

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL033021\
 Data File : VL036582.D
 Acq On : 30 Mar 2021 23:07
 Operator : SY/AP
 Sample : M1797-08
 Misc : 400mL/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 MF-SG-10(2021)

Manual Integrations
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MMDadoda
 4/1/2021 10:59:33 AM

Quant Time: Mar 31 21:31:26 2021
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL032521AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Thu Mar 2
 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	1359023	10.00	ppbv	-0.02
33) 1,4-Difluorobenzene	7.16	114	3252057	10.00	ppbv	-0.02
55) Chlorobenzene-d5	12.07	117	2941532	10.00	ppbv	-0.03

System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	14.40	95	2306118	9.84	ppbv	-0.03
Spiked Amount	10.000	Range	65 - 135	Recovery	=	98.40%

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.03	85	51017	0.230	ppbv	91
3) Chlorodifluoromethane	2.98	51	83986m	0.331	ppbv	
4) Chloromethane	3.13	50	33809	0.377	ppbv	99
9) Propene	3.01	41	64508m	0.797	ppbv	
11) Trichlorofluoromethane	3.94	101	54585	0.242	ppbv	91
13) Ethanol	3.61	45	1367023	141.815	ppbv	95
15) Acetone	3.83	43	8085671	60.449	ppbv	100
17) tert-Butyl alcohol	4.29	59	139785	1.200	ppbv #	94
19) Isopropyl Alcohol	3.97	45	543693	7.389	ppbv #	1
20) Methylene Chloride	4.33	84	2731214	43.611	ppbv	93
26) Hexane	5.67	57	5182879	35.121	ppbv #	47
27) Carbon Disulfide	4.53	76	32302m	0.222	ppbv	
29) Chloroform	5.74	83	113617m	0.481	ppbv	
30) Cyclohexane	7.11	84	42788m	0.358	ppbv	
32) 1,1,1-Trichloroethane	6.49	97	37576m	0.158	ppbv	
34) 2-Butanone	5.23	43	284365	1.791	ppbv	99
35) Carbon Tetrachloride	7.00	117	13360m	0.053	ppbv	
36) Benzene	6.87	78	71859m	0.240	ppbv	
38) Trichloroethene	7.81	130	3462m	0.030	ppbv	
43) Methyl Methacrylate	8.00	69	68411m	0.679	ppbv	
52) Tetrachloroethene	11.20	164	85416	0.773	ppbv	87
53) Toluene	9.79	91	168297m	0.527	ppbv	
59) m/p-Xylene	12.95	91	96392m	0.258	ppbv	
60) o-Xylene	13.67	91	38814m	0.108	ppbv	
74) 1,2,4-Trimethylbenzene	16.74	105	85923	0.218	ppbv #	65

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

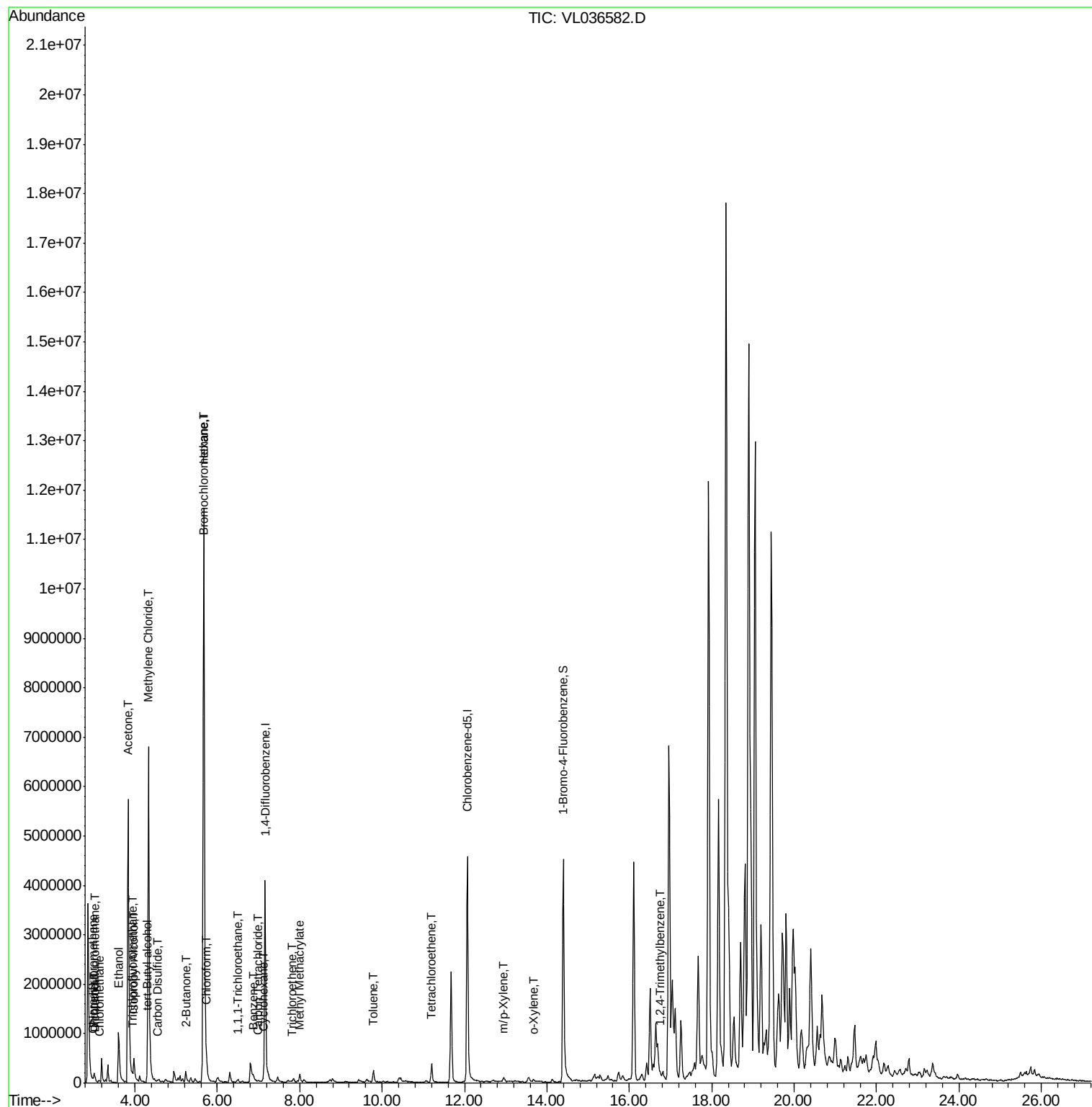
Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL033021\
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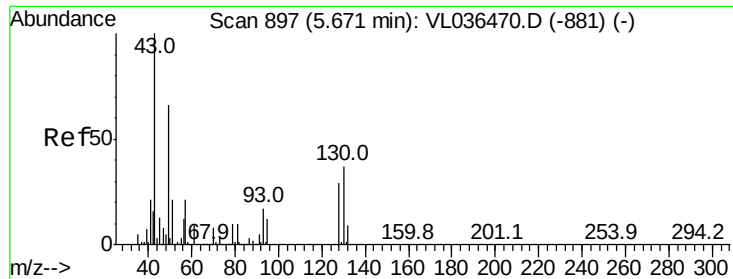
Instrument :
MSVOA_L
ClientSampleId :
MF-SG-10(2021)

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Quant Time: Mar 31 21:31:26 2021
Quant Method : Z:\VOASRV\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# 891

Delta R.T. -0.02 min

Lab File: VL036582.D

Acq: 30 Mar 2021 23:07

Instrument :

MSVOA_L

ClientSampleId :

MF-SG-10(2021)

Tot Ion: 49 Resp: 1359023

Ion Ratio Lower Upper

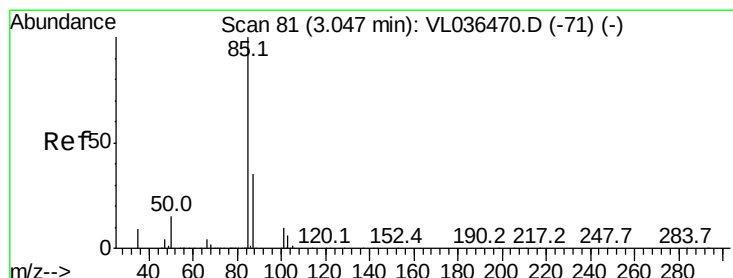
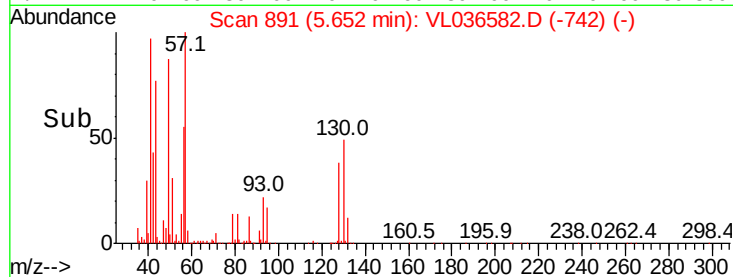
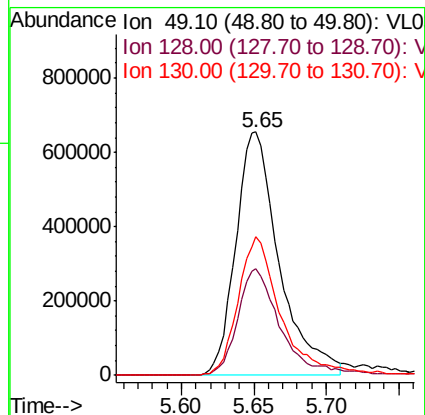
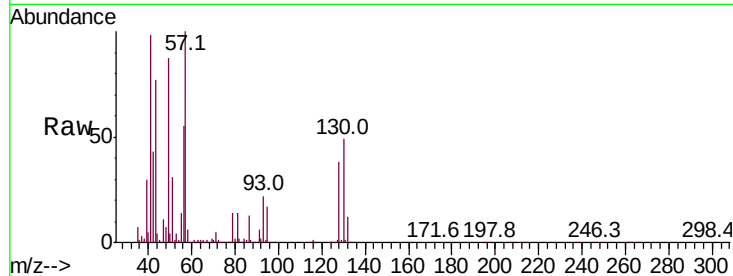
49 100

128 44.3 23.5 70.6

130 57.7 29.1 87.4

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#2

Dichlorodifluoromethane

Concen: 0.230 ppbv

RT: 3.03 min Scan# 77

Delta R.T. -0.01 min

Lab File: VL036582.D

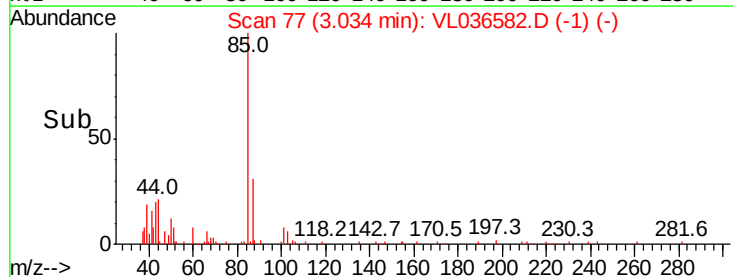
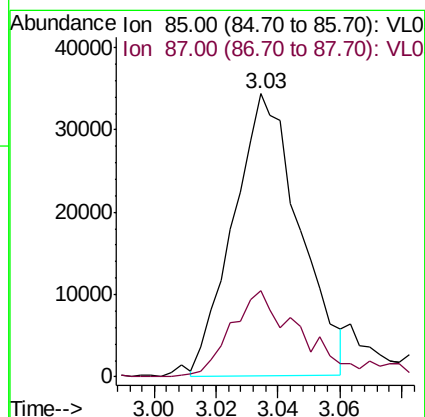
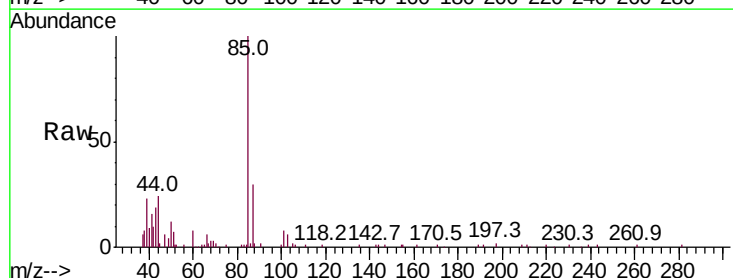
Acq: 30 Mar 2021 23:07

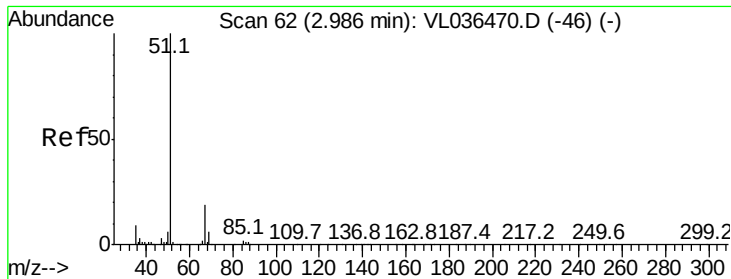
Tgt Ion: 85 Resp: 51017

Ion Ratio Lower Upper

85 100

87 29.8 27.8 41.8





#3

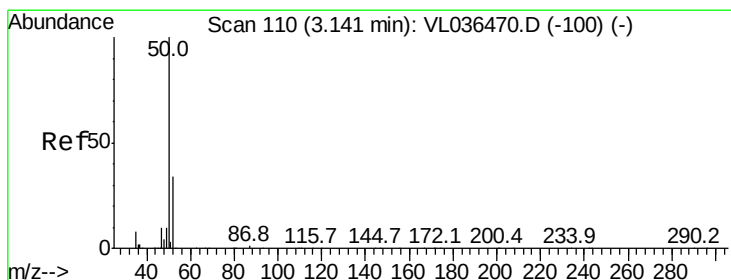
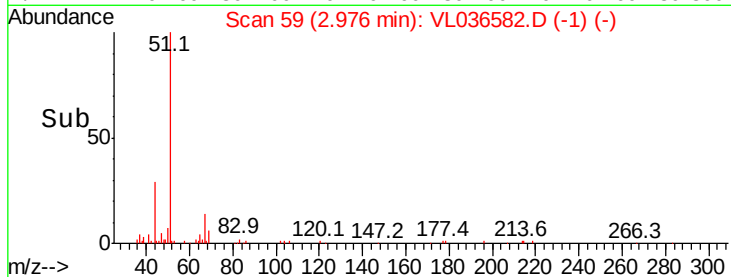
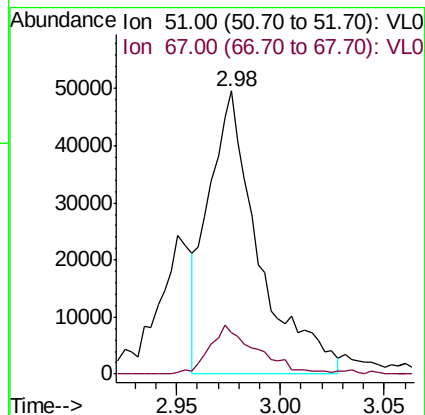
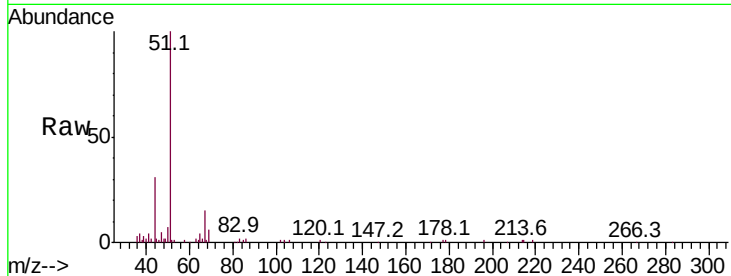
Chlorodifluoromethane
 Concen: 0.331 ppbv
 RT: 2.98 min Scan# 59
 Delta R.T. -0.01 min
 Lab File: VL036582.D
 Acq: 30 Mar 2021 23:07

Instrument :
 MSVOA_L
 ClientSampleId :
 MF-SG-10(2021)

Tot Ion	Ratio	Lower	Upper
51	100		
67	16.9	14.7	22.1

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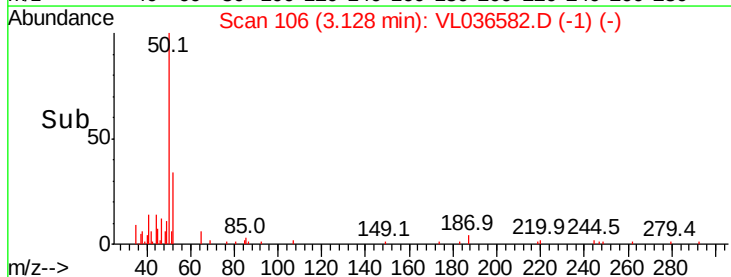
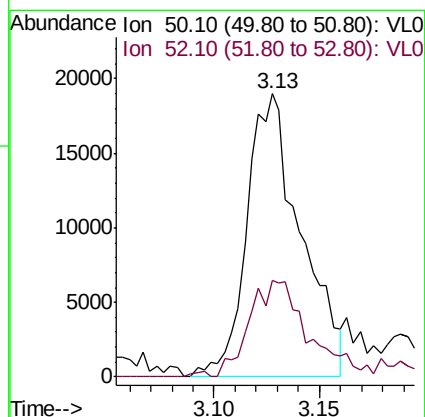
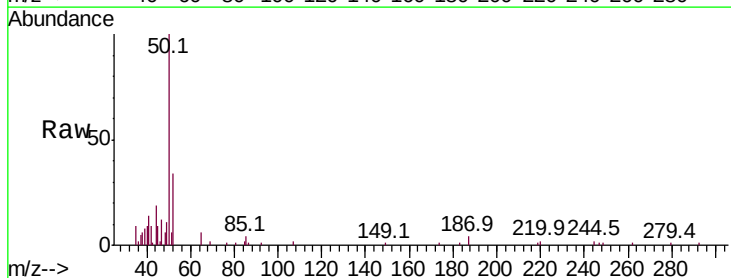
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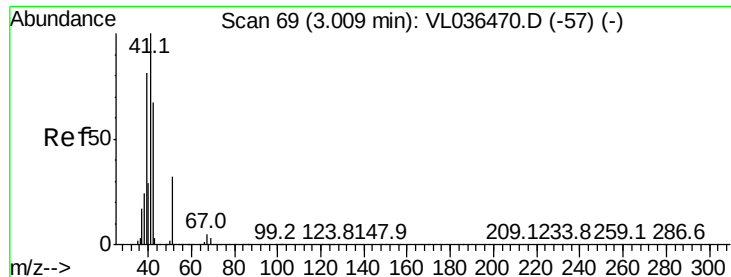


#4

Chloromethane
 Concen: 0.377 ppbv
 RT: 3.13 min Scan# 106
 Delta R.T. -0.01 min
 Lab File: VL036582.D
 Acq: 30 Mar 2021 23:07

Tgt Ion	Ratio	Lower	Upper
50	100		
52	33.1	27.0	40.6





#9

Propene

Concen: 0.797 ppbv m

RT: 3.01 min Scan# 70

Delta R.T. 0.00 min

Lab File: VL036582.D

Acq: 30 Mar 2021 23:07

Instrument :

MSVOA_L

ClientSampleId :

MF-SG-10(2021)

Tot Ion: 41 Resp: 64508

Ion Ratio Lower Upper

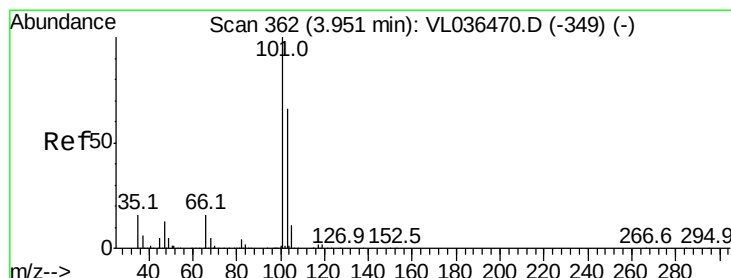
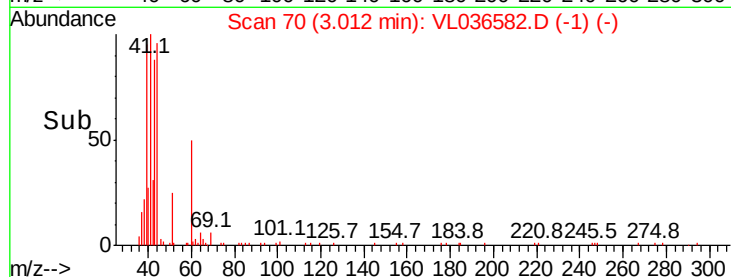
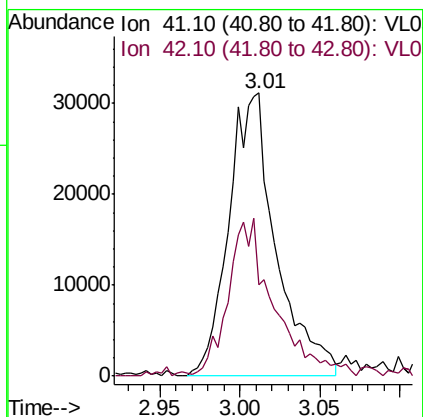
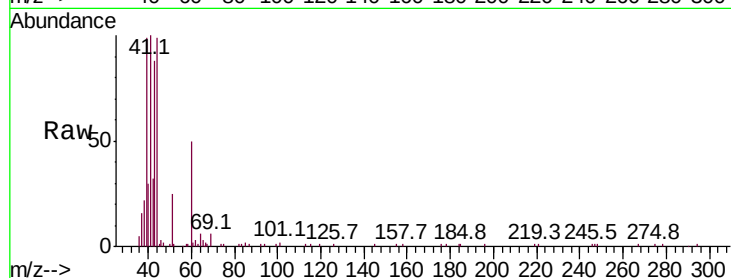
41 100

42 56.5 57.0 85.4#

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#11

Trichlorofluoromethane

Concen: 0.242 ppbv

RT: 3.94 min Scan# 359

Delta R.T. -0.01 min

Lab File: VL036582.D

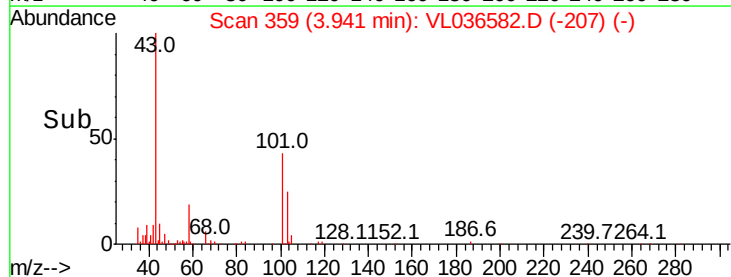
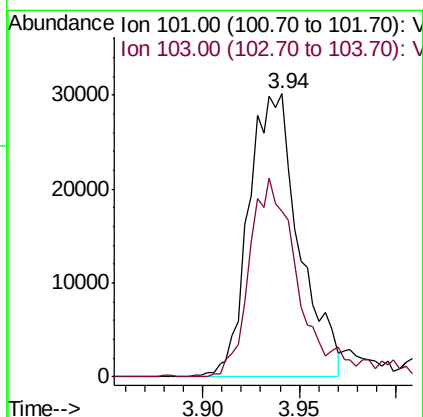
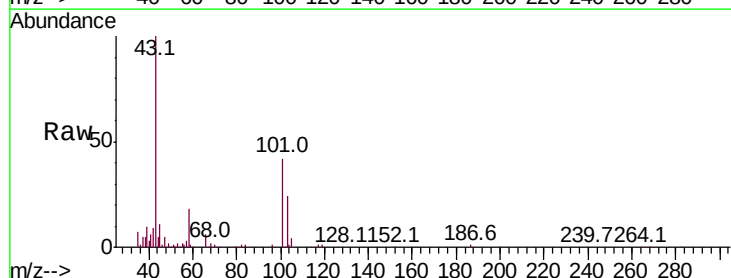
Acq: 30 Mar 2021 23:07

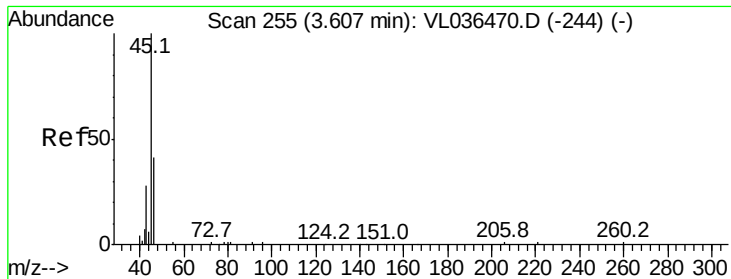
Tgt Ion: 101 Resp: 54585

Ion Ratio Lower Upper

101 100

103 58.3 52.5 78.7





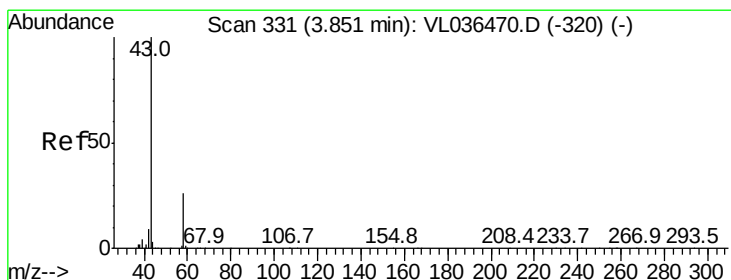
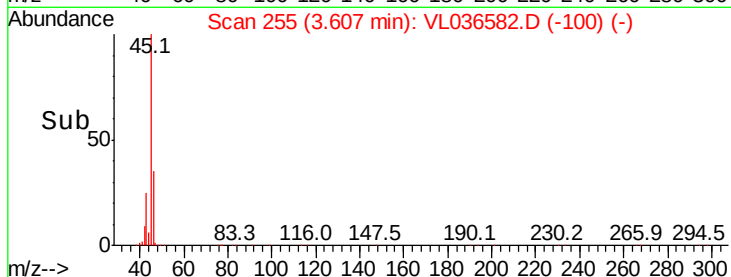
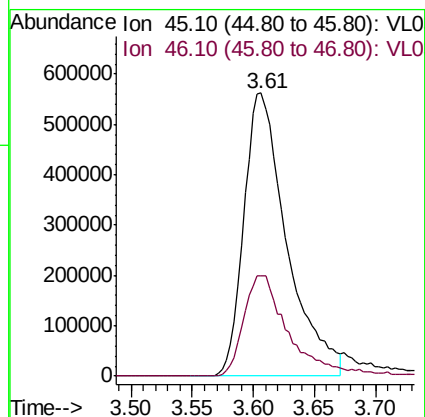
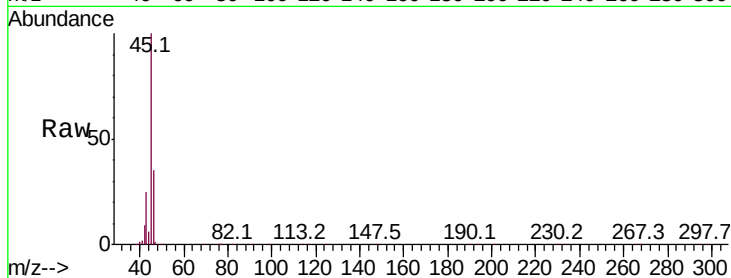
#13
Ethanol
Concen: 141.815 ppbv
RT: 3.61 min Scan# 255
Delta R.T. -0.00 min
Lab File: VL036582.D
Acq: 30 Mar 2021 23:07

Instrument :
MSVOA_L
ClientSampleId :
MF-SG-10(2021)

Tot Ion: 45 Resp: 1367023
Ion Ratio Lower Upper
45 100
46 38.1 16.6 66.2

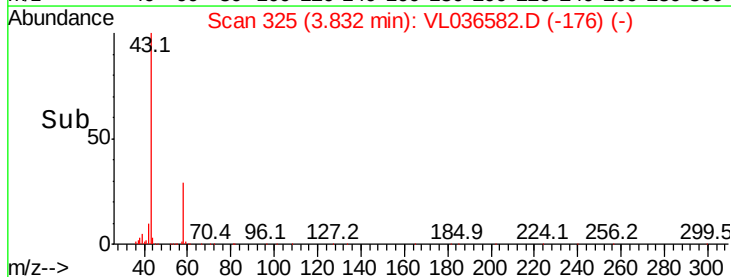
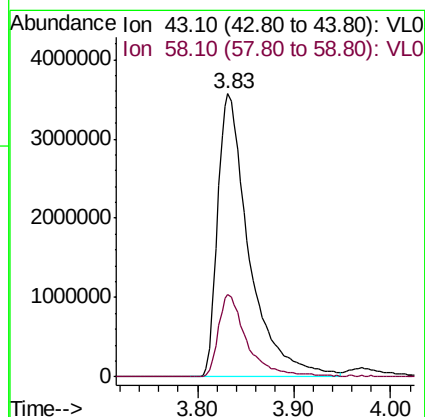
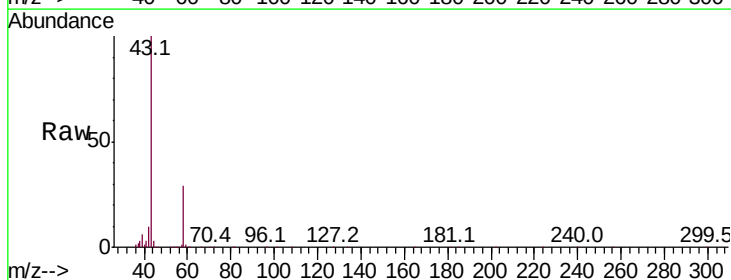
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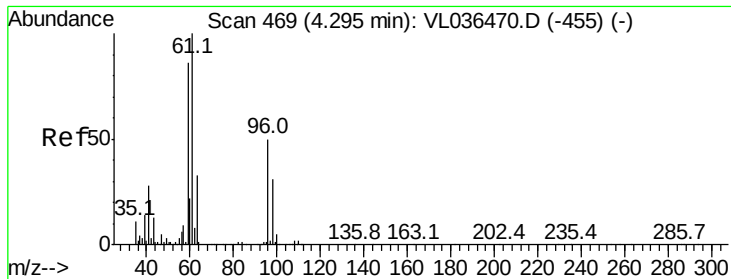
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#15
Acetone
Concen: 60.449 ppbv
RT: 3.83 min Scan# 325
Delta R.T. -0.02 min
Lab File: VL036582.D
Acq: 30 Mar 2021 23:07

Tgt Ion: 43 Resp: 8085671
Ion Ratio Lower Upper
43 100
58 26.7 21.2 31.8





#17

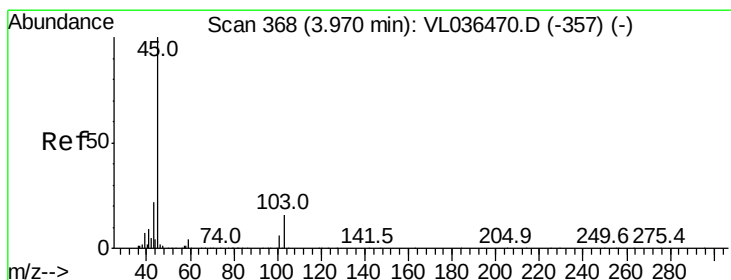
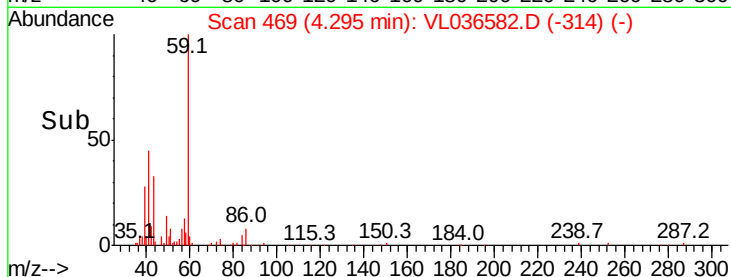
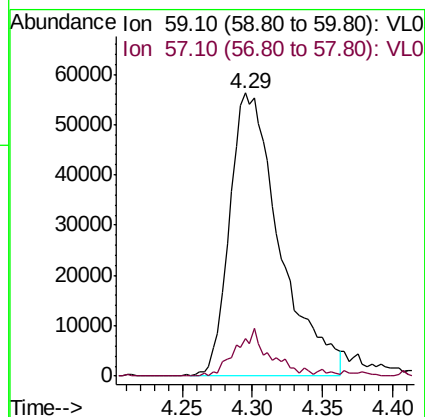
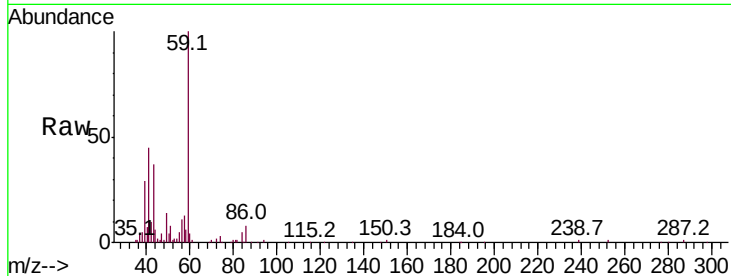
tert-Butyl alcohol
Concen: 1.200 ppbv
RT: 4.29 min Scan# 469
Delta R.T. -0.00 min
Lab File: VL036582.D
Acq: 30 Mar 2021 23:07

Instrument :
MSVOA_L
ClientSampleId :
MF-SG-10(2021)

Tot Ion	Ratio	Lower	Upper
59	100		
57	13.0	8.6	12.8#

Manual Integrations
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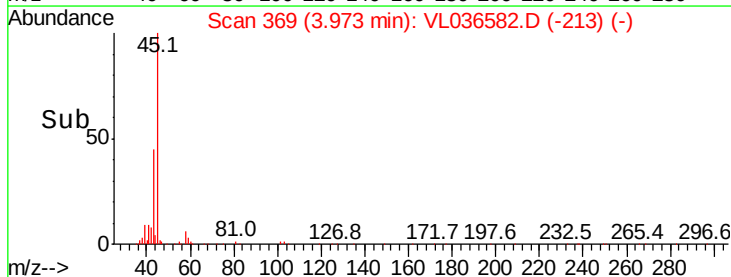
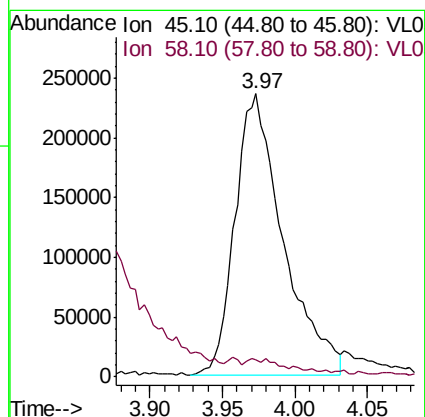
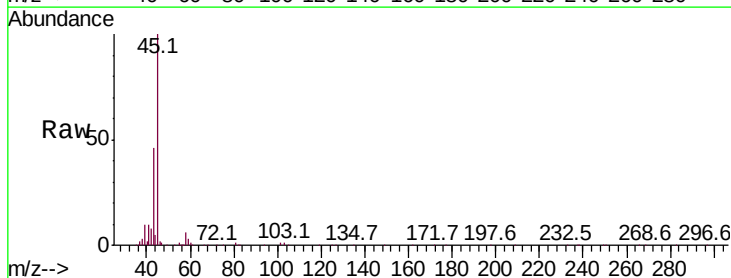
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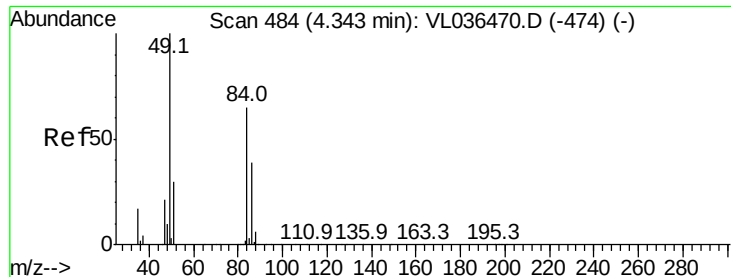


#19

Isopropyl Alcohol
Concen: 7.389 ppbv
RT: 3.97 min Scan# 369
Delta R.T. 0.00 min
Lab File: VL036582.D
Acq: 30 Mar 2021 23:07

Tgt Ion	Ratio	Lower	Upper
45	100		
58	397.0	2.9	4.3#





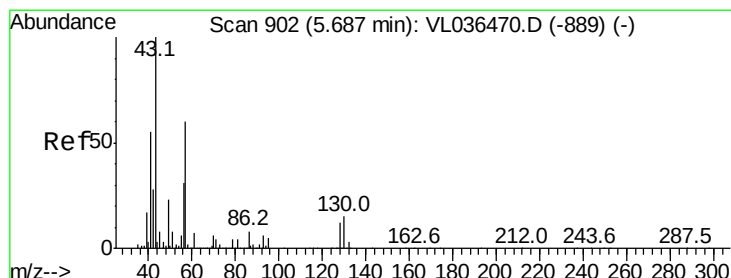
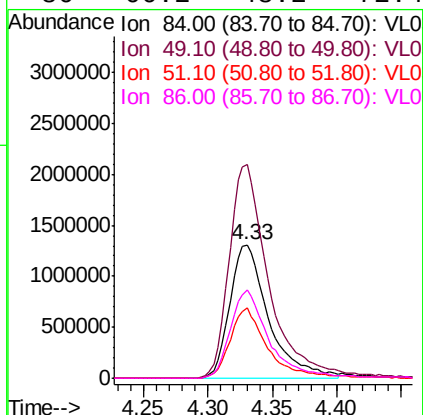
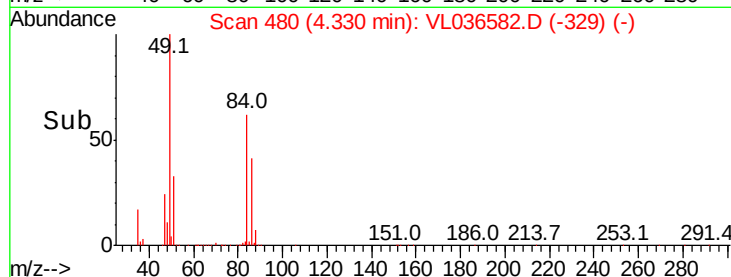
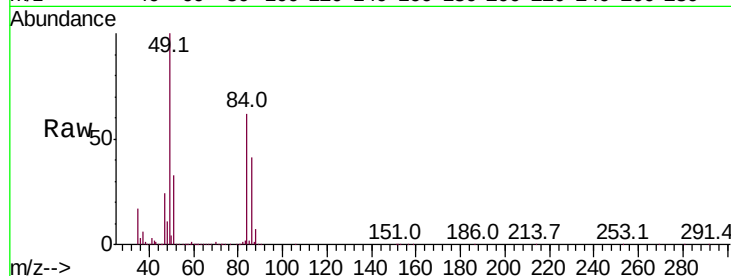
#20
Methylene Chloride
Concen: 43.611 ppbv
RT: 4.33 min Scan# 480
Delta R.T. -0.01 min
Lab File: VL036582.D
Acq: 30 Mar 2021 23:07

Instrument :
MSVOA_L
ClientSampleId :
MF-SG-10(2021)

Tot Ion	84	Resp	2731214
Ion	Ratio	Lower	Upper
84	100		
49	160.0	122.9	184.3
51	53.0	36.9	55.3
86	66.2	48.2	72.4

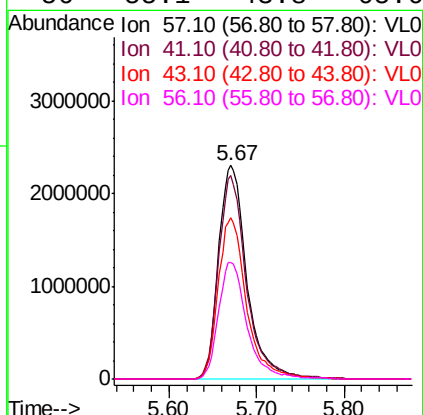
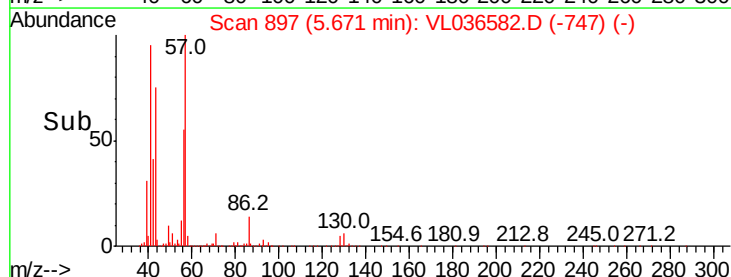
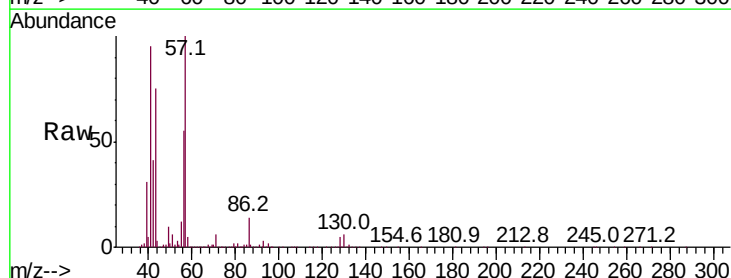
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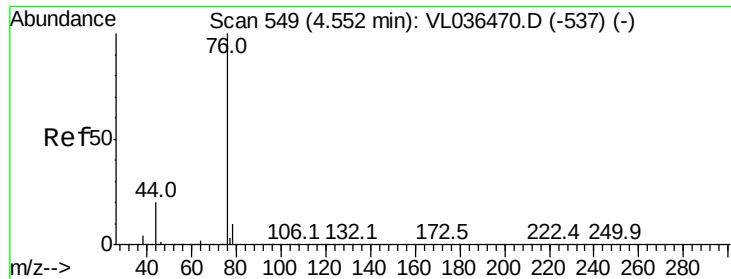
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#26
Hexane
Concen: 35.121 ppbv
RT: 5.67 min Scan# 897
Delta R.T. -0.02 min
Lab File: VL036582.D
Acq: 30 Mar 2021 23:07

Tgt Ion	57	Resp	5182879
Ion	Ratio	Lower	Upper
57	100		
41	94.9	77.2	115.8
43	75.4	173.8	260.6#
56	55.1	43.8	65.6





#27

Carbon Disulfide

Concen: 0.222 ppbv m

RT: 4.53 min Scan# 543

Delta R.T. -0.02 min

Lab File: VL036582.D

Acq: 30 Mar 2021 23:07

Instrument :

MSVOA_L

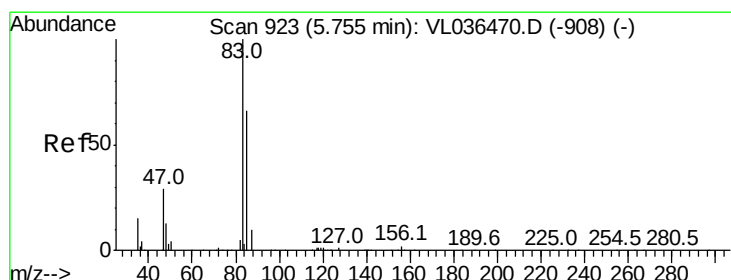
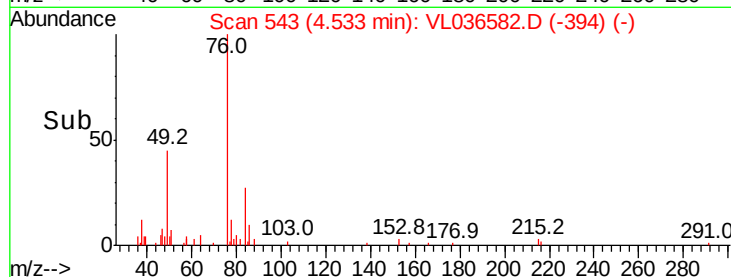
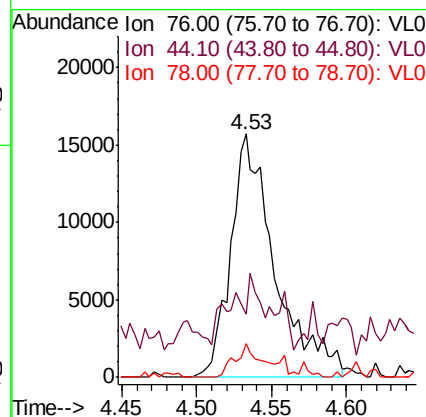
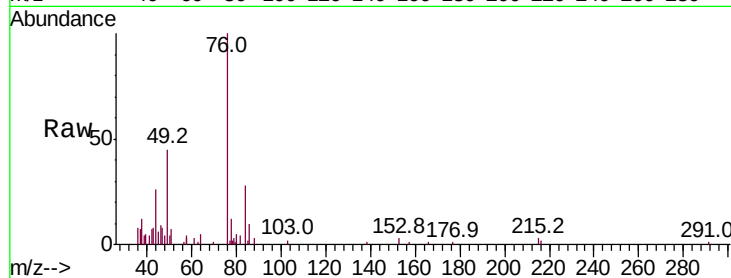
ClientSampleId :

MF-SG-10(2021)

Tot Ion:	76	Resp:	32302
Ion	Ratio	Lower	Upper
76	100		
44	25.0	17.5	26.3
78	11.0	8.6	13.0

Manual Integrations
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#29

Chloroform

Concen: 0.481 ppbv m

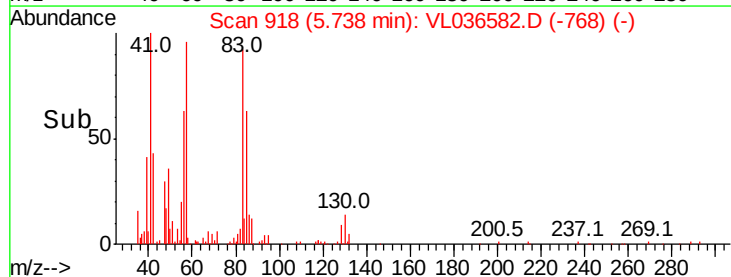
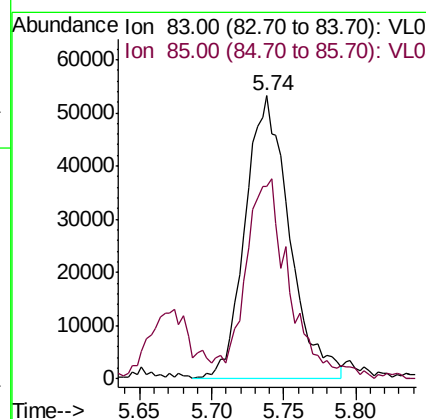
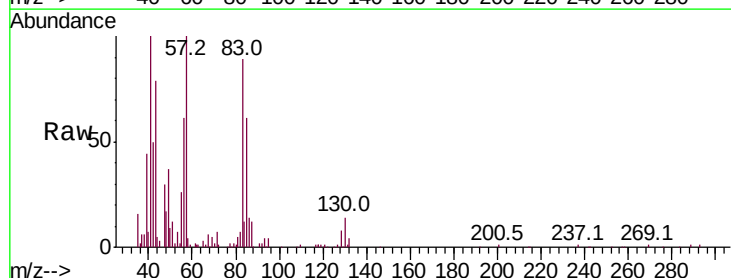
RT: 5.74 min Scan# 918

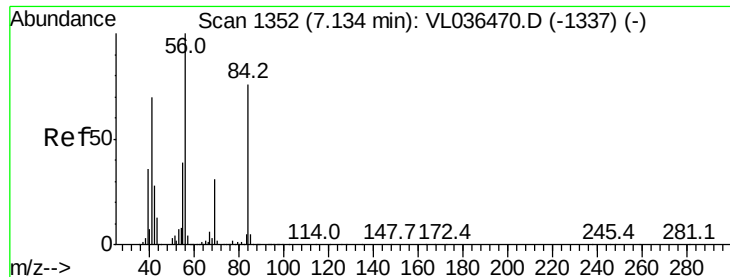
Delta R.T. -0.02 min

Lab File: VL036582.D

Acq: 30 Mar 2021 23:07

Tgt Ion:	83	Resp:	113617
Ion	Ratio	Lower	Upper
83	100		
85	68.0	52.6	78.8





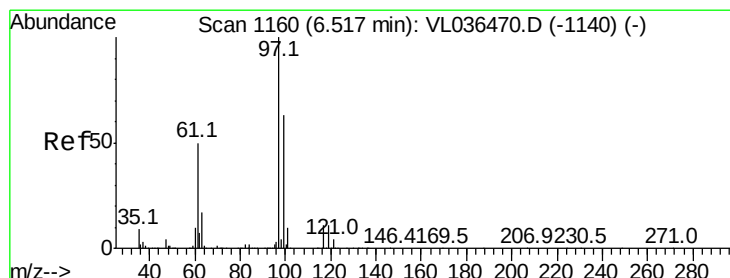
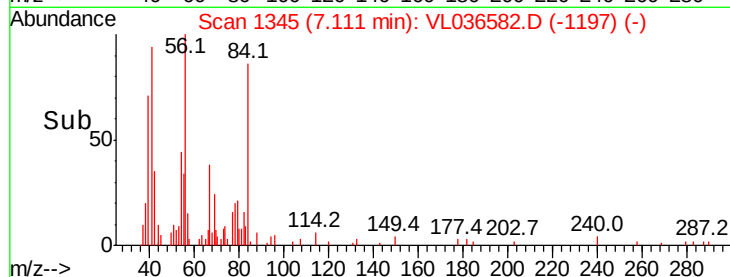
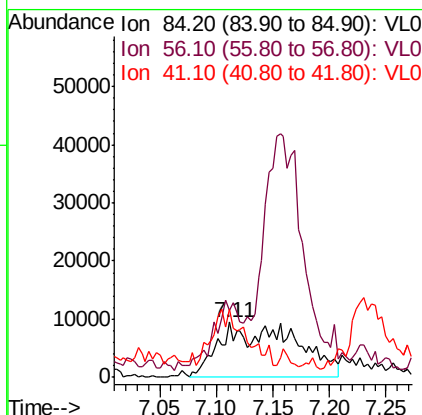
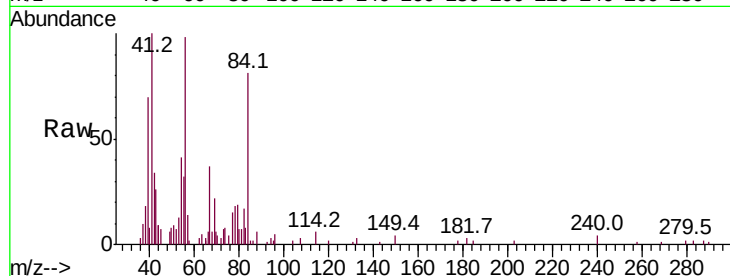
#30
Cyclohexane
Concen: 0.358 ppbv m
RT: 7.11 min Scan# 1345
Delta R.T. -0.02 min
Lab File: VL036582.D
Acq: 30 Mar 2021 23:07

Instrument :
MSVOA_L
ClientSampleId :
MF-SG-10(2021)

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

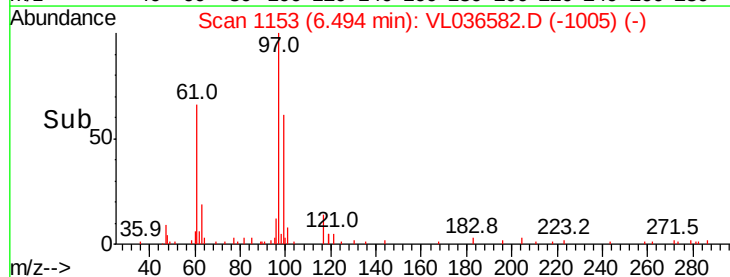
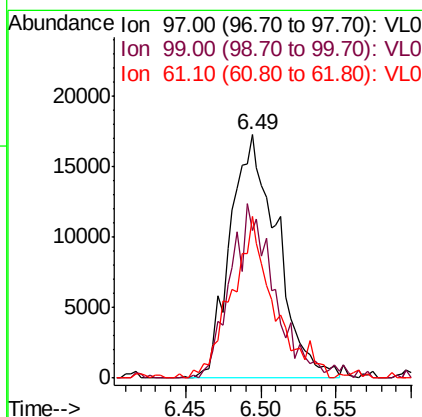
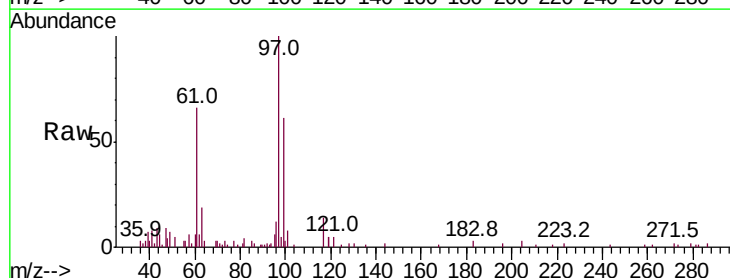
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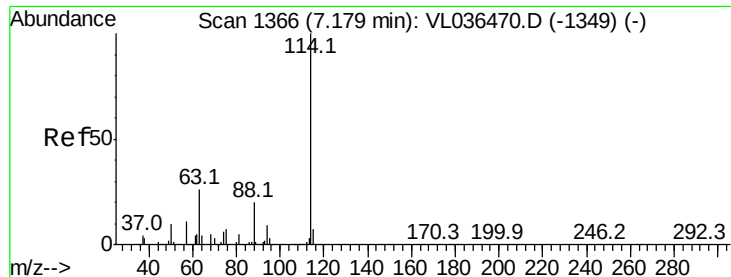
MMDadoda
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#32
1,1,1-Trichloroethane
Concen: 0.158 ppbv m
RT: 6.49 min Scan# 1153
Delta R.T. -0.02 min
Lab File: VL036582.D
Acq: 30 Mar 2021 23:07

Tgt Ion	Ratio	Lower	Upper
97	100		
99	68.3	51.4	77.0
61	59.4	40.6	60.8





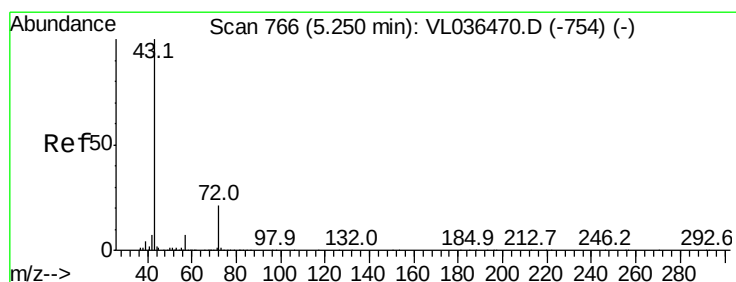
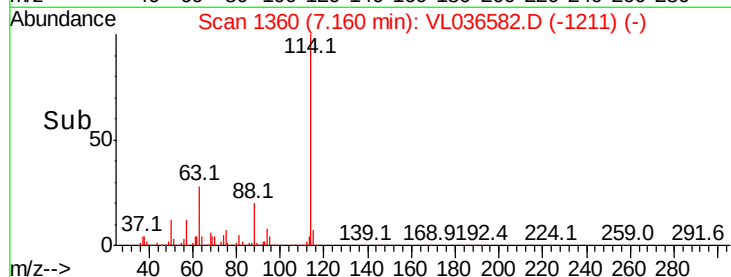
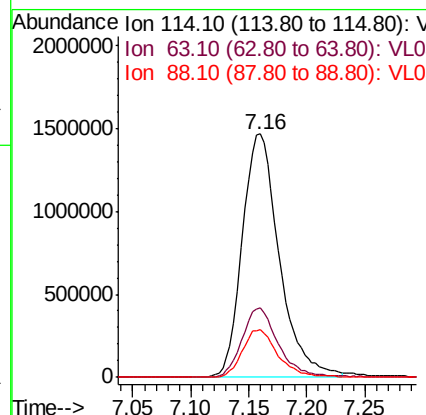
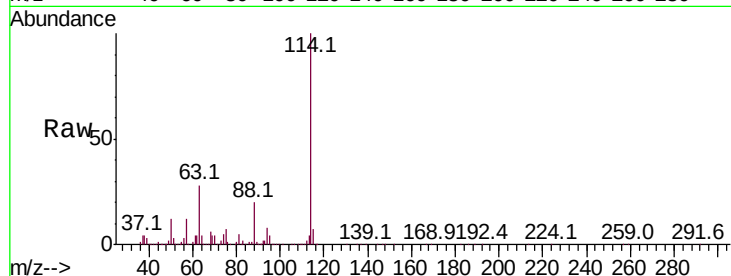
#33
 1,4-Difluorobenzene
 Concen: 10.000 ppbv
 RT: 7.16 min Scan# 1360
 Delta R.T. -0.02 min
 Lab File: VL036582.D
 Acq: 30 Mar 2021 23:07

Instrument :
 MSVOA_L
 ClientSampleId :
 MF-SG-10(2021)

Tot Ion	Ratio	Lower	Upper
114	100		
63	28.4	22.4	33.6
88	19.1	15.4	23.0

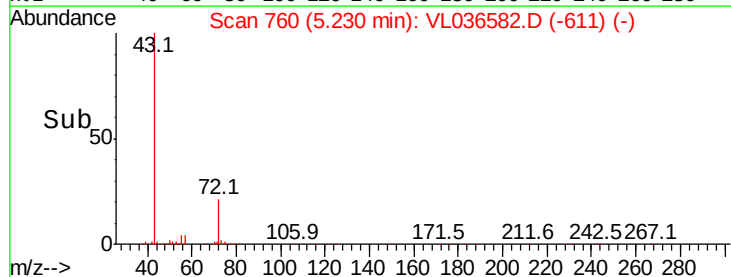
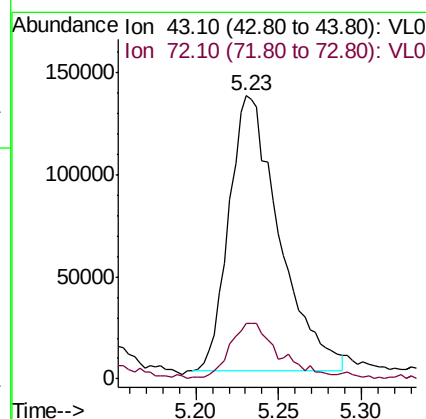
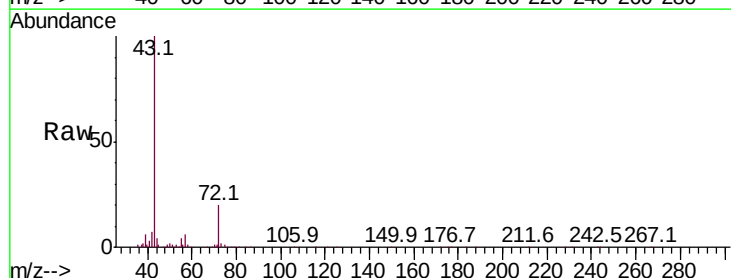
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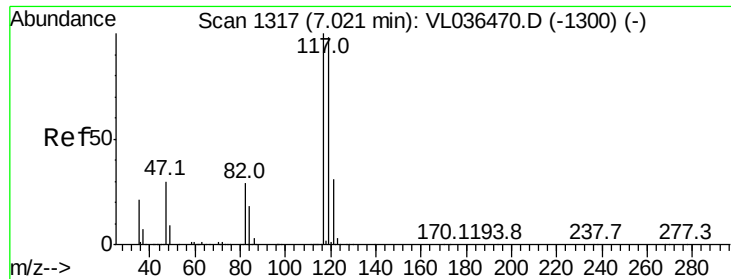
MMDadoda
 4/1/2021 10:59:33 AM



#34
 2-Butanone
 Concen: 1.791 ppbv
 RT: 5.23 min Scan# 760
 Delta R.T. -0.02 min
 Lab File: VL036582.D
 Acq: 30 Mar 2021 23:07

Tgt Ion	Ratio	Lower	Upper
43	100		
72	21.9	17.0	25.6





#35

Carbon Tetrachloride

Concen: 0.053 ppbv m

RT: 7.00 min Scan# 1311

Delta R.T. -0.02 min

Lab File: VL036582.D

Acq: 30 Mar 2021 23:07

Instrument :

MSVOA_L

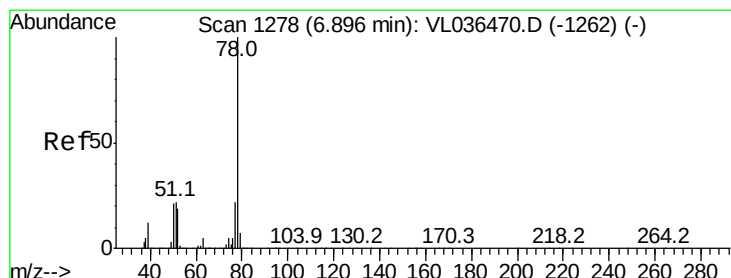
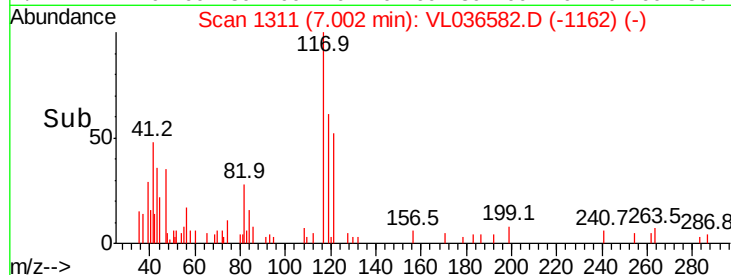
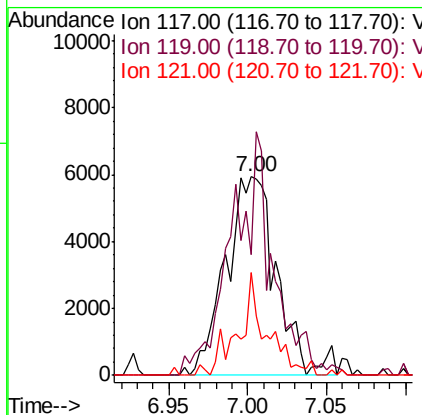
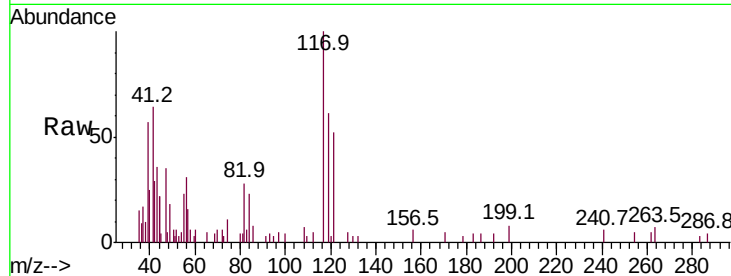
ClientSampleId :

MF-SG-10(2021)

Tot Ion	Ratio	Lower	Upper
117	100		
119	61.1	78.2	117.2#
121	52.1	24.5	36.7#

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#36

Benzene

Concen: 0.240 ppbv m

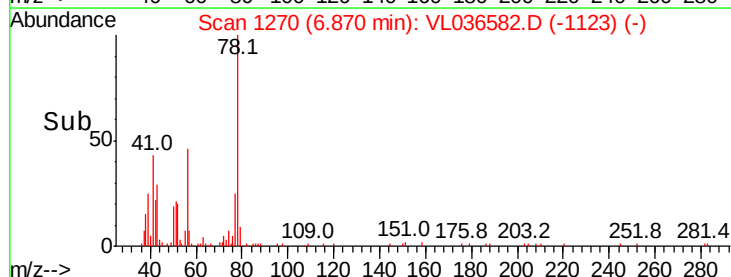
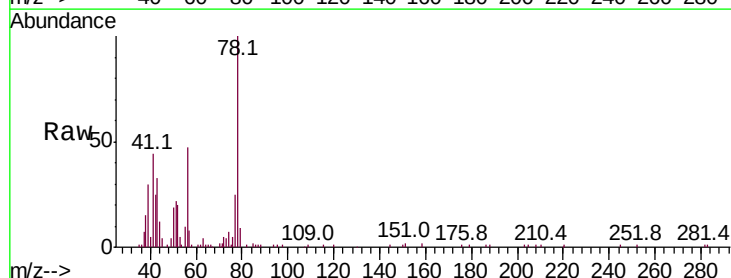
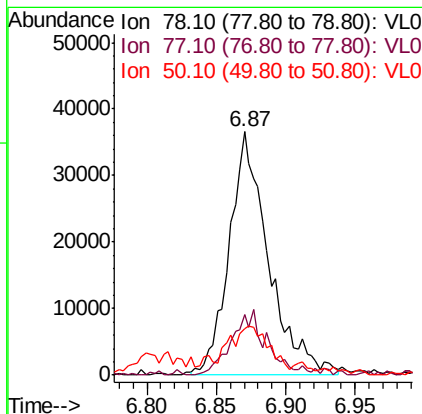
RT: 6.87 min Scan# 1270

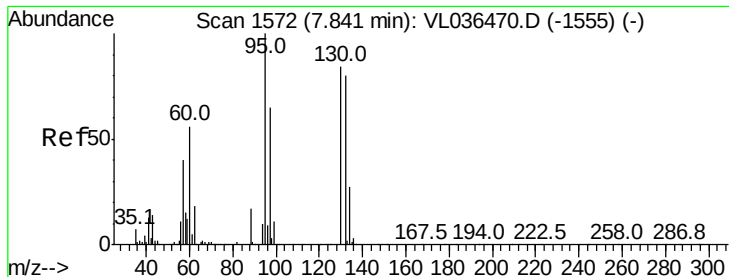
Delta R.T. -0.03 min

Lab File: VL036582.D

Acq: 30 Mar 2021 23:07

Tgt Ion	Ratio	Lower	Upper
78	100		
77	24.7	18.0	27.0
50	18.8	16.5	24.7





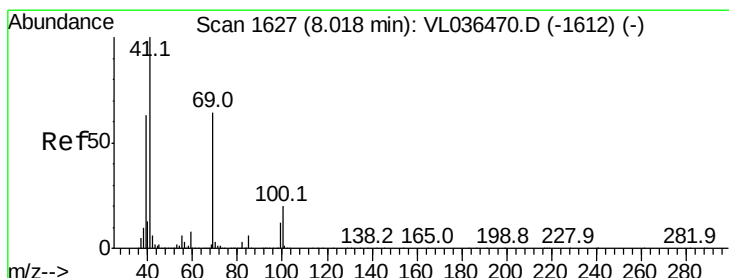
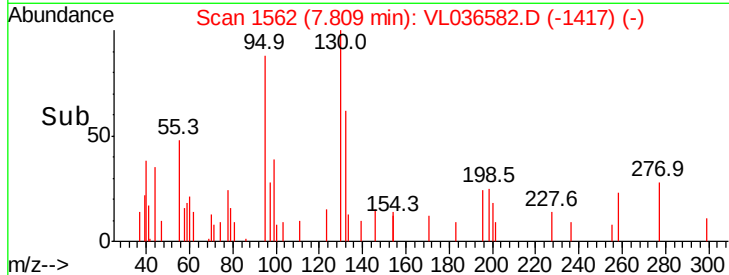
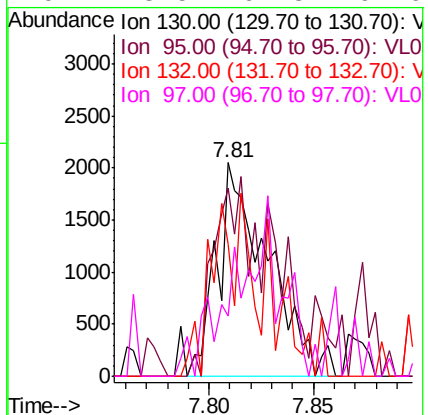
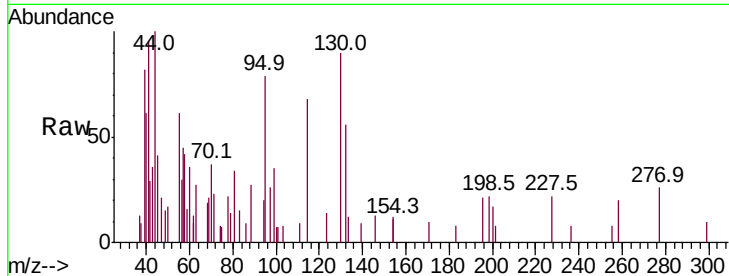
#38
 Trichloroethene
 Concen: 0.030 ppbv m
 RT: 7.81 min Scan# 1562
 Delta R.T. -0.03 min
 Lab File: VL036582.D
 Acq: 30 Mar 2021 23:07

Instrument :
 MSVOA_L
 ClientSampleId :
 MF-SG-10(2021)

Tot Ion	Ratio	Lower	Upper
130	100		
95	88.3	95.7	143.5#
132	61.9	76.2	114.4#
97	28.5	61.8	92.6#

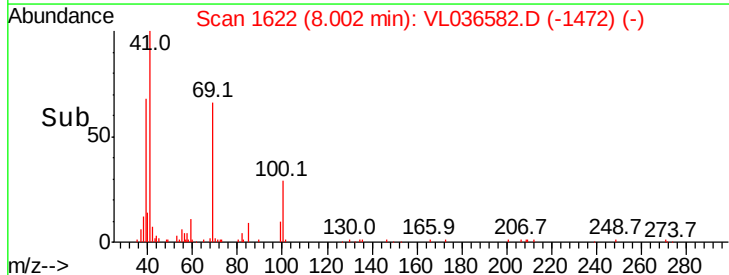
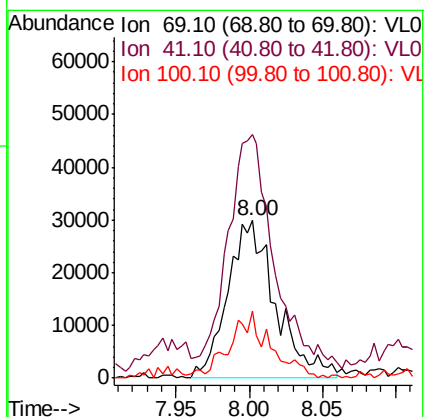
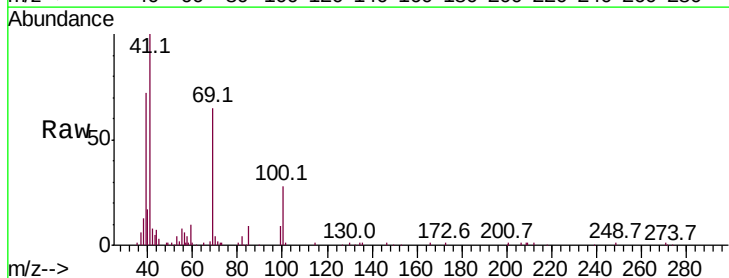
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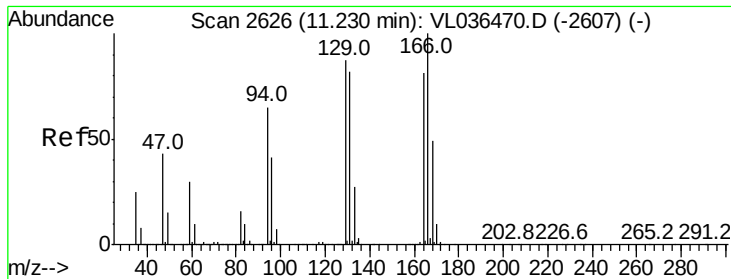
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#43
 Methyl Methacrylate
 Concen: 0.679 ppbv m
 RT: 8.00 min Scan# 1622
 Delta R.T. -0.02 min
 Lab File: VL036582.D
 Acq: 30 Mar 2021 23:07

Tgt Ion	Ratio	Lower	Upper
69	100		
41	152.3	126.8	190.2
100	36.0	24.9	37.3





#52

Tetrachloroethene

Concen: 0.773 ppbv

RT: 11.20 min Scan# 2618

Delta R.T. -0.03 min

Lab File: VL036582.D

Acq: 30 Mar 2021 23:07

Instrument :

MSVOA_L

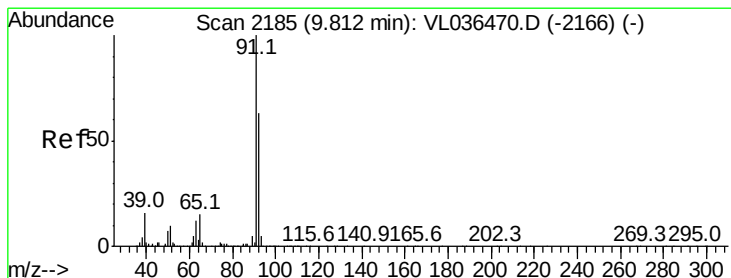
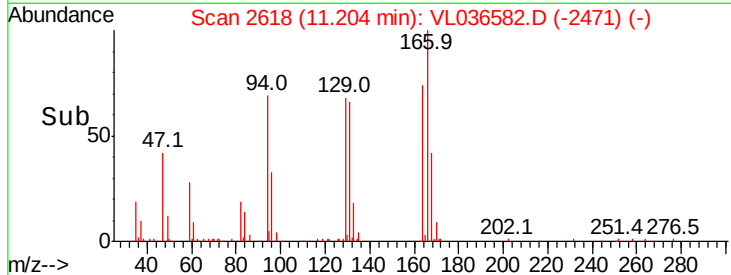
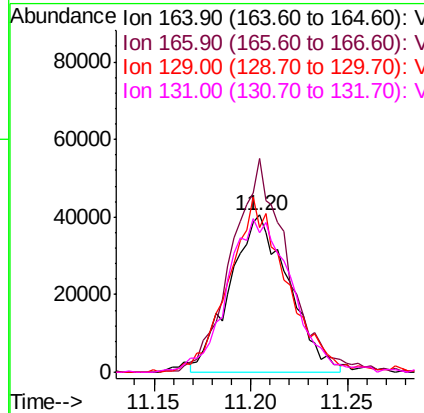
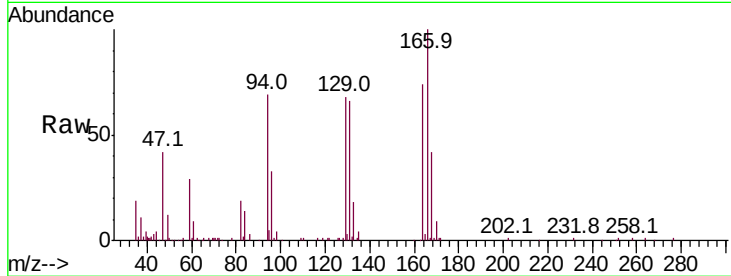
ClientSampleId :

MF-SG-10(2021)

Tot Ion:	164	Resp:	85416
Ion Ratio	Lower	Upper	
164	100		
166	136.2	98.3	147.5
129	92.2	85.8	128.8
131	88.6	80.9	121.3

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#53

Toluene

Concen: 0.527 ppbv m

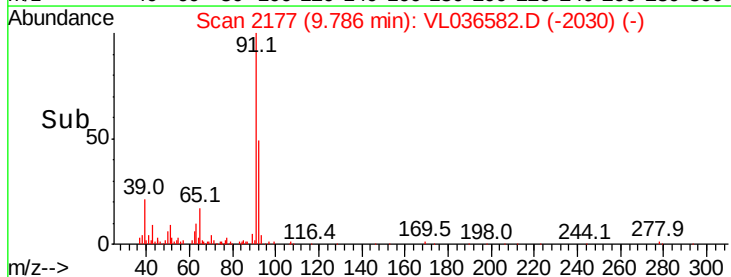
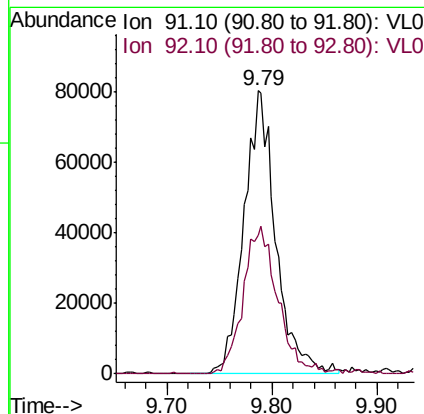
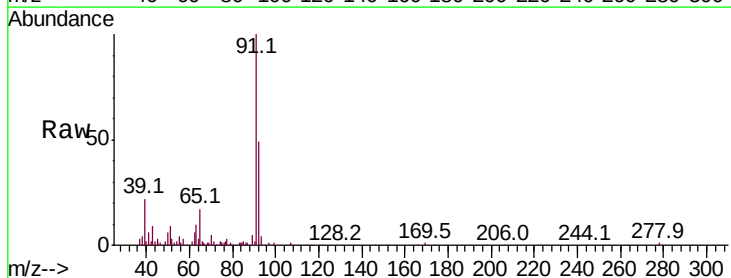
RT: 9.79 min Scan# 2177

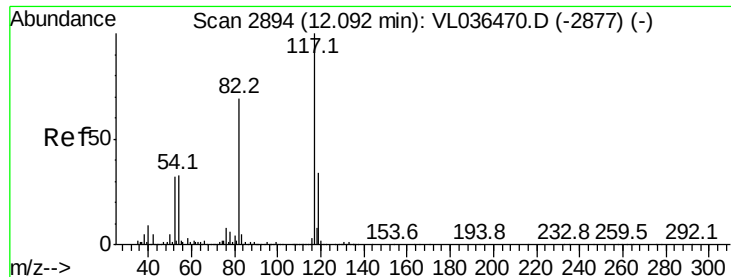
Delta R.T. -0.03 min

Lab File: VL036582.D

Acq: 30 Mar 2021 23:07

Tgt Ion:	91	Resp:	168297
Ion Ratio	Lower	Upper	
91	100		
92	57.0	48.8	73.2





#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.07 min Scan# 2886

Delta R.T. -0.03 min

Lab File: VL036582.D

Acq: 30 Mar 2021 23:07

Instrument :

MSVOA_L

ClientSampleId :

MF-SG-10(2021)

Tot Ion:117 Resp: 2941532

Ion Ratio Lower Upper

117 100

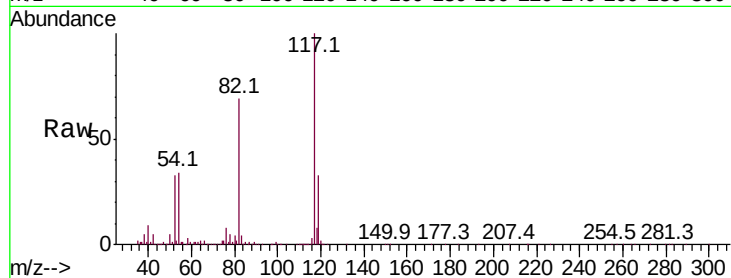
82 71.9 57.4 86.0

119 33.6 47.4 71.0#

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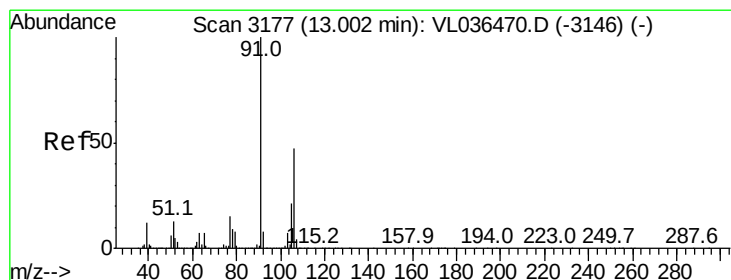
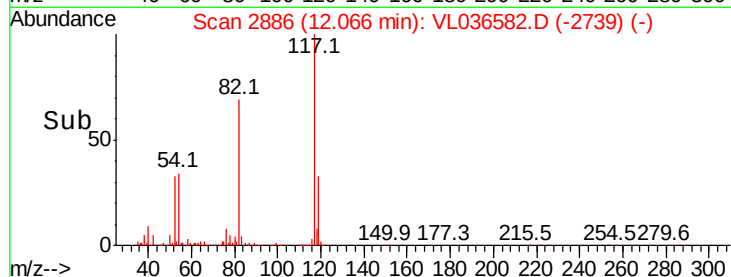
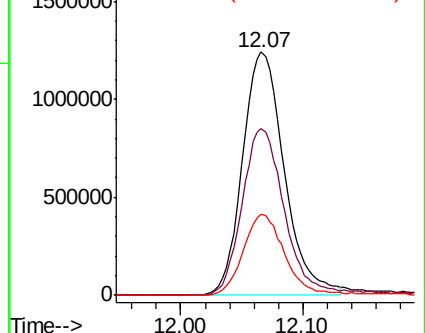
4/1/2021 10:59:33 AM



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



#59

m/p-Xylene

Concen: 0.258 ppbv m

RT: 12.95 min Scan# 3161

Delta R.T. -0.05 min

Lab File: VL036582.D

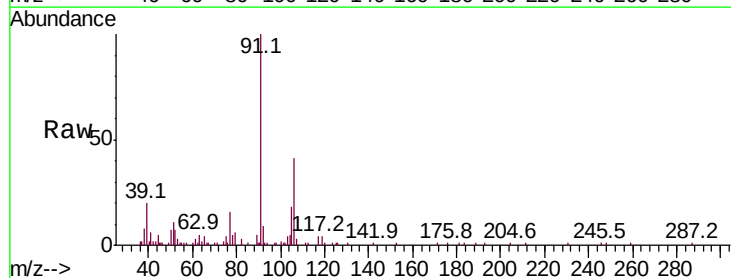
Acq: 30 Mar 2021 23:07

Tgt Ion: 91 Resp: 96392

Ion Ratio Lower Upper

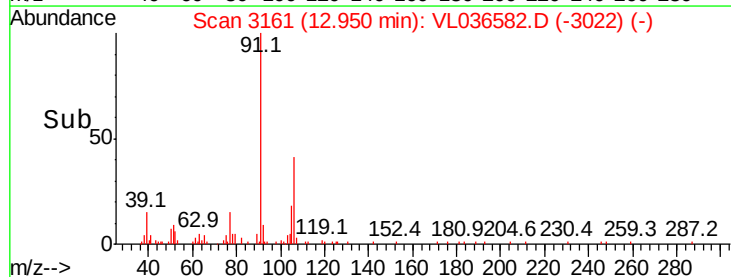
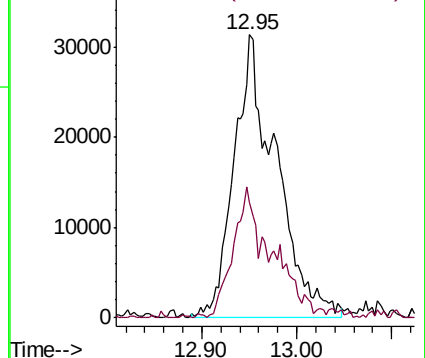
91 100

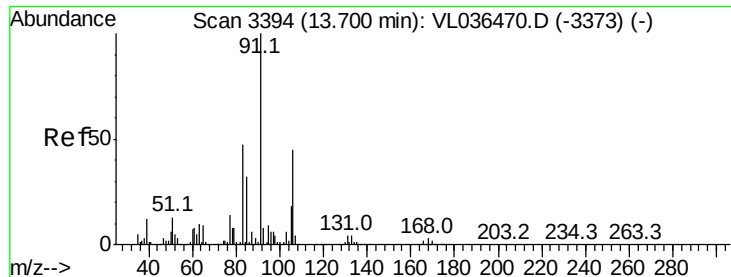
106 0.0 35.3 52.9#



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 106.10 (105.80 to 106.80): V





#60

o-Xylene

Concen: 0.108 ppbv m

RT: 13.67 min Scan# 3384

Delta R.T. -0.03 min

Lab File: VL036582.D

Acq: 30 Mar 2021 23:07

Instrument :

MSVOA_L

ClientSampleId :

MF-SG-10(2021)

Tot Ion: 91 Resp: 38814

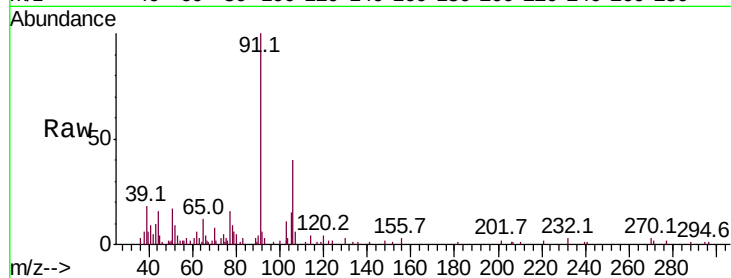
Ion Ratio Lower Upper

91 100

106 41.4 22.3 66.9

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Abundance Ion 91.10 (90.80 to 91.80): VL036470.D (-3373) (-)

Ion 106.10 (105.80 to 106.80): VL036470.D (-3373) (-)

13.67

15000

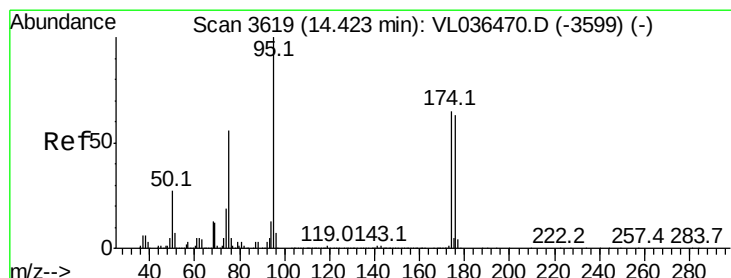
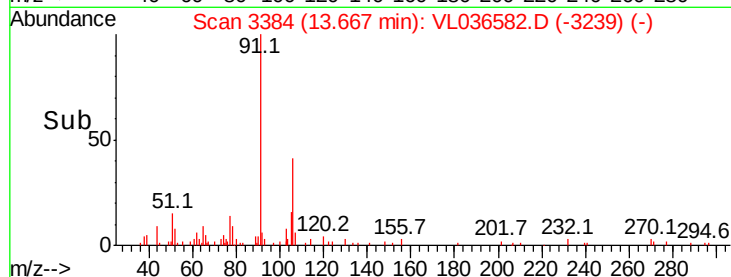
10000

5000

0

Time-->

13.60 13.65 13.70 13.75



#68

1-Bromo-4-Fluorobenzene

Concen: 9.837 ppbv

RT: 14.40 min Scan# 3611

Delta R.T. -0.03 min

Lab File: VL036582.D

Acq: 30 Mar 2021 23:07

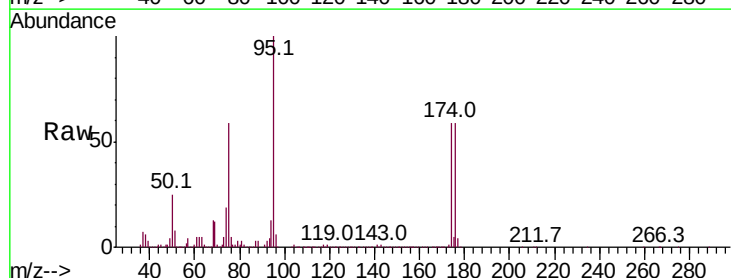
Tgt Ion: 95 Resp: 2306118

Ion Ratio Lower Upper

95 100

174 65.0 51.0 76.6

175 5.0 3.9 5.9



Abundance Ion 95.10 (94.80 to 95.80): VL036470.D (-3599) (-)

Ion 174.00 (173.70 to 174.70): VL036470.D (-3599) (-)

Ion 175.00 (174.70 to 175.70): VL036470.D (-3599) (-)

1200000

1000000

800000

600000

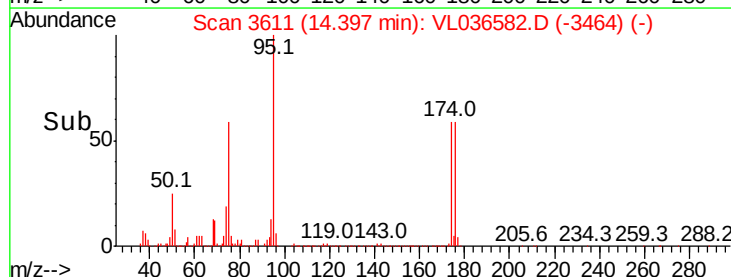
400000

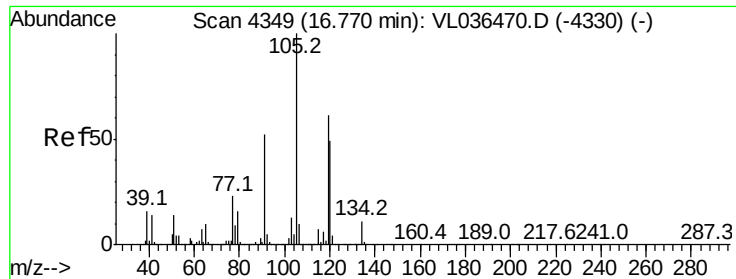
200000

0

Time-->

14.30 14.40





#74

1,2,4-Trimethylbenzene

Concen: 0.218 ppbv

RT: 16.74 min Scan# 4341

Delta R.T. -0.03 min

Lab File: VL036582.D

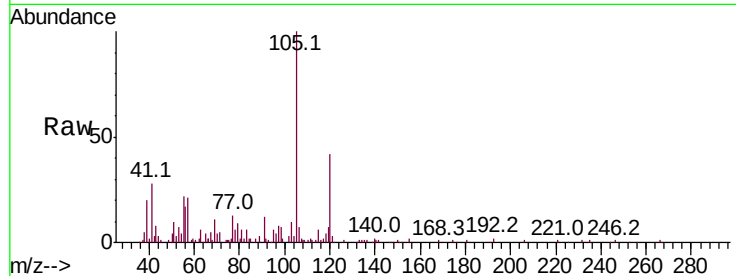
Acq: 30 Mar 2021 23:07

Instrument :

MSVOA_L

ClientSampleId :

MF-SG-10(2021)



Tot Ion	Ratio	Resp: Lower	Upper
105	100		
120	42.4	39.2	58.8
91	11.3	42.6	64.0#
77	8.0	18.6	28.0#

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4/1/2021 10:59:33 AM

