

Data File : VL034781.D
Acq On : 4 Mar 2020 4:34
Operator : SY/AP
Sample : VSTDIC0.03
Misc : 400ml/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VSTDIC0.03

Quant Time: Mar 04 06:01:12 2020
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_L\METHODS\VL030420AIR.M
Quant Title : AIR ANALYSIS BY METHOD T0-15 Instrument: MSVOA_LWed Mar 04 05:54:58 2020
QLast Update : Wed Mar 04 05:54:58 2020
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.68	49	1025984	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.19	114	2098844	10.00	ppbv	-0.01
55) Chlorobenzene-d5	12.13	117	2049504	10.00	ppbv	0.00

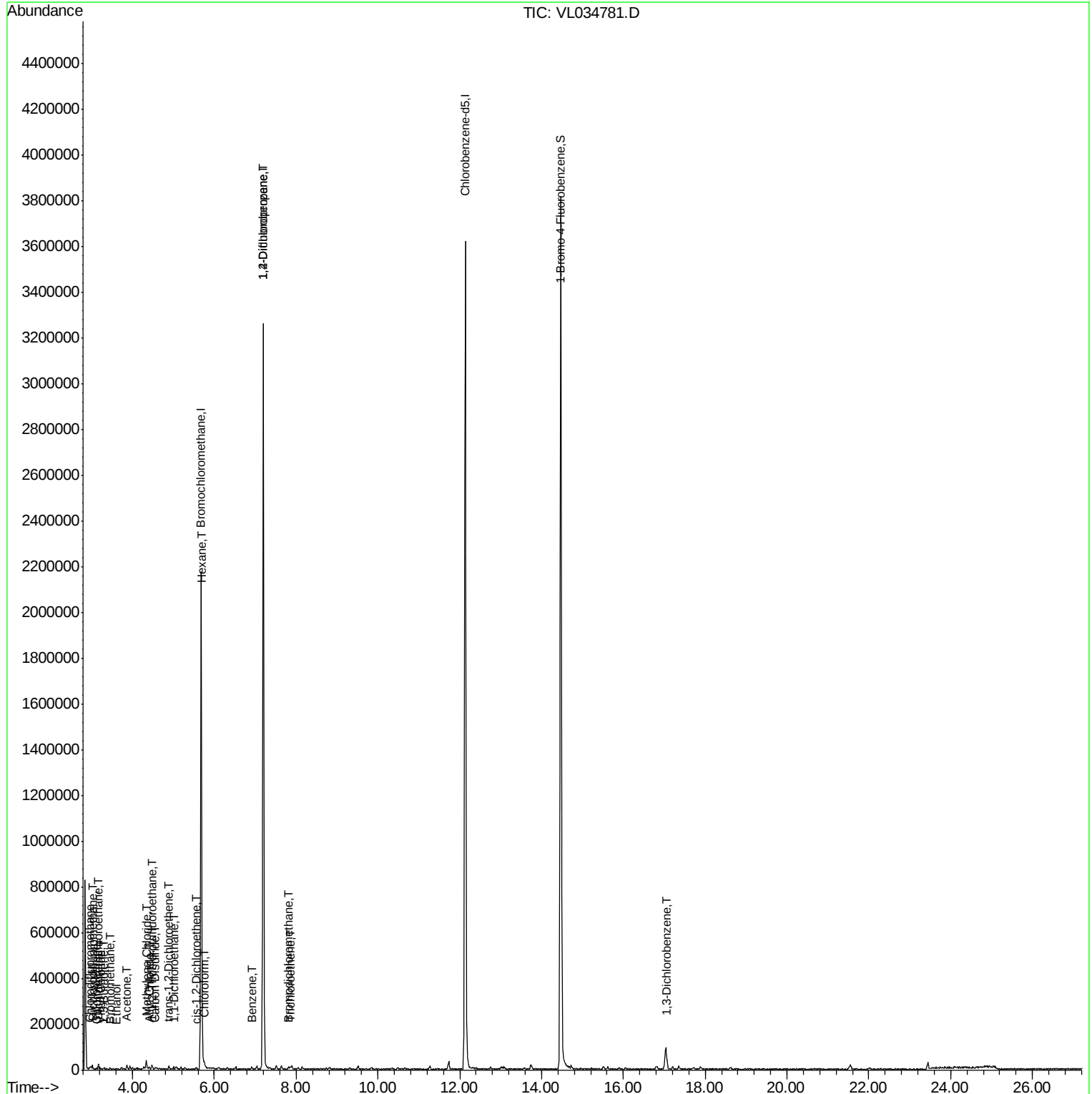
System Monitoring Compounds
68) 1-Bromo-4-Fluorobenzene 14.47 95 1757491 10.46 ppbv 0.00
Spiked Amount 10.000 Range 65 - 135 Recovery = 104.60%

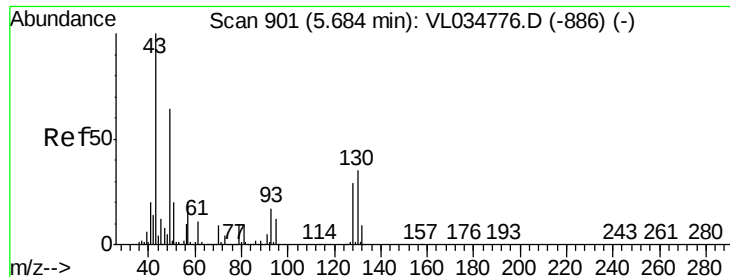
Target Compounds					Qvalue
2) Dichlorodifluoromethane	3.02	85	9432	0.058 ppbv	88
3) Chlorodifluoromethane	2.95	51	7956	0.072 ppbv	93
4) Chloromethane	3.11	50	1751	0.028 ppbv #	71
5) Vinyl Chloride	3.23	62	2672	0.044 ppbv #	80
6) Bromomethane	3.45	94	1254	0.035 ppbv	100
8) Dichlorotetrafluoroethane	3.16	85	6639	0.046 ppbv	99
12) 1,1,2-Trichlorotrifluoroet	4.48	101	5429	0.055 ppbv	97
13) Ethanol	3.61	45	847	0.058 ppbv #	38
15) Acetone	3.86	43	14959	0.128 ppbv #	76
16) 1,3-Butadiene	3.30	39	1313	0.024 ppbv #	9
20) Methylene Chloride	4.33	84	7369	0.170 ppbv	88
21) Allyl Chloride	4.40	41	3244	0.042 ppbv #	56
22) trans-1,2-Dichloroethene	4.88	96	1394	0.032 ppbv #	2
24) 1,1-Dichloroethane	5.01	63	2987	0.024 ppbv #	88
26) Hexane	5.69	57	2610	0.027 ppbv #	1
27) Carbon Disulfide	4.55	76	4294	0.040 ppbv #	1
29) Chloroform	5.76	83	5189	0.034 ppbv	89
31) cis-1,2-Dichloroethene	5.55	61	3313	0.035 ppbv #	59
36) Benzene	6.92	78	5190	0.029 ppbv #	36
38) Trichloroethene	7.86	130	1533	0.022 ppbv #	53
39) 1,2-Dichloropropane	7.20	63	613993	8.554 ppbv #	24
42) Bromodichloromethane	7.82	83	4533	0.030 ppbv #	76
75) 1,3-Dichlorobenzene	17.07	146	3720	0.025 ppbv #	42

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

ALS Vial : 1 Sample Multiplier: 1

Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.68 min Scan# 899

Delta R.T. -0.01 min

Lab File: VL034781.D

Acq: 4 Mar 2020 4:34

Instrument :

MSVOA_L

ClientSampleId :

VSTDIC0.03

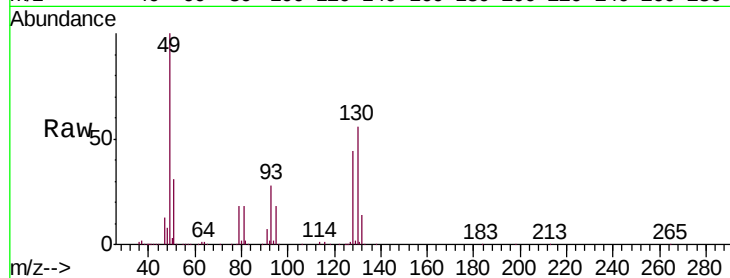
Tgt Ion: 49 Resp: 1025984

Ion Ratio Lower Upper

49 100

128 44.1 21.6 64.6

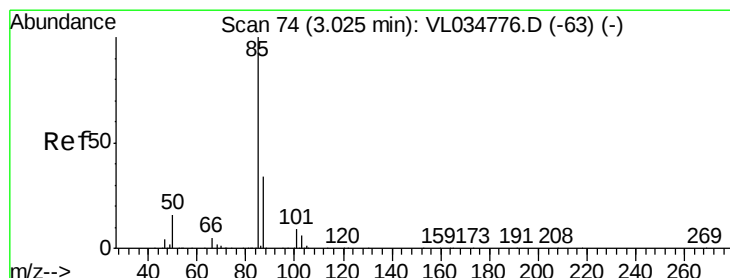
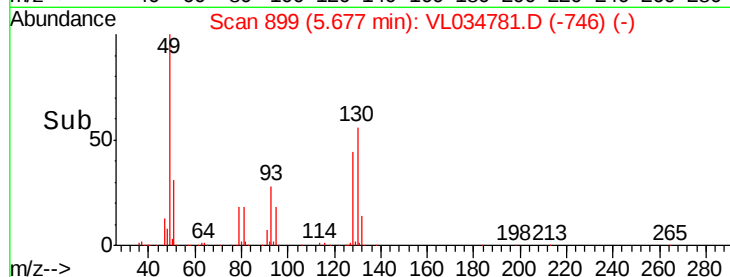
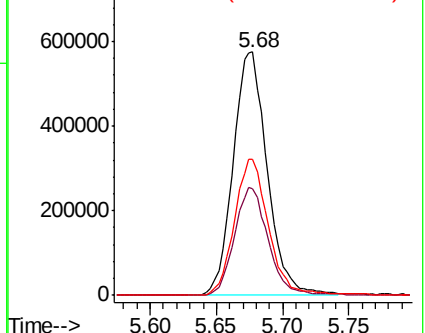
130 56.5 27.4 82.2



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: 0.058 ppbv

RT: 3.02 min Scan# 73

Delta R.T. -0.00 min

Lab File: VL034781.D

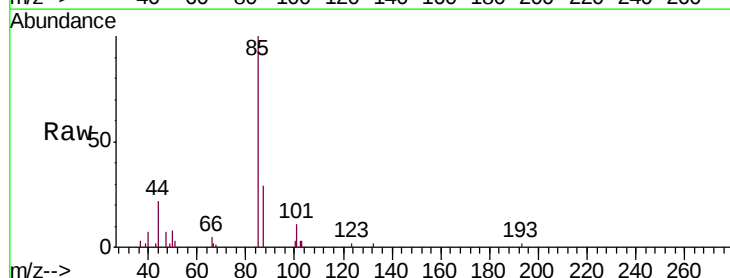
Acq: 4 Mar 2020 4:34

Tgt Ion: 85 Resp: 9432

Ion Ratio Lower Upper

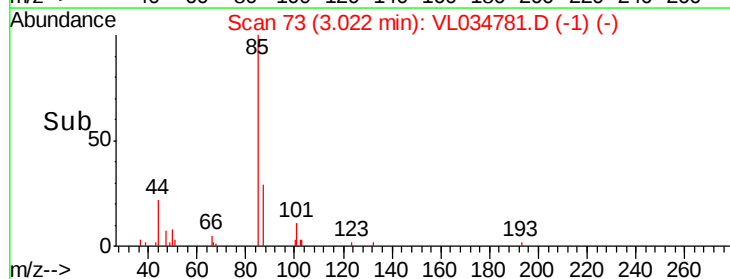
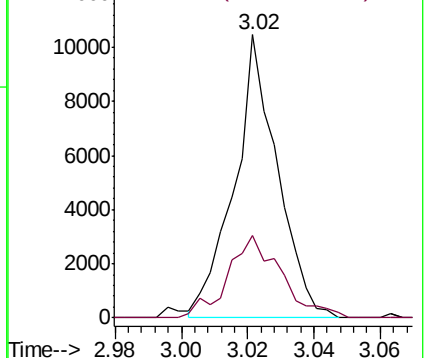
85 100

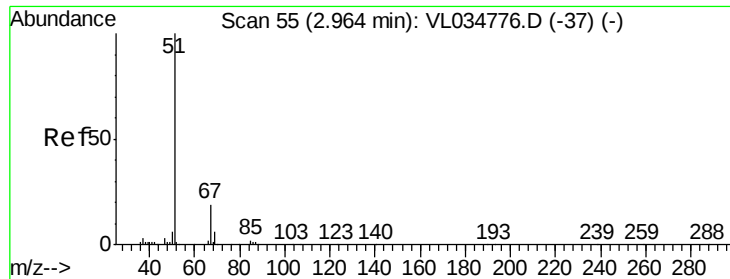
87 27.3 27.2 40.8



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0





#3

Chlorodifluoromethane

Concen: 0.072 ppbv

RT: 2.95 min Scan# 52

Delta R.T. -0.01 min

Lab File: VL034781.D

Acq: 4 Mar 2020 4:34

Instrument :

MSVOA_L

ClientSampleId :

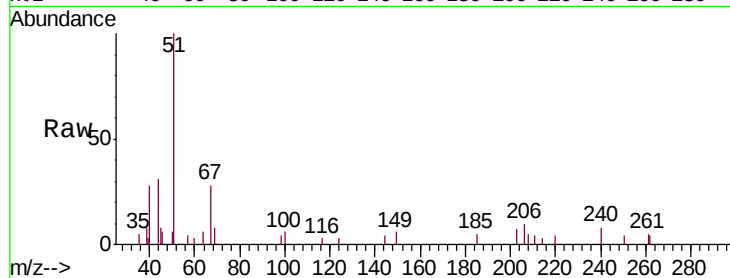
VSTDIC0.03

Tgt Ion: 51 Resp: 7956

Ion Ratio Lower Upper

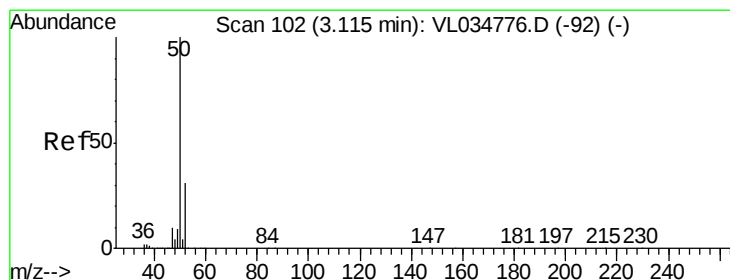
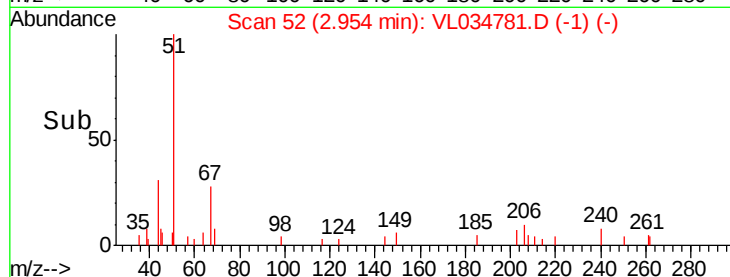
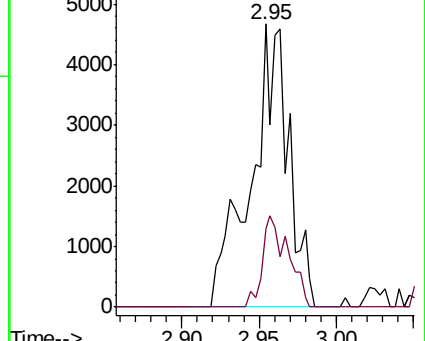
51 100

67 22.1 15.3 22.9



Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0



#4

Chloromethane

Concen: 0.028 ppbv

RT: 3.11 min Scan# 102

Delta R.T. -0.00 min

Lab File: VL034781.D

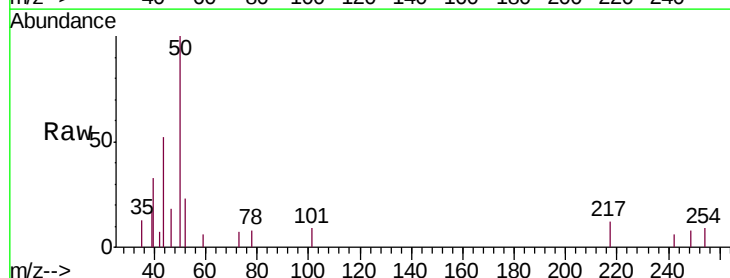
Acq: 4 Mar 2020 4:34

Tgt Ion: 50 Resp: 1751

Ion Ratio Lower Upper

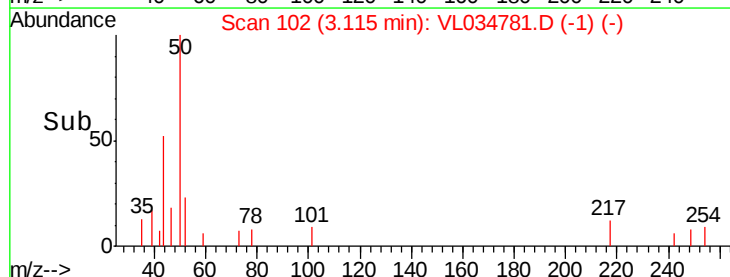
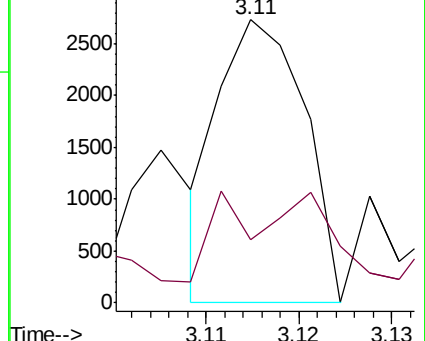
50 100

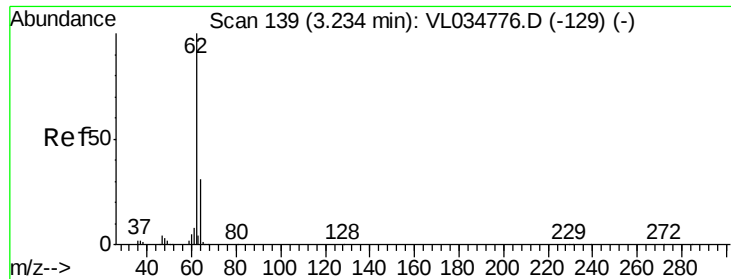
52 15.3 25.0 37.4#



Abundance Ion 50.10 (49.80 to 50.80): VL0

Ion 52.10 (51.80 to 52.80): VL0





#5

Vinyl Chloride

Concen: 0.044 ppbv

RT: 3.23 min Scan# 139

Delta R.T. -0.00 min

Lab File: VL034781.D

Acq: 4 Mar 2020 4:34

Instrument :

MSVOA_L

ClientSampleId :

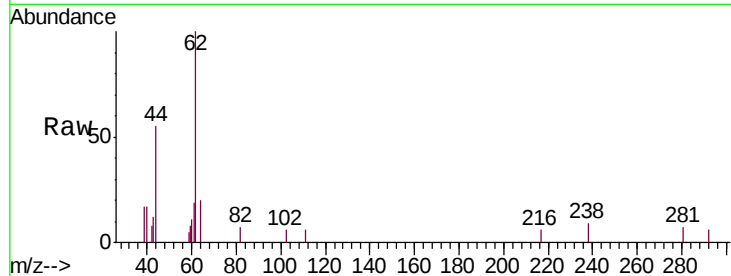
VSTDIC0.03

Tgt Ion: 62 Resp: 2672

Ion Ratio Lower Upper

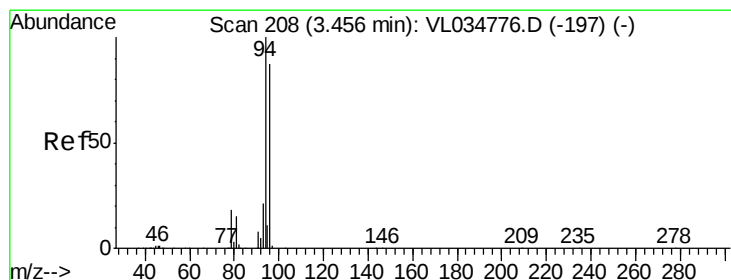
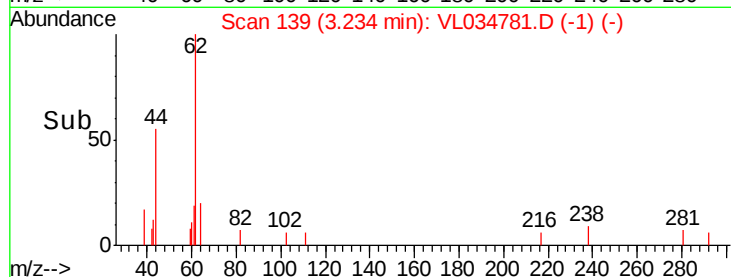
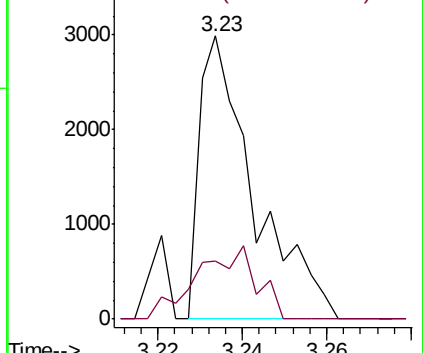
62 100

64 20.4 25.1 37.7#



Abundance Ion 62.10 (61.80 to 62.80): VL0

Ion 64.10 (63.80 to 64.80): VL0



#6

Bromomethane

Concen: 0.035 ppbv

RT: 3.45 min Scan# 206

Delta R.T. -0.01 min

Lab File: VL034781.D

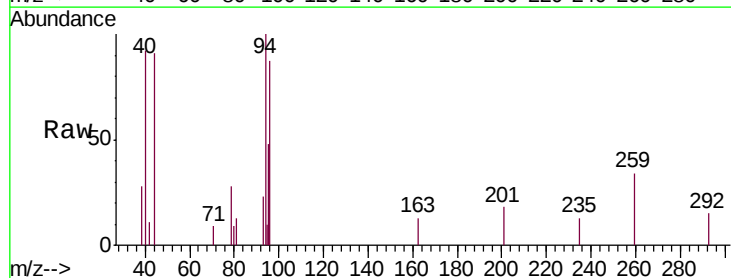
Acq: 4 Mar 2020 4:34

Tgt Ion: 94 Resp: 1254

Ion Ratio Lower Upper

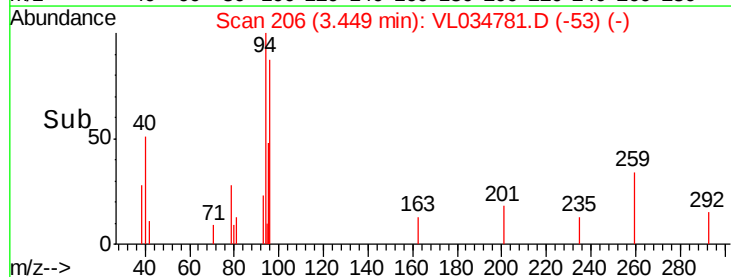
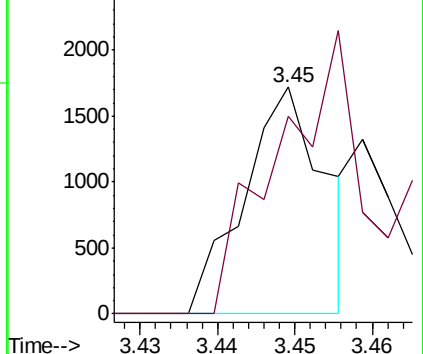
94 100

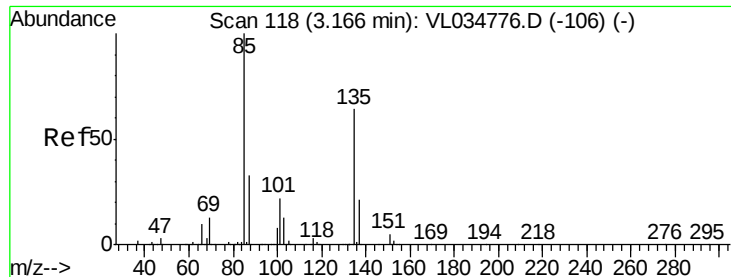
96 87.2 70.0 105.0



Abundance Ion 94.00 (93.70 to 94.70): VL0

Ion 96.00 (95.70 to 96.70): VL0





#8

Dichlorotetrafluoroethane

Concen: 0.046 ppbv

RT: 3.16 min Scan# 117

Delta R.T. -0.00 min

Lab File: VL034781.D

Acq: 4 Mar 2020 4:34

Instrument :

MSVOA_L

ClientSampleId :

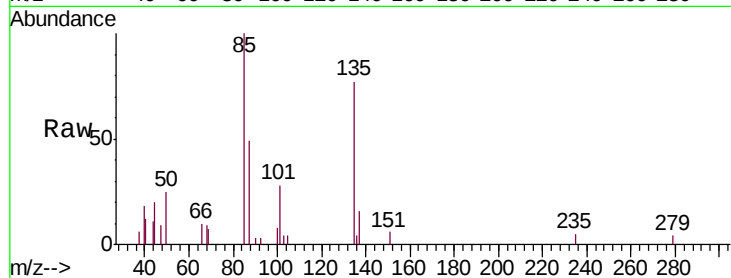
VSTDIC0.03

Tgt Ion: 85 Resp: 6639

Ion Ratio Lower Upper

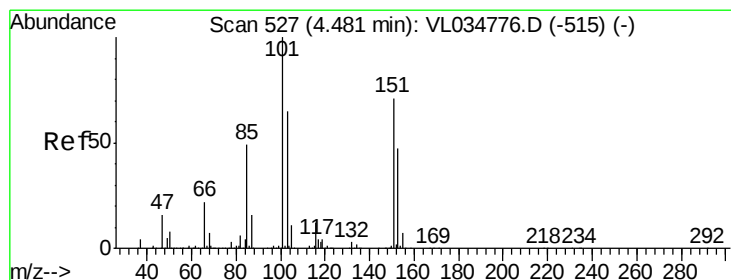
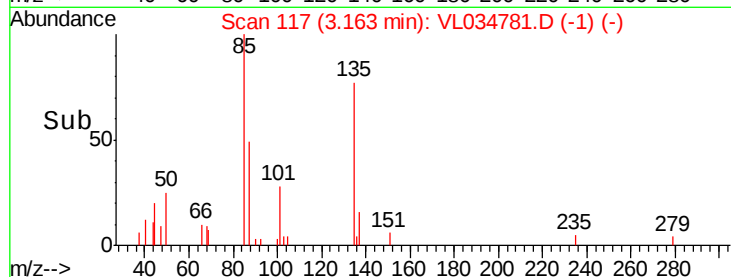
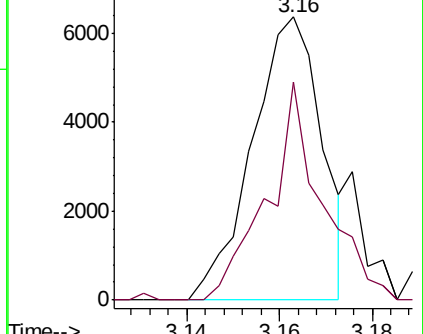
85 100

135 60.7 49.4 74.2



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 135.00 (134.70 to 135.70): V



#12

1,1,2-Trichlorotrifluoroethane

Concen: 0.055 ppbv

RT: 4.48 min Scan# 527

Delta R.T. -0.00 min

Lab File: VL034781.D

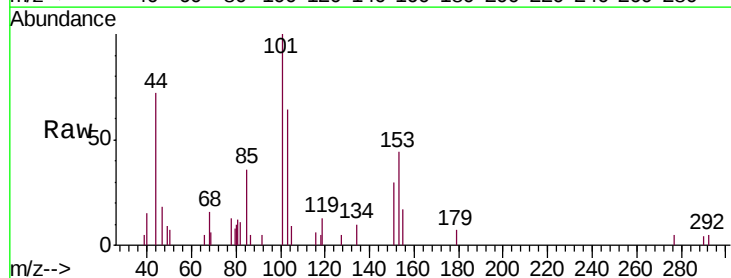
Acq: 4 Mar 2020 4:34

Tgt Ion: 101 Resp: 5429

Ion Ratio Lower Upper

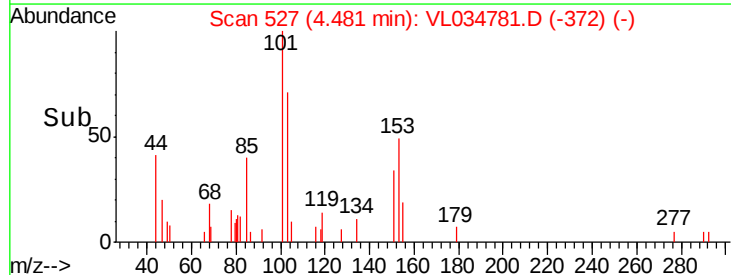
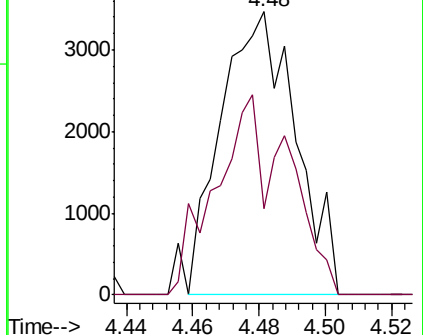
101 100

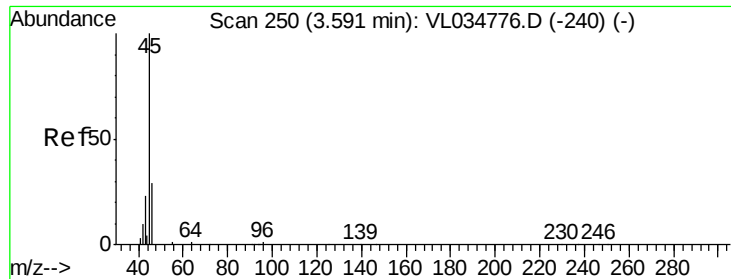
151 68.3 56.6 85.0



Abundance Ion 101.00 (100.70 to 101.70): V

Ion 151.00 (150.70 to 151.70): V





#13

Ethanol

Concen: 0.058 ppbv

RT: 3.61 min Scan# 256

Delta R.T. 0.02 min

Lab File: VL034781.D

Acq: 4 Mar 2020 4:34

Instrument :

MSVOA_L

ClientSampleId :

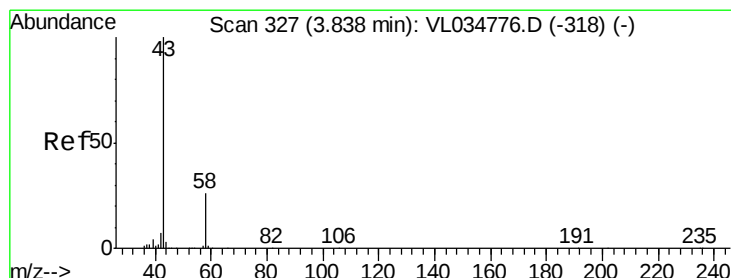
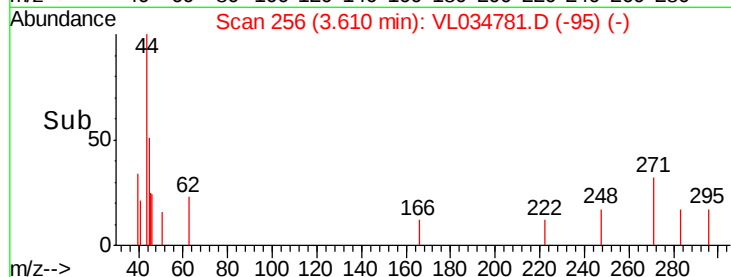
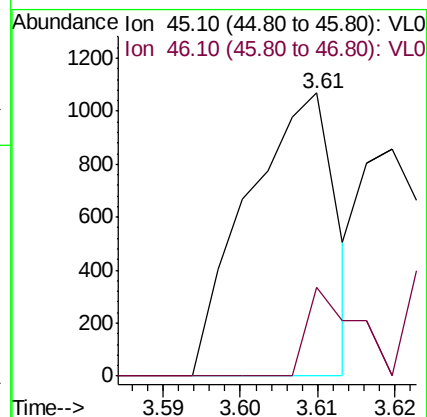
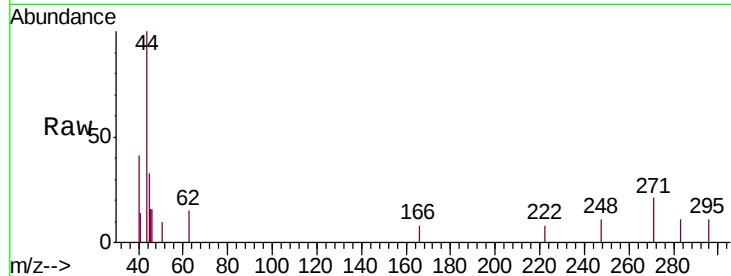
VSTDIC0.03

Tgt Ion: 45 Resp: 847

Ion Ratio Lower Upper

45 100

46 0.0 14.7 58.9#



#15

Acetone

Concen: 0.128 ppbv

RT: 3.86 min Scan# 335

Delta R.T. 0.03 min

Lab File: VL034781.D

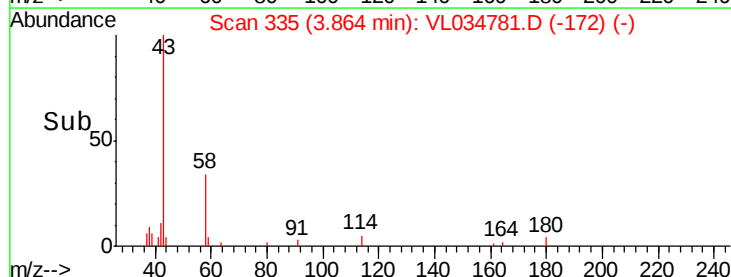
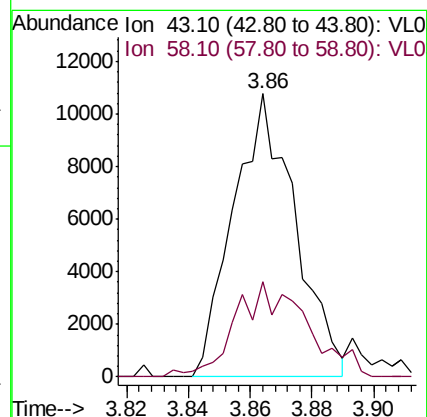
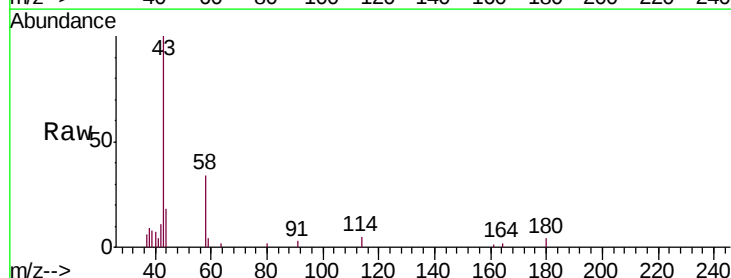
Acq: 4 Mar 2020 4:34

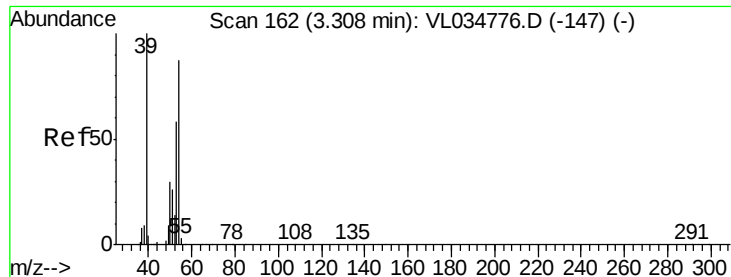
Tgt Ion: 43 Resp: 14959

Ion Ratio Lower Upper

43 100

58 38.8 21.0 31.6#

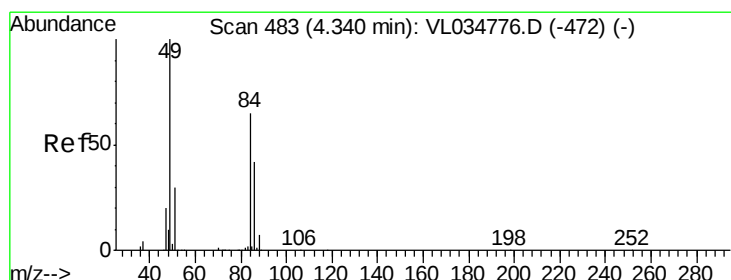
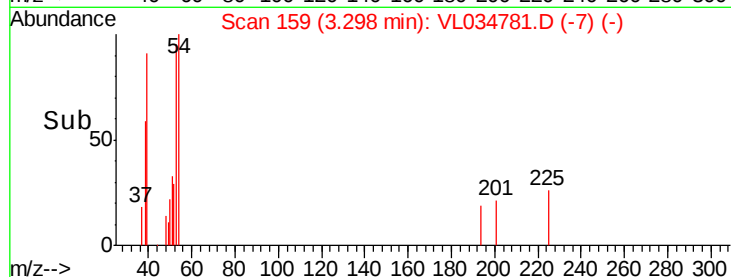
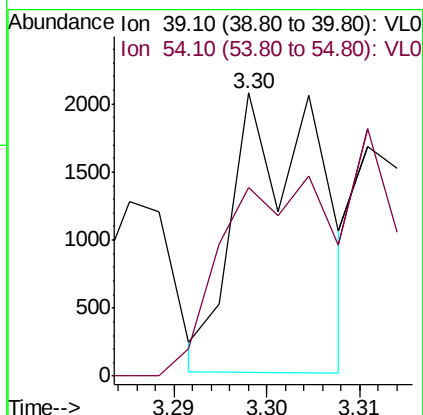
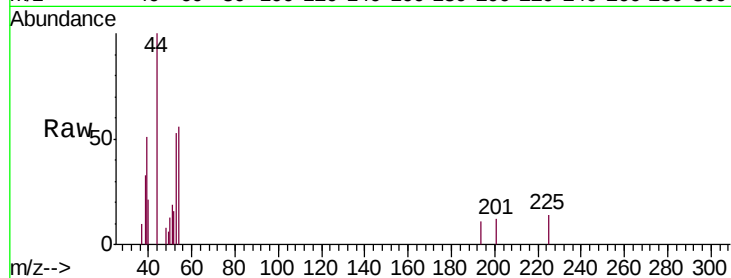




#16
1,3-Butadiene
Concen: 0.024 ppbv
RT: 3.30 min Scan# 159
Delta R.T. -0.01 min
Lab File: VL034781.D
Acq: 4 Mar 2020 4:34

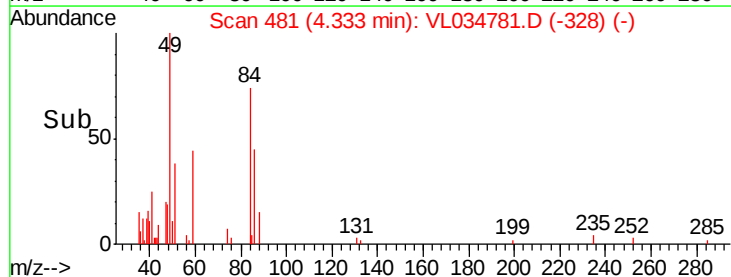
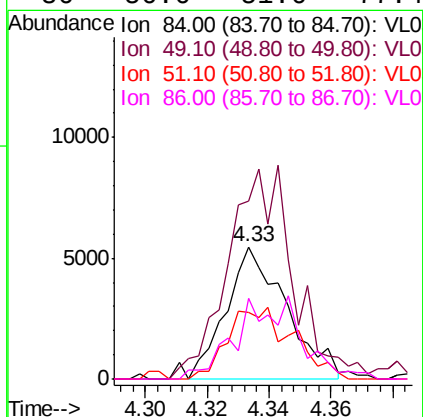
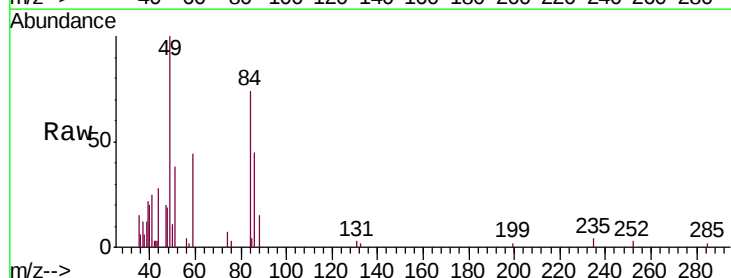
Instrument :
MSVOA_L
ClientSampleId :
VSTDIC0.03

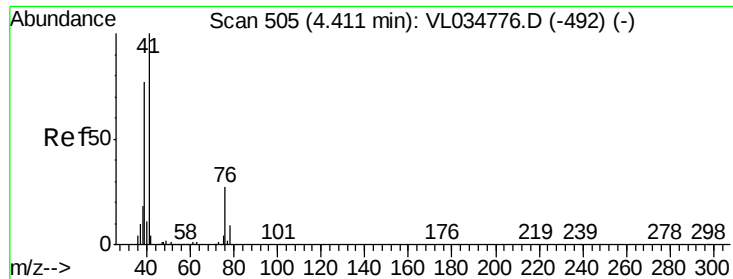
Tgt Ion: 39 Resp: 1313
Ion Ratio Lower Upper
39 100
54 0.0 64.2 96.2#



#20
Methylene Chloride
Concen: 0.170 ppbv
RT: 4.33 min Scan# 481
Delta R.T. -0.01 min
Lab File: VL034781.D
Acq: 4 Mar 2020 4:34

Tgt Ion: 84 Resp: 7369
Ion Ratio Lower Upper
84 100
49 134.6 123.2 184.8
51 50.9 37.4 56.2
86 56.6 51.6 77.4

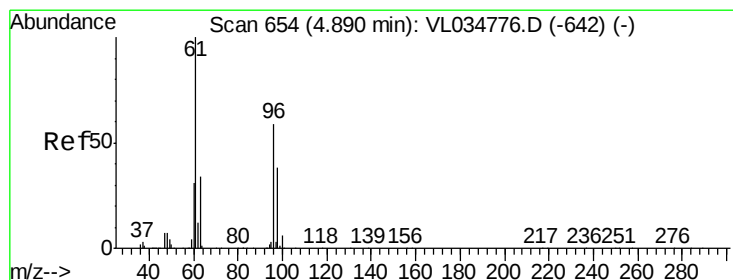
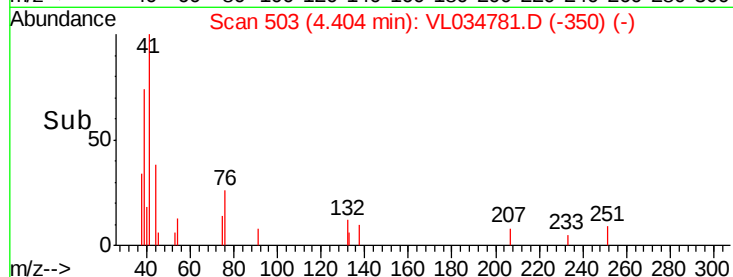
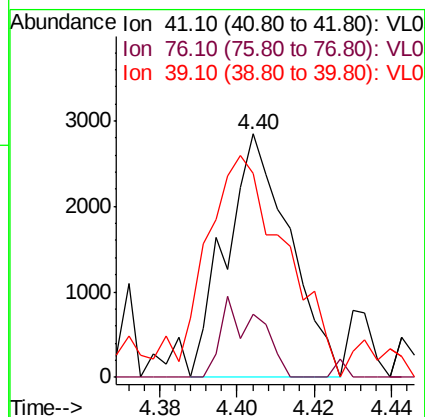
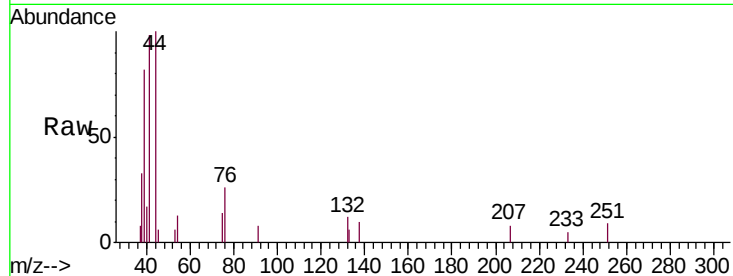




#21
 Allyl Chloride
 Concen: 0.042 ppbv
 RT: 4.40 min Scan# 503
 Delta R.T. -0.01 min
 Lab File: VL034781.D
 Acq: 4 Mar 2020 4:34

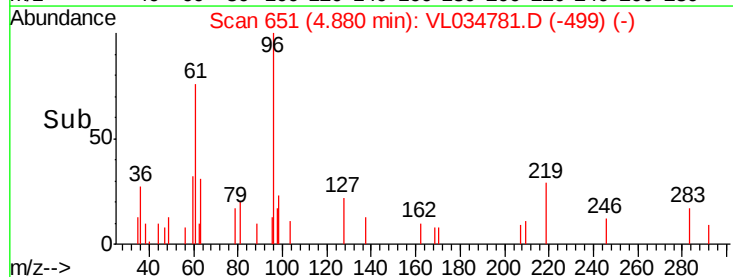
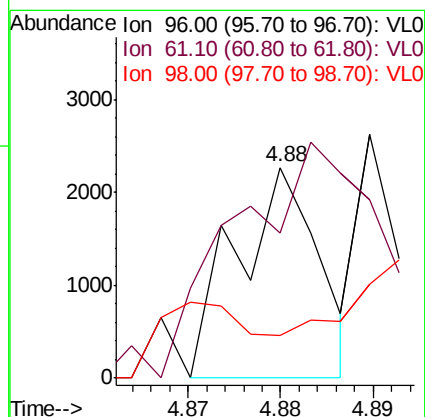
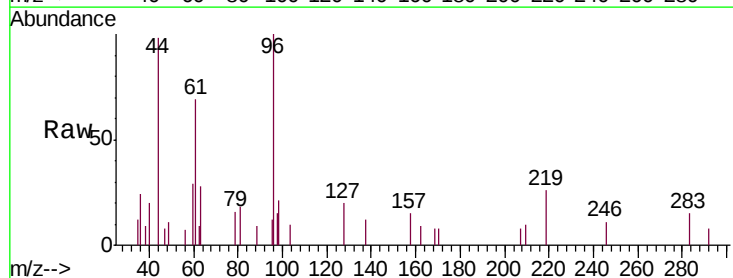
Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDIC0.03

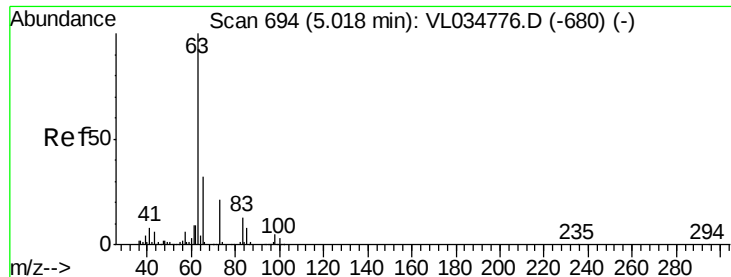
Tgt Ion: 41 Resp: 3244
 Ion Ratio Lower Upper
 41 100
 76 21.0 22.5 33.7#
 39 129.6 65.0 97.6#



#22
 trans-1,2-Dichloroethene
 Concen: 0.032 ppbv
 RT: 4.88 min Scan# 651
 Delta R.T. -0.01 min
 Lab File: VL034781.D
 Acq: 4 Mar 2020 4:34

Tgt Ion: 96 Resp: 1394
 Ion Ratio Lower Upper
 96 100
 61 26.5 135.2 202.8#
 98 0.0 50.8 76.2#





#24

1,1-Dichloroethane

Concen: 0.024 ppbv

RT: 5.01 min Scan# 691

Delta R.T. -0.01 min

Lab File: VL034781.D

Acq: 4 Mar 2020 4:34

Instrument :

MSVOA_L

ClientSampleId :

VSTDIC0.03

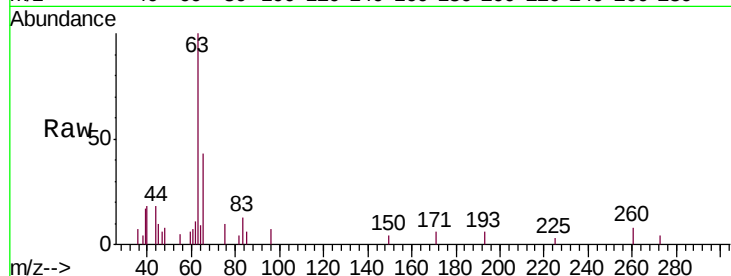
Tgt Ion: 63 Resp: 2987

Ion Ratio Lower Upper

63 100

98 0.0 2.3 6.8#

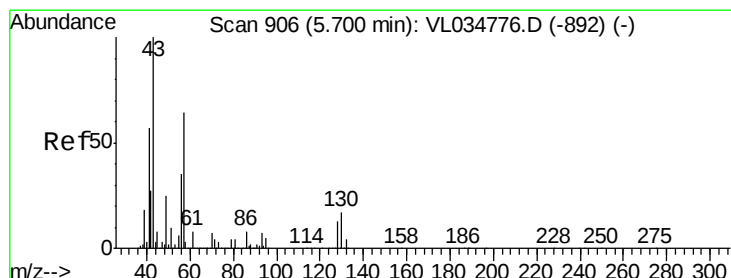
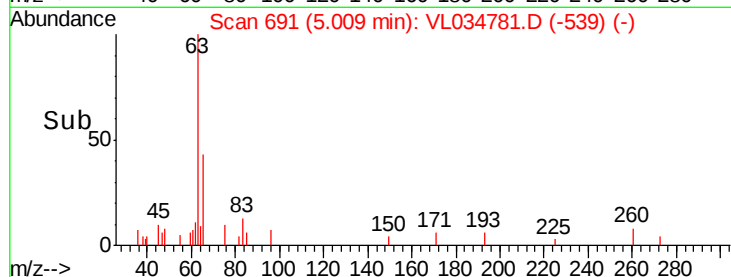
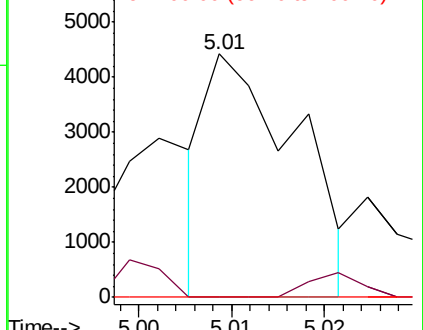
100 0.0 1.5 4.4#



Abundance Ion 63.10 (62.80 to 63.80): VL0

Ion 98.00 (97.70 to 98.70): VL0

Ion 100.00 (99.70 to 100.70): VL0



#26

Hexane

Concen: 0.027 ppbv

RT: 5.69 min Scan# 903

Delta R.T. -0.01 min

Lab File: VL034781.D

Acq: 4 Mar 2020 4:34

Tgt Ion: 57 Resp: 2610

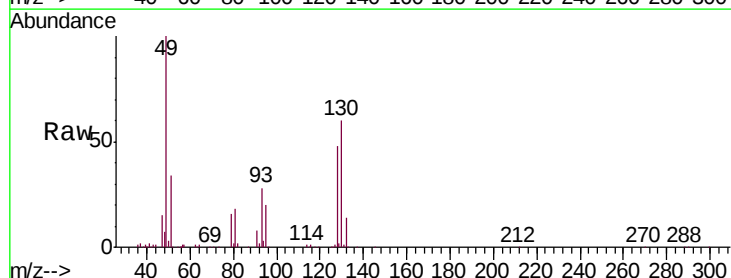
Ion Ratio Lower Upper

57 100

41 190.0 72.0 108.0#

43 0.0 179.1 268.7#

56 96.6 42.6 63.8#

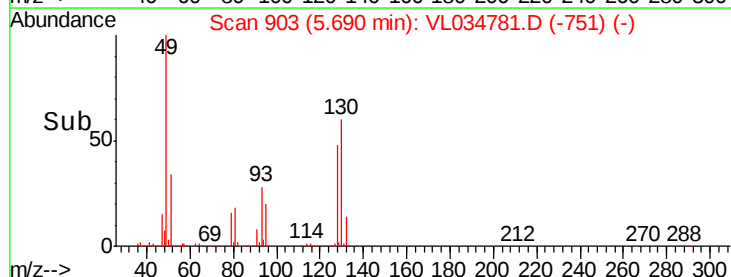
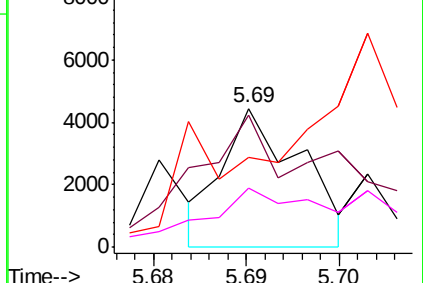


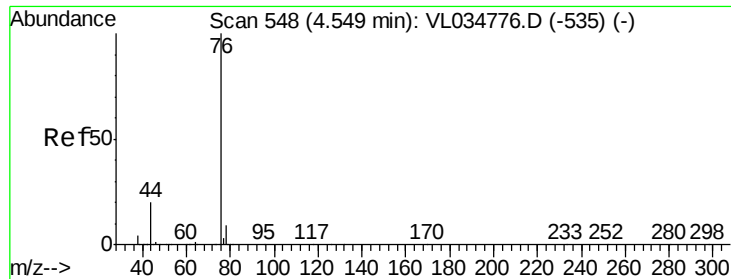
Abundance Ion 57.10 (56.80 to 57.80): VL0

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: 0.040 ppbv

RT: 4.55 min Scan# 549

Delta R.T. 0.00 min

Lab File: VL034781.D

Acq: 4 Mar 2020 4:34

Instrument :

MSVOA_L

ClientSampleId :

VSTDIC0.03

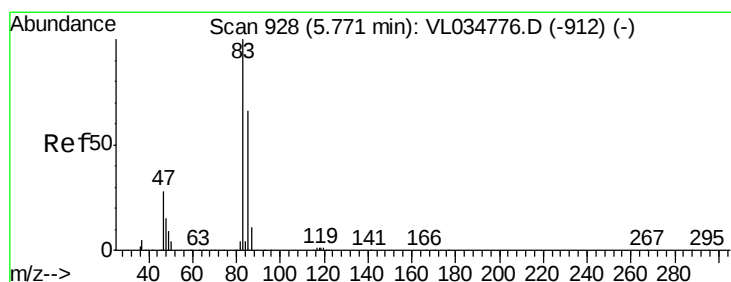
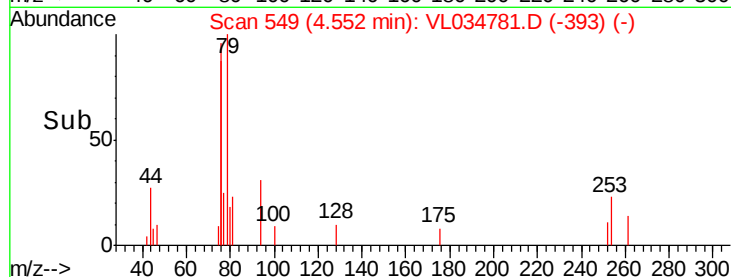
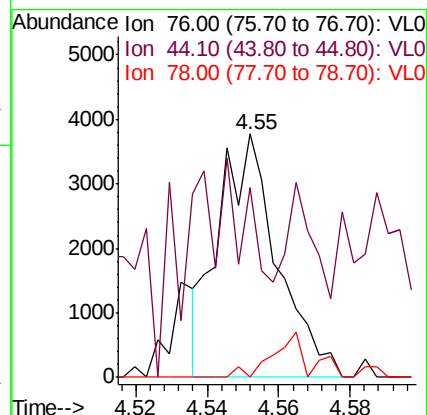
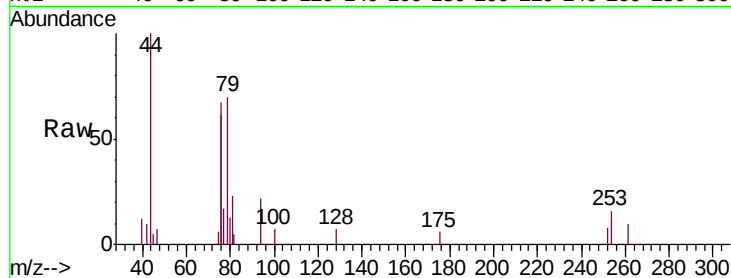
Tgt Ion: 76 Resp: 4294

Ion Ratio Lower Upper

76 100

44 149.1 16.1 24.1#

78 12.7 7.5 11.3#



#29

Chloroform

Concen: 0.034 ppbv

RT: 5.76 min Scan# 924

Delta R.T. -0.01 min

Lab File: VL034781.D

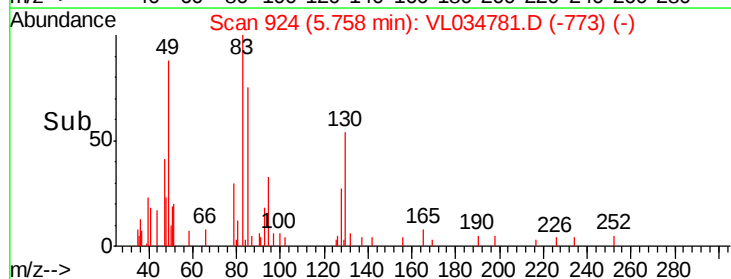
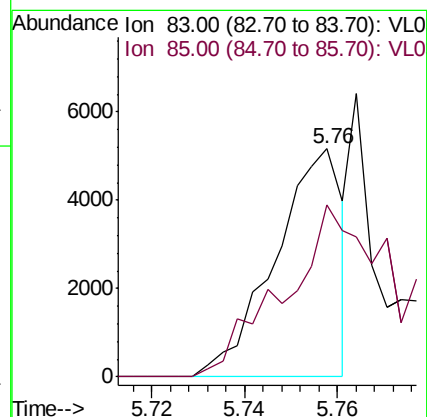
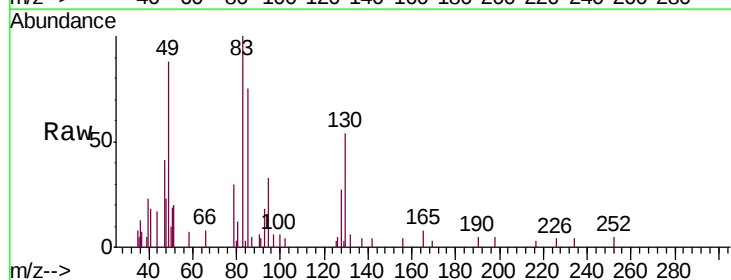
Acq: 4 Mar 2020 4:34

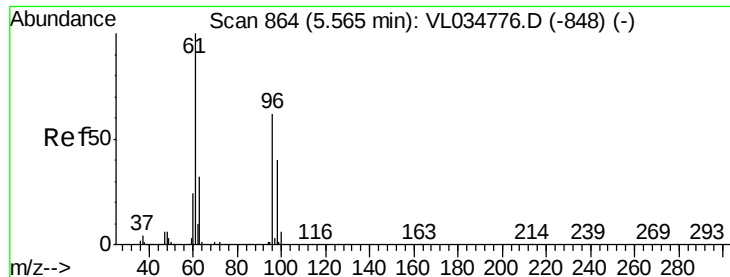
Tgt Ion: 83 Resp: 5189

Ion Ratio Lower Upper

83 100

85 75.2 53.0 79.4

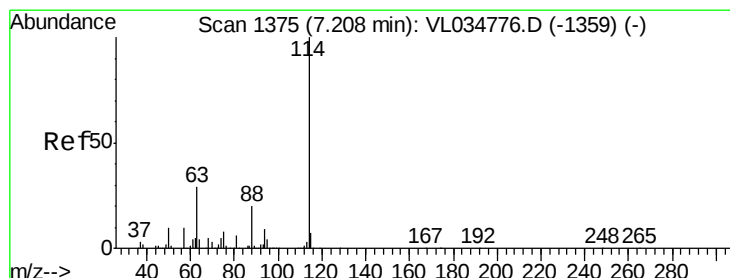
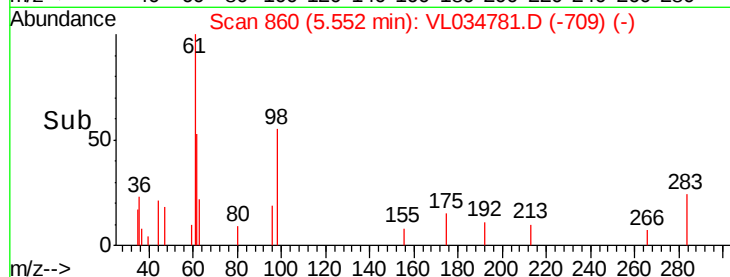
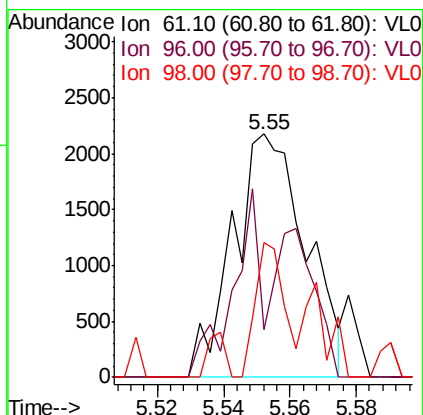
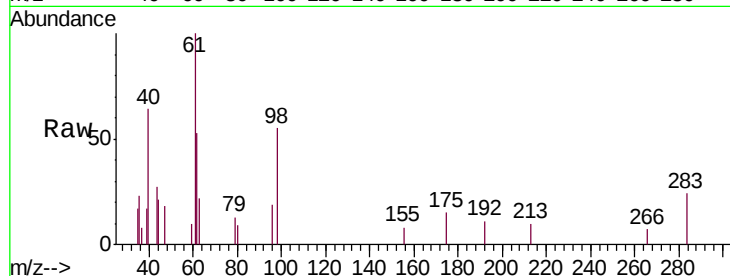




#31
 cis-1,2-Dichloroethene
 Concen: 0.035 ppbv
 RT: 5.55 min Scan# 860
 Delta R.T. -0.01 min
 Lab File: VL034781.D
 Acq: 4 Mar 2020 4:34

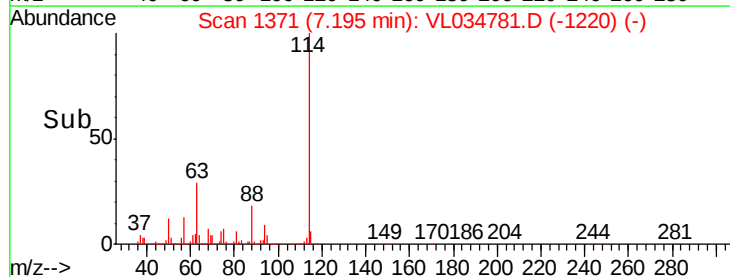
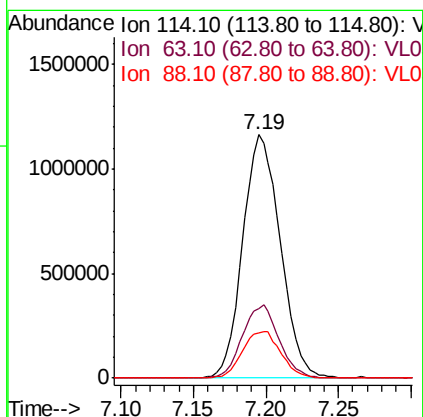
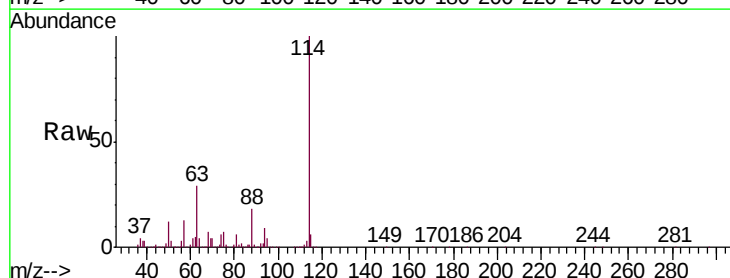
Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDIC0.03

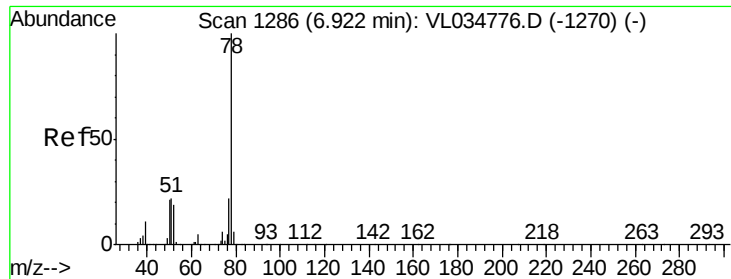
Tgt Ion: 61 Resp: 3313
 Ion Ratio Lower Upper
 61 100
 96 12.7 49.7 74.5#
 98 36.2 31.9 47.9



#33
 1,4-Difluorobenzene
 Concen: 10.000 ppbv
 RT: 7.19 min Scan# 1371
 Delta R.T. -0.01 min
 Lab File: VL034781.D
 Acq: 4 Mar 2020 4:34

Tgt Ion: 114 Resp: 2098844
 Ion Ratio Lower Upper
 114 100
 63 29.6 23.6 35.4
 88 19.6 15.8 23.8





#36

Benzene

Concen: 0.029 ppbv

RT: 6.92 min Scan# 1284

Delta R.T. -0.01 min

Lab File: VL034781.D

Acq: 4 Mar 2020 4:34

Instrument :

MSVOA_L

ClientSampleId :

VSTDIC0.03

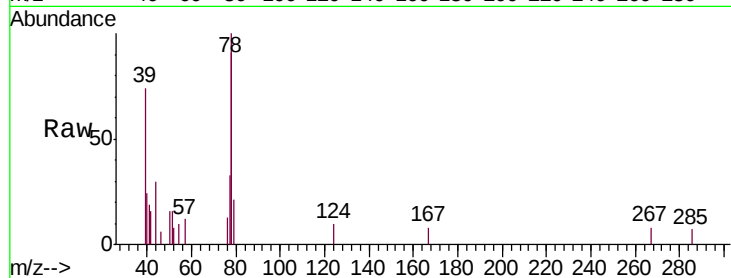
Tgt Ion: 78 Resp: 5190

Ion Ratio Lower Upper

78 100

77 70.0 18.0 27.0#

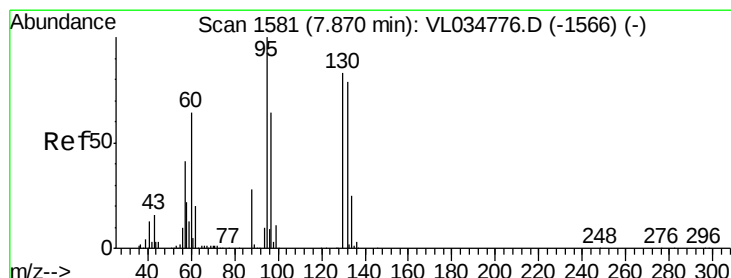
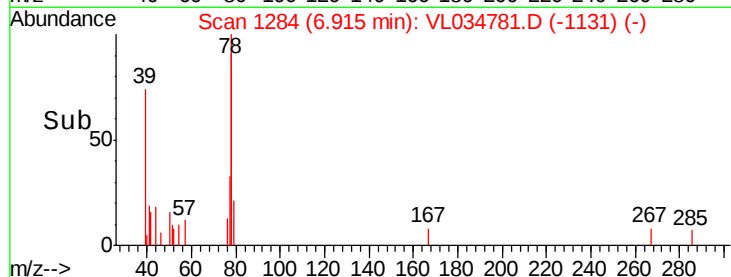
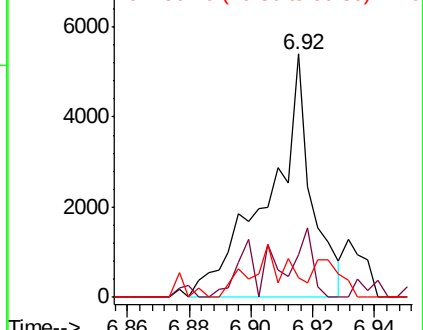
50 8.3 16.9 25.3#



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



#38

Trichloroethene

Concen: 0.022 ppbv

RT: 7.86 min Scan# 1577

Delta R.T. -0.01 min

Lab File: VL034781.D

Acq: 4 Mar 2020 4:34

Tgt Ion: 130 Resp: 1533

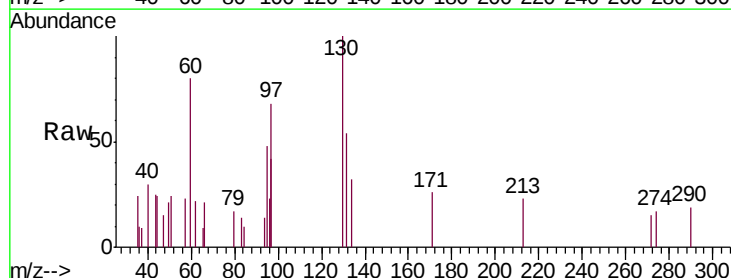
Ion Ratio Lower Upper

130 100

95 54.7 95.8 143.8#

132 52.3 76.1 114.1#

97 48.5 61.1 91.7#

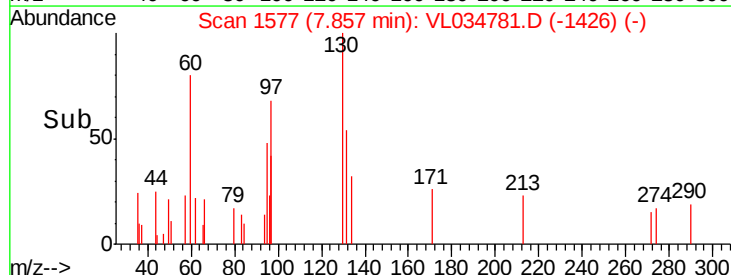
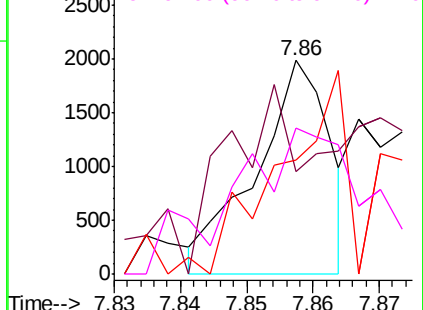


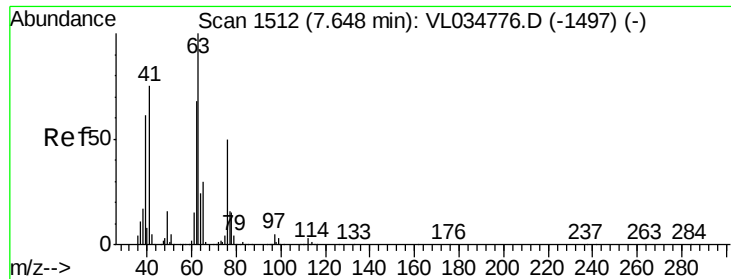
Abundance Ion 130.00 (129.70 to 130.70): V

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: 8.554 ppbv

RT: 7.20 min Scan# 1372

Delta R.T. -0.45 min

Lab File: VL034781.D

Acq: 4 Mar 2020 4:34

Instrument :

MSVOA_L

ClientSampleId :

VSTDIC0.03

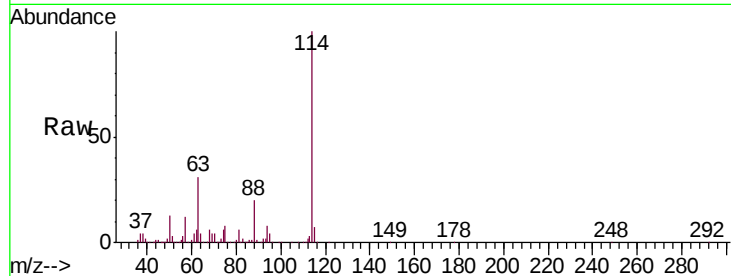
Tgt Ion: 63 Resp: 613993

Ion Ratio Lower Upper

63 100

41 0.2 60.3 90.5#

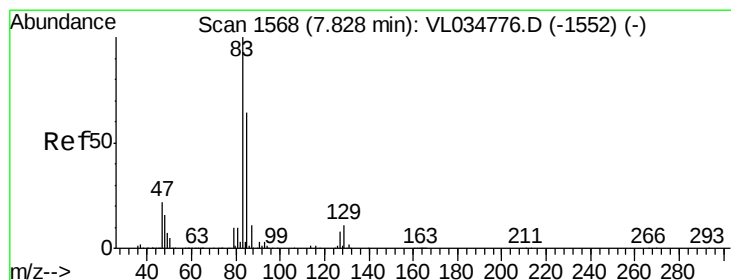
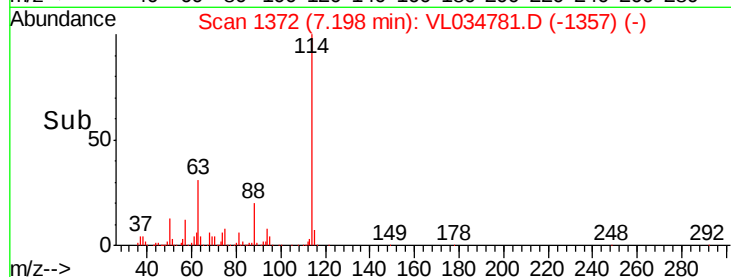
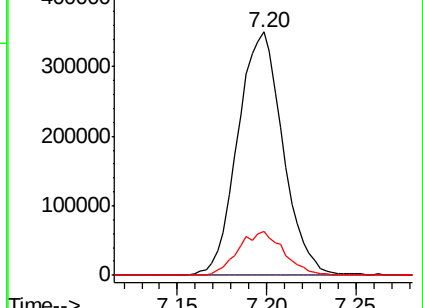
62 17.8 54.5 81.7#



Abundance Ion 63.10 (62.80 to 63.80): VL0

Ion 41.10 (40.80 to 41.80): VL0

Ion 62.10 (61.80 to 62.80): VL0



#42

Bromodichloromethane

Concen: 0.030 ppbv

RT: 7.82 min Scan# 1564

Delta R.T. -0.01 min

Lab File: VL034781.D

Acq: 4 Mar 2020 4:34

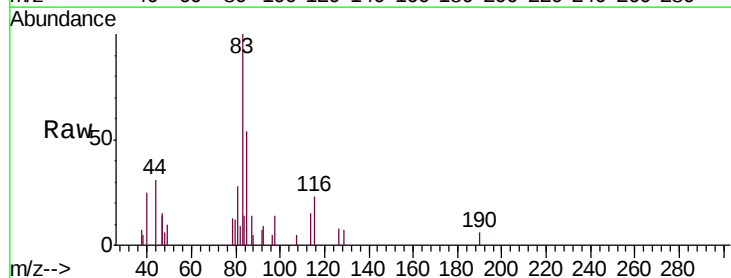
Tgt Ion: 83 Resp: 4533

Ion Ratio Lower Upper

83 100

85 43.7 50.8 76.2#

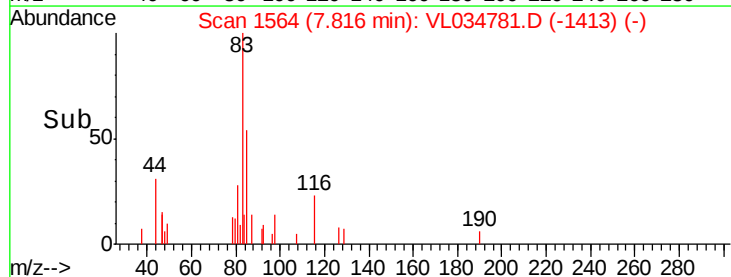
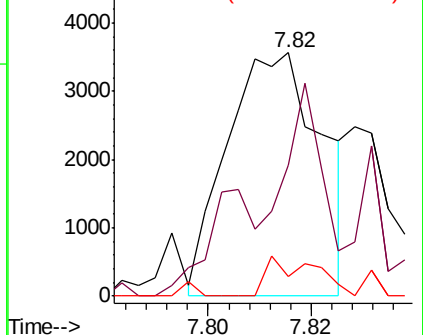
127 3.2 6.5 9.7#

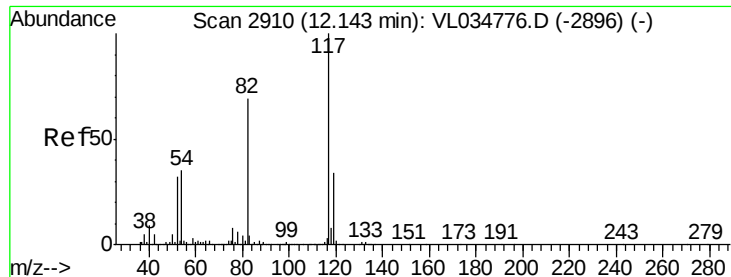


Abundance Ion 83.00 (82.70 to 83.70): VL0

Ion 85.00 (84.70 to 85.70): VL0

Ion 126.90 (126.60 to 127.60): V

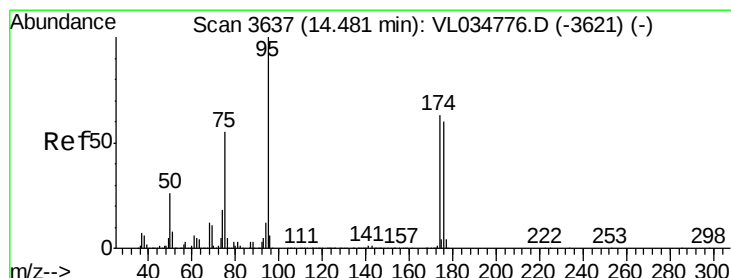
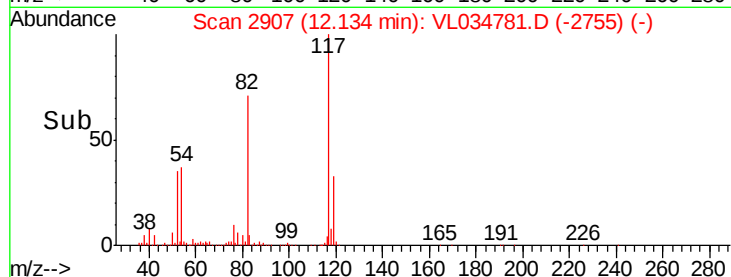
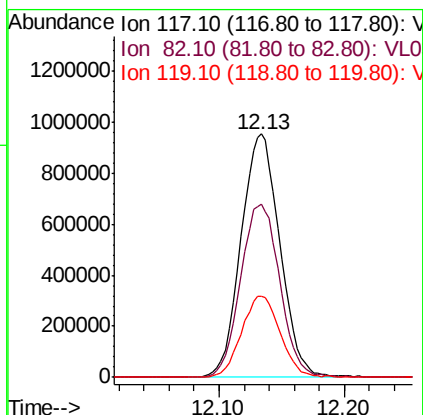
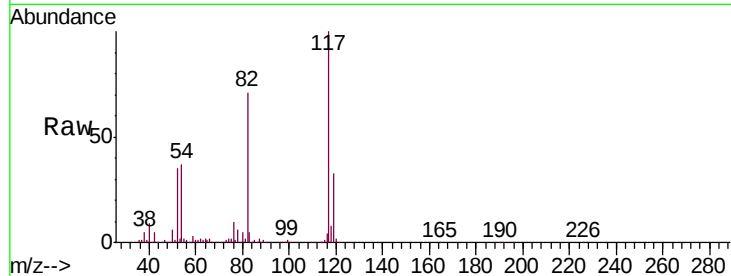




#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 12.13 min Scan# 2907
Delta R.T. -0.01 min
Lab File: VL034781.D
Acq: 4 Mar 2020 4:34

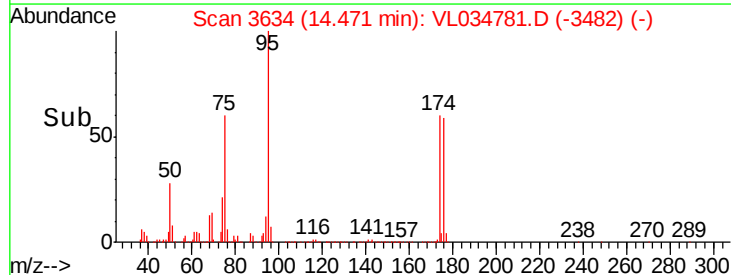
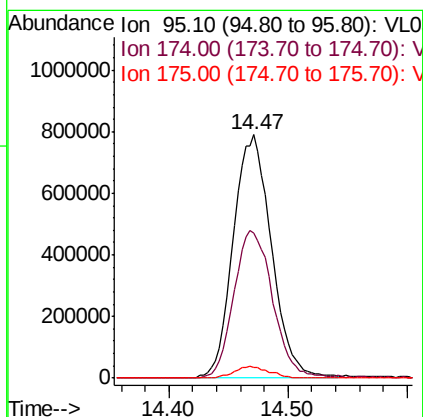
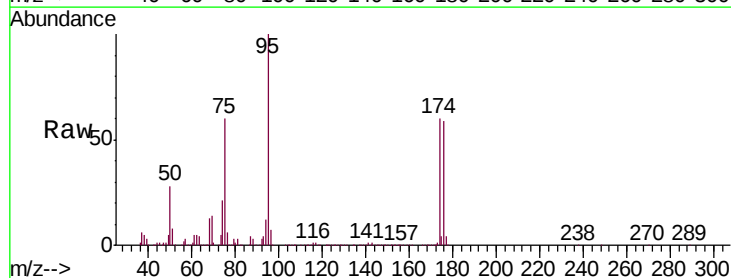
Instrument :
MSVOA_L
ClientSampleId :
VSTDIC0.03

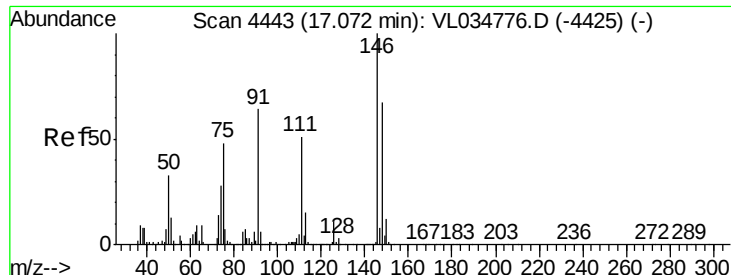
Tgt Ion: 117 Resp: 2049504
Ion Ratio Lower Upper
117 100
82 72.3 53.9 80.9
119 33.4 25.0 37.4



#68
1-Bromo-4-Fluorobenzene
Concen: 10.458 ppbv
RT: 14.47 min Scan# 3634
Delta R.T. -0.01 min
Lab File: VL034781.D
Acq: 4 Mar 2020 4:34

Tgt Ion: 95 Resp: 1757491
Ion Ratio Lower Upper
95 100
174 61.6 50.6 76.0
175 4.6 3.8 5.6





#75

1,3-Dichlorobenzene

Concen: 0.025 ppbv

RT: 17.07 min Scan# 4443

Delta R.T. -0.00 min

Lab File: VL034781.D

Acq: 4 Mar 2020 4:34

Instrument :

MSVOA_L

ClientSampleId :

VSTDIC0.03

Tgt Ion:146 Resp: 3720

Ion Ratio Lower Upper

146 100

111 60.0 24.7 74.1

148 135.0 31.8 95.4#

