

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL040522\
 Data File : VL038813.D
 Acq On : 5 Apr 2022 16:36
 Operator : SY/AP
 Sample : VSTDICC002
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDICC002

Quant Time: Apr 05 17:22:33 2022
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_L\METHODS\VL040522AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Tue Apr 05 17:22:42 2022
 QLast Update : Tue Apr 05 17:22:42 2022
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.66	49	1481899	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.17	114	4029808	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.08	117	3874040	10.00	ppbv	0.00

System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	14.41	95	2806446	9.45	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	94.50%

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	3.05	85	393066	1.97	ppbv	98
3) Chlorodifluoromethane	2.99	51	374011	2.39	ppbv	99
4) Chloromethane	3.14	50	195270	2.27	ppbv	95
5) Vinyl Chloride	3.26	62	173709	1.99	ppbv	98
6) Bromomethane	3.47	94	85917	1.85	ppbv	88
7) Chloroethane	3.56	64	55686	1.93	ppbv	97
8) Dichlorotetrafluoroethane	3.19	85	407995	2.05	ppbv	100
9) Propene	3.01	41	192584	2.55	ppbv	92
10) Heptane	8.12	43	507516	2.81	ppbv	99
11) Trichlorofluoromethane	3.95	101	352722	2.01	ppbv	93
12) 1,1,2-Trichlorotrifluoroet	4.49	101	266019	1.97	ppbv	94
13) Ethanol	3.61	45	4234	0.51	ppbv #	100
14) Bromoethene	3.74	108	118854	1.98	ppbv	96
15) Acetone	3.85	43	266469	2.08	ppbv	90
16) 1,3-Butadiene	3.33	39	171326	2.36	ppbv	96
17) tert-Butyl alcohol	4.29	59	242455	2.17	ppbv #	94
18) 1,1-Dichloroethene	4.29	96	117256	1.93	ppbv	99
19) Isopropyl Alcohol	3.97	45	135533	1.91	ppbv #	100
20) Methylene Chloride	4.34	84	104616	1.94	ppbv	88
21) Allyl Chloride	4.41	41	221311	2.40	ppbv	99
22) trans-1,2-Dichloroethene	4.89	96	122494	1.94	ppbv	96
23) Vinyl Acetate	5.07	43	284687	2.30	ppbv #	94
24) 1,1-Dichloroethane	5.01	63	271940	2.23	ppbv	99
25) Ethyl Acetate	5.68	43	769139	2.39	ppbv	99
26) Hexane	5.68	57	361486	2.51	ppbv	98
27) Carbon Disulfide	4.55	76	323279	2.29	ppbv	94
28) Methyl tert-Butyl Ether	5.04	73	270713	2.52	ppbv	97
29) Chloroform	5.75	83	487837	2.11	ppbv	96
30) Cyclohexane	7.13	84	315869	2.52	ppbv	90
31) cis-1,2-Dichloroethene	5.55	61	322801	2.38	ppbv	98
32) 1,1,1-Trichloroethane	6.51	97	496472	2.23	ppbv	98
34) 2-Butanone	5.25	43	309974	1.94	ppbv	95
35) Carbon Tetrachloride	7.01	117	518732	2.22	ppbv	97
36) Benzene	6.89	78	767791	2.47	ppbv	96
37) 1,2-Dichloroethane	6.30	62	357330	2.26	ppbv	99
38) Trichloroethene	7.83	130	311700	2.39	ppbv	98
39) 1,2-Dichloropropane	7.61	63	295275	2.43	ppbv	96
40) 1,4-Dioxane	7.83	88	36236	0.86	ppbv #	20
41) Tetrahydrofuran	6.05	42	313338	2.64	ppbv	98
42) Bromodichloromethane	7.79	83	545378	2.30	ppbv	98
43) Methyl Methacrylate	8.01	69	296471	2.57	ppbv	97

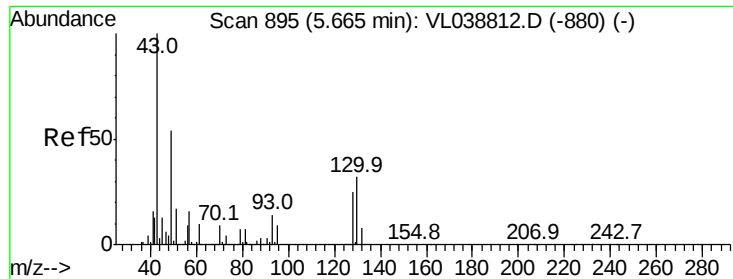
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL040522\
 Data File : VL038813.D
 Acq On : 5 Apr 2022 16:36
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Instrument :
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 ClientSampleId :
 VSTDICC002

Quant Time: Apr 05 17:22:33 2022
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_L\METHODS\VL040522AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Tue Apr 05 17:22:42 2022
 QLast Update : Tue Apr 05 17:22:42 2022
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 2,2,4-Trimethylpentane	7.86	57	1349411	2.58	ppbv	99
45) t-1,3-Dichloropropene	9.27	75	299746	2.55	ppbv	100
46) cis-1,3-Dichloropropene	8.70	75	411797	2.59	ppbv	96
47) 1,1,2-Trichloroethane	9.47	97	293966	2.26	ppbv	97
48) Dibromochloromethane	10.29	129	479152	2.36	ppbv	97
49) Bromoform	13.03	173	388780	2.35	ppbv	99
50) 4-Methyl-2-Pentanone	8.74	43	770176	2.60	ppbv	100
51) 2-Hexanone	10.13	43	583114	2.74	ppbv #	99
52) Tetrachloroethene	11.22	164	259927	2.28	ppbv	96
53) Toluene	9.80	91	911666	2.73	ppbv	99
54) 1,2-Dibromoethane	10.60	107	401427	2.26	ppbv	100
56) 1,1,1,2-Tetrachloroethane	12.12	131	186614	1.16	ppbv #	1
57) Chlorobenzene	12.14	112	661542	2.37	ppbv	94
58) Ethyl Benzene	12.70	91	1200065	2.65	ppbv	93
59) m/p-Xylene	12.99	91	963873	2.43	ppbv #	26
60) o-Xylene	13.68	91	949727	2.52	ppbv	98
61) Styrene	13.52	104	567375	2.78	ppbv	99
62) Isopropylbenzene	14.66	105	1434238	2.54	ppbv	97
63) 1,1,2,2-Tetrachloroethane	13.67	83	581368	2.00	ppbv	100
64) n-propylbenzene	15.55	120	371644	2.50	ppbv	91
65) tert-Butylbenzene	16.74	119	1262271	2.48	ppbv	97
66) Benzyl Chloride	16.98	91	257422	2.68	ppbv	98
67) sec-Butylbenzene	17.28	105	1819191	2.50	ppbv	99
69) p-Isopropyltoluene	17.64	119	1527807	2.58	ppbv	98
70) n-Butylbenzene	18.54	91	795526	1.30	ppbv #	41
71) 2-Chlorotoluene	15.45	91	1073305	2.56	ppbv	98
72) 4-Ethyltoluene	15.83	105	1108273	2.50	ppbv	99
73) 1,3,5-Trimethylbenzene	15.99	105	1026773	2.54	ppbv	97
74) 1,2,4-Trimethylbenzene	16.75	105	1122381	2.55	ppbv	97
75) 1,3-Dichlorobenzene	16.99	146	624288	2.22	ppbv	99
76) 1,4-Dichlorobenzene	17.13	146	585131	2.10	ppbv	98
77) 1,2-Dichlorobenzene	17.81	146	603895	2.17	ppbv	98
78) Hexachloro-1,3-Butadiene	23.36	225	501708	1.95	ppbv	99
79) Naphthalene	22.18	128	859144	2.55	ppbv	98
80) Naphthalene,2-methyl-	24.97	142	206976	2.29	ppbv	93
81) 1,2,4-Trichlorobenzene	21.91	180	473683	2.05	ppbv	98

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



#1

Bromochloromethane

Concen: 10.00 ppbv

RT: 5.66 Instrument: MSVOA_1

Delta R.T.:

Lab File: ClientSampleId:

VSTDIC002

Acq: 5 Apr 2022 16:36

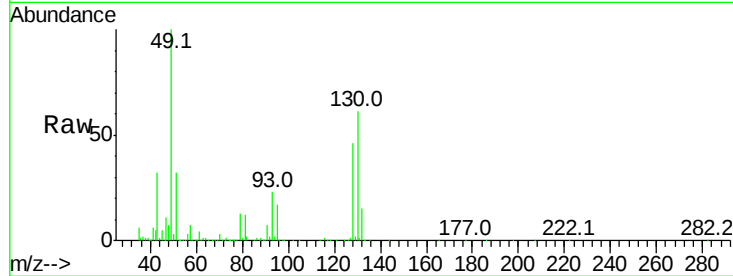
Tgt Ion: 49 Resp: 1481899

Ion Ratio Lower Upper

49 100

128 48.8 24.1 72.3

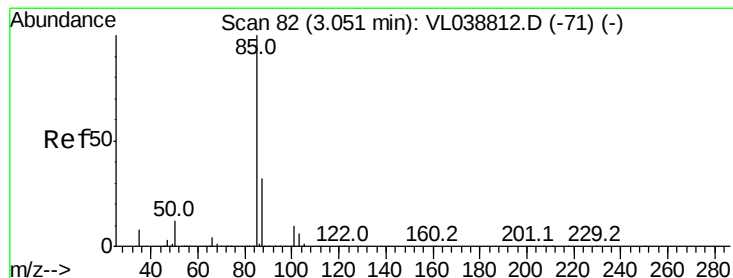
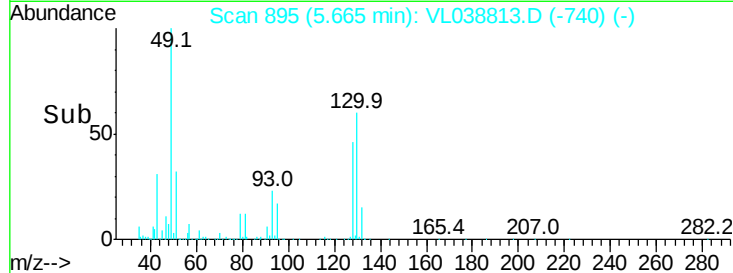
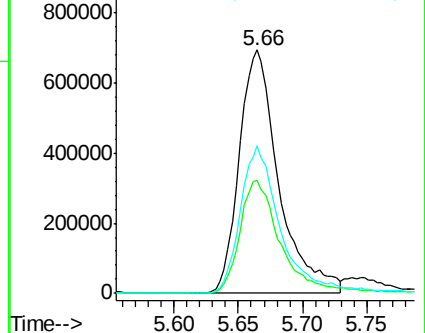
130 63.4 30.9 92.8



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: 1.97 ppbv

RT: 3.05 min Scan# 82

Delta R.T. -0.00 min

Lab File: VL038813.D

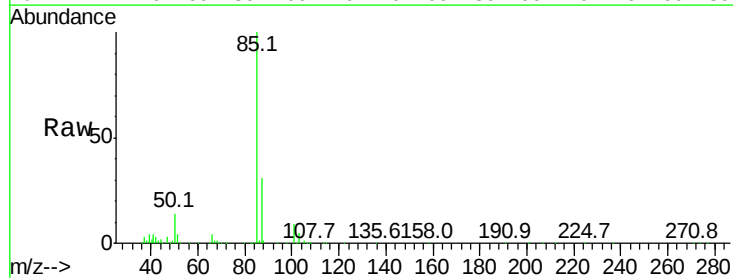
Acq: 5 Apr 2022 16:36

Tgt Ion: 85 Resp: 393066

Ion Ratio Lower Upper

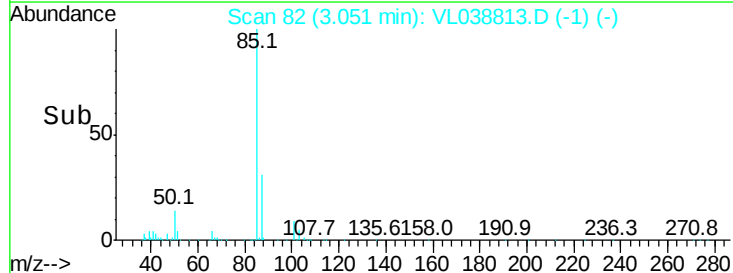
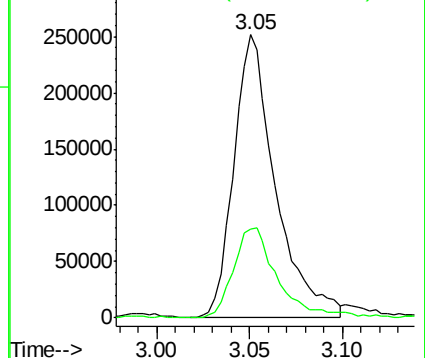
85 100

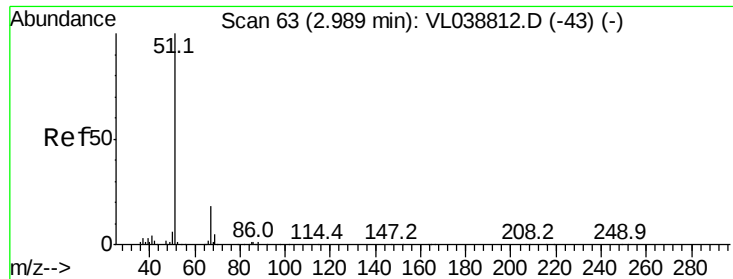
87 31.2 25.9 38.9



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0





#3

Chlorodifluoromethane

Concen: 2.39 ppbv

RT: 2.99 Instrument: MSVOA_1

Delta R.T. 0.00 min

Lab File: ClientSampleId: VSTDIC002

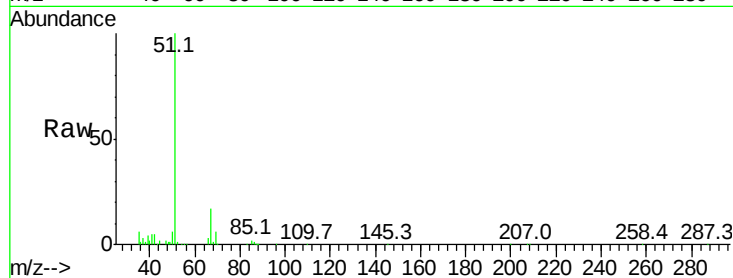
Acq: 5 Apr 2022 16:36

Tgt Ion: 51 Resp: 374011

Ion Ratio Lower Upper

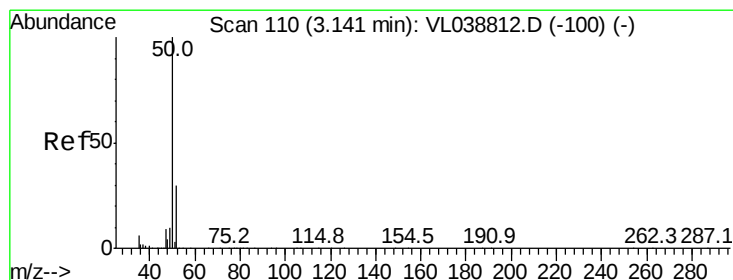
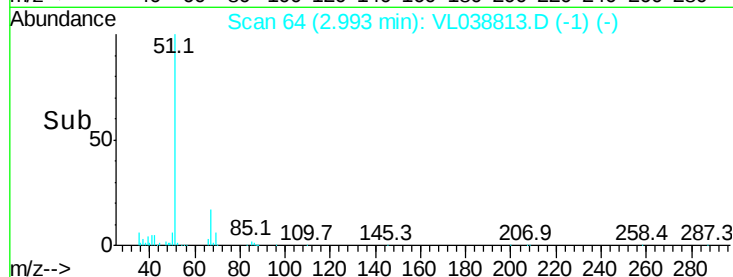
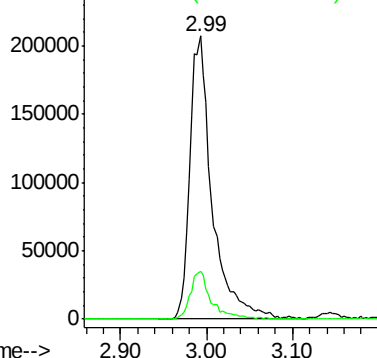
51 100

67 16.2 13.4 20.0



Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0



#4

Chloromethane

Concen: 2.27 ppbv

RT: 3.14 min Scan# 111

Delta R.T. 0.00 min

Lab File: VL038813.D

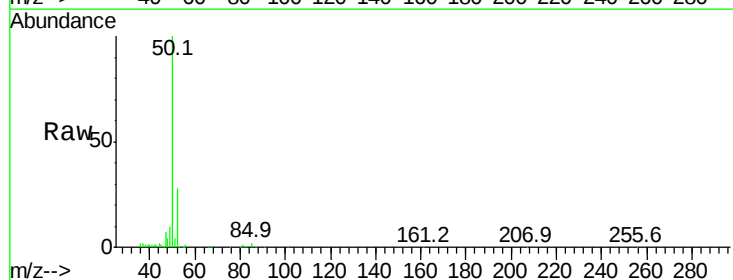
Acq: 5 Apr 2022 16:36

Tgt Ion: 50 Resp: 195270

Ion Ratio Lower Upper

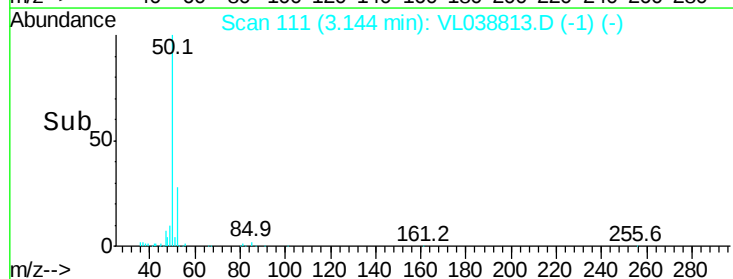
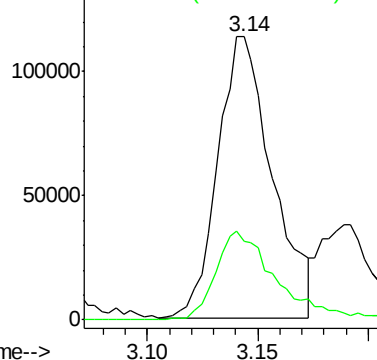
50 100

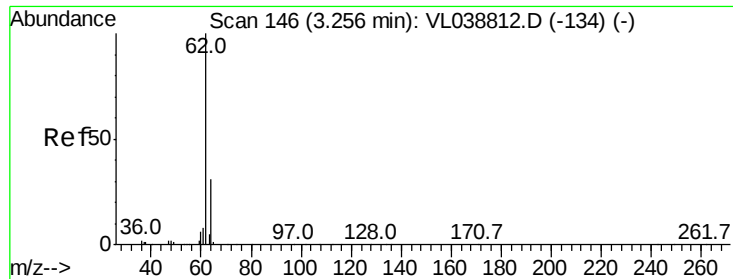
52 27.9 24.3 36.5



Abundance Ion 50.10 (49.80 to 50.80): VL0

Ion 52.10 (51.80 to 52.80): VL0





#5

Vinyl Chloride

Concen: 1.99 ppbv

RT: 3.26 Instrument:

Delta R.T. MSVOA_1

Lab File: ClientSampleId:

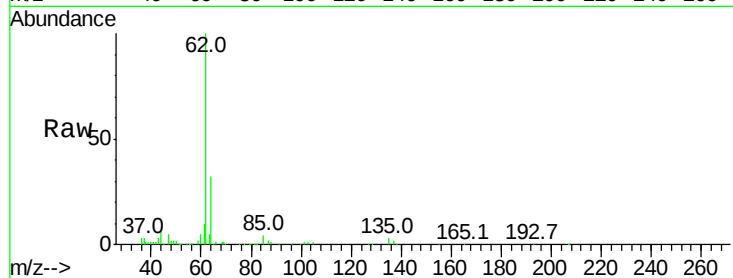
Acq: 5 Apr 2022 16:36 VSTDIC002

Tgt Ion: 62 Resp: 173709

Ion Ratio Lower Upper

62 100

64 31.8 24.6 37.0



Abundance Ion 62.10 (61.80 to 62.80): VL0

Ion 64.10 (63.80 to 64.80): VL0

120000

100000

80000

60000

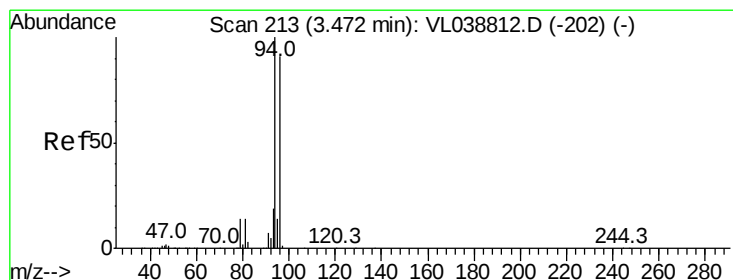
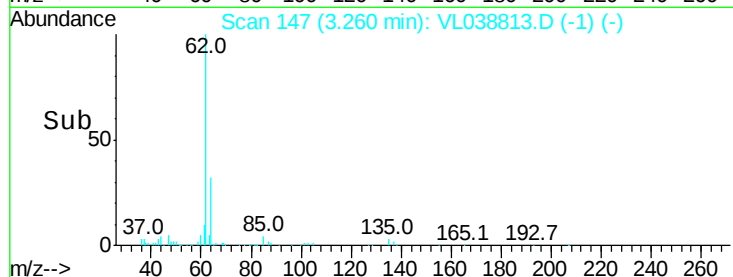
40000

20000

0

3.20 3.25 3.30

Time-->



#6

Bromomethane

Concen: 1.85 ppbv

RT: 3.47 min Scan# 214

Delta R.T. 0.00 min

Lab File: VL038813.D

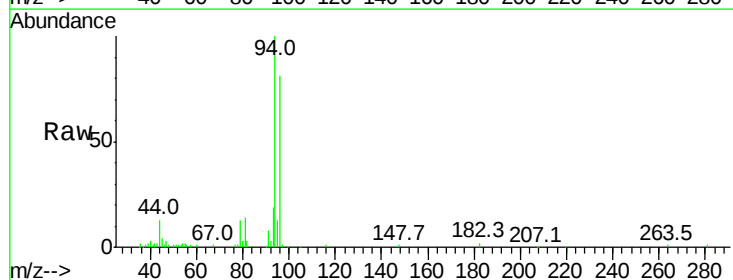
Acq: 5 Apr 2022 16:36

Tgt Ion: 94 Resp: 85917

Ion Ratio Lower Upper

94 100

96 79.9 73.2 109.8



Abundance Ion 94.00 (93.70 to 94.70): VL0

Ion 96.00 (95.70 to 96.70): VL0

50000

40000

30000

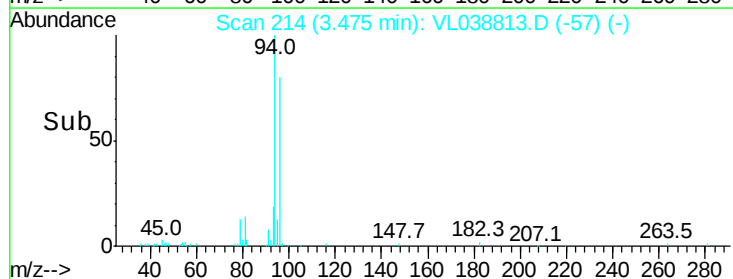
20000

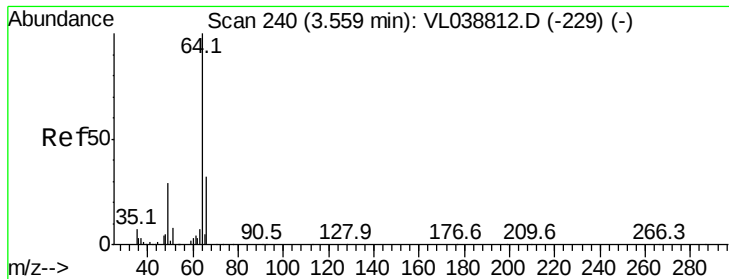
10000

0

3.40 3.45 3.50 3.55

Time-->





#7

Chloroethane

Concen: 1.93 ppbv

RT: 3.56 Instrument:

Delta R.T. MSVOA_1

Lab File: ClientSampleId:

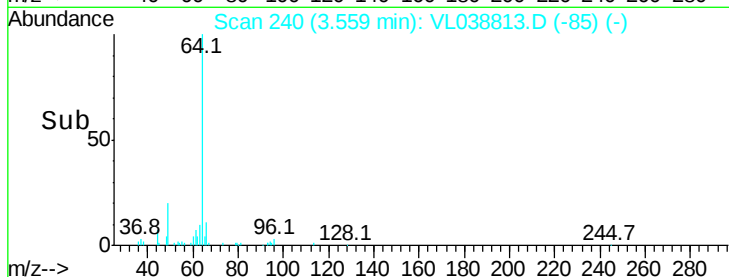
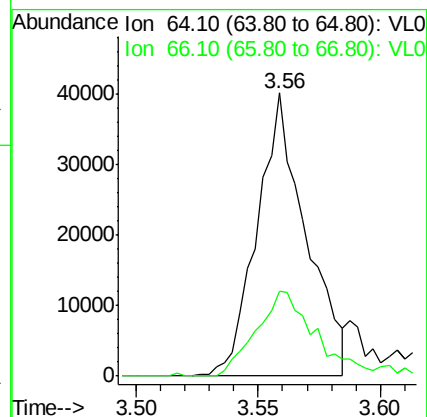
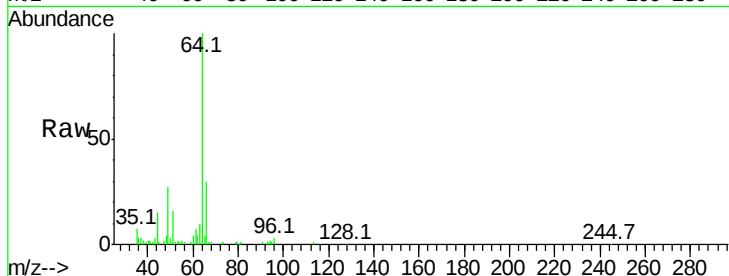
Acq: 5 Apr 2022 16:36 VSTDIC002

Tgt Ion: 64 Resp: 55686

Ion Ratio Lower Upper

64 100

66 30.0 25.4 38.2



#8

Dichlorotetrafluoroethane

Concen: 2.05 ppbv

RT: 3.19 min Scan# 125

Delta R.T. -0.00 min

Lab File: VL038813.D

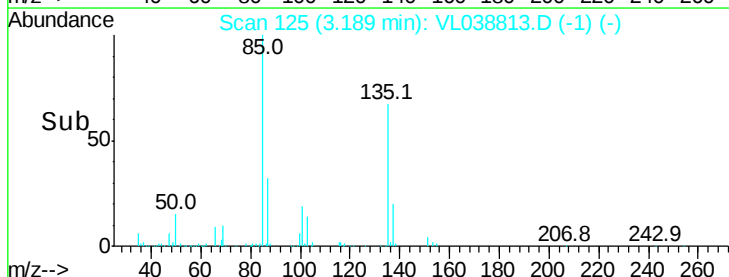
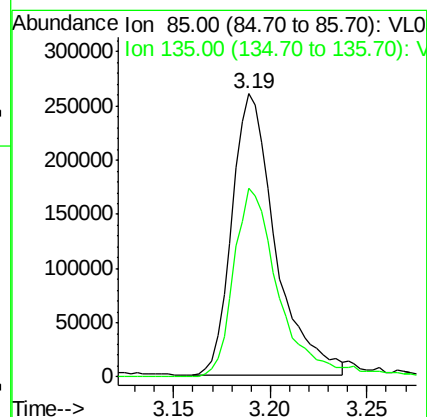
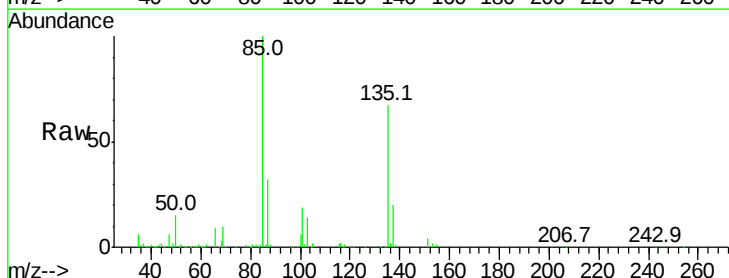
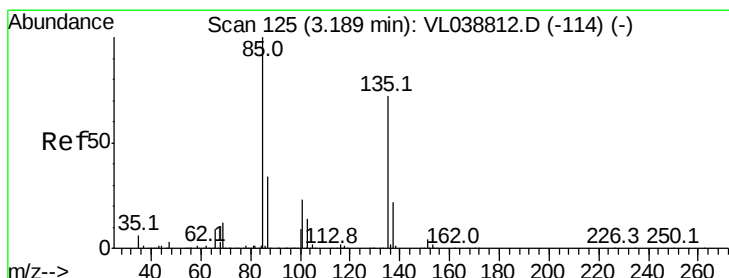
Acq: 5 Apr 2022 16:36

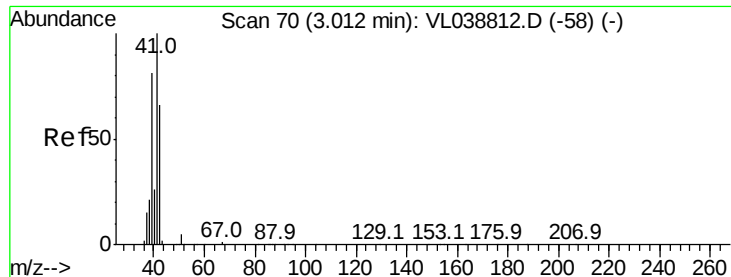
Tgt Ion: 85 Resp: 407995

Ion Ratio Lower Upper

85 100

135 71.5 57.0 85.6





#9

Propene

Concen: 2.55 ppbv

RT: 3.01 Instrument:

Delta R.T. MSVOA_1

Lab File: ClientSampleId:

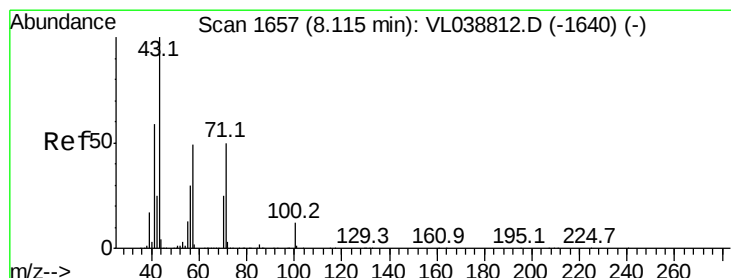
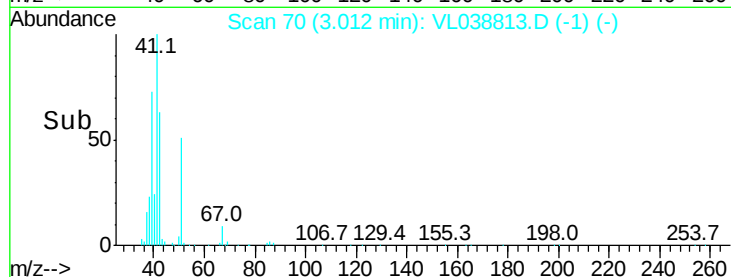
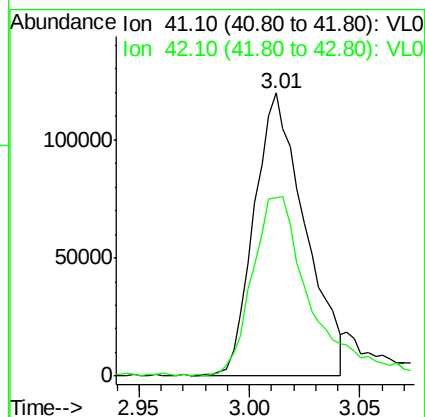
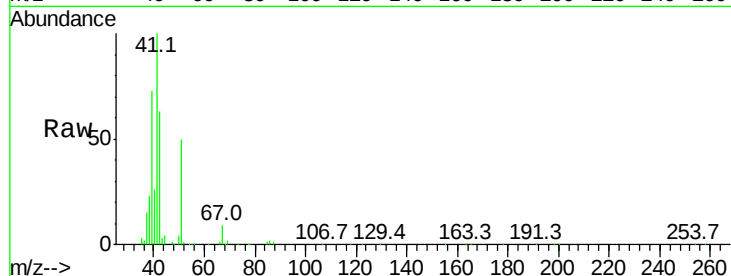
Acq: 5 Apr 2022 16:36

Tgt Ion: 41 Resp: 192584

Ion Ratio Lower Upper

41 100

42 74.1 54.2 81.4



#10

Heptane

Concen: 2.81 ppbv

RT: 8.12 min Scan# 1658

Delta R.T. 0.00 min

Lab File: VL038813.D

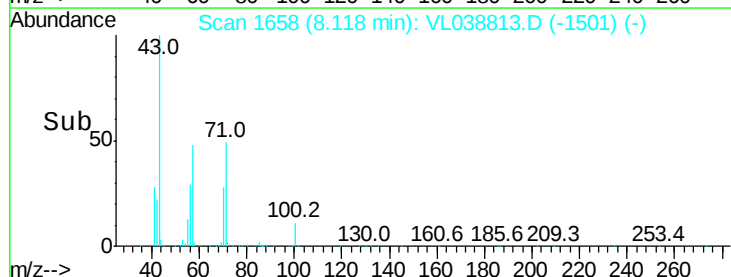
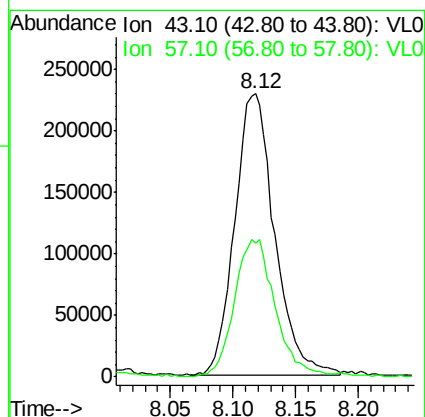
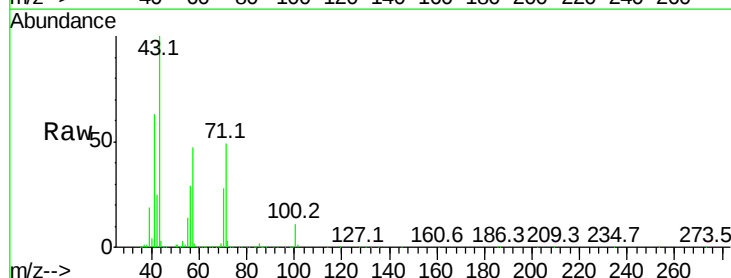
Acq: 5 Apr 2022 16:36

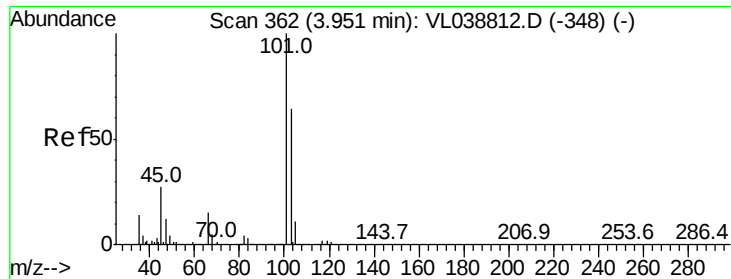
Tgt Ion: 43 Resp: 507516

Ion Ratio Lower Upper

43 100

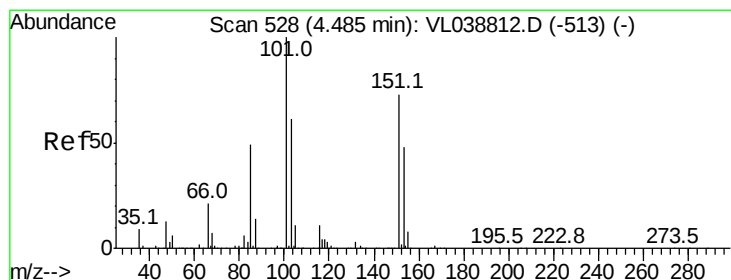
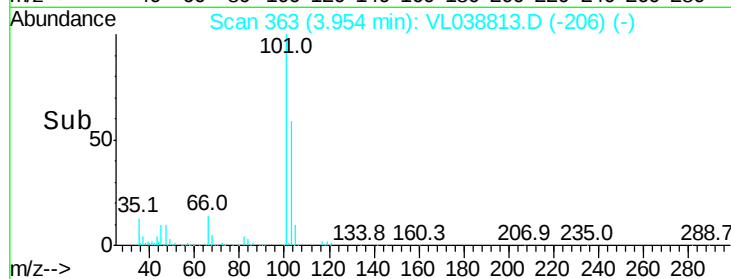
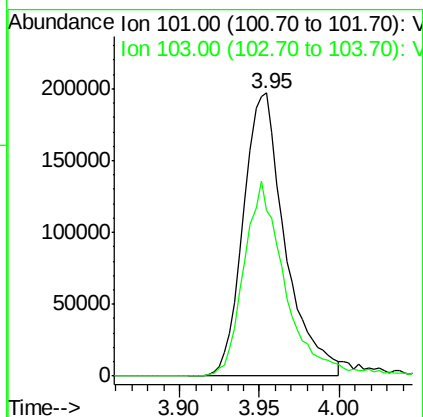
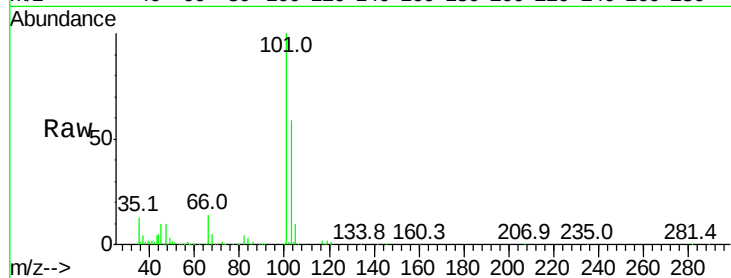
57 50.1 39.3 58.9





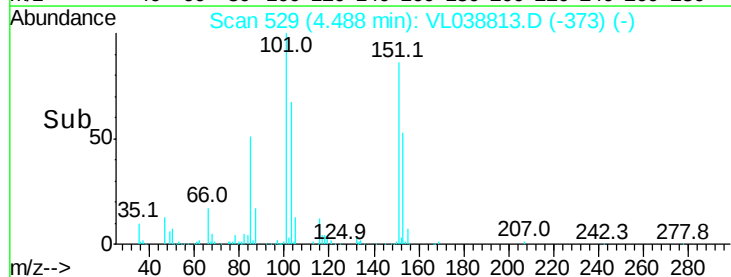
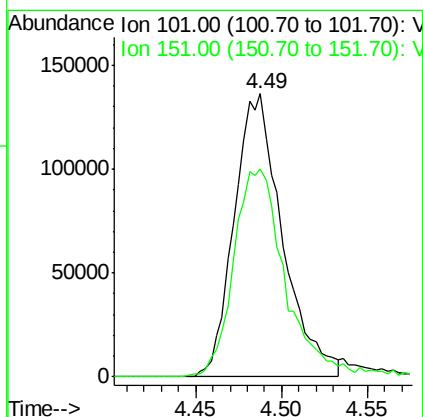
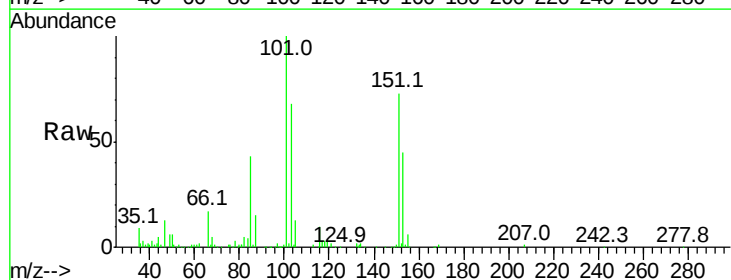
#11
 Trichlorofluoromethane
 Concen: 2.01 ppbv
 RT: 3.95 min
 Instrument: MSVOA_1
 Delta R.T.:
 Lab File: ClientSampleId :
 VSTDIC002
 Acq: 5 Apr 2022 16:36

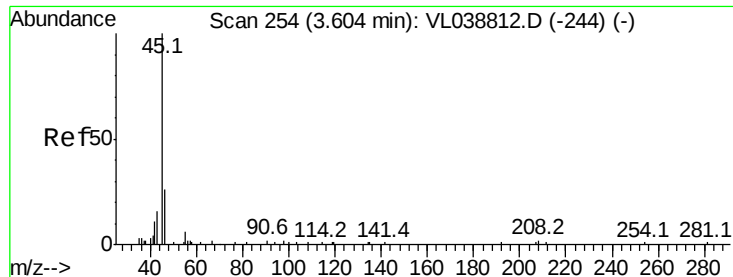
Tgt Ion:101 Resp: 352722
 Ion Ratio Lower Upper
 101 100
 103 58.7 51.4 77.0



#12
 1,1,2-Trichlorotrifluoroethane
 Concen: 1.97 ppbv
 RT: 4.49 min Scan# 529
 Delta R.T.: 0.00 min
 Lab File: VL038813.D
 Acq: 5 Apr 2022 16:36

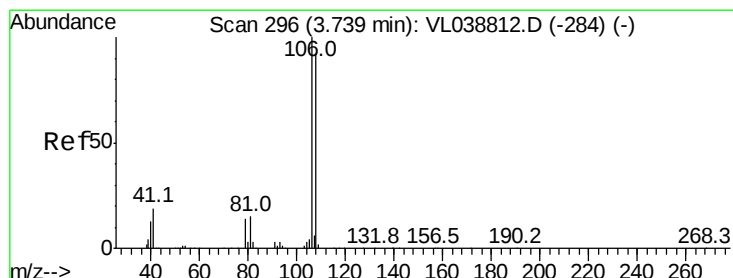
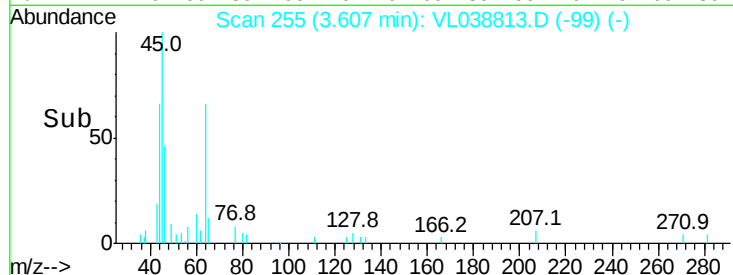
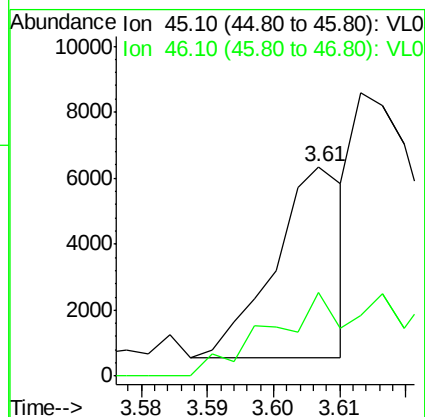
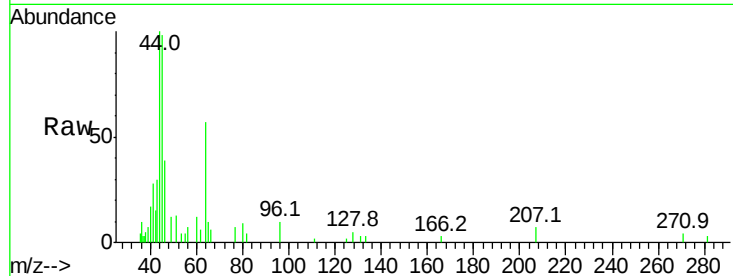
Tgt Ion:101 Resp: 266019
 Ion Ratio Lower Upper
 101 100
 151 80.4 59.9 89.9





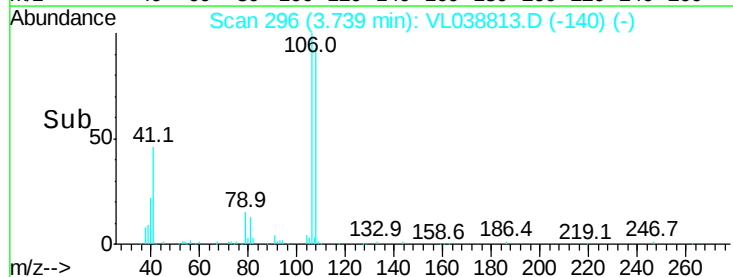
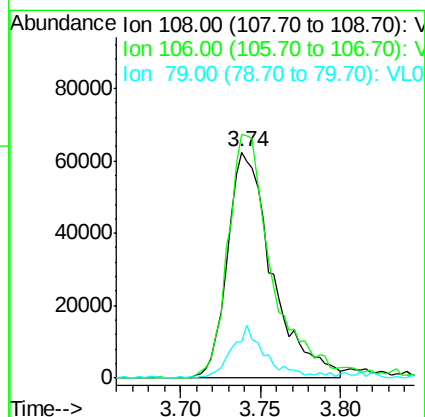
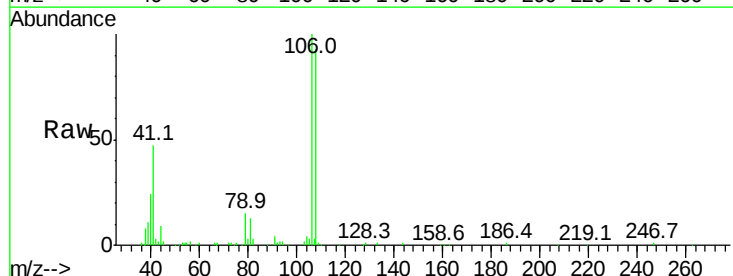
#13
 Ethanol
 Concen: 0.51 ppbv
 RT: 3.61
 Delta R.T. MSVOA_1
 Lab File: ClientSampleId:
 VSTDIC002
 Acq: 5 Apr 2022 16:36

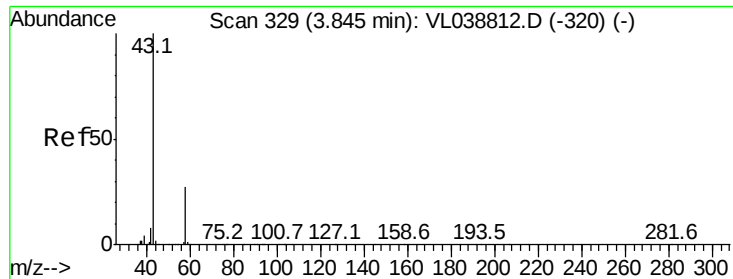
Tgt Ion: 45 Resp: 4234
 Ion Ratio Lower Upper
 45 100
 46 124.2 0.0 0.0#



#14
 Bromoethene
 Concen: 1.98 ppbv
 RT: 3.74 min Scan# 296
 Delta R.T. -0.00 min
 Lab File: VL038813.D
 Acq: 5 Apr 2022 16:36

Tgt Ion: 108 Resp: 118854
 Ion Ratio Lower Upper
 108 100
 106 110.3 91.5 137.3
 79 20.0 13.7 20.5





#15

Acetone

Concen: 2.08 ppbv

RT: 3.85 Instrument:

Delta R.T. MSVOA_1

Lab File: ClientSampleId:

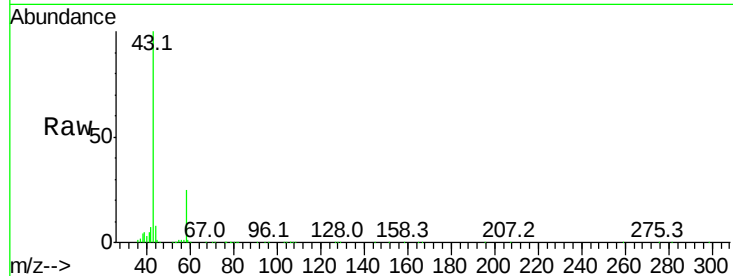
Acq: 5 Apr 2022 16:36 VSTDIC002

Tgt Ion: 43 Resp: 266469

Ion Ratio Lower Upper

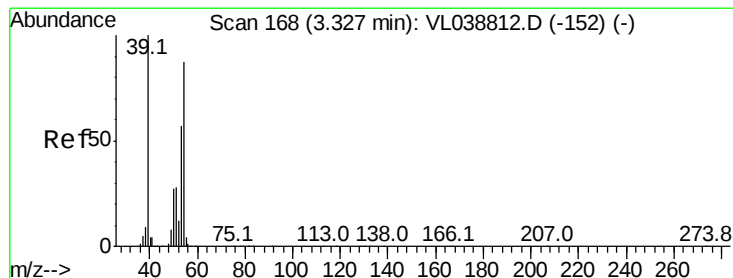
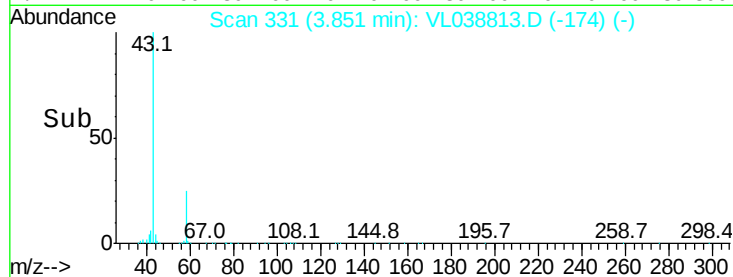
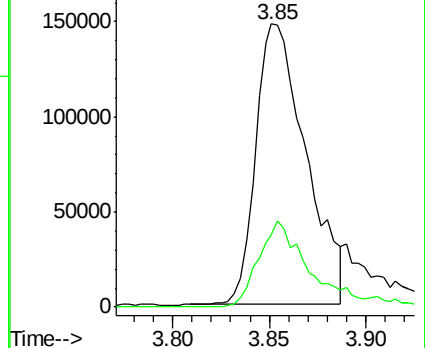
43 100

58 33.1 22.5 33.7



Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 58.10 (57.80 to 58.80): VL0



#16

1,3-Butadiene

Concen: 2.36 ppbv

RT: 3.33 min Scan# 168

Delta R.T. -0.00 min

Lab File: VL038813.D

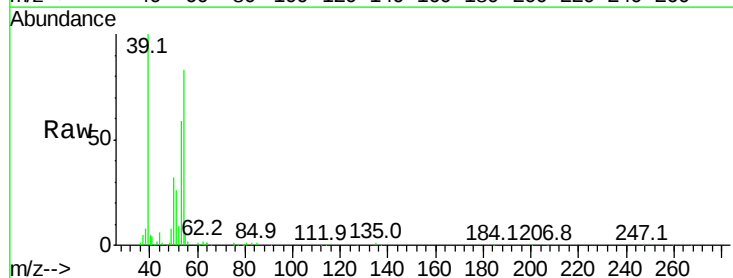
Acq: 5 Apr 2022 16:36

Tgt Ion: 39 Resp: 171326

Ion Ratio Lower Upper

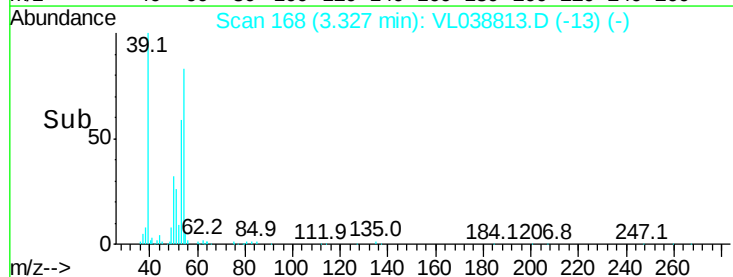
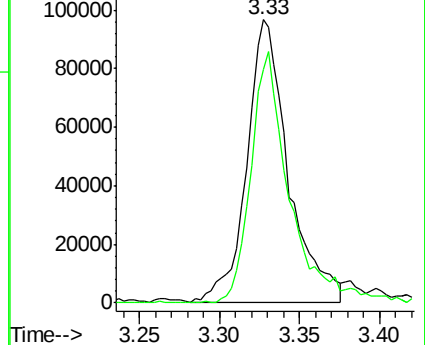
39 100

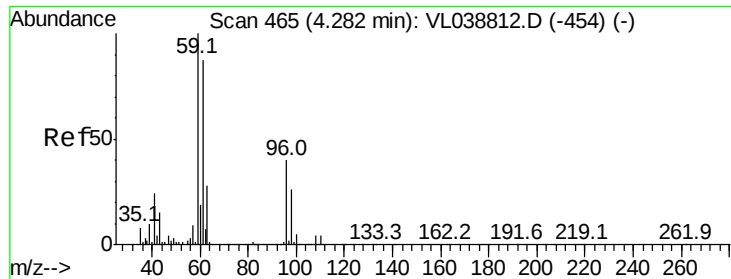
54 84.2 64.8 97.2



Abundance Ion 39.10 (38.80 to 39.80): VL0

Ion 54.10 (53.80 to 54.80): VL0





#17

tert-Butyl alcohol

Concen: 2.17 ppbv

RT: 4.29 Instrument:

Delta R.T. MSVOA_1

Lab File: ClientSampleId:

VSTDIC002

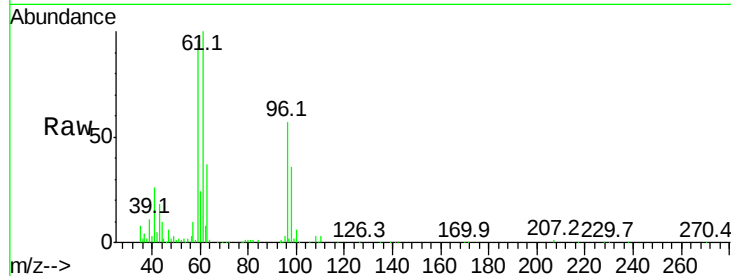
Acq: 5 Apr 2022 16:36

Tgt Ion: 59 Resp: 242455

Ion Ratio Lower Upper

59 100

57 12.8 8.5 12.7#



Abundance Ion 59.10 (58.80 to 59.80): VL0

Ion 57.10 (56.80 to 57.80): VL0

4.29

120000

100000

80000

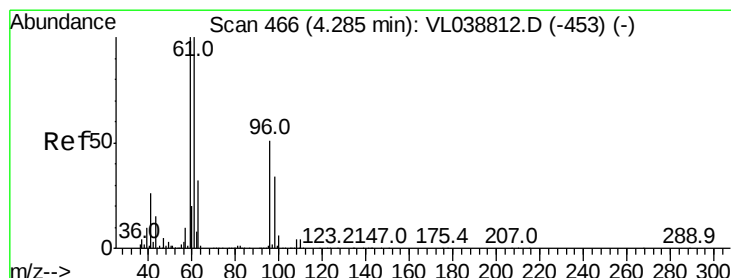
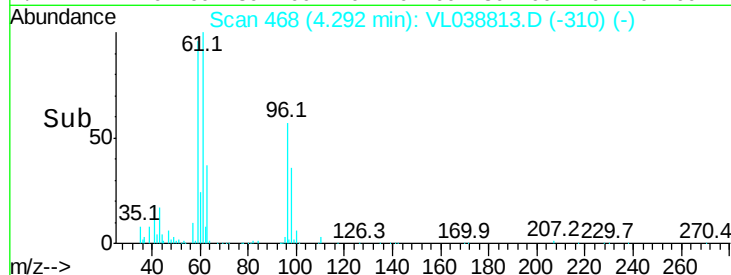
60000

40000

20000

0

Time-->



#18

1,1-Dichloroethene

Concen: 1.93 ppbv

RT: 4.29 min Scan# 467

Delta R.T. 0.00 min

Lab File: VL038813.D

Acq: 5 Apr 2022 16:36

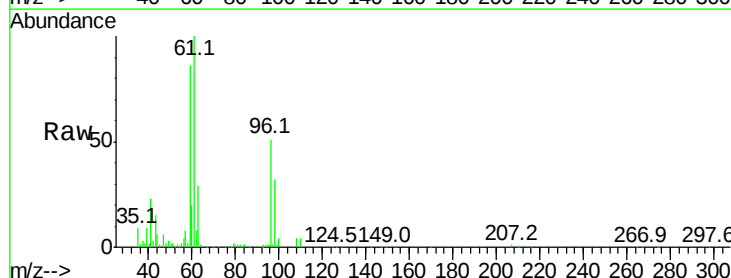
Tgt Ion: 96 Resp: 117256

Ion Ratio Lower Upper

96 100

61 195.1 156.1 234.1

98 61.9 53.0 79.6



Abundance Ion 96.00 (95.70 to 96.70): VL0

Ion 61.10 (60.80 to 61.80): VL0

Ion 98.00 (97.70 to 98.70): VL0

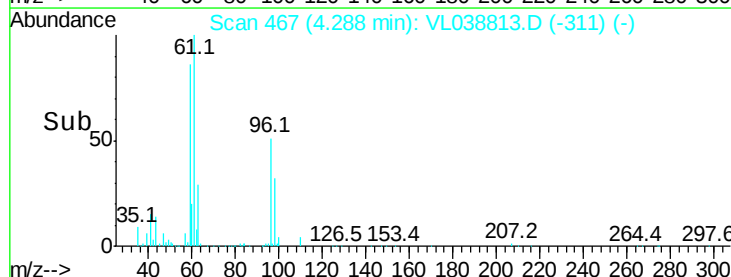
150000

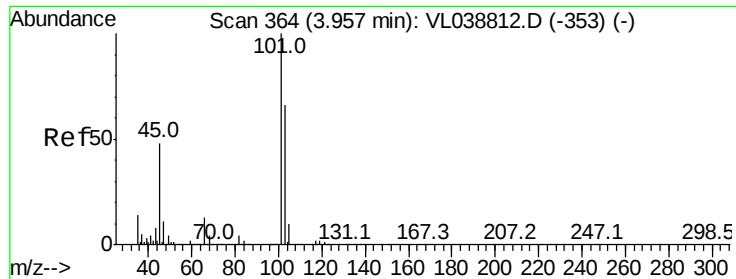
100000

50000

0

Time-->





#19

Isopropyl Alcohol

Concen: 1.91 ppbv

RT: 3.97 Instrument:

Delta R.T. MSVOA_1

Lab File: ClientSampleId:

VSTDIC002

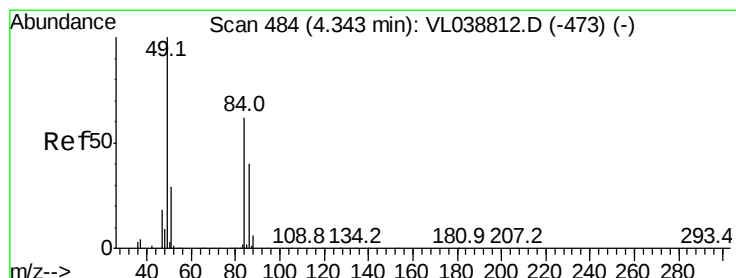
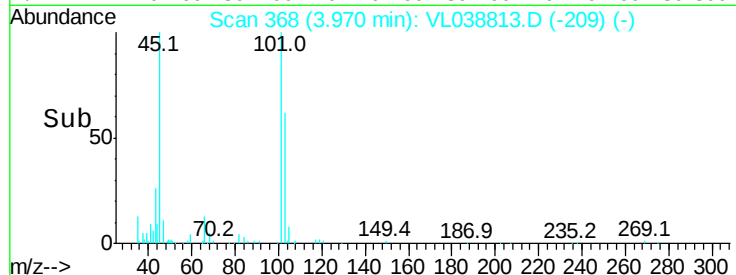
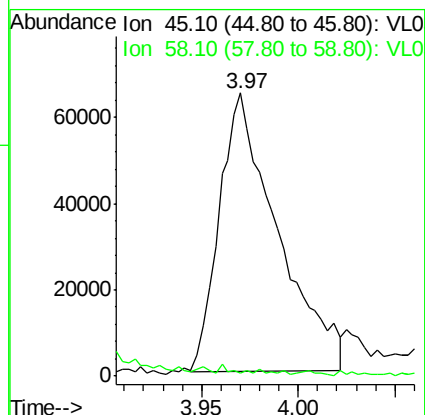
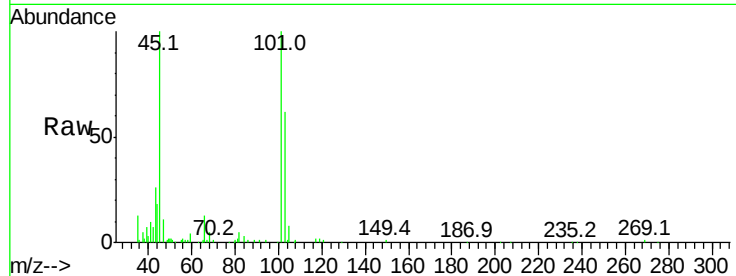
Acq: 5 Apr 2022 16:36

Tgt Ion: 45 Resp: 135533

Ion Ratio Lower Upper

45 100

58 65.8 0.0 0.0#



#20

Methylene Chloride

Concen: 1.94 ppbv

RT: 4.34 min Scan# 484

Delta R.T. -0.00 min

Lab File: VL038813.D

Acq: 5 Apr 2022 16:36

Tgt Ion: 84 Resp: 104616

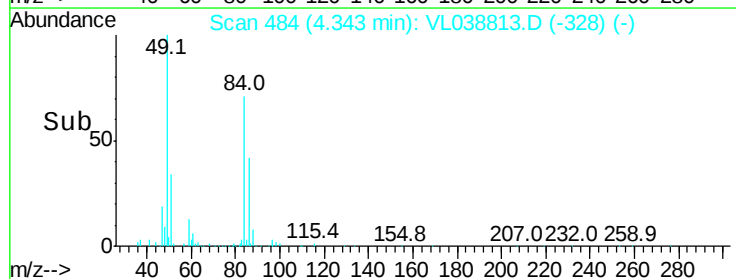
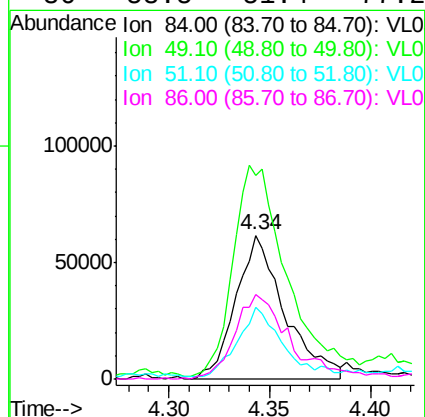
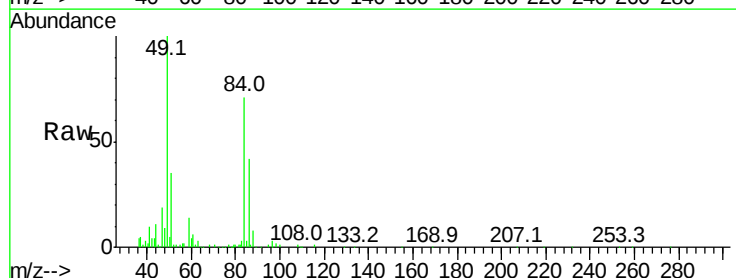
Ion Ratio Lower Upper

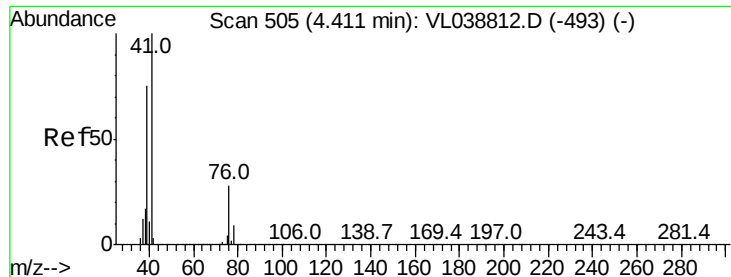
84 100

49 140.1 129.4 194.0

51 47.3 37.4 56.2

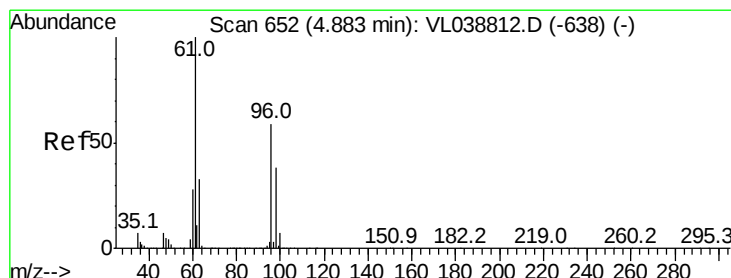
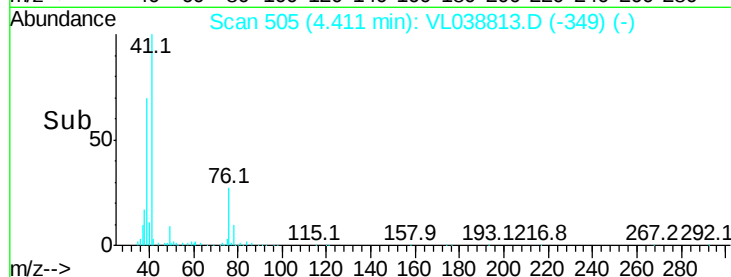
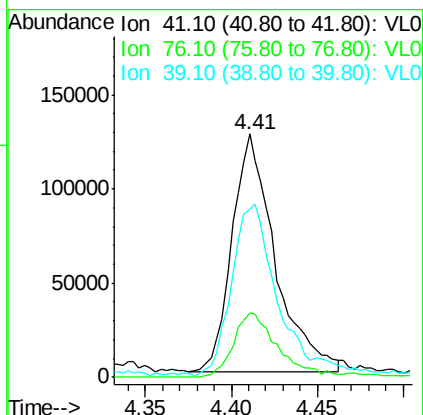
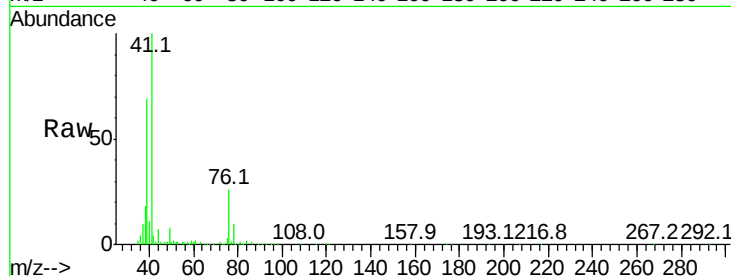
86 58.5 51.4 77.2





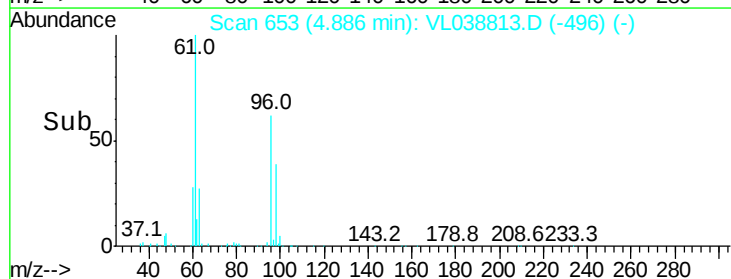
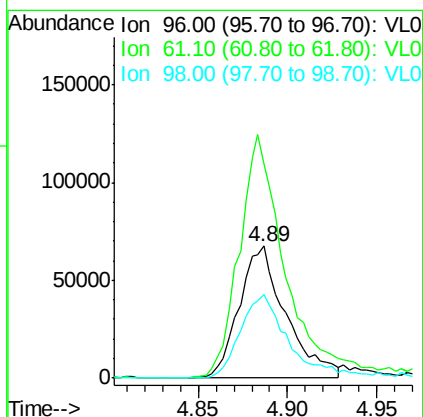
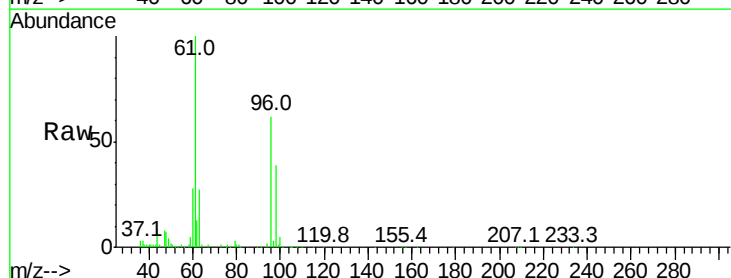
#21
 Allyl Chloride
 Concen: 2.40 ppbv
 RT: 4.41
 Delta R.T. MSVOA_L
 Lab File: ClientSampleId :
 VSTDIC002
 Acq: 5 Apr 2022 16:36

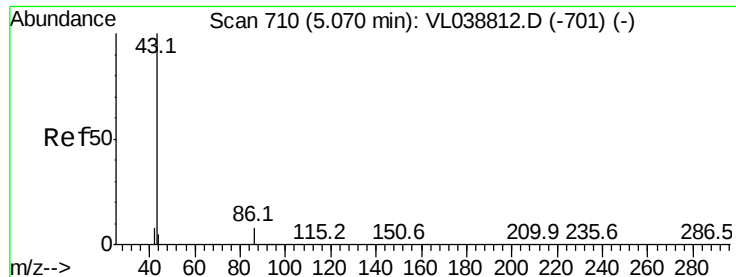
Tgt Ion: 41 Resp: 221311
 Ion Ratio Lower Upper
 41 100
 76 29.2 23.7 35.5
 39 79.0 62.0 93.0



#22
 trans-1,2-Dichloroethene
 Concen: 1.94 ppbv
 RT: 4.89 min Scan# 653
 Delta R.T. 0.00 min
 Lab File: VL038813.D
 Acq: 5 Apr 2022 16:36

Tgt Ion: 96 Resp: 122494
 Ion Ratio Lower Upper
 96 100
 61 162.5 134.8 202.2
 98 63.1 51.9 77.9





#23

Vinyl Acetate

Concen: 2.30 ppbv

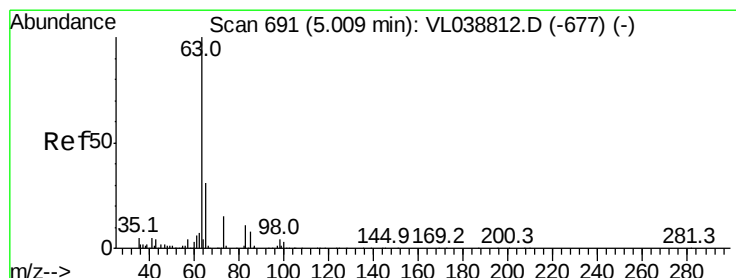
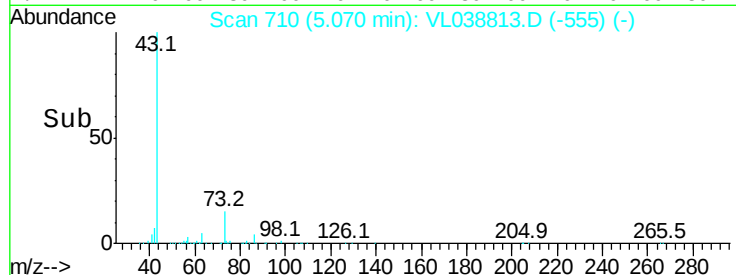
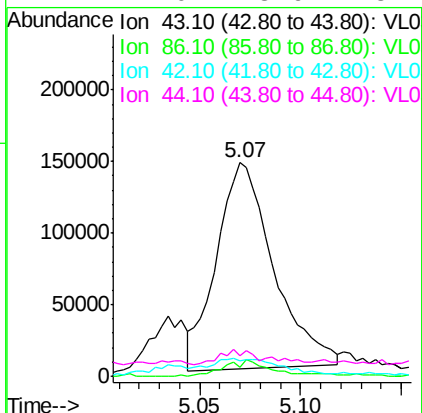
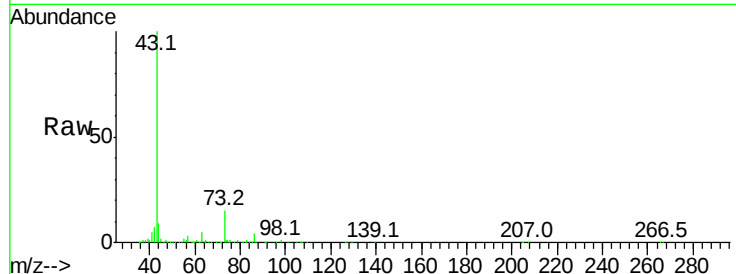
RT: 5.07 Instrument: MSVOA_1

Delta R.T. ClientSampleId:

Lab File: VSTDIC002

Acq: 5 Apr 2022 16:36

Tgt Ion:	43	Resp:	284687
Ion	Ratio	Lower	Upper
43	100		
86	4.7	5.8	8.6#
42	7.1	7.8	11.6#
44	4.0	3.6	5.4



#24

1,1-Dichloroethane

Concen: 2.23 ppbv

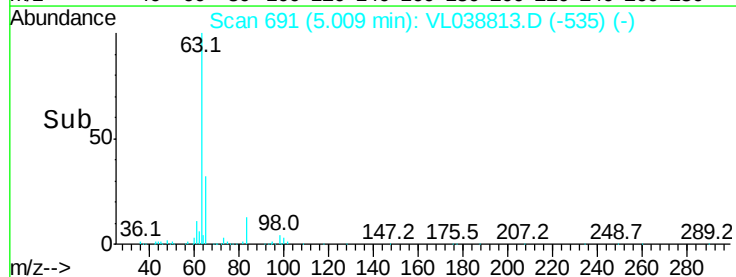
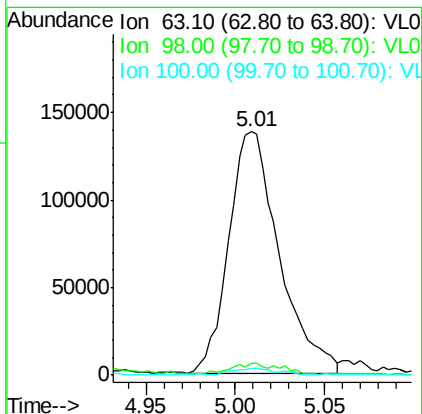
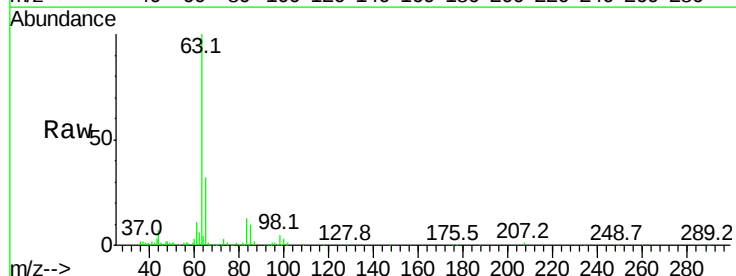
RT: 5.01 min Scan# 691

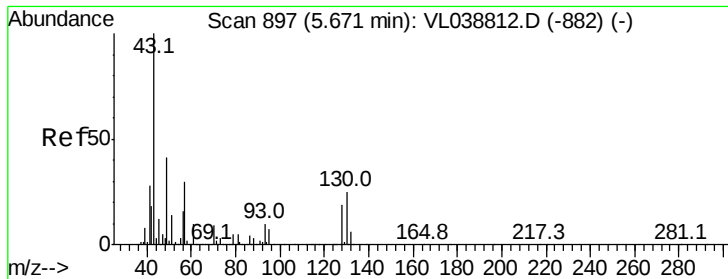
Delta R.T. -0.00 min

Lab File: VL038813.D

Acq: 5 Apr 2022 16:36

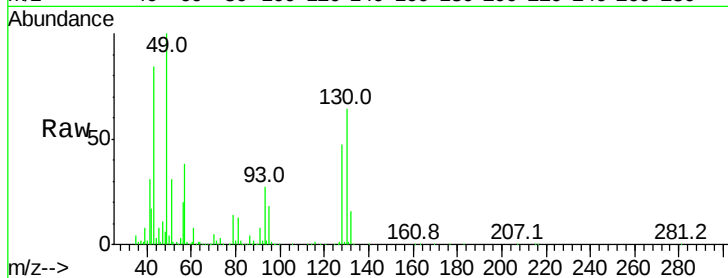
Tgt Ion:	63	Resp:	271940
Ion	Ratio	Lower	Upper
63	100		
98	4.1	2.2	6.6
100	2.8	1.4	4.0



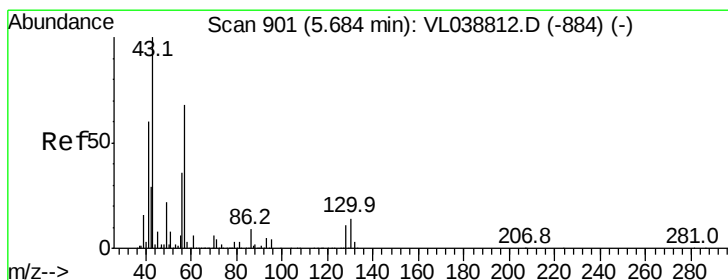
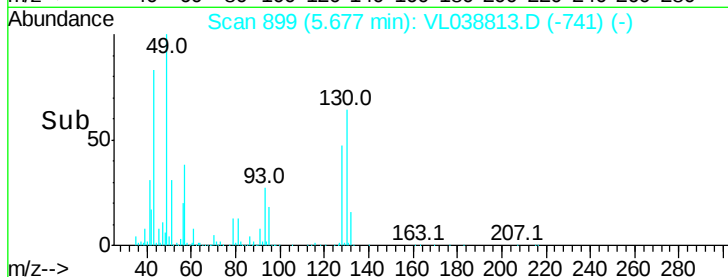
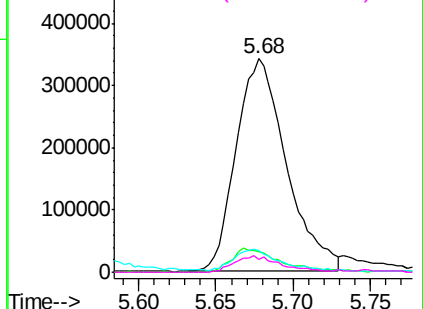


#25
Ethyl Acetate
Concen: 2.39 ppbv
RT: 5.68
Delta R.T. MSVOA_L
Lab File: ClientSampleId :
Acq: 5 Apr 2022 16:36

Tgt Ion:	43	Resp:	769139
Ion	Ratio	Lower	Upper
43	100		
45	10.9	8.4	12.6
61	9.3	7.9	11.9
70	7.1	5.6	8.4

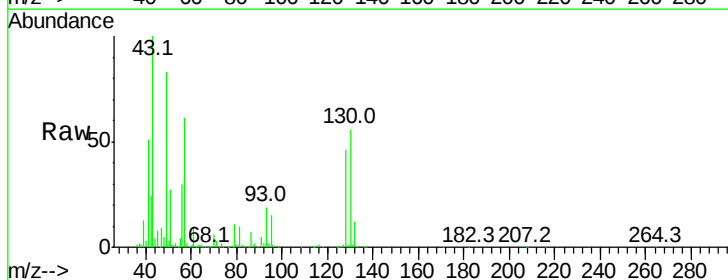


Abundance Ion 43.10 (42.80 to 43.80): VL0
Ion 45.10 (44.80 to 45.80): VL0
Ion 61.10 (60.80 to 61.80): VL0
Ion 70.10 (69.80 to 70.80): VL0

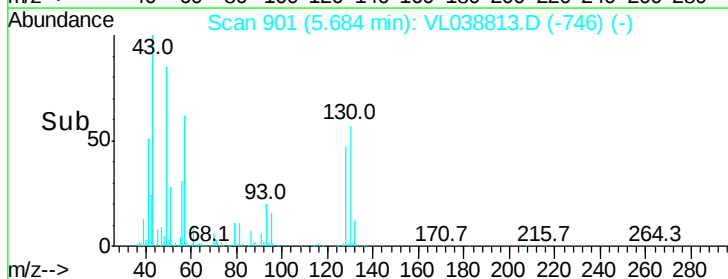
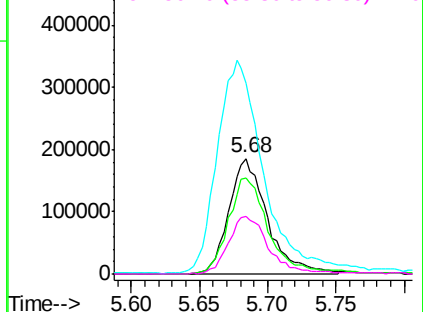


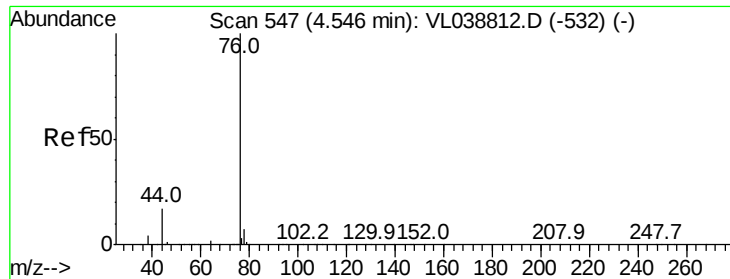
#26
Hexane
Concen: 2.51 ppbv
RT: 5.68 min Scan# 901
Delta R.T. -0.00 min
Lab File: VL038813.D
Acq: 5 Apr 2022 16:36

Tgt Ion:	57	Resp:	361486
Ion	Ratio	Lower	Upper
57	100		
41	88.9	72.0	108.0
43	228.3	186.6	280.0
56	54.2	42.8	64.2



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





#27

Carbon Disulfide

Concen: 2.29 ppbv

RT: 4.55 Instrument: MSVOA_1

Delta R.T.

Lab File: ClientSampleId:

VSTDIC002

Acq: 5 Apr 2022 16:36

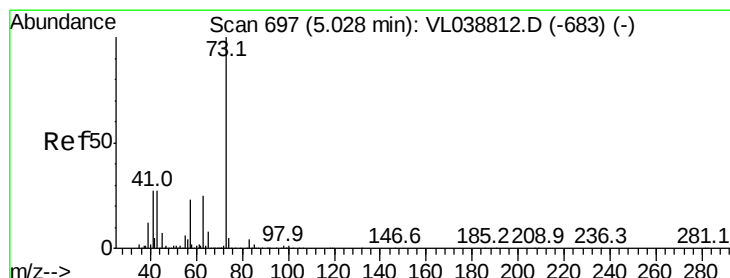
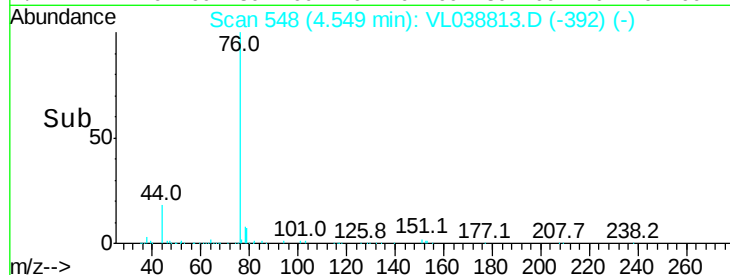
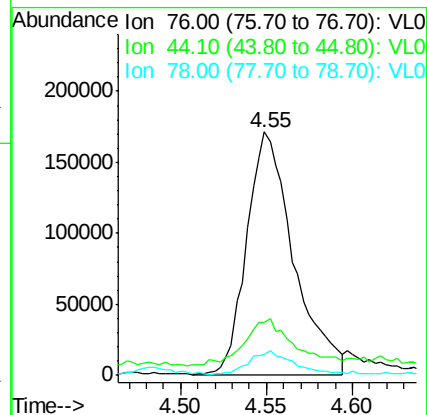
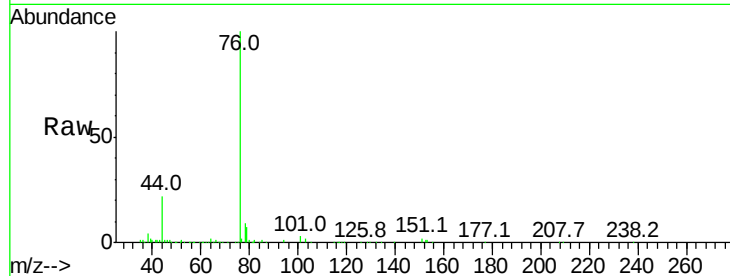
Tgt Ion: 76 Resp: 323279

Ion Ratio Lower Upper

76 100

44 23.1 15.7 23.5

78 10.8 7.8 11.8



#28

Methyl tert-Butyl Ether

Concen: 2.52 ppbv

RT: 5.04 min Scan# 700

Delta R.T. 0.01 min

Lab File: VL038813.D

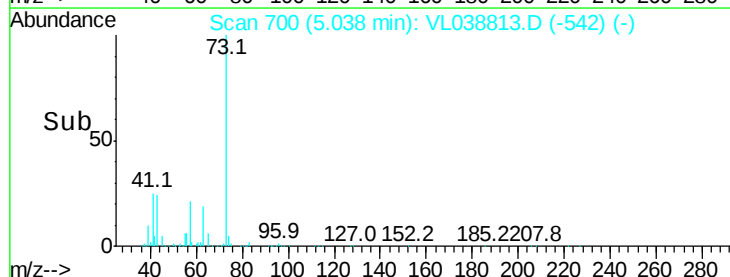
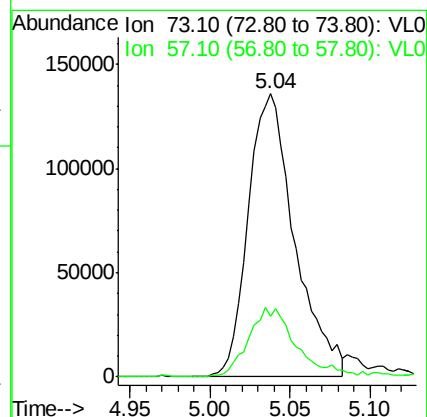
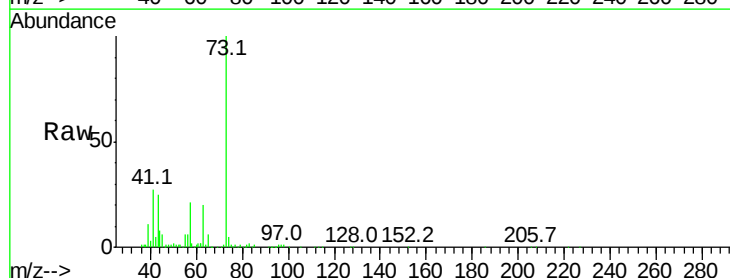
Acq: 5 Apr 2022 16:36

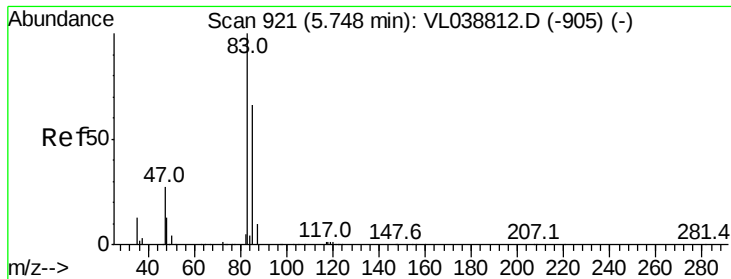
Tgt Ion: 73 Resp: 270713

Ion Ratio Lower Upper

73 100

57 26.2 19.7 29.5





#29

Chloroform

Concen: 2.11 ppbv

RT: 5.75 Instrument: MSVOA_1

Delta R.T. 0.00 min

Lab File: ClientSampleId: VSTDIC002

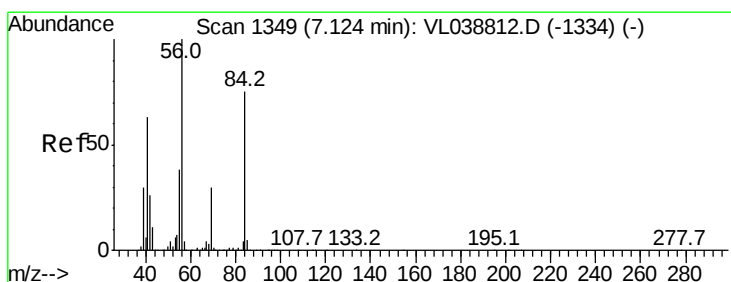
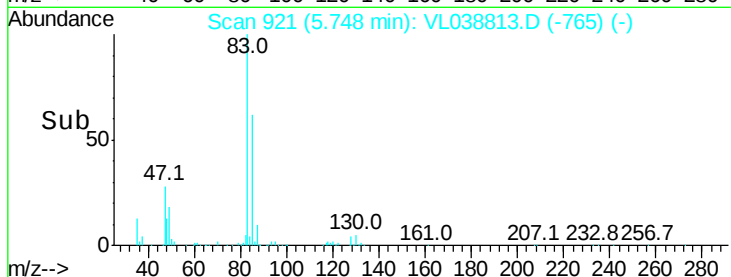
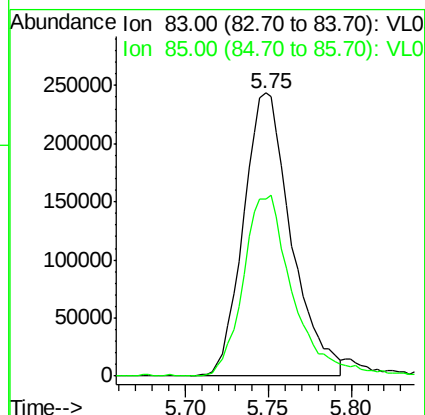
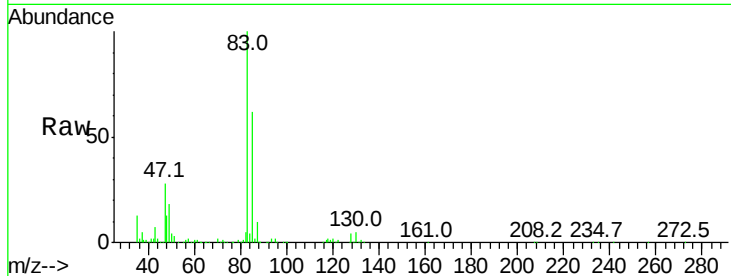
Acq: 5 Apr 2022 16:36

Tgt Ion: 83 Resp: 487837

Ion Ratio Lower Upper

83 100

85 62.4 52.5 78.7



#30

Cyclohexane

Concen: 2.52 ppbv

RT: 7.13 min Scan# 1350

Delta R.T. 0.00 min

Lab File: VL038813.D

Acq: 5 Apr 2022 16:36

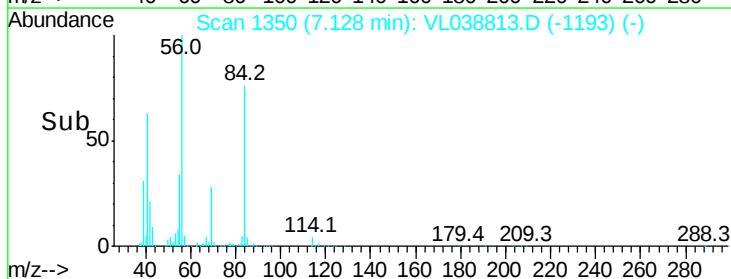
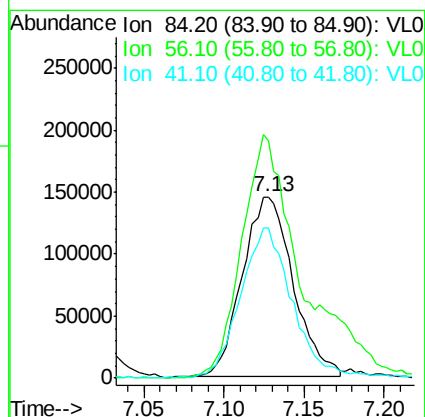
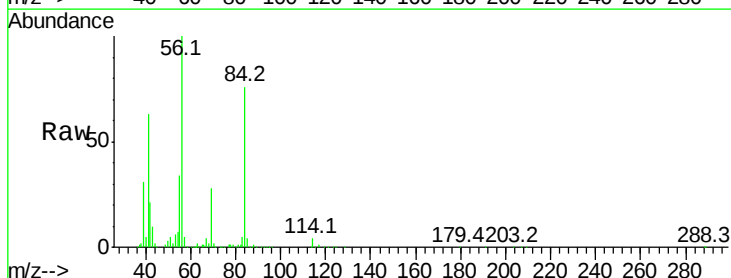
Tgt Ion: 84 Resp: 315869

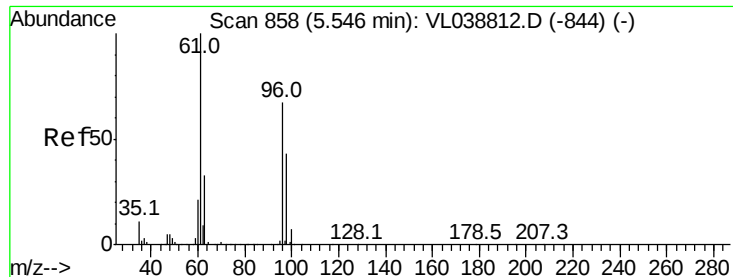
Ion Ratio Lower Upper

84 100

56 162.3 114.4 171.6

41 86.6 69.0 103.4





#31

cis-1,2-Dichloroethene

Concen: 2.38 ppbv

RT: 5.55 Instrument:

Delta R.T. MSVOA_1

Lab File: ClientSampleId:

Acq: 5 Apr 2022 16:36 VSTDIC002

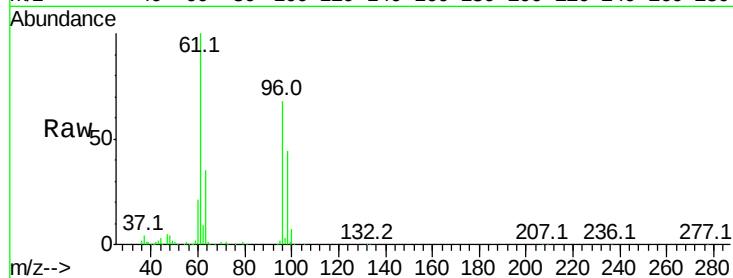
Tgt Ion: 61 Resp: 322801

Ion Ratio Lower Upper

61 100

96 68.6 53.4 80.0

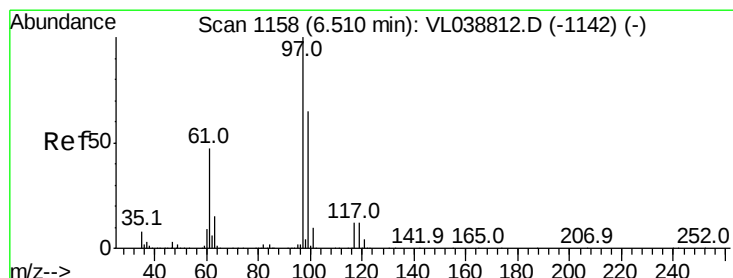
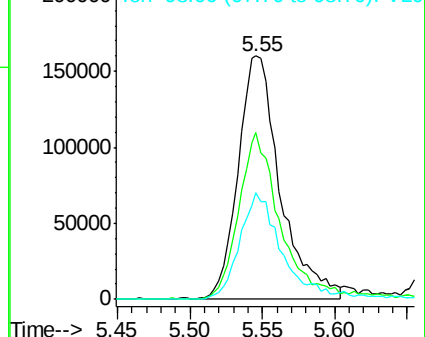
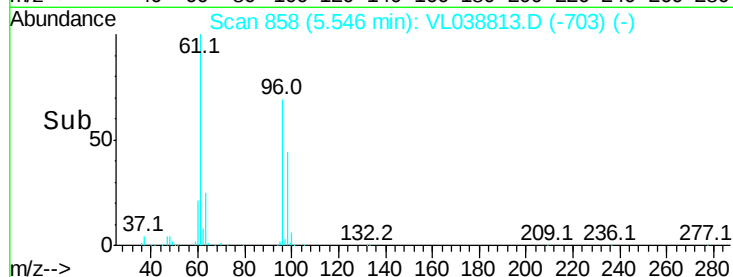
98 43.9 34.2 51.4



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



#32

1,1,1-Trichloroethane

Concen: 2.23 ppbv

RT: 6.51 min Scan# 1157

Delta R.T. -0.00 min

Lab File: VL038813.D

Acq: 5 Apr 2022 16:36

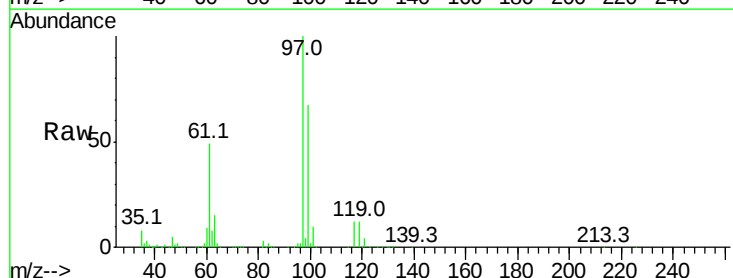
Tgt Ion: 97 Resp: 496472

Ion Ratio Lower Upper

97 100

99 65.8 52.4 78.6

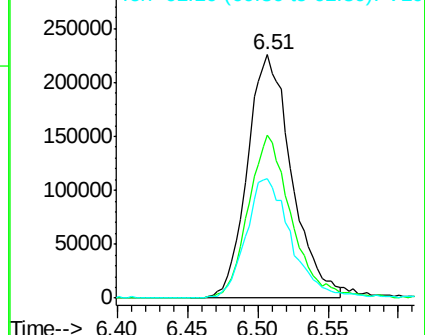
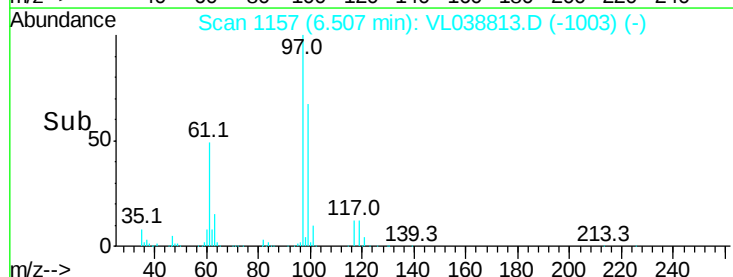
61 50.9 38.6 57.8

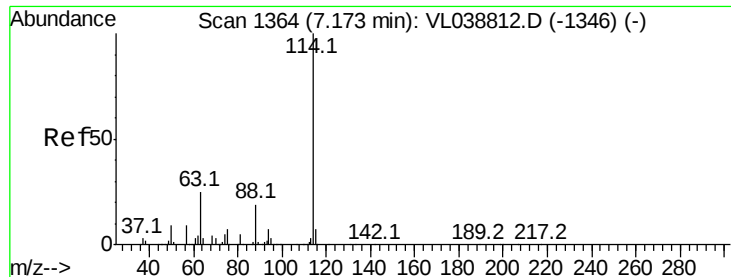


Abundance Ion 97.00 (96.70 to 97.70): VL0

Ion 99.00 (98.70 to 99.70): VL0

Ion 61.10 (60.80 to 61.80): VL0





#33

1,4-Difluorobenzene

Concen: 10.00 ppbv

RT: 7.17

Instrument: MSVOA_1

Delta R.T.:

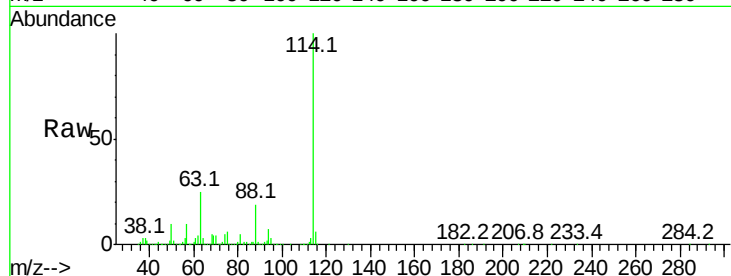
Client SampleId:

Lab File: VSTDIC002

Acq: 5 Apr 2022 16:30

Tgt Ion: 114 Resp: 4029808

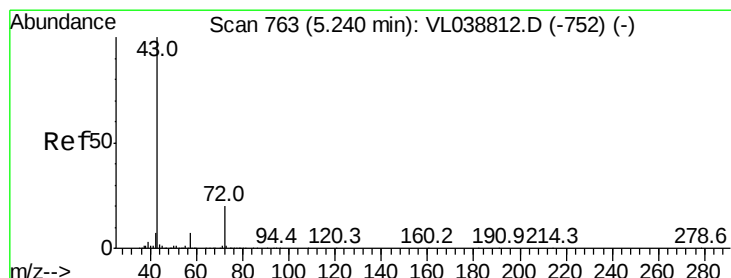
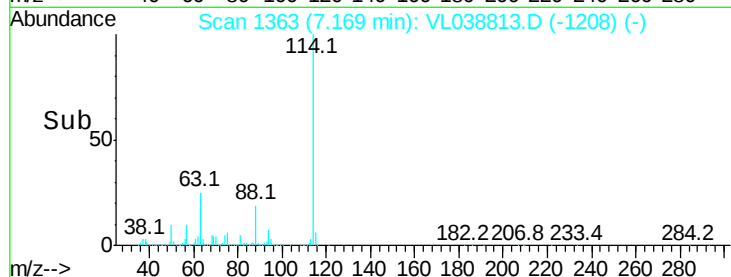
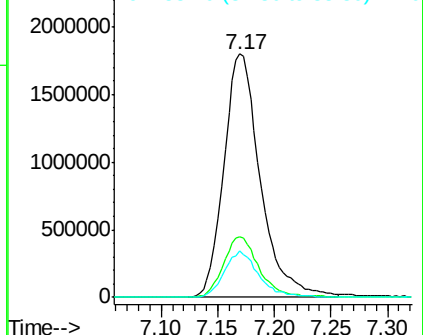
Ion	Ratio	Lower	Upper
114	100		
63	24.7	19.8	29.8
88	18.2	14.2	21.4



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: 1.94 ppbv

RT: 5.25 min Scan# 765

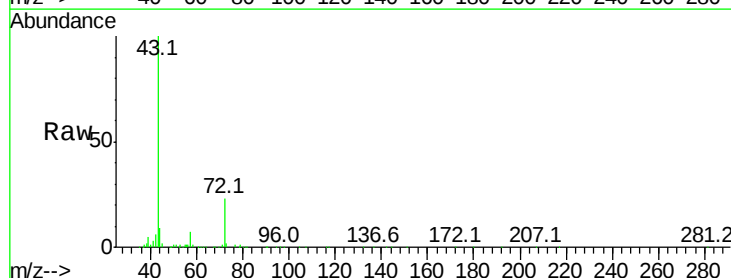
Delta R.T. 0.01 min

Lab File: VL038813.D

Acq: 5 Apr 2022 16:36

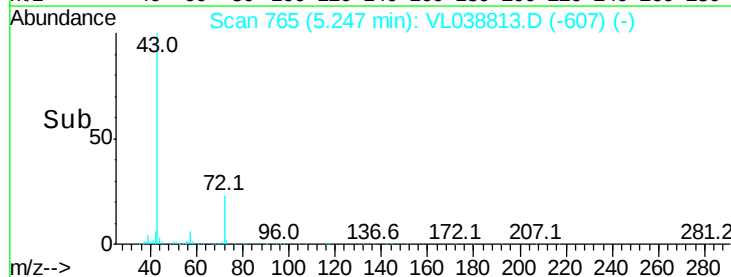
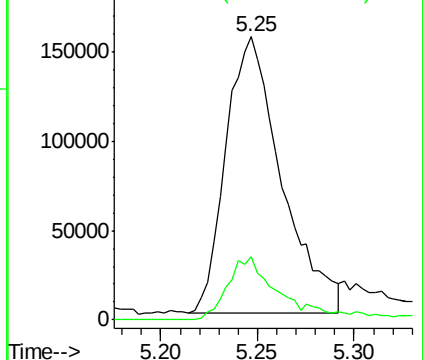
Tgt Ion: 43 Resp: 309974

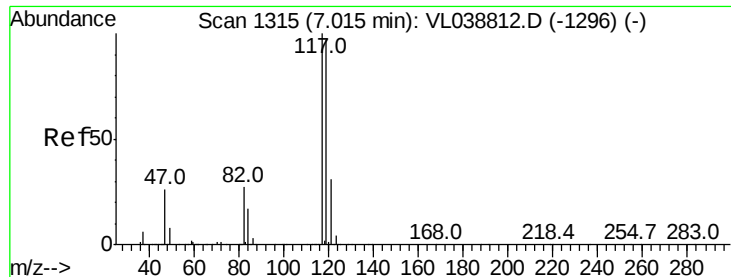
Ion	Ratio	Lower	Upper
43	100		
72	23.4	16.9	25.3



Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 72.10 (71.80 to 72.80): VL0





#35

Carbon Tetrachloride

Concen: 2.22 ppbv

RT: 7.01

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

VSTDIC002

Acq: 5 Apr 2022 16:36

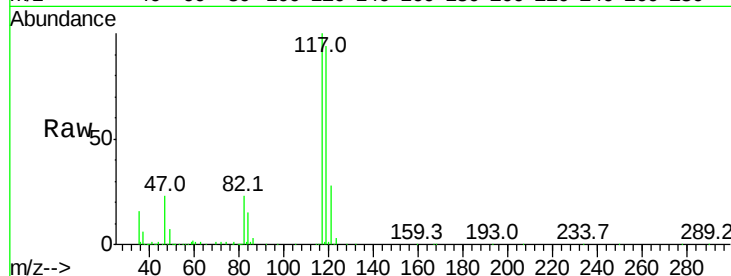
Tgt Ion: 117 Resp: 518732

Ion Ratio Lower Upper

117 100

119 94.3 77.7 116.5

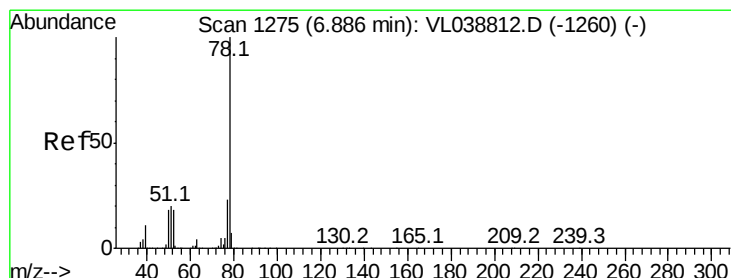
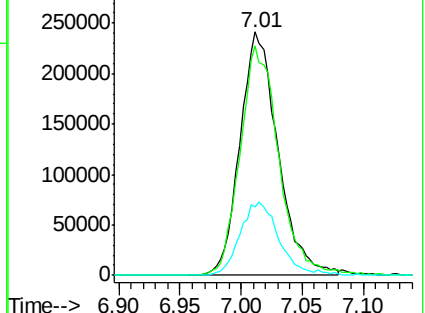
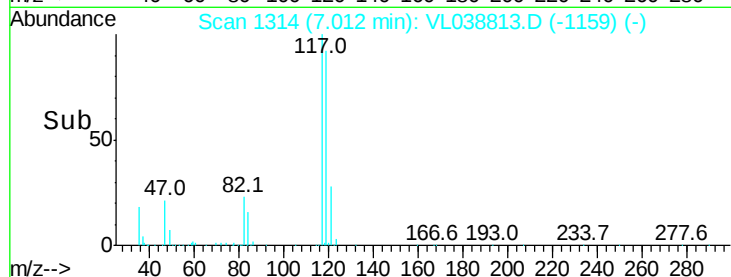
121 28.0 24.5 36.7



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: 2.47 ppbv

RT: 6.89 min Scan# 1275

Delta R.T. -0.00 min

Lab File: VL038813.D

Acq: 5 Apr 2022 16:36

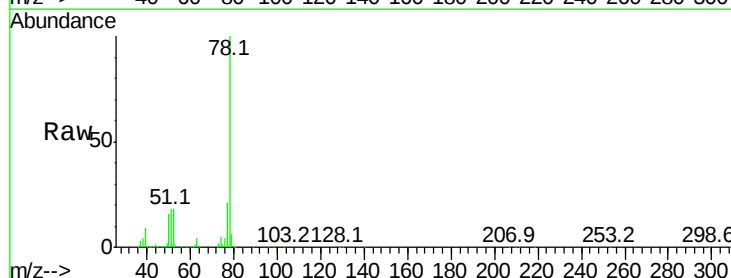
Tgt Ion: 78 Resp: 767791

Ion Ratio Lower Upper

78 100

77 21.2 18.2 27.2

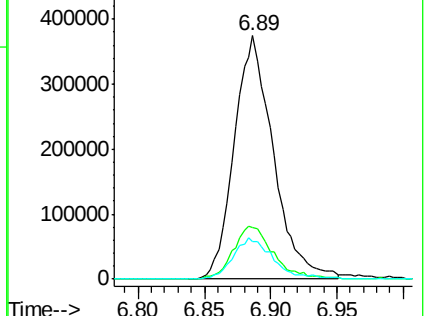
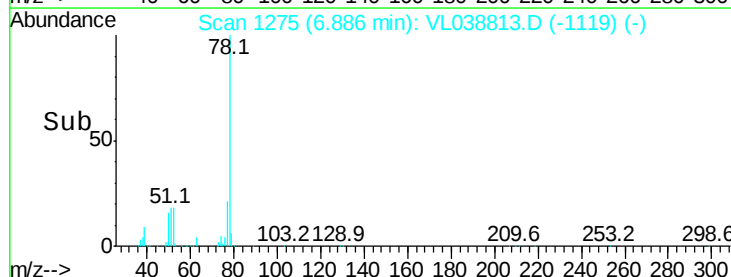
50 15.6 14.0 21.0

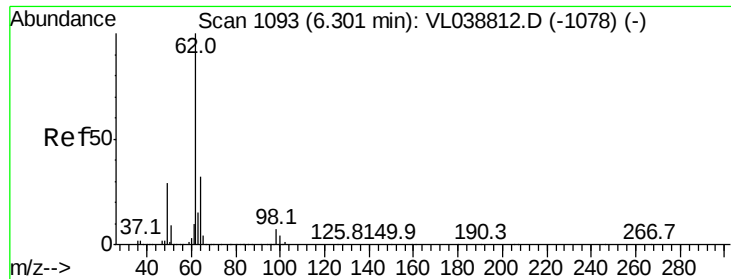


Abundance Ion 78.10 (77.80 to 78.80): VL0

Ion 77.10 (76.80 to 77.80): VL0

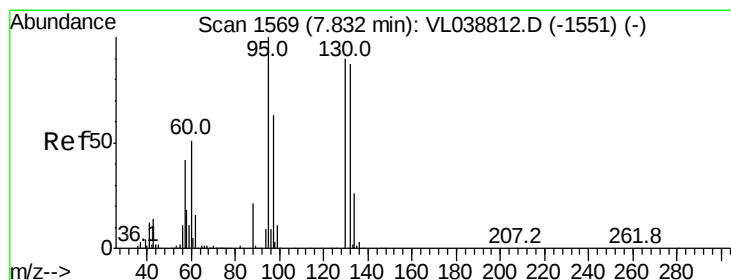
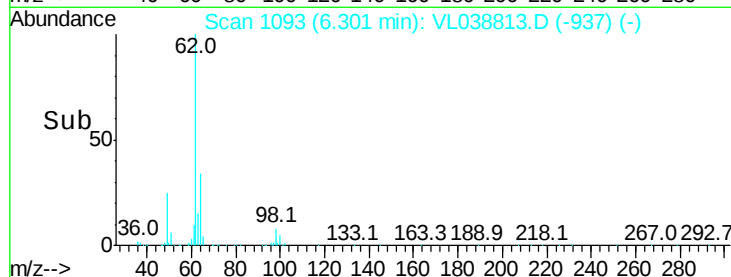
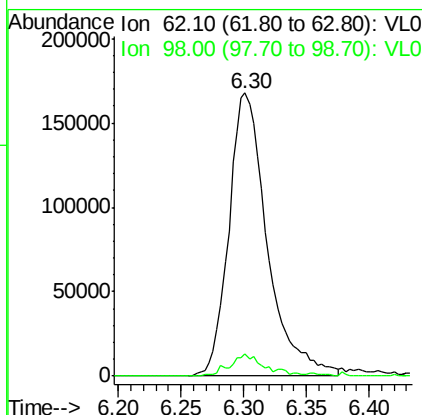
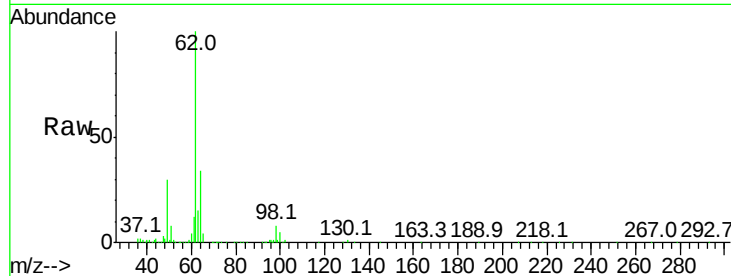
Ion 50.10 (49.80 to 50.80): VL0





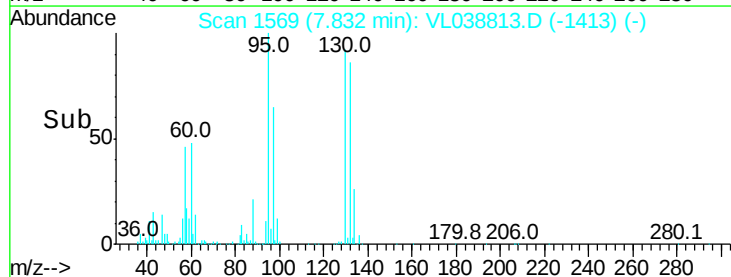
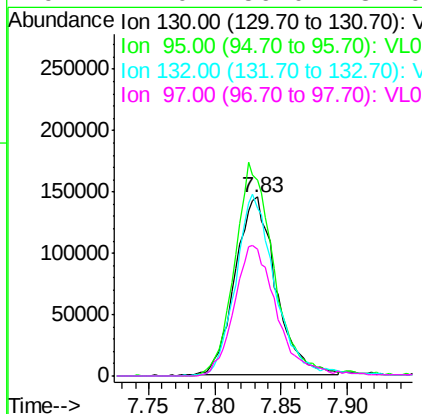
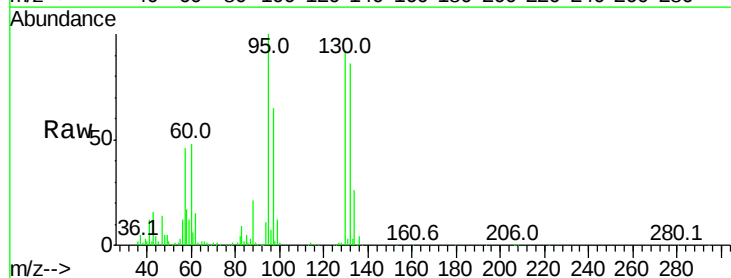
#37
 1,2-Dichloroethane
 Concen: 2.26 ppbv
 RT: 6.30
 Delta R.T. MSVOA_L
 Lab File: ClientSampleId :
 VSTDIC002
 Acq: 5 Apr 2022 16:36

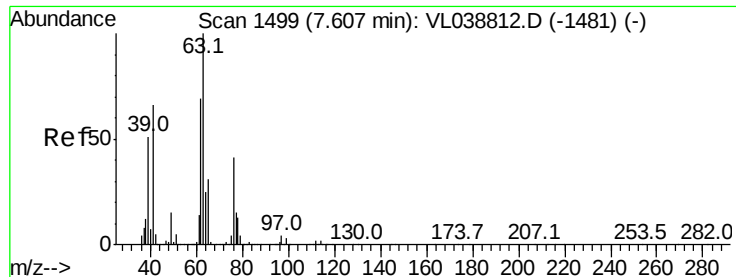
Tgt Ion: 62 Resp: 357330
 Ion Ratio Lower Upper
 62 100
 98 7.0 5.9 8.9



#38
 Trichloroethene
 Concen: 2.39 ppbv
 RT: 7.83 min Scan# 1569
 Delta R.T. -0.00 min
 Lab File: VL038813.D
 Acq: 5 Apr 2022 16:36

Tgt Ion: 130 Resp: 311700
 Ion Ratio Lower Upper
 130 100
 95 109.5 89.4 134.0
 132 93.9 77.7 116.5
 97 71.0 56.0 84.0





#39

1,2-Dichloropropane

Concen: 2.43 ppbv

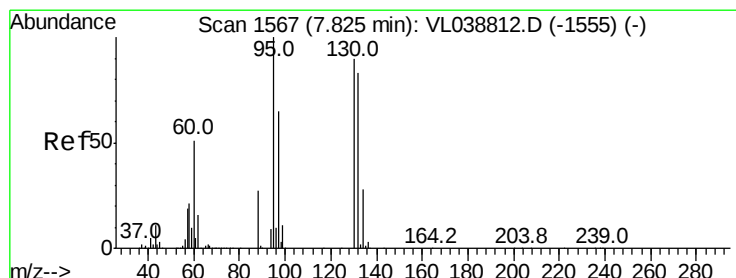
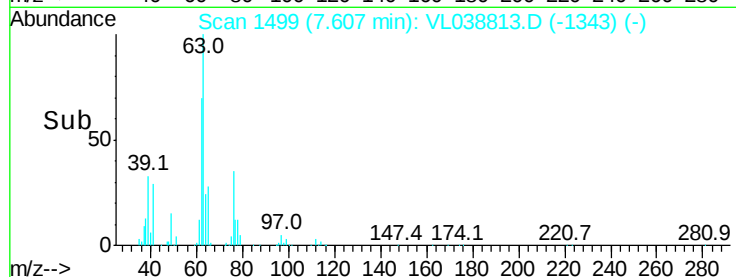
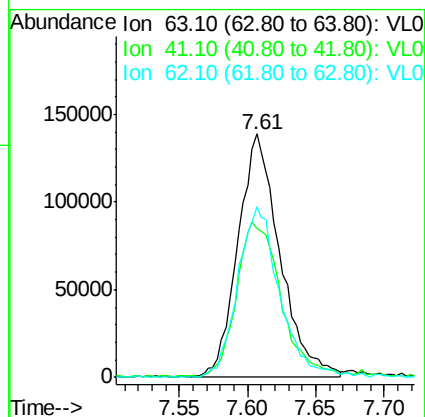
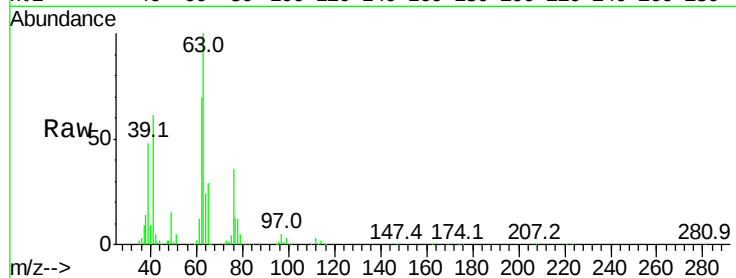
RT: 7.61 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

Acq: 5 Apr 2022 16:36

Tgt Ion:	63	Resp:	295275
Ion	Ratio	Lower	Upper
63	100		
41	60.8	53.0	79.6
62	70.0	55.0	82.4



#40

1,4-Dioxane

Concen: 0.86 ppbv

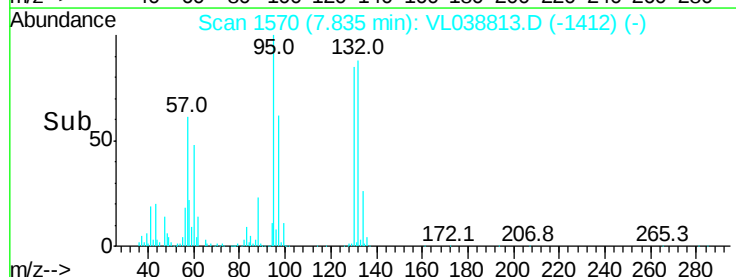
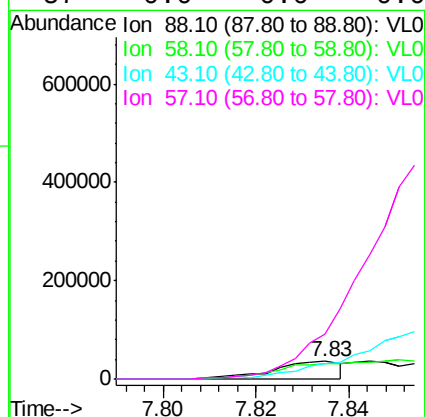
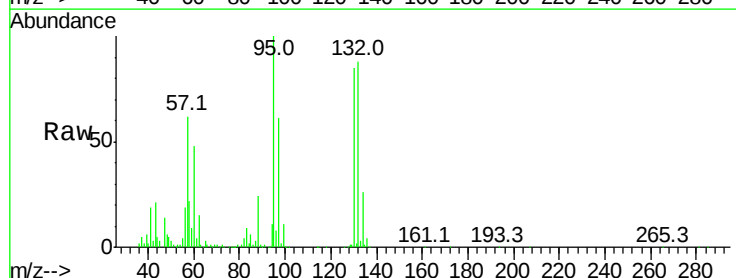
RT: 7.83 min Scan# 1570

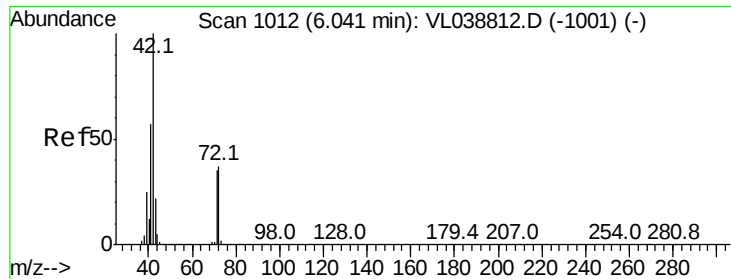
Delta R.T. 0.01 min

Lab File: VL038813.D

Acq: 5 Apr 2022 16:36

Tgt Ion:	88	Resp:	36236
Ion	Ratio	Lower	Upper
88	100		
58	0.0	49.4	74.0#
43	0.0	0.0	0.0
57	0.0	0.0	0.0





#41

Tetrahydrofuran

Concen: 2.64 ppbv

RT: 6.05 Instrument: MSVOA_1

Delta R.T. -0.00 min

Lab File: ClientSampleId: VSTDIC002

Acq: 5 Apr 2022 16:36

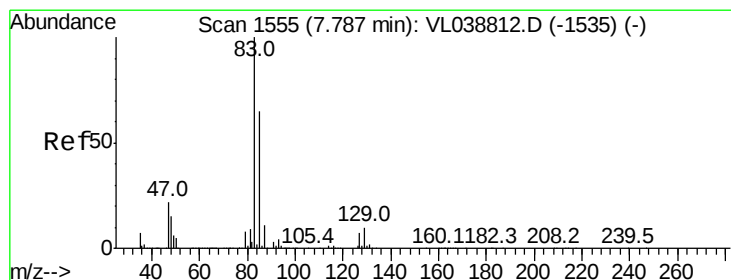
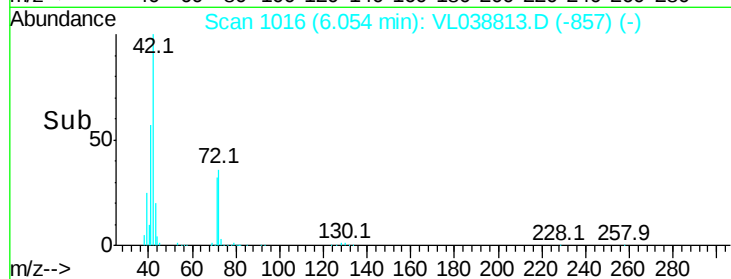
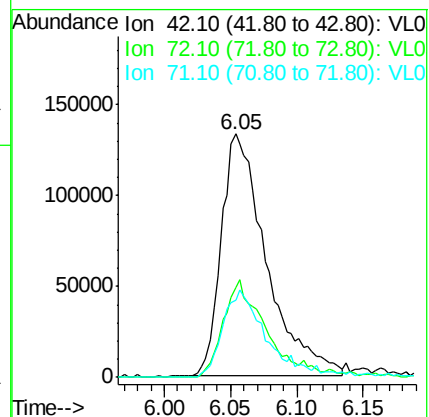
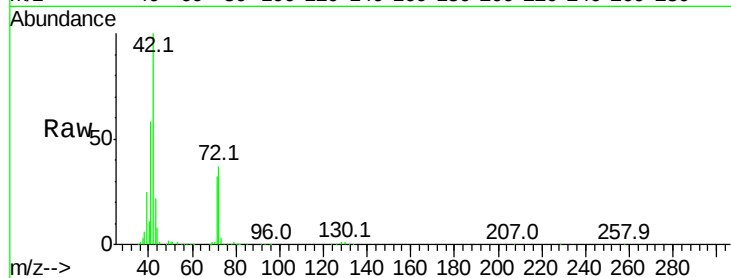
Tgt Ion: 42 Resp: 313338

Ion Ratio Lower Upper

42 100

72 41.0 31.4 47.0

71 37.3 30.2 45.4



#42

Bromodichloromethane

Concen: 2.30 ppbv

RT: 7.79 min Scan# 1555

Delta R.T. -0.00 min

Lab File: VL038813.D

Acq: 5 Apr 2022 16:36

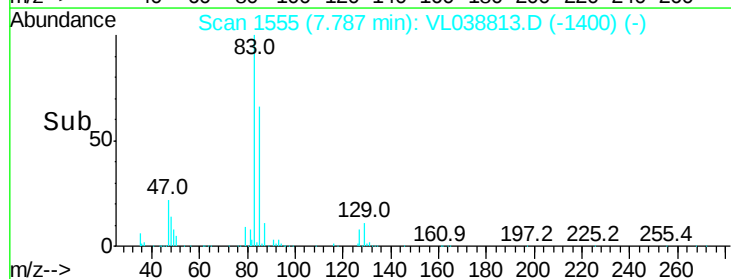
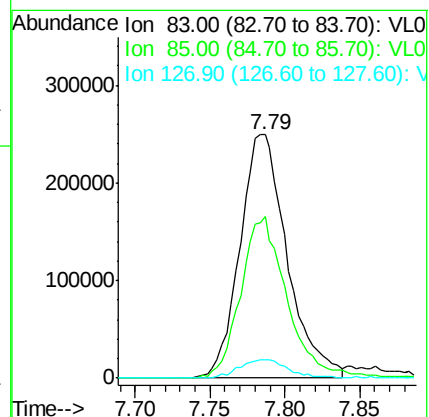
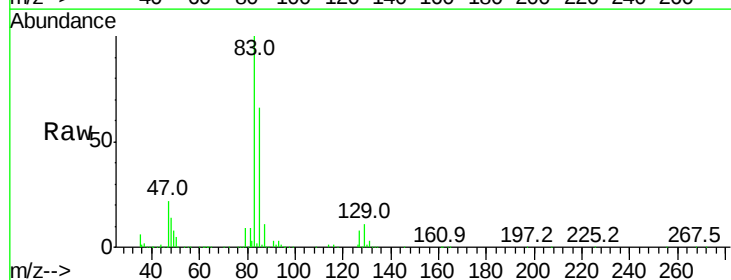
Tgt Ion: 83 Resp: 545378

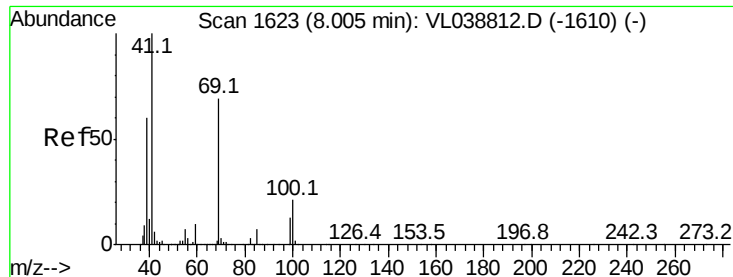
Ion Ratio Lower Upper

83 100

85 66.3 51.7 77.5

127 7.8 5.9 8.9





#43

Methyl Methacrylate

Concen: 2.57 ppbv

RT: 8.01

Instrument: MSVOA_1

Delta R.T.:

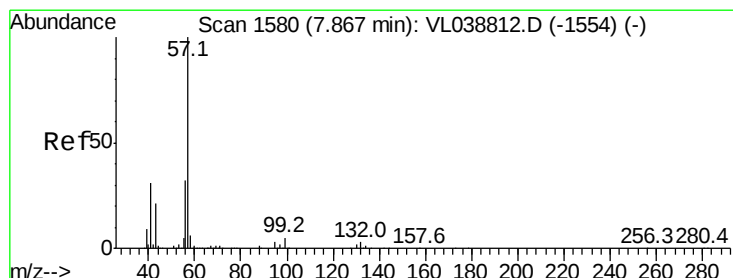
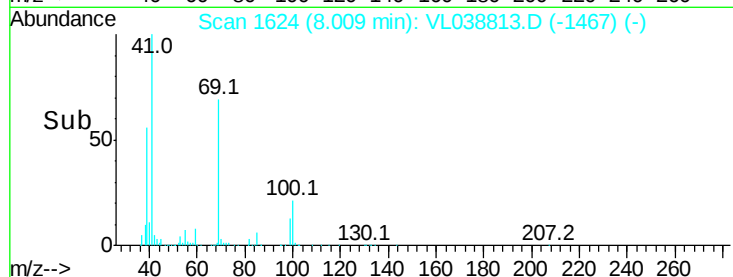
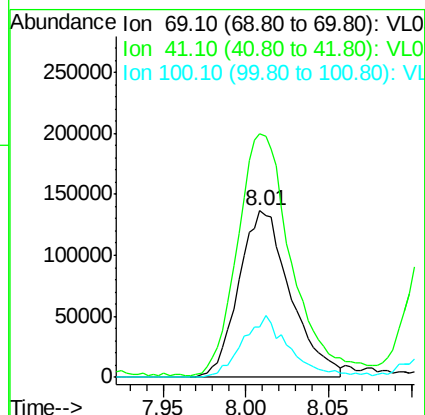
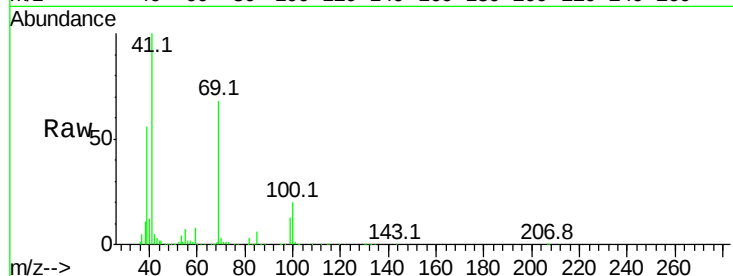
ClientSampleId:

Lab File: VSTDIC002

Acq: 5 Apr 2022 16:36

Tgt Ion: 69 Resp: 296471

Ion	Ratio	Lower	Upper
69	100		
41	153.7	119.0	178.4
100	33.8	26.4	39.6



#44

2,2,4-Trimethylpentane

Concen: 2.58 ppbv

RT: 7.86 min Scan# 1579

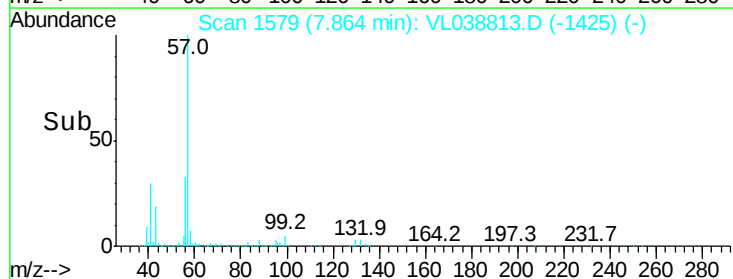
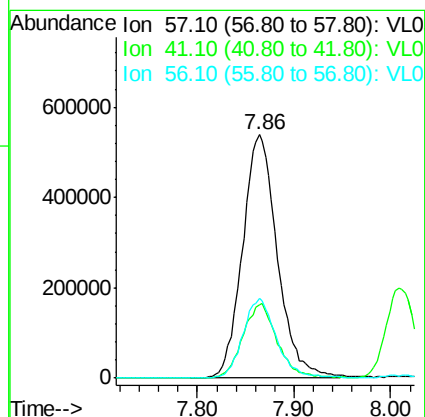
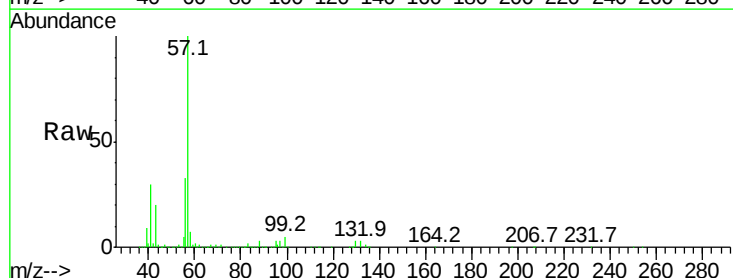
Delta R.T. -0.00 min

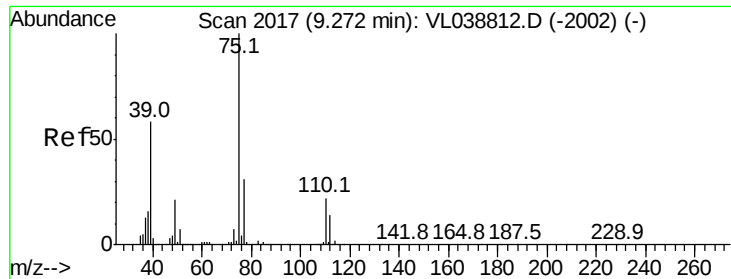
Lab File: VL038813.D

Acq: 5 Apr 2022 16:36

Tgt Ion: 57 Resp: 1349411

Ion	Ratio	Lower	Upper
57	100		
41	30.0	25.0	37.4
56	31.7	25.3	37.9





#45

t-1,3-Dichloropropene

Concen: 2.55 ppbv

RT: 9.27 Instrument: MSVOA_1

Delta R.T.

Lab File: ClientSampleId:

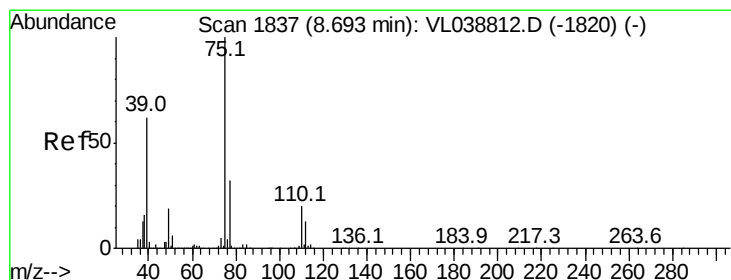
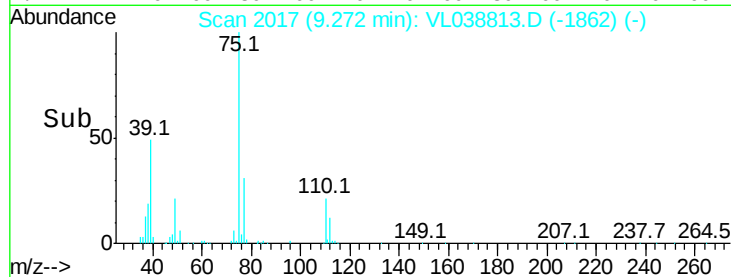
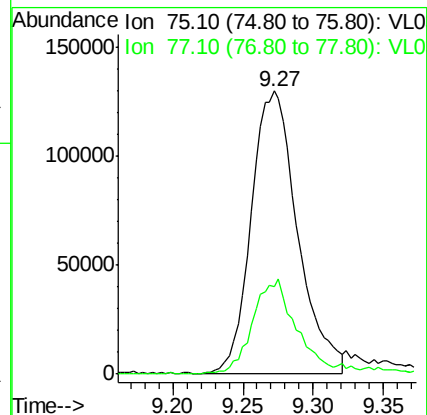
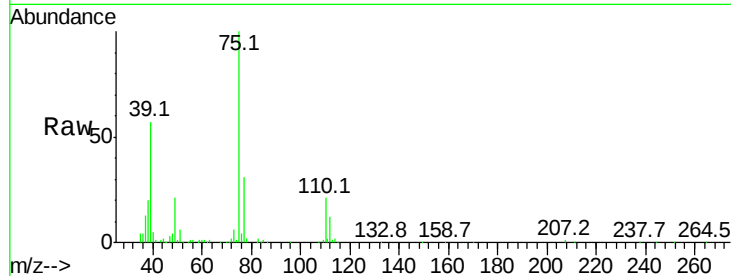
Acq: 5 Apr 2022 16:36

Tgt Ion: 75 Resp: 299746

Ion Ratio Lower Upper

75 100

77 31.1 25.0 37.4



#46

cis-1,3-Dichloropropene

Concen: 2.59 ppbv

RT: 8.70 min Scan# 1839

Delta R.T. 0.01 min

Lab File: VL038813.D

Acq: 5 Apr 2022 16:36

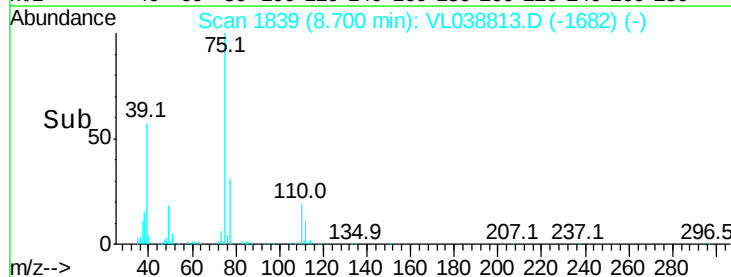
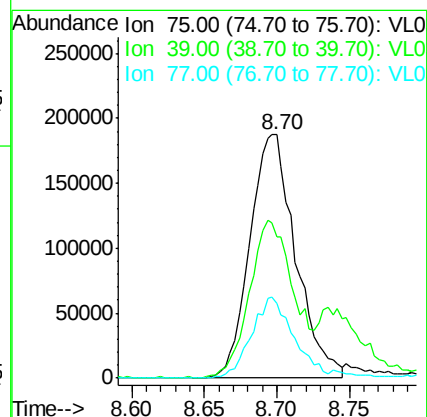
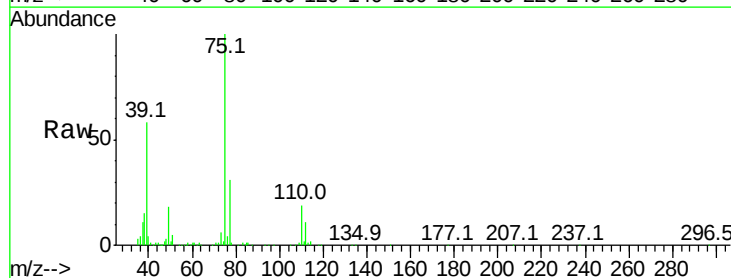
Tgt Ion: 75 Resp: 411797

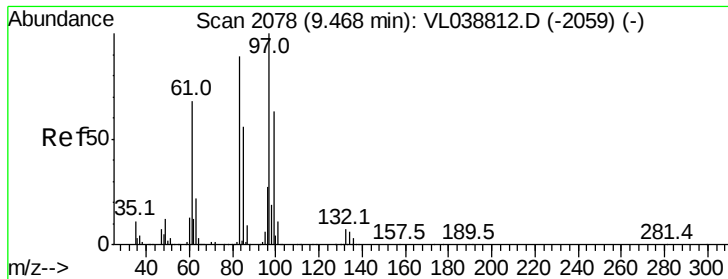
Ion Ratio Lower Upper

75 100

39 57.8 49.7 74.5

77 30.9 25.6 38.4





#47

1,1,2-Trichloroethane

Concen: 2.26 ppbv

RT: 9.47 Instrument:

Delta R.T. MSVOA_1

Lab File: ClientSampleId:

Acq: 5 Apr 2022 16:36 VSTDIC002

Tgt Ion: 97 Resp: 293966

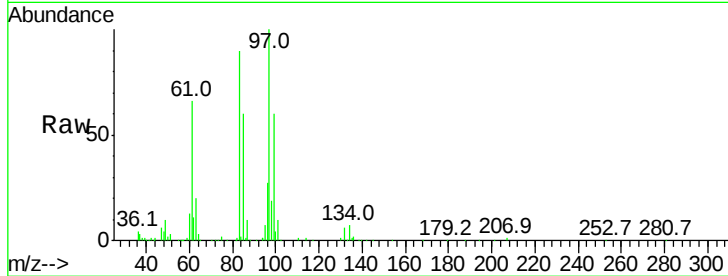
Ion Ratio Lower Upper

97 100

83 89.8 71.1 106.7

85 60.4 45.1 67.7

99 60.1 50.8 76.2

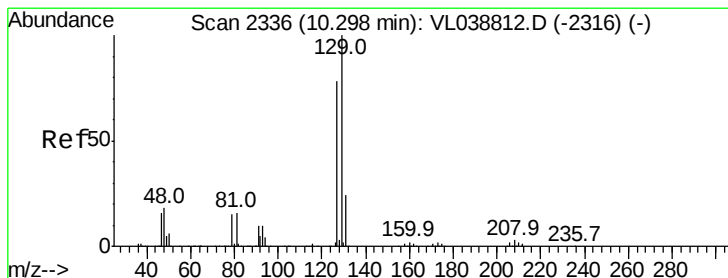
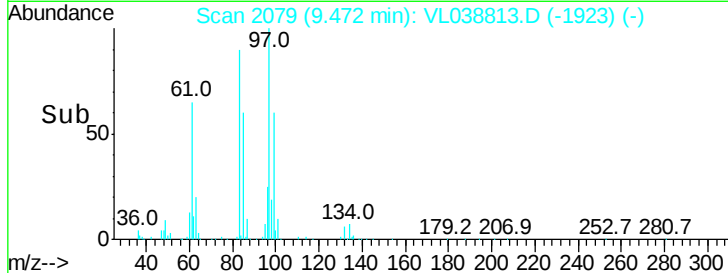
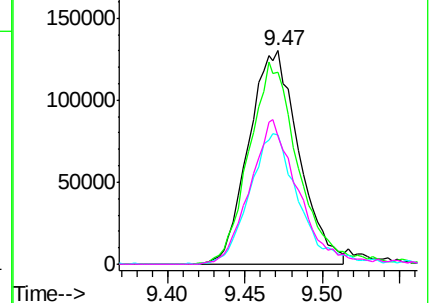


Abundance Ion 97.00 (96.70 to 97.70): VL0

Ion 83.00 (82.70 to 83.70): VL0

Ion 85.00 (84.70 to 85.70): VL0

Ion 99.00 (98.70 to 99.70): VL0



#48

Dibromochloromethane

Concen: 2.36 ppbv

RT: 10.29 min Scan# 2335

Delta R.T. -0.00 min

Lab File: VL038813.D

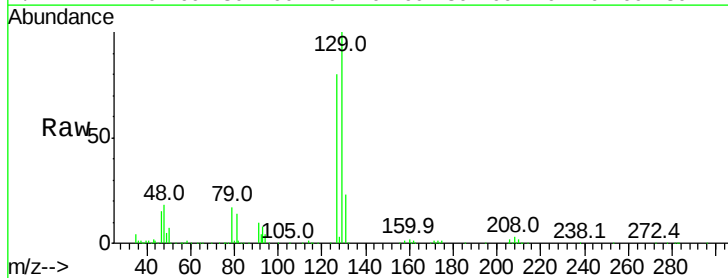
Acq: 5 Apr 2022 16:36

Tgt Ion: 129 Resp: 479152

Ion Ratio Lower Upper

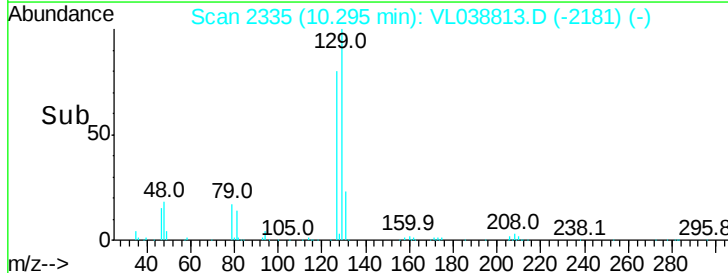
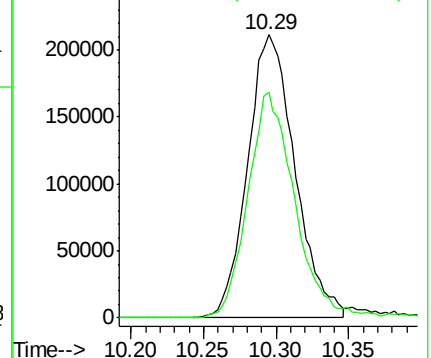
129 100

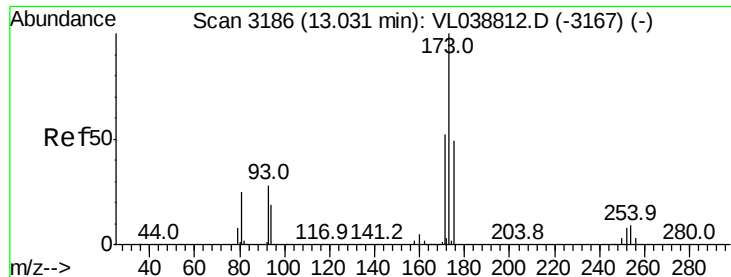
127 80.2 38.9 116.6



Abundance Ion 129.00 (128.70 to 129.70): V

Ion 127.00 (126.70 to 127.70): V





#49

Bromoform

Concen: 2.35 ppbv

RT: 13.03

Delta R.T. MSVOA_L

Lab File: ClientSampleId :

Acq: 5 Apr 2022 16:36

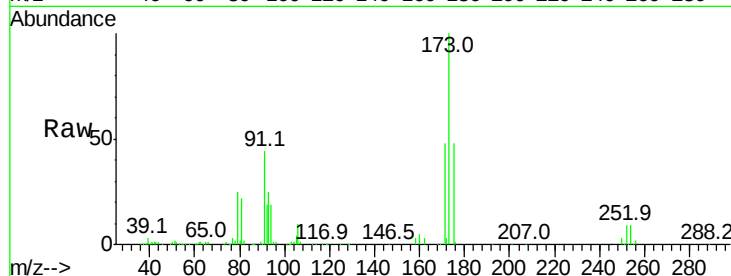
Tgt Ion: 173 Resp: 388780

Ion Ratio Lower Upper

173 100

175 50.9 39.9 59.9

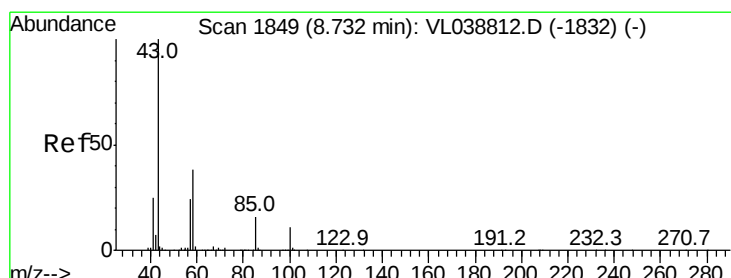
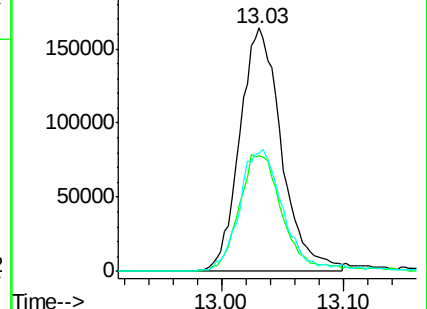
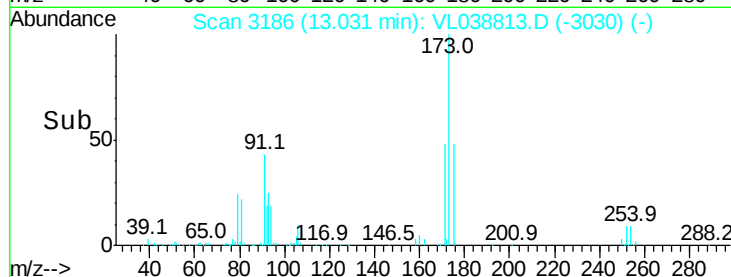
171 54.0 43.4 65.0



Abundance Ion 172.90 (172.60 to 173.60): V

Ion 174.90 (174.60 to 175.60): V

Ion 170.90 (170.60 to 171.60): V



#50

4-Methyl-2-Pentanone

Concen: 2.60 ppbv

RT: 8.74 min Scan# 1851

Delta R.T. 0.01 min

Lab File: VL038813.D

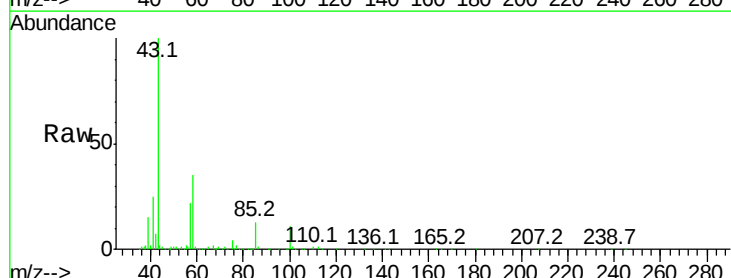
Acq: 5 Apr 2022 16:36

Tgt Ion: 43 Resp: 770176

Ion Ratio Lower Upper

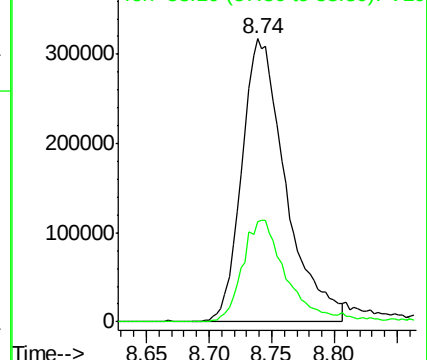
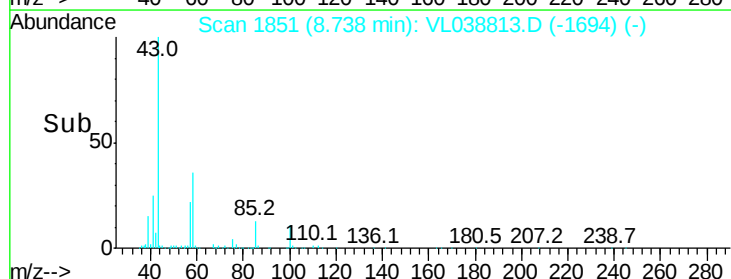
43 100

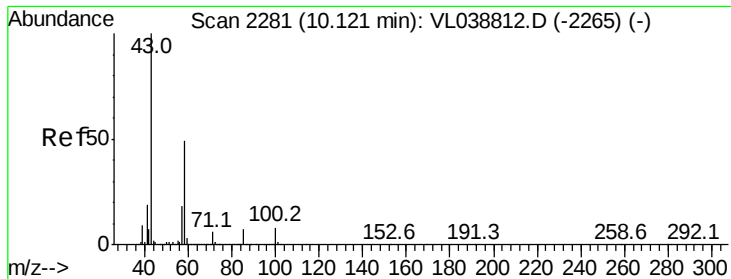
58 36.4 29.0 43.6



Abundance Ion 43.10 (42.80 to 43.80): VL0

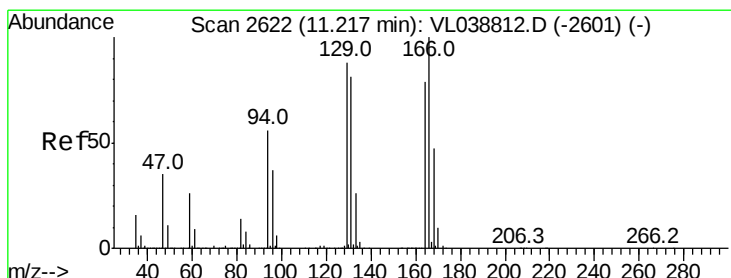
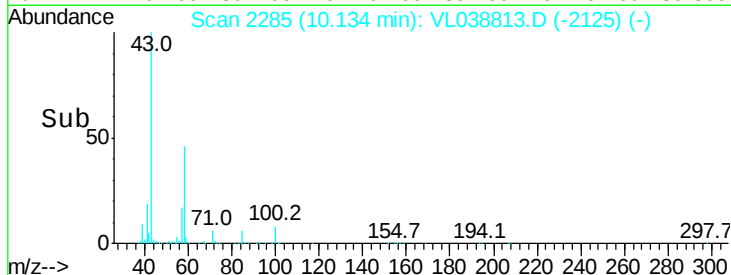
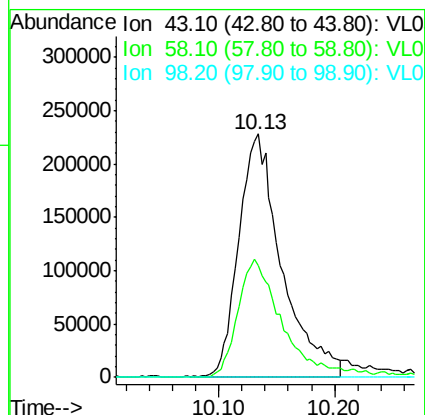
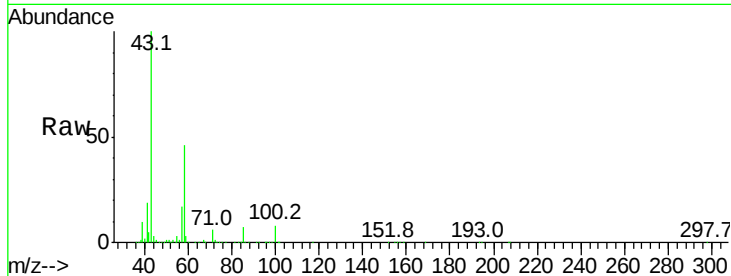
Ion 58.10 (57.80 to 58.80): VL0





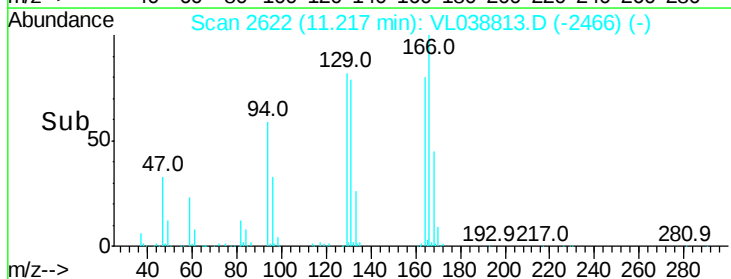
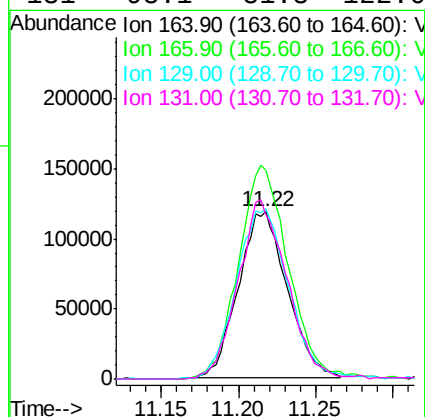
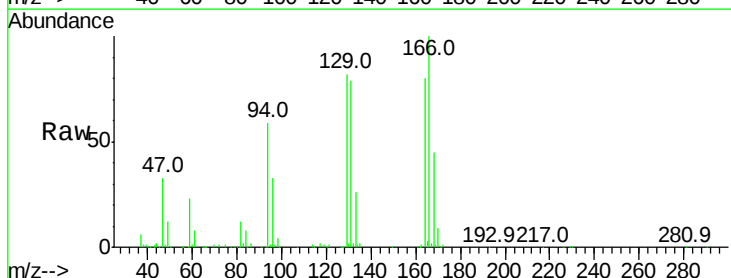
#51
2-Hexanone
Concen: 2.74 ppbv
RT: 10.13 min
Delta R.T. MSVOA_L
Lab File: ClientSampleId :
Acq: 5 Apr 2022 16:36

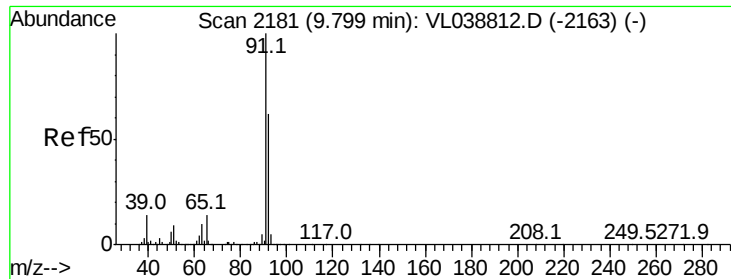
Tgt Ion: 43 Resp: 583114
Ion Ratio Lower Upper
43 100
58 52.1 41.4 62.0
98 0.2 0.1 0.1#



#52
Tetrachloroethene
Concen: 2.28 ppbv
RT: 11.22 min Scan# 2622
Delta R.T. -0.00 min
Lab File: VL038813.D
Acq: 5 Apr 2022 16:36

Tgt Ion: 164 Resp: 259927
Ion Ratio Lower Upper
164 100
166 124.8 101.0 151.6
129 102.1 88.7 133.1
131 98.1 81.8 122.6





#53

Toluene

Concen: 2.73 ppbv

RT: 9.80

Delta R.T.

Lab File:

Acq: 5 Apr 2022 16:30

Instrument:

MSVOA_1

ClientSampleId:

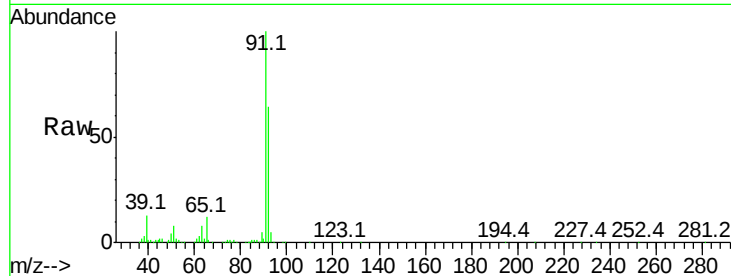
VSTDIC002

Tgt Ion: 91 Resp: 911666

Ion Ratio Lower Upper

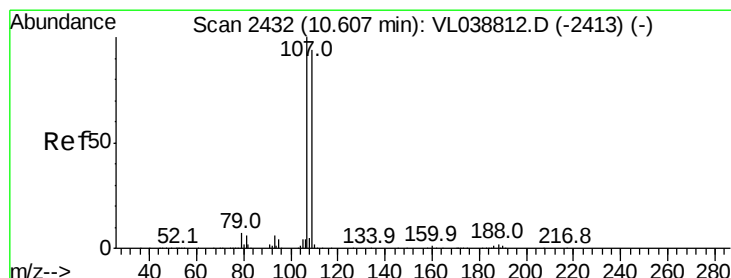
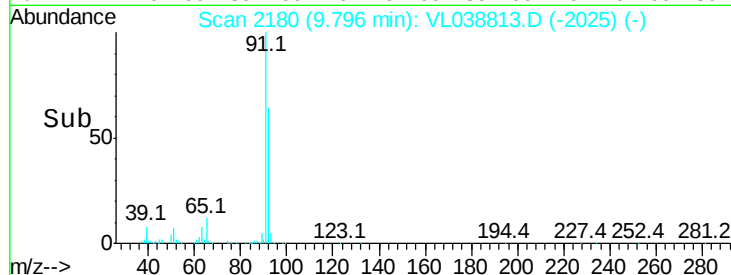
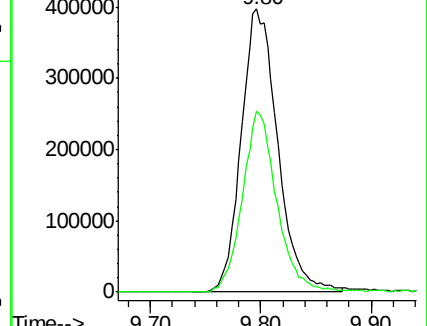
91 100

92 60.6 49.2 73.8



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 92.10 (91.80 to 92.80): VL0



#54

1,2-Dibromoethane

Concen: 2.26 ppbv

RT: 10.60 min Scan# 2430

Delta R.T. -0.01 min

Lab File: VL038813.D

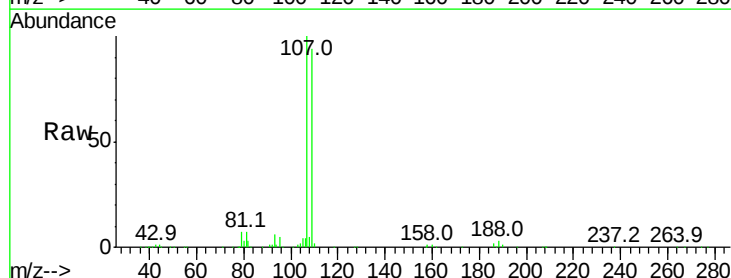
Acq: 5 Apr 2022 16:36

Tgt Ion: 107 Resp: 401427

Ion Ratio Lower Upper

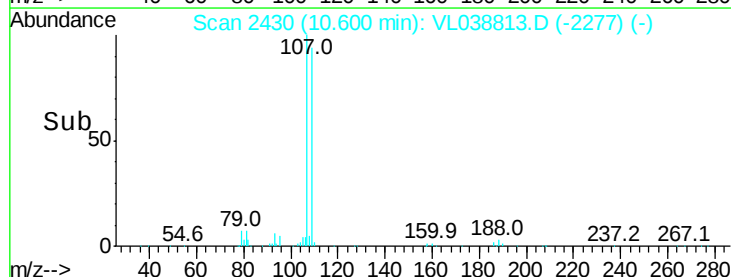
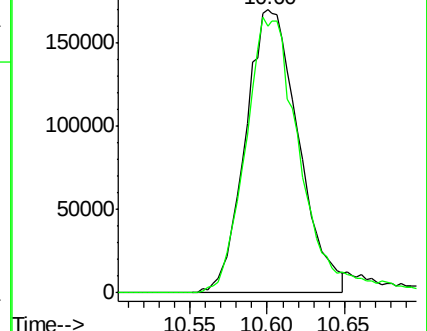
107 100

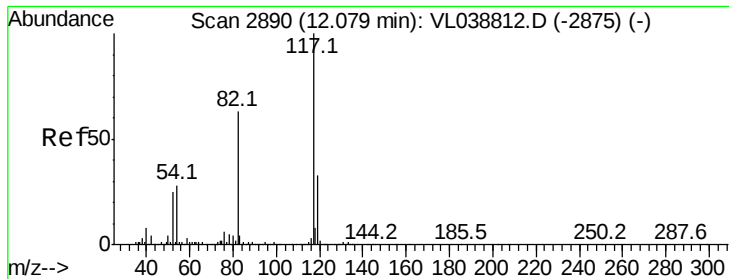
109 94.7 75.5 113.3



Abundance Ion 107.00 (106.70 to 107.70): V

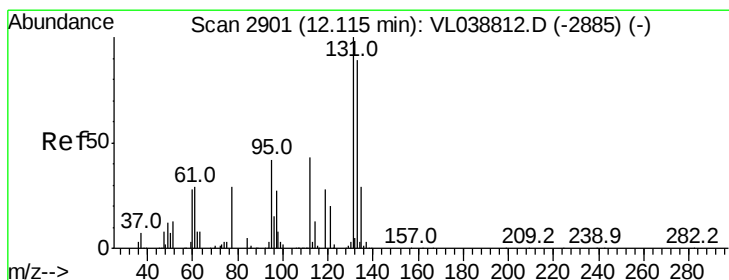
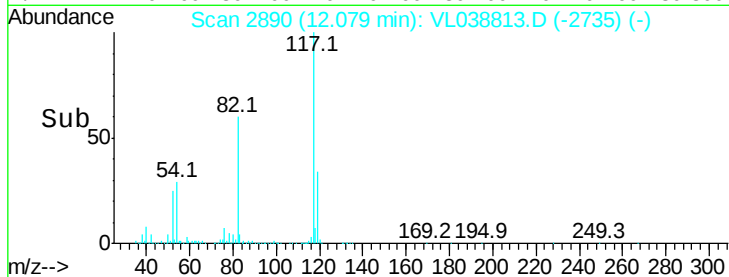
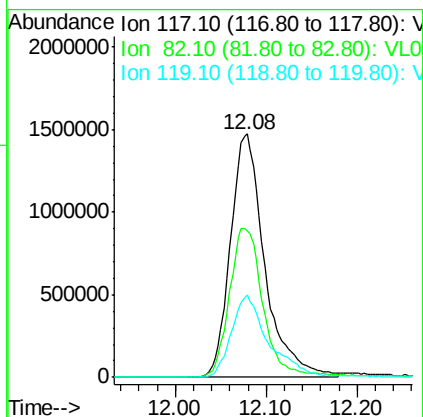
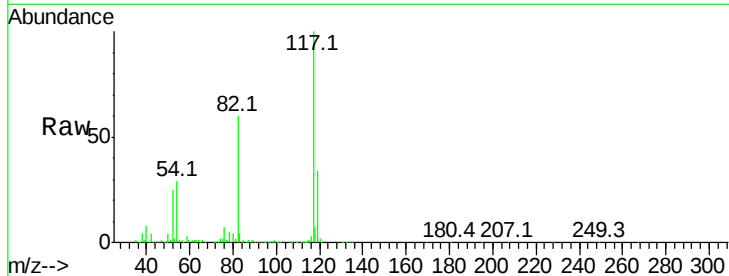
Ion 109.00 (108.70 to 109.70): V





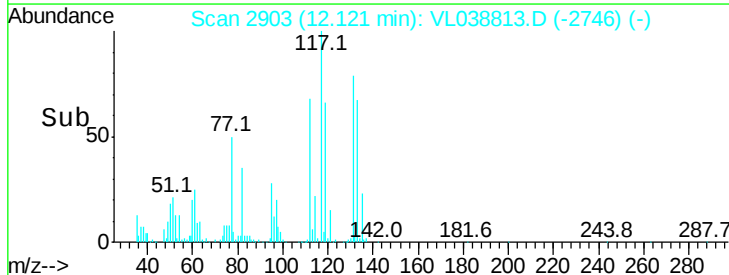
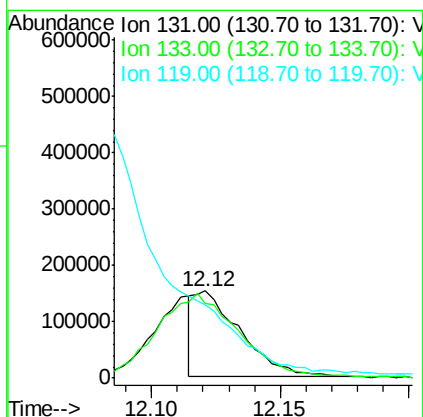
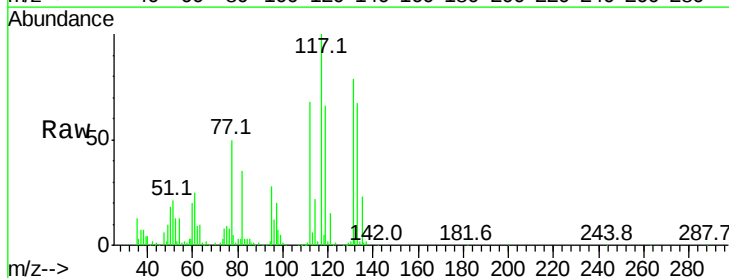
#55
Chlorobenzene-d5
Concen: 10.00 ppbv
RT: 12.08
Instrument: MSVOA_1
Delta R.T.:
Lab File: ClientSampleId :
Acq: 5 Apr 2022 16:36

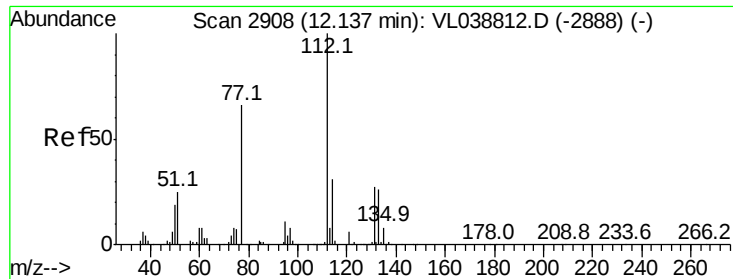
Tgt Ion:117 Resp: 3874040
Ion Ratio Lower Upper
117 100
82 61.9 53.0 79.6
119 37.2 24.9 37.3



#56
1,1,1,2-Tetrachloroethane
Concen: 1.16 ppbv
RT: 12.12 min Scan# 2903
Delta R.T.: 0.01 min
Lab File: VL038813.D
Acq: 5 Apr 2022 16:36

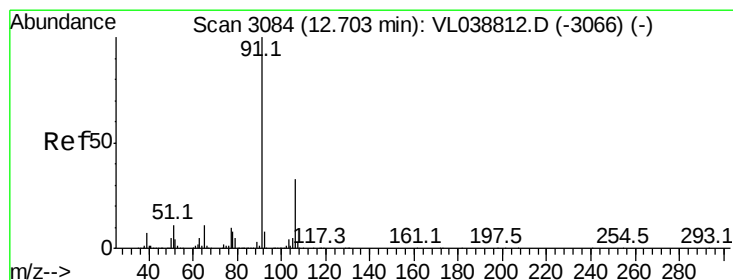
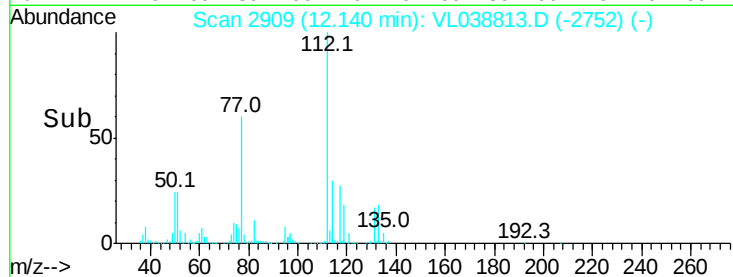
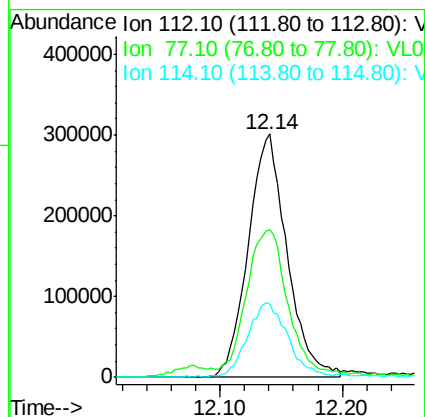
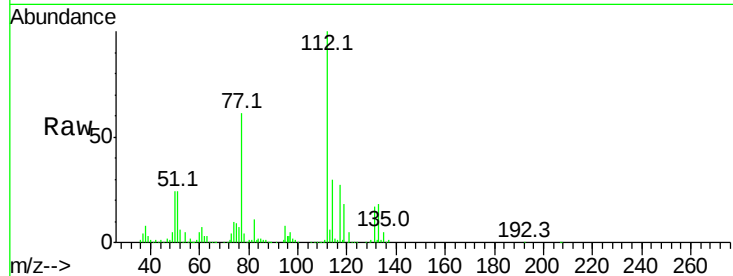
Tgt Ion:131 Resp: 186614
Ion Ratio Lower Upper
131 100
133 184.2 78.2 117.4#
119 772.8 58.6 87.8#





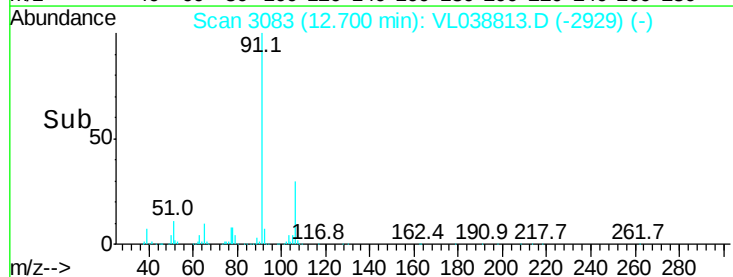
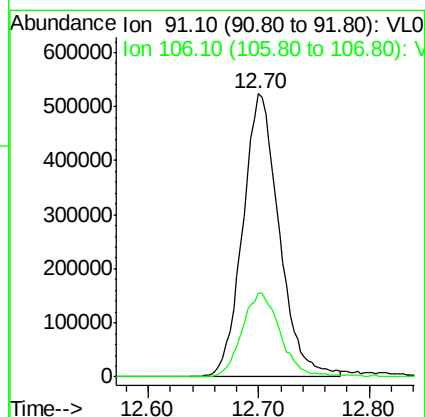
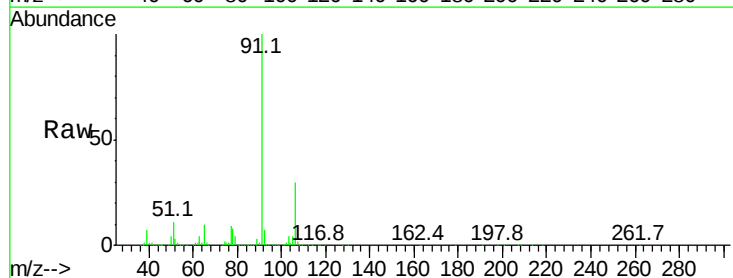
#57
Chlorobenzene
Concen: 2.37 ppbv
RT: 12.14 min
Instrument: MSVOA_1
Delta R.T.: -0.00 min
Lab File: ClientSampleId : VSTDIC002
Acq: 5 Apr 2022 16:36

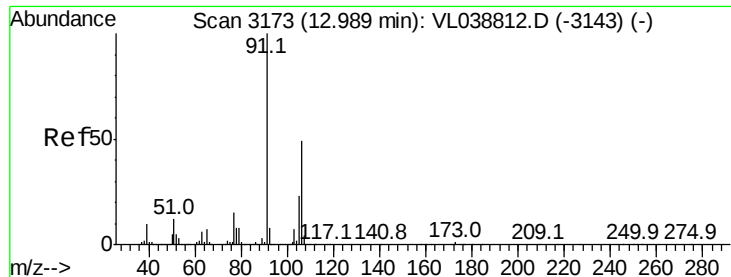
Tgt Ion	Ratio	Lower	Upper
112	100		
77	58.9	52.4	78.6
114	30.2	28.1	34.3



#58
Ethyl Benzene
Concen: 2.65 ppbv
RT: 12.70 min Scan# 3083
Delta R.T.: -0.00 min
Lab File: VL038813.D
Acq: 5 Apr 2022 16:36

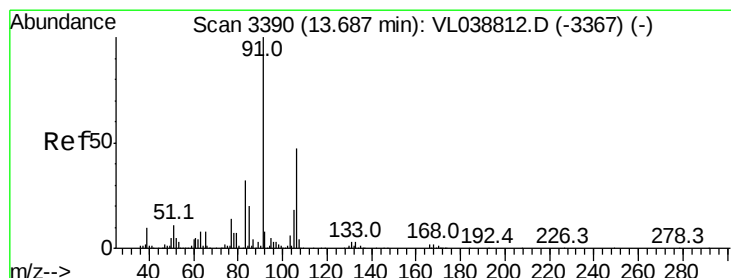
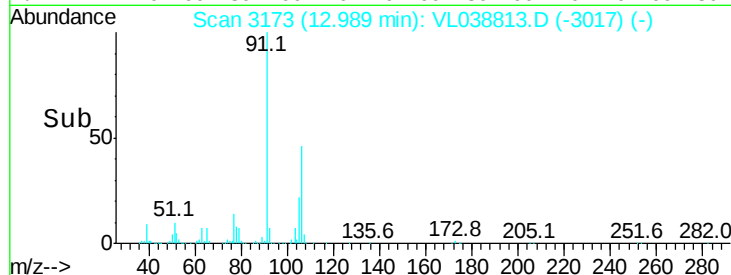
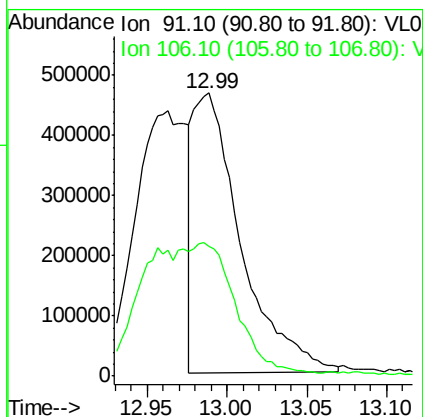
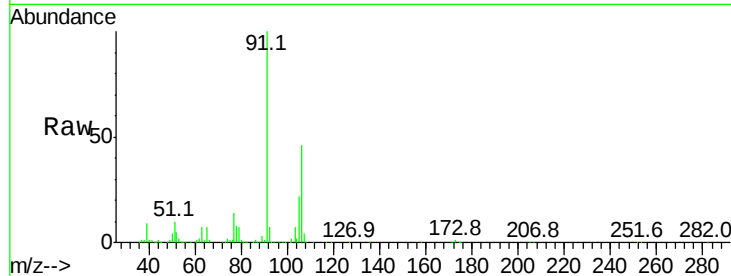
Tgt Ion	Ratio	Lower	Upper
91	100		
106	29.5	26.7	40.1





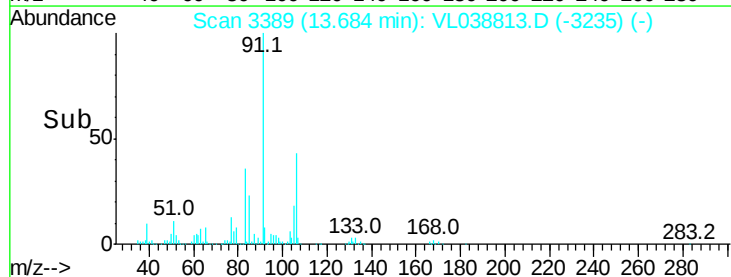
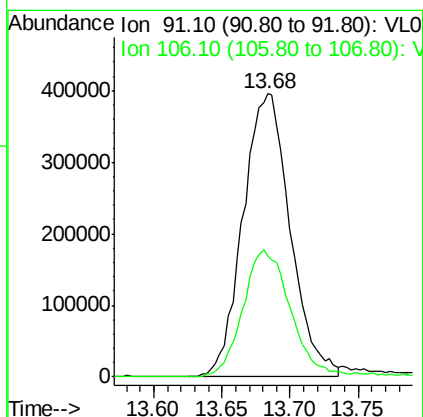
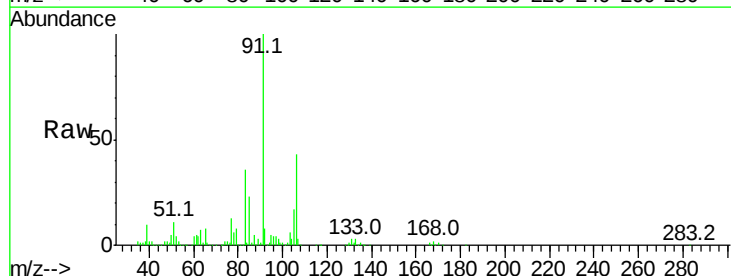
#59
m/p-Xylene
Concen: 2.43 ppbv
RT: 12.99 min
Instrument: MSVOA_1
Delta R.T.:
Lab File: ClientSampleId :
VSTDIC002
Acq: 5 Apr 2022 16:36

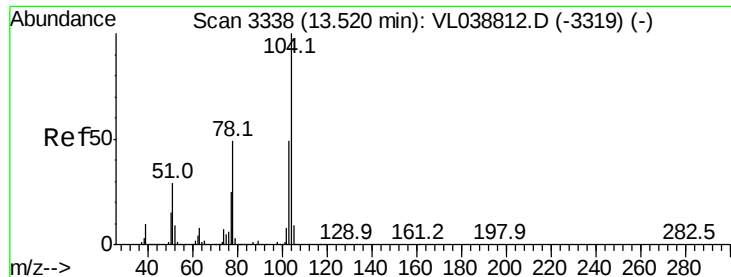
Tgt Ion: 91 Resp: 963873
Ion Ratio Lower Upper
91 100
106 95.2 37.1 55.7#



#60
o-Xylene
Concen: 2.52 ppbv
RT: 13.68 min Scan# 3389
Delta R.T. -0.00 min
Lab File: VL038813.D
Acq: 5 Apr 2022 16:36

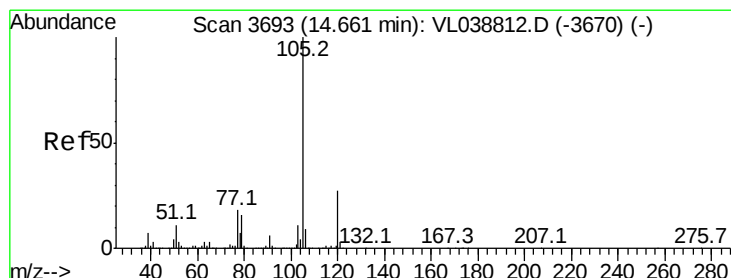
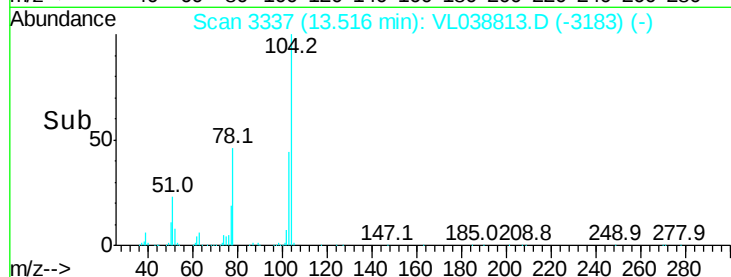
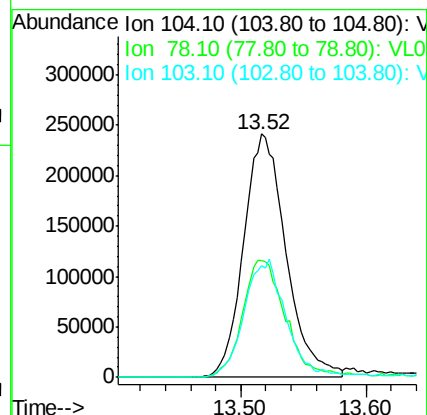
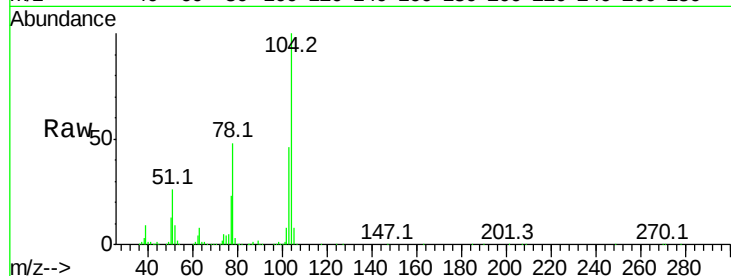
Tgt Ion: 91 Resp: 949727
Ion Ratio Lower Upper
91 100
106 46.5 23.8 71.4





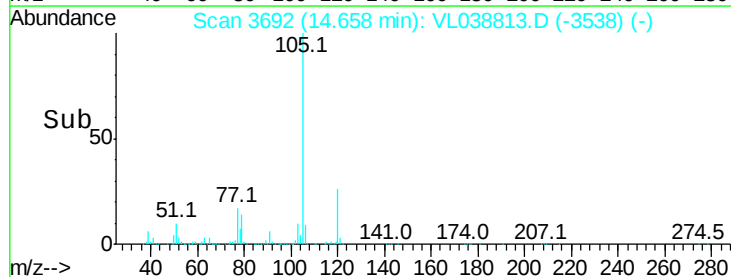
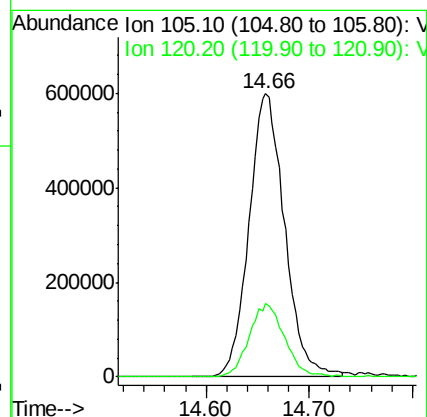
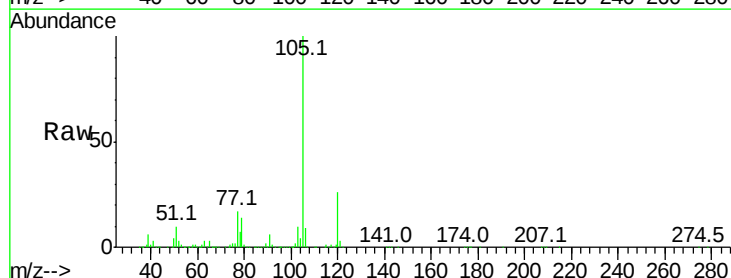
#61
Styrene
Concen: 2.78 ppbv
RT: 13.52
Delta R.T. MSVOA_L
Lab File: ClientSampleId :
Acq: 5 Apr 2022 16:36

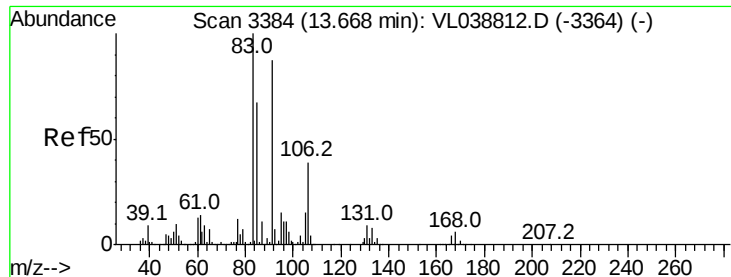
Tgt Ion	Ratio	Lower	Upper
104	100		
78	49.6	40.5	60.7
103	48.3	39.0	58.4



#62
Isopropylbenzene
Concen: 2.54 ppbv
RT: 14.66 min Scan# 3692
Delta R.T. -0.00 min
Lab File: VL038813.D
Acq: 5 Apr 2022 16:36

Tgt Ion	Ratio	Lower	Upper
105	100		
120	25.7	21.8	32.8





#63

1,1,2,2-Tetrachloroethane

Concen: 2.00 ppbv

RT: 13.67

Delta R.T. MSVOA_1

Lab File: ClientSampleId :

VSTDIC002

Acq: 5 Apr 2022 16:36

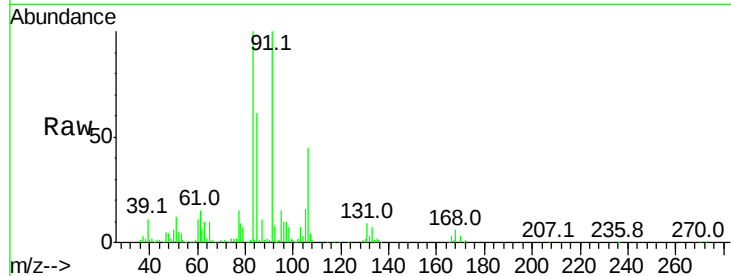
Tgt Ion: 83 Resp: 581368

Ion Ratio Lower Upper

83 100

131 9.3 4.6 13.8

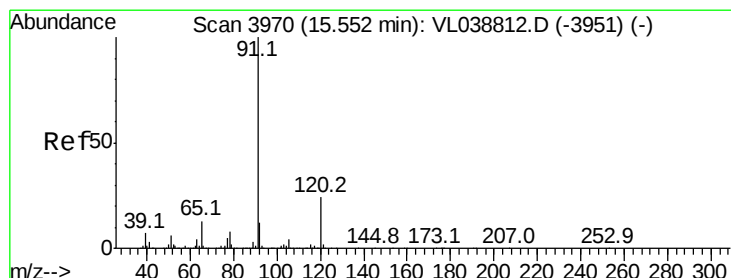
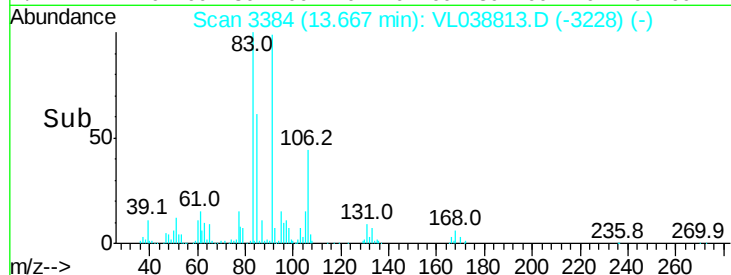
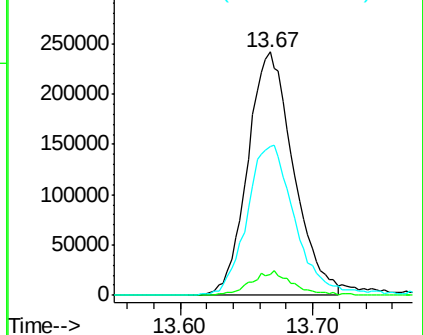
85 65.8 33.0 99.0



Abundance Ion 83.00 (82.70 to 83.70): VL0

Ion 131.00 (130.70 to 131.70): VL0

Ion 85.00 (84.70 to 85.70): VL0



#64

n-propylbenzene

Concen: 2.50 ppbv

RT: 15.55 min Scan# 3971

Delta R.T. 0.00 min

Lab File: VL038813.D

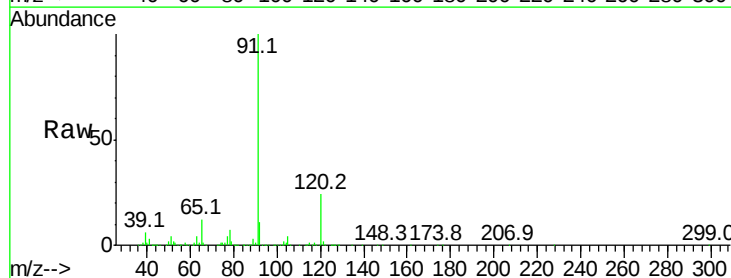
Acq: 5 Apr 2022 16:36

Tgt Ion: 120 Resp: 371644

Ion Ratio Lower Upper

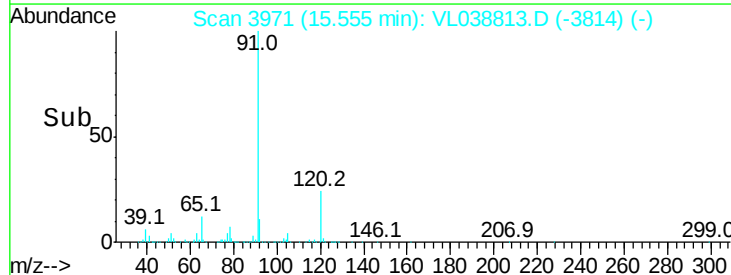
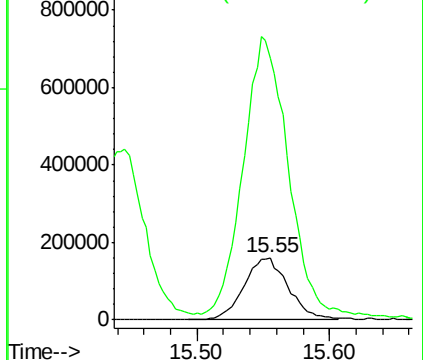
120 100

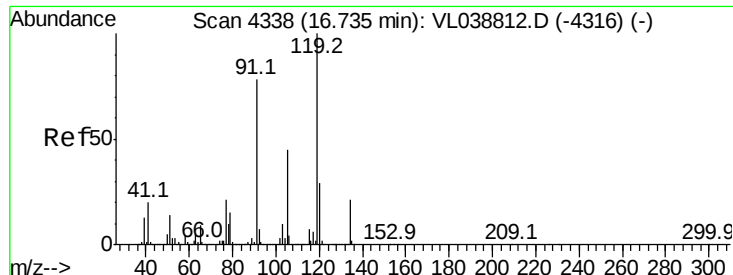
91 474.1 360.6 540.8



Abundance Ion 120.20 (119.90 to 120.90): VL0

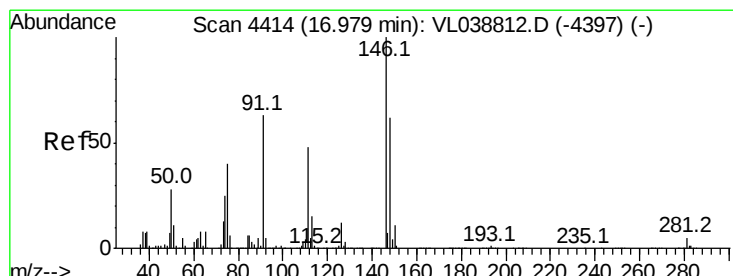
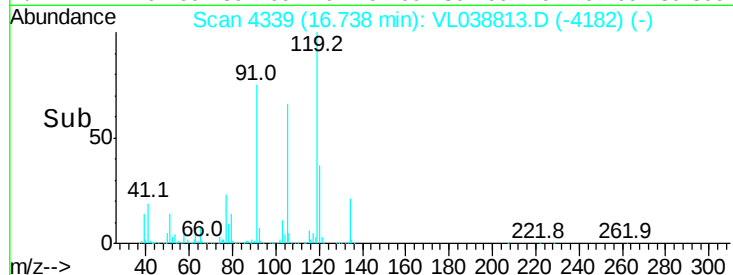
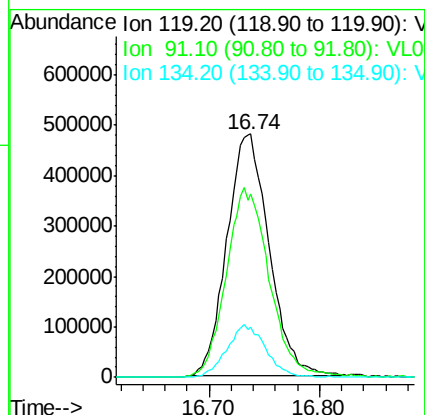
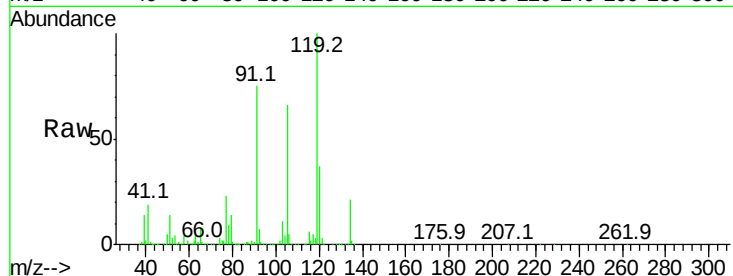
Ion 91.10 (90.80 to 91.80): VL0





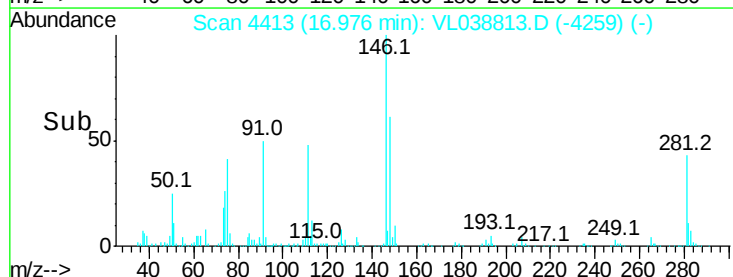
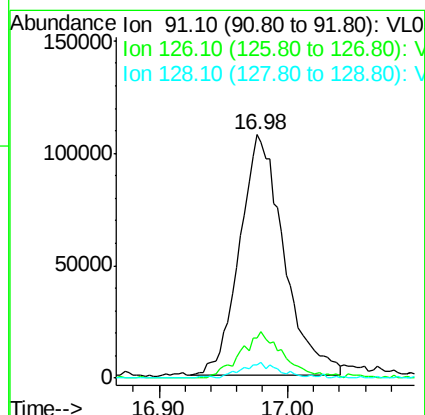
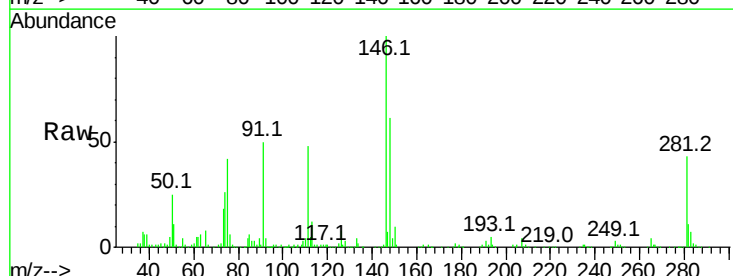
#65
 tert-Butylbenzene
 Concen: 2.48 ppbv
 RT: 16.74 min
 Delta R.T.: MSVOA_1
 Lab File: ClientSampleId : VSTDIC002
 Acq: 5 Apr 2022 16:30

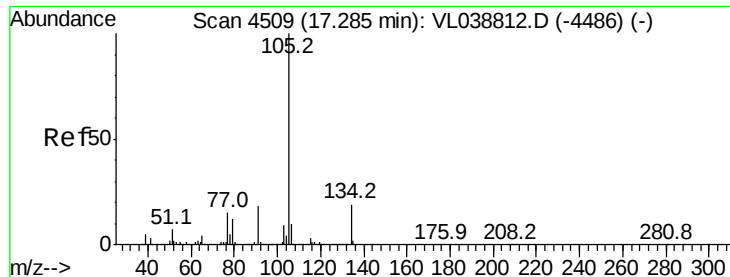
Tgt Ion:	119	Resp:	1262271
Ion	Ratio	Lower	Upper
119	100		
91	81.5	62.8	94.2
134	20.5	16.2	24.4



#66
 Benzyl Chloride
 Concen: 2.68 ppbv
 RT: 16.98 min Scan# 4413
 Delta R.T.: -0.00 min
 Lab File: VL038813.D
 Acq: 5 Apr 2022 16:36

Tgt Ion:	91	Resp:	257422
Ion	Ratio	Lower	Upper
91	100		
126	18.3	15.4	23.0
128	6.3	4.7	7.1





#67

sec-Butylbenzene

Concen: 2.50 ppbv

RT: 17.28

Delta R.T. MSVOA_L

Lab File: ClientSampleId :

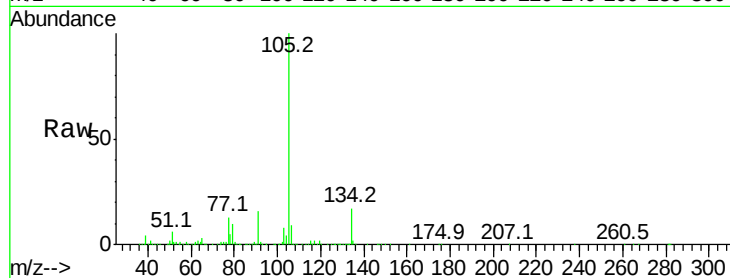
Acq: 5 Apr 2022 16:36

Tgt Ion: 105 Resp: 1819191

Ion Ratio Lower Upper

105 100

134 18.6 15.1 22.7



Abundance Ion 105.10 (104.80 to 105.80): V

Ion 134.20 (133.90 to 134.90): V

17.28

800000

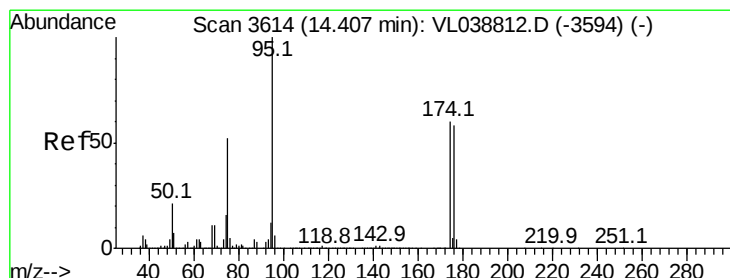
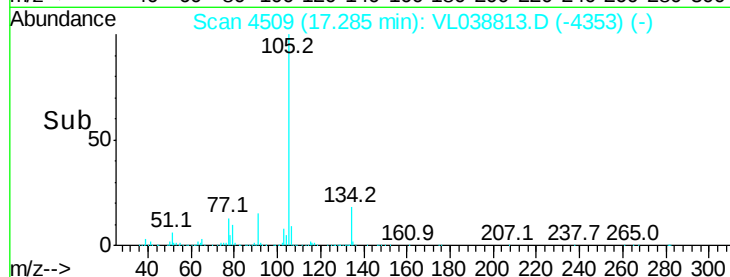
600000

400000

200000

0

Time-->



#68

1-Bromo-4-Fluorobenzene

Concen: 9.45 ppbv

RT: 14.41 min Scan# 3614

Delta R.T. -0.00 min

Lab File: VL038813.D

Acq: 5 Apr 2022 16:36

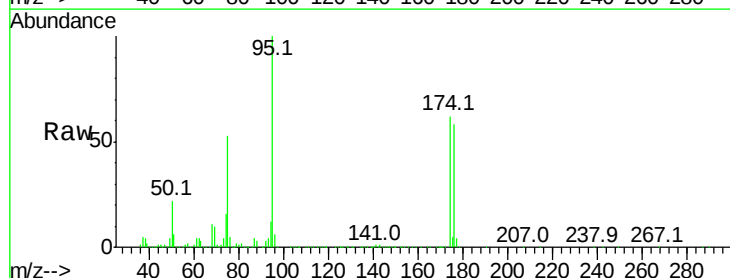
Tgt Ion: 95 Resp: 2806446

Ion Ratio Lower Upper

95 100

174 64.4 52.0 78.0

175 4.8 4.0 6.0



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

14.41

1500000

1000000

500000

0

Time-->

