

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL121421\
 Data File : VL038173.D
 Acq On : 14 Dec 2021 19:25
 Operator : SY/AP
 Sample : M5075-01
 Misc : 400mL/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :

Quant Time: Dec 15 04:57:24 2021
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL111821AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Thu Nov 18 13:16:09 2021
 QLast Update : Thu Nov 18 13:16:09 2021
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.63	49	860863	10.00	ppbv	-0.04
33) 1,4-Difluorobenzene	7.13	114	2298775	10.00	ppbv	-0.04
55) Chlorobenzene-d5	12.03	117	2015781	10.00	ppbv	-0.05

System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	14.36	95	1612771	11.09	ppbv	-0.05
Spiked Amount	10.000	Range	65 - 135	Recovery	=	110.90%

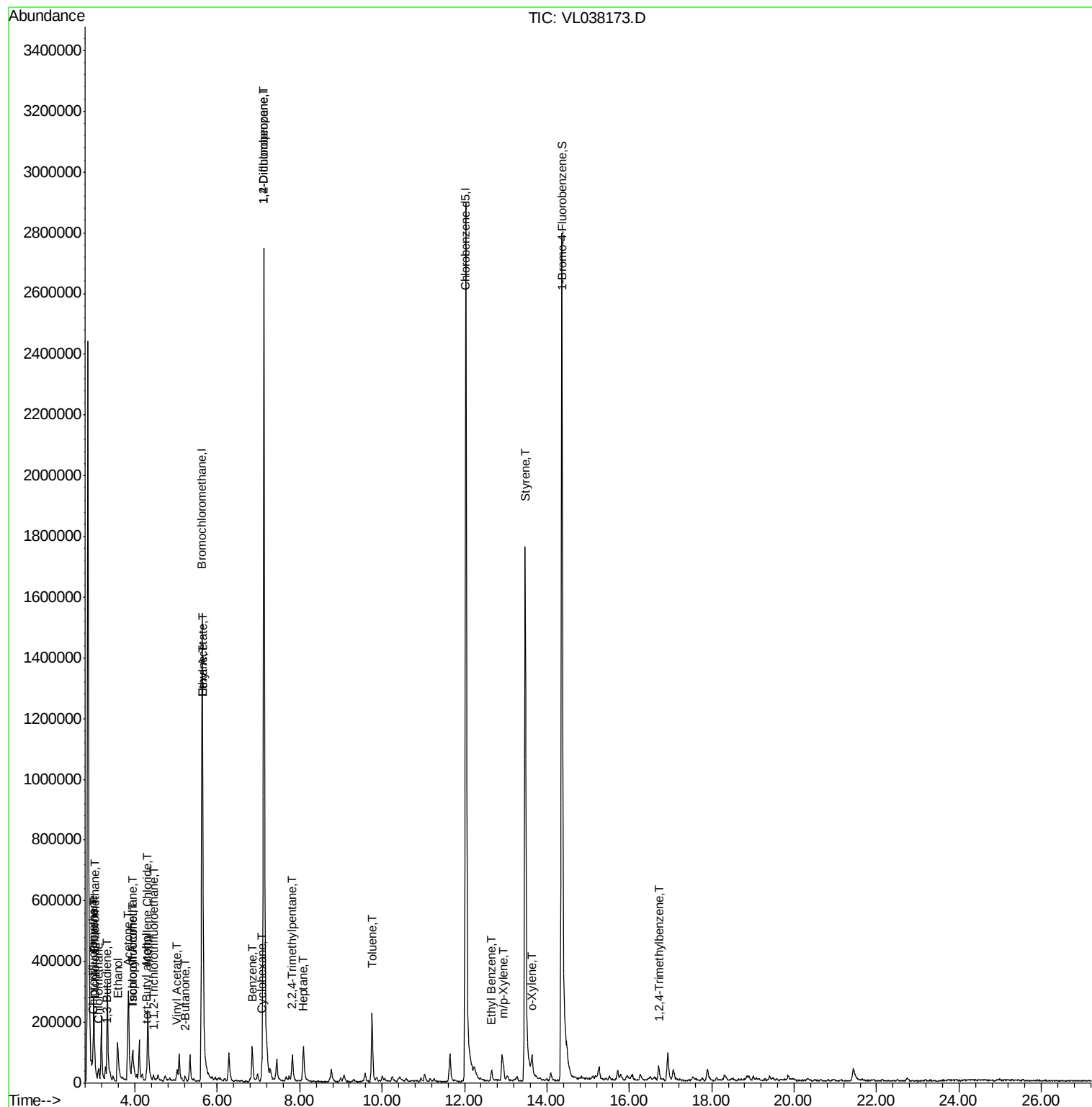
Target Compounds					Ovalue
2) Dichlorodifluoromethane	3.03	85	31593	0.222 ppbv	97
3) Chlorodifluoromethane	2.97	51	80858	0.447 ppbv #	86
4) Chloromethane	3.12	50	26565	0.432 ppbv	89
9) Propene	3.00	41	91705	1.377 ppbv #	82
10) Heptane	8.07	43	7347	0.045 ppbv #	27
11) Trichlorofluoromethane	3.92	101	31257	0.231 ppbv #	80
12) 1,1,2-Trichlorotrifluoroet	4.45	101	4681	0.049 ppbv #	71
13) Ethanol	3.58	45	126862	19.717 ppbv	68
15) Acetone	3.83	43	299362	4.011 ppbv #	85
16) 1,3-Butadiene	3.30	39	2299	0.039 ppbv #	1
17) tert-Butyl alcohol	4.28	59	4171	0.046 ppbv #	71
19) Isopropyl Alcohol	3.94	45	109630	2.033 ppbv #	92
20) Methylene Chloride	4.31	84	94294	2.255 ppbv	95
23) Vinyl Acetate	5.03	43	6637	0.061 ppbv #	1
25) Ethyl Acetate	5.65	43	91021	0.367 ppbv #	87
26) Hexane	5.65	57	98947	0.828 ppbv #	51
30) Cyclohexane	7.08	84	5438	0.050 ppbv #	1
34) 2-Butanone	5.21	43	10767	0.116 ppbv #	52
36) Benzene	6.85	78	99462	0.434 ppbv	95
39) 1,2-Dichloropropane	7.13	63	613138	6.970 ppbv #	27
44) 2,2,4-Trimethylpentane	7.82	57	32177	0.084 ppbv #	43
53) Toluene	9.76	91	164500	0.623 ppbv	99
58) Ethyl Benzene	12.65	91	25858	0.078 ppbv	97
59) m/p-Xylene	12.95	91	11921	0.043 ppbv #	29
60) o-Xylene	13.64	91	23478	0.090 ppbv #	60
61) Styrene	13.47	104	1161563	8.327 ppbv	94
74) 1,2,4-Trimethylbenzene	16.71	105	30401	0.107 ppbv #	69

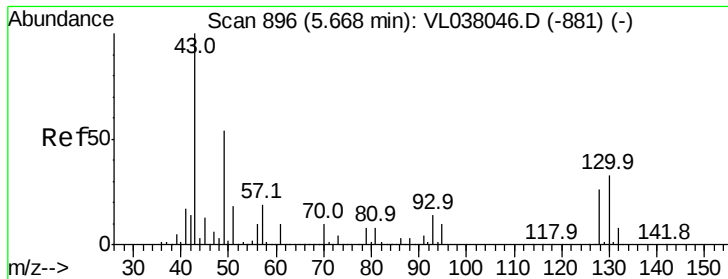
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.63 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

Acq: 14 Dec 2021 19:25

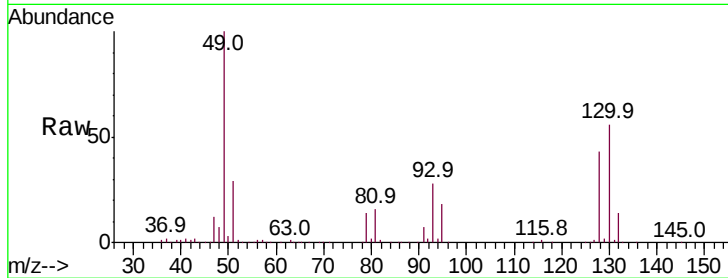
Tot Ion: 49 Resp: 860863

Ion Ratio Lower Upper

49 100

128 48.3 26.5 79.5

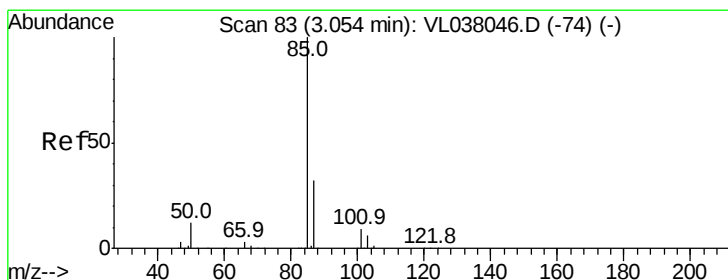
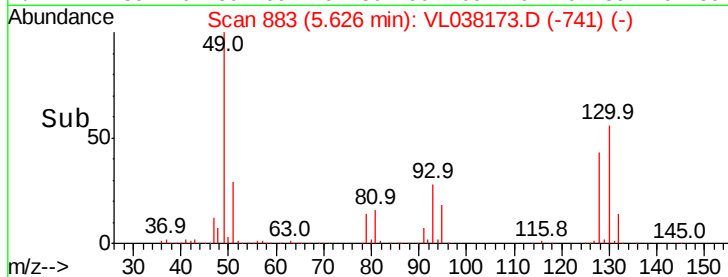
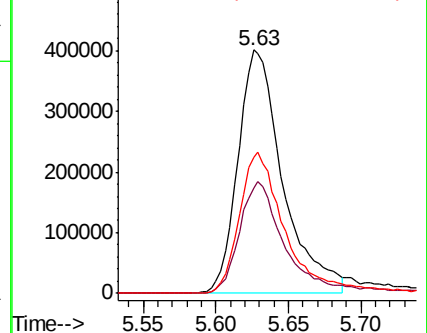
130 61.3 32.5 97.4



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: 0.222 ppbv

RT: 3.03 min Scan# 75

Delta R.T. -0.03 min

Lab File: VL038173.D

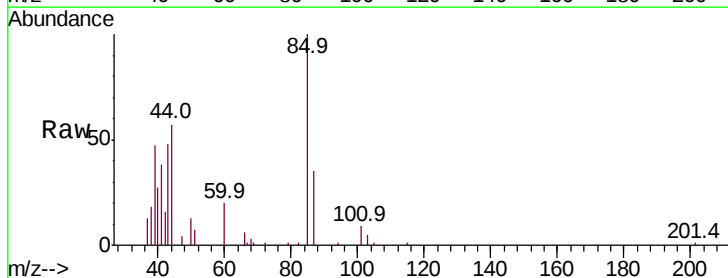
Acq: 14 Dec 2021 19:25

Tgt Ion: 85 Resp: 31593

Ion Ratio Lower Upper

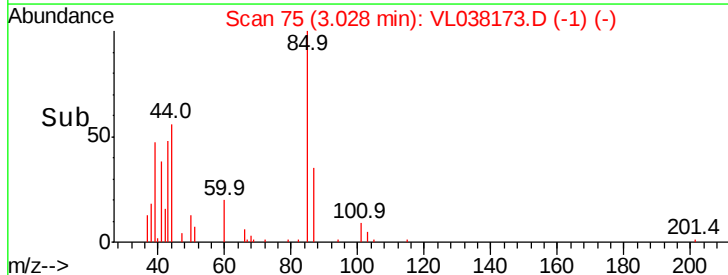
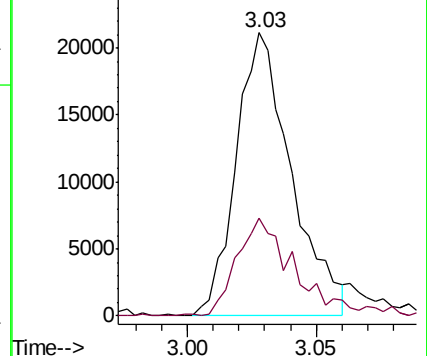
85 100

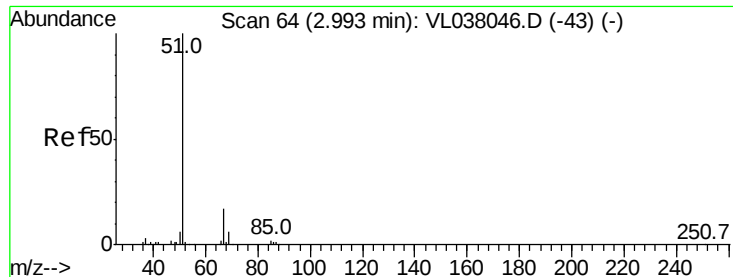
87 33.8 25.8 38.6



Abundance Ion 85.00 (84.70 to 85.70): VL0

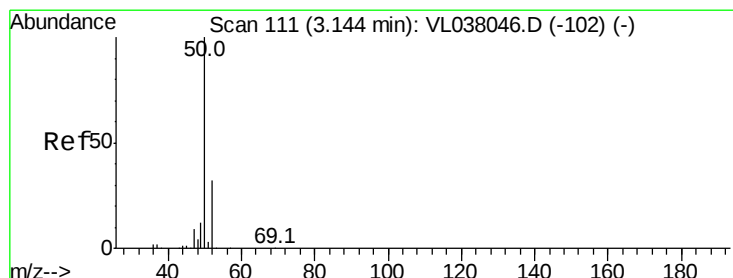
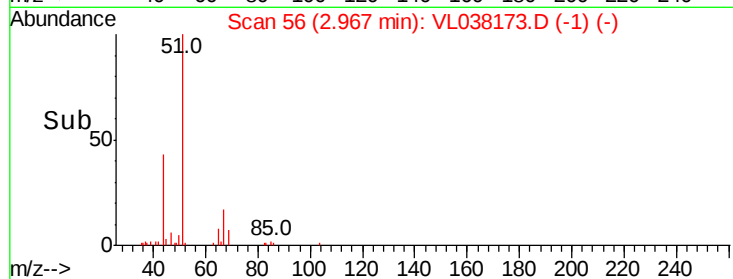
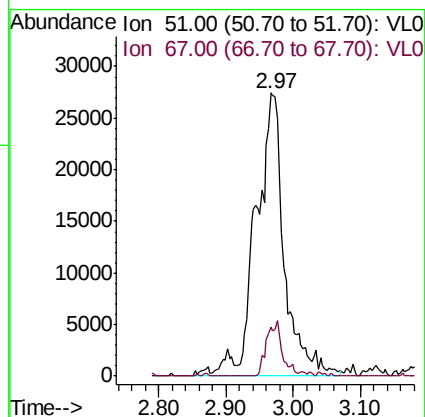
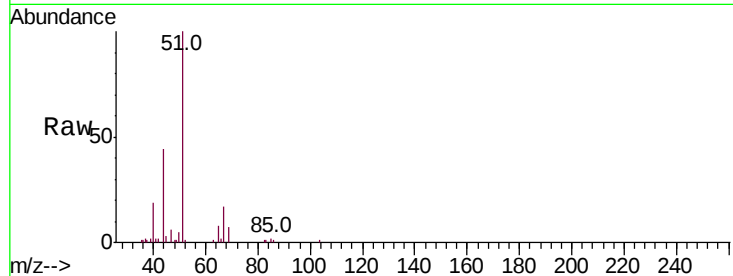
Ion 87.00 (86.70 to 87.70): VL0





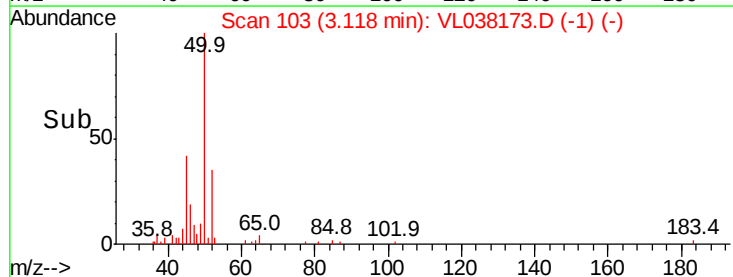
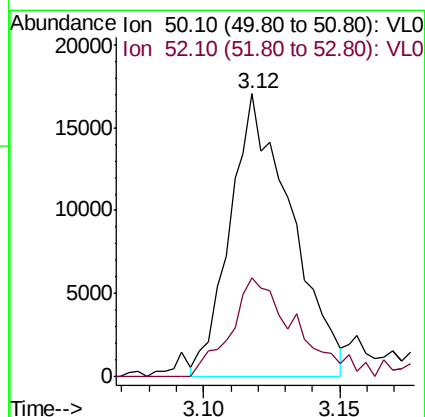
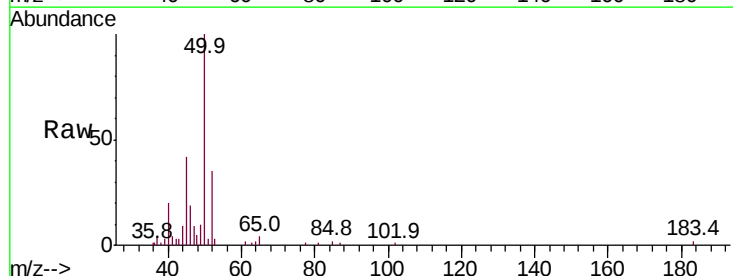
#3
 Chlorodifluoromethane
 Concen: 0.447 ppbv
 RT: 2.97
 Delta R.T. MSVOA_L
 Lab File: ClientSampleId :
 Acq: 14 Dec 2021 19:25

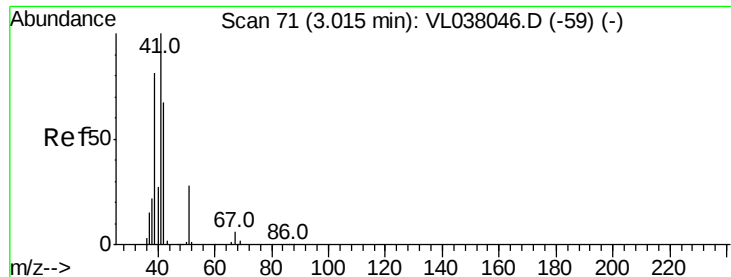
Tot Ion: 51 Resp: 80858
 Ion Ratio Lower Upper
 51 100
 67 11.1 13.8 20.8#



#4
 Chloromethane
 Concen: 0.432 ppbv
 RT: 3.12 min Scan# 103
 Delta R.T. -0.03 min
 Lab File: VL038173.D
 Acq: 14 Dec 2021 19:25

Tgt Ion: 50 Resp: 26565
 Ion Ratio Lower Upper
 50 100
 52 37.8 25.4 38.0





#9

Propene

Concen: 1.377 ppbv

RT: 3.00 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

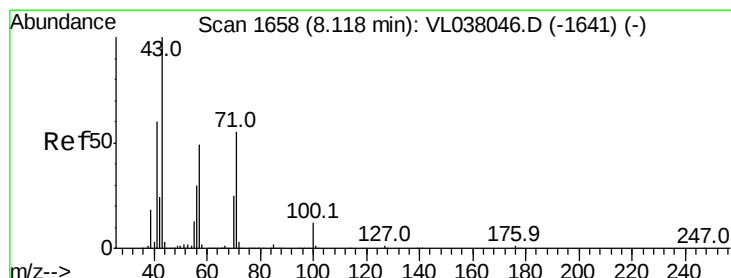
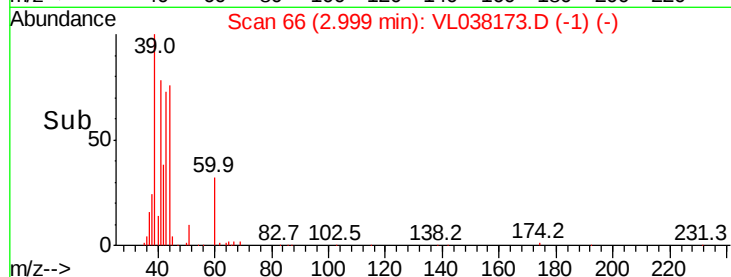
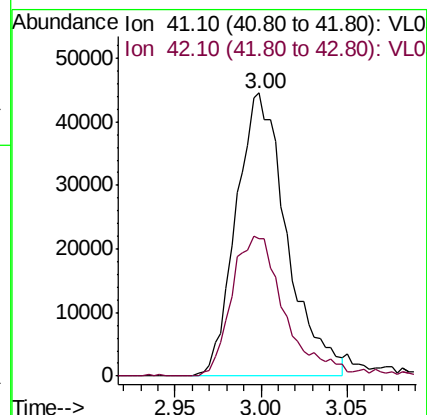
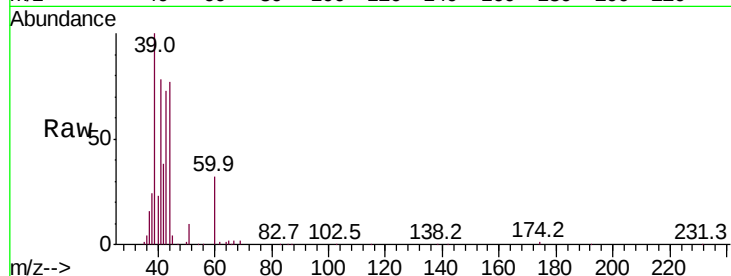
Acq: 14 Dec 2021 19:25

Tot Ion: 41 Resp: 91705

Ion Ratio Lower Upper

41 100

42 52.8 53.8 80.8#



#10

Heptane

Concen: 0.045 ppbv

RT: 8.07 min Scan# 1642

Delta R.T. -0.05 min

Lab File: VL038173.D

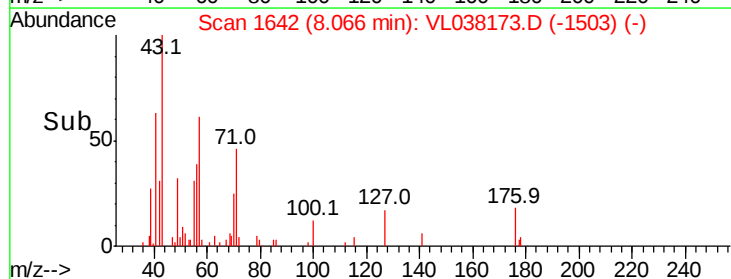
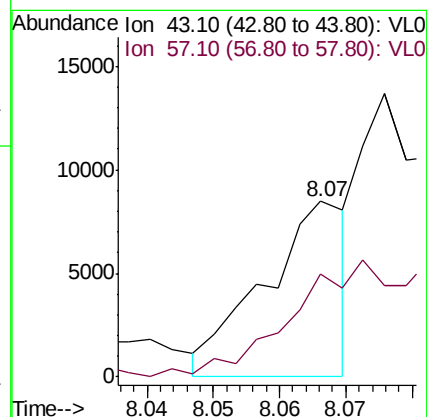
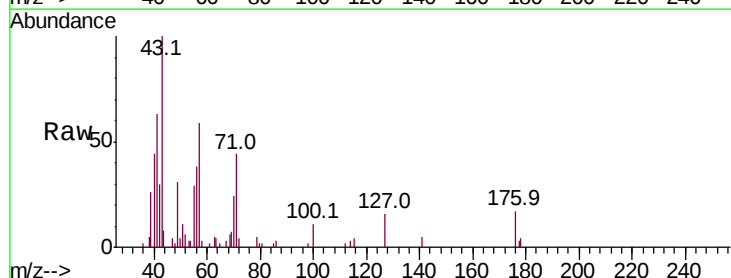
Acq: 14 Dec 2021 19:25

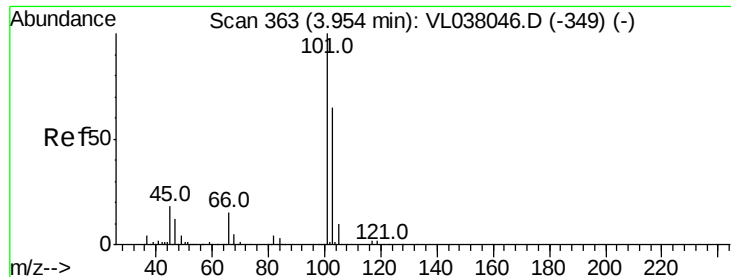
Tgt Ion: 43 Resp: 7347

Ion Ratio Lower Upper

43 100

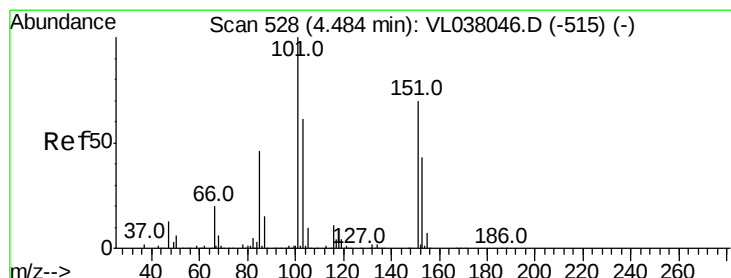
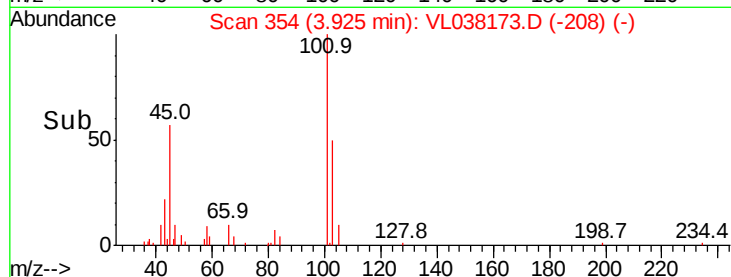
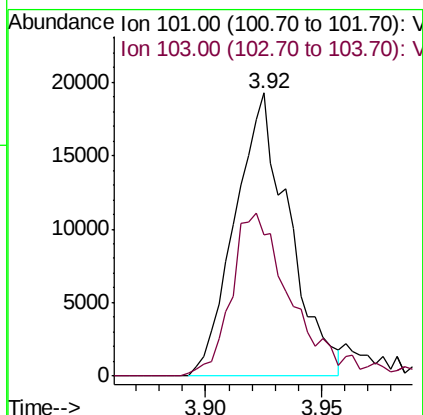
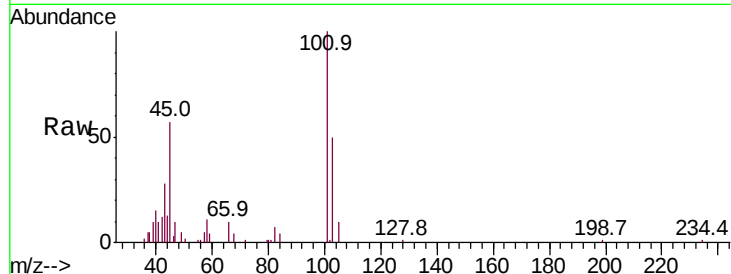
57 0.0 40.4 60.6#





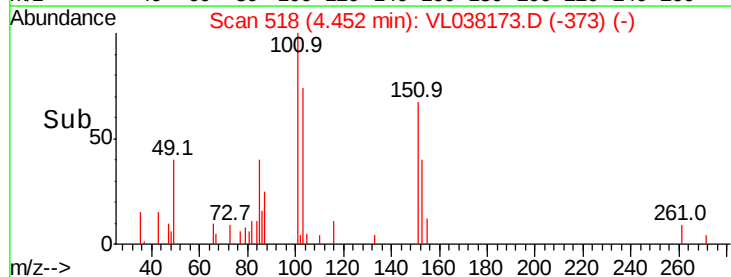
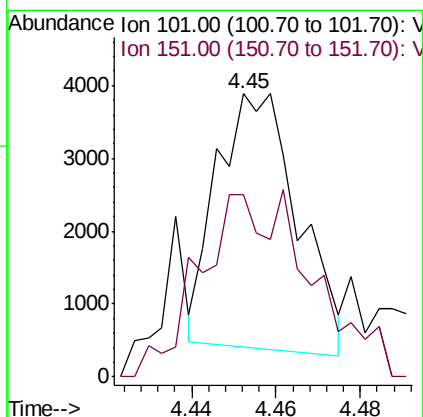
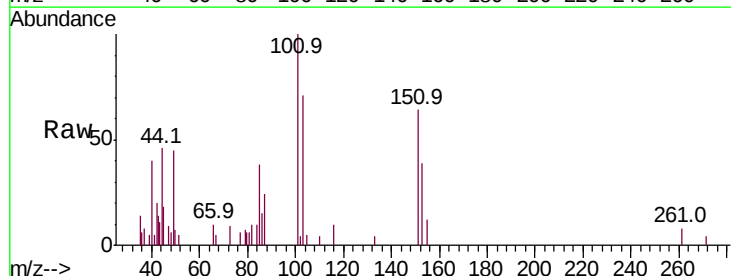
#11
 Trichlorofluoromethane
 Concen: 0.231 ppbv
 RT: 3.92
 Instrument: MSVOA_1
 Delta R.T.:
 Lab File: ClientSampleId:
 Acq: 14 Dec 2021 19:25

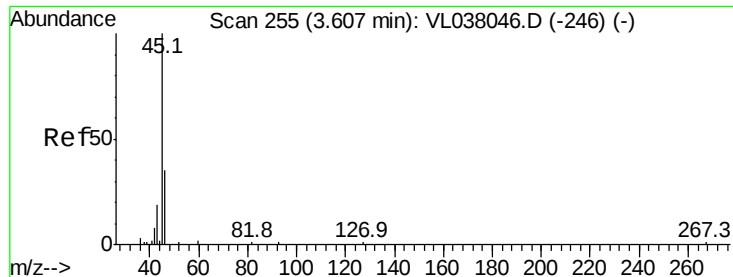
Tot Ion:101 Resp: 31257
 Ion Ratio Lower Upper
 101 100
 103 48.7 51.8 77.6#



#12
 1,1,2-Trichlorotrifluoroethane
 Concen: 0.049 ppbv
 RT: 4.45 min Scan# 518
 Delta R.T. -0.03 min
 Lab File: VL038173.D
 Acq: 14 Dec 2021 19:25

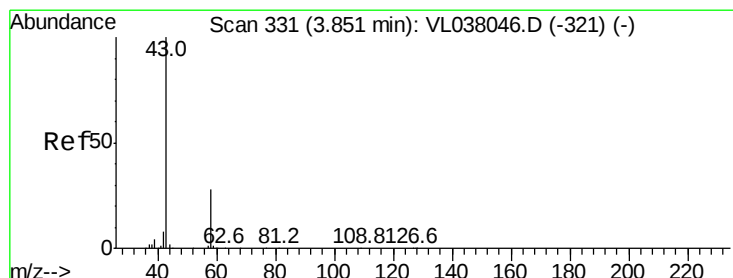
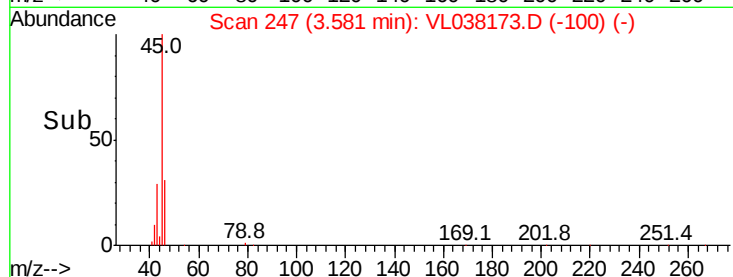
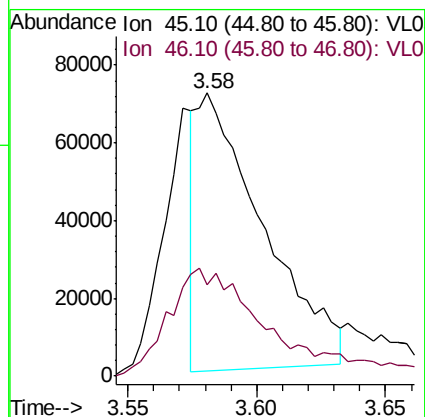
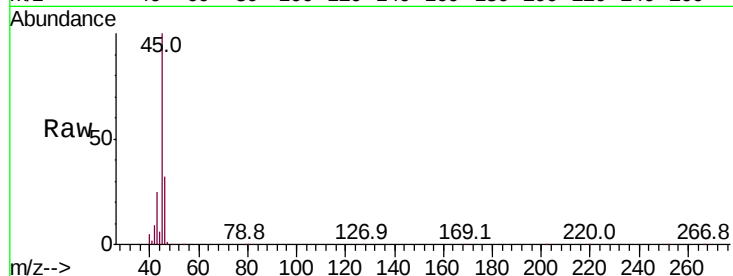
Tgt Ion:101 Resp: 4681
 Ion Ratio Lower Upper
 101 100
 151 98.4 59.0 88.4#





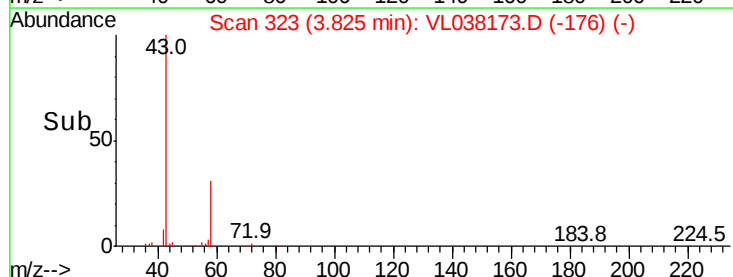
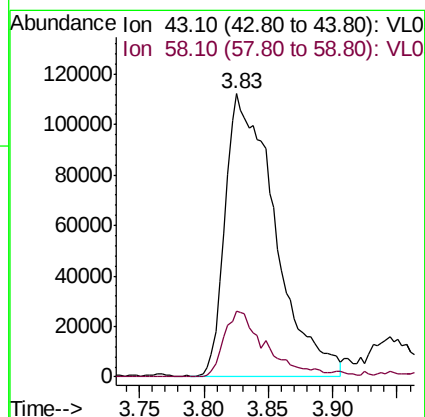
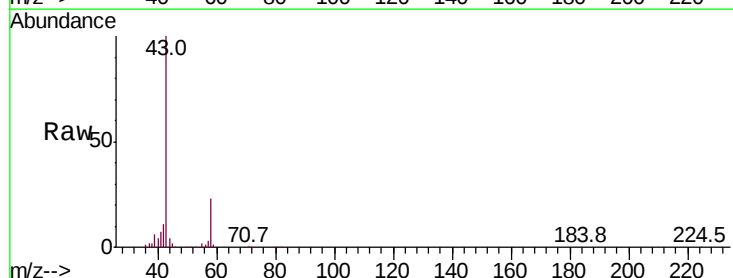
#13
Ethanol
Concen: 19.717 ppbv
RT: 3.58
Delta R.T. MSVOA_L
Lab File: ClientSampleId :
Acq: 14 Dec 2021 19:25

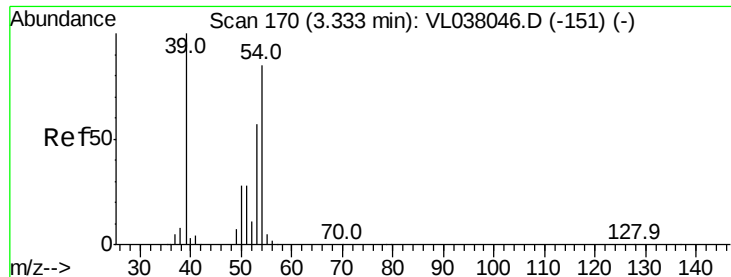
Tot Ion: 45 Resp: 126862
Ion Ratio Lower Upper
45 100
46 64.8 17.6 70.2



#15
Acetone
Concen: 4.011 ppbv
RT: 3.83 min Scan# 323
Delta R.T. -0.03 min
Lab File: VL038173.D
Acq: 14 Dec 2021 19:25

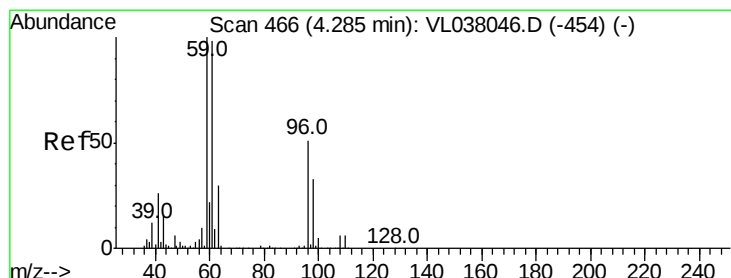
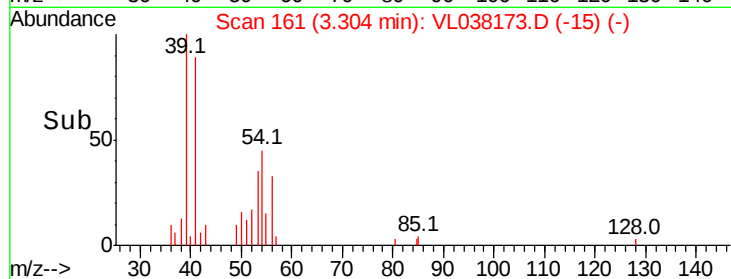
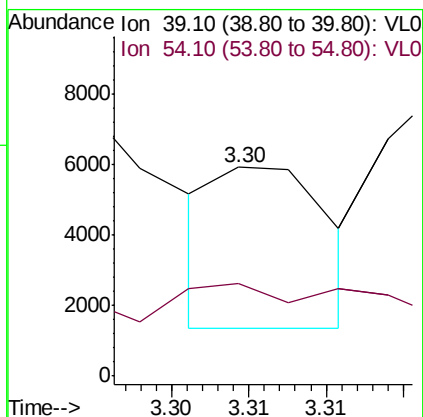
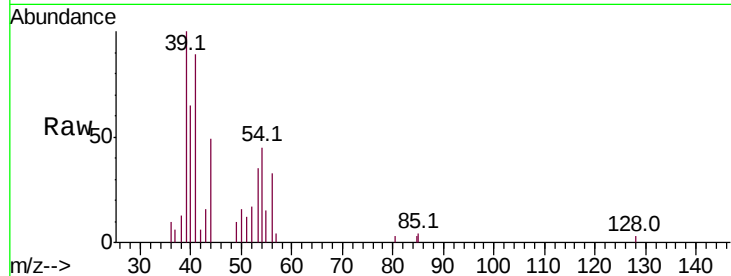
Tgt Ion: 43 Resp: 299362
Ion Ratio Lower Upper
43 100
58 20.2 22.4 33.6#





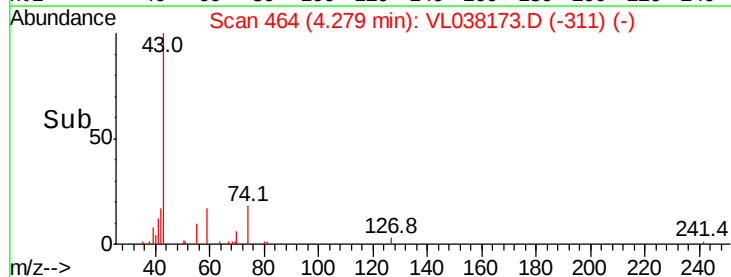
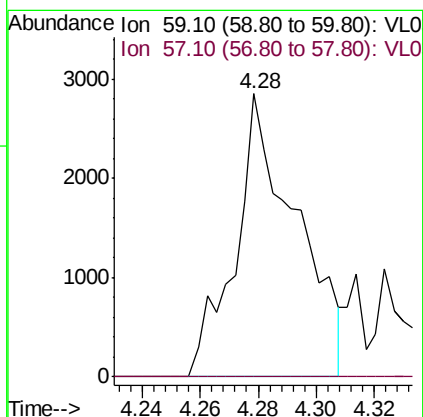
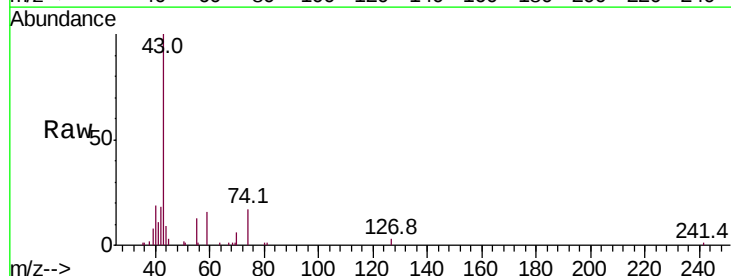
#16
 1,3-Butadiene
 Concen: 0.039 ppbv
 RT: 3.30 Instrument: MSVOA_1
 Delta R.T.:
 Lab File: ClientSampleId:
 Acq: 14 Dec 2021 19:25

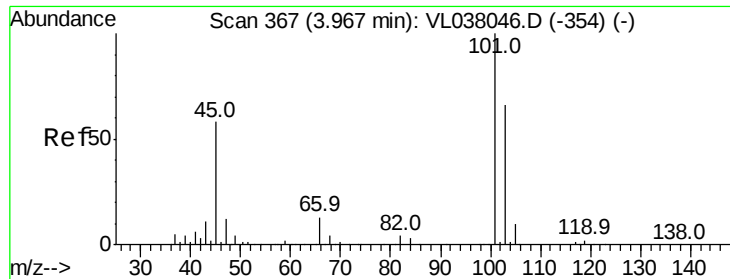
Tot Ion: 39 Resp: 2299
 Ion Ratio Lower Upper
 39 100
 54 281.3 64.4 96.6#



#17
 tert-Butyl alcohol
 Concen: 0.046 ppbv
 RT: 4.28 min Scan# 464
 Delta R.T. -0.01 min
 Lab File: VL038173.D
 Acq: 14 Dec 2021 19:25

Tgt Ion: 59 Resp: 4171
 Ion Ratio Lower Upper
 59 100
 57 0.0 8.6 13.0#





#19

Isopropyl Alcohol

Concen: 2.033 ppbv

RT: 3.94 Instrument:

Delta R.T. MSVOA_1

Lab File: ClientSampleId:

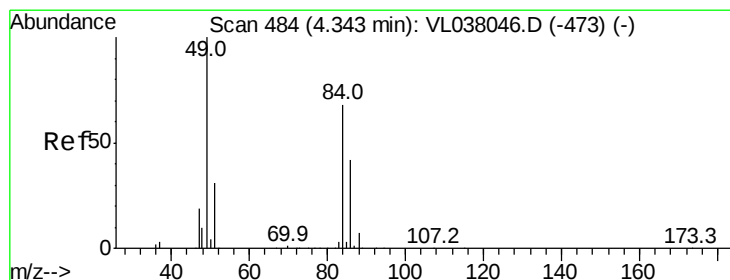
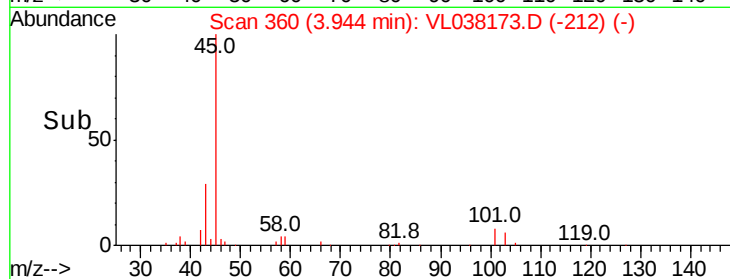
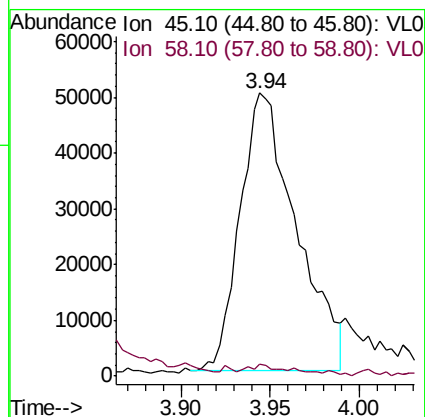
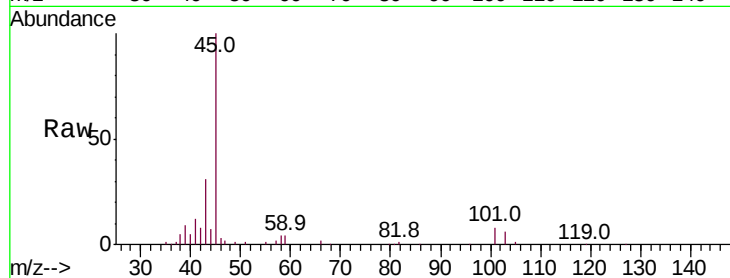
Acq: 14 Dec 2021 19:25

Tot Ion: 45 Resp: 109630

Ion Ratio Lower Upper

45 100

58 4.6 1.4 2.0#



#20

Methylene Chloride

Concen: 2.255 ppbv

RT: 4.31 min Scan# 474

Delta R.T. -0.03 min

Lab File: VL038173.D

Acq: 14 Dec 2021 19:25

Tgt Ion: 84 Resp: 94294

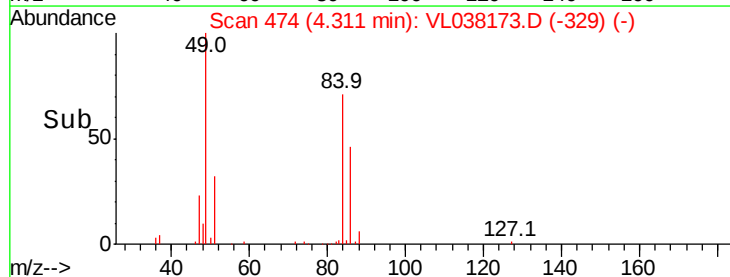
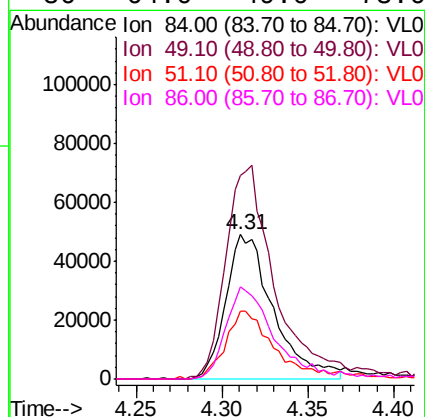
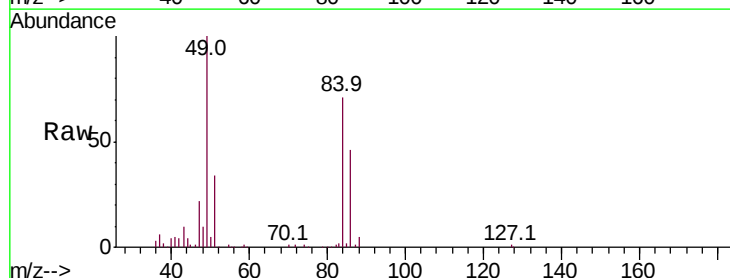
Ion Ratio Lower Upper

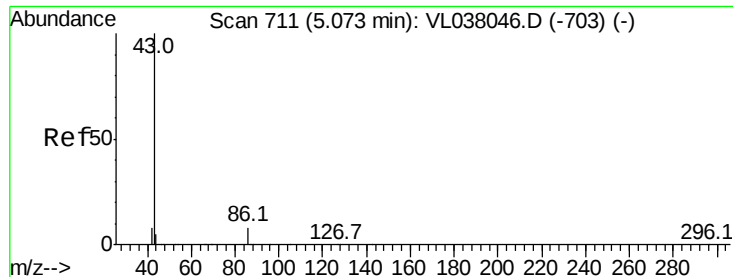
84 100

49 139.0 118.2 177.2

51 46.8 36.8 55.2

86 64.0 49.0 73.6





#23

Vinyl Acetate

Concen: 0.061 ppbv

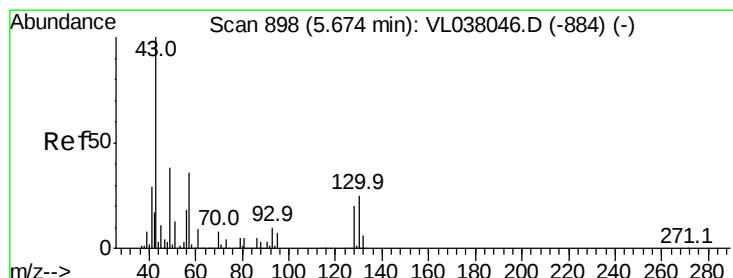
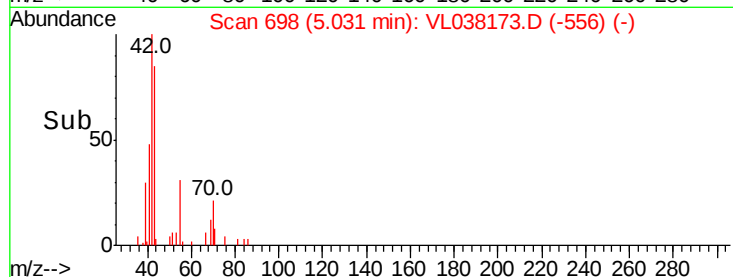
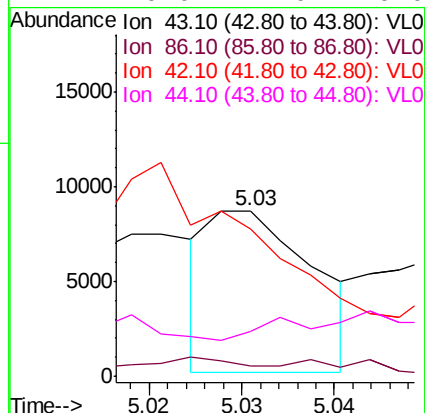
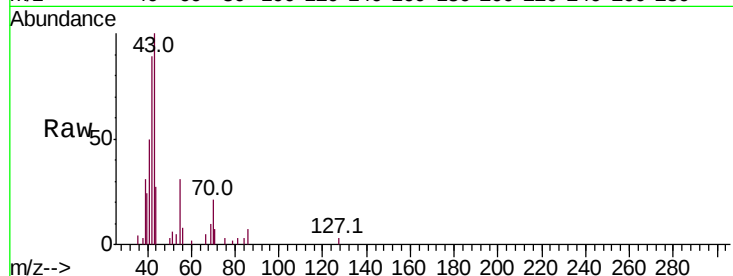
RT: 5.03 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

Acq: 14 Dec 2021 19:25

Tot Ion:	43	Resp:	6637
Ion	Ratio	Lower	Upper
43	100		
86	3.0	5.3	7.9#
42	98.7	7.0	10.6#
44	6.0	4.0	6.0#



#25

Ethyl Acetate

Concen: 0.367 ppbv

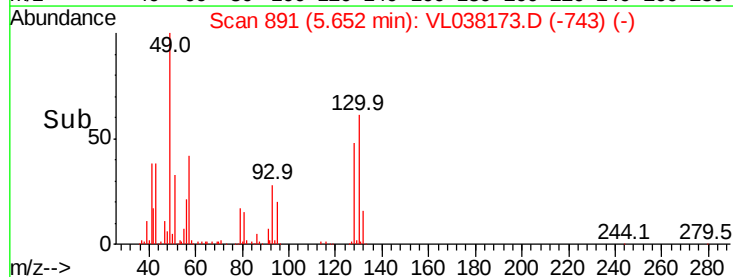
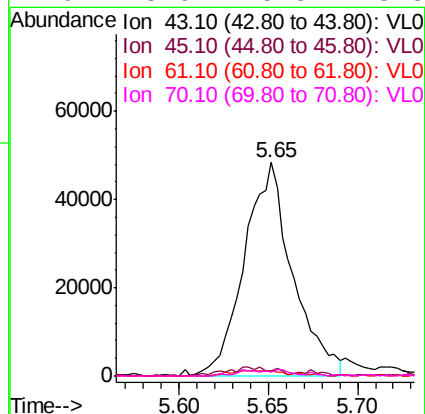
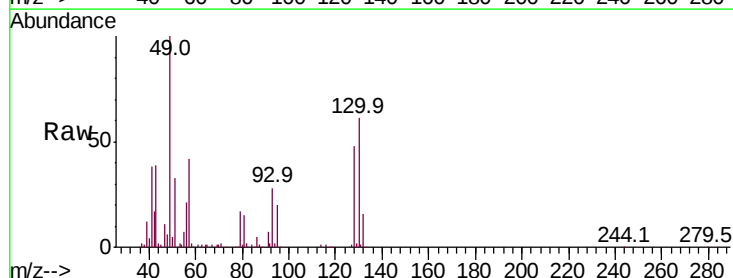
RT: 5.65 min Scan# 891

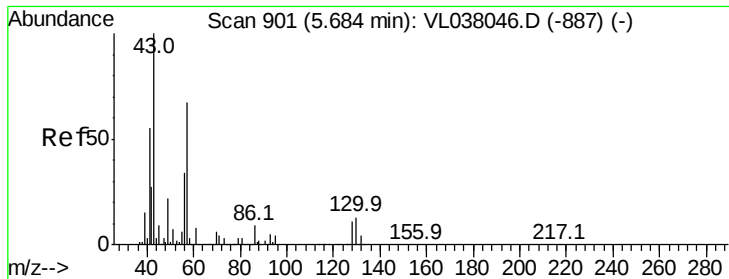
Delta R.T. -0.02 min

Lab File: VL038173.D

Acq: 14 Dec 2021 19:25

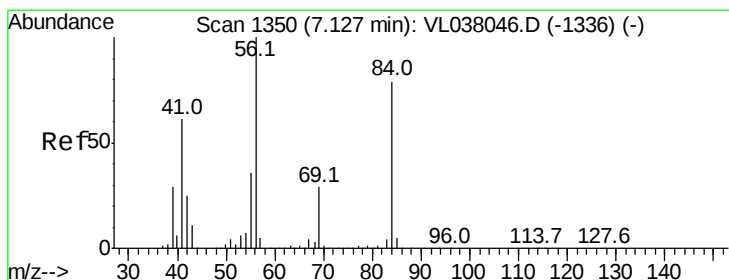
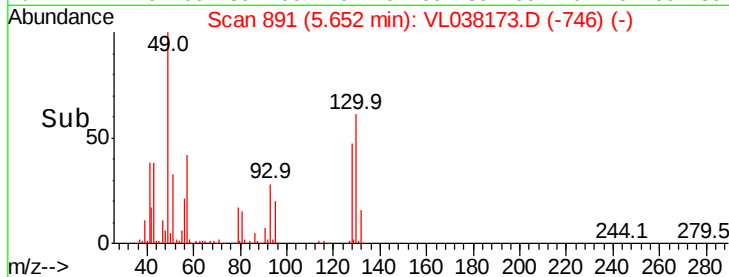
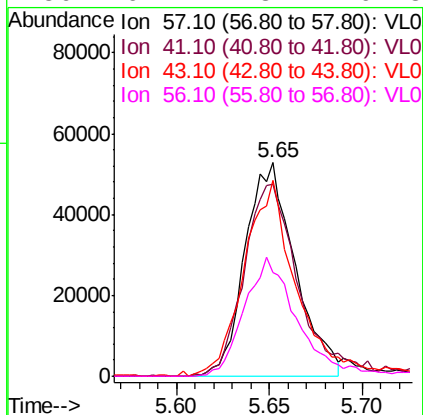
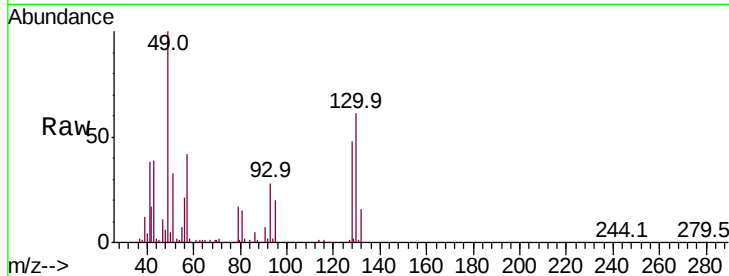
Tgt Ion:	43	Resp:	91021
Ion	Ratio	Lower	Upper
43	100		
45	5.6	7.9	11.9#
61	3.2	7.8	11.6#
70	3.6	5.8	8.8#





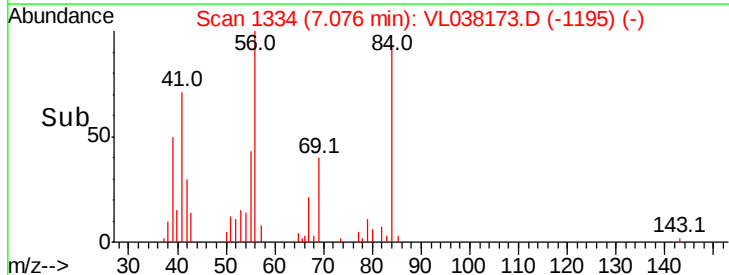
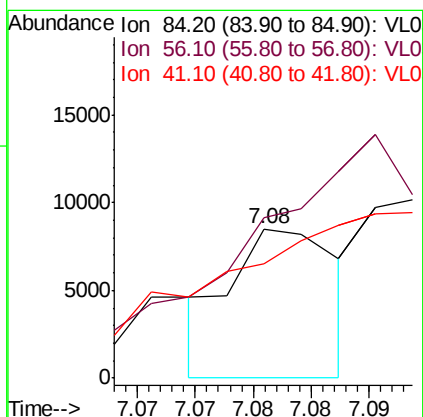
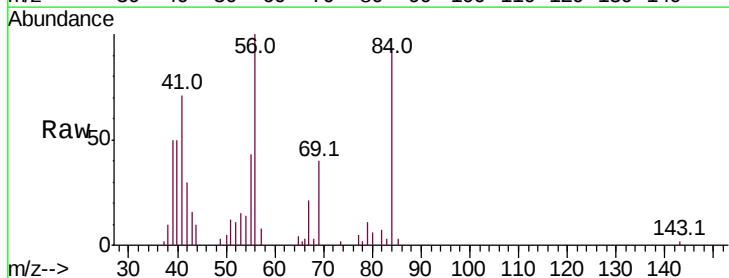
#26
Hexane
Concen: 0.828 ppbv
RT: 5.65
Instrument: MSVOA_1
Delta R.T.:
Lab File: ClientSampleId:
Acq: 14 Dec 2021 19:25

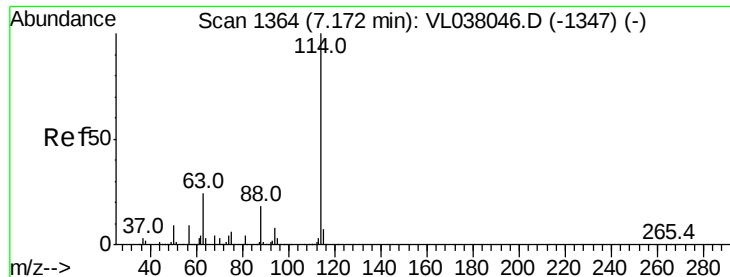
Tot Ion: 57 Resp: 98947
Ion Ratio Lower Upper
57 100
41 101.6 71.4 107.2
43 100.0 174.6 261.8#
56 61.4 43.2 64.8



#30
Cyclohexane
Concen: 0.050 ppbv
RT: 7.08 min Scan# 1334
Delta R.T. -0.05 min
Lab File: VL038173.D
Acq: 14 Dec 2021 19:25

Tgt Ion: 84 Resp: 5438
Ion Ratio Lower Upper
84 100
56 0.0 108.1 162.1#
41 0.0 64.4 96.6#





#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 7.13 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

Acq: 14 Dec 2021 19:25

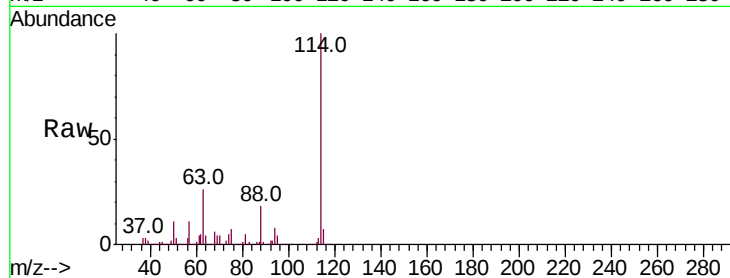
Tot Ion:114 Resp: 2298775

Ion Ratio Lower Upper

114 100

63 27.3 19.7 29.5

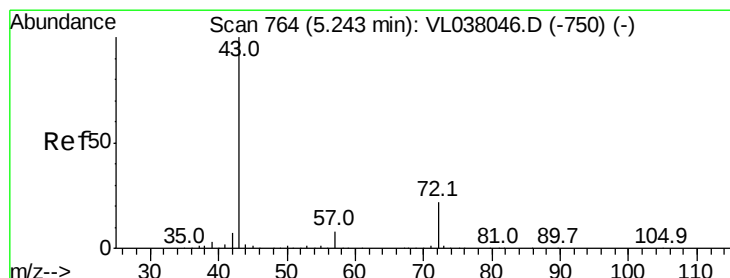
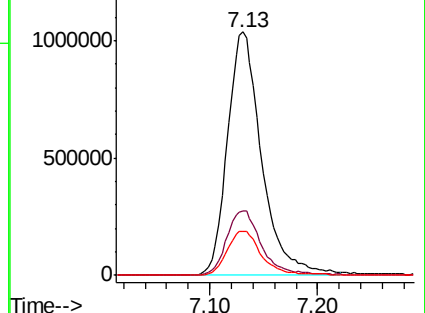
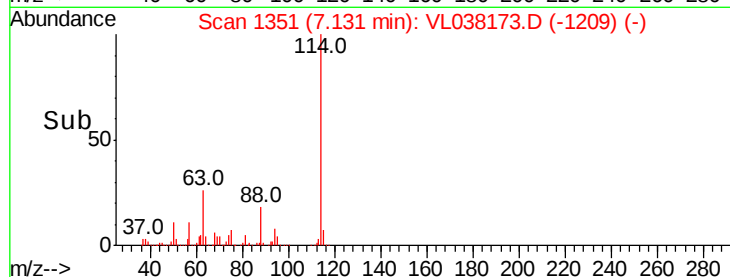
88 18.7 14.4 21.6



Abundance Ion 114.10 (113.80 to 114.80): VL0

Ion 63.10 (62.80 to 63.80): VL0

Ion 88.10 (87.80 to 88.80): VL0



#34

2-Butanone

Concen: 0.116 ppbv

RT: 5.21 min Scan# 755

Delta R.T. -0.03 min

Lab File: VL038173.D

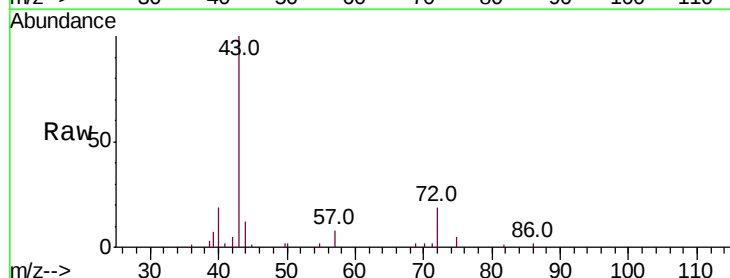
Acq: 14 Dec 2021 19:25

Tgt Ion: 43 Resp: 10767

Ion Ratio Lower Upper

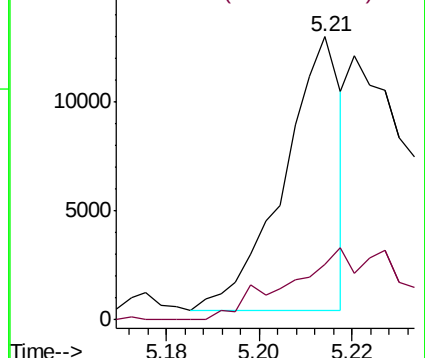
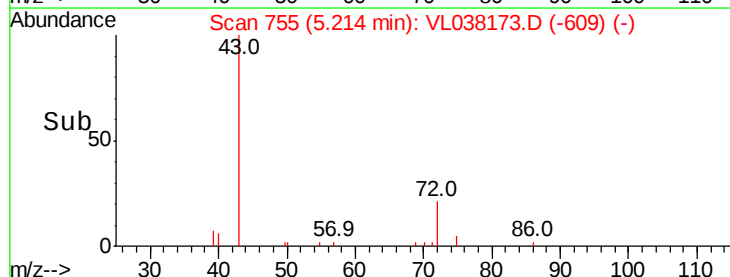
43 100

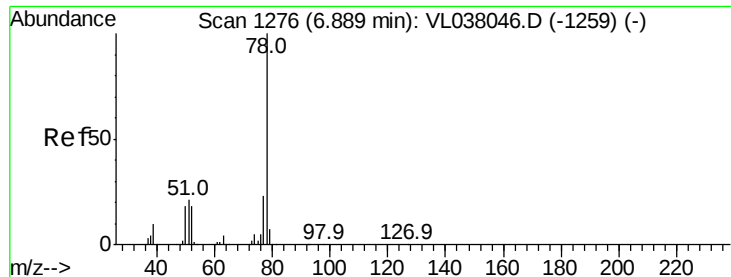
72 0.0 18.8 28.2#



Abundance Ion 43.10 (42.80 to 43.80): VL0

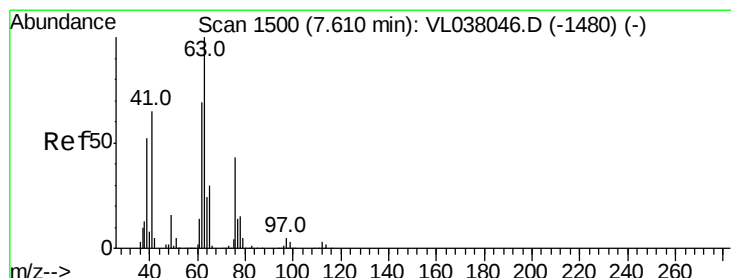
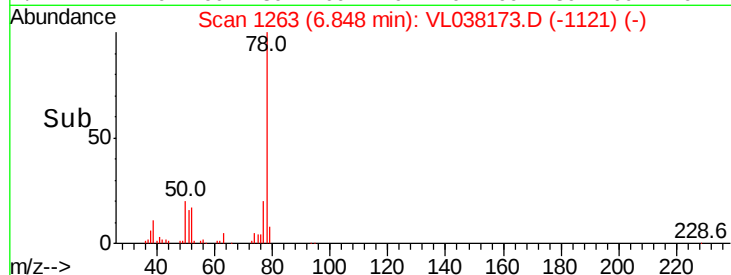
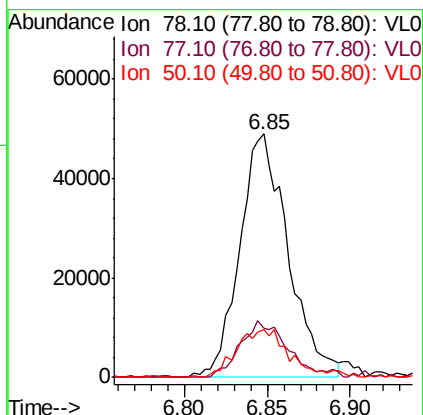
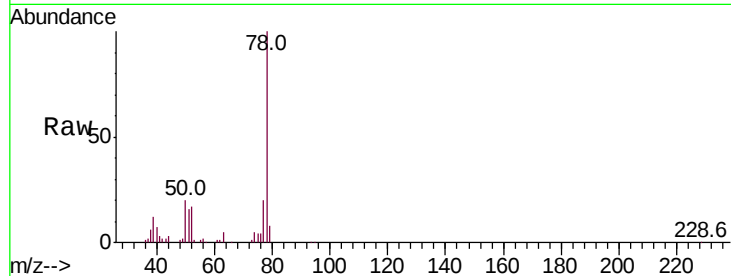
Ion 72.10 (71.80 to 72.80): VL0





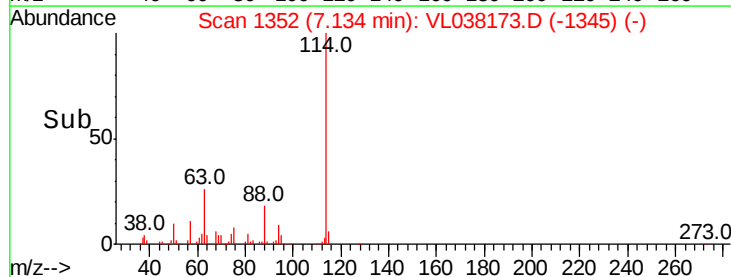
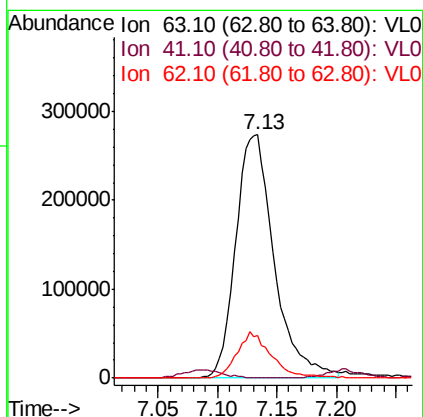
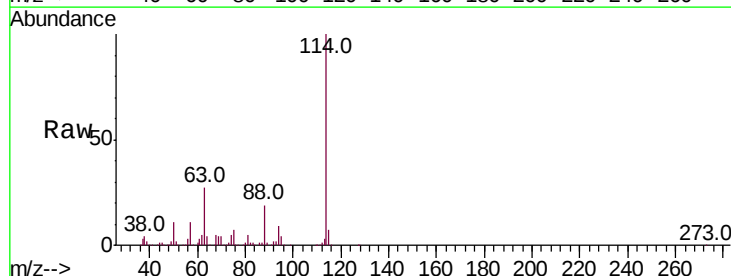
#36
Benzene
Concen: 0.434 ppbv
RT: 6.85
Instrument: MSVOA_L
Delta R.T.:
Lab File: ClientSampleId :
Acq: 14 Dec 2021 19:25

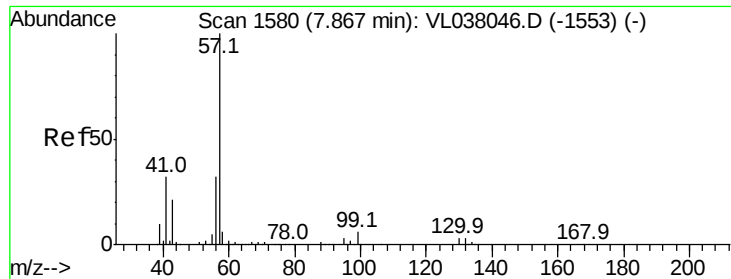
Tot Ion: 78 Resp: 99462
Ion Ratio Lower Upper
78 100
77 20.2 18.2 27.4
50 19.9 14.7 22.1



#39
1,2-Dichloropropane
Concen: 6.970 ppbv
RT: 7.13 min Scan# 1352
Delta R.T. -0.48 min
Lab File: VL038173.D
Acq: 14 Dec 2021 19:25

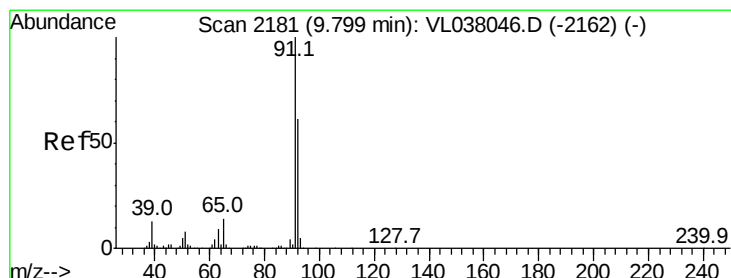
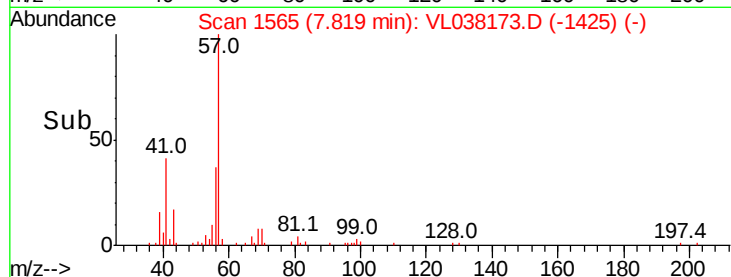
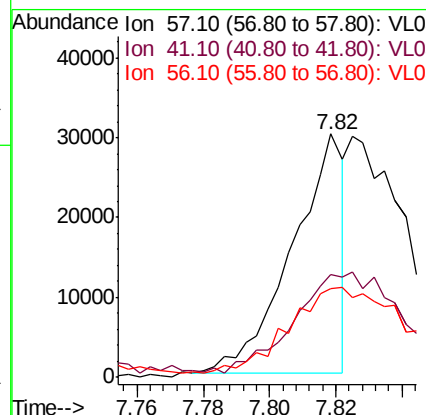
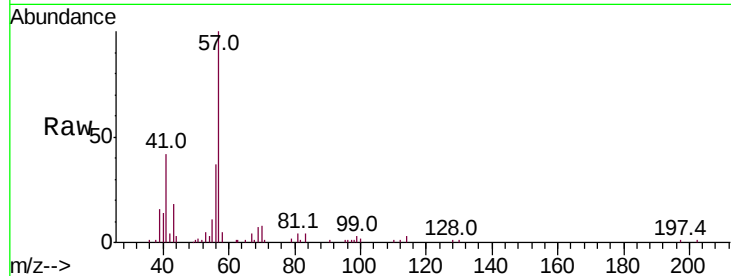
Tgt Ion: 63 Resp: 613138
Ion Ratio Lower Upper
63 100
41 0.0 52.3 78.5#
62 17.5 55.1 82.7#





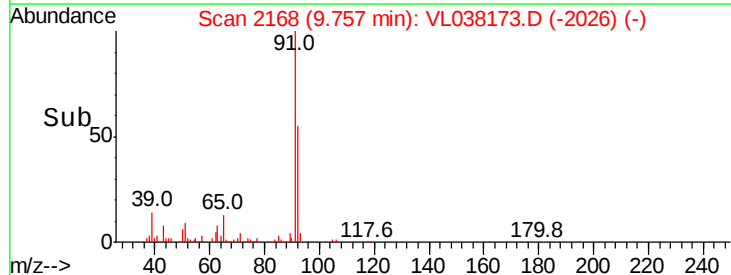
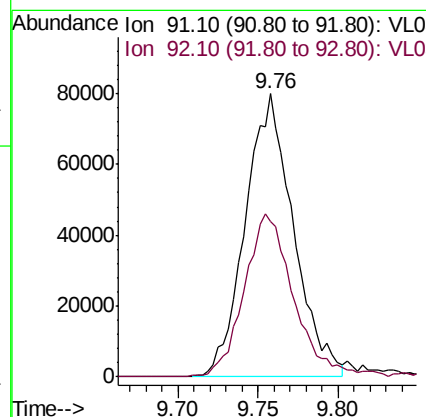
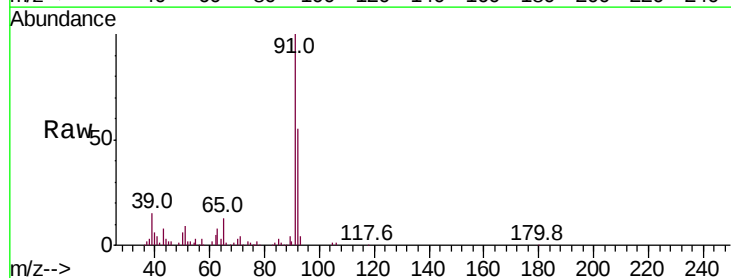
#44
2,2,4-Trimethylpentane
Concen: 0.084 ppbv
RT: 7.82 min
Instrument: MSVOA_1
Delta R.T.:
Lab File: ClientSampleId:
Acq: 14 Dec 2021 19:25

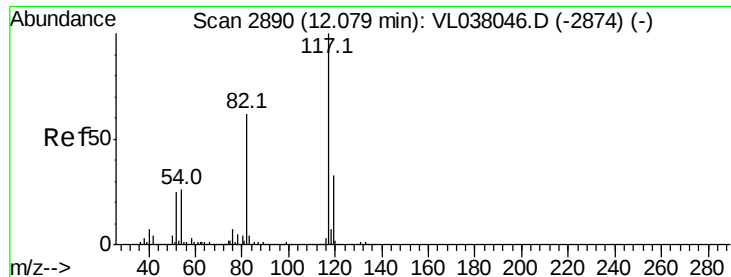
Tot Ion: 57 Resp: 32177
Ion Ratio Lower Upper
57 100
41 0.0 25.8 38.6#
56 0.0 25.6 38.4#



#53
Toluene
Concen: 0.623 ppbv
RT: 9.76 min Scan# 2168
Delta R.T. -0.04 min
Lab File: VL038173.D
Acq: 14 Dec 2021 19:25

Tgt Ion: 91 Resp: 164500
Ion Ratio Lower Upper
91 100
92 61.1 49.7 74.5

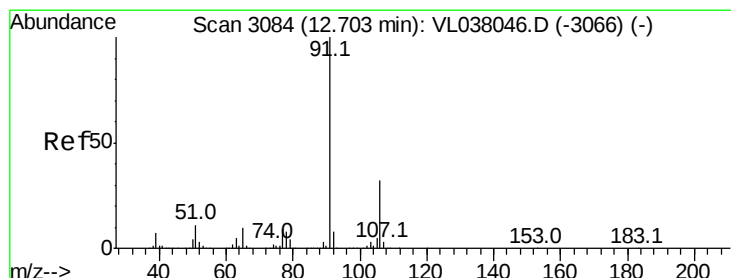
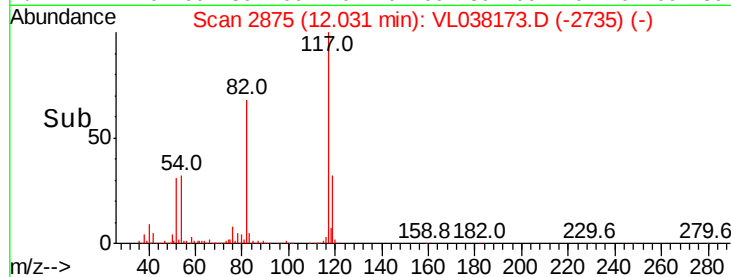
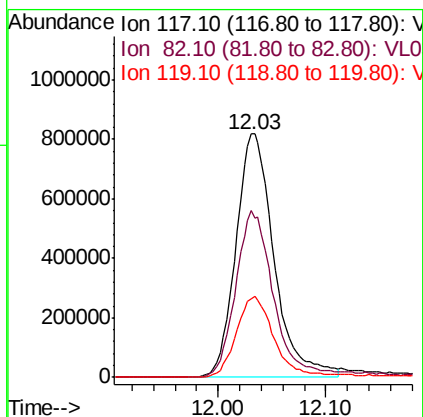
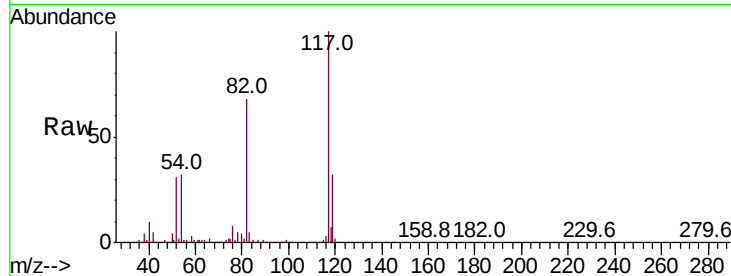




#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 12.03 min
Instrument: MSVOA_1
Delta R.T.:
Lab File: ClientSampleId:
Acq: 14 Dec 2021 19:25

Tot Ion: 117 Resp: 2015781

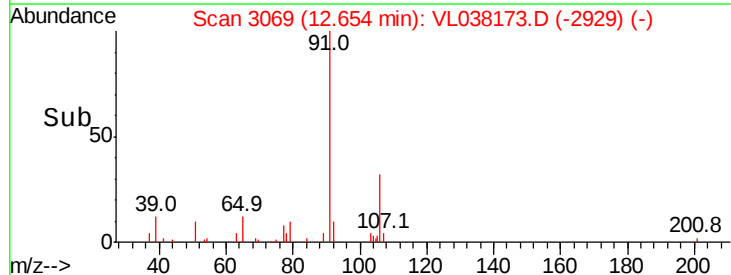
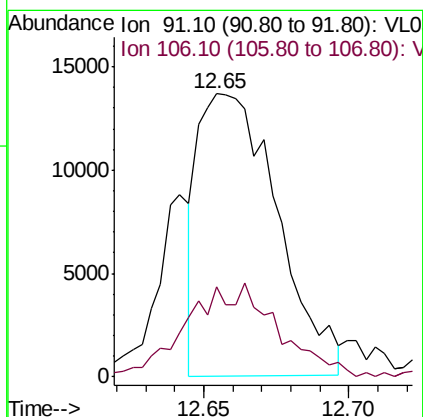
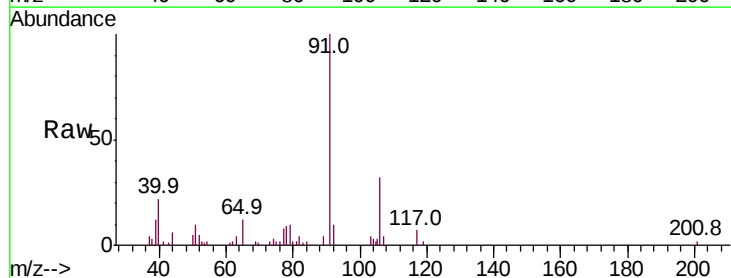
Ion	Ratio	Lower	Upper
117	100		
82	70.6	52.8	79.2
119	34.2	26.8	40.2

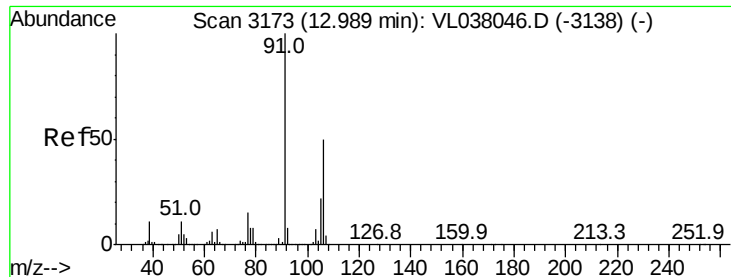


#58
Ethyl Benzene
Concen: 0.078 ppbv
RT: 12.65 min Scan# 3069
Delta R.T.: -0.05 min
Lab File: VL038173.D
Acq: 14 Dec 2021 19:25

Tgt Ion: 91 Resp: 25858

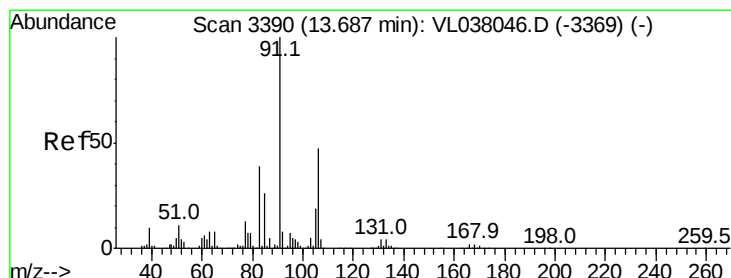
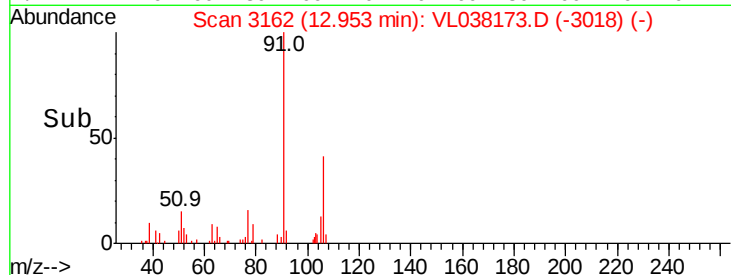
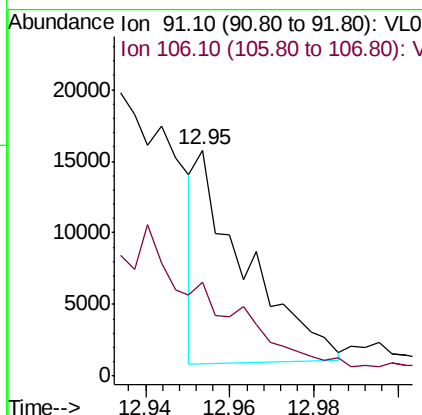
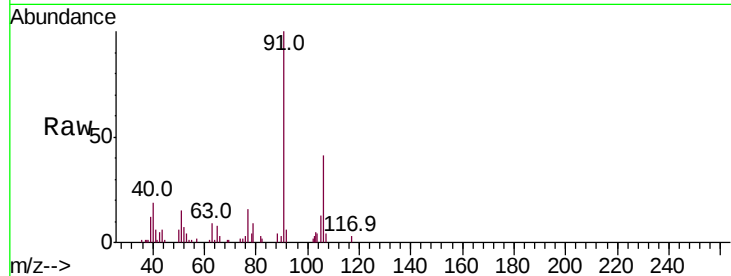
Ion	Ratio	Lower	Upper
91	100		
106	30.3	25.8	38.6





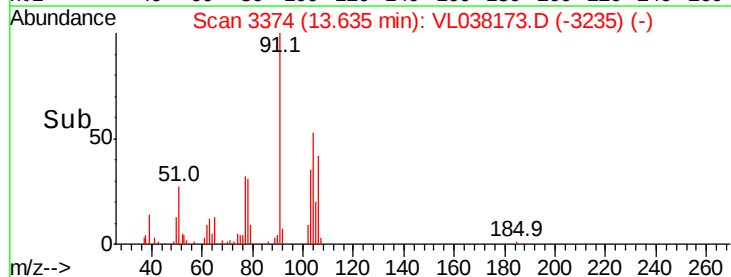
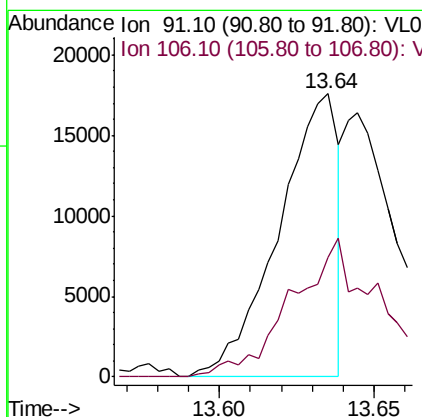
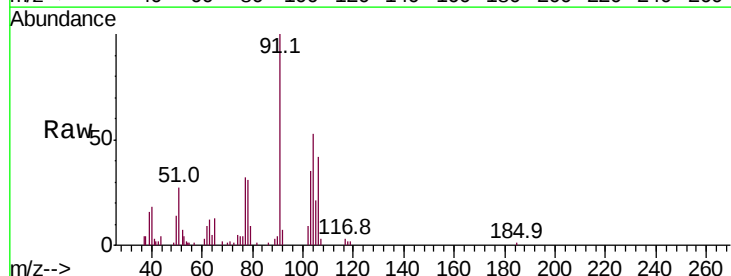
#59
m/p-Xylene
Concen: 0.043 ppbv
RT: 12.95 min
Delta R.T. MSVOA_L
Lab File: ClientSampleId :
Acq: 14 Dec 2021 19:25

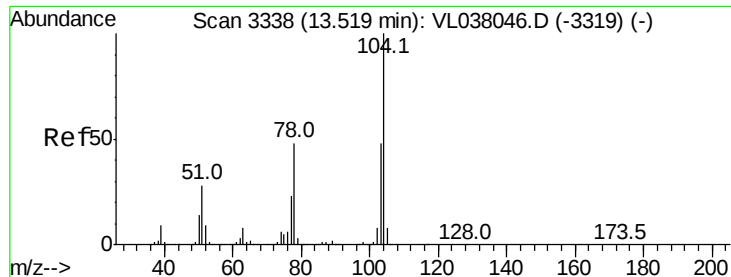
Tot Ion: 91 Resp: 11921
Ion Ratio Lower Upper
91 100
106 0.0 38.1 57.1#



#60
o-Xylene
Concen: 0.090 ppbv
RT: 13.64 min Scan# 3374
Delta R.T. -0.05 min
Lab File: VL038173.D
Acq: 14 Dec 2021 19:25

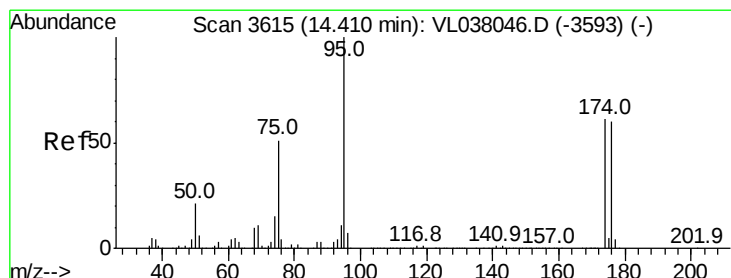
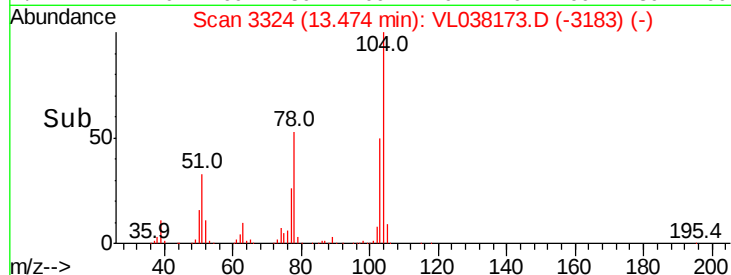
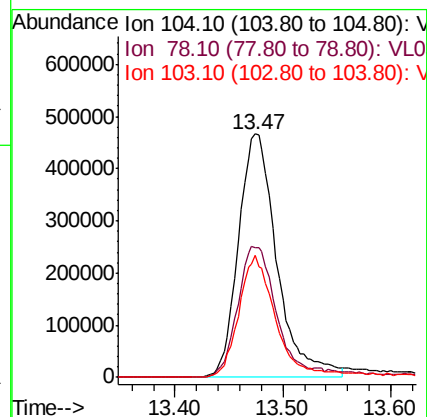
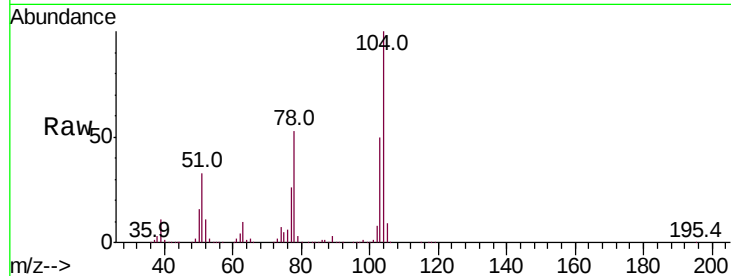
Tgt Ion: 91 Resp: 23478
Ion Ratio Lower Upper
91 100
106 75.3 24.2 72.6#





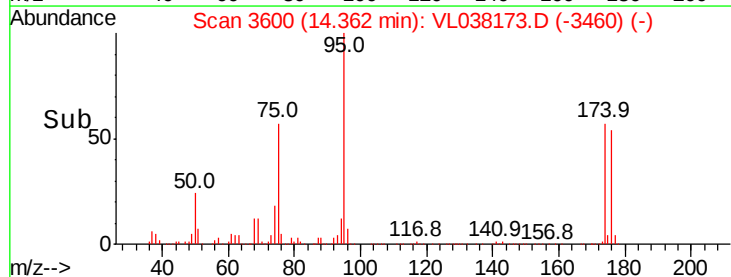
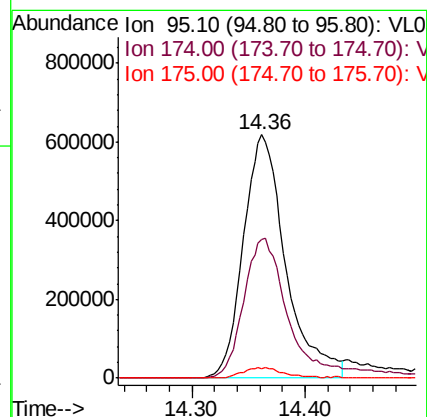
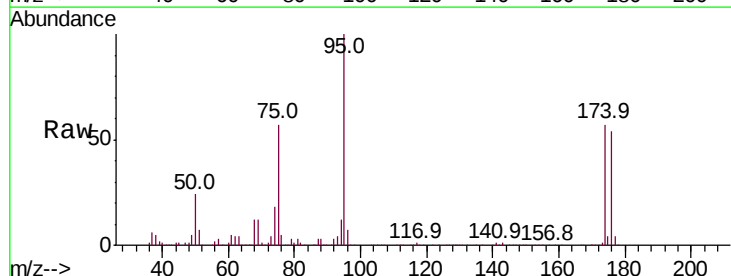
#61
Stvrene
Concen: 8.327 ppbv
RT: 13.47 min
Delta R.T. MSVOA_L
Lab File: ClientSampleId :
Acq: 14 Dec 2021 19:25

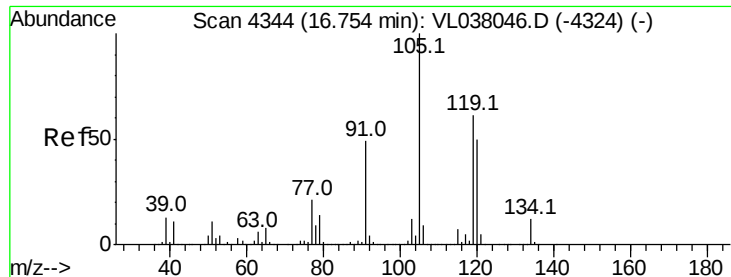
Tot Ion: 104 Resp: 1161563
Ion Ratio Lower Upper
104 100
78 56.9 39.8 59.6
103 49.1 38.2 57.2



#68
1-Bromo-4-Fluorobenzene
Concen: 11.092 ppbv
RT: 14.36 min Scan# 3600
Delta R.T. -0.05 min
Lab File: VL038173.D
Acq: 14 Dec 2021 19:25

Tgt Ion: 95 Resp: 1612771
Ion Ratio Lower Upper
95 100
174 64.6 53.1 79.7
175 4.4 4.0 6.0





#74
 1,2,4-Trimethylbenzene
 Concen: 0.107 ppbv
 RT: 16.71
 Delta R.T: MSVOA_L
 Lab File: ClientSampleId :
 Acq: 14 Dec 2021 19:25

Tot Ion:	105	Resp:	30401
Ion Ratio	Lower	Upper	
105	100		
120	32.0	40.1	60.1#
91	22.0	39.8	59.8#
77	11.2	16.6	25.0#

