

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL040921\
 Data File : VL036774.D
 Acq On : 9 Apr 2021 14:49
 Operator : SY/AP
 Sample : M1987-01
 Misc : 400mL/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 GOI-IA-4(2021)

Manual Integrations
 APPROVED

MMDadoda
 4/12/2021 5:42:44 PM

Quant Time: Apr 10 11:43:13 2021
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL032521AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Thu Mar 25 2021
 QLast Update : Thu Mar 25 09:42:40 2021
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.65	49	1332172	10.00	ppbv	-0.02
33) 1,4-Difluorobenzene	7.16	114	3142202	10.00	ppbv	-0.02
55) Chlorobenzene-d5	12.07	117	2473593	10.00	ppbv	-0.02

System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	14.41	95	1598009	8.11	ppbv	-0.02
Spiked Amount	10.000	Range	65 - 135	Recovery	=	81.10%

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.04	85	45470	0.209	ppbv	93
3) Chlorodifluoromethane	2.98	51	93048	0.374	ppbv #	88
4) Chloromethane	3.13	50	47060	0.535	ppbv #	82
9) Propene	3.01	41	802373m	10.112	ppbv	
10) Heptane	8.12	43	29591	0.146	ppbv #	76
11) Trichlorofluoromethane	3.94	101	39459	0.178	ppbv	90
13) Ethanol	3.59	45	744409	78.782	ppbv	94
15) Acetone	3.85	43	358296m	2.733	ppbv	
19) Isopropyl Alcohol	3.96	45	148620	2.061	ppbv #	94
20) Methylene Chloride	4.33	84	452360	7.369	ppbv	94
26) Hexane	5.67	57	484578	3.350	ppbv #	47
30) Cyclohexane	7.14	84	33897m	0.289	ppbv	
34) 2-Butanone	5.24	43	67875	0.443	ppbv	92
35) Carbon Tetrachloride	7.00	117	13917m	0.058	ppbv	
36) Benzene	6.88	78	98036	0.338	ppbv	97
44) 2,2,4-Trimethylpentane	7.86	57	177361m	0.348	ppbv	
53) Toluene	9.79	91	641927	2.080	ppbv	99
58) Ethyl Benzene	12.70	91	49022m	0.136	ppbv	
59) m/p-Xylene	12.96	91	157629m	0.502	ppbv	
60) o-Xylene	13.68	91	47655	0.157	ppbv	94

(#) = qualifier out of range (m) = manual integration (+) = signals summed

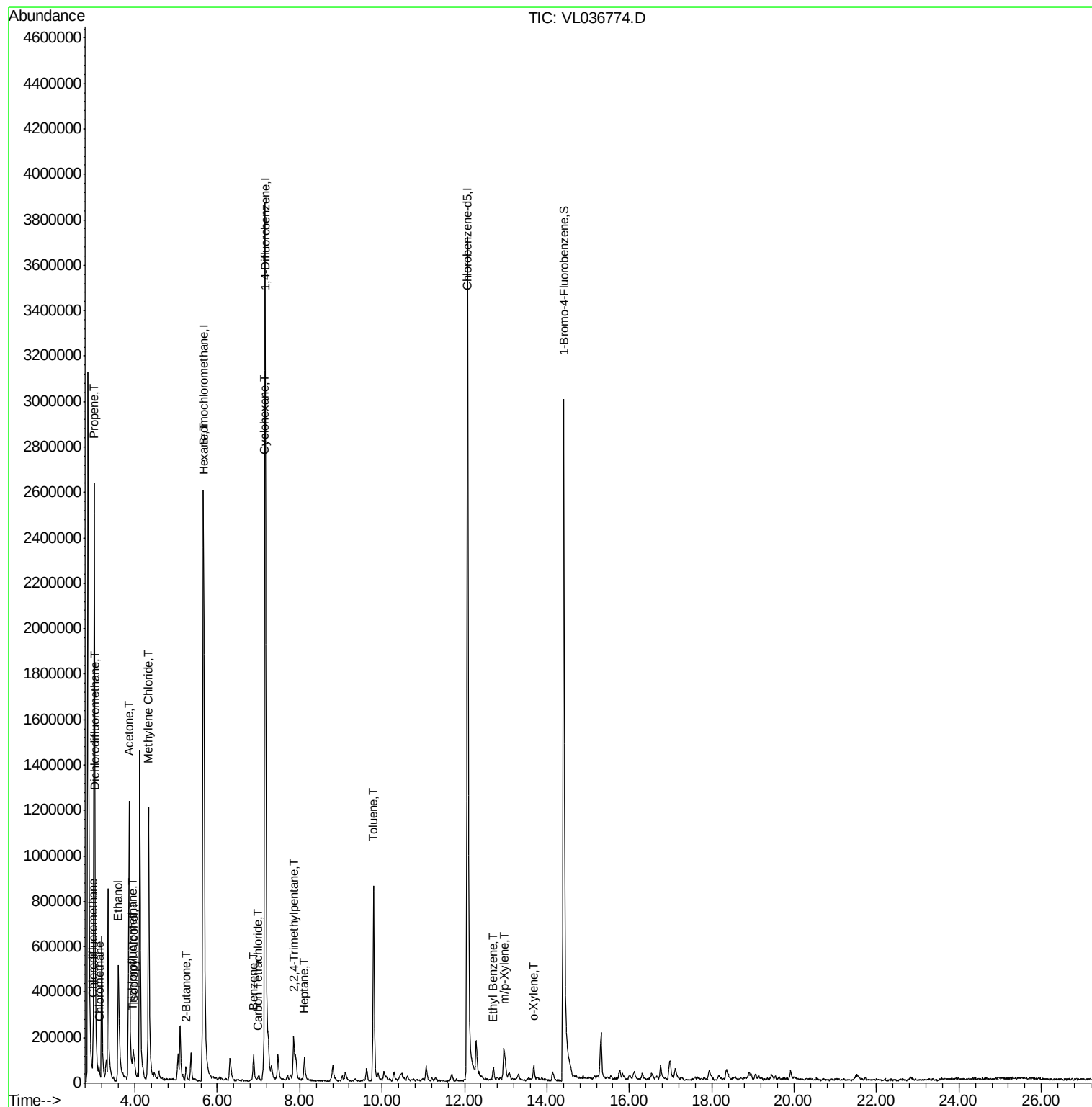
Data Path : Z:\V0ASRV\HPCHEM1\MSVOA L\DATA\VL040921\
Data File : VL036774.D
Acq On : 9 Apr 2021 14:49
Operator : SY/AP
Sample : M1987-01
Misc : 400mL/MSVOA L
ALS Vial : 1 Sample Multiplier: 1

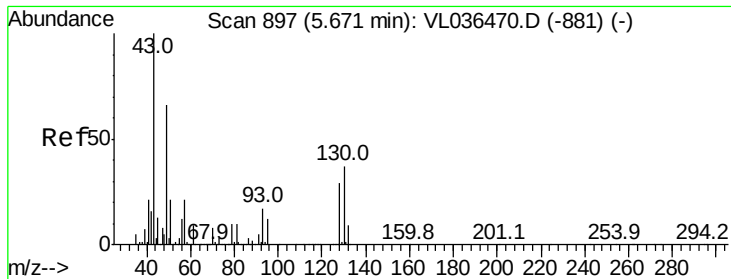
Instrument :
MSVOA_L
ClientSampled :
GOI-IA-4(2021)

Manual Integrations
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Quant Time: Apr 10 11:43:13 2021
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA L\METHODS\VL032521AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Thu Mar
QLast Update : Thu Mar 25 09:42:40 2021
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.65 min Scan# 892

Delta R.T. -0.02 min

Lab File: VL036774.D

Acq: 9 Apr 2021 14:49

Instrument :

MSVOA_L

ClientSampleId :

GOI-IA-4(2021)

Tot Ion: 49 Resp: 1332172

Ion Ratio Lower Upper

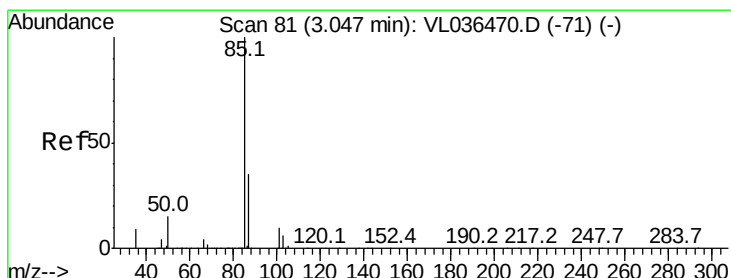
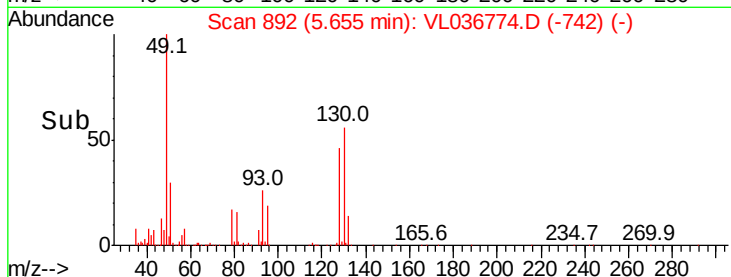
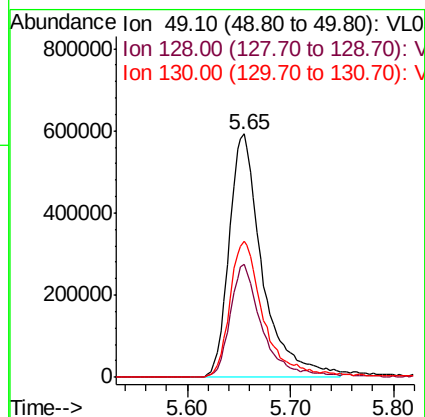
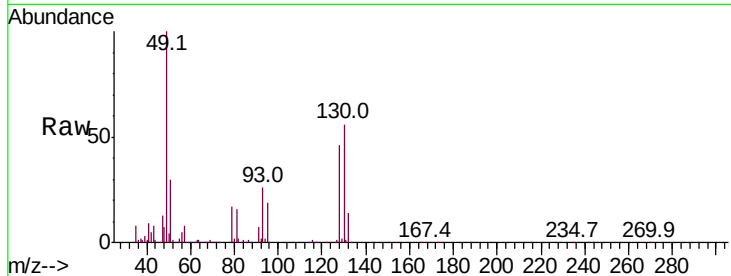
49 100

128 45.6 23.5 70.6

130 58.6 29.1 87.4

Manual Integrations
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#2

Dichlorodifluoromethane

Concen: 0.209 ppbv

RT: 3.04 min Scan# 78

Delta R.T. -0.01 min

Lab File: VL036774.D

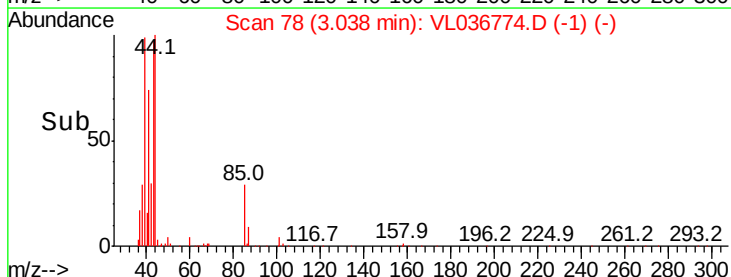
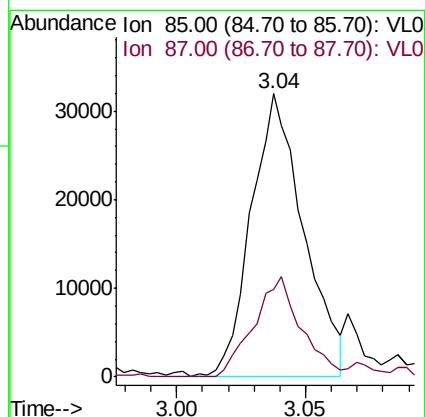
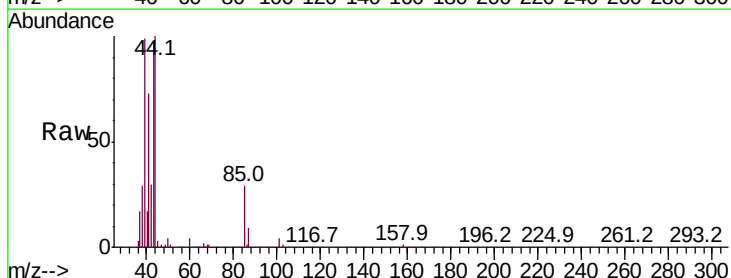
Acq: 9 Apr 2021 14:49

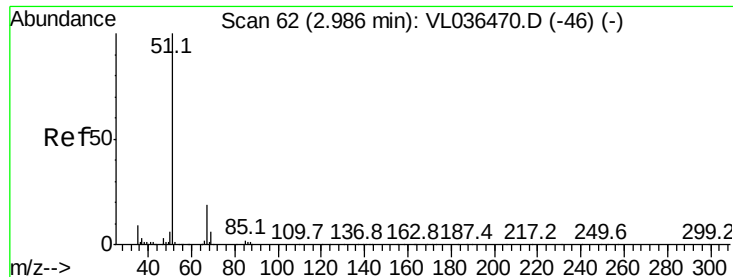
Tgt Ion: 85 Resp: 45470

Ion Ratio Lower Upper

85 100

87 31.0 27.8 41.8





#3

Chlorodifluoromethane

Concen: 0.374 ppbv

RT: 2.98 min Scan# 59

Delta R.T. -0.01 min

Lab File: VL036774.D

Acq: 9 Apr 2021 14:49

Instrument :

MSVOA_L

ClientSampleId :

GOI-IA-4(2021)

Tot Ion: 51 Resp: 93048

Ion Ratio Lower Upper

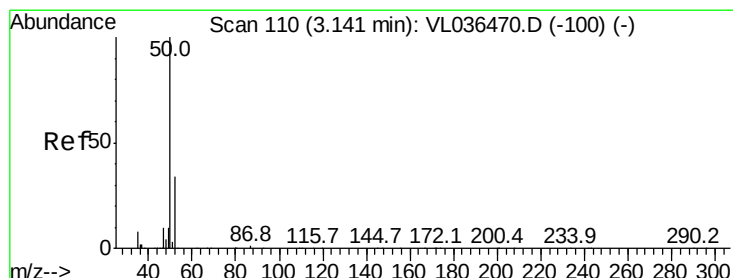
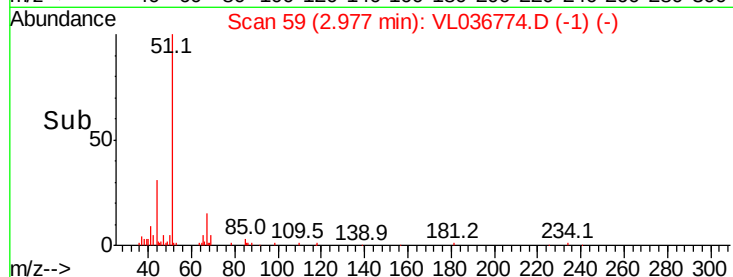
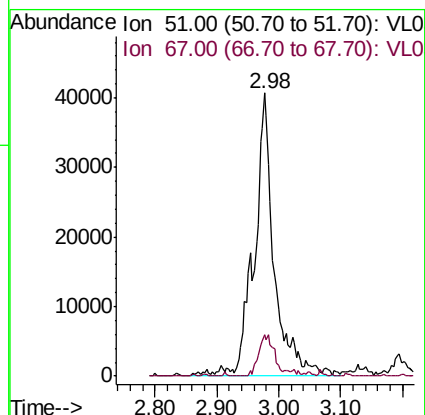
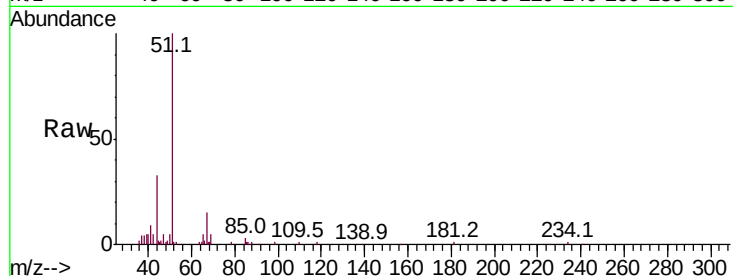
51 100

67 13.2 14.7 22.1#

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#4

Chloromethane

Concen: 0.535 ppbv

RT: 3.13 min Scan# 107

Delta R.T. -0.01 min

Lab File: VL036774.D

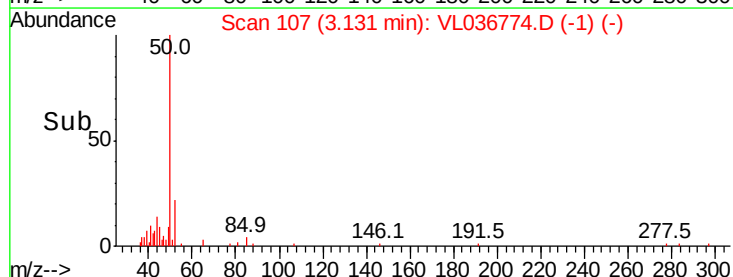
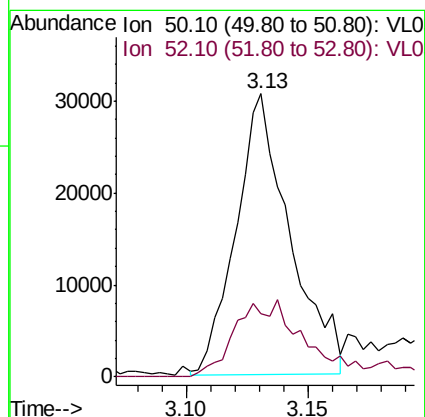
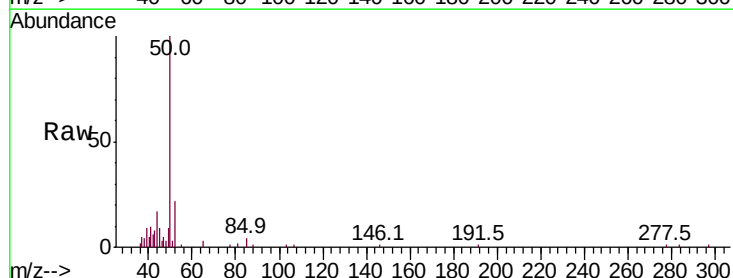
Acq: 9 Apr 2021 14:49

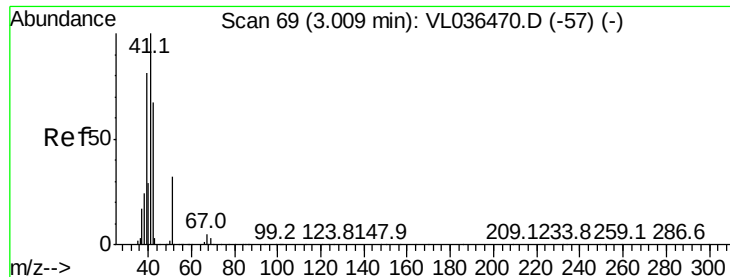
Tgt Ion: 50 Resp: 47060

Ion Ratio Lower Upper

50 100

52 23.3 27.0 40.6#





#9

Propene

Concen: 10.112 ppbv m

RT: 3.01 min Scan# 70

Delta R.T. 0.00 min

Lab File: VL036774.D

Acq: 9 Apr 2021 14:49

Instrument :

MSVOA_L

ClientSampleId :

GOI-IA-4(2021)

Tot Ion: 41 Resp: 802373

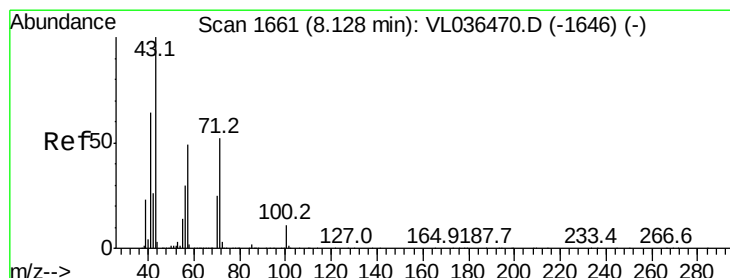
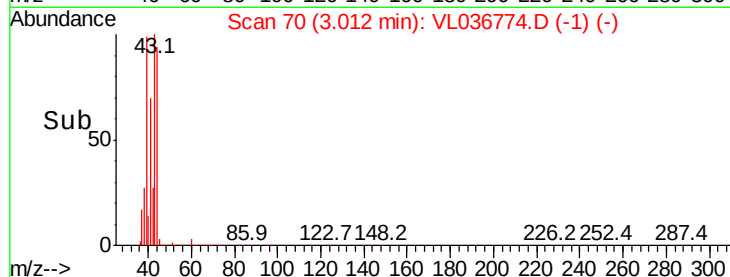
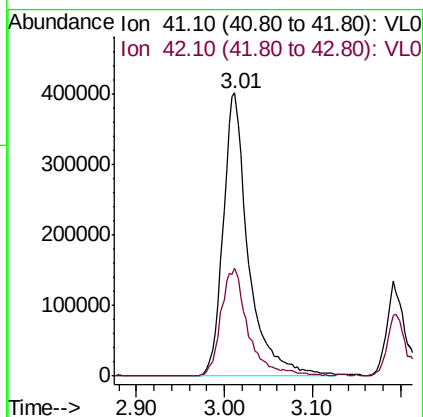
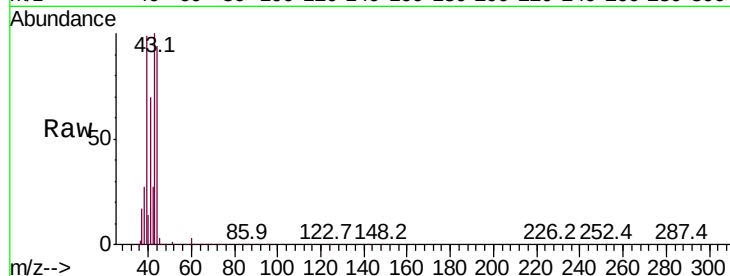
Ion Ratio Lower Upper

41 100

42 16.9 57.0 85.4#

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#10

Heptane

Concen: 0.146 ppbv

RT: 8.12 min Scan# 1658

Delta R.T. -0.01 min

Lab File: VL036774.D

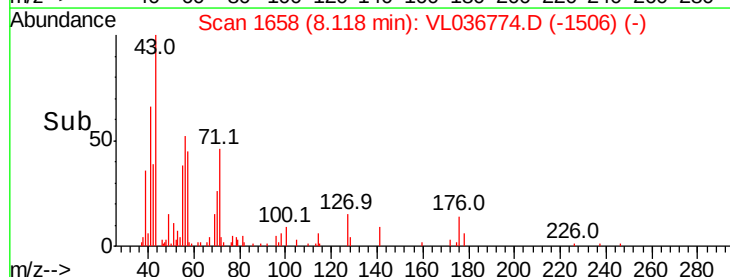
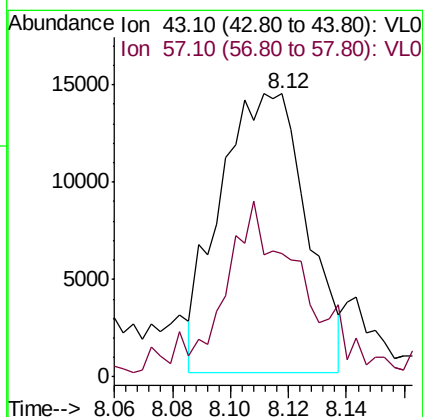
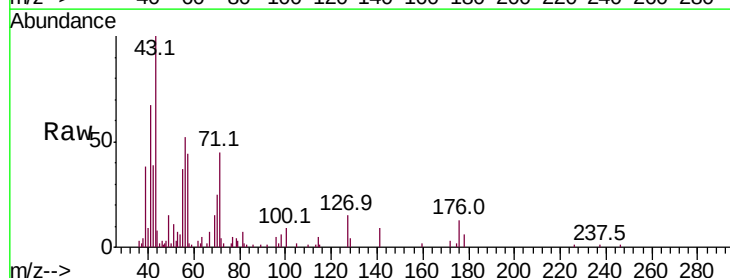
Acq: 9 Apr 2021 14:49

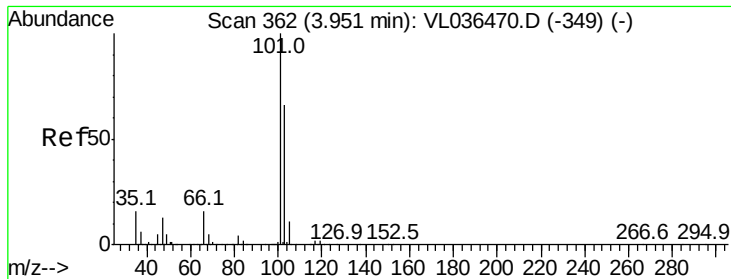
Tgt Ion: 43 Resp: 29591

Ion Ratio Lower Upper

43 100

57 65.0 39.0 58.6#





#11

Trichlorofluoromethane

Concen: 0.178 ppbv

RT: 3.94 min Scan# 359

Delta R.T. -0.01 min

Lab File: VL036774.D

Acq: 9 Apr 2021 14:49

Instrument :

MSVOA_L

ClientSampleId :

GOI-IA-4(2021)

Tot Ion:101 Resp: 39459

Ion Ratio Lower Upper

101 100

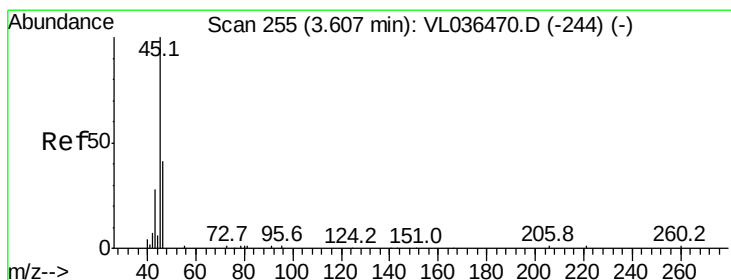
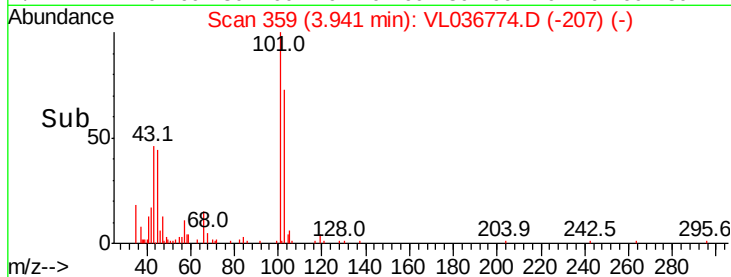
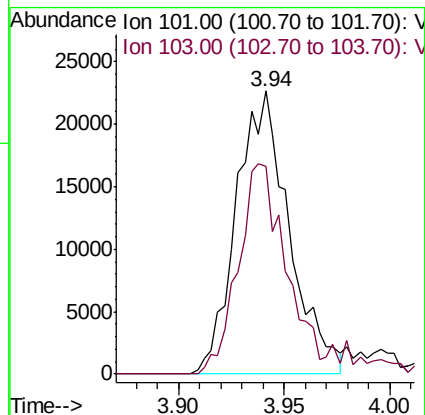
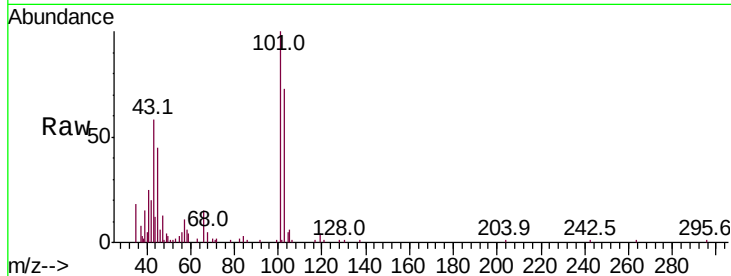
103 73.3 52.5 78.7

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#13

Ethanol

Concen: 78.782 ppbv

RT: 3.59 min Scan# 251

Delta R.T. -0.01 min

Lab File: VL036774.D

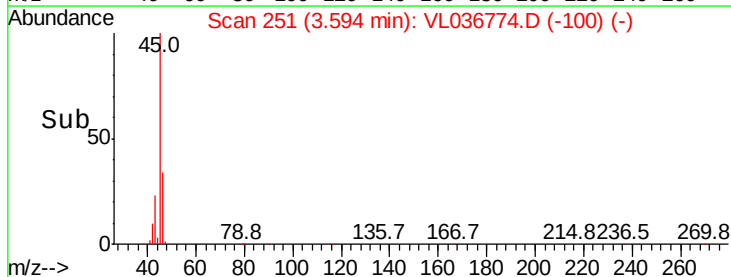
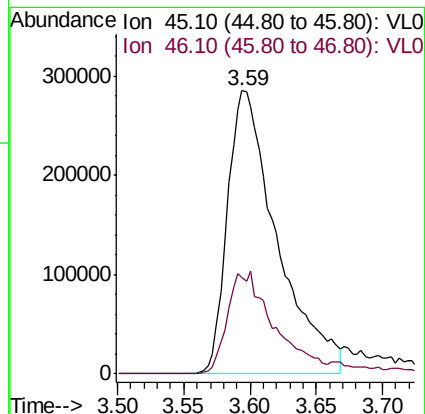
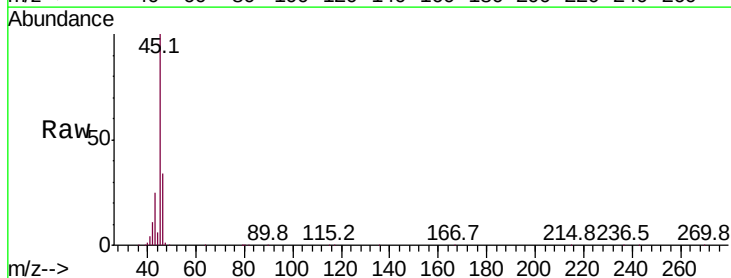
Acq: 9 Apr 2021 14:49

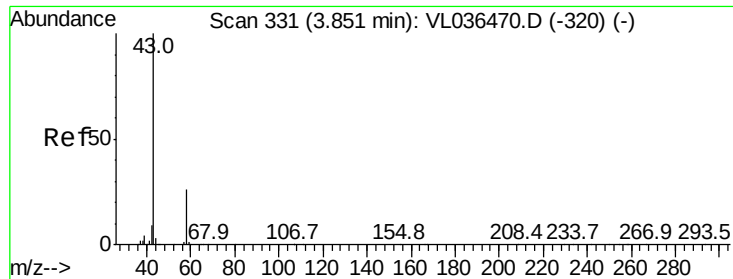
Tgt Ion: 45 Resp: 744409

Ion Ratio Lower Upper

45 100

46 37.9 16.6 66.2





#15

Acetone

Concen: 2.733 ppbv m

RT: 3.85 min Scan# 331

Delta R.T. -0.00 min

Lab File: VL036774.D

Acq: 9 Apr 2021 14:49

Instrument :

MSVOA_L

ClientSampleId :

GOI-IA-4(2021)

Tot Ion: 43 Resp: 358296

Ion Ratio Lower Upper

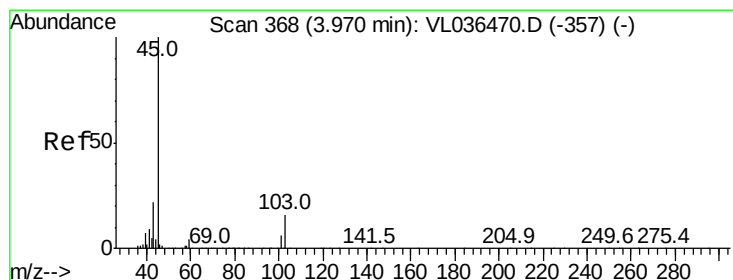
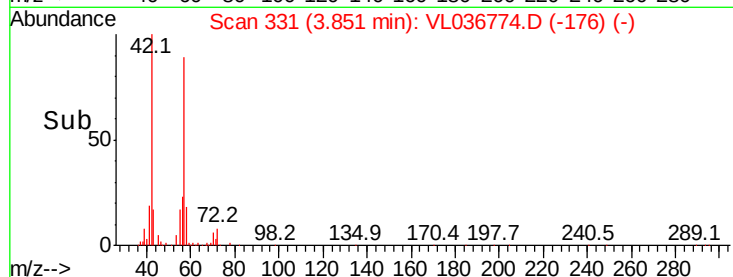
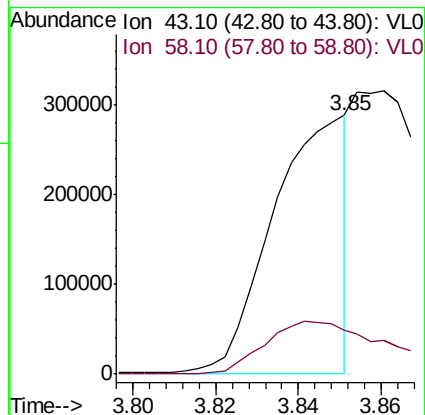
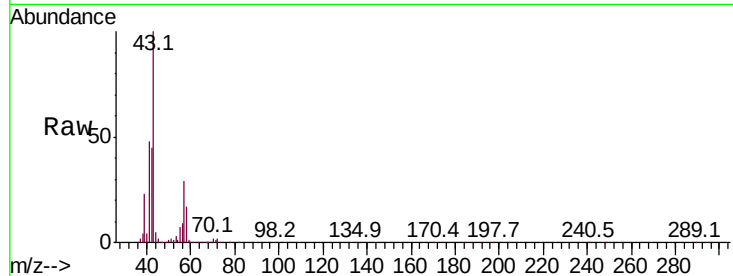
43 100

58 39.8 21.2 31.8#

Manual Integrations
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#19

Isopropyl Alcohol

Concen: 2.061 ppbv

RT: 3.96 min Scan# 366

Delta R.T. -0.01 min

Lab File: VL036774.D

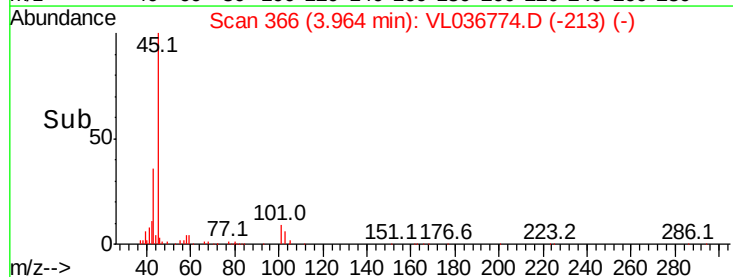
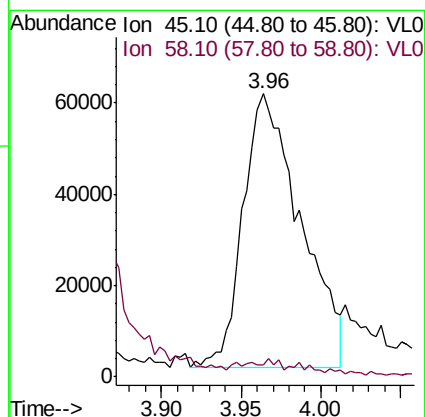
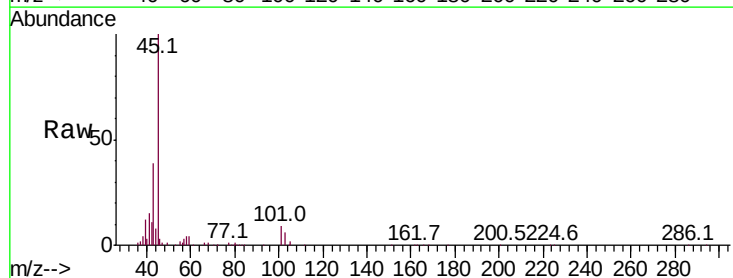
Acq: 9 Apr 2021 14:49

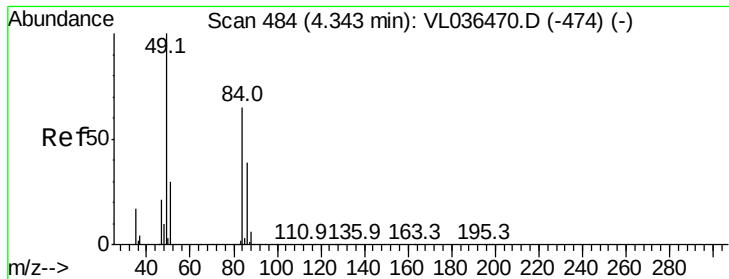
Tgt Ion: 45 Resp: 148620

Ion Ratio Lower Upper

45 100

58 5.5 2.9 4.3#





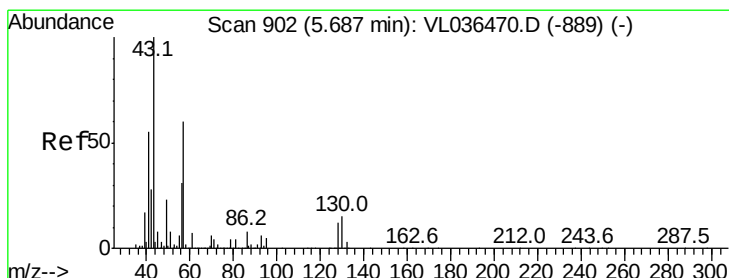
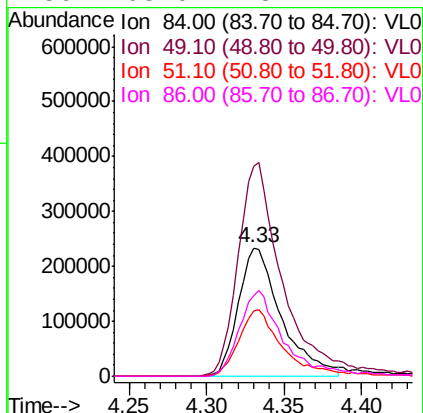
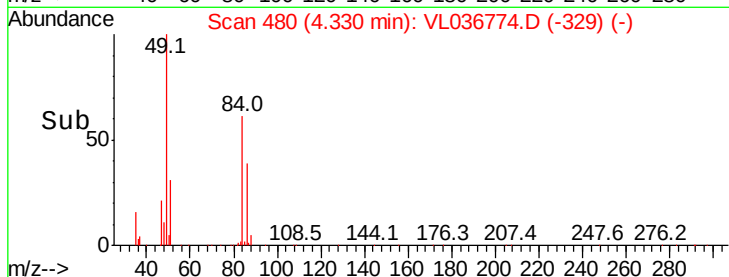
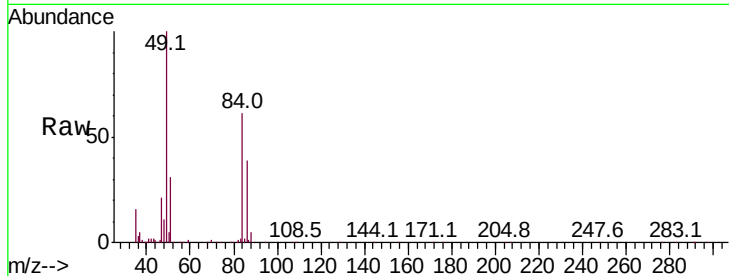
#20
Methvlene Chloride
Concen: 7.369 ppbv
RT: 4.33 min Scan# 480
Delta R.T. -0.01 min
Lab File: VL036774.D
Acq: 9 Apr 2021 14:49

Instrument :
MSVOA_L
ClientSampleId :
GOI-IA-4(2021)

Tot Ion	Ion	Ratio	Lower	Upper
84	100			
49	163.1	122.9	184.3	
51	50.9	36.9	55.3	
86	63.0	48.2	72.4	

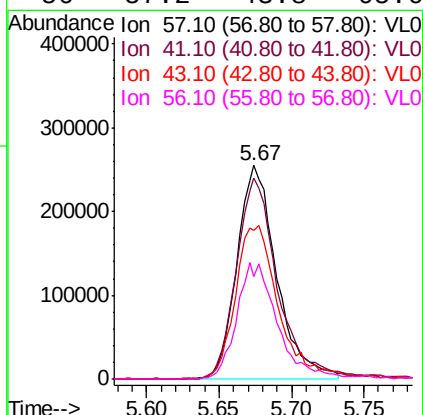
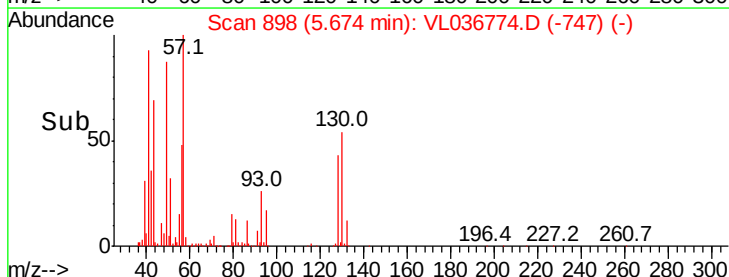
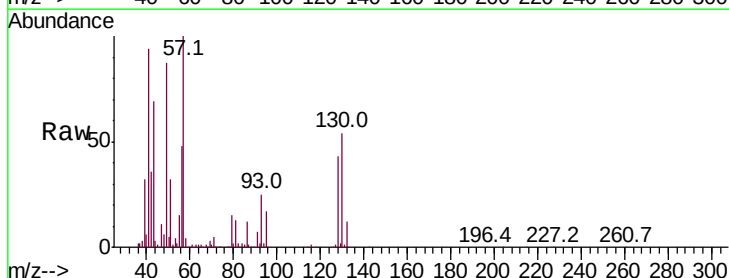
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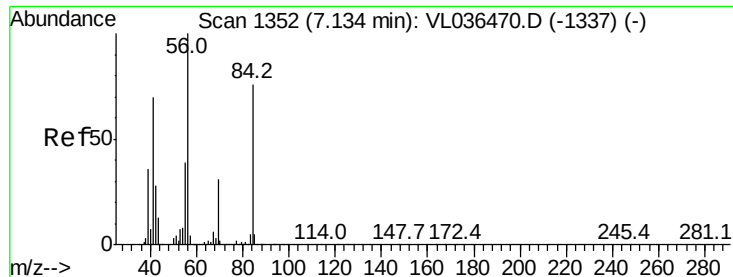
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4/12/2021 5:42:44 PM



#26
Hexane
Concen: 3.350 ppbv
RT: 5.67 min Scan# 898
Delta R.T. -0.01 min
Lab File: VL036774.D
Acq: 9 Apr 2021 14:49

Tgt Ion	Ion	Ratio	Lower	Upper
57	100			
41	99.5	77.2	115.8	
43	78.6	173.8	260.6#	
56	57.2	43.8	65.6	





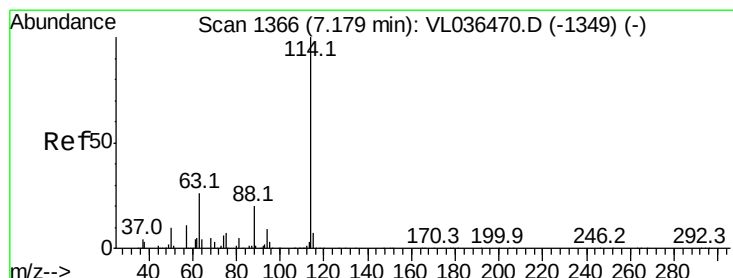
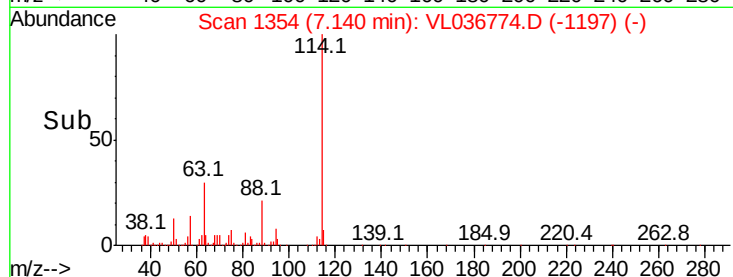
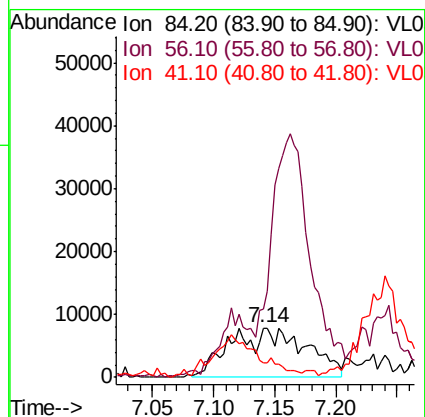
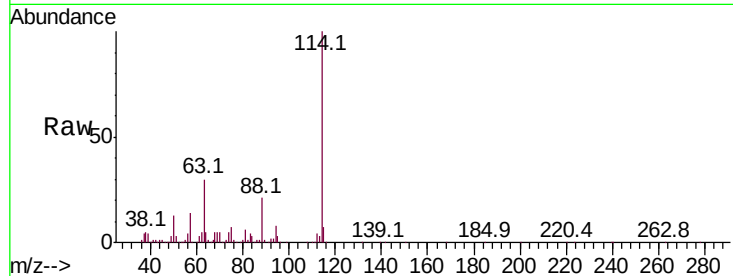
#30
Cyclohexane
Concen: 0.289 ppbv m
RT: 7.14 min Scan# 1354
Delta R.T. 0.01 min
Lab File: VL036774.D
Acq: 9 Apr 2021 14:49

Instrument :
MSVOA_L
ClientSampleId :
GOI-IA-4(2021)

Tot Ion	Ratio	Lower	Upper
84	100		
56	0.0	114.6	171.8#
41	50.9	75.3	112.9#

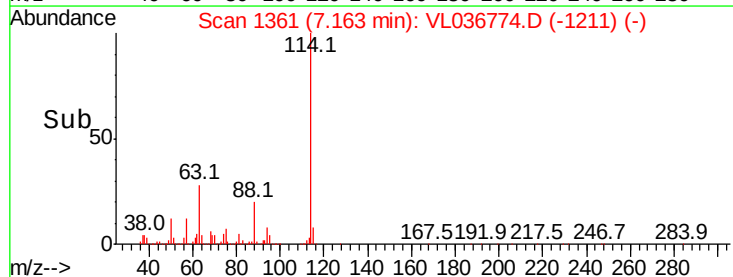
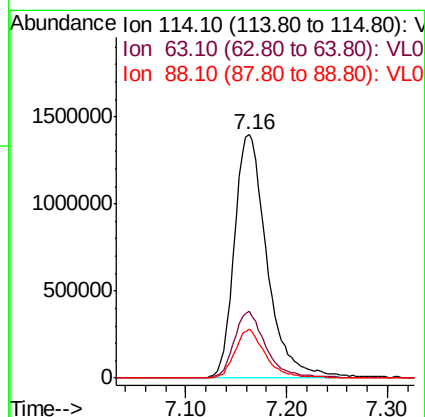
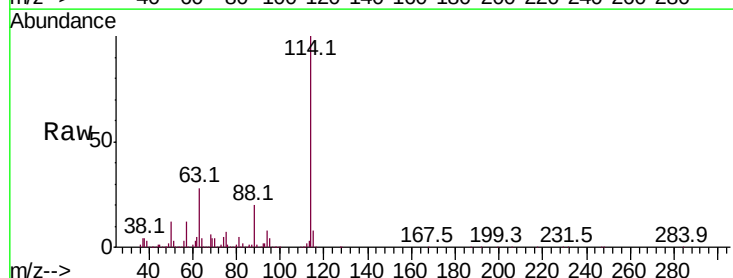
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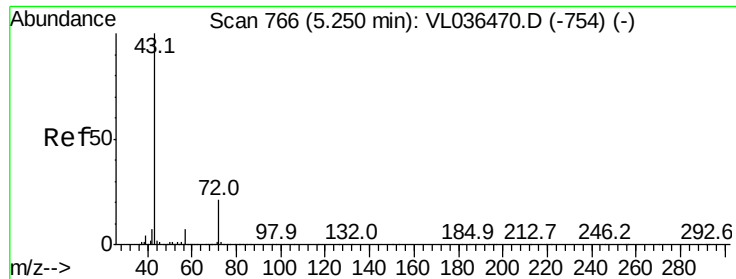
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#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 7.16 min Scan# 1361
Delta R.T. -0.02 min
Lab File: VL036774.D
Acq: 9 Apr 2021 14:49

Tgt Ion	Ratio	Lower	Upper
114	100		
63	27.0	22.4	33.6
88	19.0	15.4	23.0





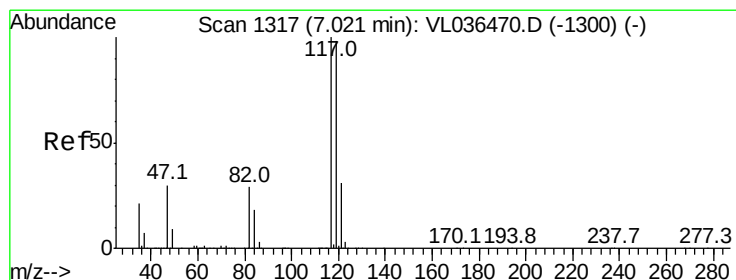
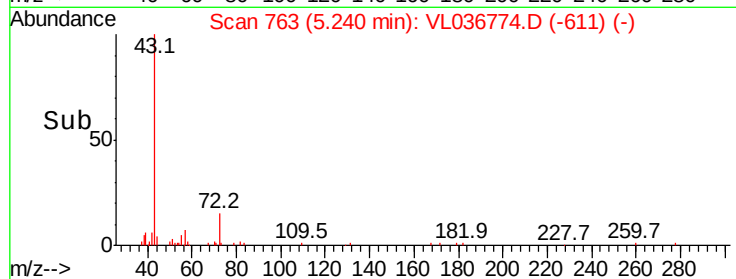
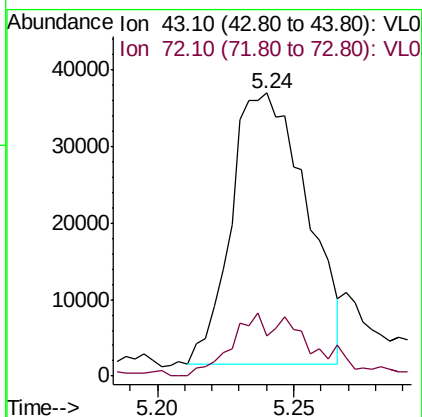
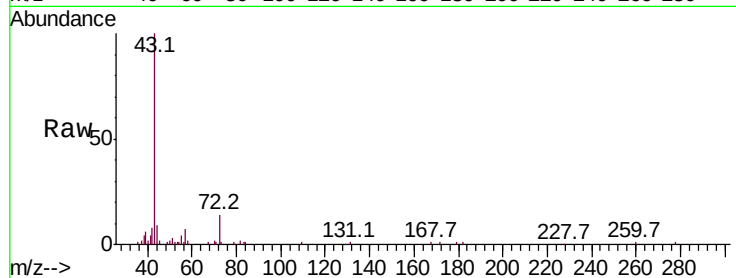
#34
2-Butanone
Concen: 0.443 ppbv
RT: 5.24 min Scan# 763
Delta R.T. -0.01 min
Lab File: VL036774.D
Acq: 9 Apr 2021 14:49

Instrument :
MSVOA_L
ClientSampleId :
GOI-IA-4(2021)

Tot Ion: 43 Resp: 67875
Ion Ratio Lower Upper
43 100
72 24.8 17.0 25.6

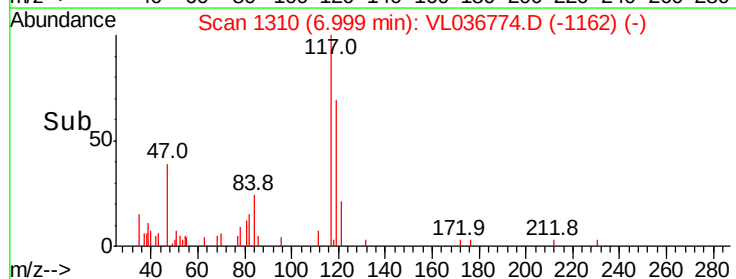
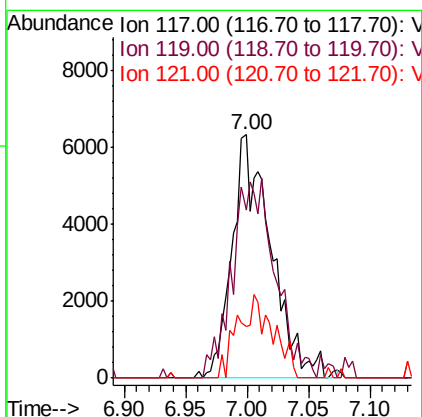
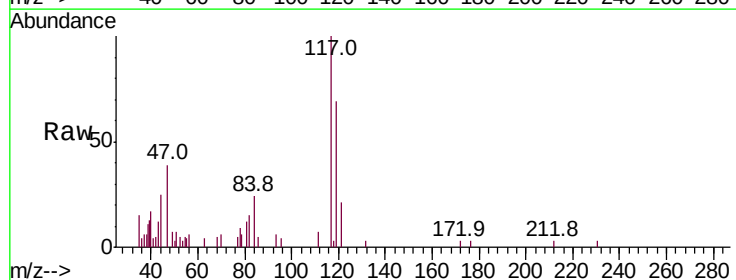
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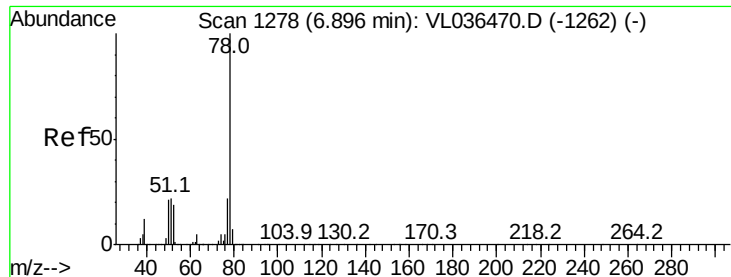
MMDadoda
4/12/2021 5:42:44 PM



#35
Carbon Tetrachloride
Concen: 0.058 ppbv m
RT: 7.00 min Scan# 1310
Delta R.T. -0.02 min
Lab File: VL036774.D
Acq: 9 Apr 2021 14:49

Tgt Ion: 117 Resp: 13917
Ion Ratio Lower Upper
117 100
119 68.9 78.2 117.2#
121 21.3 24.5 36.7#





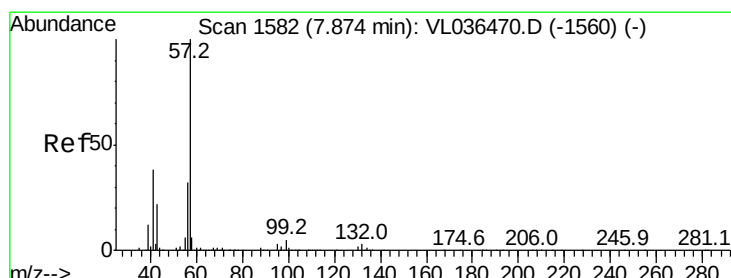
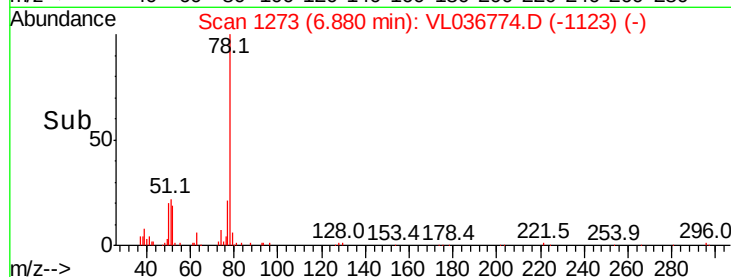
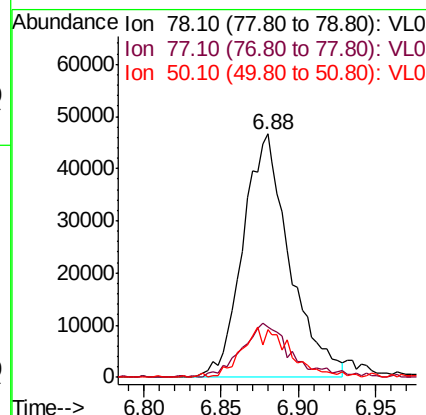
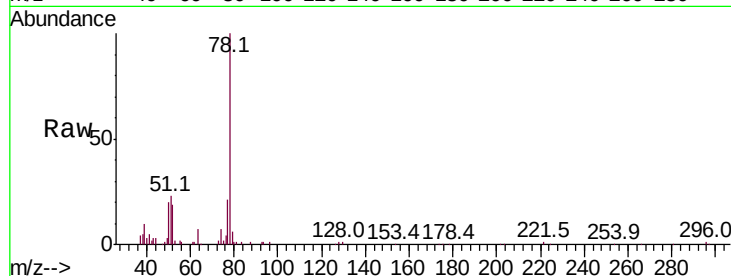
#36
Benzene
Concen: 0.338 ppbv
RT: 6.88 min Scan# 1273
Delta R.T. -0.02 min
Lab File: VL036774.D
Acq: 9 Apr 2021 14:49

Instrument :
MSVOA_L
ClientSampleId :
GOI-IA-4(2021)

Tot Ion	Ratio	Lower	Upper
78	100		
77	20.3	18.0	27.0
50	19.8	16.5	24.7

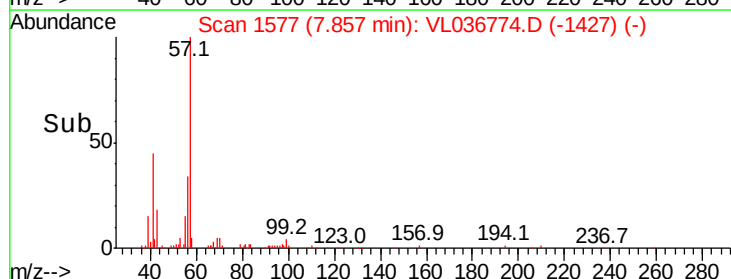
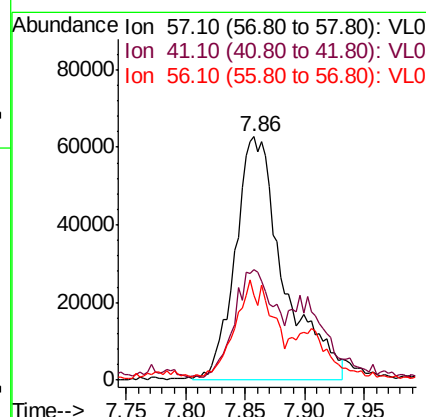
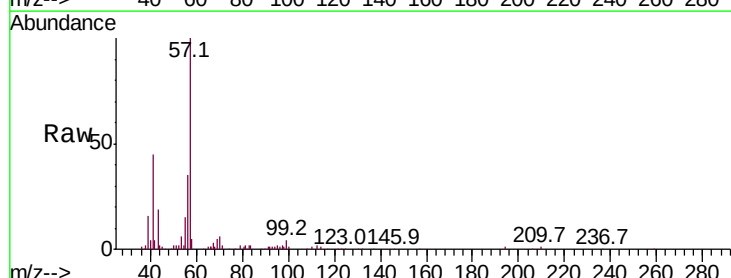
Manual Integrations
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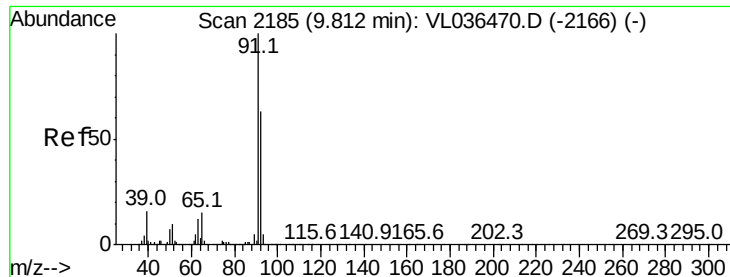
MMDadoda
4/12/2021 5:42:44 PM



#44
2,2,4-Trimethylpentane
Concen: 0.348 ppbv m
RT: 7.86 min Scan# 1577
Delta R.T. -0.02 min
Lab File: VL036774.D
Acq: 9 Apr 2021 14:49

Tgt Ion	Ratio	Lower	Upper
57	100		
41	65.6	28.8	43.2#
56	50.0	26.1	39.1#





#53

Toluene

Concen: 2.080 ppbv

RT: 9.79 min Scan# 2179

Delta R.T. -0.02 min

Lab File: VL036774.D

Acq: 9 Apr 2021 14:49

Instrument :

MSVOA_L

ClientSampleId :

GOI-IA-4(2021)

Tot Ion: 91 Resp: 641927

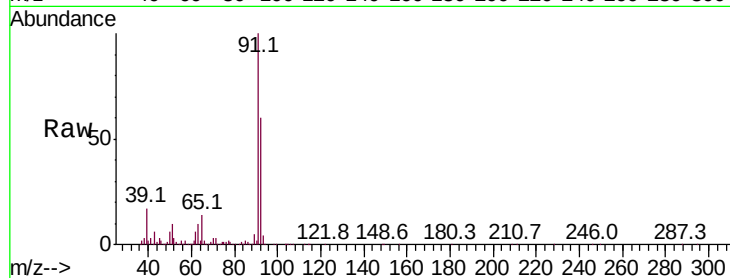
Ion Ratio Lower Upper

91 100

92 60.5 48.8 73.2

Manual Integrations
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Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 92.10 (91.80 to 92.80): VL0

9.79

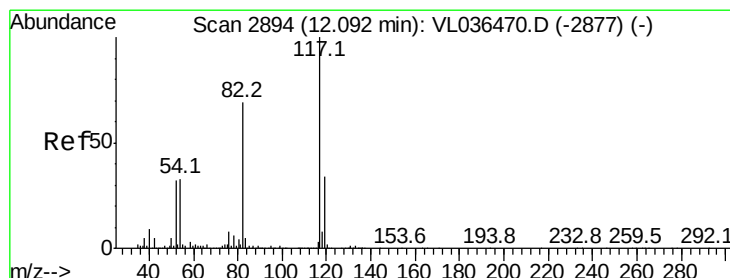
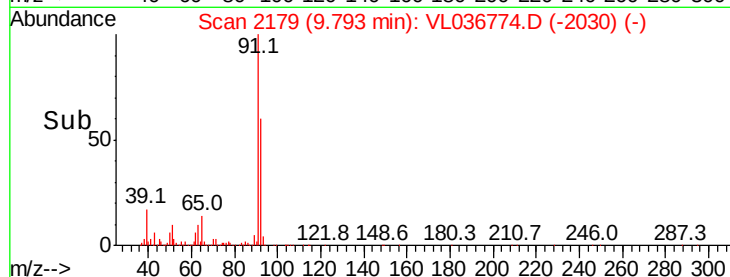
300000

200000

100000

0

Time-->



#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.07 min Scan# 2888

Delta R.T. -0.02 min

Lab File: VL036774.D

Acq: 9 Apr 2021 14:49

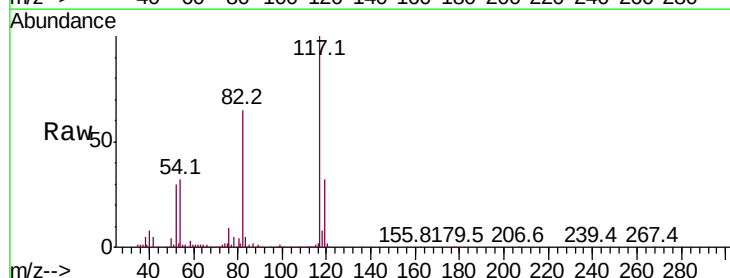
Tgt Ion: 117 Resp: 2473593

Ion Ratio Lower Upper

117 100

82 68.6 57.4 86.0

119 33.8 47.4 71.0#



Abundance Ion 117.10 (116.80 to 117.80): V

Ion 82.10 (81.80 to 82.80): VL0

Ion 119.10 (118.80 to 119.80): V

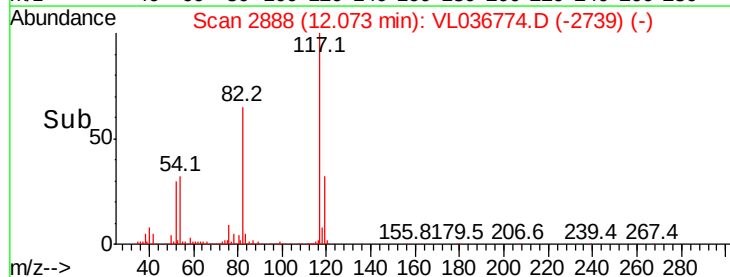
12.07

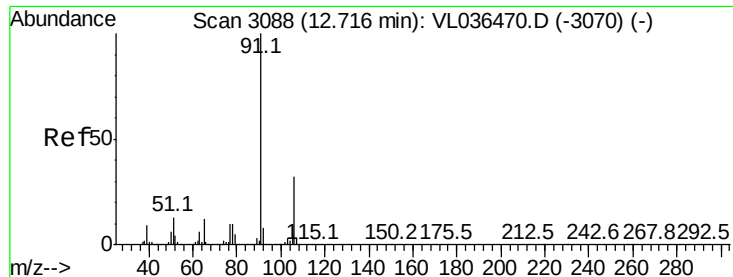
1000000

500000

0

Time-->





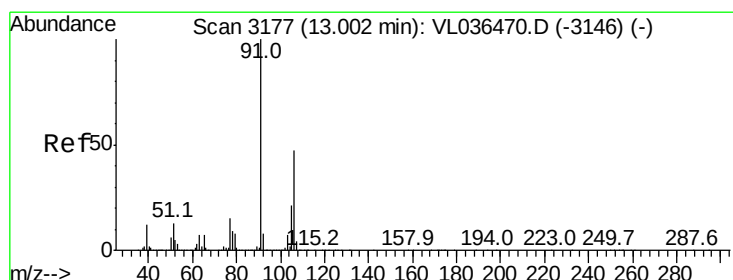
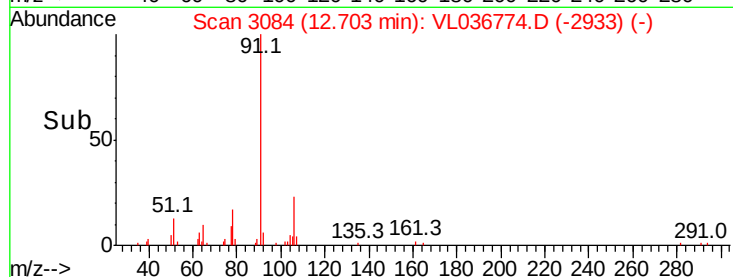
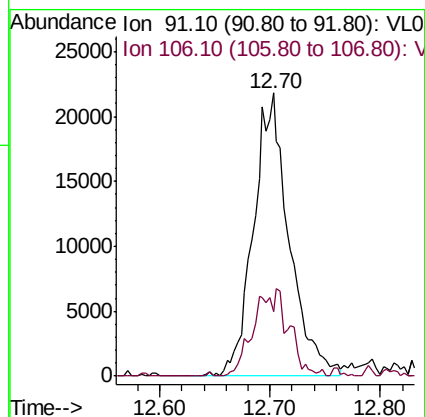
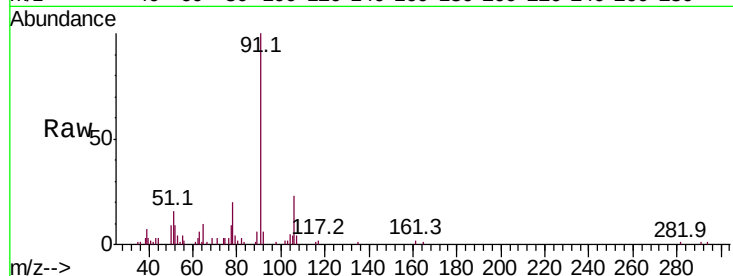
#58
Ethyl Benzene
Concen: 0.136 ppbv m
RT: 12.70 min Scan# 3084
Delta R.T. -0.01 min
Lab File: VL036774.D
Acq: 9 Apr 2021 14:49

Instrument :
MSVOA_L
ClientSampleId :
GOI-IA-4(2021)

Tot Ion: 91 Resp: 49022
Ion Ratio Lower Upper
91 100
106 22.7 25.3 37.9#

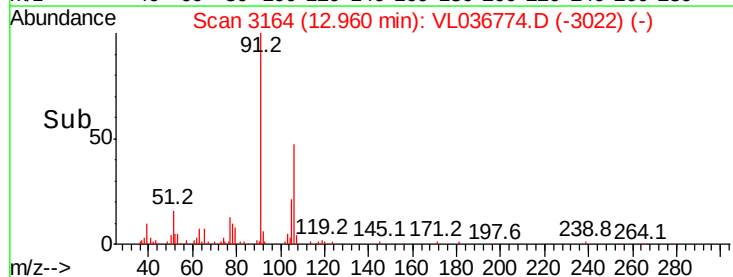
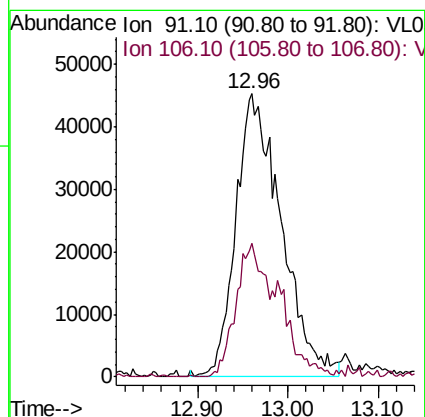
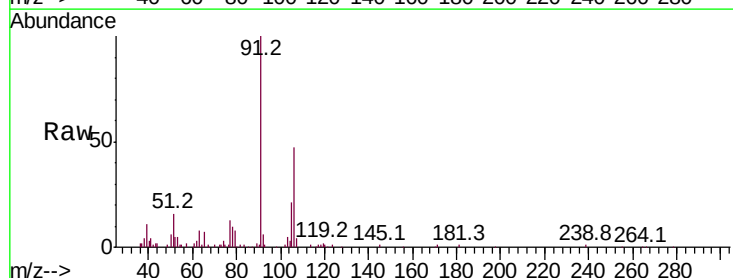
Manual Integrations
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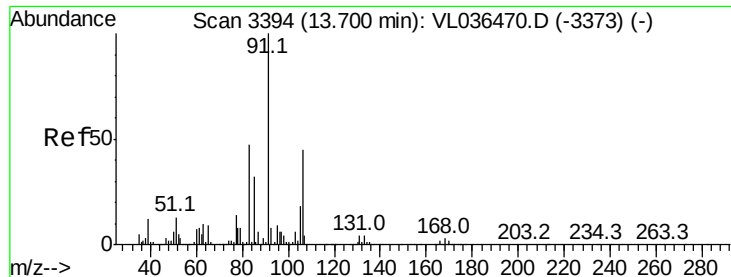
MMDadoda
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#59
m/p-Xylene
Concen: 0.502 ppbv m
RT: 12.96 min Scan# 3164
Delta R.T. -0.04 min
Lab File: VL036774.D
Acq: 9 Apr 2021 14:49

Tgt Ion: 91 Resp: 157629
Ion Ratio Lower Upper
91 100
106 0.0 35.3 52.9#





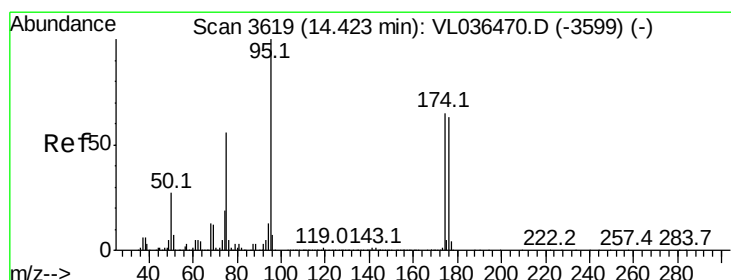
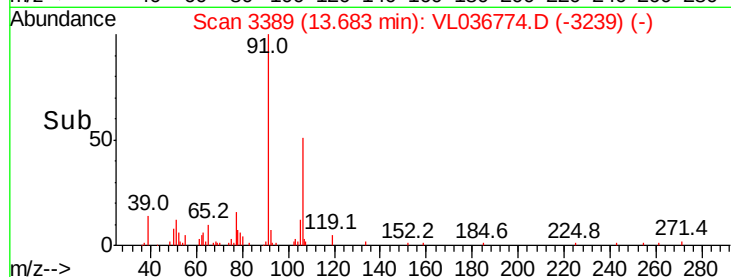
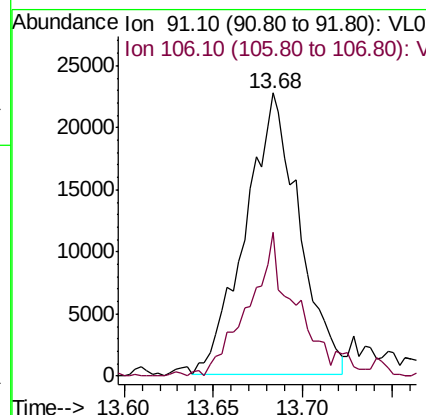
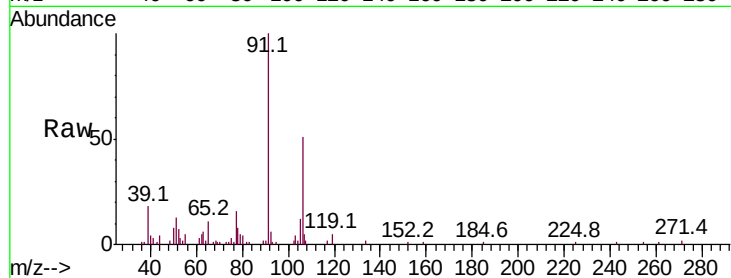
#60
o-Xylene
Concen: 0.157 ppbv
RT: 13.68 min Scan# 3389
Delta R.T. -0.02 min
Lab File: VL036774.D
Acq: 9 Apr 2021 14:49

Instrument :
MSVOA_L
ClientSampleId :
GOI-IA-4(2021)

Tot Ion	Ratio	Lower	Upper
91	100		
106	48.2	22.3	66.9

Manual Integrations
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4/12/2021 5:42:44 PM



#68
1-Bromo-4-Fluorobenzene
Concen: 8.106 ppbv
RT: 14.41 min Scan# 3614
Delta R.T. -0.02 min
Lab File: VL036774.D
Acq: 9 Apr 2021 14:49

Tgt Ion	Ratio	Lower	Upper
95	100		
174	66.8	51.0	76.6
175	5.0	3.9	5.9

