

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL062921\
 Data File : VL037252.D
 Acq On : 29 Jun 2021 17:00
 Operator : SY/AP
 Sample : M2887-03 10X
 Misc : 400mL/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :

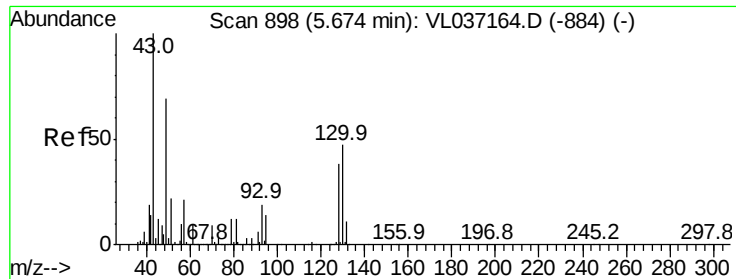
Quant Time: Jun 30 05:21:45 2021
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL061621AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LWed Jun 16 14:06:32 2021
 QLast Update : Wed Jun 16 14:06:32 2021
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.66	49	1742088	10.00	ppbv	-0.02
33) 1,4-Difluorobenzene	7.17	114	5095654	10.00	ppbv	-0.02
55) Chlorobenzene-d5	12.08	117	4537571	10.00	ppbv	-0.02

System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	14.40	95	3429616	9.97	ppbv	-0.02
Spiked Amount	10.000	Range	65 - 135	Recovery	=	99.70%

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.04	85	10928	0.036	ppbv	99
9) Propene	3.01	41	2150823	19.858	ppbv	95
10) Heptane	8.11	43	114556	0.437	ppbv #	35
13) Ethanol	3.61	45	15372	0.917	ppbv #	7
15) Acetone	3.84	43	1929512	9.822	ppbv	99
16) 1,3-Butadiene	3.30	39	1203004	10.358	ppbv #	33
17) tert-Butyl alcohol	4.31	59	16897	0.093	ppbv #	71
20) Methylene Chloride	4.34	84	301665	2.565	ppbv	98
21) Allyl Chloride	4.39	41	29282	0.198	ppbv #	1
23) Vinyl Acetate	5.06	43	58221	0.207	ppbv #	34
25) Ethyl Acetate	5.68	43	337739	0.794	ppbv #	78
26) Hexane	5.68	57	456539	2.124	ppbv #	44
27) Carbon Disulfide	4.55	76	17788	0.084	ppbv #	59
30) Cyclohexane	7.11	84	16487	0.092	ppbv #	1
34) 2-Butanone	5.24	43	1026434	5.179	ppbv	99
36) Benzene	6.88	78	233685	0.567	ppbv	98
39) 1,2-Dichloropropane	7.17	63	1235425	8.069	ppbv #	24
41) Tetrahydrofuran	5.98	42	9184	0.100	ppbv #	41
51) 2-Hexanone	10.14	43	51895	0.392	ppbv #	29
53) Toluene	9.79	91	300230	0.610	ppbv	99
58) Ethyl Benzene	12.70	91	56871	0.091	ppbv #	84
60) o-Xylene	13.68	91	26621	0.053	ppbv #	30
69) p-Isopropyltoluene	17.65	119	74634	0.104	ppbv #	89
74) 1,2,4-Trimethylbenzene	16.76	105	25459	0.045	ppbv #	69

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



#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.66 min Scan# 893

Delta R.T. -0.02 min

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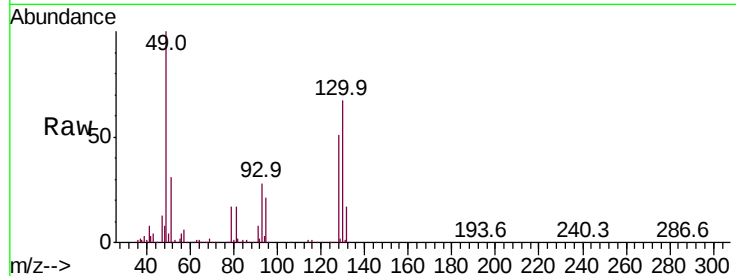
Tot Ion: 49 Resp: 1742088

Ion Ratio Lower Upper

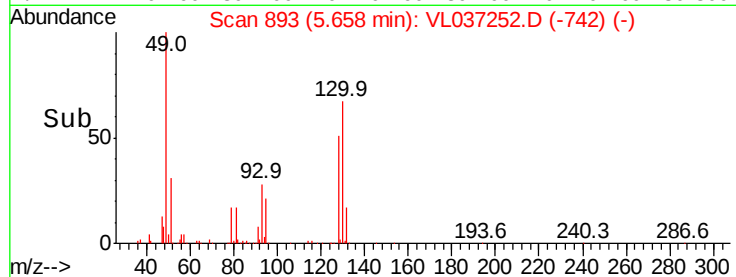
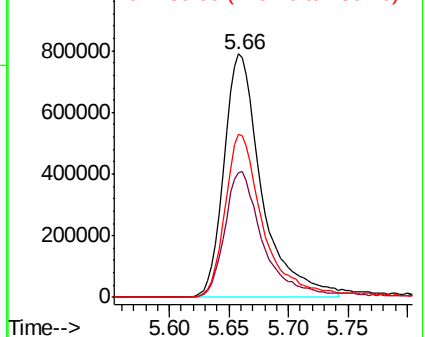
49 100

128 54.5 29.3 88.0

130 69.3 35.9 107.8



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



#2

Dichlorodifluoromethane

Concen: 0.036 ppbv

RT: 3.04 min Scan# 79

Delta R.T. -0.01 min

Lab File: VL037252.D

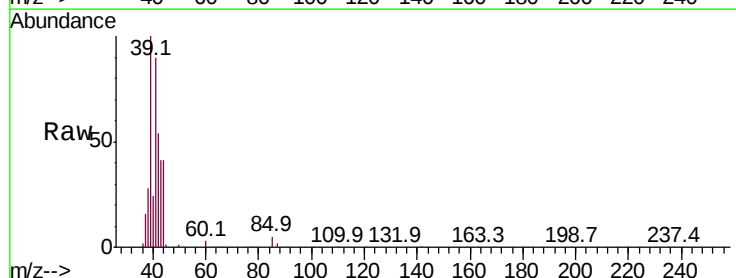
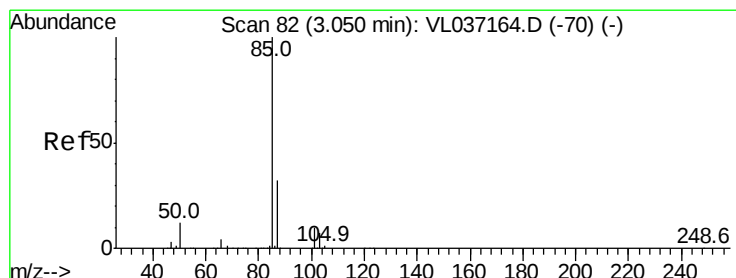
Acq: 29 Jun 2021 17:00

Tgt Ion: 85 Resp: 10928

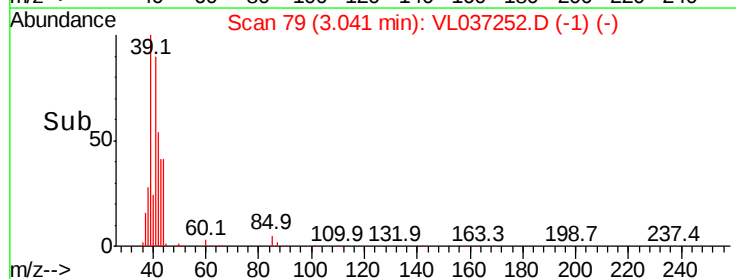
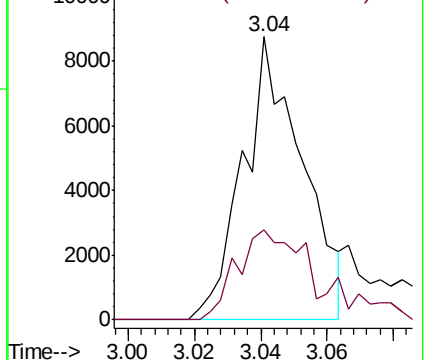
Ion Ratio Lower Upper

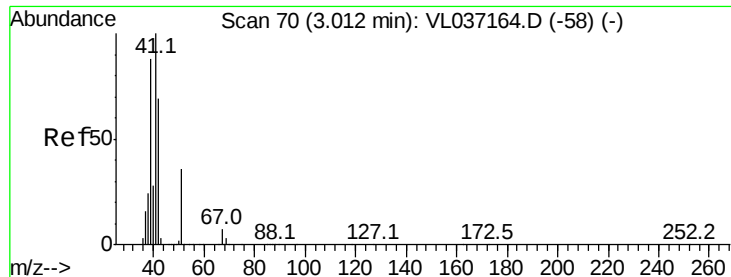
85 100

87 31.7 25.8 38.6



Abundance Ion 85.00 (84.70 to 85.70): VL0
Ion 87.00 (86.70 to 87.70): VL0





#9

Propene

Concen: 19.858 ppbv

RT: 3.01 min Scan# 68

Delta R.T. -0.01 min

Lab File: VL037252.D

Acq: 29 Jun 2021 17:00

Instrument :

MSVOA_L

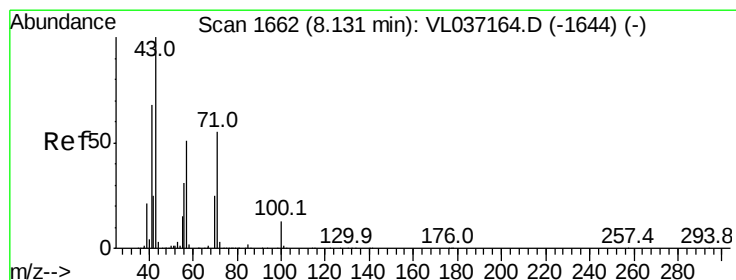
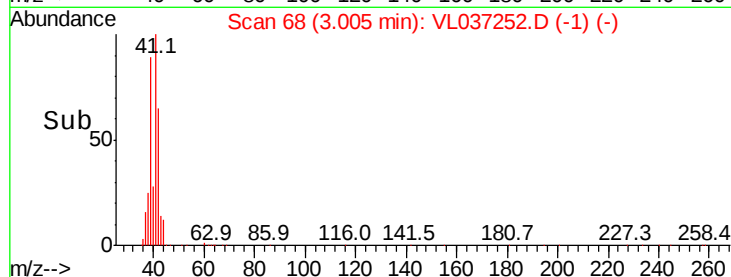
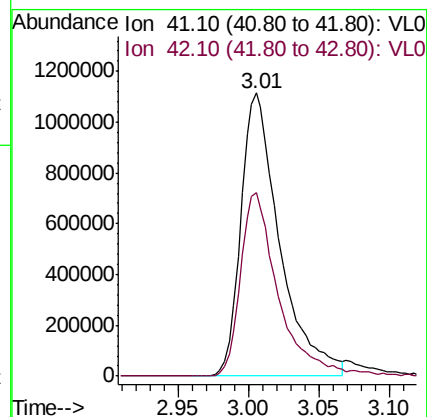
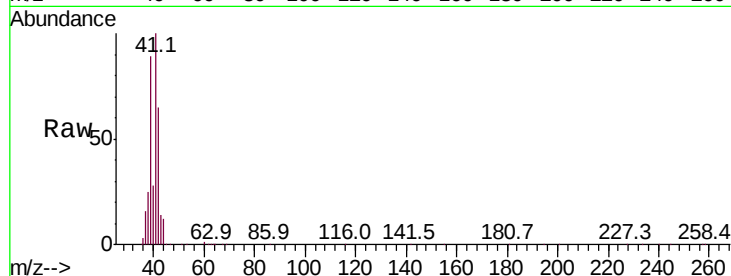
ClientSampleId :

Tot Ion: 41 Resp: 2150823

Ion Ratio Lower Upper

41 100

42 64.0 54.5 81.7



#10

Heptane

Concen: 0.437 ppbv

RT: 8.11 min Scan# 1655

Delta R.T. -0.02 min

Lab File: VL037252.D

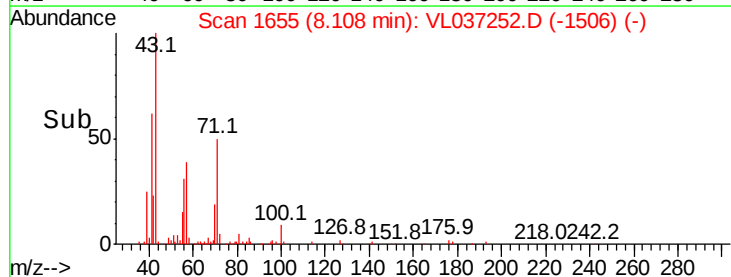
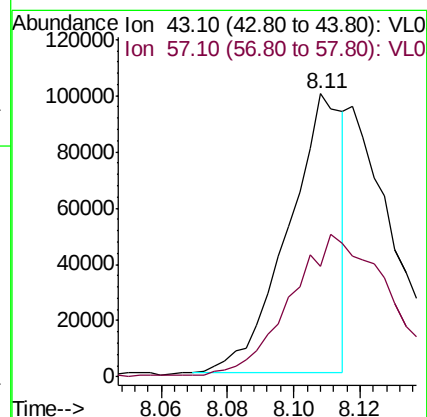
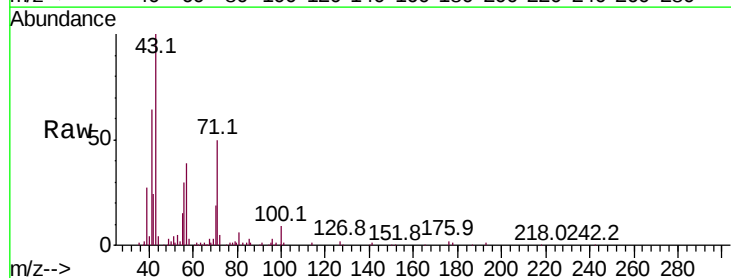
Acq: 29 Jun 2021 17:00

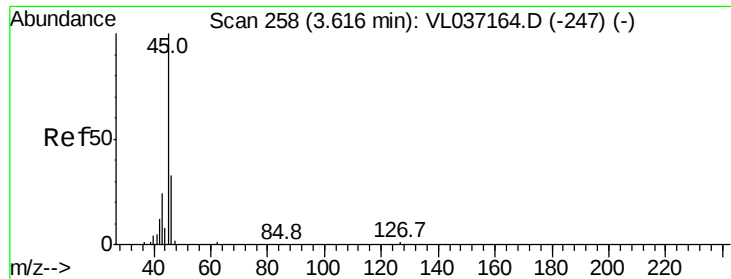
Tgt Ion: 43 Resp: 114556

Ion Ratio Lower Upper

43 100

57 95.7 40.6 61.0#

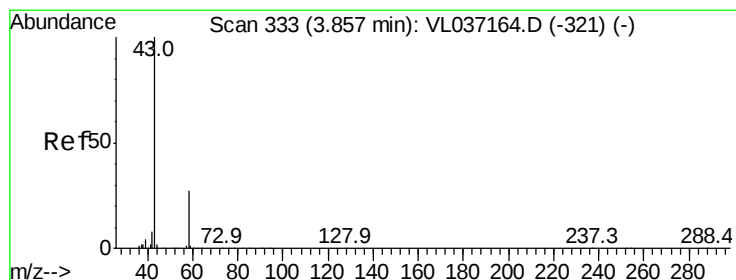
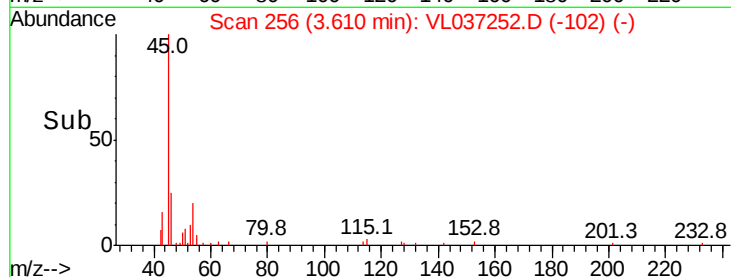
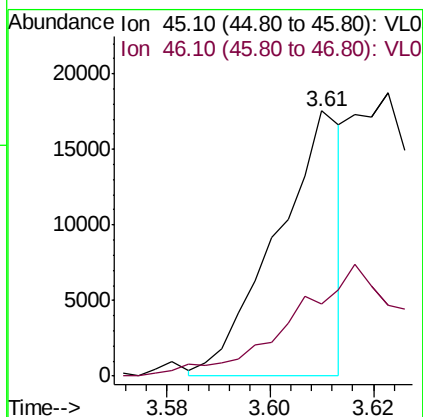
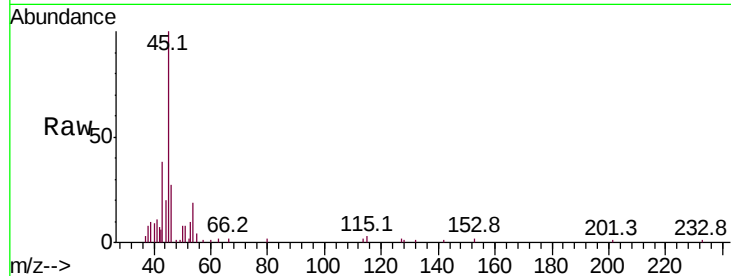




#13
Ethanol
Concen: 0.917 ppbv
RT: 3.61 min Scan# 256
Delta R.T. -0.01 min
Lab File: VL037252.D
Acq: 29 Jun 2021 17:00

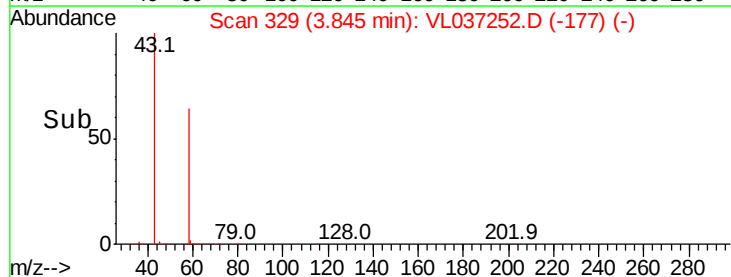
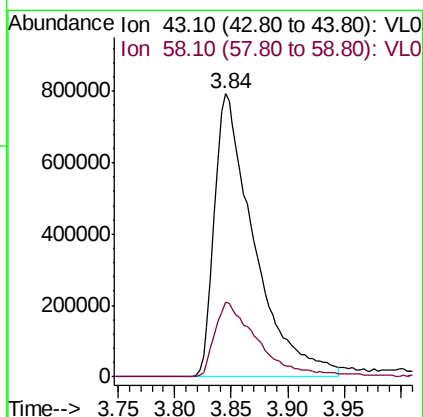
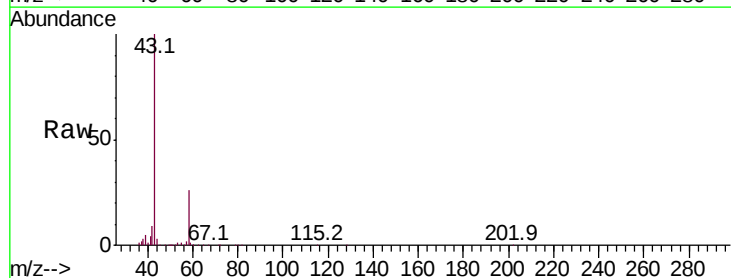
Instrument :
MSVOA_L
ClientSampleId :

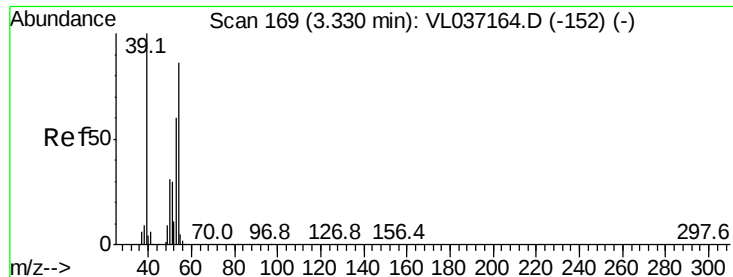
Tot Ion: 45 Resp: 15372
Ion Ratio Lower Upper
45 100
46 0.0 34.2 137.0#



#15
Acetone
Concen: 9.822 ppbv
RT: 3.84 min Scan# 329
Delta R.T. -0.01 min
Lab File: VL037252.D
Acq: 29 Jun 2021 17:00

Tgt Ion: 43 Resp: 1929512
Ion Ratio Lower Upper
43 100
58 29.9 23.7 35.5

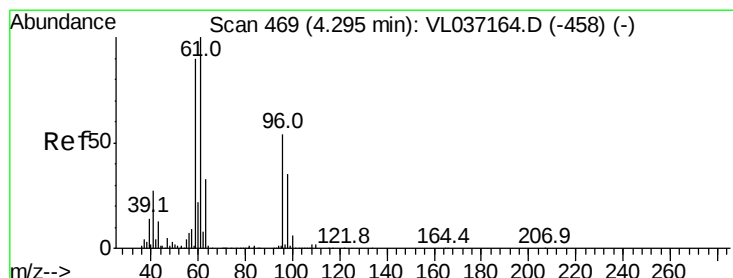
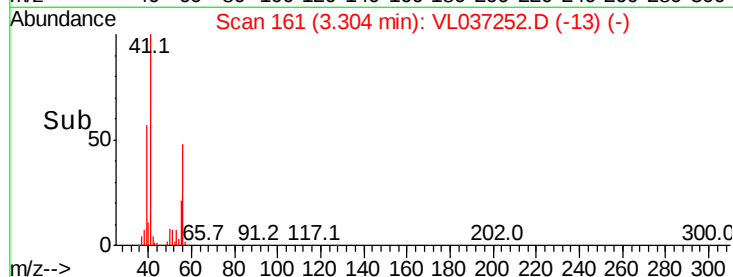
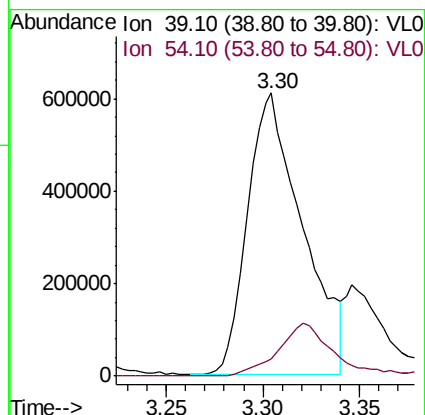
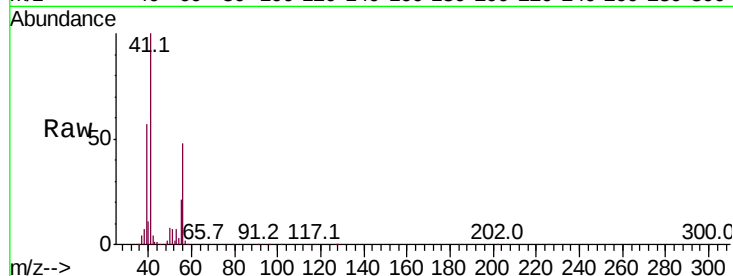




#16
1,3-Butadiene
Concen: 10.358 ppbv
RT: 3.30 min Scan# 161
Delta R.T. -0.03 min
Lab File: VL037252.D
Acq: 29 Jun 2021 17:00

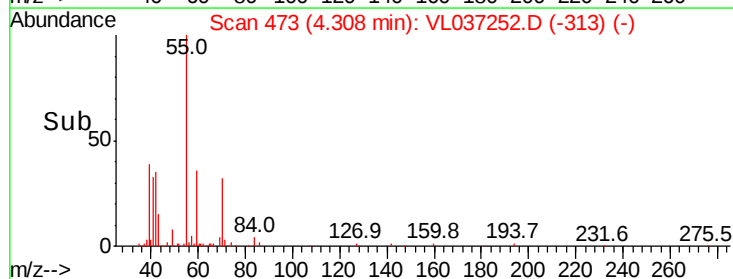
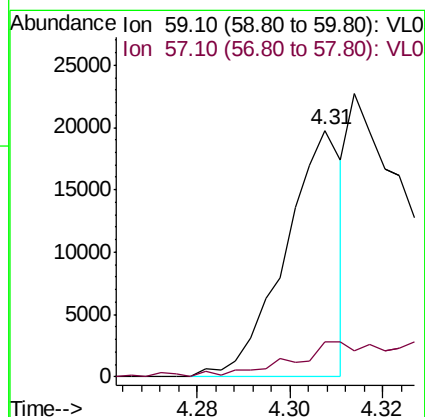
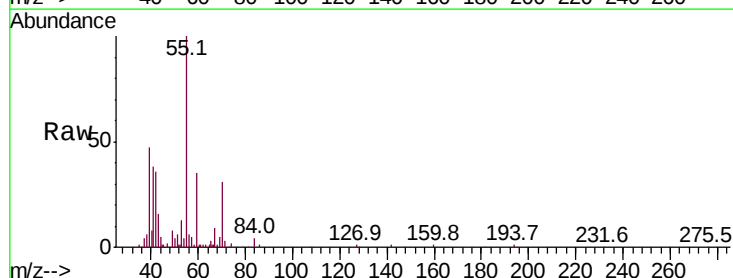
Instrument :
MSVOA_L
ClientSampleId :

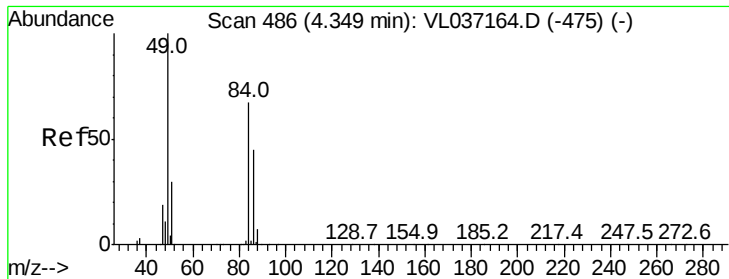
Tot Ion: 39 Resp: 1203004
Ion Ratio Lower Upper
39 100
54 18.6 61.2 91.8#



#17
tert-Butyl alcohol
Concen: 0.093 ppbv
RT: 4.31 min Scan# 473
Delta R.T. 0.01 min
Lab File: VL037252.D
Acq: 29 Jun 2021 17:00

Tgt Ion: 59 Resp: 16897
Ion Ratio Lower Upper
59 100
57 0.0 8.8 13.2#

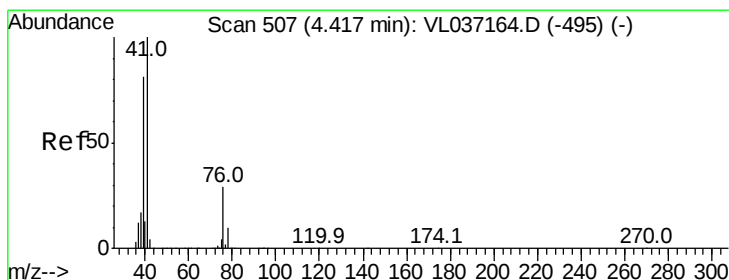
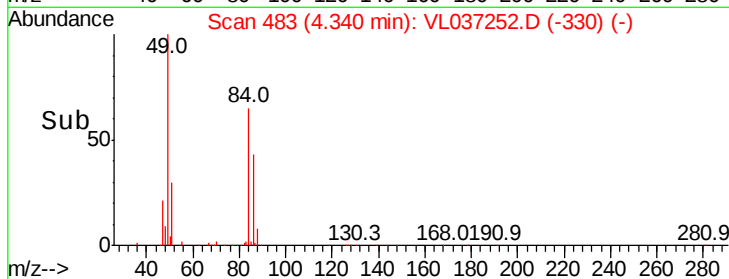
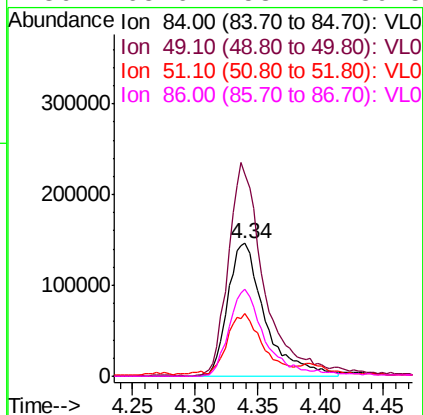
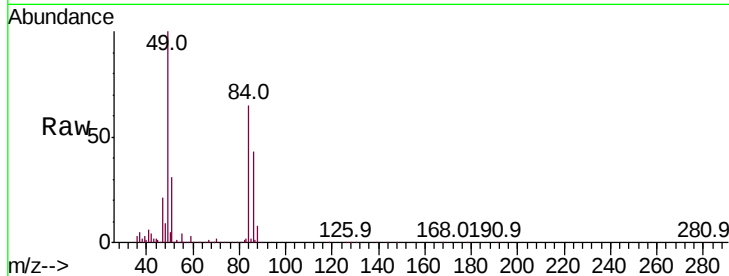




#20
Methylene Chloride
Concen: 2.565 ppbv
RT: 4.34 min Scan# 483
Delta R.T. -0.01 min
Lab File: VL037252.D
Acq: 29 Jun 2021 17:00

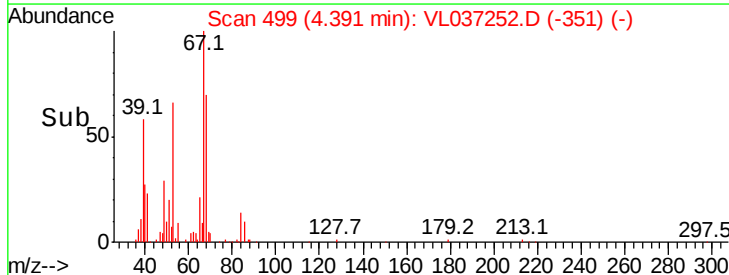
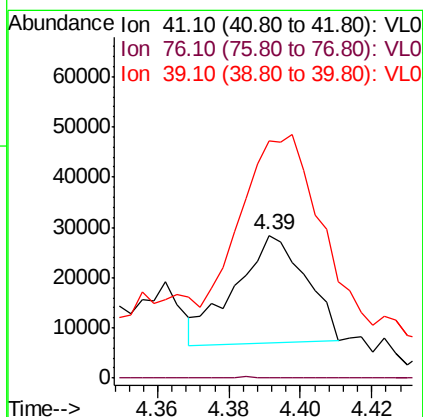
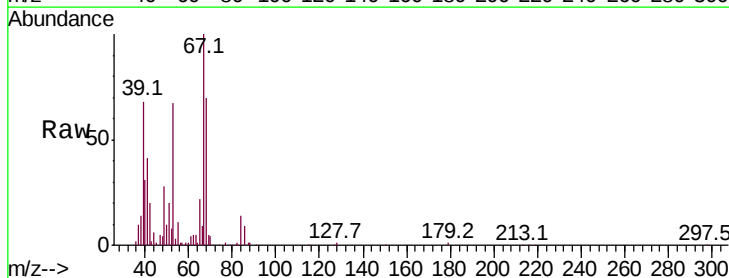
Instrument :
MSVOA_L
ClientSampleId :

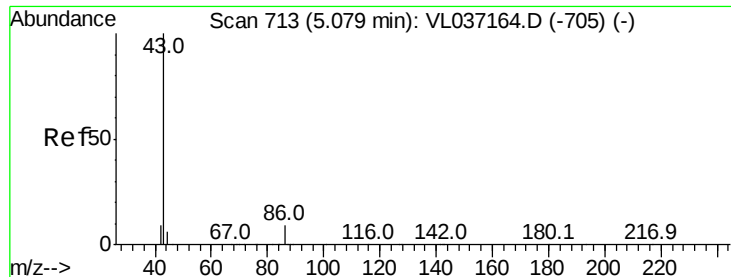
Tot Ion:	84	Resp:	301665
Ion	Ratio	Lower	Upper
84	100		
49	152.4	119.7	179.5
51	44.6	36.1	54.1
86	65.6	53.7	80.5



#21
Allyl Chloride
Concen: 0.198 ppbv
RT: 4.39 min Scan# 499
Delta R.T. -0.03 min
Lab File: VL037252.D
Acq: 29 Jun 2021 17:00

Tgt Ion:	41	Resp:	29282
Ion	Ratio	Lower	Upper
41	100		
76	0.0	24.6	37.0#
39	426.1	65.4	98.0#

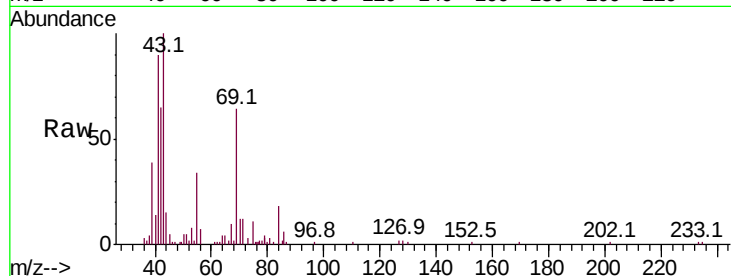




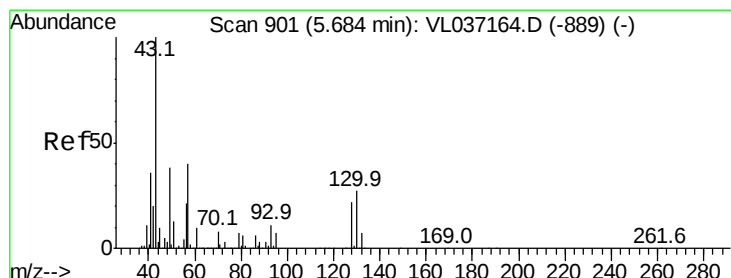
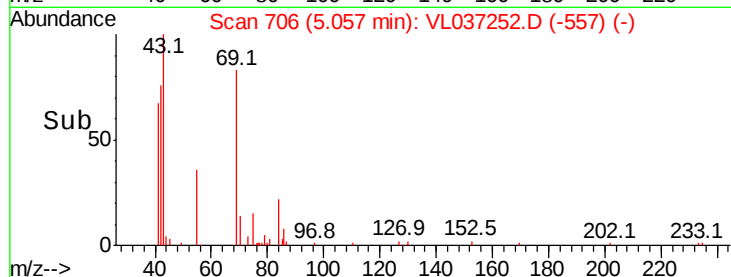
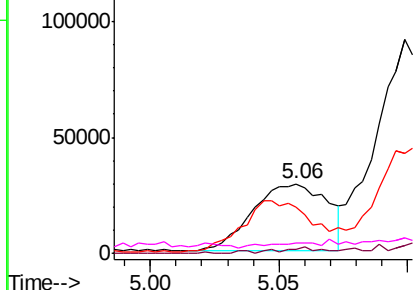
#23
 Vinyl Acetate
 Concen: 0.207 ppbv
 RT: 5.06 min Scan# 706
 Delta R.T. -0.02 min
 Lab File: VL037252.D
 Acq: 29 Jun 2021 17:00

Instrument :
 MSVOA_L
 ClientSampled :

Tot Ion:	43	Resp:	58221
Ion	Ratio	Lower	Upper
43	100		
86	7.7	5.8	8.8
42	64.7	8.2	12.2#
44	6.3	4.2	6.4

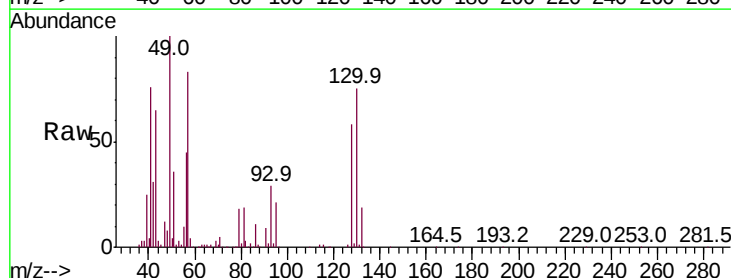


Abundance Ion 43.10 (42.80 to 43.80): VL0
 Ion 86.10 (85.80 to 86.80): VL0
 Ion 42.10 (41.80 to 42.80): VL0
 Ion 44.10 (43.80 to 44.80): VL0

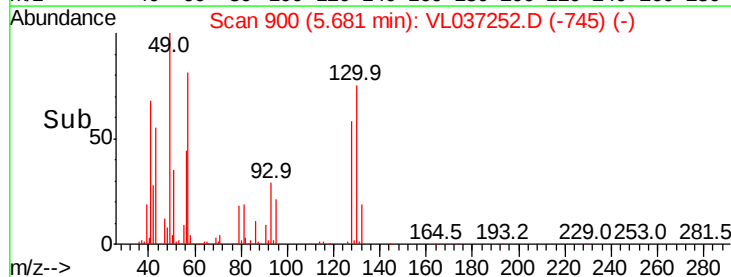
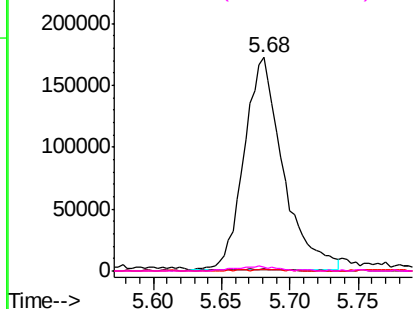


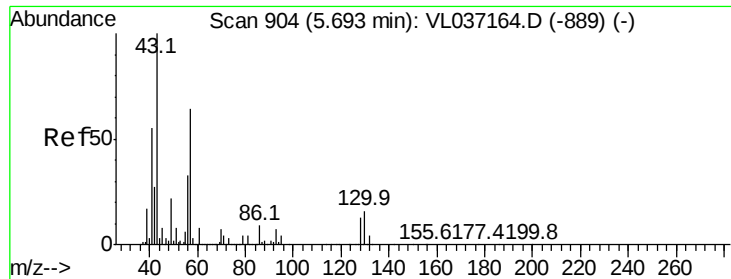
#25
 Ethyl Acetate
 Concen: 0.794 ppbv
 RT: 5.68 min Scan# 900
 Delta R.T. -0.00 min
 Lab File: VL037252.D
 Acq: 29 Jun 2021 17:00

Tgt Ion:	43	Resp:	337739
Ion	Ratio	Lower	Upper
43	100		
45	1.2	8.0	12.0#
61	0.6	8.1	12.1#
70	2.6	5.5	8.3#



Abundance Ion 43.10 (42.80 to 43.80): VL0
 Ion 45.10 (44.80 to 45.80): VL0
 Ion 61.10 (60.80 to 61.80): VL0
 Ion 70.10 (69.80 to 70.80): VL0

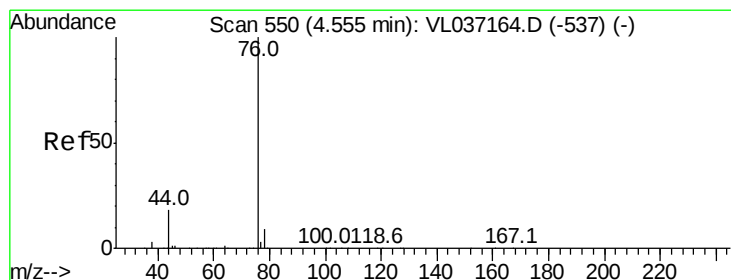
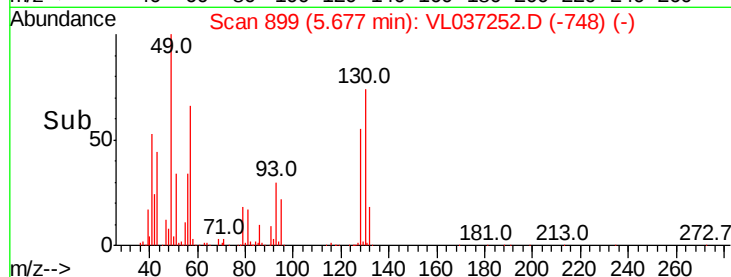
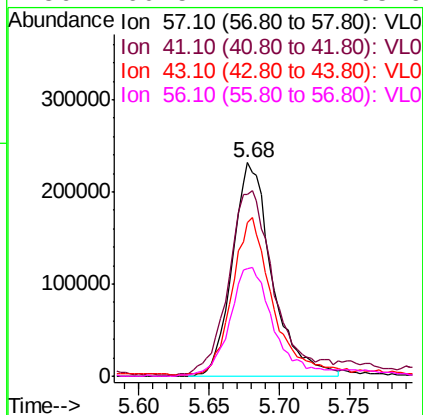
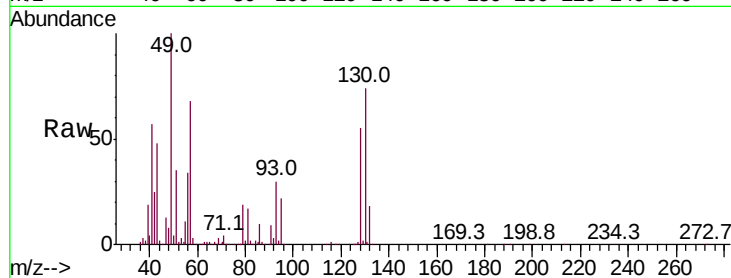




#26
Hexane
Concen: 2.124 ppbv
RT: 5.68 min Scan# 899
Delta R.T. -0.02 min
Lab File: VL037252.D
Acq: 29 Jun 2021 17:00

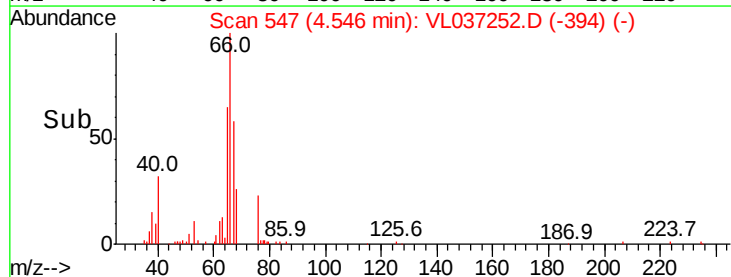
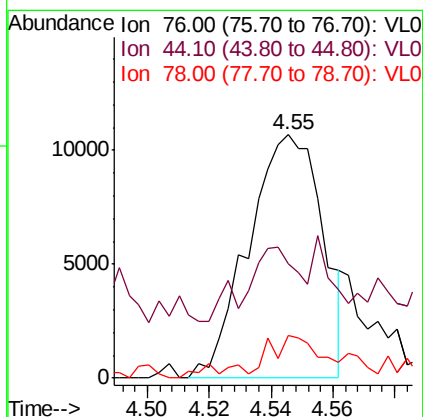
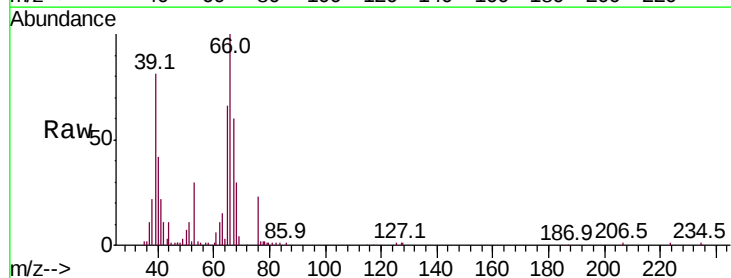
Instrument :
MSVOA_L
ClientSampleId :

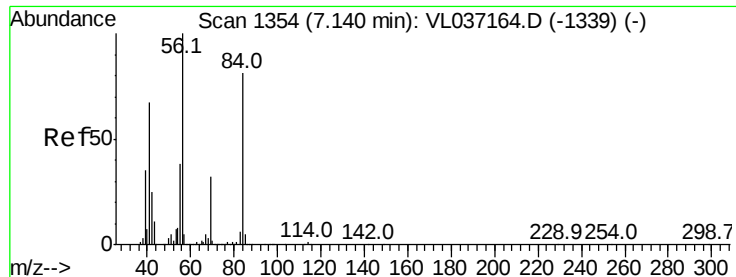
Tot Ion: 57 Resp: 456539
Ion Ratio Lower Upper
57 100
41 106.6 73.5 110.3
43 78.5 170.7 256.1#
56 60.5 42.4 63.6



#27
Carbon Disulfide
Concen: 0.084 ppbv
RT: 4.55 min Scan# 547
Delta R.T. -0.01 min
Lab File: VL037252.D
Acq: 29 Jun 2021 17:00

Tgt Ion: 76 Resp: 17788
Ion Ratio Lower Upper
76 100
44 43.0 15.4 23.2#
78 17.4 8.0 12.0#

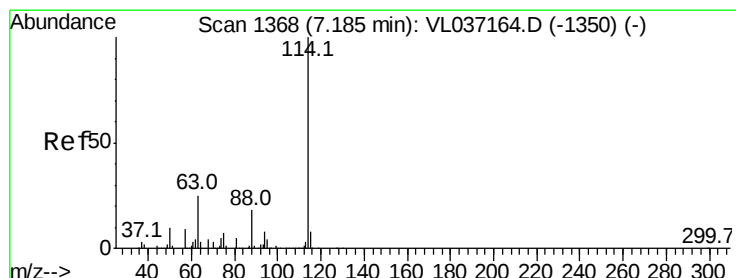
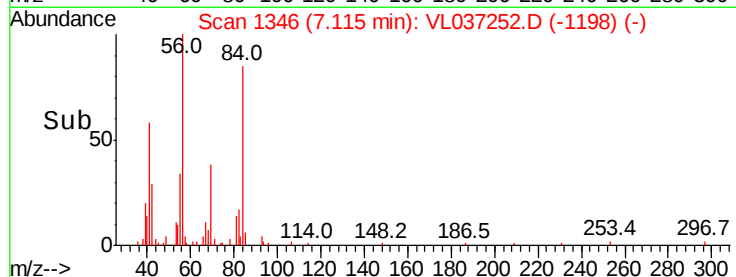
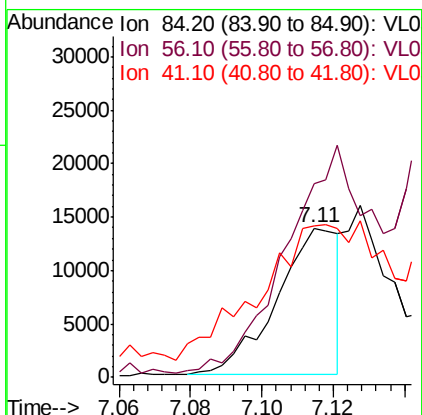
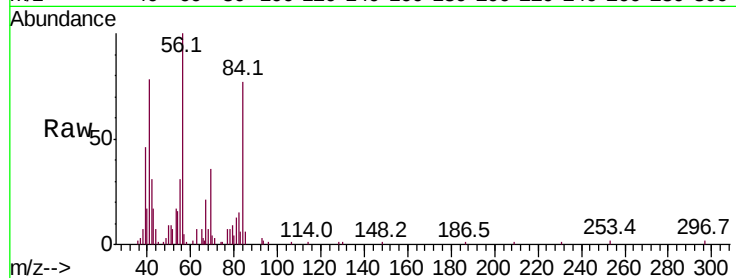




#30
Cvclohexane
Concen: 0.092 ppbv
RT: 7.11 min Scan# 1346
Delta R.T. -0.03 min
Lab File: VL037252.D
Acq: 29 Jun 2021 17:00

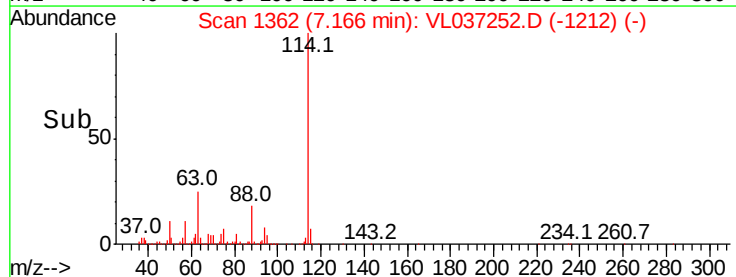
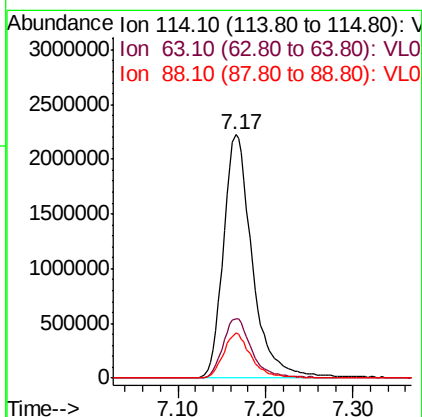
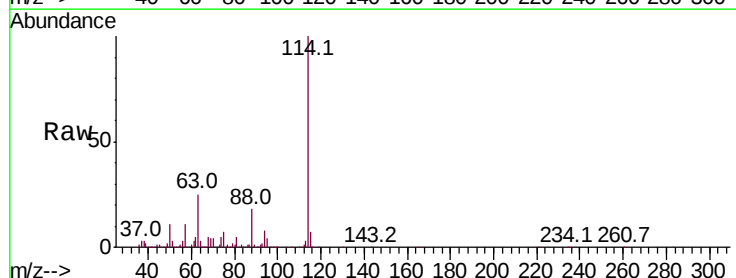
Instrument :
MSVOA_L
ClientSampled :

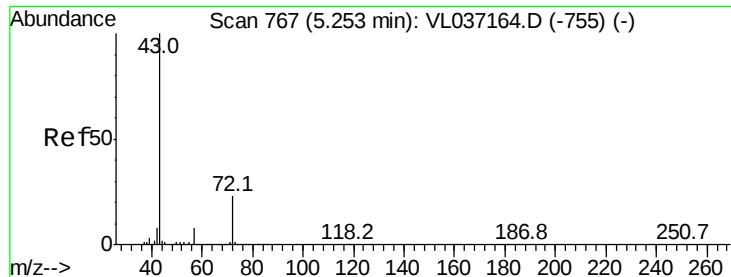
Tot Ion: 84 Resp: 16487
Ion Ratio Lower Upper
84 100
56 0.0 107.7 161.5#
41 0.0 69.0 103.6#



#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 7.17 min Scan# 1362
Delta R.T. -0.02 min
Lab File: VL037252.D
Acq: 29 Jun 2021 17:00

Tgt Ion:114 Resp: 5095654
Ion Ratio Lower Upper
114 100
63 24.6 19.6 29.4
88 18.0 14.2 21.2

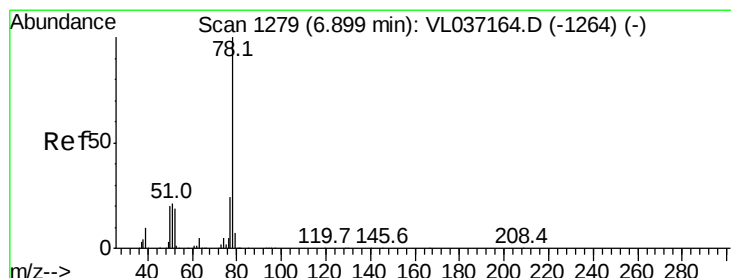
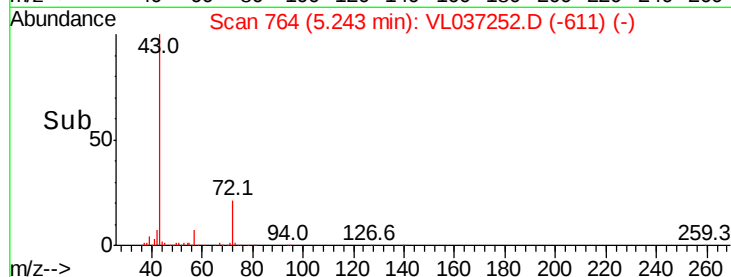
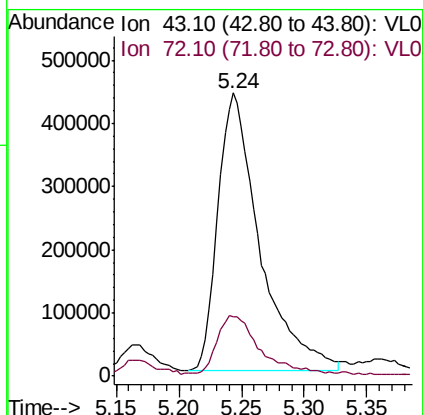
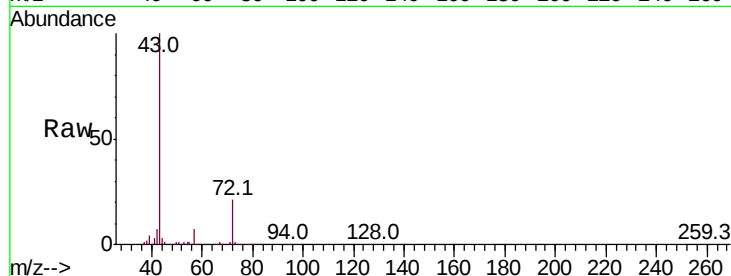




#34
2-Butanone
Concen: 5.179 ppbv
RT: 5.24 min Scan# 764
Delta R.T. -0.01 min
Lab File: VL037252.D
Acq: 29 Jun 2021 17:00

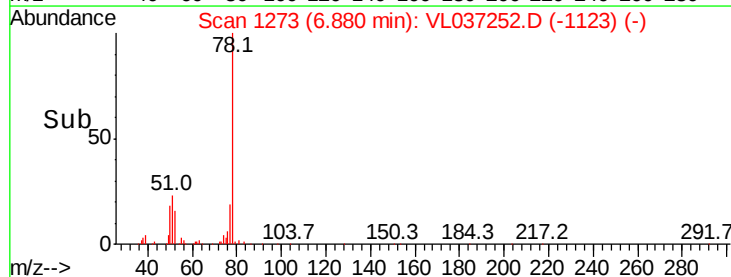
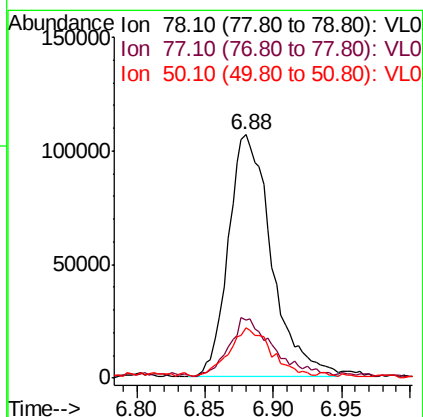
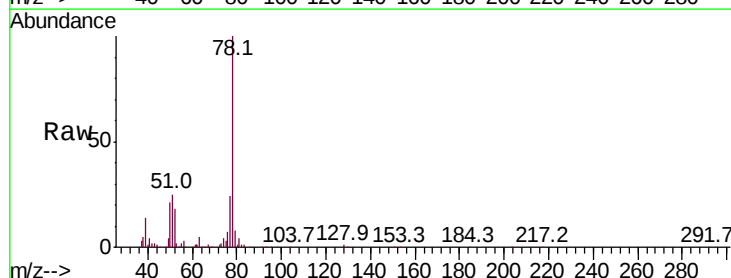
Instrument :
MSVOA_L
ClientSampleId :

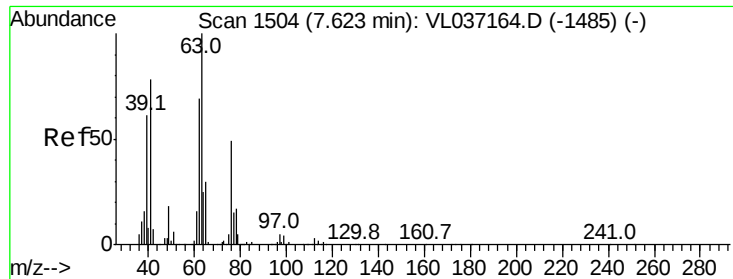
Tot Ion: 43 Resp: 1026434
Ion Ratio Lower Upper
43 100
72 24.0 18.9 28.3



#36
Benzene
Concen: 0.567 ppbv
RT: 6.88 min Scan# 1273
Delta R.T. -0.02 min
Lab File: VL037252.D
Acq: 29 Jun 2021 17:00

Tgt Ion: 78 Resp: 233685
Ion Ratio Lower Upper
78 100
77 22.2 19.0 28.6
50 19.9 15.7 23.5





#39

1,2-Dichloropropane

Concen: 8.069 ppbv

RT: 7.17 min Scan# 1362

Delta R.T. -0.46 min

Lab File: VL037252.D

Acq: 29 Jun 2021 17:00

Instrument :

MSVOA_L

ClientSampleId :

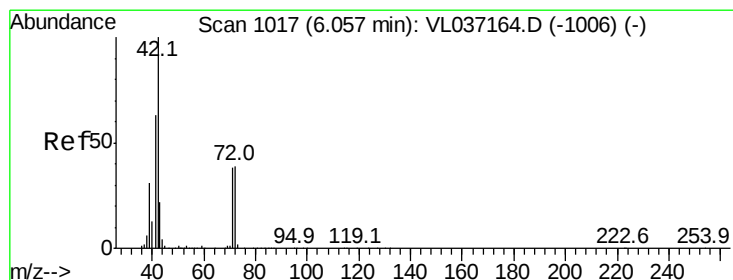
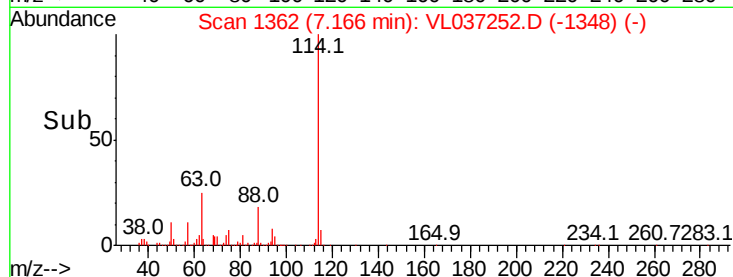
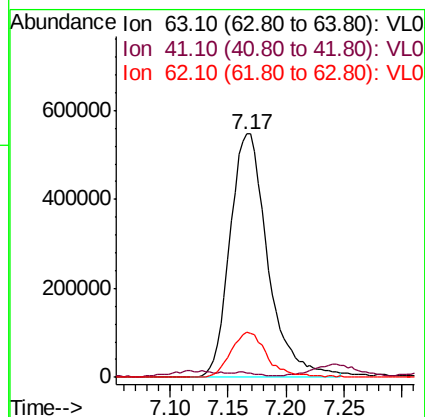
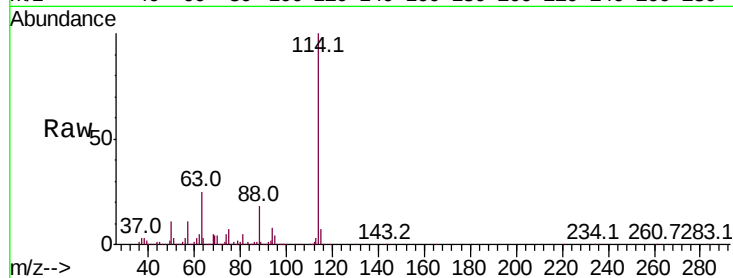
Tot Ion: 63 Resp: 1235425

Ion Ratio Lower Upper

63 100

41 0.0 62.0 93.0#

62 18.4 54.9 82.3#



#41

Tetrahydrofuran

Concen: 0.100 ppbv

RT: 5.98 min Scan# 992

Delta R.T. -0.08 min

Lab File: VL037252.D

Acq: 29 Jun 2021 17:00

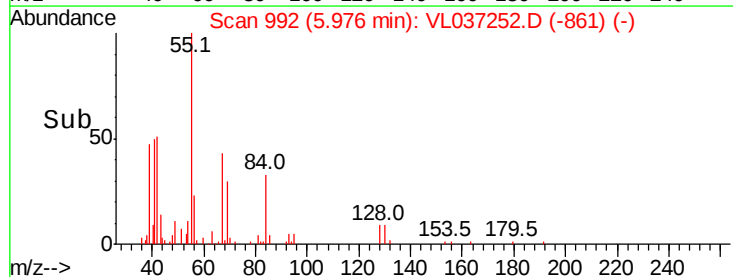
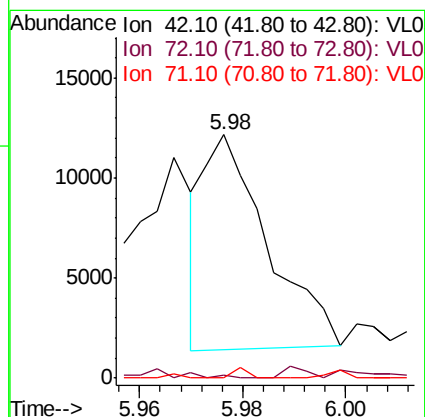
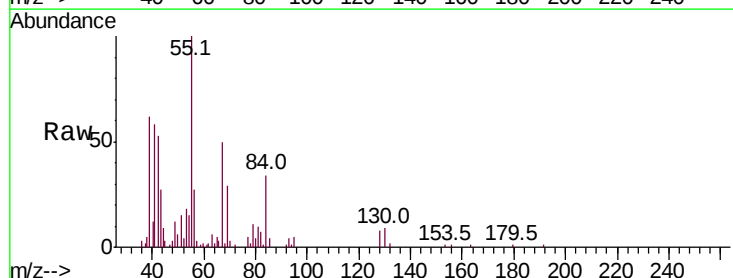
Tgt Ion: 42 Resp: 9184

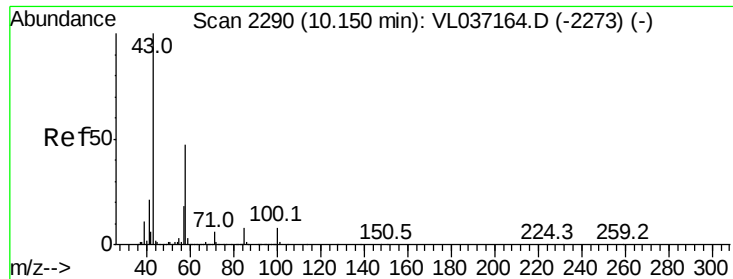
Ion Ratio Lower Upper

42 100

72 6.5 33.0 49.4#

71 0.0 31.0 46.6#

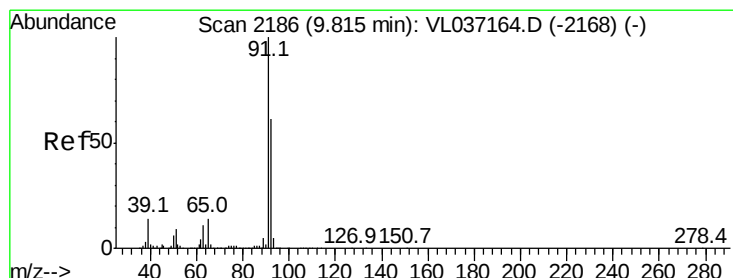
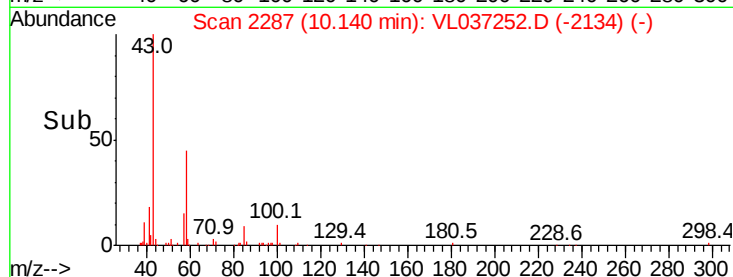
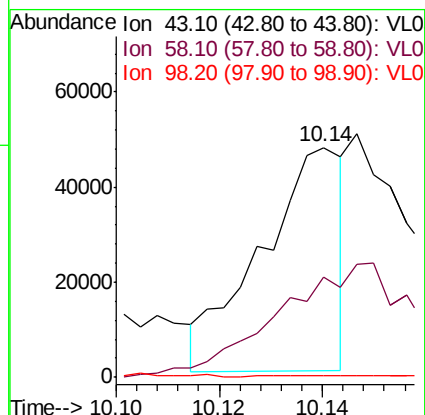
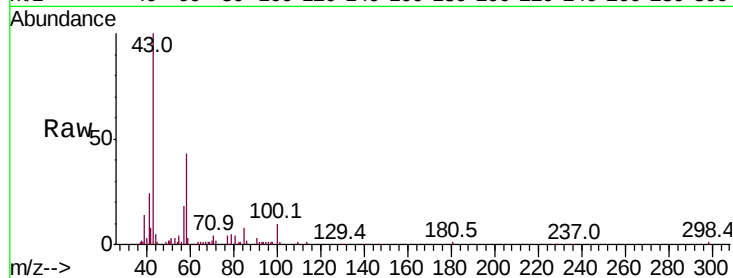




#51
2-Hexanone
Concen: 0.392 ppbv
RT: 10.14 min Scan# 2287
Delta R.T. -0.01 min
Lab File: VL037252.D
Acq: 29 Jun 2021 17:00

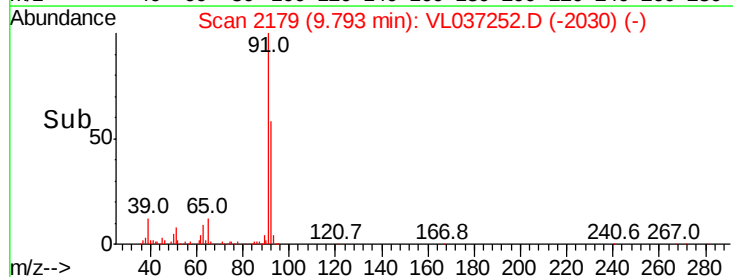
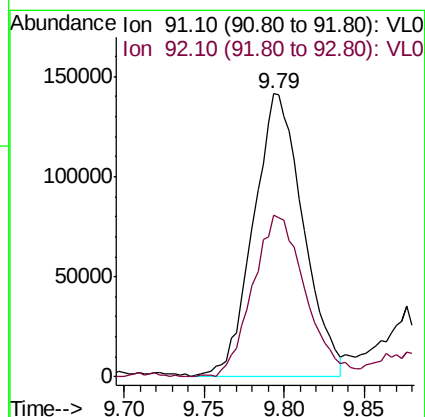
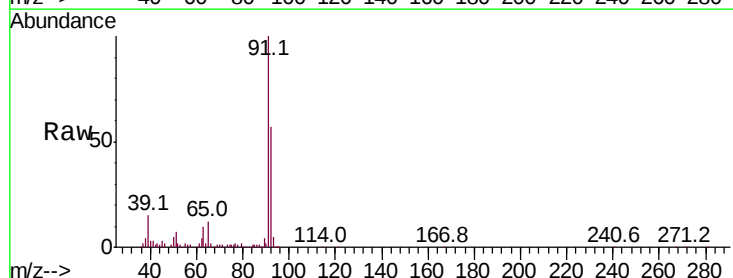
Instrument :
MSVOA_L
ClientSampleId :

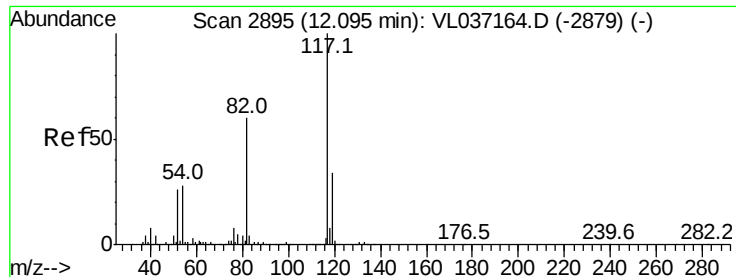
Tot Ion: 43 Resp: 51895
Ion Ratio Lower Upper
43 100
58 0.0 38.4 57.6#
98 0.0 0.3 0.5#



#53
Toluene
Concen: 0.610 ppbv
RT: 9.79 min Scan# 2179
Delta R.T. -0.02 min
Lab File: VL037252.D
Acq: 29 Jun 2021 17:00

Tgt Ion: 91 Resp: 300230
Ion Ratio Lower Upper
91 100
92 60.8 48.3 72.5

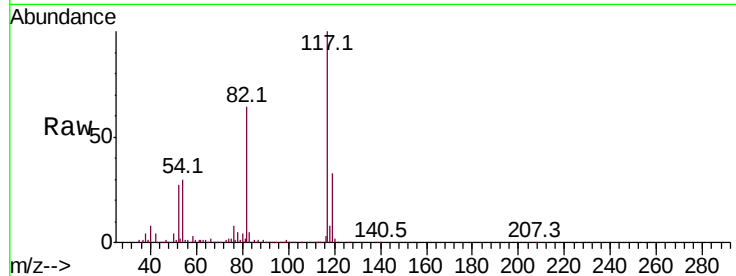




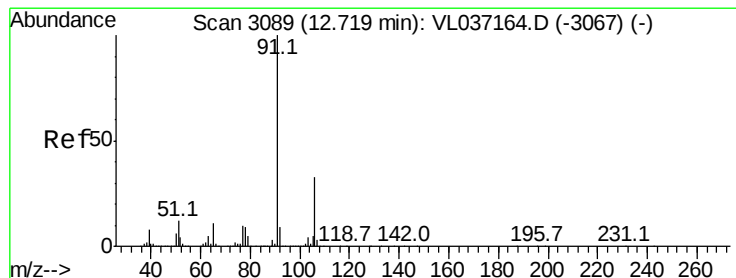
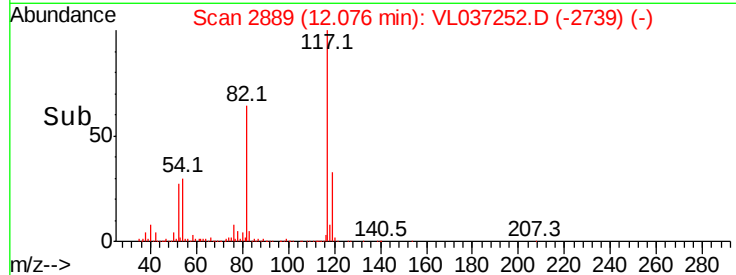
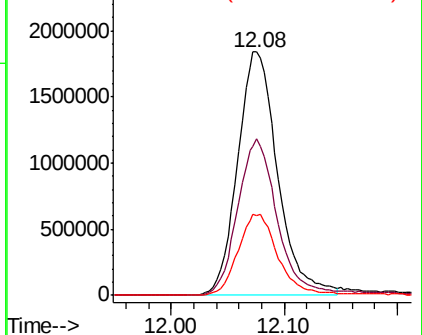
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 12.08 min Scan# 2889
Delta R.T. -0.02 min
Lab File: VL037252.D
Acq: 29 Jun 2021 17:00

Instrument :
MSVOA_L
ClientSampleId :

Tot Ion:117 Resp: 4537571
Ion Ratio Lower Upper
117 100
82 65.3 51.7 77.5
119 33.9 47.6 71.4#

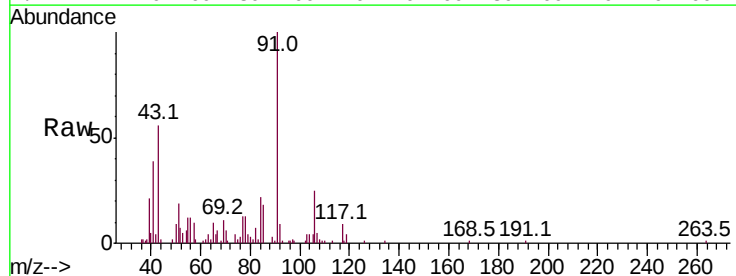


Abundance Ion 117.10 (116.80 to 117.80): V
2500000
Ion 82.10 (81.80 to 82.80): VL0
Ion 119.10 (118.80 to 119.80): V

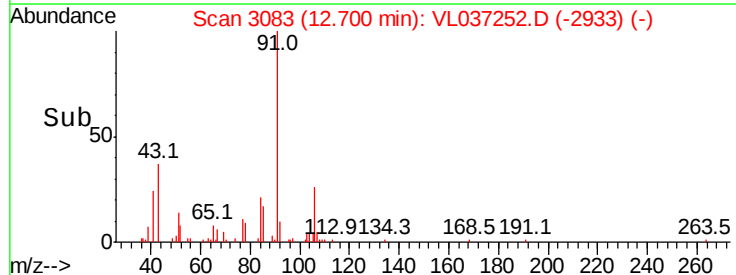
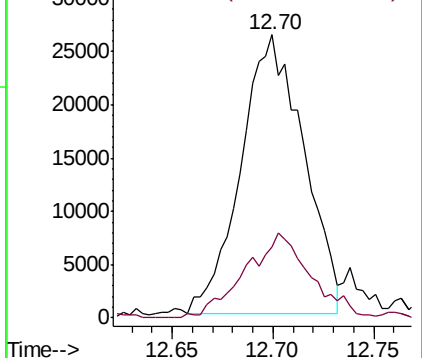


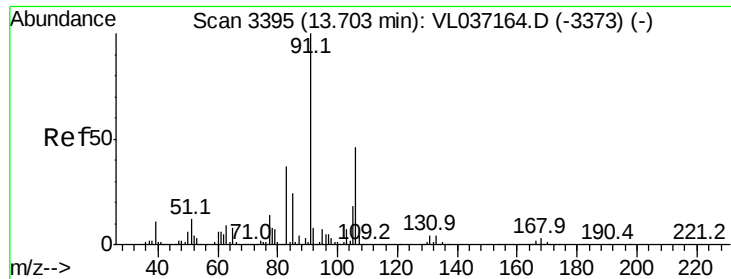
#58
Ethyl Benzene
Concen: 0.091 ppbv
RT: 12.70 min Scan# 3083
Delta R.T. -0.02 min
Lab File: VL037252.D
Acq: 29 Jun 2021 17:00

Tgt Ion: 91 Resp: 56871
Ion Ratio Lower Upper
91 100
106 23.9 26.3 39.5#



Abundance Ion 91.10 (90.80 to 91.80): VL0
30000
Ion 106.10 (105.80 to 106.80): V

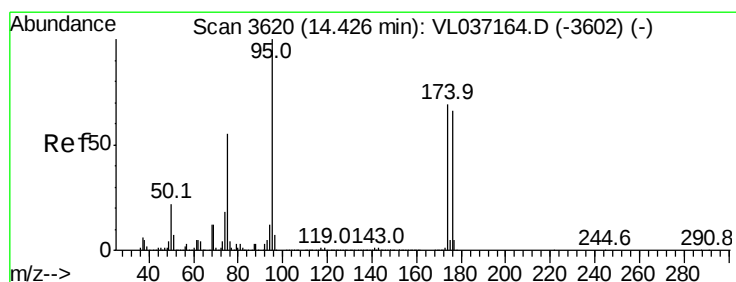
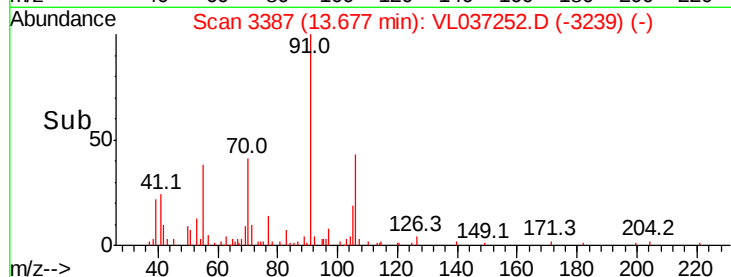
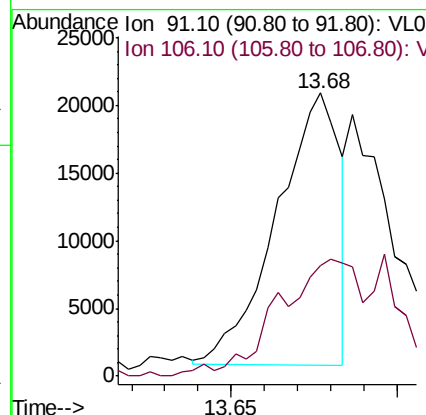
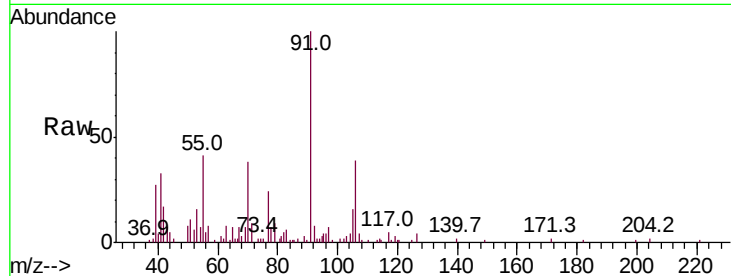




#60
o-Xylene
Concen: 0.053 ppbv
RT: 13.68 min Scan# 3387
Delta R.T. -0.03 min
Lab File: VL037252.D
Acq: 29 Jun 2021 17:00

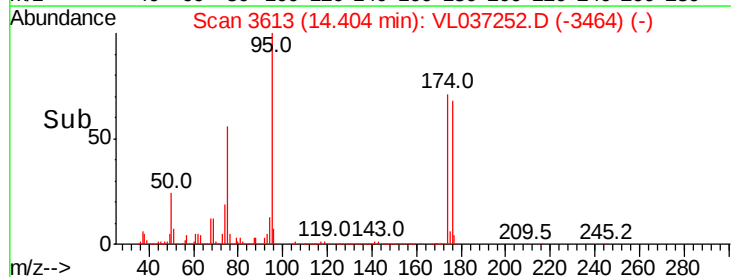
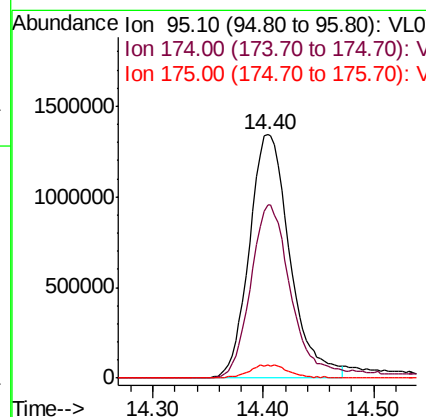
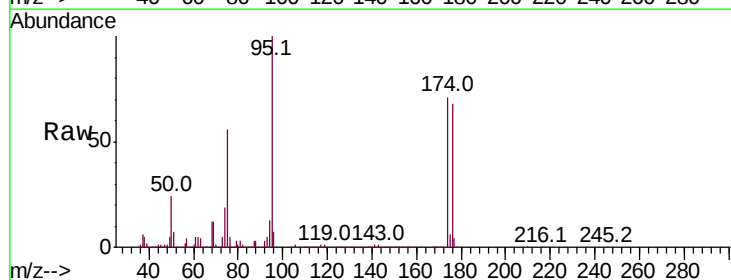
Instrument :
MSVOA_L
ClientSampled :

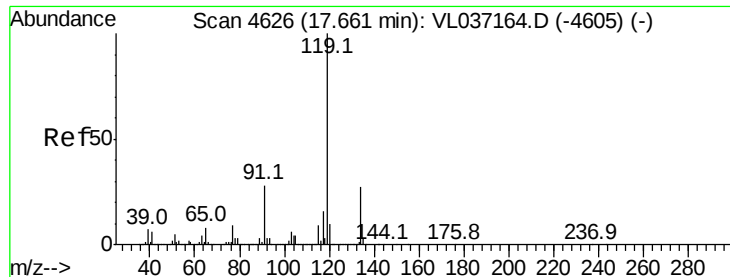
Tot Ion: 91 Resp: 26621
Ion Ratio Lower Upper
91 100
106 0.0 23.0 69.0#



#68
1-Bromo-4-Fluorobenzene
Concen: 9.974 ppbv
RT: 14.40 min Scan# 3613
Delta R.T. -0.02 min
Lab File: VL037252.D
Acq: 29 Jun 2021 17:00

Tgt Ion: 95 Resp: 3429616
Ion Ratio Lower Upper
95 100
174 75.2 57.0 85.4
175 5.6 4.4 6.6





#69

p-Isopropyltoluene

Concen: 0.104 ppbv

RT: 17.65 min Scan# 4622

Delta R.T. -0.01 min

Lab File: VL037252.D

Acq: 29 Jun 2021 17:00

Instrument :

MSVOA_L

ClientSampleId :

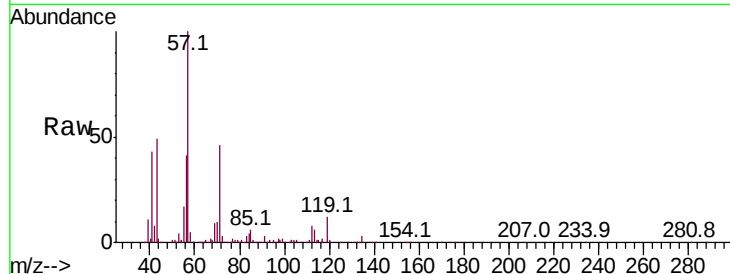
Tot Ion:119 Resp: 74634

Ion Ratio Lower Upper

119 100

134 29.6 20.9 31.3

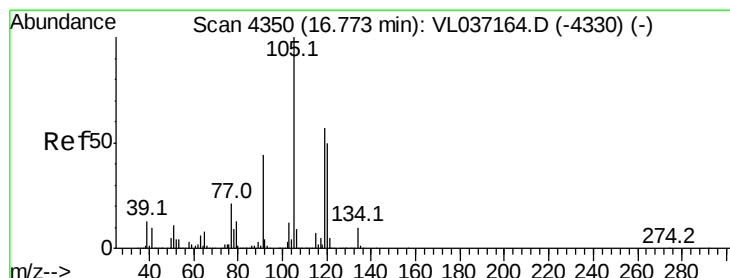
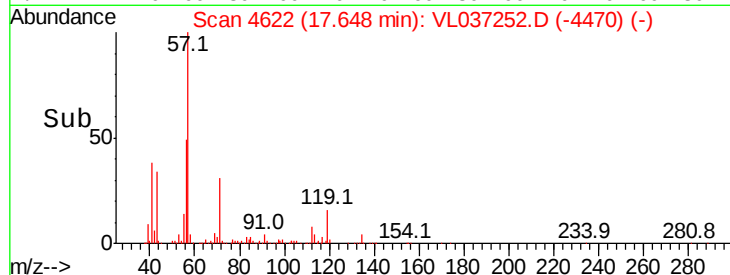
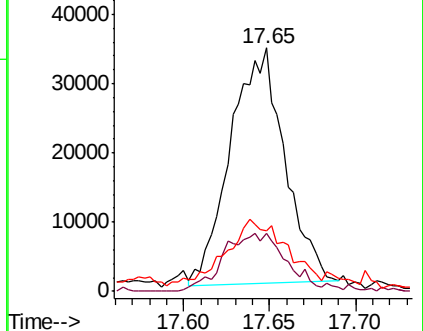
91 35.8 22.6 34.0#



Abundance Ion 119.10 (118.80 to 119.80): V

Ion 134.20 (133.90 to 134.90): V

Ion 91.10 (90.80 to 91.80): VLO



#74

1,2,4-Trimethylbenzene

Concen: 0.045 ppbv

RT: 16.76 min Scan# 4345

Delta R.T. -0.02 min

Lab File: VL037252.D

Acq: 29 Jun 2021 17:00

Tgt Ion:105 Resp: 25459

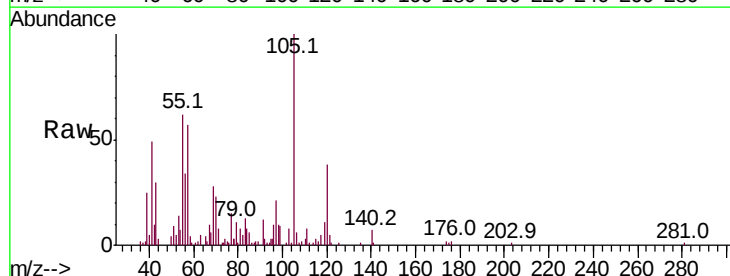
Ion Ratio Lower Upper

105 100

120 36.6 39.8 59.8#

91 10.7 37.0 55.4#

77 17.2 17.0 25.4



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): VLO

Ion 77.10 (76.80 to 77.80): VLO

