

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL032822\
 Data File : VL038780.D
 Acq On : 28 Mar 2022 21:00
 Operator : SY/AP
 Sample : N2078-08
 Misc : 400mL/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 V-6

Quant Time: Mar 29 06:12:13 2022
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL032122AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Mon Mar 21 17:09:26 2022
 QLast Update : Mon Mar 21 17:09:26 2022
 Response via : Initial Calibration

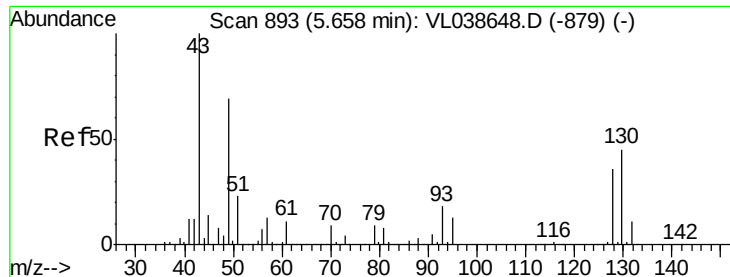
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.66	49	708926	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.17	114	1951131	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.08	117	1673344	10.00	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.40	95	1265086	9.86	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	98.60%

Target Compounds					Ovalue
2) Dichlorodifluoromethane	3.05	85	23739	0.249 ppbv	94
3) Chlorodifluoromethane	2.99	51	29788	0.398 ppbv	92
4) Chloromethane	3.15	50	23008	0.560 ppbv	96
9) Propene	3.02	41	35768	0.989 ppbv	92
10) Heptane	8.12	43	5309	0.061 ppbv #	26
11) Trichlorofluoromethane	3.95	101	25421	0.302 ppbv	96
12) 1,1,2-Trichlorotrifluoroet	4.48	101	6090	0.094 ppbv	98
13) Ethanol	3.61	45	37116	9.308 ppbv #	1
15) Acetone	3.86	43	122733	2.006 ppbv #	79
16) 1,3-Butadiene	3.33	39	2525	0.073 ppbv #	1
19) Isopropyl Alcohol	3.98	45	16552	0.488 ppbv #	77
20) Methylene Chloride	4.34	84	30151	1.170 ppbv	99
23) Vinyl Acetate	5.06	43	12867	0.217 ppbv #	1
25) Ethyl Acetate	5.68	43	47898	0.311 ppbv #	82
26) Hexane	5.68	57	53395	0.775 ppbv #	46
30) Cyclohexane	7.13	84	2999	0.050 ppbv #	1
34) 2-Butanone	5.25	43	23825	0.309 ppbv #	85
35) Carbon Tetrachloride	7.01	117	3951	0.035 ppbv	88
36) Benzene	6.89	78	59226	0.393 ppbv	96
39) 1,2-Dichloropropane	7.17	63	460296	7.819 ppbv #	28
44) 2,2,4-Trimethylpentane	7.86	57	66114	0.261 ppbv #	76
53) Toluene	9.80	91	193234	1.194 ppbv	96
58) Ethyl Benzene	12.69	91	14887	0.076 ppbv	99
59) m/p-Xylene	12.96	91	17841	0.104 ppbv #	1
60) o-Xylene	13.69	91	30967	0.191 ppbv	99
74) 1,2,4-Trimethylbenzene	16.75	105	23643	0.124 ppbv #	76

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



#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.66 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

Acq: 28 Mar 2022 21:00

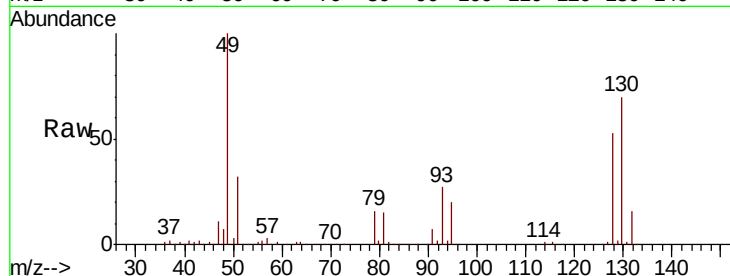
Tot Ion: 49 Resp: 708926

Ion Ratio Lower Upper

49 100

128 56.3 26.2 78.6

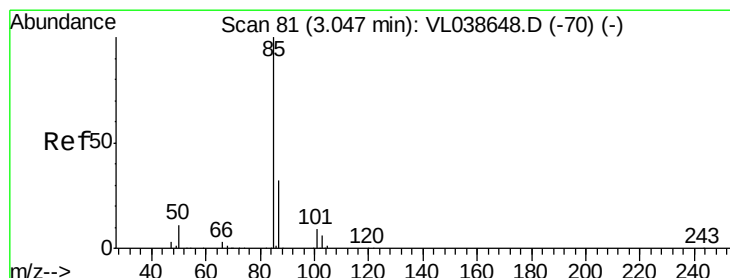
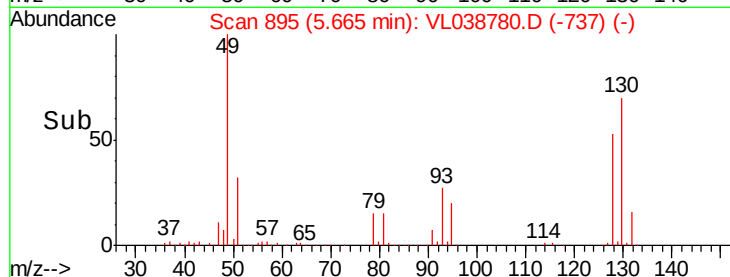
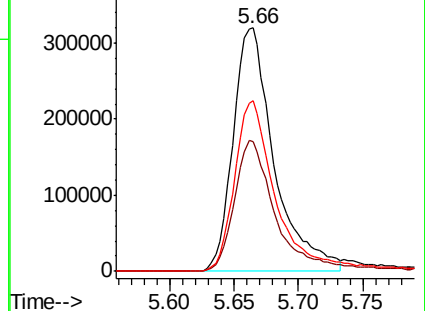
130 73.0 33.7 101.1



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: 0.249 ppbv

RT: 3.05 min Scan# 83

Delta R.T. 0.01 min

Lab File: VL038780.D

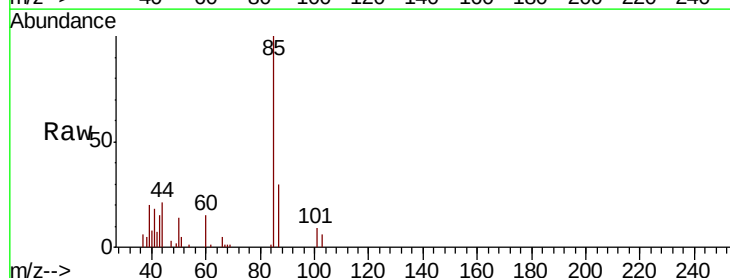
Acq: 28 Mar 2022 21:00

Tgt Ion: 85 Resp: 23739

Ion Ratio Lower Upper

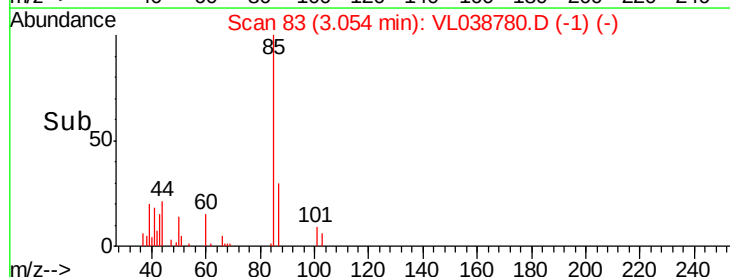
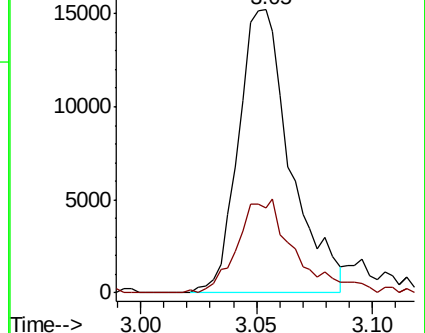
85 100

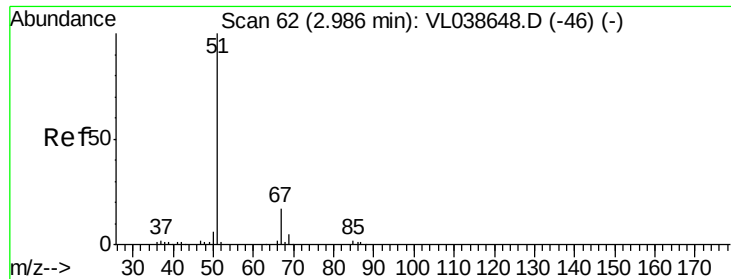
87 29.0 26.0 39.0



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0





#3

Chlorodifluoromethane

Concen: 0.398 ppbv

RT: 2.99 Instrument:

Delta R.T. MSVOA_1

Lab File: ClientSampleId:

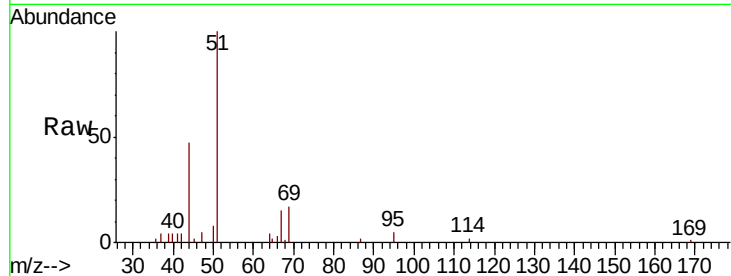
Acq: 28 Mar 2022 21:00

Tot Ion: 51 Resp: 29788

Ion Ratio Lower Upper

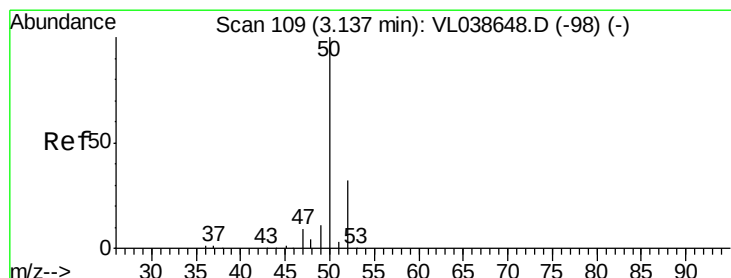
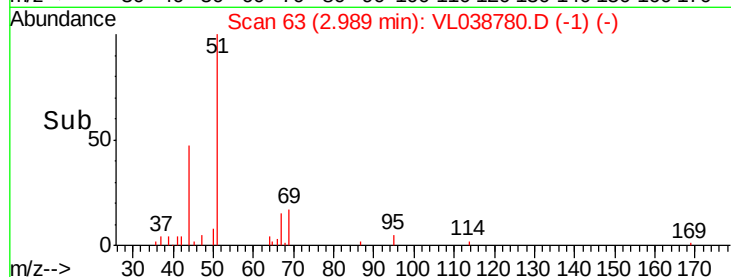
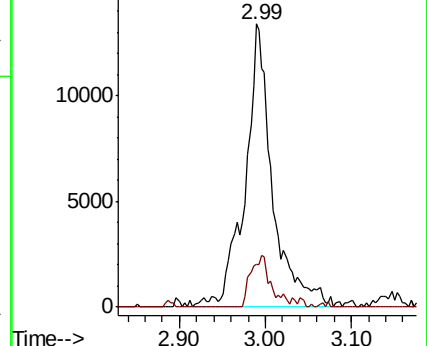
51 100

67 14.2 14.1 21.1



Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0



#4

Chloromethane

Concen: 0.560 ppbv

RT: 3.15 min Scan# 112

Delta R.T. 0.01 min

Lab File: VL038780.D

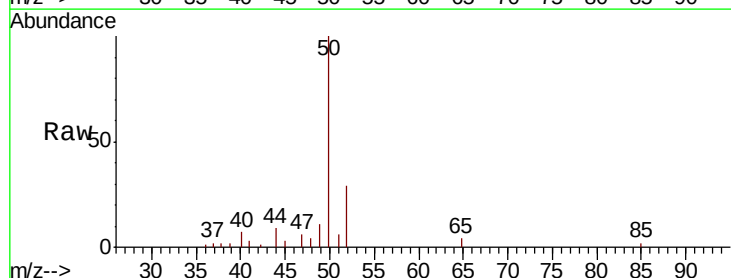
Acq: 28 Mar 2022 21:00

Tgt Ion: 50 Resp: 23008

Ion Ratio Lower Upper

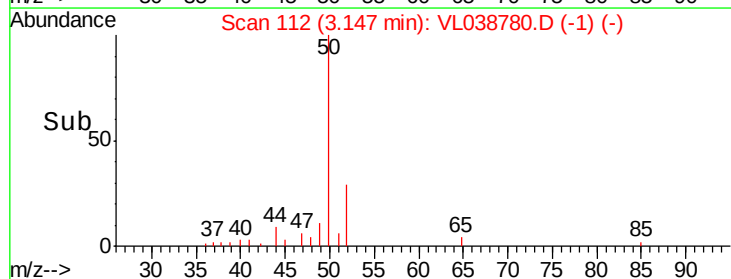
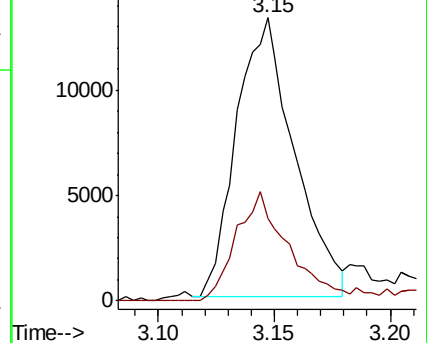
50 100

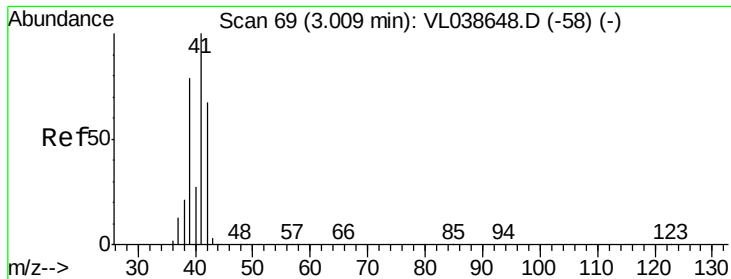
52 29.7 25.5 38.3



Abundance Ion 50.10 (49.80 to 50.80): VL0

Ion 52.10 (51.80 to 52.80): VL0





#9

Propene

Concen: 0.989 ppbv

RT: 3.02 Instrument:

Delta R.T. MSVOA_1

Lab File: ClientSampleId:

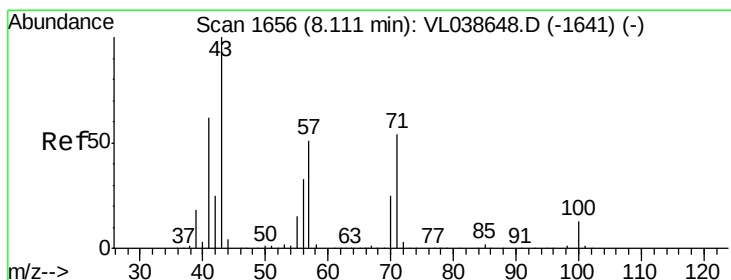
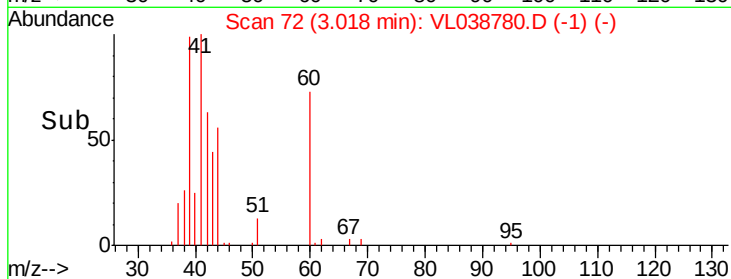
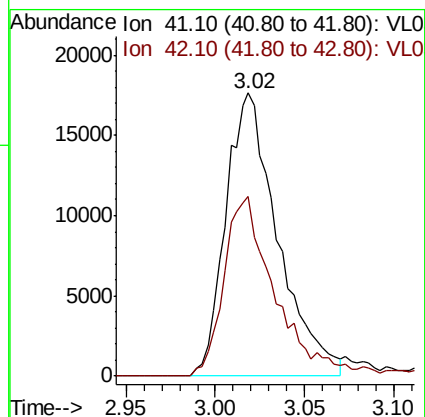
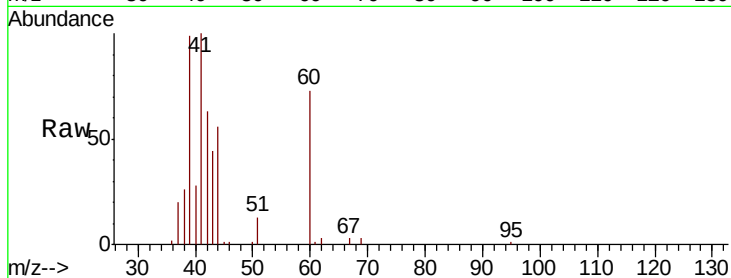
Acq: 28 Mar 2022 21:00

Tot Ion: 41 Resp: 35768

Ion Ratio Lower Upper

41 100

42 64.1 56.2 84.4



#10

Heptane

Concen: 0.061 ppbv

RT: 8.12 min Scan# 1660

Delta R.T. 0.01 min

Lab File: VL038780.D

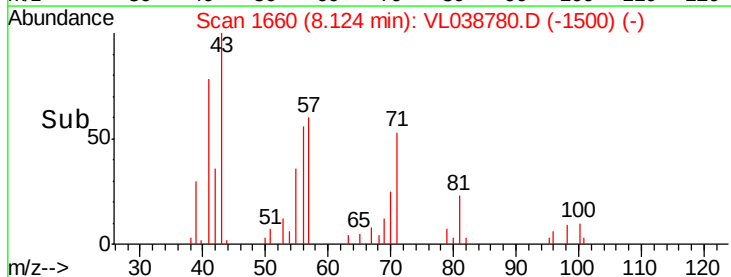
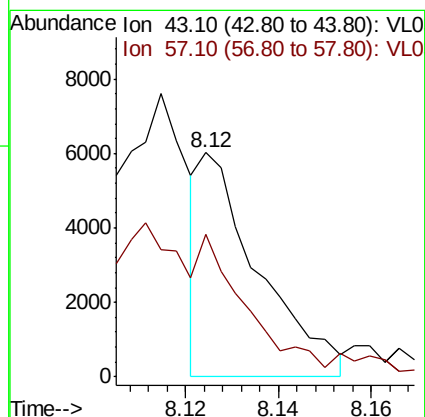
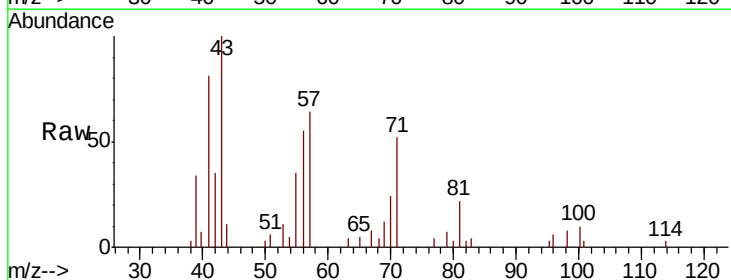
Acq: 28 Mar 2022 21:00

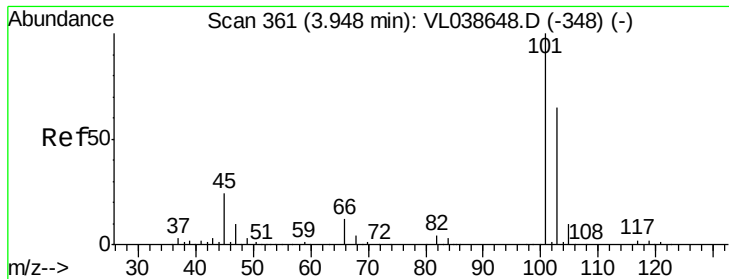
Tgt Ion: 43 Resp: 5309

Ion Ratio Lower Upper

43 100

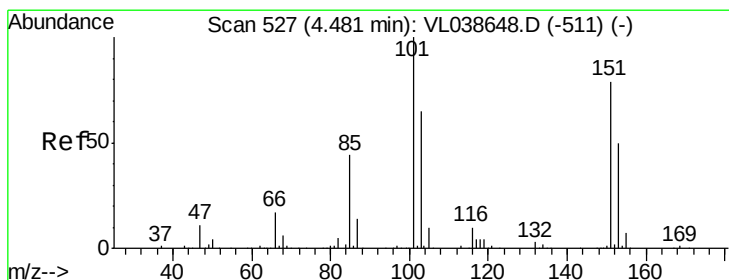
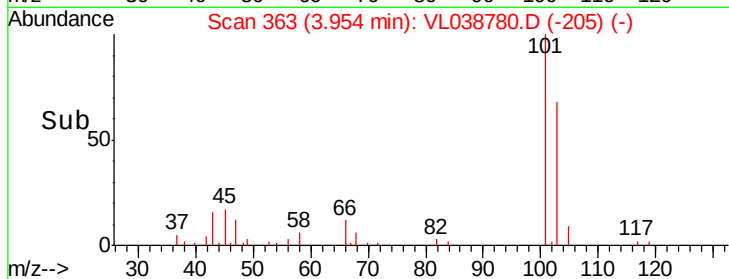
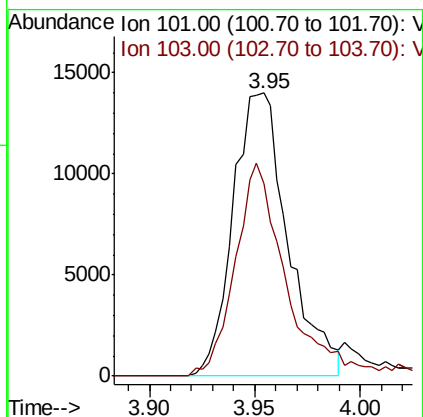
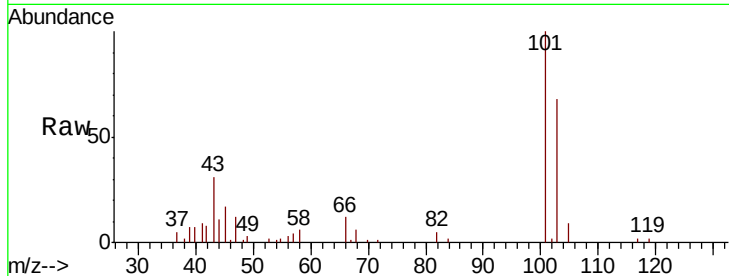
57 0.0 41.4 62.2#





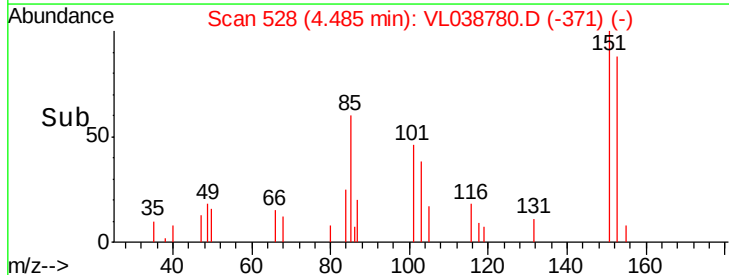
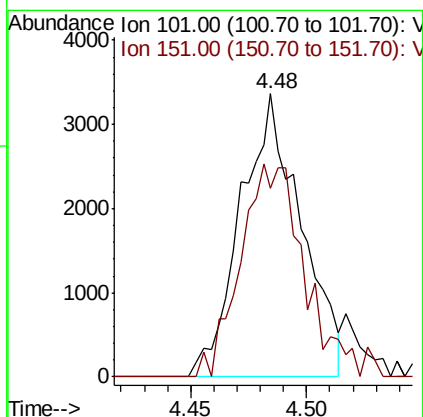
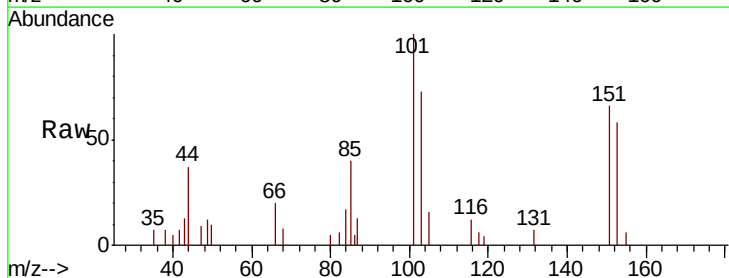
#11
 Trichlorofluoromethane
 Concen: 0.302 ppbv
 RT: 3.95
 Delta R.T. MSVOA_L
 Lab File: ClientSampleId :
 Acq: 28 Mar 2022 21:00

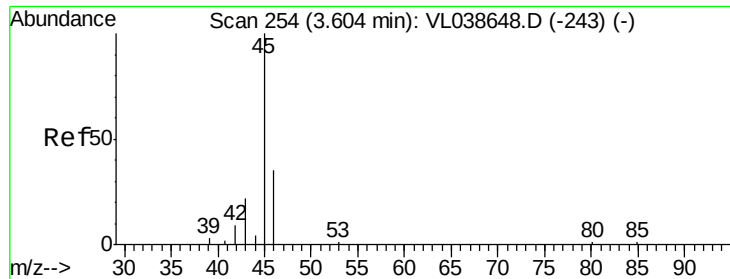
Tot Ion:101 Resp: 25421
 Ion Ratio Lower Upper
 101 100
 103 67.9 51.9 77.9



#12
 1,1,2-Trichlorotrifluoroethane
 Concen: 0.094 ppbv
 RT: 4.48 min Scan# 528
 Delta R.T. 0.00 min
 Lab File: VL038780.D
 Acq: 28 Mar 2022 21:00

Tgt Ion:101 Resp: 6090
 Ion Ratio Lower Upper
 101 100
 151 80.5 62.9 94.3





#13

Ethanol

Concen: 9.308 ppbv

RT: 3.61 Instrument:

Delta R.T. MSVOA_1

Lab File: ClientSampleId:

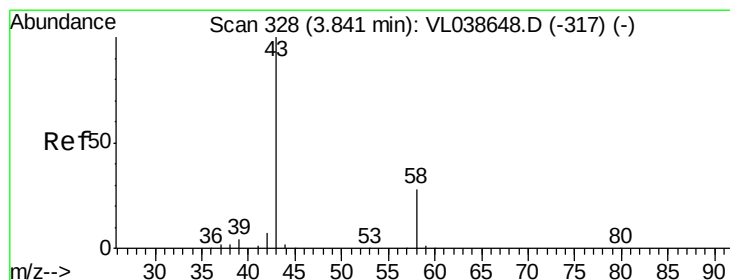
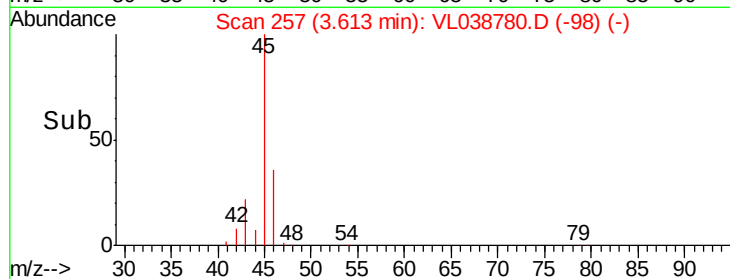
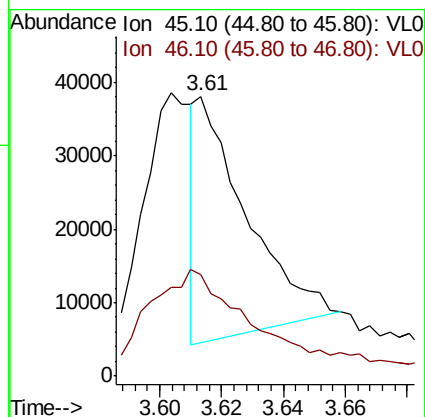
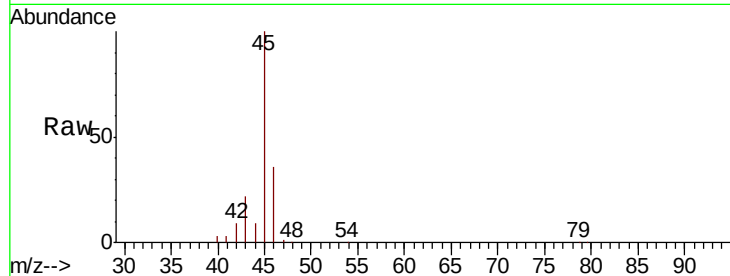
Acq: 28 Mar 2022 21:00

Tot Ion: 45 Resp: 37116

Ion Ratio Lower Upper

45 100

46 115.3 15.1 60.5#



#15

Acetone

Concen: 2.006 ppbv

RT: 3.86 min Scan# 334

Delta R.T. 0.02 min

Lab File: VL038780.D

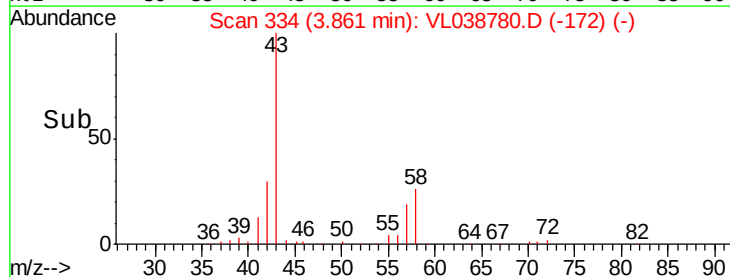
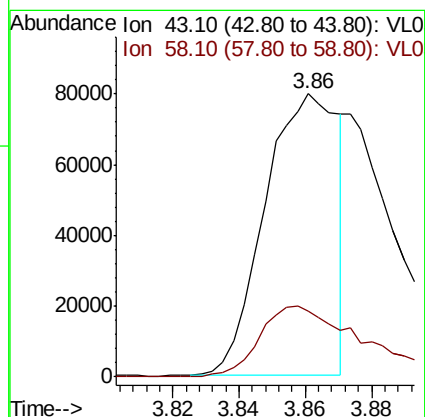
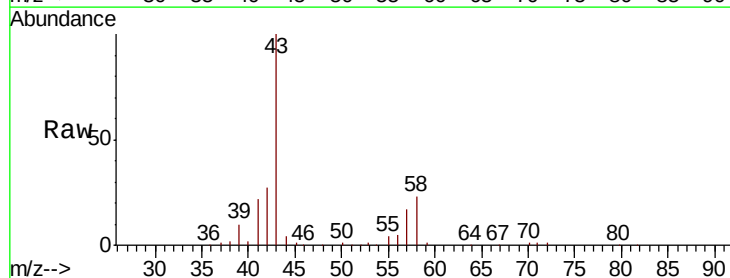
Acq: 28 Mar 2022 21:00

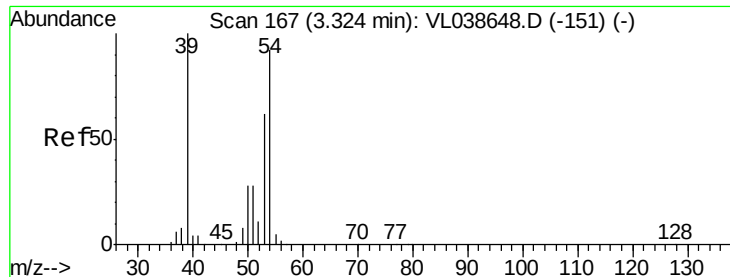
Tgt Ion: 43 Resp: 122733

Ion Ratio Lower Upper

43 100

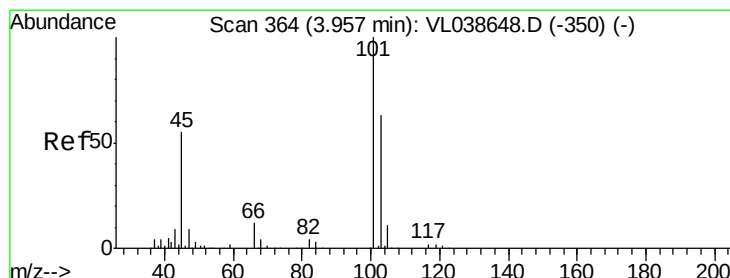
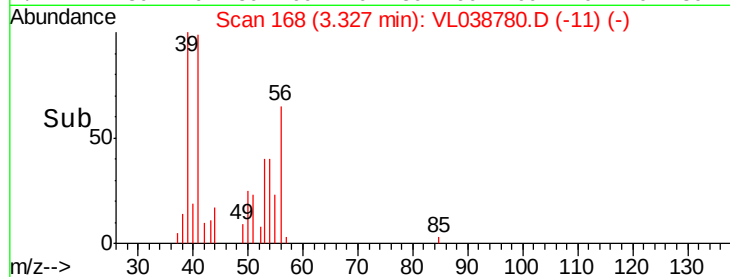
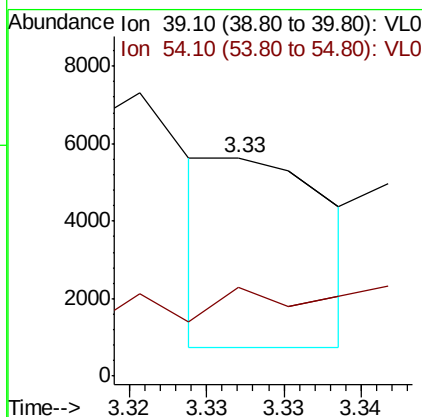
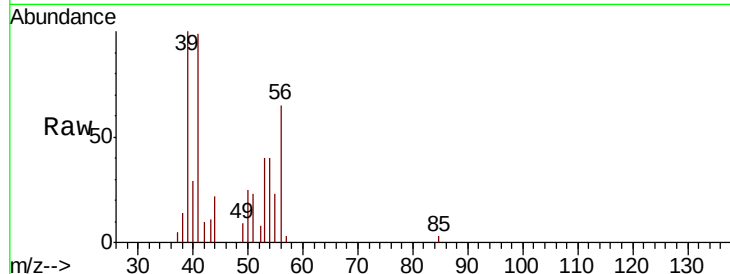
58 40.1 23.3 34.9#





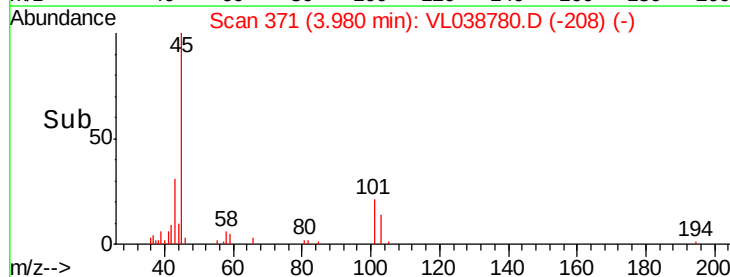
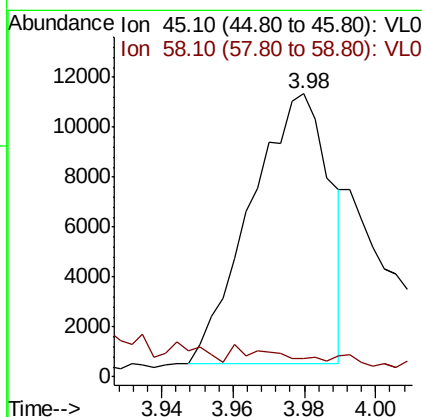
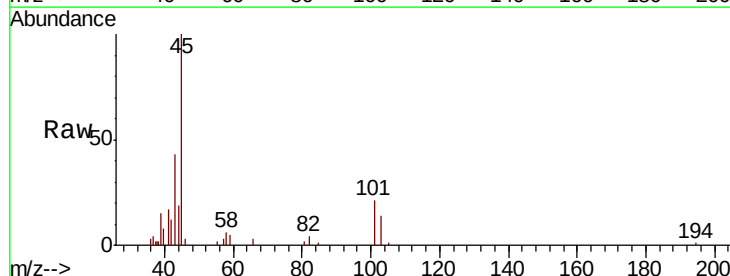
#16
 1,3-Butadiene
 Concen: 0.073 ppbv
 RT: 3.33
 Delta R.T. MSVOA_L
 Lab File: ClientSampleId :
 V-6
 Acq: 28 Mar 2022 21:00

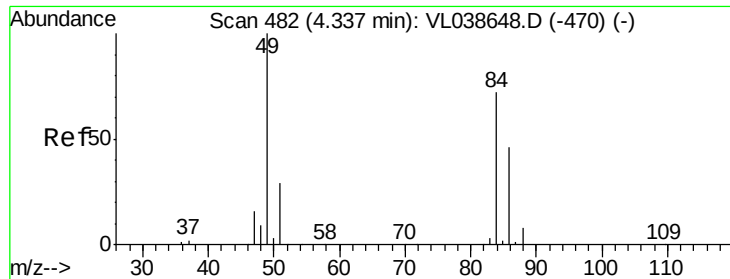
Tot Ion: 39 Resp: 2525
 Ion Ratio Lower Upper
 39 100
 54 234.6 69.1 103.7#



#19
 Isopropyl Alcohol
 Concen: 0.488 ppbv
 RT: 3.98 min Scan# 371
 Delta R.T. 0.02 min
 Lab File: VL038780.D
 Acq: 28 Mar 2022 21:00

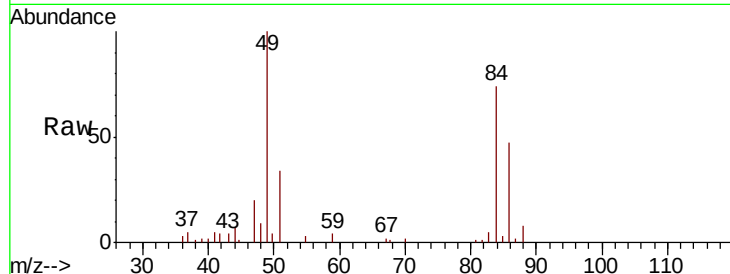
Tgt Ion: 45 Resp: 16552
 Ion Ratio Lower Upper
 45 100
 58 10.5 2.3 3.5#





#20
Methvlene Chloride
Concen: 1.170 ppbv
RT: 4.34
Delta R.T. MSVOA_L
Lab File: ClientSampleId :
Acq: 28 Mar 2022 21:00

Tot Ion:	84	Resp:	30151
Ion	Ratio	Lower	Upper
84	100		
49	139.0	111.2	166.8
51	44.6	32.8	49.2
86	63.8	51.4	77.0



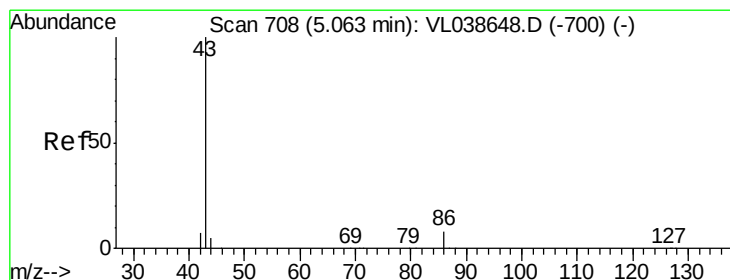
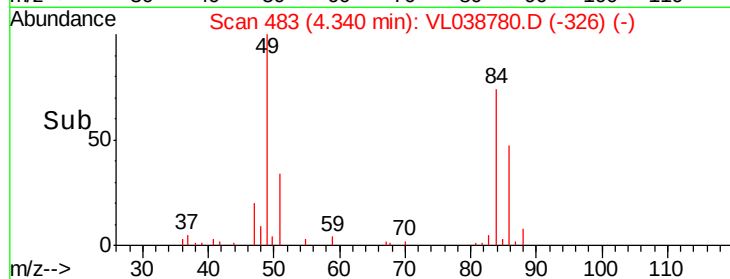
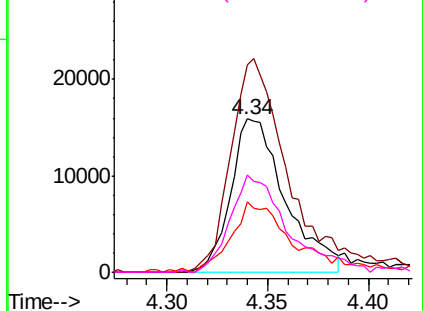
Abundance

Ion 84.00 (83.70 to 84.70): VL0

Ion 49.10 (48.80 to 49.80): VL0

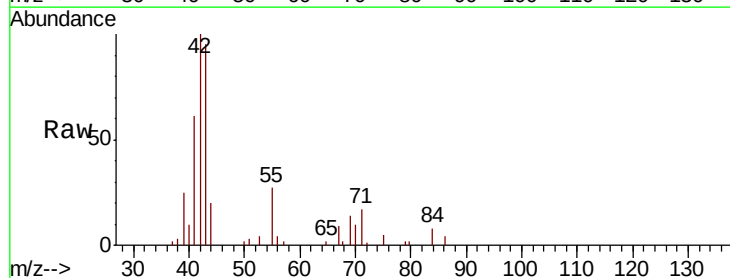
Ion 51.10 (50.80 to 51.80): VL0

Ion 86.00 (85.70 to 86.70): VL0



#23
Vinyl Acetate
Concen: 0.217 ppbv
RT: 5.06 min Scan# 706
Delta R.T. -0.01 min
Lab File: VL038780.D
Acq: 28 Mar 2022 21:00

Tgt Ion:	43	Resp:	12867
Ion	Ratio	Lower	Upper
43	100		
86	3.9	5.6	8.4#
42	103.3	6.8	10.2#
44	10.5	4.2	6.2#



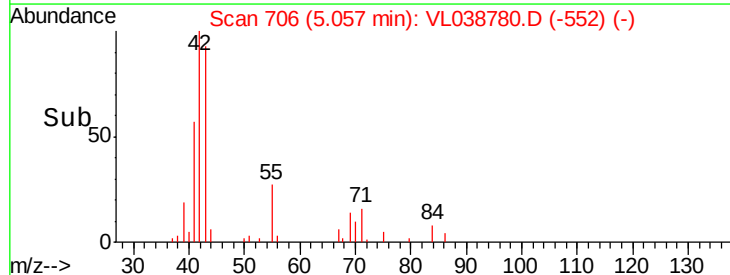
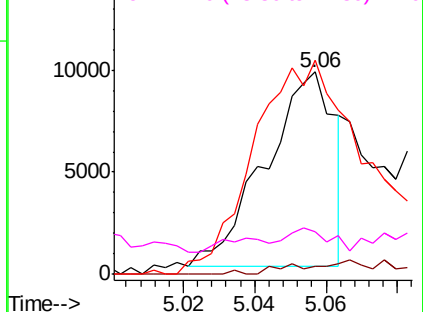
Abundance

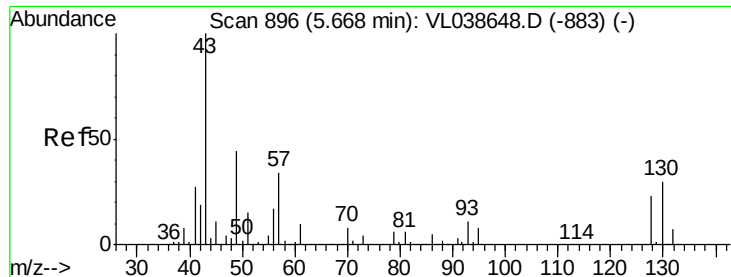
Ion 43.10 (42.80 to 43.80): VL0

Ion 86.10 (85.80 to 86.80): VL0

Ion 42.10 (41.80 to 42.80): VL0

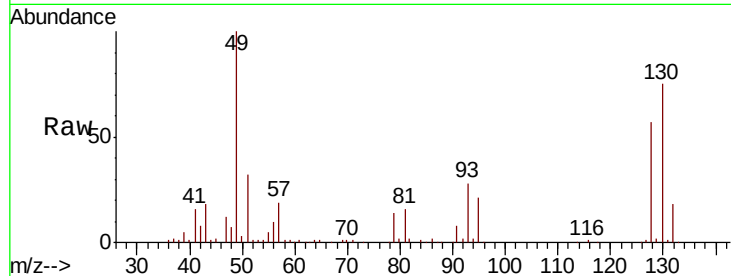
Ion 44.10 (43.80 to 44.80): VL0





#25
Ethyl Acetate
Concen: 0.311 ppbv
RT: 5.68 min
Delta R.T.: 0.00 min
Lab File: VL038648.D
Acq: 28 Mar 2022 21:00

Tot Ion	43	Resp	47898
Ion Ratio	Lower	Upper	
43	100		
45	20.9	8.2	12.4#
61	5.3	8.3	12.5#
70	4.5	5.6	8.4#



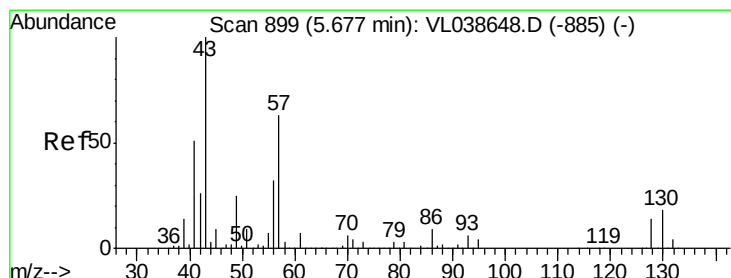
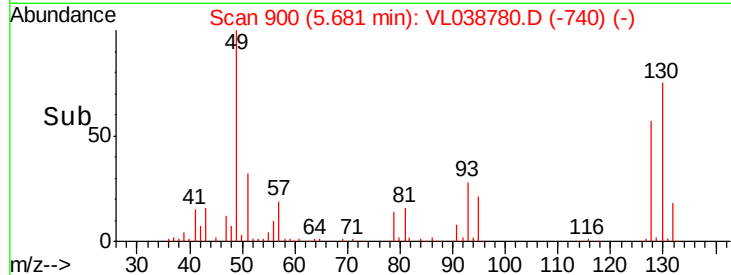
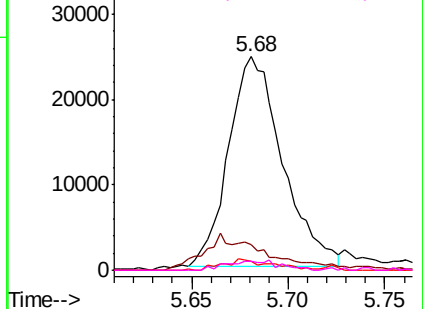
Abundance

Ion 43.10 (42.80 to 43.80): VL0

Ion 45.10 (44.80 to 45.80): VL0

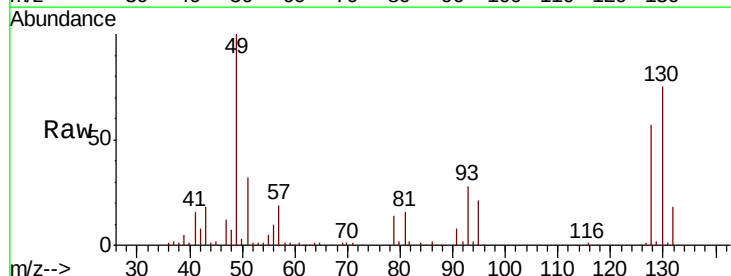
Ion 61.10 (60.80 to 61.80): VL0

Ion 70.10 (69.80 to 70.80): VL0



#26
Hexane
Concen: 0.775 ppbv
RT: 5.68 min Scan# 900
Delta R.T.: 0.00 min
Lab File: VL038780.D
Acq: 28 Mar 2022 21:00

Tgt Ion	57	Resp	53395
Ion Ratio	Lower	Upper	
57	100		
41	96.4	67.0	100.4
43	100.1	184.2	276.2#
56	59.4	42.6	64.0



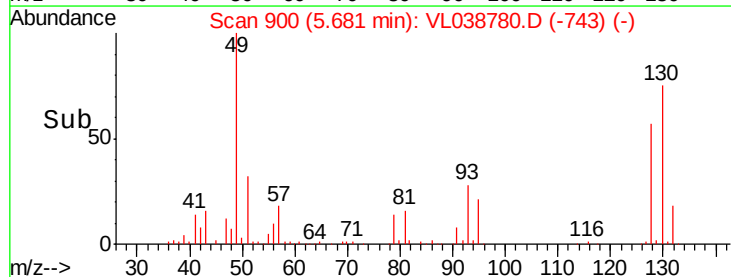
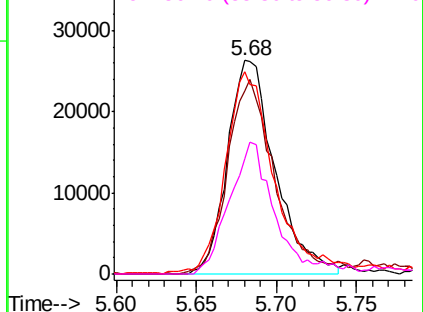
Abundance

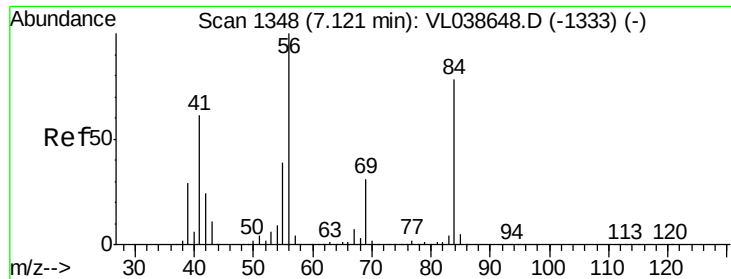
Ion 57.10 (56.80 to 57.80): VL0

Ion 41.10 (40.80 to 41.80): VL0

Ion 43.10 (42.80 to 43.80): VL0

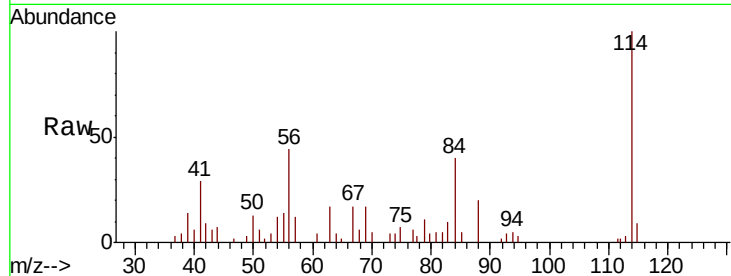
Ion 56.10 (55.80 to 56.80): VL0



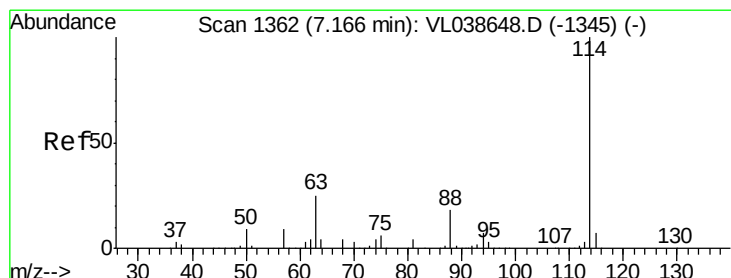
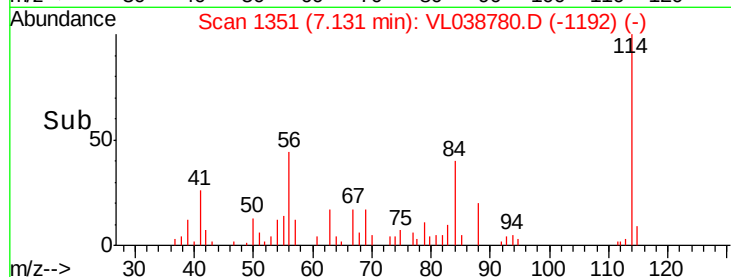
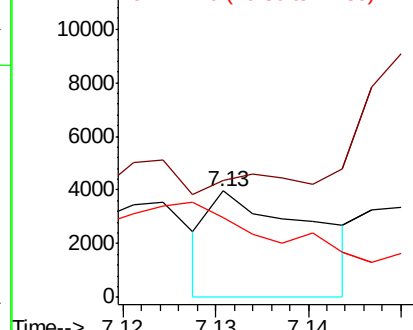


#30
Cvclohexane
Concen: 0.050 ppbv
RT: 7.13
Delta R.T. MSVOA_L
Lab File: ClientSampleId :
Acq: 28 Mar 2022 21:00

Tot Ion: 84 Resp: 2999
Ion Ratio Lower Upper
84 100
56 0.0 108.2 162.4#
41 288.2 61.8 92.6#

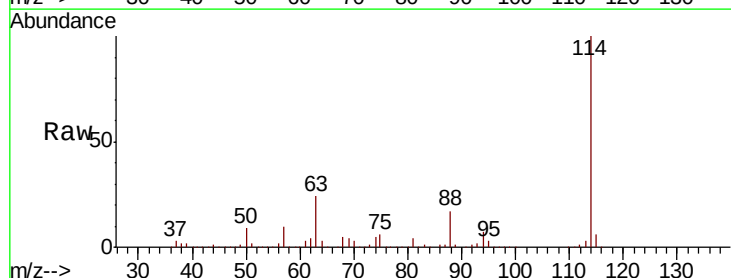


Abundance Ion 84.20 (83.90 to 84.90): VL0
Ion 56.10 (55.80 to 56.80): VL0
Ion 41.10 (40.80 to 41.80): VL0

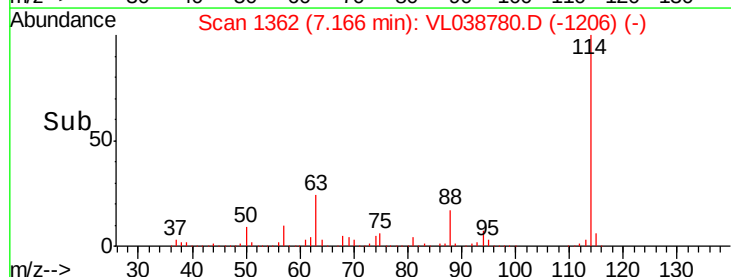
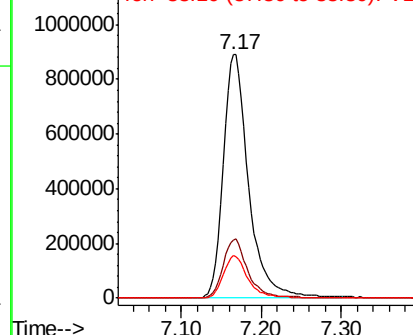


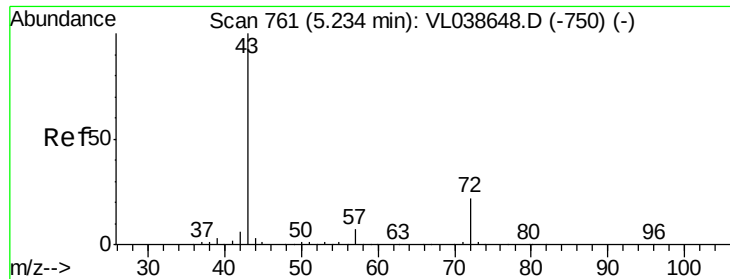
#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 7.17 min Scan# 1362
Delta R.T. 0.00 min
Lab File: VL038780.D
Acq: 28 Mar 2022 21:00

Tgt Ion: 114 Resp: 1951131
Ion Ratio Lower Upper
114 100
63 23.8 19.4 29.0
88 17.1 13.9 20.9



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





#34

2-Butanone

Concen: 0.309 ppbv

RT: 5.25 Instrument: MSVOA_1

Delta R.T. ClientSampleId:

Lab File: V-6

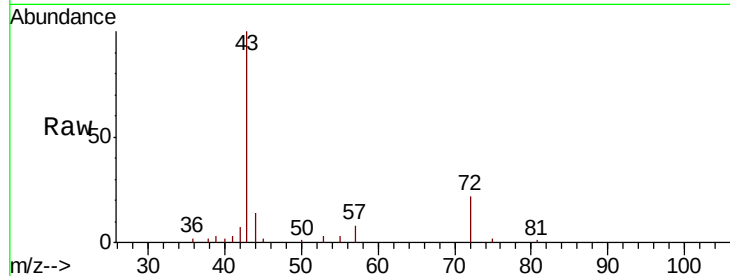
Acq: 28 Mar 2022 21:00

Tot Ion: 43 Resp: 23825

Ion Ratio Lower Upper

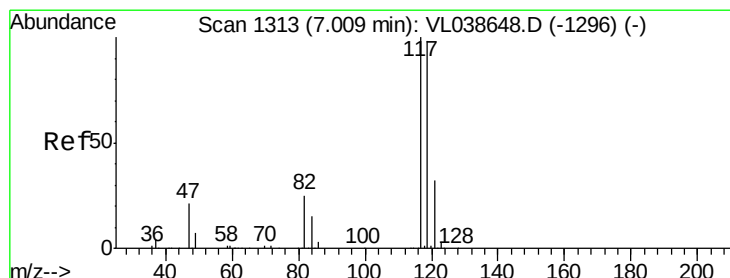
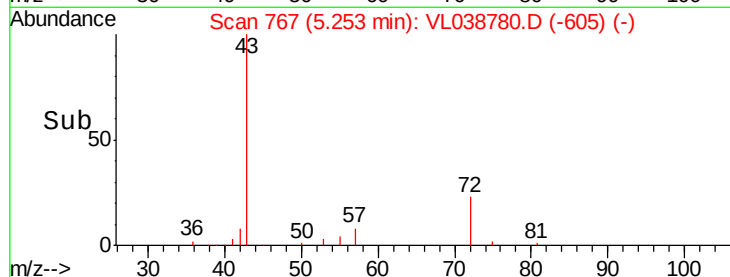
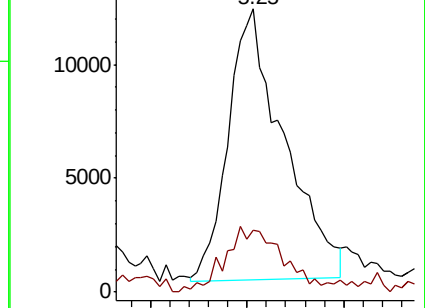
43 100

72 29.5 17.8 26.8#



Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 72.10 (71.80 to 72.80): VL0



#35

Carbon Tetrachloride

Concen: 0.035 ppbv

RT: 7.01 min Scan# 1312

Delta R.T. -0.00 min

Lab File: VL038780.D

Acq: 28 Mar 2022 21:00

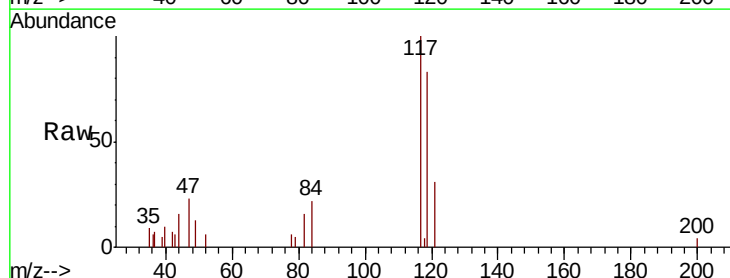
Tgt Ion: 117 Resp: 3951

Ion Ratio Lower Upper

117 100

119 83.1 78.1 117.1

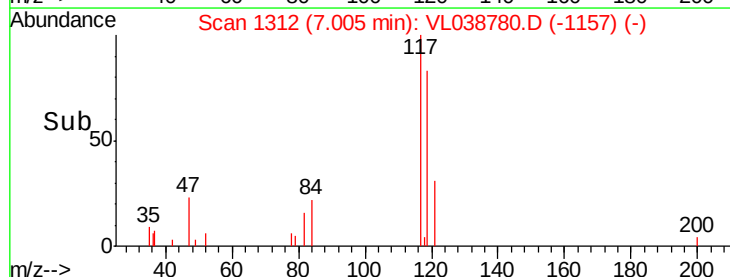
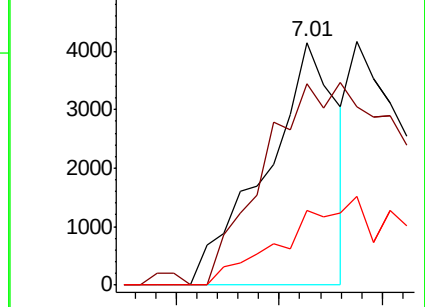
121 30.5 25.8 38.6

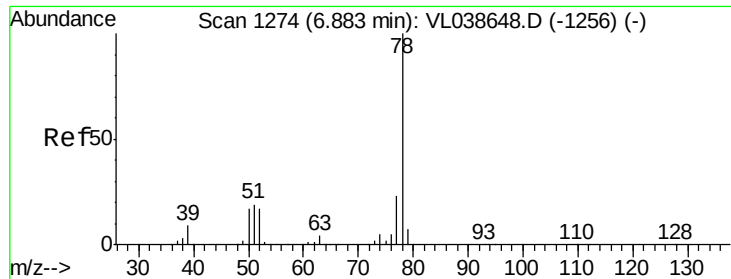


Abundance Ion 117.00 (116.70 to 117.70): V

Ion 119.00 (118.70 to 119.70): V

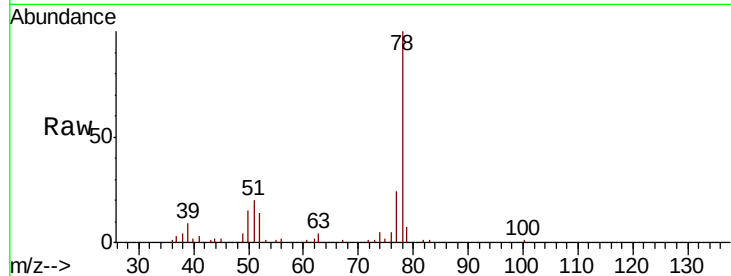
Ion 121.00 (120.70 to 121.70): V



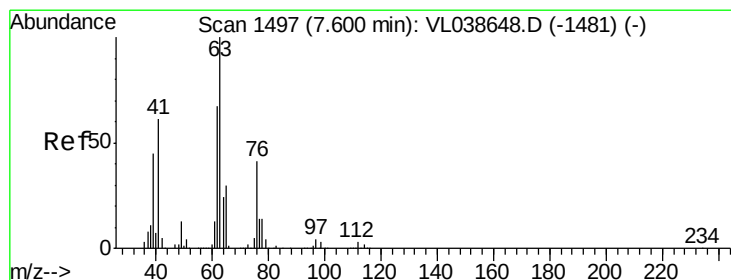
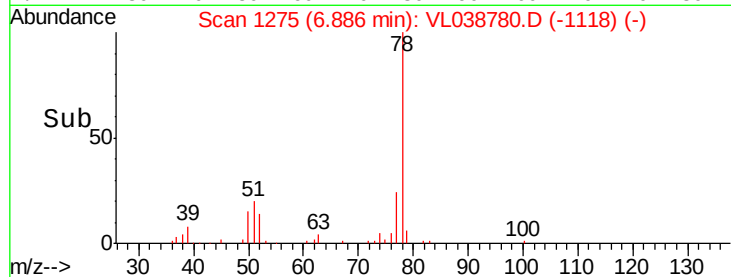
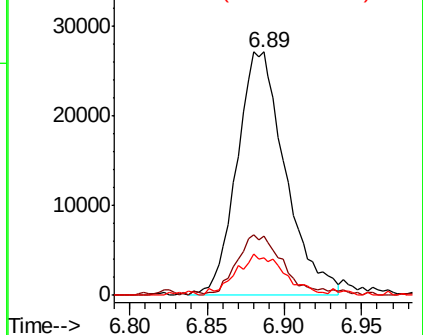


#36
Benzene
Concen: 0.393 ppbv
RT: 6.89
Delta R.T. MSVOA_L
Lab File: ClientSampleId :
Acq: 28 Mar 2022 21:00

Tot Ion	78	Resp	59226
Ion	Ratio	Lower	Upper
78	100		
77	24.1	18.1	27.1
50	14.5	13.6	20.4

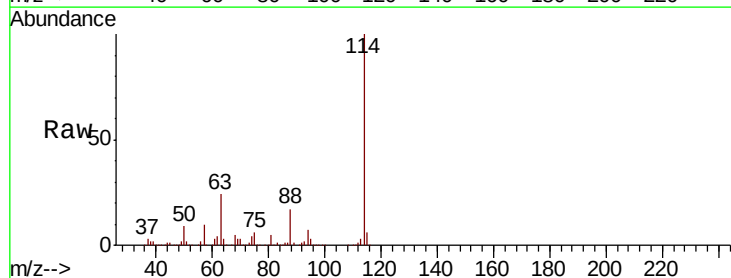


Abundance Ion 78.10 (77.80 to 78.80): VL0
Ion 77.10 (76.80 to 77.80): VL0
Ion 50.10 (49.80 to 50.80): VL0

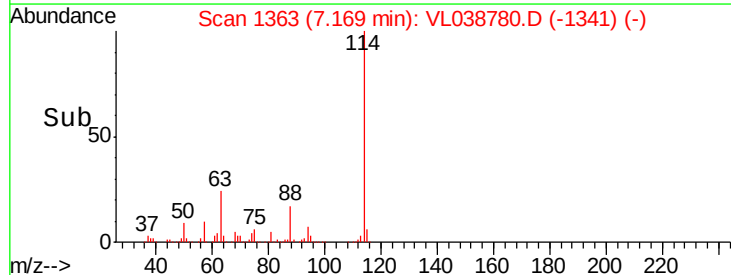
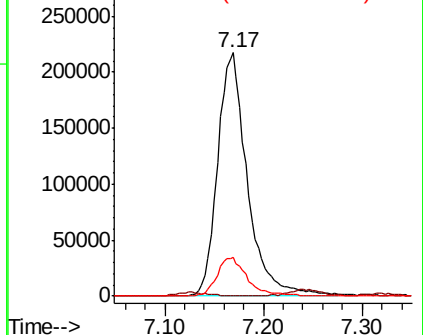


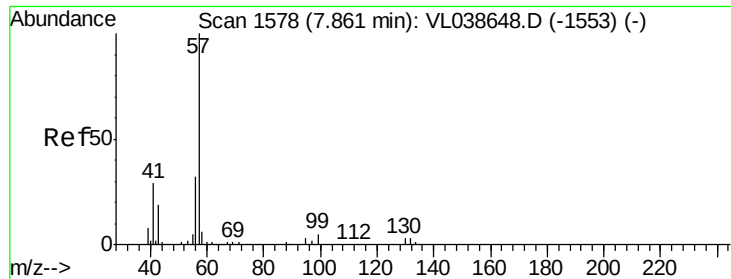
#39
1,2-Dichloropropane
Concen: 7.819 ppbv
RT: 7.17 min Scan# 1363
Delta R.T. -0.43 min
Lab File: VL038780.D
Acq: 28 Mar 2022 21:00

Tgt Ion	63	Resp	460296
Ion	Ratio	Lower	Upper
63	100		
41	0.0	49.0	73.6#
62	15.6	53.9	80.9#



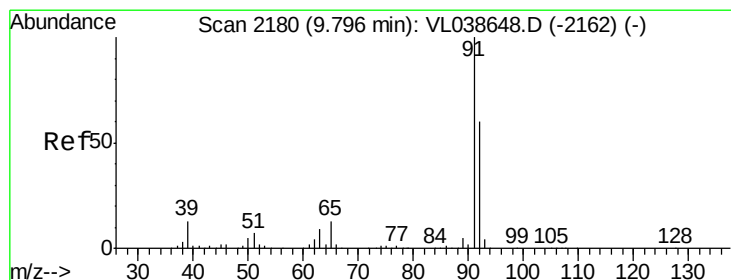
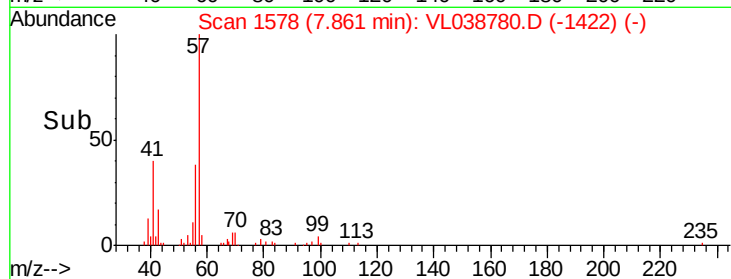
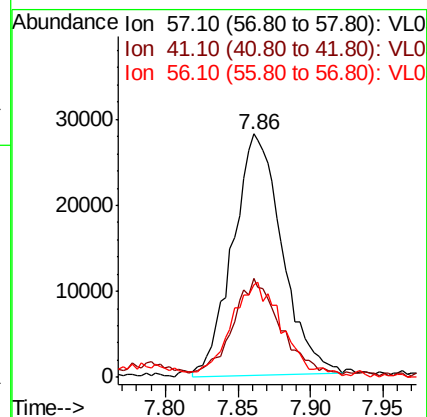
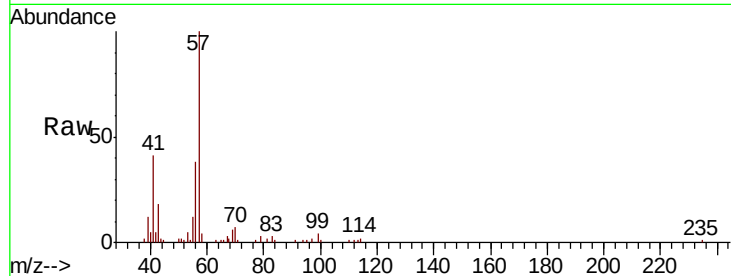
Abundance Ion 63.10 (62.80 to 63.80): VL0
Ion 41.10 (40.80 to 41.80): VL0
Ion 62.10 (61.80 to 62.80): VL0





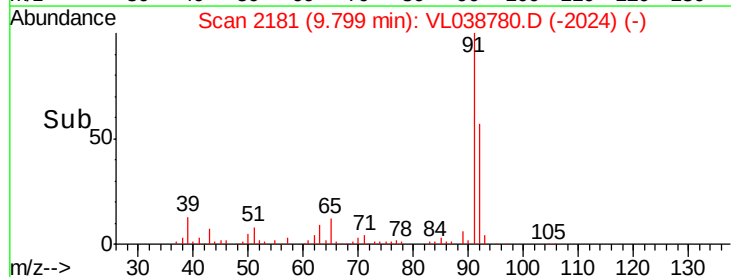
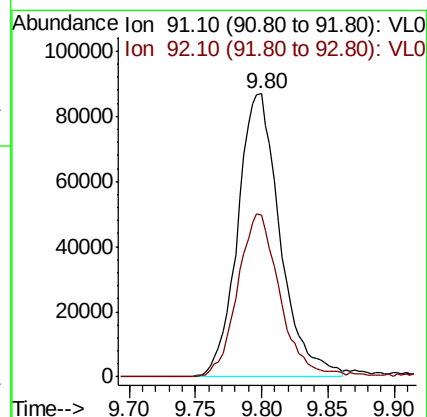
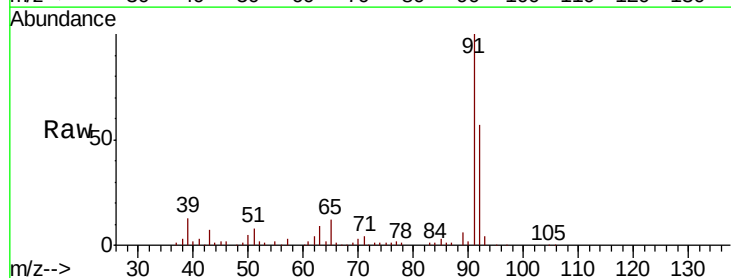
#44
 2,2,4-Trimethylpentane
 Concen: 0.261 ppbv
 RT: 7.86
 Delta R.T. MSVOA_L
 Lab File: ClientSampleId :
 Acq: 28 Mar 2022 21:00

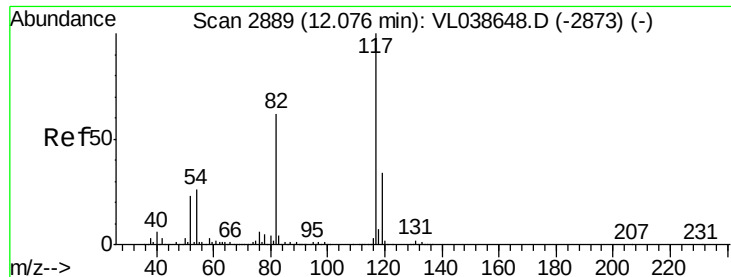
Tot Ion	57	Resp	66114
Ion Ratio	Lower	Upper	
57	100		
41	43.1	23.0	34.4#
56	43.1	25.3	37.9#



#53
 Toluene
 Concen: 1.194 ppbv
 RT: 9.80 min Scan# 2181
 Delta R.T. 0.00 min
 Lab File: VL038780.D
 Acq: 28 Mar 2022 21:00

Tgt Ion	91	Resp	193234
Ion Ratio	Lower	Upper	
91	100		
92	57.9	48.7	73.1





#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.08

Delta R.T. MSVOA_L

Lab File: ClientSampleId :

Acq: 28 Mar 2022 21:00

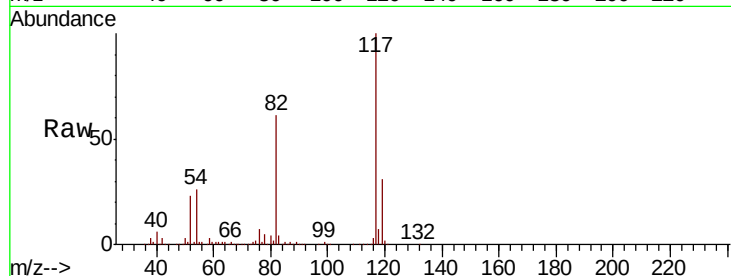
Tot Ion:117 Resp: 1673344

Ion Ratio Lower Upper

117 100

82 66.7 51.6 77.4

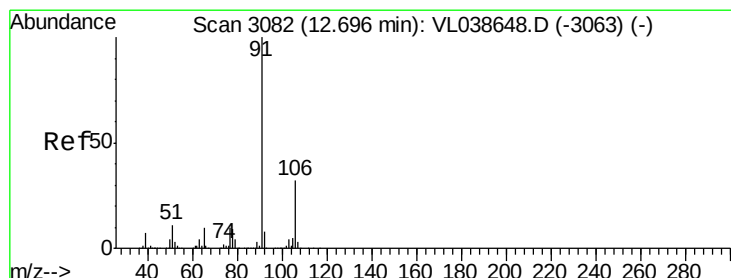
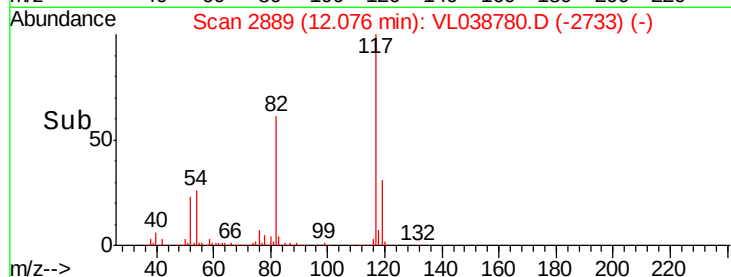
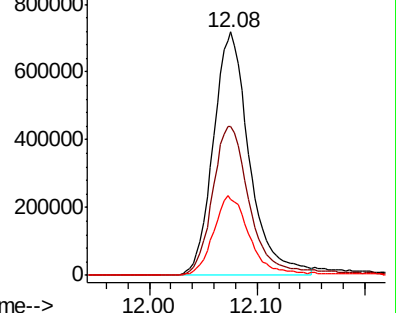
119 34.3 26.9 40.3



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: 0.076 ppbv

RT: 12.69 min Scan# 3081

Delta R.T. -0.00 min

Lab File: VL038780.D

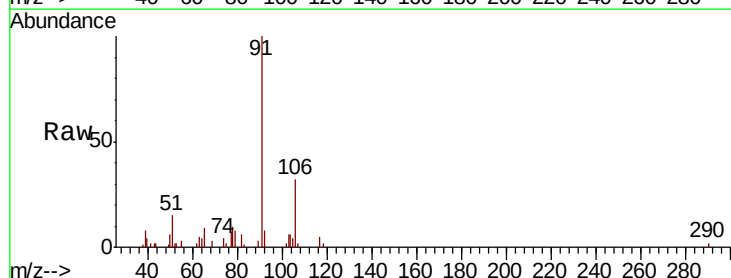
Acq: 28 Mar 2022 21:00

Tgt Ion: 91 Resp: 14887

Ion Ratio Lower Upper

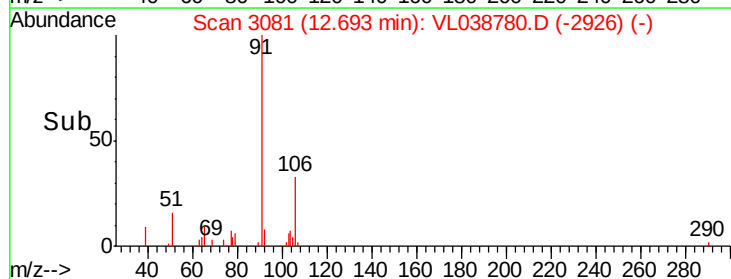
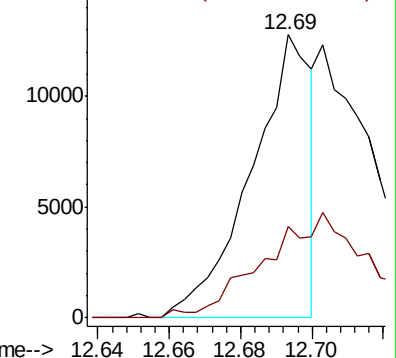
91 100

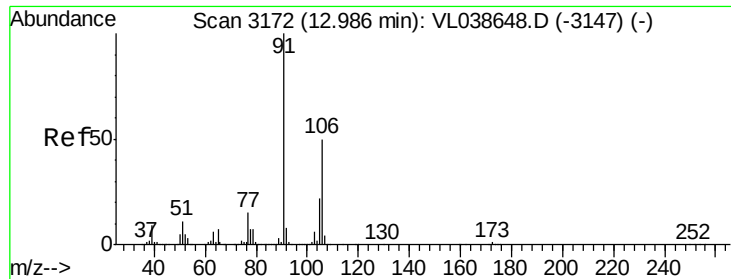
106 32.3 25.4 38.0



Abundance Ion 91.10 (90.80 to 91.80): VL0

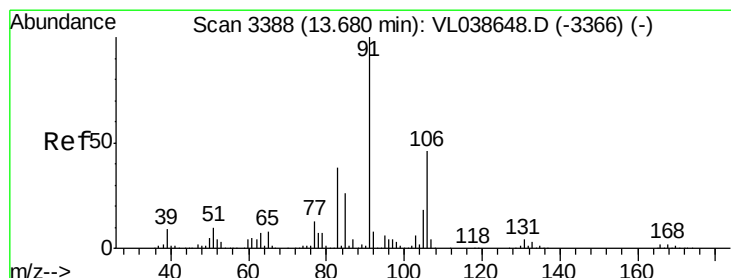
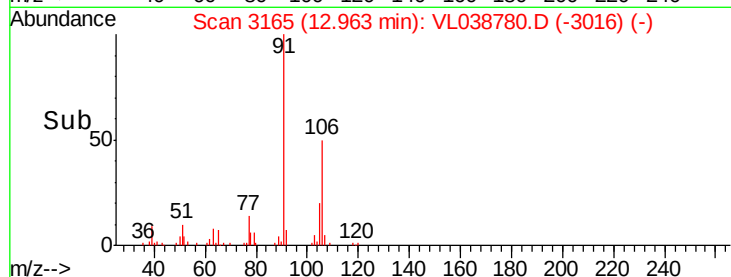
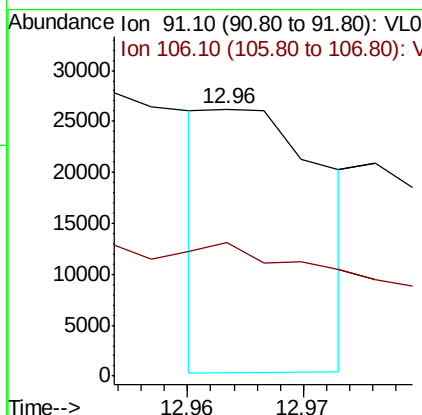
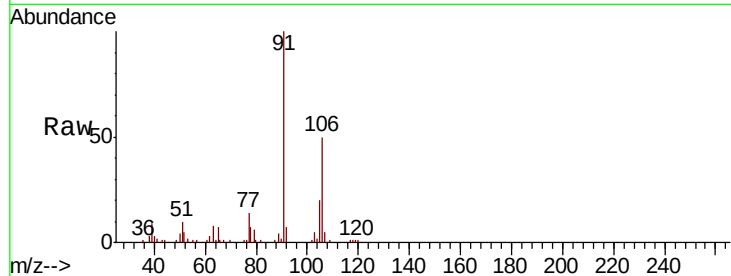
Ion 106.10 (105.80 to 106.80): V





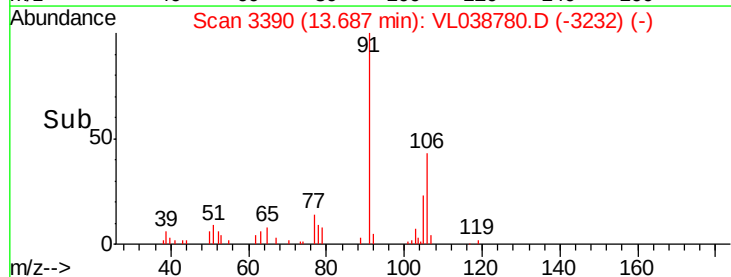
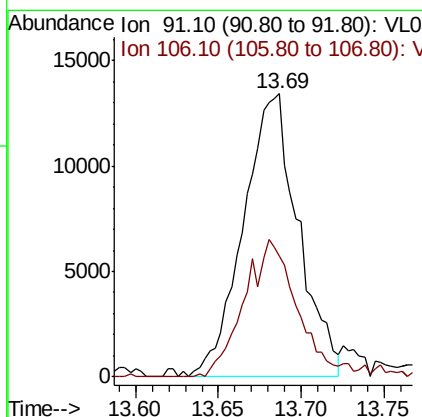
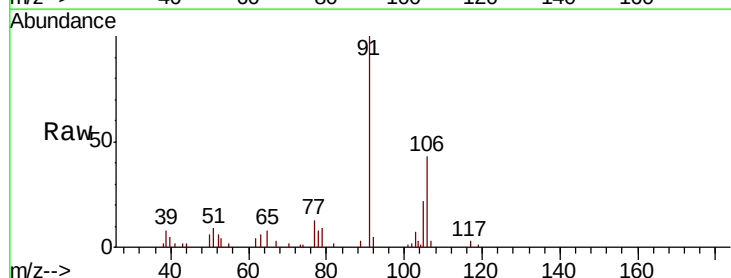
#59
m/p-Xylene
Concen: 0.104 ppbv
RT: 12.96 min
Delta R.T. MSVOA_L
Lab File: ClientSampleId :
Acq: 28 Mar 2022 21:00

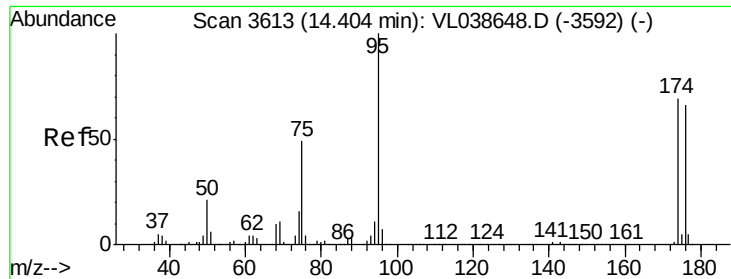
Tot Ion: 91 Resp: 17841
Ion Ratio Lower Upper
91 100
106 243.2 37.2 55.8#



#60
o-Xylene
Concen: 0.191 ppbv
RT: 13.69 min Scan# 3390
Delta R.T. 0.01 min
Lab File: VL038780.D
Acq: 28 Mar 2022 21:00

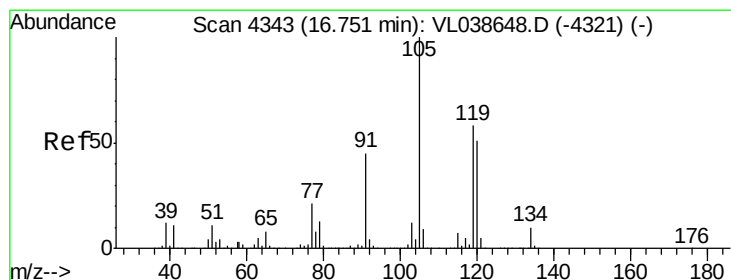
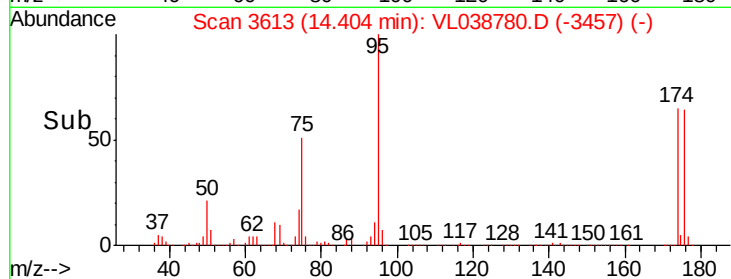
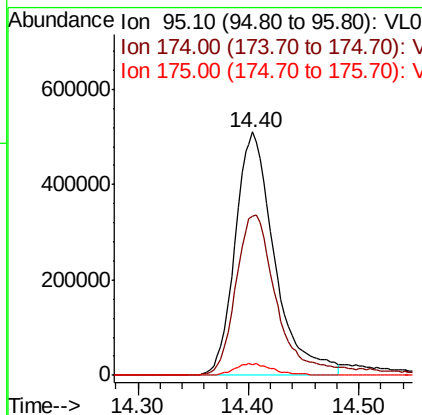
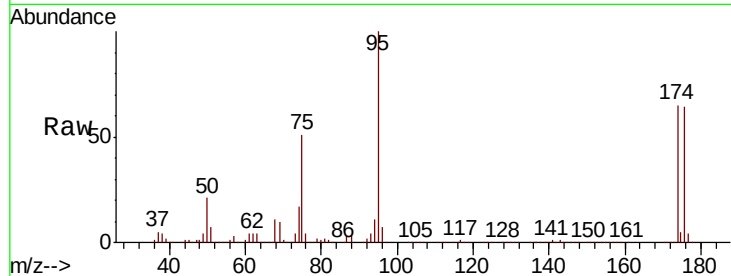
Tgt Ion: 91 Resp: 30967
Ion Ratio Lower Upper
91 100
106 47.5 23.5 70.5





#68
 1-Bromo-4-Fluorobenzene
 Concen: 9.861 ppbv
 RT: 14.40 min
 Delta R.T. 0.00 min
 Lab File: VL038648.D
 Acq: 28 Mar 2022 21:00

Tot Ion: 95 Resp: 1265086
 Ion Ratio Lower Upper
 95 100
 174 72.7 56.1 84.1
 175 4.9 4.2 6.2



#74
 1,2,4-Trimethylbenzene
 Concen: 0.124 ppbv
 RT: 16.75 min Scan# 4344
 Delta R.T. 0.00 min
 Lab File: VL038780.D
 Acq: 28 Mar 2022 21:00

Tgt Ion: 105 Resp: 23643
 Ion Ratio Lower Upper
 105 100
 120 46.7 40.5 60.7
 91 13.6 35.9 53.9#
 77 13.1 16.6 25.0#

