

Data Path : Z:\VOASRV\HPCHEM1\MSVOA_L\DATA\VL100721\
 Data File : VL037804.D
 Acq On : 7 Oct 2021 20:25
 Operator : SY/AP
 Sample : M4079-10
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 C0P16

Quant Time: Oct 08 10:06:56 2021
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_L\METHODS\VL100421AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Mon Oct 04 17:43:54 2021
 QLast Update : Mon Oct 04 17:43:54 2021
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.65	49	1126423	10.00	ppbv	-0.01
33) 1,4-Difluorobenzene	7.16	114	3454070	10.00	ppbv	-0.02
55) Chlorobenzene-d5	12.07	117	2972723	10.00	ppbv	-0.02

System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	14.40	95	2072071	9.97	ppbv	-0.02
Spiked Amount	10.000	Range	65 - 135	Recovery	=	99.70%

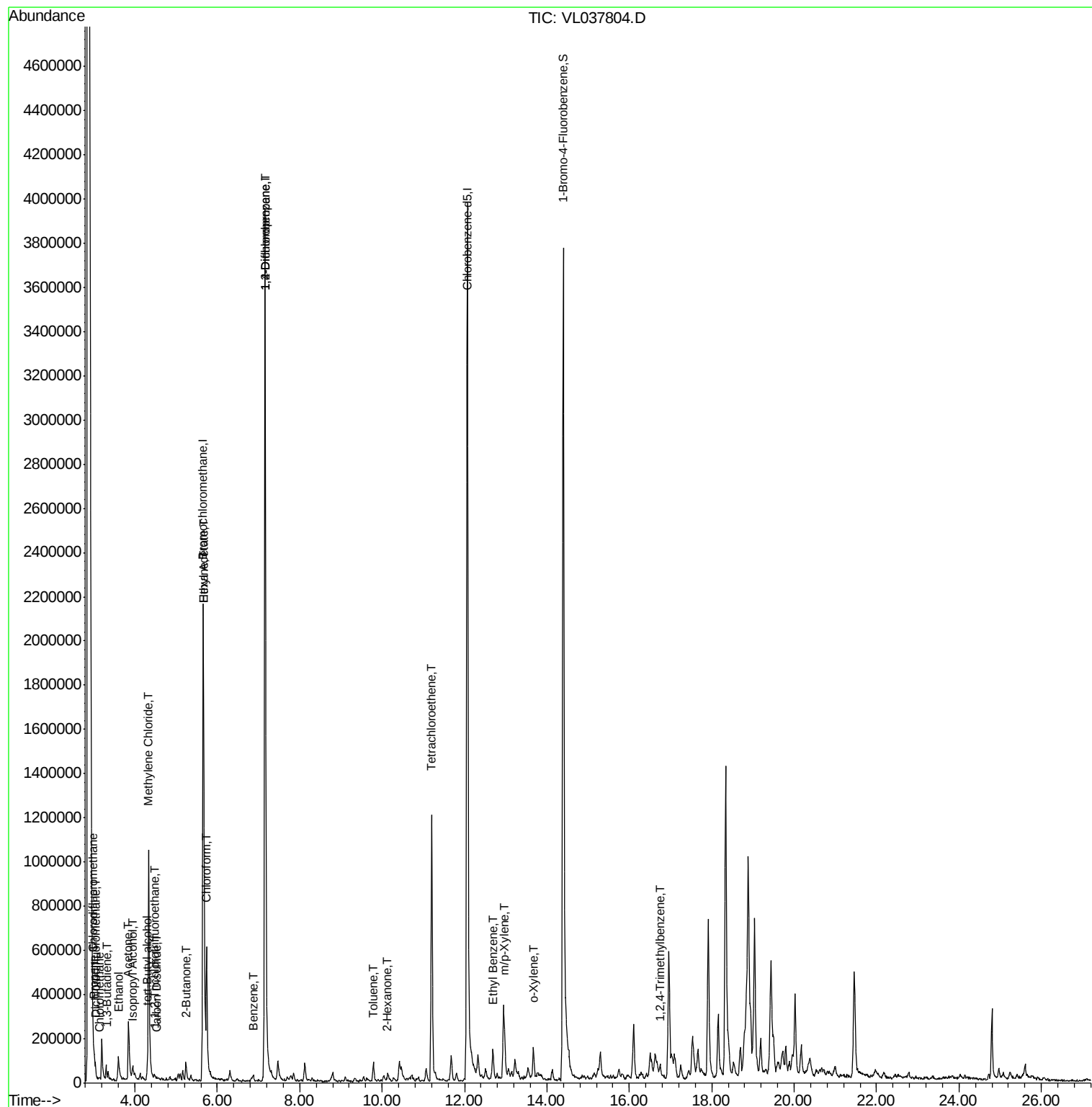
Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	3.04	85	26824	0.149	ppbv	94
3) Chlorodifluoromethane	2.98	51	25010	0.116	ppbv #	89
4) Chloromethane	3.13	50	5140	0.065	ppbv #	79
9) Propene	3.00	41	8432	0.106	ppbv #	16
12) 1,1,2-Trichlorotrifluoroet	4.47	101	4894	0.040	ppbv #	23
13) Ethanol	3.60	45	120935	18.569	ppbv	98
15) Acetone	3.84	43	337308	3.336	ppbv	97
16) 1,3-Butadiene	3.32	39	2060	0.028	ppbv #	11
17) tert-Butyl alcohol	4.30	59	25580	0.246	ppbv #	73
19) Isopropyl Alcohol	3.94	45	2005	0.032	ppbv #	1
20) Methylene Chloride	4.33	84	411558	8.055	ppbv	97
25) Ethyl Acetate	5.67	43	199277	0.702	ppbv #	80
26) Hexane	5.67	57	261941	1.875	ppbv #	44
27) Carbon Disulfide	4.54	76	7216	0.058	ppbv #	61
29) Chloroform	5.74	83	416040	2.083	ppbv	99
34) 2-Butanone	5.24	43	107496	0.771	ppbv #	88
36) Benzene	6.88	78	6843	0.023	ppbv #	74
39) 1,2-Dichloropropane	7.16	63	807606	7.278	ppbv #	28
51) 2-Hexanone	10.11	43	2405	0.030	ppbv #	28
52) Tetrachloroethene	11.20	164	326602	2.845	ppbv	95
53) Toluene	9.79	91	48783	0.149	ppbv #	82
58) Ethyl Benzene	12.69	91	104144	0.261	ppbv	99
59) m/p-Xylene	12.97	91	104399	0.305	ppbv #	30
60) o-Xylene	13.67	91	55060	0.168	ppbv #	30
74) 1,2,4-Trimethylbenzene	16.73	105	9608	0.027	ppbv #	86

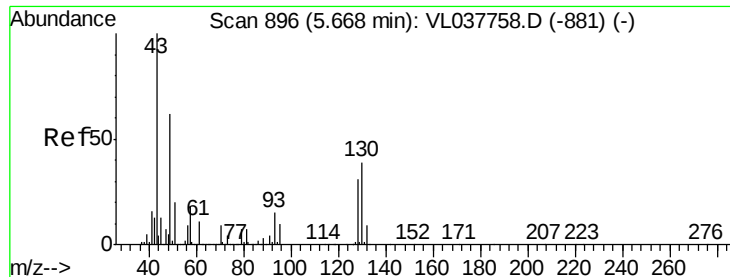
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\VOASRV\HPCHEM1\MSVOA_L\DATA\VL100721\
Data File : VL037804.D
Acq On : 7 Oct 2021 20:25
Operator : SY/AP
Sample : M4079-10
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
C0P16

Quant Time: Oct 08 10:06:56 2021
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_L\METHODS\VL100421AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Mon Oct 04 17:43:54 2021
QLast Update : Mon Oct 04 17:43:54 2021
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.65 min Scan# 892

Delta R.T. -0.01 min

Lab File: VL037804.D

Acq: 7 Oct 2021 20:25

Instrument :

MSVOA_L

ClientSampleId :

C0P16

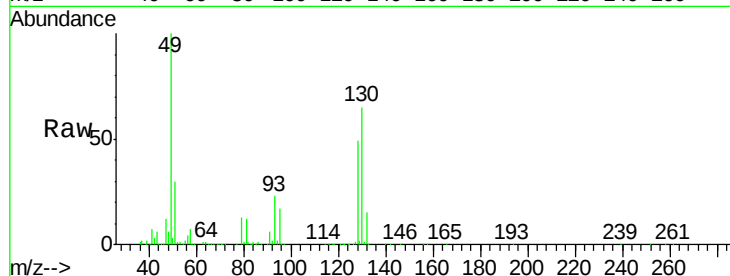
Tgt Ion: 49 Resp: 1126423

Ion Ratio Lower Upper

49 100

128 52.4 27.1 81.3

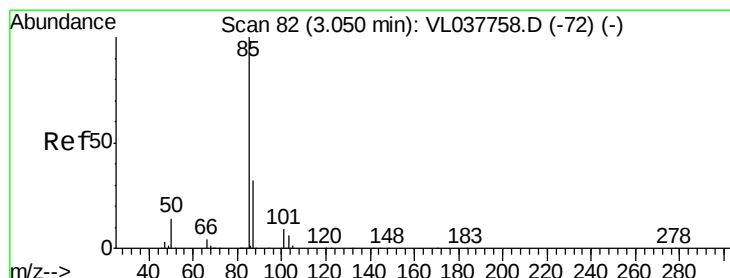
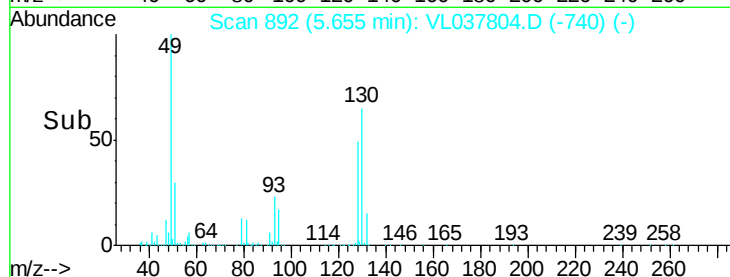
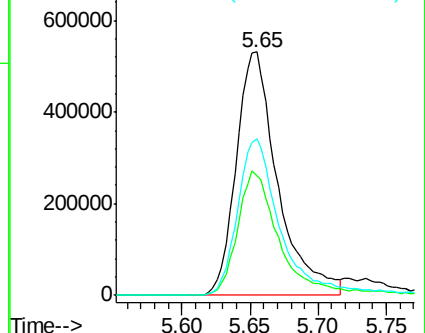
130 67.3 33.2 99.6



Abundance Ion 49.10 (48.80 to 49.80): VL0

Ion 128.00 (127.70 to 128.70): VL0

Ion 130.00 (129.70 to 130.70): VL0



#2

Dichlorodifluoromethane

Concen: 0.149 ppbv

RT: 3.04 min Scan# 78

Delta R.T. -0.01 min

Lab File: VL037804.D

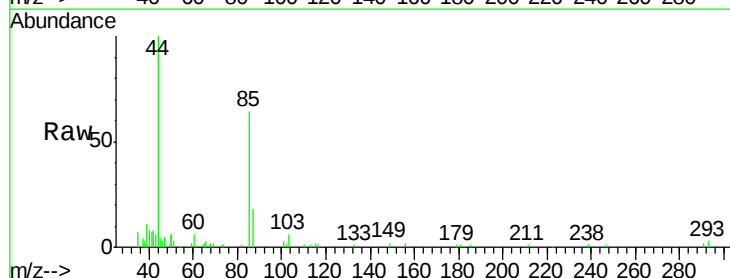
Acq: 7 Oct 2021 20:25

Tgt Ion: 85 Resp: 26824

Ion Ratio Lower Upper

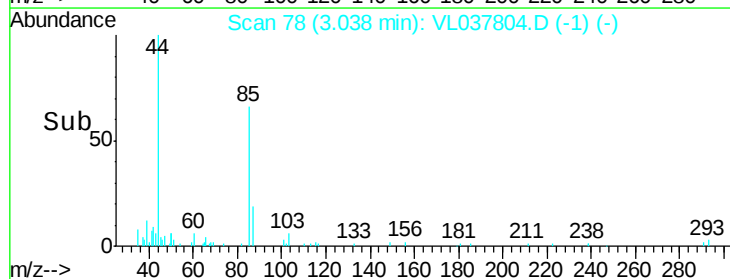
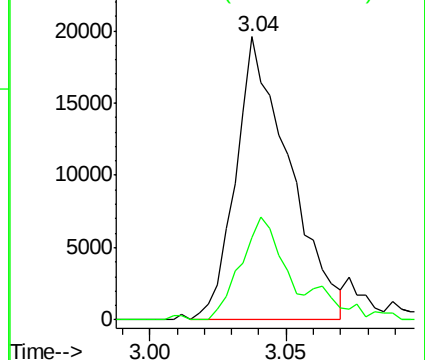
85 100

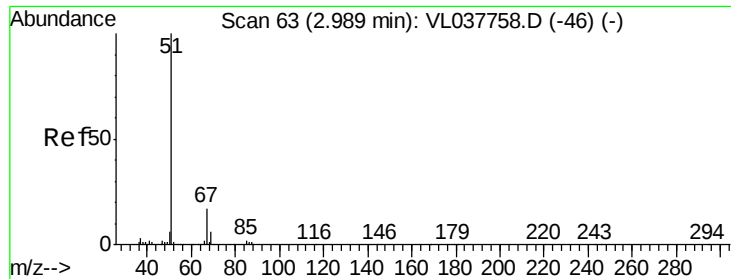
87 29.0 25.7 38.5



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0





#3

Chlorodifluoromethane

Concen: 0.116 ppbv

RT: 2.98 min Scan# 60

Delta R.T. -0.01 min

Lab File: VL037804.D

Acq: 7 Oct 2021 20:25

Instrument :

MSVOA_L

ClientSampleId :

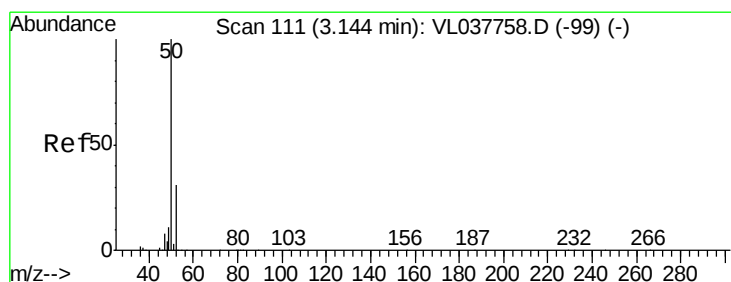
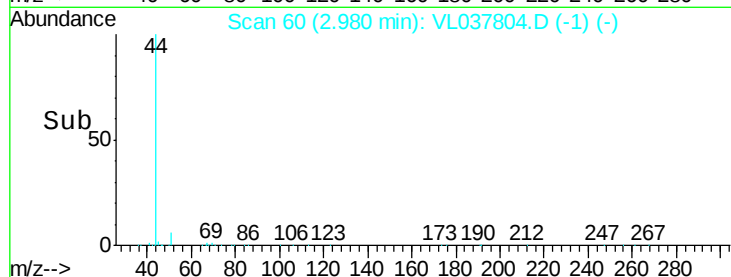
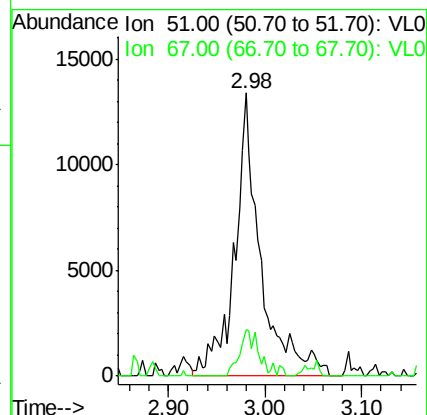
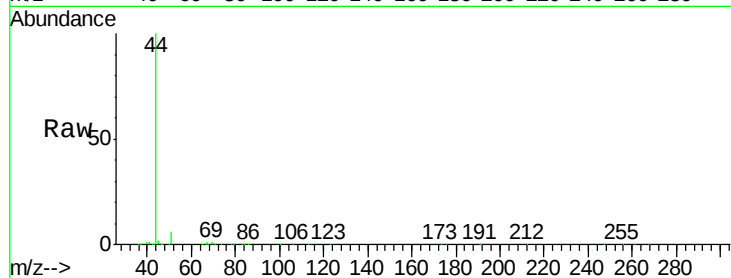
C0P16

Tgt Ion: 51 Resp: 25010

Ion Ratio Lower Upper

51 100

67 12.0 13.5 20.3#



#4

Chloromethane

Concen: 0.065 ppbv

RT: 3.13 min Scan# 108

Delta R.T. -0.01 min

Lab File: VL037804.D

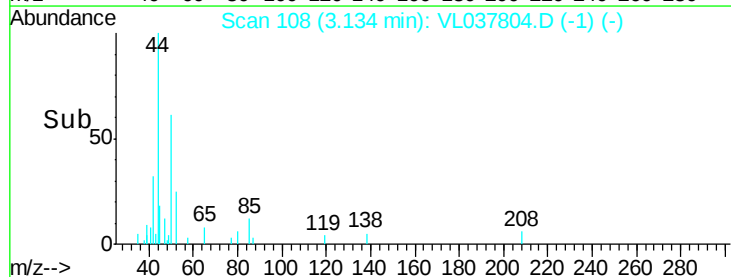
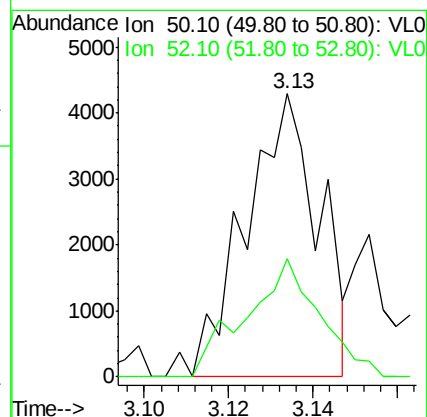
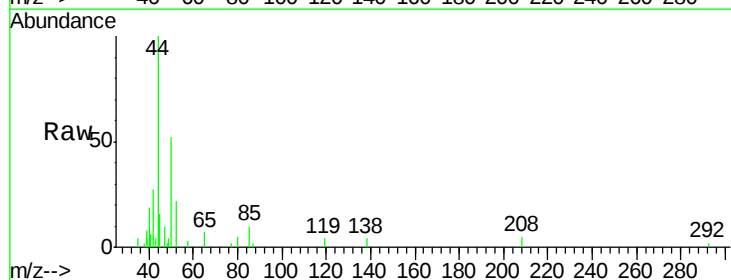
Acq: 7 Oct 2021 20:25

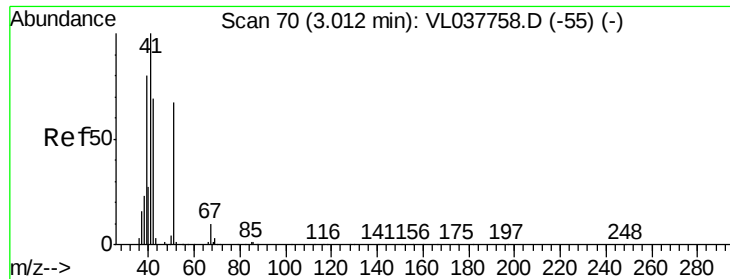
Tgt Ion: 50 Resp: 5140

Ion Ratio Lower Upper

50 100

52 41.7 24.4 36.6#





#9

Propene

Concen: 0.106 ppbv

RT: 3.00 min Scan# 67

Delta R.T. -0.01 min

Lab File: VL037804.D

Acq: 7 Oct 2021 20:25

Instrument :

MSVOA_L

ClientSampled :

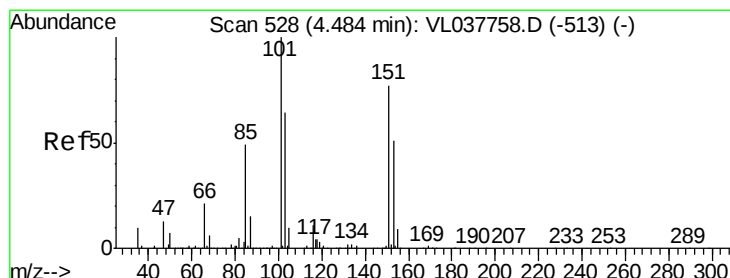
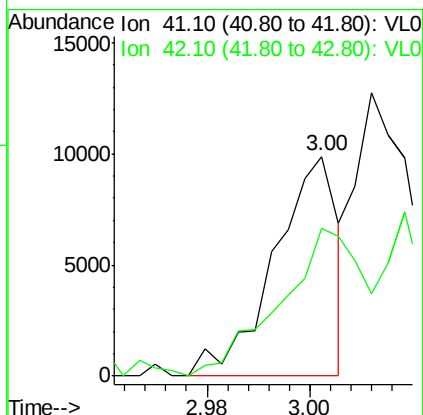
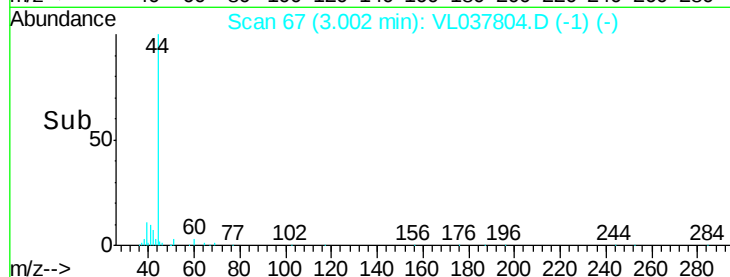
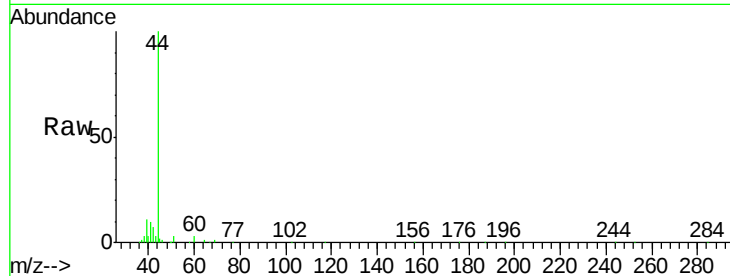
C0P16

Tgt Ion: 41 Resp: 8432

Ion Ratio Lower Upper

41 100

42 0.0 54.2 81.2#



#12

1,1,2-Trichlorotrifluoroethane

Concen: 0.040 ppbv

RT: 4.47 min Scan# 525

Delta R.T. -0.01 min

Lab File: VL037804.D

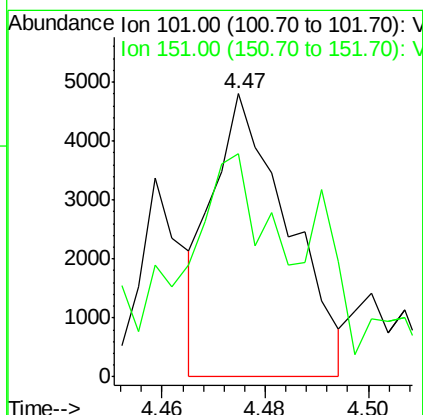
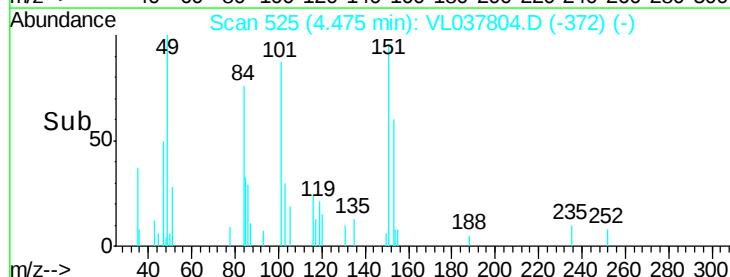
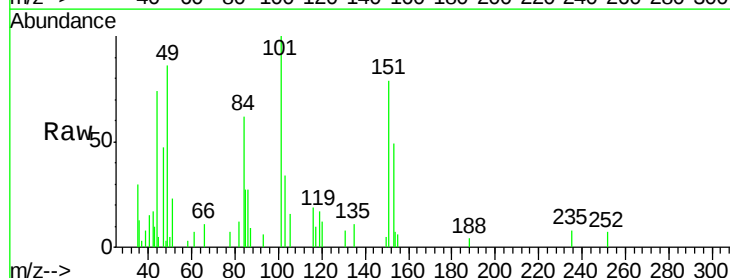
Acq: 7 Oct 2021 20:25

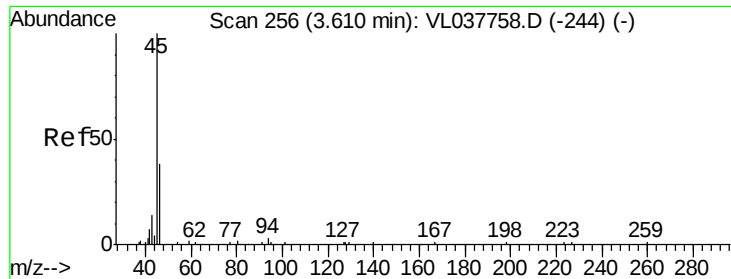
Tgt Ion: 101 Resp: 4894

Ion Ratio Lower Upper

101 100

151 145.7 62.9 94.3#





#13

Ethanol

Concen: 18.569 ppbv

RT: 3.60 min Scan# 253

Delta R.T. -0.01 min

Lab File: VL037804.D

Acq: 7 Oct 2021 20:25

Instrument :

MSVOA_L

ClientSampleId :

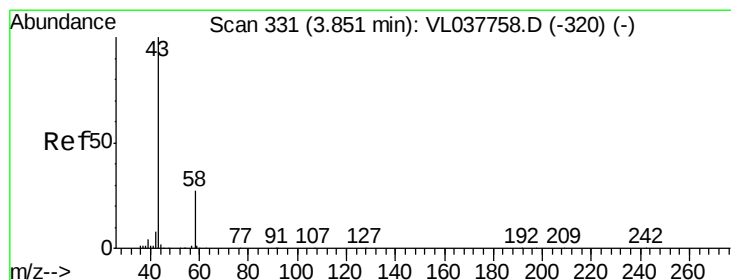
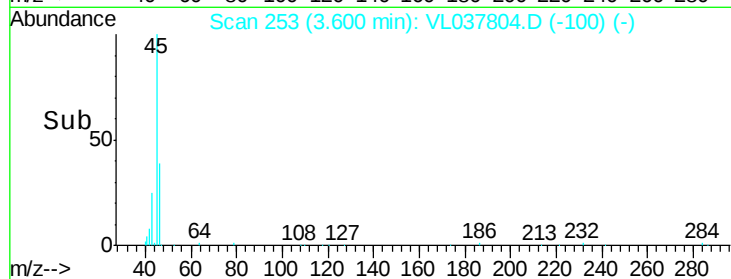
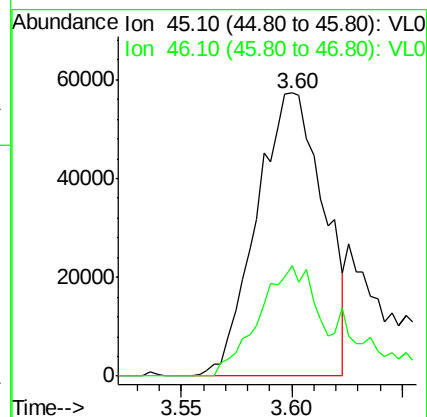
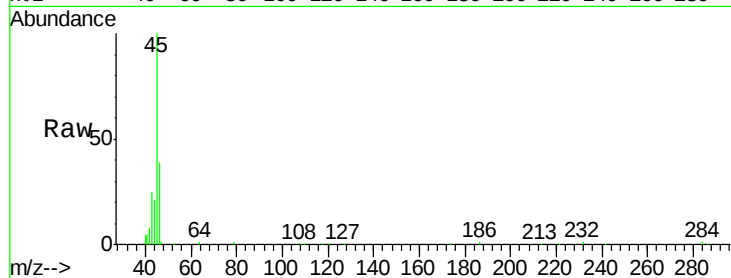
C0P16

Tgt Ion: 45 Resp: 120935

Ion Ratio Lower Upper

45 100

46 51.7 20.2 81.0



#15

Acetone

Concen: 3.336 ppbv

RT: 3.84 min Scan# 328

Delta R.T. -0.01 min

Lab File: VL037804.D

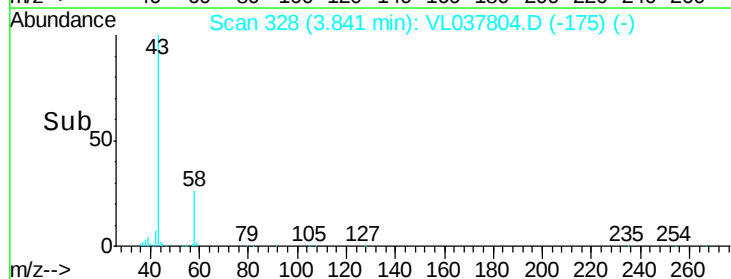
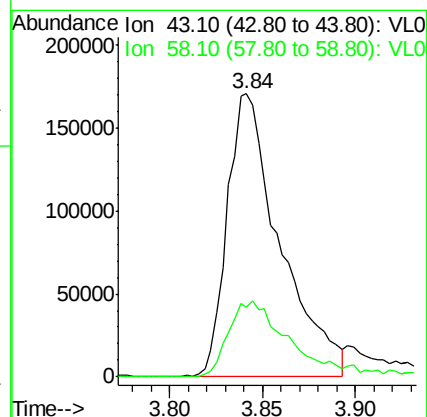
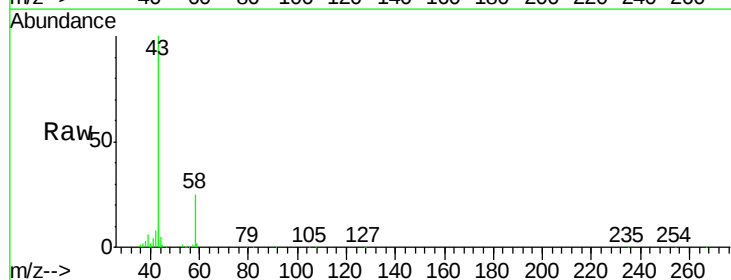
Acq: 7 Oct 2021 20:25

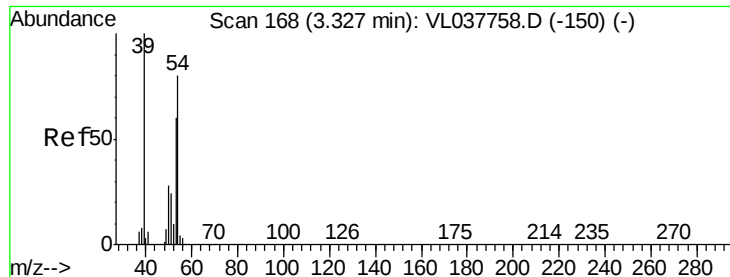
Tgt Ion: 43 Resp: 337308

Ion Ratio Lower Upper

43 100

58 30.4 23.0 34.6

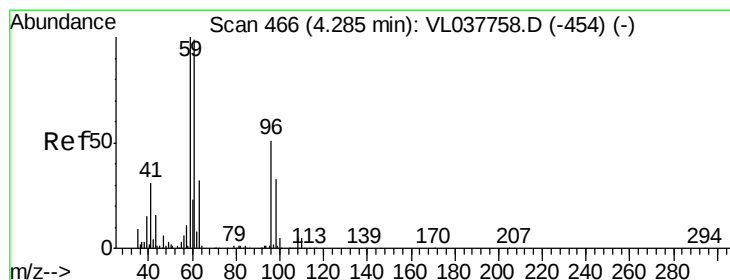
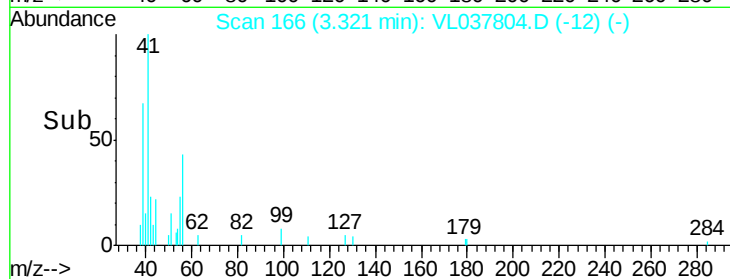
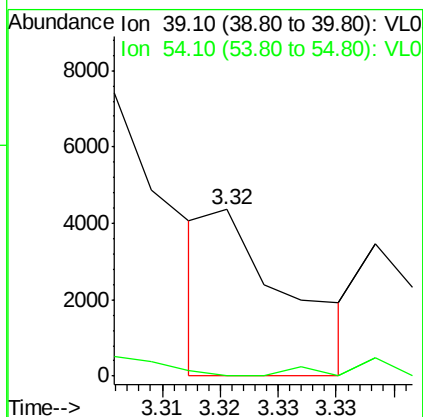
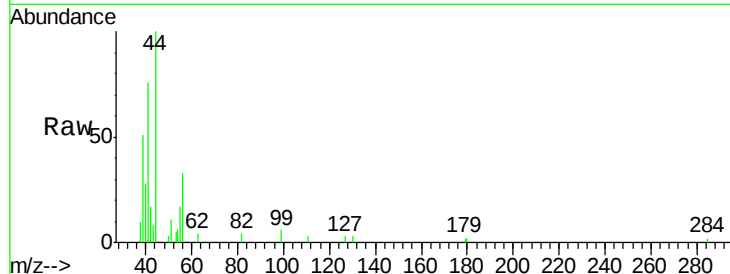




#16
 1,3-Butadiene
 Concen: 0.028 ppbv
 RT: 3.32 min Scan# 166
 Delta R.T. -0.01 min
 Lab File: VL037804.D
 Acq: 7 Oct 2021 20:25

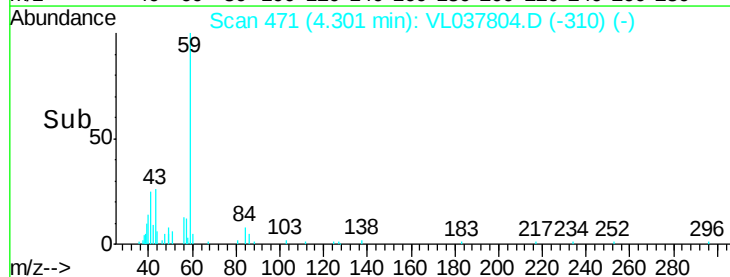
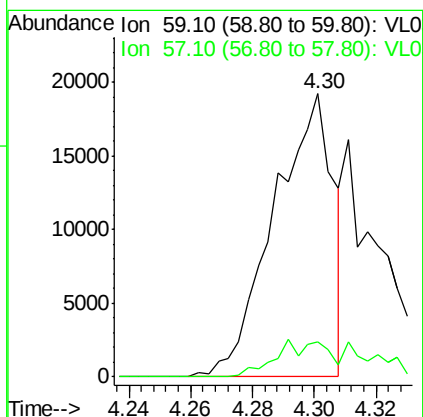
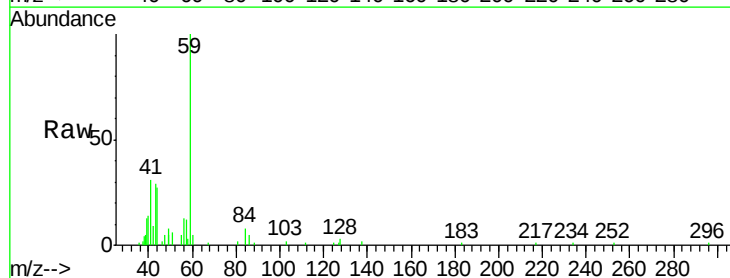
Instrument :
 MSVOA_L
 ClientSampleId :
 C0P16

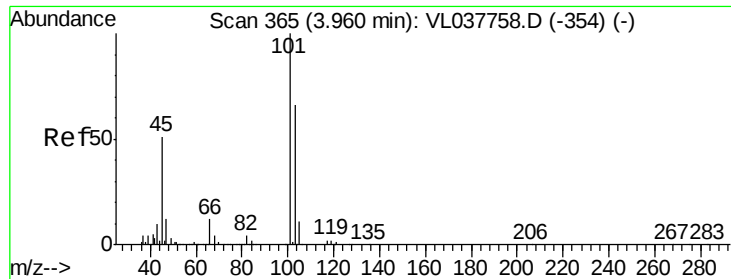
Tgt Ion: 39 Resp: 2060
 Ion Ratio Lower Upper
 39 100
 54 0.0 61.7 92.5#



#17
 tert-Butyl alcohol
 Concen: 0.246 ppbv
 RT: 4.30 min Scan# 471
 Delta R.T. 0.02 min
 Lab File: VL037804.D
 Acq: 7 Oct 2021 20:25

Tgt Ion: 59 Resp: 25580
 Ion Ratio Lower Upper
 59 100
 57 21.0 8.6 13.0#





#19

Isopropyl Alcohol

Concen: 0.032 ppbv

RT: 3.94 min Scan# 360

Delta R.T. -0.02 min

Lab File: VL037804.D

Acq: 7 Oct 2021 20:25

Instrument :

MSVOA_L

ClientSampled :

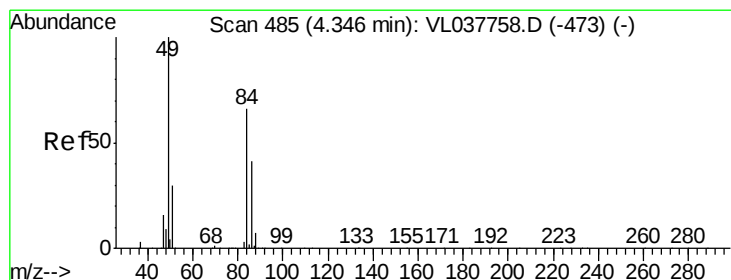
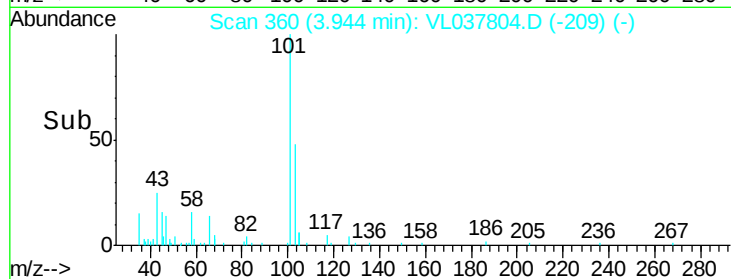
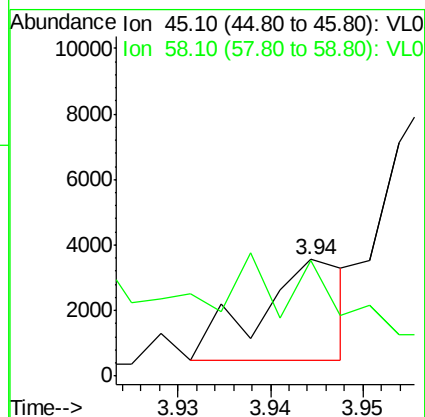
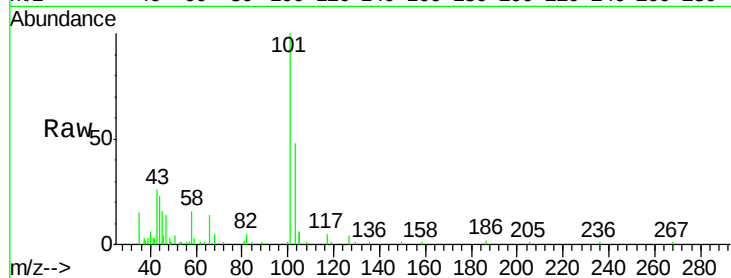
C0P16

Tgt Ion: 45 Resp: 2005

Ion Ratio Lower Upper

45 100

58 289.9 1.1 1.7#



#20

Methylene Chloride

Concen: 8.055 ppbv

RT: 4.33 min Scan# 480

Delta R.T. -0.02 min

Lab File: VL037804.D

Acq: 7 Oct 2021 20:25

Tgt Ion: 84 Resp: 411558

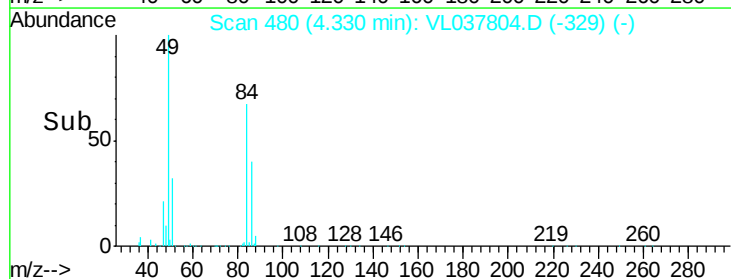
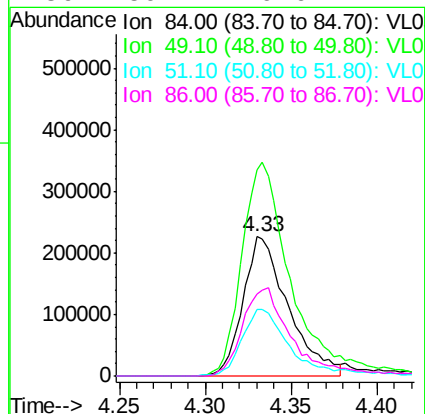
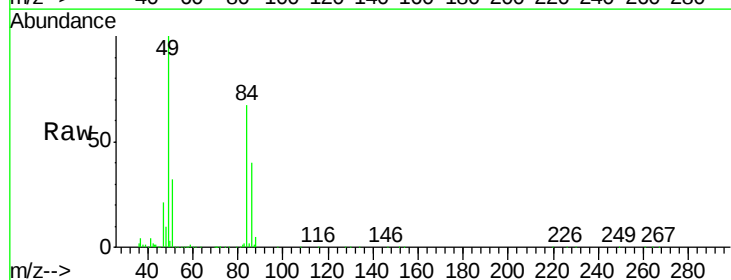
Ion Ratio Lower Upper

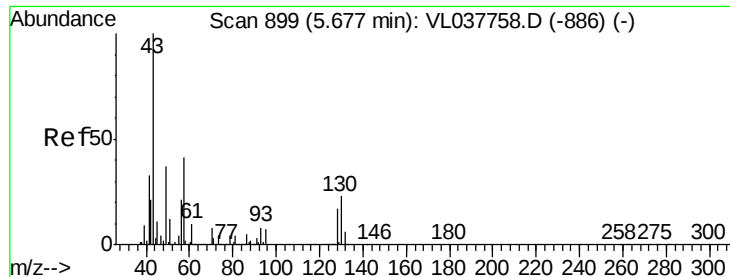
84 100

49 148.2 120.7 181.1

51 47.4 36.2 54.4

86 59.2 49.6 74.4





#25

Ethyl Acetate

Concen: 0.702 ppbv

RT: 5.67 min Scan# 897

Delta R.T. -0.01 min

Lab File: VL037804.D

Acq: 7 Oct 2021 20:25

Instrument :

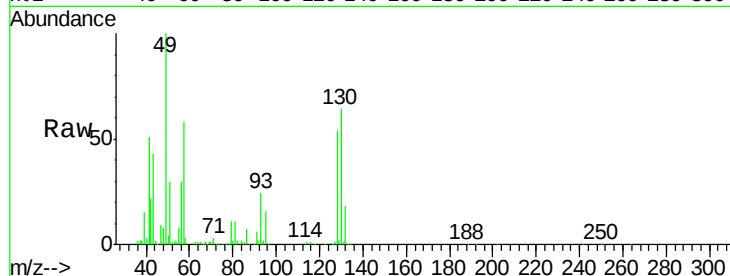
MSVOA_L

ClientSampleId :

C0P16

Tgt Ion: 43 Resp: 199277

Ion	Ratio	Lower	Upper
43	100		
45	2.3	8.1	12.1#
61	0.6	7.5	11.3#
70	2.2	5.9	8.9#



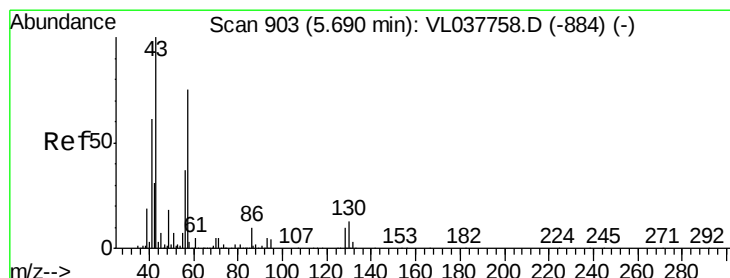
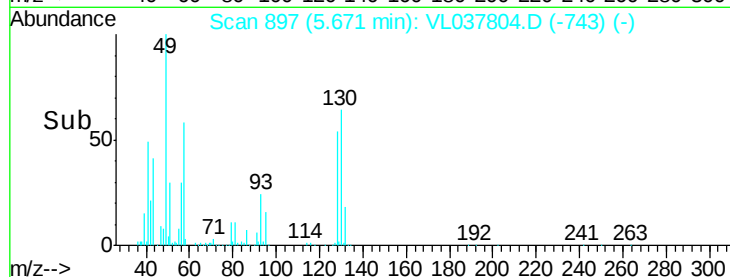
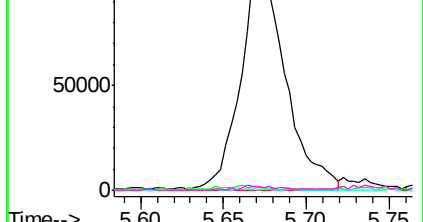
Abundance

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: 1.875 ppbv

RT: 5.67 min Scan# 897

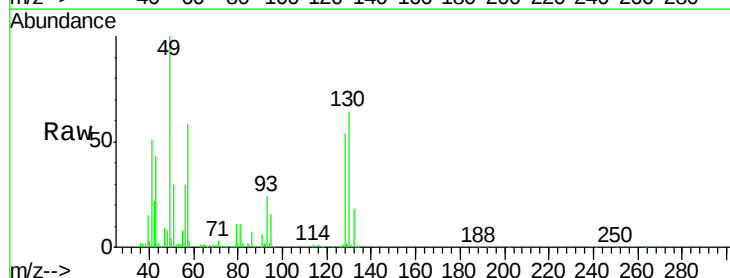
Delta R.T. -0.02 min

Lab File: VL037804.D

Acq: 7 Oct 2021 20:25

Tgt Ion: 57 Resp: 261941

Ion	Ratio	Lower	Upper
57	100		
41	98.3	69.6	104.4
43	78.8	171.4	257.0#
56	57.8	42.0	63.0



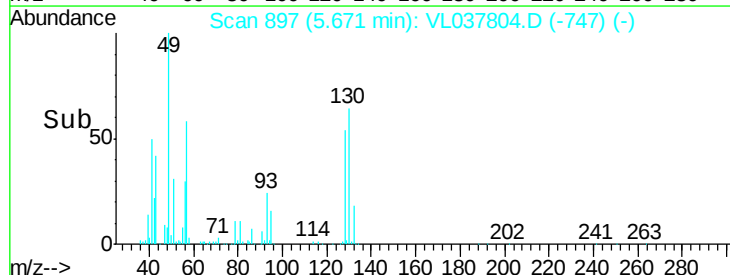
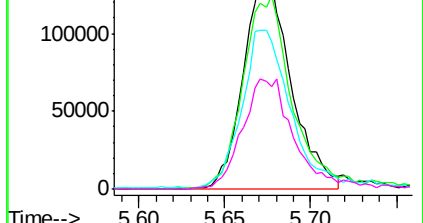
Abundance

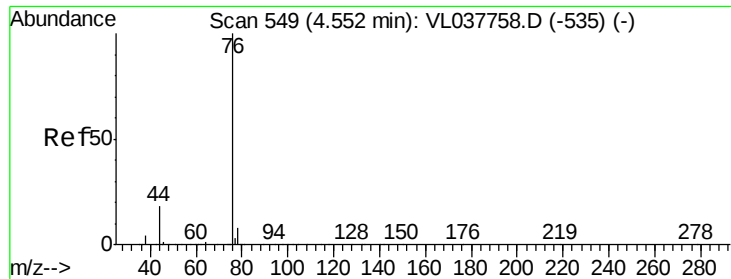
Ion 57.10 (56.80 to 57.80): VL0

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





#27

Carbon Disulfide

Concen: 0.058 ppbv

RT: 4.54 min Scan# 544

Delta R.T. -0.02 min

Lab File: VL037804.D

Acq: 7 Oct 2021 20:25

Instrument :

MSVOA_L

ClientSampled :

C0P16

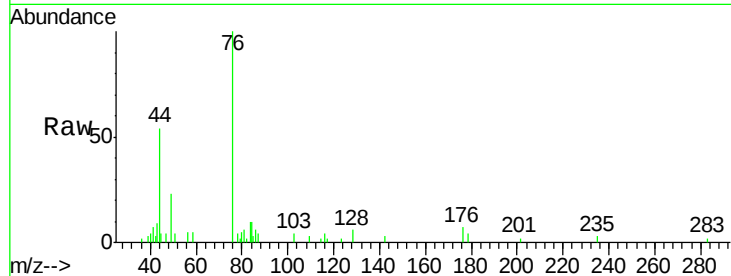
Tgt Ion: 76 Resp: 7216

Ion Ratio Lower Upper

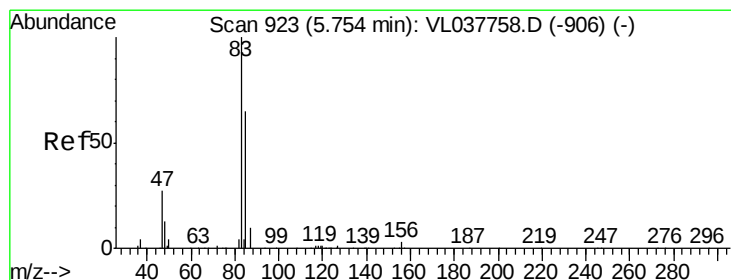
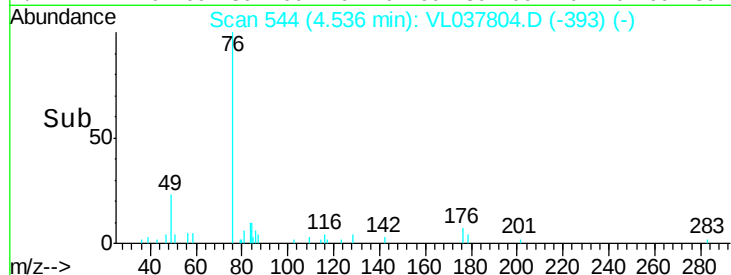
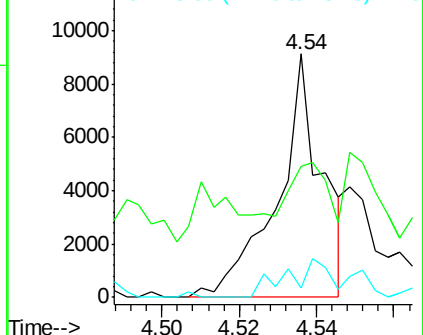
76 100

44 0.0 14.3 21.5#

78 23.2 7.8 11.6#



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



#29

Chloroform

Concen: 2.083 ppbv

RT: 5.74 min Scan# 917

Delta R.T. -0.02 min

Lab File: VL037804.D

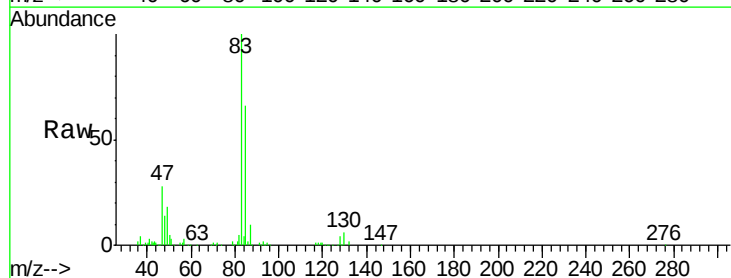
Acq: 7 Oct 2021 20:25

Tgt Ion: 83 Resp: 416040

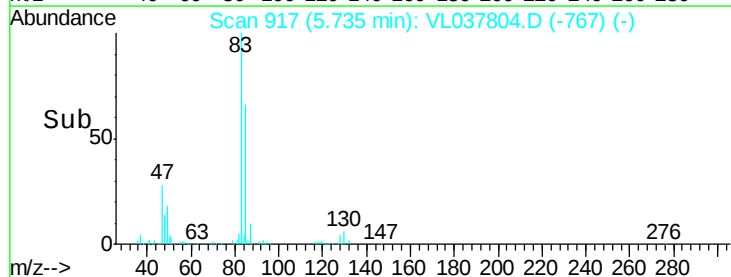
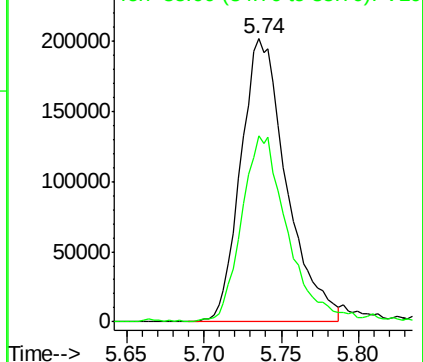
Ion Ratio Lower Upper

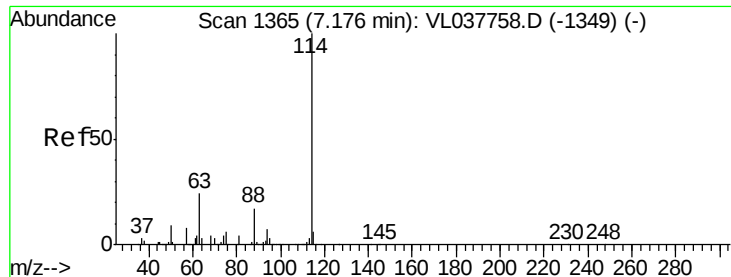
83 100

85 65.6 51.8 77.8



Abundance Ion 83.00 (82.70 to 83.70): VL0
Ion 85.00 (84.70 to 85.70): VL0

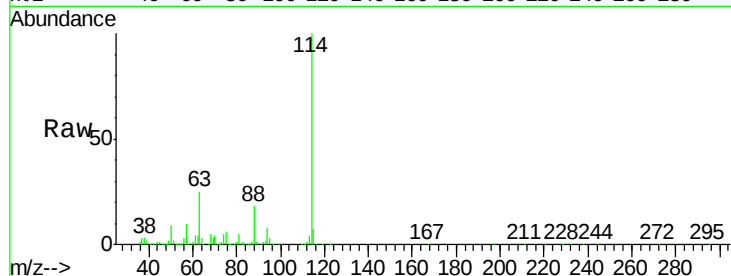




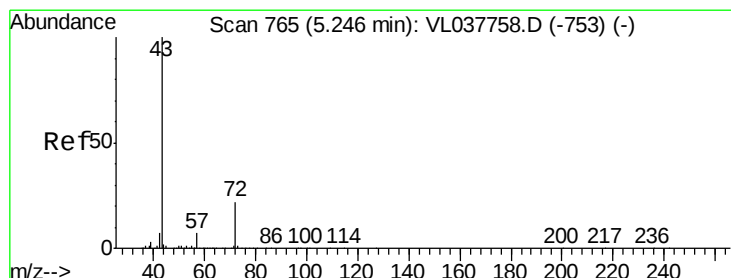
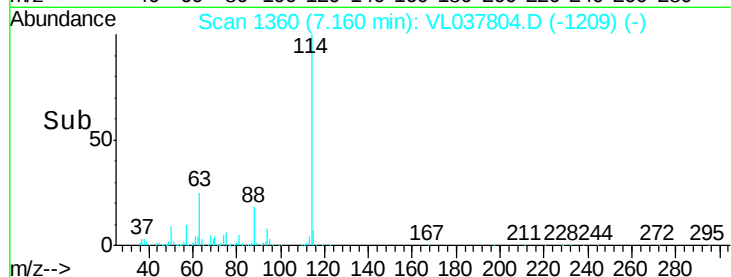
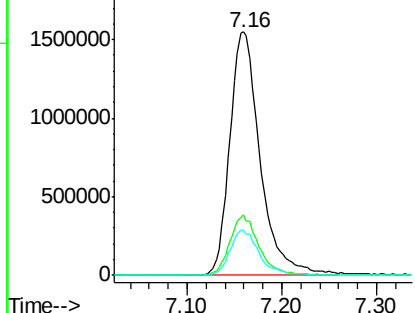
#33
 1,4-Difluorobenzene
 Concen: 10.000 ppbv
 RT: 7.16 min Scan# 1360
 Delta R.T. -0.02 min
 Lab File: VL037804.D
 Acq: 7 Oct 2021 20:25

Instrument :
 MSVOA_L
 ClientSampleId :
 C0P16

Tgt Ion: 114 Resp: 3454070
 Ion Ratio Lower Upper
 114 100
 63 24.1 19.4 29.2
 88 18.1 14.4 21.6

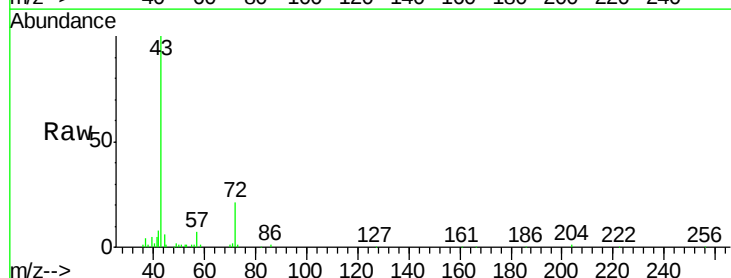


Abundance Ion 114.10 (113.80 to 114.80): VL0
 Ion 63.10 (62.80 to 63.80): VL0
 Ion 88.10 (87.80 to 88.80): VL0

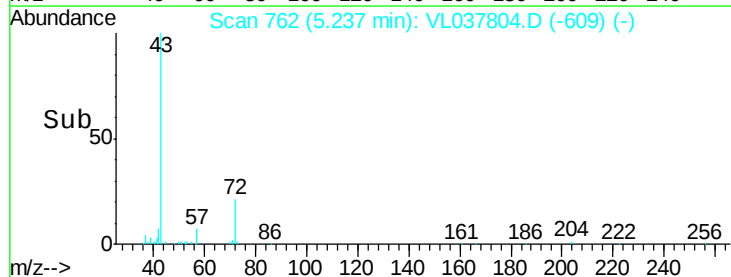
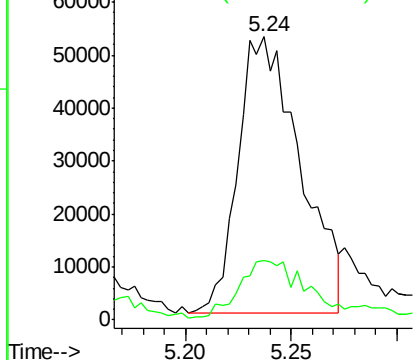


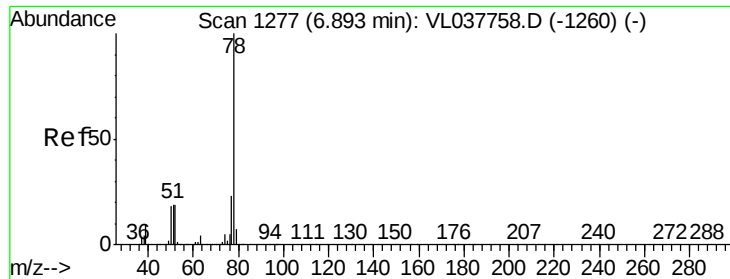
#34
 2-Butanone
 Concen: 0.771 ppbv
 RT: 5.24 min Scan# 762
 Delta R.T. -0.01 min
 Lab File: VL037804.D
 Acq: 7 Oct 2021 20:25

Tgt Ion: 43 Resp: 107496
 Ion Ratio Lower Upper
 43 100
 72 28.6 18.2 27.2#



Abundance Ion 43.10 (42.80 to 43.80): VL0
 Ion 72.10 (71.80 to 72.80): VL0





#36

Benzene

Concen: 0.023 ppbv

RT: 6.88 min Scan# 1272

Delta R.T. -0.02 min

Lab File: VL037804.D

Acq: 7 Oct 2021 20:25

Instrument :

MSVOA_L

ClientSampleId :

C0P16

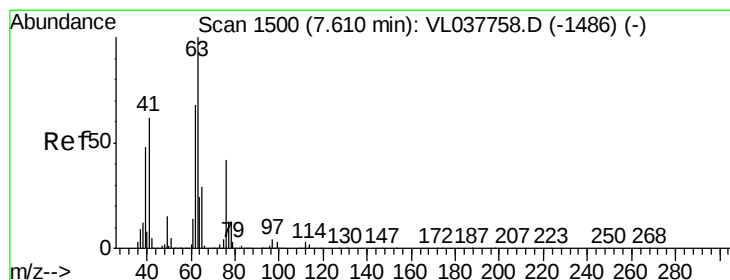
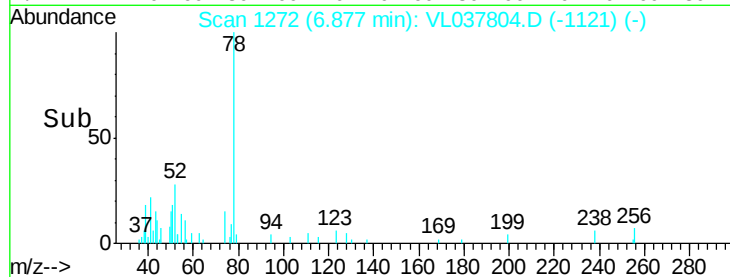
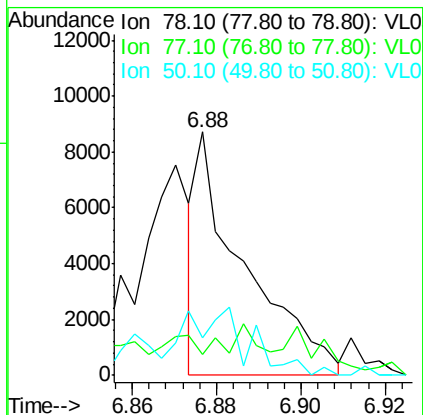
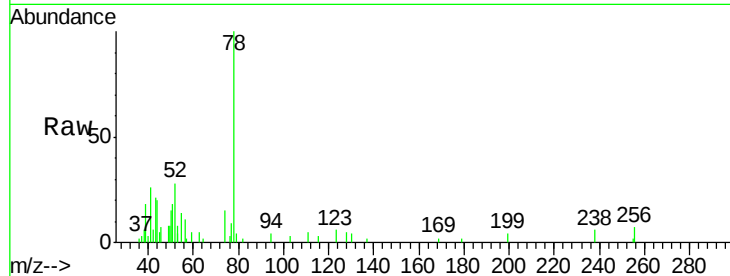
Tgt Ion: 78 Resp: 6843

Ion Ratio Lower Upper

78 100

77 2.7 18.8 28.2#

50 16.1 14.7 22.1



#39

1,2-Dichloropropane

Concen: 7.278 ppbv

RT: 7.16 min Scan# 1360

Delta R.T. -0.45 min

Lab File: VL037804.D

Acq: 7 Oct 2021 20:25

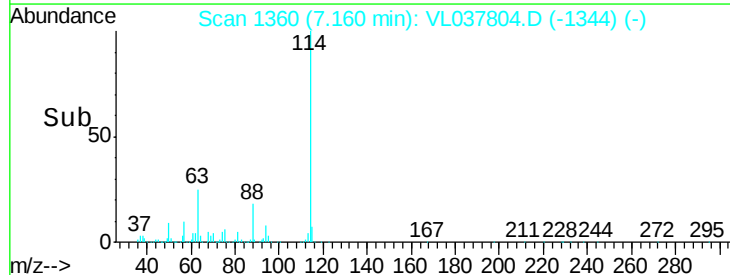
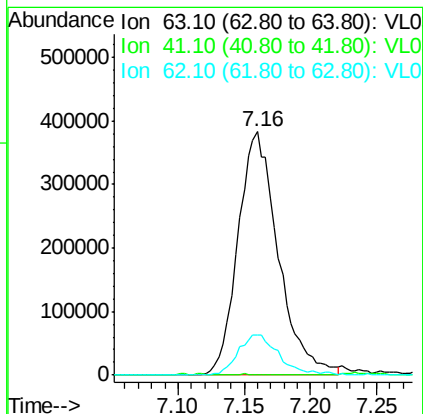
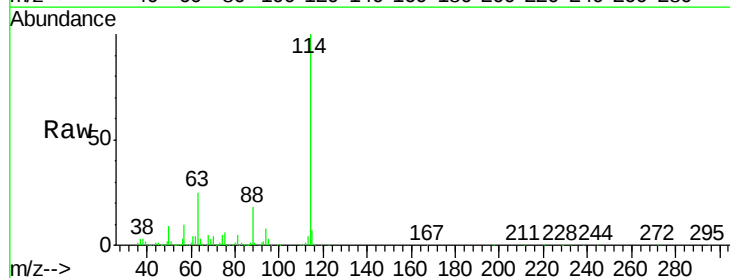
Tgt Ion: 63 Resp: 807606

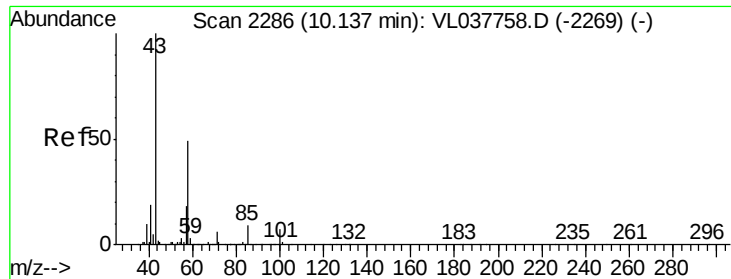
Ion Ratio Lower Upper

63 100

41 0.0 49.8 74.6#

62 16.7 54.6 82.0#

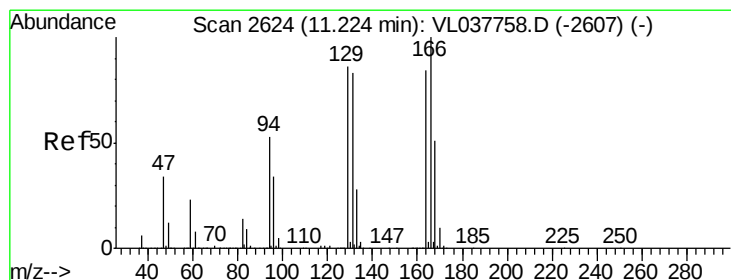
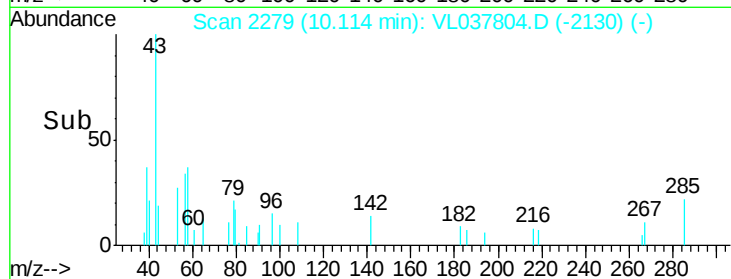
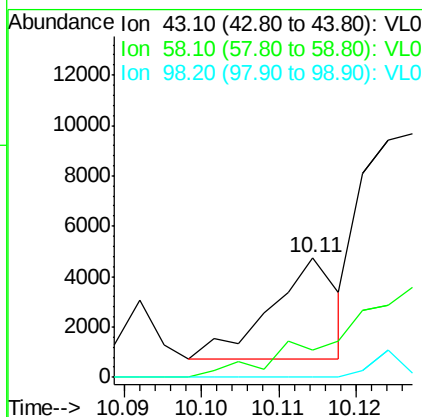
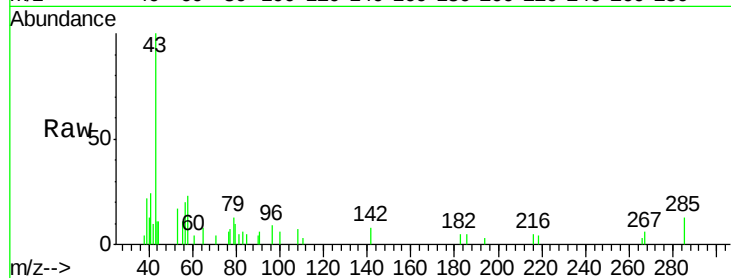




#51
2-Hexanone
Concen: 0.030 ppbv
RT: 10.11 min Scan# 2279
Delta R.T. -0.02 min
Lab File: VL037804.D
Acq: 7 Oct 2021 20:25

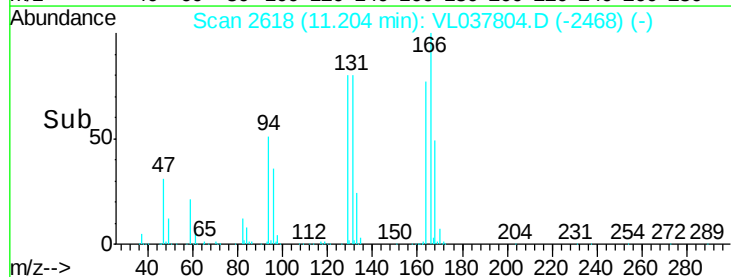
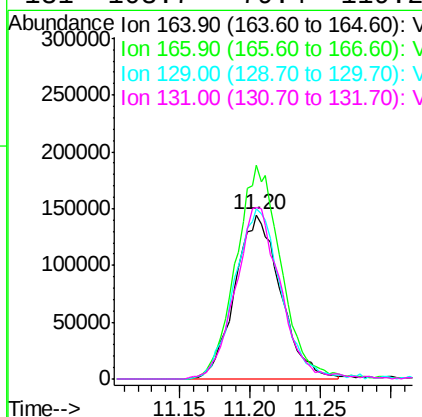
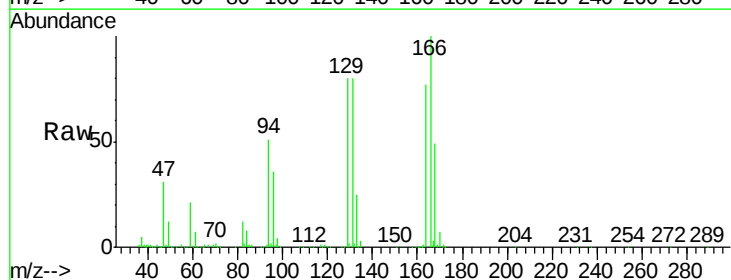
Instrument :
MSVOA_L
ClientSampleId :
C0P16

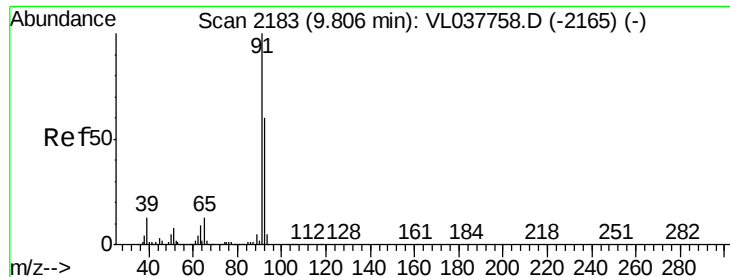
Tgt Ion: 43 Resp: 2405
Ion Ratio Lower Upper
43 100
58 0.0 39.4 59.0#
98 33.8 0.3 0.5#



#52
Tetrachloroethene
Concen: 2.845 ppbv
RT: 11.20 min Scan# 2618
Delta R.T. -0.02 min
Lab File: VL037804.D
Acq: 7 Oct 2021 20:25

Tgt Ion: 164 Resp: 326602
Ion Ratio Lower Upper
164 100
166 130.0 95.4 143.2
129 103.5 82.2 123.4
131 103.7 79.4 119.2





#53

Toluene

Concen: 0.149 ppbv

RT: 9.79 min Scan# 2178

Delta R.T. -0.02 min

Lab File: VL037804.D

Acq: 7 Oct 2021 20:25

Instrument :

MSVOA_L

ClientSampleId :

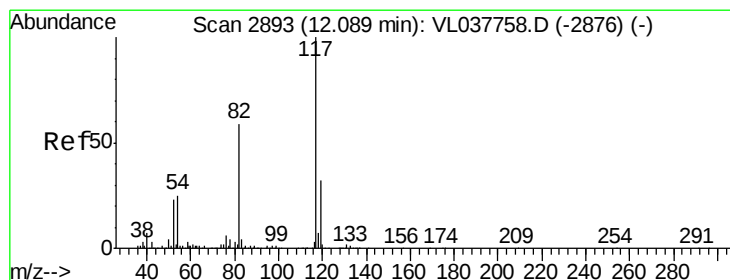
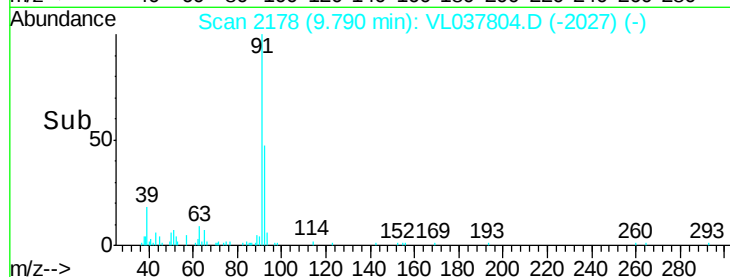
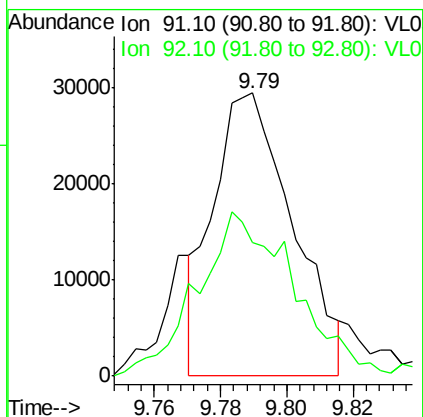
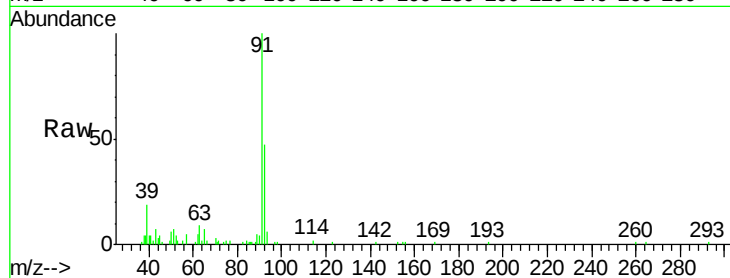
C0P16

Tgt Ion: 91 Resp: 48783

Ion Ratio Lower Upper

91 100

92 74.5 48.4 72.6#



#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.07 min Scan# 2886

Delta R.T. -0.02 min

Lab File: VL037804.D

Acq: 7 Oct 2021 20:25

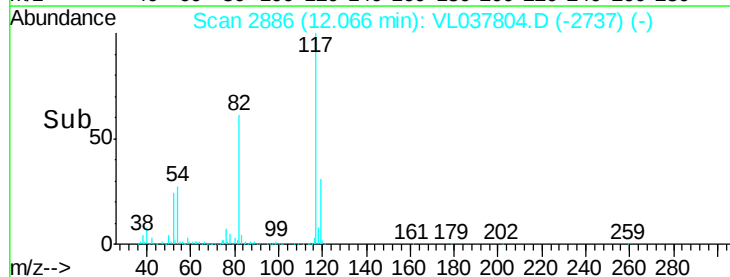
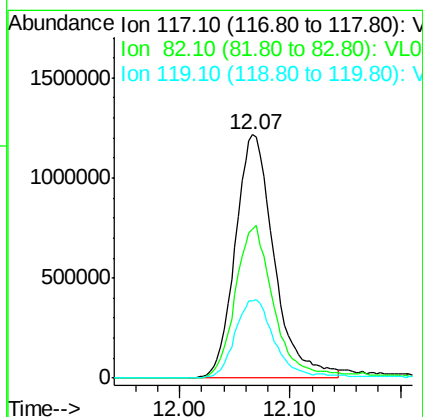
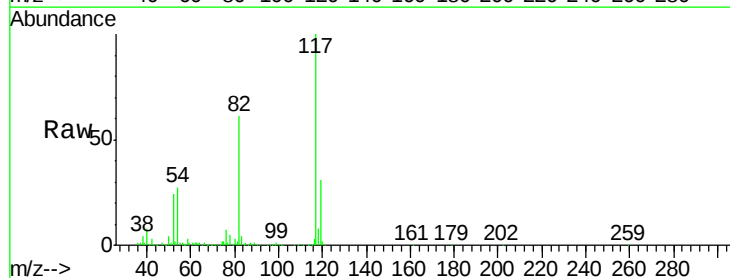
Tgt Ion: 117 Resp: 2972723

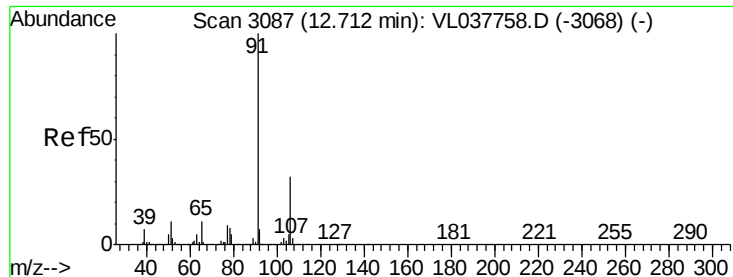
Ion Ratio Lower Upper

117 100

82 64.3 52.2 78.2

119 34.3 26.0 39.0





#58

Ethyl Benzene

Concen: 0.261 ppbv

RT: 12.69 min Scan# 3080

Delta R.T. -0.02 min

Lab File: VL037804.D

Acq: 7 Oct 2021 20:25

Instrument :

MSVOA_L

ClientSampleId :

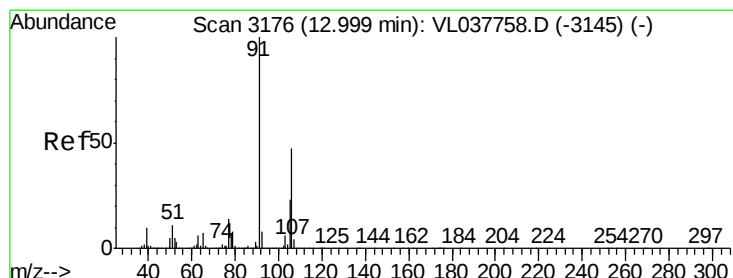
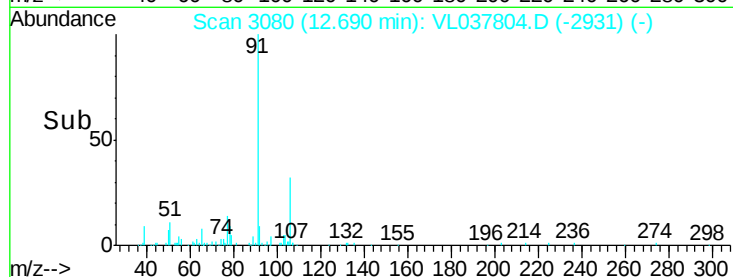
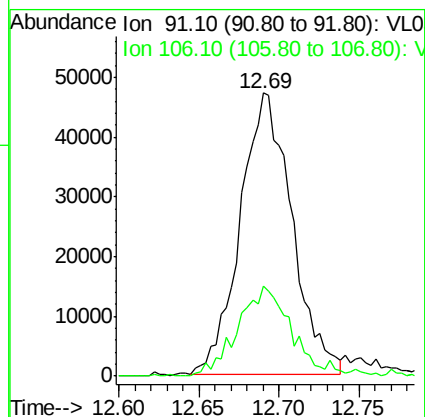
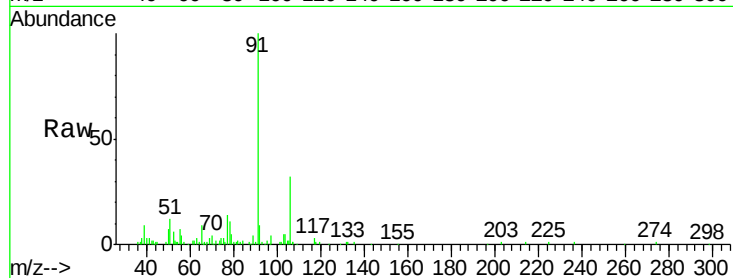
C0P16

Tgt Ion: 91 Resp: 104144

Ion Ratio Lower Upper

91 100

106 32.0 25.3 37.9



#59

m/p-Xylene

Concen: 0.305 ppbv

RT: 12.97 min Scan# 3167

Delta R.T. -0.03 min

Lab File: VL037804.D

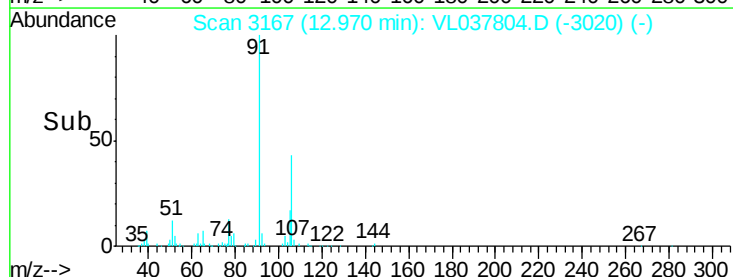
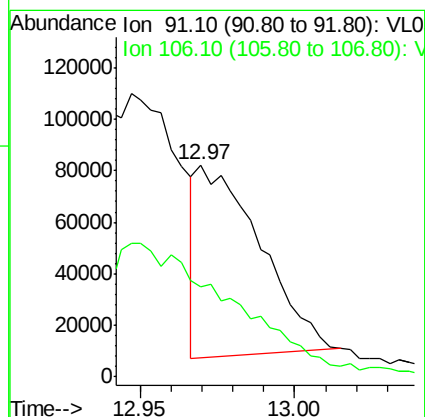
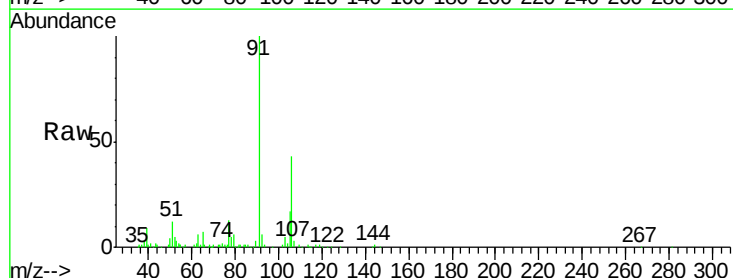
Acq: 7 Oct 2021 20:25

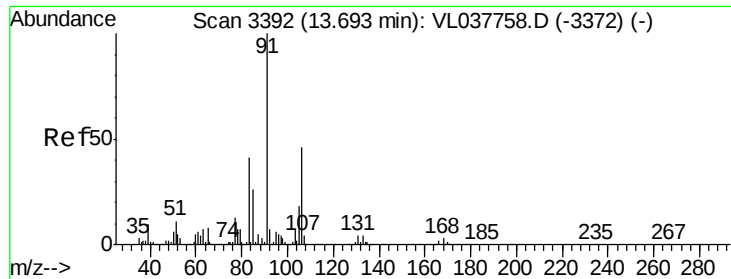
Tgt Ion: 91 Resp: 104399

Ion Ratio Lower Upper

91 100

106 0.0 36.7 55.1#

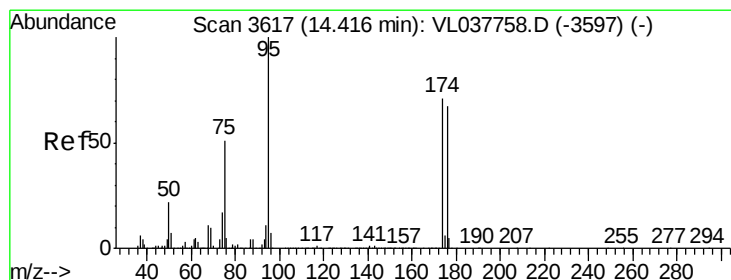
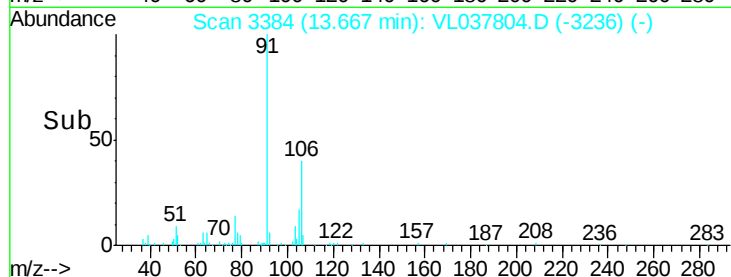
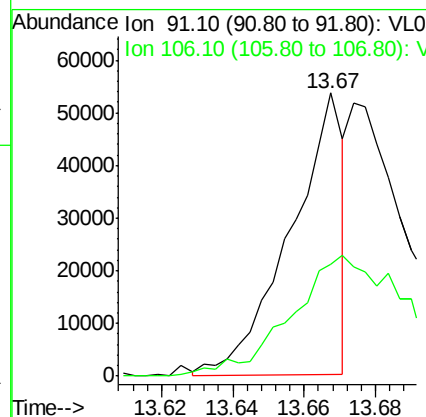
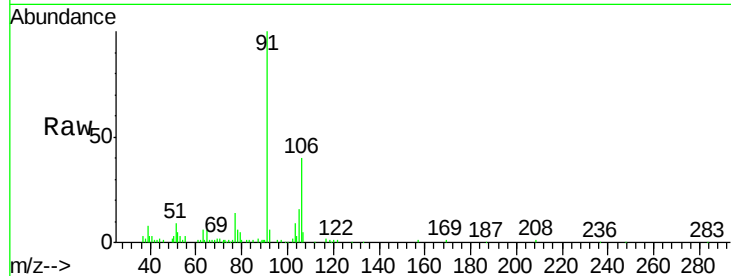




#60
o-Xylene
Concen: 0.168 ppbv
RT: 13.67 min Scan# 3384
Delta R.T. -0.03 min
Lab File: VL037804.D
Acq: 7 Oct 2021 20:25

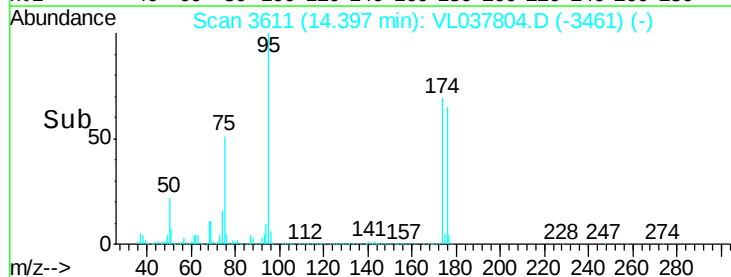
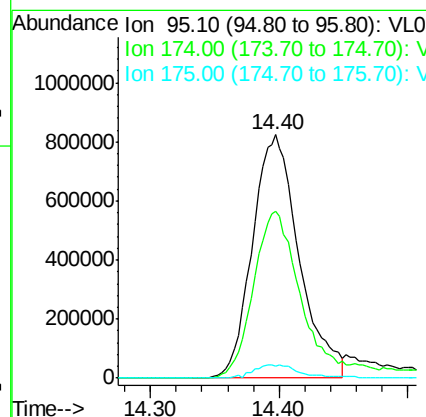
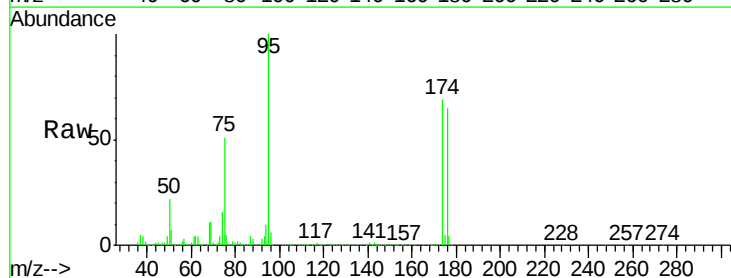
Instrument :
MSVOA_L
ClientSampleId :
C0P16

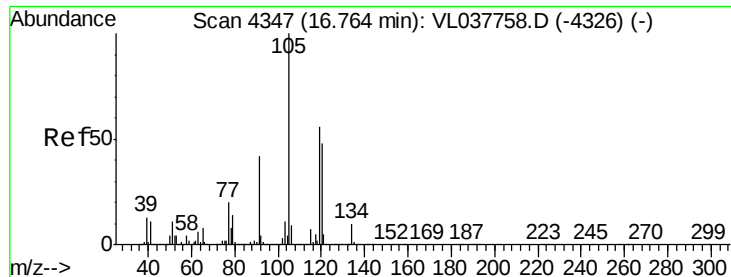
Tgt Ion: 91 Resp: 55060
Ion Ratio Lower Upper
91 100
106 0.0 23.5 70.5#



#68
1-Bromo-4-Fluorobenzene
Concen: 9.967 ppbv
RT: 14.40 min Scan# 3611
Delta R.T. -0.02 min
Lab File: VL037804.D
Acq: 7 Oct 2021 20:25

Tgt Ion: 95 Resp: 2072071
Ion Ratio Lower Upper
95 100
174 77.3 57.8 86.6
175 5.5 4.7 7.1





#74
 1,2,4-Trimethylbenzene
 Concen: 0.027 ppbv
 RT: 16.73 min Scan# 4336
 Delta R.T. -0.04 min
 Lab File: VL037804.D
 Acq: 7 Oct 2021 20:25

Instrument :
 MSVOA_L
 ClientSampleId :
 C0P16

Tgt Ion:	105	Resp:	9608
Ion	Ratio	Lower	Upper
105	100		
120	40.9	38.4	57.6
91	37.8	34.2	51.2
77	2.4	15.8	23.8#

