

Data File : VL032020.D

Acq On : 31 May 2018 18:39

Operator : SY/AP

Sample : VSTDIC0.1

Misc : 400ml/MSVOA_L

ALS Vial : 1 Sample Multiplier: 1

Instrument :

MSVOA_L

ClientSampleId :

VSTDIC0.1

Quant Time: Jun 01 02:04:35 2018

Quant Method : W:\HPCHEM1\MSVOA_L\METHODS\VL053118AIR.M

Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Jun 01 01:58:27 2018

QLast Update : Fri Jun 01 01:58:27 2018

Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.86	49	1309349	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.40	114	2575982	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.37	117	2471913	10.00	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.70	95	1930793	10.06	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	100.60%

Target Compounds

						Qvalue
2) Dichlorodifluoromethane	3.15	85	25486	0.15	ppbv #	86
3) Chlorodifluoromethane	3.09	51	13825	0.11	ppbv #	90
4) Chloromethane	3.24	50	3936	0.06	ppbv #	87
5) Vinyl Chloride	3.37	62	7211	0.10	ppbv	92
6) Bromomethane	3.59	94	5091	0.11	ppbv	88
7) Chloroethane	3.68	64	2691	0.10	ppbv #	87
8) Dichlorotetrafluoroethane	3.30	85	20570	0.12	ppbv	99
9) Propene	3.10	41	3276	0.07	ppbv	88
10) Heptane	8.36	43	4923	0.03	ppbv #	26
11) Trichlorofluoromethane	4.09	101	33441	0.16	ppbv #	74
12) 1,1,2-Trichlorotrifluoroet	4.65	101	19252	0.13	ppbv	100
13) Ethanol	3.75	45	763	0.05	ppbv	74
14) Bromoethene	3.87	108	3846	0.07	ppbv #	58
15) Acetone	4.00	43	42374	0.23	ppbv #	82
16) 1,3-Butadiene	3.44	39	2997	0.05	ppbv #	8
18) 1,1-Dichloroethene	4.44	96	3027	0.05	ppbv #	55
20) Methylene Chloride	4.50	84	15612	0.25	ppbv #	81
21) Allyl Chloride	4.56	41	4617	0.04	ppbv #	18
22) trans-1,2-Dichloroethene	5.06	96	4706	0.06	ppbv #	42
24) 1,1-Dichloroethane	5.19	63	18167	0.09	ppbv	97
25) Ethyl Acetate	5.89	43	27219	0.09	ppbv #	90
26) Hexane	5.88	57	11286	0.08	ppbv #	64
27) Carbon Disulfide	4.72	76	17045	0.10	ppbv #	74
28) Methyl tert-Butyl Ether	5.23	73	7595	0.04	ppbv #	41
29) Chloroform	5.95	83	16121	0.07	ppbv	97
31) cis-1,2-Dichloroethene	5.74	61	5180	0.04	ppbv	94
32) 1,1,1-Trichloroethane	6.73	97	9996	0.05	ppbv #	13
34) 2-Butanone	5.45	43	18488	0.09	ppbv #	90
35) Carbon Tetrachloride	7.25	117	18887	0.09	ppbv #	78
36) Benzene	7.12	78	11339	0.05	ppbv	95
37) 1,2-Dichloroethane	6.52	62	9937	0.06	ppbv #	90
38) Trichloroethene	8.08	130	3797	0.04	ppbv #	34
39) 1,2-Dichloropropane	7.40	63	684649	8.08	ppbv #	23
42) Bromodichloromethane	8.04	83	16871	0.09	ppbv #	61
44) 2,2,4-Trimethylpentane	8.10	57	21885	0.06	ppbv #	78
46) cis-1,3-Dichloropropene	8.95	75	4541	0.03	ppbv #	71
47) 1,1,2-Trichloroethane	9.74	97	6136	0.06	ppbv #	69
48) Dibromochloromethane	10.57	129	13600	0.08	ppbv	99
49) Bromoform	13.32	173	3952	0.03	ppbv #	27
52) Tetrachloroethene	11.50	164	4585	0.05	ppbv #	78
54) 1,2-Dibromoethane	10.88	107	8190	0.05	ppbv	84

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ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Quant Time: Jun 01 02:04:35 2018
Quant Method : W:\HPCHEM1\MSVOA_L\METHODS\VL053118AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Jun 01 01:58:27 2018
QLast Update : Fri Jun 01 01:58:27 2018
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
57) Chlorobenzene	12.42	112	16334	0.08	ppbv #	84
58) Ethyl Benzene	12.99	91	15115	0.04	ppbv	92
67) sec-Butylbenzene	17.59	105	25408	0.05	ppbv #	91
71) 2-Chlorotoluene	15.74	91	9976	0.03	ppbv #	59
72) 4-Ethyltoluene	16.13	105	13327	0.04	ppbv #	83
74) 1,2,4-Trimethylbenzene	17.05	105	12119	0.04	ppbv #	59
75) 1,3-Dichlorobenzene	17.29	146	12667	0.06	ppbv #	23
78) Hexachloro-1,3-Butadiene	23.67	225	15167	0.19	ppbv	91

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

Data File : VL032020.D

Acq On : 31 May 2018 18:39

Operator : SY/AP

Sample : VSTDIC0.1

Misc : 400ml/MSVOA_L

ALS Vial : 1 Sample Multiplier: 1

Instrument :

MSVOA_L

ClientSampleId :

VSTDIC0.1

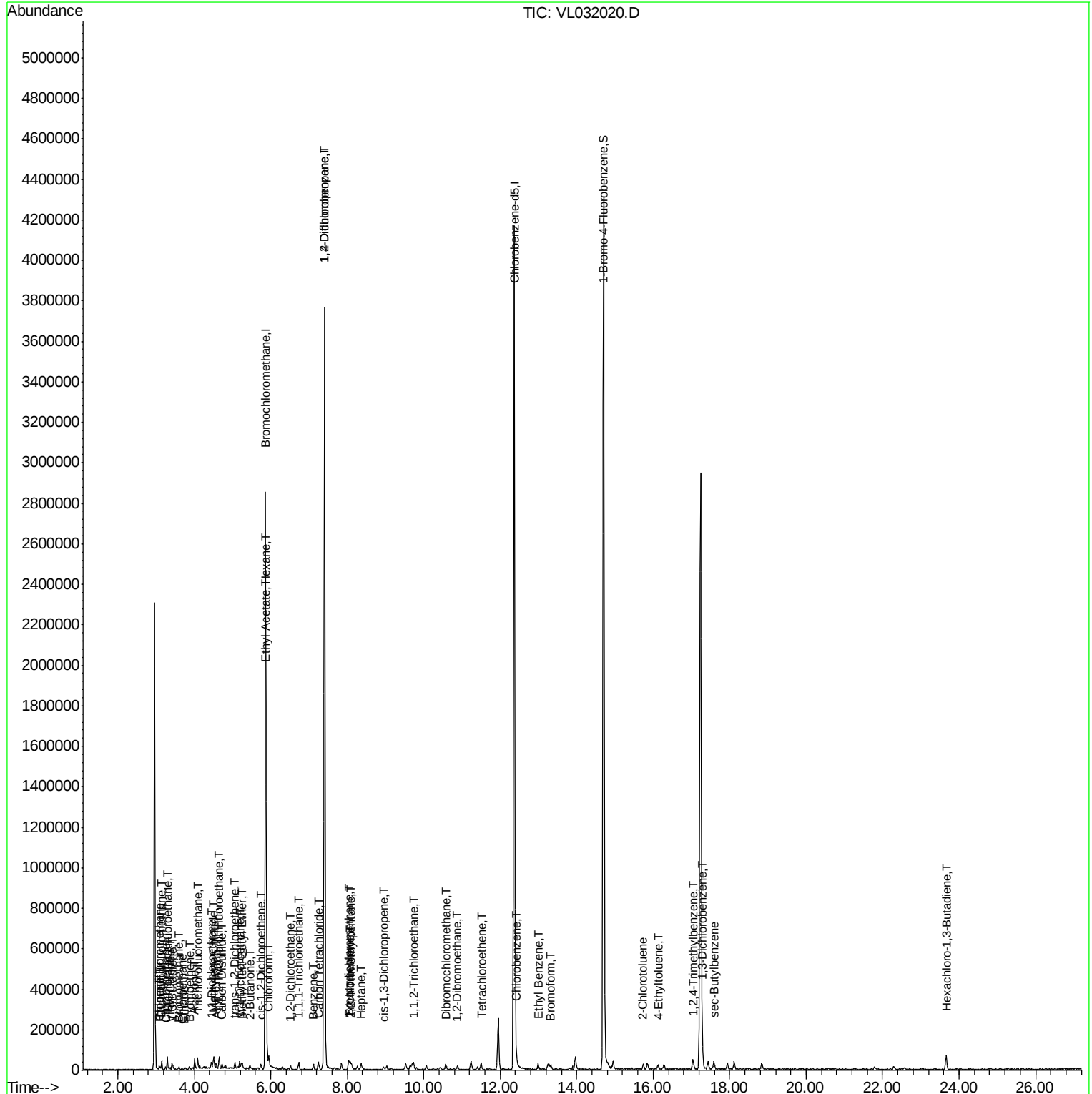
Quant Time: Jun 01 02:04:35 2018

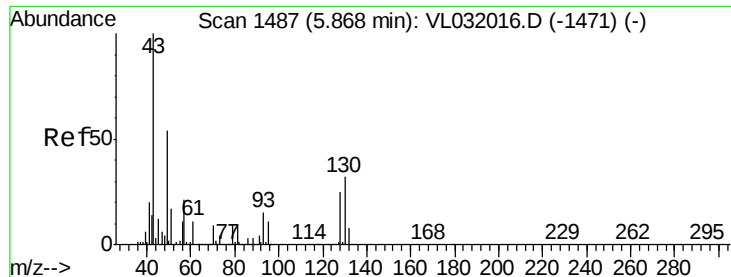
Quant Method : W:\HPCHEM1\MSVOA_L\METHODS\VL053118AIR.M

Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Jun 01 01:58:27 2018

QLast Update : Fri Jun 01 01:58:27 2018

Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.00 ppbv

RT: 5.86 min Scan# 1486

Delta R.T. -0.00 min

Lab File: VL032020.D

Acq: 31 May 2018 18:39

Instrument :

MSVOA_L

ClientSampleId :

VSTDIC0.1

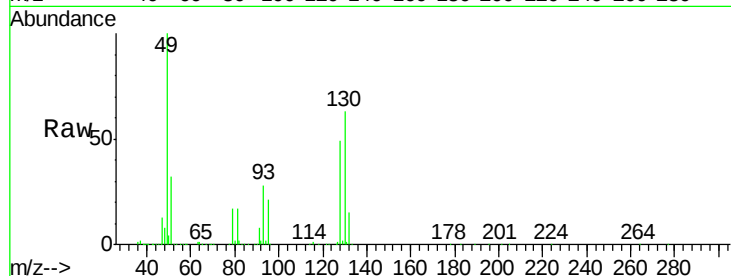
Tgt Ion: 49 Resp: 1309349

Ion Ratio Lower Upper

49 100

128 49.4 24.1 72.3

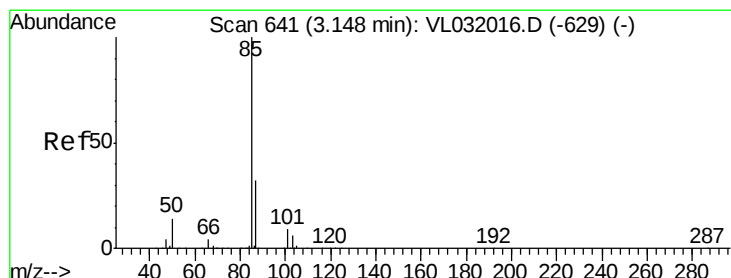
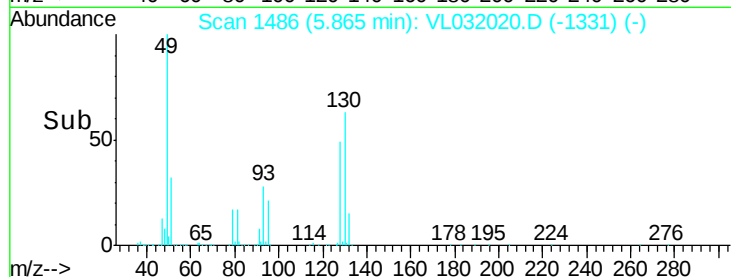
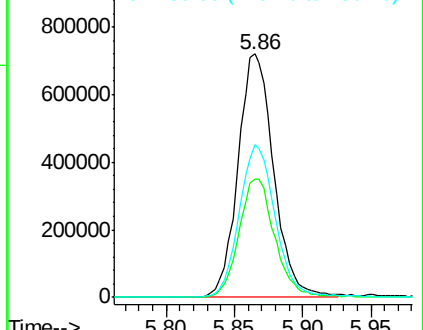
130 63.5 30.9 92.8



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: 0.15 ppbv

RT: 3.15 min Scan# 641

Delta R.T. 0.00 min

Lab File: VL032020.D

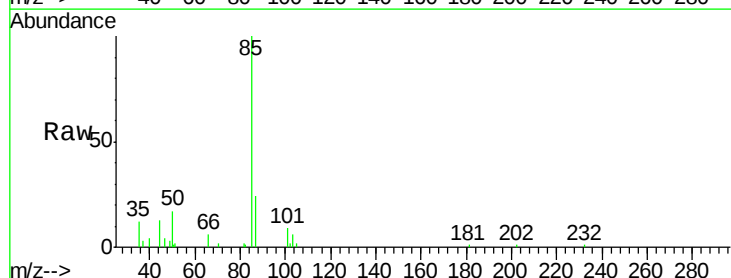
Acq: 31 May 2018 18:39

Tgt Ion: 85 Resp: 25486

Ion Ratio Lower Upper

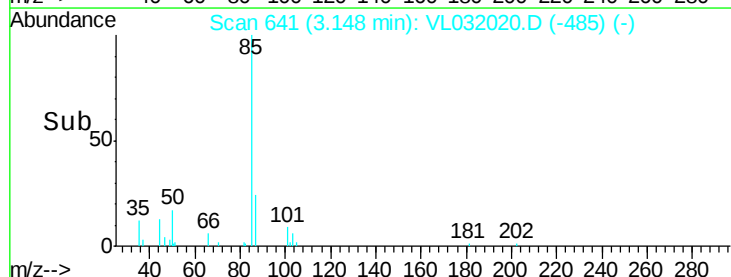
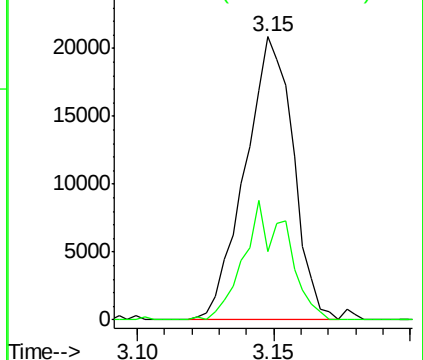
85 100

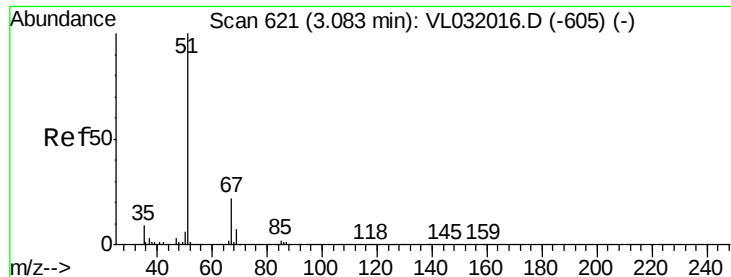
87 24.1 25.5 38.3#



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0





#3

Chlorodifluoromethane

Concen: 0.11 ppbv

RT: 3.09 min Scan# 622

Delta R.T. 0.00 min

Lab File: VL032020.D

Acq: 31 May 2018 18:39

Instrument :

MSVOA_L

ClientSampleId :

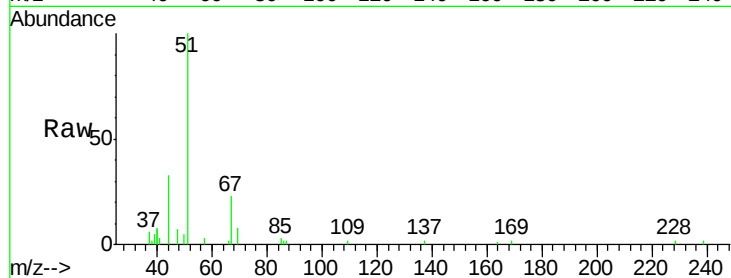
VSTDIC0.1

Tgt Ion: 51 Resp: 13825

Ion Ratio Lower Upper

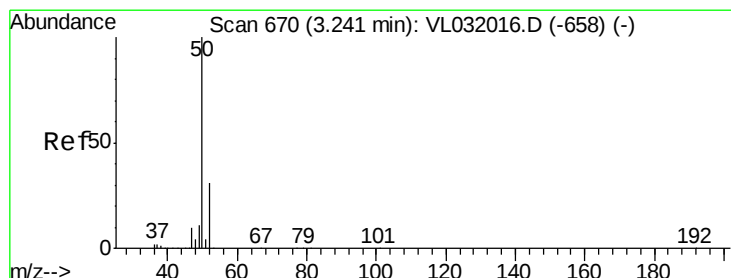
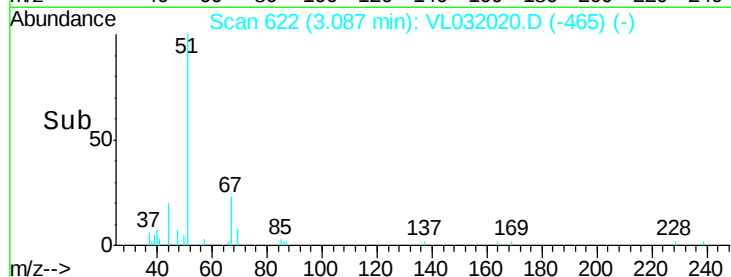
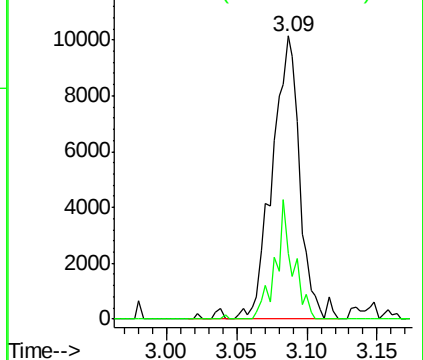
51 100

67 26.1 17.2 25.8#



Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0



#4

Chloromethane

Concen: 0.06 ppbv

RT: 3.24 min Scan# 671

Delta R.T. 0.00 min

Lab File: VL032020.D

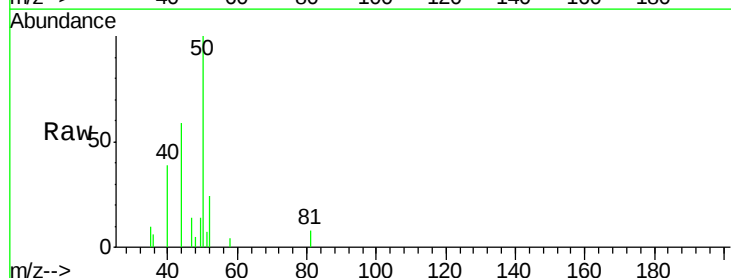
Acq: 31 May 2018 18:39

Tgt Ion: 50 Resp: 3936

Ion Ratio Lower Upper

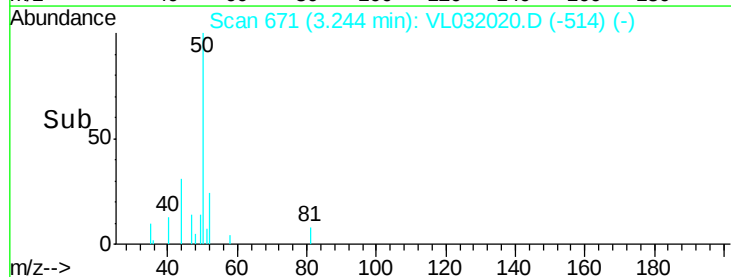
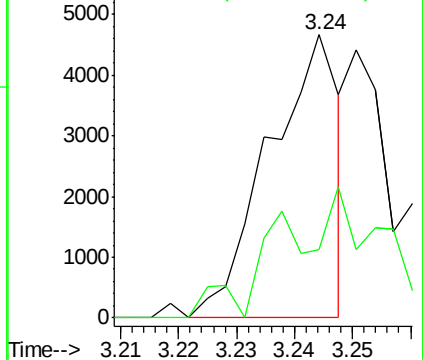
50 100

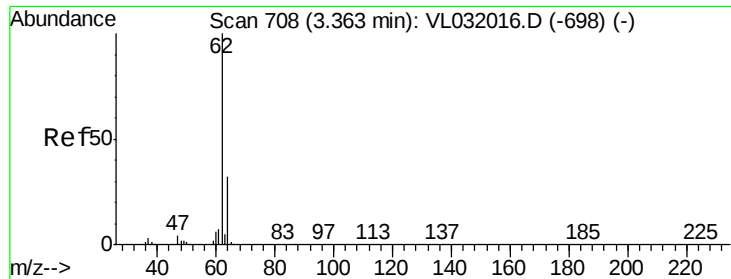
52 23.9 25.0 37.6#



Abundance Ion 50.10 (49.80 to 50.80): VL0

Ion 52.10 (51.80 to 52.80): VL0





#5

Vinyl Chloride

Concen: 0.10 ppbv

RT: 3.37 min Scan# 709

Delta R.T. 0.00 min

Lab File: VL032020.D

Acq: 31 May 2018 18:39

Instrument :

MSVOA_L

ClientSampleId :

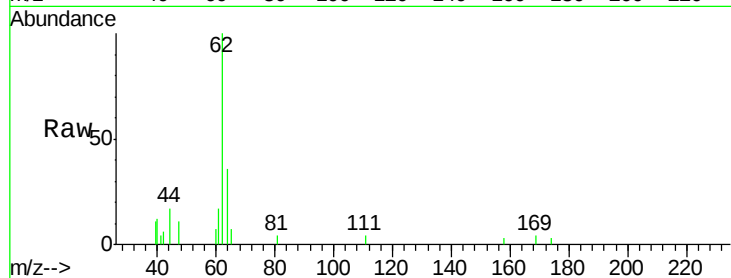
VSTDIC0.1

Tgt Ion: 62 Resp: 7211

Ion Ratio Lower Upper

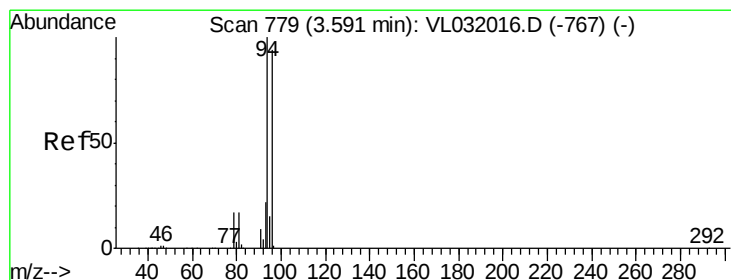
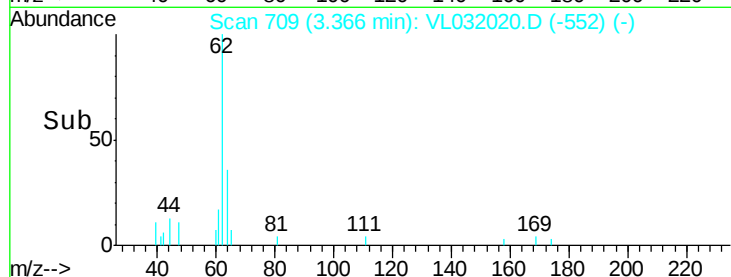
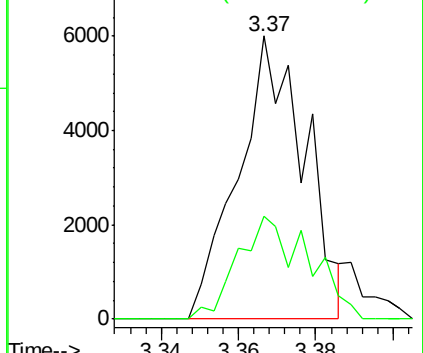
62 100

64 36.2 25.2 37.8



Abundance Ion 62.10 (61.80 to 62.80): VL0

Ion 64.10 (63.80 to 64.80): VL0



#6

Bromomethane

Concen: 0.11 ppbv

RT: 3.59 min Scan# 780

Delta R.T. 0.00 min

Lab File: VL032020.D

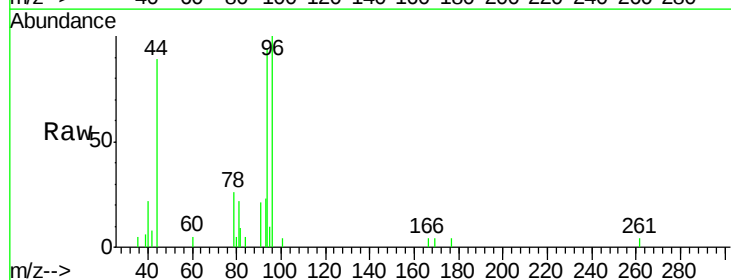
Acq: 31 May 2018 18:39

Tgt Ion: 94 Resp: 5091

Ion Ratio Lower Upper

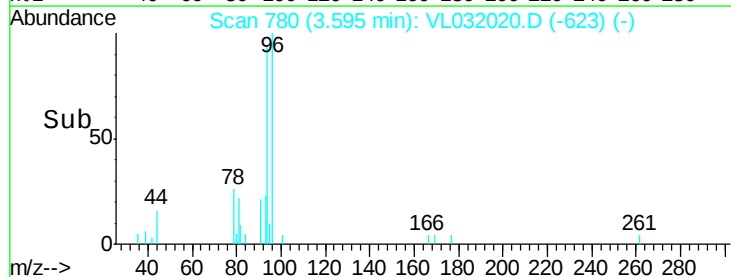
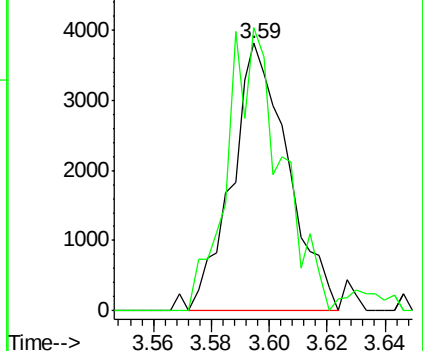
94 100

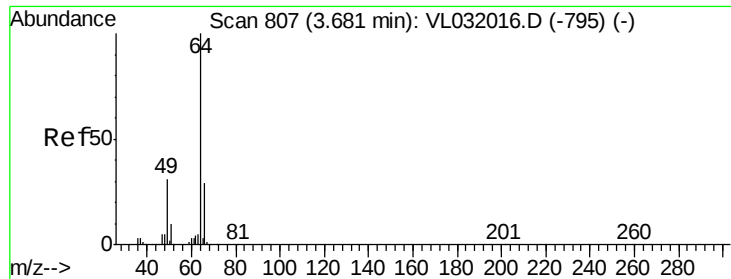
96 105.8 75.1 112.7



Abundance Ion 94.00 (93.70 to 94.70): VL0

Ion 96.00 (95.70 to 96.70): VL0





#7

Chloroethane

Concen: 0.10 ppbv

RT: 3.68 min Scan# 808

Delta R.T. 0.00 min

Lab File: VL032020.D

Acq: 31 May 2018 18:39

Instrument :

MSVOA_L

ClientSampleId :

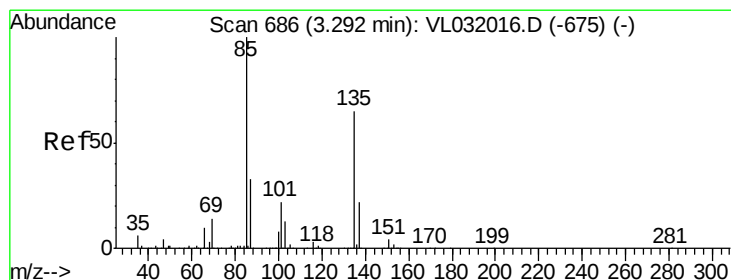
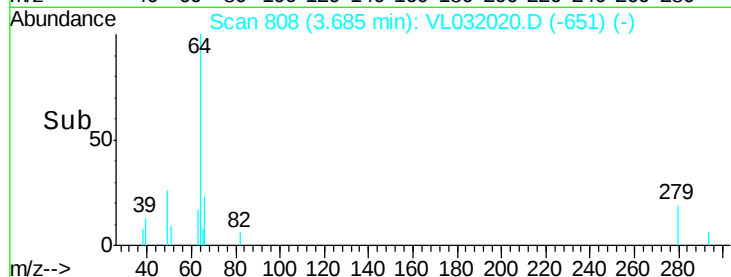
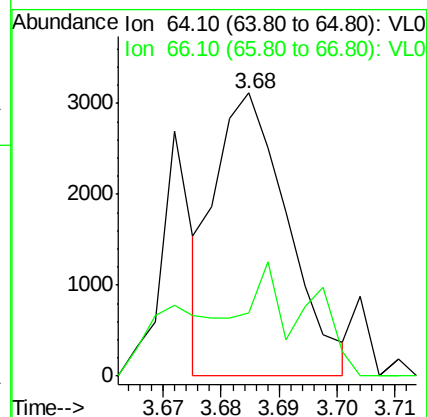
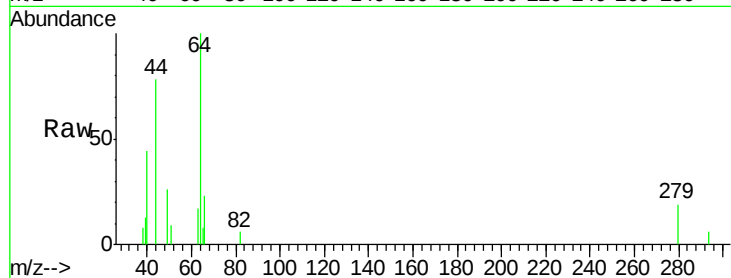
VSTDIC0.1

Tgt Ion: 64 Resp: 2691

Ion Ratio Lower Upper

64 100

66 22.5 23.4 35.2#



#8

Dichlorotetrafluoroethane

Concen: 0.12 ppbv

RT: 3.30 min Scan# 687

Delta R.T. 0.00 min

Lab File: VL032020.D

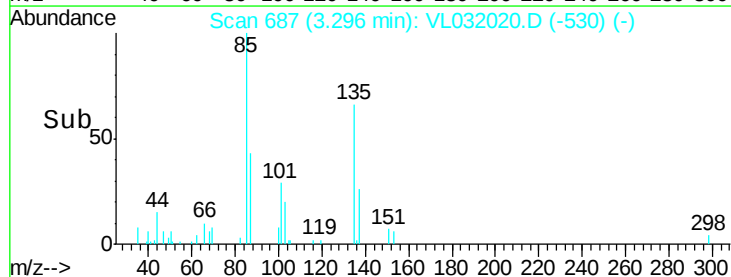
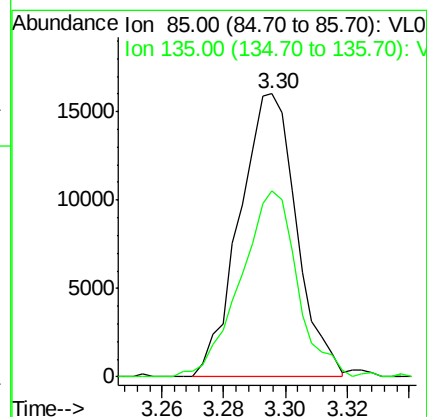
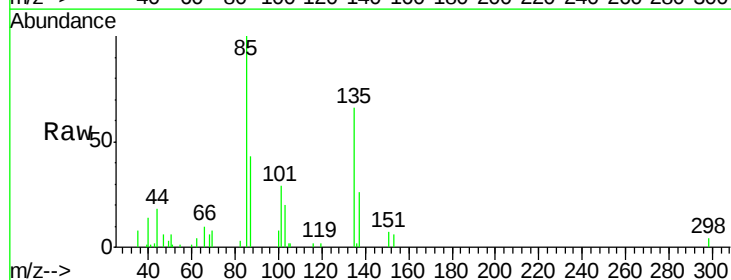
Acq: 31 May 2018 18:39

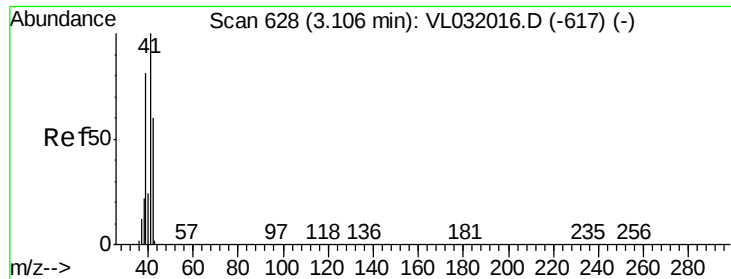
Tgt Ion: 85 Resp: 20570

Ion Ratio Lower Upper

85 100

135 65.3 52.6 79.0





#9

Propene

Concen: 0.07 ppbv

RT: 3.10 min Scan# 627

Delta R.T. -0.00 min

Lab File: VL032020.D

Acq: 31 May 2018 18:39

Instrument :

MSVOA_L

ClientSampleId :

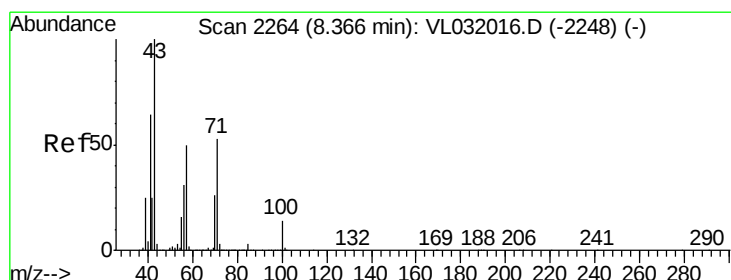
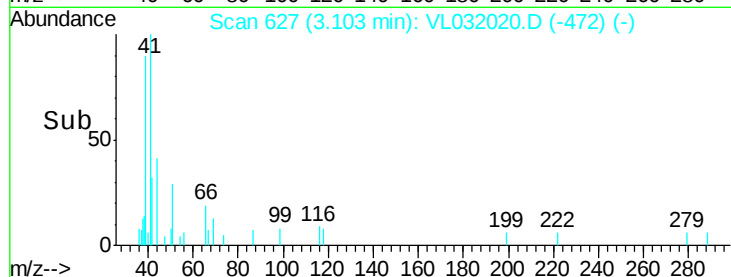
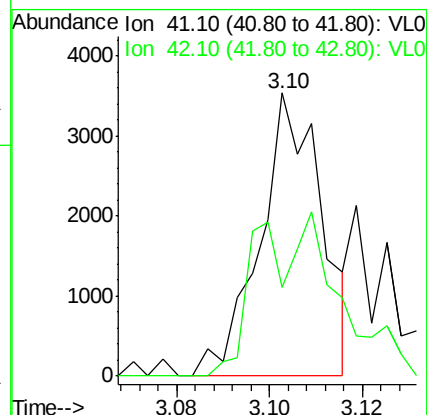
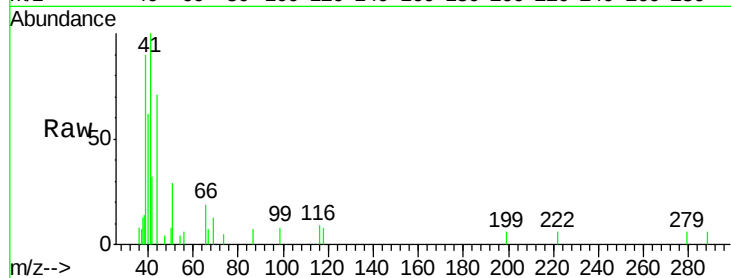
VSTDIC0.1

Tgt Ion: 41 Resp: 3276

Ion Ratio Lower Upper

41 100

42 77.7 54.4 81.6



#10

Heptane

Concen: 0.03 ppbv

RT: 8.36 min Scan# 2263

Delta R.T. -0.00 min

Lab File: VL032020.D

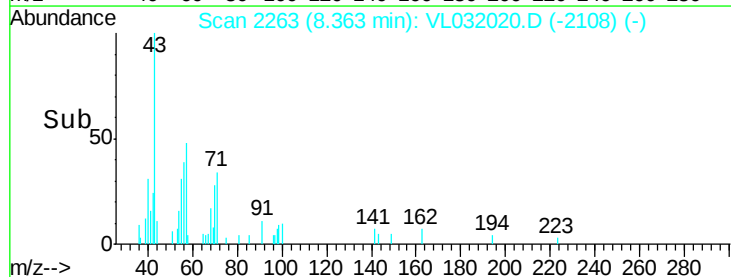
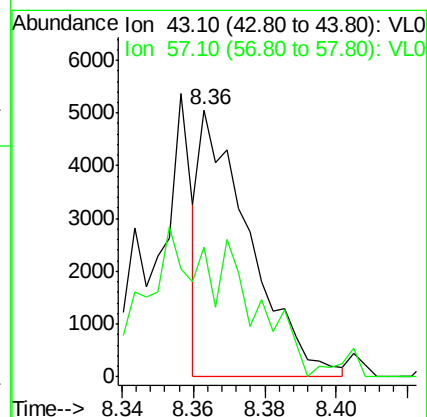
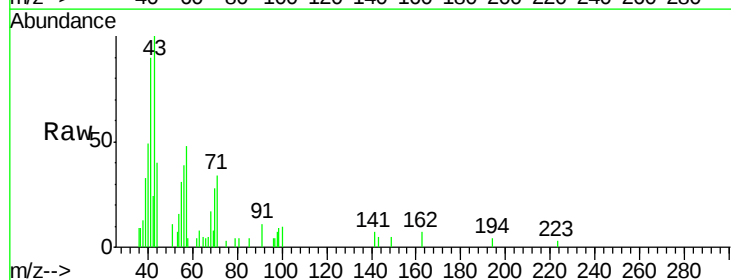
Acq: 31 May 2018 18:39

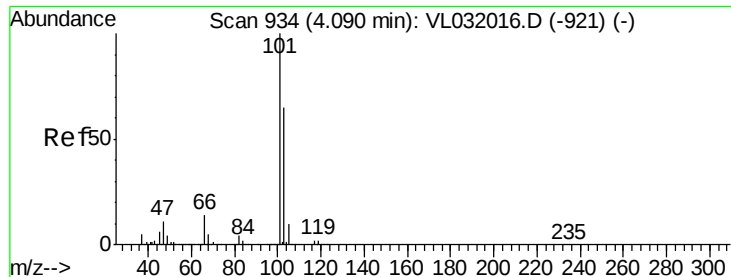
Tgt Ion: 43 Resp: 4923

Ion Ratio Lower Upper

43 100

57 0.0 41.7 62.5#





#11

Trichlorofluoromethane

Concen: 0.16 ppbv

RT: 4.09 min Scan# 934

Delta R.T. 0.00 min

Lab File: VL032020.D

Acq: 31 May 2018 18:39

Instrument :

MSVOA_L

ClientSampleId :

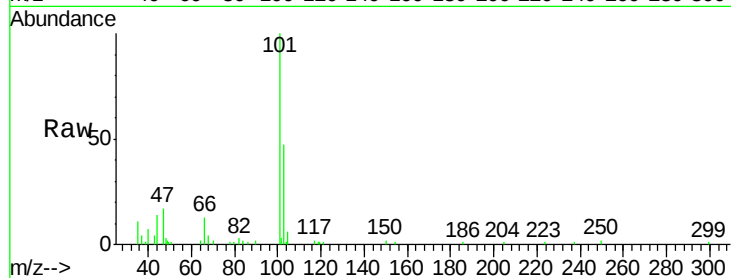
VSTDIC0.1

Tgt Ion:101 Resp: 33441

Ion Ratio Lower Upper

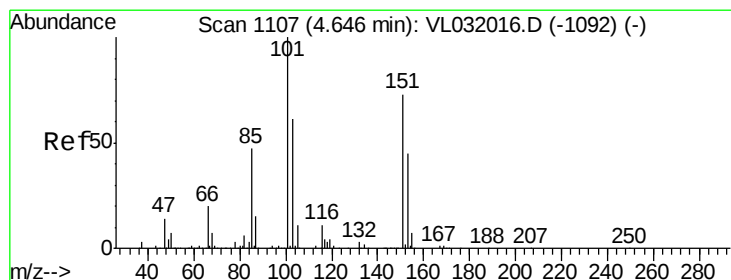
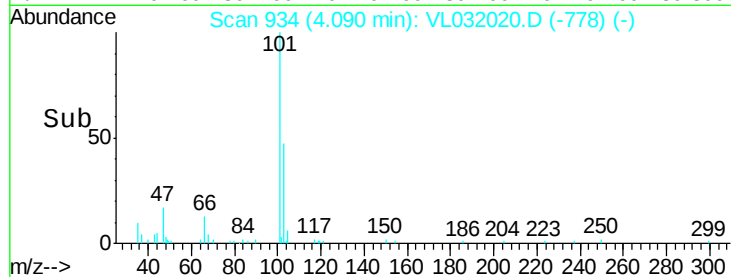
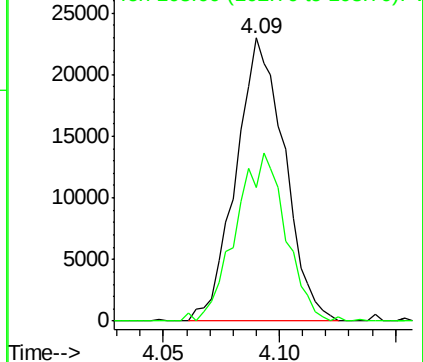
101 100

103 44.6 52.0 78.0#



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: 0.13 ppbv

RT: 4.65 min Scan# 1107

Delta R.T. 0.00 min

Lab File: VL032020.D

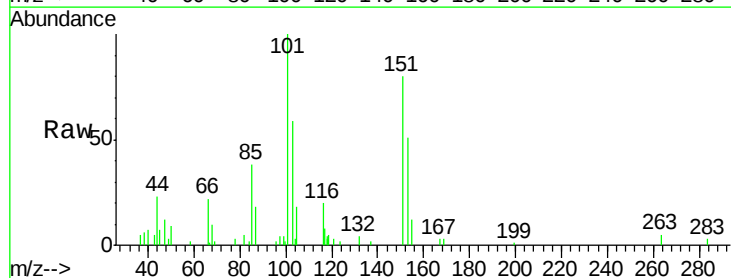
Acq: 31 May 2018 18:39

Tgt Ion:101 Resp: 19252

Ion Ratio Lower Upper

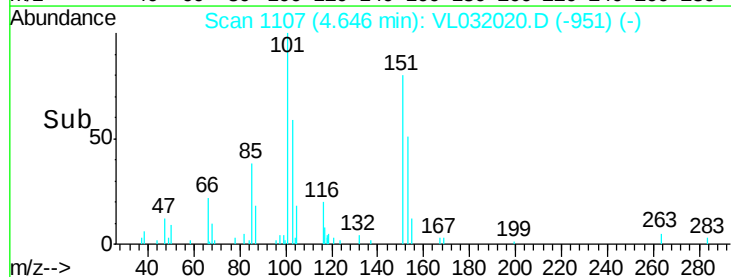
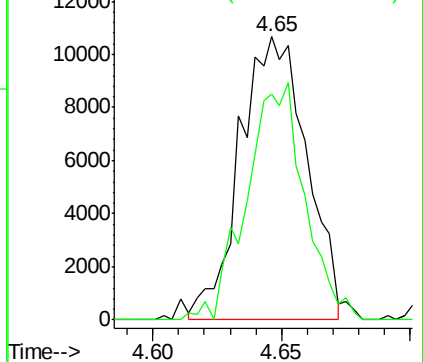
101 100

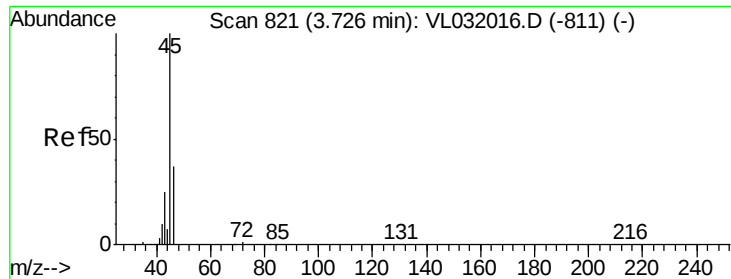
151 73.2 58.2 87.4



Abundance Ion 101.00 (100.70 to 101.70): V

Ion 151.00 (150.70 to 151.70): V

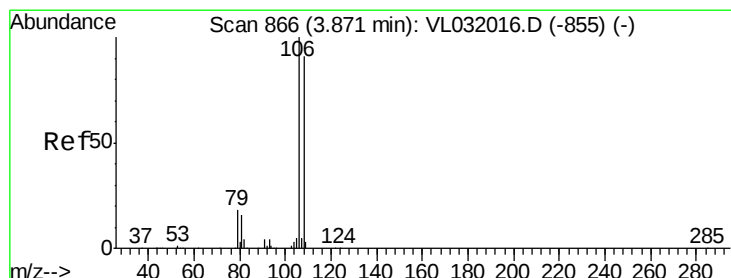
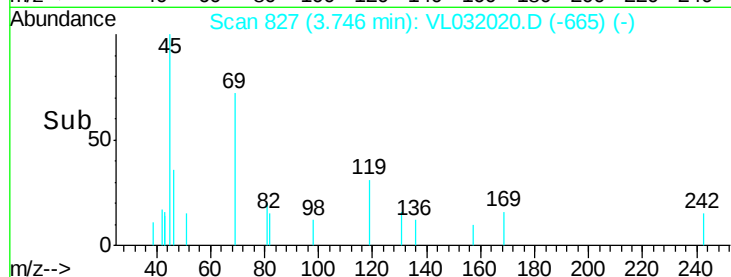
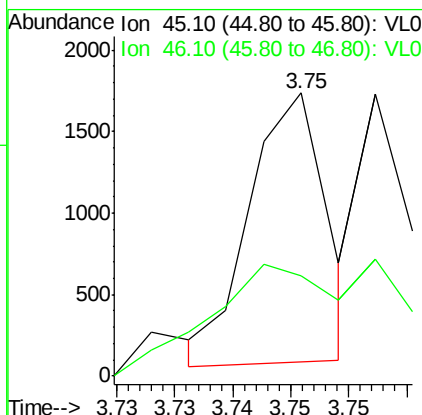
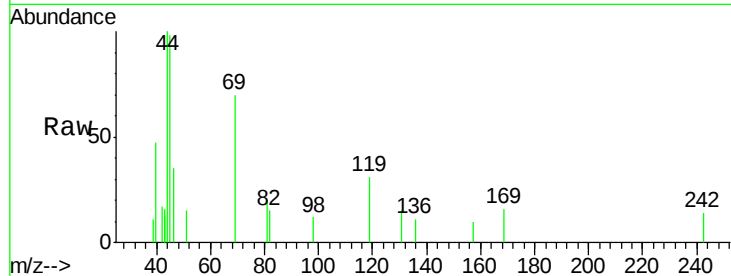




#13
Ethanol
Concen: 0.05 ppbv
RT: 3.75 min Scan# 827
Delta R.T. 0.02 min
Lab File: VL032020.D
Acq: 31 May 2018 18:39

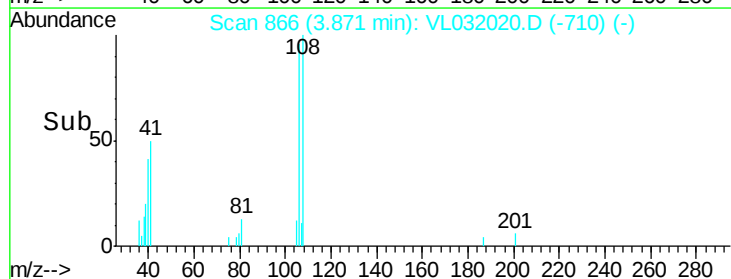
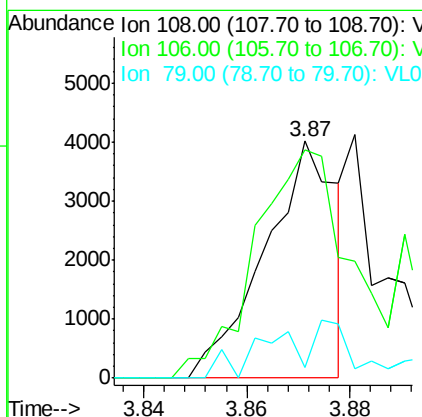
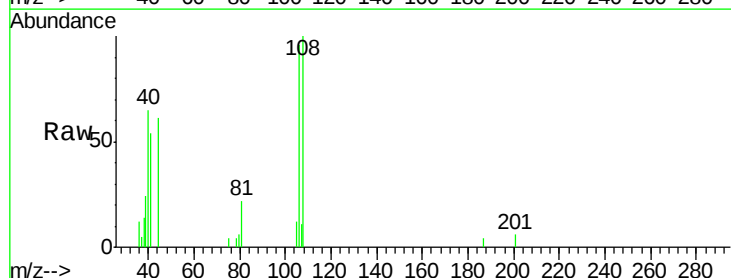
Instrument :
MSVOA_L
ClientSampleId :
VSTDIC0.1

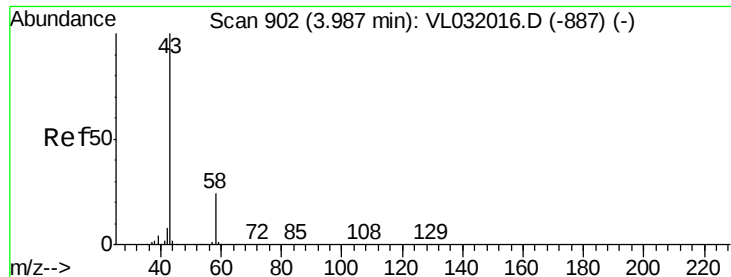
Tgt Ion: 45 Resp: 763
Ion Ratio Lower Upper
45 100
46 21.8 14.9 59.5



#14
Bromoethene
Concen: 0.07 ppbv
RT: 3.87 min Scan# 866
Delta R.T. 0.00 min
Lab File: VL032020.D
Acq: 31 May 2018 18:39

Tgt Ion: 108 Resp: 3846
Ion Ratio Lower Upper
108 100
106 156.1 85.1 127.7#
79 24.0 15.2 22.8#





#15

Acetone

Concen: 0.23 ppbv

RT: 4.00 min Scan# 907

Delta R.T. 0.02 min

Lab File: VL032020.D

Acq: 31 May 2018 18:39

Instrument :

MSVOA_L

ClientSampleId :

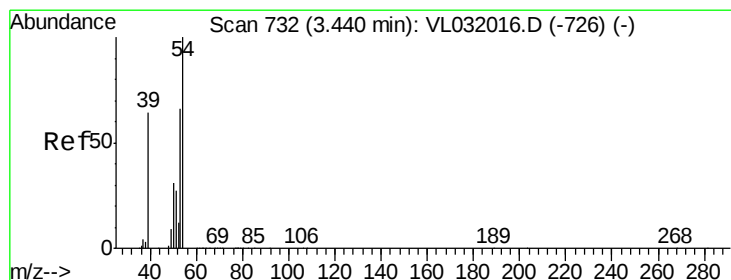
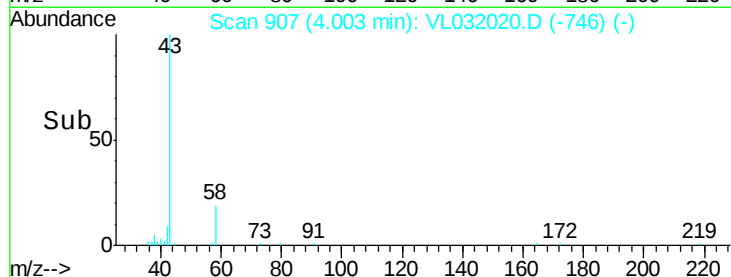
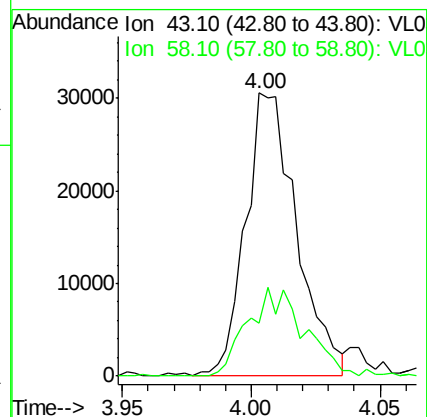
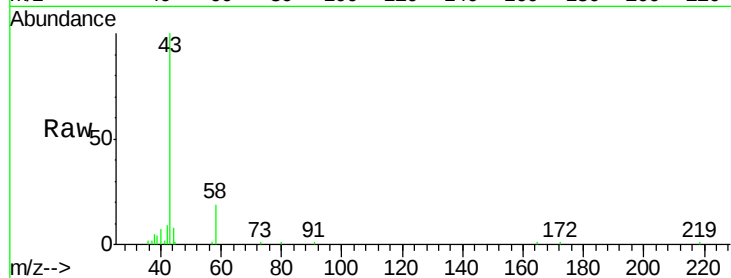
VSTDIC0.1

Tgt Ion: 43 Resp: 42374

Ion Ratio Lower Upper

43 100

58 35.1 20.7 31.1#



#16

1,3-Butadiene

Concen: 0.05 ppbv

RT: 3.44 min Scan# 731

Delta R.T. -0.00 min

Lab File: VL032020.D

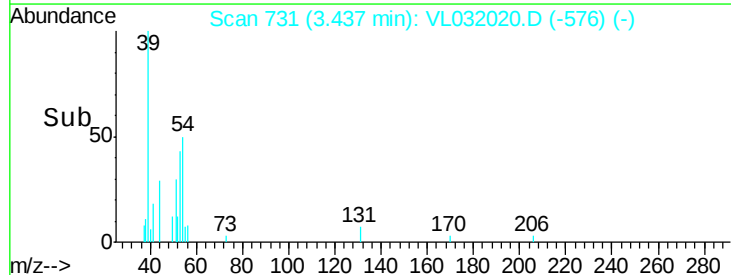
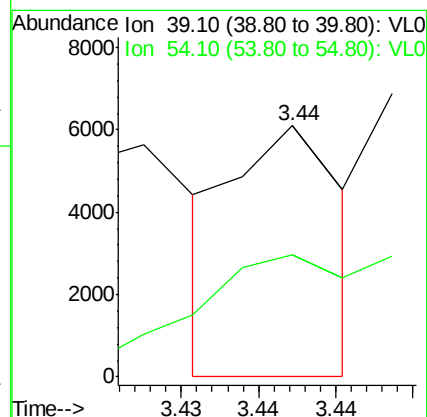
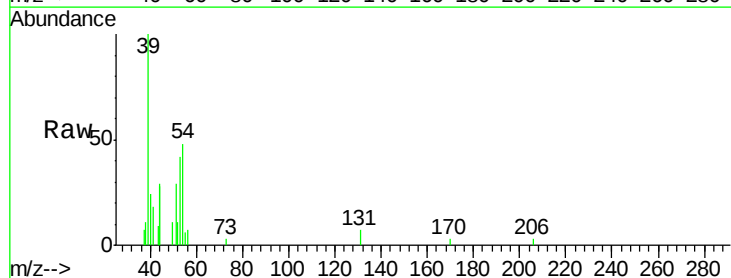
Acq: 31 May 2018 18:39

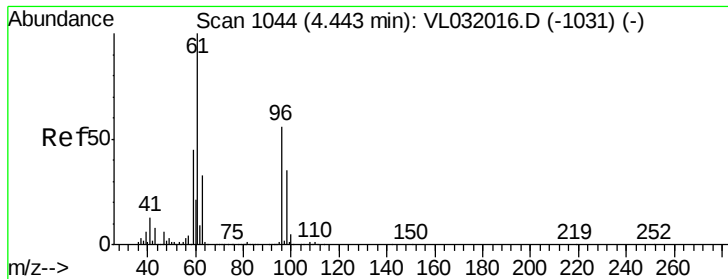
Tgt Ion: 39 Resp: 2997

Ion Ratio Lower Upper

39 100

54 0.0 65.7 98.5#

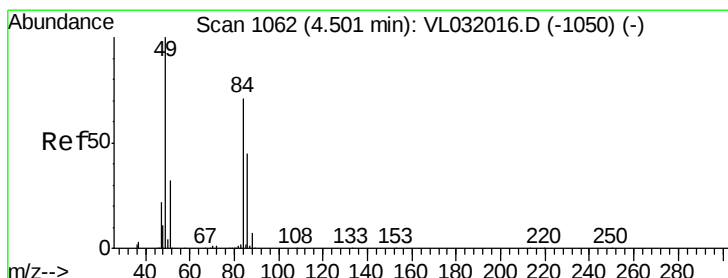
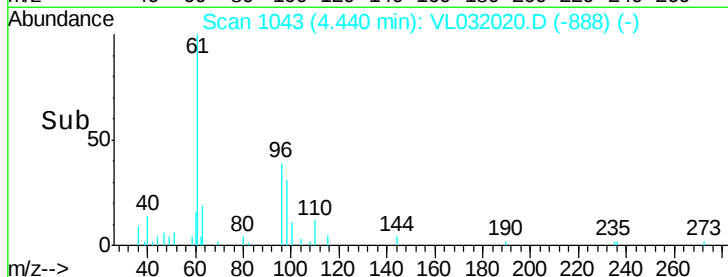
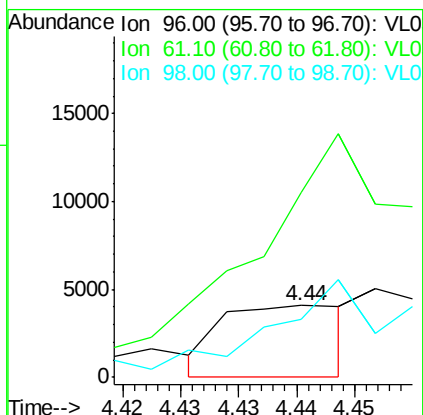
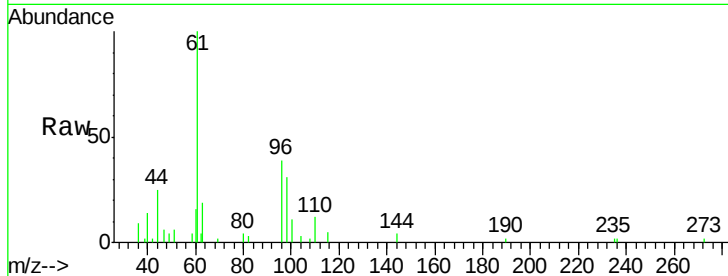




#18
 1,1-Dichloroethene
 Concen: 0.05 ppbv
 RT: 4.44 min Scan# 1043
 Delta R.T. -0.00 min
 Lab File: VL032020.D
 Acq: 31 May 2018 18:39

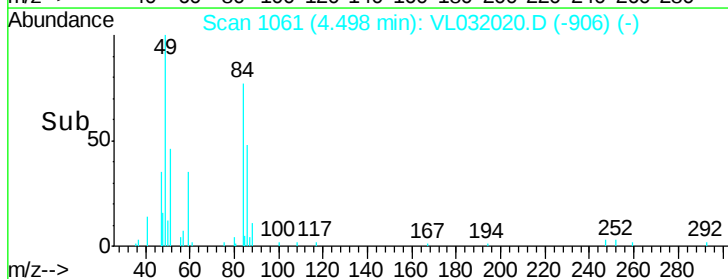
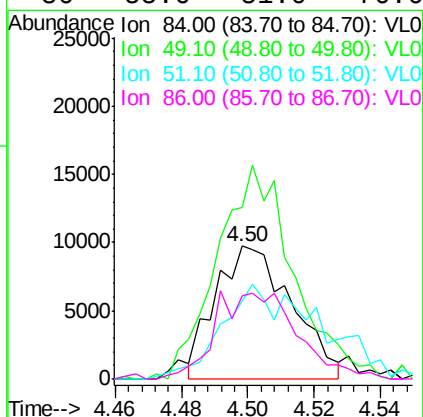
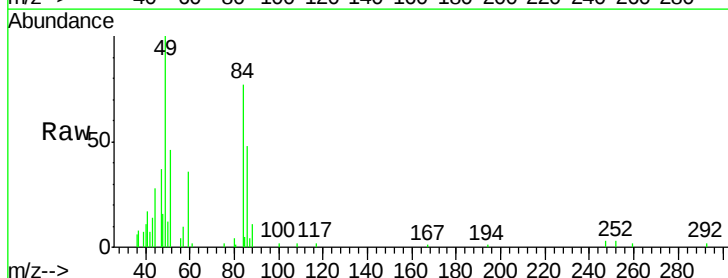
Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDIC0.1

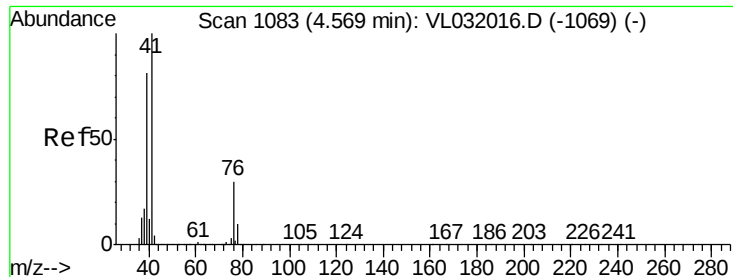
Tgt Ion: 96 Resp: 3027
 Ion Ratio Lower Upper
 96 100
 61 260.7 143.5 215.3#
 98 71.2 50.0 75.0



#20
 Methylene Chloride
 Concen: 0.25 ppbv
 RT: 4.50 min Scan# 1061
 Delta R.T. -0.00 min
 Lab File: VL032020.D
 Acq: 31 May 2018 18:39

Tgt Ion: 84 Resp: 15612
 Ion Ratio Lower Upper
 84 100
 49 110.0 113.0 169.4#
 51 52.3 36.4 54.6
 86 55.6 51.0 76.6





#21

Allyl Chloride

Concen: 0.04 ppbv

RT: 4.56 min Scan# 1081

Delta R.T. -0.01 min

Lab File: VL032020.D

Acq: 31 May 2018 18:39

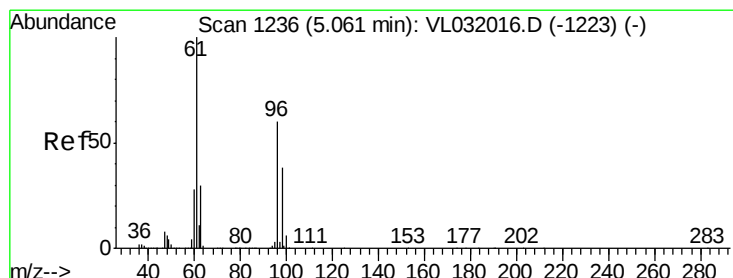
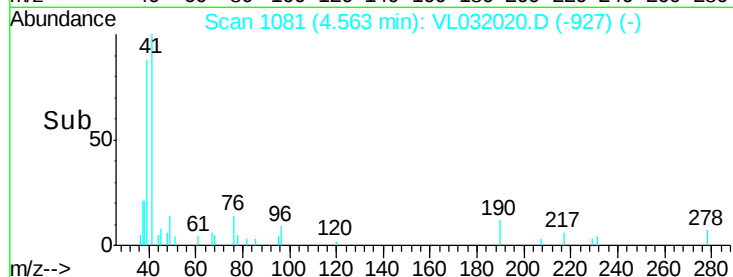
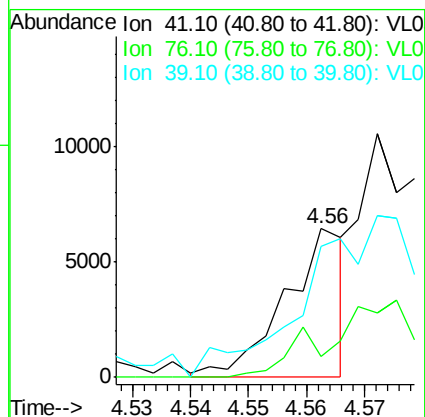
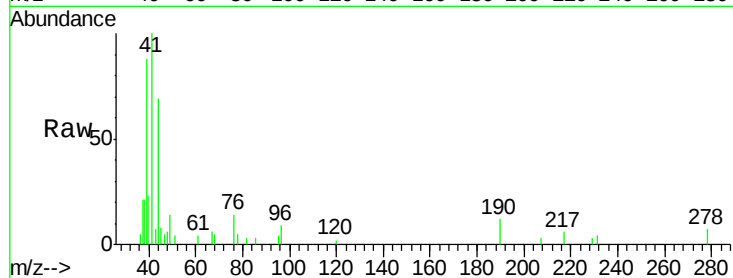
Instrument :

MSVOA_L

ClientSampleId :

VSTDIC0.1

Tgt Ion:	41	Resp:	4617
Ion	Ratio	Lower	Upper
41	100		
76	0.0	23.9	35.9#
39	0.0	65.9	98.9#



#22

trans-1,2-Dichloroethene

Concen: 0.06 ppbv

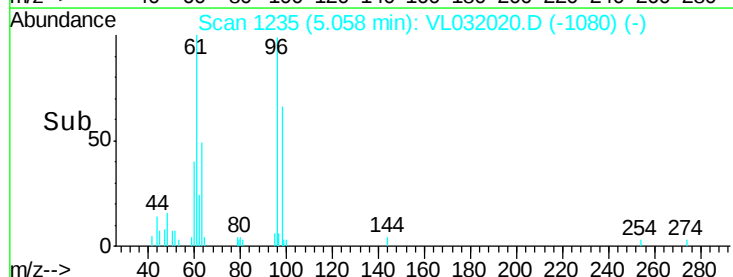
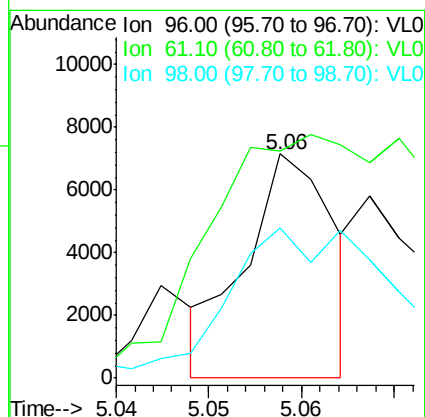
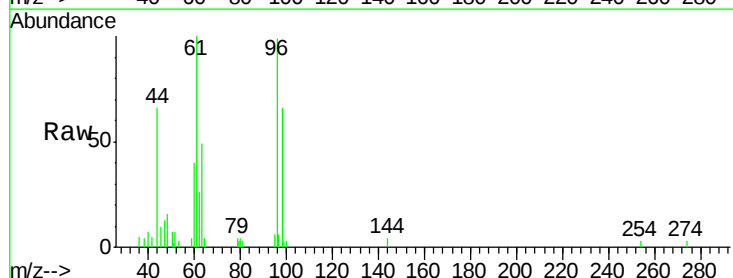
RT: 5.06 min Scan# 1235

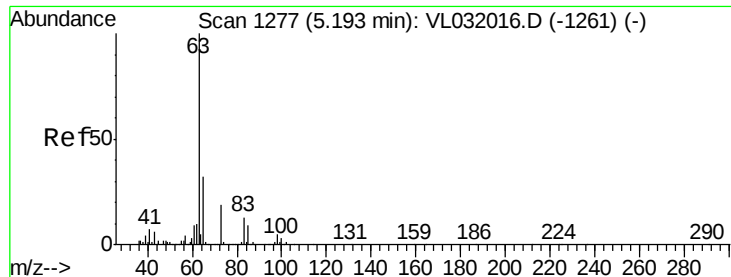
Delta R.T. -0.00 min

Lab File: VL032020.D

Acq: 31 May 2018 18:39

Tgt Ion:	96	Resp:	4706
Ion	Ratio	Lower	Upper
96	100		
61	69.8	133.3	199.9#
98	81.8	51.0	76.4#





#24

1,1-Dichloroethane

Concen: 0.09 ppbv

RT: 5.19 min Scan# 1275

Delta R.T. -0.01 min

Lab File: VL032020.D

Acq: 31 May 2018 18:39

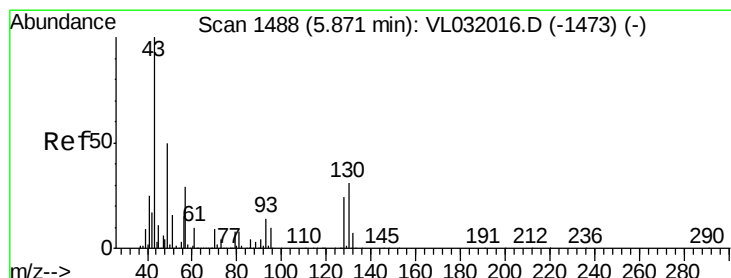
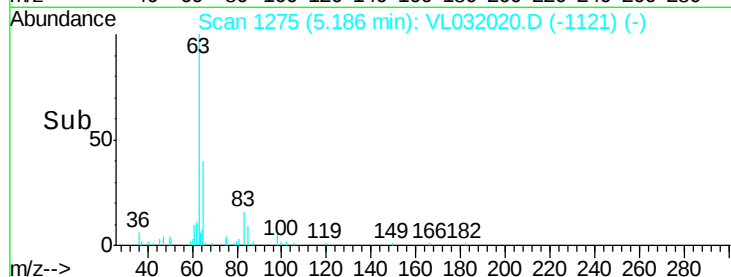
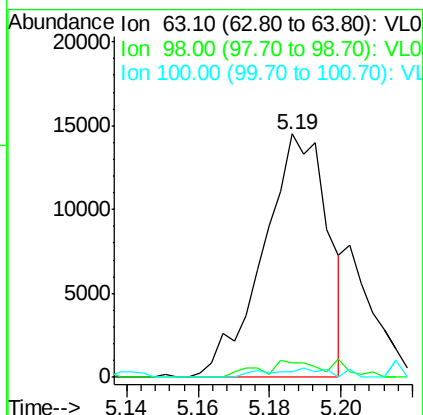
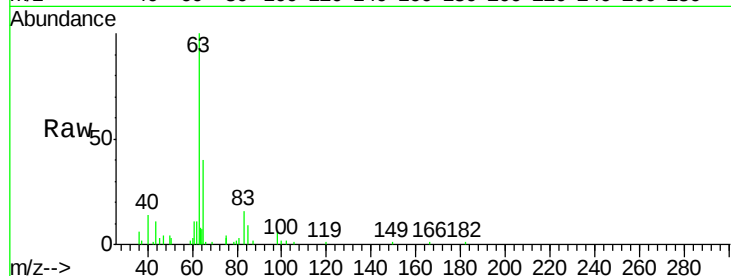
Instrument :

MSVOA_L

ClientSampleId :

VSTDIC0.1

Tgt Ion:	63	Resp:	18167
Ion	Ratio	Lower	Upper
63	100		
98	5.7	2.4	7.1
100	2.0	1.5	4.5



#25

Ethyl Acetate

Concen: 0.09 ppbv

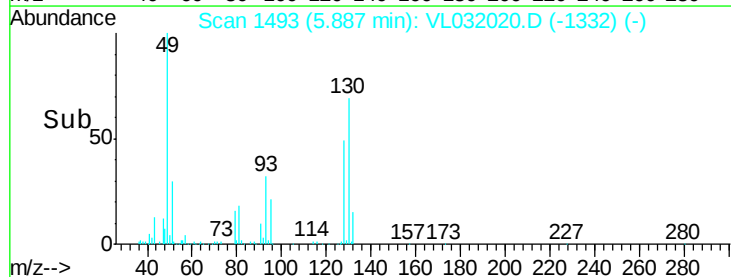
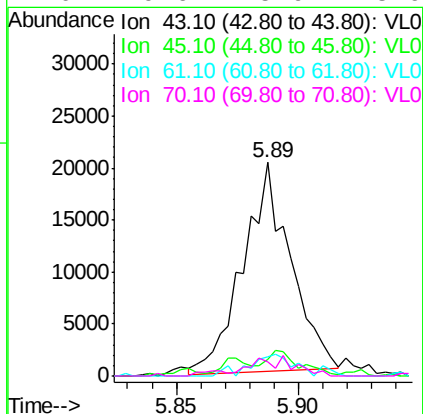
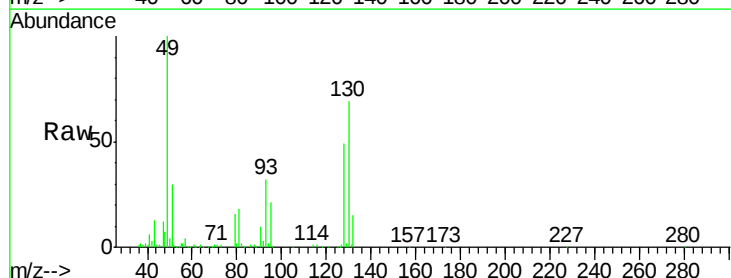
RT: 5.89 min Scan# 1493

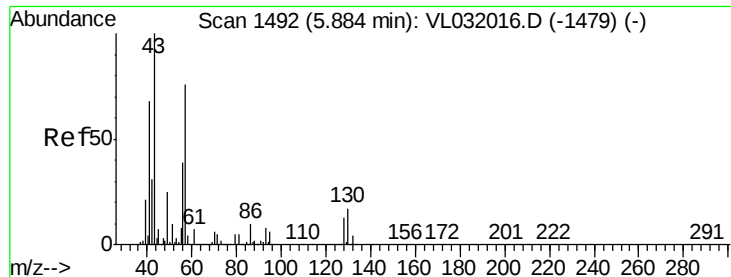
Delta R.T. 0.02 min

Lab File: VL032020.D

Acq: 31 May 2018 18:39

Tgt Ion:	43	Resp:	27219
Ion	Ratio	Lower	Upper
43	100		
45	17.0	7.8	11.6#
61	10.7	7.4	11.2
70	9.6	5.9	8.9#





#26

Hexane

Concen: 0.08 ppbv

RT: 5.88 min Scan# 1492

Delta R.T. 0.00 min

Lab File: VL032020.D

Acq: 31 May 2018 18:39

Instrument :

MSVOA_L

ClientSampleId :

VSTDIC0.1

Tgt Ion: 57 Resp: 11286

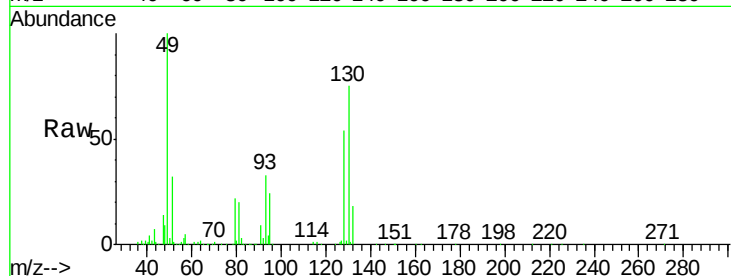
Ion Ratio Lower Upper

57 100

41 118.9 71.4 107.2#

43 268.9 168.6 252.8#

56 78.4 42.4 63.6#

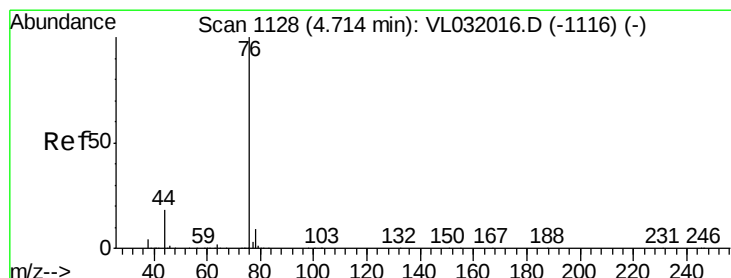
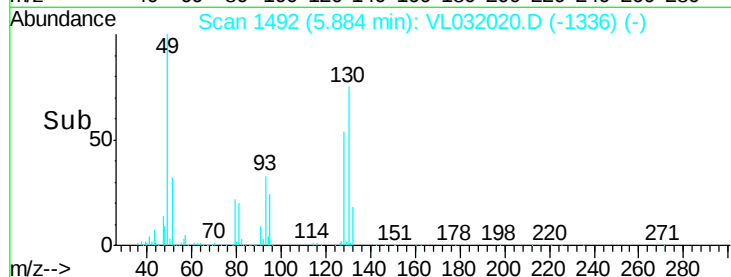
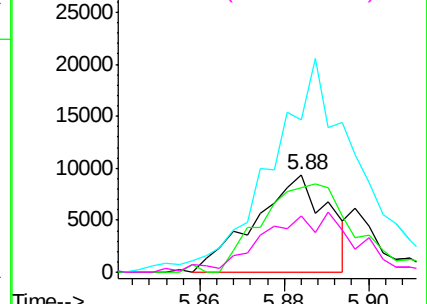


Abundance Ion 57.10 (56.80 to 57.80): VL0

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: 0.10 ppbv

RT: 4.72 min Scan# 1129

Delta R.T. 0.00 min

Lab File: VL032020.D

Acq: 31 May 2018 18:39

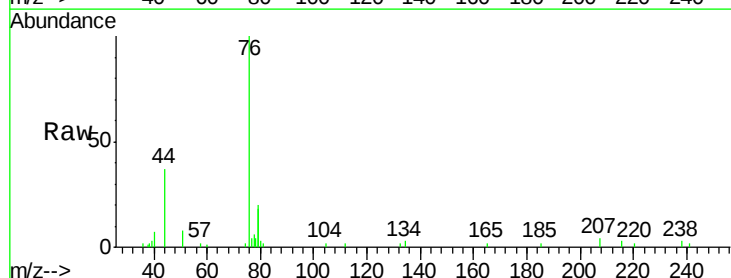
Tgt Ion: 76 Resp: 17045

Ion Ratio Lower Upper

76 100

44 33.5 14.9 22.3#

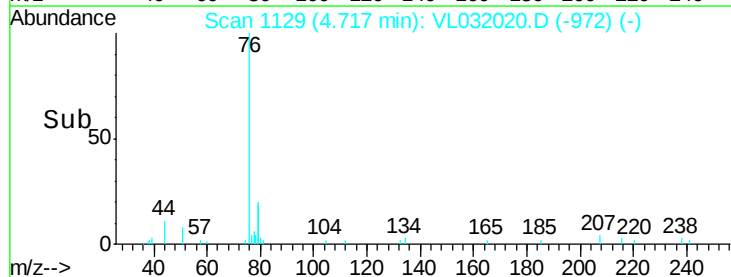
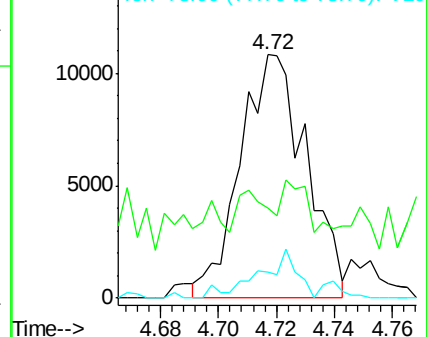
78 13.9 7.6 11.4#

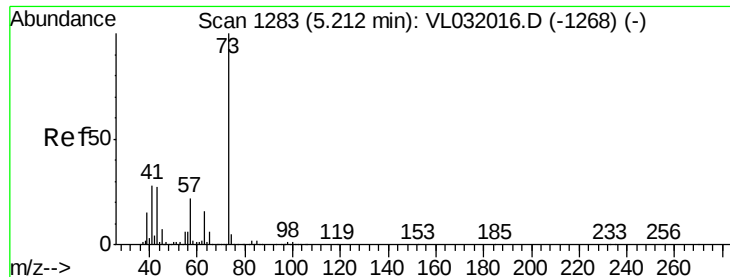


Abundance Ion 76.00 (75.70 to 76.70): VL0

Ion 44.10 (43.80 to 44.80): VL0

Ion 78.00 (77.70 to 78.70): VL0





#28

Methyl tert-Butyl Ether

Concen: 0.04 ppbv

RT: 5.23 min Scan# 1290

Delta R.T. 0.02 min

Lab File: VL032020.D

Acq: 31 May 2018 18:39

Instrument :

MSVOA_L

ClientSampleId :

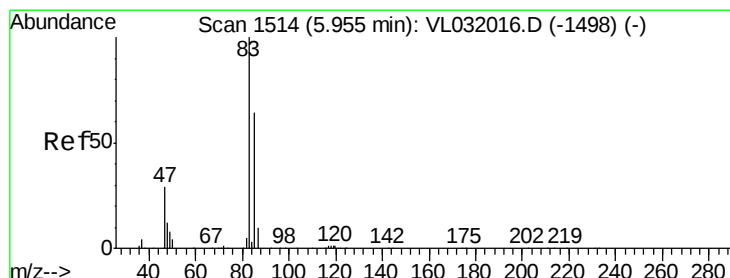
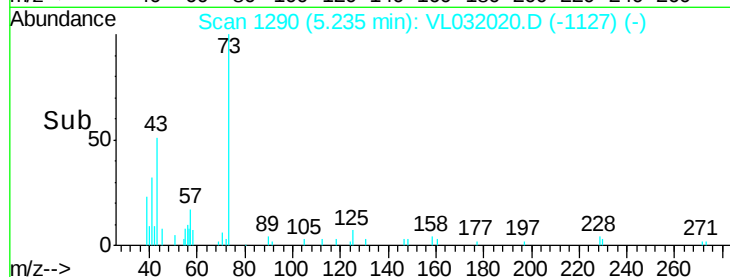
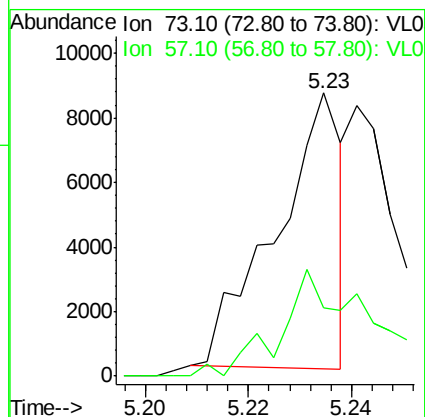
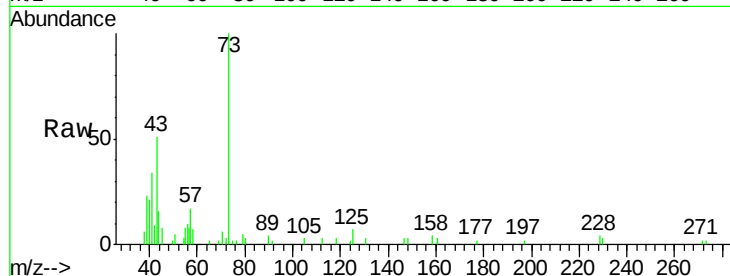
VSTDIC0.1

Tgt Ion: 73 Resp: 7595

Ion Ratio Lower Upper

73 100

57 50.8 17.8 26.8#



#29

Chloroform

Concen: 0.07 ppbv

RT: 5.95 min Scan# 1512

Delta R.T. -0.01 min

Lab File: VL032020.D

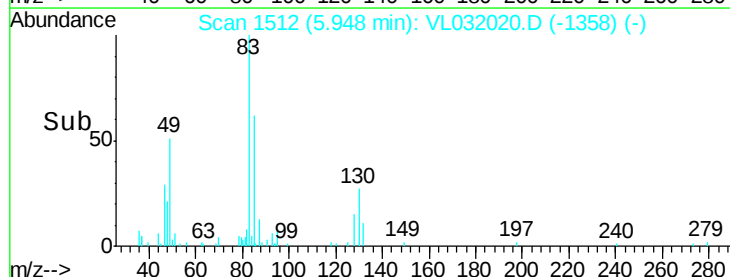
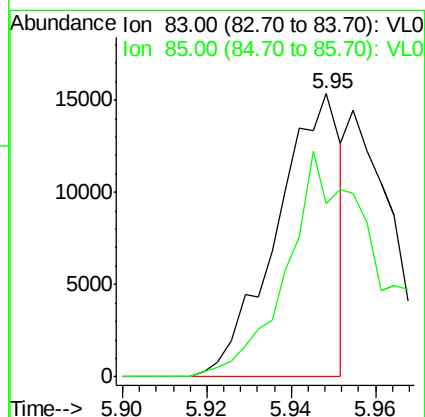
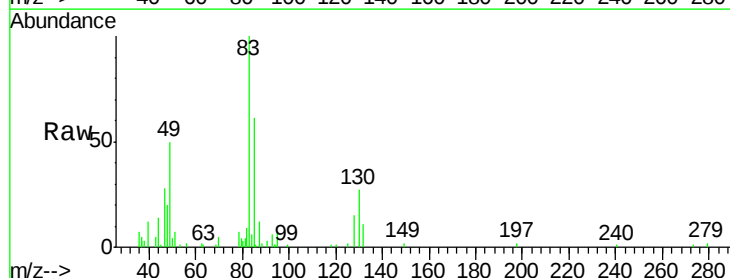
Acq: 31 May 2018 18:39

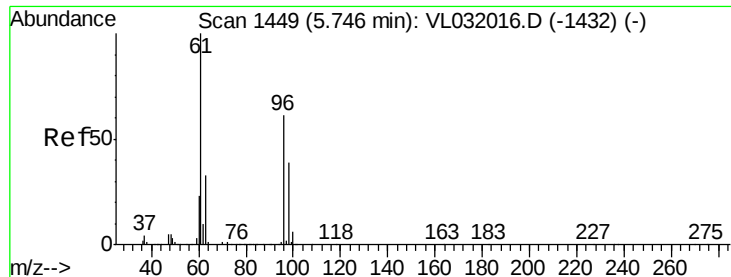
Tgt Ion: 83 Resp: 16121

Ion Ratio Lower Upper

83 100

85 61.1 50.9 76.3





#31

cis-1,2-Dichloroethene

Concen: 0.04 ppbv

RT: 5.74 min Scan# 1446

Delta R.T. -0.01 min

Lab File: VL032020.D

Acq: 31 May 2018 18:39

Instrument :

MSVOA_L

ClientSampleId :

VSTDIC0.1

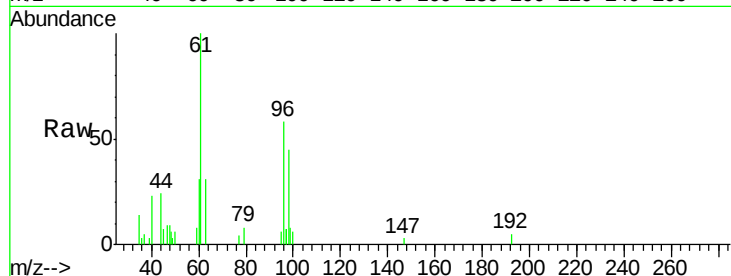
Tgt Ion: 61 Resp: 5180

Ion Ratio Lower Upper

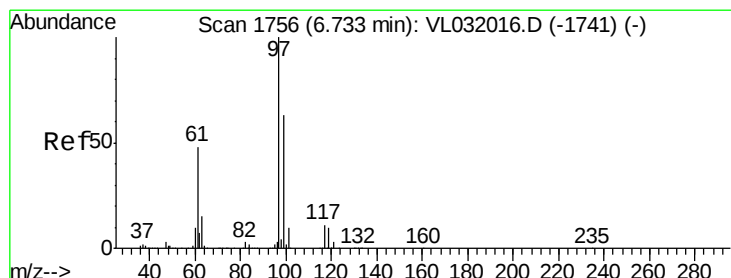
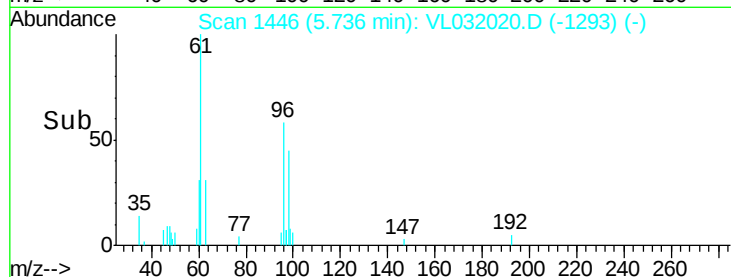
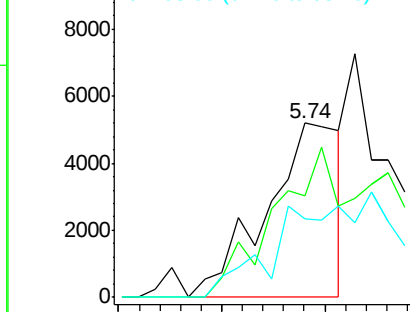
61 100

96 58.2 49.0 73.6

98 44.9 31.2 46.8



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: 0.05 ppbv

RT: 6.73 min Scan# 1754

Delta R.T. -0.01 min

Lab File: VL032020.D

Acq: 31 May 2018 18:39

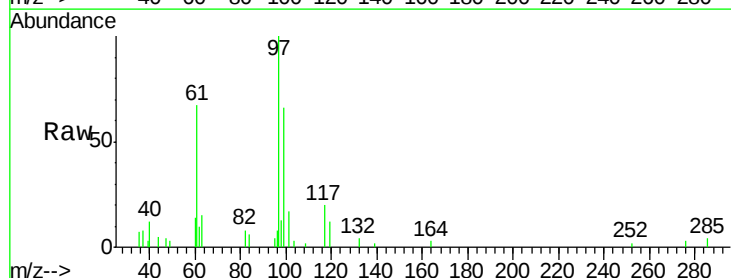
Tgt Ion: 97 Resp: 9996

Ion Ratio Lower Upper

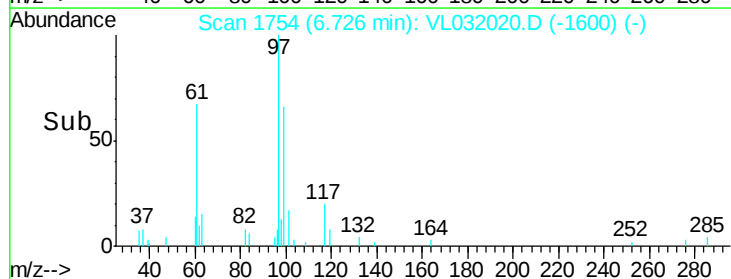
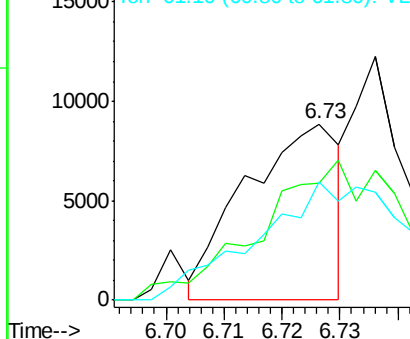
97 100

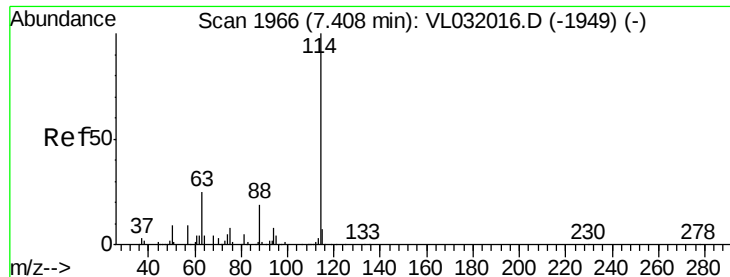
99 129.6 51.5 77.3#

61 112.2 39.4 59.2#



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

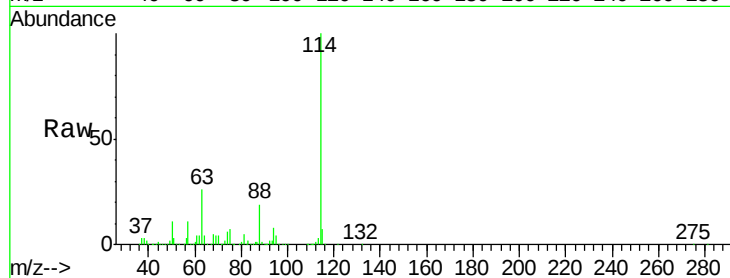




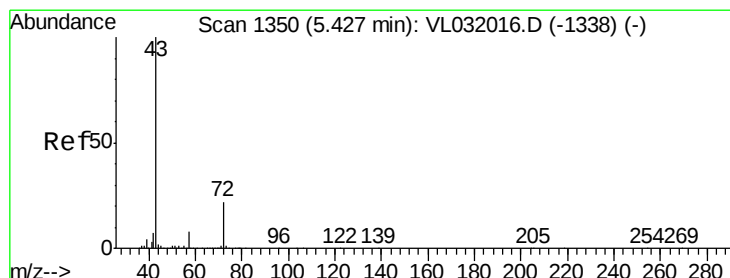
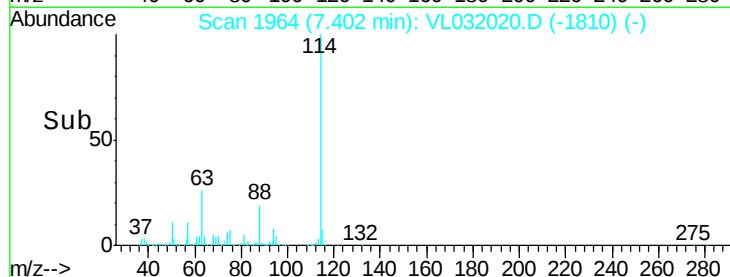
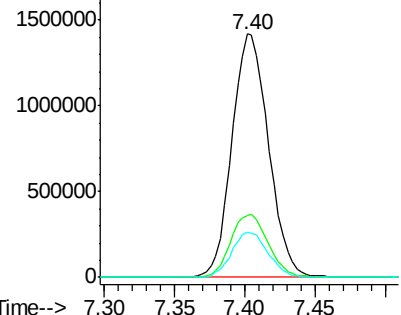
#33
 1,4-Difluorobenzene
 Concen: 10.00 ppbv
 RT: 7.40 min Scan# 1964
 Delta R.T. -0.01 min
 Lab File: VL032020.D
 Acq: 31 May 2018 18:39

Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDIC0.1

Tgt Ion:114 Resp: 2575982
 Ion Ratio Lower Upper
 114 100
 63 26.8 21.1 31.7
 88 18.6 14.8 22.2

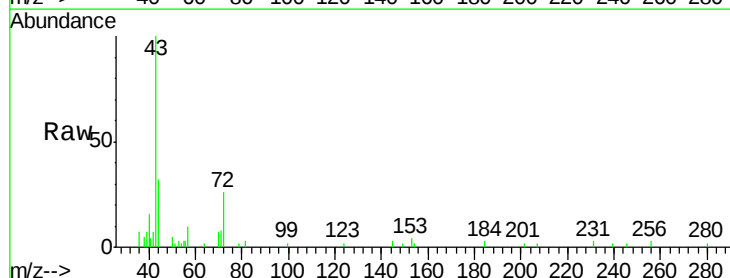


Abundance Ion 114.10 (113.80 to 114.80): V
 Ion 63.10 (62.80 to 63.80): VL0
 Ion 88.10 (87.80 to 88.80): VL0

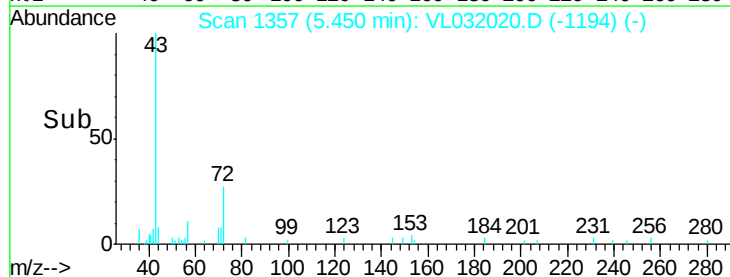
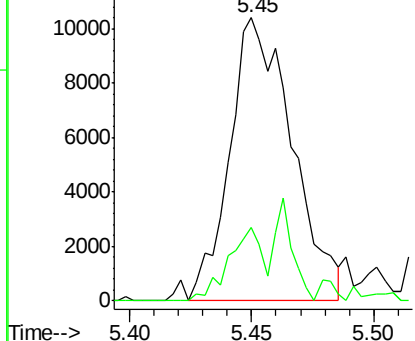


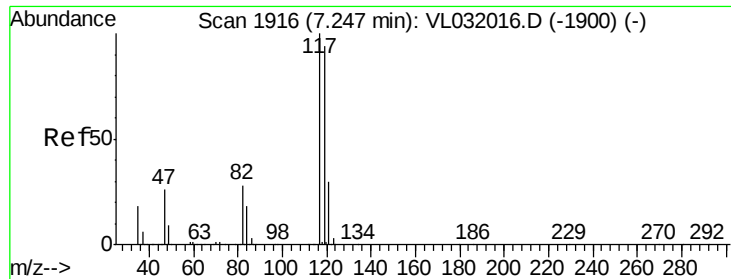
#34
 2-Butanone
 Concen: 0.09 ppbv
 RT: 5.45 min Scan# 1357
 Delta R.T. 0.02 min
 Lab File: VL032020.D
 Acq: 31 May 2018 18:39

Tgt Ion: 43 Resp: 18488
 Ion Ratio Lower Upper
 43 100
 72 27.9 18.6 27.8#



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





#35

Carbon Tetrachloride

Concen: 0.09 ppbv

RT: 7.25 min Scan# 1916

Delta R.T. 0.00 min

Lab File: VL032020.D

Acq: 31 May 2018 18:39

Instrument :

MSVOA_L

ClientSampleId :

VSTDIC0.1

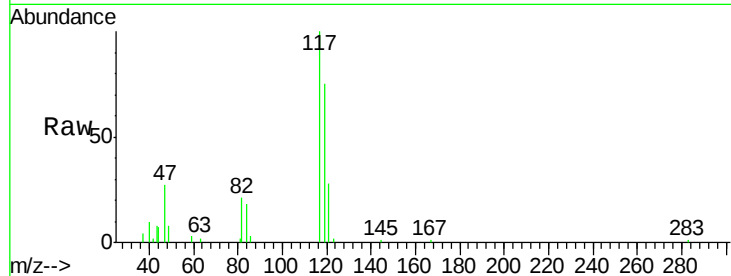
Tgt Ion:117 Resp: 18887

Ion Ratio Lower Upper

117 100

119 68.6 75.3 112.9#

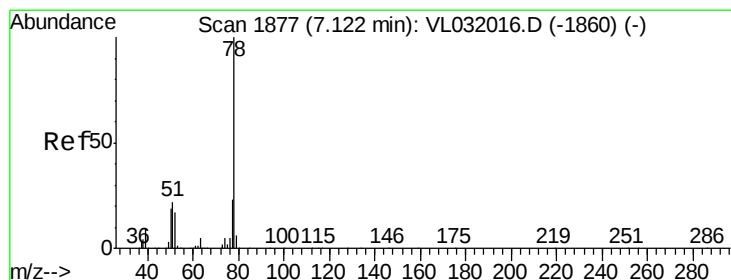
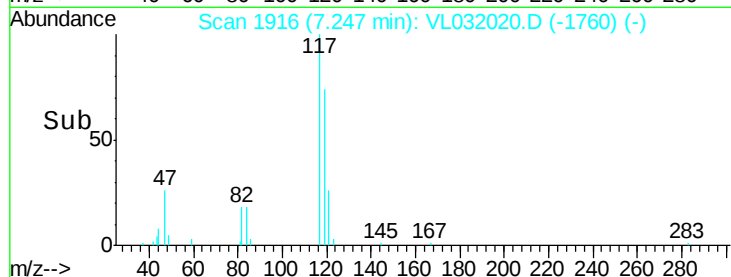
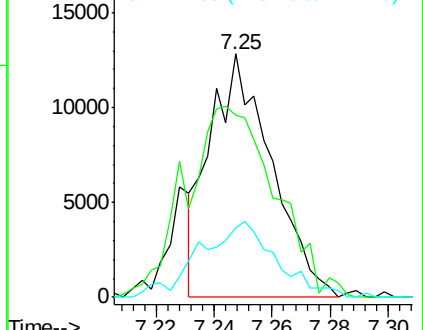
121 25.8 24.1 36.1



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: 0.05 ppbv

RT: 7.12 min Scan# 1877

Delta R.T. 0.00 min

Lab File: VL032020.D

Acq: 31 May 2018 18:39

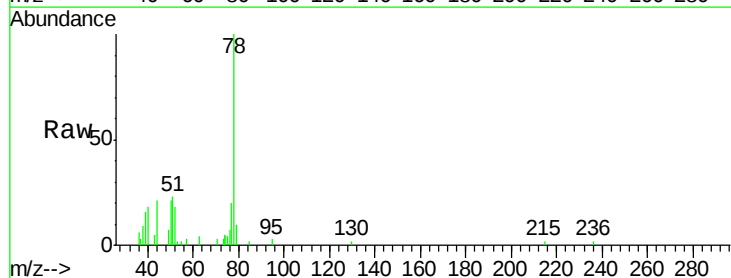
Tgt Ion: 78 Resp: 11339

Ion Ratio Lower Upper

78 100

77 20.1 18.1 27.1

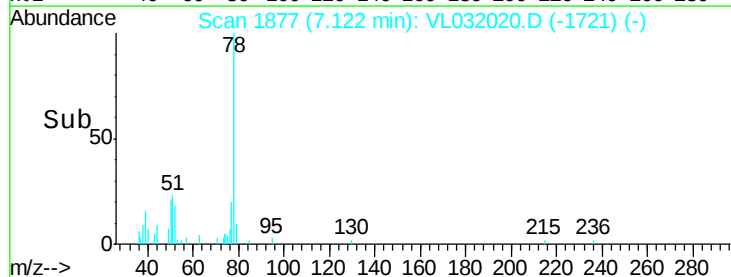
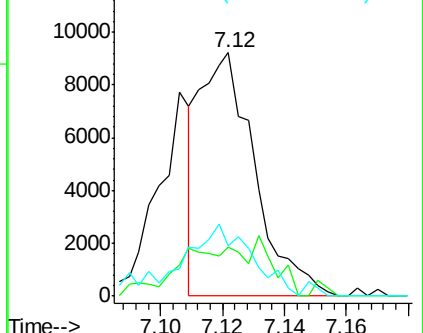
50 20.6 14.9 22.3

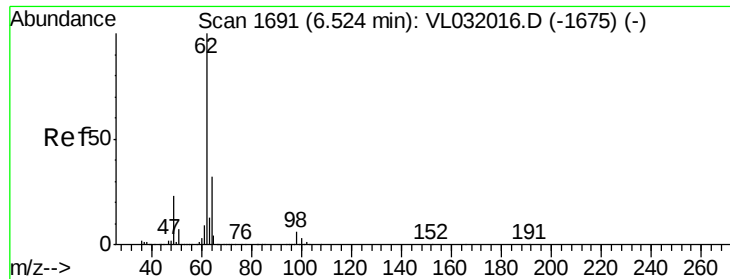


Abundance Ion 78.10 (77.80 to 78.80): VL0

Ion 77.10 (76.80 to 77.80): VL0

Ion 50.10 (49.80 to 50.80): VL0

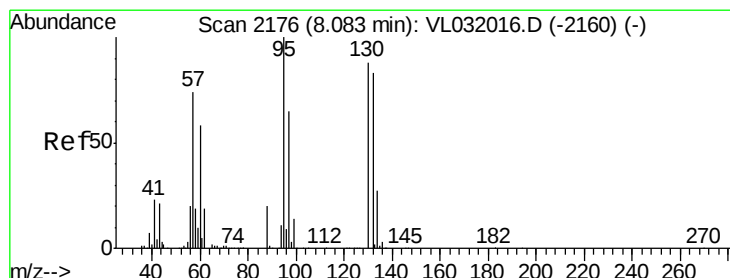
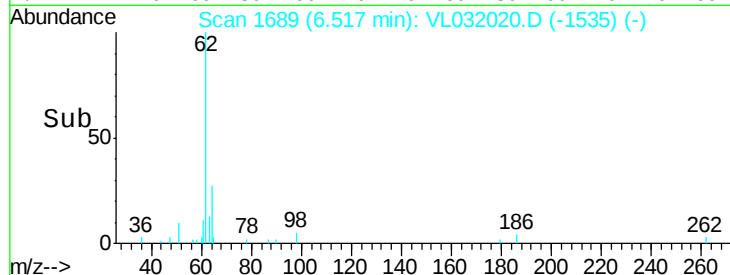
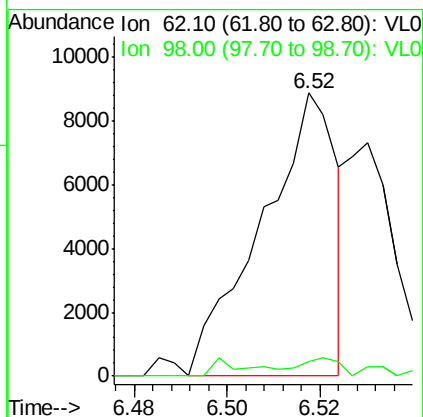
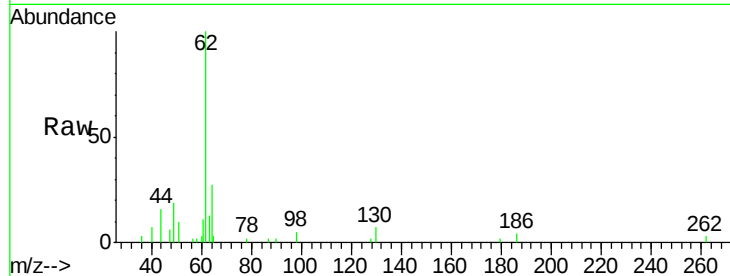




#37
 1,2-Dichloroethane
 Concen: 0.06 ppbv
 RT: 6.52 min Scan# 1689
 Delta R.T. -0.01 min
 Lab File: VL032020.D
 Acq: 31 May 2018 18:39

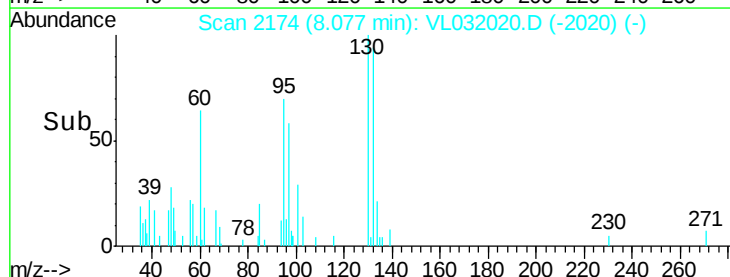
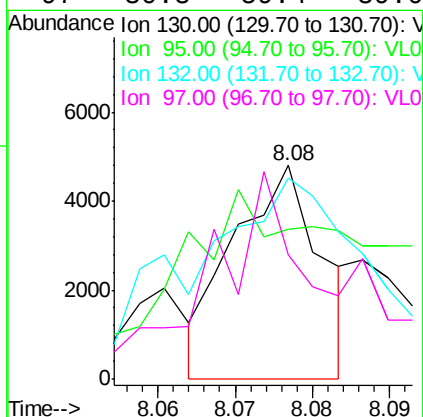
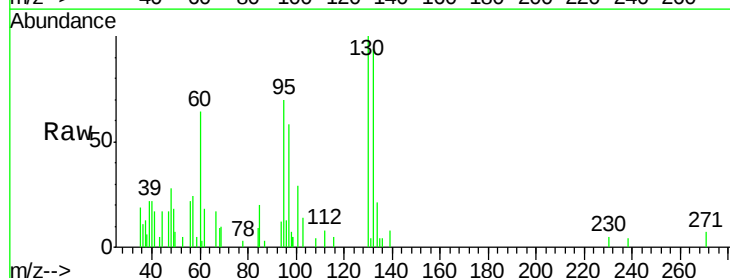
Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDIC0.1

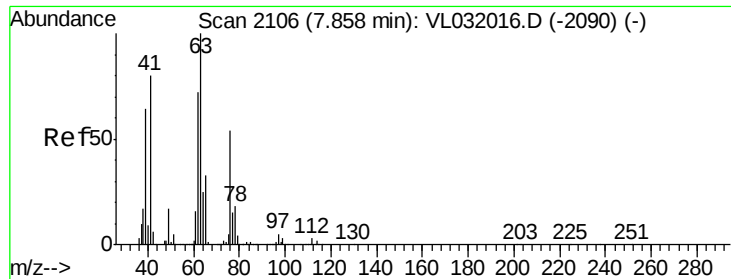
Tgt Ion: 62 Resp: 9937
 Ion Ratio Lower Upper
 62 100
 98 8.5 4.2 6.4#



#38
 Trichloroethene
 Concen: 0.04 ppbv
 RT: 8.08 min Scan# 2174
 Delta R.T. -0.01 min
 Lab File: VL032020.D
 Acq: 31 May 2018 18:39

Tgt Ion: 130 Resp: 3797
 Ion Ratio Lower Upper
 130 100
 95 2.0 90.7 136.1#
 132 63.5 75.6 113.4#
 97 30.8 59.4 89.0#





#39

1,2-Dichloropropane

Concen: 8.08 ppbv

RT: 7.40 min Scan# 1965

Delta R.T. -0.45 min

Lab File: VL032020.D

Acq: 31 May 2018 18:39

Instrument :

MSVOA_L

ClientSampleId :

VSTDIC0.1

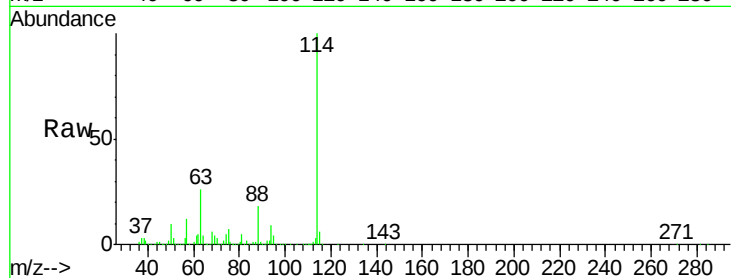
Tgt Ion: 63 Resp: 684649

Ion Ratio Lower Upper

63 100

41 0.1 64.0 96.0#

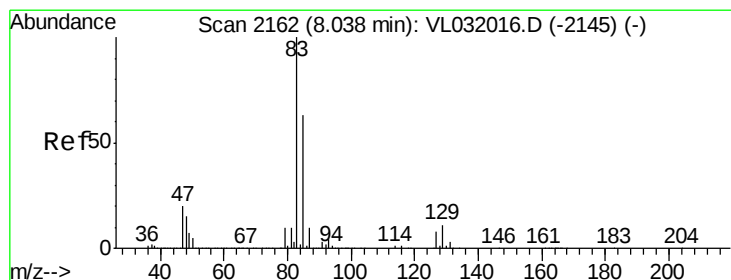
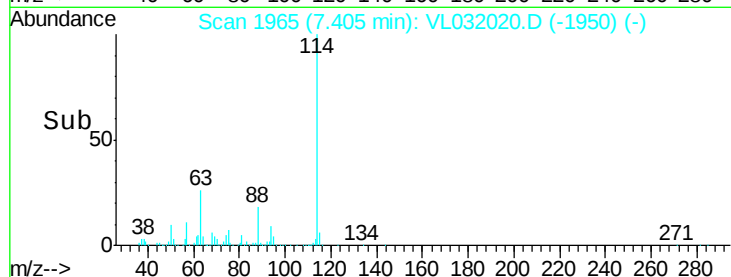
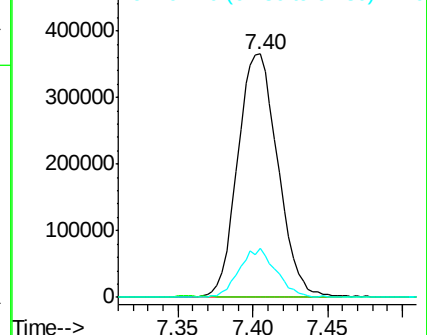
62 19.9 57.6 86.4#



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: 0.09 ppbv

RT: 8.04 min Scan# 2161

Delta R.T. -0.00 min

Lab File: VL032020.D

Acq: 31 May 2018 18:39

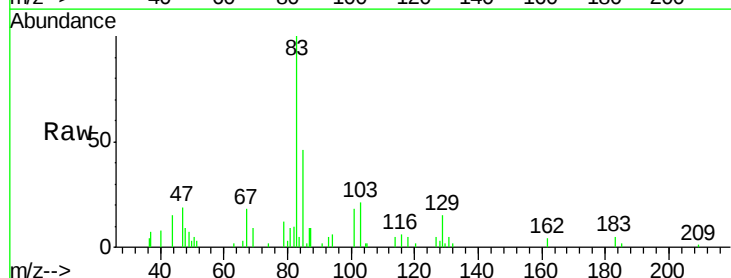
Tgt Ion: 83 Resp: 16871

Ion Ratio Lower Upper

83 100

85 30.1 50.3 75.5#

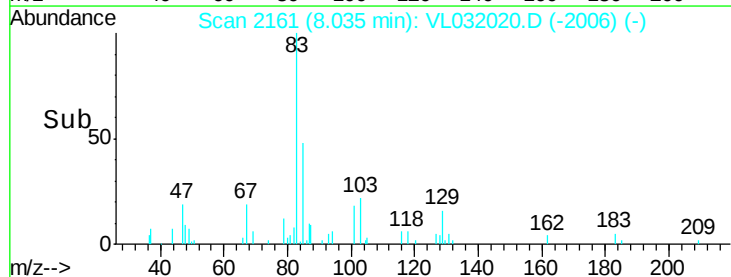
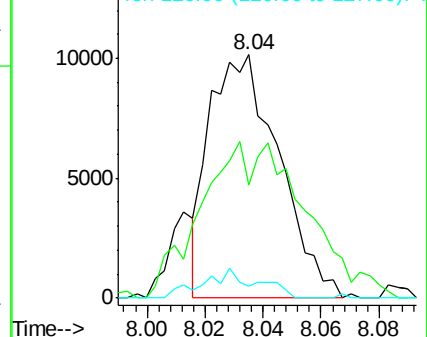
127 3.5 6.6 9.8#

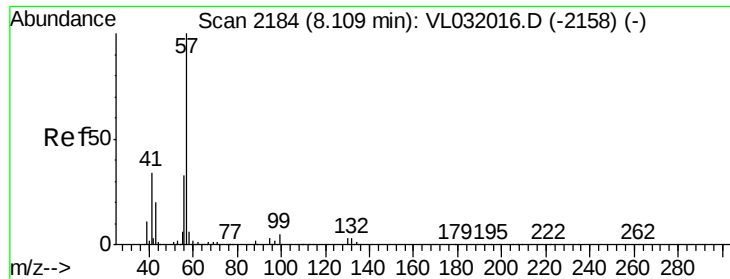


Abundance Ion 83.00 (82.70 to 83.70): VL0

Ion 85.00 (84.70 to 85.70): VL0

Ion 126.90 (126.60 to 127.60): V





#44

2,2,4-Trimethylpentane

Concen: 0.06 ppbv

RT: 8.10 min Scan# 2182

Delta R.T. -0.01 min

Lab File: VL032020.D

Acq: 31 May 2018 18:39

Instrument :

MSVOA_L

ClientSampleId :

VSTDIC0.1

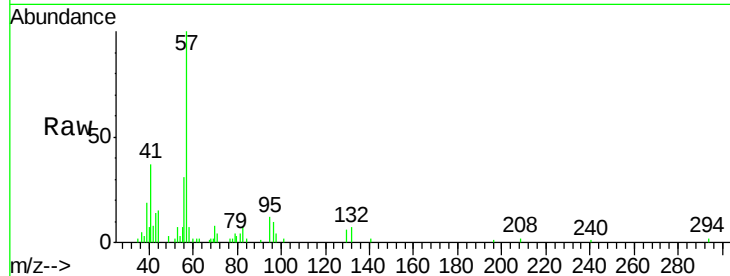
Tgt Ion: 57 Resp: 21885

Ion Ratio Lower Upper

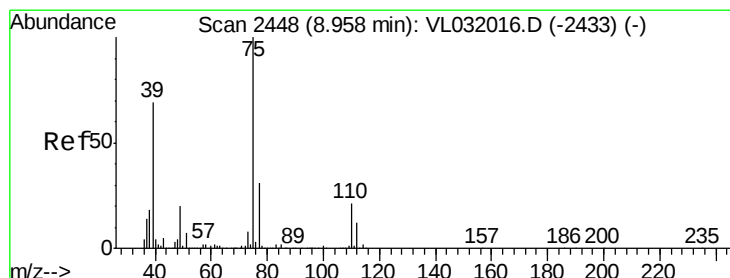
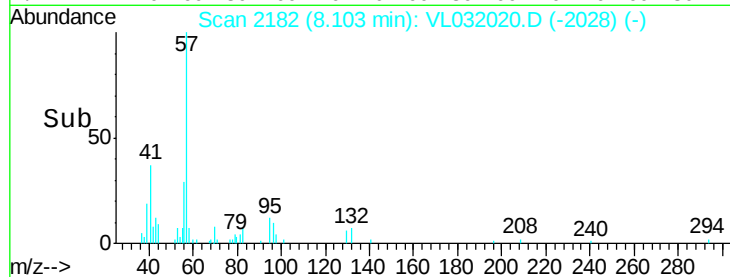
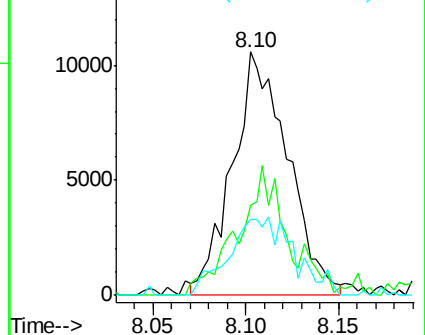
57 100

41 50.6 26.6 40.0#

56 37.8 24.9 37.3#



Abundance Ion 57.10 (56.80 to 57.80): VL0
Ion 41.10 (40.80 to 41.80): VL0
Ion 56.10 (55.80 to 56.80): VL0



#46

cis-1,3-Dichloropropene

Concen: 0.03 ppbv

RT: 8.95 min Scan# 2446

Delta R.T. -0.01 min

Lab File: VL032020.D

Acq: 31 May 2018 18:39

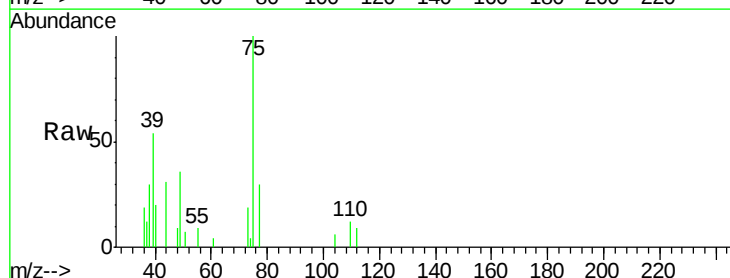
Tgt Ion: 75 Resp: 4541

Ion Ratio Lower Upper

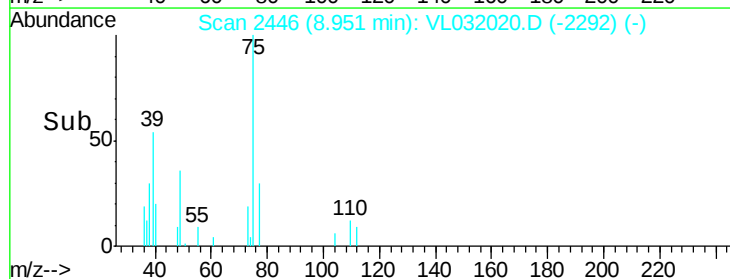
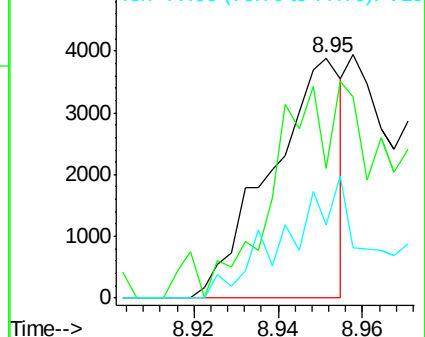
75 100

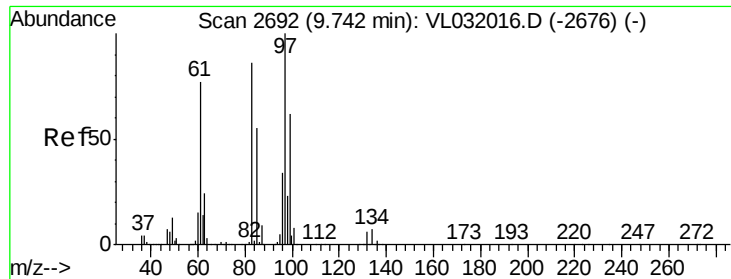
39 34.6 55.0 82.6#

77 30.4 25.0 37.6



Abundance Ion 75.00 (74.70 to 75.70): VL0
Ion 39.00 (38.70 to 39.70): VL0
Ion 77.00 (76.70 to 77.70): VL0





#47

1,1,2-Trichloroethane

Concen: 0.06 ppbv

RT: 9.74 min Scan# 2690

Delta R.T. -0.01 min

Lab File: VL032020.D

Acq: 31 May 2018 18:39

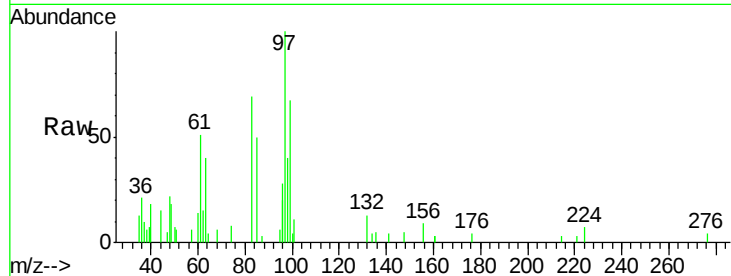
Instrument :

MSVOA_L

ClientSampleId :

VSTDIC0.1

Tgt Ion:	97	Resp:	6136
Ion	Ratio	Lower	Upper
97	100		
83	63.8	69.1	103.7#
85	10.3	44.5	66.7#
99	70.6	49.3	73.9

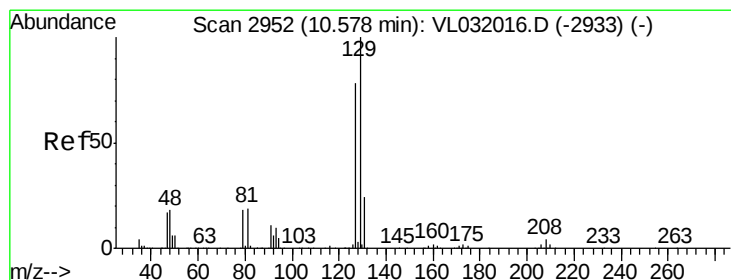
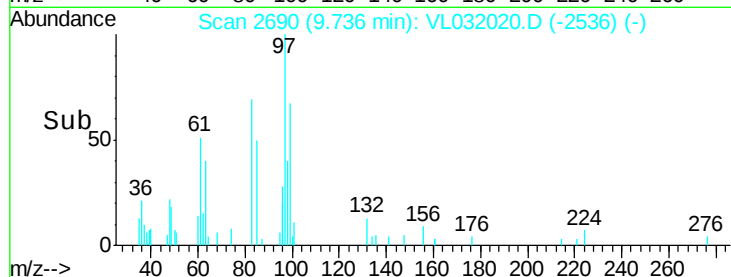
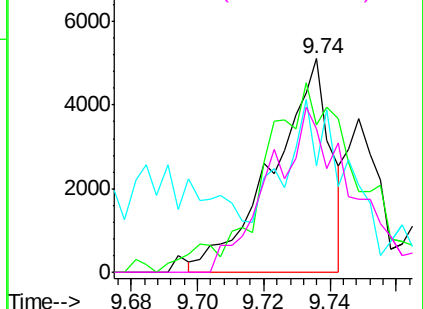


Abundance Ion 97.00 (96.70 to 97.70): VL0

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: 0.08 ppbv

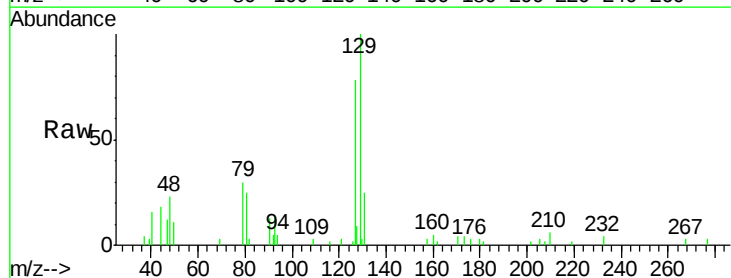
RT: 10.57 min Scan# 2950

Delta R.T. -0.01 min

Lab File: VL032020.D

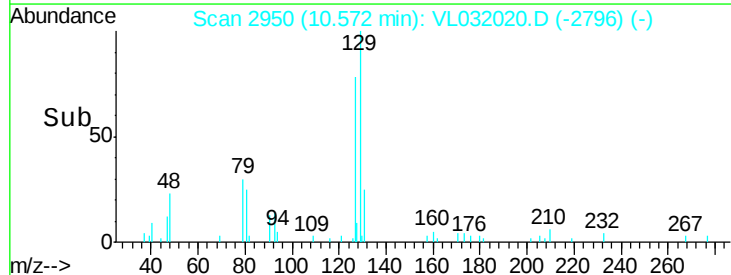
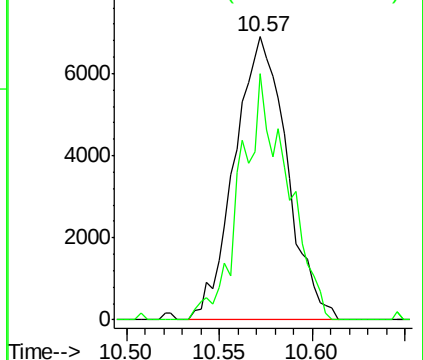
Acq: 31 May 2018 18:39

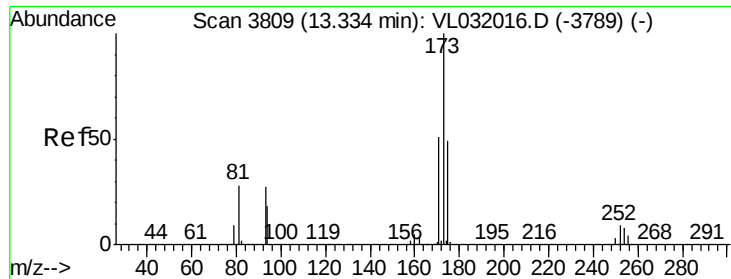
Tgt Ion:	129	Resp:	13600
Ion	Ratio	Lower	Upper
129	100		
127	77.8	39.3	117.9



Abundance Ion 129.00 (128.70 to 129.70): V

Ion 127.00 (126.70 to 127.70): V





#49

Bromoform

Concen: 0.03 ppbv

RT: 13.32 min Scan# 3804

Delta R.T. -0.02 min

Lab File: VL032020.D

Acq: 31 May 2018 18:39

Instrument :

MSVOA_L

ClientSampleId :

VSTDIC0.1

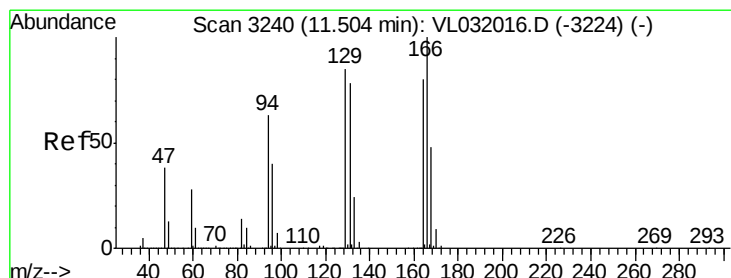
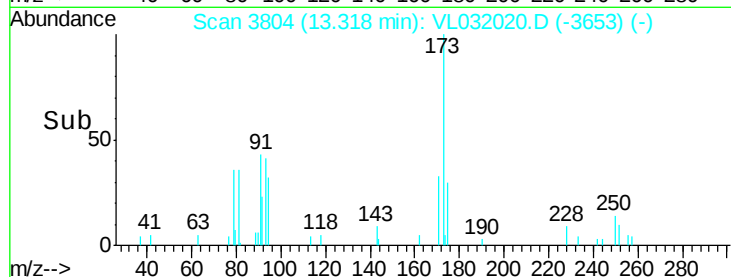
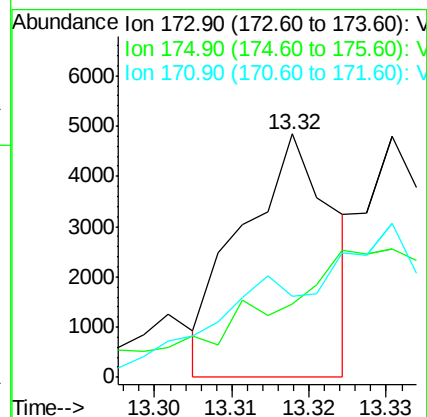
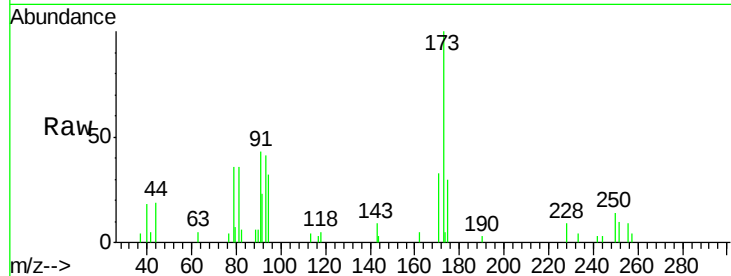
Tgt Ion:173 Resp: 3952

Ion Ratio Lower Upper

173 100

175 0.0 39.8 59.8#

171 0.0 41.7 62.5#



#52

Tetrachloroethene

Concen: 0.05 ppbv

RT: 11.50 min Scan# 3238

Delta R.T. -0.01 min

Lab File: VL032020.D

Acq: 31 May 2018 18:39

Tgt Ion:164 Resp: 4585

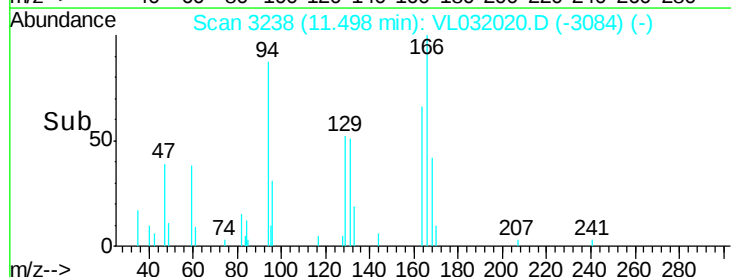
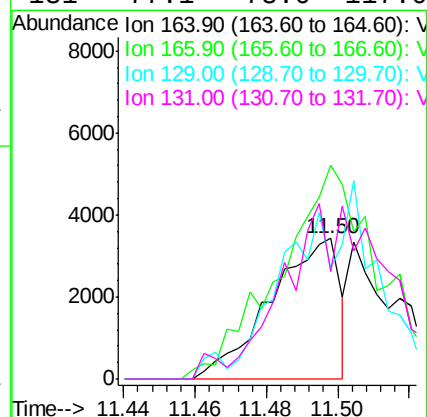
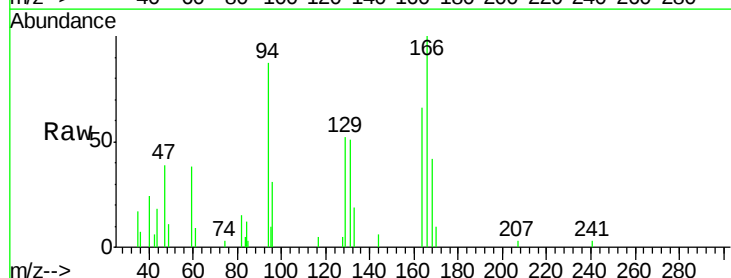
Ion Ratio Lower Upper

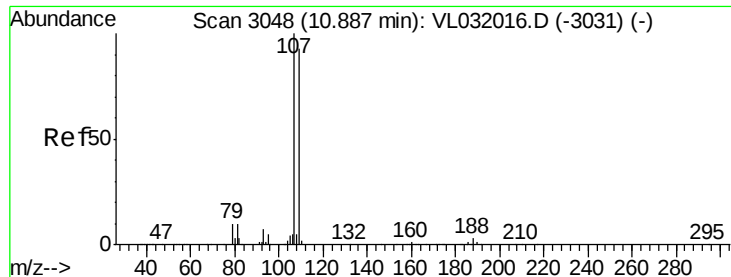
164 100

166 146.1 100.2 150.2

129 79.7 85.4 128.0#

131 77.1 78.0 117.0#

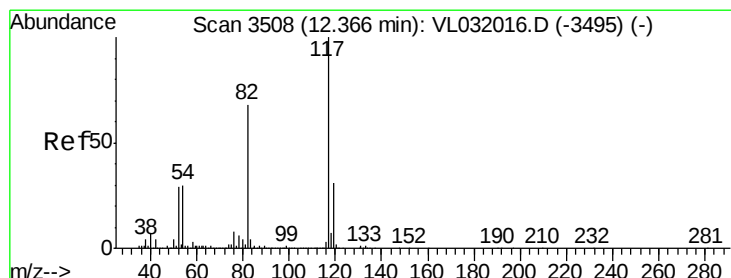
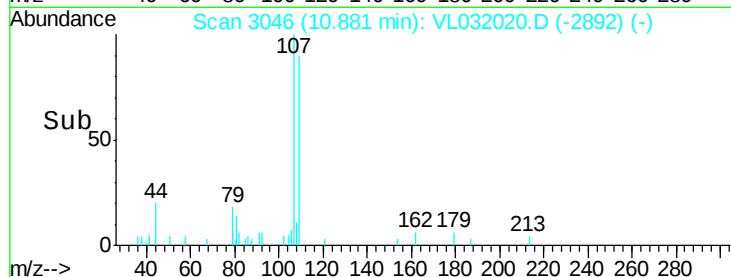
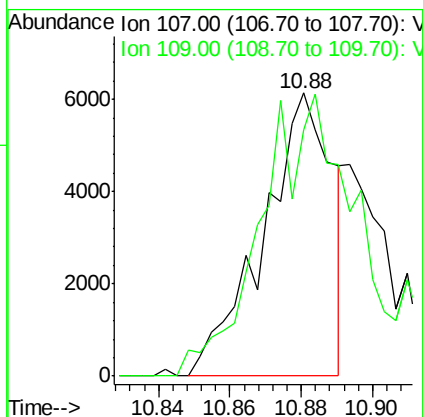
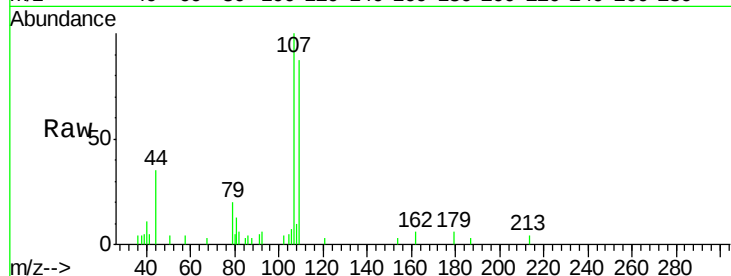




#54
 1,2-Dibromoethane
 Concen: 0.05 ppbv
 RT: 10.88 min Scan# 3046
 Delta R.T. -0.01 min
 Lab File: VL032020.D
 Acq: 31 May 2018 18:39

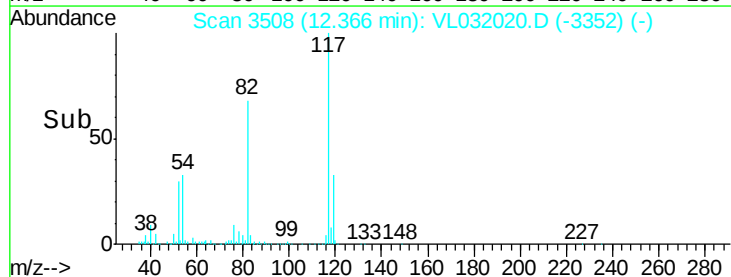
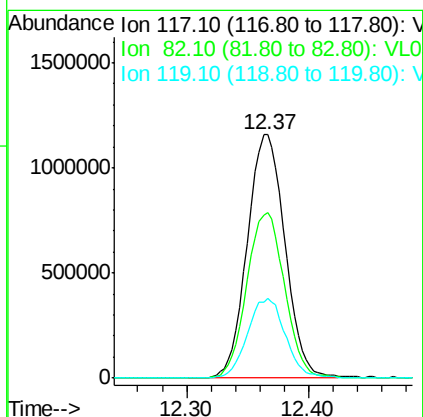
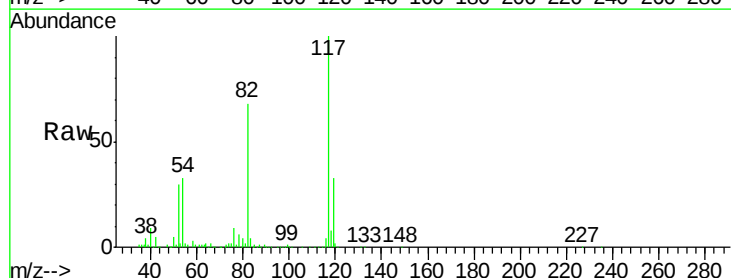
Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDIC0.1

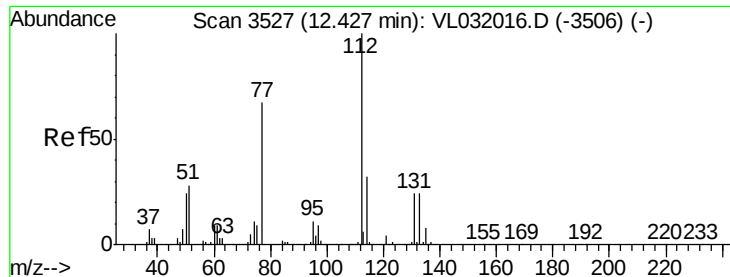
Tgt Ion:107 Resp: 8190
 Ion Ratio Lower Upper
 107 100
 109 77.9 74.6 111.8



#55
 Chlorobenzene-d5
 Concen: 10.00 ppbv
 RT: 12.37 min Scan# 3508
 Delta R.T. 0.00 min
 Lab File: VL032020.D
 Acq: 31 May 2018 18:39

Tgt Ion:117 Resp: 2471913
 Ion Ratio Lower Upper
 117 100
 82 68.9 52.7 79.1
 119 32.9 25.5 38.3

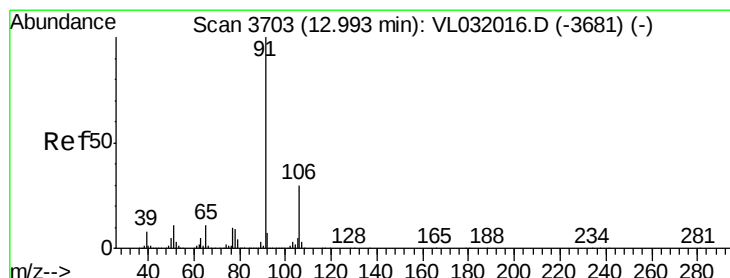
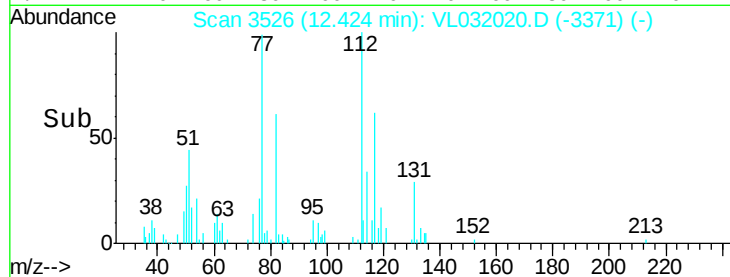
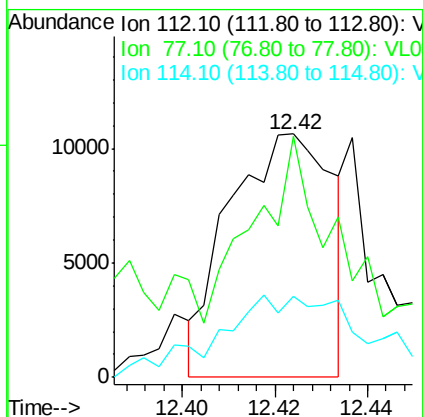
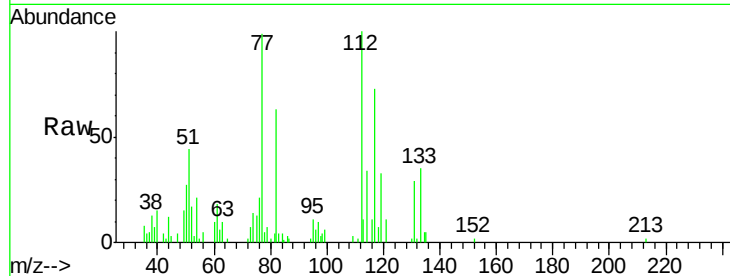




#57
Chlorobenzene
Concen: 0.08 ppbv
RT: 12.42 min Scan# 3526
Delta R.T. -0.00 min
Lab File: VL032020.D
Acq: 31 May 2018 18:39

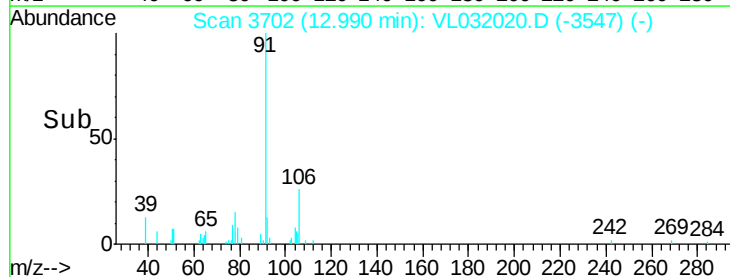
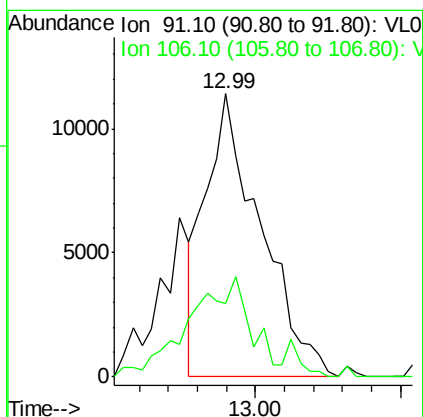
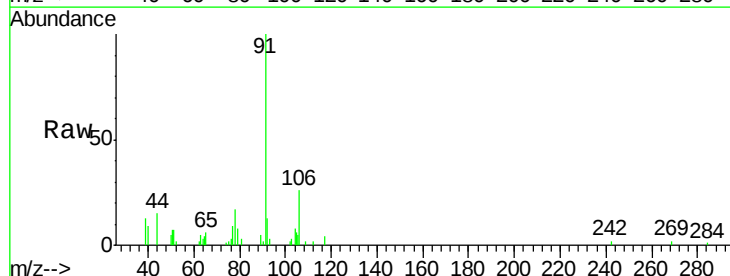
Instrument :
MSVOA_L
ClientSampleId :
VSTDIC0.1

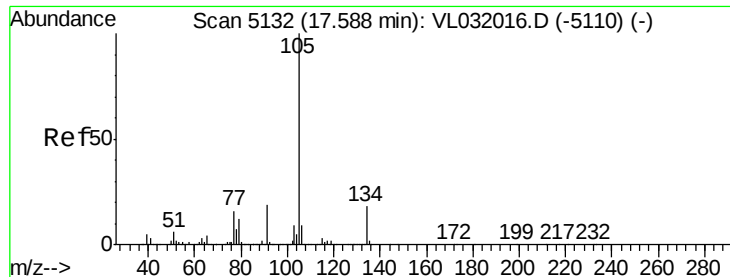
Tgt Ion: 112 Resp: 16334
Ion Ratio Lower Upper
112 100
77 83.6 54.3 81.5#
114 27.2 28.6 35.0#



#58
Ethyl Benzene
Concen: 0.04 ppbv
RT: 12.99 min Scan# 3702
Delta R.T. -0.00 min
Lab File: VL032020.D
Acq: 31 May 2018 18:39

Tgt Ion: 91 Resp: 15115
Ion Ratio Lower Upper
91 100
106 26.1 24.2 36.2

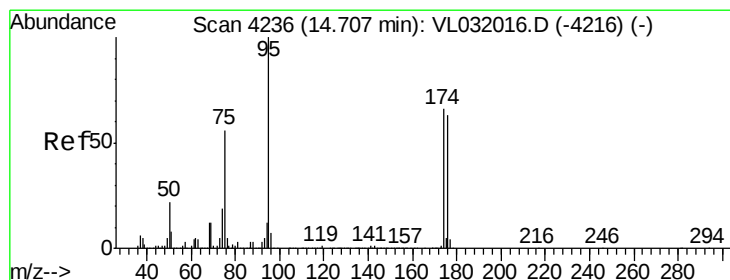
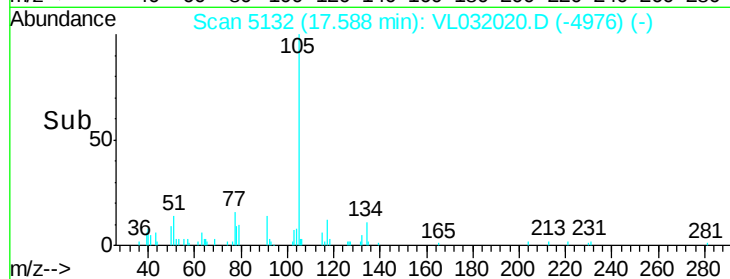
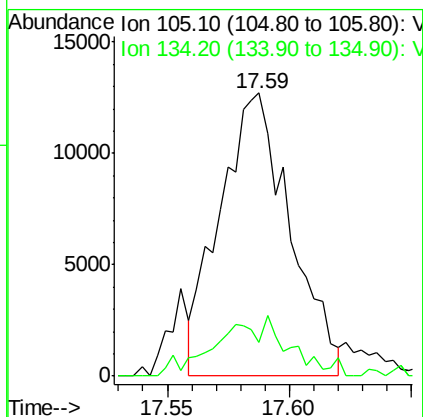
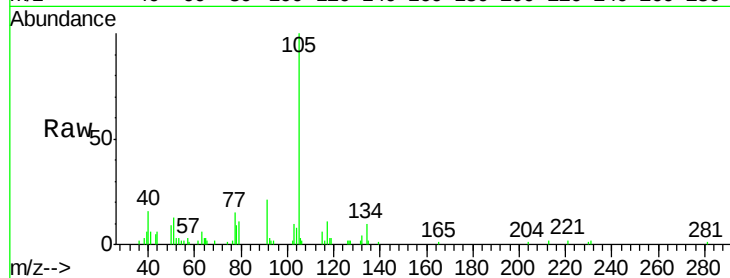




#67
 sec-Butylbenzene
 Concen: 0.05 ppbv
 RT: 17.59 min Scan# 5132
 Delta R.T. 0.00 min
 Lab File: VL032020.D
 Acq: 31 May 2018 18:39

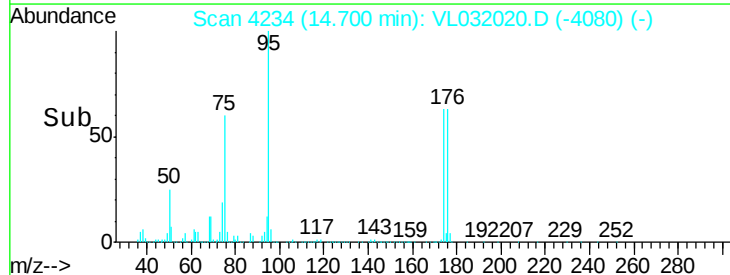
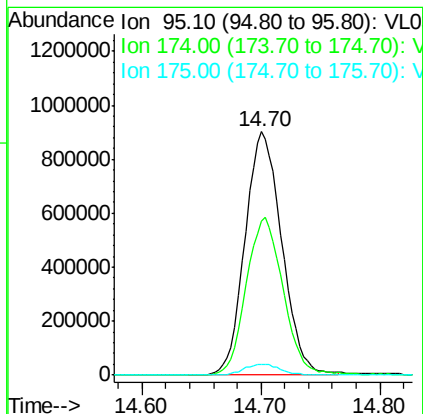
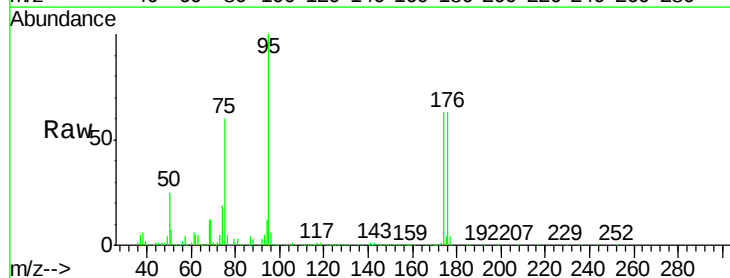
Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDIC0.1

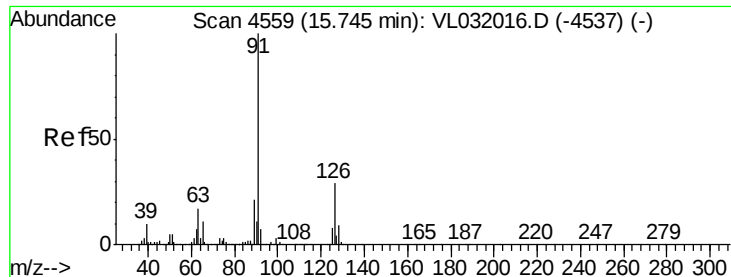
Tgt Ion: 105 Resp: 25408
 Ion Ratio Lower Upper
 105 100
 134 21.9 14.4 21.6#



#68
 1-Bromo-4-Fluorobenzene
 Concen: 10.06 ppbv
 RT: 14.70 min Scan# 4234
 Delta R.T. -0.01 min
 Lab File: VL032020.D
 Acq: 31 May 2018 18:39

Tgt Ion: 95 Resp: 1930793
 Ion Ratio Lower Upper
 95 100
 174 65.5 53.2 79.8
 175 4.6 3.7 5.5

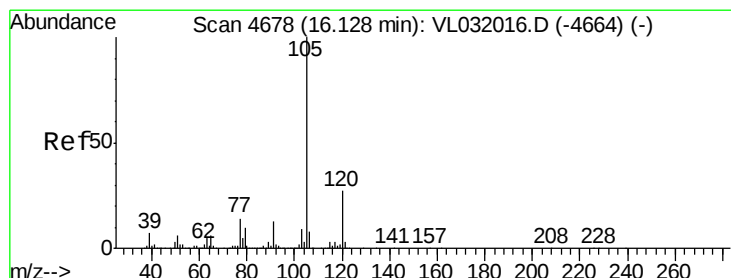
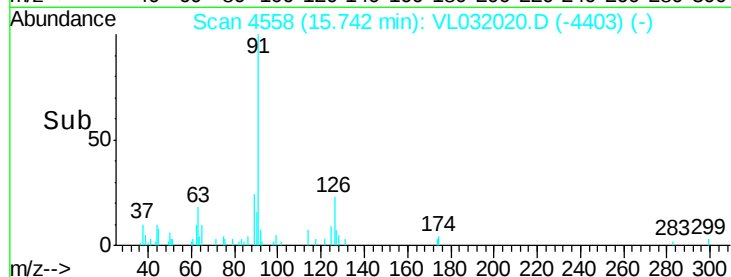
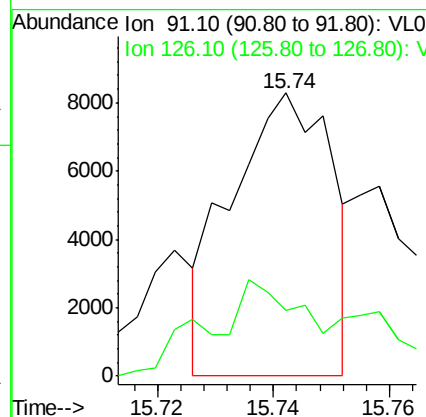
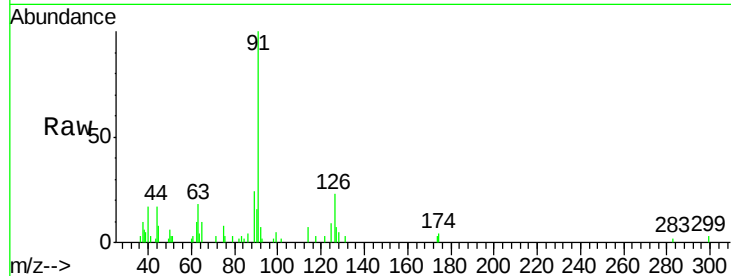




#71
 2-Chlorotoluene
 Concen: 0.03 ppbv
 RT: 15.74 min Scan# 4558
 Delta R.T. -0.00 min
 Lab File: VL032020.D
 Acq: 31 May 2018 18:39

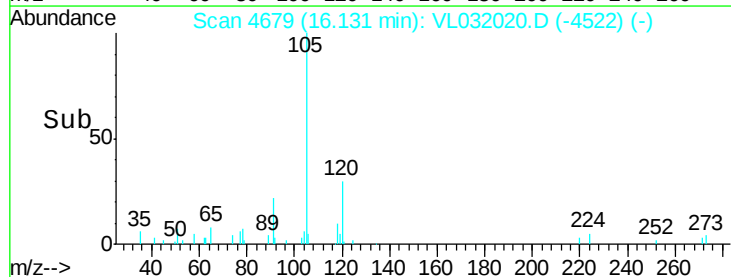
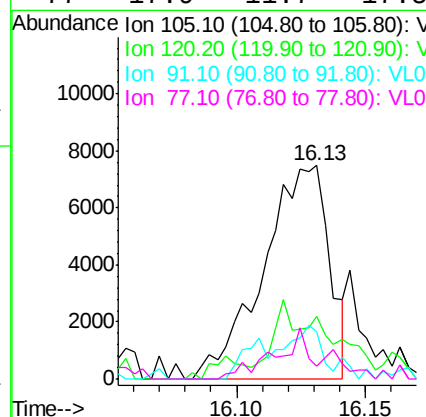
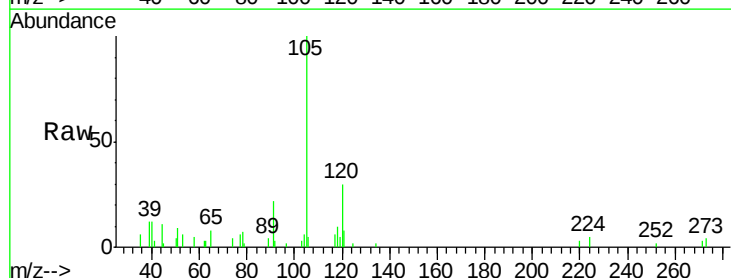
Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDIC0.1

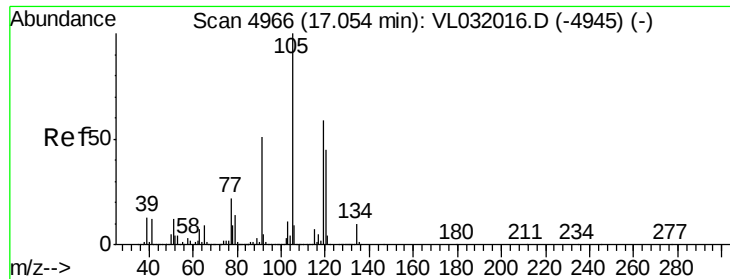
Tgt Ion: 91 Resp: 9976
 Ion Ratio Lower Upper
 91 100
 126 51.2 11.7 46.7#



#72
 4-Ethyltoluene
 Concen: 0.04 ppbv
 RT: 16.13 min Scan# 4679
 Delta R.T. 0.00 min
 Lab File: VL032020.D
 Acq: 31 May 2018 18:39

Tgt Ion: 105 Resp: 13327
 Ion Ratio Lower Upper
 105 100
 120 39.3 23.4 35.0#
 91 21.8 10.7 16.1#
 77 17.9 11.7 17.5#





#74

1,2,4-Trimethylbenzene

Concen: 0.04 ppbv

RT: 17.05 min Scan# 4966

Delta R.T. 0.00 min

Lab File: VL032020.D

Acq: 31 May 2018 18:39

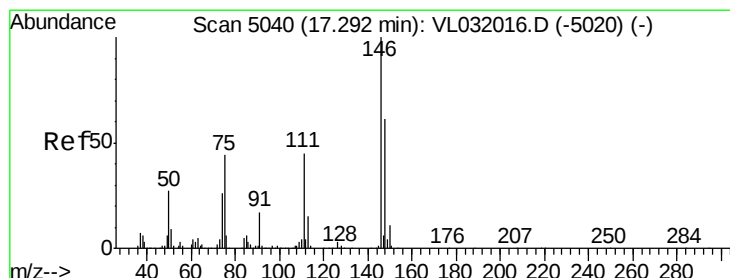
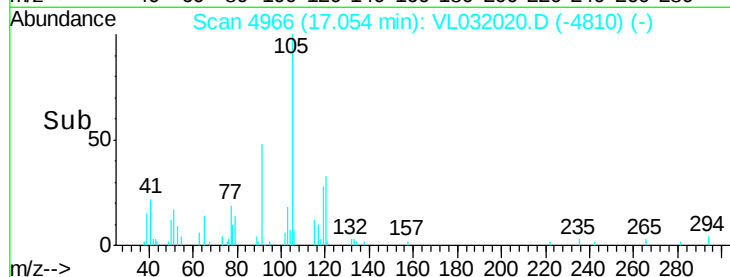
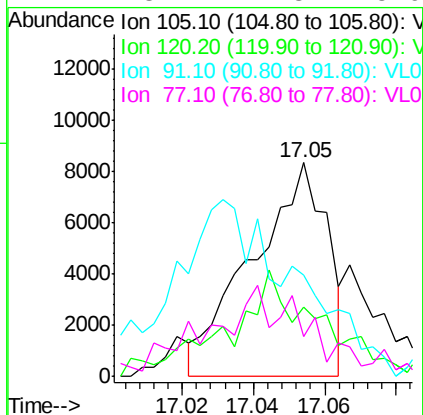
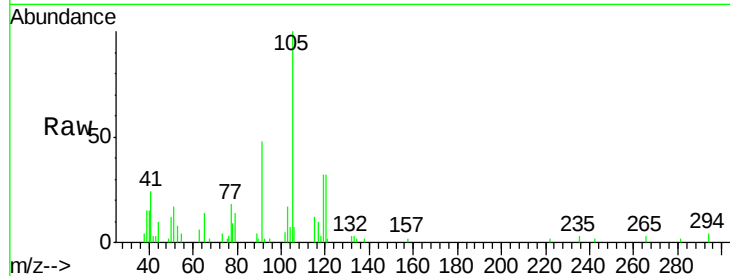
Instrument :

MSVOA_L

ClientSampleId :

VSTDIC0.1

Tgt Ion:	105	Resp:	12119
Ion	Ratio	Lower	Upper
105	100		
120	21.0	36.0	54.0#
91	19.5	41.4	62.0#
77	3.4	17.3	25.9#



#75

1,3-Dichlorobenzene

Concen: 0.06 ppbv

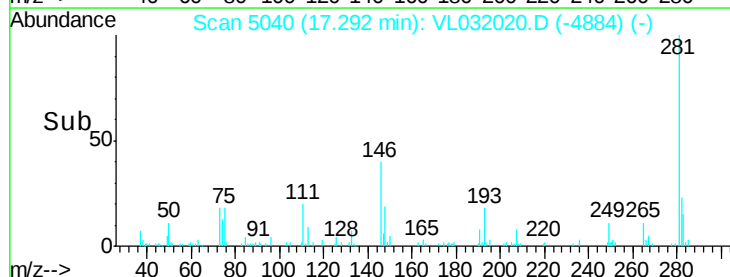
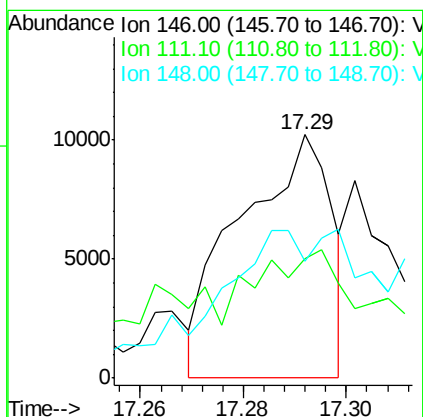
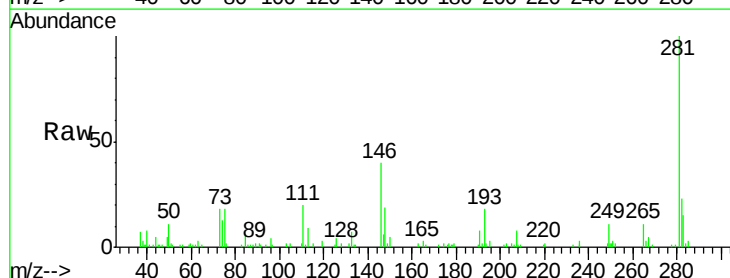
RT: 17.29 min Scan# 5040

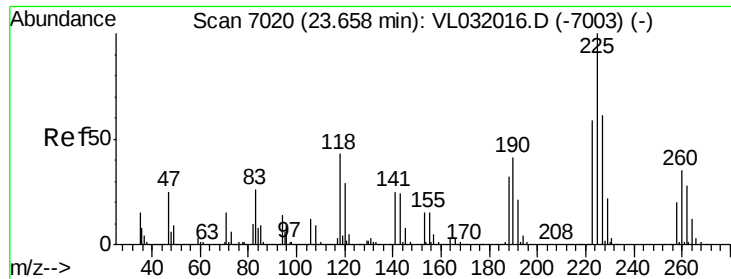
Delta R.T. 0.00 min

Lab File: VL032020.D

Acq: 31 May 2018 18:39

Tgt Ion:	146	Resp:	12667
Ion	Ratio	Lower	Upper
146	100		
111	0.0	23.7	71.1#
148	0.0	32.1	96.5#





#78

Hexachloro-1,3-Butadiene

Concen: 0.19 ppbv

RT: 23.67 min Scan# 7023

Delta R.T. 0.01 min

Lab File: VL032020.D

Acq: 31 May 2018 18:39

Instrument :

MSVOA_L

ClientSampleId :

VSTDIC0.1

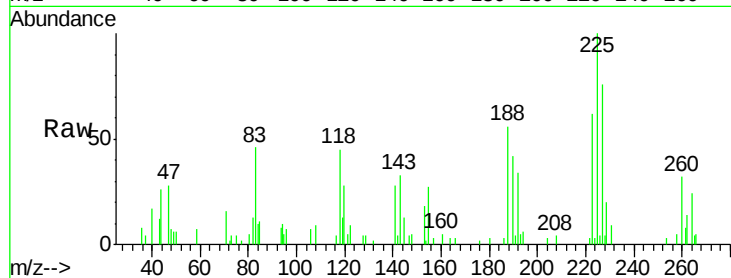
Tgt Ion:225 Resp: 15167

Ion Ratio Lower Upper

225 100

223 72.4 49.4 74.2

227 66.9 51.2 76.8



Abundance Ion 224.90 (224.60 to 225.60): V

Ion 222.90 (222.60 to 223.60): V

Ion 226.90 (226.60 to 227.60): V

