

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL051821\
 Data File : VL036954.D
 Acq On : 18 May 2021 4:29
 Operator : SY/AP
 Sample : VSTDIC0.1
 Misc : 400mL/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDIC0.1

Quant Time: May 18 07:09:34 2021
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL051821AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Tue May 18 07:06:50 2021
 QLast Update : Tue May 18 07:06:50 2021
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.65	49	1286078	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.15	114	3750952	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.06	117	3585780	10.00	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.39	95	2677320	9.58	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	95.80%

Target Compounds					Ovalue
2) Dichlorodifluoromethane	3.03	85	30665	0.140	ppbv 98
3) Chlorodifluoromethane	2.97	51	30317	0.120	ppbv 99
4) Chloromethane	3.12	50	9699	0.117	ppbv 92
5) Vinyl Chloride	3.24	62	6684	0.074	ppbv 97
6) Bromomethane	3.46	94	3685	0.081	ppbv # 62
7) Chloroethane	3.55	64	2246	0.078	ppbv 99
8) Dichlorotetrafluoroethane	3.18	85	24281	0.117	ppbv 90
9) Propene	3.00	41	14745	0.205	ppbv 94
10) Heptane	8.10	43	12379	0.072	ppbv # 11
11) Trichlorofluoromethane	3.93	101	21320	0.108	ppbv 87
12) 1,1,2-Trichlorotrifluoroet	4.47	101	14128	0.106	ppbv # 81
14) Bromoethene	3.74	108	2481	0.046	ppbv # 1
16) 1,3-Butadiene	3.32	39	8384	0.107	ppbv # 68
18) 1,1-Dichloroethene	4.28	96	6250	0.114	ppbv # 92
20) Methylene Chloride	4.33	84	15006	0.152	ppbv 95
21) Allyl Chloride	4.40	41	6205	0.070	ppbv # 15
24) 1,1-Dichloroethane	5.00	63	16148	0.124	ppbv 96
25) Ethyl Acetate	5.66	43	10027	0.034	ppbv # 75
26) Hexane	5.67	57	17617	0.115	ppbv # 88
27) Carbon Disulfide	4.53	76	6854	0.051	ppbv # 1
28) Methyl tert-Butyl Ether	5.04	73	11665	0.079	ppbv # 55
29) Chloroform	5.73	83	14969	0.065	ppbv 96
30) Cyclohexane	7.10	84	3656	0.031	ppbv # 1
31) cis-1,2-Dichloroethene	5.53	61	11908	0.099	ppbv 92
32) 1,1,1-Trichloroethane	6.48	97	14578	0.059	ppbv # 35
36) Benzene	6.87	78	36013	0.120	ppbv 97
37) 1,2-Dichloroethane	6.29	62	7304	0.041	ppbv # 71
38) Trichloroethene	7.80	130	6331	0.051	ppbv # 80
39) 1,2-Dichloropropane	7.15	63	883899	7.161	ppbv # 25
42) Bromodichloromethane	7.77	83	10343	0.039	ppbv 87
44) 2,2,4-Trimethylpentane	7.85	57	61470	0.115	ppbv # 90
47) 1,1,2-Trichloroethane	9.45	97	5054	0.037	ppbv # 54
48) Dibromochloromethane	10.27	129	14763	0.072	ppbv # 10
49) Bromoform	13.01	173	8558	0.051	ppbv # 42
52) Tetrachloroethene	11.19	164	6858	0.062	ppbv 90
53) Toluene	9.78	91	43420	0.144	ppbv 98
54) 1,2-Dibromoethane	10.58	107	7165	0.041	ppbv # 80
56) 1,1,1,2-Tetrachloroethane	12.10	131	14782	0.090	ppbv # 1
57) Chlorobenzene	12.12	112	21819	0.072	ppbv # 88
58) Ethyl Benzene	12.68	91	57441	0.135	ppbv 93
59) m/p-Xylene	12.96	91	20987	0.052	ppbv # 1

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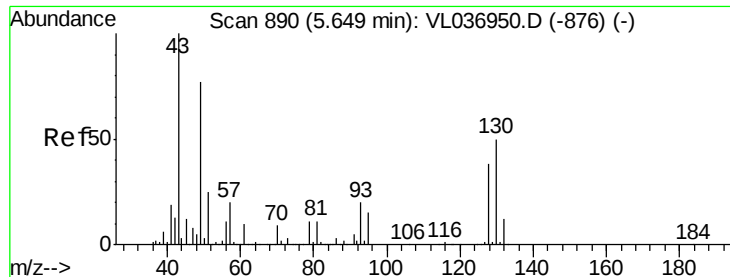
Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDIC0.1

Quant Time: May 18 07:09:34 2021
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL051821AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Tue May 18 07:06:50 2021
 QLast Update : Tue May 18 07:06:50 2021
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)

60) o-Xylene	13.67	91	45469	0.117	ppbv	92
61) Styrene	13.51	104	14917	0.094	ppbv #	51
62) Isopropylbenzene	14.64	105	63057	0.119	ppbv	97
63) 1,1,2,2-Tetrachloroethane	13.65	83	15090	0.041	ppbv #	13
64) n-propylbenzene	15.54	120	10372	0.079	ppbv #	1
65) tert-Butylbenzene	16.72	119	34059	0.073	ppbv #	20
67) sec-Butylbenzene	17.27	105	39316	0.059	ppbv #	57
69) p-Isopropyltoluene	17.64	119	59918	0.119	ppbv #	88
71) 2-Chlorotoluene	15.43	91	29654	0.078	ppbv #	42
72) 4-Ethyltoluene	15.82	105	12422	0.031	ppbv #	36
73) 1,3,5-Trimethylbenzene	15.98	105	41520	0.106	ppbv	98
74) 1,2,4-Trimethylbenzene	16.74	105	40666	0.094	ppbv #	88
76) 1,4-Dichlorobenzene	17.10	146	7484	0.030	ppbv #	22
77) 1,2-Dichlorobenzene	17.80	146	15273	0.060	ppbv #	13
78) Hexachloro-1,3-Butadiene	23.36	225	33002	0.146	ppbv	93
80) Naphthalene, 2-methyl-	25.23	142	2496	0.088	ppbv	85
81) 1,2,4-Trichlorobenzene	21.91	180	7793	0.056	ppbv #	9

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



#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.65 min Scan# 889

Delta R.T. -0.00 min

Lab File: VL036954.D

Acq: 18 May 2021 4:29

Instrument :

MSVOA_L

ClientSampleId :

VSTDIC0.1

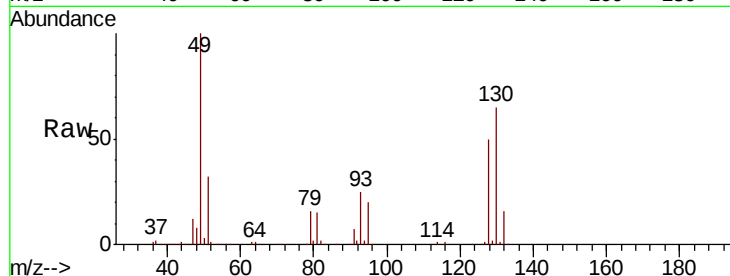
Tot Ion: 49 Resp: 1286078

Ion Ratio Lower Upper

49 100

128 53.7 26.9 80.7

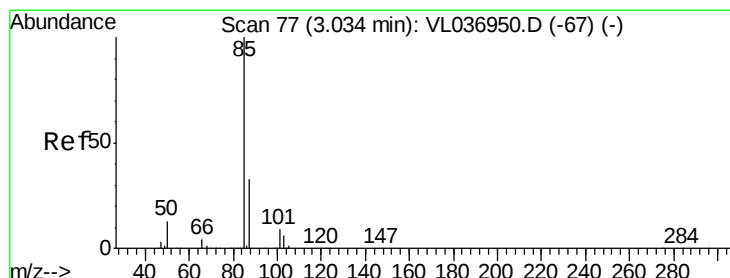
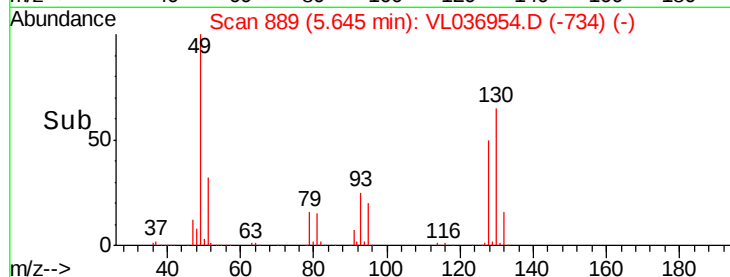
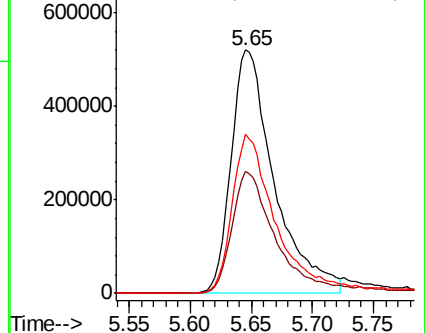
130 68.9 33.8 101.4



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: 0.140 ppbv

RT: 3.03 min Scan# 76

Delta R.T. -0.00 min

Lab File: VL036954.D

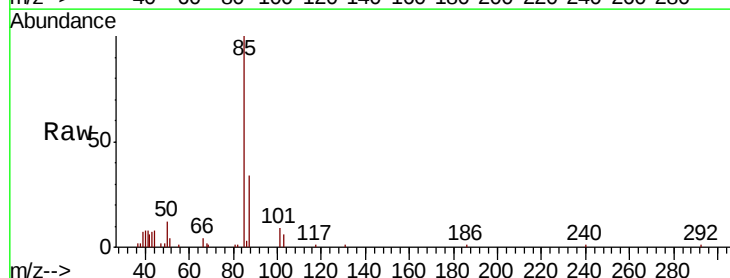
Acq: 18 May 2021 4:29

Tgt Ion: 85 Resp: 30665

Ion Ratio Lower Upper

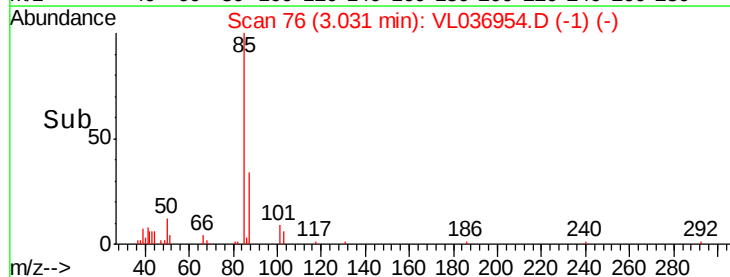
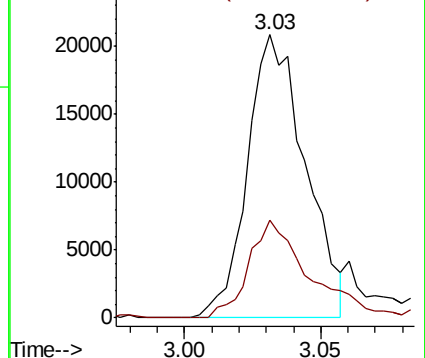
85 100

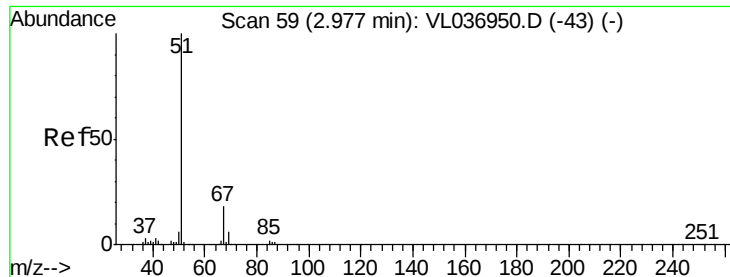
87 34.4 26.6 39.8



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0





#3

Chlorodifluoromethane

Concen: 0.120 ppbv

RT: 2.97 min Scan# 57

Delta R.T. -0.01 min

Lab File: VL036954.D

Acq: 18 May 2021 4:29

Instrument :

MSVOA_L

ClientSampleId :

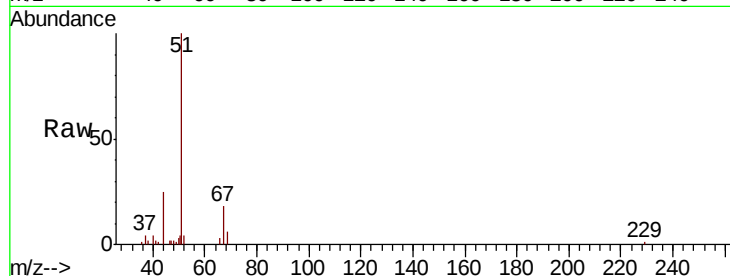
VSTDIC0.1

Tot Ion: 51 Resp: 30317

Ion Ratio Lower Upper

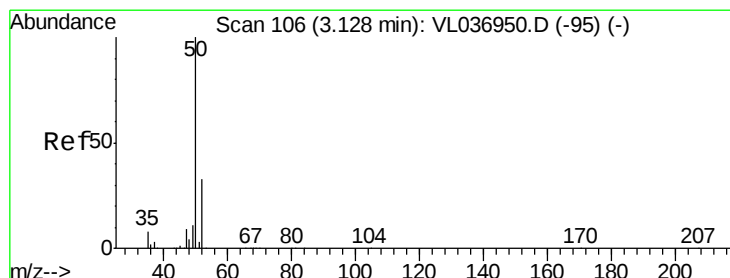
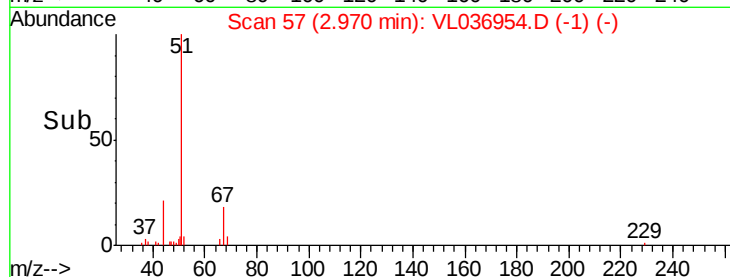
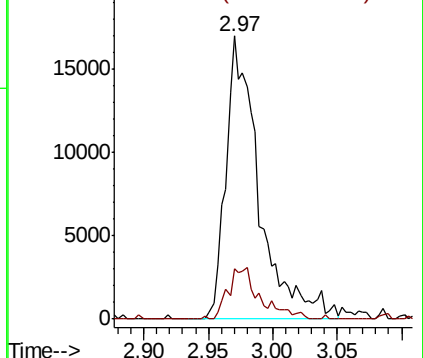
51 100

67 17.7 14.6 21.8



Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0



#4

Chloromethane

Concen: 0.117 ppbv

RT: 3.12 min Scan# 105

Delta R.T. -0.00 min

Lab File: VL036954.D

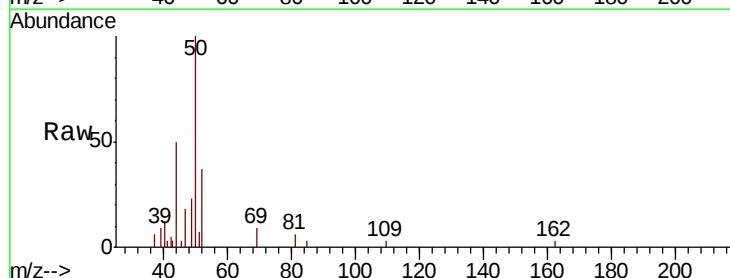
Acq: 18 May 2021 4:29

Tgt Ion: 50 Resp: 9699

Ion Ratio Lower Upper

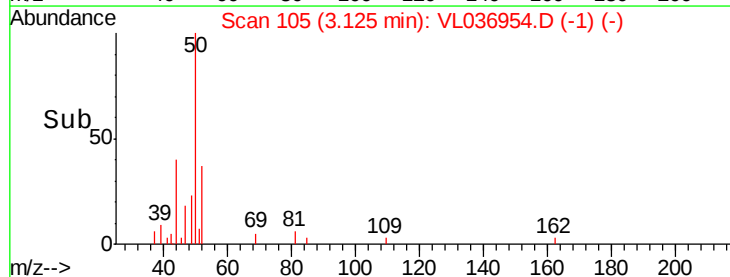
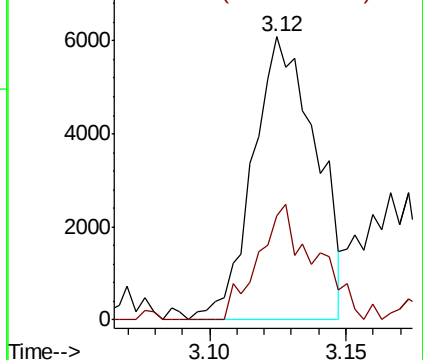
50 100

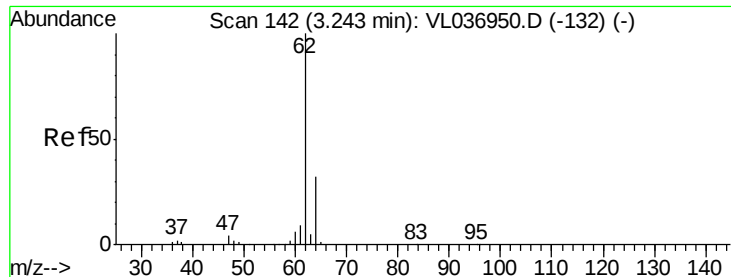
52 37.0 26.1 39.1



Abundance Ion 50.10 (49.80 to 50.80): VL0

Ion 52.10 (51.80 to 52.80): VL0





#5

Vinyl Chloride

Concen: 0.074 ppbv

RT: 3.24 min Scan# 142

Delta R.T. 0.00 min

Lab File: VL036954.D

Acq: 18 May 2021 4:29

Instrument :

MSVOA_L

ClientSampleId :

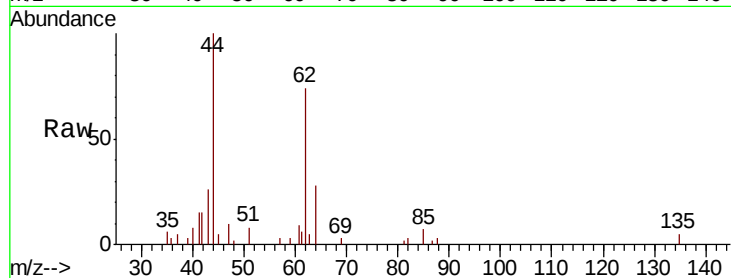
VSTDIC0.1

Tot Ion: 62 Resp: 6684

Ion Ratio Lower Upper

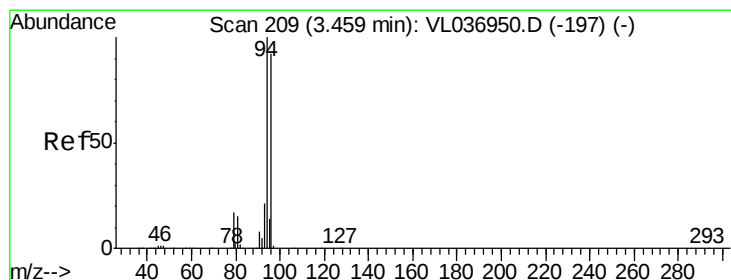
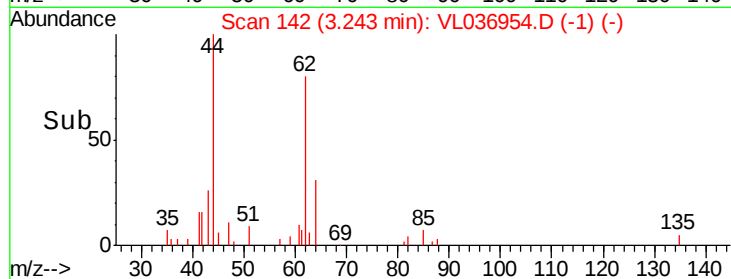
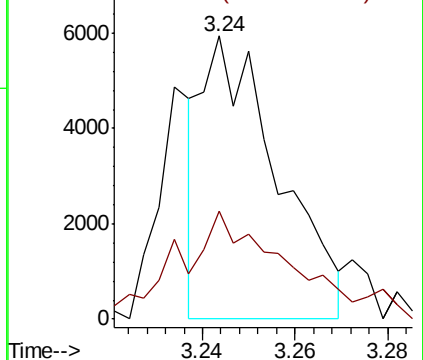
62 100

64 30.8 25.9 38.9



Abundance Ion 62.10 (61.80 to 62.80): VL0

Ion 64.10 (63.80 to 64.80): VL0



#6

Bromomethane

Concen: 0.081 ppbv

RT: 3.46 min Scan# 209

Delta R.T. 0.00 min

Lab File: VL036954.D

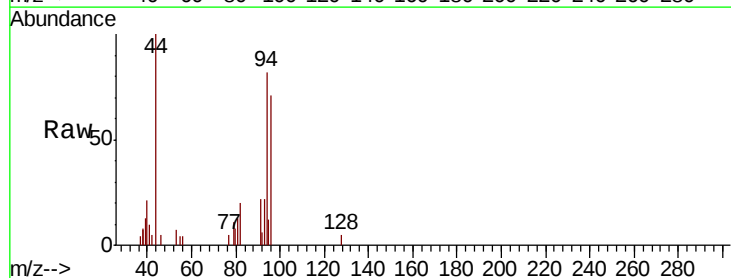
Acq: 18 May 2021 4:29

Tgt Ion: 94 Resp: 3685

Ion Ratio Lower Upper

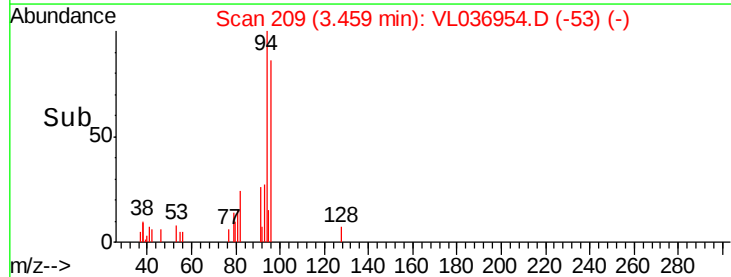
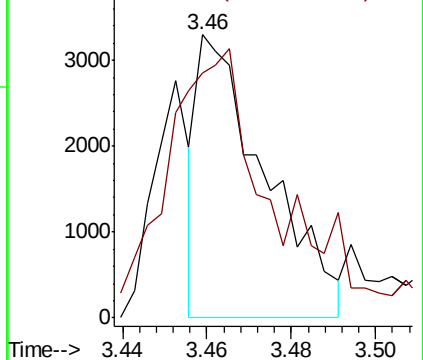
94 100

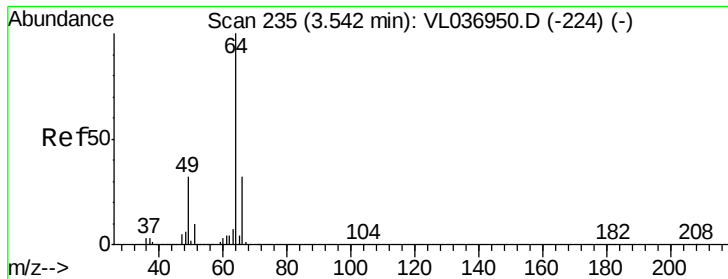
96 56.5 74.0 111.0#



Abundance Ion 94.00 (93.70 to 94.70): VL0

Ion 96.00 (95.70 to 96.70): VL0





#7

Chloroethane

Concen: 0.078 ppbv

RT: 3.55 min Scan# 236

Delta R.T. 0.00 min

Lab File: VL036954.D

Acq: 18 May 2021 4:29

Instrument :

MSVOA_L

ClientSampleId :

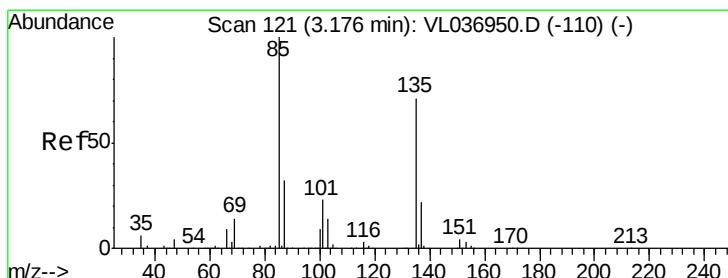
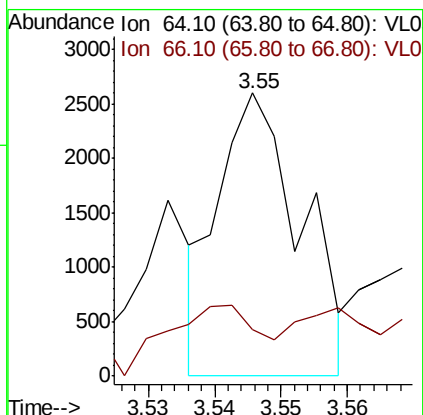
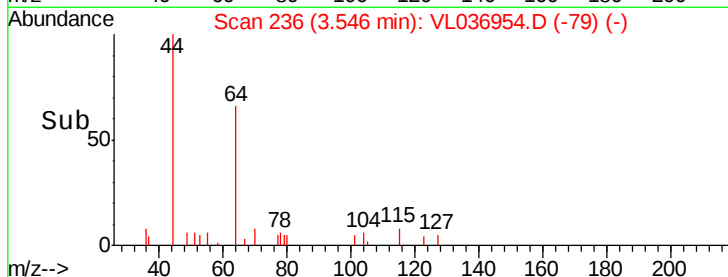
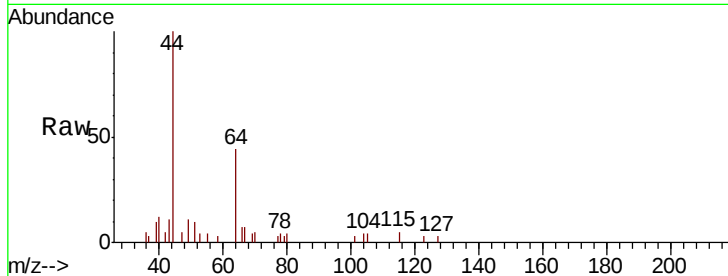
VSTDIC0.1

Tot Ion: 64 Resp: 2246

Ion Ratio Lower Upper

64 100

66 32.4 25.4 38.2



#8

Dichlorotetrafluoroethane

Concen: 0.117 ppbv

RT: 3.18 min Scan# 121

Delta R.T. 0.00 min

Lab File: VL036954.D

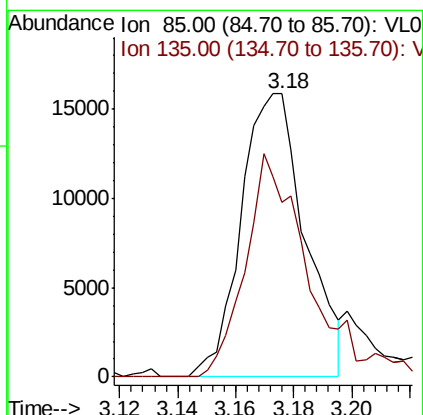
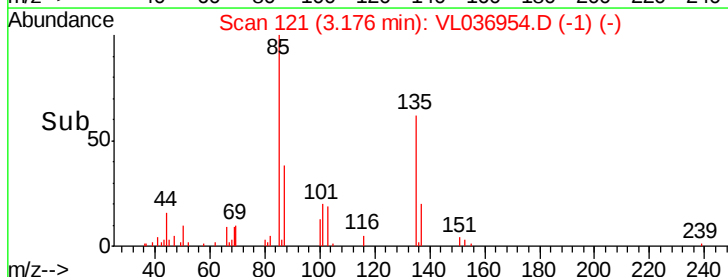
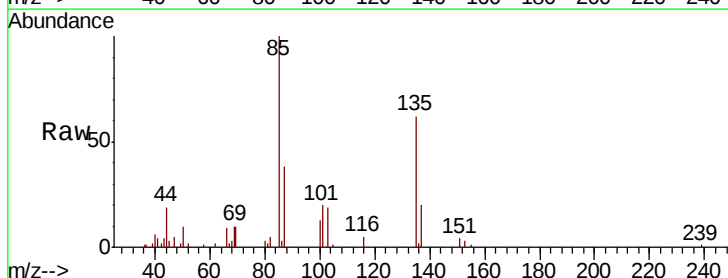
Acq: 18 May 2021 4:29

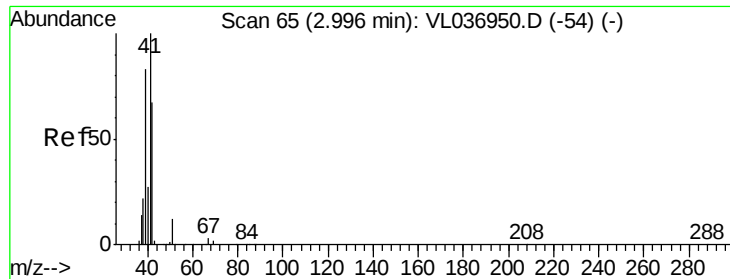
Tgt Ion: 85 Resp: 24281

Ion Ratio Lower Upper

85 100

135 80.3 57.7 86.5





#9

Propene

Concen: 0.205 ppbv

RT: 3.00 min Scan# 65

Delta R.T. 0.00 min

Lab File: VL036954.D

Acq: 18 May 2021 4:29

Instrument :

MSVOA_L

ClientSampleId :

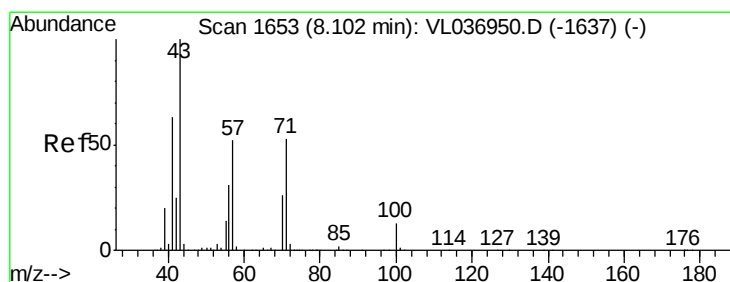
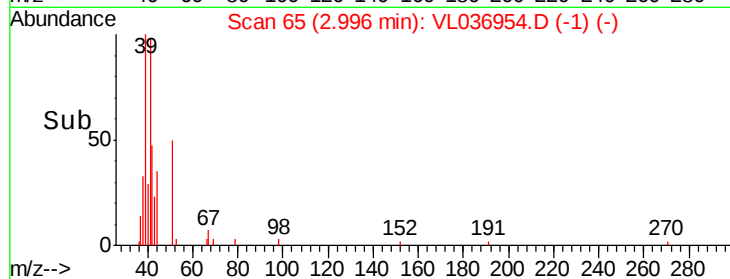
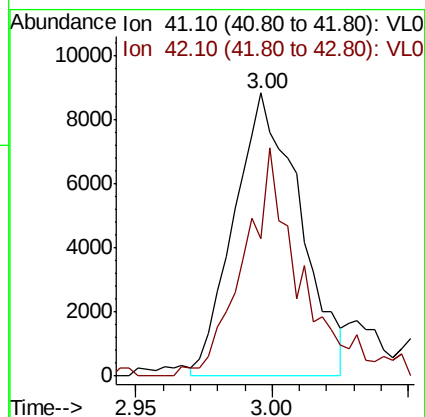
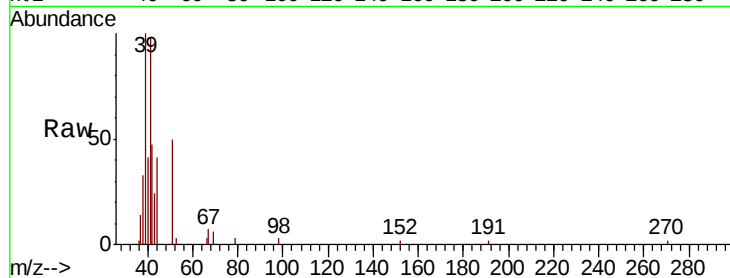
VSTDIC0.1

Tot Ion: 41 Resp: 14745

Ion Ratio Lower Upper

41 100

42 72.6 53.9 80.9



#10

Heptane

Concen: 0.072 ppbv

RT: 8.10 min Scan# 1651

Delta R.T. -0.01 min

Lab File: VL036954.D

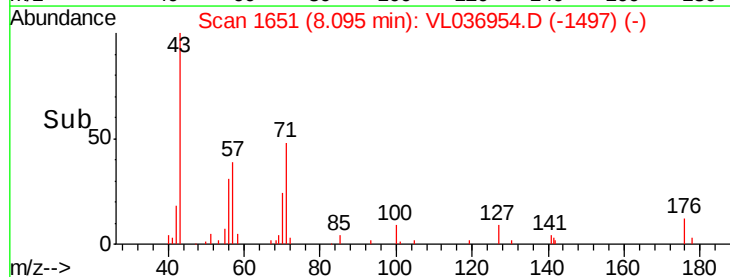
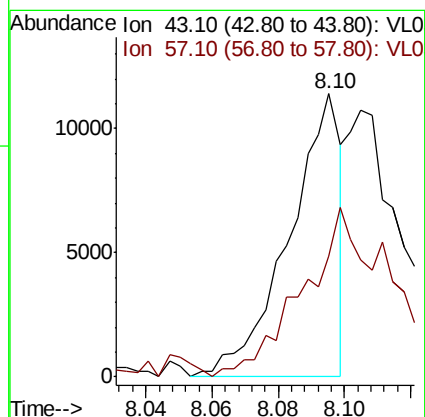
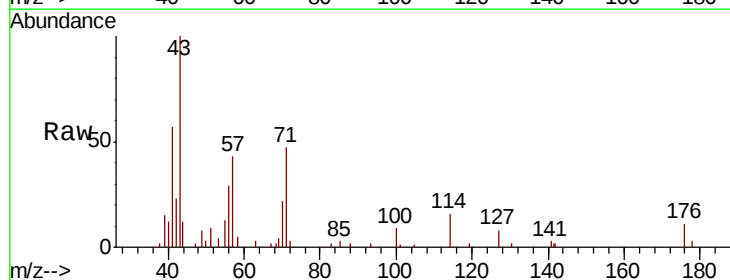
Acq: 18 May 2021 4:29

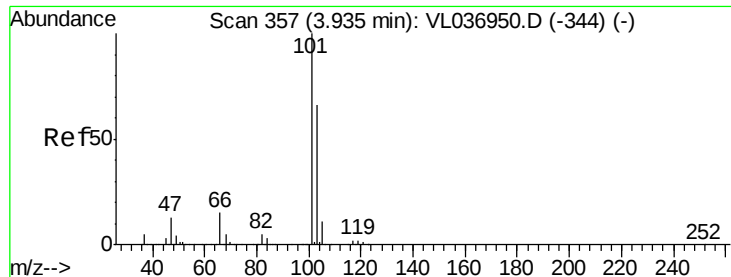
Tgt Ion: 43 Resp: 12379

Ion Ratio Lower Upper

43 100

57 113.7 41.0 61.6#





#11

Trichlorofluoromethane

Concen: 0.108 ppbv

RT: 3.93 min Scan# 356

Delta R.T. -0.00 min

Lab File: VL036954.D

Acq: 18 May 2021 4:29

Instrument :

MSVOA_L

ClientSampleId :

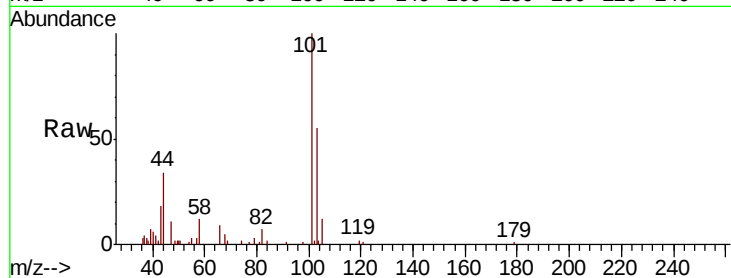
VSTDIC0.1

Tot Ion:101 Resp: 21320

Ion Ratio Lower Upper

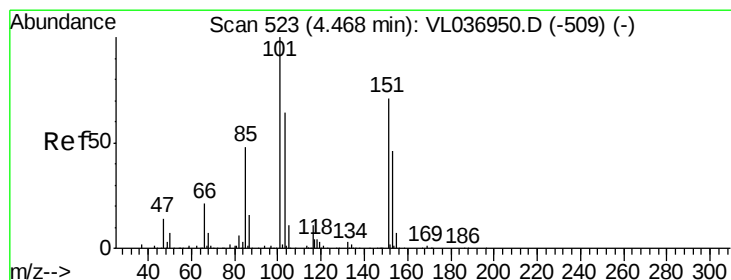
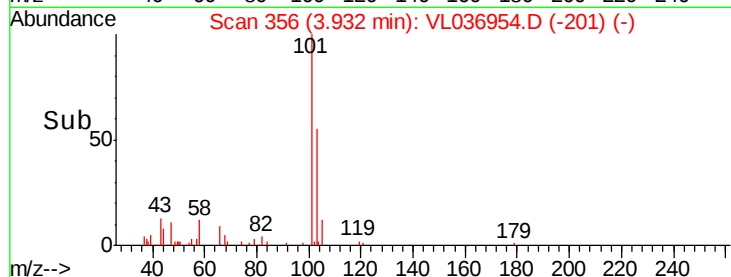
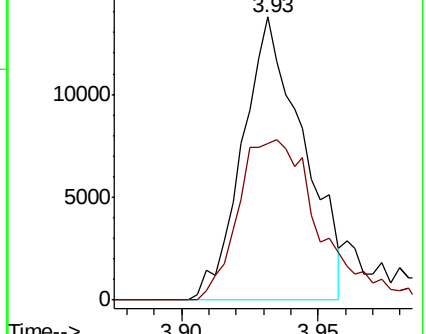
101 100

103 55.4 52.6 79.0



Abundance Ion 101.00 (100.70 to 101.70): V

Ion 103.00 (102.70 to 103.70): V



#12

1,1,2-Trichlorotrifluoroethane

Concen: 0.106 ppbv

RT: 4.47 min Scan# 522

Delta R.T. -0.00 min

Lab File: VL036954.D

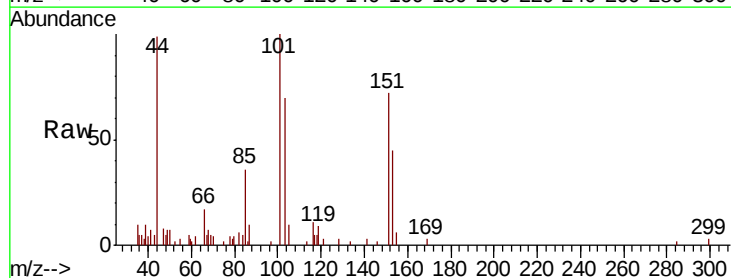
Acq: 18 May 2021 4:29

Tgt Ion:101 Resp: 14128

Ion Ratio Lower Upper

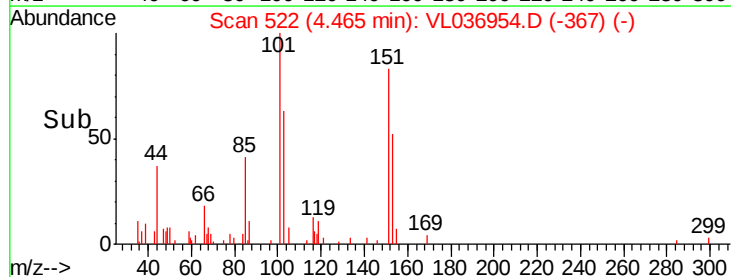
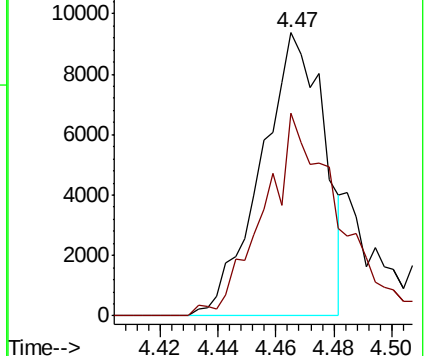
101 100

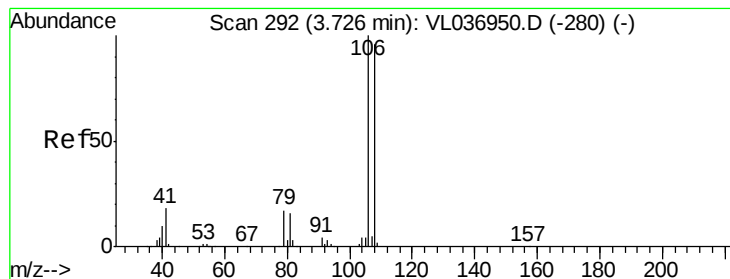
151 88.3 57.7 86.5#



Abundance Ion 101.00 (100.70 to 101.70): V

Ion 151.00 (150.70 to 151.70): V





#14

Bromoethene

Concen: 0.046 ppbv

RT: 3.74 min Scan# 295

Delta R.T. 0.01 min

Lab File: VL036954.D

Acq: 18 May 2021 4:29

Instrument :

MSVOA_L

ClientSampleId :

VSTDIC0.1

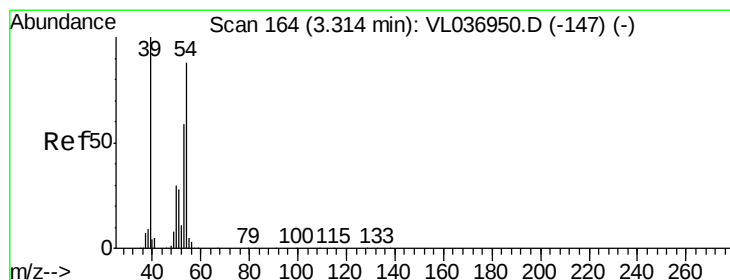
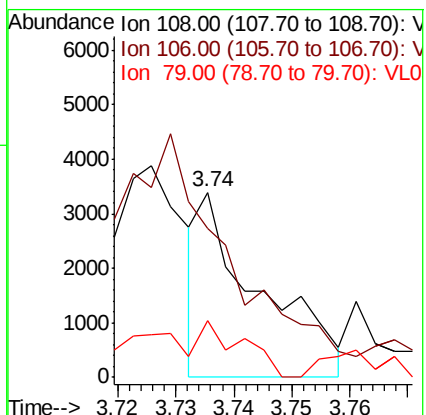
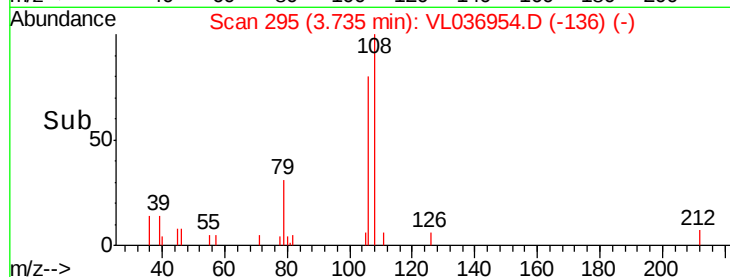
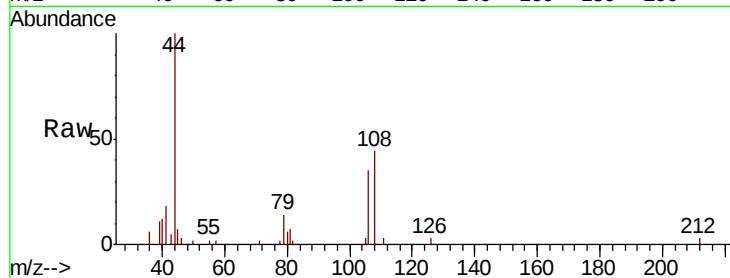
Tot Ion:108 Resp: 2481

Ion Ratio Lower Upper

108 100

106 0.0 86.5 129.7#

79 88.6 15.0 22.4#



#16

1,3-Butadiene

Concen: 0.107 ppbv

RT: 3.32 min Scan# 165

Delta R.T. 0.00 min

Lab File: VL036954.D

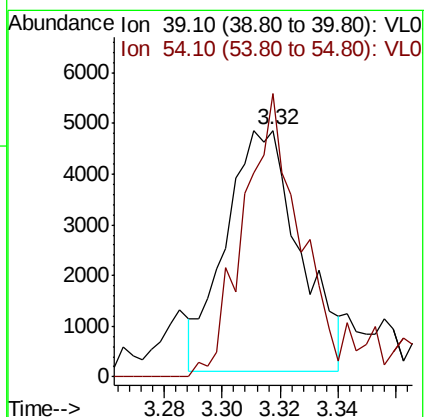
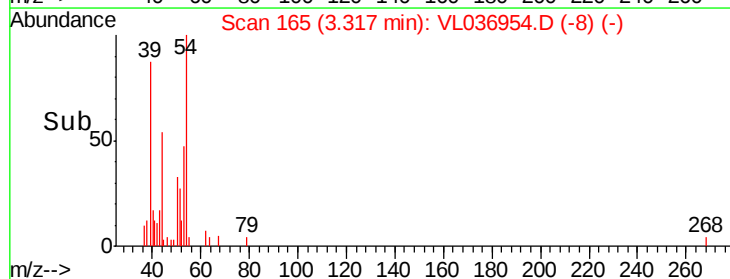
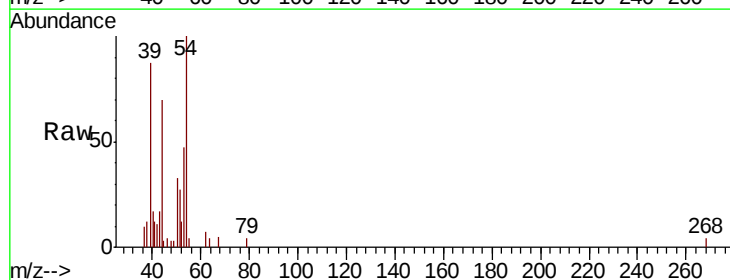
Acq: 18 May 2021 4:29

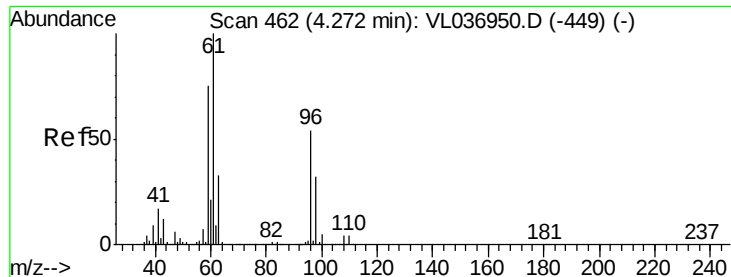
Tgt Ion: 39 Resp: 8384

Ion Ratio Lower Upper

39 100

54 107.0 63.2 94.8#





#18

1,1-Dichloroethene

Concen: 0.114 ppbv

RT: 4.28 min Scan# 463

Delta R.T. 0.00 min

Lab File: VL036954.D

Acq: 18 May 2021 4:29

Instrument :

MSVOA_L

ClientSampleId :

VSTDIC0.1

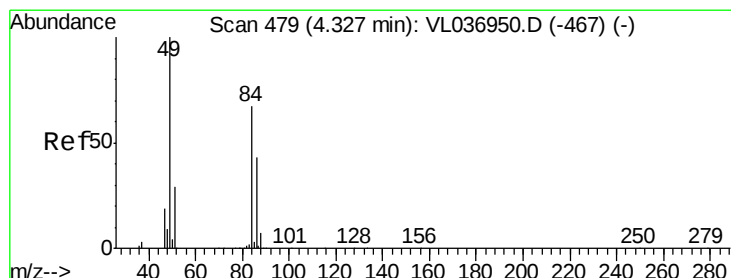
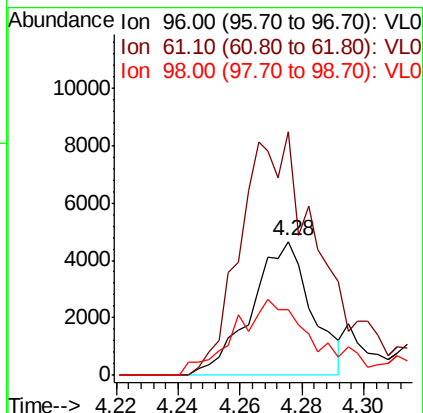
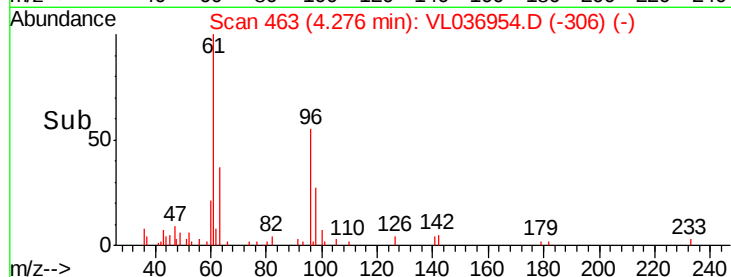
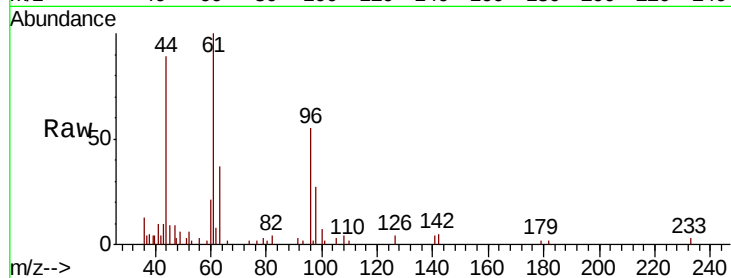
Tot Ion: 96 Resp: 6250

Ion Ratio Lower Upper

96 100

61 182.3 148.2 222.4

98 39.9 47.8 71.6#



#20

Methylene Chloride

Concen: 0.152 ppbv

RT: 4.33 min Scan# 480

Delta R.T. 0.00 min

Lab File: VL036954.D

Acq: 18 May 2021 4:29

Tgt Ion: 84 Resp: 15006

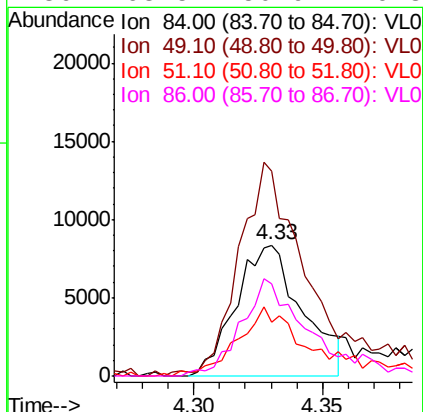
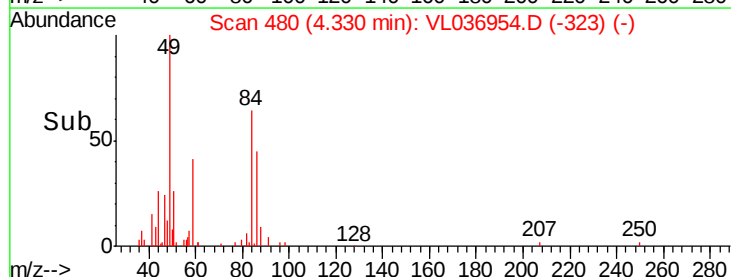
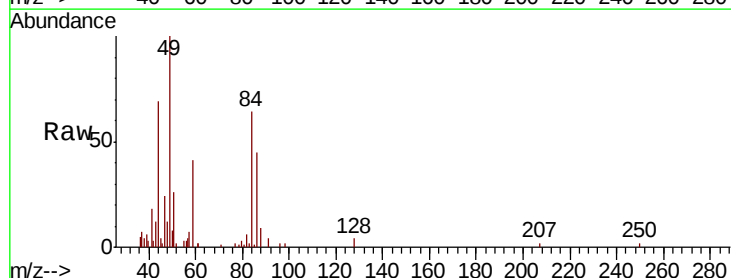
Ion Ratio Lower Upper

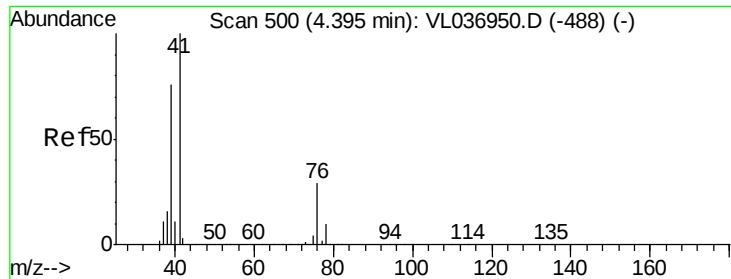
84 100

49 154.2 119.8 179.6

51 38.1 35.1 52.7

86 68.5 50.9 76.3

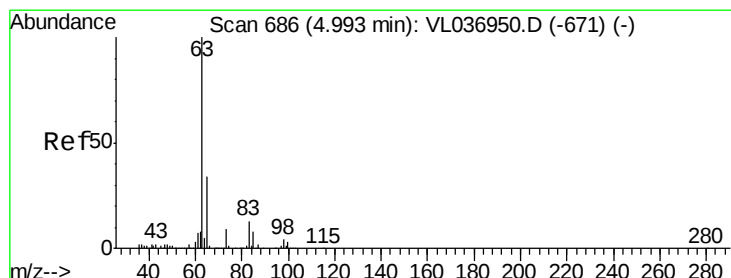
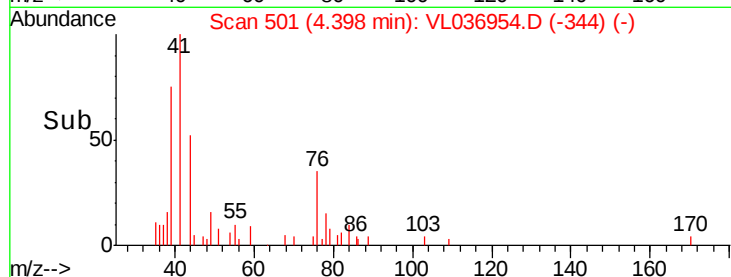
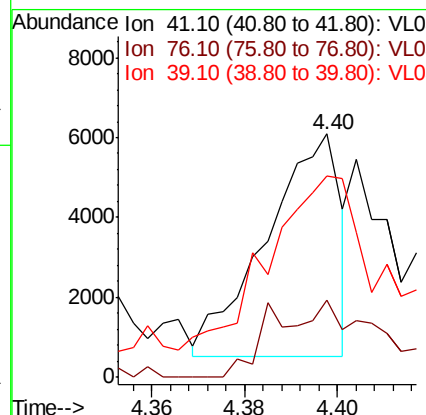
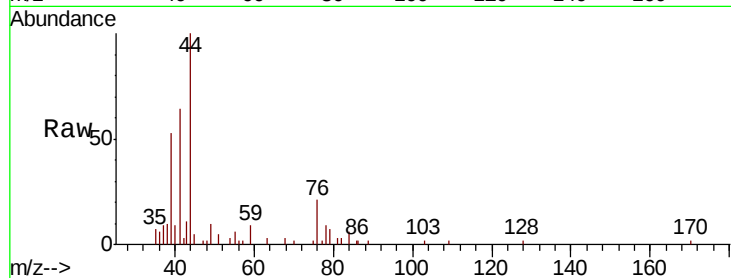




#21
 Allvl Chloride
 Concen: 0.070 ppbv
 RT: 4.40 min Scan# 501
 Delta R.T. 0.00 min
 Lab File: VL036954.D
 Acq: 18 May 2021 4:29

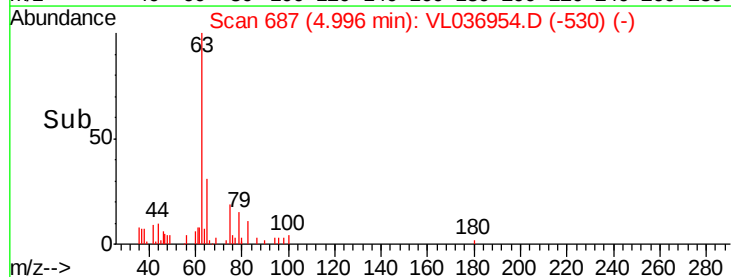
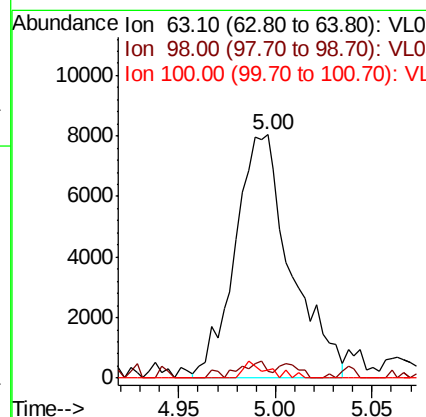
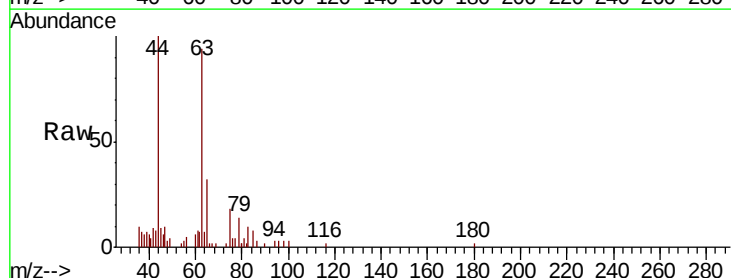
Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDIC0.1

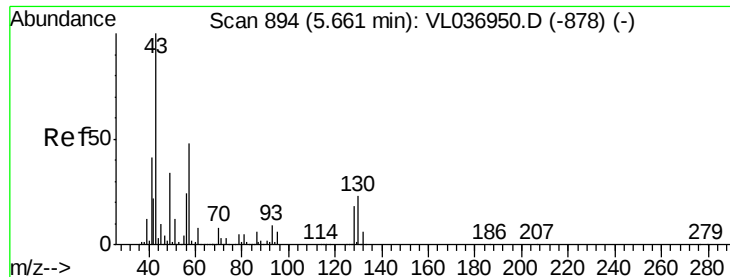
Tot Ion: 41 Resp: 6205
 Ion Ratio Lower Upper
 41 100
 76 60.5 24.9 37.3#
 39 164.9 63.7 95.5#



#24
 1,1-Dichloroethane
 Concen: 0.124 ppbv
 RT: 5.00 min Scan# 687
 Delta R.T. 0.00 min
 Lab File: VL036954.D
 Acq: 18 May 2021 4:29

Tgt Ion: 63 Resp: 16148
 Ion Ratio Lower Upper
 63 100
 98 2.9 2.3 6.9
 100 3.7 1.4 4.0

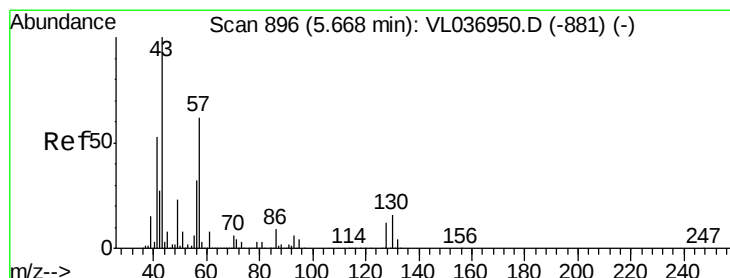
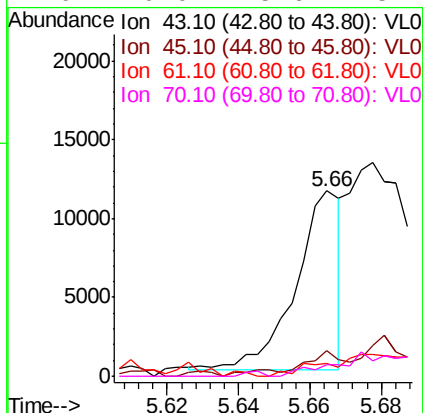
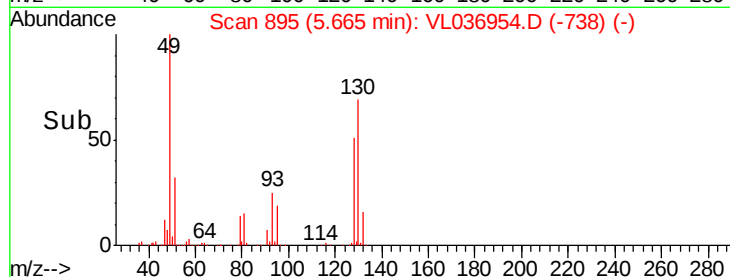
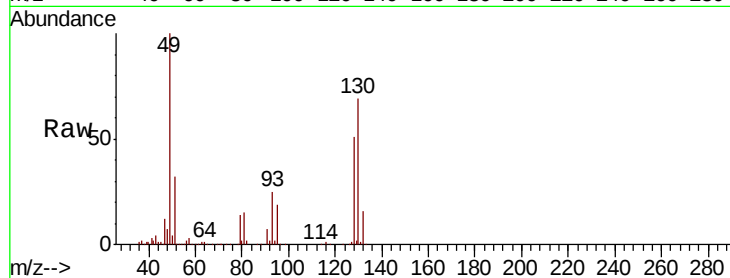




#25
Ethyl Acetate
Concen: 0.034 ppbv
RT: 5.66 min Scan# 895
Delta R.T. 0.00 min
Lab File: VL036954.D
Acq: 18 May 2021 4:29

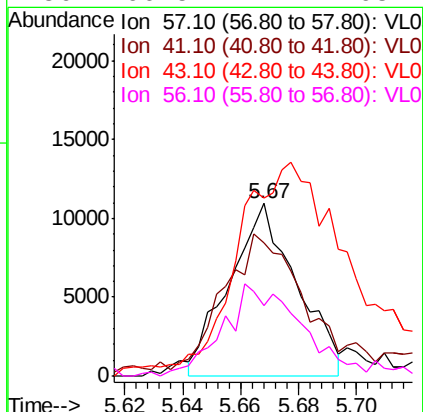
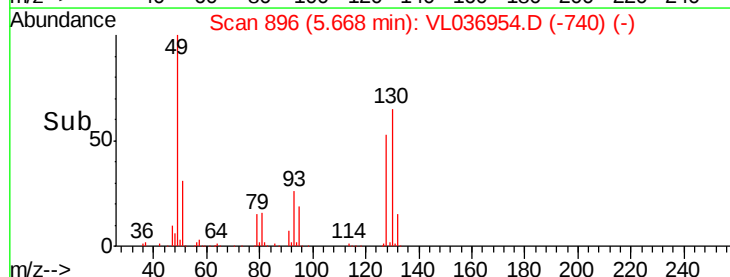
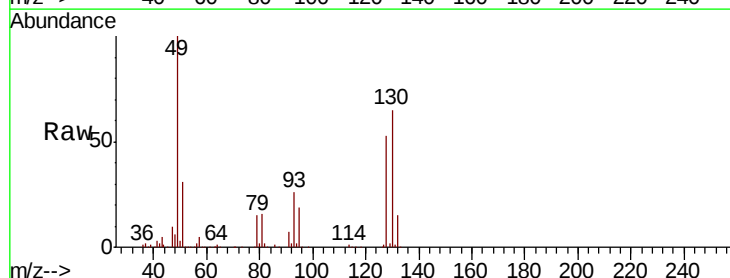
Instrument :
MSVOA_L
ClientSampleId :
VSTDIC0.1

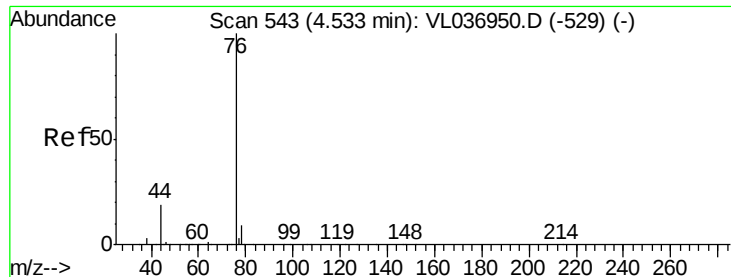
Tot Ion:	43	Resp:	10027
Ion	Ratio	Lower	Upper
43	100		
45	0.0	7.8	11.8#
61	0.0	7.8	11.8#
70	0.0	5.6	8.4#



#26
Hexane
Concen: 0.115 ppbv
RT: 5.67 min Scan# 896
Delta R.T. 0.00 min
Lab File: VL036954.D
Acq: 18 May 2021 4:29

Tgt Ion:	57	Resp:	17617
Ion	Ratio	Lower	Upper
57	100		
41	109.3	70.5	105.7#
43	198.3	165.8	248.8
56	66.5	42.2	63.4#





#27

Carbon Disulfide

Concen: 0.051 ppbv

RT: 4.53 min Scan# 542

Delta R.T. -0.00 min

Lab File: VL036954.D

Acq: 18 May 2021 4:29

Instrument :

MSVOA_L

ClientSampleId :

VSTDIC0.1

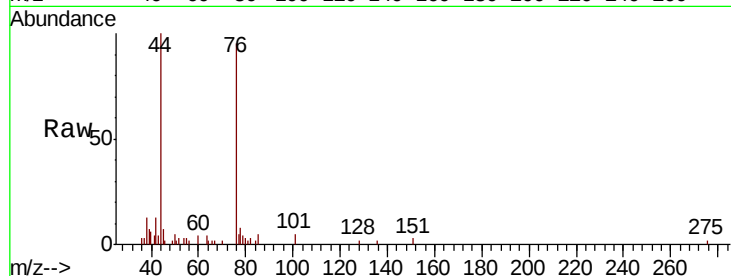
Tot Ion: 76 Resp: 6854

Ion Ratio Lower Upper

76 100

44 151.6 15.5 23.3#

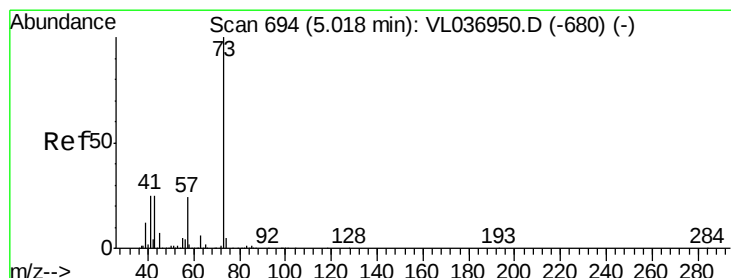
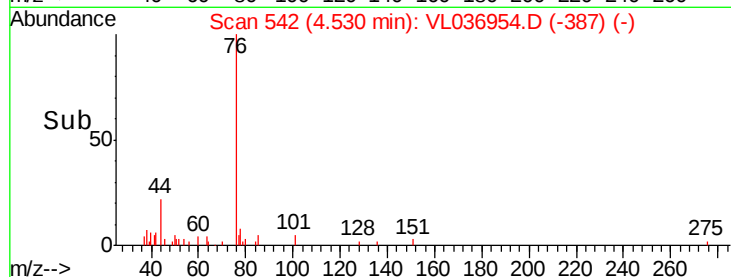
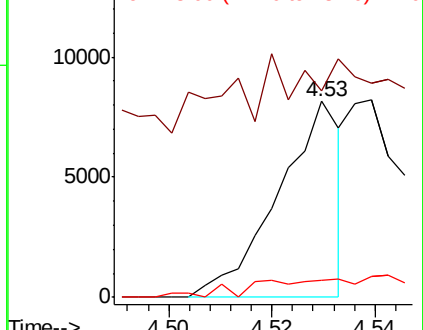
78 0.0 7.8 11.6#



Abundance Ion 76.00 (75.70 to 76.70): VL0

Ion 44.10 (43.80 to 44.80): VL0

Ion 78.00 (77.70 to 78.70): VL0



#28

Methyl tert-Butyl Ether

Concen: 0.079 ppbv

RT: 5.04 min Scan# 702

Delta R.T. 0.03 min

Lab File: VL036954.D

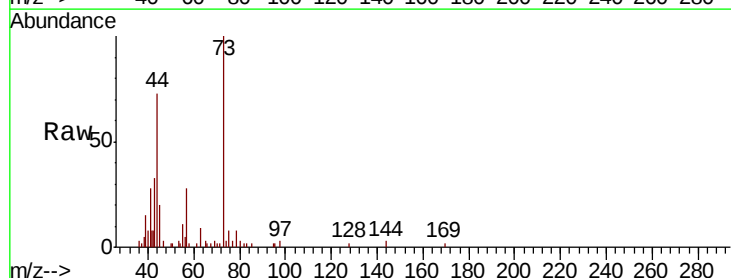
Acq: 18 May 2021 4:29

Tgt Ion: 73 Resp: 11665

Ion Ratio Lower Upper

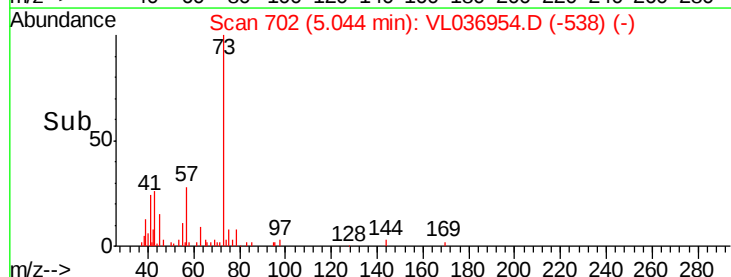
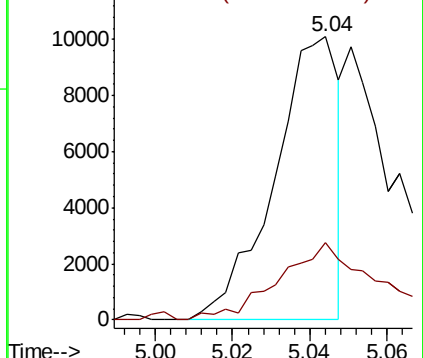
73 100

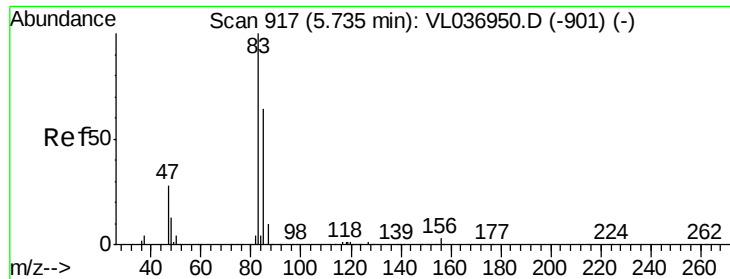
57 44.6 18.3 27.5#



Abundance Ion 73.10 (72.80 to 73.80): VL0

Ion 57.10 (56.80 to 57.80): VL0





#29

Chloroform

Concen: 0.065 ppbv

RT: 5.73 min Scan# 915

Delta R.T. -0.01 min

Lab File: VL036954.D

Acq: 18 May 2021 4:29

Instrument :

MSVOA_L

ClientSampleId :

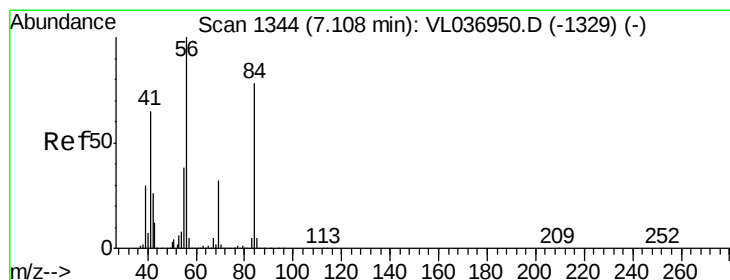
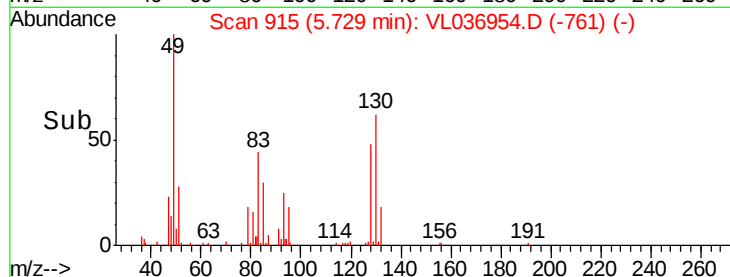
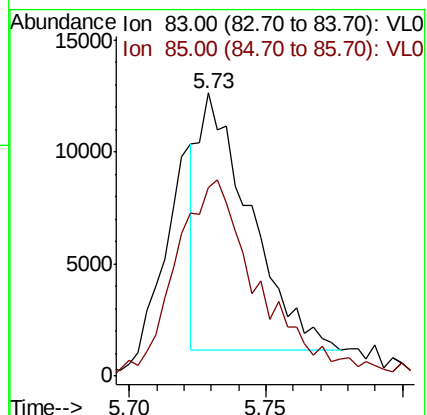
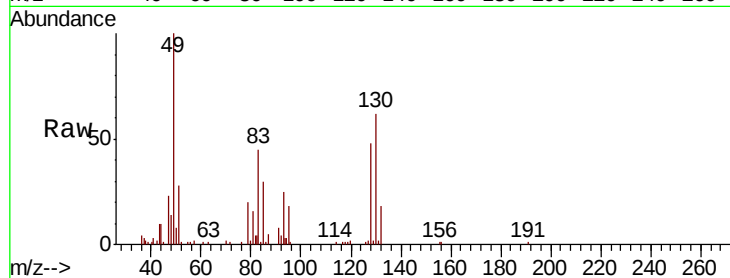
VSTDIC0.1

Tot Ion: 83 Resp: 14969

Ion Ratio Lower Upper

83 100

85 67.1 51.1 76.7



#30

Cyclohexane

Concen: 0.031 ppbv

RT: 7.10 min Scan# 1342

Delta R.T. -0.01 min

Lab File: VL036954.D

Acq: 18 May 2021 4:29

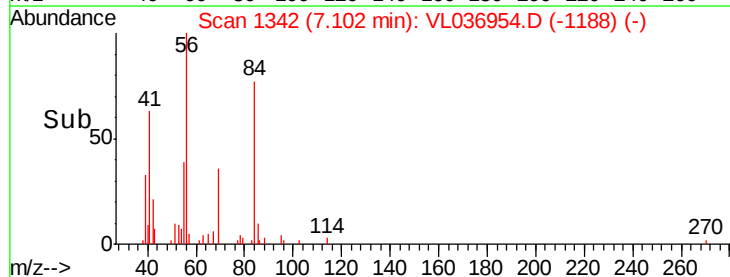
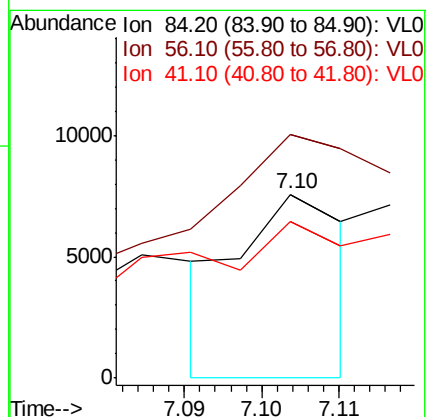
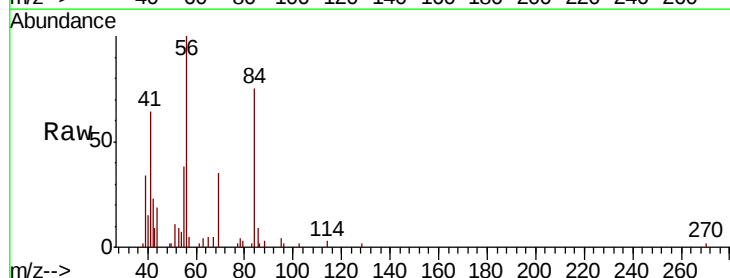
Tgt Ion: 84 Resp: 3656

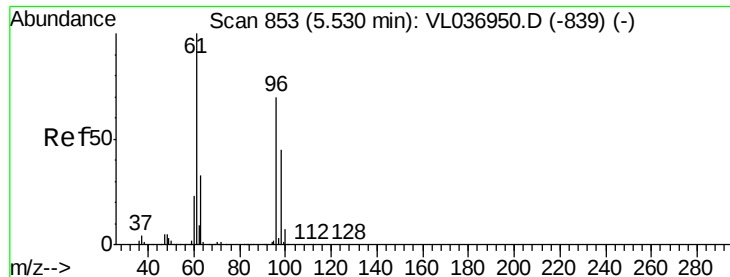
Ion Ratio Lower Upper

84 100

56 0.0 107.9 161.9#

41 0.0 65.5 98.3#



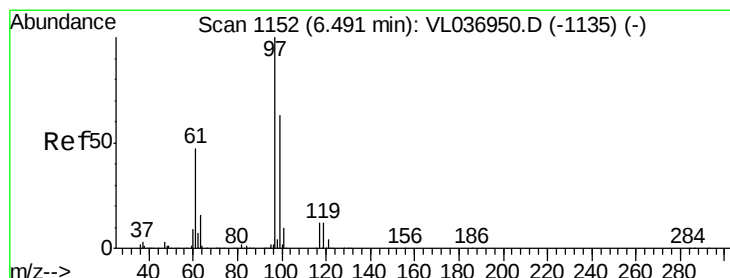
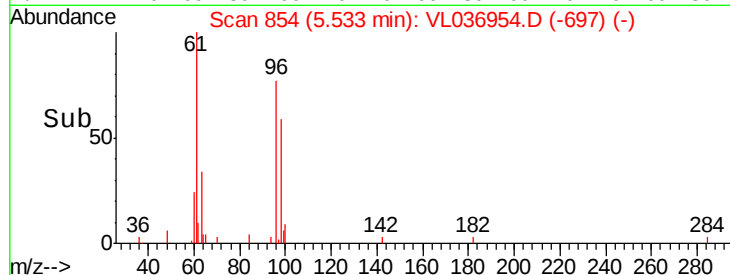
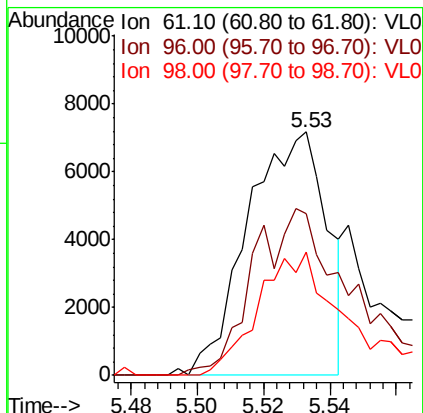
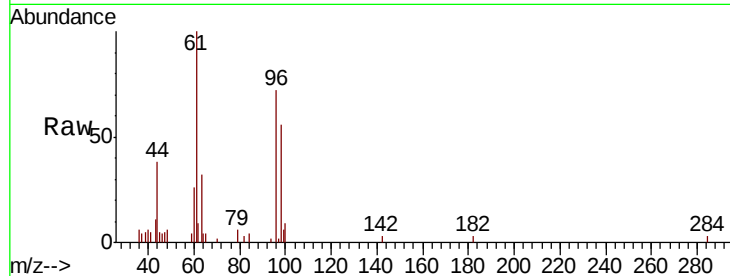


#31

cis-1,2-Dichloroethene
 Concen: 0.099 ppbv
 RT: 5.53 min Scan# 854
 Delta R.T. 0.00 min
 Lab File: VL036954.D
 Acq: 18 May 2021 4:29

Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDIC0.1

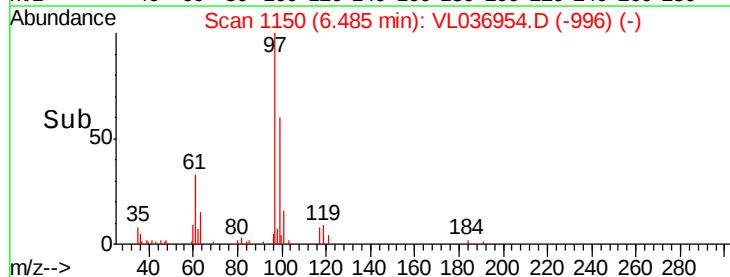
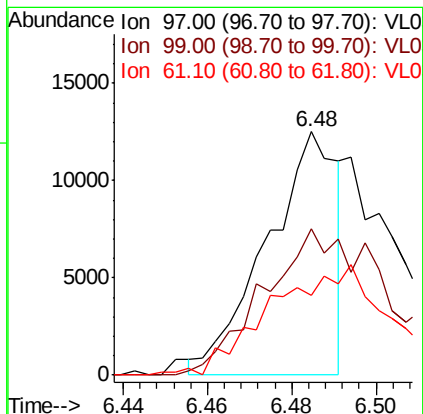
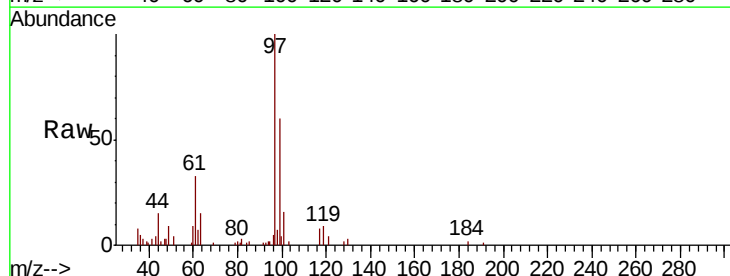
Tot Ion	Ratio	Lower	Upper
61	100		
96	64.1	55.9	83.9
98	50.8	35.6	53.4

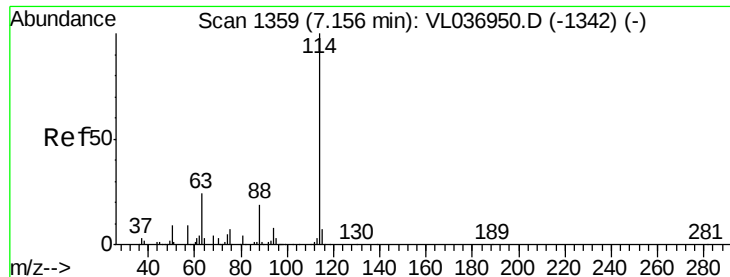


#32

1,1,1-Trichloroethane
 Concen: 0.059 ppbv
 RT: 6.48 min Scan# 1150
 Delta R.T. -0.01 min
 Lab File: VL036954.D
 Acq: 18 May 2021 4:29

Tgt Ion	Ratio	Lower	Upper
97	100		
99	112.9	51.9	77.9#
61	0.0	37.6	56.4#

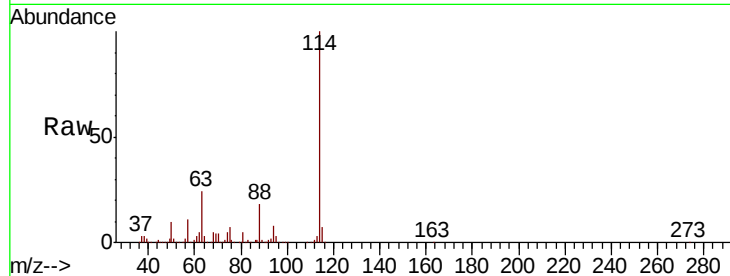




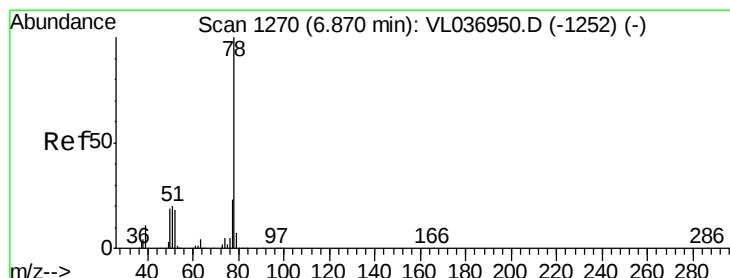
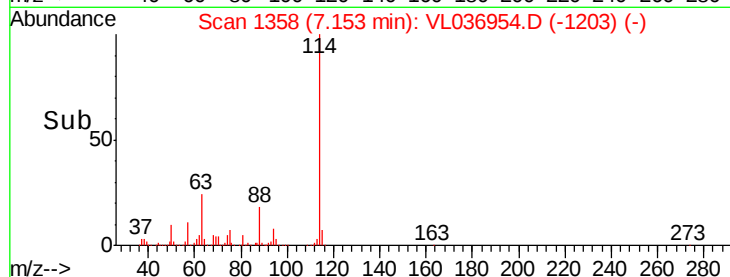
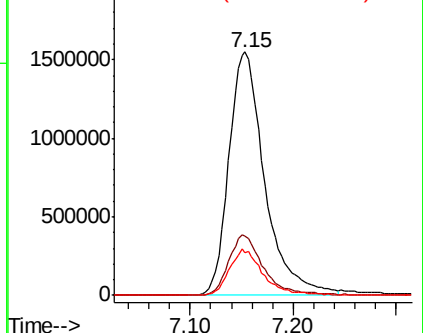
#33
 1,4-Difluorobenzene
 Concen: 10.000 ppbv
 RT: 7.15 min Scan# 1358
 Delta R.T. -0.00 min
 Lab File: VL036954.D
 Acq: 18 May 2021 4:29

Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDIC0.1

Tot Ion:114 Resp: 3750952
 Ion Ratio Lower Upper
 114 100
 63 24.6 19.6 29.4
 88 18.2 14.6 21.8

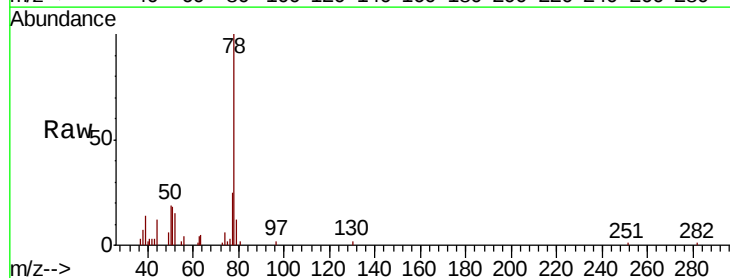


Abundance Ion 114.10 (113.80 to 114.80): VL0
 Ion 63.10 (62.80 to 63.80): VL0
 Ion 88.10 (87.80 to 88.80): VL0

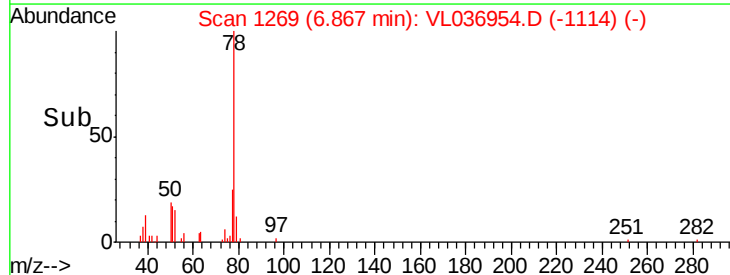
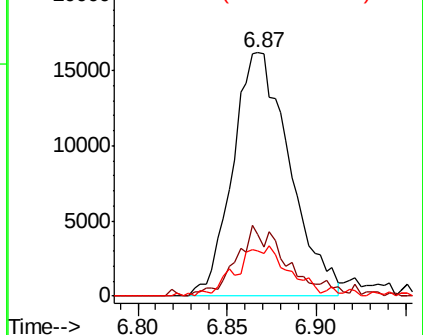


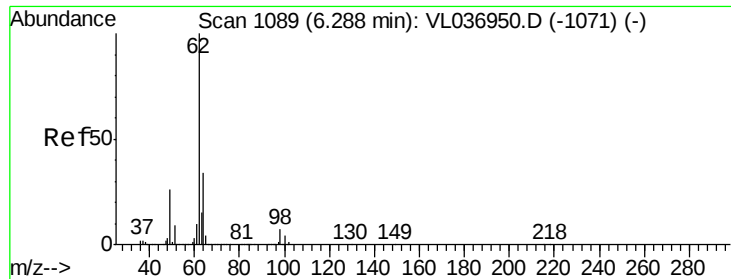
#36
 Benzene
 Concen: 0.120 ppbv
 RT: 6.87 min Scan# 1269
 Delta R.T. -0.00 min
 Lab File: VL036954.D
 Acq: 18 May 2021 4:29

Tgt Ion: 78 Resp: 36013
 Ion Ratio Lower Upper
 78 100
 77 25.5 18.6 28.0
 50 17.7 15.0 22.4



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





#37

1,2-Dichloroethane

Concen: 0.041 ppbv

RT: 6.29 min Scan# 1089

Delta R.T. 0.00 min

Lab File: VL036954.D

Acq: 18 May 2021 4:29

Instrument :

MSVOA_L

ClientSampleId :

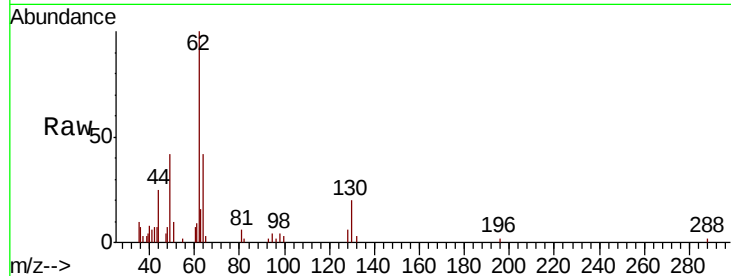
VSTDIC0.1

Tot Ion: 62 Resp: 7304

Ion Ratio Lower Upper

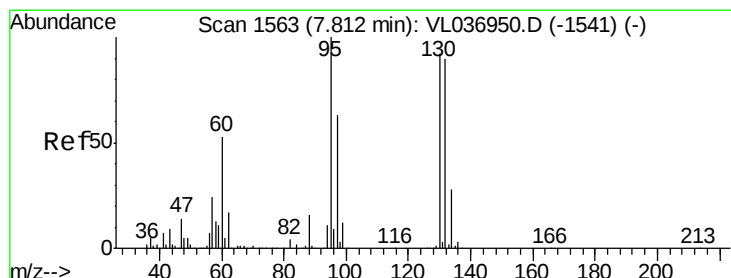
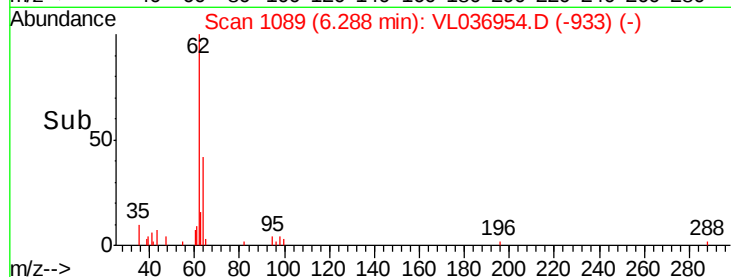
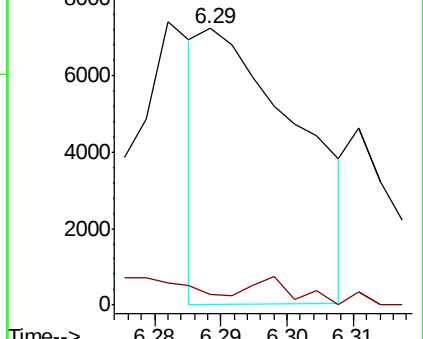
62 100

98 16.7 5.5 8.3#



Abundance Ion 62.10 (61.80 to 62.80): VL0

Ion 98.00 (97.70 to 98.70): VL0



#38

Trichloroethene

Concen: 0.051 ppbv

RT: 7.80 min Scan# 1560

Delta R.T. -0.01 min

Lab File: VL036954.D

Acq: 18 May 2021 4:29

Tgt Ion:130 Resp: 6331

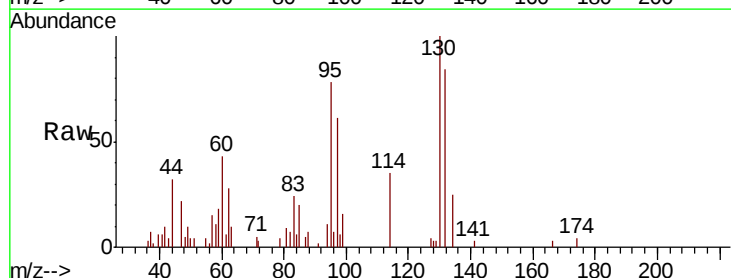
Ion Ratio Lower Upper

130 100

95 74.6 86.9 130.3#

132 83.7 78.4 117.6

97 60.9 55.0 82.6

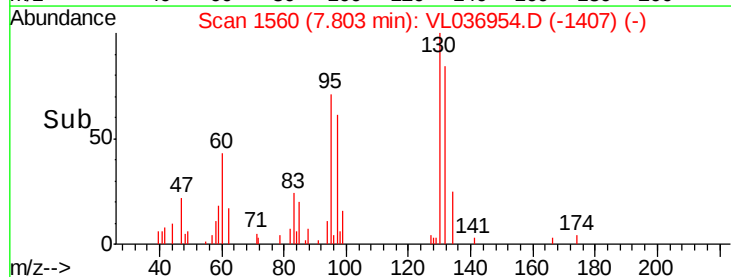
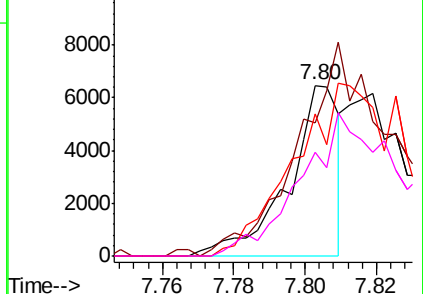


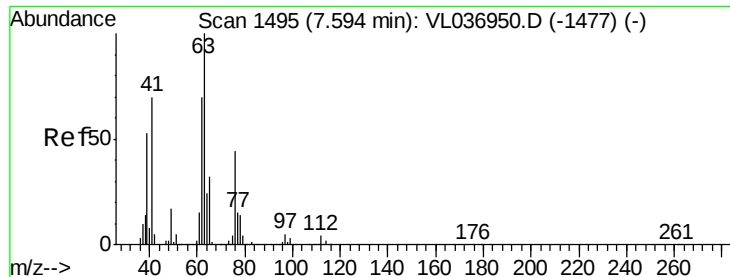
Abundance Ion 130.00 (129.70 to 130.70): V

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: 7.161 ppbv

RT: 7.15 min Scan# 1357

Delta R.T. -0.44 min

Lab File: VL036954.D

Acq: 18 May 2021 4:29

Instrument :

MSVOA_L

ClientSampleId :

VSTDIC0.1

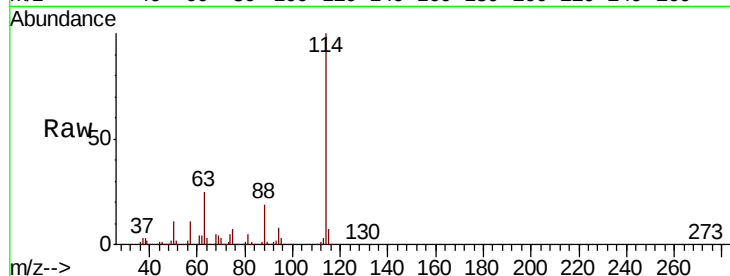
Tot Ion: 63 Resp: 883899

Ion Ratio Lower Upper

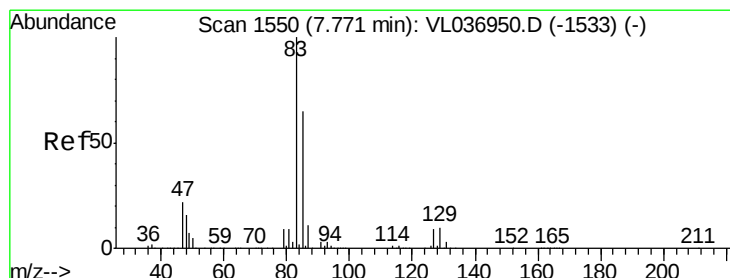
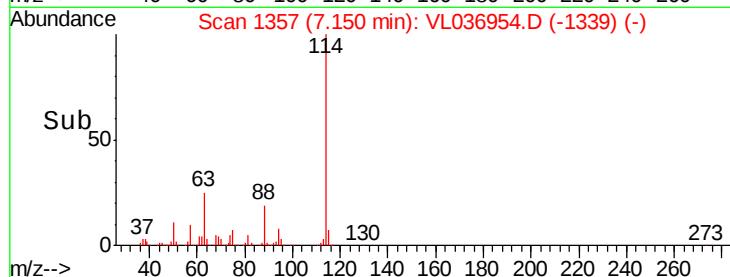
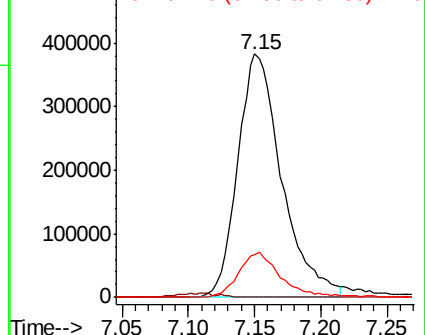
63 100

41 0.1 55.7 83.5#

62 17.5 56.2 84.4#



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



#42

Bromodichloromethane

Concen: 0.039 ppbv

RT: 7.77 min Scan# 1550

Delta R.T. 0.00 min

Lab File: VL036954.D

Acq: 18 May 2021 4:29

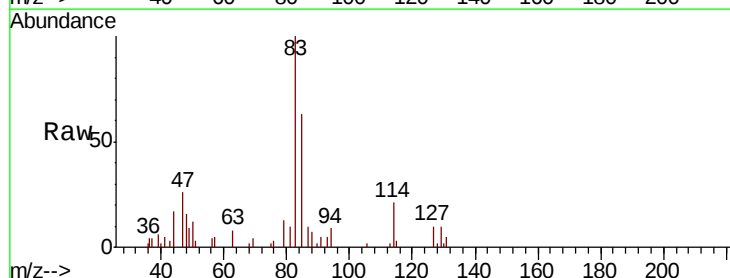
Tgt Ion: 83 Resp: 10343

Ion Ratio Lower Upper

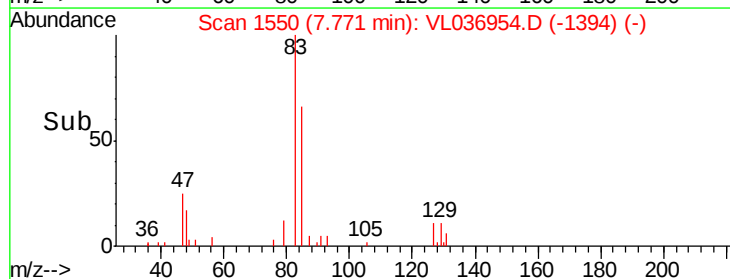
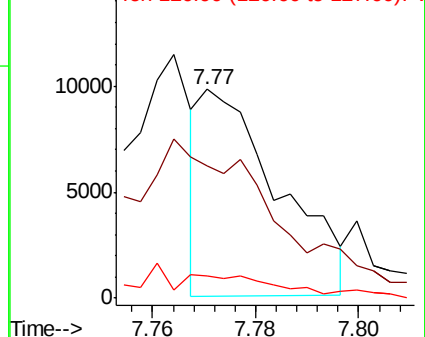
83 100

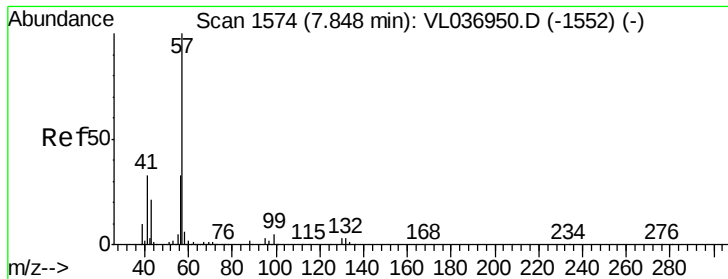
85 53.3 51.7 77.5

127 7.5 6.9 10.3



Abundance Ion 83.00 (82.70 to 83.70): VL0
Ion 85.00 (84.70 to 85.70): VL0
Ion 126.90 (126.60 to 127.60): V

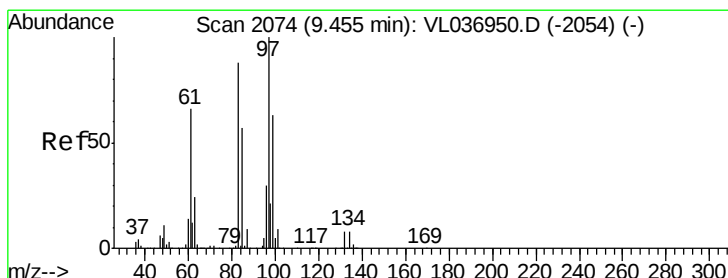
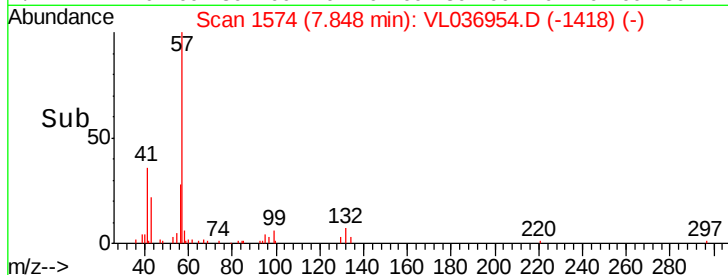
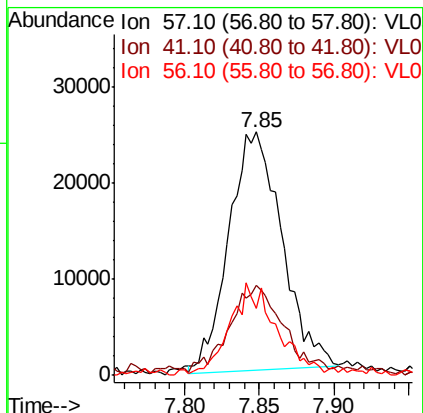
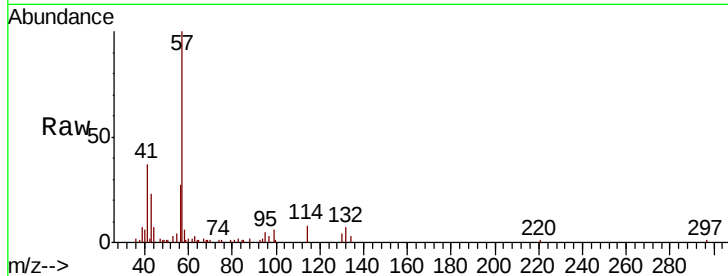




#44
 2,2,4-Trimethylpentane
 Concen: 0.115 ppbv
 RT: 7.85 min Scan# 1574
 Delta R.T. 0.00 min
 Lab File: VL036954.D
 Acq: 18 May 2021 4:29

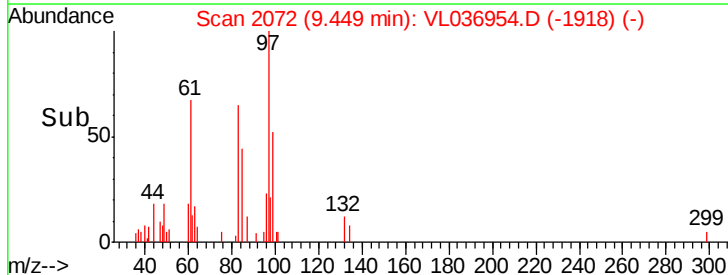
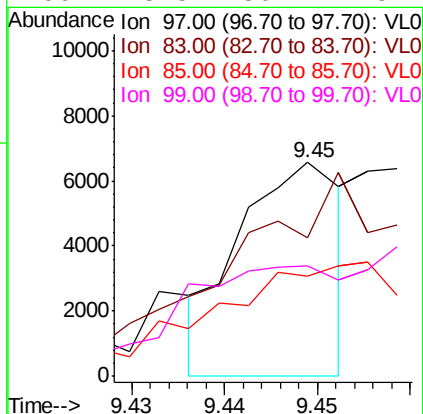
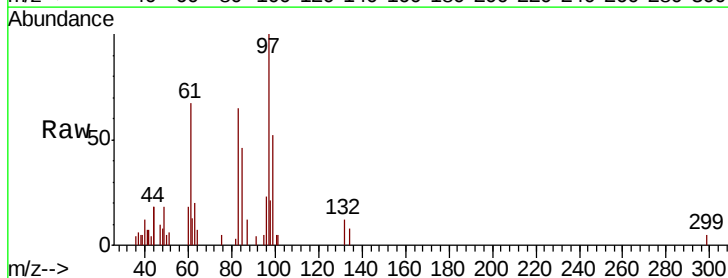
Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDIC0.1

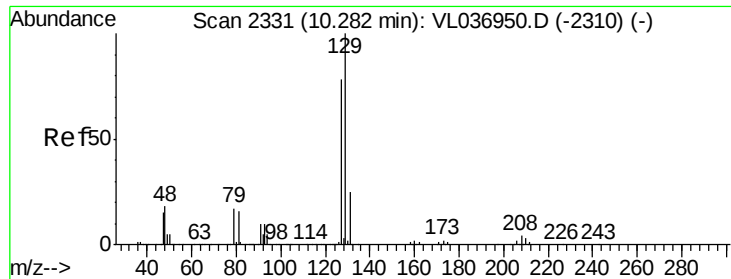
Tot Ion: 57 Resp: 61470
 Ion Ratio Lower Upper
 57 100
 41 41.1 27.0 40.4#
 56 35.7 25.4 38.2



#47
 1,1,2-Trichloroethane
 Concen: 0.037 ppbv
 RT: 9.45 min Scan# 2072
 Delta R.T. -0.01 min
 Lab File: VL036954.D
 Acq: 18 May 2021 4:29

Tgt Ion: 97 Resp: 5054
 Ion Ratio Lower Upper
 97 100
 83 44.4 70.4 105.6#
 85 38.6 45.5 68.3#
 99 13.5 50.2 75.2#





#48

Dibromochloromethane

Concen: 0.072 ppbv

RT: 10.27 min Scan# 2328

Delta R.T. -0.01 min

Lab File: VL036954.D

Acq: 18 May 2021 4:29

Instrument :

MSVOA_L

ClientSampleId :

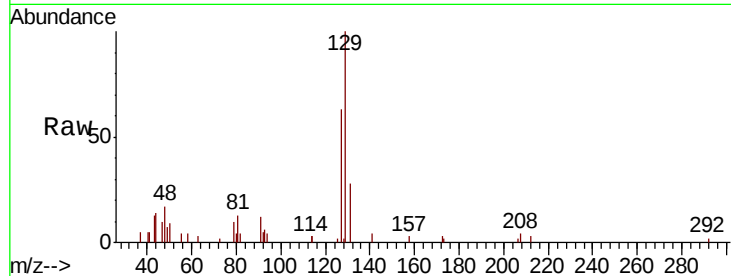
VSTDIC0.1

Tot Ion:129 Resp: 14763

Ion Ratio Lower Upper

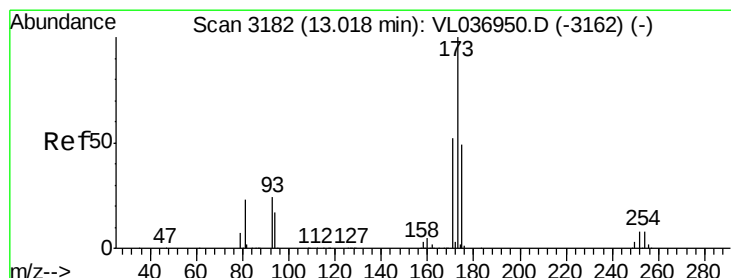
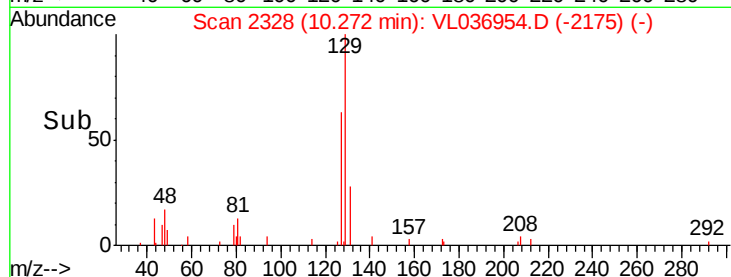
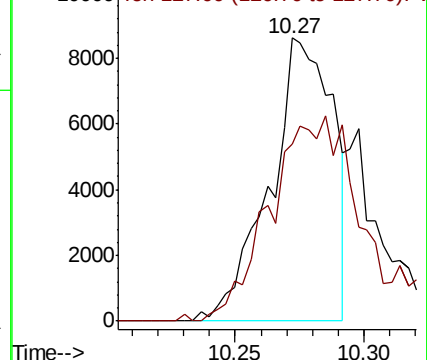
129 100

127 0.0 39.3 117.8#



Abundance Ion 129.00 (128.70 to 129.70): V

Ion 127.00 (126.70 to 127.70): V



#49

Bromoform

Concen: 0.051 ppbv

RT: 13.01 min Scan# 3181

Delta R.T. -0.00 min

Lab File: VL036954.D

Acq: 18 May 2021 4:29

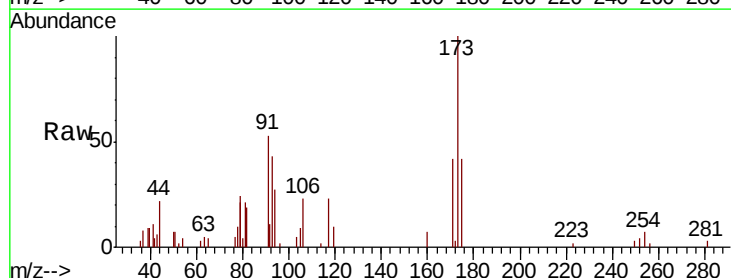
Tgt Ion:173 Resp: 8558

Ion Ratio Lower Upper

173 100

175 78.7 40.4 60.6#

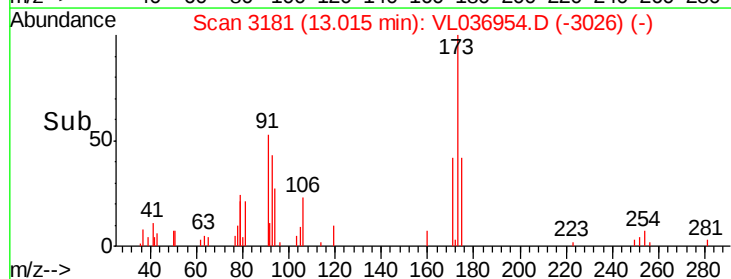
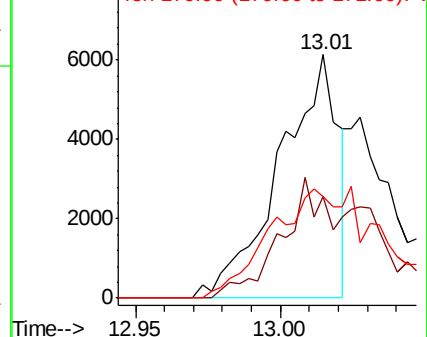
171 0.0 42.6 64.0#

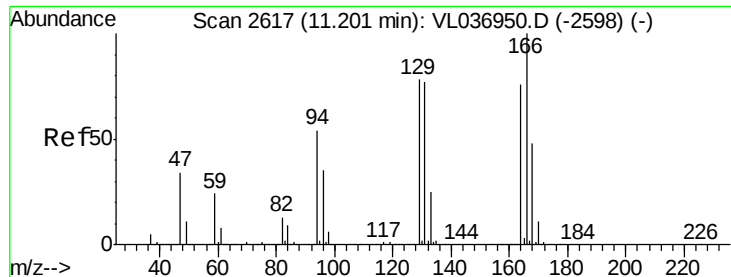


Abundance Ion 172.90 (172.60 to 173.60): V

Ion 174.90 (174.60 to 175.60): V

Ion 170.90 (170.60 to 171.60): V





#52

Tetrachloroethene

Concen: 0.062 ppbv

RT: 11.19 min Scan# 2614

Delta R.T. -0.01 min

Lab File: VL036954.D

Acq: 18 May 2021 4:29

Instrument :

MSVOA_L

ClientSampleId :

VSTDIC0.1

Tot Ion:164 Resp: 6858

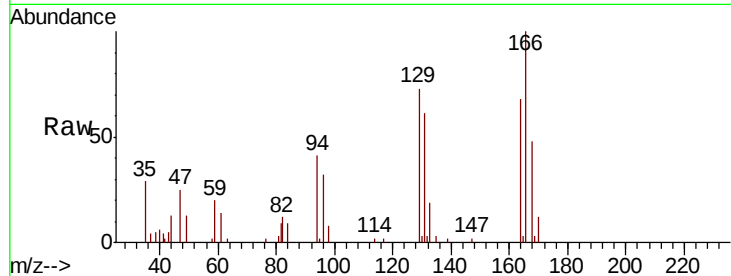
Ion Ratio Lower Upper

164 100

166 147.9 105.5 158.3

129 107.8 81.8 122.8

131 90.1 81.2 121.8

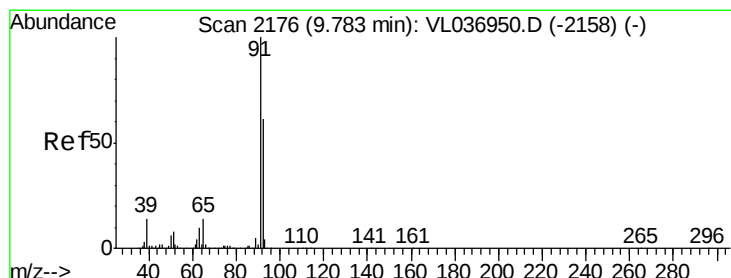
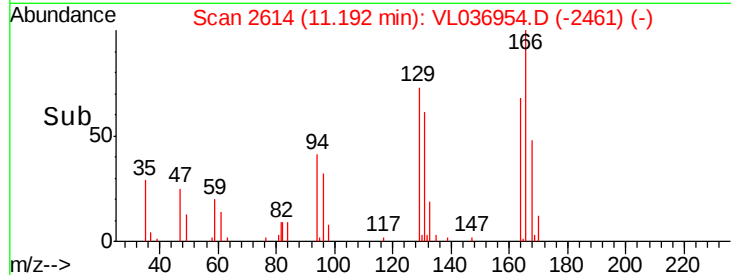
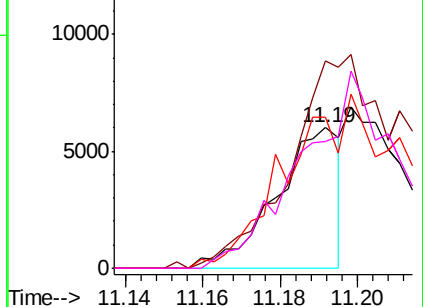


Abundance Ion 163.90 (163.60 to 164.60): V

Ion 165.90 (165.60 to 166.60): V

Ion 129.00 (128.70 to 129.70): V

Ion 131.00 (130.70 to 131.70): V



#53

Toluene

Concen: 0.144 ppbv

RT: 9.78 min Scan# 2176

Delta R.T. 0.00 min

Lab File: VL036954.D

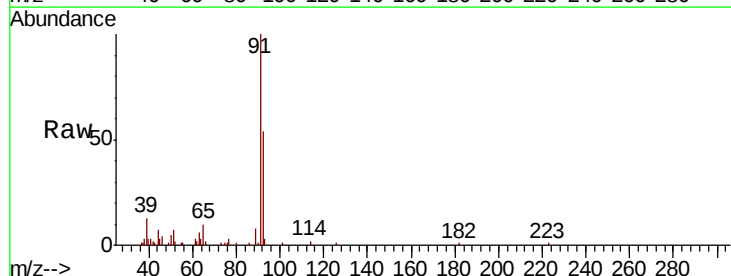
Acq: 18 May 2021 4:29

Tgt Ion: 91 Resp: 43420

Ion Ratio Lower Upper

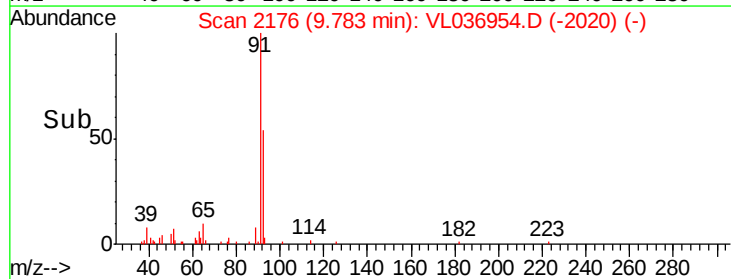
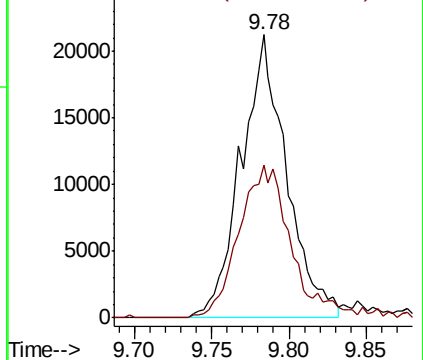
91 100

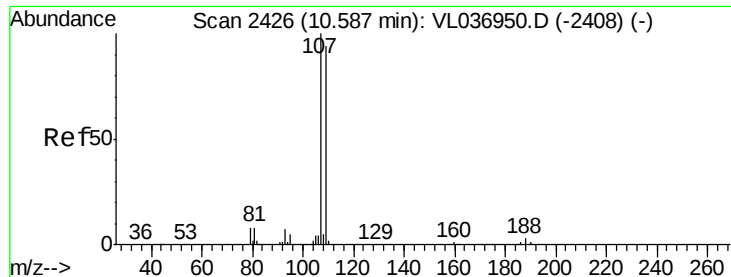
92 63.3 49.5 74.3



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 92.10 (91.80 to 92.80): VL0





#54

1,2-Dibromoethane

Concen: 0.041 ppbv

RT: 10.58 min Scan# 2424

Delta R.T. -0.01 min

Lab File: VL036954.D

Acq: 18 May 2021 4:29

Instrument :

MSVOA_L

ClientSampleId :

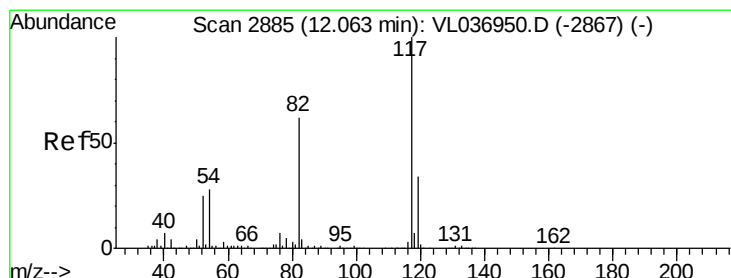
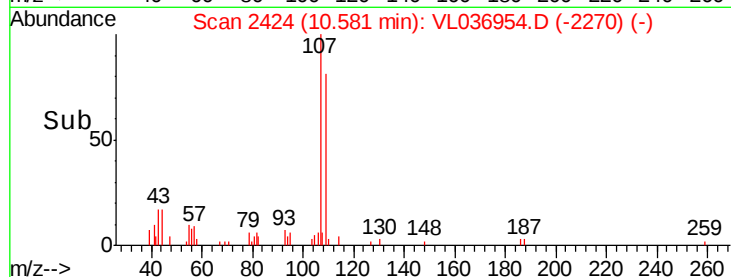
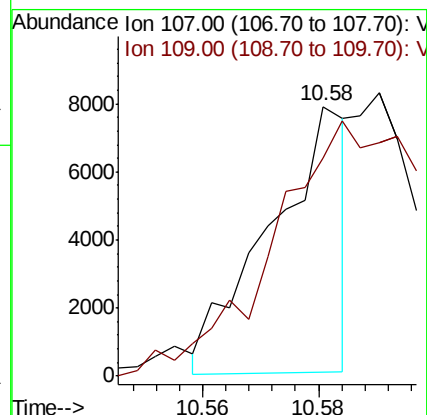
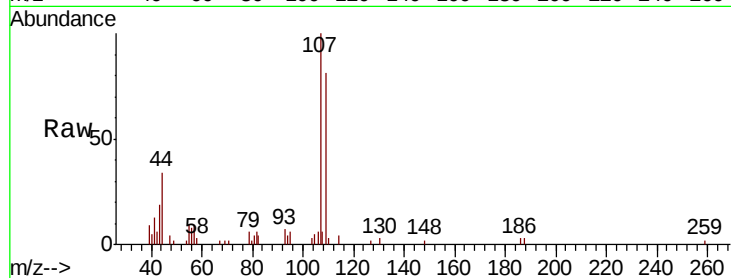
VSTDIC0.1

Tot Ion:107 Resp: 7165

Ion Ratio Lower Upper

107 100

109 74.7 75.0 112.4#



#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.06 min Scan# 2884

Delta R.T. -0.00 min

Lab File: VL036954.D

Acq: 18 May 2021 4:29

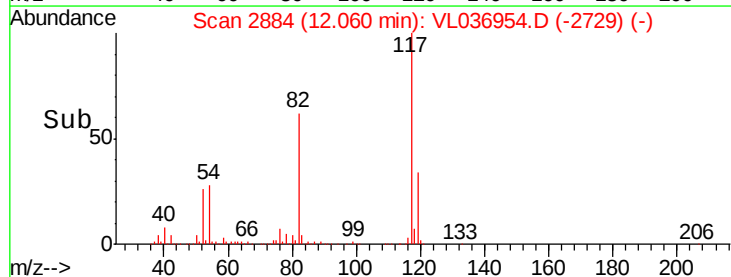
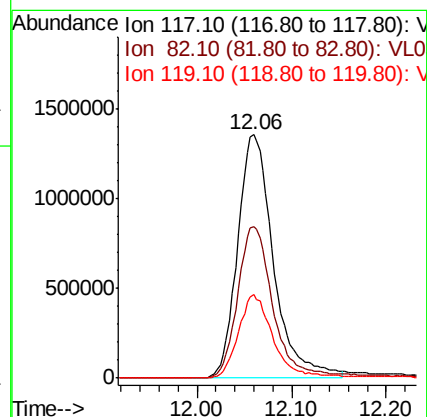
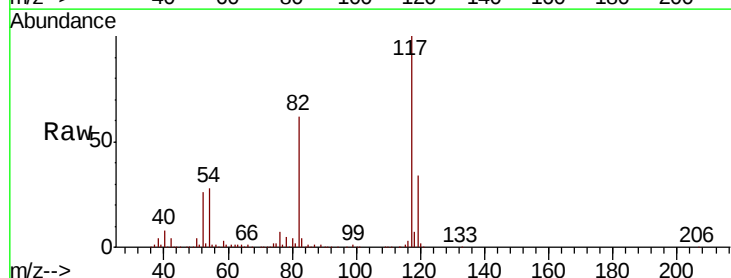
Tgt Ion:117 Resp: 3585780

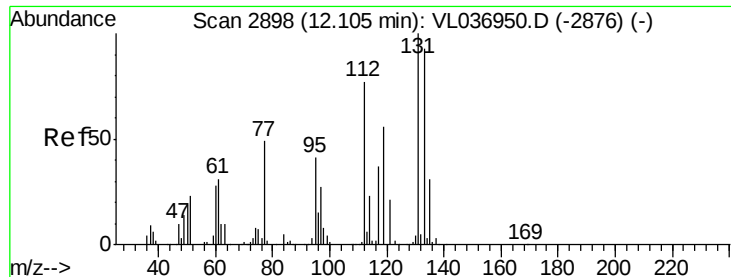
Ion Ratio Lower Upper

117 100

82 63.8 52.6 79.0

119 34.1 46.6 70.0#





#56

1,1,1,2-Tetrachloroethane

Concen: 0.090 ppbv

RT: 12.10 min Scan# 2896

Delta R.T. -0.01 min

Lab File: VL036954.D

Acq: 18 May 2021 4:29

Instrument :

MSVOA_L

ClientSampleId :

VSTDIC0.1

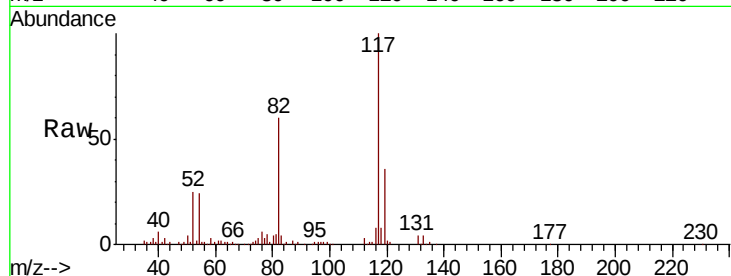
Tot Ion:131 Resp: 14782

Ion Ratio Lower Upper

131 100

133 110.4 76.9 115.3

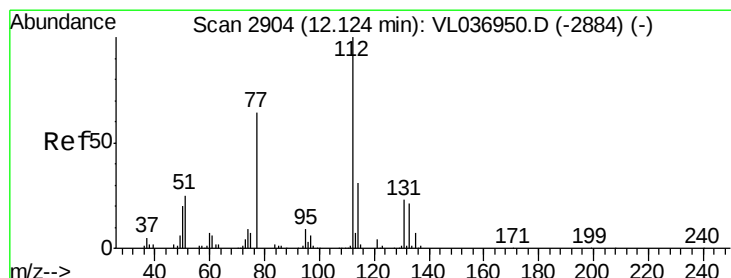
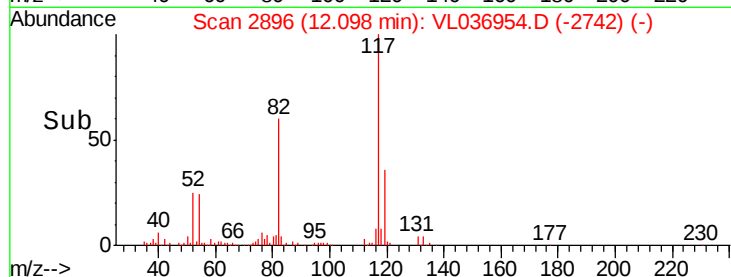
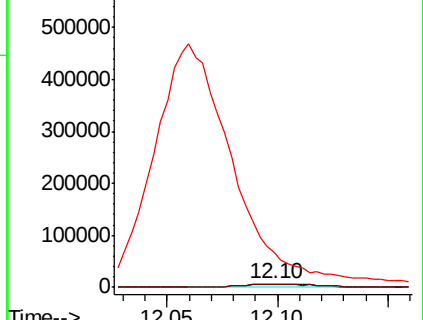
119 8336.3 120.2 180.4#



Abundance Ion 131.00 (130.70 to 131.70): V

Ion 133.00 (132.70 to 133.70): V

Ion 119.00 (118.70 to 119.70): V



#57

Chlorobenzene

Concen: 0.072 ppbv

RT: 12.12 min Scan# 2903

Delta R.T. -0.00 min

Lab File: VL036954.D

Acq: 18 May 2021 4:29

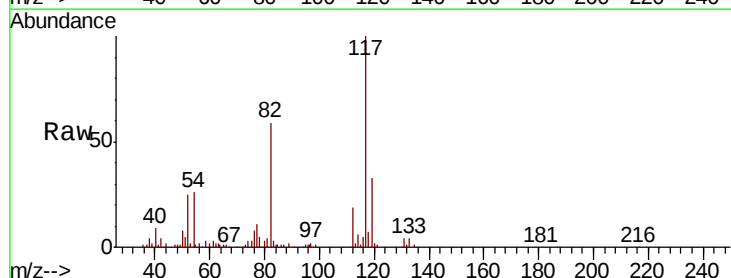
Tgt Ion:112 Resp: 21819

Ion Ratio Lower Upper

112 100

77 50.6 51.0 76.6#

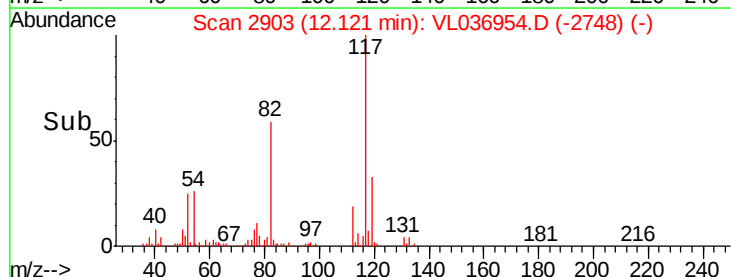
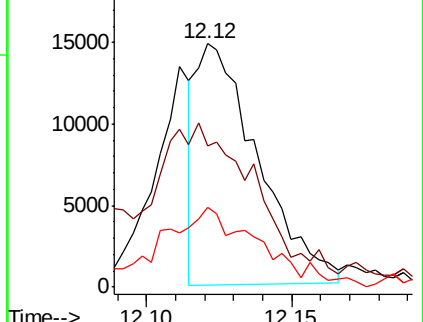
114 31.9 28.3 34.5

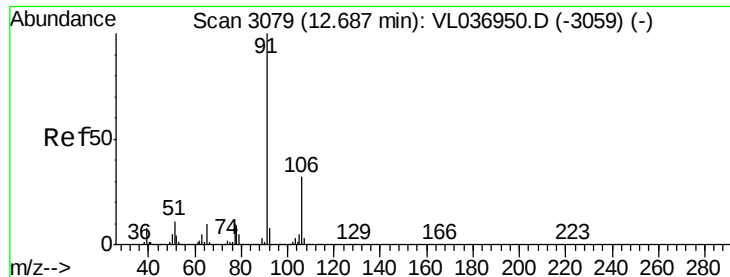


Abundance Ion 112.10 (111.80 to 112.80): V

Ion 77.10 (76.80 to 77.80): VL0

Ion 114.10 (113.80 to 114.80): V





#58

Ethyl Benzene

Concen: 0.135 ppbv

RT: 12.68 min Scan# 3078

Delta R.T. -0.00 min

Lab File: VL036954.D

Acq: 18 May 2021 4:29

Instrument :

MSVOA_L

ClientSampleId :

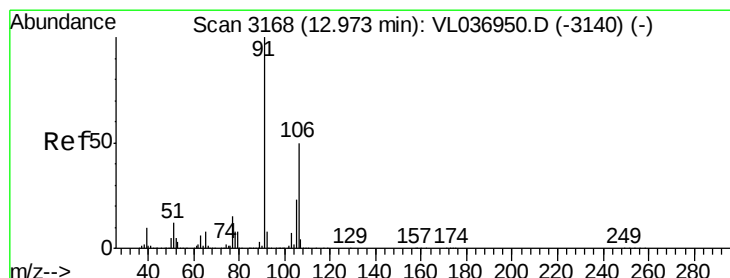
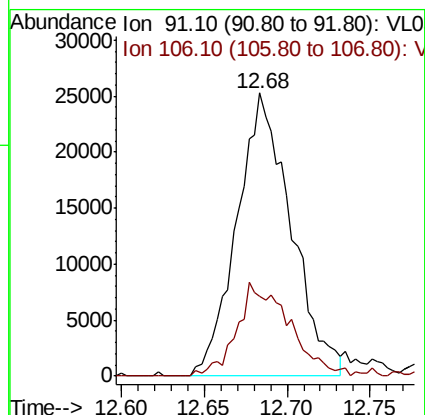
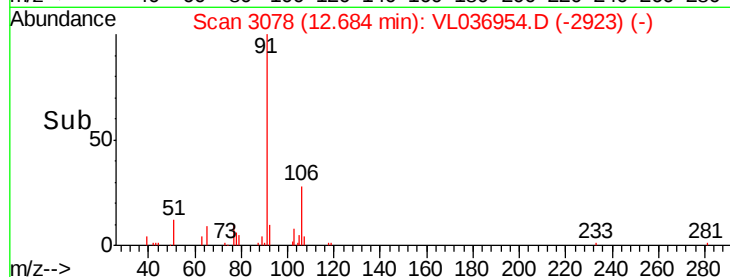
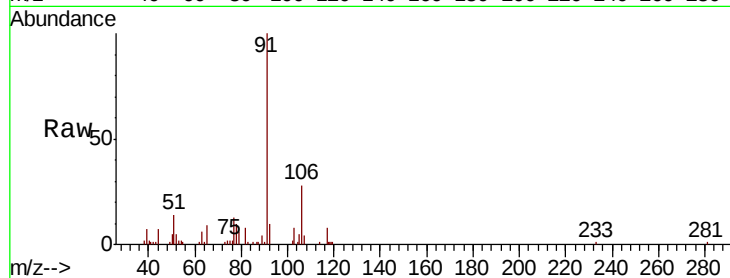
VSTDIC0.1

Tot Ion: 91 Resp: 57441

Ion Ratio Lower Upper

91 100

106 28.3 25.6 38.4



#59

m/p-Xylene

Concen: 0.052 ppbv

RT: 12.96 min Scan# 3165

Delta R.T. -0.01 min

Lab File: VL036954.D

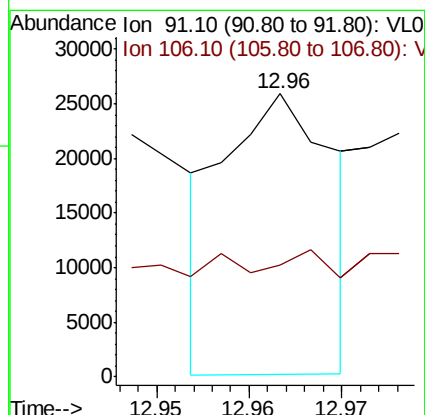
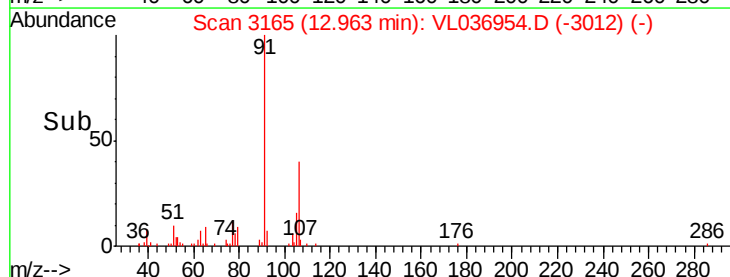
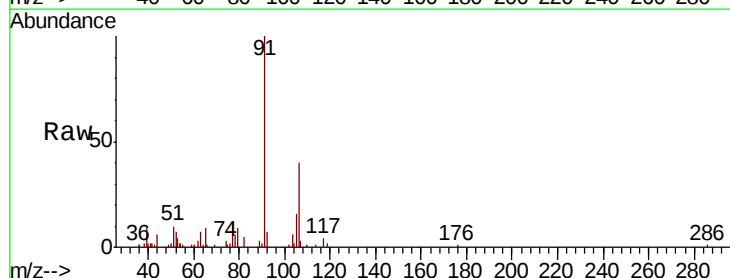
Acq: 18 May 2021 4:29

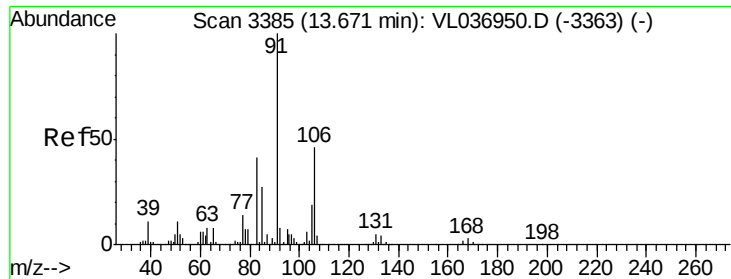
Tgt Ion: 91 Resp: 20987

Ion Ratio Lower Upper

91 100

106 227.0 37.4 56.2#

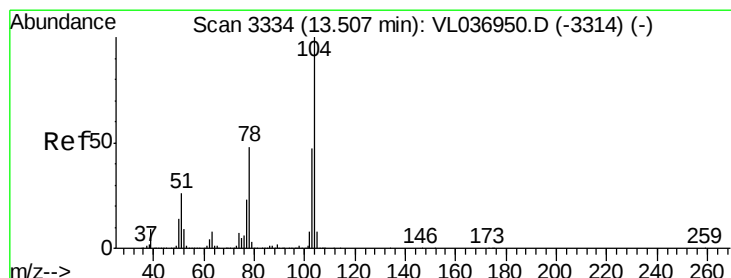
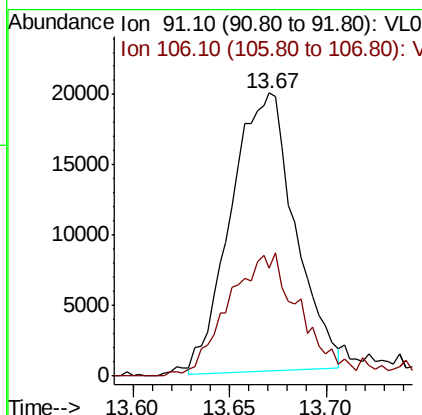
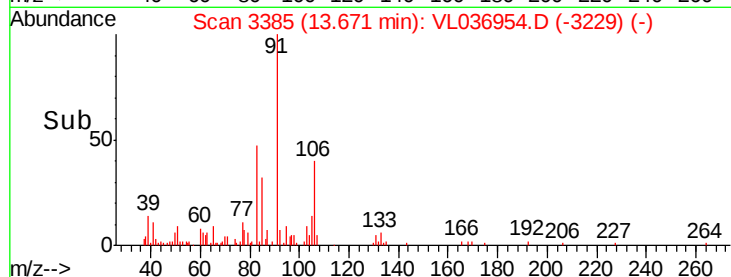
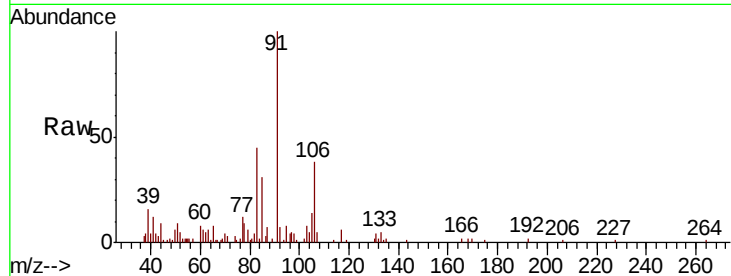




#60
o-Xylene
Concen: 0.117 ppbv
RT: 13.67 min Scan# 3385
Delta R.T. 0.00 min
Lab File: VL036954.D
Acq: 18 May 2021 4:29

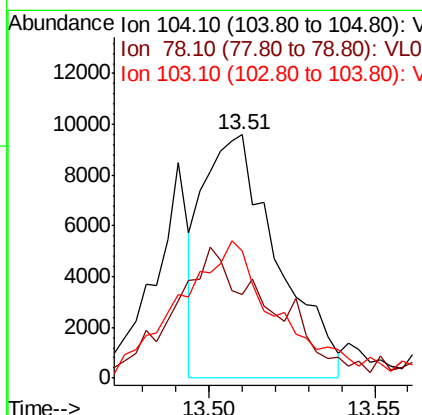
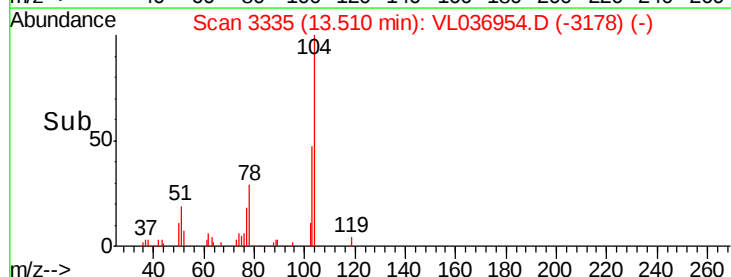
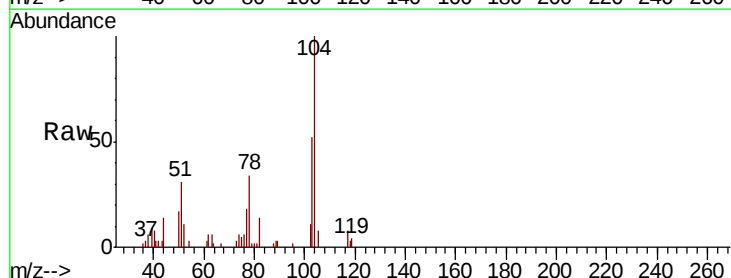
Instrument :
MSVOA_L
ClientSampleId :
VSTDIC0.1

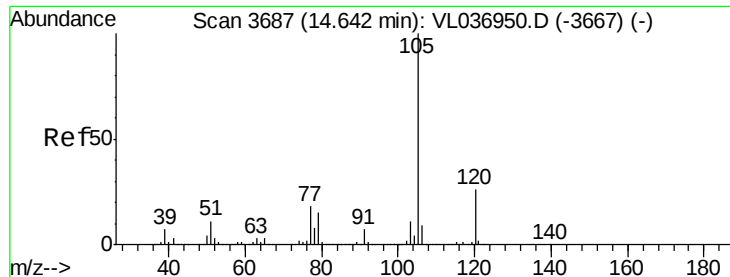
Tot Ion: 91 Resp: 45469
Ion Ratio Lower Upper
91 100
106 52.5 23.4 70.3



#61
Styrene
Concen: 0.094 ppbv
RT: 13.51 min Scan# 3335
Delta R.T. 0.00 min
Lab File: VL036954.D
Acq: 18 May 2021 4:29

Tgt Ion: 104 Resp: 14917
Ion Ratio Lower Upper
104 100
78 80.6 39.0 58.6#
103 81.8 38.0 57.0#





#62

Isopropylbenzene

Concen: 0.119 ppbv

RT: 14.64 min Scan# 3687

Delta R.T. 0.00 min

Lab File: VL036954.D

Acq: 18 May 2021 4:29

Instrument :

MSVOA_L

ClientSampleId :

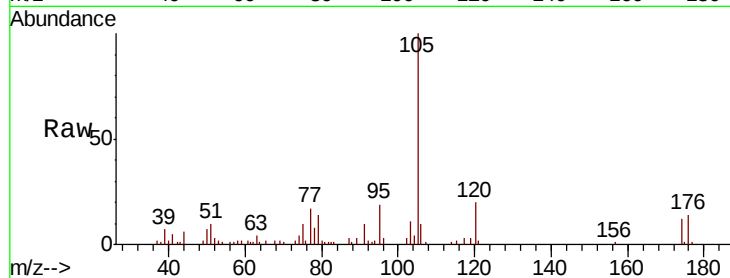
VSTDIC0.1

Tot Ion:105 Resp: 63057

Ion Ratio Lower Upper

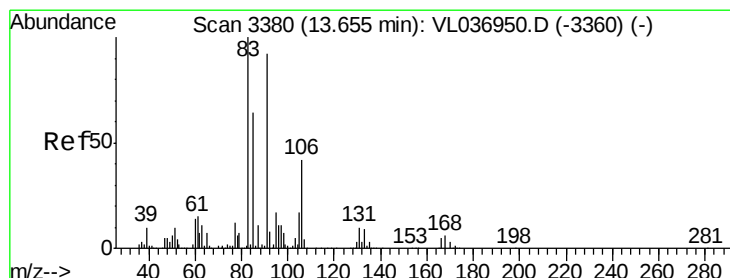
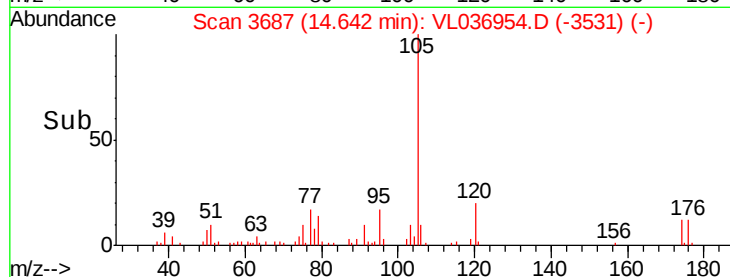
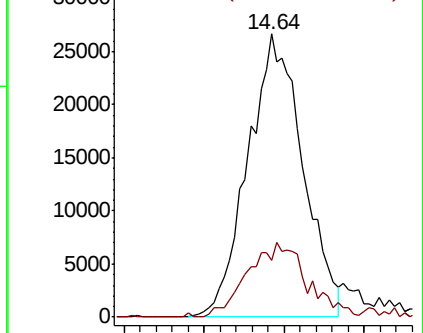
105 100

120 28.5 21.7 32.5



Abundance Ion 105.10 (104.80 to 105.80): V

Ion 120.20 (119.90 to 120.90): V



#63

1,1,2,2-Tetrachloroethane

Concen: 0.041 ppbv

RT: 13.65 min Scan# 3380

Delta R.T. 0.00 min

Lab File: VL036954.D

Acq: 18 May 2021 4:29

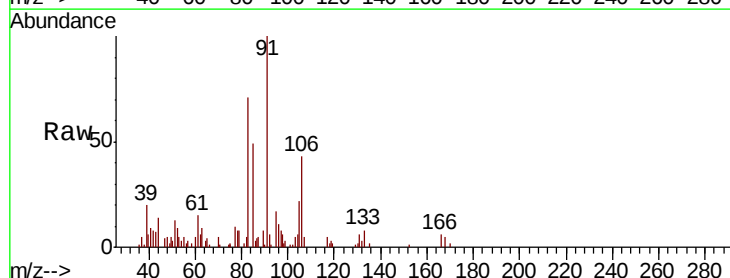
Tgt Ion: 83 Resp: 15090

Ion Ratio Lower Upper

83 100

131 0.0 5.0 15.0#

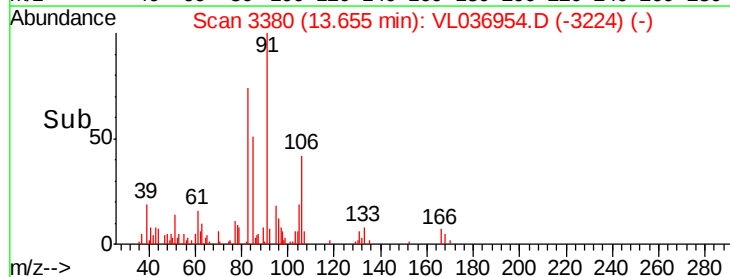
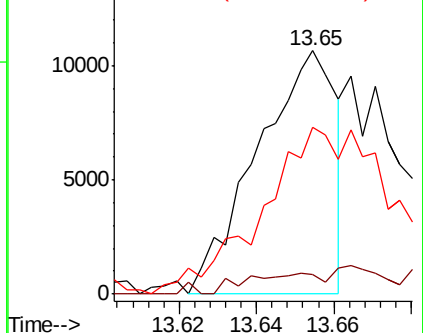
85 141.9 32.9 98.6#

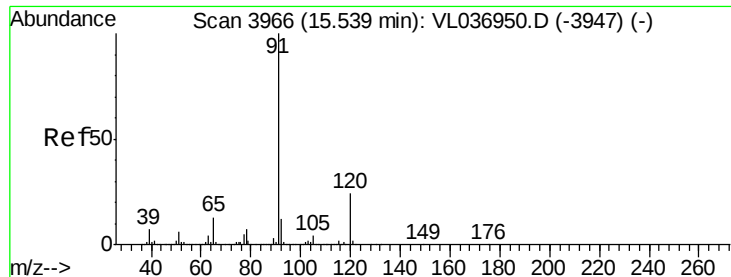


Abundance Ion 83.00 (82.70 to 83.70): VL0

Ion 131.00 (130.70 to 131.70): V

Ion 85.00 (84.70 to 85.70): VL0





#64

n-propylbenzene

Concen: 0.079 ppbv

RT: 15.54 min Scan# 3965

Delta R.T. -0.00 min

Lab File: VL036954.D

Acq: 18 May 2021 4:29

Instrument :

MSVOA_L

ClientSampleId :

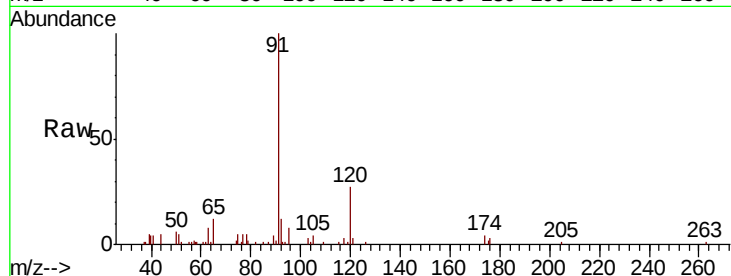
VSTDIC0.1

Tot Ion:120 Resp: 10372

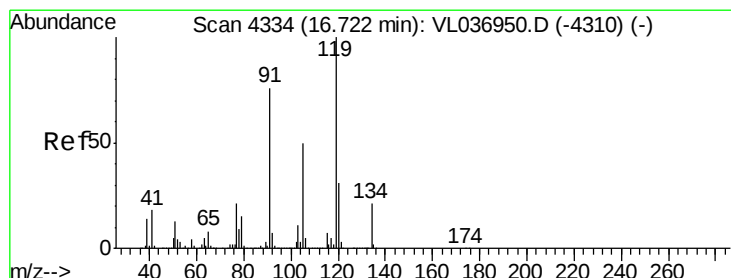
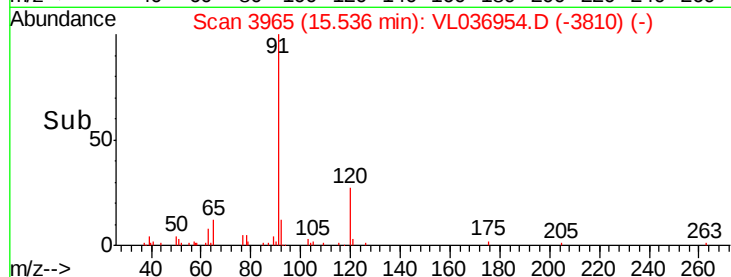
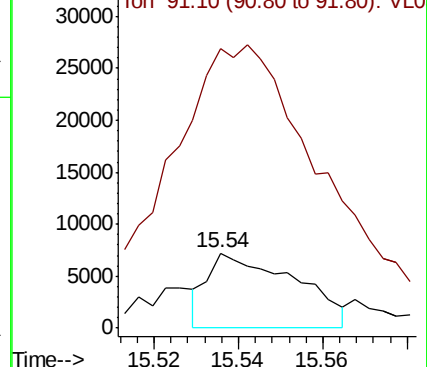
Ion Ratio Lower Upper

120 100

91 833.0 343.8 515.6#



Abundance Ion 120.20 (119.90 to 120.90): V



#65

tert-Butylbenzene

Concen: 0.073 ppbv

RT: 16.72 min Scan# 4334

Delta R.T. 0.00 min

Lab File: VL036954.D

Acq: 18 May 2021 4:29

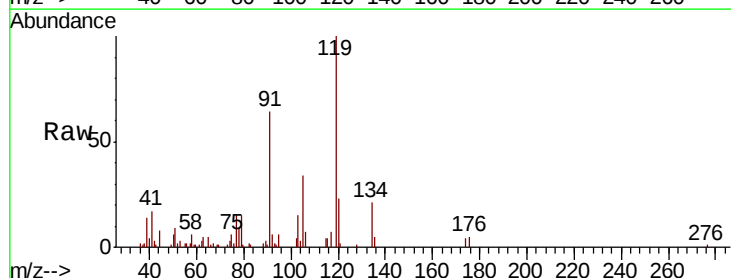
Tgt Ion:119 Resp: 34059

Ion Ratio Lower Upper

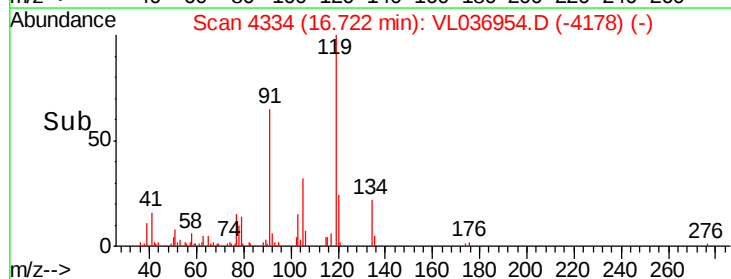
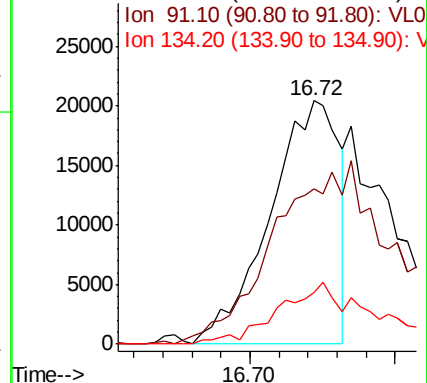
119 100

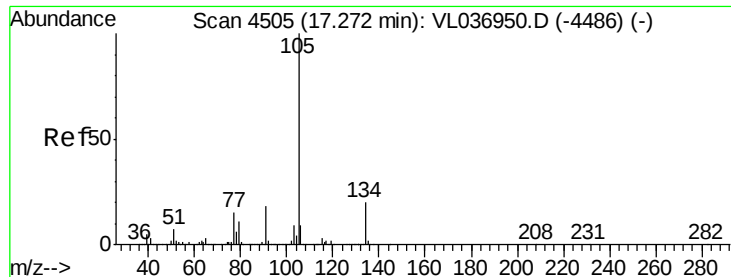
91 0.0 61.9 92.9#

134 40.3 16.2 24.4#



Abundance Ion 119.20 (118.90 to 119.90): V





#67

sec-Butylbenzene

Concen: 0.059 ppbv

RT: 17.27 min Scan# 4505

Delta R.T. 0.00 min

Lab File: VL036954.D

Acq: 18 May 2021 4:29

Instrument :

MSVOA_L

ClientSampleId :

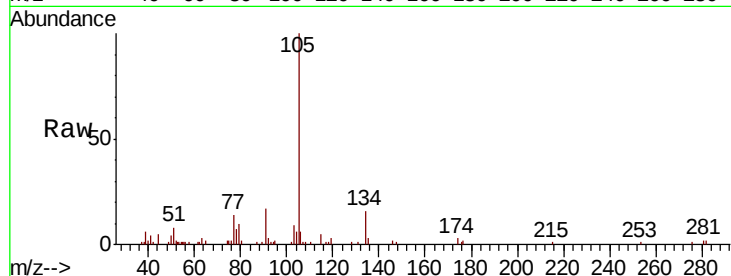
VSTDIC0.1

Tot Ion:105 Resp: 39316

Ion Ratio Lower Upper

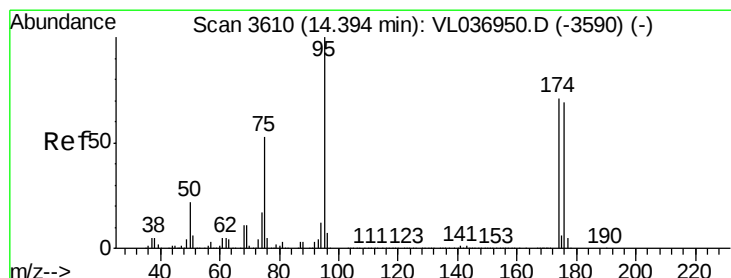
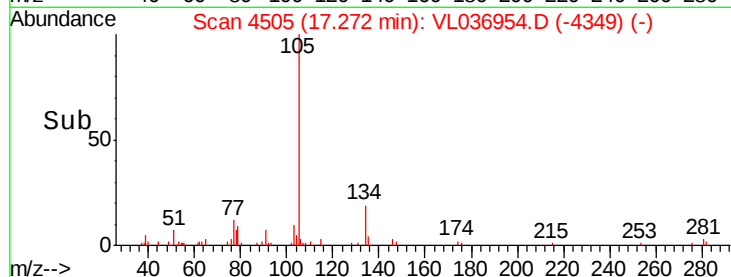
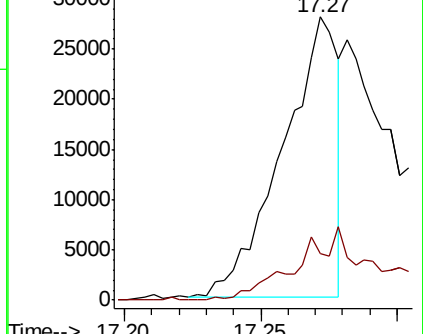
105 100

134 0.0 15.6 23.4#



Abundance Ion 105.10 (104.80 to 105.80): V

Ion 134.20 (133.90 to 134.90): V



#68

1-Bromo-4-Fluorobenzene

Concen: 9.575 ppbv

RT: 14.39 min Scan# 3609

Delta R.T. -0.00 min

Lab File: VL036954.D

Acq: 18 May 2021 4:29

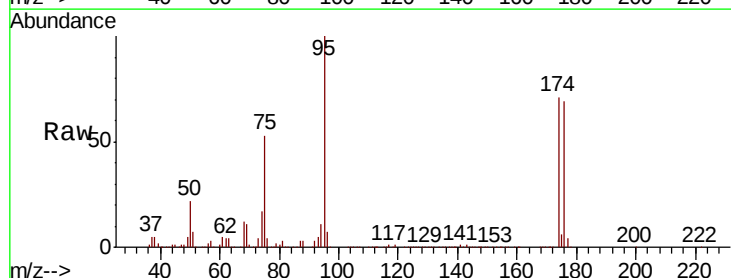
Tgt Ion: 95 Resp: 2677320

Ion Ratio Lower Upper

95 100

174 77.2 58.4 87.6

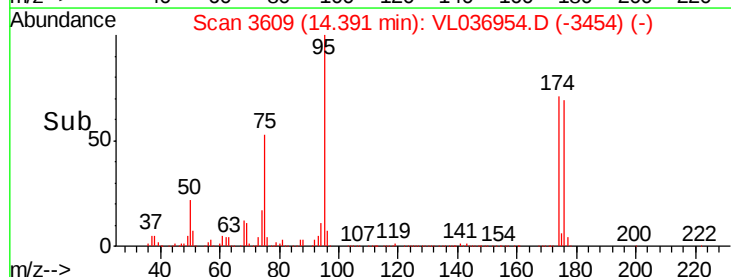
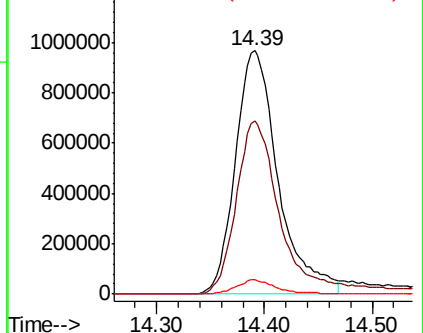
175 5.8 4.4 6.6

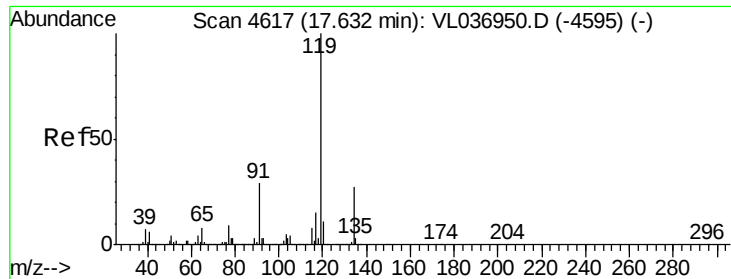


Abundance Ion 95.10 (94.80 to 95.80): VL0

Ion 174.00 (173.70 to 174.70): V

Ion 175.00 (174.70 to 175.70): V

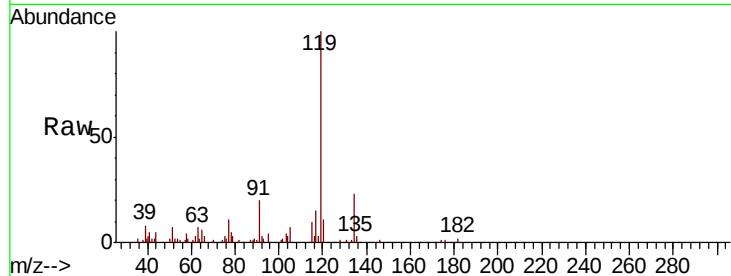




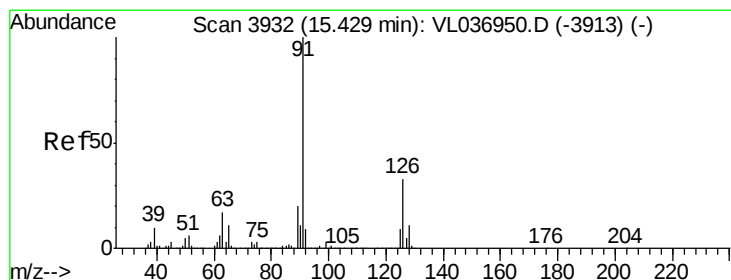
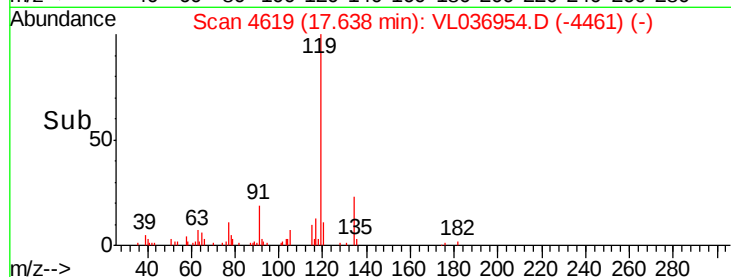
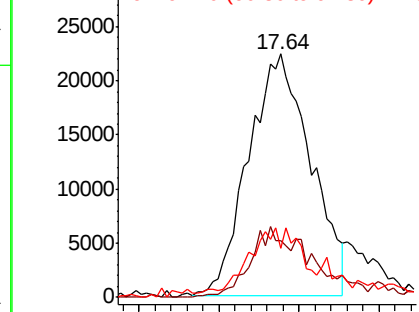
#69
 p-Isopropyltoluene
 Concen: 0.119 ppbv
 RT: 17.64 min Scan# 4619
 Delta R.T. 0.01 min
 Lab File: VL036954.D
 Acq: 18 May 2021 4:29

Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDIC0.1

Tot Ion	Ratio	Lower	Upper
119	100		
134	30.9	21.2	31.8
91	35.5	22.2	33.4

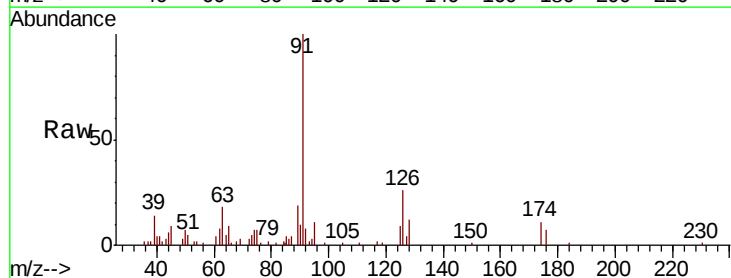


Abundance Ion 119.10 (118.80 to 119.80): V
 Ion 134.20 (133.90 to 134.90): V
 Ion 91.10 (90.80 to 91.80): V

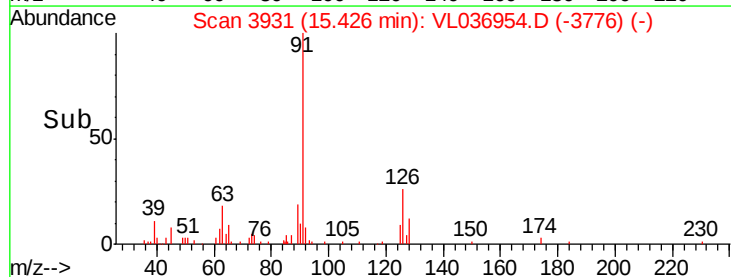
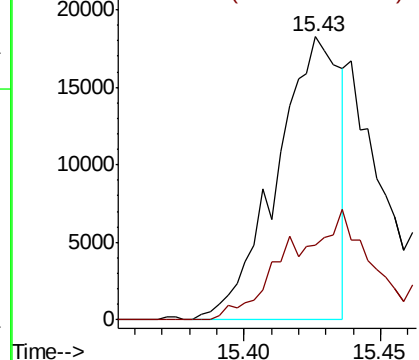


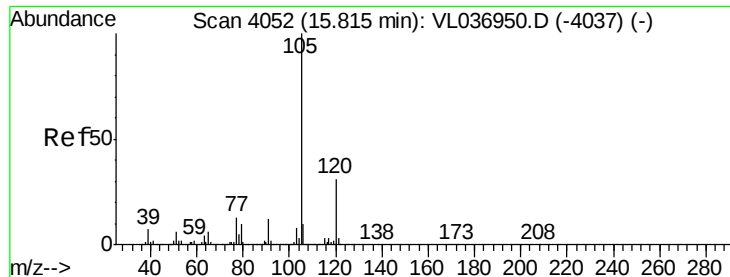
#71
 2-Chlorotoluene
 Concen: 0.078 ppbv
 RT: 15.43 min Scan# 3931
 Delta R.T. -0.00 min
 Lab File: VL036954.D
 Acq: 18 May 2021 4:29

Tgt Ion	Ratio	Lower	Upper
91	100		
126	0.0	13.1	52.5



Abundance Ion 91.10 (90.80 to 91.80): V
 Ion 126.10 (125.80 to 126.80): V





#72

4-Ethyltoluene

Concen: 0.031 ppbv

RT: 15.82 min Scan# 4052

Delta R.T. 0.00 min

Lab File: VL036954.D

Acq: 18 May 2021 4:29

Instrument :

MSVOA_L

ClientSampleId :

VSTDIC0.1

Tot Ion:105 Resp: 12422

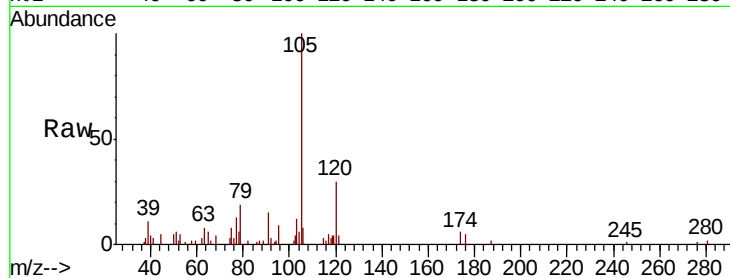
Ion Ratio Lower Upper

105 100

120 0.0 24.6 37.0#

91 0.0 9.8 14.6#

77 58.5 10.4 15.6#

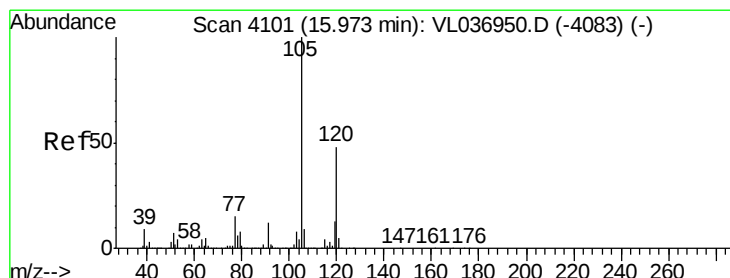
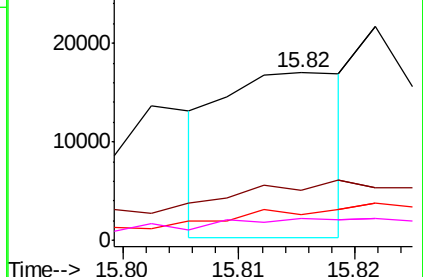
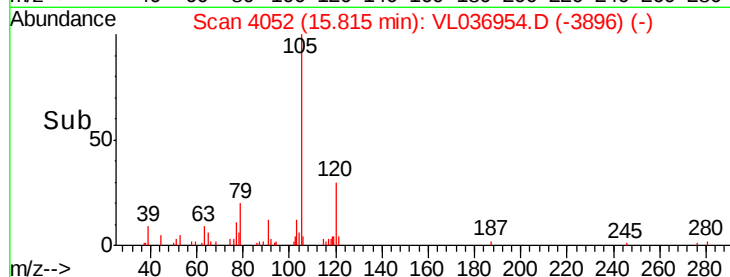


Abundance Ion 105.10 (104.80 to 105.80): V

Ion 120.20 (119.90 to 120.90): V

Ion 91.10 (90.80 to 91.80): VL0

Ion 77.10 (76.80 to 77.80): VL0



#73

1,3,5-Trimethylbenzene

Concen: 0.106 ppbv

RT: 15.98 min Scan# 4102

Delta R.T. 0.00 min

Lab File: VL036954.D

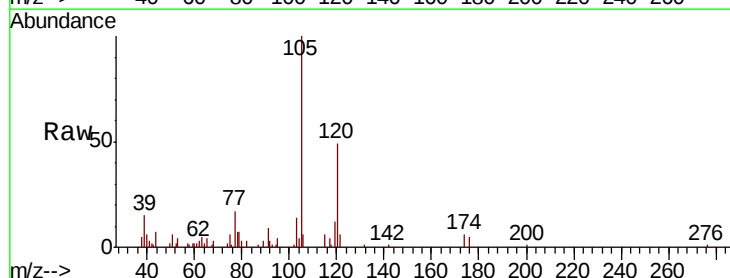
Acq: 18 May 2021 4:29

Tgt Ion:105 Resp: 41520

Ion Ratio Lower Upper

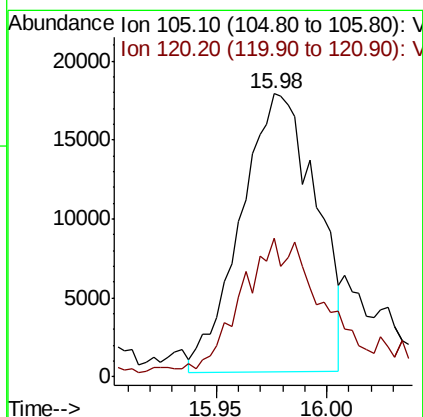
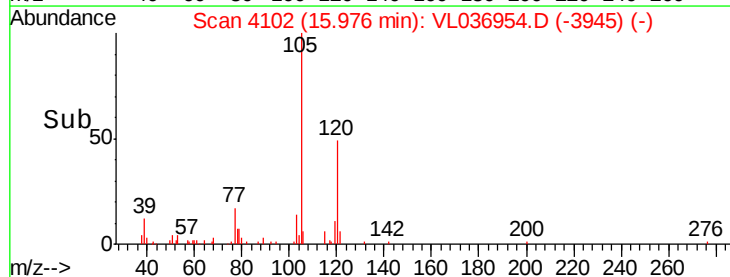
105 100

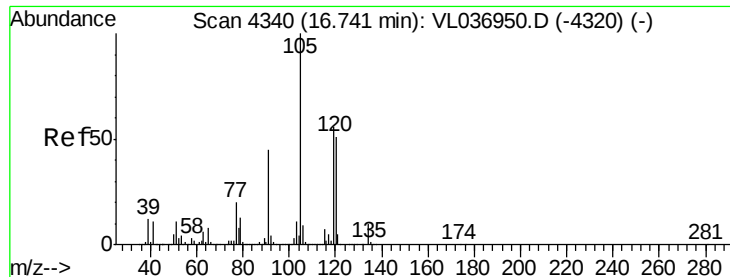
120 47.2 38.6 58.0



Abundance Ion 105.10 (104.80 to 105.80): V

Ion 120.20 (119.90 to 120.90): V





#74

1,2,4-Trimethylbenzene

Concen: 0.094 ppbv

RT: 16.74 min Scan# 4339

Delta R.T. -0.00 min

Lab File: VL036954.D

Acq: 18 May 2021 4:29

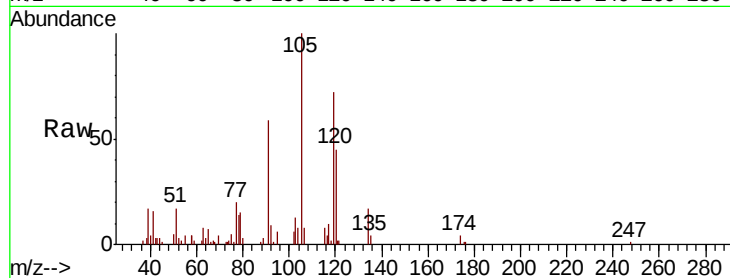
Instrument :

MSVOA_L

ClientSampleId :

VSTDIC0.1

Tot Ion:	105	Resp:	40666
Ion	Ratio	Lower	Upper
105	100		
120	43.5	40.6	61.0
91	36.4	37.4	56.0#
77	17.7	16.2	24.4

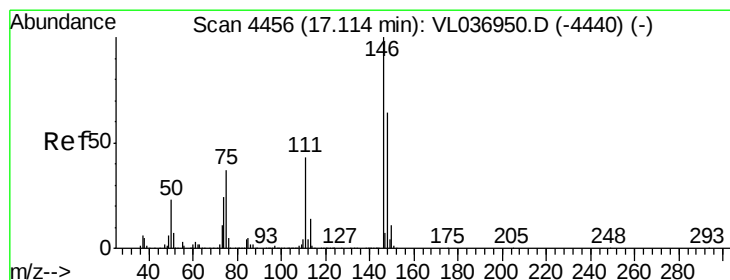
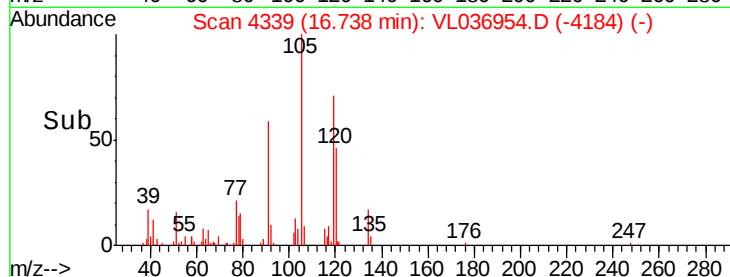
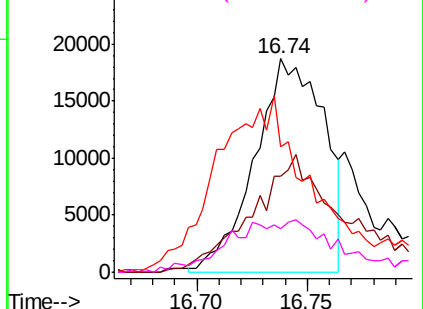


Abundance Ion 105.10 (104.80 to 105.80): V

Ion 120.20 (119.90 to 120.90): V

Ion 91.10 (90.80 to 91.80): VL0

Ion 77.10 (76.80 to 77.80): VL0



#76

1,4-Dichlorobenzene

Concen: 0.030 ppbv

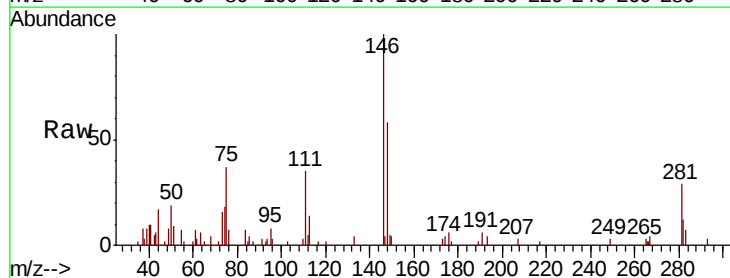
RT: 17.10 min Scan# 4453

Delta R.T. -0.01 min

Lab File: VL036954.D

Acq: 18 May 2021 4:29

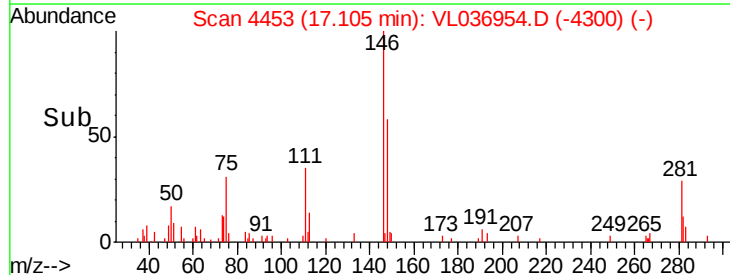
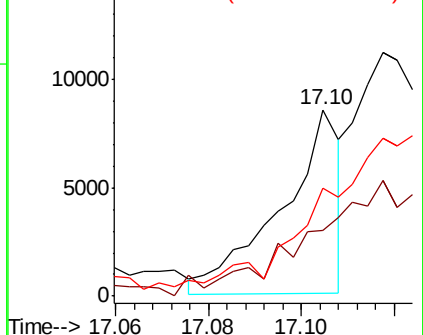
Tgt Ion:	146	Resp:	7484
Ion	Ratio	Lower	Upper
146	100		
111	0.0	22.6	67.7#
148	0.0	33.5	100.5#

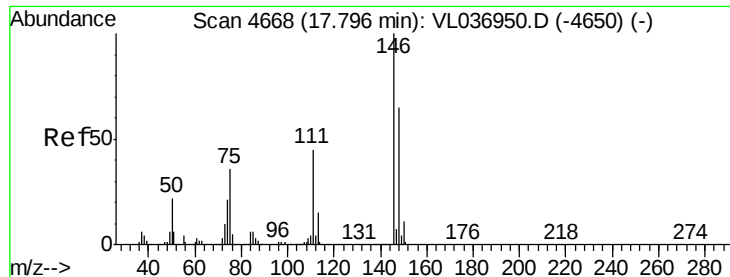


Abundance Ion 146.00 (145.70 to 146.70): V

Ion 111.10 (110.80 to 111.80): V

Ion 148.00 (147.70 to 148.70): V





#77

1,2-Dichlorobenzene

Concen: 0.060 ppbv

RT: 17.80 min Scan# 4669

Delta R.T. 0.00 min

Lab File: VL036954.D

Acq: 18 May 2021 4:29

Instrument :

MSVOA_L

ClientSampleId :

VSTDIC0.1

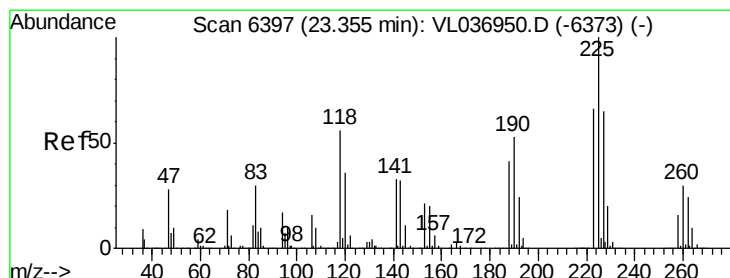
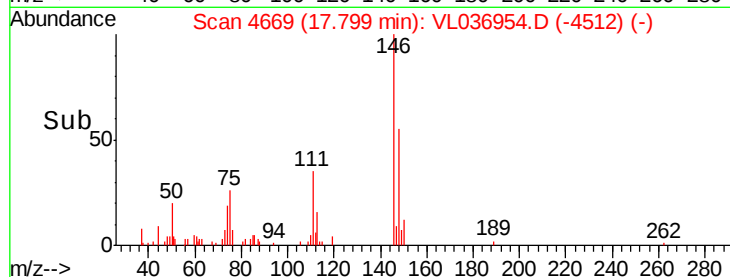
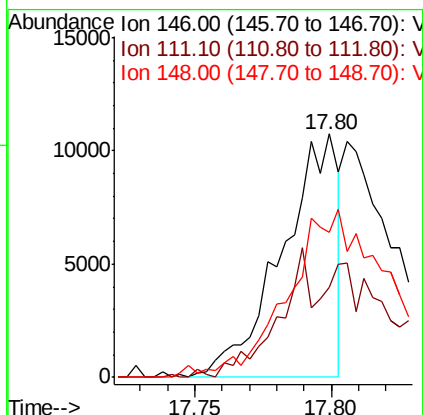
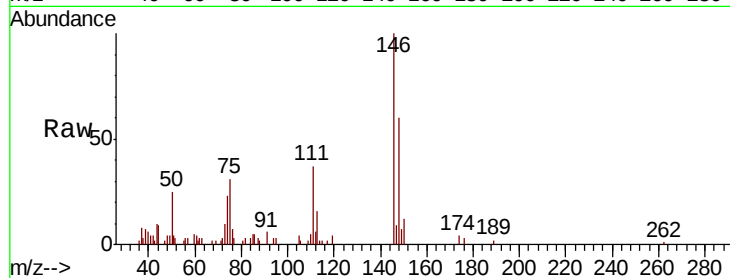
Tot Ion:146 Resp: 15273

Ion Ratio Lower Upper

146 100

111 108.0 23.1 69.2#

148 0.0 32.5 97.4#



#78

Hexachloro-1,3-Butadiene

Concen: 0.146 ppbv

RT: 23.36 min Scan# 6398

Delta R.T. 0.00 min

Lab File: VL036954.D

Acq: 18 May 2021 4:29

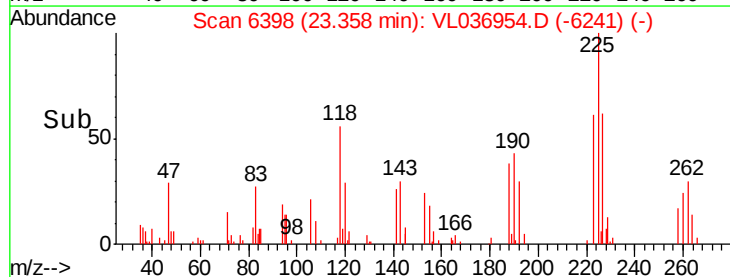
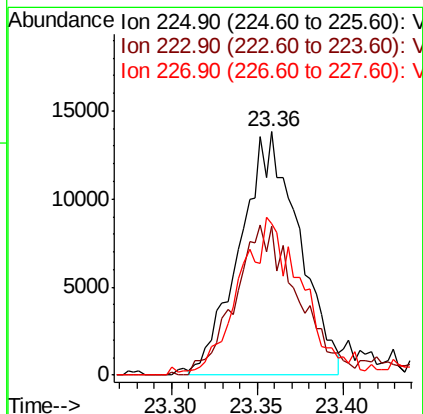
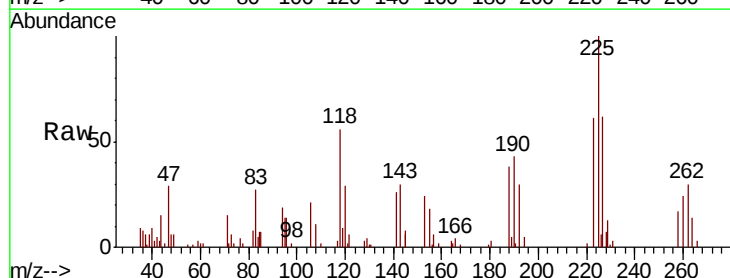
Tgt Ion:225 Resp: 33002

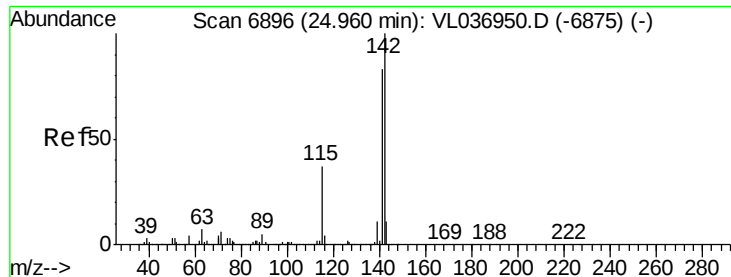
Ion Ratio Lower Upper

225 100

223 72.1 51.9 77.9

227 69.3 51.8 77.6





#80

Naphthalene, 2-methyl-

Concen: 0.088 ppbv

RT: 25.23 min Scan# 6980

Delta R.T. 0.27 min

Lab File: VL036954.D

Acq: 18 May 2021 4:29

Instrument :

MSVOA_L

ClientSampleId :

VSTDIC0.1

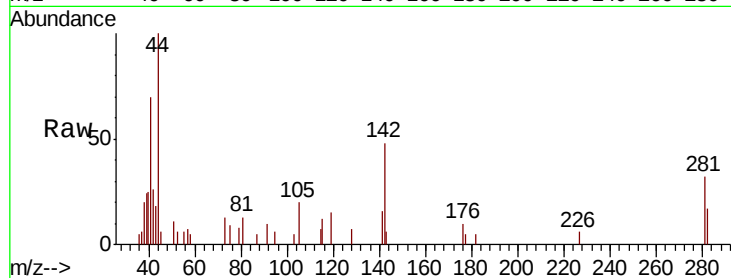
Tot Ion:142 Resp: 2496

Ion Ratio Lower Upper

142 100

141 69.4 69.3 103.9

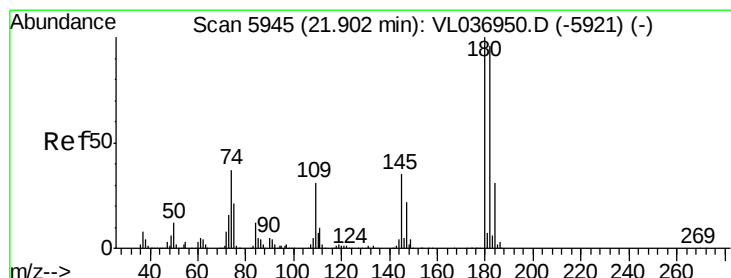
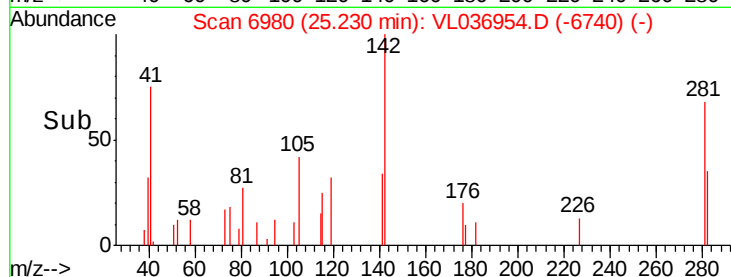
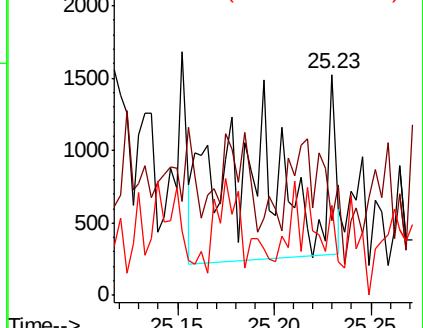
115 39.3 29.1 43.7



Abundance Ion 142.00 (141.70 to 142.70): V

Ion 141.00 (140.70 to 141.70): V

Ion 115.00 (114.70 to 115.70): V



#81

1,2,4-Trichlorobenzene

Concen: 0.056 ppbv

RT: 21.91 min Scan# 5946

Delta R.T. 0.00 min

Lab File: VL036954.D

Acq: 18 May 2021 4:29

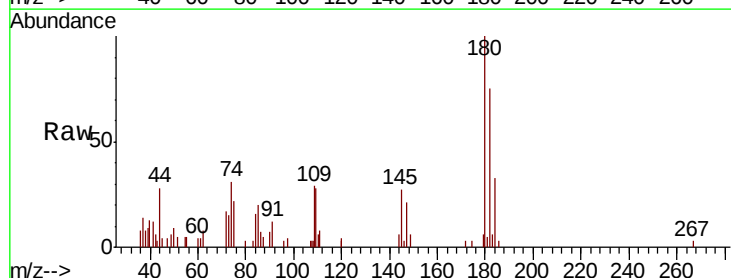
Tgt Ion:180 Resp: 7793

Ion Ratio Lower Upper

180 100

182 0.0 81.7 122.5#

184 0.0 24.9 37.3#



Abundance Ion 180.00 (179.70 to 180.70): V

Ion 182.00 (181.70 to 182.70): V

Ion 184.00 (183.70 to 184.70): V

