5 Dichlorotetrafluoroethane	85		3.043	3.043	(0.558)	1256354	20.0000	16.9
6 Chloromethane	50		3.048	3.048	(0.559)	395417	20.0000	16.0
7 Vinyl chloride	62		3.118	3.118	(0.571)	440750	20.0000	17.2
8 1,3-Butadiene	54		3.151	3.151	(0.578)	288969	20.0000	17.6
9 Bromomethane	94		3.268	3.268	(0.599)	498129	20.0000	16.6
10 Chloroethane	64		3.313	3.313	(0.607)	201573	20.0000	16.7
11 Ethanol	45		3.322	3.322	(0.609)	645421	100.000	84.2
12 Vinyl Bromide	106		3.419	3.419	(0.627)	486307	20.0000	16.6
13 Isopentane	43		3.434	3.434	(0.629)	330808	20.0000	16.7
14 Freon 123	83		3.469	3.469	(0.636)	1016426	20.0000	16.0
15 Trichlorofluoromethane	101		3.494	3.494	(0.640)	1004276	20.0000	15.1
16 Acrolein	56		3.496	3.496	(0.641)	355932	50.0000	41.9
17 Acetone	43		3.515	3.515	(0.644)	2152052	100.000	75.7
18 Isopropyl Alcohol	45		3.540	3.540	(0.649)	2421247	100.000	77.1
19 1,1-Dichloroethene	61		3.710	3.710	(0.680)	753705	20.0000	17.0
20 Acrylonitrile	53		3.717	3.717	(0.681)	808031	50.0000	44.5
21 Tert Butyl Alcohol (TBA)	59		3.737	3.737	(0.685)	999043	20.0000	17.5
22 Methyl Acetate	43		3.741	3.741	(0.686)	737818	20.0000	15.4
23 Freon 113	101		3.744	3.744	(0.686)	1189268	20.0000	16.2

Compounds	QUANT SIG		AMOUNTS					
	MASS		RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ppbv)	ON-COL (ppbv)
24 Allyl Chloride	76		3.819	3.819	(0.700)	237849	20.0000	19.2
25 Methylene chloride	49		3.822	3.822	(0.700)	2076256	100.0000	98.3
26 Carbon Disulfide	76		3.927	3.927	(0.720)	1584907	20.0000	18.8
27 Methyl Tert Butyl Ether	73		4.078	4.078	(0.747)	1446084	20.0000	20.1
28 trans-1,2-dichloroethene	96		4.092	4.092	(0.750)	608775	20.0000	18.0
29 Vinyl Acetate	43		4.167	4.167	(0.764)	1091669	20.0000	21.2
30 1,1-Dichloroethane	63		4.216	4.216	(0.773)	949933	20.0000	17.4
31 Methyl Ethyl Ketone	72		4.328	4.328	(0.793)	274212	20.0000	17.7
32 Di-isopropyl Ether	45		4.353	4.353	(0.798)	1260719	20.0000	18.8
33 n-Hexane	57		4.362	4.362	(0.799)	665170	20.0000	17.7
34 Ethyl Acetate	43		4.486	4.486	(0.822)	906894	20.0000	19.1
35 cis-1,2-Dichloroethene	96		4.507	4.507	(0.826)	652467	20.0000	18.8
36 Ethyl Tert-Butyl Ether	59		4.580	4.580	(0.839)	1490990	20.0000	20.7
37 Chloroform	83		4.688	4.688	(0.859)	1264428	20.0000	16.9
38 Tetrahydrofuran	42		4.754	4.754	(0.871)	397924	20.0000	20.2
39 1,1,1-Trichloroethane	97		5.004	5.004	(0.917)	1311868	20.0000	17.8
40 1,2-Dichloroethane	62		5.084	5.084	(0.932)	792522	20.0000	17.8
41 Benzene	78		5.242	5.242	(0.961)	1667781	20.0000	18.7
42 Carbon tetrachloride	117		5.258	5.258	(0.964)	1358606	20.0000	18.1
43 Cyclohexane	56		5.283	5.283	(0.968)	672018	20.0000	21.3(Q)
44 Tert Amyl Methyl Ether	73		5.382	5.382	(0.986)	1508757	20.0000	22.3
* 45 1,4-Difluorobenzene	114		5.457	5.457	(1.000)	958822	10.0000	
46 2,2,4-Trimethylpentane	57		5.551	5.551	(1.017)	2171336	20.0000	19.0
47 Heptane	43		5.679	5.679	(1.041)	662143	20.0000	19.8
48 Trichloroethene	130		5.787	5.787	(1.060)	912579	20.0000	18.9
49 1,2-Dichloropropane	63		5.833	5.833	(1.069)	565563	20.0000	17.5
50 Methyl methacrylate	69		5.828	5.828	(1.068)	546529	20.0000	18.7
51 1,4-Dioxane	88		5.877	5.877	(1.077)	989788	50.0000	49.3
52 Bromodichloromethane	83		5.993	5.993	(1.098)	1297639	20.0000	18.2
53 Methylcyclohexane	98		6.259	6.259	(1.147)	460400	20.0000	20.1
54 Methyl Isobutyl Ketone	43		6.337	6.337	(1.161)	947828	20.0000	21.4
55 cis-1,3-Dichloropropene	75		6.419	6.419	(1.176)	1011701	20.0000	21.4
56 trans-1,3-Dichloropropene	75		6.866	6.866	(1.258)	955301	20.0000	20.2
57 Toluene	91		6.965	6.965	(1.276)	2034961	20.0000	21.7
58 1,1,2-Trichloroethane	97		7.090	7.090	(1.299)	754425	20.0000	18.7
59 Methyl Butyl Ketone	43		7.184	7.184	(0.850)	891837	20.0000	23.7
60 n-Octane	43		7.388	7.388	(0.874)	901517	20.0000	22.6
61 Dibromochloromethane	129		7.626	7.626	(0.902)	1489565	20.0000	19.2
62 Tetrachloroethene	166		7.711	7.711	(0.912)	1188307	20.0000	17.5
63 1,2-Dibromoethane	107		7.828	7.828	(0.926)	1243264	20.0000	19.1
* 64 Chlorobenzene - d5	117		8.454	8.454	(1.000)	853443	10.0000	
65 Chlorobenzene	112		8.497	8.497	(1.005)	1727350	20.0000	18.1
66 Ethyl Benzene	91		8.717	8.717	(1.031)	2562445	20.0000	21.6
67 m&p-Xylene	91		8.900	8.900	(1.053)	3879442	40.0000	43.0(M)
68 n-Nonane	43		9.242	9.242	(1.093)	899844	20.0000	19.9
69 Styrene	104		9.306	9.306	(1.101)	1567962	20.0000	20.0
70 o-Xylene	91		9.340	9.340	(1.105)	1945901	20.0000	20.2
71 Bromoform	173		9.411	9.411	(1.113)	1271104	20.0000	21.0
72 1,1,2,2-Tetrachloroethane	83		9.753	9.753	(1.154)	1377318	20.0000	19.1
73 Isopropylbenzene	105		9.892	9.892	(1.170)	2778791	20.0000	19.9
74 N-Propylbenzene	91		10.460	10.460	(1.237)	3117164	20.0000	20.0
75 4-Ethyltoluene	105		10.643	10.643	(1.259)	2542333	20.0000	20.0
76 1,3,5-Trimethylbenzene	105		10.717	10.717	(1.268)	2172106	20.0000	20.0
77 n-Decane	57		11.070	11.070	(2.029)	1037376	20.0000	20.5

Compounds	QUANT SIG		AMOUNTS				
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ppbv)	ON-COL (ppbv)
78 Tert-Butyl Benzene	119	11.163	11.163	(1.320)	2154718	20.0000	20.0
79 1,2,4-Trimethylbenzene	105	11.207	11.207	(1.326)	2048125	20.0000	20.0
80 Sec- Butylbenzene	105	11.466	11.466	(1.356)	3018038	20.0000	20.1
81 1,3-Dichlorobenzene	146	11.500	11.500	(1.360)	1379380	20.0000	22.3
82 Benzyl Chloride	91	11.571	11.571	(1.369)	1434200	20.0000	20.3
83 1,4-Dichlorobenzene	146	11.633	11.633	(1.376)	1320809	20.0000	20.3
84 p-Isopropyltoluene	119	11.670	11.670	(1.380)	2571205	20.0000	20.0
85 1,2,3-Trimethylbenzene	105	11.686	11.686	(1.382)	1974893	20.0000	19.9
86 1,2-Dichlorobenzene	146	11.940	11.940	(1.412)	1290828	20.0000	20.1
87 N-Butylbenzene	91	12.117	12.117	(1.433)	2019241	20.0000	20.1
88 1,2-Dibromo-3-Chloropropane	157	12.632	12.632	(1.494)	520946	20.0000	20.2
89 1,2,4-Trichlorobenzene	180	13.576	13.576	(1.606)	497657	20.0000	20.8
90 Naphthalene	128	13.717	13.717	(1.622)	1066223	20.0000	20.8
91 Hexachlorobutadiene	225	13.827	13.827	(1.635)	719738	20.0000	20.8

QC Flag Legend

Q - Qualifier signal failed the ratio test.
 M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10airH.i\091018.B\25308.D
Report Date: 11-Sep-2018 09:17

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10airH.i
Lab File ID: 25308.D
Lab Smp Id: CAL6
Analysis Type: VOA
Quant Type: ISTD
Operator: AFV
Method File: \\192.168.10.12\chem\10airH.i\091018.B\TO15_253-18.m
Misc Info:

Calibration Date: 10-SEP-2018
Calibration Time: 13:22

Level: LOW
Sample Type: AIR

Test Mode:

Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
45 1,4-Difluorobenze	1034069	620441	1447697	958822	-7.28
64 Chlorobenzene - d	896862	538117	1255607	853443	-4.84

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
45 1,4-Difluorobenze	5.46	5.13	5.79	5.46	0.04
64 Chlorobenzene - d	8.45	8.12	8.78	8.45	0.02

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: \\192.168.10.12\chem\10airH.i\091018.B\25308.D

Date : 10-SEP-2018 13:49

Client ID:

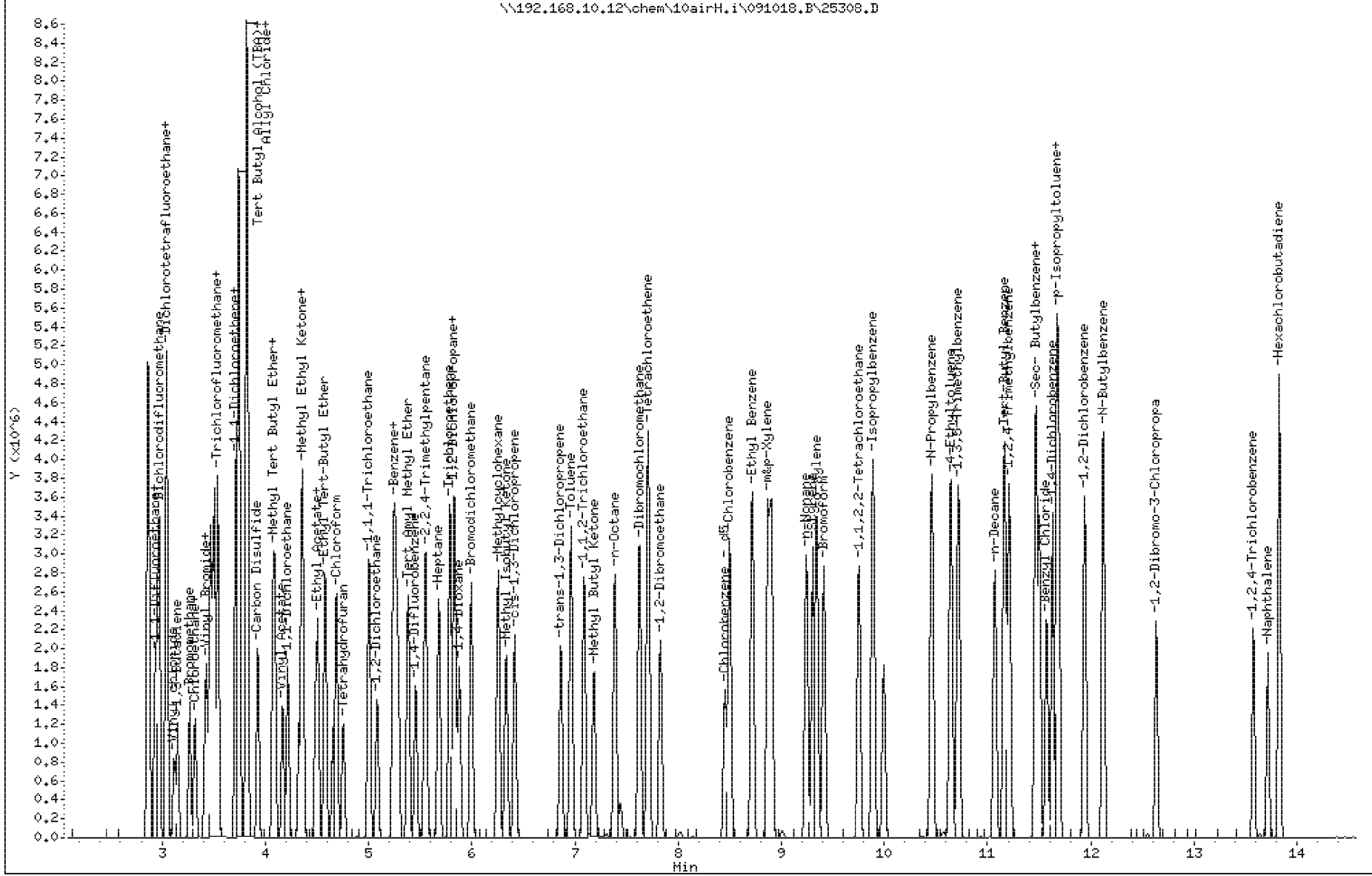
Sample Info:

Column phase: ZB-5MSplus SN338857

Instrument: 10airH.i

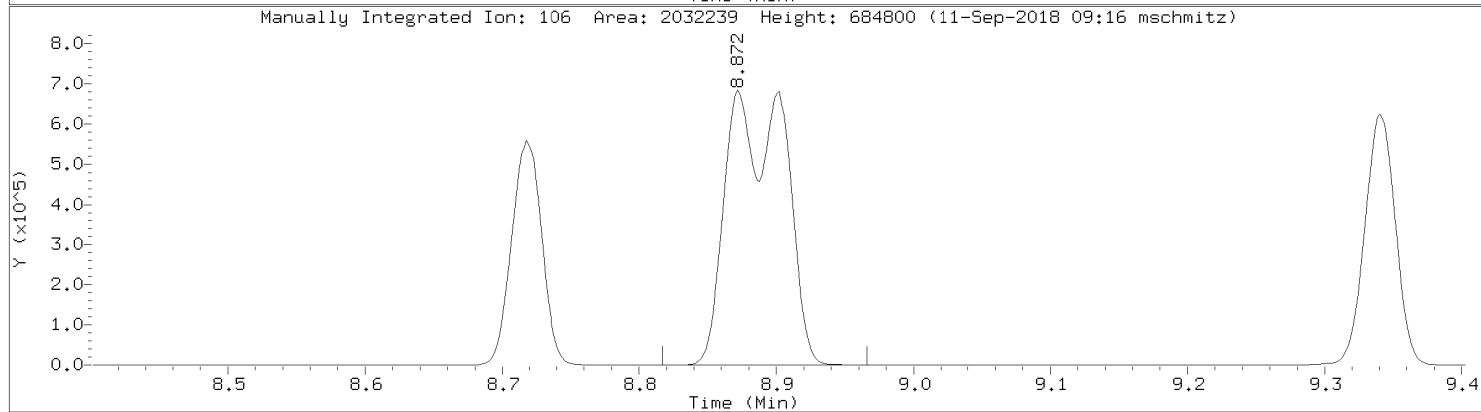
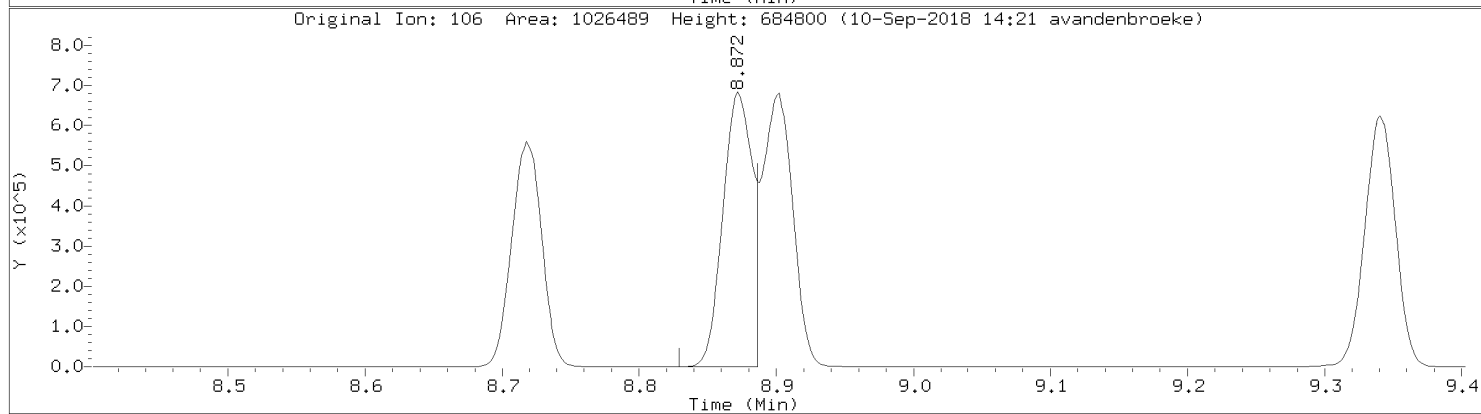
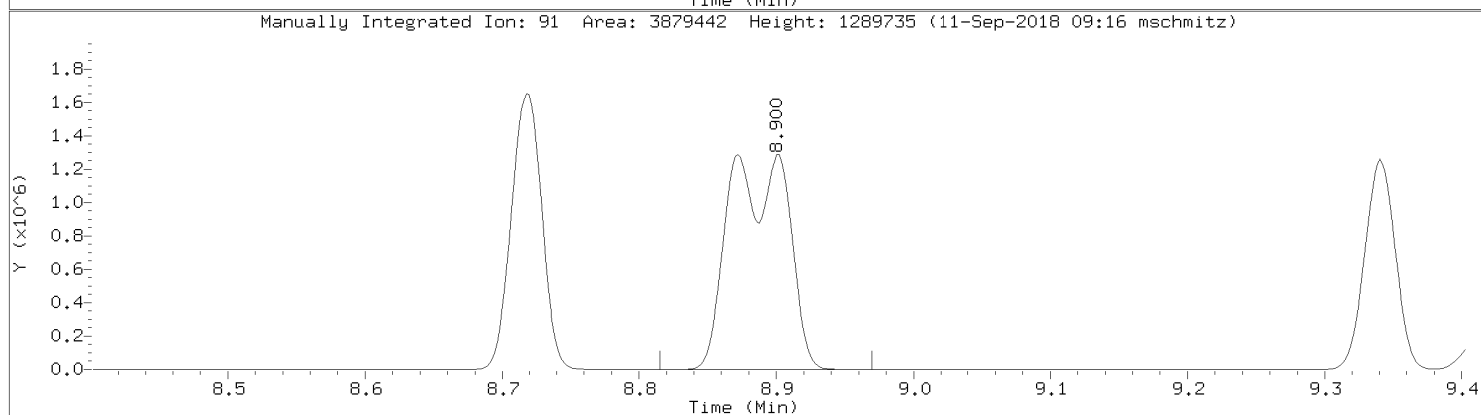
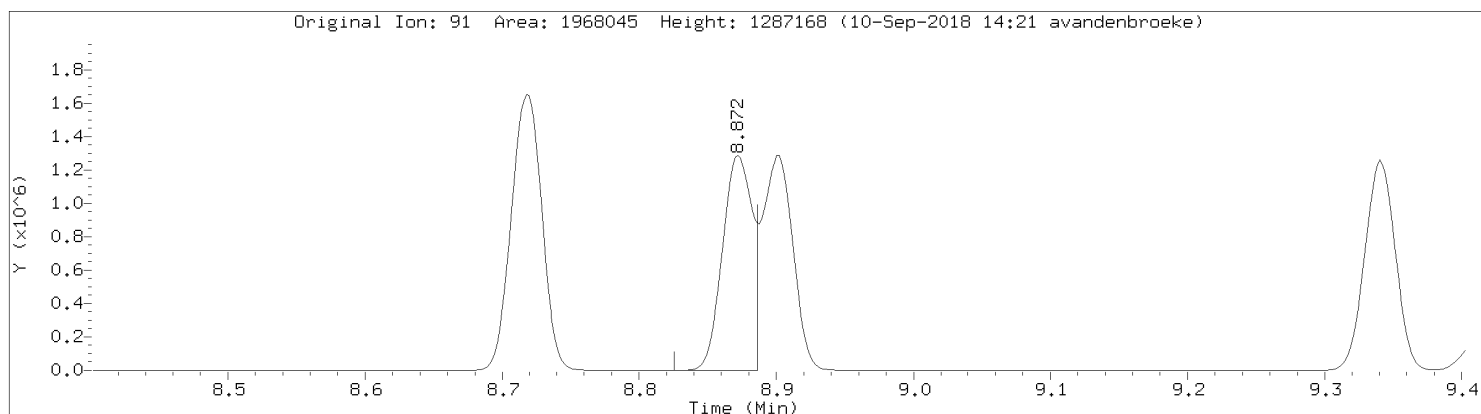
Operator: AFV

Column diameter: 0.32



Data File: \\192.168.10.12\chem\10airH.i\091018.B\25308.D
Injection Date: 10-SEP-2018 13:49
Instrument: 10airH.i
Lab Sample ID: CAL6

Compound: m&p-Xylene
CAS Number: 7816-60-0



Pace Analytical Services, Inc.

TO15 Analysis (UNIX)

Data file : \\192.168.10.12\chem\10airH.i\091018.B\25309.D
 Lab Smp Id: CAL7
 Inj Date : 10-SEP-2018 14:17
 Operator : AFV Inst ID: 10airH.i
 Smp Info :
 Misc Info :
 Comment : Volatile Organic COMPOUNDS in Air
 Method : \\192.168.10.12\chem\10airH.i\091018.B\TO15_253-18.m
 Meth Date : 11-Sep-2018 09:17 10airH.i Quant Type: ISTD
 Cal Date : 10-SEP-2018 13:49 Cal File: 25308.D
 Als bottle: 9 Calibration Sample, Level: 7
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: all.sub
 Target Version: 4.14
 Processing Host: 10MNAIRWKS10

Concentration Formula: Amt * DF * Uf * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
							CAL-AMT (ppbv)	ON-COL (ppbv)
1 1,1-Difluoroethane	65		2.933	2.933	(0.537)	503823	30.0000	25.9(Q)
2 Chlorodifluoromethane	67		2.949	2.949	(0.540)	232345	30.0000	25.5(Q)
3 Propylene	41		2.954	2.954	(0.541)	407130	30.0000	25.0
4 Dichlorodifluoromethane	85		2.974	2.974	(0.545)	2228530	30.0000	23.7
5 Dichlorotetrafluoroethane	85		3.047	3.047	(0.558)	1719848	30.0000	23.0
6 Chloromethane	50		3.050	3.050	(0.559)	541830	30.0000	21.8
7 Vinyl chloride	62		3.119	3.119	(0.572)	628541	30.0000	24.5
8 1,3-Butadiene	54		3.153	3.153	(0.578)	410254	30.0000	24.8
9 Bromomethane	94		3.270	3.270	(0.599)	720283	30.0000	23.8
10 Chloroethane	64		3.316	3.316	(0.608)	291729	30.0000	24.0
11 Ethanol	45		3.329	3.329	(0.610)	899241	150.000	117
12 Vinyl Bromide	106		3.421	3.421	(0.627)	694271	30.0000	23.5
13 Isopentane	43		3.435	3.435	(0.629)	458939	30.0000	23.1
14 Freon 123	83		3.474	3.474	(0.637)	1405810	30.0000	22.0
15 Trichlorofluoromethane	101		3.497	3.497	(0.641)	1369960	30.0000	20.5
16 Acrolein	56		3.499	3.499	(0.641)	490206	75.0000	57.4
17 Acetone	43		3.519	3.519	(0.645)	2890535	150.000	101
18 Isopropyl Alcohol	45		3.545	3.545	(0.650)	3213662	150.000	102
19 1,1-Dichloroethene	61		3.714	3.714	(0.680)	1044229	30.0000	23.5
20 Acrylonitrile	53		3.721	3.721	(0.682)	1110537	75.0000	60.8
21 Tert Butyl Alcohol (TBA)	59		3.742	3.742	(0.686)	1259750	30.0000	22.0
22 Methyl Acetate	43		3.744	3.744	(0.686)	951785	30.0000	19.7
23 Freon 113	101		3.748	3.748	(0.687)	1524534	30.0000	20.7

Compounds	QUANT SIG		AMOUNTS					
	MASS		RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ppbv)	ON-COL (ppbv)
24 Allyl Chloride	76		3.820	3.820	(0.700)	303918	30.0000	24.4
25 Methylene chloride	49		3.824	3.824	(0.701)	2616485	150.0000	151 (A)
26 Carbon Disulfide	76		3.930	3.930	(0.720)	2172145	30.0000	25.6
27 Methyl Tert Butyl Ether	73		4.079	4.079	(0.747)	1968564	30.0000	27.2
28 trans-1,2-dichloroethene	96		4.094	4.094	(0.750)	828519	30.0000	24.4
29 Vinyl Acetate	43		4.170	4.170	(0.764)	1496077	30.0000	28.9
30 1,1-Dichloroethane	63		4.220	4.220	(0.773)	1294539	30.0000	23.6
31 Methyl Ethyl Ketone	72		4.332	4.332	(0.794)	381386	30.0000	24.5
32 Di-isopropyl Ether	45		4.356	4.356	(0.798)	1659270	30.0000	24.6
33 n-Hexane	57		4.365	4.365	(0.800)	900168	30.0000	23.8
34 Ethyl Acetate	43		4.491	4.491	(0.823)	1232759	30.0000	25.7
35 cis-1,2-Dichloroethene	96		4.511	4.511	(0.826)	891406	30.0000	25.5
36 Ethyl Tert-Butyl Ether	59		4.584	4.584	(0.840)	2032039	30.0000	28.1
37 Chloroform	83		4.692	4.692	(0.860)	1716382	30.0000	22.9
38 Tetrahydrofuran	42		4.757	4.757	(0.872)	547112	30.0000	27.6
39 1,1,1-Trichloroethane	97		5.008	5.008	(0.917)	1784140	30.0000	24.0
40 1,2-Dichloroethane	62		5.086	5.086	(0.932)	1081468	30.0000	24.2
41 Benzene	78		5.244	5.244	(0.961)	2285408	30.0000	25.4
42 Carbon tetrachloride	117		5.261	5.261	(0.964)	1799598	30.0000	23.8
43 Cyclohexane	56		5.286	5.286	(0.968)	915952	30.0000	28.9
44 Tert Amyl Methyl Ether	73		5.386	5.386	(0.987)	2094658	30.0000	30.8 (A)
* 45 1,4-Difluorobenzene	114		5.458	5.458	(1.000)	964576	10.0000	
46 2,2,4-Trimethylpentane	57		5.553	5.553	(1.017)	2955399	30.0000	25.7
47 Heptane	43		5.682	5.682	(1.041)	897747	30.0000	26.7
48 Trichloroethene	130		5.790	5.790	(1.061)	1262558	30.0000	25.9
49 1,2-Dichloropropane	63		5.835	5.835	(1.069)	762584	30.0000	23.5
50 Methyl methacrylate	69		5.831	5.831	(1.068)	751397	30.0000	25.6
51 1,4-Dioxane	88		5.881	5.881	(1.077)	1361120	75.0000	67.4
52 Bromodichloromethane	83		5.996	5.996	(1.099)	1773127	30.0000	24.7
53 Methylcyclohexane	98		6.262	6.262	(1.147)	645019	30.0000	30.0
54 Methyl Isobutyl Ketone	43		6.339	6.339	(1.161)	1294298	30.0000	29.1
55 cis-1,3-Dichloropropene	75		6.422	6.422	(1.177)	1405081	30.0000	29.5
56 trans-1,3-Dichloropropene	75		6.868	6.868	(1.258)	1338396	30.0000	29.9
57 Toluene	91		6.967	6.967	(1.276)	2816312	30.0000	29.8
58 1,1,2-Trichloroethane	97		7.093	7.093	(1.299)	1044299	30.0000	25.7
59 Methyl Butyl Ketone	43		7.187	7.187	(0.850)	1228847	30.0000	32.1 (A)
60 n-Octane	43		7.391	7.391	(0.874)	1218095	30.0000	29.9
61 Dibromochloromethane	129		7.627	7.627	(0.902)	2049187	30.0000	26.0
62 Tetrachloroethene	166		7.711	7.711	(0.912)	1634342	30.0000	23.7
63 1,2-Dibromoethane	107		7.830	7.830	(0.926)	1714978	30.0000	25.8
* 64 Chlorobenzene - d5	117		8.456	8.456	(1.000)	869379	10.0000	
65 Chlorobenzene	112		8.500	8.500	(1.005)	2408274	30.0000	24.8
66 Ethyl Benzene	91		8.719	8.719	(1.031)	3541993	30.0000	29.3
67 m&p-Xylene	91		8.902	8.902	(1.053)	5325129	60.0000	58.0 (M)
68 n-Nonane	43		9.244	9.244	(1.093)	1207154	30.0000	30.0 (A)
69 Styrene	104		9.308	9.308	(1.101)	2187304	30.0000	30.0
70 o-Xylene	91		9.342	9.342	(1.105)	2667867	30.0000	27.3
71 Bromoform	173		9.413	9.413	(1.113)	1770168	30.0000	28.7
72 1,1,2,2-Tetrachloroethane	83		9.755	9.755	(1.154)	1906129	30.0000	26.0
73 Isopropylbenzene	105		9.892	9.892	(1.170)	3817532	30.0000	30.0 (A)
74 N-Propylbenzene	91		10.460	10.460	(1.237)	4287227	30.0000	30.0
75 4-Ethyltoluene	105		10.644	10.644	(1.259)	3510388	30.0000	30.0
76 1,3,5-Trimethylbenzene	105		10.717	10.717	(1.267)	2969034	30.0000	30.0 (A)
77 n-Decane	57		11.072	11.072	(2.028)	1386298	30.0000	29.8

Compounds	QUANT SIG		AMOUNTS				
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ppbv)	ON-COL (ppbv)
78 Tert-Butyl Benzene	119	11.164	11.164	(1.320)	2941156	30.0000	30.0
79 1,2,4-Trimethylbenzene	105	11.211	11.211	(1.326)	2800053	30.0000	30.0
80 Sec- Butylbenzene	105	11.468	11.468	(1.356)	4098087	30.0000	30.0
81 1,3-Dichlorobenzene	146	11.500	11.500	(1.360)	1902596	30.0000	30.2 (A)
82 Benzyl Chloride	91	11.573	11.573	(1.369)	2077385	30.0000	29.9
83 1,4-Dichlorobenzene	146	11.633	11.633	(1.376)	1832059	30.0000	29.9
84 p-Isopropyltoluene	119	11.670	11.670	(1.380)	3451833	30.0000	30.0
85 1,2,3-Trimethylbenzene	105	11.688	11.688	(1.382)	2662875	30.0000	30.0 (A)
86 1,2-Dichlorobenzene	146	11.940	11.940	(1.412)	1805091	30.0000	29.9
87 N-Butylbenzene	91	12.119	12.119	(1.433)	2818760	30.0000	29.9
88 1,2-Dibromo-3-Chloropropane	157	12.632	12.632	(1.494)	777347	30.0000	29.9
89 1,2,4-Trichlorobenzene	180	13.576	13.576	(1.605)	749987	30.0000	29.8
90 Naphthalene	128	13.717	13.717	(1.622)	1575201	30.0000	29.7
91 Hexachlorobutadiene	225	13.828	13.828	(1.635)	955822	30.0000	29.7

QC Flag Legend

- A - Target compound detected but, quantitated amount exceeded maximum amount.
- Q - Qualifier signal failed the ratio test.
- M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10airH.i\091018.B\25309.D
Report Date: 11-Sep-2018 09:17

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10airH.i
Lab File ID: 25309.D
Lab Smp Id: CAL7
Analysis Type: VOA
Quant Type: ISTD
Operator: AFV
Method File: \\192.168.10.12\chem\10airH.i\091018.B\TO15_253-18.m
Misc Info:

Calibration Date: 10-SEP-2018
Calibration Time: 13:22

Level: LOW
Sample Type: AIR

Test Mode:

Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

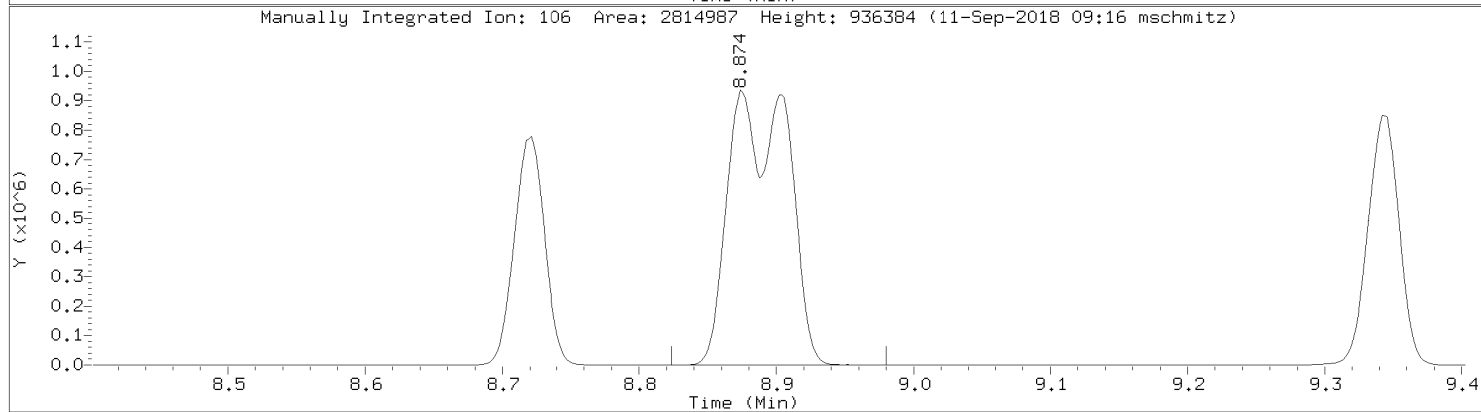
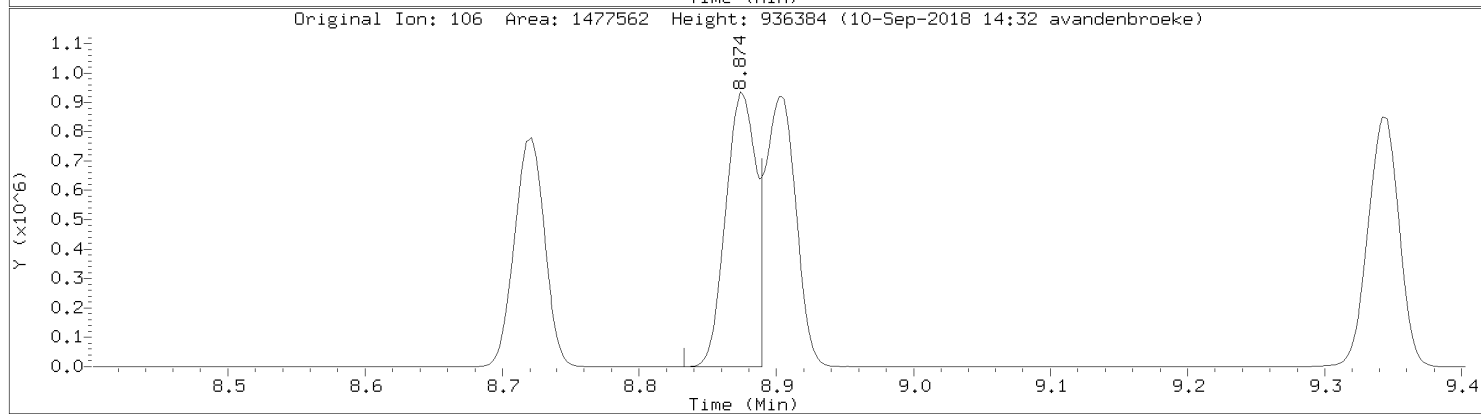
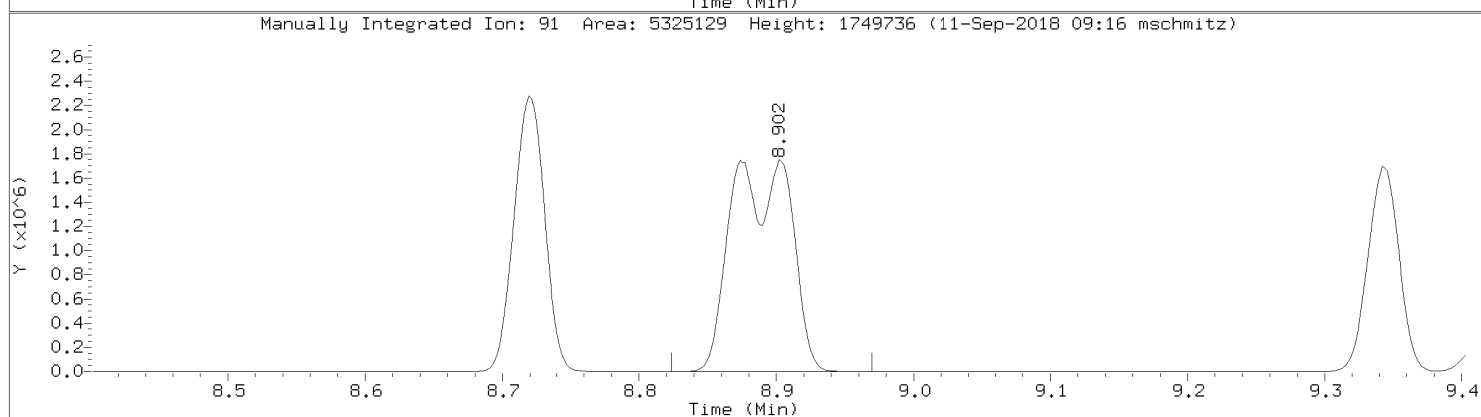
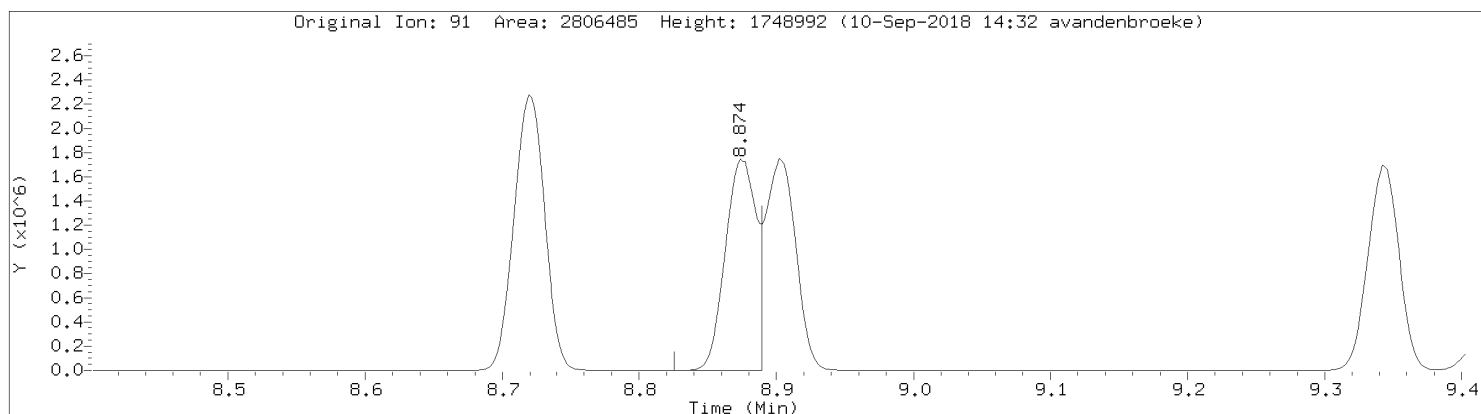
COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
45 1,4-Difluorobenze	1034069	620441	1447697	964576	-6.72
64 Chlorobenzene - d	896862	538117	1255607	869379	-3.06

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
45 1,4-Difluorobenze	5.46	5.13	5.79	5.46	0.07
64 Chlorobenzene - d	8.45	8.12	8.78	8.46	0.04

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: \\192.168.10.12\chem\10airH.i\091018.B\25309.D
Injection Date: 10-SEP-2018 14:17
Instrument: 10airH.i
Lab Sample ID: CAL7

Compound: m&p-Xylene
CAS Number: 7816-60-0



Pace Analytical Services, Inc.

TO15 Analysis (UNIX)

Data file : \\192.168.10.12\chem\10airH.i\091018.B\25311.D
 Lab Smp Id: ICV
 Inj Date : 10-SEP-2018 15:10
 Operator : EMC Inst ID: 10airH.i
 Smp Info :
 Misc Info :
 Comment : Volatile Organic COMPOUNDS in Air
 Method : \\192.168.10.12\chem\10airH.i\091018.B\TO15_253-18.m
 Meth Date : 11-Sep-2018 09:17 10airH.i Quant Type: ISTD
 Cal Date : 10-SEP-2018 14:17 Cal File: 25309.D
 Als bottle: 11 QC Sample: LCS
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: all.sub
 Target Version: 4.14
 Processing Host: 10MNAIRWKS10

Concentration Formula: Amt * DF * Uf * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN (ppbv)	FINAL (ppbv)
1 1,1-Difluoroethane	65		2.933	2.933	(0.538)	3338	0.16405	0.164 (QR)
2 Chlorodifluoromethane	67		2.947	2.949	(0.540)	87309	9.14914	9.15
3 Propylene	41		2.954	2.954	(0.541)	168789	9.89671	9.90
4 Dichlorodifluoromethane	85		2.974	2.974	(0.545)	914029	9.28252	9.28
5 Dichlorotetrafluoroethane	85		3.045	3.047	(0.558)	723730	9.25720	9.26
6 Chloromethane	50		3.048	3.050	(0.559)	219911	8.45370	8.45
7 Vinyl chloride	62		3.119	3.119	(0.572)	233925	8.69557	8.70
8 1,3-Butadiene	54		3.151	3.153	(0.578)	152167	8.79560	8.80
9 Bromomethane	94		3.270	3.270	(0.599)	275954	8.70973	8.71
10 Chloroethane	64		3.315	3.316	(0.607)	110516	8.68730	8.69
11 Ethanol	45		3.322	3.329	(0.609)	85985	10.6507	10.7
12 Vinyl Bromide	106		3.421	3.421	(0.627)	273571	8.85552	8.86
13 Isopentane	43		3.433	3.435	(0.629)	175134	8.40518	8.41
14 Freon 123	83		3.469	3.474	(0.636)	9837	0.14735	0.147 (R)
15 Trichlorofluoromethane	101		3.496	3.497	(0.641)	609755	8.70523	8.71
16 Acrolein	56		3.497	3.499	(0.641)	70798	7.92190	7.92
17 Acetone	43		3.519	3.519	(0.645)	273210	9.13044	9.13
18 Isopropyl Alcohol	45		3.540	3.545	(0.649)	332985	10.0723	10.1 (M)
19 1,1-Dichloroethene	61		3.712	3.714	(0.680)	391404	8.40771	8.41
20 Acrylonitrile	53		3.716	3.721	(0.681)	179734	9.40702	9.41
21 Tert Butyl Alcohol (TBA)	59		3.737	3.742	(0.685)	524436	8.74250	8.74
22 Methyl Acetate	43		3.739	3.744	(0.685)	75543	1.49541	1.50 (QR)
23 Freon 113	101		3.746	3.748	(0.686)	652907	8.45867	8.46

Compounds	QUANT	SIG						CONCENTRATIONS	
			MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ppbv)	FINAL (ppbv)
24 Allyl Chloride	76		3.820	3.820	(0.700)	86735	6.66744	6.67	
25 Methylene chloride	49		3.822	3.824	(0.700)	297156	9.54829	9.55	
26 Carbon Disulfide	76		3.929	3.930	(0.720)	640693	7.20735	7.21	
27 Methyl Tert Butyl Ether	73		4.079	4.079	(0.748)	776371	10.2686	10.3	
28 trans-1,2-dichloroethene	96		4.092	4.094	(0.750)	298737	8.39090	8.39	
29 Vinyl Acetate	43		4.166	4.170	(0.764)	399573	7.37960	7.38	
30 1,1-Dichloroethane	63		4.216	4.220	(0.773)	514697	8.97035	8.97	
31 Methyl Ethyl Ketone	72		4.328	4.332	(0.793)	147709	9.05974	9.06	
32 Di-isopropyl Ether	45		4.355	4.356	(0.798)	686523	9.72202	9.72	
33 n-Hexane	57		4.363	4.365	(0.800)	344354	8.70926	8.71	
34 Ethyl Acetate	43		4.488	4.491	(0.822)	404592	8.07413	8.07	
35 cis-1,2-Dichloroethene	96		4.505	4.511	(0.826)	348843	9.53583	9.54	
36 Ethyl Tert-Butyl Ether	59		4.580	4.584	(0.839)	811743	10.7288	10.7	
37 Chloroform	83		4.688	4.692	(0.859)	683015	8.69325	8.69	
38 Tetrahydrofuran	42		4.756	4.757	(0.872)	219916	10.5833	10.6	
39 1,1,1-Trichloroethane	97		5.004	5.008	(0.917)	699984	9.00420	9.00	
40 1,2-Dichloroethane	62		5.082	5.086	(0.931)	416055	8.88223	8.88	
41 Benzene	78		5.242	5.244	(0.961)	902291	9.59932	9.60	
42 Carbon tetrachloride	117		5.258	5.261	(0.964)	671543	8.47620	8.48	
43 Cyclohexane	56		5.283	5.286	(0.968)	363408	10.9383	10.9(Q)	
44 Tert Amyl Methyl Ether	73		5.382	5.386	(0.986)	808065	11.3375	11.3	
* 45 1,4-Difluorobenzene	114		5.457	5.458	(1.000)	1009472	10.0000		
46 2,2,4-Trimethylpentane	57		5.551	5.553	(1.017)	1145750	9.51074	9.51	
47 Heptane	43		5.680	5.682	(1.041)	351414	9.98392	9.98	
48 Trichloroethene	130		5.789	5.790	(1.061)	519959	10.2101	10.2	
49 1,2-Dichloropropane	63		5.831	5.835	(1.069)	305486	8.99227	8.99	
50 Methyl methacrylate	69		5.828	5.831	(1.068)	290901	9.47392	9.47	
51 1,4-Dioxane	88		5.879	5.881	(1.077)	224199	10.6080	10.6	
52 Bromodichloromethane	83		5.994	5.996	(1.099)	706979	9.41643	9.42	
53 Methylcyclohexane	98		6.261	6.262	(1.147)	247195	9.64465	9.64	
54 Methyl Isobutyl Ketone	43		6.337	6.339	(1.161)	509363	10.9306	10.9	
55 cis-1,3-Dichloropropene	75		6.419	6.422	(1.176)	564031	11.3145	11.3	
56 trans-1,3-Dichloropropene	75		6.864	6.868	(1.258)	467714	8.83938	8.84	
57 Toluene	91		6.963	6.967	(1.276)	1079143	10.9166	10.9	
58 1,1,2-Trichloroethane	97		7.089	7.093	(1.299)	400744	9.42282	9.42	
59 Methyl Butyl Ketone	43		7.187	7.187	(0.850)	459118	11.9216	11.9	
60 n-Octane	43		7.388	7.391	(0.874)	27865	0.68138	0.681(R)	
61 Dibromochloromethane	129		7.624	7.627	(0.902)	750417	9.47542	9.48	
62 Tetrachloroethene	166		7.711	7.711	(0.912)	636058	9.17167	9.17	
63 1,2-Dibromoethane	107		7.828	7.830	(0.926)	655323	9.82799	9.83	
* 64 Chlorobenzene - d5	117		8.452	8.456	(1.000)	873432	10.0000		
65 Chlorobenzene	112		8.499	8.500	(1.005)	892865	9.15217	9.15	
66 Ethyl Benzene	91		8.717	8.719	(1.031)	1313106	10.8193	10.8	
67 m&p-Xylene	91		8.871	8.902	(1.050)	2003590	21.7056	21.7(M)	
68 n-Nonane	43		9.239	9.244	(1.093)	63989	1.33269	1.33(R)	
69 Styrene	104		9.304	9.308	(1.101)	785528	9.03556	9.04	
70 o-Xylene	91		9.340	9.342	(1.105)	1020793	10.3787	10.4	
71 Bromoform	173		9.409	9.413	(1.113)	558342	8.99978	9.00	
72 1,1,2,2-Tetrachloroethane	83		9.753	9.755	(1.154)	625571	8.49754	8.50	
73 Isopropylbenzene	105		9.890	9.892	(1.170)	1411037	8.94868	8.95	
74 N-Propylbenzene	91		10.458	10.460	(1.237)	1528379	8.69276	8.69	
75 4-Ethyltoluene	105		10.644	10.644	(1.259)	1278837	9.00942	9.01	
76 1,3,5-Trimethylbenzene	105		10.715	10.717	(1.268)	1101961	8.92038	8.92	
77 n-Decane	57		11.069	11.072	(2.028)	176343	3.10100	3.10(R)	

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (ppbv)	FINAL (ppbv)
78 Tert-Butyl Benzene	119	11.163	11.164	(1.321)	1087113	8.90729	8.91
79 1,2,4-Trimethylbenzene	105	11.207	11.211	(1.326)	1042497	8.98759	8.99
80 Sec- Butylbenzene	105	11.466	11.468	(1.357)	1508795	8.82308	8.82
81 1,3-Dichlorobenzene	146	11.498	11.500	(1.360)	674355	10.6587	10.7
82 Benzyl Chloride	91	11.571	11.573	(1.369)	610595	8.22045	8.22
83 1,4-Dichlorobenzene	146	11.629	11.633	(1.376)	628427	8.70609	8.71
84 p-Isopropyltoluene	119	11.670	11.670	(1.381)	1310620	8.90324	8.90
85 1,2,3-Trimethylbenzene	105	11.686	11.688	(1.383)	1030591	9.05521	9.06
86 1,2-Dichlorobenzene	146	11.938	11.940	(1.412)	629368	8.88572	8.89
87 N-Butylbenzene	91	12.117	12.119	(1.434)	972026	8.79635	8.80
88 1,2-Dibromo-3-Chloropropane	157	12.632	12.632	(1.494)	129887	5.01991	5.02 (R)
89 1,2,4-Trichlorobenzene	180	13.578	13.576	(1.606)	209289	9.07593	9.08
90 Naphthalene	128	13.716	13.717	(1.623)	468654	9.24296	9.24
91 Hexachlorobutadiene	225	13.826	13.828	(1.636)	369089	9.44397	9.44

QC Flag Legend

- Q - Qualifier signal failed the ratio test.
- R - Spike/Surrogate failed recovery limits.
- M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10airH.i\091018.B\25311.D
 Report Date: 11-Sep-2018 09:17

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: 10airH.i
 Lab File ID: 25311.D
 Lab Smp Id: ICV
 Analysis Type: VOA
 Quant Type: ISTD
 Operator: EMC
 Method File: \\192.168.10.12\chem\10airH.i\091018.B\TO15_253-18.m
 Misc Info:

Calibration Date: 10-SEP-2018
 Calibration Time: 13:22
 Level: LOW
 Sample Type: AIR

Test Mode:
 Use Initial Calibration Level 5.
 If Continuing Cal. use Initial Cal. Level 5

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
45 1,4-Difluorobenze	1034069	620441	1447697	1009472	-2.38
64 Chlorobenzene - d	896862	538117	1255607	873432	-2.61

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
45 1,4-Difluorobenze	5.46	5.13	5.79	5.46	0.03
64 Chlorobenzene - d	8.45	8.12	8.78	8.45	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
 AREA LOWER LIMIT = - 40% of internal standard area.
 RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
 RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Pace Analytical Services, Inc.

RECOVERY REPORT

Client Name: Client SDG: 091018.B
 Sample Matrix: Gas Fraction: VOA
 Lab Smp Id: ICV Operator: EMC
 Level: LOW SampleType: LCS
 Data Type: MS DATA Quant Type: ISTD
 SpikeList File: 516icv.spk
 Sublist File: all.sub
 Method File: \\192.168.10.12\chem\10airH.i\091018.B\TO15_253-18.m
 Misc Info:

SPIKE COMPOUND	CONC ADDED ppbv	CONC RECOVERED ppbv	% RECOVERED	LIMITS
1 1,1-Difluoroethane	10.0	0.164	1.64*	60-140
2 Chlorodifluorometh	10.7	9.15	85.51	60-140
3 Propylene	10.8	9.90	91.64	60-140
4 Dichlorodifluorome	10.6	9.28	87.57	60-140
5 Dichlorotetrafluor	10.6	9.26	87.33	60-140
6 Chloromethane	10.9	8.45	77.56	60-140
7 Vinyl chloride	9.90	8.70	87.83	60-140
8 1,3-Butadiene	10.2	8.80	86.23	60-140
9 Bromomethane	10.2	8.71	85.39	60-140
10 Chloroethane	9.90	8.69	87.75	60-140
11 Ethanol	10.6	10.7	100.48	60-140
12 Vinyl Bromide	10.5	8.86	84.34	60-140
13 Isopentane	10.7	8.41	78.55	60-140
14 Freon 123	10.0	0.147	1.47*	60-140
15 Trichlorofluoromet	10.6	8.71	82.12	60-140
16 Acrolein	10.9	7.92	72.68	60-140
17 Acetone	10.7	9.13	85.33	60-140
18 Isopropyl Alcohol	10.7	10.1	94.13	60-140
19 1,1-Dichloroethene	9.90	8.41	84.93	60-140
20 Acrylonitrile	11.0	9.41	85.52	60-140
23 Freon 113	10.3	8.46	82.12	60-140
21 Tert Butyl Alcohol	11.0	8.74	79.48	60-140
22 Methyl Acetate	10.0	1.50	14.95*	60-140
25 Methylene chloride	11.0	9.55	86.80	60-140
24 Allyl Chloride	11.0	6.67	60.61	60-140
26 Carbon Disulfide	10.5	7.21	68.64	60-140
28 trans-1,2-dichloro	9.00	8.39	93.23	60-140
27 Methyl Tert Butyl	10.5	10.3	97.80	60-140
29 Vinyl Acetate	10.3	7.38	71.65	60-140
30 1,1-Dichloroethane	10.6	8.97	84.63	60-140
31 Methyl Ethyl Keton	10.6	9.06	85.47	60-140
33 n-Hexane	10.0	8.71	87.09	60-140
32 Di-isopropyl Ether	10.2	9.72	95.31	60-140
34 Ethyl Acetate	10.2	8.07	79.16	60-140
35 cis-1,2-Dichloroet	10.6	9.54	89.96	60-140
36 Ethyl Tert-Butyl E	10.6	10.7	101.22	60-140
37 Chloroform	10.2	8.69	85.23	60-140
38 Tetrahydrofuran	10.7	10.6	98.91	60-140
39 1,1,1-Trichloroeth	10.7	9.00	84.15	60-140
40 1,2-Dichloroethane	10.7	8.88	83.01	60-140

SPIKE COMPOUND	CONC ADDED ppbv	CONC RECOVERED ppbv	% RECOVERED	LIMITS
41 Benzene	10.8	9.60	88.88	60-140
42 Carbon tetrachlori	10.2	8.48	83.10	60-140
43 Cyclohexane	10.0	10.9	109.38	60-140
44 Tert Amyl Methyl E	10.5	11.3	107.98	60-140
46 2,2,4-Trimethylpen	10.6	9.51	89.72	60-140
47 Heptane	11.0	9.98	90.76	60-140
49 1,2-Dichloropropan	10.9	8.99	82.50	60-140
48 Trichloroethene	10.7	10.2	95.42	60-140
50 Methyl methacrylat	10.4	9.47	91.10	60-140
51 1,4-Dioxane	10.7	10.6	99.14	60-140
52 Bromodichlorometha	10.7	9.42	88.00	60-140
53 Methylcyclohexane	11.0	9.64	87.68	60-140
54 Methyl Isobutyl Ke	11.0	10.9	99.37	60-140
55 cis-1,3-Dichloropr	11.0	11.3	102.86	60-140
56 trans-1,3-Dichloro	10.3	8.84	85.82	60-140
57 Toluene	10.8	10.9	101.08	60-140
58 1,1,2-Trichloroeth	11.0	9.42	85.66	60-140
59 Methyl Butyl Keton	11.0	11.9	108.38	60-140
60 n-Octane	10.0	0.681	6.81*	60-140
61 Dibromochlorometha	10.5	9.48	90.24	60-140
63 1,2-Dibromoethane	10.9	9.83	90.17	60-140
62 Tetrachloroethene	10.7	9.17	85.72	60-140
65 Chlorobenzene	11.0	9.15	83.20	60-140
66 Ethyl Benzene	10.8	10.8	100.18	60-140
67 m&p-Xylene	21.0	21.7	103.36	60-140
68 n-Nonane	10.0	1.33	13.33*	60-140
71 Bromoform	10.5	9.00	85.71	60-140
69 Styrene	10.9	9.04	82.90	60-140
70 o-Xylene	10.9	10.4	95.22	60-140
72 1,1,2,2-Tetrachlor	10.9	8.50	77.96	60-140
73 Isopropylbenzene	10.4	8.95	86.05	60-140
74 N-Propylbenzene	10.1	8.69	86.07	60-140
75 4-Ethyltoluene	10.8	9.01	83.42	60-140
76 1,3,5-Trimethylben	10.7	8.92	83.37	60-140
77 n-Decane	10.0	3.10	31.01*	60-140
78 Tert-Butyl Benzene	10.7	8.91	83.25	60-140
79 1,2,4-Trimethylben	10.7	8.99	84.00	60-140
81 1,3-Dichlorobenzen	10.4	10.7	102.49	60-140
80 Sec- Butylbenzene	10.8	8.82	81.70	60-140
82 Benzyl Chloride	10.4	8.22	79.04	60-140
83 1,4-Dichlorobenzen	10.8	8.71	80.61	60-140
84 p-Isopropyltoluene	10.8	8.90	82.44	60-140
85 1,2,3-Trimethylben	10.9	9.06	83.08	60-140
86 1,2-Dichlorobenzen	10.8	8.89	82.28	60-140
87 N-Butylbenzene	11.0	8.80	79.97	60-140
88 1,2-Dibromo-3-Chlo	10.0	5.02	50.20*	60-140
89 1,2,4-Trichloroben	10.8	9.08	84.04	60-140
90 Naphthalene	11.0	9.24	84.03	60-140
91 Hexachlorobutadien	11.0	9.44	85.85	60-140

Data File: \\192.168.10.12\chem\10airH.i\091018.B\25311.D

Date : 10-SEP-2018 15:10

Client ID:

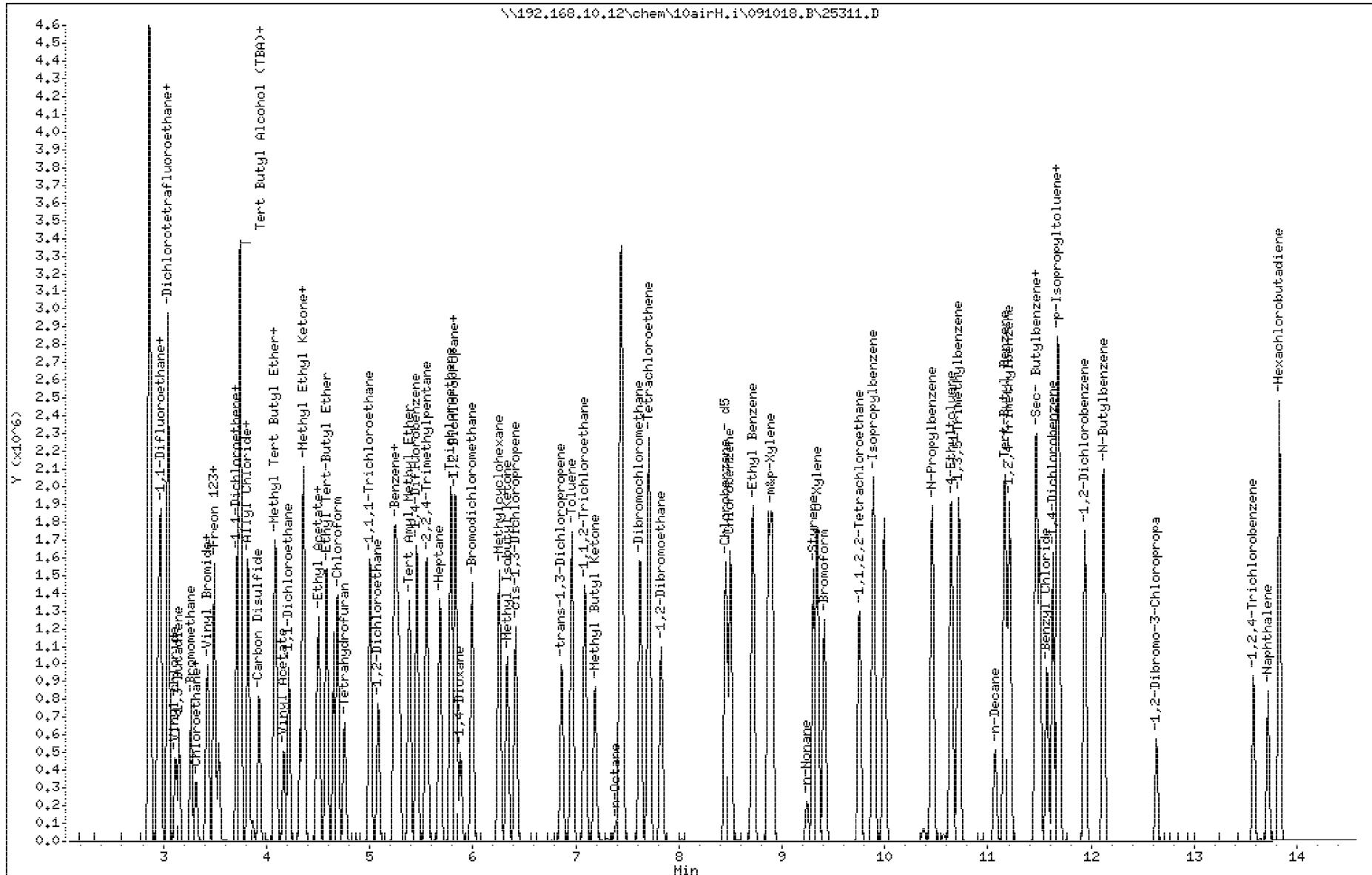
Sample Info:

Column phase: ZB-5MSplus SN338857

Instrument: 10airH.i

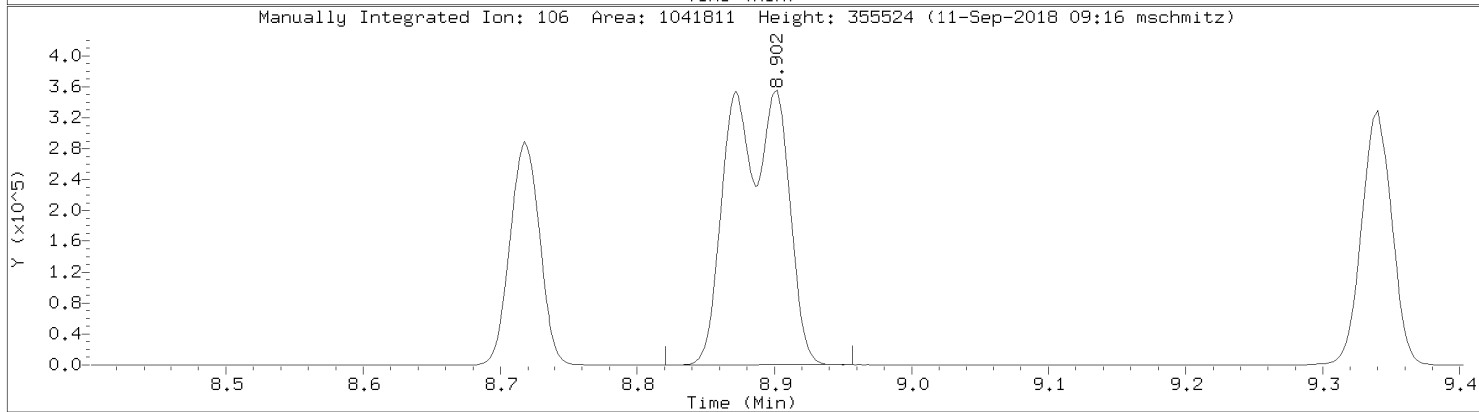
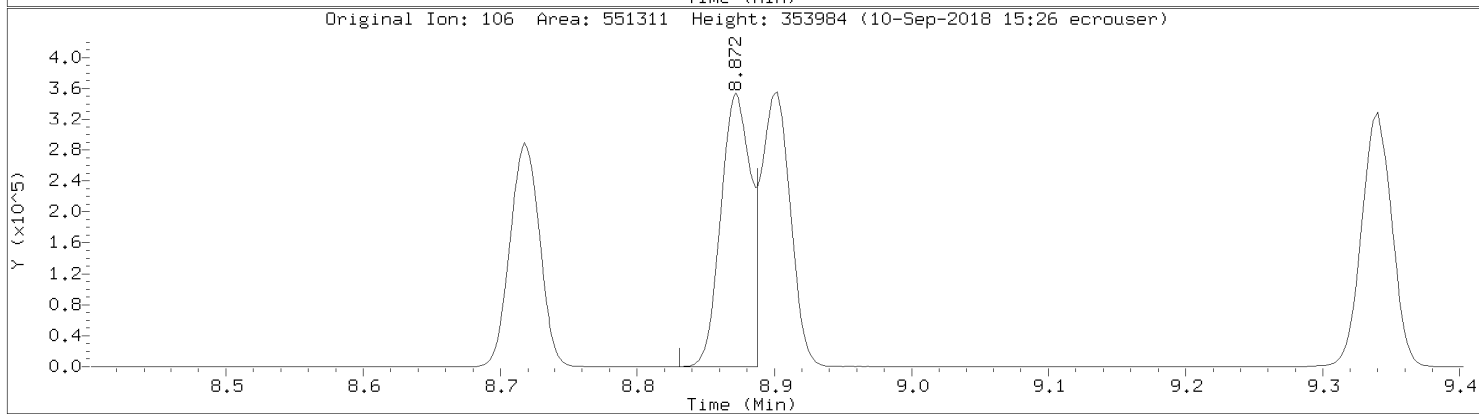
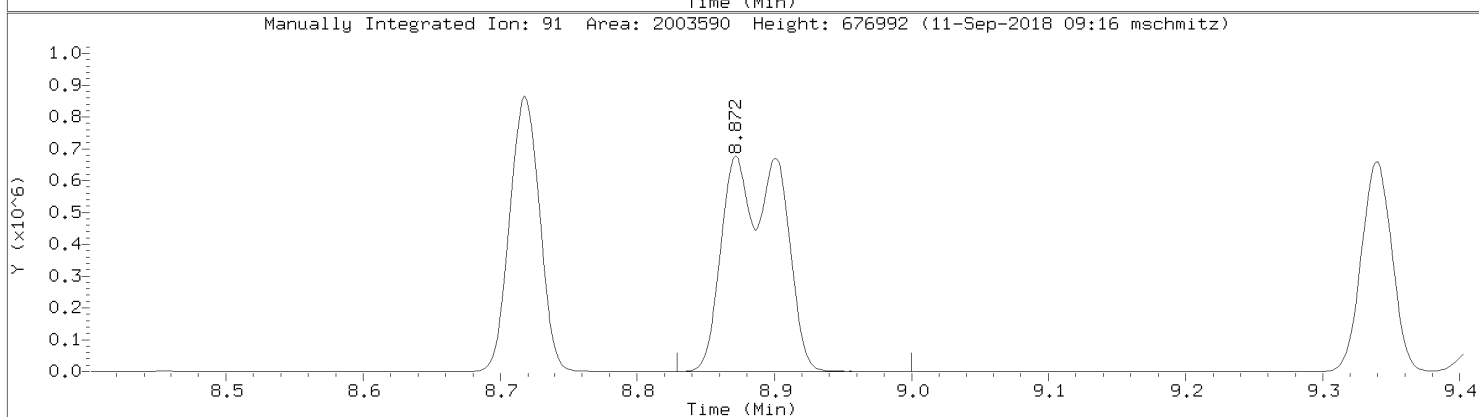
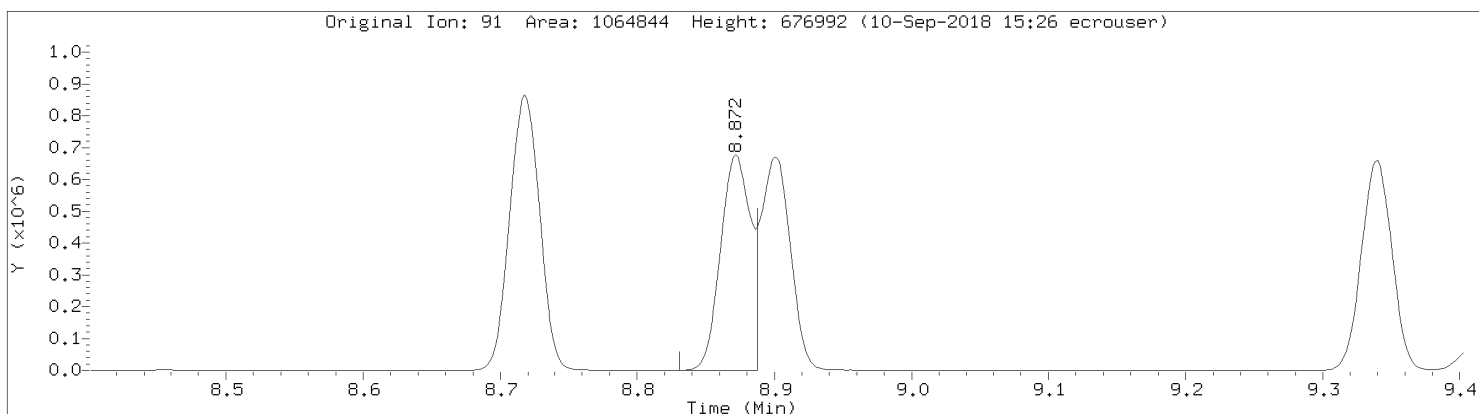
Operator: EMC

Column diameter: 0.32



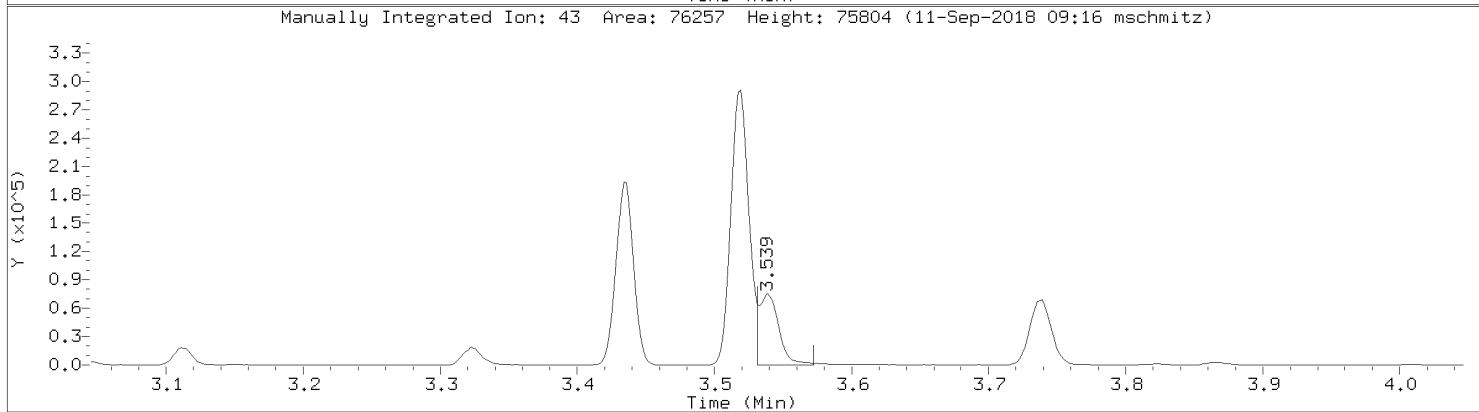
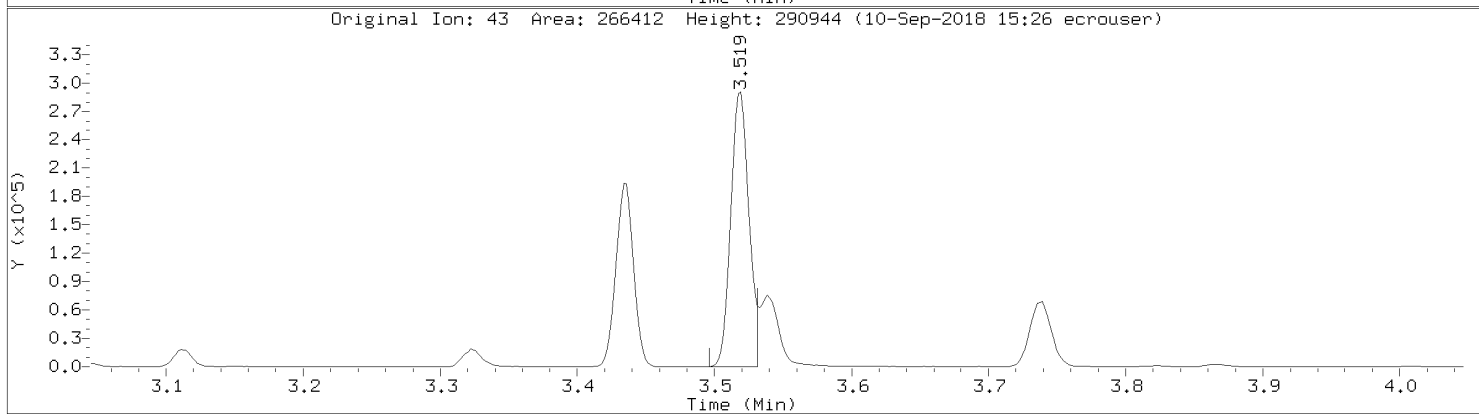
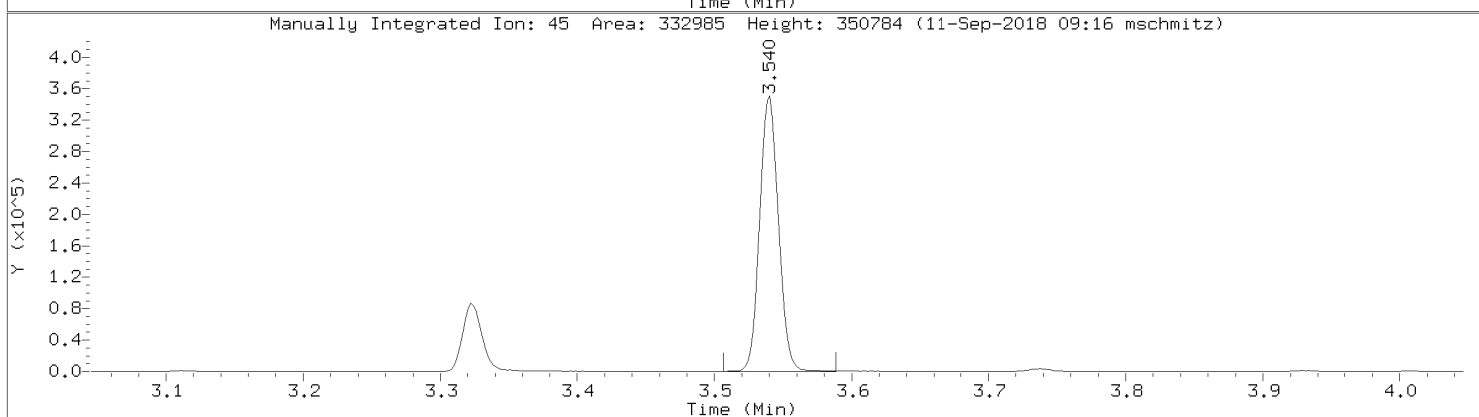
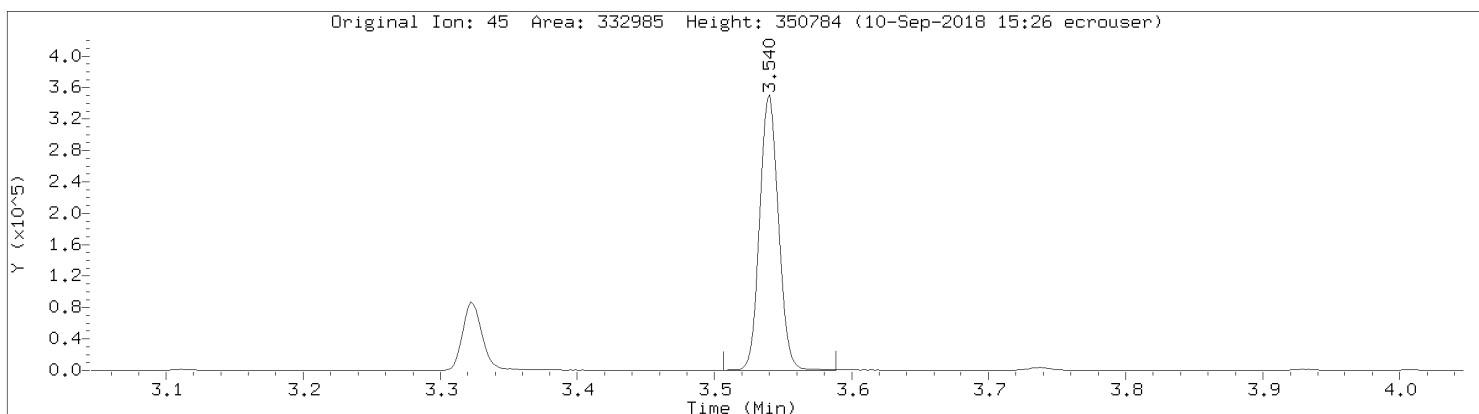
Data File: \\192.168.10.12\chem\10airH.i\091018.B\25311.D
Injection Date: 10-SEP-2018 15:10
Instrument: 10airH.i
Lab Sample ID: ICV

Compound: m&p-Xylene
CAS Number: 7816-60-0



Data File: \\192.168.10.12\chem\10airH.i\091018.B\25311.D
Injection Date: 10-SEP-2018 15:10
Instrument: 10airH.i
Lab Sample ID: ICV

Compound: Isopropyl Alcohol
CAS Number: 67-63-0



Date : 10-SEP-2018 10:04

Client ID: BFB

Instrument: 10airH,i

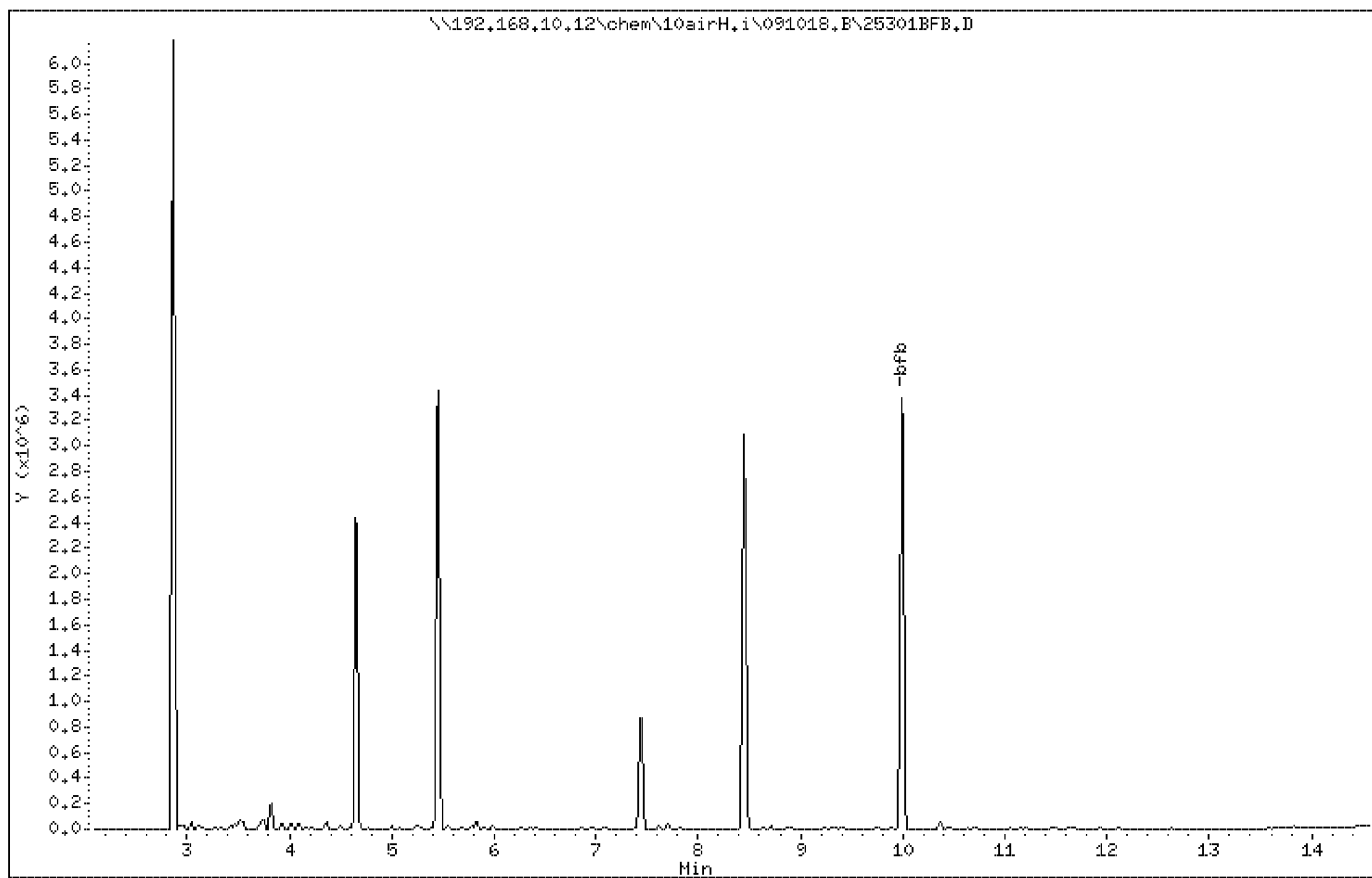
Sample Info:

Operator: AFV

Column phase: J&W DB-5

Column diameter: 0.32

\\192.168.10.12\chem\10airH,i\091018,B\25301BFB,D



Date : 10-SEP-2018 10:04

Client ID: BFB

Instrument: 10airH,i

Sample Info:

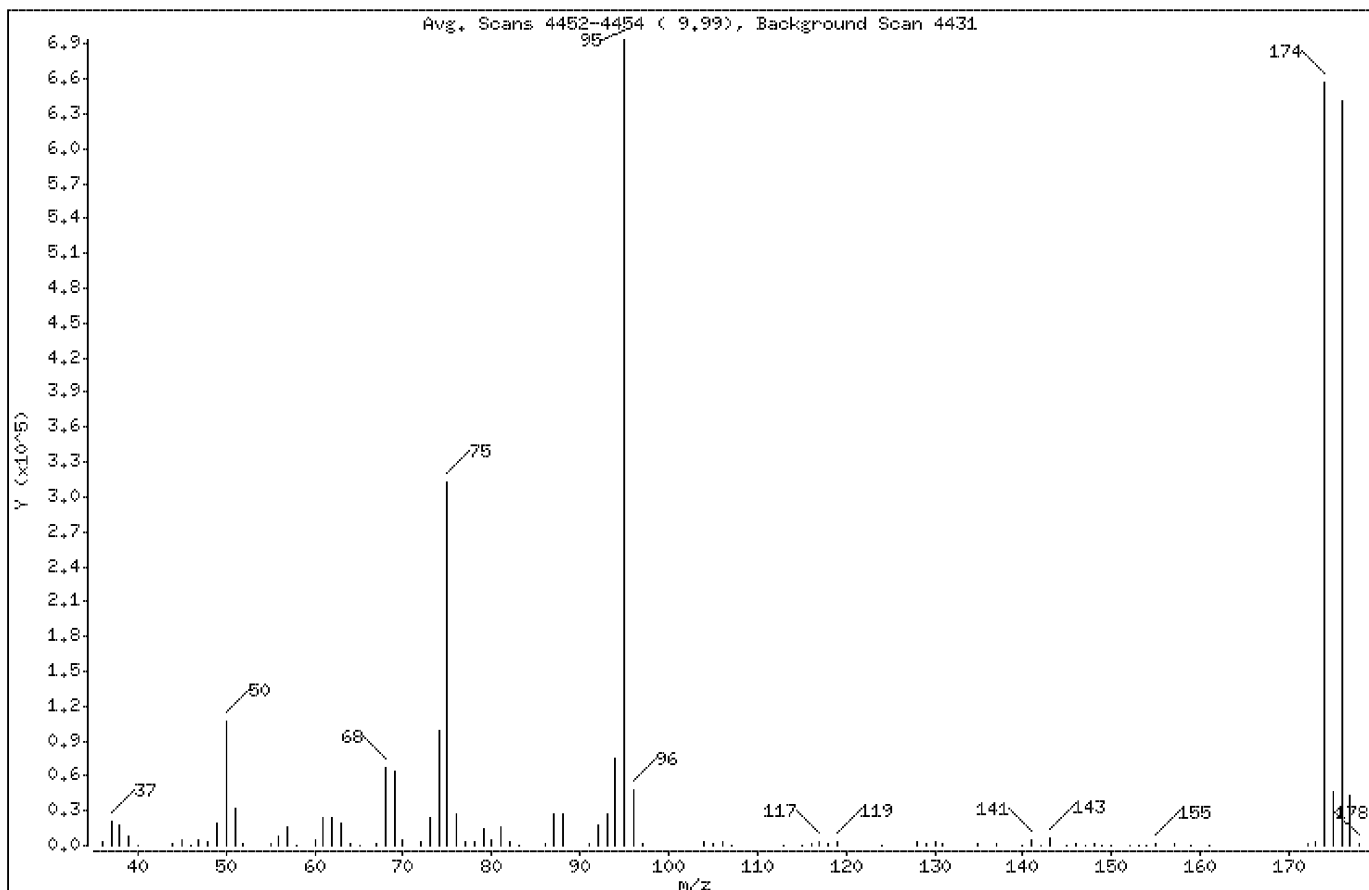
Operator: AFV

Column phase: J&W DB-5

Column diameter: 0,32

1 bfb

Avg. Scans 4452-4454 (9.99), Background Scan 4431



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100,00
50	8,00 - 40,00% of mass 95	15,46
75	30,00 - 66,00% of mass 95	44,97
96	5,00 - 9,00% of mass 95	6,82
173	Less than 2,00% of mass 174	0,49 (0,52)
174	50,00 - 120,00% of mass 95	94,73
175	4,00 - 9,00% of mass 174	6,72 (7,09)
176	93,00 - 101,00% of mass 174	92,31 (97,44)
177	5,00 - 9,00% of mass 176	6,16 (6,67)

Date : 10-SEP-2018 10:04

Client ID: BFB

Instrument: 10airH,i

Sample Info:

Operator: AFV

Column phase: J&W DB-5

Column diameter: 0.32

Data File: 25301BFB.D

Spectrum: Avg. Scans 4452-4454 (9.99), Background Scan 4431

Location of Maximum: 95.00

Number of points: 91

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	3550	65.00	611	94.00	75528	142.00	590
37.00	20280	67.00	1476	95.00	693696	143.00	6008
38.00	17984	68.00	66232	96.00	47304	145.00	599
39.00	7916	69.00	64544	97.00	1234	146.00	1019
40.00	493	70.00	4756	104.00	2600	147.00	339
44.00	2290	72.00	2777	105.00	953	148.00	1682
45.00	4464	73.00	24640	106.00	2405	149.00	327
46.00	140	74.00	98632	107.00	724	150.00	683
47.00	5251	75.00	311936	113.00	301	152.00	140
48.00	2781	76.00	26920	115.00	598	153.00	504
49.00	19792	77.00	3671	116.00	1951	154.00	466
50.00	107224	78.00	2485	117.00	3795	155.00	1811
51.00	32600	79.00	14819	118.00	1959	157.00	1268
52.00	1613	80.00	4063	119.00	3235	159.00	634
55.00	1322	81.00	15537	124.00	133	161.00	731
56.00	8076	82.00	2830	128.00	2620	172.00	862
57.00	15531	83.00	136	129.00	1236	173.00	3404
58.00	666	86.00	827	130.00	2795	174.00	657152
60.00	4155	87.00	27560	131.00	932	175.00	46608
61.00	24704	88.00	26760	135.00	1050	176.00	640320
62.00	24624	91.00	1993	137.00	941	177.00	42712
63.00	19848	92.00	17032	140.00	148	178.00	1194
64.00	1850	93.00	27632	141.00	5378		

Date : 10-SEP-2018 10:04

Client ID: BFB

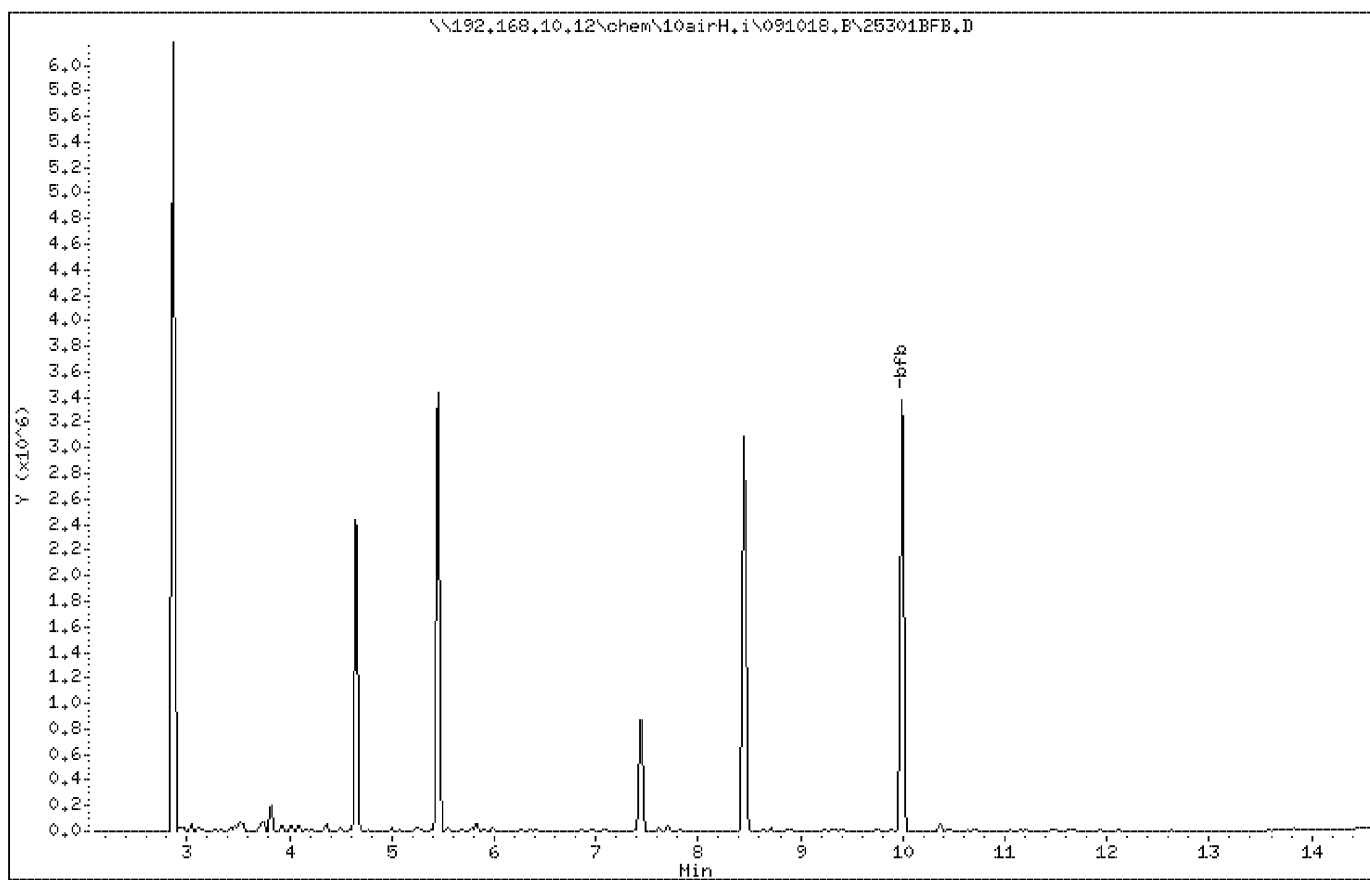
Instrument: 10airH,i

Sample Info:

Operator: AFV

Column phase: J&W DB-5

Column diameter: 0.32



Date : 10-SEP-2018 10:04

Client ID: BFB

Instrument: 10airH,i

Sample Info:

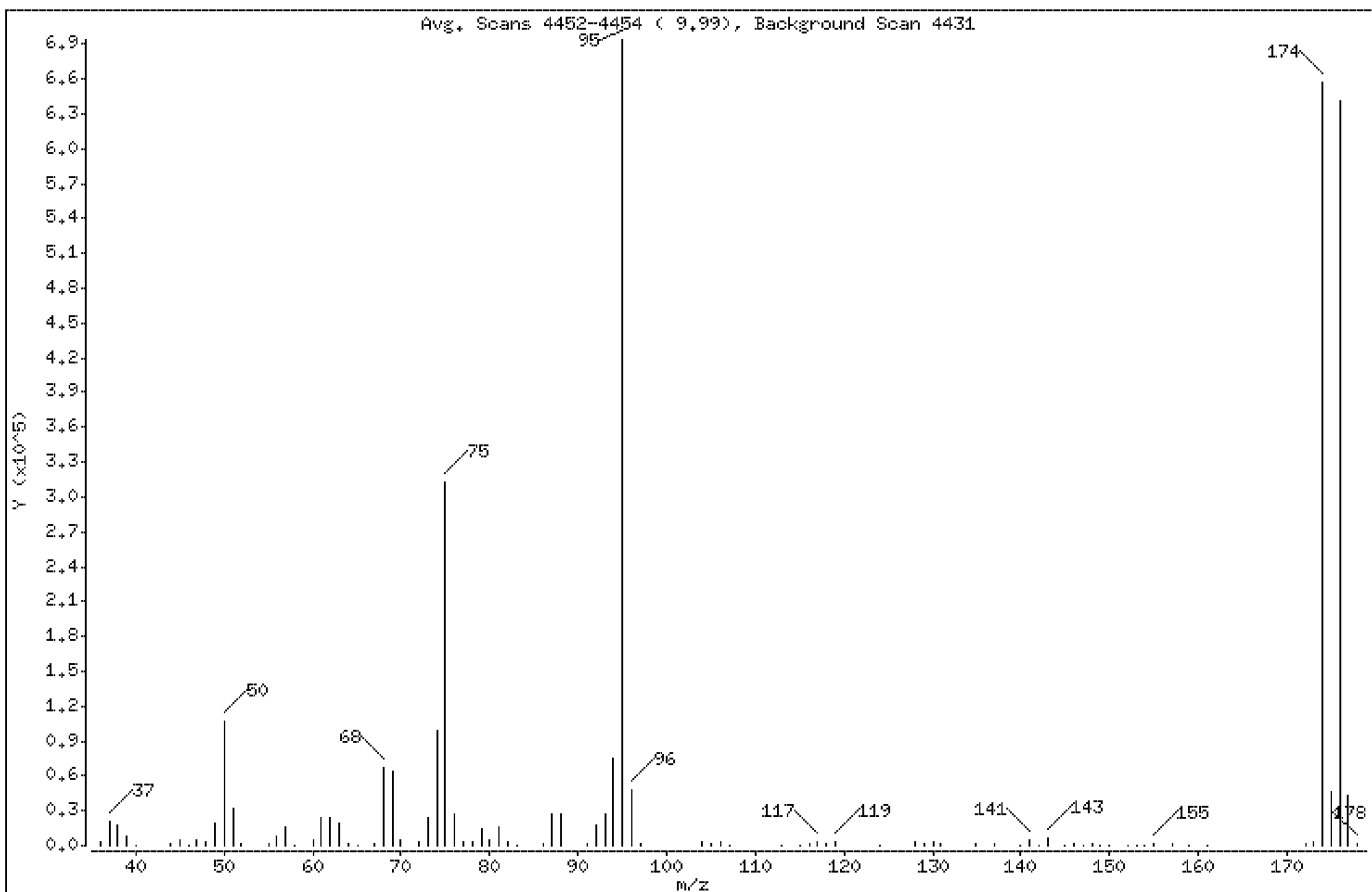
Operator: AFV

Column phase: J&W DB-5

Column diameter: 0,32

1 bfb

Avg. Scans 4452-4454 (9.99), Background Scan 4431



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100,00
50	8,00 - 40,00% of mass 95	15,46
75	30,00 - 66,00% of mass 95	44,97
96	5,00 - 9,00% of mass 95	6,82
173	Less than 2,00% of mass 174	0,49 (0,52)
174	50,00 - 120,00% of mass 95	94,73
175	4,00 - 9,00% of mass 174	6,72 (7,09)
176	93,00 - 101,00% of mass 174	92,31 (97,44)
177	5,00 - 9,00% of mass 176	6,16 (6,67)

Date : 10-SEP-2018 10:04

Client ID: BFB

Instrument: 10airH.i

Sample Info:

Operator: AFV

Column phase: J&W DB-5

Column diameter: 0.32

Data File: 25301BFB.D

Spectrum: Avg. Scans 4452-4454 (9.99), Background Scan 4431

Location of Maximum: 95.00

Number of points: 91

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	3550	65.00	611	94.00	75528	142.00	590
37.00	20280	67.00	1476	95.00	693696	143.00	6008
38.00	17984	68.00	66232	96.00	47304	145.00	599
39.00	7916	69.00	64544	97.00	1234	146.00	1019
40.00	493	70.00	4756	104.00	2600	147.00	339
44.00	2290	72.00	2777	105.00	953	148.00	1682
45.00	4464	73.00	24640	106.00	2405	149.00	327
46.00	140	74.00	98632	107.00	724	150.00	683
47.00	5251	75.00	311936	113.00	301	152.00	140
48.00	2781	76.00	26920	115.00	598	153.00	504
49.00	19792	77.00	3671	116.00	1951	154.00	466
50.00	107224	78.00	2485	117.00	3795	155.00	1811
51.00	32600	79.00	14819	118.00	1959	157.00	1268
52.00	1613	80.00	4063	119.00	3235	159.00	634
55.00	1322	81.00	15537	124.00	133	161.00	731
56.00	8076	82.00	2830	128.00	2620	172.00	862
57.00	15531	83.00	136	129.00	1236	173.00	3404
58.00	666	86.00	827	130.00	2795	174.00	657152
60.00	4155	87.00	27560	131.00	932	175.00	46608
61.00	24704	88.00	26760	135.00	1050	176.00	640320
62.00	24624	91.00	1993	137.00	941	177.00	42712
63.00	19848	92.00	17032	140.00	148	178.00	1194
64.00	1850	93.00	27632	141.00	5378		

5A - FORM V VOA
VOLATILE ORGANIC INSTRUMENT
PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

EPA SAMPLE NO.

BFB

Lab Name: Pace Analytical Contract:
Lab Code: PASI Case No.: SAS No.: SDG No.: 10446892
Lab File ID: 25601BFB.D BFB Injection Date: 09/13/2018
Instrument ID: 10AIRH BFB Injection Time: 08:02
GC Column: J&W DB-5 ID: 0.32 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	8.00 - 40.00% of mass 95	13.84
75	30.00 - 66.00% of mass 95	42.07
96	5.00 - 9.00% of mass 95	6.98
173	Less than 2.00% of mass 174	0.55 (0.54)
174	50.00 - 120.00% of mass 95	102.16
175	4.00 - 9.00% of mass 174	7.01 (6.86)
176	93.00 - 101.00% of mass 174	100.51 (98.38)
177	5.00 - 9.00% of mass 176	6.60 (6.57)

1 - Value is %mass 174 2 - Value is %mass 176

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	LCS for HBN 562618 [AIR/31710]	3053763	25602_31710.D	09/13/2018	08:29
2	CCV	CCV	25602.D	09/13/2018	08:29
3	CERT	CERT	25605.D	09/13/2018	10:47
4	BLANK for HBN 562618 [AIR/3171	3053762	25605_31710.D	09/13/2018	10:47
5	SS-01_SG_180831(3047734DUP)	3054972-DUP	25613.D	09/13/2018	15:24
6	SV-1(3050328DUP)	3054977-DUP	25615.D	09/13/2018	16:20
7	HSV-A LA 336	10446892001	25625.D	09/13/2018	21:03
8	HSV-1 LA 337	10446892002	25626.D	09/13/2018	21:31
9	HSV-2 LA 338	10446892003	25627.D	09/13/2018	21:59
10	HSV-3 LA 339	10446892004	25628.D	09/13/2018	22:27
11	HSV-4 LA 340	10446892005	25629.D	09/13/2018	22:55

Date : 13-SEP-2018 08:02

Client ID: BFB

Instrument: 10airH,i

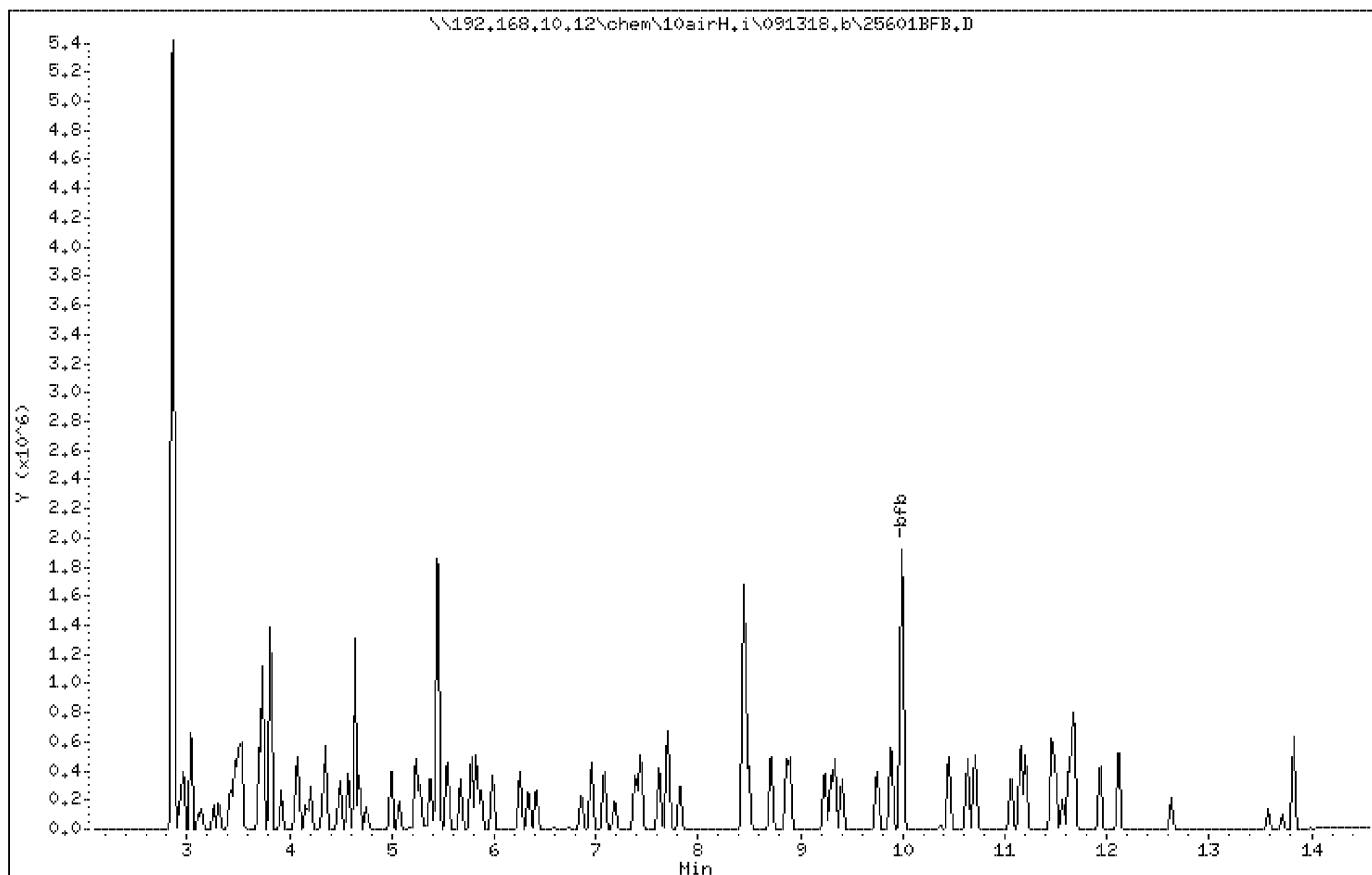
Sample Info:

Operator: NCK

Column phase: J&W DB-5

Column diameter: 0.32

\\192.168.10.12\chem\10airH,i\091318,b\25601BFB,D



Date : 13-SEP-2018 08:02

Client ID: BFB

Instrument: 10airH,i

Sample Info:

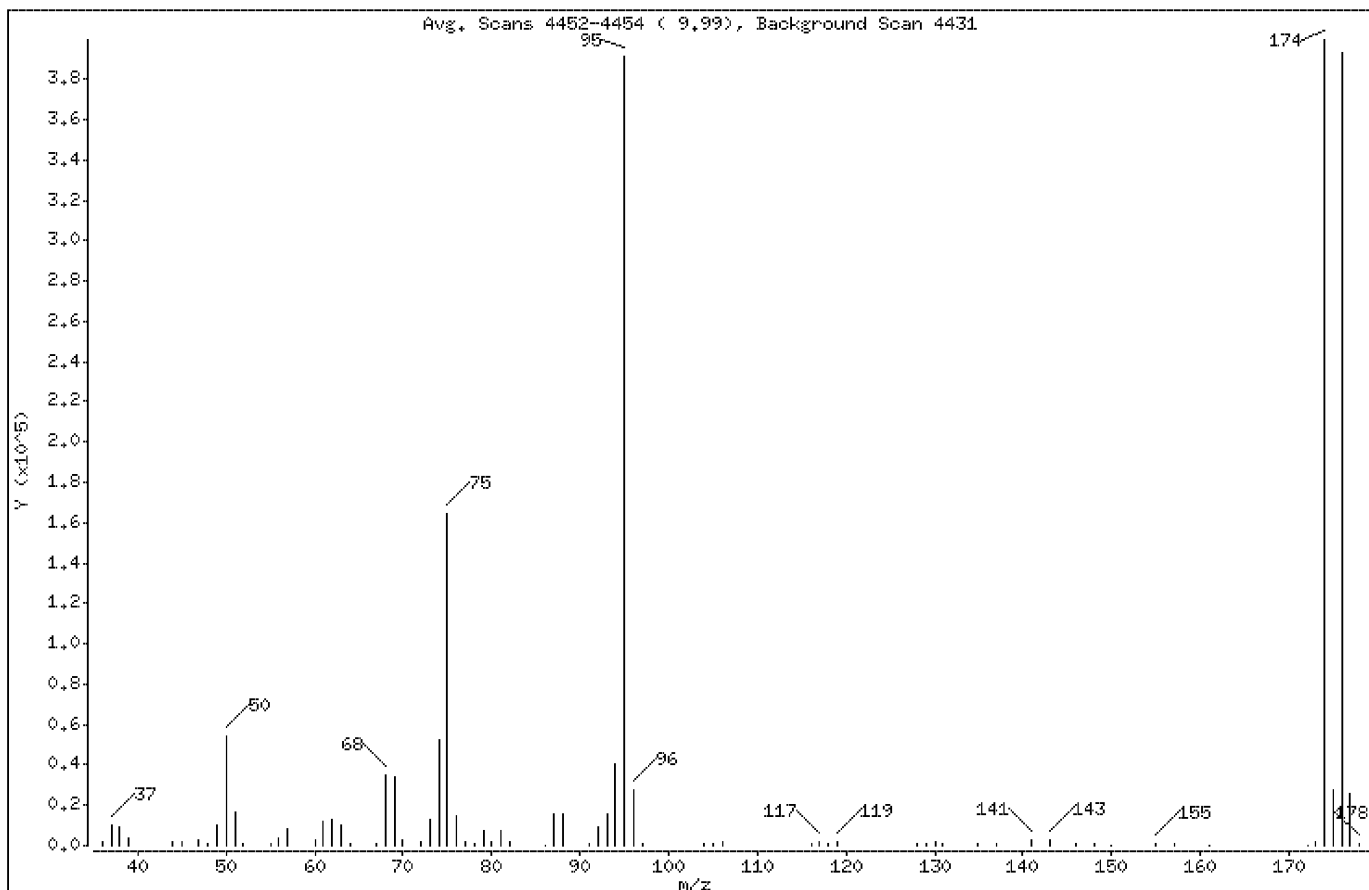
Operator: NCK

Column phase: J&W DB-5

Column diameter: 0,32

1 bfb

Avg. Scans 4452-4454 (9.99), Background Scan 4431



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100,00
50	8,00 - 40,00% of mass 95	13,84
75	30,00 - 66,00% of mass 95	42,07
96	5,00 - 9,00% of mass 95	6,98
173	Less than 2,00% of mass 174	0,55 (0,54)
174	50,00 - 120,00% of mass 95	102,16
175	4,00 - 9,00% of mass 174	7,01 (6,86)
176	93,00 - 101,00% of mass 174	100,51 (98,38)
177	5,00 - 9,00% of mass 176	6,60 (6,57)

Date : 13-SEP-2018 08:02

Client ID: BFB

Instrument: 10airH,i

Sample Info:

Operator: NCK

Column phase: J&W DB-5

Column diameter: 0.32

Data File: 25601BFB.D

Spectrum: Avg. Scans 4452-4454 (9.99), Background Scan 4431

Location of Maximum: 174.00

Number of points: 73

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1593	64.00	867	91.00	1097	137.00	569
37.00	9877	67.00	643	92.00	9099	141.00	2726
38.00	9323	68.00	34832	93.00	15264	143.00	2829
39.00	3961	69.00	34152	94.00	40840	146.00	555
44.00	1640	70.00	2540	95.00	391104	148.00	889
45.00	2144	72.00	1445	96.00	27296	150.00	288
47.00	2916	73.00	12908	97.00	857	155.00	1019
48.00	1323	74.00	52520	104.00	1363	157.00	671
49.00	10537	75.00	164544	105.00	608	161.00	161
50.00	54144	76.00	14266	106.00	1381	172.00	134
51.00	16496	77.00	1982	116.00	1089	173.00	2141
52.00	665	78.00	1354	117.00	2002	174.00	399552
55.00	714	79.00	7608	118.00	1238	175.00	27416
56.00	3969	80.00	2292	119.00	1746	176.00	393088
57.00	8042	81.00	7568	128.00	1347	177.00	25824
60.00	2372	82.00	1622	129.00	648	178.00	694
61.00	12083	86.00	144	130.00	1397		
62.00	13237	87.00	15776	131.00	496		
63.00	10064	88.00	15303	135.00	577		

Pace Analytical Services, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 10airH.i Injection Date: 13-SEP-2018 08:29
 Lab File ID: 25602.D Init. Cal. Date(s): 10-SEP-2018 10-SEP-2018
 Analysis Type: AIR Init. Cal. Times: 10:59 14:17
 Lab Sample ID: ccv Quant Type: ISTD
 Method: \\192.168.10.12\chem\10airH.i\091318.b\TO15_253-18.m

COMPOUND	RRF / AMOUNT	RF10	CCAL RRF10	MIN RRF %D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	QC FLAGS
1 1,1-Difluoroethane	0.20157	0.20349	0.20349	0.010 0.95271	30.00000	Aver	(M)
2 Chlorodifluoromethane	0.09453	0.09643	0.09643	0.010 2.00997	30.00000	Aver	
3 Propylene	0.16895	0.16074	0.16074	0.010 -4.85881	30.00000	Aver	
4 Dichlorodifluoromethane	0.97544	0.97903	0.97903	0.010 0.36839	30.00000	Aver	
5 Dichlorotetrafluoroethane	0.77447	0.74040	0.74040	0.010 -4.39861	30.00000	Aver	
6 Chloromethane	0.25769	0.22480	0.22480	0.010 -12.76389	30.00000	Aver	
7 Vinyl chloride	0.26649	0.24701	0.24701	0.010 -7.31110	30.00000	Aver	
8 1,3-Butadiene	0.17138	0.16287	0.16287	0.010 -4.96410	30.00000	Aver	
9 Bromomethane	0.31386	0.28408	0.28408	0.010 -9.48941	30.00000	Aver	
10 Chloroethane	0.12602	0.11454	0.11454	0.010 -9.11040	30.00000	Aver	
11 Ethanol	0.07997	0.07412	0.07412	0.005 -7.31993	30.00000	Aver	
12 Vinyl Bromide	0.30603	0.27991	0.27991	0.010 -8.53549	30.00000	Aver	
13 Isopentane	0.20641	0.18435	0.18435	0.010 -10.68874	30.00000	Aver	
14 Freon 123	0.66133	0.59171	0.59171	0.010 -10.52721	30.00000	Aver	
15 Trichlorofluoromethane	0.69387	0.60601	0.60601	0.010 -12.66328	30.00000	Aver	
16 Acrolein	0.08853	0.08125	0.08125	0.010 -8.22773	30.00000	Aver	
17 Acetone	0.29642	0.25577	0.25577	0.010 -13.71509	30.00000	Aver	
18 Isopropyl Alcohol	0.32749	0.28901	0.28901	0.010 -11.75152	30.00000	Aver	(M)
19 1,1-Dichloroethene	0.46116	0.45188	0.45188	0.010 -2.01286	30.00000	Aver	
20 Acrylonitrile	0.18927	0.18327	0.18327	0.010 -3.17019	30.00000	Aver	
21 Tert Butyl Alcohol (TBA)	0.59424	0.61402	0.61402	0.010 3.32803	30.00000	Aver	
22 Methyl Acetate	0.50042	0.42682	0.42682	0.010 -14.70775	30.00000	Aver	
23 Freon 113	0.76464	0.74786	0.74786	0.010 -2.19415	30.00000	Aver	
24 Allyl Chloride	0.12887	0.14622	0.14622	0.010 13.46791	30.00000	Aver	
25 Methylene chloride	50.00000	47.71647	0.24909	0.010 -4.56705	30.00000	Quad	
26 Carbon Disulfide	0.88060	0.94317	0.94317	0.010 7.10466	30.00000	Aver	
27 Methyl Tert Butyl Ether	0.74897	0.86101	0.86101	0.010 14.95987	30.00000	Aver	
28 trans-1,2-dichloroethene	0.35268	0.37056	0.37056	0.010 5.06935	30.00000	Aver	
29 Vinyl Acetate	0.53638	0.59043	0.59043	0.010 10.07693	30.00000	Aver	
30 1,1-Dichloroethane	0.56839	0.55168	0.55168	0.010 -2.94001	30.00000	Aver	
31 Methyl Ethyl Ketone	0.16151	0.16047	0.16047	0.010 -0.64084	30.00000	Aver	
32 Di-isopropyl Ether	0.69953	0.70777	0.70777	0.010 1.17824	30.00000	Aver	
33 n-Hexane	0.39168	0.38582	0.38582	0.010 -1.49607	30.00000	Aver	
34 Ethyl Acetate	0.49640	0.49239	0.49239	0.010 -0.80770	30.00000	Aver	
35 cis-1,2-Dichloroethene	0.36239	0.39636	0.39636	0.010 9.37265	30.00000	Aver	
36 Ethyl Tert-Butyl Ether	0.74950	0.86976	0.86976	0.010 16.04602	30.00000	Aver	
37 Chloroform	0.77831	0.75915	0.75915	0.010 -2.46163	30.00000	Aver	
38 Tetrahydrofuran	0.20585	0.21133	0.21133	0.010 2.66527	30.00000	Aver	
39 1,1,1-Trichloroethane	0.77010	0.78569	0.78569	0.010 2.02345	30.00000	Aver	
40 1,2-Dichloroethane	0.46402	0.46131	0.46131	0.010 -0.58273	30.00000	Aver	
41 Benzene	0.93113	0.99396	0.99396	0.010 6.74701	30.00000	Aver	
42 Carbon tetrachloride	0.78483	0.82684	0.82684	0.010 5.35185	30.00000	Aver	

Data File: \\192.168.10.12\chem\10airH.i\091318.b\25602.D
Report Date: 13-Sep-2018 08:59

QC Flag Legend

M - Compound response manually integrated.

Pace Analytical Services, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 10airH.i Injection Date: 13-SEP-2018 08:29
 Lab File ID: 25602.D Init. Cal. Date(s): 10-SEP-2018 10-SEP-2018
 Analysis Type: AIR Init. Cal. Times: 10:59 14:17
 Lab Sample ID: ccv Quant Type: ISTD
 Method: \\192.168.10.12\chem\10airH.i\091318.b\TO15_253-18.m

COMPOUND	RRF / AMOUNT	RF10	CCAL RRF10	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	QC FLAGS
43 Cyclohexane	0.32912	0.38420	0.38420	0.010	16.73638	30.00000	Aver	
44 Tert Amyl Methyl Ether	0.70605	0.90285	0.90285	0.010	27.87475	30.00000	Aver	
46 2,2,4-Trimethylpentane	1.19339	1.23960	1.23960	0.010	3.87224	30.00000	Aver	
47 Heptane	0.34868	0.36099	0.36099	0.010	3.53097	30.00000	Aver	
48 Trichloroethene	0.50448	0.57122	0.57122	0.010	13.22848	30.00000	Aver	
49 1,2-Dichloropropane	0.33653	0.32829	0.32829	0.010	-2.44834	30.00000	Aver	
50 Methyl methacrylate	0.30417	0.31995	0.31995	0.010	5.18643	30.00000	Aver	
51 1,4-Dioxane	0.20937	0.23923	0.23923	0.010	14.26557	30.00000	Aver	
52 Bromodichloromethane	0.74375	0.76867	0.76867	0.010	3.35106	30.00000	Aver	
53 Methylcyclohexane	10.00000	10.96058	0.27646	0.010	9.60580	30.00000	Quad	
54 Methyl Isobutyl Ketone	0.46162	0.51590	0.51590	0.010	11.75839	30.00000	Aver	
55 cis-1,3-Dichloropropene	0.49383	0.58907	0.58907	0.010	19.28710	30.00000	Aver	
56 trans-1,3-Dichloropropene	10.00000	10.49507	0.54637	0.010	4.95065	30.00000	Quad	
57 Toluene	0.97926	1.23633	1.23633	0.010	26.25156	30.00000	Aver	
58 1,1,2-Trichloroethane	0.42130	0.45455	0.45455	0.010	7.89248	30.00000	Aver	
59 Methyl Butyl Ketone	0.44092	0.54864	0.54864	0.010	24.43156	30.00000	Aver	
60 n-Octane	0.46821	0.56423	0.56423	0.010	20.50816	30.00000	Aver	
61 Dibromochloromethane	0.90672	1.02590	1.02590	0.010	13.14311	30.00000	Aver	
62 Tetrachloroethene	0.79400	0.87078	0.87078	0.010	9.66989	30.00000	Aver	
63 1,2-Dibromoethane	0.76342	0.86203	0.86203	0.010	12.91748	30.00000	Aver	
65 Chlorobenzene	1.11695	1.20855	1.20855	0.010	8.20111	30.00000	Aver	
66 Ethyl Benzene	1.38954	1.76899	1.76899	0.010	27.30794	30.00000	Aver	
67 m&p-Xylene	1.05684	1.34673	1.34673	0.010	27.43037	30.00000	Aver	(M)
68 n-Nonane	10.00000	9.42984	0.55948	0.010	-5.70160	30.00000	Quad	
69 Styrene	10.00000	10.91018	1.07393	0.010	9.10177	30.00000	Quad	
70 o-Xylene	1.12607	1.36036	1.36036	0.010	20.80510	30.00000	Aver	
71 Bromoform	0.71030	0.83508	0.83508	0.010	17.56802	30.00000	Aver	
72 1,1,2,2-Tetrachloroethane	0.84286	0.92914	0.92914	0.010	10.23717	30.00000	Aver	
73 Isopropylbenzene	10.00000	11.01393	1.95772	0.010	10.13927	30.00000	Quad	
74 N-Propylbenzene	10.00000	10.71508	2.12470	0.010	7.15085	30.00000	Quad	
75 4-Ethyltoluene	10.00000	10.91194	1.75175	0.010	9.11940	30.00000	Quad	
76 1,3,5-Trimethylbenzene	10.00000	10.88569	1.51476	0.010	8.85689	30.00000	Quad	
77 n-Decane	10.00000	9.90555	0.56555	0.010	-0.94453	30.00000	Quad	
78 Tert-Butyl Benzene	10.00000	11.01510	1.51316	0.010	10.15100	30.00000	Quad	
79 1,2,4-Trimethylbenzene	10.00000	10.90730	1.42597	0.010	9.07301	30.00000	Quad	
80 Sec- Butylbenzene	10.00000	10.90255	2.09944	0.010	9.02553	30.00000	Quad	
81 1,3-Dichlorobenzene	0.72436	0.95740	0.95740	0.010	32.17187	30.00000	Aver	<-
82 Benzyl Chloride	10.00000	10.52849	0.89533	0.010	5.28486	30.00000	Quad	
83 1,4-Dichlorobenzene	10.00000	11.00699	0.89806	0.010	10.06990	30.00000	Quad	
84 p-Isopropyltoluene	10.00000	10.97879	1.81748	0.010	9.78789	30.00000	Quad	
85 1,2,3-Trimethylbenzene	10.00000	10.85915	1.39121	0.010	8.59154	30.00000	Quad	
86 1,2-Dichlorobenzene	10.00000	11.15821	0.89352	0.010	11.58211	30.00000	Quad	
87 N-Butylbenzene	10.00000	10.71369	1.34358	0.010	7.13688	30.00000	Quad	

Data File: \\192.168.10.12\chem\10airH.i\091318.b\25602.D
Report Date: 13-Sep-2018 08:59

QC Flag Legend

M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10airH.i\091318.b\25602.D
 Report Date: 13-Sep-2018 08:59

Pace Analytical Services, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 10airH.i Injection Date: 13-SEP-2018 08:29
 Lab File ID: 25602.D Init. Cal. Date(s): 10-SEP-2018 10-SEP-2018
 Analysis Type: AIR Init. Cal. Times: 10:59 14:17
 Lab Sample ID: ccv Quant Type: ISTD
 Method: \\192.168.10.12\chem\10airH.i\091318.b\TO15_253-18.m

COMPOUND	RRF / AMOUNT	RF10	CCAL RRF10	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	QC FLAGS
88 1,2-Dibromo-3-Chloropropane	10.00000	11.05730	0.33549	0.010	10.57301	30.00000	Quad	
89 1,2,4-Trichlorobenzene	10.00000	10.92788	0.29244	0.010	9.27876	30.00000	Quad	
90 Naphthalene	10.00000	10.47907	0.61236	0.010	4.79066	30.00000	Quad	
91 Hexachlorobutadiene	10.00000	11.56938	0.50977	0.010	15.69378	30.00000	Quad	

QC Flag Legend

M - Compound response manually integrated.

```

Average %D / Drift Results.
=====
|Calculated Average %D/Drift =    9.43049
|Maximum Average %D/Drift    = 0.000e+000
|* Failed Average %D/Drift Test.
|
  
```

Pace Analytical Services, Inc.

TO15 Analysis (UNIX)

Data file : \\192.168.10.12\chem\10airH.i\091318.b\25602.D
 Lab Smp Id: ccv
 Inj Date : 13-SEP-2018 08:29
 Operator : NCK Inst ID: 10airH.i
 Smp Info :
 Misc Info :
 Comment : Volatile Organic COMPOUNDS in Air
 Method : \\192.168.10.12\chem\10airH.i\091318.b\TO15_253-18.m
 Meth Date : 13-Sep-2018 08:53 nkoller Quant Type: ISTD
 Cal Date : 10-SEP-2018 14:17 Cal File: 25309.D
 Als bottle: 2 Continuing Calibration Sample
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: all.sub
 Target Version: RC10A
 Processing Host: 10MNAIRWKS5

Concentration Formula: Amt * DF * Uf * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
							CAL-AMT (ppbv)	ON-COL (ppbv)
1 1,1-Difluoroethane	65		2.929	2.929	(0.537)	194941	10.0000	10.1 (M)
2 Chlorodifluoromethane	67		2.945	2.945	(0.540)	92383	10.0000	10.2
3 Propylene	41		2.952	2.952	(0.541)	153990	10.0000	9.51
4 Dichlorodifluoromethane	85		2.972	2.972	(0.545)	937911	10.0000	10.0
5 Dichlorotetrafluoroethane	85		3.043	3.043	(0.558)	709303	10.0000	9.56
6 Chloromethane	50		3.046	3.046	(0.559)	215361	10.0000	8.72
7 Vinyl chloride	62		3.116	3.116	(0.571)	236634	10.0000	9.27
8 1,3-Butadiene	54		3.149	3.149	(0.578)	156032	10.0000	9.50
9 Bromomethane	94		3.267	3.267	(0.599)	272146	10.0000	9.05
10 Chloroethane	64		3.311	3.311	(0.607)	109730	10.0000	9.09
11 Ethanol	45		3.318	3.318	(0.609)	355037	50.0000	46.3
12 Vinyl Bromide	106		3.417	3.417	(0.627)	268151	10.0000	9.15
13 Isopentane	43		3.432	3.432	(0.629)	176604	10.0000	8.93
14 Freon 123	83		3.467	3.467	(0.636)	566861	10.0000	8.95
15 Trichlorofluoromethane	101		3.492	3.492	(0.640)	580554	10.0000	8.73
16 Acrolein	56		3.494	3.494	(0.641)	194587	25.0000	22.9
17 Acetone	43		3.513	3.513	(0.644)	1225125	50.0000	43.1
18 Isopropyl Alcohol	45		3.536	3.536	(0.649)	1384349	50.0000	44.1 (M)
19 1,1-Dichloroethene	61		3.708	3.708	(0.680)	432900	10.0000	9.80
20 Acrylonitrile	53		3.714	3.714	(0.681)	438933	25.0000	24.2
21 Tert Butyl Alcohol (TBA)	59		3.733	3.733	(0.685)	588228	10.0000	10.3
22 Methyl Acetate	43		3.739	3.739	(0.686)	408896	10.0000	8.53
23 Freon 113	101		3.742	3.742	(0.686)	716448	10.0000	9.78

Compounds	QUANT SIG		AMOUNTS					
	MASS		RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ppbv)	ON-COL (ppbv)
24 Allyl Chloride	76		3.817	3.817	(0.700)	140081	10.0000	11.3
25 Methylene chloride	49		3.820	3.820	(0.701)	1193129	50.0000	47.7
26 Carbon Disulfide	76		3.927	3.927	(0.720)	903553	10.0000	10.7
27 Methyl Tert Butyl Ether	73		4.076	4.076	(0.747)	824848	10.0000	11.5
28 trans-1,2-dichloroethene	96		4.090	4.090	(0.750)	354999	10.0000	10.5
29 Vinyl Acetate	43		4.165	4.165	(0.764)	565627	10.0000	11.0
30 1,1-Dichloroethane	63		4.214	4.214	(0.773)	528510	10.0000	9.71
31 Methyl Ethyl Ketone	72		4.326	4.326	(0.793)	153734	10.0000	9.94
32 Di-isopropyl Ether	45		4.351	4.351	(0.798)	678042	10.0000	10.1
33 n-Hexane	57		4.362	4.362	(0.800)	369614	10.0000	9.85
34 Ethyl Acetate	43		4.484	4.484	(0.822)	471705	10.0000	9.92
35 cis-1,2-Dichloroethene	96		4.504	4.504	(0.826)	379709	10.0000	10.9
36 Ethyl Tert-Butyl Ether	59		4.576	4.576	(0.839)	833234	10.0000	11.6
37 Chloroform	83		4.685	4.685	(0.859)	727268	10.0000	9.75
38 Tetrahydrofuran	42		4.752	4.752	(0.871)	202456	10.0000	10.3
39 1,1,1-Trichloroethane	97		5.001	5.001	(0.917)	752686	10.0000	10.2
40 1,2-Dichloroethane	62		5.080	5.080	(0.932)	441938	10.0000	9.94
41 Benzene	78		5.238	5.238	(0.961)	952210	10.0000	10.7
42 Carbon tetrachloride	117		5.256	5.256	(0.964)	792110	10.0000	10.5
43 Cyclohexane	56		5.281	5.281	(0.968)	368064	10.0000	11.7
44 Tert Amyl Methyl Ether	73		5.379	5.379	(0.986)	864934	10.0000	12.8
* 45 1,4-Difluorobenzene	114		5.453	5.453	(1.000)	957999	10.0000	
46 2,2,4-Trimethylpentane	57		5.547	5.547	(1.017)	1187533	10.0000	10.4
47 Heptane	43		5.677	5.677	(1.041)	345827	10.0000	10.4
48 Trichloroethene	130		5.785	5.785	(1.061)	547225	10.0000	11.3
49 1,2-Dichloropropane	63		5.829	5.829	(1.069)	314505	10.0000	9.76
50 Methyl methacrylate	69		5.824	5.824	(1.068)	306511	10.0000	10.5
51 1,4-Dioxane	88		5.874	5.874	(1.077)	572965	25.0000	28.6
52 Bromodichloromethane	83		5.989	5.989	(1.098)	736387	10.0000	10.3
53 Methylcyclohexane	98		6.257	6.257	(1.147)	264853	10.0000	11.0
54 Methyl Isobutyl Ketone	43		6.333	6.333	(1.161)	494234	10.0000	11.2
55 cis-1,3-Dichloropropene	75		6.415	6.415	(1.176)	564330	10.0000	11.9
56 trans-1,3-Dichloropropene	75		6.862	6.862	(1.258)	523420	10.0000	10.5
57 Toluene	91		6.960	6.960	(1.276)	1184407	10.0000	12.6
58 1,1,2-Trichloroethane	97		7.086	7.086	(1.299)	435460	10.0000	10.8
59 Methyl Butyl Ketone	43		7.182	7.182	(0.850)	456628	10.0000	12.4
60 n-Octane	43		7.384	7.384	(0.874)	469600	10.0000	12.1
61 Dibromochloromethane	129		7.622	7.622	(0.902)	853840	10.0000	11.3
62 Tetrachloroethene	166		7.705	7.705	(0.912)	724736	10.0000	11.0
63 1,2-Dibromoethane	107		7.824	7.824	(0.926)	717457	10.0000	11.3
* 64 Chlorobenzene - d5	117		8.451	8.451	(1.000)	832287	10.0000	
65 Chlorobenzene	112		8.495	8.495	(1.005)	1005860	10.0000	10.8
66 Ethyl Benzene	91		8.713	8.713	(1.031)	1472308	10.0000	12.7
67 m&p-Xylene	91		8.868	8.868	(1.049)	2241732	20.0000	25.5 (M)
68 n-Nonane	43		9.237	9.237	(1.093)	465647	10.0000	9.43
69 Styrene	104		9.303	9.303	(1.101)	893818	10.0000	10.9
70 o-Xylene	91		9.338	9.338	(1.105)	1132206	10.0000	12.1
71 Bromoform	173		9.405	9.405	(1.113)	695027	10.0000	11.8
72 1,1,2,2-Tetrachloroethane	83		9.750	9.750	(1.154)	773313	10.0000	11.0
73 Isopropylbenzene	105		9.886	9.886	(1.170)	1629381	10.0000	11.0
74 N-Propylbenzene	91		10.454	10.454	(1.237)	1768360	10.0000	10.7
75 4-Ethyltoluene	105		10.639	10.639	(1.259)	1457960	10.0000	10.9
76 1,3,5-Trimethylbenzene	105		10.713	10.713	(1.268)	1260711	10.0000	10.9
77 n-Decane	57		11.067	11.067	(2.029)	541792	10.0000	9.91

Compounds	QUANT SIG		AMOUNTS				
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ppbv)	ON-COL (ppbv)
78 Tert-Butyl Benzene	119	11.159	11.159	(1.320)	1259380	10.0000	11.0
79 1,2,4-Trimethylbenzene	105	11.203	11.203	(1.326)	1186815	10.0000	10.9
80 Sec- Butylbenzene	105	11.462	11.462	(1.356)	1747336	10.0000	10.9
81 1,3-Dichlorobenzene	146	11.496	11.496	(1.360)	796830	10.0000	13.2
82 Benzyl Chloride	91	11.567	11.567	(1.369)	745171	10.0000	10.5
83 1,4-Dichlorobenzene	146	11.627	11.627	(1.376)	747445	10.0000	11.0
84 p-Isopropyltoluene	119	11.667	11.667	(1.381)	1512665	10.0000	11.0
85 1,2,3-Trimethylbenzene	105	11.683	11.683	(1.382)	1157888	10.0000	10.9
86 1,2-Dichlorobenzene	146	11.935	11.935	(1.412)	743664	10.0000	11.2
87 N-Butylbenzene	91	12.114	12.114	(1.433)	1118242	10.0000	10.7
88 1,2-Dibromo-3-Chloropropane	157	12.630	12.630	(1.495)	279228	10.0000	11.1
89 1,2,4-Trichlorobenzene	180	13.574	13.574	(1.606)	243397	10.0000	10.9
90 Naphthalene	128	13.715	13.715	(1.623)	509662	10.0000	10.5
91 Hexachlorobutadiene	225	13.825	13.825	(1.636)	424275	10.0000	11.6

QC Flag Legend

M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10airH.i\091318.b\25602.D
Report Date: 13-Sep-2018 08:59

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10airH.i
Lab File ID: 25602.D
Lab Smp Id: ccv
Analysis Type: VOA
Quant Type: ISTD
Operator: NCK
Method File: \\192.168.10.12\chem\10airH.i\091318.b\TO15_253-18.m
Misc Info:

Calibration Date: 12-SEP-2018
Calibration Time: 07:44

Level: LOW
Sample Type: AIR

Test Mode:

Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

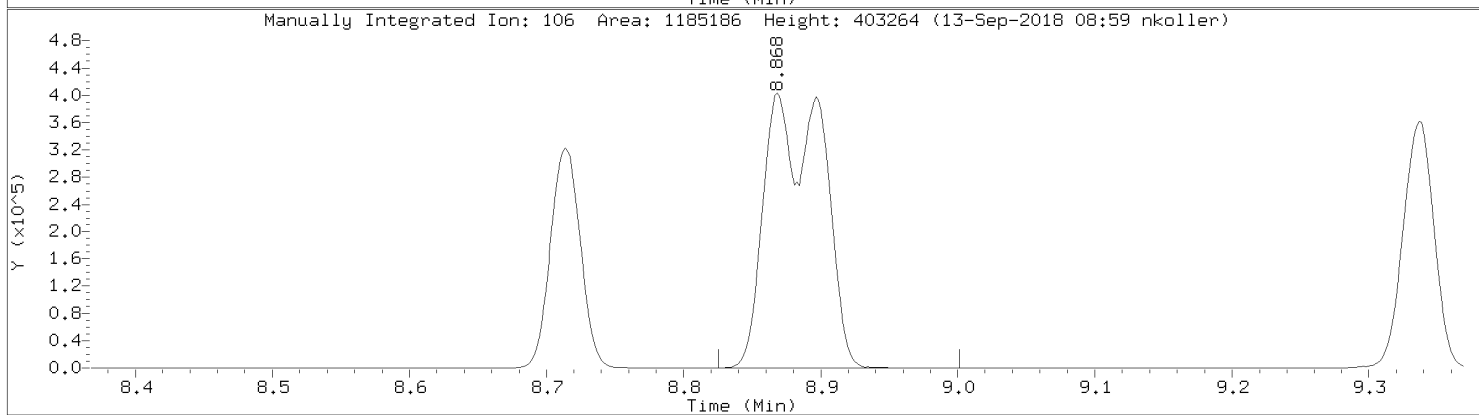
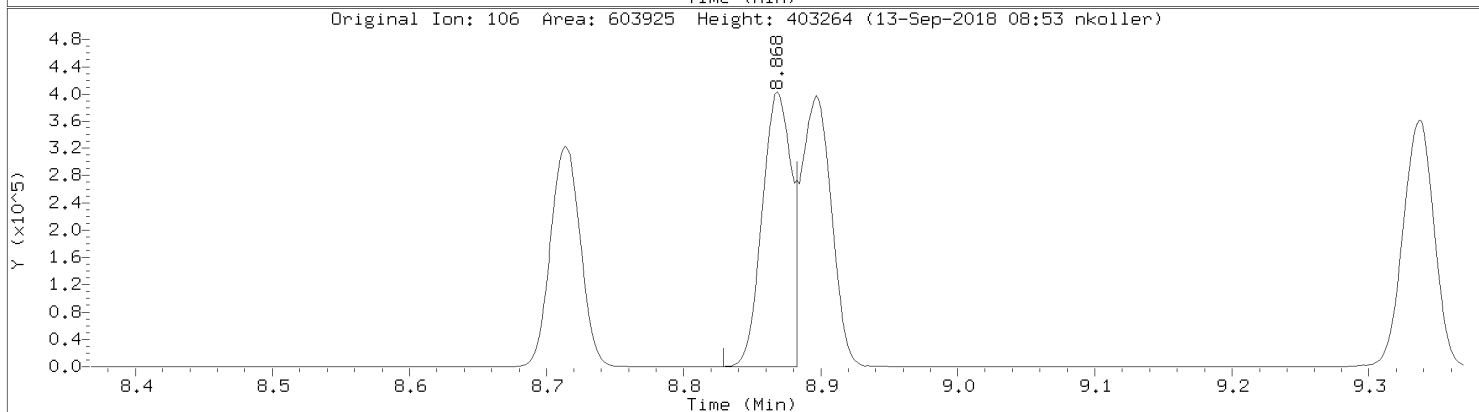
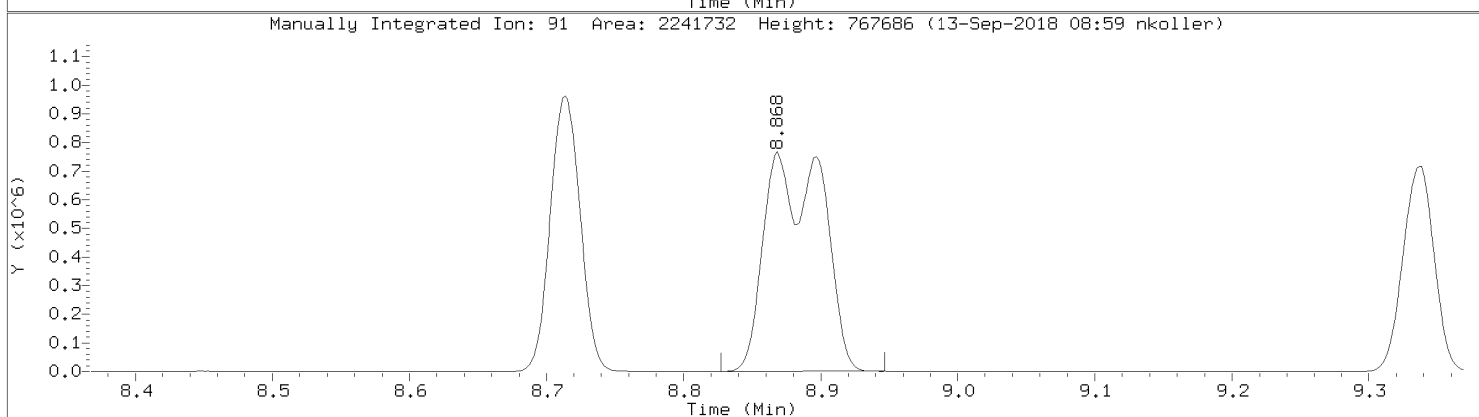
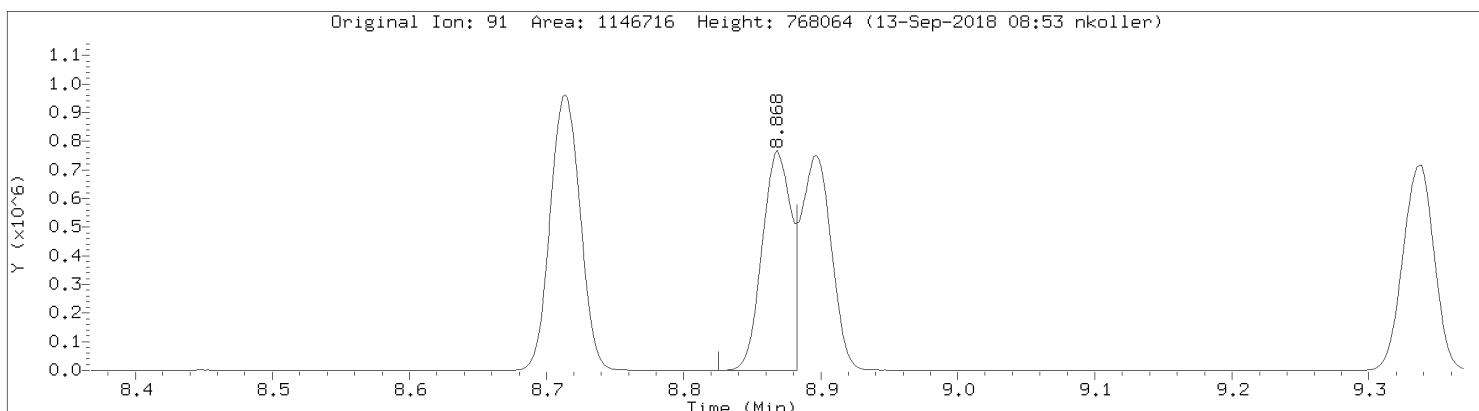
COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
45 1,4-Difluorobenze	1034069	620441	1447697	957999	-7.36
64 Chlorobenzene - d	896862	538117	1255607	832287	-7.20

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
45 1,4-Difluorobenze	5.46	5.13	5.79	5.45	-0.03
64 Chlorobenzene - d	8.45	8.12	8.78	8.45	-0.02

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

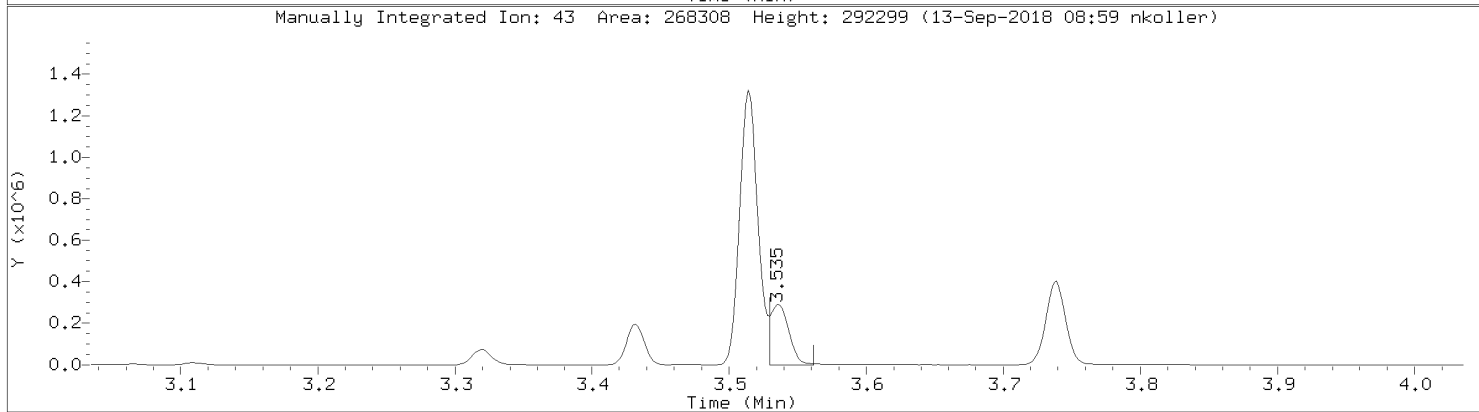
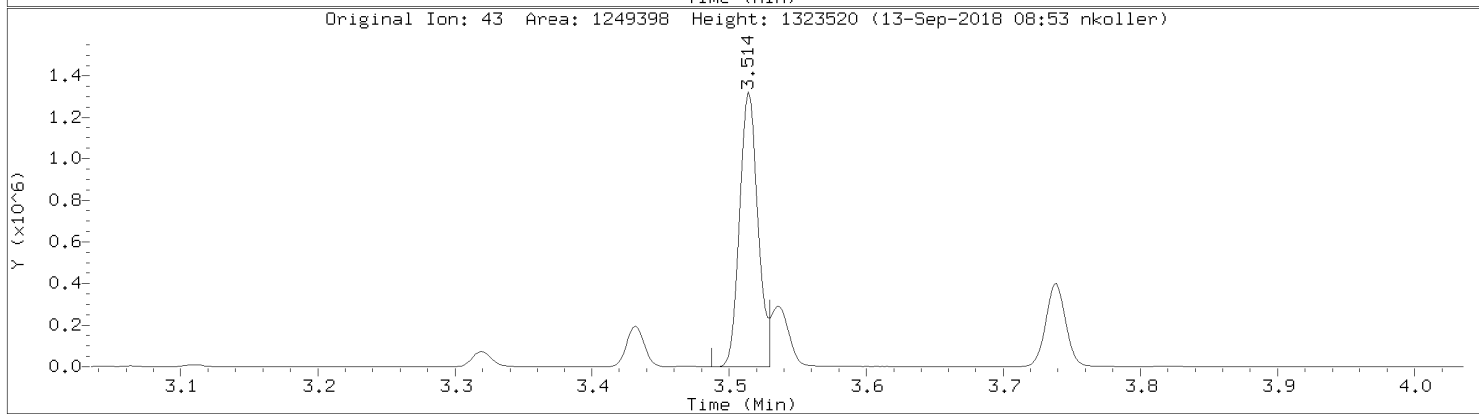
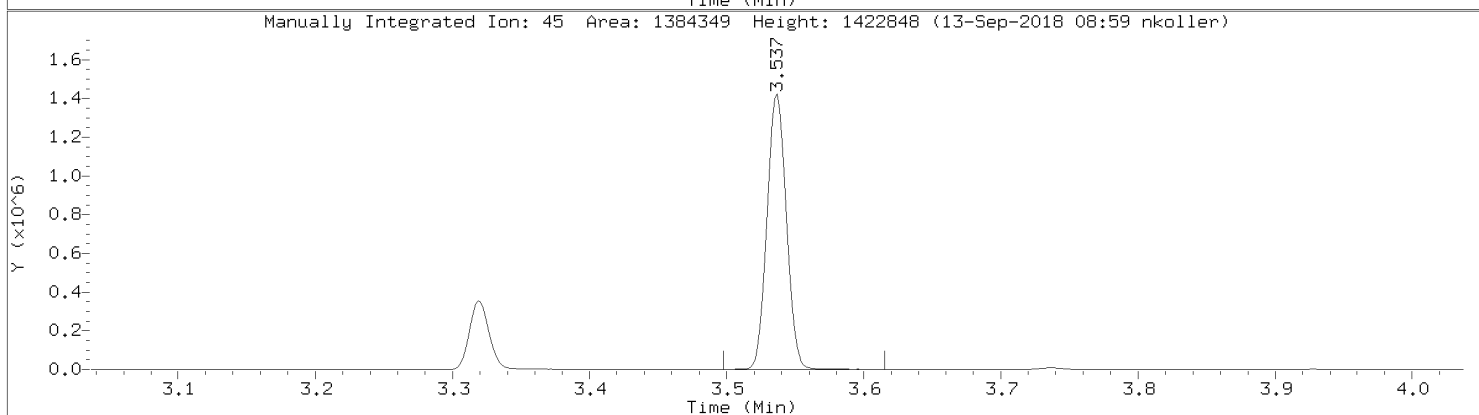
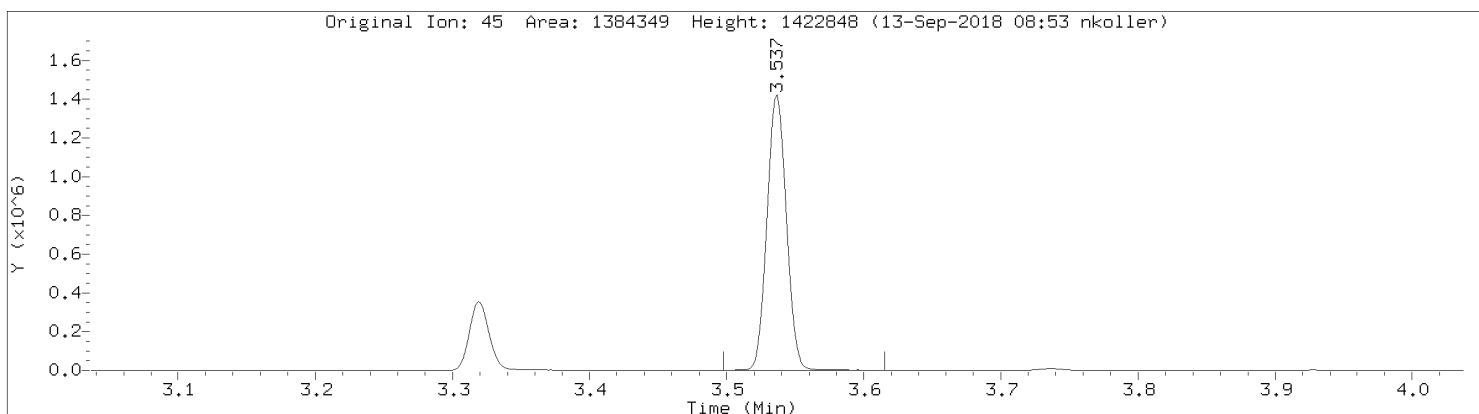
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Injection Date: 13-SEP-2018 08:29
Instrument: 10airH.i
Lab Sample ID: ccv

Compound: m&p-Xylene
CAS Number: 7816-60-0



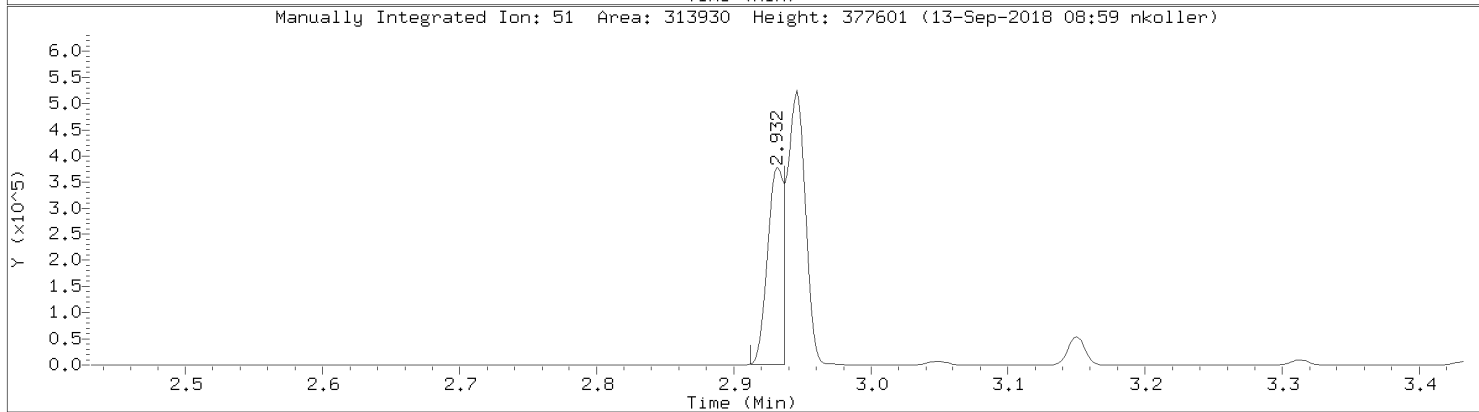
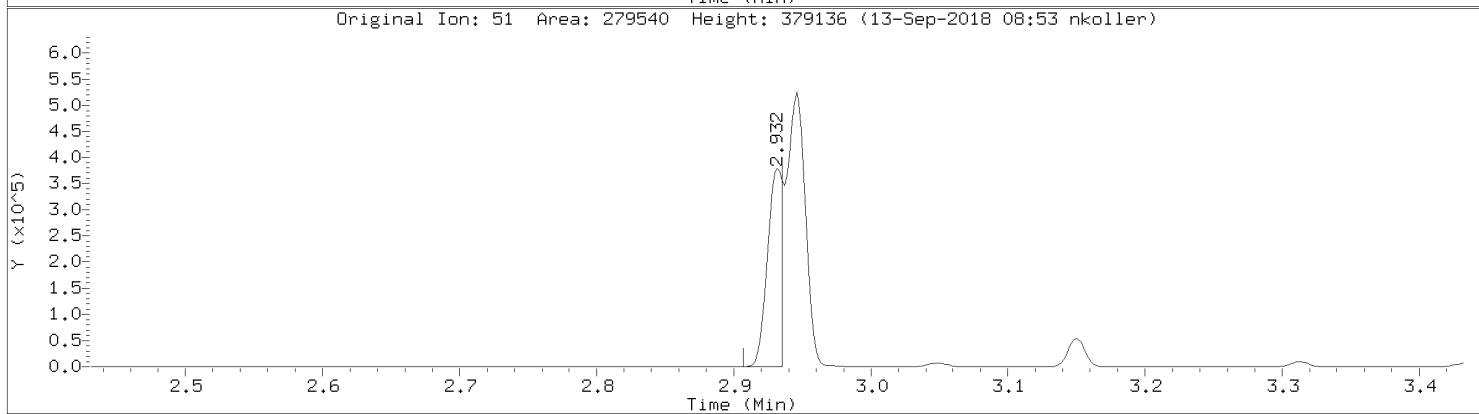
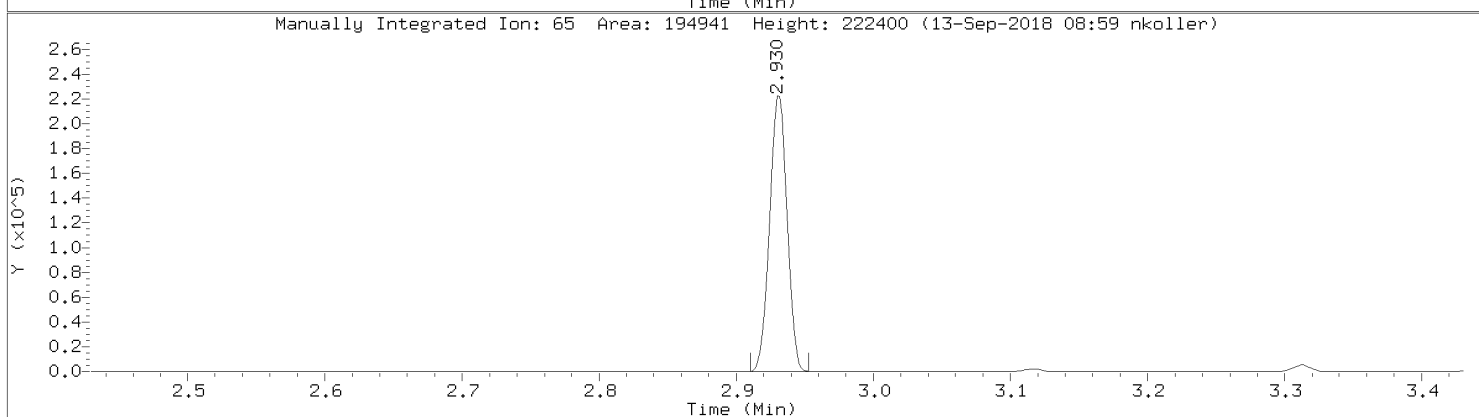
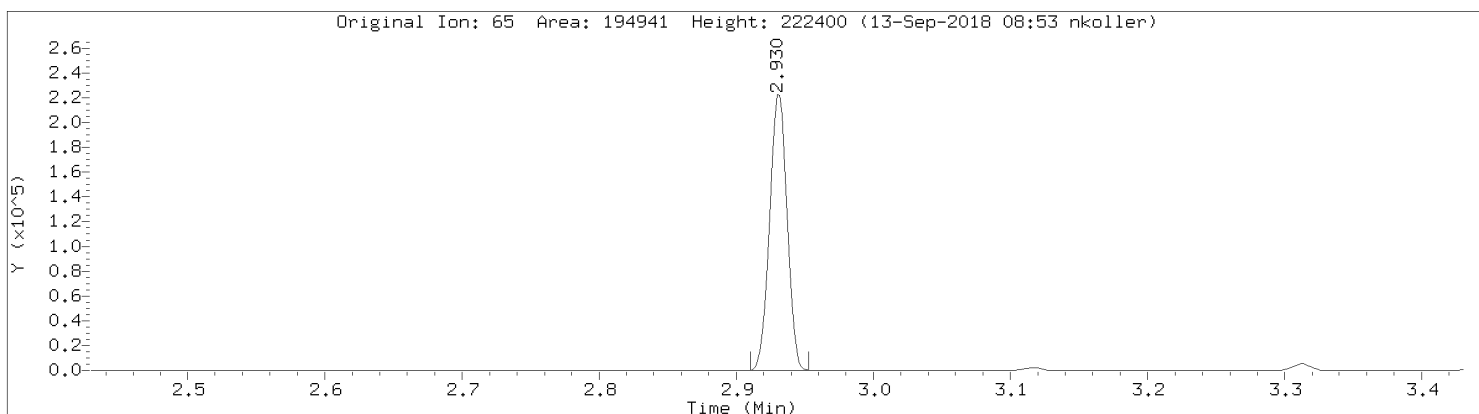
Data File: \\192.168.10.12\chem\10airH.i\091318.b\25602.D
Injection Date: 13-SEP-2018 08:29
Instrument: 10airH.i
Lab Sample ID: ccv

Compound: Isopropyl Alcohol
CAS Number: 67-63-0

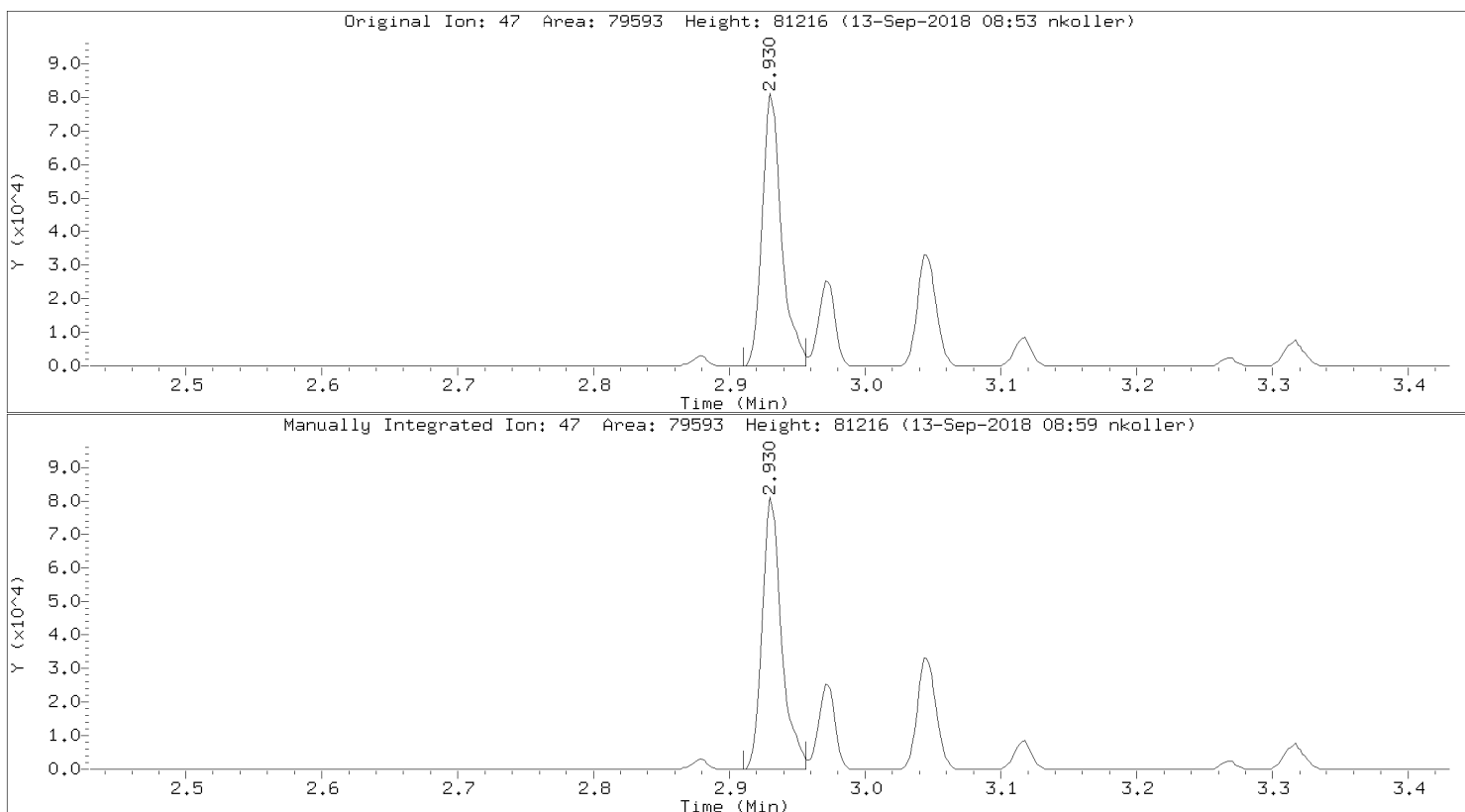


Data File: \\192.168.10.12\chem\10airH.i\091318.b\25602.D
Injection Date: 13-SEP-2018 08:29
Instrument: 10airH.i
Lab Sample ID: ccv

Compound: 1,1-Difluoroethane
CAS Number: 75-37-6



Data File: \\192.168.10.12\chem\10airH.i\091318.b\25602.D
Injection Date: 13-SEP-2018 08:29
Instrument: 10airH.i
Lab Sample ID: ccv



Pace Analytical Services, Inc.

TO15 Analysis (UNIX)

Data file : \\192.168.10.12\chem\10airH.i\091318.b\25605_31710.D
 Lab Smp Id: 3053762
 Inj Date : 13-SEP-2018 10:47
 Operator : CH1 Inst ID: 10airH.i
 Smp Info :
 Misc Info : 31710
 Comment : Volatile Organic COMPOUNDS in Air
 Method : \\192.168.10.12\chem\10airH.i\091318.b\TO15_253-18.m
 Meth Date : 13-Sep-2018 14:08 nkoller Quant Type: ISTD
 Cal Date : 10-SEP-2018 14:17 Cal File: 25309.D
 Als bottle: 5 QC Sample: BLANK
 Dil Factor: 0.50000
 Integrator: HP RTE Compound Sublist: all.sub
 Target Version: 4.14
 Processing Host: 10MNAIRRC91

Concentration Formula: Amt * DF * Uf * CpndVariable

Name	Value	Description
DF	0.500	Dilution Factor
Uf	1.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN (ppbv)	FINAL (ppbv)
1 1,1-Difluoroethane	65							
2 Chlorodifluoromethane	67							
3 Propylene	41							
4 Dichlorodifluoromethane	85		2.974	2.972	(0.546)	1099	0.01151	0.00576(a)
5 Dichlorotetrafluoroethane	85							
6 Chloromethane	50							
7 Vinyl chloride	62							
8 1,3-Butadiene	54							
9 Bromomethane	94							
10 Chloroethane	64							
11 Ethanol	45							
12 Vinyl Bromide	106							
13 Isopentane	43							
14 Freon 123	83							
15 Trichlorofluoromethane	101							
16 Acrolein	56							
17 Acetone	43		3.527	3.513	(0.647)	3914	0.13495	0.0675
18 Isopropyl Alcohol	45							
19 1,1-Dichloroethene	61							
20 Acrylonitrile	53							
21 Tert Butyl Alcohol (TBA)	59							
22 Methyl Acetate	43							
23 Freon 113	101							

Compounds	QUANT MASS	SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN (ppbv)	FINAL (ppbv)
24 Allyl Chloride	76		Compound	Not	Detected.			
25 Methylene chloride	49		Compound	Not	Detected.			(D)
26 Carbon Disulfide	76		Compound	Not	Detected.			
27 Methyl Tert Butyl Ether	73		Compound	Not	Detected.			
28 trans-1,2-dichloroethene	96		Compound	Not	Detected.			
29 Vinyl Acetate	43		Compound	Not	Detected.			
30 1,1-Dichloroethane	63		Compound	Not	Detected.			
31 Methyl Ethyl Ketone	72		Compound	Not	Detected.			
32 Di-isopropyl Ether	45		Compound	Not	Detected.			
33 n-Hexane	57		Compound	Not	Detected.			
34 Ethyl Acetate	43		Compound	Not	Detected.			
35 cis-1,2-Dichloroethene	96		Compound	Not	Detected.			
36 Ethyl Tert-Butyl Ether	59		Compound	Not	Detected.			
37 Chloroform	83		Compound	Not	Detected.			
38 Tetrahydrofuran	42		Compound	Not	Detected.			
39 1,1,1-Trichloroethane	97		Compound	Not	Detected.			
40 1,2-Dichloroethane	62		Compound	Not	Detected.			
41 Benzene	78		Compound	Not	Detected.			
42 Carbon tetrachloride	117		Compound	Not	Detected.			
43 Cyclohexane	56		Compound	Not	Detected.			
44 Tert Amyl Methyl Ether	73		Compound	Not	Detected.			(D)
* 45 1,4-Difluorobenzene	114		5.451	5.453	(1.000)	978481	10.0000	
46 2,2,4-Trimethylpentane	57		Compound	Not	Detected.			
47 Heptane	43		Compound	Not	Detected.			
48 Trichloroethene	130		Compound	Not	Detected.			
49 1,2-Dichloropropane	63		Compound	Not	Detected.			
50 Methyl methacrylate	69		5.835	5.824	(1.070)	347	0.01166	0.00583(aQ)
51 1,4-Dioxane	88		Compound	Not	Detected.			
52 Bromodichloromethane	83		Compound	Not	Detected.			
53 Methylcyclohexane	98		Compound	Not	Detected.			
54 Methyl Isobutyl Ketone	43		Compound	Not	Detected.			
55 cis-1,3-Dichloropropene	75		Compound	Not	Detected.			
56 trans-1,3-Dichloropropene	75		Compound	Not	Detected.			
57 Toluene	91		Compound	Not	Detected.			
58 1,1,2-Trichloroethane	97		Compound	Not	Detected.			
59 Methyl Butyl Ketone	43		Compound	Not	Detected.			
60 n-Octane	43		Compound	Not	Detected.			
61 Dibromochloromethane	129		Compound	Not	Detected.			
62 Tetrachloroethene	166		Compound	Not	Detected.			
63 1,2-Dibromoethane	107		Compound	Not	Detected.			
* 64 Chlorobenzene - d5	117		8.449	8.451	(1.000)	795673	10.0000	
65 Chlorobenzene	112		Compound	Not	Detected.			
66 Ethyl Benzene	91		Compound	Not	Detected.			
67 m&p-Xylene	91		Compound	Not	Detected.			
68 n-Nonane	43		Compound	Not	Detected.			
69 Styrene	104		Compound	Not	Detected.			
70 o-Xylene	91		Compound	Not	Detected.			
71 Bromoform	173		Compound	Not	Detected.			
72 1,1,2,2-Tetrachloroethane	83		Compound	Not	Detected.			
73 Isopropylbenzene	105		Compound	Not	Detected.			
74 N-Propylbenzene	91		Compound	Not	Detected.			
75 4-Ethyltoluene	105		Compound	Not	Detected.			
76 1,3,5-Trimethylbenzene	105		Compound	Not	Detected.			
77 n-Decane	57		Compound	Not	Detected.			

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (ppbv)	FINAL (ppbv)
78 Tert-Butyl Benzene	119						
79 1,2,4-Trimethylbenzene	105						
80 Sec- Butylbenzene	105						
81 1,3-Dichlorobenzene	146						
82 Benzyl Chloride	91						
83 1,4-Dichlorobenzene	146						
84 p-Isopropyltoluene	119						
85 1,2,3-Trimethylbenzene	105						
86 1,2-Dichlorobenzene	146						
87 N-Butylbenzene	91						
88 1,2-Dibromo-3-Chloropropane	157						
89 1,2,4-Trichlorobenzene	180						
90 Naphthalene	128						
91 Hexachlorobutadiene	225						

QC Flag Legend

- a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
- Q - Qualifier signal failed the ratio test.
- D - User disabled compound identification.

Data File: \\192.168.10.12\chem\10airH.i\091318.b\25605_31710.D
Report Date: 14-Sep-2018 11:16

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10airH.i
Lab File ID: 25605_31710.D
Lab Smp Id: 3053762
Analysis Type: VOA
Quant Type: ISTD
Operator: CH1
Method File: \\192.168.10.12\chem\10airH.i\091318.b\TO15_253-18.m
Misc Info: 31710

Calibration Date: 13-SEP-2018
Calibration Time: 08:29

Level: LOW
Sample Type: AIR

Test Mode:

Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
45 1,4-Difluorobenze	1034069	620441	1447697	978481	-5.38
64 Chlorobenzene - d	896862	538117	1255607	795673	-11.28

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
45 1,4-Difluorobenze	5.45	5.12	5.78	5.45	-0.03
64 Chlorobenzene - d	8.45	8.12	8.78	8.45	-0.02

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: \\192.168.10.12\chem\10airH.i\091318.b\25605_31710.D

Date : 13-SEP-2018 10:47

Client ID:

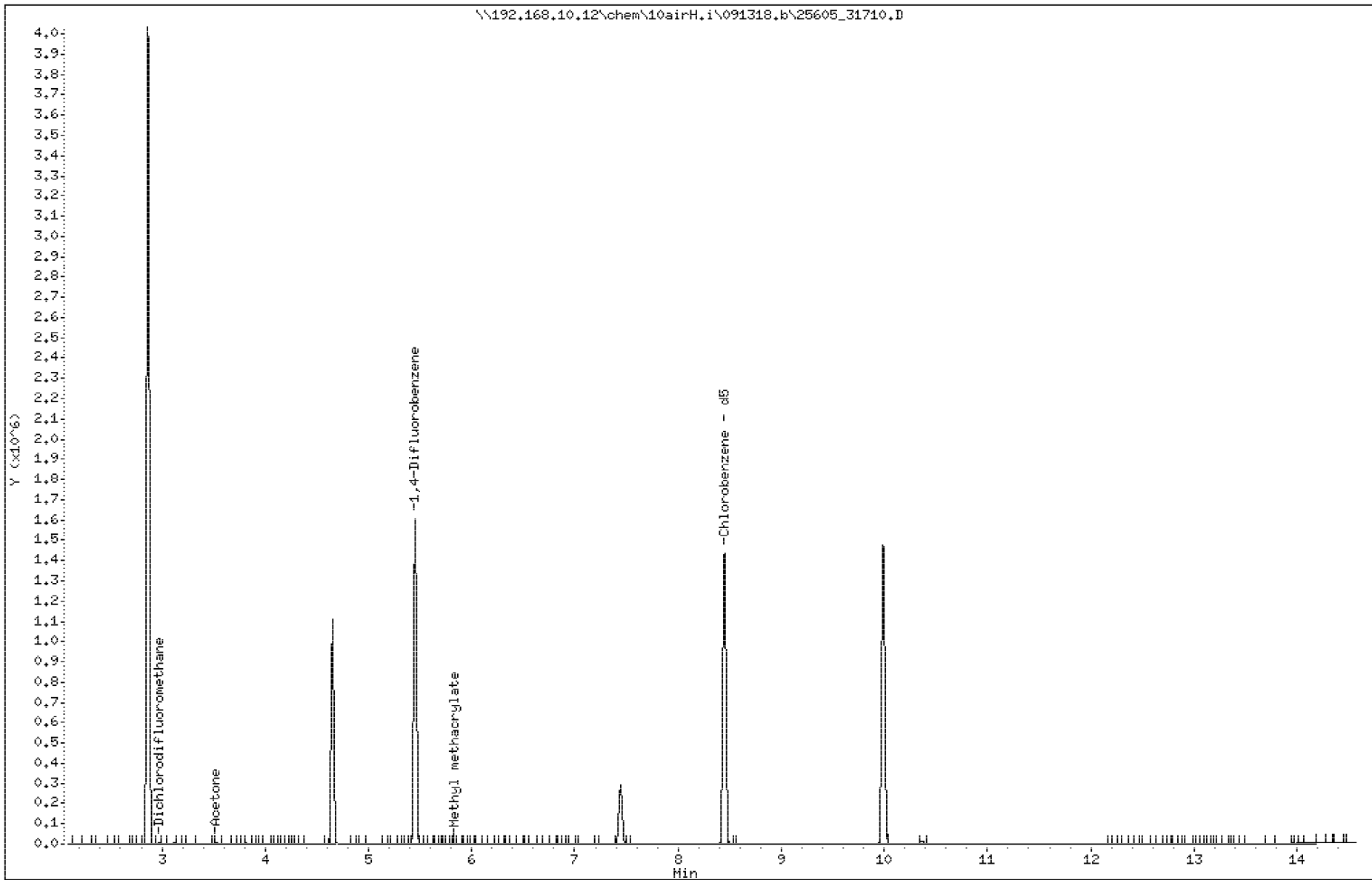
Instrument: 10airH.i

Sample Info:

Operator: CH1

Column phase: ZB-5MSplus SN338857

Column diameter: 0,32



Data File: \\192.168.10.12\chem\10airH,i\091318,b\25605_31710.D

Date : 13-SEP-2018 10:47

Client ID:

Instrument: 10airH.i

Sample Info:

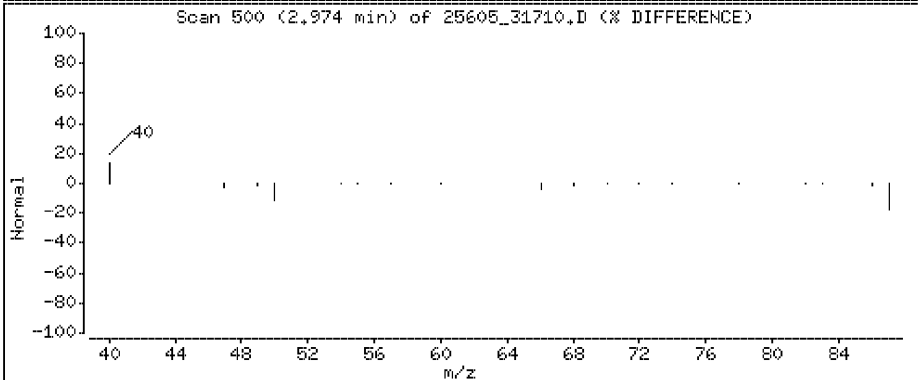
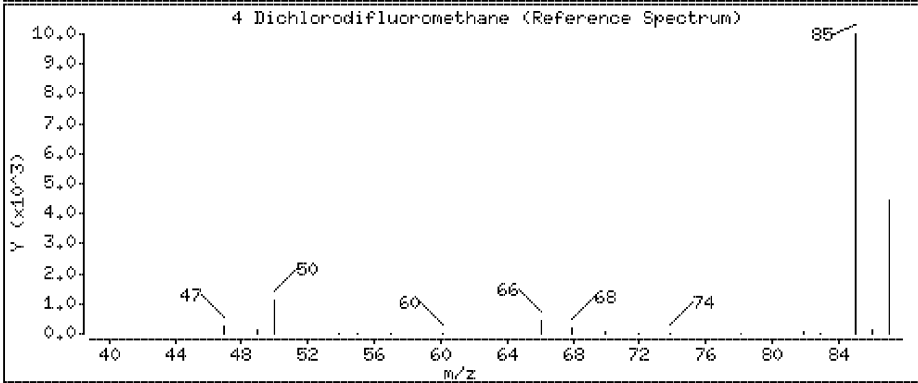
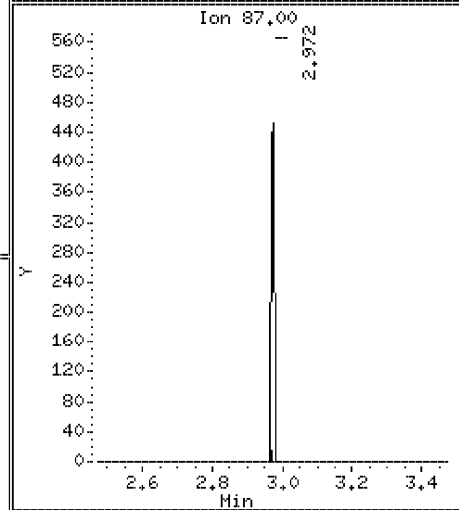
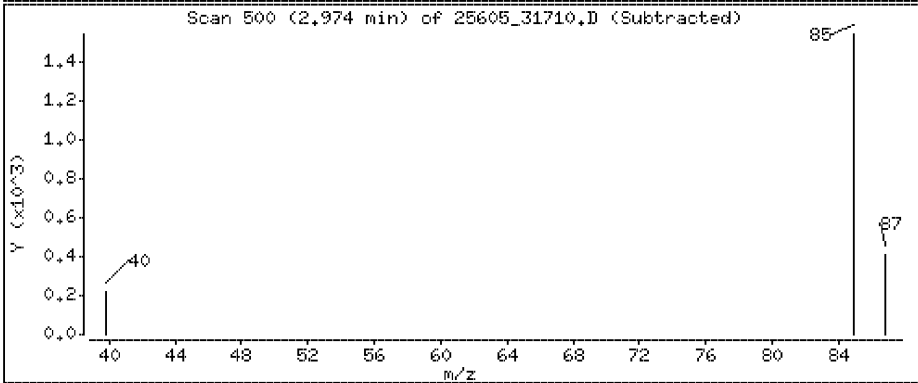
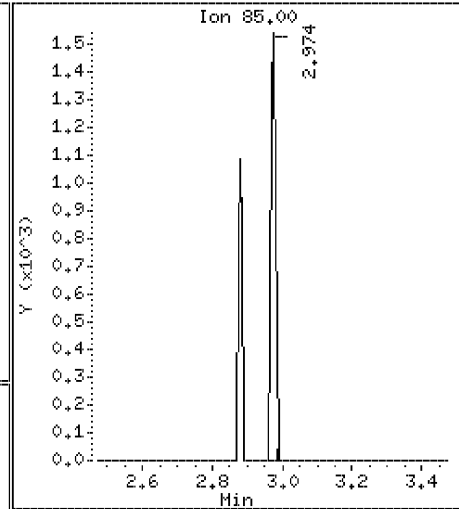
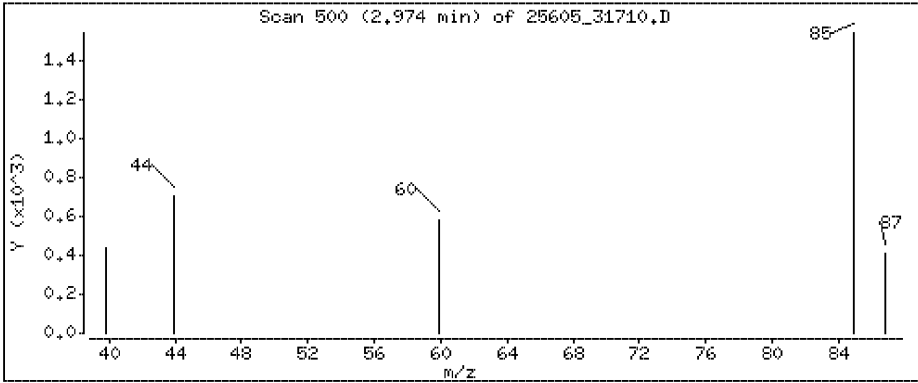
Operator: CH1

Column phase: ZB-5MSplus SN338857

Column diameter: 0,32

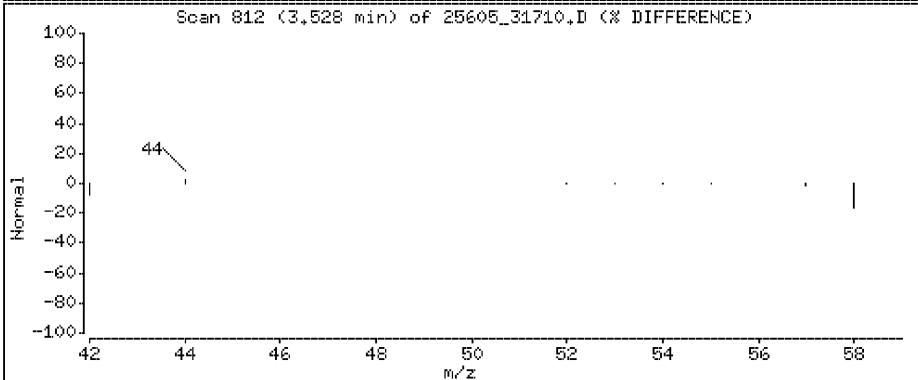
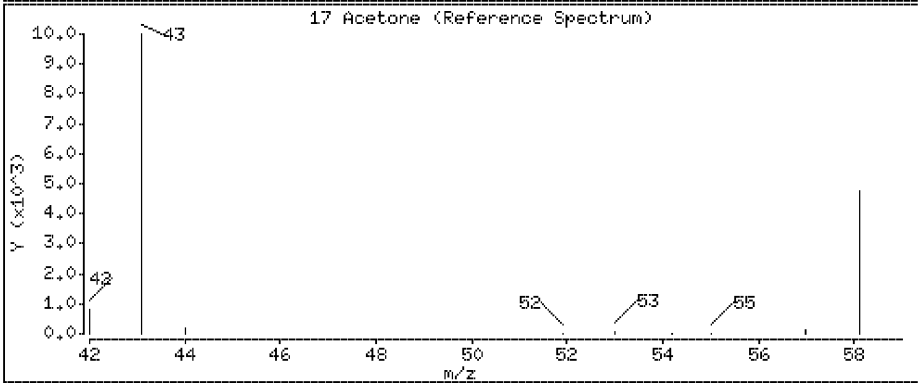
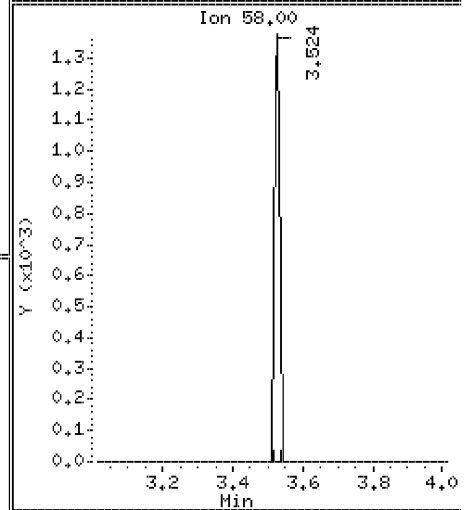
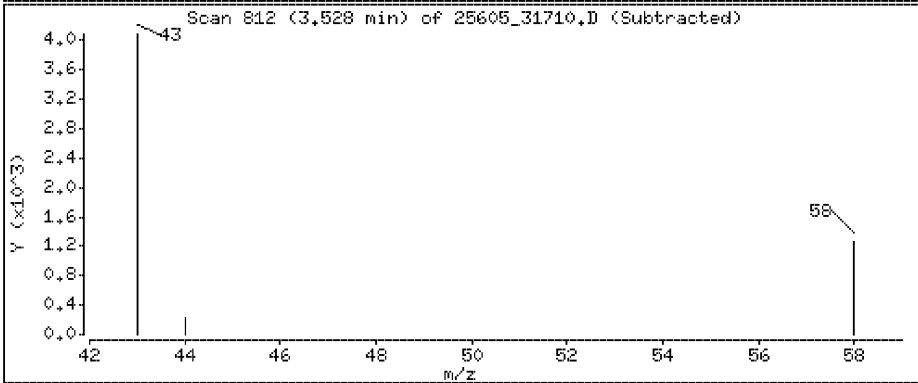
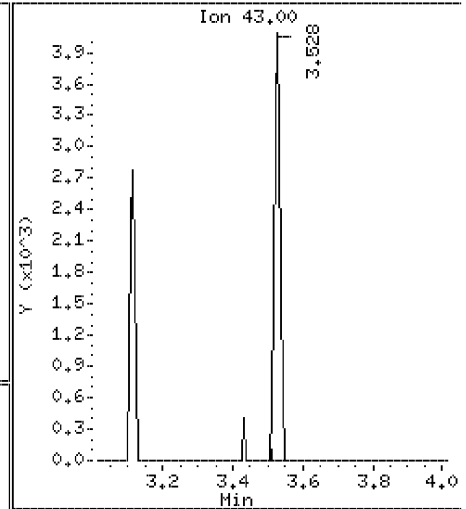
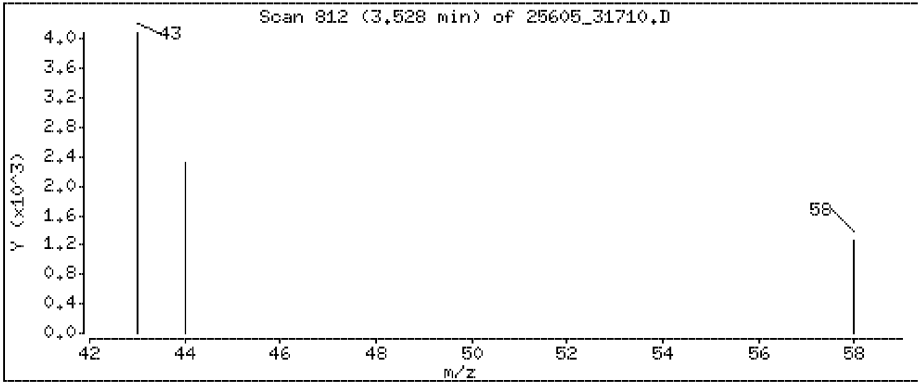
4 Dichlorodifluoromethane

Concentration: 0,00576 ppbv



17 Acetone

Concentration: 0.0675 ppbv



Data File: \\192.168.10.12\chem\10airH,1\091318,b\25605_31710.D

Date : 13-SEP-2018 10:47

Client ID:

Instrument: 10airH.i

Sample Info:

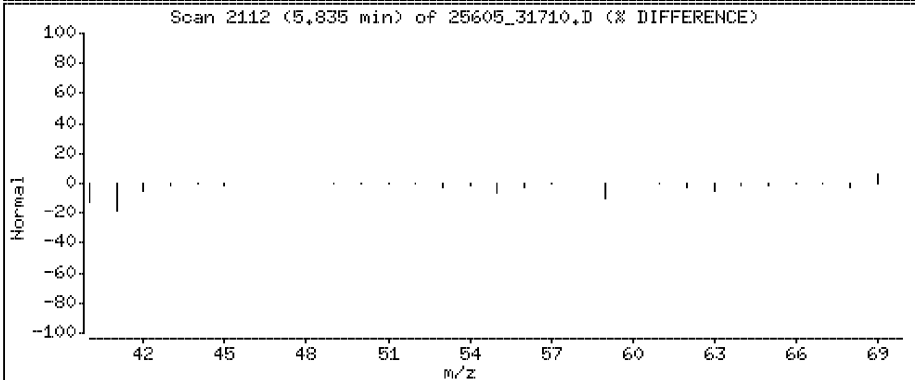
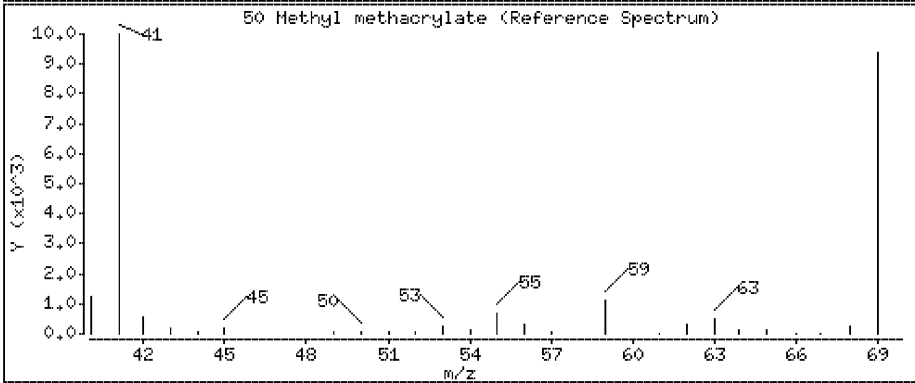
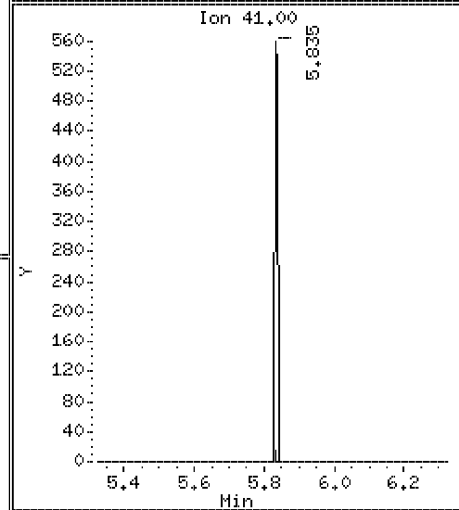
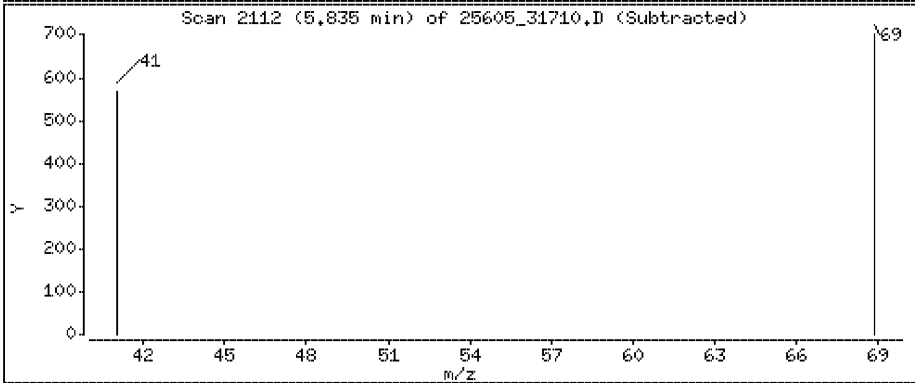
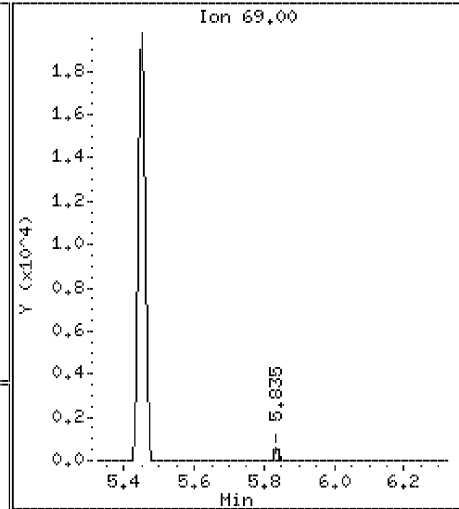
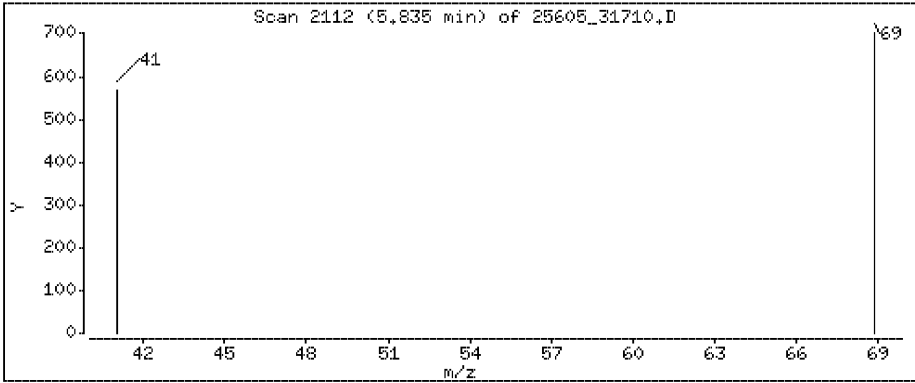
Operator: CH1

Column phase: ZB-5MSplus SN338857

Column diameter: 0.32

50 Methyl methacrylate

Concentration: 0.00583 ppbv



Data File: \\192.168.10.12\chem\10airH.i\091318.b\25605.D
Injection Date: 13-SEP-2018 10:47
Instrument: 10airH.i
Lab Sample ID: cert
NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

Pace Analytical Services, Inc.

TO15 Analysis (UNIX)

Data file : \\192.168.10.12\chem\10airH.i\091318.b\25602_31710.D
 Lab Smp Id: 3053763
 Inj Date : 13-SEP-2018 08:29
 Operator : CH1 Inst ID: 10airH.i
 Smp Info :
 Misc Info : 31710
 Comment : Volatile Organic COMPOUNDS in Air
 Method : \\192.168.10.12\chem\10airH.i\091318.b\TO15_253-18.m
 Meth Date : 13-Sep-2018 14:08 nkoller Quant Type: ISTD
 Cal Date : 10-SEP-2018 14:17 Cal File: 25309.D
 Als bottle: 2 QC Sample: LCS
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: all.sub
 Target Version: 4.14
 Processing Host: 10MNAIRRC91

Concentration Formula: Amt * DF * Uf * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN (ppbv)	FINAL (ppbv)
1 1,1-Difluoroethane	65		2.929	2.929	(0.537)	194941	10.0953	10.1 (M)
2 Chlorodifluoromethane	67		2.945	2.945	(0.540)	92383	10.2010	10.2
3 Propylene	41		2.952	2.952	(0.541)	153990	9.51412	9.51
4 Dichlorodifluoromethane	85		2.972	2.972	(0.545)	937911	10.0368	10.0
5 Dichlorotetrafluoroethane	85		3.043	3.043	(0.558)	709303	9.56014	9.56
6 Chloromethane	50		3.046	3.046	(0.559)	215361	8.72361	8.72
7 Vinyl chloride	62		3.116	3.116	(0.571)	236634	9.26889	9.27
8 1,3-Butadiene	54		3.149	3.149	(0.578)	156032	9.50359	9.50
9 Bromomethane	94		3.267	3.267	(0.599)	272146	9.05106	9.05
10 Chloroethane	64		3.311	3.311	(0.607)	109730	9.08896	9.09
11 Ethanol	45		3.318	3.318	(0.609)	355037	46.3400	46.3
12 Vinyl Bromide	106		3.417	3.417	(0.627)	268151	9.14645	9.15
13 Isopentane	43		3.432	3.432	(0.629)	176604	8.93113	8.93
14 Freon 123	83		3.467	3.467	(0.636)	566861	8.94728	8.95
15 Trichlorofluoromethane	101		3.492	3.492	(0.640)	580554	8.73367	8.73
16 Acrolein	56		3.494	3.494	(0.641)	194587	22.9431	22.9
17 Acetone	43		3.513	3.513	(0.644)	1225125	43.1425	43.1
18 Isopropyl Alcohol	45		3.536	3.536	(0.649)	1384349	44.1242	44.1 (M)
19 1,1-Dichloroethene	61		3.708	3.708	(0.680)	432900	9.79871	9.80
20 Acrylonitrile	53		3.714	3.714	(0.681)	438933	24.2075	24.2
21 Tert Butyl Alcohol (TBA)	59		3.733	3.733	(0.685)	588228	10.3328	10.3
22 Methyl Acetate	43		3.739	3.739	(0.686)	408896	8.52922	8.53
23 Freon 113	101		3.742	3.742	(0.686)	716448	9.78059	9.78

Compounds	QUANT MASS	SIG						CONCENTRATIONS	
			RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ppbv)	FINAL (ppbv)	
24 Allyl Chloride	76		3.817	3.817	(0.700)	140081	11.3468	11.3	
25 Methylene chloride	49		3.820	3.820	(0.701)	1193129	47.7165	47.7	
26 Carbon Disulfide	76		3.927	3.927	(0.720)	903553	10.7105	10.7	
27 Methyl Tert Butyl Ether	73		4.076	4.076	(0.747)	824848	11.4960	11.5	
28 trans-1,2-dichloroethene	96		4.090	4.090	(0.750)	354999	10.5069	10.5	
29 Vinyl Acetate	43		4.165	4.165	(0.764)	565627	11.0077	11.0	
30 1,1-Dichloroethane	63		4.214	4.214	(0.773)	528510	9.70600	9.71	
31 Methyl Ethyl Ketone	72		4.326	4.326	(0.793)	153734	9.93592	9.94	
32 Di-isopropyl Ether	45		4.351	4.351	(0.798)	678042	10.1178	10.1	
33 n-Hexane	57		4.362	4.362	(0.800)	369614	9.85039	9.85	
34 Ethyl Acetate	43		4.484	4.484	(0.822)	471705	9.91923	9.92	
35 cis-1,2-Dichloroethene	96		4.504	4.504	(0.826)	379709	10.9373	10.9	
36 Ethyl Tert-Butyl Ether	59		4.576	4.576	(0.839)	833234	11.6046	11.6	
37 Chloroform	83		4.685	4.685	(0.859)	727268	9.75384	9.75	
38 Tetrahydrofuran	42		4.752	4.752	(0.871)	202456	10.2665	10.3	
39 1,1,1-Trichloroethane	97		5.001	5.001	(0.917)	752686	10.2023	10.2	
40 1,2-Dichloroethane	62		5.080	5.080	(0.932)	441938	9.94173	9.94	
41 Benzene	78		5.238	5.238	(0.961)	952210	10.6747	10.7	
42 Carbon tetrachloride	117		5.256	5.256	(0.964)	792110	10.5352	10.5	
43 Cyclohexane	56		5.281	5.281	(0.968)	368064	11.6736	11.7	
44 Tert Amyl Methyl Ether	73		5.379	5.379	(0.986)	864934	12.7875	12.8	
* 45 1,4-Difluorobenzene	114		5.453	5.453	(1.000)	957999	10.0000		
46 2,2,4-Trimethylpentane	57		5.547	5.547	(1.017)	1187533	10.3872	10.4	
47 Heptane	43		5.677	5.677	(1.041)	345827	10.3531	10.4	
48 Trichloroethene	130		5.785	5.785	(1.061)	547225	11.3228	11.3	
49 1,2-Dichloropropane	63		5.829	5.829	(1.069)	314505	9.75517	9.76	
50 Methyl methacrylate	69		5.824	5.824	(1.068)	306511	10.5186	10.5	
51 1,4-Dioxane	88		5.874	5.874	(1.077)	572965	28.5664	28.6	
52 Bromodichloromethane	83		5.989	5.989	(1.098)	736387	10.3351	10.3	
53 Methylcyclohexane	98		6.257	6.257	(1.147)	264853	10.9606	11.0	
54 Methyl Isobutyl Ketone	43		6.333	6.333	(1.161)	494234	11.1758	11.2	
55 cis-1,3-Dichloropropene	75		6.415	6.415	(1.176)	564330	11.9287	11.9	
56 trans-1,3-Dichloropropene	75		6.862	6.862	(1.258)	523420	10.4951	10.5	
57 Toluene	91		6.960	6.960	(1.276)	1184407	12.6252	12.6	
58 1,1,2-Trichloroethane	97		7.086	7.086	(1.299)	435460	10.7892	10.8	
59 Methyl Butyl Ketone	43		7.182	7.182	(0.850)	456628	12.4432	12.4	
60 n-Octane	43		7.384	7.384	(0.874)	469600	12.0508	12.1	
61 Dibromochloromethane	129		7.622	7.622	(0.902)	853840	11.3143	11.3	
62 Tetrachloroethene	166		7.705	7.705	(0.912)	724736	10.9670	11.0	
63 1,2-Dibromoethane	107		7.824	7.824	(0.926)	717457	11.2917	11.3	
* 64 Chlorobenzene - d5	117		8.451	8.451	(1.000)	832287	10.0000		
65 Chlorobenzene	112		8.495	8.495	(1.005)	1005860	10.8201	10.8	
66 Ethyl Benzene	91		8.713	8.713	(1.031)	1472308	12.7308	12.7	
67 m&p-Xylene	91		8.868	8.868	(1.049)	2241732	25.4861	25.5 (M)	
68 n-Nonane	43		9.237	9.237	(1.093)	465647	9.42984	9.43	
69 Styrene	104		9.303	9.303	(1.101)	893818	10.9102	10.9	
70 o-Xylene	91		9.338	9.338	(1.105)	1132206	12.0805	12.1	
71 Bromoform	173		9.405	9.405	(1.113)	695027	11.7568	11.8	
72 1,1,2,2-Tetrachloroethane	83		9.750	9.750	(1.154)	773313	11.0237	11.0	
73 Isopropylbenzene	105		9.886	9.886	(1.170)	1629381	11.0139	11.0	
74 N-Propylbenzene	91		10.454	10.454	(1.237)	1768360	10.7151	10.7	
75 4-Ethyltoluene	105		10.639	10.639	(1.259)	1457960	10.9119	10.9	
76 1,3,5-Trimethylbenzene	105		10.713	10.713	(1.268)	1260711	10.8857	10.9	
77 n-Decane	57		11.067	11.067	(2.029)	541792	9.90555	9.91	

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (ppbv)	FINAL (ppbv)
78 Tert-Butyl Benzene	119	11.159	11.159	(1.320)	1259380	11.0151	11.0
79 1,2,4-Trimethylbenzene	105	11.203	11.203	(1.326)	1186815	10.9073	10.9
80 Sec- Butylbenzene	105	11.462	11.462	(1.356)	1747336	10.9026	10.9
81 1,3-Dichlorobenzene	146	11.496	11.496	(1.360)	796830	13.2172	13.2
82 Benzyl Chloride	91	11.567	11.567	(1.369)	745171	10.5285	10.5
83 1,4-Dichlorobenzene	146	11.627	11.627	(1.376)	747445	11.0070	11.0
84 p-Isopropyltoluene	119	11.667	11.667	(1.381)	1512665	10.9788	11.0
85 1,2,3-Trimethylbenzene	105	11.683	11.683	(1.382)	1157888	10.8592	10.9
86 1,2-Dichlorobenzene	146	11.935	11.935	(1.412)	743664	11.1582	11.2
87 N-Butylbenzene	91	12.114	12.114	(1.433)	1118242	10.7137	10.7
88 1,2-Dibromo-3-Chloropropane	157	12.630	12.630	(1.495)	279228	11.0573	11.1
89 1,2,4-Trichlorobenzene	180	13.574	13.574	(1.606)	243397	10.9279	10.9
90 Naphthalene	128	13.715	13.715	(1.623)	509662	10.4791	10.5
91 Hexachlorobutadiene	225	13.825	13.825	(1.636)	424275	11.5694	11.6

QC Flag Legend

M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10airH.i\091318.b\25602_31710.D
Report Date: 14-Sep-2018 11:16

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10airH.i
Lab File ID: 25602_31710.D
Lab Smp Id: 3053763
Analysis Type: VOA
Quant Type: ISTD
Operator: CH1
Method File: \\192.168.10.12\chem\10airH.i\091318.b\TO15_253-18.m
Misc Info: 31710

Calibration Date: 13-SEP-2018
Calibration Time: 08:29

Level: LOW
Sample Type: AIR

Test Mode:

Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

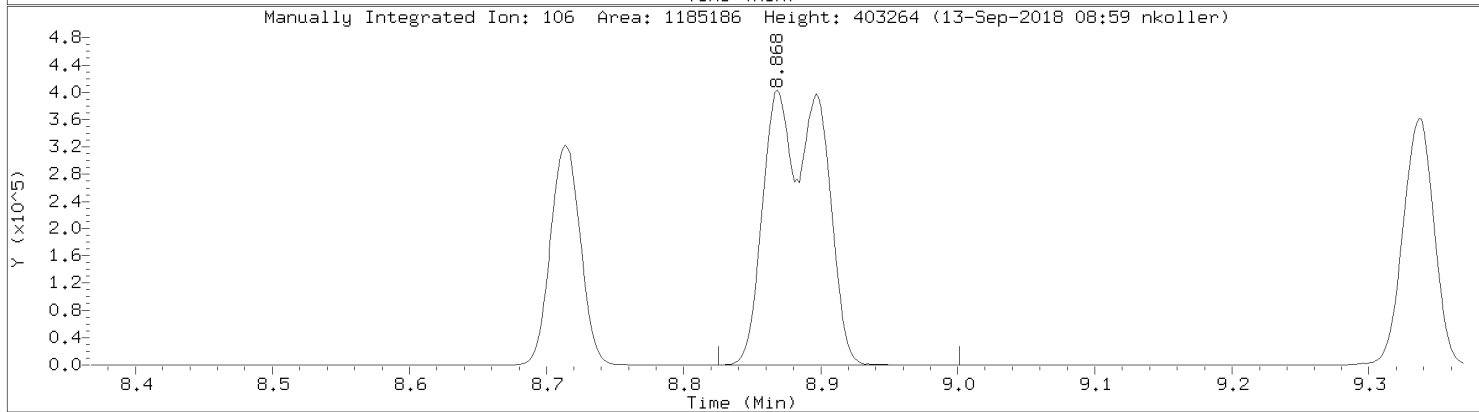
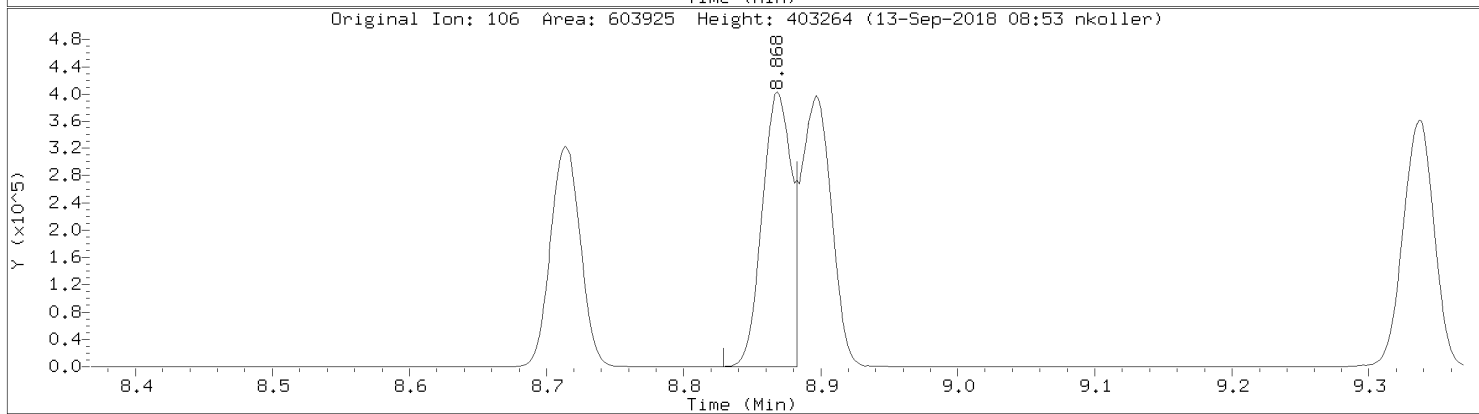
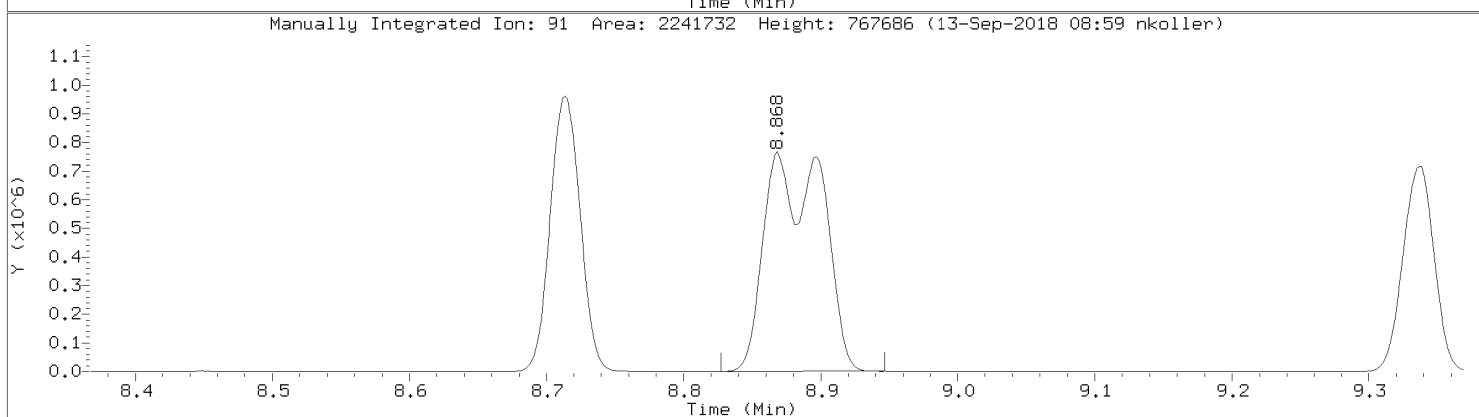
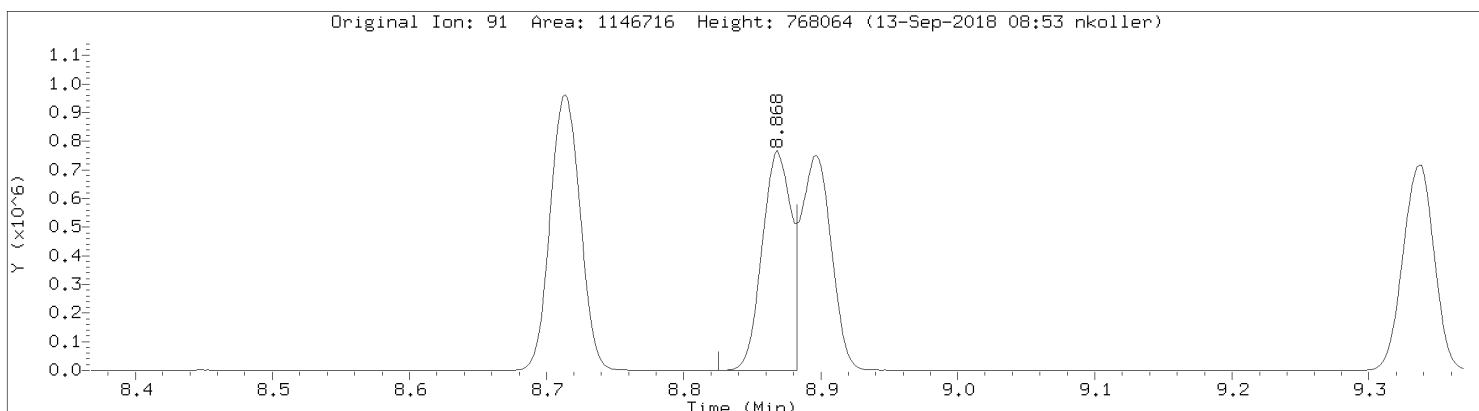
COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
45 1,4-Difluorobenze	1034069	620441	1447697	957999	-7.36
64 Chlorobenzene - d	896862	538117	1255607	832287	-7.20

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
45 1,4-Difluorobenze	5.45	5.12	5.78	5.45	0.00
64 Chlorobenzene - d	8.45	8.12	8.78	8.45	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

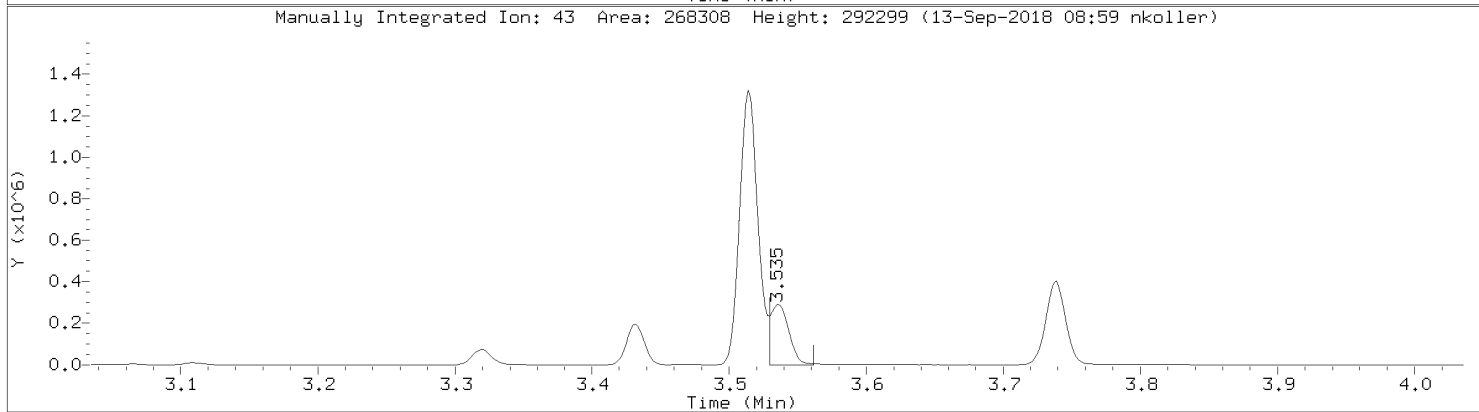
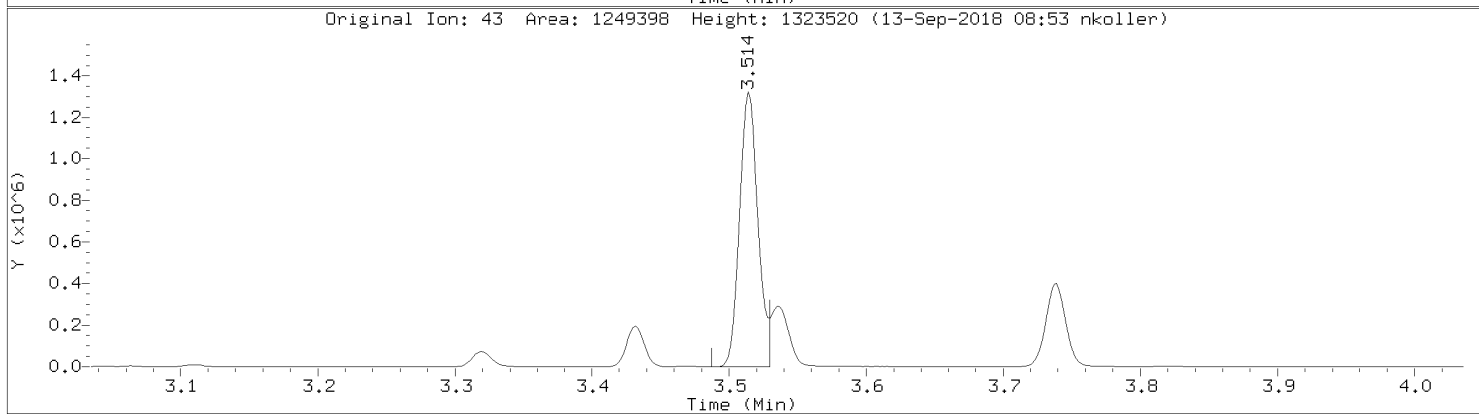
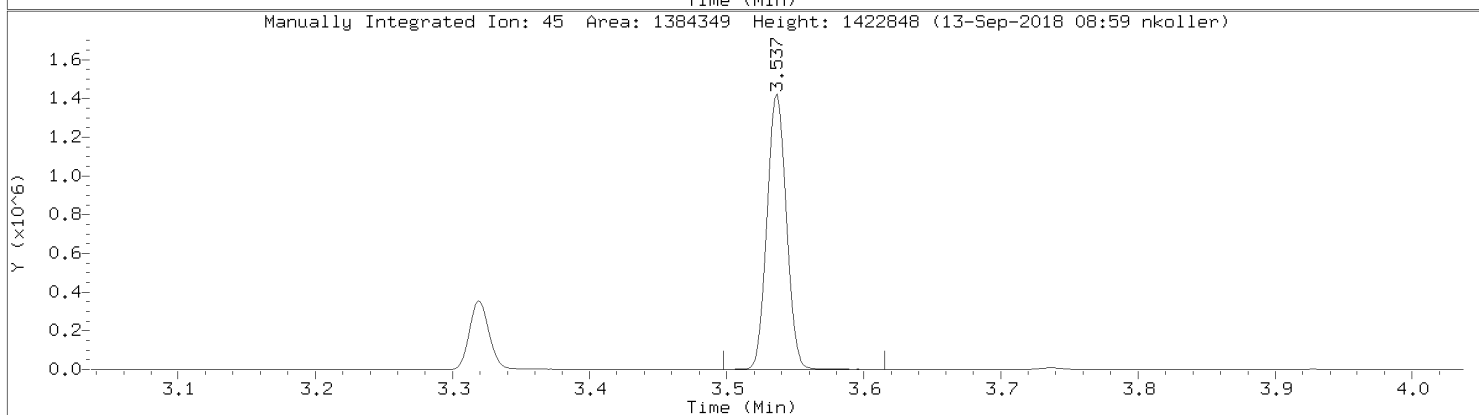
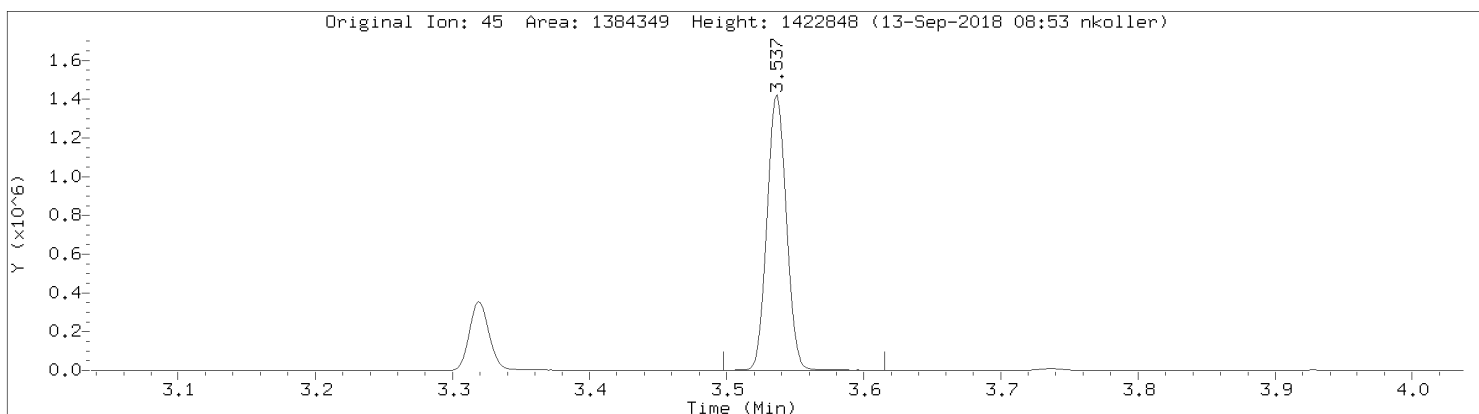
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Injection Date: 13-SEP-2018 08:29
Instrument: 10airH.i
Lab Sample ID: ccv

Compound: m&p-Xylene
CAS Number: 7816-60-0



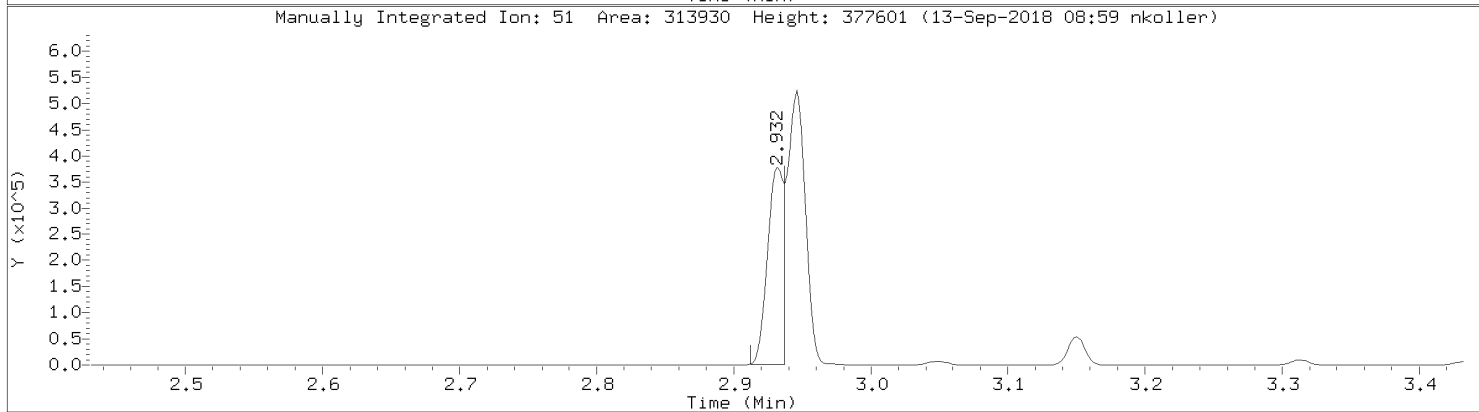
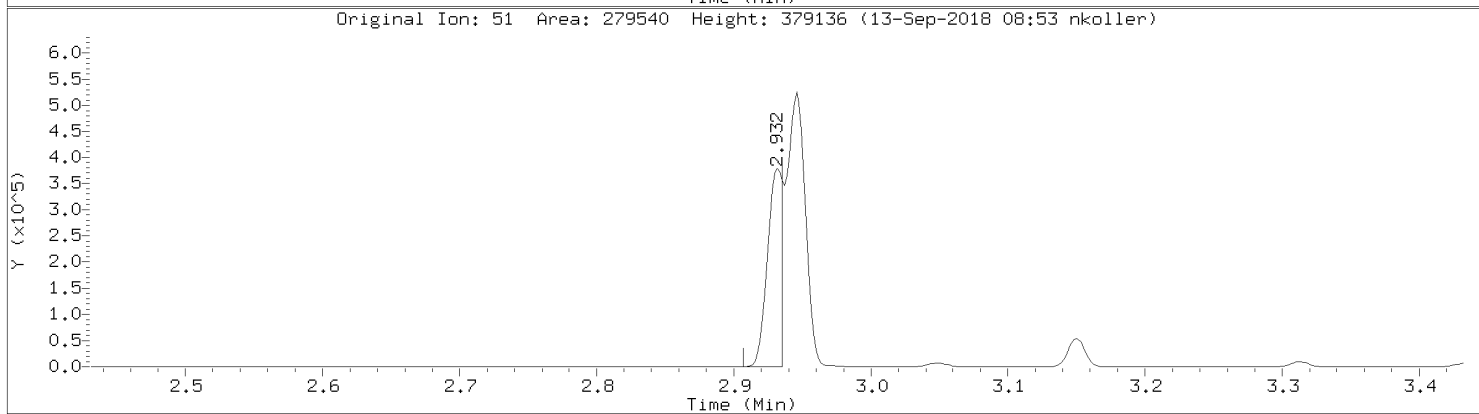
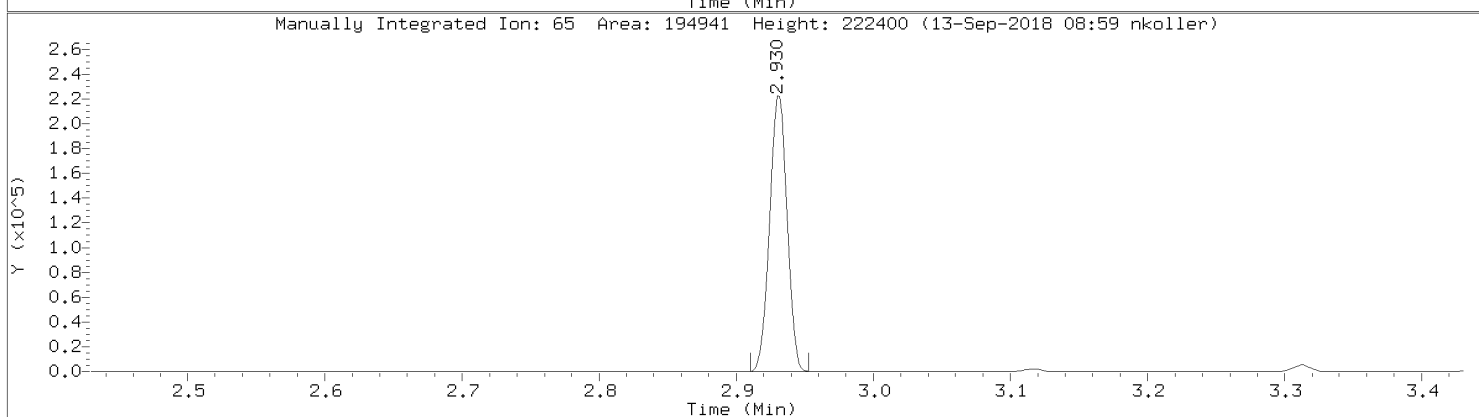
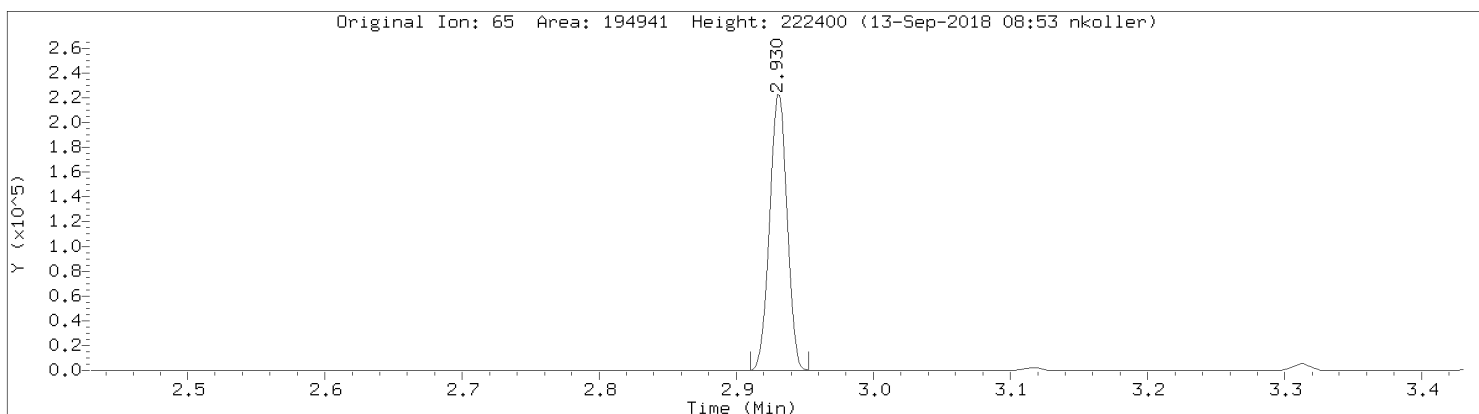
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Injection Date: 13-SEP-2018 08:29
Instrument: 10airH.i
Lab Sample ID: ccv

Compound: Isopropyl Alcohol
CAS Number: 67-63-0

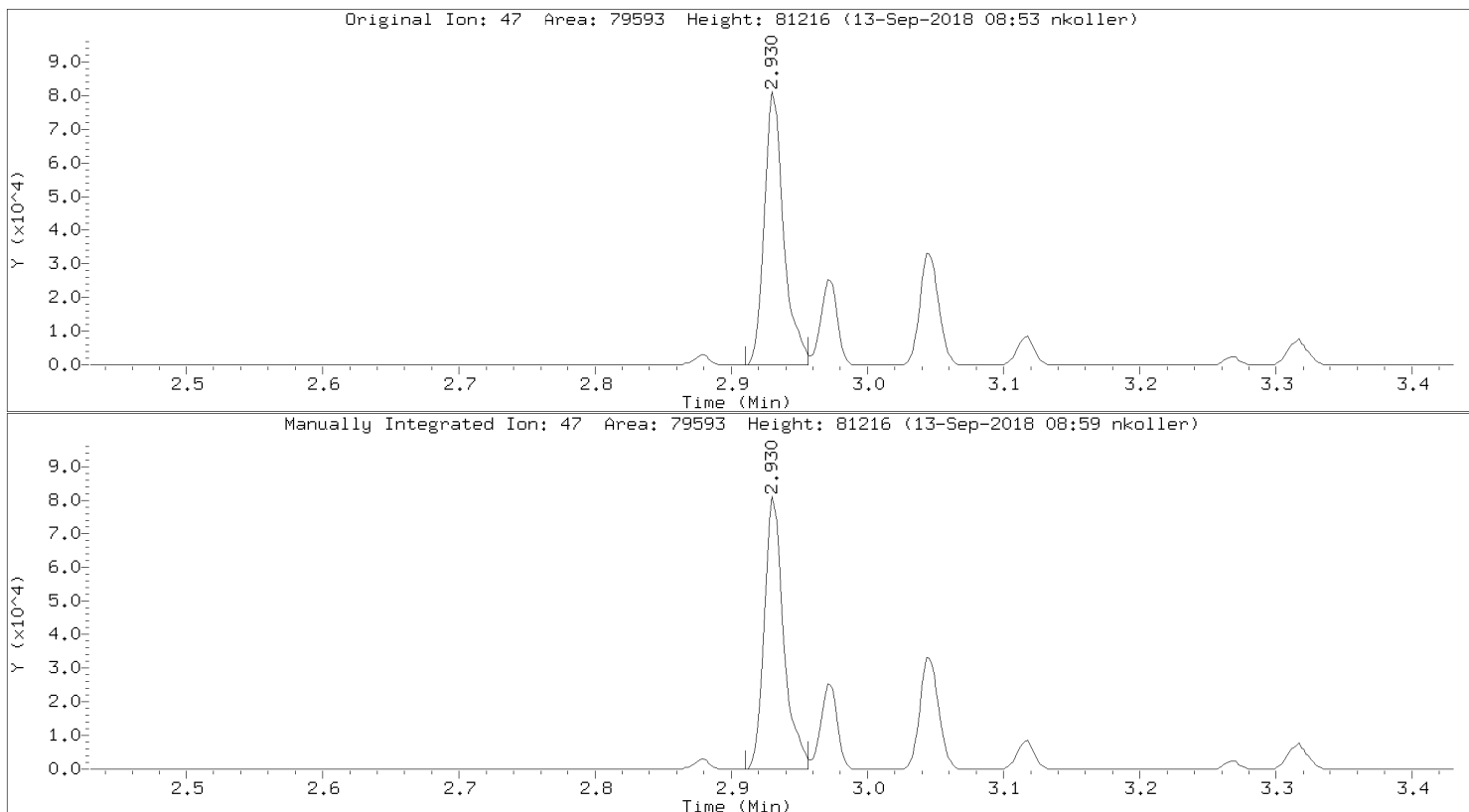


Data File: \\192.168.10.12\chem\10airH.i\091318.b\25602.D
Injection Date: 13-SEP-2018 08:29
Instrument: 10airH.i
Lab Sample ID: ccv

Compound: 1,1-Difluoroethane
CAS Number: 75-37-6



Data File: \\192.168.10.12\chem\10airH.i\091318.b\25602.D
Injection Date: 13-SEP-2018 08:29
Instrument: 10airH.i
Lab Sample ID: ccv



Pace Analytical Services, Inc.

TO15 Analysis (UNIX)

Data file : \\192.168.10.12\chem\10airH.i\091318.b\25625.D
 Lab Smp Id: 10446892001
 Inj Date : 13-SEP-2018 21:03
 Operator : CH1 Inst ID: 10airH.i
 Smp Info :
 Misc Info : 31710
 Comment : Volatile Organic COMPOUNDS in Air
 Method : \\192.168.10.12\chem\10airH.i\091318.b\TO15_253-18.m
 Meth Date : 13-Sep-2018 14:08 nkoller Quant Type: ISTD
 Cal Date : 10-SEP-2018 14:17 Cal File: 25309.D
 Als bottle: 25
 Dil Factor: 1.74000
 Integrator: HP RTE Compound Sublist: all.sub
 Target Version: 4.14
 Processing Host: 10MNAIRRC91

Concentration Formula: Amt * DF * Uf * CpndVariable

Name	Value	Description
DF	1.740	Dilution Factor
Uf	1.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS		
							ON-COLUMN (ppbv)	FINAL (ppbv)	
1 1,1-Difluoroethane	65								(D)
2 Chlorodifluoromethane	67								(D)
3 Propylene	41		2.952	2.952	(0.541)	3233	0.20631	0.359	
4 Dichlorodifluoromethane	85		2.974	2.972	(0.545)	19812	0.21898	0.381	
5 Dichlorotetrafluoroethane	85								
6 Chloromethane	50		3.048	3.046	(0.559)	6193	0.25911	0.451	
7 Vinyl chloride	62								
8 1,3-Butadiene	54								(D)
9 Bromomethane	94		3.268	3.267	(0.599)	816	0.02803	0.0488(a)	
10 Chloroethane	64								
11 Ethanol	45		3.325	3.318	(0.610)	19645	2.64838	4.61	
12 Vinyl Bromide	106								
13 Isopentane	43		3.433	3.432	(0.630)	2565	0.13398	0.233	
14 Freon 123	83								
15 Trichlorofluoromethane	101		3.494	3.492	(0.641)	6274	0.09749	0.170	
16 Acrolein	56								(D)
17 Acetone	43		3.518	3.513	(0.645)	167313	6.08555	10.6(M)	
18 Isopropyl Alcohol	45		3.547	3.536	(0.650)	11792	0.38821	0.675(QM)	
19 1,1-Dichloroethene	61								
20 Acrylonitrile	53								
21 Tert Butyl Alcohol (TBA)	59		3.747	3.733	(0.687)	22719	0.41220	0.717	
22 Methyl Acetate	43								(D)
23 Freon 113	101		3.746	3.742	(0.687)	2547	0.03591	0.0625(a)	
24 Allyl Chloride	76								

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN (ppbv)	FINAL (ppbv)
25 Methylene chloride	49		3.820	3.820	(0.701)	37773	0.64483	1.12
26 Carbon Disulfide	76		3.927	3.927	(0.720)	117737	1.44150	2.51
27 Methyl Tert Butyl Ether	73		Compound Not Detected.					
28 trans-1,2-dichloroethene	96		Compound Not Detected.					
29 Vinyl Acetate	43		Compound Not Detected.					(D)
30 1,1-Dichloroethane	63		Compound Not Detected.					
31 Methyl Ethyl Ketone	72		4.328	4.326	(0.794)	18885	1.26067	2.19 (M)
32 Di-isopropyl Ether	45		Compound Not Detected.					
33 n-Hexane	57		4.363	4.362	(0.800)	8270	0.22764	0.396 (QM)
34 Ethyl Acetate	43		Compound Not Detected.					
35 cis-1,2-Dichloroethene	96		Compound Not Detected.					
36 Ethyl Tert-Butyl Ether	59		Compound Not Detected.					
37 Chloroform	83		Compound Not Detected.					
38 Tetrahydrofuran	42		Compound Not Detected.					(D)
39 1,1,1-Trichloroethane	97		Compound Not Detected.					
40 1,2-Dichloroethane	62		Compound Not Detected.					
41 Benzene	78		Compound Not Detected.					(D)
42 Carbon tetrachloride	117		5.256	5.256	(0.964)	2230	0.03063	0.0533(a)
43 Cyclohexane	56		Compound Not Detected.					(D)
44 Tert Amyl Methyl Ether	73		Compound Not Detected.					(D)
* 45 1,4-Difluorobenzene	114		5.453	5.453	(1.000)	927512	10.0000	
46 2,2,4-Trimethylpentane	57		5.545	5.547	(1.017)	10279	0.09286	0.162
47 Heptane	43		Compound Not Detected.					(D)
48 Trichloroethene	130		Compound Not Detected.					
49 1,2-Dichloropropane	63		Compound Not Detected.					
50 Methyl methacrylate	69		Compound Not Detected.					(D)
51 1,4-Dioxane	88		Compound Not Detected.					
52 Bromodichloromethane	83		Compound Not Detected.					
53 Methylcyclohexane	98		Compound Not Detected.					(D)
54 Methyl Isobutyl Ketone	43		Compound Not Detected.					(D)
55 cis-1,3-Dichloropropene	75		Compound Not Detected.					
56 trans-1,3-Dichloropropene	75		Compound Not Detected.					
57 Toluene	91		6.962	6.960	(1.277)	8512	0.09372	0.163
58 1,1,2-Trichloroethane	97		Compound Not Detected.					
59 Methyl Butyl Ketone	43		7.192	7.182	(0.851)	3501	0.10221	0.178
60 n-Octane	43		Compound Not Detected.					(D)
61 Dibromochloromethane	129		Compound Not Detected.					
62 Tetrachloroethene	166		7.707	7.705	(0.912)	12679	0.20556	0.358
63 1,2-Dibromoethane	107		Compound Not Detected.					
* 64 Chlorobenzene - d5	117		8.452	8.451	(1.000)	776846	10.0000	
65 Chlorobenzene	112		Compound Not Detected.					
66 Ethyl Benzene	91		Compound Not Detected.					
67 m&p-Xylene	91		Compound Not Detected.					(D)
68 n-Nonane	43		Compound Not Detected.					(D)
69 Styrene	104		Compound Not Detected.					
70 o-Xylene	91		Compound Not Detected.					(D)
71 Bromoform	173		Compound Not Detected.					
72 1,1,2,2-Tetrachloroethane	83		Compound Not Detected.					
73 Isopropylbenzene	105		Compound Not Detected.					
74 N-Propylbenzene	91		Compound Not Detected.					
75 4-Ethyltoluene	105		Compound Not Detected.					
76 1,3,5-Trimethylbenzene	105		Compound Not Detected.					(D)
77 n-Decane	57		Compound Not Detected.					(D)
78 Tert-Butyl Benzene	119		Compound Not Detected.					

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS		
						ON-COLUMN (ppbv)	FINAL (ppbv)	
79 1,2,4-Trimethylbenzene	105							(D)
80 Sec- Butylbenzene	105							
81 1,3-Dichlorobenzene	146							
82 Benzyl Chloride	91							
83 1,4-Dichlorobenzene	146							
84 p-Isopropyltoluene	119							
85 1,2,3-Trimethylbenzene	105							
86 1,2-Dichlorobenzene	146							
87 N-Butylbenzene	91							
88 1,2-Dibromo-3-Chloropropane	157							
89 1,2,4-Trichlorobenzene	180							
90 Naphthalene	128	13.718	13.715	(1.623)	5145	0.53484	0.931	
91 Hexachlorobutadiene	225							

QC Flag Legend

- a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
- Q - Qualifier signal failed the ratio test.
- M - Compound response manually integrated.
- D - User disabled compound identification.

Data File: \\192.168.10.12\chem\10airH.i\091318.b\25625.D
Report Date: 14-Sep-2018 10:12

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10airH.i
Lab File ID: 25625.D
Lab Smp Id: 10446892001
Analysis Type: VOA
Quant Type: ISTD
Operator: CH1
Method File: \\192.168.10.12\chem\10airH.i\091318.b\TO15_253-18.m
Misc Info: 31710

Calibration Date: 13-SEP-2018
Calibration Time: 08:29

Level: LOW
Sample Type: AIR

Test Mode:

Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
45 1,4-Difluorobenze	1034069	620441	1447697	927512	-10.30
64 Chlorobenzene - d	896862	538117	1255607	776846	-13.38

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
45 1,4-Difluorobenze	5.45	5.12	5.78	5.45	-0.00
64 Chlorobenzene - d	8.45	8.12	8.78	8.45	0.02

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: \\192.168.10.12\chem\10airH.i\091318.b\25625.D

Date : 13-SEP-2018 21:03

Client ID:

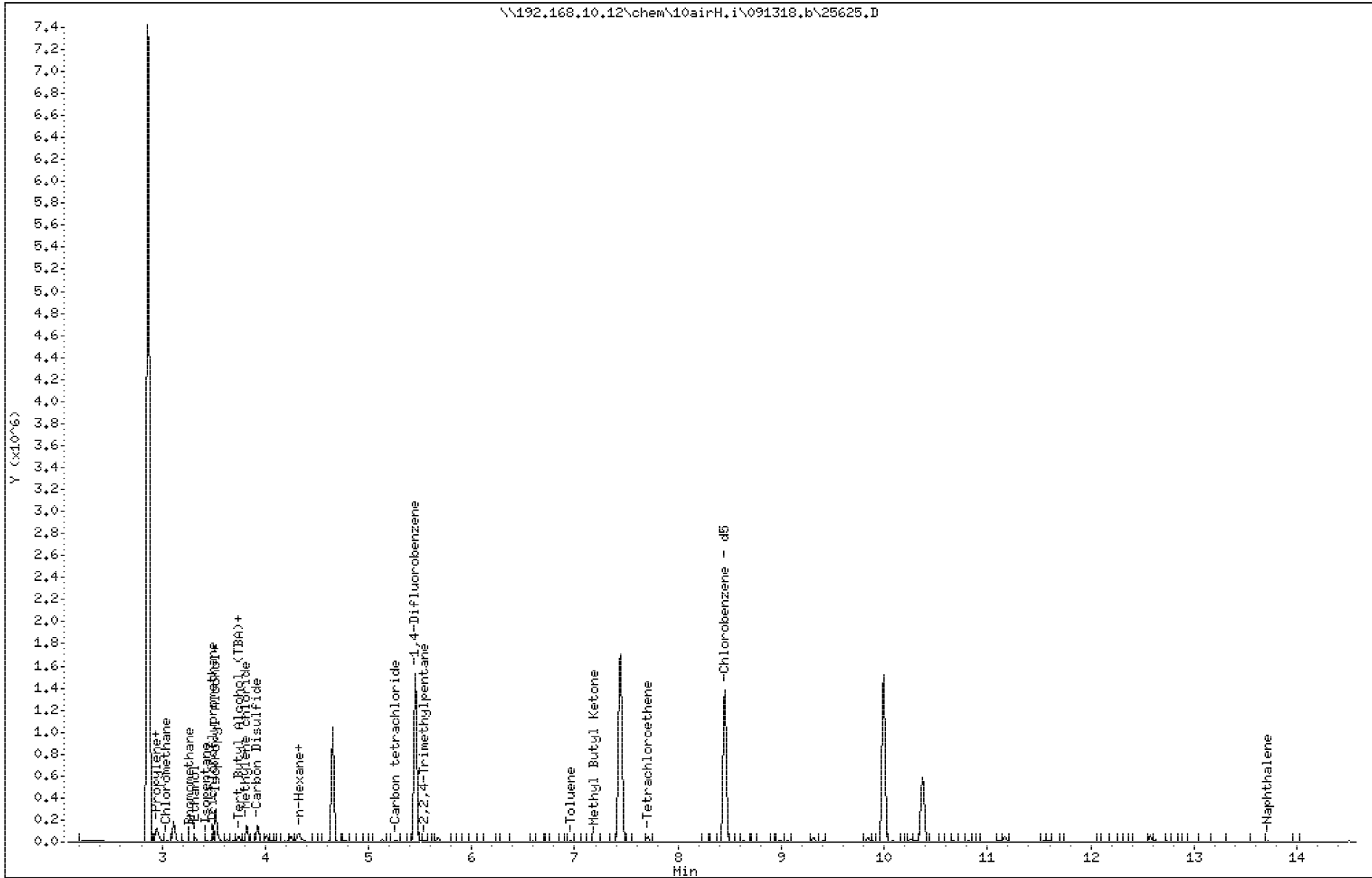
Instrument: 10airH.i

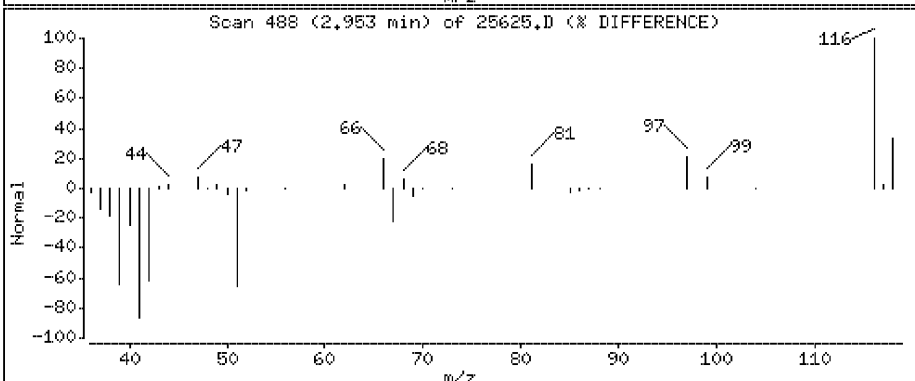
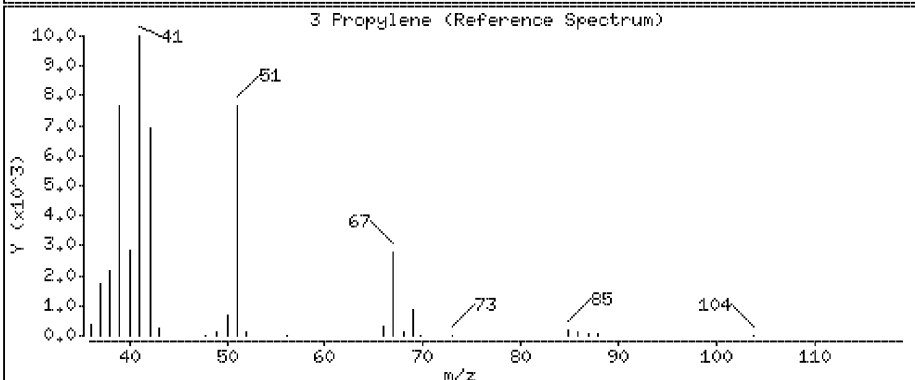
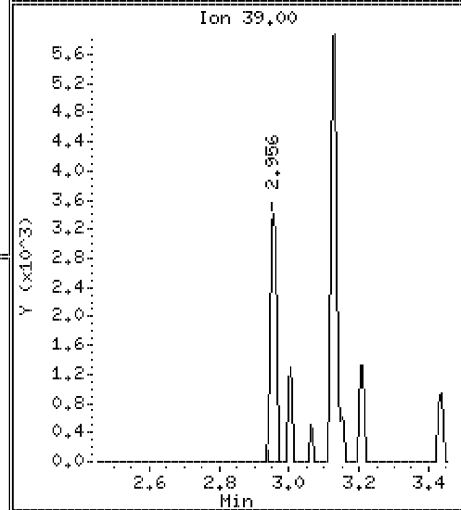
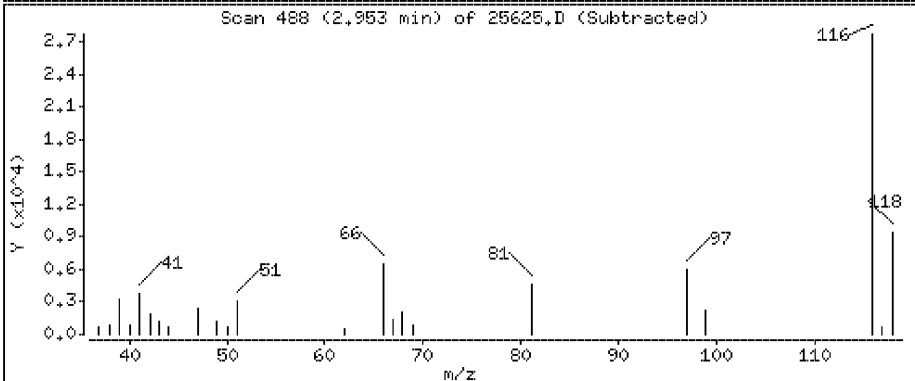
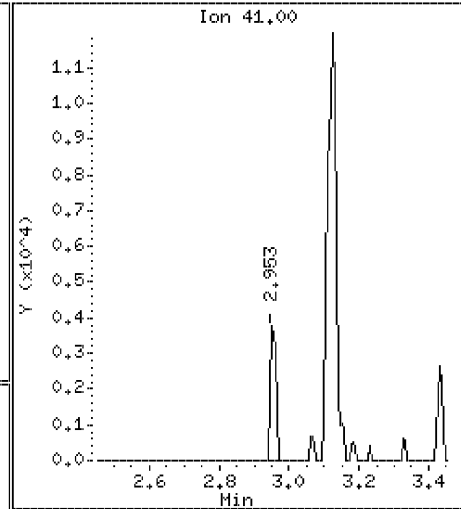
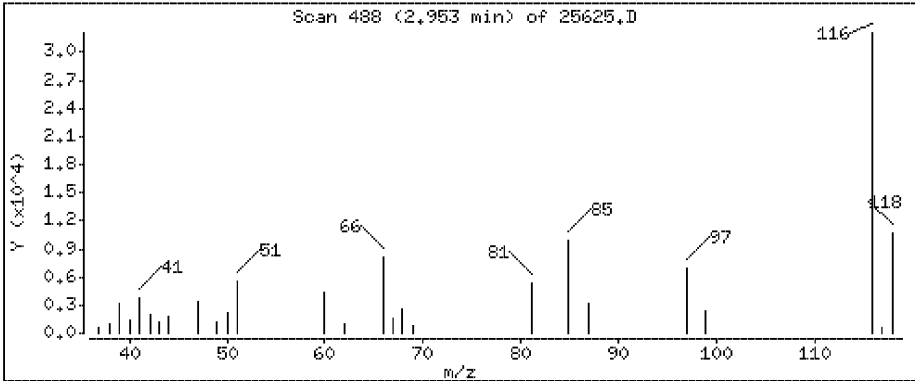
Sample Info:

Operator: CH1

Column phase: ZB-5MSplus SN338857

Column diameter: 0.32





Data File: \\192.168.10.12\chem\10airH,1\091318,b\25625.D

Date : 13-SEP-2018 21:03

Client ID:

Instrument: 10airH.i

Sample Info:

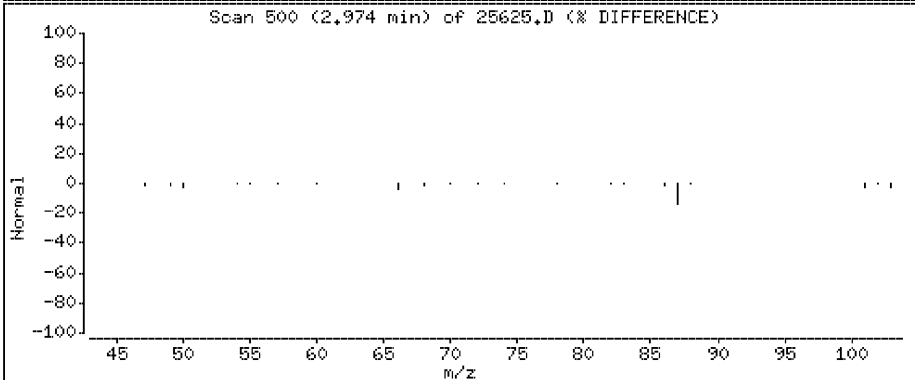
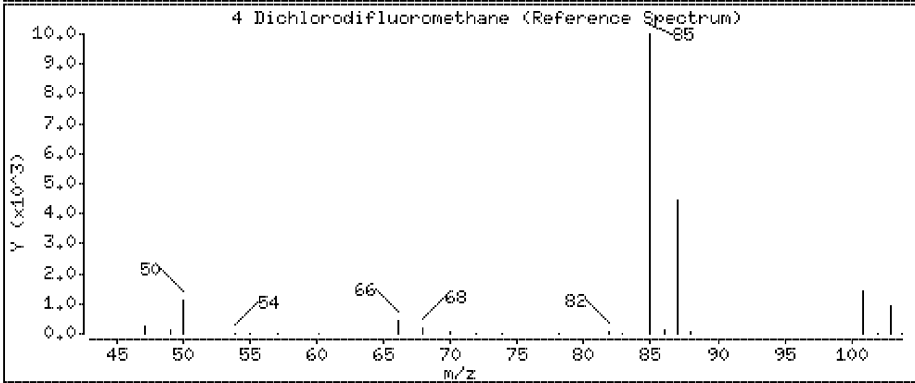
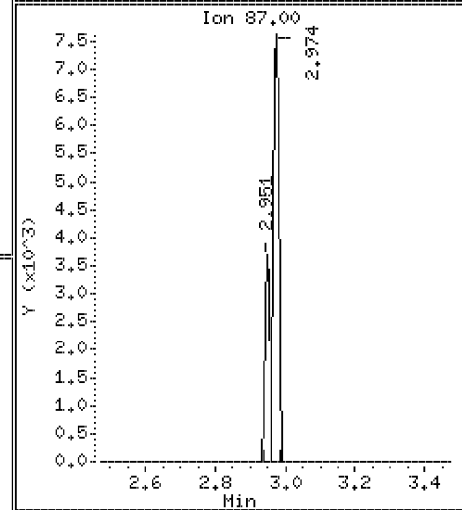
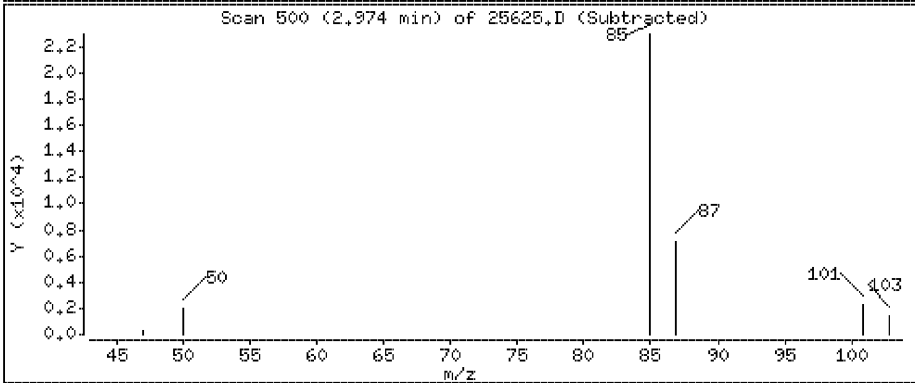
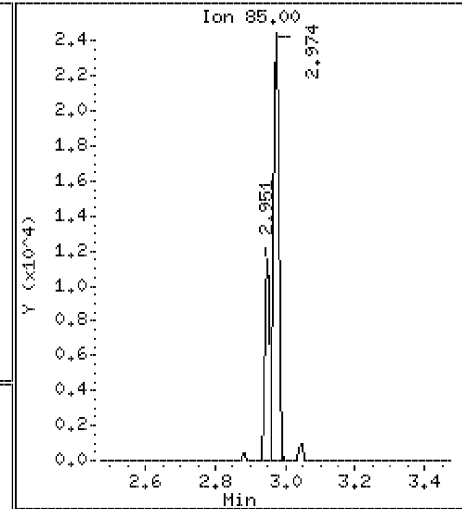
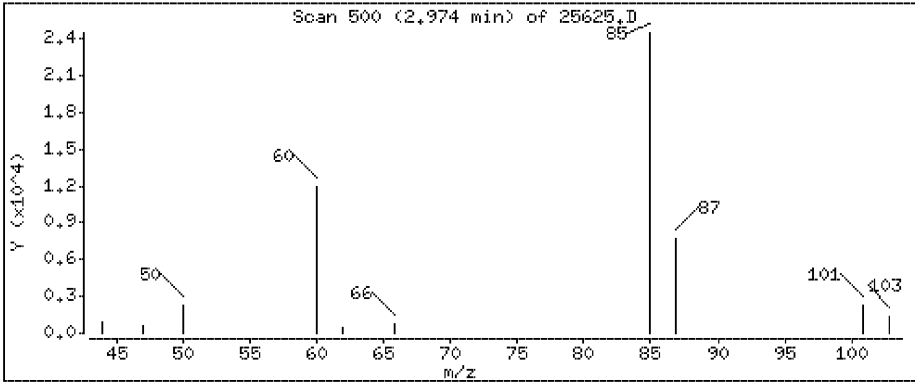
Operator: CH1

Column phase: ZB-5MSplus SN338857

Column diameter: 0,32

4 Dichlorodifluoromethane

Concentration: 0,381 ppbv



Data File: \\192.168.10.12\chem\10airH,1\091318,b\25625.D

Date : 13-SEP-2018 21:03

Client ID:

Instrument: 10airH.i

Sample Info:

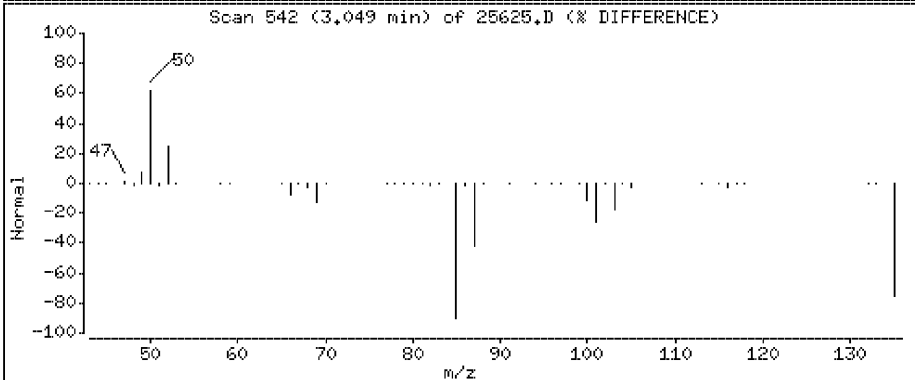
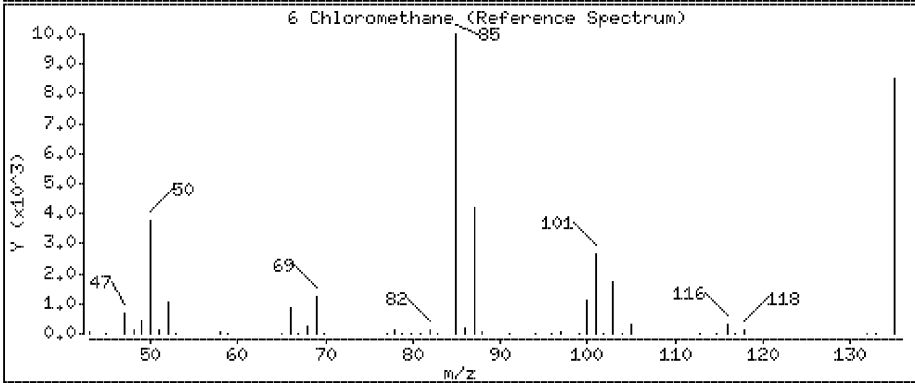
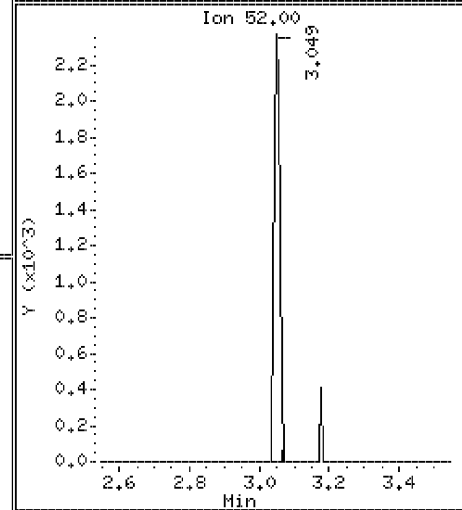
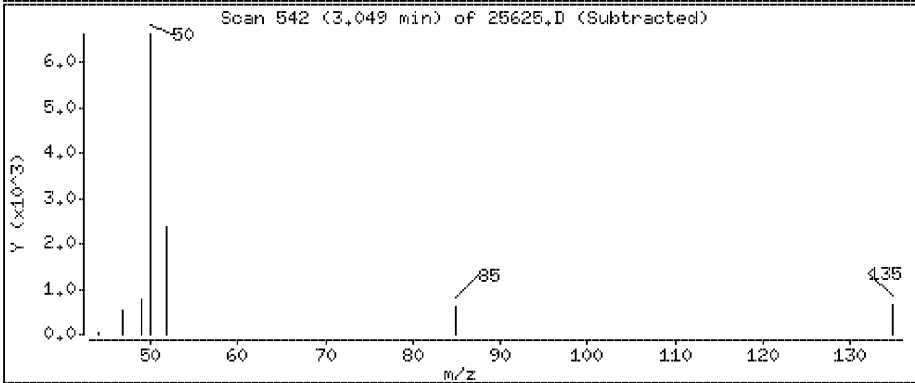
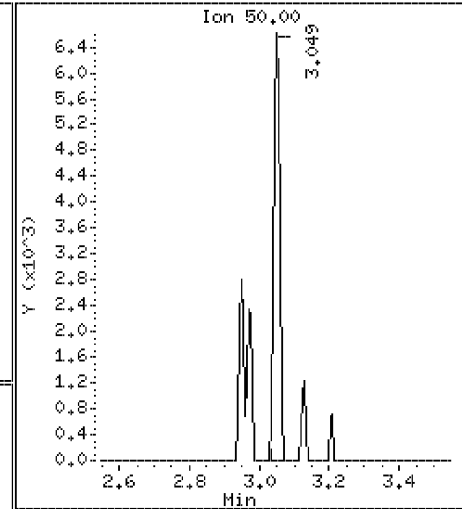
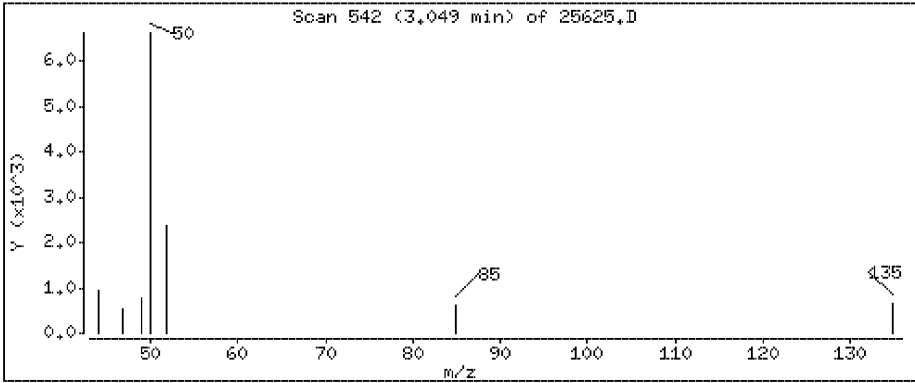
Operator: CH1

Column phase: ZB-5MSplus SN338857

Column diameter: 0,32

6 Chloromethane

Concentration: 0,451 ppbv



Data File: \\192.168.10.12\chem\10airH,1\091318,b\25625.D

Date : 13-SEP-2018 21:03

Client ID:

Instrument: 10airH.i

Sample Info:

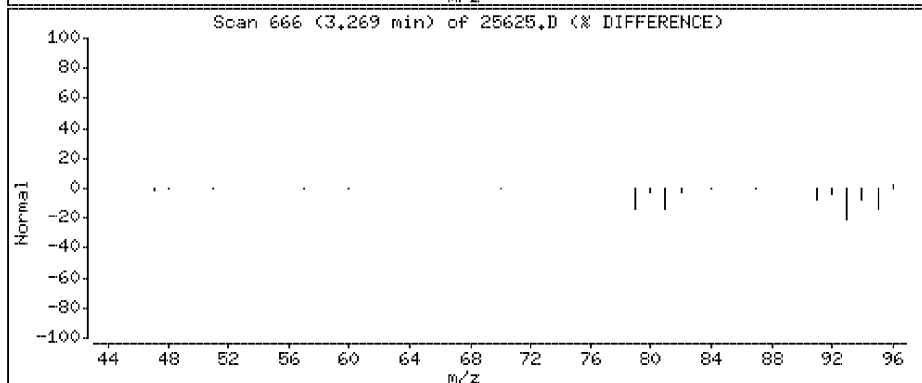
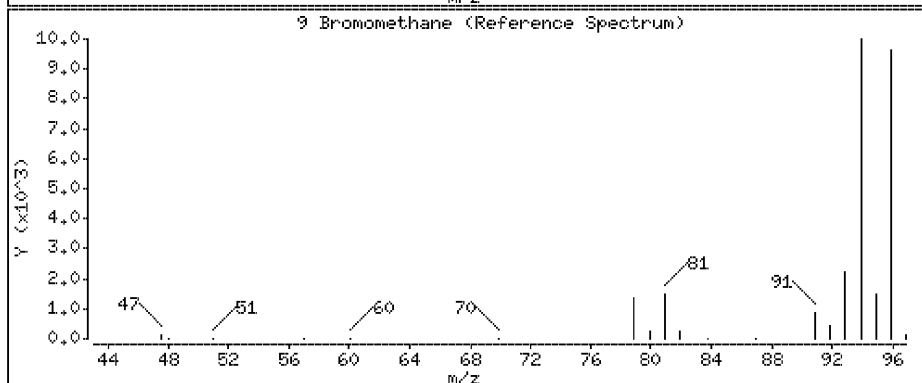
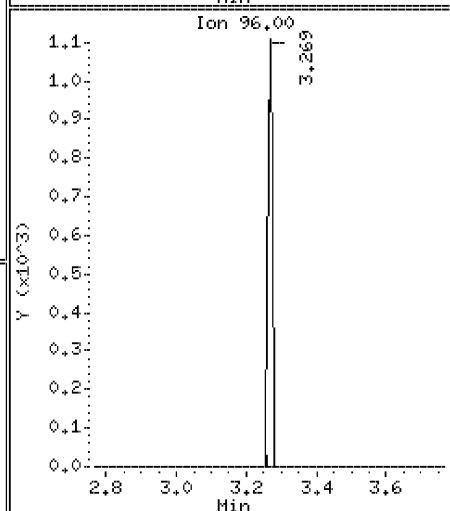
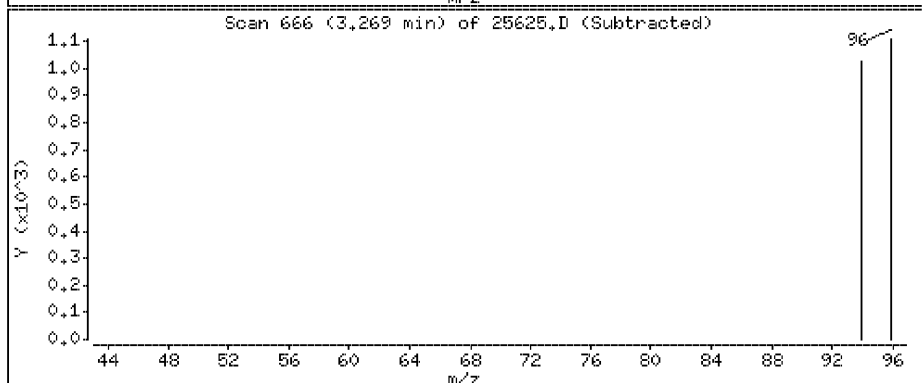
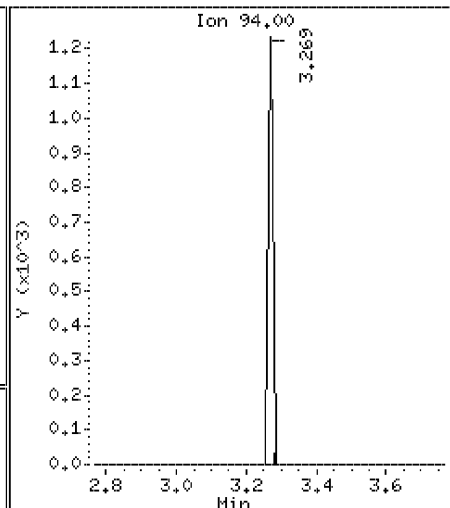
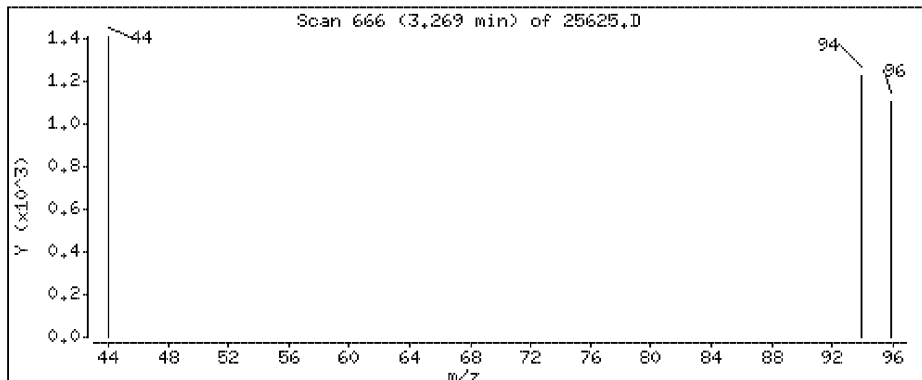
Operator: CH1

Column phase: ZB-5MSplus SN338857

Column diameter: 0,32

9 Bromomethane

Concentration: 0,0488 ppbv



Data File: \\192.168.10.12\chem\10airH,1\091318,b\25625.D

Date : 13-SEP-2018 21:03

Client ID:

Instrument: 10airH.i

Sample Info:

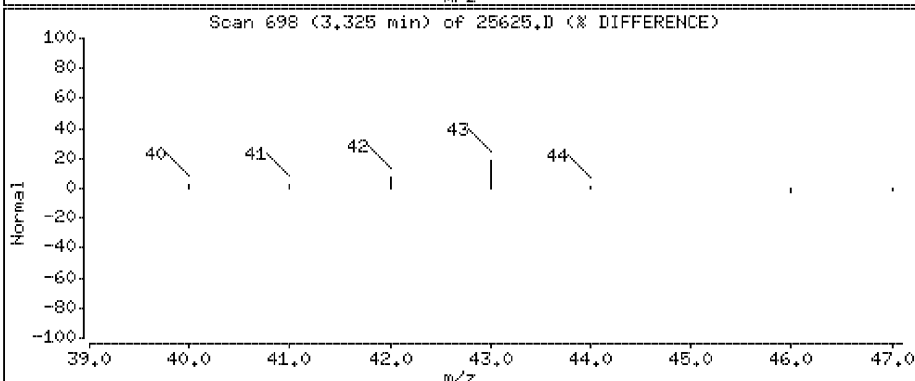
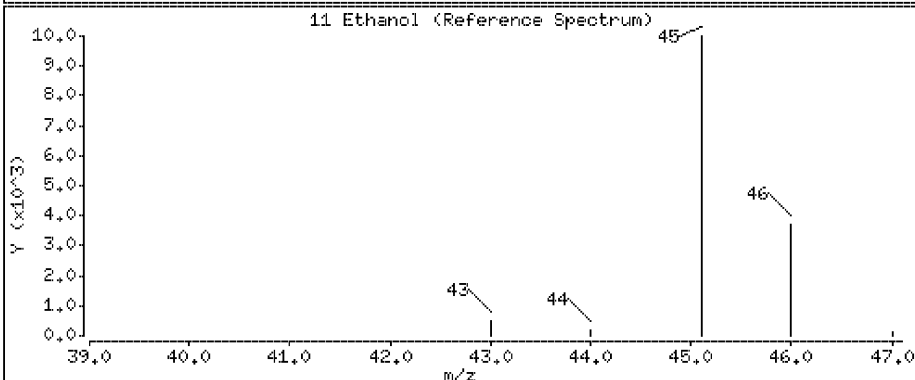
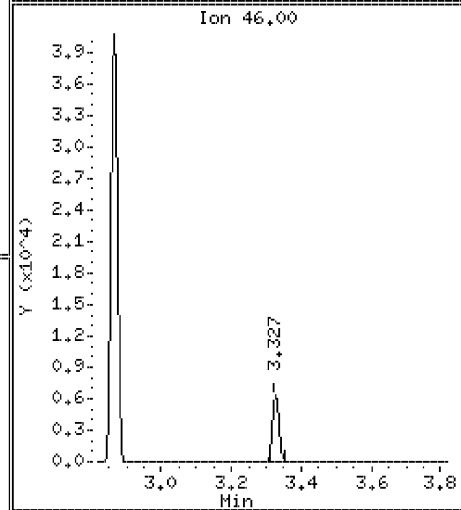
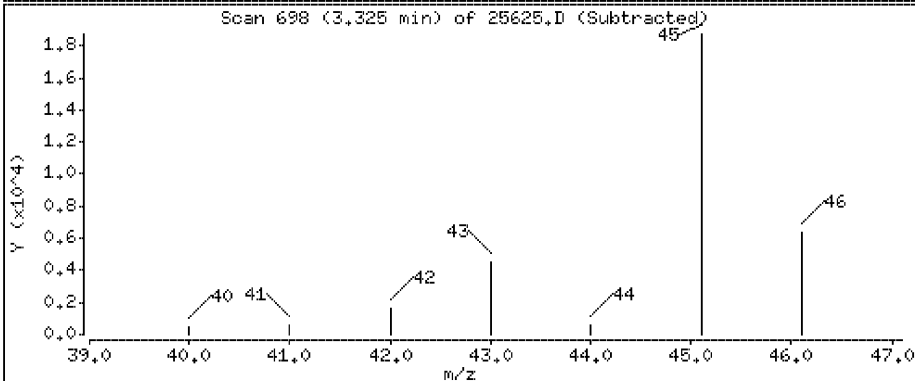
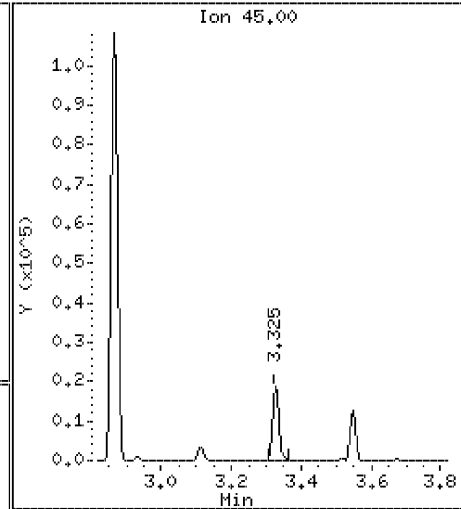
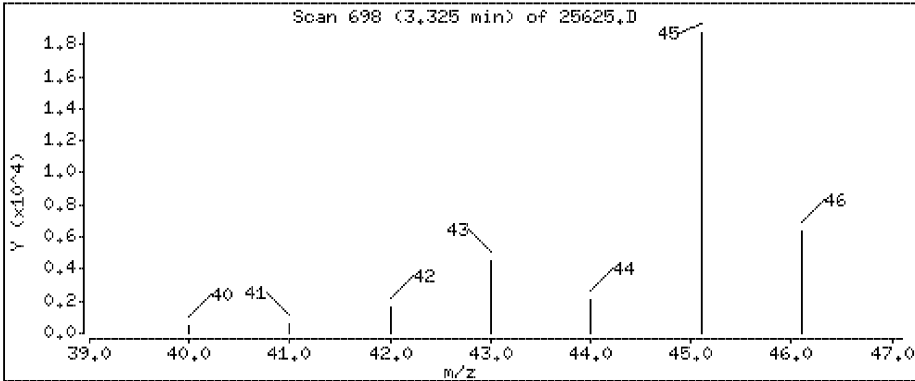
Operator: CH1

Column phase: ZB-5MSplus SN338857

Column diameter: 0,32

11 Ethanol

Concentration: 4.61 ppbv



Data File: \\192.168.10.12\chem\10airH,1\091318,b\25625.D

Date : 13-SEP-2018 21:03

Client ID:

Instrument: 10airH.i

Sample Info:

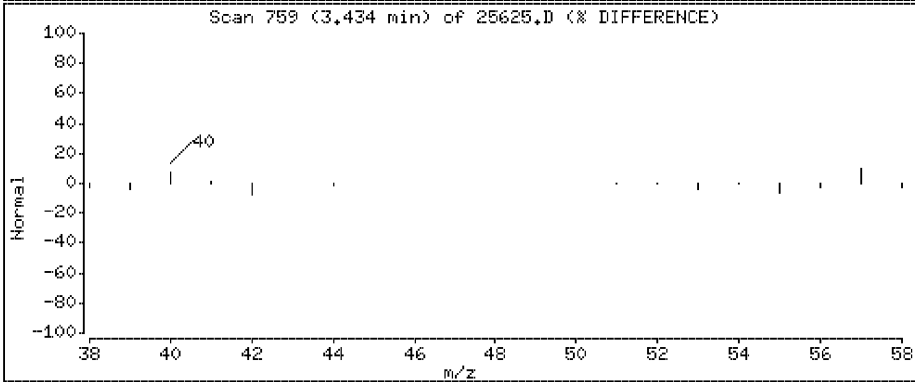
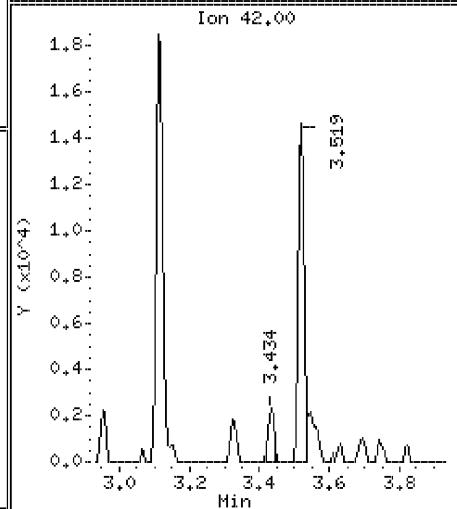
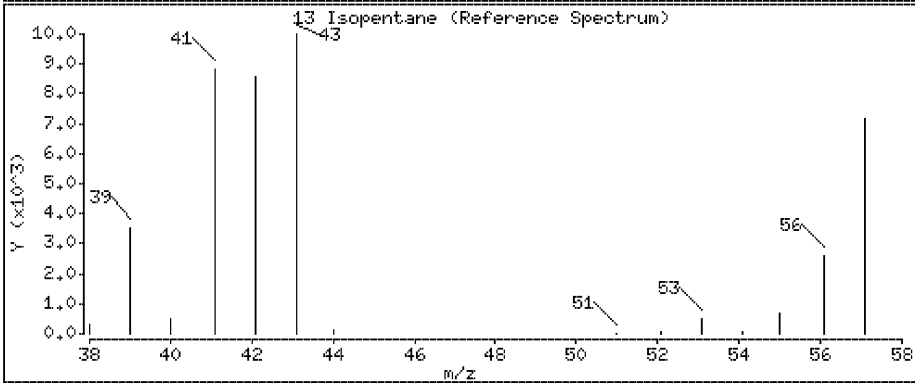
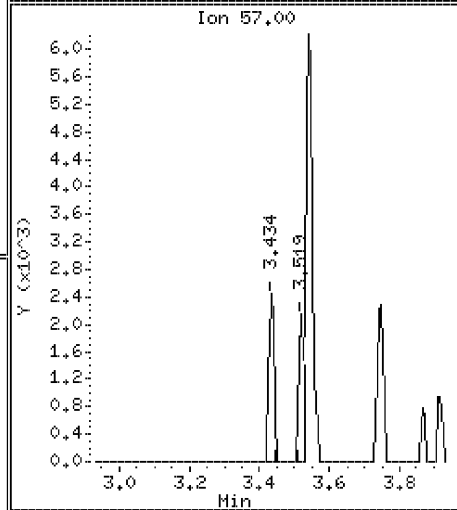
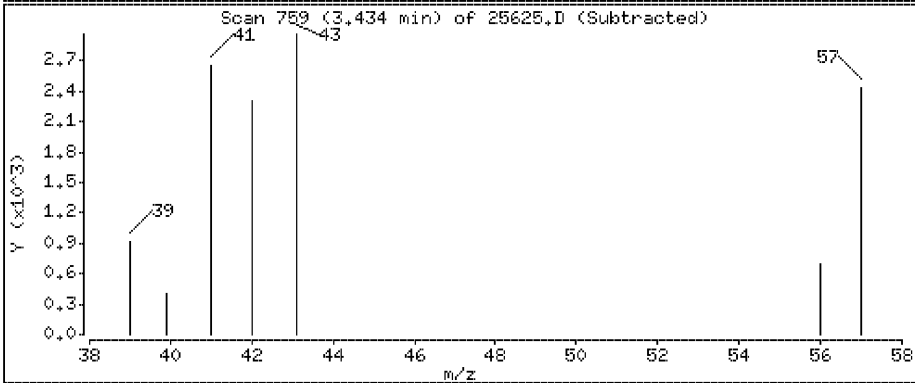
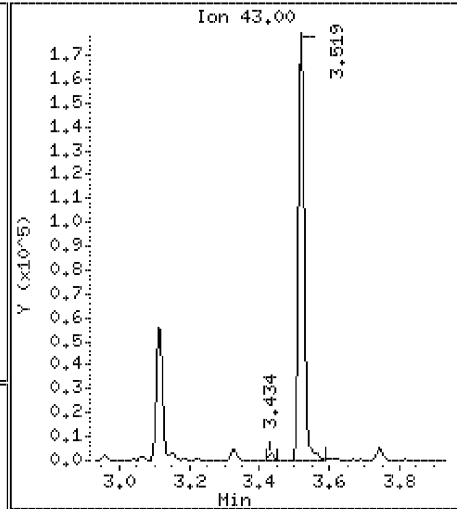
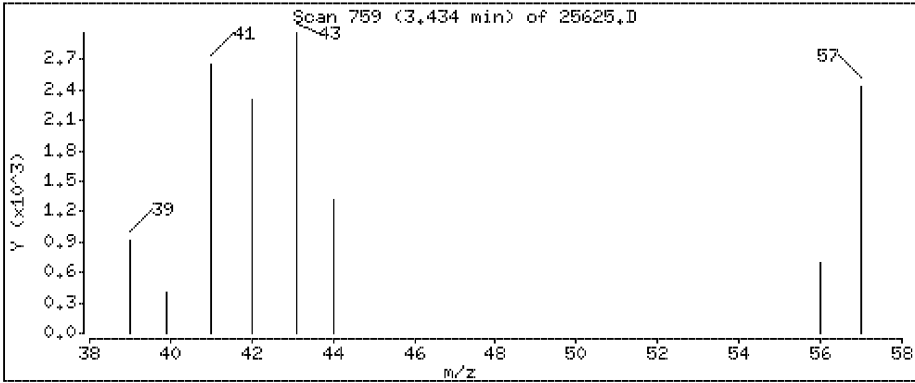
Operator: CH1

Column phase: ZB-5MSplus SN338857

Column diameter: 0,32

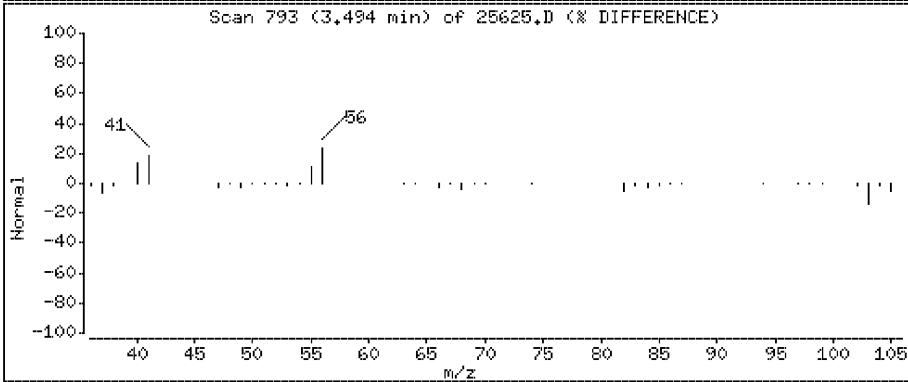
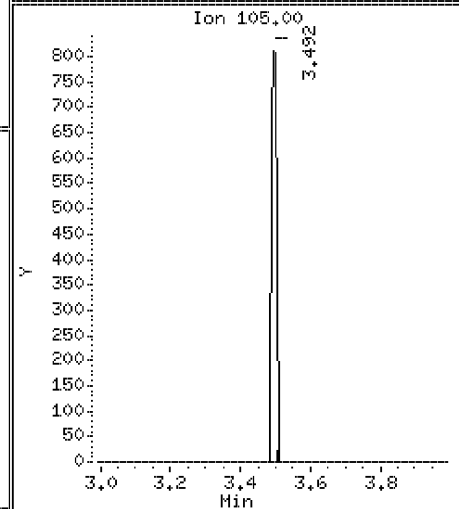
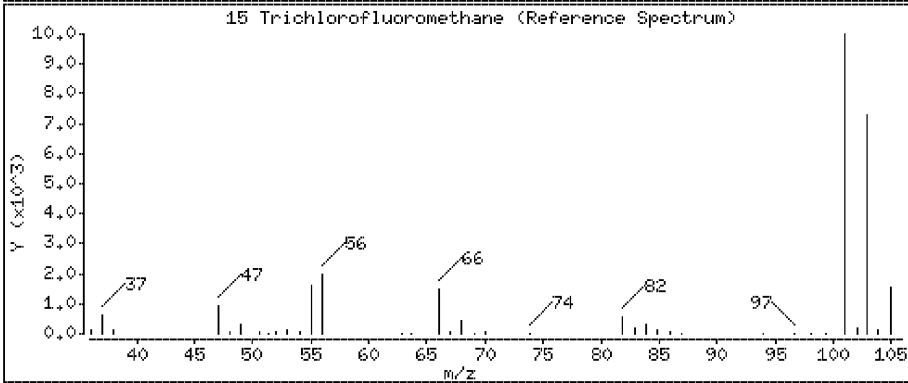
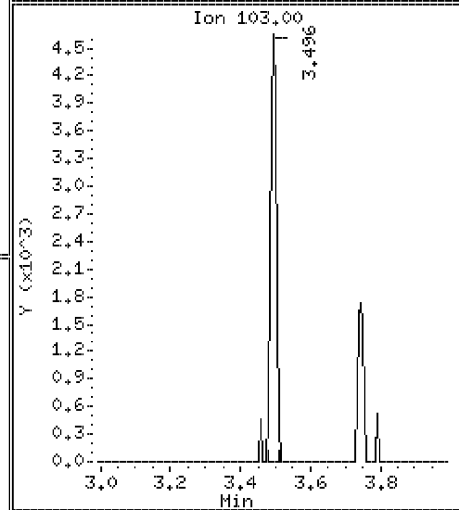
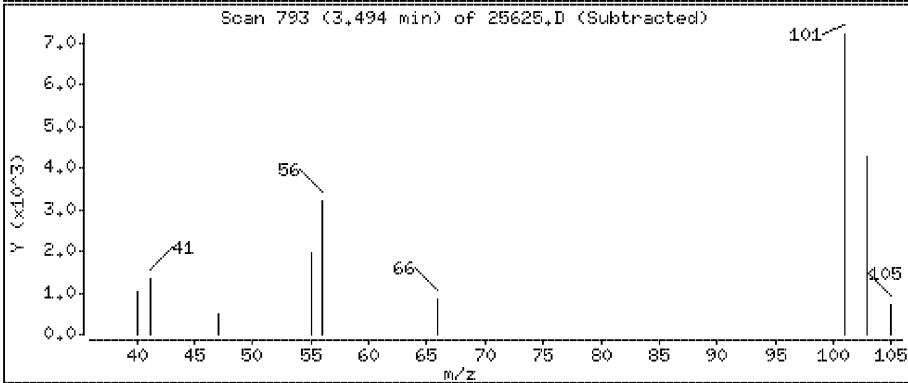
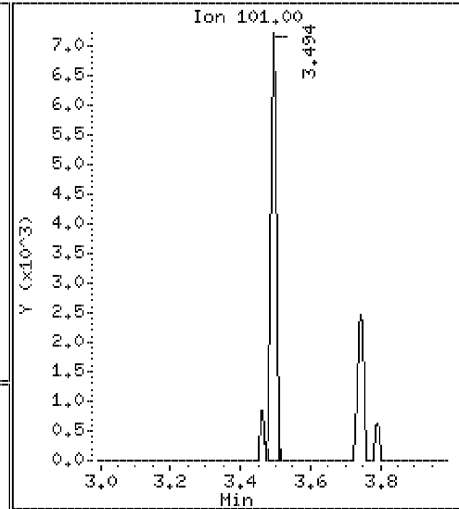
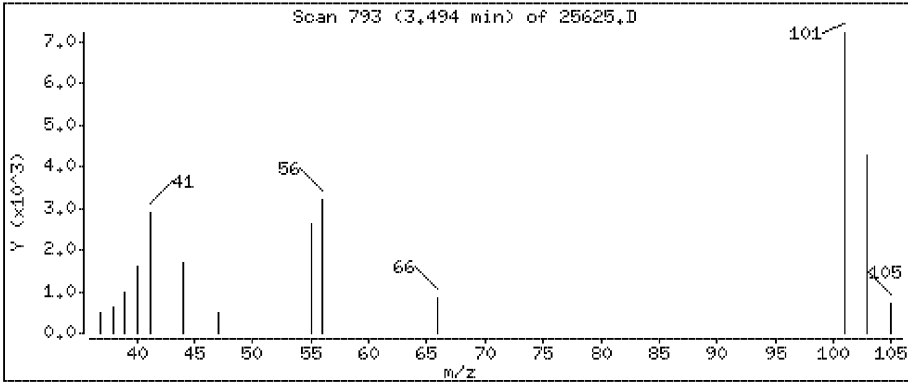
13 Isopentane

Concentration: 0,233 ppbv



15 Trichlorofluoromethane

Concentration: 0,170 ppbv



Data File: \\192.168.10.12\chem\10airH,1\091318,b\25625.D

Date : 13-SEP-2018 21:03

Client ID:

Instrument: 10airH.i

Sample Info:

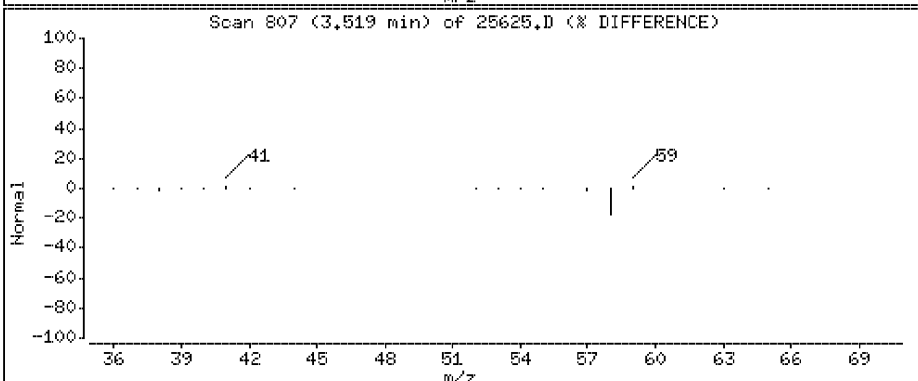
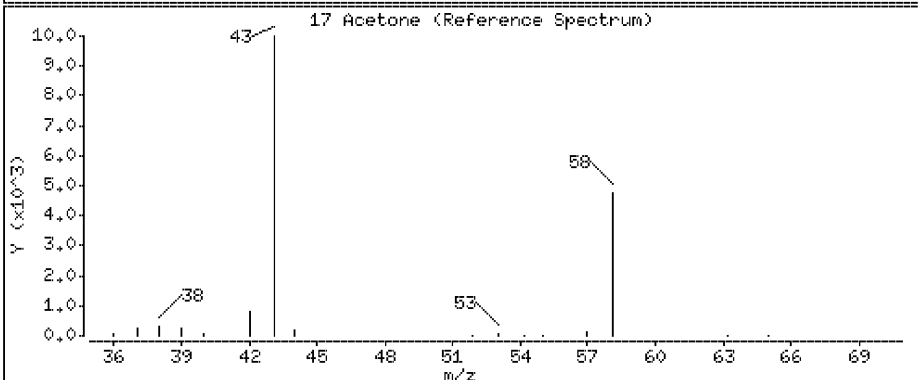
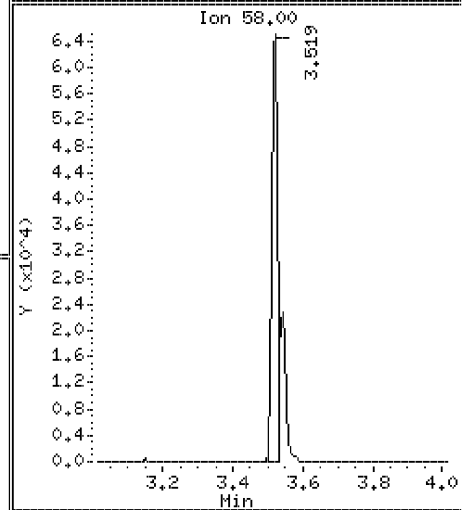
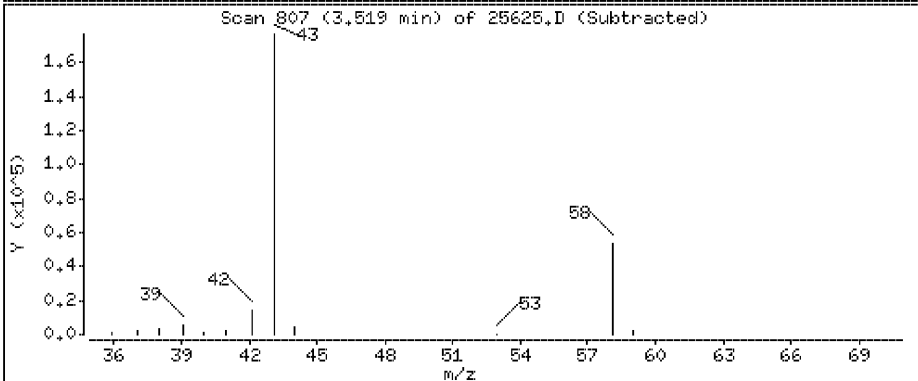
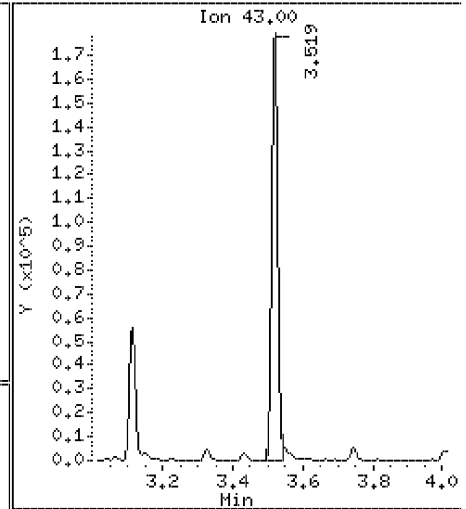
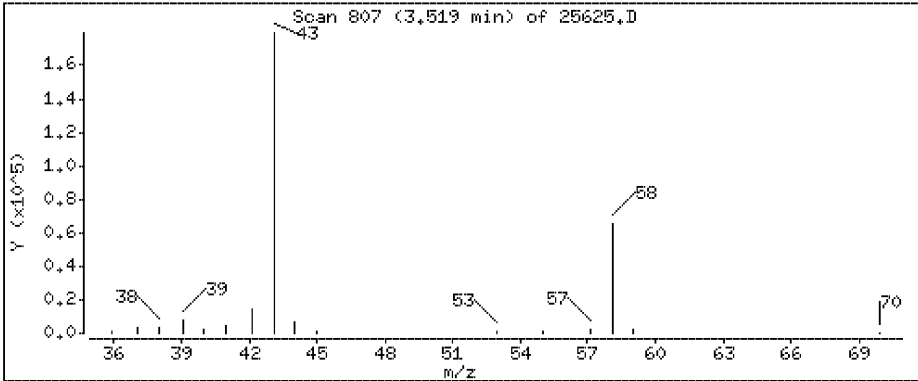
Operator: CH1

Column phase: ZB-5MSplus SN338857

Column diameter: 0,32

17 Acetone

Concentration: 10,6 ppbv



Data File: \\192.168.10.12\chem\10airH,1\091318,b\25625.D

Date : 13-SEP-2018 21:03

Client ID:

Instrument: 10airH.i

Sample Info:

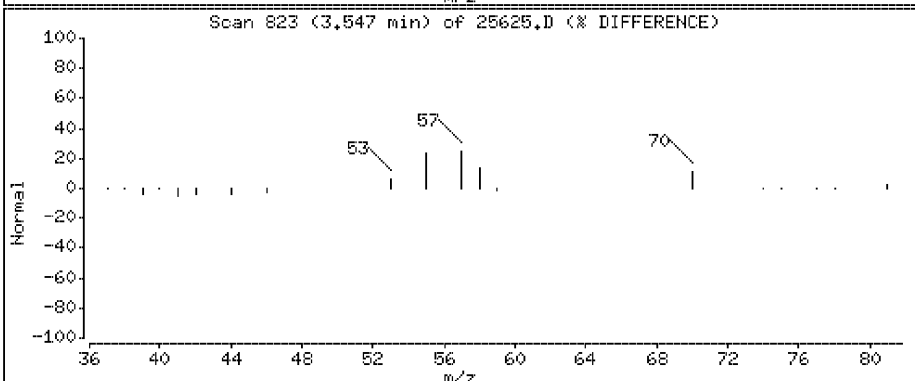
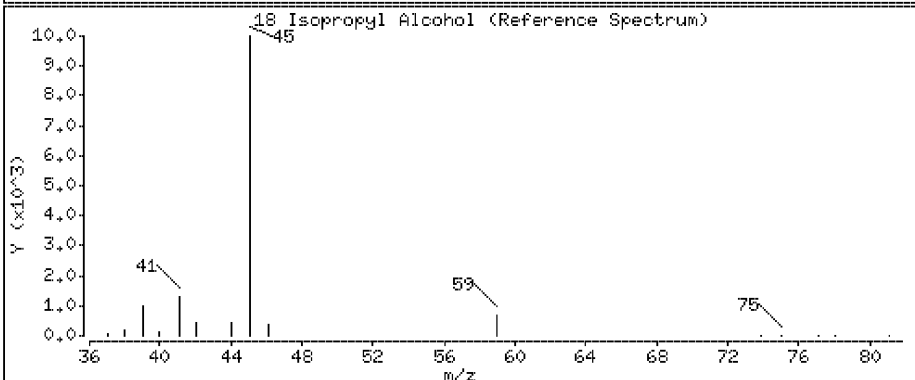
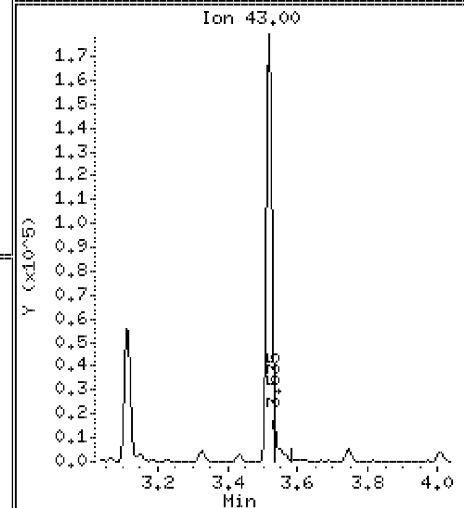
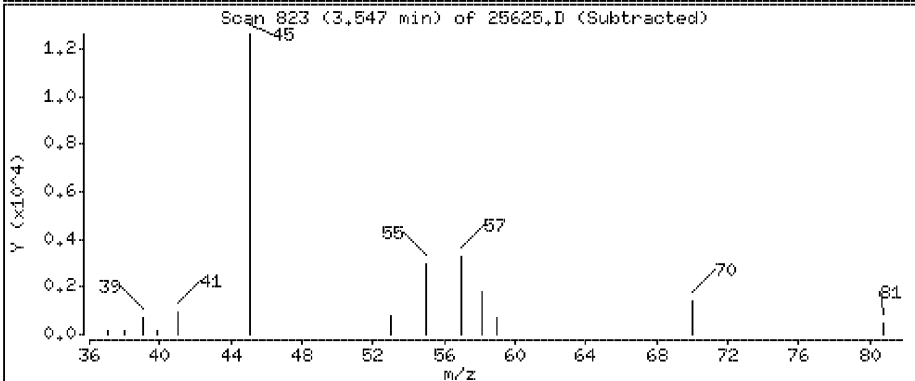
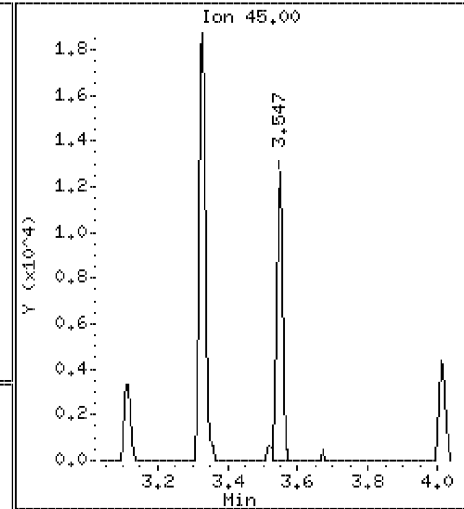
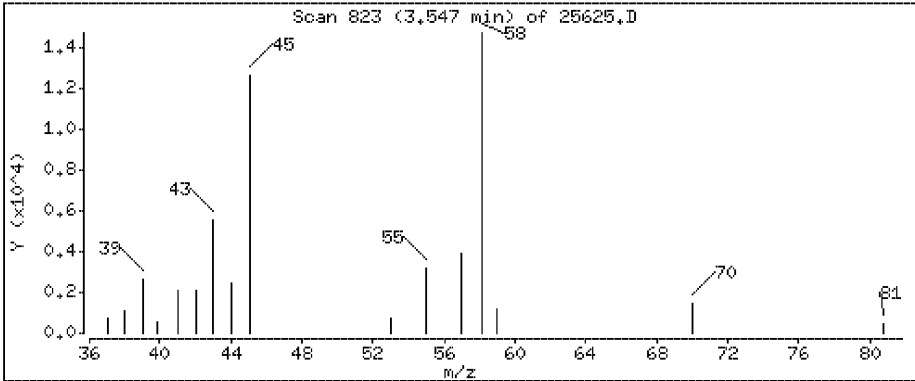
Operator: CH1

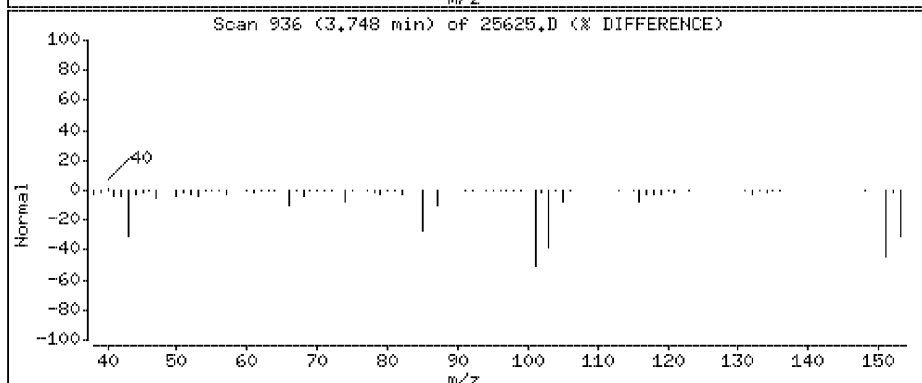
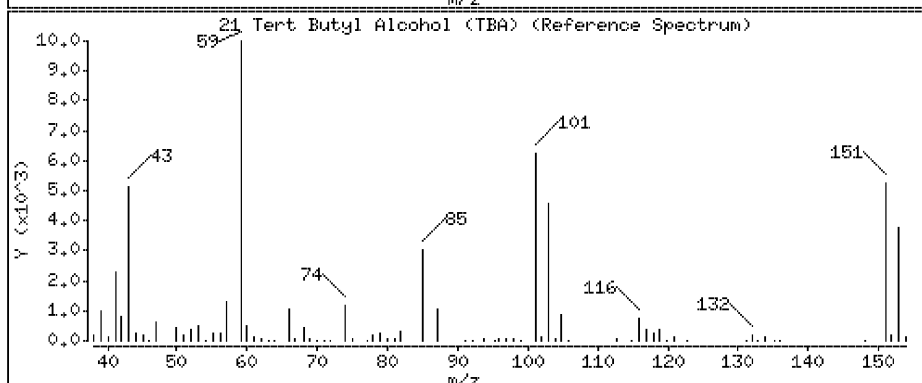
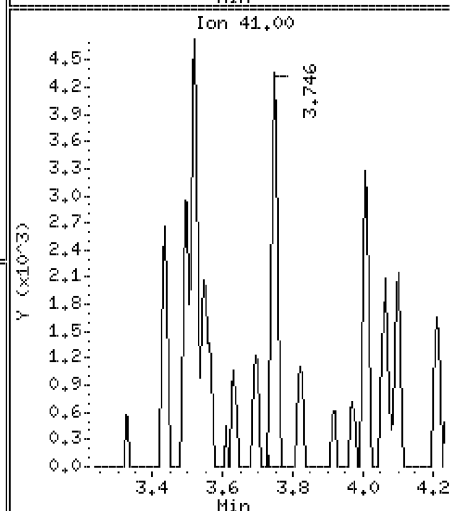
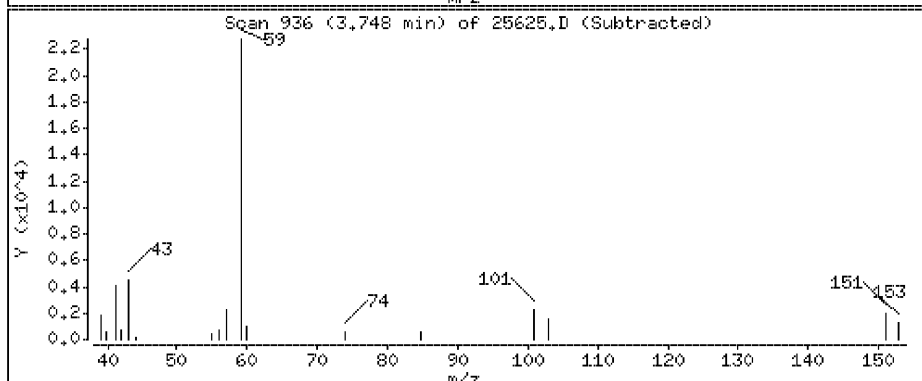
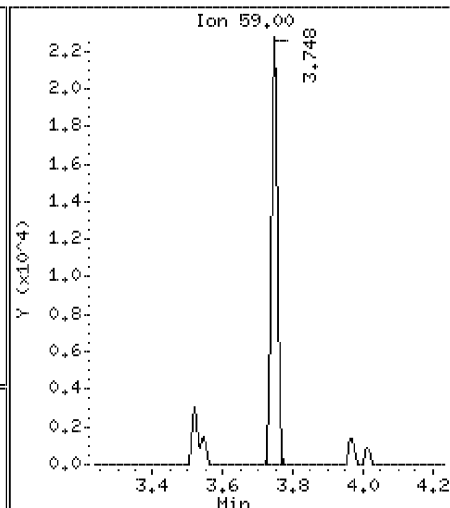
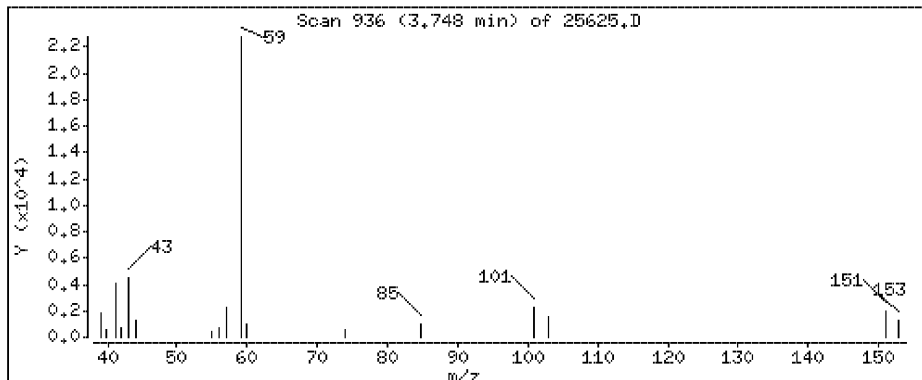
Column phase: ZB-5MSplus SN338857

Column diameter: 0,32

18 Isopropyl Alcohol

Concentration: 0,675 ppbv





Data File: \\192.168.10.12\chem\10airH,i\091318,b\25625.D

Date : 13-SEP-2018 21:03

Client ID:

Instrument: 10airH.i

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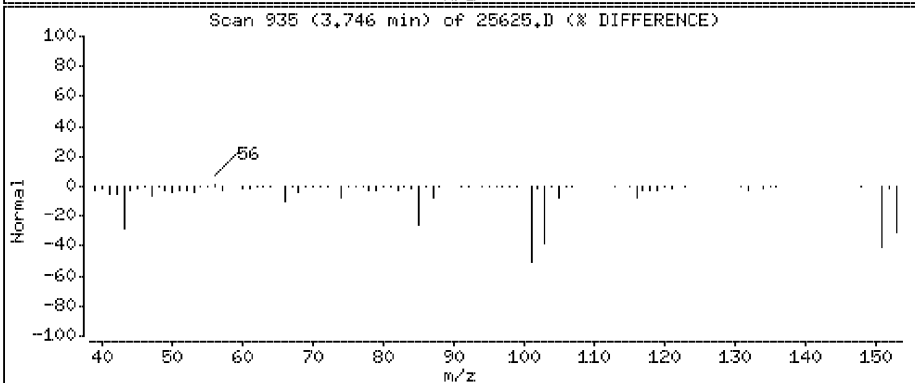
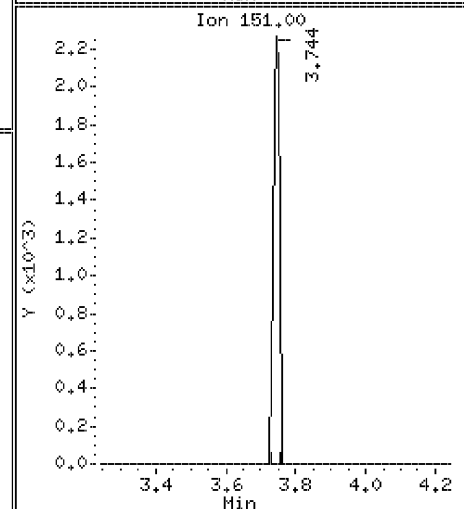
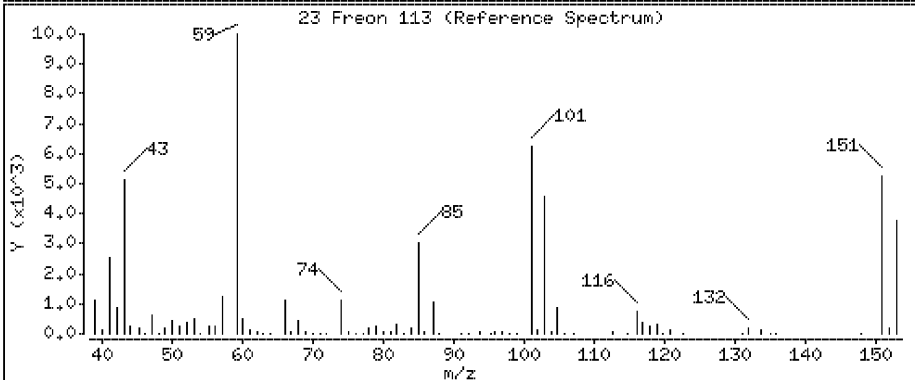
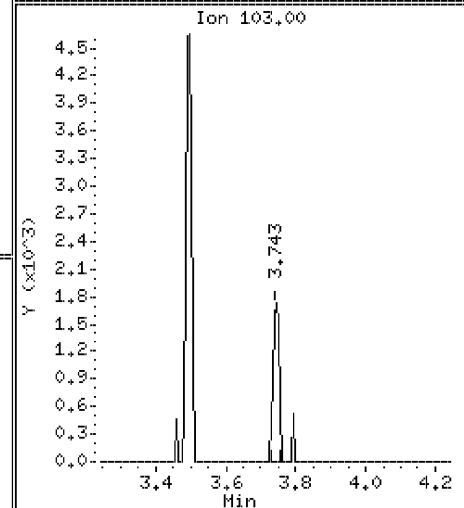
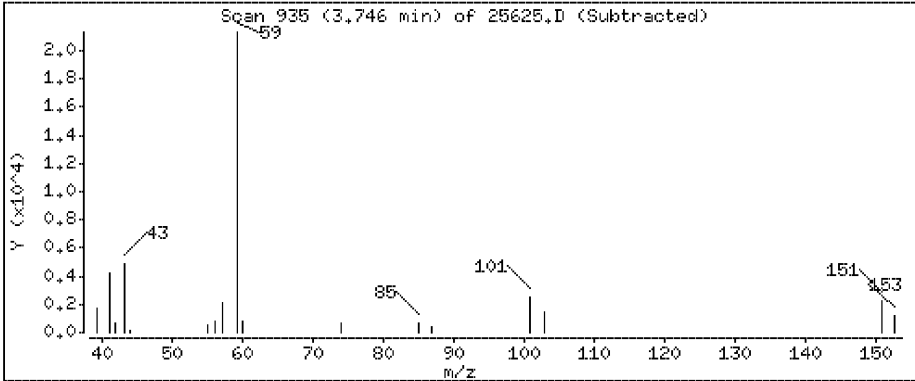
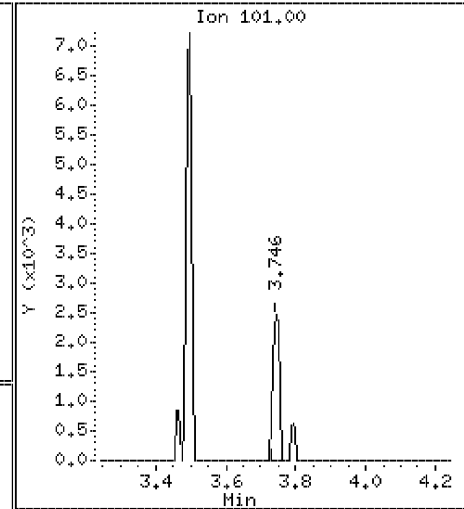
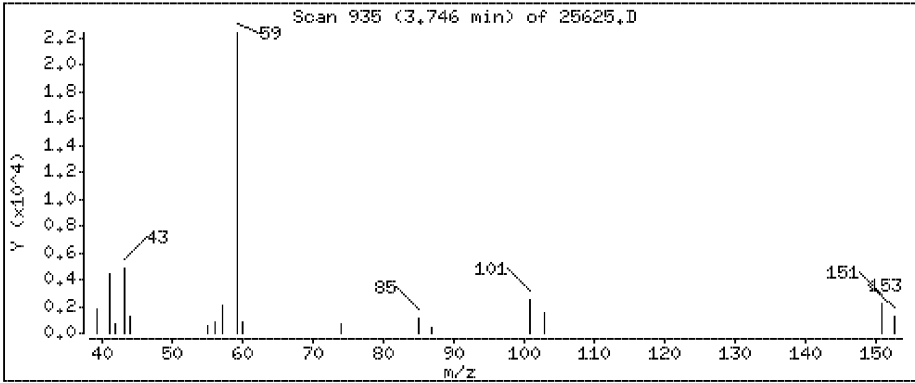
Operator: CH1

Column phase: ZB-5MSplus SN338857

Column diameter: 0,32

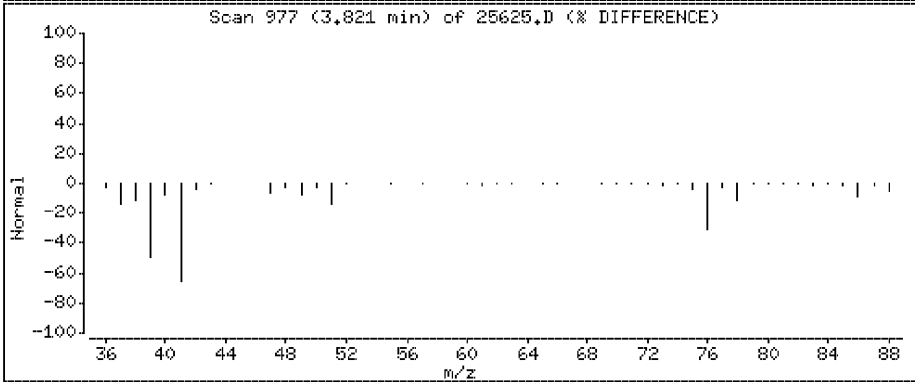
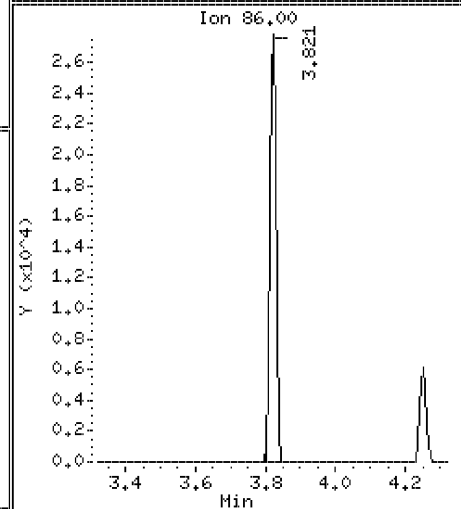
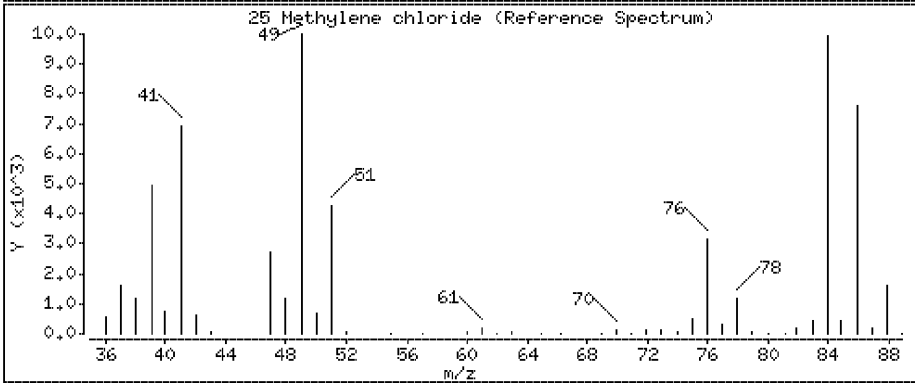
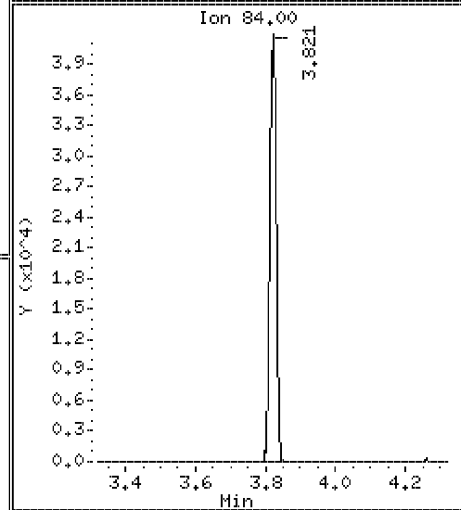
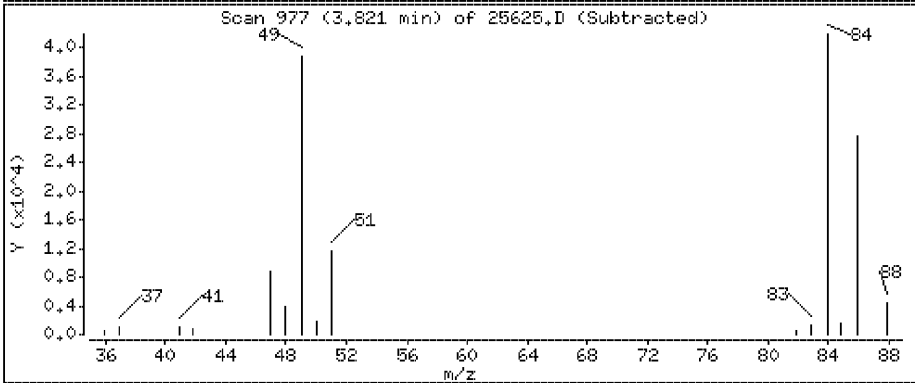
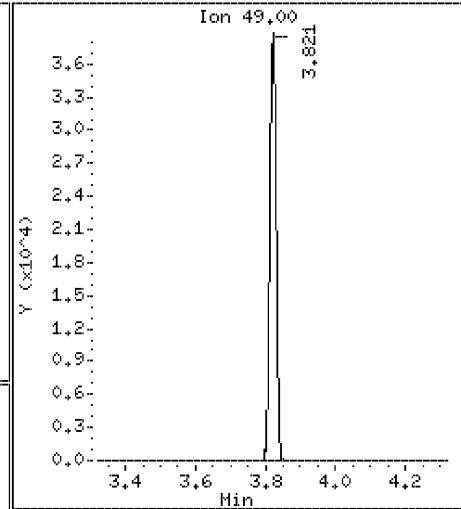
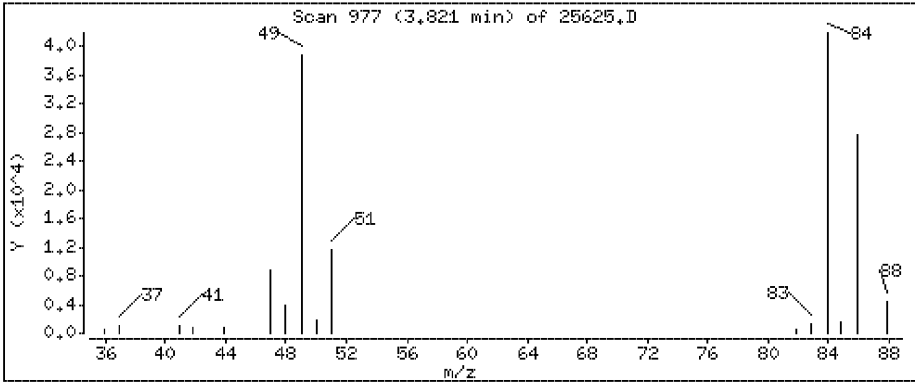
23 Freon 113

Concentration: 0,0625 ppbv



25 Methylene chloride

Concentration: 1.12 ppbv



Data File: \\192.168.10.12\chem\10airH,1\091318,b\25625.D

Date : 13-SEP-2018 21:03

Client ID:

Instrument: 10airH.i

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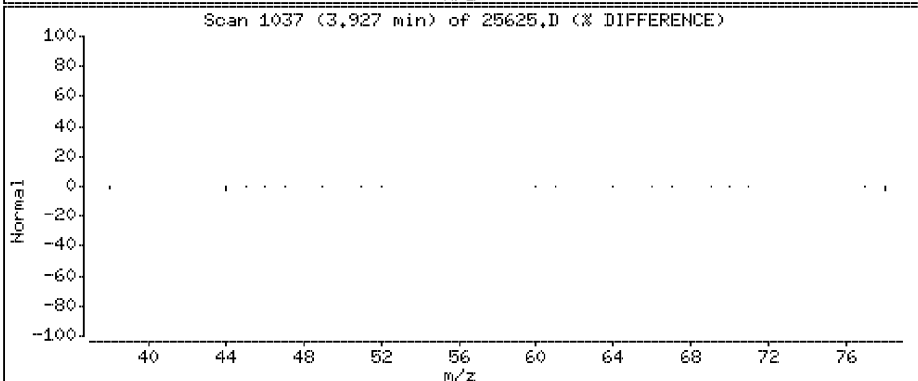
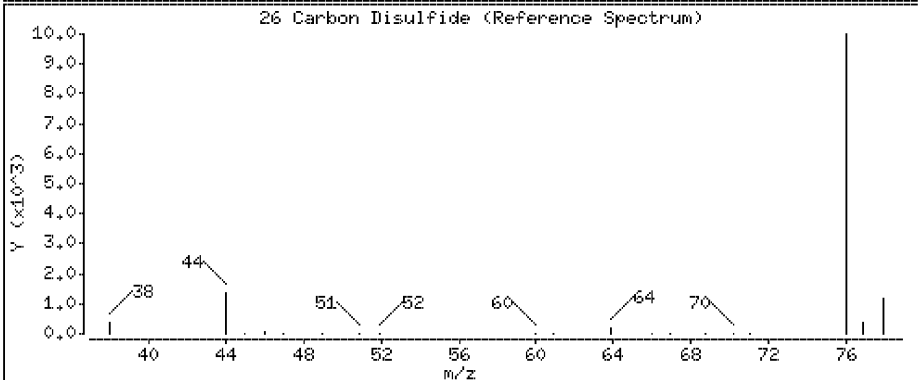
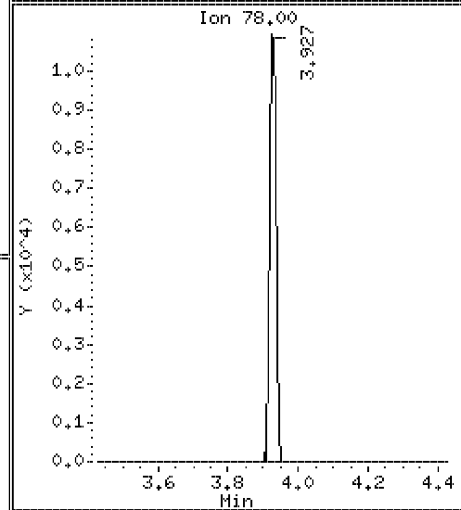
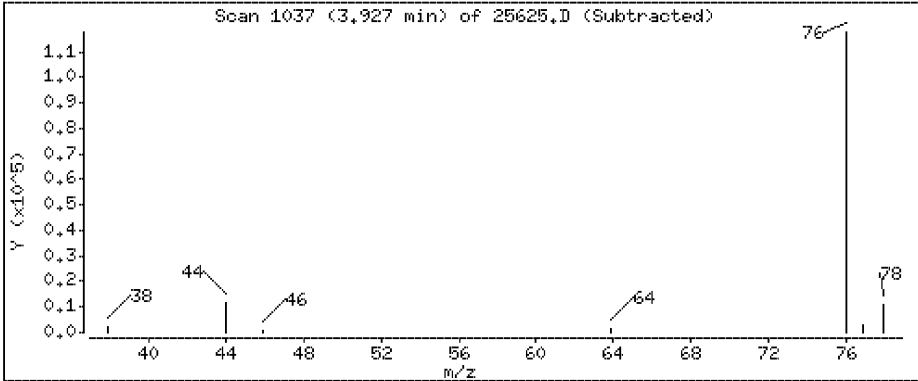
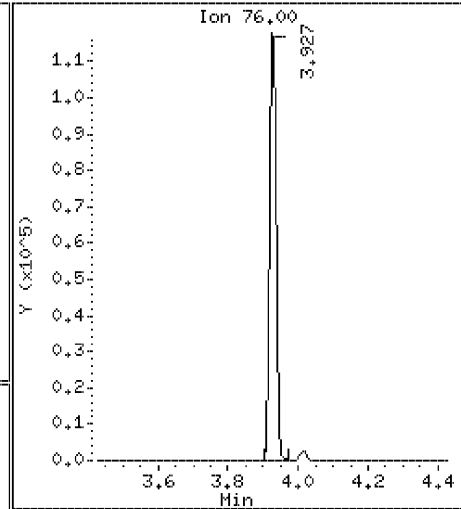
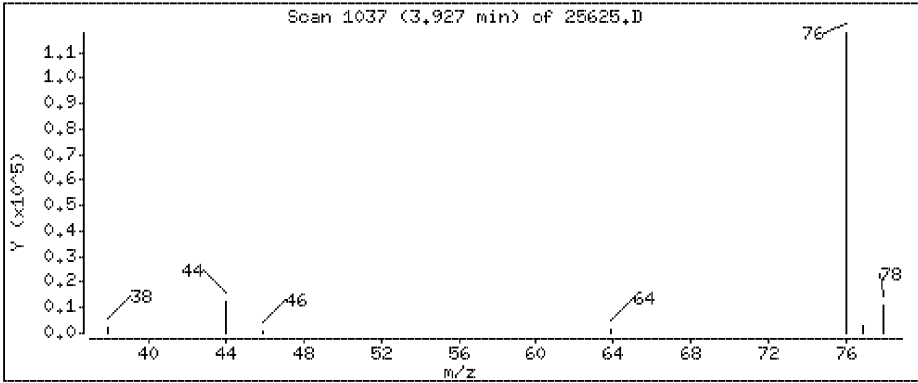
Operator: CH1

Column phase: ZB-5MSplus SN338857

Column diameter: 0.32

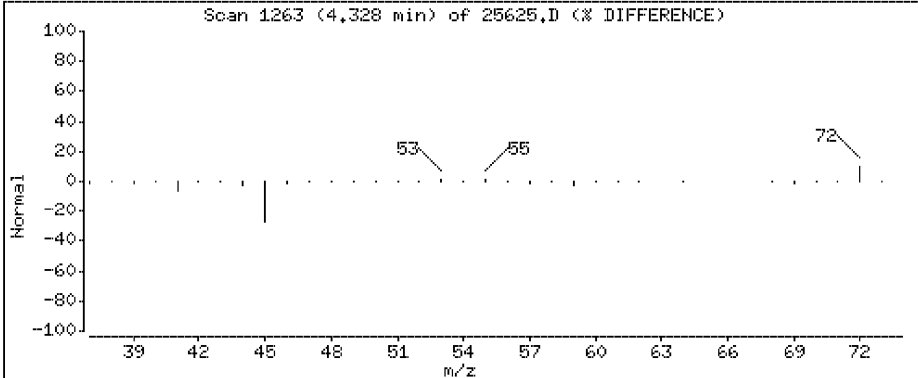
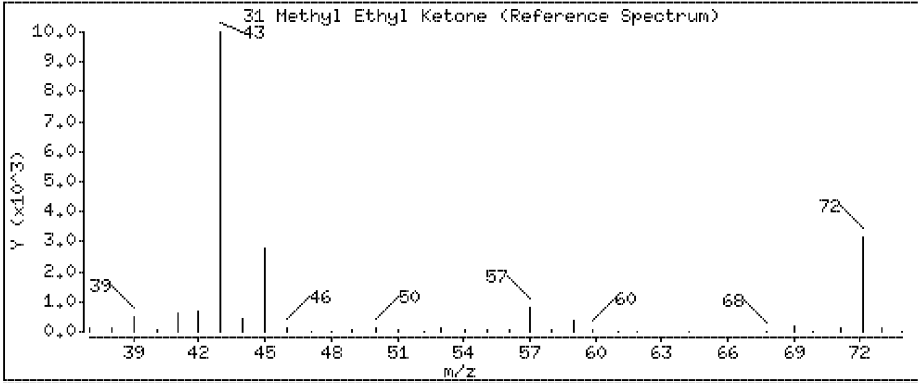
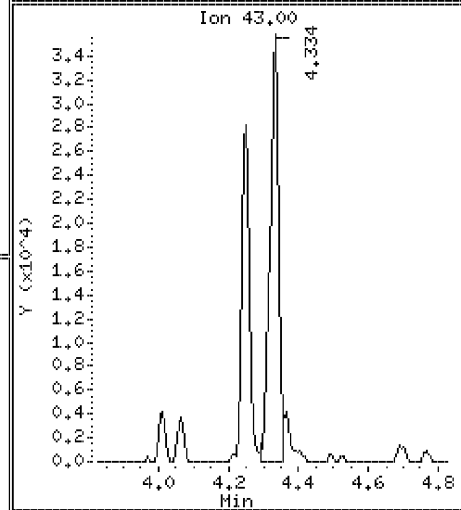
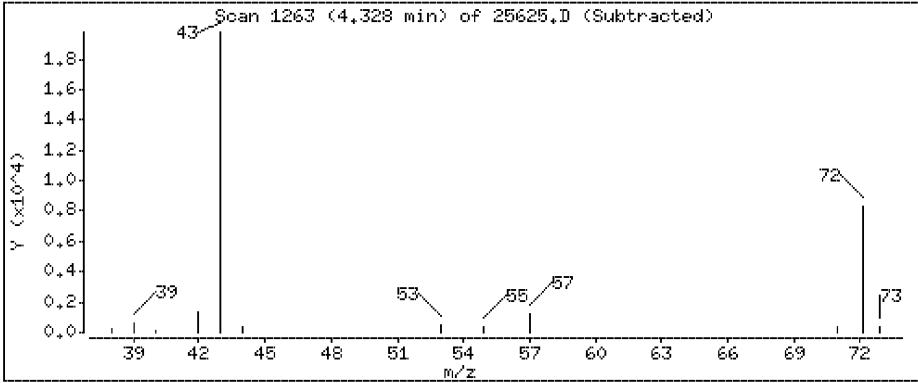
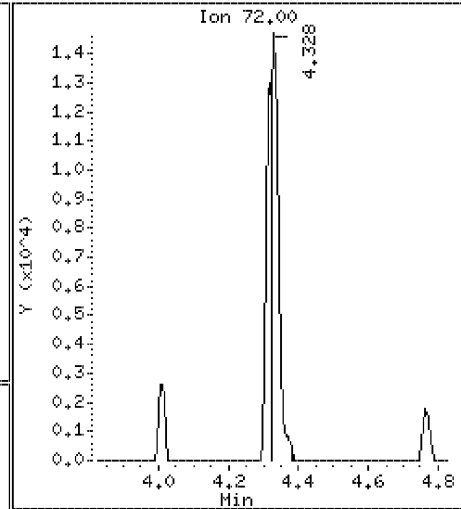
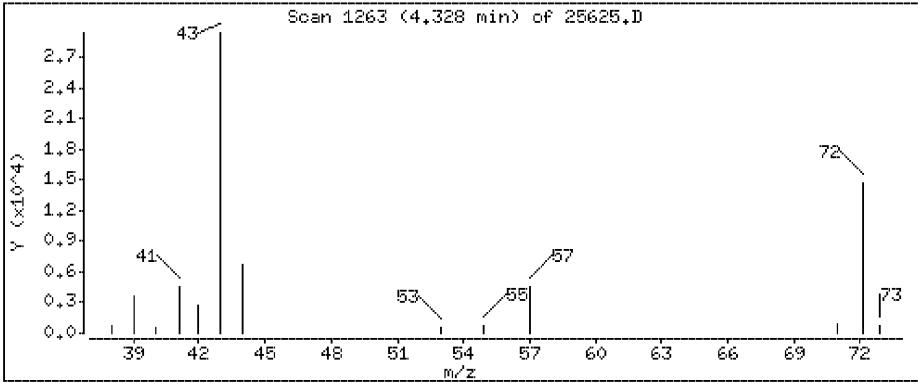
26 Carbon Disulfide

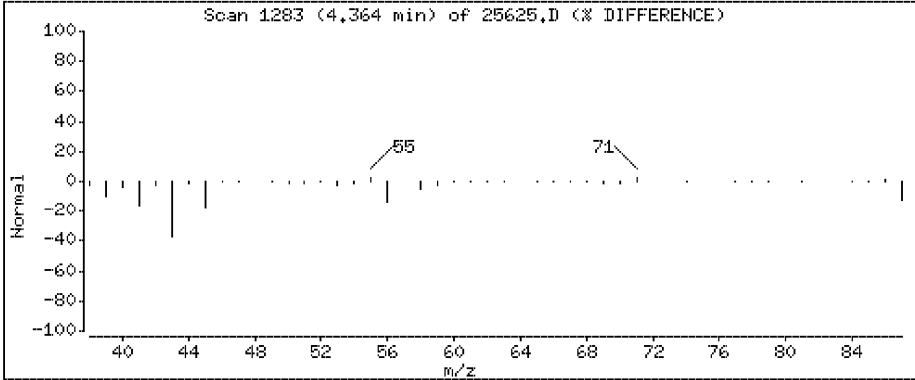
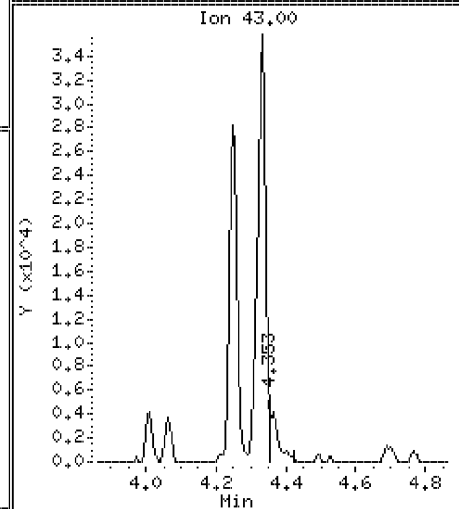
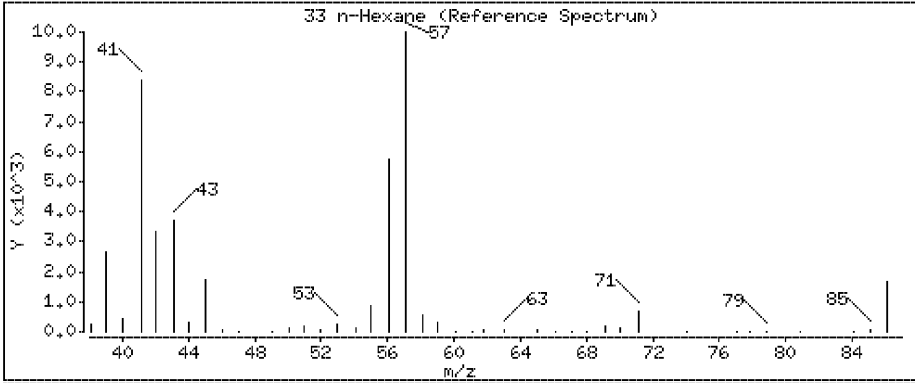
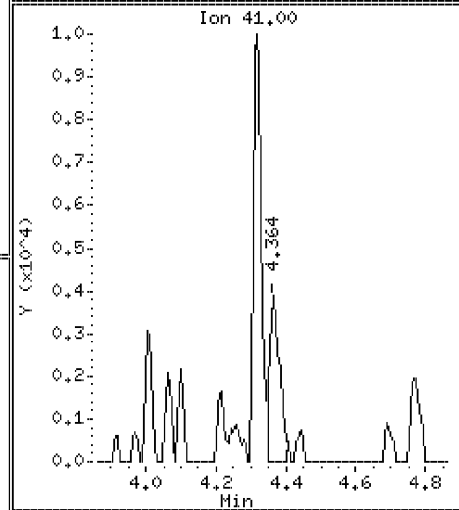
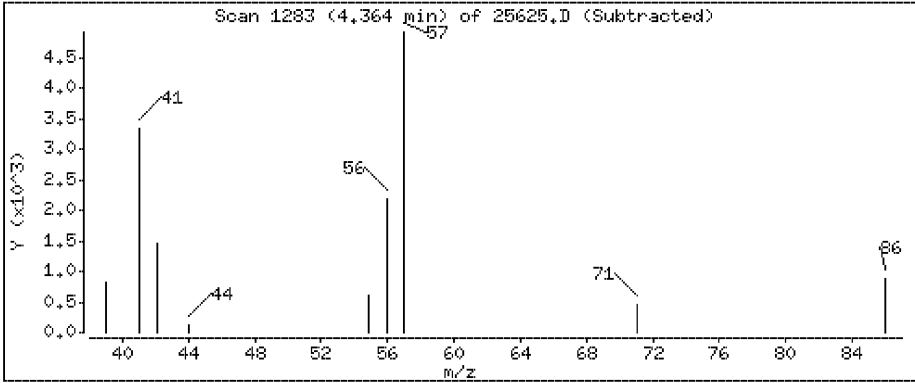
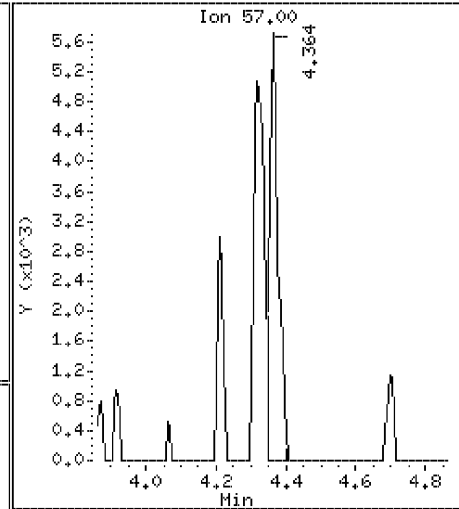
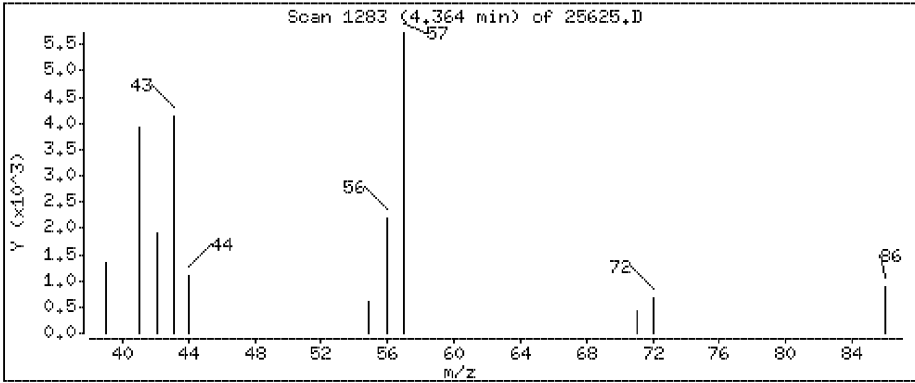
Concentration: 2.51 ppbv



31 Methyl Ethyl Ketone

Concentration: 2.19 ppbv





Data File: \\192.168.10.12\chem\10airH,1\091318,b\25625.D

Date : 13-SEP-2018 21:03

Client ID:

Instrument: 10airH.i

Sample Info:

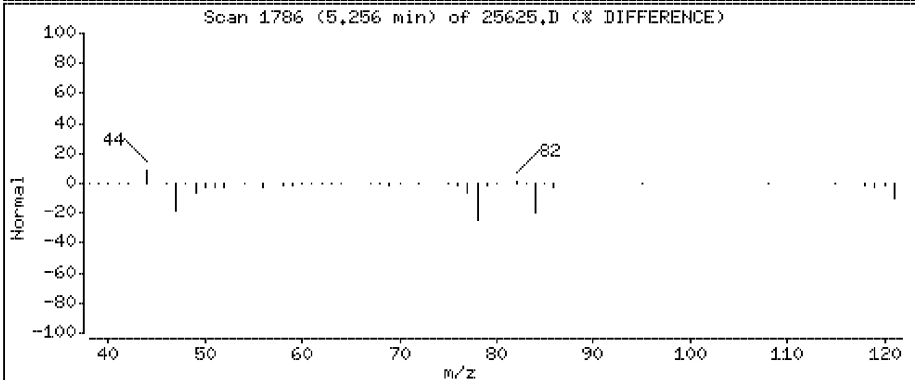
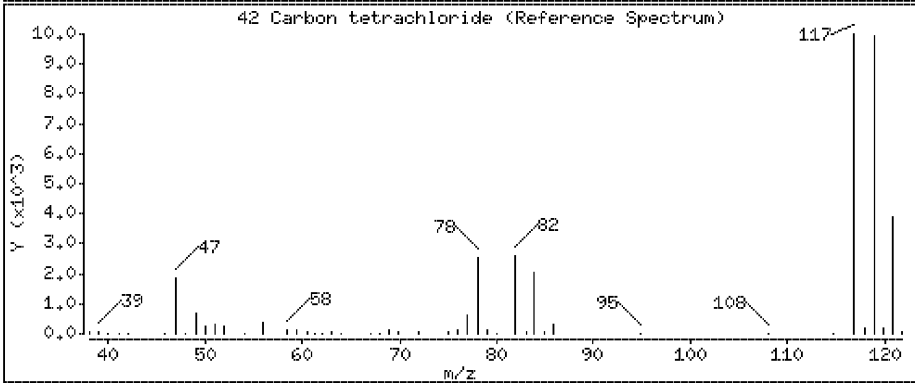
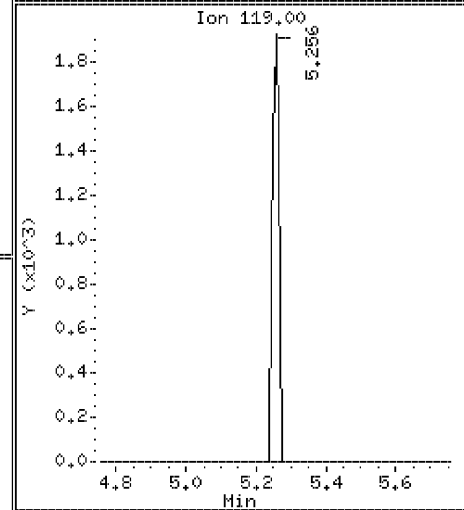
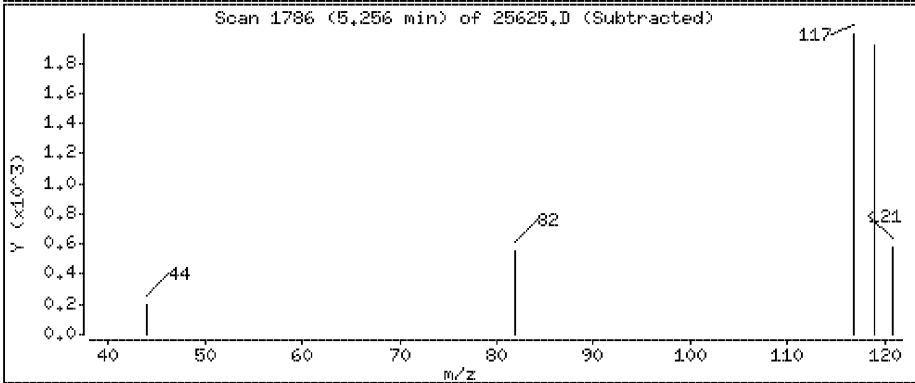
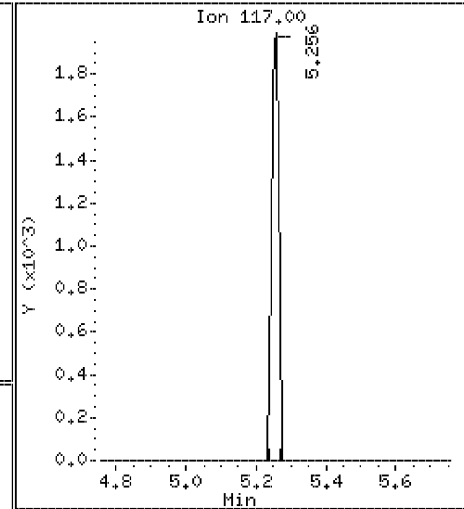
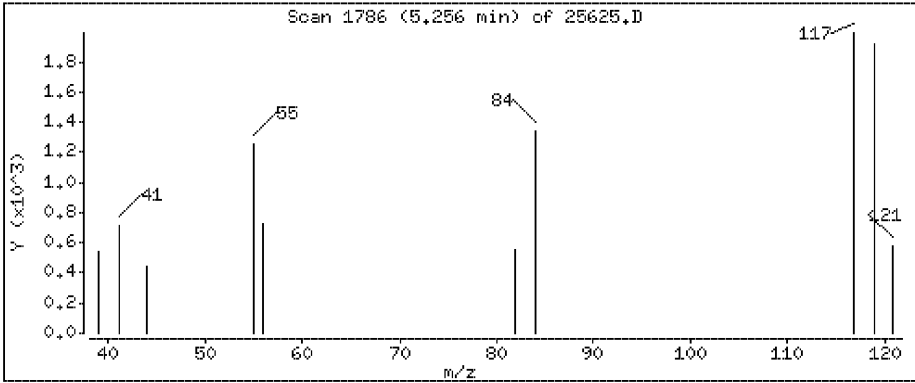
Operator: CH1

Column phase: ZB-5MSplus SN338857

Column diameter: 0.32

42 Carbon tetrachloride

Concentration: 0.0533 ppbv



Data File: \\192.168.10.12\chem\10airH,1\091318,b\25625.D

Date : 13-SEP-2018 21:03

Client ID:

Instrument: 10airH.i

Sample Info:

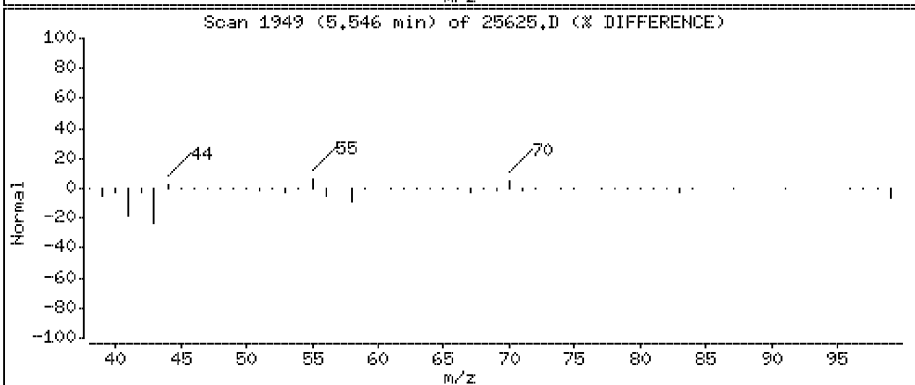
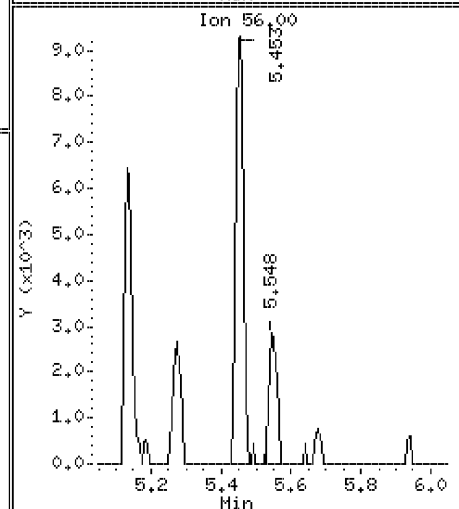
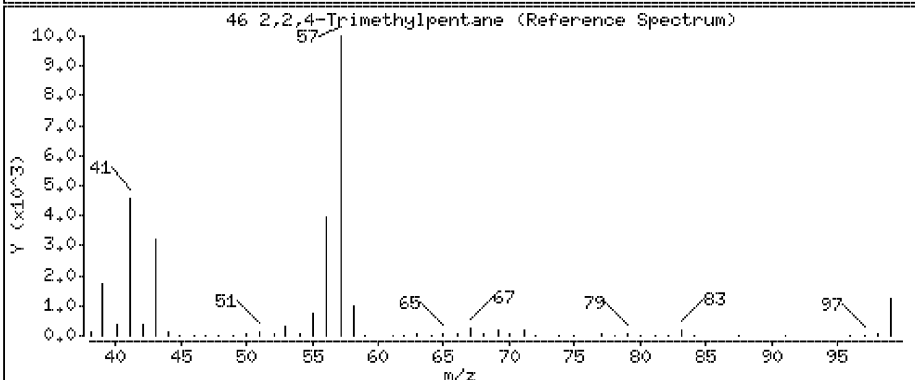
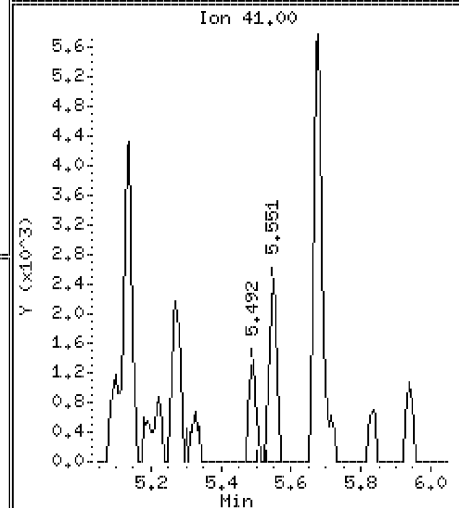
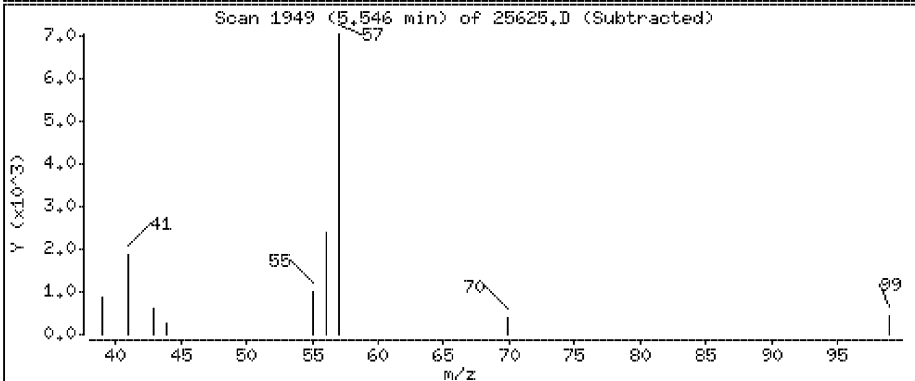
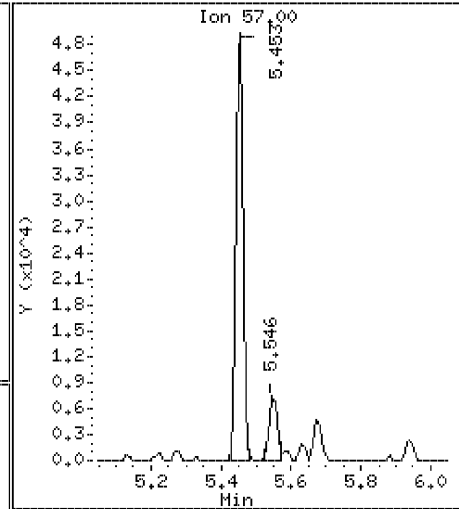
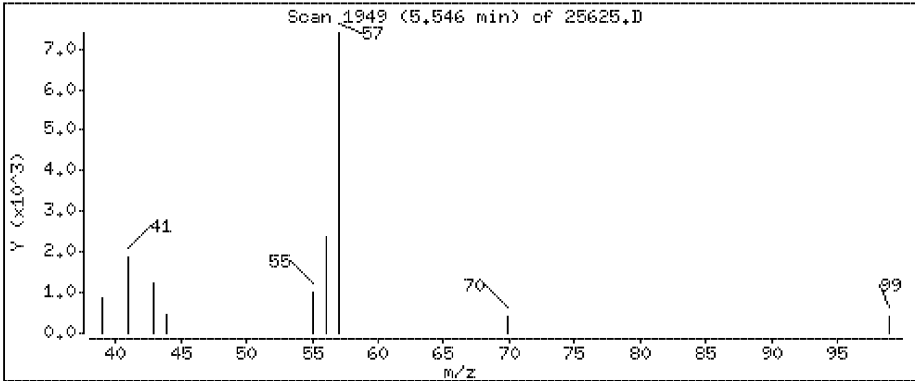
Operator: CH1

Column phase: ZB-5MSplus SN338857

Column diameter: 0,32

46 2,2,4-Trimethylpentane

Concentration: 0,162 ppbv



Data File: \\192.168.10.12\chem\10airH,1\091318,b\25625.D

Date : 13-SEP-2018 21:03

Client ID:

Instrument: 10airH.i

Sample Info:

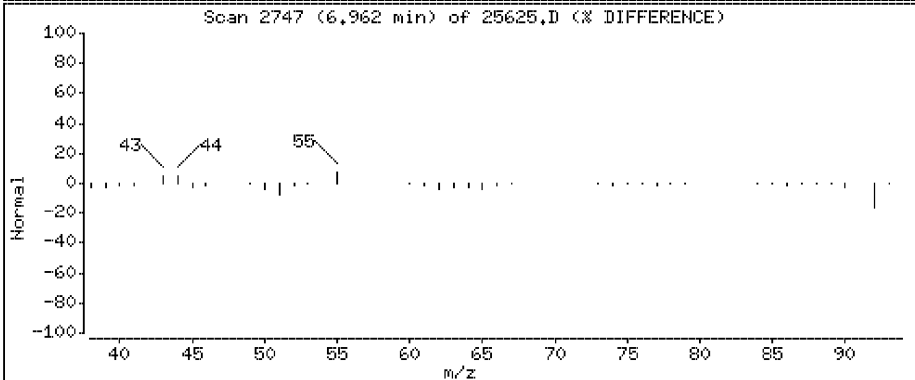
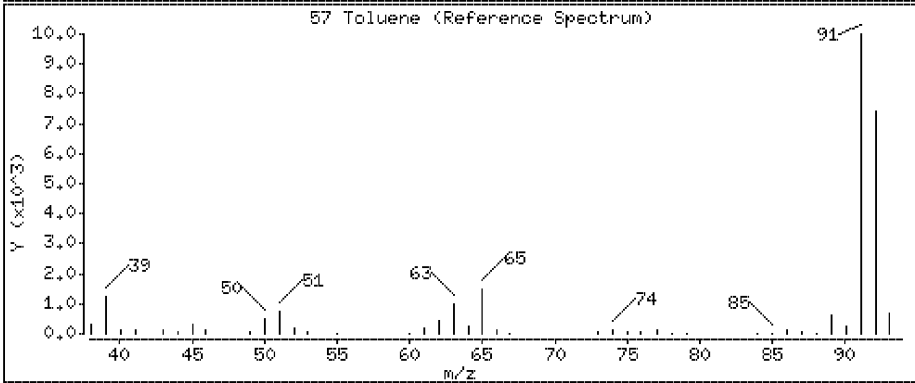
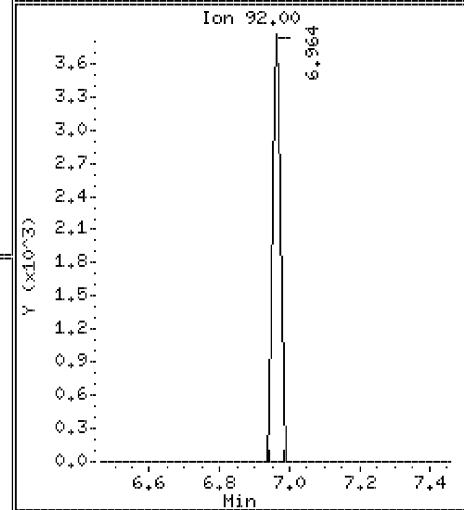
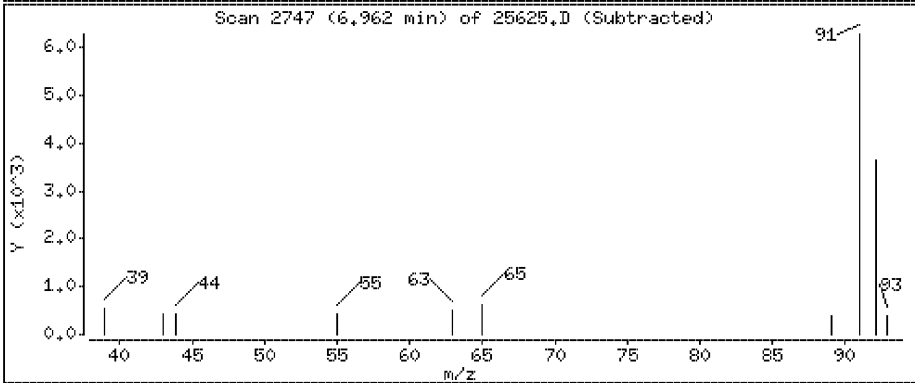
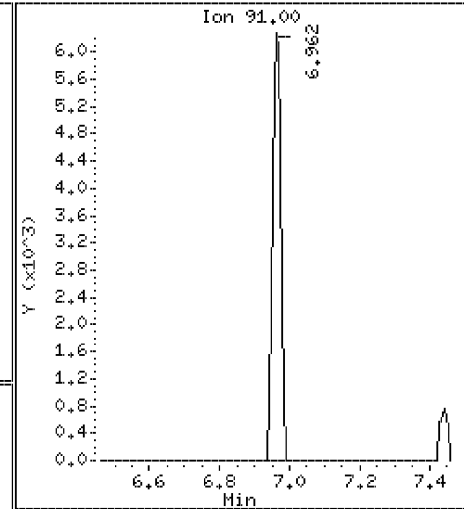
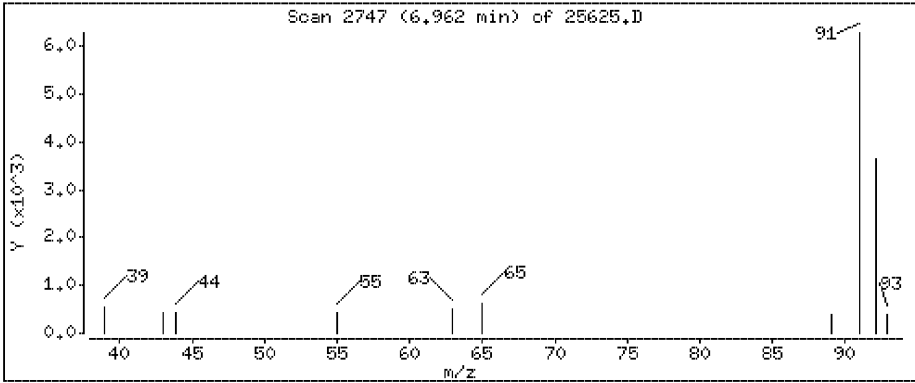
Operator: CH1

Column phase: ZB-5MSplus SN338857

Column diameter: 0,32

57 Toluene

Concentration: 0,163 ppbv



Data File: \\192.168.10.12\chem\10airH,1\091318,b\25625.D

Date : 13-SEP-2018 21:03

Client ID:

Instrument: 10airH.i

Sample Info:

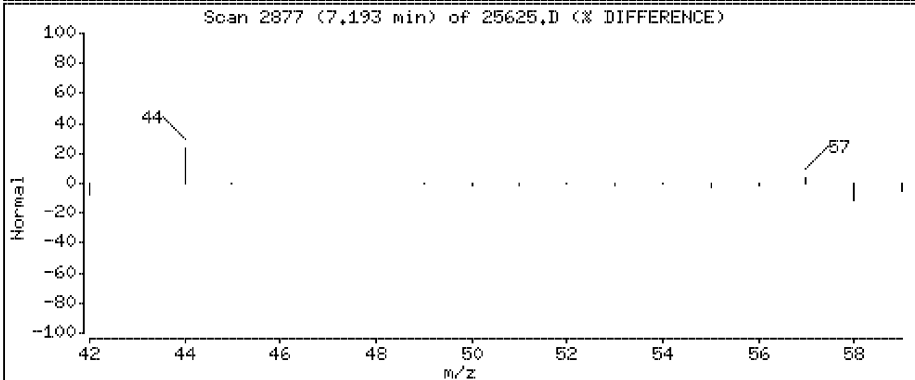
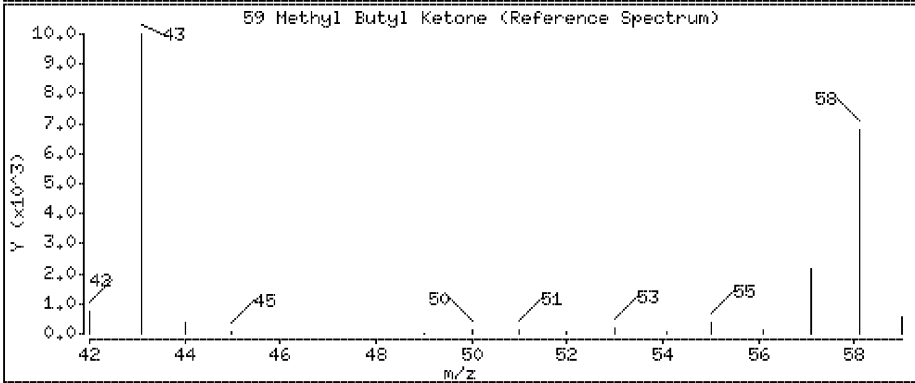
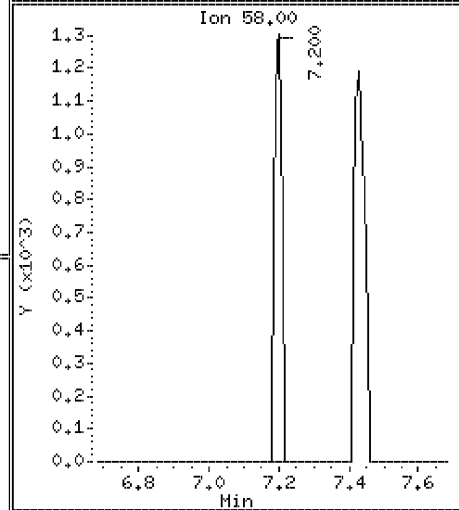
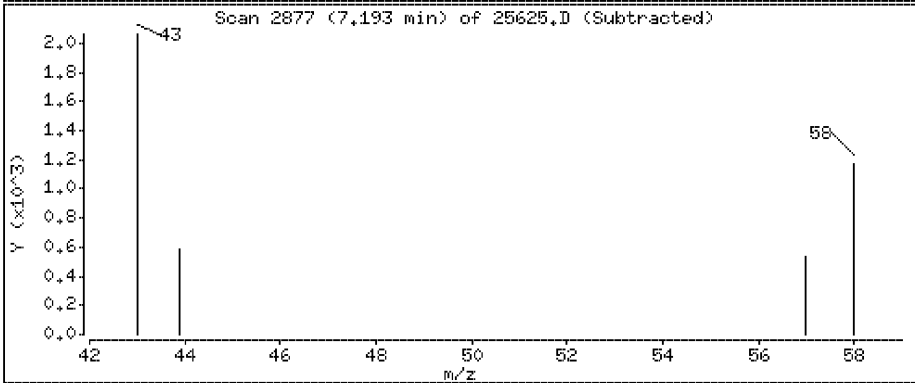
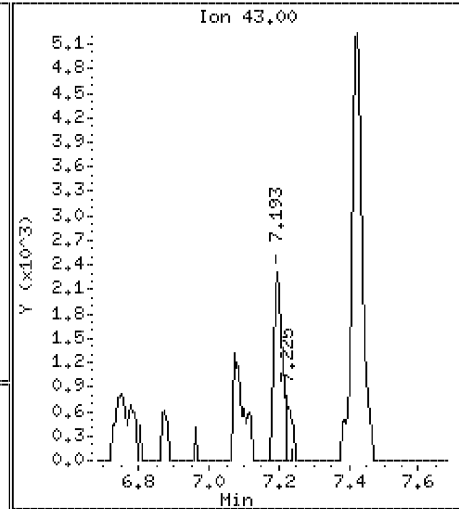
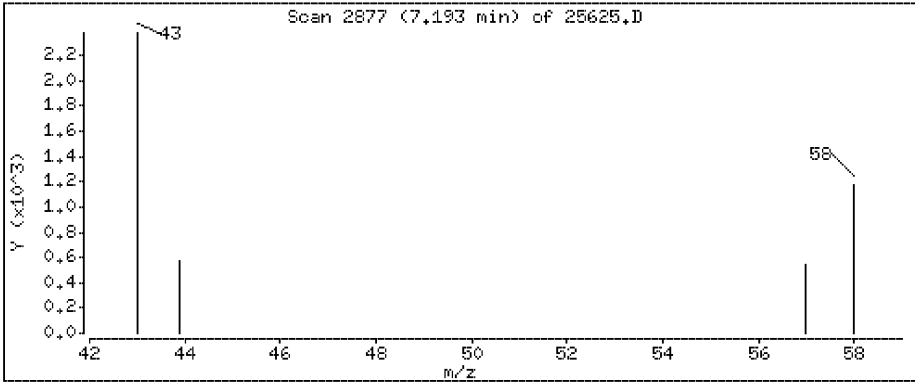
Operator: CH1

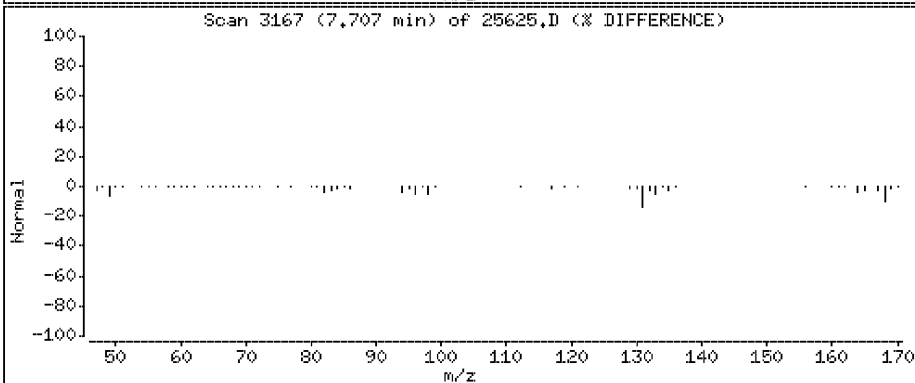
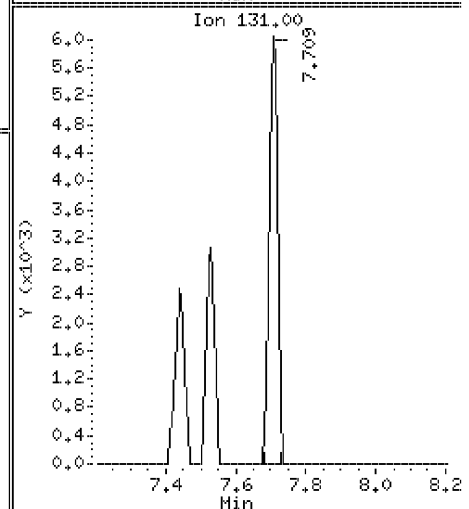
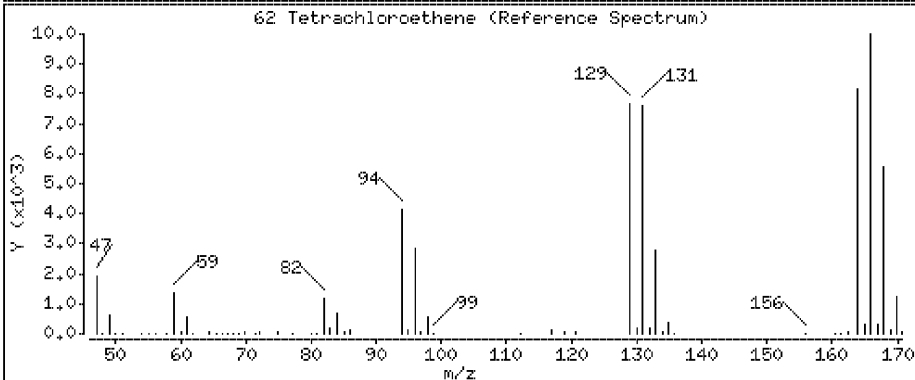
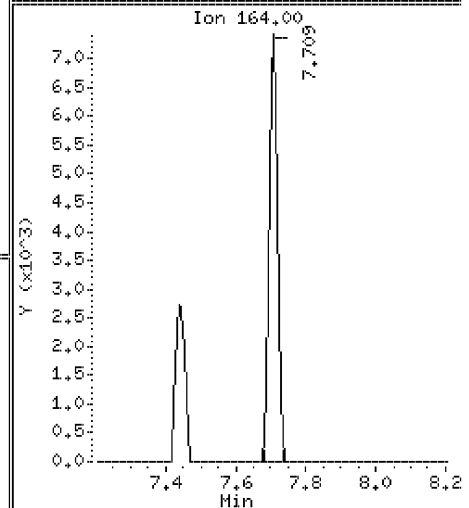
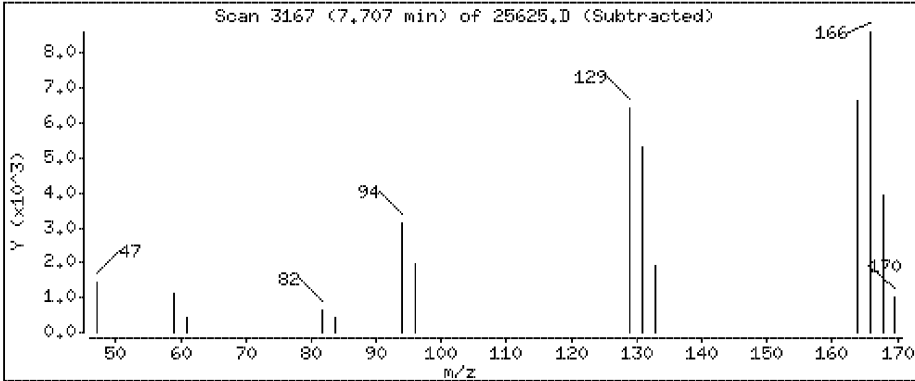
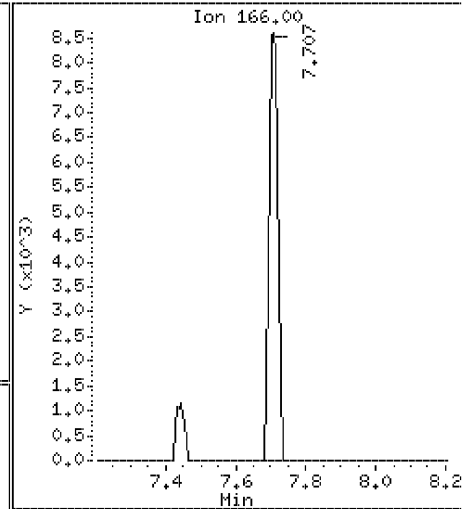
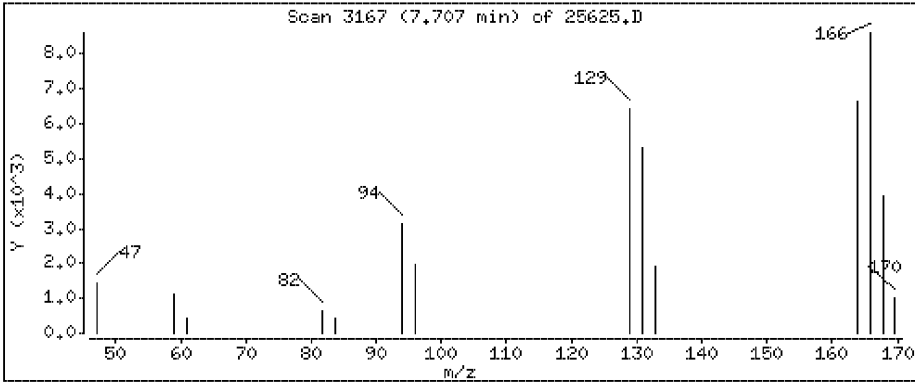
Column phase: ZB-5MSplus SN338857

Column diameter: 0,32

59 Methyl Butyl Ketone

Concentration: 0,178 ppbv





Data File: \\192.168.10.12\chem\10airH,1\091318,b\25625.D

Date : 13-SEP-2018 21:03

Client ID:

Instrument: 10airH.i

Sample Info:

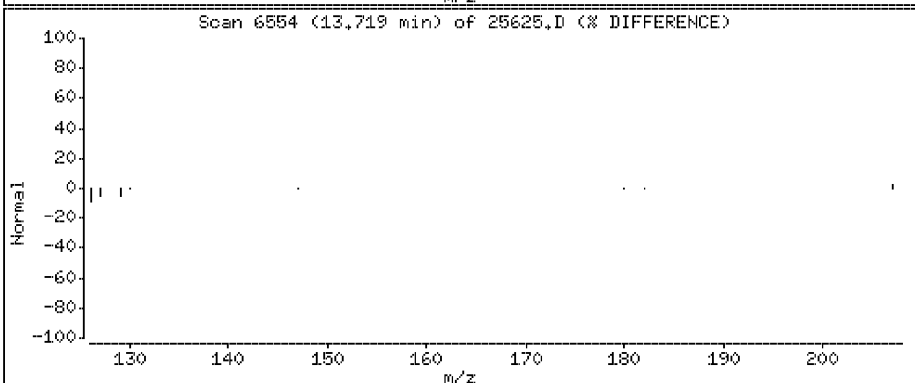
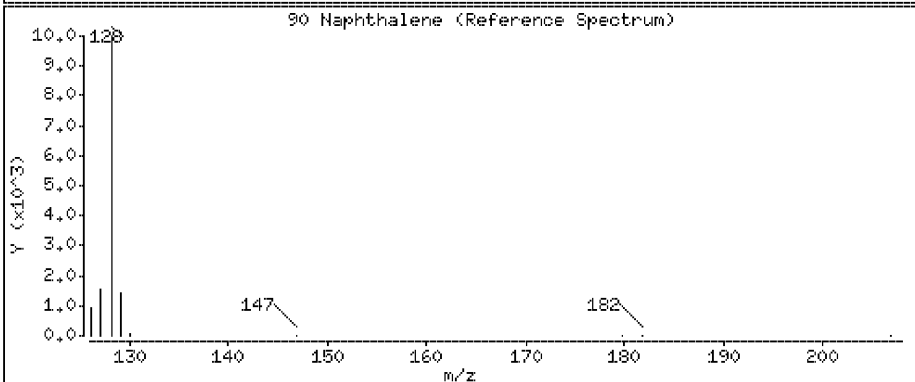
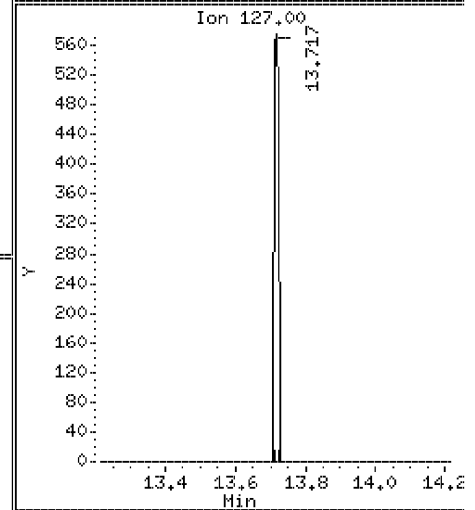
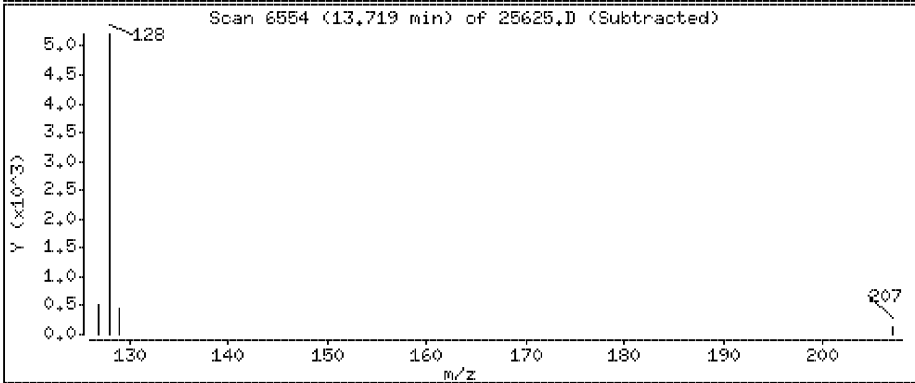
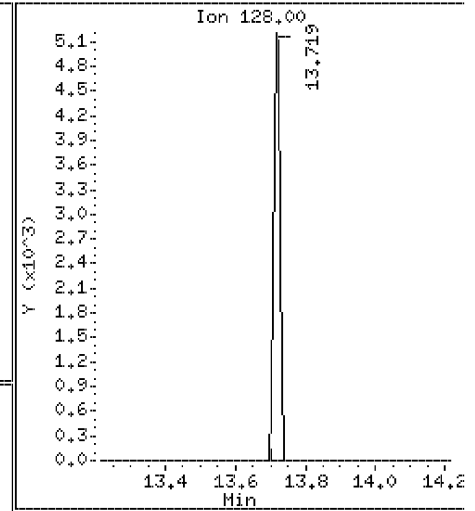
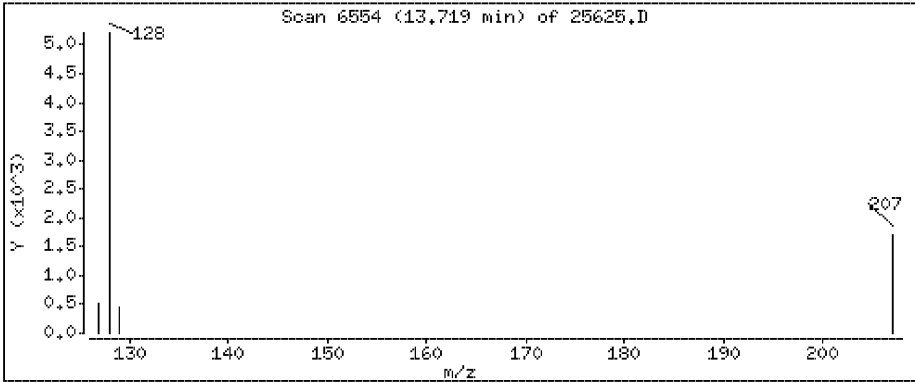
Operator: CH1

Column phase: ZB-5MSplus SN338857

Column diameter: 0.32

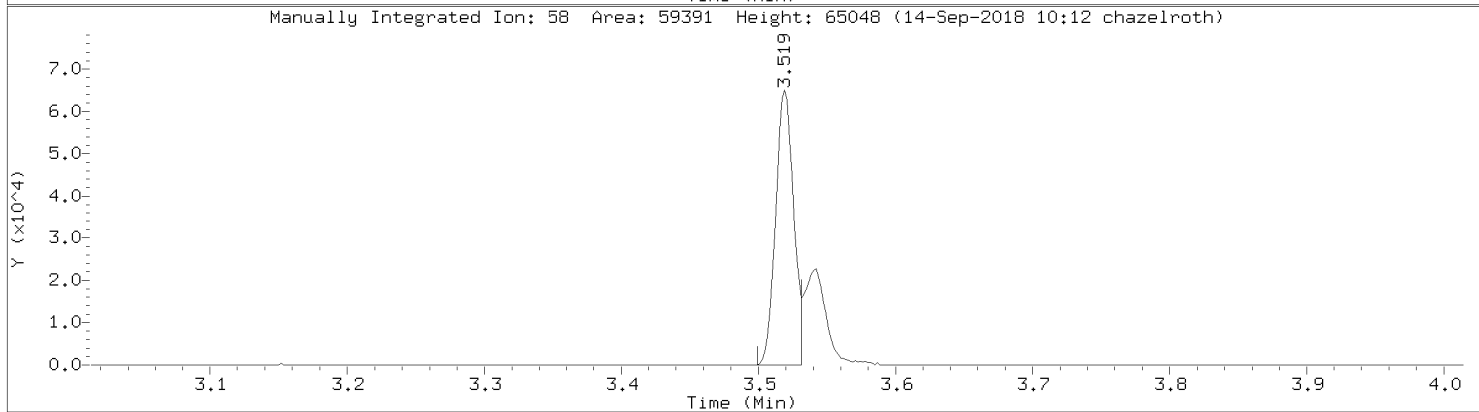
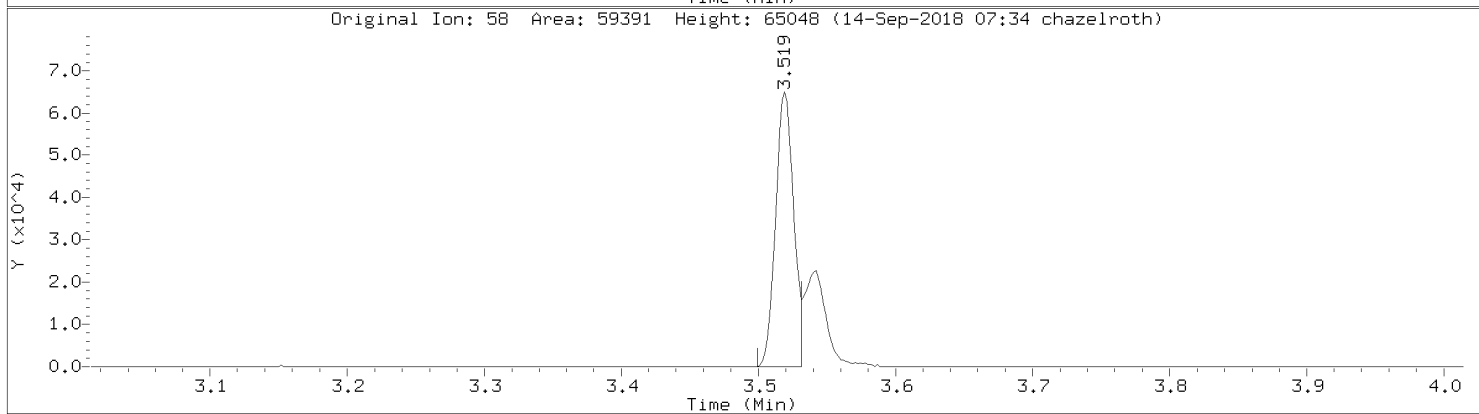
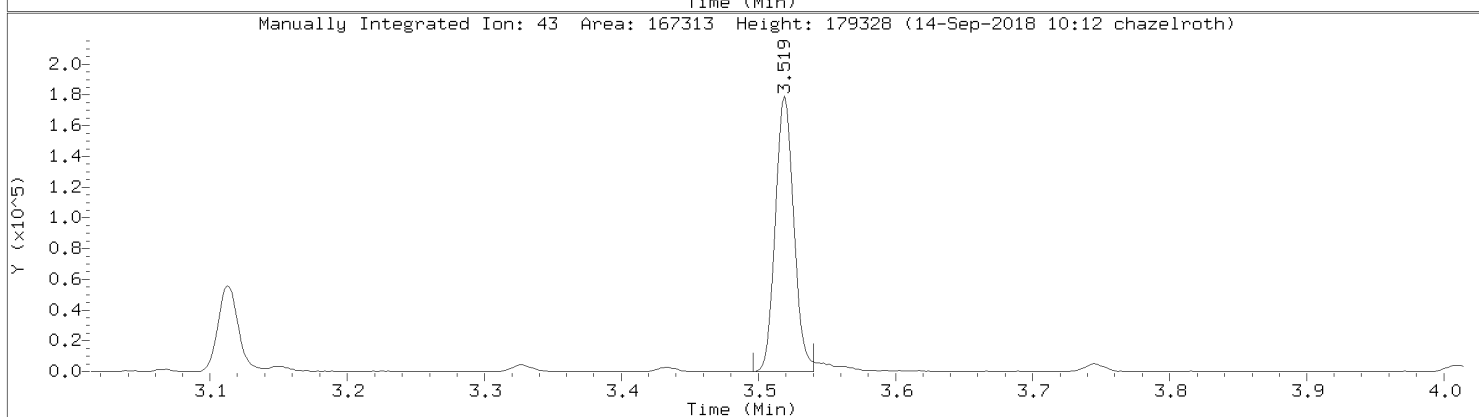
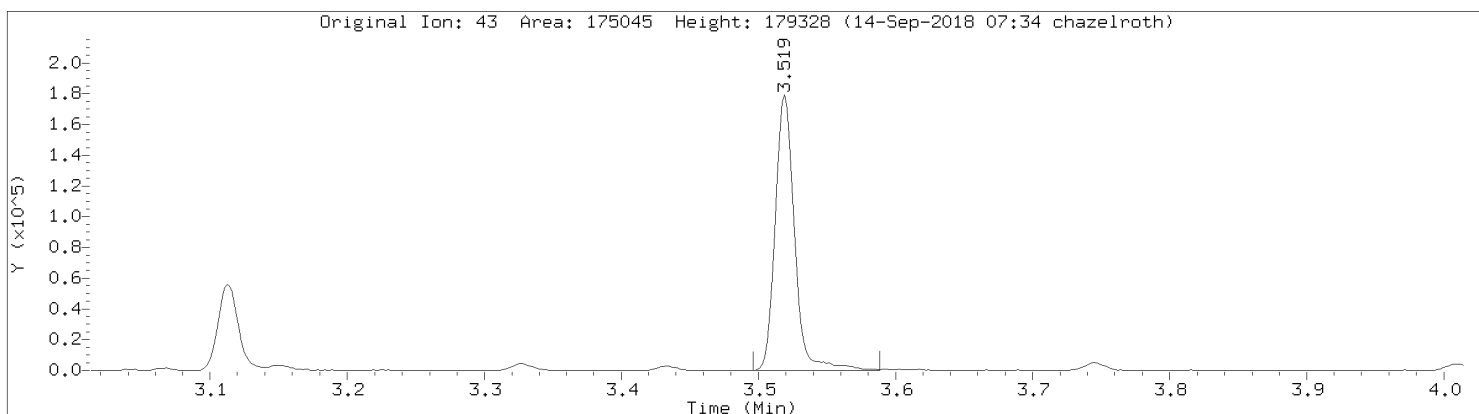
90 Naphthalene

Concentration: 0.931 ppbv



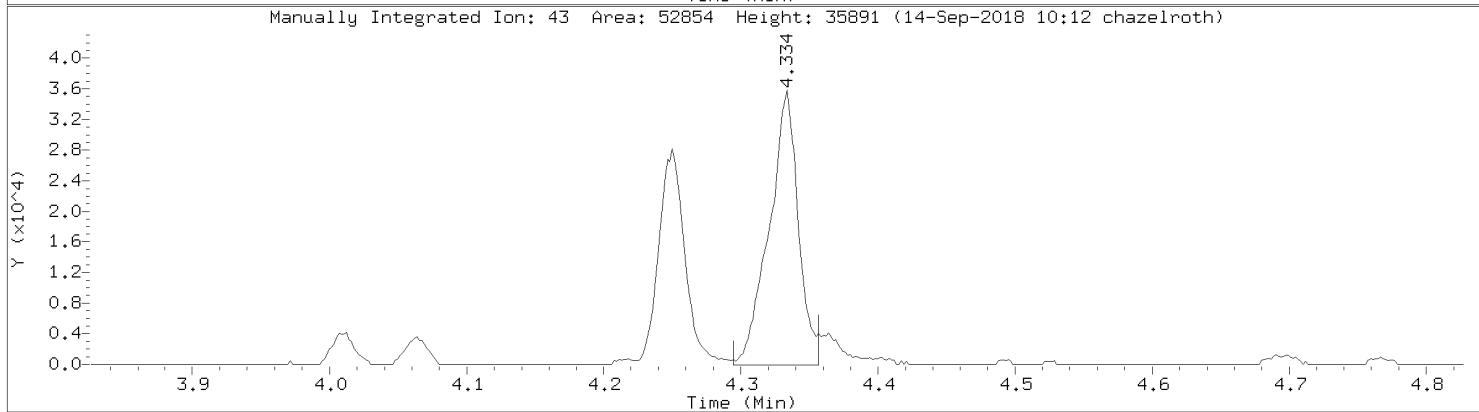
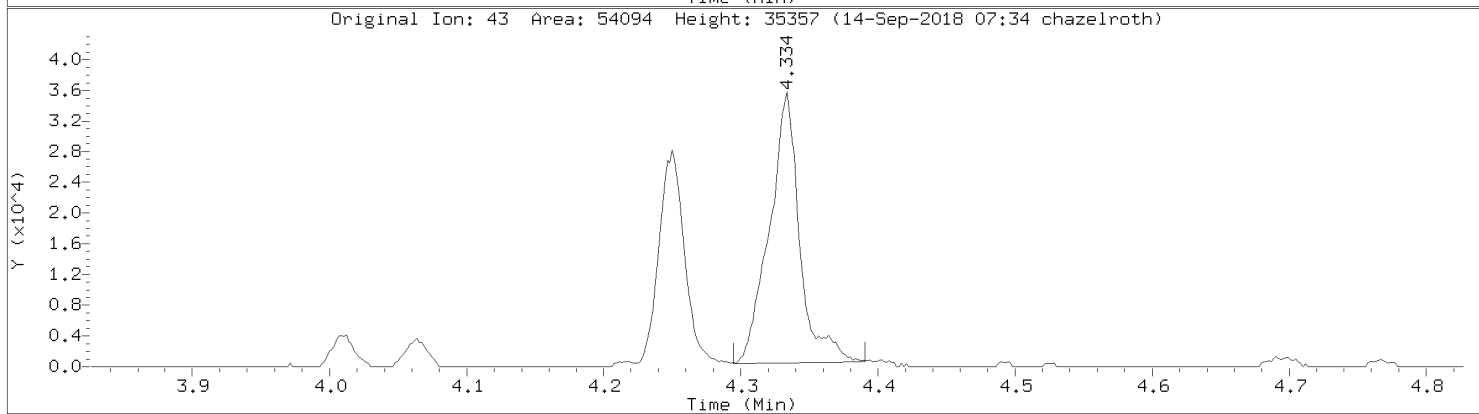
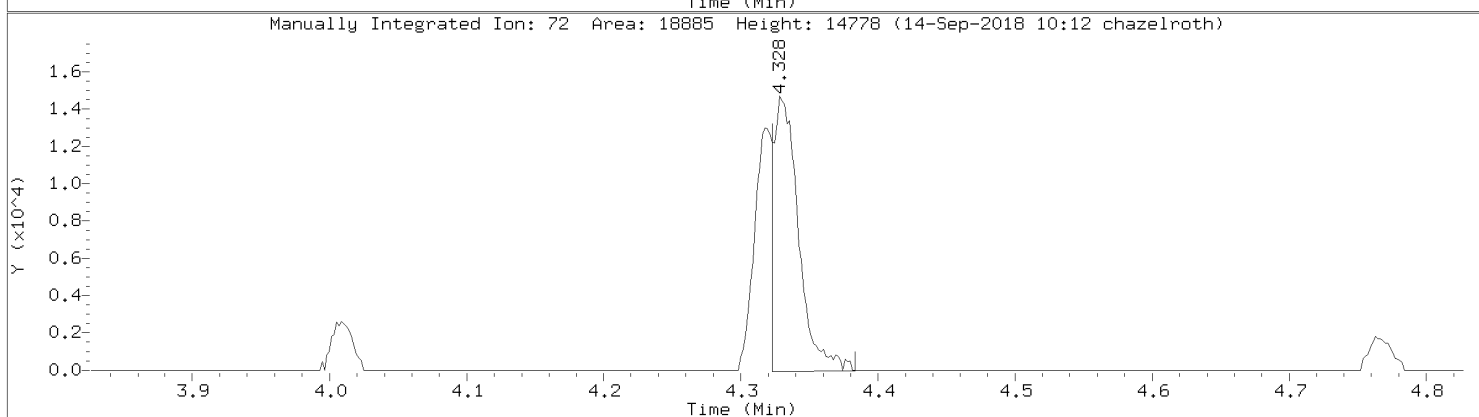
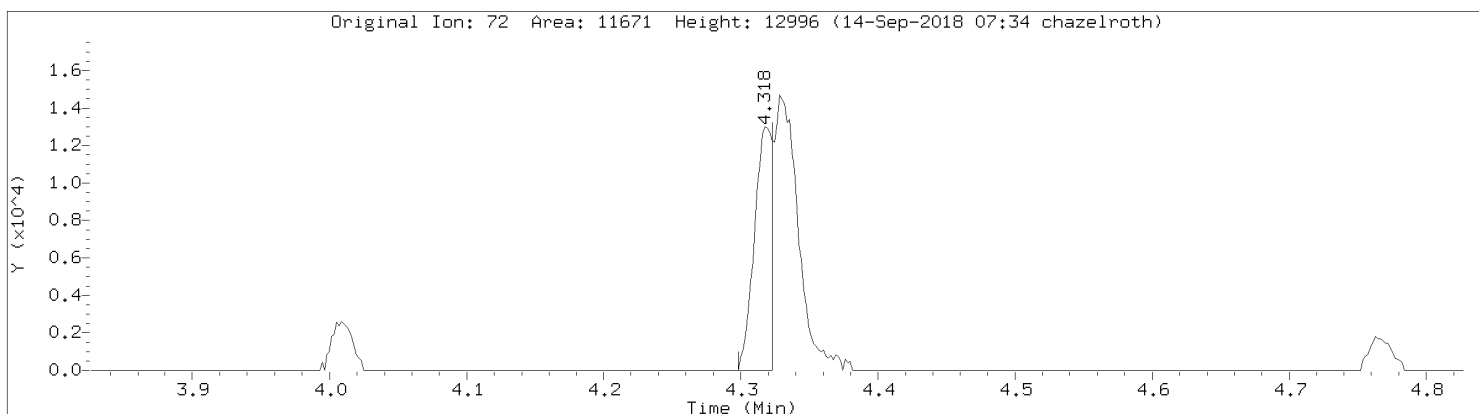
Data File: \\192.168.10.12\chem\10airH.i\091318.b\25625.D
Injection Date: 13-SEP-2018 21:03
Instrument: 10airH.i
Lab Sample ID: 10446892001

Compound: Acetone
CAS Number: 67-64-1



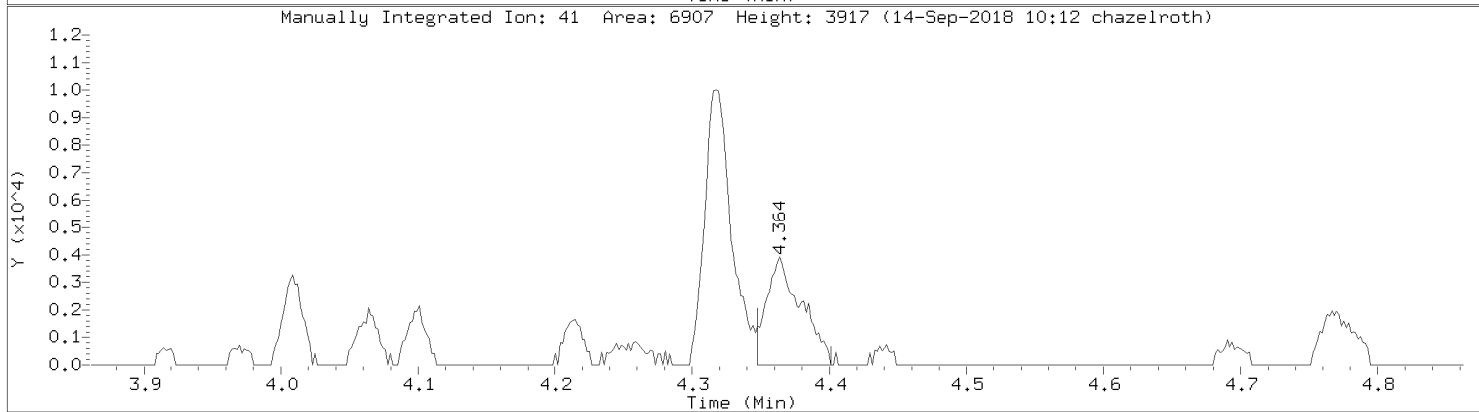
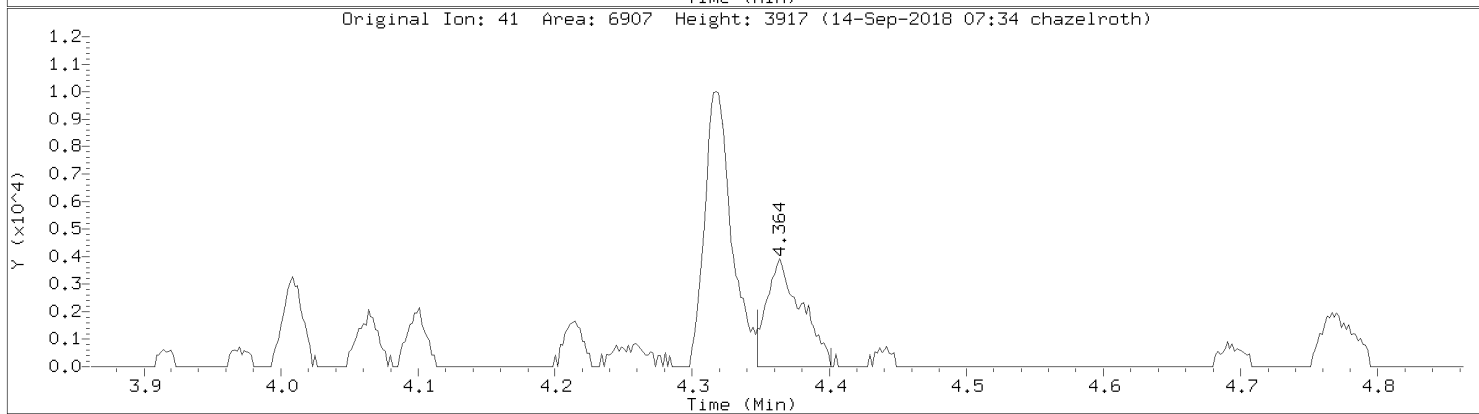
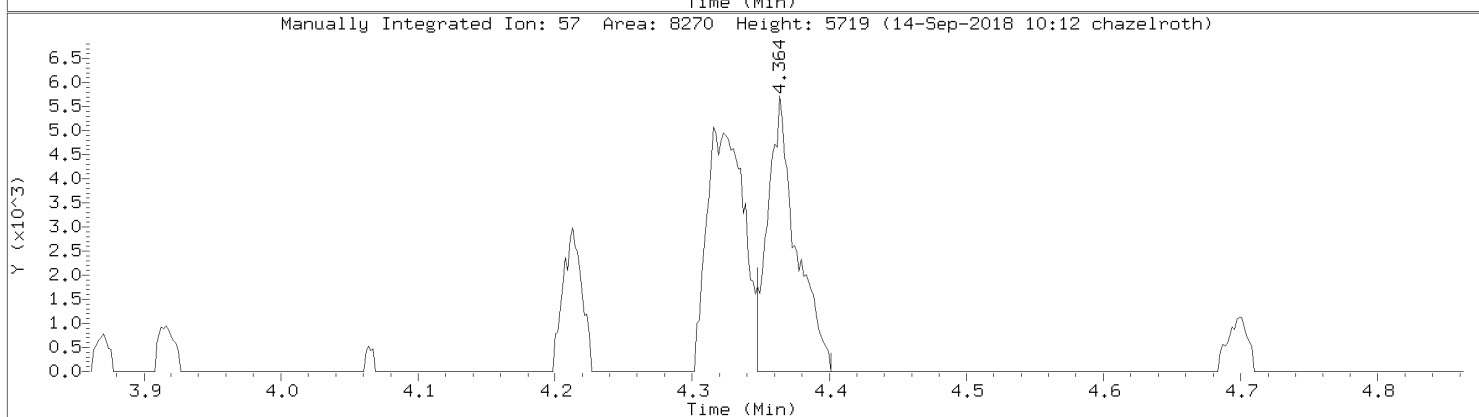
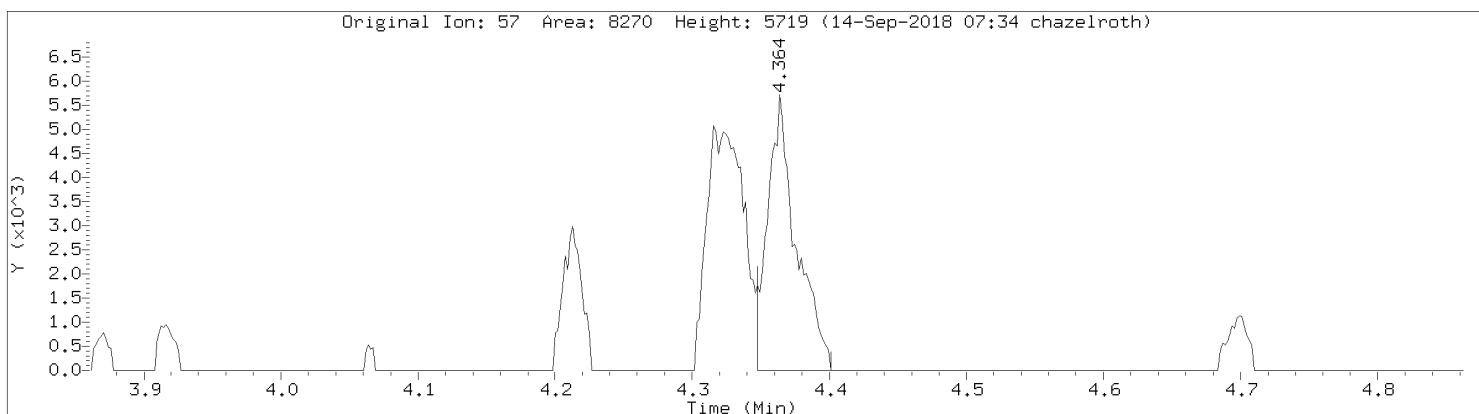
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Injection Date: 13-SEP-2018 21:03
Instrument: 10airH.i
Lab Sample ID: 10446892001

Compound: Methyl Ethyl Ketone
CAS Number: 78-93-3

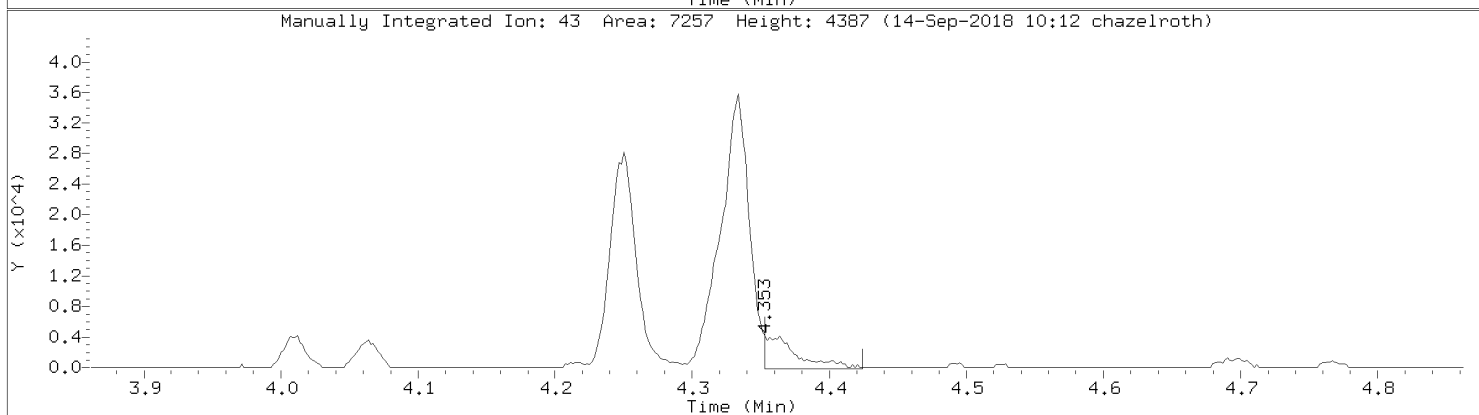
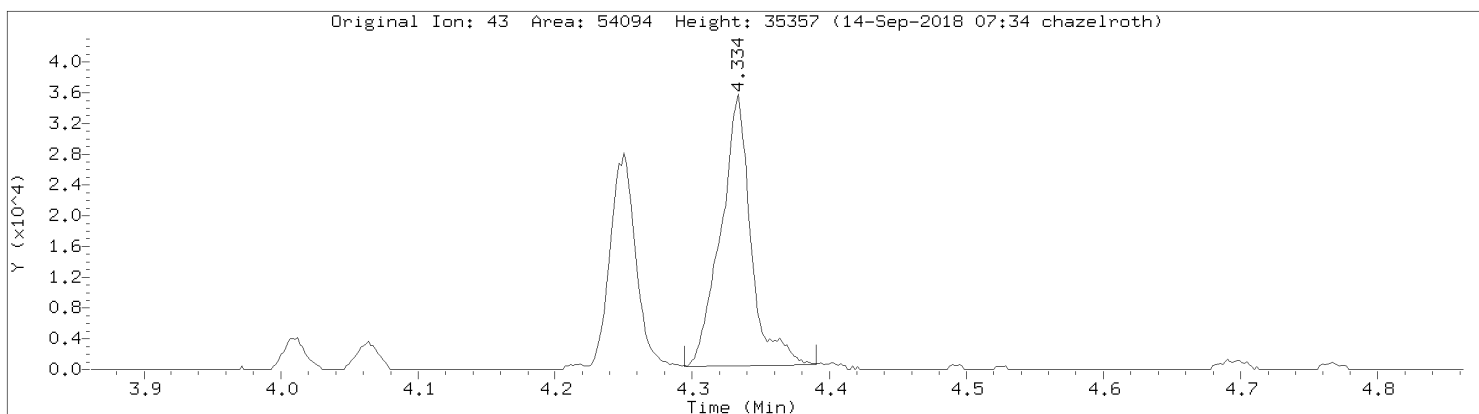


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Injection Date: 13-SEP-2018 21:03
Instrument: 10airH.i
Lab Sample ID: 10446892001

Compound: n-Hexane
CAS Number: 110-54-3

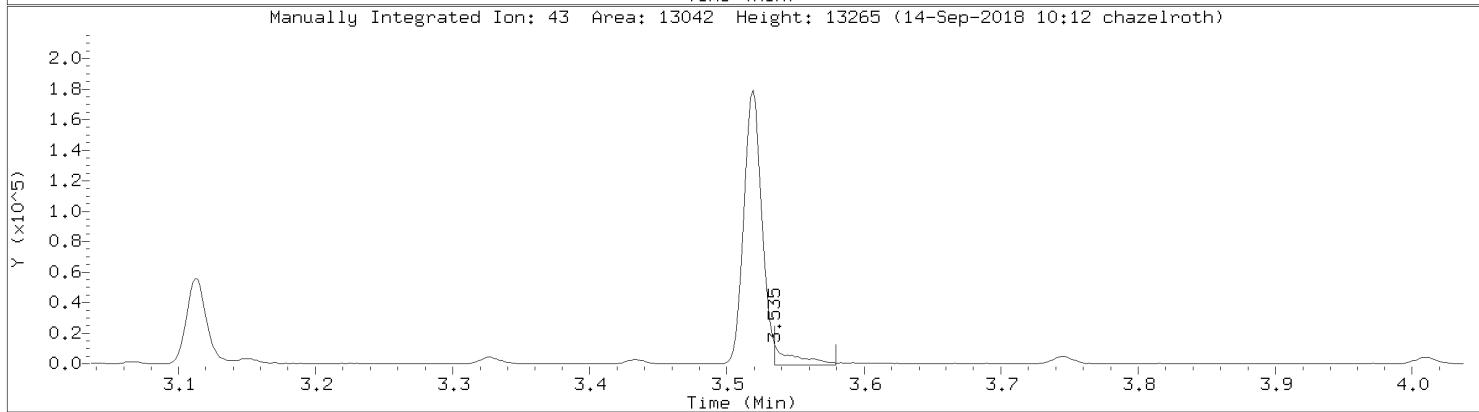
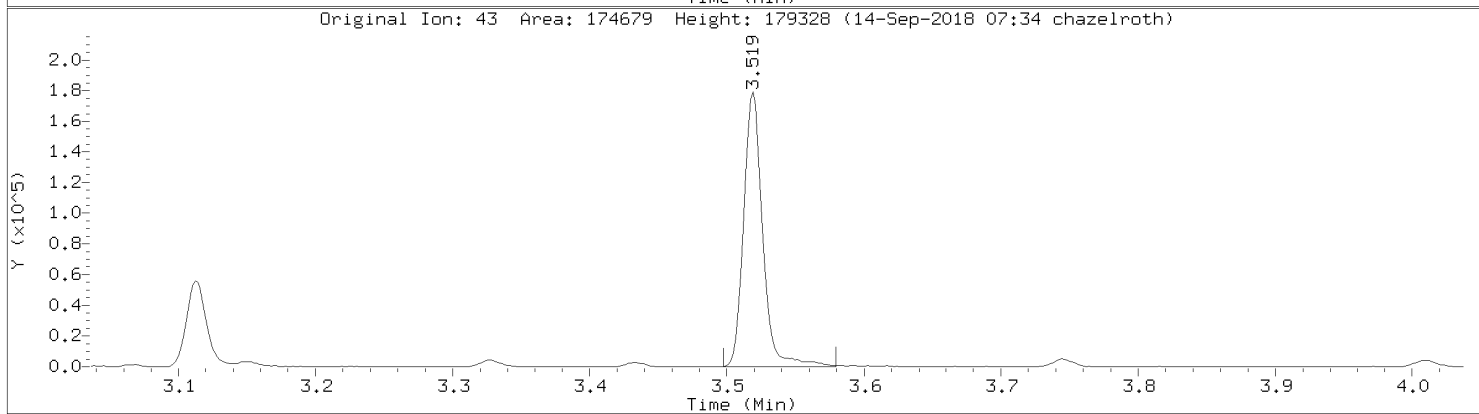
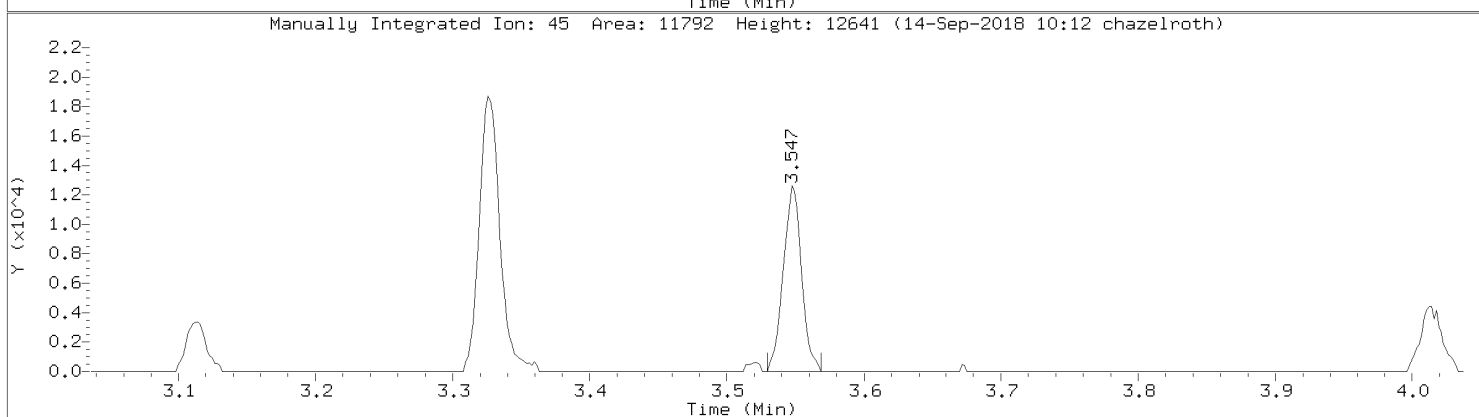
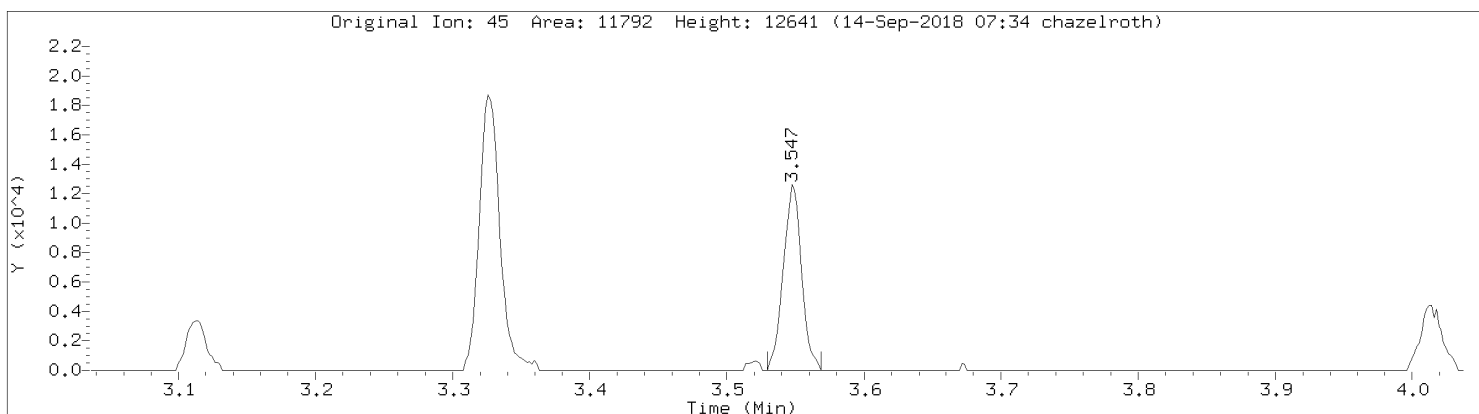


Data File: \\192.168.10.12\chem\10airH.i\091318.b\25625.D
Injection Date: 13-SEP-2018 21:03
Instrument: 10airH.i
Lab Sample ID: 10446892001



Data File: \\192.168.10.12\chem\10airH.i\091318.b\25625.D
Injection Date: 13-SEP-2018 21:03
Instrument: 10airH.i
Lab Sample ID: 10446892001

Compound: Isopropyl Alcohol
CAS Number: 67-63-0



Pace Analytical Services, Inc.

TO15 Analysis (UNIX)

Data file : \\192.168.10.12\chem\10airH.i\091318.b\25626.D
 Lab Smp Id: 10446892002
 Inj Date : 13-SEP-2018 21:31
 Operator : CH1 Inst ID: 10airH.i
 Smp Info :
 Misc Info : 31710
 Comment : Volatile Organic COMPOUNDS in Air
 Method : \\192.168.10.12\chem\10airH.i\091318.b\TO15_253-18.m
 Meth Date : 13-Sep-2018 14:08 nkoller Quant Type: ISTD
 Cal Date : 10-SEP-2018 14:17 Cal File: 25309.D
 Als bottle: 26
 Dil Factor: 1.74000
 Integrator: HP RTE Compound Sublist: all.sub
 Target Version: 4.14
 Processing Host: 10MNAIRRC91

Concentration Formula: Amt * DF * Uf * CpndVariable

Name	Value	Description
DF	1.740	Dilution Factor
Uf	1.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS		
						ON-COLUMN (ppbv)	FINAL (ppbv)	
1 1,1-Difluoroethane	65							(D)
2 Chlorodifluoromethane	67							(D)
3 Propylene	41	2.954	2.952	(0.542)	16056	1.02154	1.78	
4 Dichlorodifluoromethane	85	2.972	2.972	(0.545)	19403	0.21382	0.372	
5 Dichlorotetrafluoroethane	85							
6 Chloromethane	50	3.048	3.046	(0.559)	21416	0.89332	1.55	
7 Vinyl chloride	62							
8 1,3-Butadiene	54							(D)
9 Bromomethane	94	3.266	3.267	(0.599)	2799	0.09586	0.167	
10 Chloroethane	64	3.313	3.311	(0.608)	1140	0.09724	0.169(M)	
11 Ethanol	45	3.321	3.318	(0.609)	26389	3.54689	6.17	
12 Vinyl Bromide	106							
13 Isopentane	43	3.430	3.432	(0.629)	4872	0.25372	0.441	
14 Freon 123	83							
15 Trichlorofluoromethane	101	3.494	3.492	(0.641)	5939	0.09200	0.160	
16 Acrolein	56							(D)
17 Acetone	43	3.517	3.513	(0.645)	369027	13.3821	23.3	
18 Isopropyl Alcohol	45	3.542	3.536	(0.649)	10553	0.34638	0.603(Q)	
19 1,1-Dichloroethene	61							
20 Acrylonitrile	53							
21 Tert Butyl Alcohol (TBA)	59	3.739	3.733	(0.686)	43257	0.78247	1.36	
22 Methyl Acetate	43							(D)
23 Freon 113	101	3.747	3.742	(0.687)	2505	0.03522	0.0613(a)	
24 Allyl Chloride	76							

Compounds	QUANT MASS	SIG						CONCENTRATIONS	
			RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ppbv)	FINAL (ppbv)	
25 Methylene chloride	49		3.822	3.820	(0.701)	51711	1.15506	2.01	
26 Carbon Disulfide	76		3.927	3.927	(0.720)	86128	1.05133	1.83	
27 Methyl Tert Butyl Ether	73		Compound Not Detected.						
28 trans-1,2-dichloroethene	96		Compound Not Detected.						
29 Vinyl Acetate	43		Compound Not Detected.						(D)
30 1,1-Dichloroethane	63		Compound Not Detected.						
31 Methyl Ethyl Ketone	72		4.328	4.326	(0.794)	93877	6.24797	10.9(QM)	
32 Di-isopropyl Ether	45		Compound Not Detected.						
33 n-Hexane	57		4.361	4.362	(0.800)	12090	0.33180	0.577(QM)	
34 Ethyl Acetate	43		Compound Not Detected.						
35 cis-1,2-Dichloroethene	96		Compound Not Detected.						
36 Ethyl Tert-Butyl Ether	59		Compound Not Detected.						
37 Chloroform	83		4.684	4.685	(0.859)	24038	0.33199	0.578	
38 Tetrahydrofuran	42		Compound Not Detected.						(D)
39 1,1,1-Trichloroethane	97		Compound Not Detected.						
40 1,2-Dichloroethane	62		Compound Not Detected.						
41 Benzene	78		5.240	5.238	(0.961)	8669	0.10008	0.174	
42 Carbon tetrachloride	117		Compound Not Detected.						(D)
43 Cyclohexane	56		Compound Not Detected.						(D)
44 Tert Amyl Methyl Ether	73		Compound Not Detected.						(D)
* 45 1,4-Difluorobenzene	114		5.453	5.453	(1.000)	930301	10.0000		
46 2,2,4-Trimethylpentane	57		Compound Not Detected.						(D)
47 Heptane	43		Compound Not Detected.						(D)
48 Trichloroethene	130		5.785	5.785	(1.061)	3436	0.07321	0.127	
49 1,2-Dichloropropane	63		Compound Not Detected.						
50 Methyl methacrylate	69		Compound Not Detected.						(D)
51 1,4-Dioxane	88		Compound Not Detected.						
52 Bromodichloromethane	83		Compound Not Detected.						
53 Methylcyclohexane	98		Compound Not Detected.						(D)
54 Methyl Isobutyl Ketone	43		Compound Not Detected.						(D)
55 cis-1,3-Dichloropropene	75		Compound Not Detected.						
56 trans-1,3-Dichloropropene	75		Compound Not Detected.						
57 Toluene	91		6.961	6.960	(1.277)	40839	0.44828	0.780	
58 1,1,2-Trichloroethane	97		Compound Not Detected.						(D)
59 Methyl Butyl Ketone	43		7.185	7.182	(0.850)	18022	0.52250	0.909	
60 n-Octane	43		Compound Not Detected.						(D)
61 Dibromochloromethane	129		Compound Not Detected.						
62 Tetrachloroethene	166		7.707	7.705	(0.912)	2714	0.04370	0.0760(a)	
63 1,2-Dibromoethane	107		Compound Not Detected.						
* 64 Chlorobenzene - d5	117		8.452	8.451	(1.000)	782266	10.0000		
65 Chlorobenzene	112		Compound Not Detected.						
66 Ethyl Benzene	91		8.715	8.713	(1.031)	11291	0.10387	0.181	
67 m&p-Xylene	91		8.869	8.868	(1.049)	39449	0.47717	0.830(M)	
68 n-Nonane	43		Compound Not Detected.						(D)
69 Styrene	104		Compound Not Detected.						(D)
70 o-Xylene	91		9.338	9.338	(1.105)	18836	0.21383	0.372	
71 Bromoform	173		Compound Not Detected.						
72 1,1,2,2-Tetrachloroethane	83		Compound Not Detected.						
73 Isopropylbenzene	105		Compound Not Detected.						(D)
74 N-Propylbenzene	91		10.458	10.454	(1.237)	6975	0.19910	0.346	
75 4-Ethyltoluene	105		10.646	10.639	(1.260)	7243	0.29836	0.519	
76 1,3,5-Trimethylbenzene	105		10.713	10.713	(1.267)	16077	0.27676	0.482	
77 n-Decane	57		Compound Not Detected.						(D)
78 Tert-Butyl Benzene	119		Compound Not Detected.						

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN (ppbv)	FINAL (ppbv)
79 1,2,4-Trimethylbenzene	105		11.203	11.203	(1.325)	42826	0.51564	0.897
80 Sec- Butylbenzene	105		Compound Not Detected.					
81 1,3-Dichlorobenzene	146		Compound Not Detected.					
82 Benzyl Chloride	91		Compound Not Detected.					
83 1,4-Dichlorobenzene	146		Compound Not Detected.					
84 p-Isopropyltoluene	119		Compound Not Detected.					(D)
85 1,2,3-Trimethylbenzene	105		11.682	11.683	(1.382)	12880	0.25691	0.447
86 1,2-Dichlorobenzene	146		Compound Not Detected.					
87 N-Butylbenzene	91		Compound Not Detected.					(D)
88 1,2-Dibromo-3-Chloropropane	157		Compound Not Detected.					
89 1,2,4-Trichlorobenzene	180		Compound Not Detected.					
90 Naphthalene	128		13.716	13.715	(1.623)	15809	0.75955	1.32
91 Hexachlorobutadiene	225		Compound Not Detected.					

QC Flag Legend

- a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
- Q - Qualifier signal failed the ratio test.
- M - Compound response manually integrated.
- D - User disabled compound identification.

Data File: \\192.168.10.12\chem\10airH.i\091318.b\25626.D
Report Date: 14-Sep-2018 10:21

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10airH.i
Lab File ID: 25626.D
Lab Smp Id: 10446892002
Analysis Type: VOA
Quant Type: ISTD
Operator: CH1
Method File: \\192.168.10.12\chem\10airH.i\091318.b\TO15_253-18.m
Misc Info: 31710

Calibration Date: 13-SEP-2018
Calibration Time: 08:29

Level: LOW
Sample Type: AIR

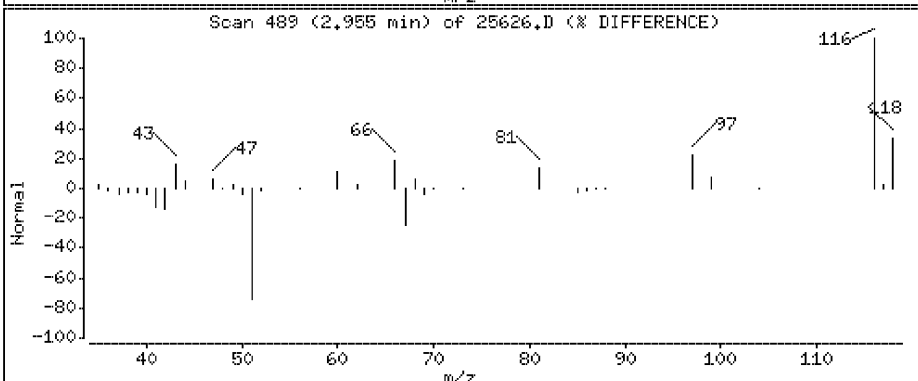
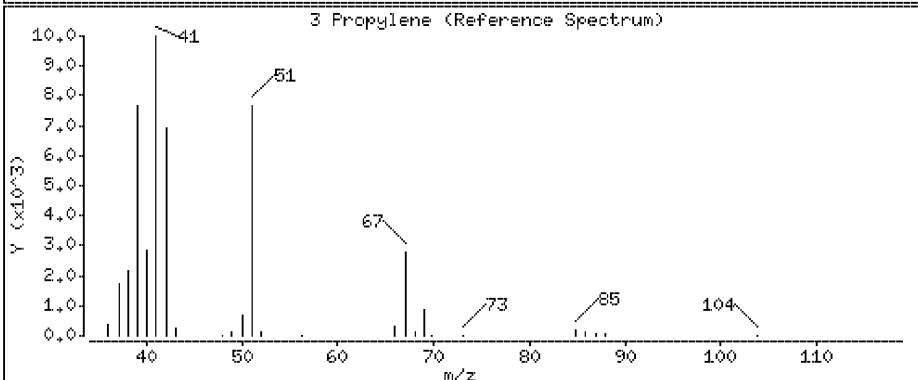
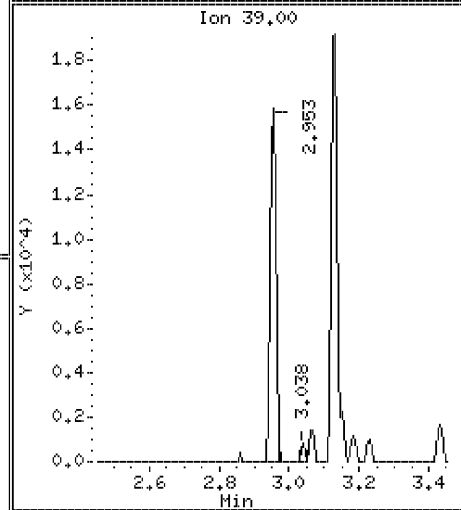
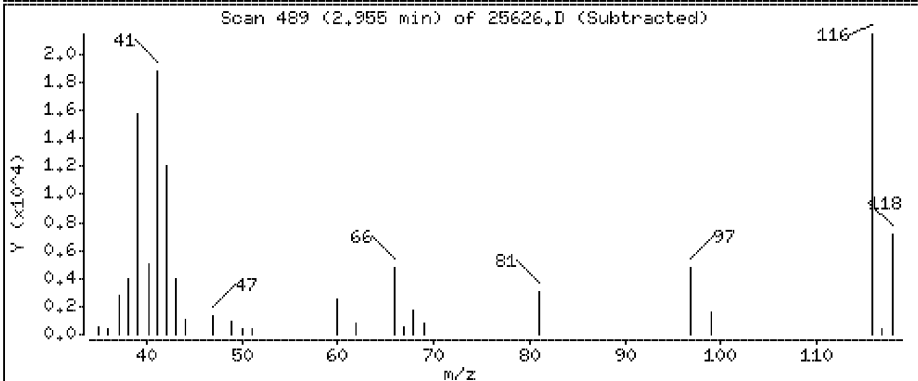
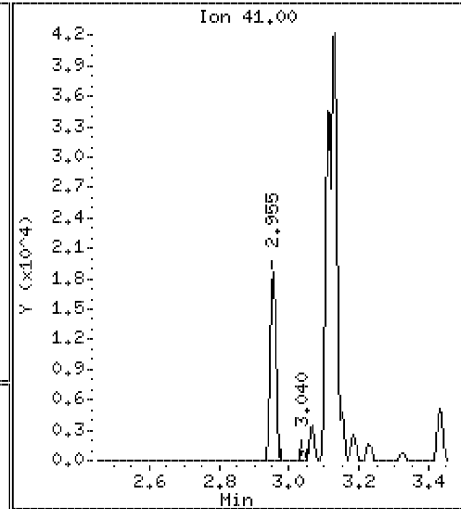
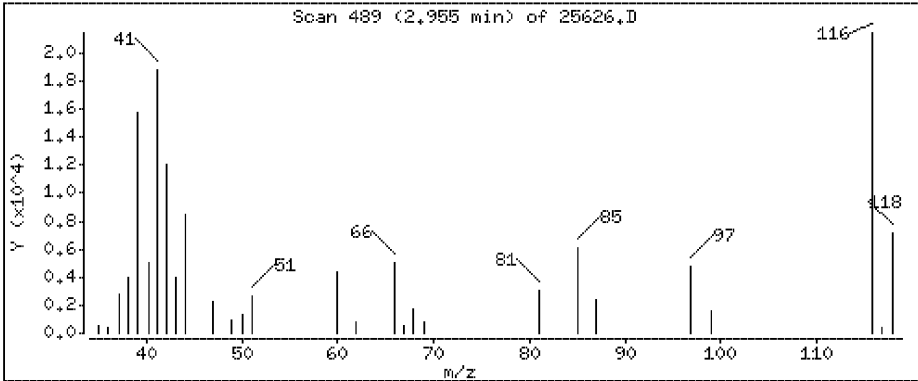
Test Mode:

Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
45 1,4-Difluorobenze	1034069	620441	1447697	930301	-10.03
64 Chlorobenzene - d	896862	538117	1255607	782266	-12.78

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
45 1,4-Difluorobenze	5.45	5.12	5.78	5.45	-0.00
64 Chlorobenzene - d	8.45	8.12	8.78	8.45	0.02

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.



Data File: \\192.168.10.12\chem\10airH,1\091318,b\25626.D

Date : 13-SEP-2018 21:31

Client ID:

Instrument: 10airH.i

Sample Info:

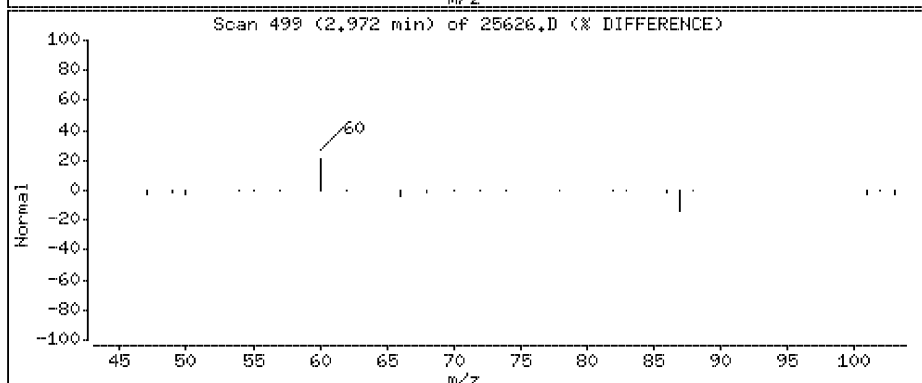
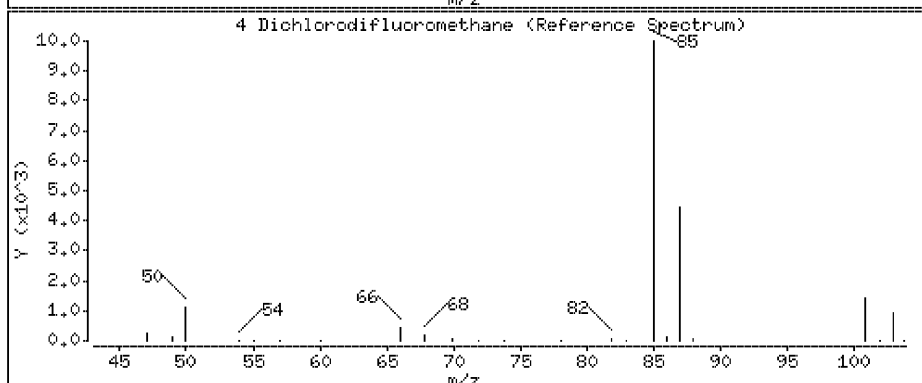
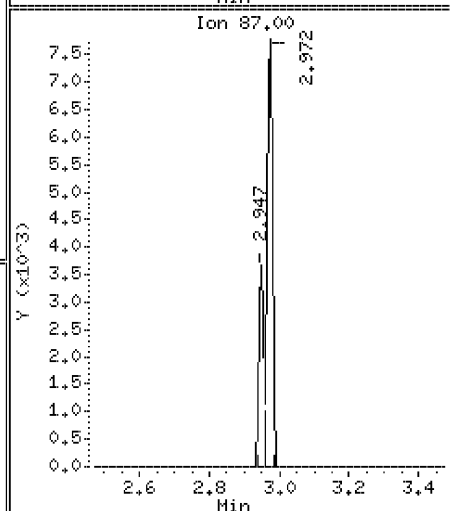
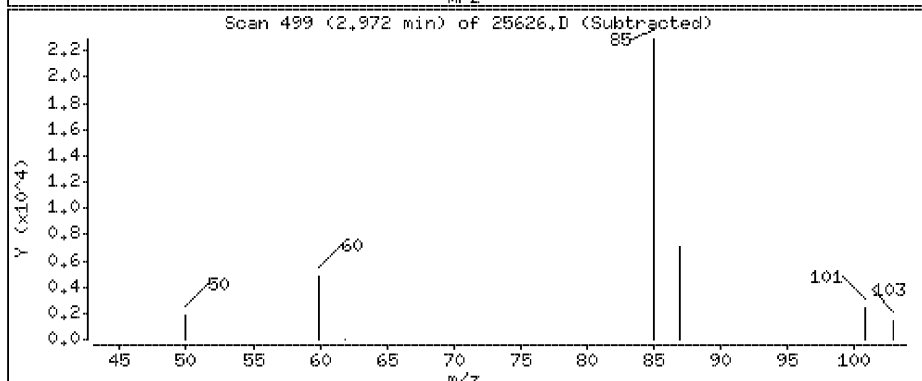
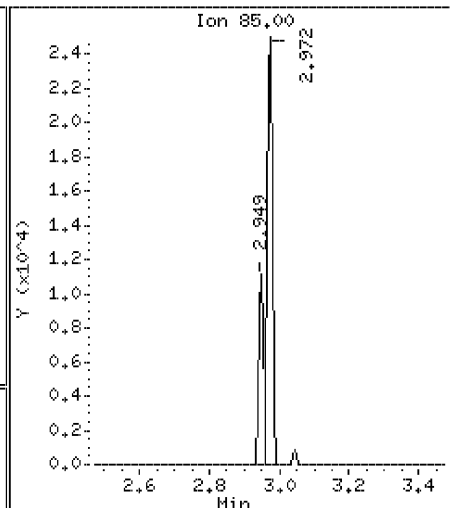
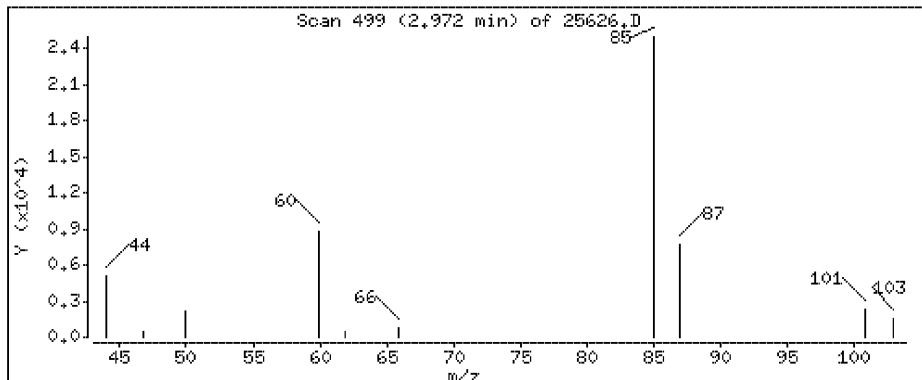
Operator: CH1

Column phase: ZB-5MSplus SN338857

Column diameter: 0,32

4 Dichlorodifluoromethane

Concentration: 0,372 ppbv



Data File: \\192.168.10.12\chem\10airH,1\091318,b\25626.D

Date : 13-SEP-2018 21:31

Client ID:

Instrument: 10airH.i

Sample Info:

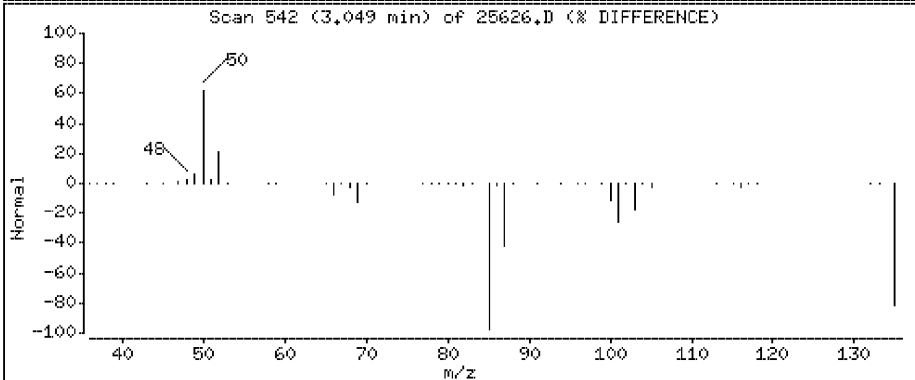
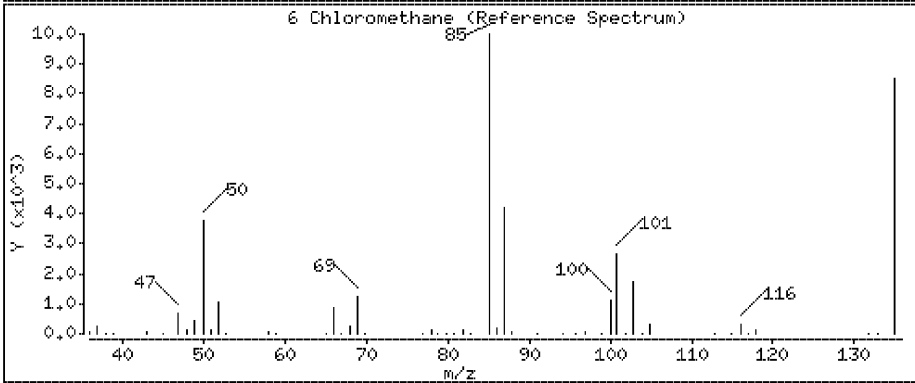
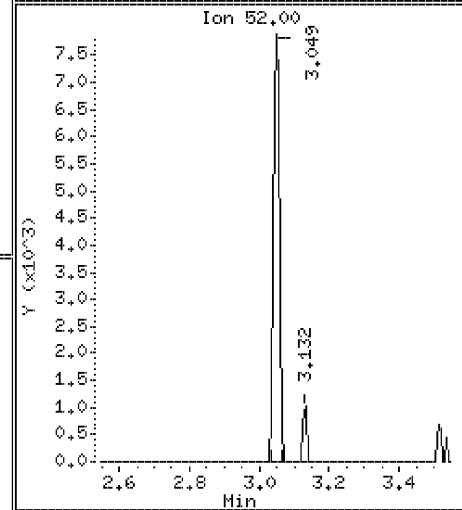
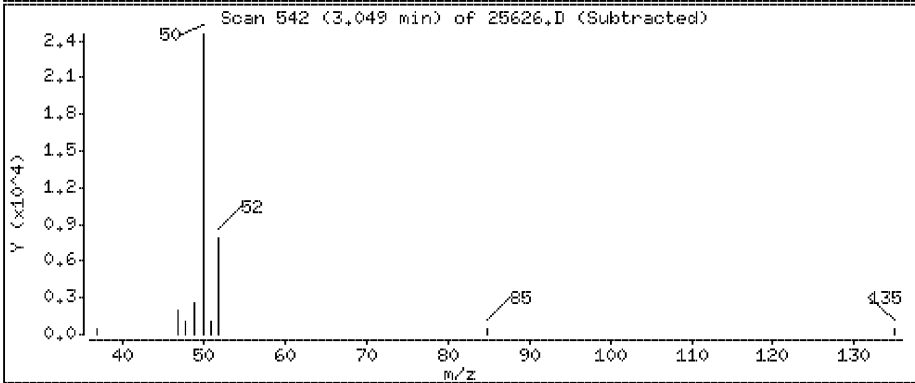
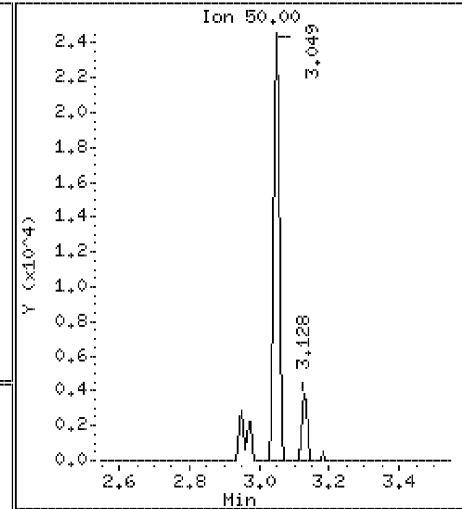
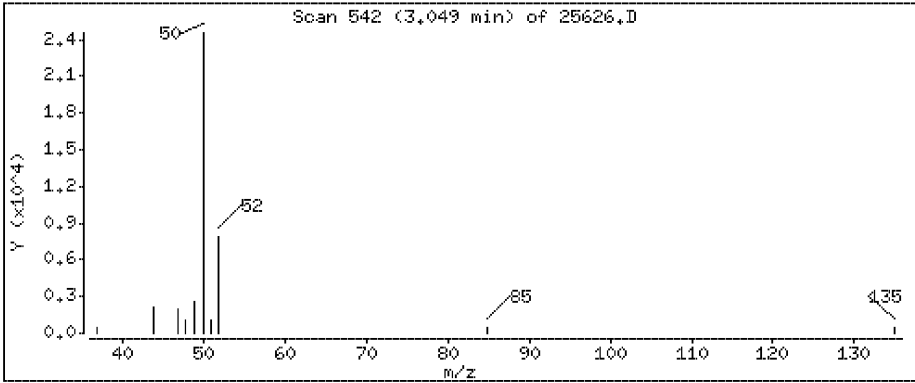
Operator: CH1

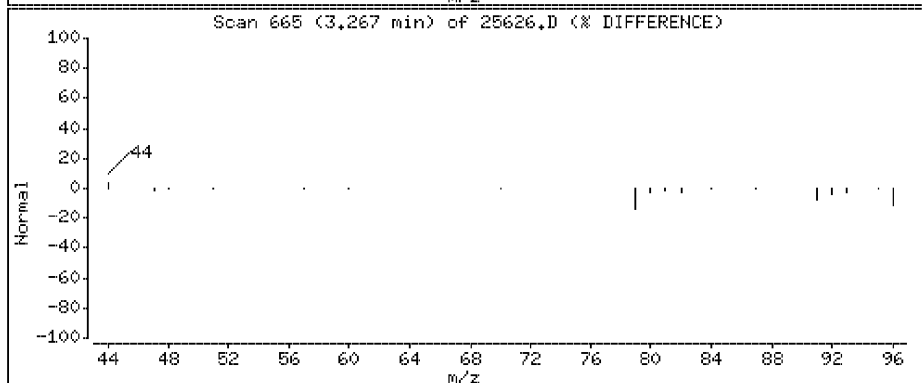
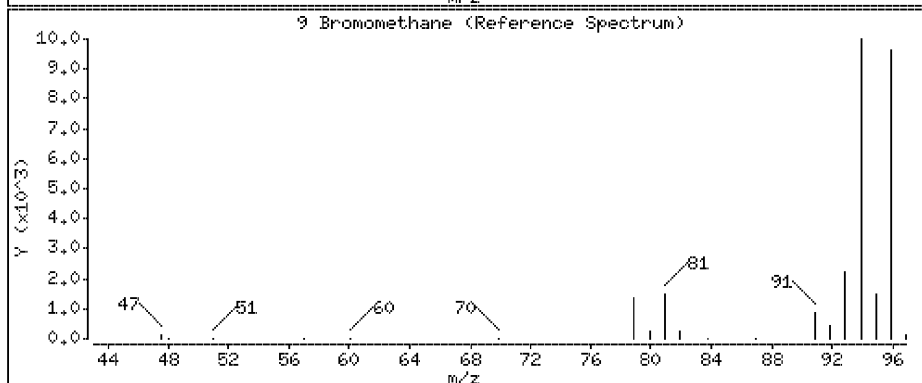
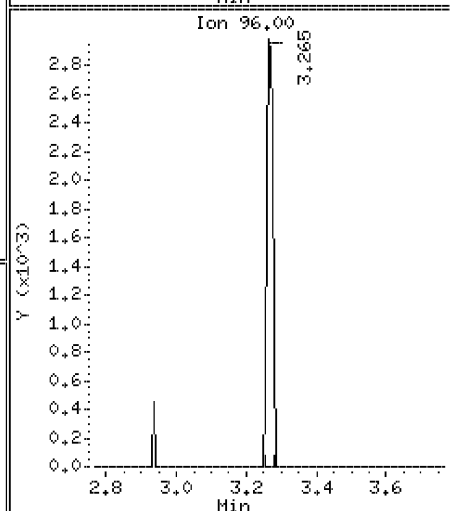
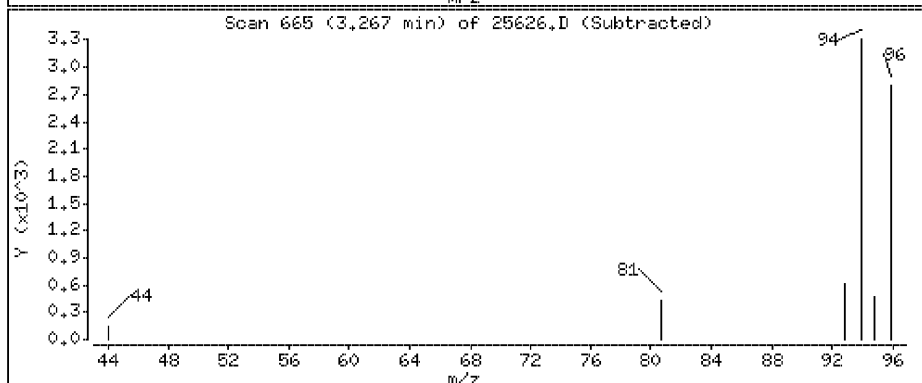
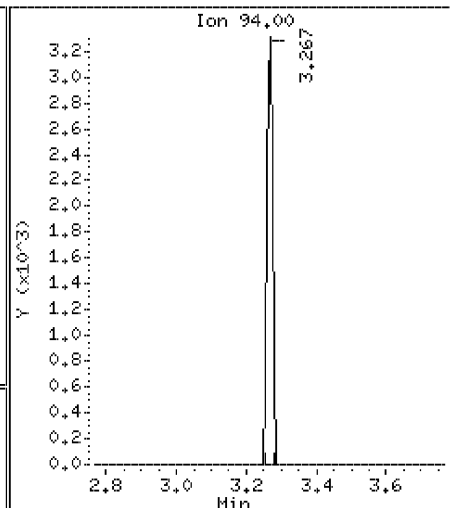
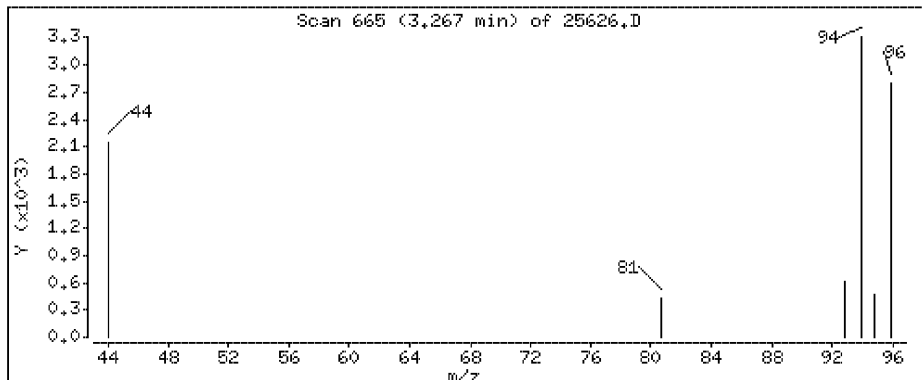
Column phase: ZB-5MSplus SN338857

Column diameter: 0,32

6 Chloromethane

Concentration: 1,55 ppbv





Data File: \\192.168.10.12\chem\10airH,1\091318,b\25626.D

Date : 13-SEP-2018 21:31

Client ID:

Instrument: 10airH.i

Sample Info:

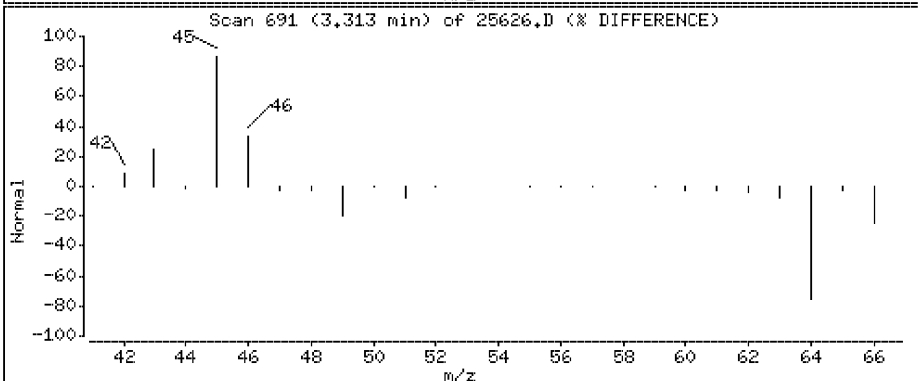
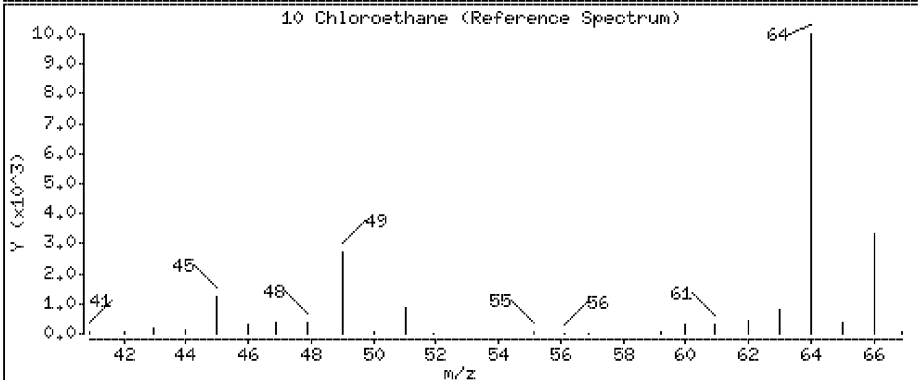
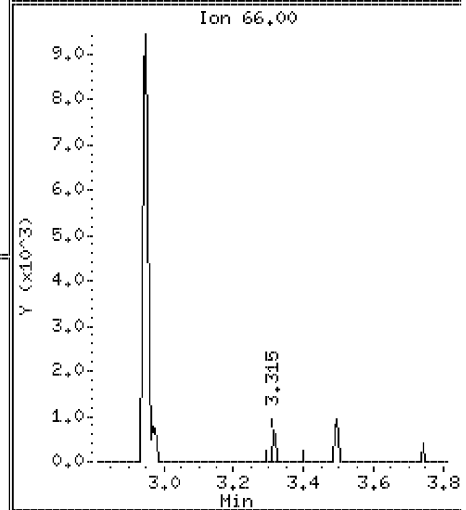
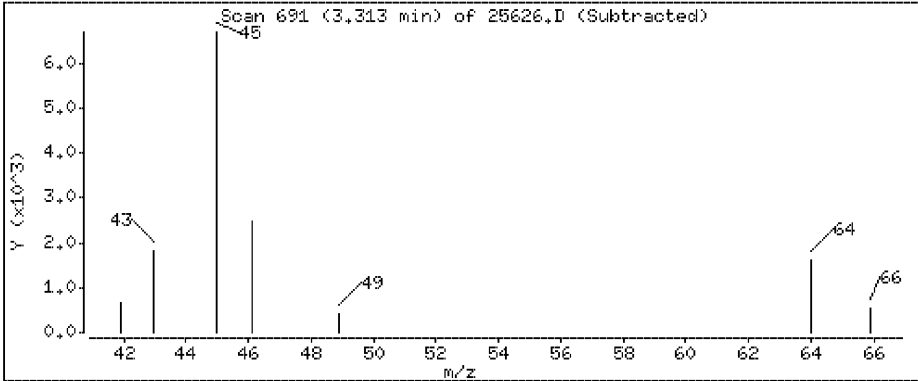
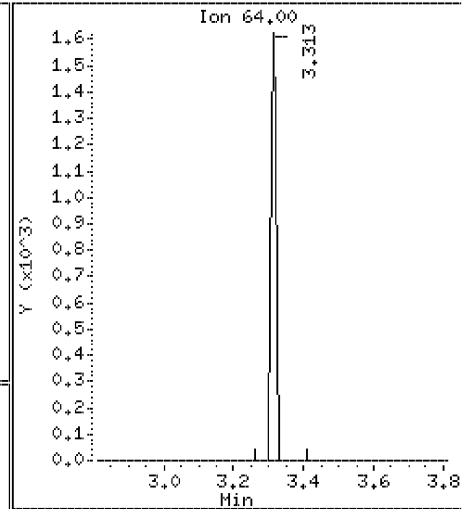
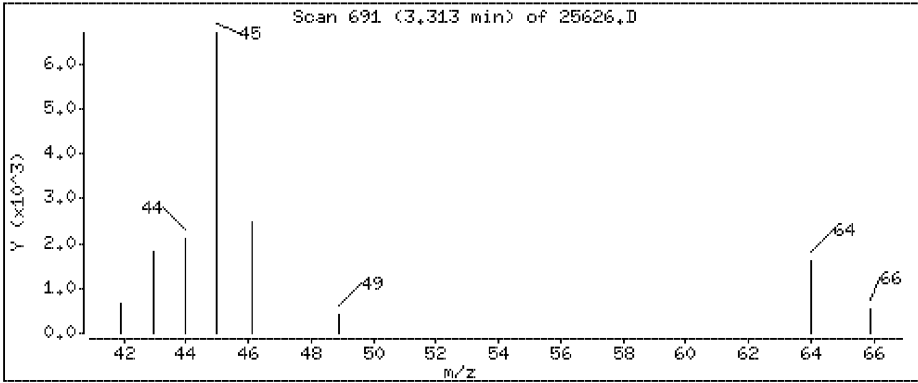
Operator: CH1

Column phase: ZB-5MSplus SN338857

Column diameter: 0,32

10 Chloroethane

Concentration: 0,169 ppbv



Data File: \\192.168.10.12\chem\10airH,1\091318,b\25626.D

Date : 13-SEP-2018 21:31

Client ID:

Instrument: 10airH.i

Sample Info:

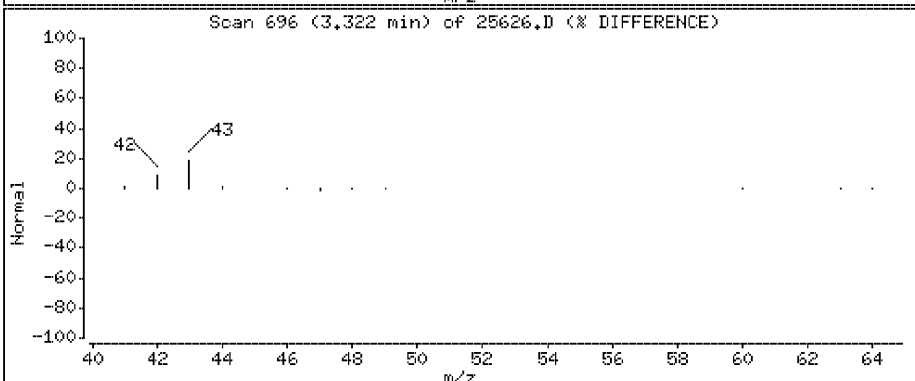
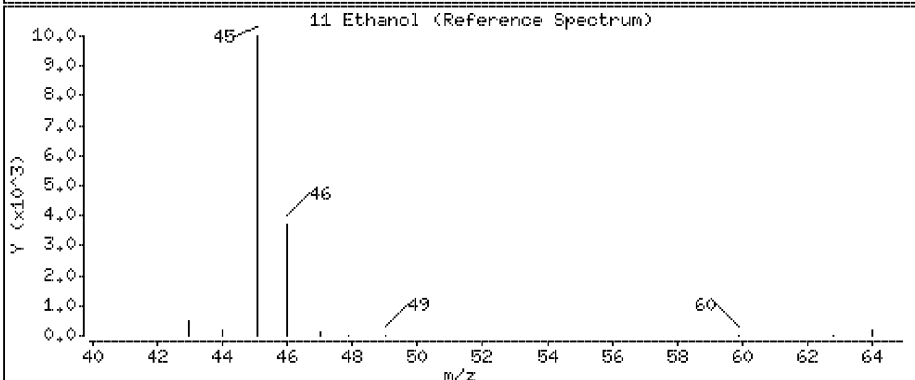
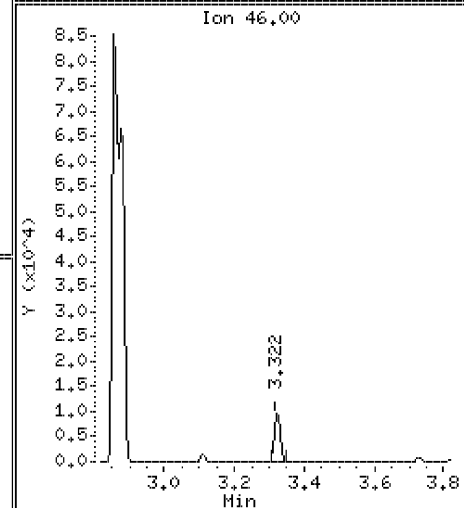
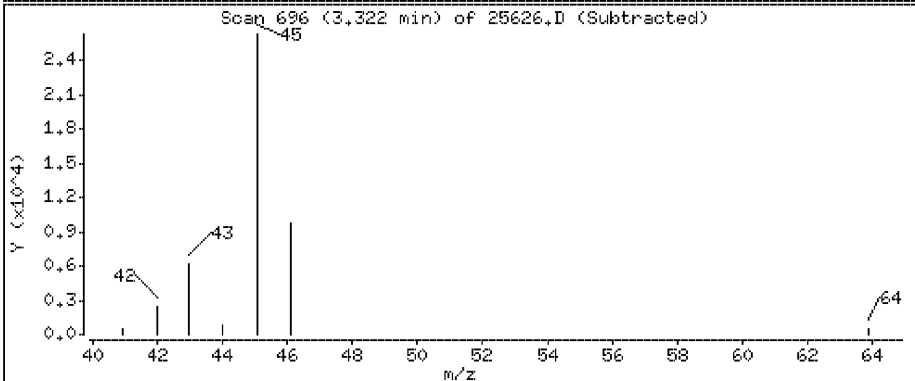
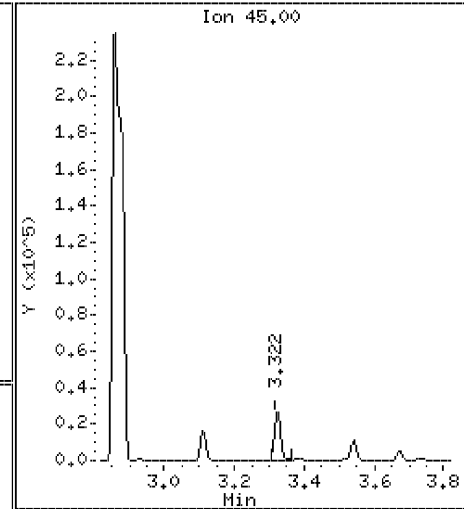
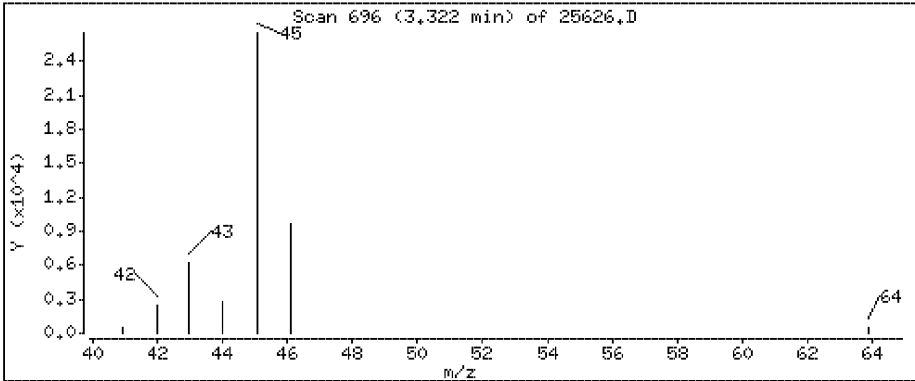
Operator: CH1

Column phase: ZB-5MSplus SN338857

Column diameter: 0,32

11 Ethanol

Concentration: 6,17 ppbv



Data File: \\192.168.10.12\chem\10airH,1\091318,b\25626.D

Date : 13-SEP-2018 21:31

Client ID:

Instrument: 10airH.i

Sample Info:

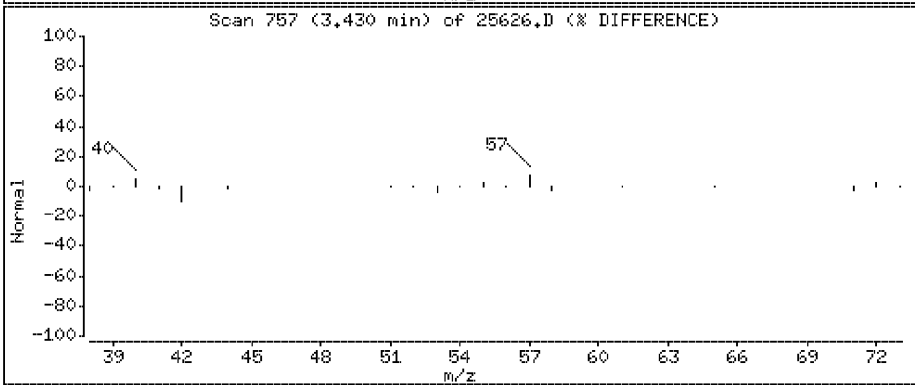
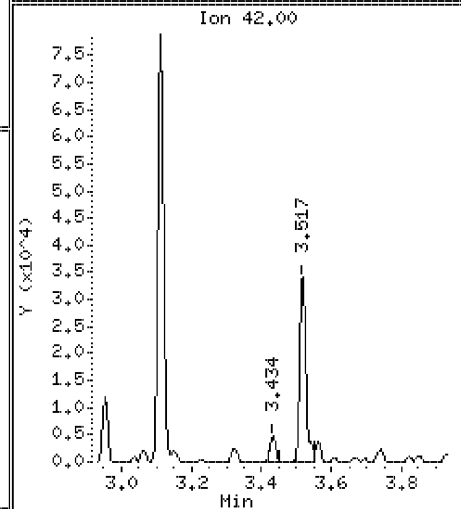
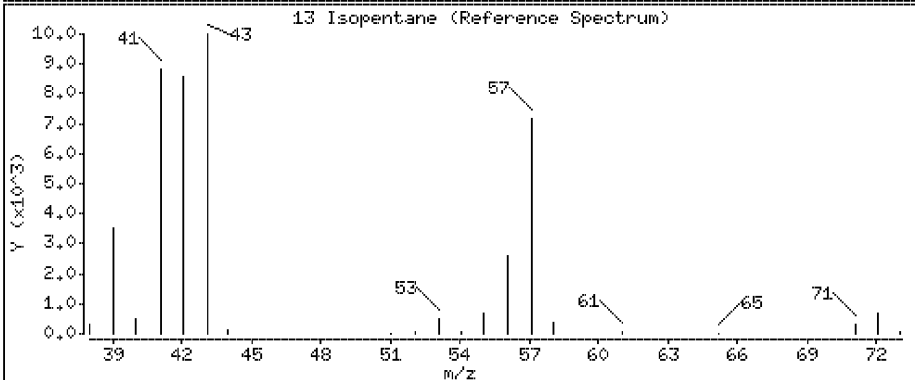
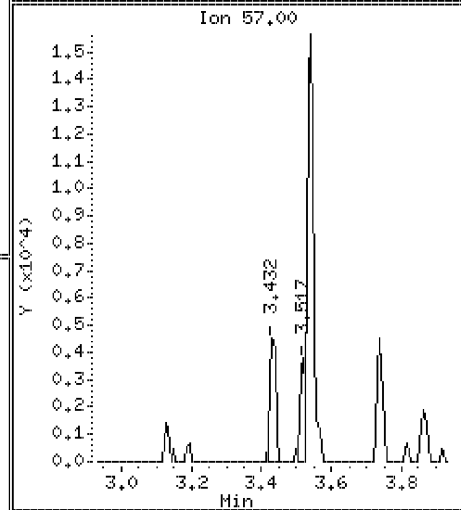
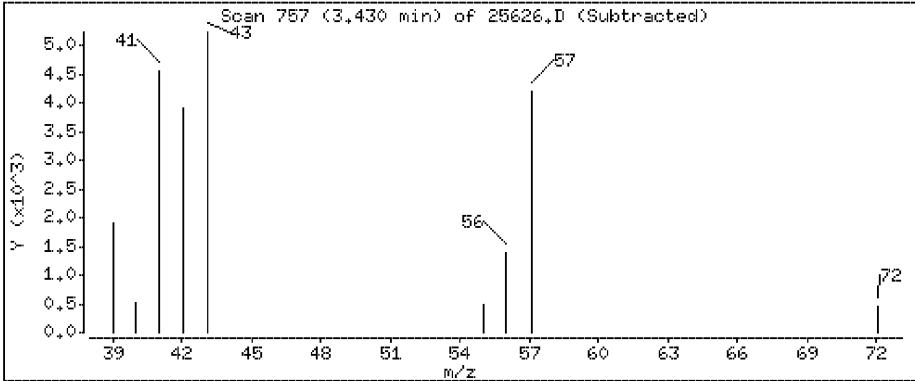
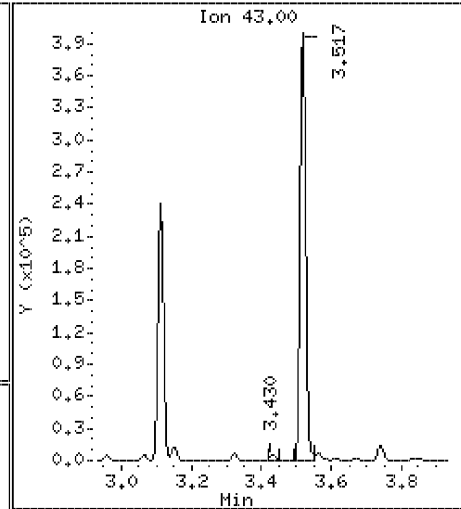
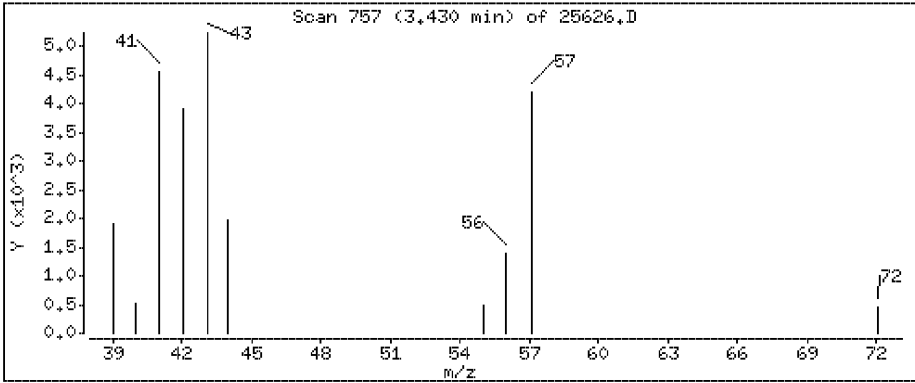
Operator: CH1

Column phase: ZB-5MSplus SN338857

Column diameter: 0.32

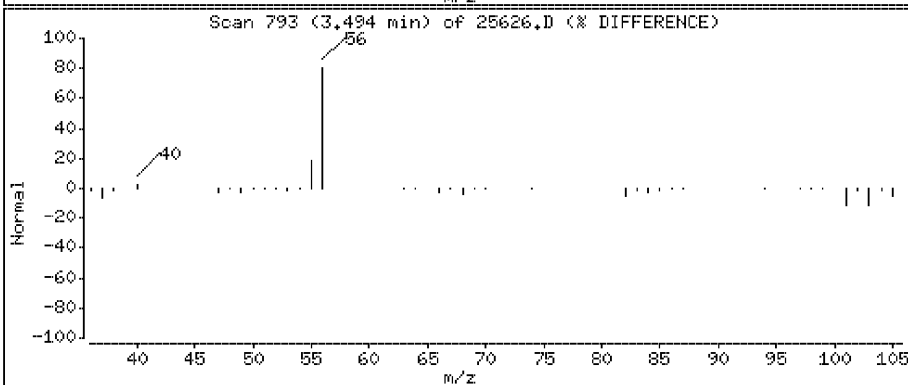
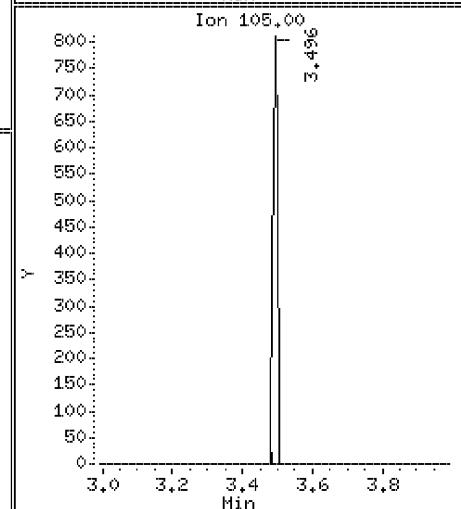
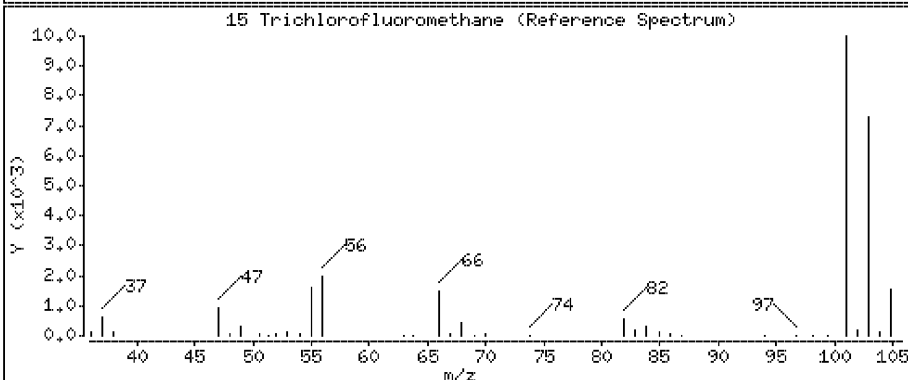
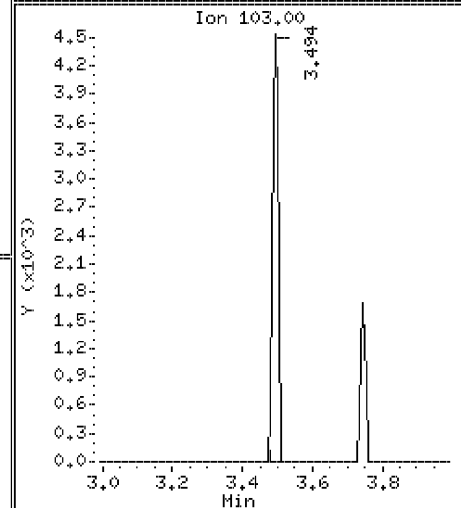
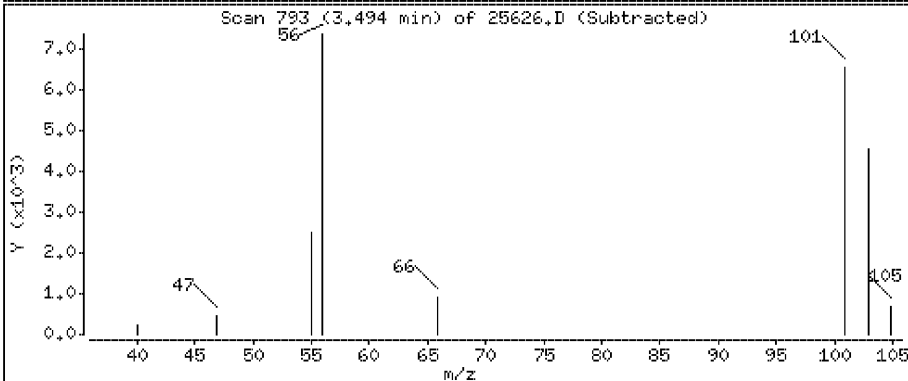
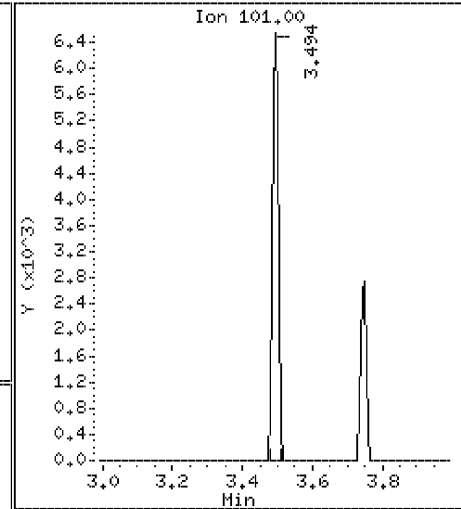
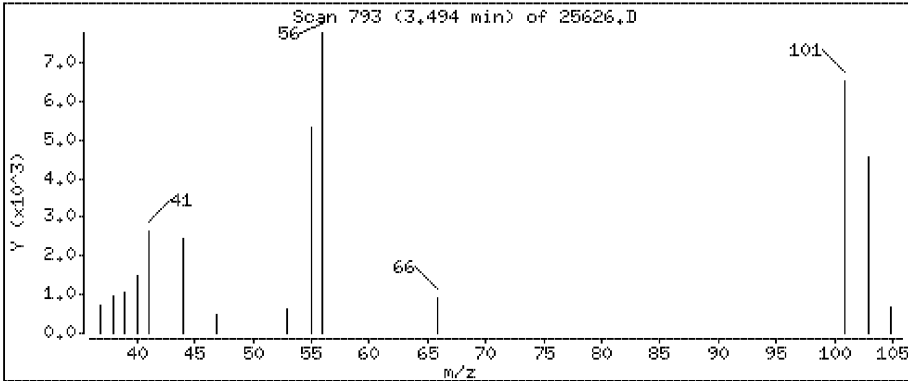
13 Isopentane

Concentration: 0.441 ppbv



15 Trichlorofluoromethane

Concentration: 0,160 ppbv



Data File: \\192.168.10.12\chem\10airH,1\091318,b\25626.D

Date : 13-SEP-2018 21:31

Client ID:

Instrument: 10airH.i

Sample Info:

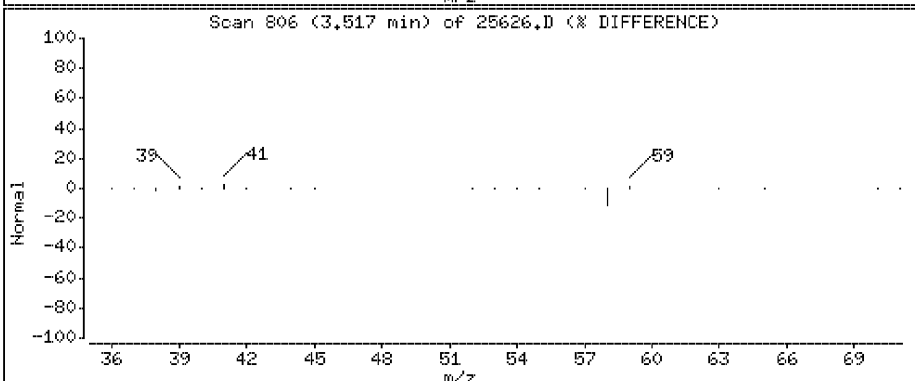
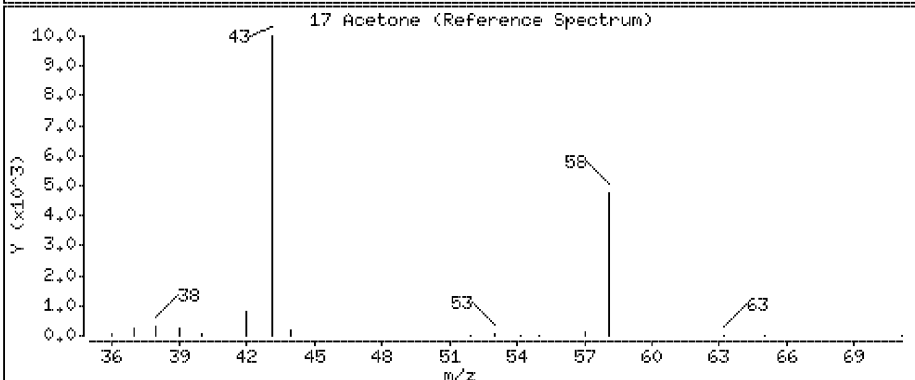
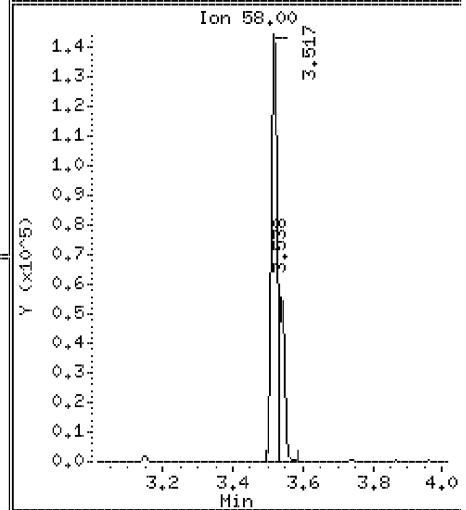
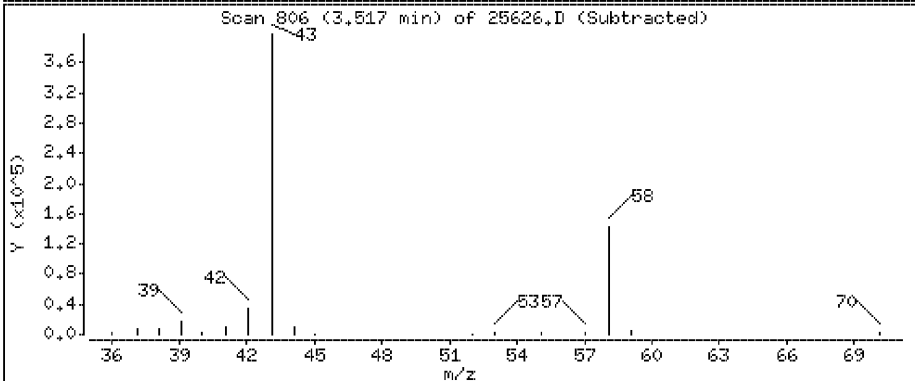
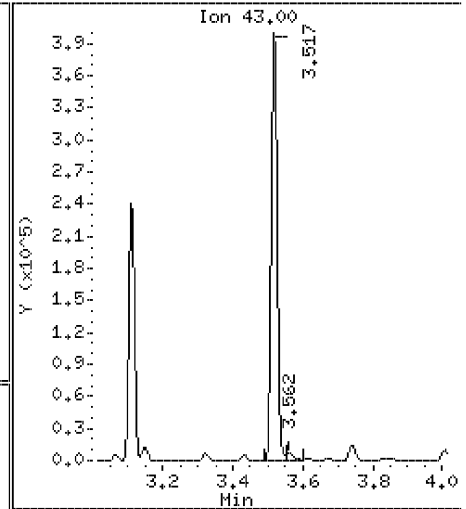
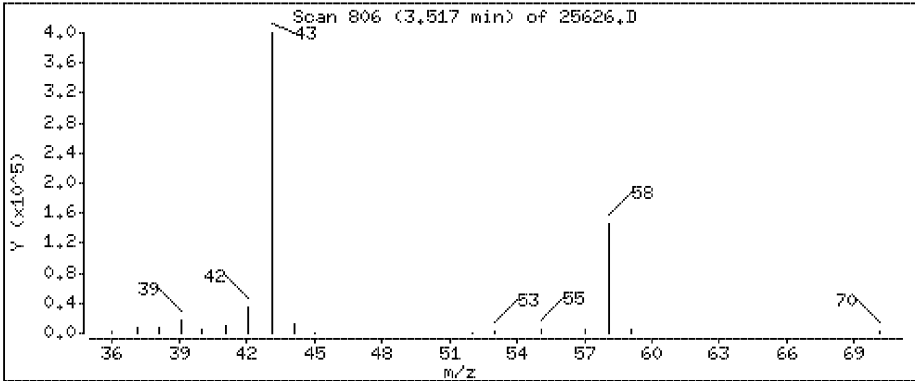
Operator: CH1

Column phase: ZB-5MSplus SN338857

Column diameter: 0,32

17 Acetone

Concentration: 23,3 ppbv



Data File: \\192.168.10.12\chem\10airH,i\091318,b\25626.D

Date : 13-SEP-2018 21:31

Client ID:

Instrument: 10airH.i

Sample Info:

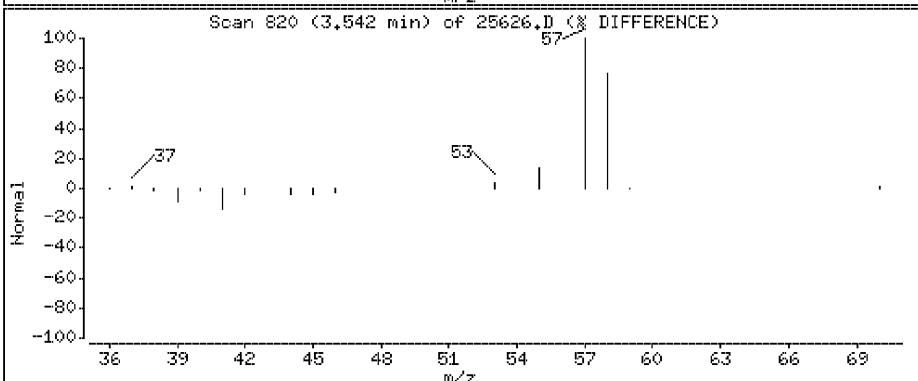
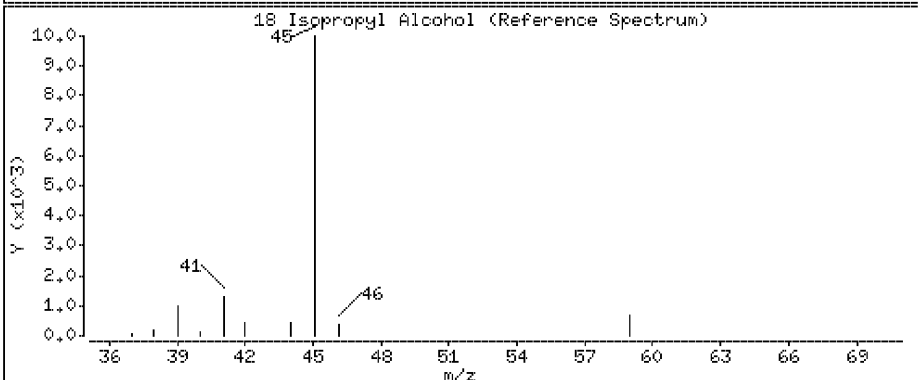
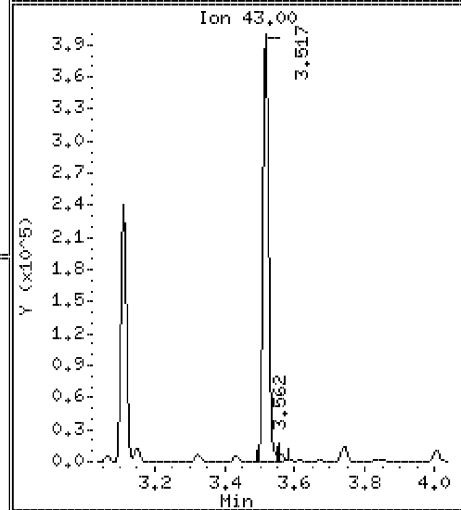
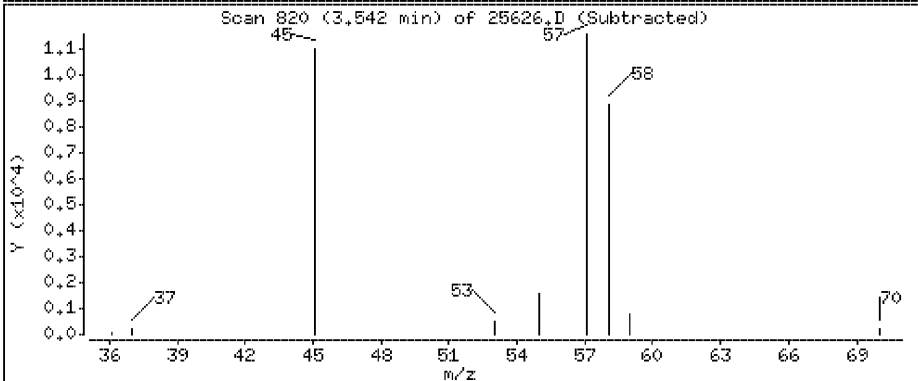
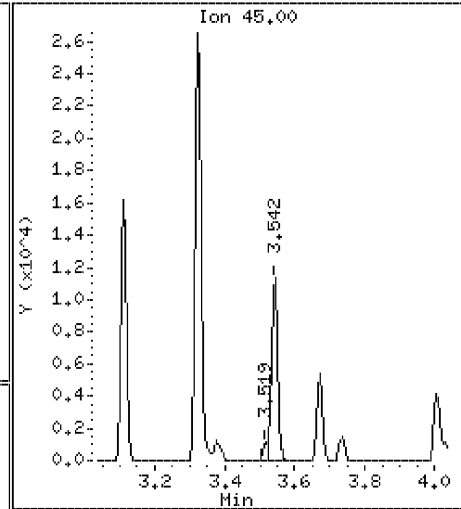
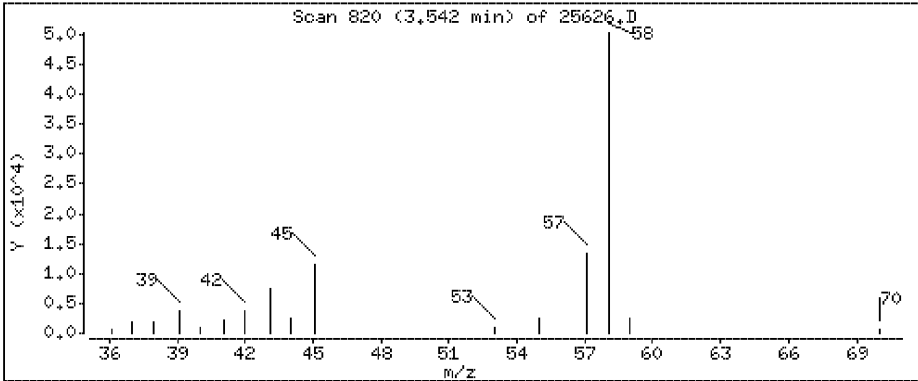
Operator: CH1

Column phase: ZB-5MSplus SN338857

Column diameter: 0.32

18 Isopropyl Alcohol

Concentration: 0.603 ppbv



Data File: \\192.168.10.12\chem\10airH,1\091318,b\25626.D

Date : 13-SEP-2018 21:31

Client ID:

Instrument: 10airH.i

Sample Info:

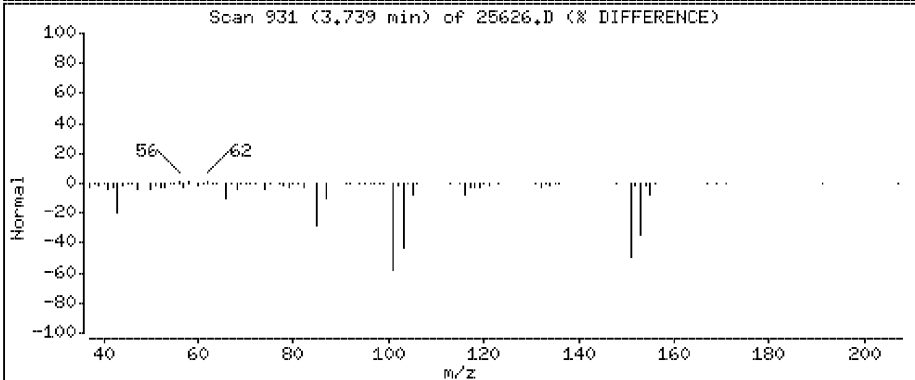
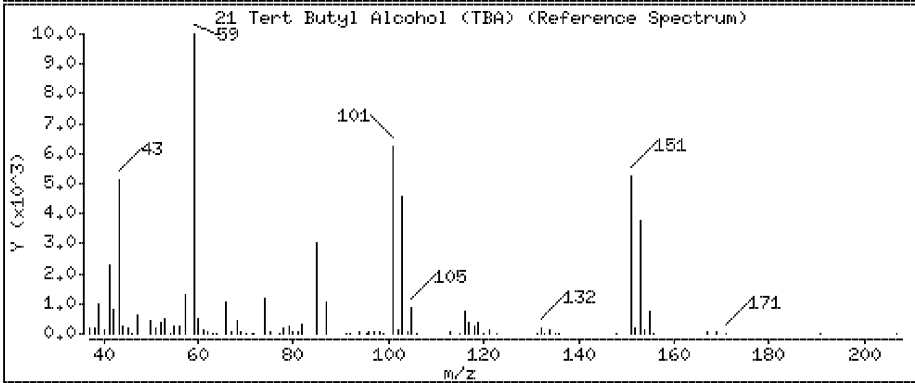
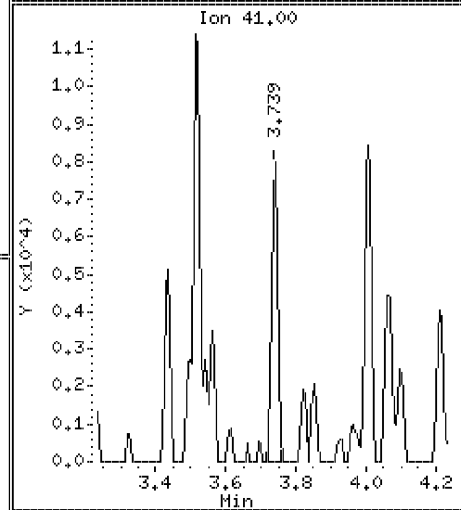
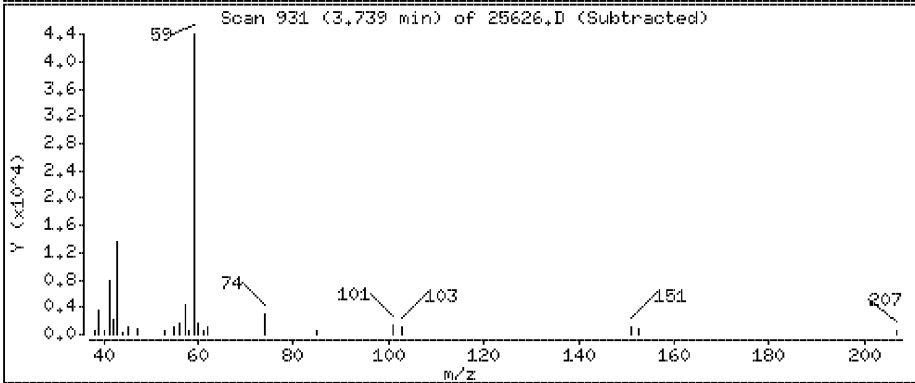
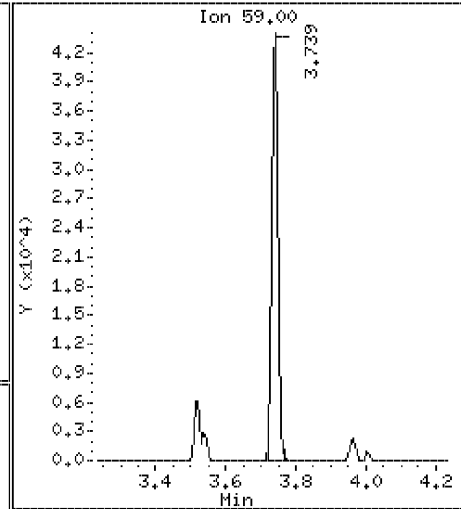
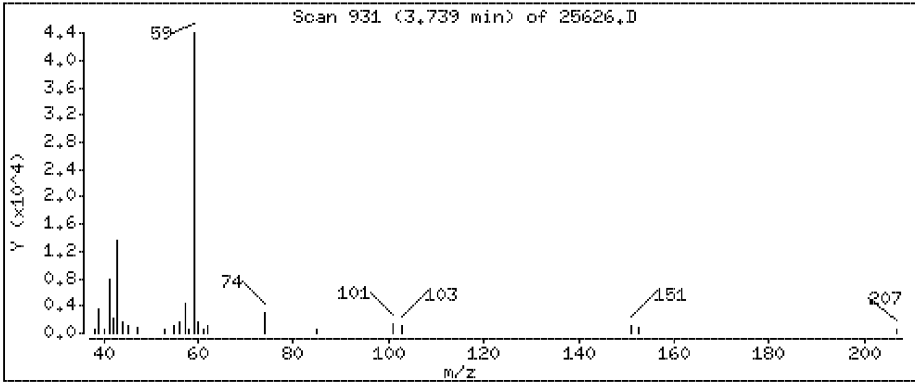
Operator: CH1

Column phase: ZB-5MSplus SN338857

Column diameter: 0.32

21 Tert Butyl Alcohol (TBA)

Concentration: 1.36 ppbv



Data File: \\192.168.10.12\chem\10airH,i\091318,b\25626.D

Date : 13-SEP-2018 21:31

Client ID:

Instrument: 10airH.i

Sample Info:

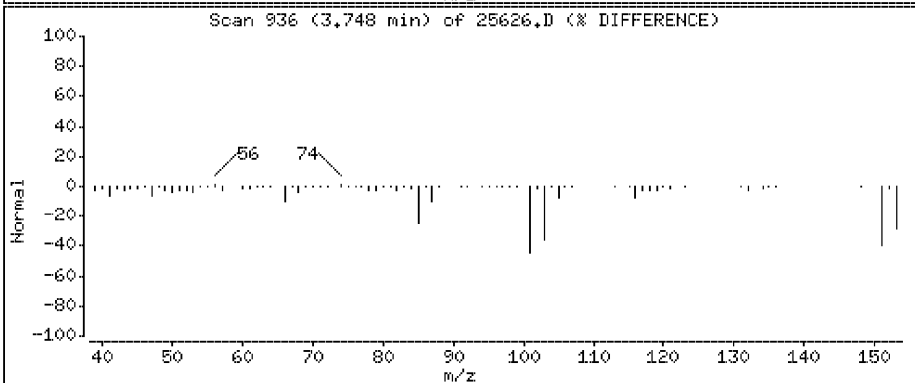
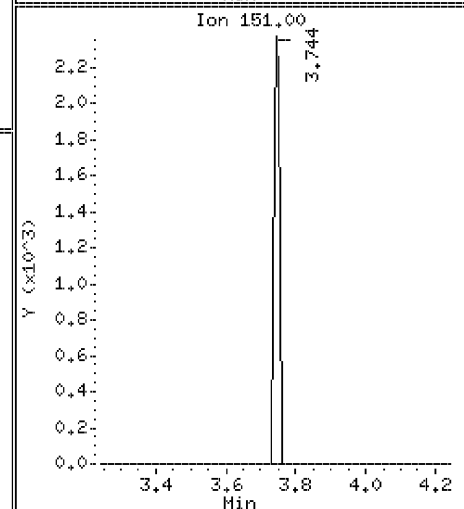
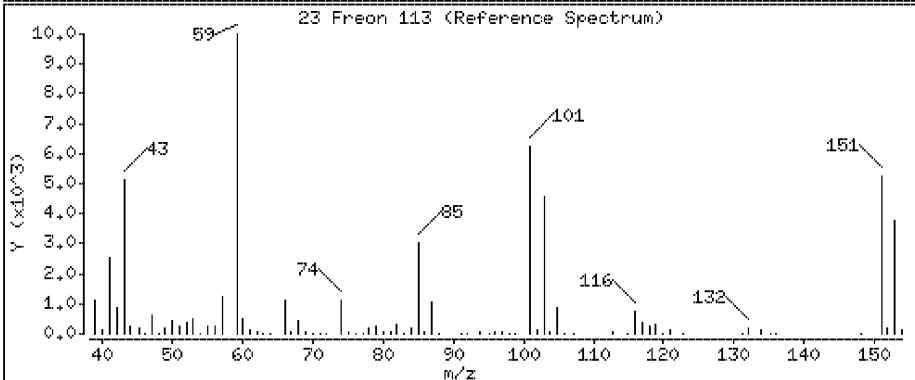
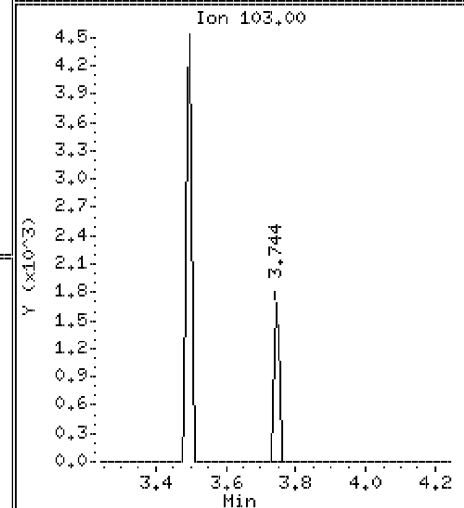
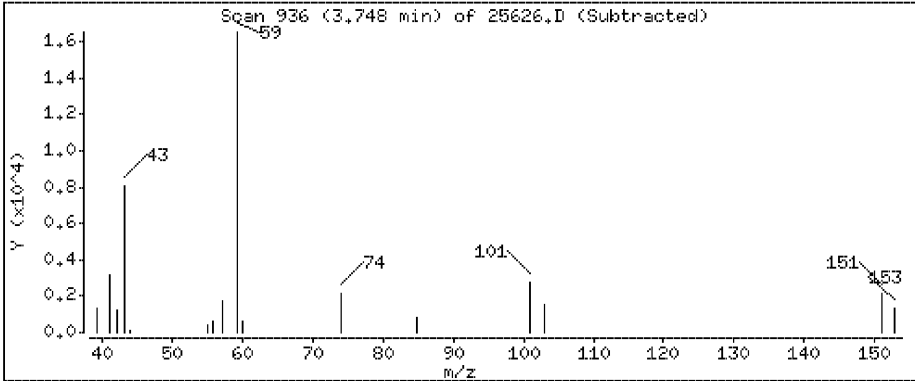
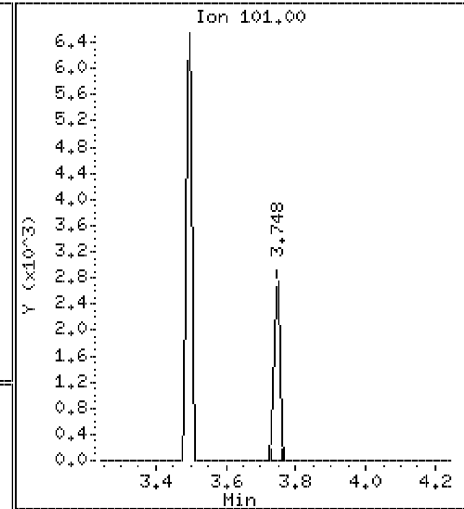
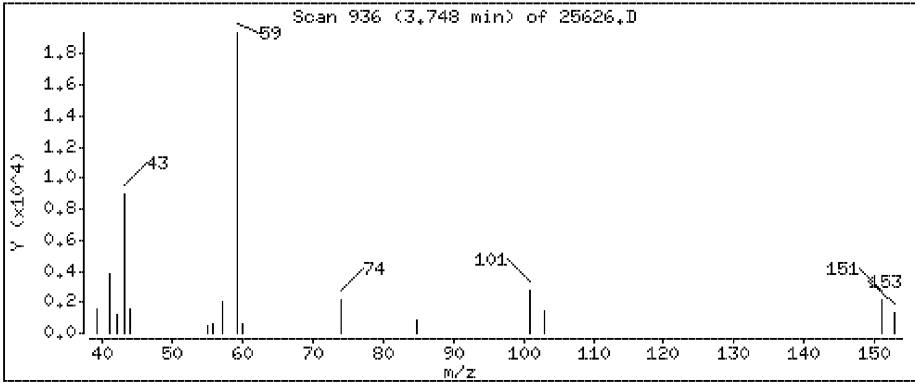
Operator: CH1

Column phase: ZB-5MSplus SN338857

Column diameter: 0,32

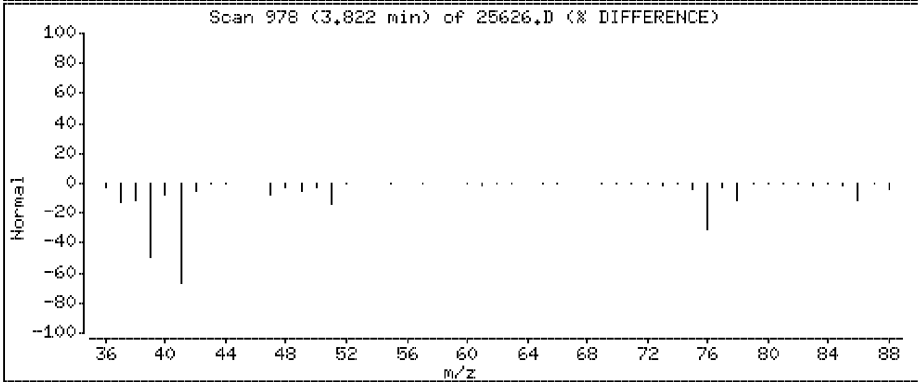
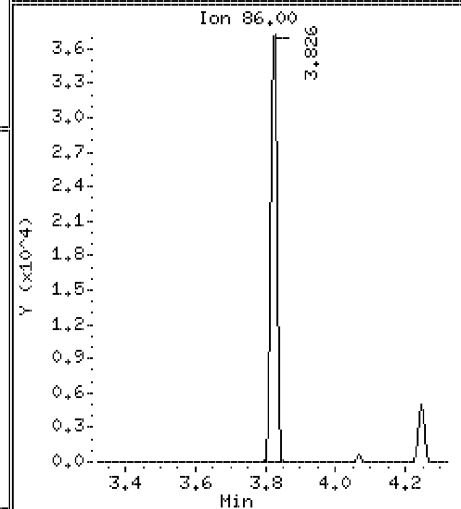
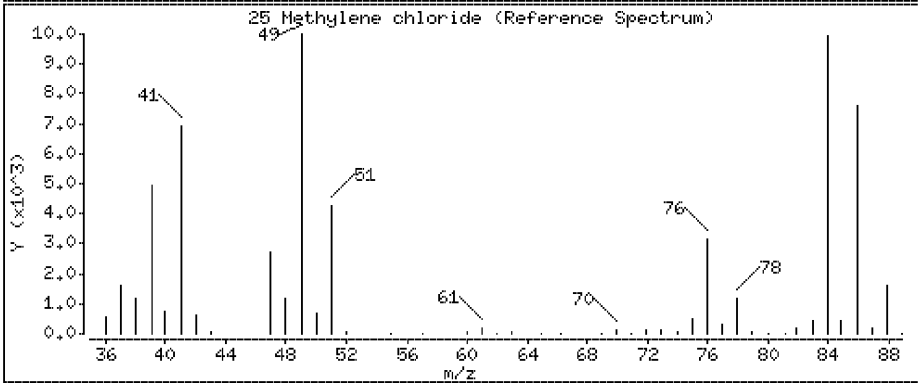
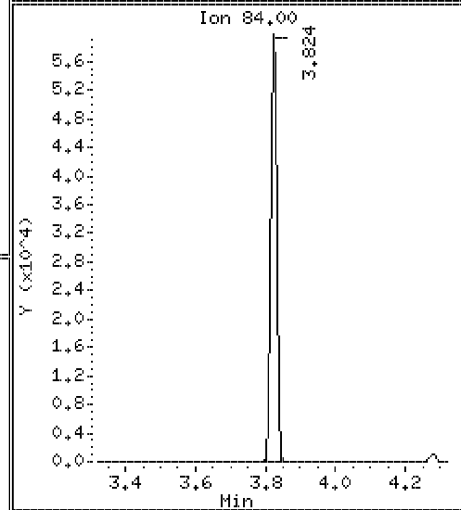
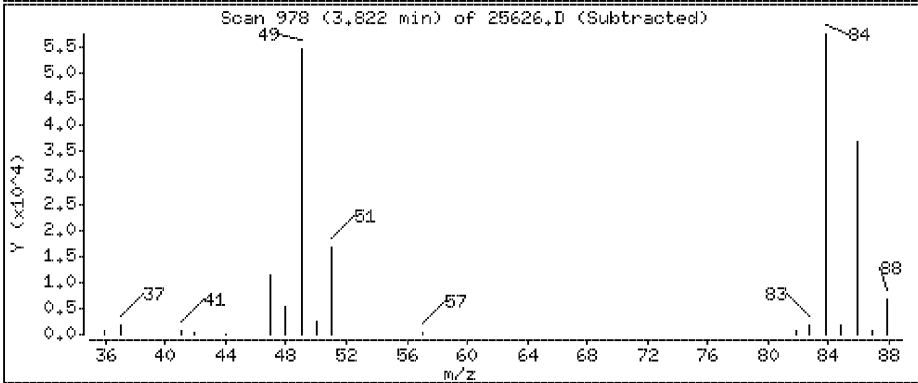
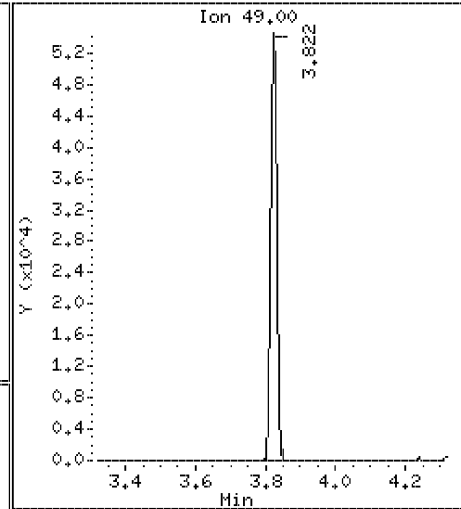
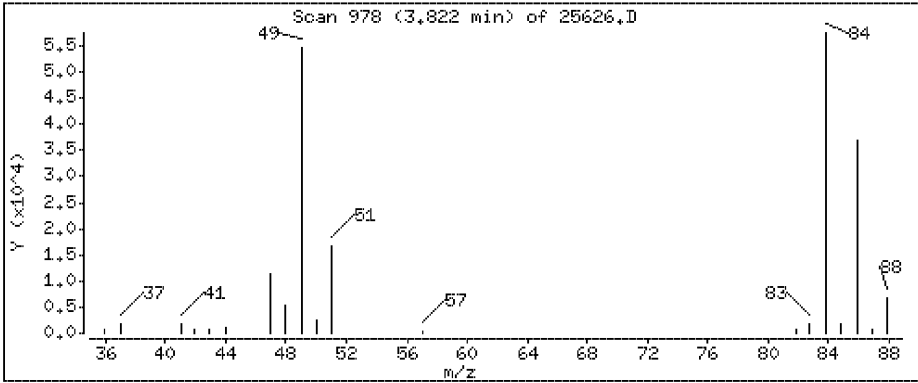
23 Freon 113

Concentration: 0,0613 ppbv



25 Methylene chloride

Concentration: 2.01 ppbv



Data File: \\192.168.10.12\chem\10airH,1\091318,b\25626.D

Date : 13-SEP-2018 21:31

Client ID:

Instrument: 10airH.i

Sample Info:

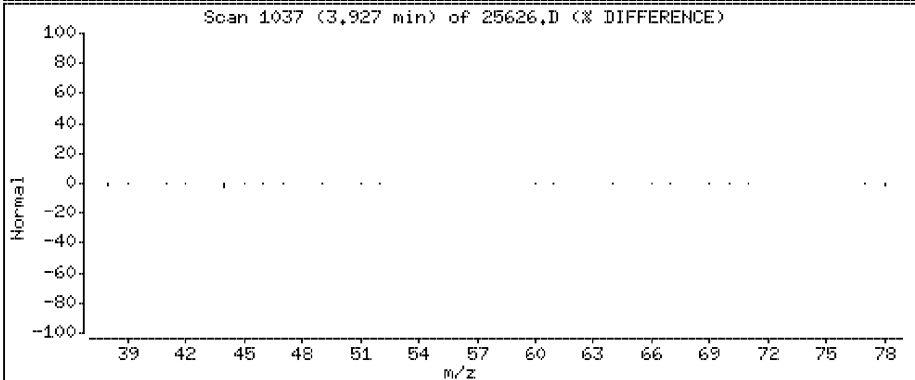
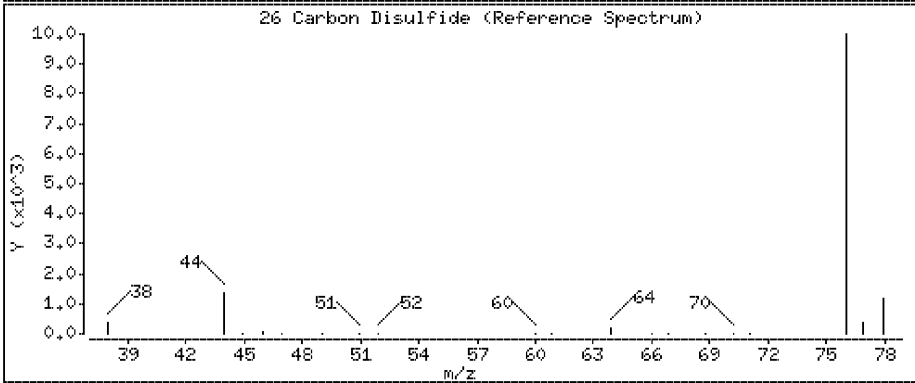
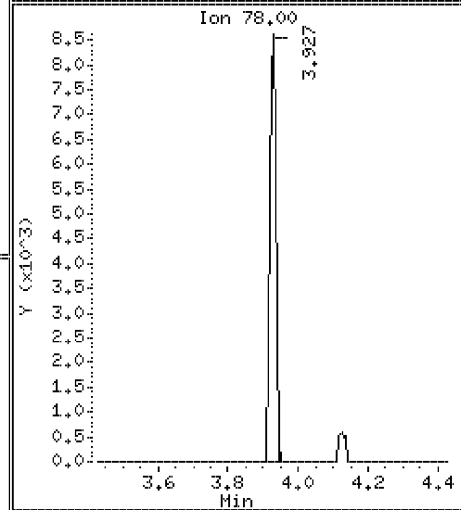
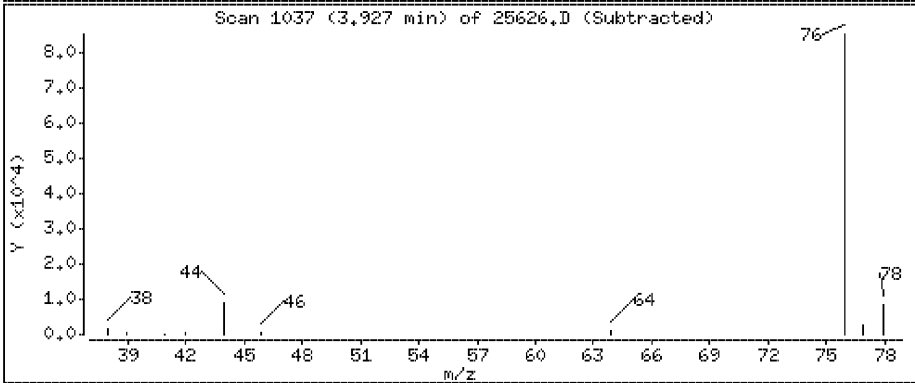
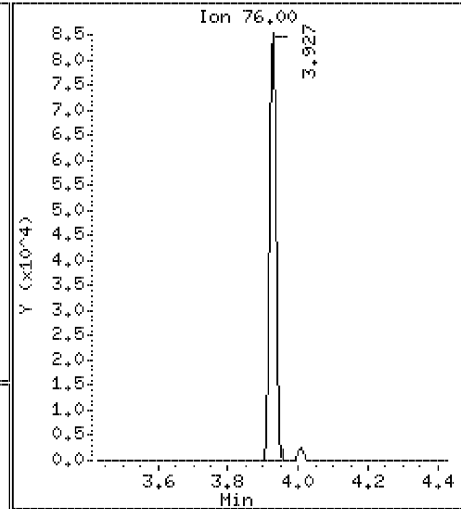
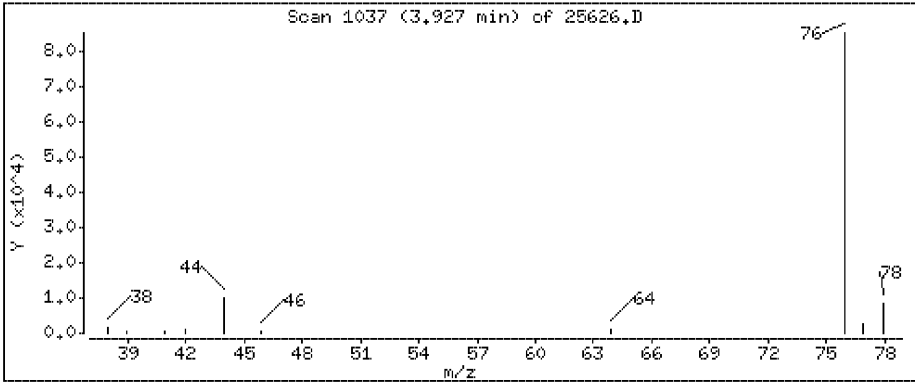
Operator: CH1

Column phase: ZB-5MSplus SN338857

Column diameter: 0.32

26 Carbon Disulfide

Concentration: 1.83 ppbv



Data File: \\192.168.10.12\chem\10airH,1\091318,b\25626.D

Date : 13-SEP-2018 21:31

Client ID:

Instrument: 10airH.i

Sample Info:

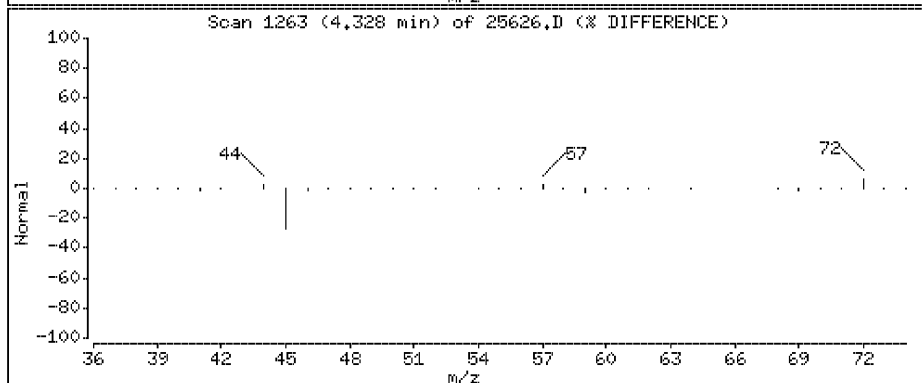
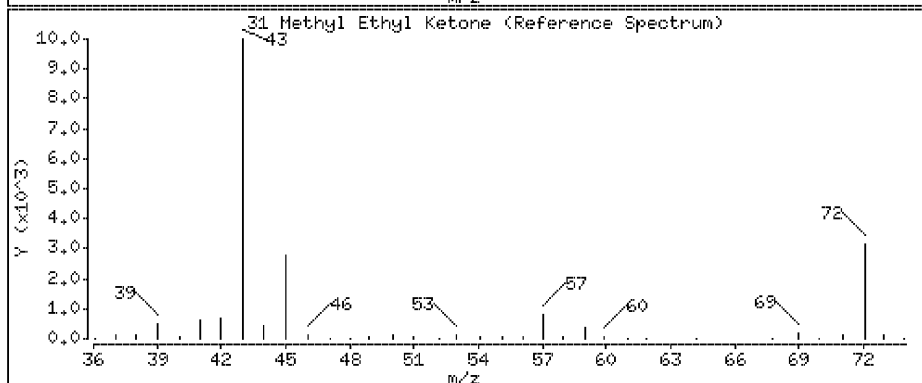
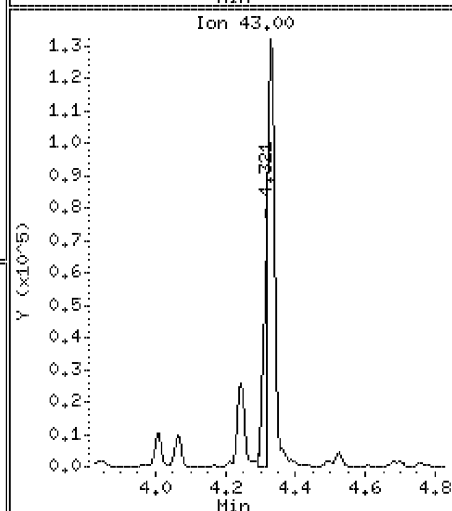
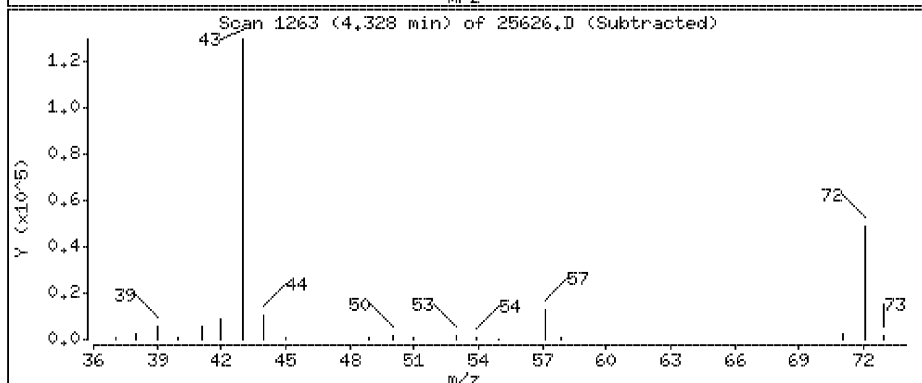
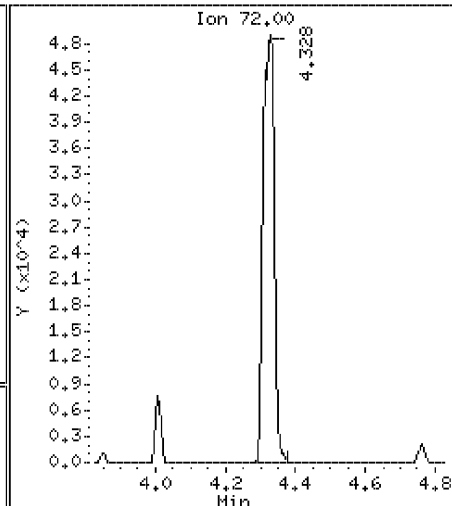
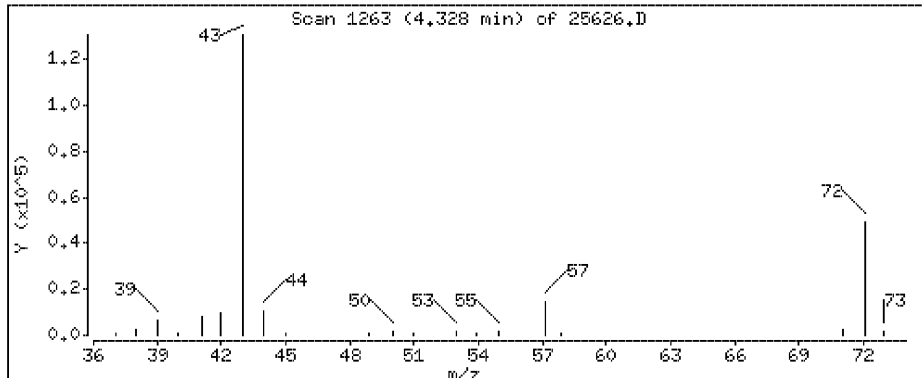
Operator: CH1

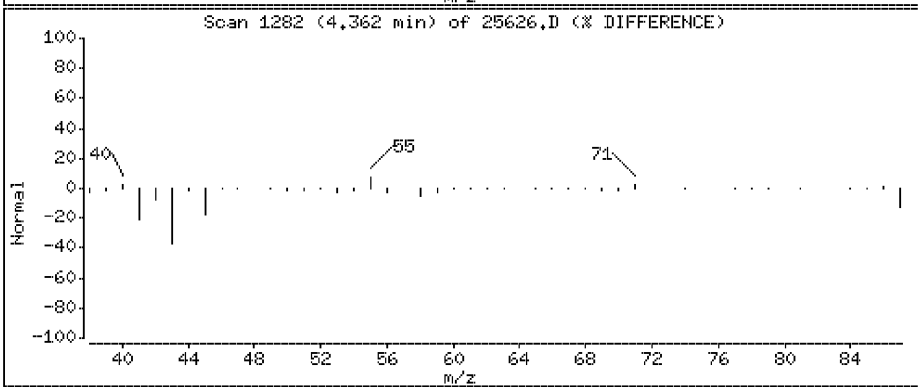
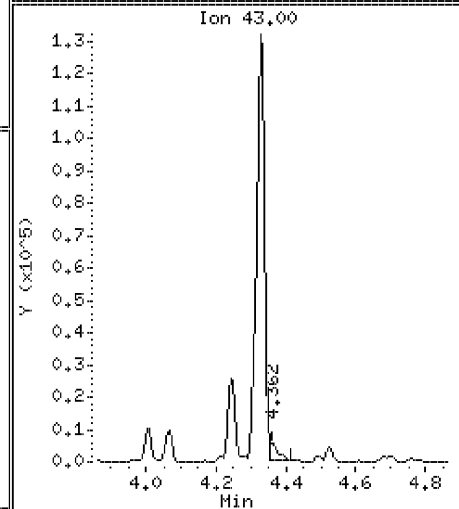
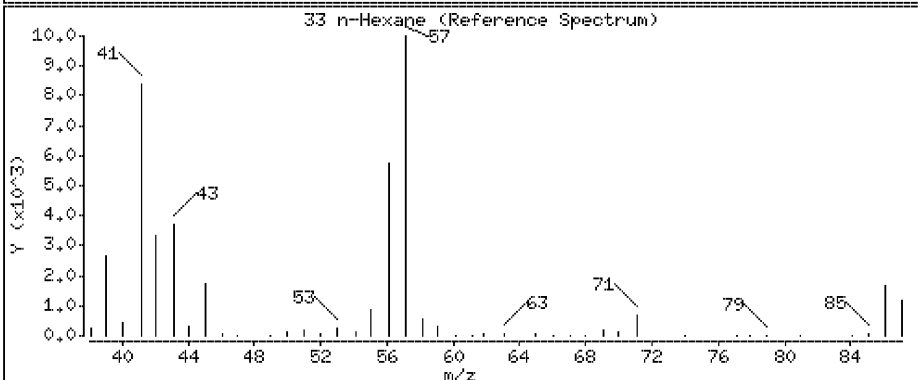
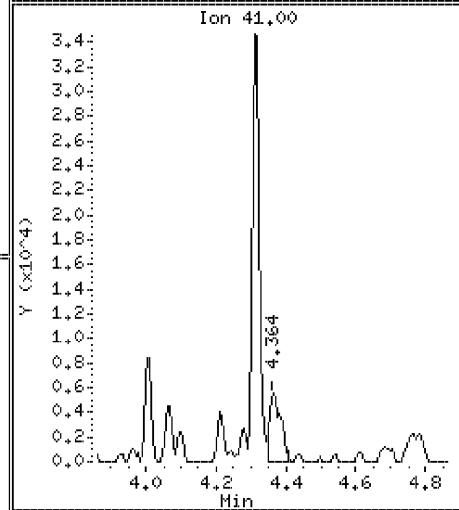
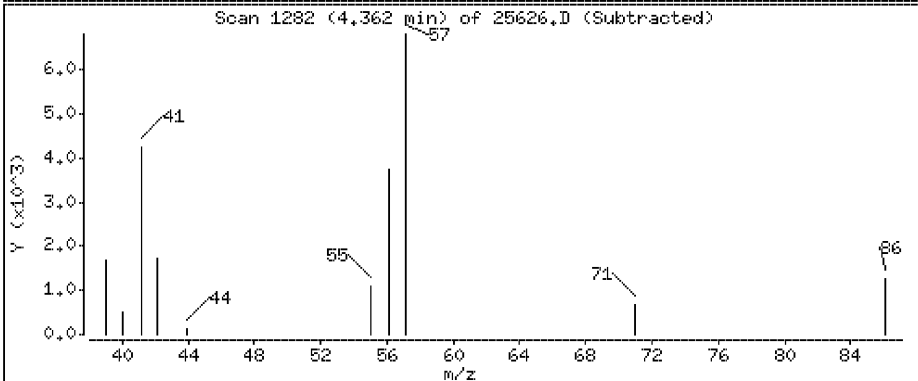
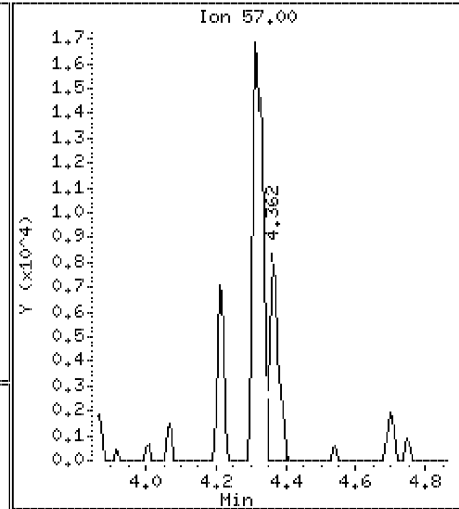
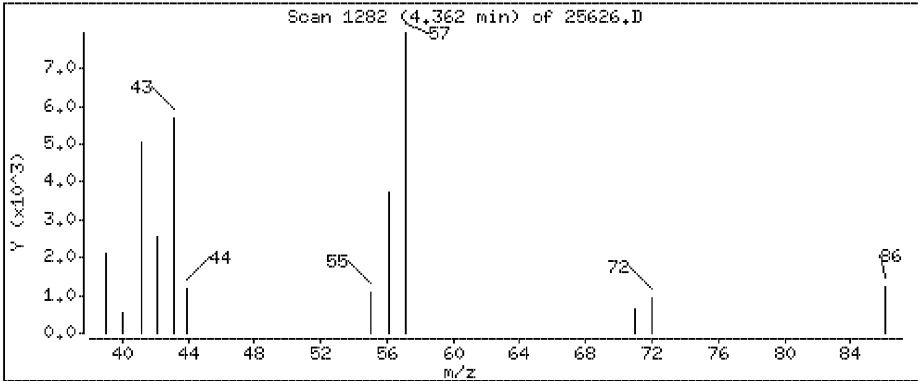
Column phase: ZB-5MSplus SN338857

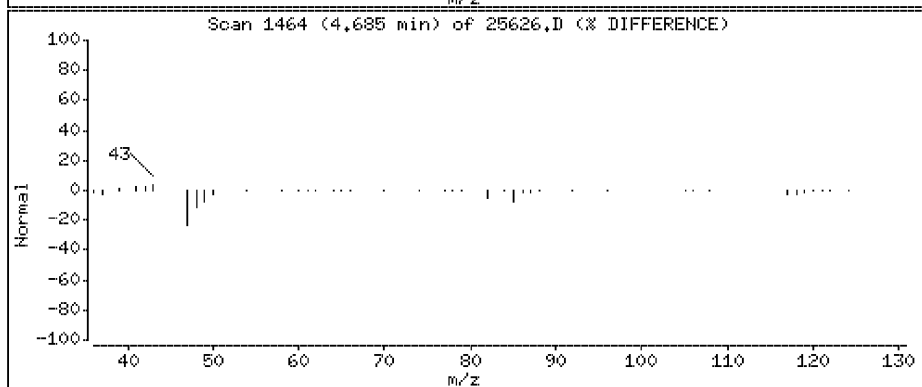
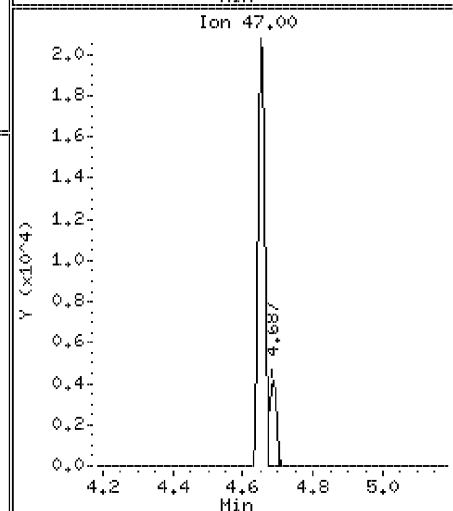
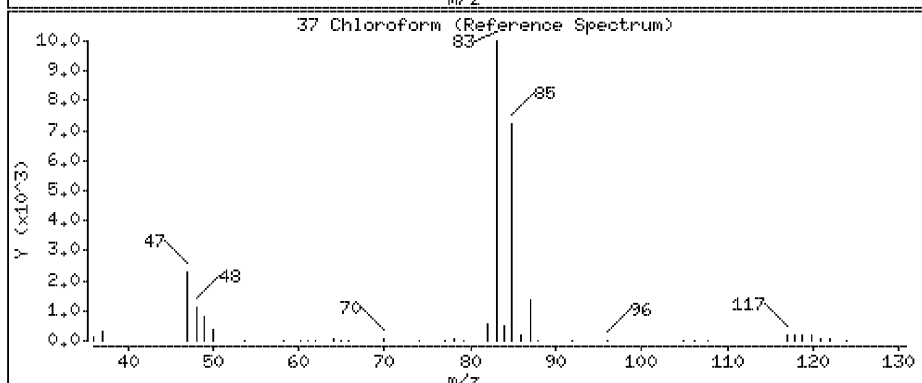
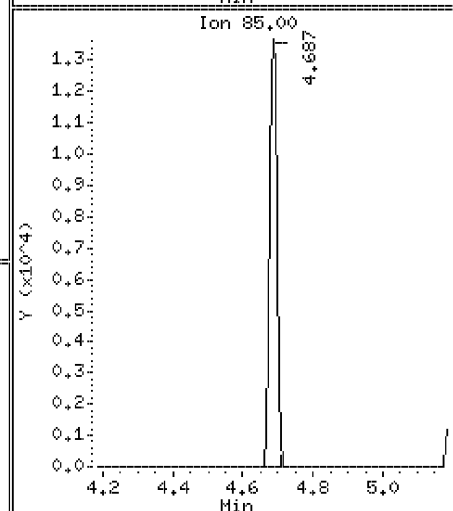
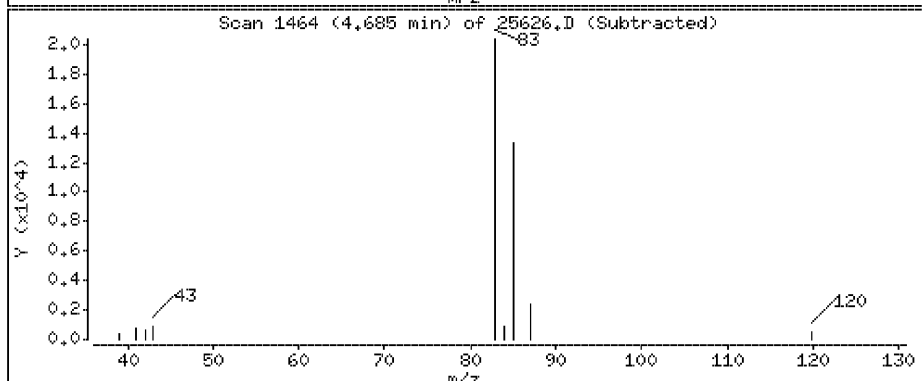
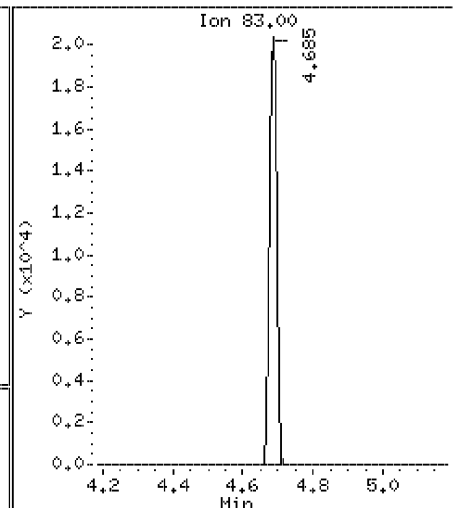
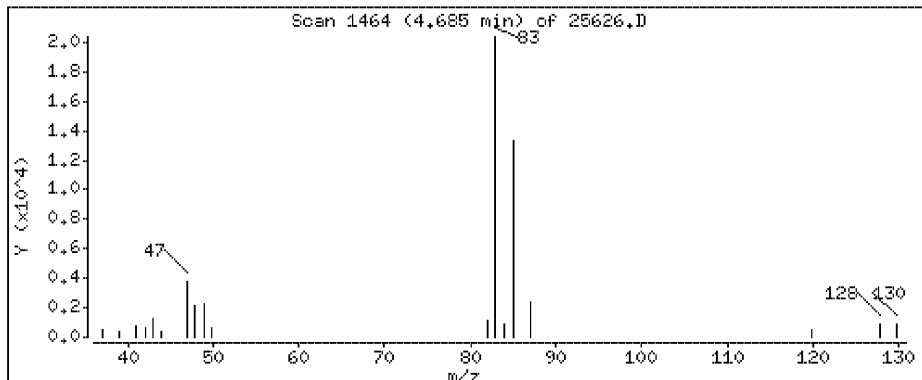
Column diameter: 0,32

31 Methyl Ethyl Ketone

Concentration: 10,9 ppbv

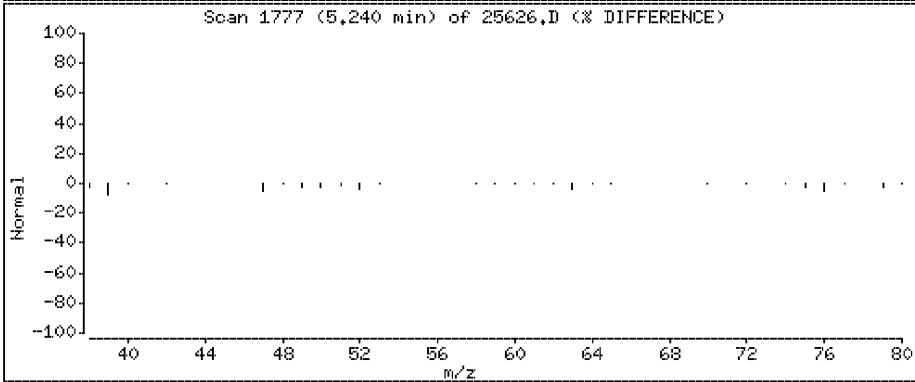
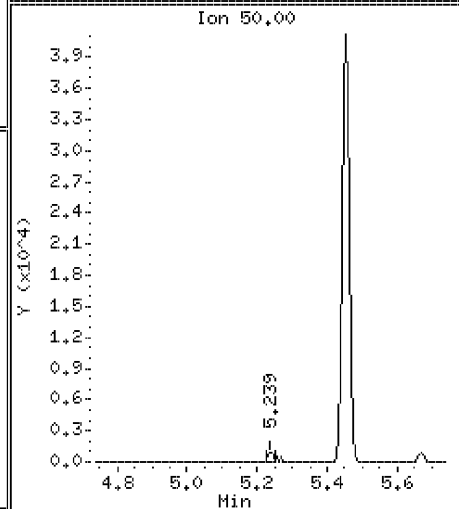
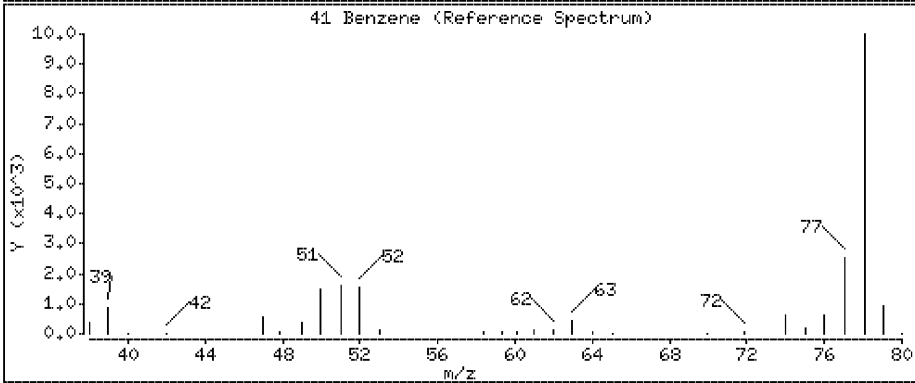
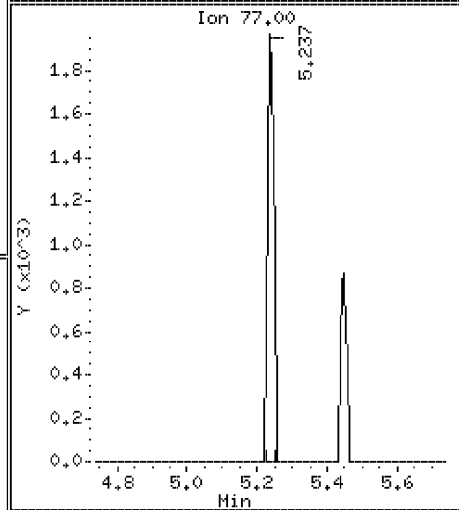
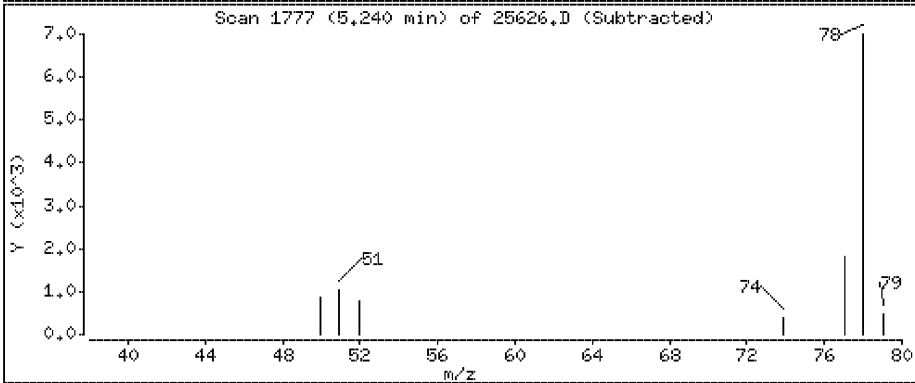
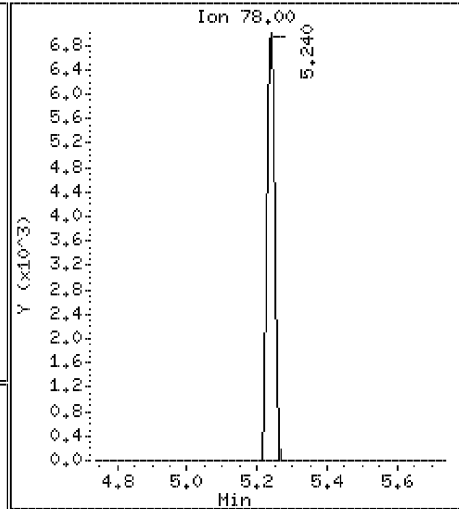
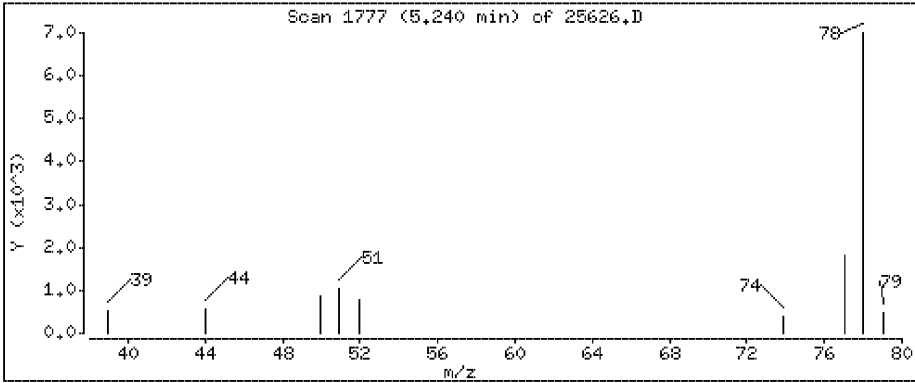


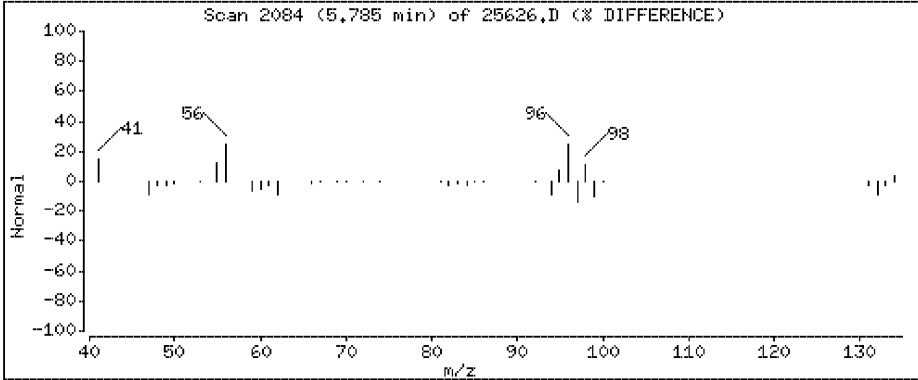
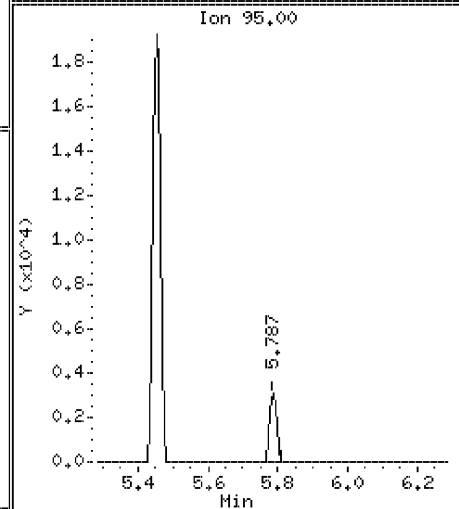
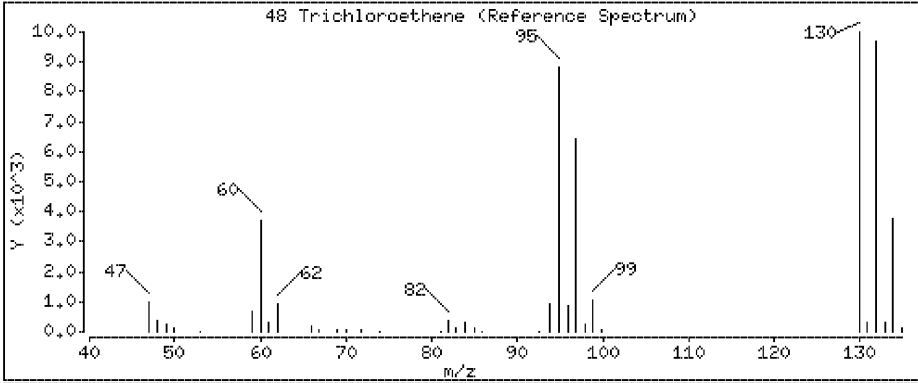
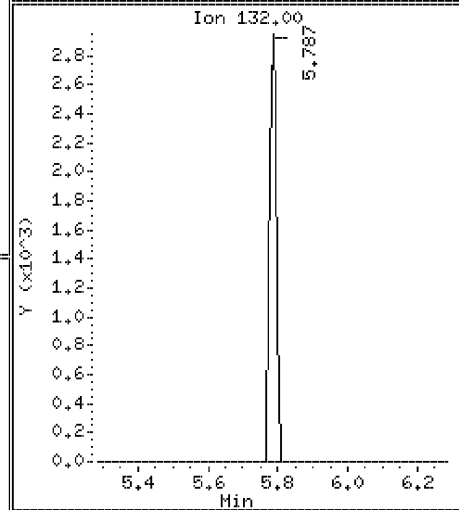
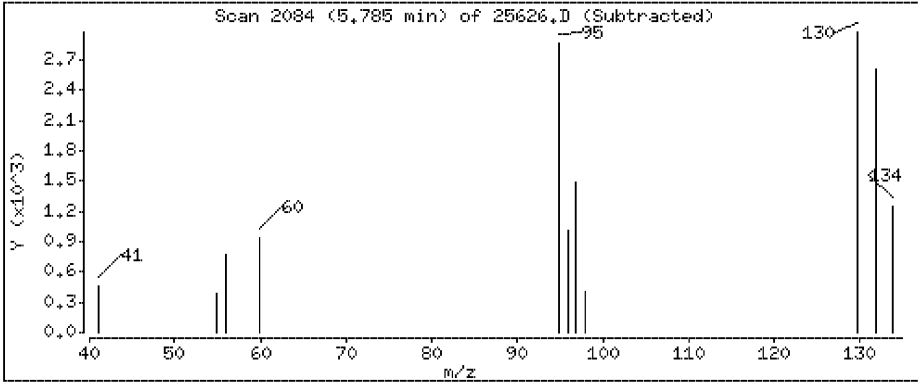
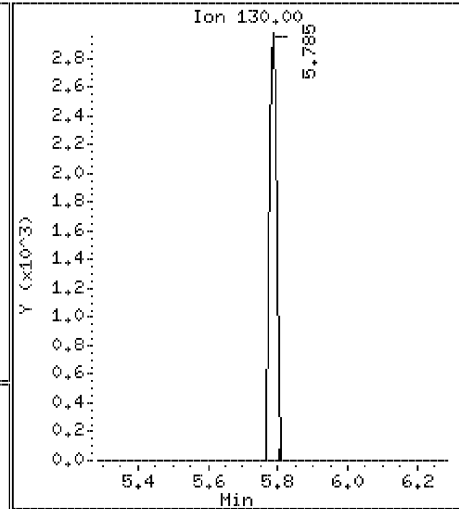
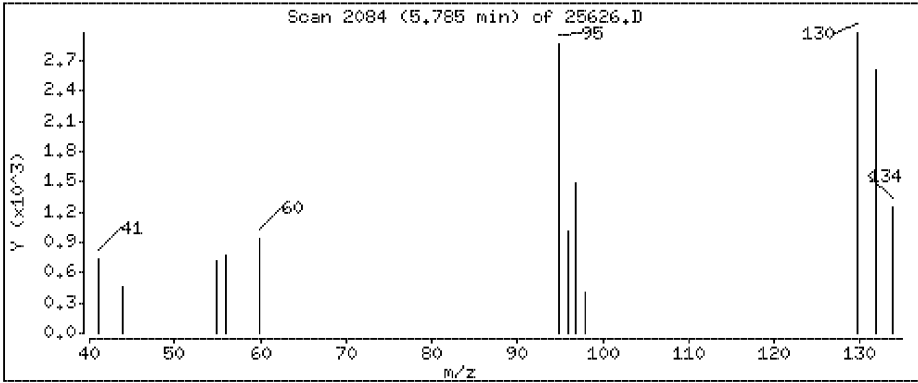




41 Benzene

Concentration: 0.174 ppbv





Data File: \\192.168.10.12\chem\10airH,1\091318,b\25626.D

Date : 13-SEP-2018 21:31

Client ID:

Instrument: 10airH.i

Sample Info:

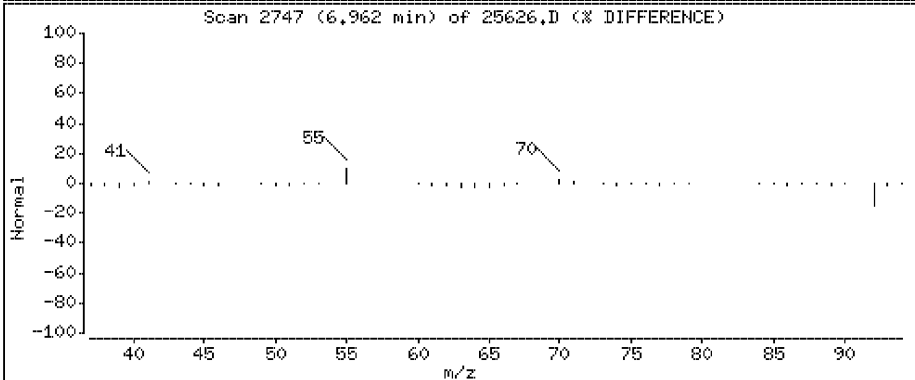
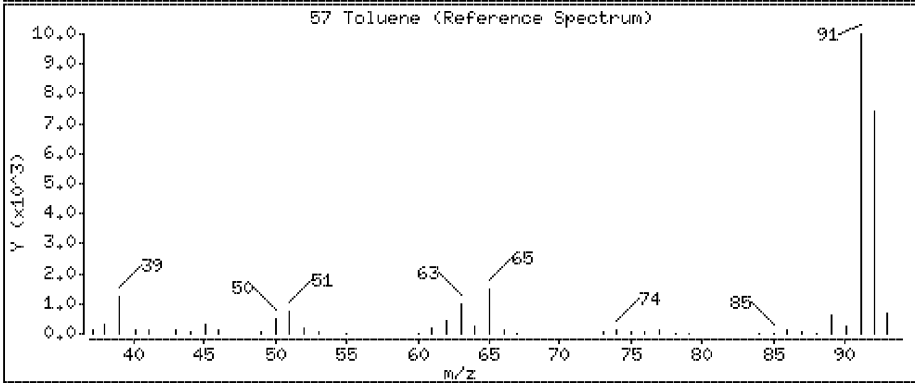
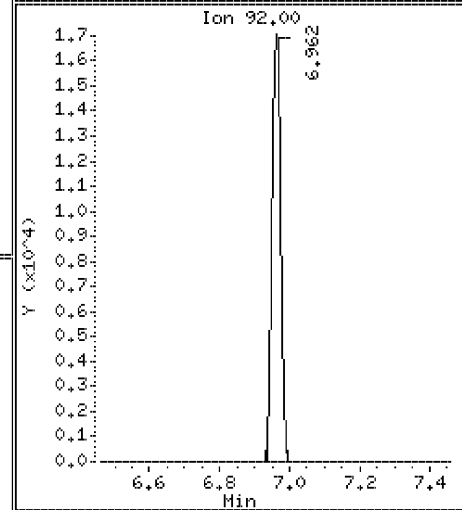
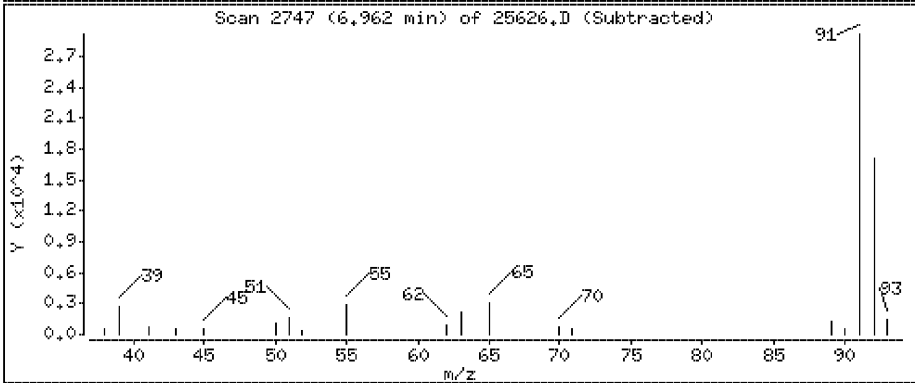
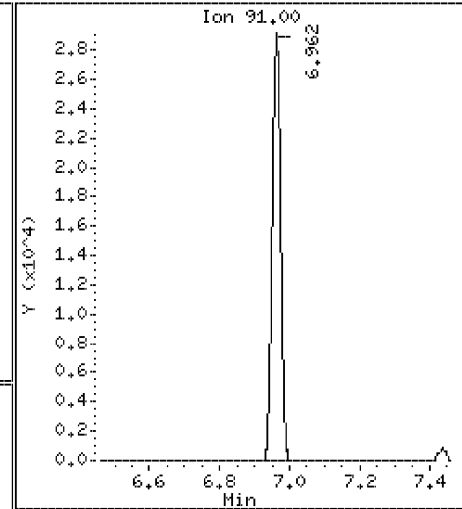
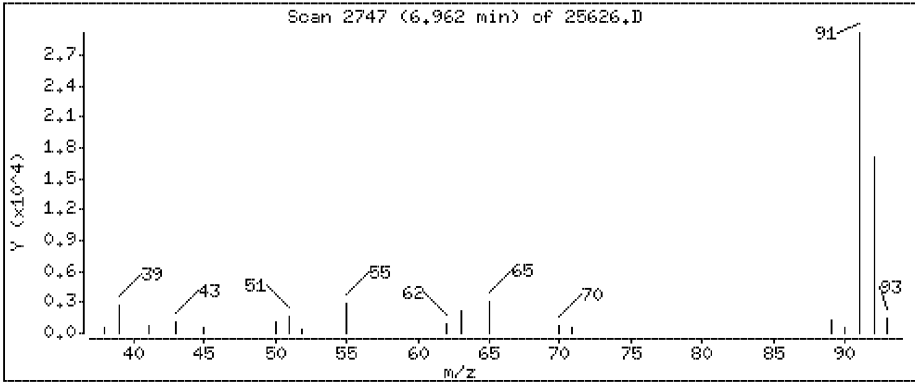
Operator: CH1

Column phase: ZB-5MSplus SN338857

Column diameter: 0,32

57 Toluene

Concentration: 0,780 ppbv



Data File: \\192.168.10.12\chem\10airH,1\091318,b\25626.D

Date : 13-SEP-2018 21:31

Client ID:

Instrument: 10airH.i

Sample Info:

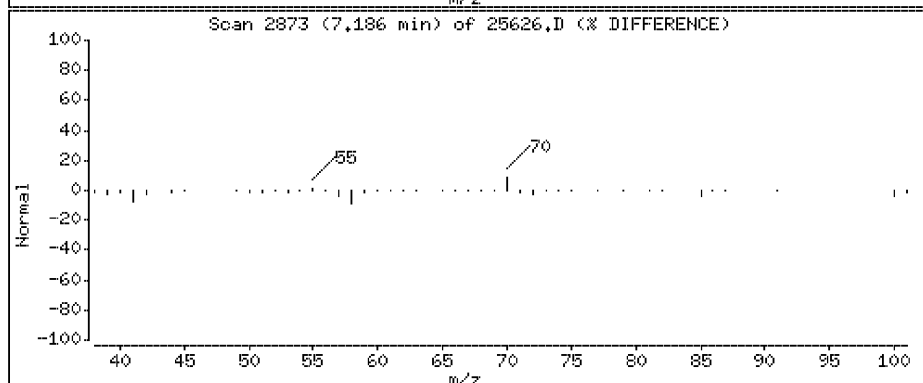
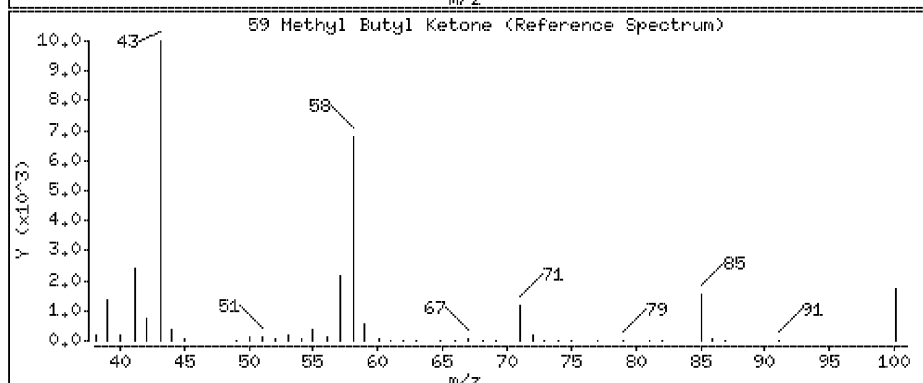
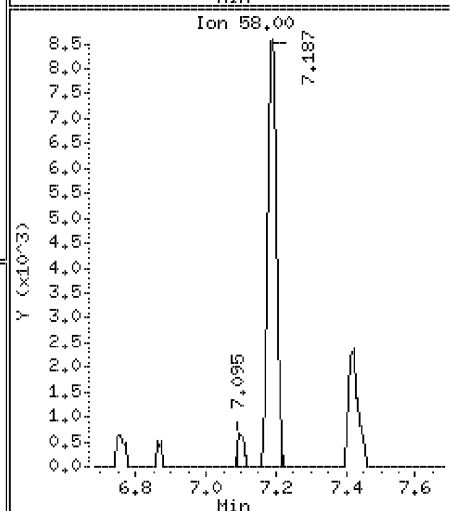
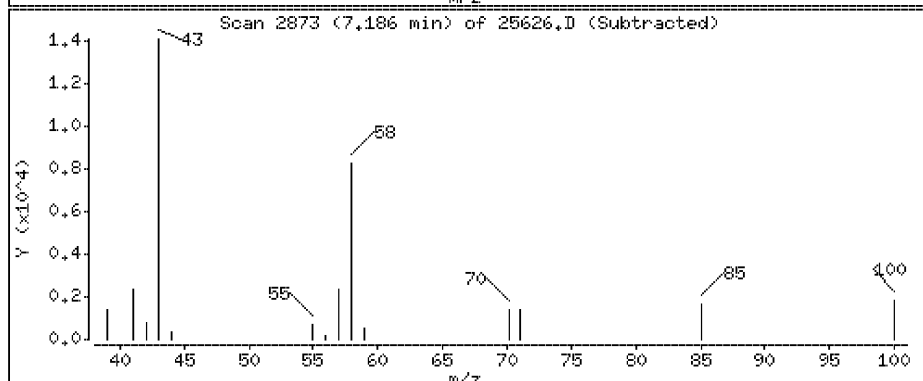
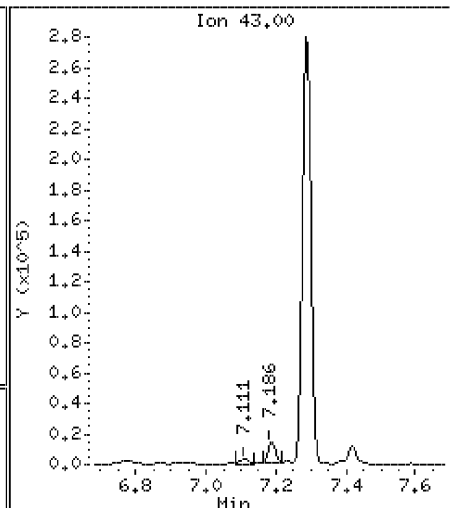
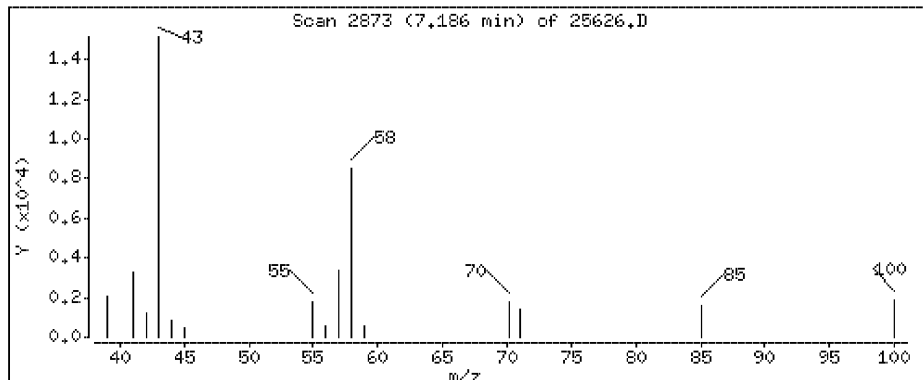
Operator: CH1

Column phase: ZB-5MSplus SN338857

Column diameter: 0.32

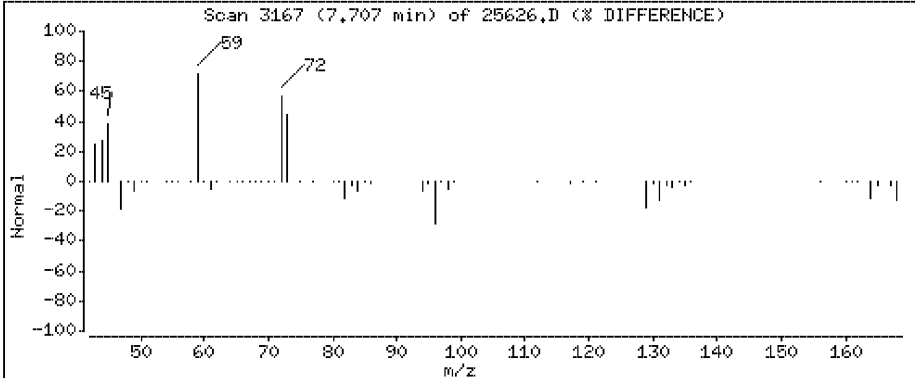
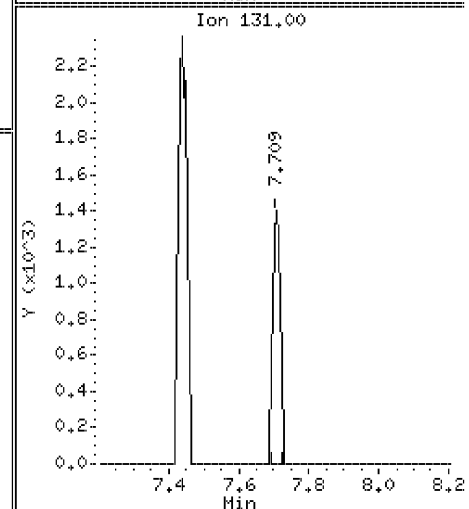
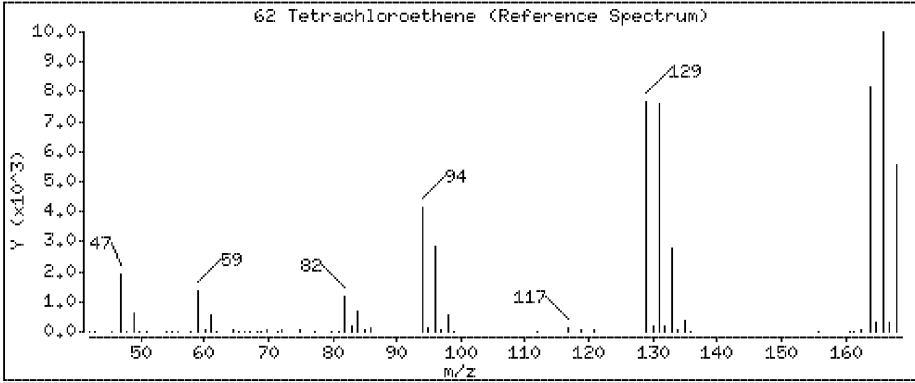
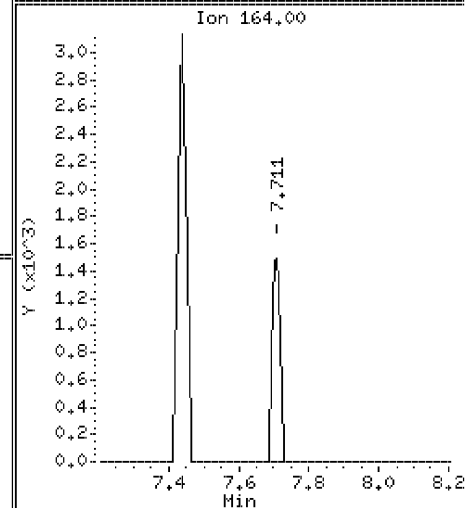
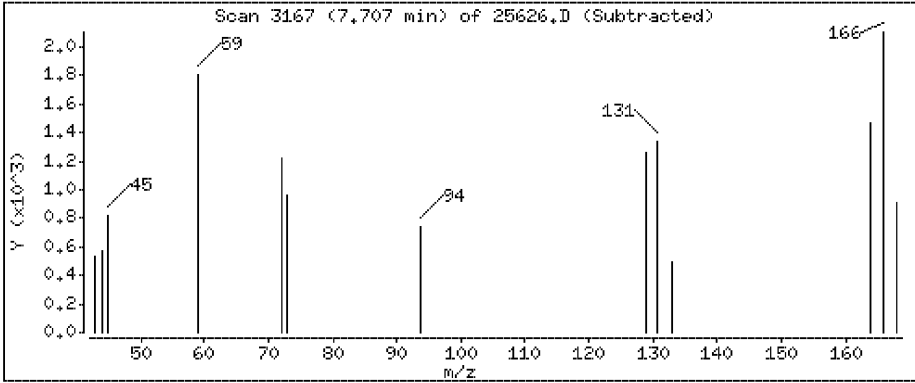
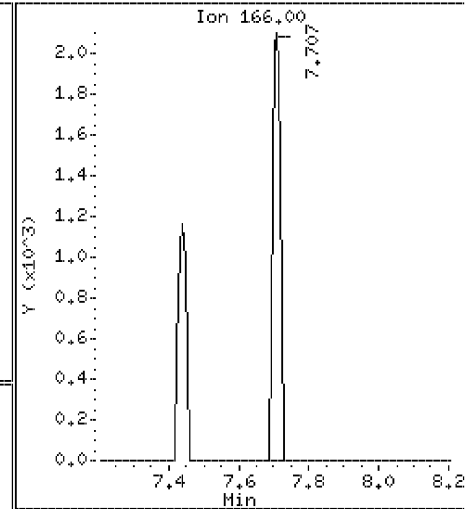
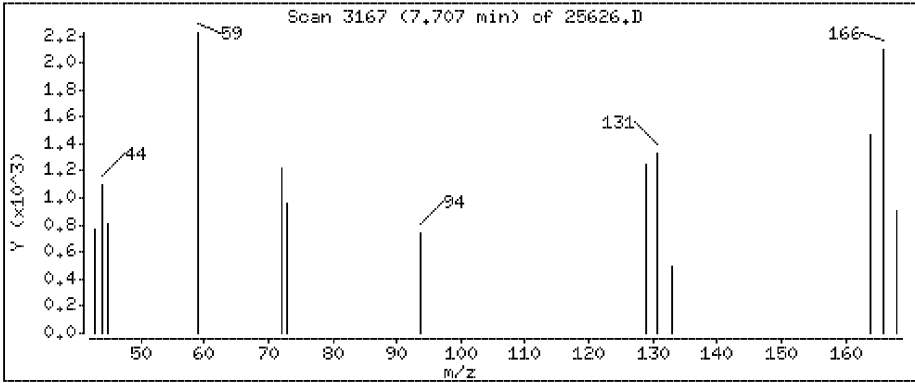
59 Methyl Butyl Ketone

Concentration: 0.909 ppbv



62 Tetrachloroethene

Concentration: 0.0760 ppbv



Data File: \\192.168.10.12\chem\10airH,i\091318,b\25626.D

Date : 13-SEP-2018 21:31

Client ID:

Instrument: 10airH.i

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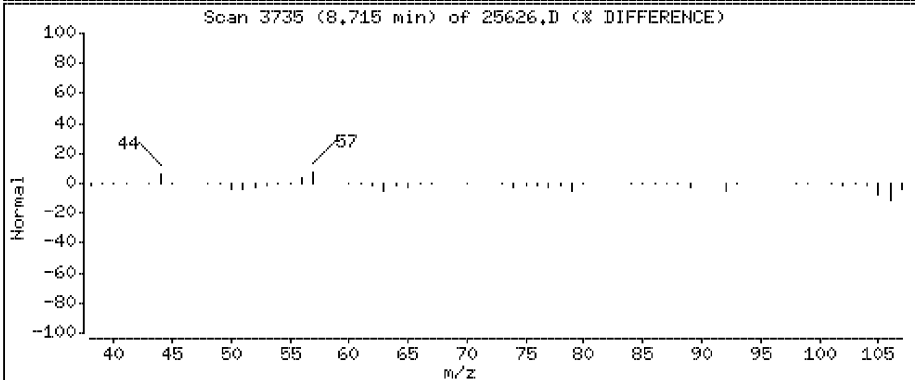
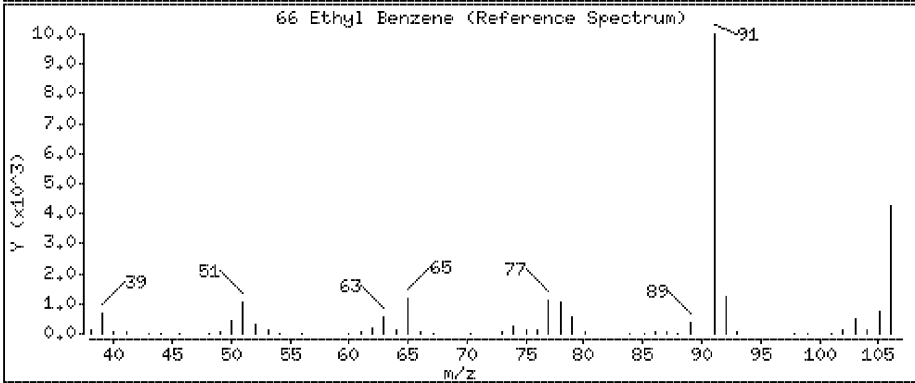
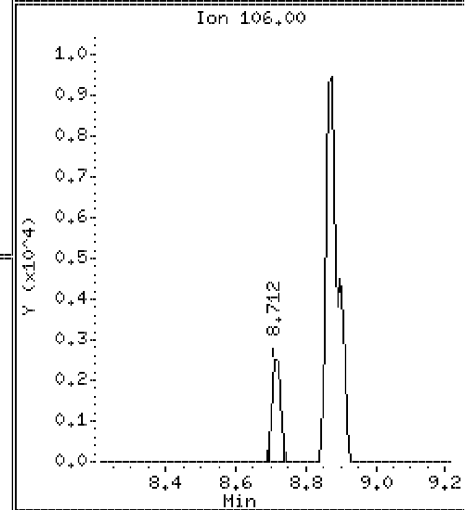
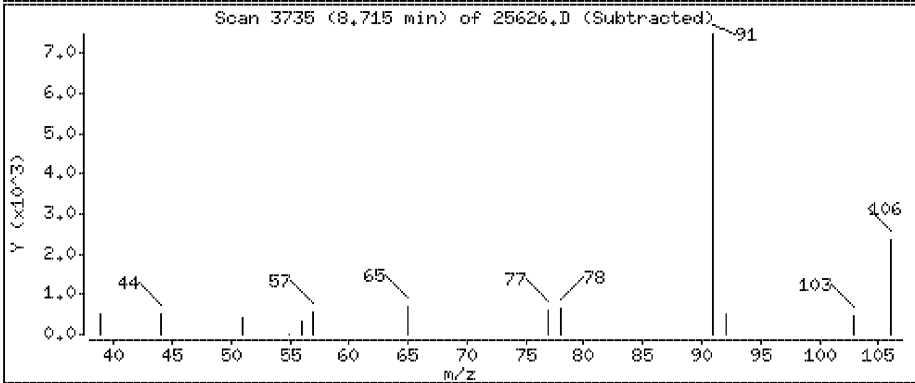
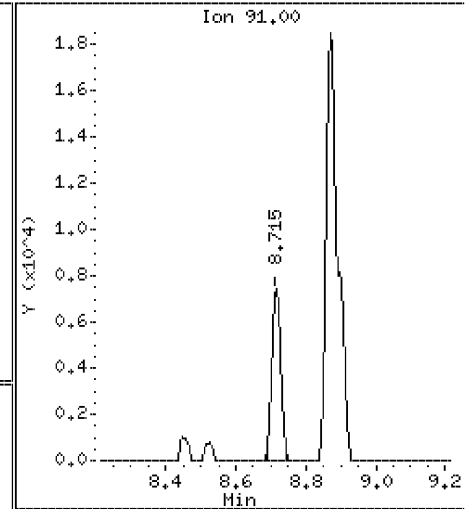
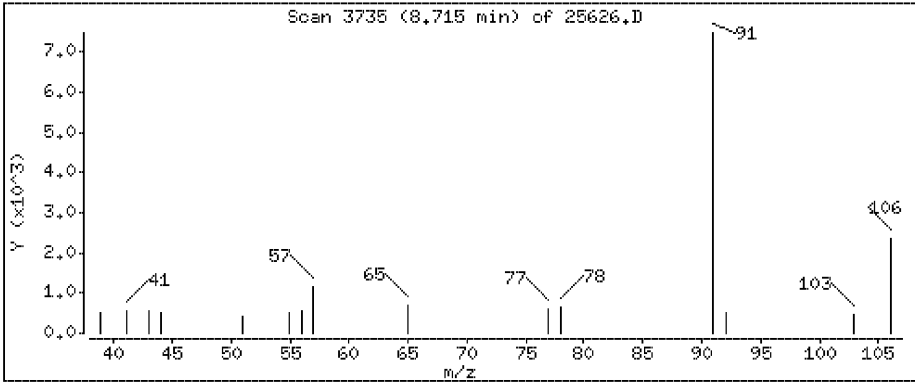
Operator: CH1

Column phase: ZB-5MSplus SN338857

Column diameter: 0,32

66 Ethyl Benzene

Concentration: 0,181 ppbv



Data File: \\192.168.10.12\chem\10airH,1\091318,b\25626.D

Date : 13-SEP-2018 21:31

Client ID:

Instrument: 10airH.i

Sample Info:

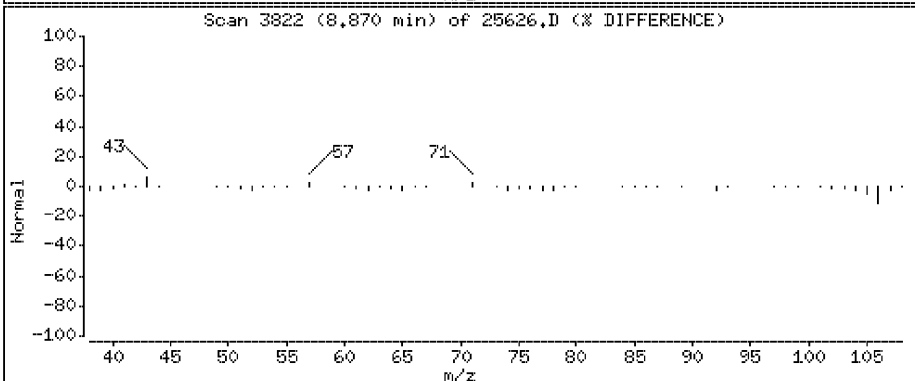
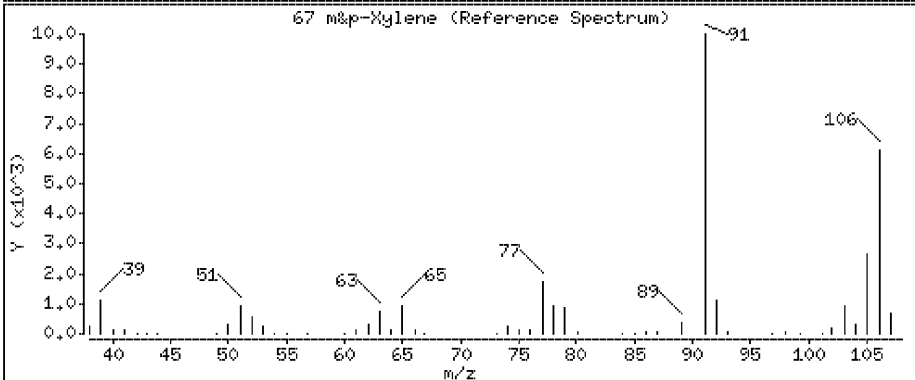
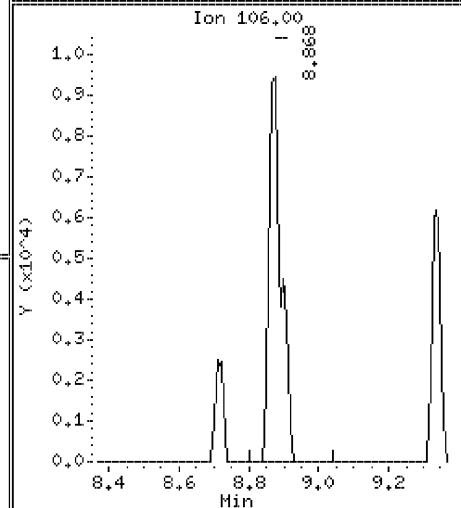
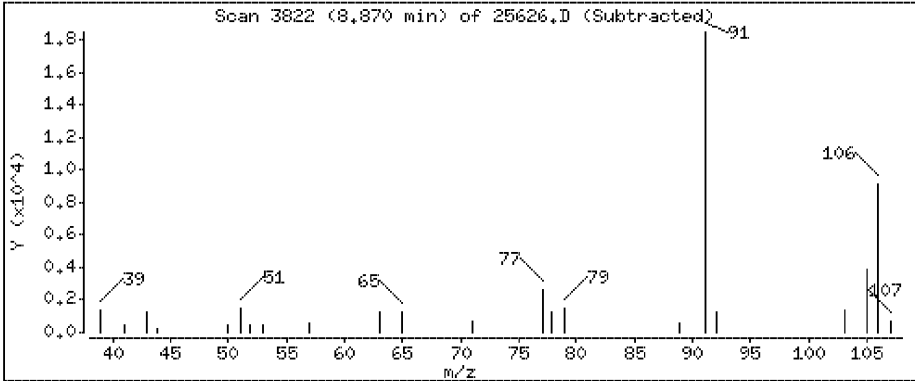
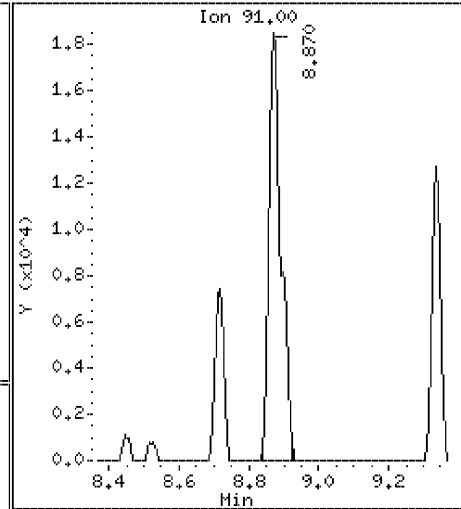
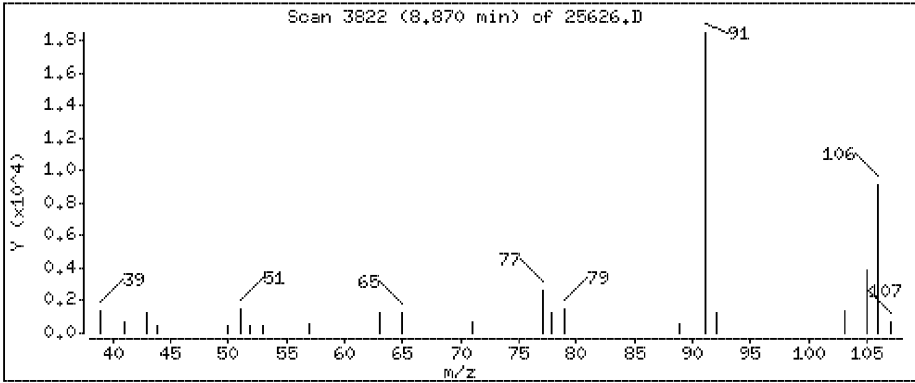
Operator: CH1

Column phase: ZB-5MSplus SN338857

Column diameter: 0.32

67 m&p-Xylene

Concentration: 0.830 ppbv



Data File: \\192.168.10.12\chem\10airH,1\091318,b\25626.D

Date : 13-SEP-2018 21:31

Client ID:

Instrument: 10airH.i

Sample Info:

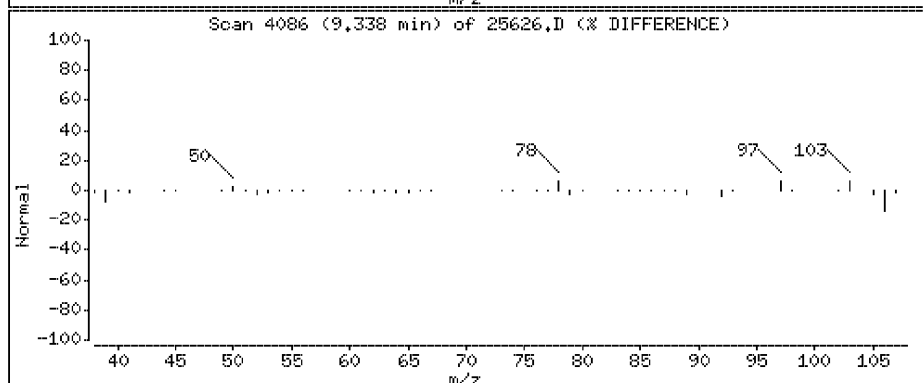
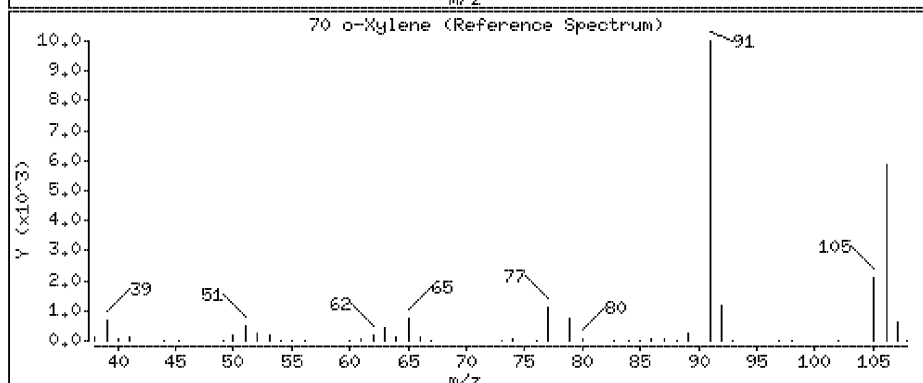
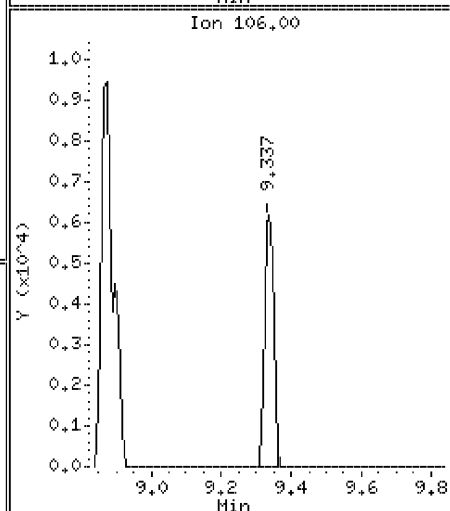
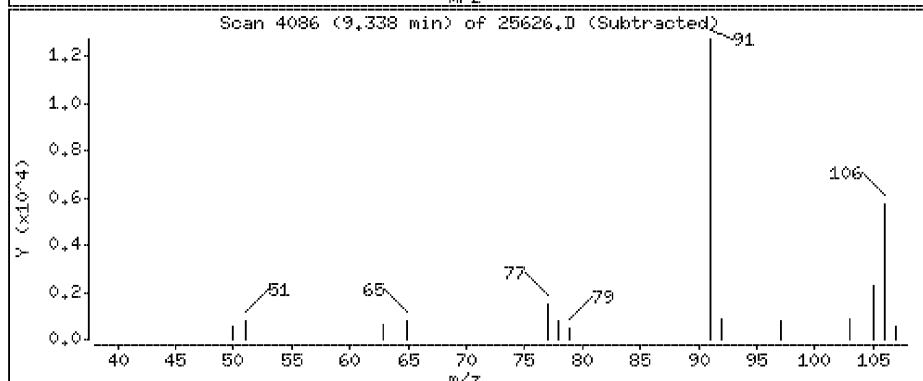
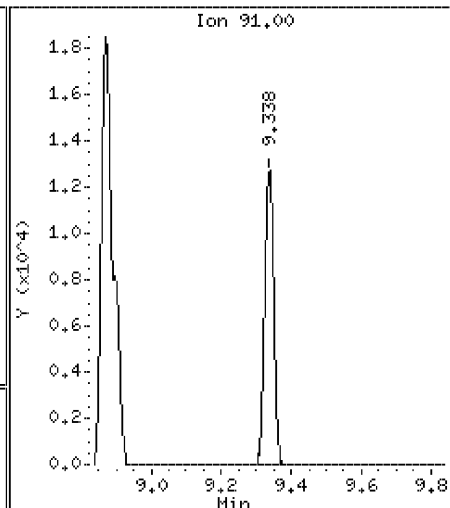
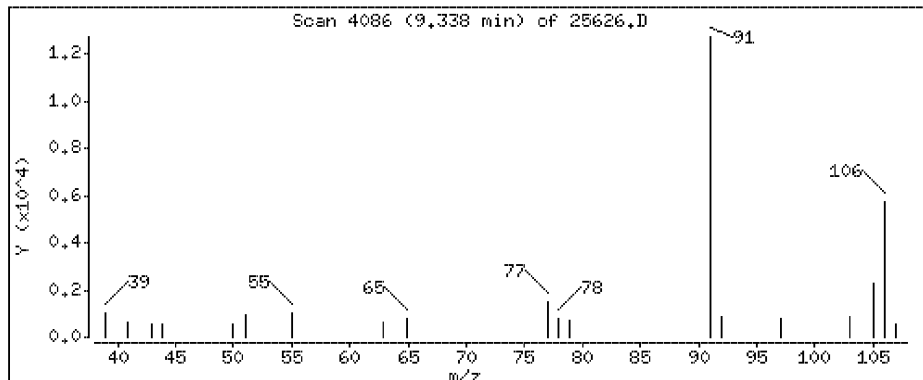
Operator: CH1

Column phase: ZB-5MSplus SN338857

Column diameter: 0.32

70 o-Xylene

Concentration: 0.372 ppbv



Data File: \\192.168.10.12\chem\10airH,1\091318,b\25626.D

Date : 13-SEP-2018 21:31

Client ID:

Instrument: 10airH.i

Sample Info:

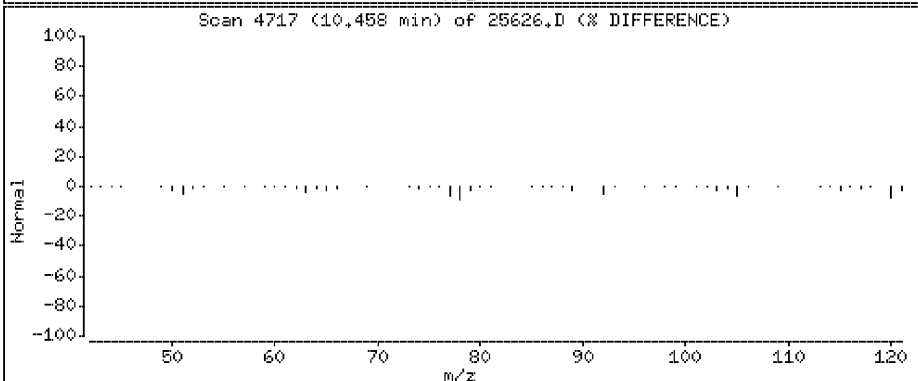
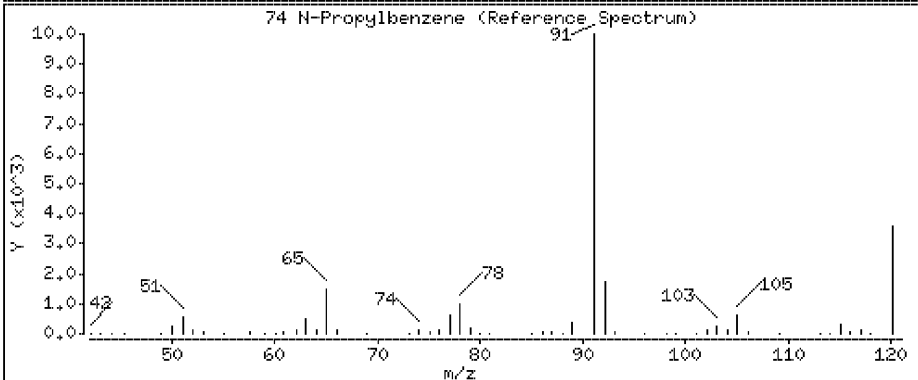
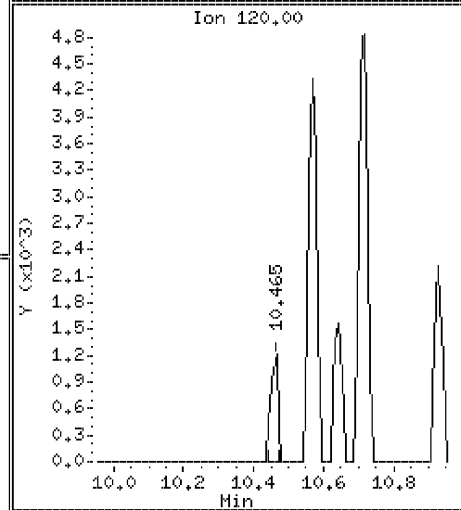
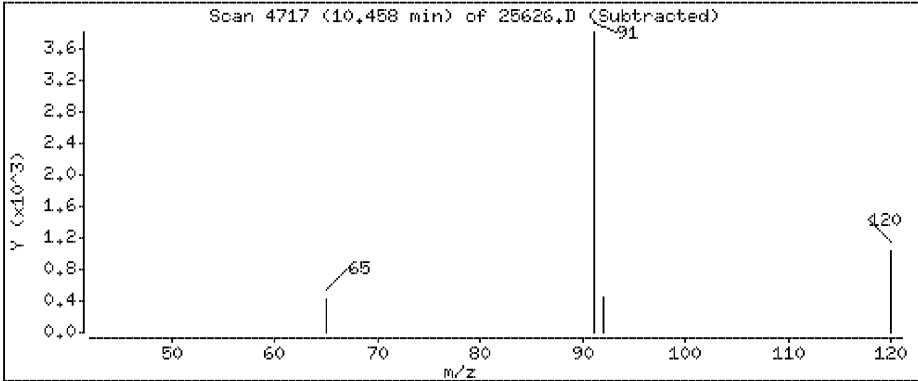
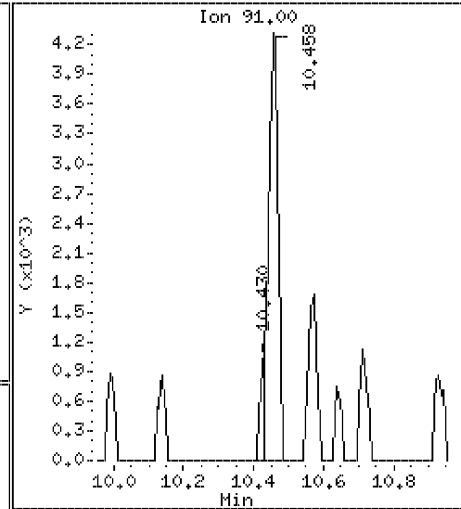
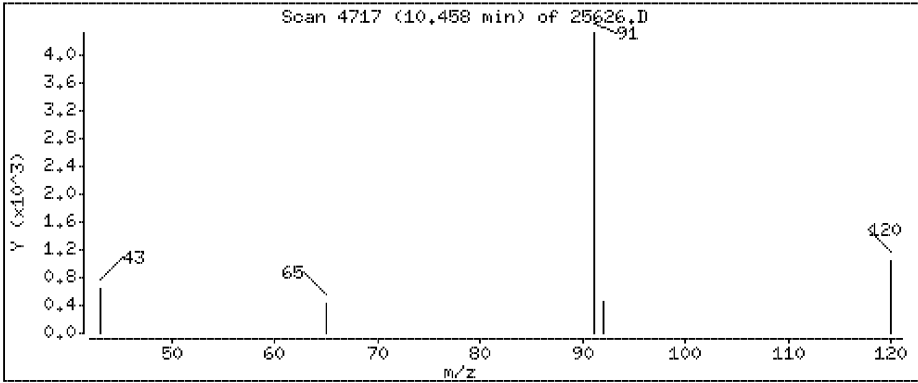
Operator: CH1

Column phase: ZB-5MSplus SN338857

Column diameter: 0,32

74 N-Propylbenzene

Concentration: 0,346 ppbv



Data File: \\192.168.10.12\chem\10airH,i\091318,b\25626.D

Date : 13-SEP-2018 21:31

Client ID:

Instrument: 10airH,i

Sample Info:

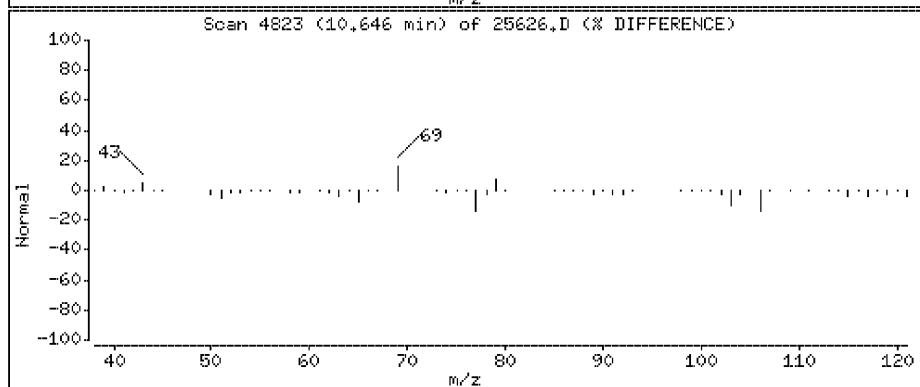
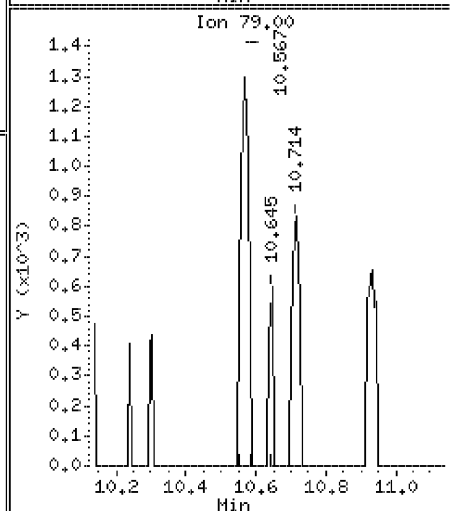
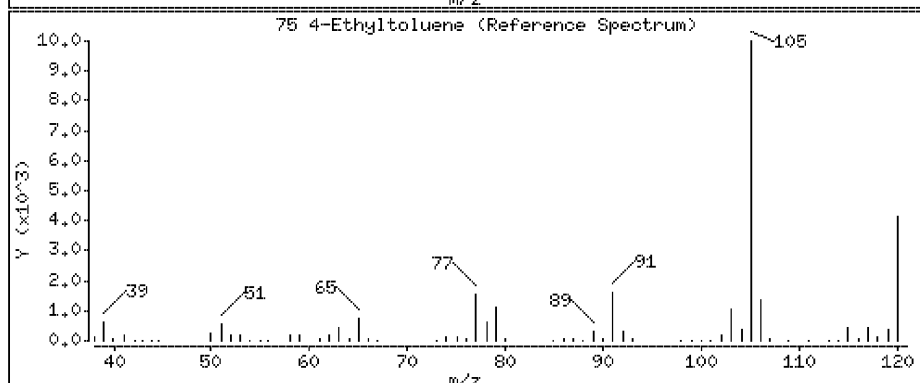
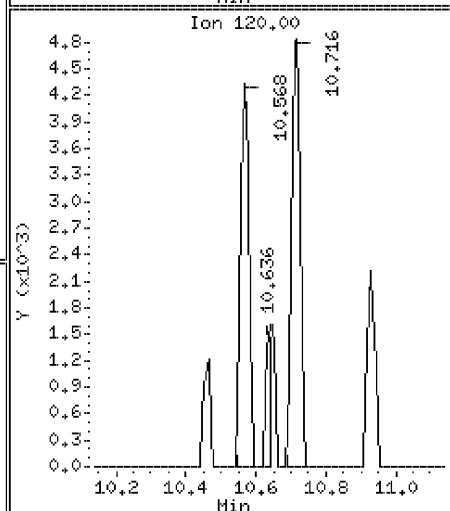
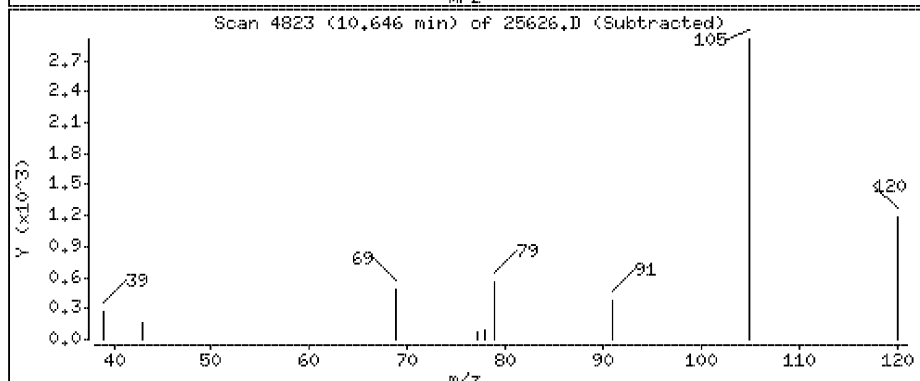
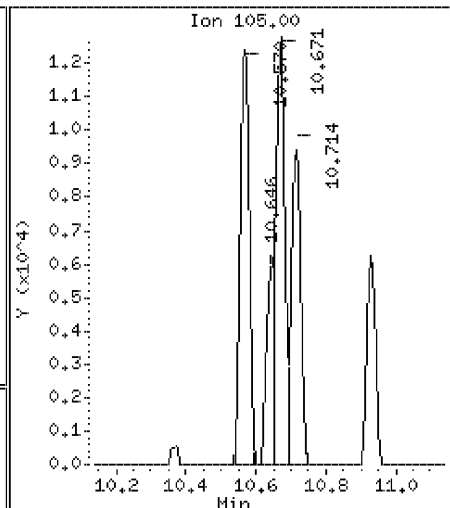
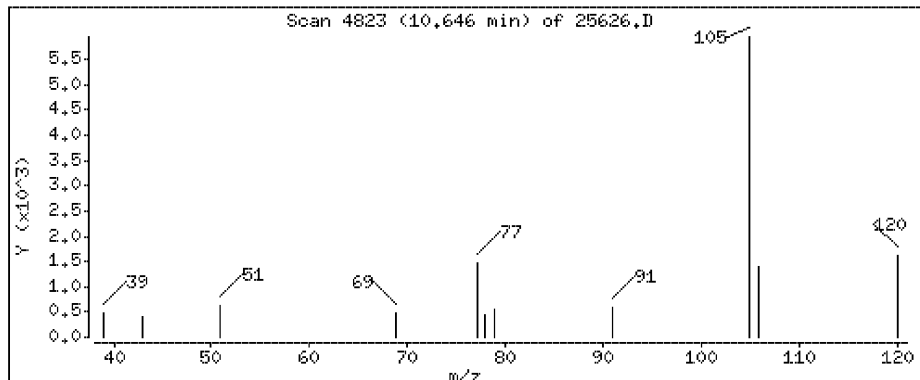
Operator: CH1

Column phase: ZB-5MSplus SN338857

Column diameter: 0,32

75 4-Ethyltoluene

Concentration: 0,519 ppbv



Data File: \\192.168.10.12\chem\10airH,i\091318,b\25626.D

Date : 13-SEP-2018 21:31

Client ID:

Instrument: 10airH,i

Sample Info:

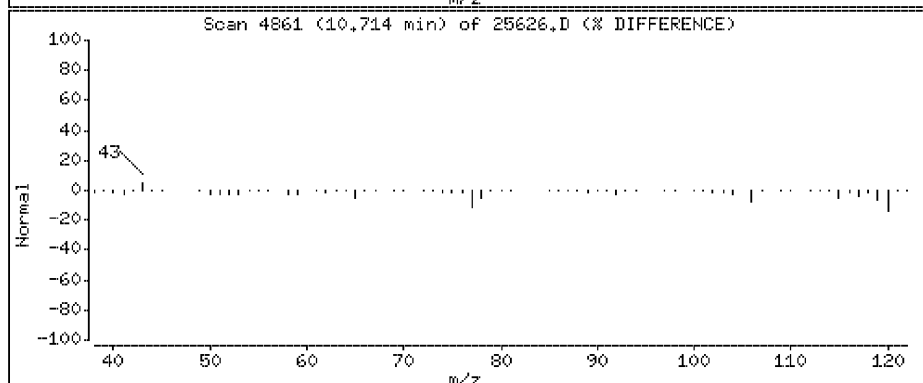
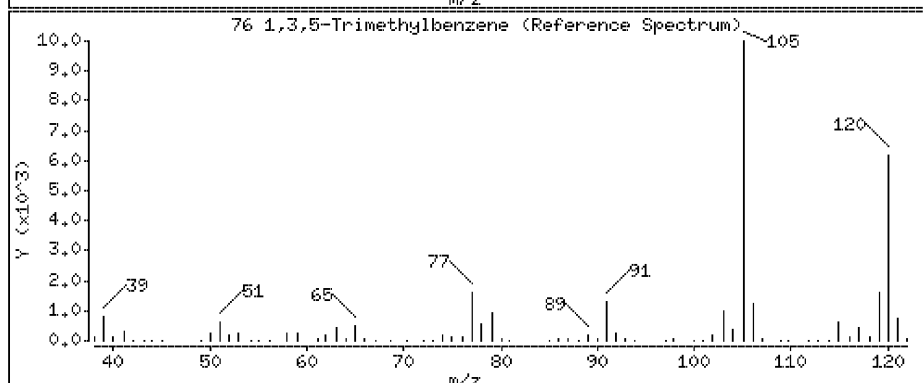
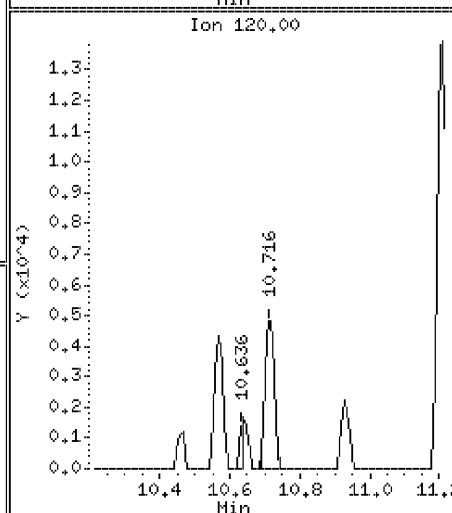
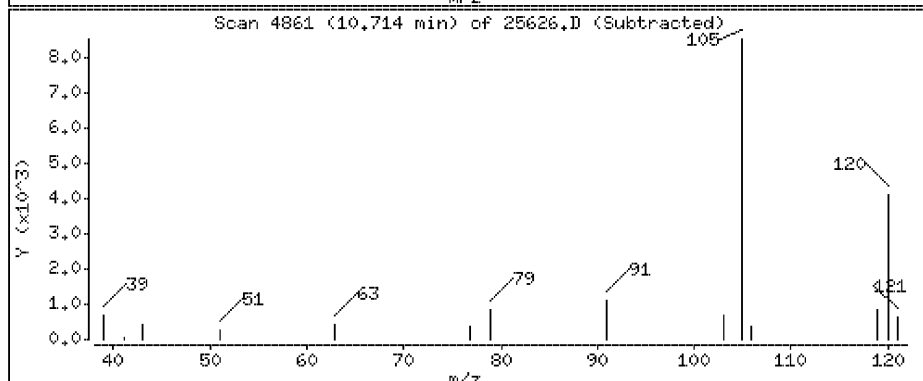
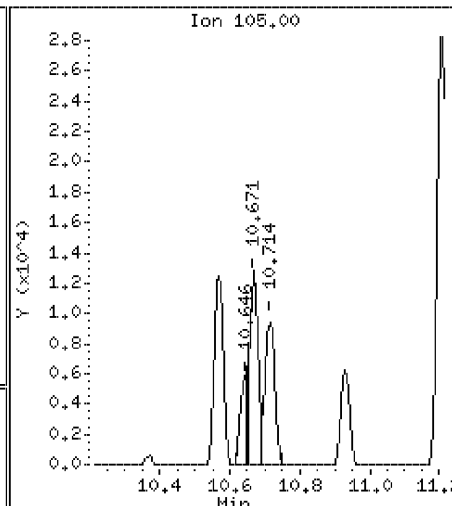
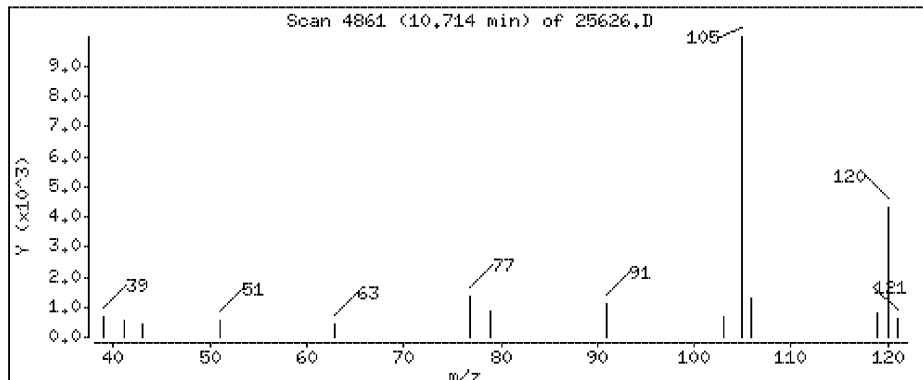
Operator: CH1

Column phase: ZB-5MSplus SN338857

Column diameter: 0,32

76 1,3,5-Trimethylbenzene

Concentration: 0,482 ppbv



Data File: \\192.168.10.12\chem\10airH,1\091318,b\25626.D

Date : 13-SEP-2018 21:31

Client ID:

Instrument: 10airH.i

Sample Info:

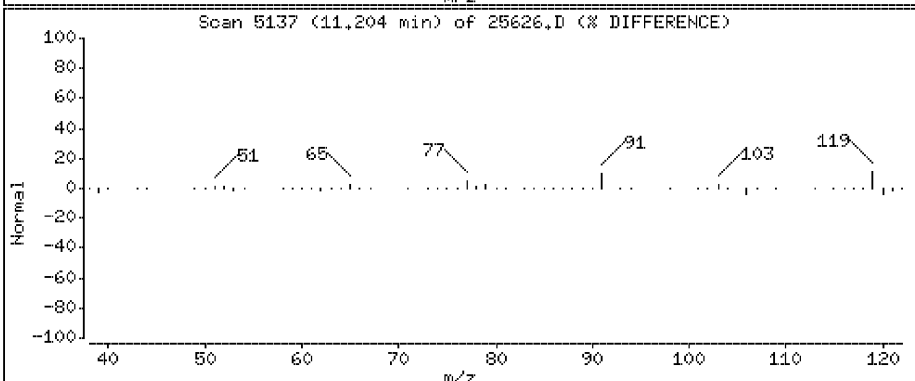
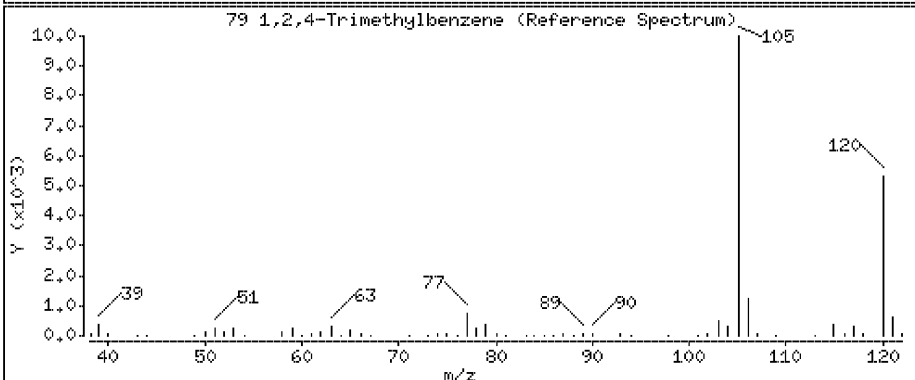
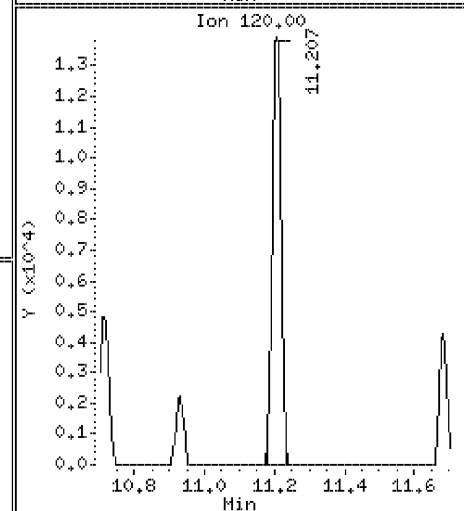
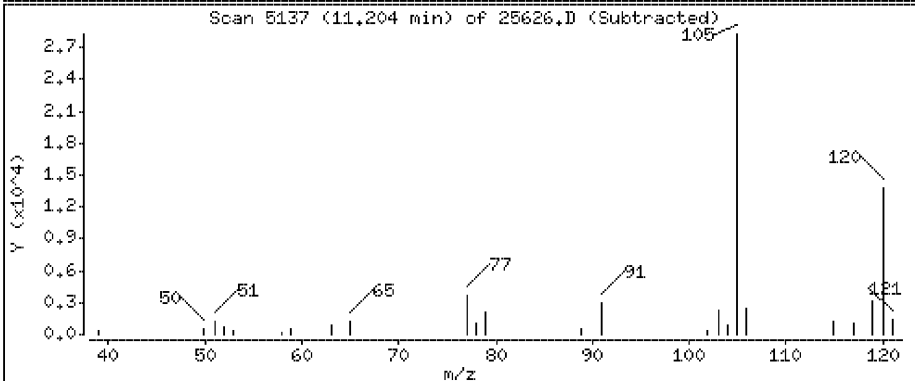
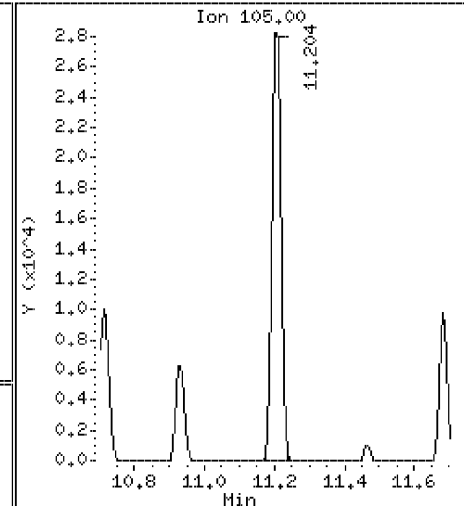
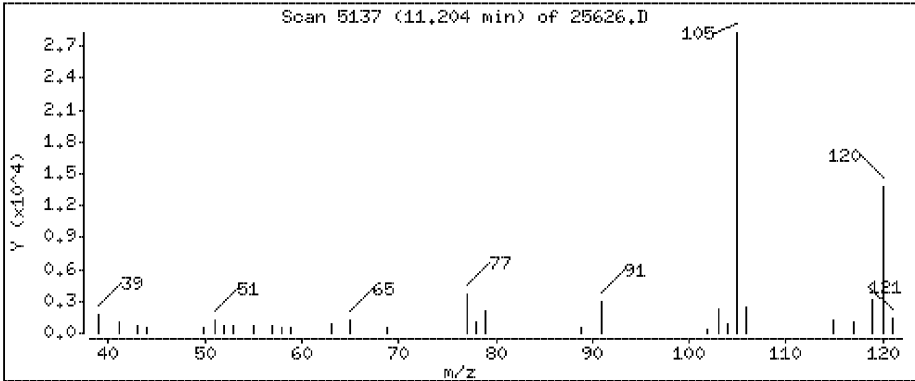
Operator: CH1

Column phase: ZB-5MSplus SN338857

Column diameter: 0,32

79 1,2,4-Trimethylbenzene

Concentration: 0,897 ppbv



Data File: \\192.168.10.12\chem\10airH,1\091318,b\25626.D

Date : 13-SEP-2018 21:31

Client ID:

Instrument: 10airH.i

Sample Info:

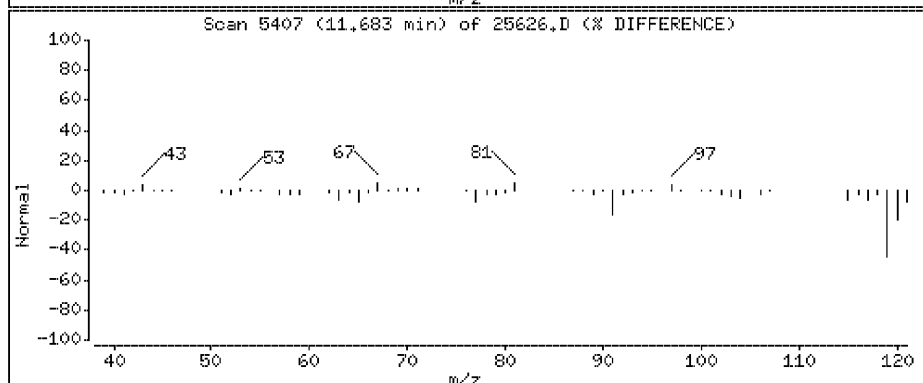
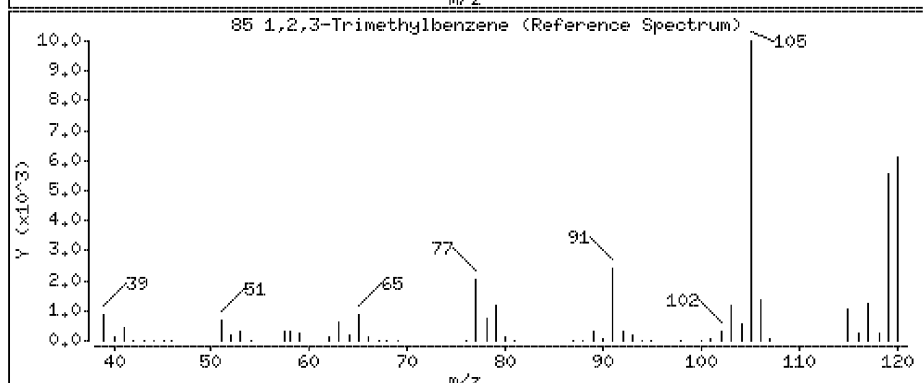
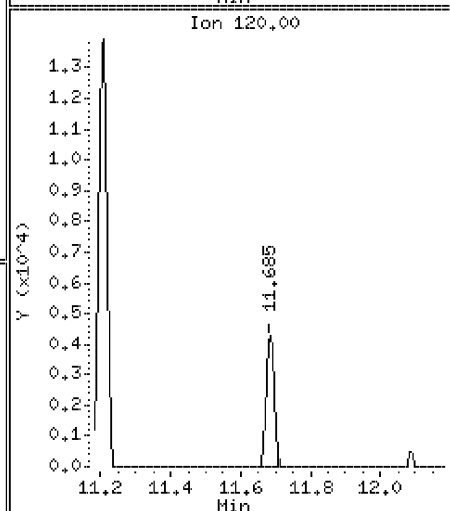
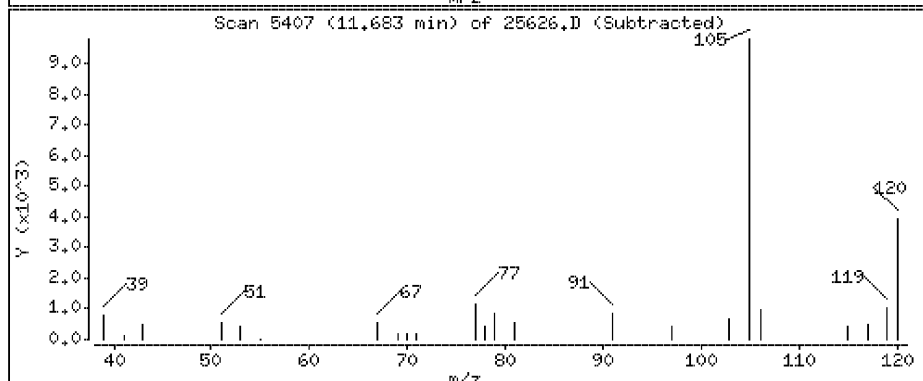
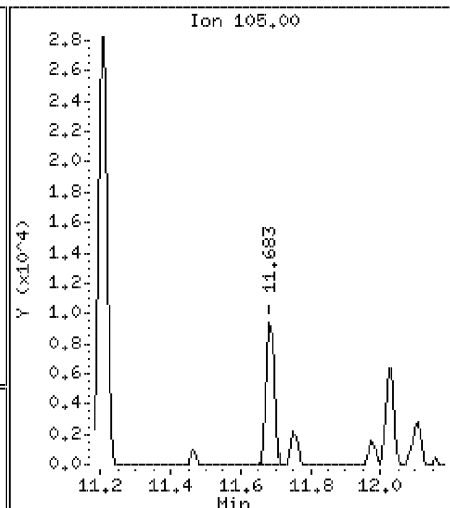
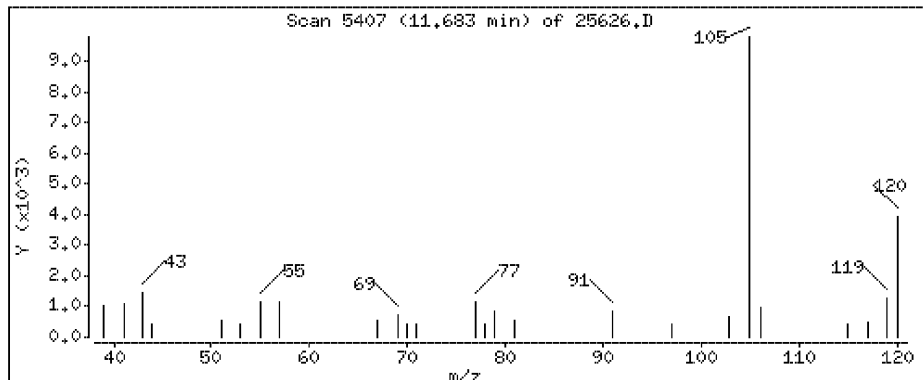
Operator: CH1

Column phase: ZB-5MSplus SN338857

Column diameter: 0.32

85 1,2,3-Trimethylbenzene

Concentration: 0.447 ppbv



Data File: \\192.168.10.12\chem\10airH,1\091318,b\25626.D

Date : 13-SEP-2018 21:31

Client ID:

Instrument: 10airH.i

Sample Info:

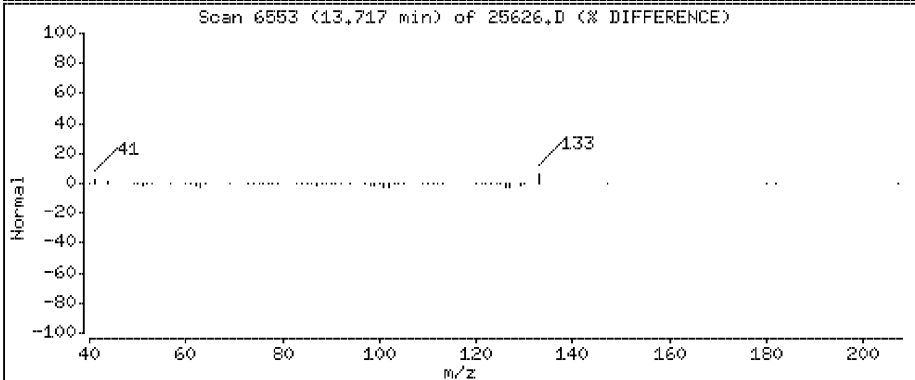
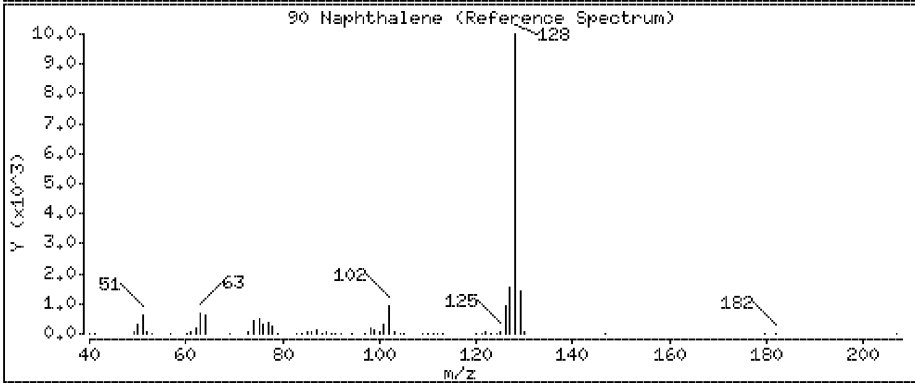
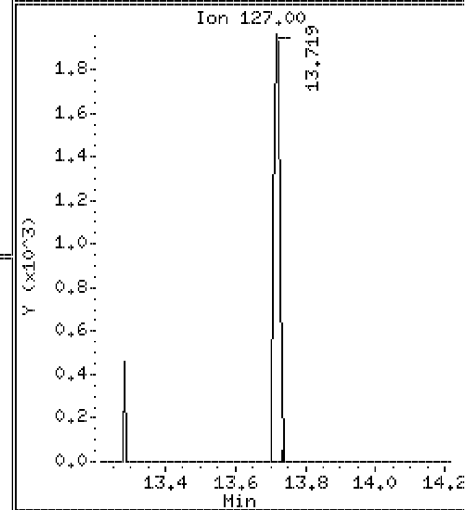
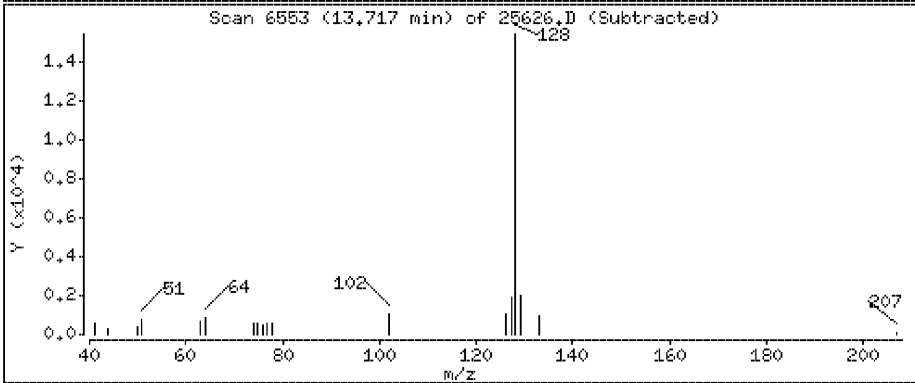
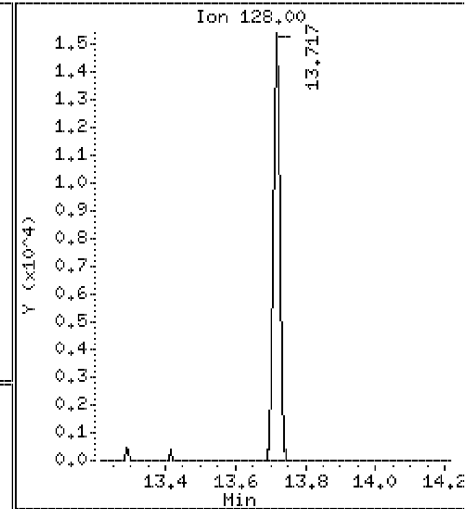
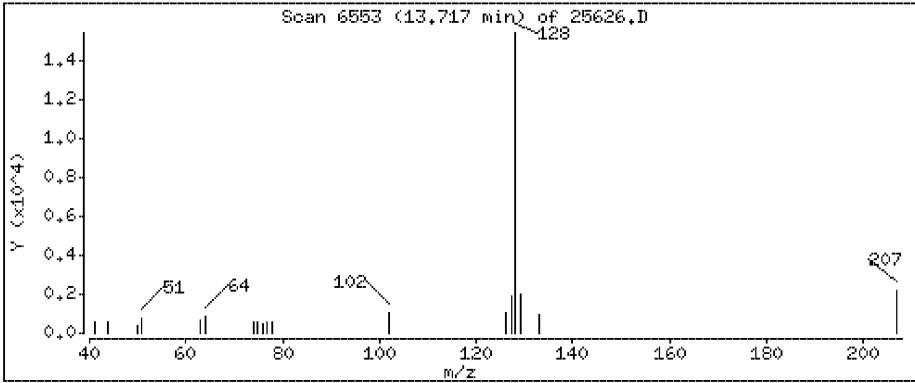
Operator: CH1

Column phase: ZB-5MSplus SN338857

Column diameter: 0.32

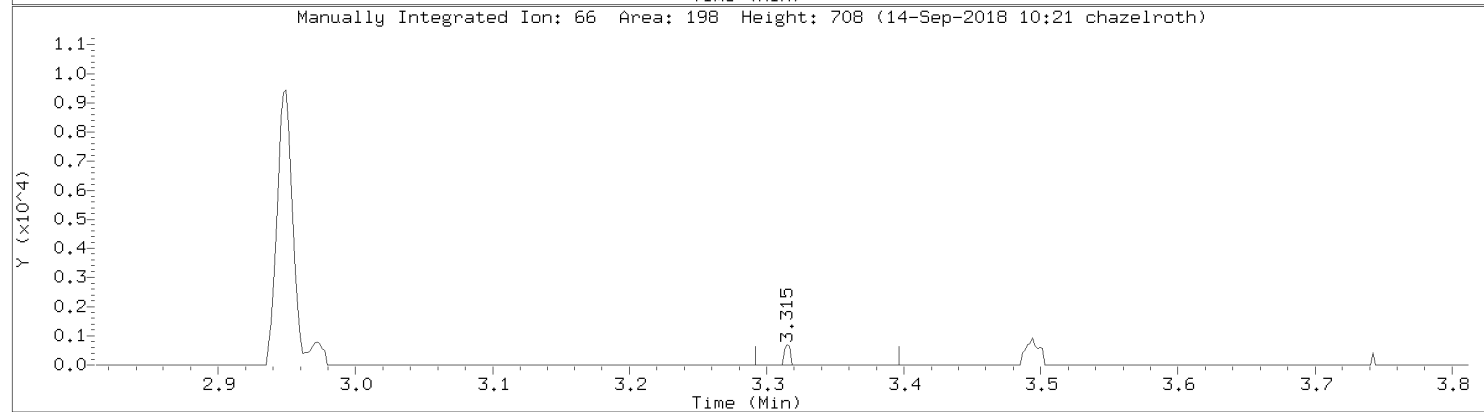
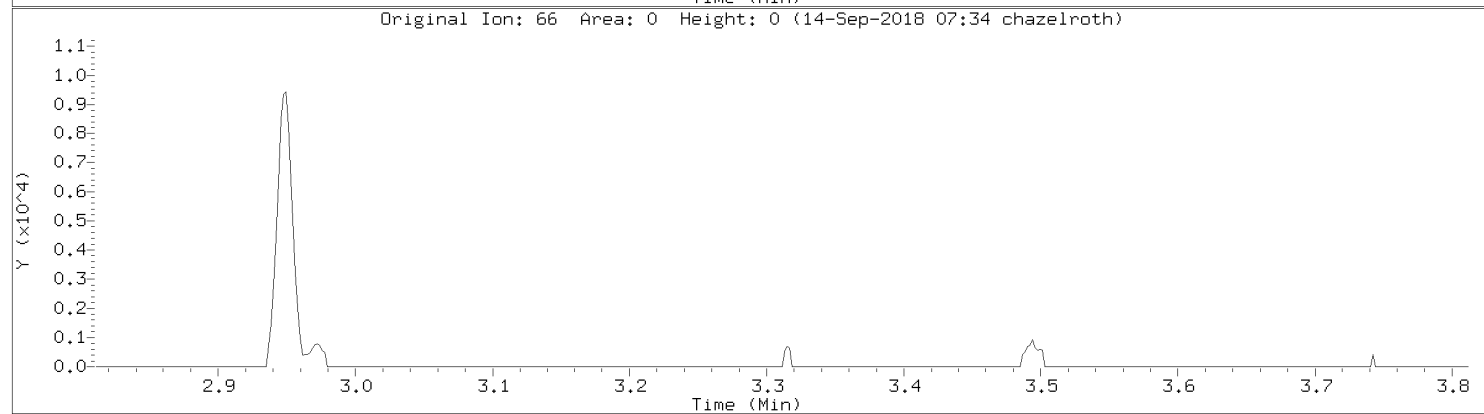
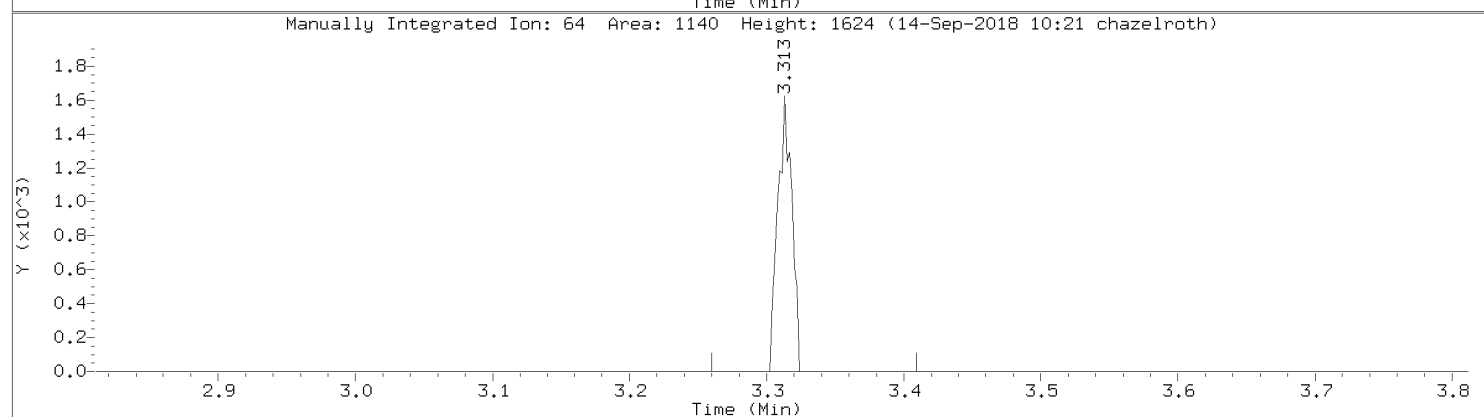
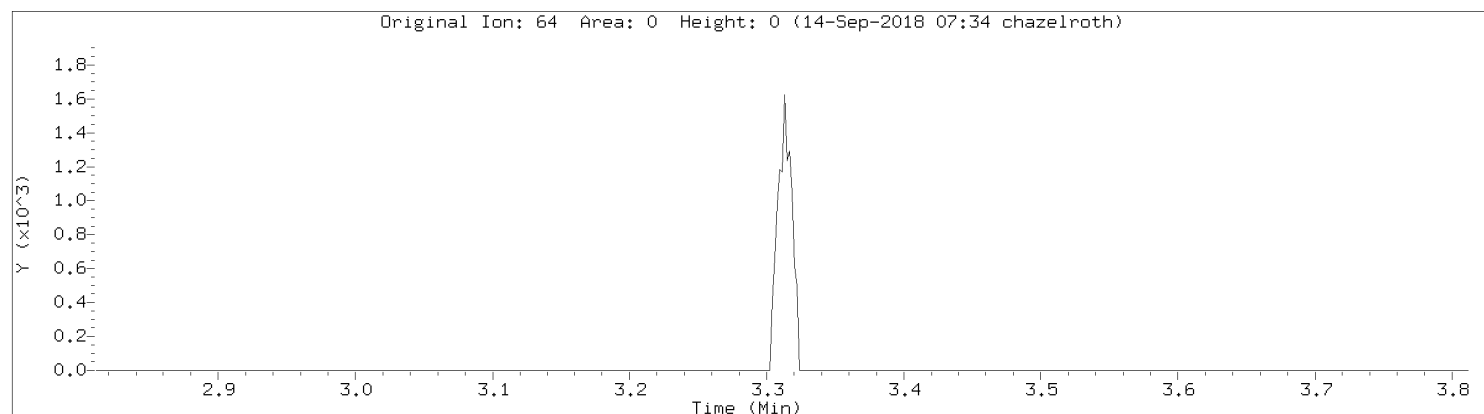
90 Naphthalene

Concentration: 1.32 ppbv



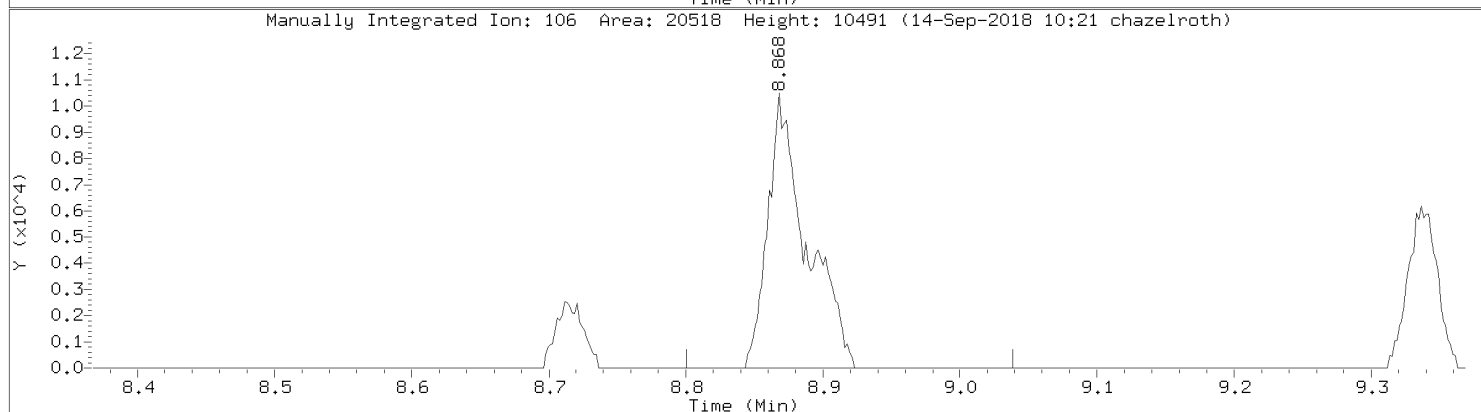
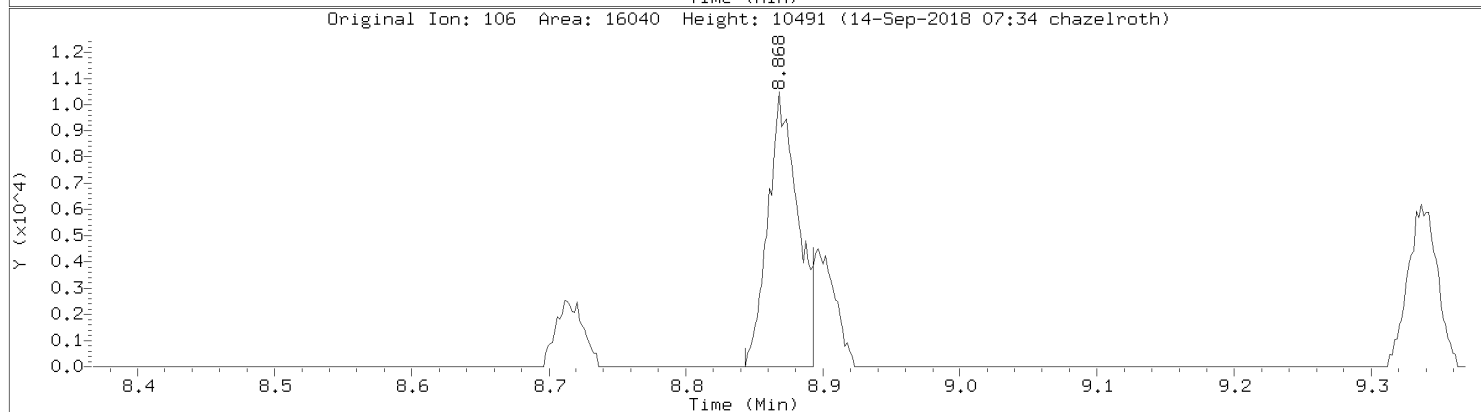
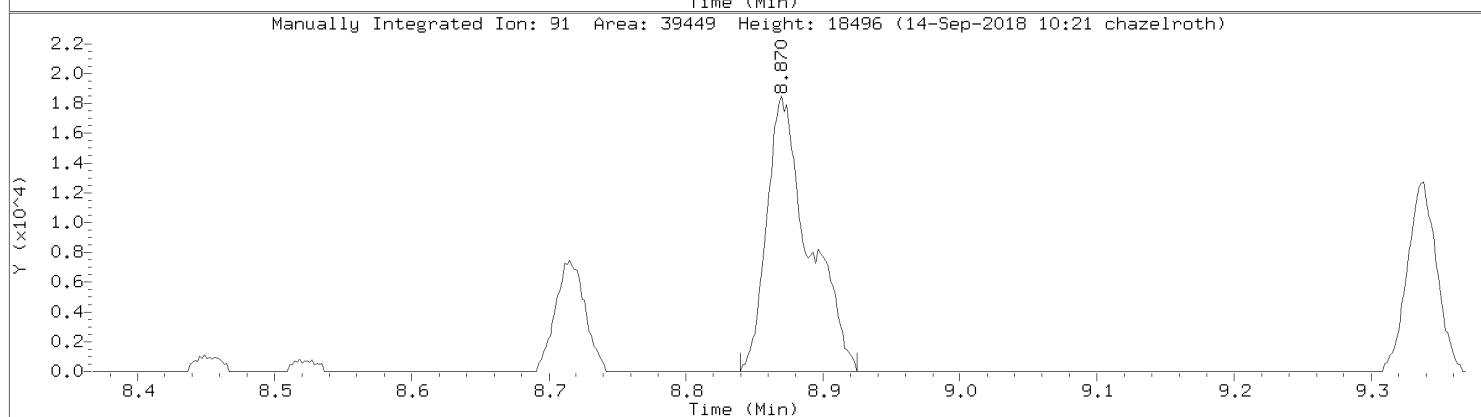
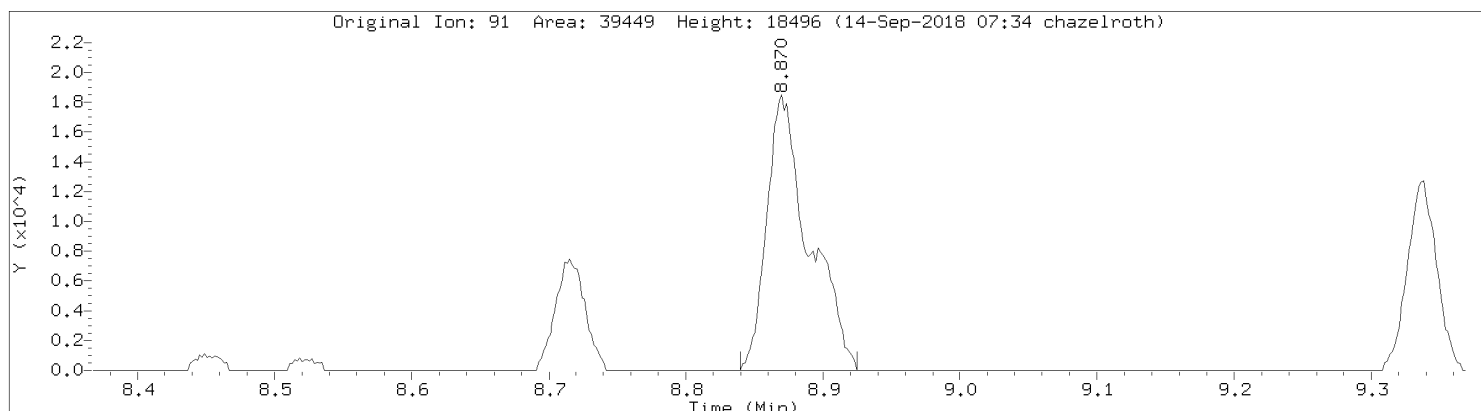
Data File: \\192.168.10.12\chem\10airH.i\091318.b\25626.D
Injection Date: 13-SEP-2018 21:31
Instrument: 10airH.i
Lab Sample ID: 10446892002

Compound: Chloroethane
CAS Number: 75-00-3



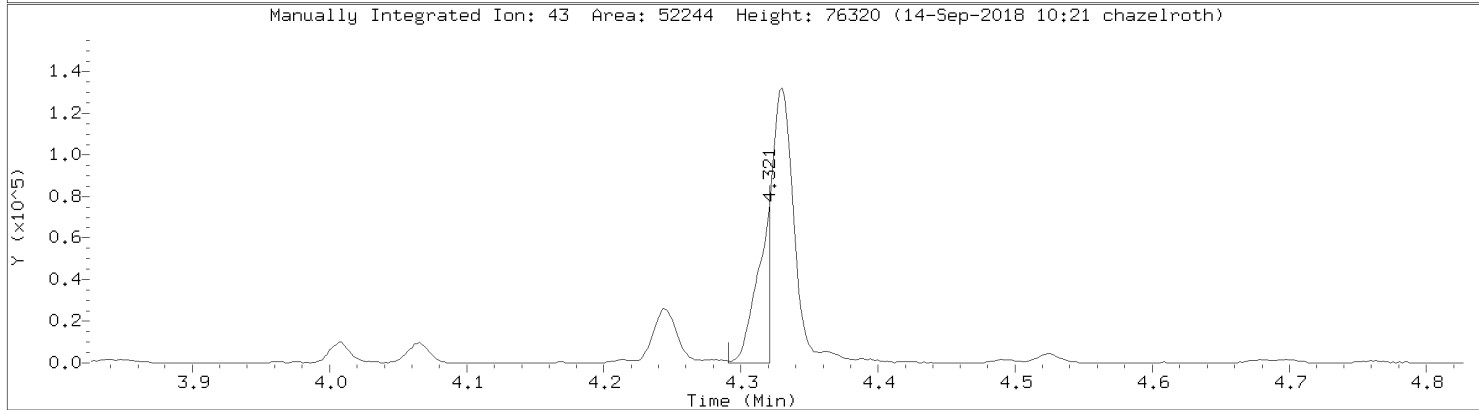
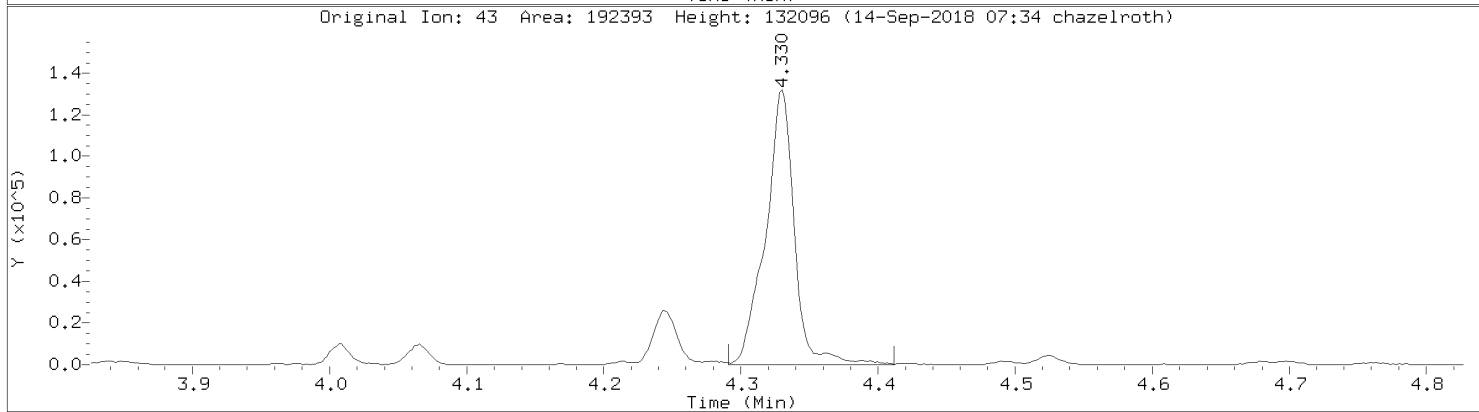
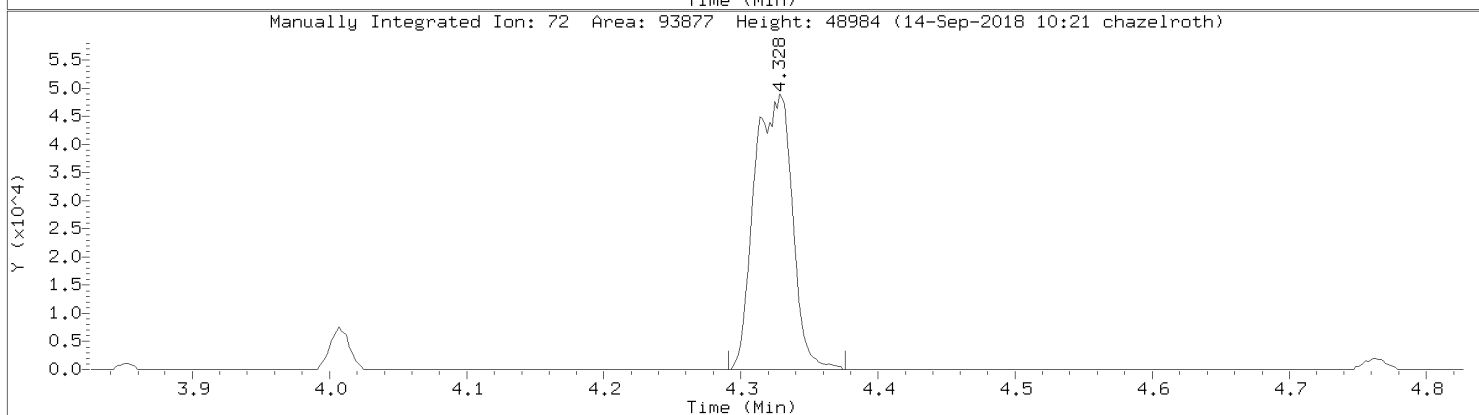
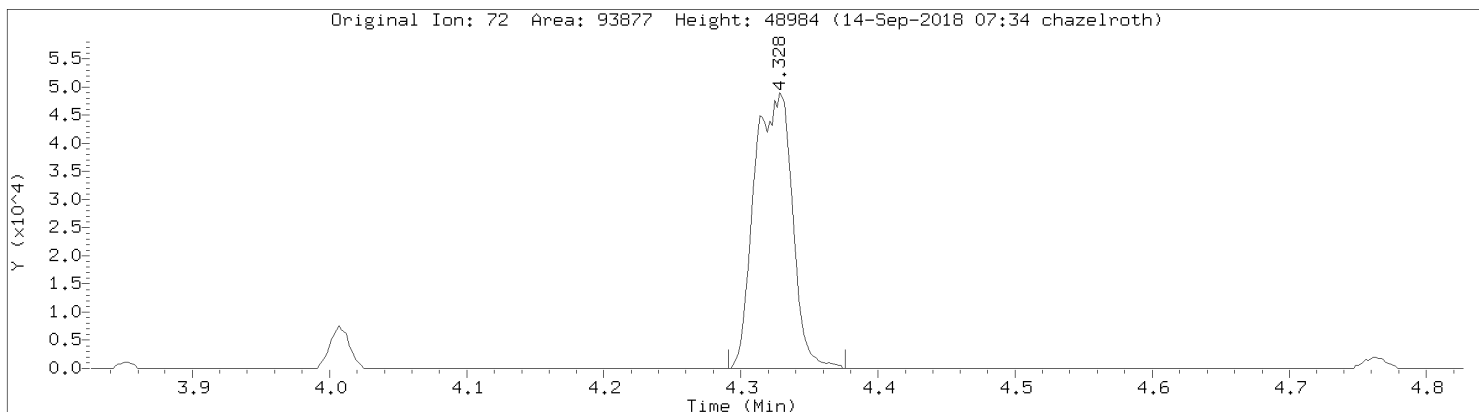
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Injection Date: 13-SEP-2018 21:31
Instrument: 10airH.i
Lab Sample ID: 10446892002

Compound: m&p-Xylene
CAS Number: 7816-60-0



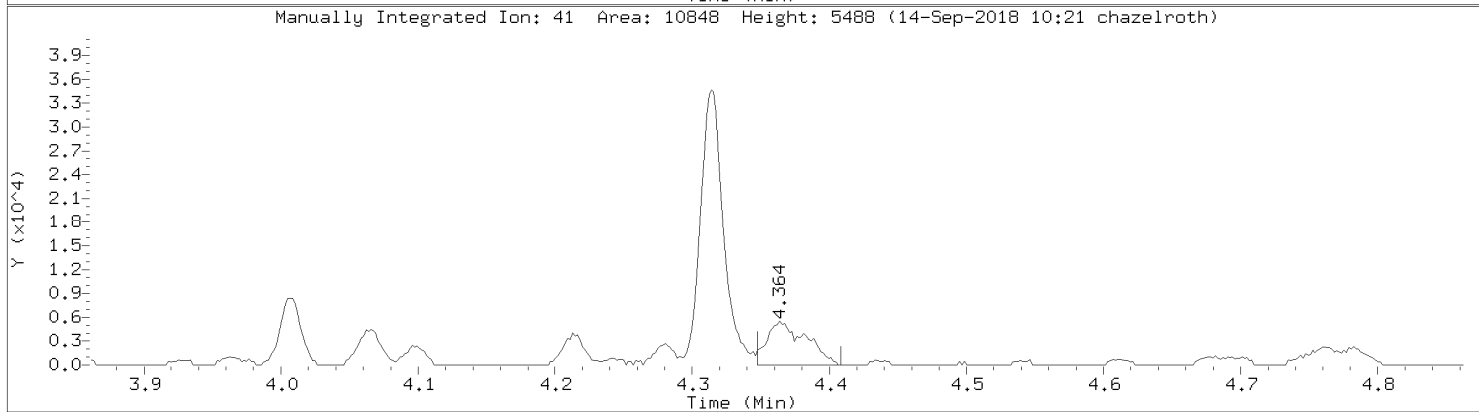
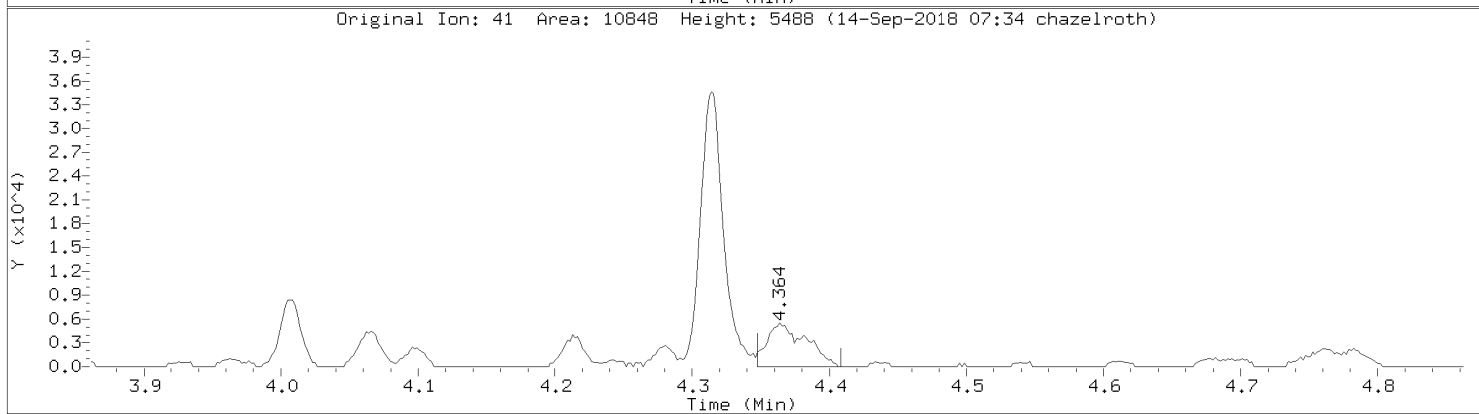
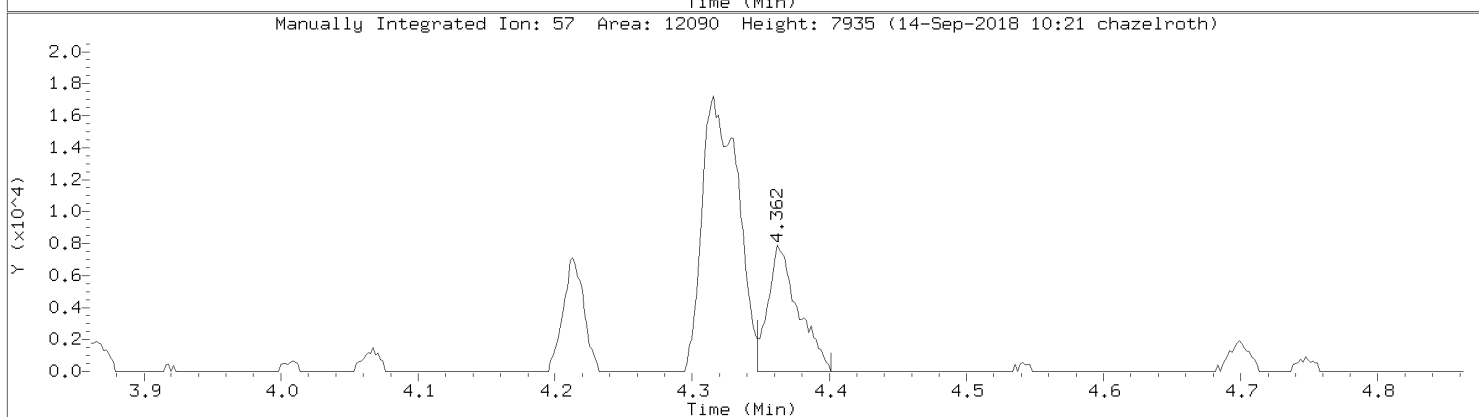
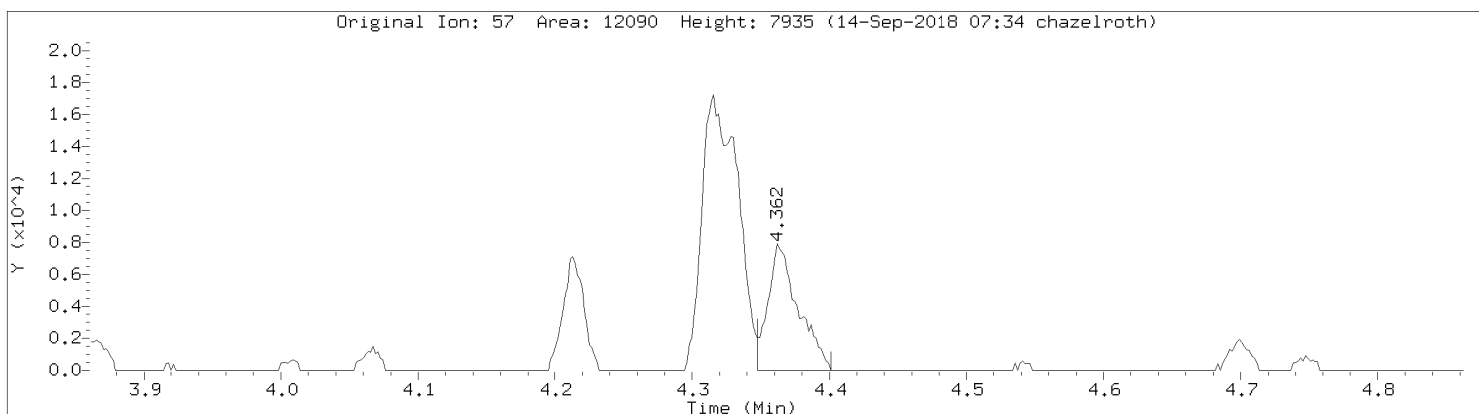
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Injection Date: 13-SEP-2018 21:31
Instrument: 10airH.i
Lab Sample ID: 10446892002

Compound: Methyl Ethyl Ketone
CAS Number: 78-93-3

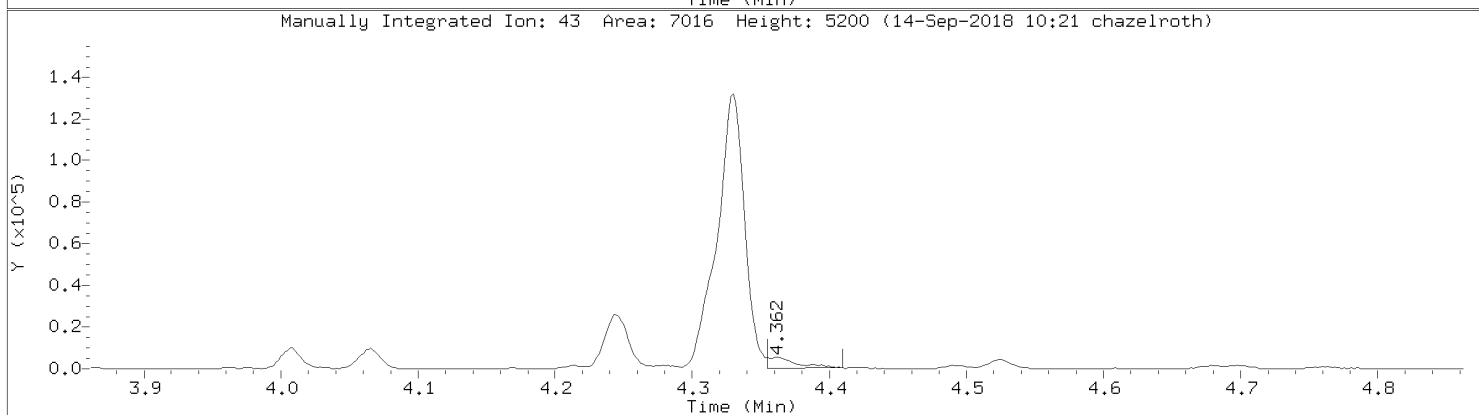
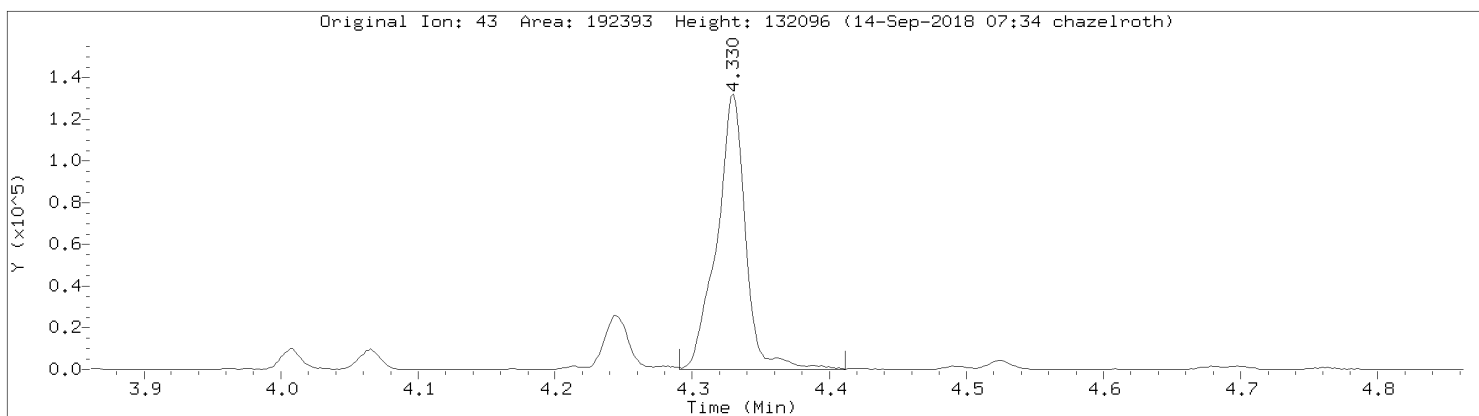


Data File: \\192.168.10.12\chem\10airH.i\091318.b\25626.D
Injection Date: 13-SEP-2018 21:31
Instrument: 10airH.i
Lab Sample ID: 10446892002

Compound: n-Hexane
CAS Number: 110-54-3



Data File: \\192.168.10.12\chem\10airH.i\091318.b\25626.D
Injection Date: 13-SEP-2018 21:31
Instrument: 10airH.i
Lab Sample ID: 10446892002



Pace Analytical Services, Inc.

TO15 Analysis (UNIX)

Data file : \\192.168.10.12\chem\10airH.i\091318.b\25627.D
 Lab Smp Id: 10446892003
 Inj Date : 13-SEP-2018 21:59
 Operator : CH1 Inst ID: 10airH.i
 Smp Info :
 Misc Info : 31710
 Comment : Volatile Organic COMPOUNDS in Air
 Method : \\192.168.10.12\chem\10airH.i\091318.b\TO15_253-18.m
 Meth Date : 13-Sep-2018 14:08 nkoller Quant Type: ISTD
 Cal Date : 10-SEP-2018 14:17 Cal File: 25309.D
 Als bottle: 27
 Dil Factor: 1.80000
 Integrator: HP RTE Compound Sublist: all.sub
 Target Version: 4.14
 Processing Host: 10MNAIRRC91

Concentration Formula: Amt * DF * Uf * CpndVariable

Name	Value	Description
DF	1.800	Dilution Factor
Uf	1.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS		
							ON-COLUMN (ppbv)	FINAL (ppbv)	
1 1,1-Difluoroethane	65								(D)
2 Chlorodifluoromethane	67								(D)
3 Propylene	41		2.947	2.952	(0.540)	6010	0.38754	0.698	
4 Dichlorodifluoromethane	85		2.968	2.972	(0.544)	16859	0.18829	0.339	
5 Dichlorotetrafluoroethane	85								
6 Chloromethane	50		3.045	3.046	(0.558)	3888	0.16437	0.296	
7 Vinyl chloride	62								
8 1,3-Butadiene	54								(D)
9 Bromomethane	94		3.265	3.267	(0.599)	948	0.03291	0.0592(a)	
10 Chloroethane	64								
11 Ethanol	45		3.329	3.318	(0.610)	9361	1.27519	2.30	
12 Vinyl Bromide	106								
13 Isopentane	43		3.432	3.432	(0.629)	116985	6.17453	11.1	
14 Freon 123	83								
15 Trichlorofluoromethane	101		3.494	3.492	(0.641)	7031	0.11039	0.199	
16 Acrolein	56								(D)
17 Acetone	43		3.520	3.513	(0.645)	283883	10.4336	18.8	
18 Isopropyl Alcohol	45		3.547	3.536	(0.650)	8217	0.27335	0.492(Q)	
19 1,1-Dichloroethene	61								
20 Acrylonitrile	53								
21 Tert Butyl Alcohol (TBA)	59		3.744	3.733	(0.686)	24389	0.44713	0.805	
22 Methyl Acetate	43								(D)
23 Freon 113	101		3.742	3.742	(0.686)	2453	0.03495	0.0629(a)	
24 Allyl Chloride	76								

Compounds	QUANT	SIG						CONCENTRATIONS	
			MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ppbv)	FINAL (ppbv)
25 Methylene chloride	49		3.824	3.820	(0.701)	32869	0.47633	0.857	
26 Carbon Disulfide	76		3.925	3.927	(0.720)	21648	0.26782	0.482	
27 Methyl Tert Butyl Ether	73		Compound Not Detected.						
28 trans-1,2-dichloroethene	96		Compound Not Detected.						
29 Vinyl Acetate	43		Compound Not Detected.						(D)
30 1,1-Dichloroethane	63		Compound Not Detected.						
31 Methyl Ethyl Ketone	72		4.333	4.326	(0.794)	19706	1.32924	2.39 (QM)	
32 Di-isopropyl Ether	45		Compound Not Detected.						
33 n-Hexane	57		4.365	4.362	(0.800)	15235	0.42376	0.763 (Q)	
34 Ethyl Acetate	43		Compound Not Detected.						
35 cis-1,2-Dichloroethene	96		Compound Not Detected.						
36 Ethyl Tert-Butyl Ether	59		Compound Not Detected.						
37 Chloroform	83		4.692	4.685	(0.860)	3626	0.05075	0.0914 (QM)	
38 Tetrahydrofuran	42		Compound Not Detected.						(D)
39 1,1,1-Trichloroethane	97		Compound Not Detected.						
40 1,2-Dichloroethane	62		Compound Not Detected.						
41 Benzene	78		5.240	5.238	(0.961)	11661	0.13644	0.246	
42 Carbon tetrachloride	117		Compound Not Detected.						
43 Cyclohexane	56		Compound Not Detected.						(D)
44 Tert Amyl Methyl Ether	73		Compound Not Detected.						(D)
* 45 1,4-Difluorobenzene	114		5.455	5.453	(1.000)	917903	10.0000		
46 2,2,4-Trimethylpentane	57		5.551	5.547	(1.018)	386230	3.52588	6.35 (M)	
47 Heptane	43		Compound Not Detected.						(D)
48 Trichloroethene	130		5.787	5.785	(1.061)	5888	0.12715	0.229	
49 1,2-Dichloropropane	63		Compound Not Detected.						
50 Methyl methacrylate	69		Compound Not Detected.						(D)
51 1,4-Dioxane	88		Compound Not Detected.						
52 Bromodichloromethane	83		Compound Not Detected.						
53 Methylcyclohexane	98		Compound Not Detected.						(D)
54 Methyl Isobutyl Ketone	43		Compound Not Detected.						(D)
55 cis-1,3-Dichloropropene	75		Compound Not Detected.						
56 trans-1,3-Dichloropropene	75		Compound Not Detected.						
57 Toluene	91		6.963	6.960	(1.277)	36306	0.40391	0.727	
58 1,1,2-Trichloroethane	97		Compound Not Detected.						
59 Methyl Butyl Ketone	43		7.191	7.182	(0.851)	10355	0.30351	0.546	
60 n-Octane	43		Compound Not Detected.						(D)
61 Dibromochloromethane	129		Compound Not Detected.						
62 Tetrachloroethene	166		7.707	7.705	(0.912)	3928	0.06393	0.115	
63 1,2-Dibromoethane	107		Compound Not Detected.						
* 64 Chlorobenzene - d5	117		8.453	8.451	(1.000)	773778	10.0000		
65 Chlorobenzene	112		Compound Not Detected.						
66 Ethyl Benzene	91		8.717	8.713	(1.031)	44943	0.41800	0.752	
67 m&p-Xylene	91		8.870	8.868	(1.049)	104302	1.27547	2.30	
68 n-Nonane	43		9.241	9.237	(1.093)	10011	0.42239	0.760	
69 Styrene	104		Compound Not Detected.						(D)
70 o-Xylene	91		9.336	9.338	(1.105)	84272	0.96716	1.74	
71 Bromoform	173		Compound Not Detected.						
72 1,1,2,2-Tetrachloroethane	83		Compound Not Detected.						
73 Isopropylbenzene	105		9.890	9.886	(1.170)	8865	0.27558	0.496	
74 N-Propylbenzene	91		10.460	10.454	(1.237)	30741	0.33880	0.610	
75 4-Ethyltoluene	105		10.641	10.639	(1.259)	36429	0.50882	0.916	
76 1,3,5-Trimethylbenzene	105		10.714	10.713	(1.267)	59822	0.64264	1.16	
77 n-Decane	57		11.067	11.067	(2.029)	13302	0.52576	0.946 (M)	
78 Tert-Butyl Benzene	119		Compound Not Detected.						

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN (ppbv)	FINAL (ppbv)
79 1,2,4-Trimethylbenzene	105		11.205	11.203	(1.326)	191017	1.85356	3.34
80 Sec- Butylbenzene	105		11.463	11.462	(1.356)	6738	0.22779	0.410
81 1,3-Dichlorobenzene	146		Compound Not Detected.					
82 Benzyl Chloride	91		Compound Not Detected.					
83 1,4-Dichlorobenzene	146		Compound Not Detected.					
84 p-Isopropyltoluene	119		Compound Not Detected.					
85 1,2,3-Trimethylbenzene	105		11.686	11.683	(1.383)	61484	0.69389	1.25
86 1,2-Dichlorobenzene	146		Compound Not Detected.					
87 N-Butylbenzene	91		12.117	12.114	(1.434)	8726	0.37938	0.683
88 1,2-Dibromo-3-Chloropropane	157		Compound Not Detected.					
89 1,2,4-Trichlorobenzene	180		Compound Not Detected.					
90 Naphthalene	128		13.716	13.715	(1.623)	50131	1.49630	2.69
91 Hexachlorobutadiene	225		Compound Not Detected.					

QC Flag Legend

- a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
- Q - Qualifier signal failed the ratio test.
- M - Compound response manually integrated.
- D - User disabled compound identification.

Data File: \\192.168.10.12\chem\10airH.i\091318.b\25627.D
 Report Date: 14-Sep-2018 10:36

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: 10airH.i
 Lab File ID: 25627.D
 Lab Smp Id: 10446892003
 Analysis Type: VOA
 Quant Type: ISTD
 Operator: CH1
 Method File: \\192.168.10.12\chem\10airH.i\091318.b\TO15_253-18.m
 Misc Info: 31710

Calibration Date: 13-SEP-2018
 Calibration Time: 08:29

Level: LOW
 Sample Type: AIR

Test Mode:

Use Initial Calibration Level 5.
 If Continuing Cal. use Initial Cal. Level 5

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
45 1,4-Difluorobenze	1034069	620441	1447697	917903	-11.23
64 Chlorobenzene - d	896862	538117	1255607	773778	-13.72

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
45 1,4-Difluorobenze	5.45	5.12	5.78	5.46	0.03
64 Chlorobenzene - d	8.45	8.12	8.78	8.45	0.02

AREA UPPER LIMIT = + 40% of internal standard area.
 AREA LOWER LIMIT = - 40% of internal standard area.
 RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
 RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: \\192.168.10.12\chem\10airH.i\091318.b\25627.D

Date : 13-SEP-2018 21:59

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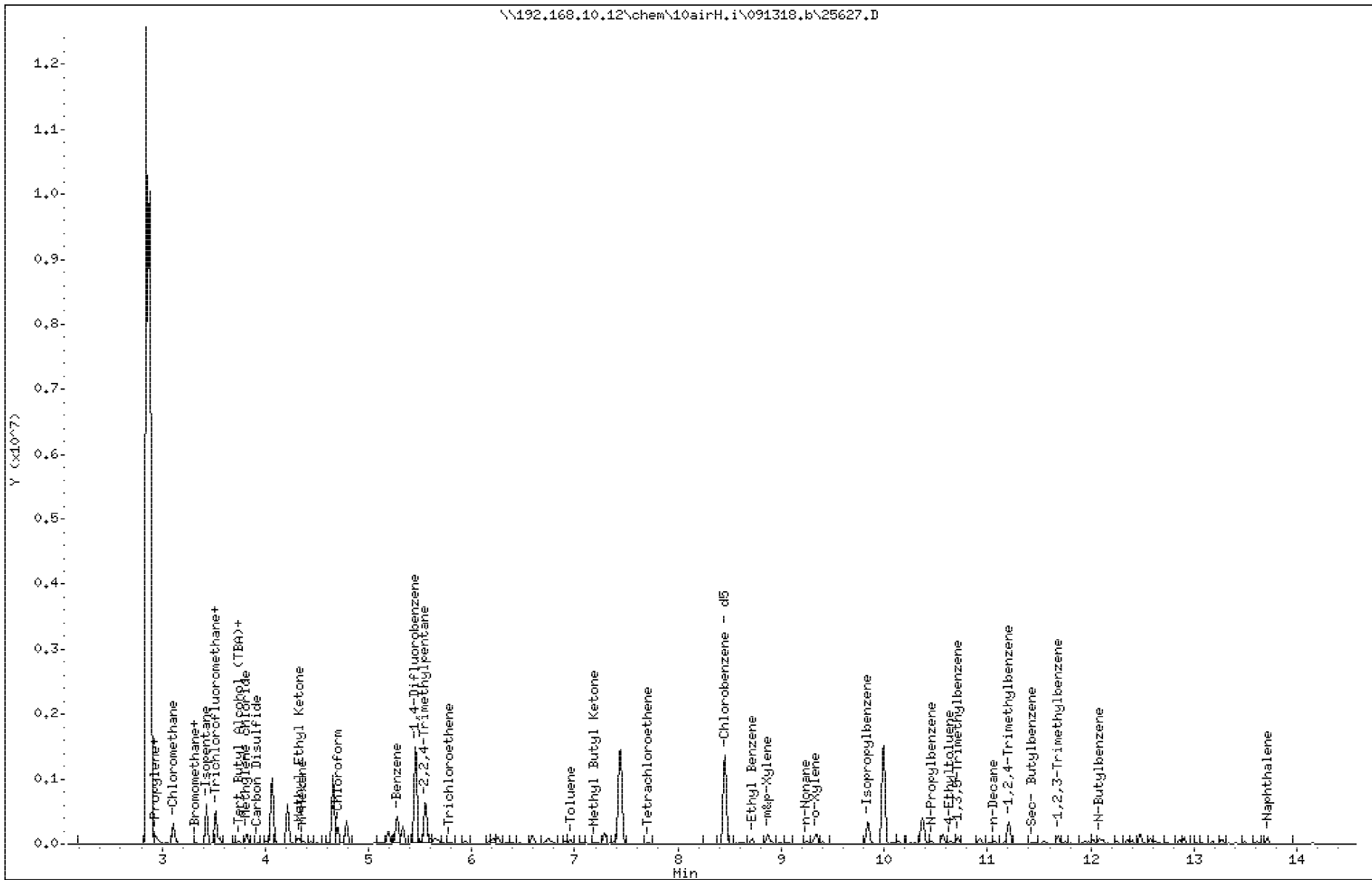
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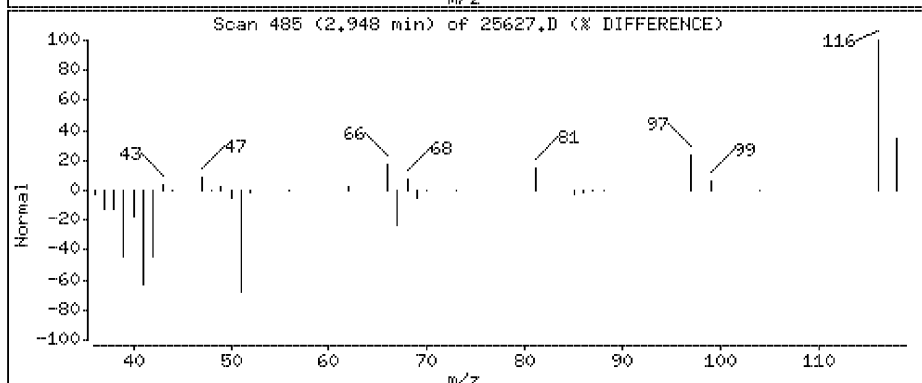
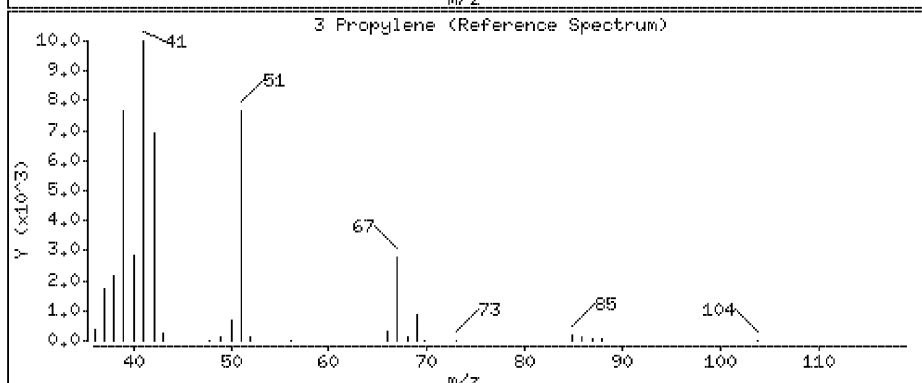
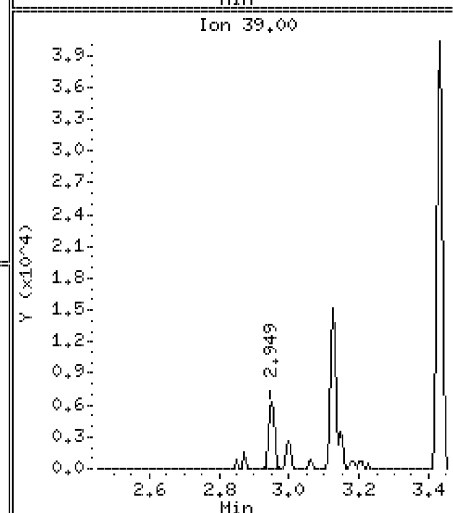
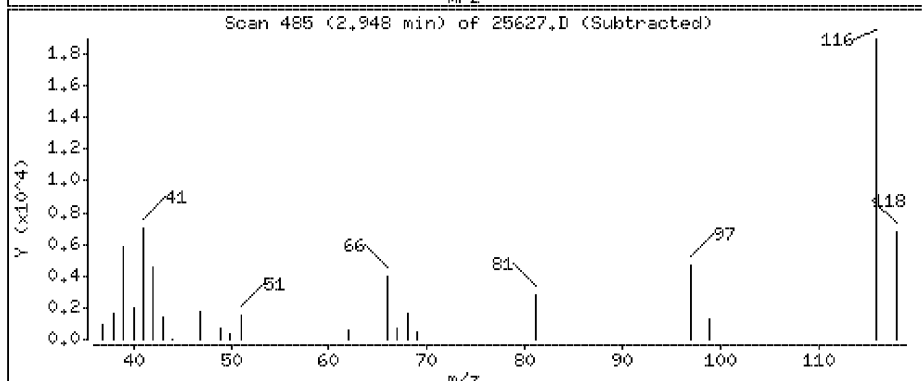
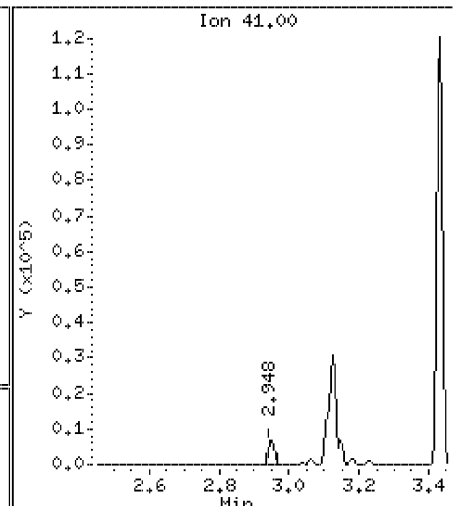
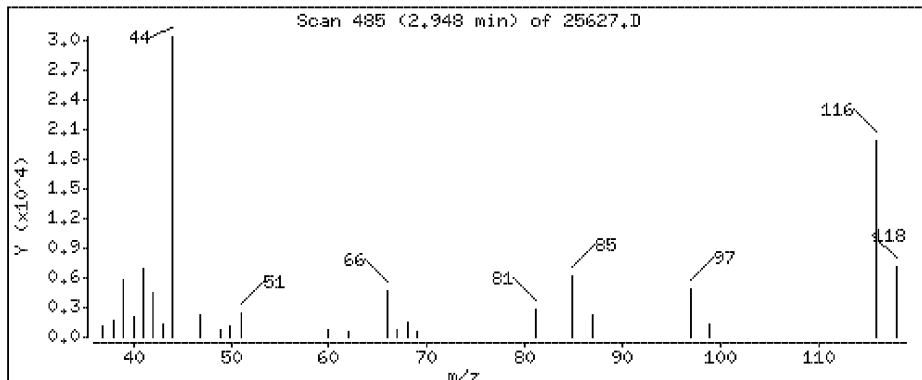
Column phase: ZB-5MSplus SN338857

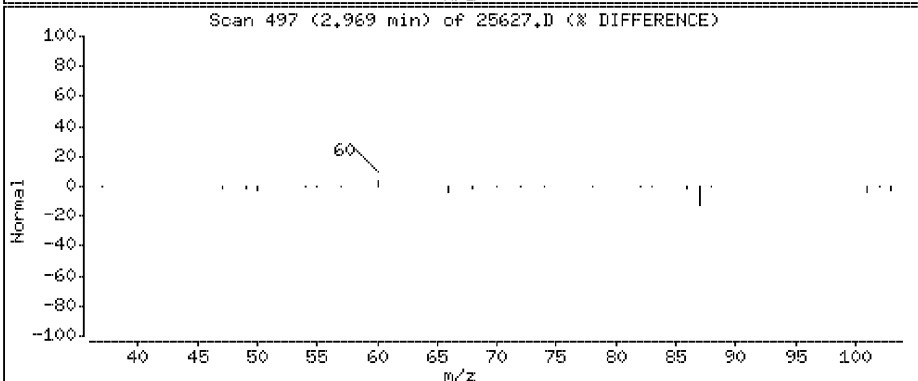
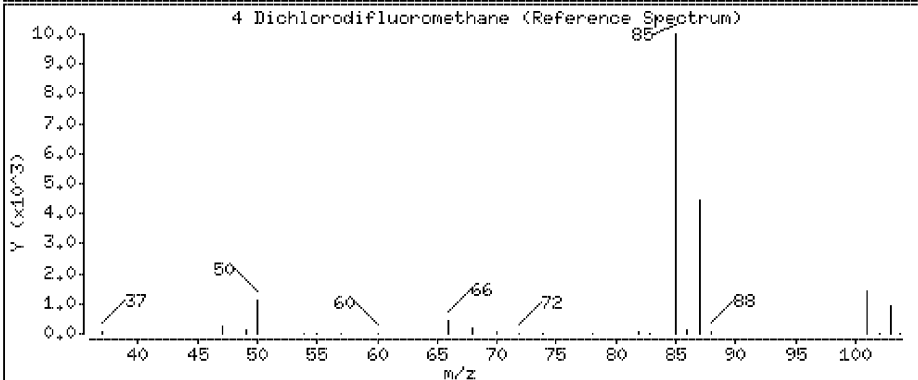
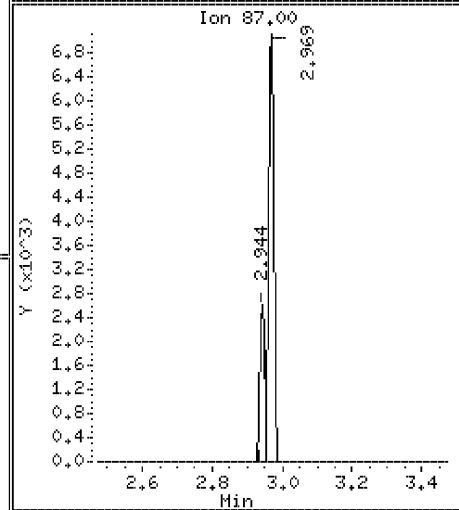
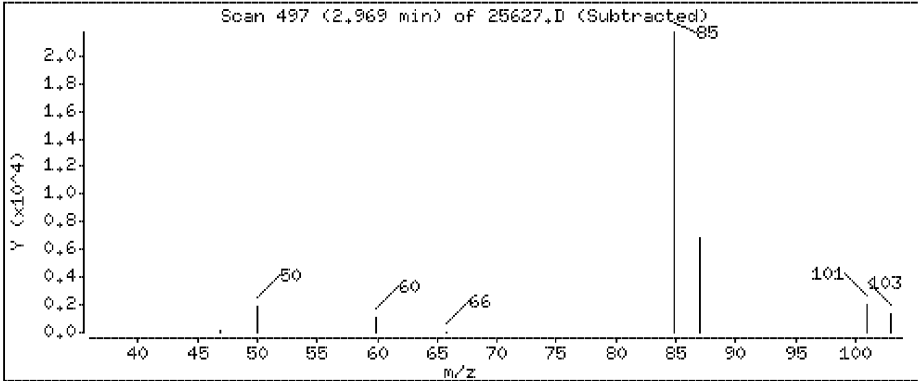
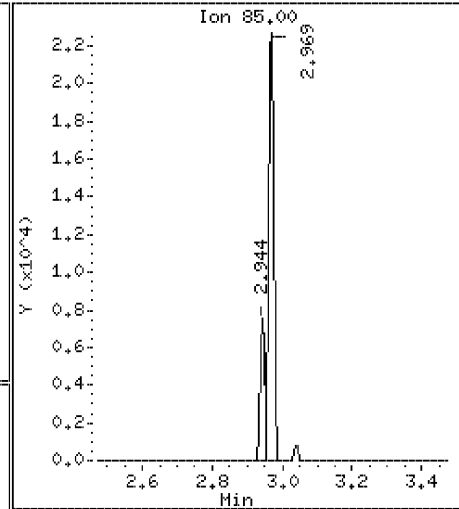
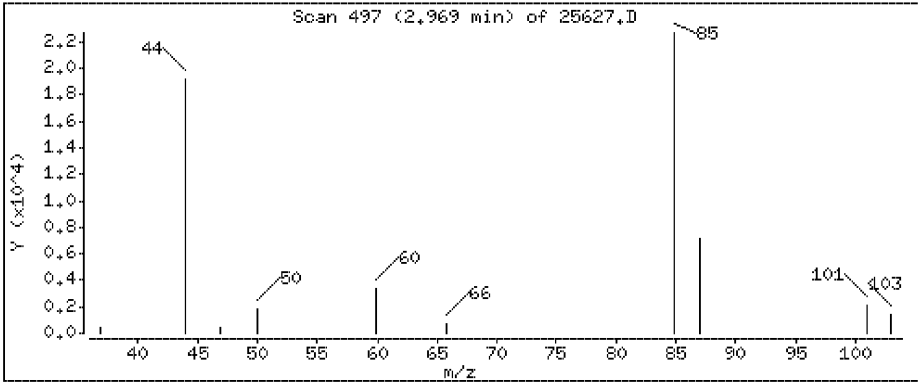
Instrument: 10airH.i

Operator: CH1

Column diameter: 0.32







Data File: \\192.168.10.12\chem\10airH,1\091318,b\25627.D

Date : 13-SEP-2018 21:59

Client ID:

Instrument: 10airH.i

Sample Info:

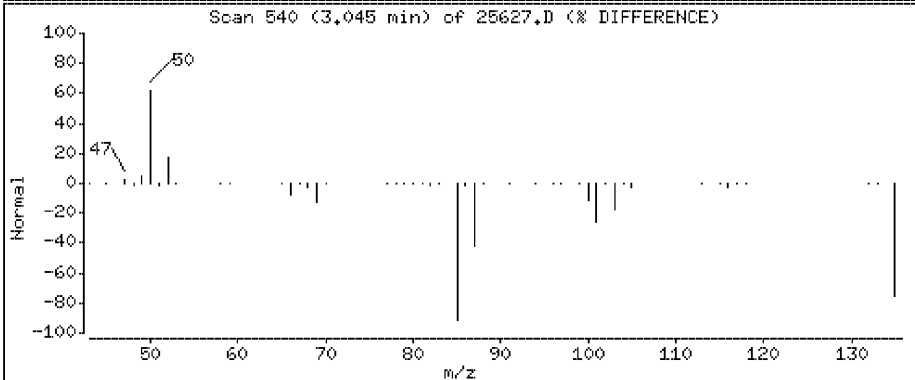
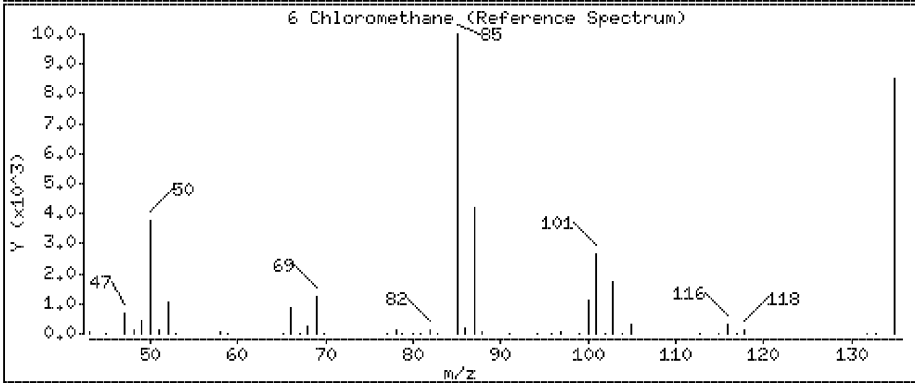
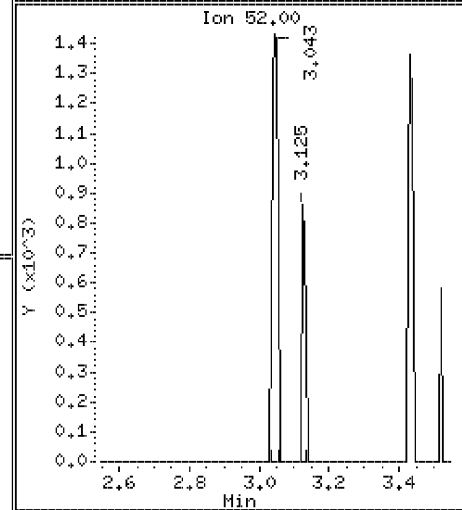
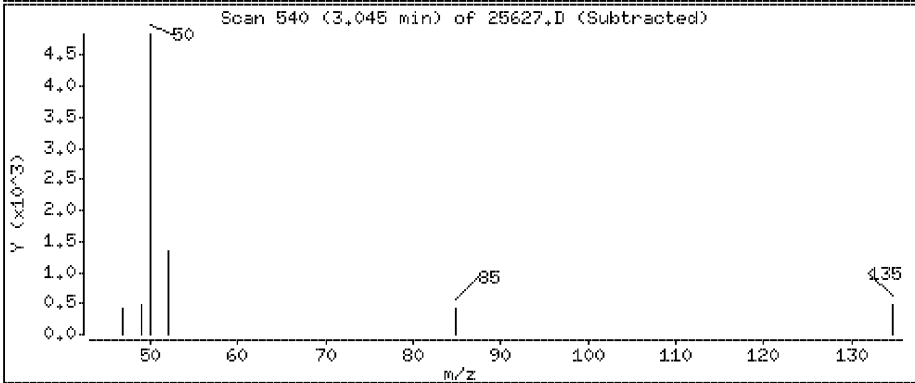
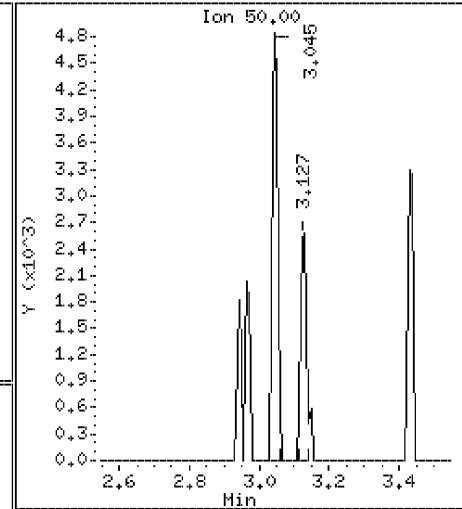
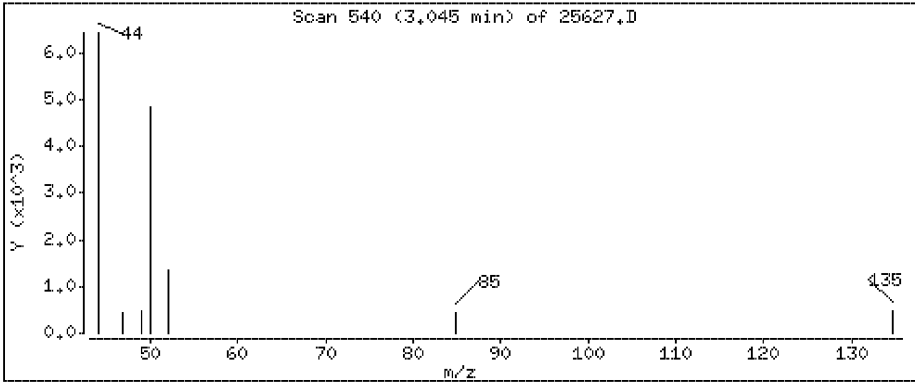
Operator: CH1

Column phase: ZB-5MSplus SN338857

Column diameter: 0,32

6 Chloromethane

Concentration: 0,296 ppbv



Data File: \\192.168.10.12\chem\10airH,1\091318,b\25627.D

Date : 13-SEP-2018 21:59

Client ID:

Instrument: 10airH.i

Sample Info:

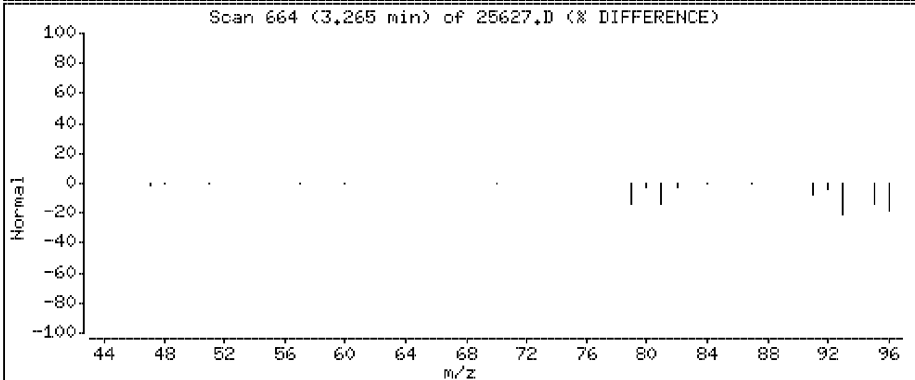
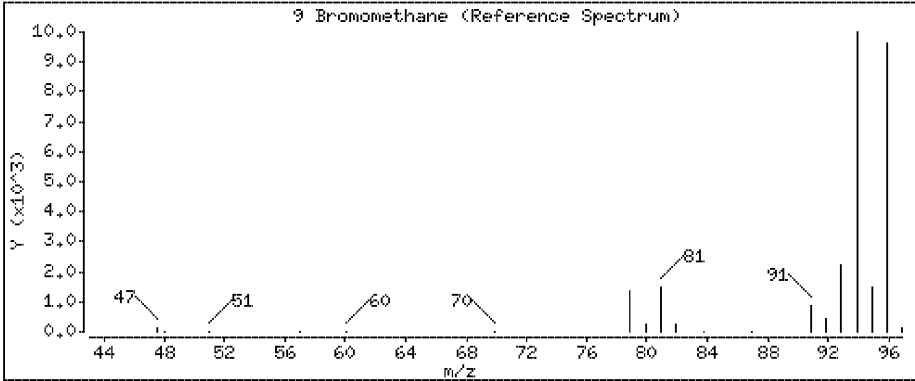
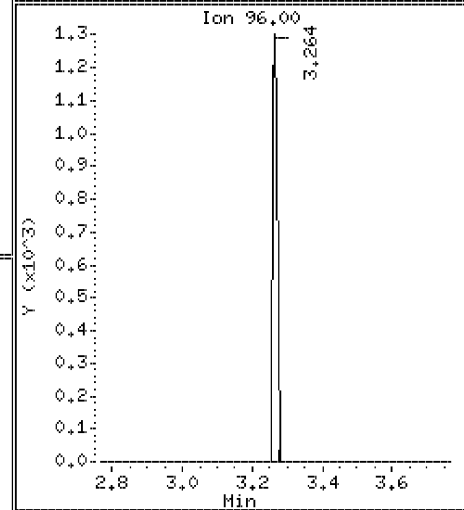
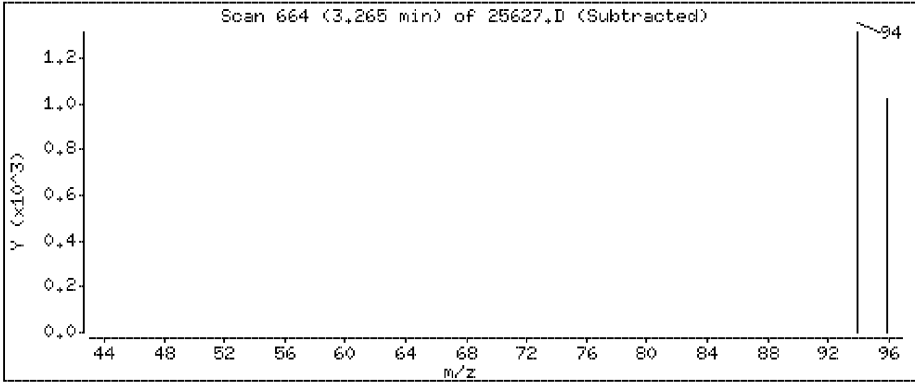
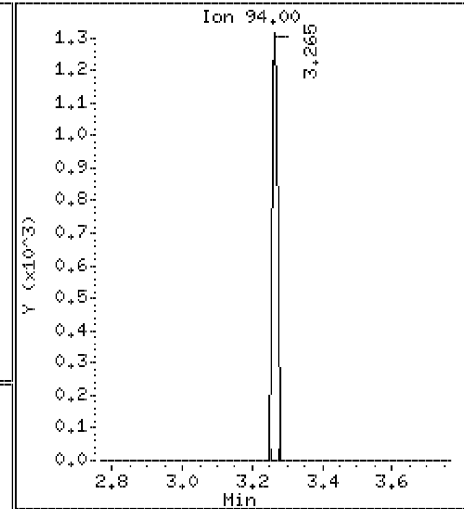
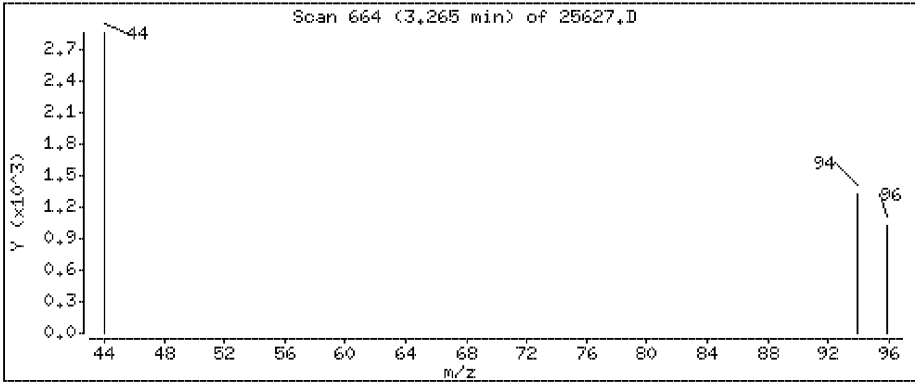
Operator: CH1

Column phase: ZB-5MSplus SN338857

Column diameter: 0,32

9 Bromomethane

Concentration: 0,0592 ppbv



Data File: \\192.168.10.12\chem\10airH,1\091318,b\25627.D

Date : 13-SEP-2018 21:59

Client ID:

Instrument: 10airH.i

Sample Info:

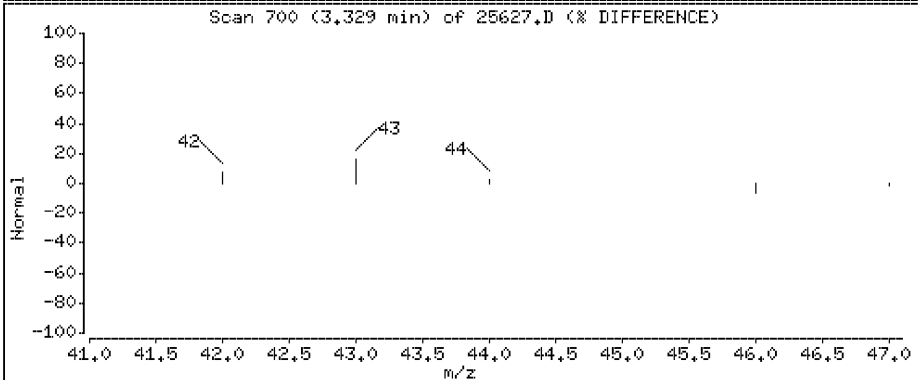
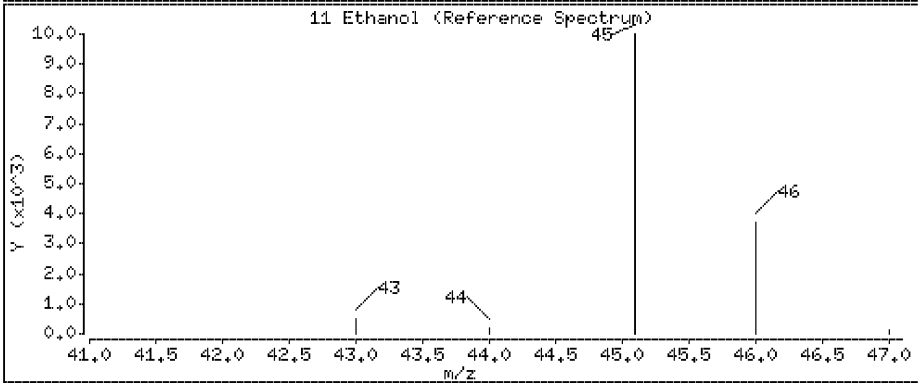
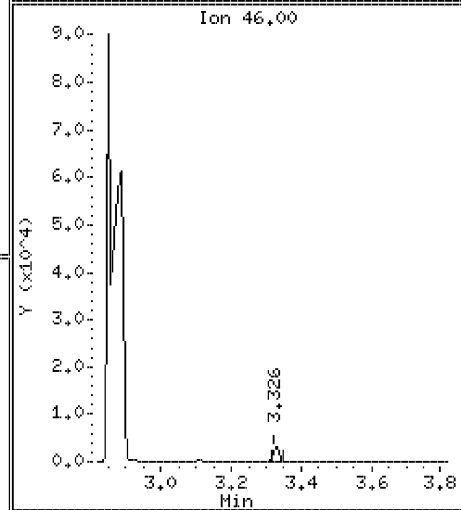
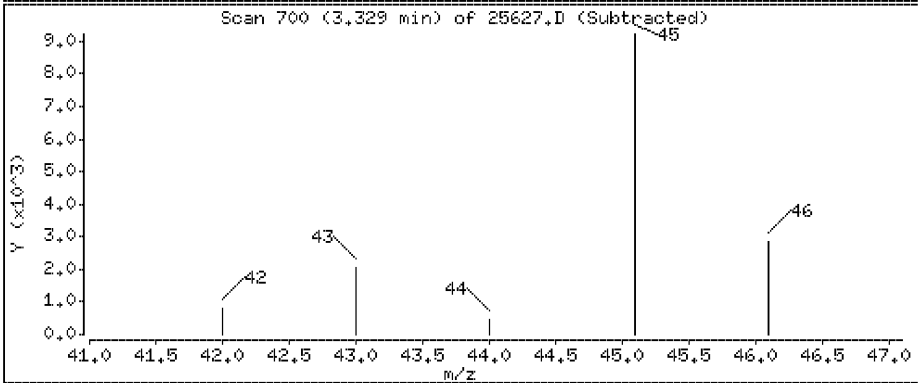
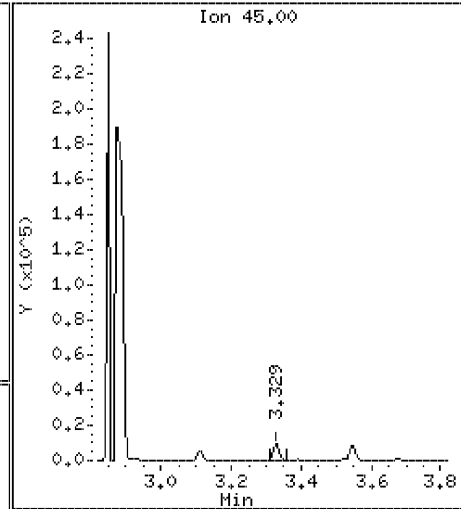
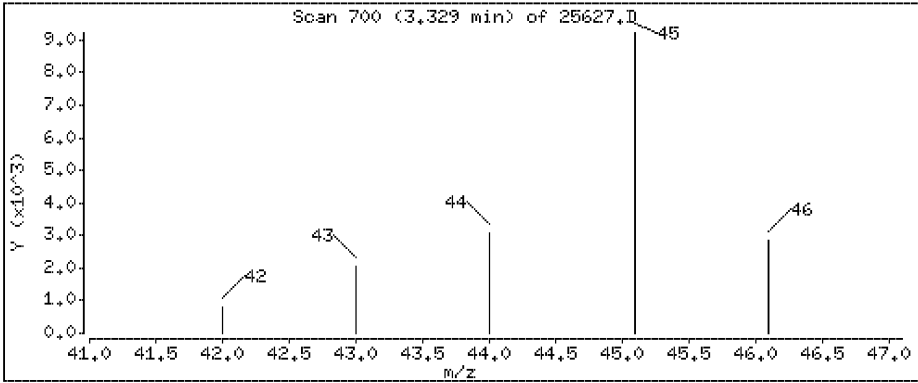
Operator: CH1

Column phase: ZB-5MSplus SN338857

Column diameter: 0,32

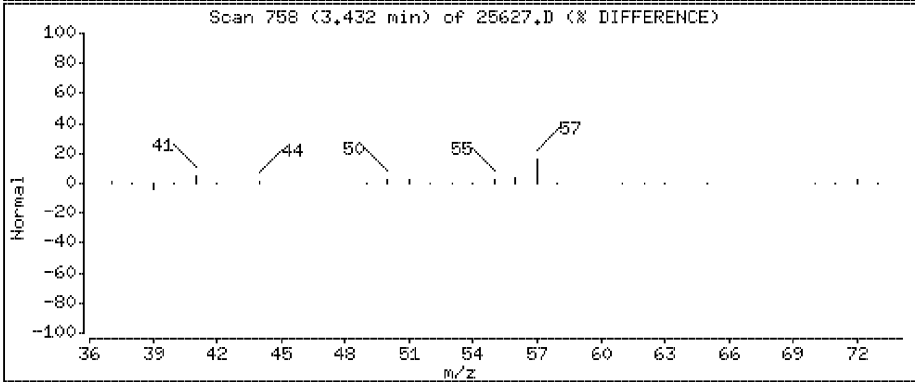
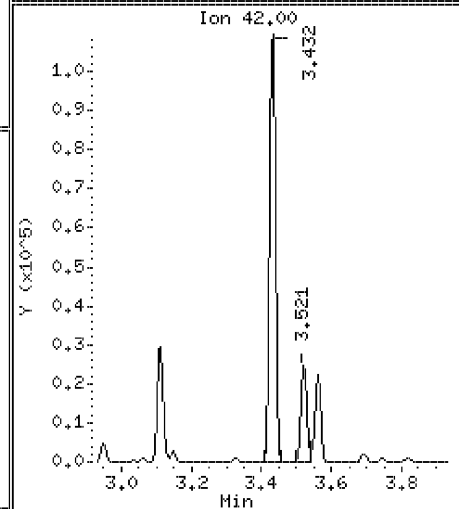
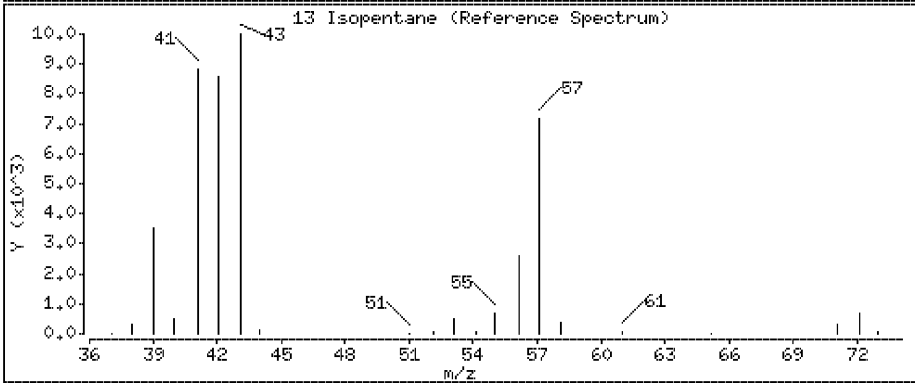
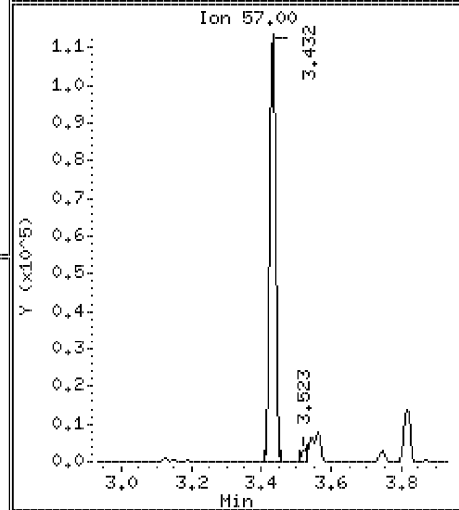
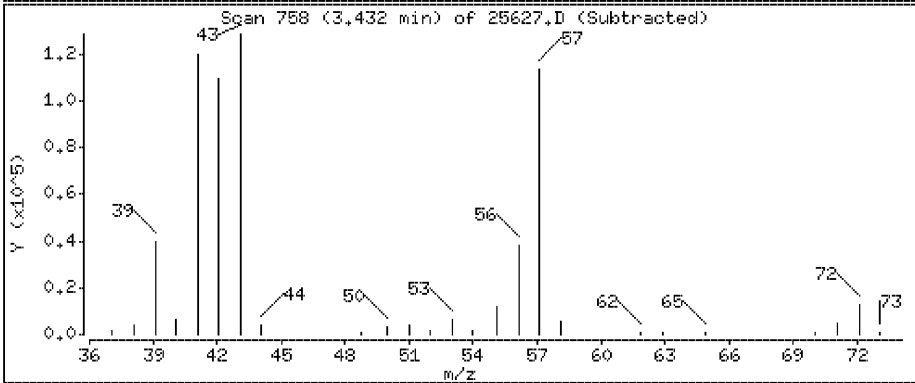
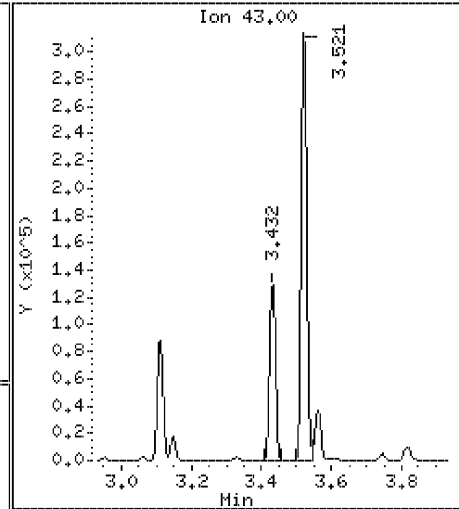
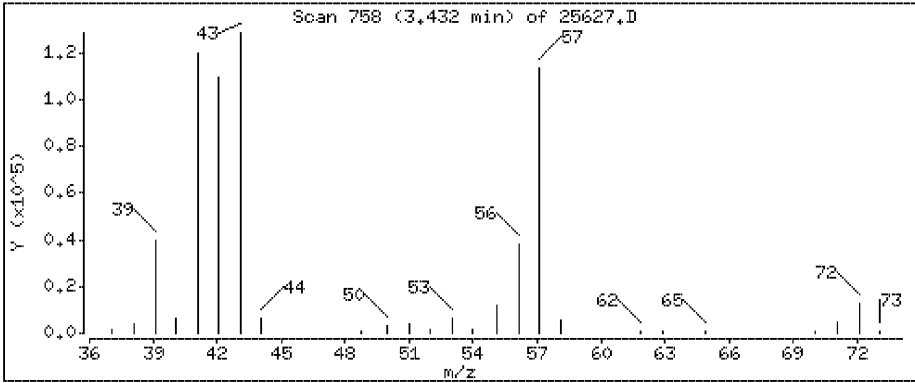
11 Ethanol

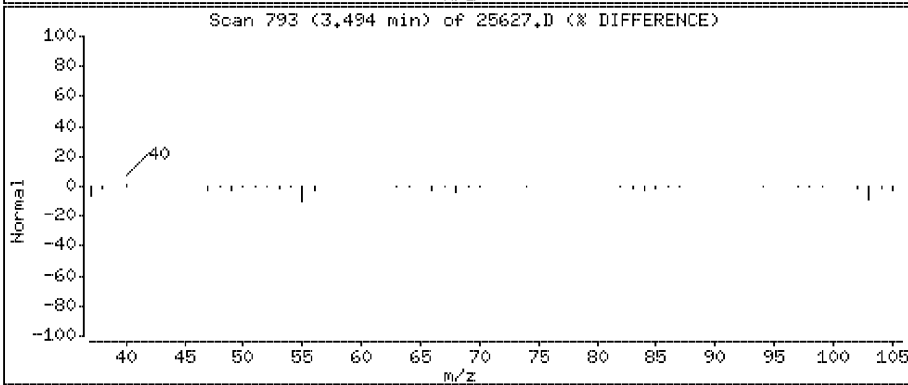
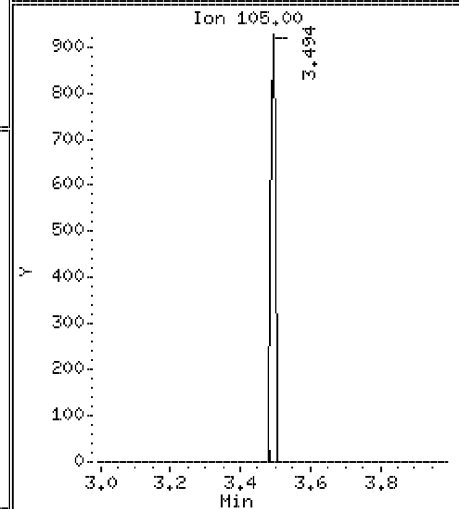
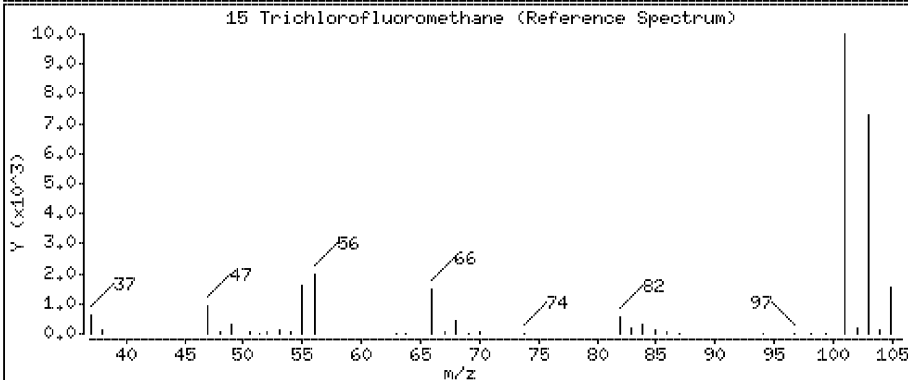
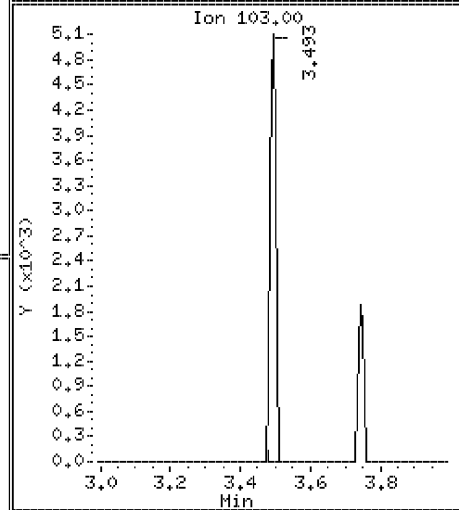
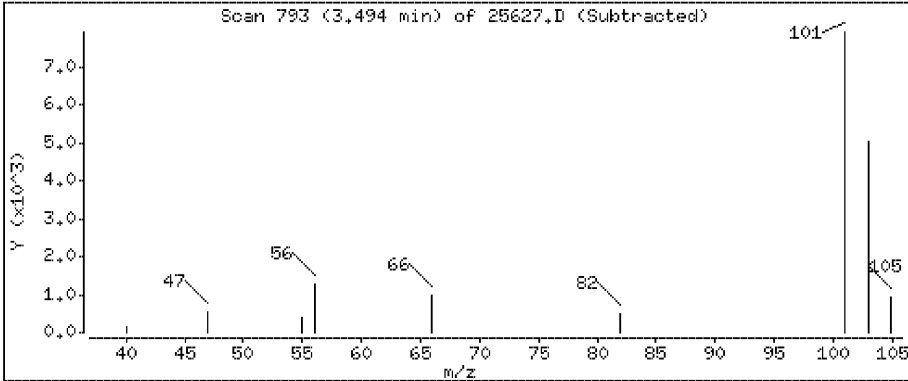
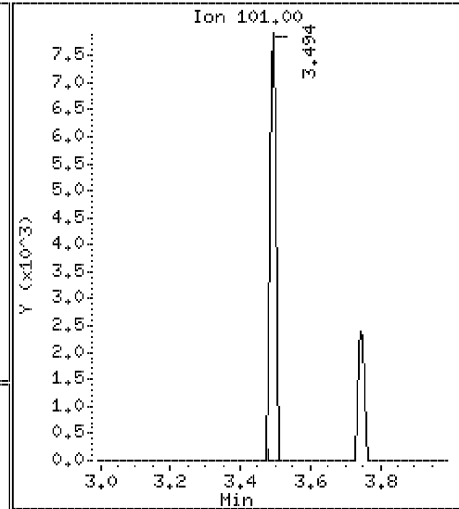
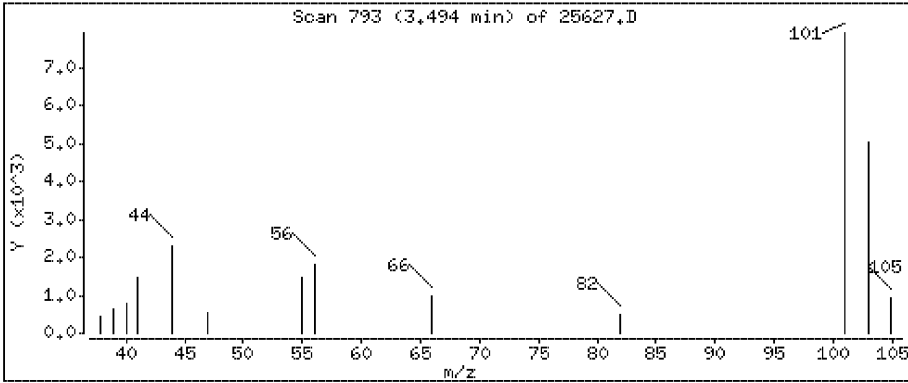
Concentration: 2,30 ppbv

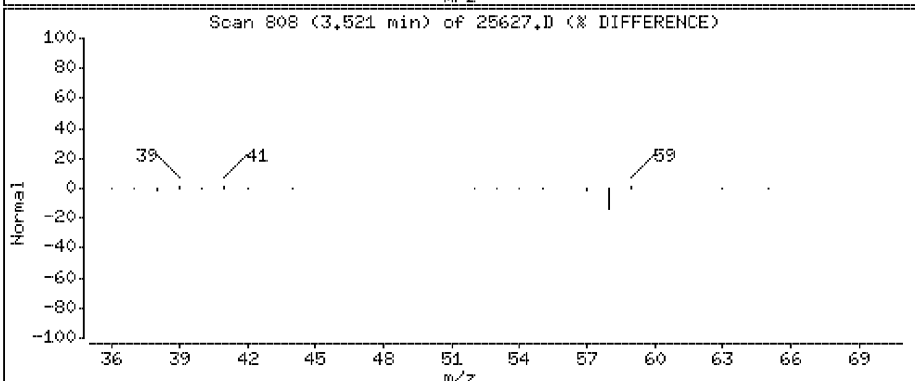
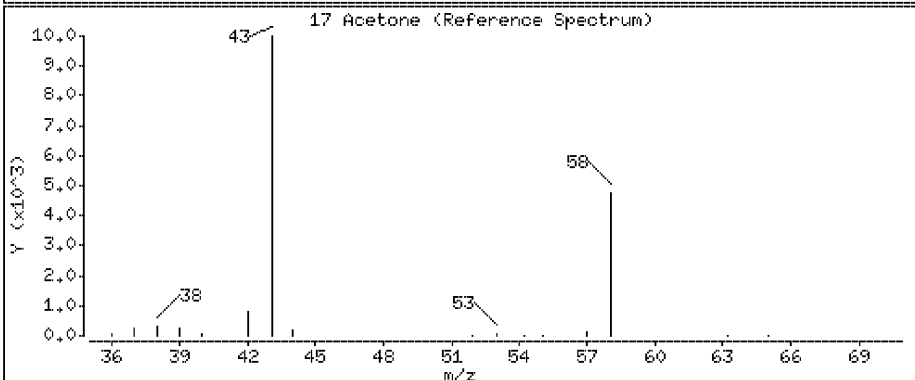
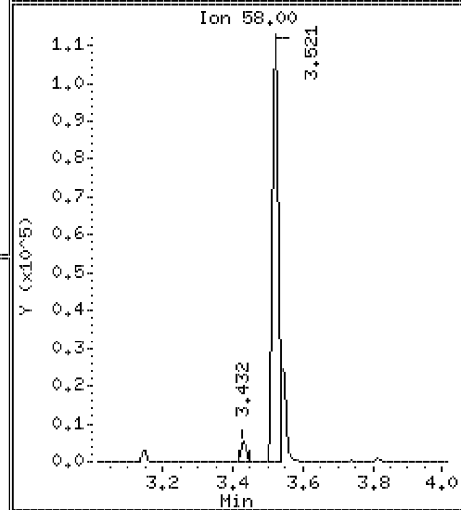
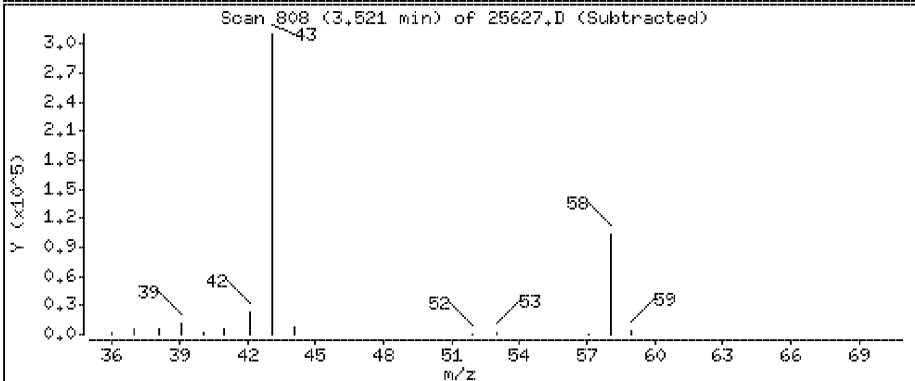
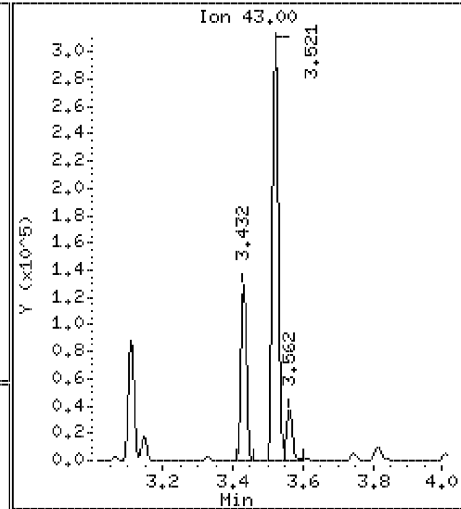
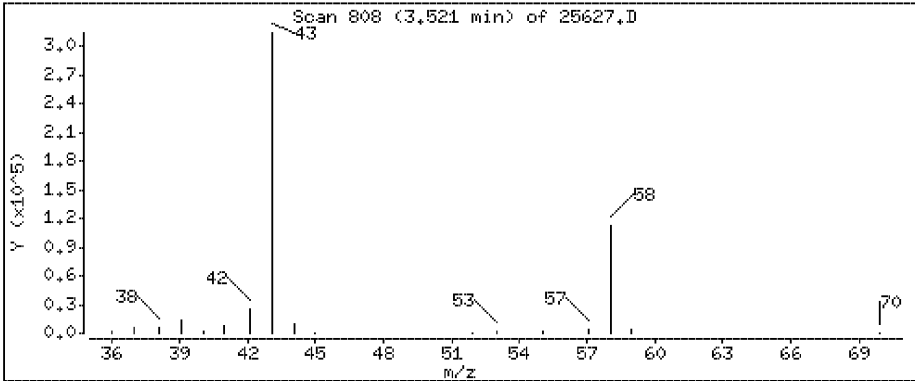


13 Isopentane

Concentration: 11,1 ppbv







Data File: \\192.168.10.12\chem\10airH,i\091318,b\25627.D

Date : 13-SEP-2018 21:59

Client ID:

Instrument: 10airH.i

Sample Info:

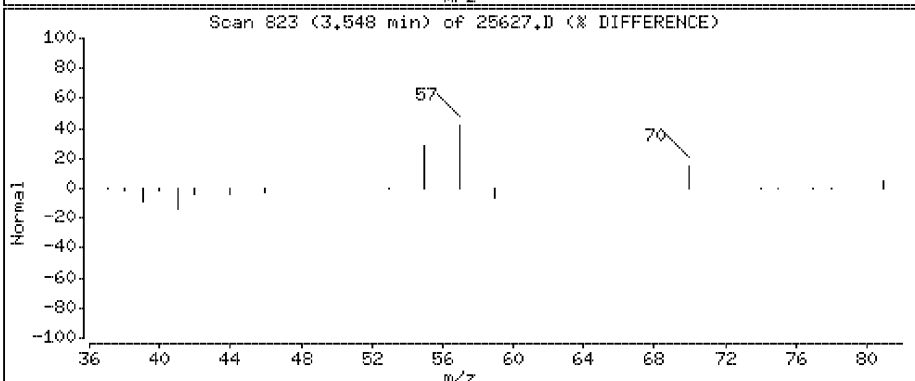
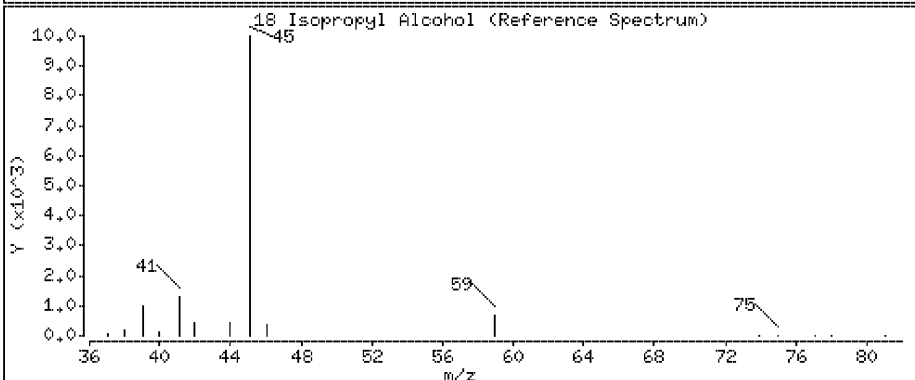
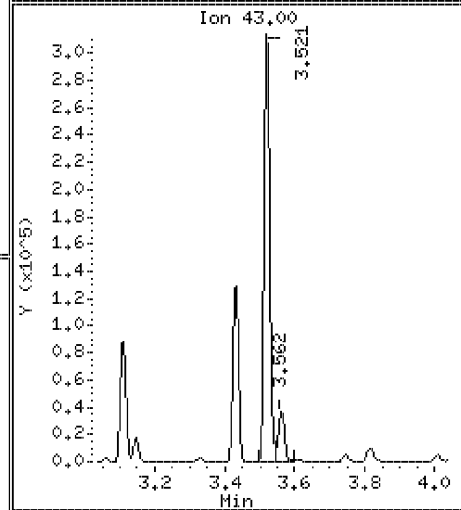
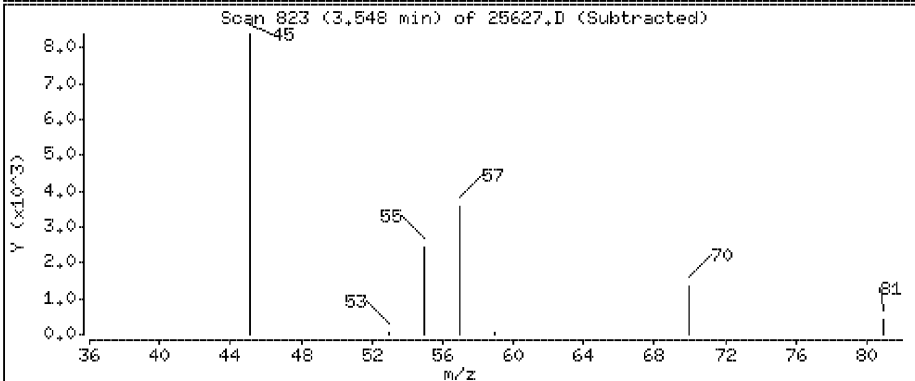
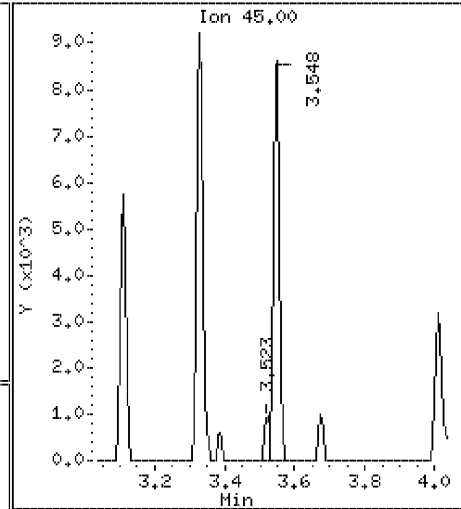
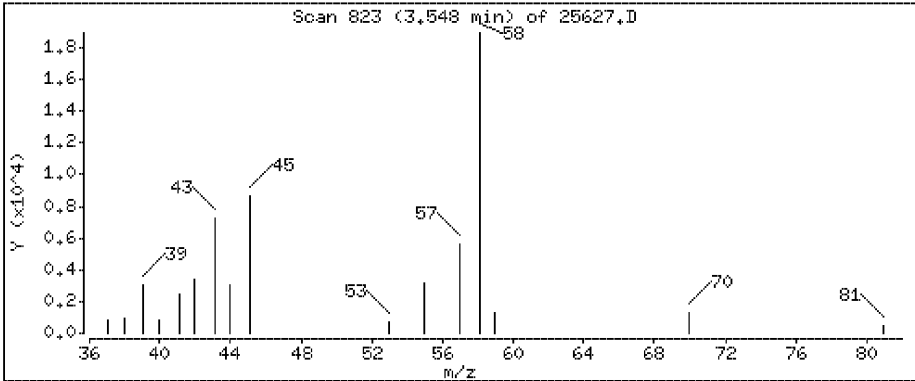
Operator: CH1

Column phase: ZB-5MSplus SN338857

Column diameter: 0,32

18 Isopropyl Alcohol

Concentration: 0,492 ppbv



Data File: \\192.168.10.12\chem\10airH,1\091318,b\25627.D

Date : 13-SEP-2018 21:59

Client ID:

Instrument: 10airH.i

Sample Info:

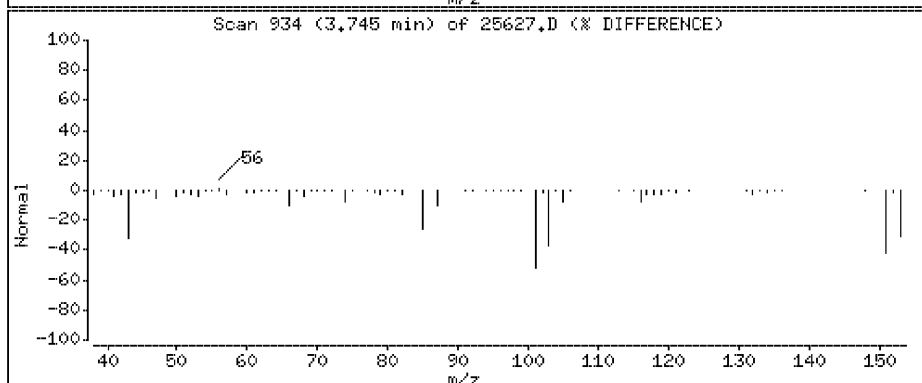
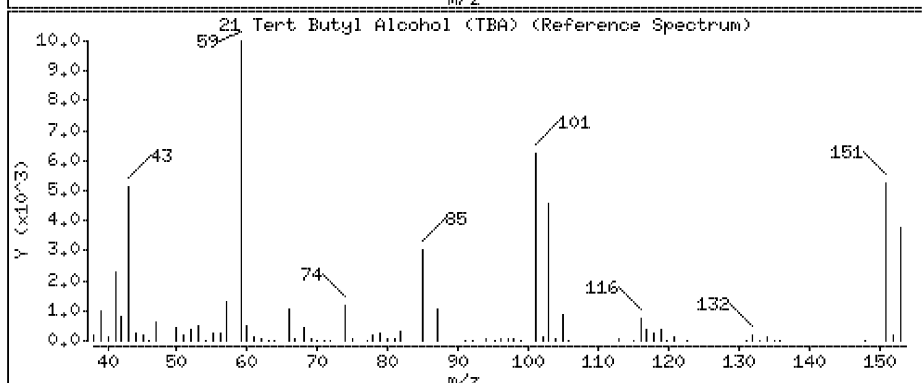
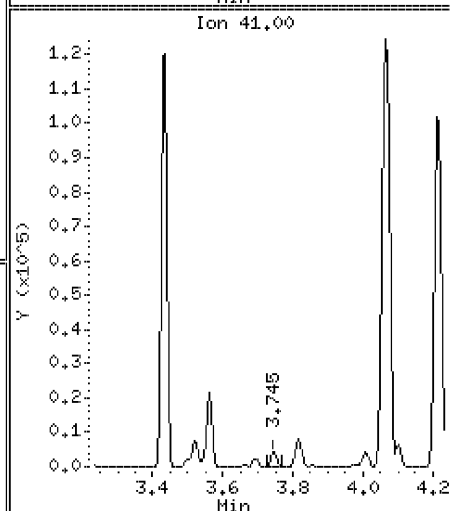
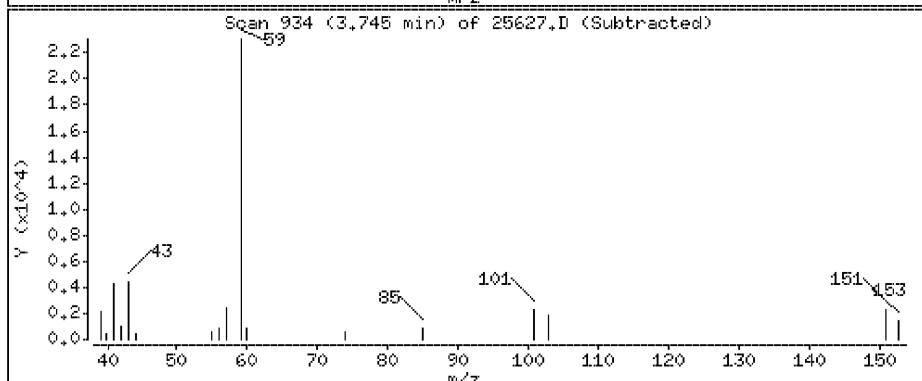
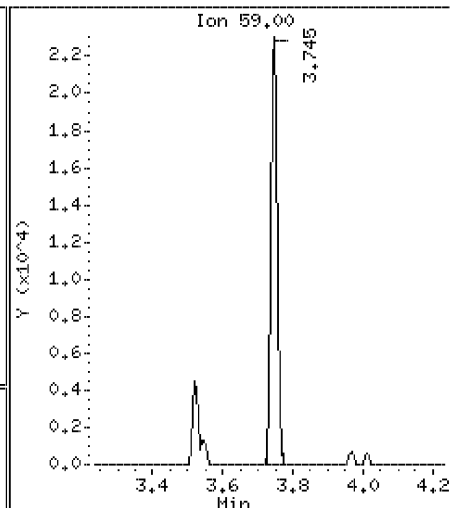
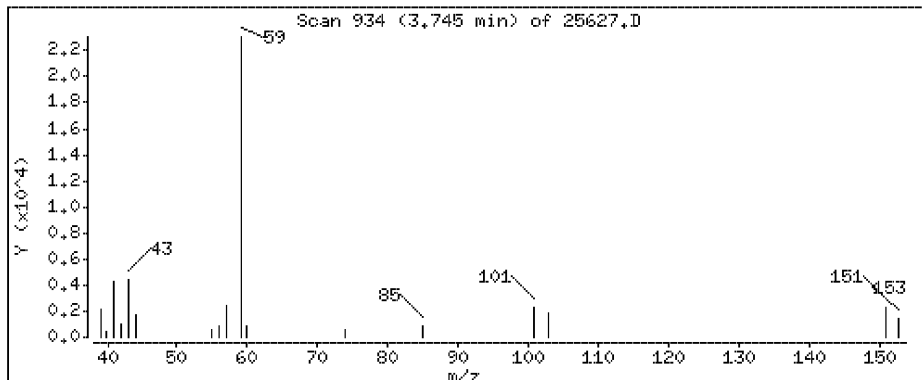
Operator: CH1

Column phase: ZB-5MSplus SN338857

Column diameter: 0,32

21 Tert Butyl Alcohol (TBA)

Concentration: 0,805 ppbv



Data File: \\192.168.10.12\chem\10airH,i\091318,b\25627.D

Date : 13-SEP-2018 21:59

Client ID:

Instrument: 10airH.i

Sample Info:

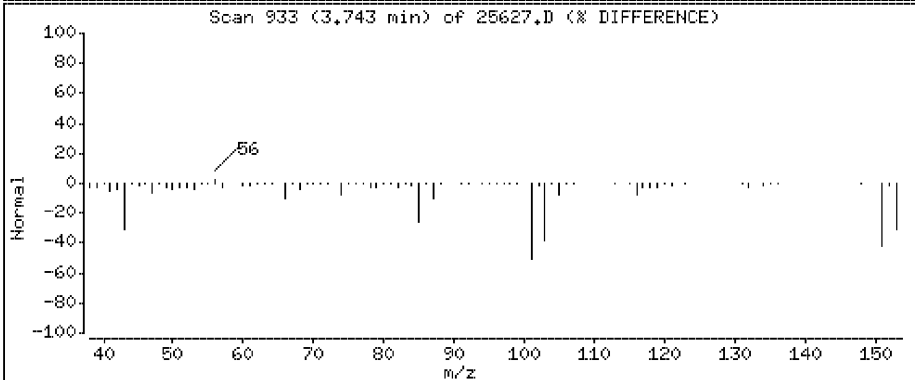
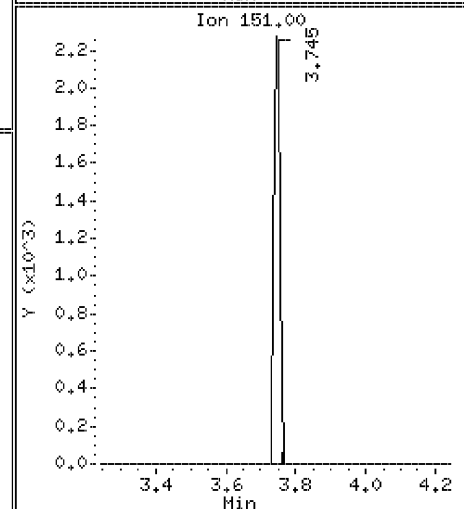
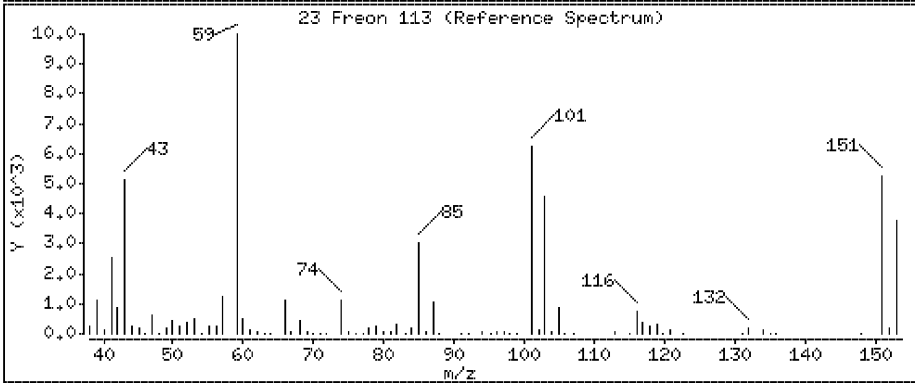
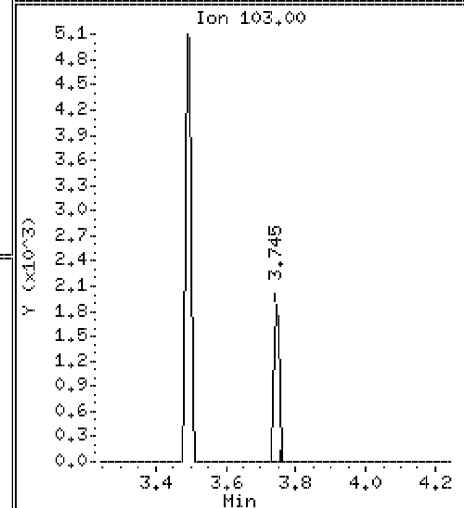
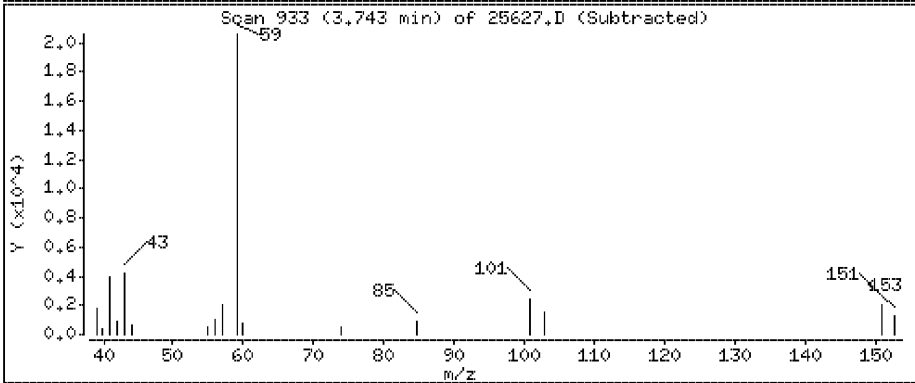
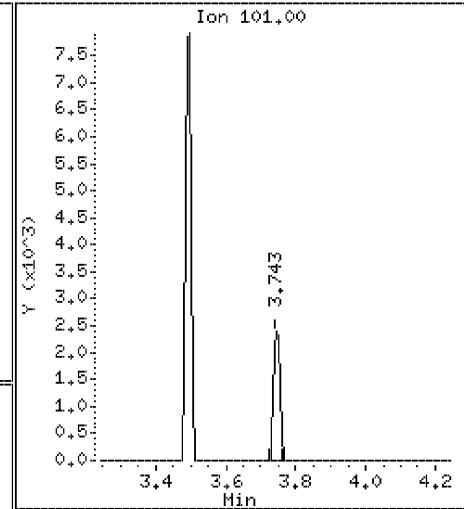
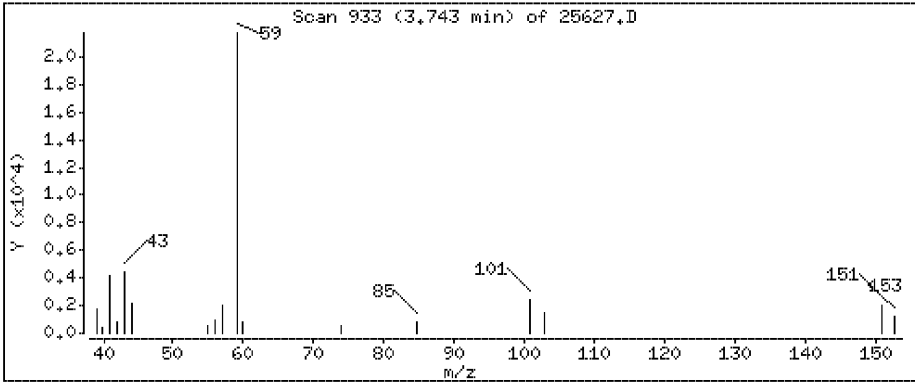
Operator: CH1

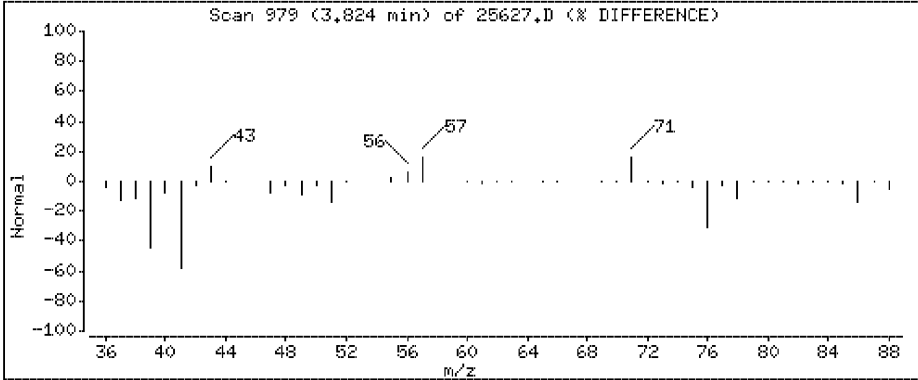
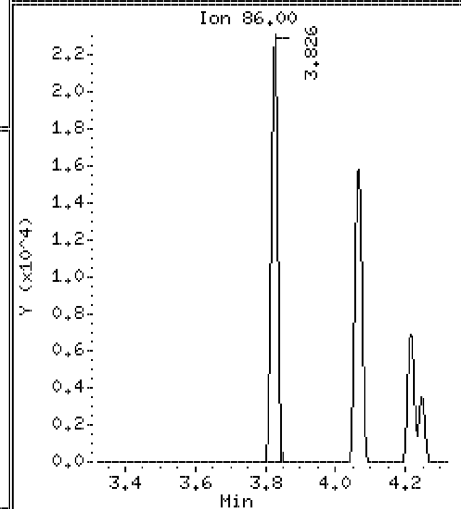
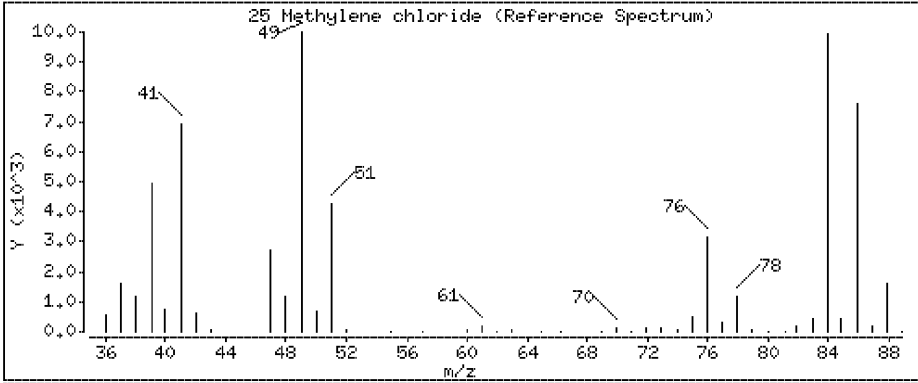
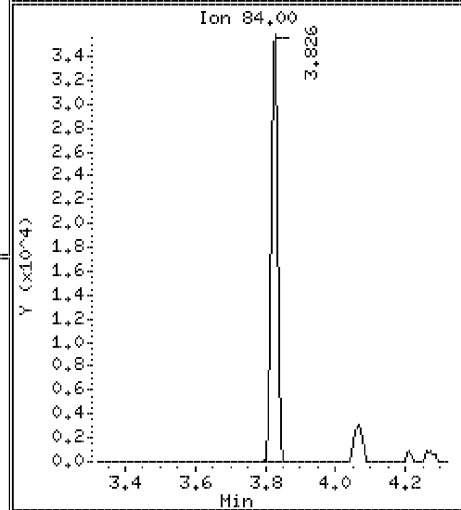
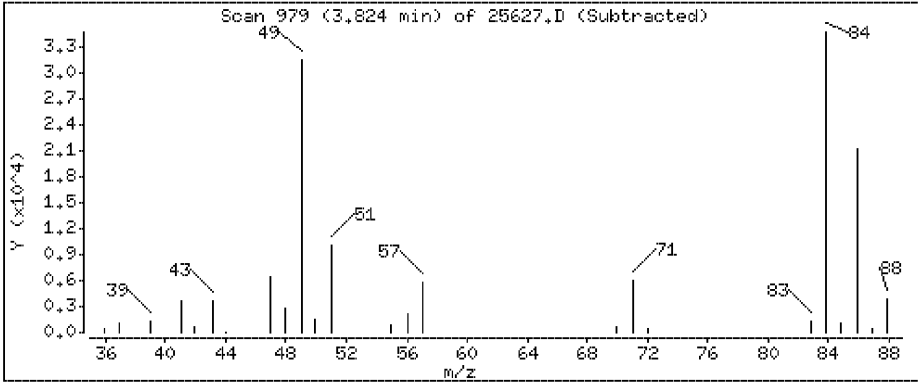
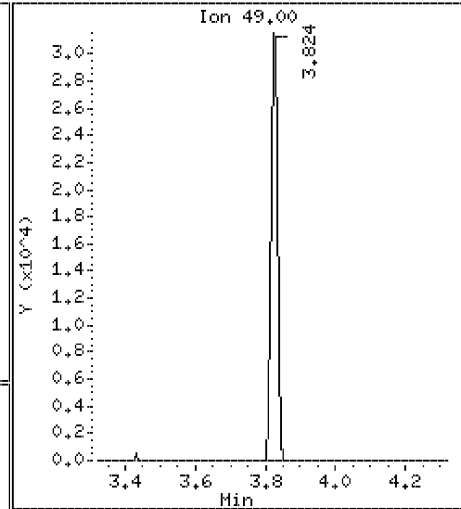
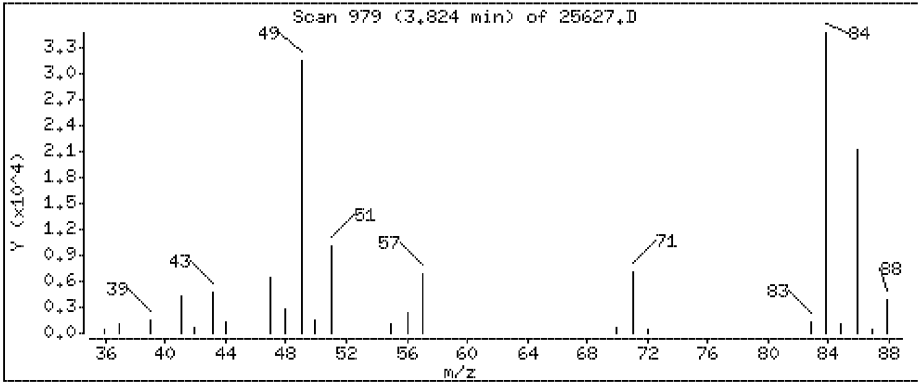
Column phase: ZB-5MSplus SN338857

Column diameter: 0,32

23 Freon 113

Concentration: 0,0629 ppbv





Data File: \\192.168.10.12\chem\10airH,1\091318,b\25627.D

Date : 13-SEP-2018 21:59

Client ID:

Instrument: 10airH.i

Sample Info:

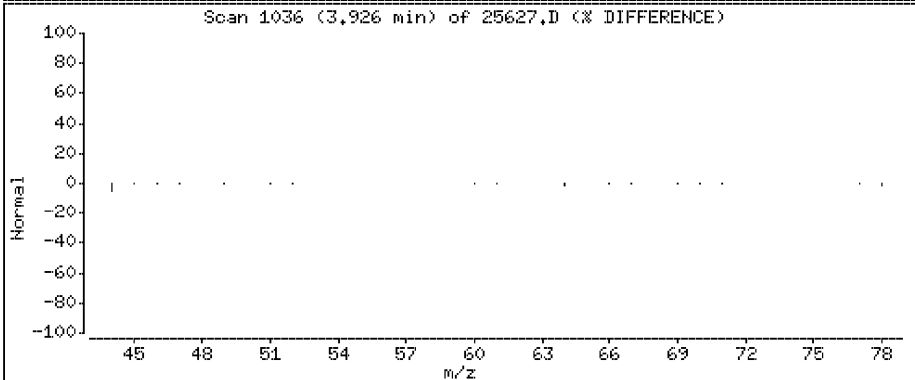
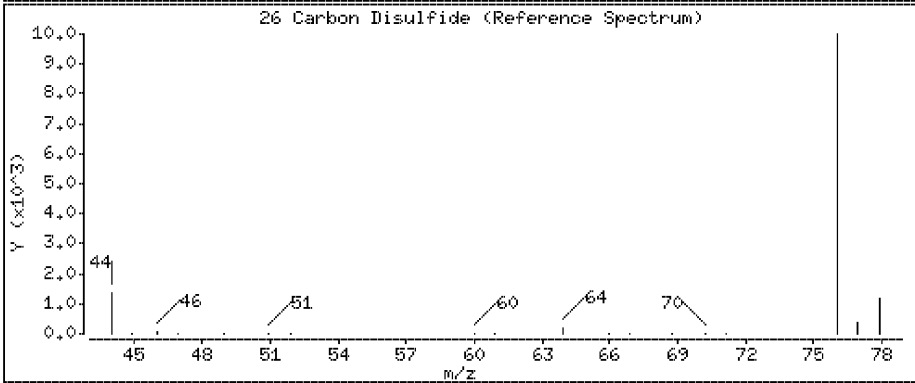
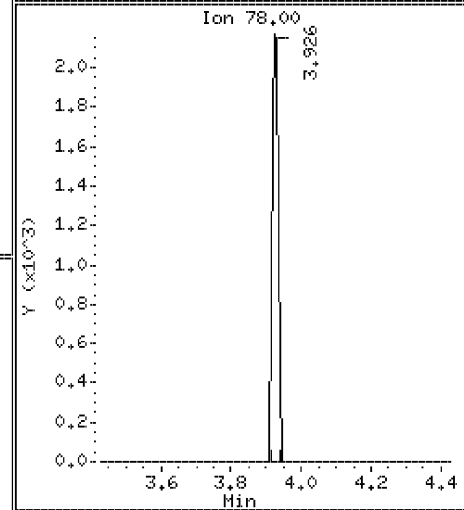
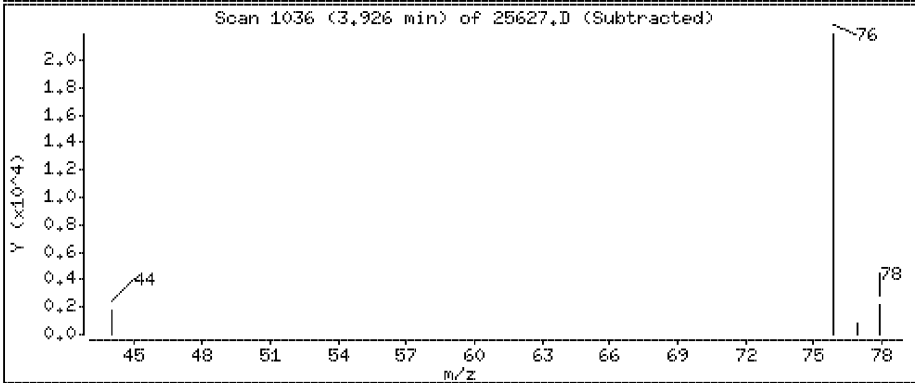
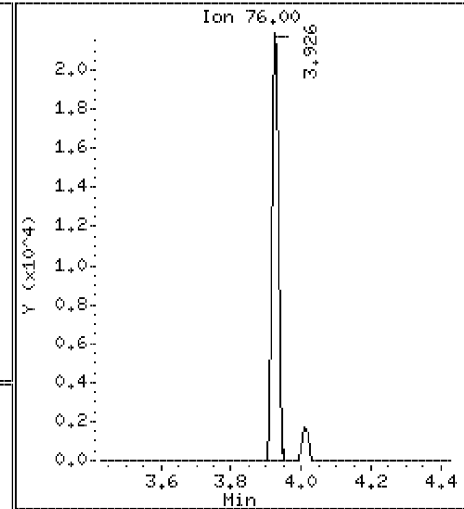
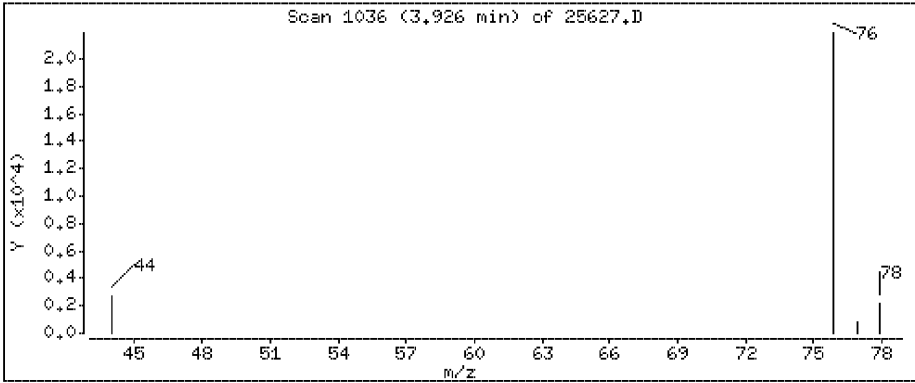
Operator: CH1

Column phase: ZB-5MSplus SN338857

Column diameter: 0.32

26 Carbon Disulfide

Concentration: 0.482 ppbv



Data File: \\192.168.10.12\chem\10airH,1\091318,b\25627.D

Date : 13-SEP-2018 21:59

Client ID:

Instrument: 10airH.i

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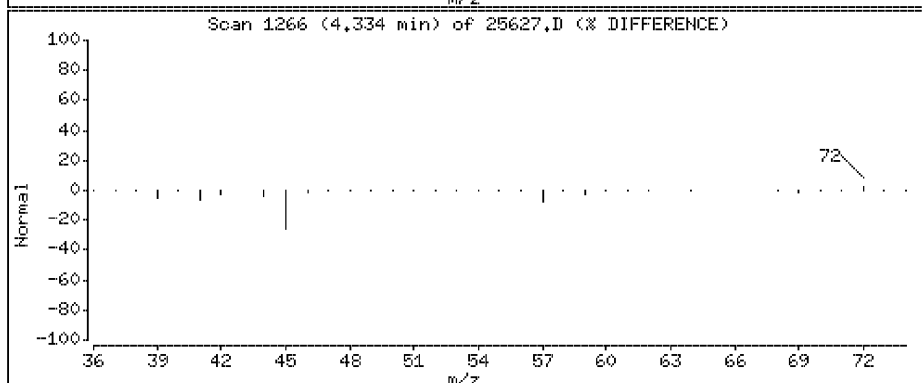
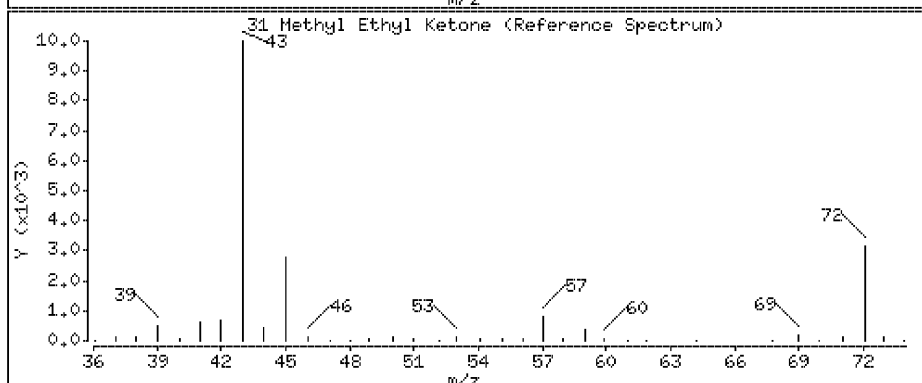
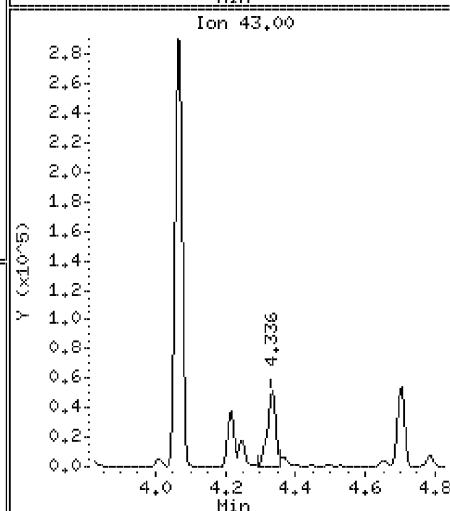
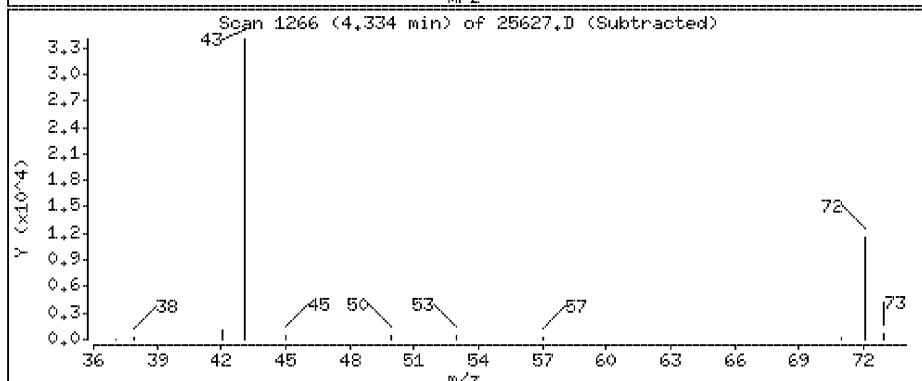
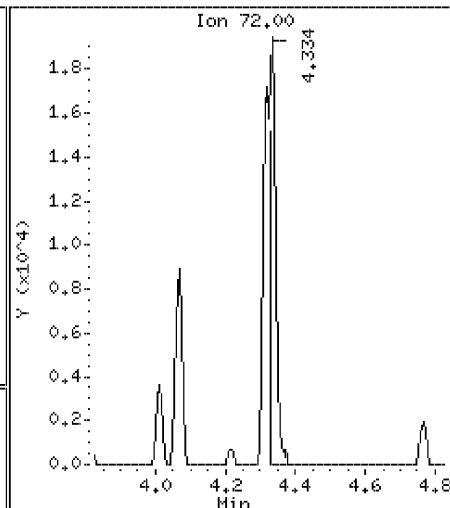
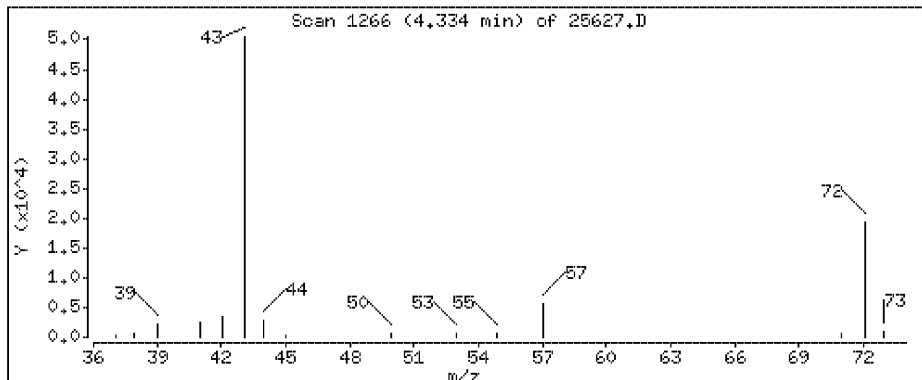
Operator: CH1

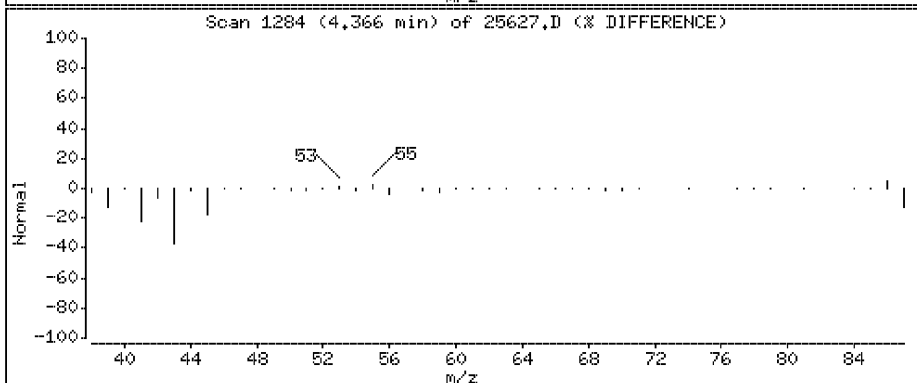
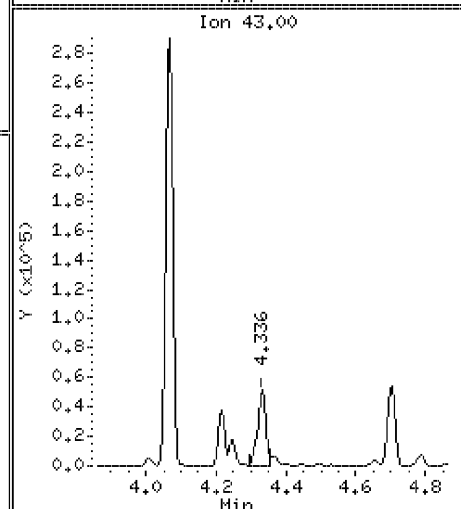
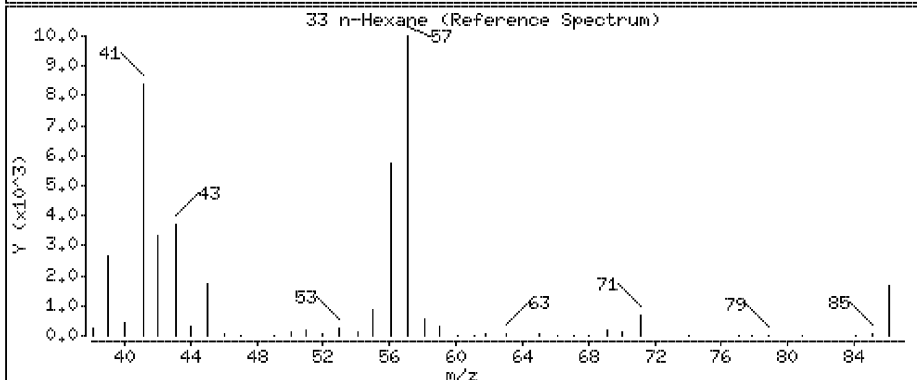
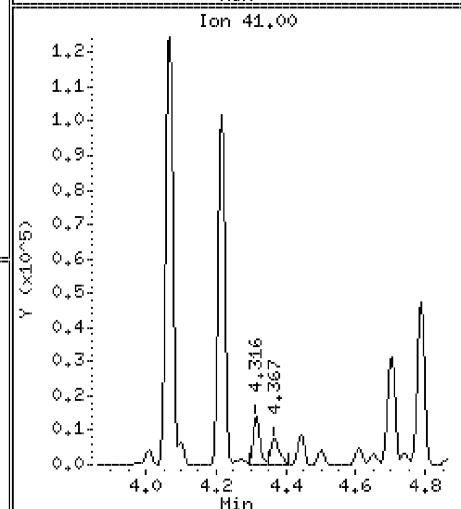
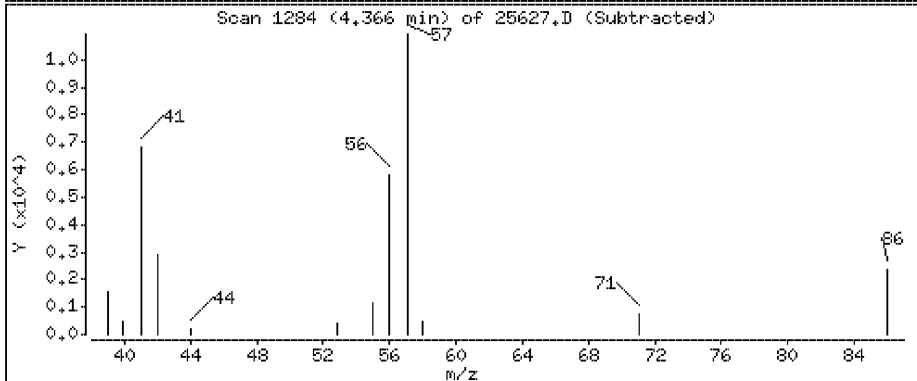
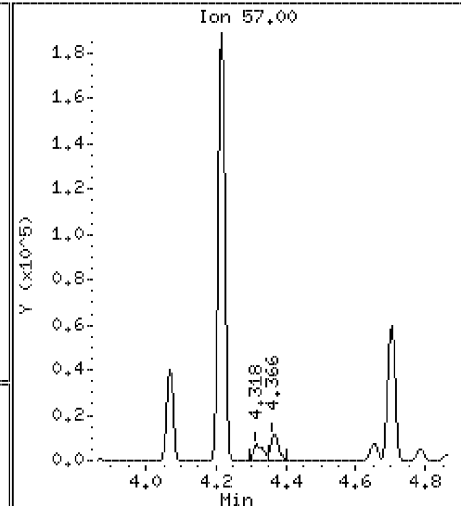
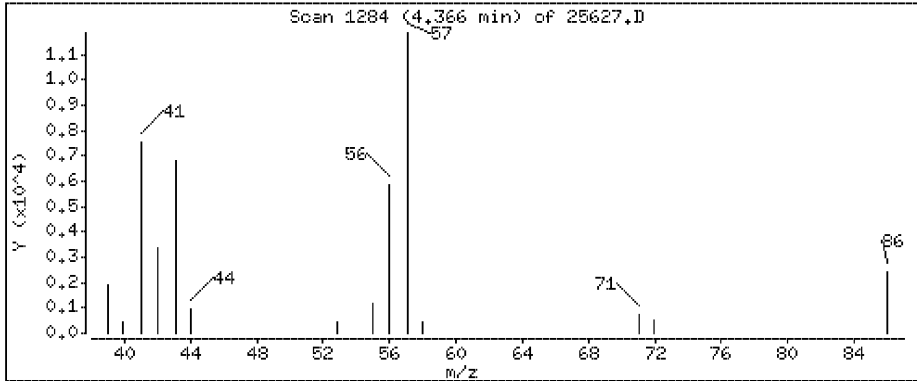
Column phase: ZB-5MSplus SN338857

Column diameter: 0.32

31 Methyl Ethyl Ketone

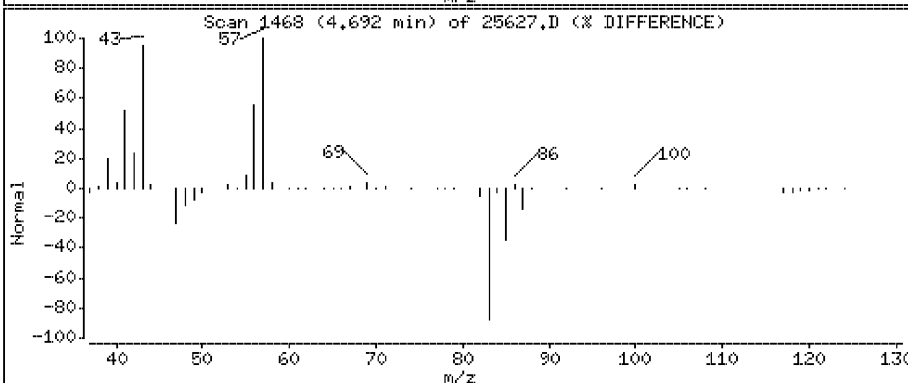
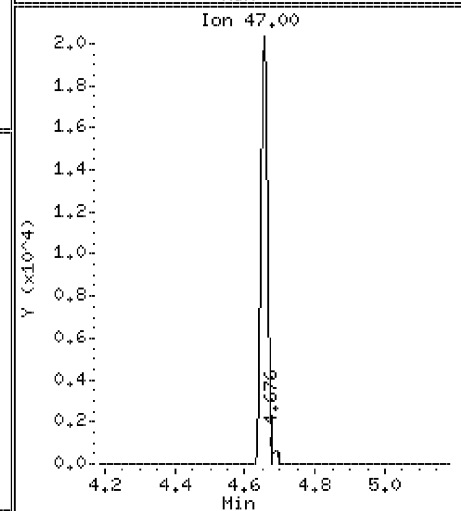
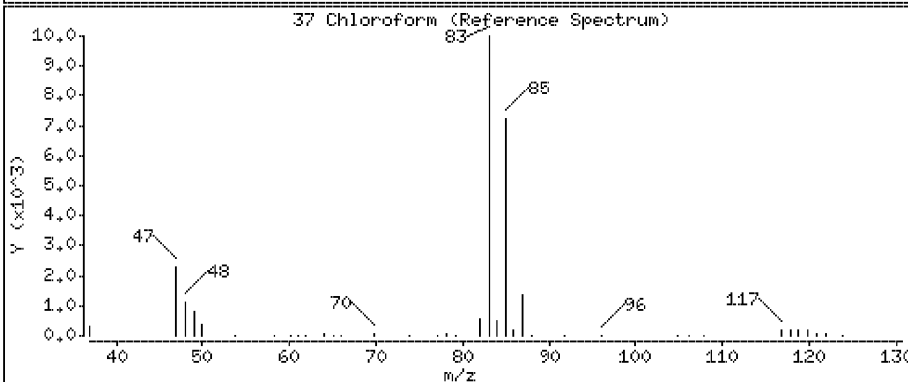
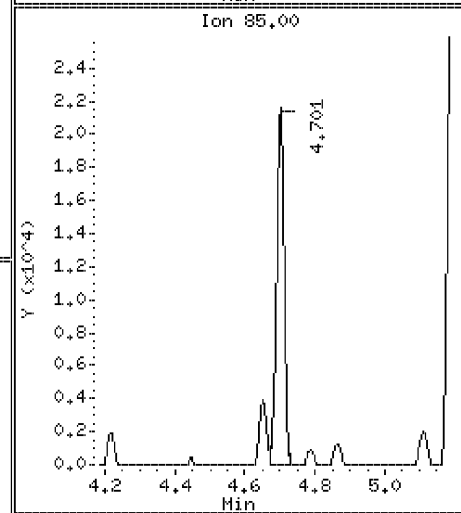
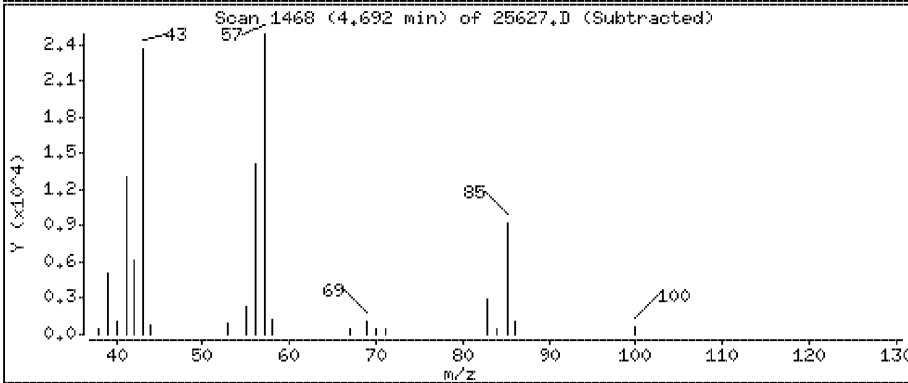
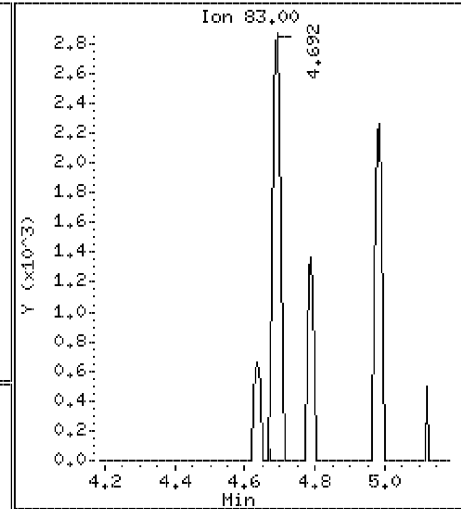
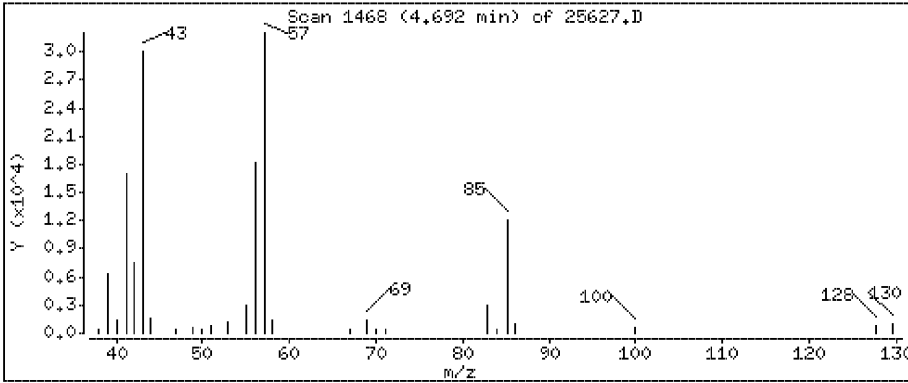
Concentration: 2.39 ppbv





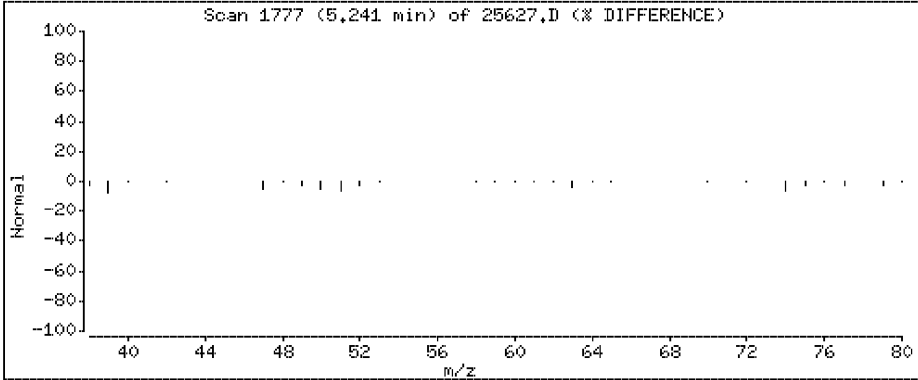
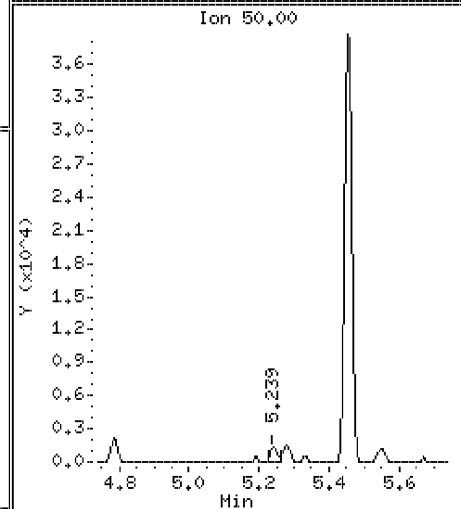
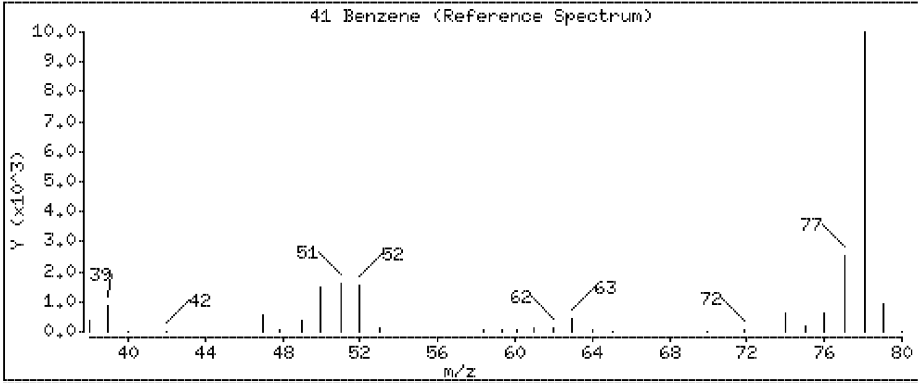
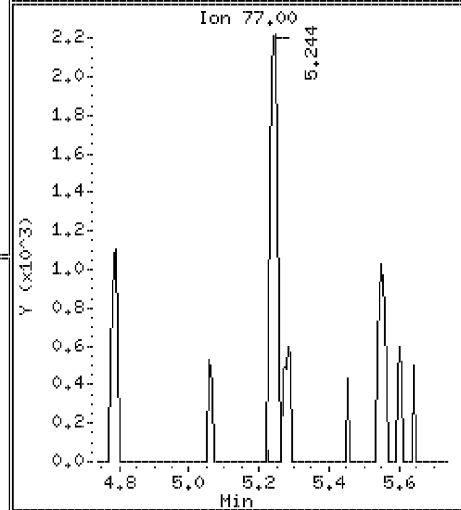
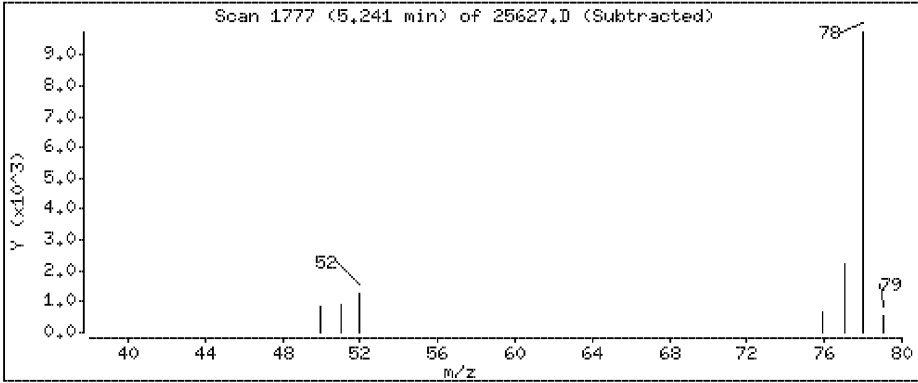
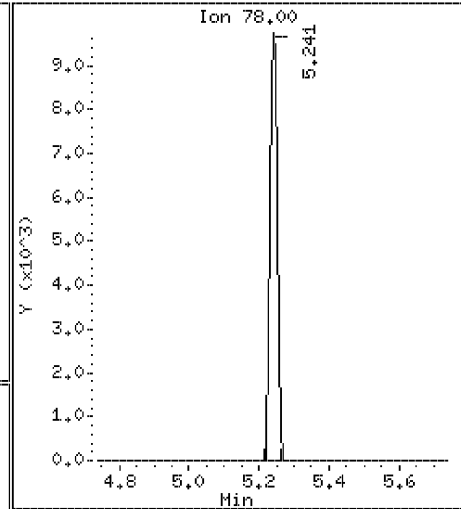
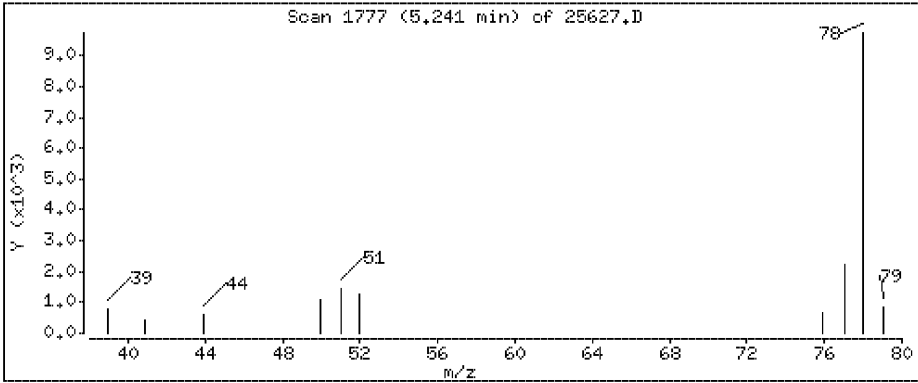
37 Chloroform

Concentration: 0,0914 ppbv



41 Benzene

Concentration: 0,246 ppbv



Data File: \\192.168.10.12\chem\10airH,i\091318,b\25627.D

Date : 13-SEP-2018 21:59

Client ID:

Instrument: 10airH.i

Sample Info:

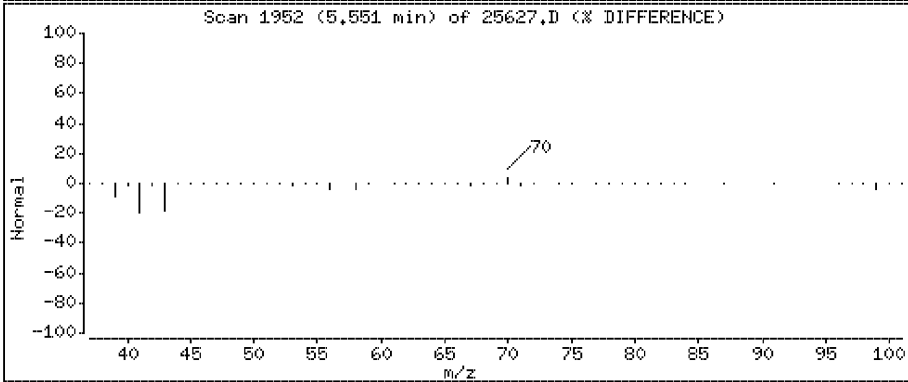
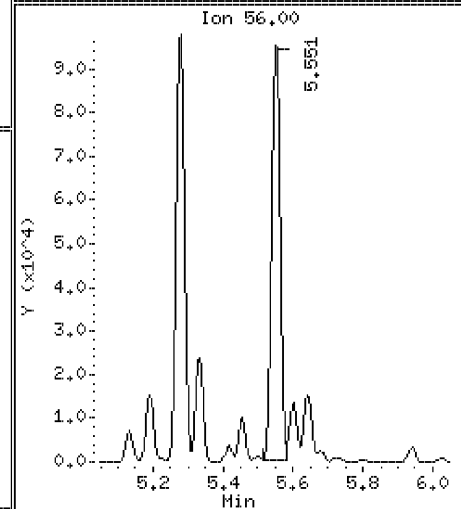
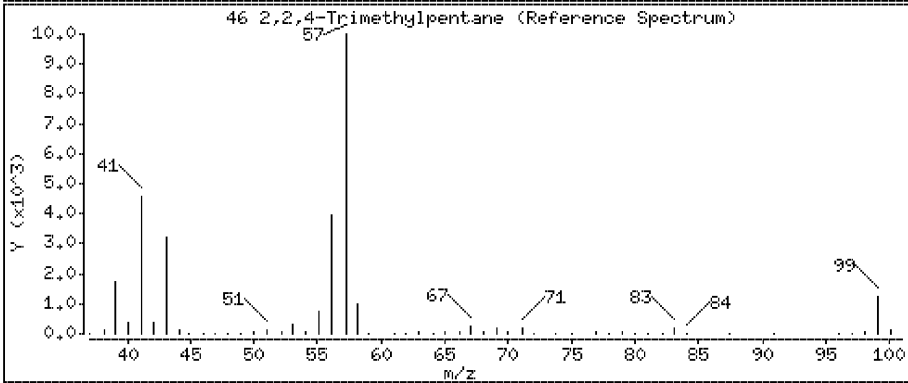
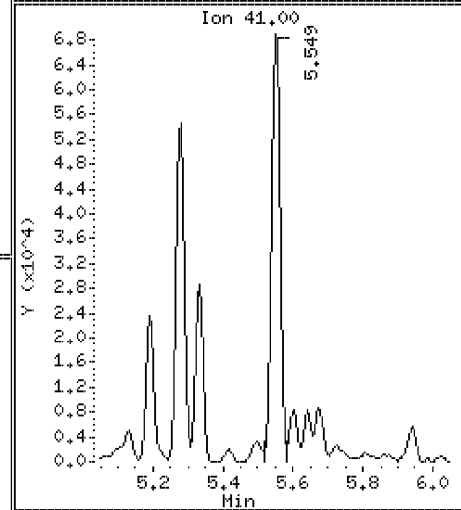
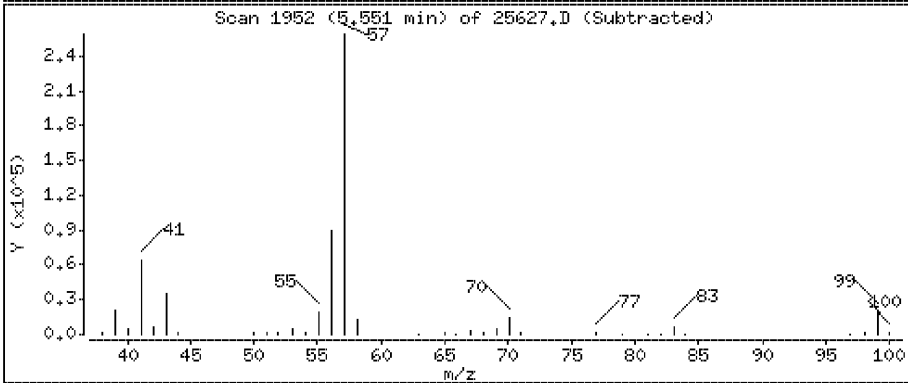
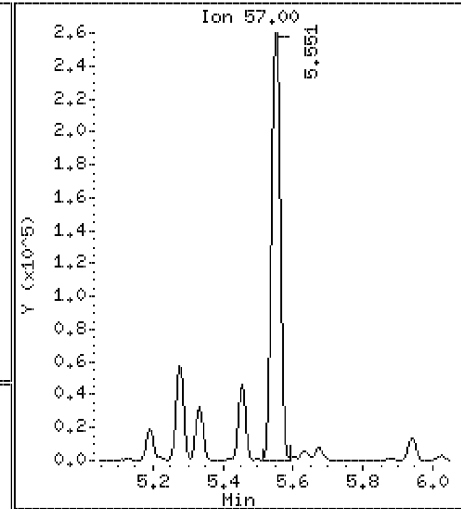
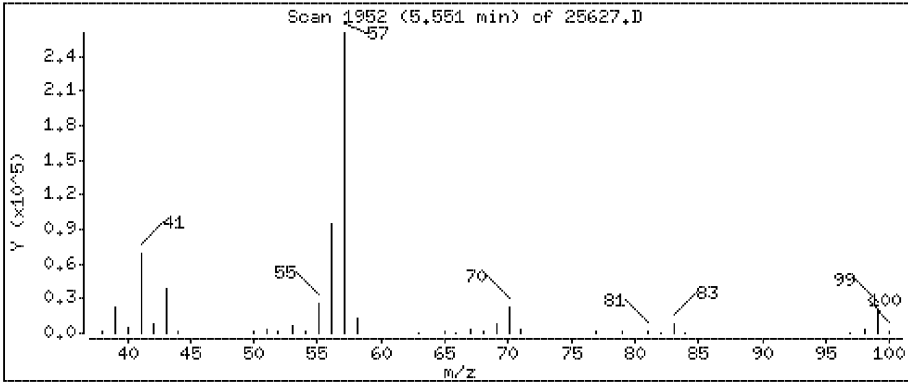
Operator: CH1

Column phase: ZB-5MSplus SN338857

Column diameter: 0.32

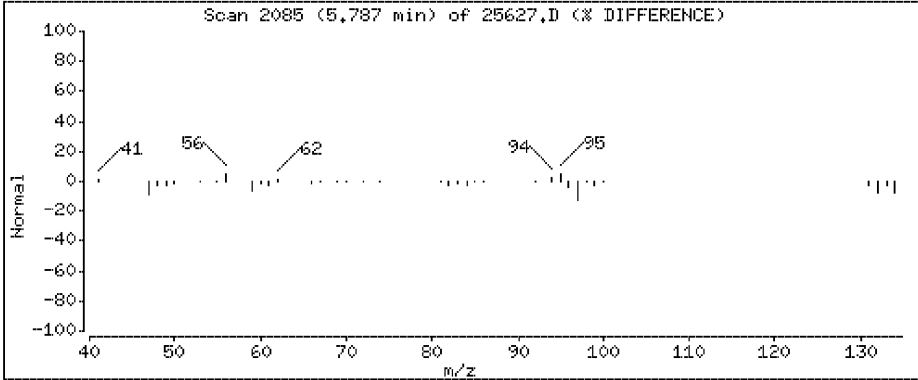
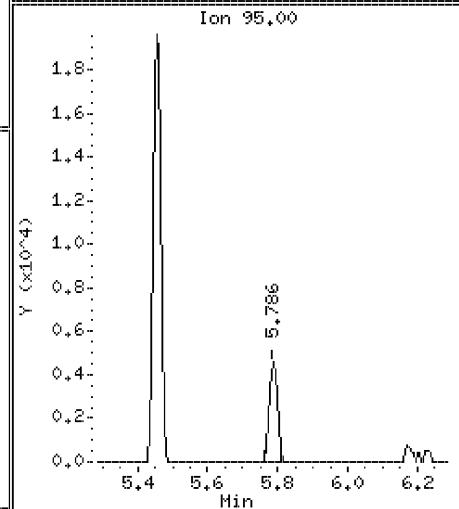
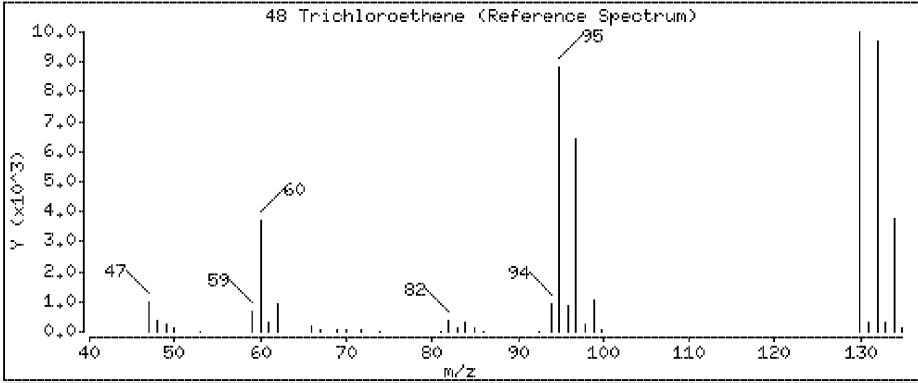
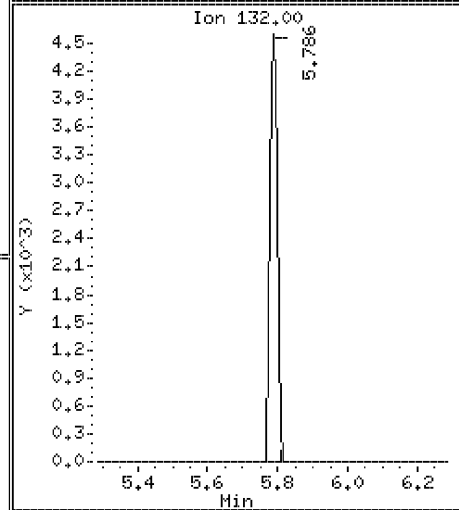
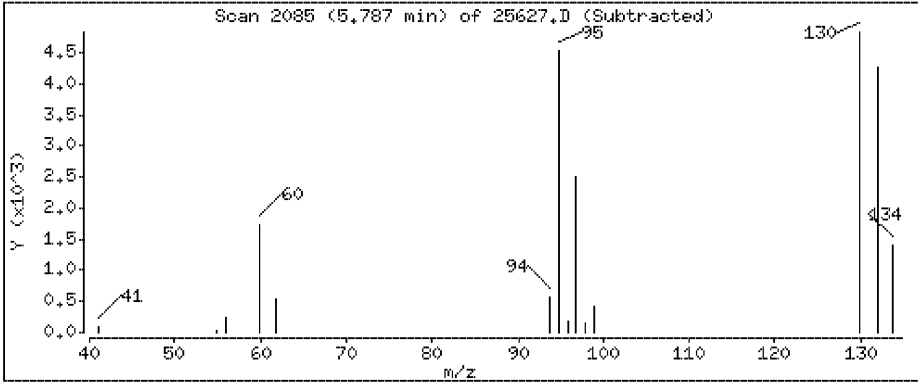
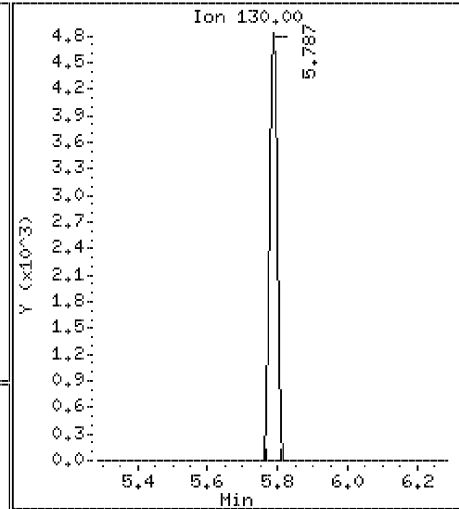
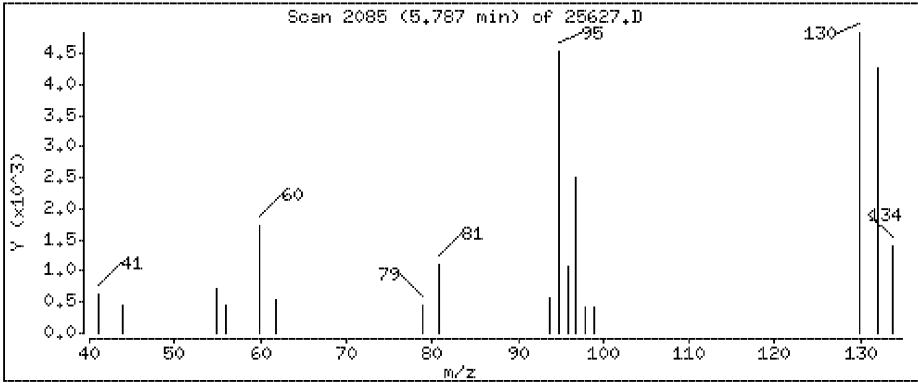
46 2,2,4-Trimethylpentane

Concentration: 6.35 ppbv



48 Trichloroethene

Concentration: 0,229 ppbv



Data File: \\192.168.10.12\chem\10airH,i\091318,b\25627.D

Date : 13-SEP-2018 21:59

Client ID:

Instrument: 10airH.i

Sample Info:

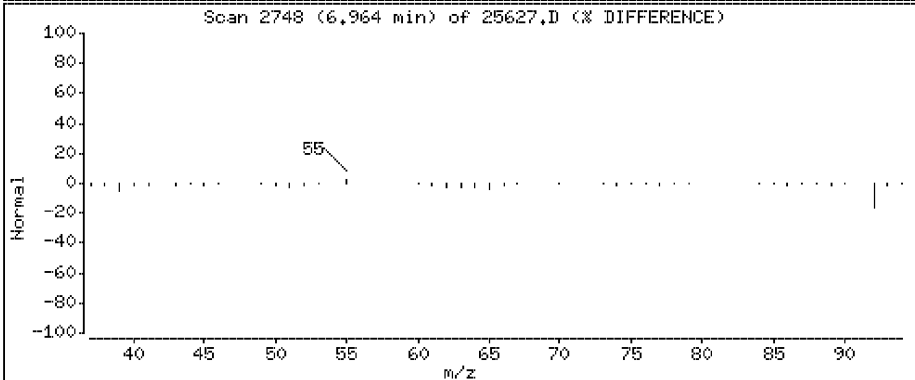
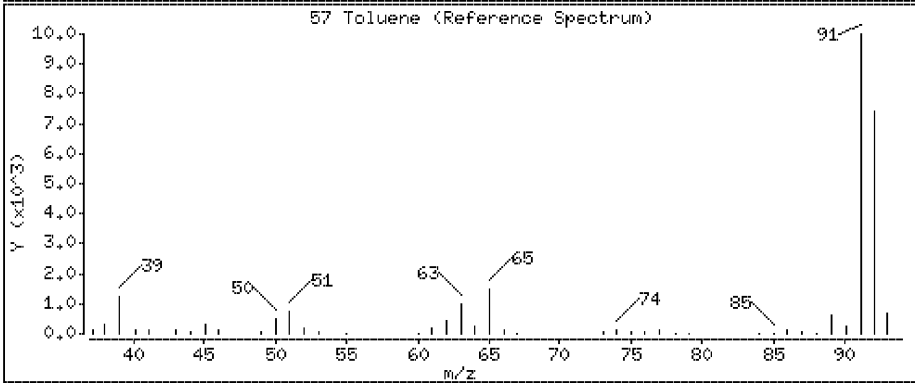
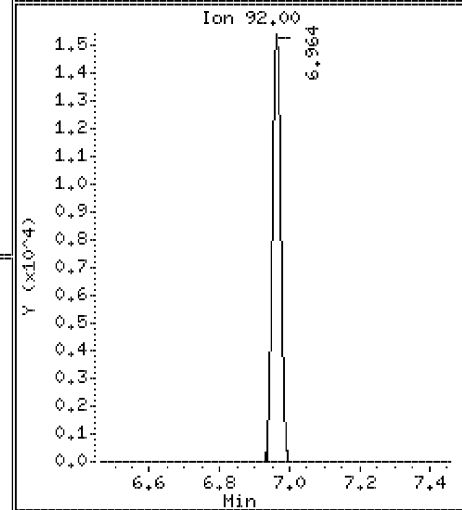
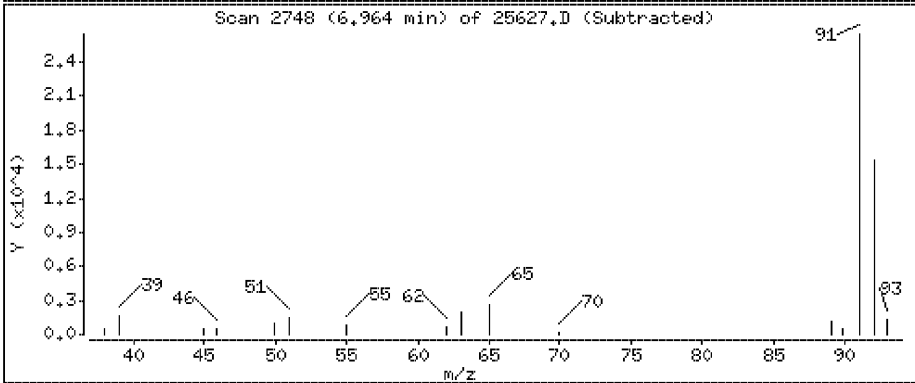
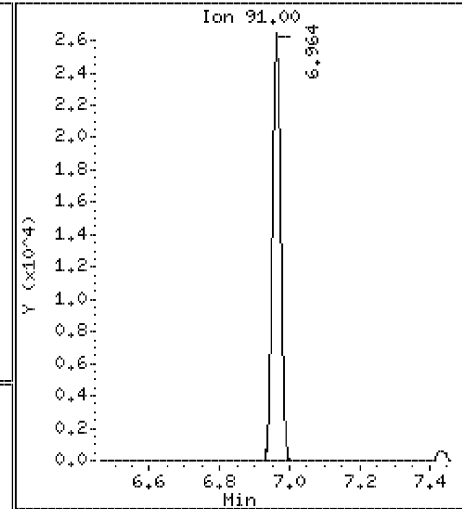
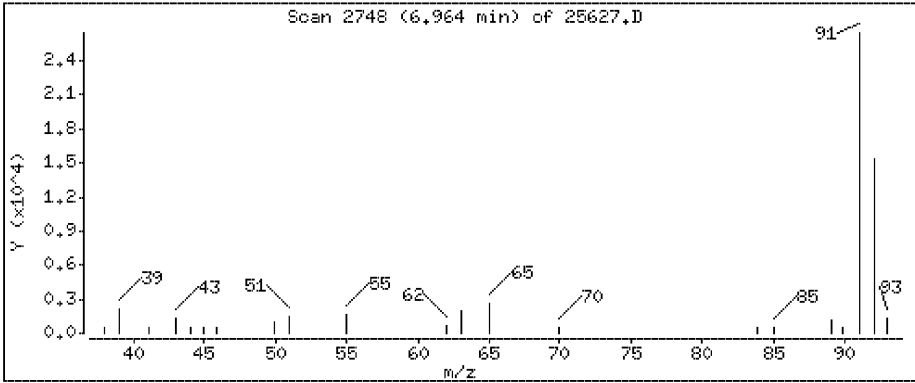
Operator: CH1

Column phase: ZB-5MSplus SN338857

Column diameter: 0,32

57 Toluene

Concentration: 0,727 ppbv



Data File: \\192.168.10.12\chem\10airH,1\091318,b\25627.D

Date : 13-SEP-2018 21:59

Client ID:

Instrument: 10airH.i

Sample Info:

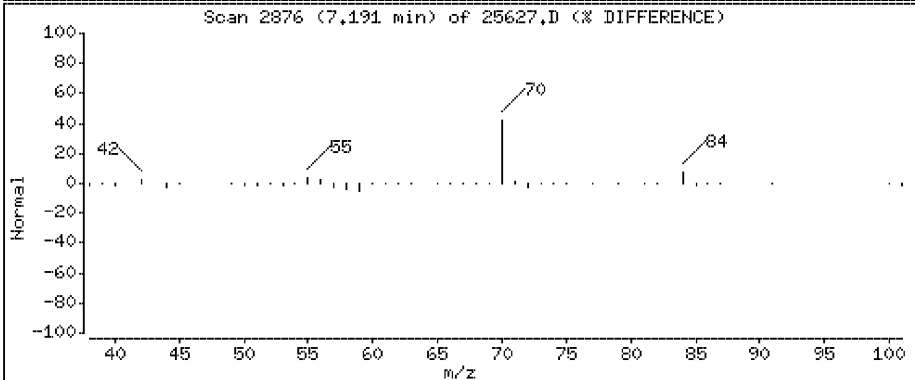
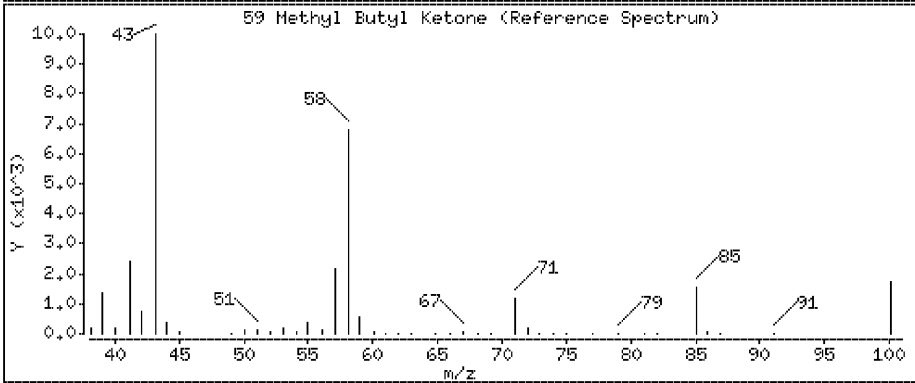
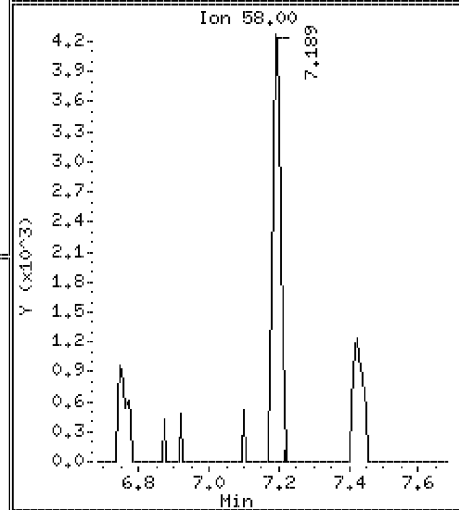
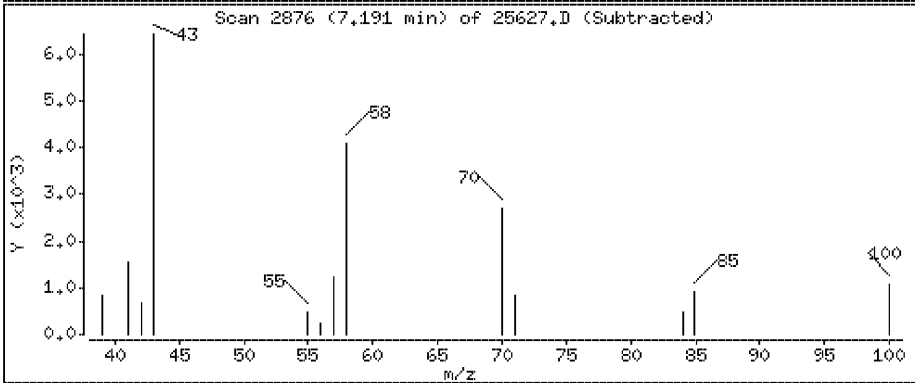
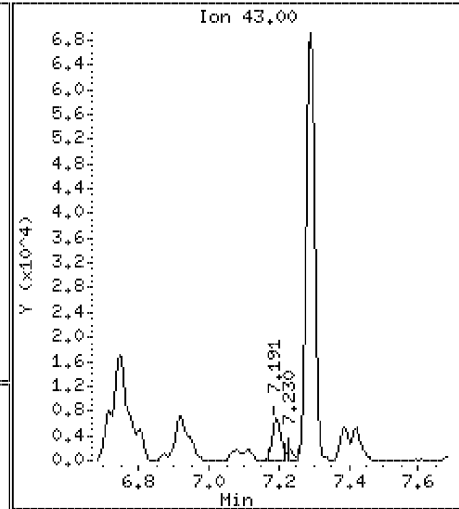
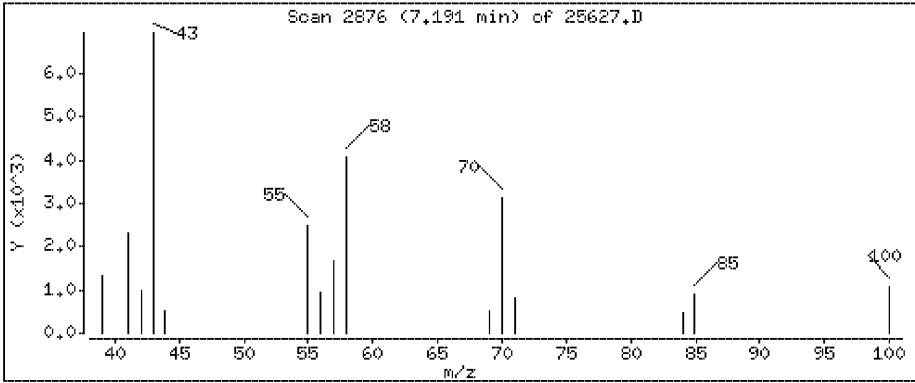
Operator: CH1

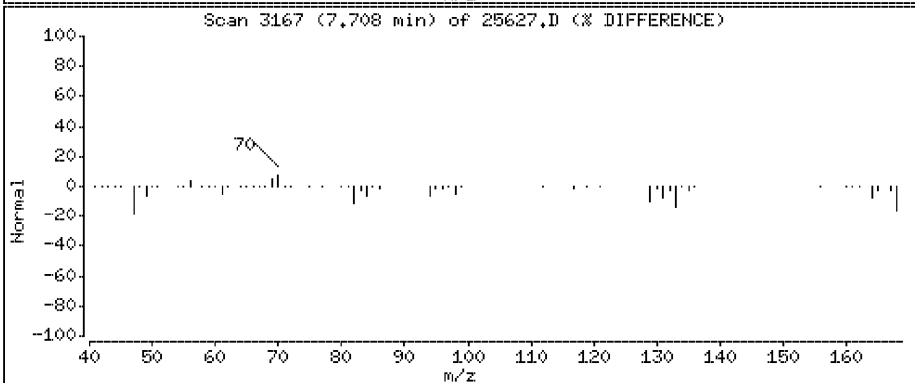
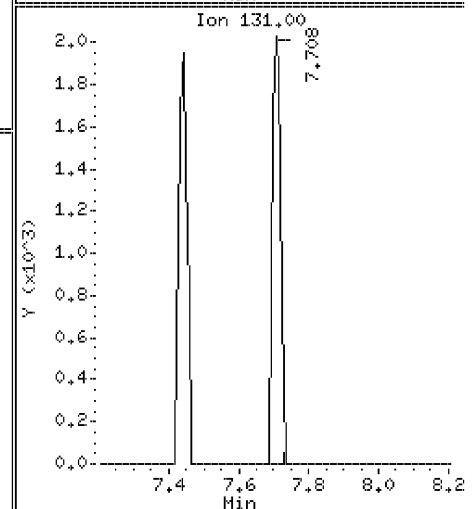
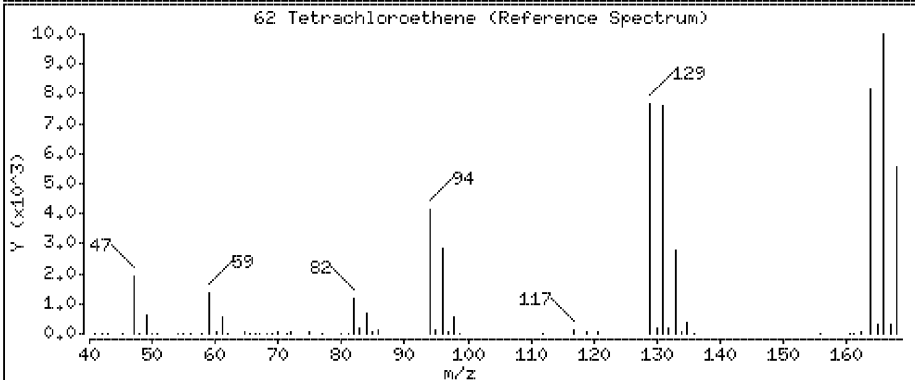
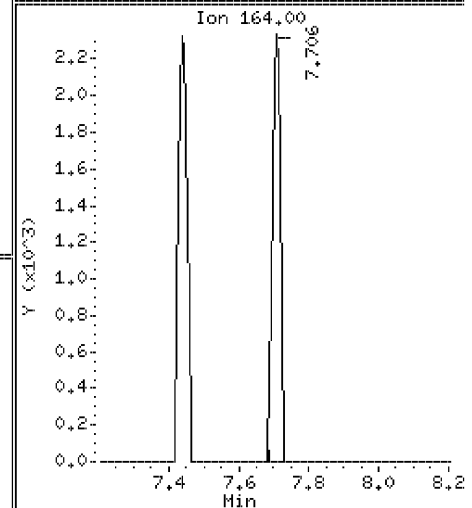
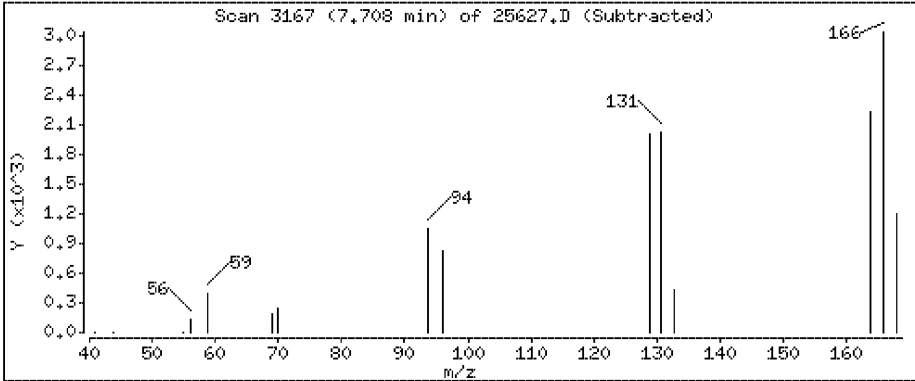
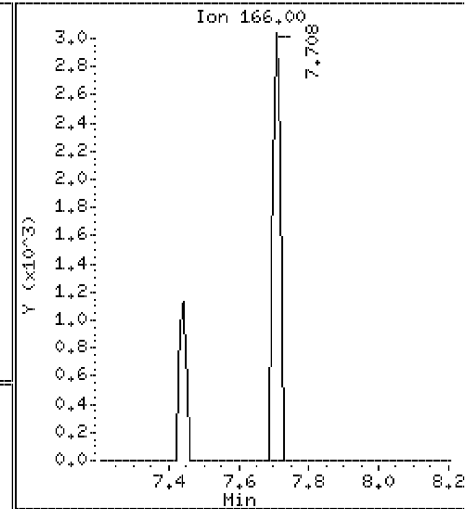
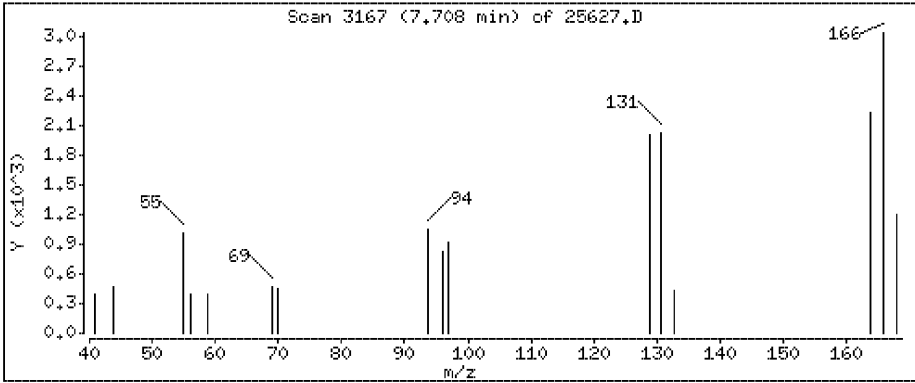
Column phase: ZB-5MSplus SN338857

Column diameter: 0.32

59 Methyl Butyl Ketone

Concentration: 0.546 ppbv





Data File: \\192.168.10.12\chem\10airH,1\091318,b\25627.D

Date : 13-SEP-2018 21:59

Client ID:

Instrument: 10airH.i

Sample Info:

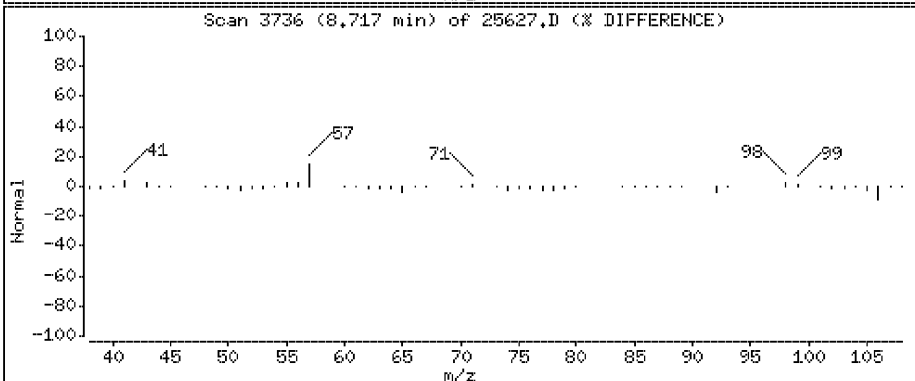
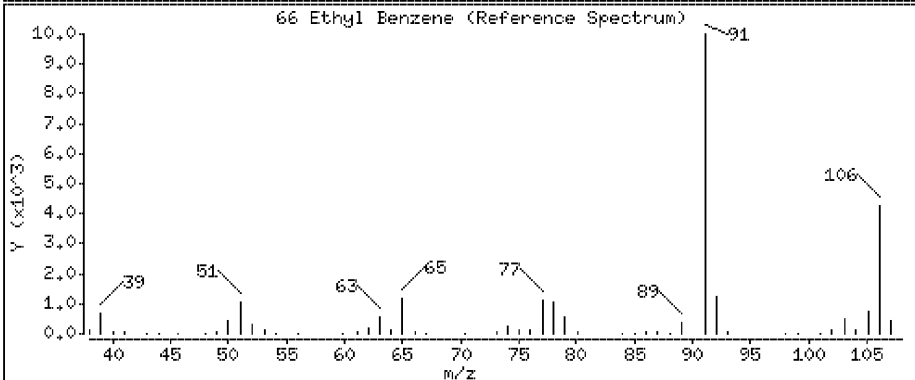
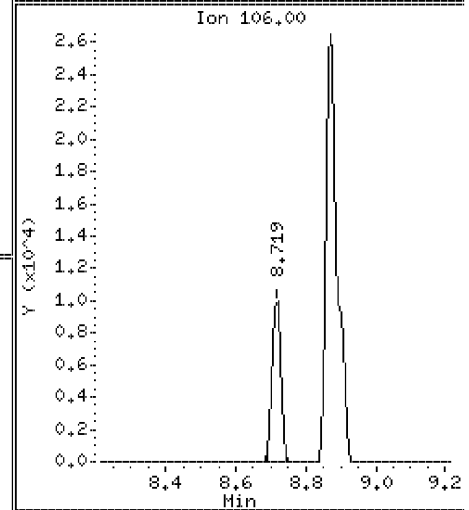
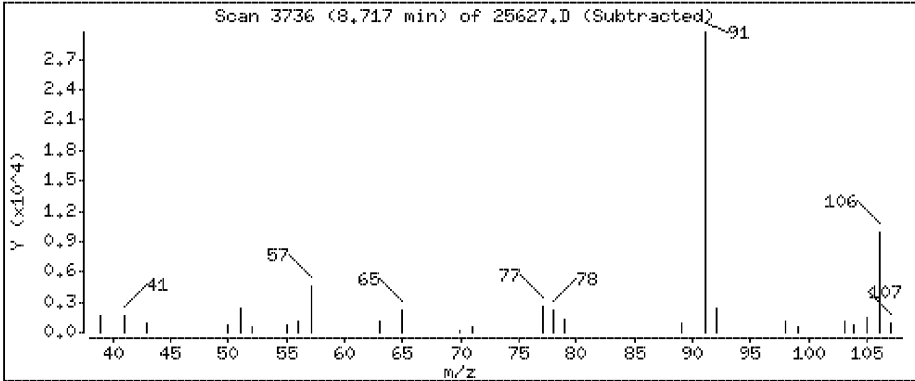
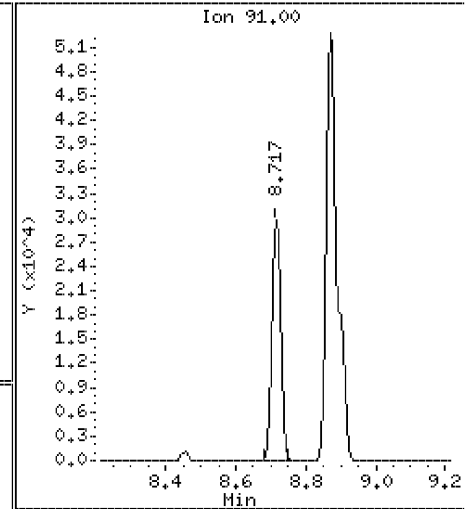
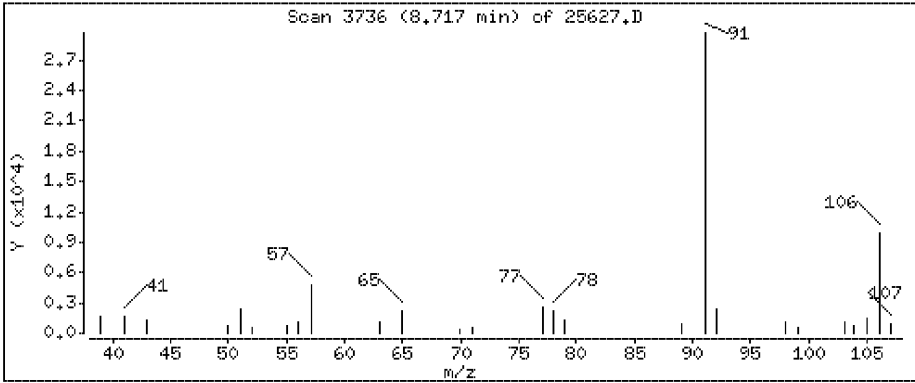
Operator: CH1

Column phase: ZB-5MSplus SN338857

Column diameter: 0,32

66 Ethyl Benzene

Concentration: 0,752 ppbv



Data File: \\192.168.10.12\chem\10airH,1\091318,b\25627.D

Date : 13-SEP-2018 21:59

Client ID:

Instrument: 10airH.i

Sample Info:

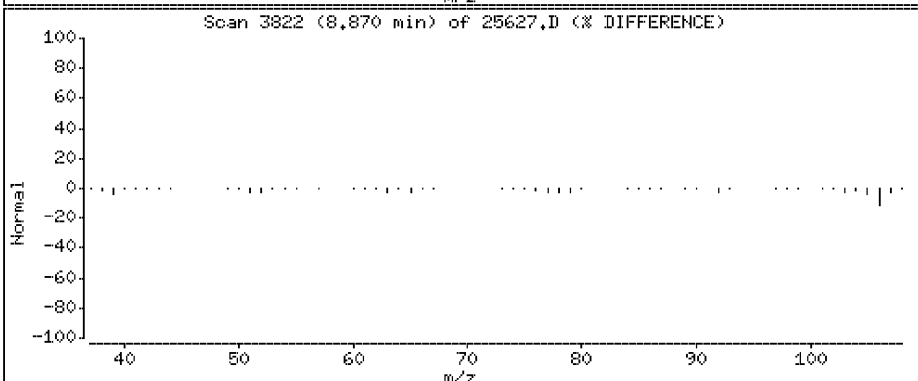
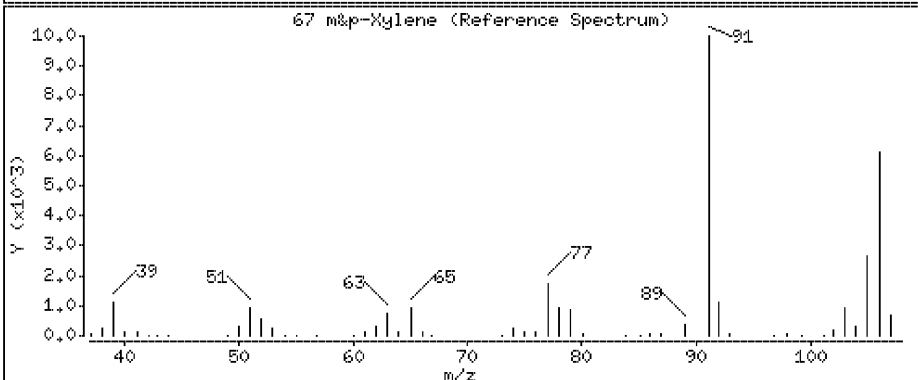
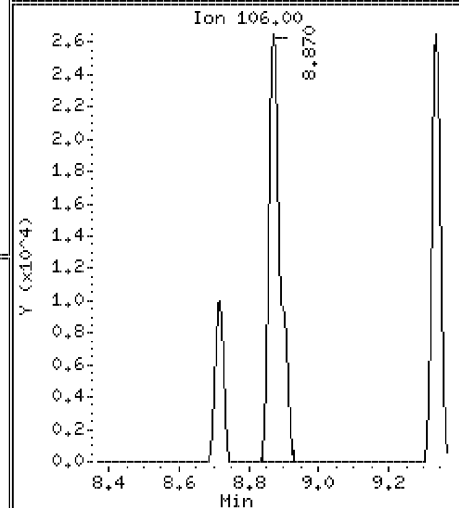
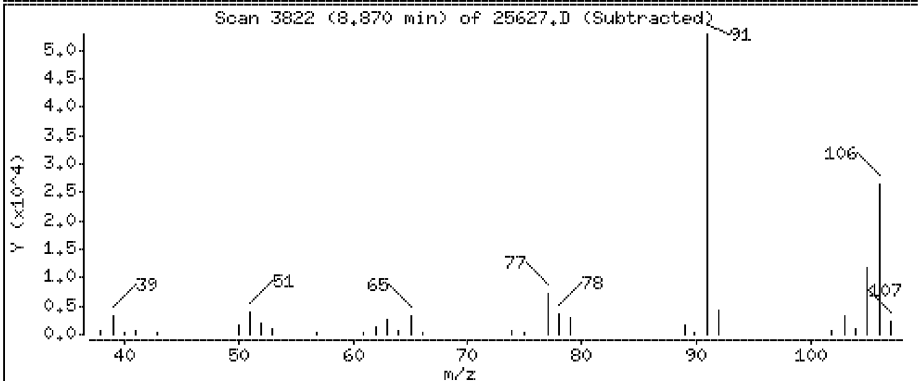
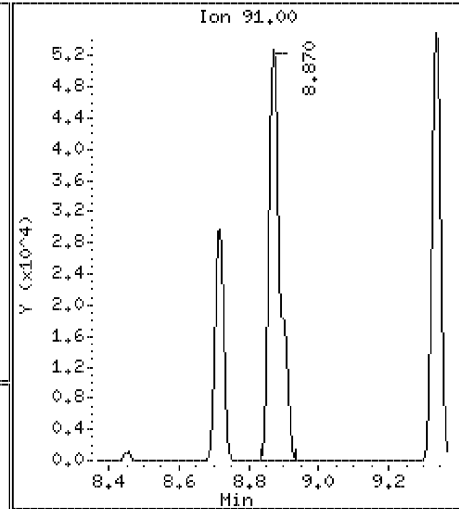
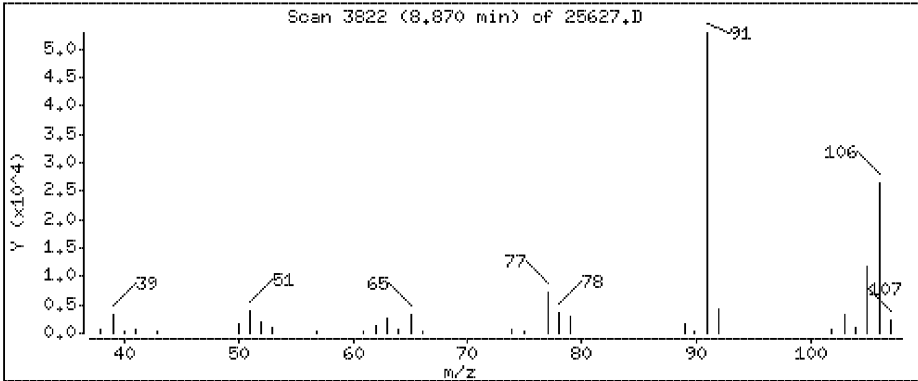
Operator: CH1

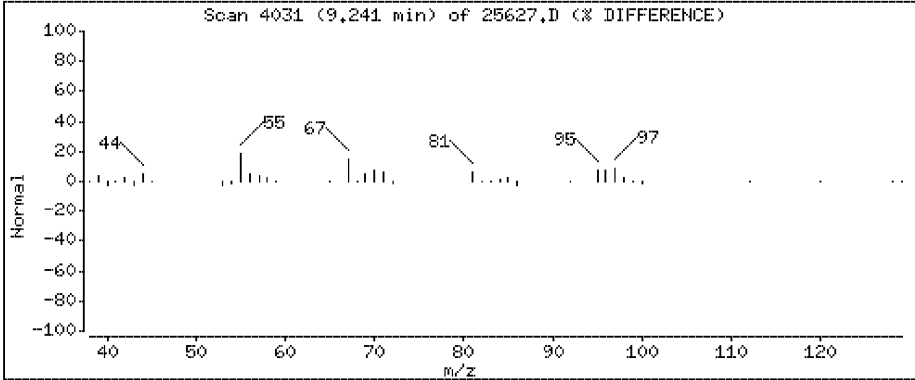
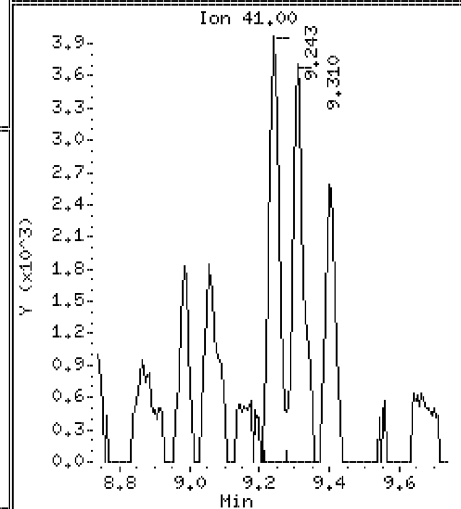
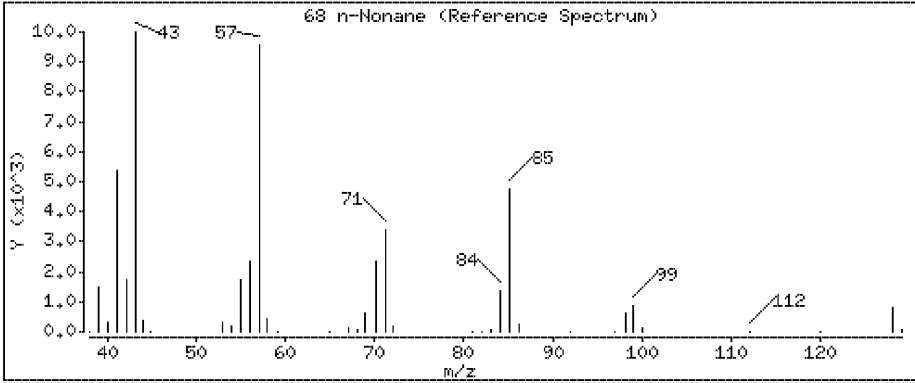
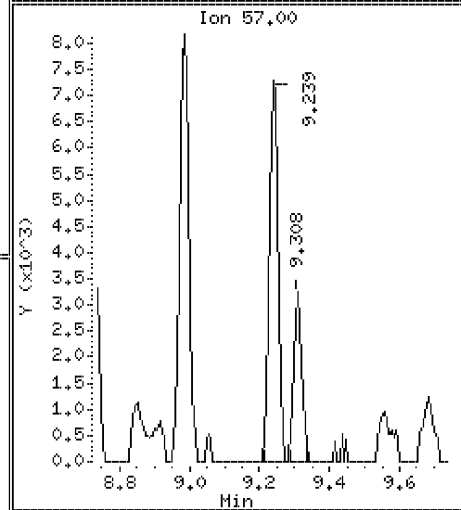
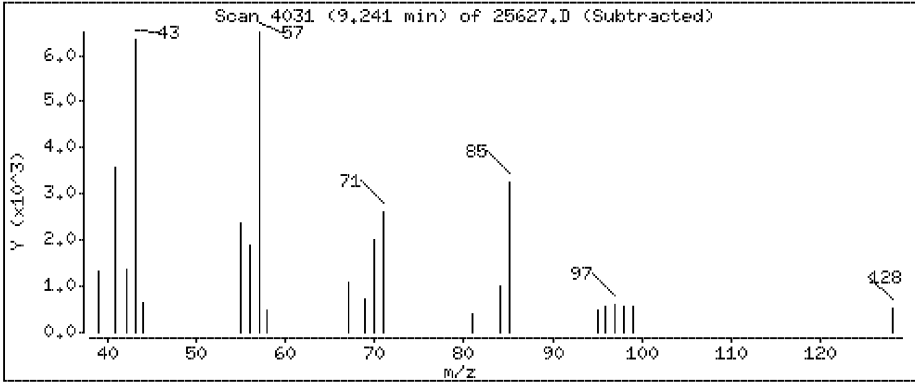
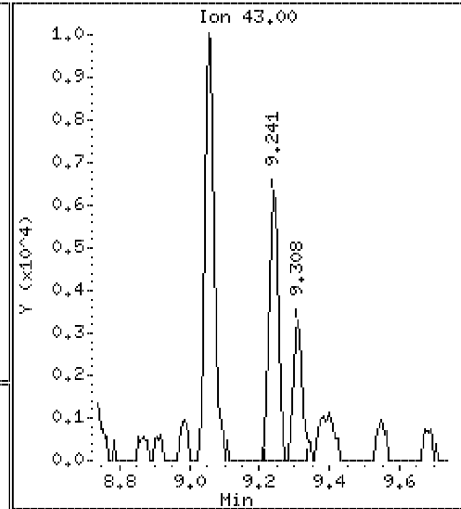
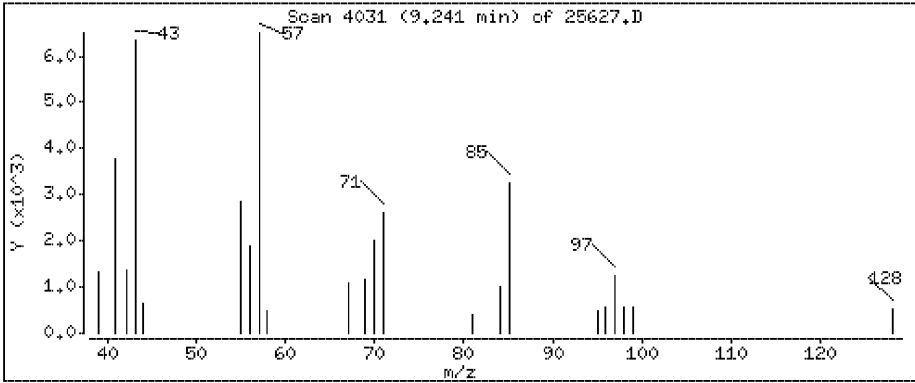
Column phase: ZB-5MSplus SN338857

Column diameter: 0.32

67 m&p-Xylene

Concentration: 2.30 ppbv





Data File: \\192.168.10.12\chem\10airH,i\091318,b\25627.D

Date : 13-SEP-2018 21:59

Client ID:

Instrument: 10airH.i

Sample Info:

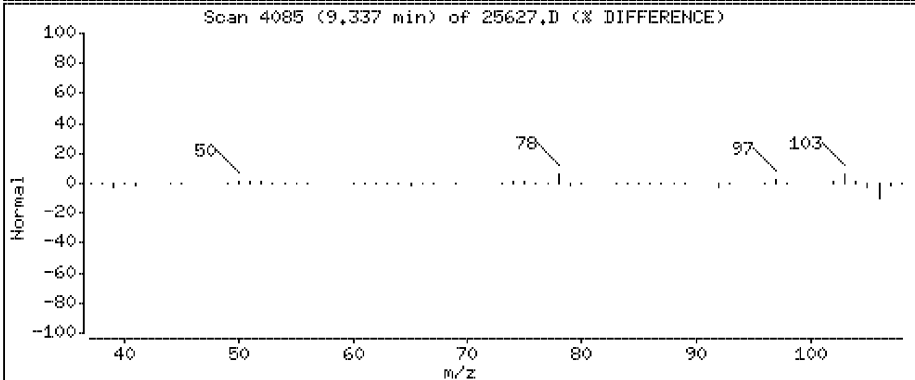
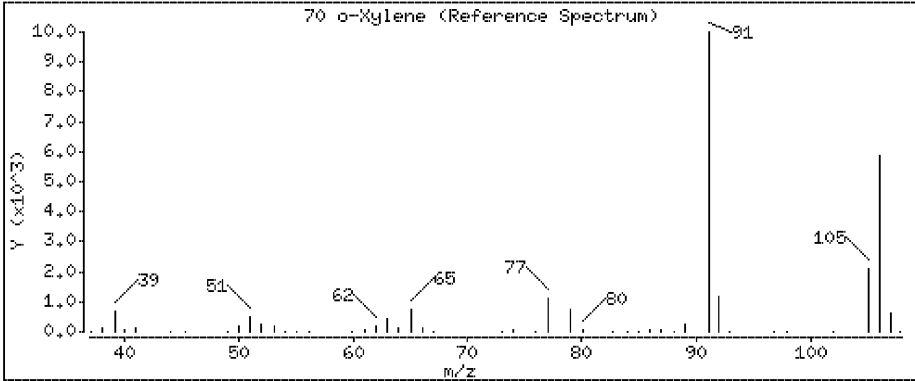
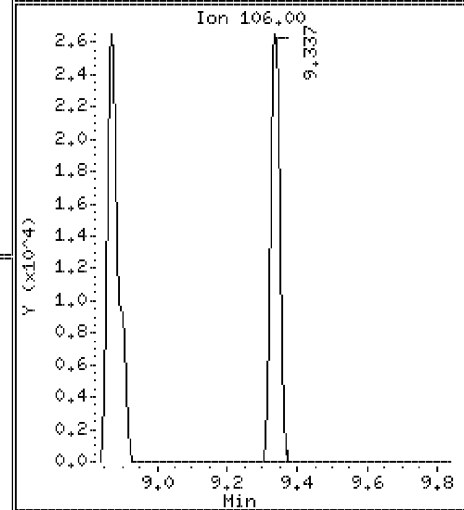
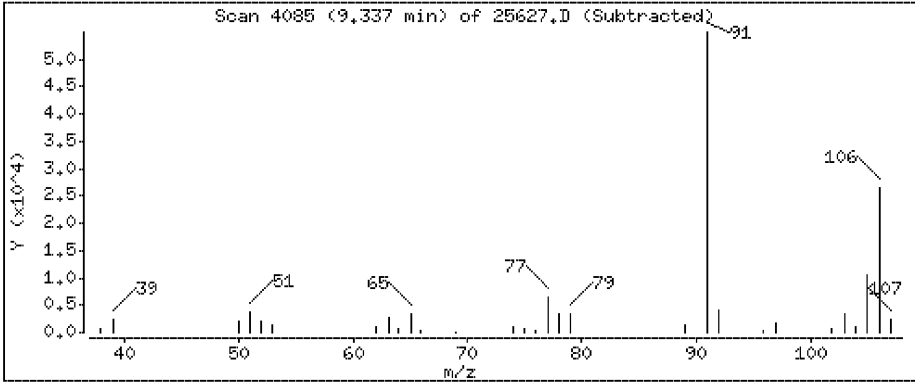
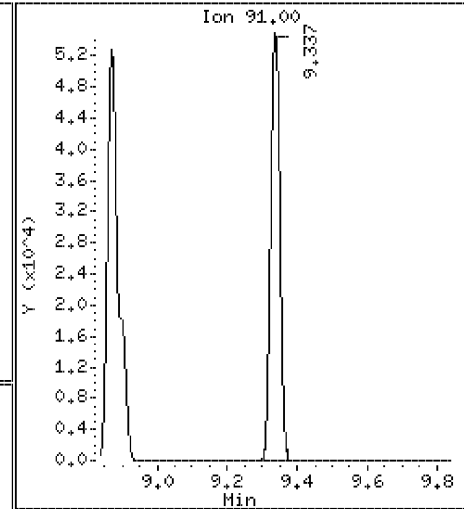
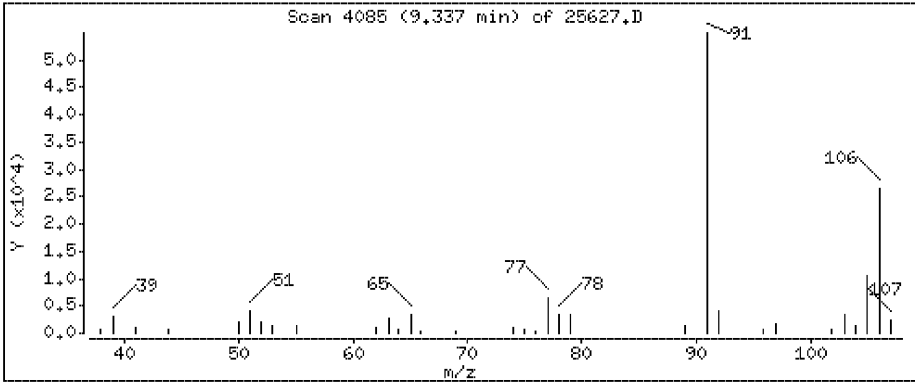
Operator: CH1

Column phase: ZB-5MSplus SN338857

Column diameter: 0.32

70 o-Xylene

Concentration: 1.74 ppbv



Data File: \\192.168.10.12\chem\10airH,i\091318,b\25627.D

Date : 13-SEP-2018 21:59

Client ID:

Instrument: 10airH.i

Sample Info:

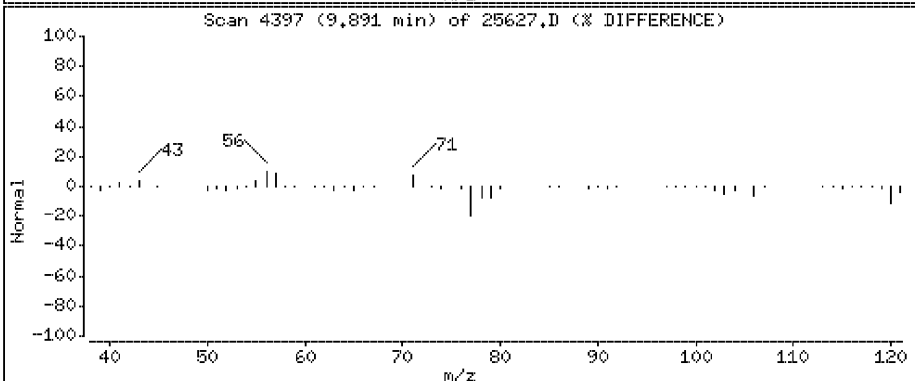
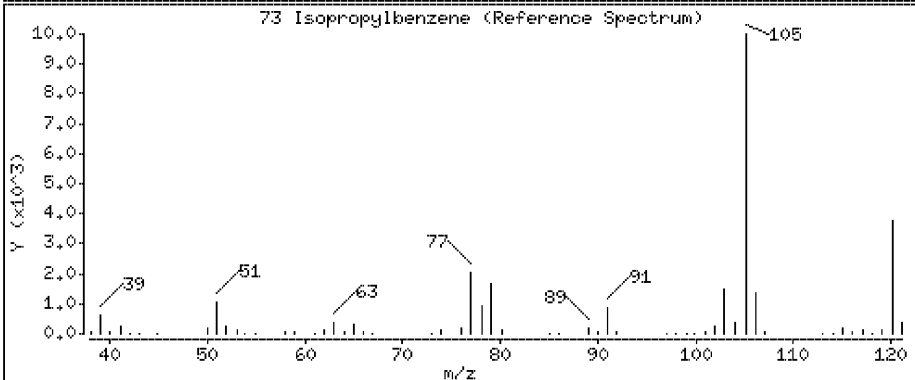
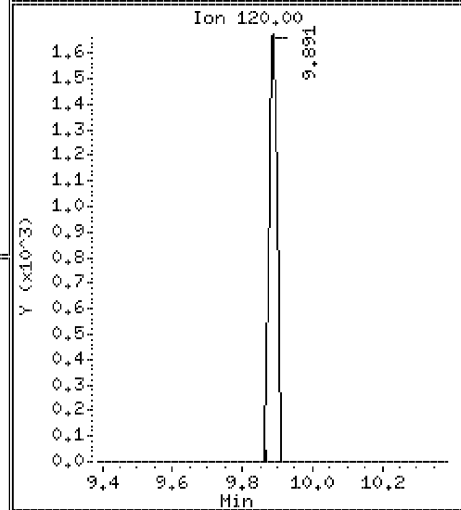
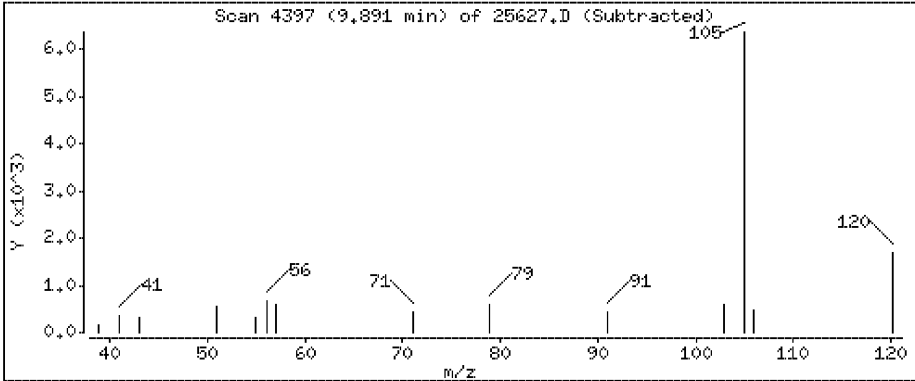
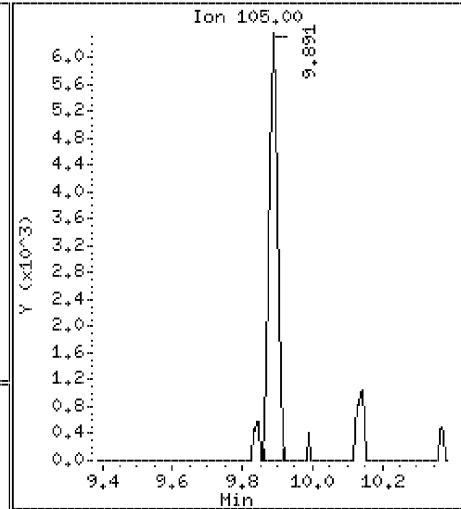
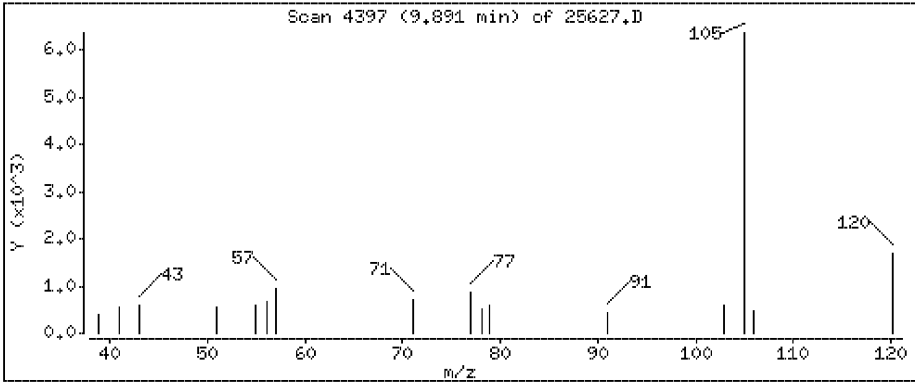
Operator: CH1

Column phase: ZB-5MSplus SN338857

Column diameter: 0,32

73 Isopropylbenzene

Concentration: 0,496 ppbv



Data File: \\192.168.10.12\chem\10airH,i\091318,b\25627.D

Date : 13-SEP-2018 21:59

Client ID:

Instrument: 10airH.i

Sample Info:

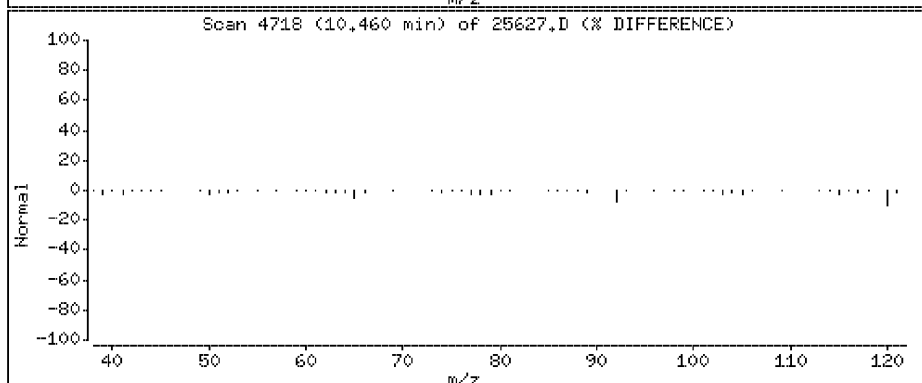
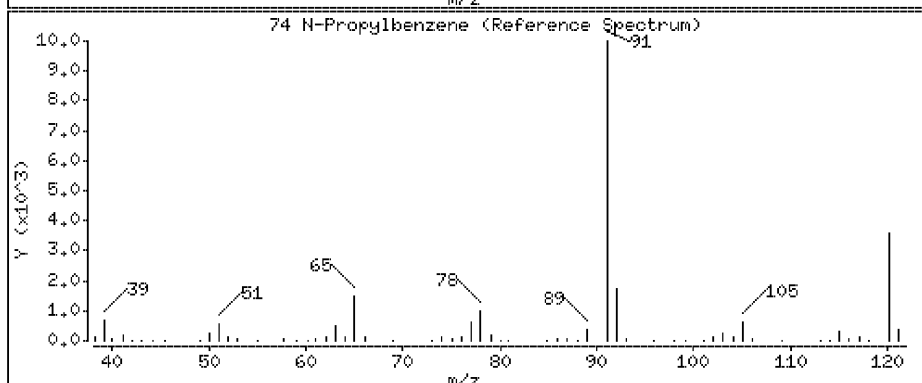
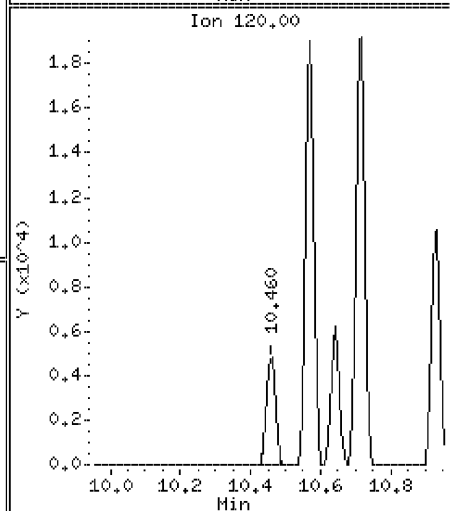
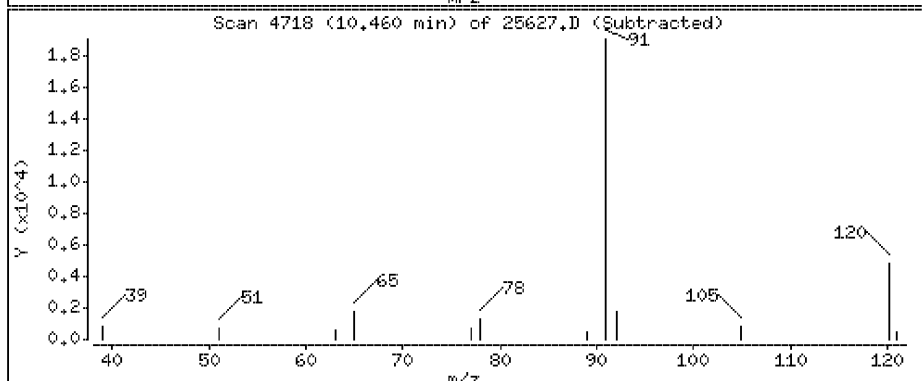
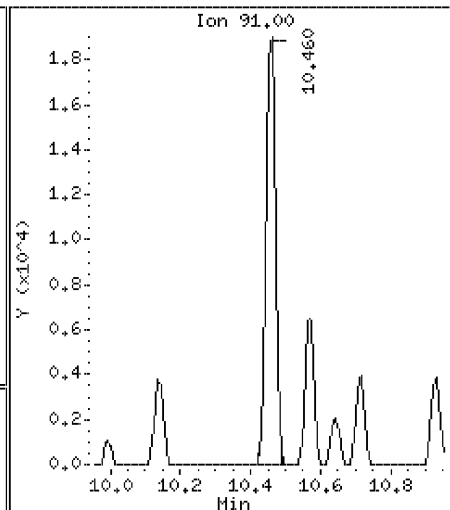
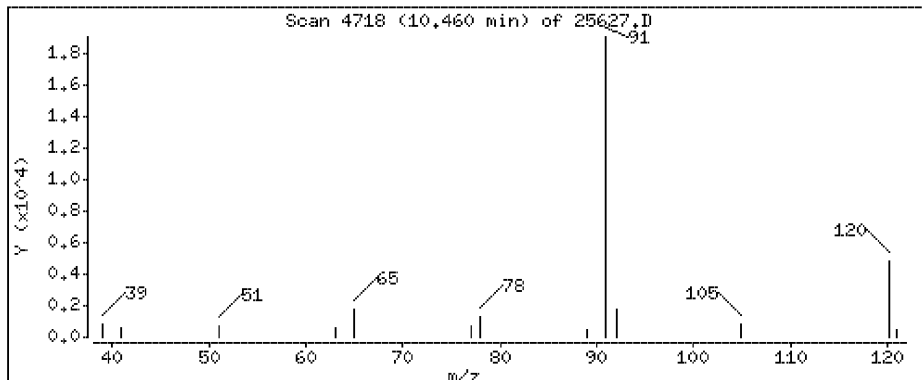
Operator: CH1

Column phase: ZB-5MSplus SN338857

Column diameter: 0,32

74 N-Propylbenzene

Concentration: 0,610 ppbv



Data File: \\192.168.10.12\chem\10airH,1\091318,b\25627.D

Date : 13-SEP-2018 21:59

Client ID:

Instrument: 10airH.i

Sample Info:

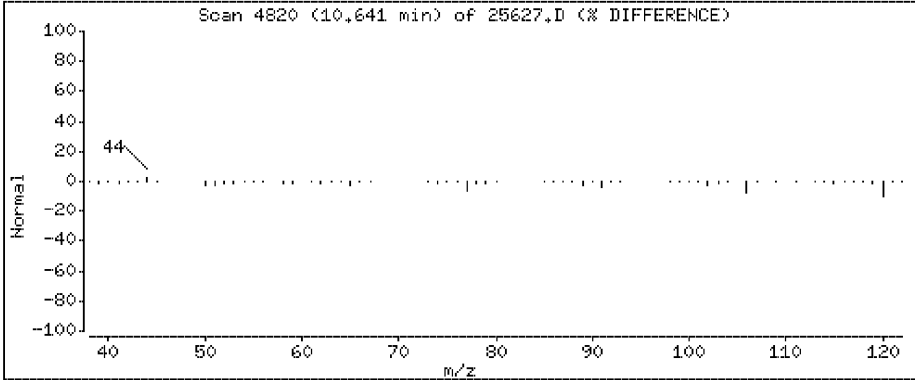
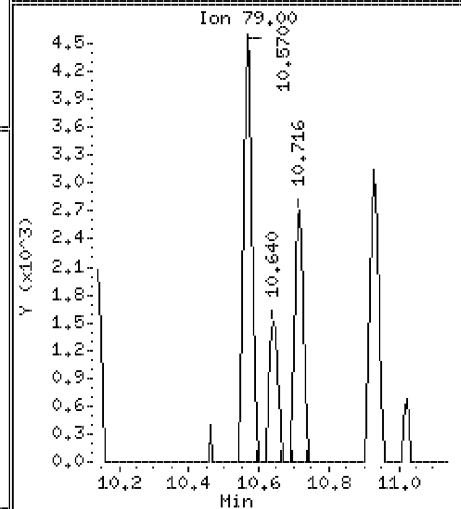
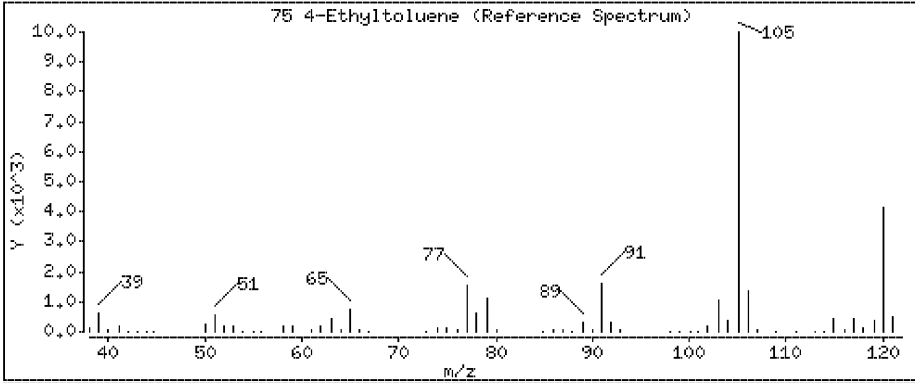
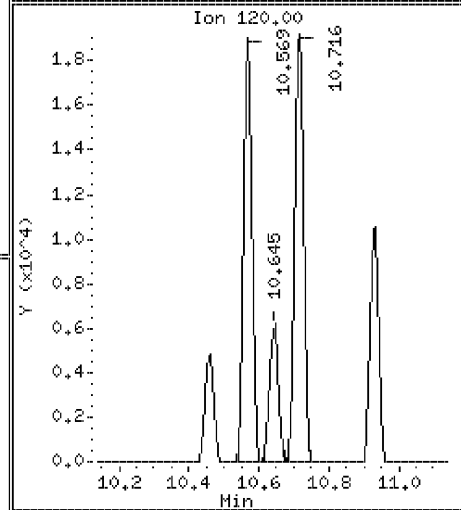
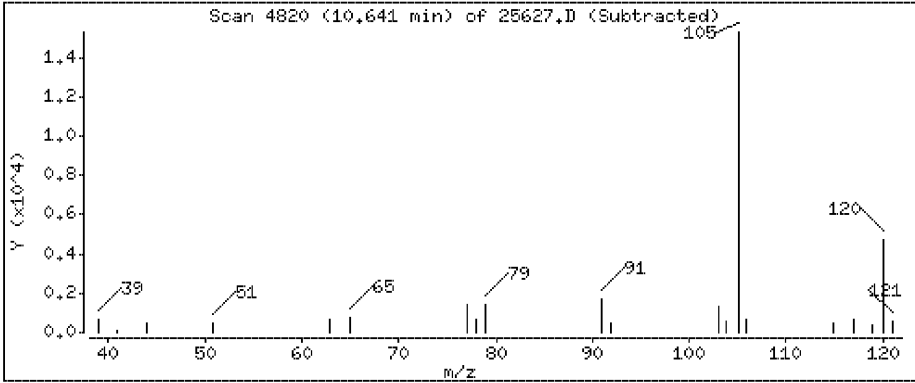
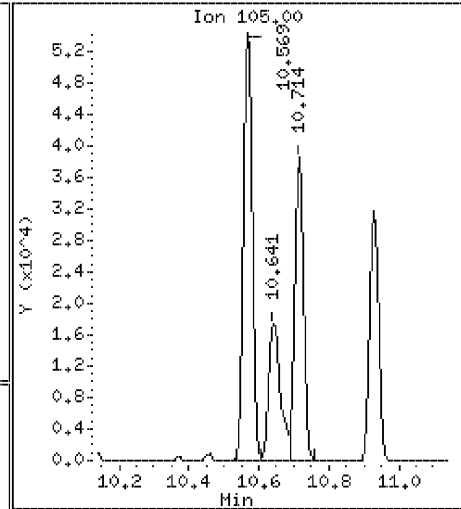
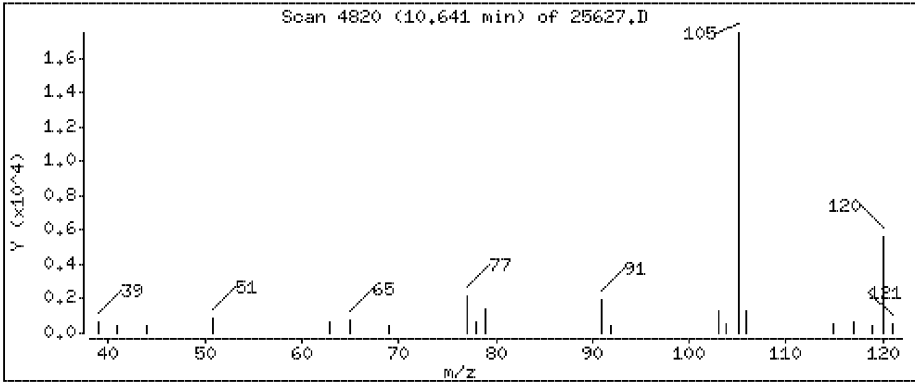
Operator: CH1

Column phase: ZB-5MSplus SN338857

Column diameter: 0,32

75 4-Ethyltoluene

Concentration: 0,916 ppbv



Data File: \\192.168.10.12\chem\10airH,i\091318,b\25627.D

Date : 13-SEP-2018 21:59

Client ID:

Instrument: 10airH.i

Sample Info:

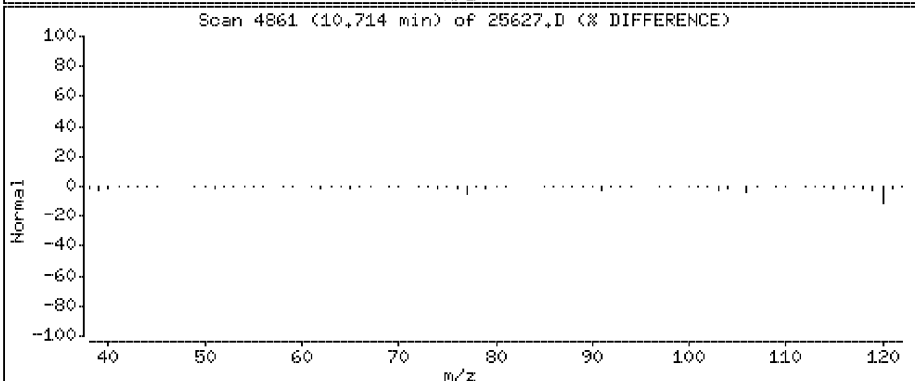
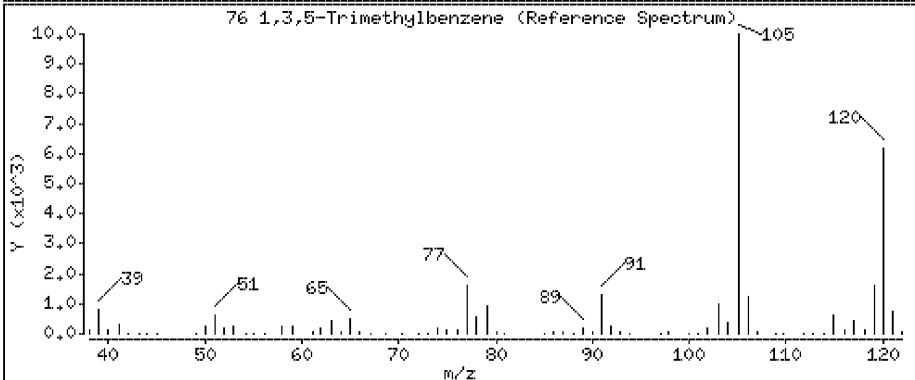
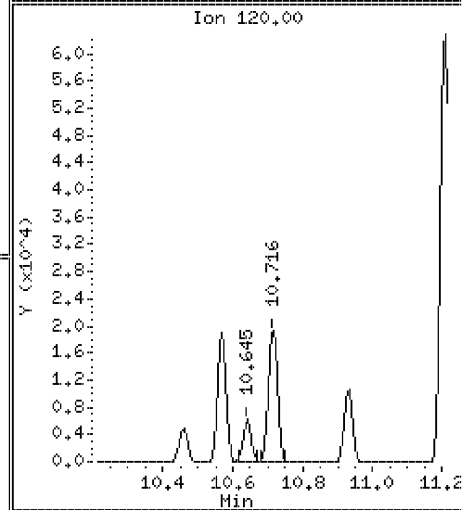
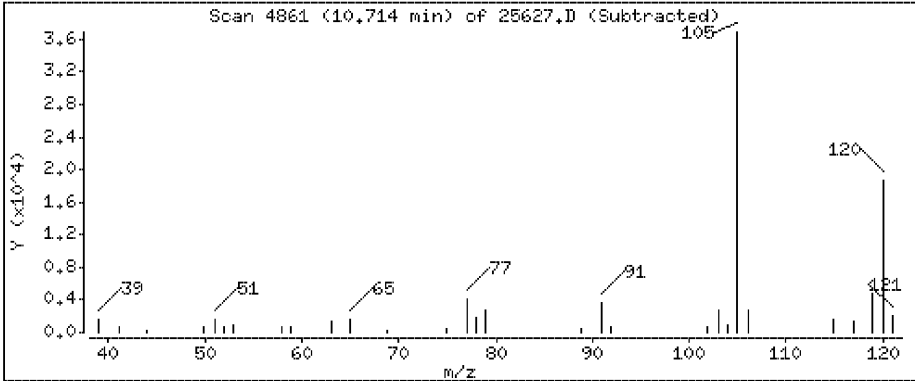
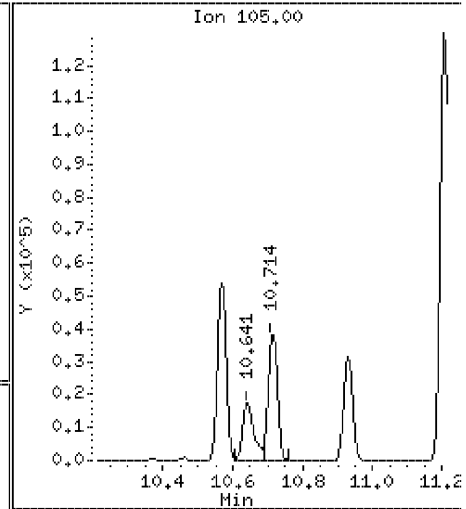
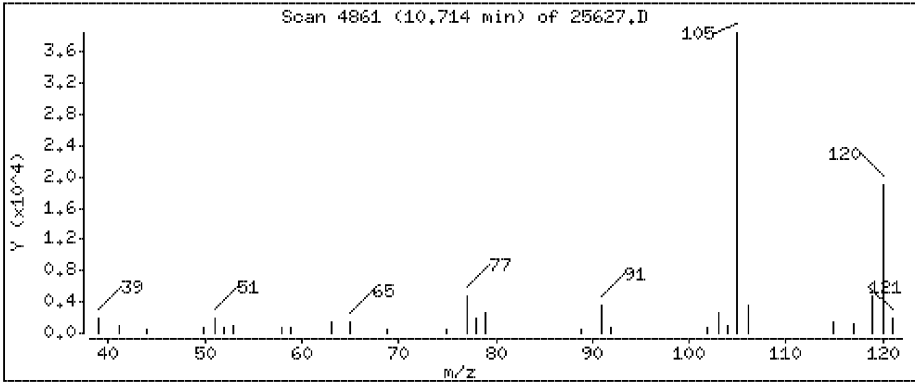
Operator: CH1

Column phase: ZB-5MSplus SN338857

Column diameter: 0,32

76 1,3,5-Trimethylbenzene

Concentration: 1,16 ppbv



Data File: \\192.168.10.12\chem\10airH,1\091318,b\25627.D

Date : 13-SEP-2018 21:59

Client ID:

Instrument: 10airH.i

Sample Info:

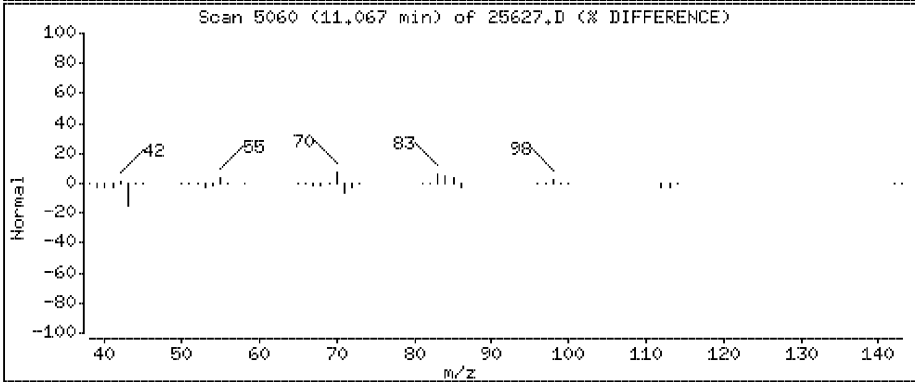
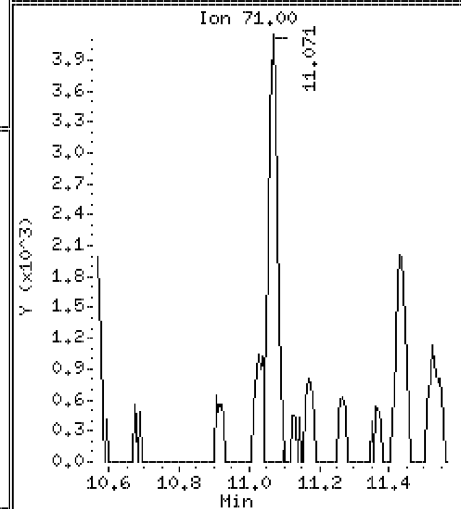
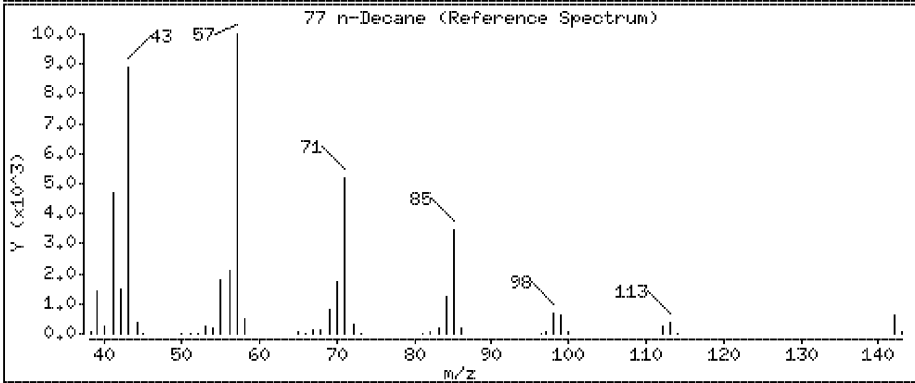
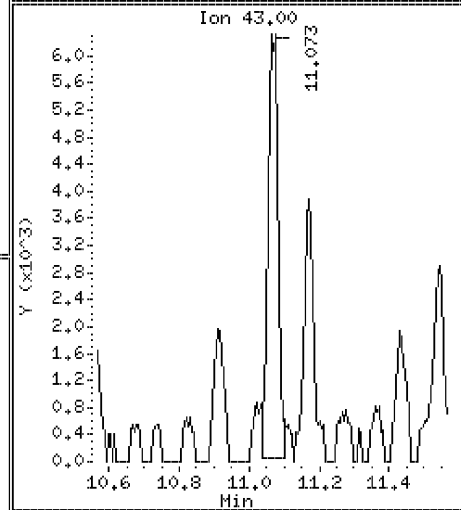
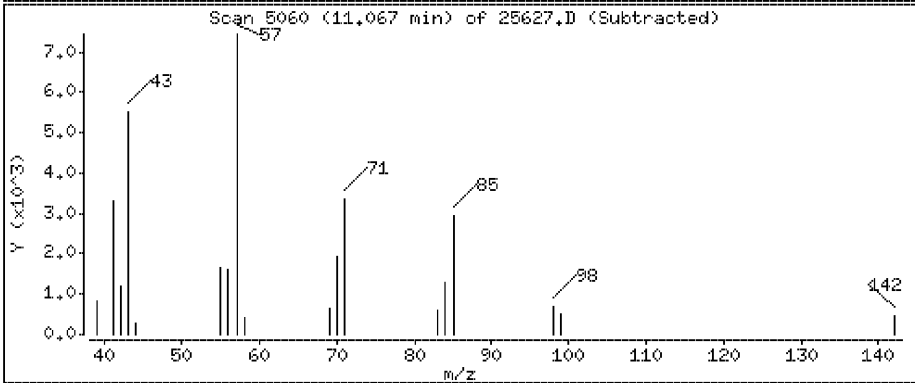
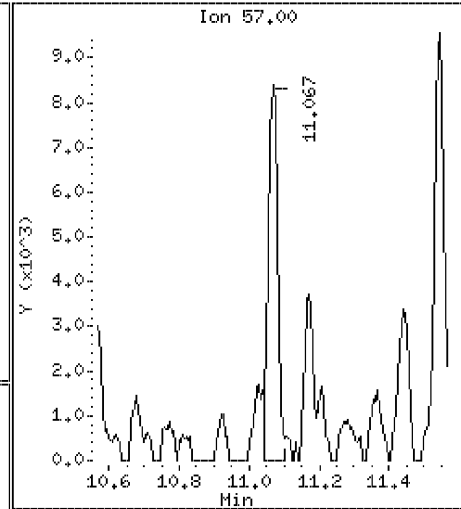
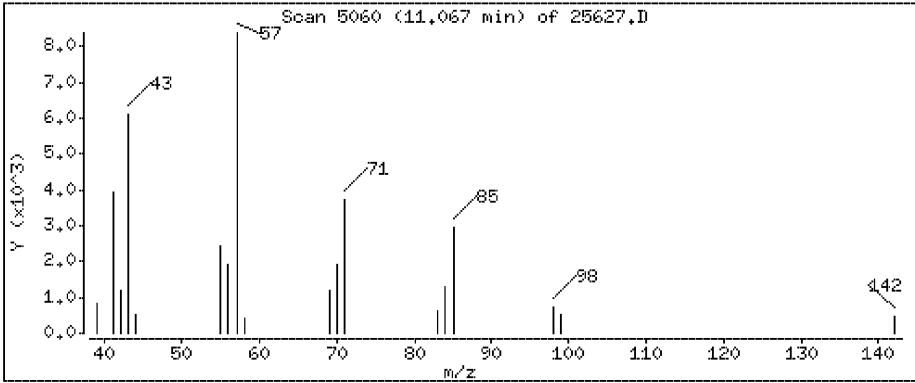
Operator: CH1

Column phase: ZB-5MSplus SN338857

Column diameter: 0,32

77 n-Decane

Concentration: 0,946 ppbv



Data File: \\192.168.10.12\chem\10airH,1\091318,b\25627.D

Date : 13-SEP-2018 21:59

Client ID:

Instrument: 10airH.i

Sample Info:

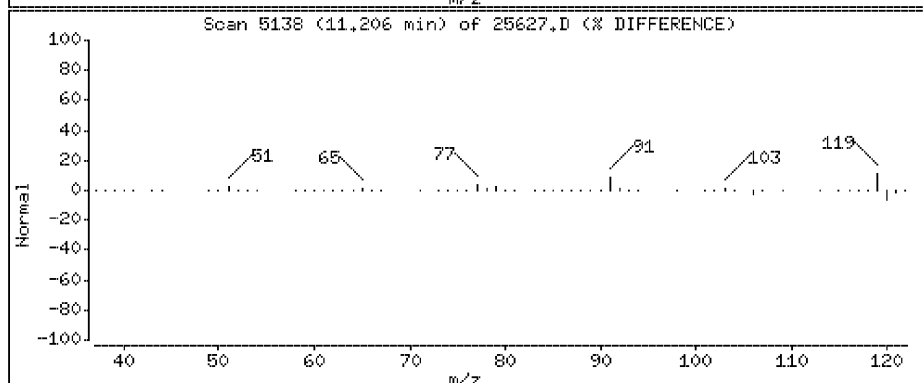
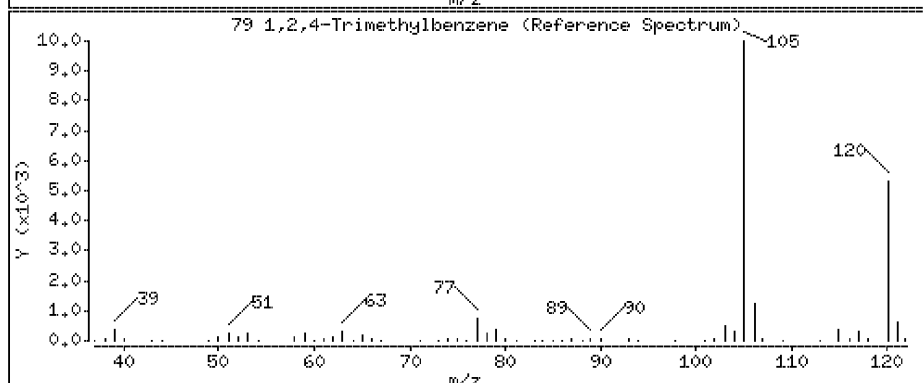
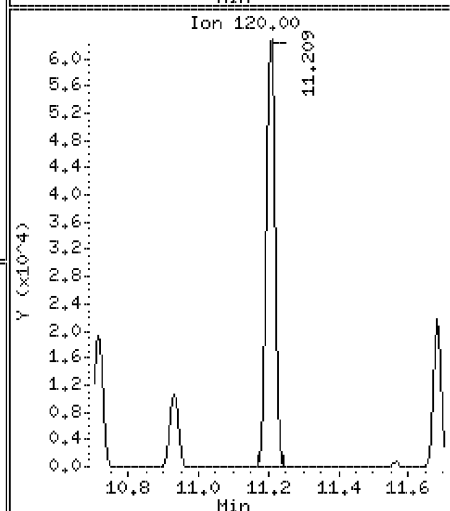
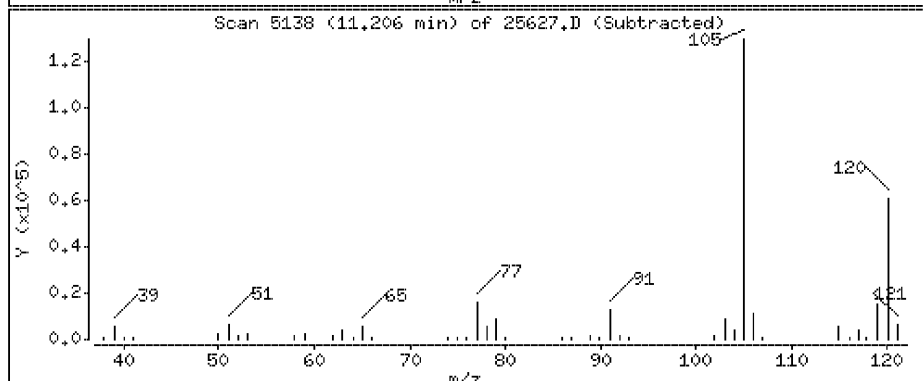
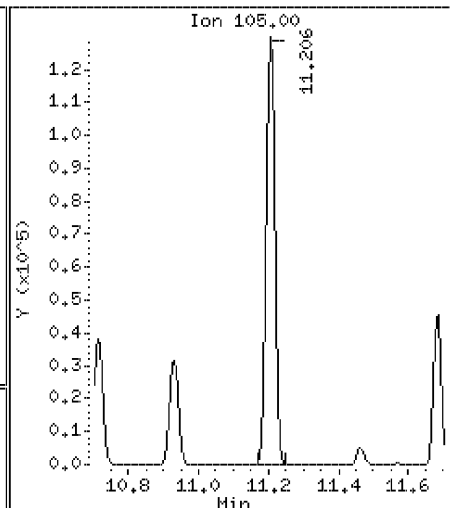
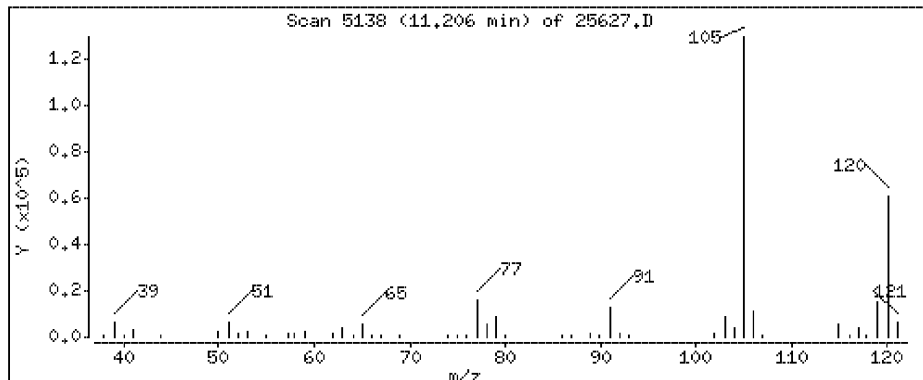
Operator: CH1

Column phase: ZB-5MSplus SN338857

Column diameter: 0,32

79 1,2,4-Trimethylbenzene

Concentration: 3.34 ppbv



Data File: \\192.168.10.12\chem\10airH,i\091318,b\25627.D

Date : 13-SEP-2018 21:59

Client ID:

Instrument: 10airH.i

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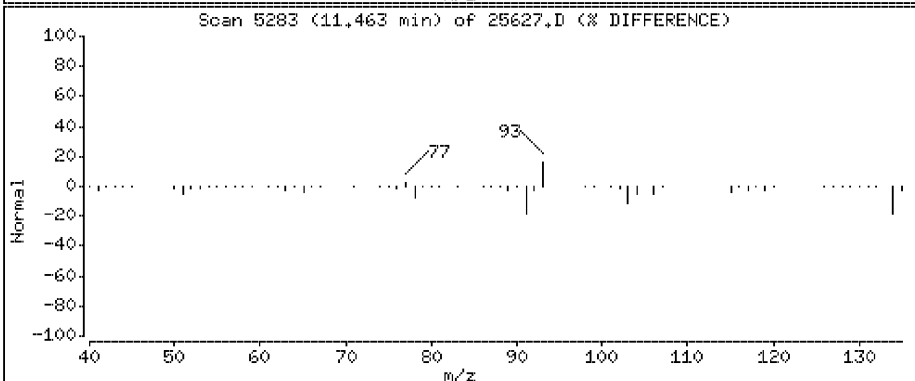
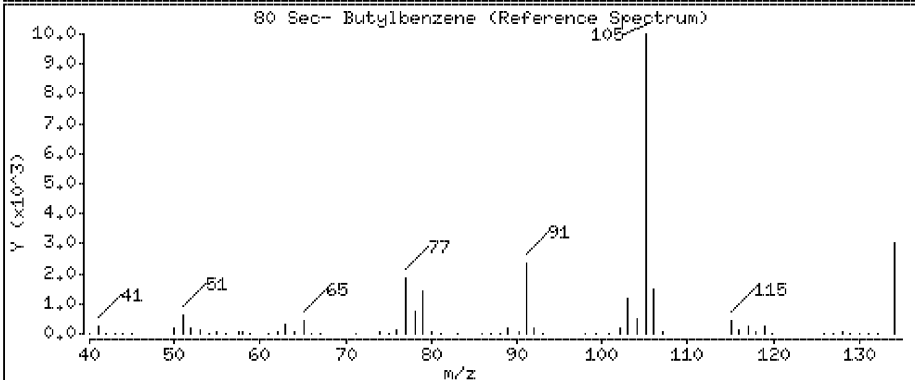
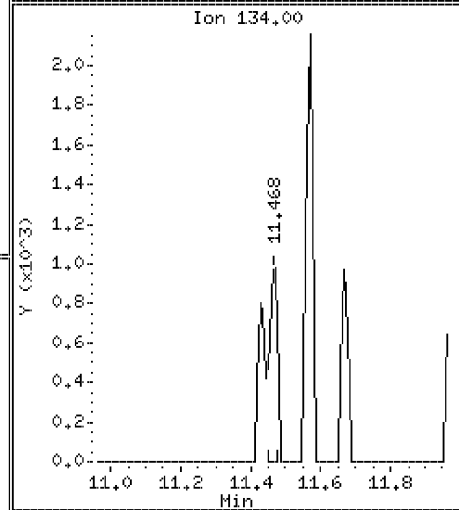
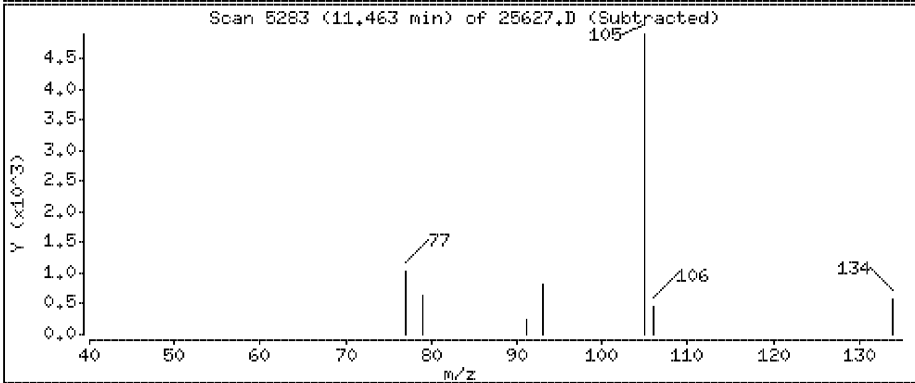
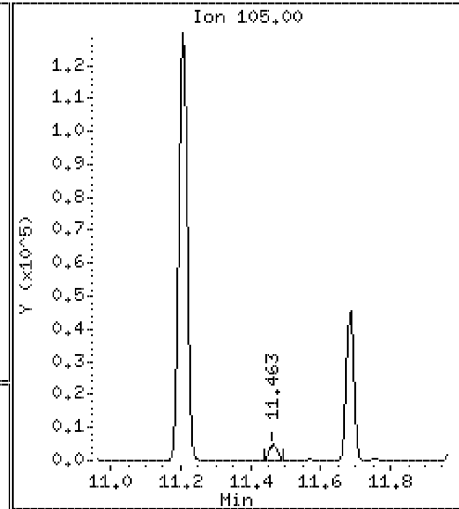
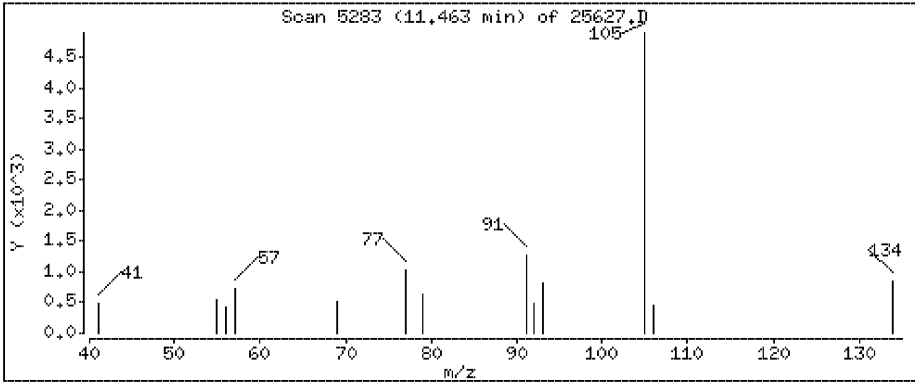
Operator: CH1

Column phase: ZB-5MSplus SN338857

Column diameter: 0,32

80 Sec- Butylbenzene

Concentration: 0,410 ppbv



Data File: \\192.168.10.12\chem\10airH,1\091318,b\25627.D

Date : 13-SEP-2018 21:59

Client ID:

Instrument: 10airH.i

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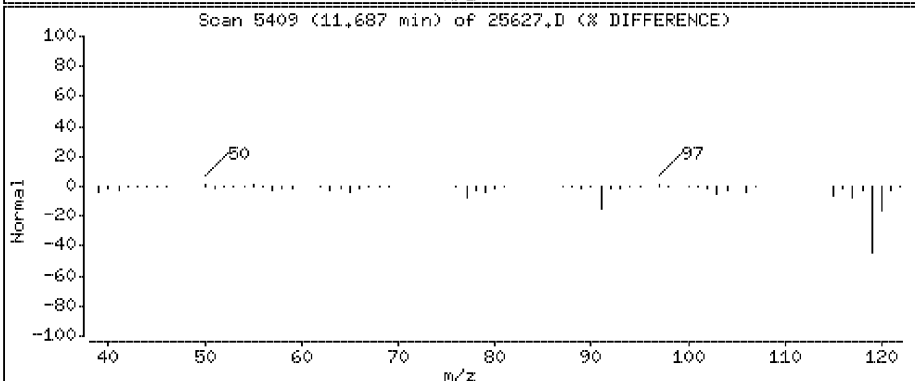
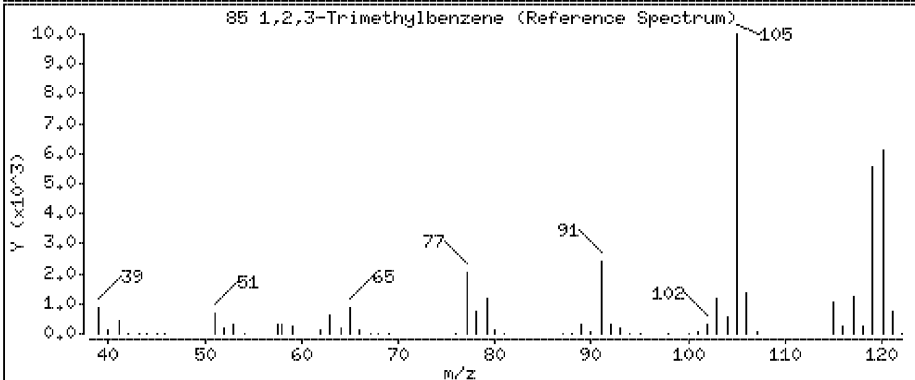
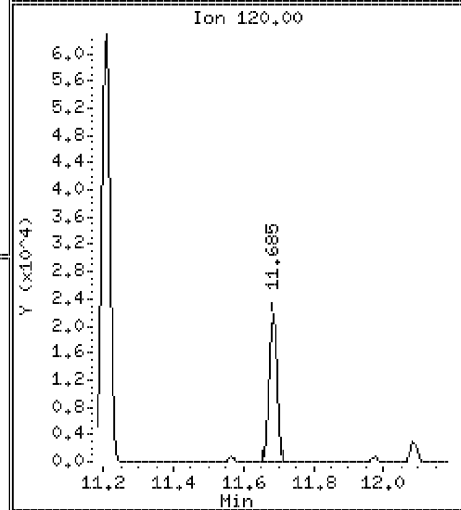
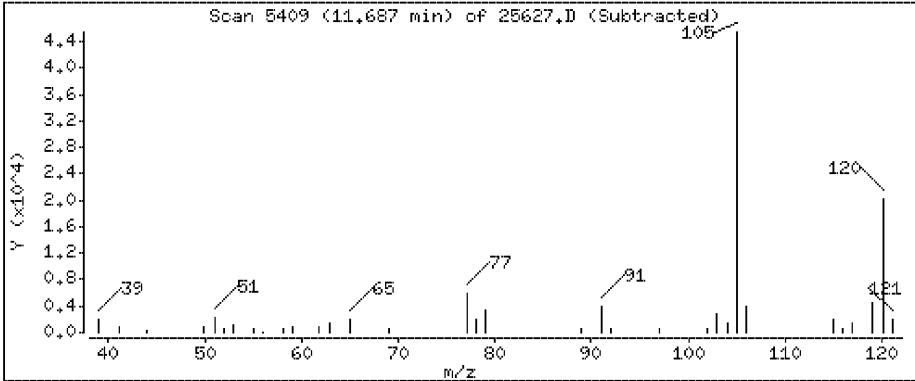
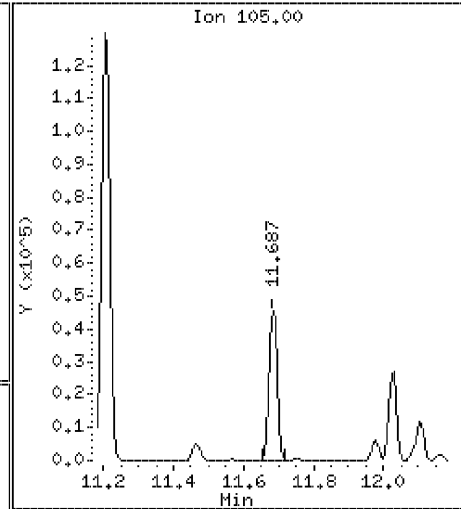
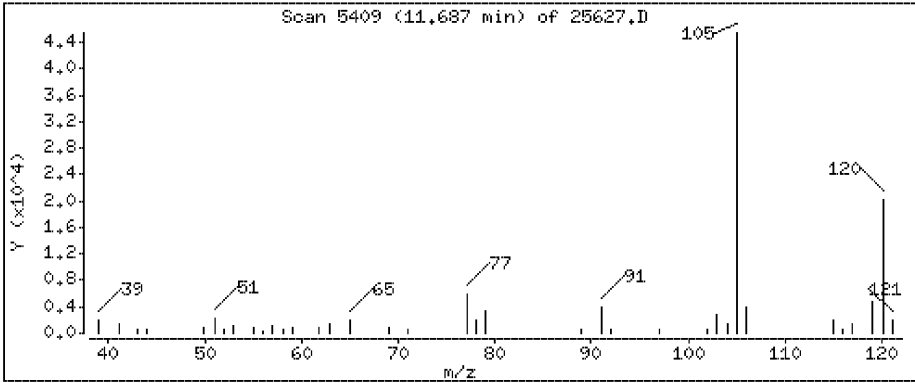
Operator: CH1

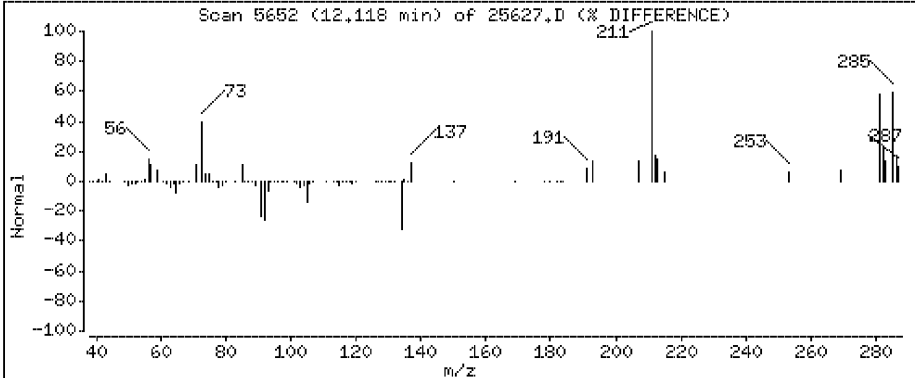
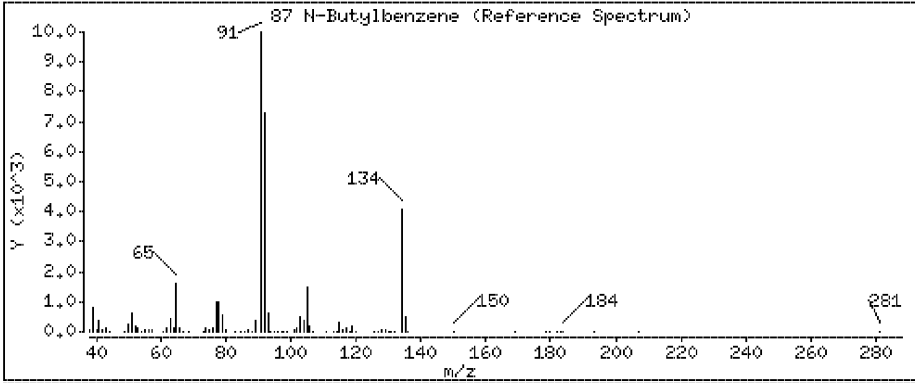
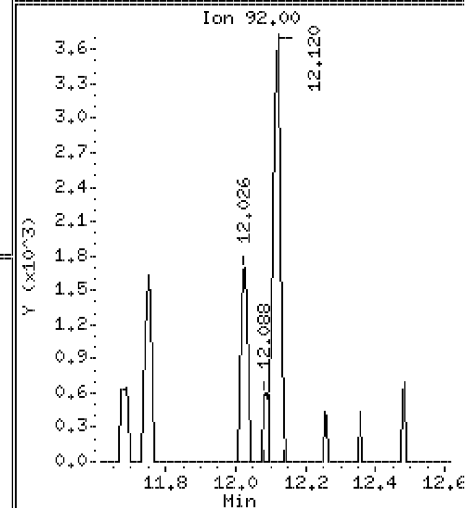
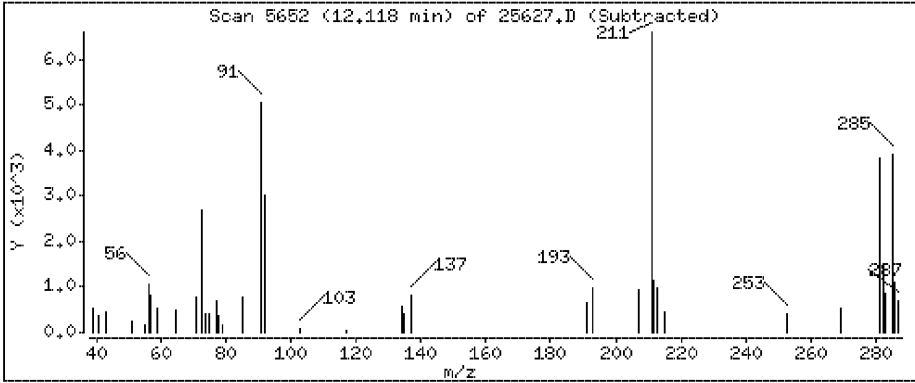
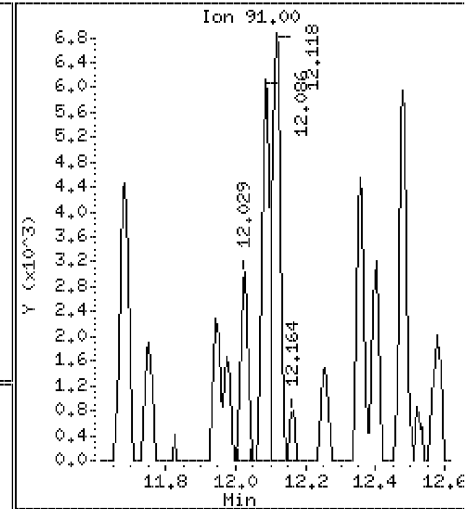
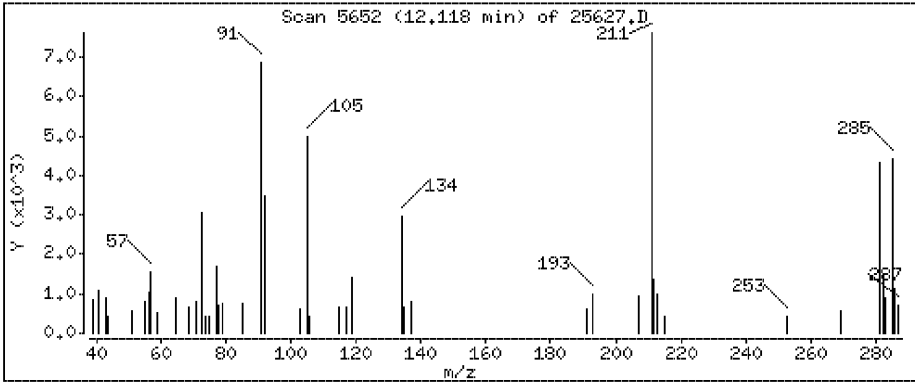
Column phase: ZB-5MSplus SN338857

Column diameter: 0.32

85 1,2,3-Trimethylbenzene

Concentration: 1.25 ppbv





Data File: \\192.168.10.12\chem\10airH,1\091318,b\25627.D

Date : 13-SEP-2018 21:59

Client ID:

Instrument: 10airH.i

Sample Info:

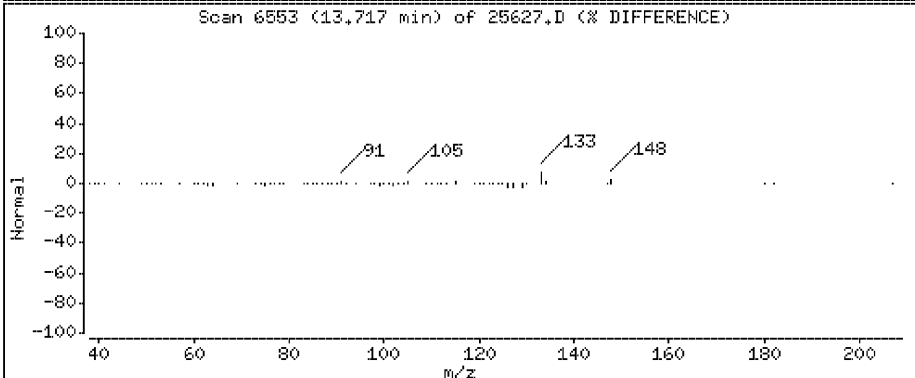
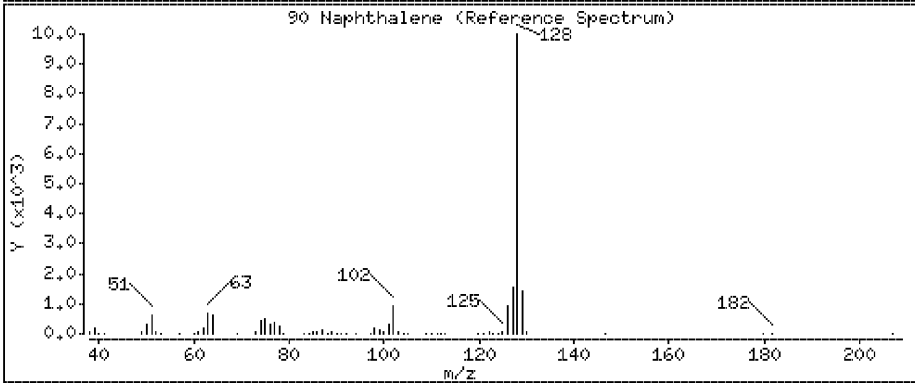
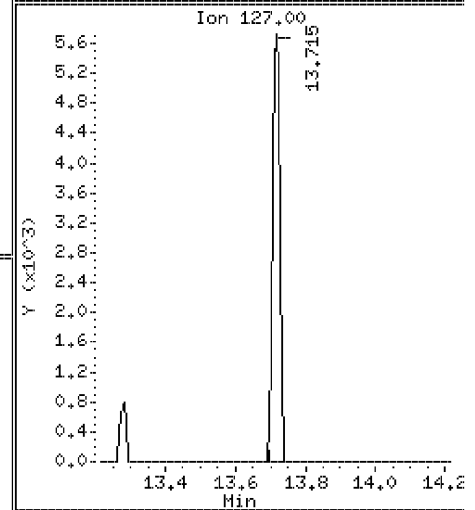
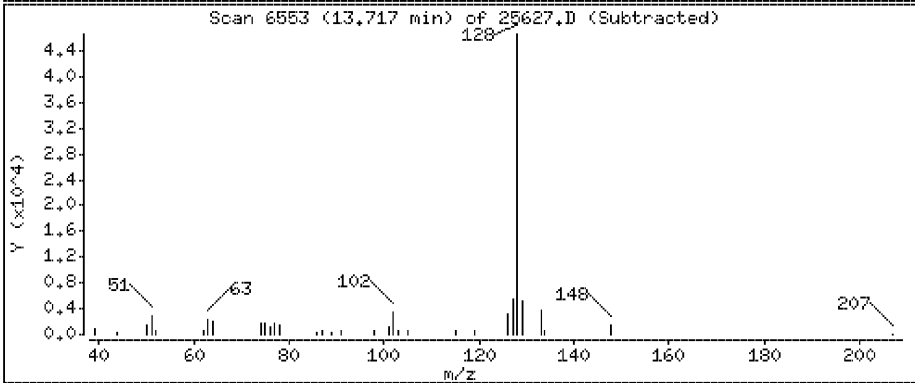
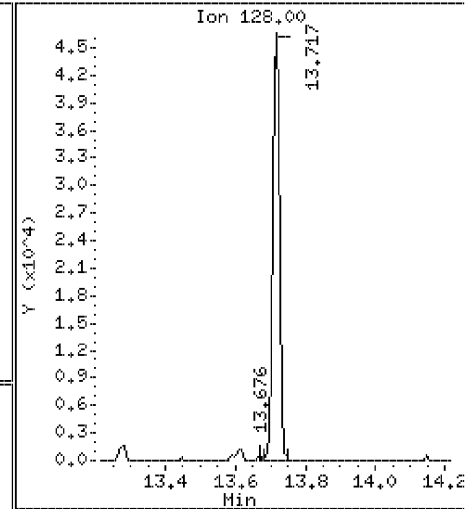
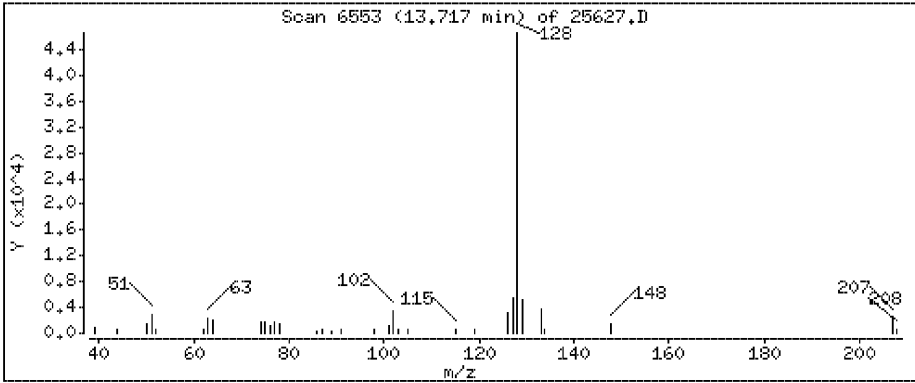
Operator: CH1

Column phase: ZB-5MSplus SN338857

Column diameter: 0.32

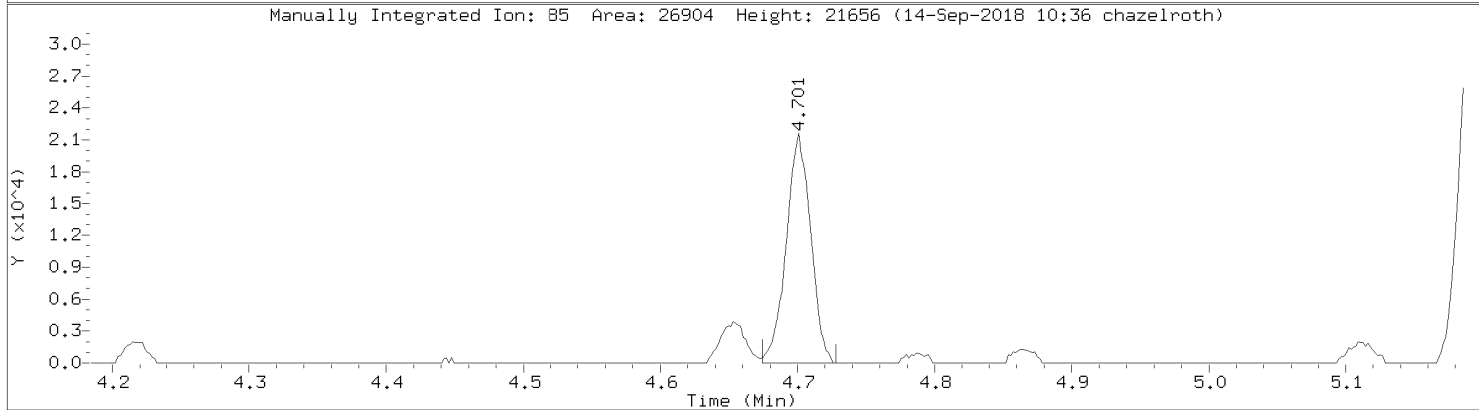
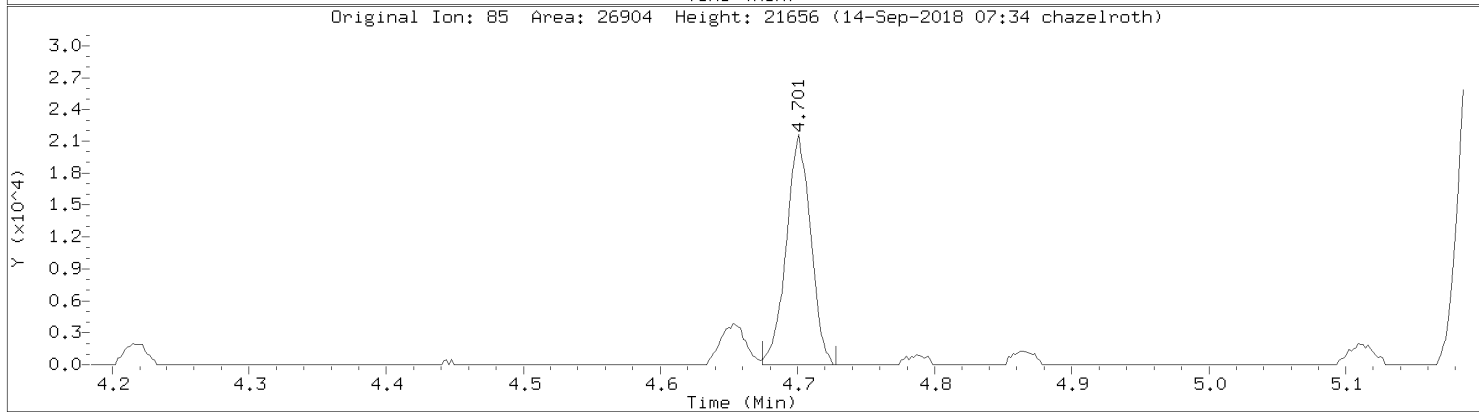
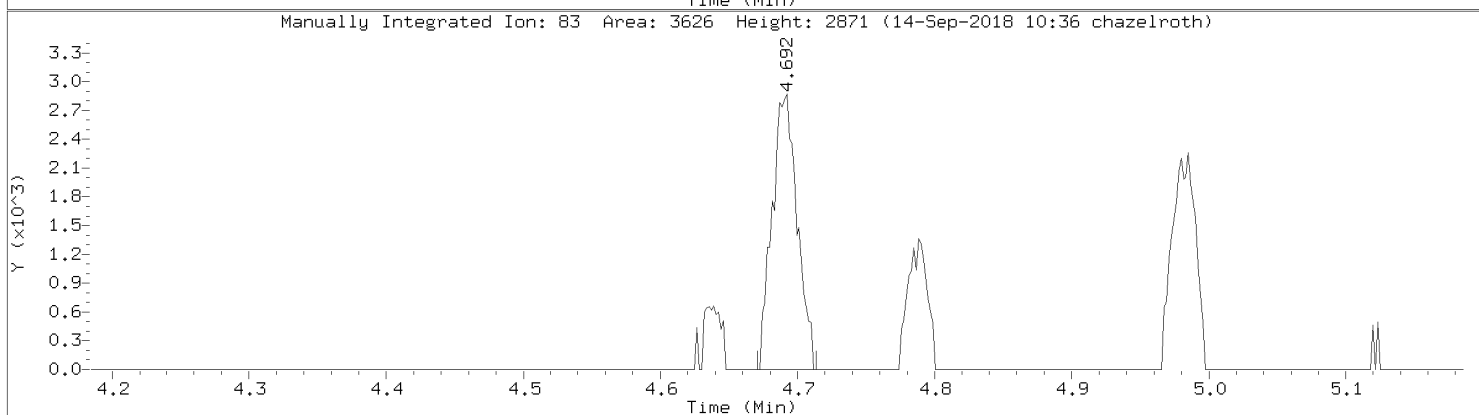
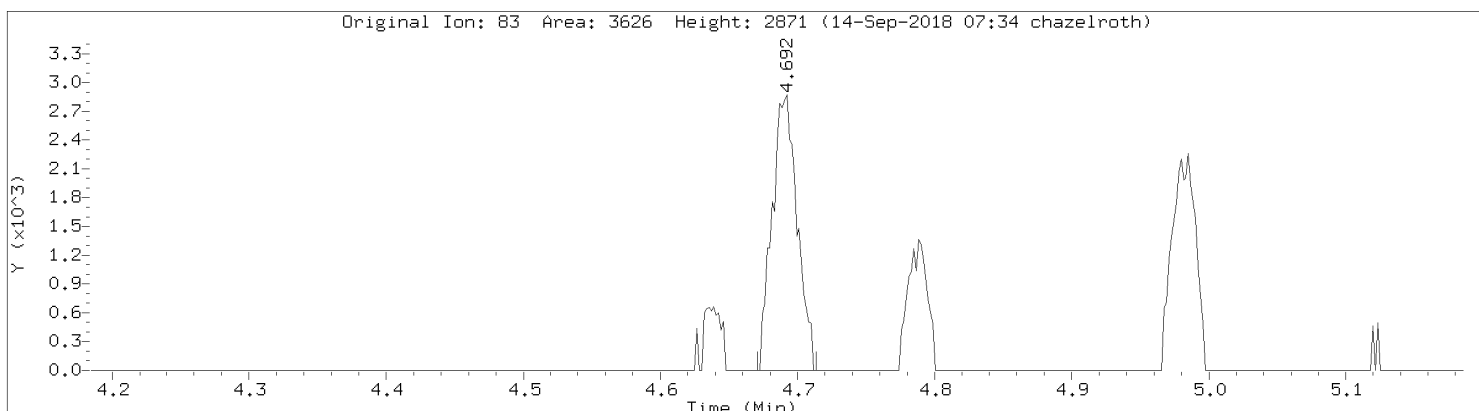
90 Naphthalene

Concentration: 2.69 ppbv

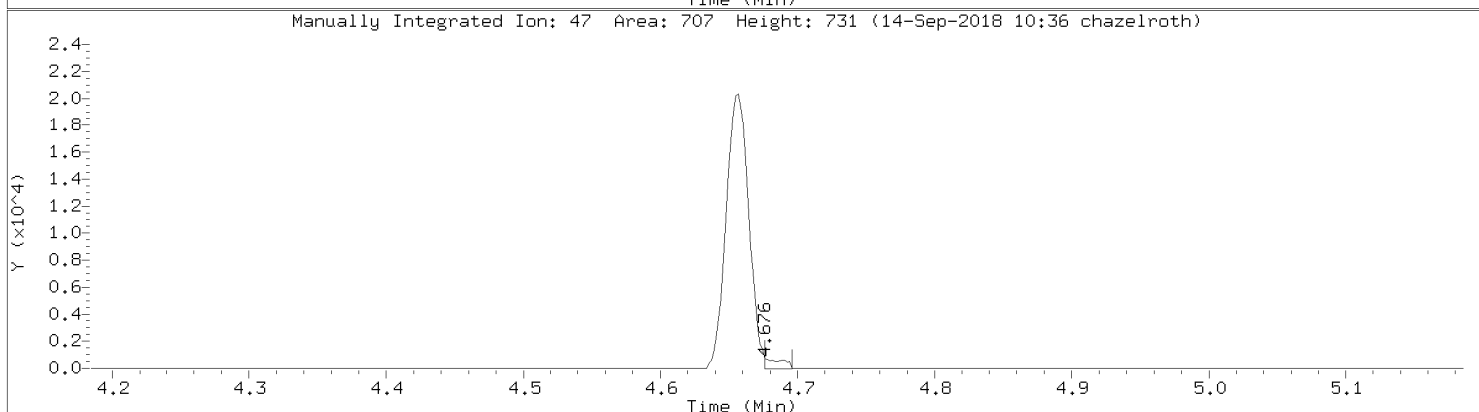
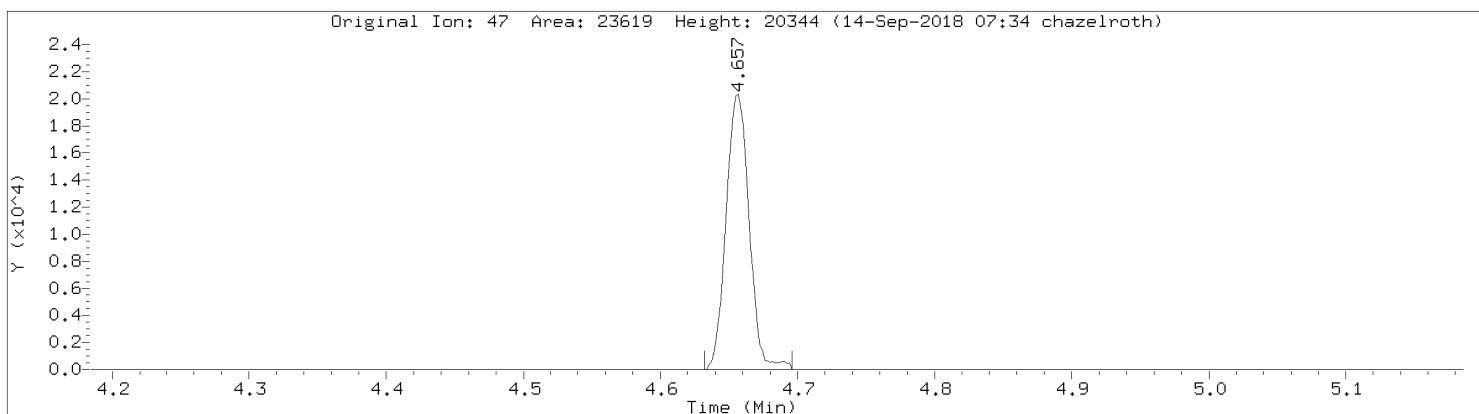


Data File: \\192.168.10.12\chem\10airH.i\091318.b\25627.D
Injection Date: 13-SEP-2018 21:59
Instrument: 10airH.i
Lab Sample ID: 10446892003

Compound: Chloroform
CAS Number: 67-66-3

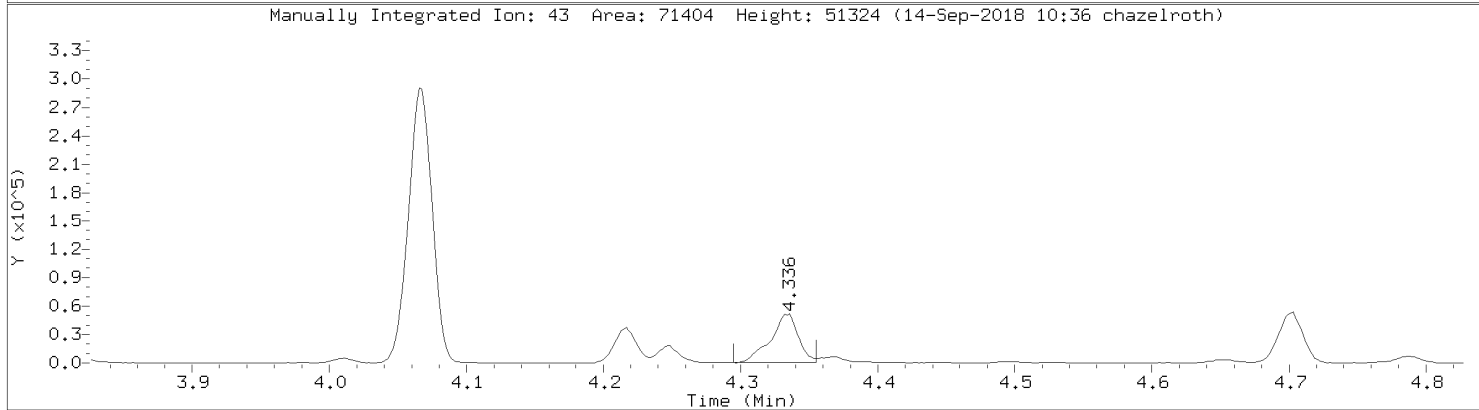
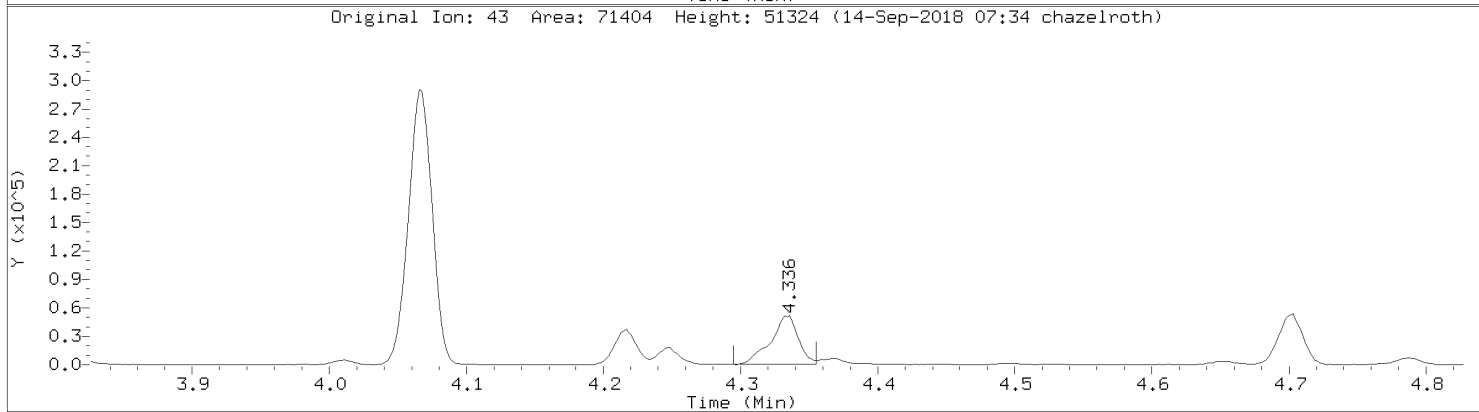
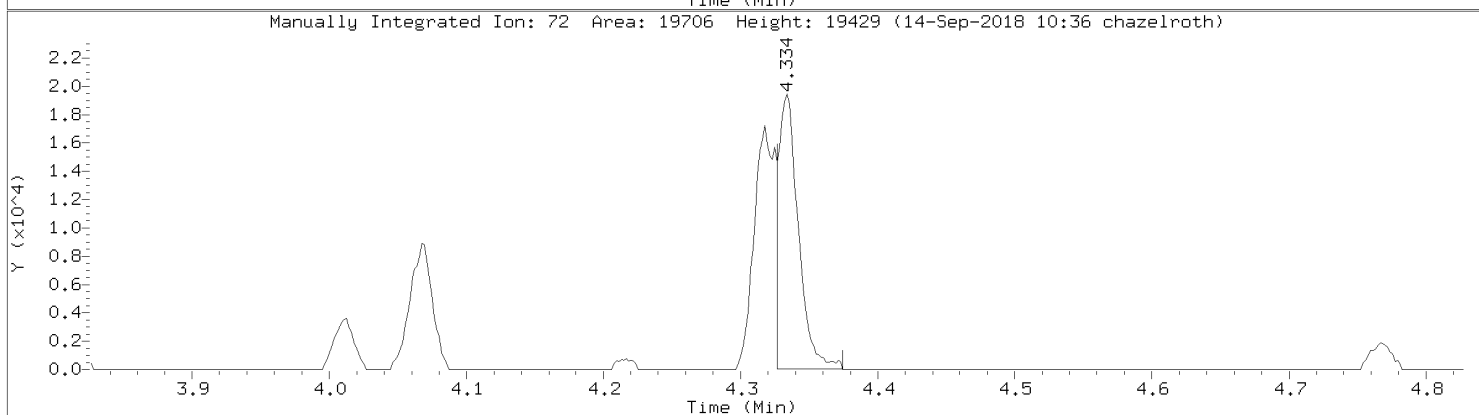
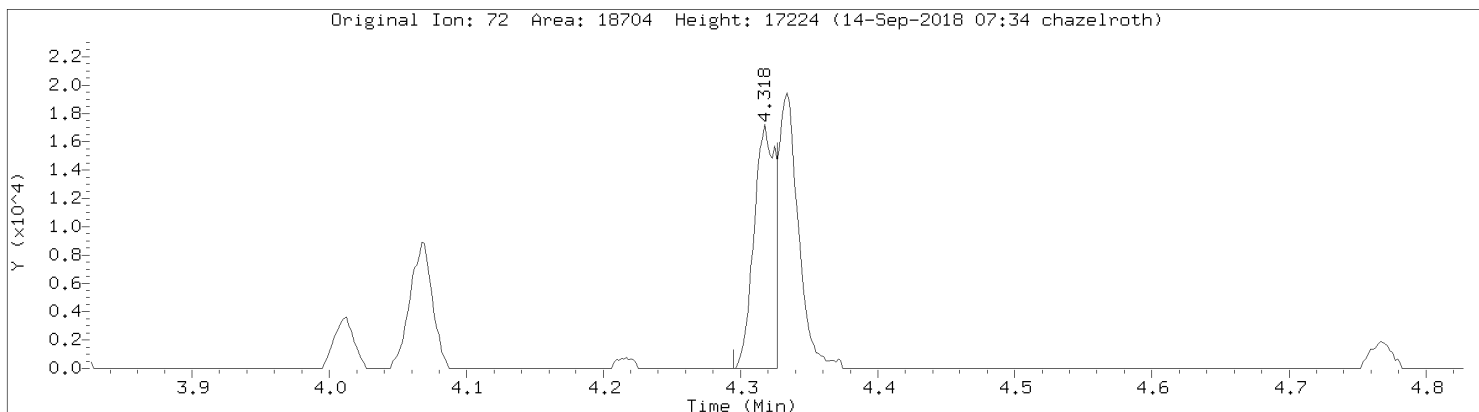


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Injection Date: 13-SEP-2018 21:59
Instrument: 10airH.i
Lab Sample ID: 10446892003



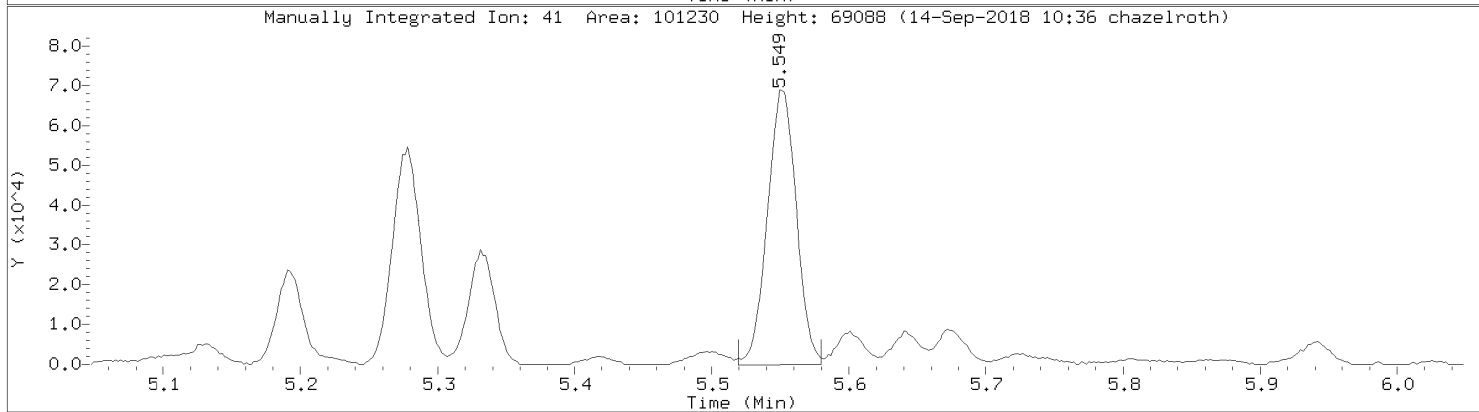
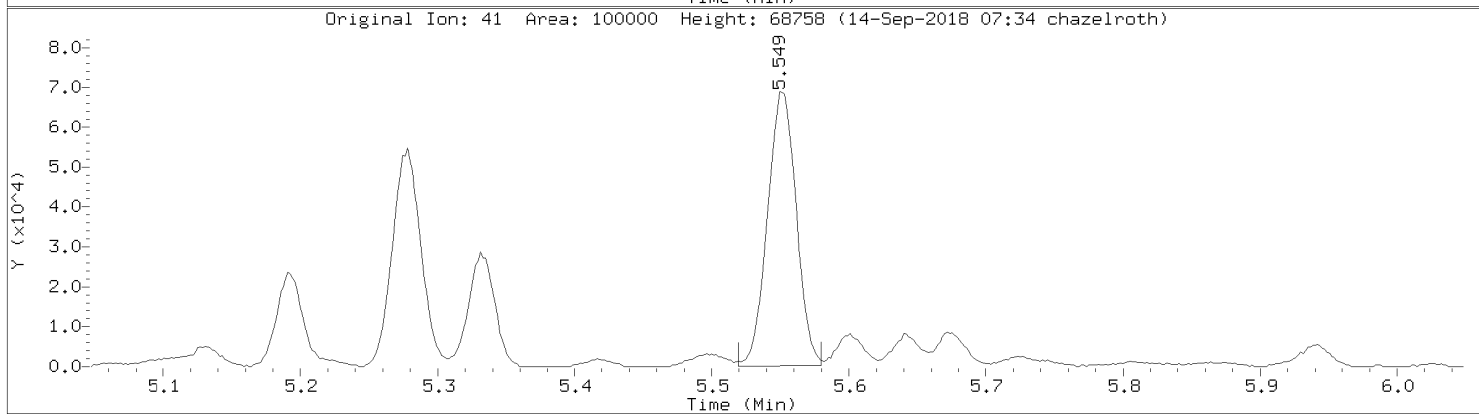
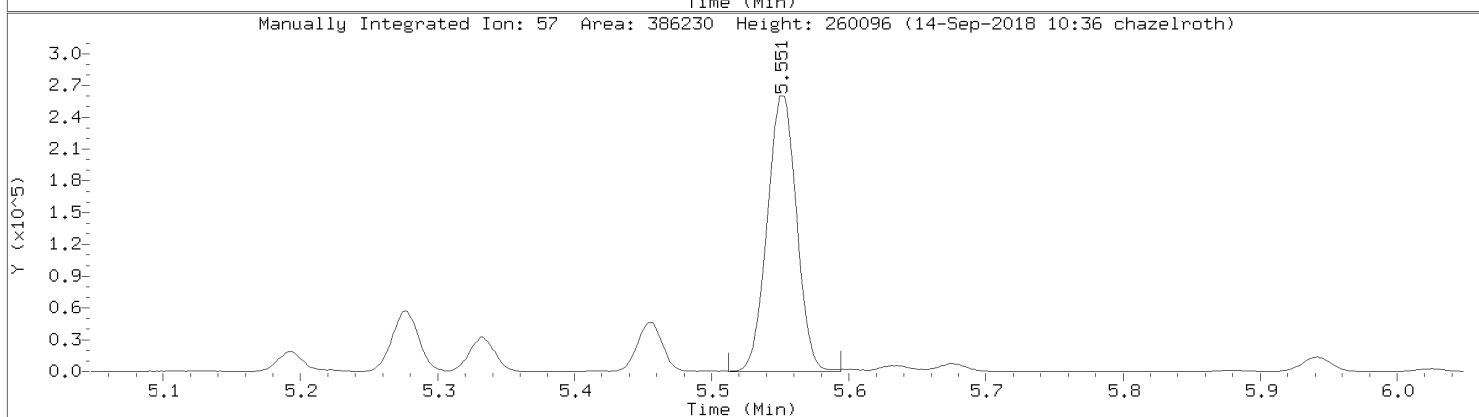
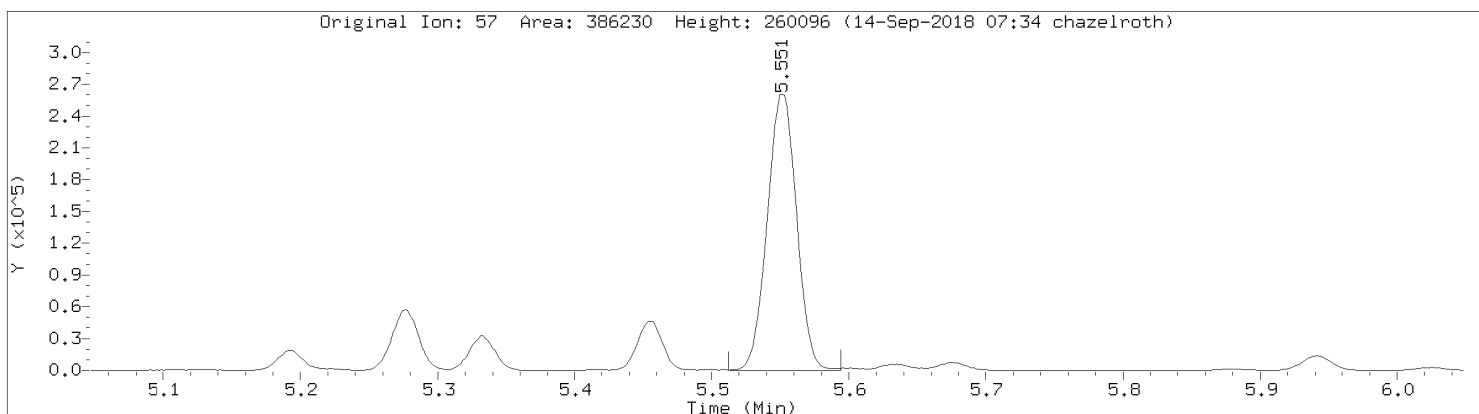
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Injection Date: 13-SEP-2018 21:59
Instrument: 10airH.i
Lab Sample ID: 10446892003

Compound: Methyl Ethyl Ketone
CAS Number: 78-93-3

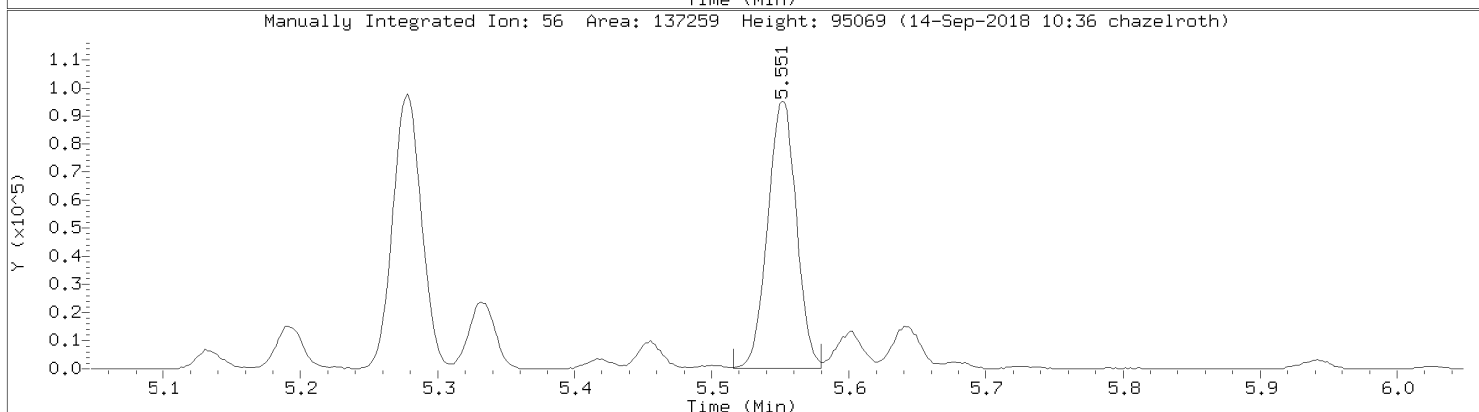
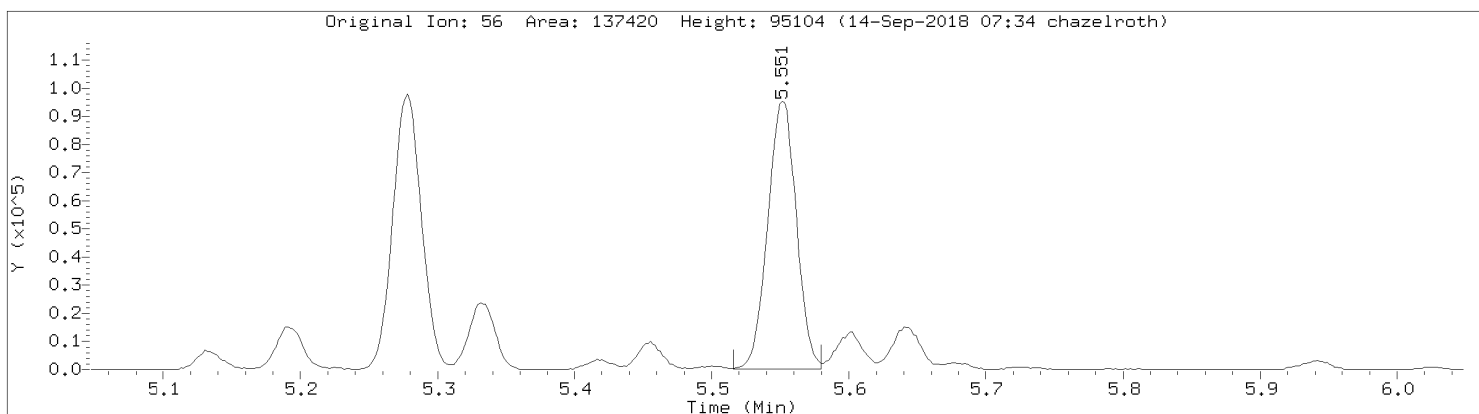


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Injection Date: 13-SEP-2018 21:59
Instrument: 10airH.i
Lab Sample ID: 10446892003

Compound: 2,2,4-Trimethylpentane
CAS Number: 540-84-1

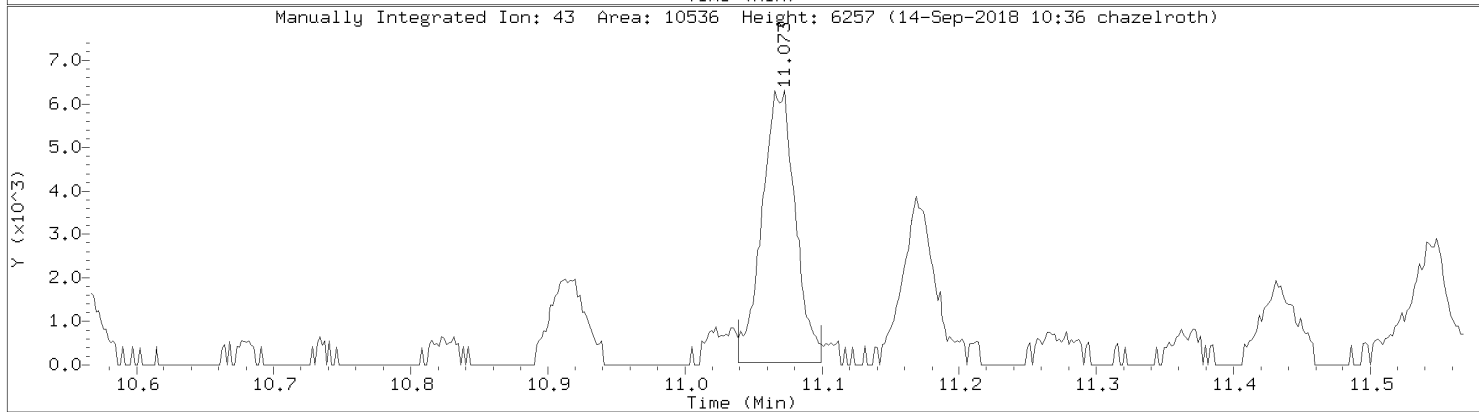
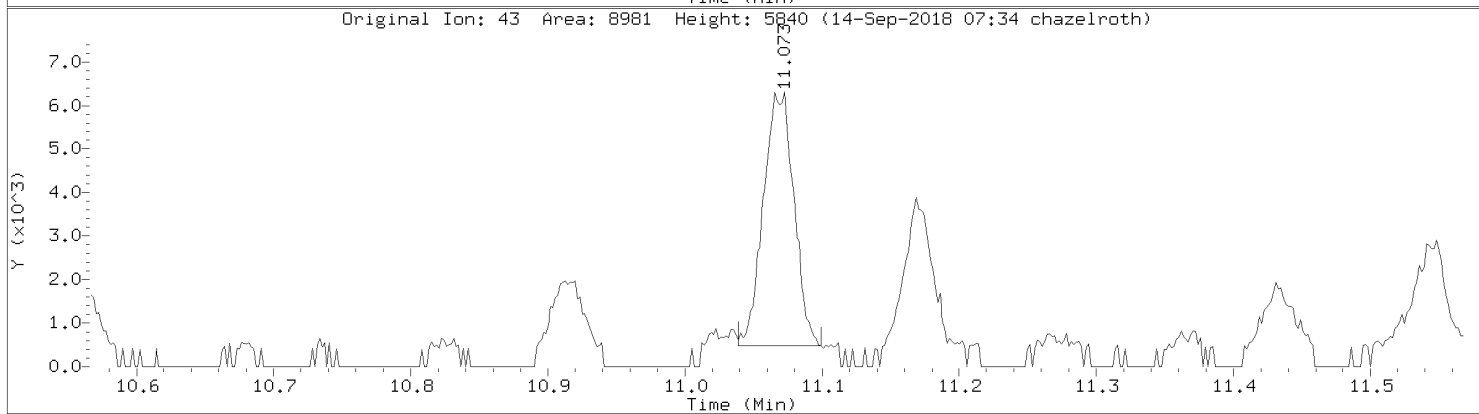
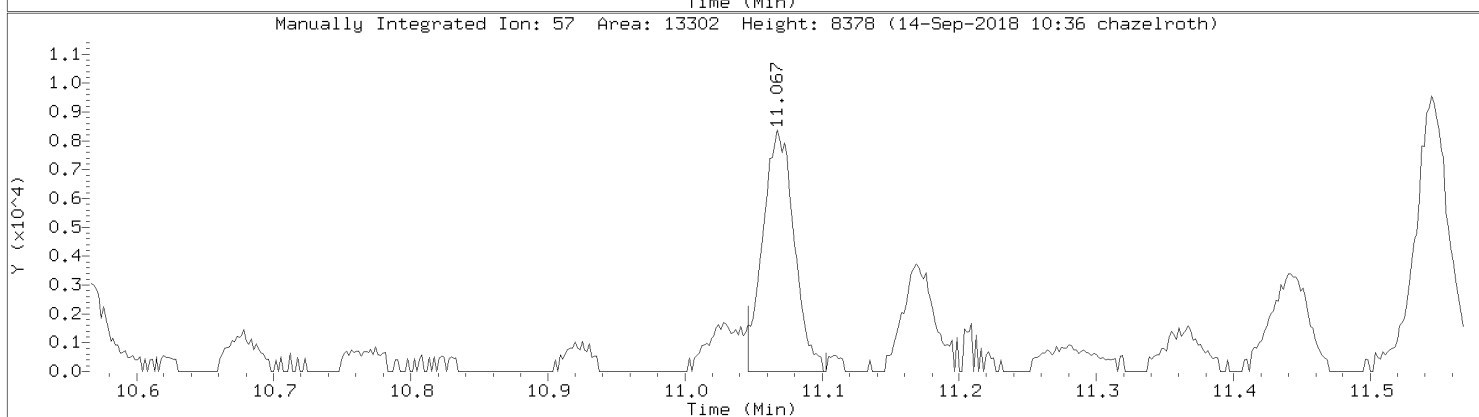
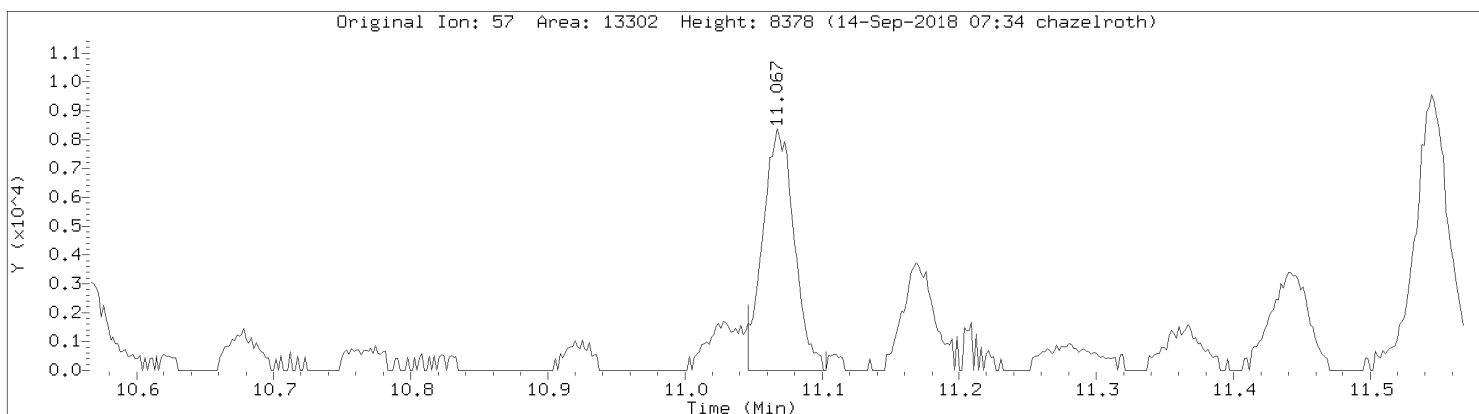


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Injection Date: 13-SEP-2018 21:59
Instrument: 10airH.i
Lab Sample ID: 10446892003

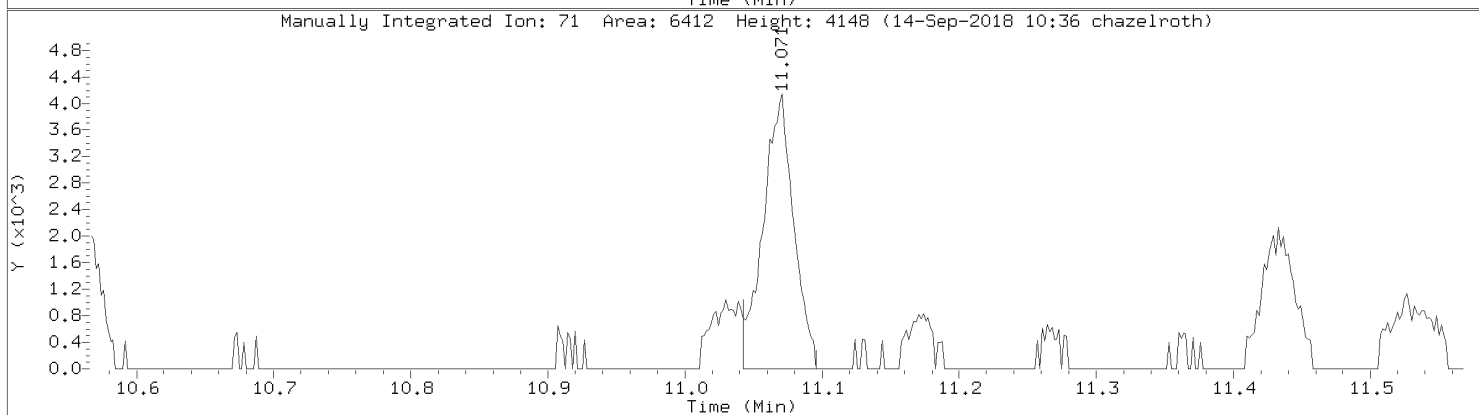
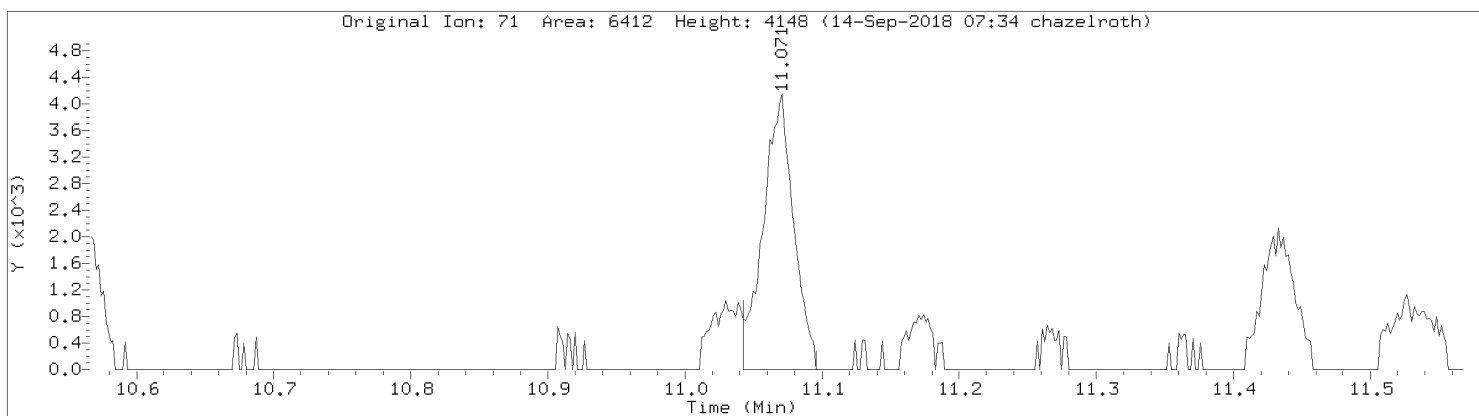


Data File: \\192.168.10.12\chem\10airH.i\091318.b\25627.D
Injection Date: 13-SEP-2018 21:59
Instrument: 10airH.i
Lab Sample ID: 10446892003

Compound: n-Decane
CAS Number: 124-18-5



Data File: \\192.168.10.12\chem\10airH.i\091318.b\25627.D
Injection Date: 13-SEP-2018 21:59
Instrument: 10airH.i
Lab Sample ID: 10446892003



Pace Analytical Services, Inc.

TO15 Analysis (UNIX)

Data file : \\192.168.10.12\chem\10airH.i\091318.b\25628.D
 Lab Smp Id: 10446892004
 Inj Date : 13-SEP-2018 22:27
 Operator : CH1 Inst ID: 10airH.i
 Smp Info :
 Misc Info : 31710
 Comment : Volatile Organic COMPOUNDS in Air
 Method : \\192.168.10.12\chem\10airH.i\091318.b\TO15_253-18.m
 Meth Date : 13-Sep-2018 14:08 nkoller Quant Type: ISTD
 Cal Date : 10-SEP-2018 14:17 Cal File: 25309.D
 Als bottle: 28
 Dil Factor: 1.77000
 Integrator: HP RTE Compound Sublist: all.sub
 Target Version: 4.14
 Processing Host: 10MNAIRRC91

Concentration Formula: Amt * DF * Uf * CpndVariable

Name	Value	Description
DF	1.770	Dilution Factor
Uf	1.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS		
							ON-COLUMN (ppbv)	FINAL (ppbv)	
1 1,1-Difluoroethane	65								(D)
2 Chlorodifluoromethane	67								(D)
3 Propylene	41		2.954	2.952	(0.542)	11703	0.77439	1.37	
4 Dichlorodifluoromethane	85		2.972	2.972	(0.545)	17097	0.19595	0.347	
5 Dichlorotetrafluoroethane	85								
6 Chloromethane	50		3.048	3.046	(0.559)	14224	0.61708	1.09	
7 Vinyl chloride	62								
8 1,3-Butadiene	54								(D)
9 Bromomethane	94		3.267	3.267	(0.599)	11328	0.40349	0.714	
10 Chloroethane	64		3.314	3.311	(0.608)	1093	0.09696	0.172	
11 Ethanol	45		3.323	3.318	(0.609)	52242	7.30280	12.9	
12 Vinyl Bromide	106								
13 Isopentane	43		3.433	3.432	(0.630)	230275	12.4721	22.1	
14 Freon 123	83								
15 Trichlorofluoromethane	101		3.495	3.492	(0.641)	6692	0.10782	0.191	
16 Acrolein	56								(D)
17 Acetone	43		3.517	3.513	(0.645)	402447	15.1782	26.9	
18 Isopropyl Alcohol	45		3.545	3.536	(0.650)	10735	0.36646	0.649(Q)	
19 1,1-Dichloroethene	61								
20 Acrylonitrile	53								
21 Tert Butyl Alcohol (TBA)	59		3.740	3.733	(0.686)	34793	0.65456	1.16	
22 Methyl Acetate	43								(D)
23 Freon 113	101		3.746	3.742	(0.687)	2387	0.03490	0.0618(a)	
24 Allyl Chloride	76								

Compounds	QUANT	SIG						CONCENTRATIONS	
			MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ppbv)	FINAL (ppbv)
25 Methylene chloride	49		3.824	3.820	(0.701)	31987	0.47465	0.840	
26 Carbon Disulfide	76		3.929	3.927	(0.720)	87123	1.10605	1.96	
27 Methyl Tert Butyl Ether	73		Compound Not Detected.						
28 trans-1,2-dichloroethene	96		Compound Not Detected.						
29 Vinyl Acetate	43		Compound Not Detected.						(D)
30 1,1-Dichloroethane	63		Compound Not Detected.						(D)
31 Methyl Ethyl Ketone	72		4.330	4.326	(0.794)	58645	4.05935	7.19 (Q)	
32 Di-isopropyl Ether	45		Compound Not Detected.						
33 n-Hexane	57		4.363	4.362	(0.800)	24266	0.69261	1.23 (Q)	
34 Ethyl Acetate	43		Compound Not Detected.						
35 cis-1,2-Dichloroethene	96		Compound Not Detected.						
36 Ethyl Tert-Butyl Ether	59		Compound Not Detected.						
37 Chloroform	83		4.686	4.685	(0.859)	30350	0.43594	0.772 (Q)	
38 Tetrahydrofuran	42		Compound Not Detected.						(D)
39 1,1,1-Trichloroethane	97		Compound Not Detected.						
40 1,2-Dichloroethane	62		Compound Not Detected.						
41 Benzene	78		5.242	5.238	(0.961)	6818	0.08186	0.145	
42 Carbon tetrachloride	117		Compound Not Detected.						
43 Cyclohexane	56		Compound Not Detected.						(D)
44 Tert Amyl Methyl Ether	73		Compound Not Detected.						(D)
* 45 1,4-Difluorobenzene	114		5.453	5.453	(1.000)	894495	10.0000		
46 2,2,4-Trimethylpentane	57		5.549	5.547	(1.018)	736579	6.90018	12.2	
47 Heptane	43		Compound Not Detected.						(D)
48 Trichloroethene	130		Compound Not Detected.						
49 1,2-Dichloropropane	63		Compound Not Detected.						
50 Methyl methacrylate	69		Compound Not Detected.						(D)
51 1,4-Dioxane	88		Compound Not Detected.						
52 Bromodichloromethane	83		Compound Not Detected.						
53 Methylcyclohexane	98		6.259	6.257	(1.148)	33604	1.53479	2.72	
54 Methyl Isobutyl Ketone	43		Compound Not Detected.						(D)
55 cis-1,3-Dichloropropene	75		Compound Not Detected.						
56 trans-1,3-Dichloropropene	75		Compound Not Detected.						
57 Toluene	91		6.962	6.960	(1.277)	37220	0.42491	0.752	
58 1,1,2-Trichloroethane	97		Compound Not Detected.						
59 Methyl Butyl Ketone	43		7.191	7.182	(0.851)	17226	0.51433	0.910	
60 n-Octane	43		7.388	7.384	(0.874)	8278	0.23276	0.412	
61 Dibromochloromethane	129		Compound Not Detected.						
62 Tetrachloroethene	166		7.705	7.705	(0.912)	9999	0.16579	0.293	
63 1,2-Dibromoethane	107		Compound Not Detected.						
* 64 Chlorobenzene - d5	117		8.451	8.451	(1.000)	759601	10.0000		
65 Chlorobenzene	112		Compound Not Detected.						
66 Ethyl Benzene	91		8.717	8.713	(1.032)	25036	0.23720	0.420	
67 m&p-Xylene	91		8.869	8.868	(1.050)	99526	1.23978	2.19 (M)	
68 n-Nonane	43		9.237	9.237	(1.093)	9843	0.42270	0.748	
69 Styrene	104		Compound Not Detected.						(D)
70 o-Xylene	91		9.338	9.338	(1.105)	68896	0.80546	1.43	
71 Bromoform	173		Compound Not Detected.						
72 1,1,2,2-Tetrachloroethane	83		Compound Not Detected.						
73 Isopropylbenzene	105		9.886	9.886	(1.170)	5783	0.25641	0.454	
74 N-Propylbenzene	91		10.458	10.454	(1.238)	26205	0.31506	0.558	
75 4-Ethyltoluene	105		10.641	10.639	(1.259)	33074	0.48910	0.866 (M)	
76 1,3,5-Trimethylbenzene	105		10.715	10.713	(1.268)	58904	0.64416	1.14	
77 n-Decane	57		11.068	11.067	(2.030)	19332	0.63797	1.13 (M)	
78 Tert-Butyl Benzene	119		Compound Not Detected.						

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN (ppbv)	FINAL (ppbv)
79 1,2,4-Trimethylbenzene	105		11.207	11.203	(1.326)	222229	2.17660	3.85
80 Sec- Butylbenzene	105		11.466	11.462	(1.357)	5278	0.21968	0.389
81 1,3-Dichlorobenzene	146		Compound Not Detected.					
82 Benzyl Chloride	91		Compound Not Detected.					(D)
83 1,4-Dichlorobenzene	146		Compound Not Detected.					
84 p-Isopropyltoluene	119		Compound Not Detected.					(D)
85 1,2,3-Trimethylbenzene	105		11.684	11.683	(1.383)	69437	0.77724	1.38
86 1,2-Dichlorobenzene	146		Compound Not Detected.					
87 N-Butylbenzene	91		12.117	12.114	(1.434)	11940	0.41123	0.728
88 1,2-Dibromo-3-Chloropropane	157		Compound Not Detected.					
89 1,2,4-Trichlorobenzene	180		Compound Not Detected.					
90 Naphthalene	128		13.716	13.715	(1.623)	78763	2.13858	3.79
91 Hexachlorobutadiene	225		Compound Not Detected.					

QC Flag Legend

- a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
- Q - Qualifier signal failed the ratio test.
- M - Compound response manually integrated.
- D - User disabled compound identification.

Data File: \\192.168.10.12\chem\10airH.i\091318.b\25628.D
Report Date: 14-Sep-2018 10:58

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10airH.i
Lab File ID: 25628.D
Lab Smp Id: 10446892004
Analysis Type: VOA
Quant Type: ISTD
Operator: CH1
Method File: \\192.168.10.12\chem\10airH.i\091318.b\TO15_253-18.m
Misc Info: 31710

Calibration Date: 13-SEP-2018
Calibration Time: 08:29

Level: LOW
Sample Type: AIR

Test Mode:

Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
45 1,4-Difluorobenze	1034069	620441	1447697	894495	-13.50
64 Chlorobenzene - d	896862	538117	1255607	759601	-15.30

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
45 1,4-Difluorobenze	5.45	5.12	5.78	5.45	-0.00
64 Chlorobenzene - d	8.45	8.12	8.78	8.45	-0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: \\192.168.10.12\chem\10airH.i\091318.b\25628.D

Date : 13-SEP-2018 22:27

Client ID:

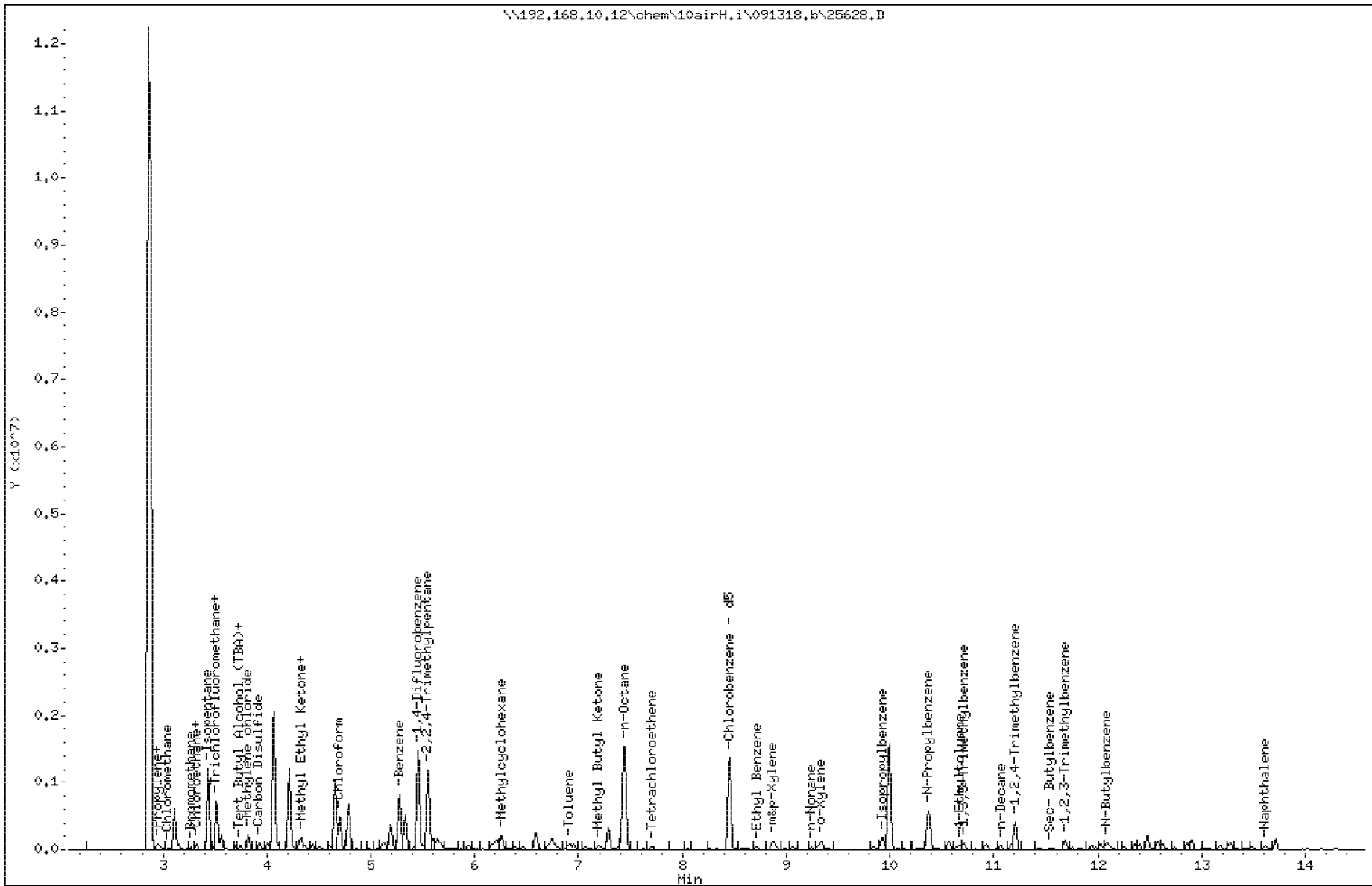
Instrument: 10airH.i

Sample Info:

Operator: CH1

Column phase: ZB-5MSplus SN338857

Column diameter: 0.32



Data File: \\192.168.10.12\chem\10airH,1\091318,b\25628.D

Date : 13-SEP-2018 22:27

Client ID:

Instrument: 10airH.i

Sample Info:

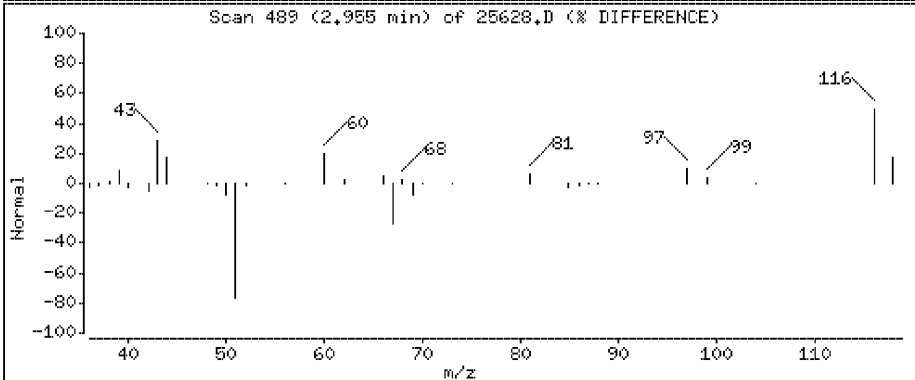
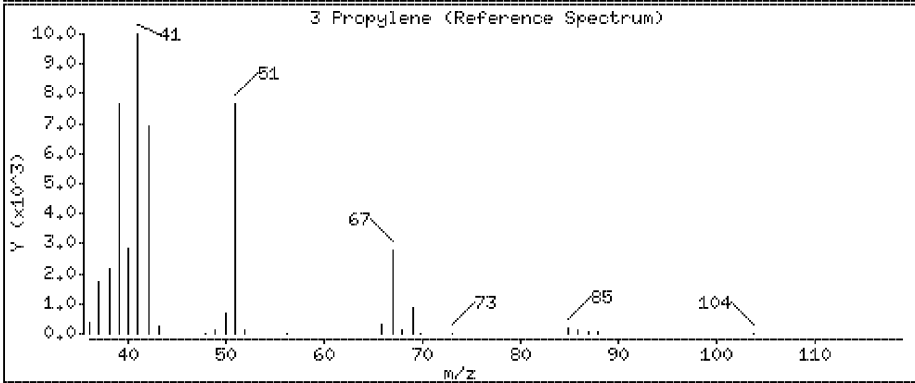
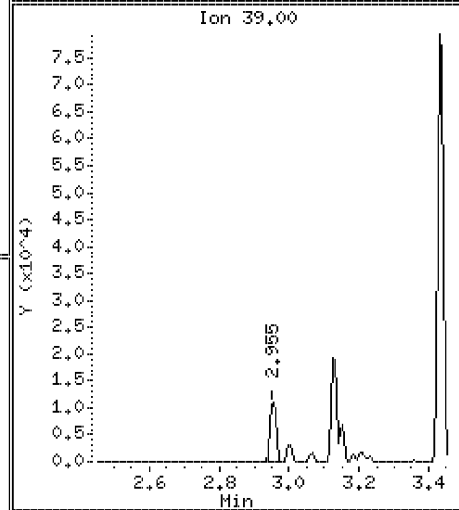
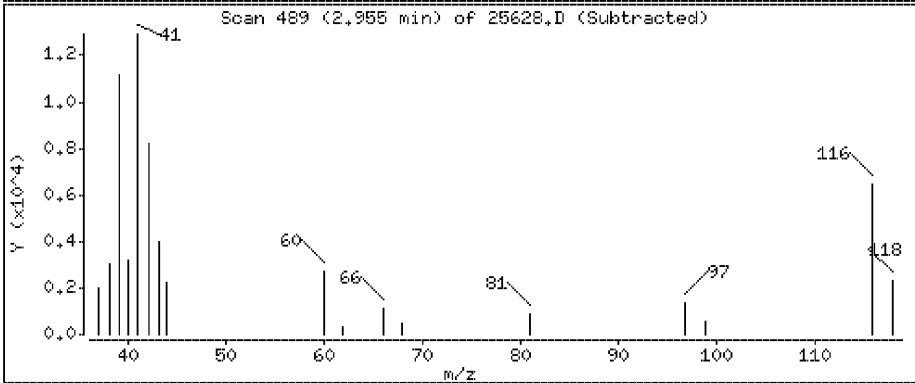
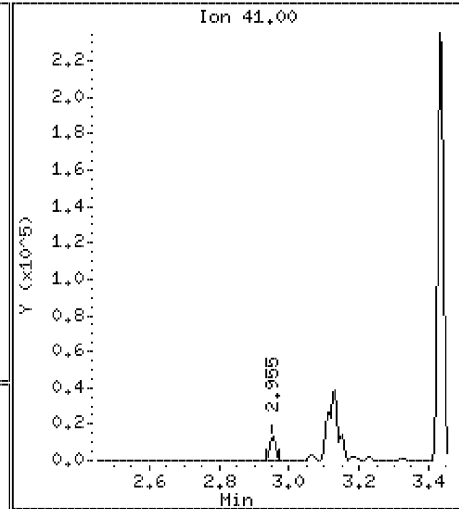
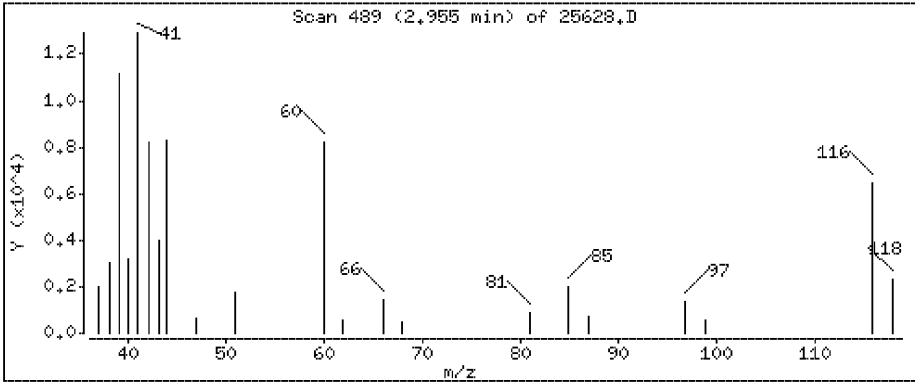
Operator: CH1

Column phase: ZB-5MSplus SN338857

Column diameter: 0,32

3 Propylene

Concentration: 1,37 ppbv



Data File: \\192.168.10.12\chem\10airH,1\091318,b\25628.D

Date : 13-SEP-2018 22:27

Client ID:

Instrument: 10airH.i

Sample Info:

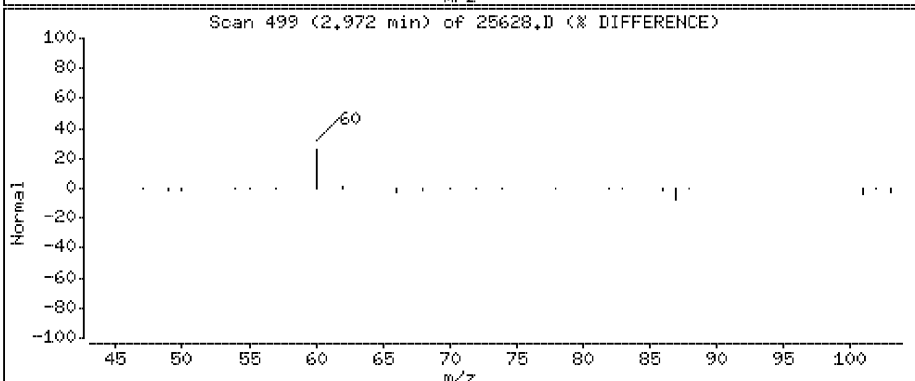
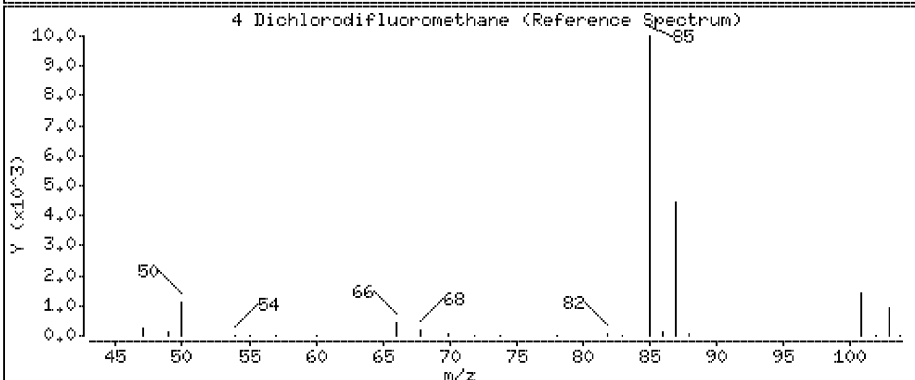
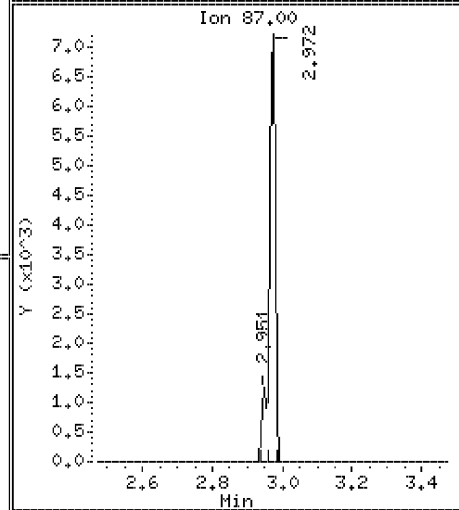
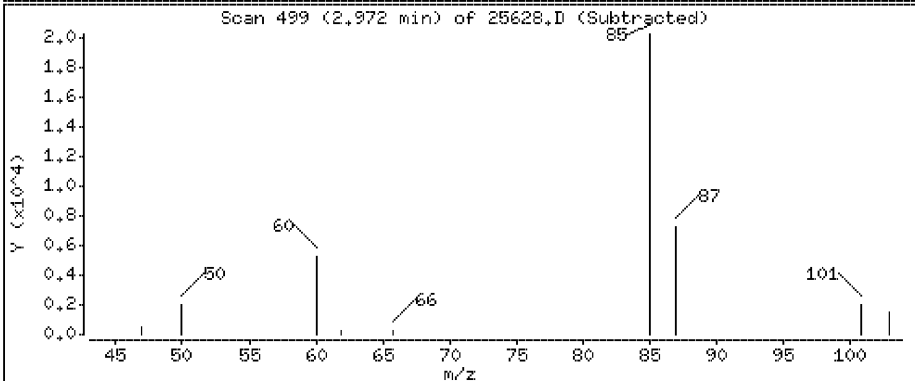
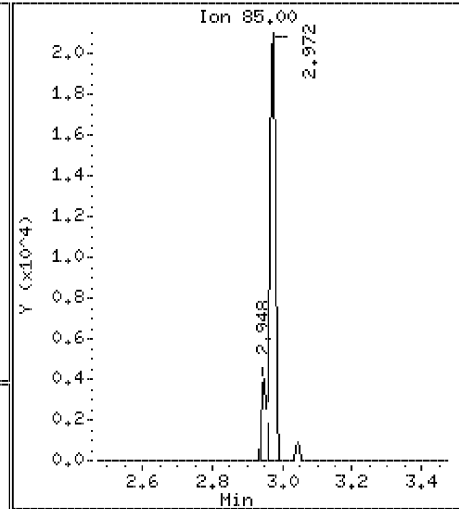
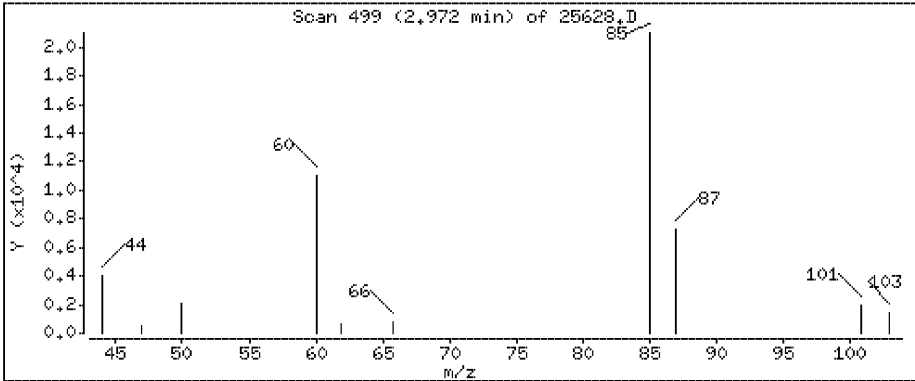
Operator: CH1

Column phase: ZB-5MSplus SN338857

Column diameter: 0,32

4 Dichlorodifluoromethane

Concentration: 0,347 ppbv



Data File: \\192.168.10.12\chem\10airH,1\091318,b\25628.D

Date : 13-SEP-2018 22:27

Client ID:

Instrument: 10airH.i

Sample Info:

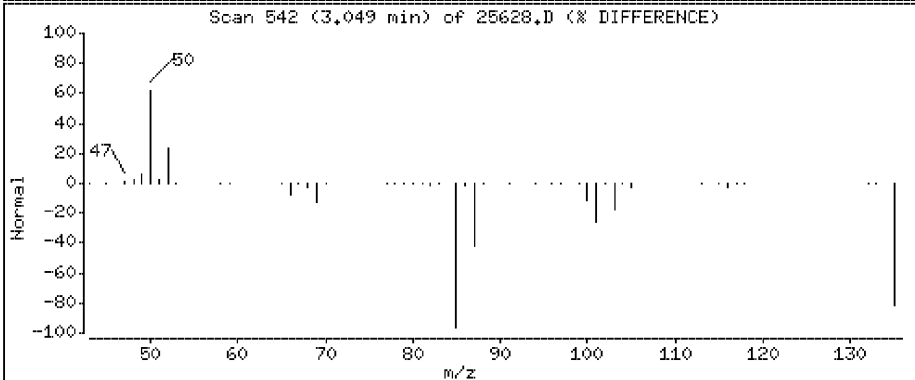
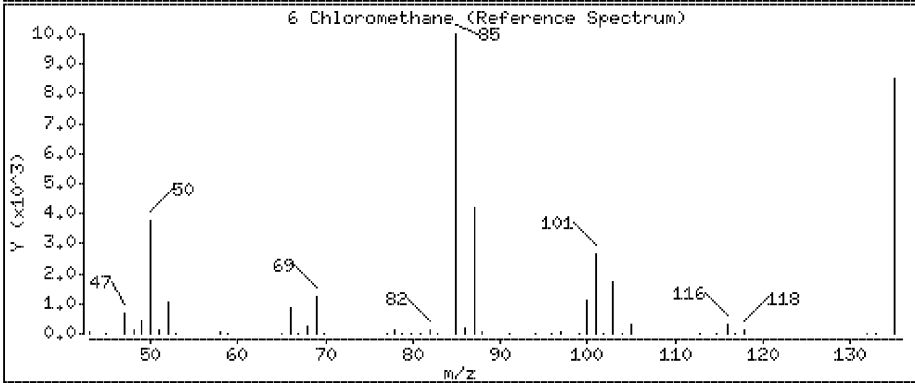
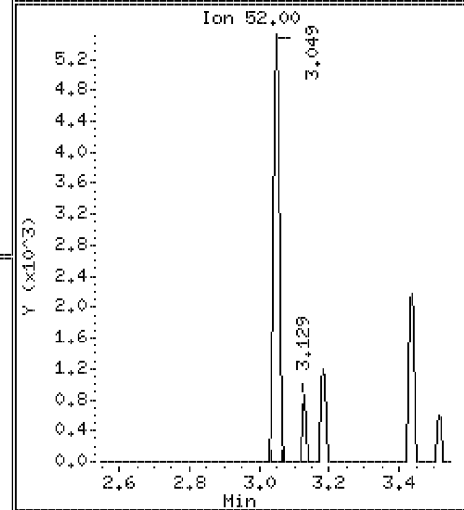
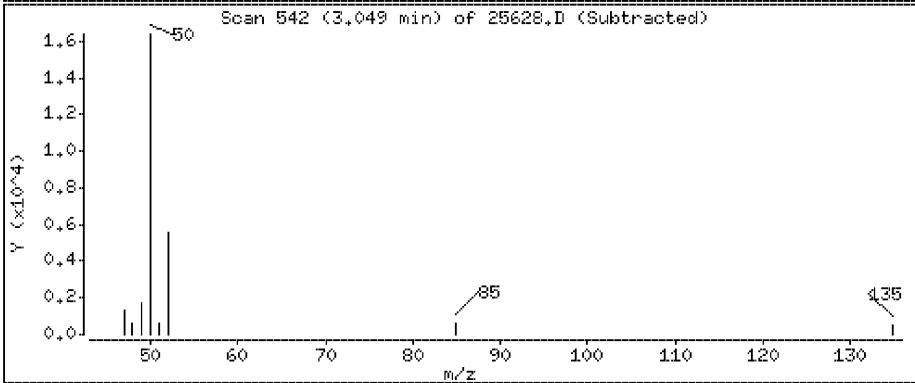
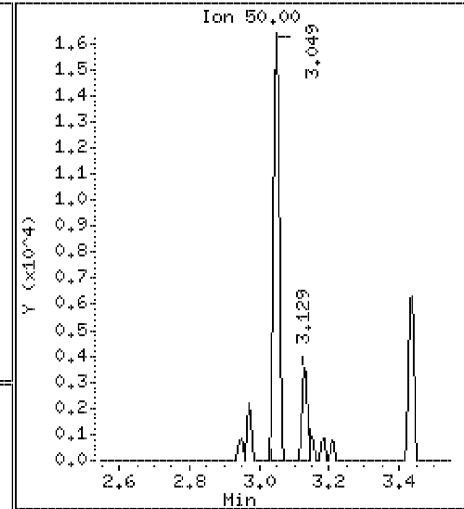
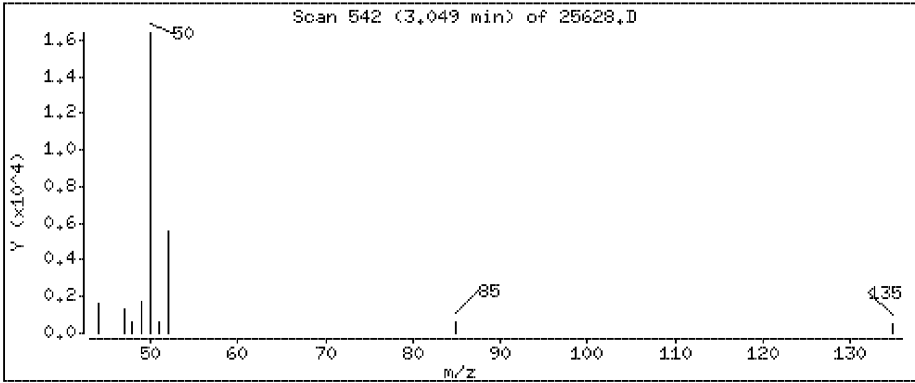
Operator: CH1

Column phase: ZB-5MSplus SN338857

Column diameter: 0,32

6 Chloromethane

Concentration: 1.09 ppbv



Data File: \\192.168.10.12\chem\10airH,1\091318,b\25628.D

Date : 13-SEP-2018 22:27

Client ID:

Instrument: 10airH.i

Sample Info:

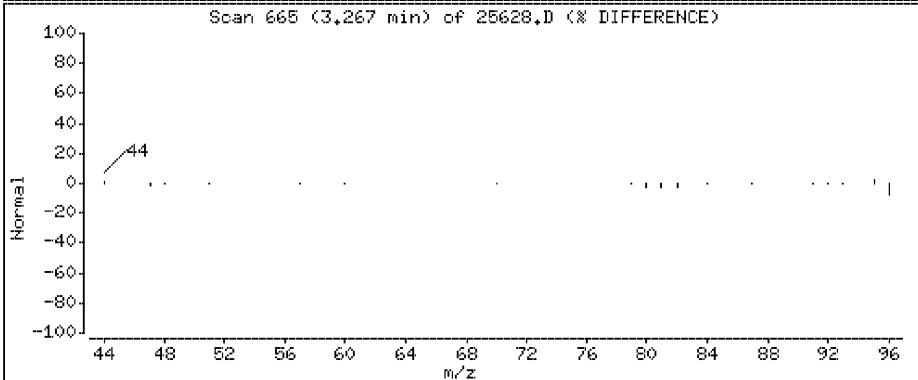
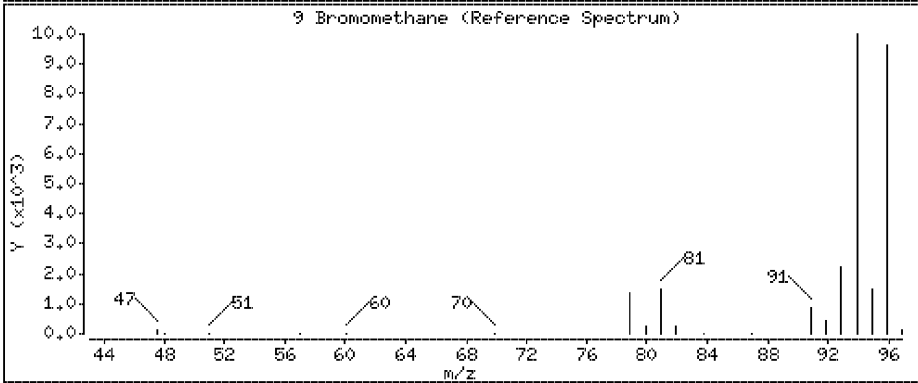
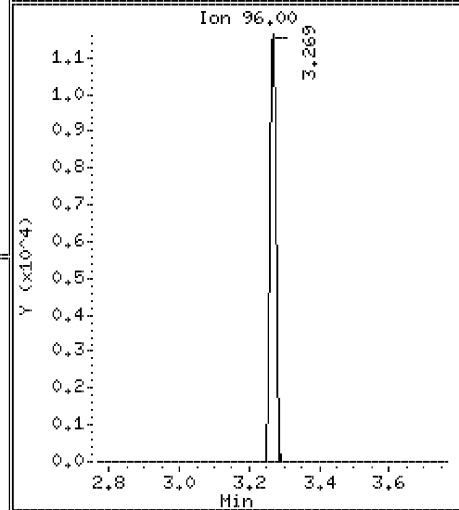
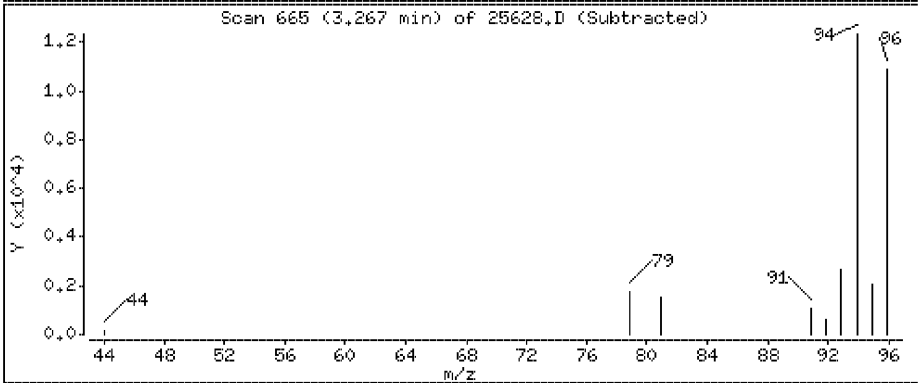
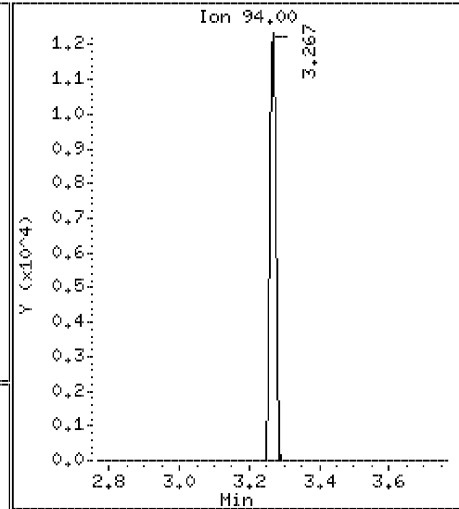
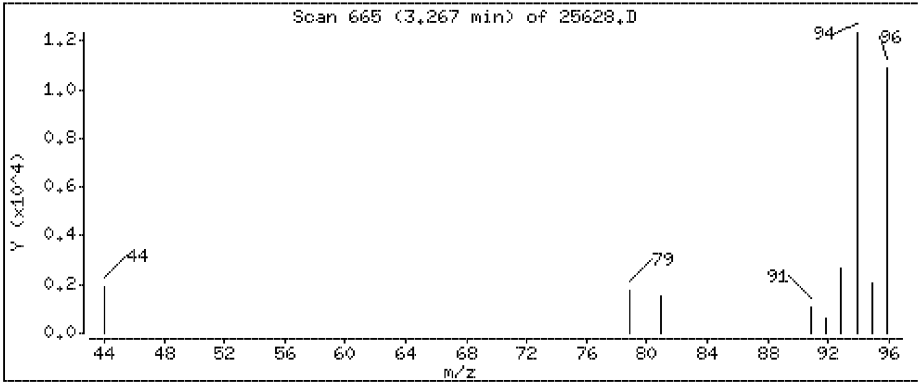
Operator: CH1

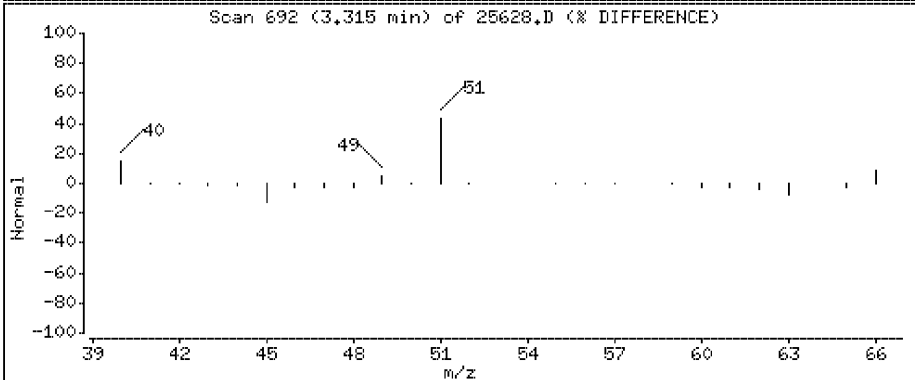
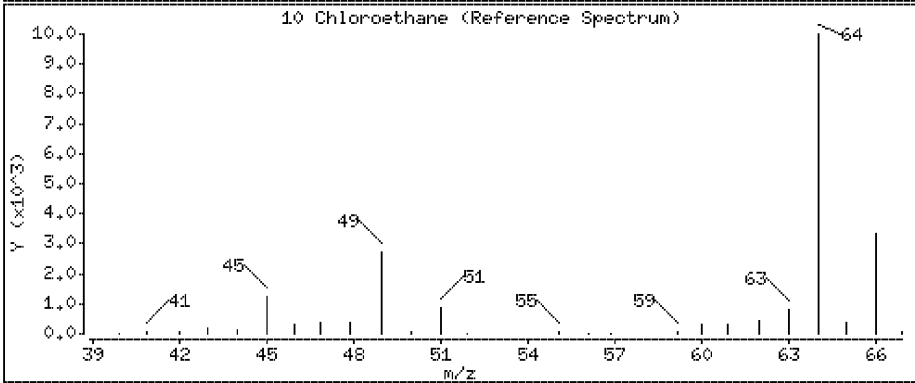
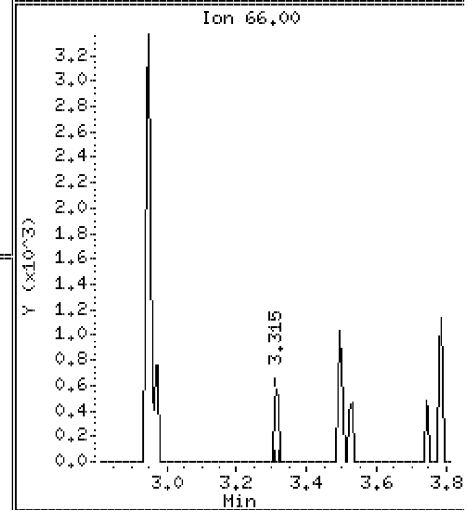
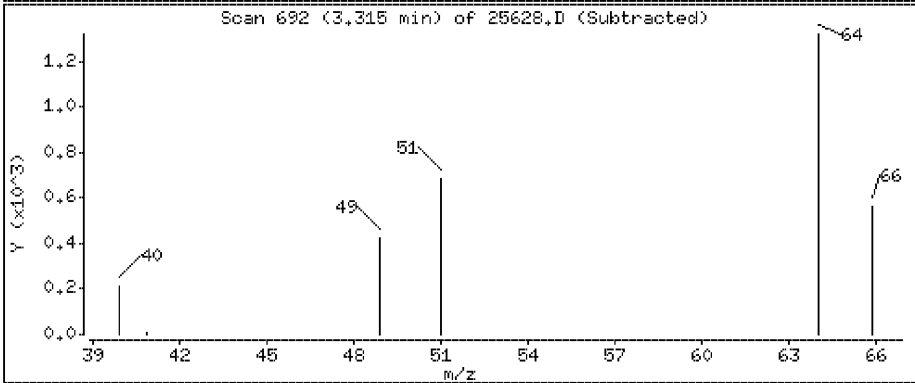
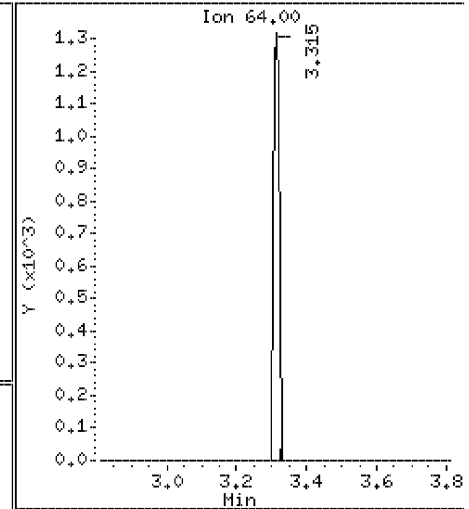
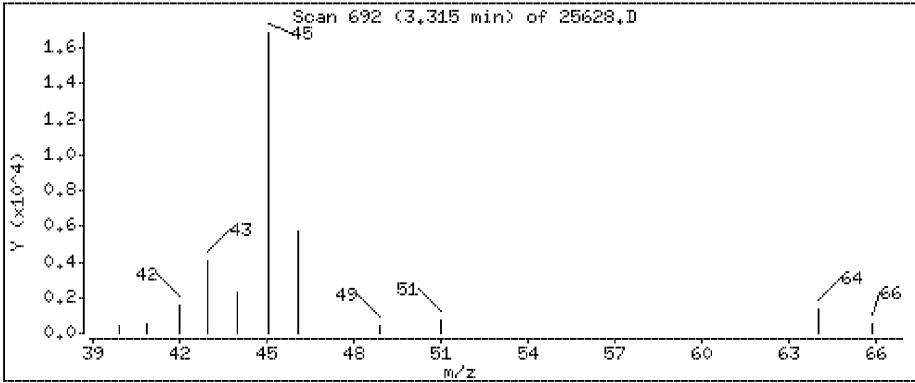
Column phase: ZB-5MSplus SN338857

Column diameter: 0,32

9 Bromomethane

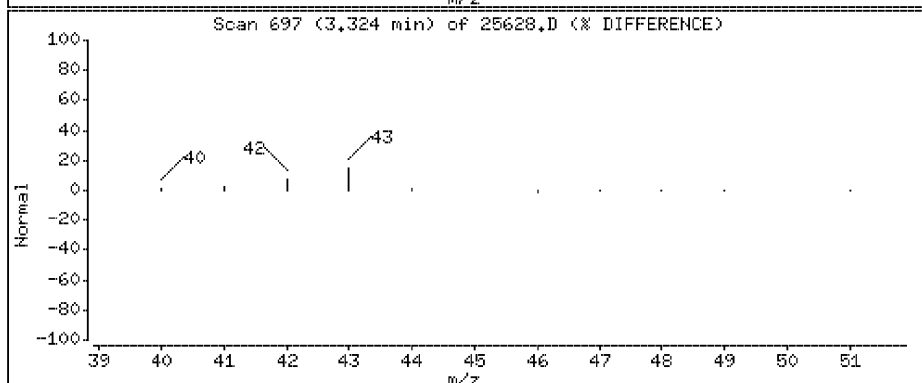
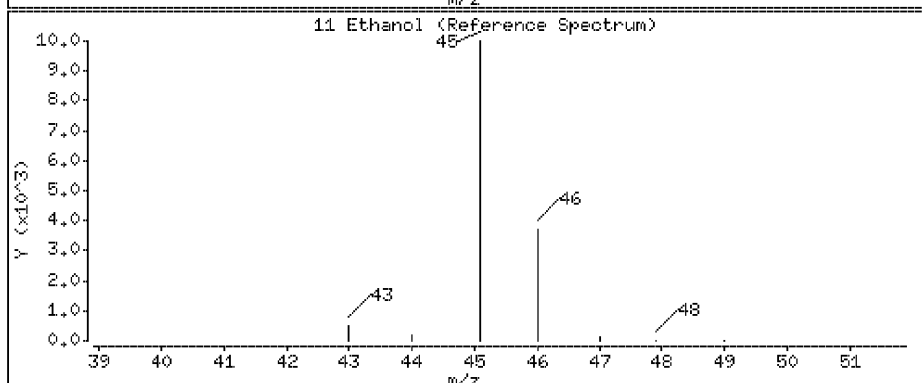
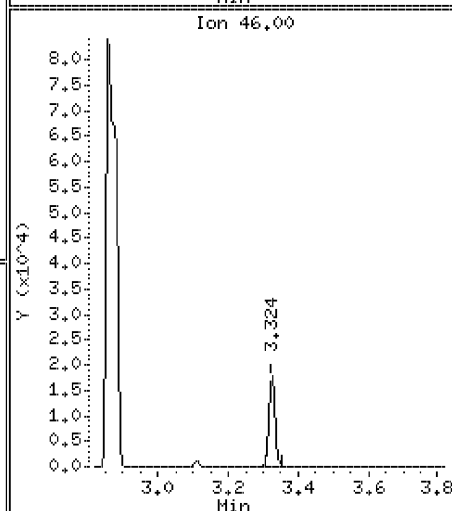
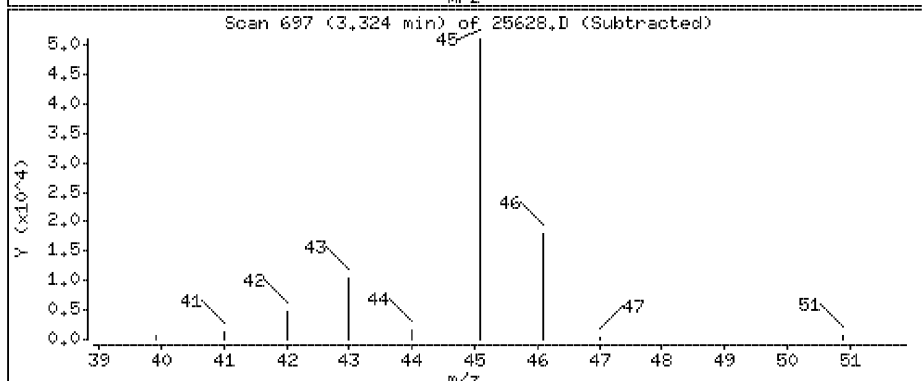
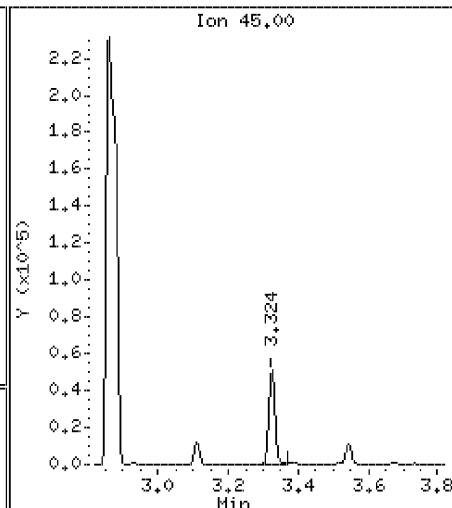
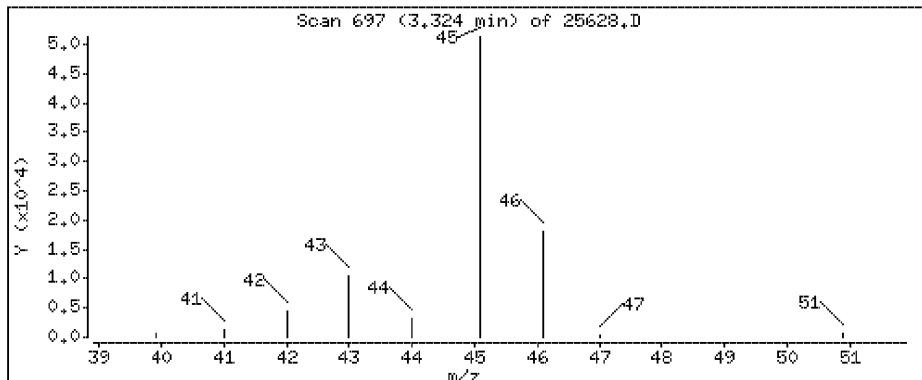
Concentration: 0,714 ppbv





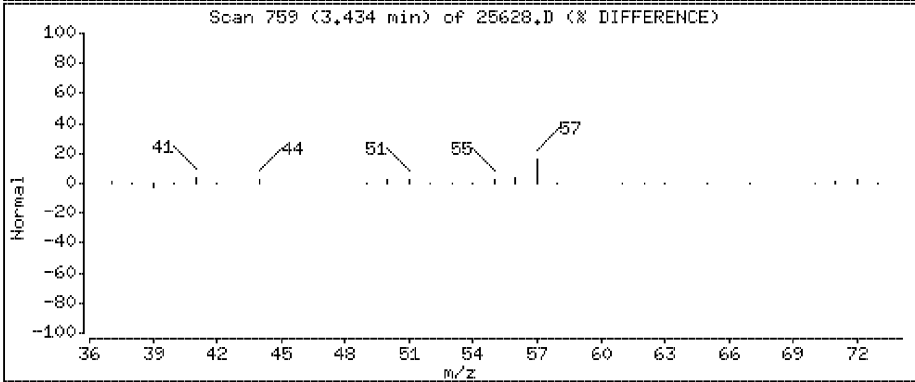
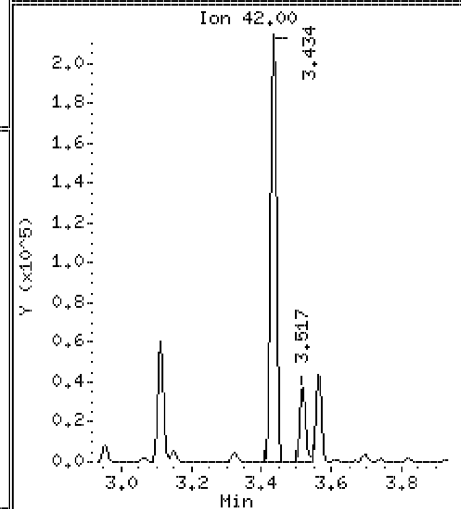
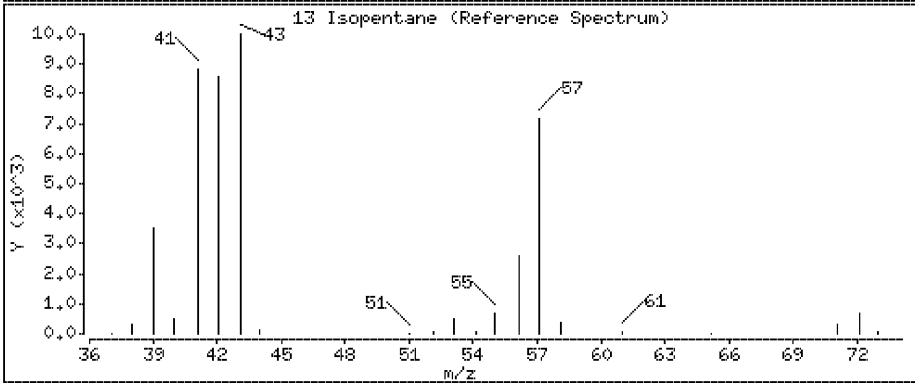
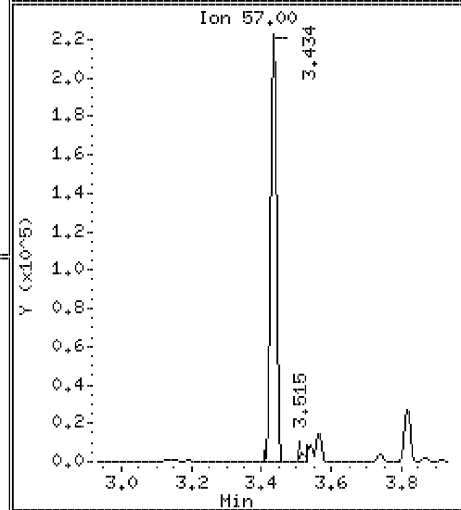
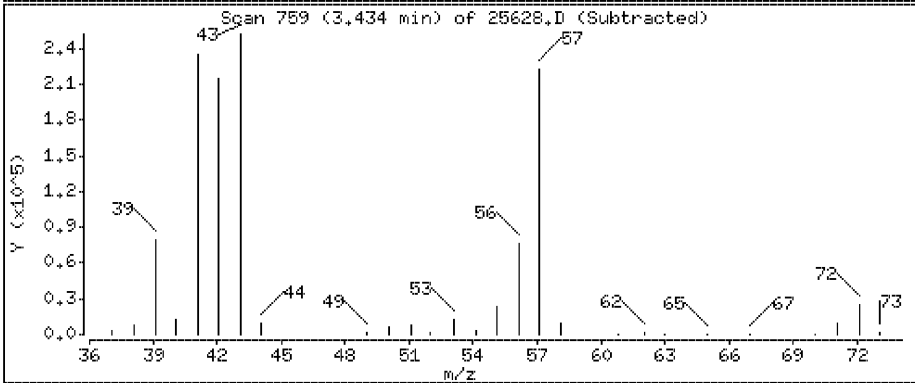
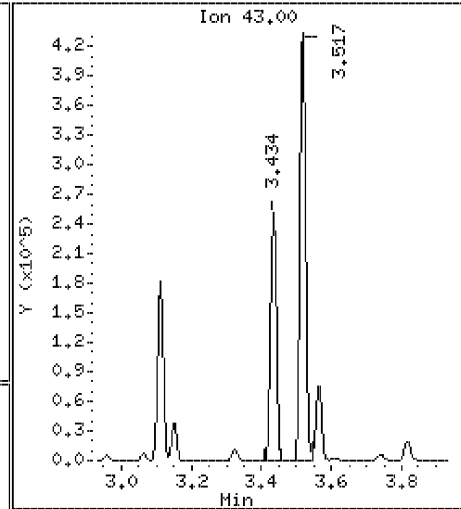
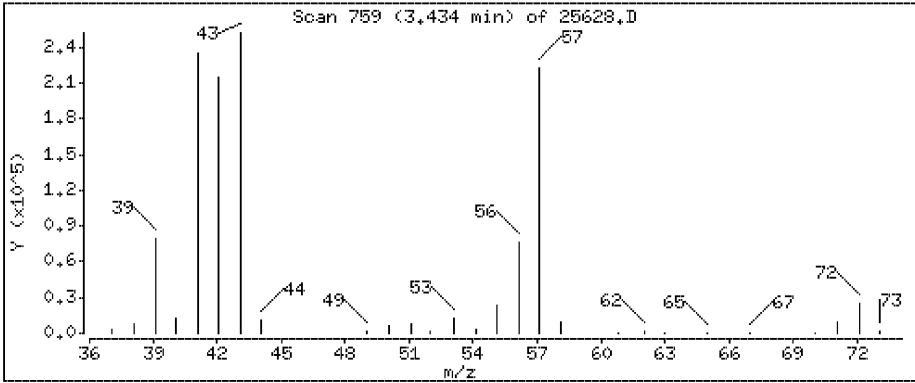
11 Ethanol

Concentration: 12,9 ppbv



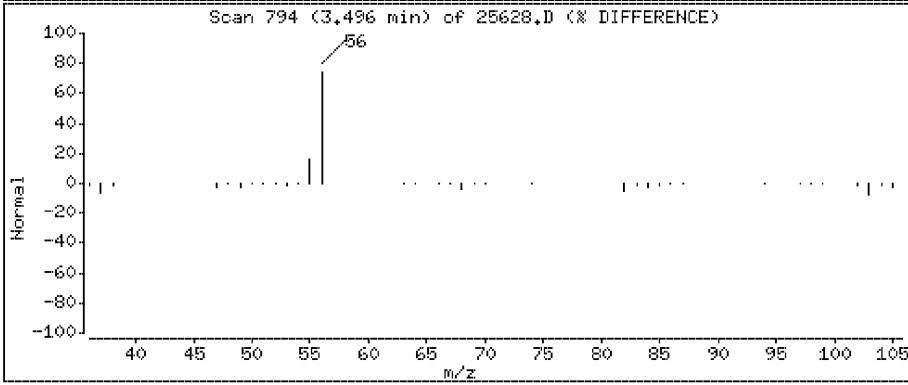
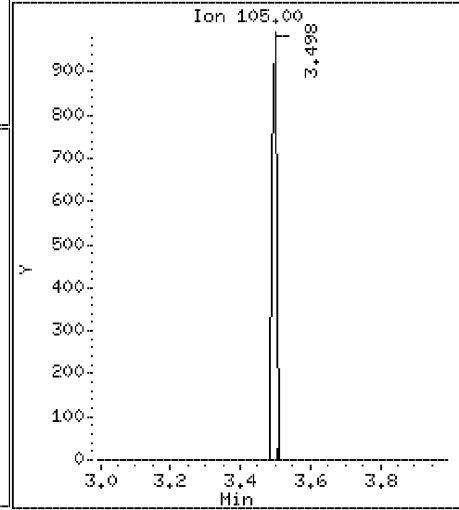
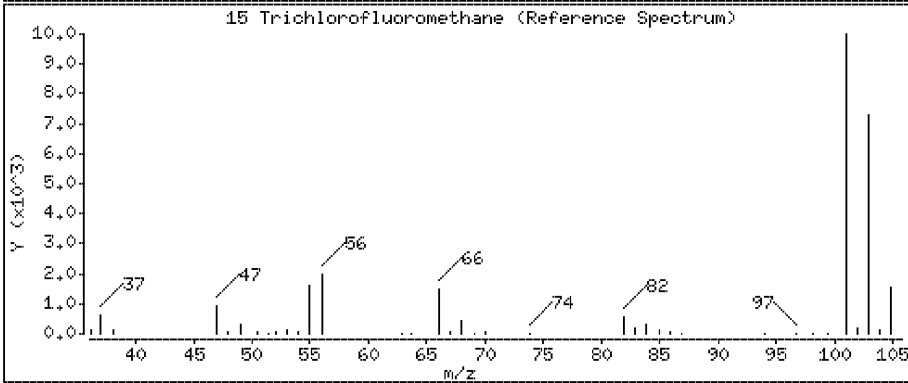
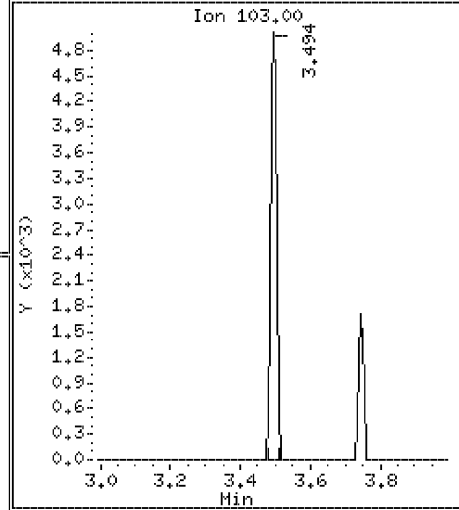
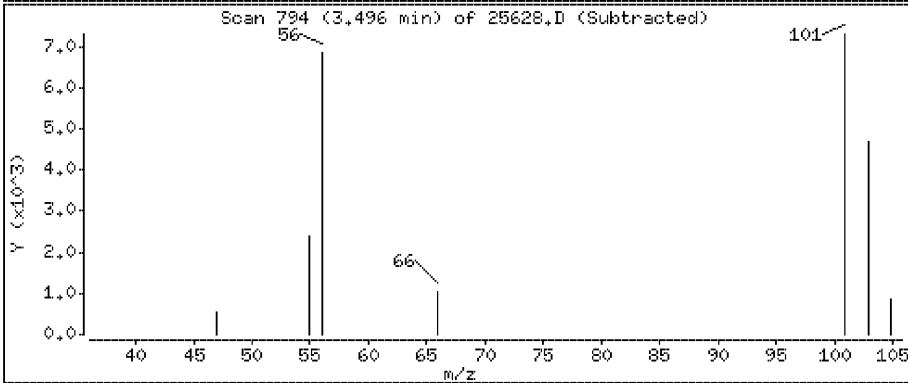
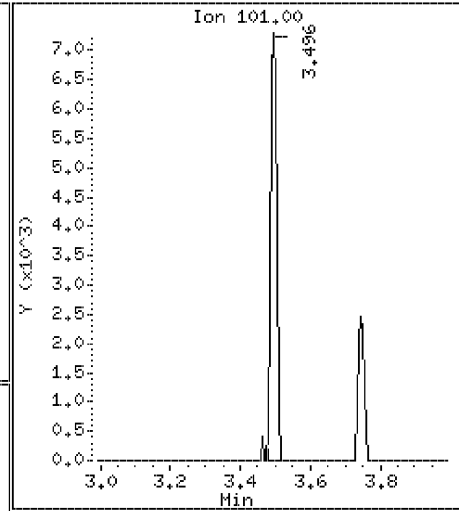
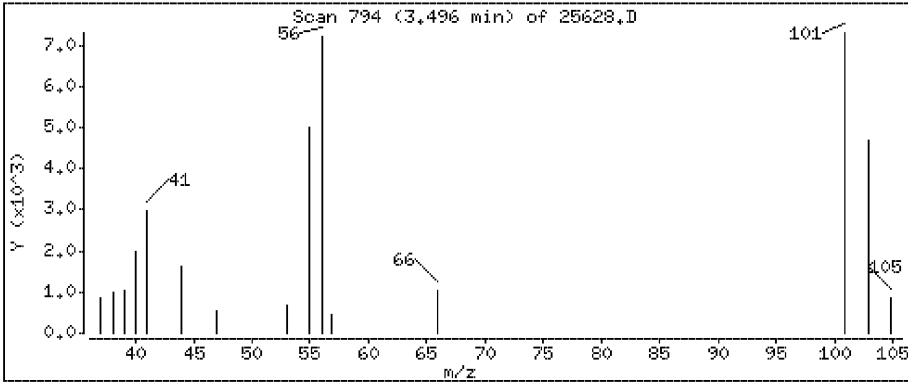
13 Isopentane

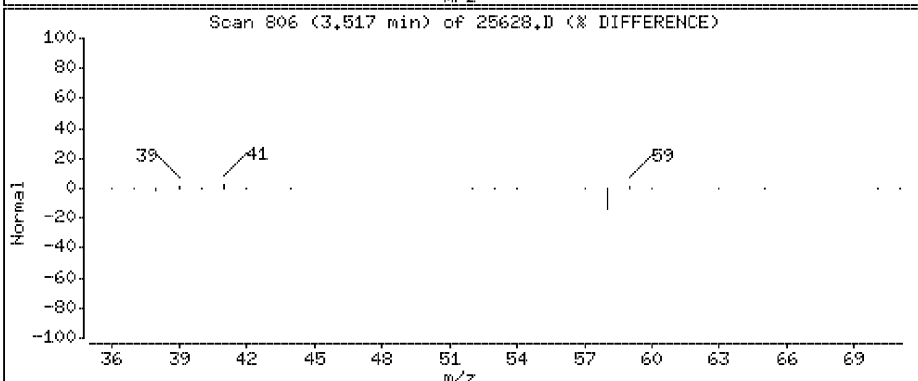
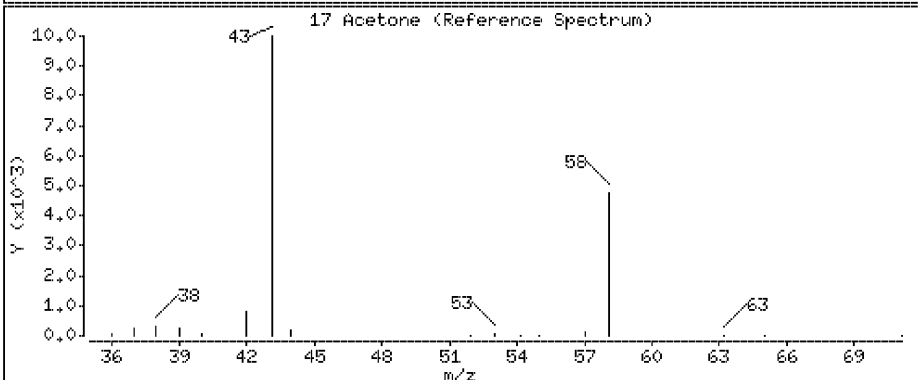
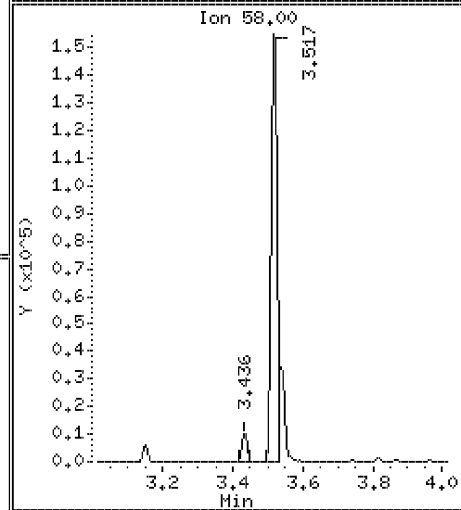
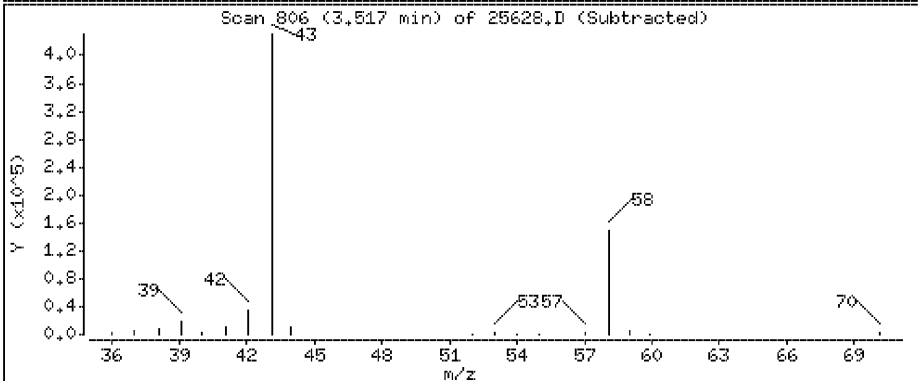
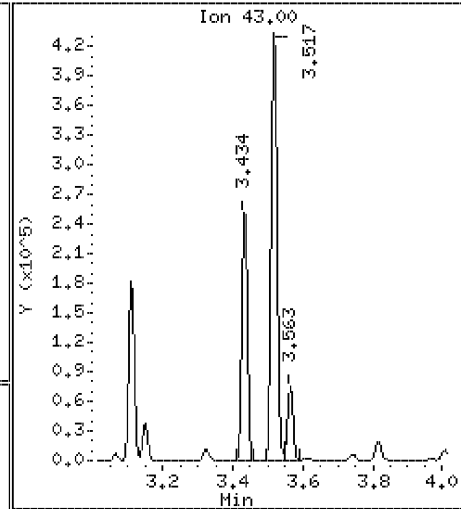
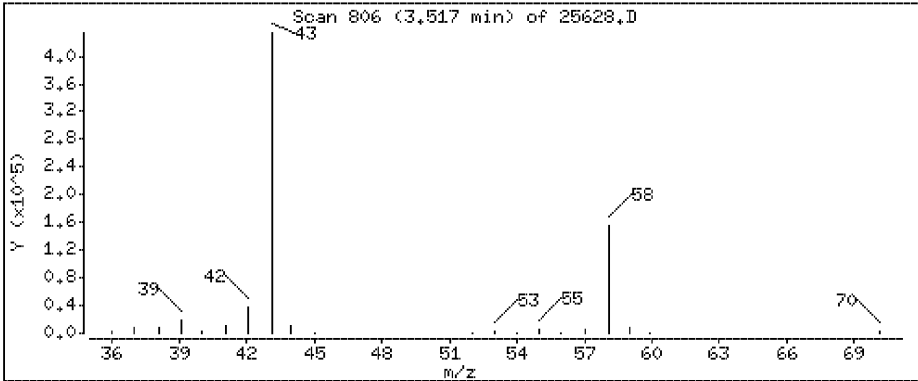
Concentration: 22,1 ppbv

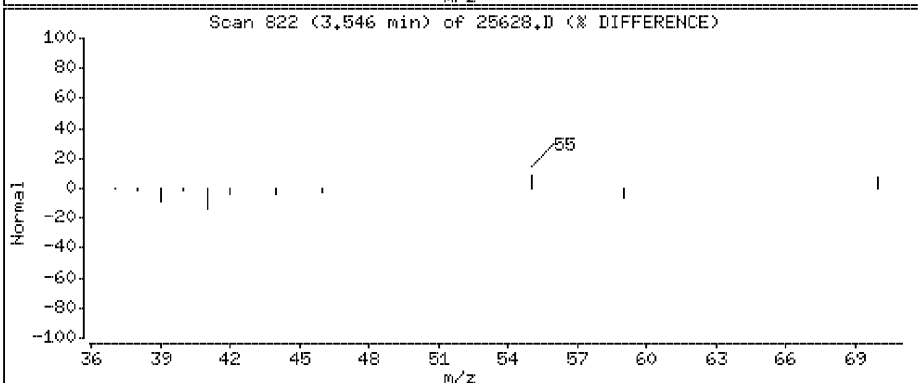
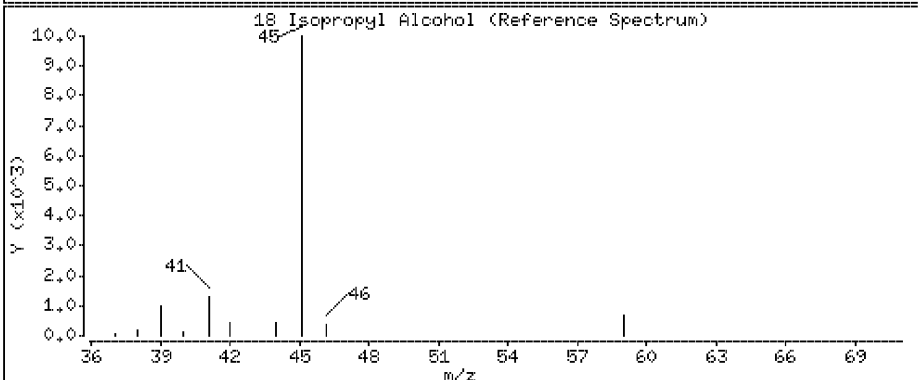
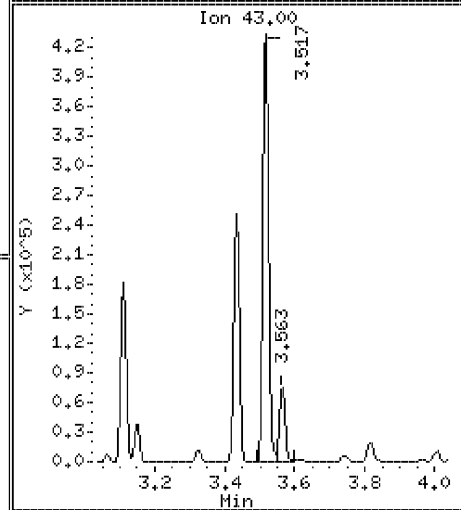
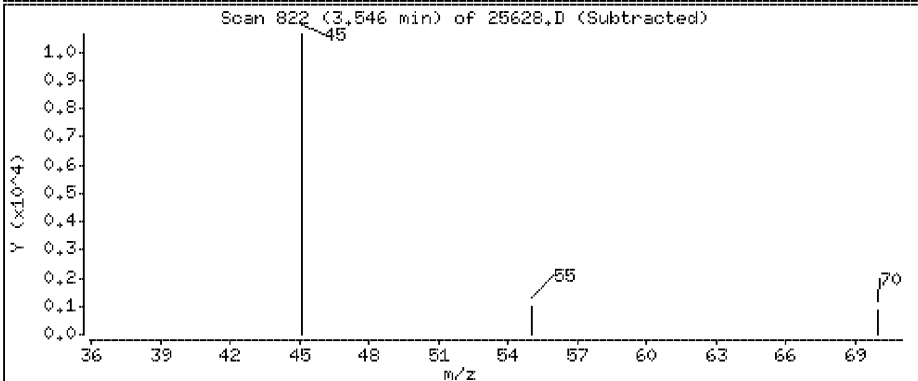
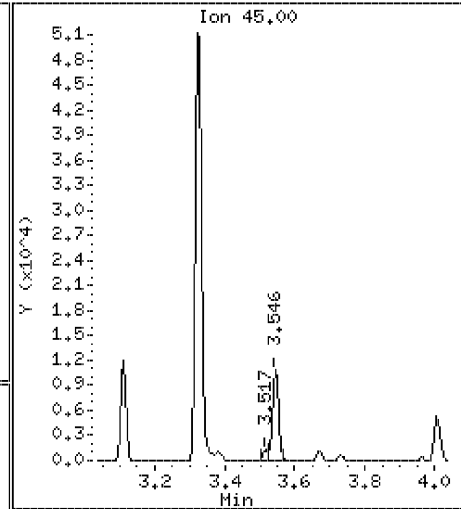
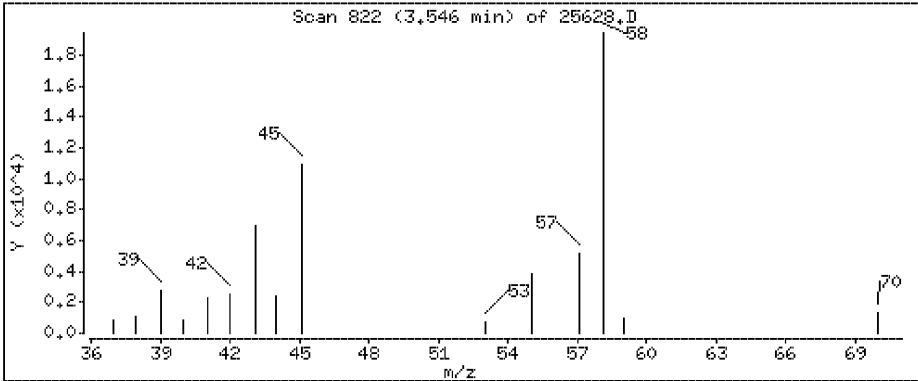


15 Trichlorofluoromethane

Concentration: 0,191 ppbv







Data File: \\192.168.10.12\chem\10airH,1\091318,b\25628.D

Date : 13-SEP-2018 22:27

Client ID:

Instrument: 10airH.i

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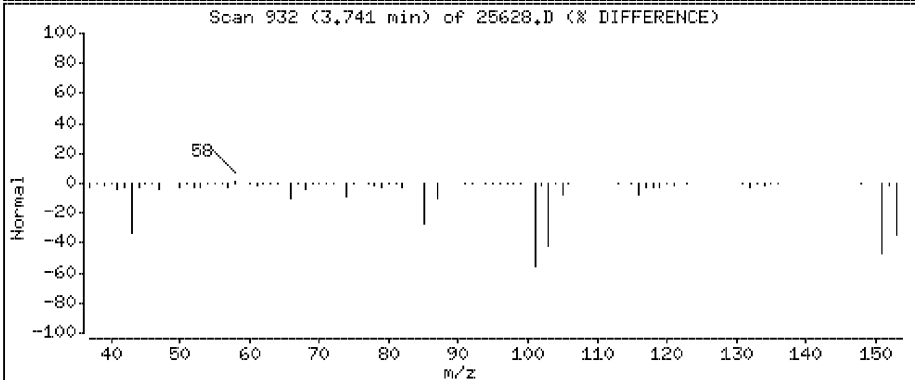
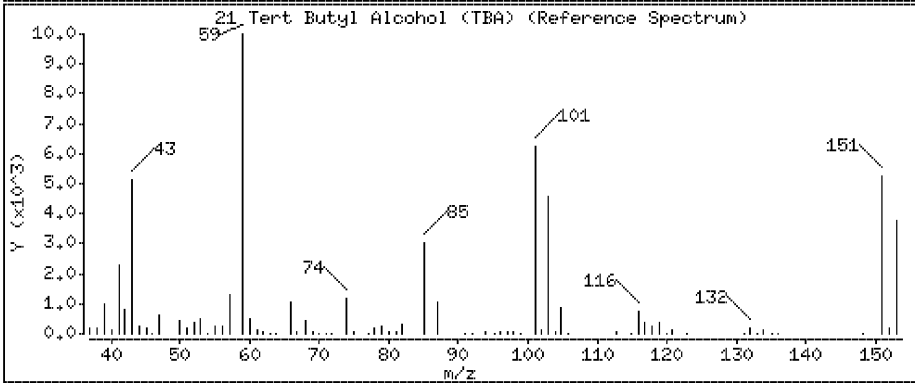
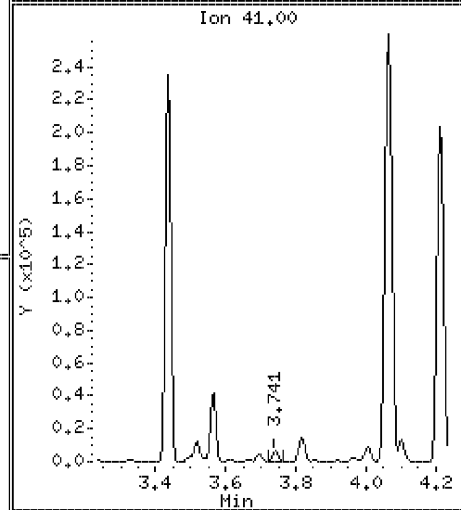
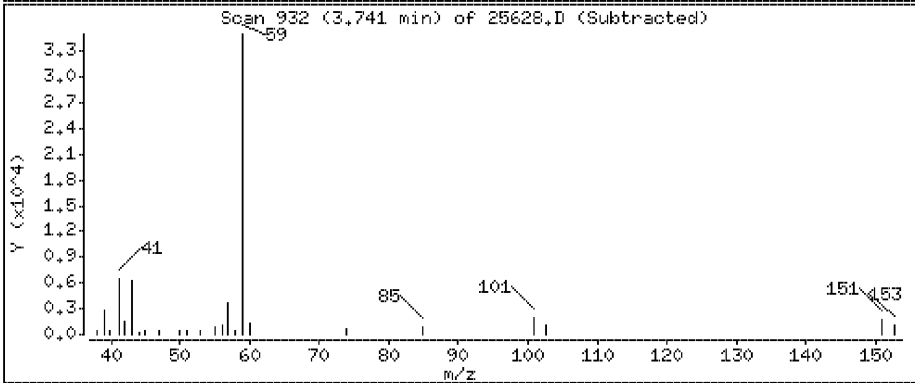
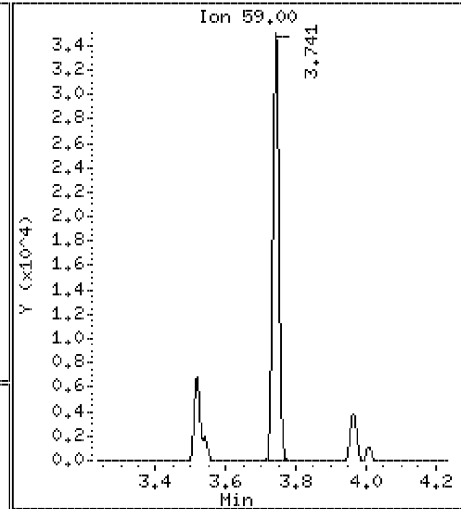
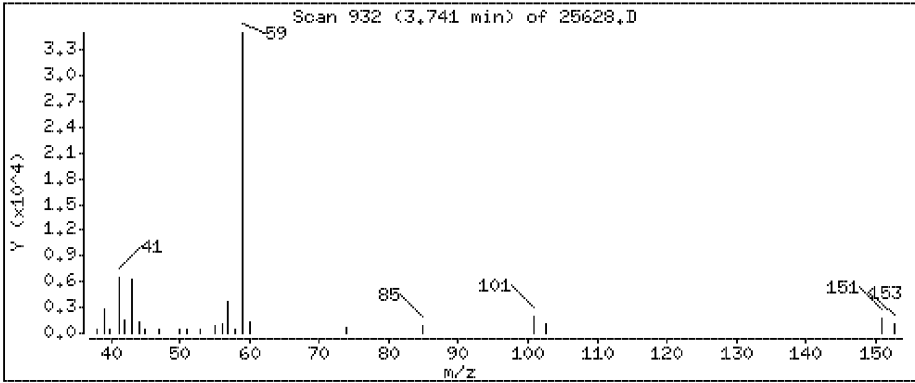
Operator: CH1

Column phase: ZB-5MSplus SN338857

Column diameter: 0,32

21 Tert Butyl Alcohol (TBA)

Concentration: 1,16 ppbv



Data File: \\192.168.10.12\chem\10airH,i\091318,b\25628.D

Date : 13-SEP-2018 22:27

Client ID:

Instrument: 10airH.i

Sample Info:

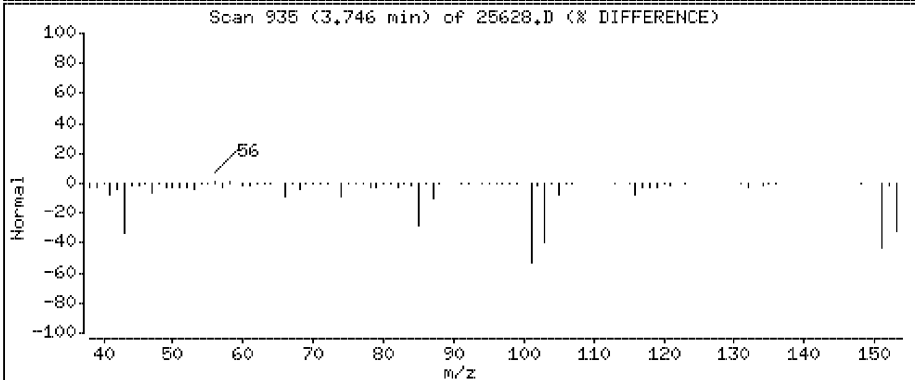
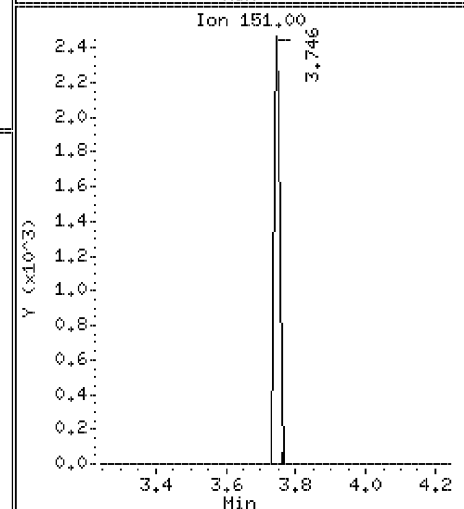
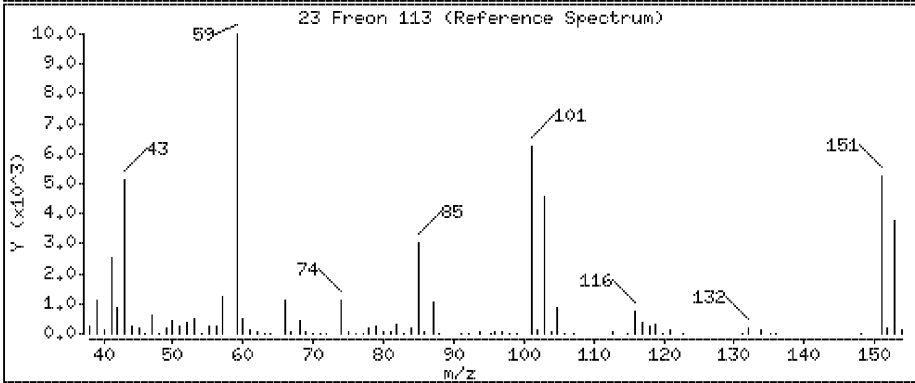
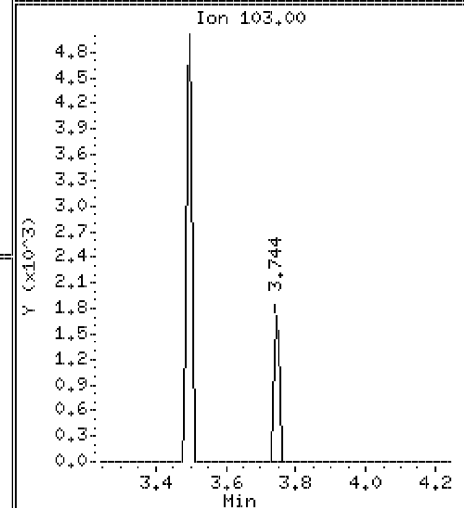
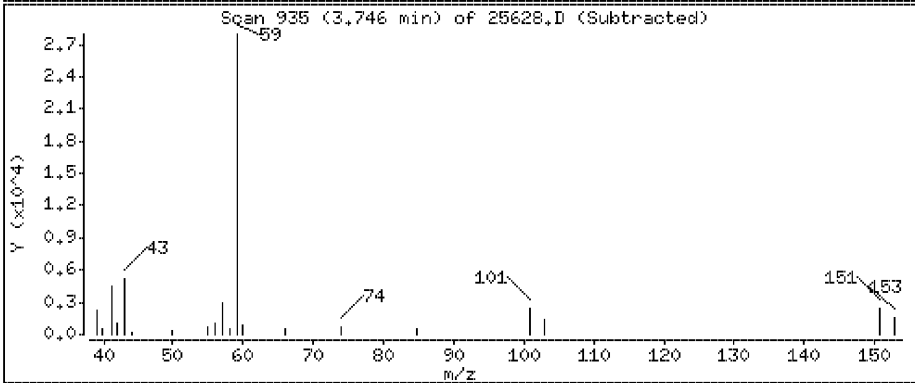
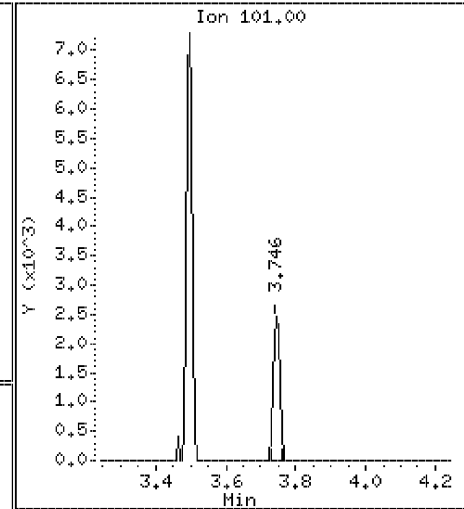
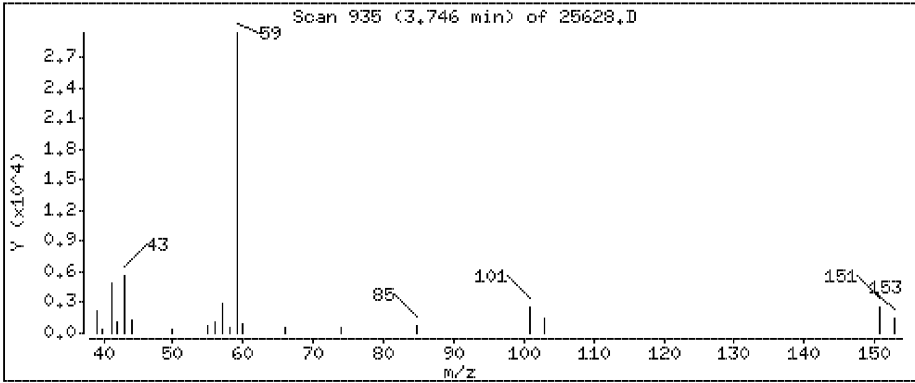
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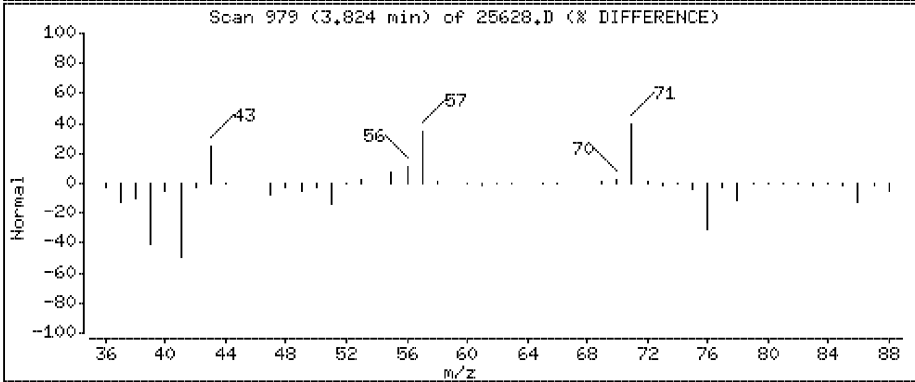
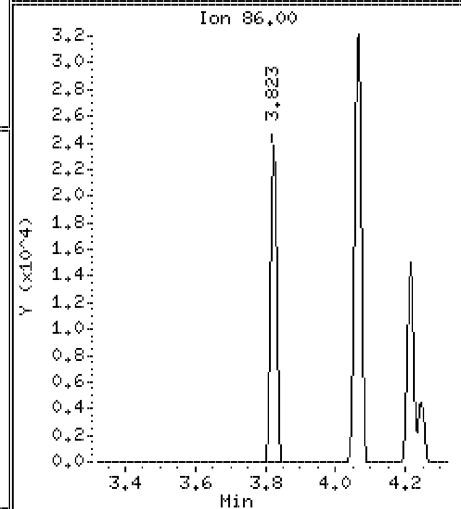
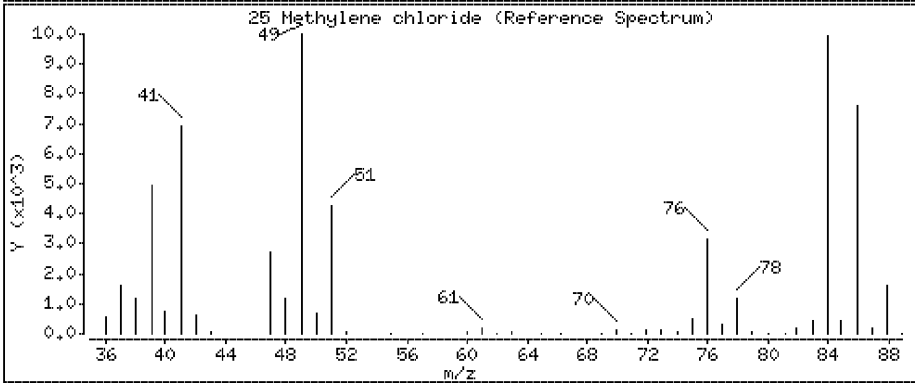
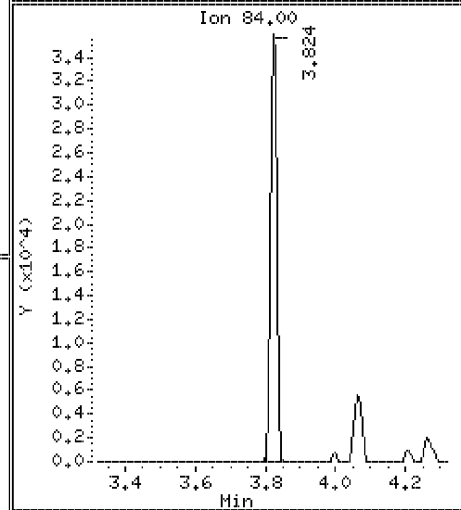
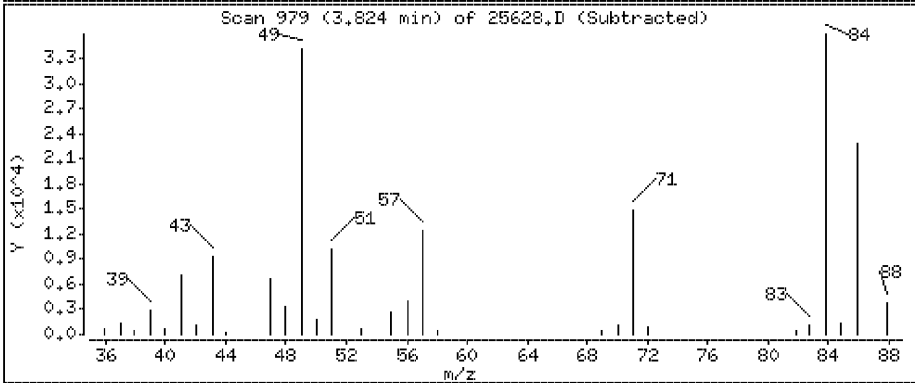
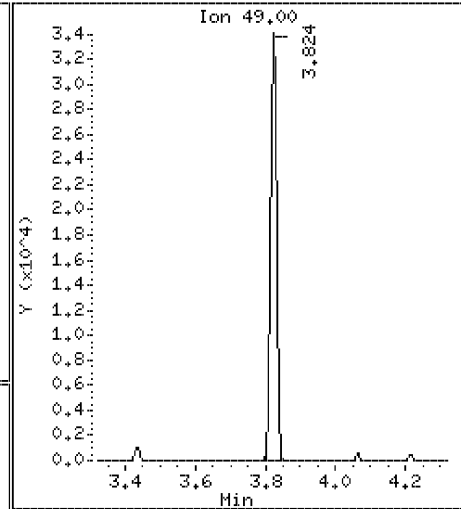
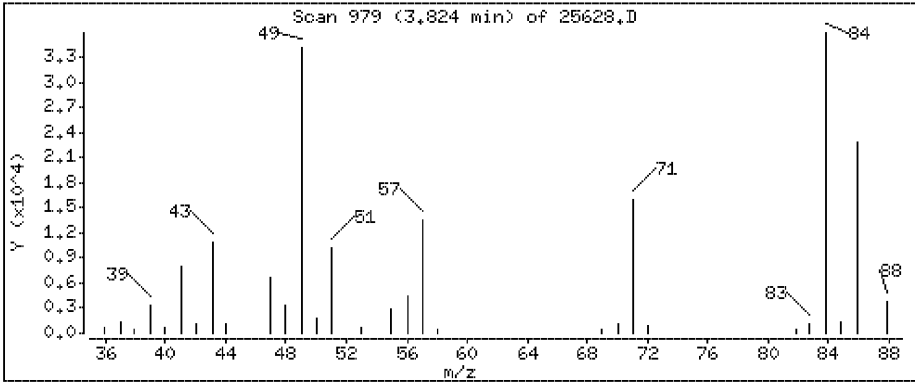
Column phase: ZB-5MSplus SN338857

Column diameter: 0,32

23 Freon 113

Concentration: 0,0618 ppbv





Data File: \\192.168.10.12\chem\10airH,1\091318,b\25628.D

Date : 13-SEP-2018 22:27

Client ID:

Instrument: 10airH.i

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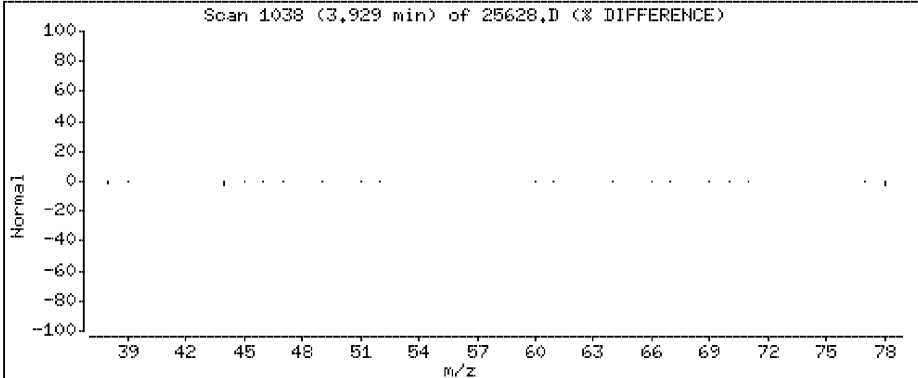
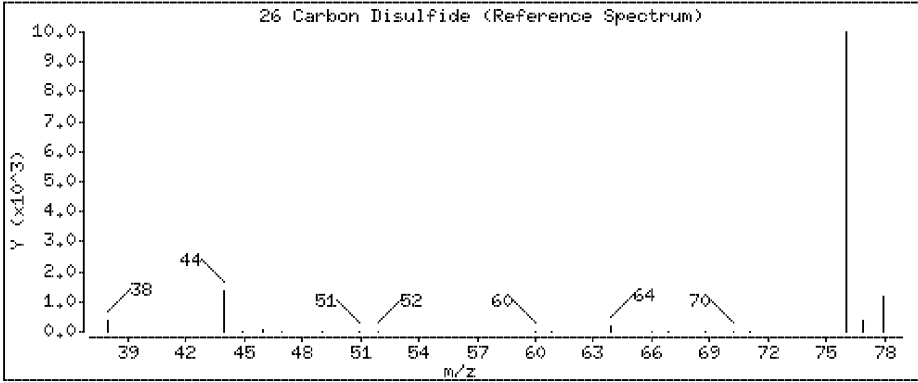
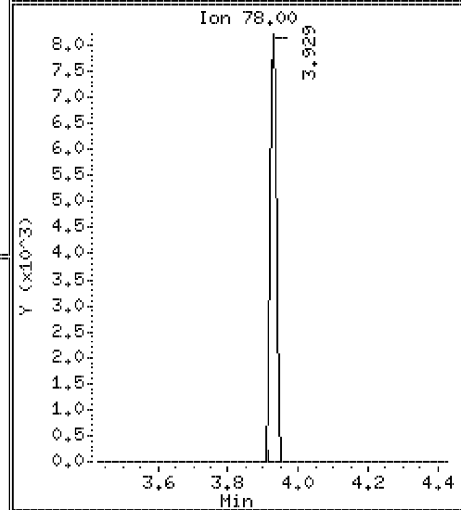
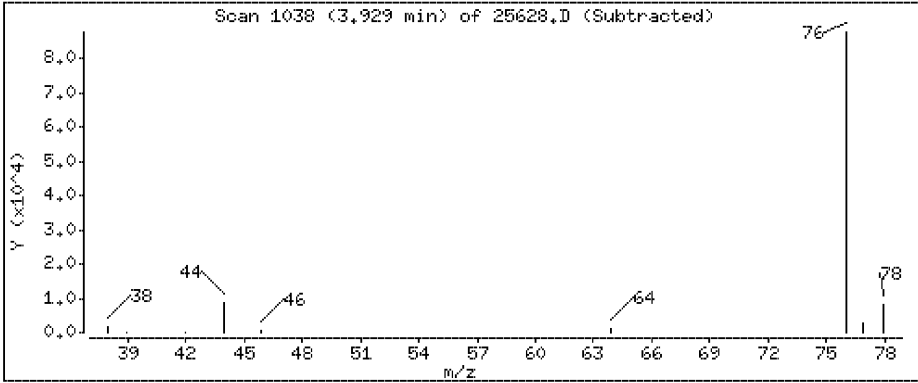
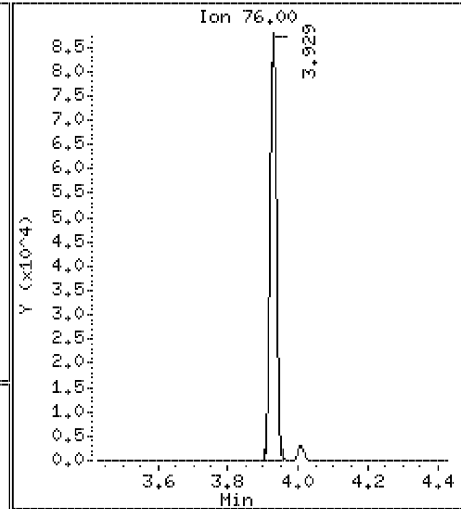
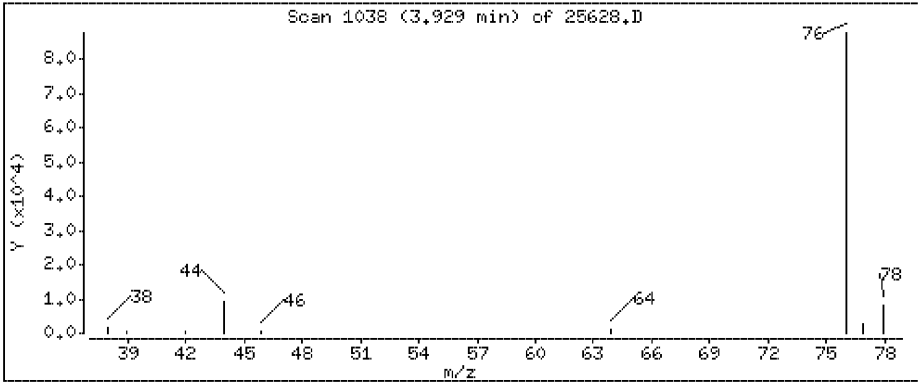
Operator: CH1

Column phase: ZB-5MSplus SN338857

Column diameter: 0.32

26 Carbon Disulfide

Concentration: 1.96 ppbv



Data File: \\192.168.10.12\chem\10airH,1\091318,b\25628.D

Date : 13-SEP-2018 22:27

Client ID:

Instrument: 10airH.i

Sample Info:

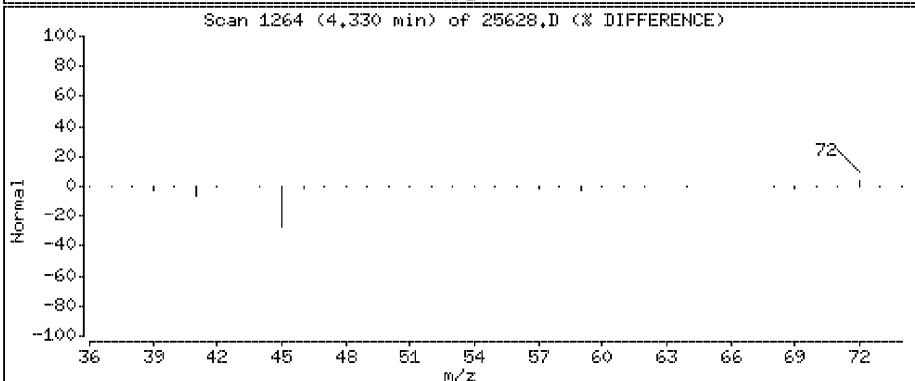
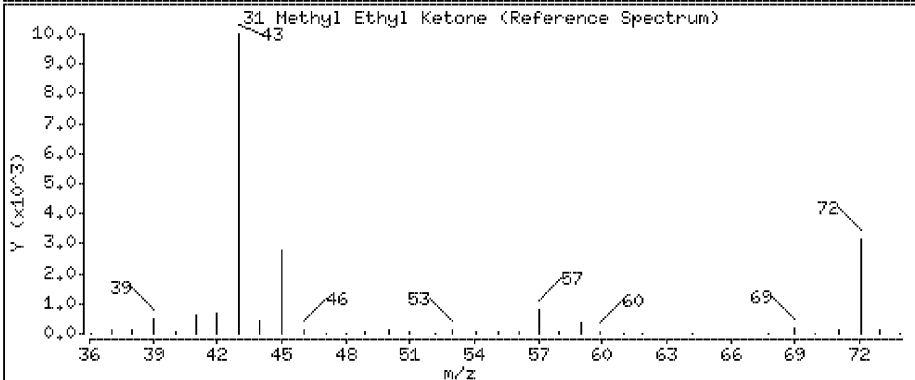
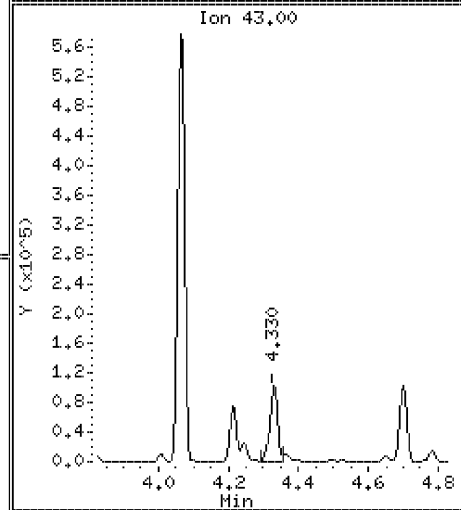
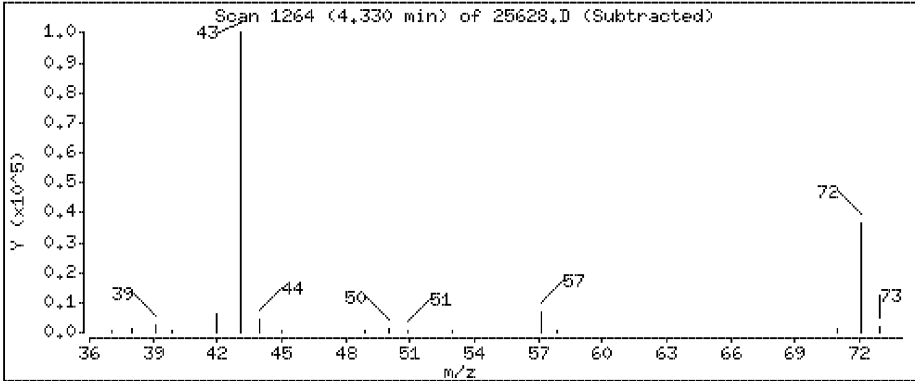
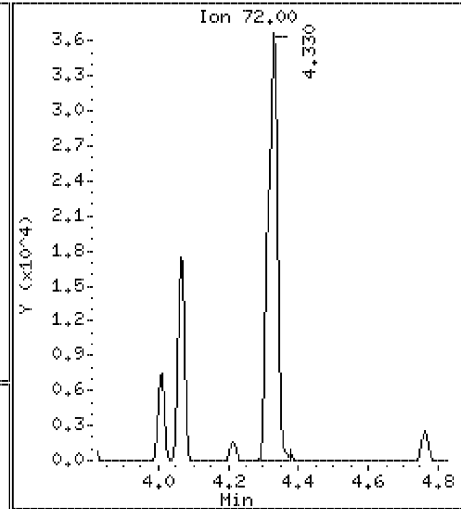
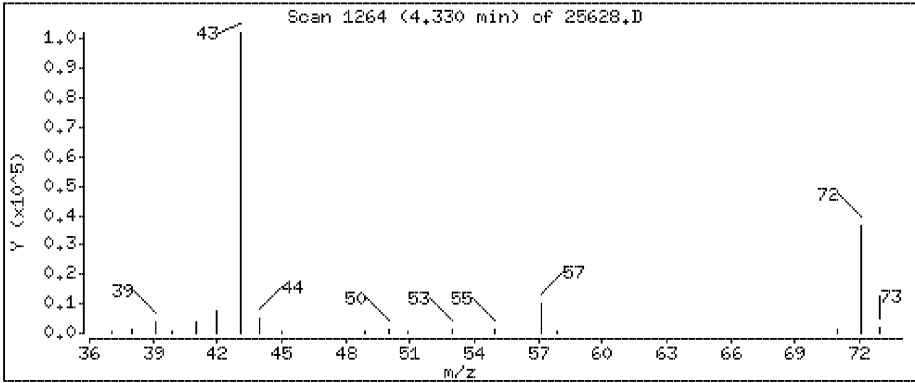
Operator: CH1

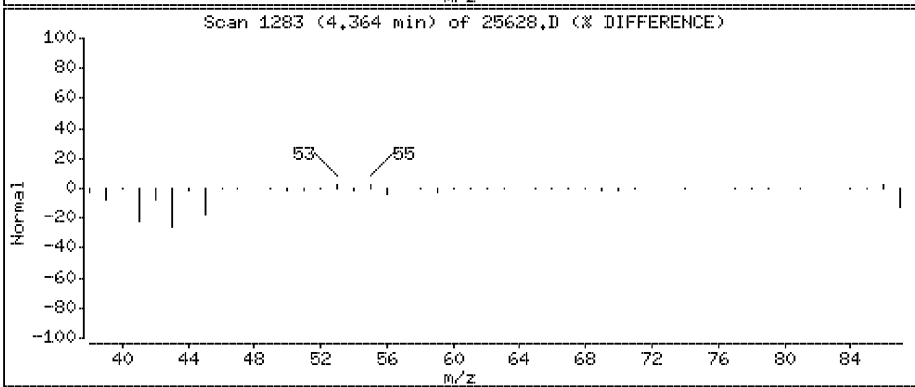
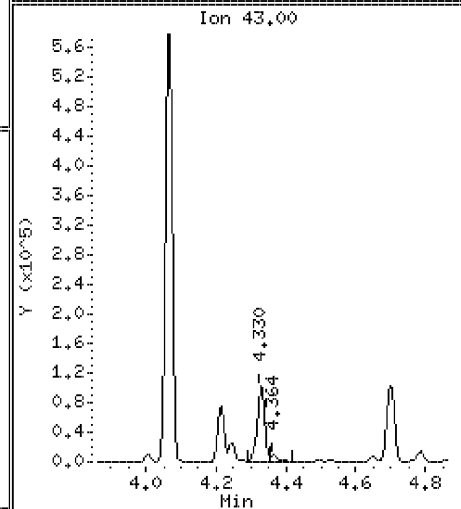
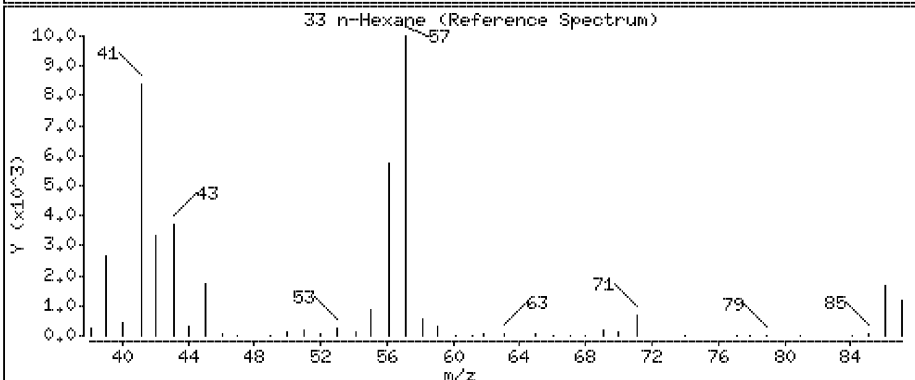
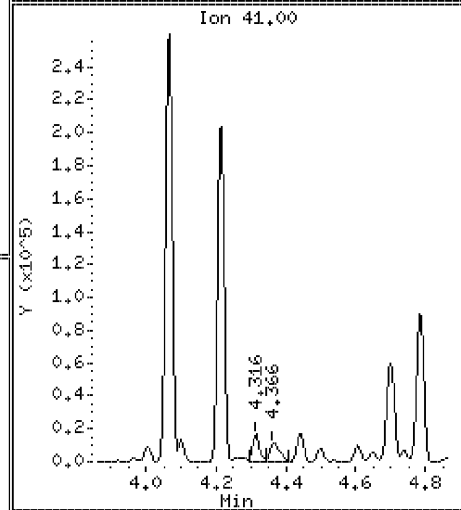
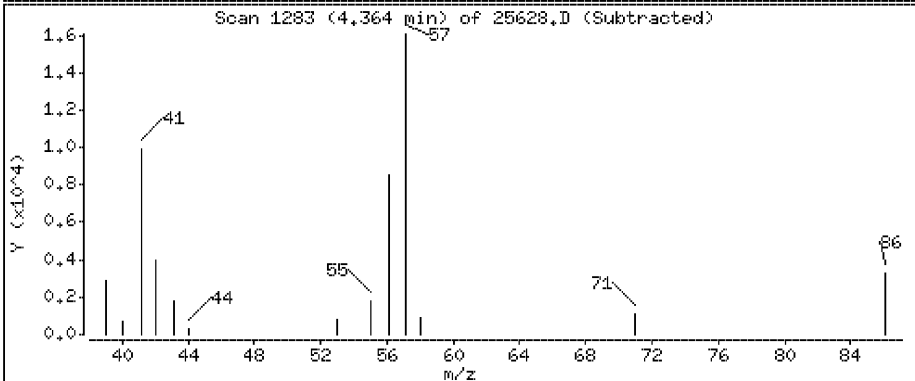
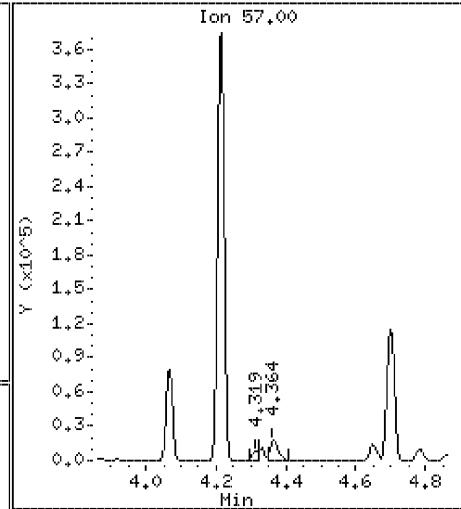
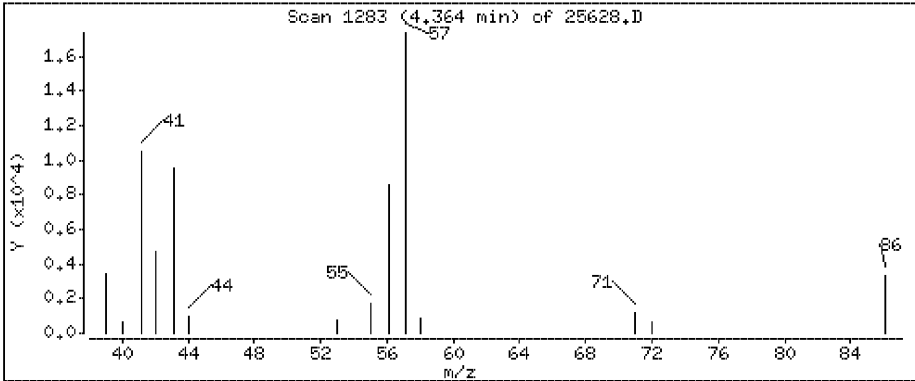
Column phase: ZB-5MSplus SN338857

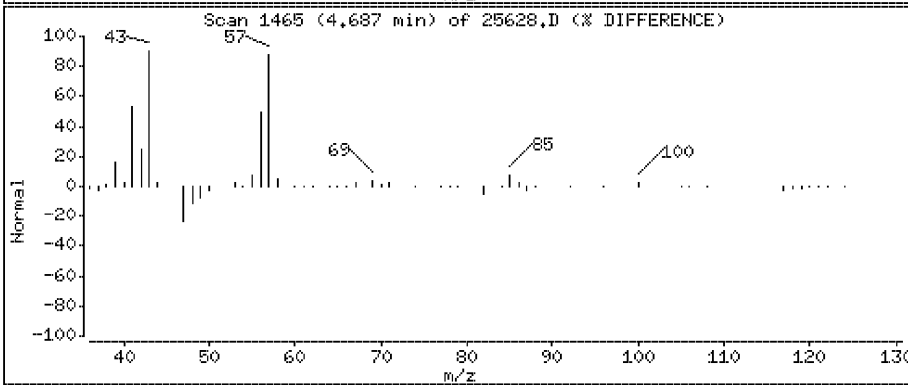
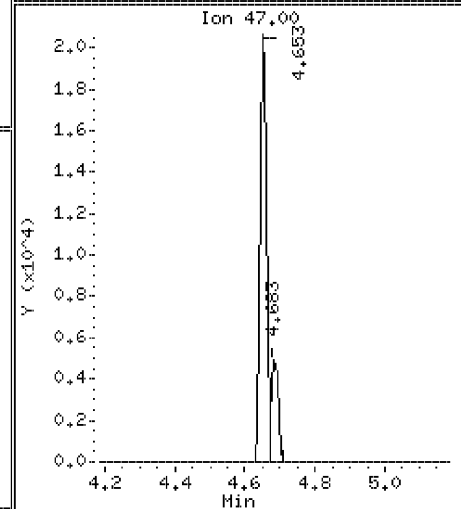
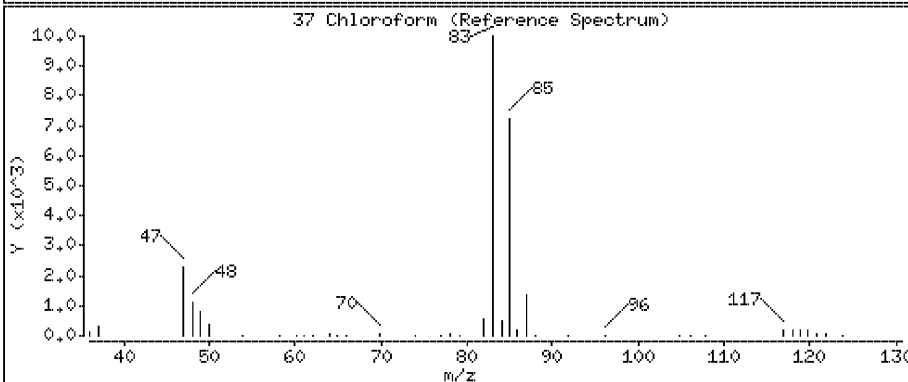
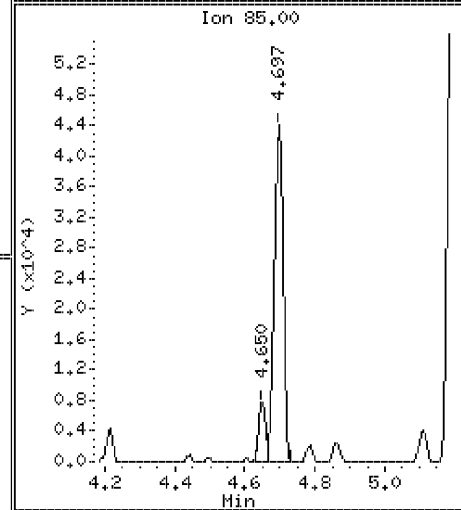
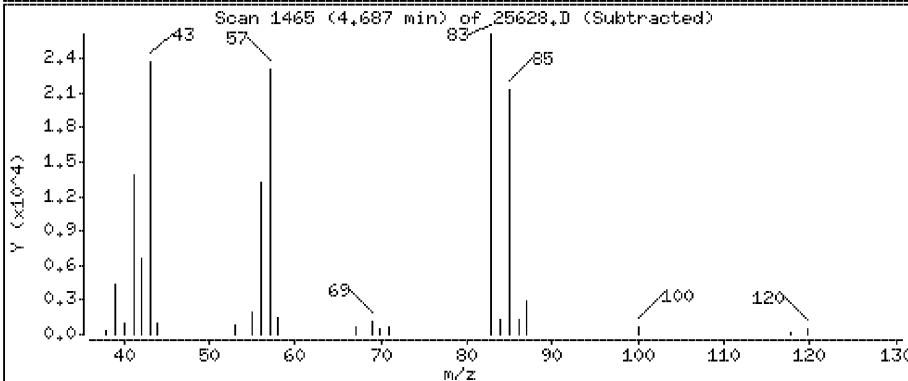
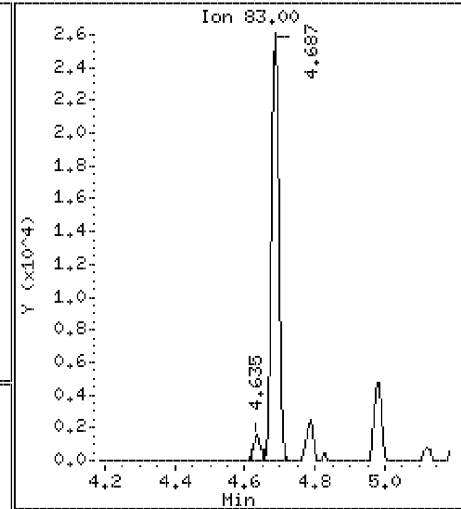
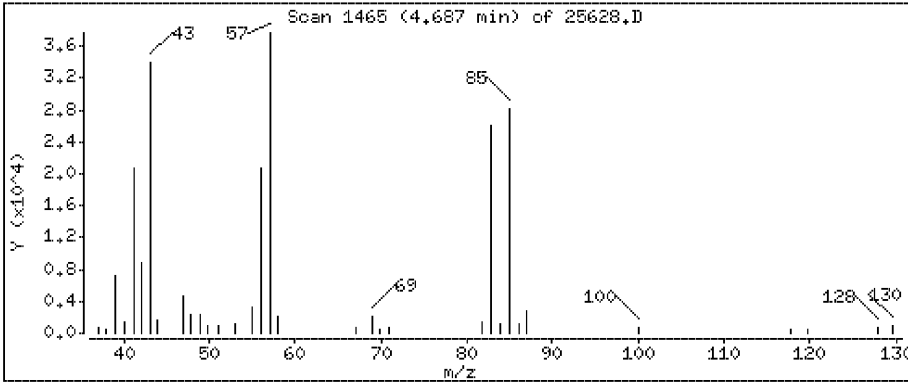
Column diameter: 0,32

31 Methyl Ethyl Ketone

Concentration: 7,19 ppbv

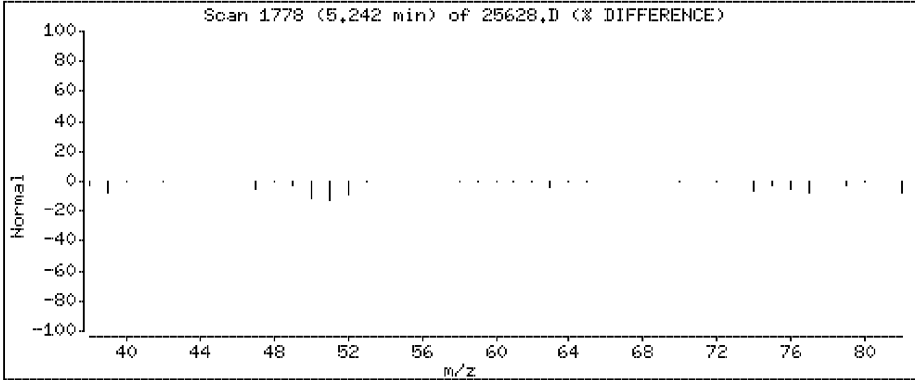
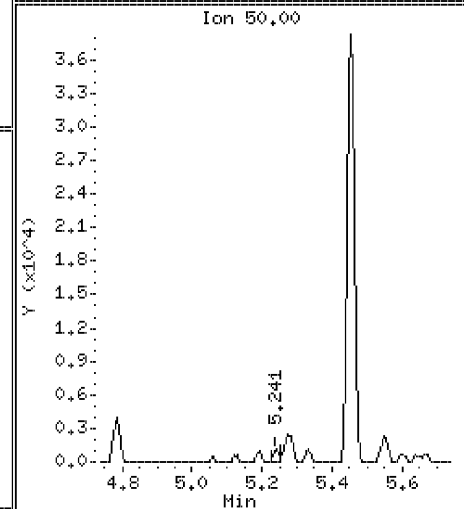
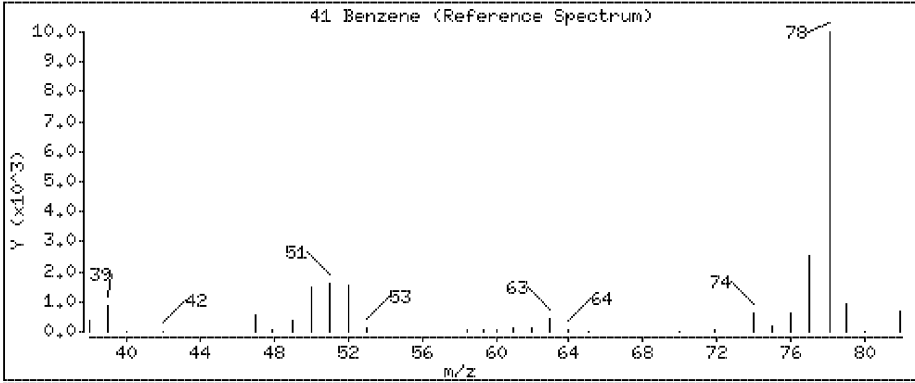
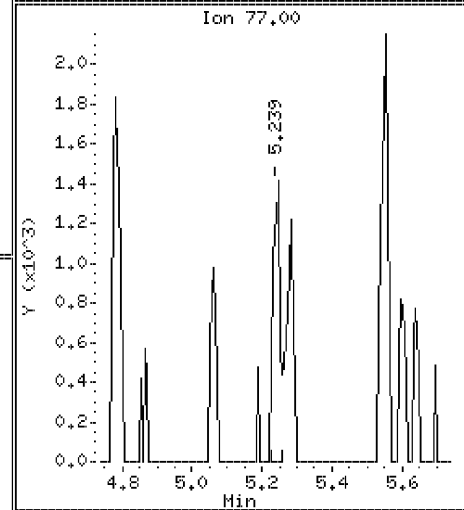
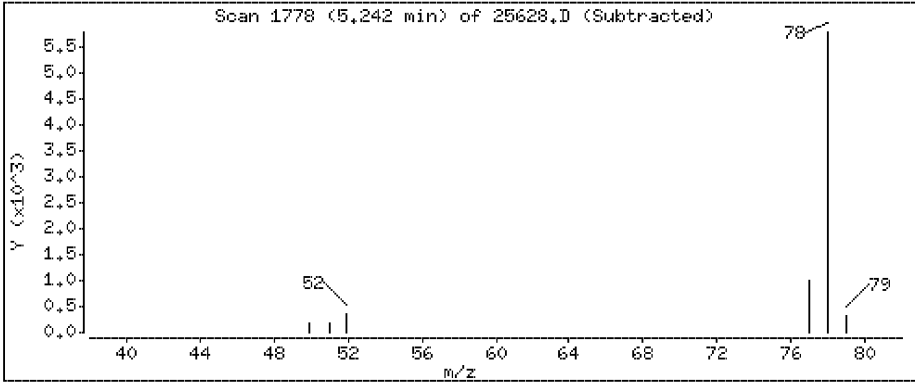
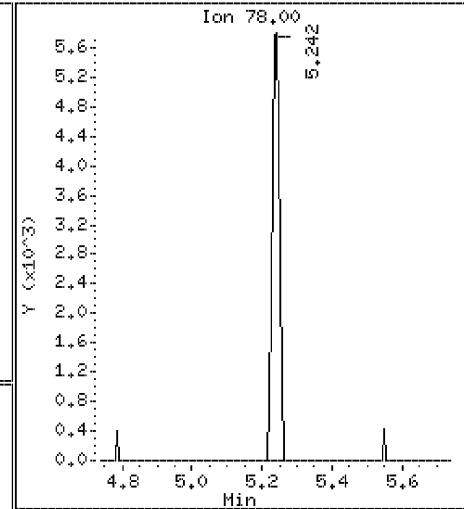
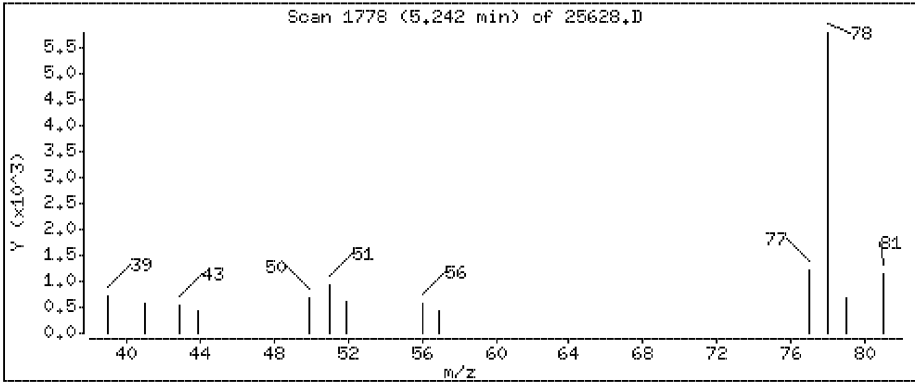


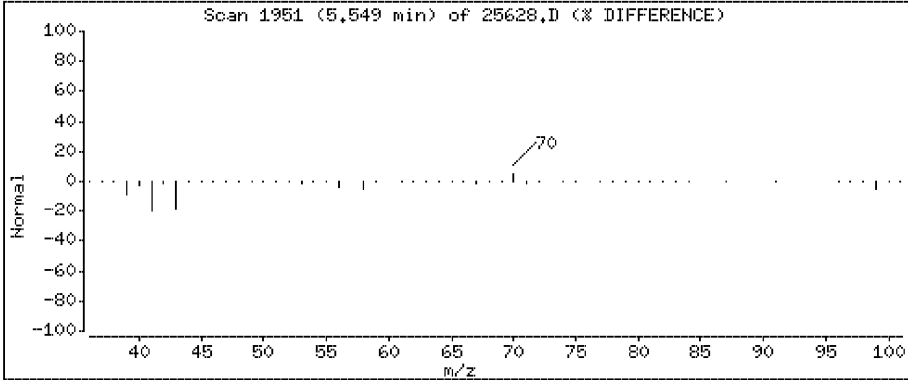
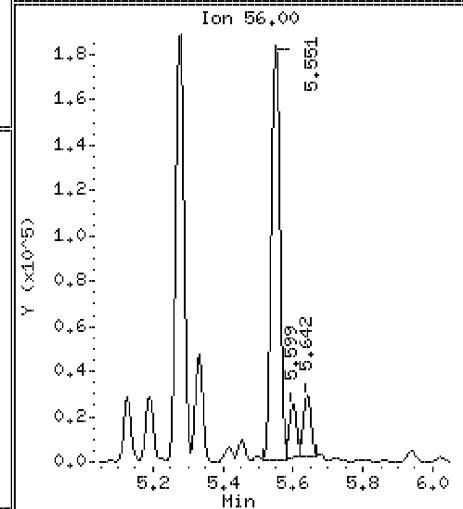
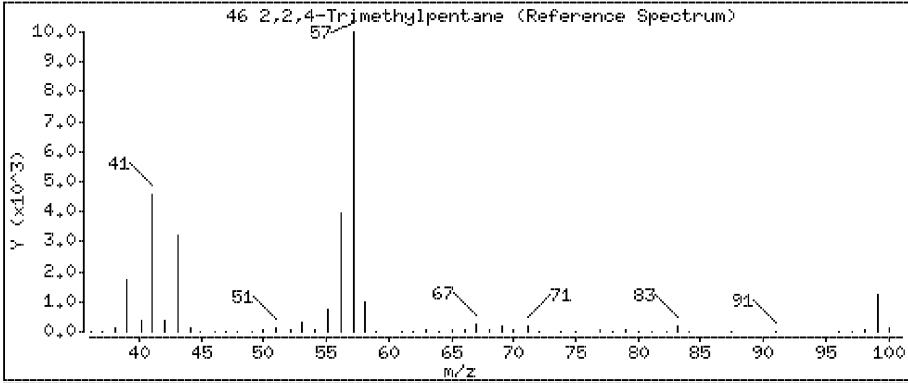
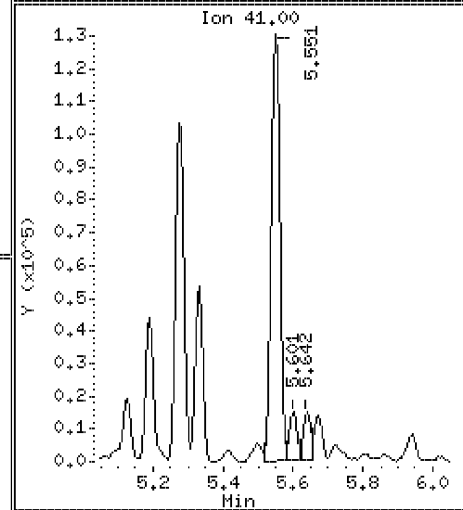
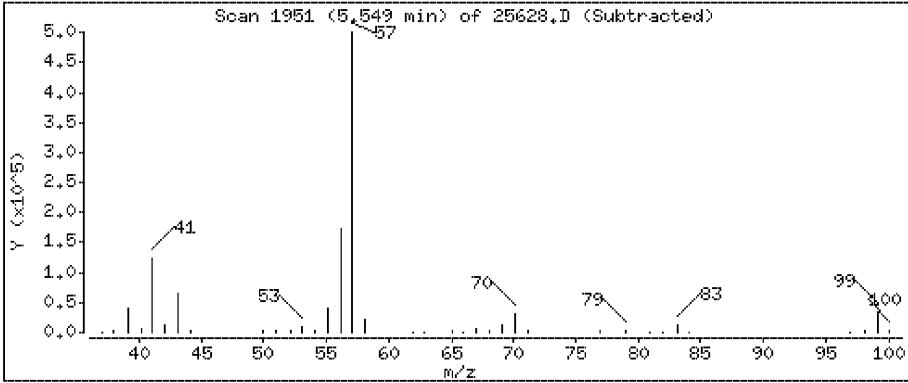
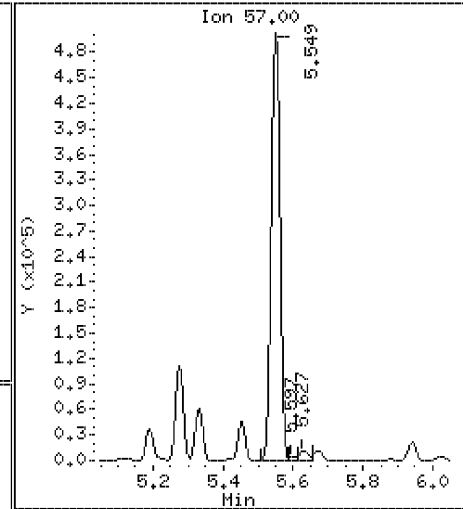
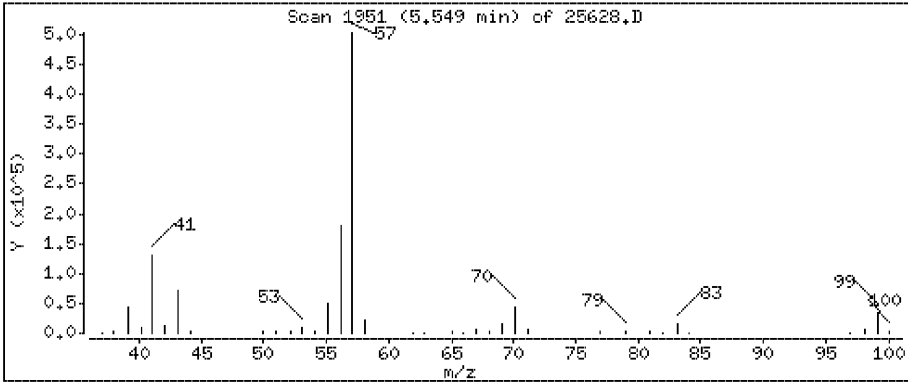




41 Benzene

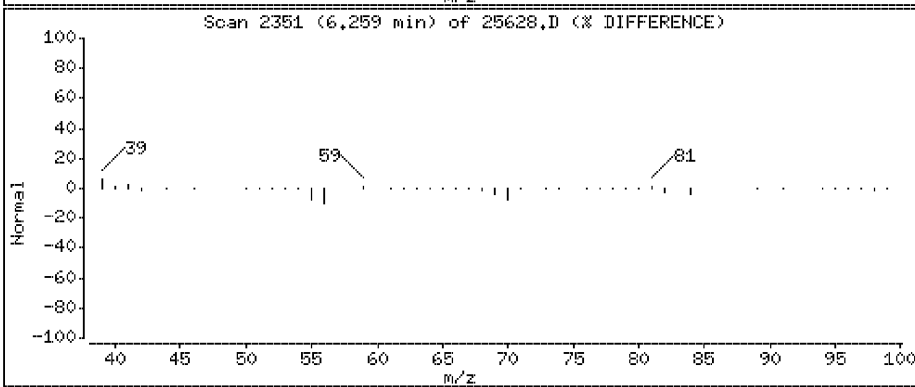
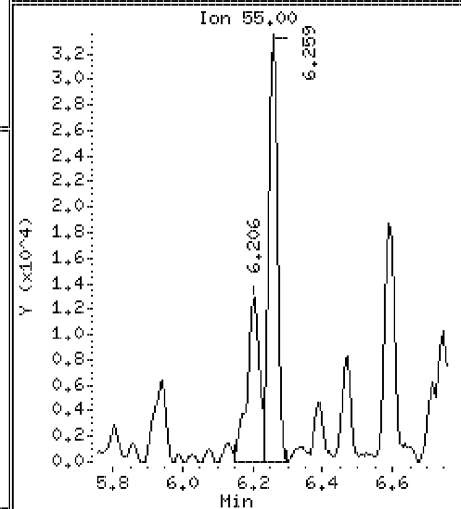
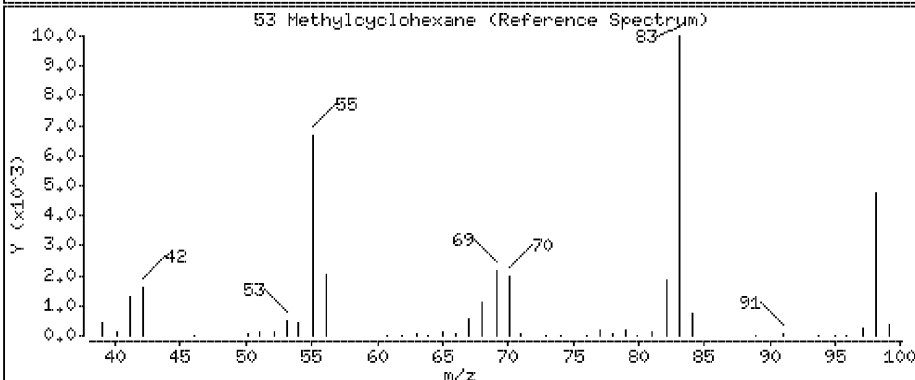
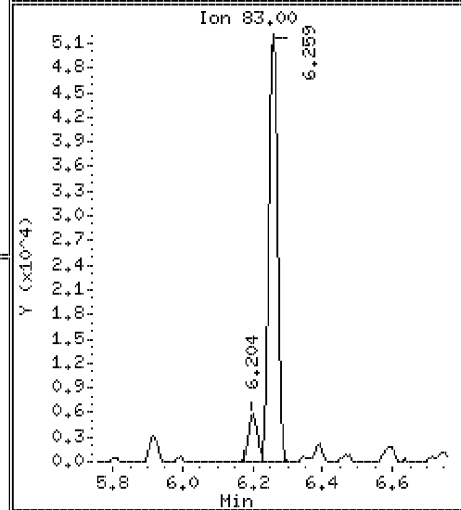
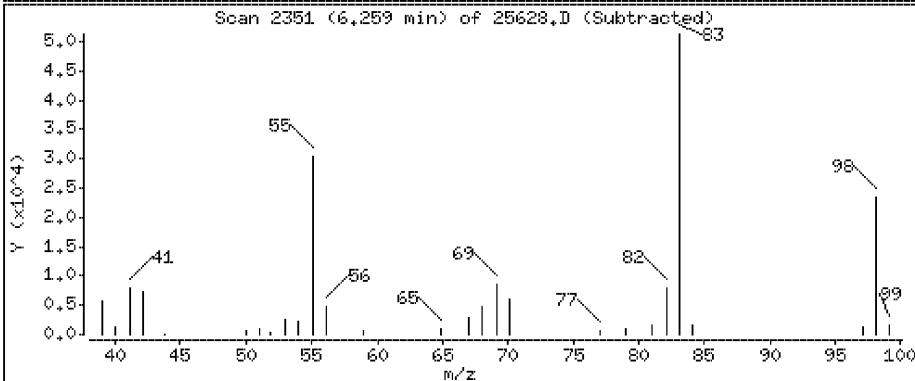
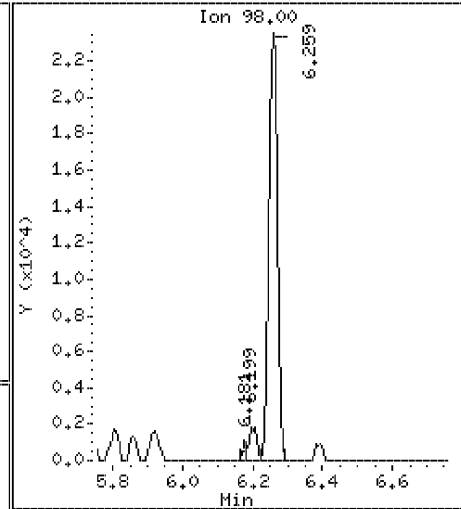
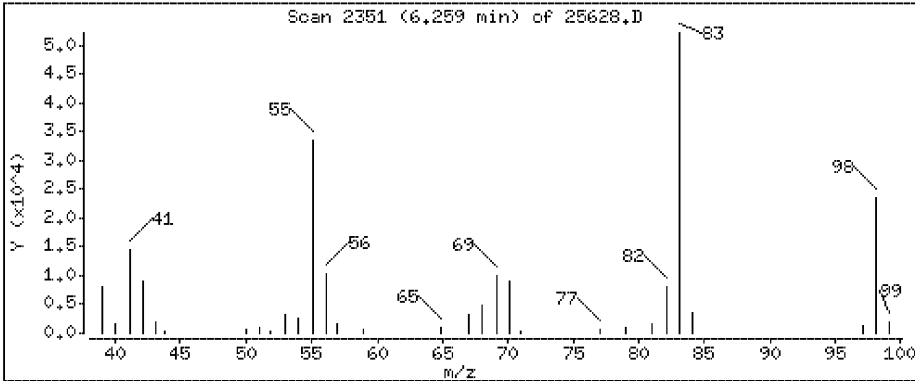
Concentration: 0,145 ppbv





53 Methylcyclohexane

Concentration: 2.72 ppbv



Data File: \\192.168.10.12\chem\10airH,1\091318,b\25628.D

Date : 13-SEP-2018 22:27

Client ID:

Instrument: 10airH.i

Sample Info:

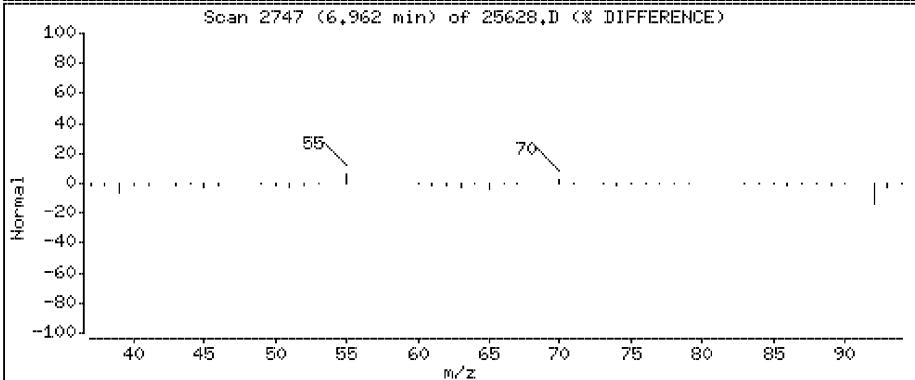
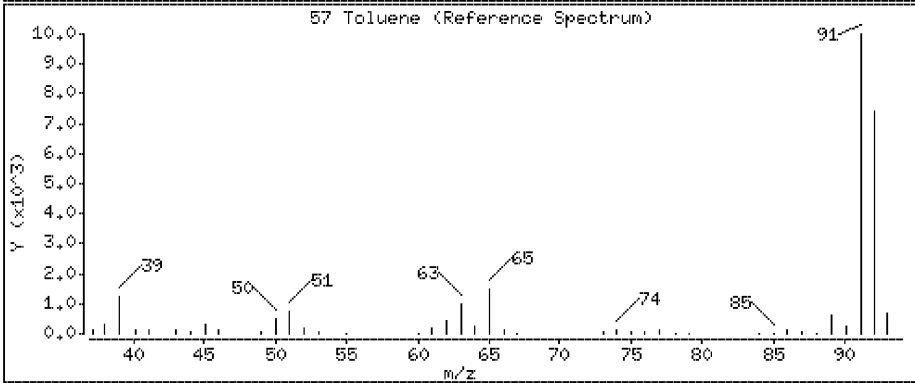
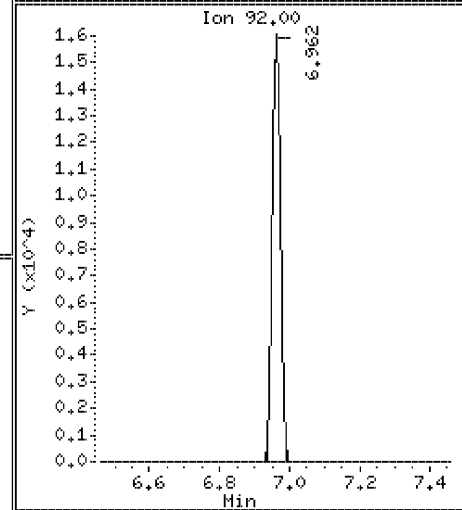
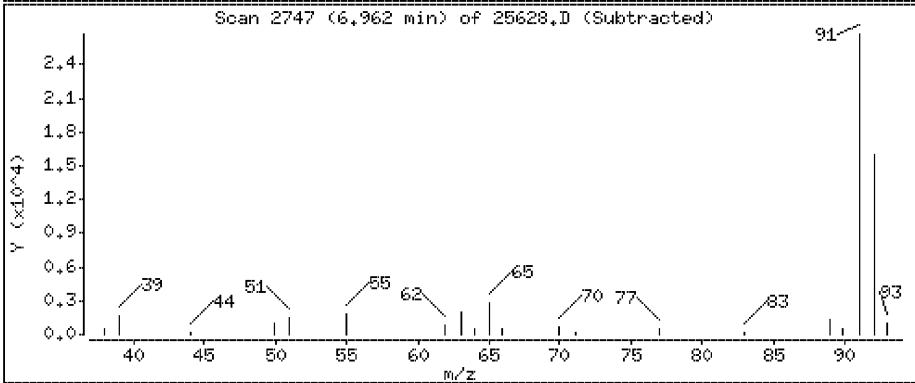
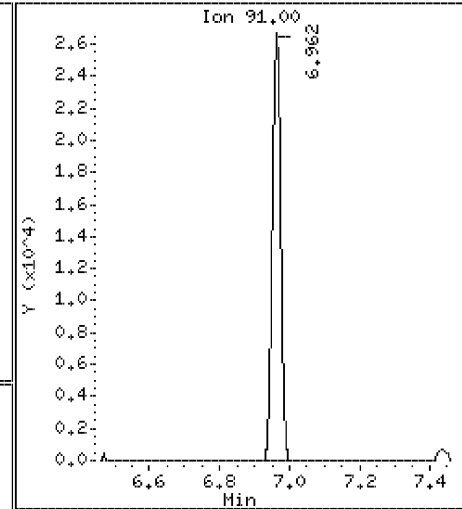
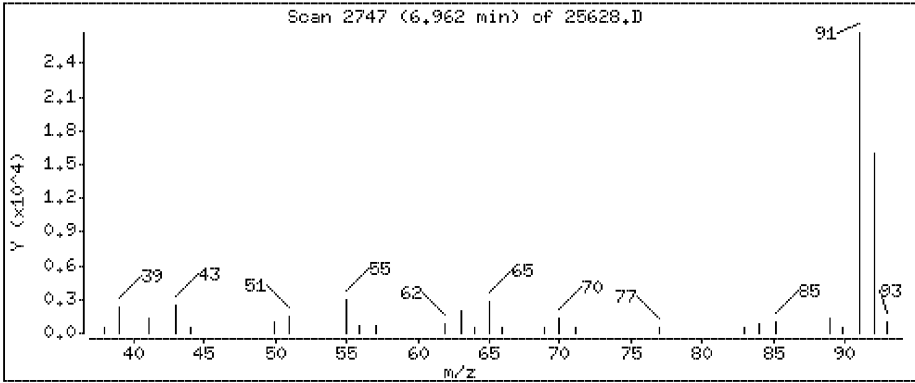
Operator: CH1

Column phase: ZB-5MSplus SN338857

Column diameter: 0,32

57 Toluene

Concentration: 0,752 ppbv



Data File: \\192.168.10.12\chem\10airH,i\091318,b\25628.D

Date : 13-SEP-2018 22:27

Client ID:

Instrument: 10airH.i

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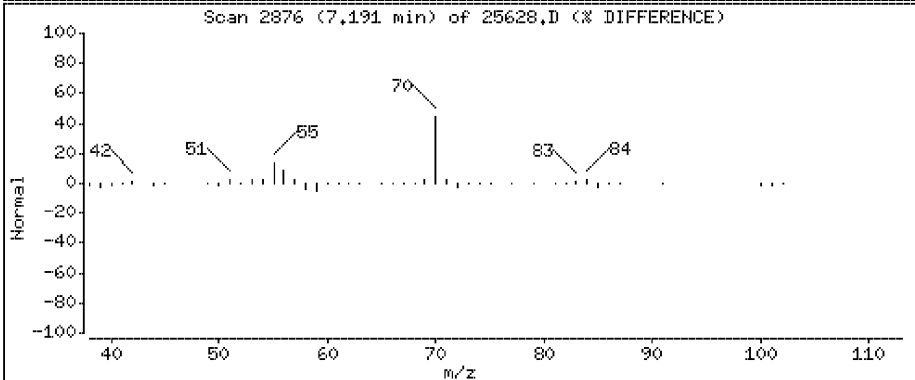
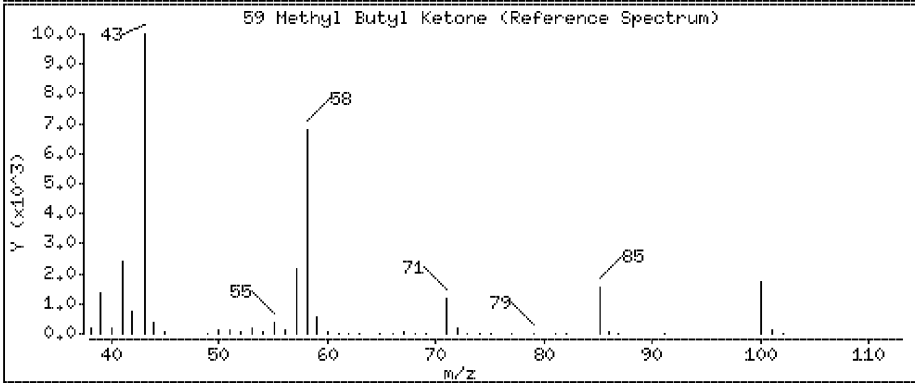
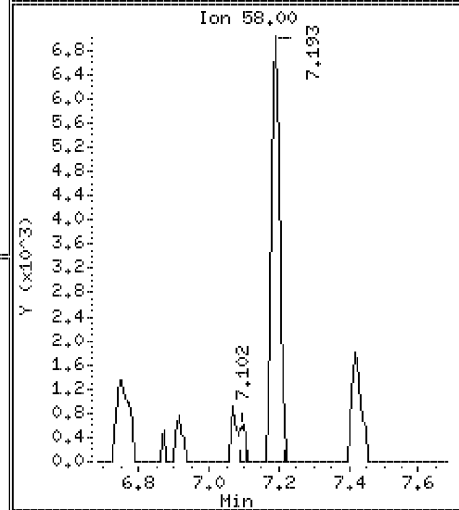
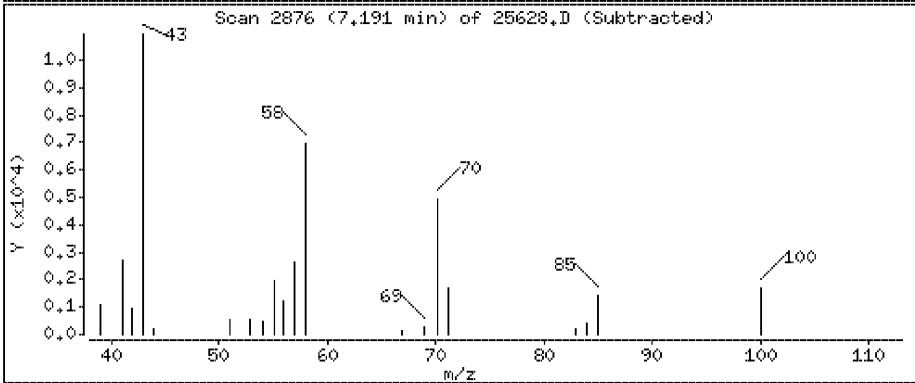
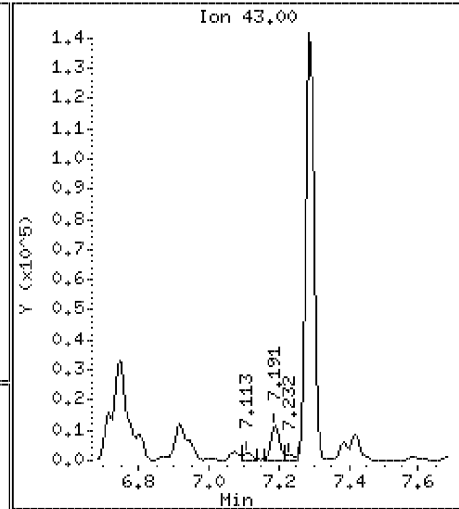
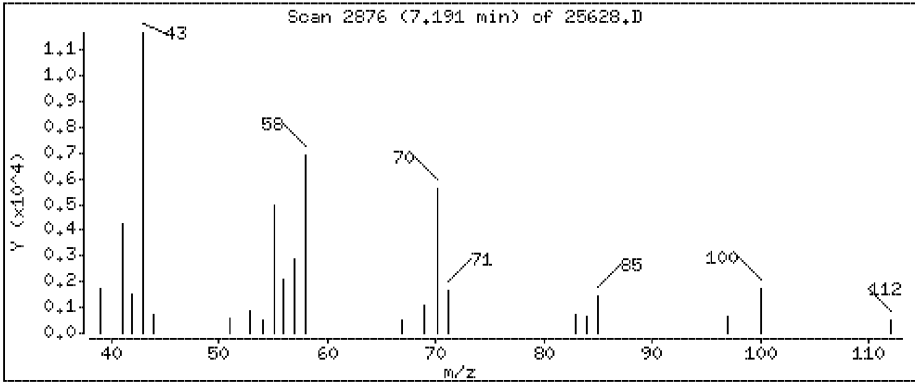
Operator: CH1

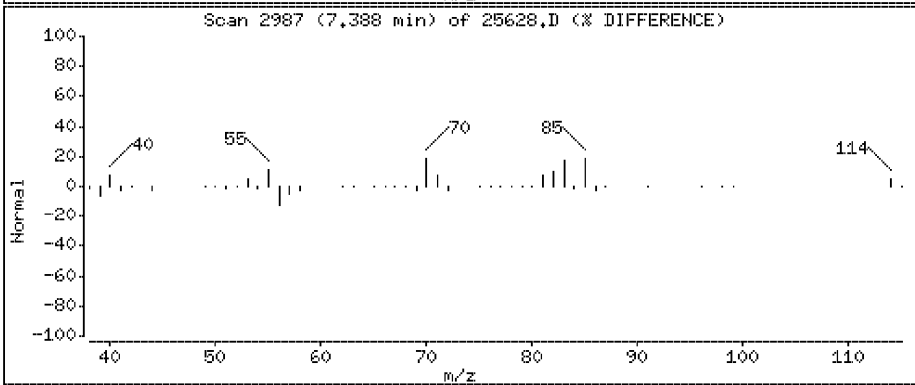
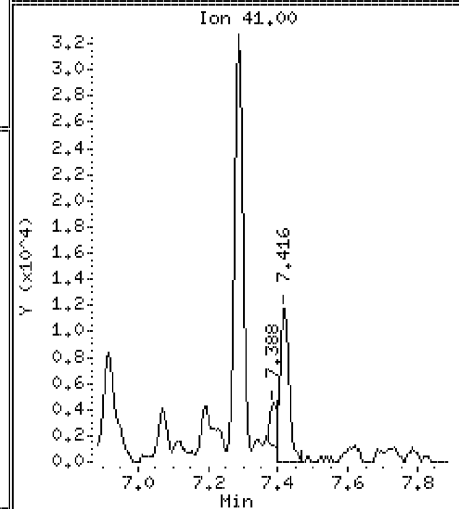
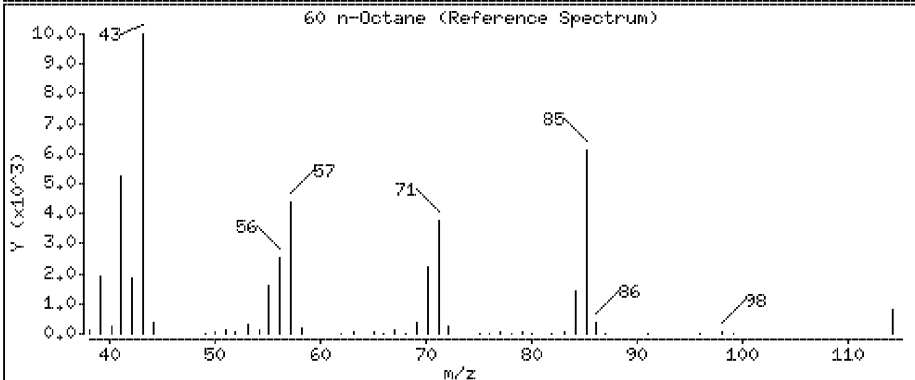
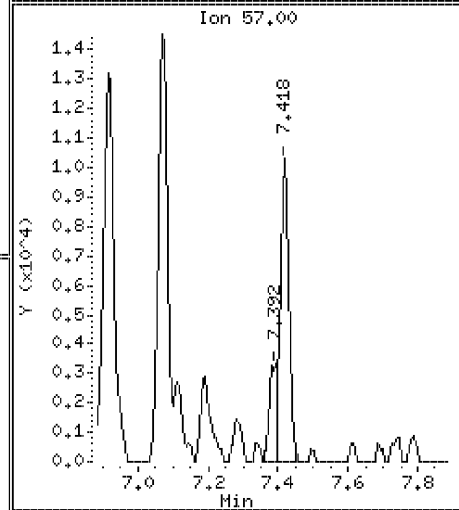
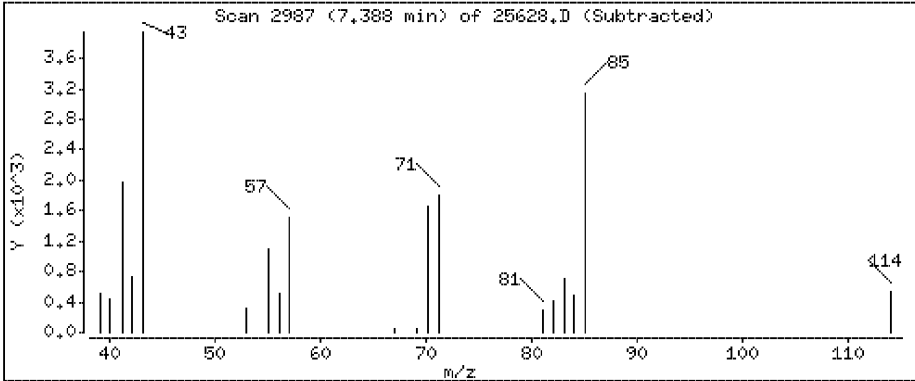
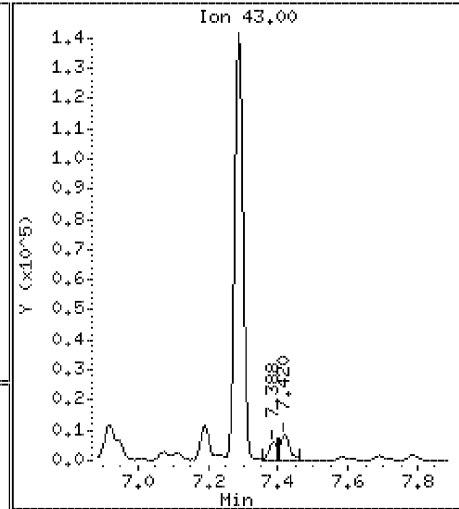
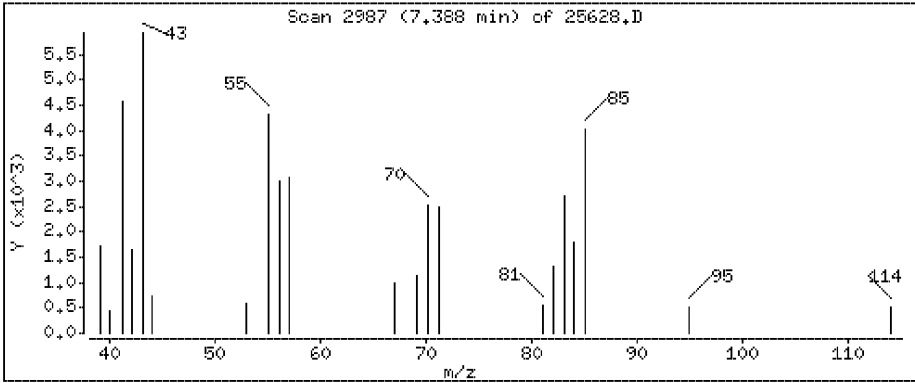
Column phase: ZB-5MSplus SN338857

Column diameter: 0.32

59 Methyl Butyl Ketone

Concentration: 0.910 ppbv





Data File: \\192.168.10.12\chem\10airH,1\091318,b\25628.D

Date : 13-SEP-2018 22:27

Client ID:

Instrument: 10airH.i

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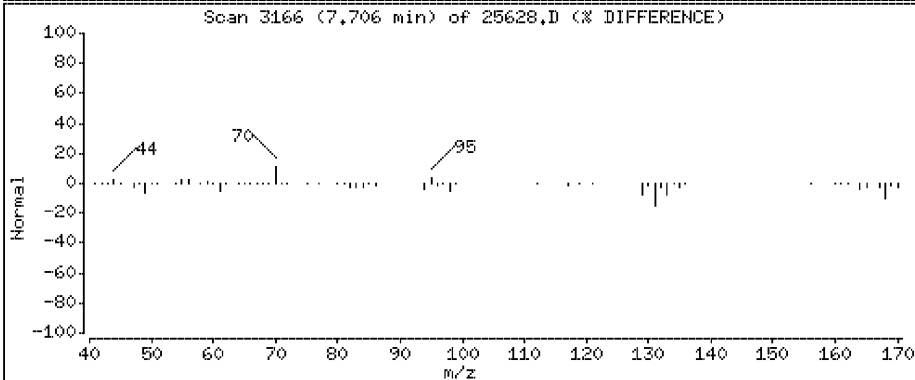
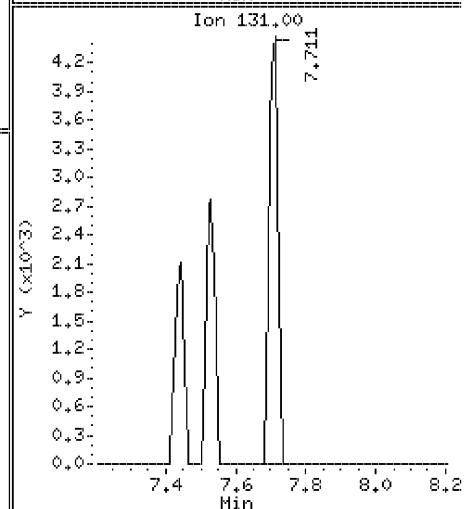
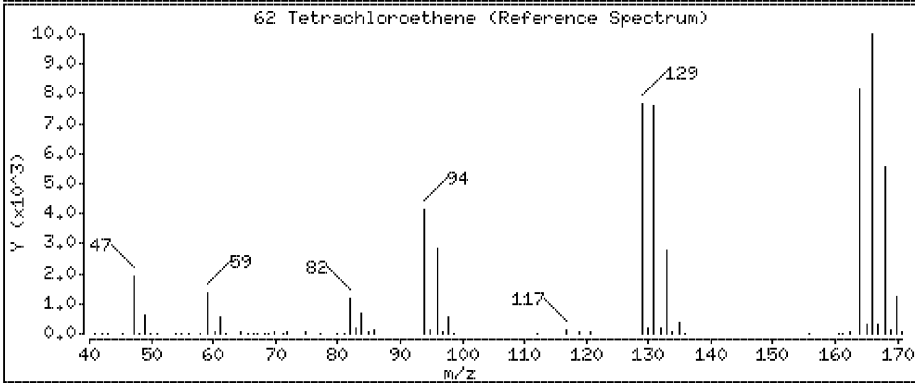
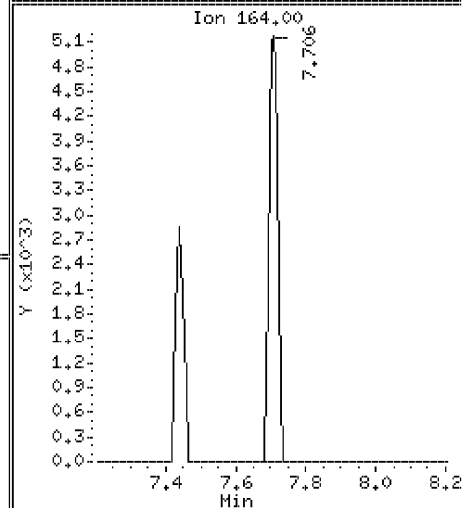
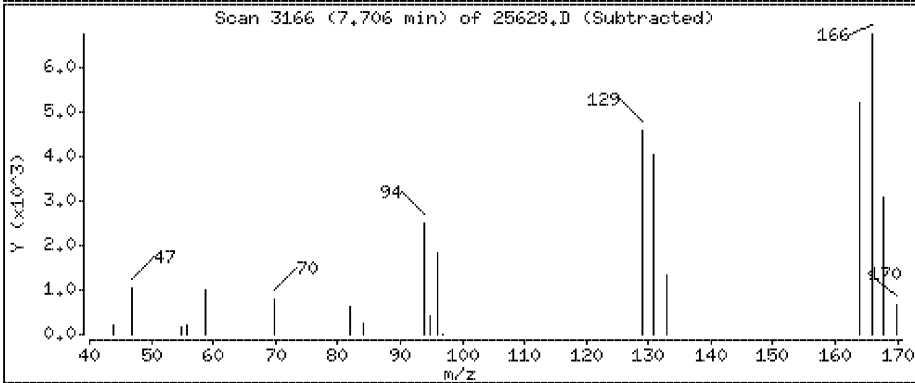
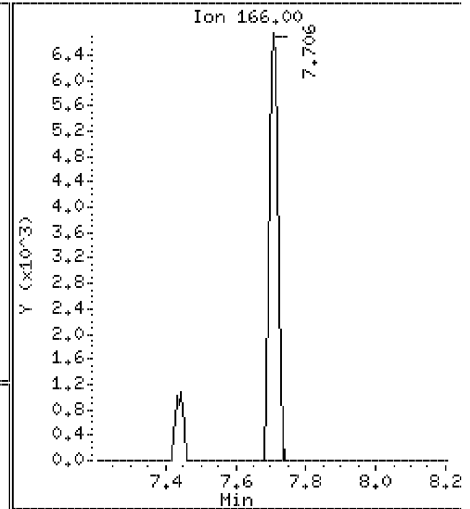
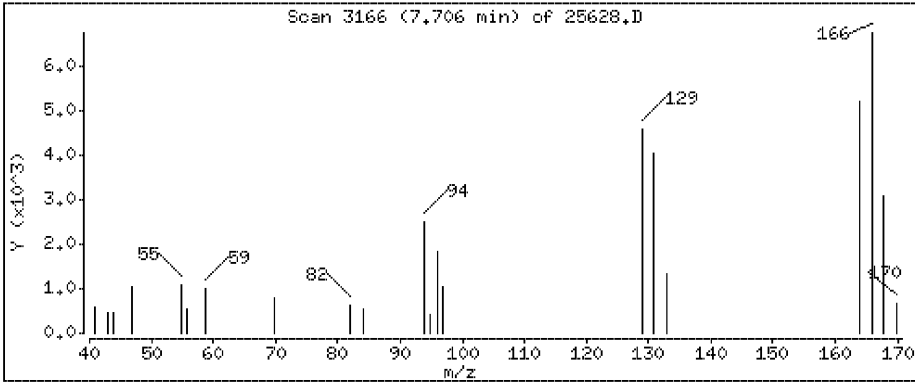
Operator: CH1

Column phase: ZB-5MSplus SN338857

Column diameter: 0.32

62 Tetrachloroethene

Concentration: 0.293 ppbv



Data File: \\192.168.10.12\chem\10airH,1\091318,b\25628.D

Date : 13-SEP-2018 22:27

Client ID:

Instrument: 10airH.i

Sample Info:

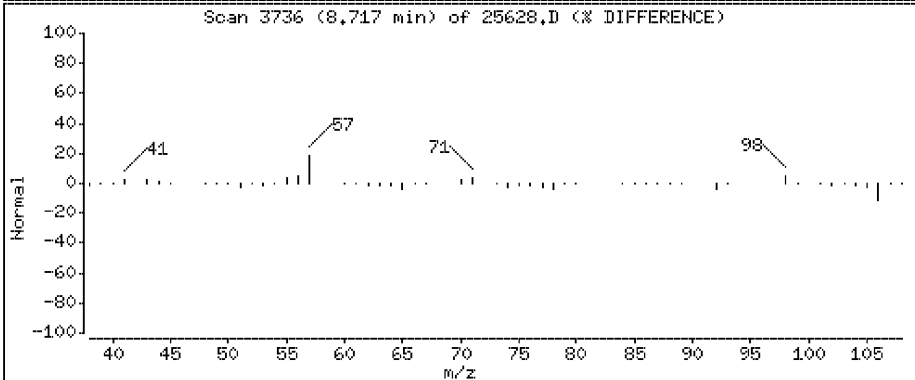
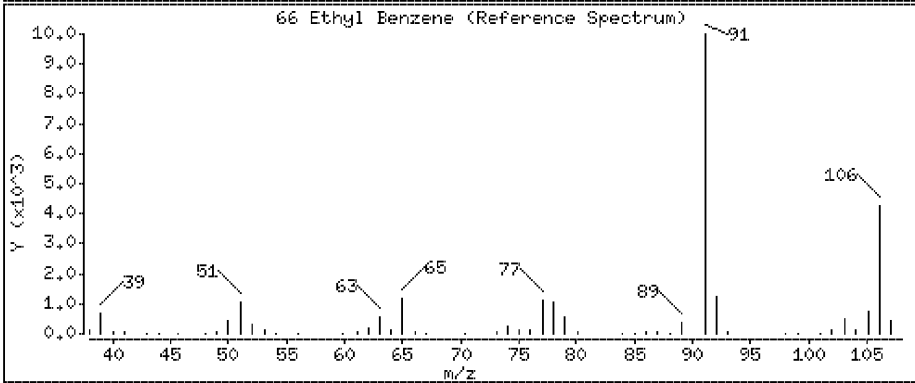
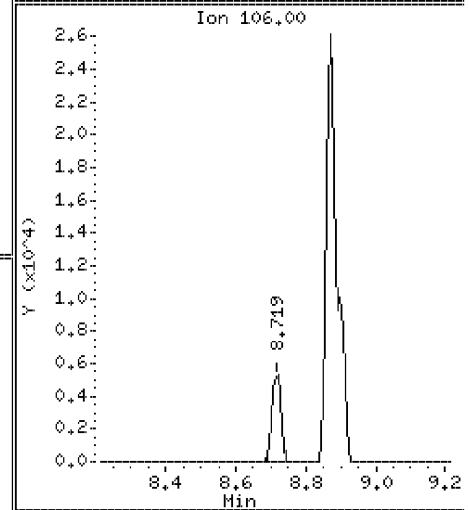
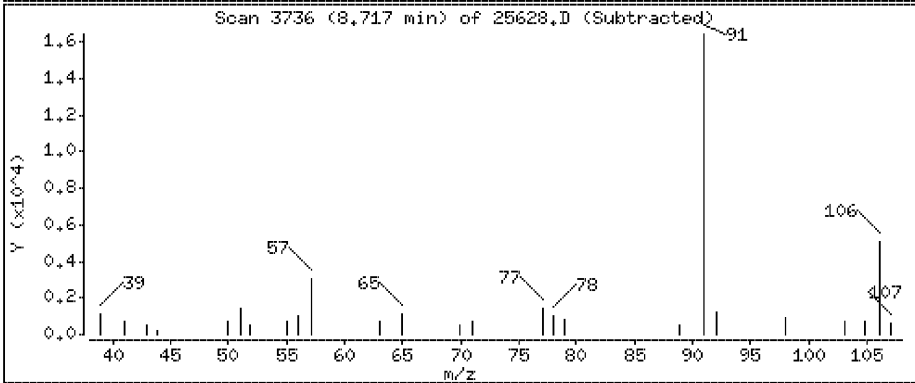
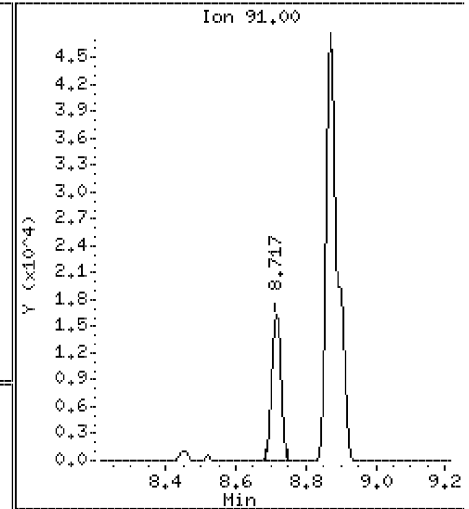
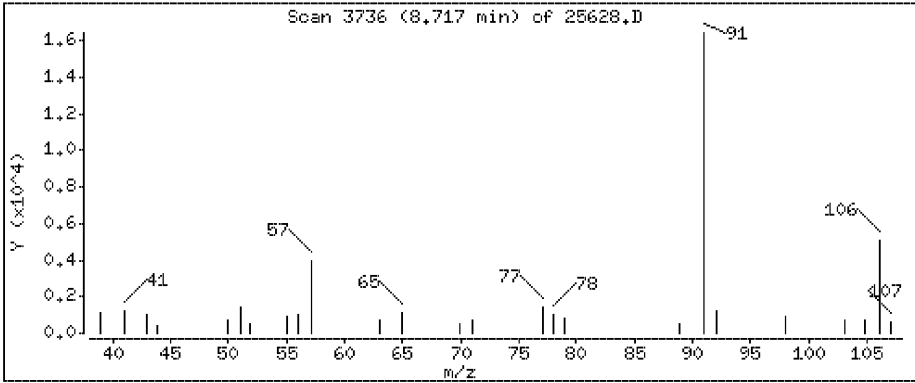
Operator: CH1

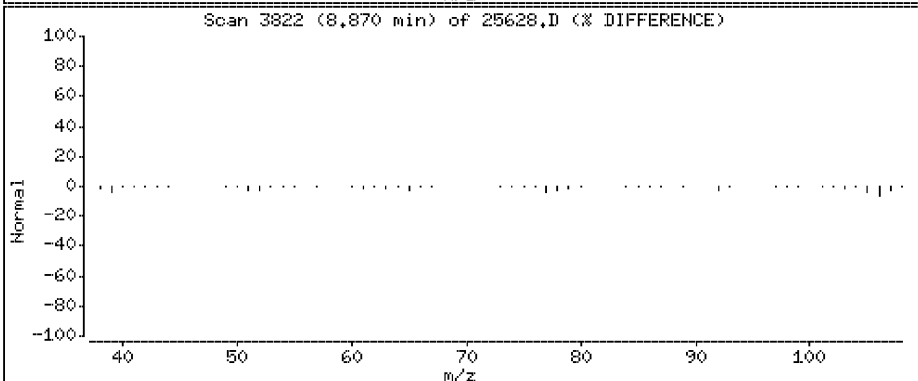
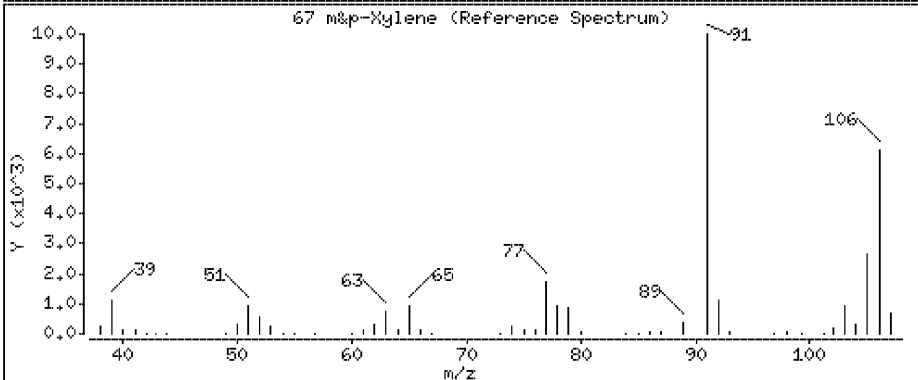
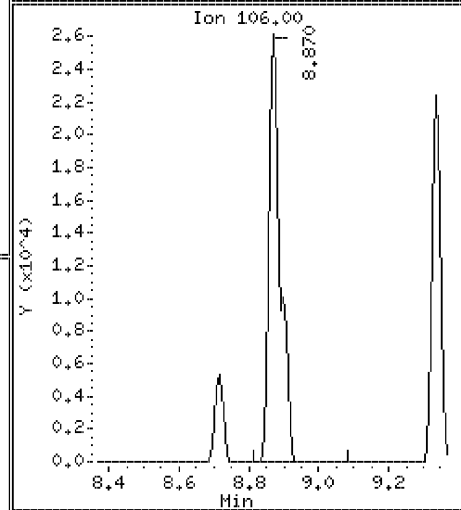
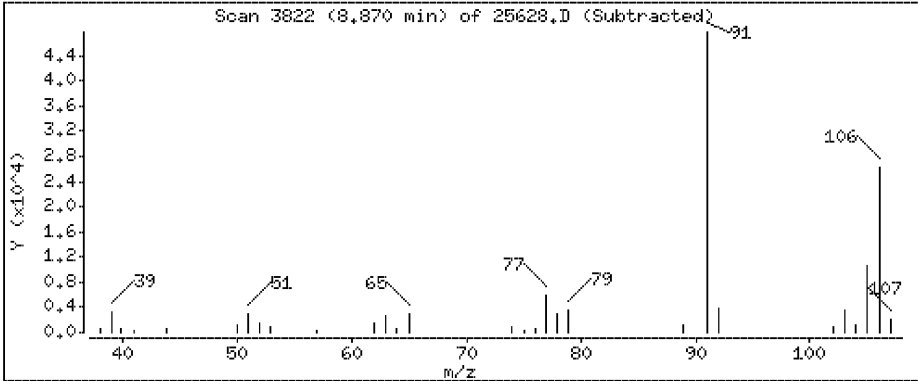
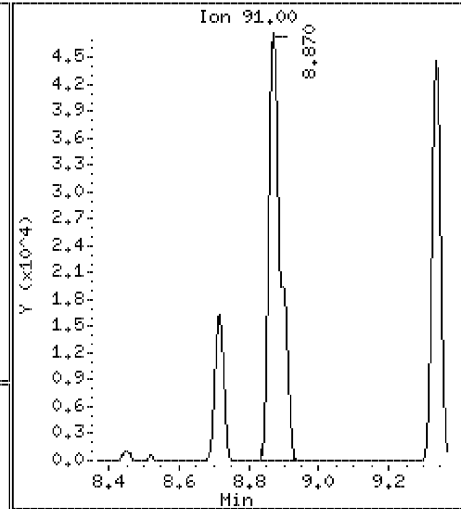
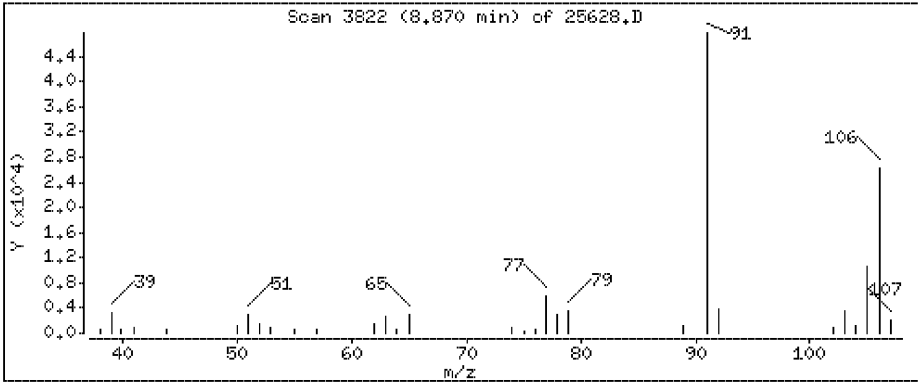
Column phase: ZB-5MSplus SN338857

Column diameter: 0,32

66 Ethyl Benzene

Concentration: 0,420 ppbv





Data File: \\192.168.10.12\chem\10airH,1\091318,b\25628.D

Date : 13-SEP-2018 22:27

Client ID:

Instrument: 10airH.i

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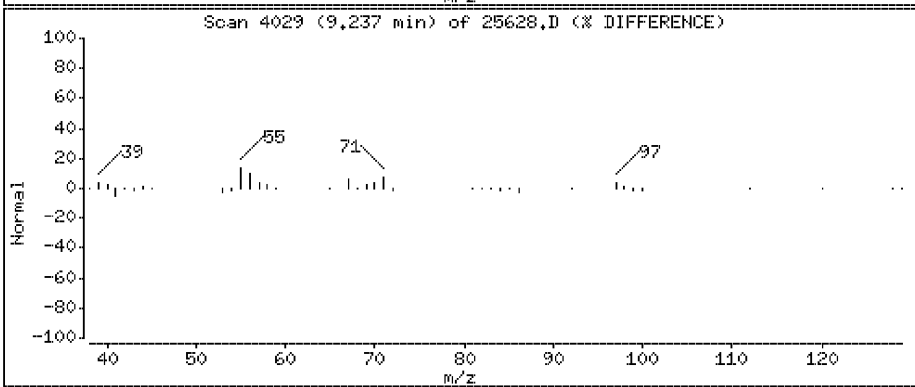
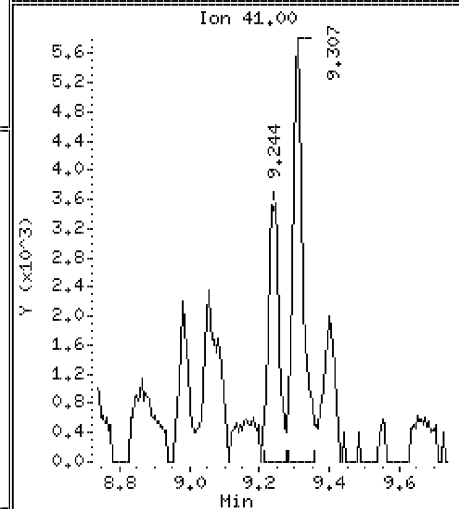
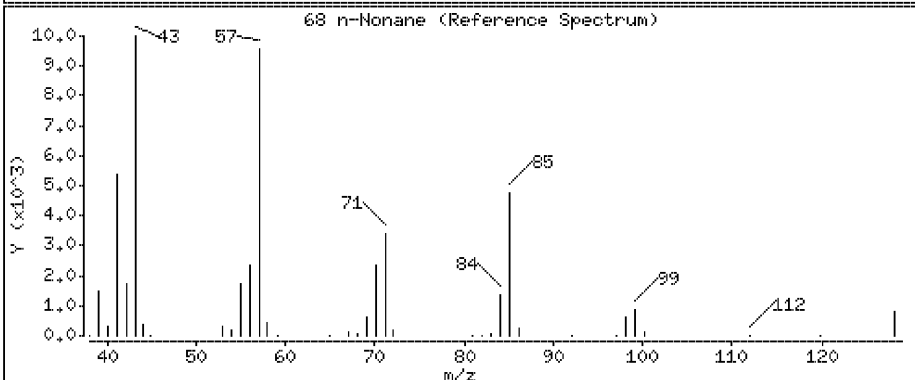
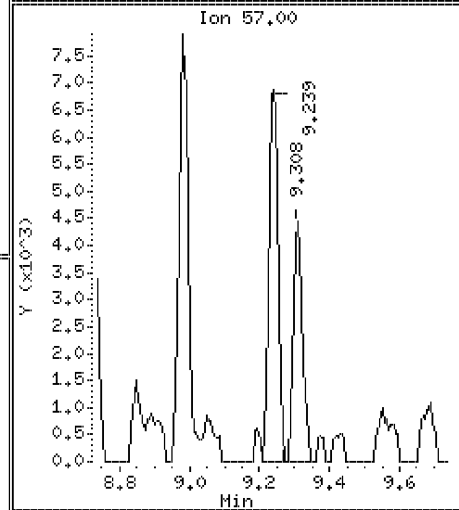
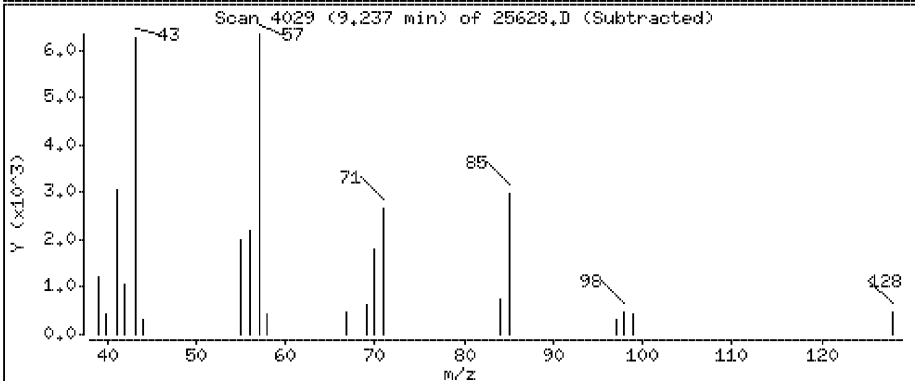
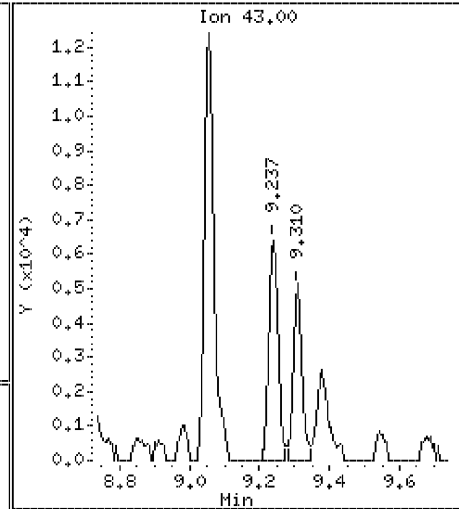
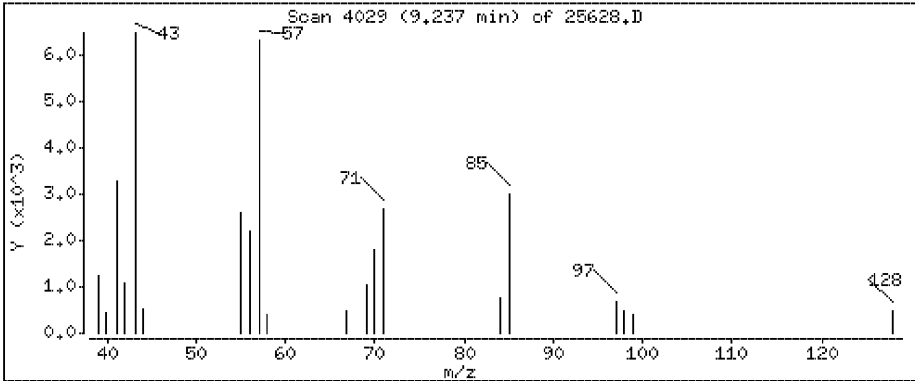
Operator: CH1

Column phase: ZB-5MSplus SN338857

Column diameter: 0,32

68 n-Nonane

Concentration: 0,748 ppbv



Data File: \\192.168.10.12\chem\10airH,i\091318,b\25628.D

Date : 13-SEP-2018 22:27

Client ID:

Instrument: 10airH.i

Sample Info:

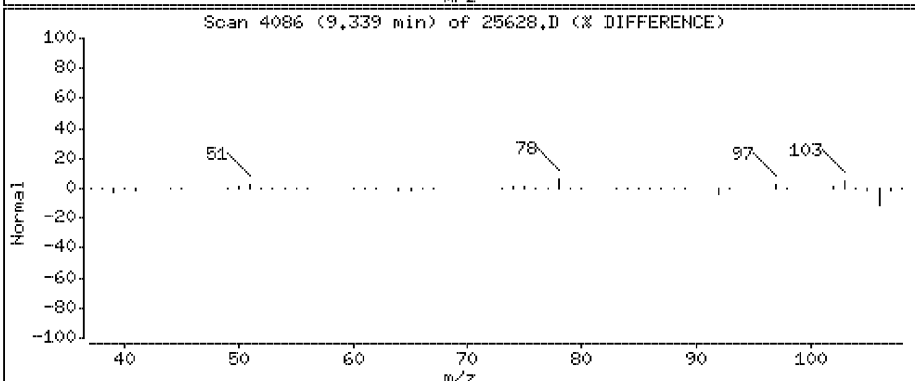
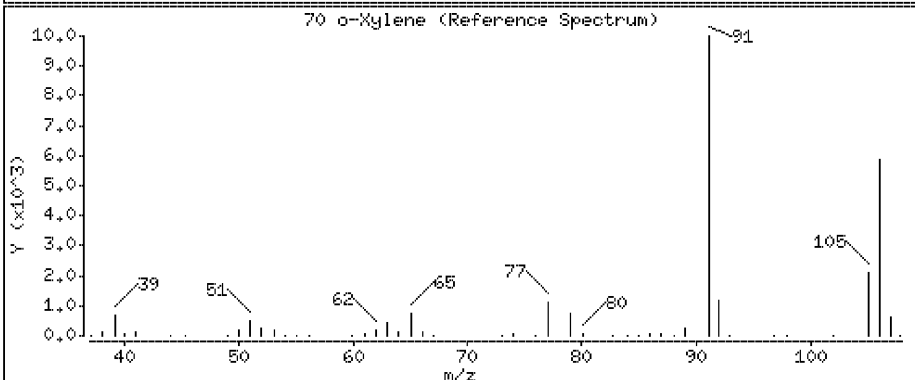
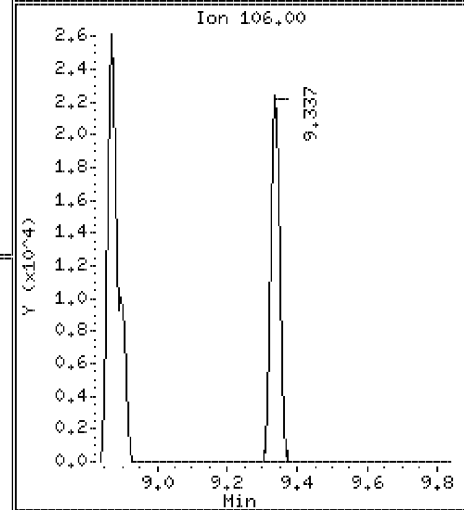
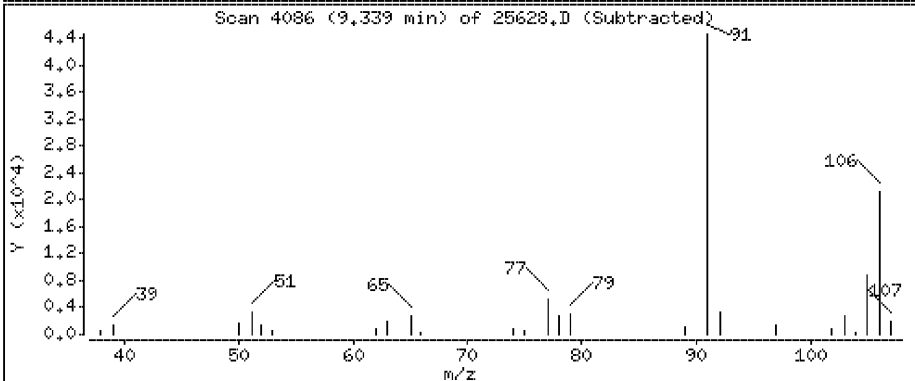
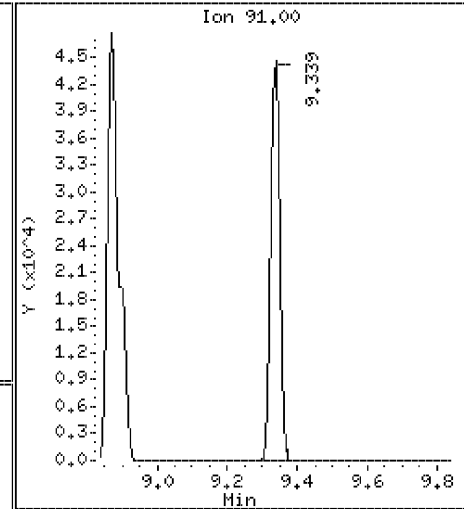
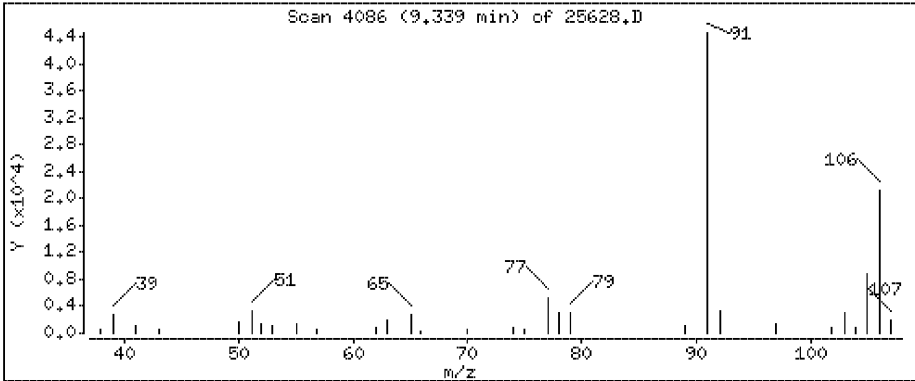
Operator: CH1

Column phase: ZB-5MSplus SN338857

Column diameter: 0.32

70 o-Xylene

Concentration: 1.43 ppbv



Data File: \\192.168.10.12\chem\10airH,1\091318,b\25628.D

Date : 13-SEP-2018 22:27

Client ID:

Instrument: 10airH.i

Sample Info:

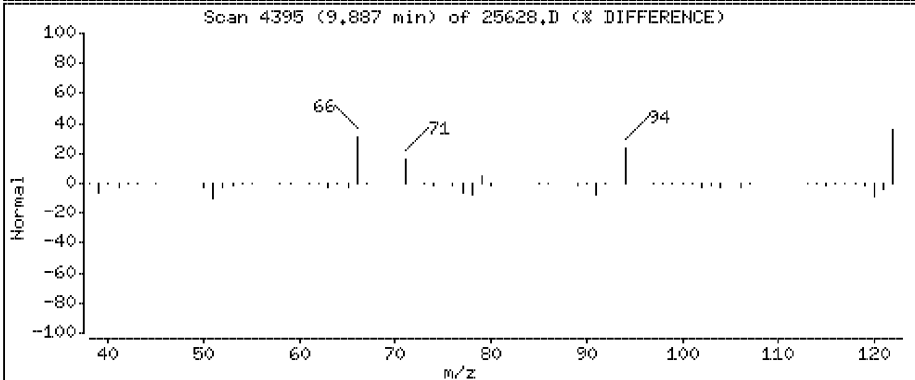
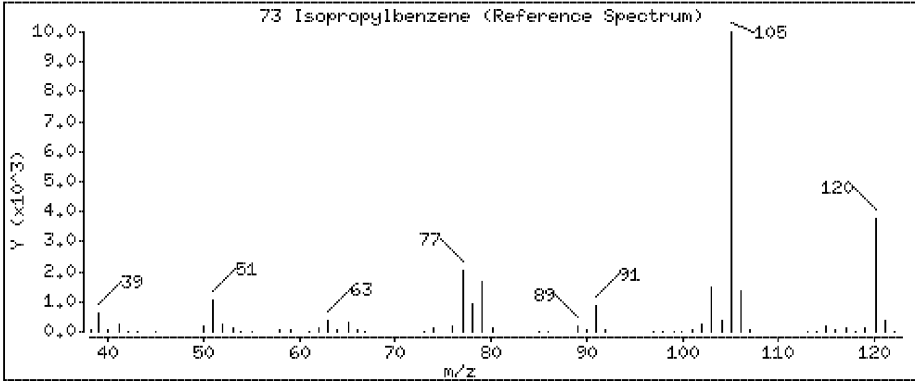
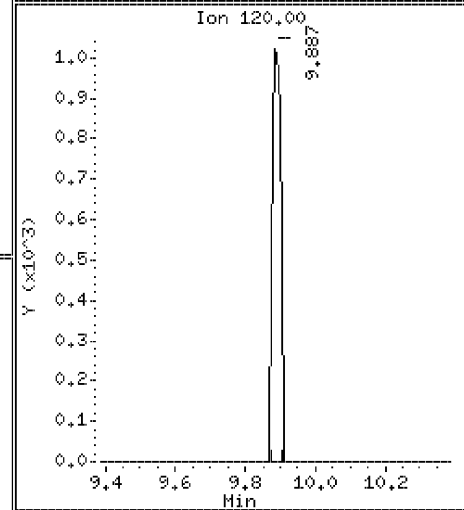
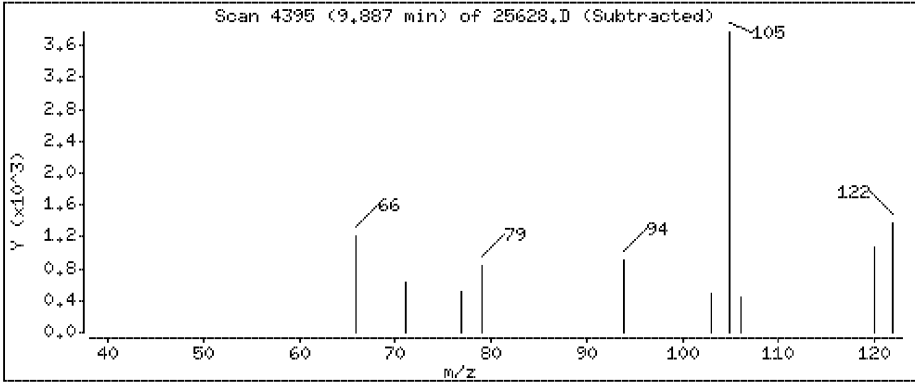
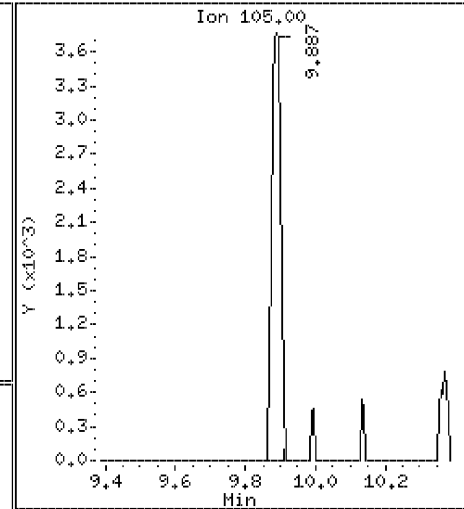
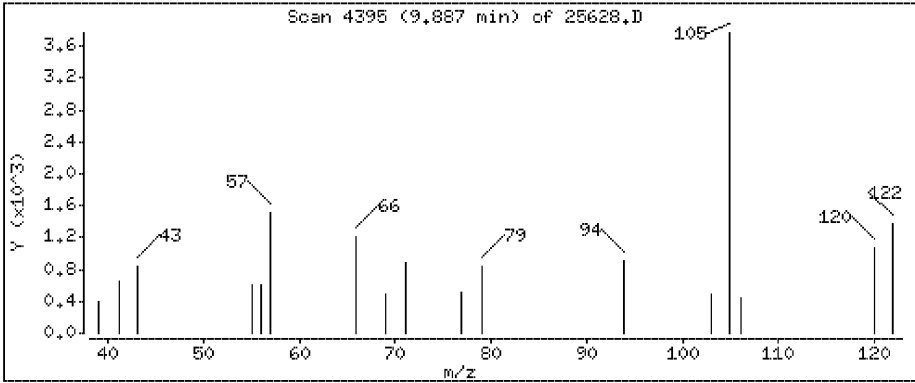
Operator: CH1

Column phase: ZB-5MSplus SN338857

Column diameter: 0,32

73 Isopropylbenzene

Concentration: 0,454 ppbv



Data File: \\192.168.10.12\chem\10airH,1\091318,b\25628.D

Date : 13-SEP-2018 22:27

Client ID:

Instrument: 10airH.i

Sample Info:

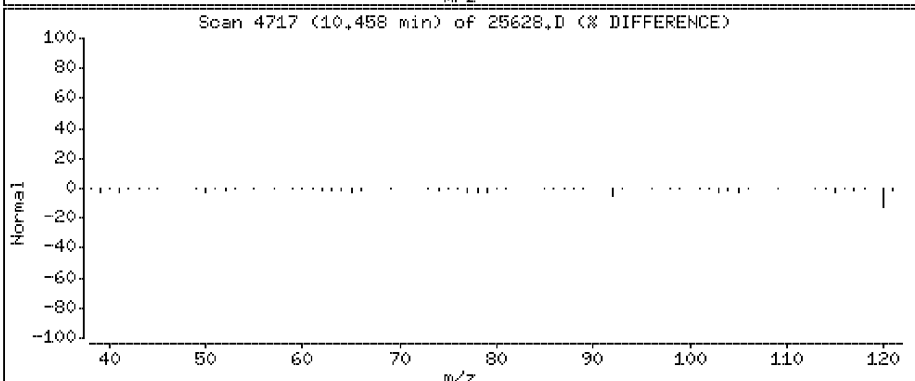
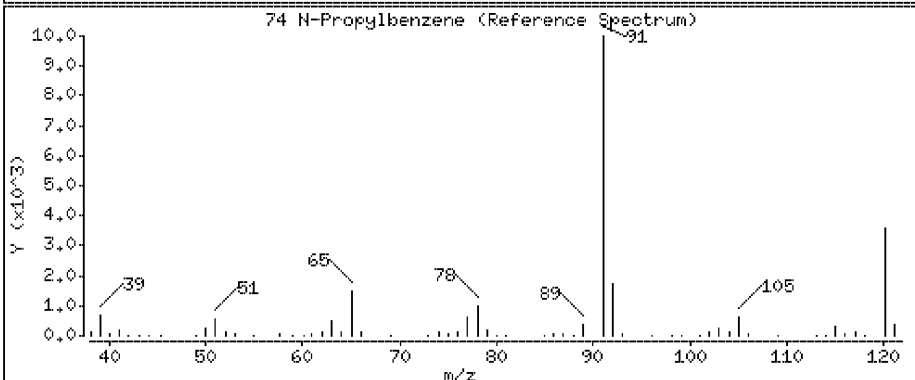
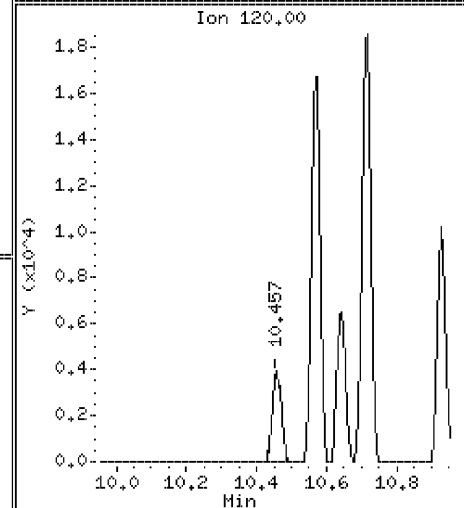
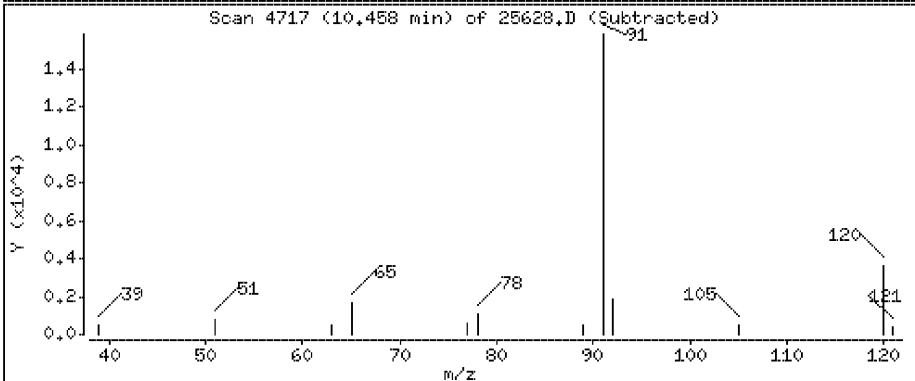
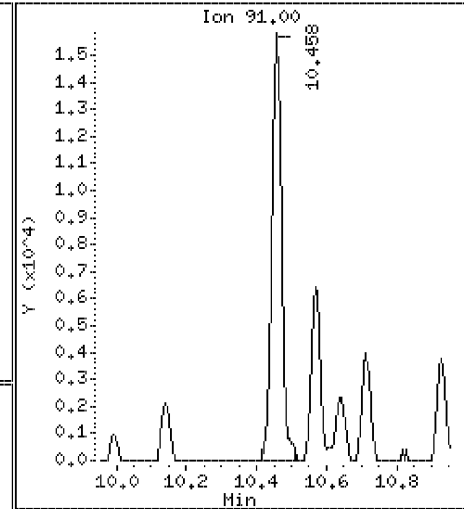
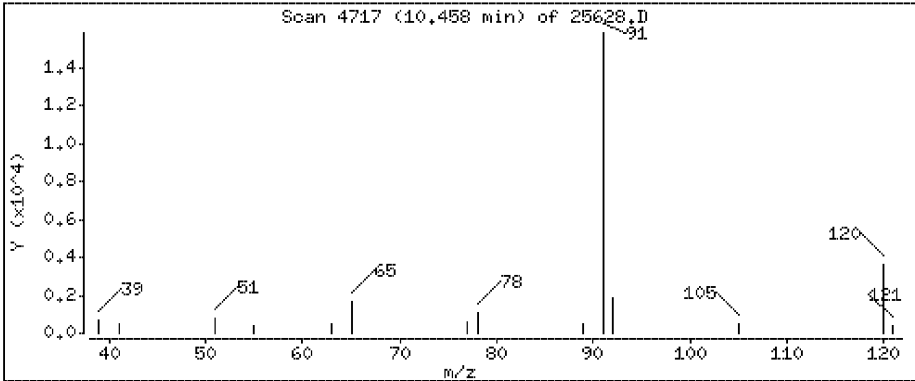
Operator: CH1

Column phase: ZB-5MSplus SN338857

Column diameter: 0,32

74 N-Propylbenzene

Concentration: 0,558 ppbv



Data File: \\192.168.10.12\chem\10airH,i\091318,b\25628.D

Date : 13-SEP-2018 22:27

Client ID:

Instrument: 10airH.i

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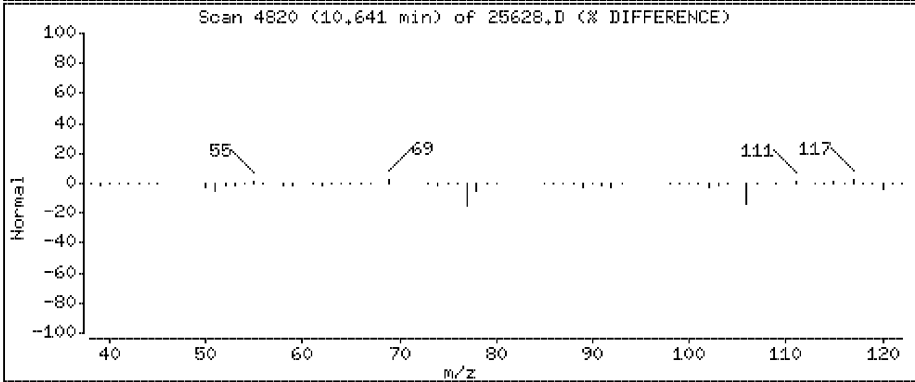
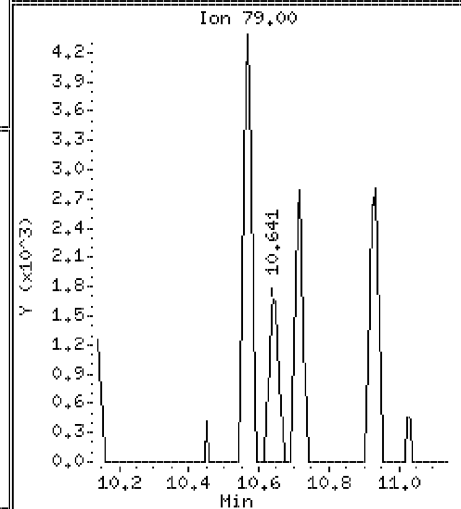
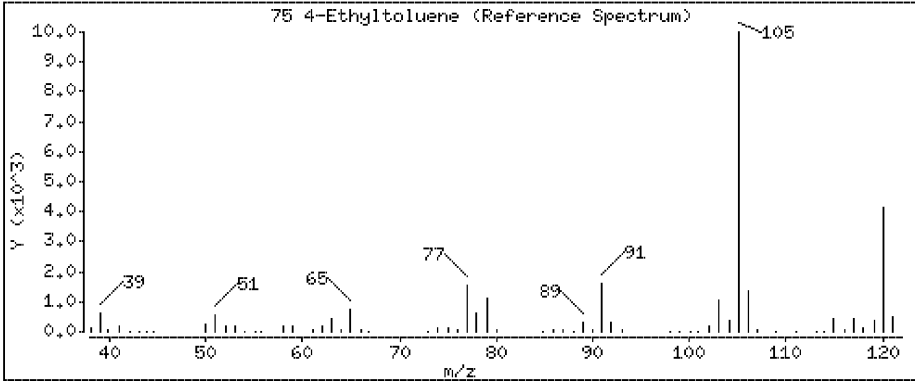
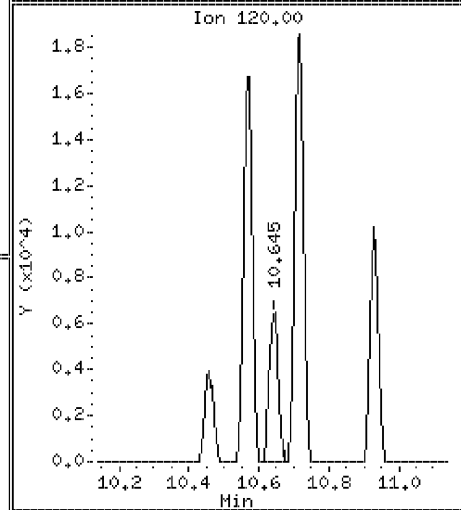
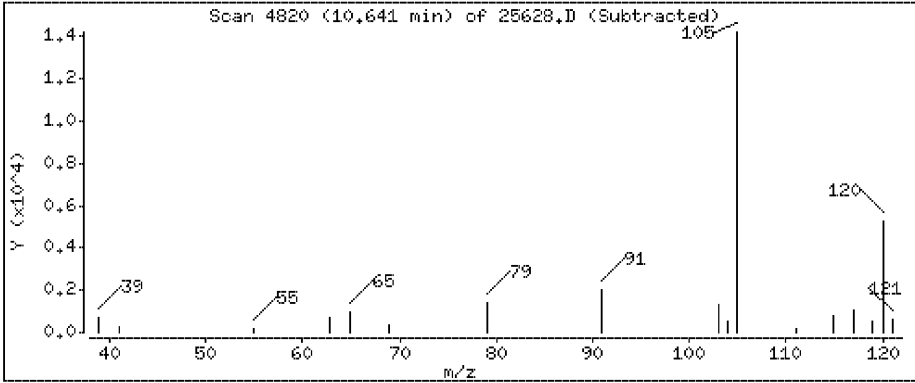
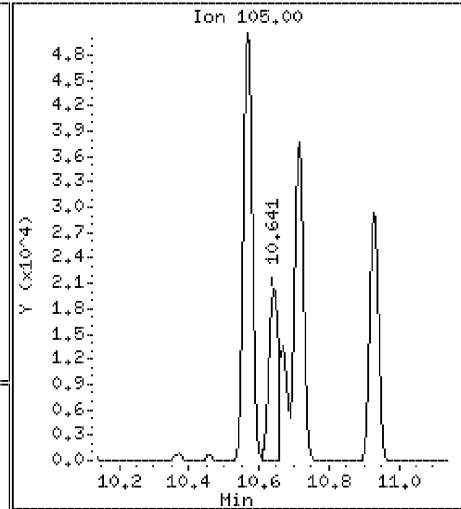
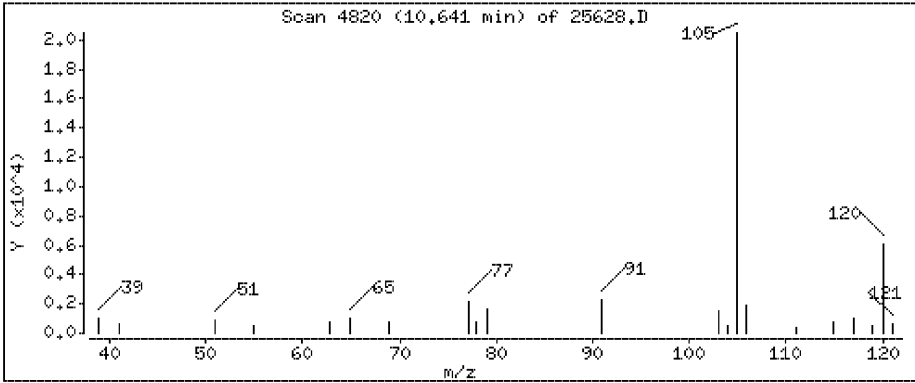
Operator: CH1

Column phase: ZB-5MSplus SN338857

Column diameter: 0,32

75 4-Ethyltoluene

Concentration: 0,866 ppbv



Data File: \\192.168.10.12\chem\10airH,1\091318,b\25628.D

Date : 13-SEP-2018 22:27

Client ID:

Instrument: 10airH.i

Sample Info:

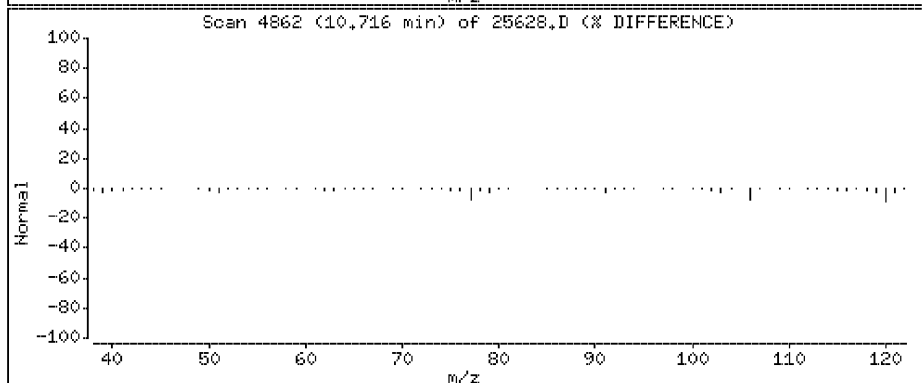
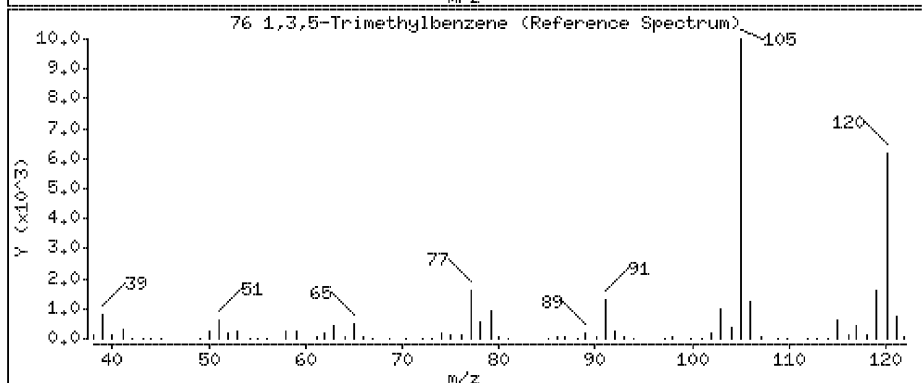
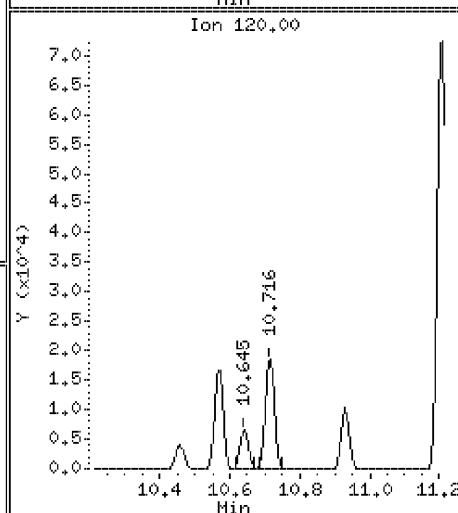
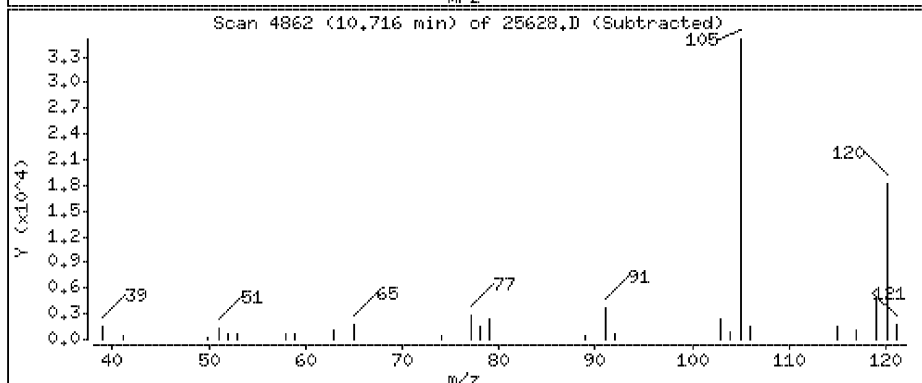
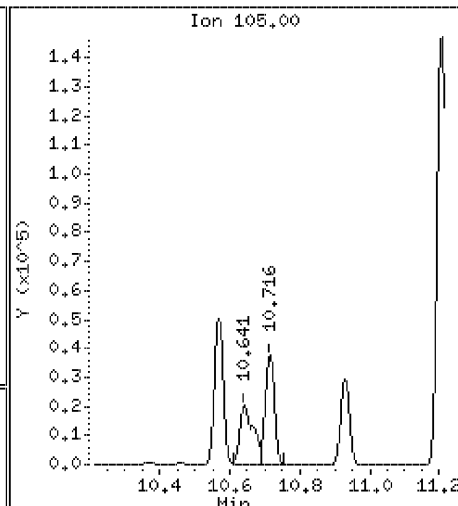
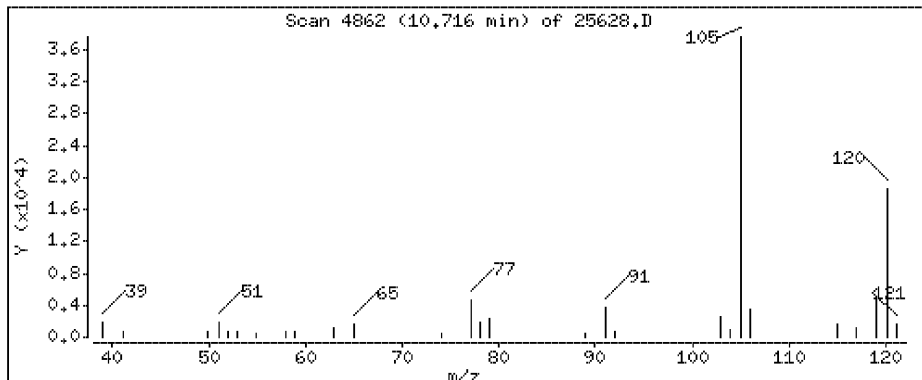
Operator: CH1

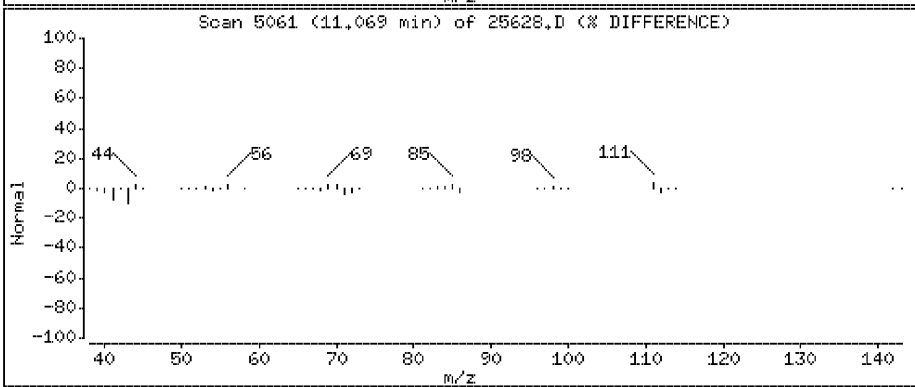
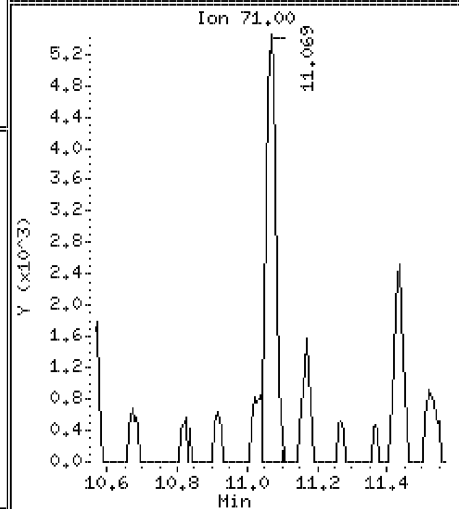
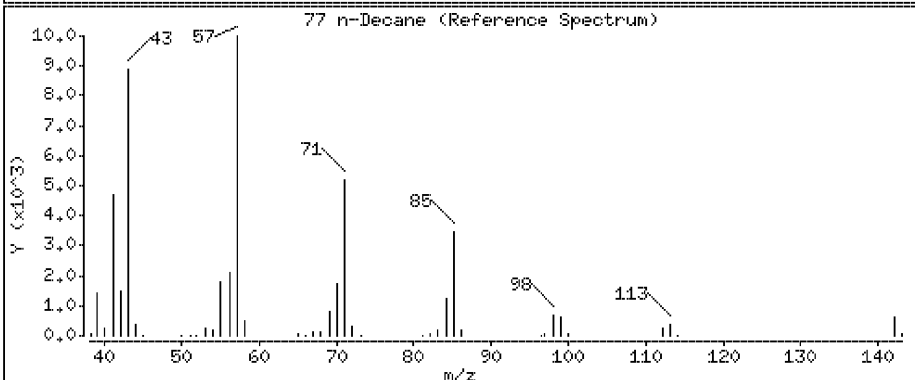
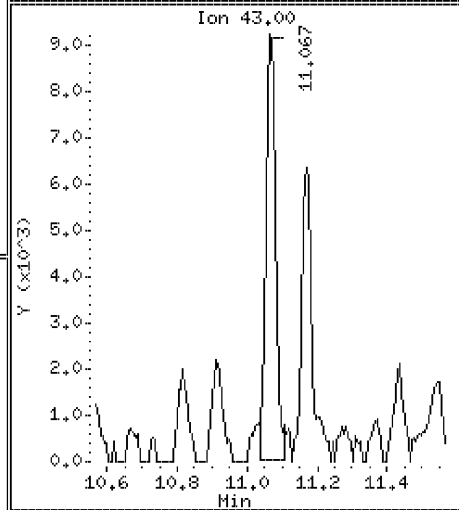
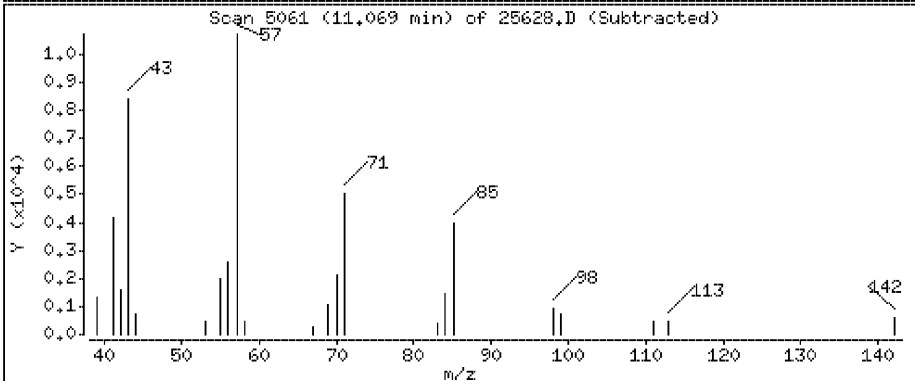
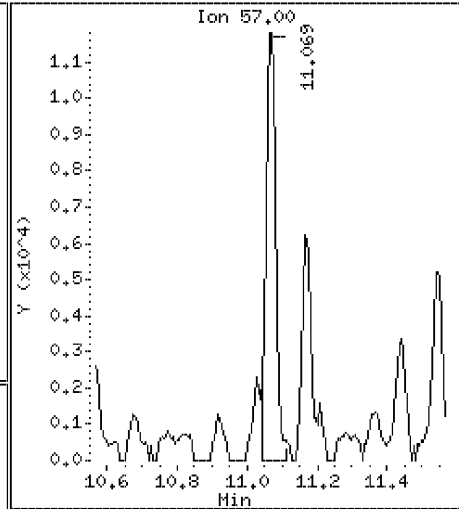
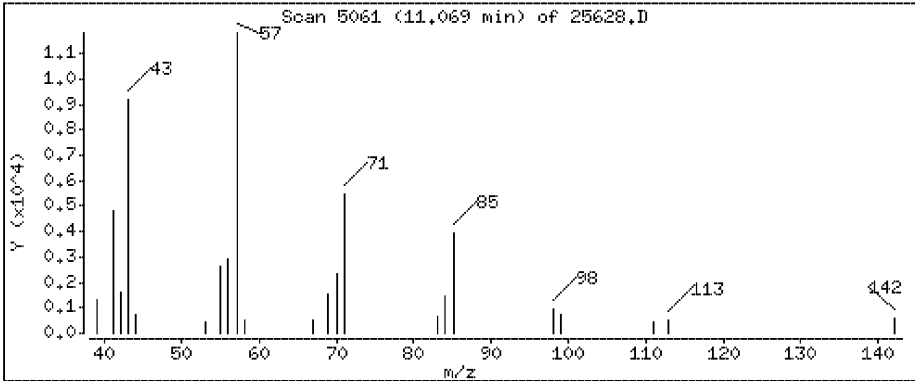
Column phase: ZB-5MSplus SN338857

Column diameter: 0,32

76 1,3,5-Trimethylbenzene

Concentration: 1,14 ppbv





Data File: \\192.168.10.12\chem\10airH,i\091318,b\25628.D

Date : 13-SEP-2018 22:27

Client ID:

Instrument: 10airH,i

Sample Info:

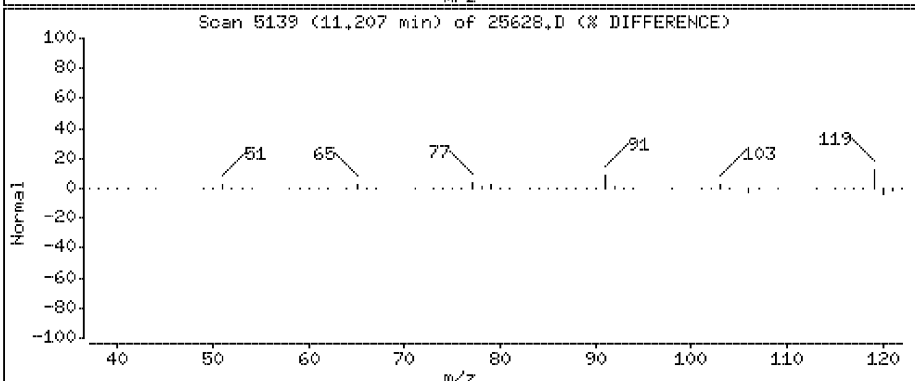
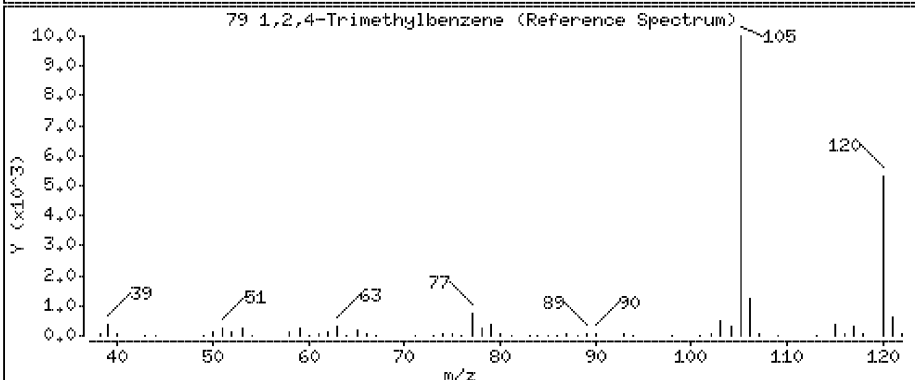
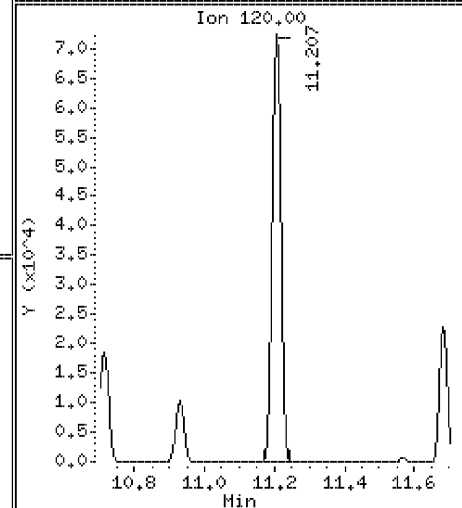
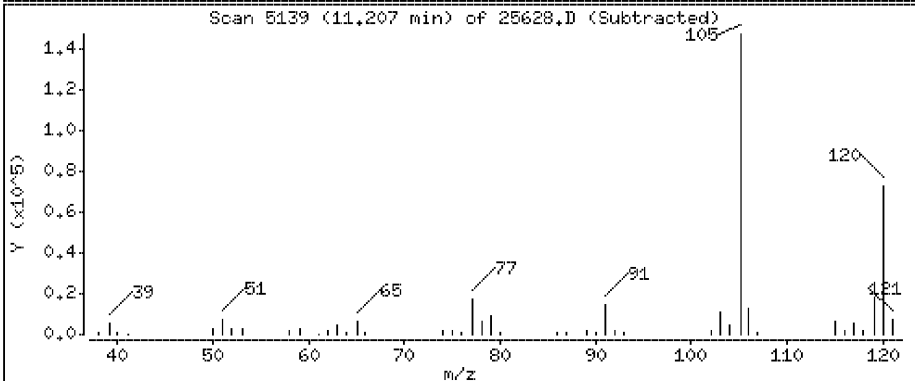
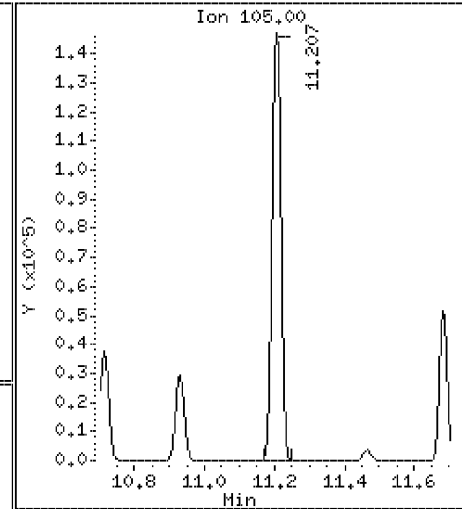
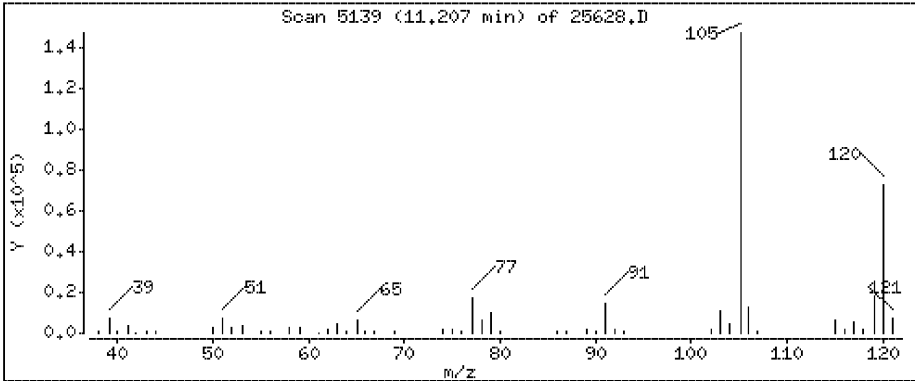
Operator: CH1

Column phase: ZB-5MSplus SN338857

Column diameter: 0,32

79 1,2,4-Trimethylbenzene

Concentration: 3,85 ppbv



Data File: \\192.168.10.12\chem\10airH,1\091318,b\25628.D

Date : 13-SEP-2018 22:27

Client ID:

Instrument: 10airH.i

Sample Info:

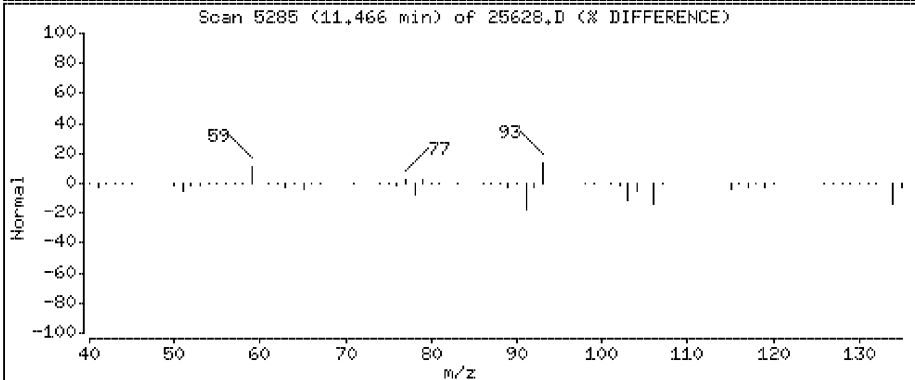
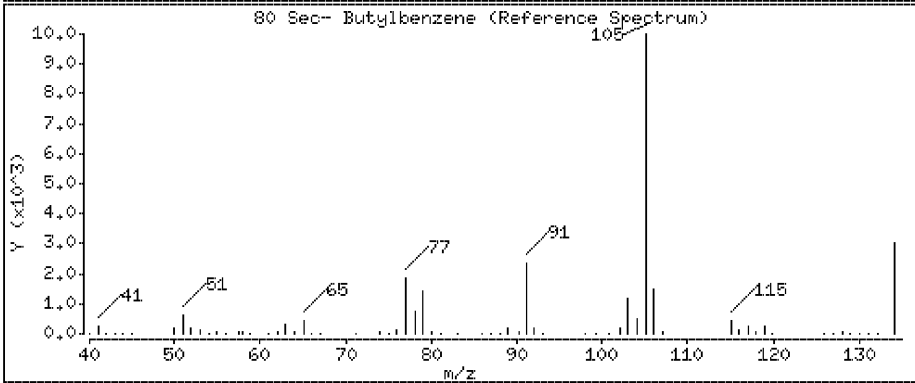
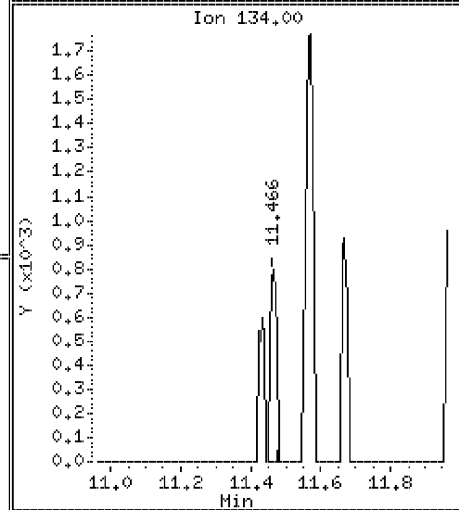
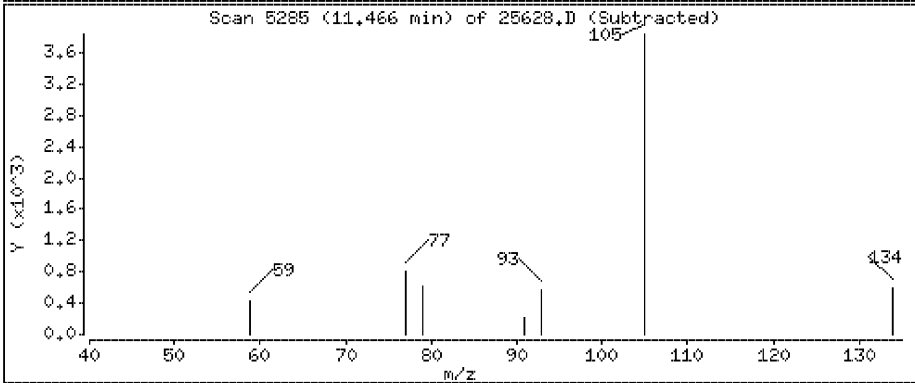
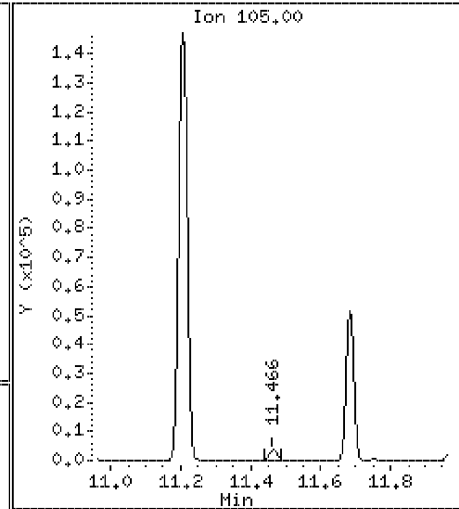
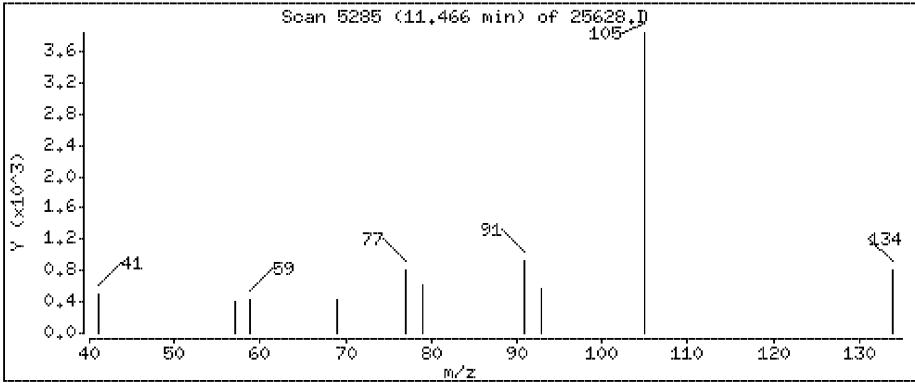
Operator: CH1

Column phase: ZB-5MSplus SN338857

Column diameter: 0.32

80 Sec- Butylbenzene

Concentration: 0.389 ppbv



Data File: \\192.168.10.12\chem\10airH,1\091318,b\25628.D

Date : 13-SEP-2018 22:27

Client ID:

Instrument: 10airH.i

Sample Info:

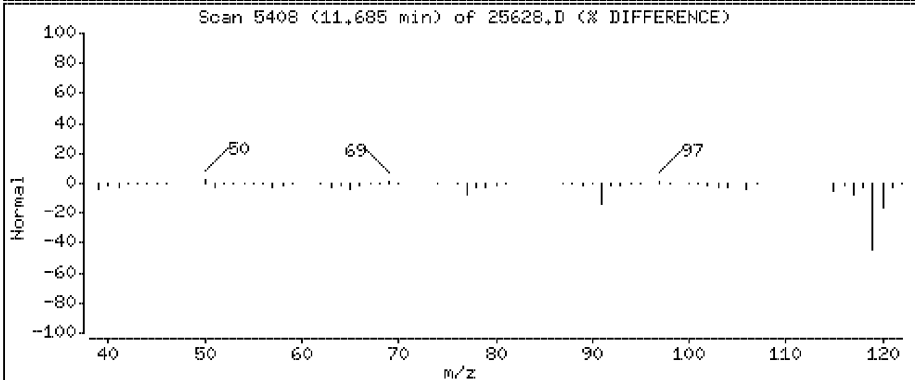
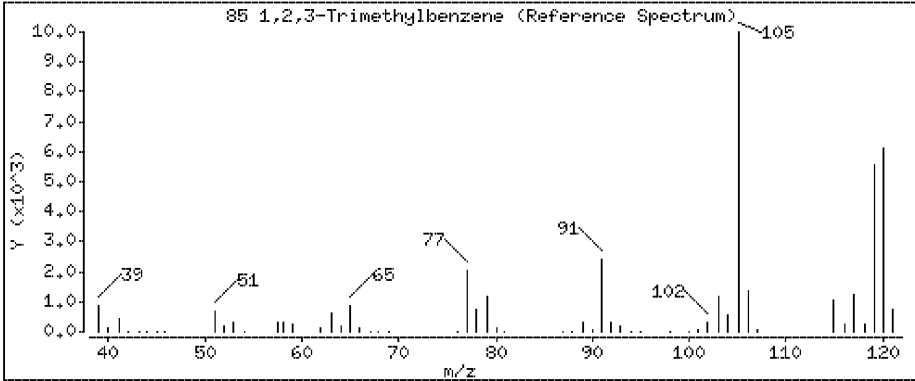
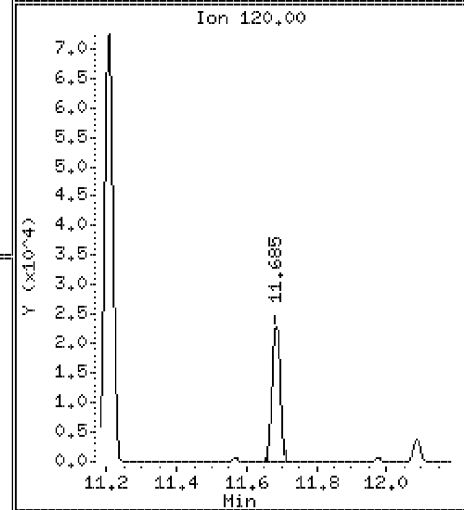
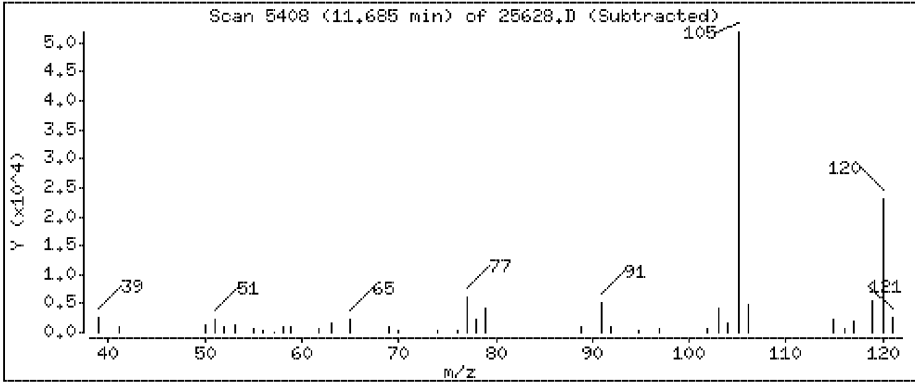
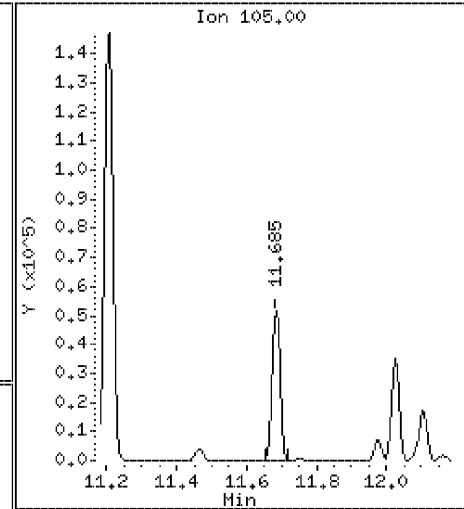
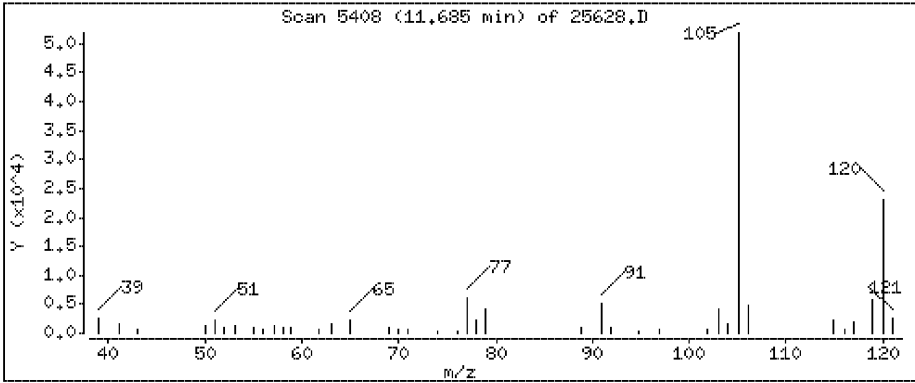
Operator: CH1

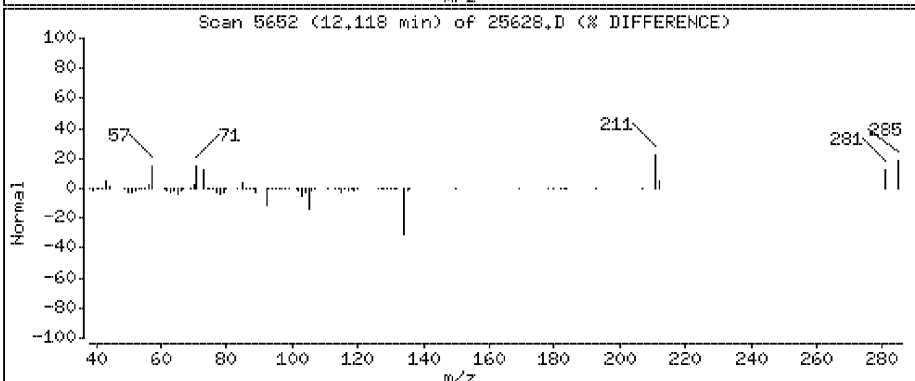
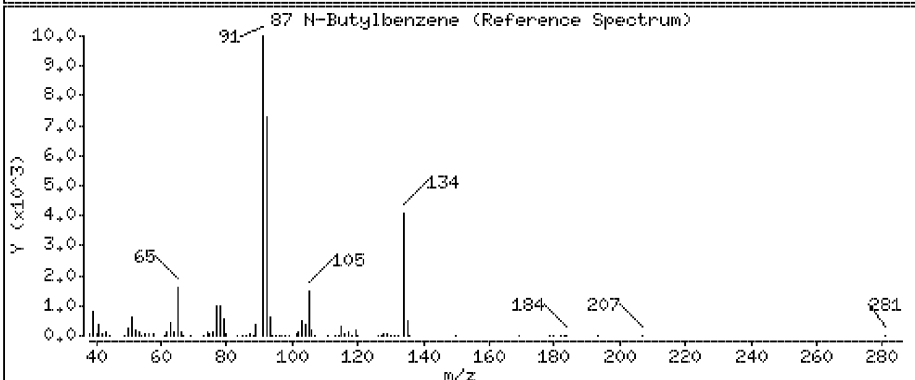
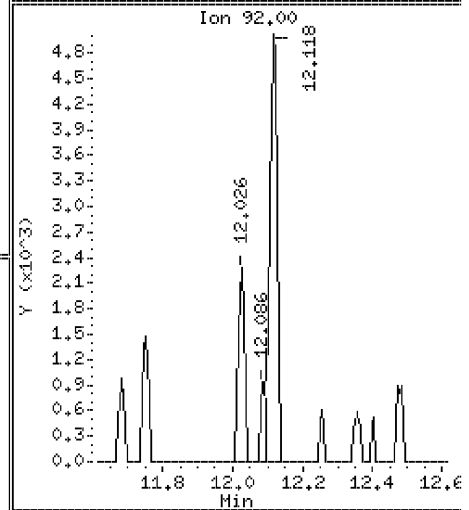
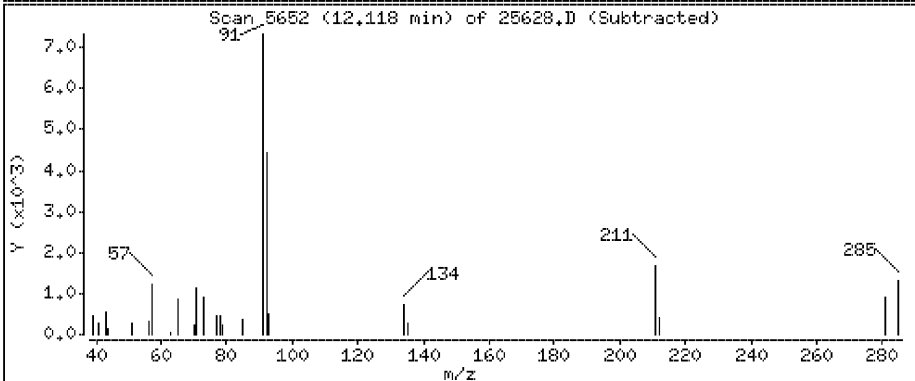
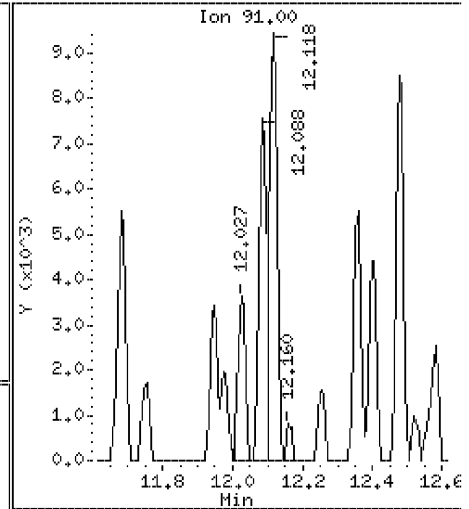
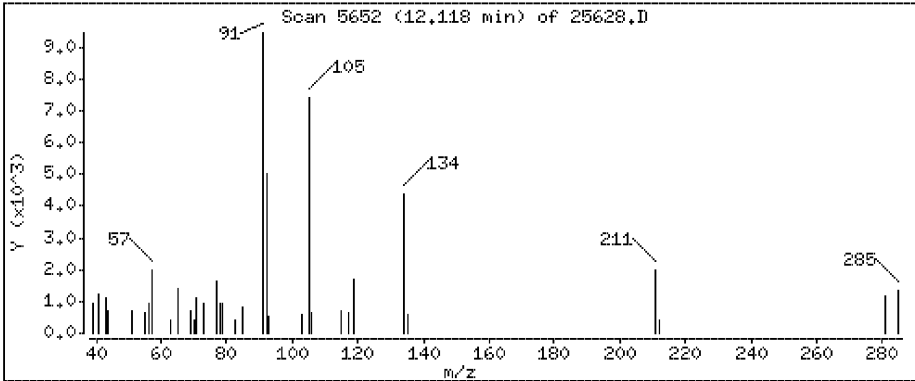
Column phase: ZB-5MSplus SN338857

Column diameter: 0.32

85 1,2,3-Trimethylbenzene

Concentration: 1.38 ppbv





Data File: \\192.168.10.12\chem\10airH,1\091318,b\25628.D

Date : 13-SEP-2018 22:27

Client ID:

Instrument: 10airH.i

Sample Info:

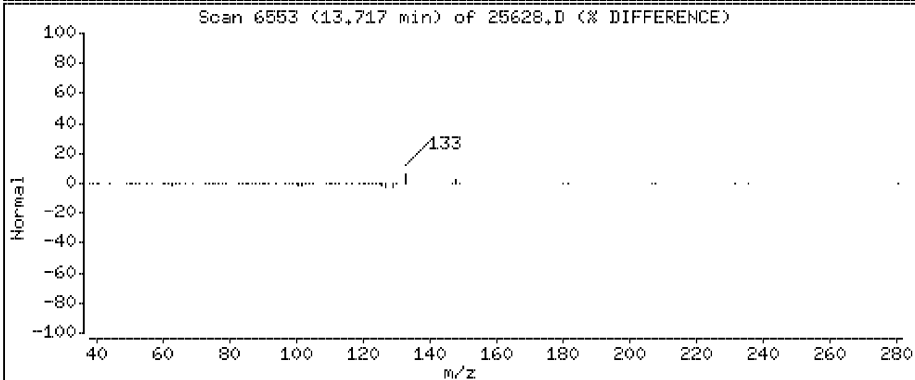
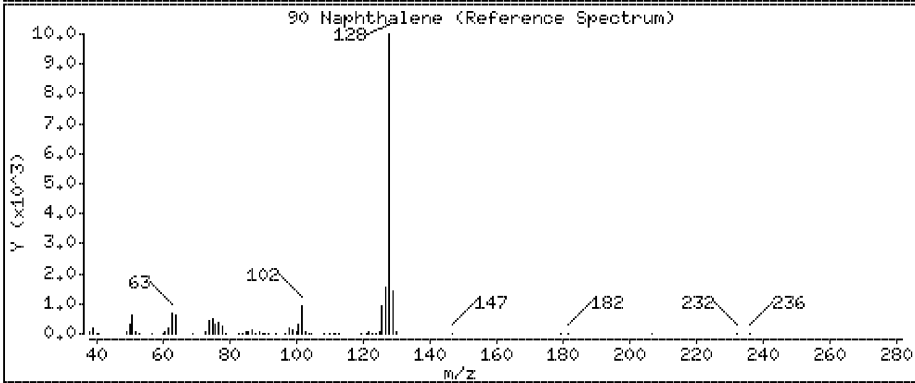
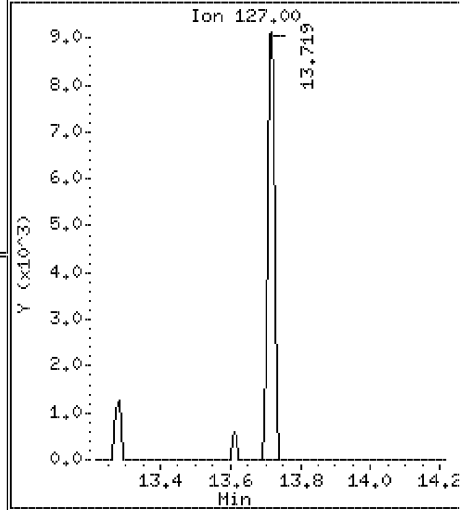
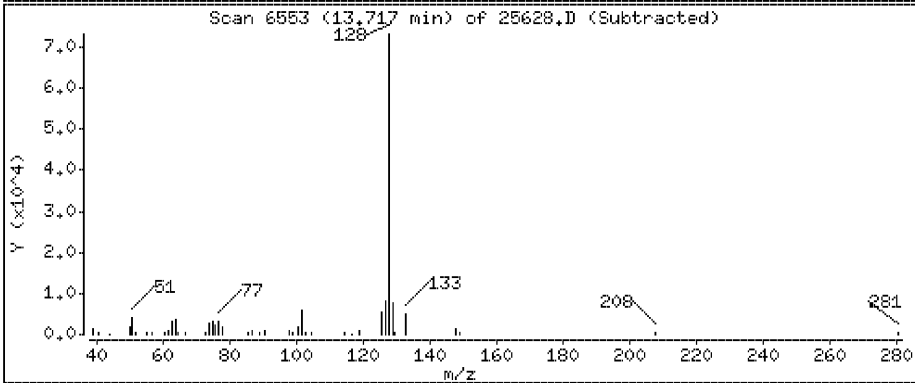
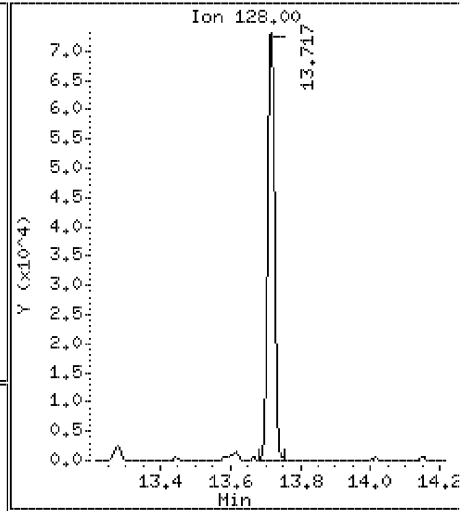
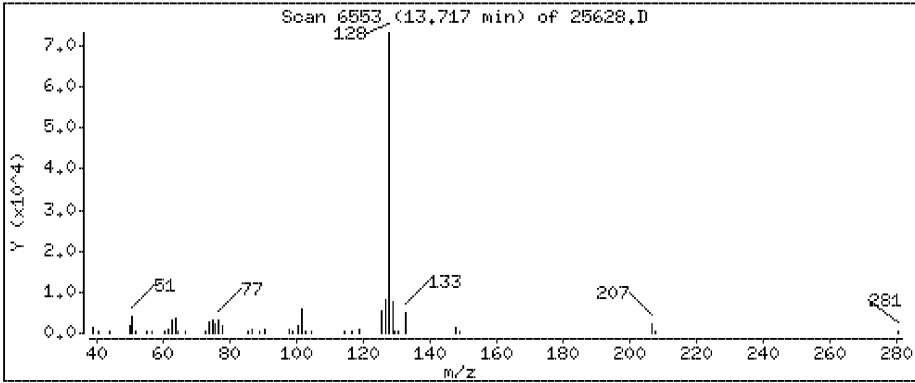
Operator: CH1

Column phase: ZB-5MSplus SN338857

Column diameter: 0.32

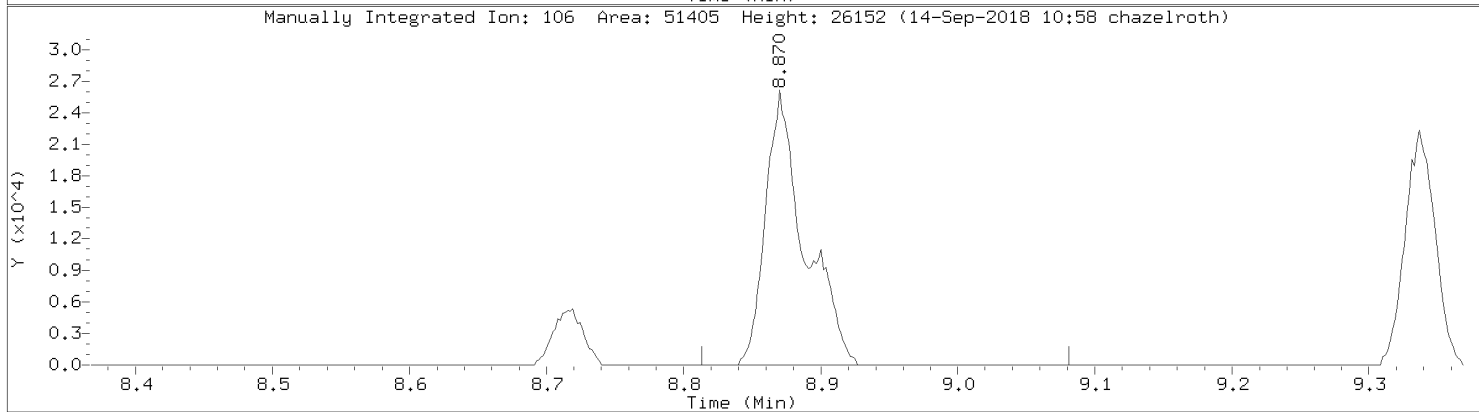
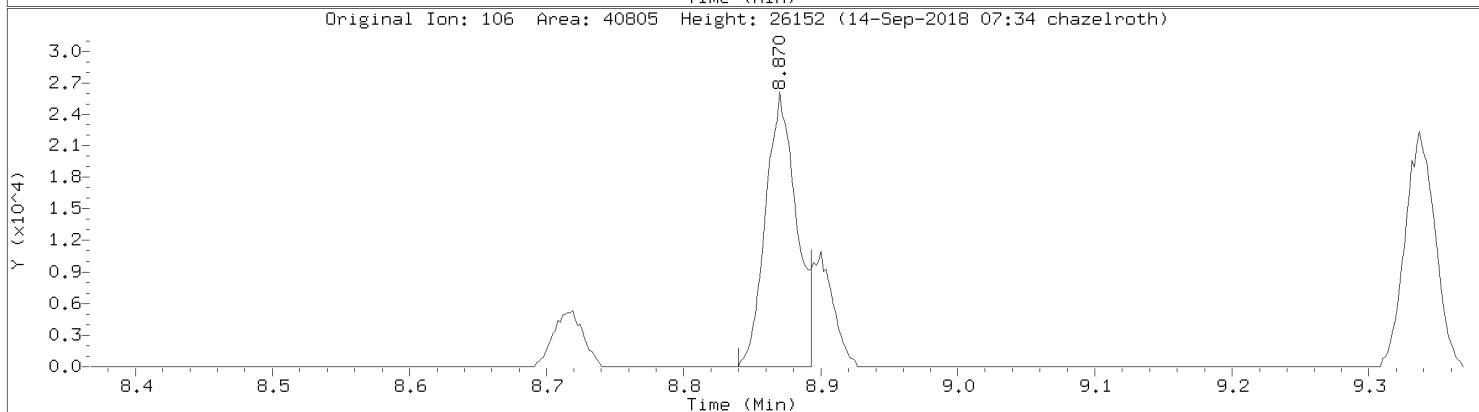
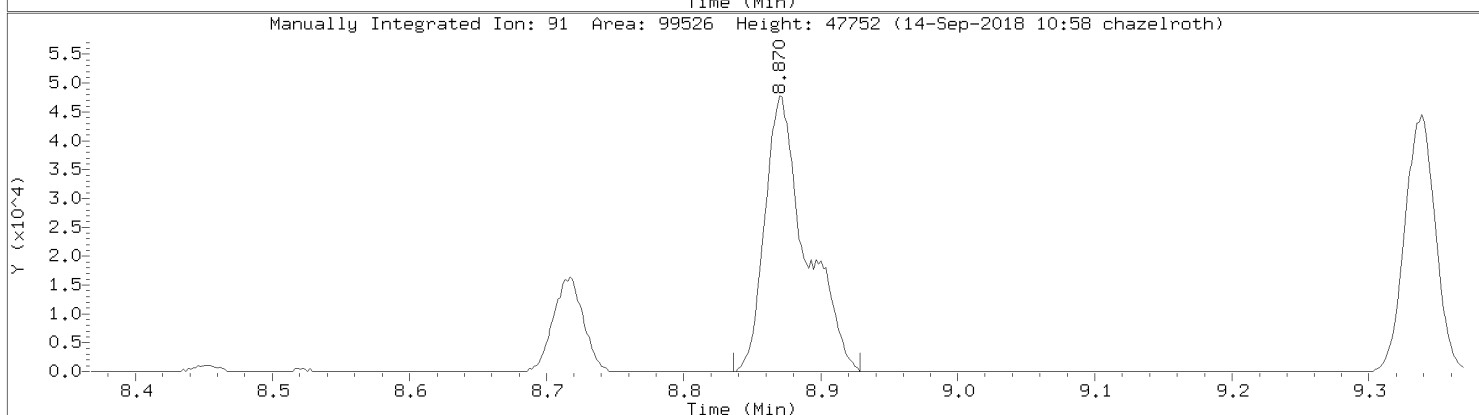
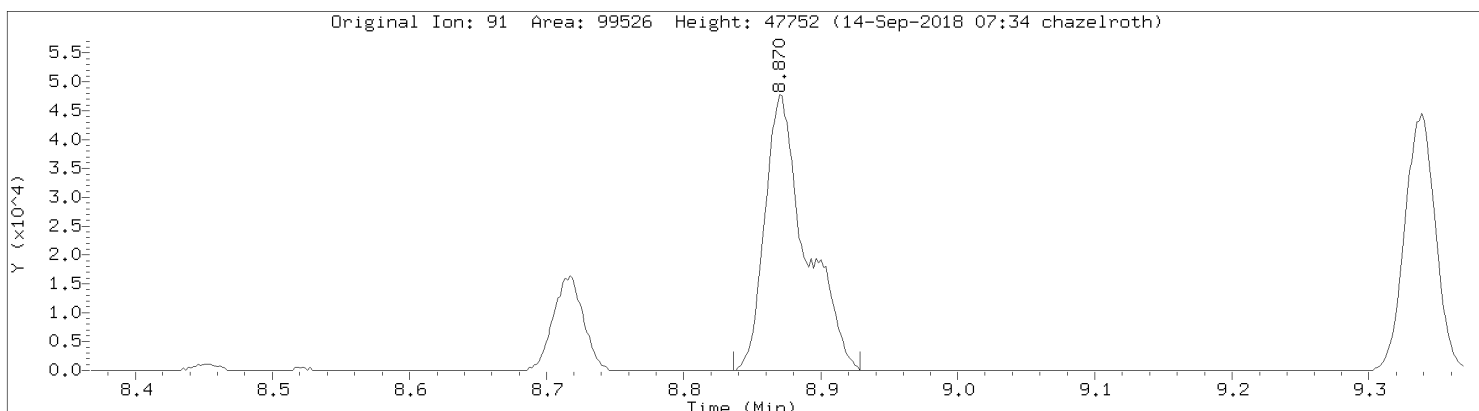
90 Naphthalene

Concentration: 3.79 ppbv



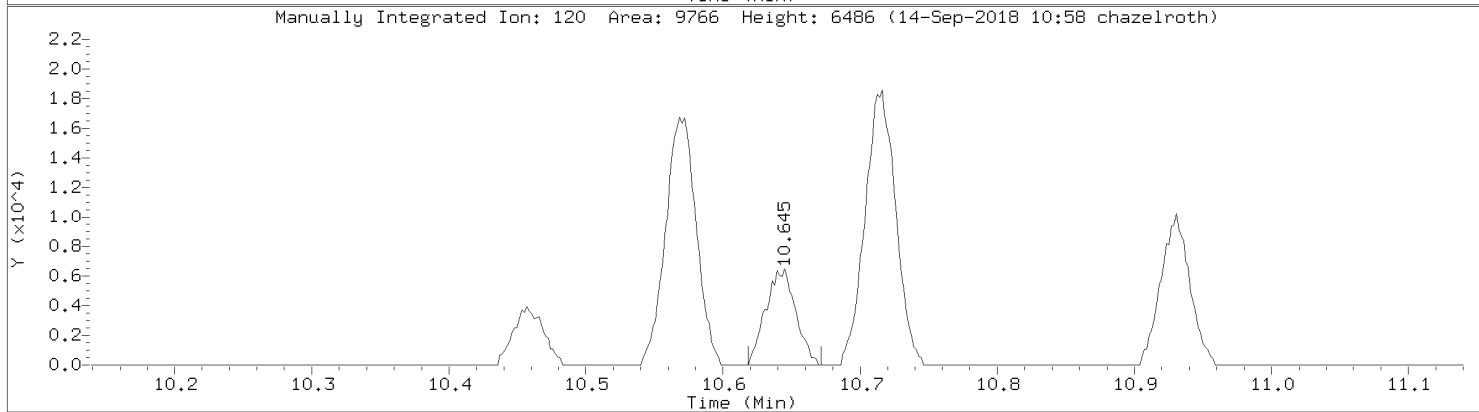
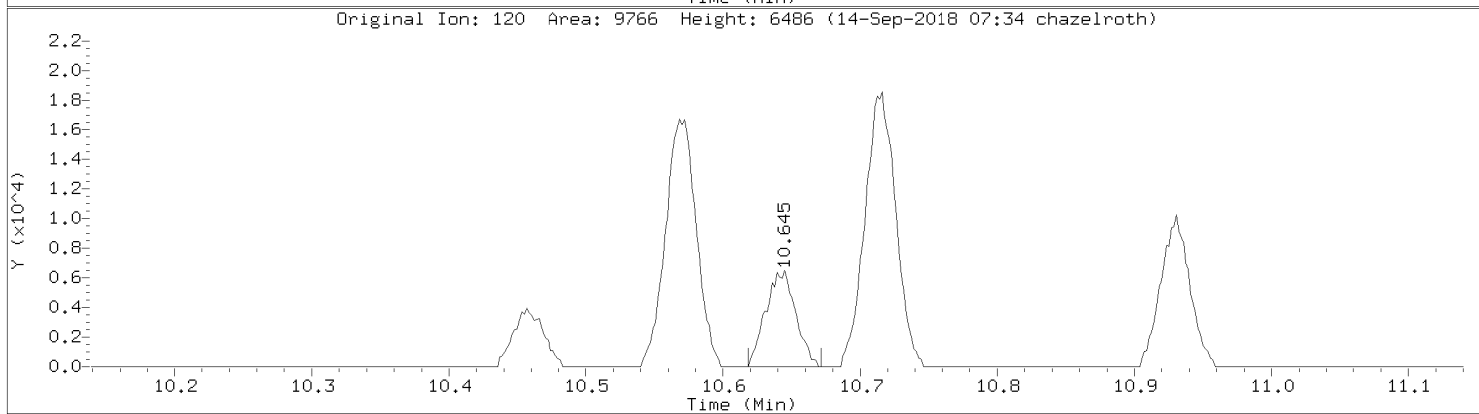
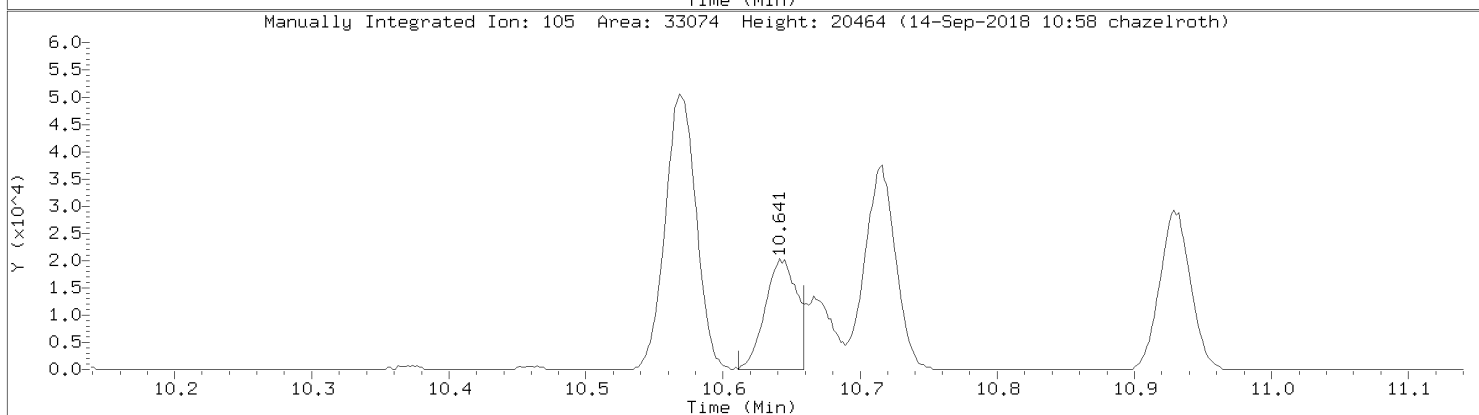
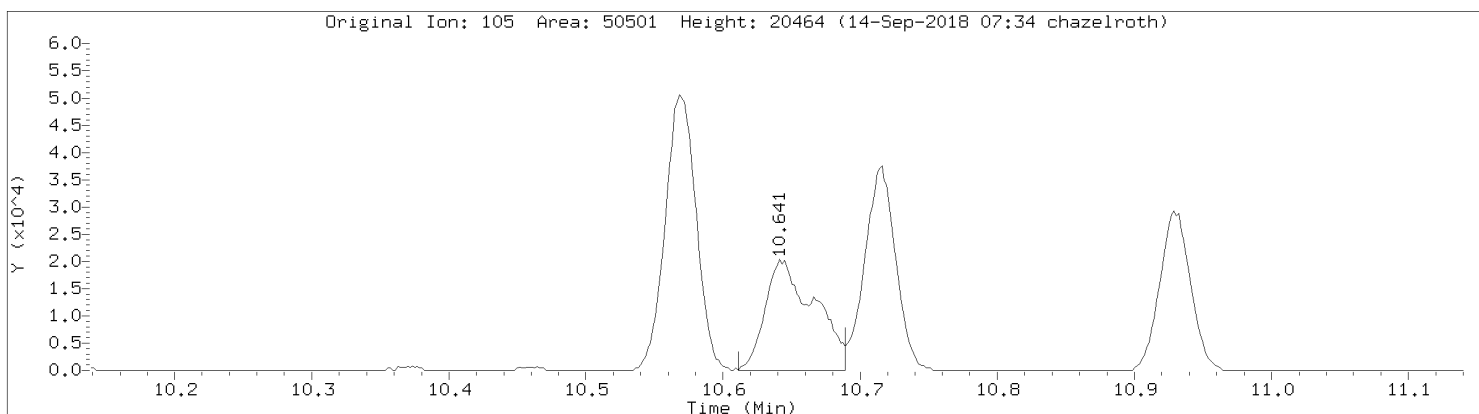
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Injection Date: 13-SEP-2018 22:27
Instrument: 10airH.i
Lab Sample ID: 10446892004

Compound: m&p-Xylene
CAS Number: 7816-60-0

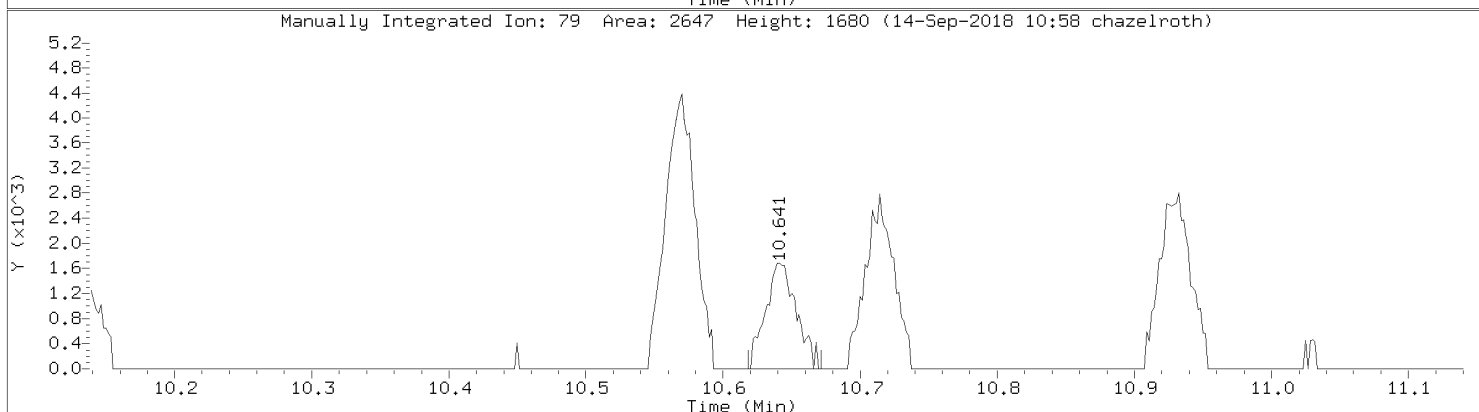
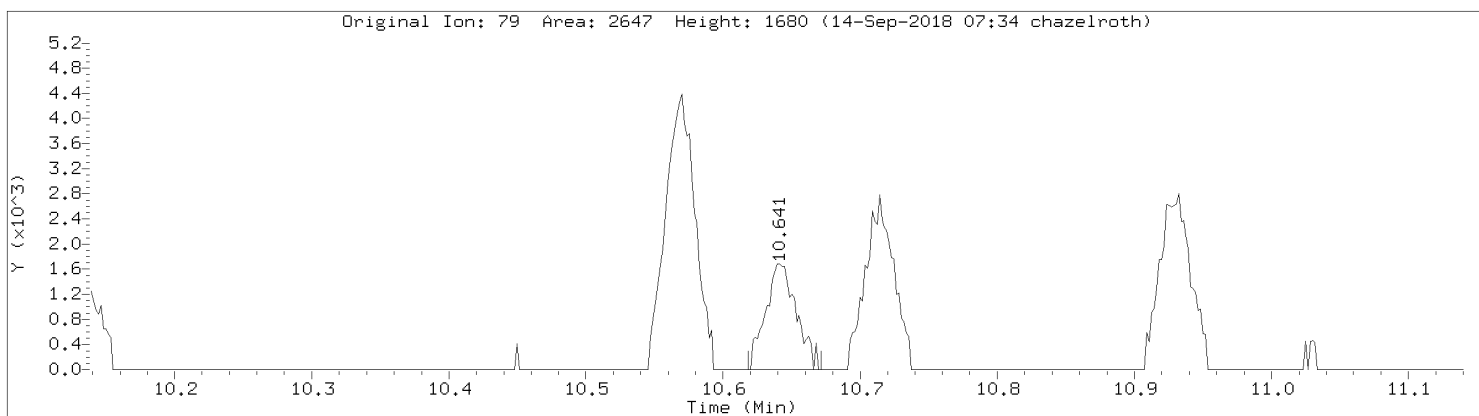


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Injection Date: 13-SEP-2018 22:27
Instrument: 10airH.i
Lab Sample ID: 10446892004

Compound: 4-Ethyltoluene
CAS Number: 622-96-8

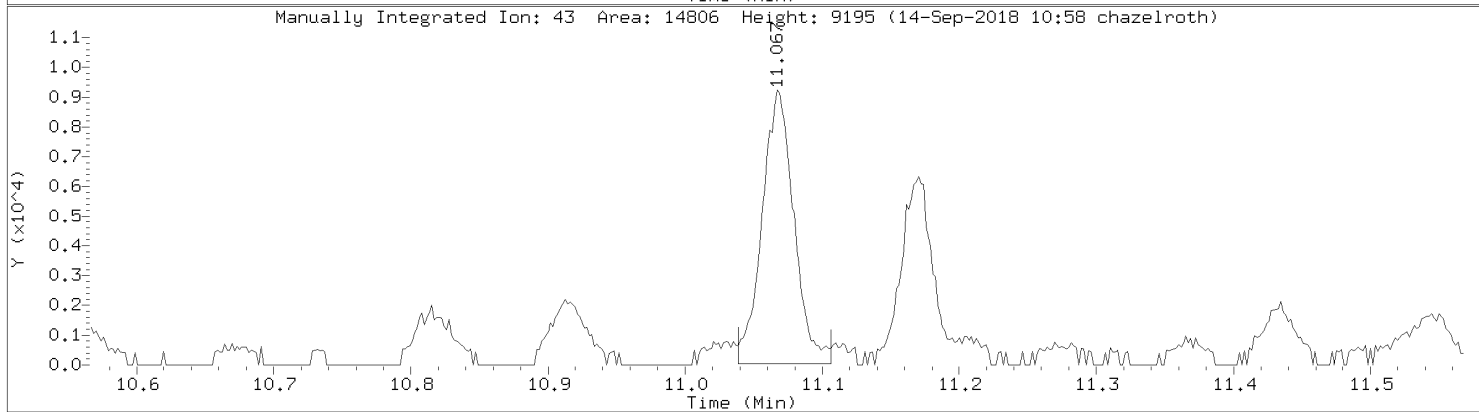
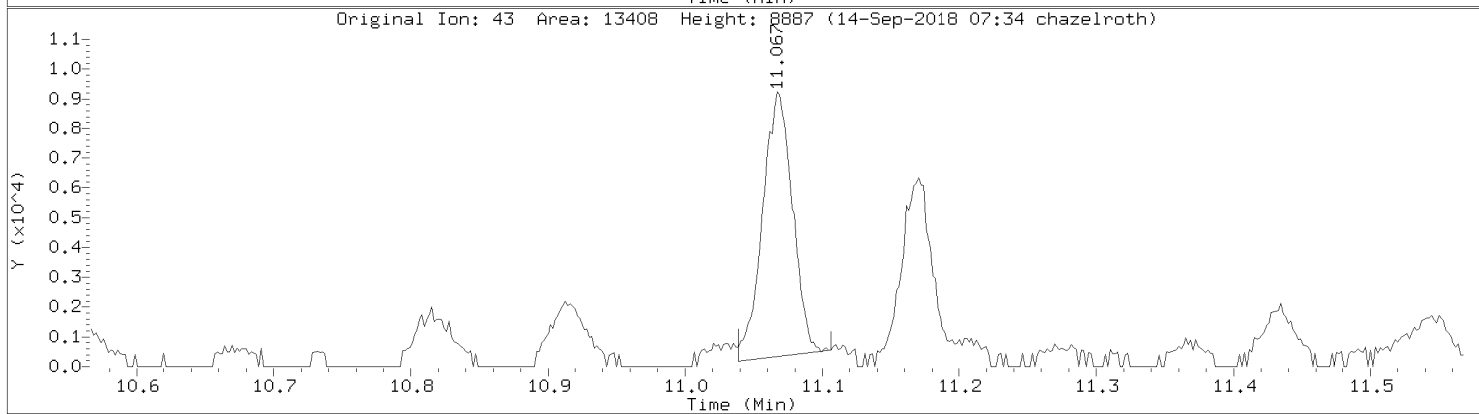
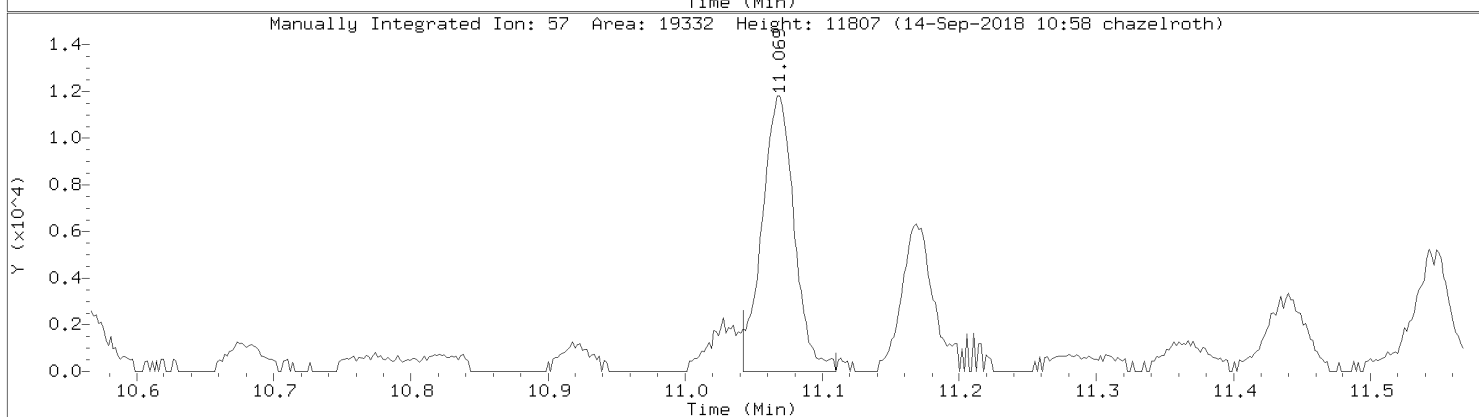
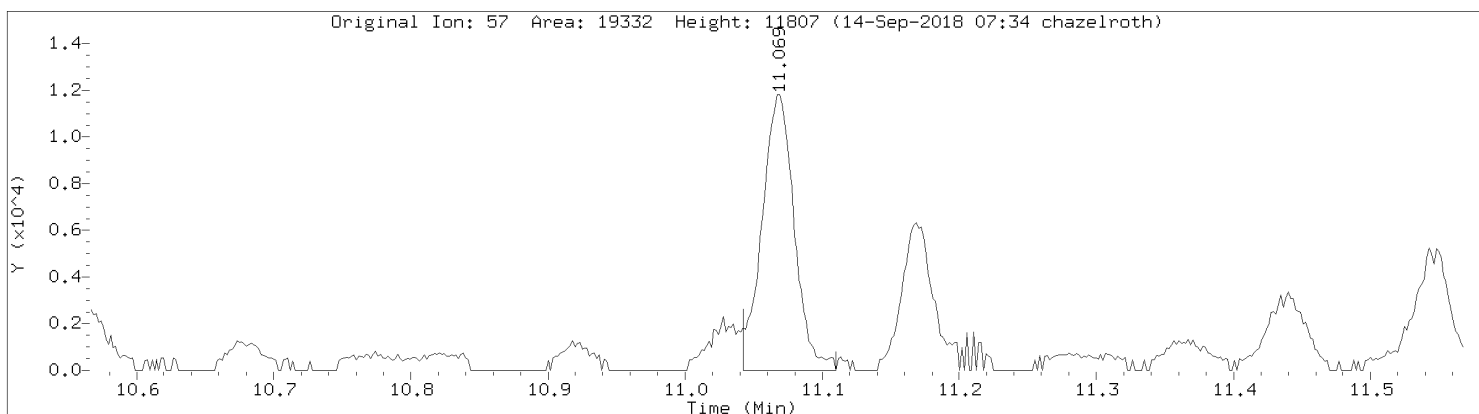


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Injection Date: 13-SEP-2018 22:27
Instrument: 10airH.i
Lab Sample ID: 10446892004

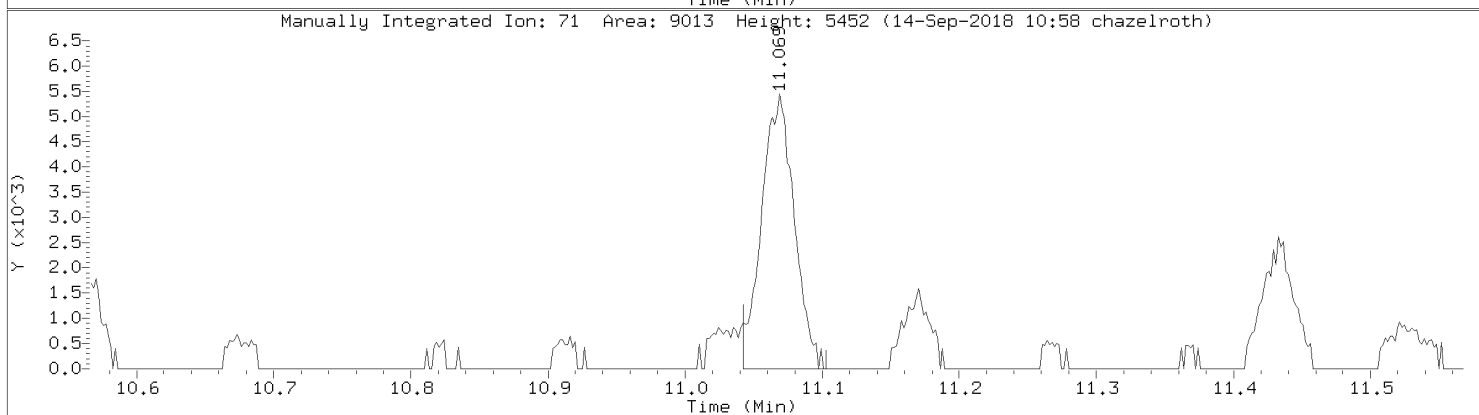
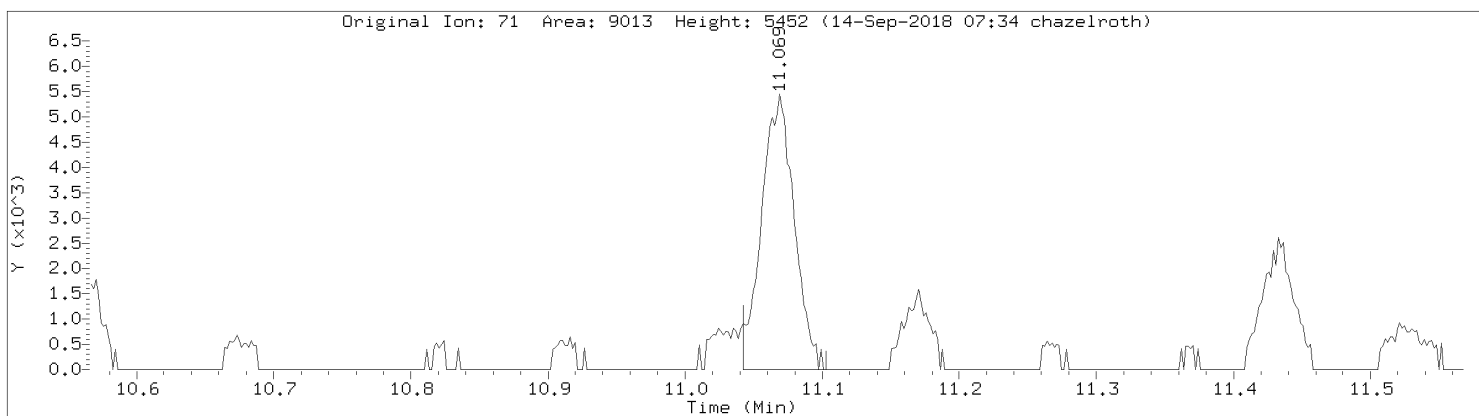


Data File: \\192.168.10.12\chem\10airH.i\091318.b\25628.D
Injection Date: 13-SEP-2018 22:27
Instrument: 10airH.i
Lab Sample ID: 10446892004

Compound: n-Decane
CAS Number: 124-18-5



Data File: \\192.168.10.12\chem\10airH.i\091318.b\25628.D
Injection Date: 13-SEP-2018 22:27
Instrument: 10airH.i
Lab Sample ID: 10446892004



Pace Analytical Services, Inc.

TO15 Analysis (UNIX)

Data file : \\192.168.10.12\chem\10airH.i\091318.b\25629.D
 Lab Smp Id: 10446892005
 Inj Date : 13-SEP-2018 22:55
 Operator : CH1 Inst ID: 10airH.i
 Smp Info :
 Misc Info : 31710
 Comment : Volatile Organic COMPOUNDS in Air
 Method : \\192.168.10.12\chem\10airH.i\091318.b\TO15_253-18.m
 Meth Date : 13-Sep-2018 14:08 nkoller Quant Type: ISTD
 Cal Date : 10-SEP-2018 14:17 Cal File: 25309.D
 Als bottle: 29
 Dil Factor: 1.77000
 Integrator: HP RTE Compound Sublist: all.sub
 Target Version: 4.14
 Processing Host: 10MNAIRRC91

Concentration Formula: Amt * DF * Uf * CpndVariable

Name	Value	Description
DF	1.770	Dilution Factor
Uf	1.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS		
							ON-COLUMN (ppbv)	FINAL (ppbv)	
1 1,1-Difluoroethane	65								(D)
2 Chlorodifluoromethane	67								(D)
3 Propylene	41		2.952	2.952	{0.541}	5691	0.37880	0.670	
4 Dichlorodifluoromethane	85		2.970	2.972	{0.545}	17992	0.20743	0.367	
5 Dichlorotetrafluoroethane	85								(D)
6 Chloromethane	50		3.048	3.046	{0.559}	1587	0.06926	0.123	
7 Vinyl chloride	62								
8 1,3-Butadiene	54								(D)
10 Chloroethane	64								
11 Ethanol	45		3.322	3.318	{0.609}	9806	1.37887	2.44	
12 Vinyl Bromide	106								
13 Isopentane	43		3.430	3.432	{0.629}	2796	0.15233	0.270	
14 Freon 123	83								
15 Trichlorofluoromethane	101		3.492	3.492	{0.640}	6413	0.10394	0.184	
16 Acrolein	56								(D)
17 Acetone	43		3.515	3.513	{0.645}	319223	12.1106	21.4 (M)	
18 Isopropyl Alcohol	45		3.540	3.536	{0.649}	10121	0.34754	0.615 (M)	
19 1,1-Dichloroethene	61								
20 Acrylonitrile	53								(D)
21 Tert Butyl Alcohol (TBA)	59		3.739	3.733	{0.686}	34141	0.64610	1.14	
22 Methyl Acetate	43								(D)
23 Freon 113	101		3.746	3.742	{0.687}	2794	0.04109	0.0727 (a)	
24 Allyl Chloride	76								

Compounds	QUANT	SIG						CONCENTRATIONS	
			MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ppbv)	FINAL (ppbv)
25 Methylene chloride	49		3.822	3.820	(0.701)	42987	0.90617	1.60	
26 Carbon Disulfide	76		3.925	3.927	(0.720)	50317	0.64257	1.14	
27 Methyl Tert Butyl Ether	73		Compound Not Detected.						
28 trans-1,2-dichloroethene	96		Compound Not Detected.						
29 Vinyl Acetate	43		Compound Not Detected.						(D)
30 1,1-Dichloroethane	63		Compound Not Detected.						
31 Methyl Ethyl Ketone	72		4.330	4.326	(0.794)	35127	2.44583	4.33 (QM)	
32 Di-isopropyl Ether	45		Compound Not Detected.						
33 n-Hexane	57		4.362	4.362	(0.800)	11830	0.33965	0.601 (QM)	
34 Ethyl Acetate	43		Compound Not Detected.						(D)
35 cis-1,2-Dichloroethene	96		Compound Not Detected.						
36 Ethyl Tert-Butyl Ether	59		Compound Not Detected.						
37 Chloroform	83		4.685	4.685	(0.859)	30624	0.44248	0.783	
38 Tetrahydrofuran	42		4.763	4.752	(0.873)	6057	0.33090	0.586 (Q)	
39 1,1,1-Trichloroethane	97		Compound Not Detected.						
40 1,2-Dichloroethane	62		Compound Not Detected.						
41 Benzene	78		5.240	5.238	(0.961)	3447	0.04163	0.0737 (a)	
42 Carbon tetrachloride	117		5.253	5.256	(0.963)	922	0.01321	0.0234 (a)	
43 Cyclohexane	56		Compound Not Detected.						(D)
44 Tert Amyl Methyl Ether	73		Compound Not Detected.						(D)
* 45 1,4-Difluorobenzene	114		5.453	5.453	(1.000)	889236	10.0000		
46 2,2,4-Trimethylpentane	57		Compound Not Detected.						(D)
47 Heptane	43		Compound Not Detected.						(D)
48 Trichloroethene	130		Compound Not Detected.						(D)
49 1,2-Dichloropropane	63		Compound Not Detected.						
50 Methyl methacrylate	69		Compound Not Detected.						(D)
51 1,4-Dioxane	88		Compound Not Detected.						
52 Bromodichloromethane	83		Compound Not Detected.						(D)
53 Methylcyclohexane	98		Compound Not Detected.						(D)
54 Methyl Isobutyl Ketone	43		6.342	6.333	(1.163)	3474	0.08463	0.150 (M)	
55 cis-1,3-Dichloropropene	75		Compound Not Detected.						
56 trans-1,3-Dichloropropene	75		Compound Not Detected.						
57 Toluene	91		6.963	6.960	(1.277)	32592	0.37428	0.662	
58 1,1,2-Trichloroethane	97		Compound Not Detected.						
59 Methyl Butyl Ketone	43		7.189	7.182	(0.851)	14857	0.44087	0.780	
60 n-Octane	43		Compound Not Detected.						(D)
61 Dibromochloromethane	129		Compound Not Detected.						
62 Tetrachloroethene	166		7.704	7.705	(0.912)	2938	0.04841	0.0857 (a)	
63 1,2-Dibromoethane	107		Compound Not Detected.						
* 64 Chlorobenzene - d5	117		8.451	8.451	(1.000)	764297	10.0000		
65 Chlorobenzene	112		Compound Not Detected.						
66 Ethyl Benzene	91		8.713	8.713	(1.031)	23219	0.21863	0.387	
67 m&p-Xylene	91		8.870	8.868	(1.050)	87880	1.08798	1.93 (M)	
68 n-Nonane	43		9.240	9.237	(1.093)	9092	0.40682	0.720	
69 Styrene	104		Compound Not Detected.						(D)
70 o-Xylene	91		9.335	9.338	(1.105)	63667	0.73975	1.31	
71 Bromoform	173		Compound Not Detected.						
72 1,1,2,2-Tetrachloroethane	83		Compound Not Detected.						
73 Isopropylbenzene	105		9.886	9.886	(1.170)	5708	0.25569	0.453	
74 N-Propylbenzene	91		10.456	10.454	(1.237)	24527	0.30414	0.538	
75 4-Ethyltoluene	105		10.641	10.639	(1.259)	30412	0.46820	0.829	
76 1,3,5-Trimethylbenzene	105		10.715	10.713	(1.268)	53381	0.59436	1.05	
77 n-Decane	57		11.067	11.067	(2.029)	19766	0.64768	1.15 (M)	
78 Tert-Butyl Benzene	119		Compound Not Detected.						

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN (ppbv)	FINAL (ppbv)
79 1,2,4-Trimethylbenzene	105		11.205	11.203	(1.326)	213765	2.08541	3.69
80 Sec- Butylbenzene	105		11.462	11.462	(1.356)	5992	0.22379	0.396
81 1,3-Dichlorobenzene	146		Compound Not Detected.					
82 Benzyl Chloride	91		Compound Not Detected.					(D)
83 1,4-Dichlorobenzene	146		Compound Not Detected.					(D)
84 p-Isopropyltoluene	119		Compound Not Detected.					(D)
85 1,2,3-Trimethylbenzene	105		11.684	11.683	(1.383)	67695	0.75741	1.34
86 1,2-Dichlorobenzene	146		Compound Not Detected.					(D)
87 N-Butylbenzene	91		12.117	12.114	(1.434)	13620	0.42631	0.755
88 1,2-Dibromo-3-Chloropropane	157		Compound Not Detected.					
89 1,2,4-Trichlorobenzene	180		13.578	13.574	(1.607)	1201	0.46074	0.816
90 Naphthalene	128		13.715	13.715	(1.623)	81436	2.18578	3.87
91 Hexachlorobutadiene	225		13.828	13.825	(1.636)	2476	0.27601	0.489

QC Flag Legend

- a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
- Q - Qualifier signal failed the ratio test.
- M - Compound response manually integrated.
- D - User disabled compound identification.

Data File: \\192.168.10.12\chem\10airH.i\091318.b\25629.D
Report Date: 14-Sep-2018 11:04

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10airH.i
Lab File ID: 25629.D
Lab Smp Id: 10446892005
Analysis Type: VOA
Quant Type: ISTD
Operator: CH1
Method File: \\192.168.10.12\chem\10airH.i\091318.b\TO15_253-18.m
Misc Info: 31710

Calibration Date: 13-SEP-2018
Calibration Time: 08:29

Level: LOW
Sample Type: AIR

Test Mode:

Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
45 1,4-Difluorobenze	1034069	620441	1447697	889236	-14.01
64 Chlorobenzene - d	896862	538117	1255607	764297	-14.78

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
45 1,4-Difluorobenze	5.45	5.12	5.78	5.45	0.00
64 Chlorobenzene - d	8.45	8.12	8.78	8.45	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: \\192.168.10.12\chem\10airH.i\091318.b\25629.D

Date : 13-SEP-2018 22:55

Client ID:

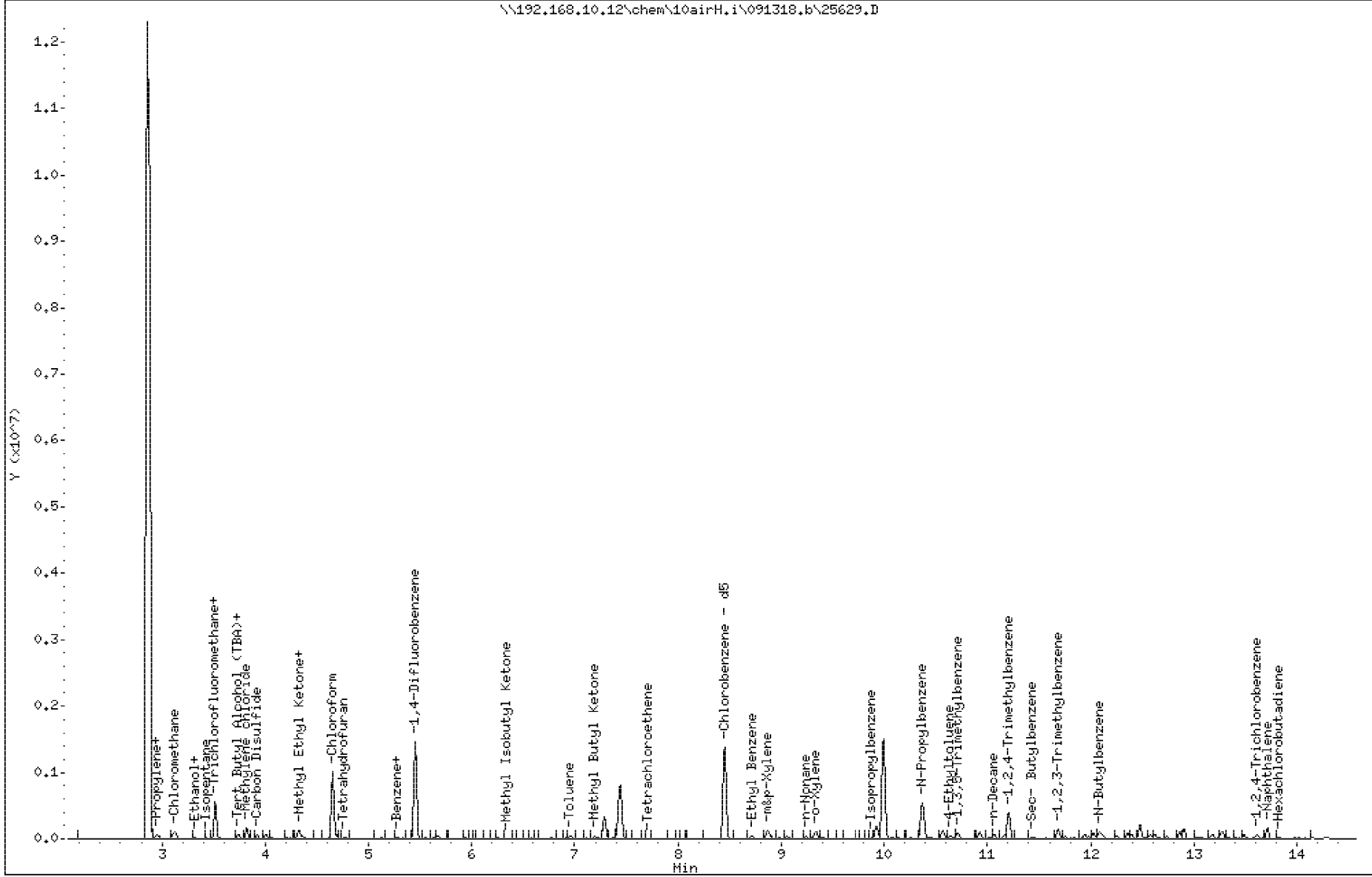
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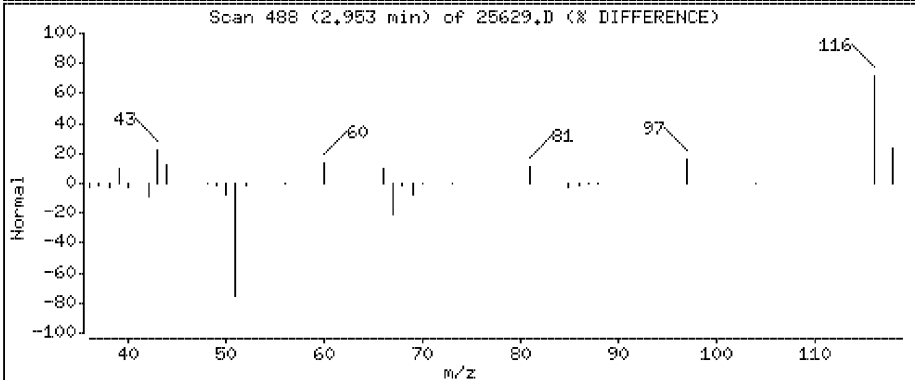
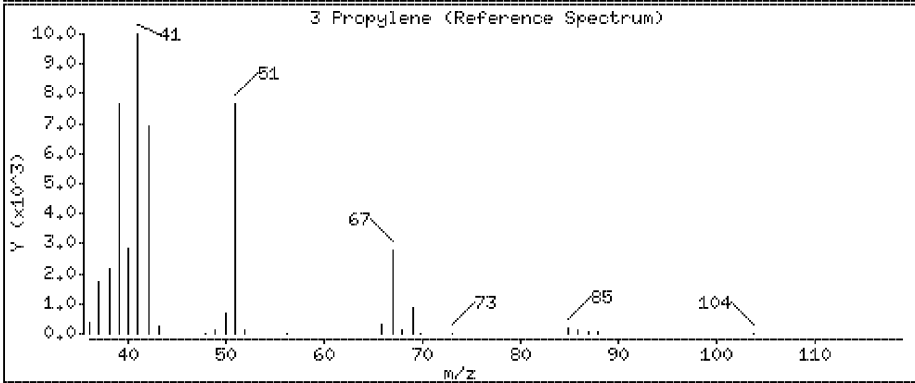
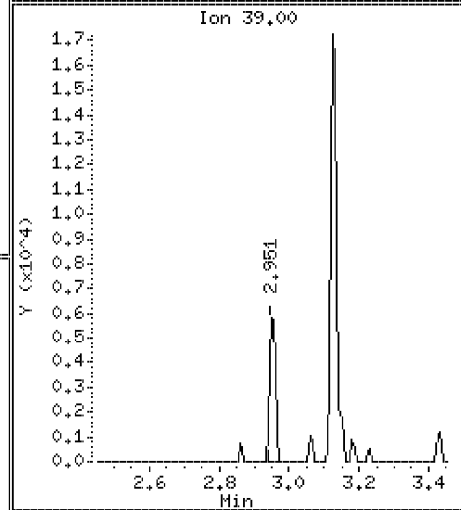
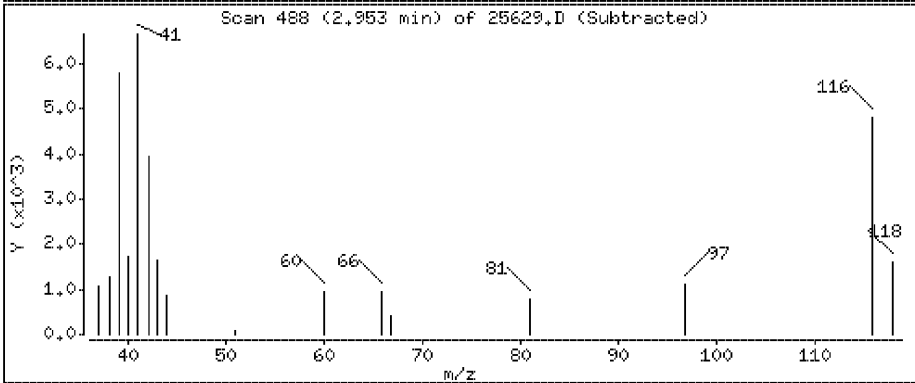
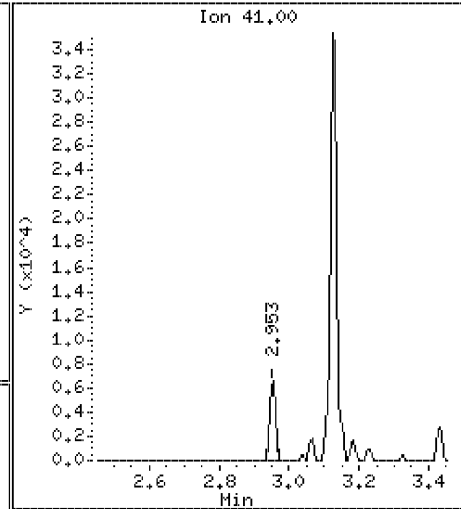
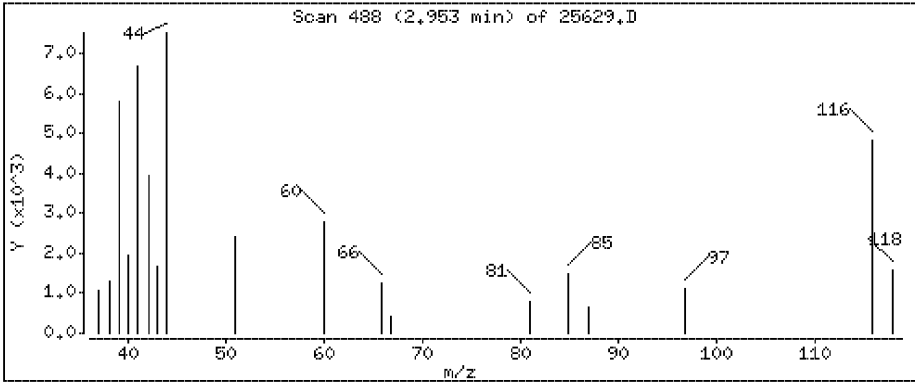
Column phase: ZB-5MSplus SN338857

Instrument: 10airH.i

Operator: CH1

Column diameter: 0,32





Data File: \\192.168.10.12\chem\10airH,1\091318,b\25629.D

Date : 13-SEP-2018 22:55

Client ID:

Instrument: 10airH.i

Sample Info:

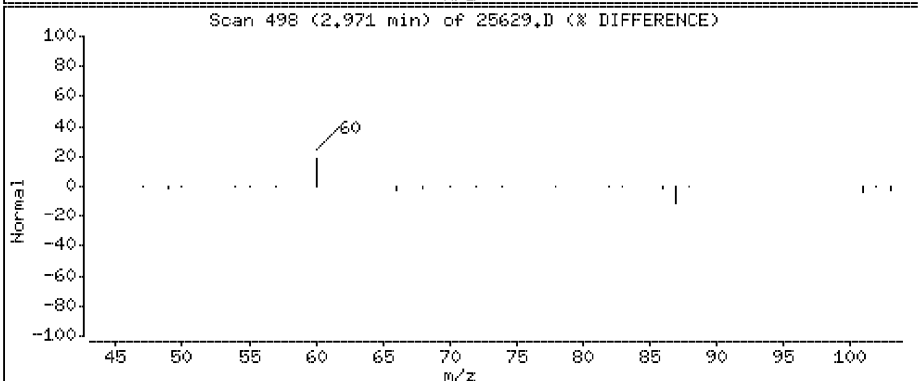
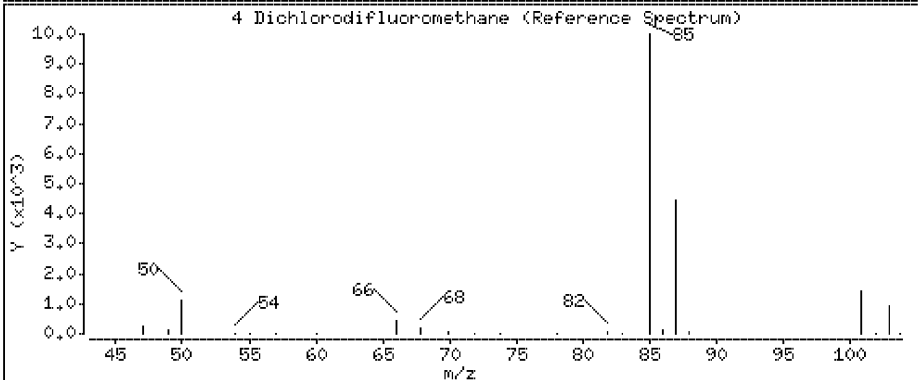
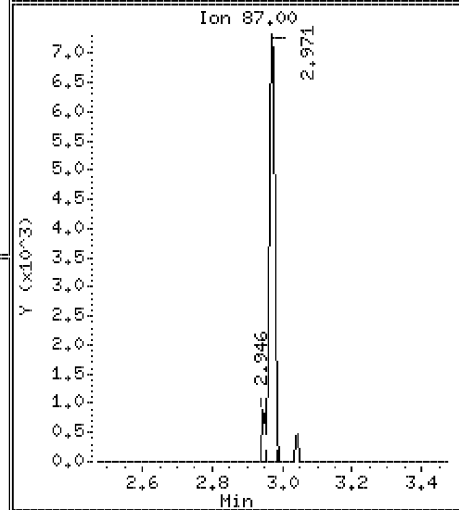
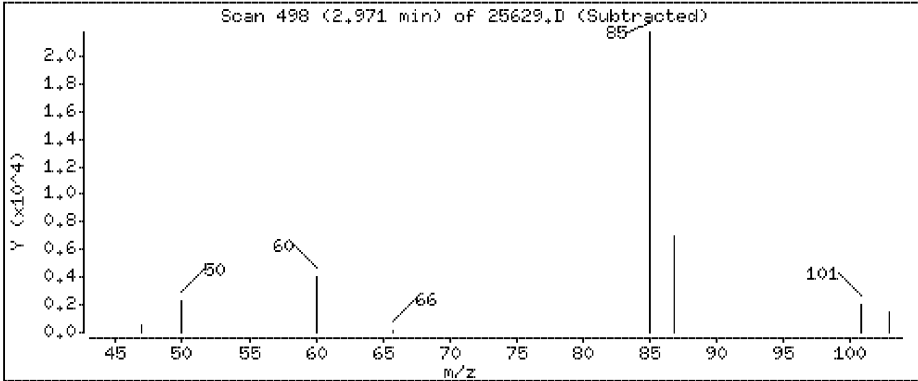
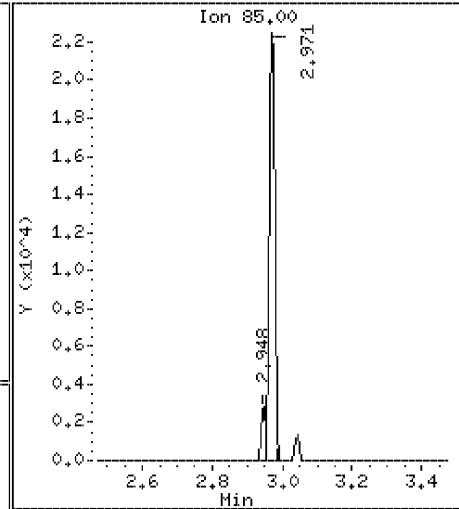
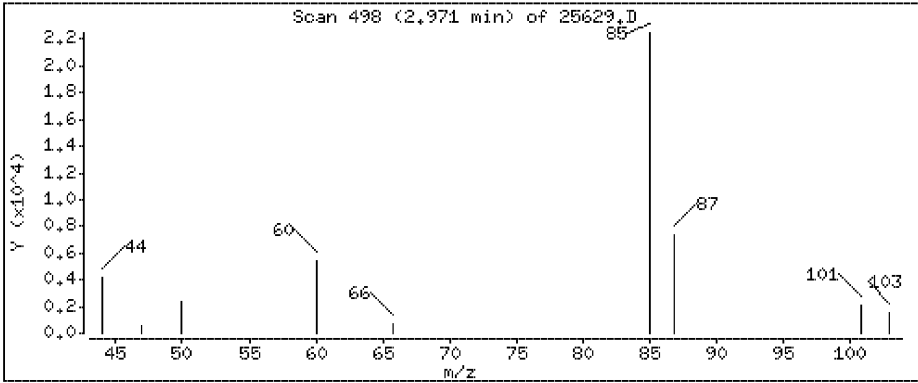
Operator: CH1

Column phase: ZB-5MSplus SN338857

Column diameter: 0,32

4 Dichlorodifluoromethane

Concentration: 0,367 ppbv



Data File: \\192.168.10.12\chem\10airH,1\091318,b\25629.D

Date : 13-SEP-2018 22:55

Client ID:

Instrument: 10airH.i

Sample Info:

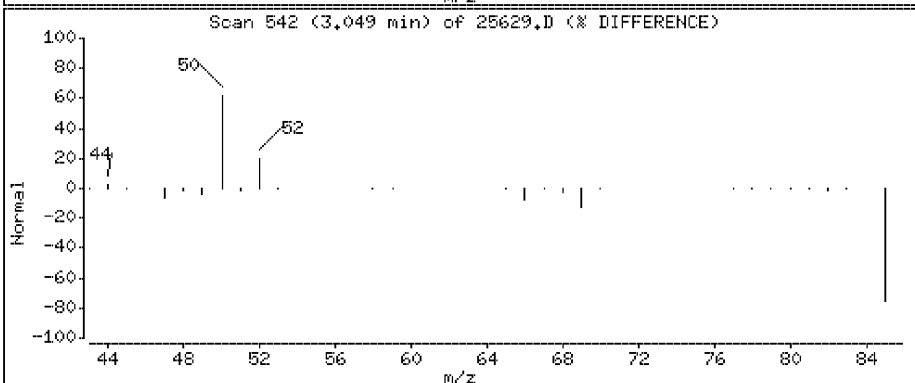
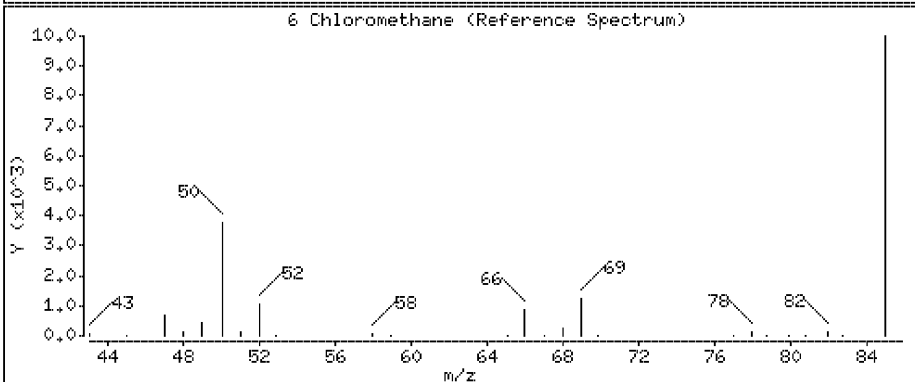
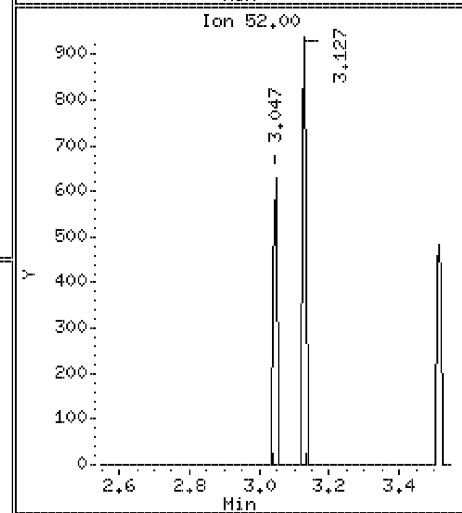
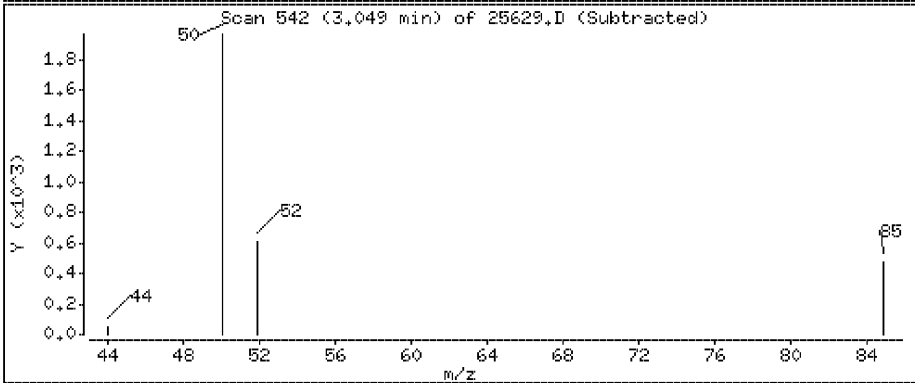
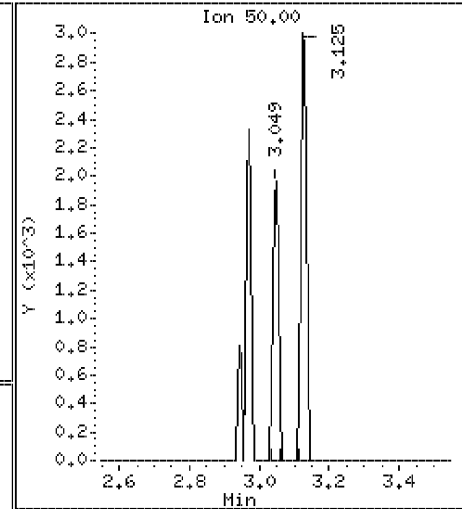
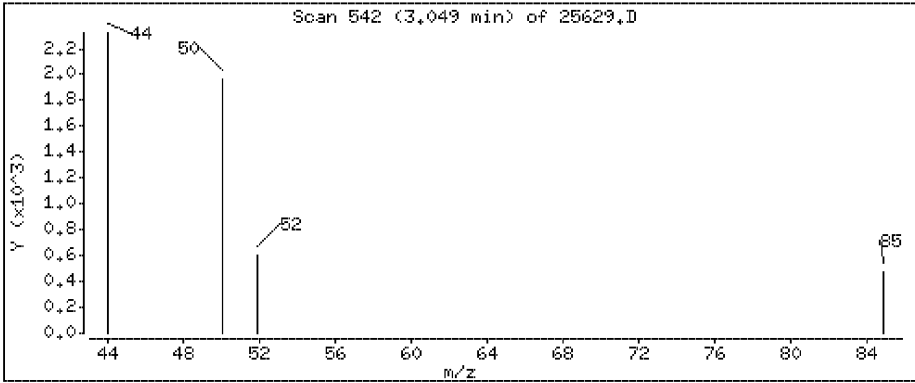
Operator: CH1

Column phase: ZB-5MSplus SN338857

Column diameter: 0,32

6 Chloromethane

Concentration: 0,123 ppbv



Data File: \\192.168.10.12\chem\10airH,1\091318,b\25629.D

Date : 13-SEP-2018 22:55

Client ID:

Instrument: 10airH.i

Sample Info:

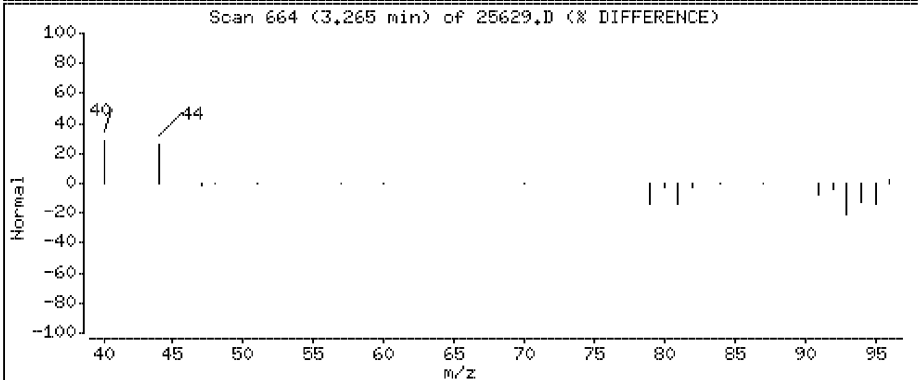
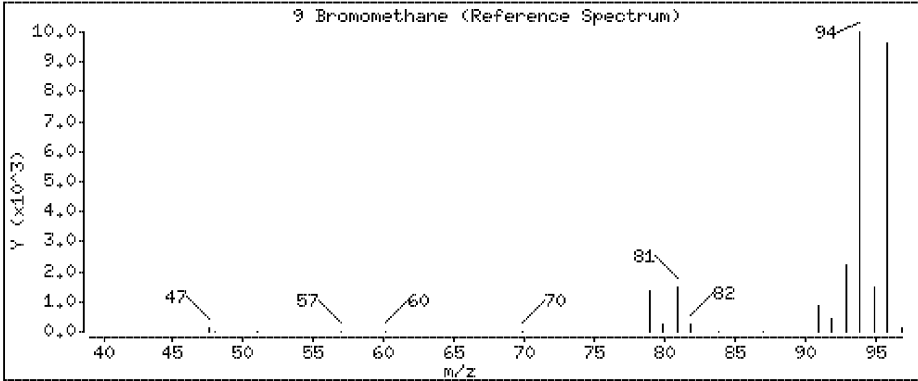
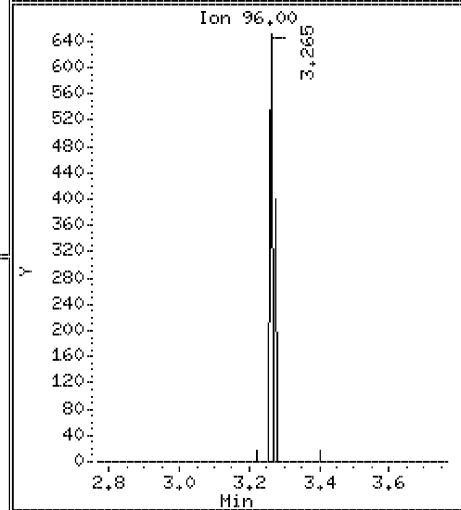
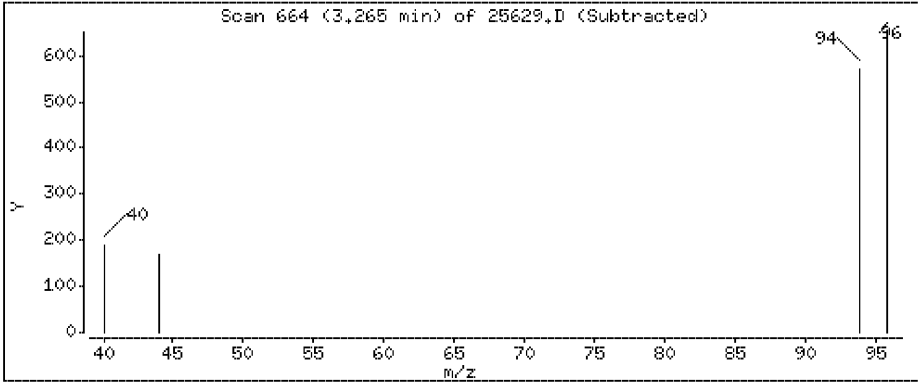
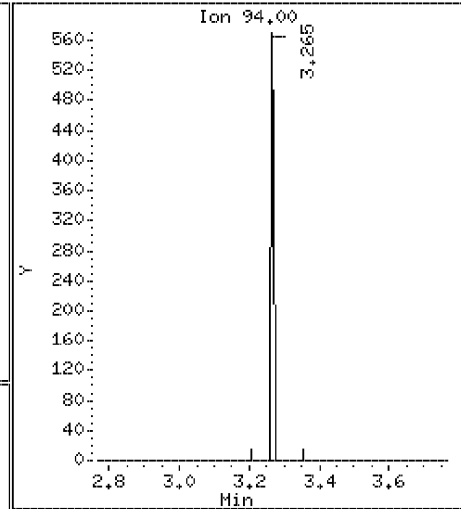
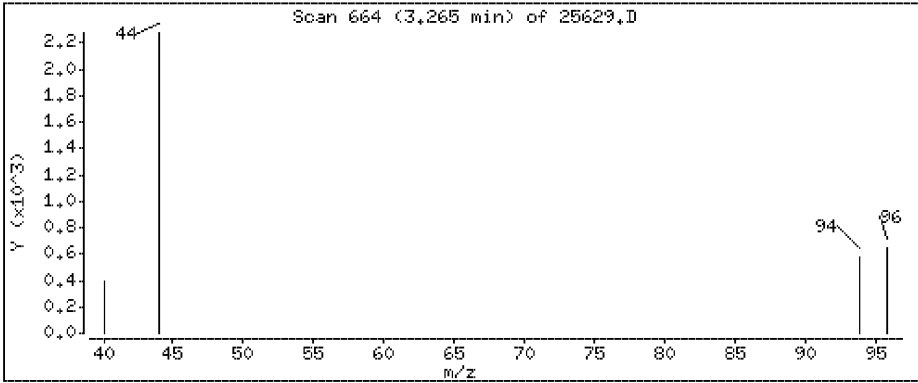
Operator: CH1

Column phase: ZB-5MSplus SN338857

Column diameter: 0.32

9 Bromomethane

Concentration: 0.0157 ppbv



Data File: \\192.168.10.12\chem\10airH,1\091318,b\25629.D

Date : 13-SEP-2018 22:55

Client ID:

Instrument: 10airH.i

Sample Info:

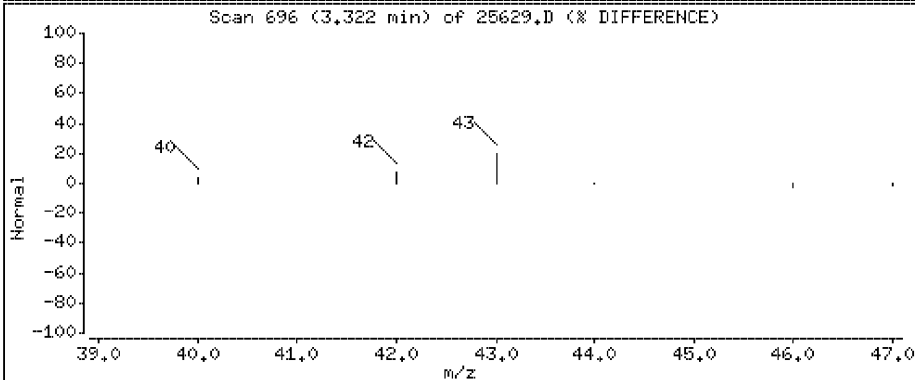
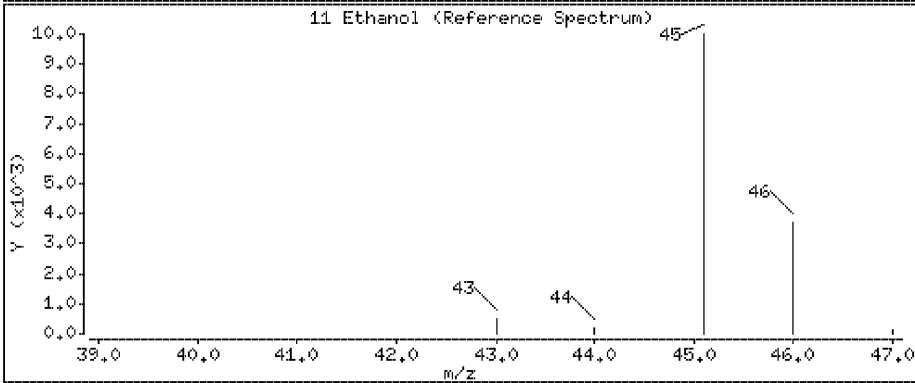
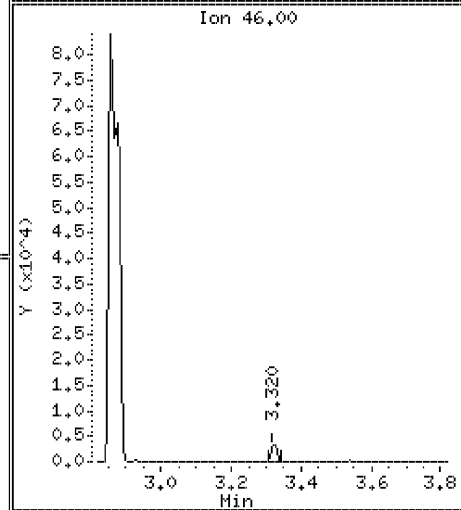
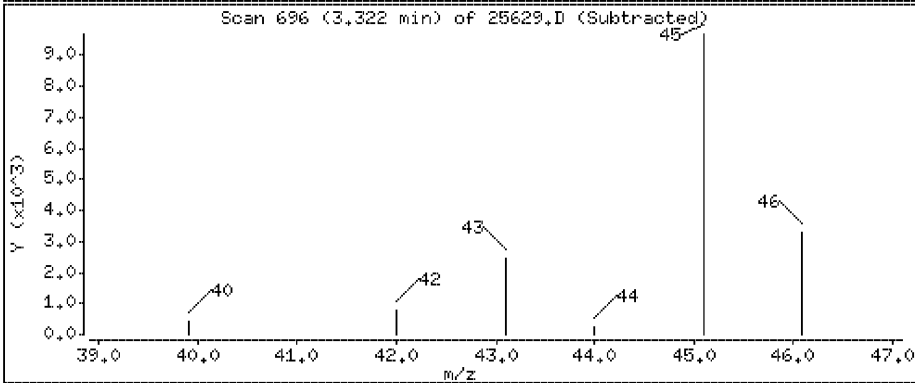
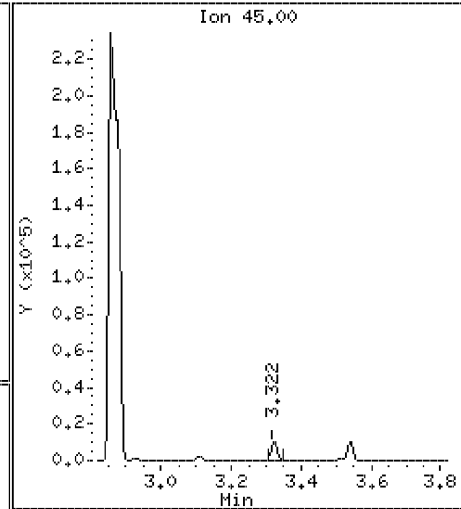
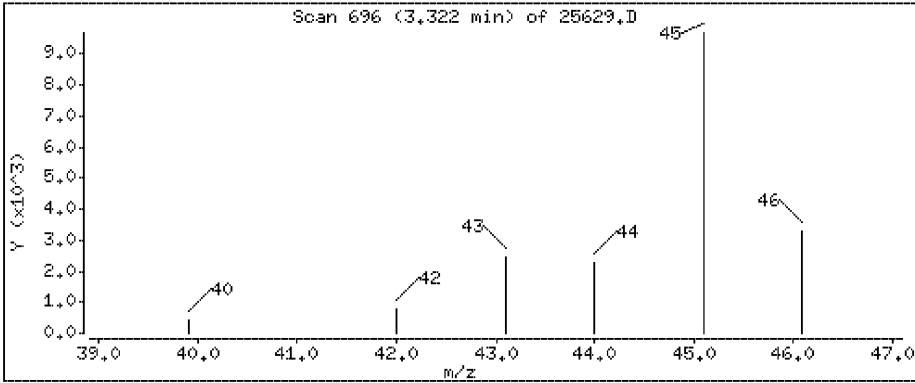
Operator: CH1

Column phase: ZB-5MSplus SN338857

Column diameter: 0,32

11 Ethanol

Concentration: 2.44 ppbv



Data File: \\192.168.10.12\chem\10airH,1\091318,b\25629.D

Date : 13-SEP-2018 22:55

Client ID:

Instrument: 10airH.i

Sample Info:

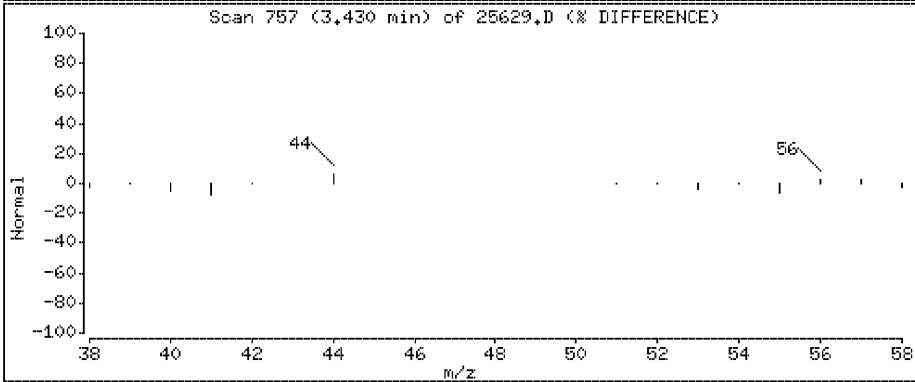
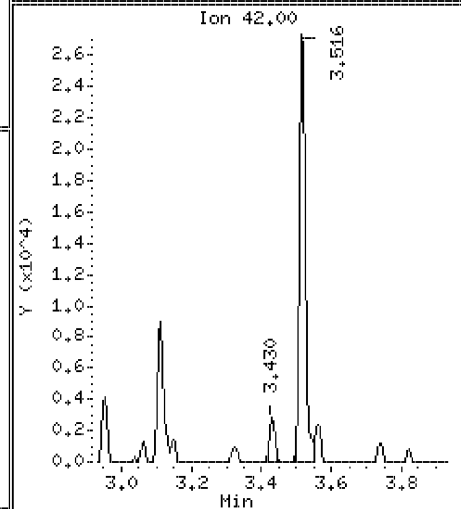
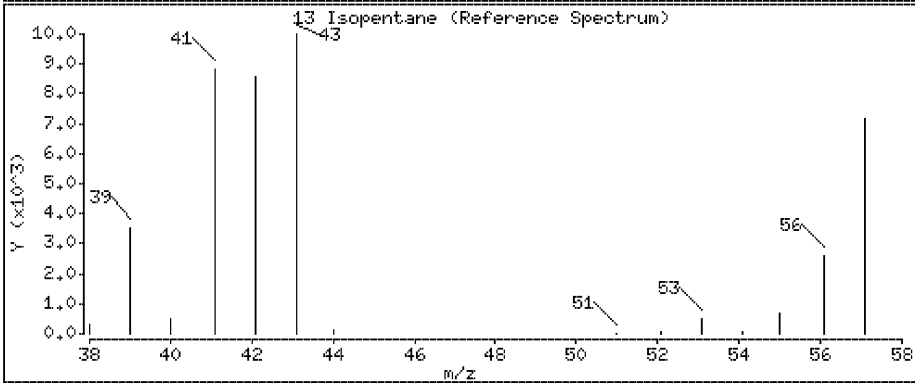
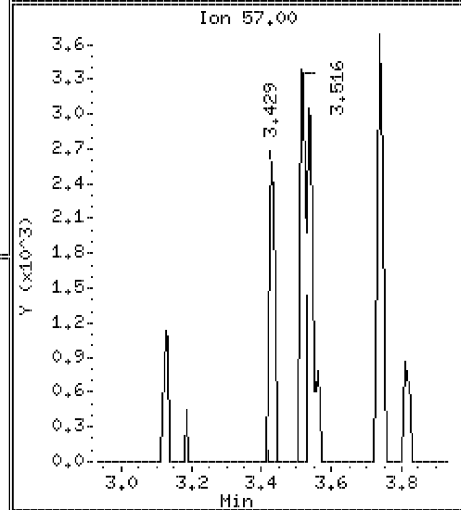
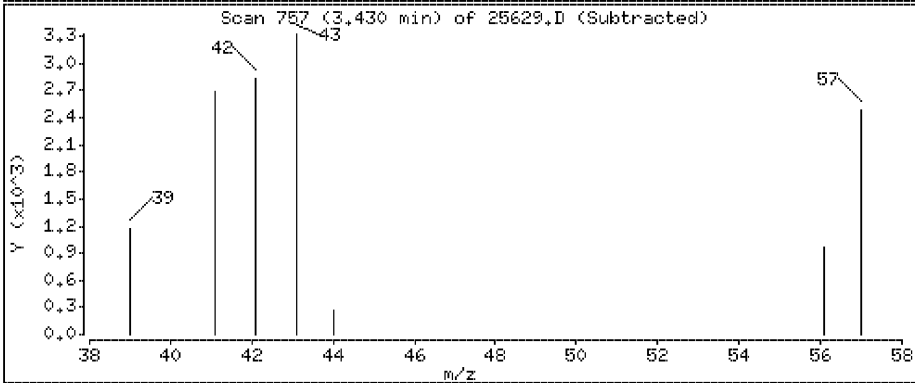
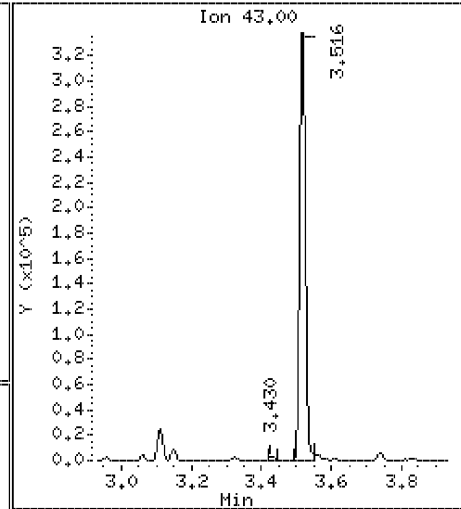
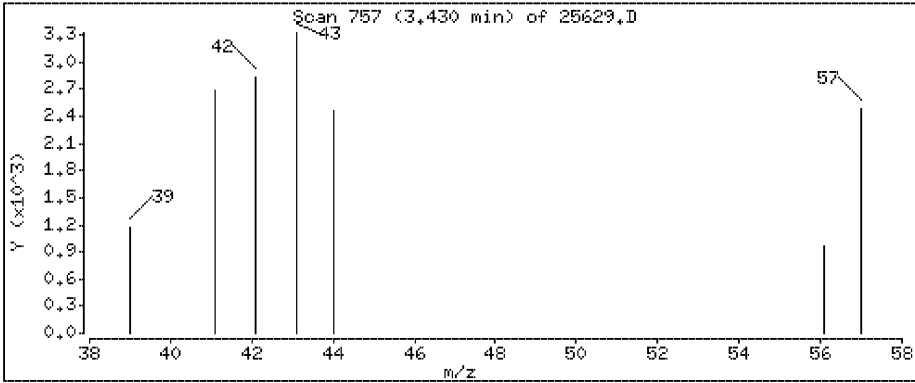
Operator: CH1

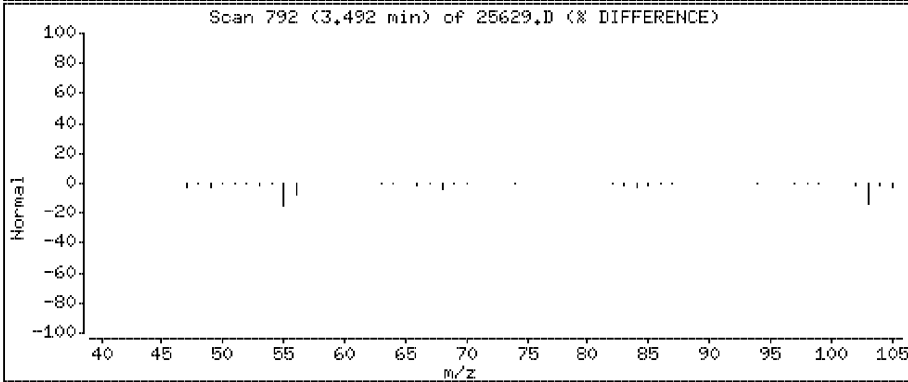
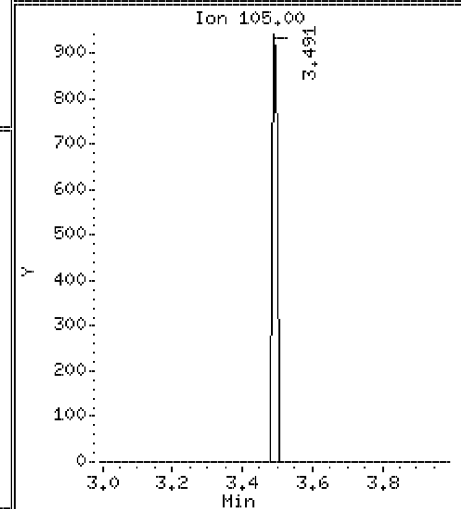
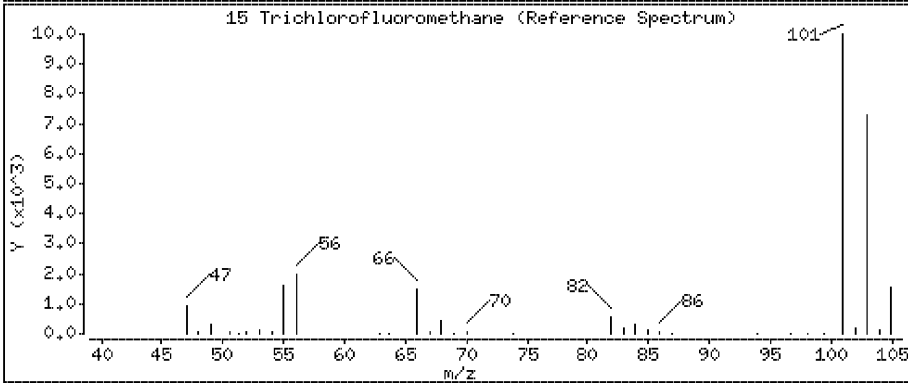
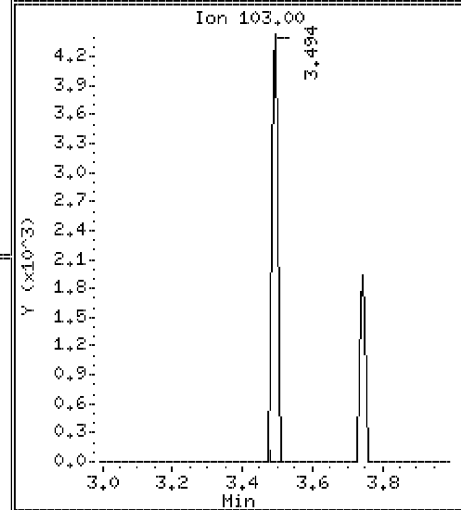
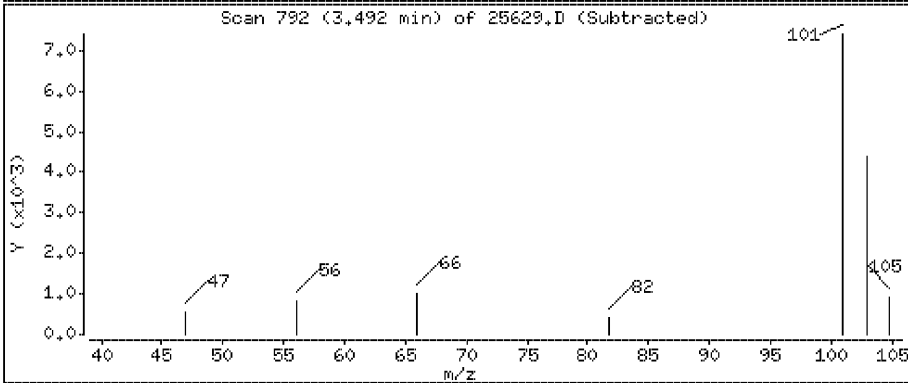
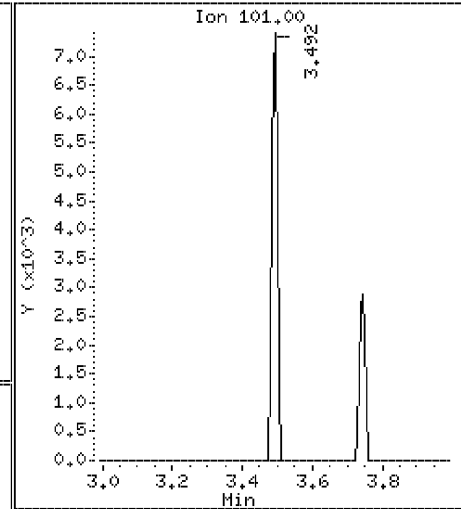
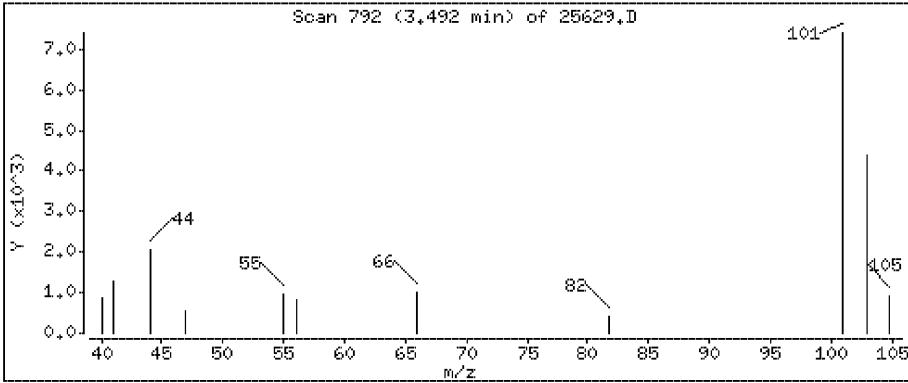
Column phase: ZB-5MSplus SN338857

Column diameter: 0,32

13 Isopentane

Concentration: 0,270 ppbv





Data File: \\192.168.10.12\chem\10airH,1\091318,b\25629.D

Date : 13-SEP-2018 22:55

Client ID:

Instrument: 10airH.i

Sample Info:

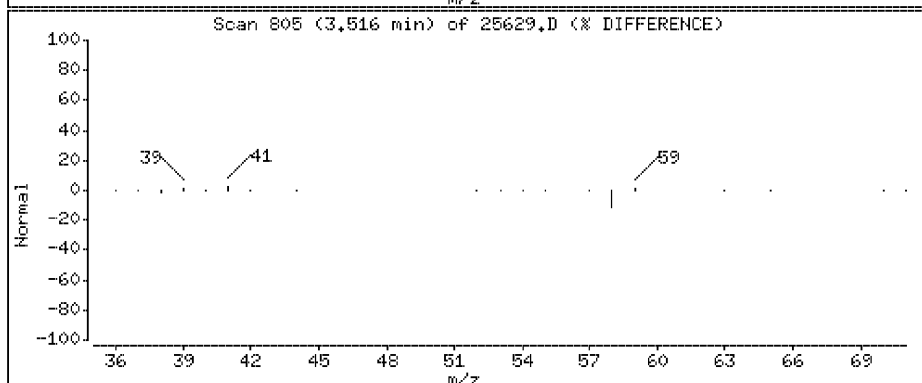
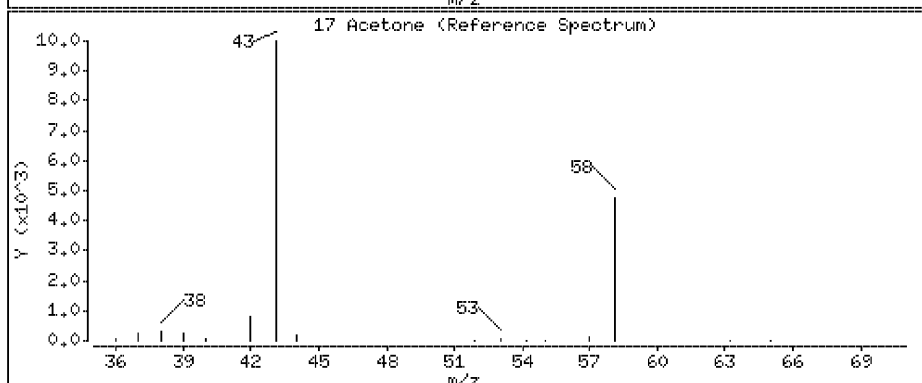
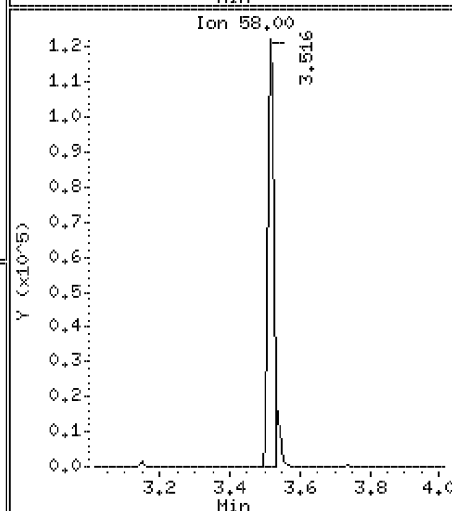
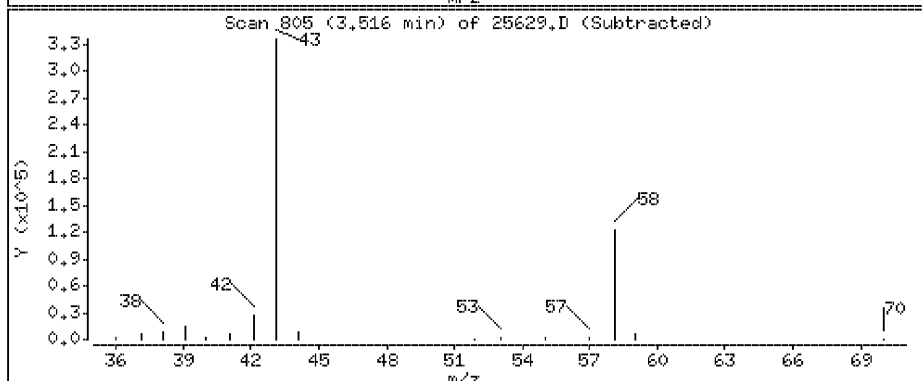
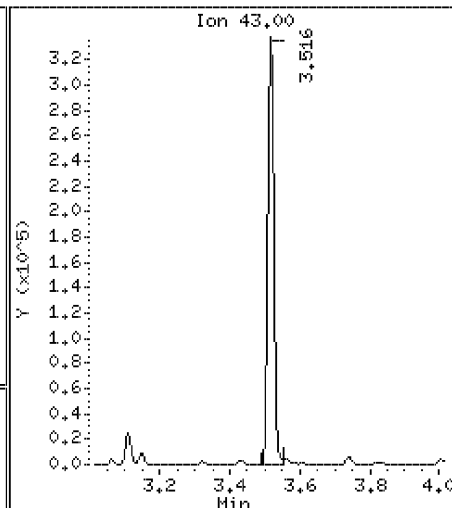
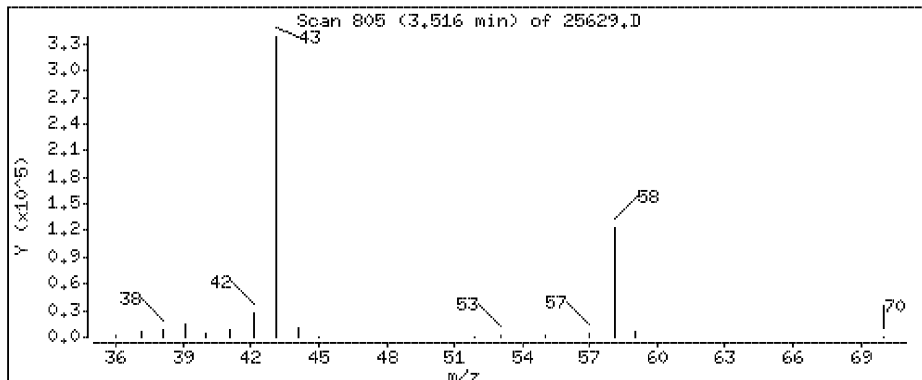
Operator: CH1

Column phase: ZB-5MSplus SN338857

Column diameter: 0,32

17 Acetone

Concentration: 21,4 ppbv



Data File: \\192.168.10.12\chem\10airH,1\091318,b\25629.D

Date : 13-SEP-2018 22:55

Client ID:

Instrument: 10airH.i

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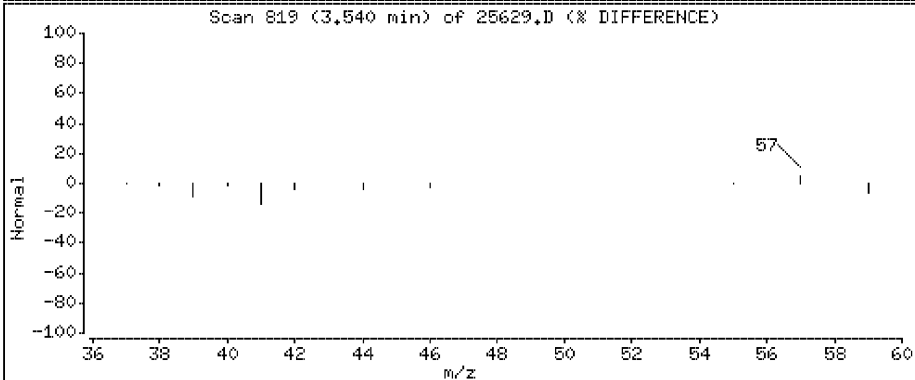
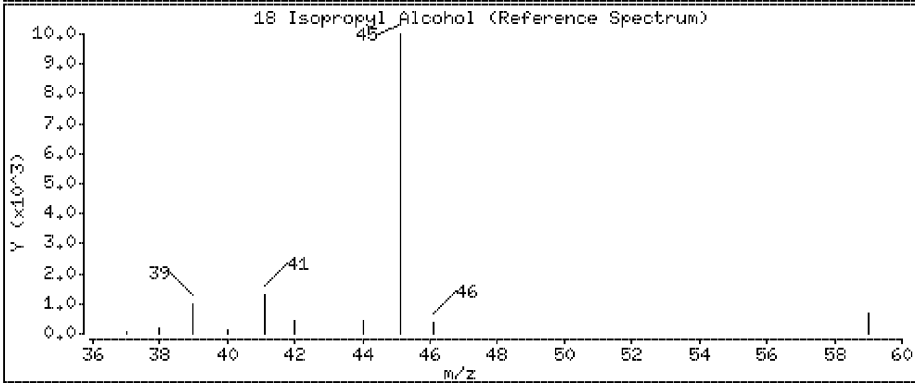
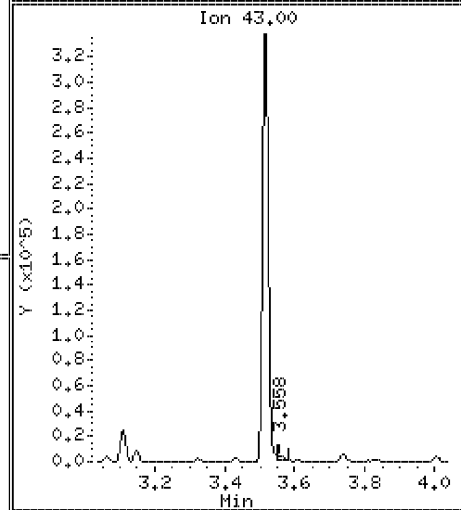
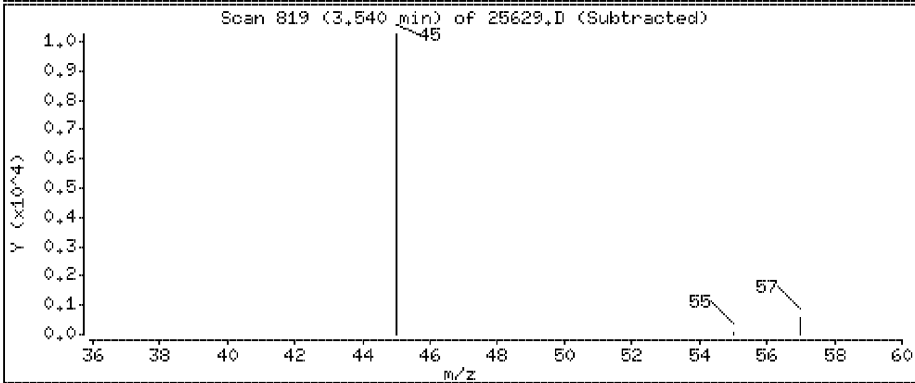
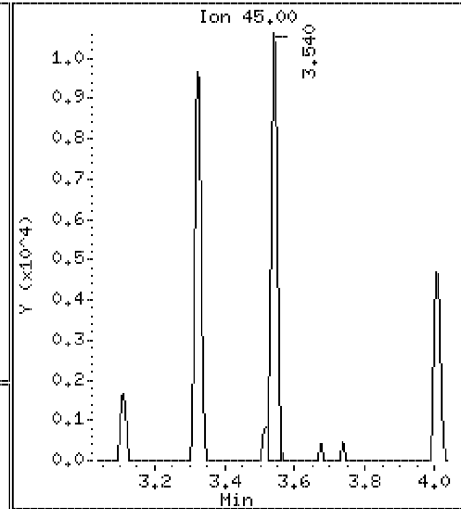
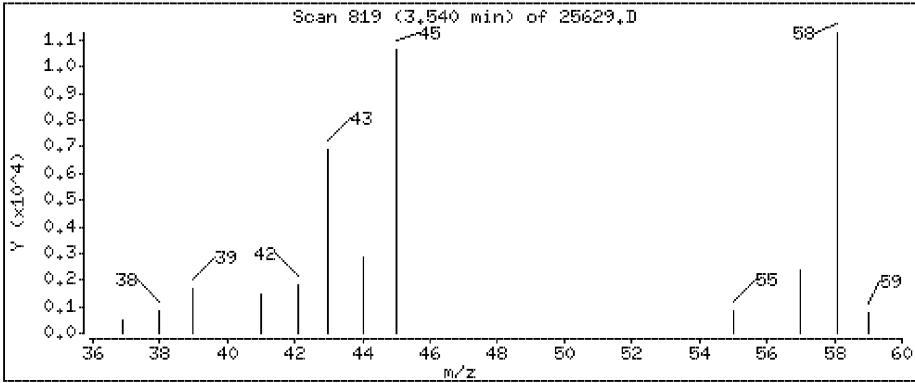
Operator: CH1

Column phase: ZB-5MSplus SN338857

Column diameter: 0,32

18 Isopropyl Alcohol

Concentration: 0,615 ppbv



Data File: \\192.168.10.12\chem\10airH,1\091318,b\25629.D

Date : 13-SEP-2018 22:55

Client ID:

Instrument: 10airH.i

Sample Info:

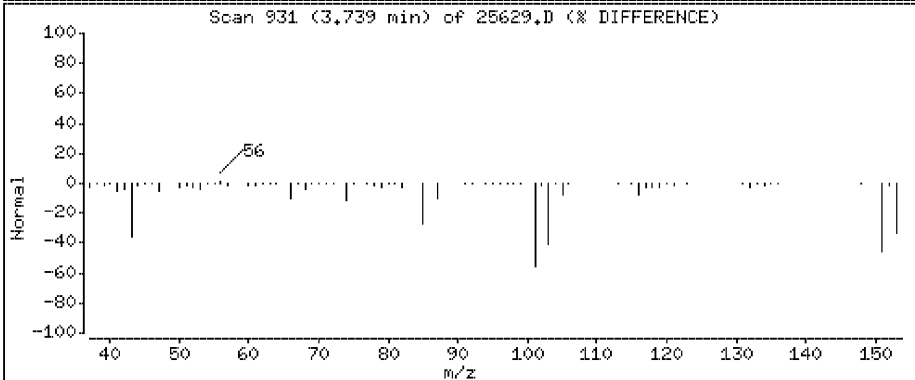
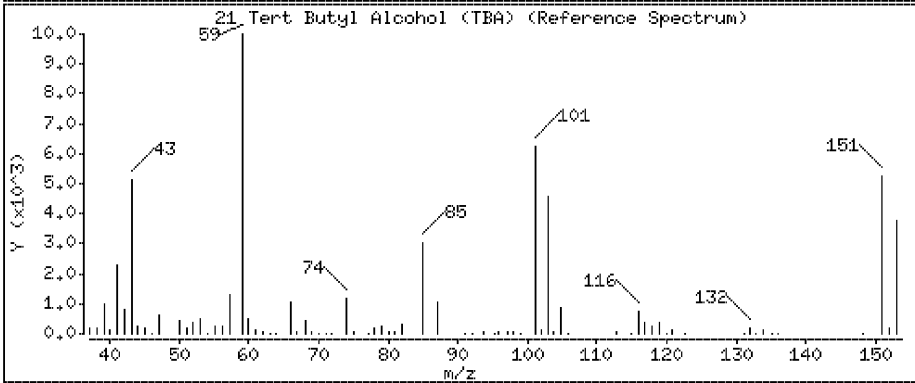
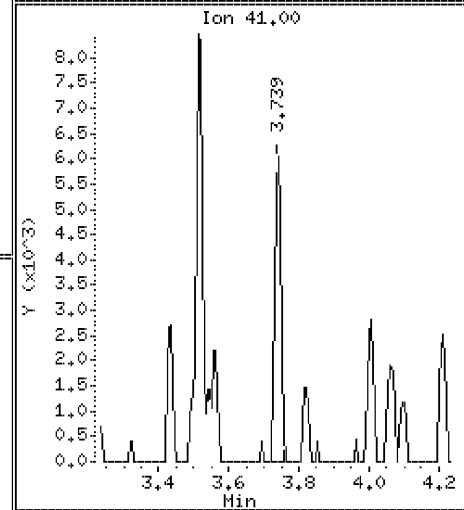
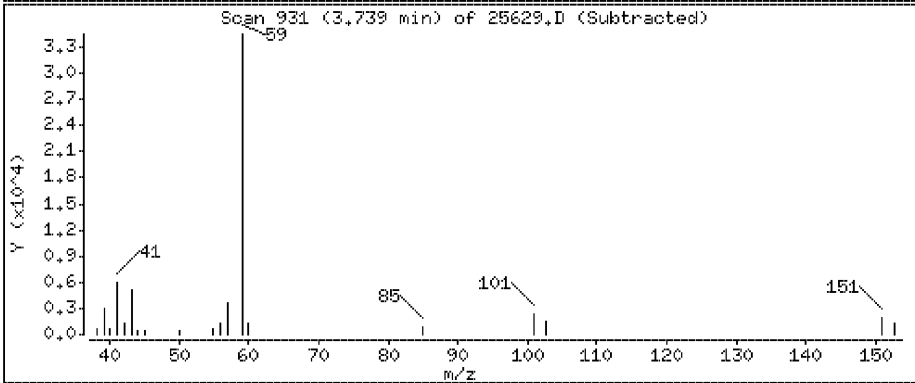
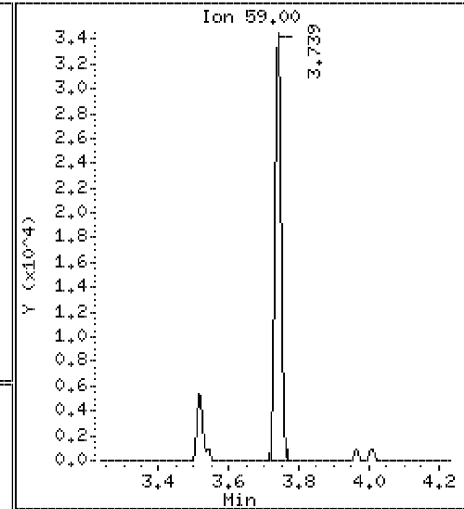
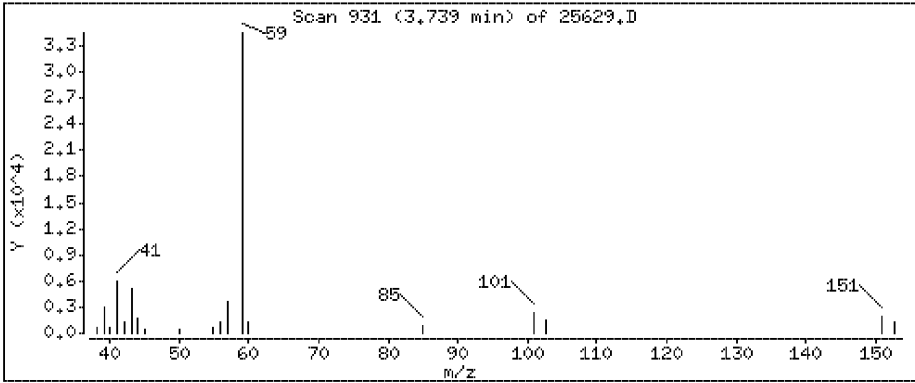
Operator: CH1

Column phase: ZB-5MSplus SN338857

Column diameter: 0,32

21 Tert Butyl Alcohol (TBA)

Concentration: 1,14 ppbv



Data File: \\192.168.10.12\chem\10airH,i\091318,b\25629.D

Date : 13-SEP-2018 22:55

Client ID:

Instrument: 10airH.i

Sample Info:

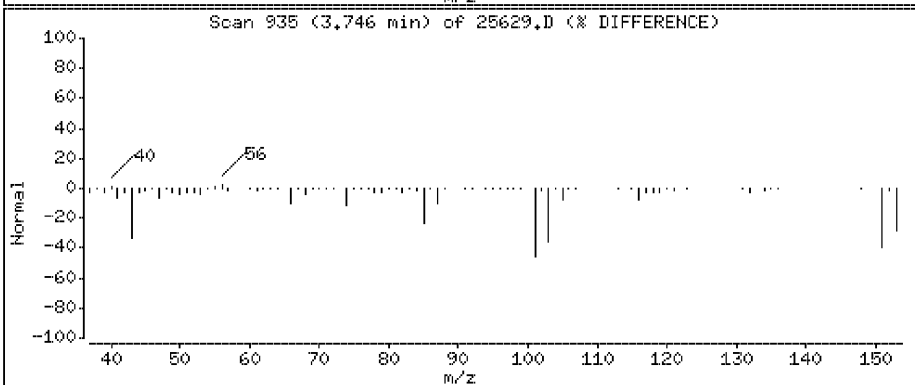
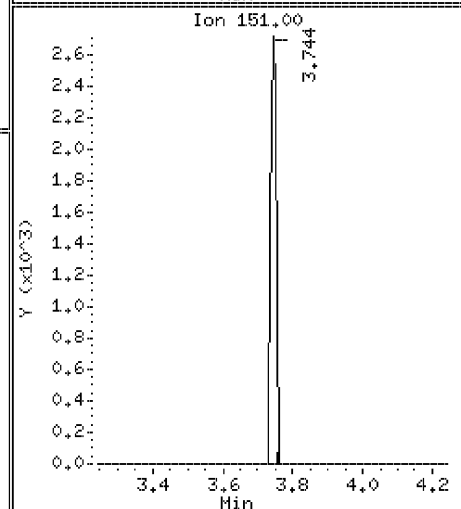
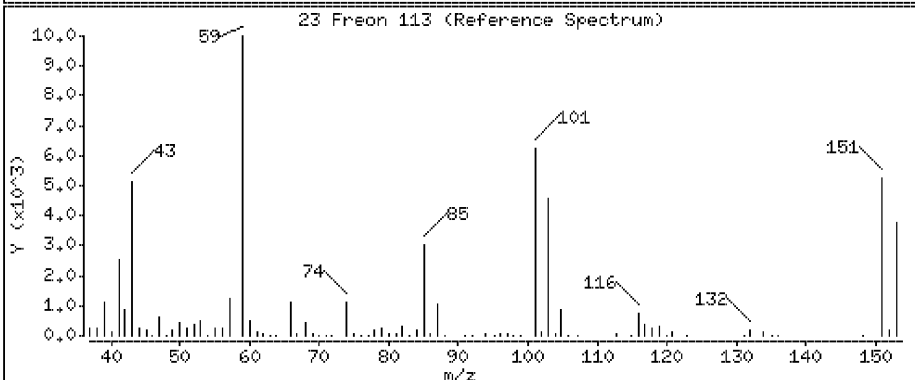
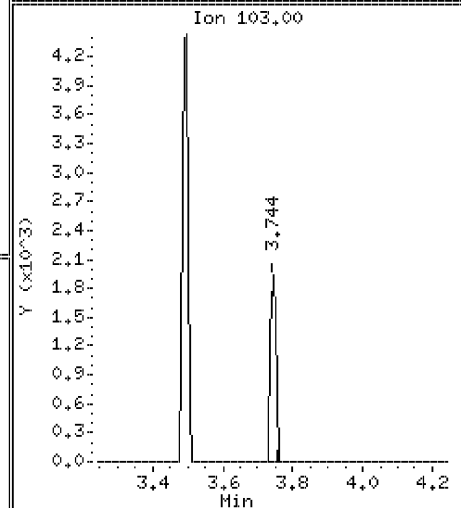
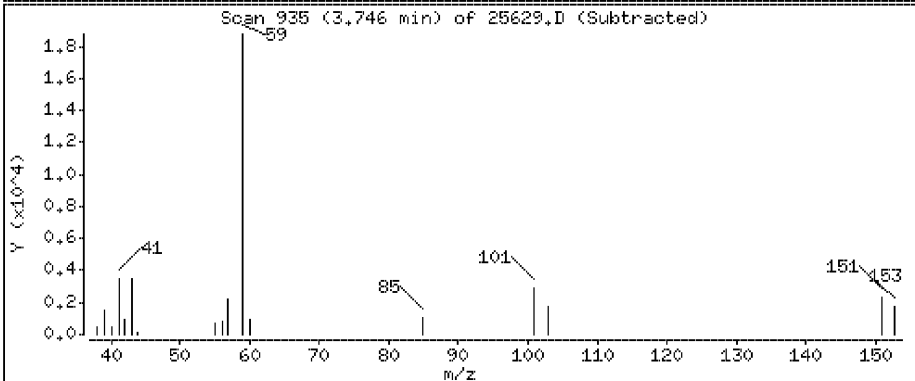
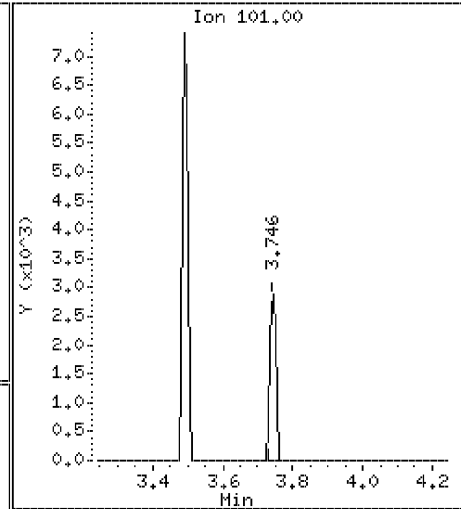
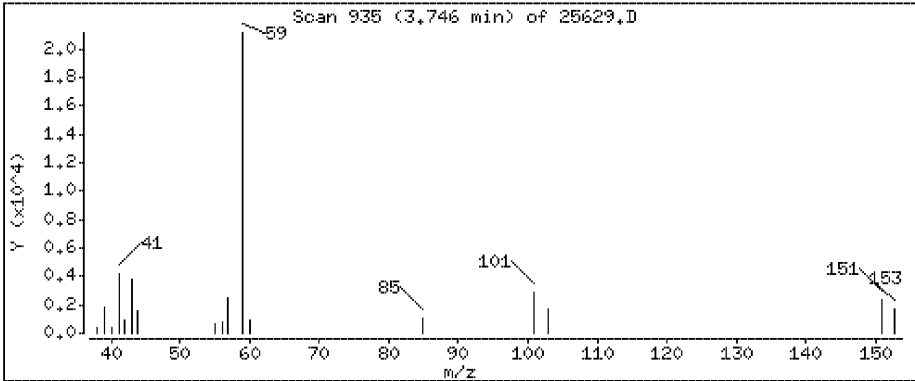
Operator: CH1

Column phase: ZB-5MSplus SN338857

Column diameter: 0,32

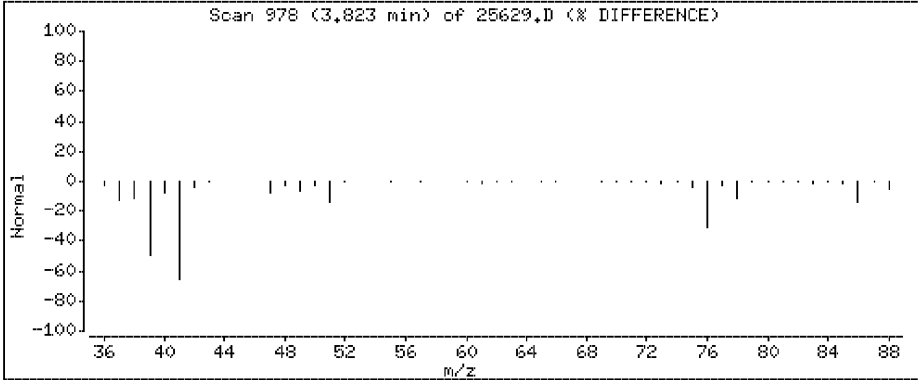
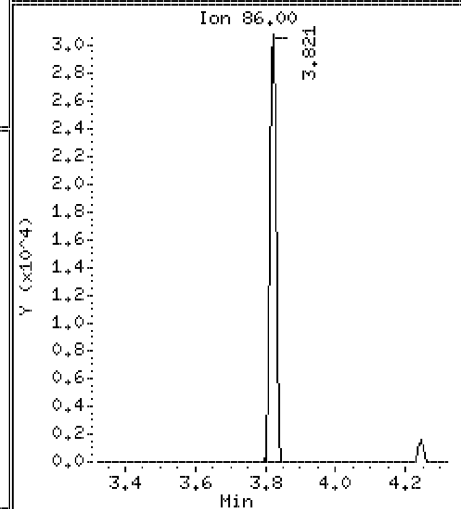
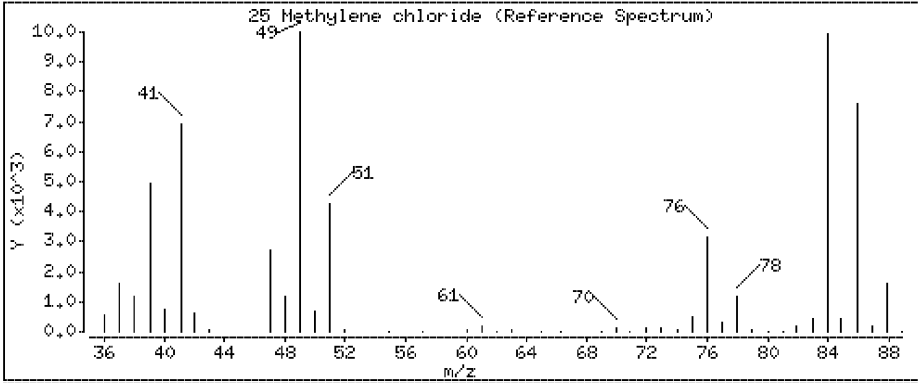
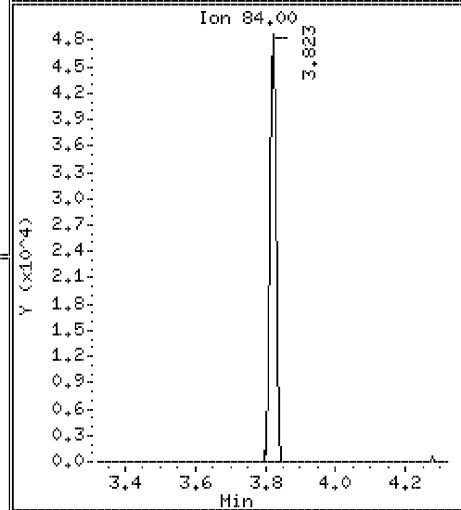
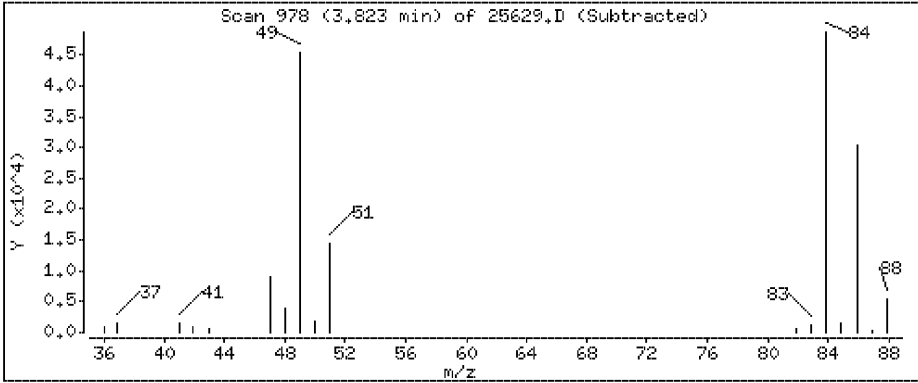
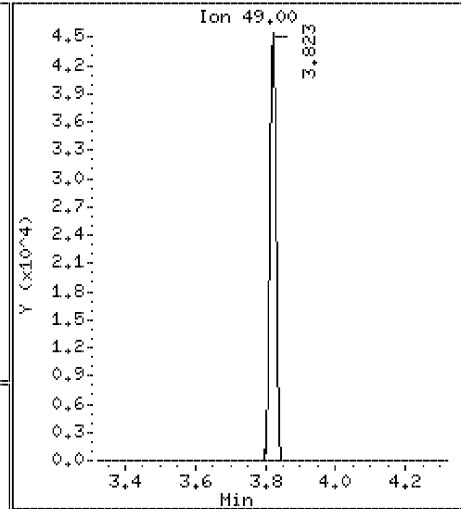
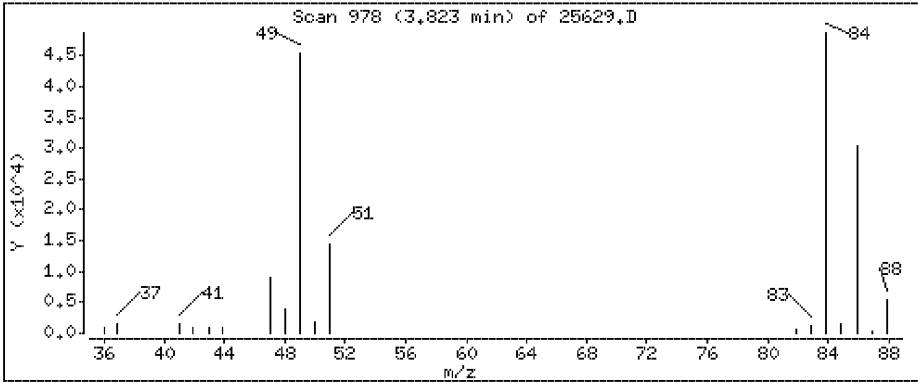
23 Freon 113

Concentration: 0,0727 ppbv



25 Methylene chloride

Concentration: 1.60 ppbv



Data File: \\192.168.10.12\chem\10airH,1\091318,b\25629.D

Date : 13-SEP-2018 22:55

Client ID:

Instrument: 10airH.i

Sample Info:

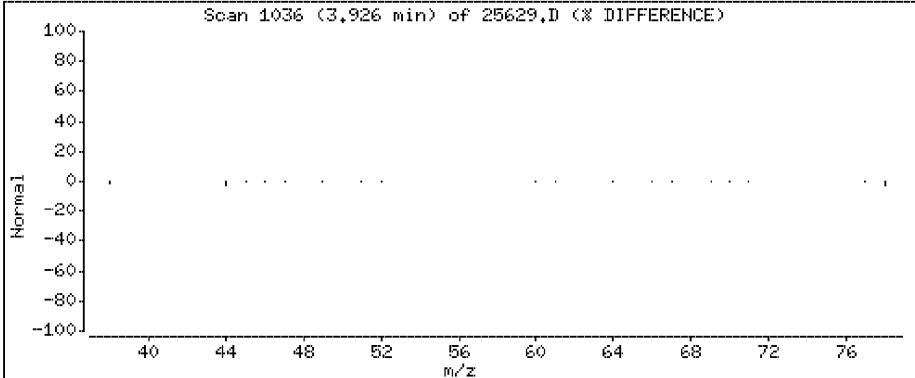
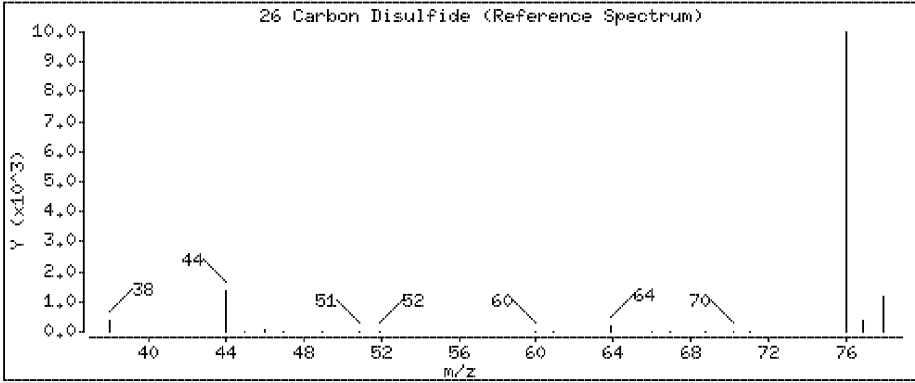
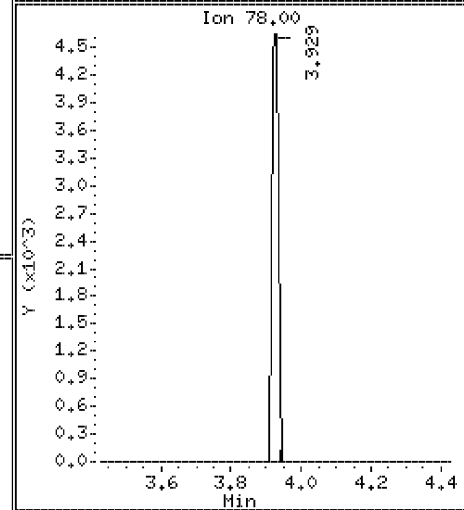
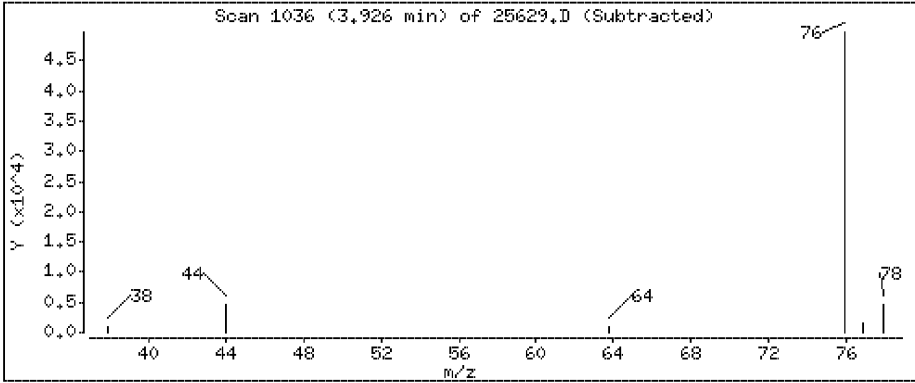
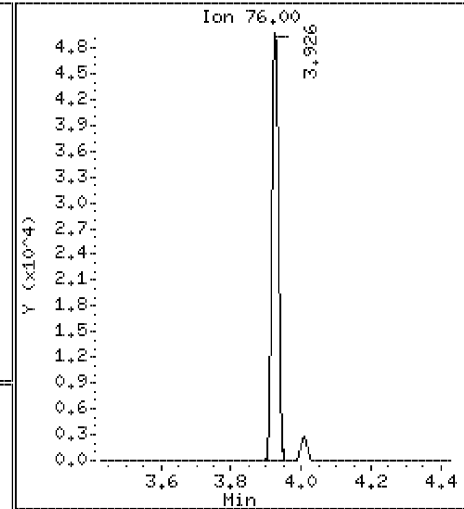
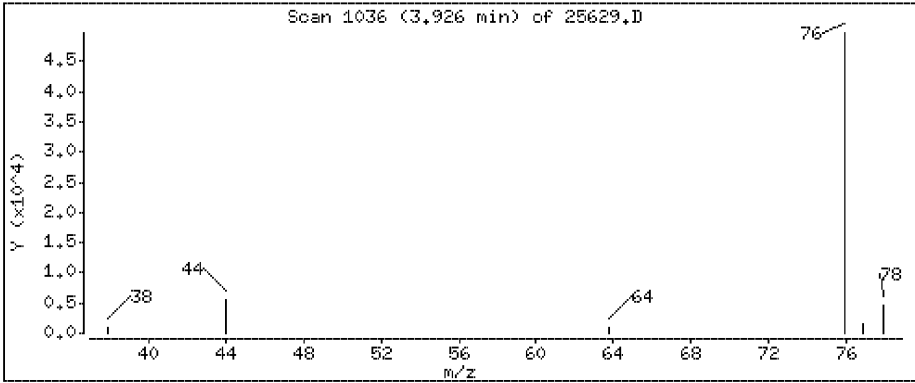
Operator: CH1

Column phase: ZB-5MSplus SN338857

Column diameter: 0.32

26 Carbon Disulfide

Concentration: 1.14 ppbv



Data File: \\192.168.10.12\chem\10airH,1\091318,b\25629.D

Date : 13-SEP-2018 22:55

Client ID:

Instrument: 10airH.i

Sample Info:

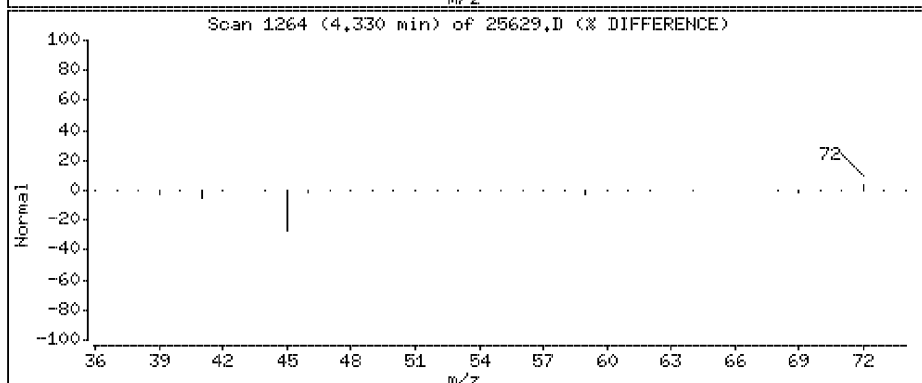
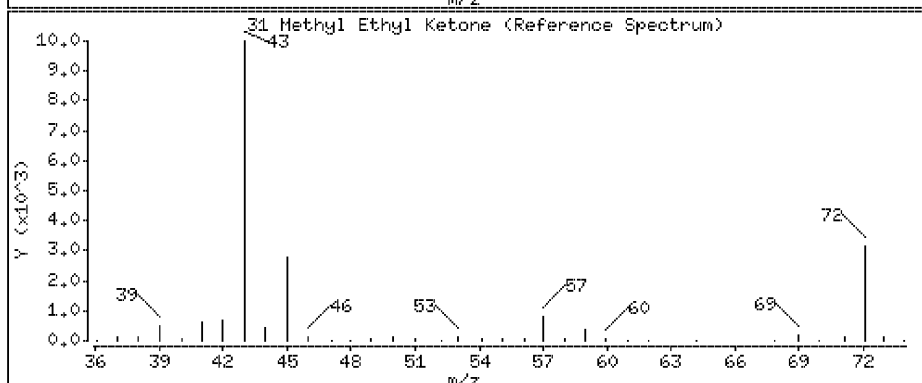
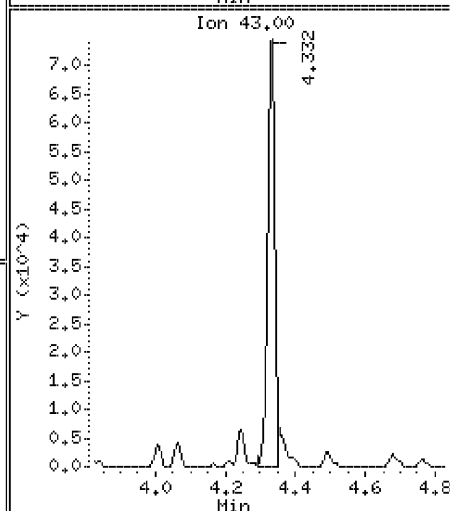
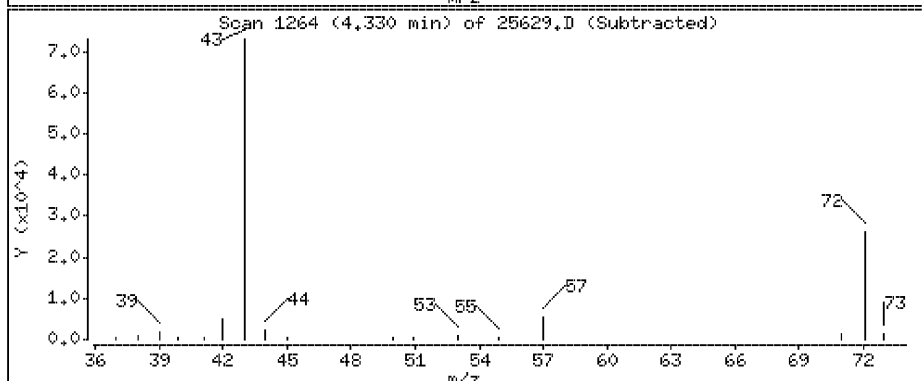
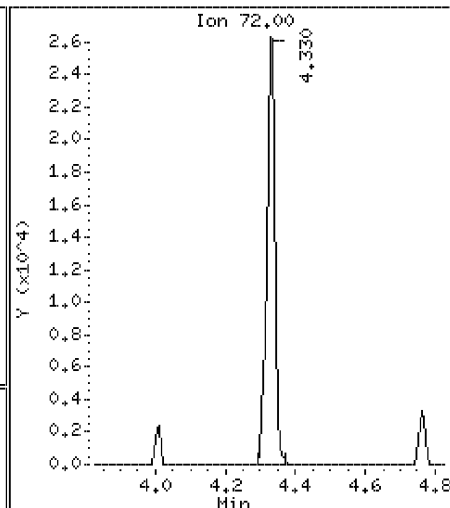
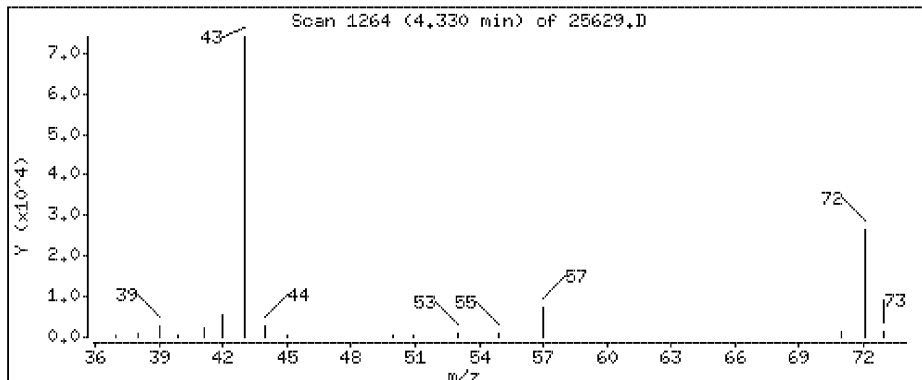
Operator: CH1

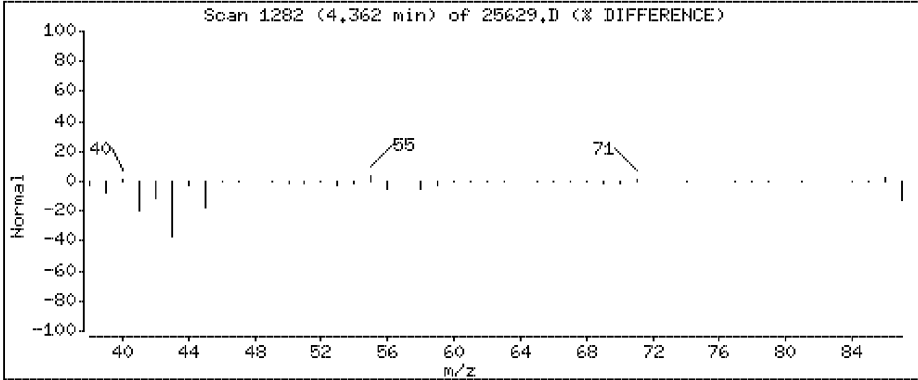
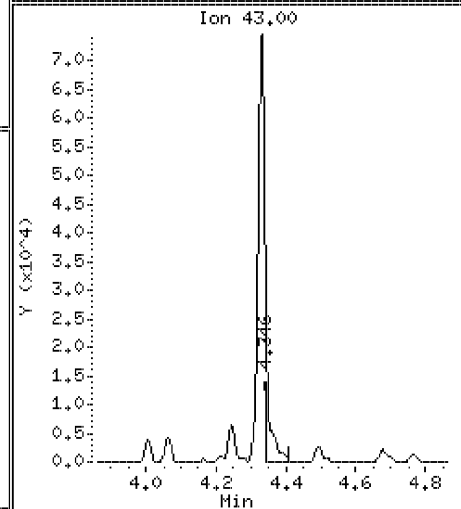
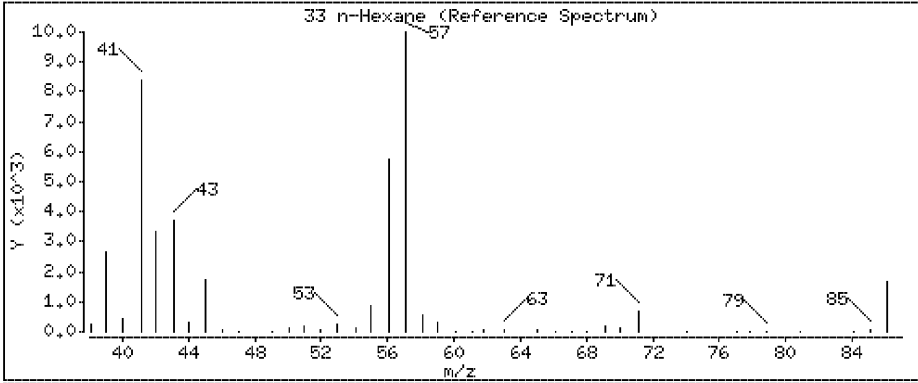
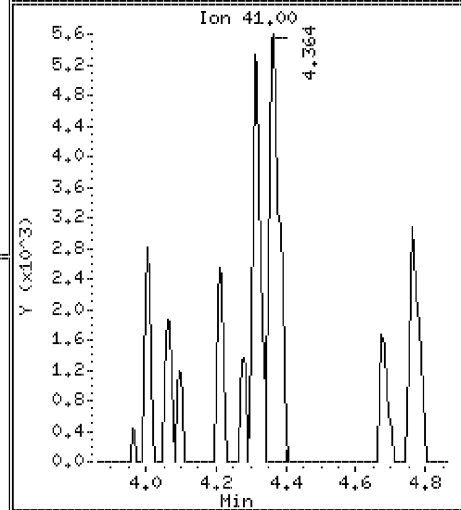
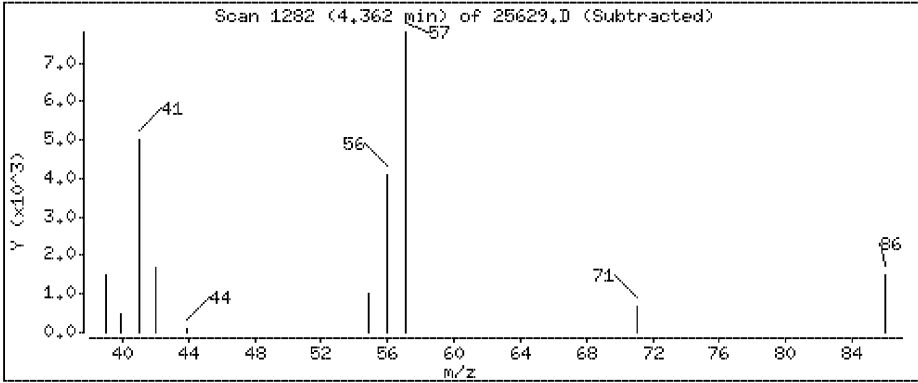
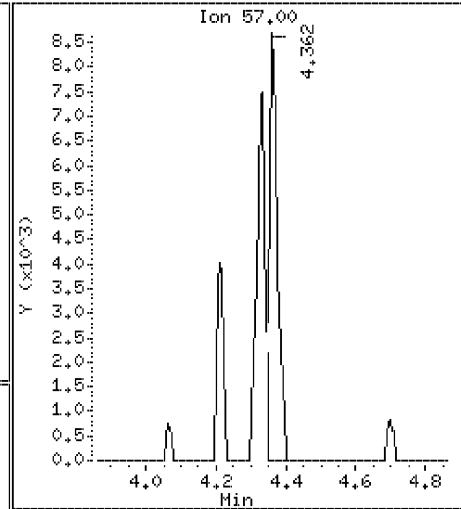
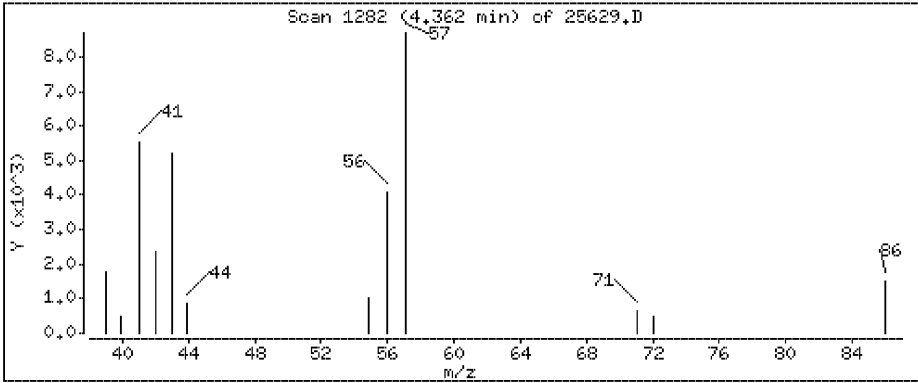
Column phase: ZB-5MSplus SN338857

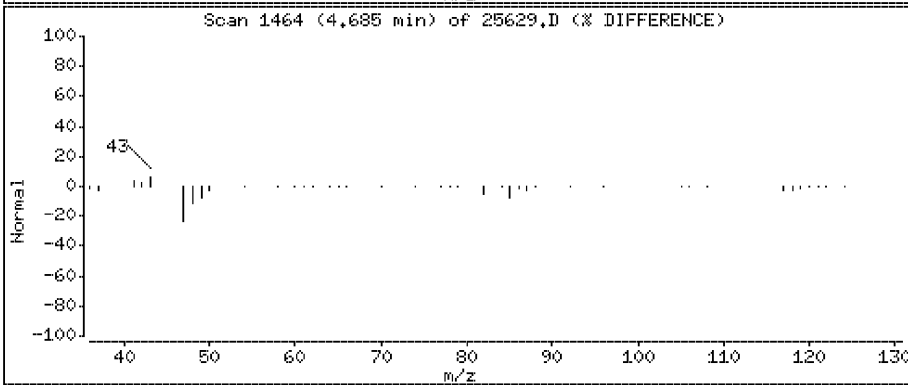
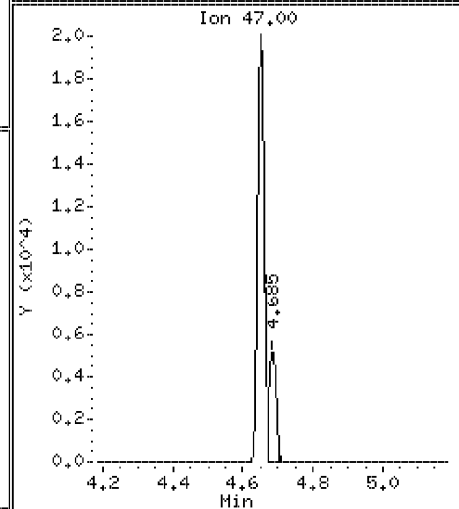
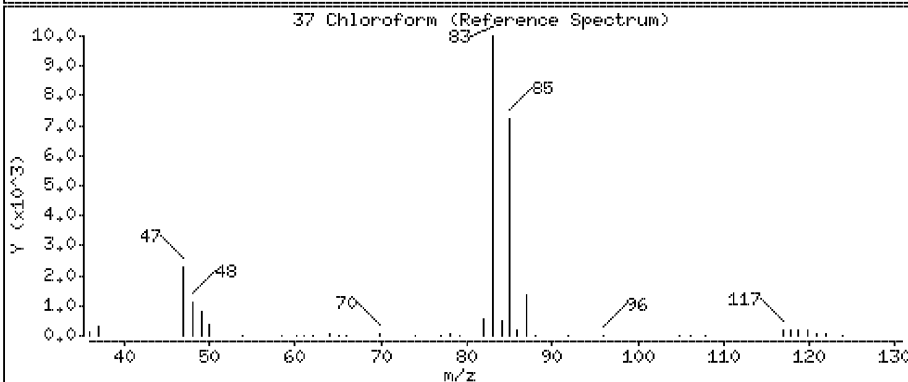
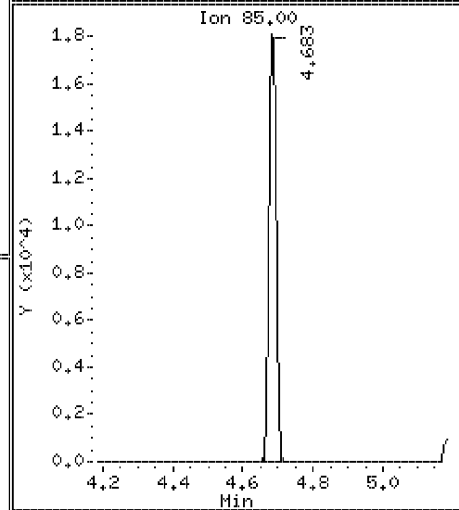
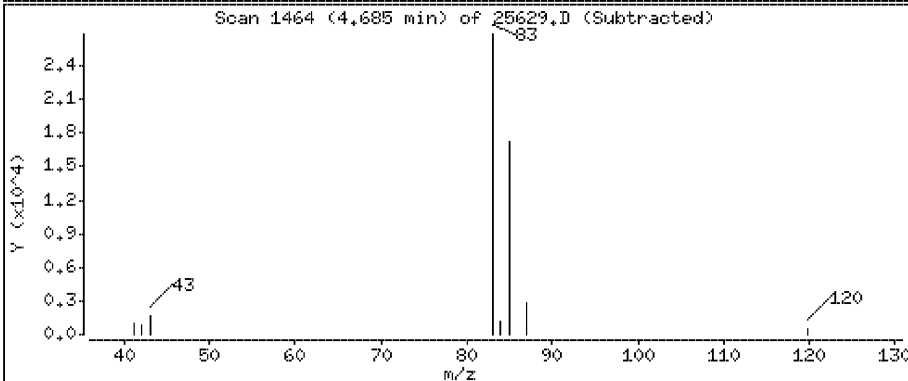
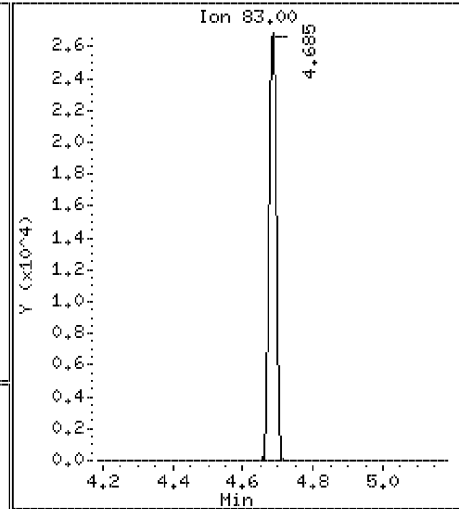
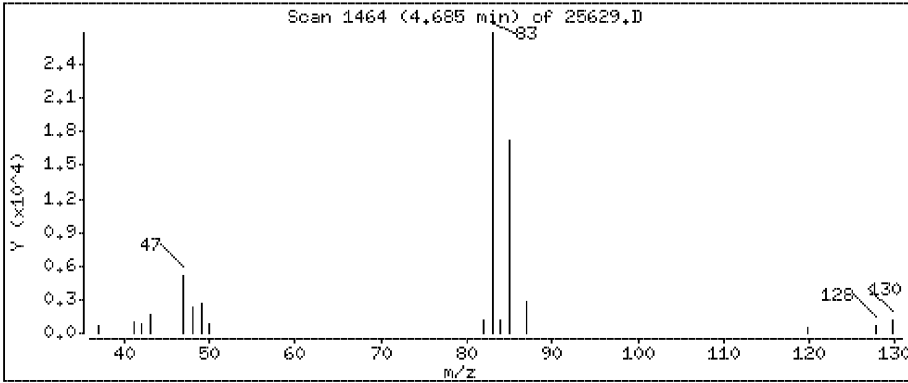
Column diameter: 0.32

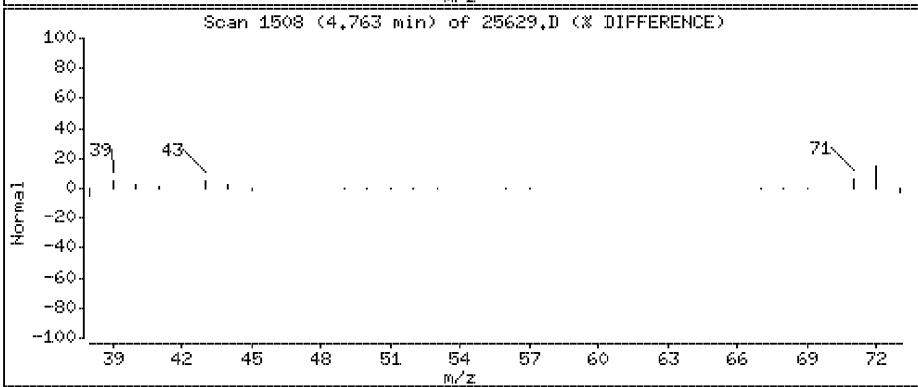
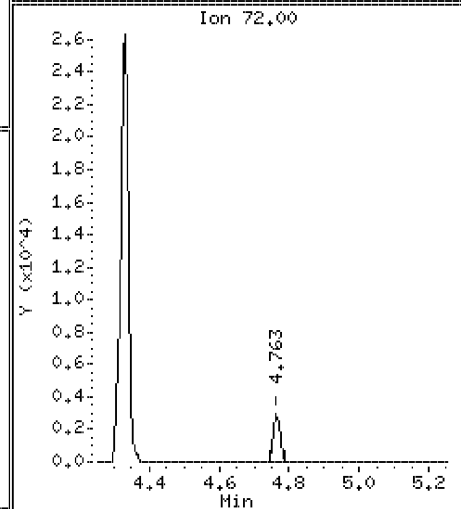
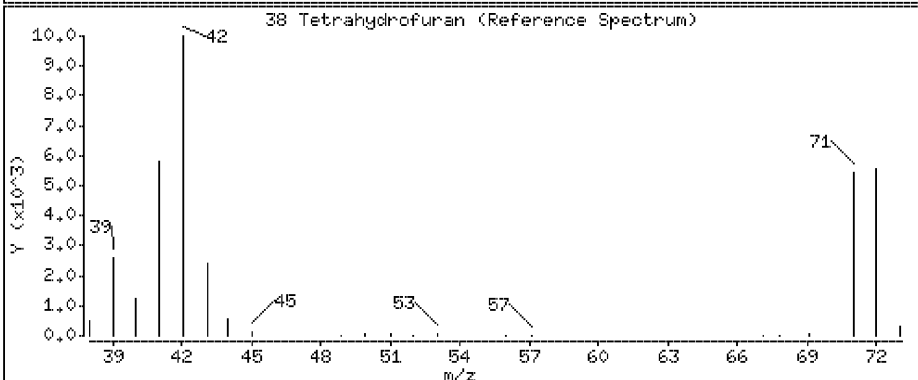
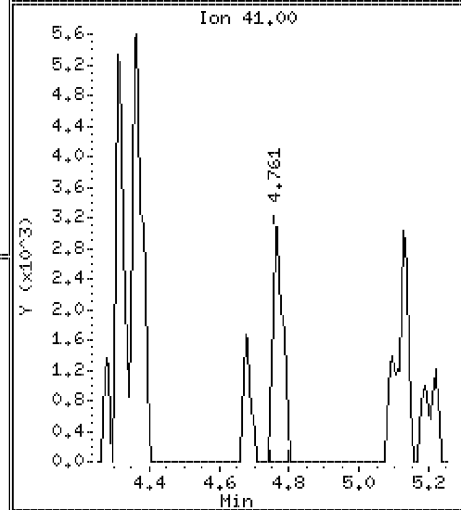
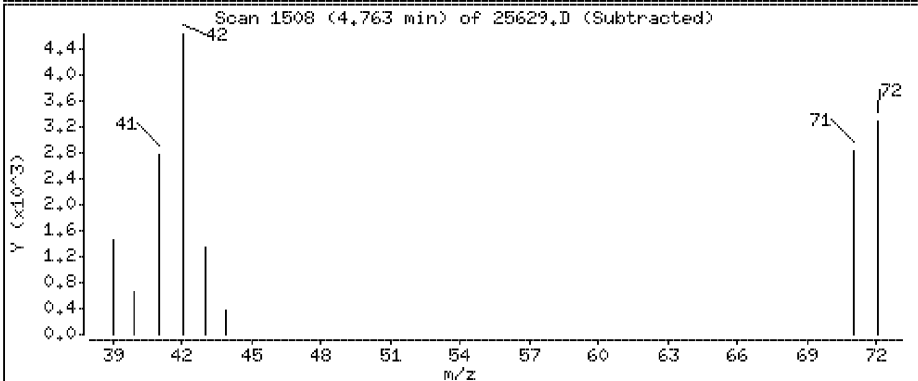
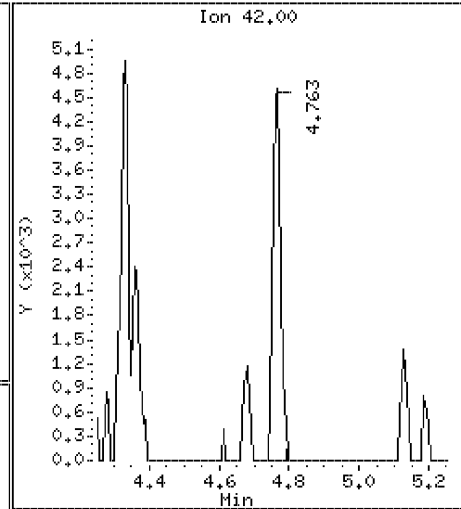
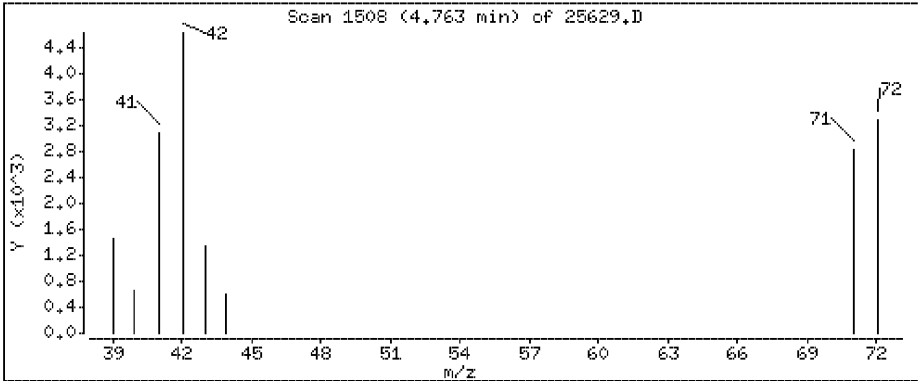
31 Methyl Ethyl Ketone

Concentration: 4.33 ppbv









Data File: \\192.168.10.12\chem\10airH,1\091318,b\25629.D

Date : 13-SEP-2018 22:55

Client ID:

Instrument: 10airH.i

Sample Info:

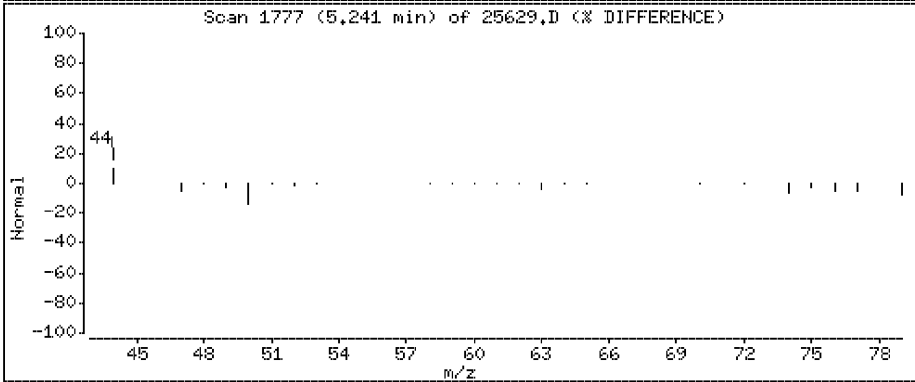
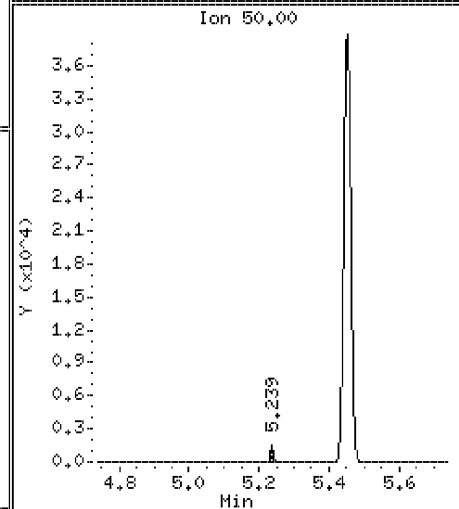
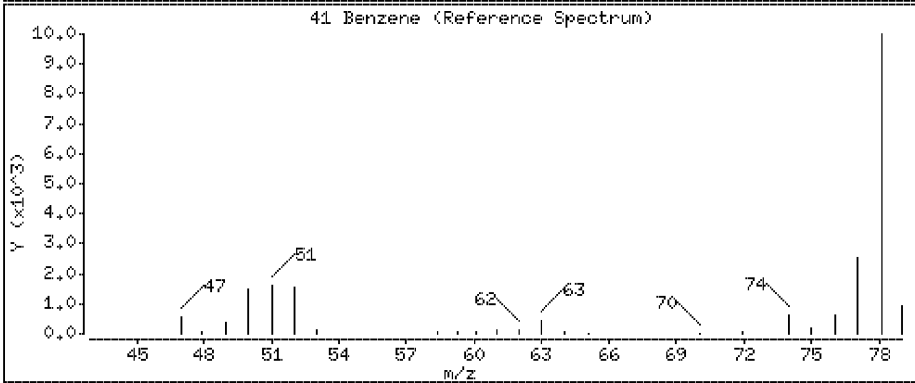
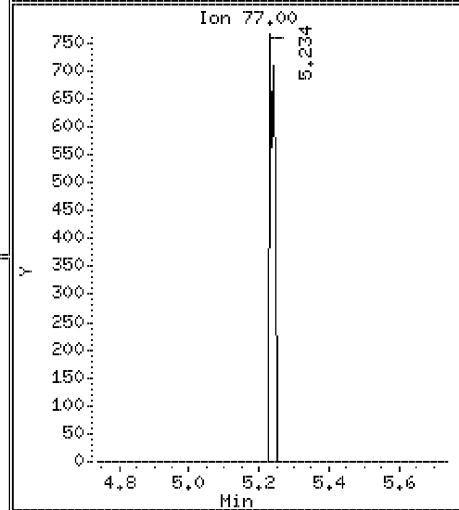
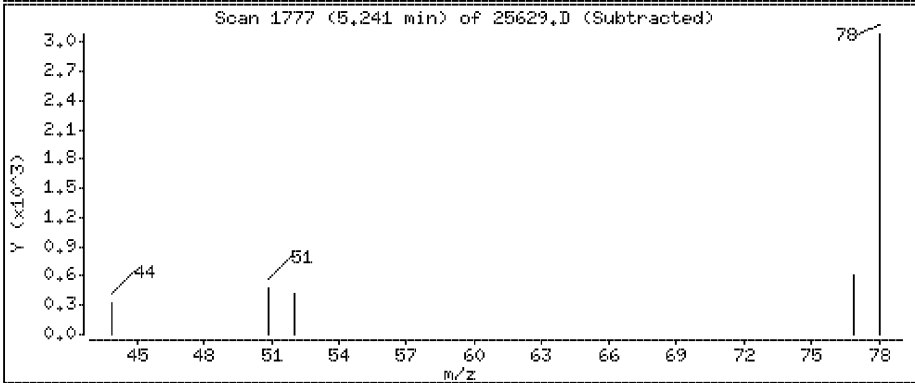
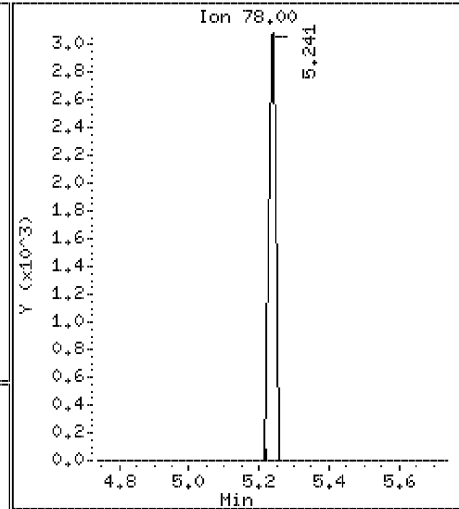
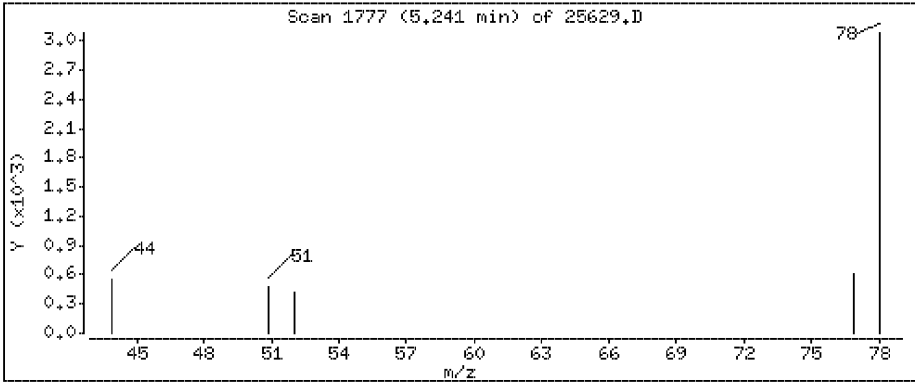
Operator: CH1

Column phase: ZB-5MSplus SN338857

Column diameter: 0.32

41 Benzene

Concentration: 0.0737 ppbv



Data File: \\192.168.10.12\chem\10airH,1\091318,b\25629.D

Date : 13-SEP-2018 22:55

Client ID:

Instrument: 10airH.i

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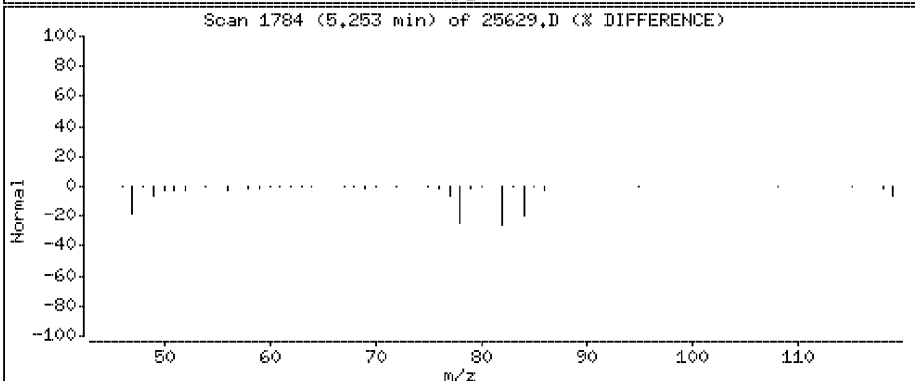
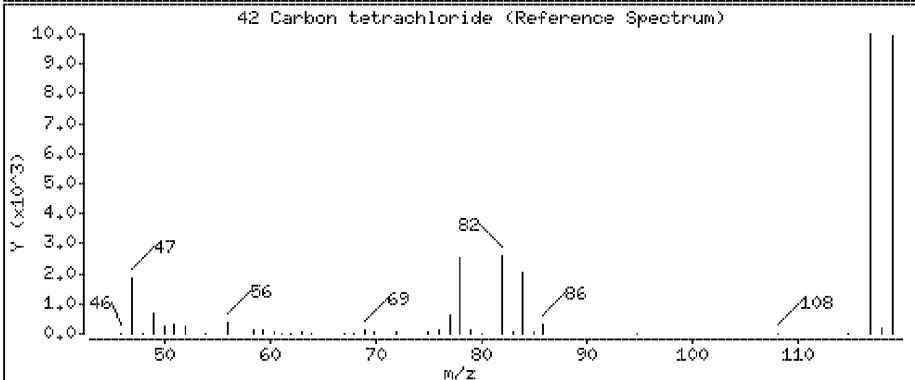
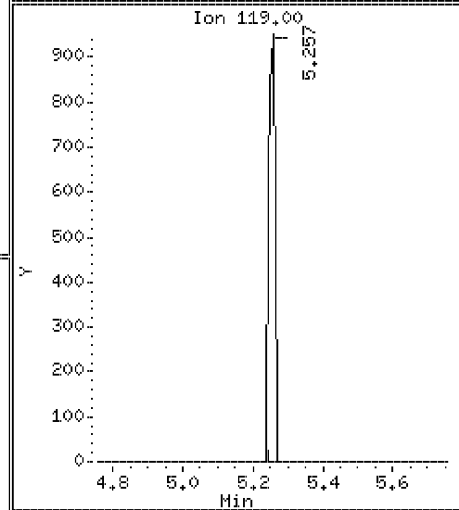
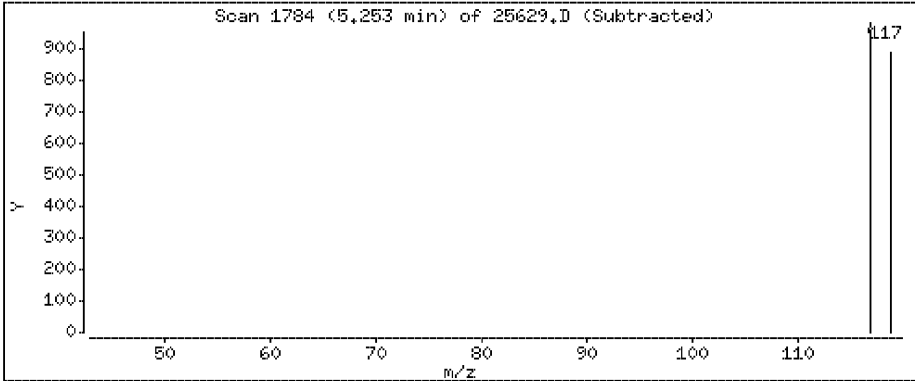
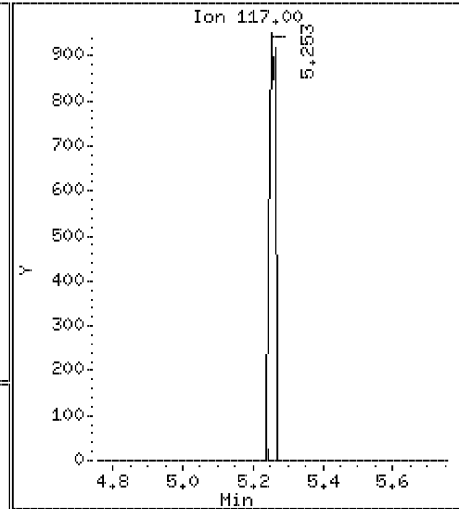
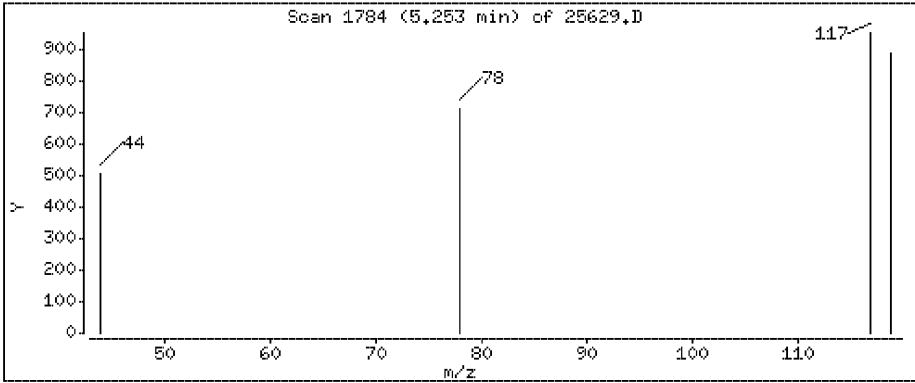
Operator: CH1

Column phase: ZB-5MSplus SN338857

Column diameter: 0.32

42 Carbon tetrachloride

Concentration: 0.0234 ppbv



Data File: \\192.168.10.12\chem\10airH,1\091318,b\25629.D

Date : 13-SEP-2018 22:55

Client ID:

Instrument: 10airH.i

Sample Info:

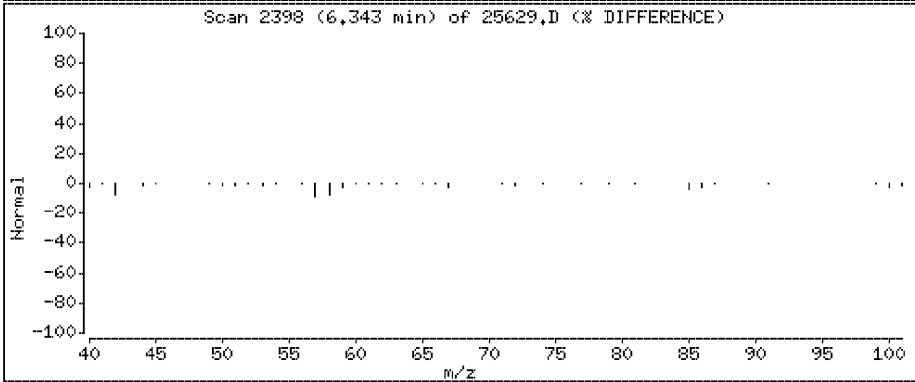
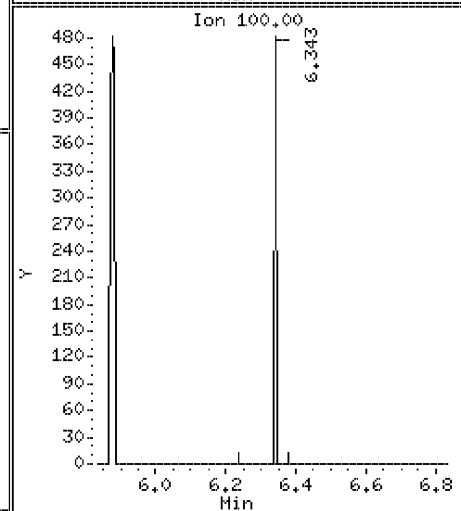
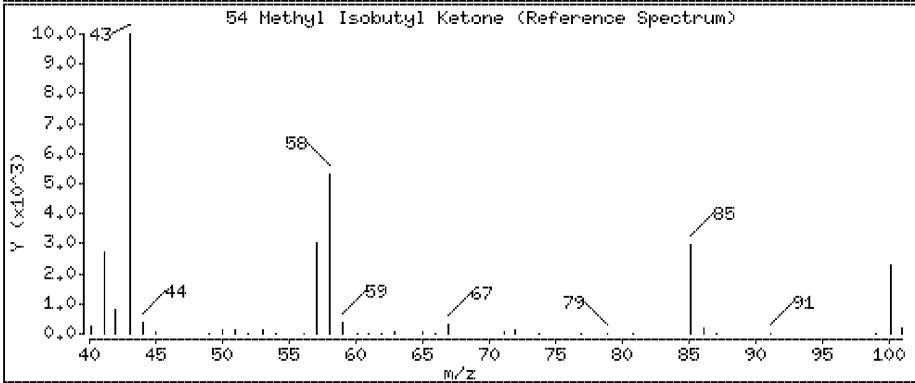
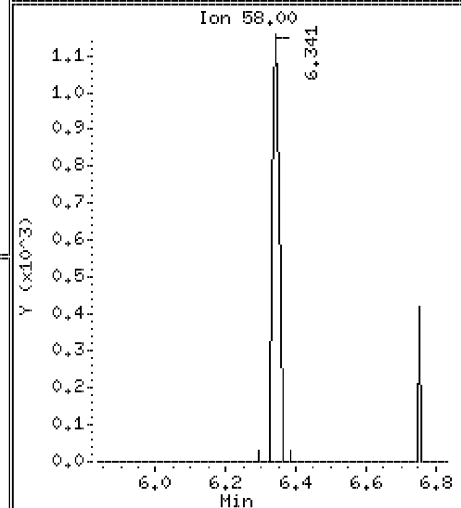
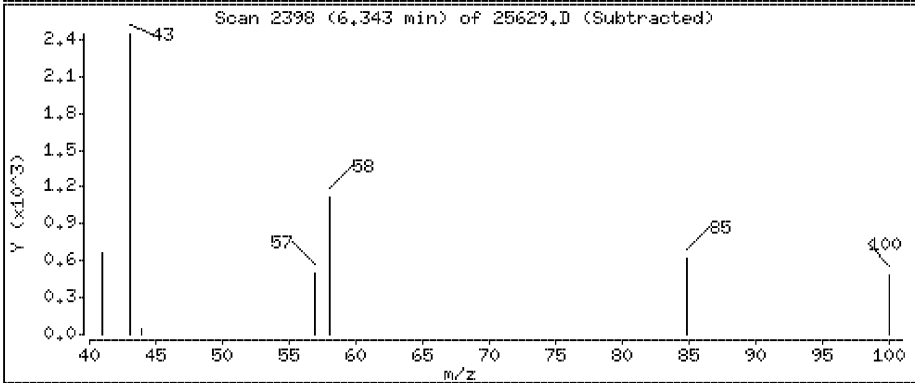
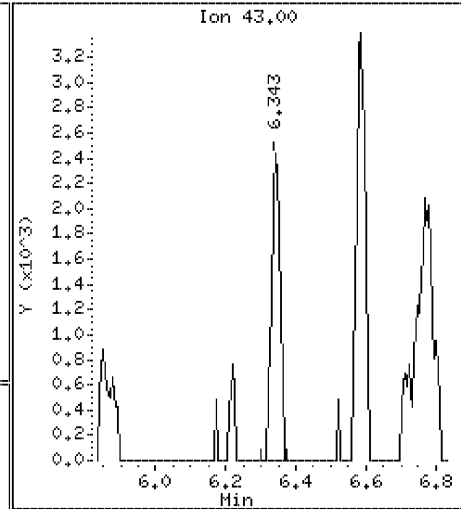
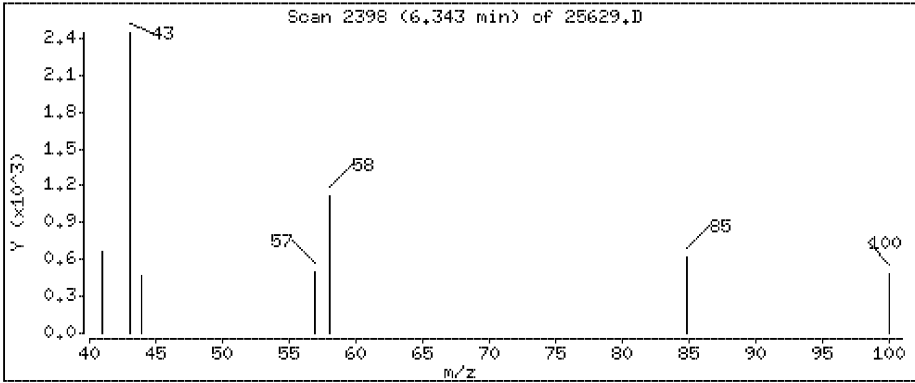
Operator: CH1

Column phase: ZB-5MSplus SN338857

Column diameter: 0,32

54 Methyl Isobutyl Ketone

Concentration: 0,150 ppbv



Data File: \\192.168.10.12\chem\10airH,1\091318,b\25629.D

Date : 13-SEP-2018 22:55

Client ID:

Instrument: 10airH.i

Sample Info:

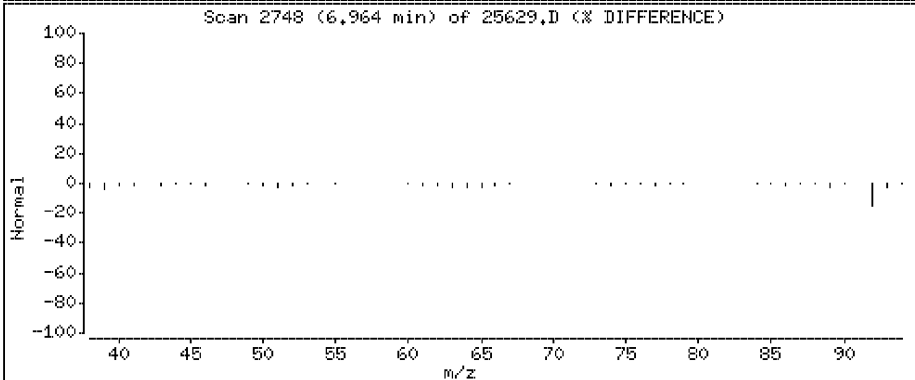
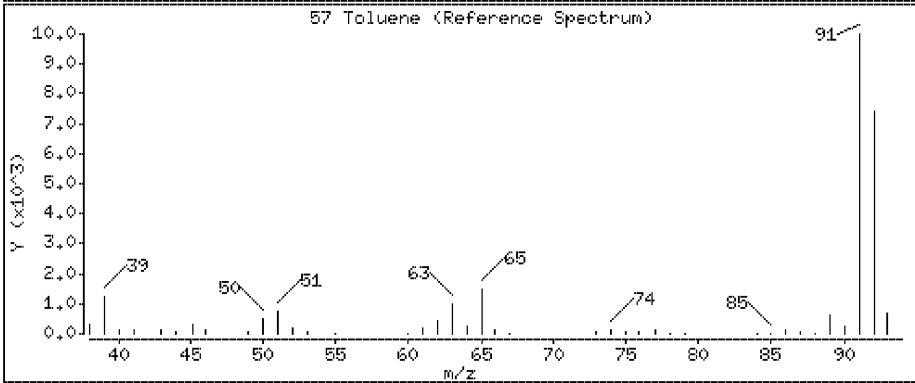
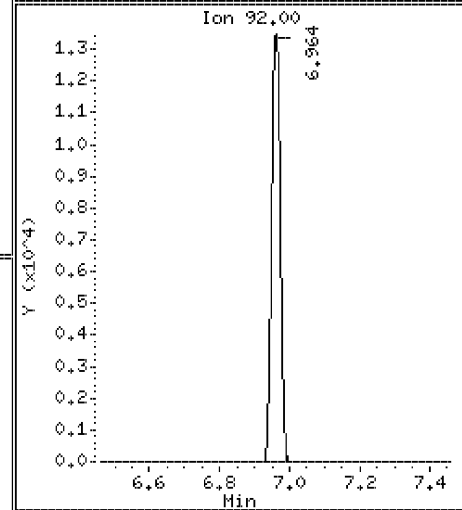
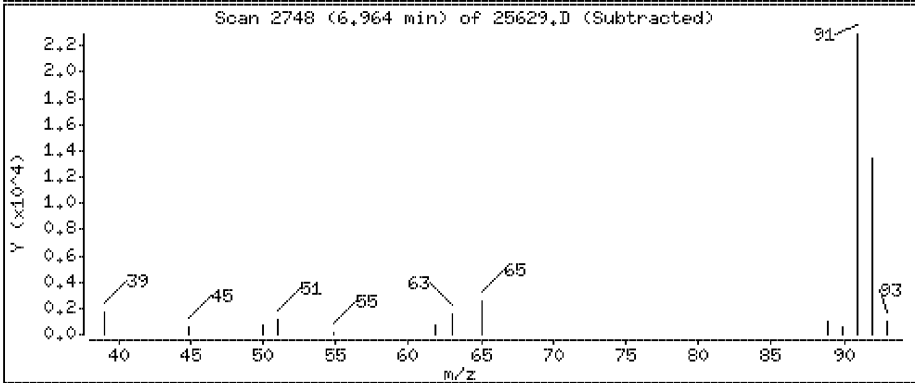
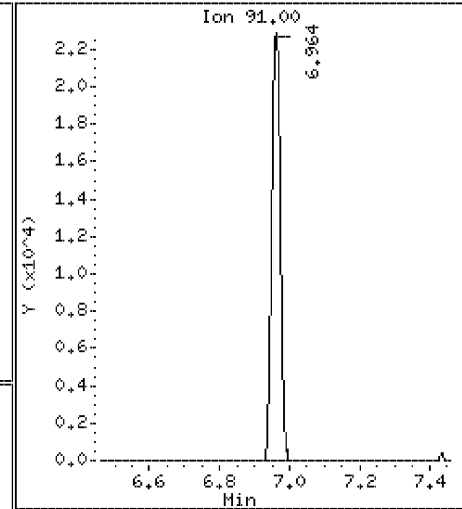
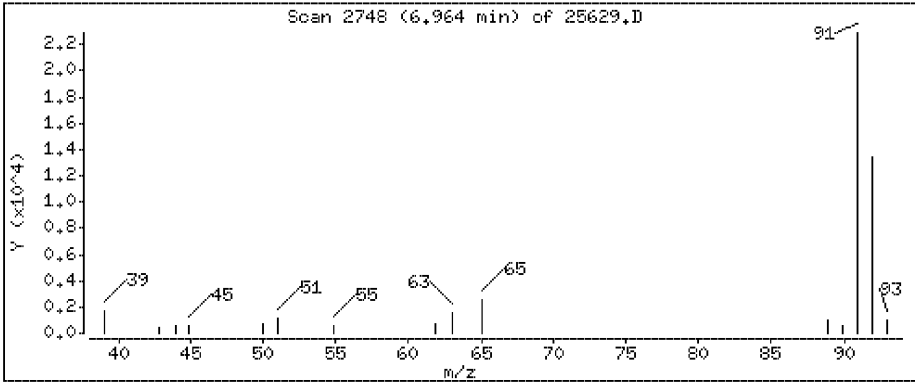
Operator: CH1

Column phase: ZB-5MSplus SN338857

Column diameter: 0,32

57 Toluene

Concentration: 0,662 ppbv



Data File: \\192.168.10.12\chem\10airH,1\091318,b\25629.D

Date : 13-SEP-2018 22:55

Client ID:

Instrument: 10airH.i

Sample Info:

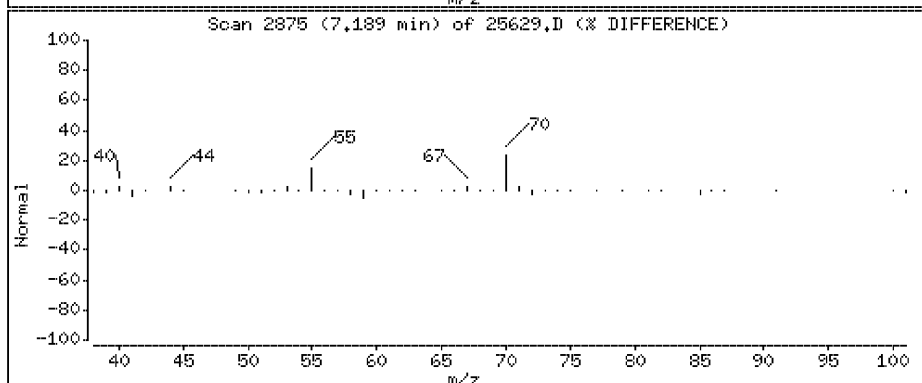
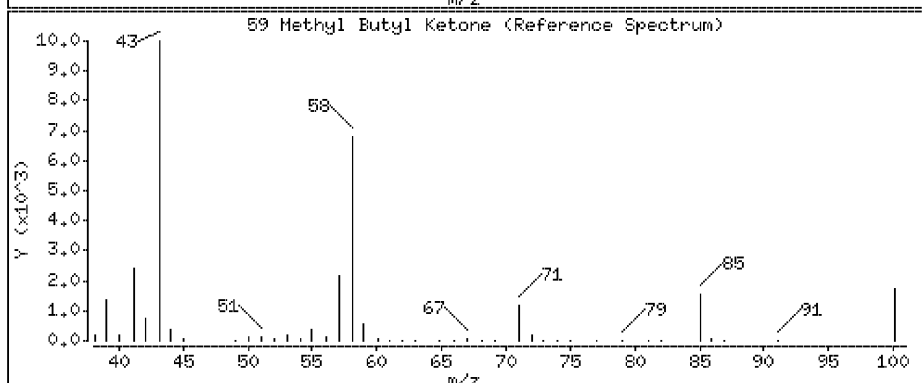
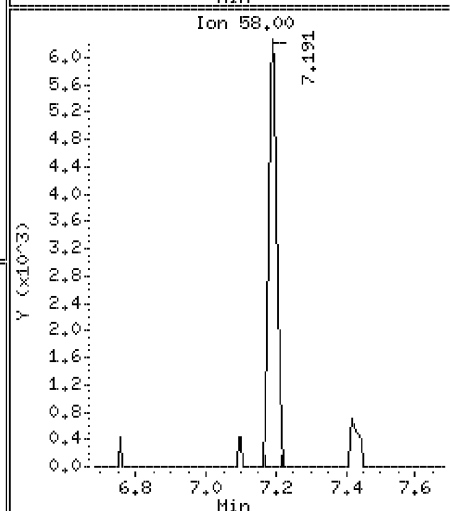
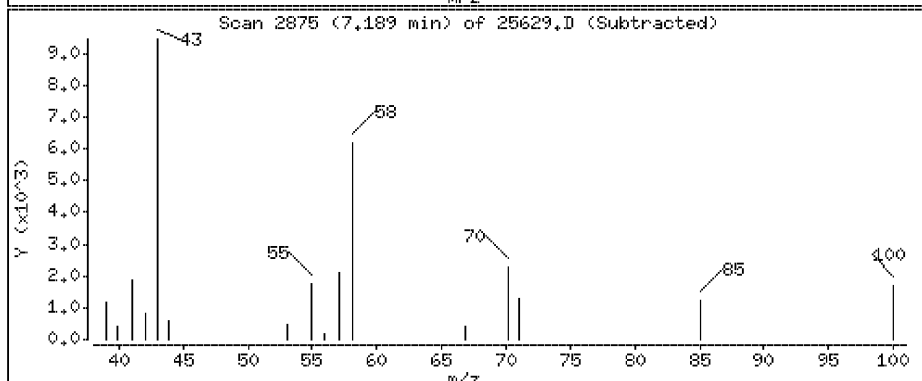
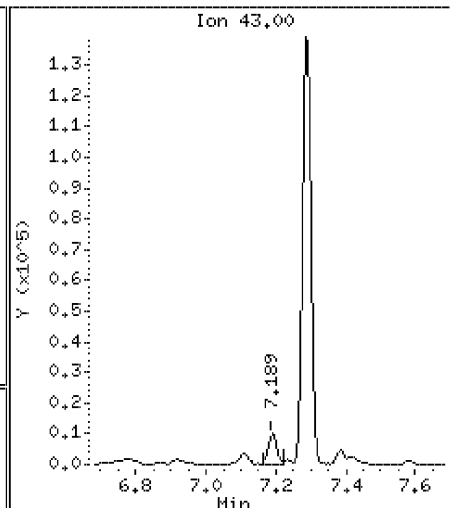
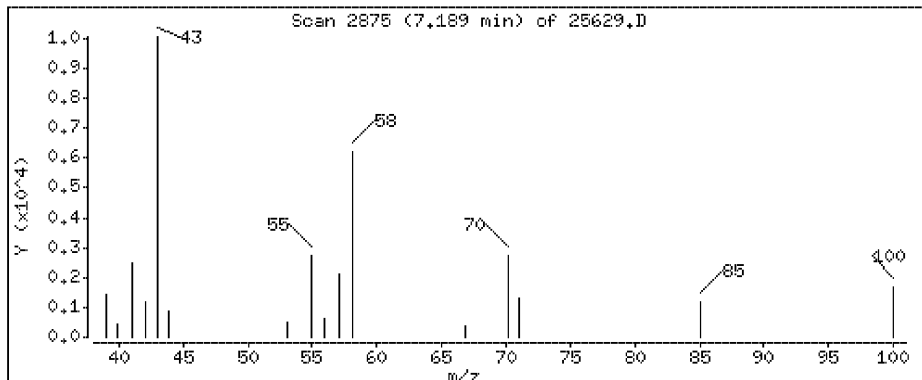
Operator: CH1

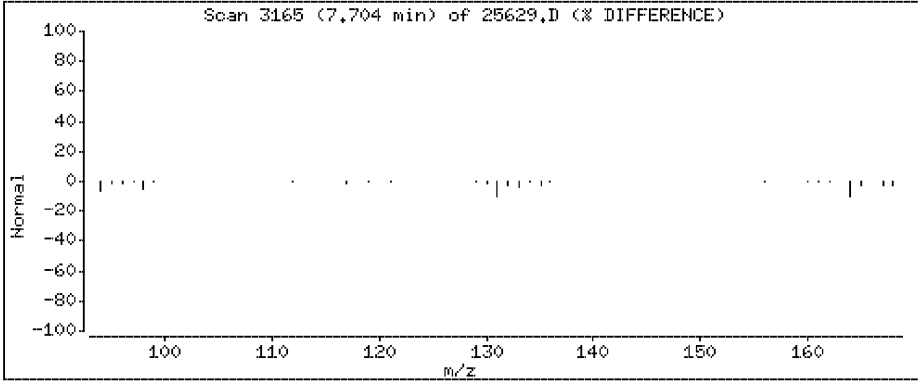
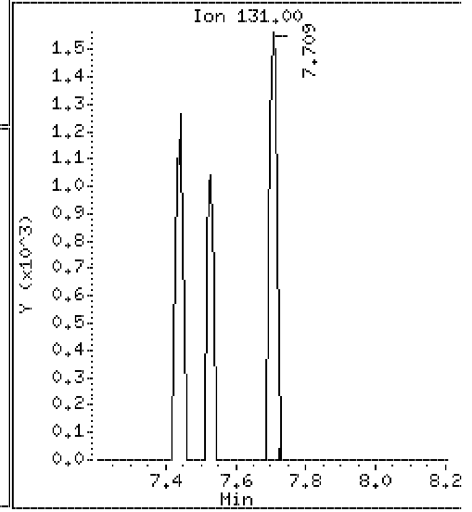
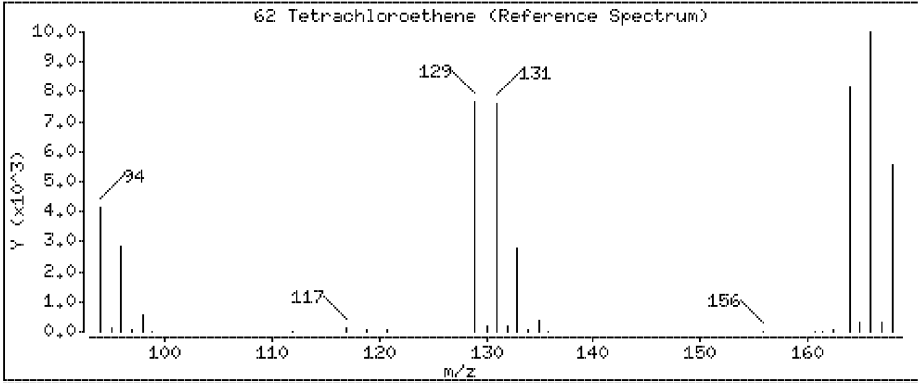
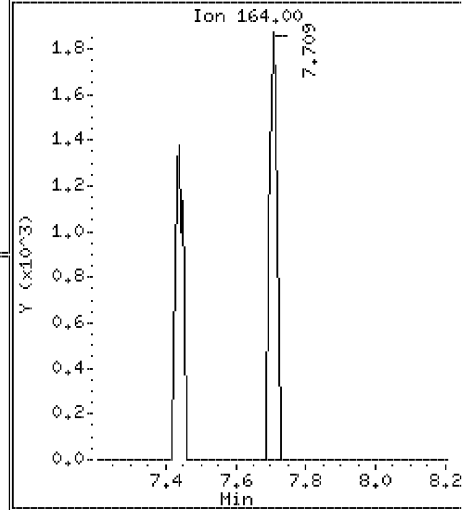
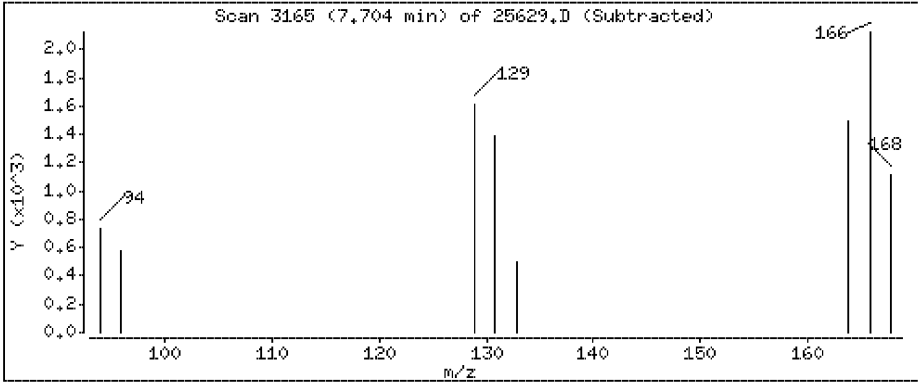
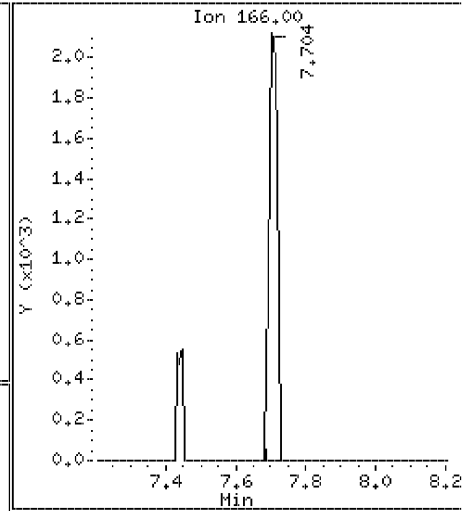
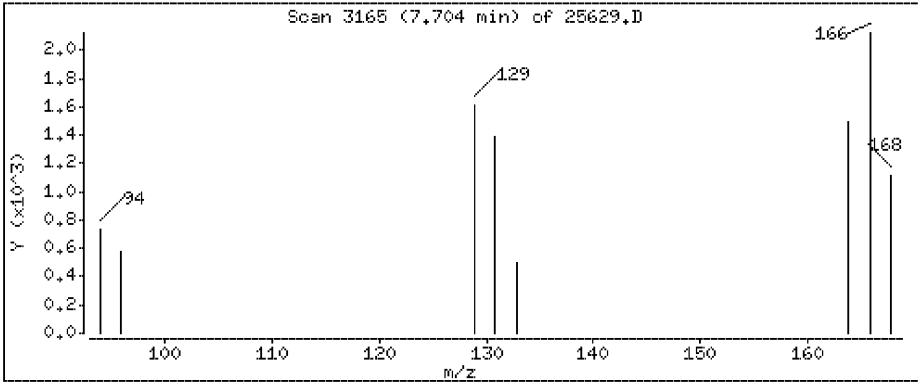
Column phase: ZB-5MSplus SN338857

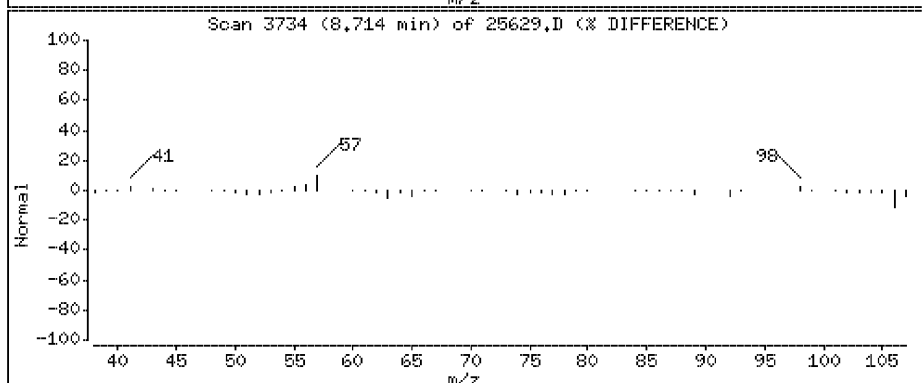
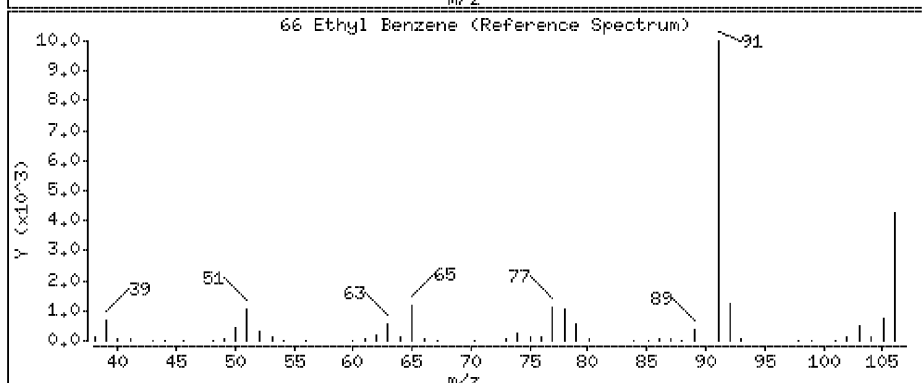
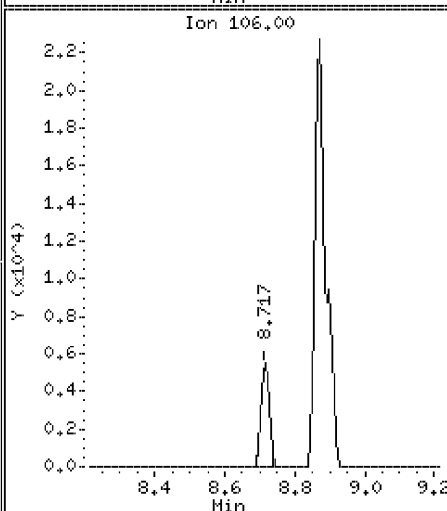
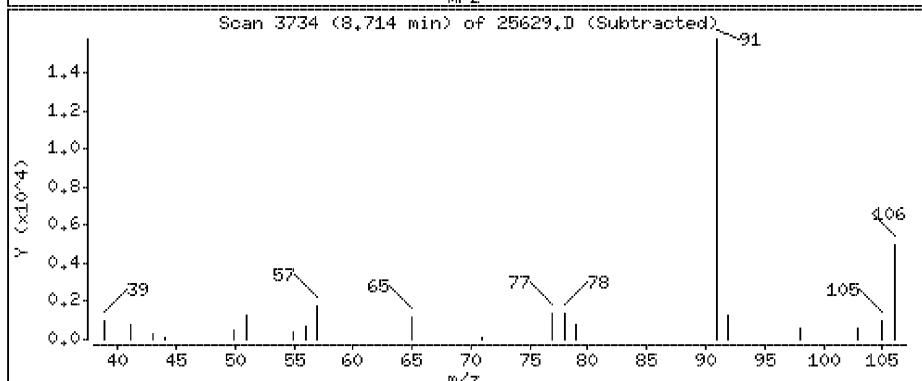
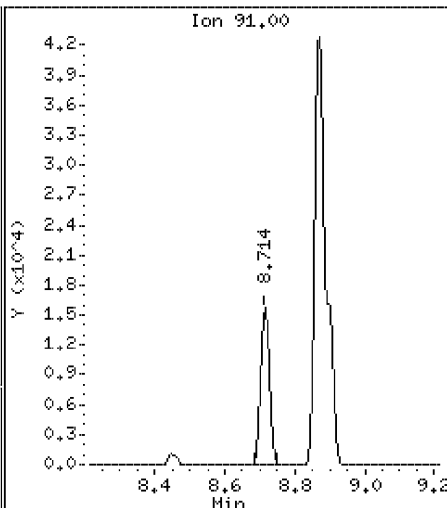
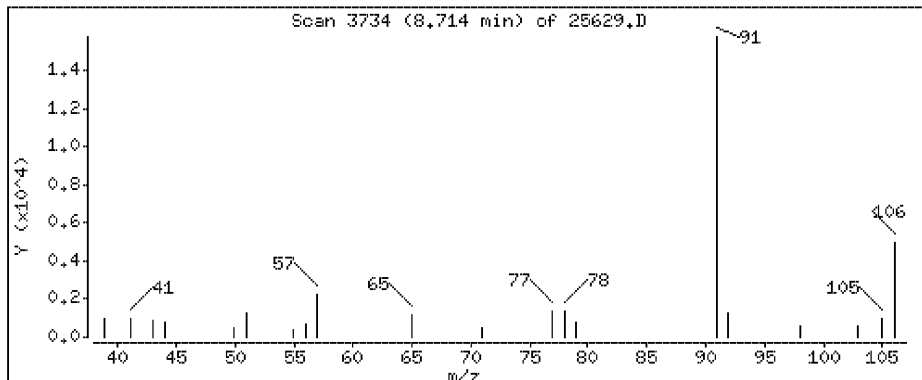
Column diameter: 0.32

59 Methyl Butyl Ketone

Concentration: 0.780 ppbv







Data File: \\192.168.10.12\chem\10airH,1\091318,b\25629.D

Date : 13-SEP-2018 22:55

Client ID:

Instrument: 10airH.i

Sample Info:

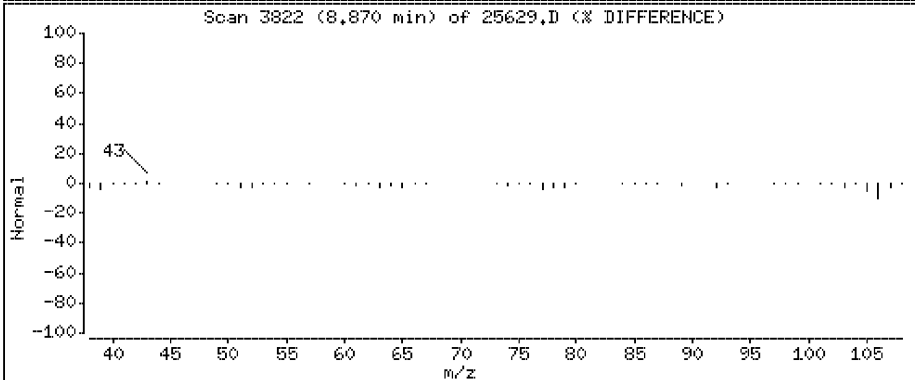
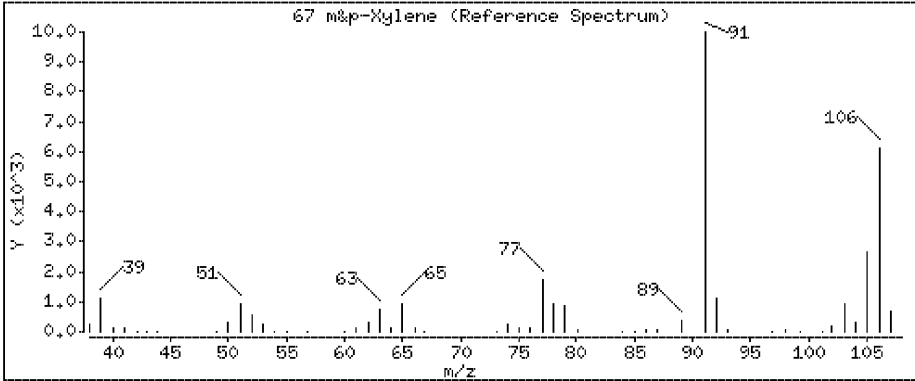
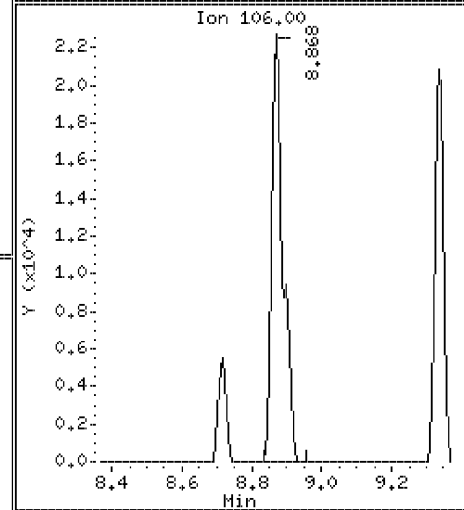
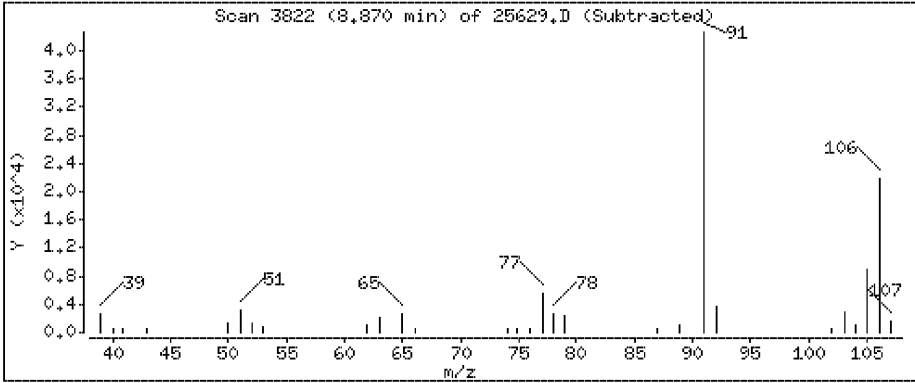
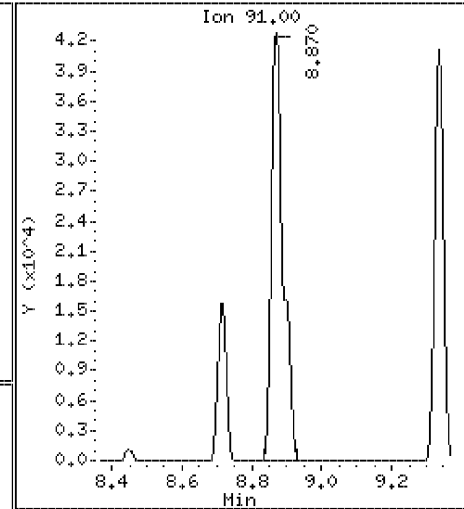
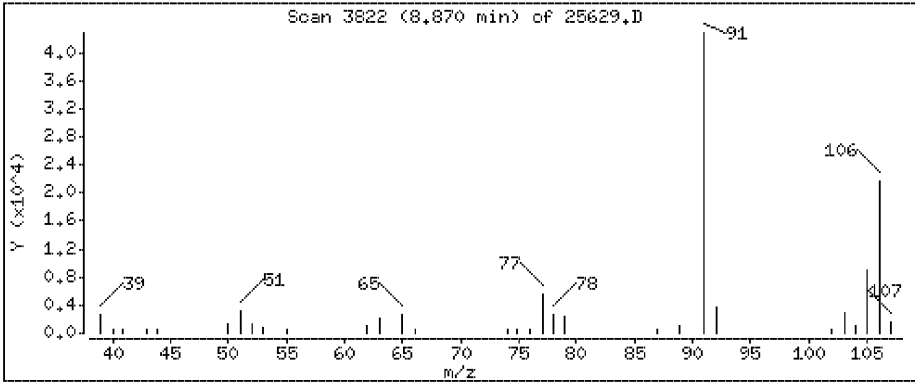
Operator: CH1

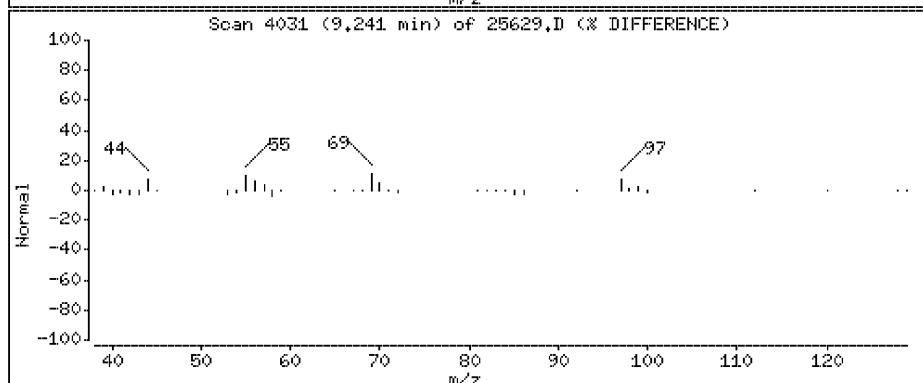
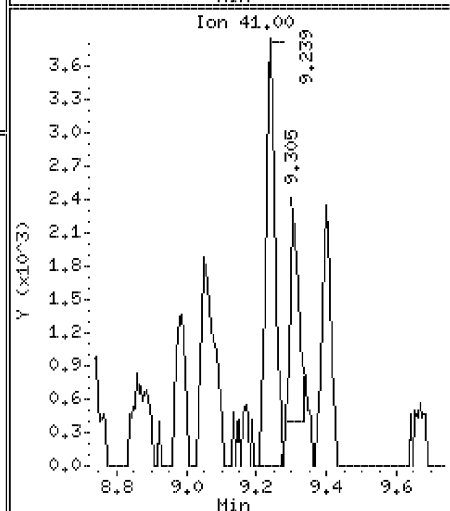
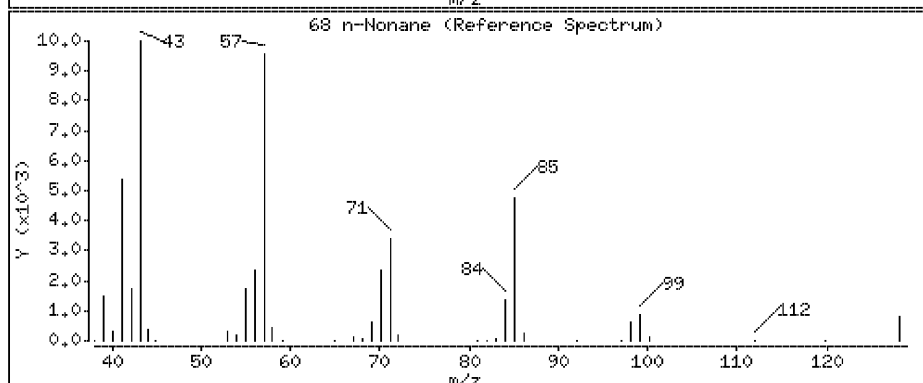
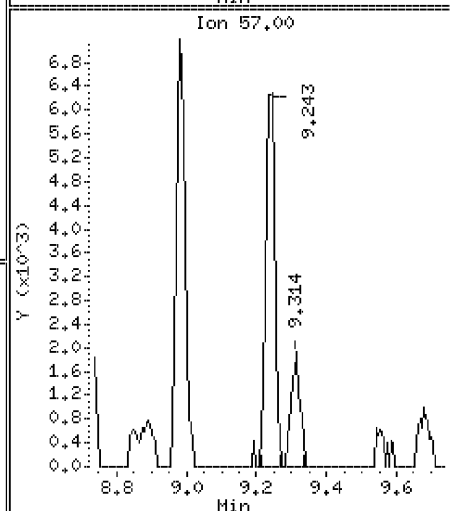
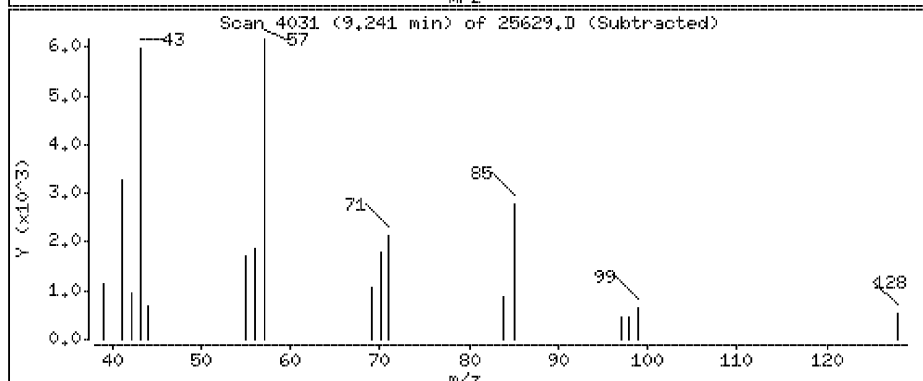
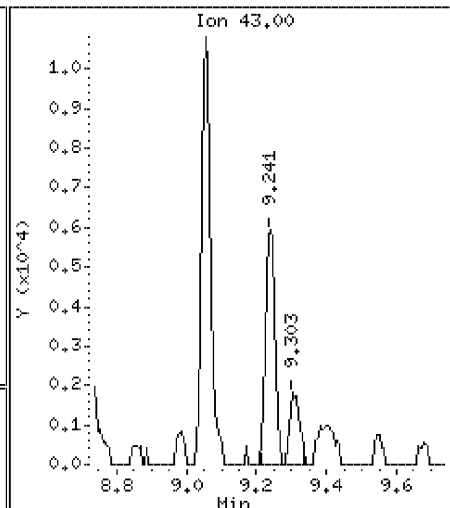
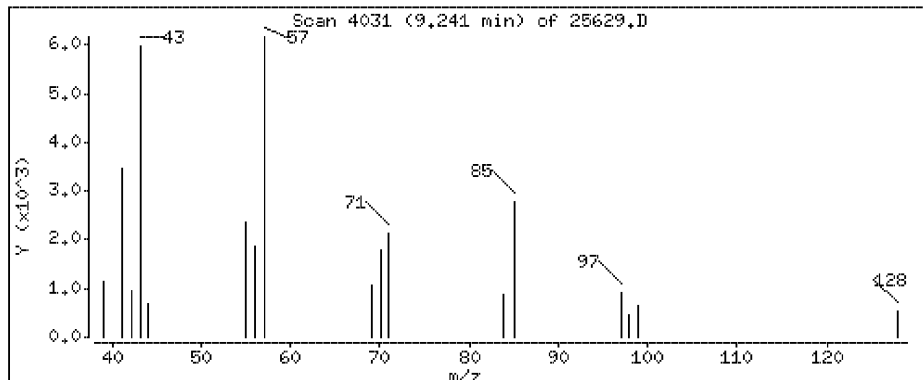
Column phase: ZB-5MSplus SN338857

Column diameter: 0.32

67 m&p-Xylene

Concentration: 1.93 ppbv





Data File: \\192.168.10.12\chem\10airH,1\091318,b\25629.D

Date : 13-SEP-2018 22:55

Client ID:

Instrument: 10airH.i

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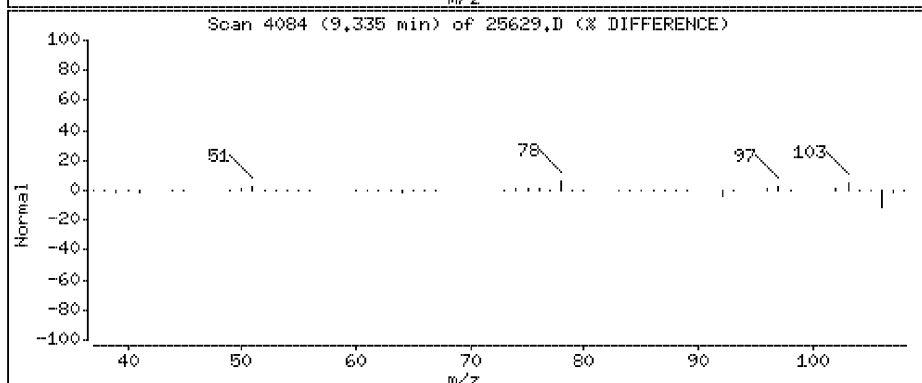
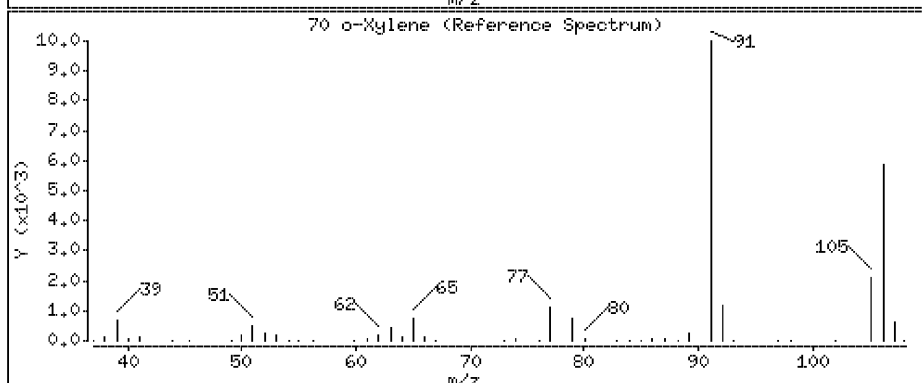
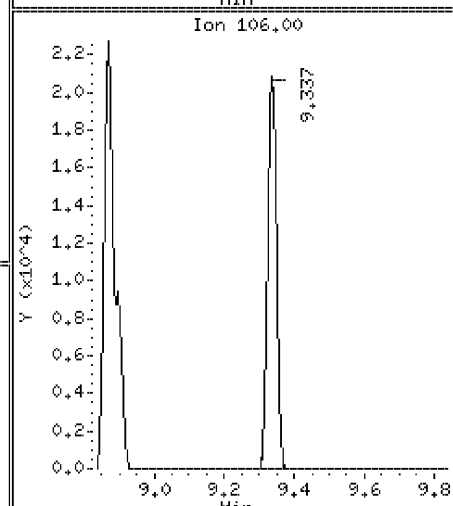
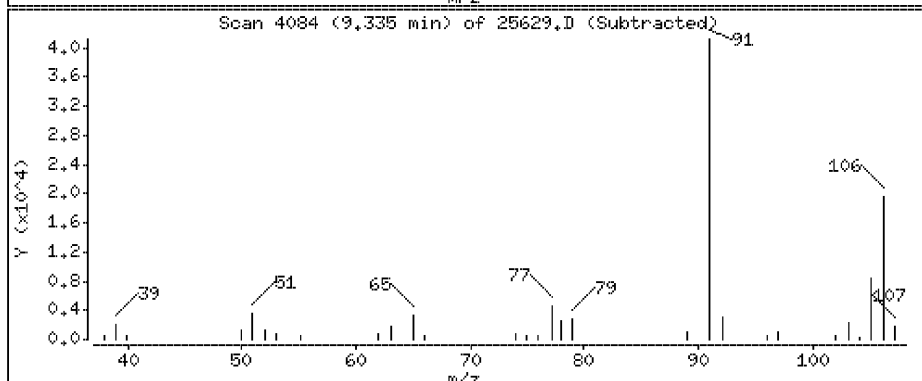
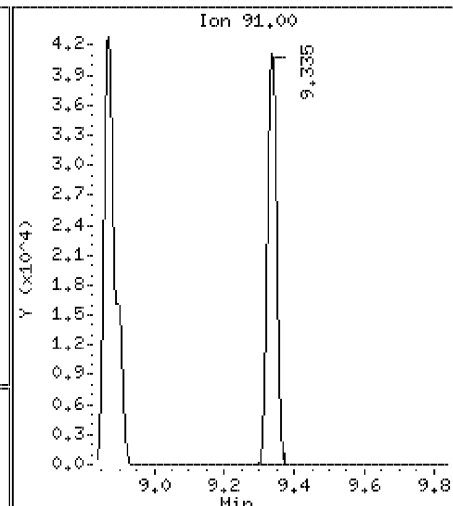
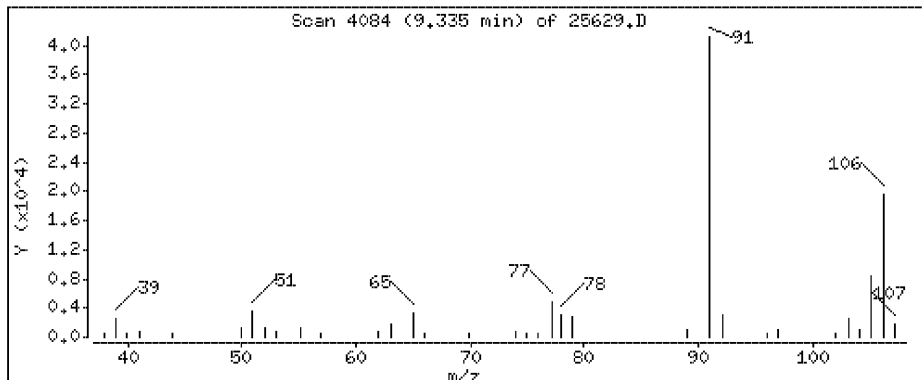
Operator: CH1

Column phase: ZB-5MSplus SN338857

Column diameter: 0.32

70 o-Xylene

Concentration: 1.31 ppbv



Data File: \\192.168.10.12\chem\10airH,1\091318,b\25629.D

Date : 13-SEP-2018 22:55

Client ID:

Instrument: 10airH.i

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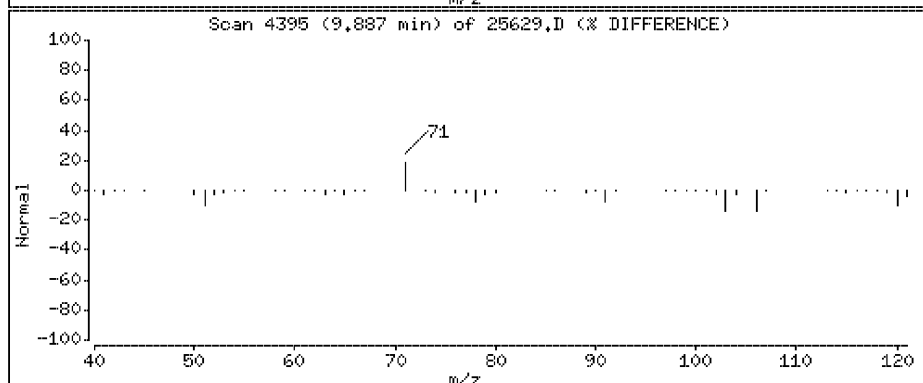
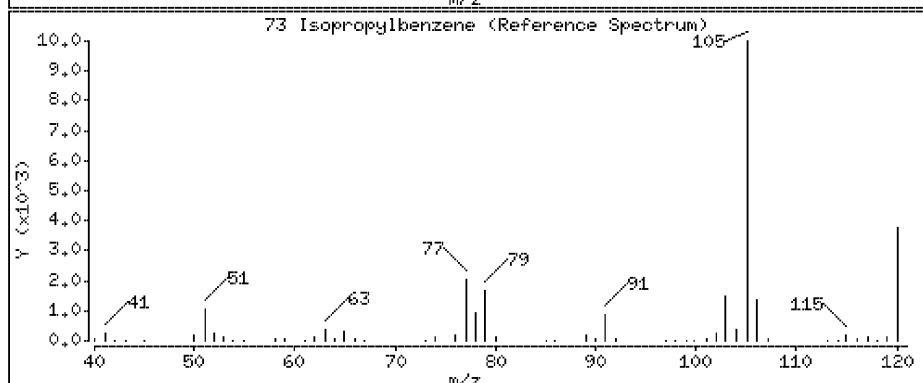
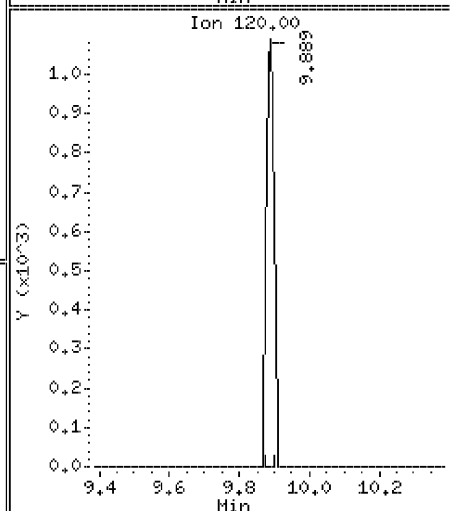
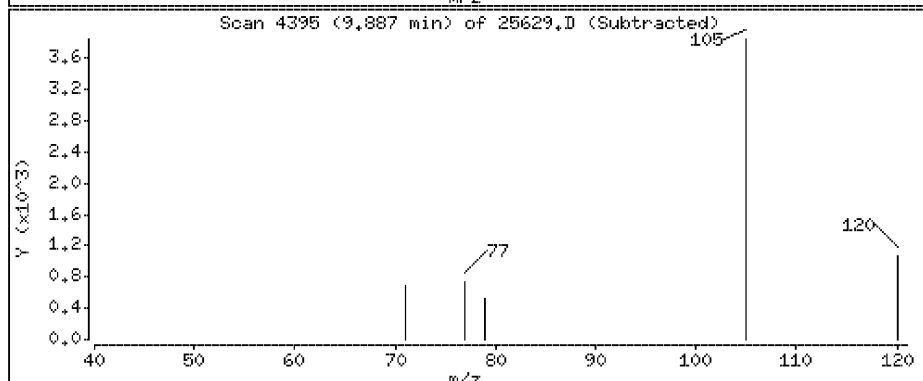
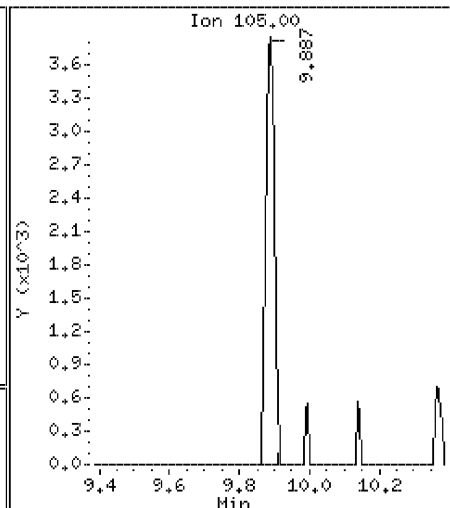
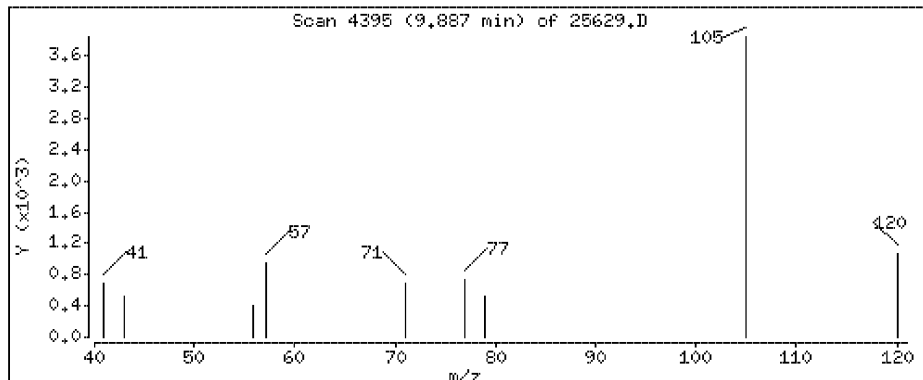
Operator: CH1

Column phase: ZB-5MSplus SN338857

Column diameter: 0,32

73 Isopropylbenzene

Concentration: 0,453 ppbv



Data File: \\192.168.10.12\chem\10airH,i\091318,b\25629.D

Date : 13-SEP-2018 22:55

Client ID:

Instrument: 10airH.i

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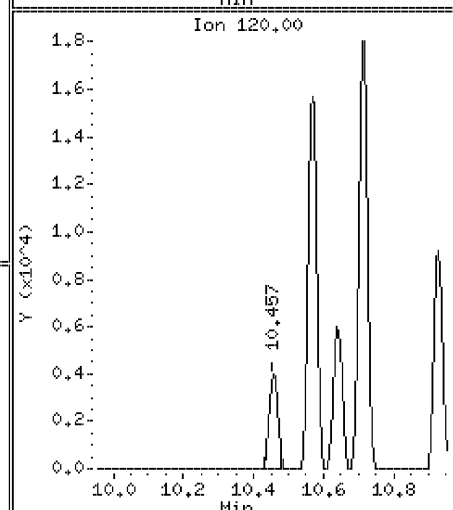
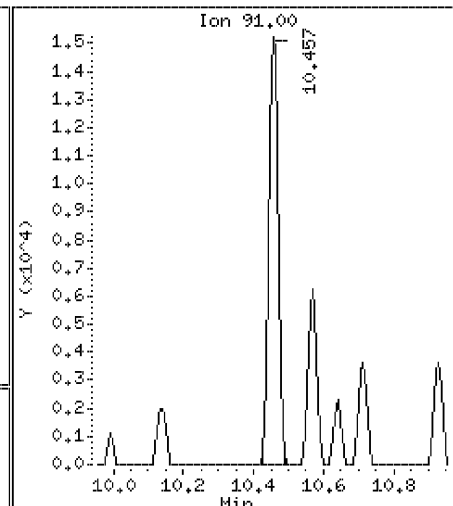
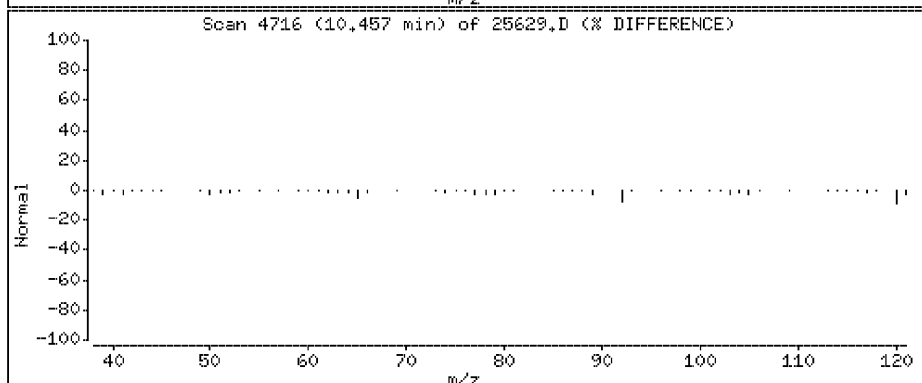
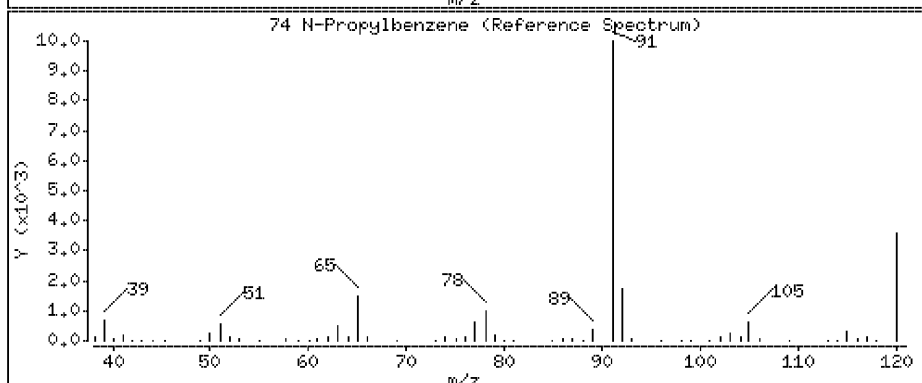
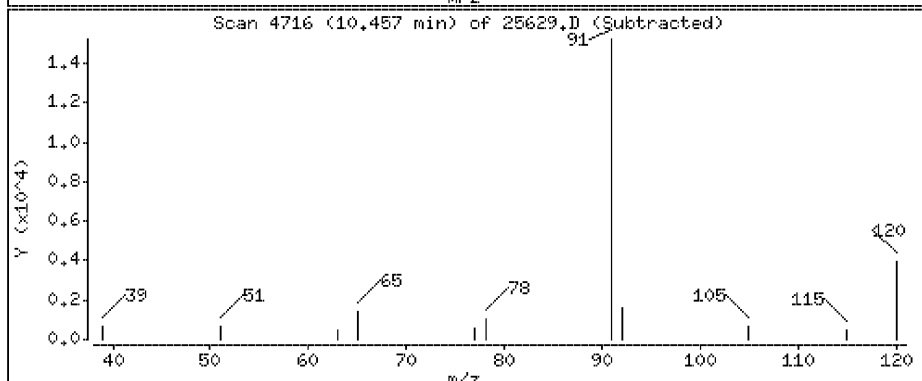
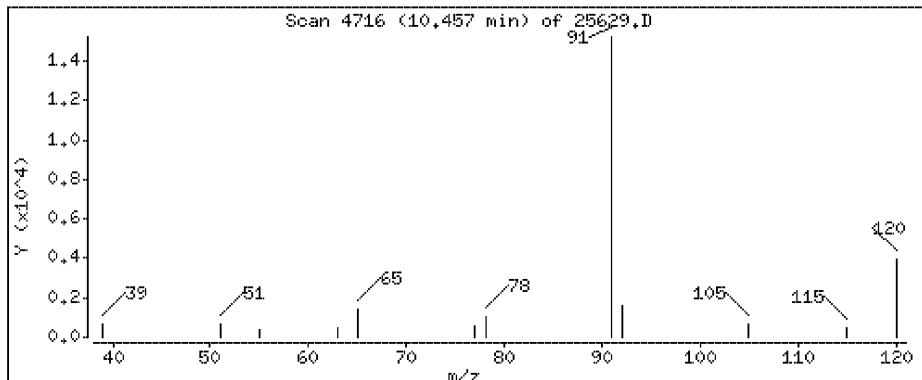
Operator: CH1

Column phase: ZB-5MSplus SN338857

Column diameter: 0,32

74 N-Propylbenzene

Concentration: 0,538 ppbv



Data File: \\192.168.10.12\chem\10airH,i\091318,b\25629.D

Date : 13-SEP-2018 22:55

Client ID:

Instrument: 10airH,i

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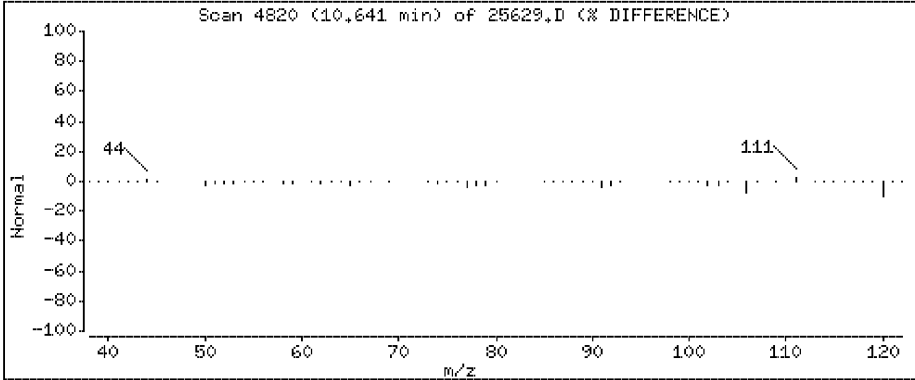
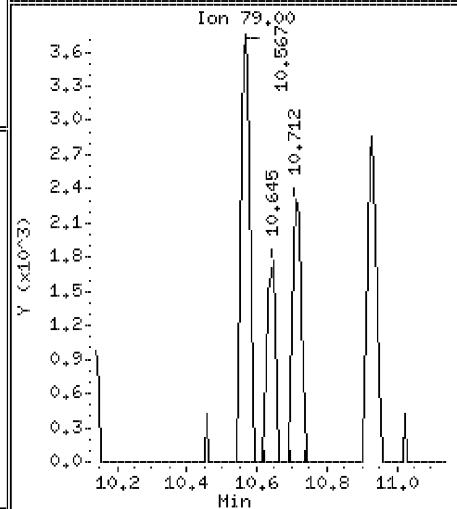
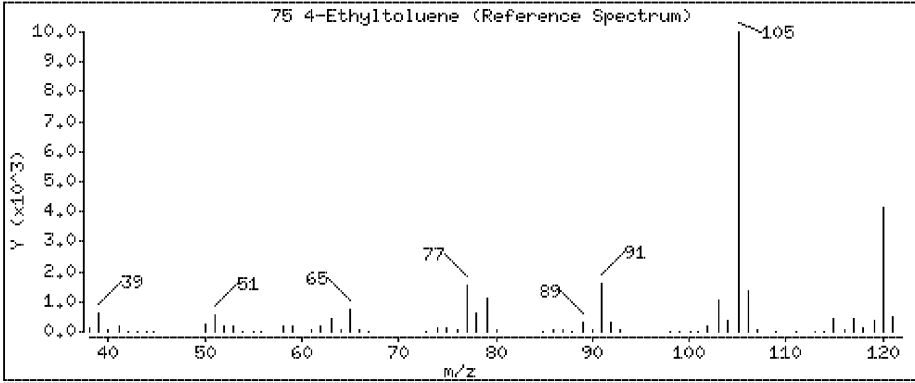
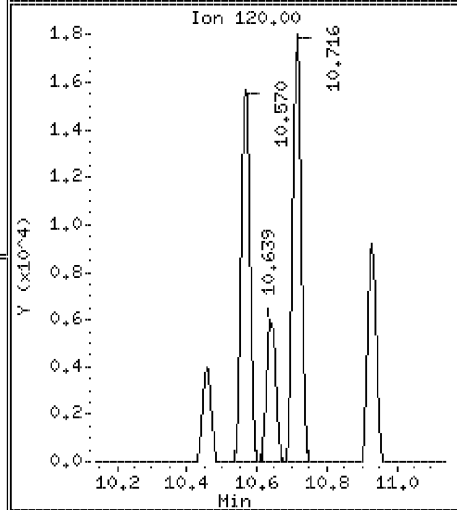
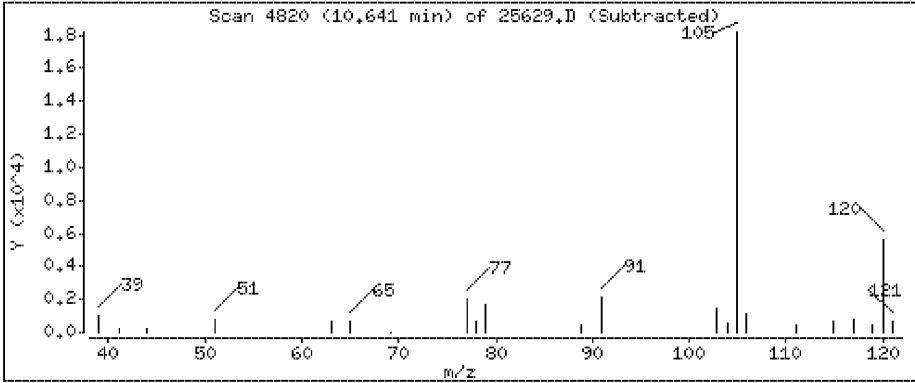
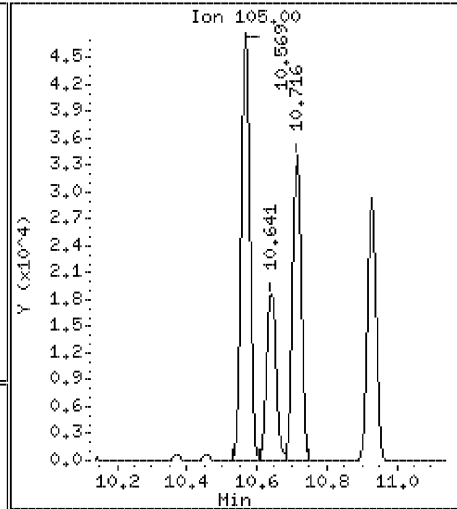
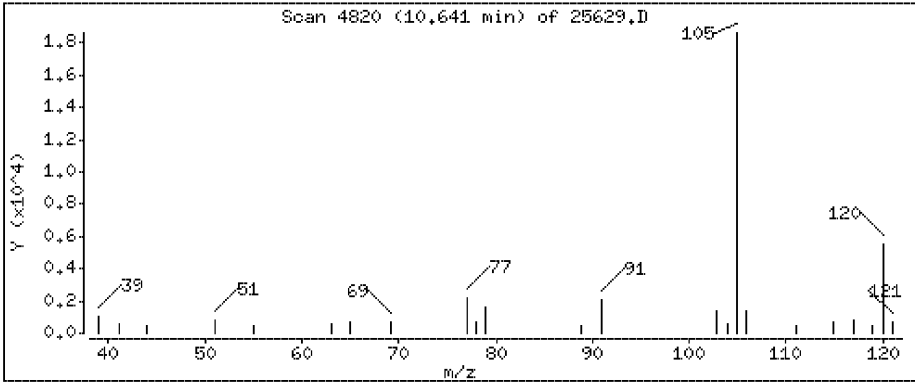
Operator: CH1

Column phase: ZB-5MSplus SN338857

Column diameter: 0,32

75 4-Ethyltoluene

Concentration: 0,829 ppbv



Data File: \\192.168.10.12\chem\10airH,1\091318,b\25629.D

Date : 13-SEP-2018 22:55

Client ID:

Instrument: 10airH.i

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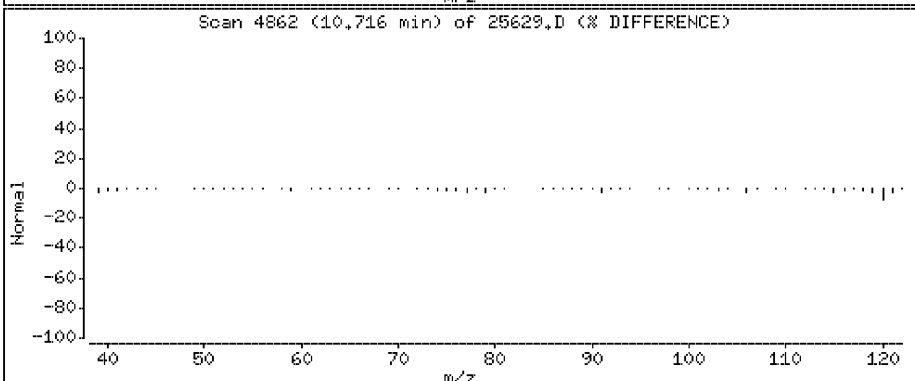
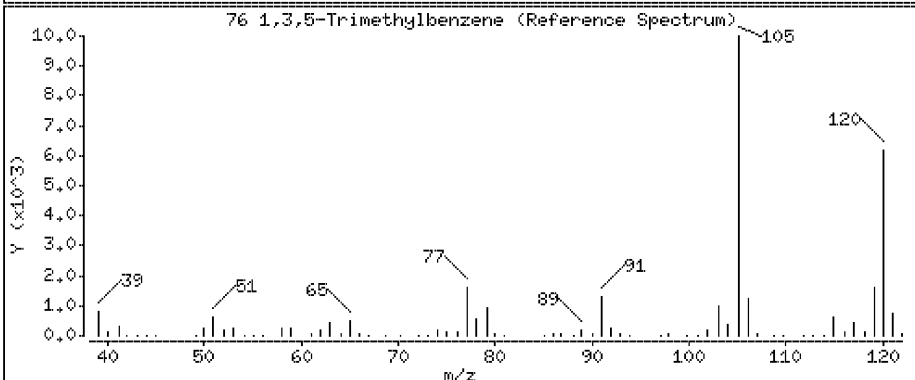
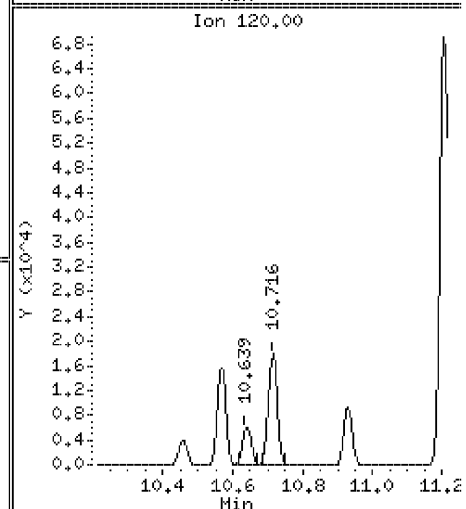
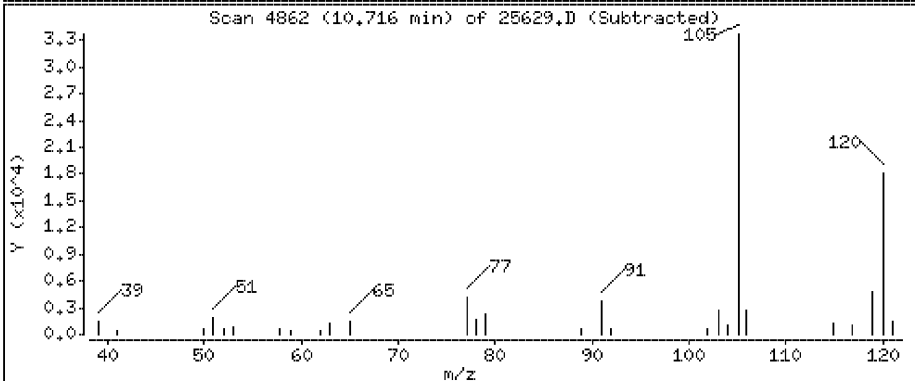
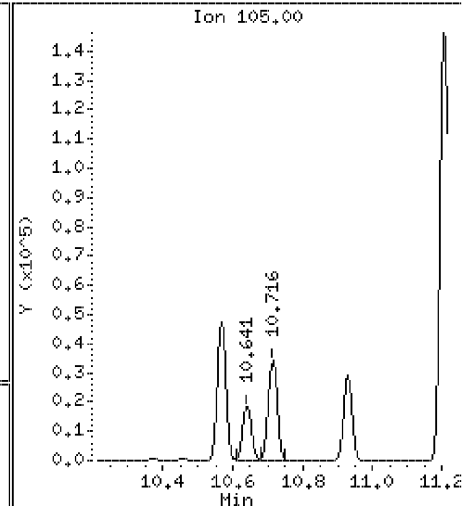
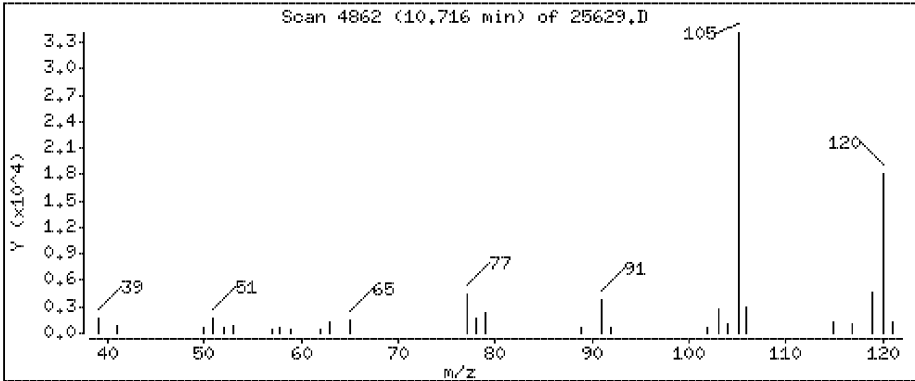
Operator: CH1

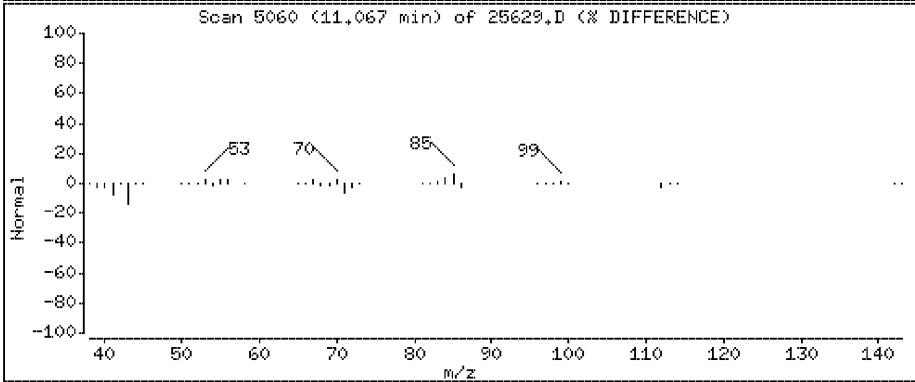
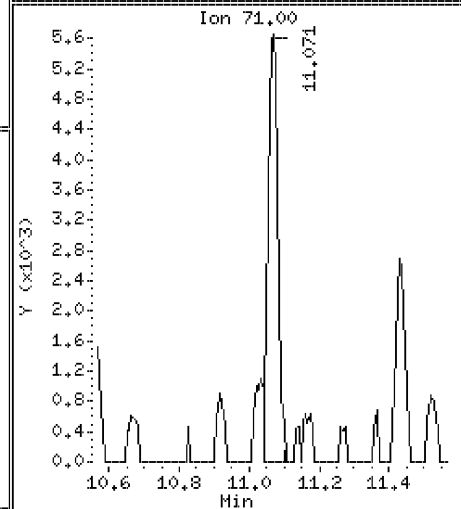
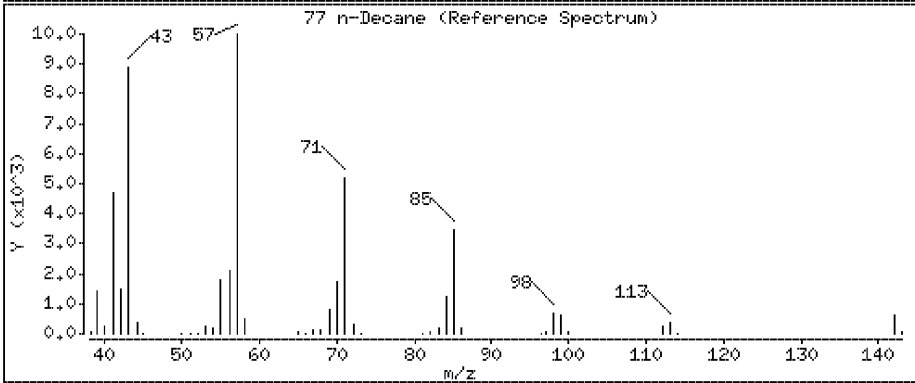
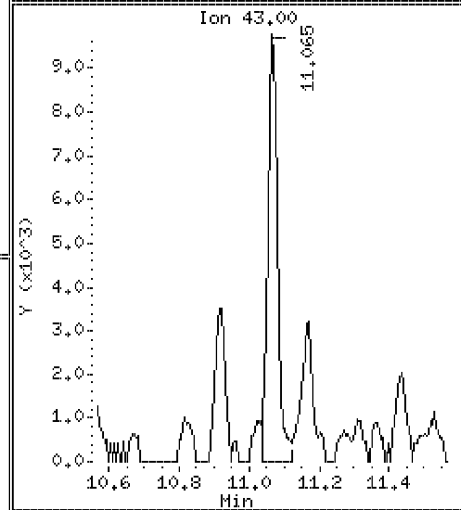
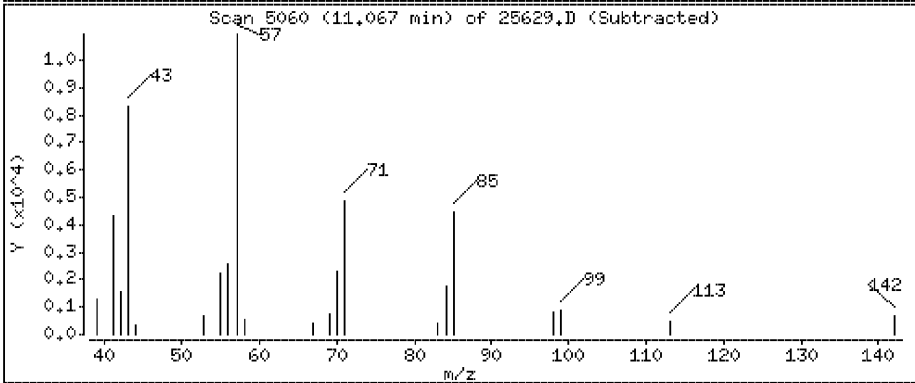
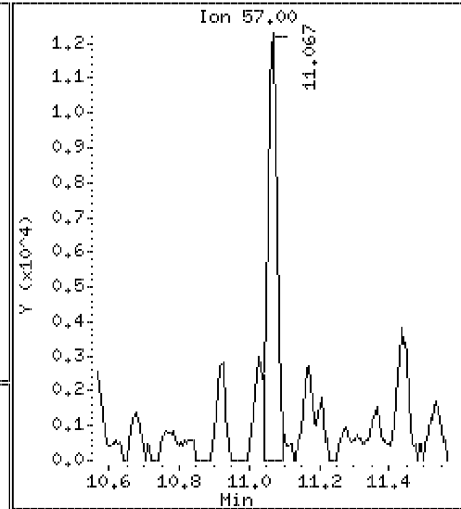
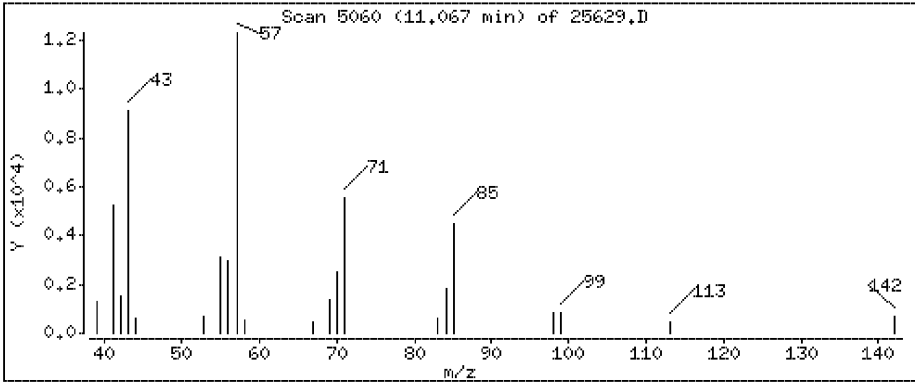
Column phase: ZB-5MSplus SN338857

Column diameter: 0.32

76 1,3,5-Trimethylbenzene

Concentration: 1.05 ppbv





Data File: \\192.168.10.12\chem\10airH,1\091318,b\25629.D

Date : 13-SEP-2018 22:55

Client ID:

Instrument: 10airH.i

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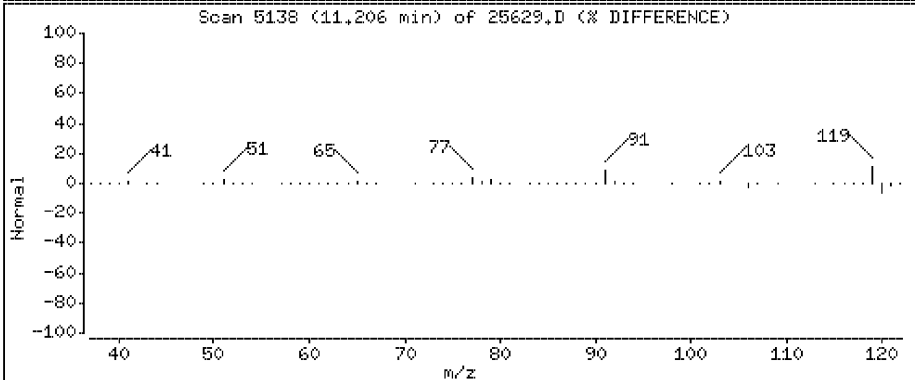
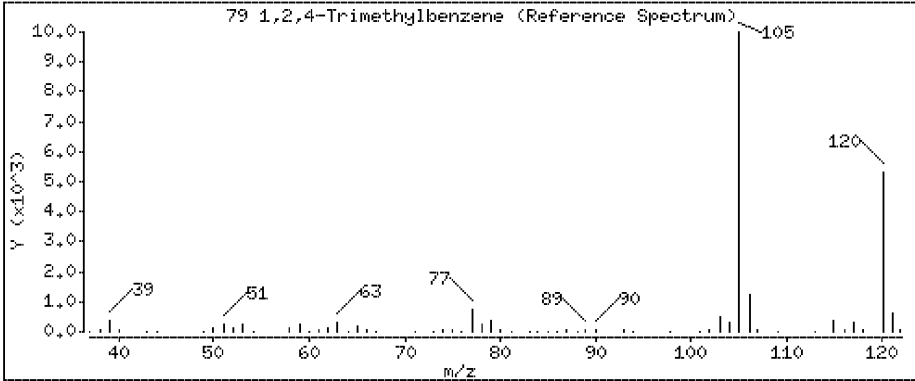
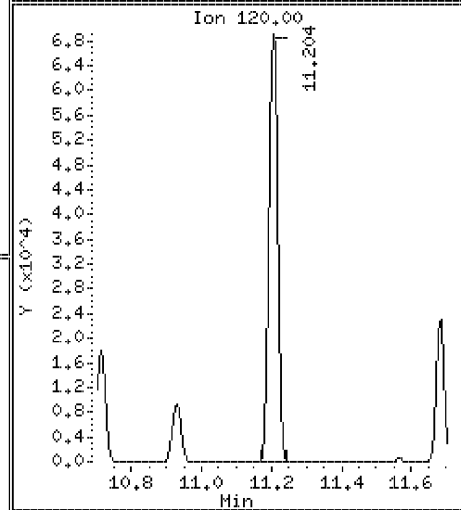
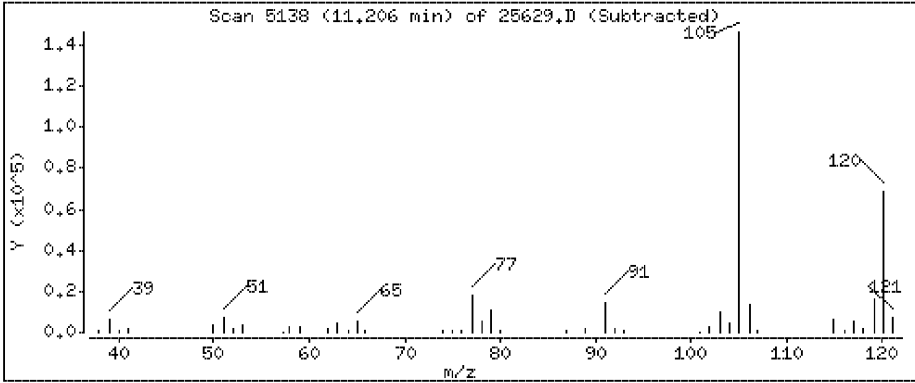
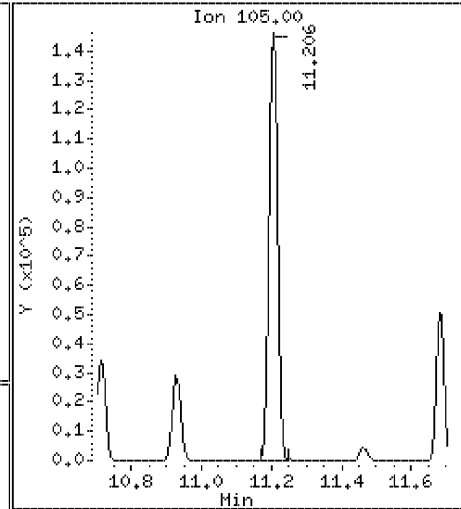
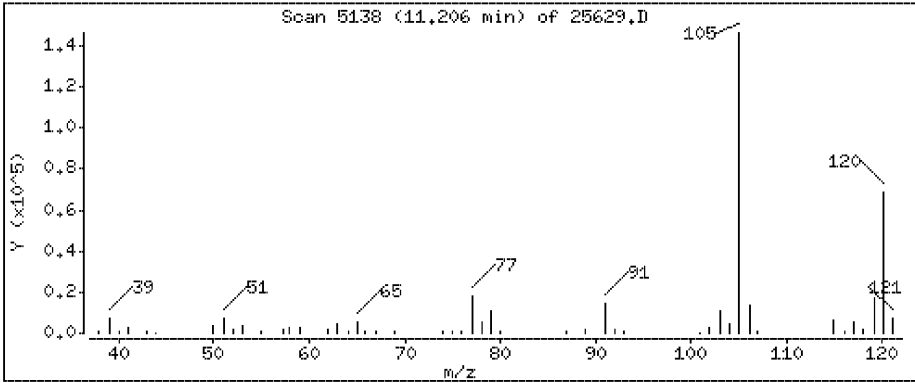
Operator: CH1

Column phase: ZB-5MSplus SN338857

Column diameter: 0.32

79 1,2,4-Trimethylbenzene

Concentration: 3.69 ppbv



Data File: \\192.168.10.12\chem\10airH,1\091318,b\25629.D

Date : 13-SEP-2018 22:55

Client ID:

Instrument: 10airH.i

Sample Info:

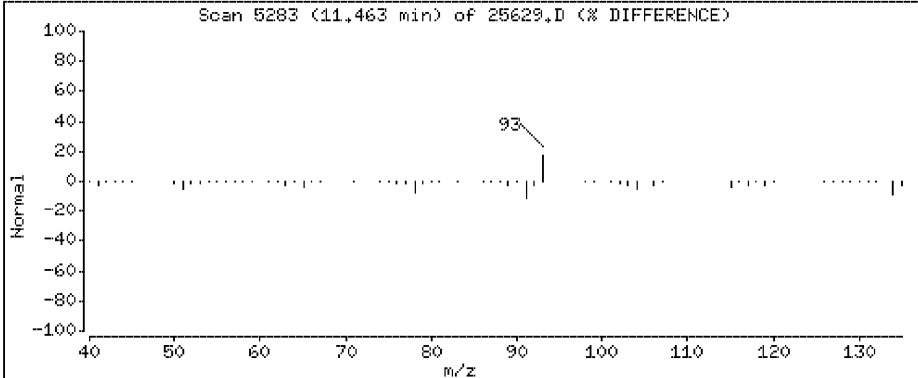
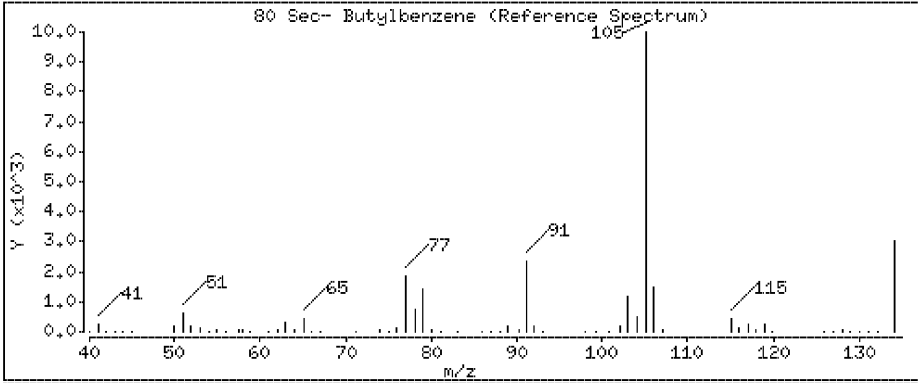
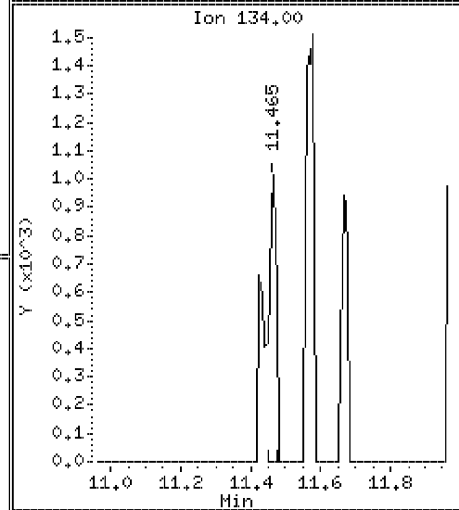
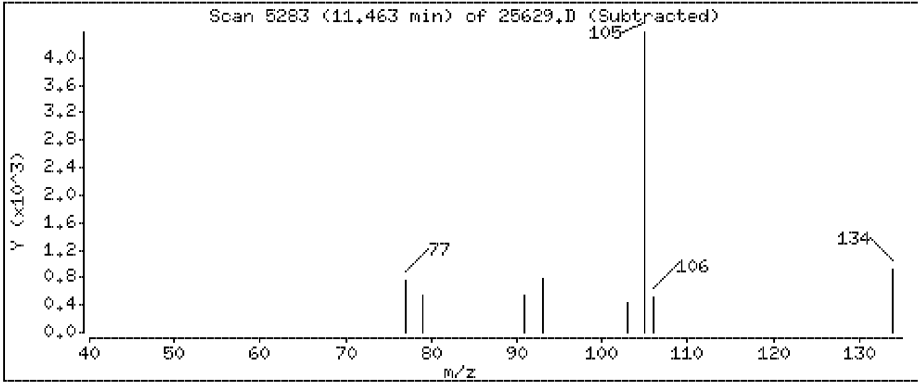
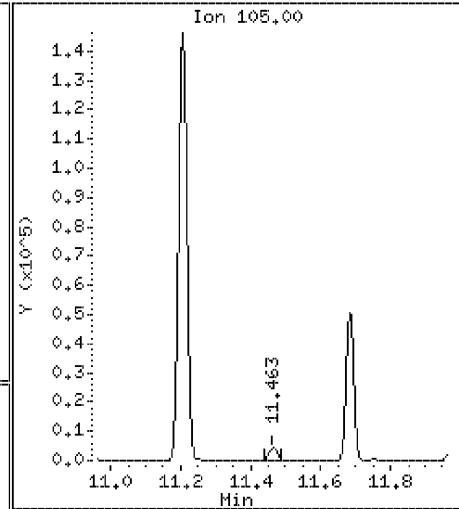
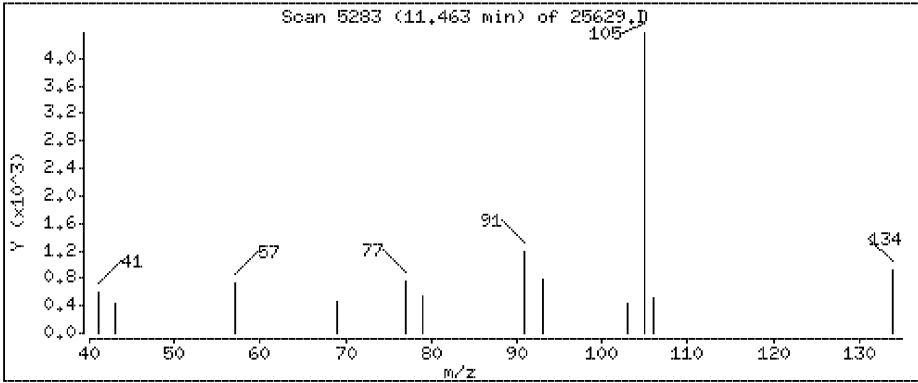
Operator: CH1

Column phase: ZB-5MSplus SN338857

Column diameter: 0.32

80 Sec- Butylbenzene

Concentration: 0.396 ppbv



Data File: \\192.168.10.12\chem\10airH,i\091318,b\25629.D

Date : 13-SEP-2018 22:55

Client ID:

Instrument: 10airH.i

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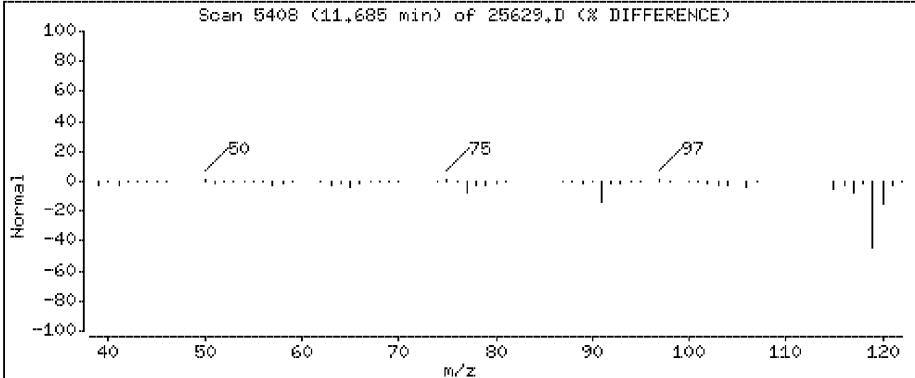
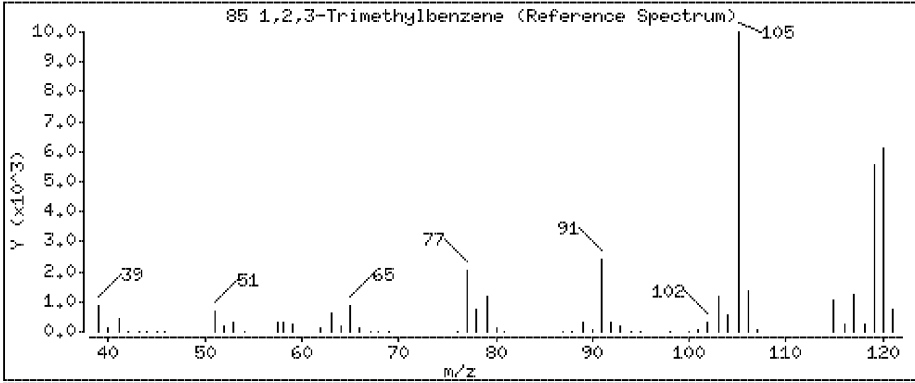
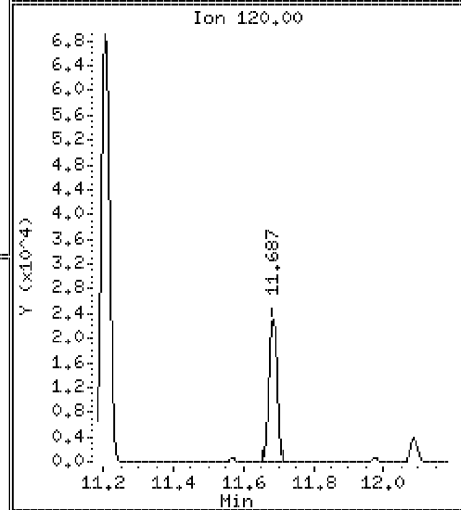
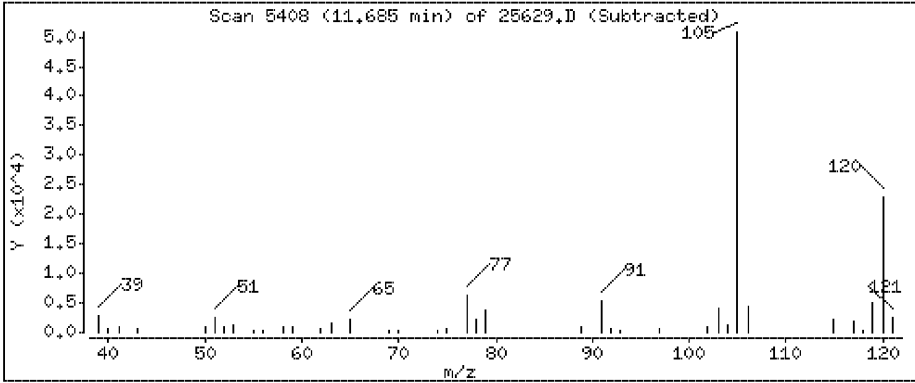
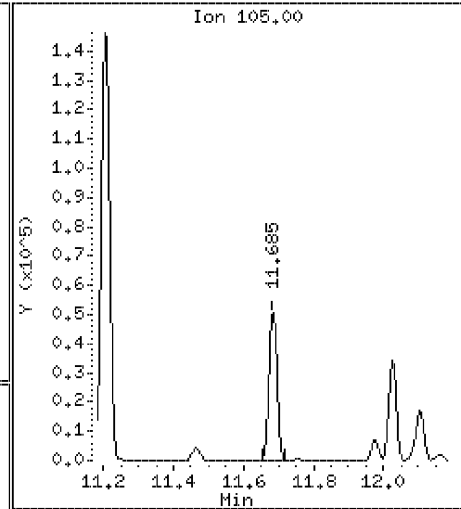
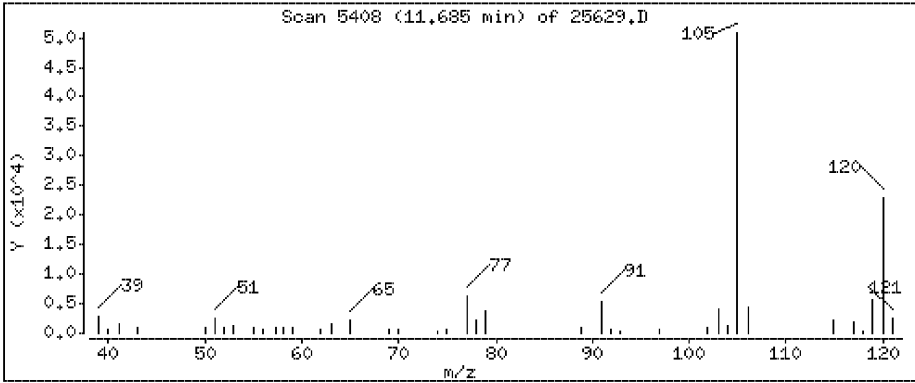
Operator: CH1

Column phase: ZB-5MSplus SN338857

Column diameter: 0.32

85 1,2,3-Trimethylbenzene

Concentration: 1.34 ppbv



Data File: \\192.168.10.12\chem\10airH,1\091318,b\25629.D

Date : 13-SEP-2018 22:55

Client ID:

Instrument: 10airH.i

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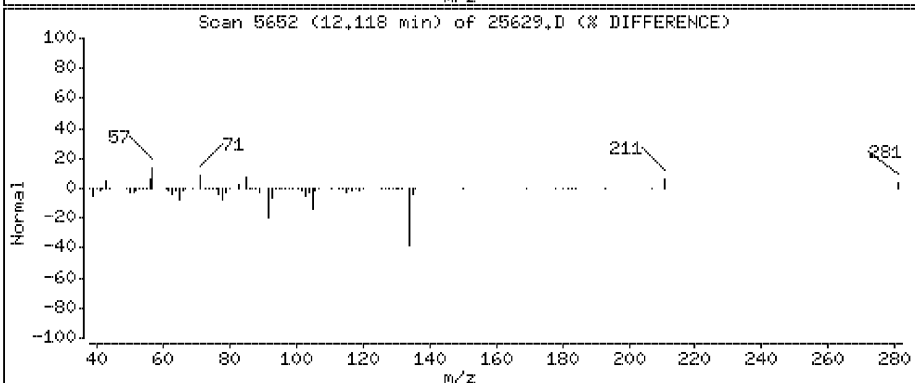
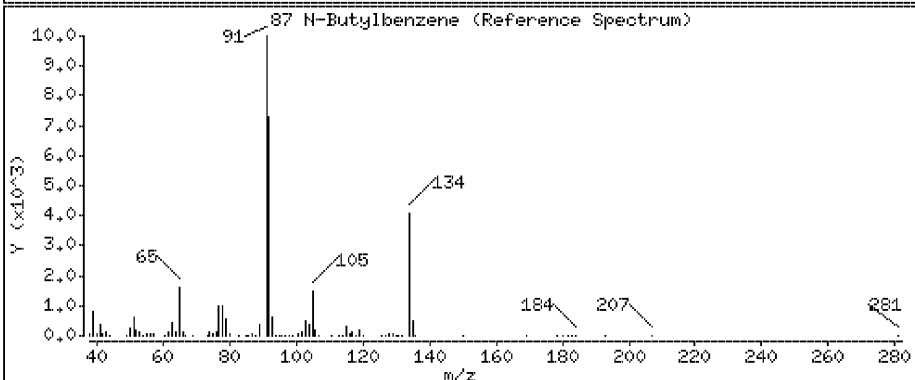
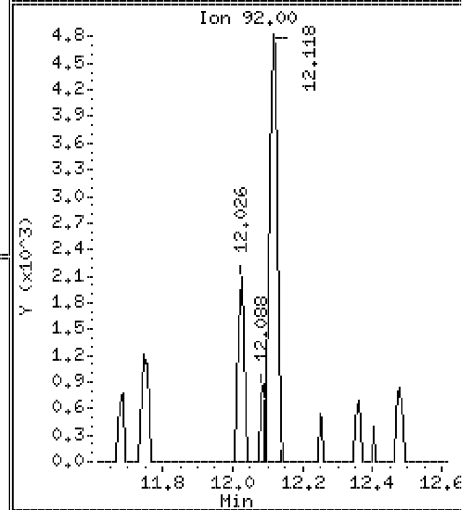
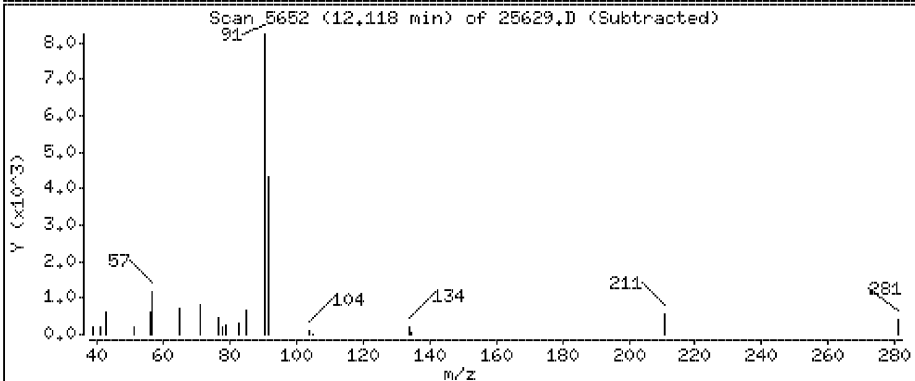
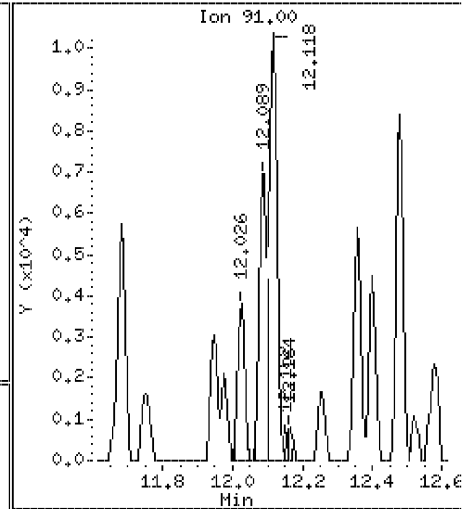
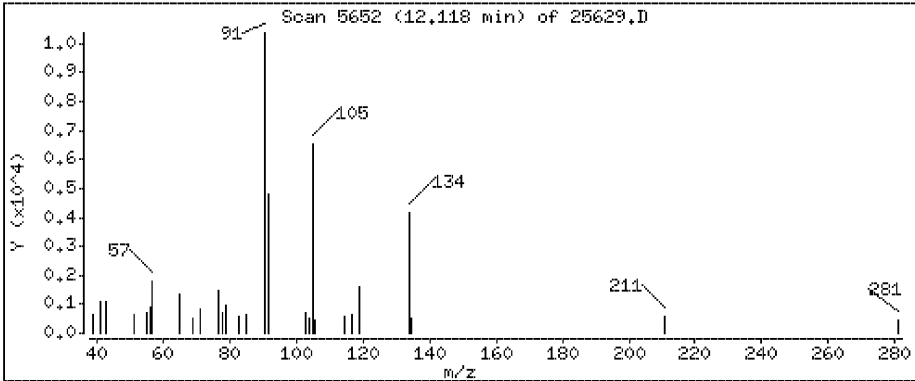
Operator: CH1

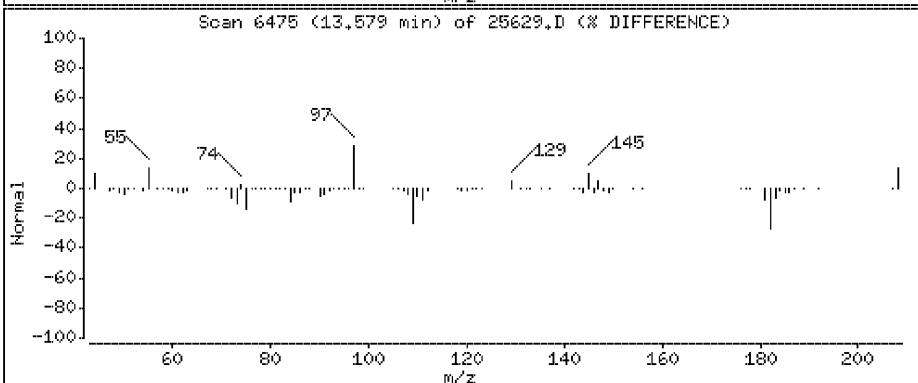
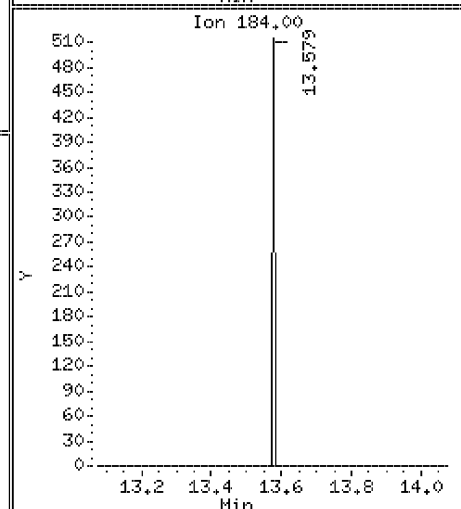
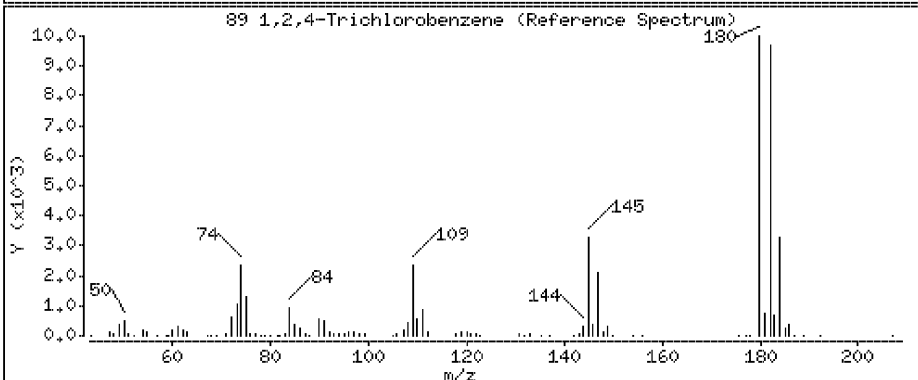
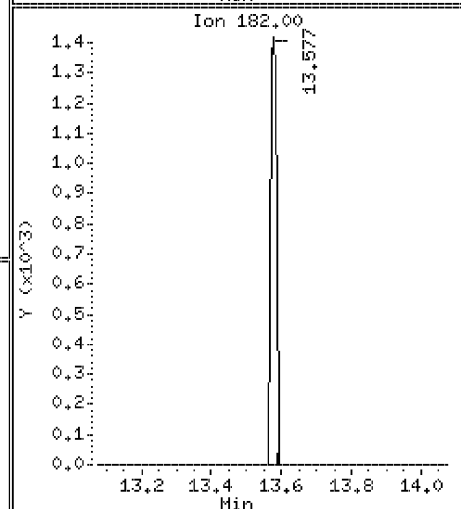
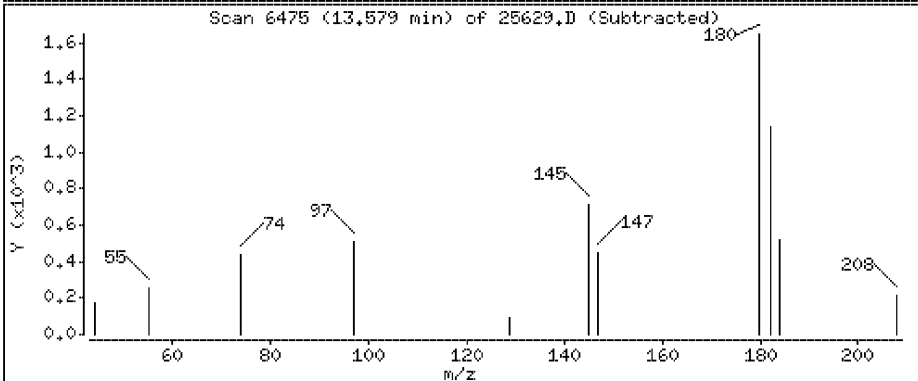
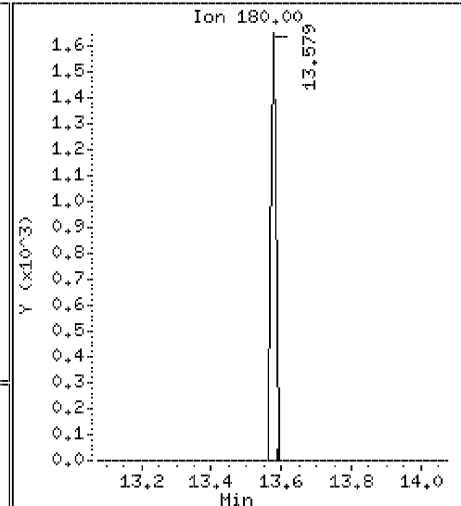
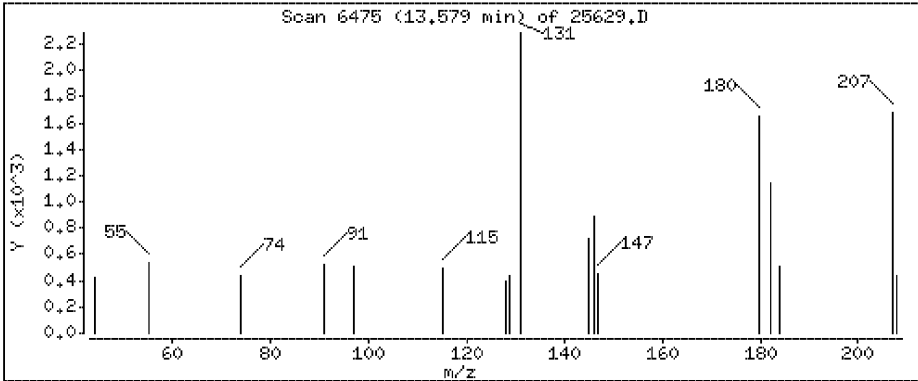
Column phase: ZB-5MSplus SN338857

Column diameter: 0.32

87 N-Butylbenzene

Concentration: 0.755 ppbv





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Date : 13-SEP-2018 22:55

Client ID:

Instrument: 10airH.i

Sample Info:

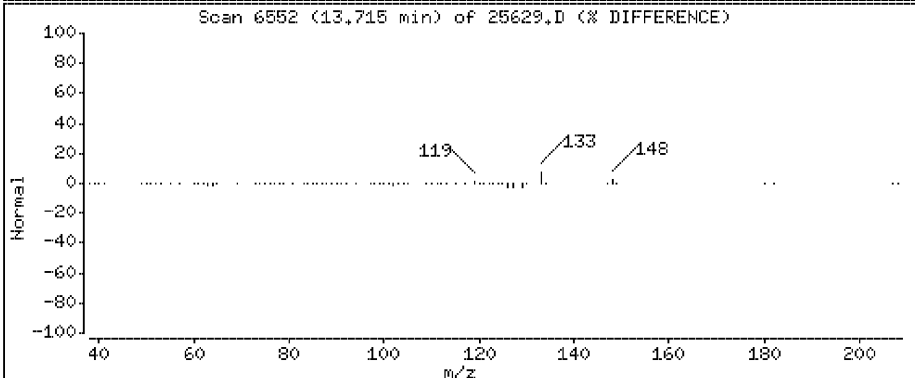
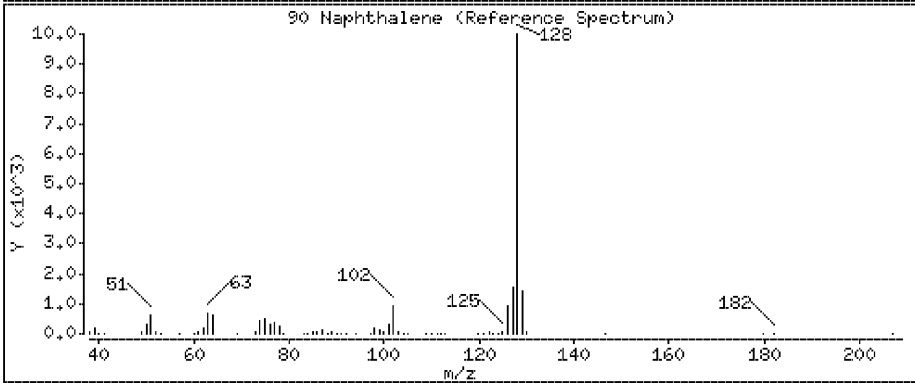
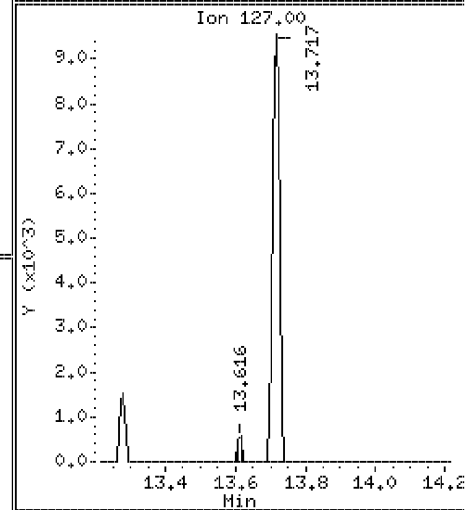
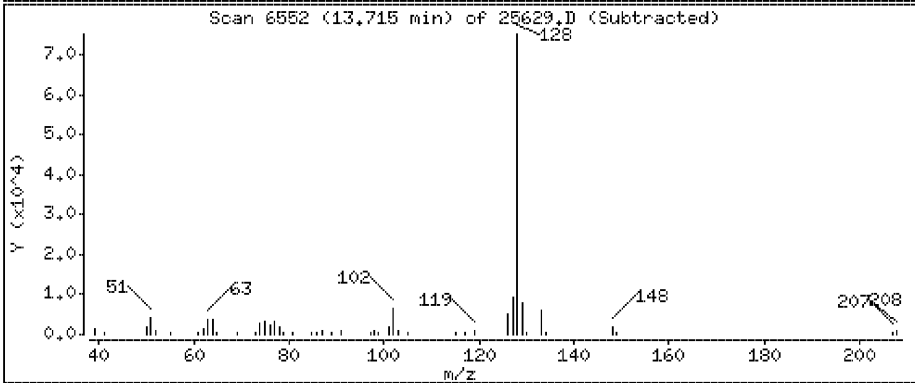
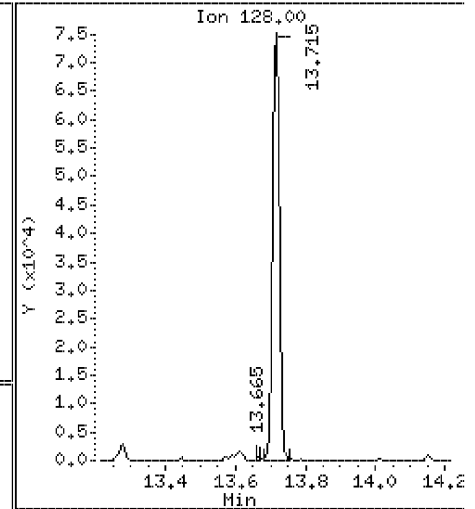
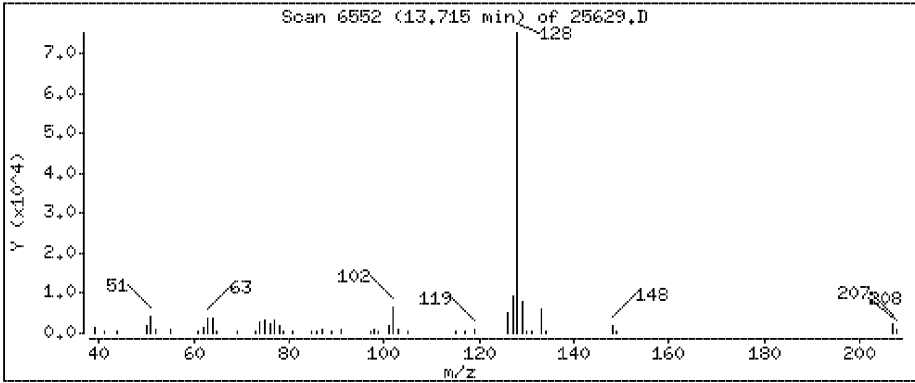
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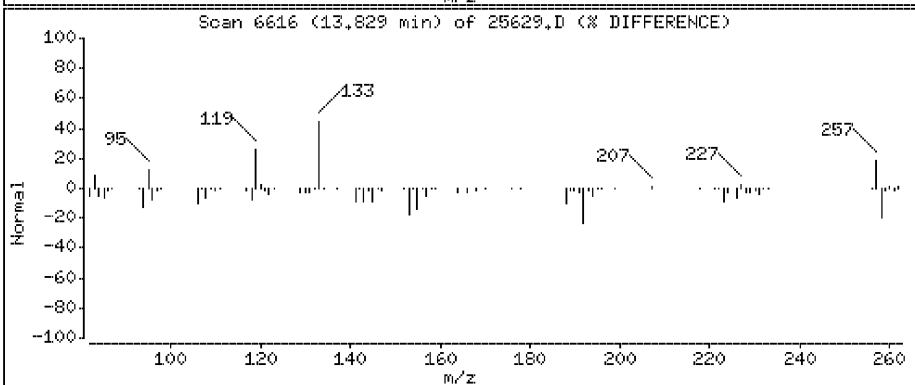
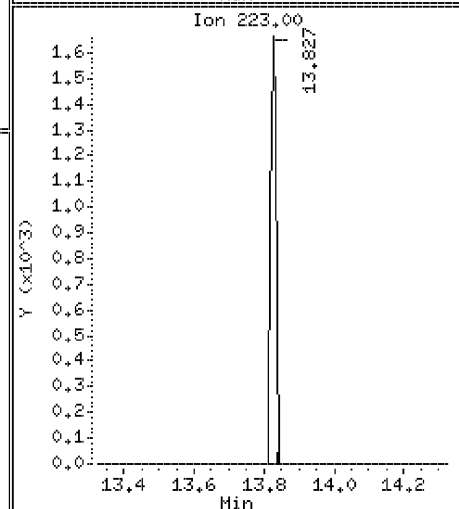
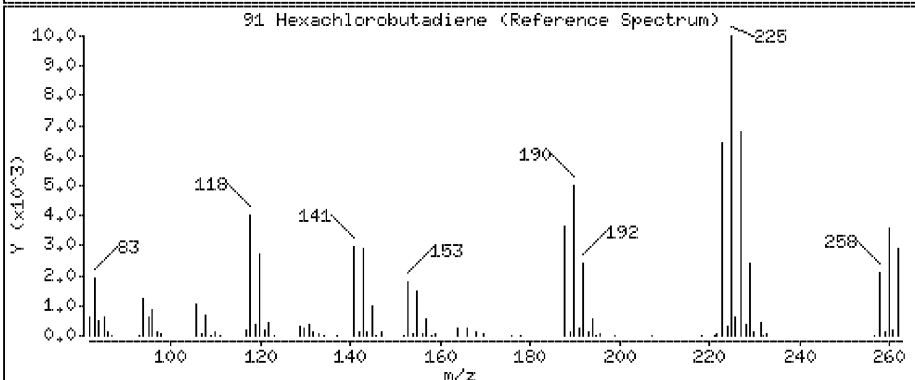
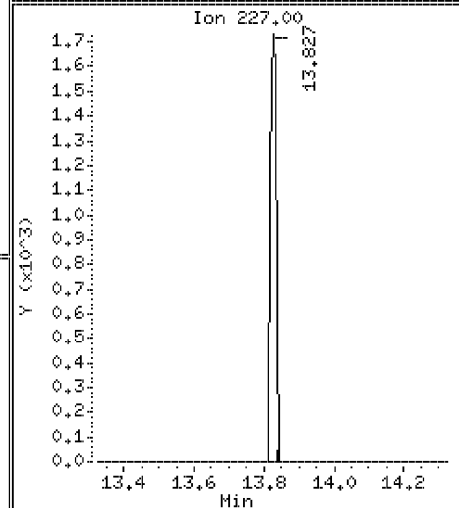
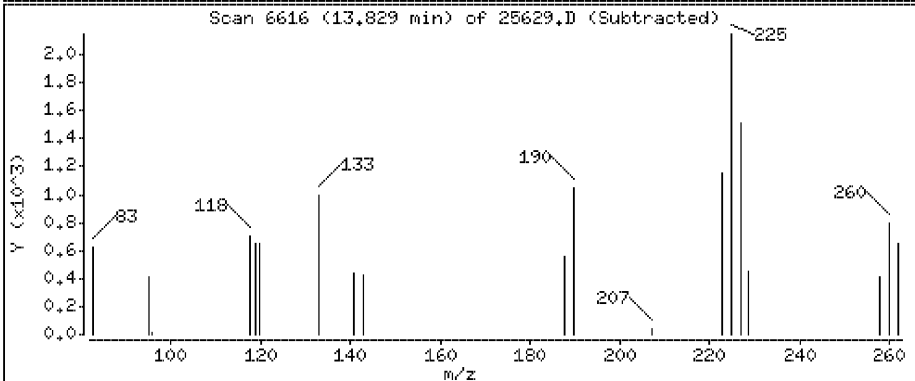
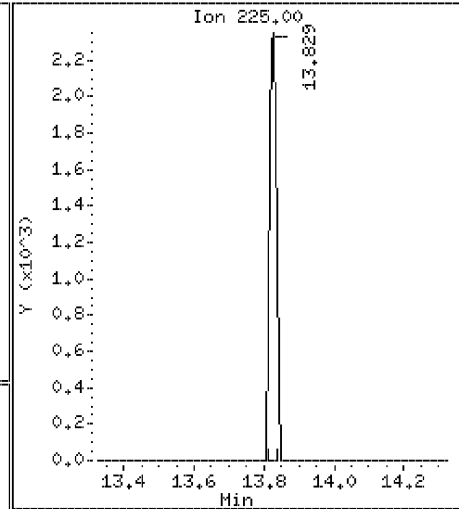
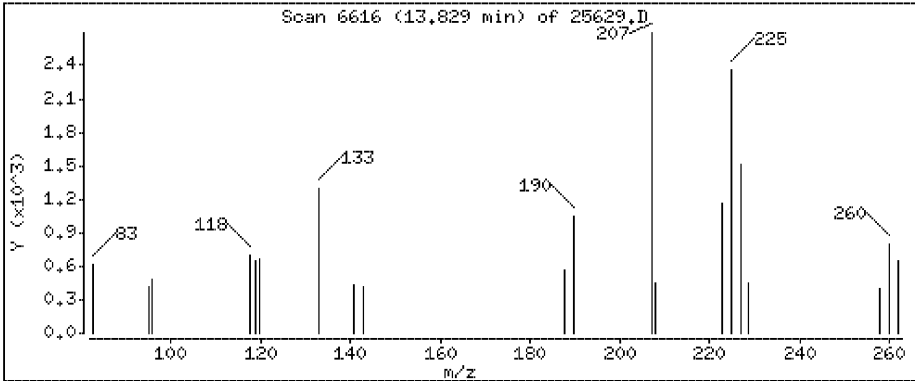
Column phase: ZB-5MSplus SN338857

Column diameter: 0.32

90 Naphthalene

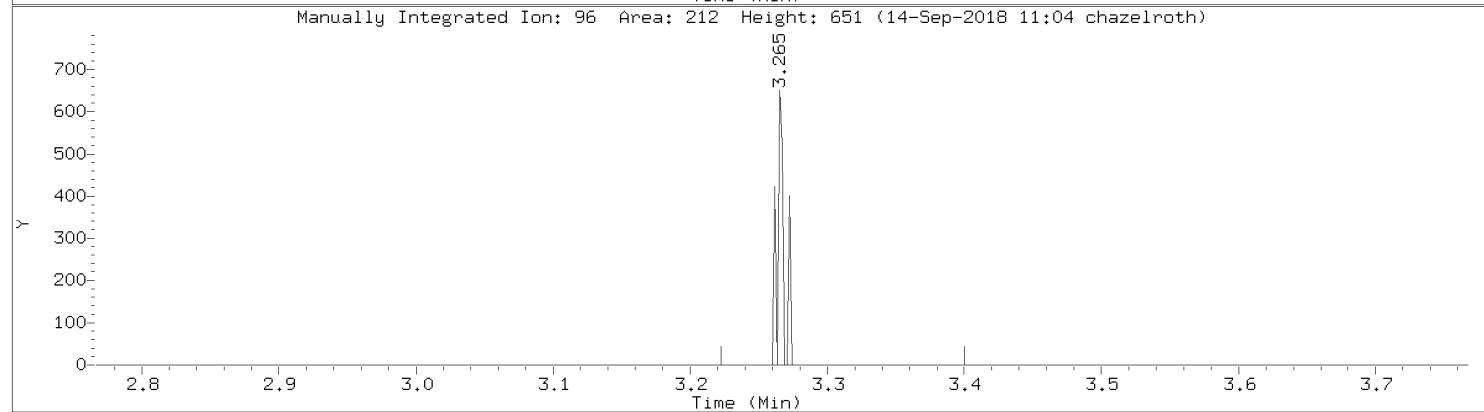
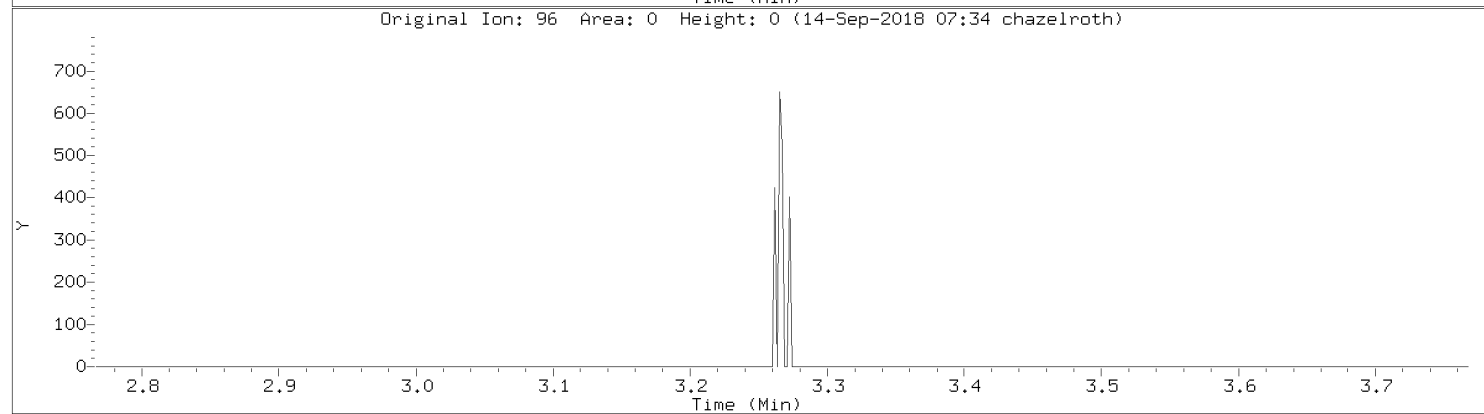
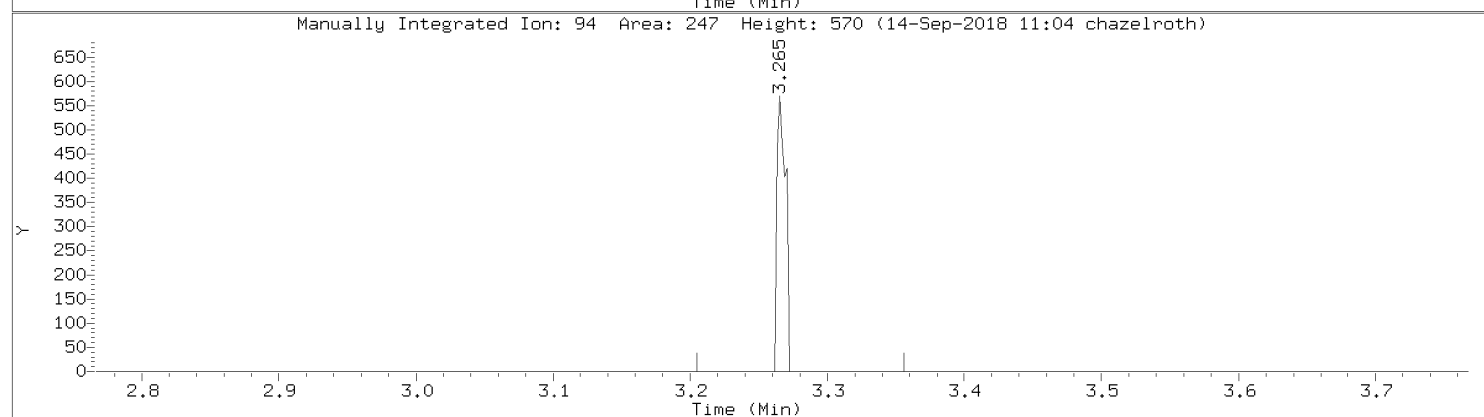
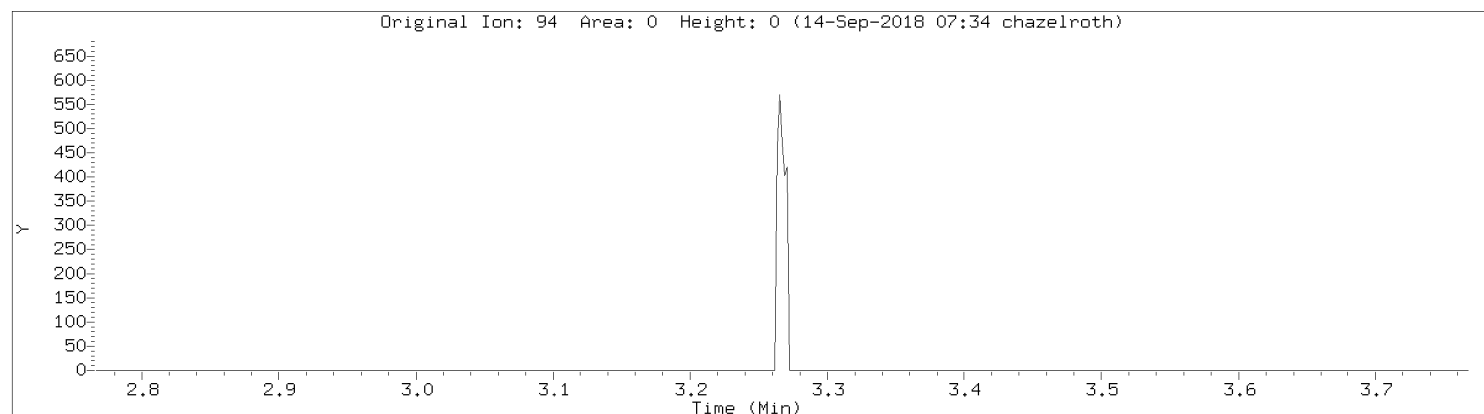
Concentration: 3.87 ppbv





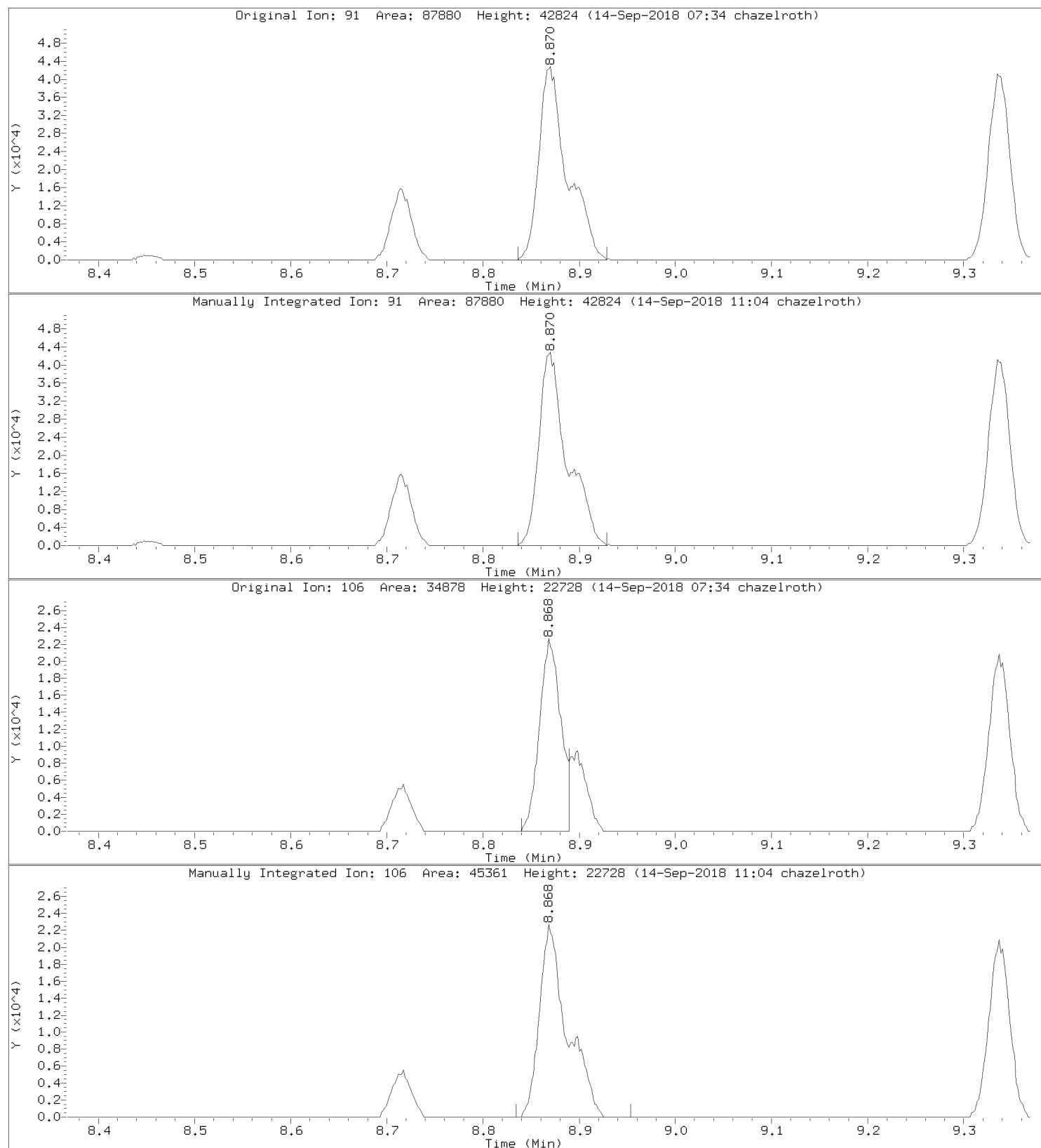
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Injection Date: 13-SEP-2018 22:55
Instrument: 10airH.i
Lab Sample ID: 10446892005

Compound: Bromomethane
CAS Number: 74-83-9



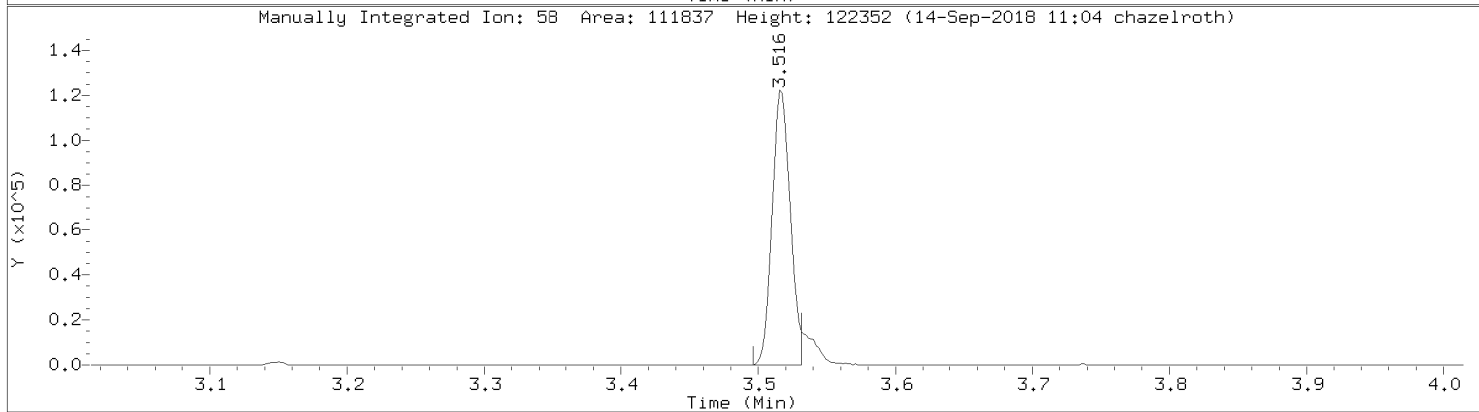
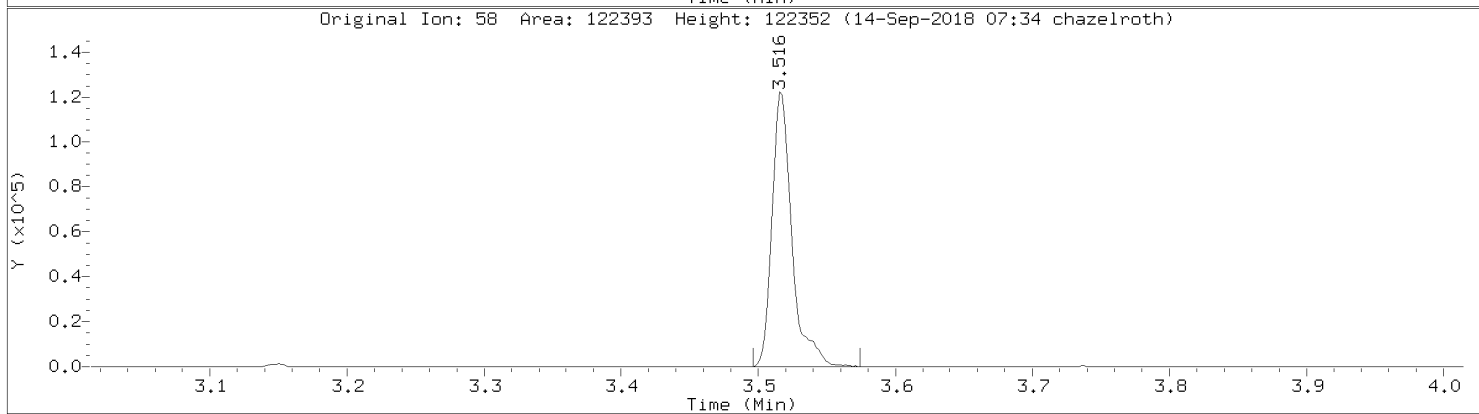
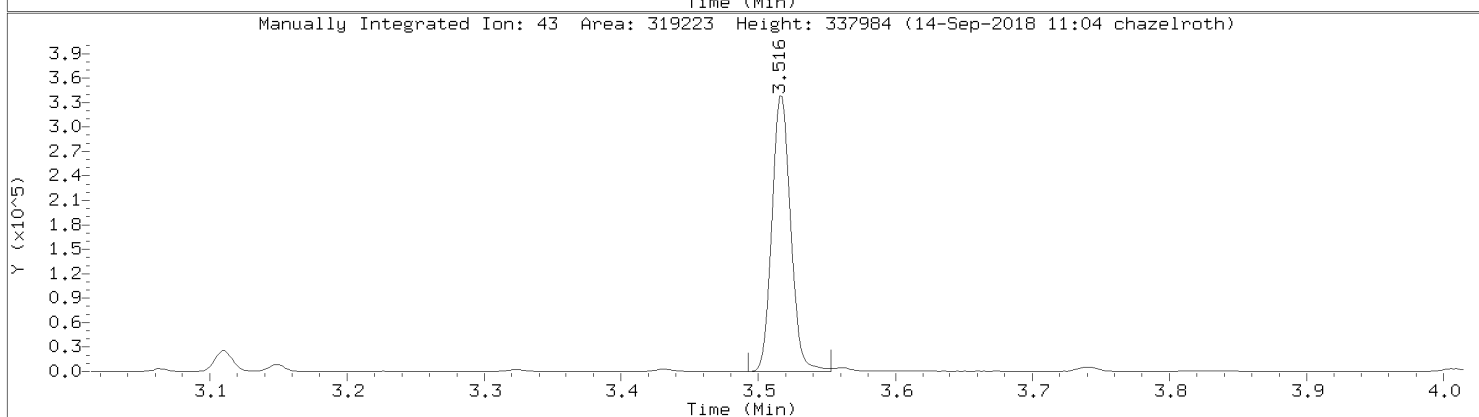
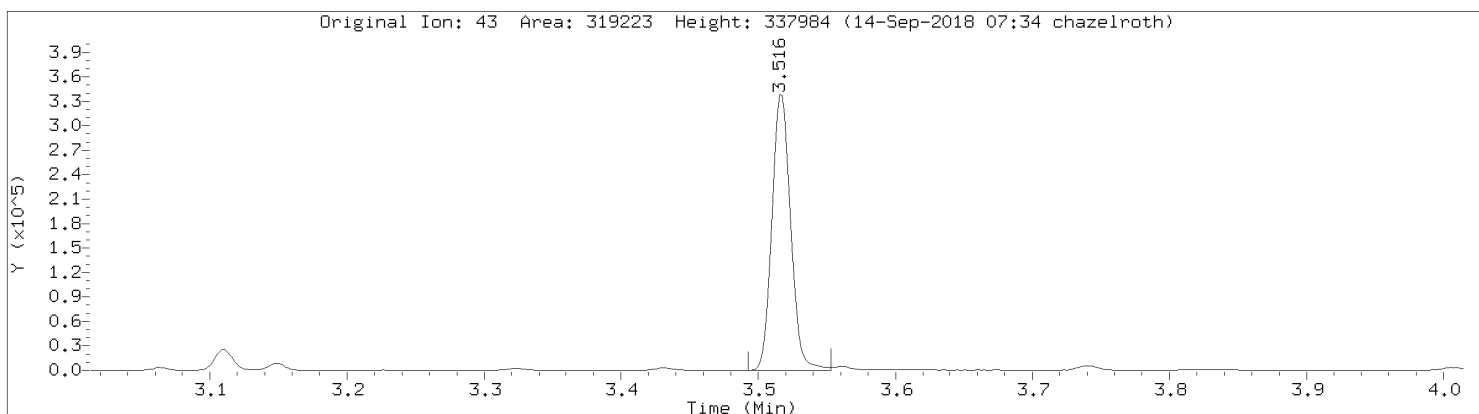
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Injection Date: 13-SEP-2018 22:55
Instrument: 10airH.i
Lab Sample ID: 10446892005

Compound: m&p-Xylene
CAS Number: 7816-60-0



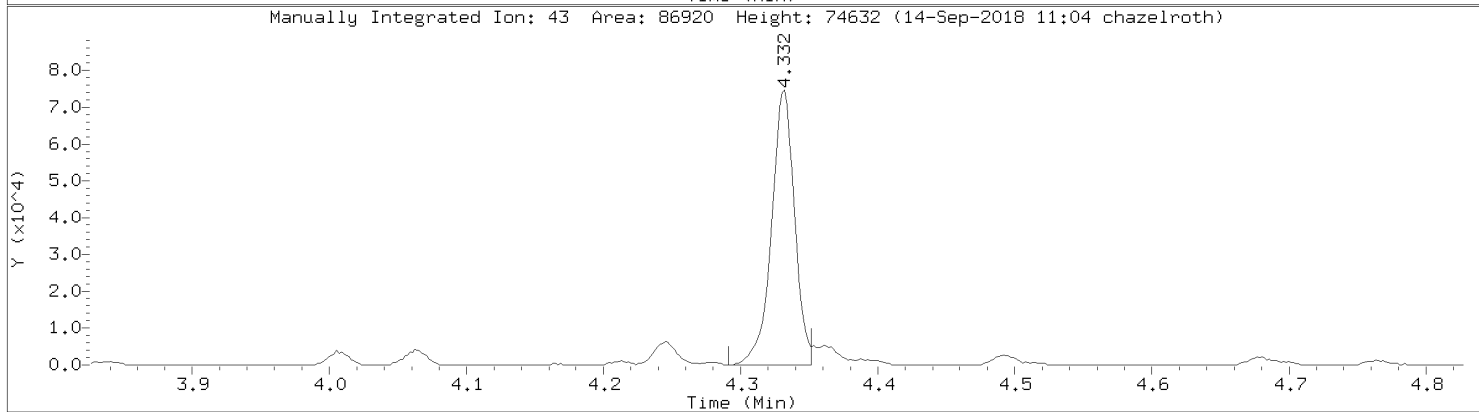
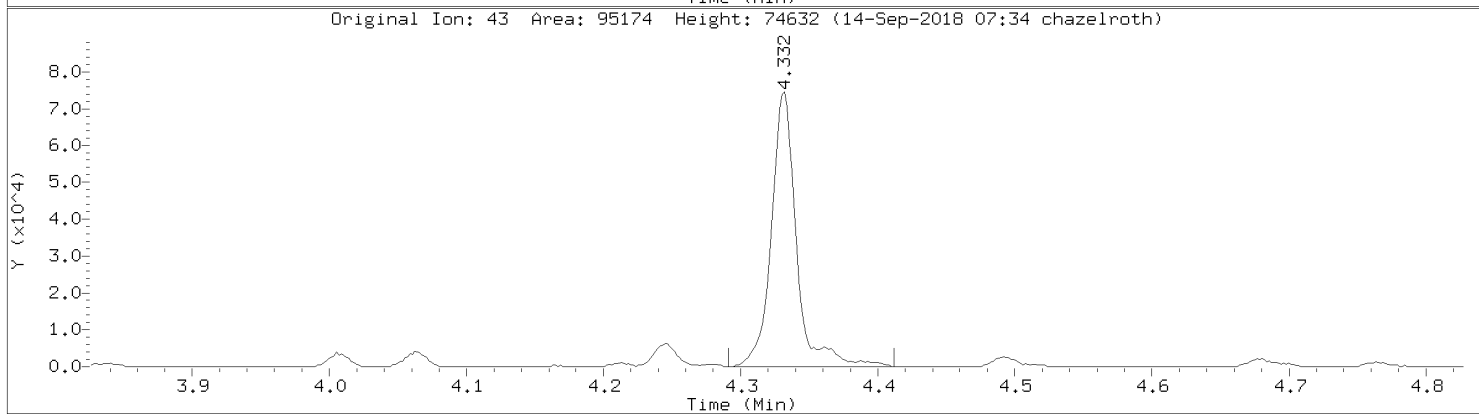
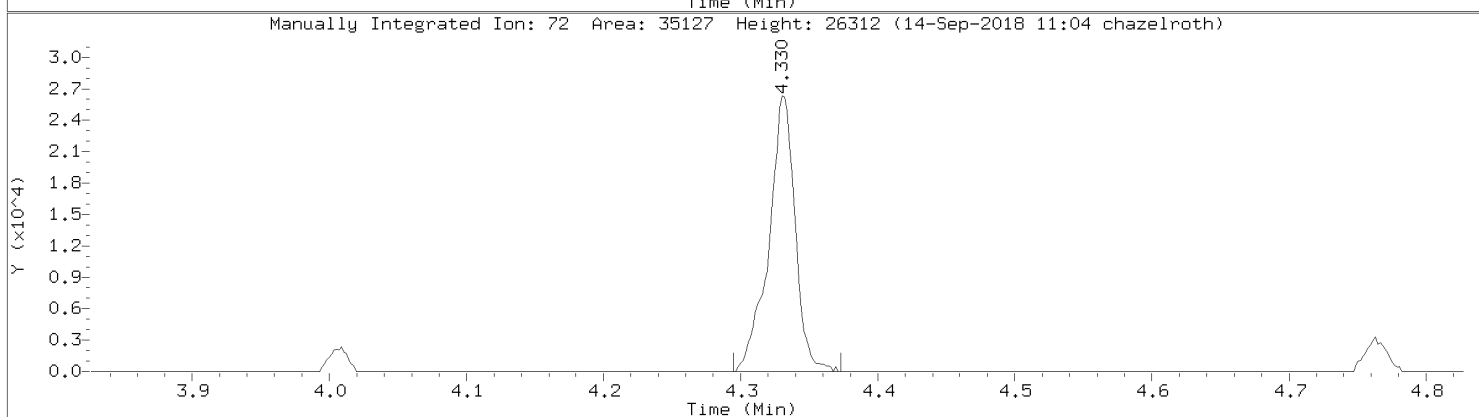
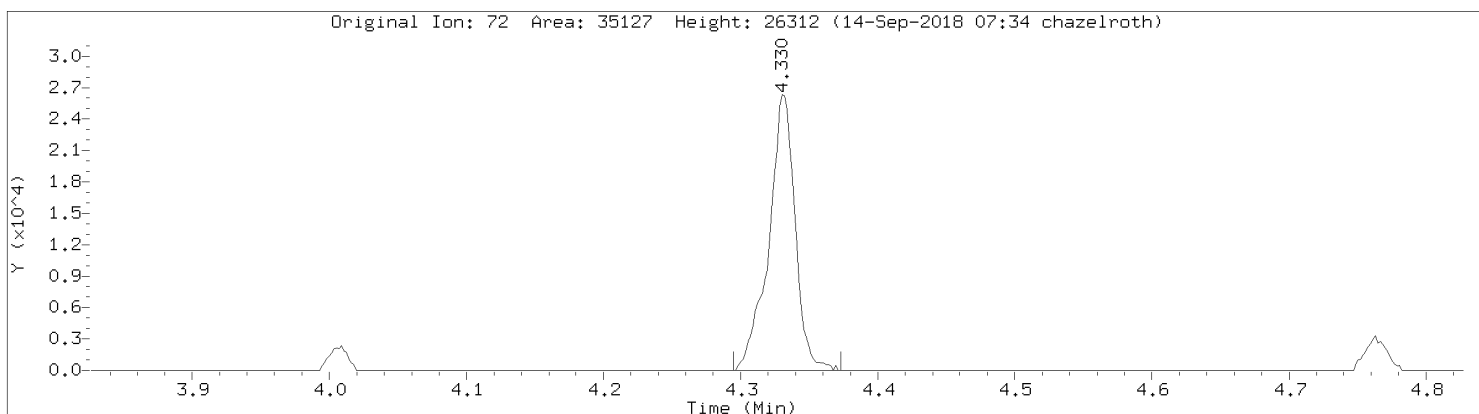
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Injection Date: 13-SEP-2018 22:55
Instrument: 10airH.i
Lab Sample ID: 10446892005

Compound: Acetone
CAS Number: 67-64-1



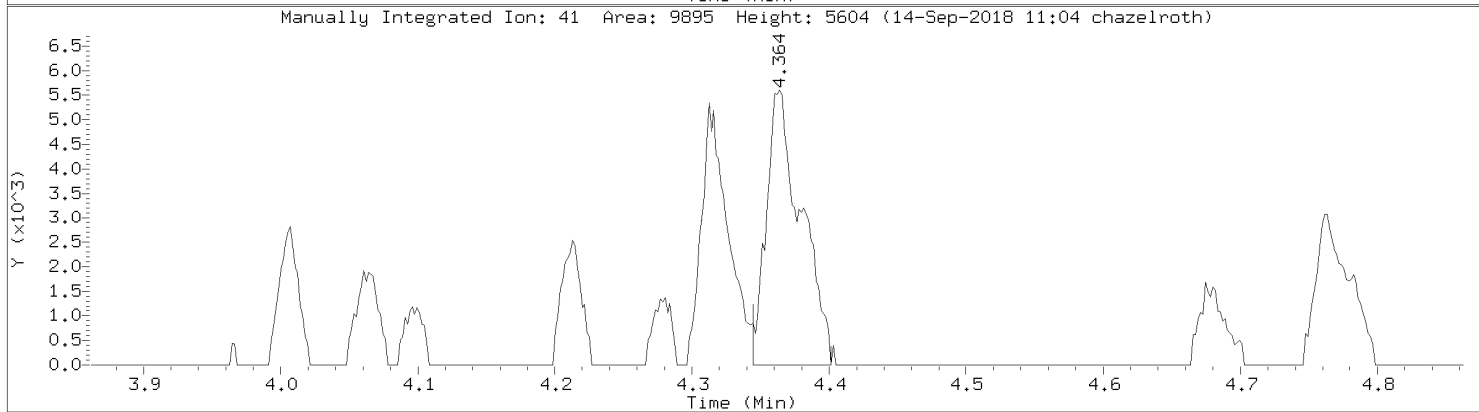
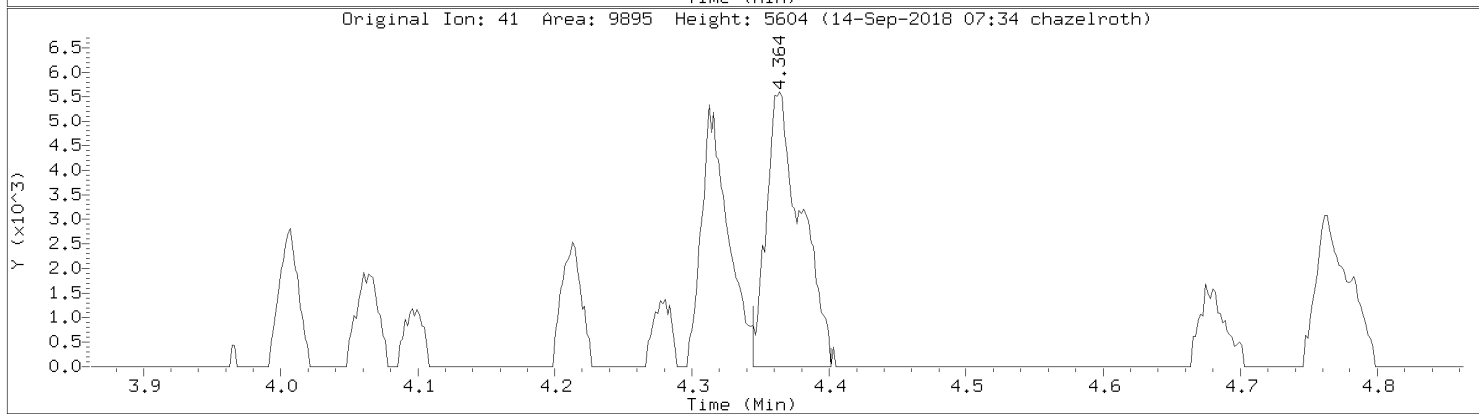
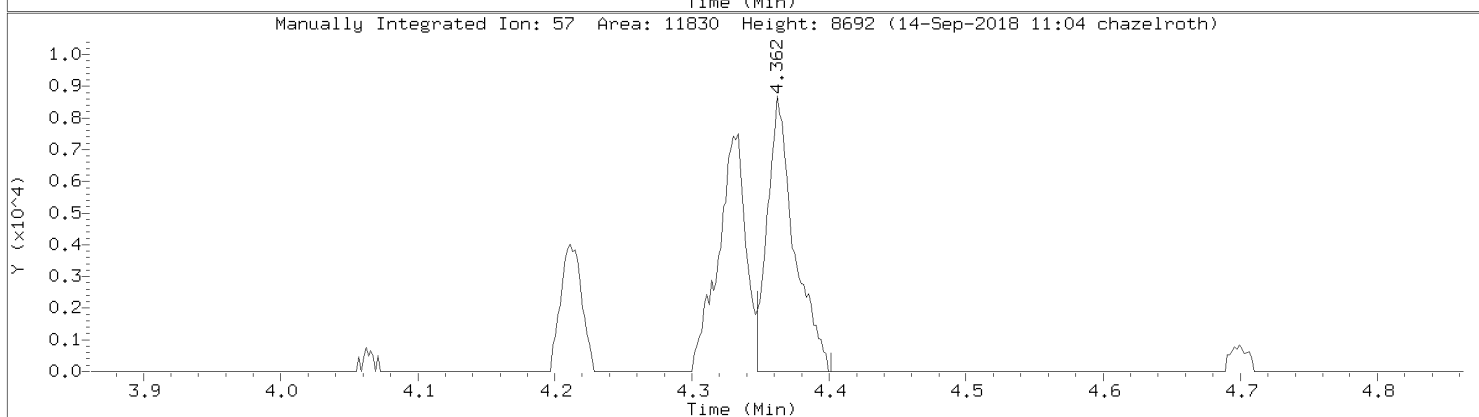
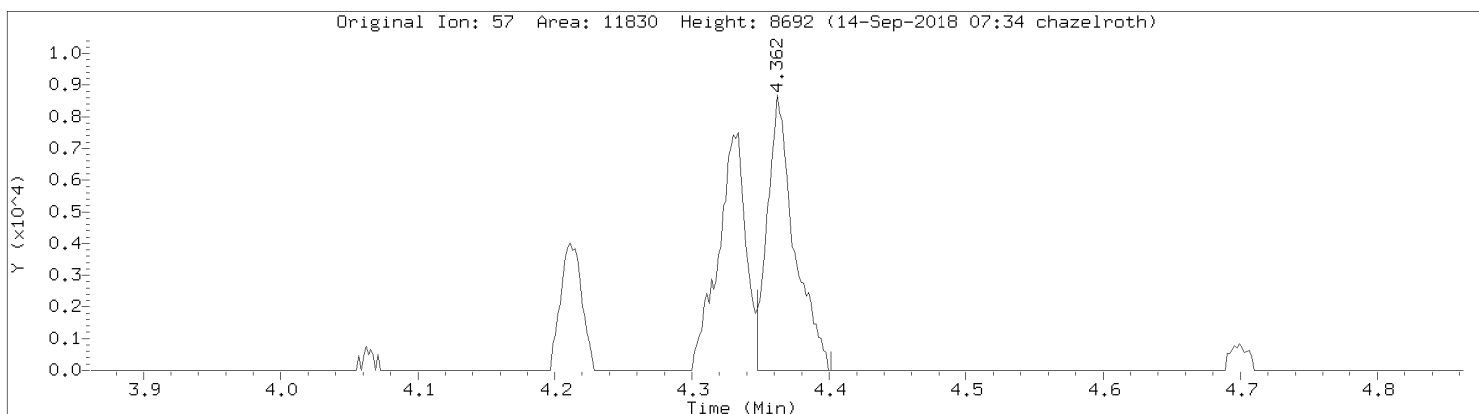
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Injection Date: 13-SEP-2018 22:55
Instrument: 10airH.i
Lab Sample ID: 10446892005

Compound: Methyl Ethyl Ketone
CAS Number: 78-93-3

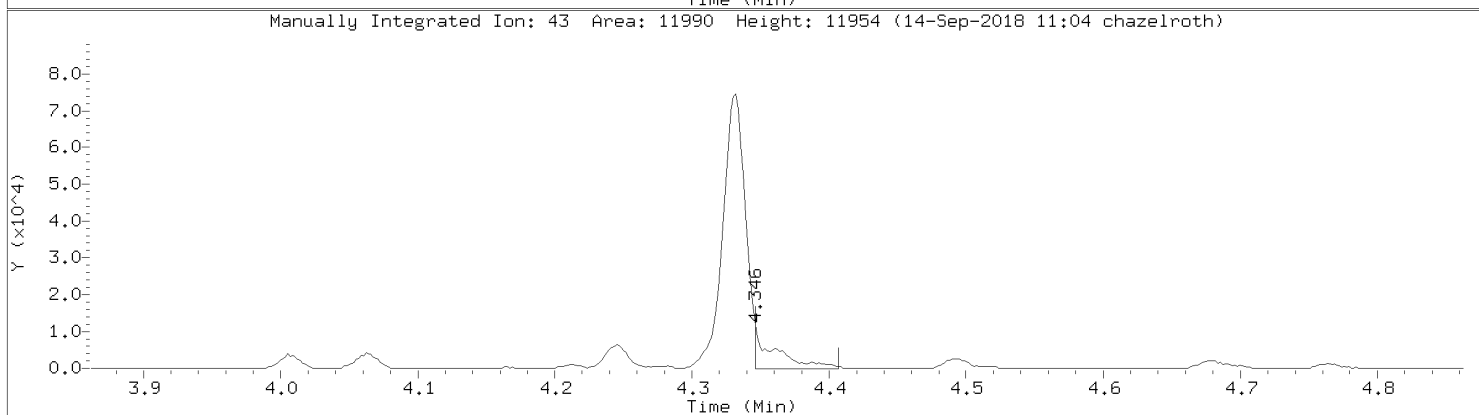
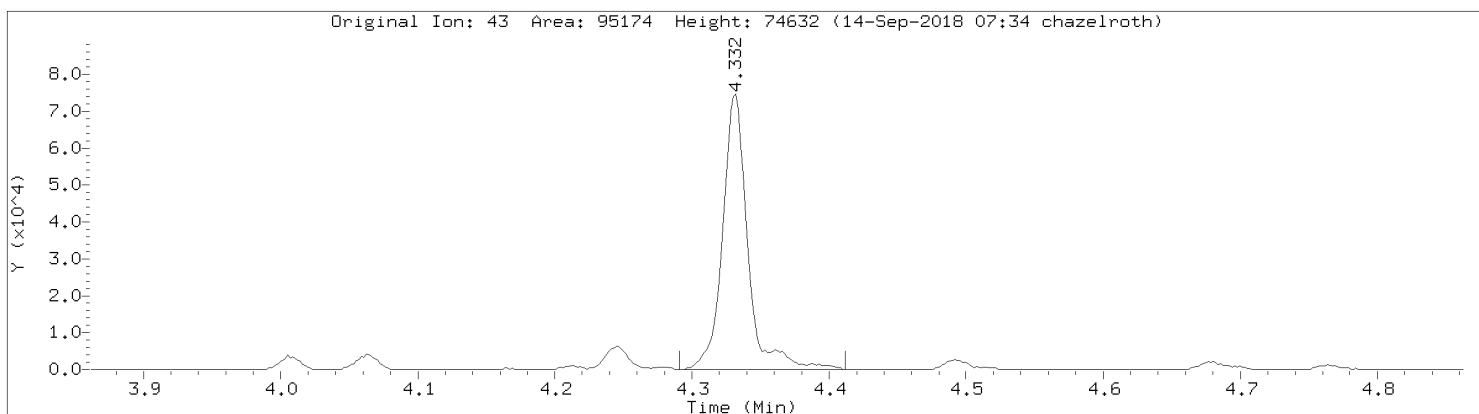


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Injection Date: 13-SEP-2018 22:55
Instrument: 10airH.i
Lab Sample ID: 10446892005

Compound: n-Hexane
CAS Number: 110-54-3

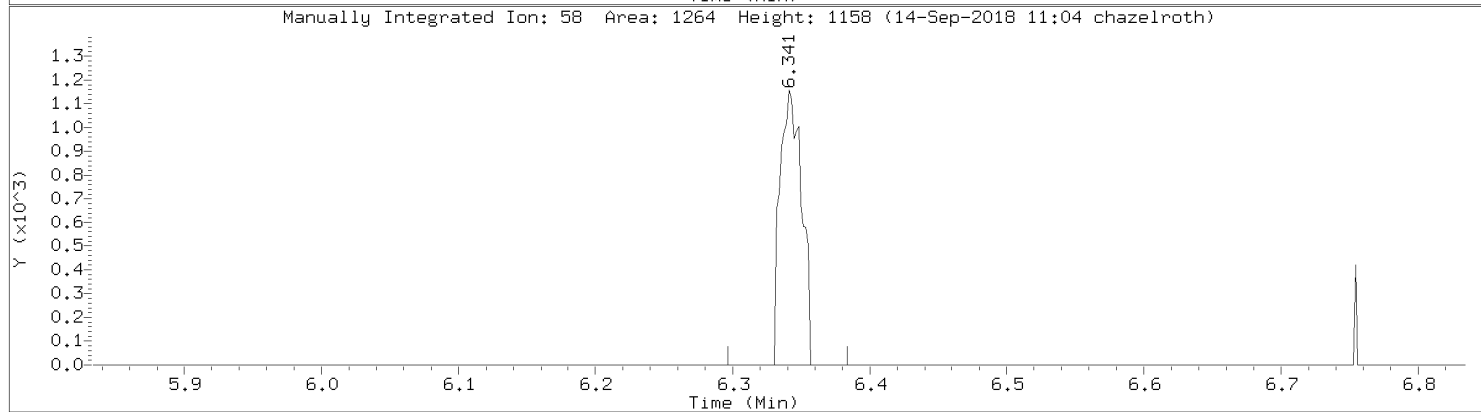
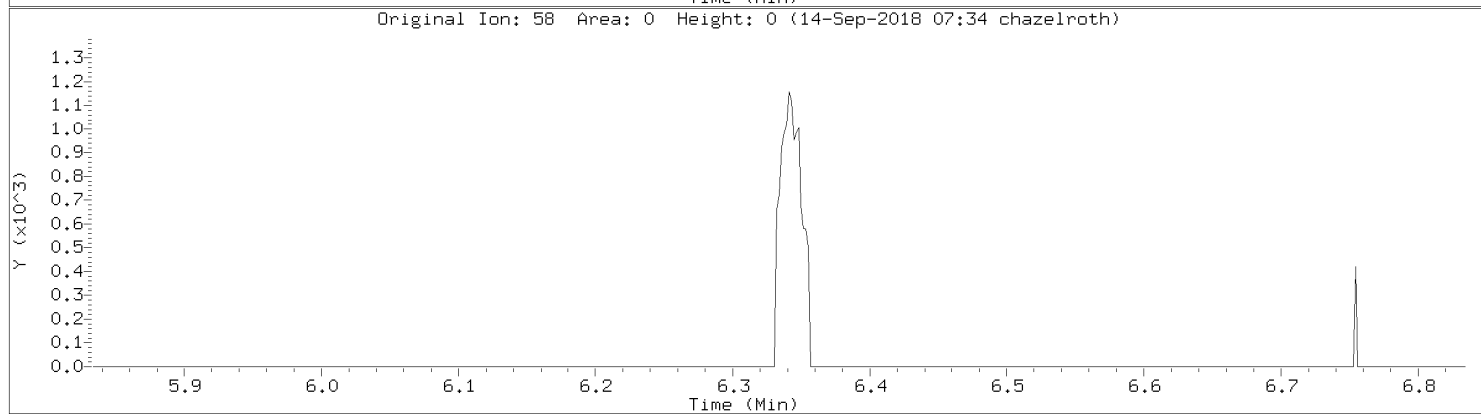
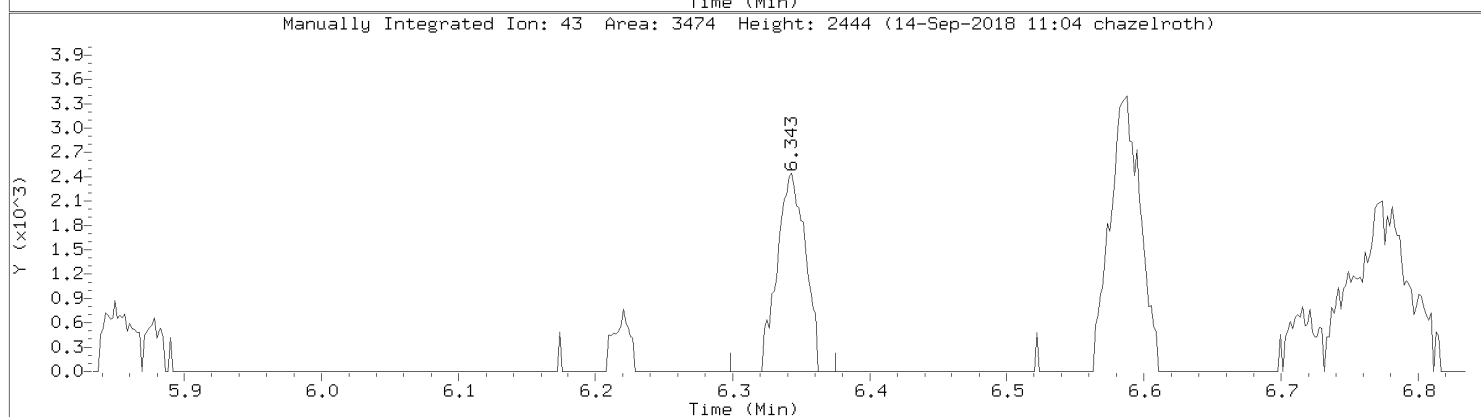
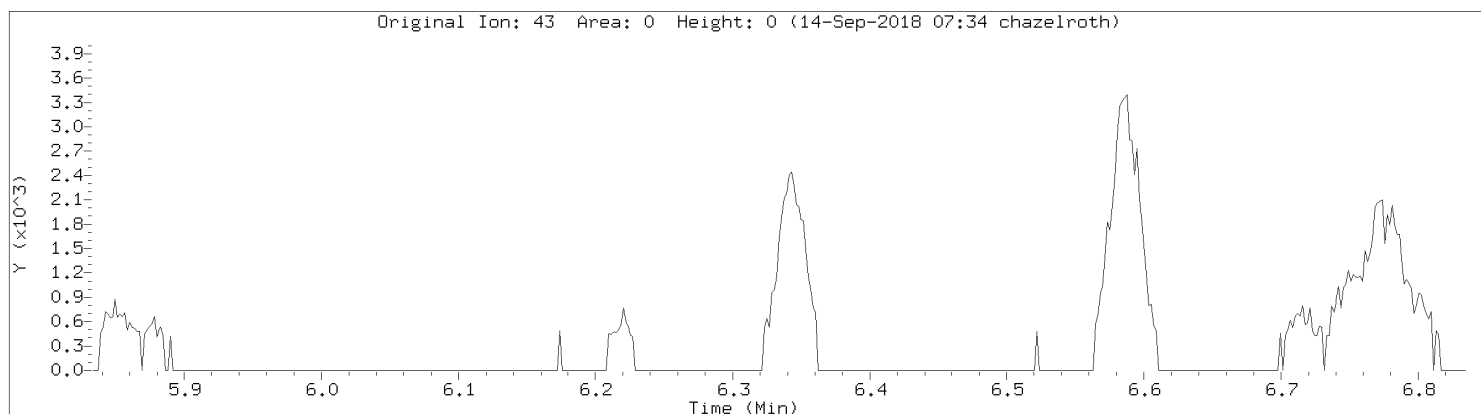


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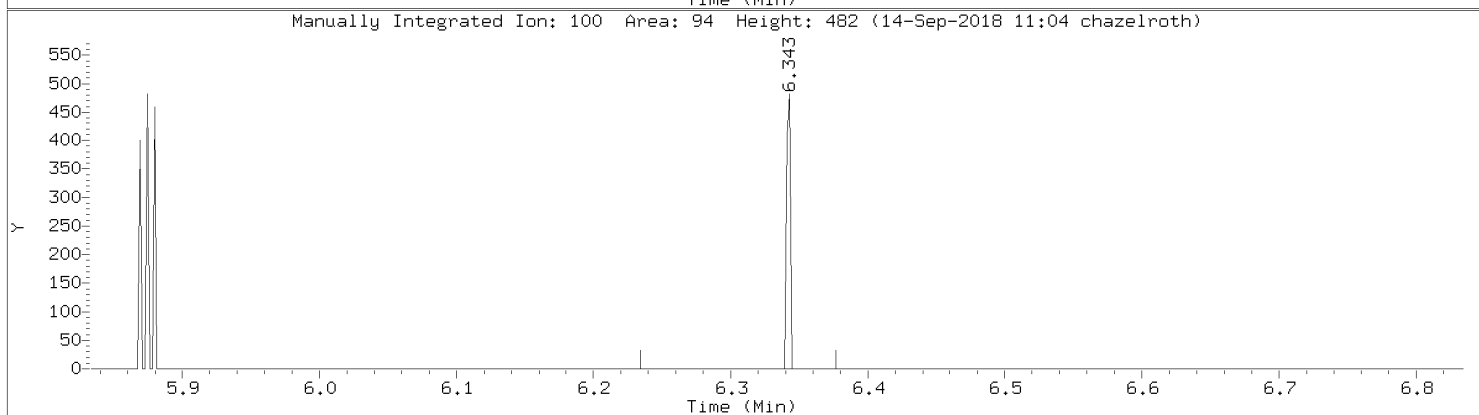
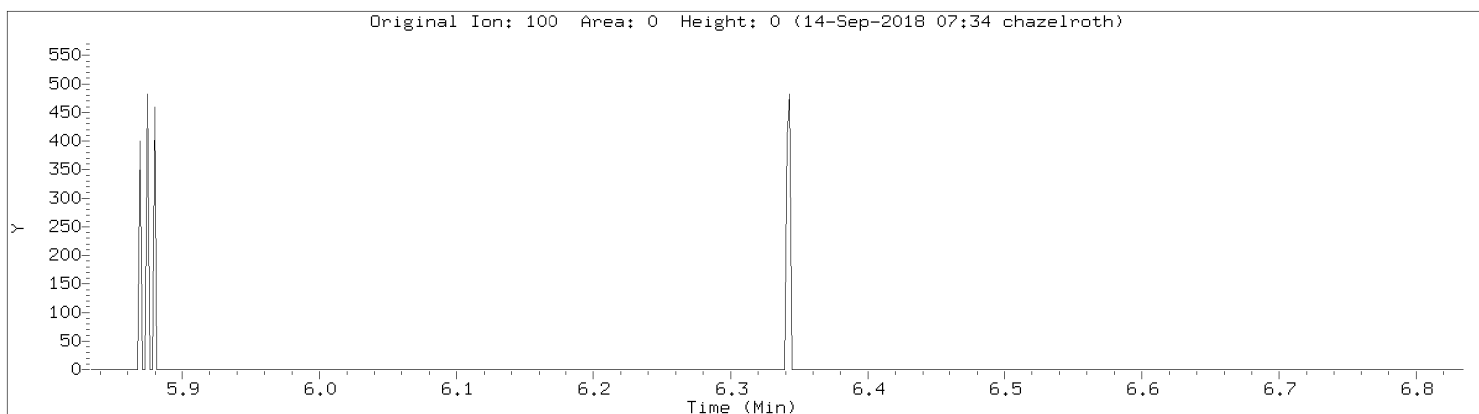


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Injection Date: 13-SEP-2018 22:55
Instrument: 10airH.i
Lab Sample ID: 10446892005

Compound: Methyl Isobutyl Ketone
CAS Number: 108-10-1

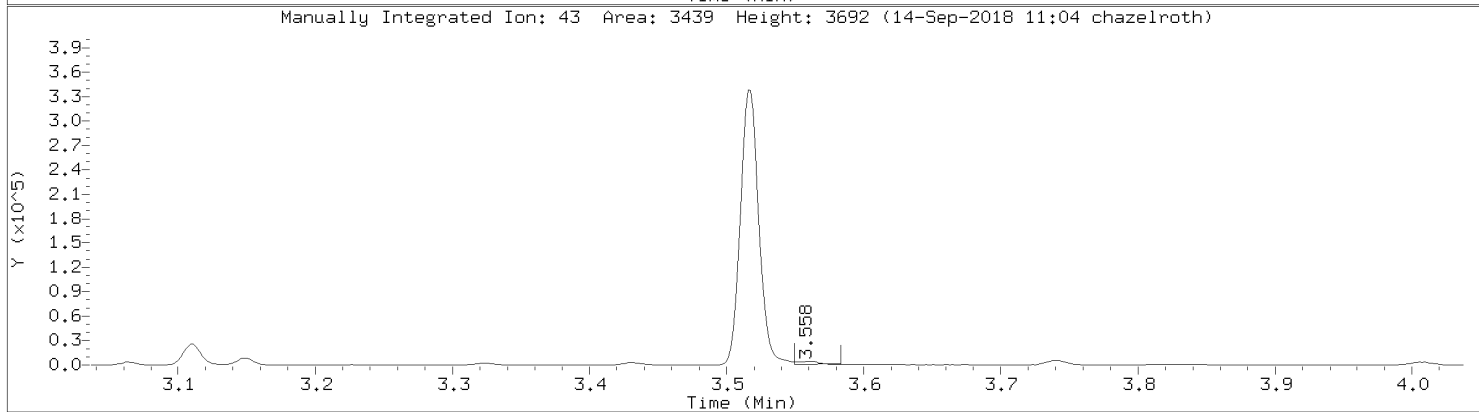
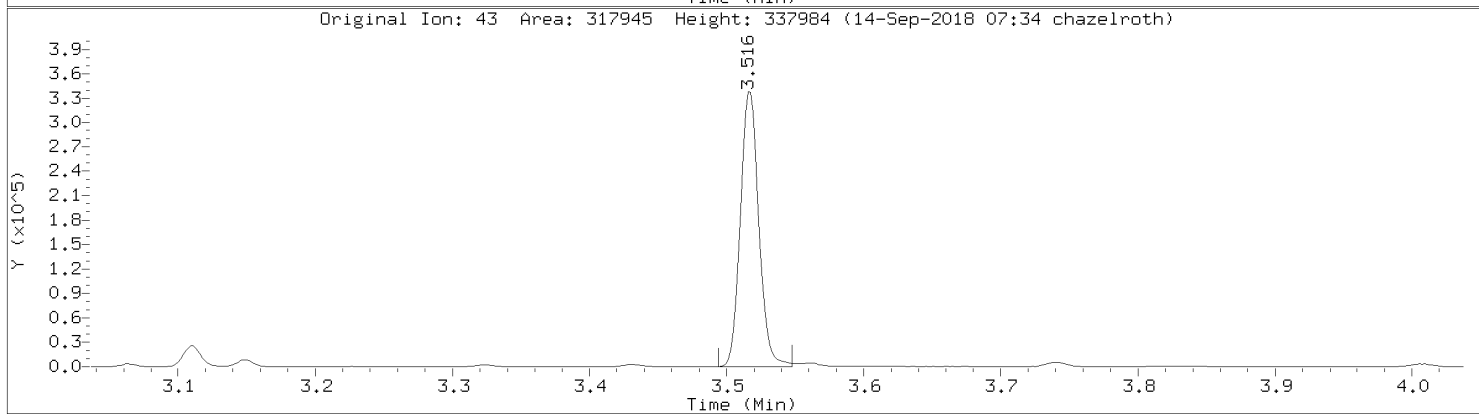
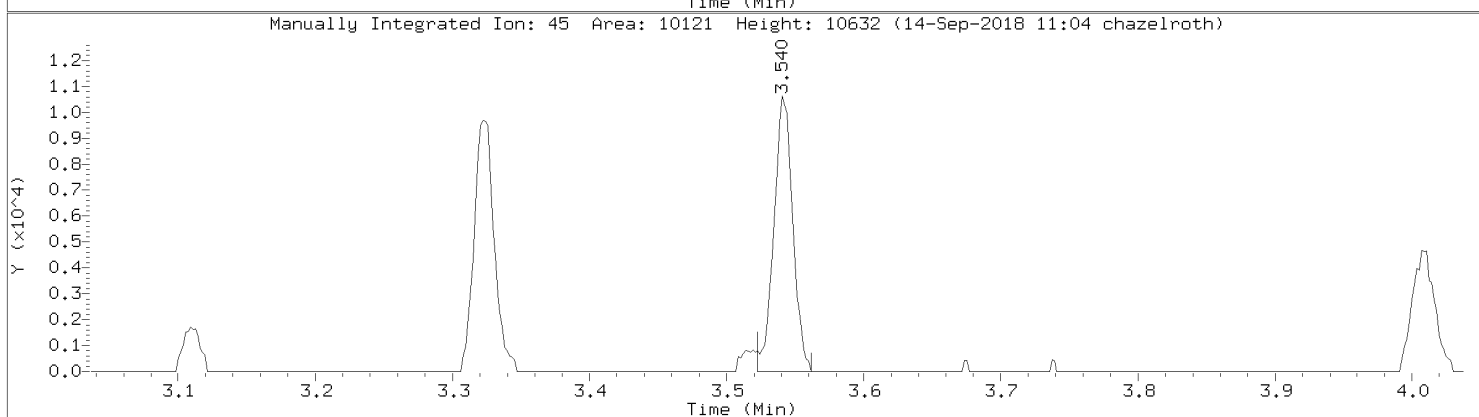
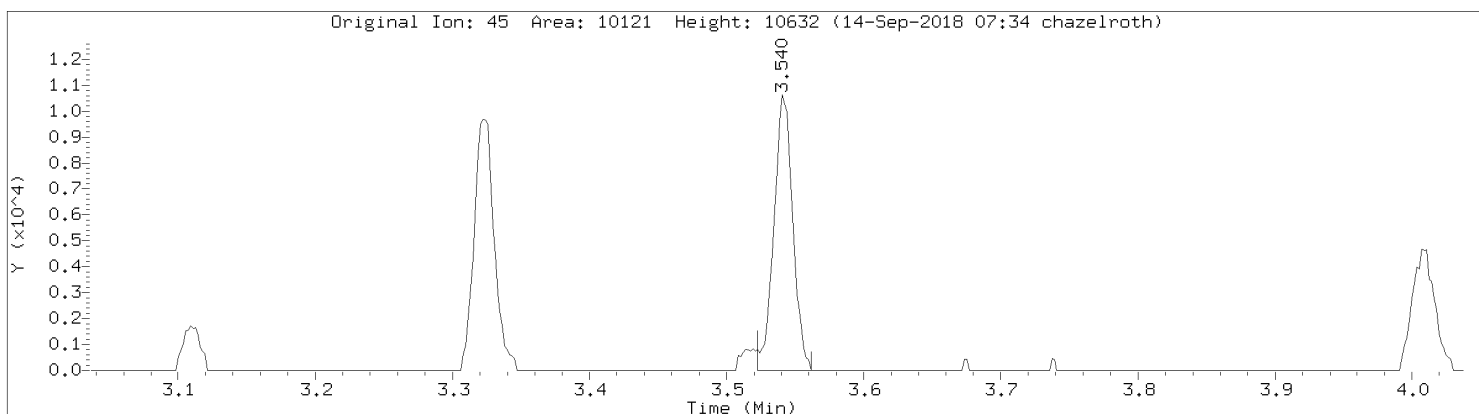


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Lab Sample ID: 10446892005



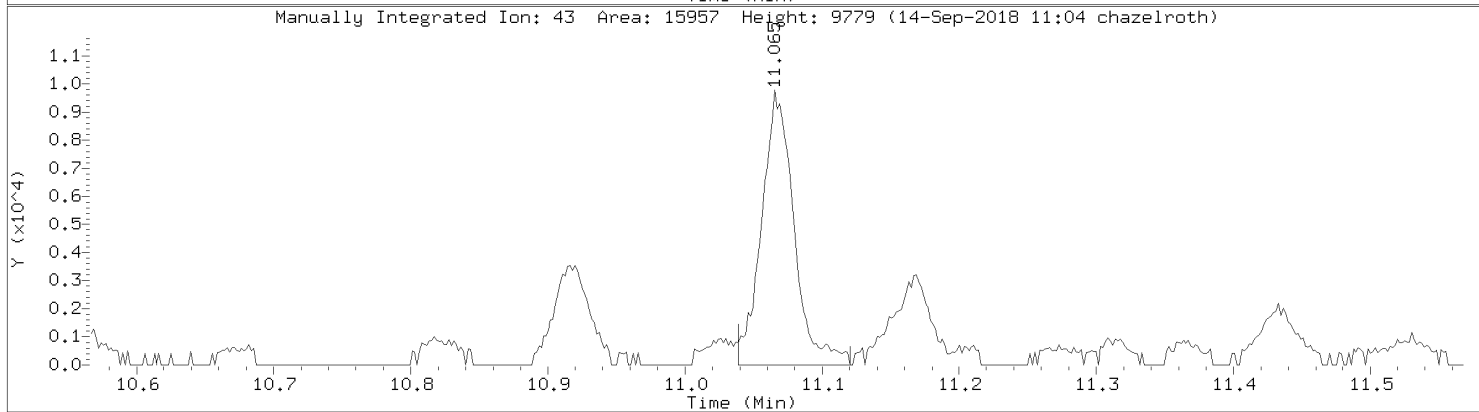
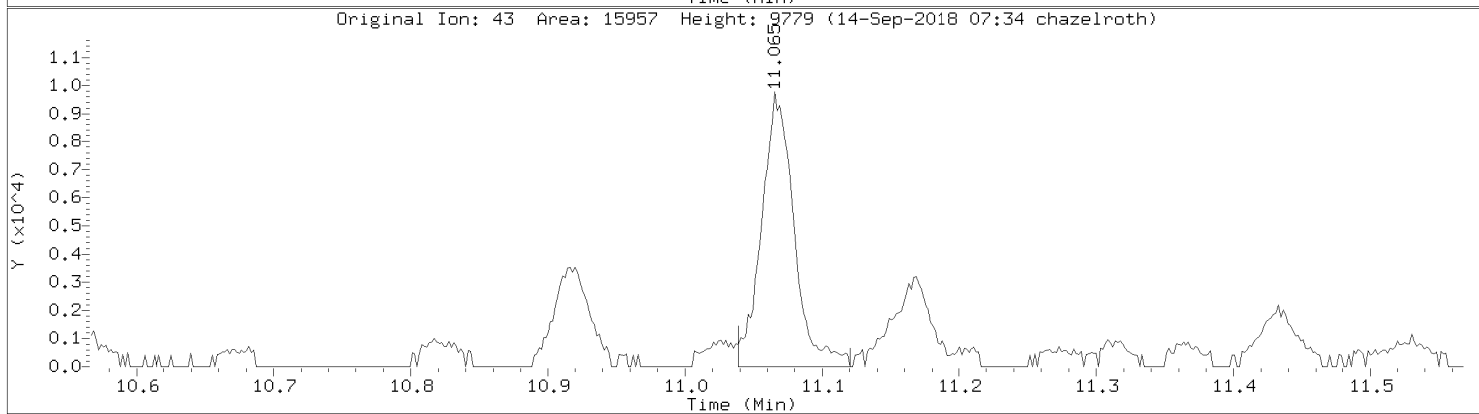
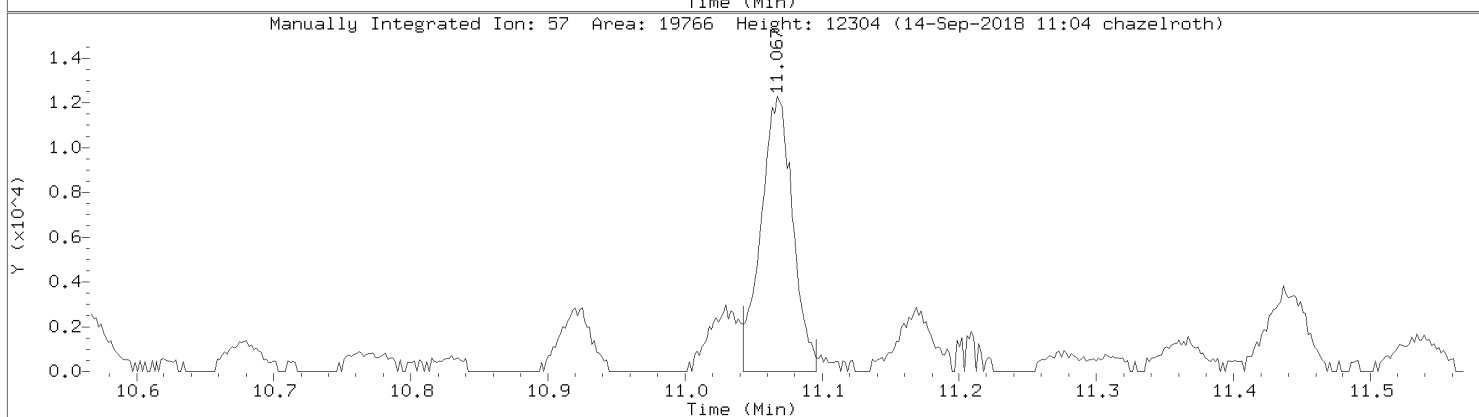
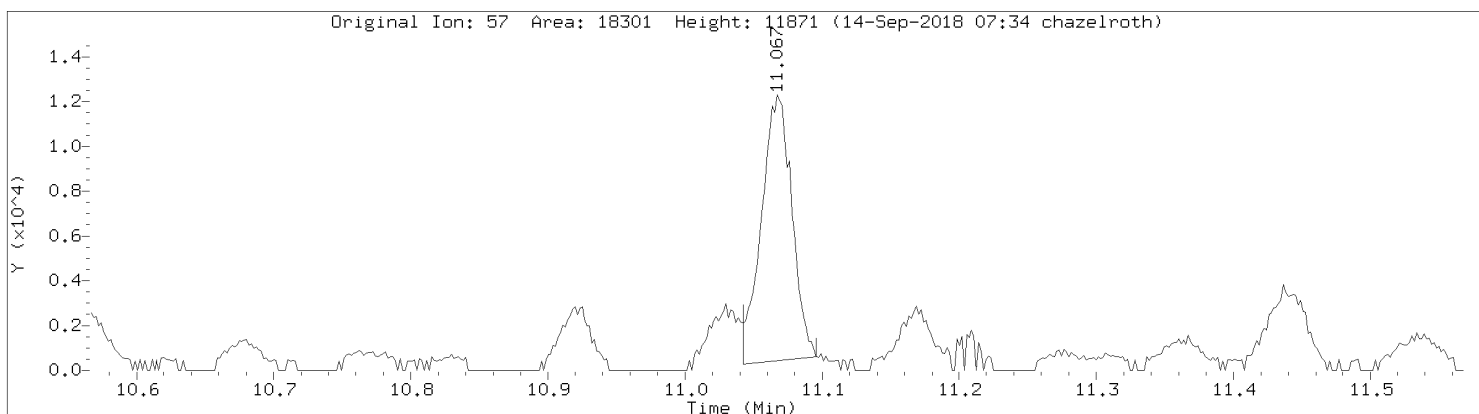
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Injection Date: 13-SEP-2018 22:55
Instrument: 10airH.i
Lab Sample ID: 10446892005

Compound: Isopropyl Alcohol
CAS Number: 67-63-0



Data File: \\192.168.10.12\chem\10airH.i\091318.b\25629.D
Injection Date: 13-SEP-2018 22:55
Instrument: 10airH.i
Lab Sample ID: 10446892005

Compound: n-Decane
CAS Number: 124-18-5



Data File: \\192.168.10.12\chem\10airH.i\091318.b\25629.D
Injection Date: 13-SEP-2018 22:55
Instrument: 10airH.i
Lab Sample ID: 10446892005

