

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL060322\
 Data File : VL039173.D
 Acq On : 4 Jun 2022 11:15
 Operator : SY/AP
 Sample : N3106-09
 Misc : 400mL/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 OA1

Quant Time: Jun 06 00:42:37 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

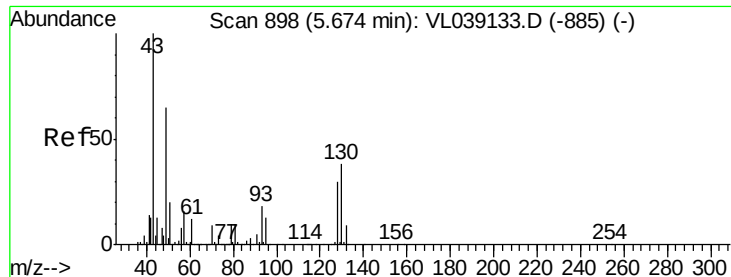
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.67	49	1242257	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.18	114	3211660	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.09	117	2784482	10.00	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.41	95	2261154	9.82	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	98.20%

Target Compounds					Ovalue
2) Dichlorodifluoromethane	3.06	85	52819	0.242	ppbv 100
4) Chloromethane	3.15	50	46042	0.567	ppbv 95
9) Propene	3.02	41	61592	0.894	ppbv # 81
10) Heptane	8.12	43	5865	0.036	ppbv # 26
11) Trichlorofluoromethane	3.96	101	40137	0.203	ppbv 91
12) 1,1,2-Trichlorotrifluoroet	4.49	101	5601	0.043	ppbv # 29
13) Ethanol	3.61	45	105073	27.955	ppbv # 100
15) Acetone	3.85	43	803406	6.209	ppbv 95
19) Isopropyl Alcohol	3.97	45	110260	1.817	ppbv # 81
20) Methylene Chloride	4.35	84	1077915	19.766	ppbv 98
23) Vinyl Acetate	5.07	43	35092	0.328	ppbv # 92
25) Ethyl Acetate	5.69	43	685673	2.351	ppbv # 77
26) Hexane	5.69	57	976755	7.621	ppbv # 39
29) Chloroform	5.76	83	9056	0.042	ppbv # 61
34) 2-Butanone	5.26	43	108782	0.623	ppbv # 75
35) Carbon Tetrachloride	7.02	117	8434	0.036	ppbv 94
36) Benzene	6.89	78	41981	0.161	ppbv # 92
37) 1,2-Dichloroethane	6.31	62	10404	0.061	ppbv # 89
39) 1,2-Dichloropropane	7.18	63	794328	7.659	ppbv # 24
41) Tetrahydrofuran	6.06	42	16618	0.158	ppbv # 60
44) 2,2,4-Trimethylpentane	7.87	57	20681	0.045	ppbv # 12
53) Toluene	9.81	91	114299	0.381	ppbv 98
58) Ethyl Benzene	12.71	91	19709	0.051	ppbv # 84
60) o-Xylene	13.69	91	48449	0.153	ppbv 100
73) 1,3,5-Trimethylbenzene	16.00	105	21422	0.064	ppbv 87
74) 1,2,4-Trimethylbenzene	16.76	105	69078	0.185	ppbv # 56

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



#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.67 Instrument: MSVOA_1

Delta R.T. ClientSampleId:

Lab File: OA1

Acq: 4 Jun 2022 11:15

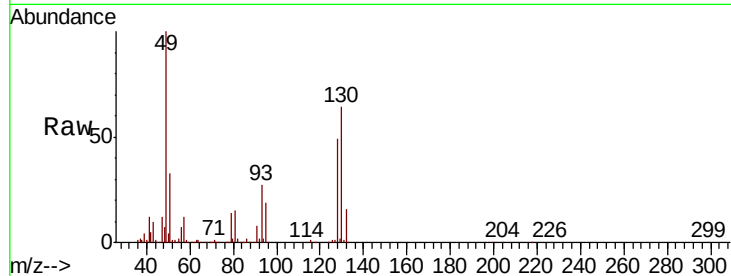
Tot Ion: 49 Resp: 1242257

Ion Ratio Lower Upper

49 100

128 50.2 24.7 74.1

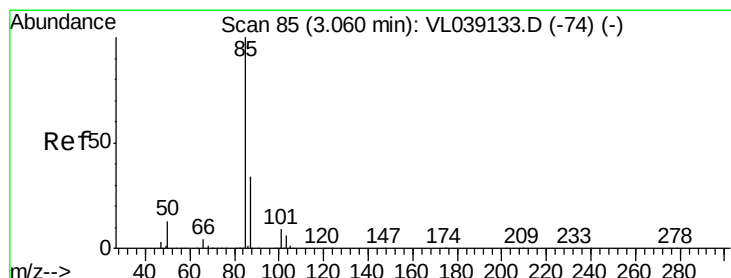
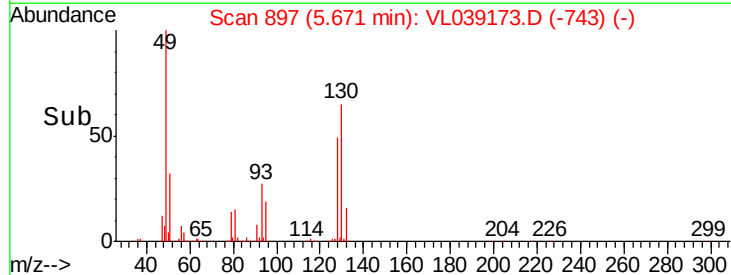
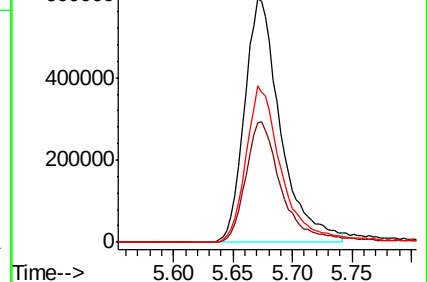
130 65.2 31.4 94.0



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: 0.242 ppbv

RT: 3.06 min Scan# 84

Delta R.T. -0.00 min

Lab File: VL039173.D

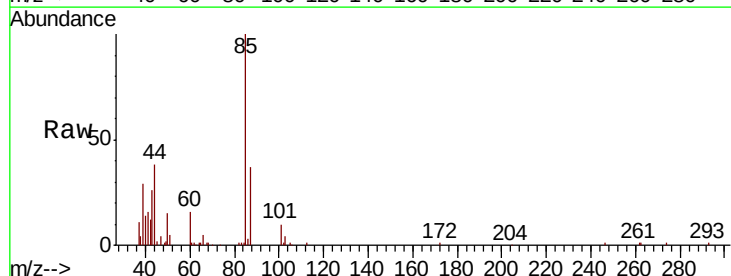
Acq: 4 Jun 2022 11:15

Tgt Ion: 85 Resp: 52819

Ion Ratio Lower Upper

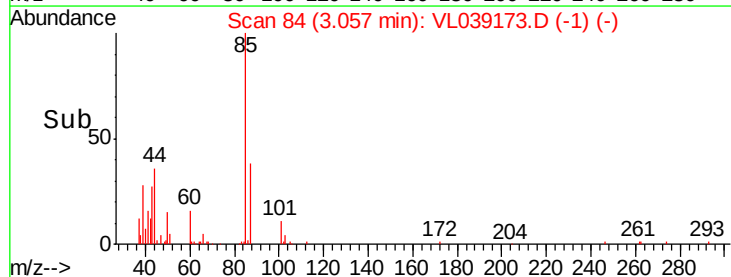
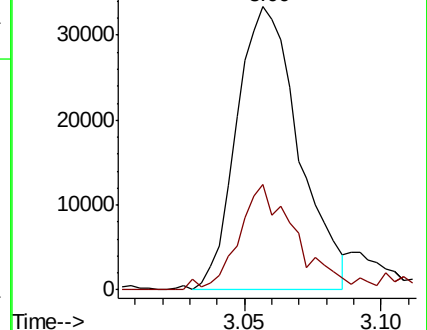
85 100

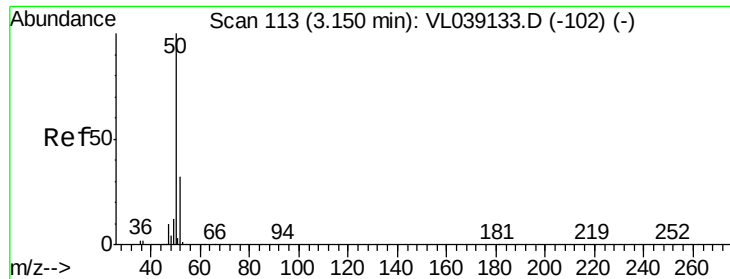
87 33.4 26.9 40.3



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0





#4

Chloromethane

Concen: 0.567 ppbv

RT: 3.15 Instrument: MSVOA_1

Delta R.T. ClientSampleId:

Lab File: OA1

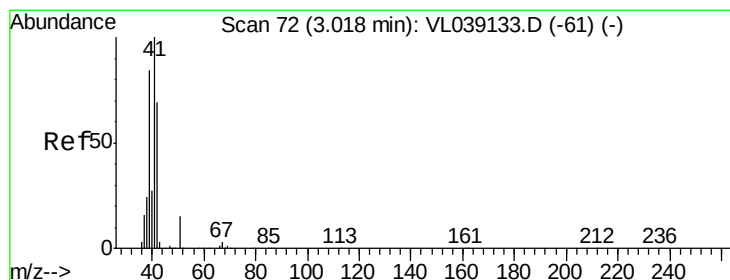
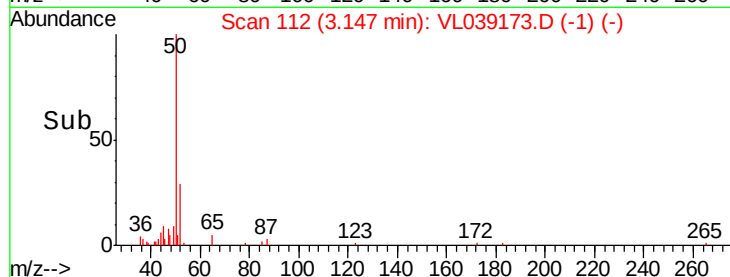
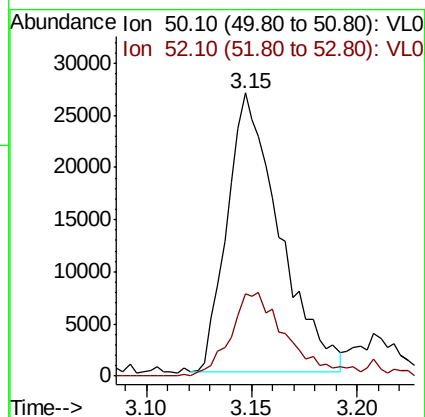
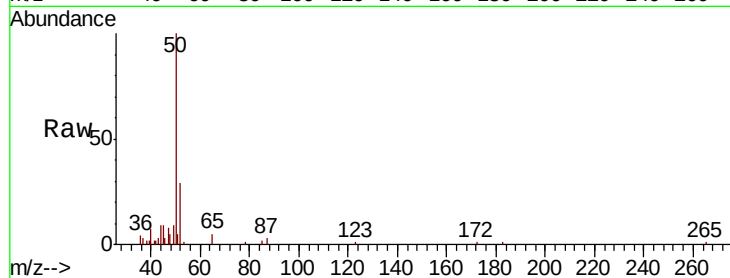
Acq: 4 Jun 2022 11:15

Tot Ion: 50 Resp: 46042

Ion Ratio Lower Upper

50 100

52 29.4 25.9 38.9



#9

Propene

Concen: 0.894 ppbv

RT: 3.02 min Scan# 74

Delta R.T. 0.01 min

Lab File: VL039173.D

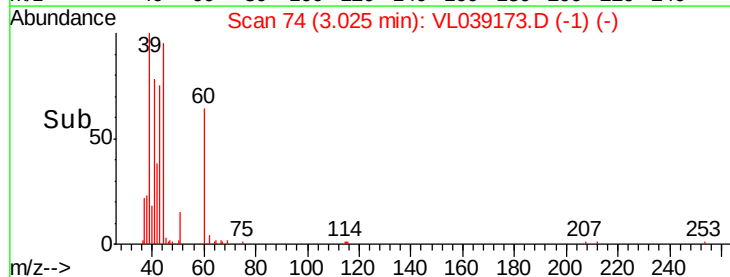
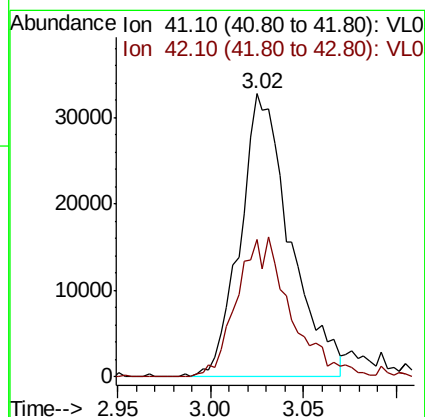
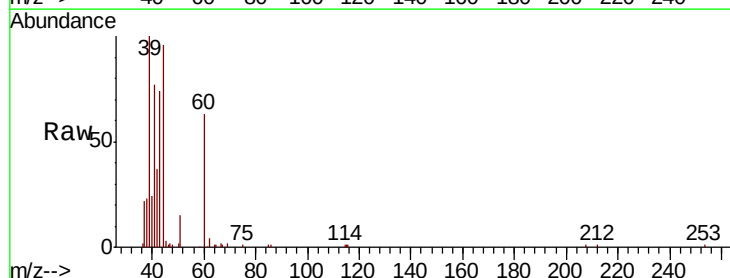
Acq: 4 Jun 2022 11:15

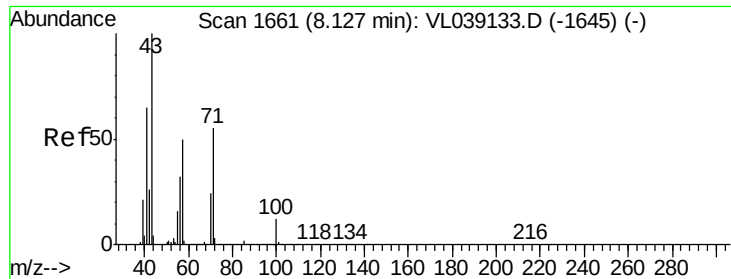
Tgt Ion: 41 Resp: 61592

Ion Ratio Lower Upper

41 100

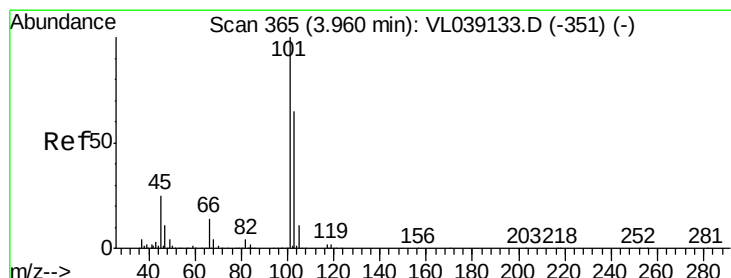
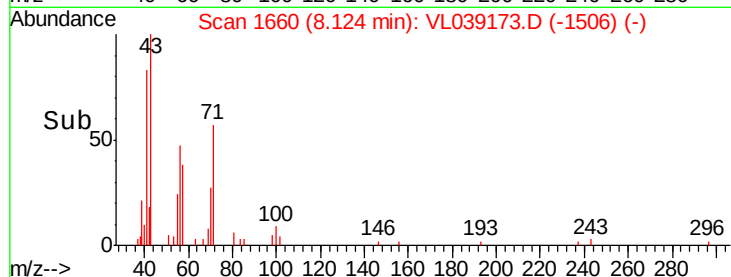
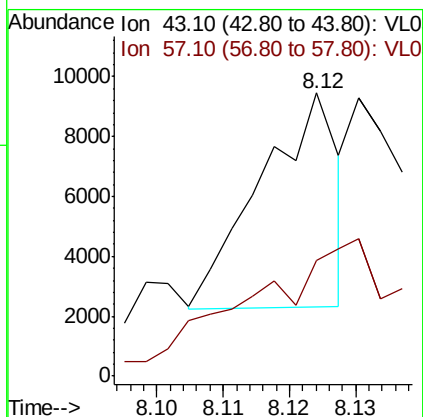
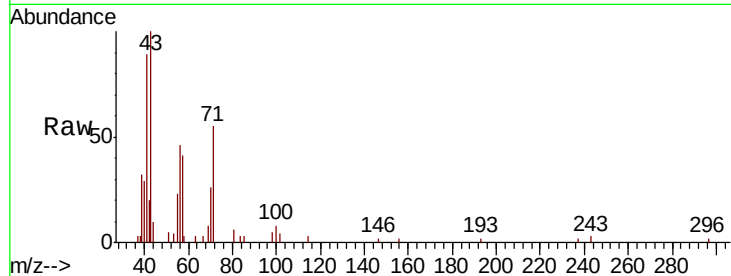
42 53.9 55.4 83.2#





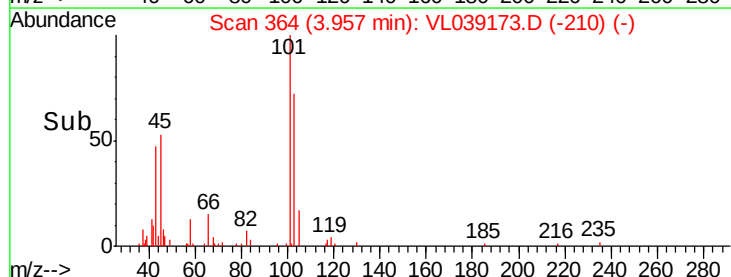
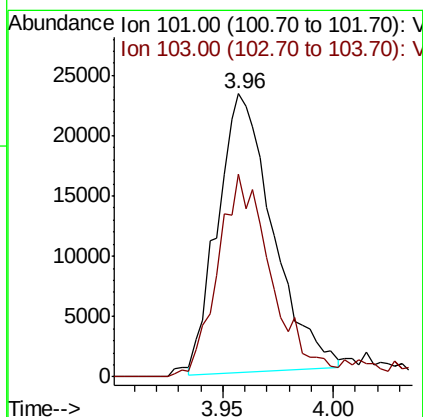
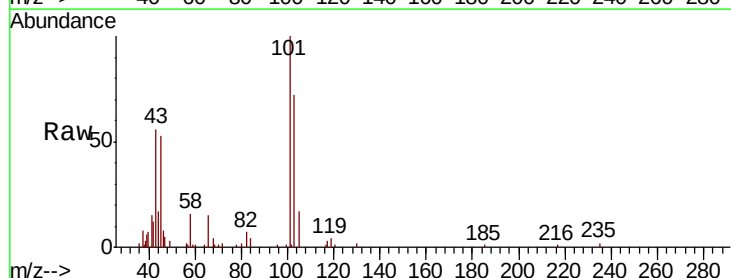
#10
 Heptane
 Concen: 0.036 ppbv
 RT: 8.12
 Delta R.T. MSVOA_L
 Lab File: ClientSampleId :
 Acq: 4 Jun 2022 11:15

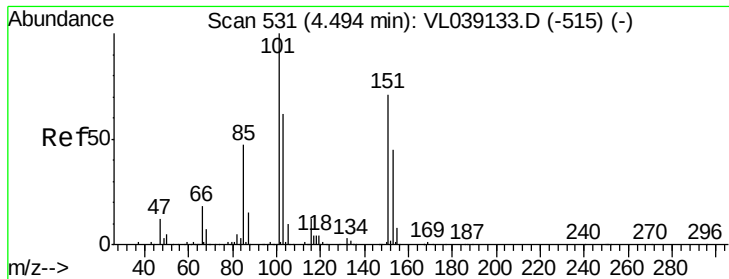
Tot Ion: 43 Resp: 5865
 Ion Ratio Lower Upper
 43 100
 57 0.0 41.4 62.2#



#11
 Trichlorofluoromethane
 Concen: 0.203 ppbv
 RT: 3.96 min Scan# 364
 Delta R.T. -0.00 min
 Lab File: VL039173.D
 Acq: 4 Jun 2022 11:15

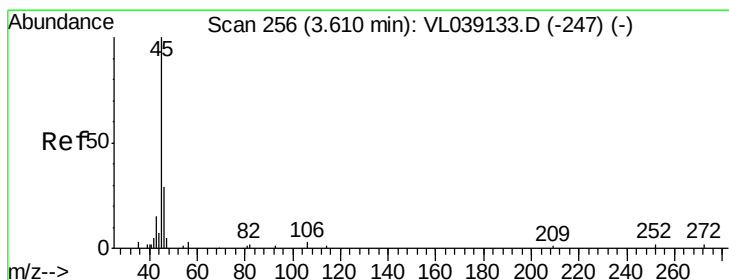
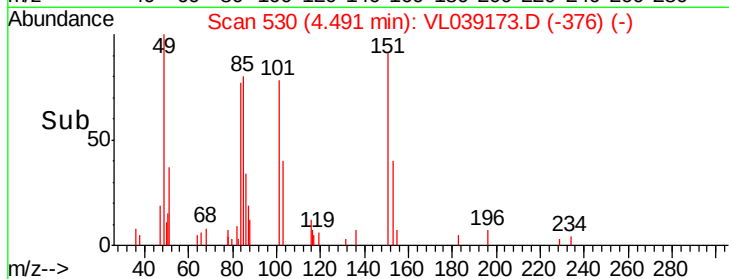
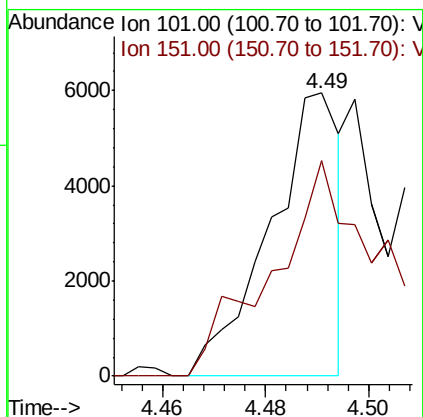
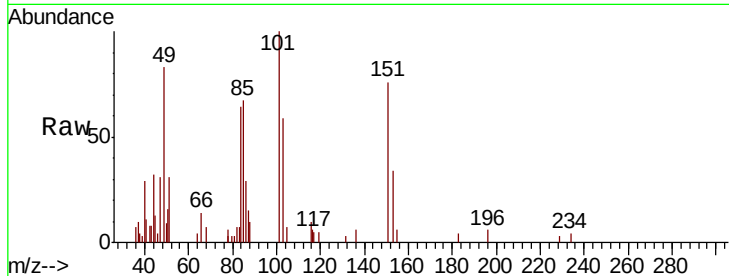
Tgt Ion:101 Resp: 40137
 Ion Ratio Lower Upper
 101 100
 103 71.7 51.7 77.5





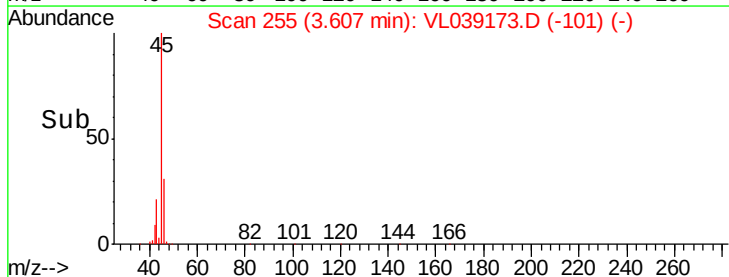
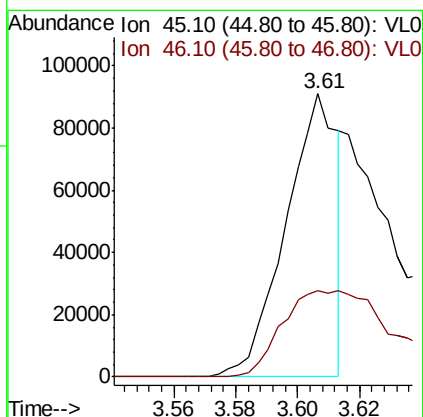
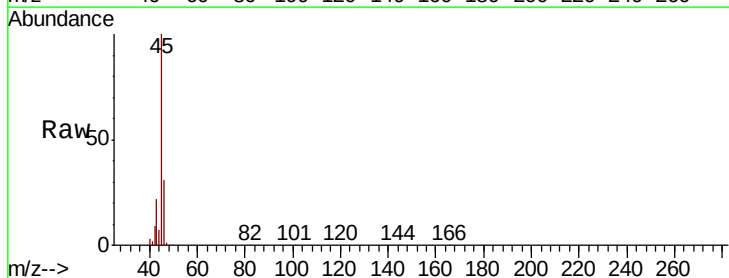
#12
 1,1,2-Trichlorotrifluoroethane
 Concen: 0.043 ppbv
 RT: 4.49
 Delta R.T. MSVOA_L
 Lab File: ClientSampleId :
 Acq: 4 Jun 2022 11:15

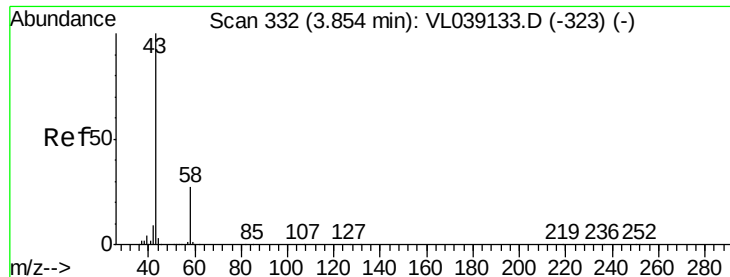
Tot Ion: 101 Resp: 5601
 Ion Ratio Lower Upper
 101 100
 151 134.5 59.4 89.0#



#13
 Ethanol
 Concen: 27.955 ppbv
 RT: 3.61 min Scan# 255
 Delta R.T. -0.00 min
 Lab File: VL039173.D
 Acq: 4 Jun 2022 11:15

Tgt Ion: 45 Resp: 105073
 Ion Ratio Lower Upper
 45 100
 46 80.8 0.0 0.0#





#15

Acetone

Concen: 6.209 ppbv

RT: 3.85

Delta R.T. MSVOA_L

Lab File: ClientSampleId :

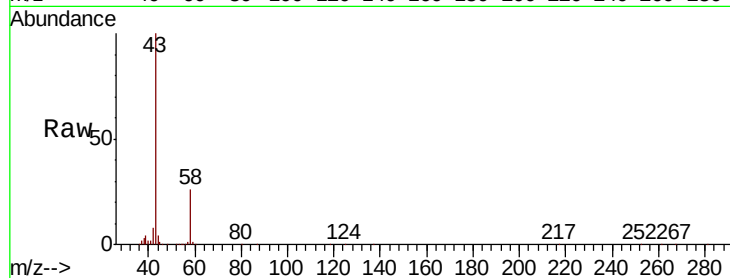
Acq: 4 Jun 2022 11:15

Tot Ion: 43 Resp: 803406

Ion Ratio Lower Upper

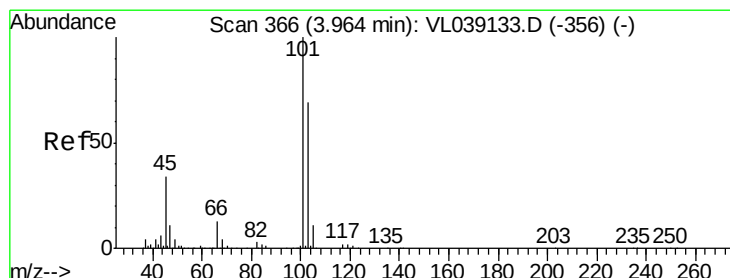
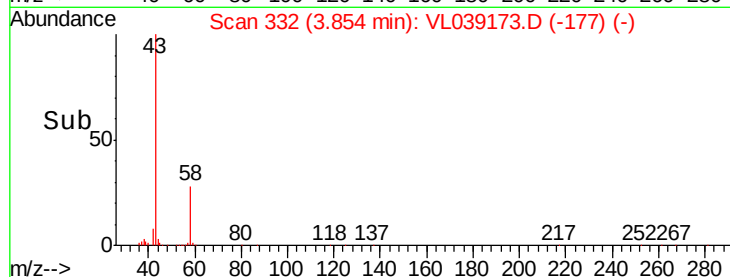
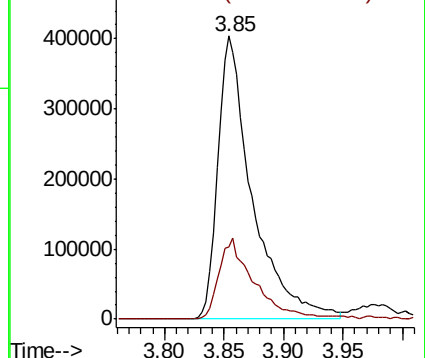
43 100

58 30.7 22.5 33.7



Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 58.10 (57.80 to 58.80): VL0



#19

Isopropyl Alcohol

Concen: 1.817 ppbv

RT: 3.97 min Scan# 369

Delta R.T. 0.01 min

Lab File: VL039173.D

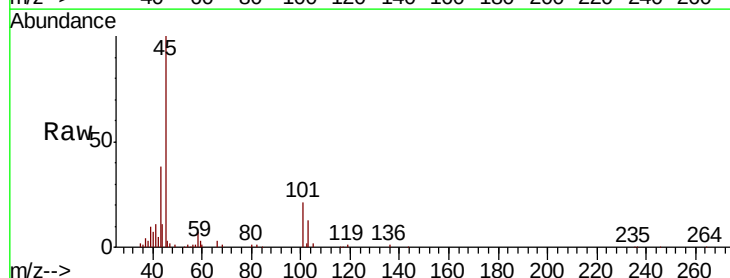
Acq: 4 Jun 2022 11:15

Tgt Ion: 45 Resp: 110260

Ion Ratio Lower Upper

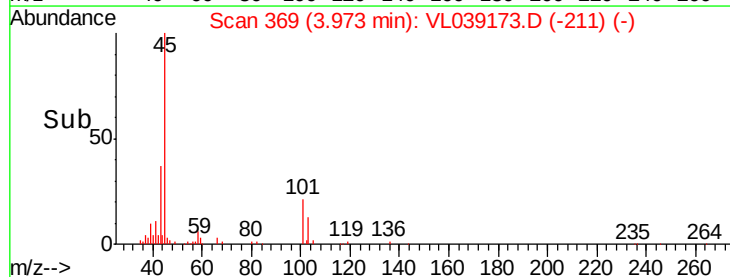
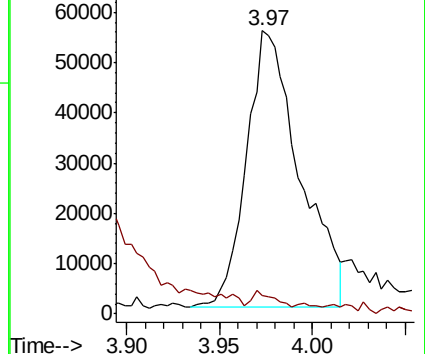
45 100

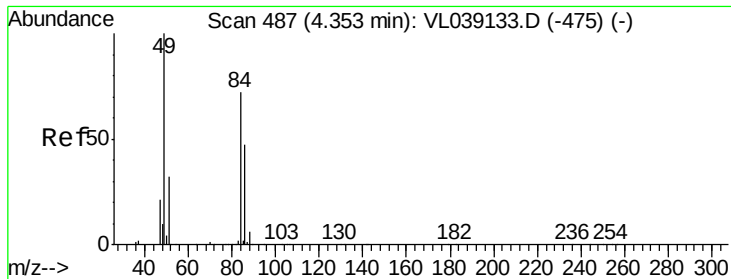
58 8.7 1.8 2.8#



Abundance Ion 45.10 (44.80 to 45.80): VL0

Ion 58.10 (57.80 to 58.80): VL0

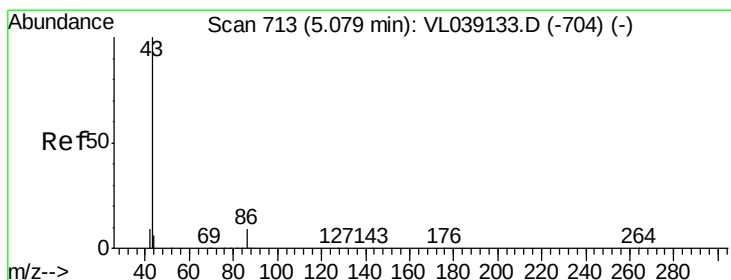
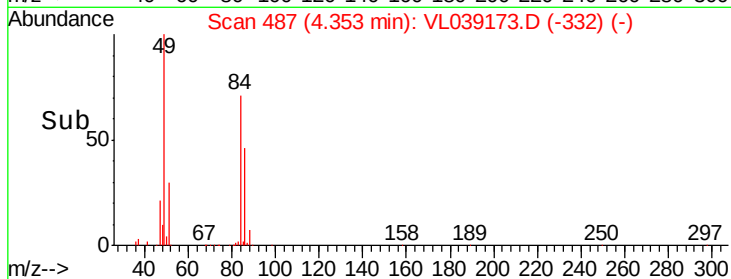
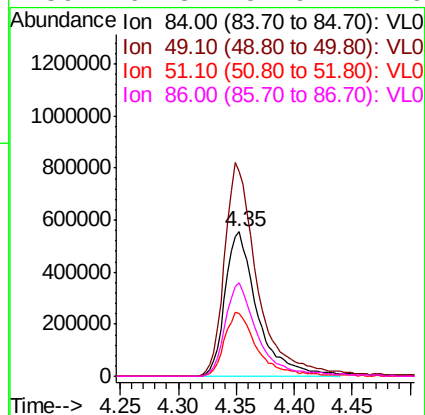
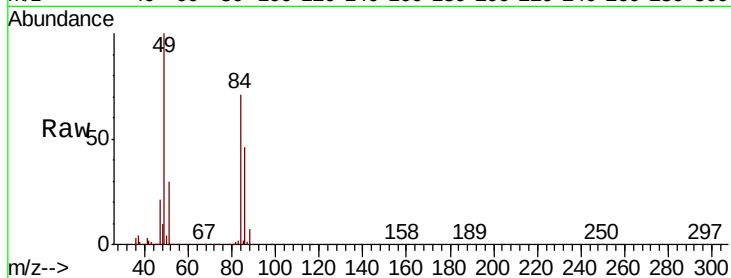




#20
Methylene Chloride
Concen: 19.766 ppbv
RT: 4.35
Delta R.T. MSVOA_L
Lab File: ClientSampleId :
Acq: 4 Jun 2022 11:15

Tot Ion: 84 Resp: 1077915

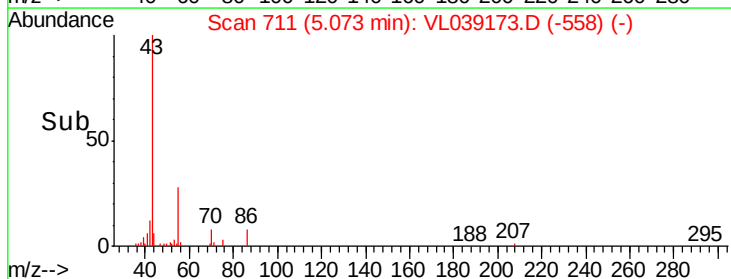
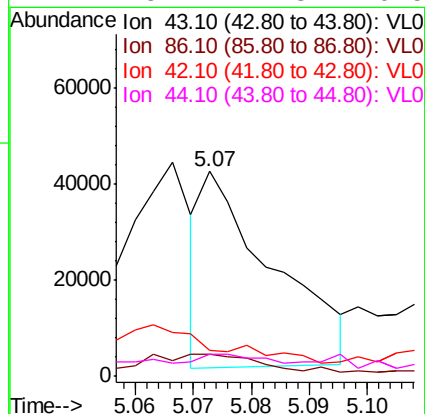
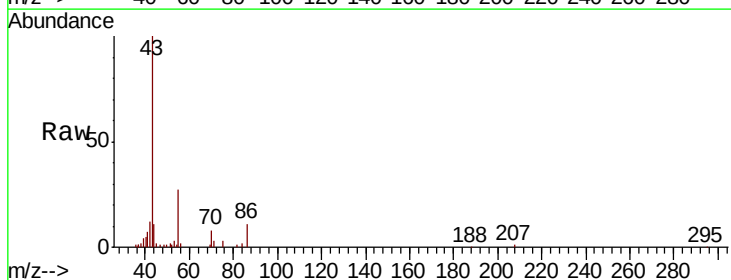
Ion	Ratio	Lower	Upper
84	100		
49	141.7	111.1	166.7
51	43.0	35.3	52.9
86	64.8	51.9	77.9

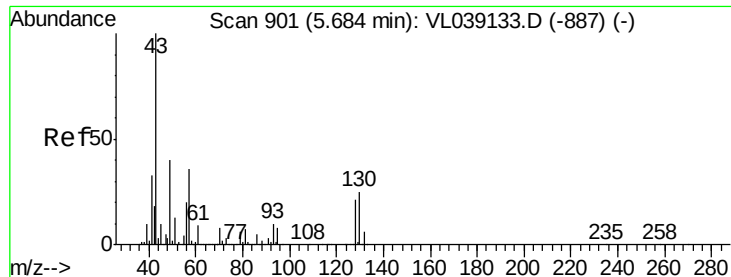


#23
Vinyl Acetate
Concen: 0.328 ppbv
RT: 5.07 min Scan# 711
Delta R.T. -0.01 min
Lab File: VL039173.D
Acq: 4 Jun 2022 11:15

Tgt Ion: 43 Resp: 35092

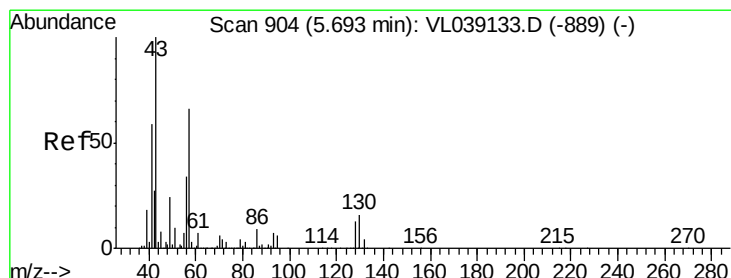
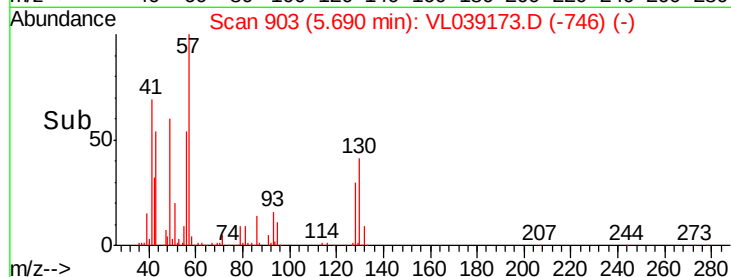
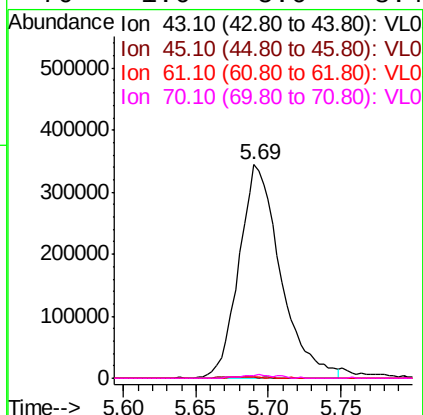
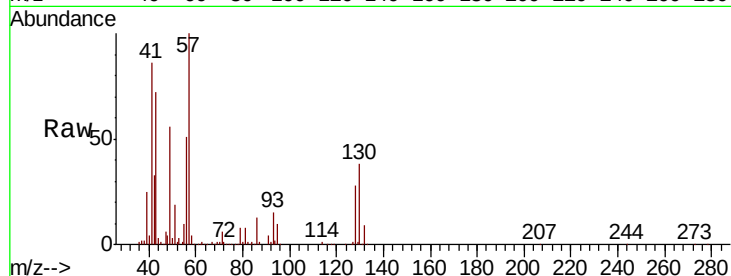
Ion	Ratio	Lower	Upper
43	100		
86	12.8	6.0	9.0#
42	7.7	8.2	12.4#
44	5.2	4.3	6.5





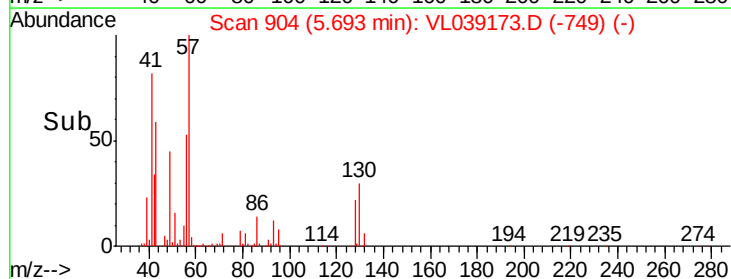
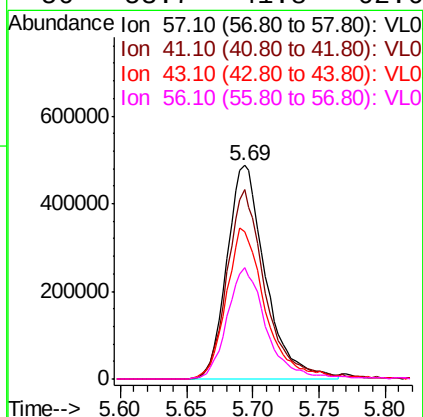
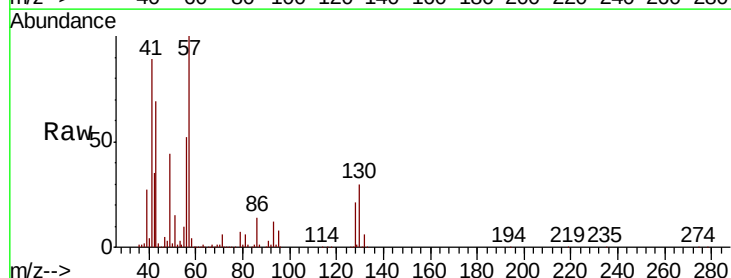
#25
Ethyl Acetate
Concen: 2.351 ppbv
RT: 5.69
Instrument: MSVOA_1
Delta R.T.:
Lab File: ClientSampleId :
Acq: 4 Jun 2022 11:15

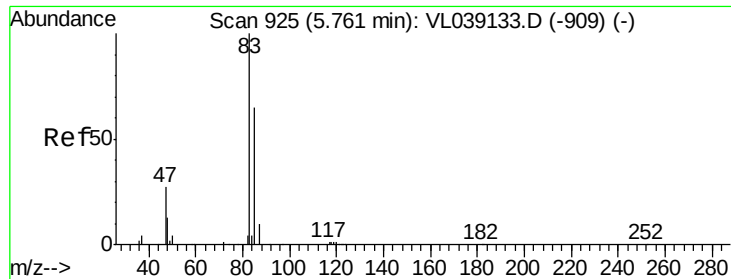
Tot Ion:	43	Resp:	685673
Ion	Ratio	Lower	Upper
43	100		
45	0.9	8.2	12.2#
61	0.7	8.4	12.6#
70	1.6	5.6	8.4#



#26
Hexane
Concen: 7.621 ppbv
RT: 5.69 min Scan# 904
Delta R.T.: -0.00 min
Lab File: VL039173.D
Acq: 4 Jun 2022 11:15

Tgt Ion:	57	Resp:	976755
Ion	Ratio	Lower	Upper
57	100		
41	89.6	72.4	108.6
43	72.3	187.0	280.6#
56	53.7	41.8	62.6





#29

Chloroform

Concen: 0.042 ppbv

RT: 5.76 Instrument: MSVOA_1

Delta R.T. ClientSampleId:

Lab File: OA1

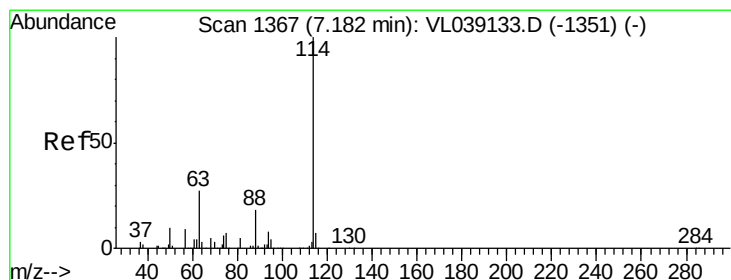
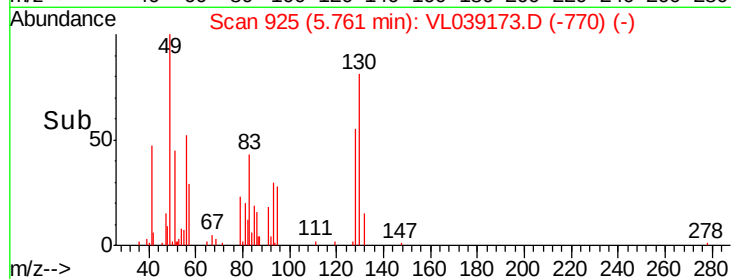
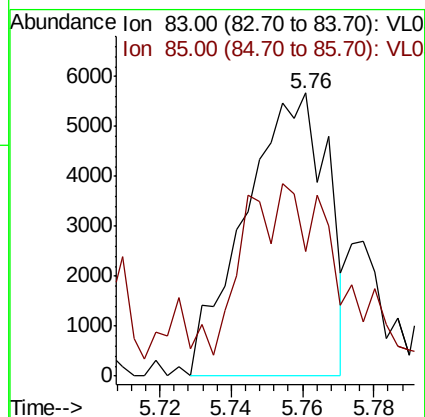
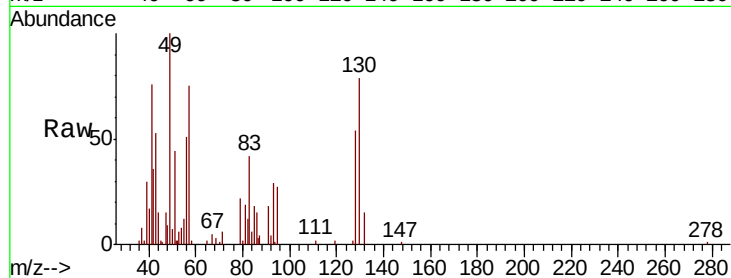
Acq: 4 Jun 2022 11:15

Tot Ion: 83 Resp: 9056

Ion Ratio Lower Upper

83 100

85 34.5 52.4 78.6#



#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 7.18 min Scan# 1366

Delta R.T. -0.00 min

Lab File: VL039173.D

Acq: 4 Jun 2022 11:15

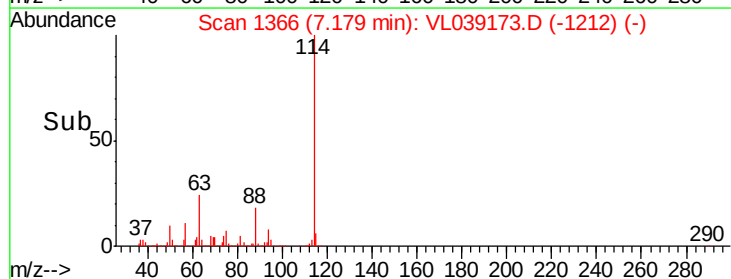
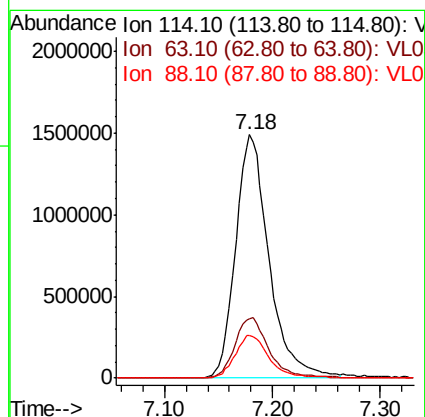
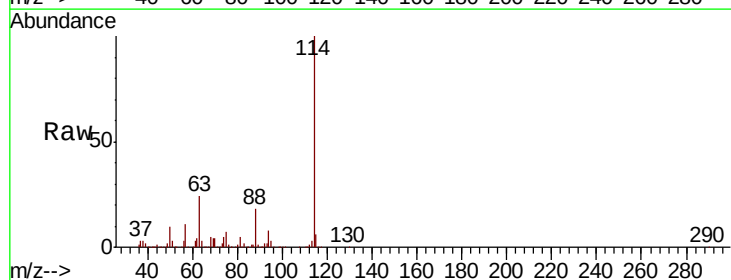
Tgt Ion: 114 Resp: 3211660

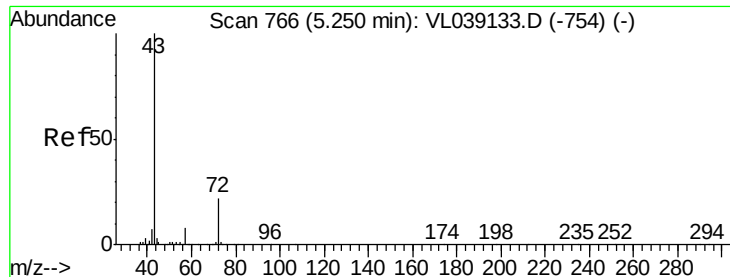
Ion Ratio Lower Upper

114 100

63 25.7 21.7 32.5

88 18.3 14.8 22.2





#34

2-Butanone

Concen: 0.623 ppbv

RT: 5.26 Instrument: MSVOA_1

Delta R.T. ClientSampleId:

Lab File: OA1

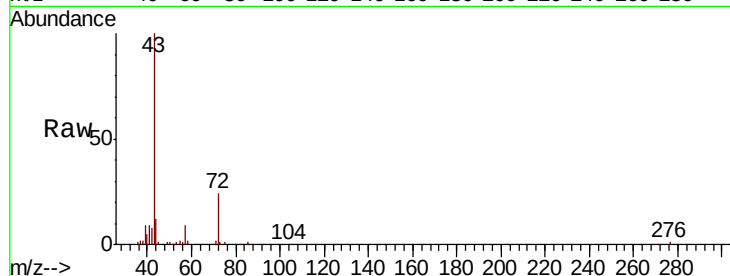
Acq: 4 Jun 2022 11:15

Tot Ion: 43 Resp: 108782

Ion Ratio Lower Upper

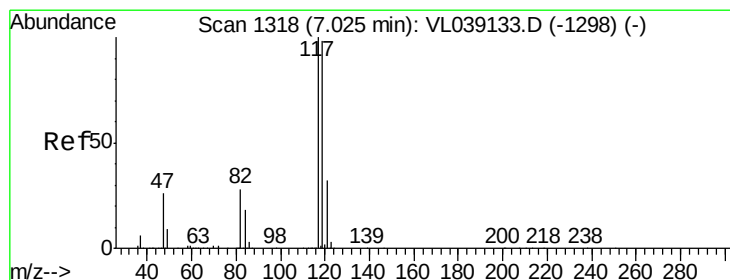
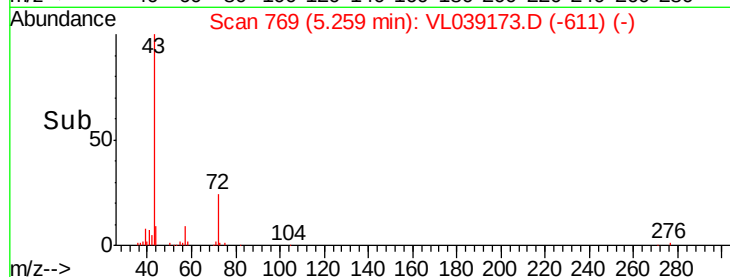
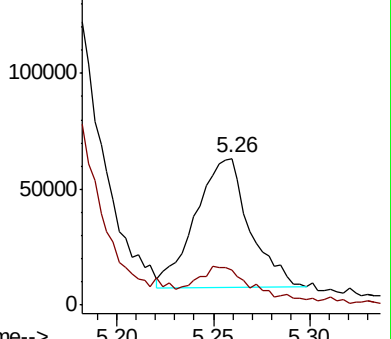
43 100

72 34.7 18.2 27.2#



Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 72.10 (71.80 to 72.80): VL0



#35

Carbon Tetrachloride

Concen: 0.036 ppbv

RT: 7.02 min Scan# 1317

Delta R.T. -0.00 min

Lab File: VL039173.D

Acq: 4 Jun 2022 11:15

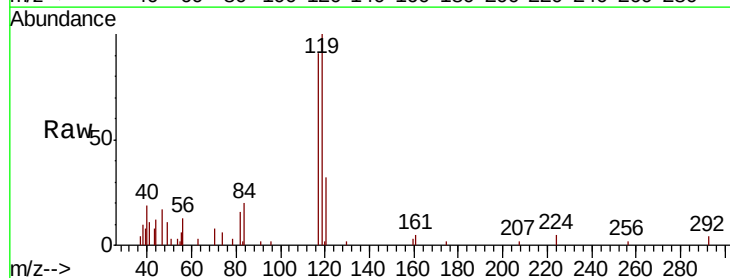
Tgt Ion: 117 Resp: 8434

Ion Ratio Lower Upper

117 100

119 104.1 78.6 118.0

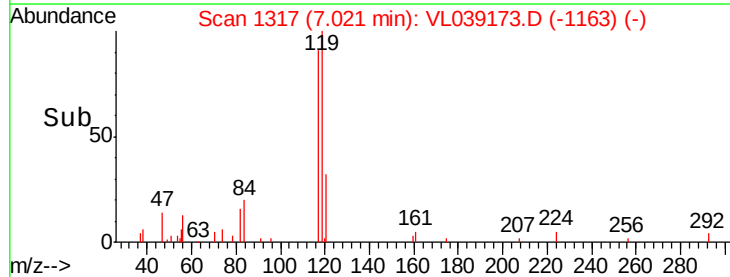
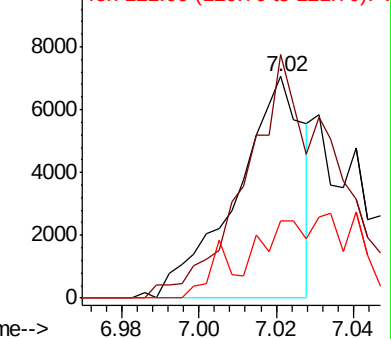
121 35.1 25.4 38.0

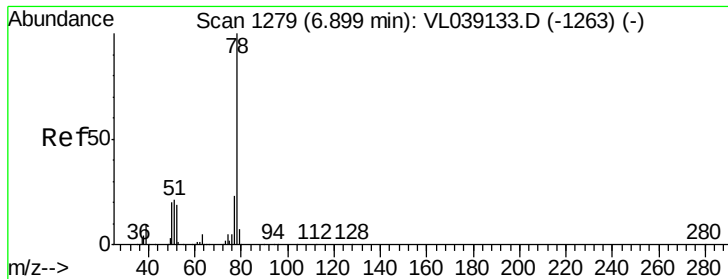


Abundance Ion 117.00 (116.70 to 117.70): V

Ion 119.00 (118.70 to 119.70): V

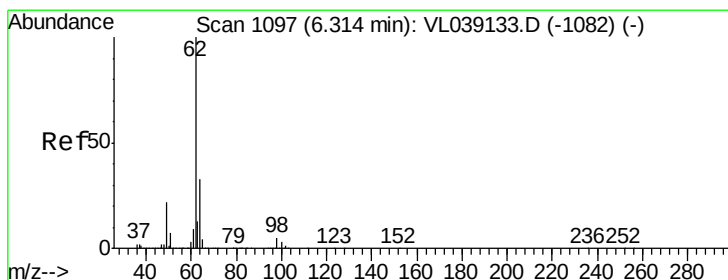
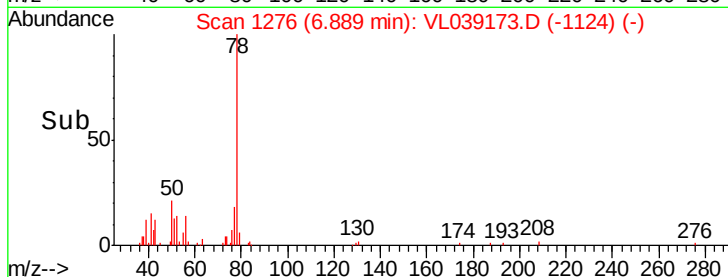
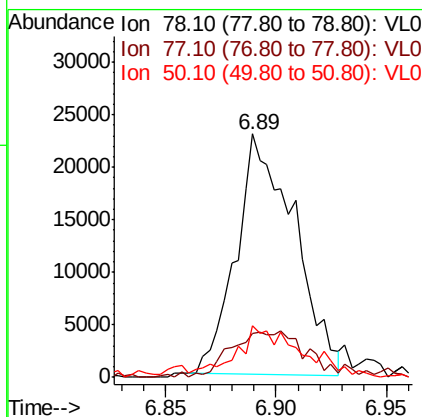
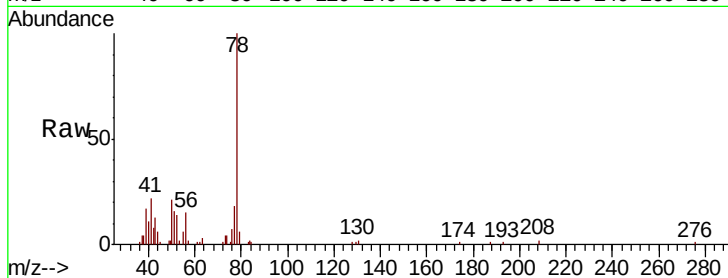
Ion 121.00 (120.70 to 121.70): V





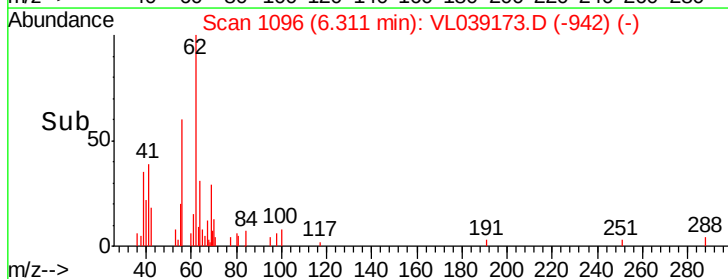
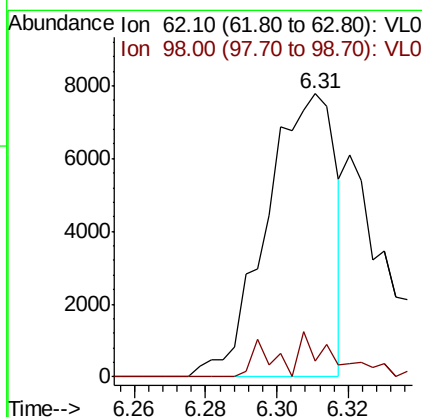
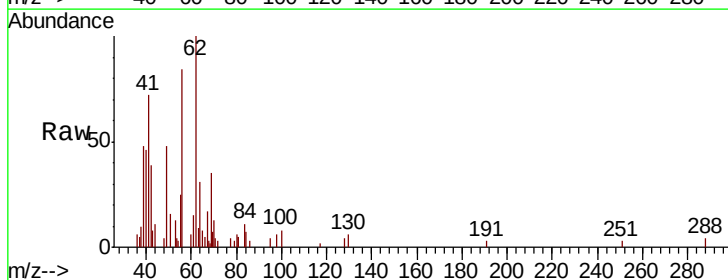
#36
Benzene
Concen: 0.161 ppbv
RT: 6.89
Delta R.T. MSVOA_L
Lab File: ClientSampleId :
Acq: 4 Jun 2022 11:15

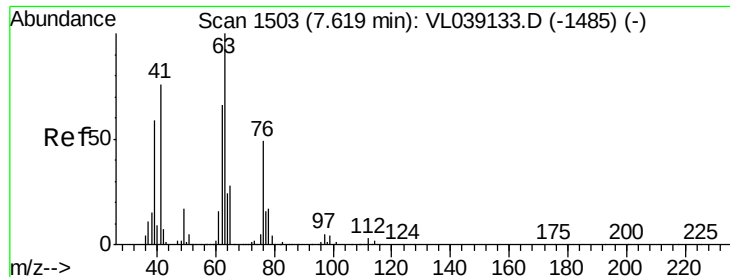
Tot Ion	Ratio	Lower	Upper
78	100		
77	16.9	18.6	27.8#
50	18.6	15.8	23.8



#37
1,2-Dichloroethane
Concen: 0.061 ppbv
RT: 6.31 min Scan# 1096
Delta R.T. -0.00 min
Lab File: VL039173.D
Acq: 4 Jun 2022 11:15

Tgt Ion	Ratio	Lower	Upper
62	100		
98	9.0	4.3	6.5#





#39

1,2-Dichloropropane

Concen: 7.659 ppbv

RT: 7.18 Instrument: MSVOA_1

Delta R.T.

Lab File: ClientSampleId:

Acq: 4 Jun 2022 11:15

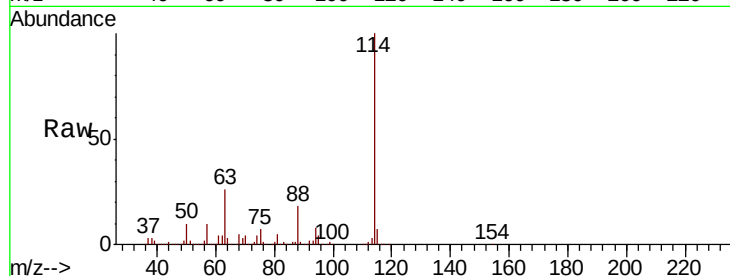
Tot Ion: 63 Resp: 794328

Ion Ratio Lower Upper

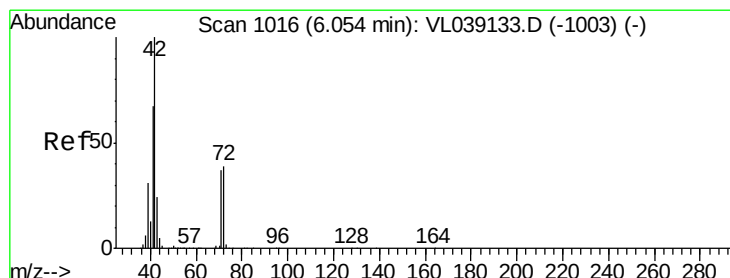
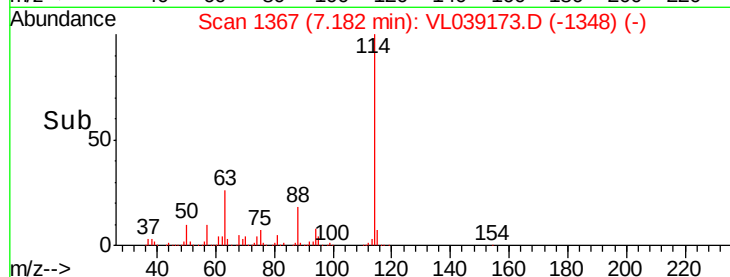
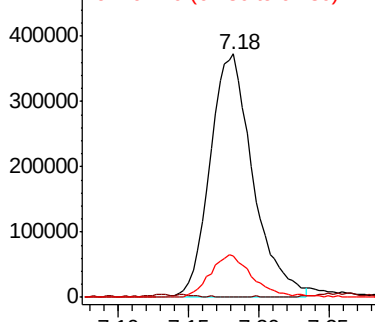
63 100

41 0.0 60.8 91.2#

62 16.8 52.9 79.3#



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



#41

Tetrahydrofuran

Concen: 0.158 ppbv

RT: 6.06 min Scan# 1019

Delta R.T. 0.01 min

Lab File: VL039173.D

Acq: 4 Jun 2022 11:15

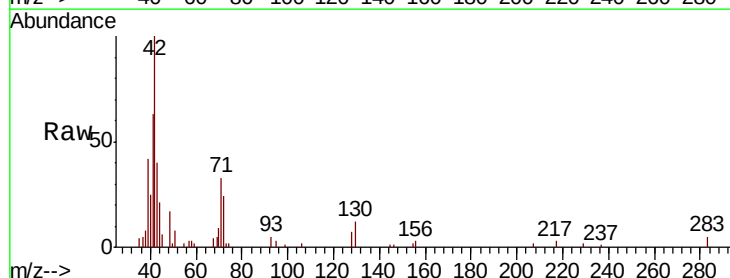
Tgt Ion: 42 Resp: 16618

Ion Ratio Lower Upper

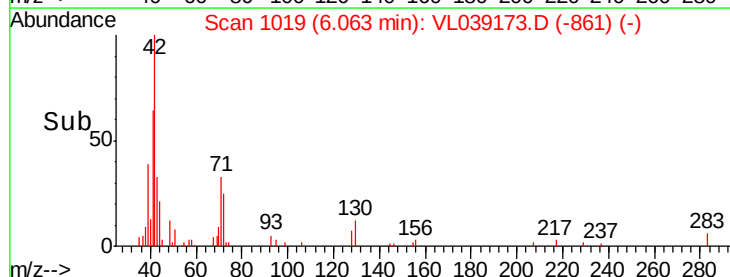
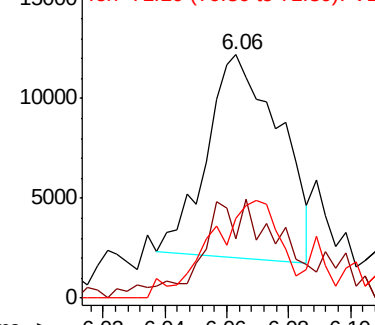
42 100

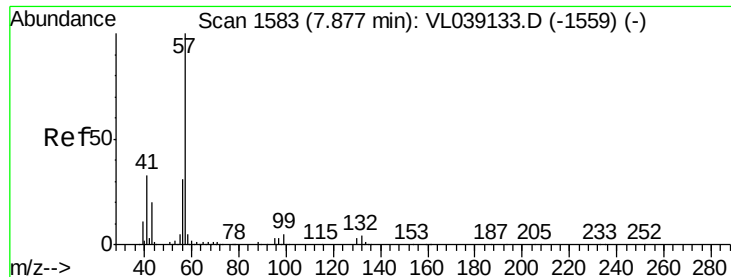
72 64.9 32.0 48.0#

71 62.8 31.1 46.7#



Abundance Ion 42.10 (41.80 to 42.80): VL0
Ion 72.10 (71.80 to 72.80): VL0
Ion 71.10 (70.80 to 71.80): VL0





#44

2,2,4-Trimethylpentane

Concen: 0.045 ppbv

RT: 7.87 Instrument:

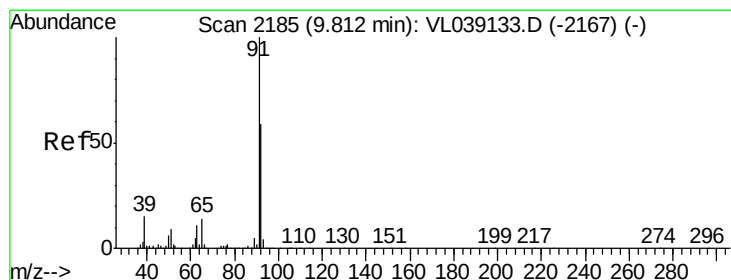
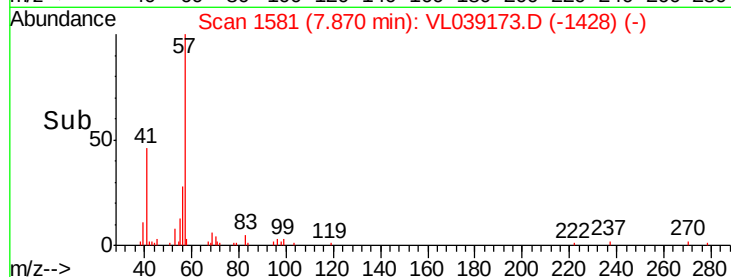
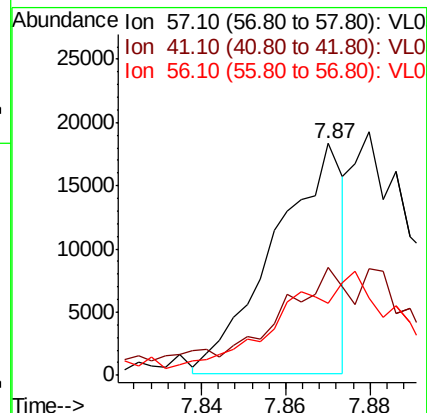
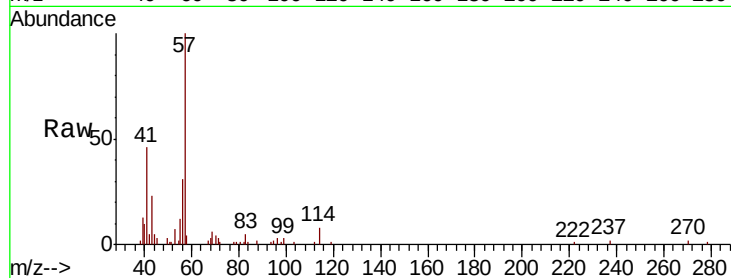
Delta R.T. MSVOA_L

Lab File: ClientSampleId:

Acq: 4 Jun 2022 11:15

Tot Ion: 57 Resp: 20681

Ion	Ratio	Lower	Upper
57	100		
41	99.5	26.2	39.4#
56	0.0	24.7	37.1#



#53

Toluene

Concen: 0.381 ppbv

RT: 9.81 min Scan# 2184

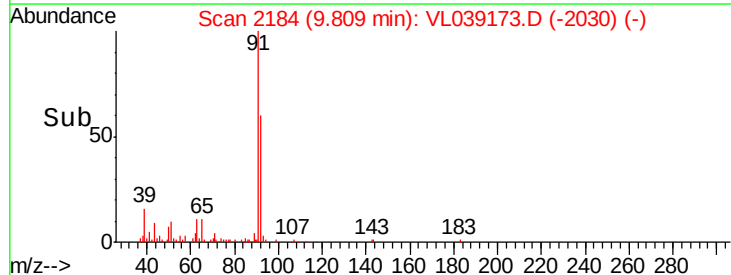
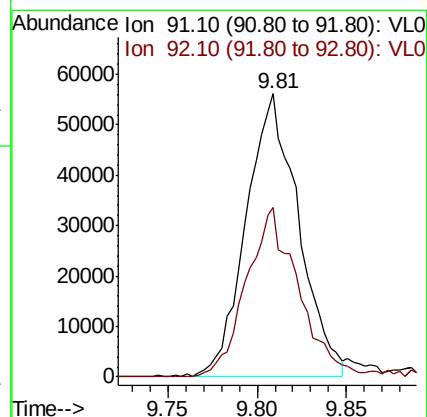
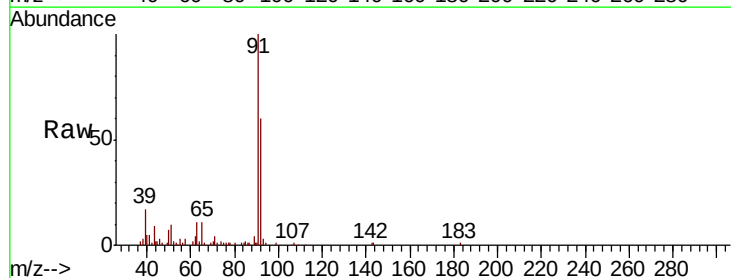
Delta R.T. -0.00 min

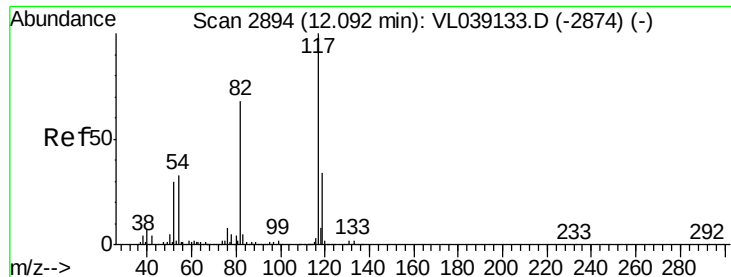
Lab File: VL039173.D

Acq: 4 Jun 2022 11:15

Tgt Ion: 91 Resp: 114299

Ion	Ratio	Lower	Upper
91	100		
92	61.8	48.1	72.1

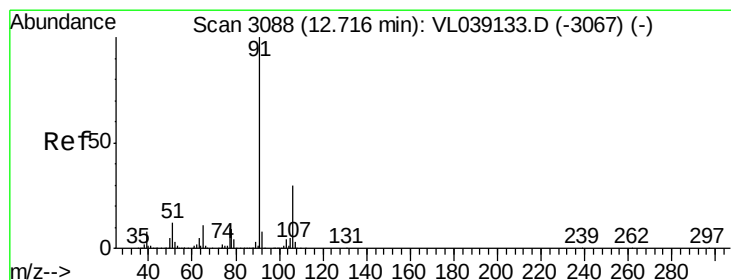
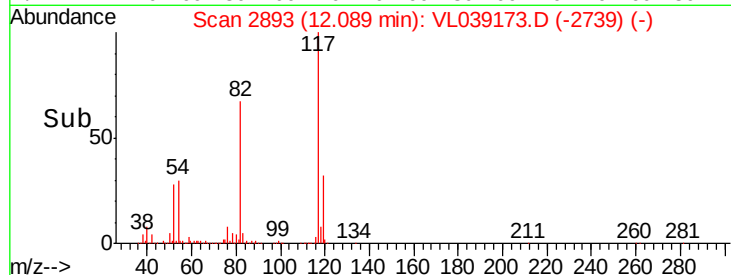
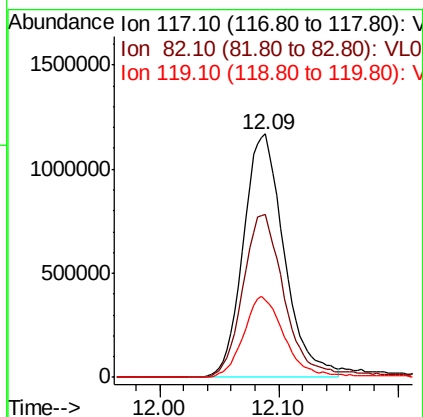
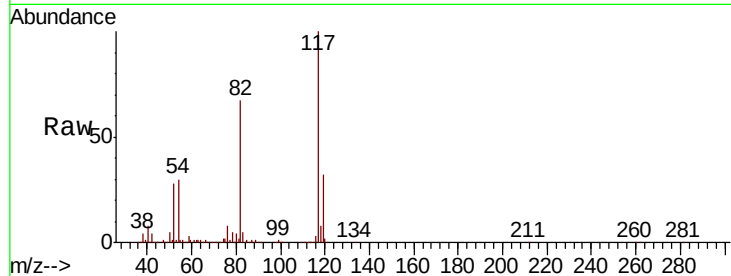




#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 12.09 min
Delta R.T.: MSVOA_L
Lab File: ClientSampleId :
Acq: 4 Jun 2022 11:15

Tot Ion: 117 Resp: 2784482

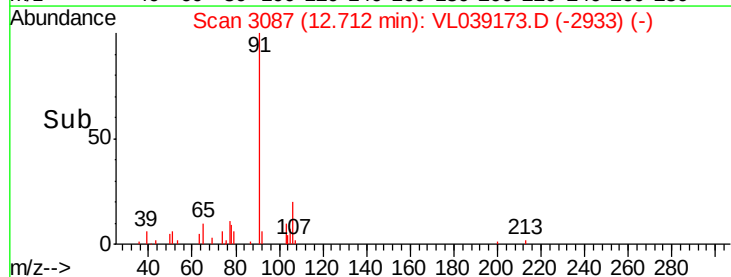
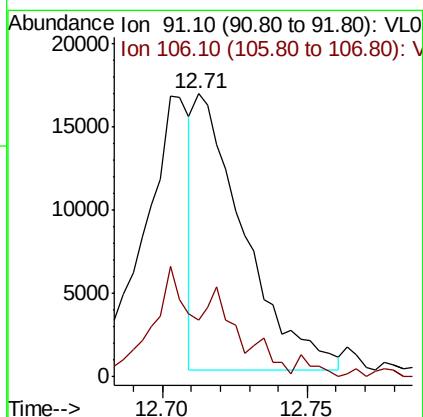
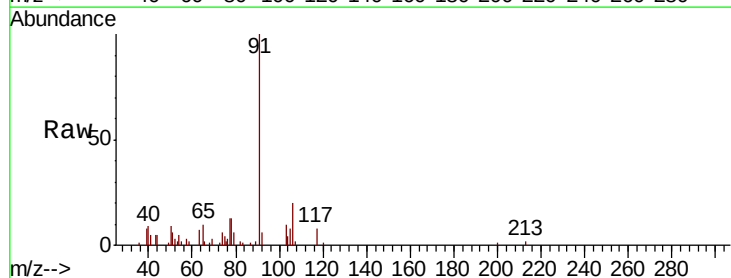
Ion	Ratio	Lower	Upper
117	100		
82	70.5	55.1	82.7
119	34.8	24.7	37.1

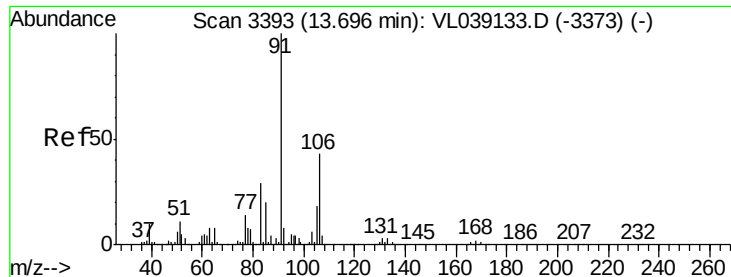


#58
Ethyl Benzene
Concen: 0.051 ppbv
RT: 12.71 min Scan# 3087
Delta R.T.: -0.00 min
Lab File: VL039173.D
Acq: 4 Jun 2022 11:15

Tgt Ion: 91 Resp: 19709

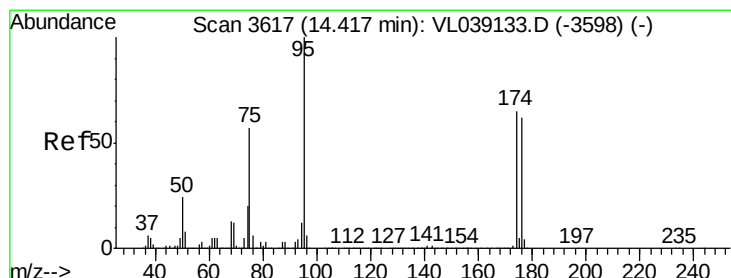
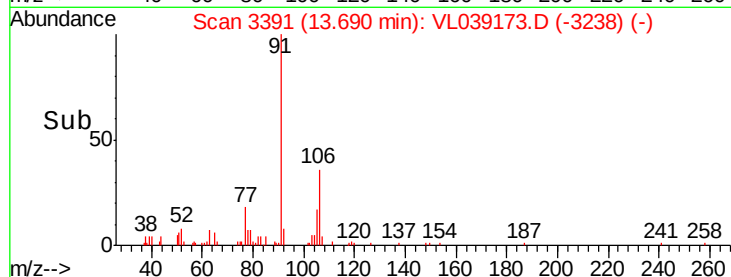
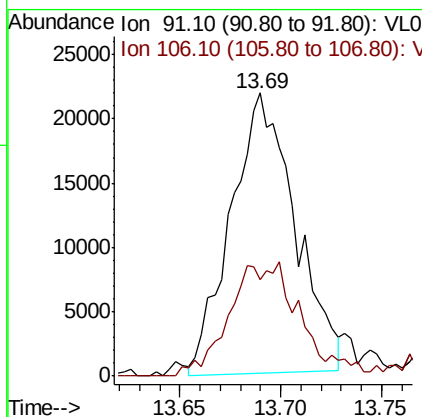
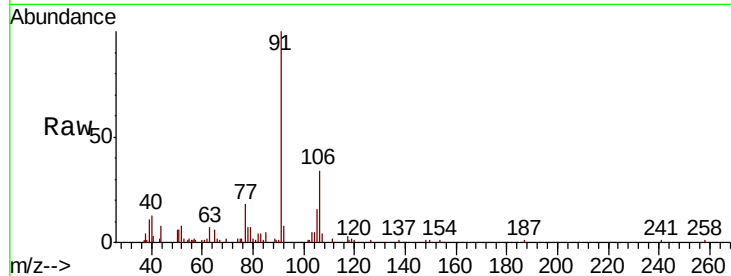
Ion	Ratio	Lower	Upper
91	100		
106	21.7	24.2	36.4#





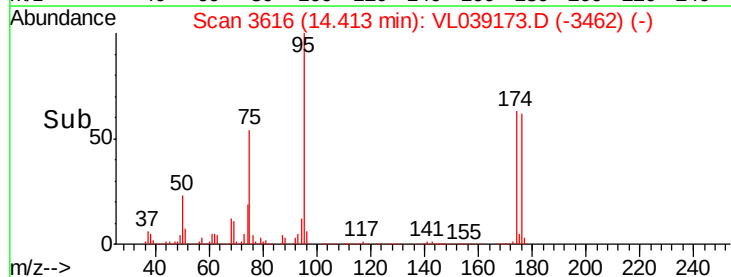
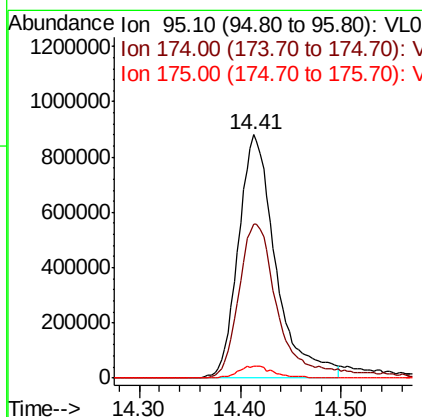
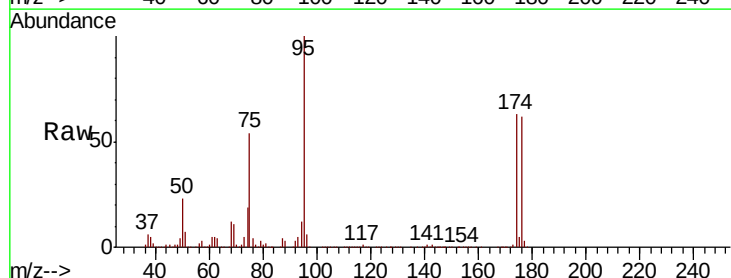
#60
o-Xylene
Concen: 0.153 ppbv
RT: 13.69
Delta R.T. MSVOA_L
Lab File: ClientSampleId :
Acq: 4 Jun 2022 11:15

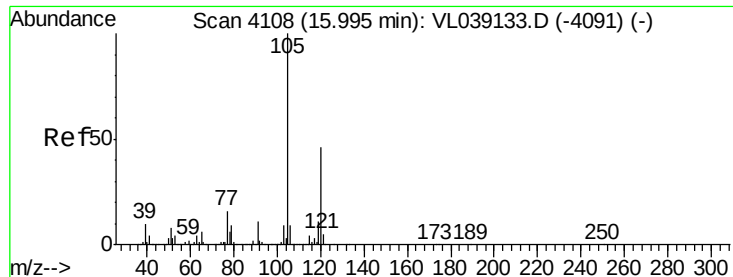
Tot Ion: 91 Resp: 48449
Ion Ratio Lower Upper
91 100
106 44.9 22.3 66.9



#68
1-Bromo-4-Fluorobenzene
Concen: 9.822 ppbv
RT: 14.41 min Scan# 3616
Delta R.T. -0.00 min
Lab File: VL039173.D
Acq: 4 Jun 2022 11:15

Tgt Ion: 95 Resp: 2261154
Ion Ratio Lower Upper
95 100
174 69.5 53.8 80.8
175 4.9 4.1 6.1





#73

1,3,5-Trimethylbenzene

Concen: 0.064 ppbv

RT: 16.00

Delta R.T. MSVOA_L

Lab File: ClientSampleId :

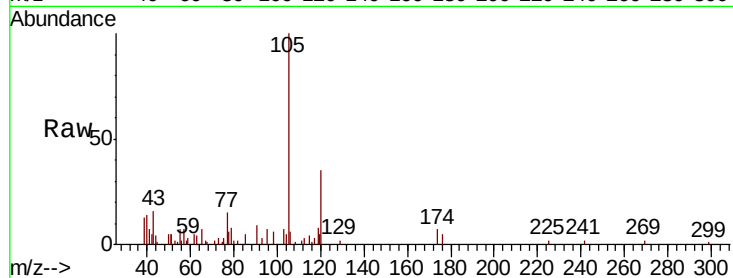
Acq: 4 Jun 2022 11:15

Tot Ion:105 Resp: 21422

Ion Ratio Lower Upper

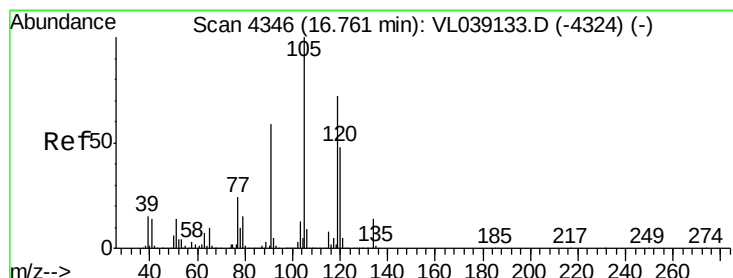
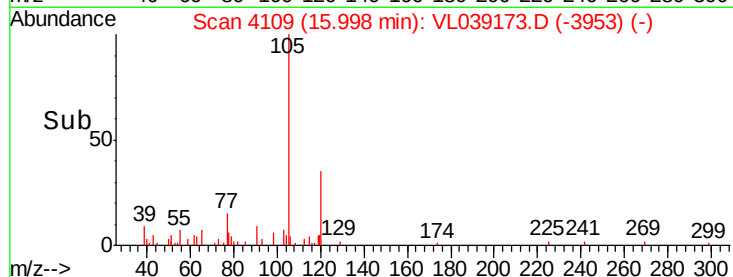
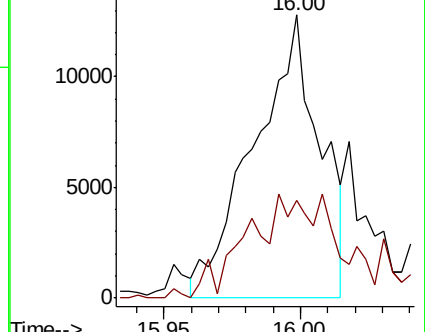
105 100

120 37.2 36.7 55.1



Abundance Ion 105.10 (104.80 to 105.80): V

Ion 120.20 (119.90 to 120.90): V



#74

1,2,4-Trimethylbenzene

Concen: 0.185 ppbv

RT: 16.76 min Scan# 4345

Delta R.T. -0.00 min

Lab File: VL039173.D

Acq: 4 Jun 2022 11:15

Tgt Ion:105 Resp: 69078

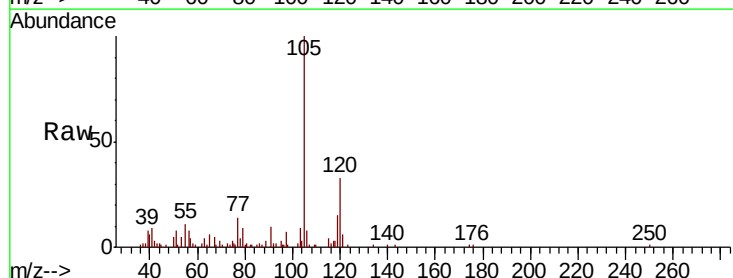
Ion Ratio Lower Upper

105 100

120 31.5 38.1 57.1#

91 7.5 47.4 71.0#

77 12.8 19.5 29.3#



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): VL0

Ion 77.10 (76.80 to 77.80): VL0

