

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL090921\
 Data File : VL037598.D
 Acq On : 9 Sep 2021 14:42
 Operator : SY/AP
 Sample : M3663-05DL DUP 20X
 Misc : 400mL/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :

Quant Time: Sep 10 01:32:58 2021
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL081621AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Tue Aug 17 02:13:47 2021
 QLast Update : Tue Aug 17 02:13:47 2021
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.68	49	1434347	10.00	ppbv	0.03
33) 1,4-Difluorobenzene	7.19	114	4338226	10.00	ppbv	0.03
55) Chlorobenzene-d5	12.10	117	3838344	10.00	ppbv	0.04

System Monitoring Compounds		R.T.	QIon	Response	Conc	Units	Dev(Min)
68) 1-Bromo-4-Fluorobenzene	14.43	95	2648692	9.71	ppbv	0.03	
Spiked Amount	10.000	Range	65 - 135	Recovery	=	97.10%	

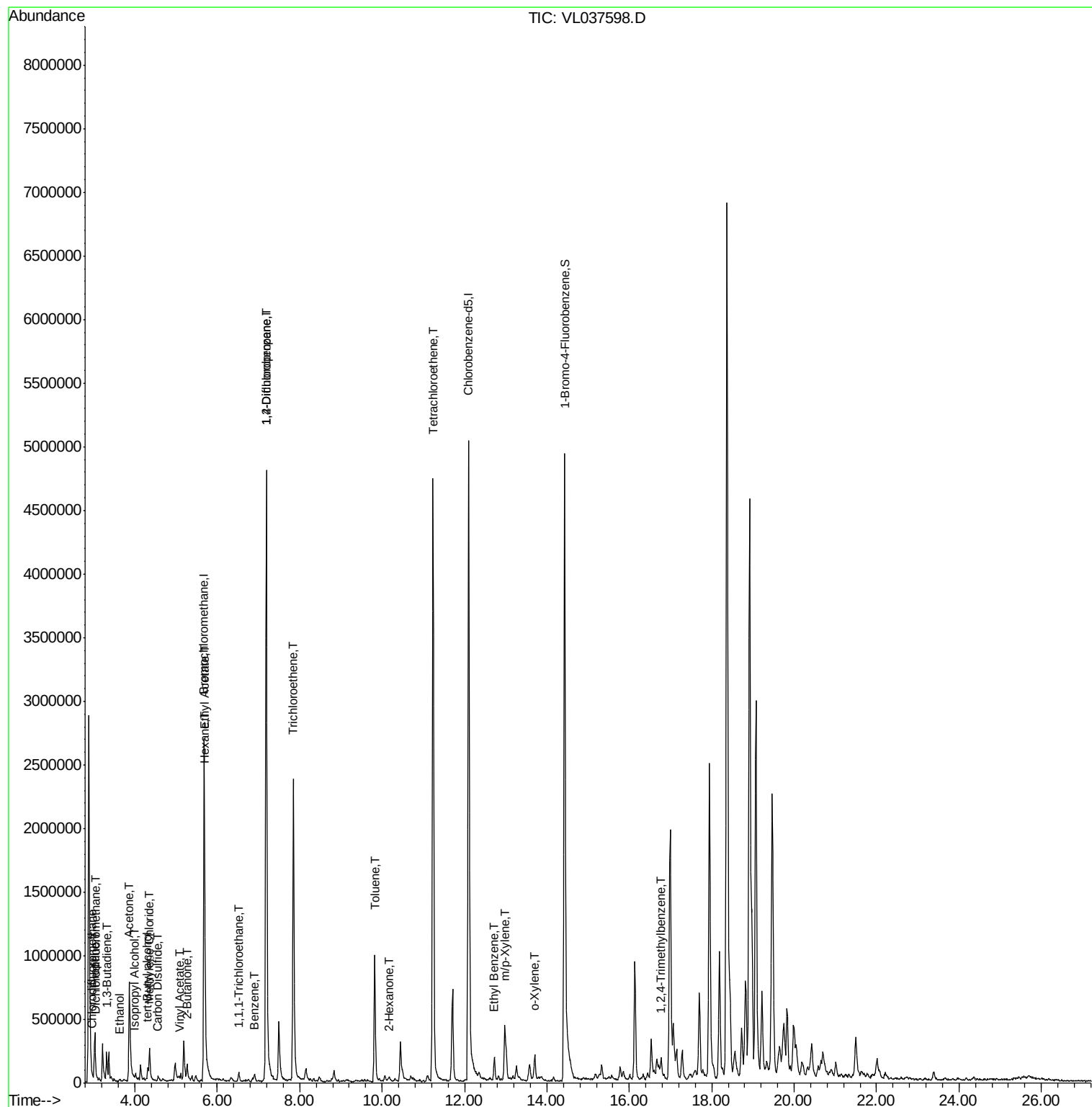
Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.05	85	8185	0.036	ppbv	98
3) Chlorodifluoromethane	2.97	51	34126	0.124	ppbv #	61
9) Propene	3.02	41	87322	0.889	ppbv #	56
13) Ethanol	3.62	45	16820	1.759	ppbv #	48
15) Acetone	3.86	43	1103837	7.562	ppbv	92
16) 1,3-Butadiene	3.31	39	69715	0.745	ppbv #	22
17) tert-Butyl alcohol	4.31	59	75665	0.567	ppbv #	78
19) Isopropyl Alcohol	3.99	45	8677	0.104	ppbv #	95
20) Methylene Chloride	4.36	84	88386	1.209	ppbv	96
23) Vinyl Acetate	5.09	43	7590	0.035	ppbv #	71
25) Ethyl Acetate	5.69	43	41634	0.112	ppbv #	82
26) Hexane	5.70	57	118654	0.655	ppbv #	43
27) Carbon Disulfide	4.56	76	41442	0.257	ppbv #	77
32) 1,1,1-Trichloroethane	6.53	97	24964	0.099	ppbv #	62
34) 2-Butanone	5.27	43	150044	0.847	ppbv #	79
36) Benzene	6.90	78	42699	0.117	ppbv #	93
38) Trichloroethene	7.85	130	875853	5.854	ppbv	91
39) 1,2-Dichloropropane	7.19	63	1000549	7.140	ppbv #	26
51) 2-Hexanone	10.16	43	17454	0.164	ppbv #	49
52) Tetrachloroethene	11.24	164	1355955	9.073	ppbv	98
53) Toluene	9.82	91	872817	2.096	ppbv	99
58) Ethyl Benzene	12.73	91	77517	0.146	ppbv	96
59) m/p-Xylene	12.98	91	462232	1.001	ppbv	94
60) o-Xylene	13.70	91	153549	0.356	ppbv	99
74) 1,2,4-Trimethylbenzene	16.77	105	118601	0.234	ppbv #	63

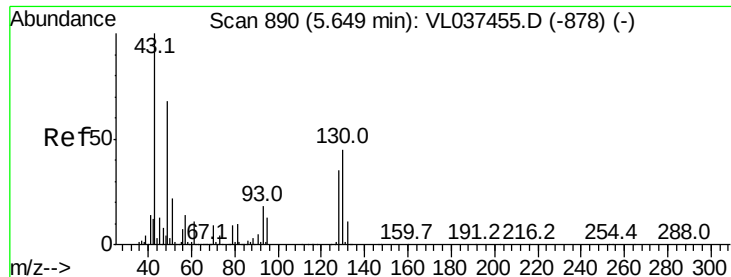
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA L\DATA\VL090921\
Data File : VL037598.D
Acq On : 9 Sep 2021 14:42
Operator : SY/AP
Sample : M3663-05DL DUP 20X
Misc : 400mL/MSVOA L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :

Quant Time: Sep 10 01:32:58 2021
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA L\METHODS\VL081621AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Tue Aug 17 02:13:47 2021
QLast Update : Tue Aug 17 02:13:47 2021
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.68 min Scan# 899

Delta R.T. 0.03 min

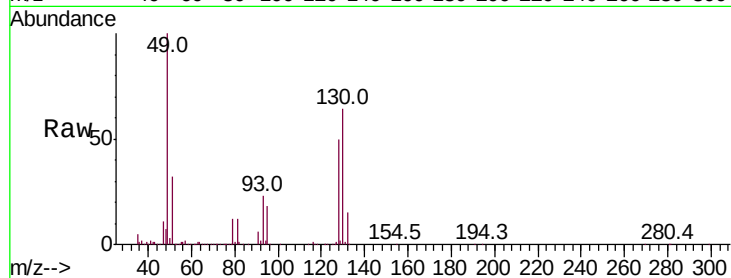
Lab File: VL037598.D

Acq: 9 Sep 2021 14:42

Instrument :
MSVOA_L
ClientSampleId :

Tot Ion: 49 Resp: 1434347

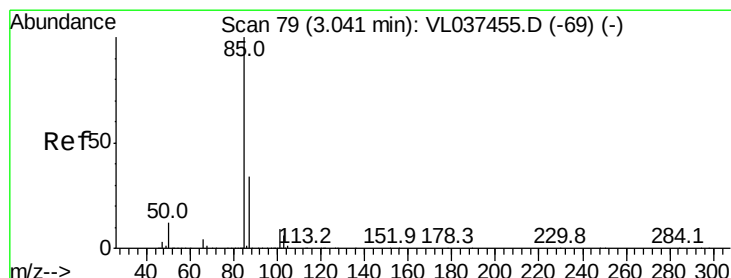
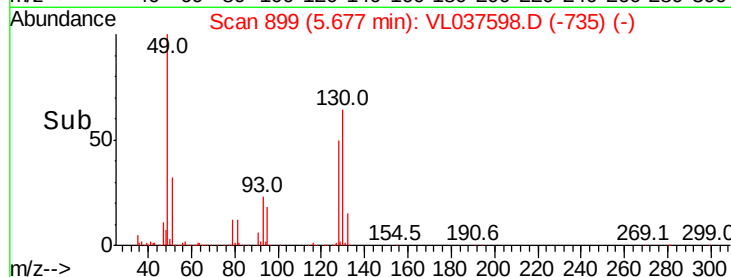
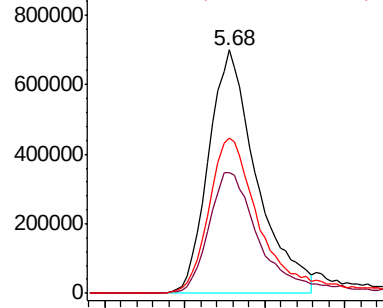
Ion	Ratio	Lower	Upper
49	100		
128	54.1	27.5	82.4
130	70.1	34.0	101.8



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: 3.05 min Scan# 82

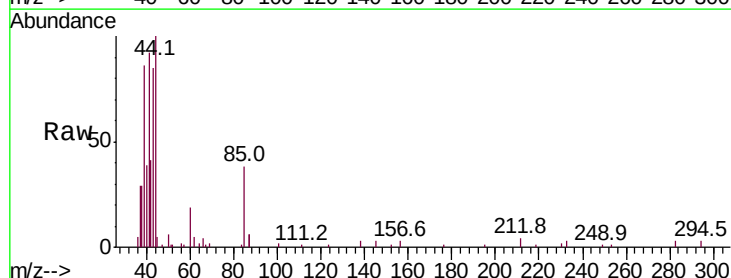
Delta R.T. 0.01 min

Lab File: VL037598.D

Acq: 9 Sep 2021 14:42

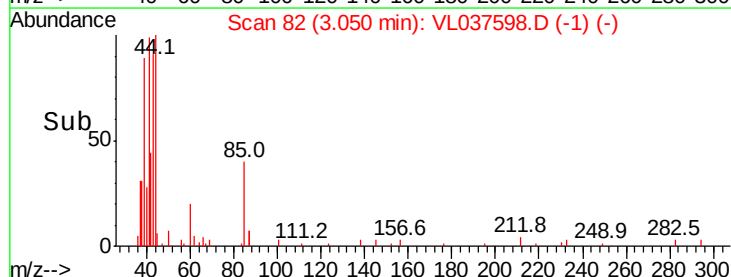
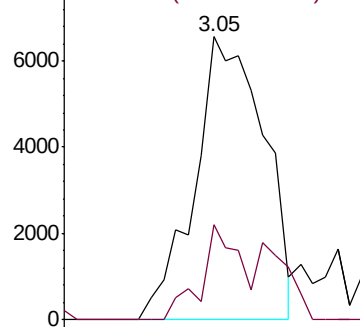
Tgt Ion: 85 Resp: 8185

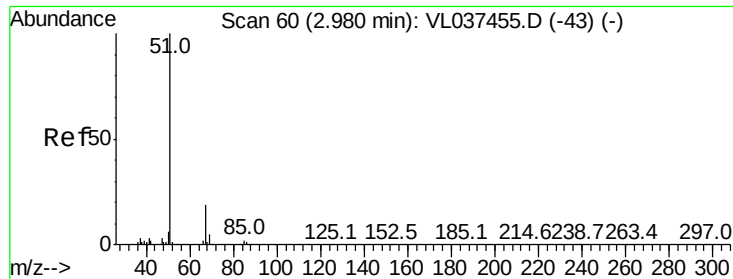
Ion	Ratio	Lower	Upper
85	100		
87	33.6	27.6	41.4



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0

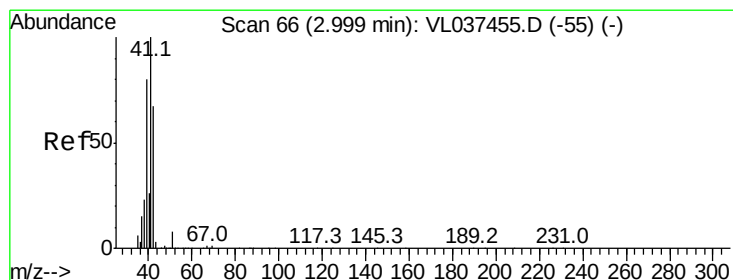
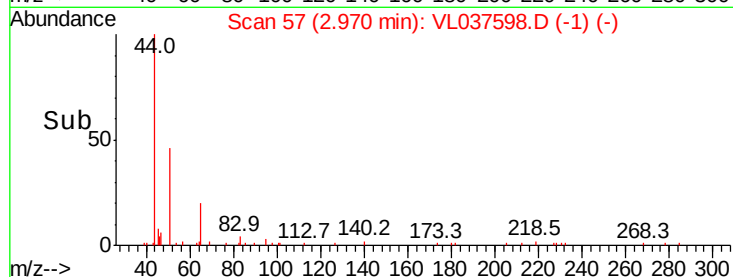
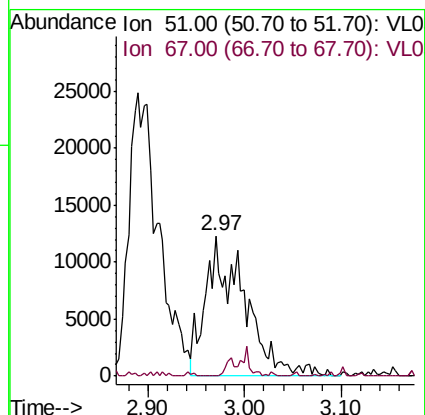
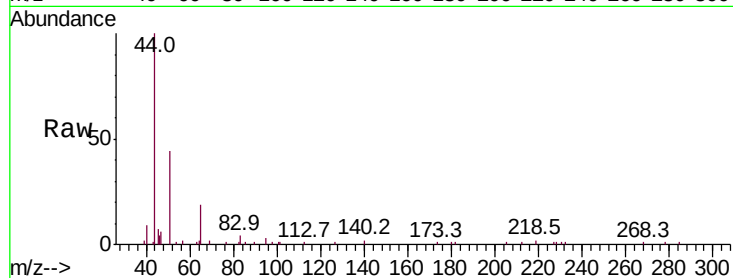




#3
 Chlorodifluoromethane
 Concen: 0.124 ppbv
 RT: 2.97 min Scan# 57
 Delta R.T. -0.01 min
 Lab File: VL037598.D
 Acq: 9 Sep 2021 14:42

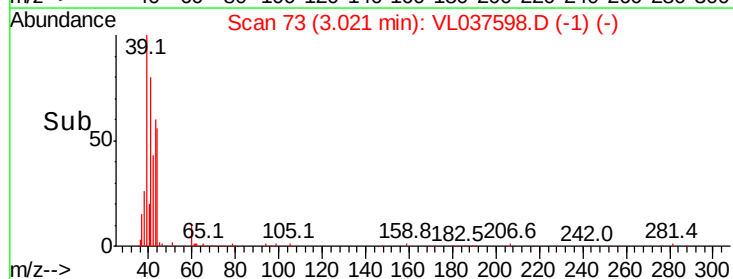
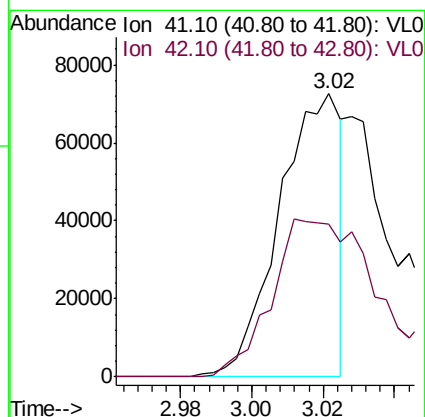
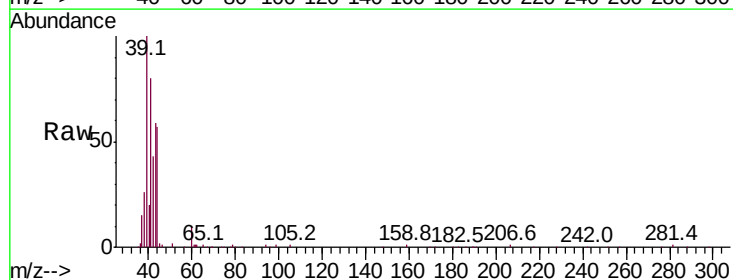
Instrument :
 MSVOA_L
 ClientSampleId :

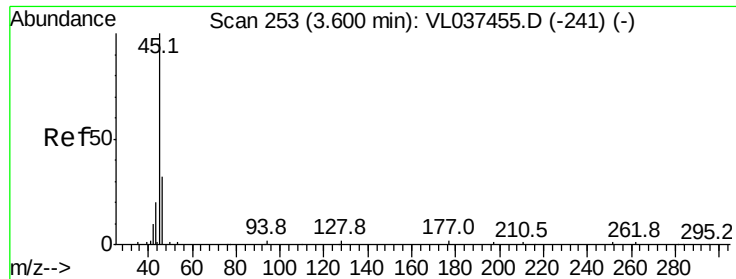
Tot Ion: 51 Resp: 34126
 Ion Ratio Lower Upper
 51 100
 67 0.4 14.2 21.2#



#9
 Propene
 Concen: 0.889 ppbv
 RT: 3.02 min Scan# 73
 Delta R.T. 0.02 min
 Lab File: VL037598.D
 Acq: 9 Sep 2021 14:42

Tgt Ion: 41 Resp: 87322
 Ion Ratio Lower Upper
 41 100
 42 102.4 53.7 80.5#

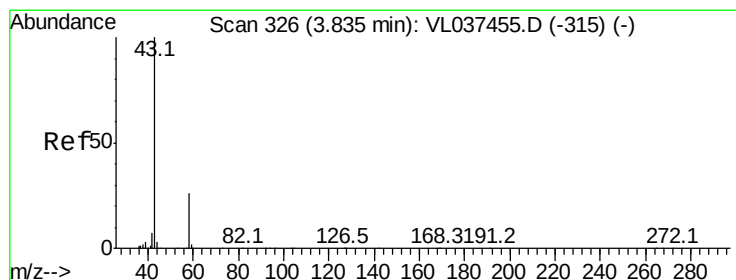
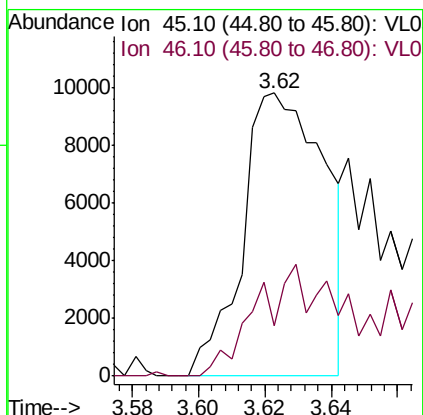
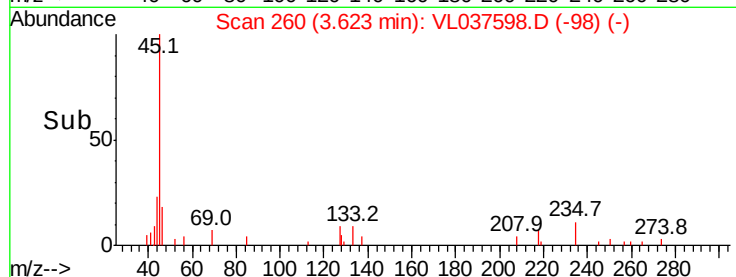
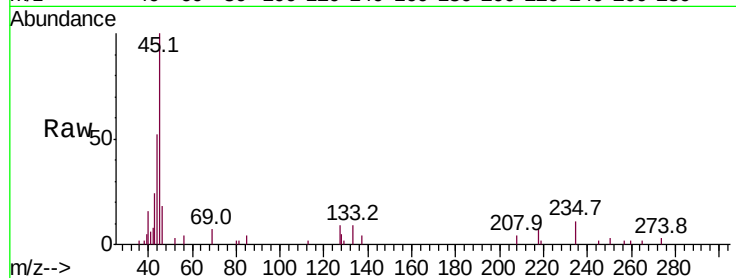




#13
Ethanol
Concen: 1.759 ppbv
RT: 3.62 min Scan# 260
Delta R.T. 0.02 min
Lab File: VL037598.D
Acq: 9 Sep 2021 14:42

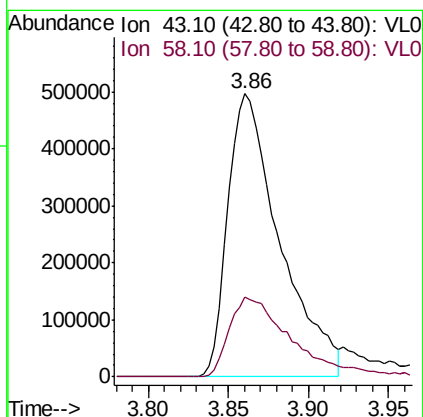
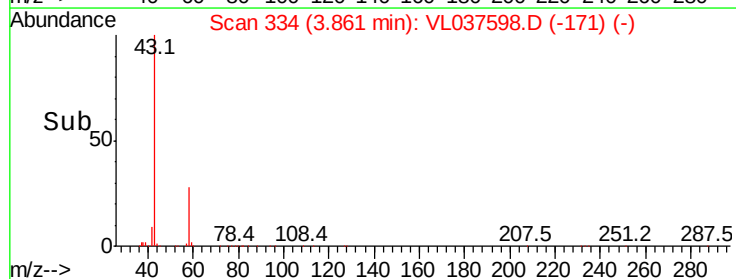
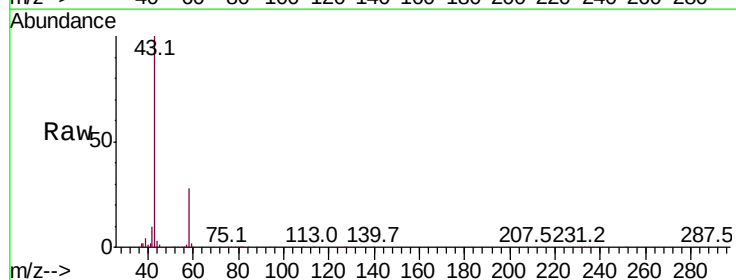
Instrument :
MSVOA_L
ClientSampleId :

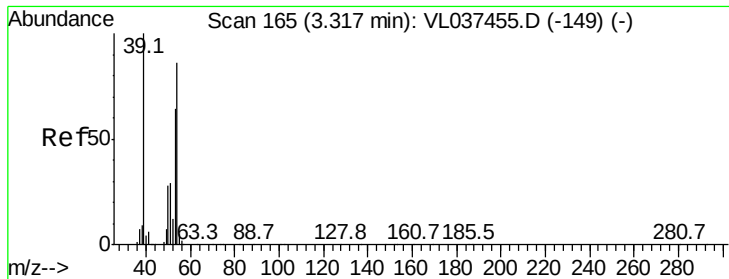
Tot Ion: 45 Resp: 16820
Ion Ratio Lower Upper
45 100
46 65.6 14.1 56.5#



#15
Acetone
Concen: 7.562 ppbv
RT: 3.86 min Scan# 334
Delta R.T. 0.03 min
Lab File: VL037598.D
Acq: 9 Sep 2021 14:42

Tgt Ion: 43 Resp: 1103837
Ion Ratio Lower Upper
43 100
58 35.3 24.8 37.2

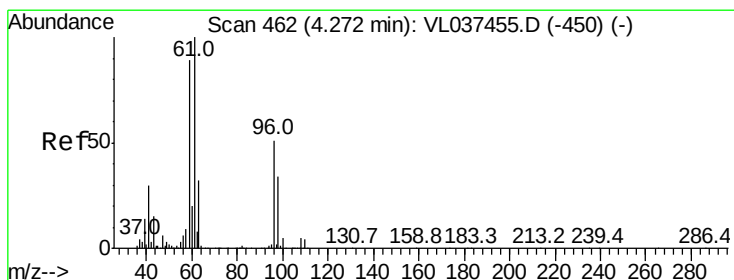
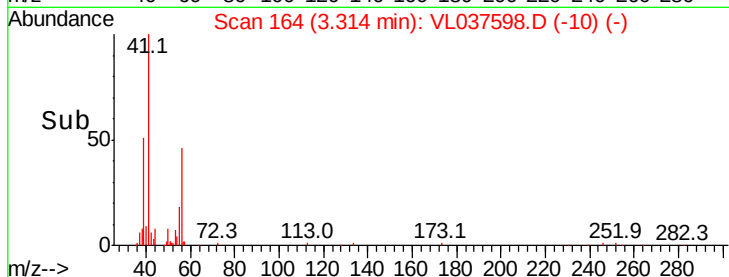
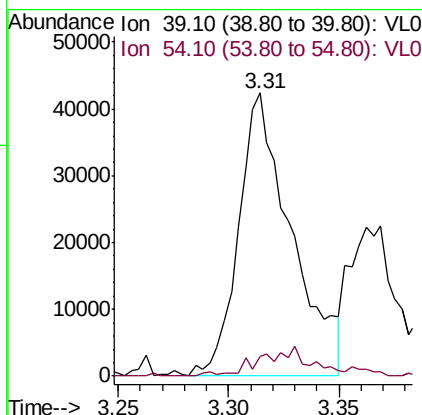
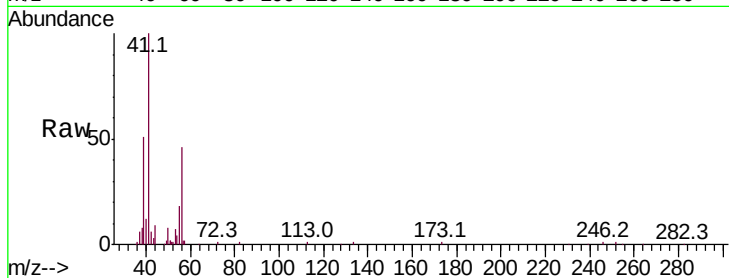




#16
 1,3-Butadiene
 Concen: 0.745 ppbv
 RT: 3.31 min Scan# 164
 Delta R.T. -0.00 min
 Lab File: VL037598.D
 Acq: 9 Sep 2021 14:42

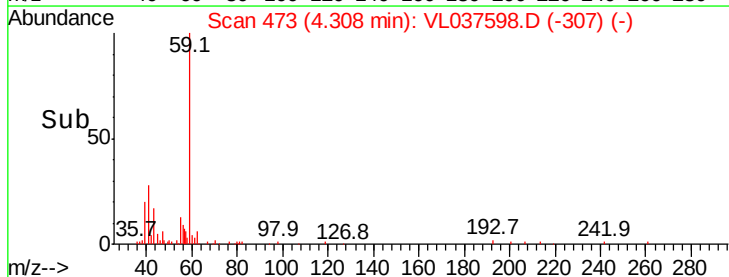
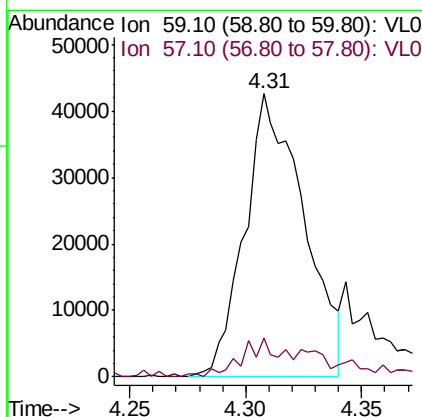
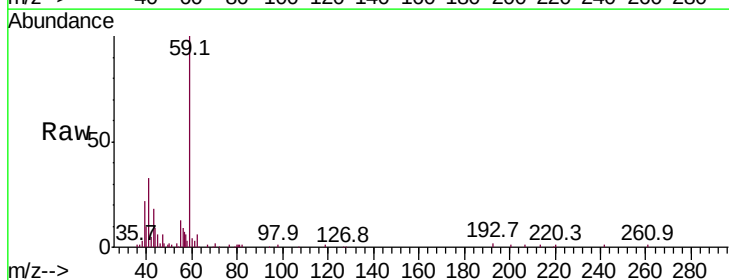
Instrument :
 MSVOA_L
 ClientSampleID :

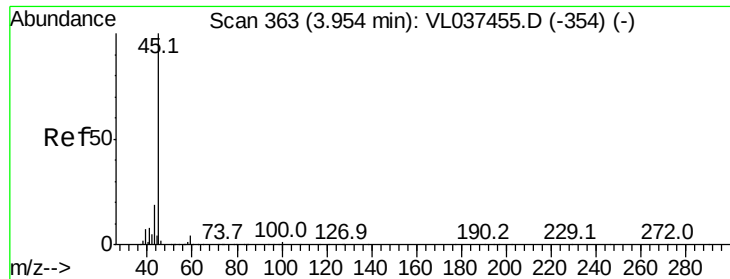
Tot Ion: 39 Resp: 69715
 Ion Ratio Lower Upper
 39 100
 54 11.4 63.7 95.5#



#17
 tert-Butyl alcohol
 Concen: 0.567 ppbv
 RT: 4.31 min Scan# 473
 Delta R.T. 0.04 min
 Lab File: VL037598.D
 Acq: 9 Sep 2021 14:42

Tgt Ion: 59 Resp: 75665
 Ion Ratio Lower Upper
 59 100
 57 18.5 8.3 12.5#





#19

Isopropyl Alcohol

Concen: 0.104 ppbv

RT: 3.99 min Scan# 373

Delta R.T. 0.03 min

Lab File: VL037598.D

Acq: 9 Sep 2021 14:42

Instrument :

MSVOA_L

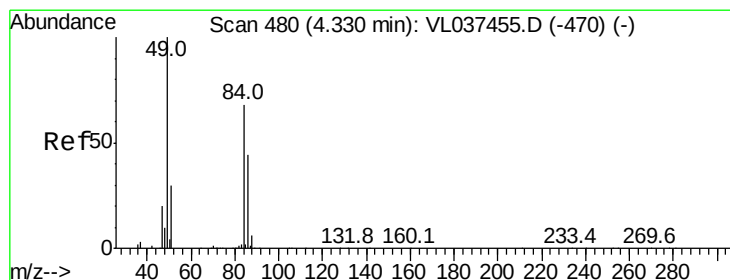
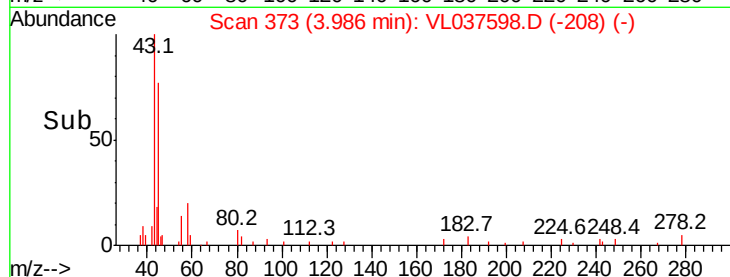
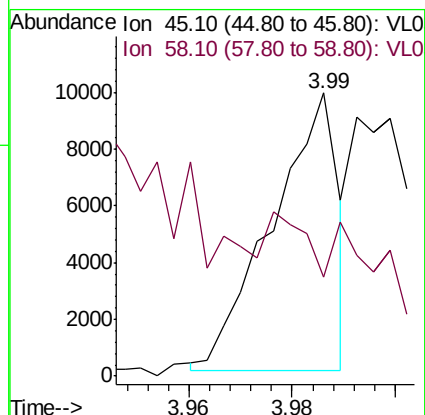
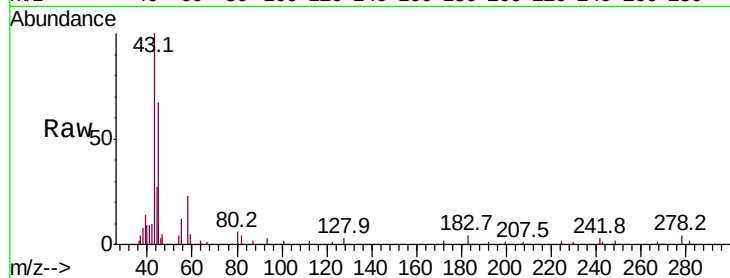
ClientSampleId :

Tot Ion: 45 Resp: 8677

Ion Ratio Lower Upper

45 100

58 0.0 1.4 2.2#



#20

Methylene Chloride

Concen: 1.209 ppbv

RT: 4.36 min Scan# 489

Delta R.T. 0.03 min

Lab File: VL037598.D

Acq: 9 Sep 2021 14:42

Tgt Ion: 84 Resp: 88386

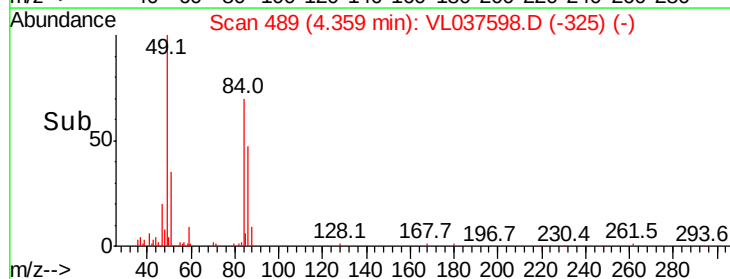
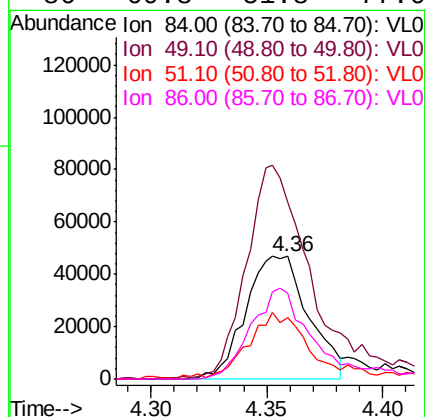
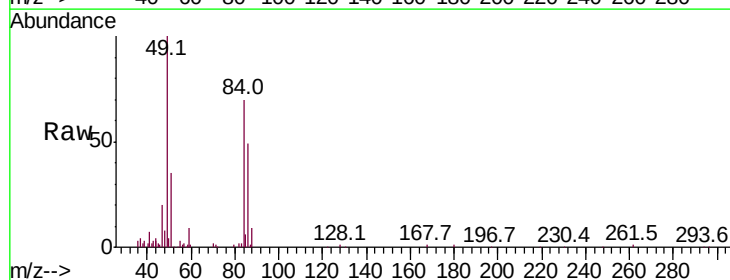
Ion Ratio Lower Upper

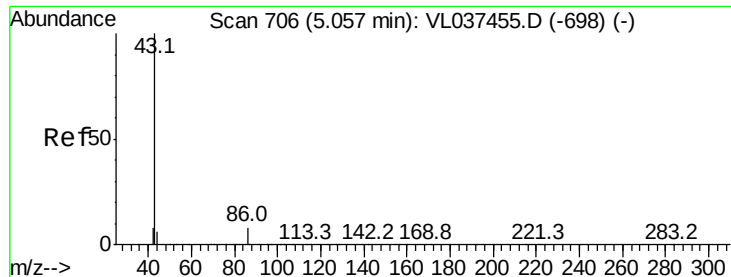
84 100

49 143.1 118.2 177.2

51 48.3 36.6 55.0

86 69.8 51.8 77.6





#23

Vinyl Acetate

Concen: 0.035 ppbv

RT: 5.09 min Scan# 716

Delta R.T. 0.03 min

Lab File: VL037598.D

Acq: 9 Sep 2021 14:42

Instrument :
MSVOA_L
ClientSampleId :

Tot Ion: 43 Resp: 7590

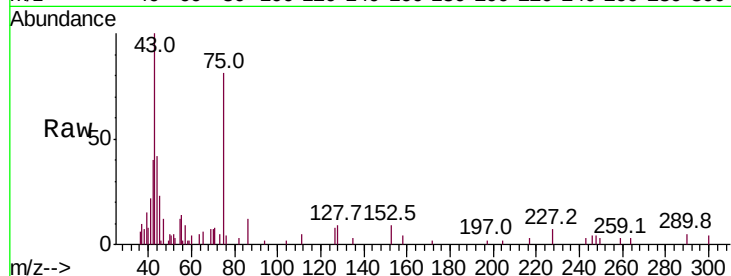
Ion Ratio Lower Upper

43 100

86 27.0 5.7 8.5#

42 6.1 7.4 11.2#

44 14.8 4.3 6.5#

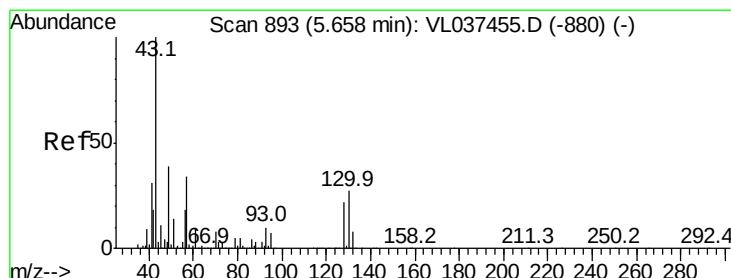
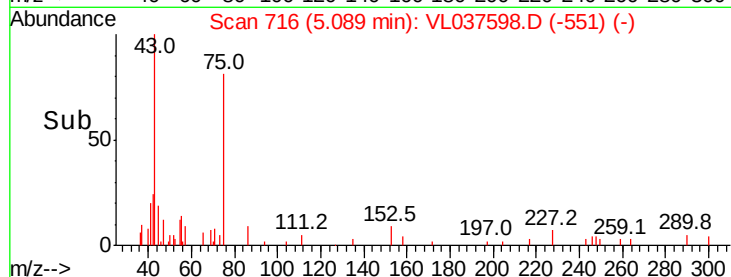
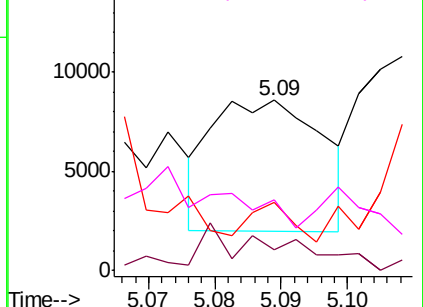


Abundance Ion 43.10 (42.80 to 43.80): VL0

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: 0.112 ppbv

RT: 5.69 min Scan# 904

Delta R.T. 0.04 min

Lab File: VL037598.D

Acq: 9 Sep 2021 14:42

Tgt Ion: 43 Resp: 41634

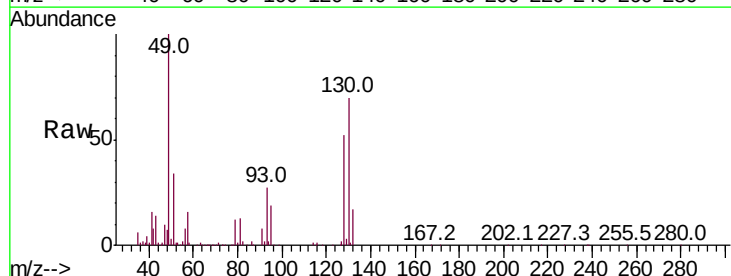
Ion Ratio Lower Upper

43 100

45 7.0 8.0 12.0#

61 0.0 8.0 12.0#

70 0.0 5.6 8.4#

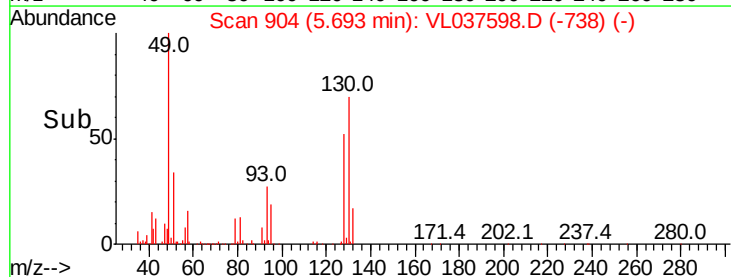
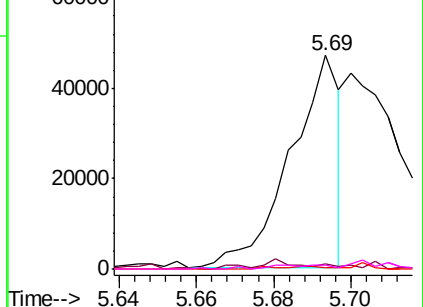


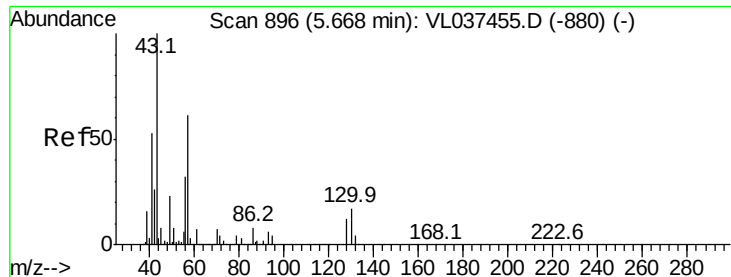
Abundance Ion 43.10 (42.80 to 43.80): VL0

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: 0.655 ppbv

RT: 5.70 min Scan# 905

Delta R.T. 0.03 min

Lab File: VL037598.D

Acq: 9 Sep 2021 14:42

Instrument :
MSVOA_L
ClientSampleId :

Tot Ion: 57 Resp: 118654

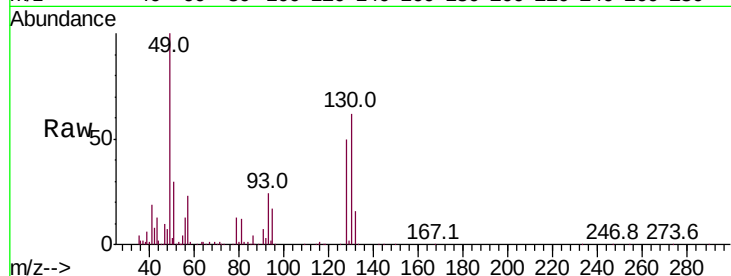
Ion Ratio Lower Upper

57 100

41 103.4 72.3 108.5

43 78.4 172.3 258.5#

56 62.3 42.8 64.2

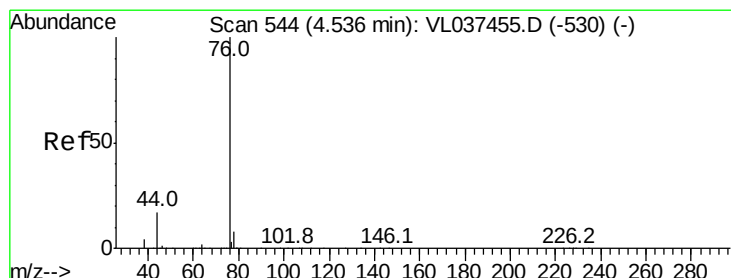
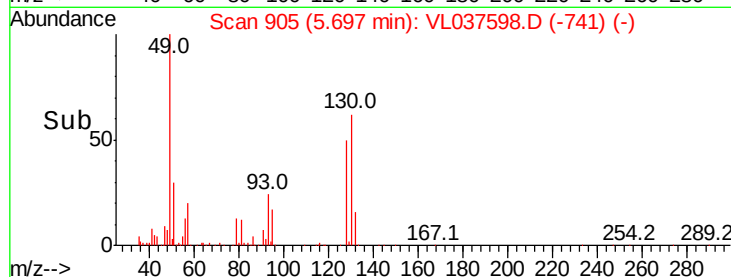
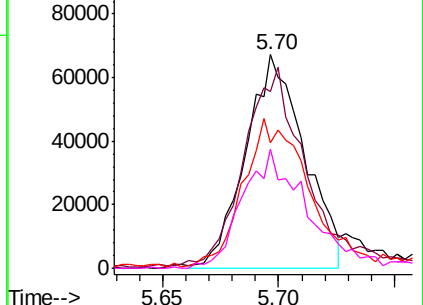


Abundance Ion 57.10 (56.80 to 57.80): VL0

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



#27

Carbon Disulfide

Concen: 0.257 ppbv

RT: 4.56 min Scan# 551

Delta R.T. 0.02 min

Lab File: VL037598.D

Acq: 9 Sep 2021 14:42

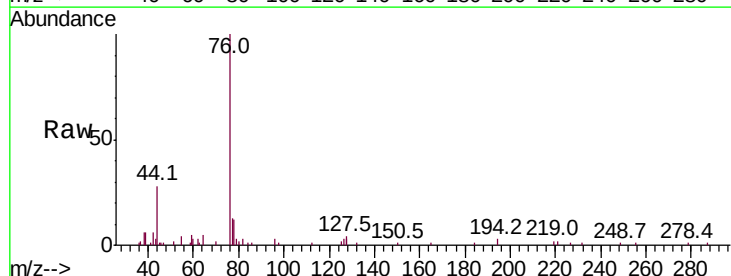
Tgt Ion: 76 Resp: 41442

Ion Ratio Lower Upper

76 100

44 32.1 13.9 20.9#

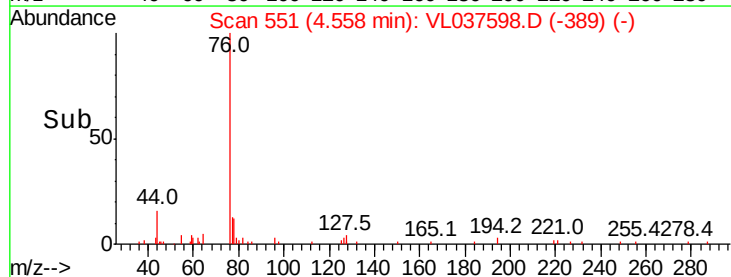
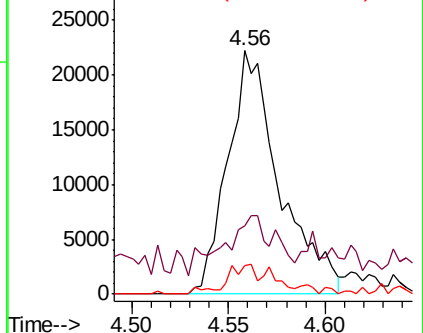
78 11.8 7.9 11.9

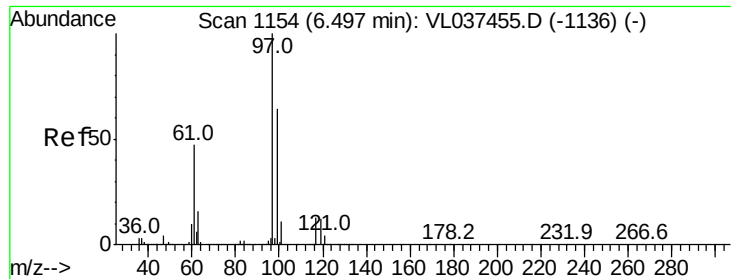


Abundance Ion 76.00 (75.70 to 76.70): VL0

Ion 44.10 (43.80 to 44.80): VL0

Ion 78.00 (77.70 to 78.70): VL0





#32

1,1,1-Trichloroethane

Concen: 0.099 ppbv

RT: 6.53 min Scan# 1163

Delta R.T. 0.03 min

Lab File: VL037598.D

Acq: 9 Sep 2021 14:42

Instrument :

MSVOA_L

ClientSampleId :

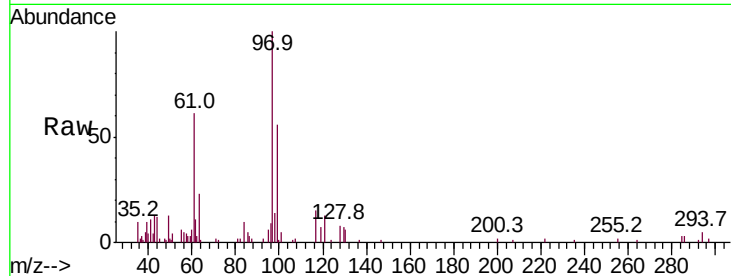
Tot Ion: 97 Resp: 24964

Ion Ratio Lower Upper

97 100

99 93.9 51.8 77.6#

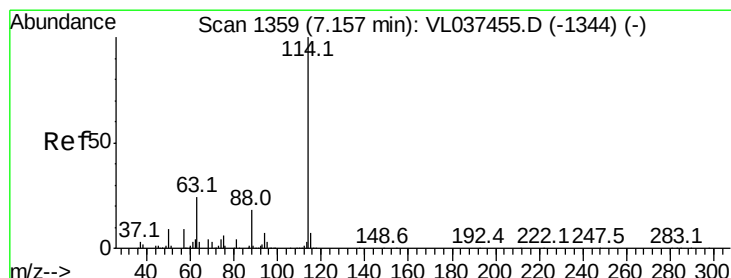
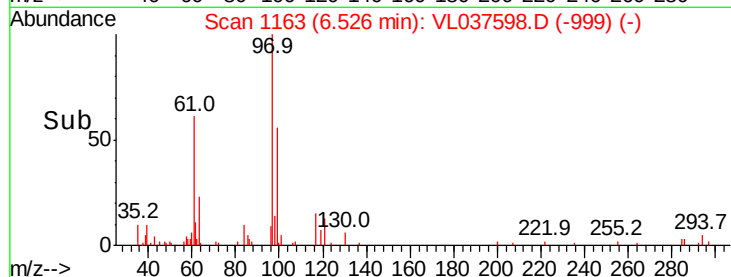
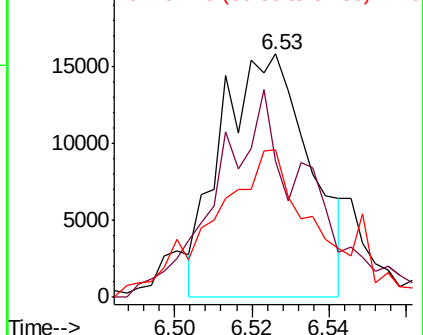
61 76.8 39.6 59.4#



Abundance Ion 97.00 (96.70 to 97.70): VL0

Ion 99.00 (98.70 to 99.70): VL0

Ion 61.10 (60.80 to 61.80): VL0



#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 7.19 min Scan# 1369

Delta R.T. 0.03 min

Lab File: VL037598.D

Acq: 9 Sep 2021 14:42

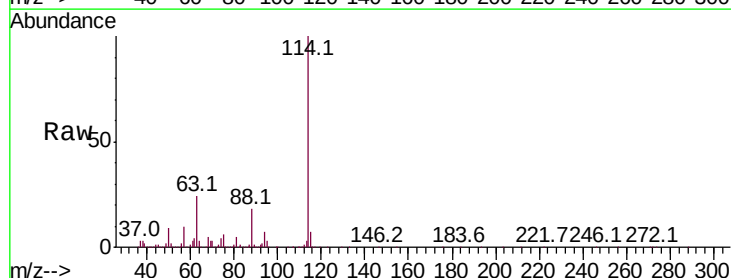
Tgt Ion: 114 Resp: 4338226

Ion Ratio Lower Upper

114 100

63 24.1 19.3 28.9

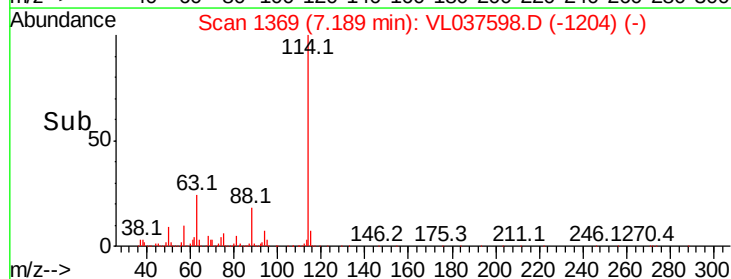
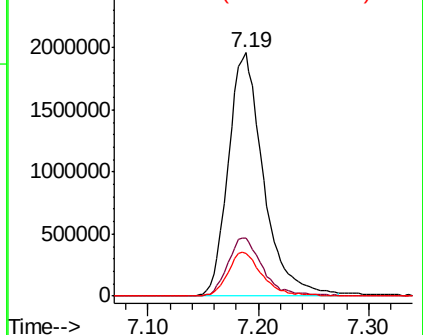
88 17.8 14.2 21.4

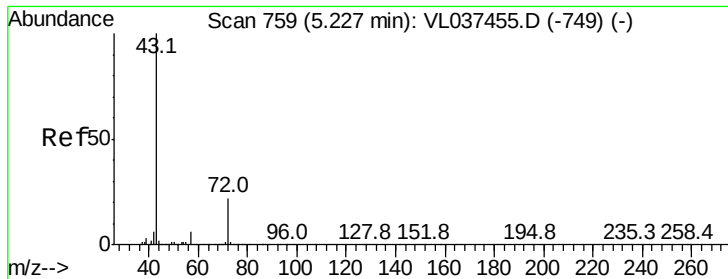


Abundance Ion 114.10 (113.80 to 114.80): V

Ion 63.10 (62.80 to 63.80): VL0

Ion 88.10 (87.80 to 88.80): VL0

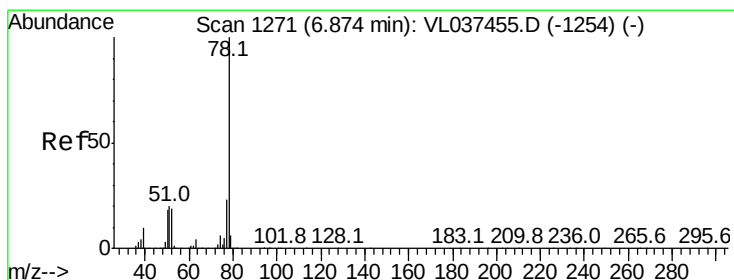
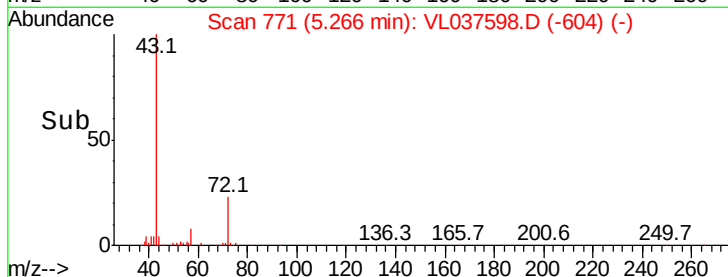
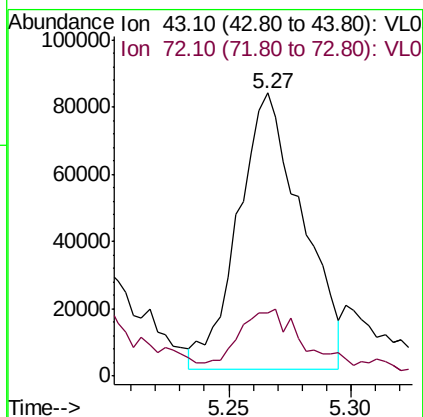
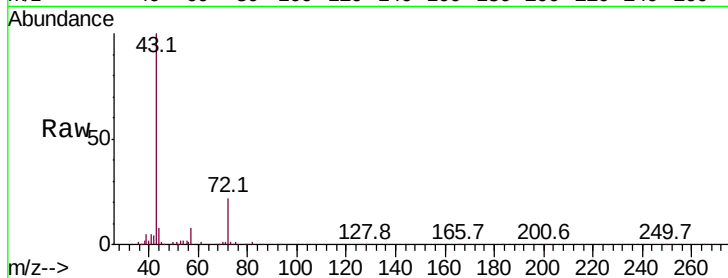




#34
2-Butanone
Concen: 0.847 ppbv
RT: 5.27 min Scan# 771
Delta R.T. 0.04 min
Lab File: VL037598.D
Acq: 9 Sep 2021 14:42

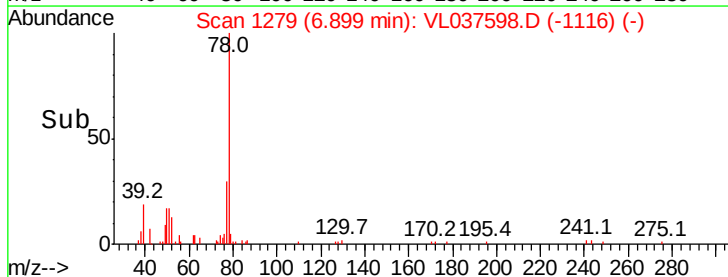
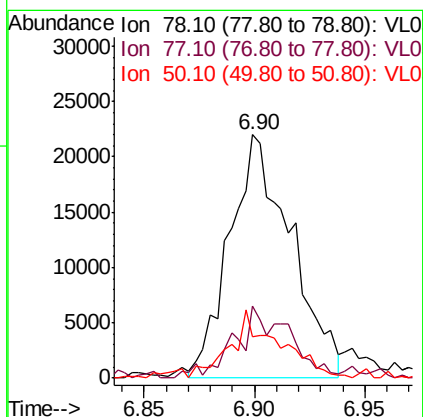
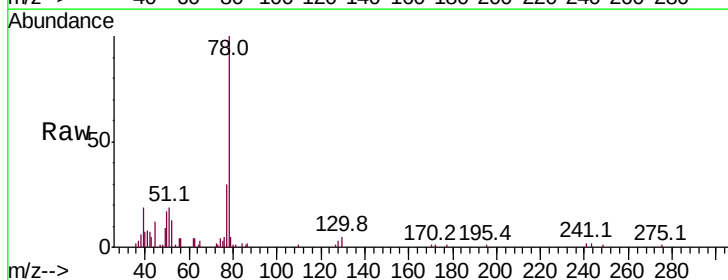
Instrument :
MSVOA_L
ClientSampleId :

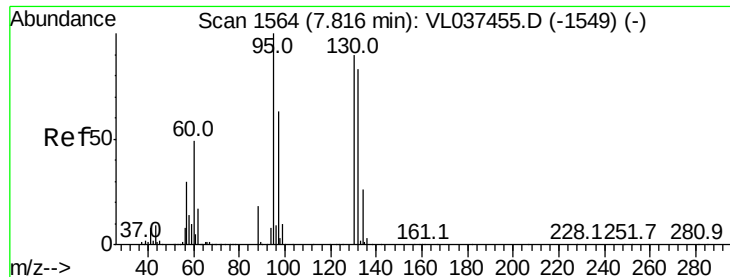
Tot Ion: 43 Resp: 150044
Ion Ratio Lower Upper
43 100
72 31.5 17.4 26.0#



#36
Benzene
Concen: 0.117 ppbv
RT: 6.90 min Scan# 1279
Delta R.T. 0.03 min
Lab File: VL037598.D
Acq: 9 Sep 2021 14:42

Tgt Ion: 78 Resp: 42699
Ion Ratio Lower Upper
78 100
77 28.6 18.2 27.4#
50 17.4 14.6 21.8





#38

Trichloroethene

Concen: 5.854 ppbv

RT: 7.85 min Scan# 1575

Delta R.T. 0.04 min

Lab File: VL037598.D

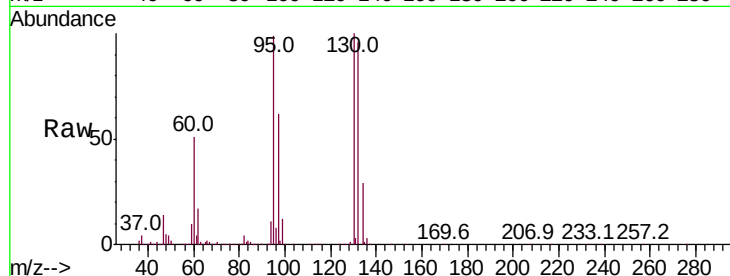
Acq: 9 Sep 2021 14:42

Instrument :

MSVOA_L

ClientSampleId :

Tot Ion:	130	Resp:	875853
Ion	Ratio	Lower	Upper
130	100		
95	98.6	89.2	133.8
132	96.0	74.0	111.0
97	61.7	56.6	84.8

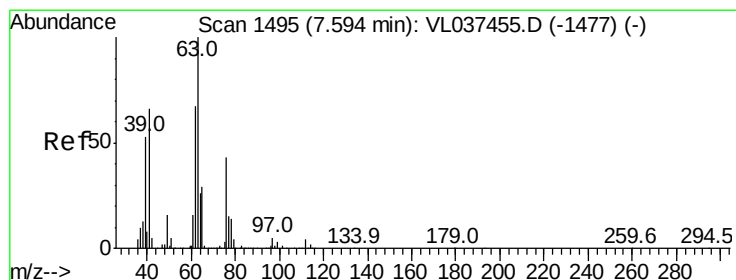
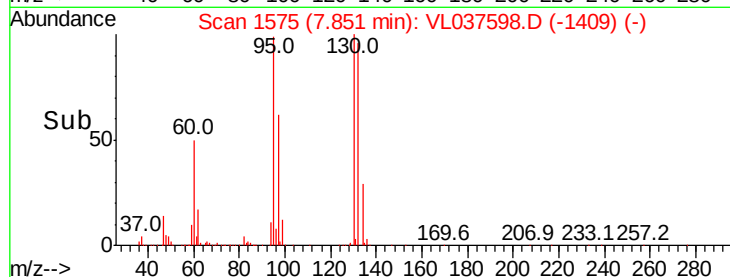
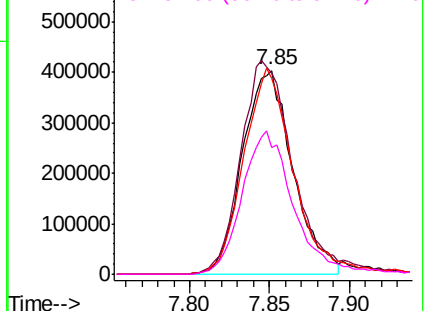


Abundance Ion 130.00 (129.70 to 130.70): V

Ion 95.00 (94.70 to 95.70): VL0

Ion 132.00 (131.70 to 132.70): V

Ion 97.00 (96.70 to 97.70): VL0



#39

1,2-Dichloropropane

Concen: 7.140 ppbv

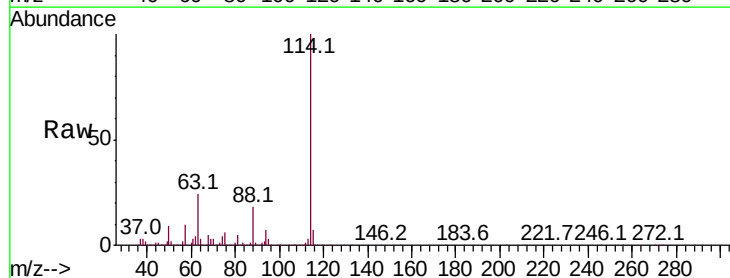
RT: 7.19 min Scan# 1369

Delta R.T. -0.41 min

Lab File: VL037598.D

Acq: 9 Sep 2021 14:42

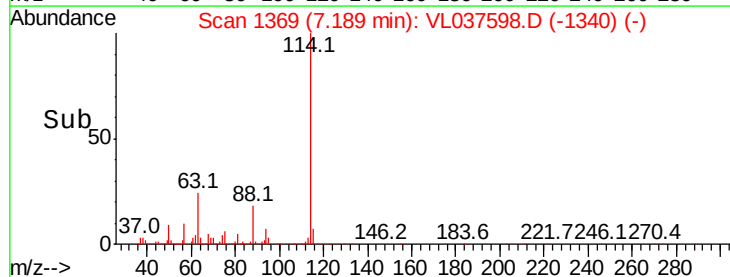
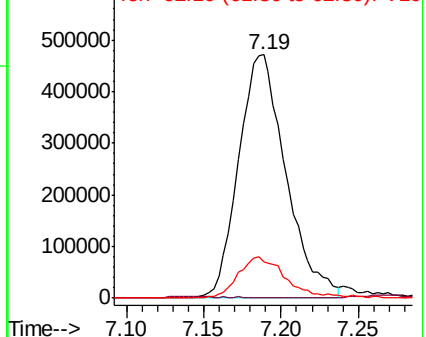
Tgt Ion:	63	Resp:	1000549
Ion	Ratio	Lower	Upper
63	100		
41	0.1	52.4	78.6#
62	14.8	53.6	80.4#

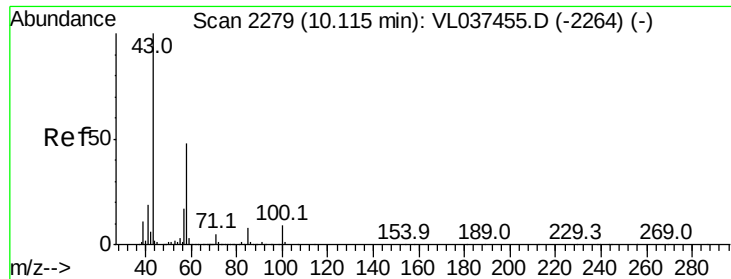


Abundance Ion 63.10 (62.80 to 63.80): VL0

Ion 41.10 (40.80 to 41.80): VL0

Ion 62.10 (61.80 to 62.80): VL0

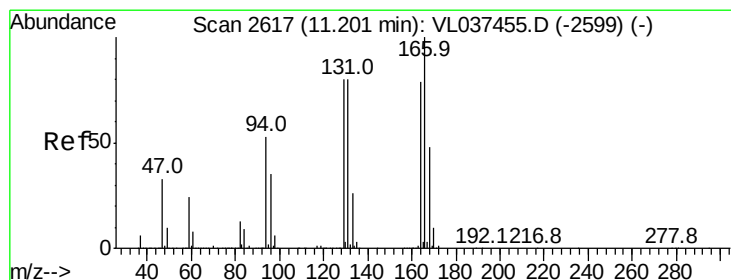
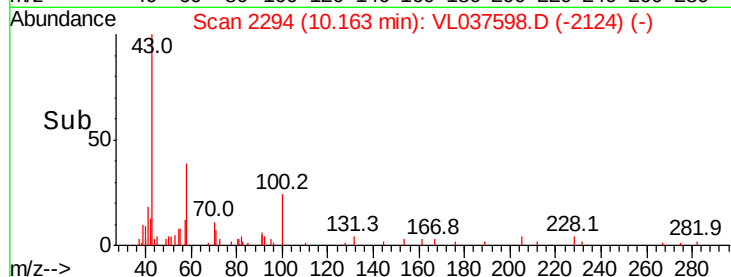
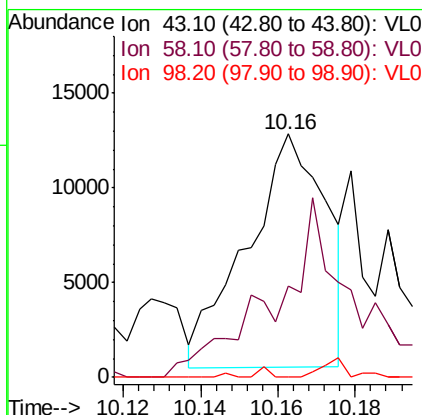
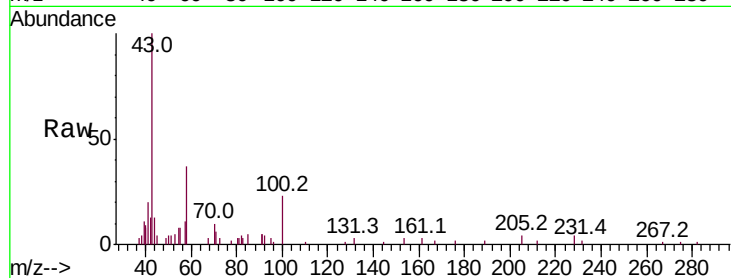




#51
2-Hexanone
Concen: 0.164 ppbv
RT: 10.16 min Scan# 2294
Delta R.T. 0.05 min
Lab File: VL037598.D
Acq: 9 Sep 2021 14:42

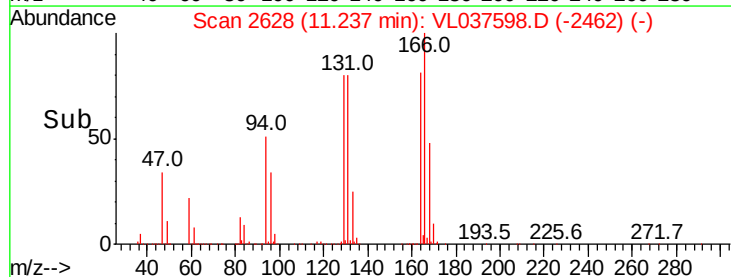
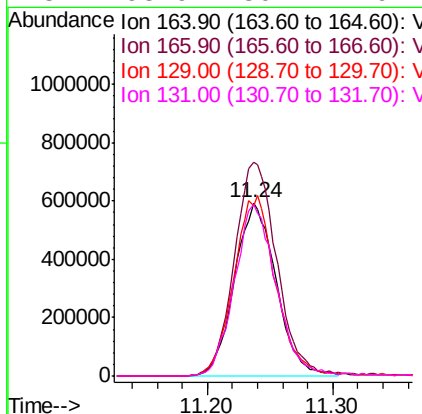
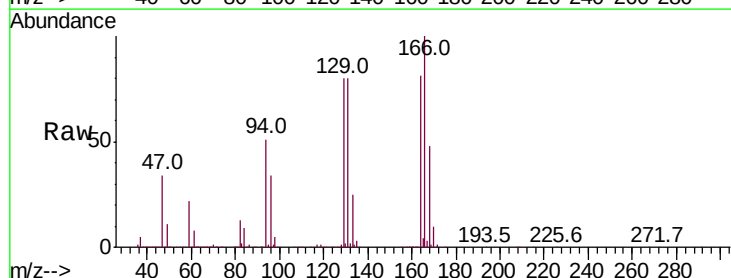
Instrument :
MSVOA_L
ClientSampleId :

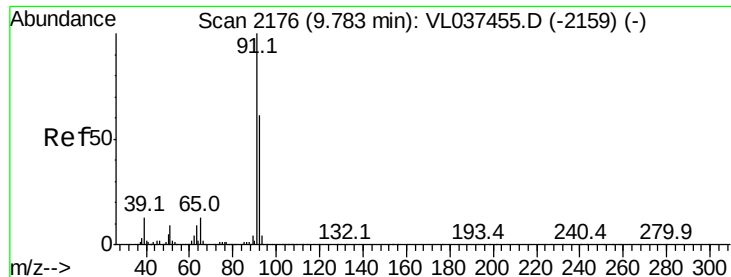
Tot Ion: 43 Resp: 17454
Ion Ratio Lower Upper
43 100
58 87.1 41.0 61.6#
98 0.0 0.3 0.5#



#52
Tetrachloroethene
Concen: 9.073 ppbv
RT: 11.24 min Scan# 2628
Delta R.T. 0.04 min
Lab File: VL037598.D
Acq: 9 Sep 2021 14:42

Tgt Ion: 164 Resp: 1355955
Ion Ratio Lower Upper
164 100
166 123.4 100.7 151.1
129 98.6 80.9 121.3
131 98.9 80.2 120.4





#53

Toluene

Concen: 2.096 ppbv

RT: 9.82 min Scan# 2187

Delta R.T. 0.04 min

Lab File: VL037598.D

Acq: 9 Sep 2021 14:42

Instrument :

MSVOA_L

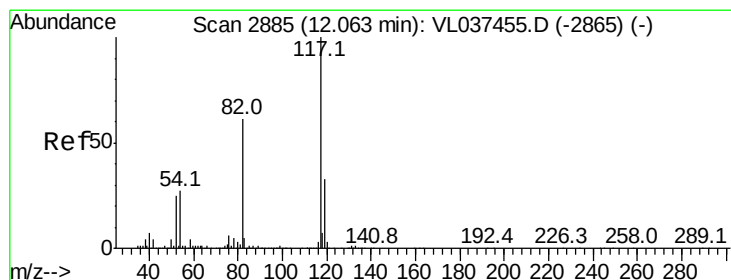
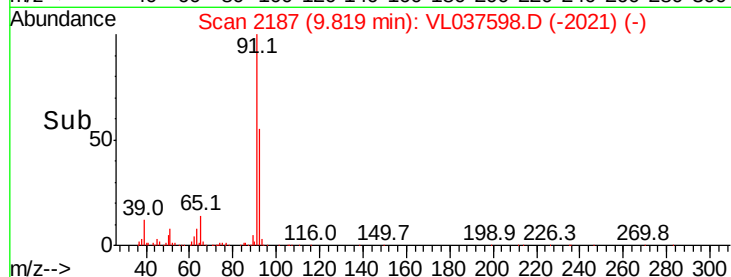
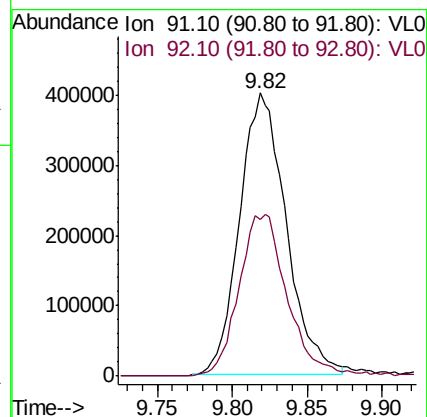
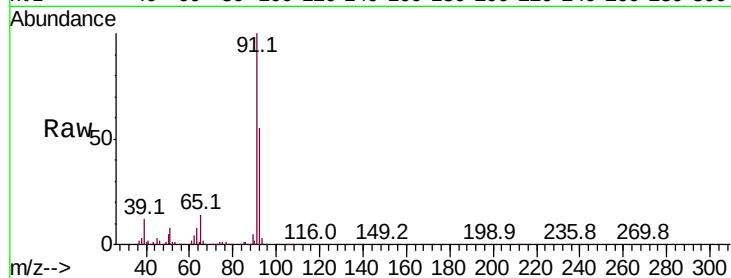
ClientSampleId :

Tot Ion: 91 Resp: 872817

Ion Ratio Lower Upper

91 100

92 60.1 48.8 73.2



#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.10 min Scan# 2896

Delta R.T. 0.04 min

Lab File: VL037598.D

Acq: 9 Sep 2021 14:42

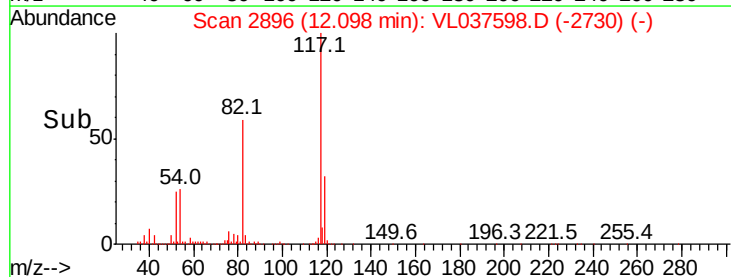
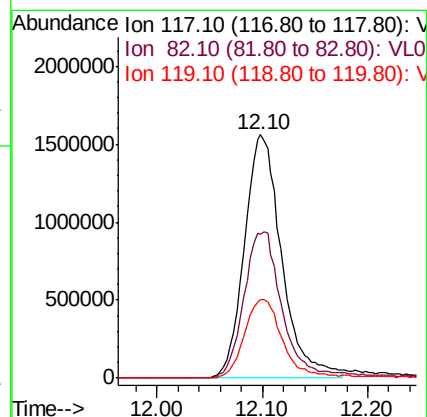
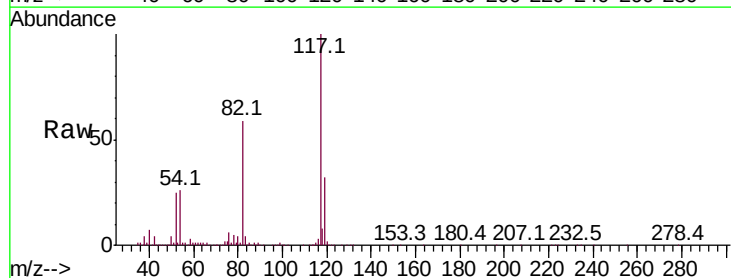
Tgt Ion: 117 Resp: 3838344

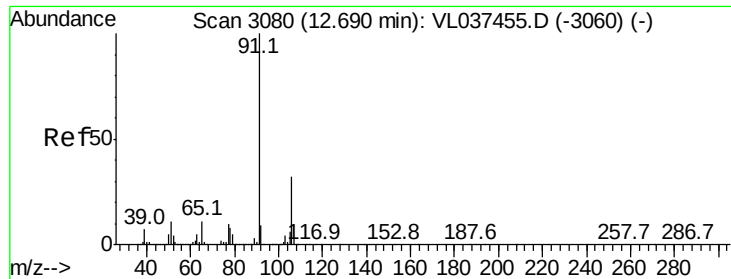
Ion Ratio Lower Upper

117 100

82 64.3 52.9 79.3

119 34.3 24.8 37.2





#58

Ethyl Benzene

Concen: 0.146 ppbv

RT: 12.73 min Scan# 3091

Delta R.T. 0.04 min

Lab File: VL037598.D

Acq: 9 Sep 2021 14:42

Instrument :

MSVOA_L

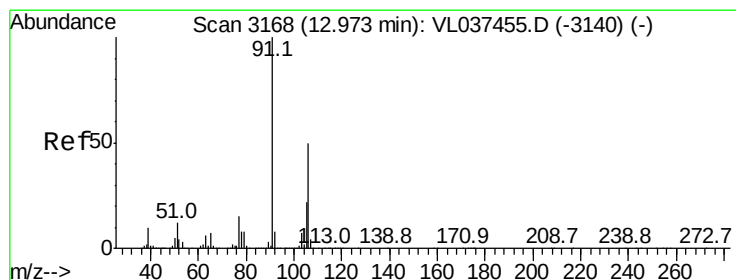
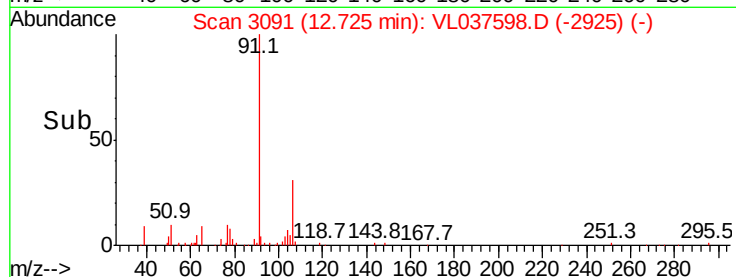
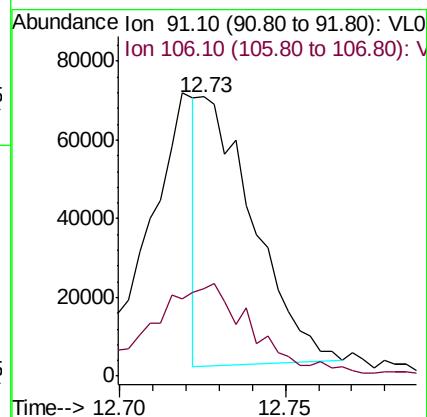
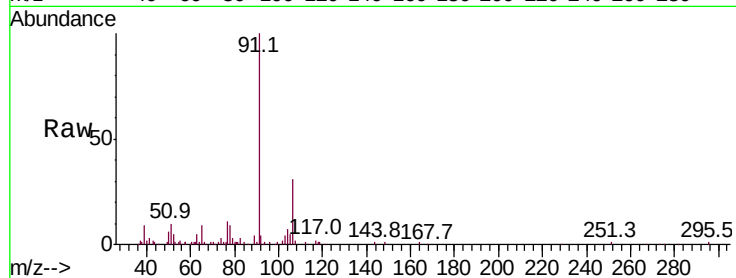
ClientSampleId :

Tot Ion: 91 Resp: 77517

Ion Ratio Lower Upper

91 100

106 29.7 25.7 38.5



#59

m/p-Xylene

Concen: 1.001 ppbv

RT: 12.98 min Scan# 3170

Delta R.T. 0.01 min

Lab File: VL037598.D

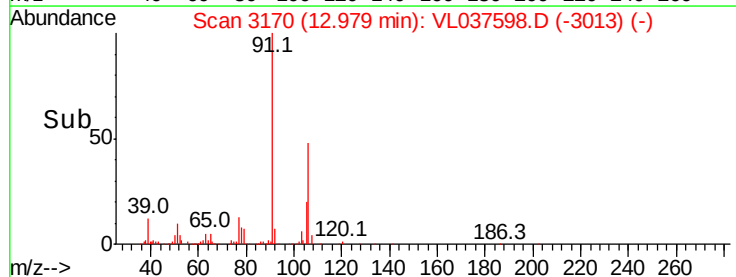
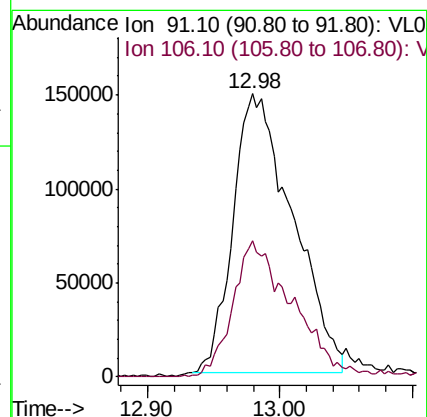
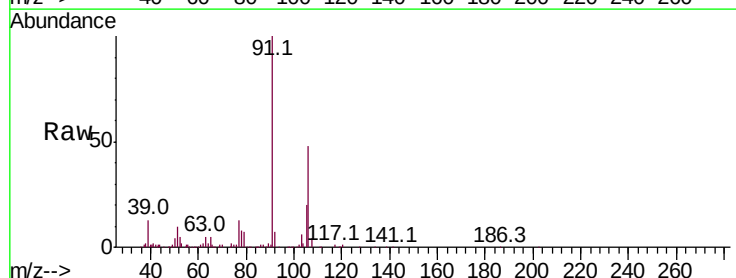
Acq: 9 Sep 2021 14:42

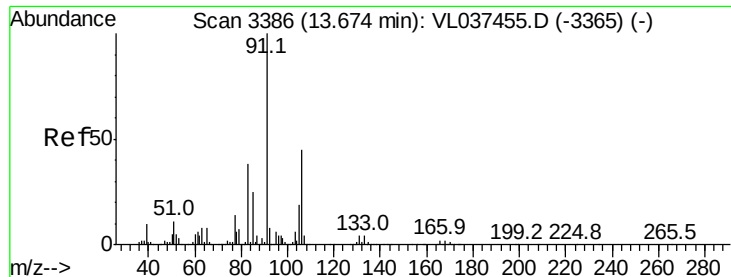
Tgt Ion: 91 Resp: 462232

Ion Ratio Lower Upper

91 100

106 49.9 36.9 55.3





#60

o-Xylene

Concen: 0.356 ppbv

RT: 13.70 min Scan# 3395

Delta R.T. 0.03 min

Lab File: VL037598.D

Acq: 9 Sep 2021 14:42

Instrument :

MSVOA_L

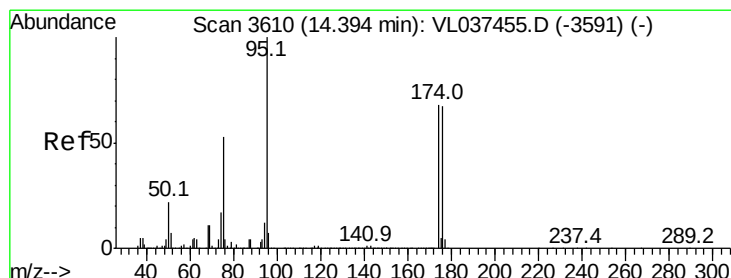
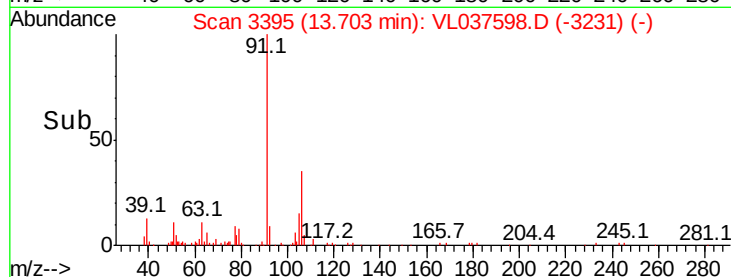
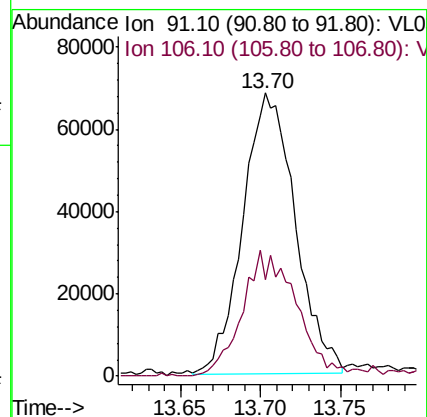
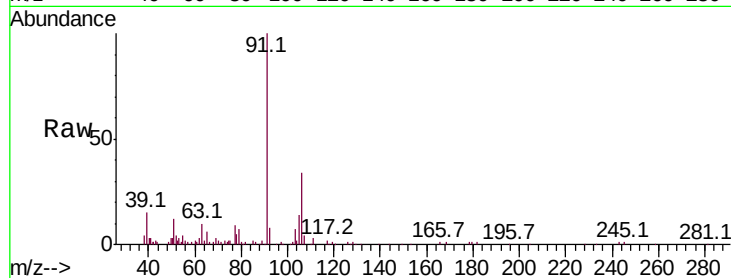
ClientSampleId :

Tot Ion: 91 Resp: 153549

Ion Ratio Lower Upper

91 100

106 48.2 23.7 71.1



#68

1-Bromo-4-Fluorobenzene

Concen: 9.713 ppbv

RT: 14.43 min Scan# 3620

Delta R.T. 0.03 min

Lab File: VL037598.D

Acq: 9 Sep 2021 14:42

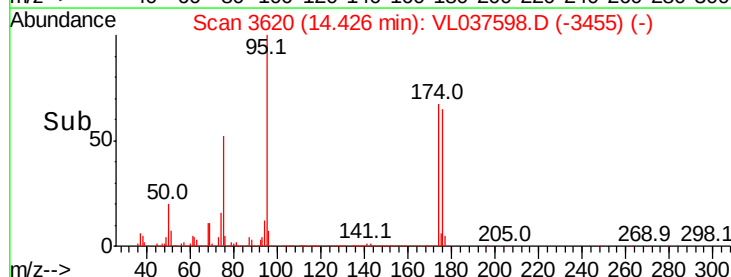
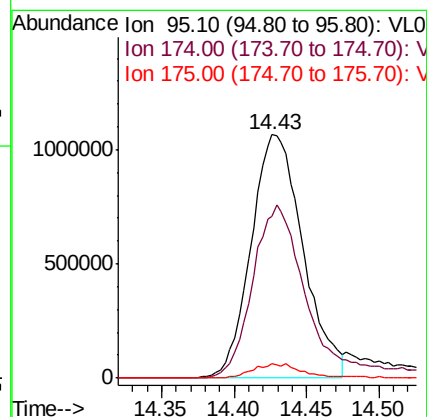
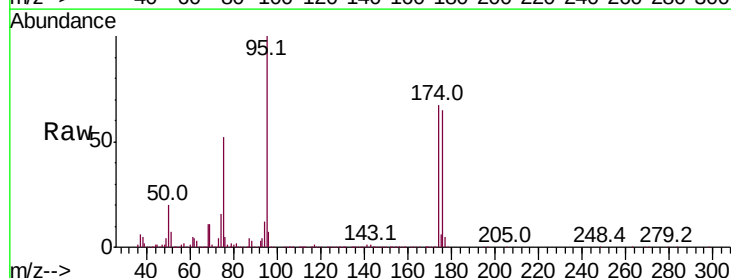
Tgt Ion: 95 Resp: 2648692

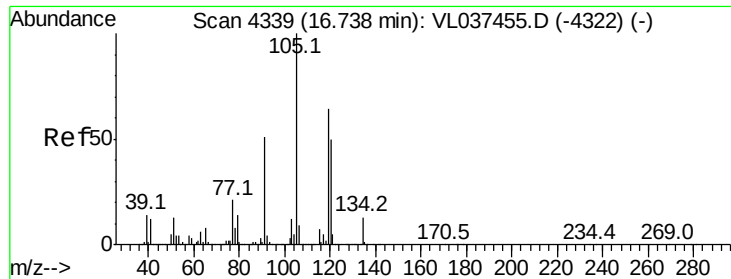
Ion Ratio Lower Upper

95 100

174 80.1 59.6 89.4

175 6.1 4.6 7.0





#74

1,2,4-Trimethylbenzene

Concen: 0.234 ppbv

RT: 16.77 min Scan# 4349

Delta R.T. 0.03 min

Lab File: VL037598.D

Acq: 9 Sep 2021 14:42

Instrument :

MSVOA_L

ClientSampleId :

Tot Ion:	105	Resp:	118601
Ion Ratio	Lower	Upper	
105	100		
120	36.3	40.4	60.6#
91	15.4	44.6	67.0#
77	9.8	17.8	26.6#

