

Data Path : Z:\VOASRV\HPCHEM1\MSVOA_L\DATA\VL032122\
 Data File : VL038678.D
 Acq On : 22 Mar 2022 9:39
 Operator : SY/AP
 Sample : N1964-12DL 4X
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 C0P82DL

Quant Time: Mar 23 03:40:38 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	5.65	49	919261	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.15	114	2371809	10.00	ppbv	-0.01
55) Chlorobenzene-d5	12.06	117	2125575	10.00	ppbv	-0.01

System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	14.39	95	1555891	9.55	ppbv	-0.01
Spiked Amount	10.000	Range	65 - 135	Recovery	=	95.50%

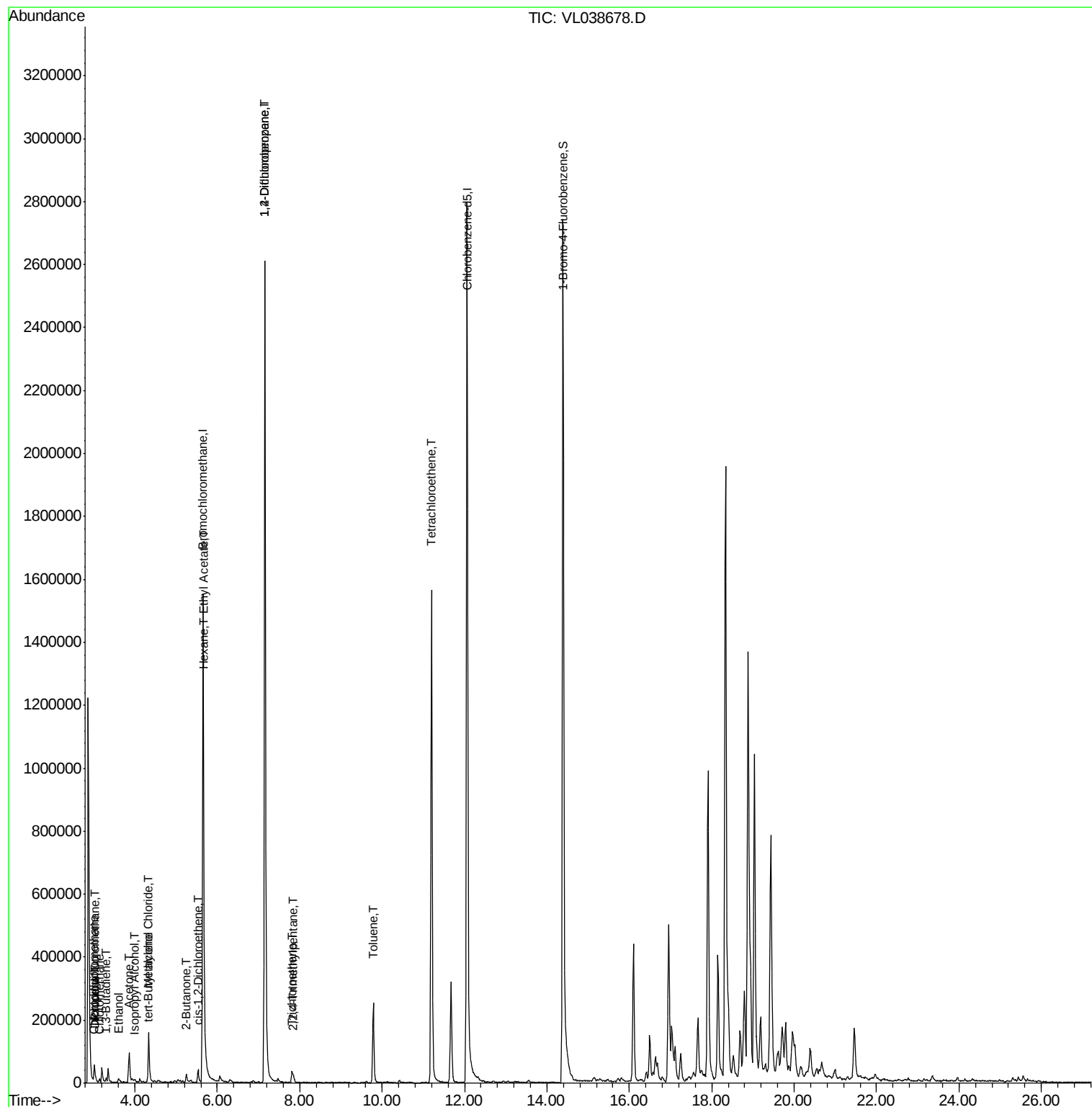
Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	3.04	85	8413	0.07	ppbv	91
3) Chlorodifluoromethane	2.98	51	10213	0.11	ppbv #	85
4) Chloromethane	3.14	50	10508	0.20	ppbv #	85
9) Propene	3.02	41	15816	0.34	ppbv	90
13) Ethanol	3.61	45	13546	2.62	ppbv	69
15) Acetone	3.85	43	88729	1.12	ppbv	100
16) 1,3-Butadiene	3.30	39	4097	0.09	ppbv #	18
17) tert-Butyl alcohol	4.31	59	2119	0.03	ppbv #	73
19) Isopropyl Alcohol	3.97	45	2054	0.05	ppbv #	91
20) Methylene Chloride	4.33	84	69647	2.08	ppbv	98
25) Ethyl Acetate	5.67	43	13863	0.07	ppbv #	76
26) Hexane	5.67	57	31227	0.35	ppbv #	39
31) cis-1,2-Dichloroethene	5.53	61	17066	0.20	ppbv	94
34) 2-Butanone	5.25	43	35262	0.38	ppbv	94
38) Trichloroethene	7.81	130	9736	0.13	ppbv #	78
39) 1,2-Dichloropropane	7.15	63	548764	7.67	ppbv #	28
44) 2,2,4-Trimethylpentane	7.85	57	16302	0.05	ppbv #	83
52) Tetrachloroethene	11.20	164	438996	6.55	ppbv	97
53) Toluene	9.79	91	217876	1.11	ppbv	98

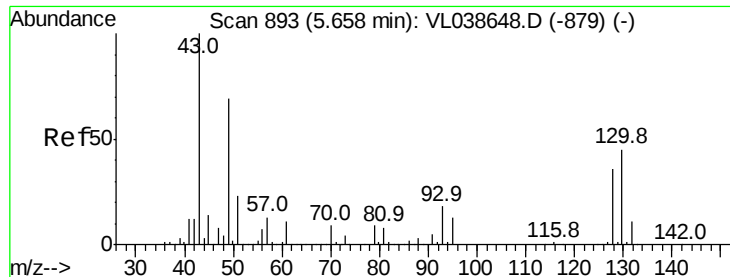
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA_L\DATA\VL032122\
Data File : VL038678.D
Acq On : 22 Mar 2022 9:39
Operator : SY/AP
Sample : N1964-12DL 4X
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
C0P82DL

Quant Time: Mar 23 03:40:38 2022
Quant Method : Z:\V0ASRV\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





#1

Bromochloromethane

Concen: 10.00 ppbv

RT: 5.65 Instrument: MSVOA_1

Delta R.T. ClientSampleId:

Lab File: C0P82DL

Acq: 22 Mar 2022 9:39

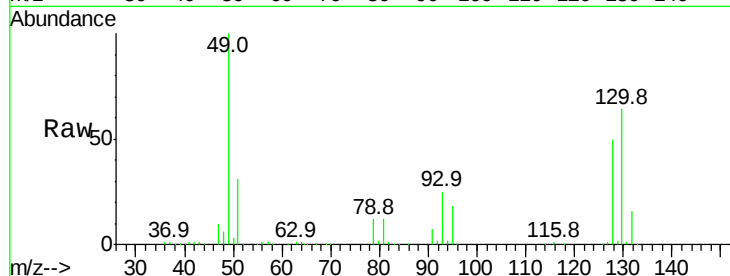
Tgt Ion: 49 Resp: 919261

Ion Ratio Lower Upper

49 100

128 53.0 26.2 78.6

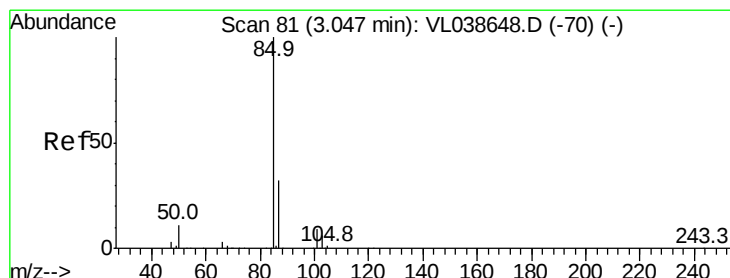
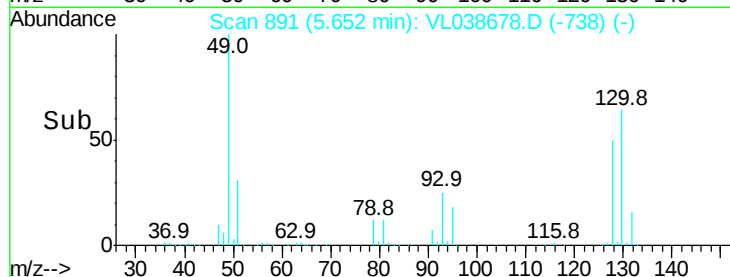
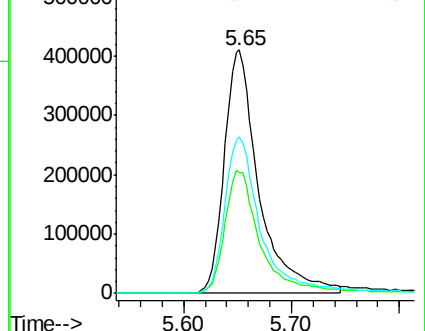
130 69.1 33.7 101.1



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: 0.07 ppbv

RT: 3.04 min Scan# 79

Delta R.T. -0.01 min

Lab File: VL038678.D

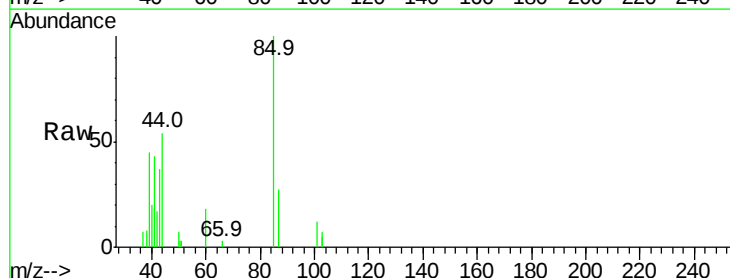
Acq: 22 Mar 2022 9:39

Tgt Ion: 85 Resp: 8413

Ion Ratio Lower Upper

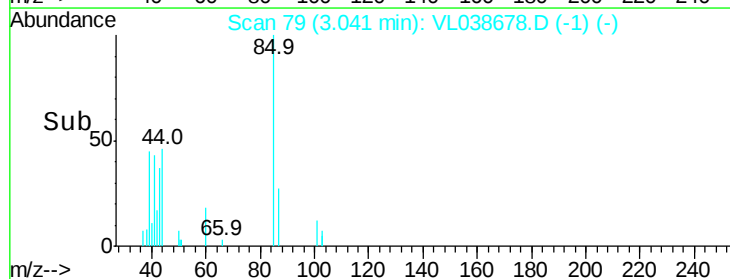
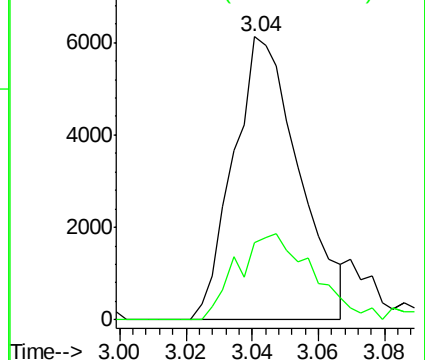
85 100

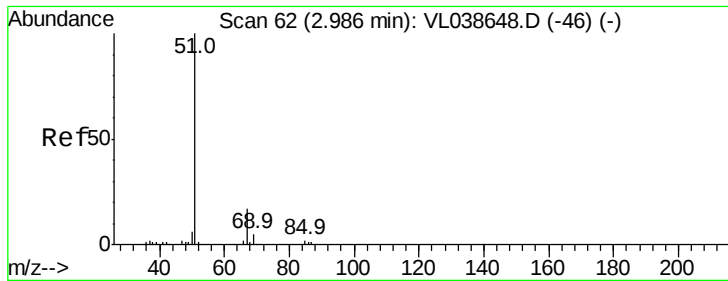
87 27.5 26.0 39.0



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0





#3

Chlorodifluoromethane

Concen: 0.11 ppbv

RT: 2.98 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

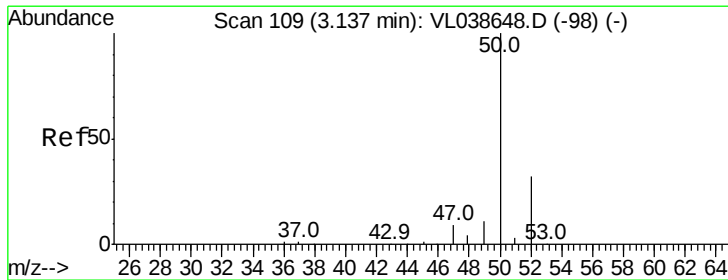
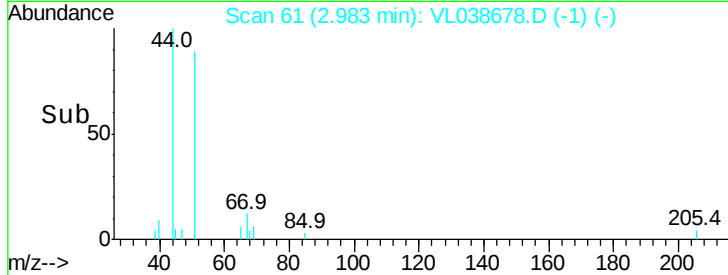
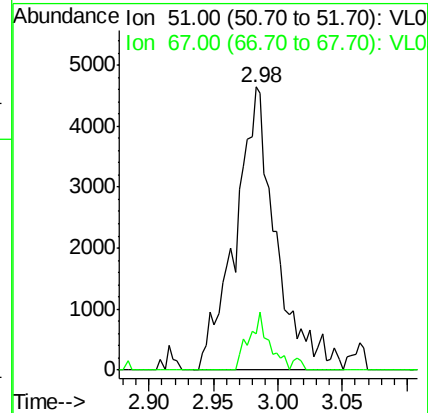
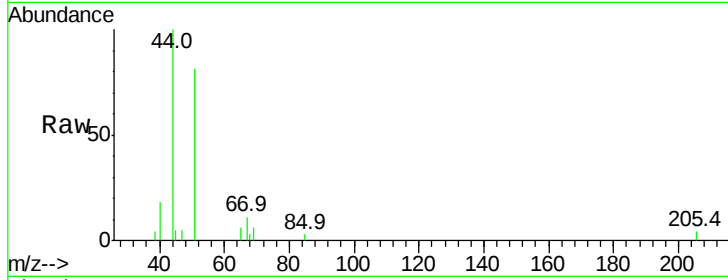
Acq: 22 Mar 2022 9:39

Tgt Ion: 51 Resp: 10213

Ion Ratio Lower Upper

51 100

67 11.1 14.1 21.1#



#4

Chloromethane

Concen: 0.20 ppbv

RT: 3.14 min Scan# 110

Delta R.T. 0.00 min

Lab File: VL038678.D

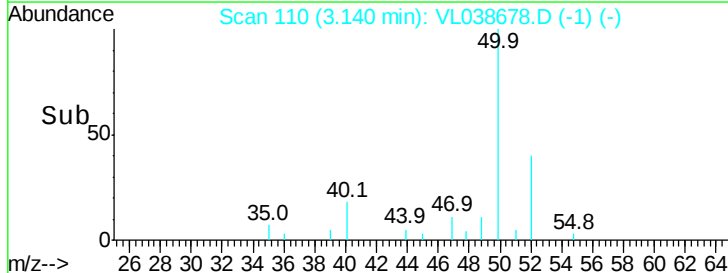
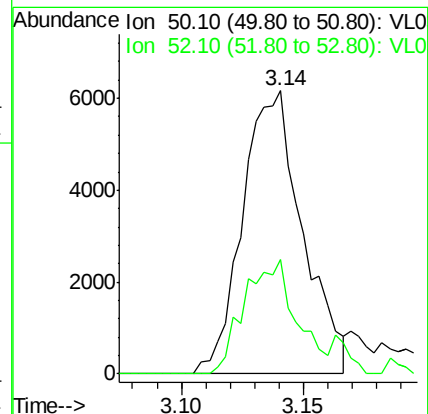
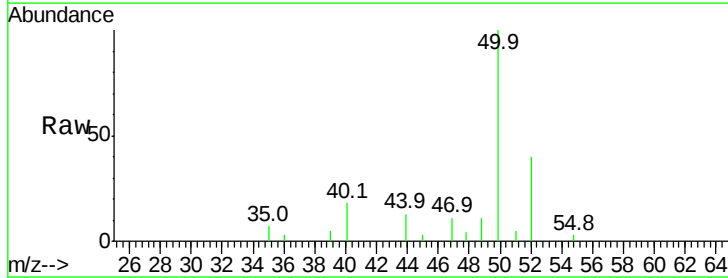
Acq: 22 Mar 2022 9:39

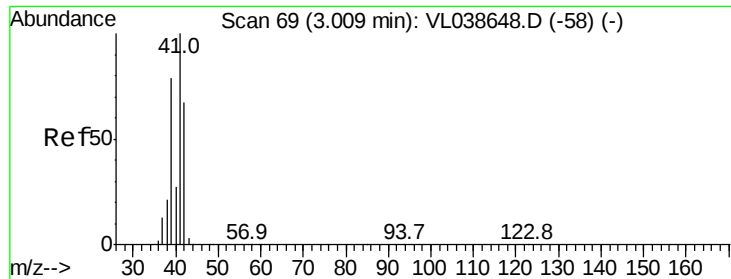
Tgt Ion: 50 Resp: 10508

Ion Ratio Lower Upper

50 100

52 40.2 25.5 38.3#





#9

Propene

Concen: 0.34 ppbv

RT: 3.02 Instrument: MSVOA_1

Delta R.T. 0.00 min

Lab File: ClientSampleId: C0P82DL

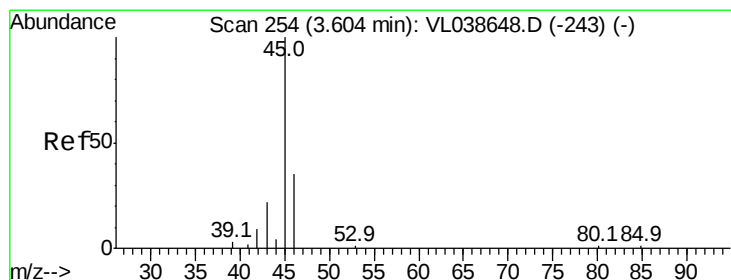
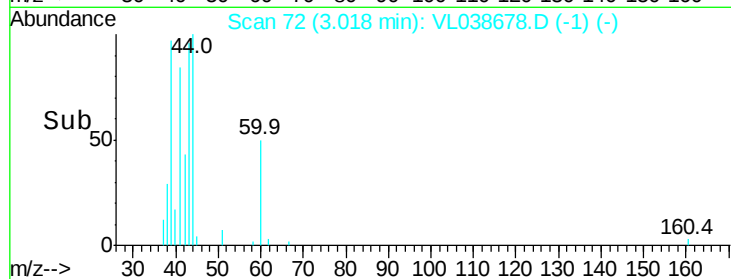
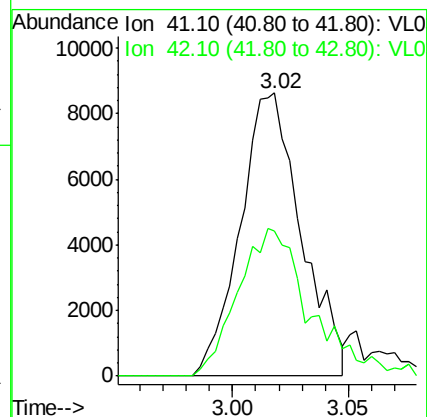
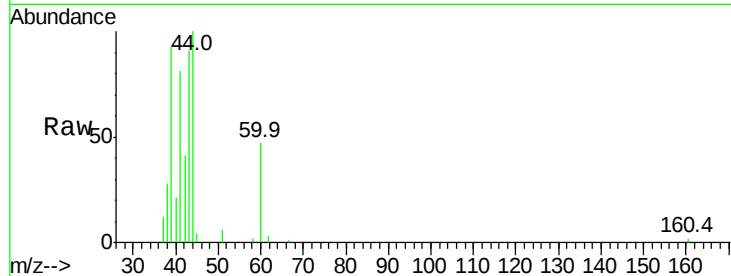
Acq: 22 Mar 2022 9:39

Tgt Ion: 41 Resp: 15816

Ion Ratio Lower Upper

41 100

42 61.8 56.2 84.4



#13

Ethanol

Concen: 2.62 ppbv

RT: 3.61 min Scan# 255

Delta R.T. 0.00 min

Lab File: VL038678.D

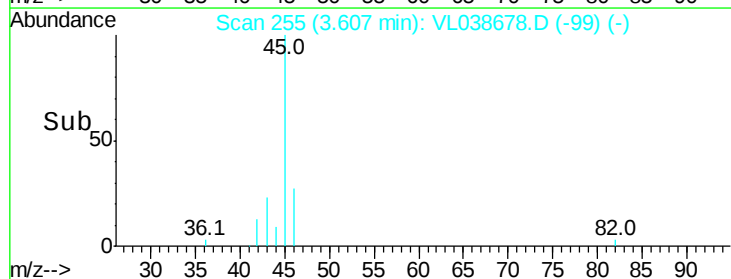
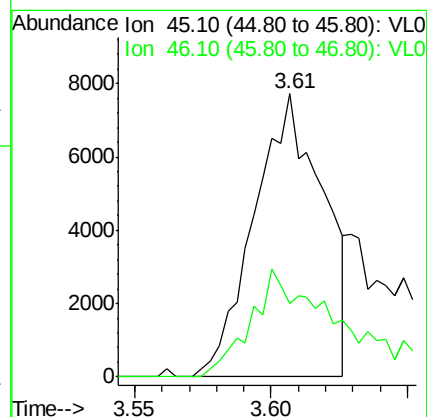
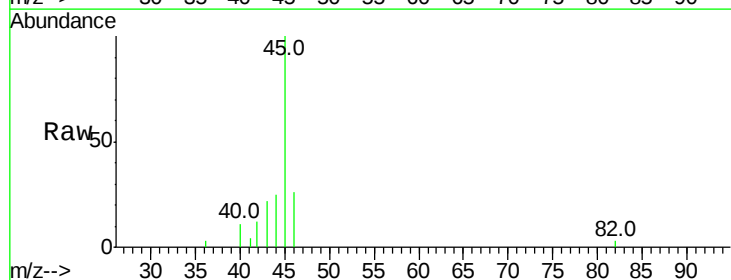
Acq: 22 Mar 2022 9:39

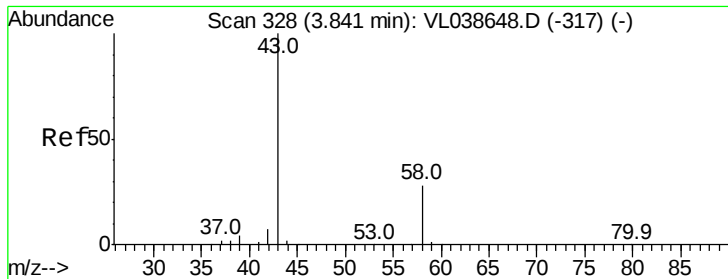
Tgt Ion: 45 Resp: 13546

Ion Ratio Lower Upper

45 100

46 56.4 15.1 60.5





#15

Acetone

Concen: 1.12 ppbv

RT: 3.85

Delta R.T. MSVOA_L

Lab File: ClientSampleId :

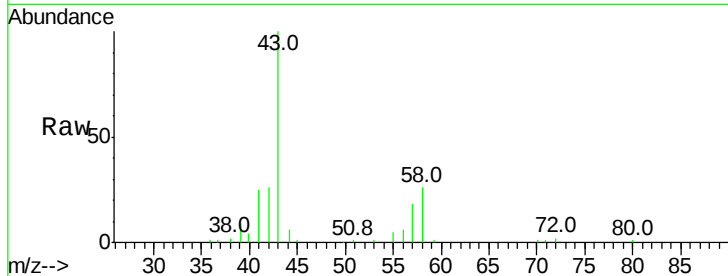
Acq: 22 Mar 2022 9:39

Tgt Ion: 43 Resp: 88729

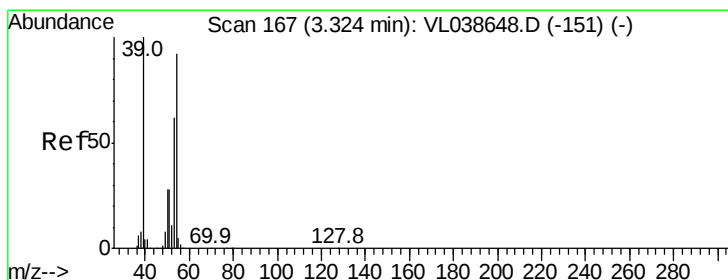
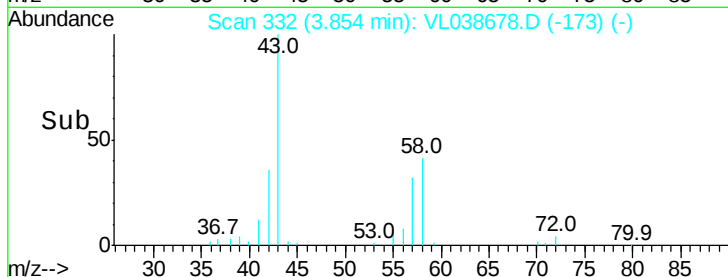
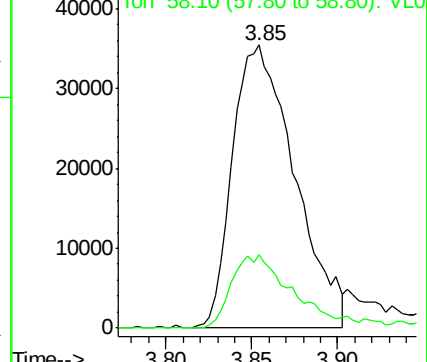
Ion Ratio Lower Upper

43 100

58 28.9 23.3 34.9



Abundance Ion 43.10 (42.80 to 43.80): VL0



#16

1,3-Butadiene

Concen: 0.09 ppbv

RT: 3.30 min Scan# 159

Delta R.T. -0.03 min

Lab File: VL038678.D

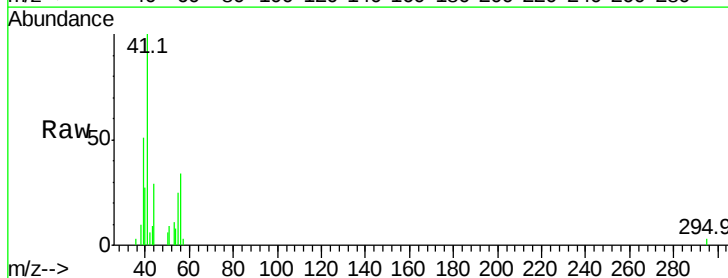
Acq: 22 Mar 2022 9:39

Tgt Ion: 39 Resp: 4097

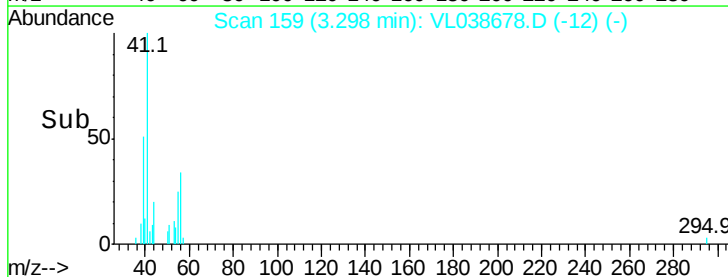
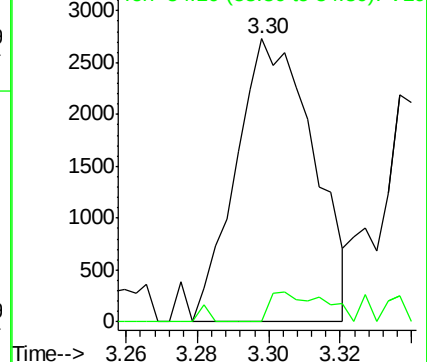
Ion Ratio Lower Upper

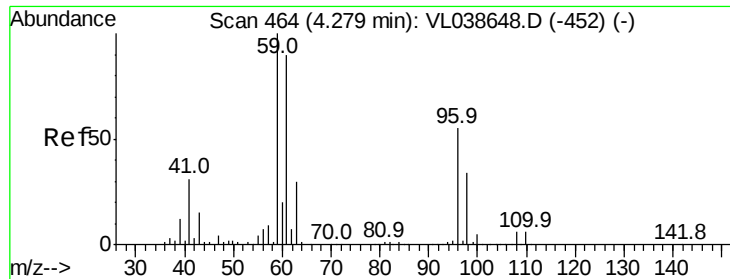
39 100

54 10.8 69.1 103.7#



Abundance Ion 39.10 (38.80 to 39.80): VL0





#17

tert-Butyl alcohol

Concen: 0.03 ppbv

RT: 4.31 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

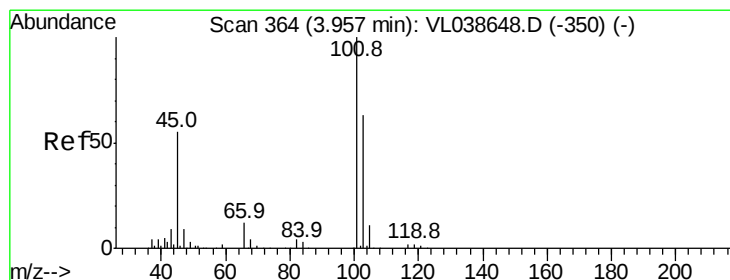
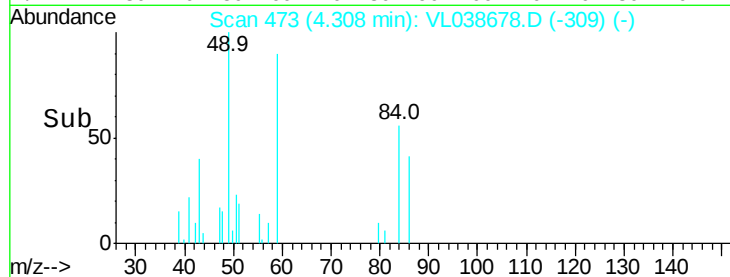
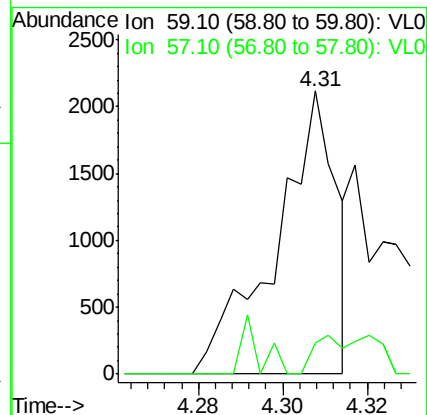
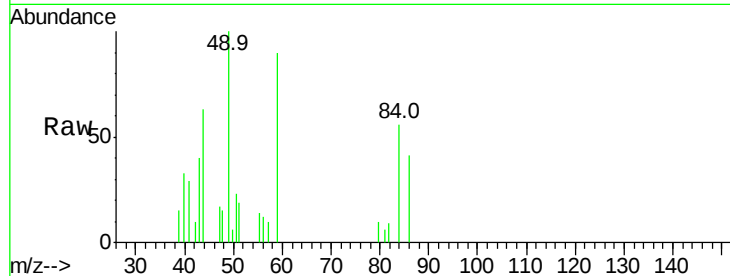
Acq: 22 Mar 2022 9:39

Tgt Ion: 59 Resp: 2119

Ion Ratio Lower Upper

59 100

57 0.0 8.2 12.2#



#19

Isopropyl Alcohol

Concen: 0.05 ppbv

RT: 3.97 min Scan# 368

Delta R.T. 0.01 min

Lab File: VL038678.D

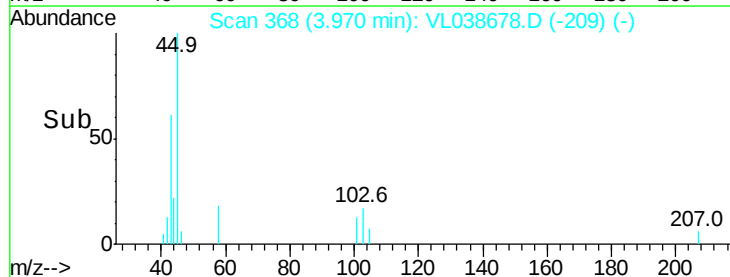
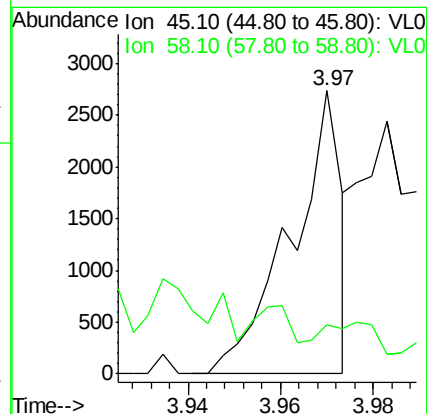
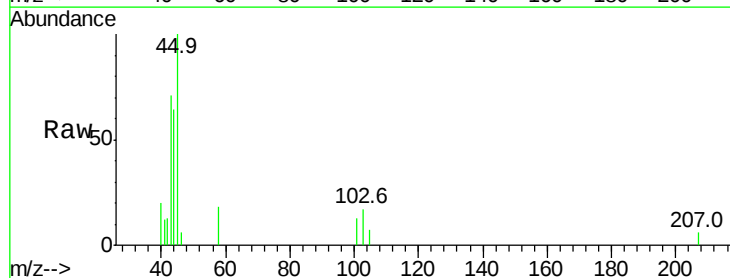
Acq: 22 Mar 2022 9:39

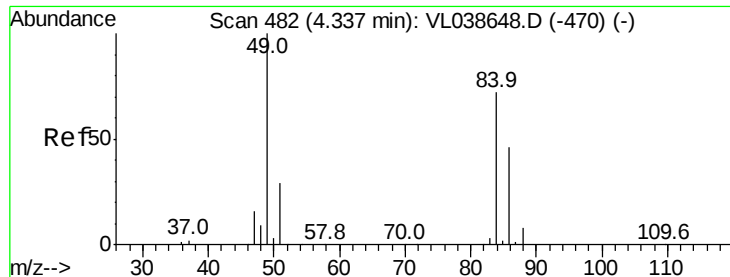
Tgt Ion: 45 Resp: 2054

Ion Ratio Lower Upper

45 100

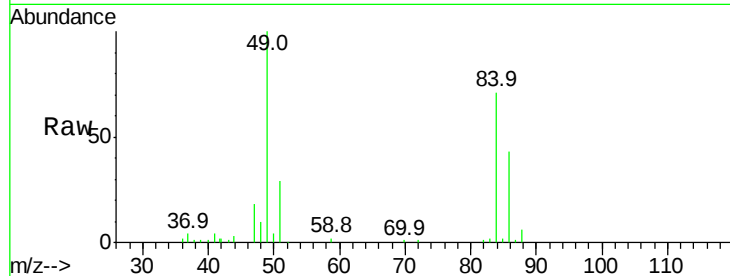
58 0.0 2.3 3.5#



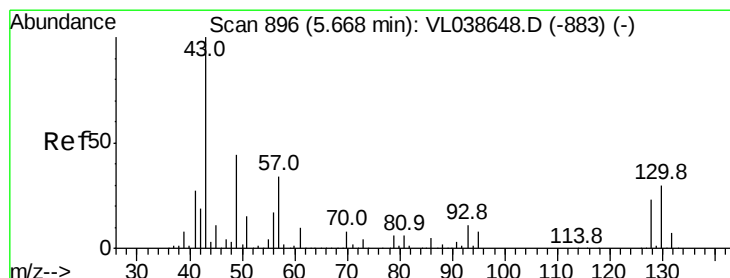
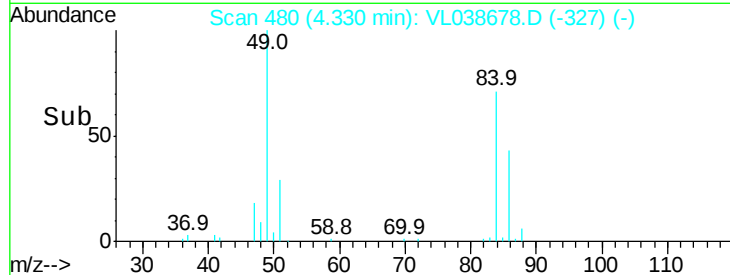
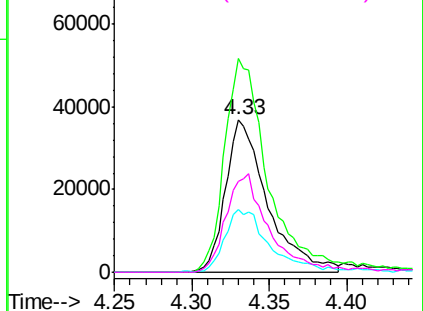


#20
Methylene Chloride
Concen: 2.08 ppbv
RT: 4.33
Delta R.T. MSVOA_L
Lab File: ClientSampleId :
Acq: 22 Mar 2022 9:39

Tgt Ion:	84	Resp:	69647
Ion	Ratio	Lower	Upper
84	100		
49	140.1	111.2	166.8
51	40.4	32.8	49.2
86	60.0	51.4	77.0

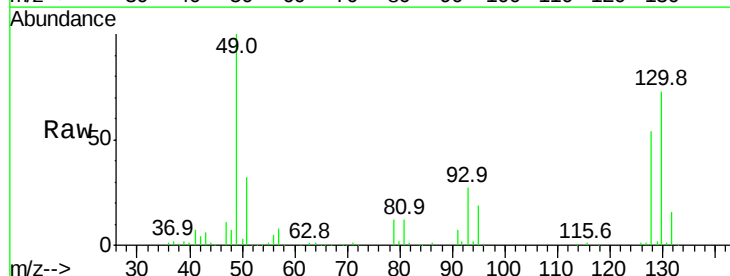


Abundance Ion 84.00 (83.70 to 84.70): VL0
Ion 49.10 (48.80 to 49.80): VL0
Ion 51.10 (50.80 to 51.80): VL0
Ion 86.00 (85.70 to 86.70): VL0

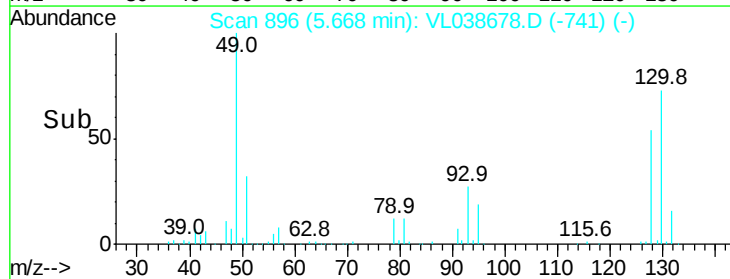
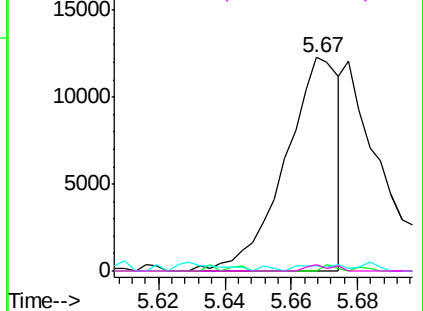


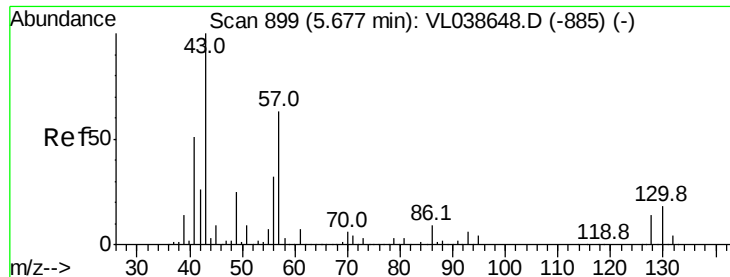
#25
Ethyl Acetate
Concen: 0.07 ppbv
RT: 5.67 min Scan# 896
Delta R.T. -0.00 min
Lab File: VL038678.D
Acq: 22 Mar 2022 9:39

Tgt Ion:	43	Resp:	13863
Ion	Ratio	Lower	Upper
43	100		
45	1.2	8.2	12.4#
61	0.0	8.3	12.5#
70	1.5	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: 0.35 ppbv

RT: 5.67

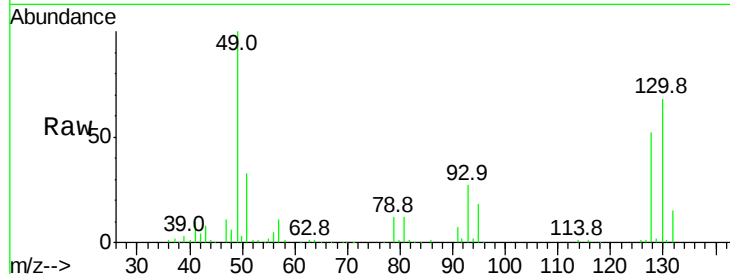
Delta R.T. MSVOA_1

Lab File: ClientSampleId :

Acq: 22 Mar 2022 9:39

Tgt Ion: 57 Resp: 31227

Ion	Ratio	Lower	Upper
57	100		
41	96.4	67.0	100.4
43	81.7	184.2	276.2#
56	58.7	42.6	64.0

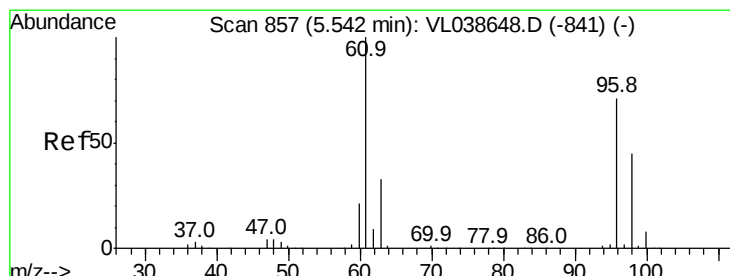
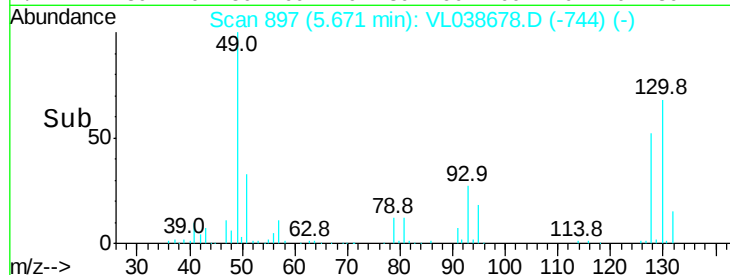
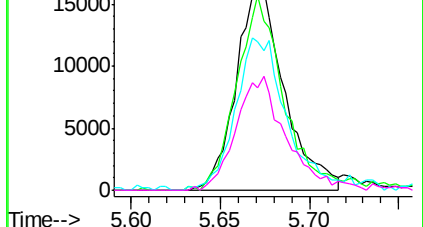


Abundance Ion 57.10 (56.80 to 57.80): VL0

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



#31

cis-1,2-Dichloroethene

Concen: 0.20 ppbv

RT: 5.53 min Scan# 854

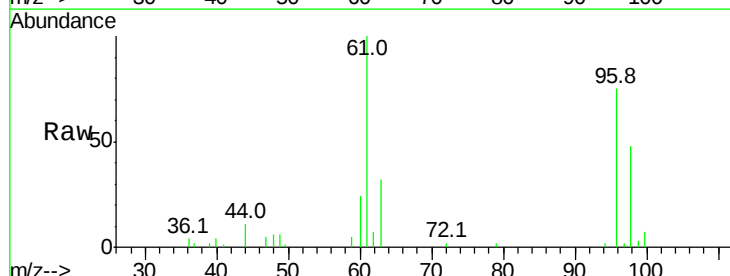
Delta R.T. -0.01 min

Lab File: VL038678.D

Acq: 22 Mar 2022 9:39

Tgt Ion: 61 Resp: 17066

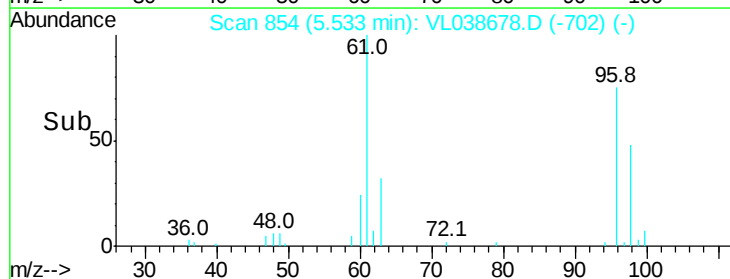
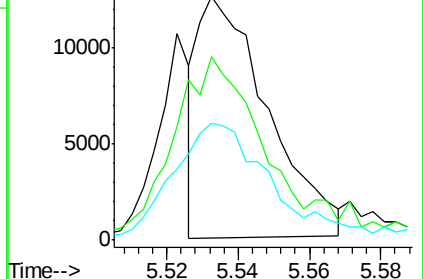
Ion	Ratio	Lower	Upper
61	100		
96	77.0	56.6	84.8
98	47.2	36.3	54.5

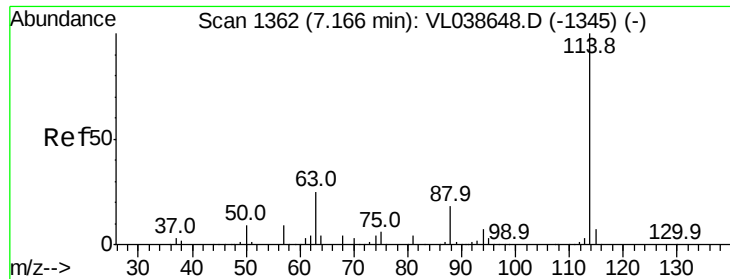


Abundance Ion 61.10 (60.80 to 61.80): VL0

Ion 96.00 (95.70 to 96.70): VL0

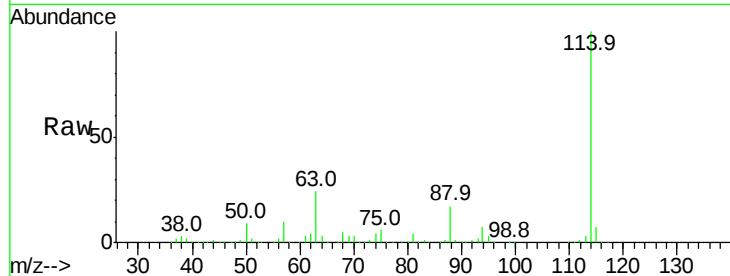
Ion 98.00 (97.70 to 98.70): VL0



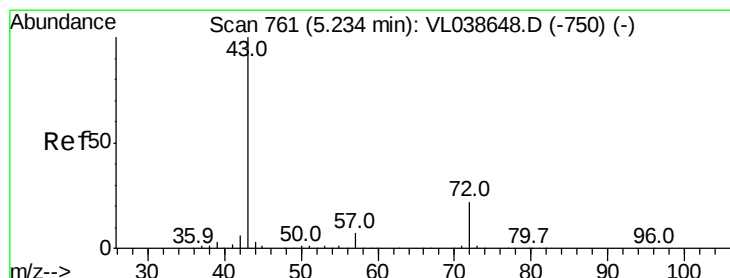
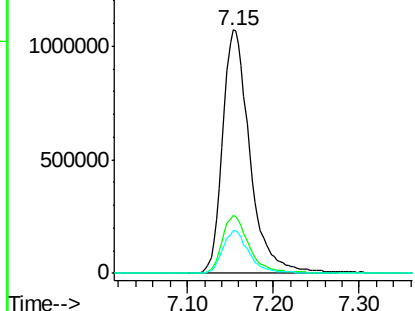
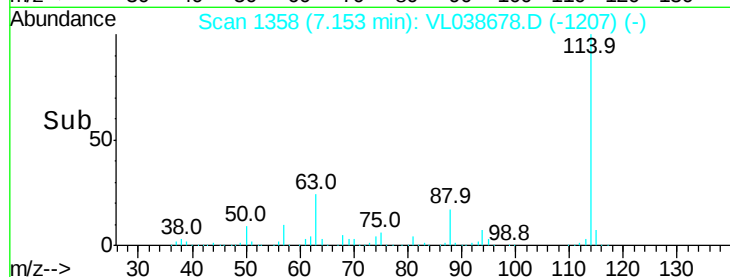


#33
 1,4-Difluorobenzene
 Concen: 10.00 ppbv
 RT: 7.15
 Delta R.T. MSVOA_L
 Lab File: ClientSampleId :
 C0P82DL
 Acq: 22 Mar 2022 9:39

Tgt Ion:114 Resp: 2371809
 Ion Ratio Lower Upper
 114 100
 63 23.7 19.4 29.0
 88 17.3 13.9 20.9

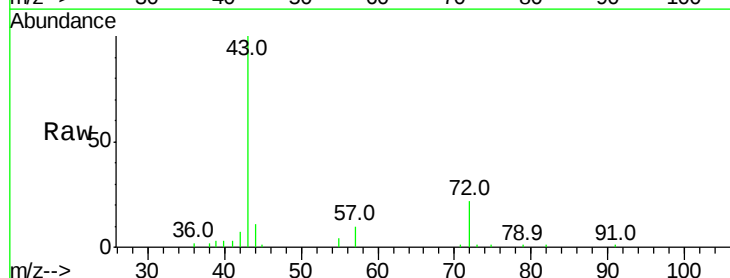


Abundance Ion 114.10 (113.80 to 114.80): VL0
 Ion 63.10 (62.80 to 63.80): VL0
 Ion 88.10 (87.80 to 88.80): VL0

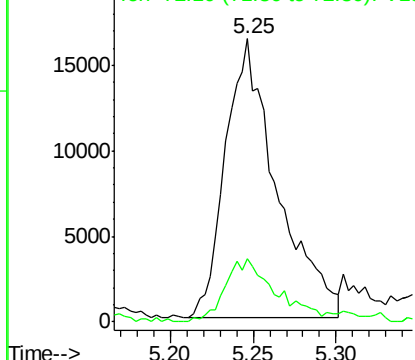
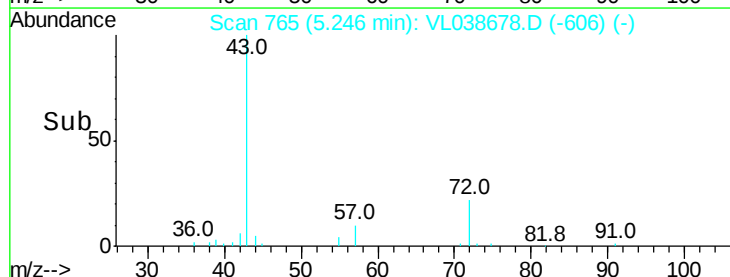


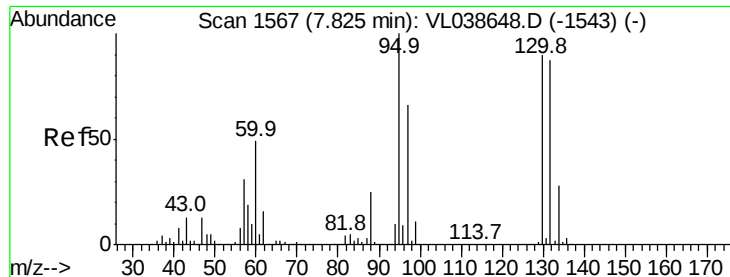
#34
 2-Butanone
 Concen: 0.38 ppbv
 RT: 5.25 min Scan# 765
 Delta R.T. 0.01 min
 Lab File: VL038678.D
 Acq: 22 Mar 2022 9:39

Tgt Ion: 43 Resp: 35262
 Ion Ratio Lower Upper
 43 100
 72 25.4 17.8 26.8



Abundance Ion 43.10 (42.80 to 43.80): VL0
 Ion 72.10 (71.80 to 72.80): VL0





#38

Trichloroethene

Concen: 0.13 ppbv

RT: 7.81 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

Acq: 22 Mar 2022 9:39

Tgt Ion: 130 Resp: 9736

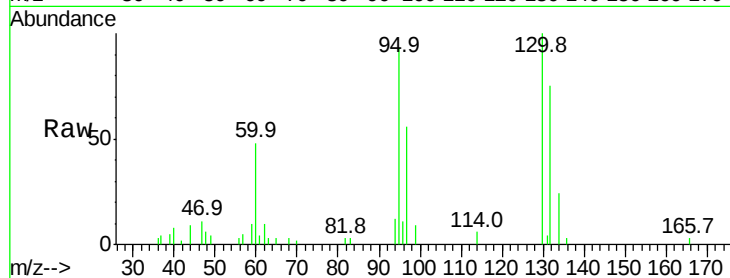
Ion Ratio Lower Upper

130 100

95 92.8 88.9 133.3

132 71.2 77.4 116.0#

97 52.6 58.2 87.4#

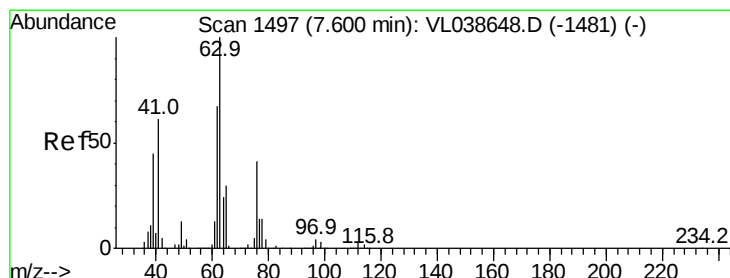
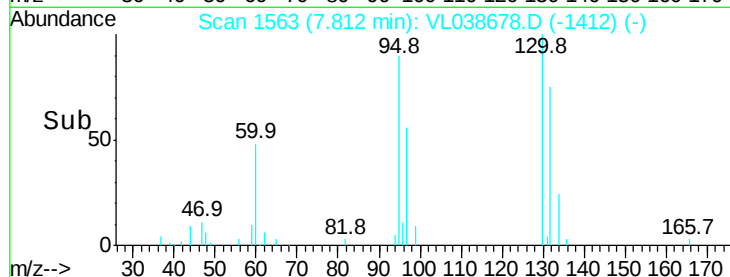
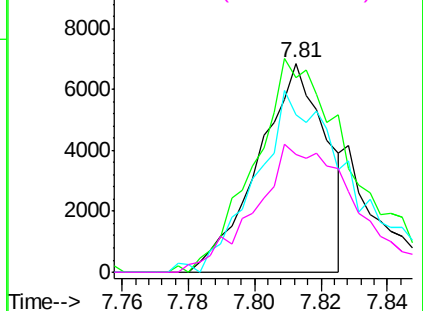


Abundance Ion 130.00 (129.70 to 130.70): V

Ion 95.00 (94.70 to 95.70): VL0

Ion 132.00 (131.70 to 132.70): V

Ion 97.00 (96.70 to 97.70): VL0



#39

1,2-Dichloropropane

Concen: 7.67 ppbv

RT: 7.15 min Scan# 1358

Delta R.T. -0.45 min

Lab File: VL038678.D

Acq: 22 Mar 2022 9:39

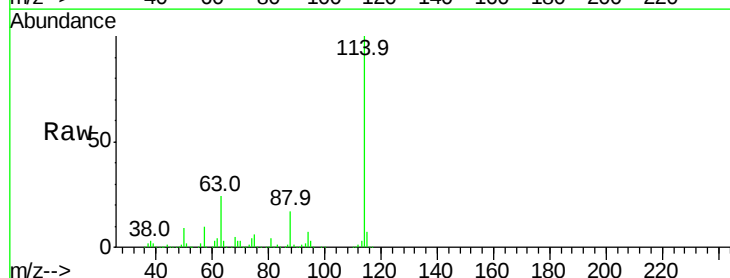
Tgt Ion: 63 Resp: 548764

Ion Ratio Lower Upper

63 100

41 0.0 49.0 73.6#

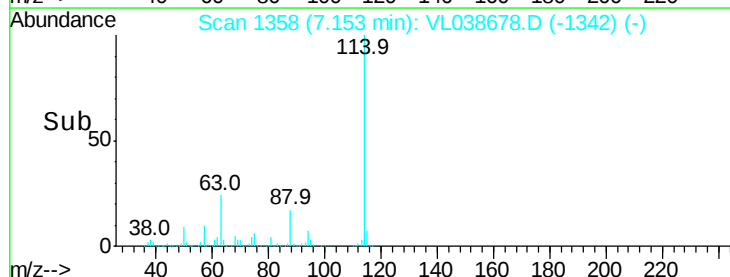
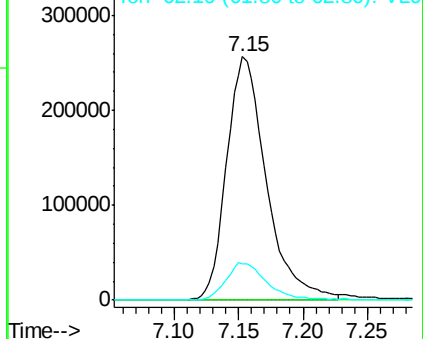
62 14.9 53.9 80.9#

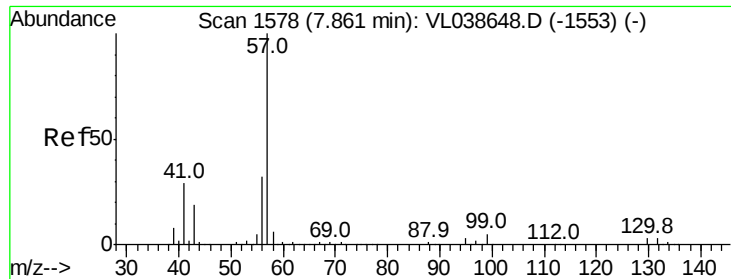


Abundance Ion 63.10 (62.80 to 63.80): VL0

Ion 41.10 (40.80 to 41.80): VL0

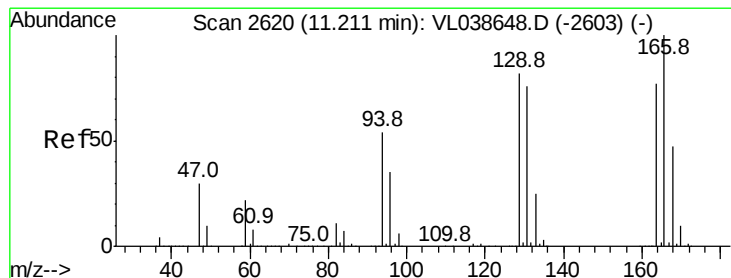
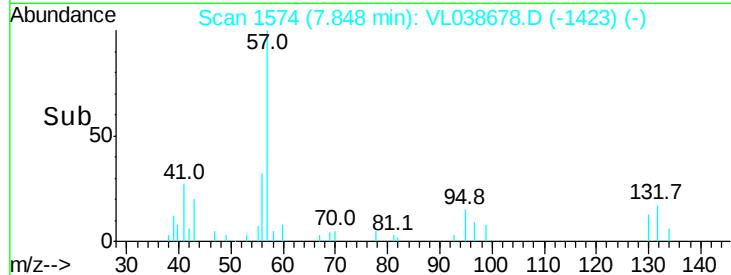
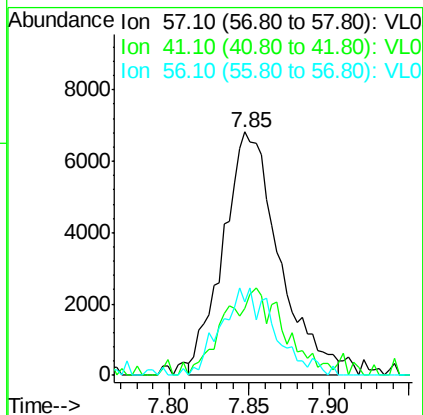
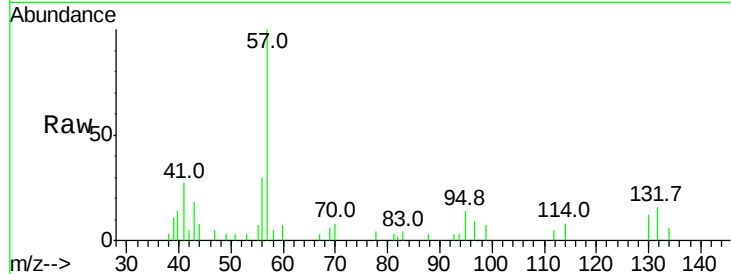
Ion 62.10 (61.80 to 62.80): VL0





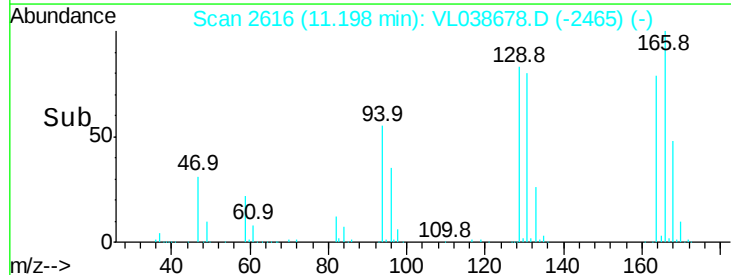
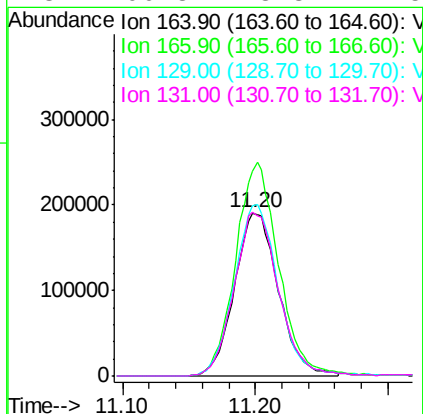
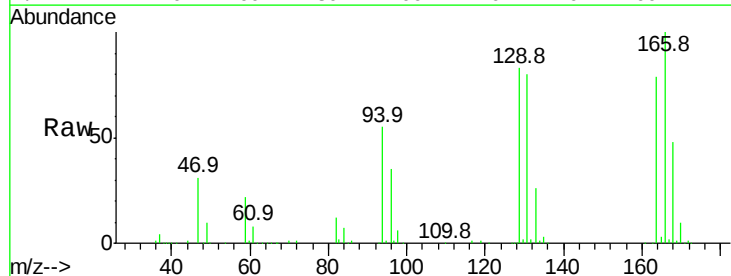
#44
 2,2,4-Trimethylpentane
 Concen: 0.05 ppbv
 RT: 7.85
 Delta R.T. MSVOA_L
 Lab File: ClientSampleId :
 Acq: 22 Mar 2022 9:39

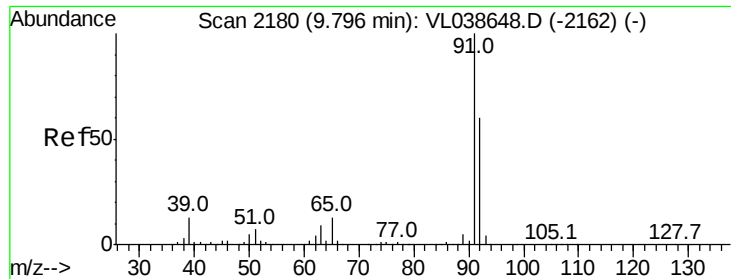
Tgt Ion	Ratio	Lower	Upper
57	100		
41	43.5	23.0	34.4#
56	35.7	25.3	37.9



#52
 Tetrachloroethene
 Concen: 6.55 ppbv
 RT: 11.20 min Scan# 2616
 Delta R.T. -0.01 min
 Lab File: VL038678.D
 Acq: 22 Mar 2022 9:39

Tgt Ion	Ratio	Lower	Upper
164	100		
166	125.8	103.3	154.9
129	104.2	85.2	127.8
131	100.8	78.3	117.5





#53

Toluene

Concen: 1.11 ppbv

RT: 9.79 Instrument: MSVOA_1

Delta R.T. ClientSampleId:

Lab File: COP82DL

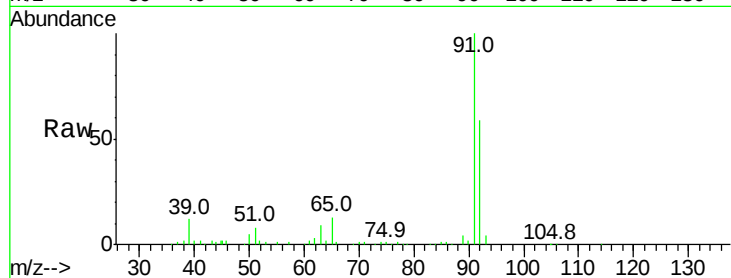
Acq: 22 Mar 2022 9:39

Tgt Ion: 91 Resp: 217876

Ion Ratio Lower Upper

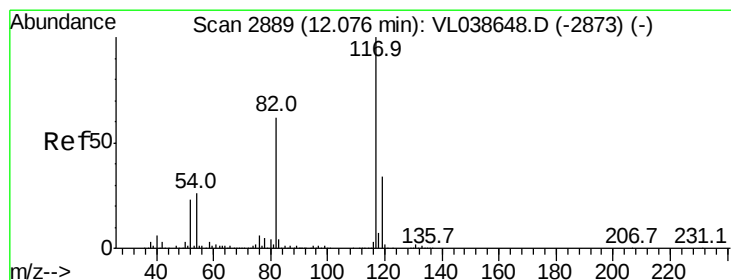
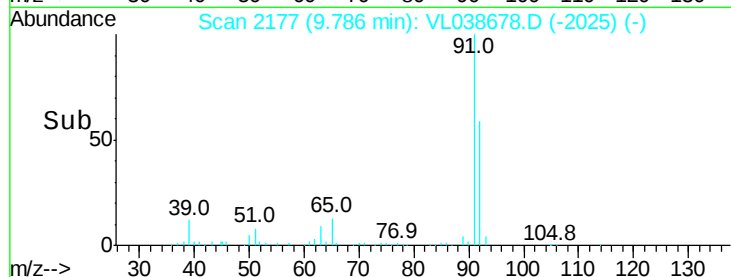
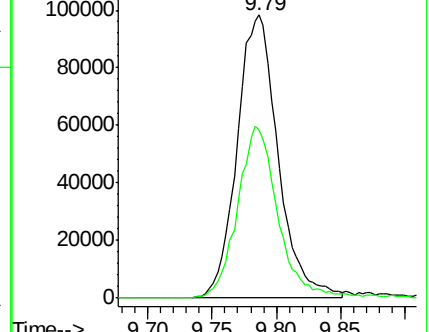
91 100

92 59.3 48.7 73.1



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 92.10 (91.80 to 92.80): VL0



#55

Chlorobenzene-d5

Concen: 10.00 ppbv

RT: 12.06 min Scan# 2885

Delta R.T. -0.01 min

Lab File: VL038678.D

Acq: 22 Mar 2022 9:39

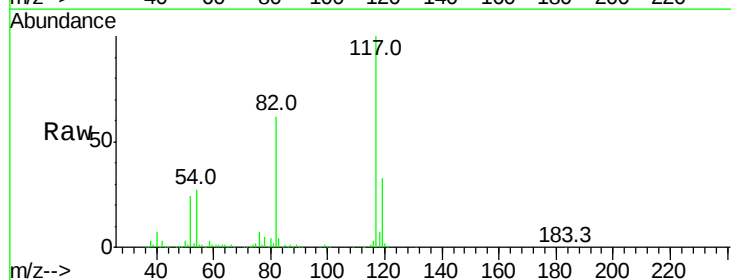
Tgt Ion: 117 Resp: 2125575

Ion Ratio Lower Upper

117 100

82 64.8 51.6 77.4

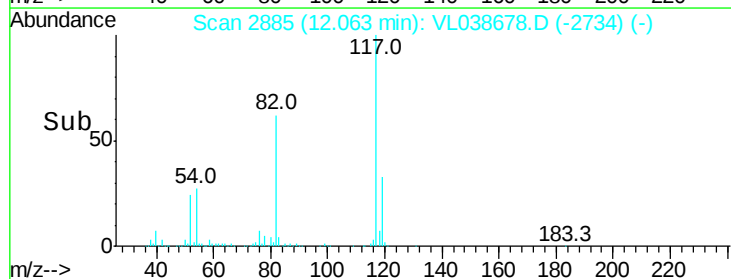
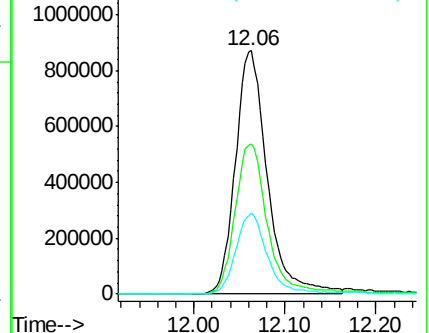
119 33.4 26.9 40.3

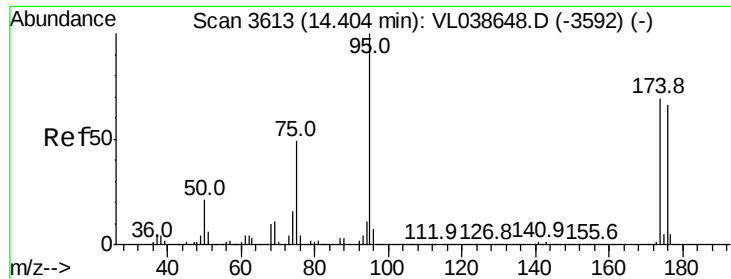


Abundance Ion 117.10 (116.80 to 117.80): V

Ion 82.10 (81.80 to 82.80): VL0

Ion 119.10 (118.80 to 119.80): V





#68

1-Bromo-4-Fluorobenzene

Concen: 9.55 ppbv

RT: 14.39

Delta R.T: MSVOA_L

Lab File: ClientSampleId :

Acq: 22 Mar 2022 9:39

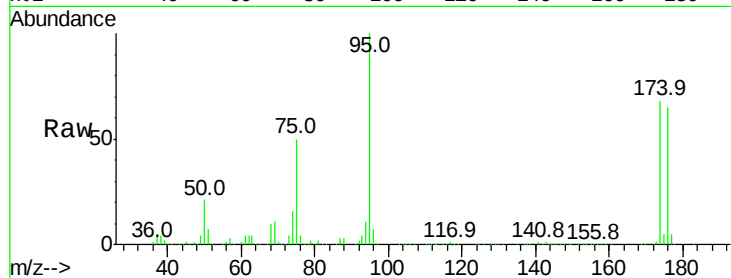
Tgt Ion: 95 Resp: 1555891

Ion Ratio Lower Upper

95 100

174 71.9 56.1 84.1

175 5.2 4.2 6.2



Abundance Ion 95.10 (94.80 to 95.80): VL0

Ion 174.00 (173.70 to 174.70): V

Ion 175.00 (174.70 to 175.70): V

