

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL061522\
 Data File : VL039307.D
 Acq On : 15 Jun 2022 22:37
 Operator : SY/AP
 Sample : N3326-02DL 10X
 Misc : 400mL/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 S V2DL

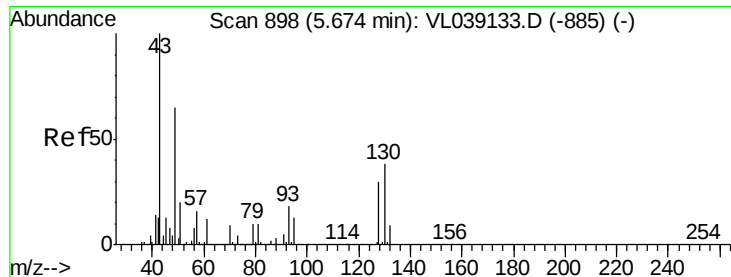
Quant Time: Jun 16 04:36:39 2022
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL053122AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LWed Jun 01 01:22:18 2022
 QLast Update : Wed Jun 01 01:22:18 2022
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.65	49	1340719	10.00	ppbv	-0.02
33) 1,4-Difluorobenzene	7.16	114	3815857	10.00	ppbv	-0.02
55) Chlorobenzene-d5	12.07	117	3291679	10.00	ppbv	-0.03

System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	14.39	95	2449316	9.00	ppbv	-0.02
Spiked Amount	10.000	Range	65 - 135	Recovery	=	90.00%

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.04	85	20981	0.089	ppbv #	79
3) Chlorodifluoromethane	2.98	51	12060	0.071	ppbv #	91
4) Chloromethane	3.14	50	4009	0.046	ppbv #	84
9) Propene	3.20	41	165385	2.223	ppbv	94
11) Trichlorofluoromethane	3.94	101	13078	0.061	ppbv	97
13) Ethanol	3.60	45	4039	0.996	ppbv #	100
15) Acetone	3.85	43	516752	3.700	ppbv	94
16) 1,3-Butadiene	3.30	39	45031	0.600	ppbv #	27
17) tert-Butyl alcohol	4.30	59	22972	0.212	ppbv #	87
20) Methylene Chloride	4.34	84	6673	0.113	ppbv #	85
23) Vinyl Acetate	5.07	43	6866	0.059	ppbv #	85
25) Ethyl Acetate	5.67	43	37903	0.120	ppbv #	80
26) Hexane	5.68	57	26599	0.192	ppbv #	1
27) Carbon Disulfide	4.55	76	5262	0.037	ppbv #	23
30) Cyclohexane	7.11	84	5119	0.044	ppbv #	1
32) 1,1,1-Trichloroethane	6.49	97	12455	0.055	ppbv	95
34) 2-Butanone	5.25	43	15700	0.076	ppbv #	62
39) 1,2-Dichloropropane	7.16	63	925492	7.511	ppbv #	24
52) Tetrachloroethene	11.21	164	5684	0.047	ppbv #	74

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



#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.65 Instrument: MSVOA_1

Delta R.T.

Lab File: ClientSampleId:

Acq: 15 Jun 2022 22:37

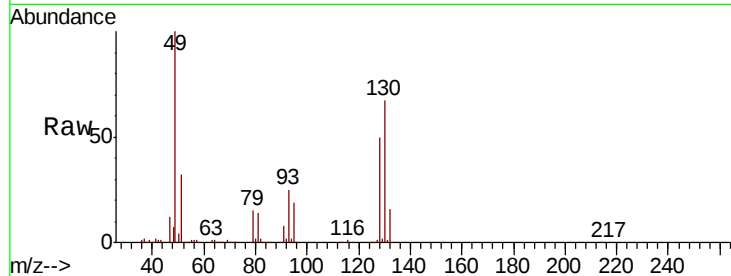
Tot Ion: 49 Resp: 1340719

Ion Ratio Lower Upper

49 100

128 54.0 24.7 74.1

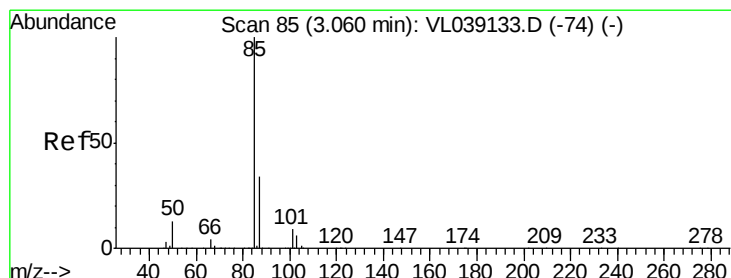
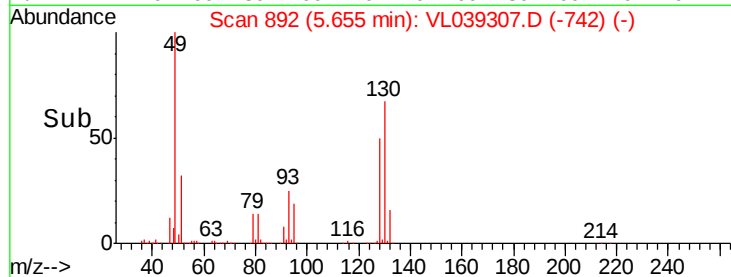
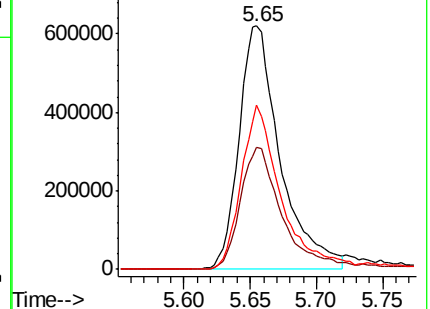
130 69.0 31.4 94.0



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: 0.089 ppbv

RT: 3.04 min Scan# 79

Delta R.T. -0.02 min

Lab File: VL039307.D

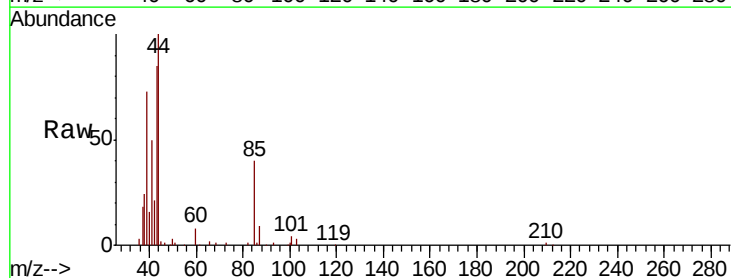
Acq: 15 Jun 2022 22:37

Tgt Ion: 85 Resp: 20981

Ion Ratio Lower Upper

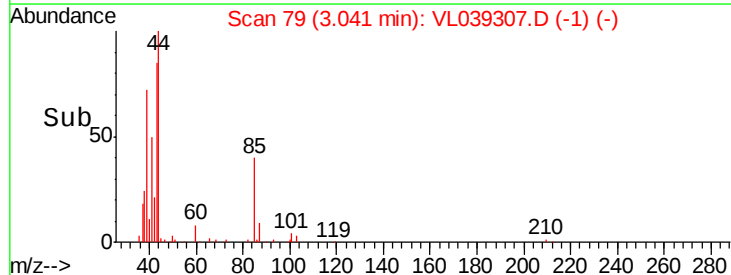
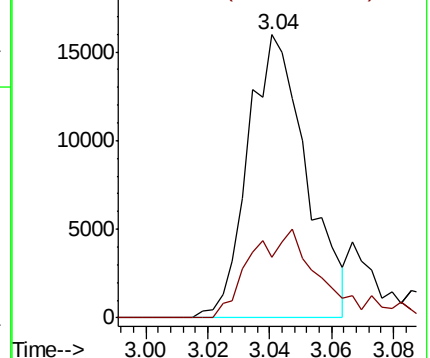
85 100

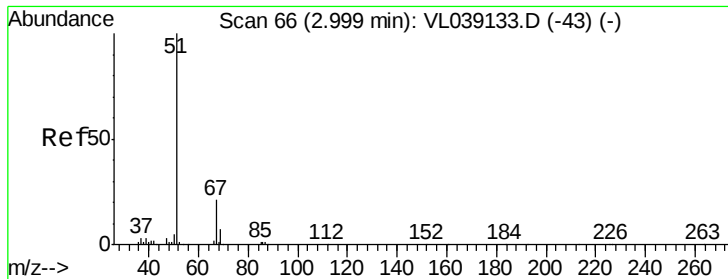
87 21.6 26.9 40.3#



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0





#3

Chlorodifluoromethane

Concen: 0.071 ppbv

RT: 2.98 Instrument: MSVOA_1

Delta R.T. ClientSampleId:

Lab File: SV2DL

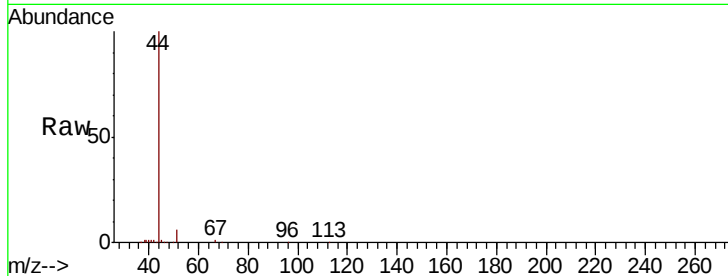
Acq: 15 Jun 2022 22:37

Tot Ion: 51 Resp: 12060

Ion Ratio Lower Upper

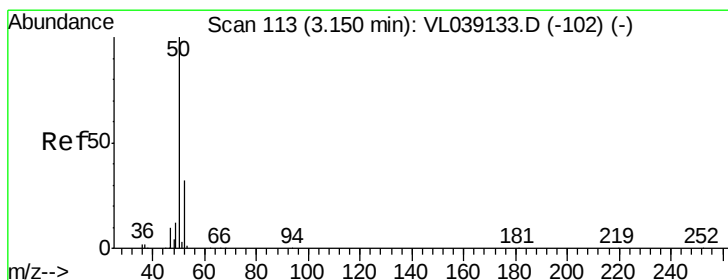
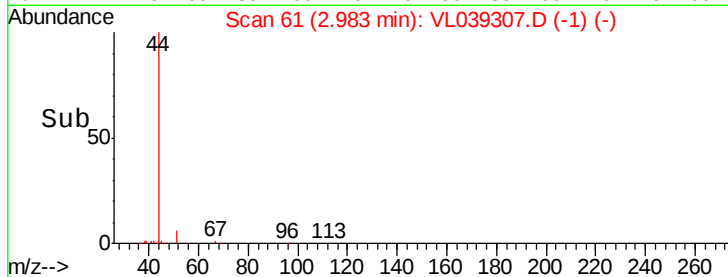
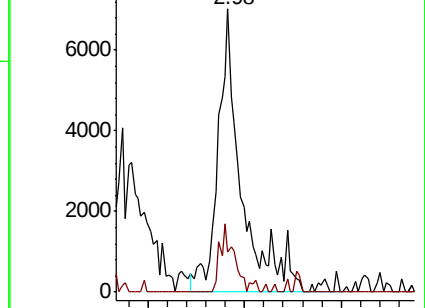
51 100

67 16.1 16.2 24.4#



Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0



#4

Chloromethane

Concen: 0.046 ppbv

RT: 3.14 min Scan# 110

Delta R.T. -0.01 min

Lab File: VL039307.D

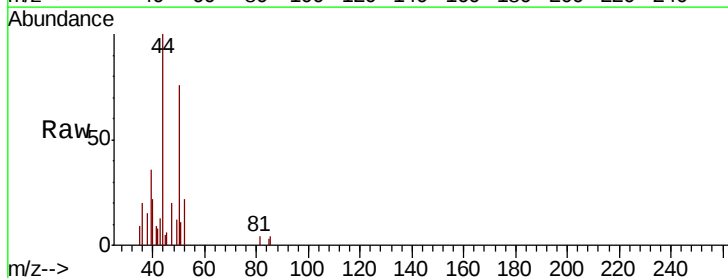
Acq: 15 Jun 2022 22:37

Tgt Ion: 50 Resp: 4009

Ion Ratio Lower Upper

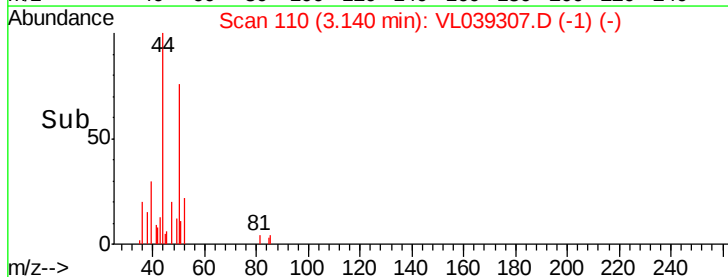
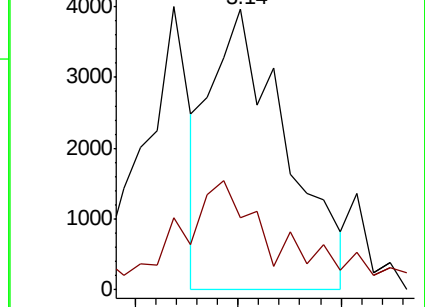
50 100

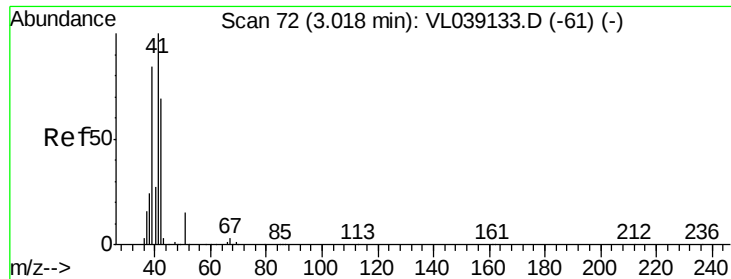
52 23.4 25.9 38.9#



Abundance Ion 50.10 (49.80 to 50.80): VL0

Ion 52.10 (51.80 to 52.80): VL0





#9

Propene

Concen: 2.223 ppbv

RT: 3.20 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

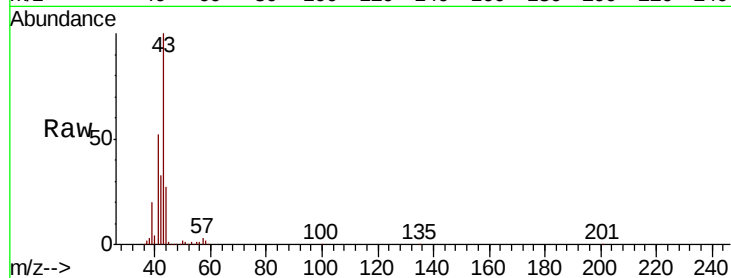
Acq: 15 Jun 2022 22:37

Tot Ion: 41 Resp: 165385

Ion Ratio Lower Upper

41 100

42 74.3 55.4 83.2



Abundance Ion 41.10 (40.80 to 41.80): VL0

Ion 42.10 (41.80 to 42.80): VL0

3.20

120000

100000

80000

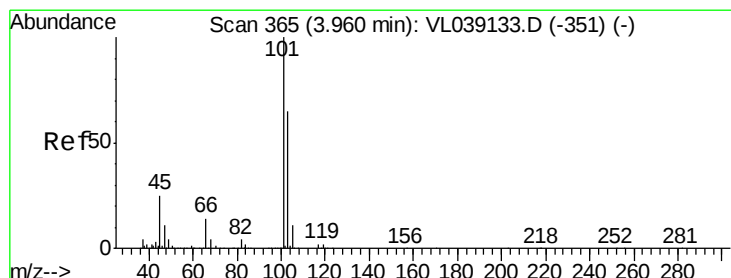
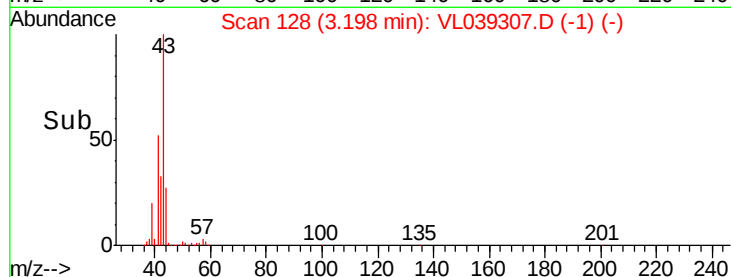
60000

40000

20000

0

Time-->



#11

Trichlorofluoromethane

Concen: 0.061 ppbv

RT: 3.94 min Scan# 358

Delta R.T. -0.02 min

Lab File: VL039307.D

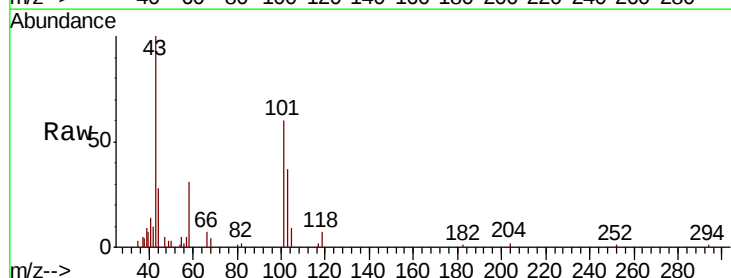
Acq: 15 Jun 2022 22:37

Tgt Ion: 101 Resp: 13078

Ion Ratio Lower Upper

101 100

103 61.9 51.7 77.5



Abundance Ion 101.00 (100.70 to 101.70): V

Ion 103.00 (102.70 to 103.70): V

3.94

8000

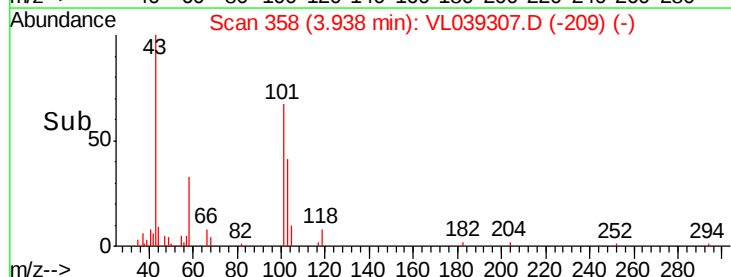
6000

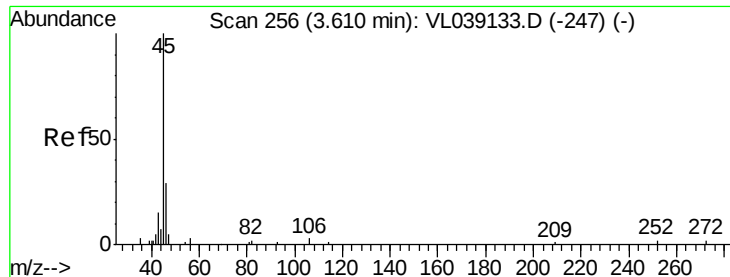
4000

2000

0

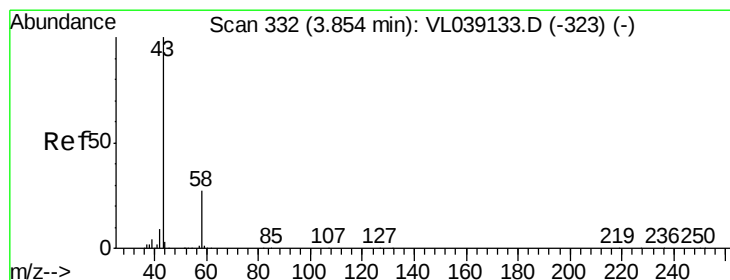
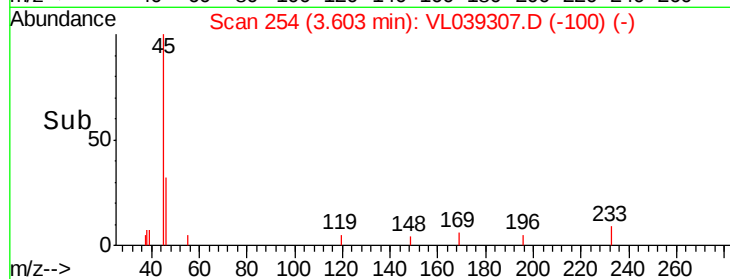
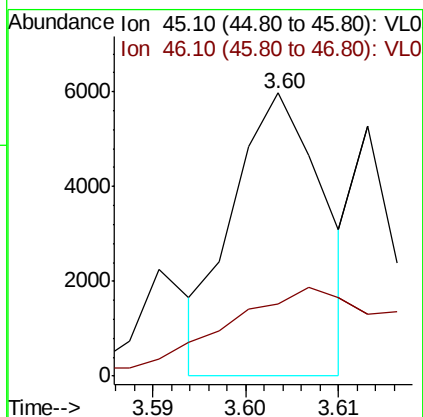
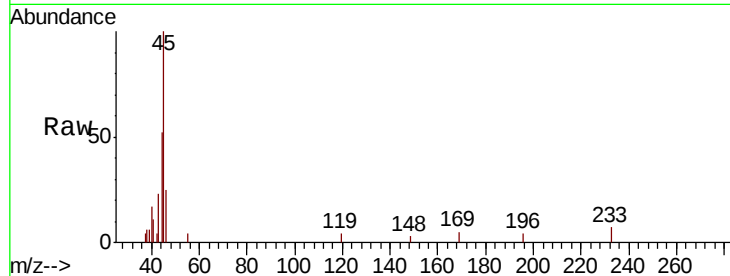
Time-->





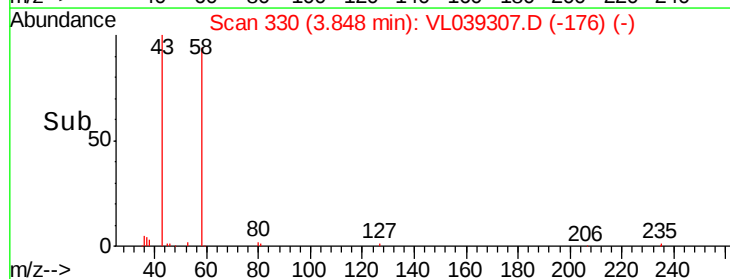
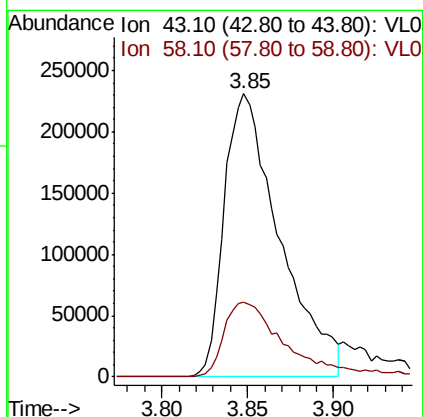
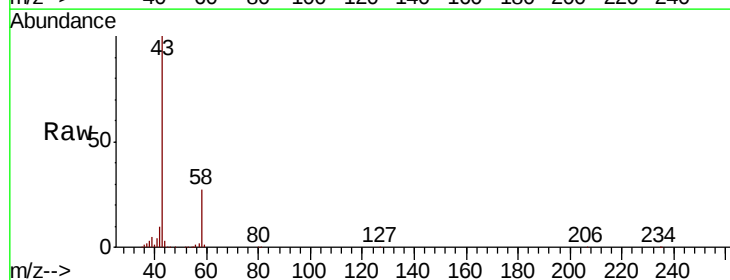
#13
Ethanol
Concen: 0.996 ppbv
RT: 3.60
Delta R.T. MSVOA_L
Lab File: ClientSampleId:
Acq: 15 Jun 2022 22:37

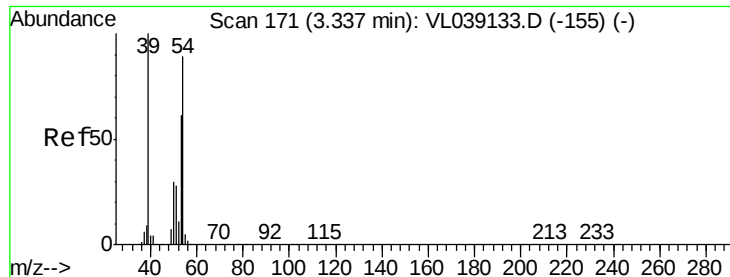
Tot Ion: 45 Resp: 4039
Ion Ratio Lower Upper
45 100
46 0.0 0.0 0.0



#15
Acetone
Concen: 3.700 ppbv
RT: 3.85 min Scan# 330
Delta R.T. -0.01 min
Lab File: VL039307.D
Acq: 15 Jun 2022 22:37

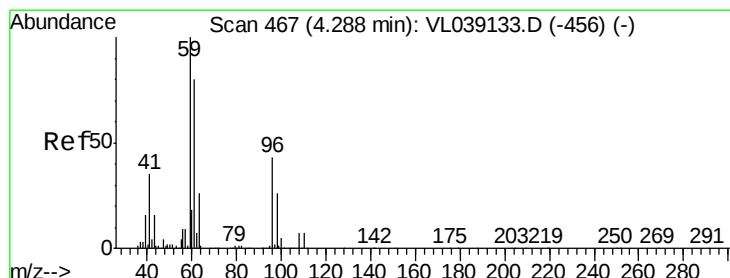
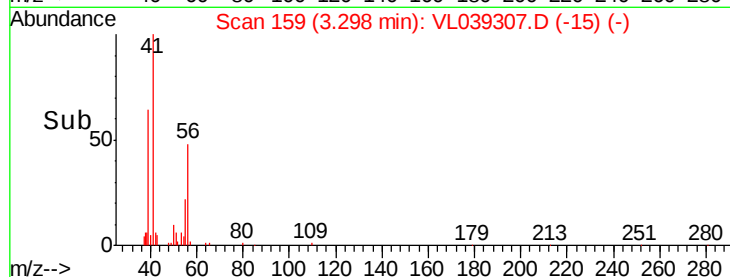
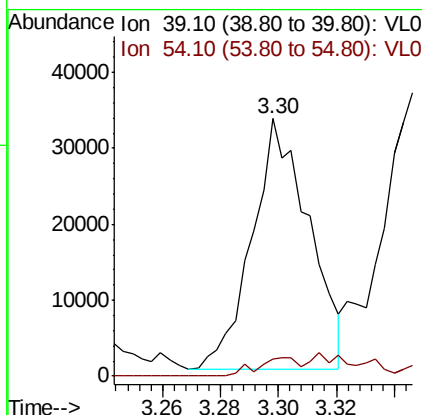
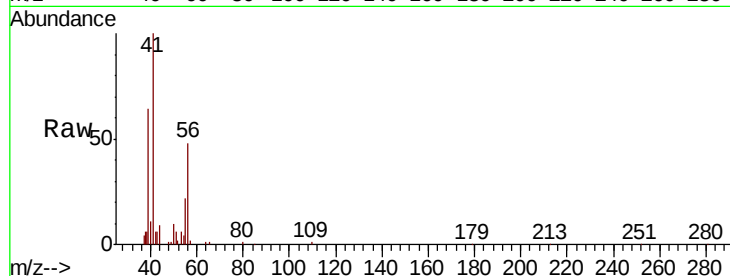
Tgt Ion: 43 Resp: 516752
Ion Ratio Lower Upper
43 100
58 31.2 22.5 33.7





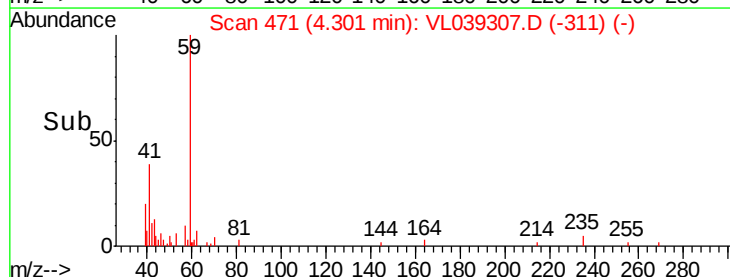
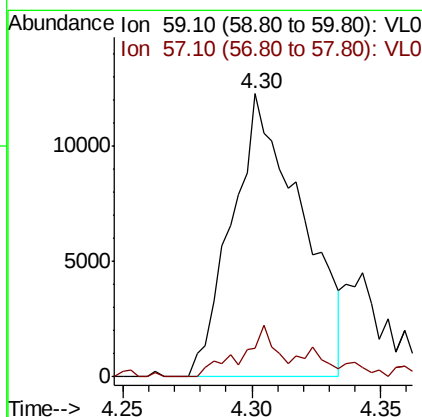
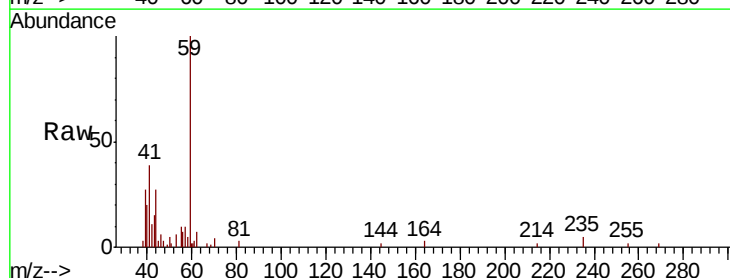
#16
 1,3-Butadiene
 Concen: 0.600 ppbv
 RT: 3.30
 Delta R.T. MSVOA_L
 Lab File: ClientSampleId:
 S V2DL
 Acq: 15 Jun 2022 22:37

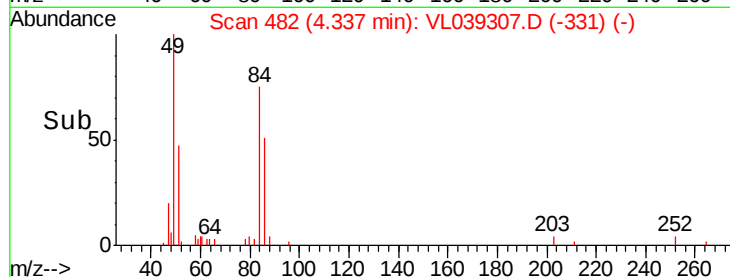
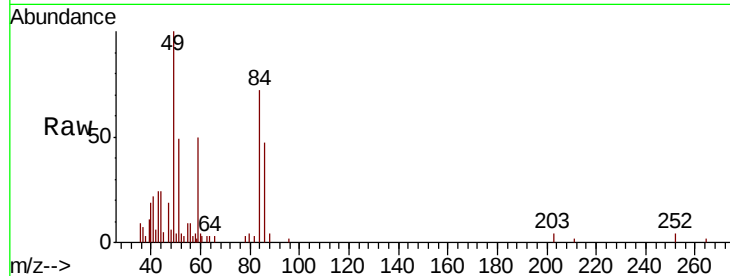
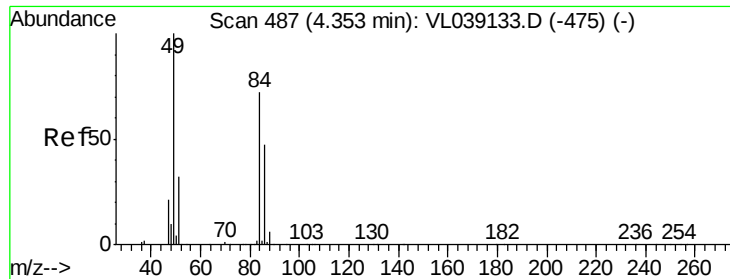
Tot Ion: 39 Resp: 45031
 Ion Ratio Lower Upper
 39 100
 54 16.5 65.8 98.6#



#17
 tert-Butyl alcohol
 Concen: 0.212 ppbv
 RT: 4.30 min Scan# 471
 Delta R.T. 0.01 min
 Lab File: VL039307.D
 Acq: 15 Jun 2022 22:37

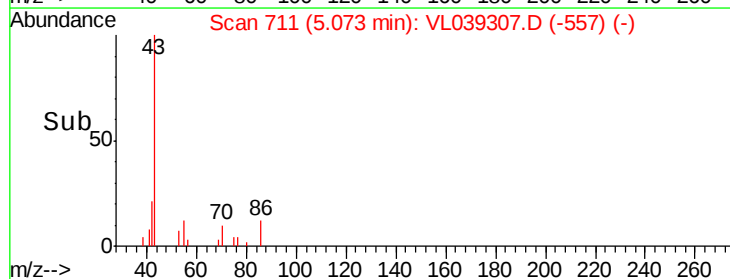
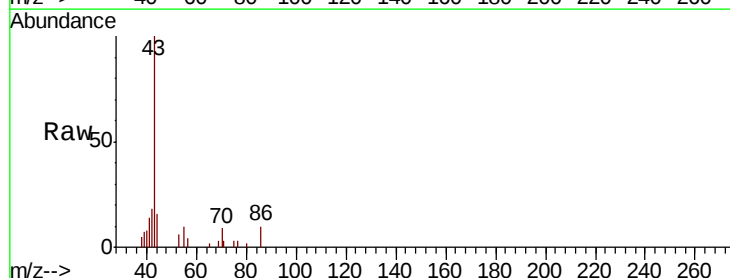
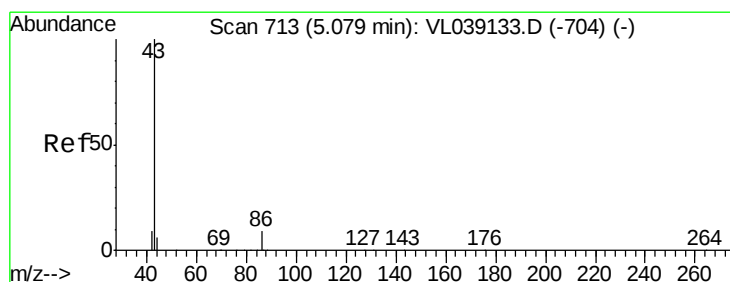
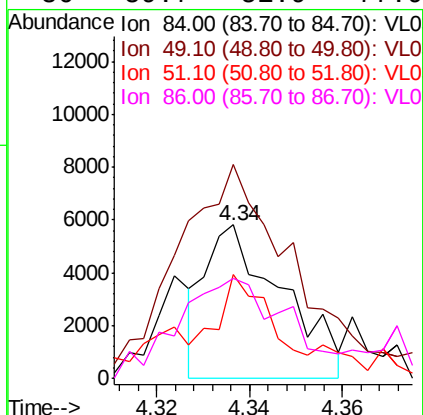
Tgt Ion: 59 Resp: 22972
 Ion Ratio Lower Upper
 59 100
 57 16.3 9.1 13.7#





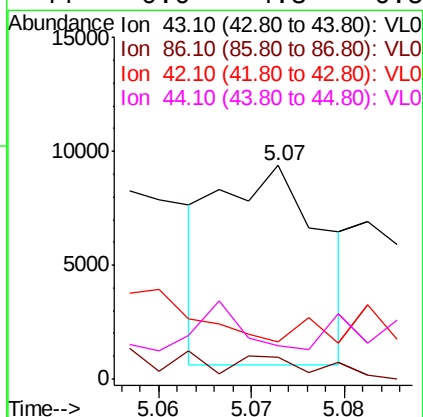
#20
Methvlene Chloride
Concen: 0.113 ppbv
RT: 4.34
Delta R.T. MSVOA_L
Lab File: ClientSampleId :
Acq: 15 Jun 2022 22:37

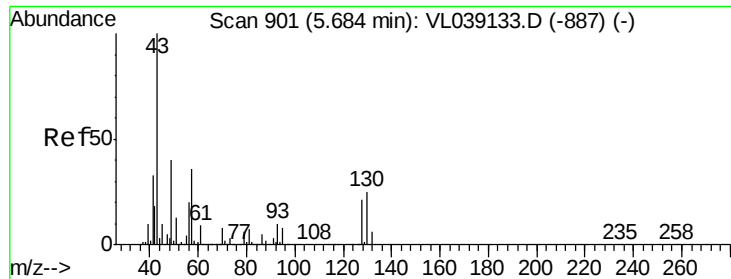
Tot Ion:	84	Resp:	6673
Ion	Ratio	Lower	Upper
84	100		
49	120.4	111.1	166.7
51	61.6	35.3	52.9#
86	59.7	51.9	77.9



#23
Vinyl Acetate
Concen: 0.059 ppbv
RT: 5.07 min Scan# 711
Delta R.T. -0.01 min
Lab File: VL039307.D
Acq: 15 Jun 2022 22:37

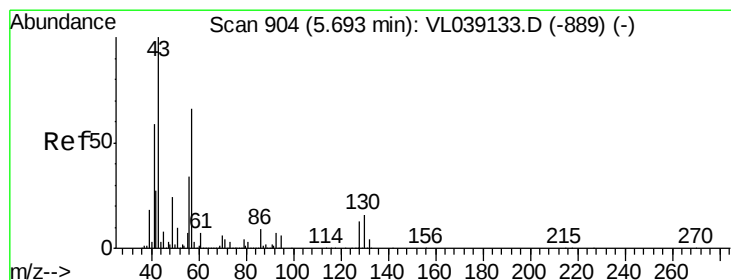
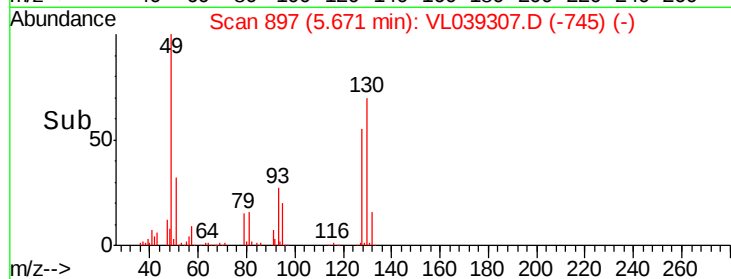
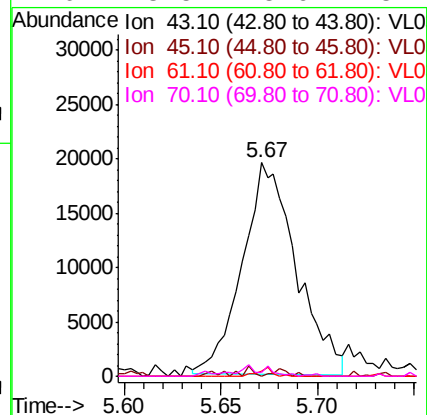
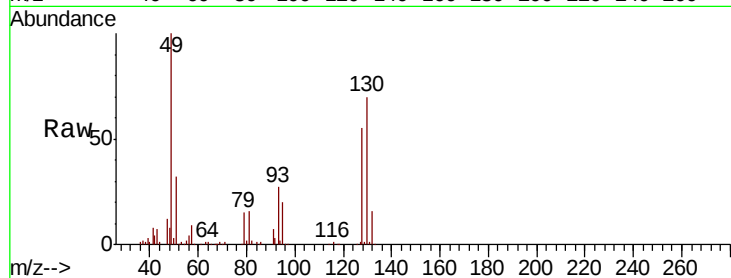
Tgt Ion:	43	Resp:	6866
Ion	Ratio	Lower	Upper
43	100		
86	8.4	6.0	9.0
42	2.0	8.2	12.4#
44	0.0	4.3	6.5#





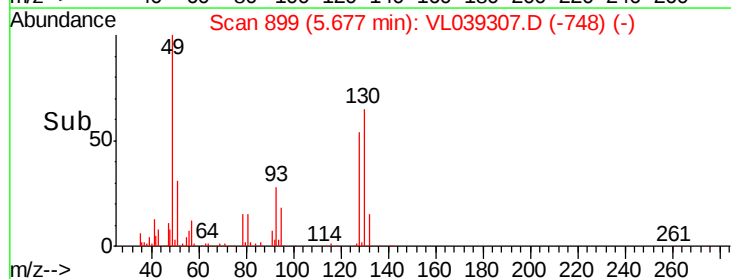
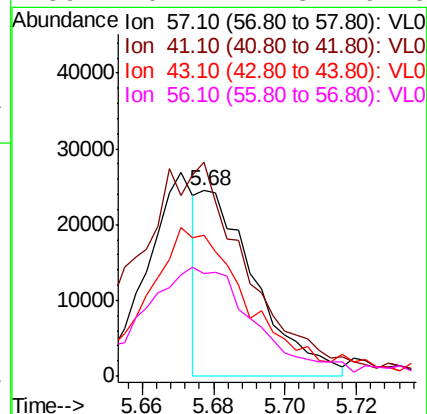
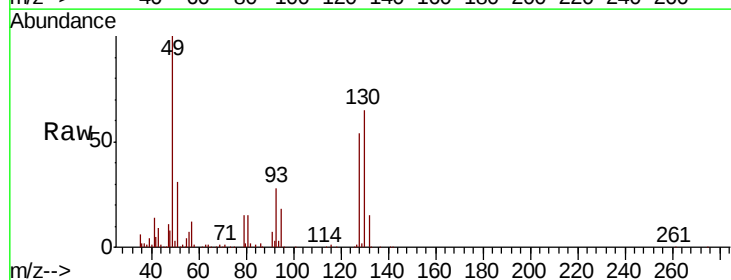
#25
Ethyl Acetate
Concen: 0.120 ppbv
RT: 5.67
Delta R.T. MSVOA_L
Lab File: ClientSampleId :
Acq: 15 Jun 2022 22:37

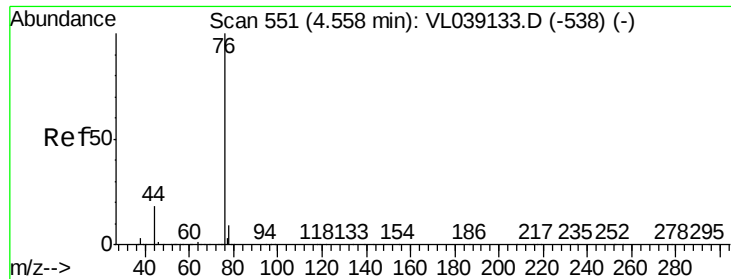
Tot Ion:	43	Resp:	37903
Ion	Ratio	Lower	Upper
43	100		
45	2.5	8.2	12.2#
61	1.1	8.4	12.6#
70	3.5	5.6	8.4#



#26
Hexane
Concen: 0.192 ppbv
RT: 5.68 min Scan# 899
Delta R.T. -0.02 min
Lab File: VL039307.D
Acq: 15 Jun 2022 22:37

Tgt Ion:	57	Resp:	26599
Ion	Ratio	Lower	Upper
57	100		
41	244.2	72.4	108.6#
43	0.0	187.0	280.6#
56	129.4	41.8	62.6#





#27

Carbon Disulfide

Concen: 0.037 ppbv

RT: 4.55 Instrument:

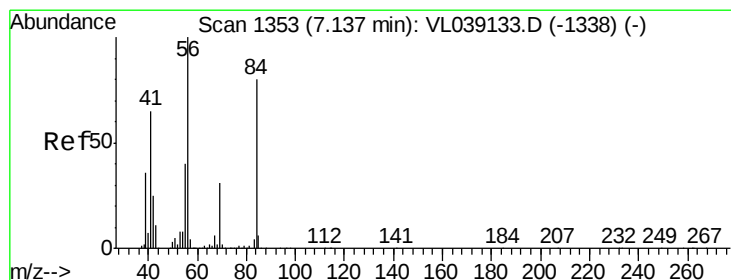
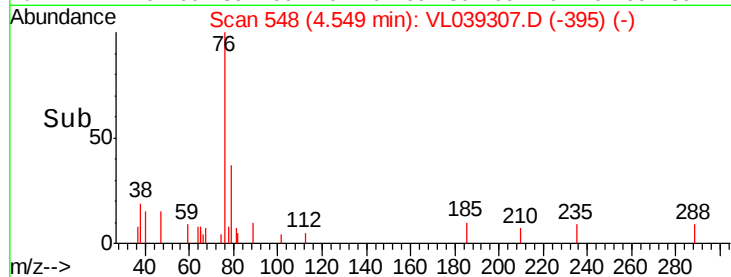
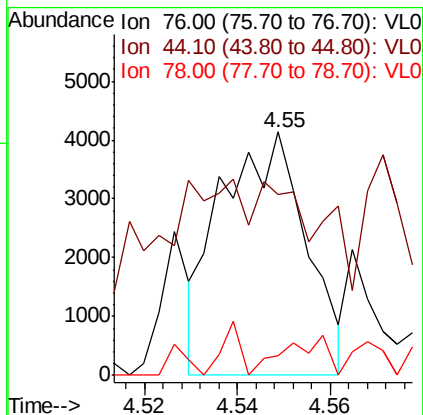
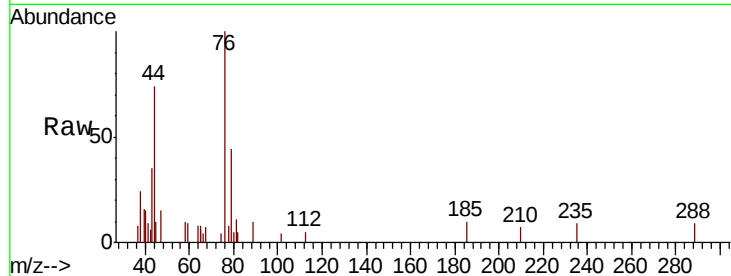
Delta R.T. MSVOA_L

Lab File: ClientSampleId:

Acq: 15 Jun 2022 22:37

Tot Ion: 76 Resp: 5262

Ion	Ratio	Lower	Upper
76	100		
44	61.0	14.4	21.6#
78	23.6	7.7	11.5#



#30

Cyclohexane

Concen: 0.044 ppbv

RT: 7.11 min Scan# 1345

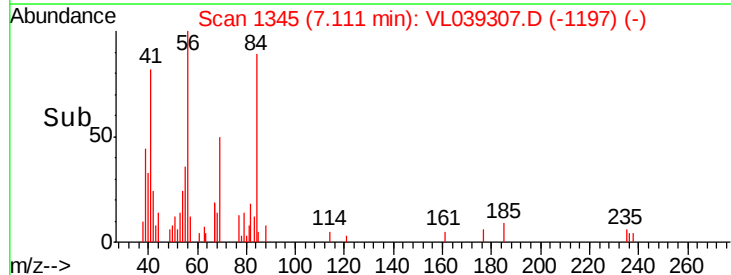
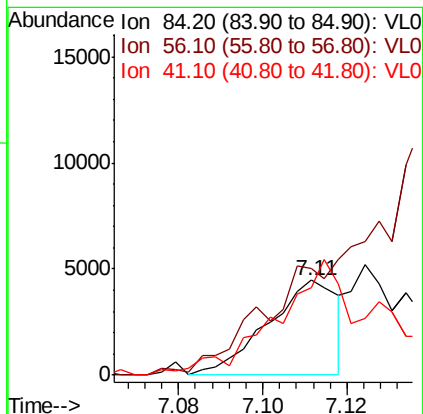
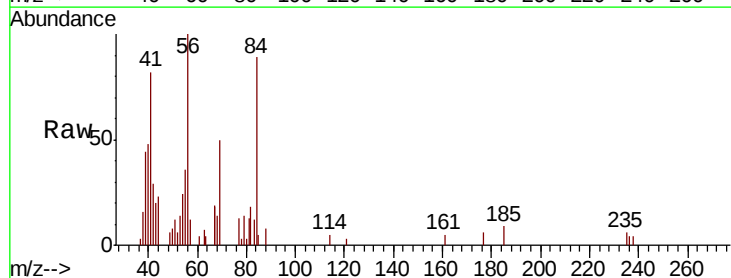
Delta R.T. -0.03 min

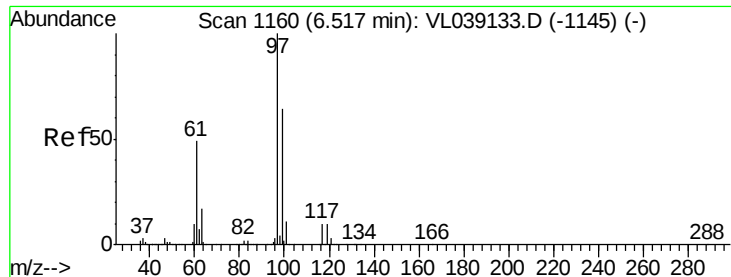
Lab File: VL039307.D

Acq: 15 Jun 2022 22:37

Tgt Ion: 84 Resp: 5119

Ion	Ratio	Lower	Upper
84	100		
56	0.0	110.6	165.8#
41	197.9	68.9	103.3#





#32

1,1,1-Trichloroethane

Concen: 0.055 ppbv

RT: 6.49 Instrument: MSVOA_1

Delta R.T.

Lab File: ClientSampleId:

Acq: 15 Jun 2022 22:37

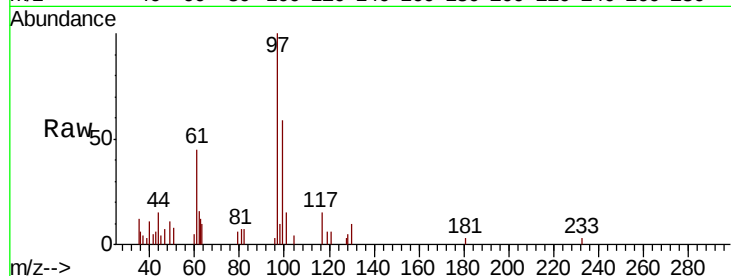
Tot Ion: 97 Resp: 12455

Ion Ratio Lower Upper

97 100

99 61.2 52.1 78.1

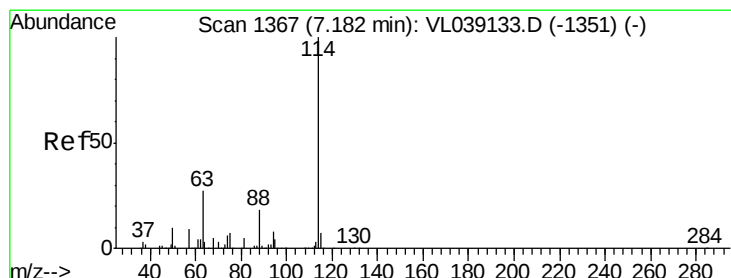
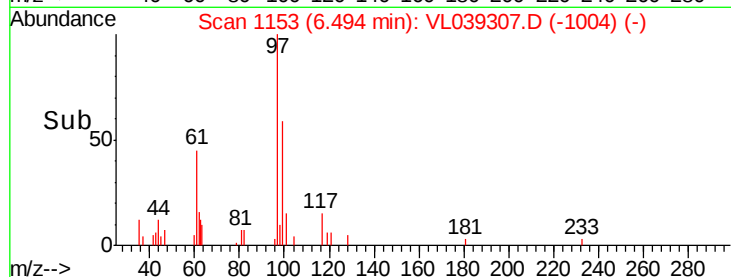
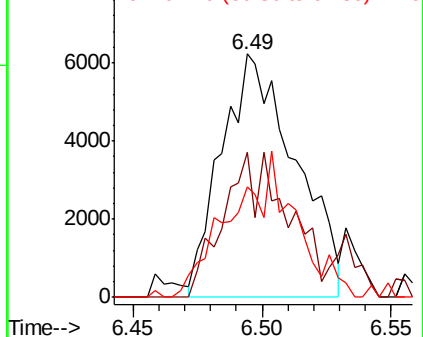
61 52.7 40.0 60.0



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: 7.16 min Scan# 1360

Delta R.T. -0.02 min

Lab File: VL039307.D

Acq: 15 Jun 2022 22:37

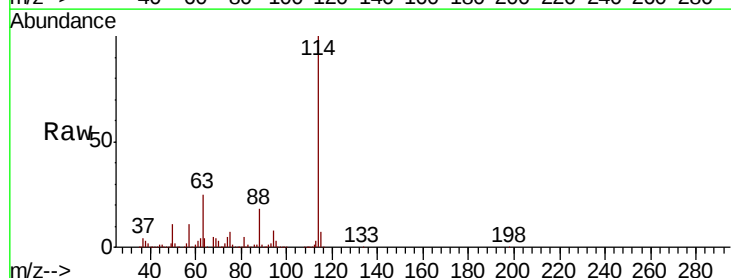
Tgt Ion: 114 Resp: 3815857

Ion Ratio Lower Upper

114 100

63 25.0 21.7 32.5

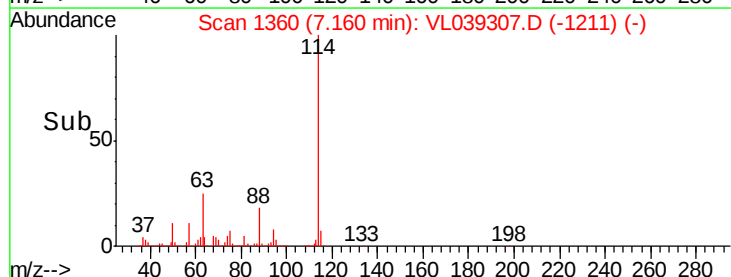
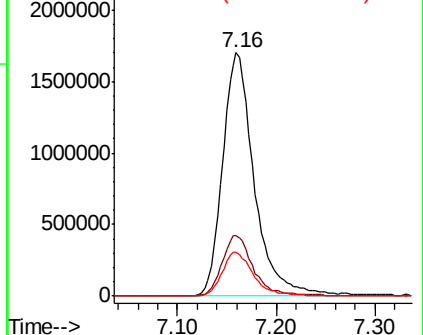
88 18.3 14.8 22.2

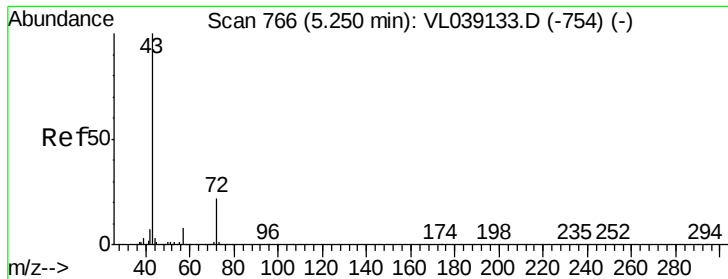


Abundance Ion 114.10 (113.80 to 114.80): VL0

Ion 63.10 (62.80 to 63.80): VL0

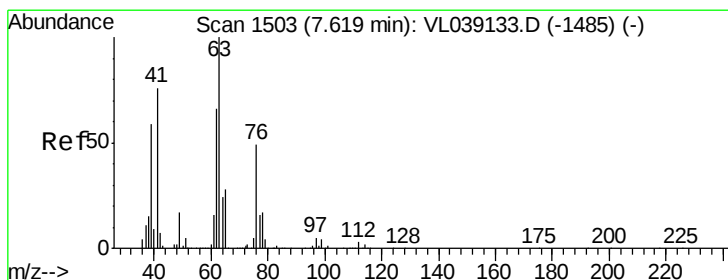
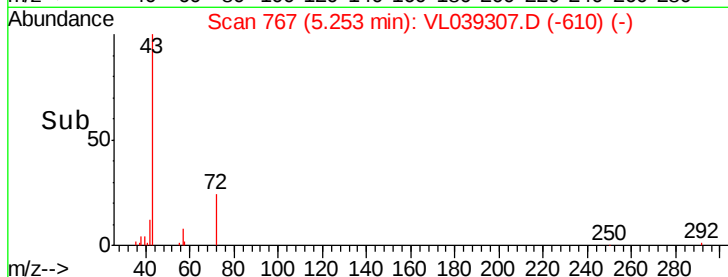
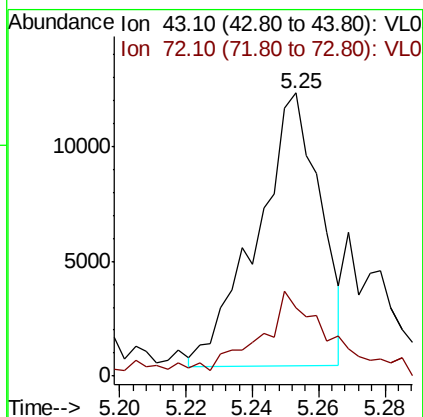
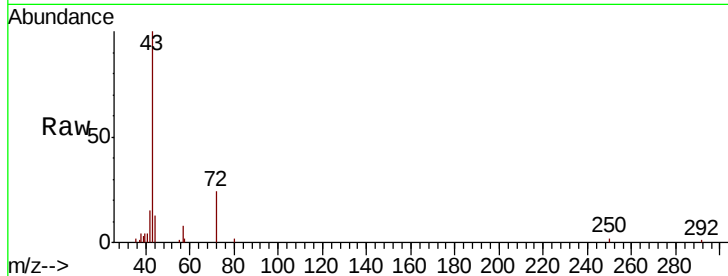
Ion 88.10 (87.80 to 88.80): VL0





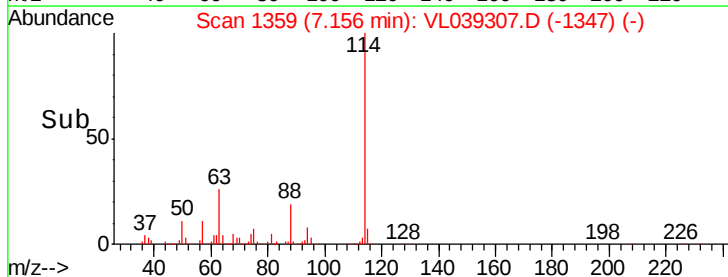
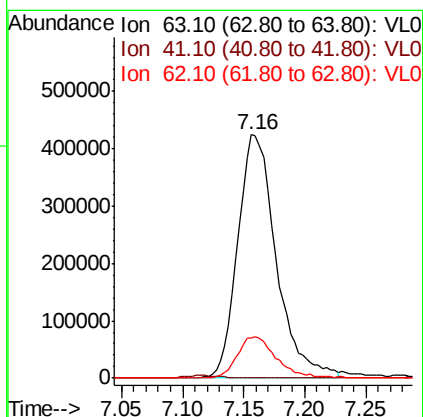
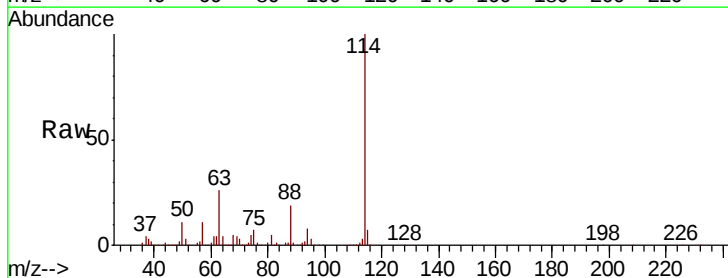
#34
 2-Butanone
 Concen: 0.076 ppbv
 RT: 5.25
 Delta R.T. MSVOA_L
 Lab File: ClientSampleId :
 Acq: 15 Jun 2022 22:37

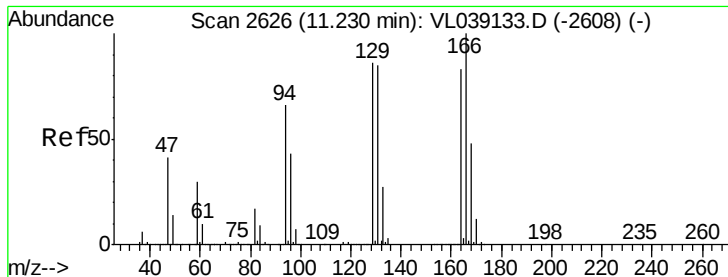
Tot Ion: 43 Resp: 15700
 Ion Ratio Lower Upper
 43 100
 72 41.0 18.2 27.2#



#39
 1,2-Dichloropropane
 Concen: 7.511 ppbv
 RT: 7.16 min Scan# 1359
 Delta R.T. -0.46 min
 Lab File: VL039307.D
 Acq: 15 Jun 2022 22:37

Tgt Ion: 63 Resp: 925492
 Ion Ratio Lower Upper
 63 100
 41 0.0 60.8 91.2#
 62 16.6 52.9 79.3#





#52

Tetrachloroethene

Concen: 0.047 ppbv

RT: 11.21

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

Acq: 15 Jun 2022 22:37

Tot Ion:164 Resp: 5684

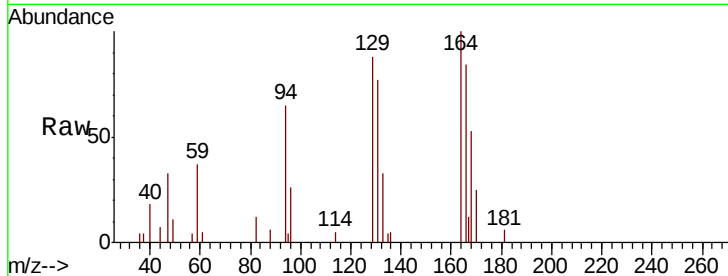
Ion Ratio Lower Upper

164 100

166 80.7 96.3 144.5#

129 87.7 82.5 123.7

131 77.2 82.1 123.1#

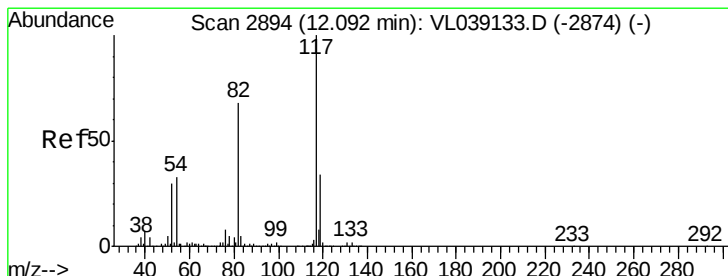
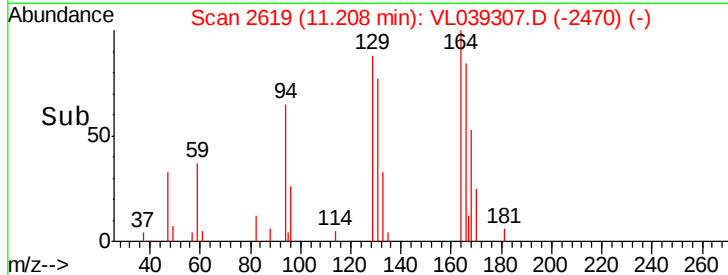
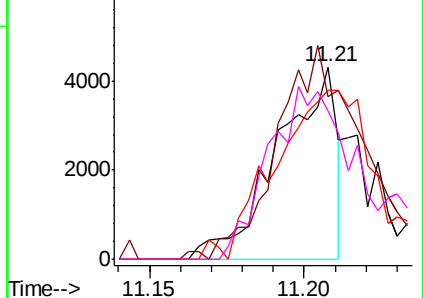


Abundance Ion 163.90 (163.60 to 164.60): V

Ion 165.90 (165.60 to 166.60): V

Ion 129.00 (128.70 to 129.70): V

Ion 131.00 (130.70 to 131.70): V



#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.07 min Scan# 2886

Delta R.T. -0.03 min

Lab File: VL039307.D

Acq: 15 Jun 2022 22:37

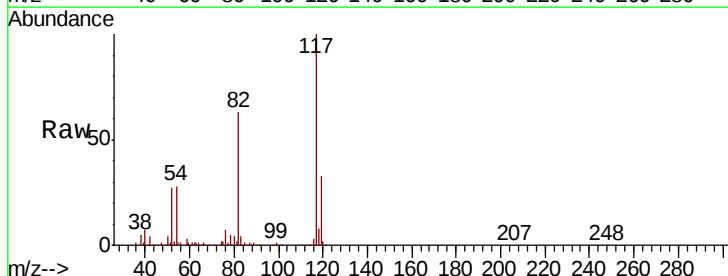
Tgt Ion:117 Resp: 3291679

Ion Ratio Lower Upper

117 100

82 67.9 55.1 82.7

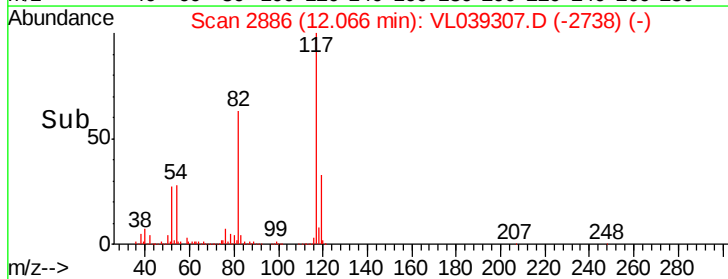
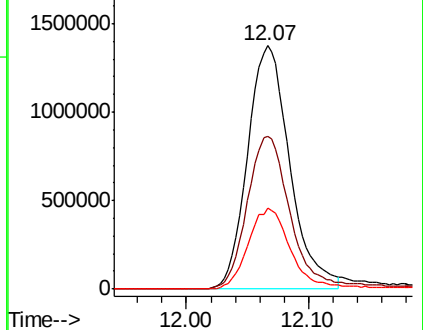
119 34.4 24.7 37.1

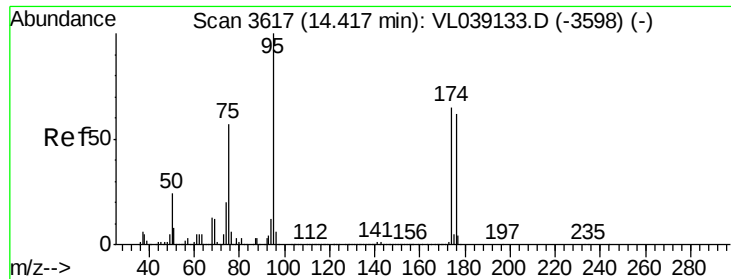


Abundance Ion 117.10 (116.80 to 117.80): V

Ion 82.10 (81.80 to 82.80): VLO

Ion 119.10 (118.80 to 119.80): V





#68

1-Bromo-4-Fluorobenzene

Concen: 9.000 ppbv

RT: 14.39 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId :

Acq: 15 Jun 2022 22:37

Tot Ion: 95 Resp: 2449316

Ion Ratio Lower Upper

95 100

174 75.6 53.8 80.8

175 5.5 4.1 6.1

