

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL061322\
 Data File : VL039256.D
 Acq On : 13 Jun 2022 17:52
 Operator : SY/AP
 Sample : N3330-01
 Misc : 400mL/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 OTC-IAZ

Quant Time: Jun 14 01:31:16 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	1222475	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.18	114	2640393	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.09	117	2247105	10.00	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.42	95	2041686	10.99	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	109.90%

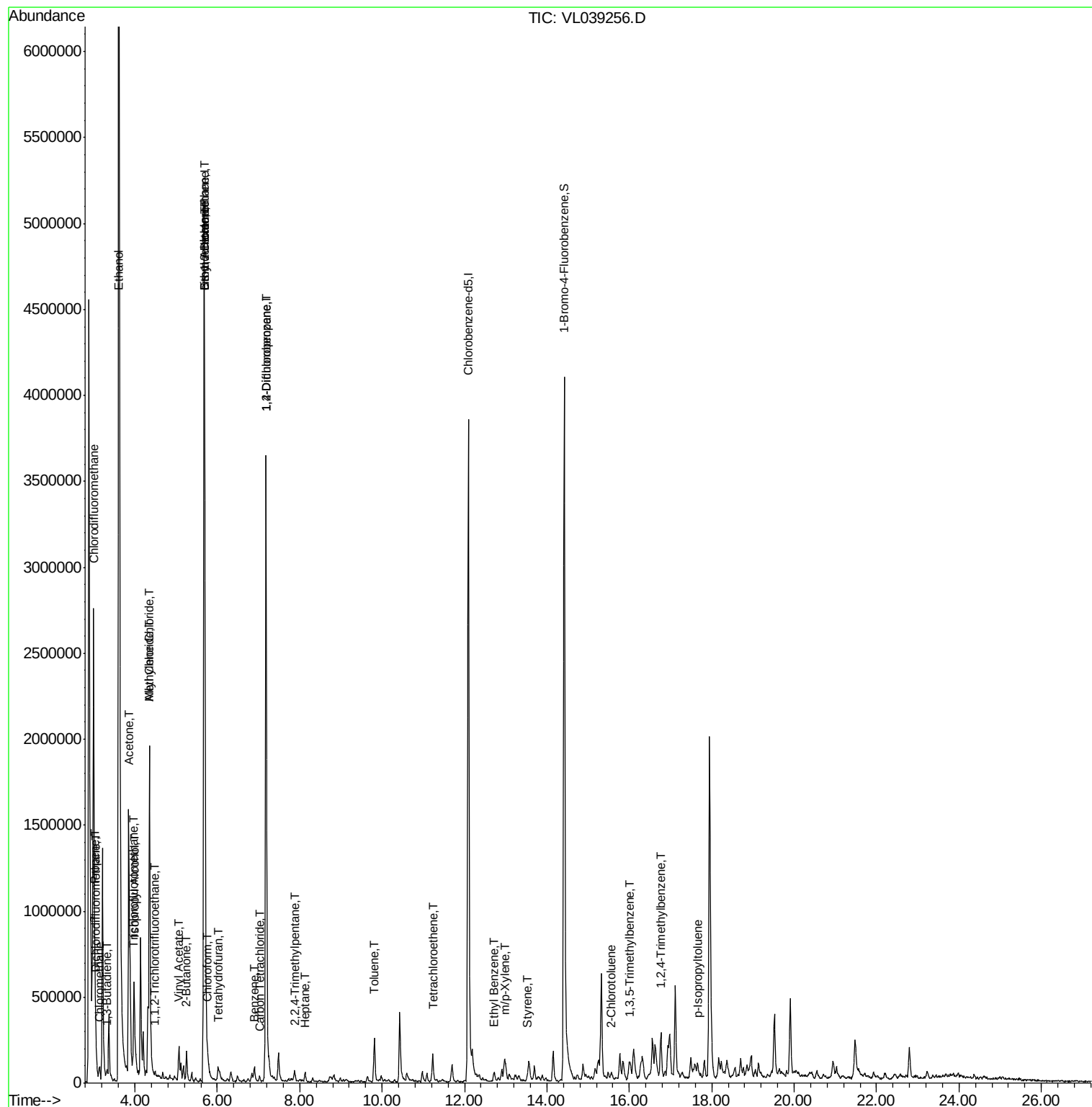
Target Compounds					Ovalue
2) Dichlorodifluoromethane	3.05	85	52658	0.245	ppbv 96
3) Chlorodifluoromethane	3.00	51	3562840	22.906	ppbv 99
4) Chloromethane	3.15	50	45730	0.572	ppbv 98
9) Propene	3.03	41	55083	0.812	ppbv 94
10) Heptane	8.13	43	10945	0.069	ppbv # 1
11) Trichlorofluoromethane	3.96	101	57379	0.295	ppbv # 74
12) 1,1,2-Trichlorotrifluoroet	4.49	101	10381	0.081	ppbv 86
13) Ethanol	3.61	45	10632917	2874.692	ppbv # 100
15) Acetone	3.85	43	2019607	15.860	ppbv 98
16) 1,3-Butadiene	3.33	39	5404	0.079	ppbv # 1
19) Isopropyl Alcohol	3.98	45	677343	11.341	ppbv # 97
20) Methylene Chloride	4.35	84	816420	15.214	ppbv 96
21) Allyl Chloride	4.35	41	19265	0.224	ppbv # 34
23) Vinyl Acetate	5.07	43	140516	1.334	ppbv # 68
25) Ethyl Acetate	5.67	43	3272887	11.403	ppbv 98
26) Hexane	5.70	57	861265	6.828	ppbv # 38
29) Chloroform	5.77	83	15022	0.071	ppbv 95
31) cis-1,2-Dichloroethene	5.67	61	169945	1.321	ppbv # 26
34) 2-Butanone	5.25	43	191701	1.336	ppbv 95
35) Carbon Tetrachloride	7.03	117	9319	0.048	ppbv # 55
36) Benzene	6.90	78	31207	0.146	ppbv # 85
39) 1,2-Dichloropropane	7.18	63	764047	8.961	ppbv # 25
41) Tetrahydrofuran	6.01	42	5579	0.065	ppbv # 58
44) 2,2,4-Trimethylpentane	7.88	57	26999	0.072	ppbv # 22
52) Tetrachloroethene	11.24	164	9052	0.108	ppbv 91
53) Toluene	9.81	91	146668	0.594	ppbv 95
58) Ethyl Benzene	12.72	91	20305	0.066	ppbv 100
59) m/p-Xylene	12.99	91	22775	0.084	ppbv # 33
61) Styrene	13.52	104	7656	0.056	ppbv # 1
69) p-Isopropyltoluene	17.65	119	15534	0.039	ppbv # 47
71) 2-Chlorotoluene	15.56	91	17357	0.060	ppbv # 46
73) 1,3,5-Trimethylbenzene	15.99	105	20860	0.077	ppbv 94
74) 1,2,4-Trimethylbenzene	16.76	105	97950	0.324	ppbv # 67

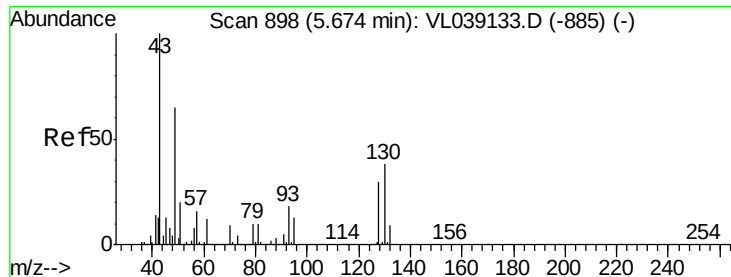
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL061322\
Data File : VL039256.D
Acq On : 13 Jun 2022 17:52
Operator : SY/AP
Sample : N3330-01
Misc : 400mL/MSVOA L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
OTC-IAZ

Quant Time: Jun 14 01:31:16 2022
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL053122AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Wed Jun 01 01:22:18 2022
QLast Update : Wed Jun 01 01:22:18 2022
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.67 Instrument:

Delta R.T. MSVOA_1

Lab File: ClientSampleId:

Acq: 13 Jun 2022 17:52

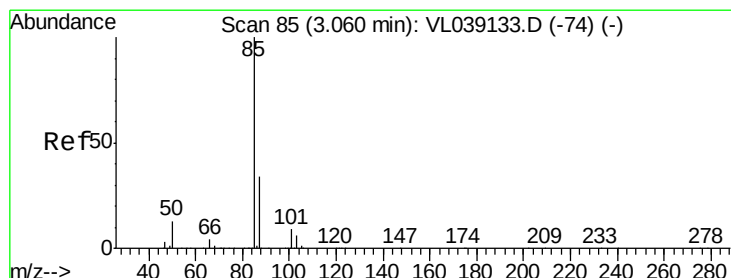
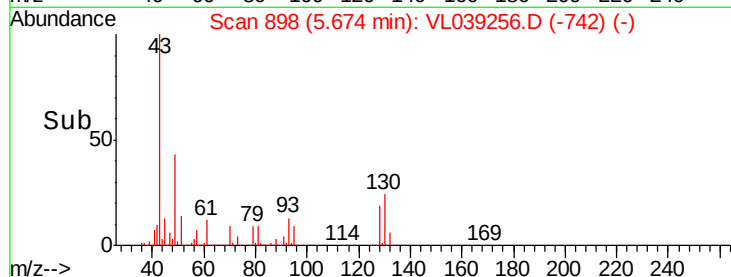
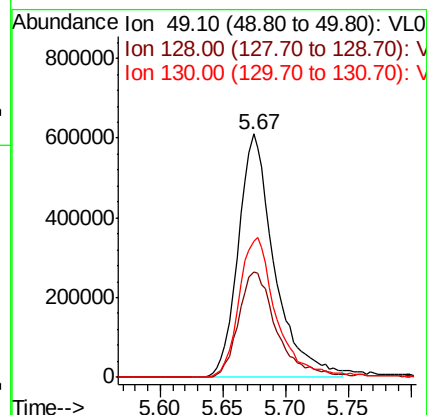
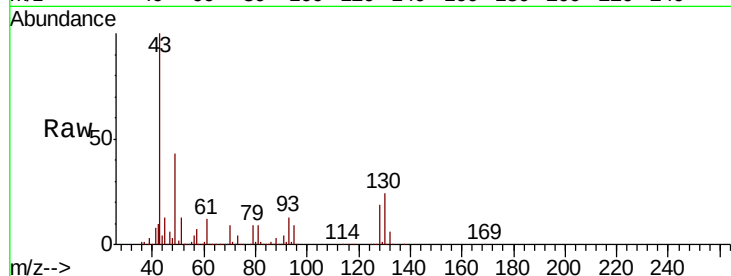
Tot Ion: 49 Resp: 1222475

Ion Ratio Lower Upper

49 100

128 46.9 24.7 74.1

130 60.1 31.4 94.0



#2

Dichlorodifluoromethane

Concen: 0.245 ppbv

RT: 3.05 min Scan# 83

Delta R.T. -0.01 min

Lab File: VL039256.D

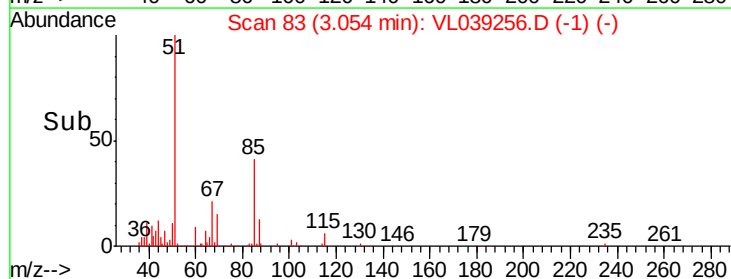
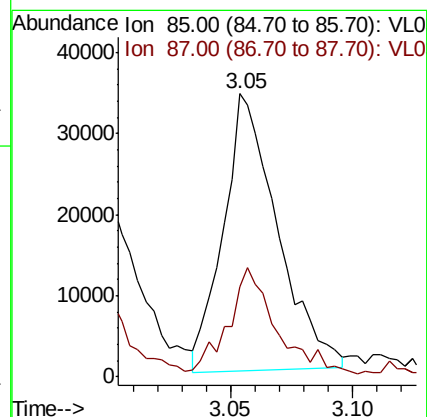
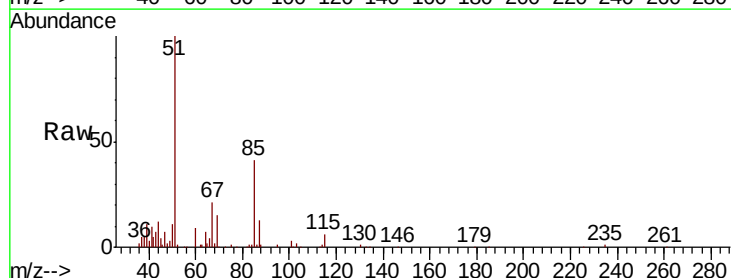
Acq: 13 Jun 2022 17:52

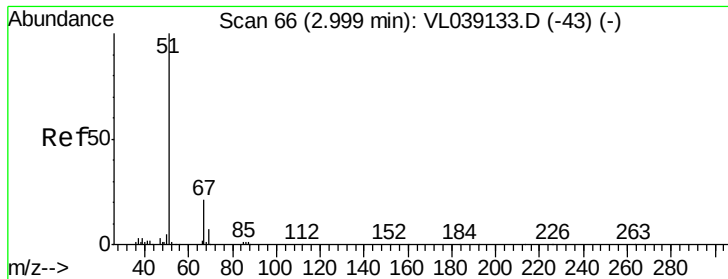
Tgt Ion: 85 Resp: 52658

Ion Ratio Lower Upper

85 100

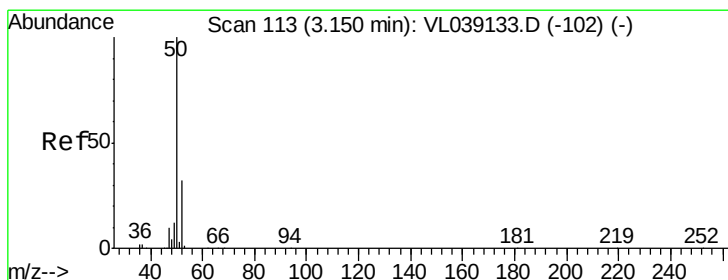
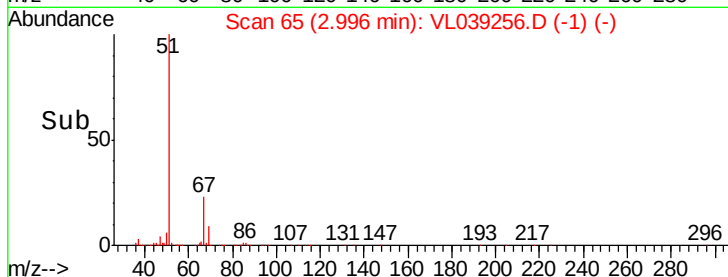
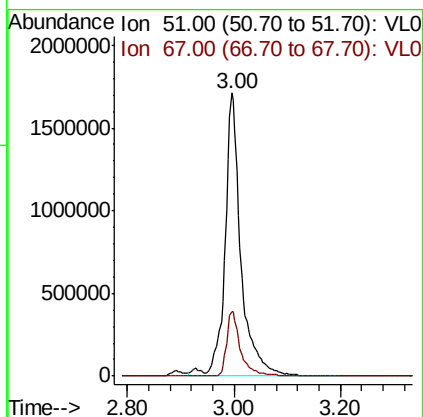
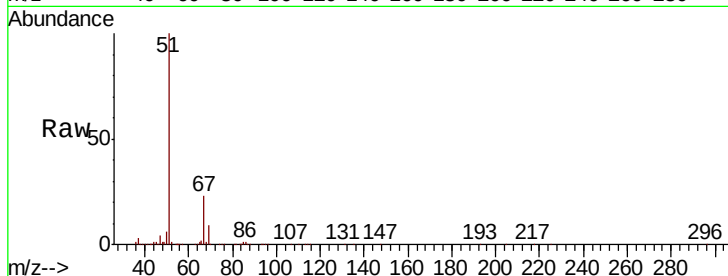
87 31.4 26.9 40.3





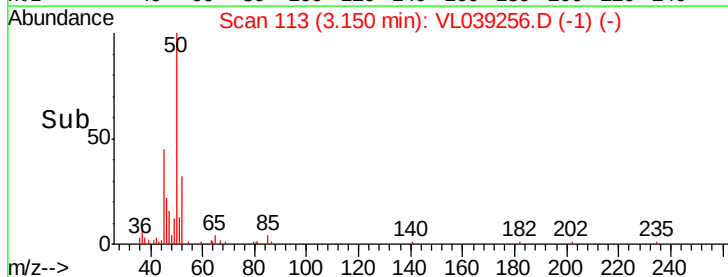
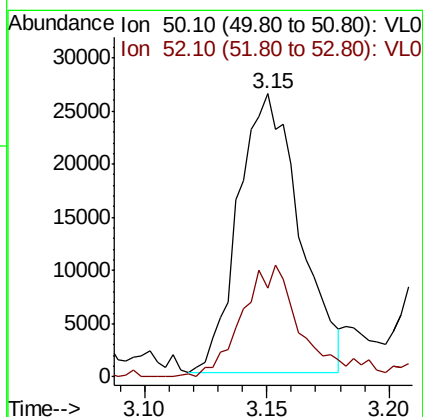
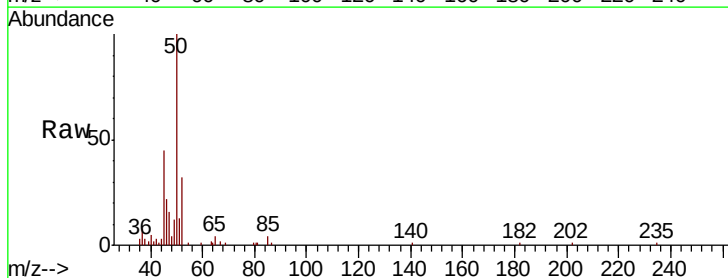
#3
 Chlorodifluoromethane
 Concen: 22.906 ppbv
 RT: 3.00
 Delta R.T. MSVOA_L
 Lab File: ClientSampleId :
 Acq: 13 Jun 2022 17:52

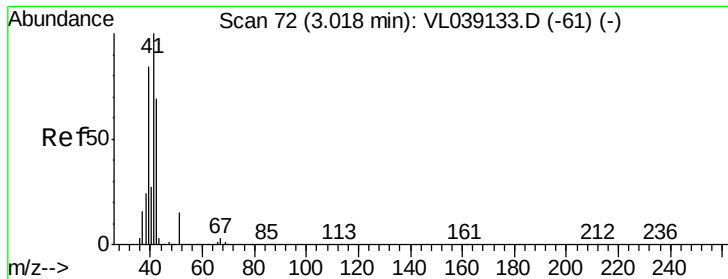
Tot Ion: 51 Resp: 3562840
 Ion Ratio Lower Upper
 51 100
 67 19.9 16.2 24.4



#4
 Chloromethane
 Concen: 0.572 ppbv
 RT: 3.15 min Scan# 113
 Delta R.T. 0.00 min
 Lab File: VL039256.D
 Acq: 13 Jun 2022 17:52

Tgt Ion: 50 Resp: 45730
 Ion Ratio Lower Upper
 50 100
 52 31.1 25.9 38.9





#9

Propene

Concen: 0.812 ppbv

RT: 3.03 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

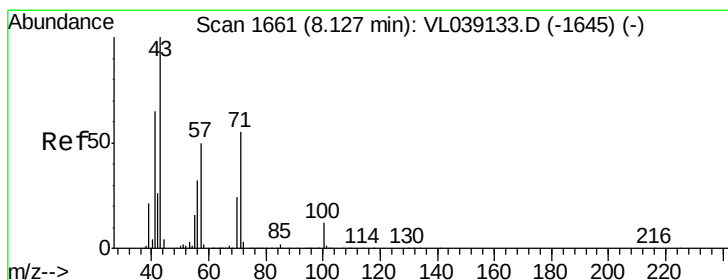
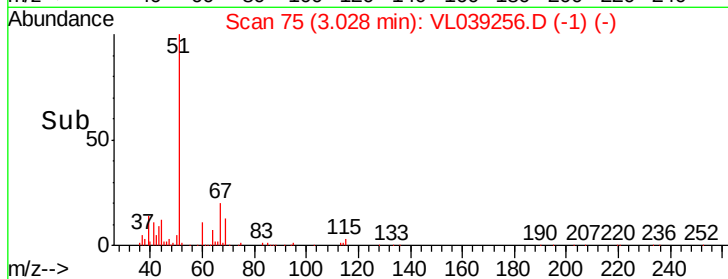
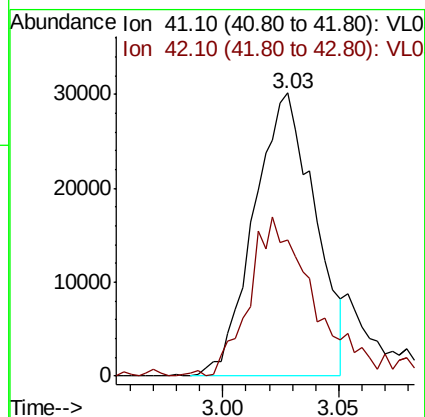
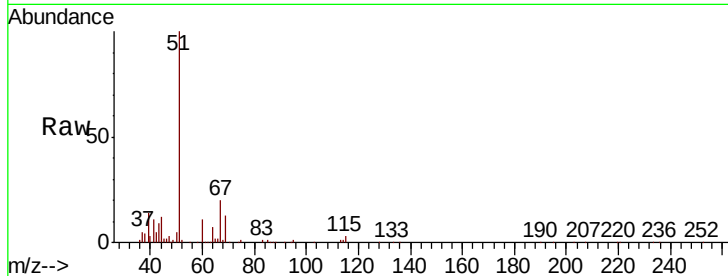
Acq: 13 Jun 2022 17:52

Tot Ion: 41 Resp: 55083

Ion Ratio Lower Upper

41 100

42 64.6 55.4 83.2



#10

Heptane

Concen: 0.069 ppbv

RT: 8.13 min Scan# 1662

Delta R.T. 0.00 min

Lab File: VL039256.D

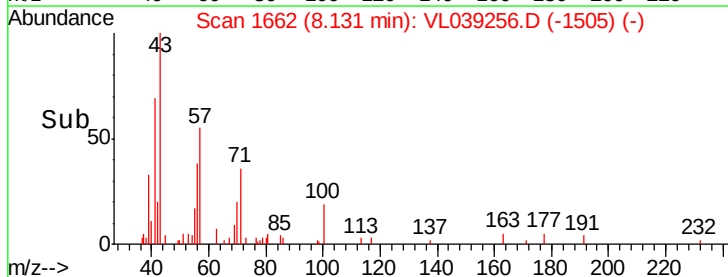
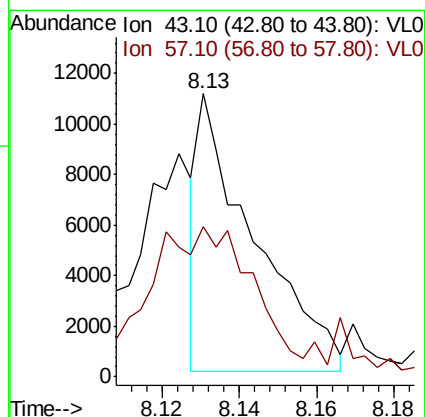
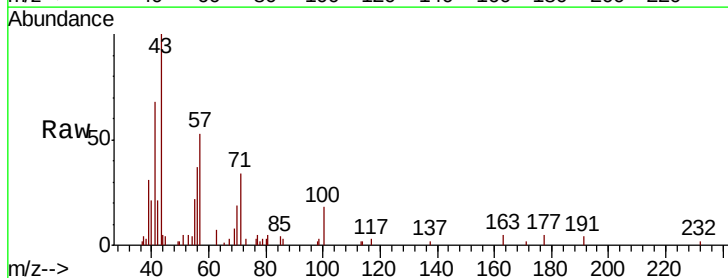
Acq: 13 Jun 2022 17:52

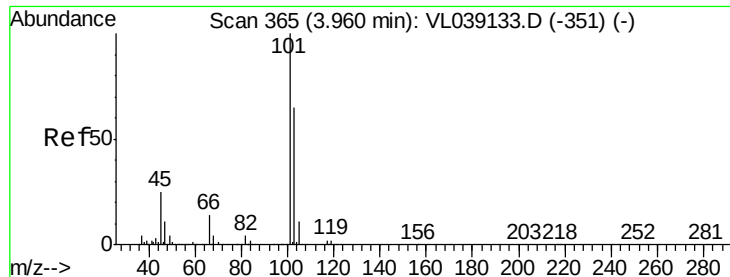
Tgt Ion: 43 Resp: 10945

Ion Ratio Lower Upper

43 100

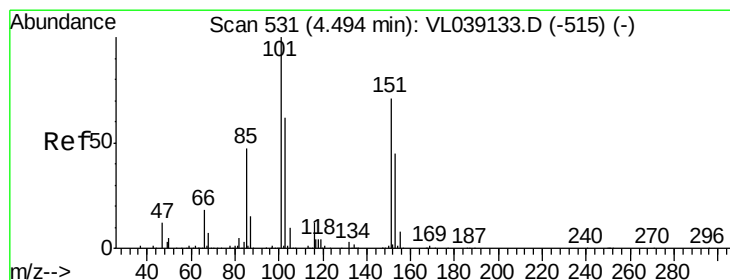
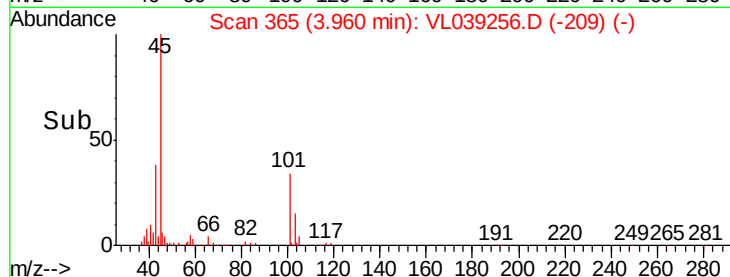
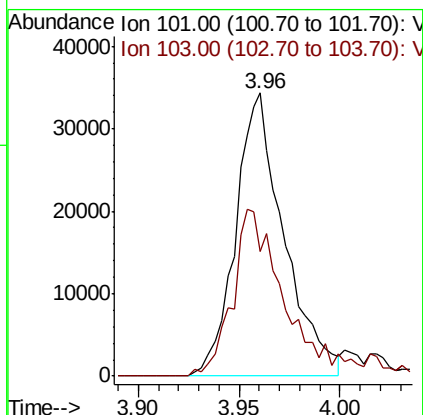
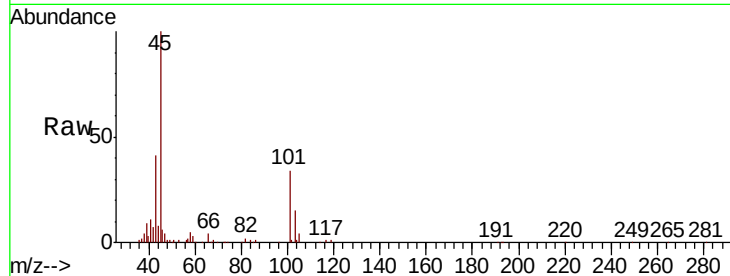
57 129.9 41.4 62.2#





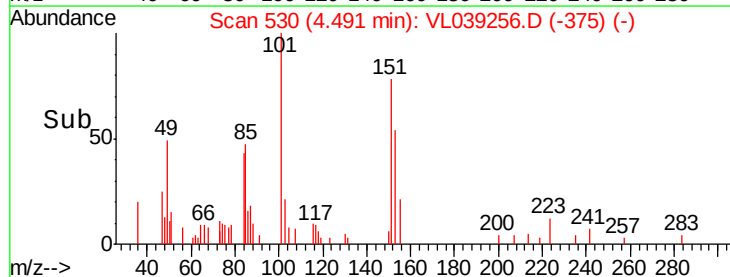
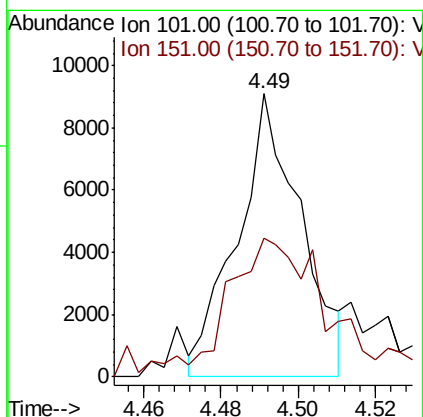
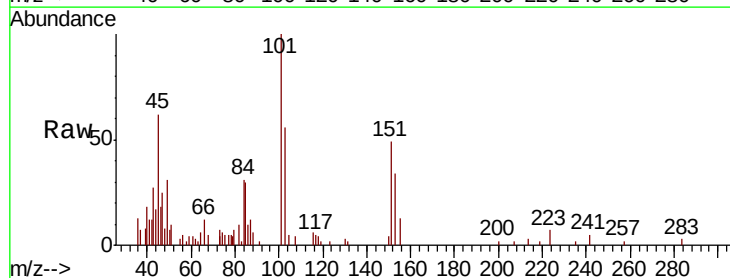
#11
 Trichlorofluoromethane
 Concen: 0.295 ppbv
 RT: 3.96
 Delta R.T. MSVOA_L
 Lab File: ClientSampleId :
 Acq: 13 Jun 2022 17:52

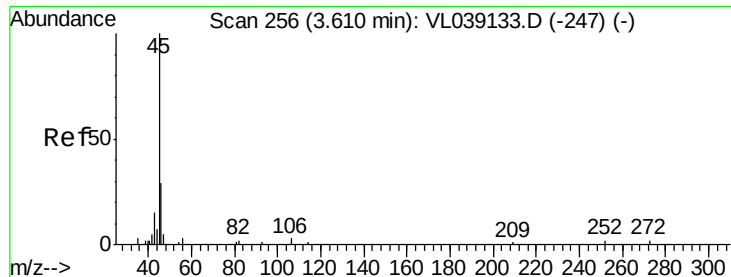
Tot Ion:101 Resp: 57379
 Ion Ratio Lower Upper
 101 100
 103 44.2 51.7 77.5#



#12
 1,1,2-Trichlorotrifluoroethane
 Concen: 0.081 ppbv
 RT: 4.49 min Scan# 530
 Delta R.T. -0.00 min
 Lab File: VL039256.D
 Acq: 13 Jun 2022 17:52

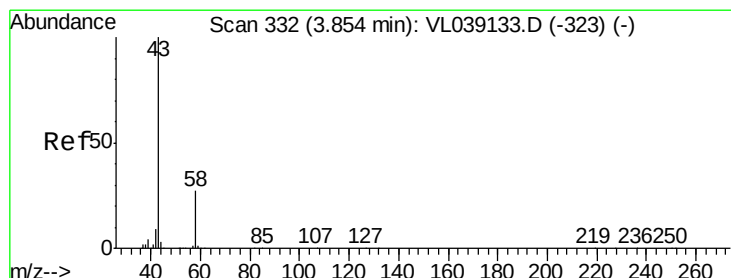
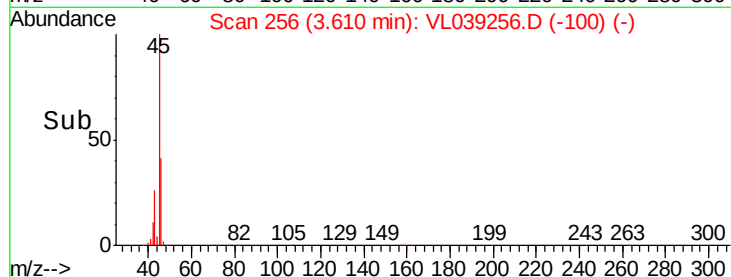
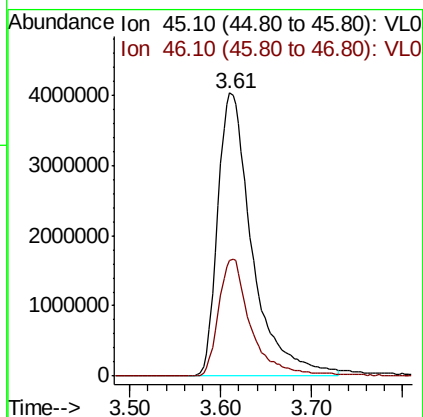
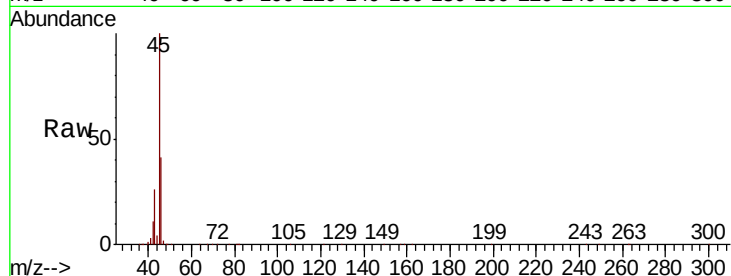
Tgt Ion:101 Resp: 10381
 Ion Ratio Lower Upper
 101 100
 151 85.7 59.4 89.0





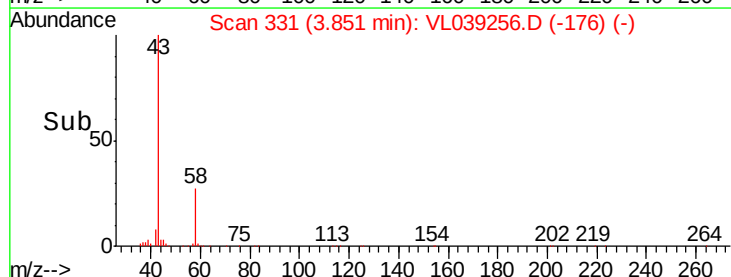
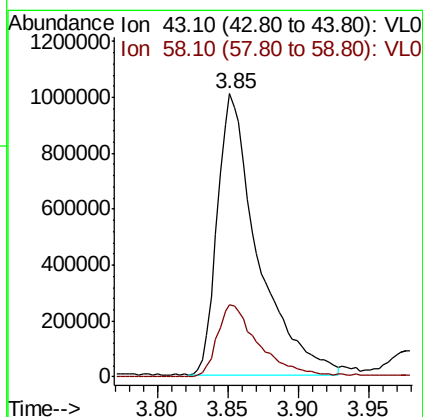
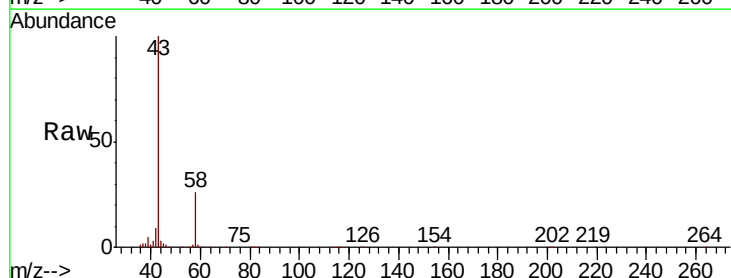
#13
 Ethanol
 Concen: 2874.692 ppbv
 RT: 3.61
 Delta R.T. MSVOA_L
 Lab File: ClientSampleId :
 Acq: 13 Jun 2022 17:52

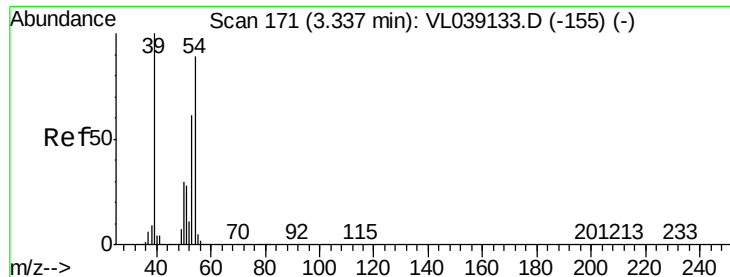
Tot Ion: 45 Resp: 10632917
 Ion Ratio Lower Upper
 45 100
 46 39.9 0.0 0.0#



#15
 Acetone
 Concen: 15.860 ppbv
 RT: 3.85 min Scan# 331
 Delta R.T. -0.00 min
 Lab File: VL039256.D
 Acq: 13 Jun 2022 17:52

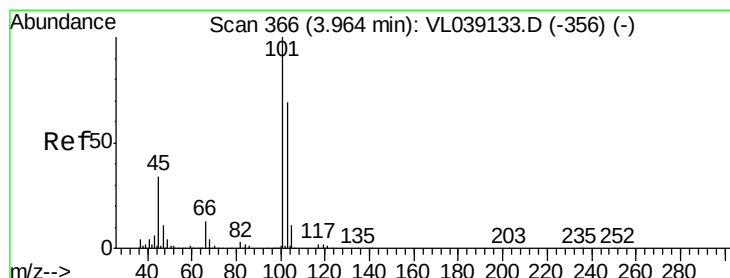
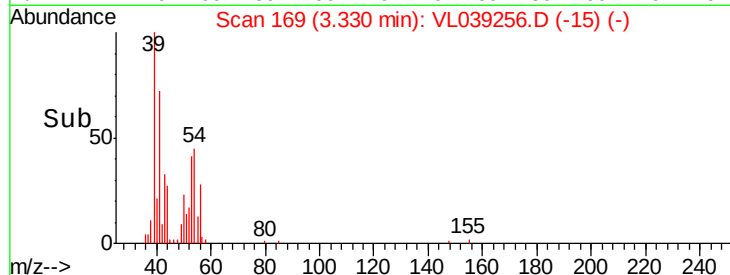
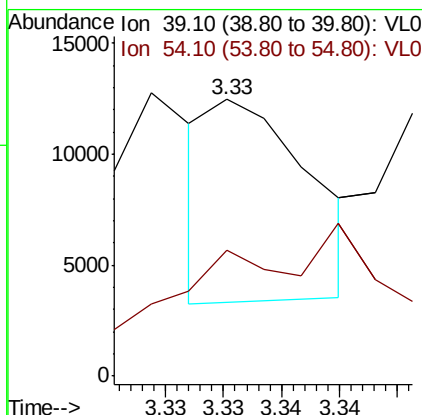
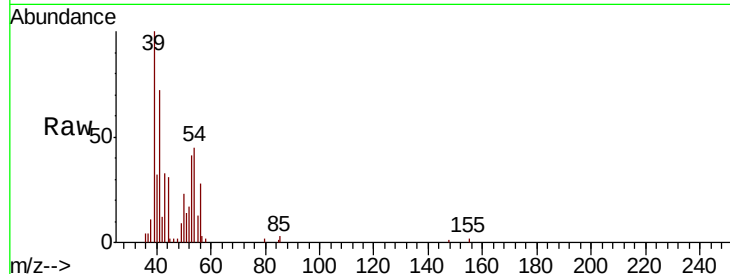
Tgt Ion: 43 Resp: 2019607
 Ion Ratio Lower Upper
 43 100
 58 27.2 22.5 33.7





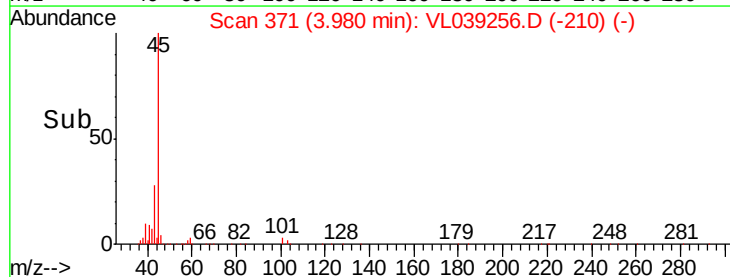
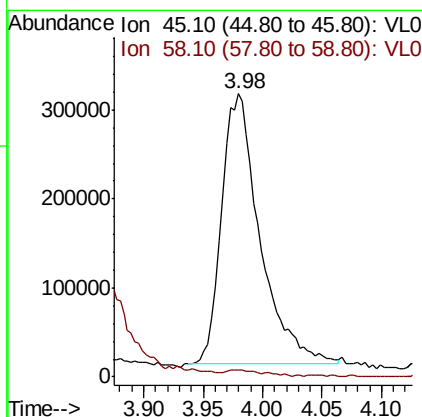
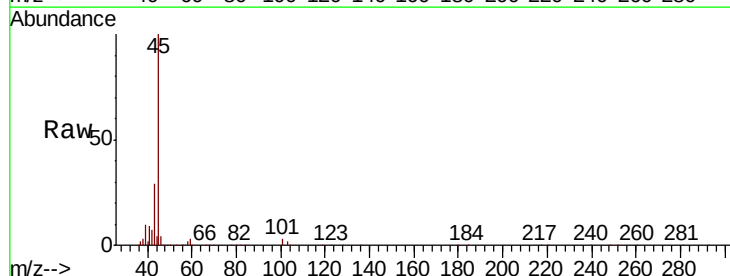
#16
 1,3-Butadiene
 Concen: 0.079 ppbv
 RT: 3.33
 Delta R.T. MSVOA_L
 Lab File: ClientSampleId:
 OTC-IAZ
 Acq: 13 Jun 2022 17:52

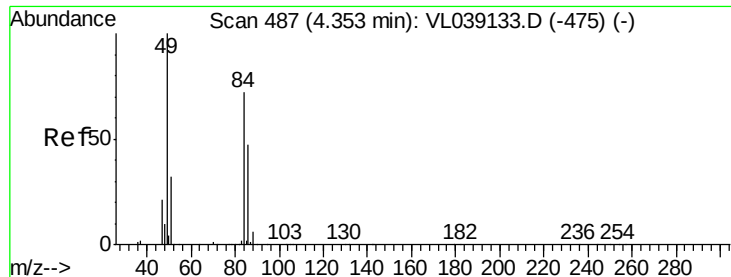
Tot Ion: 39 Resp: 5404
 Ion Ratio Lower Upper
 39 100
 54 226.1 65.8 98.6#



#19
 Isopropyl Alcohol
 Concen: 11.341 ppbv
 RT: 3.98 min Scan# 371
 Delta R.T. 0.02 min
 Lab File: VL039256.D
 Acq: 13 Jun 2022 17:52

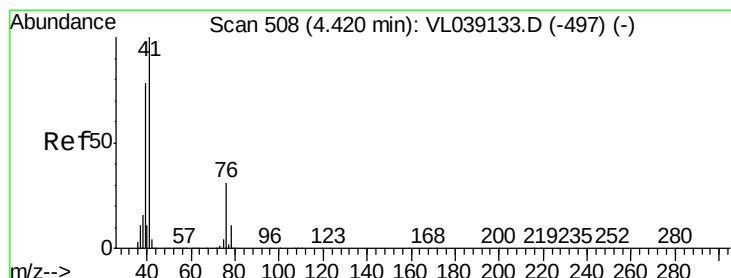
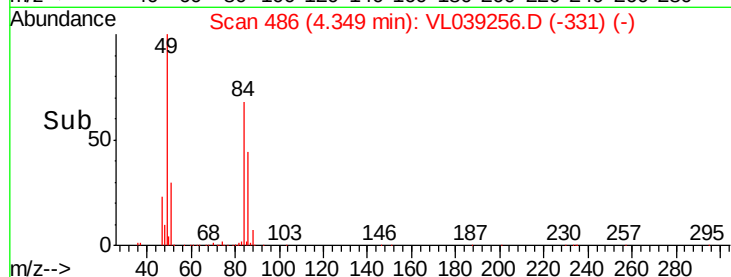
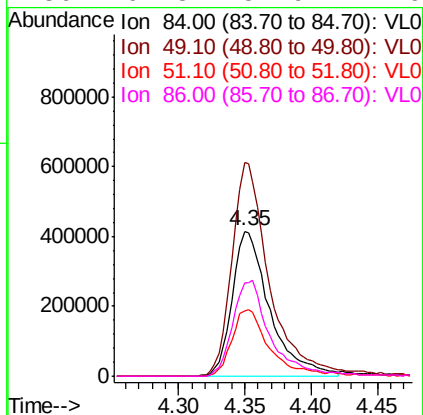
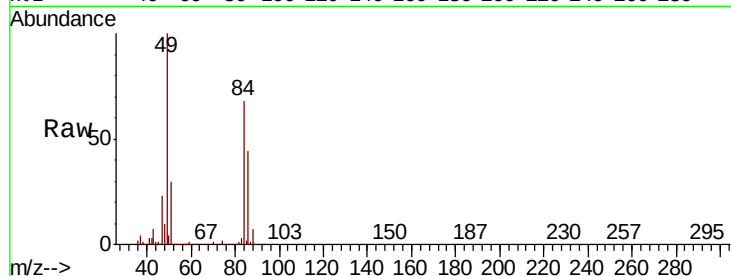
Tgt Ion: 45 Resp: 677343
 Ion Ratio Lower Upper
 45 100
 58 3.2 1.8 2.8#





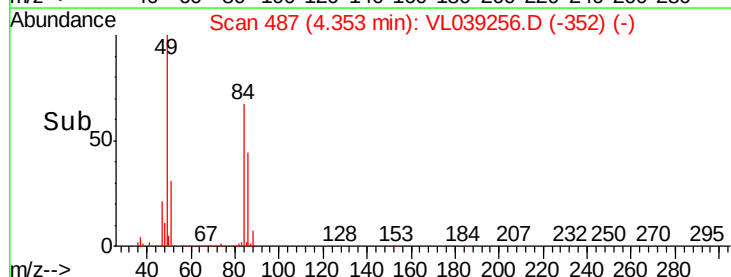
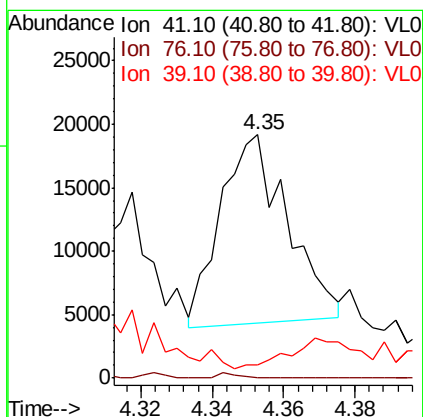
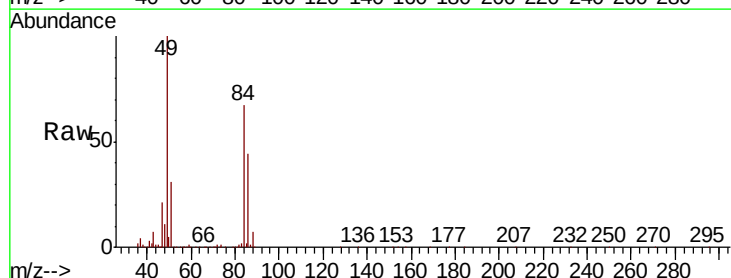
#20
Methylene Chloride
Concen: 15.214 ppbv
RT: 4.35 min
Delta R.T. MSVOA_L
Lab File: ClientSampleId :
Acq: 13 Jun 2022 17:52

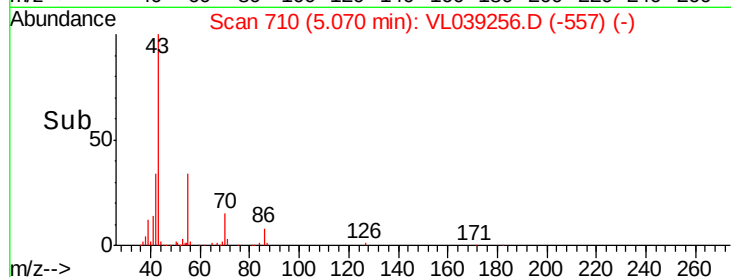
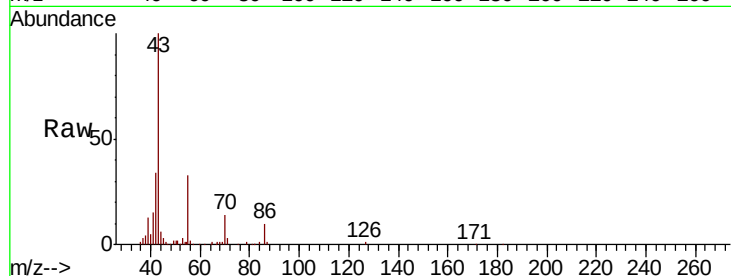
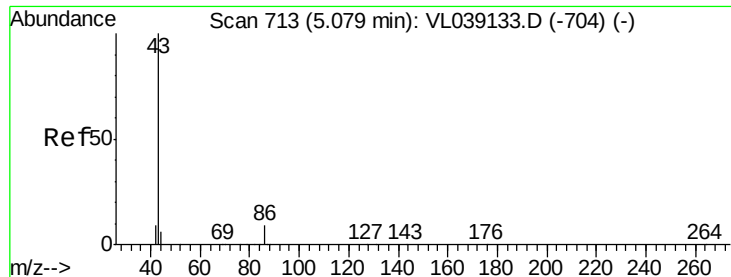
Tot Ion:	84	Resp:	816420
Ion	Ratio	Lower	Upper
84	100		
49	147.3	111.1	166.7
51	44.8	35.3	52.9
86	64.3	51.9	77.9



#21
Allyl Chloride
Concen: 0.224 ppbv
RT: 4.35 min Scan# 487
Delta R.T. -0.07 min
Lab File: VL039256.D
Acq: 13 Jun 2022 17:52

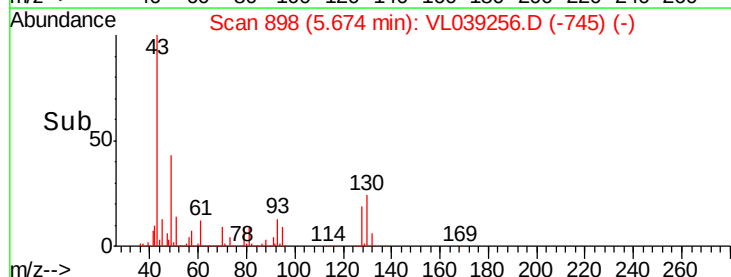
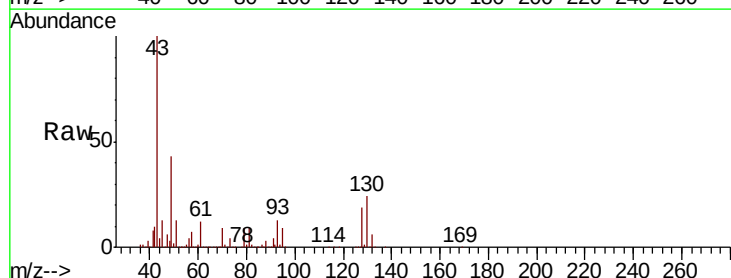
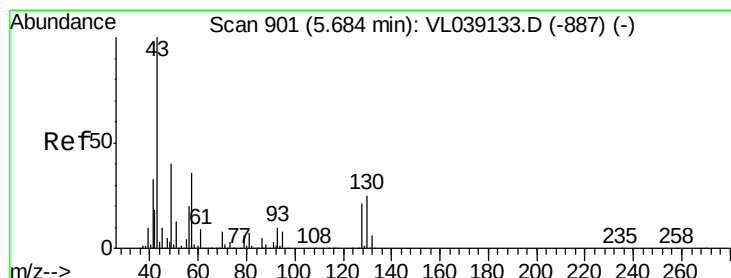
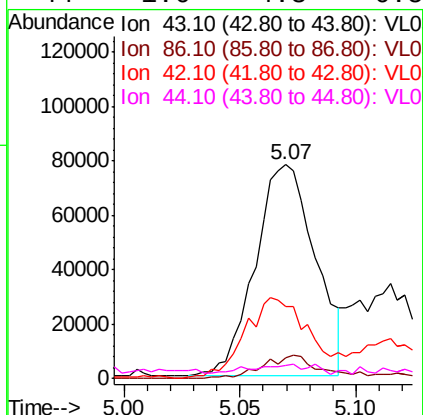
Tgt Ion:	41	Resp:	19265
Ion	Ratio	Lower	Upper
41	100		
76	0.0	24.2	36.2#
39	17.3	62.2	93.2#





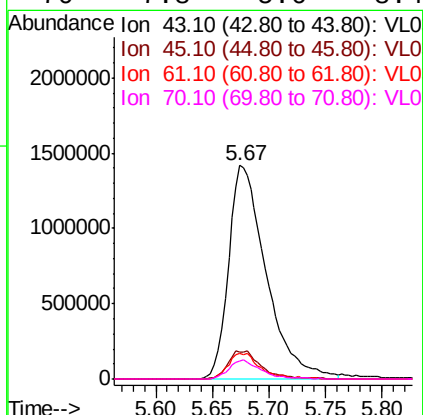
#23
 Vinyl Acetate
 Concen: 1.334 ppbv
 RT: 5.07
 Delta R.T. MSVOA_L
 Lab File: ClientSampleId :
 Acq: 13 Jun 2022 17:52

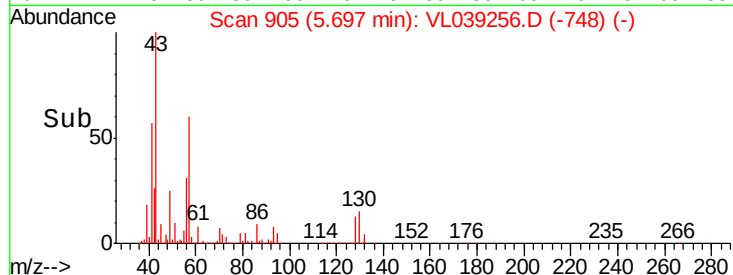
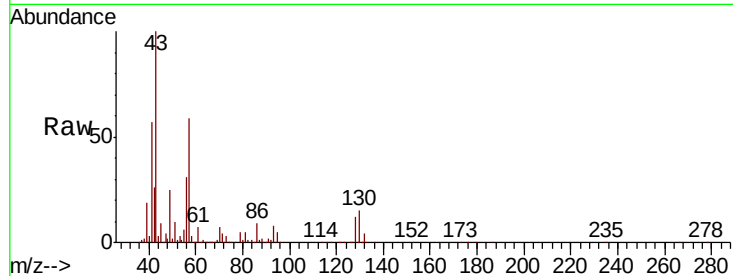
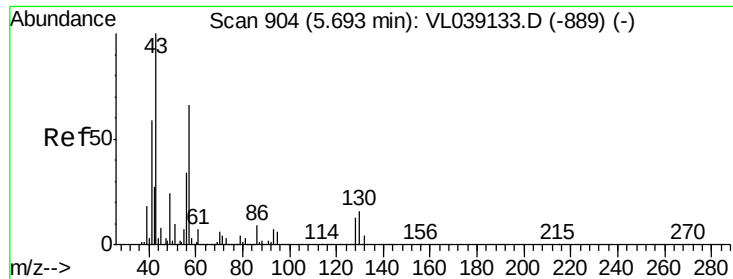
Tot Ion:	43	Resp:	140516
Ion	Ratio	Lower	Upper
43	100		
86	9.4	6.0	9.0#
42	33.5	8.2	12.4#
44	1.6	4.3	6.5#



#25
 Ethyl Acetate
 Concen: 11.403 ppbv
 RT: 5.67 min Scan# 898
 Delta R.T. -0.01 min
 Lab File: VL039256.D
 Acq: 13 Jun 2022 17:52

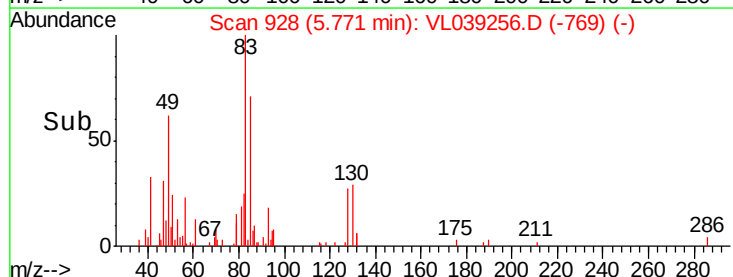
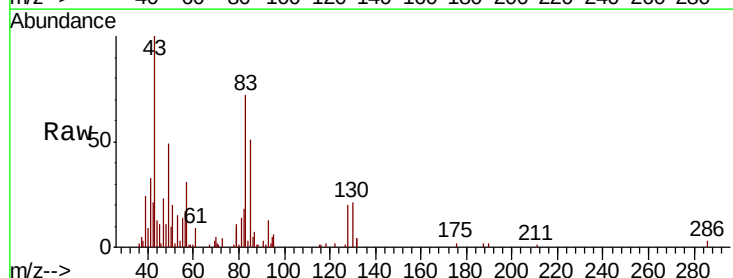
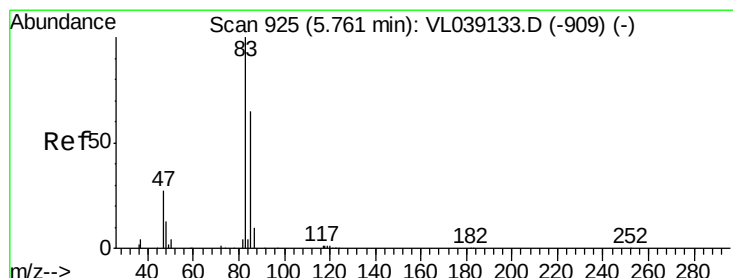
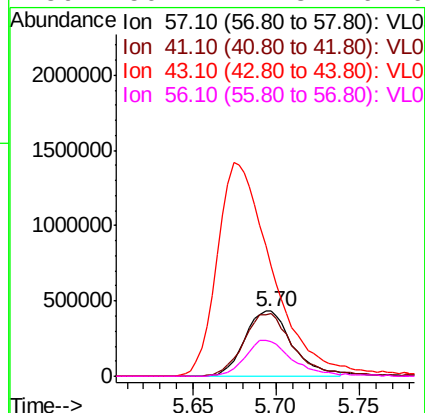
Tgt Ion:	43	Resp:	3272887
Ion	Ratio	Lower	Upper
43	100		
45	11.8	8.2	12.2
61	10.8	8.4	12.6
70	7.8	5.6	8.4





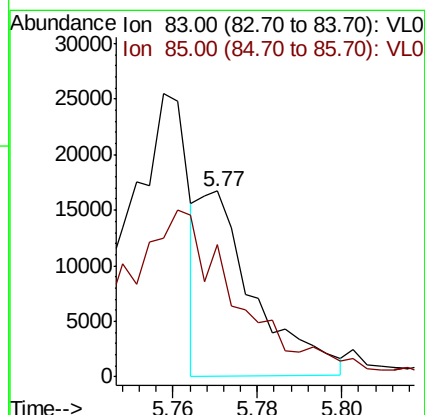
#26
Hexane
Concen: 6.828 ppbv
RT: 5.70
Delta R.T. MSVOA_L
Lab File: ClientSampleId :
Acq: 13 Jun 2022 17:52

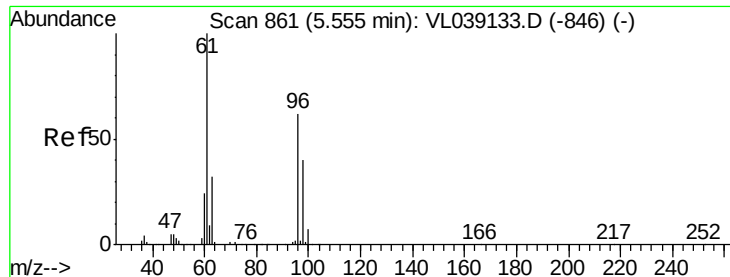
Tot Ion:	57	Resp:	861265
Ion	Ratio	Lower	Upper
57	100		
41	103.6	72.4	108.6
43	388.7	187.0	280.6#
56	56.2	41.8	62.6



#29
Chloroform
Concen: 0.071 ppbv
RT: 5.77 min Scan# 928
Delta R.T. 0.01 min
Lab File: VL039256.D
Acq: 13 Jun 2022 17:52

Tgt Ion:	83	Resp:	15022
Ion	Ratio	Lower	Upper
83	100		
85	69.4	52.4	78.6





#31

cis-1,2-Dichloroethene

Concen: 1.321 ppbv

RT: 5.67 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

Acq: 13 Jun 2022 17:52 OTC-IAZ

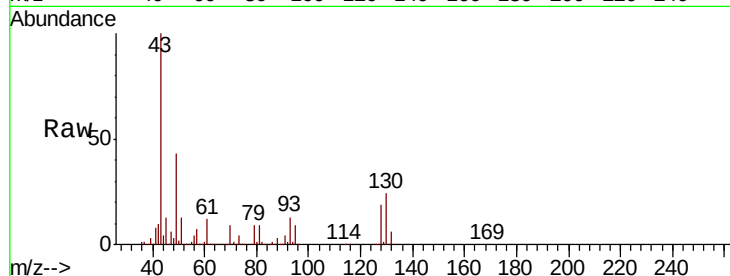
Tot Ion: 61 Resp: 169945

Ion Ratio Lower Upper

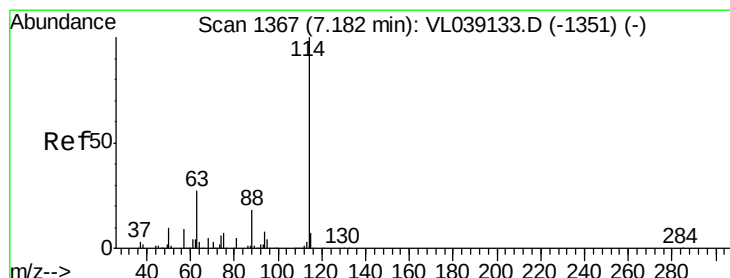
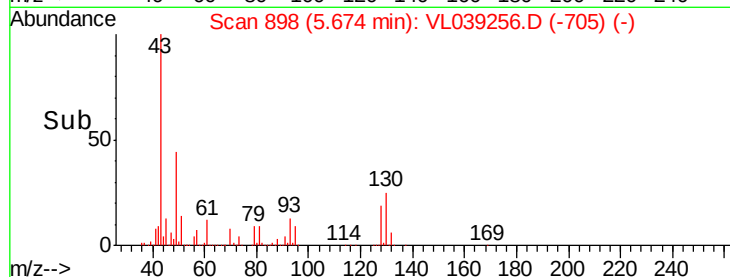
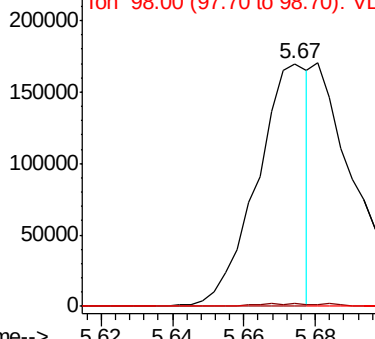
61 100

96 1.0 49.9 74.9#

98 0.0 32.0 48.0#



Abundance Ion 61.10 (60.80 to 61.80): VL0
Ion 96.00 (95.70 to 96.70): VL0
Ion 98.00 (97.70 to 98.70): VL0



#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 7.18 min Scan# 1367

Delta R.T. 0.00 min

Lab File: VL039256.D

Acq: 13 Jun 2022 17:52

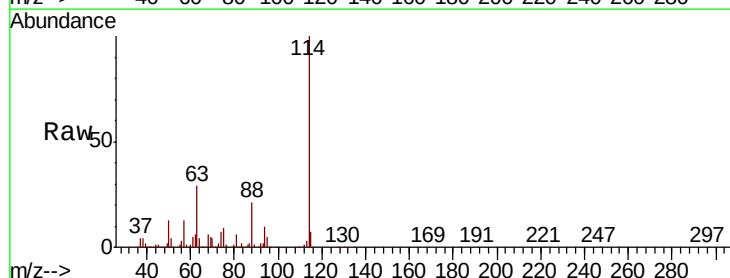
Tgt Ion: 114 Resp: 2640393

Ion Ratio Lower Upper

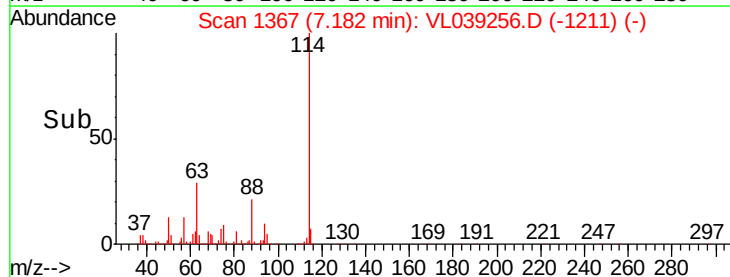
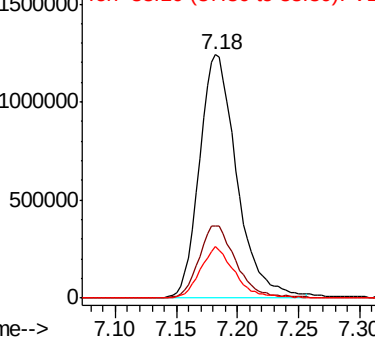
114 100

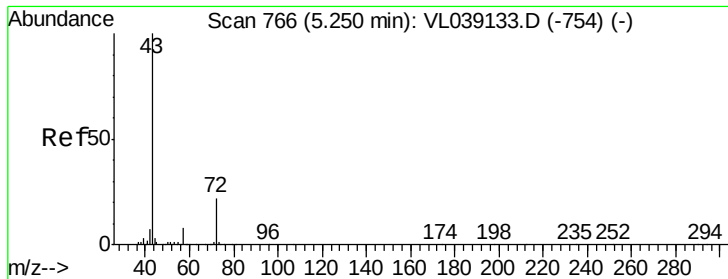
63 29.9 21.7 32.5

88 19.5 14.8 22.2



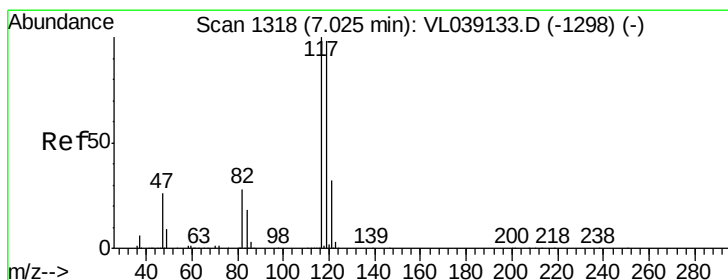
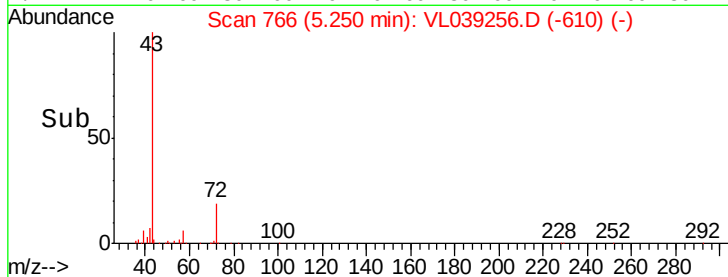
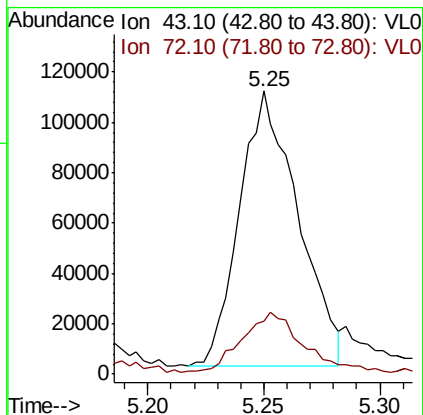
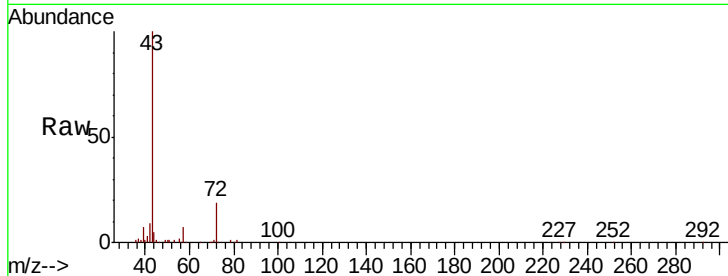
Abundance Ion 114.10 (113.80 to 114.80): V
Ion 63.10 (62.80 to 63.80): VL0
Ion 88.10 (87.80 to 88.80): VL0





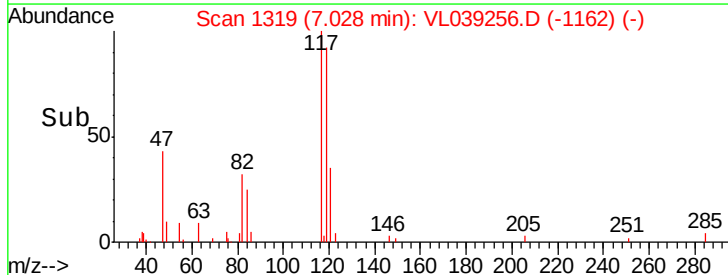
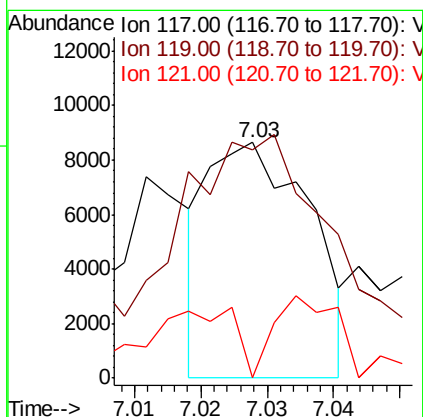
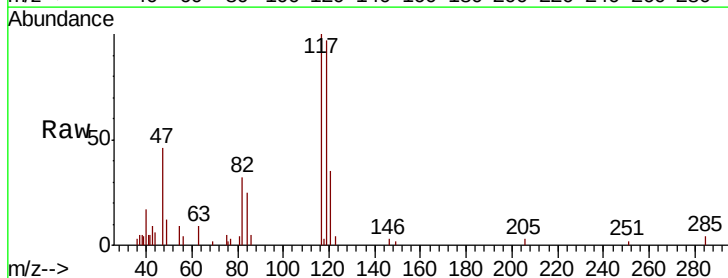
#34
 2-Butanone
 Concen: 1.336 ppbv
 RT: 5.25
 Delta R.T. MSVOA_L
 Lab File: ClientSampleId:
 Acq: 13 Jun 2022 17:52

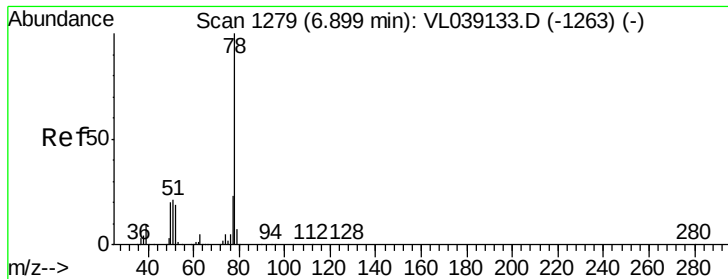
Tot Ion: 43 Resp: 191701
 Ion Ratio Lower Upper
 43 100
 72 25.3 18.2 27.2



#35
 Carbon Tetrachloride
 Concen: 0.048 ppbv
 RT: 7.03 min Scan# 1319
 Delta R.T. 0.00 min
 Lab File: VL039256.D
 Acq: 13 Jun 2022 17:52

Tgt Ion: 117 Resp: 9319
 Ion Ratio Lower Upper
 117 100
 119 57.6 78.6 118.0#
 121 0.0 25.4 38.0#





#36

Benzene

Concen: 0.146 ppbv

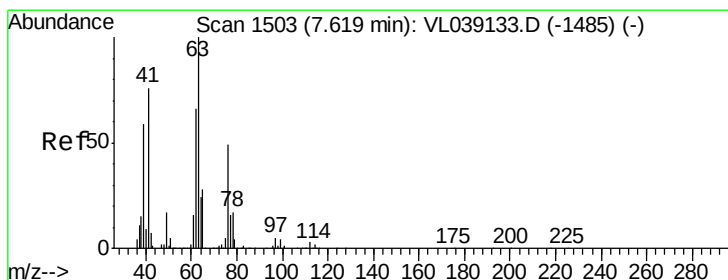
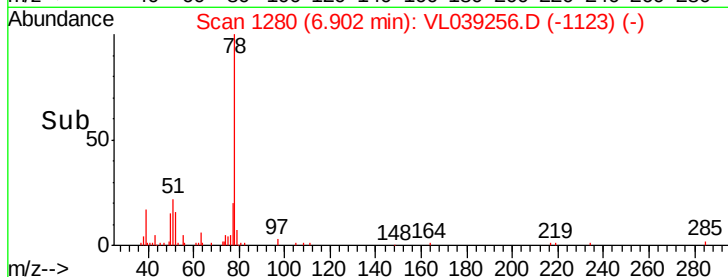
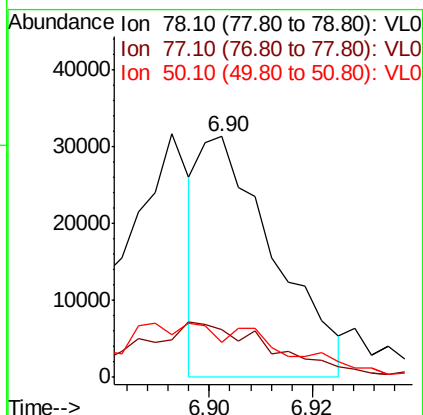
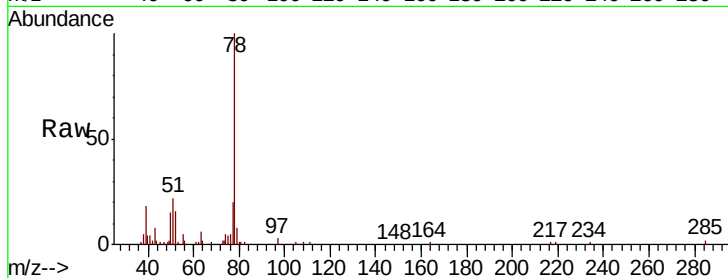
RT: 6.90 Instrument:

Delta R.T. MSVOA_1

Lab File: ClientSampleId:

Acq: 13 Jun 2022 17:52

Tot Ion:	78	Resp:	31207
Ion	Ratio	Lower	Upper
78	100		
77	18.8	18.6	27.8
50	9.8	15.8	23.8#



#39

1,2-Dichloropropane

Concen: 8.961 ppbv

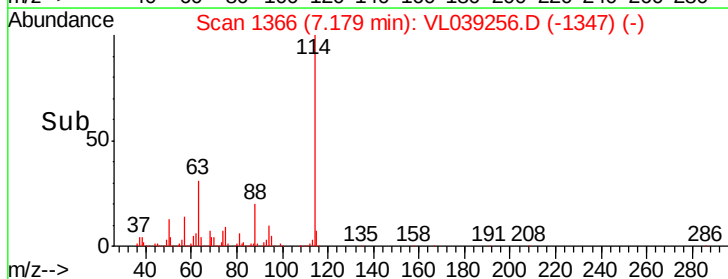
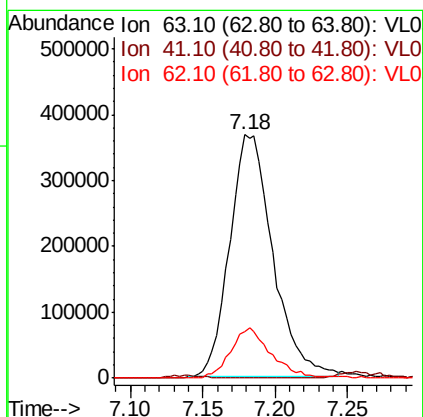
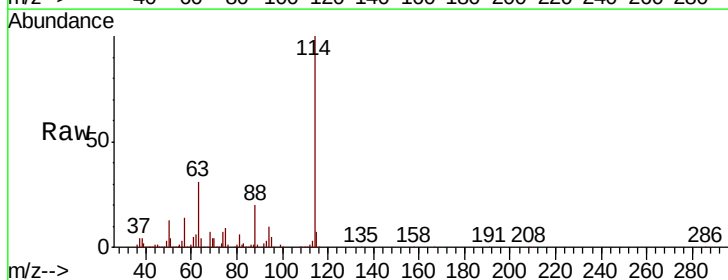
RT: 7.18 min Scan# 1366

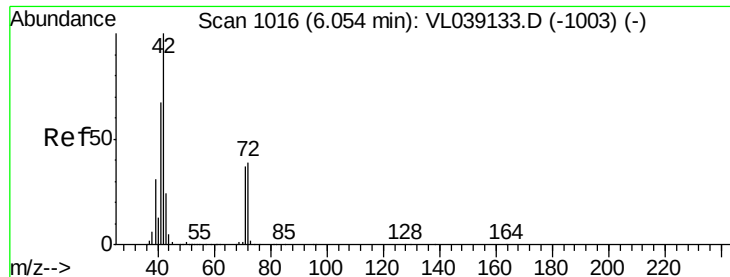
Delta R.T. -0.44 min

Lab File: VL039256.D

Acq: 13 Jun 2022 17:52

Tgt Ion:	63	Resp:	764047
Ion	Ratio	Lower	Upper
63	100		
41	0.0	60.8	91.2#
62	18.7	52.9	79.3#





#41

Tetrahydrofuran

Concen: 0.065 ppbv

RT: 6.01 Instrument:

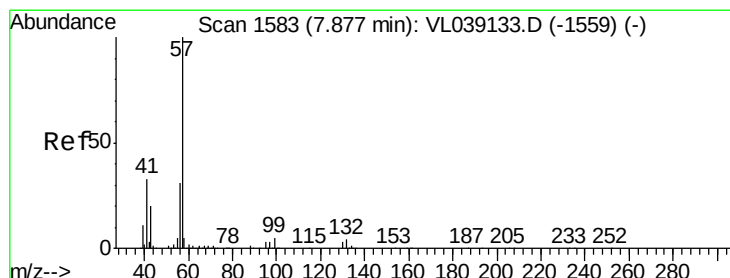
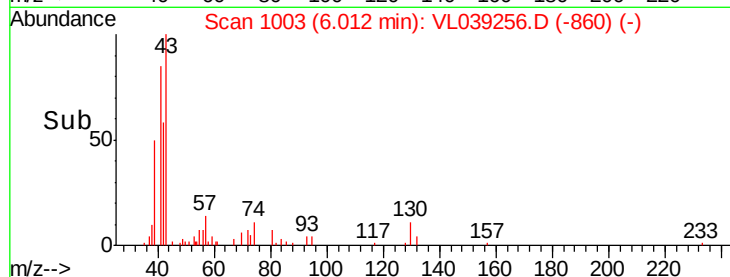
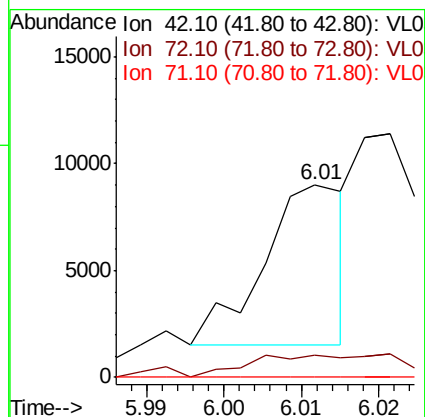
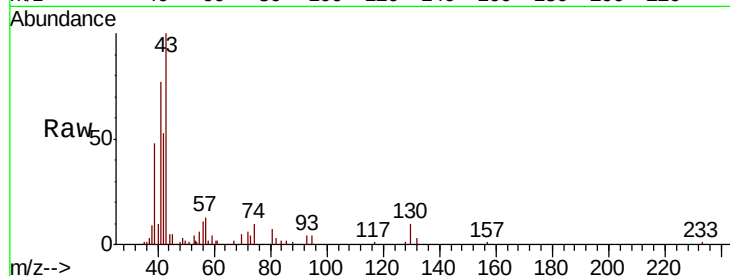
Delta R.T. MSVOA_L

Lab File: ClientSampleId:

Acq: 13 Jun 2022 17:52 OTC-IAZ

Tot Ion: 42 Resp: 5579

Ion	Ratio	Lower	Upper
42	100		
72	27.0	32.0	48.0#
71	0.0	31.1	46.7#



#44

2,2,4-Trimethylpentane

Concen: 0.072 ppbv

RT: 7.88 min Scan# 1583

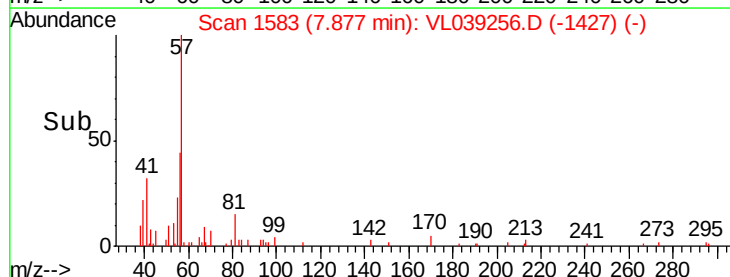
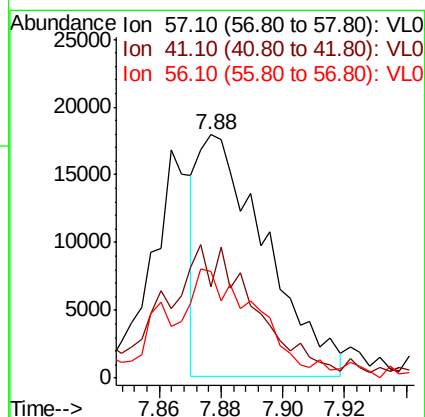
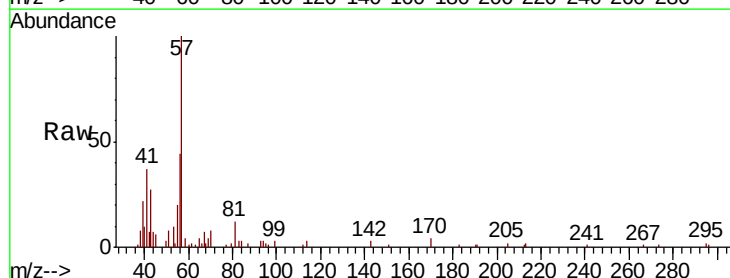
Delta R.T. 0.00 min

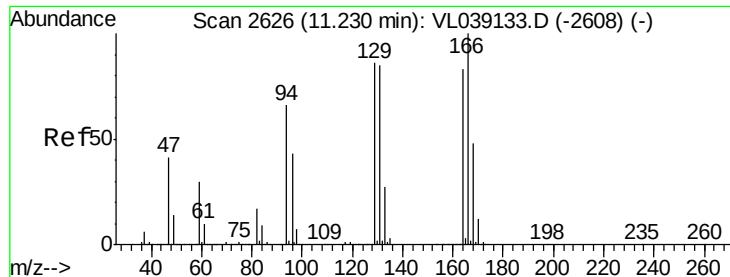
Lab File: VL039256.D

Acq: 13 Jun 2022 17:52

Tgt Ion: 57 Resp: 26999

Ion	Ratio	Lower	Upper
57	100		
41	83.8	26.2	39.4#
56	66.9	24.7	37.1#





#52

Tetrachloroethene

Concen: 0.108 ppbv

RT: 11.24

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

Acq: 13 Jun 2022 17:52

Tot Ion:164 Resp: 9052

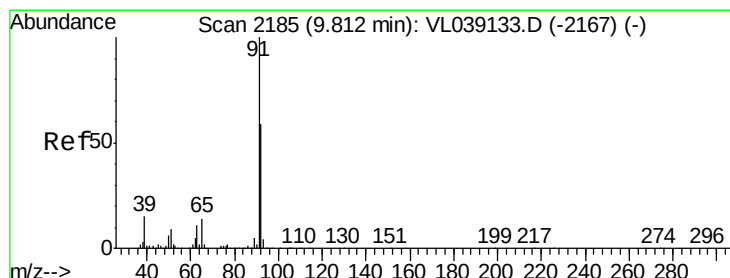
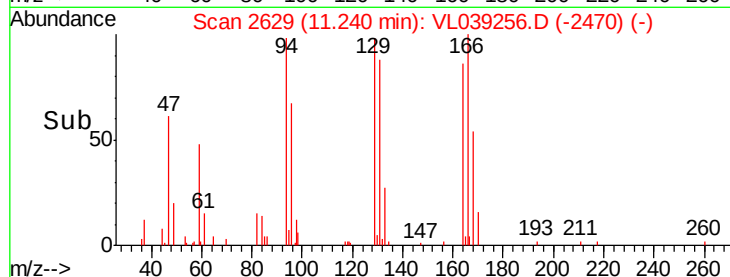
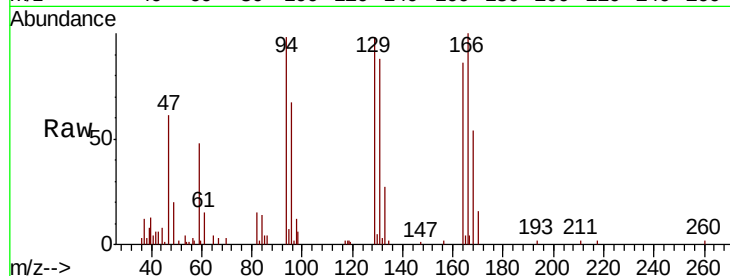
Ion Ratio Lower Upper

164 100

166 96.7 96.3 144.5

129 104.5 82.5 123.7

131 101.8 82.1 123.1



#53

Toluene

Concen: 0.594 ppbv

RT: 9.81 min Scan# 2185

Delta R.T. 0.00 min

Lab File: VL039256.D

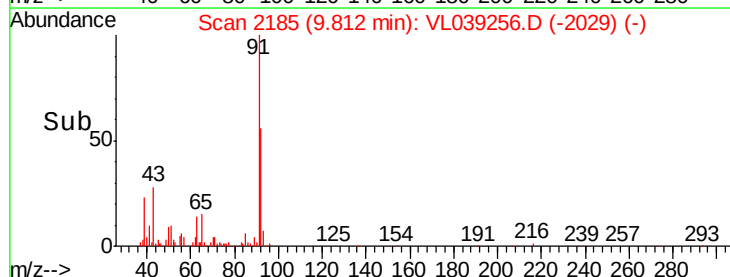
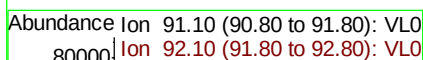
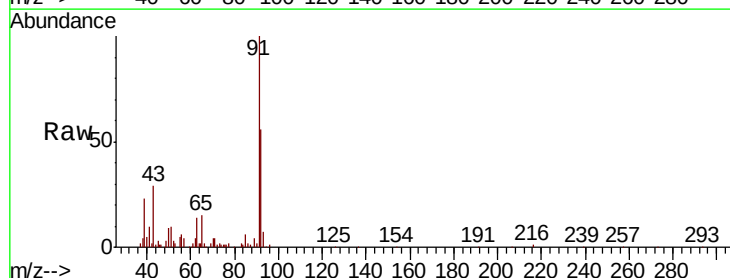
Acq: 13 Jun 2022 17:52

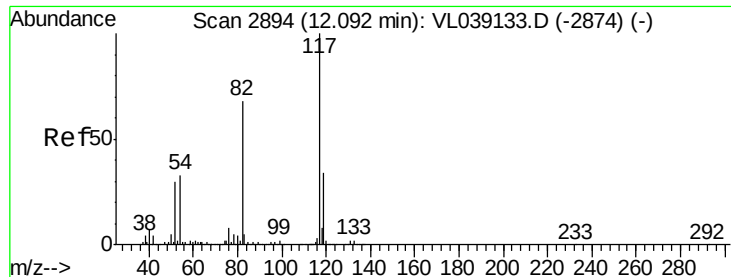
Tgt Ion: 91 Resp: 146668

Ion Ratio Lower Upper

91 100

92 63.6 48.1 72.1

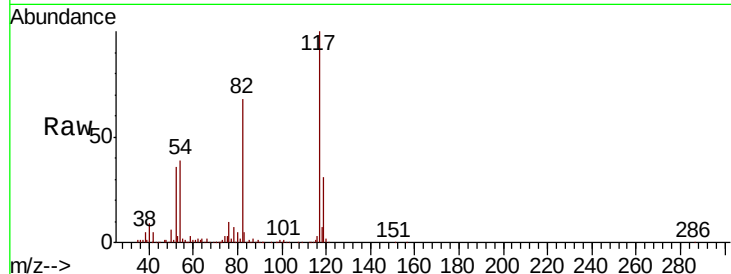




#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 12.09 min
Instrument: MSVOA_1
Delta R.T.:
Lab File: ClientSampleId:
Acq: 13 Jun 2022 17:52

Tot Ion: 117 Resp: 2247105

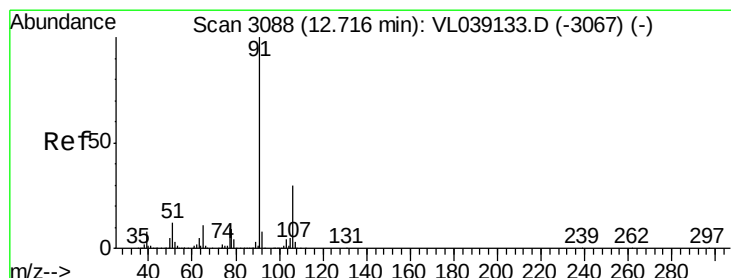
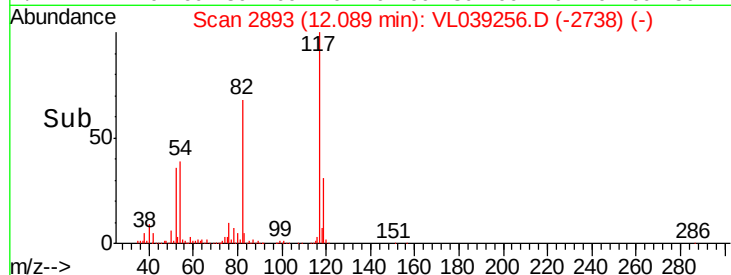
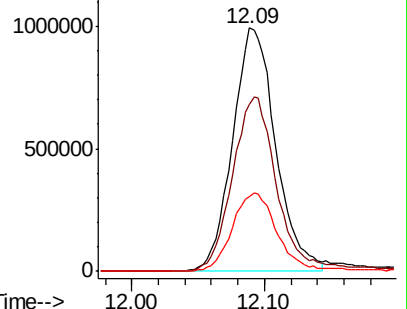
Ion	Ratio	Lower	Upper
117	100		
82	76.9	55.1	82.7
119	34.0	24.7	37.1



Abundance Ion 117.10 (116.80 to 117.80): V

Ion 82.10 (81.80 to 82.80): VL0

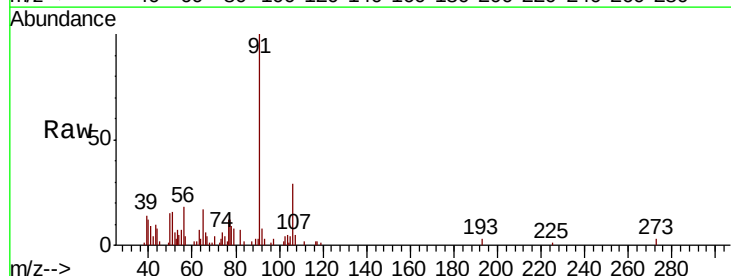
Ion 119.10 (118.80 to 119.80): V



#58
Ethyl Benzene
Concen: 0.066 ppbv
RT: 12.72 min Scan# 3088
Delta R.T.: 0.00 min
Lab File: VL039256.D
Acq: 13 Jun 2022 17:52

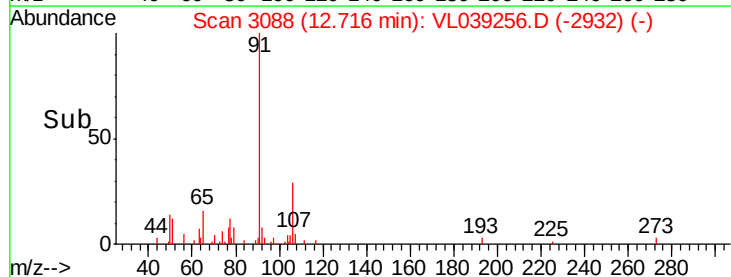
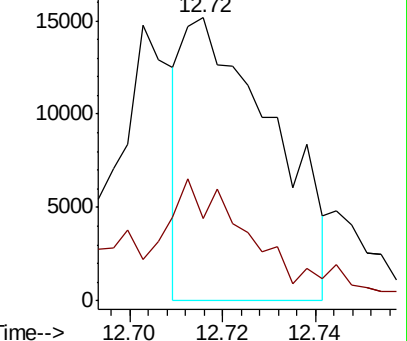
Tgt Ion: 91 Resp: 20305

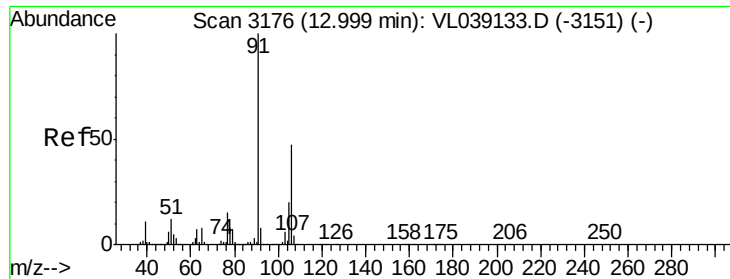
Ion	Ratio	Lower	Upper
91	100		
106	30.1	24.2	36.4



Abundance Ion 91.10 (90.80 to 91.80): VL0

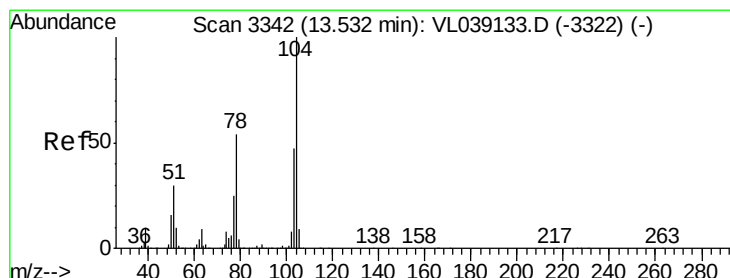
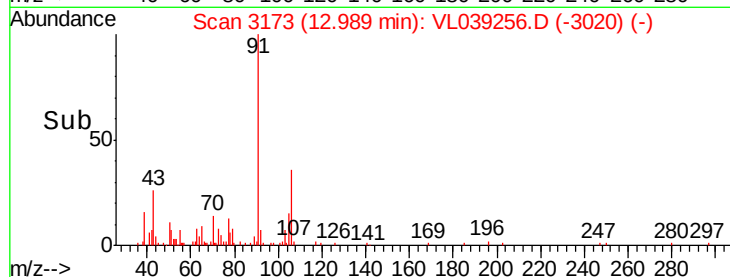
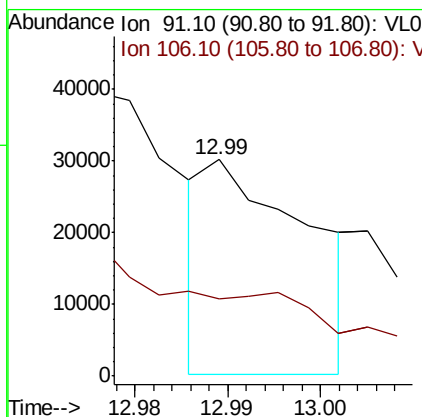
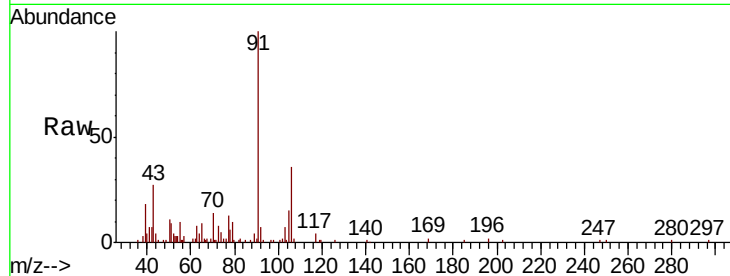
Ion 106.10 (105.80 to 106.80): V





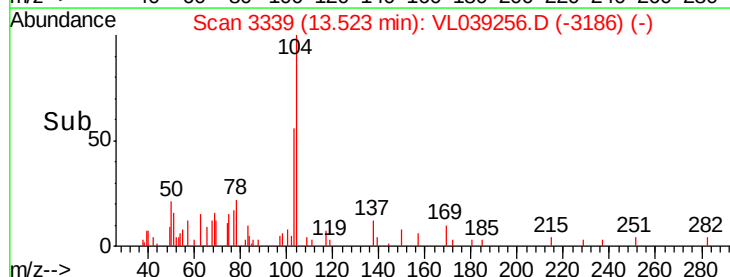
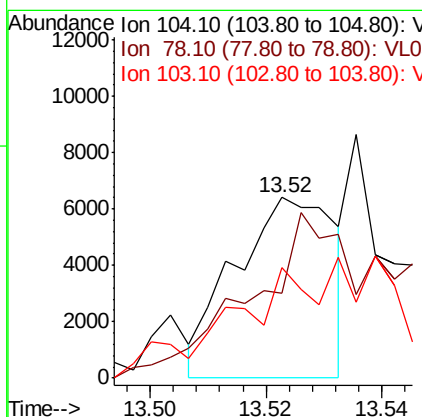
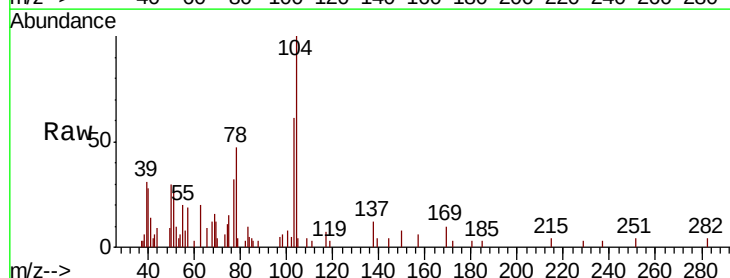
#59
m/p-Xylene
Concen: 0.084 ppbv
RT: 12.99 min
Delta R.T. MSVOA_L
Lab File: ClientSampleId:
Acq: 13 Jun 2022 17:52

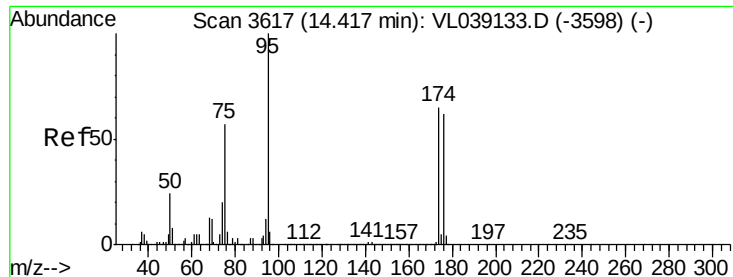
Tot Ion: 91 Resp: 22775
Ion Ratio Lower Upper
91 100
106 0.0 34.3 51.5#



#61
Styrene
Concen: 0.056 ppbv
RT: 13.52 min Scan# 3339
Delta R.T. -0.01 min
Lab File: VL039256.D
Acq: 13 Jun 2022 17:52

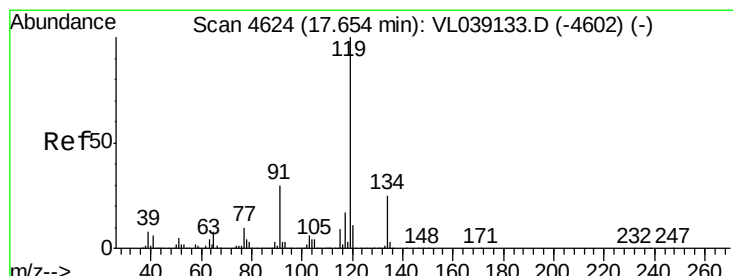
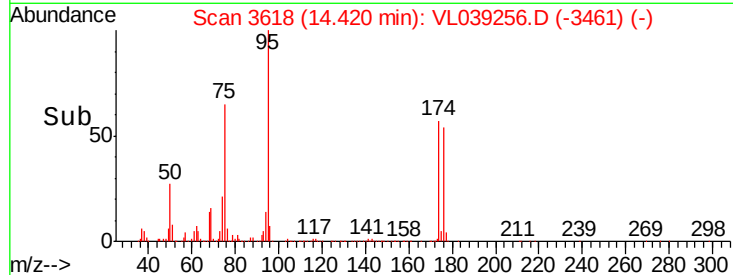
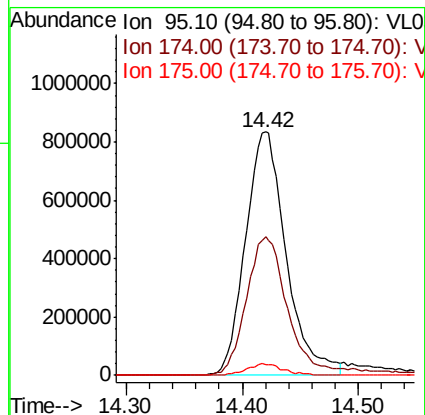
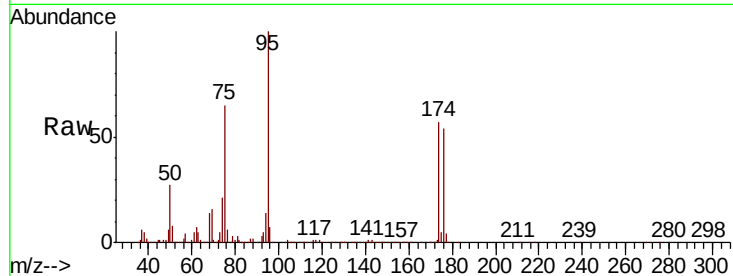
Tgt Ion: 104 Resp: 7656
Ion Ratio Lower Upper
104 100
78 161.4 45.7 68.5#
103 0.0 39.6 59.4#





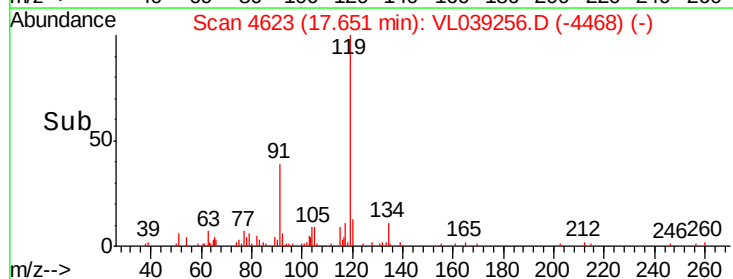
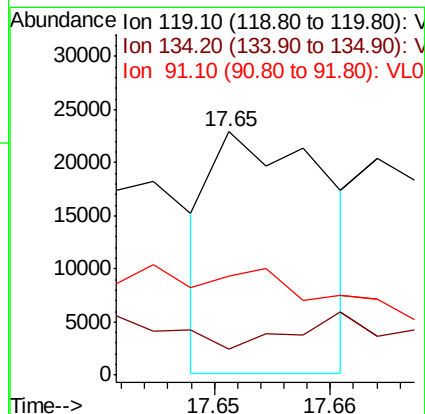
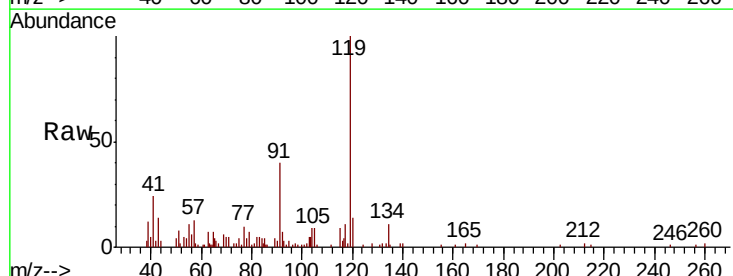
#68
 1-Bromo-4-Fluorobenzene
 Concen: 10.990 ppbv
 RT: 14.42
 Delta R.T. MSVOA_L
 Lab File: ClientSampleId :
 Acq: 13 Jun 2022 17:52

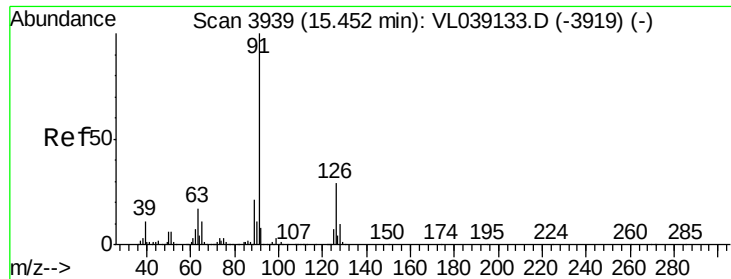
Tot Ion: 95 Resp: 2041686
 Ion Ratio Lower Upper
 95 100
 174 61.2 53.8 80.8
 175 4.6 4.1 6.1



#69
 p-Isopropyltoluene
 Concen: 0.039 ppbv
 RT: 17.65 min Scan# 4623
 Delta R.T. -0.00 min
 Lab File: VL039256.D
 Acq: 13 Jun 2022 17:52

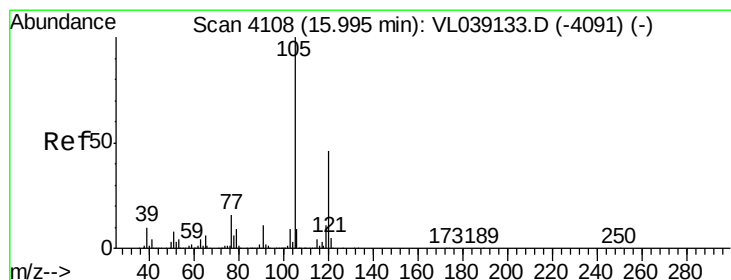
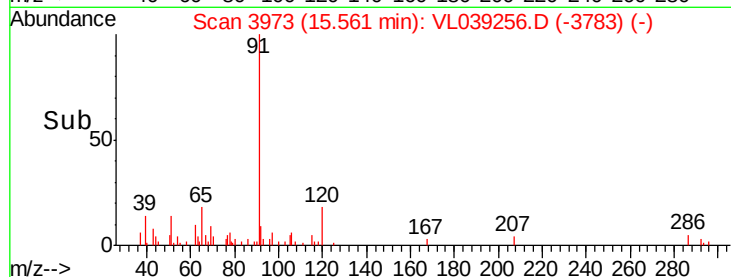
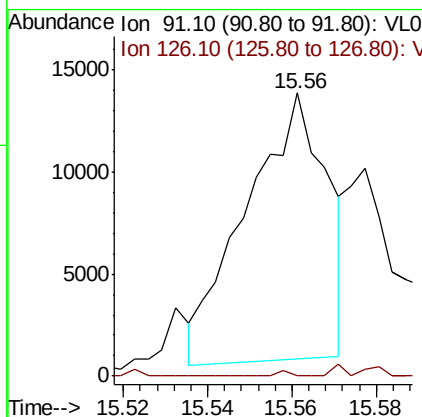
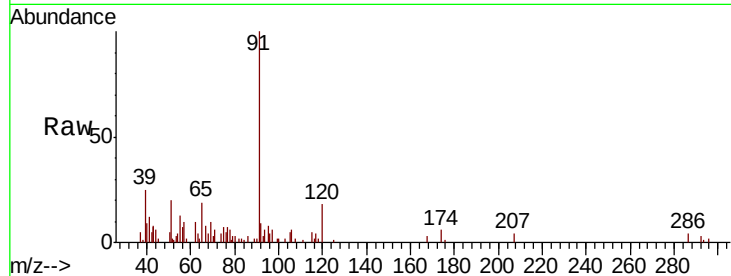
Tgt Ion: 119 Resp: 15534
 Ion Ratio Lower Upper
 119 100
 134 0.0 20.4 30.6#
 91 0.0 24.2 36.4#





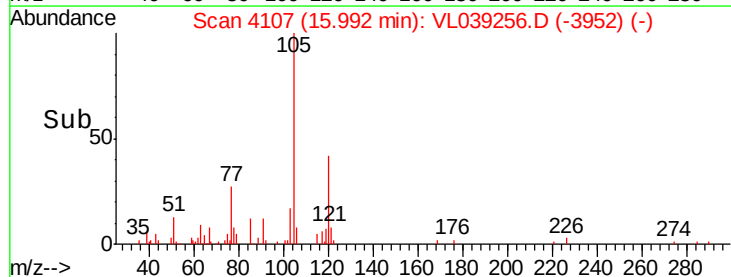
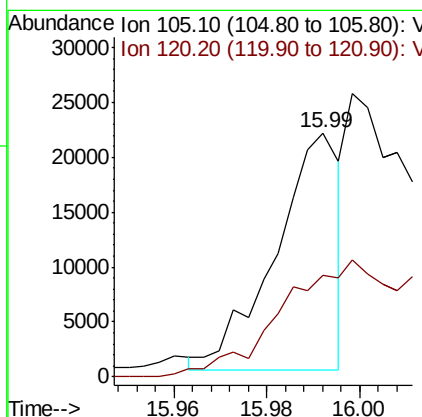
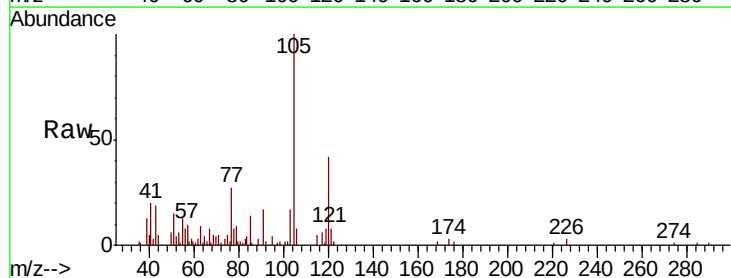
#71
 2-Chlorotoluene
 Concen: 0.060 ppbv
 RT: 15.56 min
 Delta R.T. MSVOA_L
 Lab File: ClientSampleId :
 OTC-IAZ
 Acq: 13 Jun 2022 17:52

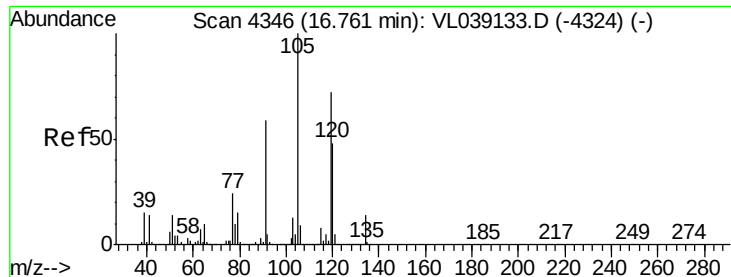
Tot Ion: 91 Resp: 17357
 Ion Ratio Lower Upper
 91 100
 126 0.8 12.2 48.6#



#73
 1,3,5-Trimethylbenzene
 Concen: 0.077 ppbv
 RT: 15.99 min Scan# 4107
 Delta R.T. -0.00 min
 Lab File: VL039256.D
 Acq: 13 Jun 2022 17:52

Tgt Ion: 105 Resp: 20860
 Ion Ratio Lower Upper
 105 100
 120 42.1 36.7 55.1





#74
 1,2,4-Trimethylbenzene
 Concen: 0.324 ppbv
 RT: 16.76
 Delta R.T: MSVOA_L
 Lab File: ClientSampleId :
 Acq: 13 Jun 2022 17:52

Tot Ion:	105	Resp:	97950
Ion Ratio	Lower	Upper	
105	100		
120	39.9	38.1	57.1
91	15.2	47.4	71.0#
77	17.7	19.5	29.3#

