

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL012021\
 Data File : VL036246.D
 Acq On : 20 Jan 2021 14:32
 Operator : SY/AP
 Sample : M1171-01
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 AA-1

Quant Time: Jan 21 01:35:00 2021
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL011321AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Thu Jan 14 16:13:38 2021
 QLast Update : Thu Jan 14 16:13:38 2021
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.67	49	1368871	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.18	114	2986656	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.09	117	2599205	10.00	ppbv	0.00

System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	14.42	95	2113098	9.82	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	98.20%

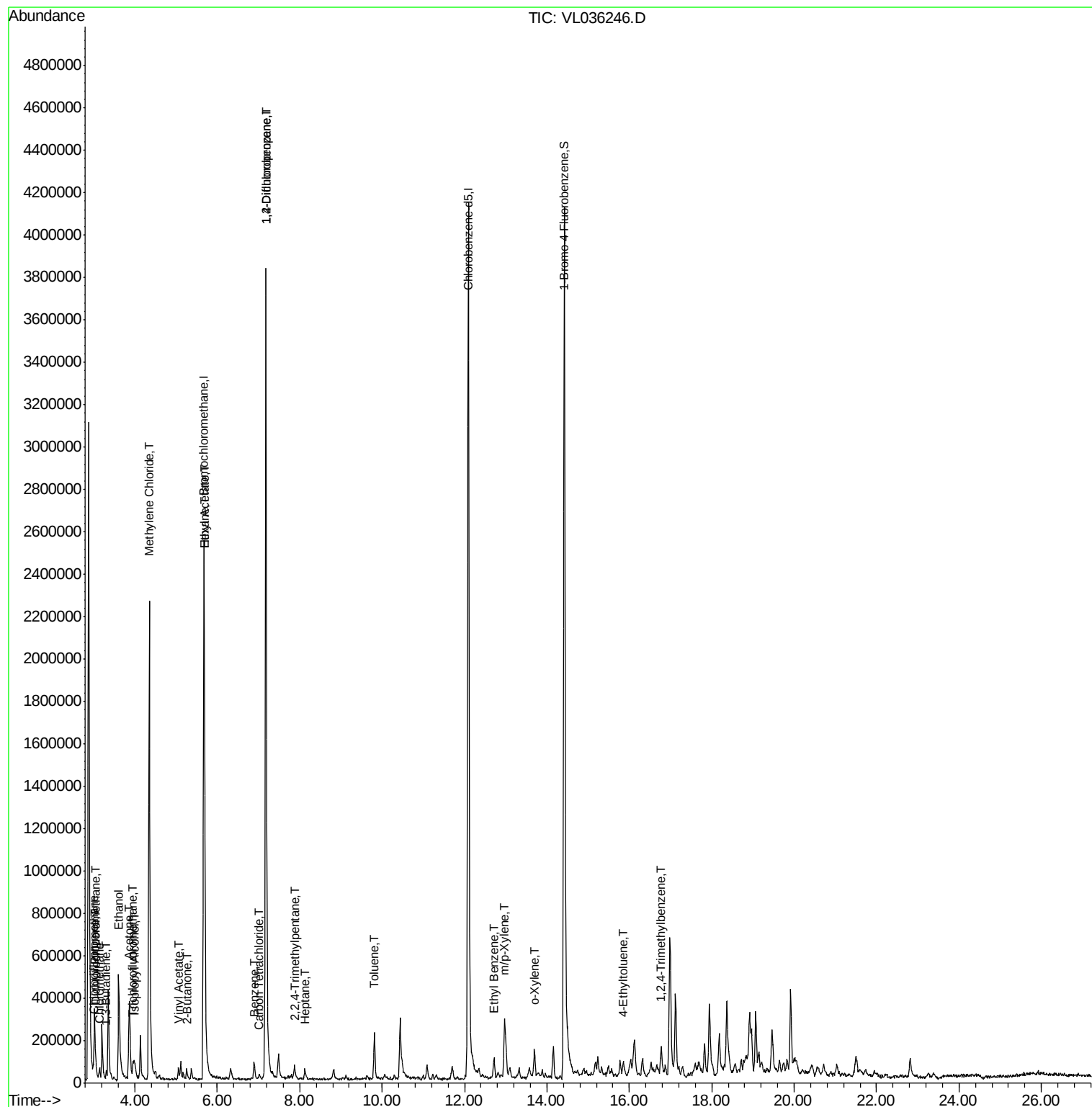
Target Compounds					Ovalue
2) Dichlorodifluoromethane	3.05	85	44815	0.244 ppbv	98
3) Chlorodifluoromethane	2.99	51	67940	0.404 ppbv	94
4) Chloromethane	3.14	50	41331	0.497 ppbv	95
9) Propene	3.02	41	90701	1.133 ppbv #	77
10) Heptane	8.13	43	14905	0.075 ppbv #	29
11) Trichlorofluoromethane	3.95	101	40781	0.219 ppbv	92
13) Ethanol	3.61	45	711480	56.598 ppbv	80
15) Acetone	3.85	43	432394	2.579 ppbv	100
16) 1,3-Butadiene	3.31	39	7263	0.089 ppbv #	56
19) Isopropyl Alcohol	3.98	45	9482	0.094 ppbv #	93
20) Methylene Chloride	4.35	84	867386	16.211 ppbv	98
23) Vinyl Acetate	5.07	43	7851	0.039 ppbv #	26
25) Ethyl Acetate	5.69	43	302145	0.898 ppbv #	80
26) Hexane	5.69	57	396012	2.826 ppbv #	39
34) 2-Butanone	5.26	43	12589	0.057 ppbv #	1
35) Carbon Tetrachloride	7.02	117	9790	0.052 ppbv #	79
36) Benzene	6.89	78	64621	0.236 ppbv #	88
39) 1,2-Dichloropropane	7.18	63	497389	4.477 ppbv #	22
44) 2,2,4-Trimethylpentane	7.87	57	35793	0.071 ppbv #	40
53) Toluene	9.81	91	156802	0.512 ppbv	98
58) Ethyl Benzene	12.72	91	83266	0.216 ppbv #	85
59) m/p-Xylene	12.98	91	175235	0.529 ppbv #	33
60) o-Xylene	13.70	91	60645	0.190 ppbv #	32
72) 4-Ethyltoluene	15.85	105	17129	0.048 ppbv #	54
74) 1,2,4-Trimethylbenzene	16.77	105	31781	0.090 ppbv #	57

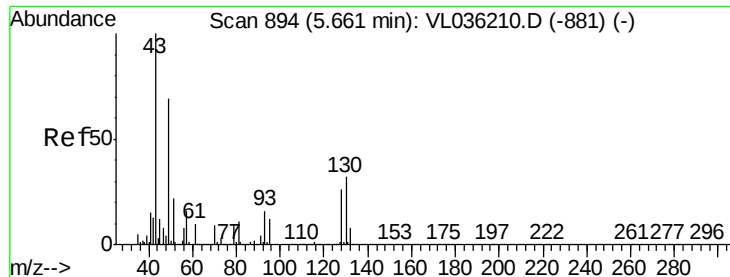
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.67 min Scan# 896

Delta R.T. 0.01 min

Lab File: VL036246.D

Acq: 20 Jan 2021 14:32

Instrument :

MSVOA_L

ClientSampleId :

AA-1

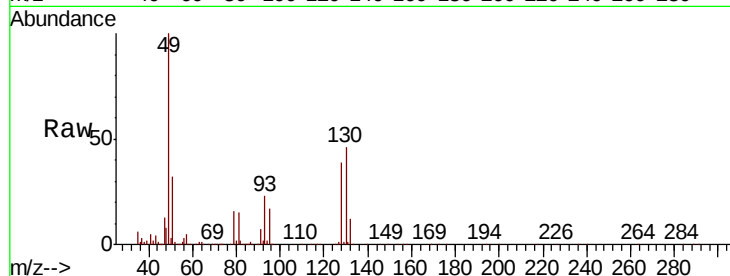
Tot Ion: 49 Resp: 1368871

Ion Ratio Lower Upper

49 100

128 41.0 20.1 60.2

130 52.0 25.3 75.9



Abundance Ion 49.10 (48.80 to 49.80): VL0

Ion 128.00 (127.70 to 128.70): V

Ion 130.00 (129.70 to 130.70): V

800000

600000

400000

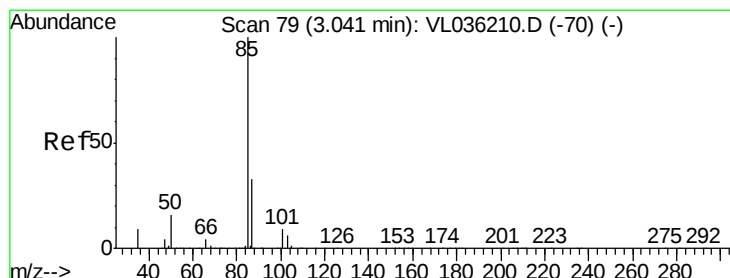
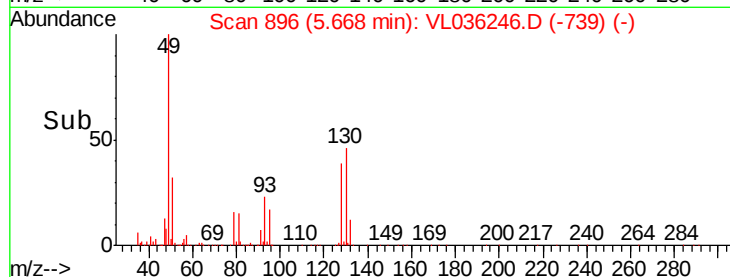
200000

0

5.67

5.60 5.65 5.70 5.75

Time-->



#2

Dichlorodifluoromethane

Concen: 0.244 ppbv

RT: 3.05 min Scan# 82

Delta R.T. 0.01 min

Lab File: VL036246.D

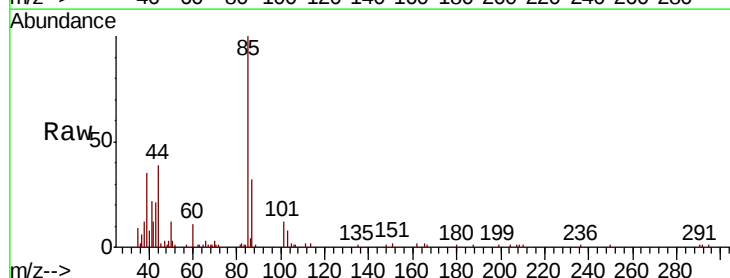
Acq: 20 Jan 2021 14:32

Tgt Ion: 85 Resp: 44815

Ion Ratio Lower Upper

85 100

87 32.0 26.4 39.6



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0

30000

20000

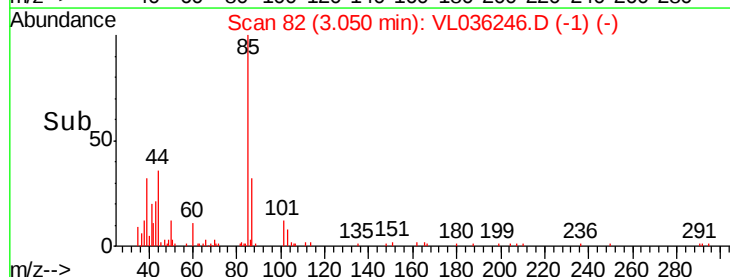
10000

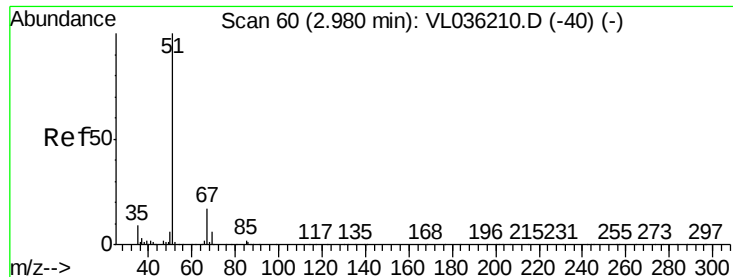
0

3.05

3.00 3.05 3.10 3.15

Time-->





#3

Chlorodifluoromethane

Concen: 0.404 ppbv

RT: 2.99 min Scan# 64

Delta R.T. 0.01 min

Lab File: VL036246.D

Acq: 20 Jan 2021 14:32

Instrument :

MSVOA_L

ClientSampleId :

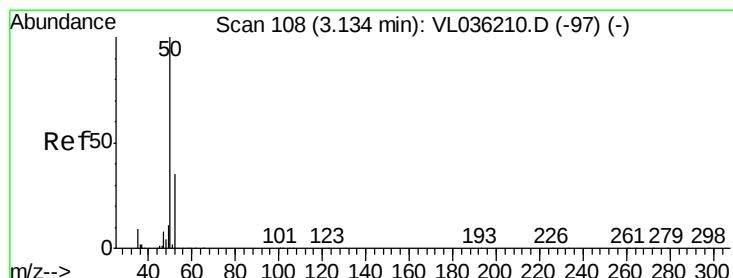
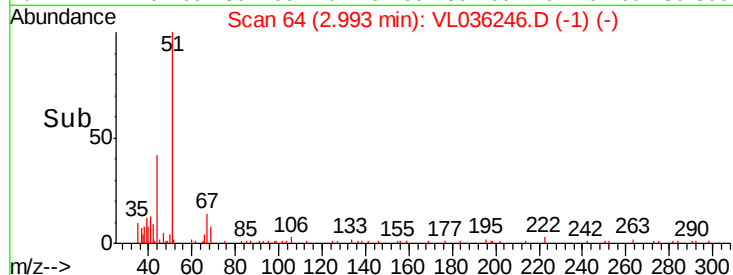
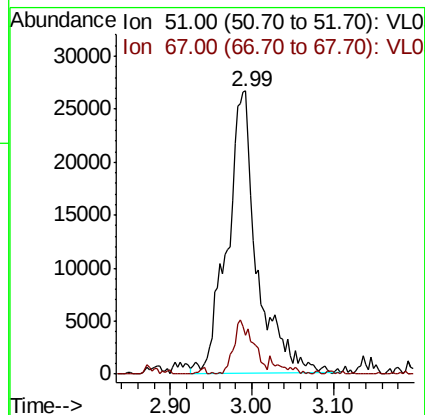
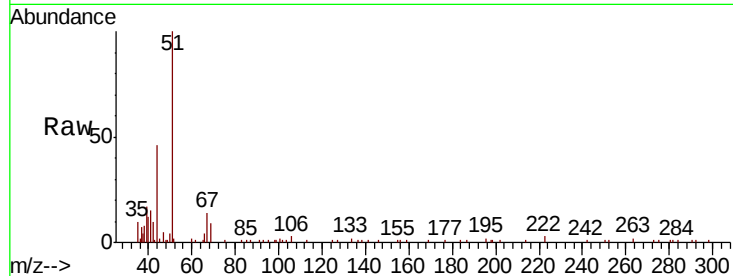
AA-1

Tot Ion: 51 Resp: 67940

Ion Ratio Lower Upper

51 100

67 15.1 14.0 21.0



#4

Chloromethane

Concen: 0.497 ppbv

RT: 3.14 min Scan# 110

Delta R.T. 0.01 min

Lab File: VL036246.D

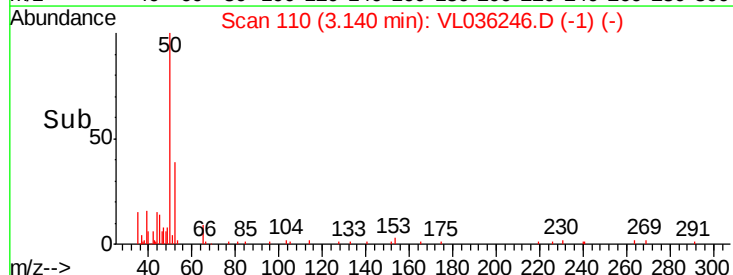
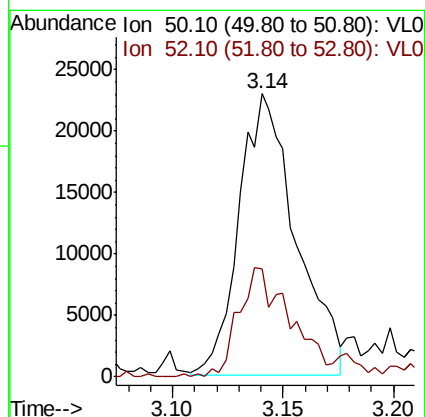
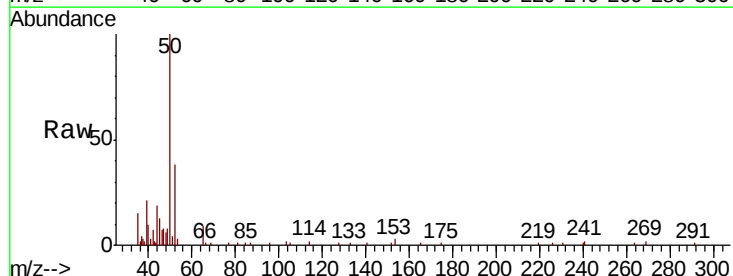
Acq: 20 Jan 2021 14:32

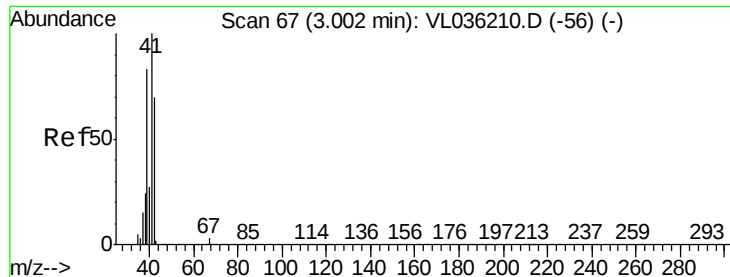
Tgt Ion: 50 Resp: 41331

Ion Ratio Lower Upper

50 100

52 37.5 27.8 41.8





#9

Propene

Concen: 1.133 ppbv

RT: 3.02 min Scan# 73

Delta R.T. 0.02 min

Lab File: VL036246.D

Acq: 20 Jan 2021 14:32

Instrument :

MSVOA_L

ClientSampleId :

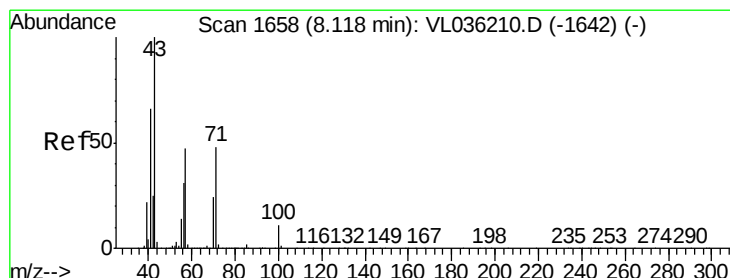
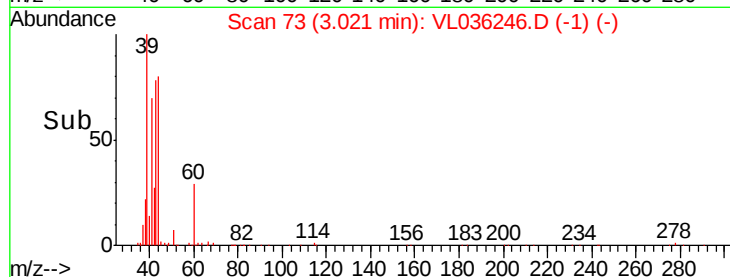
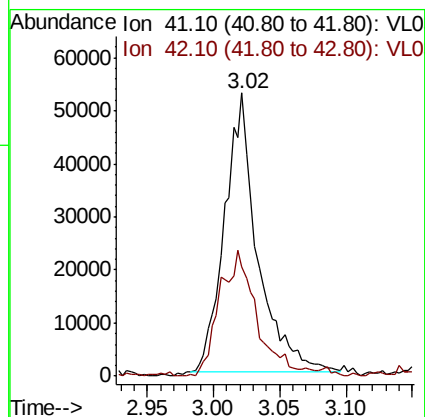
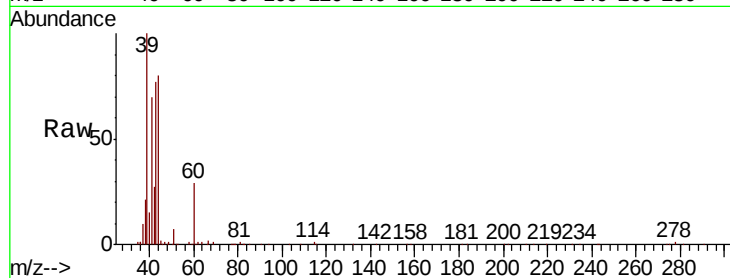
AA-1

Tot Ion: 41 Resp: 90701

Ion Ratio Lower Upper

41 100

42 52.7 57.1 85.7#



#10

Heptane

Concen: 0.075 ppbv

RT: 8.13 min Scan# 1661

Delta R.T. 0.01 min

Lab File: VL036246.D

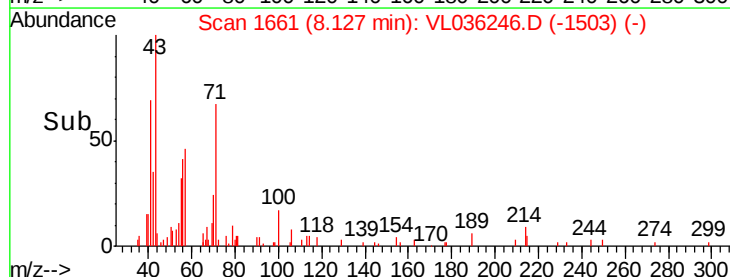
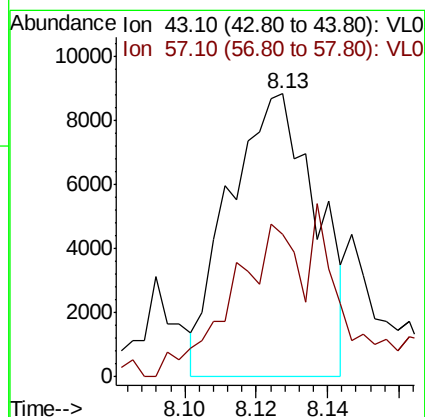
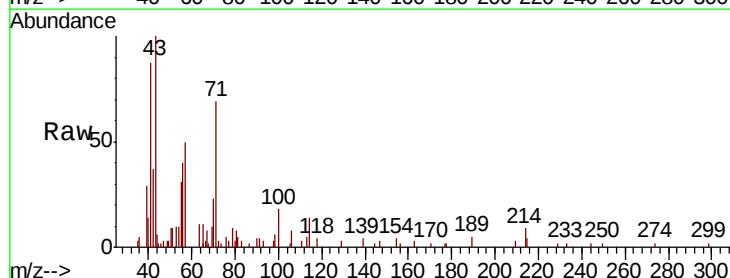
Acq: 20 Jan 2021 14:32

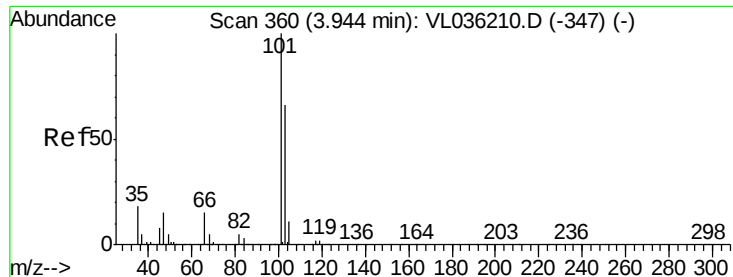
Tgt Ion: 43 Resp: 14905

Ion Ratio Lower Upper

43 100

57 0.0 38.1 57.1#

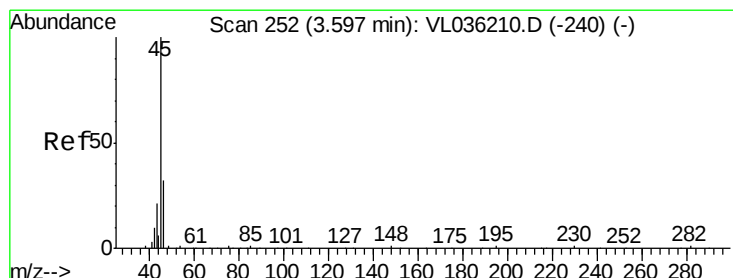
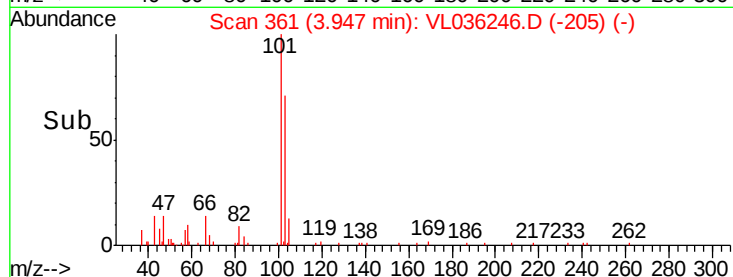
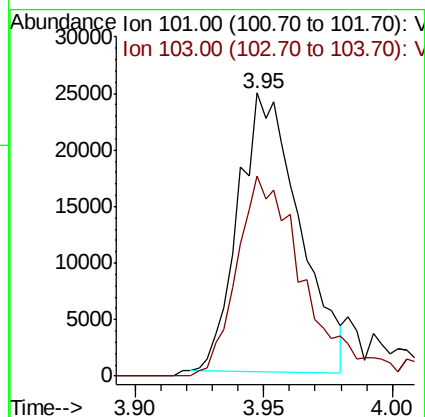
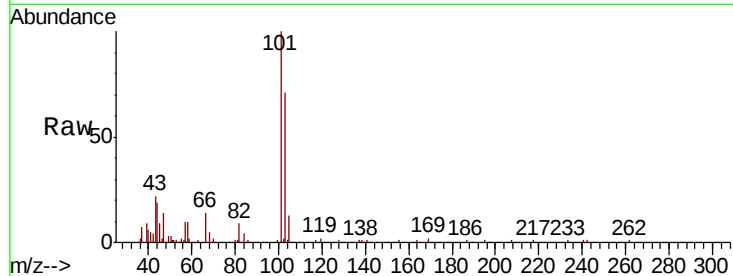




#11
Trichlorofluoromethane
Concen: 0.219 ppbv
RT: 3.95 min Scan# 361
Delta R.T. 0.00 min
Lab File: VL036246.D
Acq: 20 Jan 2021 14:32

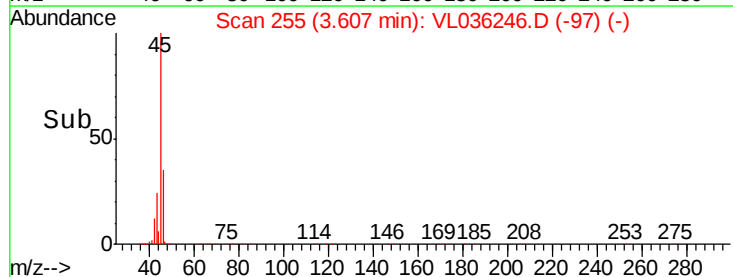
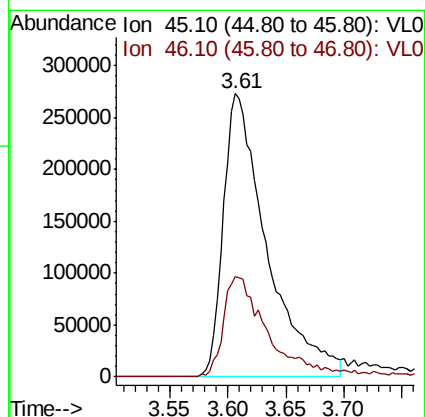
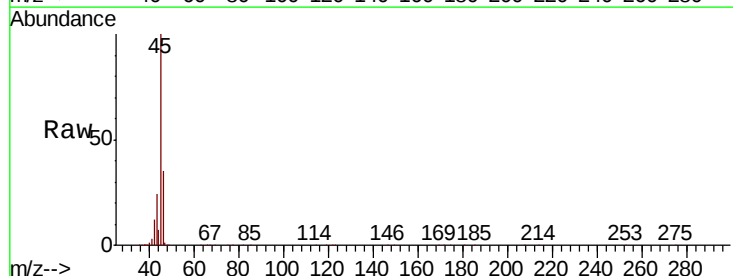
Instrument :
MSVOA_L
ClientSampleId :
AA-1

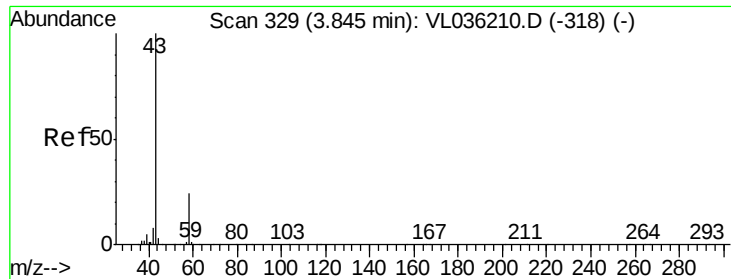
Tot Ion:101 Resp: 40781
Ion Ratio Lower Upper
101 100
103 72.3 52.6 78.8



#13
Ethanol
Concen: 56.598 ppbv
RT: 3.61 min Scan# 255
Delta R.T. 0.01 min
Lab File: VL036246.D
Acq: 20 Jan 2021 14:32

Tgt Ion: 45 Resp: 711480
Ion Ratio Lower Upper
45 100
46 34.9 19.2 77.0

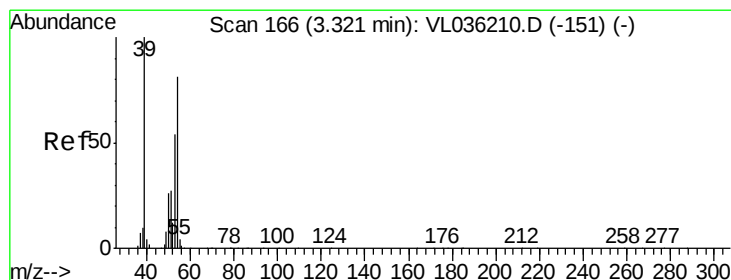
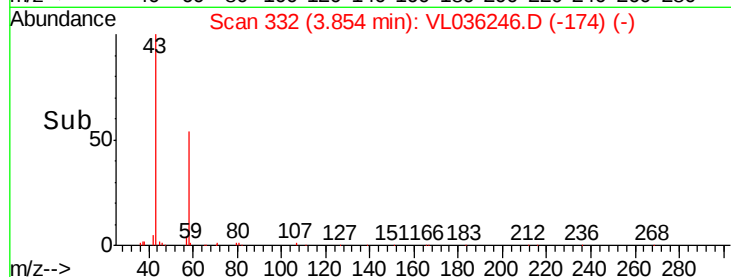
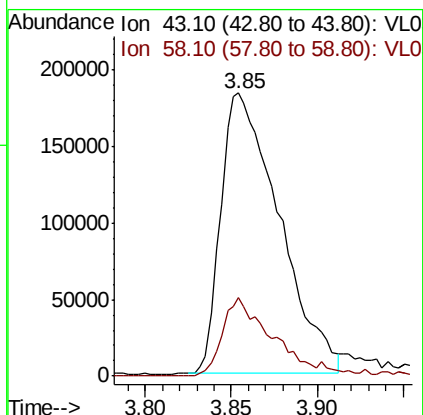
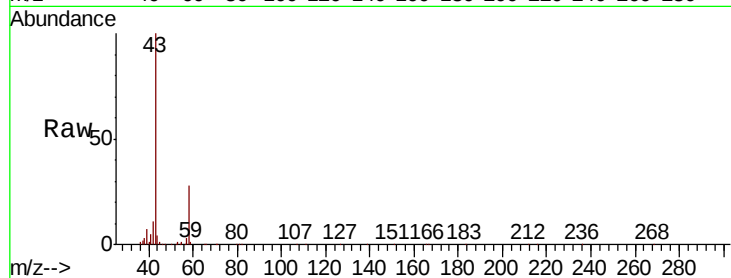




#15
Acetone
Concen: 2.579 ppbv
RT: 3.85 min Scan# 332
Delta R.T. 0.01 min
Lab File: VL036246.D
Acq: 20 Jan 2021 14:32

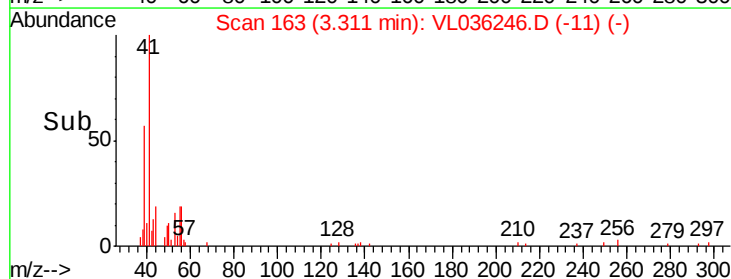
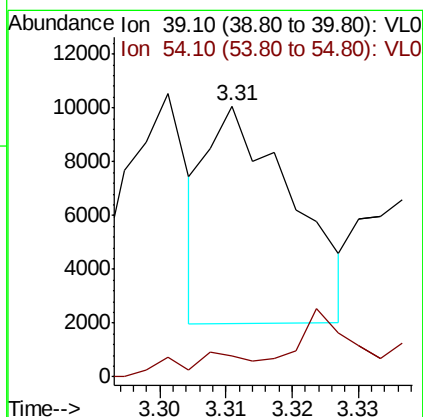
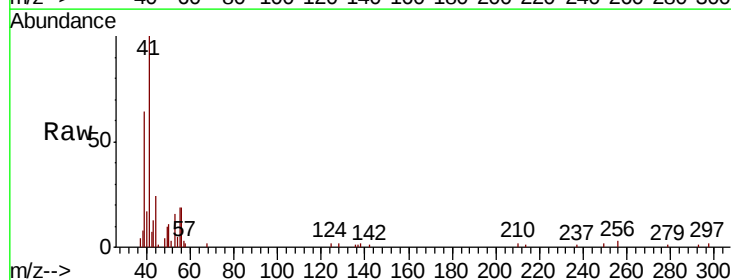
Instrument :
MSVOA_L
ClientSampleId :
AA-1

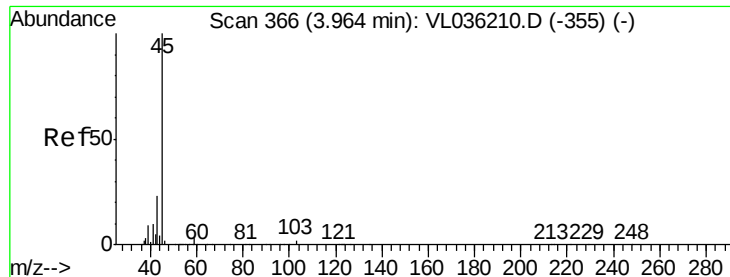
Tot Ion: 43 Resp: 432394
Ion Ratio Lower Upper
43 100
58 26.1 20.9 31.3



#16
1,3-Butadiene
Concen: 0.089 ppbv
RT: 3.31 min Scan# 163
Delta R.T. -0.01 min
Lab File: VL036246.D
Acq: 20 Jan 2021 14:32

Tgt Ion: 39 Resp: 7263
Ion Ratio Lower Upper
39 100
54 39.8 62.5 93.7#





#19

Isopropyl Alcohol

Concen: 0.094 ppbv

RT: 3.98 min Scan# 370

Delta R.T. 0.01 min

Lab File: VL036246.D

Acq: 20 Jan 2021 14:32

Instrument :

MSVOA_L

ClientSampled :

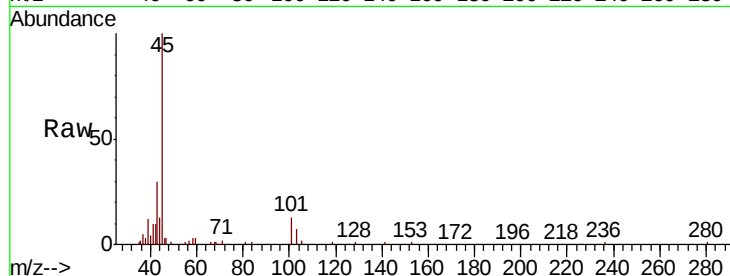
AA-1

Tot Ion: 45 Resp: 9482

Ion Ratio Lower Upper

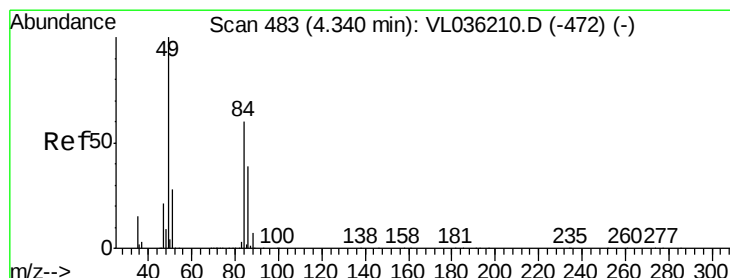
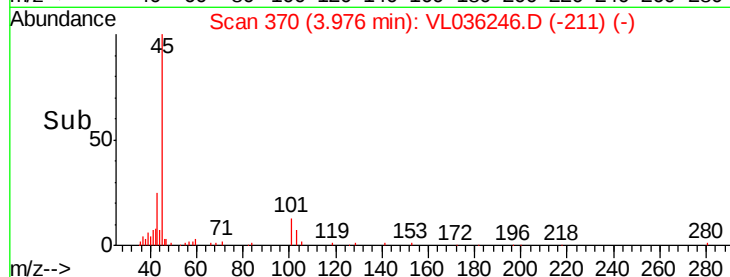
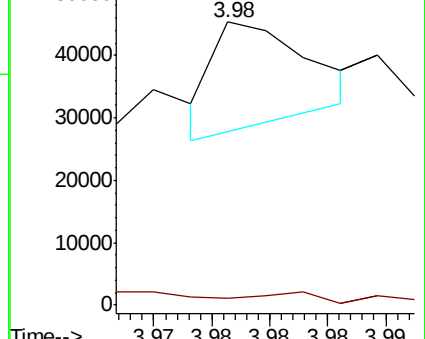
45 100

58 0.0 1.9 2.9#



Abundance Ion 45.10 (44.80 to 45.80): VL0

Ion 58.10 (57.80 to 58.80): VL0



#20

Methylene Chloride

Concen: 16.211 ppbv

RT: 4.35 min Scan# 485

Delta R.T. 0.01 min

Lab File: VL036246.D

Acq: 20 Jan 2021 14:32

Tgt Ion: 84 Resp: 867386

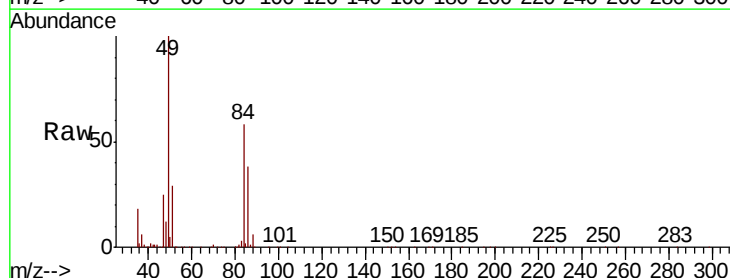
Ion Ratio Lower Upper

84 100

49 171.2 134.1 201.1

51 49.4 37.4 56.0

86 65.2 52.6 78.8

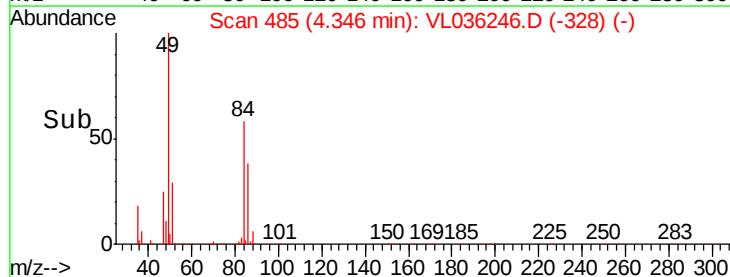
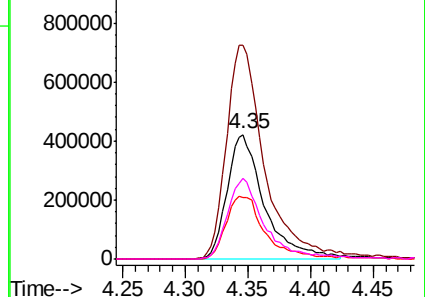


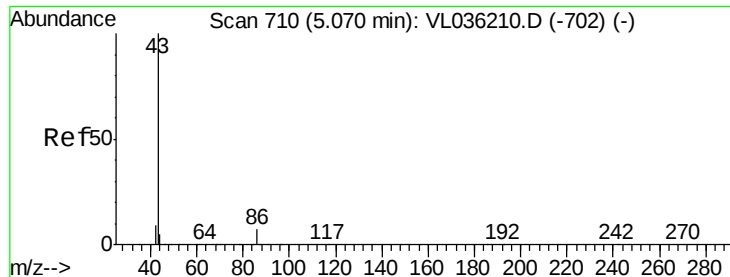
Abundance Ion 84.00 (83.70 to 84.70): VL0

Ion 49.10 (48.80 to 49.80): VL0

Ion 51.10 (50.80 to 51.80): VL0

Ion 86.00 (85.70 to 86.70): VL0





#23

Vinyl Acetate

Concen: 0.039 ppbv

RT: 5.07 min Scan# 709

Delta R.T. -0.00 min

Lab File: VL036246.D

Acq: 20 Jan 2021 14:32

Instrument :

MSVOA_L

ClientSampleId :

AA-1

Tot Ion: 43 Resp: 7851

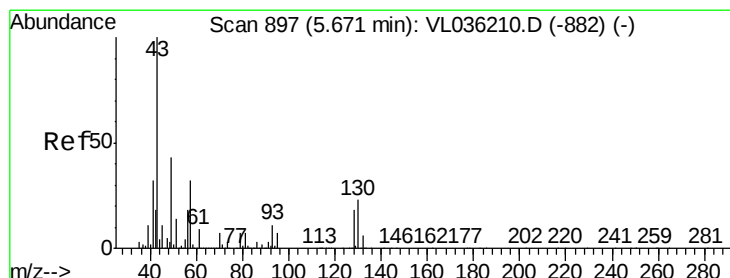
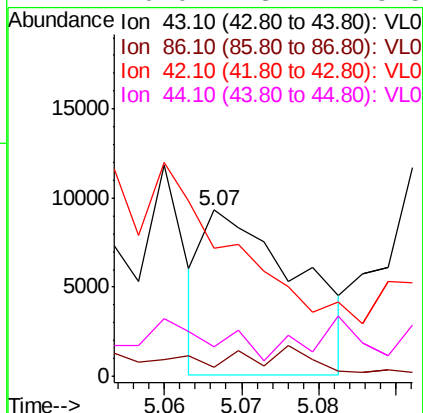
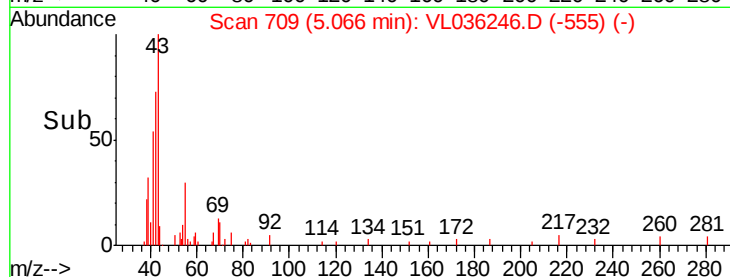
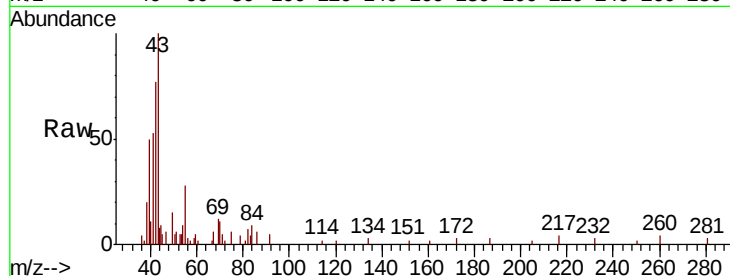
Ion Ratio Lower Upper

43 100

86 4.5 4.9 7.3#

42 63.3 7.8 11.6#

44 0.0 3.7 5.5#



#25

Ethyl Acetate

Concen: 0.898 ppbv

RT: 5.69 min Scan# 903

Delta R.T. 0.02 min

Lab File: VL036246.D

Acq: 20 Jan 2021 14:32

Tgt Ion: 43 Resp: 302145

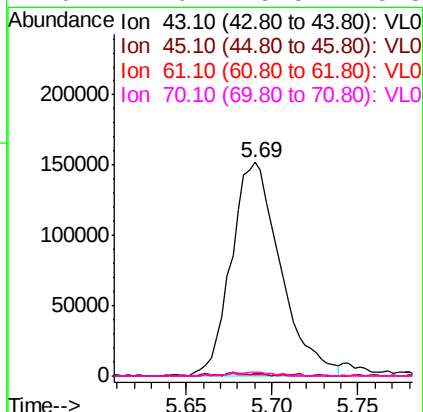
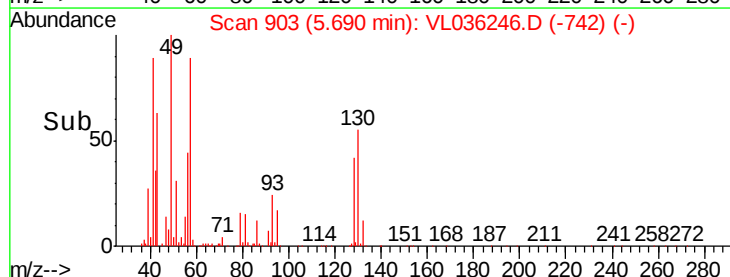
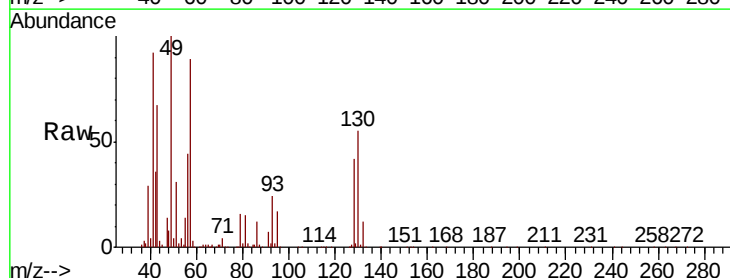
Ion Ratio Lower Upper

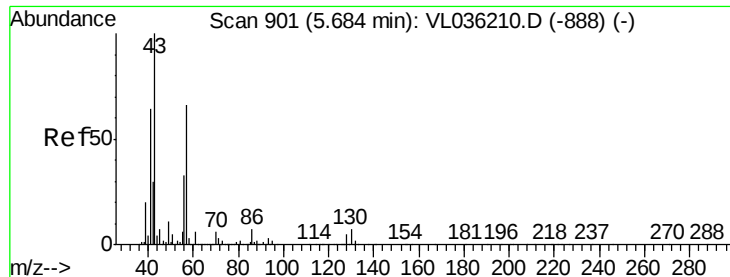
43 100

45 2.2 8.3 12.5#

61 1.0 7.4 11.2#

70 2.0 5.5 8.3#





#26

Hexane

Concen: 2.826 ppbv

RT: 5.69 min Scan# 903

Delta R.T. 0.01 min

Lab File: VL036246.D

Acq: 20 Jan 2021 14:32

Instrument :

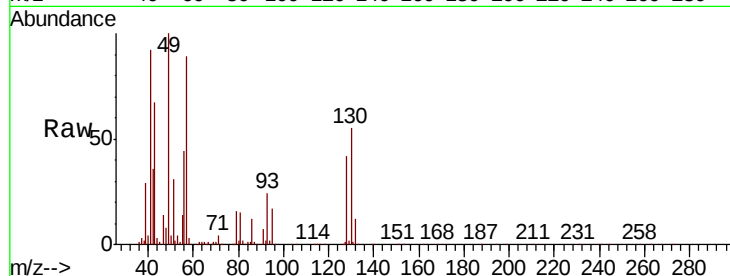
MSVOA_L

ClientSampleId :

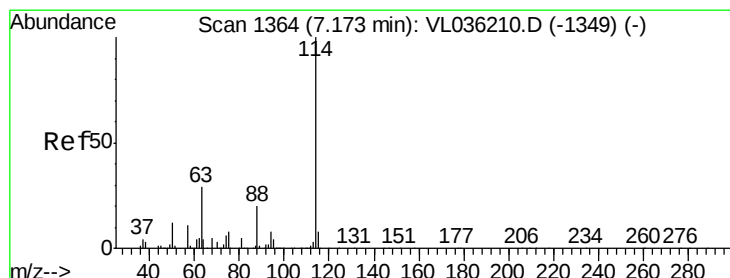
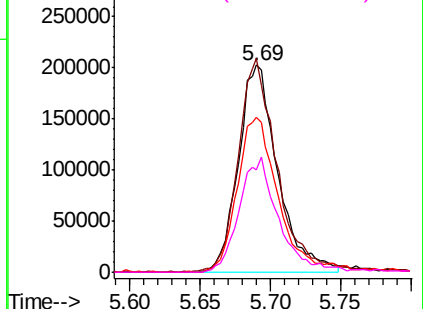
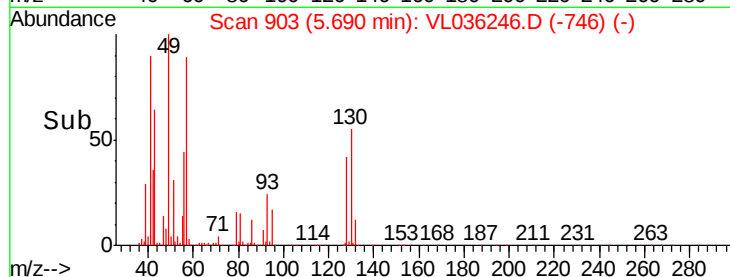
AA-1

Tot Ion: 57 Resp: 396012

Ion	Ratio	Lower	Upper
57	100		
41	104.0	83.0	124.6
43	80.5	202.4	303.6#
56	56.2	43.4	65.0



Abundance Ion 57.10 (56.80 to 57.80): VL0
Ion 41.10 (40.80 to 41.80): VL0
Ion 43.10 (42.80 to 43.80): VL0
Ion 56.10 (55.80 to 56.80): VL0



#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 7.18 min Scan# 1366

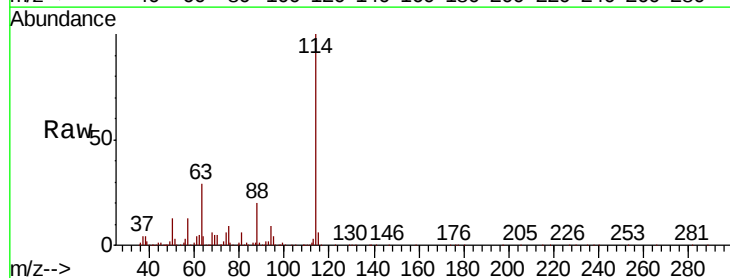
Delta R.T. 0.01 min

Lab File: VL036246.D

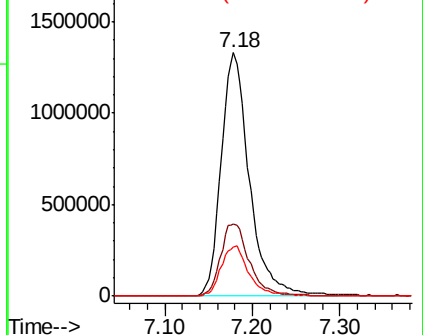
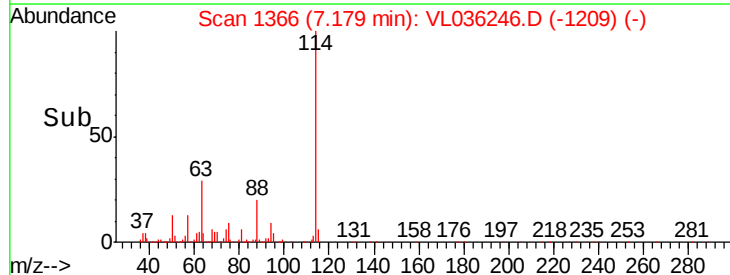
Acq: 20 Jan 2021 14:32

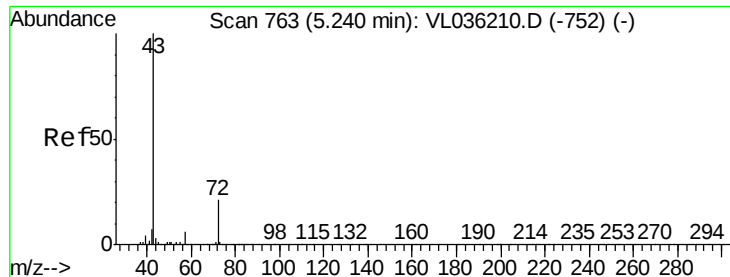
Tgt Ion: 114 Resp: 2986656

Ion	Ratio	Lower	Upper
114	100		
63	30.6	24.7	37.1
88	20.4	16.6	24.8



Abundance Ion 114.10 (113.80 to 114.80): V
Ion 63.10 (62.80 to 63.80): VL0
Ion 88.10 (87.80 to 88.80): VL0





#34

2-Butanone

Concen: 0.057 ppbv

RT: 5.26 min Scan# 769

Delta R.T. 0.02 min

Lab File: VL036246.D

Acq: 20 Jan 2021 14:32

Instrument :

MSVOA_L

ClientSampleId :

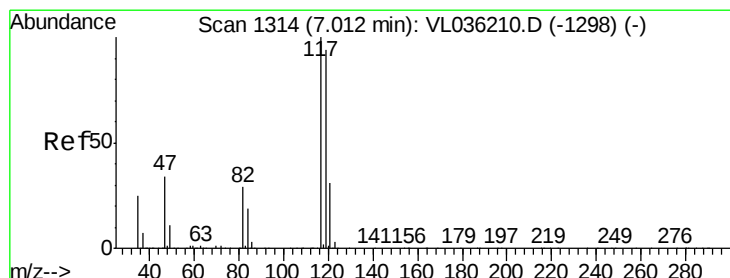
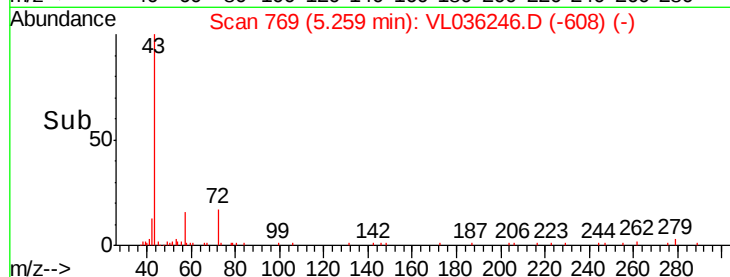
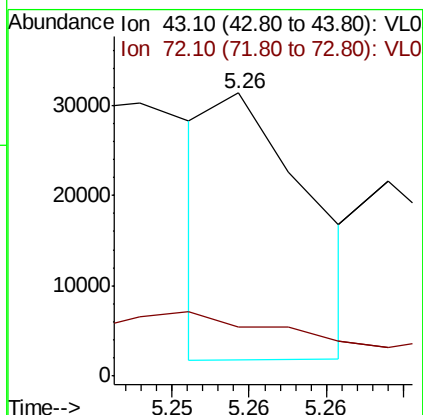
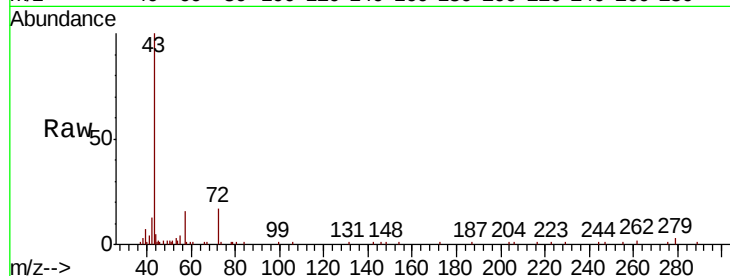
AA-1

Tot Ion: 43 Resp: 12589

Ion Ratio Lower Upper

43 100

72 120.8 16.1 24.1#



#35

Carbon Tetrachloride

Concen: 0.052 ppbv

RT: 7.02 min Scan# 1318

Delta R.T. 0.01 min

Lab File: VL036246.D

Acq: 20 Jan 2021 14:32

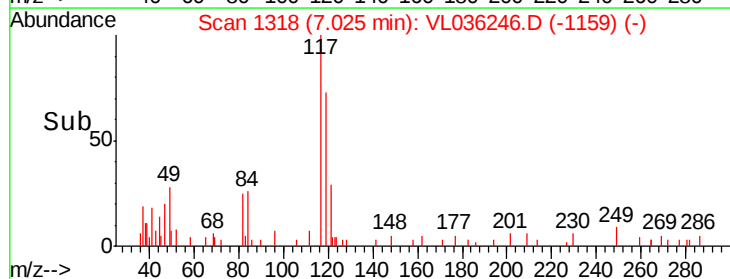
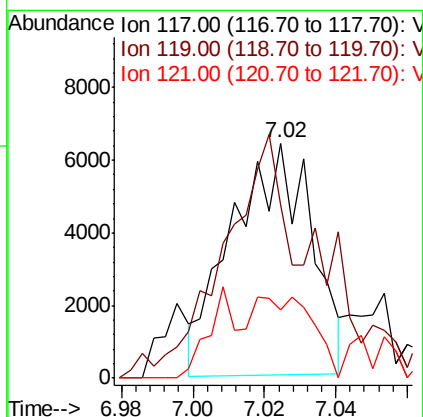
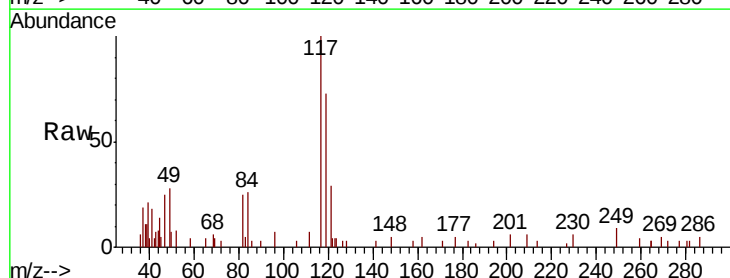
Tgt Ion: 117 Resp: 9790

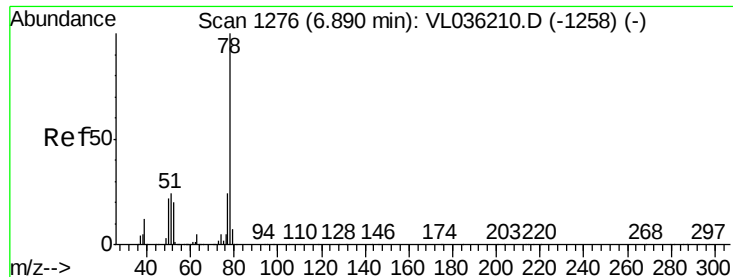
Ion Ratio Lower Upper

117 100

119 69.8 74.9 112.3#

121 37.9 25.0 37.6#

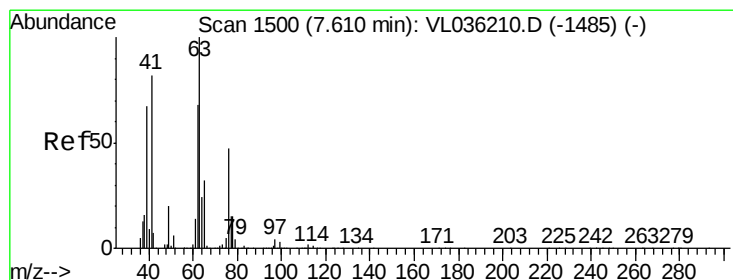
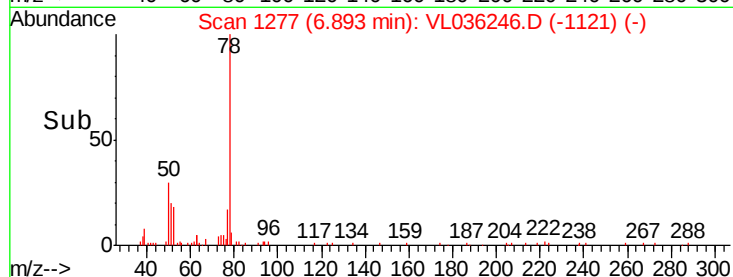
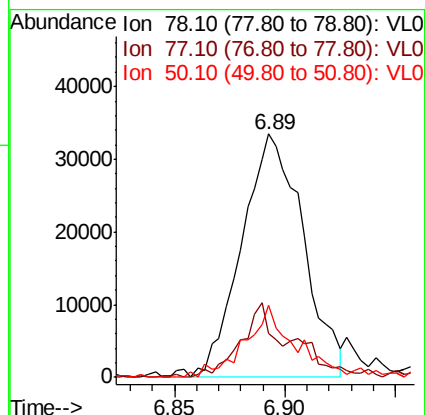
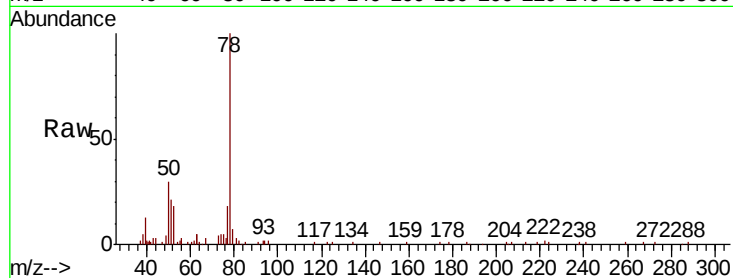




#36
Benzene
Concen: 0.236 ppbv
RT: 6.89 min Scan# 1277
Delta R.T. 0.00 min
Lab File: VL036246.D
Acq: 20 Jan 2021 14:32

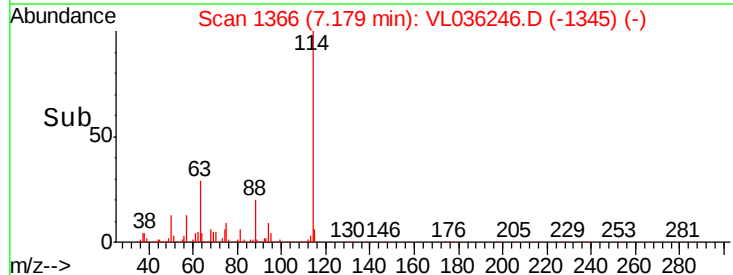
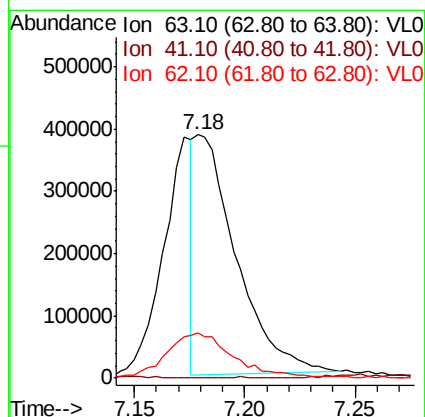
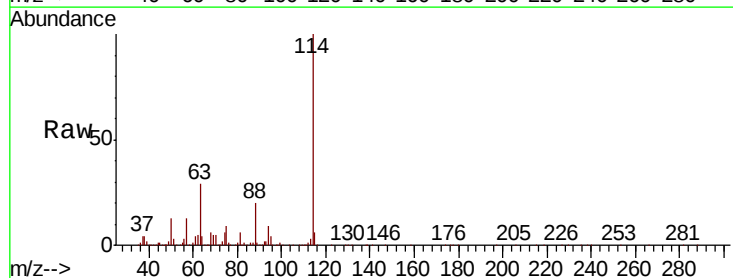
Instrument :
MSVOA_L
ClientSampleId :
AA-1

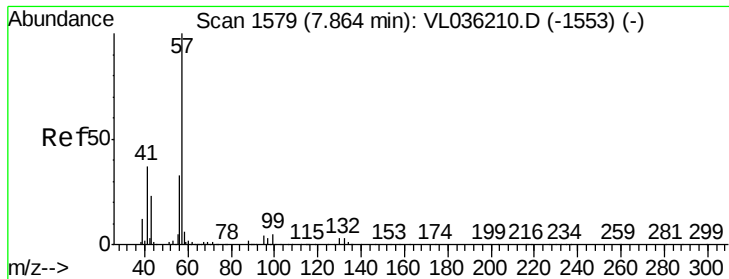
Tot Ion: 78 Resp: 64621
Ion Ratio Lower Upper
78 100
77 18.2 19.4 29.0#
50 27.6 17.4 26.2#



#39
1,2-Dichloropropane
Concen: 4.477 ppbv
RT: 7.18 min Scan# 1366
Delta R.T. -0.43 min
Lab File: VL036246.D
Acq: 20 Jan 2021 14:32

Tgt Ion: 63 Resp: 497389
Ion Ratio Lower Upper
63 100
41 0.1 66.1 99.1#
62 18.6 54.8 82.2#

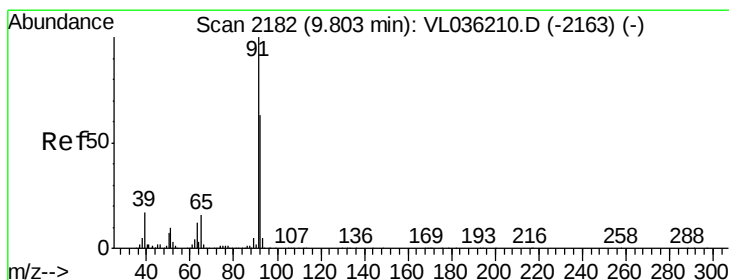
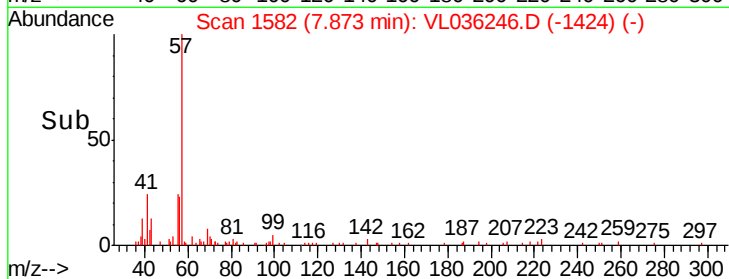
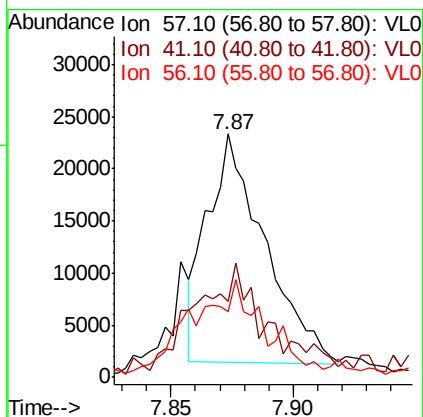
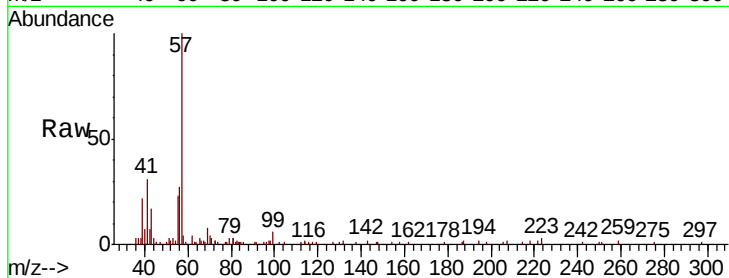




#44
 2,2,4-Trimethylpentane
 Concen: 0.071 ppbv
 RT: 7.87 min Scan# 1582
 Delta R.T. 0.01 min
 Lab File: VL036246.D
 Acq: 20 Jan 2021 14:32

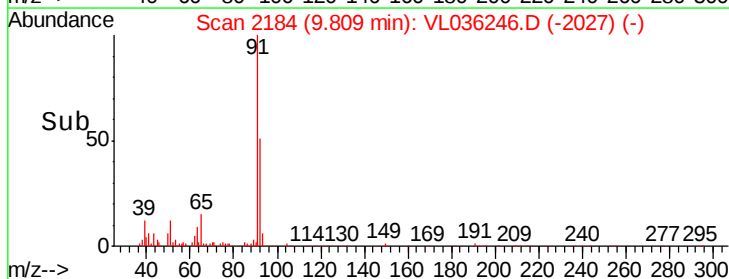
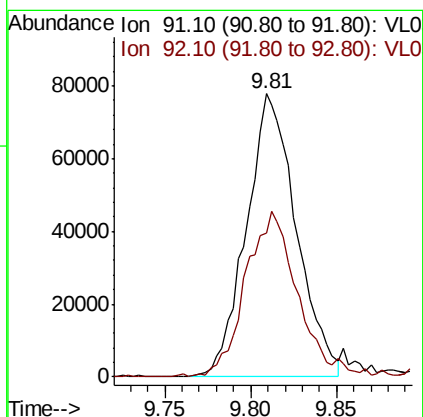
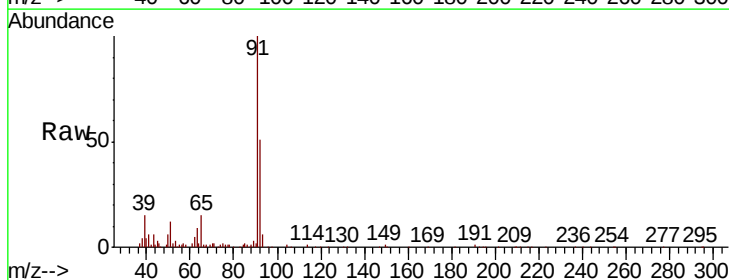
Instrument :
 MSVOA_L
 ClientSampleId :
 AA-1

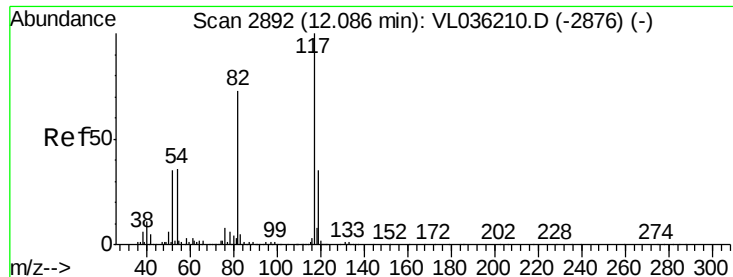
Tot Ion	57	Resp	35793
Ion	Ratio	Lower	Upper
57	100		
41	72.6	28.5	42.7#
56	63.5	25.5	38.3#



#53
 Toluene
 Concen: 0.512 ppbv
 RT: 9.81 min Scan# 2184
 Delta R.T. 0.01 min
 Lab File: VL036246.D
 Acq: 20 Jan 2021 14:32

Tgt Ion	91	Resp	156802
Ion	Ratio	Lower	Upper
91	100		
92	61.8	48.5	72.7

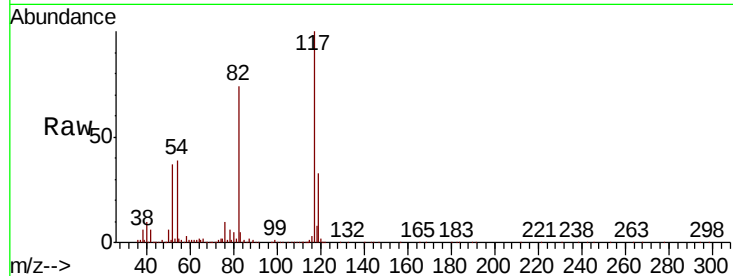




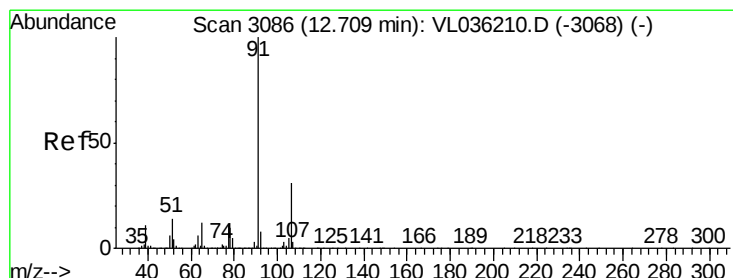
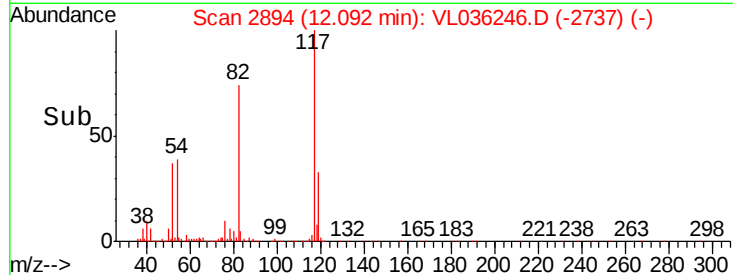
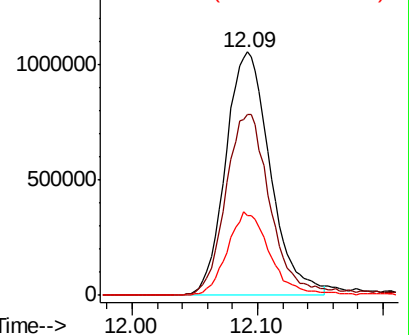
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 12.09 min Scan# 2894
Delta R.T. 0.01 min
Lab File: VL036246.D
Acq: 20 Jan 2021 14:32

Instrument :
MSVOA_L
ClientSampleId :
AA-1

Tot Ion:117 Resp: 2599205
Ion Ratio Lower Upper
117 100
82 77.0 59.7 89.5
119 33.9 28.6 43.0

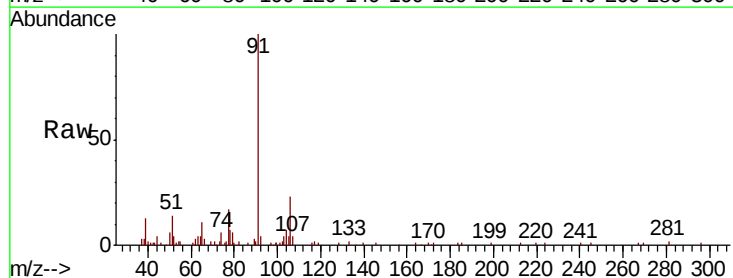


Abundance Ion 117.10 (116.80 to 117.80): V
Ion 82.10 (81.80 to 82.80): VL0
Ion 119.10 (118.80 to 119.80): V

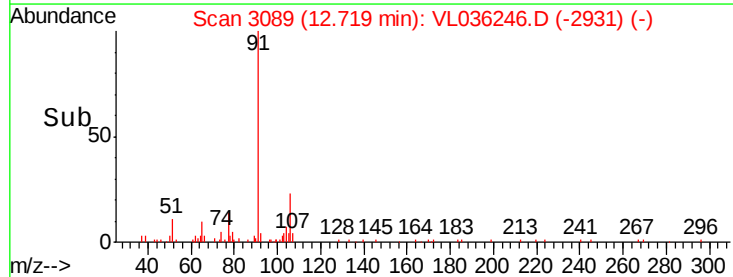
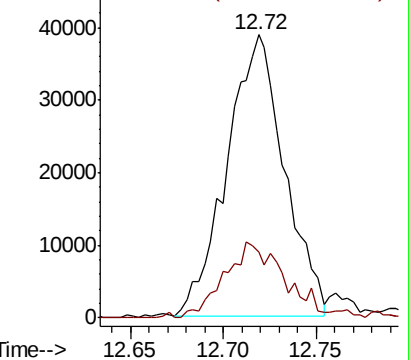


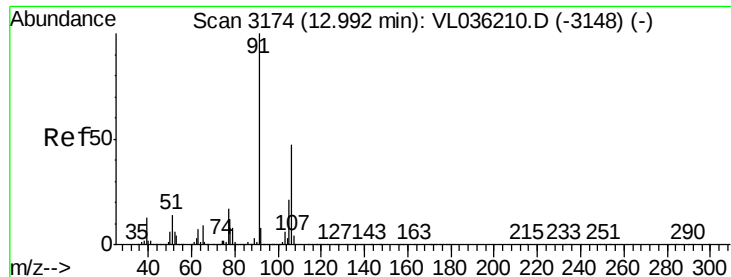
#58
Ethyl Benzene
Concen: 0.216 ppbv
RT: 12.72 min Scan# 3089
Delta R.T. 0.01 min
Lab File: VL036246.D
Acq: 20 Jan 2021 14:32

Tgt Ion: 91 Resp: 83266
Ion Ratio Lower Upper
91 100
106 22.9 24.8 37.2#



Abundance Ion 91.10 (90.80 to 91.80): VL0
Ion 106.10 (105.80 to 106.80): V

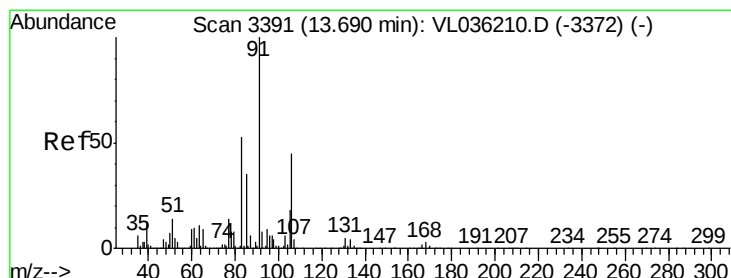
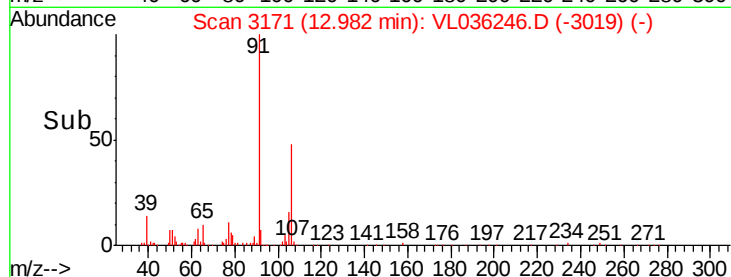
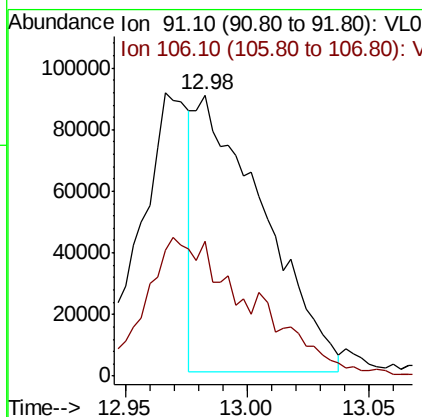
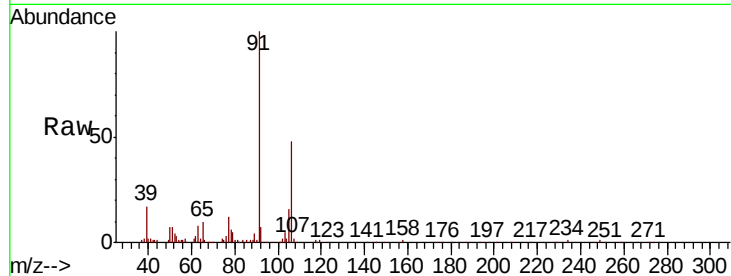




#59
m/p-Xylene
Concen: 0.529 ppbv
RT: 12.98 min Scan# 3171
Delta R.T. -0.01 min
Lab File: VL036246.D
Acq: 20 Jan 2021 14:32

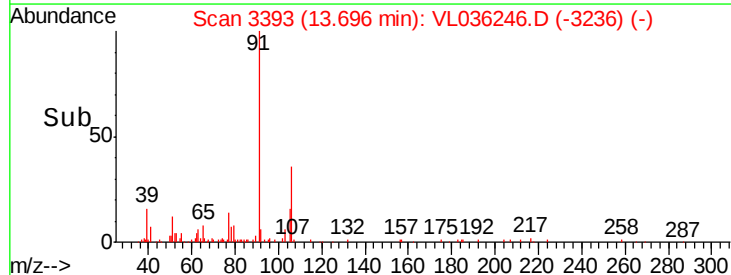
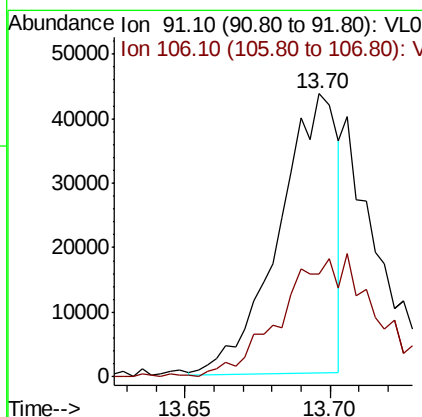
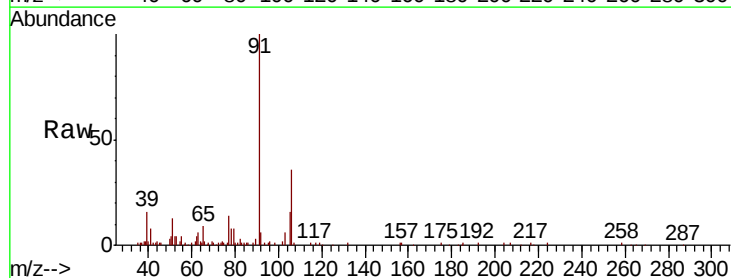
Instrument :
MSVOA_L
ClientSampleId :
AA-1

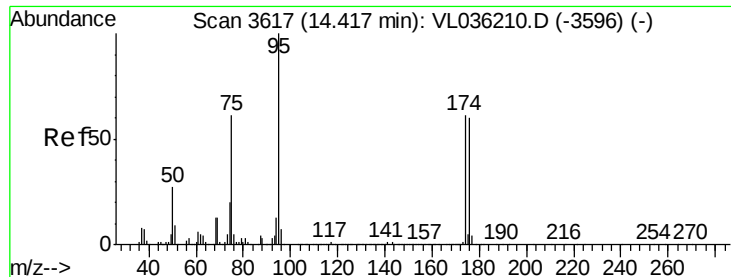
Tot Ion: 91 Resp: 175235
Ion Ratio Lower Upper
91 100
106 0.0 34.6 51.8#



#60
o-Xylene
Concen: 0.190 ppbv
RT: 13.70 min Scan# 3393
Delta R.T. 0.01 min
Lab File: VL036246.D
Acq: 20 Jan 2021 14:32

Tgt Ion: 91 Resp: 60645
Ion Ratio Lower Upper
91 100
106 0.0 21.9 65.8#





#68

1-Bromo-4-Fluorobenzene

Concen: 9.822 ppbv

RT: 14.42 min Scan# 3618

Delta R.T. 0.00 min

Lab File: VL036246.D

Acq: 20 Jan 2021 14:32

Instrument :

MSVOA_L

ClientSampled :

AA-1

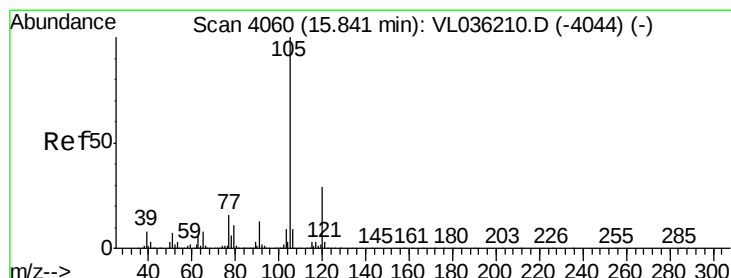
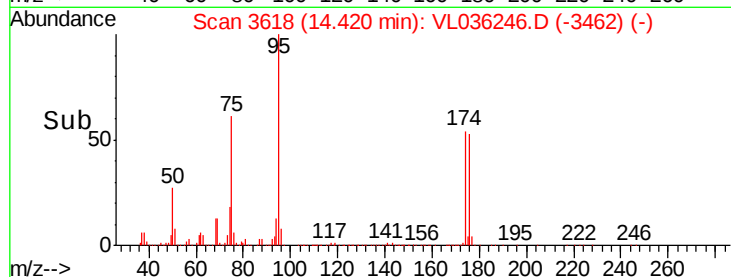
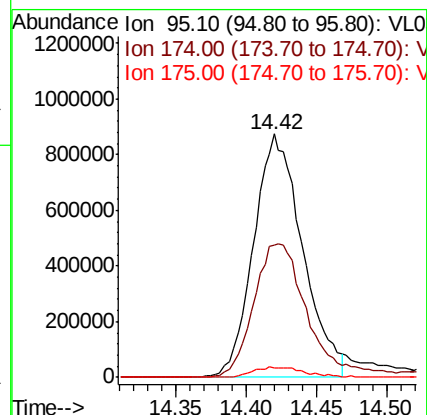
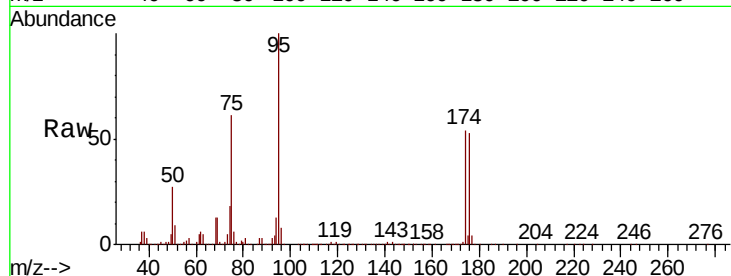
Tot Ion: 95 Resp: 2113098

Ion Ratio Lower Upper

95 100

174 64.1 49.4 74.0

175 4.7 3.8 5.8



#72

4-Ethyltoluene

Concen: 0.048 ppbv

RT: 15.85 min Scan# 4062

Delta R.T. 0.01 min

Lab File: VL036246.D

Acq: 20 Jan 2021 14:32

Tgt Ion: 105 Resp: 17129

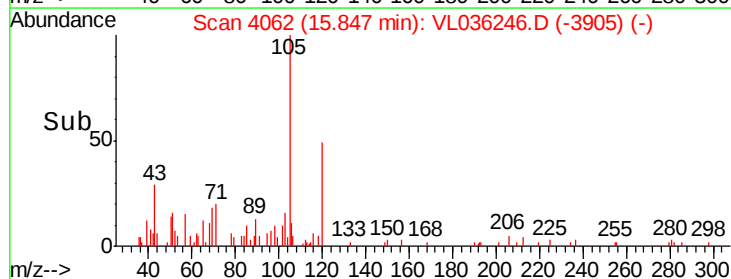
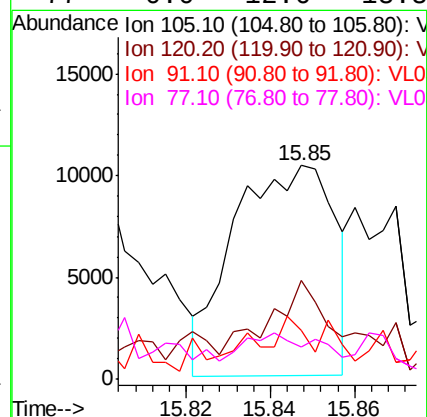
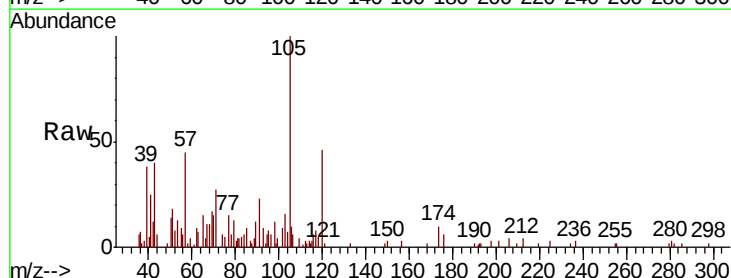
Ion Ratio Lower Upper

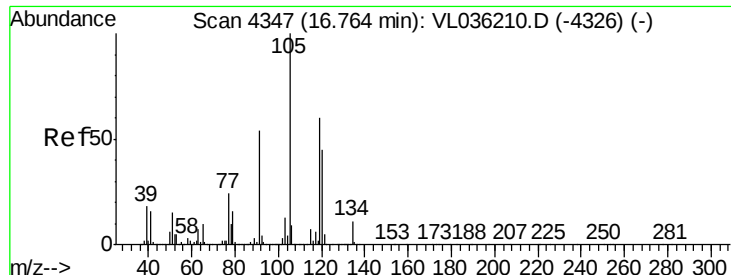
105 100

120 56.5 23.7 35.5#

91 33.9 11.9 17.9#

77 0.0 12.6 18.8#





#74
 1,2,4-Trimethylbenzene
 Concen: 0.090 ppbv
 RT: 16.77 min Scan# 4350
 Delta R.T. 0.01 min
 Lab File: VL036246.D
 Acq: 20 Jan 2021 14:32

Instrument :
 MSVOA_L
 ClientSampleId :
 AA-1

Tot Ion:	105	Resp:	31781
Ion	Ratio	Lower	Upper
105	100		
120	26.8	36.2	54.2#
91	8.4	43.3	64.9#
77	13.0	19.1	28.7#

