

Data Path : Z:\VOASRV\HPCHEM1\MSVOA_L\DATA\VL100521\
 Data File : VL037773.D
 Acq On : 5 Oct 2021 14:41
 Operator : SY/AP
 Sample : M4012-03
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 C0P17

Manual Integrations
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 10/11/2021 7:37:19 PM

Quant Time: Oct 06 05:50:05 2021
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_L\METHODS\VL100421AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Mon Oct 0
 QLast Update : Mon Oct 04 17:43:54 2021
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.65	49	1340897	10.00	ppbv	-0.02
33) 1,4-Difluorobenzene	7.16	114	3804260	10.00	ppbv	-0.02
55) Chlorobenzene-d5	12.06	117	3357129	10.00	ppbv	-0.03

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.39	95	2410518m	10.27	ppbv	-0.03
Spiked Amount	10.000	Range	65 - 135	Recovery	=	102.70%

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	3.04	85	41562m	0.194	ppbv	
3) Chlorodifluoromethane	2.98	51	49222	0.191	ppbv #	90
4) Chloromethane	3.13	50	23837	0.253	ppbv #	85
9) Propene	3.01	41	34089m	0.360	ppbv	
11) Trichlorofluoromethane	3.94	101	40673m	0.213	ppbv	
13) Ethanol	3.60	45	350379	45.194	ppbv	90
15) Acetone	3.84	43	1617910	13.441	ppbv	92
17) tert-Butyl alcohol	4.29	59	18280m	0.147	ppbv	
19) Isopropyl Alcohol	3.96	45	3773458	50.389	ppbv #	99
20) Methylene Chloride	4.33	84	821659	13.510	ppbv	98
26) Hexane	5.67	57	317253	1.907	ppbv #	49
27) Carbon Disulfide	4.54	76	32325m	0.219	ppbv	
29) Chloroform	5.74	83	4513098	18.983	ppbv	99
32) 1,1,1-Trichloroethane	6.50	97	10772m	0.048	ppbv	
34) 2-Butanone	5.23	43	292258	1.903	ppbv	96
36) Benzene	6.88	78	31613m	0.097	ppbv	
38) Trichloroethene	7.82	130	8324m	0.065	ppbv	
42) Bromodichloromethane	7.78	83	32439	0.144	ppbv #	88
50) 4-Methyl-2-Pentanone	8.73	43	35613m	0.178	ppbv	
52) Tetrachloroethene	11.21	164	2697515	21.338	ppbv	96
53) Toluene	9.78	91	119082m	0.331	ppbv	
58) Ethyl Benzene	12.70	91	55616m	0.123	ppbv	
59) m/p-Xylene	12.94	91	99977m	0.258	ppbv	
60) o-Xylene	13.67	91	45868m	0.124	ppbv	
74) 1,2,4-Trimethylbenzene	16.73	105	70358	0.175	ppbv #	74
75) 1,3-Dichlorobenzene	16.97	146	266624m	1.071	ppbv	
79) Naphthalene	22.16	128	37968m	0.154	ppbv	

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

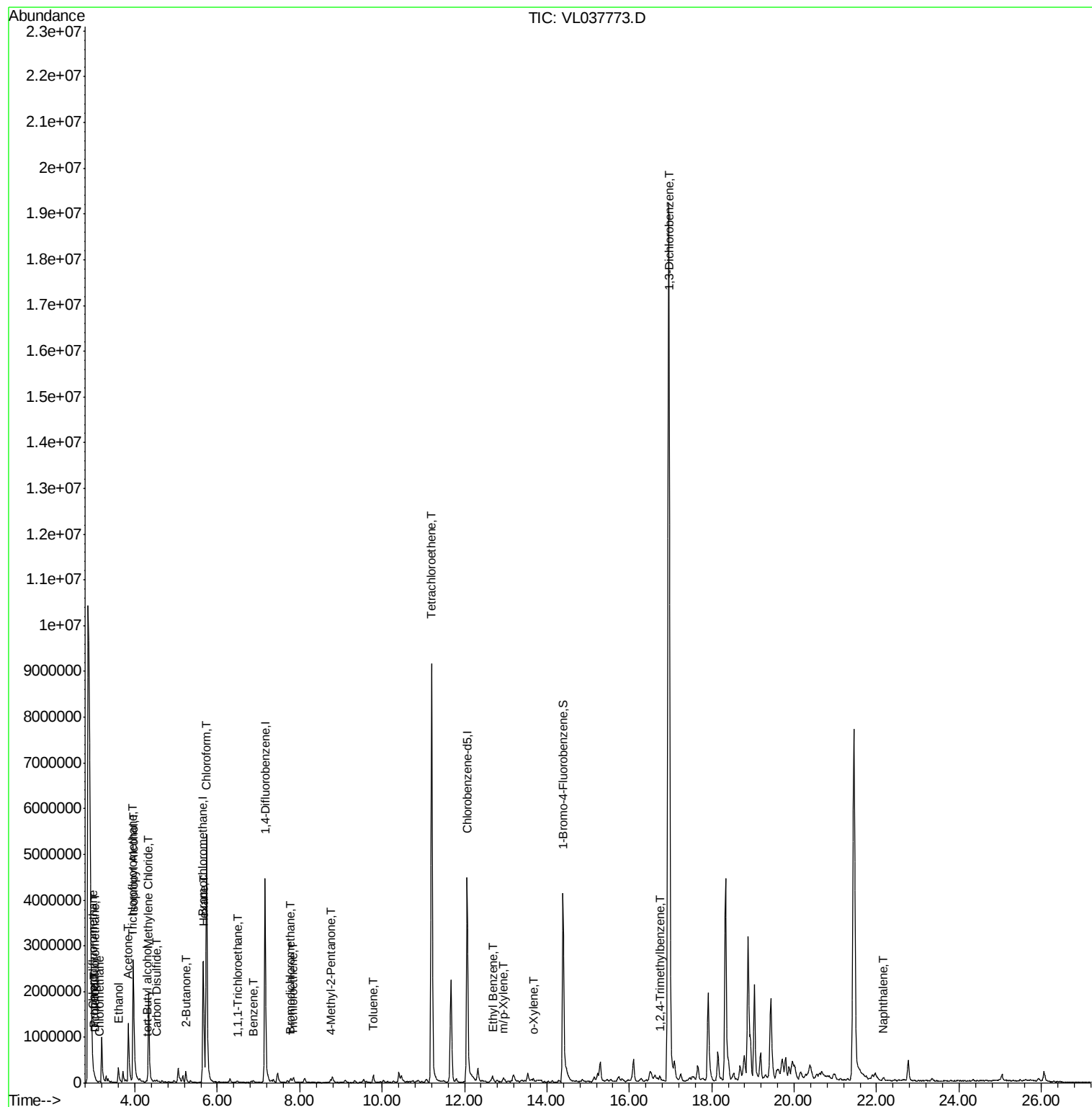
Data Path : Z:\V0ASRV\HPCHEM1\MSVOA_L\DATA\VL100521\
Data File : VL037773.D
Acq On : 5 Oct 2021 14:41
Operator : SY/AP
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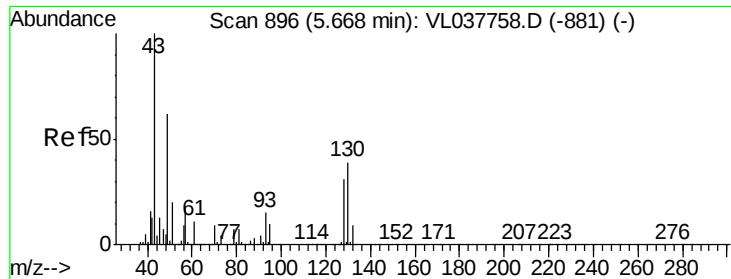
Instrument :
MSVOA_L
ClientSampleId :
C0P17

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Quant Time: Oct 06 05:50:05 2021
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA_L\METHODS\VL100421AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Mon Oct
QLast Update : Mon Oct 04 17:43:54 2021
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.65 min Scan# 891

Delta R.T. -0.02 min

Lab File: VL037773.D

Acq: 5 Oct 2021 14:41

Instrument :

MSVOA_L

ClientSampleId :

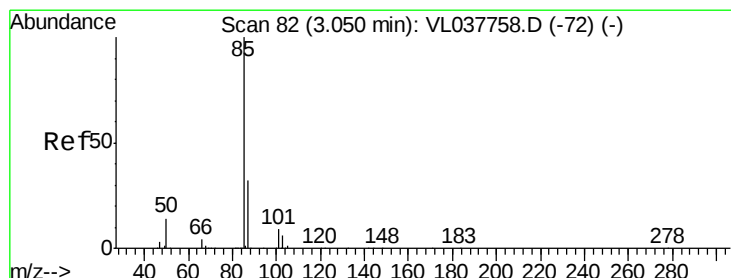
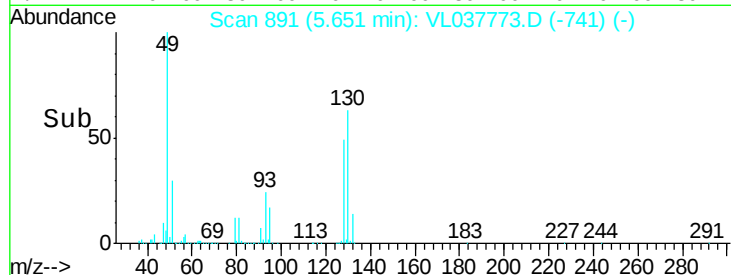
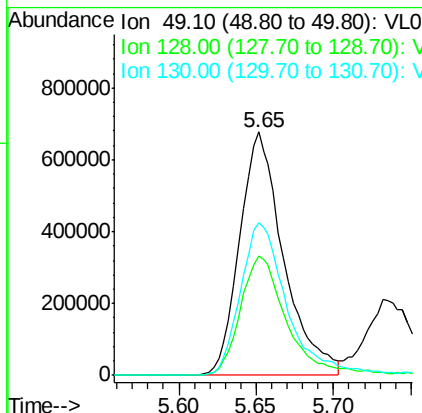
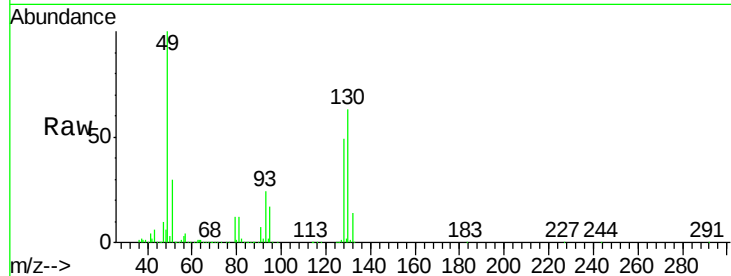
C0P17

Tgt Ion: 49 Resp: 1340897

Ion	Ratio	Lower	Upper
49	100		
128	52.3	27.1	81.3
130	68.4	33.2	99.6

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#2

Dichlorodifluoromethane

Concen: 0.194 ppbv m

RT: 3.04 min Scan# 79

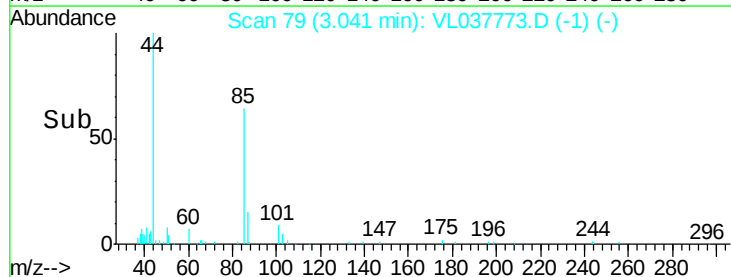
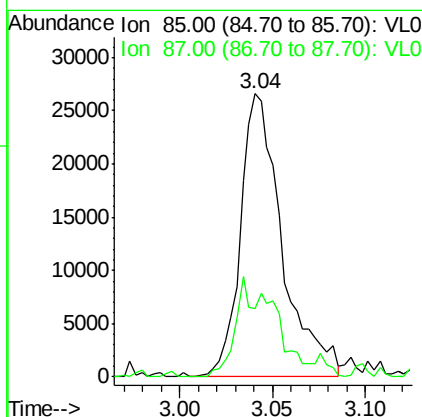
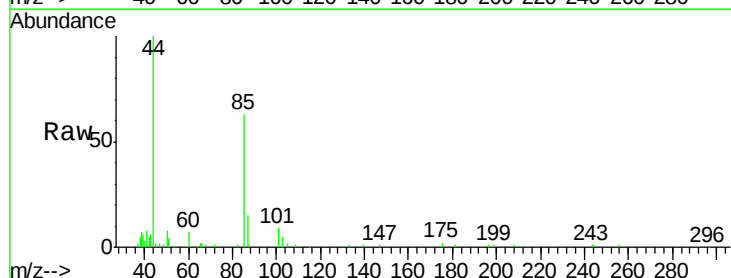
Delta R.T. -0.01 min

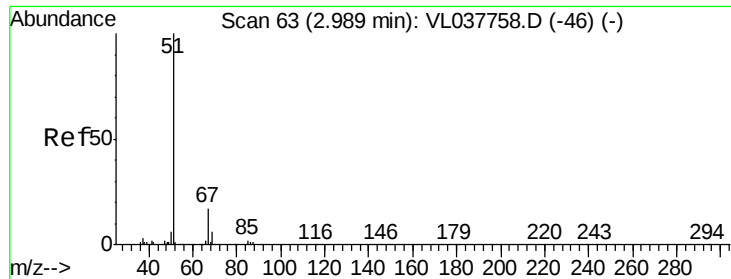
Lab File: VL037773.D

Acq: 5 Oct 2021 14:41

Tgt Ion: 85 Resp: 41562

Ion	Ratio	Lower	Upper
85	100		
87	23.9	25.7	38.5#





#3

Chlorodifluoromethane

Concen: 0.191 ppbv

RT: 2.98 min Scan# 60

Delta R.T. -0.01 min

Lab File: VL037773.D

Acq: 5 Oct 2021 14:41

Instrument :

MSVOA_L

ClientSampleId :

C0P17

Tgt Ion: 51 Resp: 49222

Ion Ratio Lower Upper

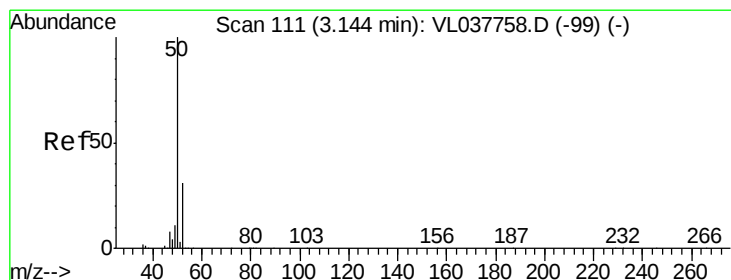
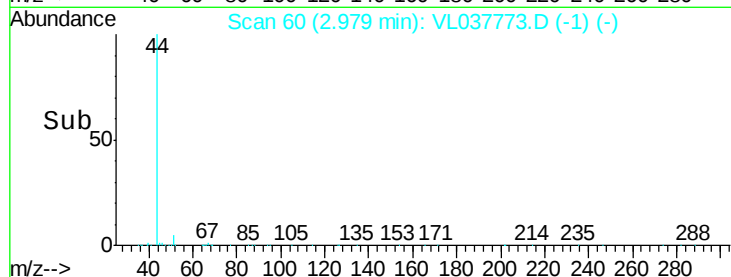
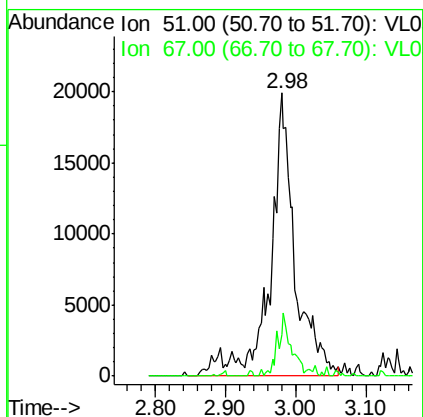
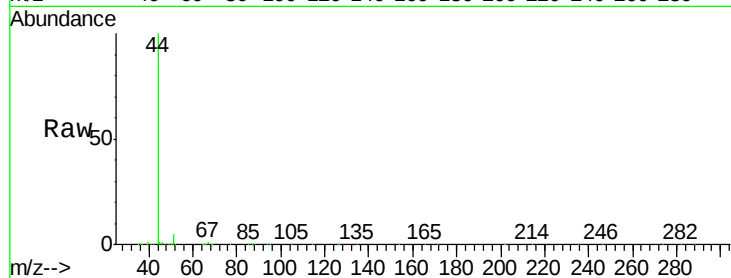
51 100

67 12.8 13.5 20.3#

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#4

Chloromethane

Concen: 0.253 ppbv

RT: 3.13 min Scan# 108

Delta R.T. -0.01 min

Lab File: VL037773.D

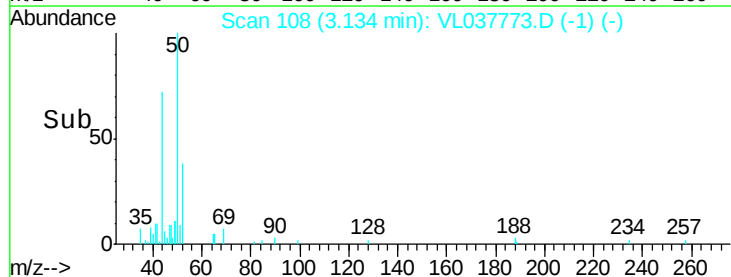
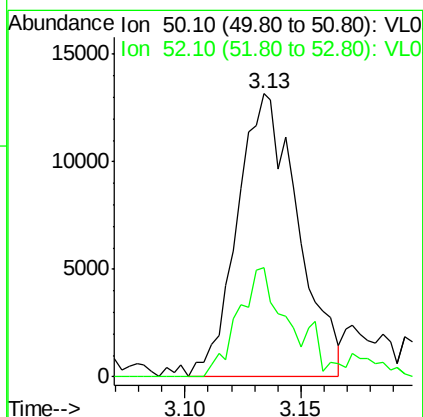
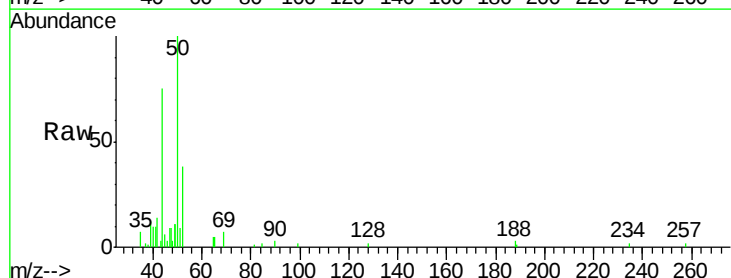
Acq: 5 Oct 2021 14:41

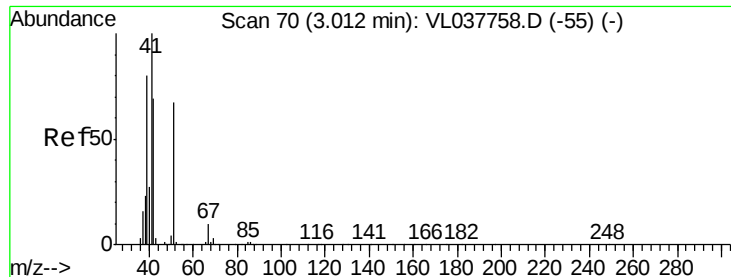
Tgt Ion: 50 Resp: 23837

Ion Ratio Lower Upper

50 100

52 38.5 24.4 36.6#





#9

Propene

Concen: 0.360 ppbv m

RT: 3.01 min Scan# 70

Delta R.T. -0.00 min

Lab File: VL037773.D

Acq: 5 Oct 2021 14:41

Instrument :

MSVOA_L

ClientSampleId :

C0P17

Tgt Ion: 41 Resp: 34089

Ion Ratio Lower Upper

41 100

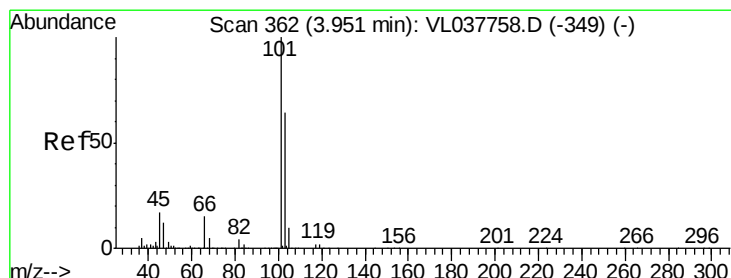
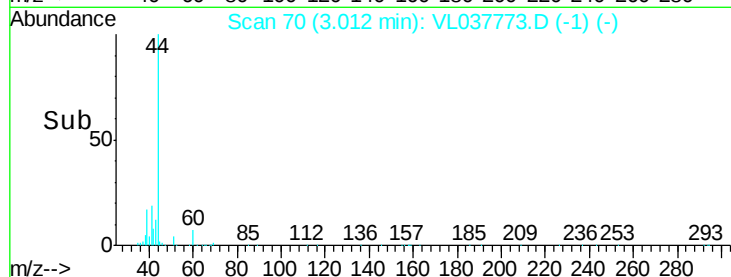
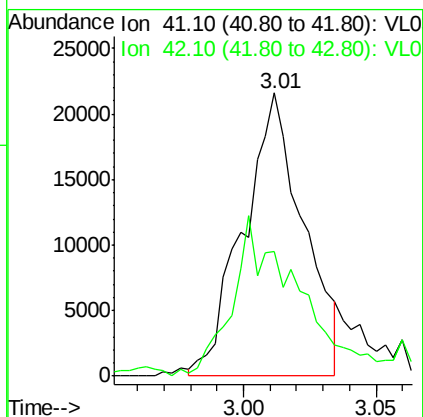
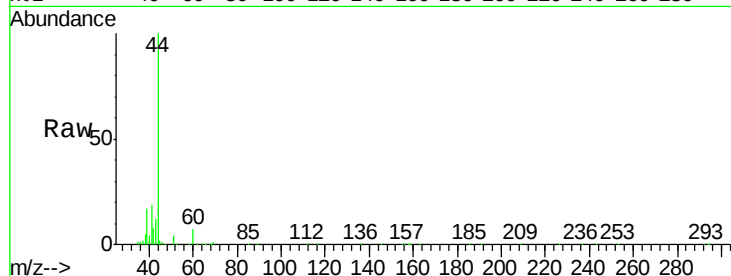
42 69.2 54.2 81.2

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#11

Trichlorofluoromethane

Concen: 0.213 ppbv m

RT: 3.94 min Scan# 359

Delta R.T. -0.01 min

Lab File: VL037773.D

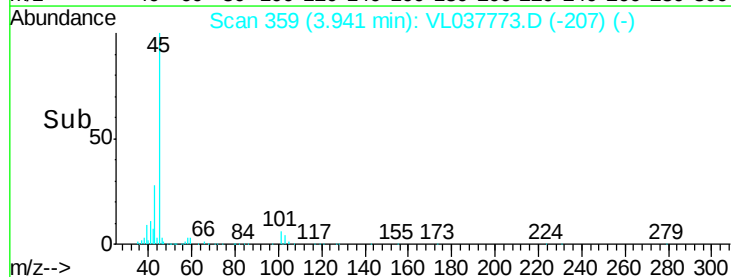
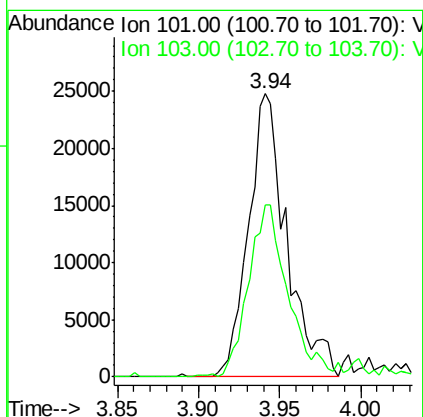
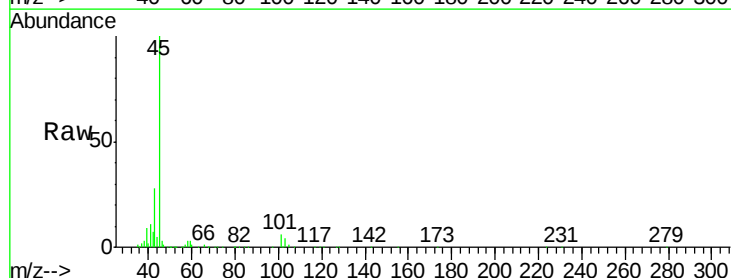
Acq: 5 Oct 2021 14:41

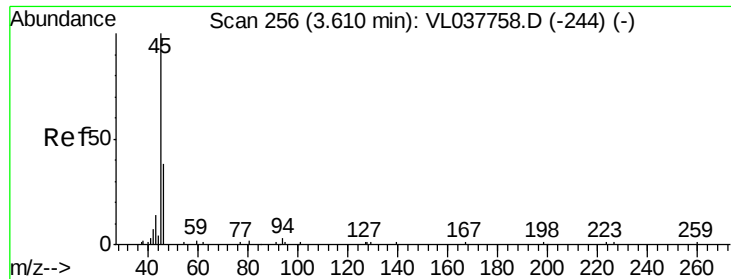
Tgt Ion: 101 Resp: 40673

Ion Ratio Lower Upper

101 100

103 60.7 51.5 77.3





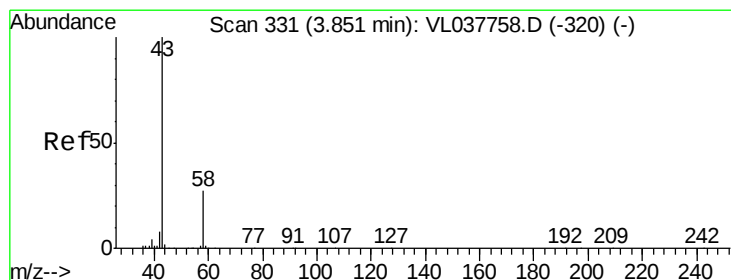
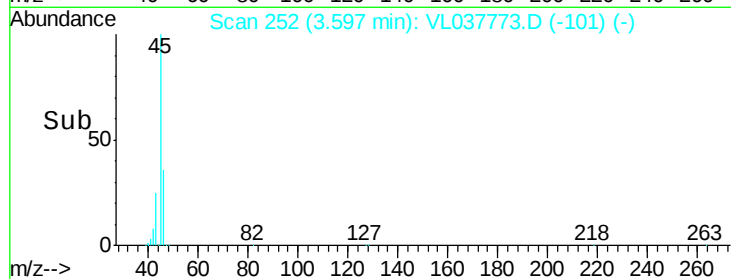
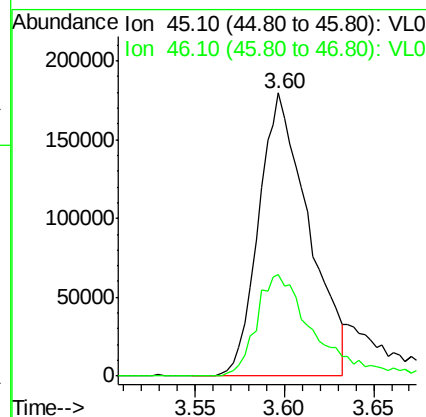
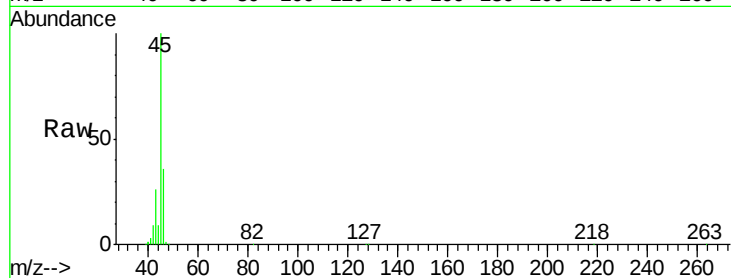
#13
Ethanol
Concen: 45.194 ppbv
RT: 3.60 min Scan# 252
Delta R.T. -0.01 min
Lab File: VL037773.D
Acq: 5 Oct 2021 14:41

Instrument :
MSVOA_L
ClientSampleId :
C0P17

Tgt Ion: 45 Resp: 350379
Ion Ratio Lower Upper
45 100
46 43.6 20.2 81.0

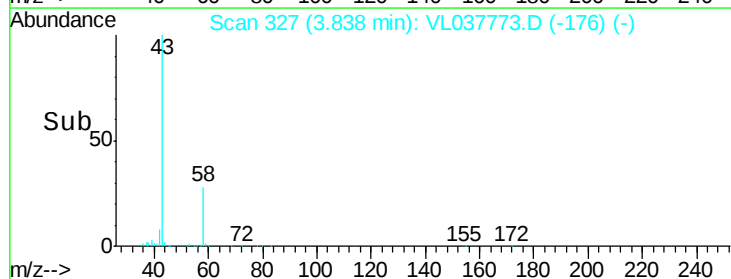
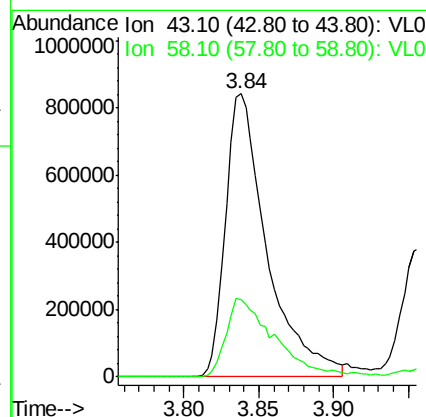
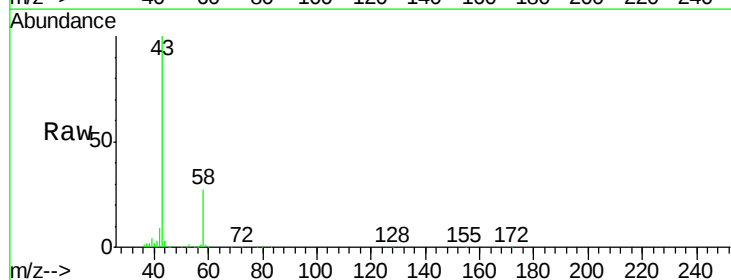
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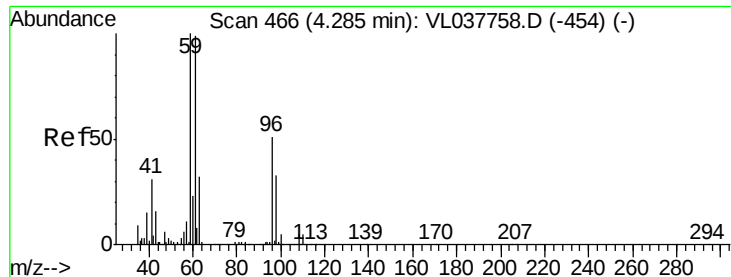
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#15
Acetone
Concen: 13.441 ppbv
RT: 3.84 min Scan# 327
Delta R.T. -0.01 min
Lab File: VL037773.D
Acq: 5 Oct 2021 14:41

Tgt Ion: 43 Resp: 1617910
Ion Ratio Lower Upper
43 100
58 32.9 23.0 34.6





#17

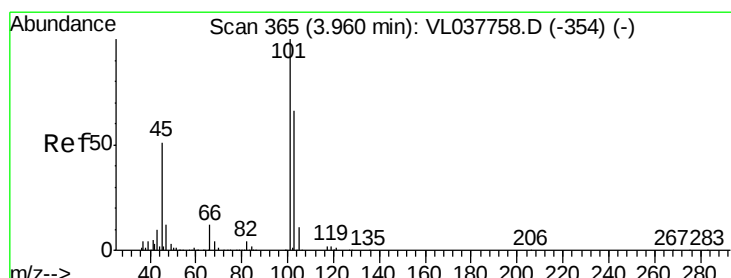
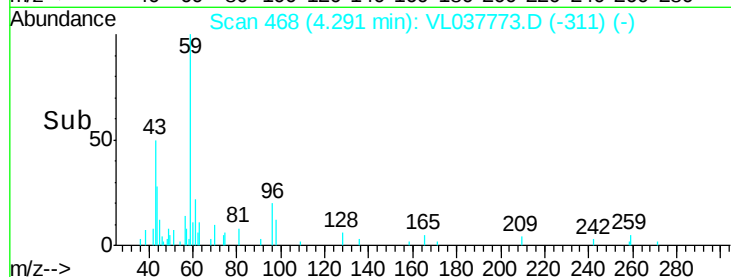
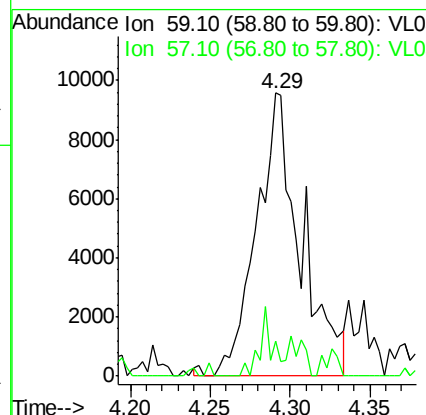
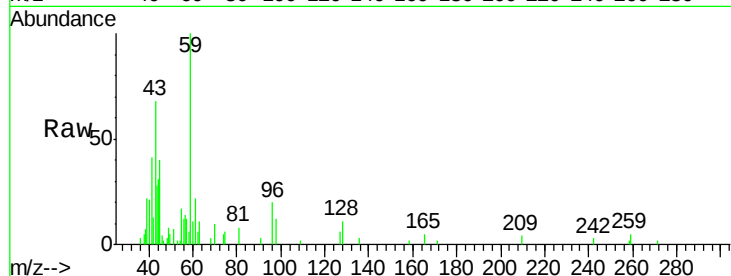
tert-Butyl alcohol
 Concen: 0.147 ppbv
 RT: 4.29 min Scan# 468
 Delta R.T. 0.01 min
 Lab File: VL037773.D
 Acq: 5 Oct 2021 14:41

Instrument :
 MSVOA_L
 ClientSampled :
 C0P17

Tgt Ion: 59 Resp: 18280
 Ion Ratio Lower Upper
 59 100
 57 14.5 8.6 13.0#

Manual Integrations
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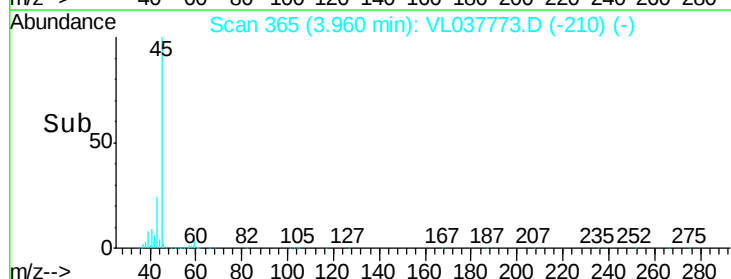
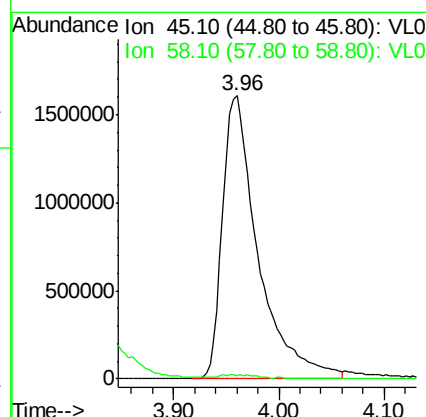
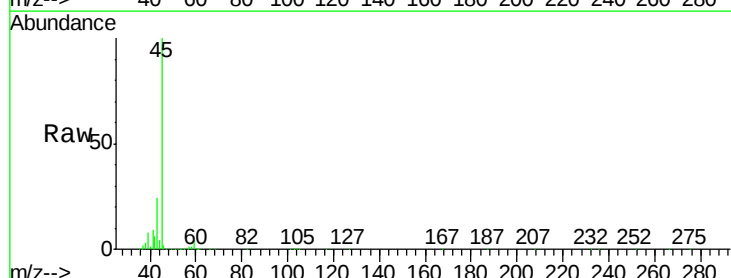
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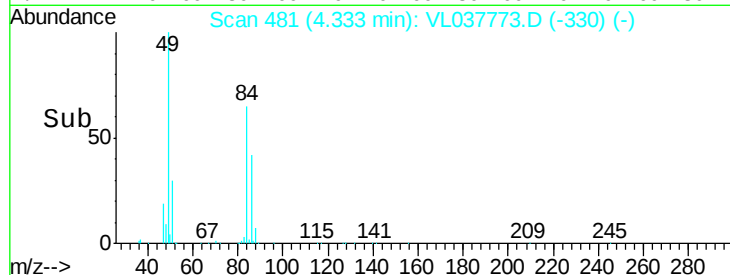
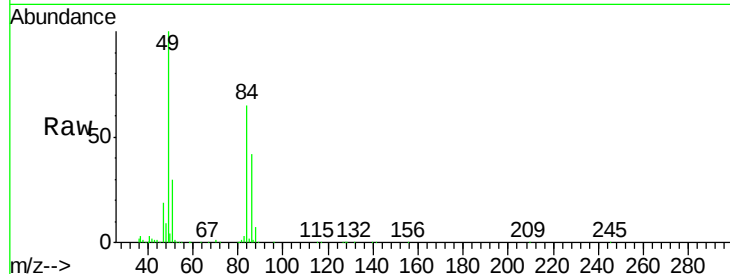
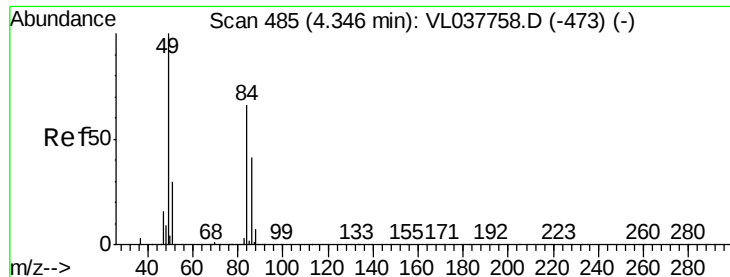


#19

Isopropyl Alcohol
 Concen: 50.389 ppbv
 RT: 3.96 min Scan# 365
 Delta R.T. -0.00 min
 Lab File: VL037773.D
 Acq: 5 Oct 2021 14:41

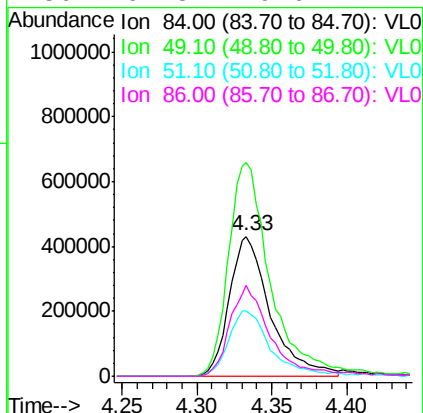
Tgt Ion: 45 Resp: 3773458
 Ion Ratio Lower Upper
 45 100
 58 1.8 1.1 1.7#





#20
Methylene Chloride
Concen: 13.510 ppbv
RT: 4.33 min Scan# 481
Delta R.T. -0.01 min
Lab File: VL037773.D
Acq: 5 Oct 2021 14:41

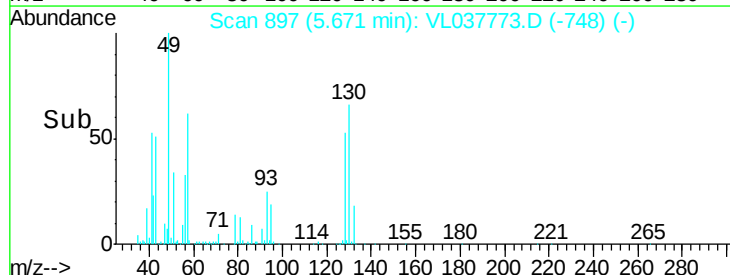
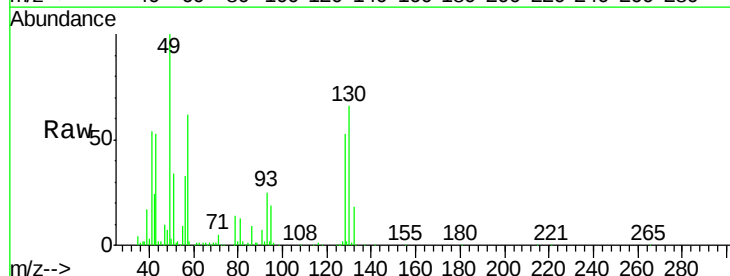
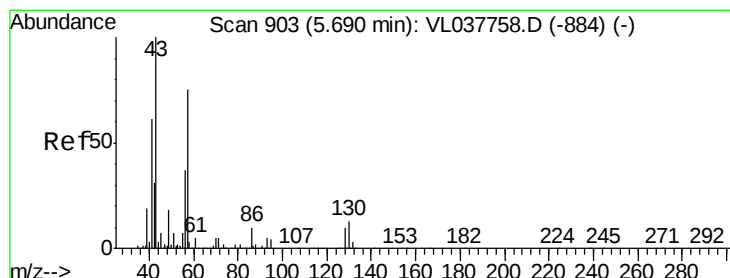
Tgt Ion	Ratio	Lower	Upper
84	100		
49	152.9	120.7	181.1
51	46.4	36.2	54.4
86	64.8	49.6	74.4



Instrument :
MSVOA_L
ClientSampleId :
C0P17

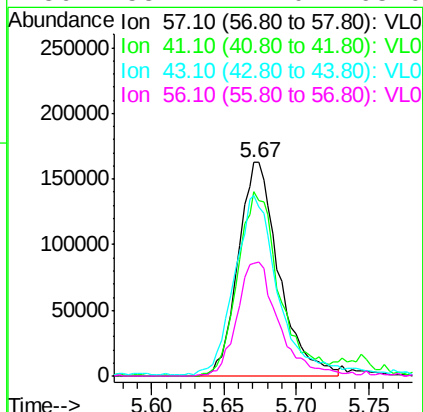
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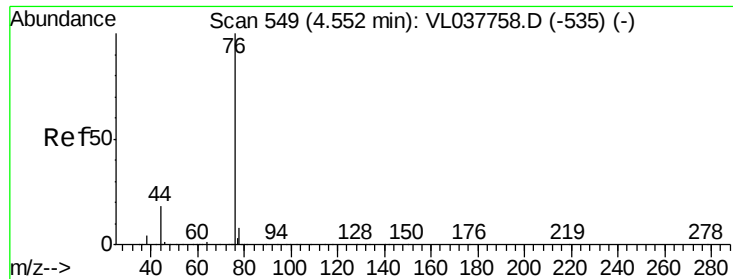
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#26
Hexane
Concen: 1.907 ppbv
RT: 5.67 min Scan# 897
Delta R.T. -0.02 min
Lab File: VL037773.D
Acq: 5 Oct 2021 14:41

Tgt Ion	Ratio	Lower	Upper
57	100		
41	97.8	69.6	104.4
43	90.5	171.4	257.0#
56	55.4	42.0	63.0





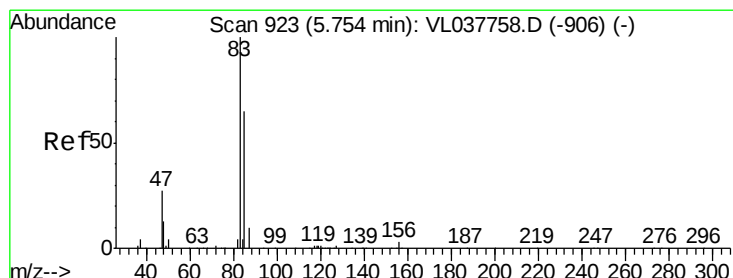
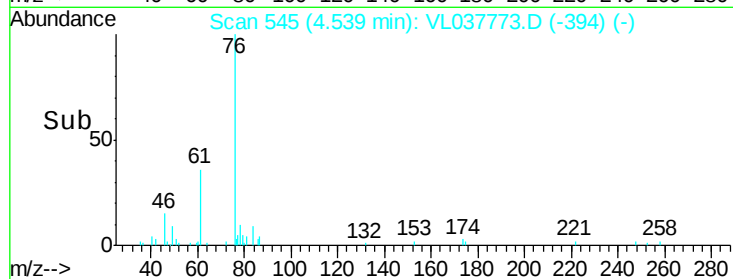
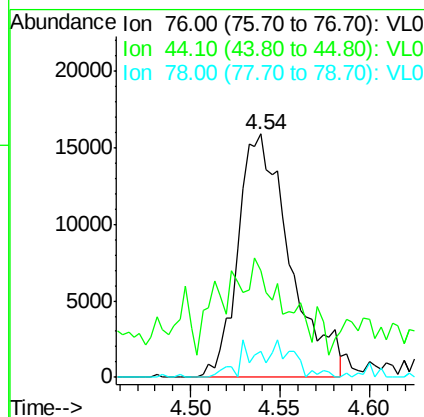
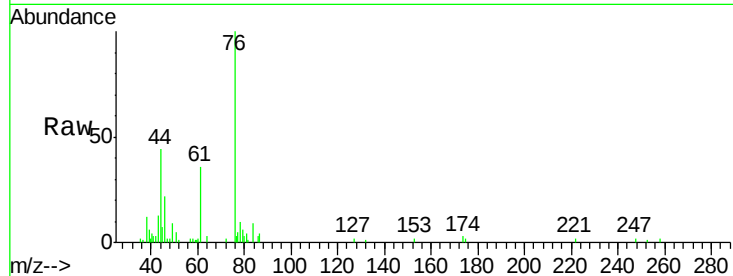
#27
Carbon Disulfide
Concen: 0.219 ppbv m
RT: 4.54 min Scan# 545
Delta R.T. -0.01 min
Lab File: VL037773.D
Acq: 5 Oct 2021 14:41

Instrument :
MSVOA_L
ClientSampleId :
C0P17

Tgt Ion	Ratio	Lower	Upper
76	100		
44	53.9	14.3	21.5#
78	0.0	7.8	11.6#

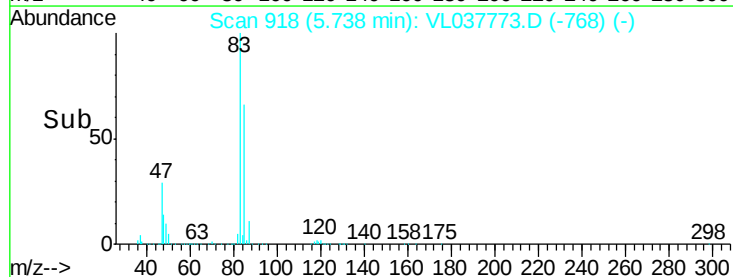
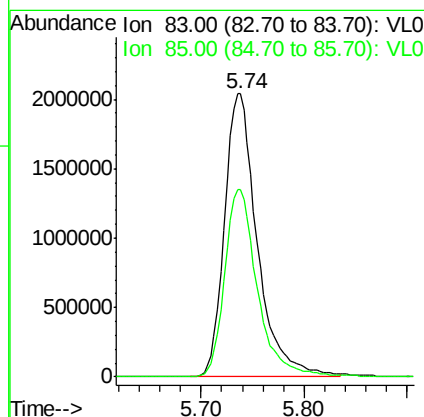
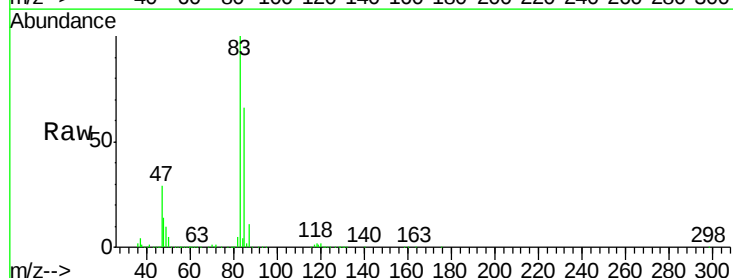
Manual Integrations
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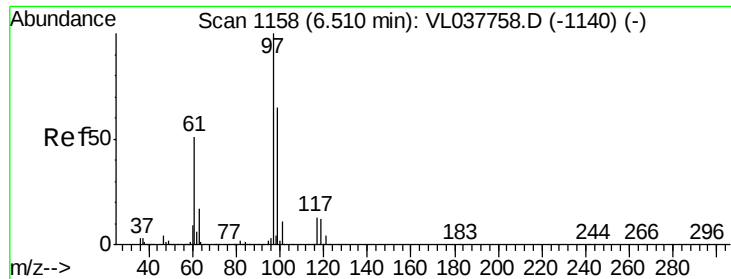
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#29
Chloroform
Concen: 18.983 ppbv
RT: 5.74 min Scan# 918
Delta R.T. -0.02 min
Lab File: VL037773.D
Acq: 5 Oct 2021 14:41

Tgt Ion	Ratio	Lower	Upper
83	100		
85	66.0	51.8	77.8





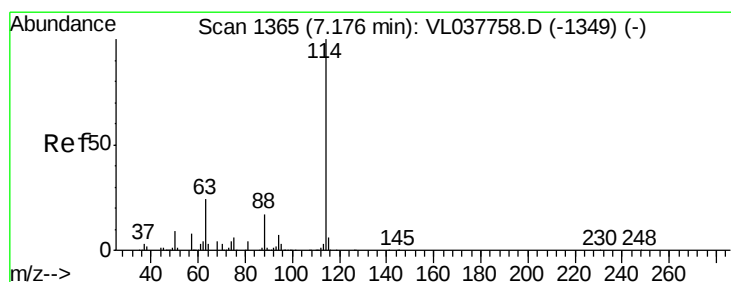
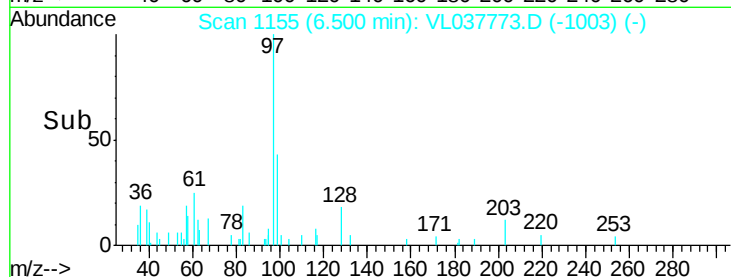
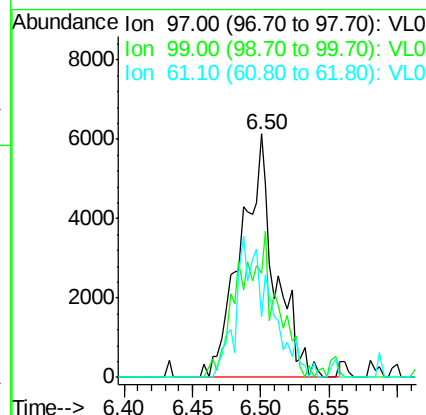
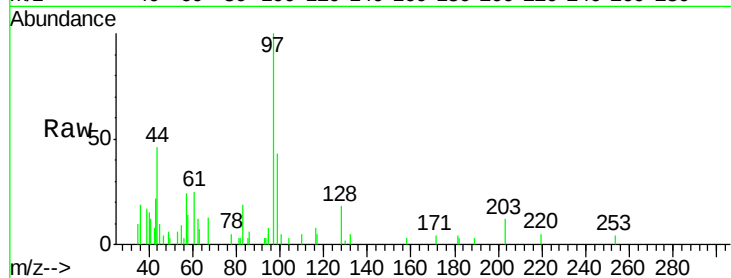
#32
 1,1,1-Trichloroethane
 Concen: 0.048 ppbv m
 RT: 6.50 min Scan# 1155
 Delta R.T. -0.01 min
 Lab File: VL037773.D
 Acq: 5 Oct 2021 14:41

Instrument :
 MSVOA_L
 ClientSampleId :
 C0P17

Tgt Ion	Ratio	Lower	Upper
97	100		
99	0.0	52.6	78.8#
61	58.1	40.2	60.4

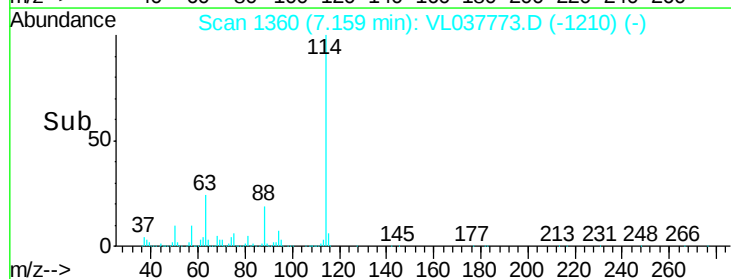
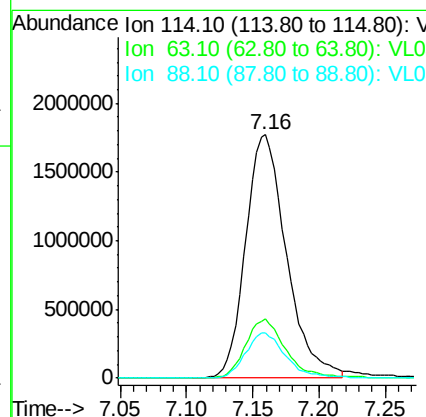
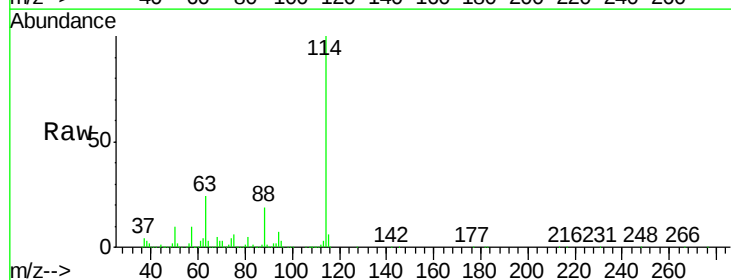
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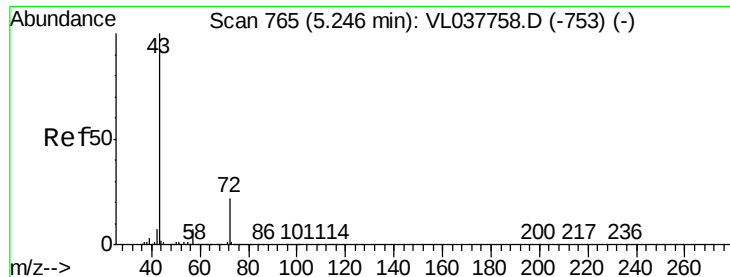
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#33
 1,4-Difluorobenzene
 Concen: 10.000 ppbv
 RT: 7.16 min Scan# 1360
 Delta R.T. -0.02 min
 Lab File: VL037773.D
 Acq: 5 Oct 2021 14:41

Tgt Ion	Ratio	Lower	Upper
114	100		
63	24.2	19.4	29.2
88	18.5	14.4	21.6





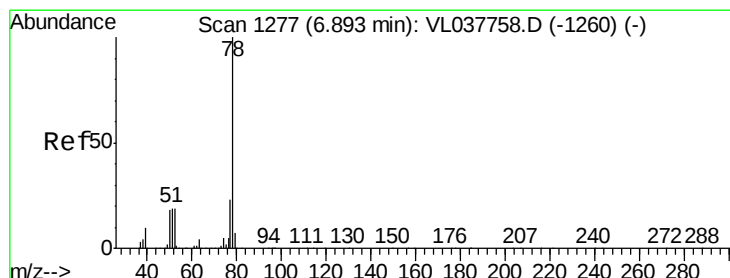
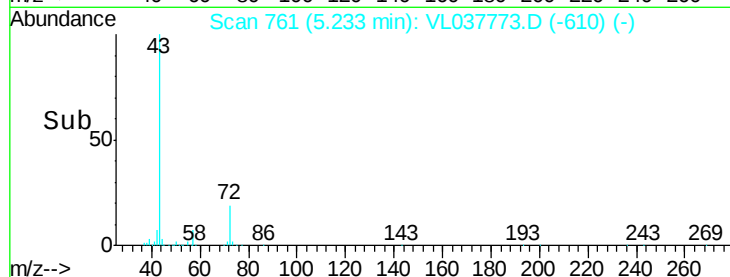
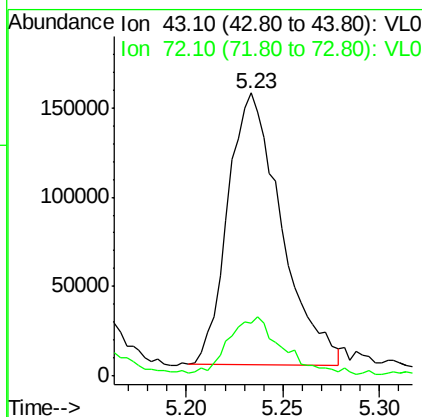
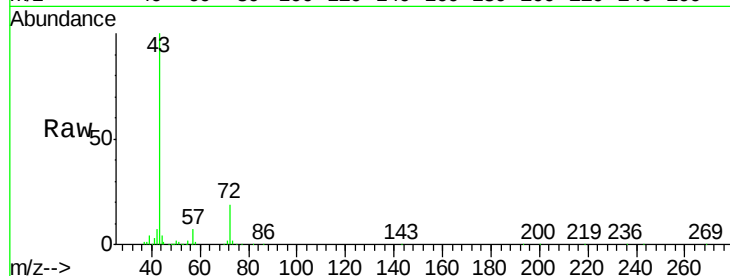
#34
2-Butanone
Concen: 1.903 ppbv
RT: 5.23 min Scan# 761
Delta R.T. -0.01 min
Lab File: VL037773.D
Acq: 5 Oct 2021 14:41

Instrument :
MSVOA_L
ClientSampleId :
C0P17

Tgt Ion: 43 Resp: 292258
Ion Ratio Lower Upper
43 100
72 24.8 18.2 27.2

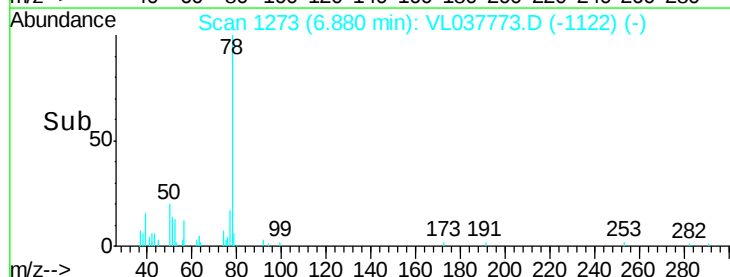
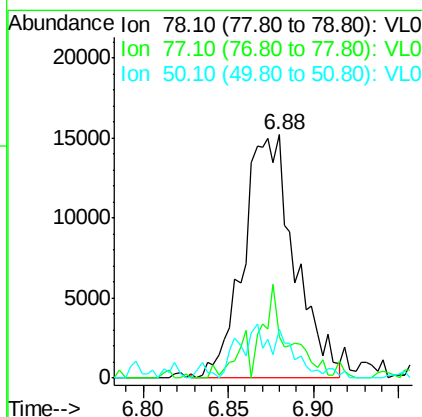
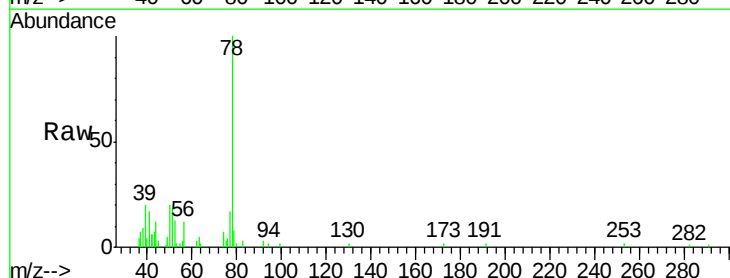
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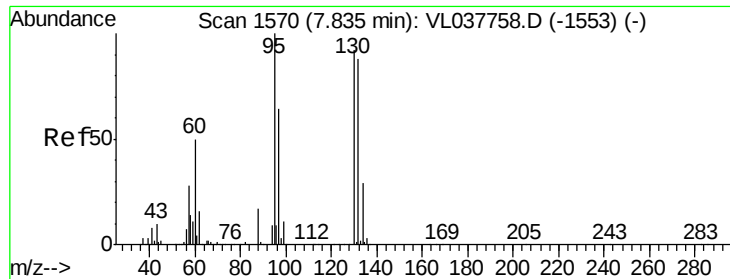
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#36
Benzene
Concen: 0.097 ppbv m
RT: 6.88 min Scan# 1273
Delta R.T. -0.01 min
Lab File: VL037773.D
Acq: 5 Oct 2021 14:41

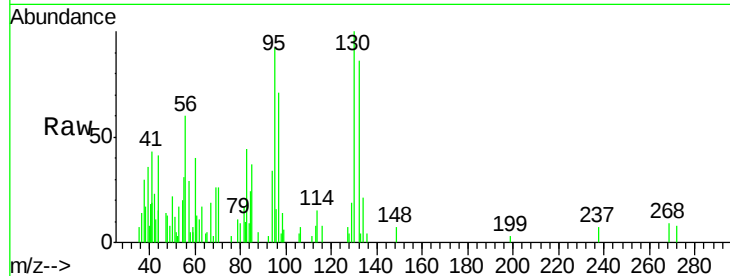
Tgt Ion: 78 Resp: 31613
Ion Ratio Lower Upper
78 100
77 17.2 18.8 28.2#
50 20.3 14.7 22.1





#38
 Trichloroethene
 Concen: 0.065 ppbv m
 RT: 7.82 min Scan# 1565
 Delta R.T. -0.02 min
 Lab File: VL037773.D
 Acq: 5 Oct 2021 14:41

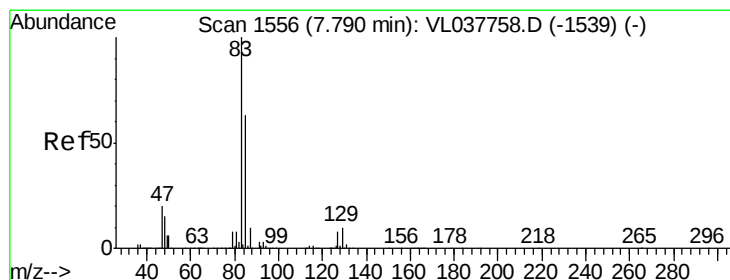
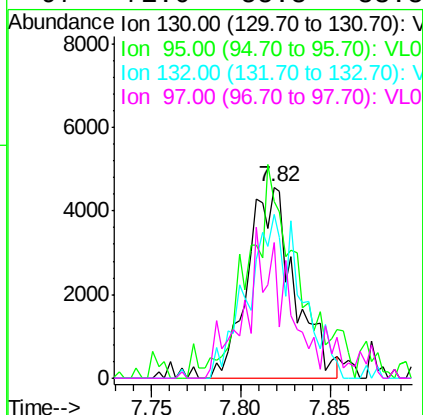
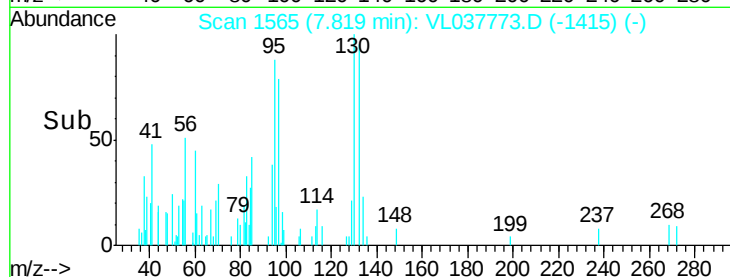
Instrument :
 MSVOA_L
 ClientSampleId :
 C0P17



Tgt Ion	Ratio	Lower	Upper
130	100		
95	92.3	87.4	131.0
132	85.6	76.8	115.2
97	71.0	55.8	83.8

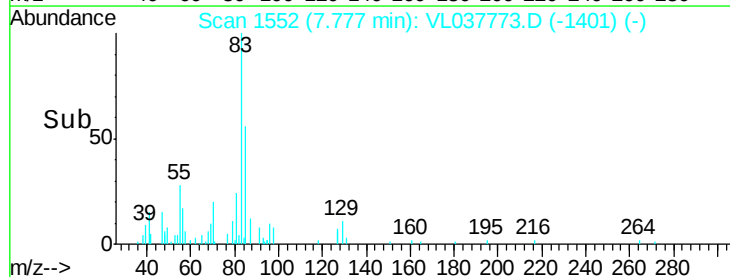
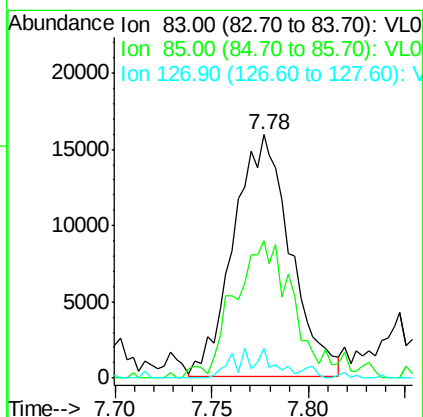
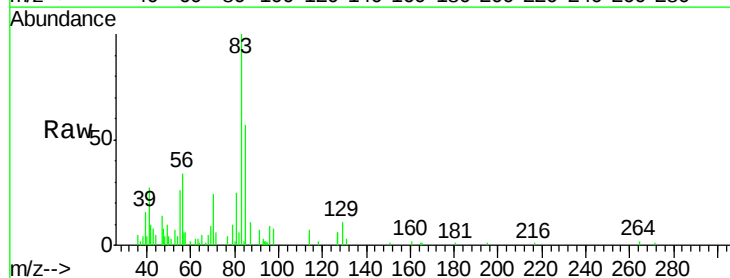
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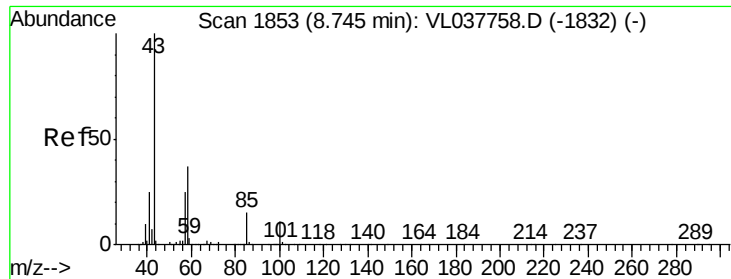
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#42
 Bromodichloromethane
 Concen: 0.144 ppbv
 RT: 7.78 min Scan# 1552
 Delta R.T. -0.01 min
 Lab File: VL037773.D
 Acq: 5 Oct 2021 14:41

Tgt Ion	Ratio	Lower	Upper
83	100		
85	54.0	50.6	75.8
127	12.4	6.2	9.4#





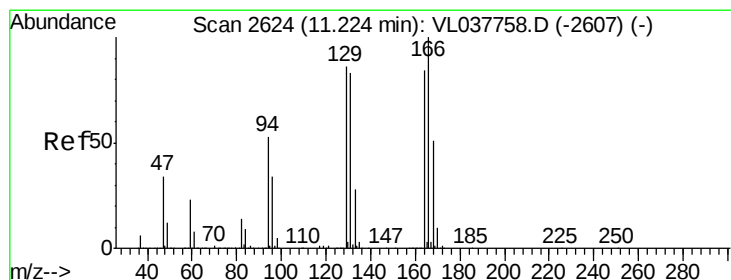
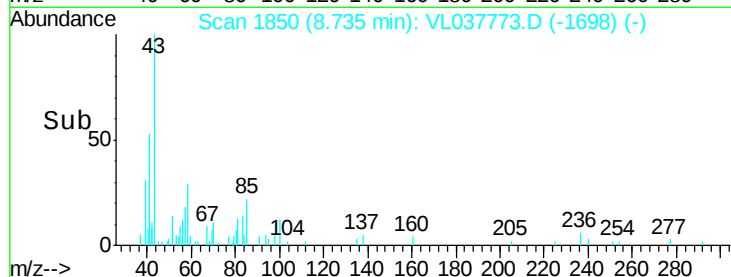
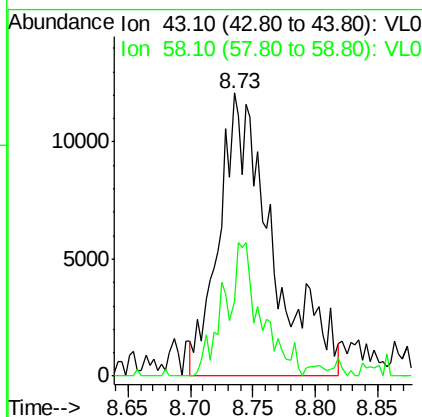
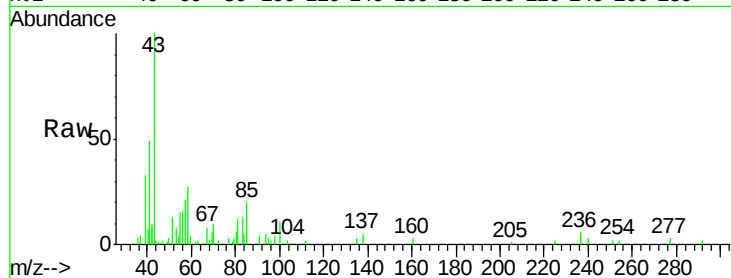
#50
4-Methyl-2-Pentanone
Concen: 0.178 ppbv m
RT: 8.73 min Scan# 1850
Delta R.T. -0.01 min
Lab File: VL037773.D
Acq: 5 Oct 2021 14:41

Instrument :
MSVOA_L
ClientSampleId :
C0P17

Tgt Ion: 43 Resp: 35613
Ion Ratio Lower Upper
43 100
58 34.6 29.4 44.0

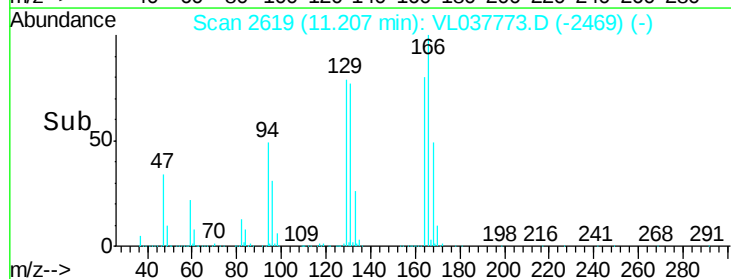
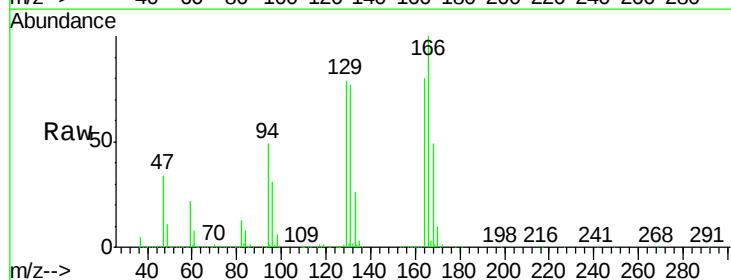
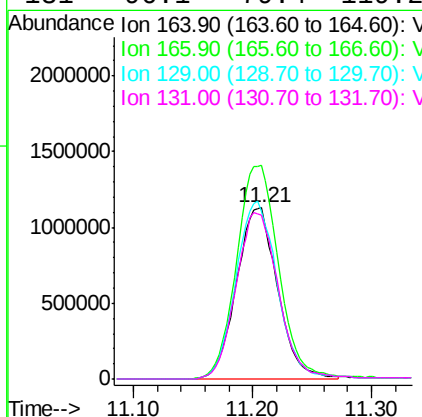
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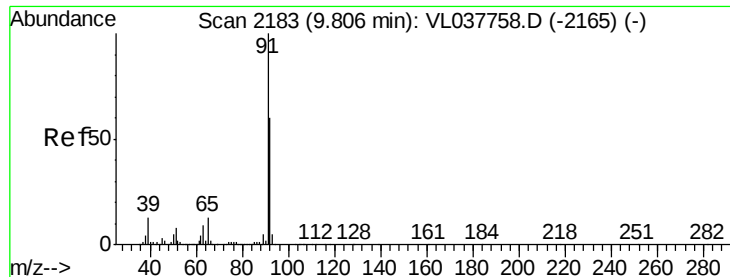
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#52
Tetrachloroethene
Concen: 21.338 ppbv
RT: 11.21 min Scan# 2619
Delta R.T. -0.02 min
Lab File: VL037773.D
Acq: 5 Oct 2021 14:41

Tgt Ion: 164 Resp: 2697515
Ion Ratio Lower Upper
164 100
166 124.9 95.4 143.2
129 98.4 82.2 123.4
131 96.1 79.4 119.2





#53

Toluene

Concen: 0.331 ppbv m

RT: 9.78 min Scan# 2176

Delta R.T. -0.02 min

Lab File: VL037773.D

Acq: 5 Oct 2021 14:41

Instrument :

MSVOA_L

ClientSampleId :

C0P17

Tgt Ion: 91 Resp: 119082

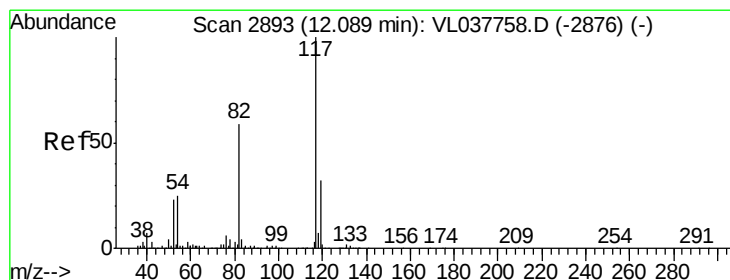
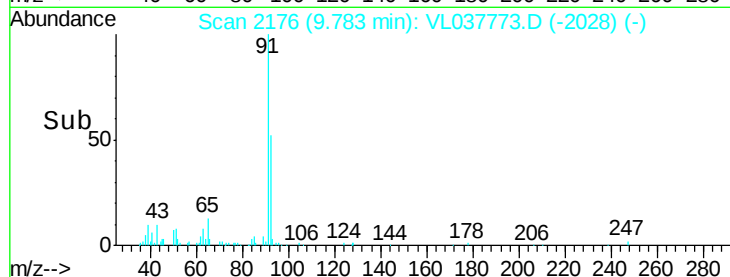
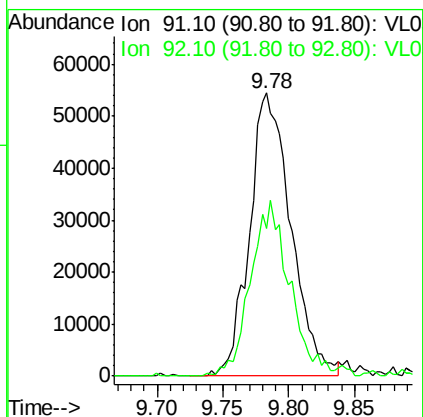
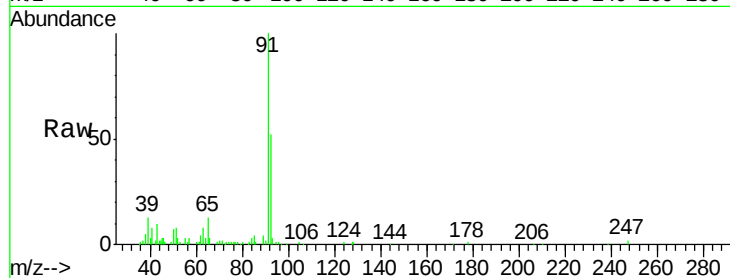
Ion Ratio Lower Upper

91 100

92 58.9 48.4 72.6

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#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.06 min Scan# 2885

Delta R.T. -0.03 min

Lab File: VL037773.D

Acq: 5 Oct 2021 14:41

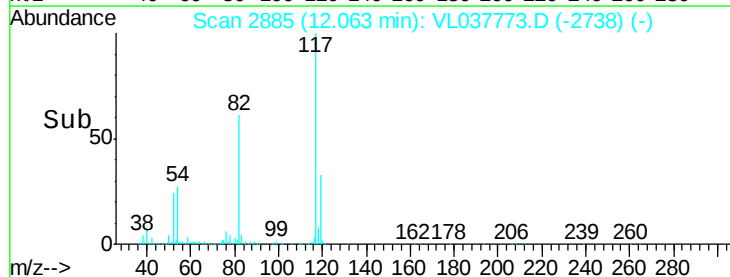
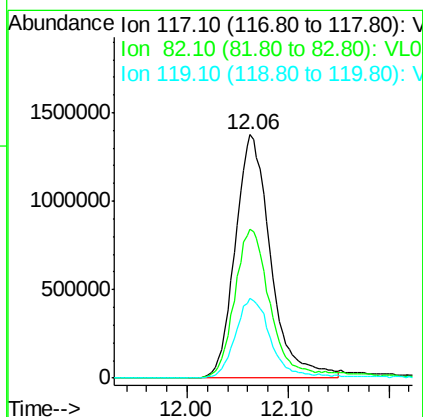
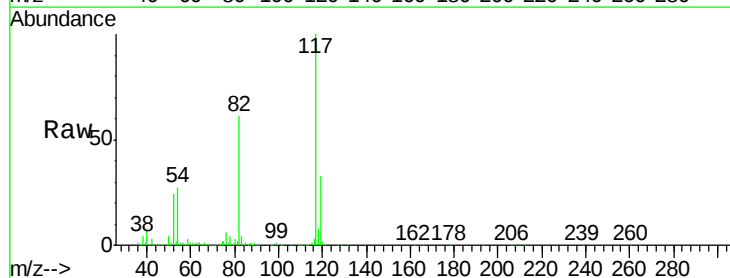
Tgt Ion: 117 Resp: 3357129

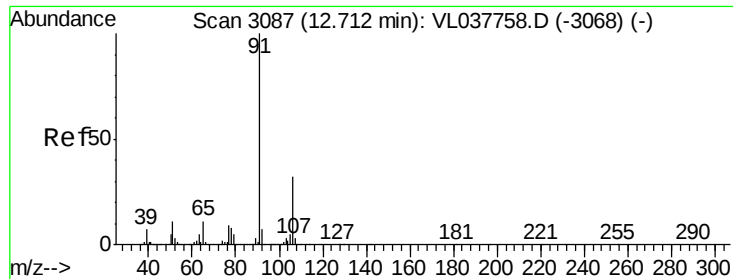
Ion Ratio Lower Upper

117 100

82 65.5 52.2 78.2

119 33.1 26.0 39.0





#58

Ethyl Benzene

Concen: 0.123 ppbv m

RT: 12.70 min Scan# 3082

Delta R.T. -0.02 min

Lab File: VL037773.D

Acq: 5 Oct 2021 14:41

Instrument :

MSVOA_L

ClientSampleId :

C0P17

Tgt Ion: 91 Resp: 55616

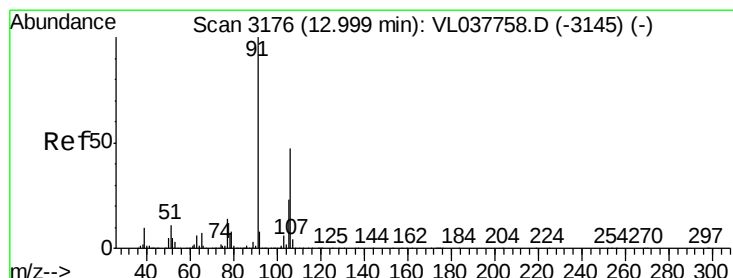
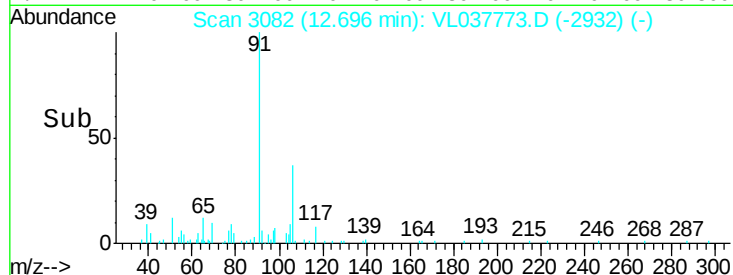
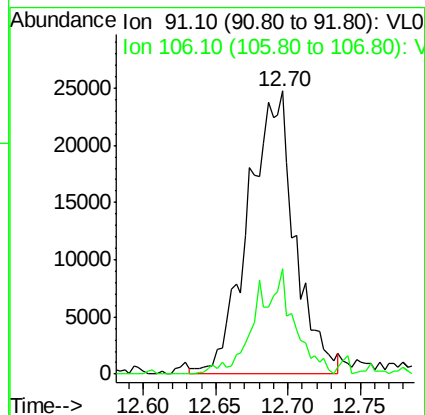
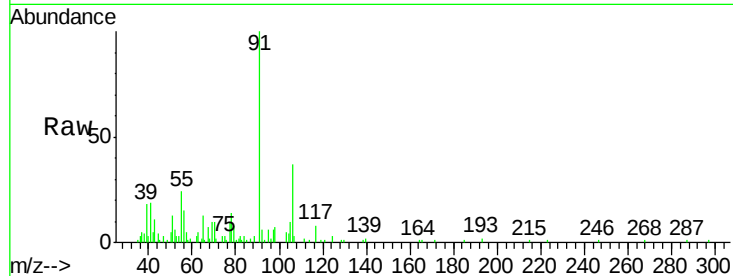
Ion Ratio Lower Upper

91 100

106 37.4 25.3 37.9

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#59

m/p-Xylene

Concen: 0.258 ppbv m

RT: 12.94 min Scan# 3158

Delta R.T. -0.06 min

Lab File: VL037773.D

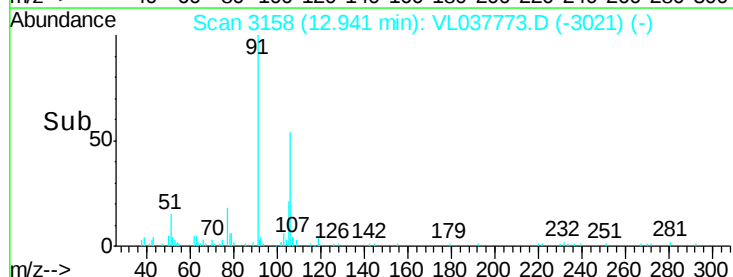
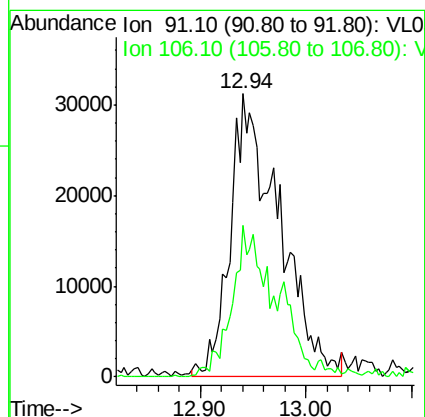
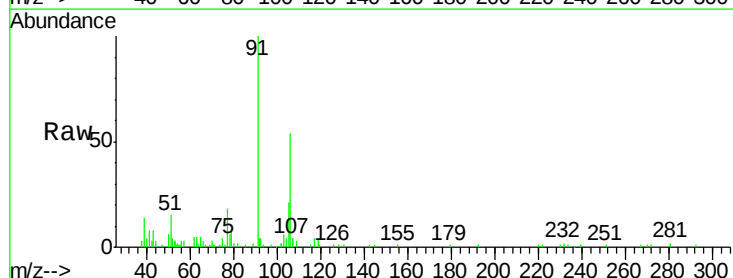
Acq: 5 Oct 2021 14:41

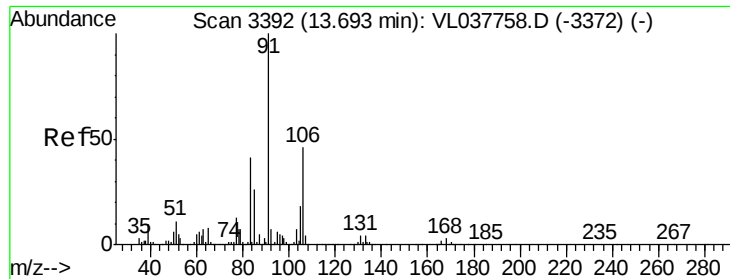
Tgt Ion: 91 Resp: 99977

Ion Ratio Lower Upper

91 100

106 0.0 36.7 55.1#





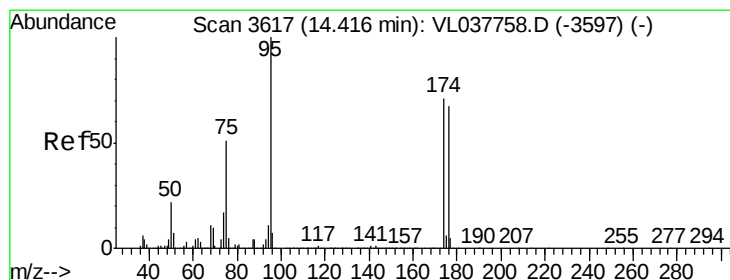
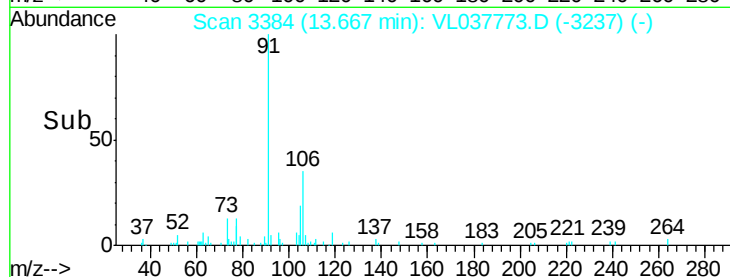
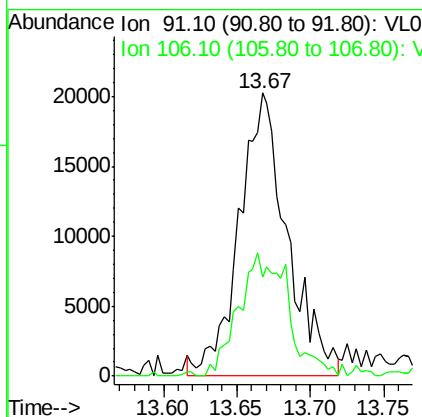
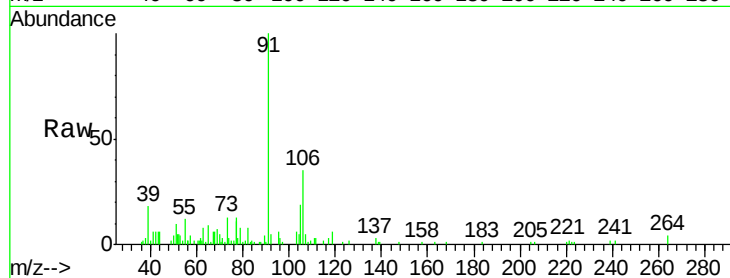
#60
o-Xylene
Concen: 0.124 ppbv m
RT: 13.67 min Scan# 3384
Delta R.T. -0.03 min
Lab File: VL037773.D
Acq: 5 Oct 2021 14:41

Instrument :
MSVOA_L
ClientSampleId :
C0P17

Tgt Ion: 91 Resp: 45868
Ion Ratio Lower Upper
91 100
106 46.2 23.5 70.5

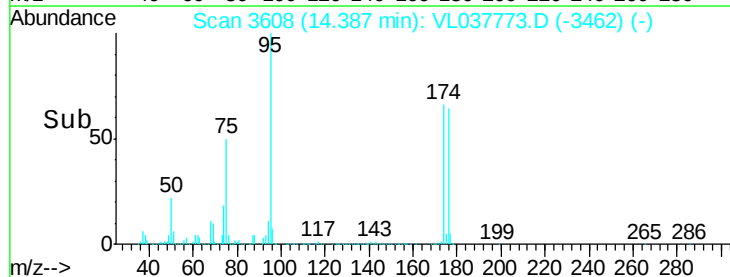
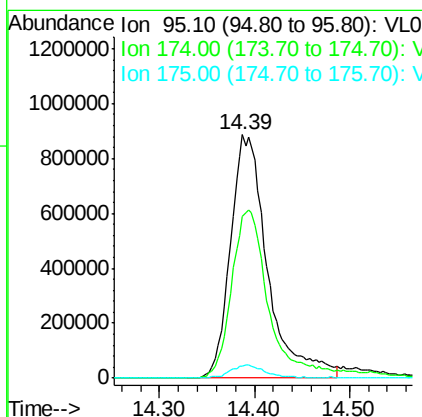
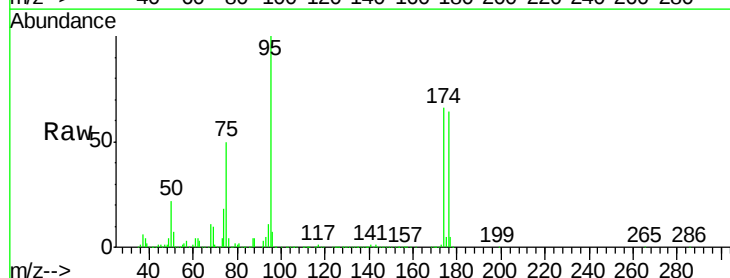
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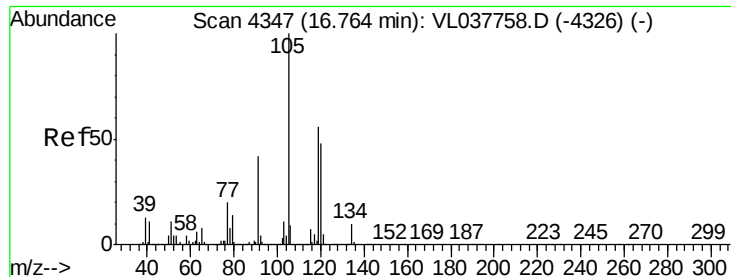
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#68
1-Bromo-4-Fluorobenzene
Concen: 10.268 ppbv m
RT: 14.39 min Scan# 3608
Delta R.T. -0.03 min
Lab File: VL037773.D
Acq: 5 Oct 2021 14:41

Tgt Ion: 95 Resp: 2410518
Ion Ratio Lower Upper
95 100
174 0.0 57.8 86.6#
175 0.0 4.7 7.1#





#74

1,2,4-Trimethylbenzene

Concen: 0.175 ppbv

RT: 16.73 min Scan# 4338

Delta R.T. -0.03 min

Lab File: VL037773.D

Acq: 5 Oct 2021 14:41

Instrument :

MSVOA_L

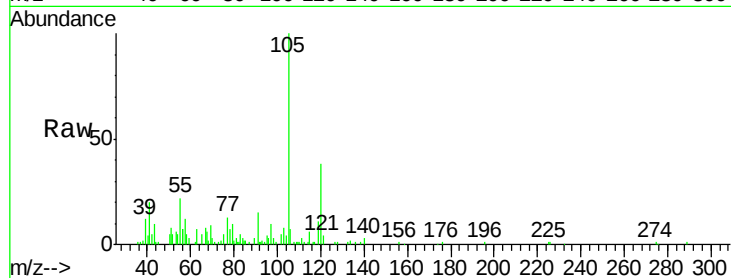
ClientSampled :

C0P17

Tgt Ion	Ratio	Lower	Upper
105	100		
120	38.0	38.4	57.6#
91	14.8	34.2	51.2#
77	12.0	15.8	23.8#

Manual Integrations
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10/11/2021 7:37:19 PM

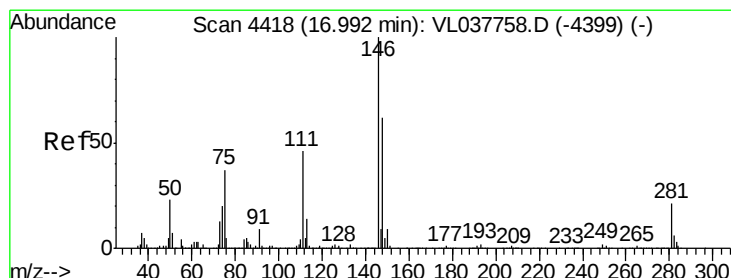
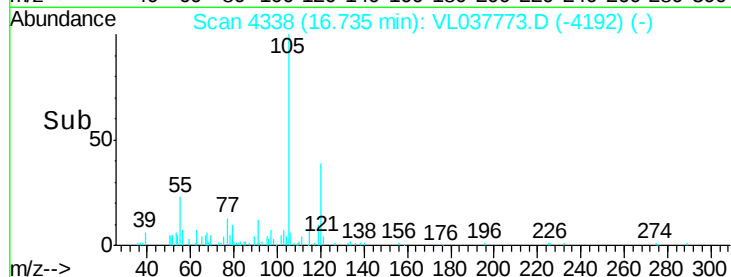
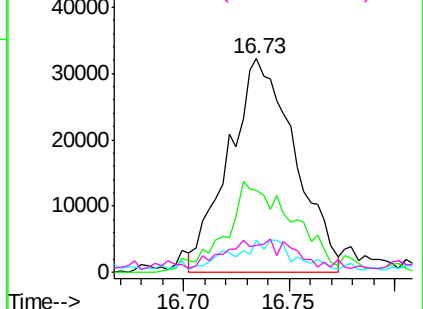


Abundance Ion 105.10 (104.80 to 105.80): V

Ion 120.20 (119.90 to 120.90): V

Ion 91.10 (90.80 to 91.80): VL0

Ion 77.10 (76.80 to 77.80): VL0



#75

1,3-Dichlorobenzene

Concen: 1.071 ppbv m

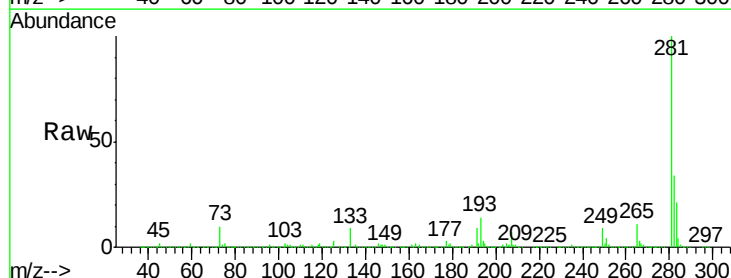
RT: 16.97 min Scan# 4411

Delta R.T. -0.02 min

Lab File: VL037773.D

Acq: 5 Oct 2021 14:41

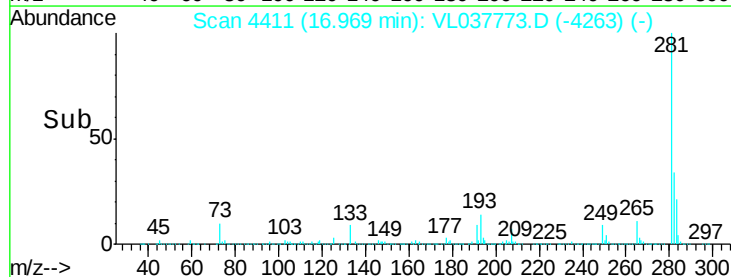
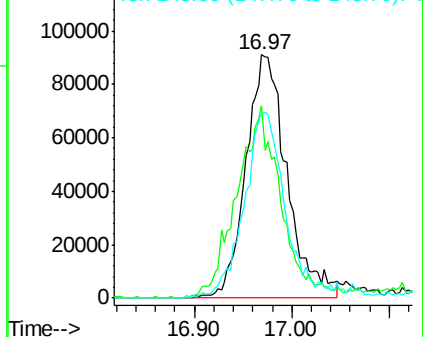
Tgt Ion	Ratio	Lower	Upper
146	100		
111	86.8	22.8	68.4#
148	79.4	32.8	98.3

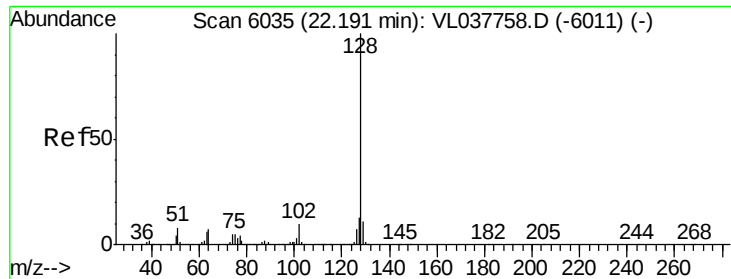


Abundance Ion 146.00 (145.70 to 146.70): V

Ion 111.10 (110.80 to 111.80): V

Ion 148.00 (147.70 to 148.70): V





#79

Naphthalene

Concen: 0.154 ppbv m

RT: 22.16 min Scan# 6026

Delta R.T. -0.03 min

Lab File: VL037773.D

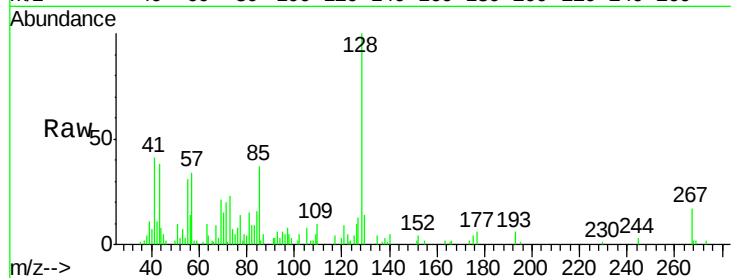
Acq: 5 Oct 2021 14:41

Instrument :

MSVOA_L

ClientSampleId :

C0P17



Tgt Ion	Ratio	Resp	Lower	Upper
128	100	37968		
127	12.7	10.1	15.1	
129	13.7	9.1	13.7	

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