

Data File : VL034681.D
Acq On : 26 Feb 2020 5:37
Operator : SY/AP
Sample : VSTDIC0.03
Misc : 400ml/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VSTDIC0.03

Quant Time: Feb 26 06:30:34 2020
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_L\METHODS\VL022620AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LWed Feb 26 03:37:46 2020
QLast Update : Wed Feb 26 03:37:46 2020
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.66	49	1081878	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.18	114	2236118	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.12	117	2189369	10.00	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.45	95	1846885	10.28	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	102.80%

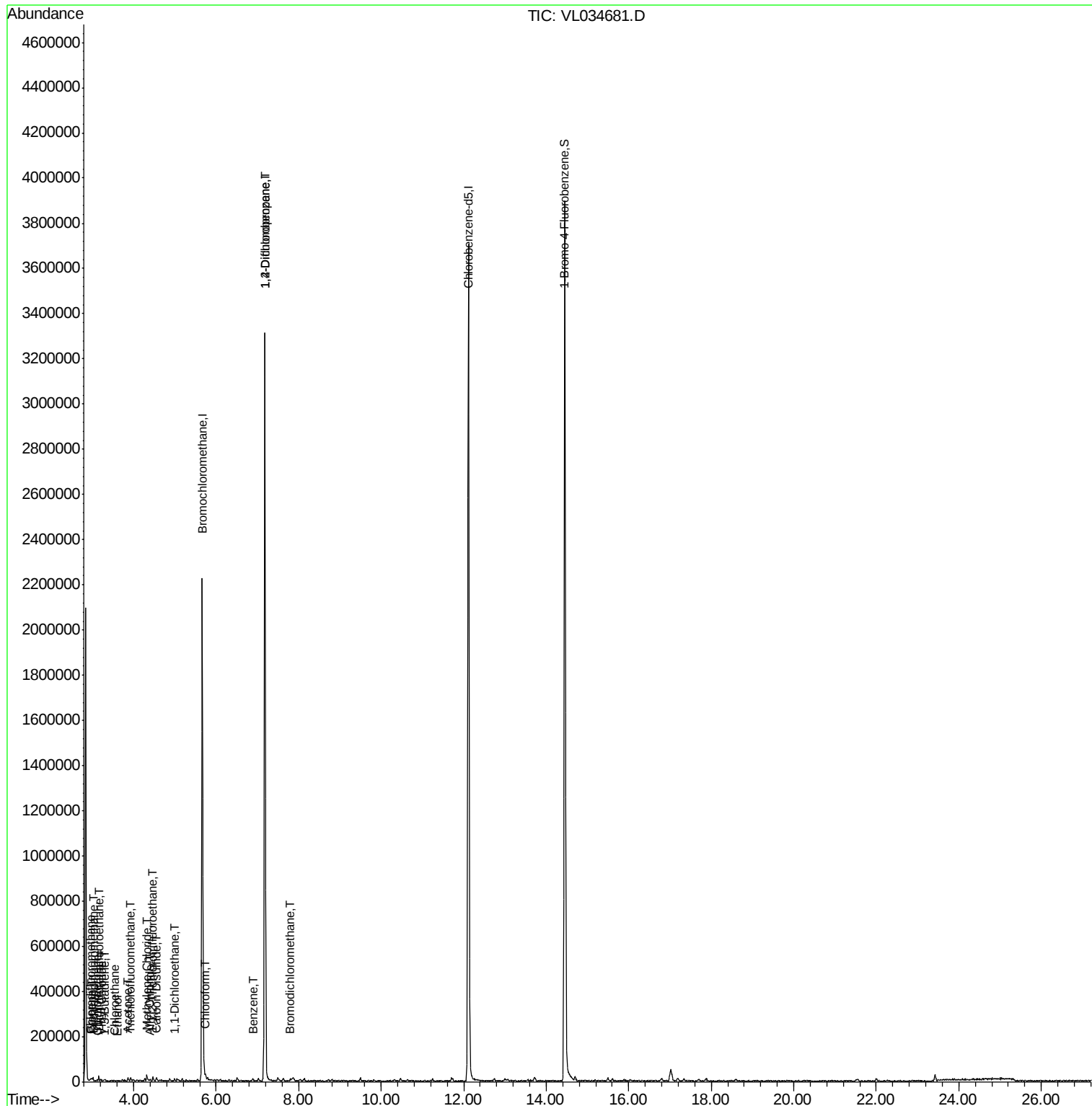
Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	3.01	85	5888	0.035	ppbv #	74
3) Chlorodifluoromethane	2.95	51	5981	0.046	ppbv	95
4) Chloromethane	3.11	50	2392	0.030	ppbv #	74
5) Vinyl Chloride	3.23	62	2221	0.030	ppbv #	71
7) Chloroethane	3.53	64	972	0.036	ppbv	90
8) Dichlorotetrafluoroethane	3.15	85	6889	0.041	ppbv	99
9) Propene	2.97	41	1746	0.033	ppbv #	15
11) Trichlorofluoromethane	3.92	101	4344	0.026	ppbv #	76
12) 1,1,2-Trichlorotrifluoroet	4.46	101	2534	0.022	ppbv #	35
13) Ethanol	3.60	45	403	0.025	ppbv #	37
15) Acetone	3.85	43	7115	0.048	ppbv #	48
16) 1,3-Butadiene	3.30	39	1660	0.027	ppbv #	47
20) Methylene Chloride	4.33	84	4761	0.089	ppbv #	82
21) Allyl Chloride	4.39	41	3003	0.034	ppbv #	53
24) 1,1-Dichloroethane	5.00	63	3032	0.020	ppbv #	91
27) Carbon Disulfide	4.54	76	2769	0.022	ppbv #	56
29) Chloroform	5.74	83	5118	0.029	ppbv	89
36) Benzene	6.89	78	4949	0.023	ppbv #	76
39) 1,2-Dichloropropane	7.18	63	632481	7.294	ppbv #	22
42) Bromodichloromethane	7.81	83	4758	0.027	ppbv #	63

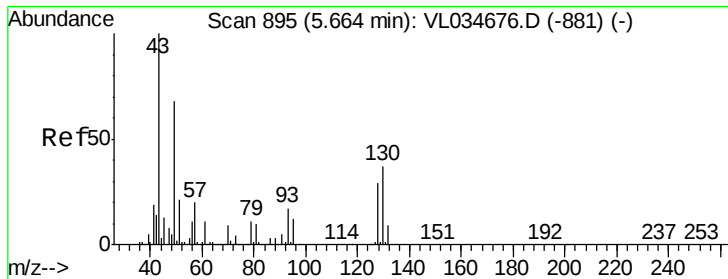
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data File : VL034681.D
Acq On : 26 Feb 2020 5:37
Operator : SY/AP
Sample : VSTDIC0.03
Misc : 400ml/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VSTDIC0.03

Quant Time: Feb 26 06:30:34 2020
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_L\METHODS\VL022620AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Wed Feb 26 03:37:46 2020
QLast Update : Wed Feb 26 03:37:46 2020
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.66 min Scan# 894

Delta R.T. -0.00 min

Lab File: VL034681.D

Acq: 26 Feb 2020 5:37

Instrument :

MSVOA_L

ClientSampleId :

VSTDIC0.03

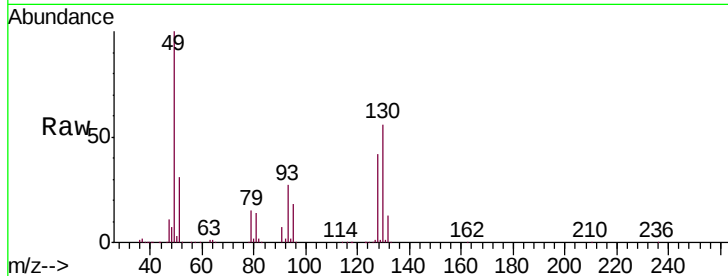
Tgt Ion: 49 Resp: 1081878

Ion Ratio Lower Upper

49 100

128 43.5 21.6 65.0

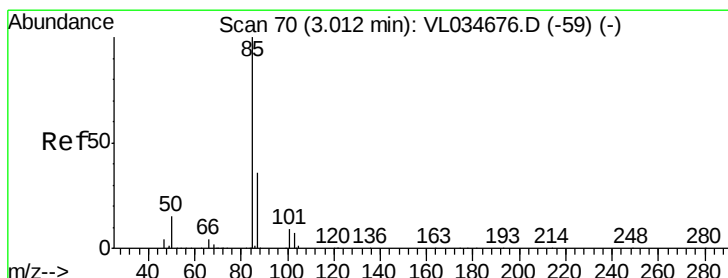
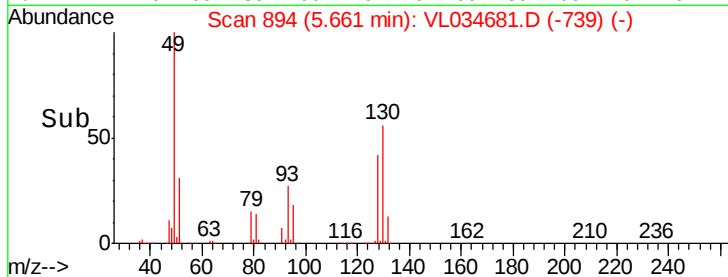
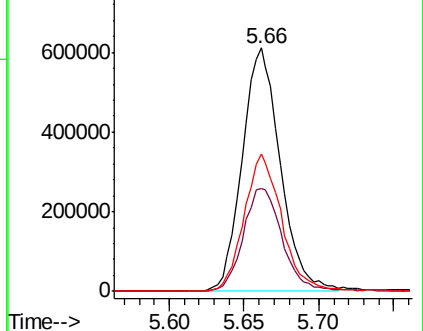
130 56.5 27.7 83.1



Abundance Ion 49.10 (48.80 to 49.80): VL0

Ion 128.00 (127.70 to 128.70): V

Ion 130.00 (129.70 to 130.70): V



#2

Dichlorodifluoromethane

Concen: 0.035 ppbv

RT: 3.01 min Scan# 69

Delta R.T. -0.00 min

Lab File: VL034681.D

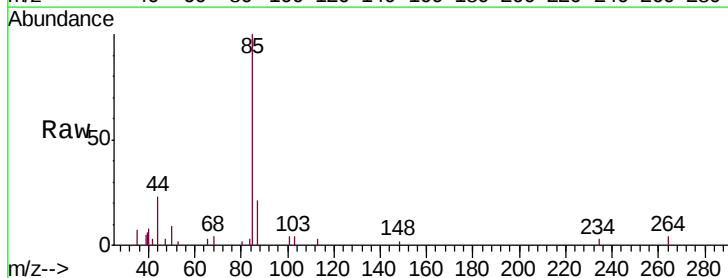
Acq: 26 Feb 2020 5:37

Tgt Ion: 85 Resp: 5888

Ion Ratio Lower Upper

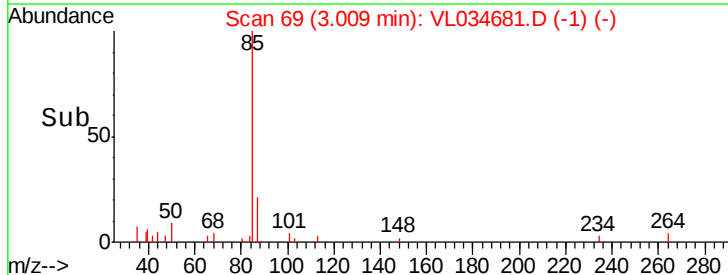
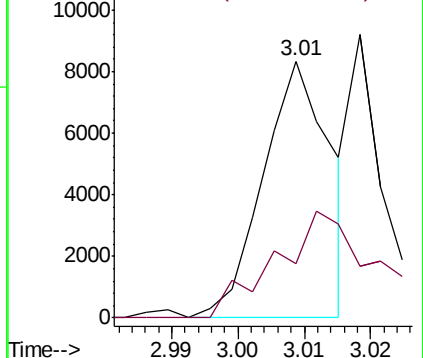
85 100

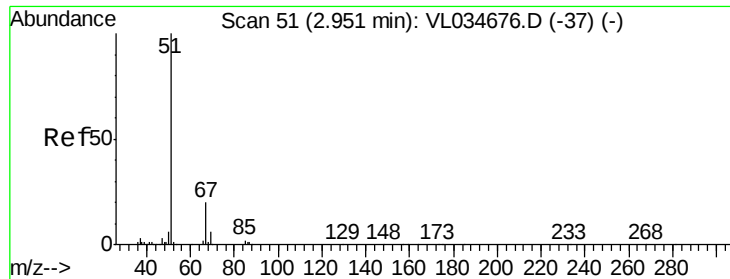
87 21.0 29.2 43.8#



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0





#3

Chlorodifluoromethane

Concen: 0.046 ppbv

RT: 2.95 min Scan# 52

Delta R.T. 0.00 min

Lab File: VL034681.D

Acq: 26 Feb 2020 5:37

Instrument :

MSVOA_L

ClientSampleId :

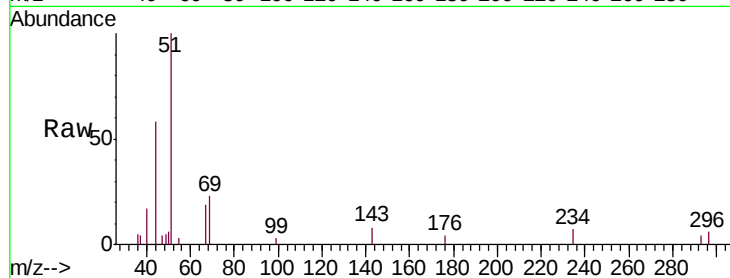
VSTDIC0.03

Tgt Ion: 51 Resp: 5981

Ion Ratio Lower Upper

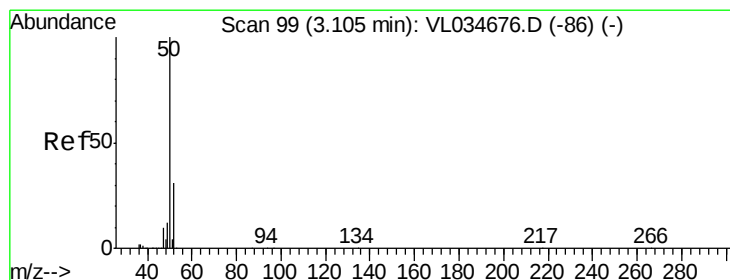
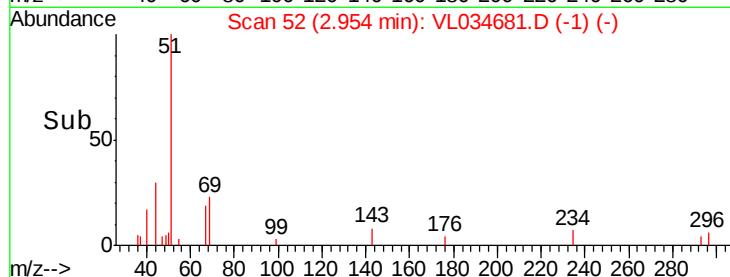
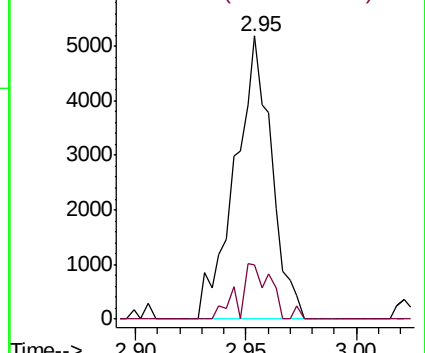
51 100

67 16.9 15.5 23.3



Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0



#4

Chloromethane

Concen: 0.030 ppbv

RT: 3.11 min Scan# 100

Delta R.T. 0.00 min

Lab File: VL034681.D

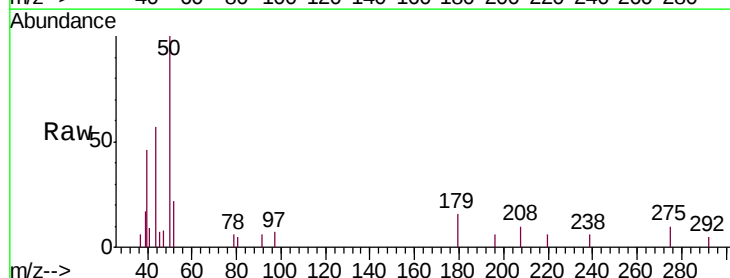
Acq: 26 Feb 2020 5:37

Tgt Ion: 50 Resp: 2392

Ion Ratio Lower Upper

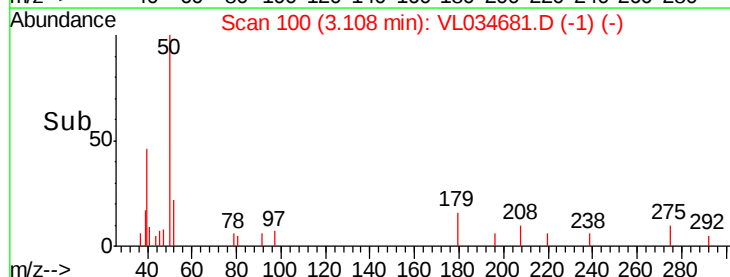
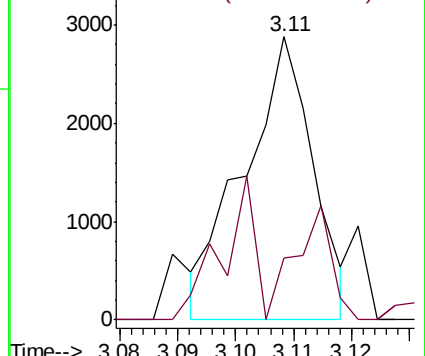
50 100

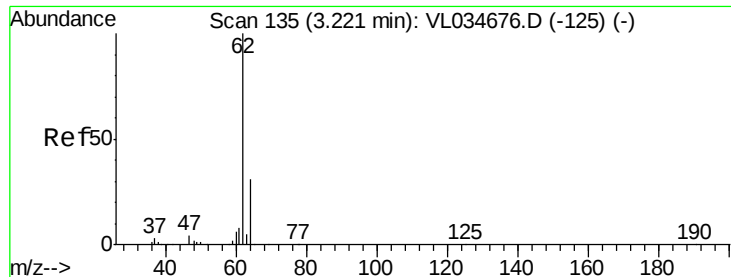
52 17.1 25.0 37.4#



Abundance Ion 50.10 (49.80 to 50.80): VL0

Ion 52.10 (51.80 to 52.80): VL0





#5

Vinyl Chloride

Concen: 0.030 ppbv

RT: 3.23 min Scan# 137

Delta R.T. 0.01 min

Lab File: VL034681.D

Acq: 26 Feb 2020 5:37

Instrument :

MSVOA_L

ClientSampleId :

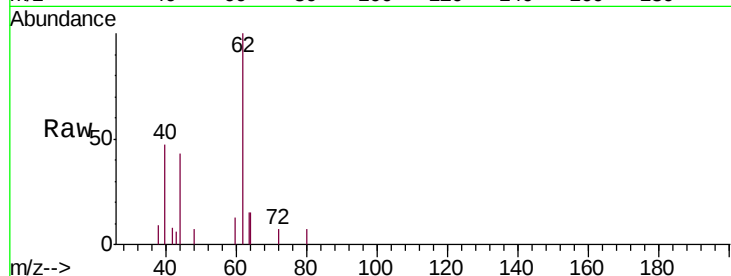
VSTDIC0.03

Tgt Ion: 62 Resp: 2221

Ion Ratio Lower Upper

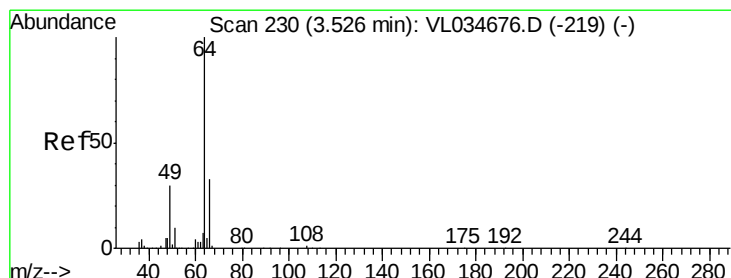
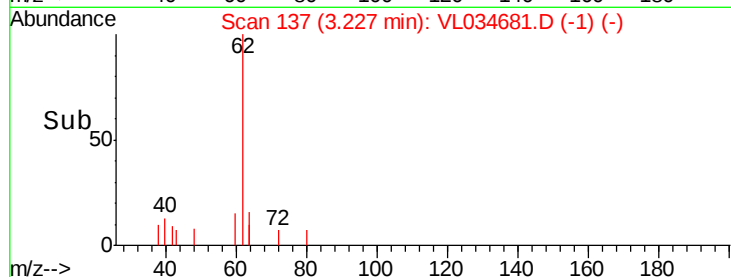
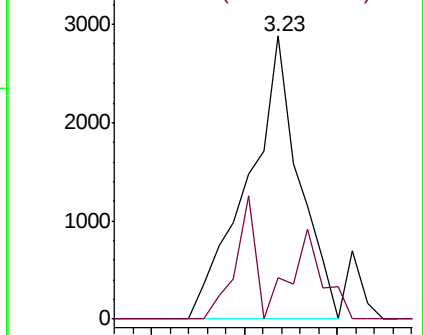
62 100

64 14.8 24.7 37.1#



Abundance Ion 62.10 (61.80 to 62.80): VL0

Ion 64.10 (63.80 to 64.80): VL0



#7

Chloroethane

Concen: 0.036 ppbv

RT: 3.53 min Scan# 230

Delta R.T. 0.00 min

Lab File: VL034681.D

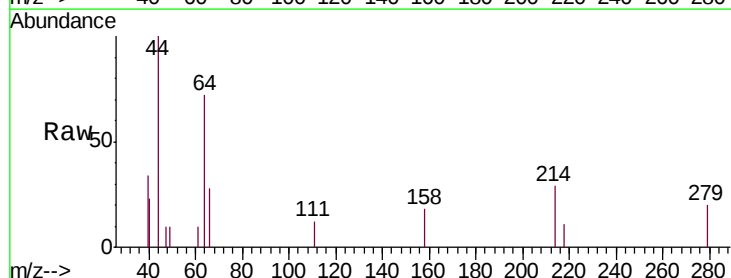
Acq: 26 Feb 2020 5:37

Tgt Ion: 64 Resp: 972

Ion Ratio Lower Upper

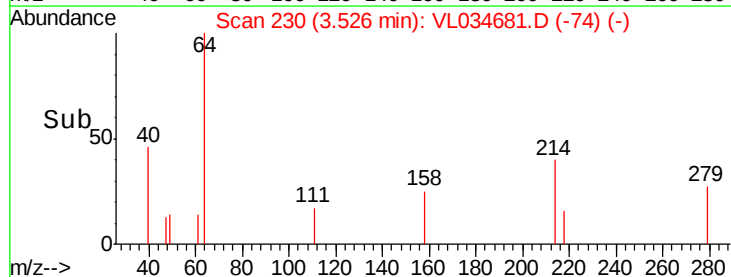
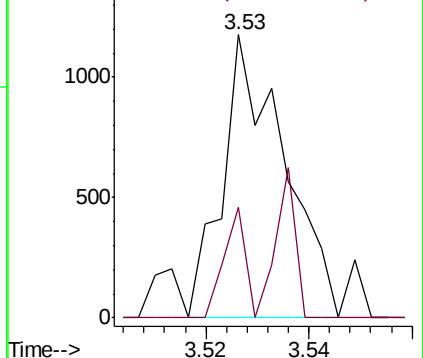
64 100

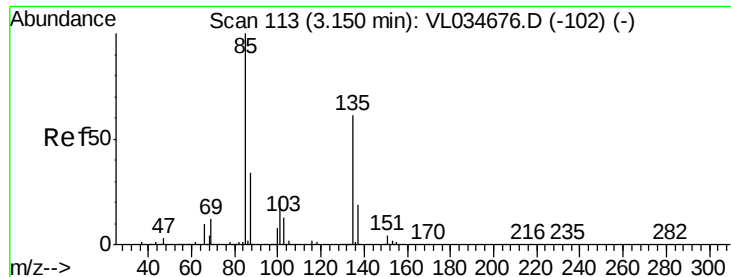
66 39.1 26.7 40.1



Abundance Ion 64.10 (63.80 to 64.80): VL0

Ion 66.10 (65.80 to 66.80): VL0





#8

Dichlorotetrafluoroethane

Concen: 0.041 ppbv

RT: 3.15 min Scan# 114

Delta R.T. 0.00 min

Lab File: VL034681.D

Acq: 26 Feb 2020 5:37

Instrument :

MSVOA_L

ClientSampleId :

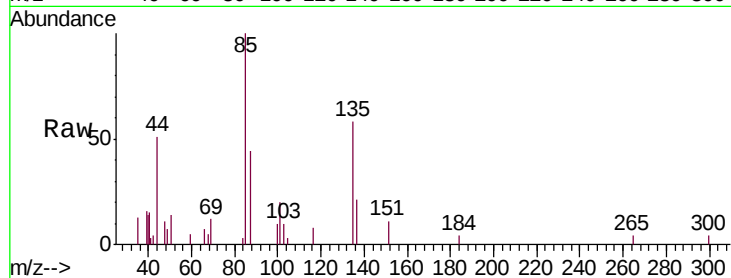
VSTDIC0.03

Tgt Ion: 85 Resp: 6889

Ion Ratio Lower Upper

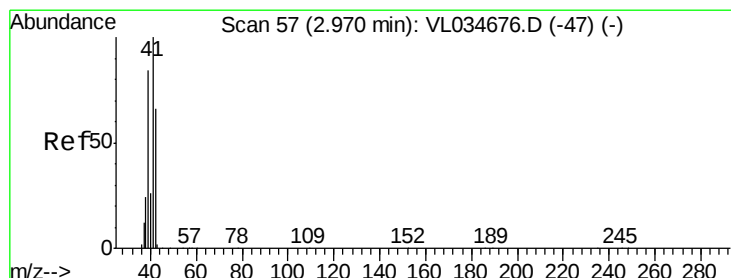
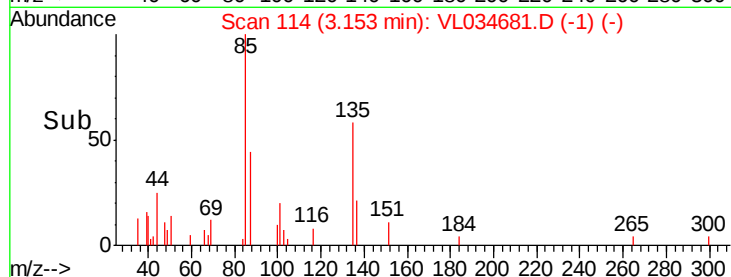
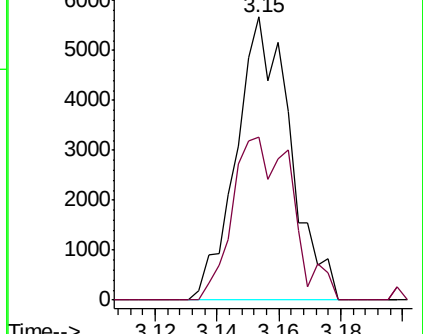
85 100

135 63.3 49.8 74.6



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 135.00 (134.70 to 135.70): VL0



#9

Propene

Concen: 0.033 ppbv

RT: 2.97 min Scan# 56

Delta R.T. -0.00 min

Lab File: VL034681.D

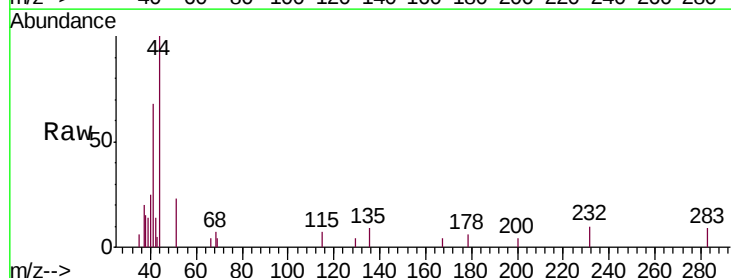
Acq: 26 Feb 2020 5:37

Tgt Ion: 41 Resp: 1746

Ion Ratio Lower Upper

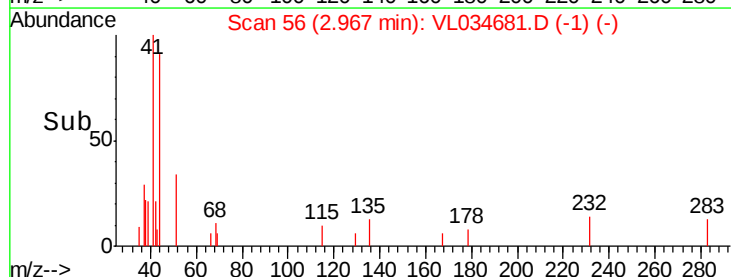
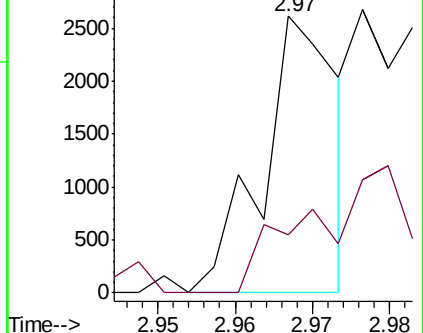
41 100

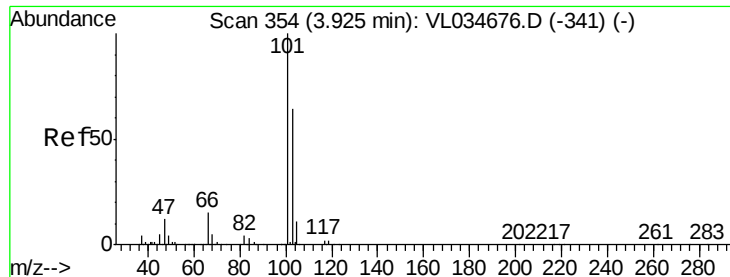
42 0.0 54.9 82.3#



Abundance Ion 41.10 (40.80 to 41.80): VL0

Ion 42.10 (41.80 to 42.80): VL0

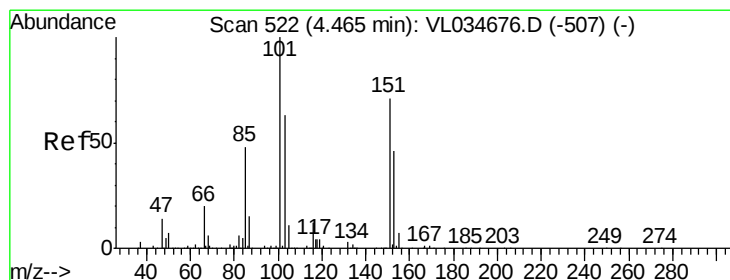
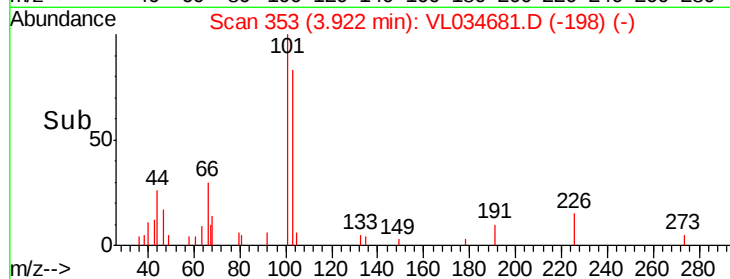
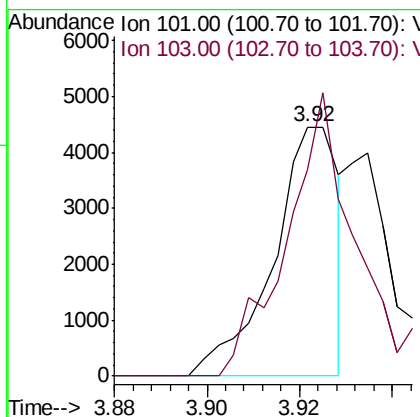
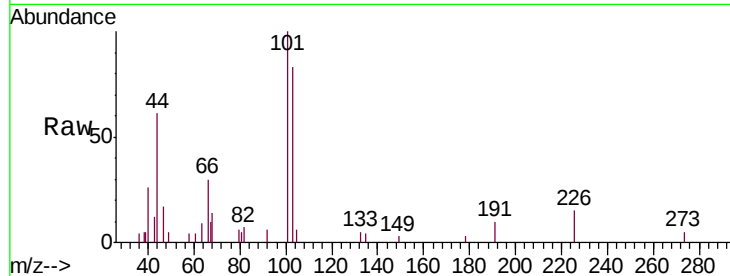




#11
 Trichlorofluoromethane
 Concen: 0.026 ppbv
 RT: 3.92 min Scan# 353
 Delta R.T. -0.00 min
 Lab File: VL034681.D
 Acq: 26 Feb 2020 5:37

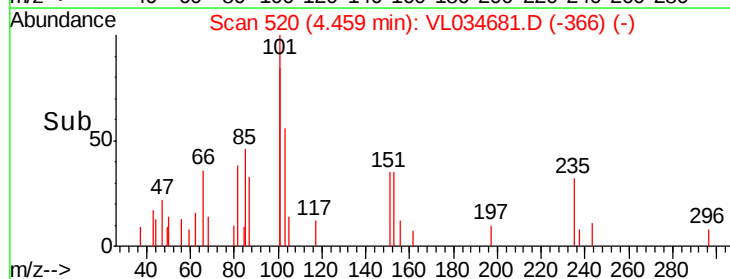
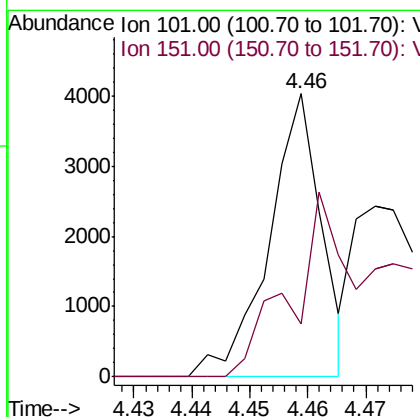
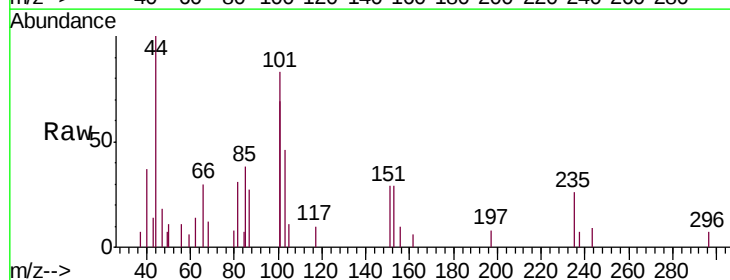
Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDIC0.03

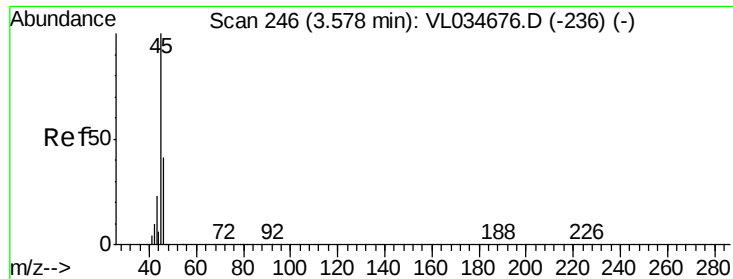
Tgt Ion:101 Resp: 4344
 Ion Ratio Lower Upper
 101 100
 103 83.0 51.2 76.8#



#12
 1,1,2-Trichlorotrifluoroethane
 Concen: 0.022 ppbv
 RT: 4.46 min Scan# 520
 Delta R.T. -0.01 min
 Lab File: VL034681.D
 Acq: 26 Feb 2020 5:37

Tgt Ion:101 Resp: 2534
 Ion Ratio Lower Upper
 101 100
 151 122.7 55.8 83.6#





#13

Ethanol

Concen: 0.025 ppbv

RT: 3.60 min Scan# 252

Delta R.T. 0.02 min

Lab File: VL034681.D

Acq: 26 Feb 2020 5:37

Instrument :

MSVOA_L

ClientSampleId :

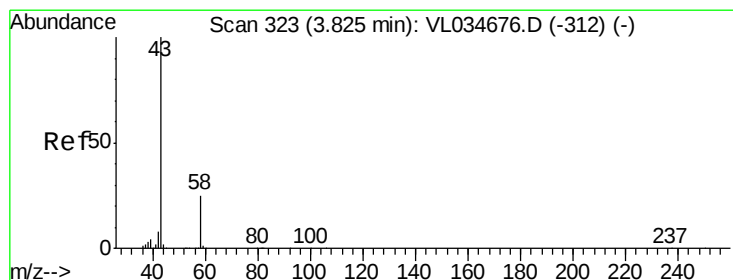
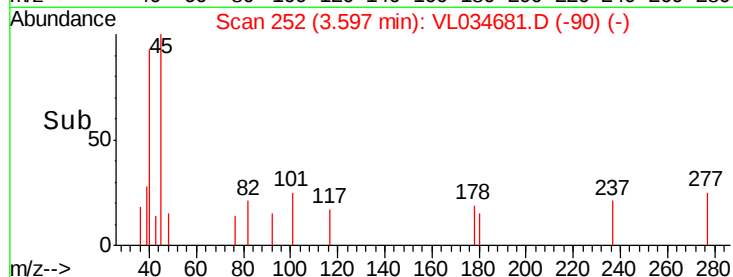
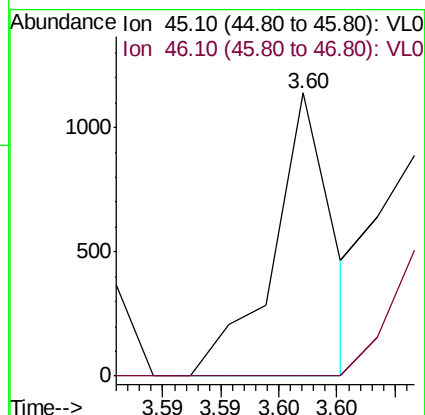
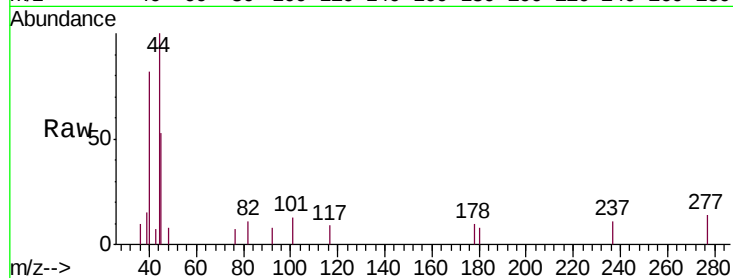
VSTDIC0.03

Tgt Ion: 45 Resp: 403

Ion Ratio Lower Upper

45 100

46 0.0 15.4 61.4#



#15

Acetone

Concen: 0.048 ppbv

RT: 3.85 min Scan# 332

Delta R.T. 0.03 min

Lab File: VL034681.D

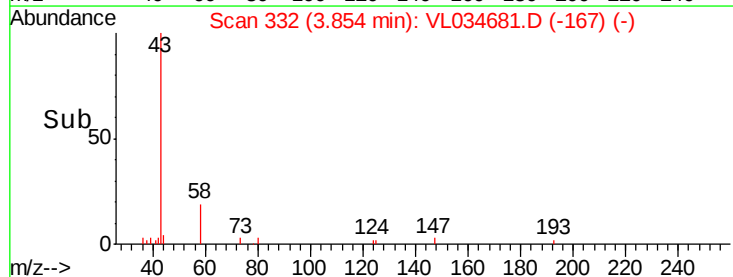
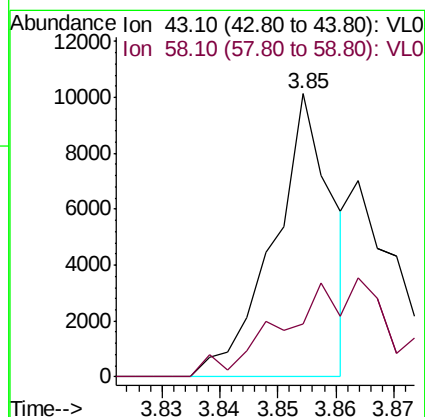
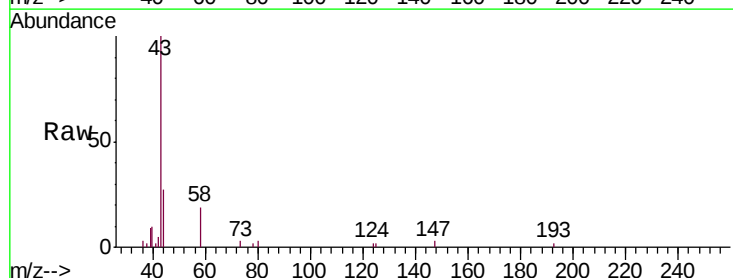
Acq: 26 Feb 2020 5:37

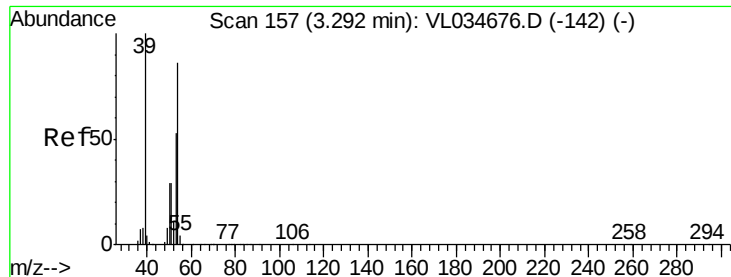
Tgt Ion: 43 Resp: 7115

Ion Ratio Lower Upper

43 100

58 0.0 21.4 32.0#

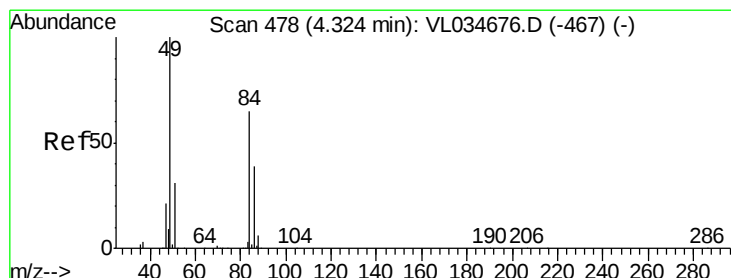
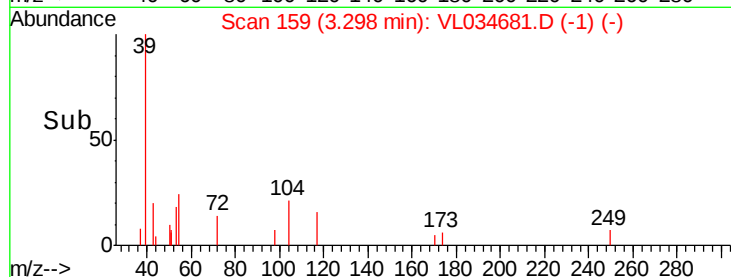
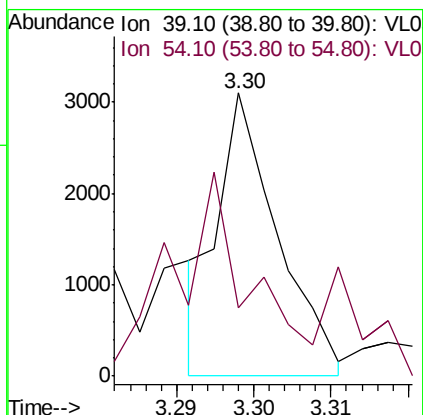
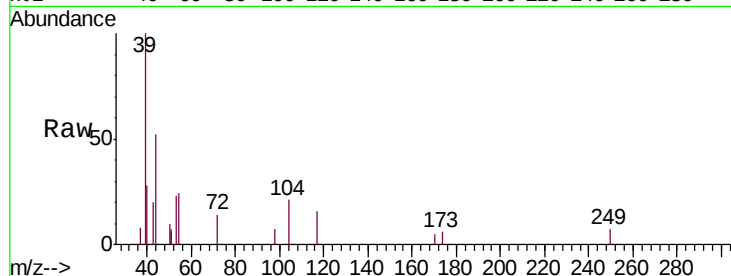




#16
 1,3-Butadiene
 Concen: 0.027 ppbv
 RT: 3.30 min Scan# 159
 Delta R.T. 0.01 min
 Lab File: VL034681.D
 Acq: 26 Feb 2020 5:37

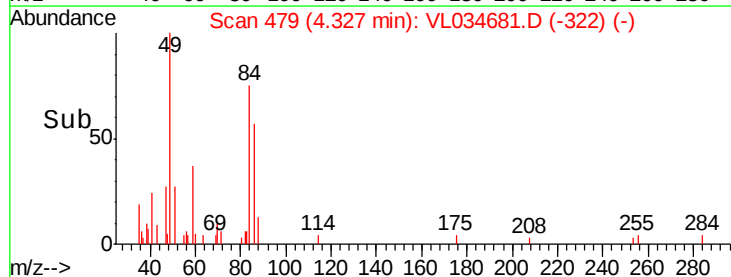
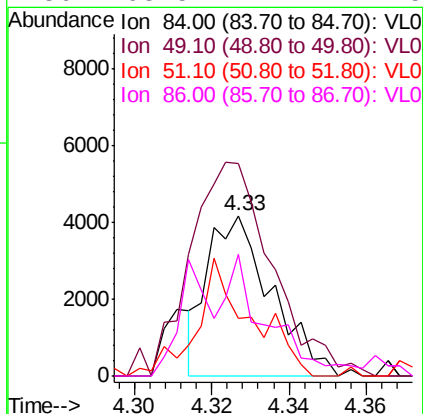
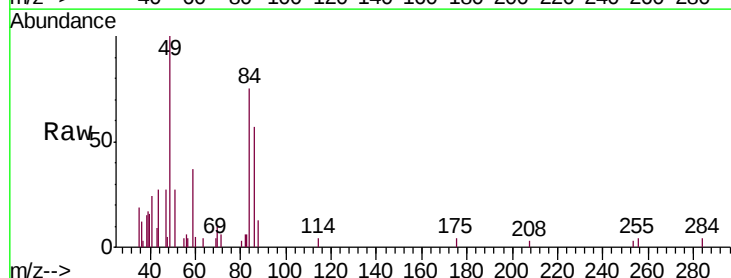
Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDIC0.03

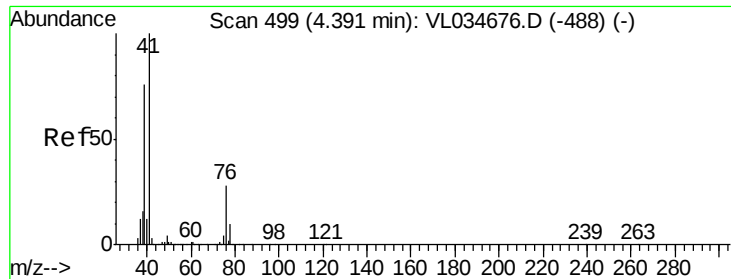
Tgt Ion: 39 Resp: 1660
 Ion Ratio Lower Upper
 39 100
 54 131.7 67.0 100.6#



#20
 Methylene Chloride
 Concen: 0.089 ppbv
 RT: 4.33 min Scan# 479
 Delta R.T. 0.00 min
 Lab File: VL034681.D
 Acq: 26 Feb 2020 5:37

Tgt Ion: 84 Resp: 4761
 Ion Ratio Lower Upper
 84 100
 49 127.3 122.8 184.2
 51 35.7 38.6 58.0#
 86 68.5 47.7 71.5

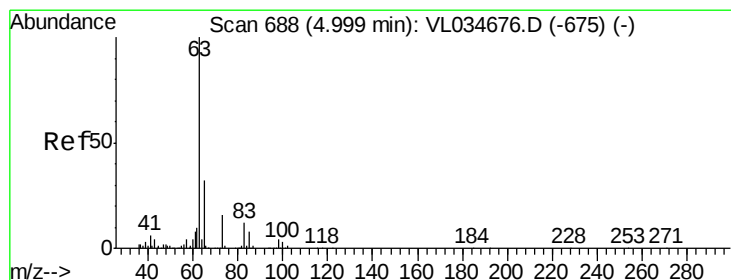
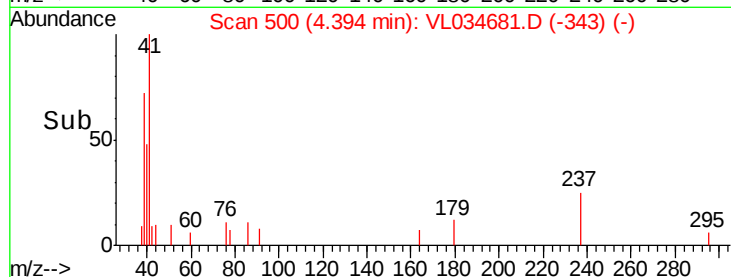
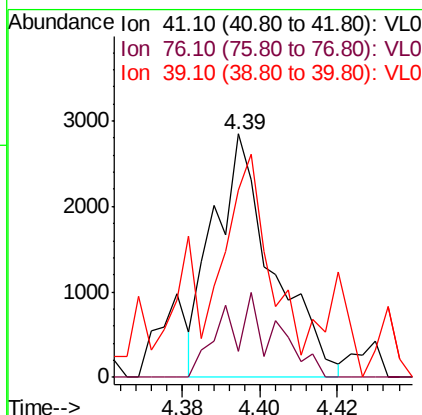
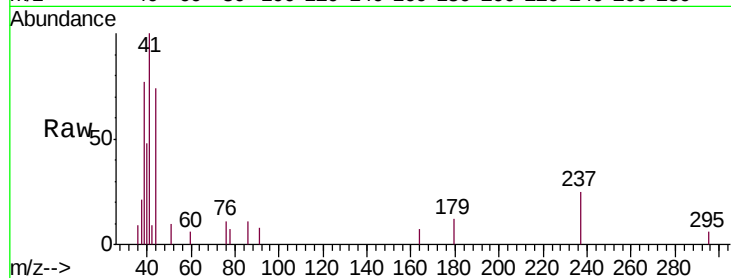




#21
 Allyl Chloride
 Concen: 0.034 ppbv
 RT: 4.39 min Scan# 500
 Delta R.T. 0.00 min
 Lab File: VL034681.D
 Acq: 26 Feb 2020 5:37

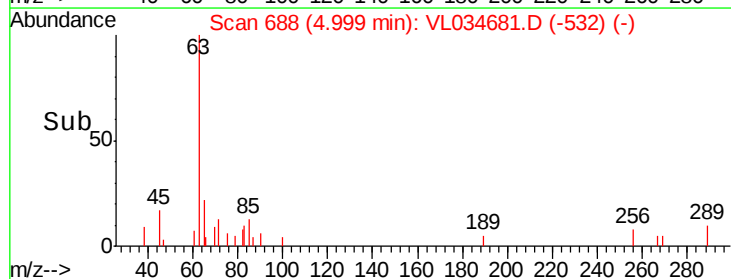
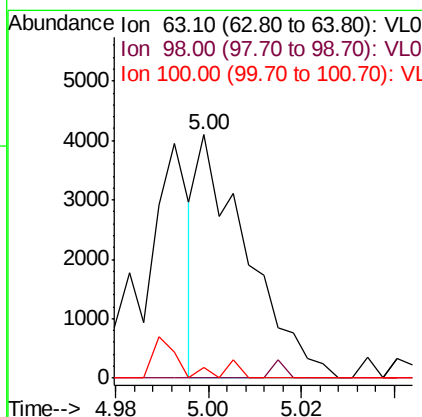
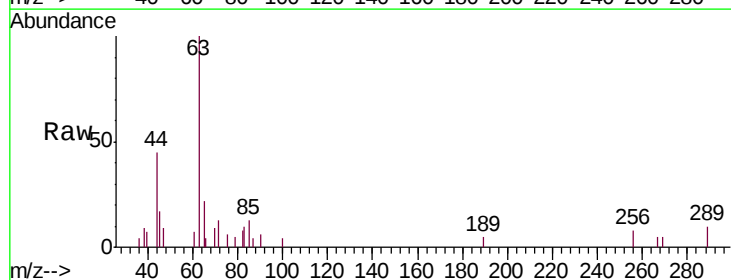
Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDIC0.03

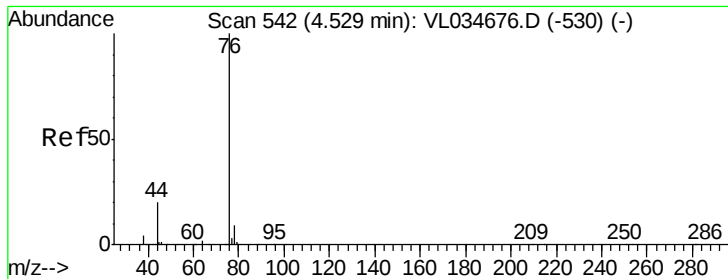
Tgt Ion: 41 Resp: 3003
 Ion Ratio Lower Upper
 41 100
 76 30.5 22.8 34.2
 39 131.2 61.7 92.5#



#24
 1,1-Dichloroethane
 Concen: 0.020 ppbv
 RT: 5.00 min Scan# 688
 Delta R.T. 0.00 min
 Lab File: VL034681.D
 Acq: 26 Feb 2020 5:37

Tgt Ion: 63 Resp: 3032
 Ion Ratio Lower Upper
 63 100
 98 0.0 2.1 6.2#
 100 4.3 1.4 4.0#





#27

Carbon Disulfide

Concen: 0.022 ppbv

RT: 4.54 min Scan# 544

Delta R.T. 0.01 min

Lab File: VL034681.D

Acq: 26 Feb 2020 5:37

Instrument :

MSVOA_L

ClientSampleId :

VSTDIC0.03

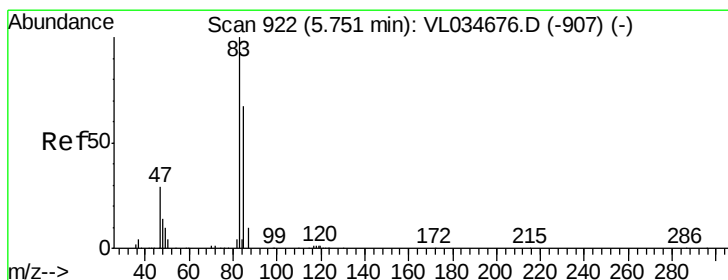
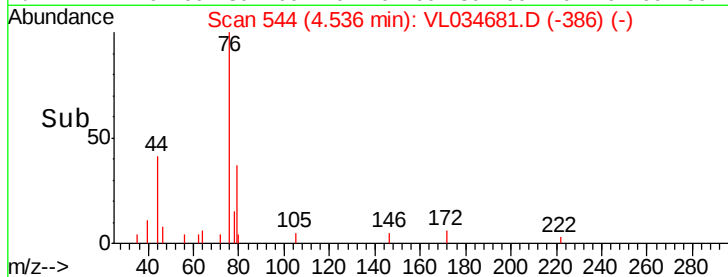
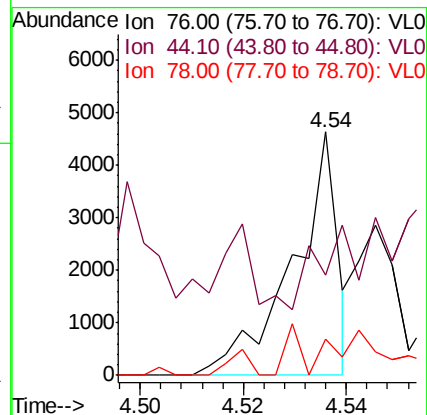
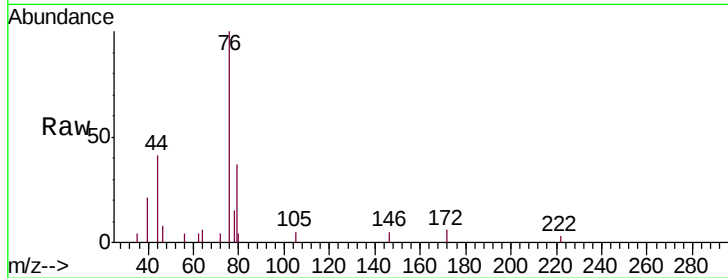
Tgt Ion: 76 Resp: 2769

Ion Ratio Lower Upper

76 100

44 26.9 15.3 22.9#

78 45.5 7.6 11.4#



#29

Chloroform

Concen: 0.029 ppbv

RT: 5.74 min Scan# 919

Delta R.T. -0.01 min

Lab File: VL034681.D

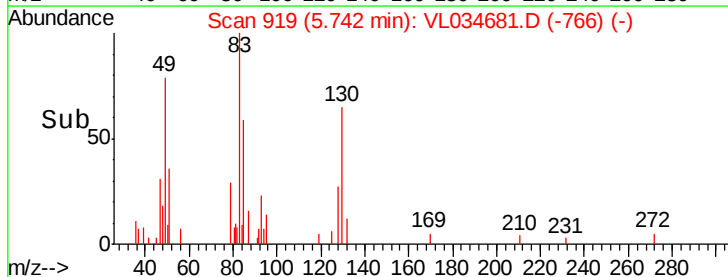
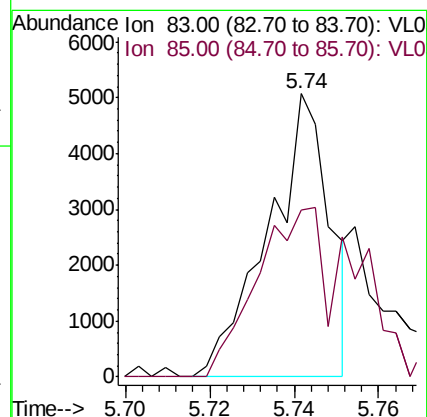
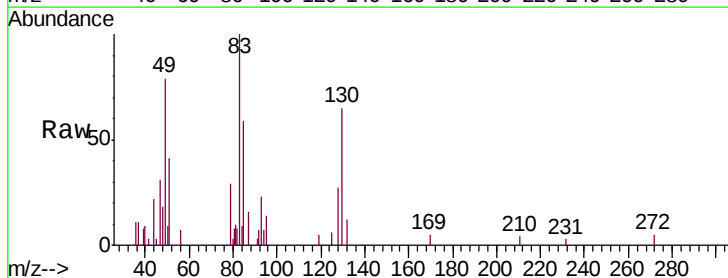
Acq: 26 Feb 2020 5:37

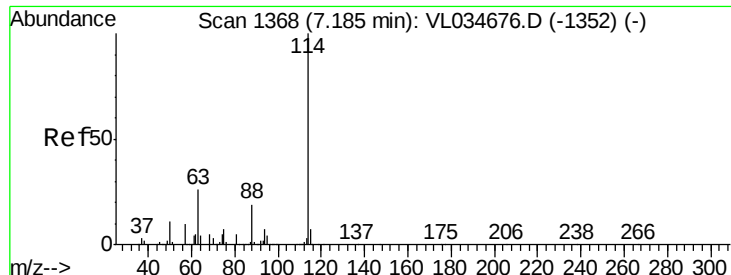
Tgt Ion: 83 Resp: 5118

Ion Ratio Lower Upper

83 100

85 58.8 53.9 80.9

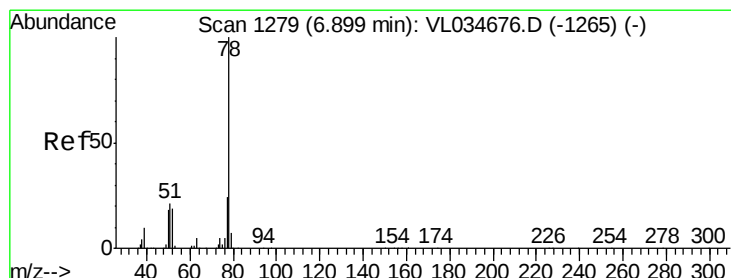
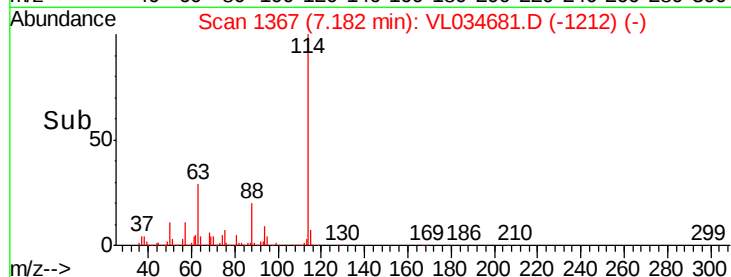
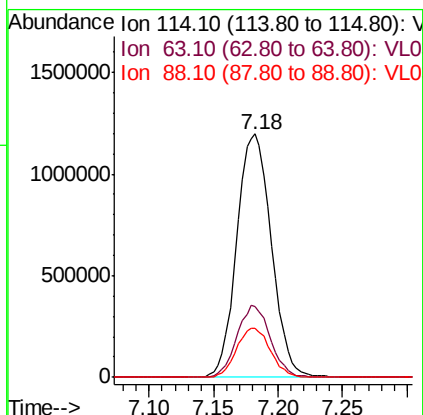
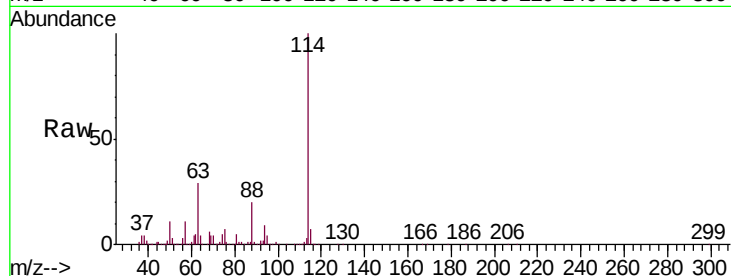




#33
 1,4-Difluorobenzene
 Concen: 10.000 ppbv
 RT: 7.18 min Scan# 1367
 Delta R.T. -0.00 min
 Lab File: VL034681.D
 Acq: 26 Feb 2020 5:37

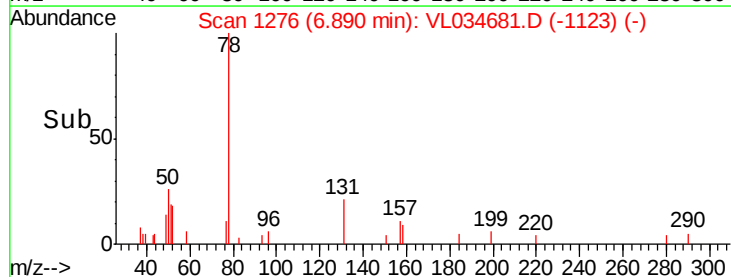
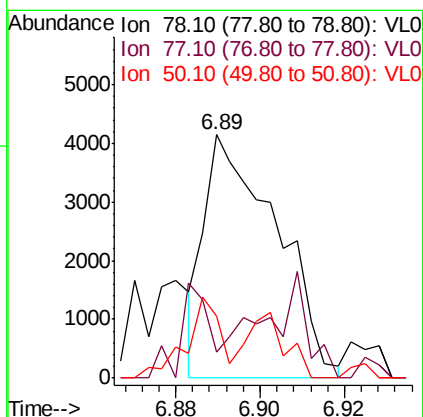
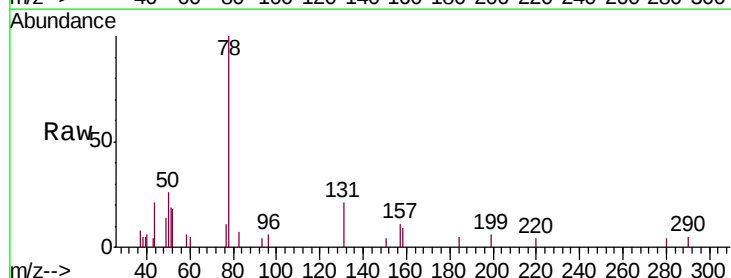
Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDIC0.03

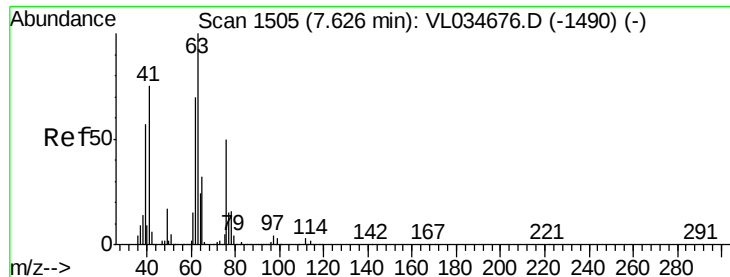
Tgt Ion:114 Resp: 2236118
 Ion Ratio Lower Upper
 114 100
 63 28.6 22.9 34.3
 88 19.7 15.8 23.6



#36
 Benzene
 Concen: 0.023 ppbv
 RT: 6.89 min Scan# 1276
 Delta R.T. -0.01 min
 Lab File: VL034681.D
 Acq: 26 Feb 2020 5:37

Tgt Ion: 78 Resp: 4949
 Ion Ratio Lower Upper
 78 100
 77 11.1 19.5 29.3#
 50 26.9 14.6 21.8#





#39

1,2-Dichloropropane

Concen: 7.294 ppbv

RT: 7.18 min Scan# 1366

Delta R.T. -0.45 min

Lab File: VL034681.D

Acq: 26 Feb 2020 5:37

Instrument :

MSVOA_L

ClientSampleId :

VSTDIC0.03

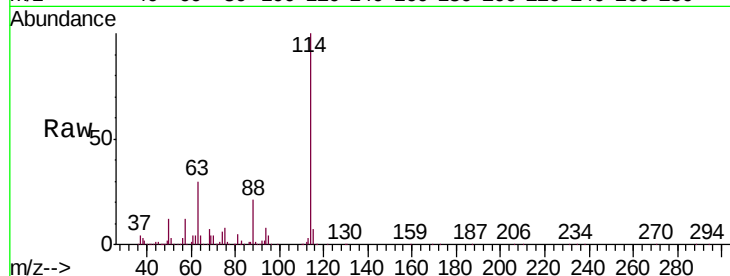
Tgt Ion: 63 Resp: 632481

Ion Ratio Lower Upper

63 100

41 0.1 60.2 90.4#

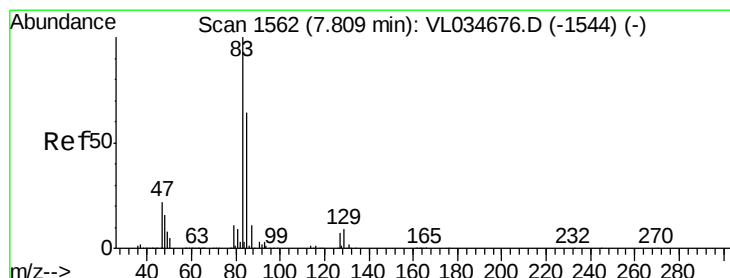
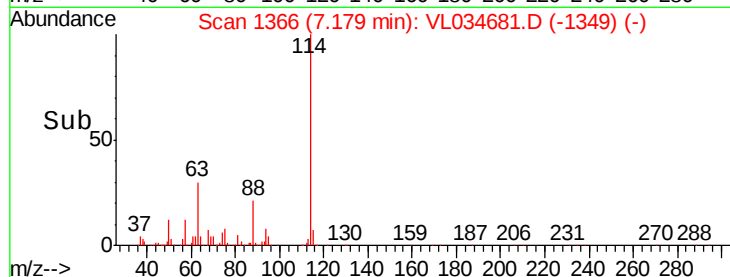
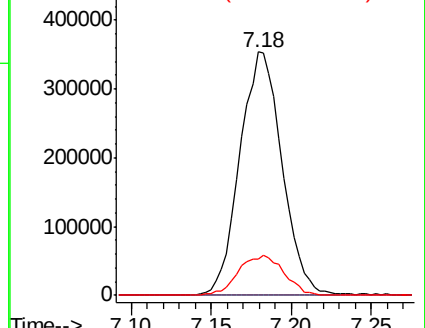
62 14.8 56.3 84.5#



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: 0.027 ppbv

RT: 7.81 min Scan# 1561

Delta R.T. -0.00 min

Lab File: VL034681.D

Acq: 26 Feb 2020 5:37

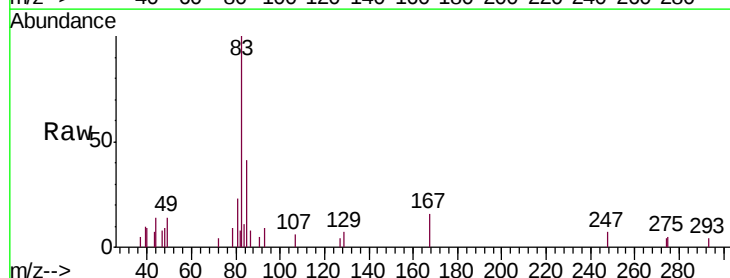
Tgt Ion: 83 Resp: 4758

Ion Ratio Lower Upper

83 100

85 32.4 51.1 76.7#

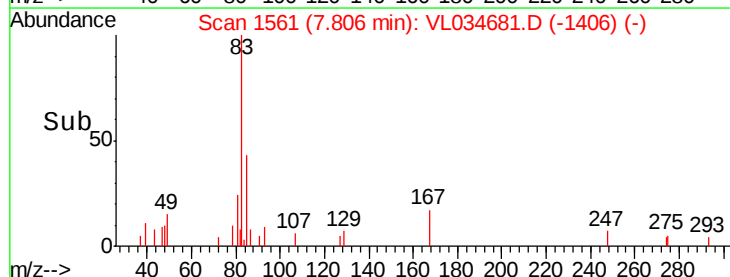
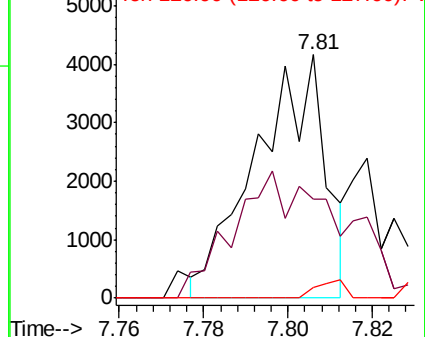
127 4.8 5.8 8.8#

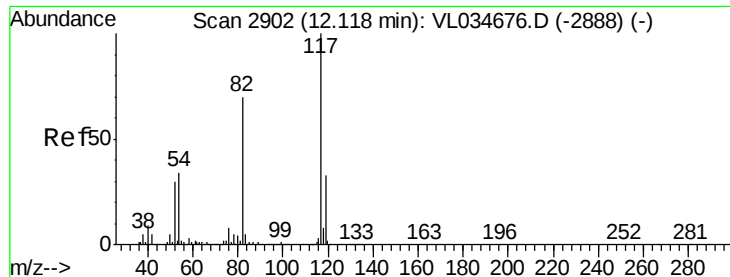


Abundance Ion 83.00 (82.70 to 83.70): VL0

Ion 85.00 (84.70 to 85.70): VL0

Ion 126.90 (126.60 to 127.60): V

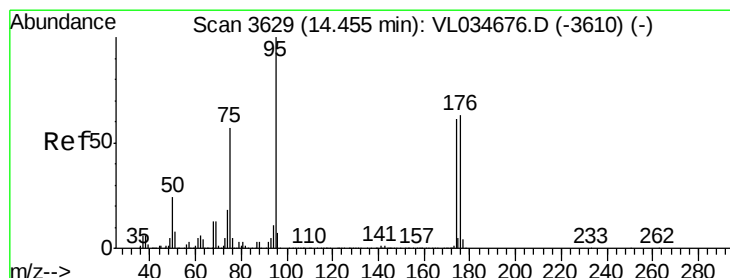
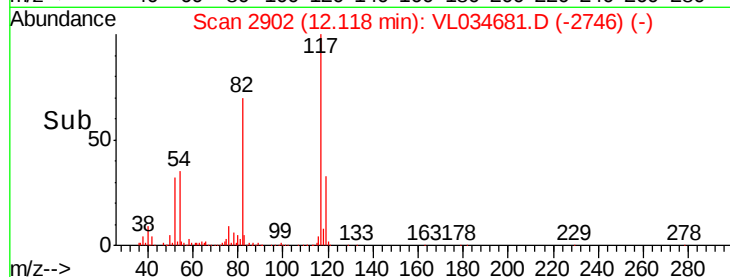
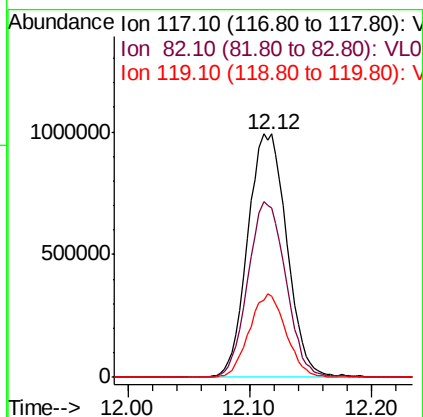
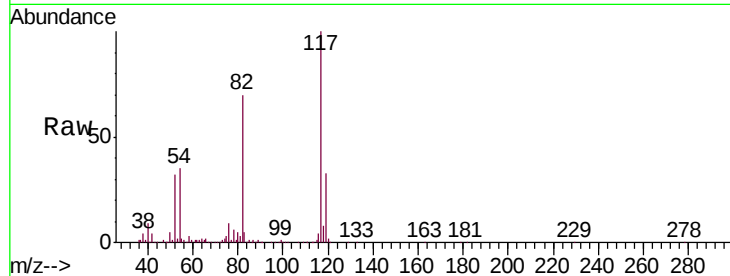




#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 12.12 min Scan# 2902
Delta R.T. 0.00 min
Lab File: VL034681.D
Acq: 26 Feb 2020 5:37

Instrument :
MSVOA_L
ClientSampleId :
VSTDIC0.03

Tgt Ion: 117 Resp: 2189369
Ion Ratio Lower Upper
117 100
82 70.3 54.1 81.1
119 32.6 27.6 41.4



#68
1-Bromo-4-Fluorobenzene
Concen: 10.278 ppbv
RT: 14.45 min Scan# 3628
Delta R.T. -0.00 min
Lab File: VL034681.D
Acq: 26 Feb 2020 5:37

Tgt Ion: 95 Resp: 1846885
Ion Ratio Lower Upper
95 100
174 63.3 50.7 76.1
175 4.6 3.9 5.9

