

Data Path : Z:\VOASRV\HPCHEM1\MSVOA_L\DATA\VL122921\
 Data File : VL038241.D
 Acq On : 29 Dec 2021 20:38
 Operator : SY/AP
 Sample : M5250-01
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 1ST-FLOOR

Quant Time: Dec 30 06:21:47 2021
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_L\METHODS\VL122121AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Tue Dec 21 17:47:08 2021
 QLast Update : Tue Dec 21 17:47:08 2021
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.67	49	649014	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.18	114	1786987	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.08	117	1514569	10.00	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.41	95	1188139	10.18	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	101.80%

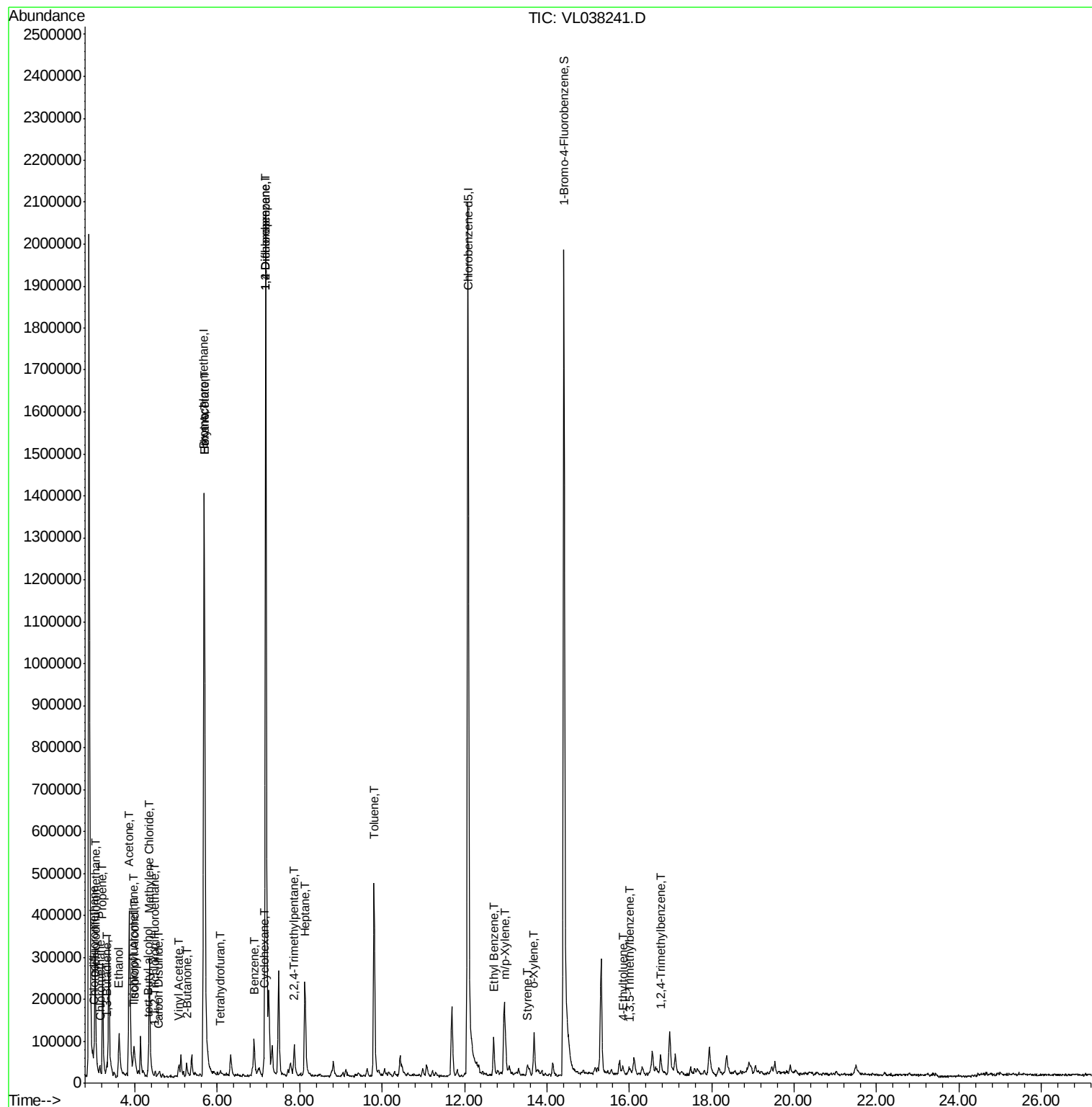
Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	3.06	85	25574	0.209	ppbv	95
3) Chlorodifluoromethane	3.00	51	64992	0.477	ppbv #	81
4) Chloromethane	3.15	50	23061	0.488	ppbv	96
9) Propene	3.21	41	77611	1.639	ppbv	85
10) Heptane	8.12	43	91806	0.764	ppbv	93
11) Trichlorofluoromethane	3.96	101	12047	0.107	ppbv	99
12) 1,1,2-Trichlorotrifluoroet	4.50	101	3547	0.042	ppbv #	65
13) Ethanol	3.61	45	172755	21.518	ppbv #	100
15) Acetone	3.85	43	583869	8.964	ppbv	95
16) 1,3-Butadiene	3.32	39	10000	0.225	ppbv #	67
17) tert-Butyl alcohol	4.32	59	2671	0.037	ppbv #	71
19) Isopropyl Alcohol	3.98	45	85504	2.105	ppbv #	1
20) Methylene Chloride	4.35	84	112710	3.065	ppbv	91
23) Vinyl Acetate	5.07	43	8352	0.095	ppbv #	30
25) Ethyl Acetate	5.69	43	256608	1.454	ppbv #	79
26) Hexane	5.69	57	361328	4.081	ppbv #	46
27) Carbon Disulfide	4.56	76	5514	0.071	ppbv #	51
30) Cyclohexane	7.13	84	8754	0.112	ppbv #	1
34) 2-Butanone	5.26	43	43961	0.818	ppbv	96
36) Benzene	6.89	78	71531	0.429	ppbv	97
39) 1,2-Dichloropropane	7.18	63	451106	7.032	ppbv #	25
41) Tetrahydrofuran	6.08	42	3828	0.097	ppbv #	86
44) 2,2,4-Trimethylpentane	7.87	57	51977	0.184	ppbv #	63
53) Toluene	9.80	91	385228	2.003	ppbv	100
58) Ethyl Benzene	12.71	91	85256	0.363	ppbv	96
59) m/p-Xylene	12.99	91	47579	0.237	ppbv #	30
60) o-Xylene	13.69	91	84724	0.455	ppbv	100
61) Styrene	13.52	104	10581	0.112	ppbv #	72
72) 4-Ethyltoluene	15.84	105	7300	0.034	ppbv #	55
73) 1,3,5-Trimethylbenzene	16.00	105	6426	0.033	ppbv #	50
74) 1,2,4-Trimethylbenzene	16.76	105	34157	0.169	ppbv #	65

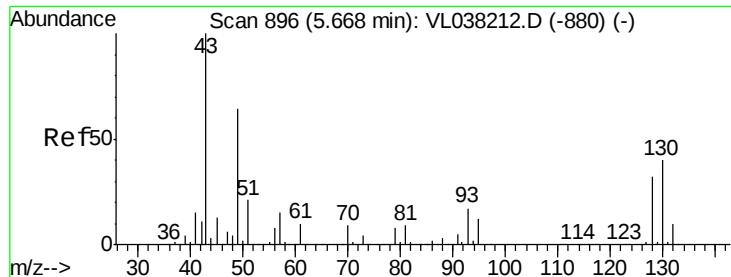
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA_L\DATA\VL122921\
Data File : VL038241.D
Acq On : 29 Dec 2021 20:38
Operator : SY/AP
Sample : M5250-01
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
1ST-FLOOR

Quant Time: Dec 30 06:21:47 2021
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA_L\METHODS\VL122121AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Tue Dec 21 17:47:08 2021
QLast Update : Tue Dec 21 17:47:08 2021
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.67 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

Acq: 29 Dec 2021 20:38

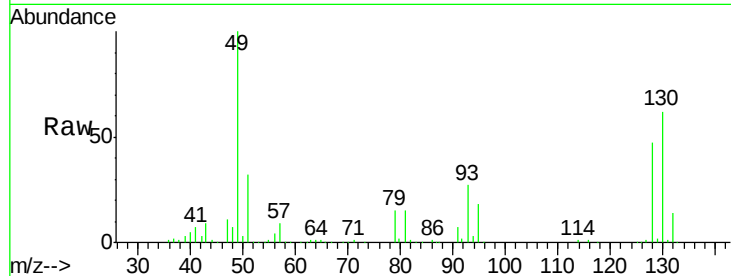
Tgt Ion: 49 Resp: 649014

Ion Ratio Lower Upper

49 100

128 50.3 26.9 80.6

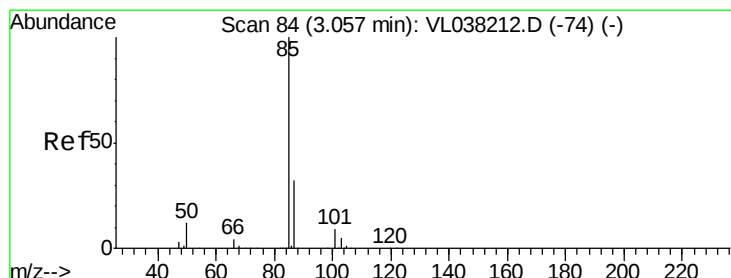
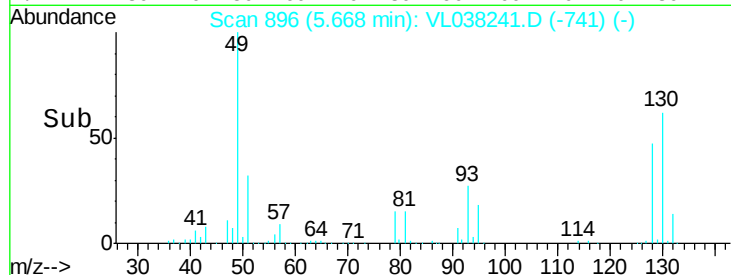
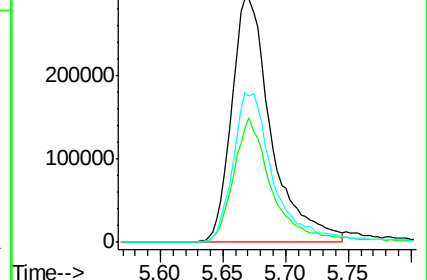
130 63.7 32.3 96.9



Abundance Ion 49.10 (48.80 to 49.80): VL0

Ion 128.00 (127.70 to 128.70): VL0

Ion 130.00 (129.70 to 130.70): VL0



#2

Dichlorodifluoromethane

Concen: 0.209 ppbv

RT: 3.06 min Scan# 84

Delta R.T. -0.00 min

Lab File: VL038241.D

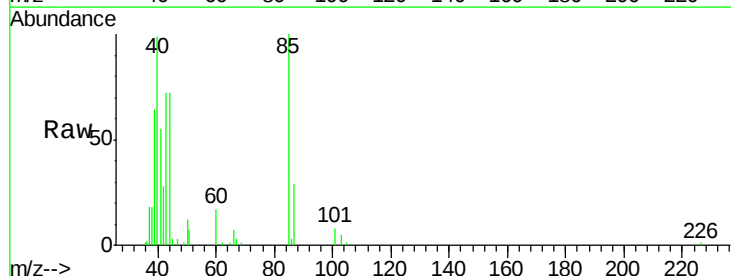
Acq: 29 Dec 2021 20:38

Tgt Ion: 85 Resp: 25574

Ion Ratio Lower Upper

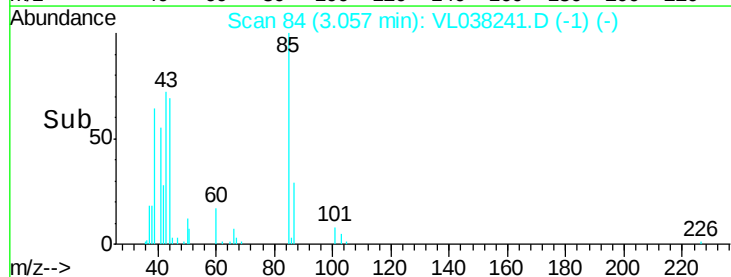
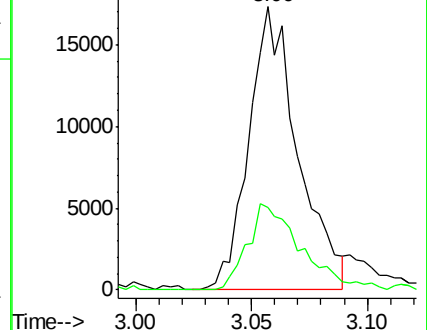
85 100

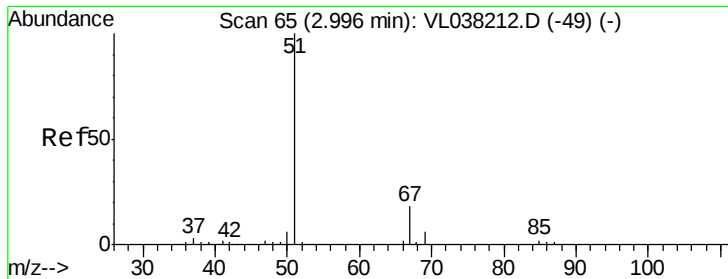
87 29.2 25.4 38.2



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0





#3

Chlorodifluoromethane

Concen: 0.477 ppbv

RT: 3.00 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

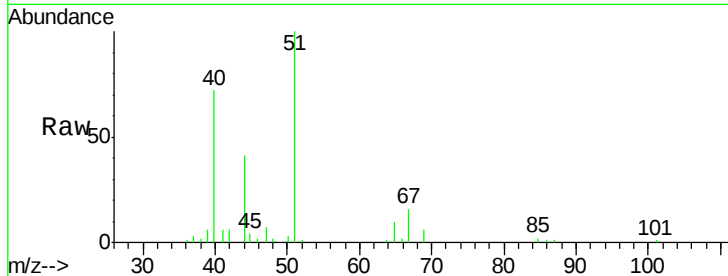
Acq: 29 Dec 2021 20:38

Tgt Ion: 51 Resp: 64992

Ion Ratio Lower Upper

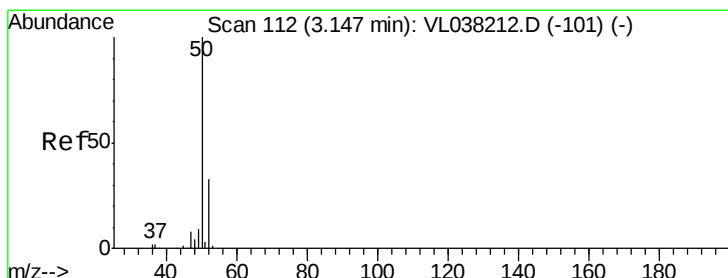
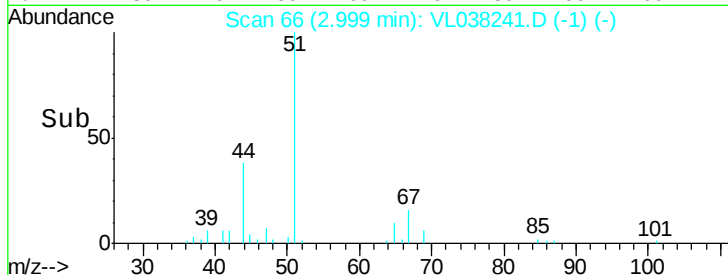
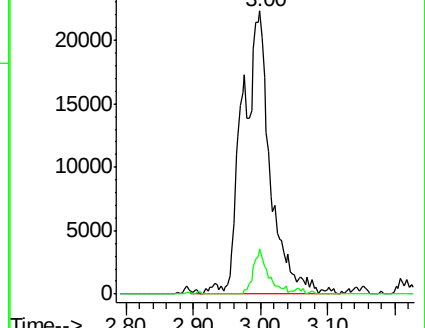
51 100

67 9.2 14.0 21.0#



Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0



#4

Chloromethane

Concen: 0.488 ppbv

RT: 3.15 min Scan# 113

Delta R.T. 0.00 min

Lab File: VL038241.D

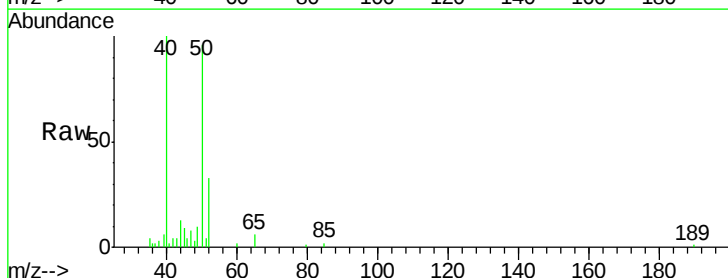
Acq: 29 Dec 2021 20:38

Tgt Ion: 50 Resp: 23061

Ion Ratio Lower Upper

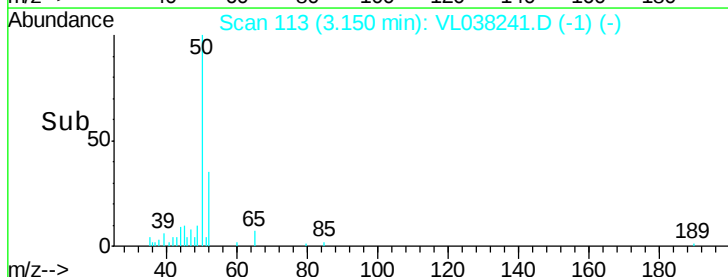
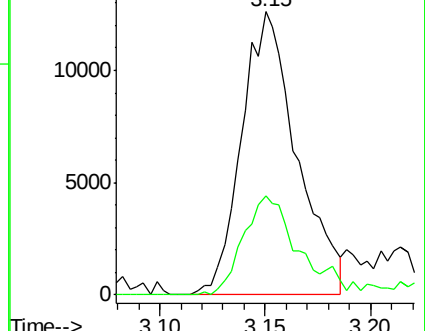
50 100

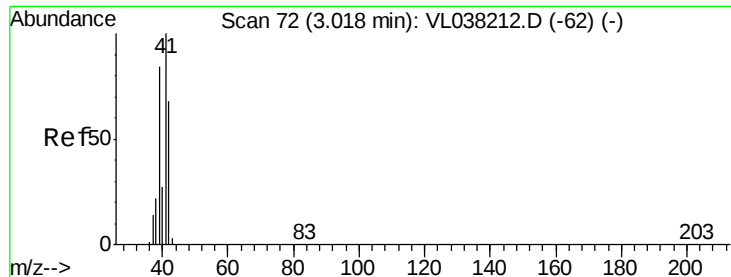
52 34.9 26.2 39.2



Abundance Ion 50.10 (49.80 to 50.80): VL0

Ion 52.10 (51.80 to 52.80): VL0





#9

Propene

Concen: 1.639 ppbv

RT: 3.21 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

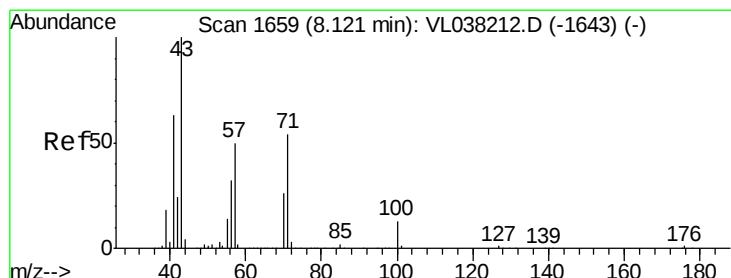
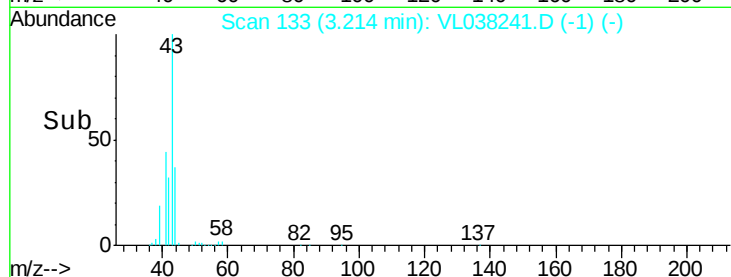
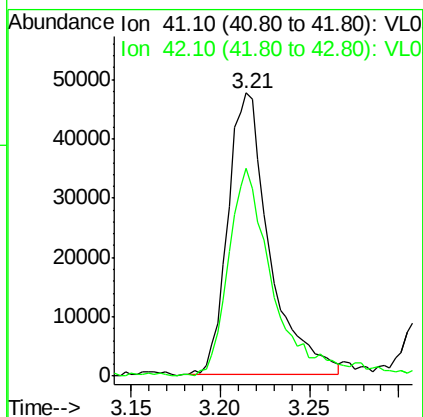
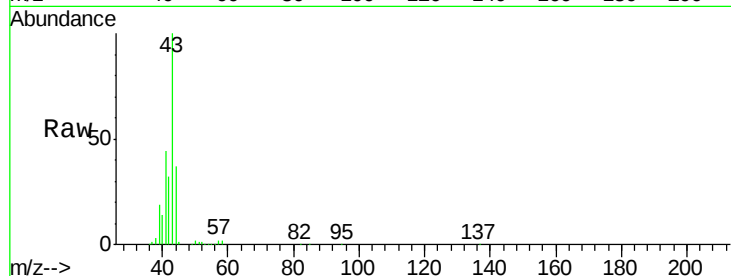
Acq: 29 Dec 2021 20:38 1ST-FLOOR

Tgt Ion: 41 Resp: 77611

Ion Ratio Lower Upper

41 100

42 81.5 55.5 83.3



#10

Heptane

Concen: 0.764 ppbv

RT: 8.12 min Scan# 1660

Delta R.T. 0.00 min

Lab File: VL038241.D

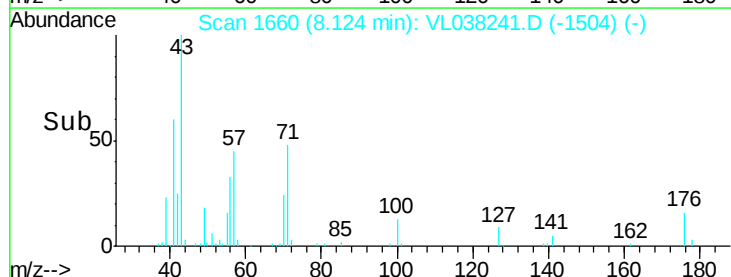
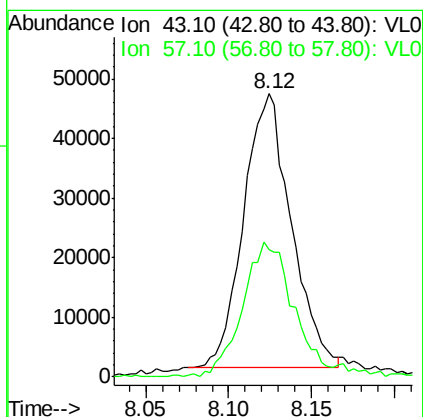
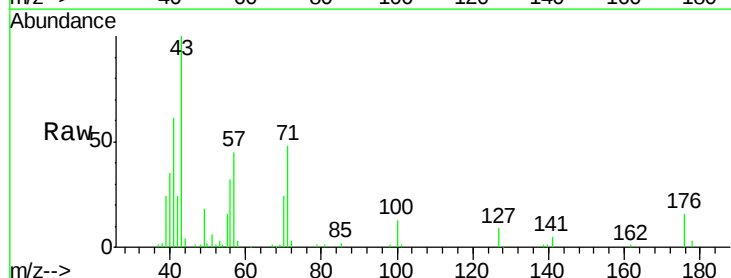
Acq: 29 Dec 2021 20:38

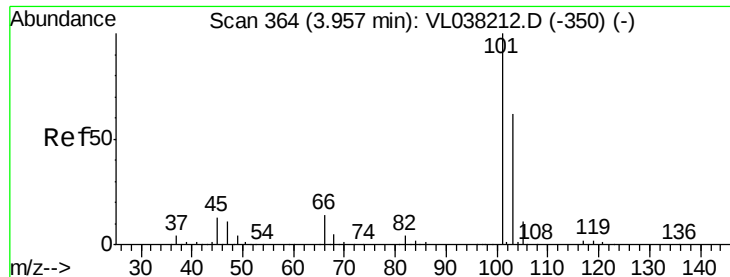
Tgt Ion: 43 Resp: 91806

Ion Ratio Lower Upper

43 100

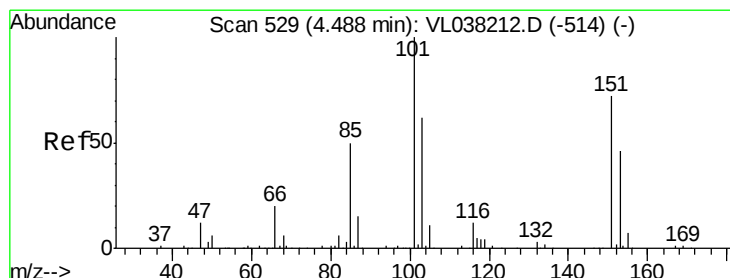
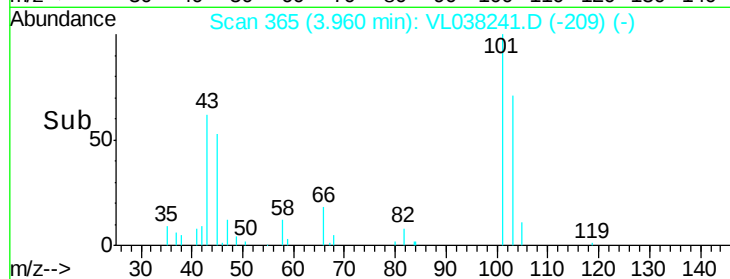
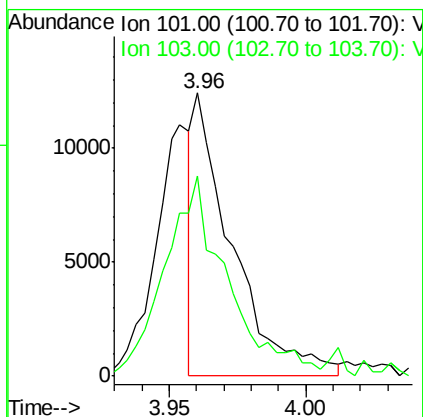
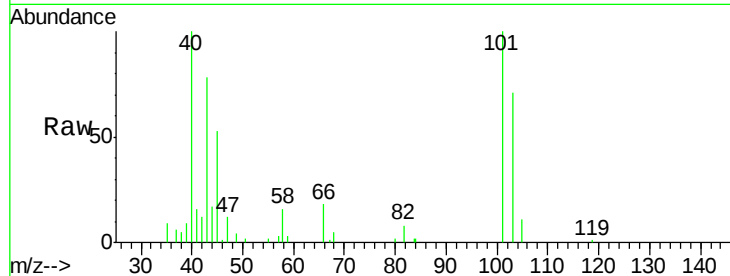
57 55.0 40.3 60.5





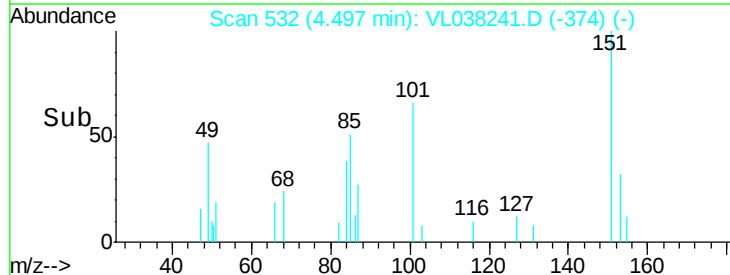
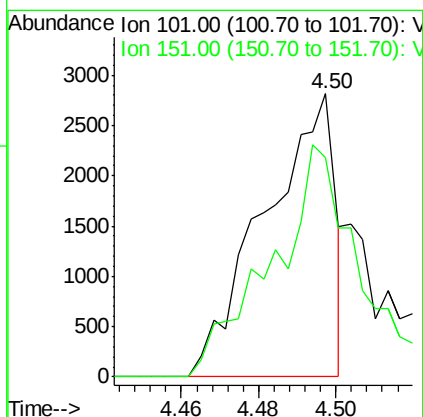
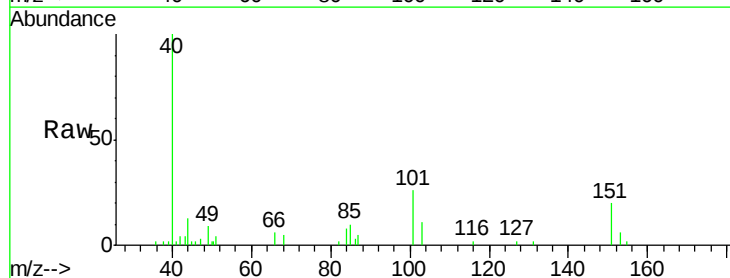
#11
 Trichlorofluoromethane
 Concen: 0.107 ppbv
 RT: 3.96
 Instrument: MSVOA_1
 Delta R.T.:
 Lab File: ClientSampleId:
 Acq: 29 Dec 2021 20:38

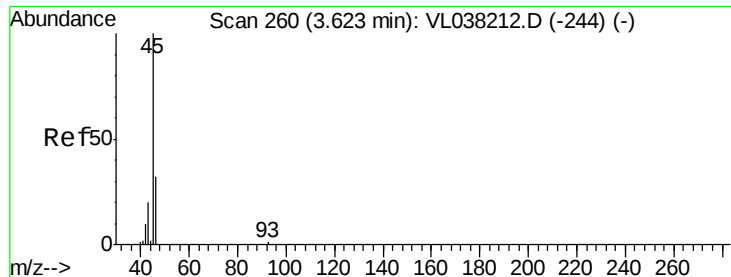
Tgt Ion:101 Resp: 12047
 Ion Ratio Lower Upper
 101 100
 103 63.3 49.9 74.9



#12
 1,1,2-Trichlorotrifluoroethane
 Concen: 0.042 ppbv
 RT: 4.50 min Scan# 532
 Delta R.T. 0.01 min
 Lab File: VL038241.D
 Acq: 29 Dec 2021 20:38

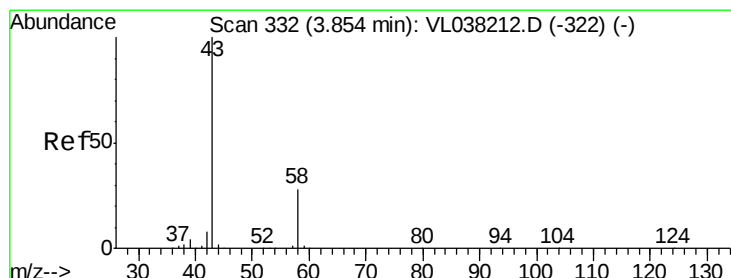
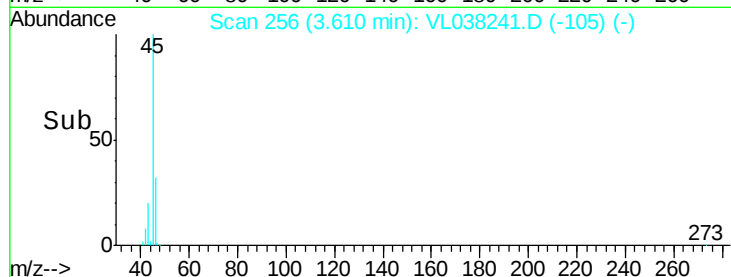
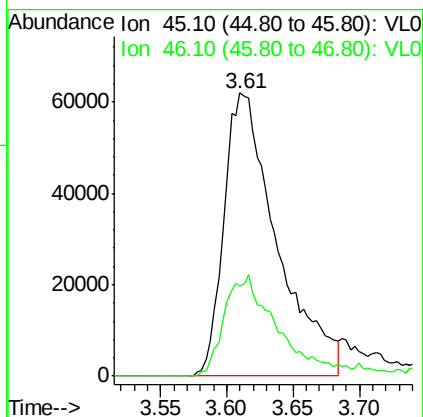
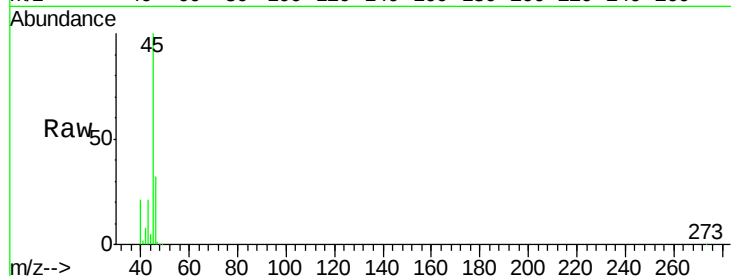
Tgt Ion:101 Resp: 3547
 Ion Ratio Lower Upper
 101 100
 151 102.5 58.6 87.8#





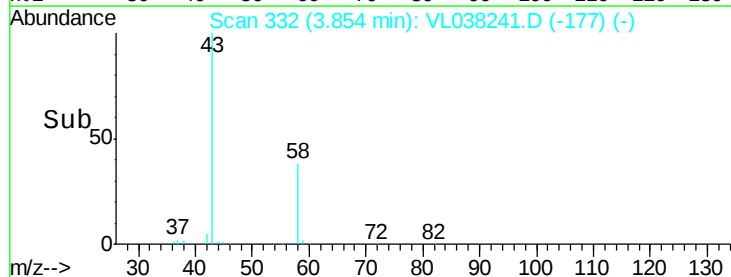
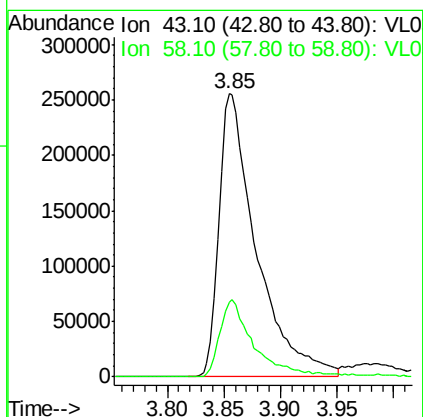
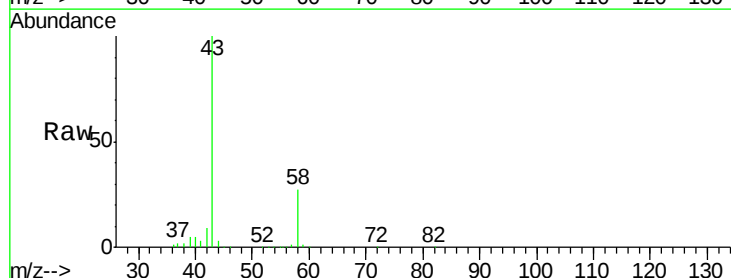
#13
Ethanol
Concen: 21.518 ppbv
RT: 3.61
Delta R.T. MSVOA_L
Lab File: ClientSampleId :
Acq: 29 Dec 2021 20:38

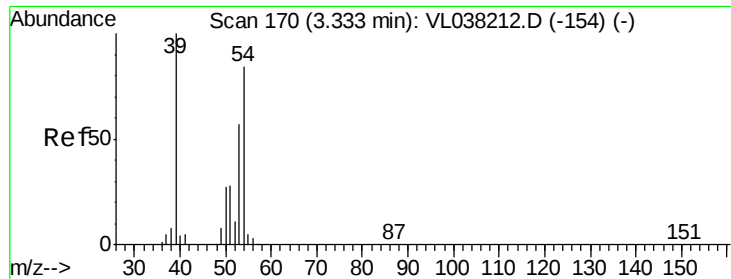
Tgt Ion: 45 Resp: 172755
Ion Ratio Lower Upper
45 100
46 38.3 0.0 0.0#



#15
Acetone
Concen: 8.964 ppbv
RT: 3.85 min Scan# 332
Delta R.T. -0.00 min
Lab File: VL038241.D
Acq: 29 Dec 2021 20:38

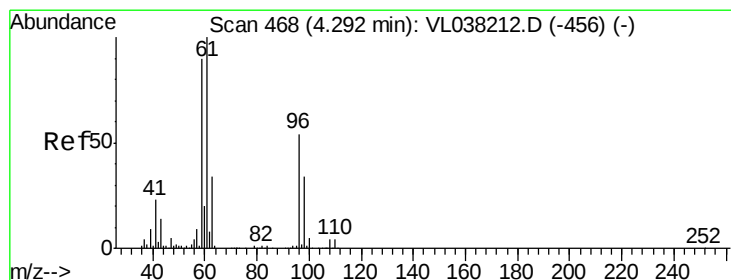
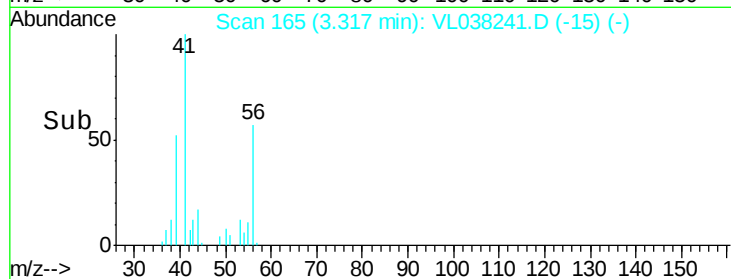
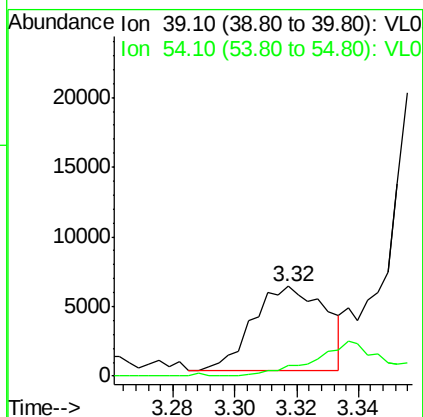
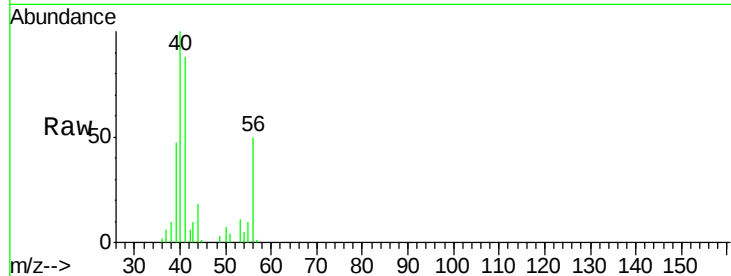
Tgt Ion: 43 Resp: 583869
Ion Ratio Lower Upper
43 100
58 26.3 23.3 34.9





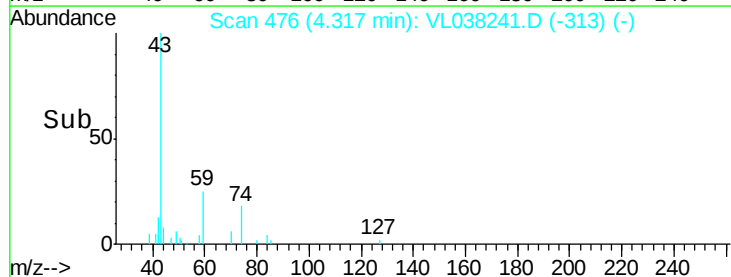
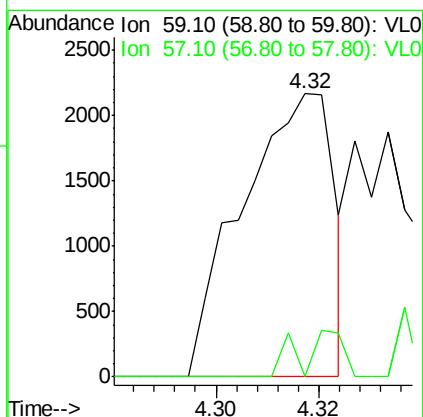
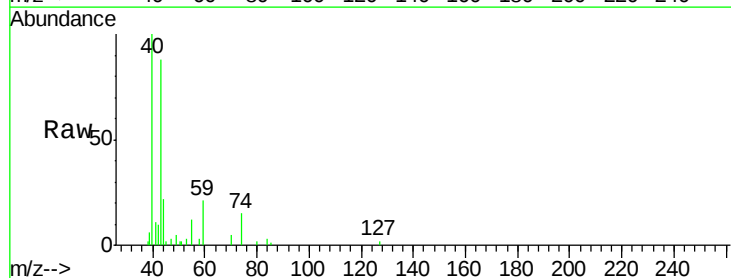
#16
 1,3-Butadiene
 Concen: 0.225 ppbv
 RT: 3.32
 Delta R.T. MSVOA_L
 Lab File: ClientSampleId:
 Acq: 29 Dec 2021 20:38

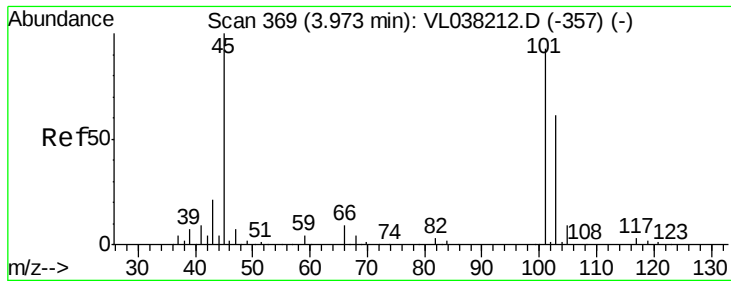
Tgt Ion: 39 Resp: 10000
 Ion Ratio Lower Upper
 39 100
 54 49.8 62.9 94.3#



#17
 tert-Butyl alcohol
 Concen: 0.037 ppbv
 RT: 4.32 min Scan# 476
 Delta R.T. 0.03 min
 Lab File: VL038241.D
 Acq: 29 Dec 2021 20:38

Tgt Ion: 59 Resp: 2671
 Ion Ratio Lower Upper
 59 100
 57 0.0 8.7 13.1#





#19

Isopropyl Alcohol

Concen: 2.105 ppbv

RT: 3.98 Instrument: MSVOA_1

Delta R.T.

Lab File: ClientSampleId:

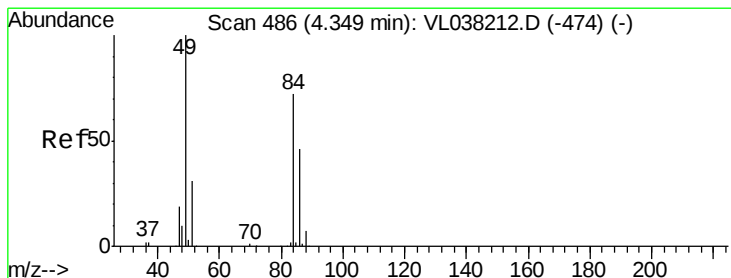
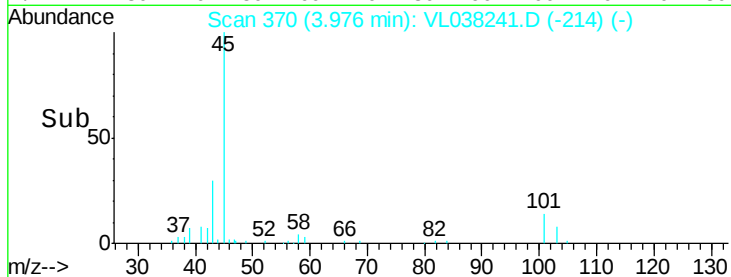
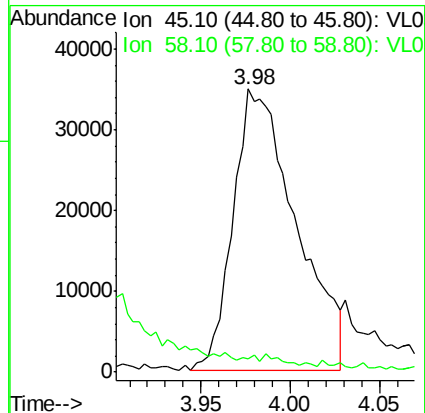
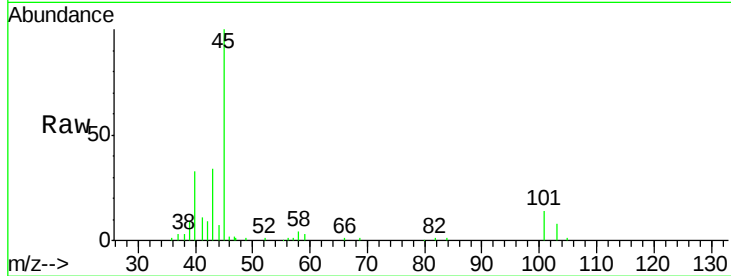
Acq: 29 Dec 2021 20:38

Tgt Ion: 45 Resp: 85504

Ion Ratio Lower Upper

45 100

58 180.8 32.4 48.6#



#20

Methylene Chloride

Concen: 3.065 ppbv

RT: 4.35 min Scan# 486

Delta R.T. -0.00 min

Lab File: VL038241.D

Acq: 29 Dec 2021 20:38

Tgt Ion: 84 Resp: 112710

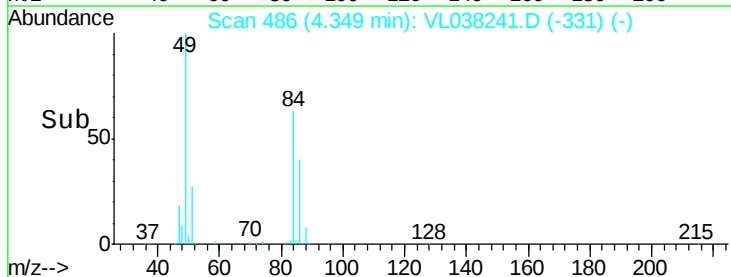
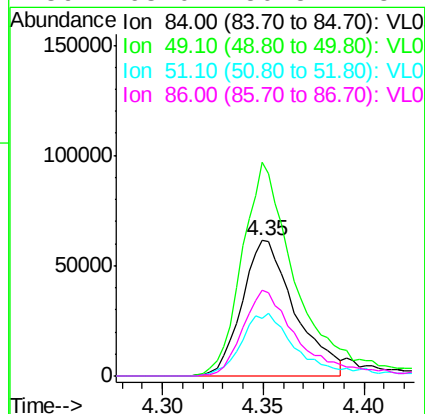
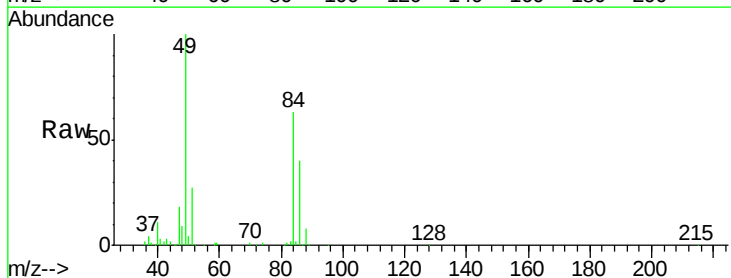
Ion Ratio Lower Upper

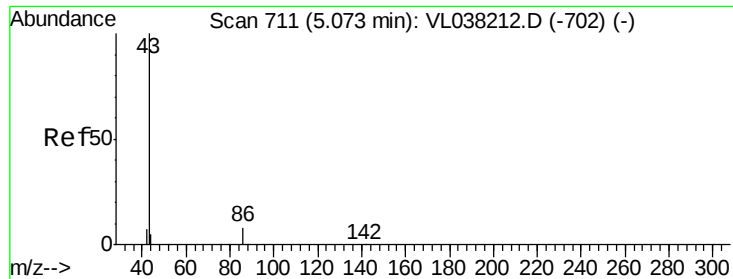
84 100

49 157.3 110.6 166.0

51 42.3 34.2 51.2

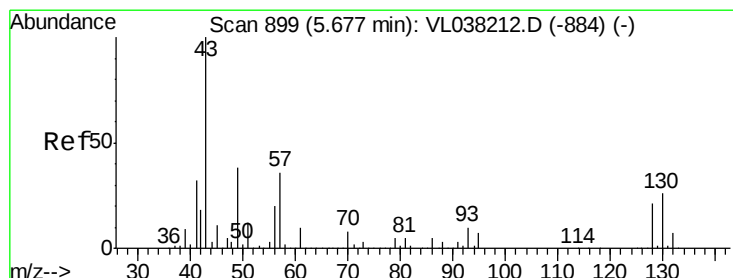
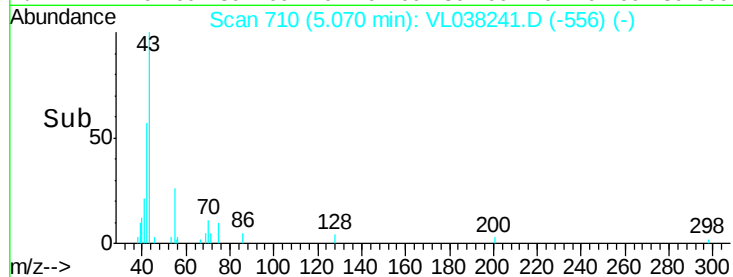
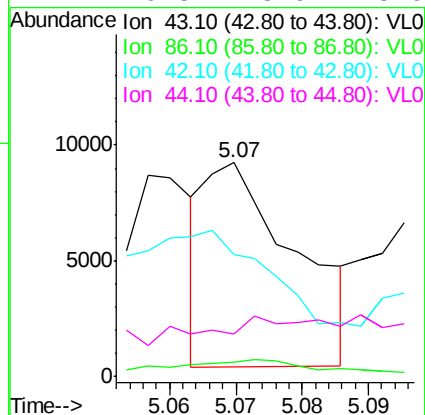
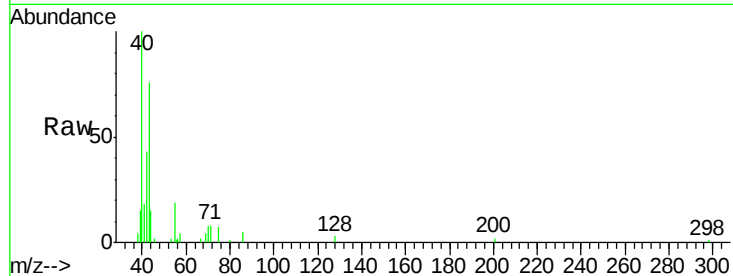
86 63.0 50.5 75.7





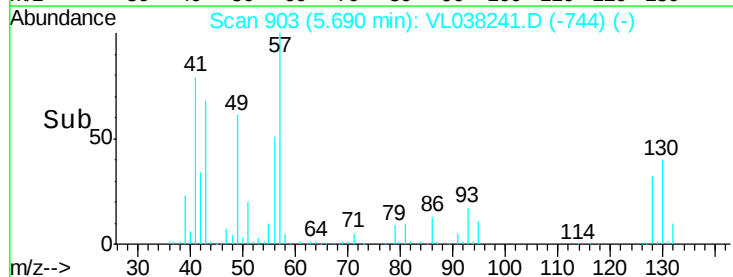
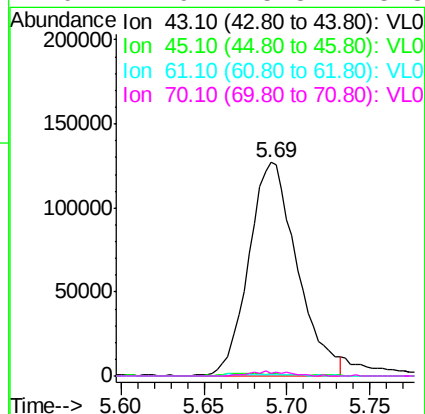
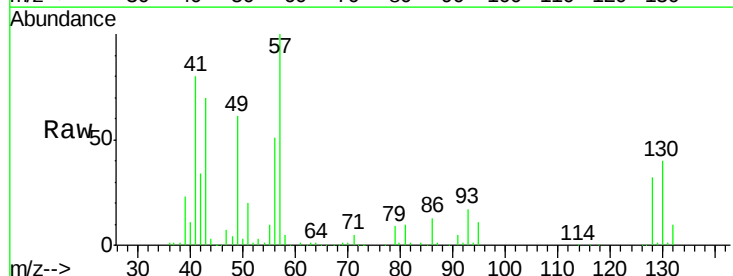
#23
 Vinyl Acetate
 Concen: 0.095 ppbv
 RT: 5.07
 Delta R.T. MSVOA_L
 Lab File: ClientSampleId:
 Acq: 29 Dec 2021 20:38

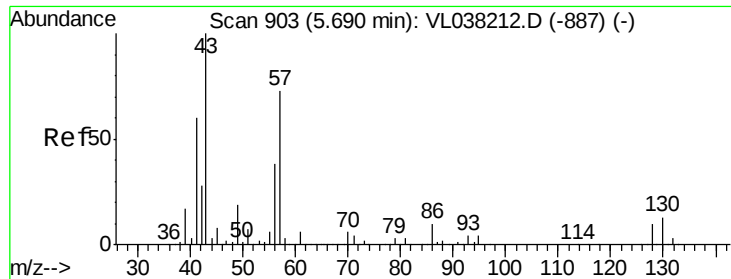
Tgt Ion:	43	Resp:	8352
Ion	Ratio	Lower	Upper
43	100		
86	6.4	5.6	8.4
42	65.0	7.0	10.4#
44	0.5	3.9	5.9#



#25
 Ethyl Acetate
 Concen: 1.454 ppbv
 RT: 5.69 min Scan# 903
 Delta R.T. 0.01 min
 Lab File: VL038241.D
 Acq: 29 Dec 2021 20:38

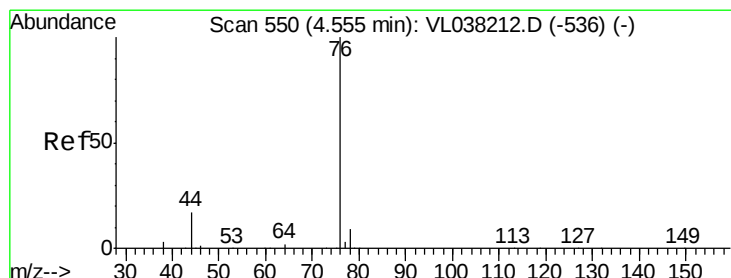
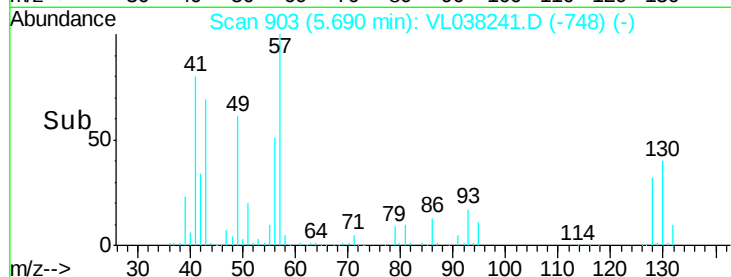
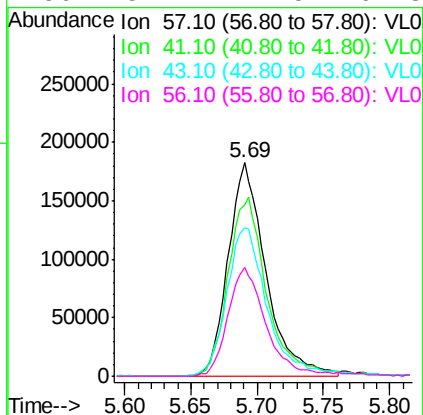
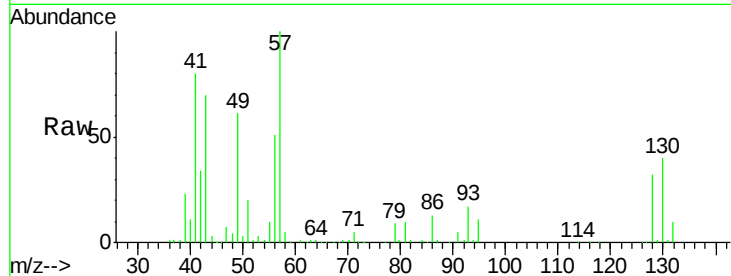
Tgt Ion:	43	Resp:	256608
Ion	Ratio	Lower	Upper
43	100		
45	2.0	7.9	11.9#
61	1.2	8.1	12.1#
70	1.9	5.5	8.3#





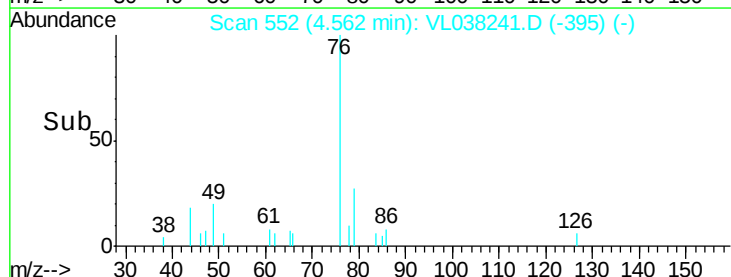
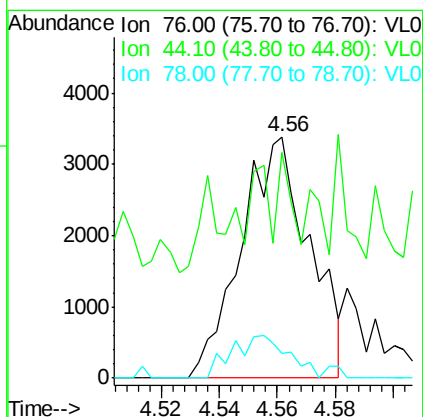
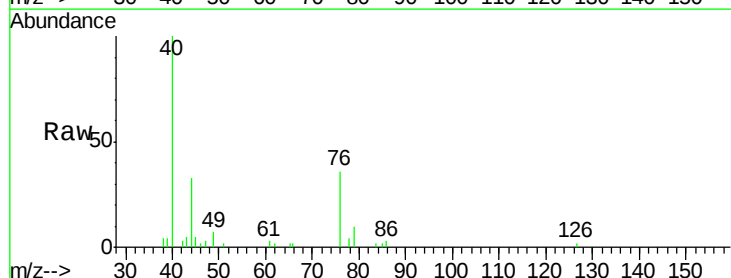
#26
Hexane
Concen: 4.081 ppbv
RT: 5.69
Delta R.T. MSVOA_L
Lab File: ClientSampleId :
Acq: 29 Dec 2021 20:38

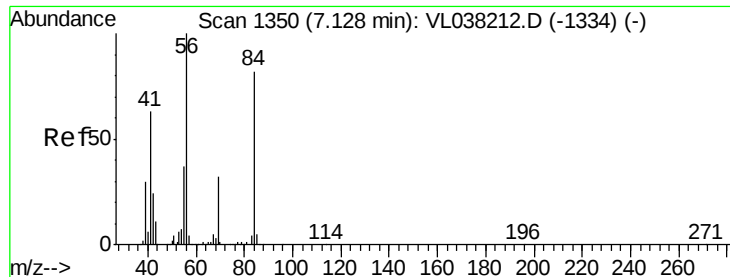
Tgt Ion:	57	Resp:	361328
Ion	Ratio	Lower	Upper
57	100		
41	88.4	69.0	103.6
43	76.3	171.2	256.8#
56	52.7	41.5	62.3



#27
Carbon Disulfide
Concen: 0.071 ppbv
RT: 4.56 min Scan# 552
Delta R.T. 0.01 min
Lab File: VL038241.D
Acq: 29 Dec 2021 20:38

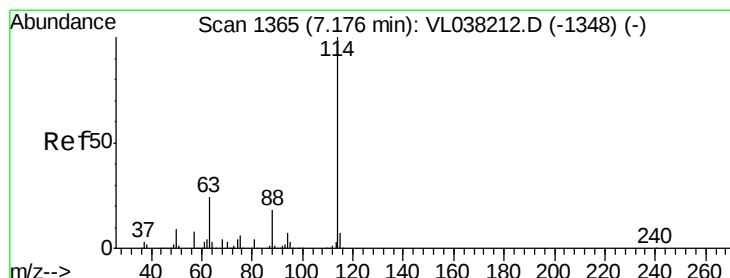
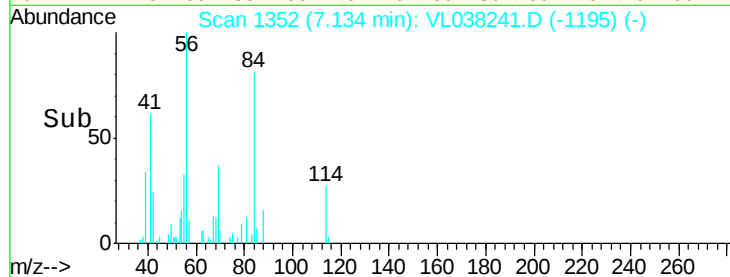
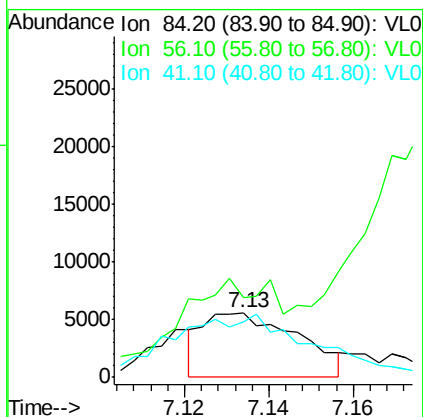
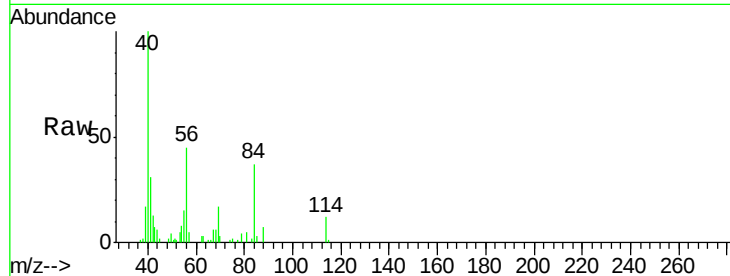
Tgt Ion:	76	Resp:	5514
Ion	Ratio	Lower	Upper
76	100		
44	47.3	14.2	21.4#
78	15.8	7.7	11.5#





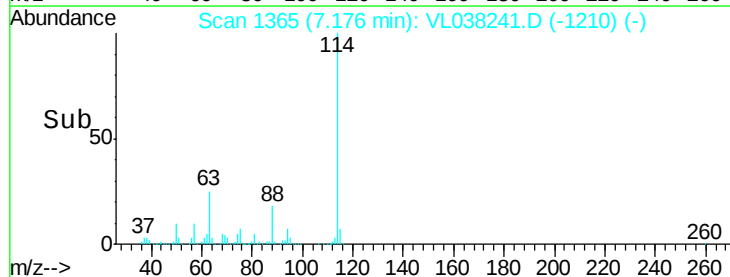
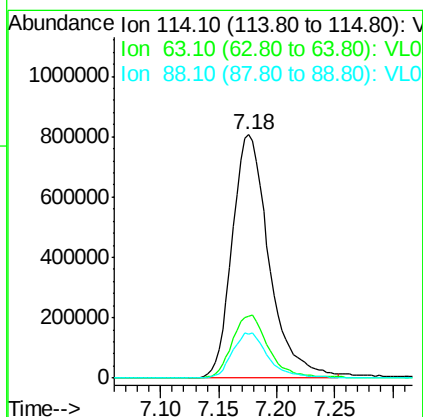
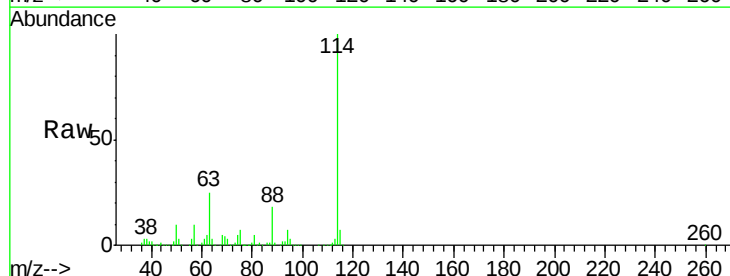
#30
Cyclohexane
Concen: 0.112 ppbv
RT: 7.13
Delta R.T. MSVOA_L
Lab File: ClientSampleId:
Acq: 29 Dec 2021 20:38

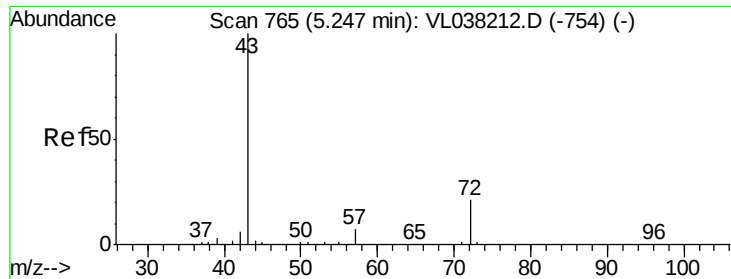
Tgt Ion: 84 Resp: 8754
Ion Ratio Lower Upper
84 100
56 0.0 105.2 157.8#
41 162.0 63.2 94.8#



#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 7.18 min Scan# 1365
Delta R.T. -0.00 min
Lab File: VL038241.D
Acq: 29 Dec 2021 20:38

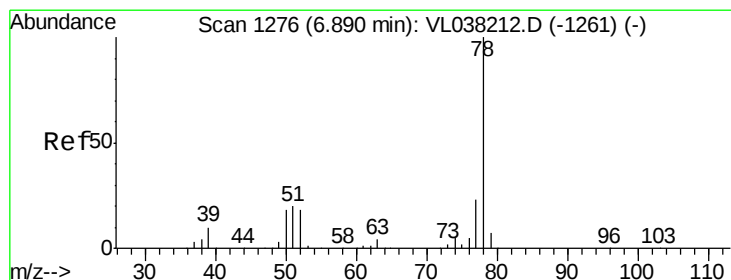
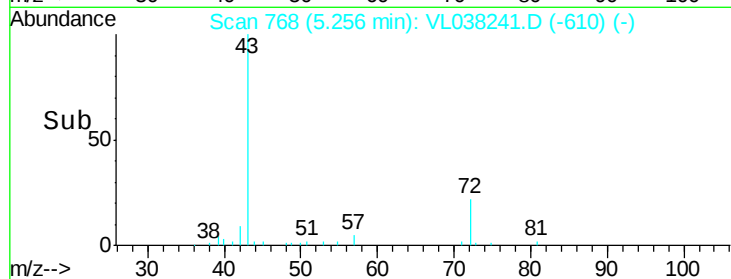
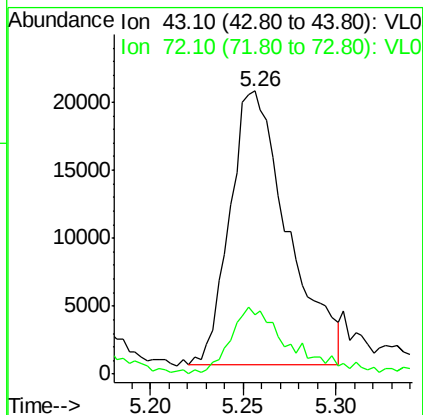
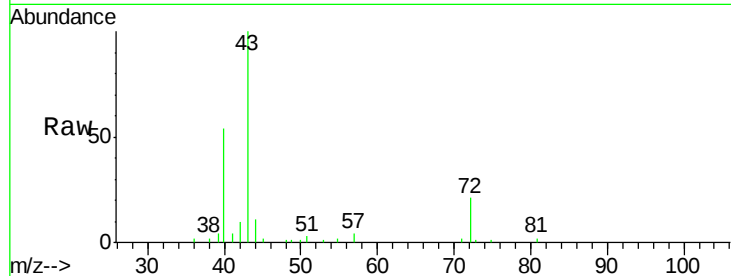
Tgt Ion: 114 Resp: 1786987
Ion Ratio Lower Upper
114 100
63 26.1 19.7 29.5
88 18.4 14.3 21.5





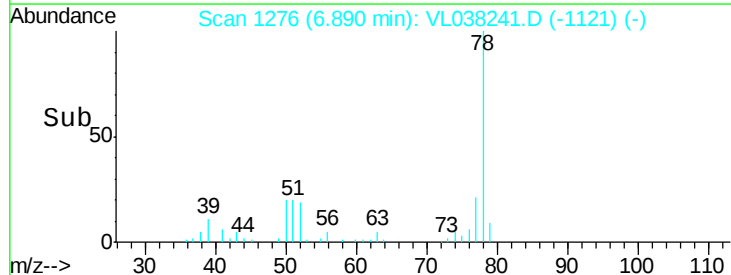
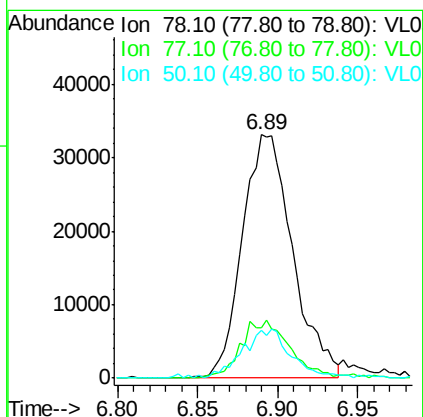
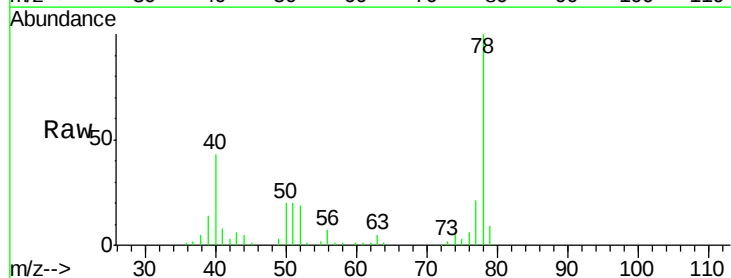
#34
 2-Butanone
 Concen: 0.818 ppbv
 RT: 5.26
 Delta R.T. MSVOA_L
 Lab File: ClientSampleId :
 Acq: 29 Dec 2021 20:38

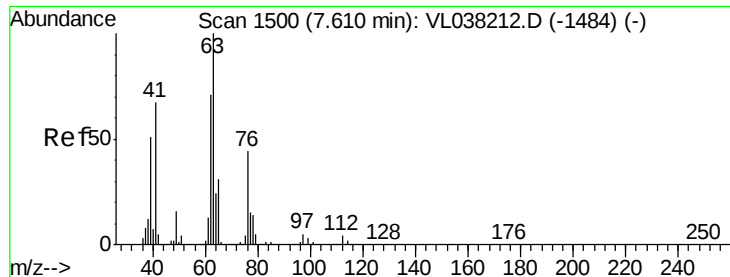
Tgt Ion: 43 Resp: 43961
 Ion Ratio Lower Upper
 43 100
 72 25.0 18.3 27.5



#36
 Benzene
 Concen: 0.429 ppbv
 RT: 6.89 min Scan# 1276
 Delta R.T. -0.00 min
 Lab File: VL038241.D
 Acq: 29 Dec 2021 20:38

Tgt Ion: 78 Resp: 71531
 Ion Ratio Lower Upper
 78 100
 77 20.6 18.2 27.4
 50 18.8 14.3 21.5





#39

1,2-Dichloropropane

Concen: 7.032 ppbv

RT: 7.18 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

Acq: 29 Dec 2021 20:38

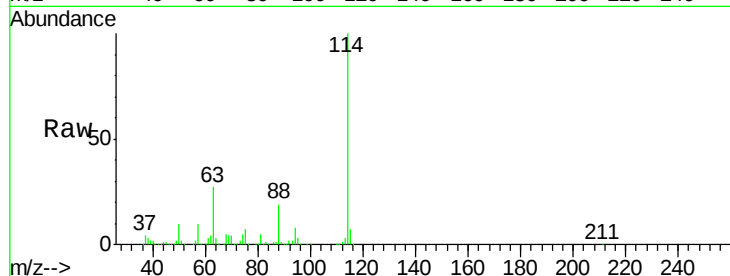
Tgt Ion: 63 Resp: 451106

Ion Ratio Lower Upper

63 100

41 0.0 53.4 80.2#

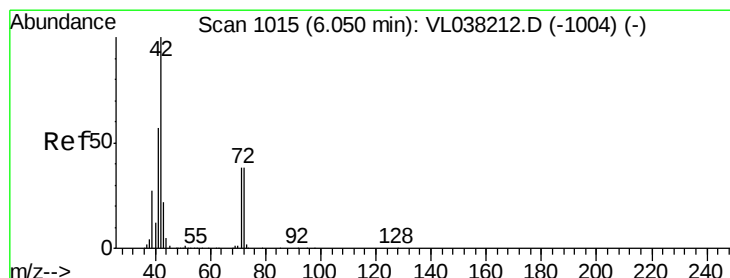
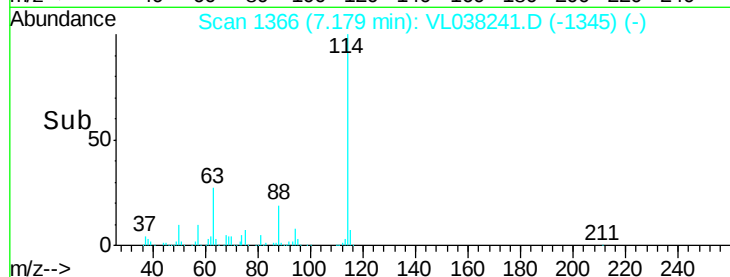
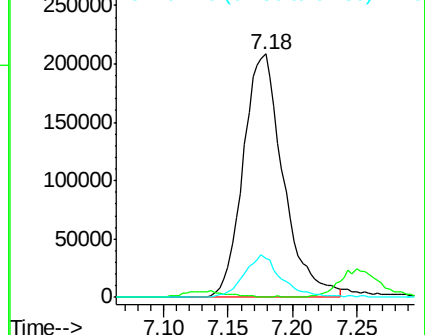
62 16.0 56.5 84.7#



Abundance Ion 63.10 (62.80 to 63.80): VL0

Ion 41.10 (40.80 to 41.80): VL0

Ion 62.10 (61.80 to 62.80): VL0



#41

Tetrahydrofuran

Concen: 0.097 ppbv

RT: 6.08 min Scan# 1023

Delta R.T. 0.03 min

Lab File: VL038241.D

Acq: 29 Dec 2021 20:38

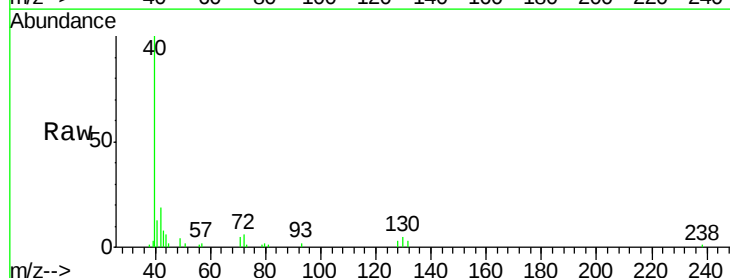
Tgt Ion: 42 Resp: 3828

Ion Ratio Lower Upper

42 100

72 45.8 31.4 47.0

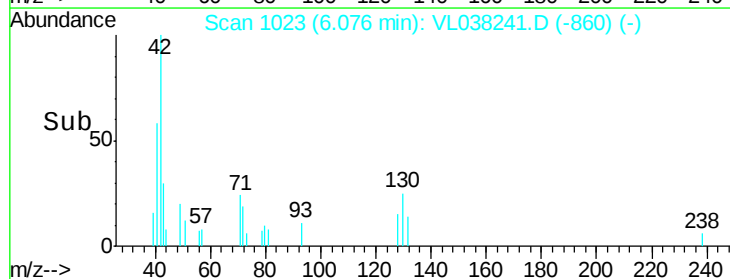
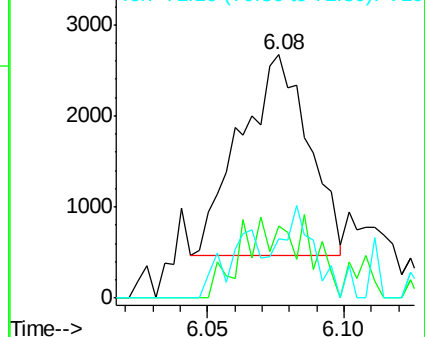
71 47.7 30.0 45.0#

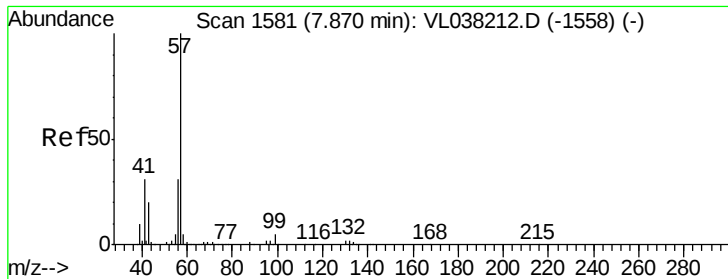


Abundance Ion 42.10 (41.80 to 42.80): VL0

Ion 72.10 (71.80 to 72.80): VL0

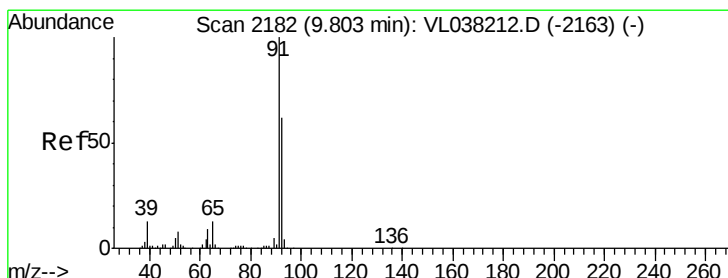
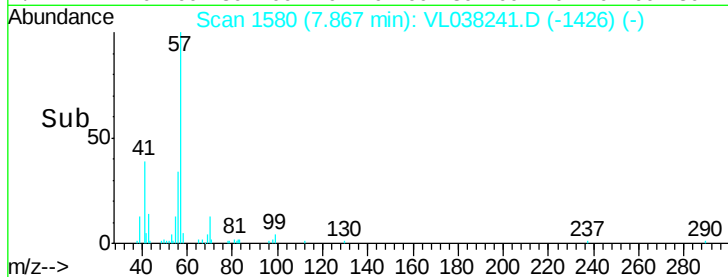
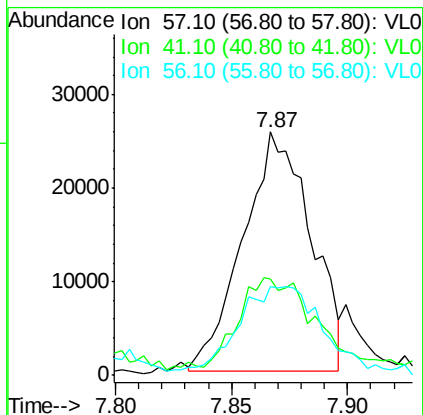
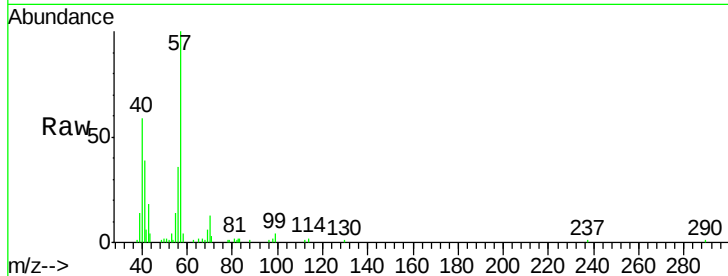
Ion 71.10 (70.80 to 71.80): VL0





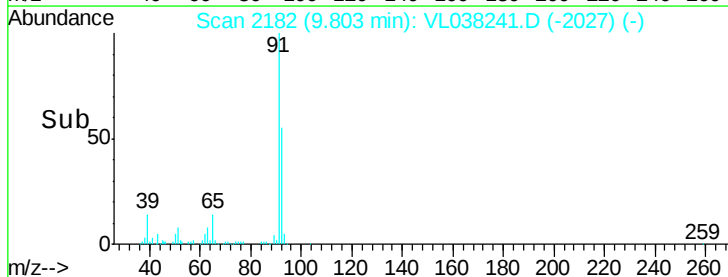
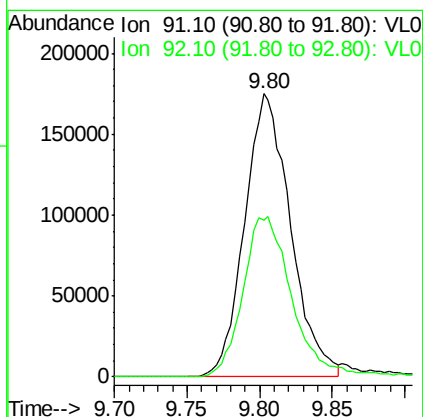
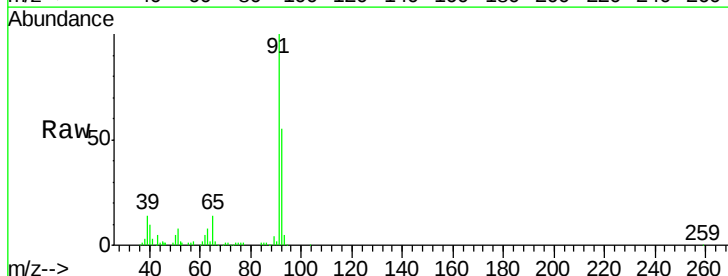
#44
 2,2,4-Trimethylpentane
 Concen: 0.184 ppbv
 RT: 7.87
 Delta R.T. MSVOA_L
 Lab File: ClientSampleId :
 Acq: 29 Dec 2021 20:38

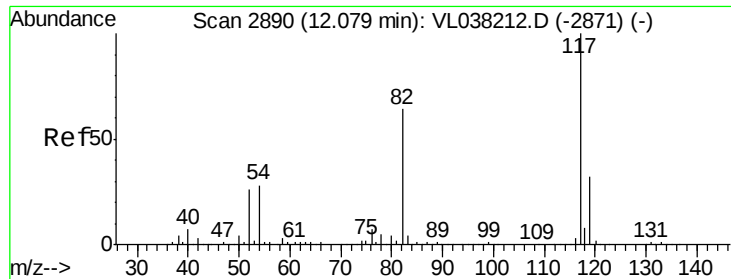
Tgt Ion: 57 Resp: 51977
 Ion Ratio Lower Upper
 57 100
 41 55.3 24.9 37.3#
 56 48.0 24.8 37.2#



#53
 Toluene
 Concen: 2.003 ppbv
 RT: 9.80 min Scan# 2182
 Delta R.T. -0.00 min
 Lab File: VL038241.D
 Acq: 29 Dec 2021 20:38

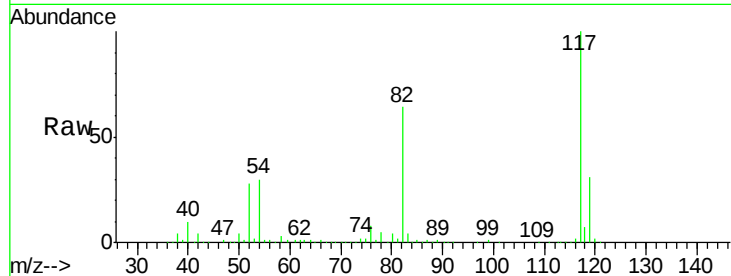
Tgt Ion: 91 Resp: 385228
 Ion Ratio Lower Upper
 91 100
 92 61.2 48.9 73.3



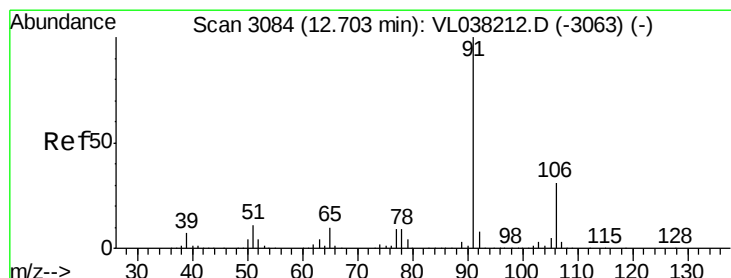
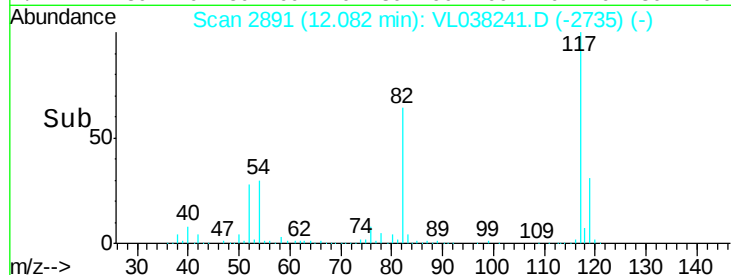
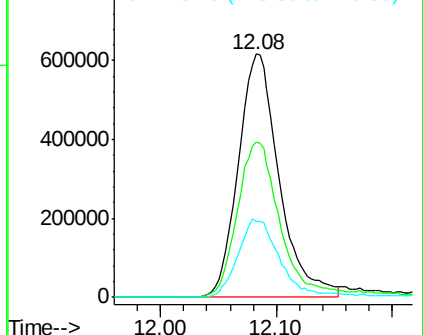


#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 12.08 min
Instrument: MSVOA_1
Delta R.T.:
Lab File: ClientSampleId:
Acq: 29 Dec 2021 20:38

Tgt Ion: 117 Resp: 1514569
Ion Ratio Lower Upper
117 100
82 71.3 53.3 79.9
119 34.8 25.5 38.3

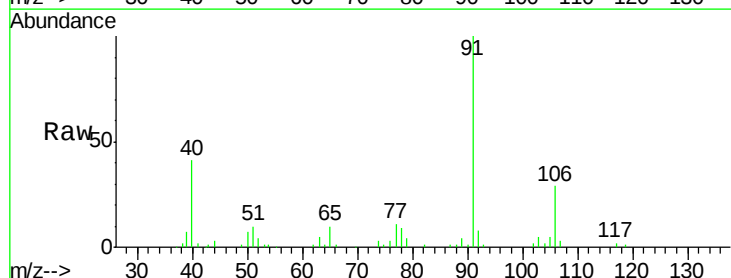


Abundance Ion 117.10 (116.80 to 117.80): V
Ion 82.10 (81.80 to 82.80): VL0
Ion 119.10 (118.80 to 119.80): V

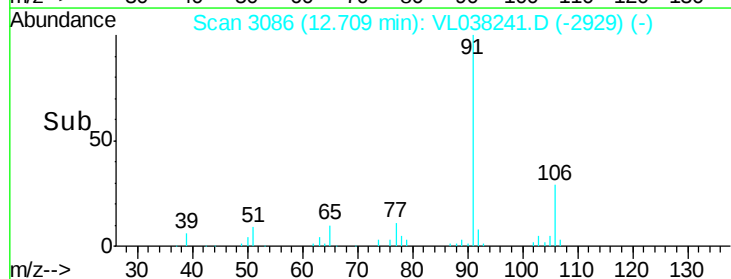
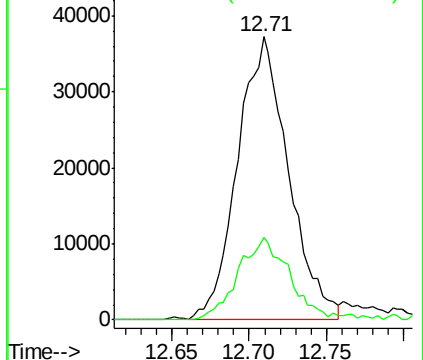


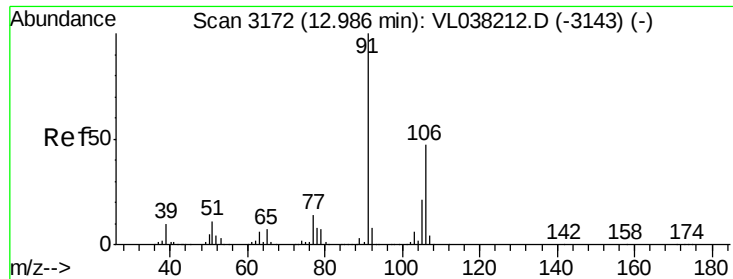
#58
Ethyl Benzene
Concen: 0.363 ppbv
RT: 12.71 min Scan# 3086
Delta R.T.: 0.01 min
Lab File: VL038241.D
Acq: 29 Dec 2021 20:38

Tgt Ion: 91 Resp: 85256
Ion Ratio Lower Upper
91 100
106 29.2 25.0 37.4



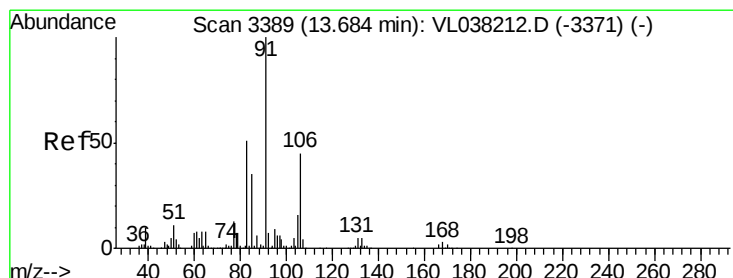
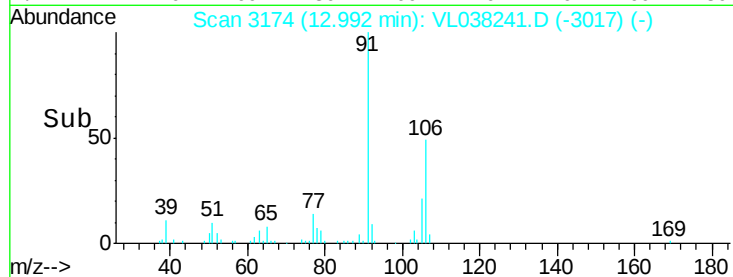
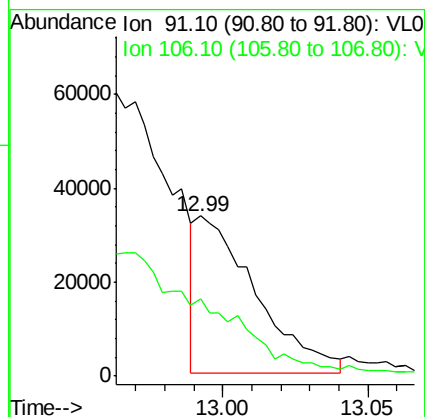
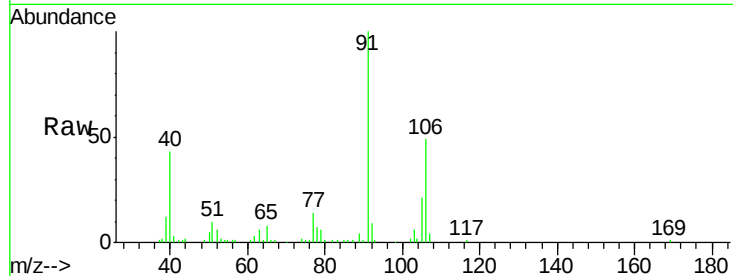
Abundance Ion 91.10 (90.80 to 91.80): VL0
Ion 106.10 (105.80 to 106.80): V





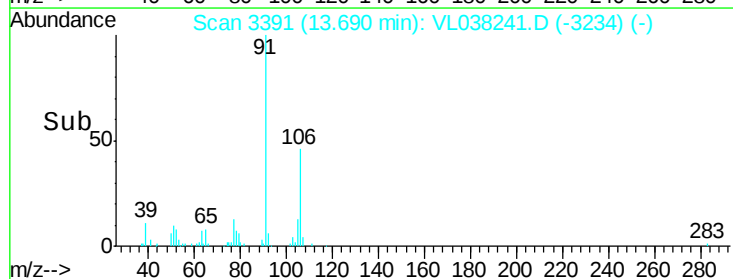
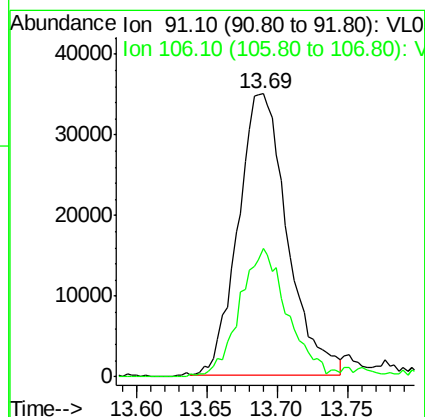
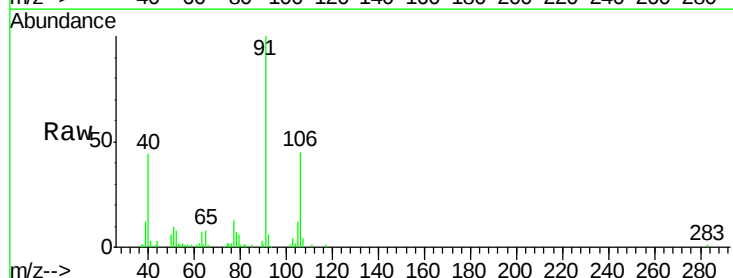
#59
m/p-Xylene
Concen: 0.237 ppbv
RT: 12.99 min
Delta R.T. MSVOA_L
Lab File: ClientSampleId :
Acq: 29 Dec 2021 20:38

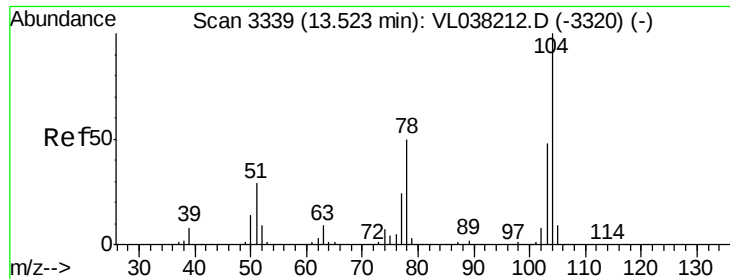
Tgt Ion: 91 Resp: 47579
Ion Ratio Lower Upper
91 100
106 0.0 36.9 55.3#



#60
o-Xylene
Concen: 0.455 ppbv
RT: 13.69 min Scan# 3391
Delta R.T. 0.01 min
Lab File: VL038241.D
Acq: 29 Dec 2021 20:38

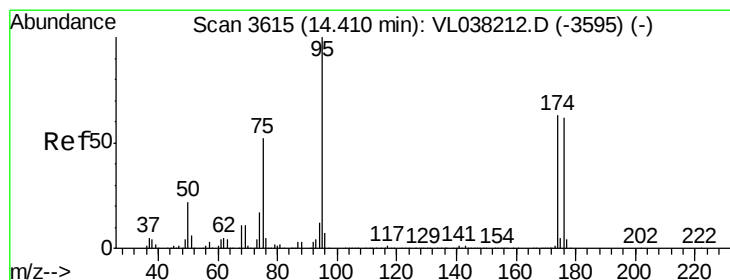
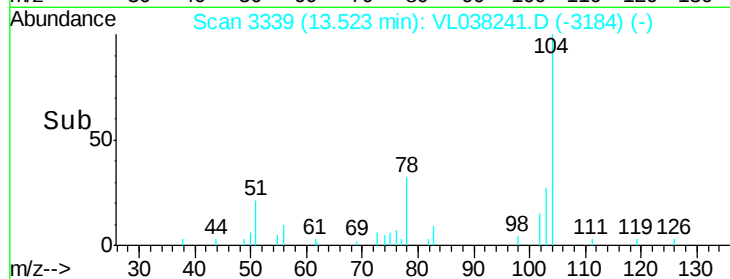
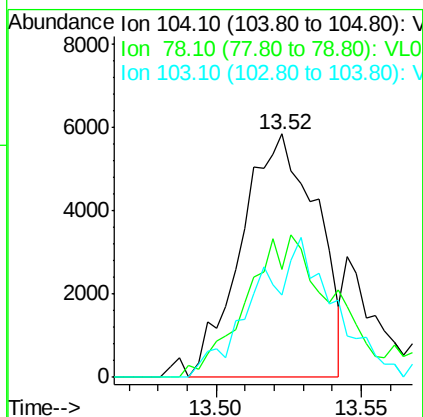
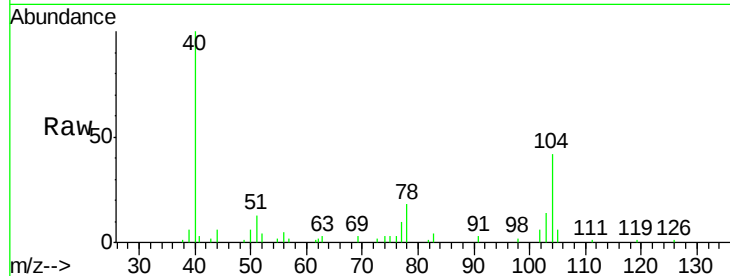
Tgt Ion: 91 Resp: 84724
Ion Ratio Lower Upper
91 100
106 46.7 23.5 70.5





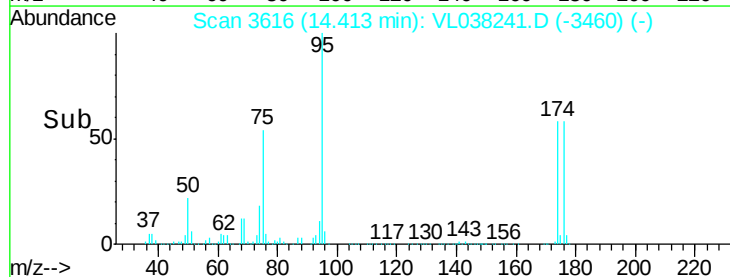
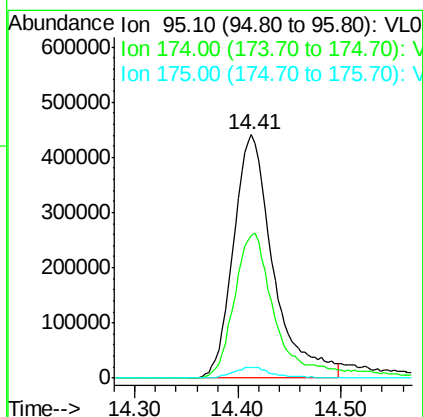
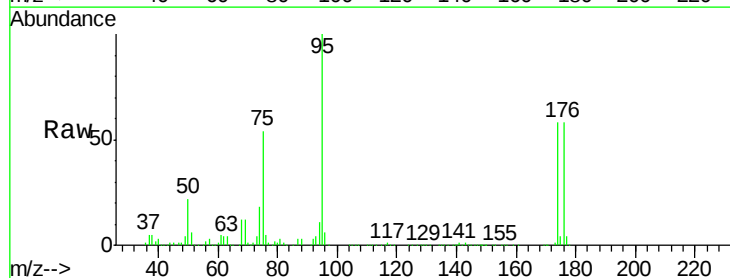
#61
Styrene
Concen: 0.112 ppbv
RT: 13.52
Delta R.T. MSVOA_L
Lab File: ClientSampleId :
Acq: 29 Dec 2021 20:38

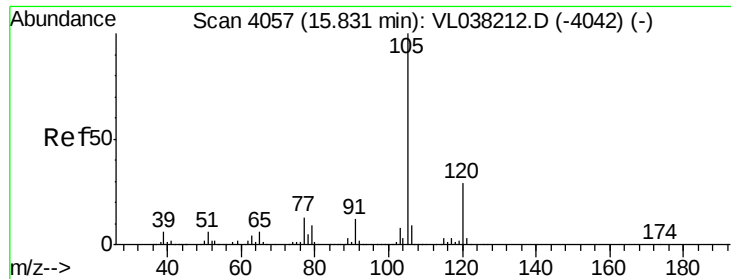
Tgt Ion: 104 Resp: 10581
Ion Ratio Lower Upper
104 100
78 75.3 41.0 61.6#
103 61.5 38.0 57.0#



#68
1-Bromo-4-Fluorobenzene
Concen: 10.180 ppbv
RT: 14.41 min Scan# 3616
Delta R.T. 0.00 min
Lab File: VL038241.D
Acq: 29 Dec 2021 20:38

Tgt Ion: 95 Resp: 1188139
Ion Ratio Lower Upper
95 100
174 63.6 54.6 81.8
175 4.7 4.1 6.1





#72

4-Ethyltoluene

Concen: 0.034 ppbv

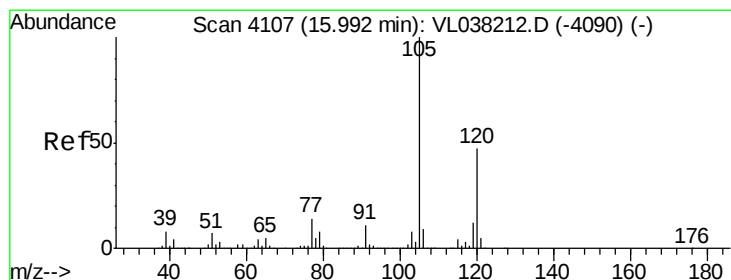
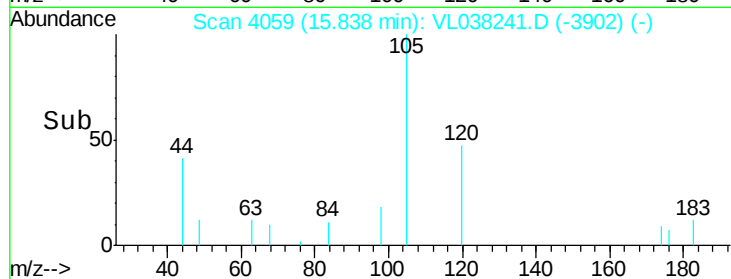
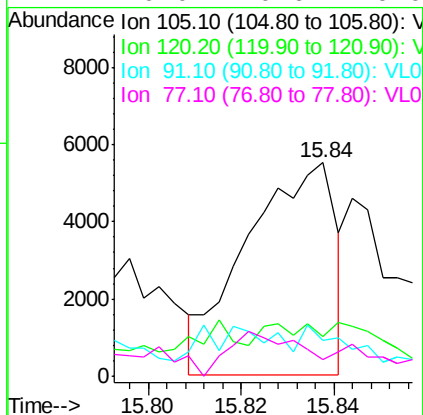
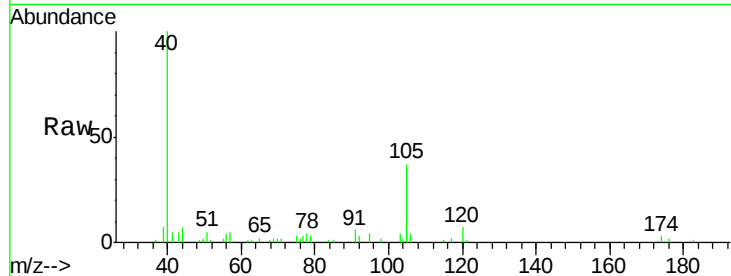
RT: 15.84 min

Delta R.T. MSVOA_L

Lab File: ClientSampleId :

Acq: 29 Dec 2021 20:38

Tgt Ion:	105	Resp:	7300
Ion	Ratio	Lower	Upper
105	100		
120	0.0	24.3	36.5#
91	0.0	9.8	14.6#
77	0.0	10.6	16.0#



#73

1,3,5-Trimethylbenzene

Concen: 0.033 ppbv

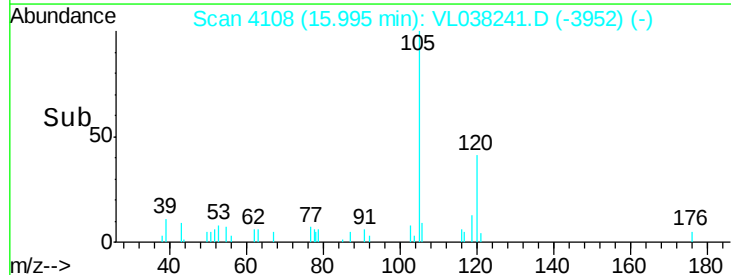
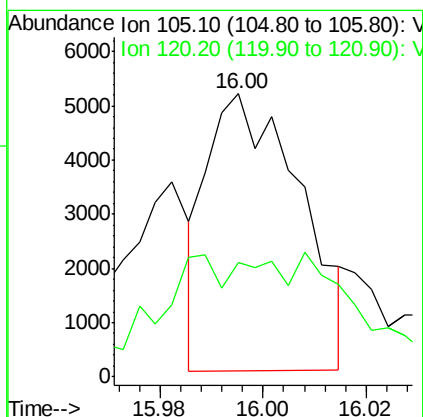
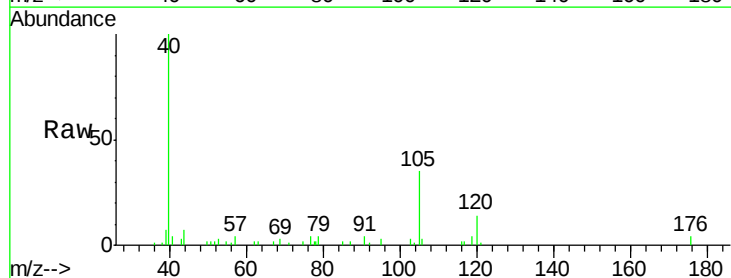
RT: 16.00 min Scan# 4108

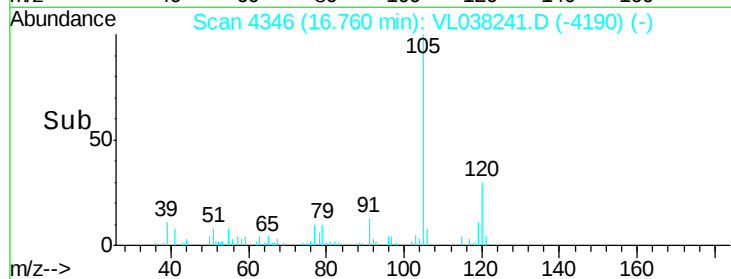
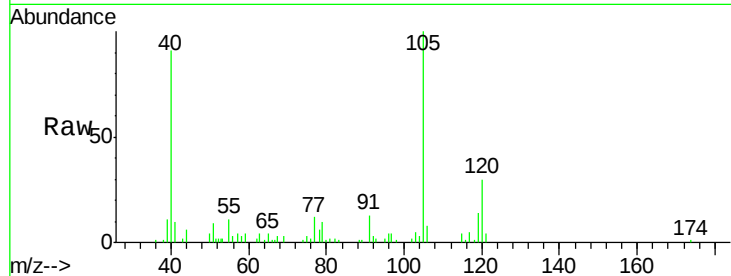
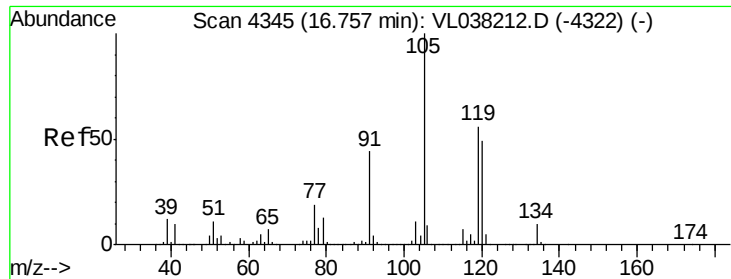
Delta R.T. 0.00 min

Lab File: VL038241.D

Acq: 29 Dec 2021 20:38

Tgt Ion:	105	Resp:	6426
Ion	Ratio	Lower	Upper
105	100		
120	13.1	37.3	55.9#





#74
 1,2,4-Trimethylbenzene
 Concen: 0.169 ppbv
 RT: 16.76
 Delta R.T: MSVOA_L
 Lab File: ClientSampleId :
 Acq: 29 Dec 2021 20:38

Tgt Ion:	105	Resp:	34157
Ion	Ratio	Lower	Upper
105	100		
120	29.7	39.4	59.2#
91	11.0	35.0	52.4#
77	12.3	15.6	23.4#

