

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL031620\
 Data File : VL034909.D
 Acq On : 17 Mar 2020 3:16
 Operator : SY/AP
 Sample : L1924-08
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 FD-01

Quant Time: Mar 17 04:29:33 2020
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL030920AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Mon Mar 09 16:42:53 2020
 QLast Update : Mon Mar 09 16:42:53 2020
 Response via : Initial Calibration

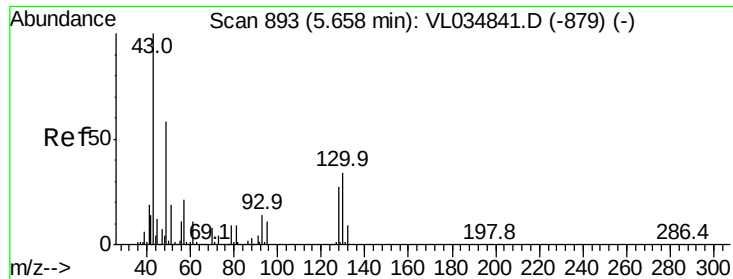
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.65	49	851472	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.17	114	1894668	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.10	117	1838573	10.00	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.44	95	1501145	10.47	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	104.70%

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.00	85	93085	0.798	ppbv #	84
3) Chlorodifluoromethane	2.95	51	57046	0.600	ppbv #	82
4) Chloromethane	3.09	50	2517	0.047	ppbv #	71
9) Propene	2.97	41	5852	0.129	ppbv #	15
10) Heptane	8.12	43	4081	0.037	ppbv #	28
11) Trichlorofluoromethane	3.92	101	25783	0.208	ppbv	97
12) 1,1,2-Trichlorotrifluoroet	4.46	101	21824	0.251	ppbv	91
13) Ethanol	3.57	45	574148	41.586	ppbv	92
15) Acetone	3.81	43	1801438	16.323	ppbv	100
16) 1,3-Butadiene	3.27	39	4028	0.081	ppbv #	9
19) Isopropyl Alcohol	3.95	45	145553	2.089	ppbv #	37
20) Methylene Chloride	4.31	84	76055	2.180	ppbv	92
25) Ethyl Acetate	5.67	43	50563	0.257	ppbv #	86
26) Hexane	5.67	57	56803	0.671	ppbv #	42
27) Carbon Disulfide	4.52	76	6185	0.064	ppbv #	41
34) 2-Butanone	5.23	43	66647	0.529	ppbv	92
35) Carbon Tetrachloride	7.01	117	3680	0.031	ppbv #	32
36) Benzene	6.88	78	43955	0.260	ppbv #	87
38) Trichloroethene	7.83	130	443783	6.919	ppbv	96
39) 1,2-Dichloropropane	7.17	63	524062	7.832	ppbv #	23
44) 2,2,4-Trimethylpentane	7.87	57	9737	0.034	ppbv #	1
52) Tetrachloroethene	11.24	164	2534	0.038	ppbv #	33
53) Toluene	9.81	91	147142	0.754	ppbv #	20
59) m/p-Xylene	13.01	91	9268	0.044	ppbv #	30

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



#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.65 min Scan# 891

Delta R.T. -0.01 min

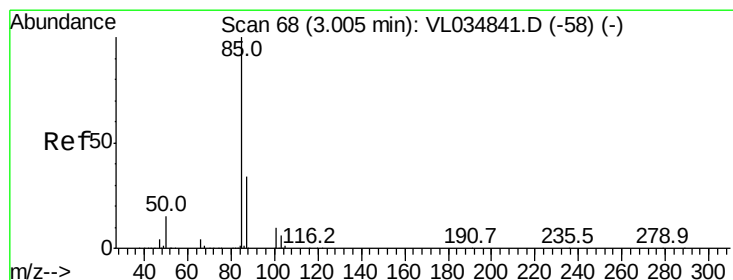
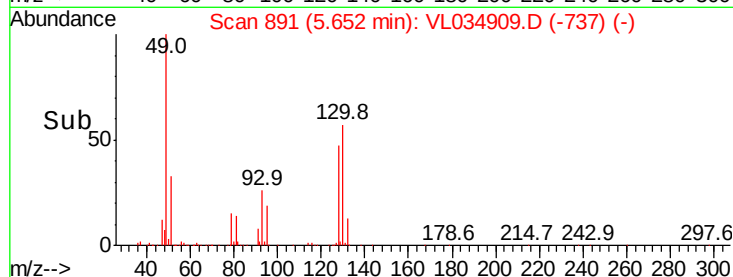
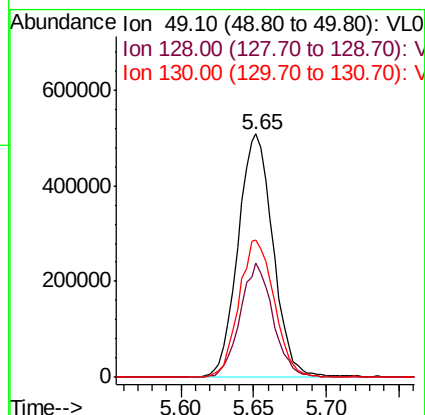
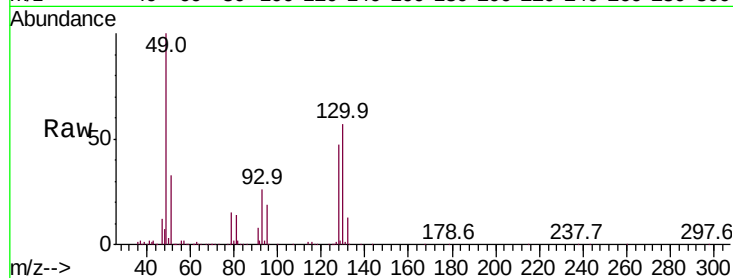
Lab File: VL034909.D

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Tot Ion: 49 Resp: 851472

Ion	Ratio	Lower	Upper
49	100		
128	44.2	23.4	70.3
130	57.6	30.0	90.0



#2

Dichlorodifluoromethane

Concen: 0.798 ppbv

RT: 3.00 min Scan# 67

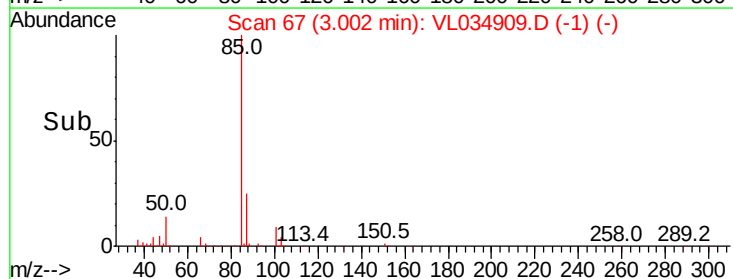
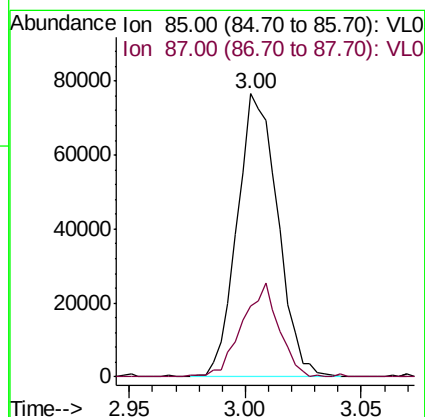
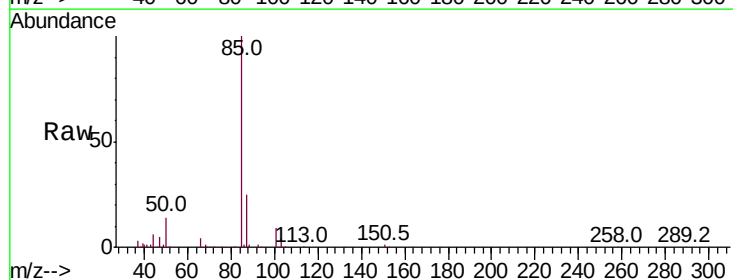
Delta R.T. -0.00 min

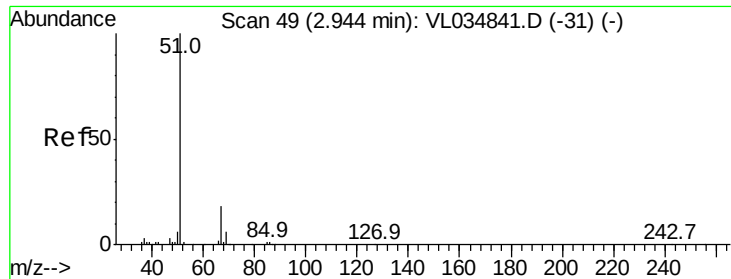
Lab File: VL034909.D

Acq: 17 Mar 2020 3:16

Tgt Ion: 85 Resp: 93085

Ion	Ratio	Lower	Upper
85	100		
87	24.5	26.9	40.3#

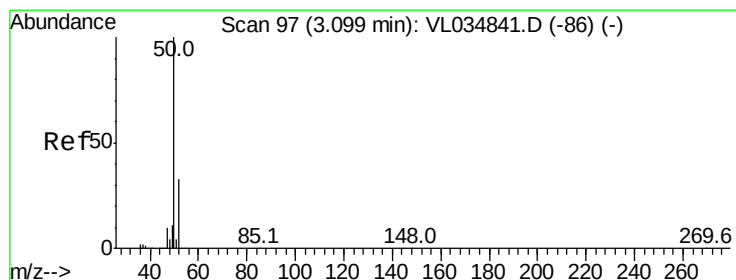
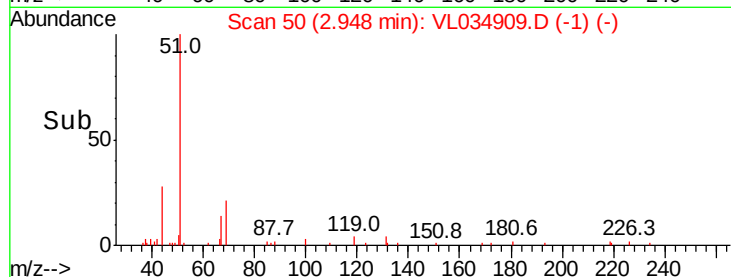
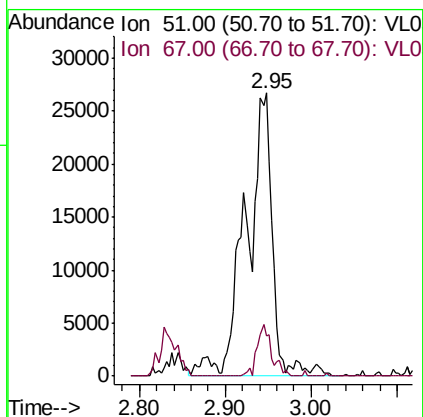
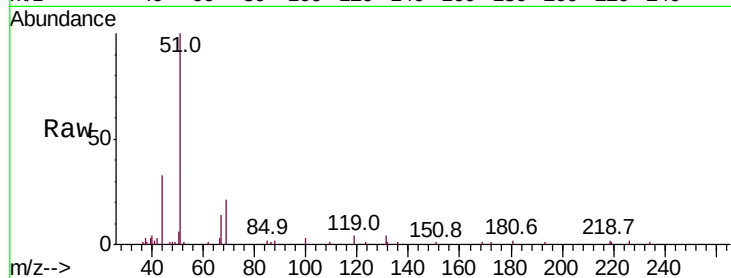




#3
Chlorodifluoromethane
Concen: 0.600 ppbv
RT: 2.95 min Scan# 50
Delta R.T. 0.00 min
Lab File: VL034909.D
Acq: 17 Mar 2020 3:16

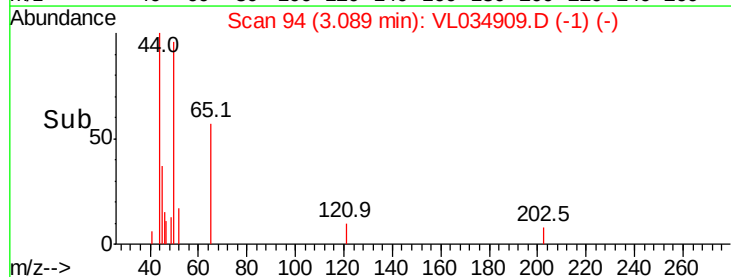
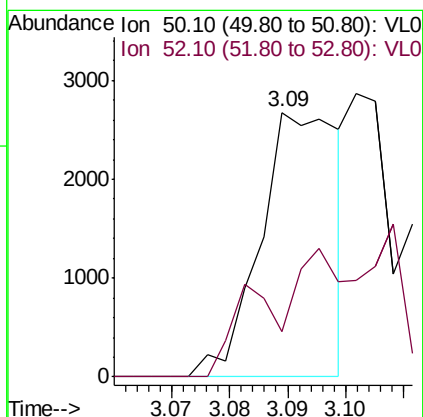
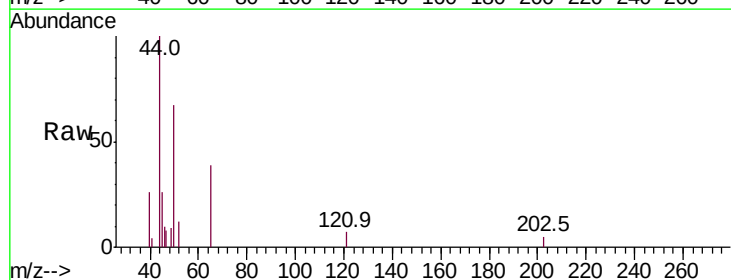
Instrument :
MSVOA_L
ClientSampleId :
FD-01

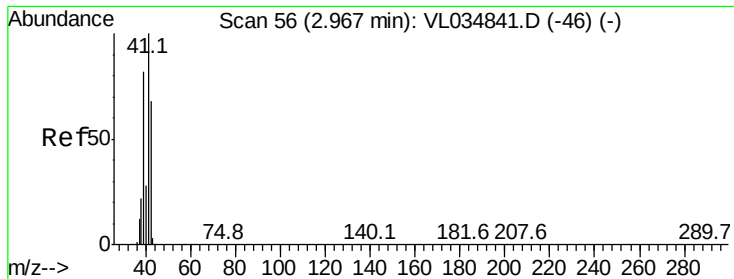
Tot Ion: 51 Resp: 57046
Ion Ratio Lower Upper
51 100
67 10.0 14.3 21.5#



#4
Chloromethane
Concen: 0.047 ppbv
RT: 3.09 min Scan# 94
Delta R.T. -0.01 min
Lab File: VL034909.D
Acq: 17 Mar 2020 3:16

Tgt Ion: 50 Resp: 2517
Ion Ratio Lower Upper
50 100
52 17.2 26.8 40.2#





#9

Propene

Concen: 0.129 ppbv

RT: 2.97 min Scan# 56

Delta R.T. 0.00 min

Lab File: VL034909.D

Acq: 17 Mar 2020 3:16

Instrument :

MSVOA_L

ClientSampleId :

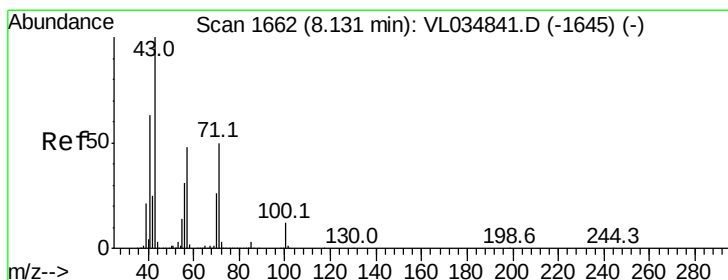
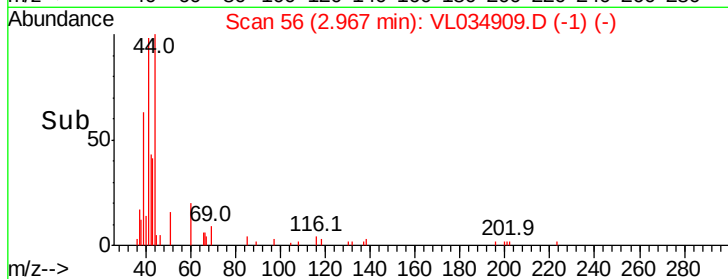
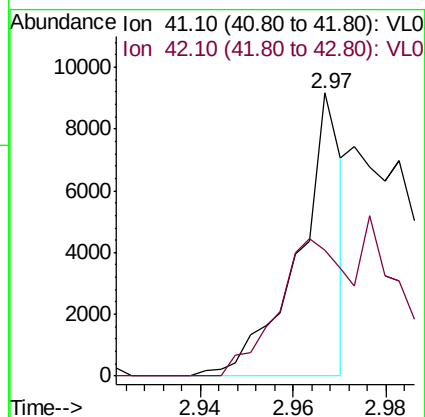
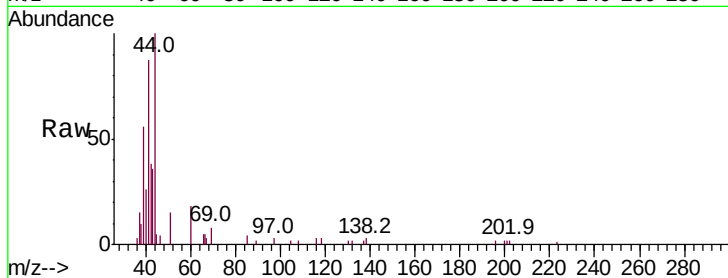
FD-01

Tot Ion: 41 Resp: 5852

Ion Ratio Lower Upper

41 100

42 0.0 55.2 82.8#



#10

Heptane

Concen: 0.037 ppbv

RT: 8.12 min Scan# 1660

Delta R.T. -0.01 min

Lab File: VL034909.D

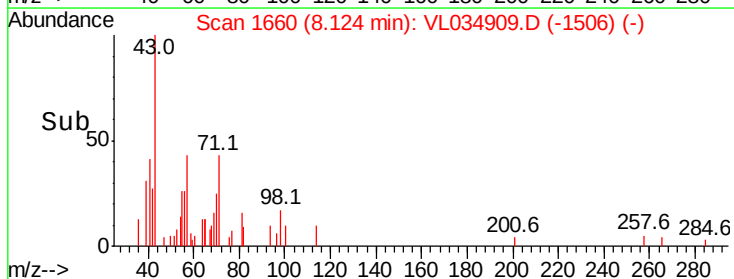
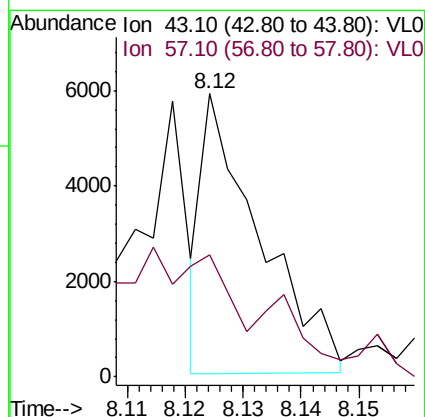
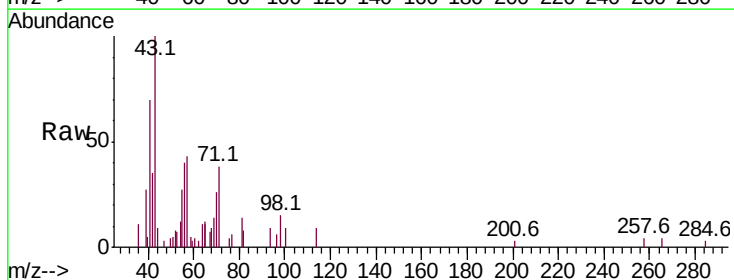
Acq: 17 Mar 2020 3:16

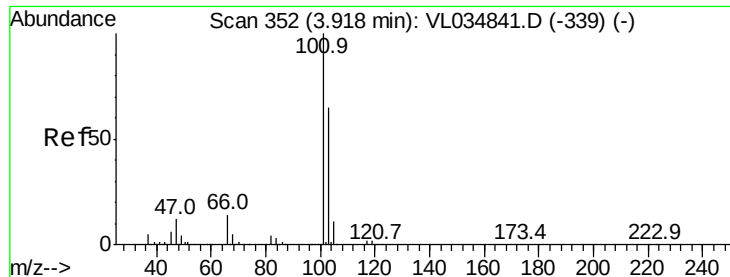
Tgt Ion: 43 Resp: 4081

Ion Ratio Lower Upper

43 100

57 0.0 39.7 59.5#

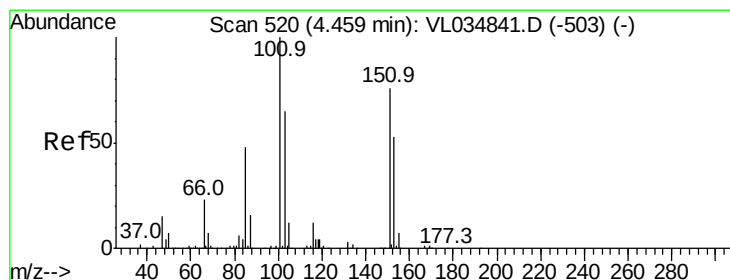
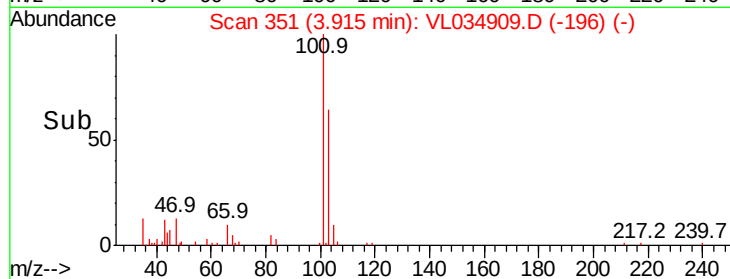
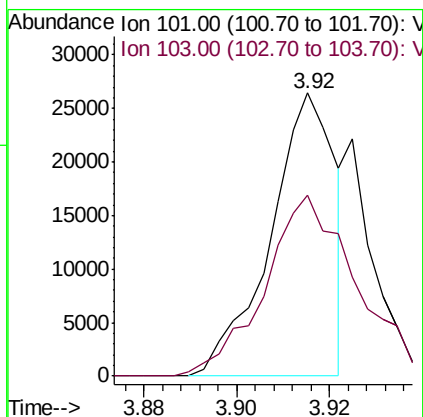
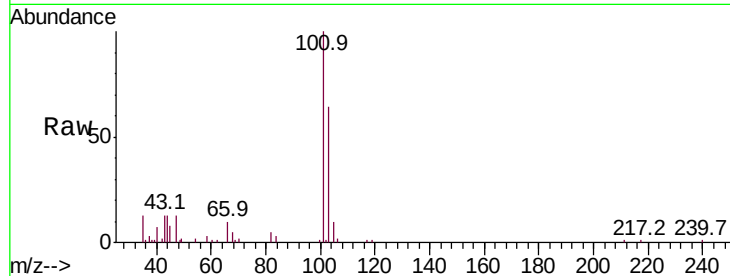




#11
 Trichlorofluoromethane
 Concen: 0.208 ppbv
 RT: 3.92 min Scan# 351
 Delta R.T. -0.00 min
 Lab File: VL034909.D
 Acq: 17 Mar 2020 3:16

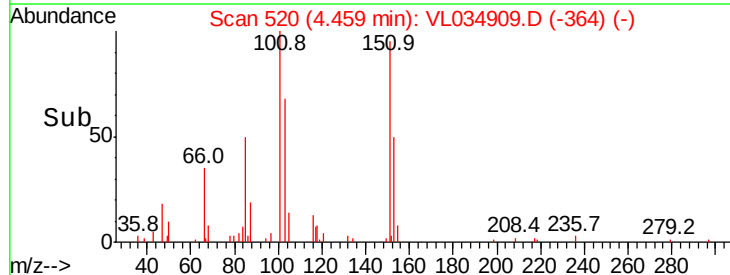
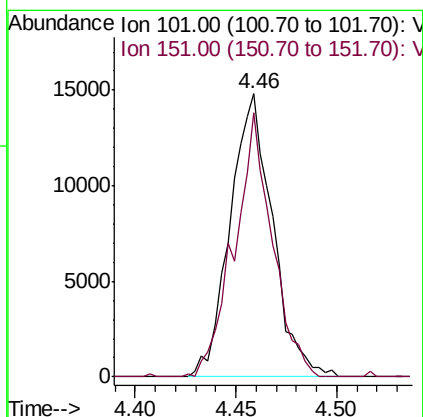
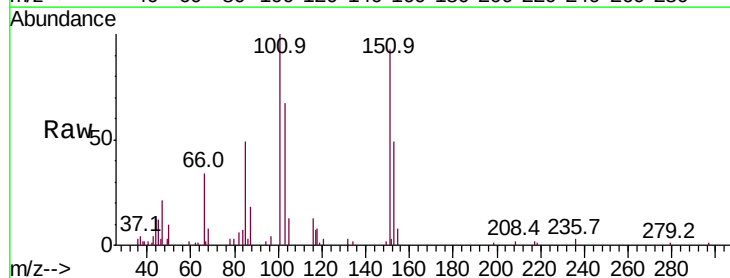
Instrument :
 MSVOA_L
 ClientSampled :
 FD-01

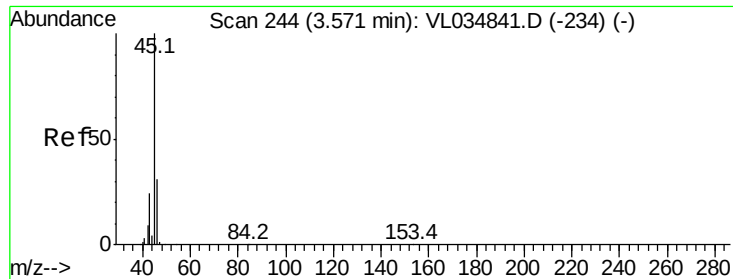
Tot Ion:101 Resp: 25783
 Ion Ratio Lower Upper
 101 100
 103 62.5 51.8 77.8



#12
 1,1,2-Trichlorotrifluoroethane
 Concen: 0.251 ppbv
 RT: 4.46 min Scan# 520
 Delta R.T. 0.00 min
 Lab File: VL034909.D
 Acq: 17 Mar 2020 3:16

Tgt Ion:101 Resp: 21824
 Ion Ratio Lower Upper
 101 100
 151 83.7 60.8 91.2





#13

Ethanol

Concen: 41.586 ppbv

RT: 3.57 min Scan# 245

Delta R.T. 0.00 min

Lab File: VL034909.D

Acq: 17 Mar 2020 3:16

Instrument :

MSVOA_L

ClientSampleId :

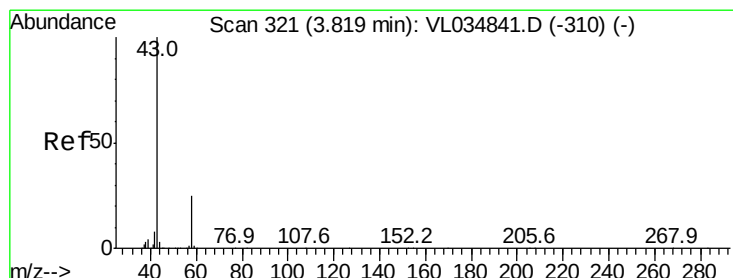
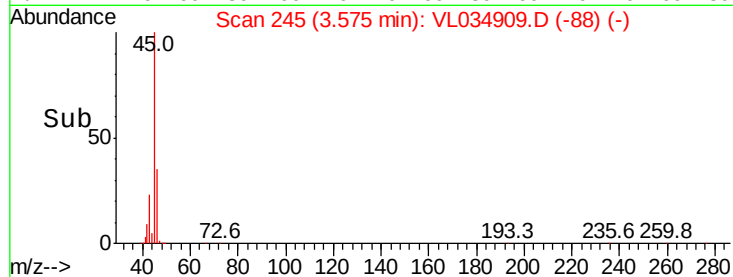
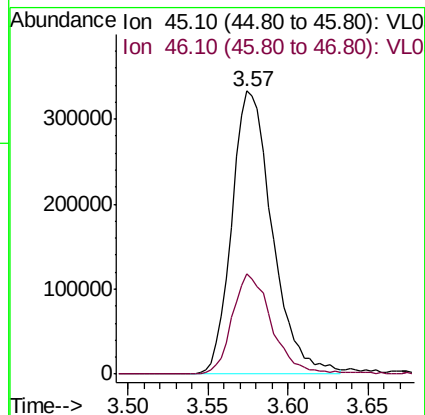
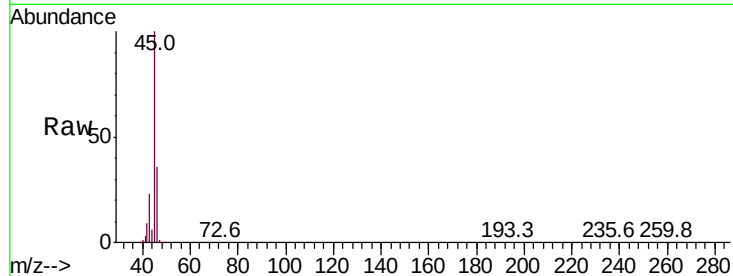
FD-01

Tot Ion: 45 Resp: 574148

Ion Ratio Lower Upper

45 100

46 35.0 16.0 64.0



#15

Acetone

Concen: 16.323 ppbv

RT: 3.81 min Scan# 318

Delta R.T. -0.01 min

Lab File: VL034909.D

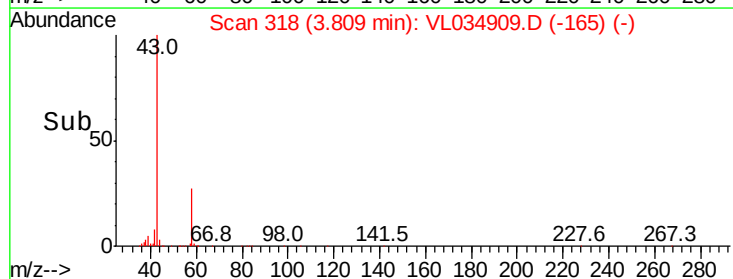
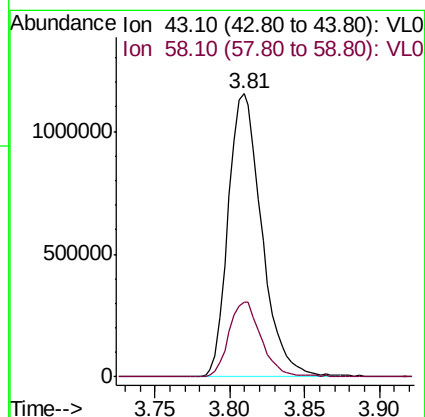
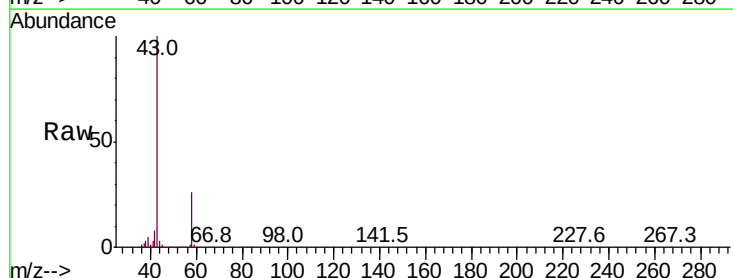
Acq: 17 Mar 2020 3:16

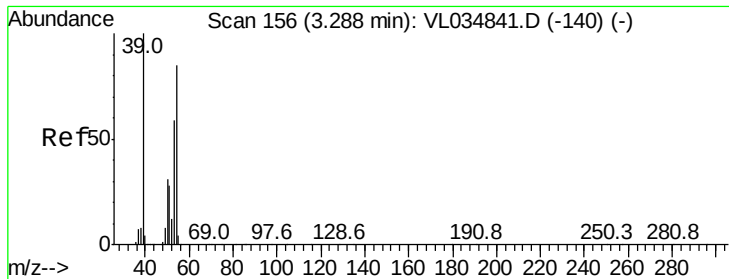
Tgt Ion: 43 Resp: 1801438

Ion Ratio Lower Upper

43 100

58 26.1 21.0 31.6





#16

1,3-Butadiene

Concen: 0.081 ppbv

RT: 3.27 min Scan# 151

Delta R.T. -0.02 min

Lab File: VL034909.D

Acq: 17 Mar 2020 3:16

Instrument :

MSVOA_L

ClientSampleId :

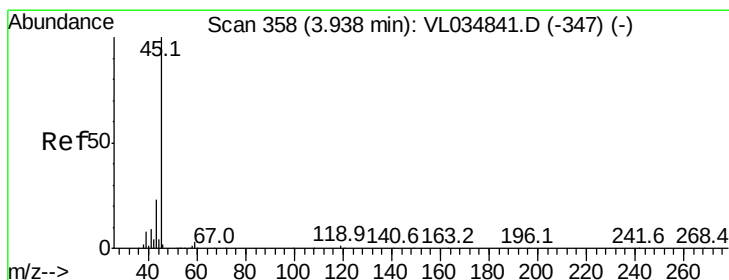
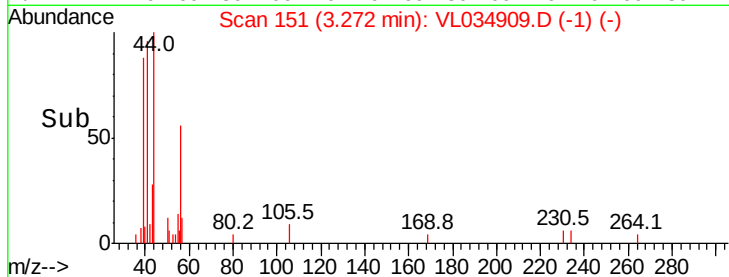
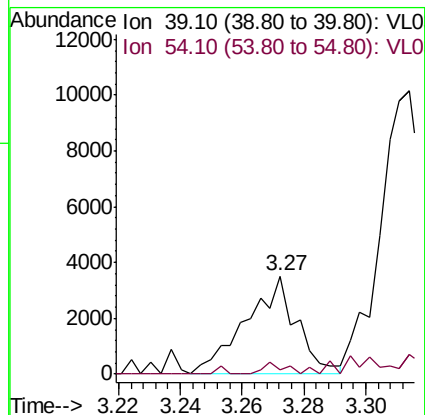
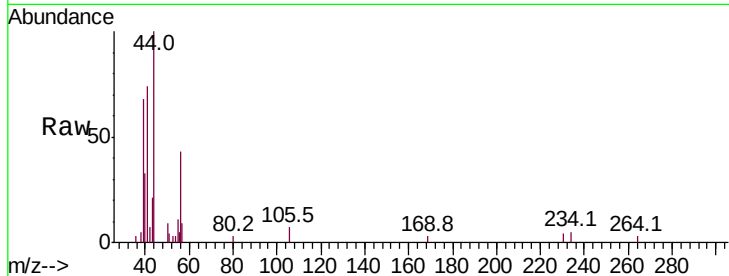
FD-01

Tot Ion: 39 Resp: 4028

Ion Ratio Lower Upper

39 100

54 0.0 65.0 97.6#



#19

Isopropyl Alcohol

Concen: 2.089 ppbv

RT: 3.95 min Scan# 362

Delta R.T. 0.01 min

Lab File: VL034909.D

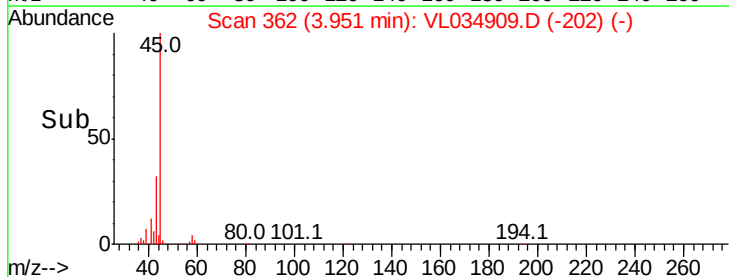
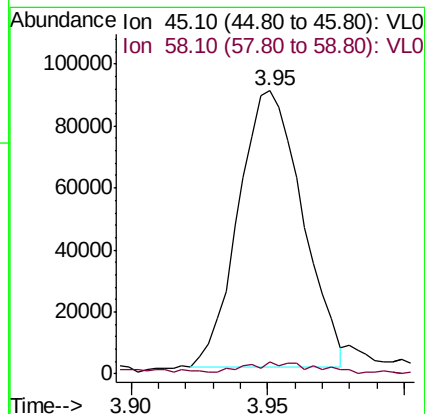
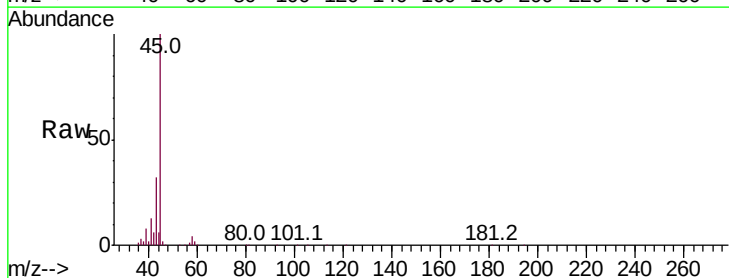
Acq: 17 Mar 2020 3:16

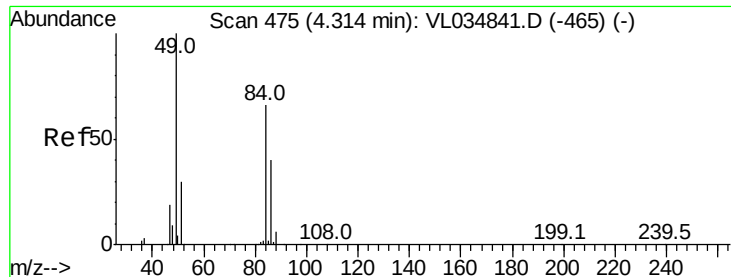
Tgt Ion: 45 Resp: 145553

Ion Ratio Lower Upper

45 100

58 0.0 30.5 45.7#

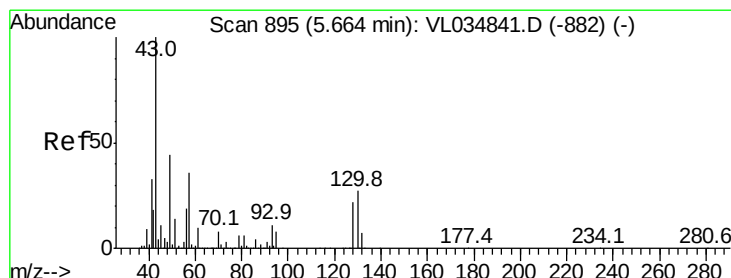
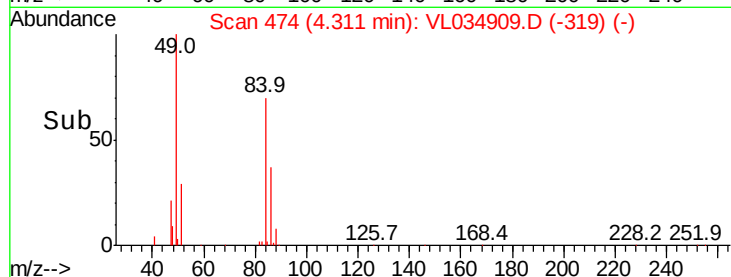
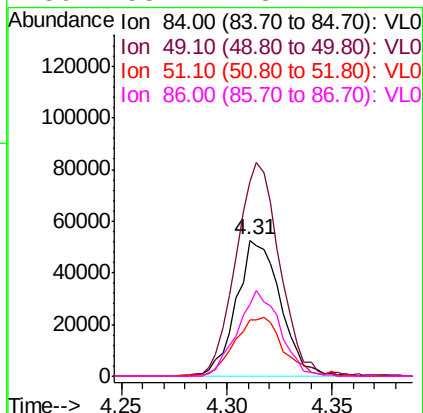
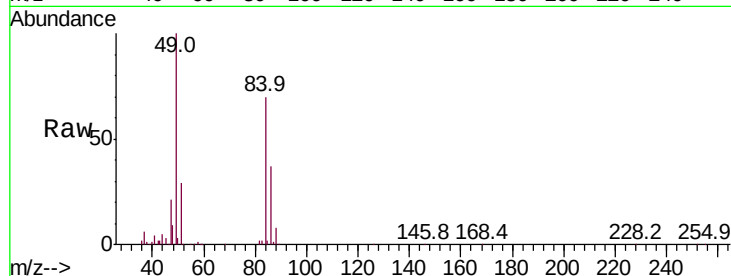




#20
Methylene Chloride
Concen: 2.180 ppbv
RT: 4.31 min Scan# 474
Delta R.T. -0.00 min
Lab File: VL034909.D
Acq: 17 Mar 2020 3:16

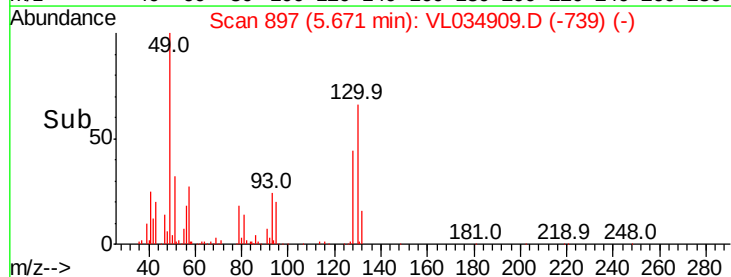
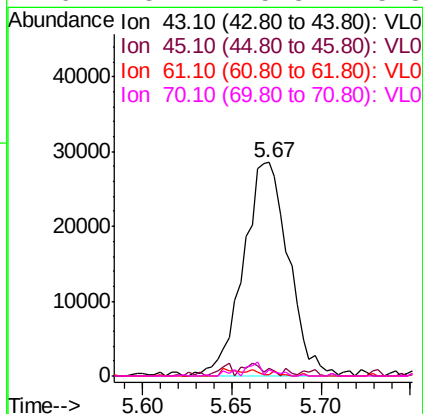
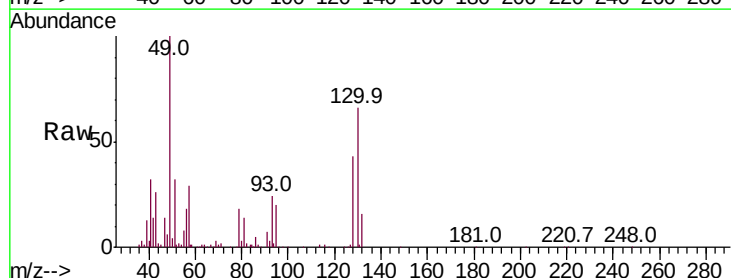
Instrument :
MSVOA_L
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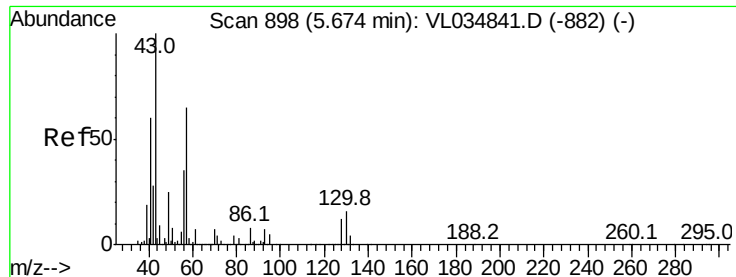
Tot Ion:	84	Resp:	76055
Ion	Ratio	Lower	Upper
84	100		
49	142.3	121.5	182.3
51	40.7	36.6	55.0
86	53.2	48.2	72.2



#25
Ethyl Acetate
Concen: 0.257 ppbv
RT: 5.67 min Scan# 897
Delta R.T. 0.01 min
Lab File: VL034909.D
Acq: 17 Mar 2020 3:16

Tgt Ion:	43	Resp:	50563
Ion	Ratio	Lower	Upper
43	100		
45	6.4	8.2	12.2#
61	2.5	7.8	11.6#
70	3.7	5.8	8.8#

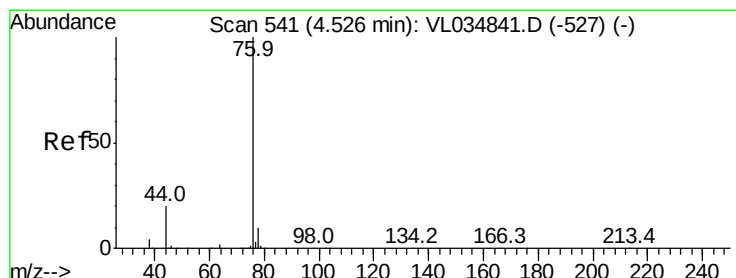
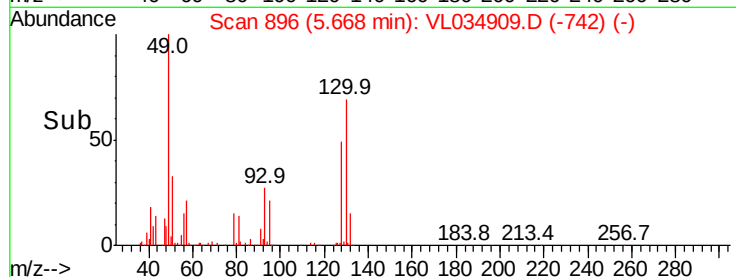
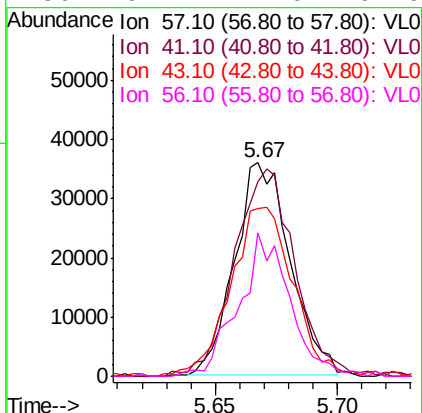
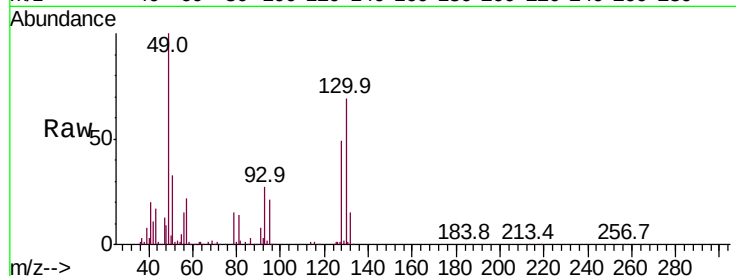




#26
Hexane
Concen: 0.671 ppbv
RT: 5.67 min Scan# 896
Delta R.T. -0.01 min
Lab File: VL034909.D
Acq: 17 Mar 2020 3:16

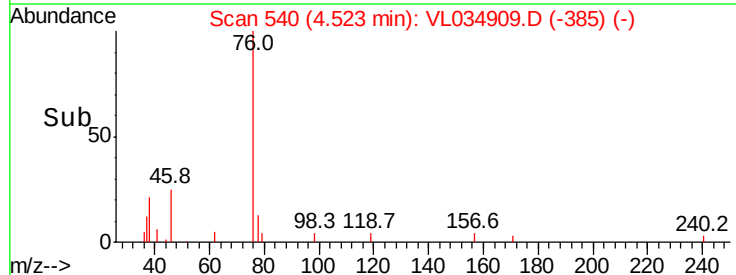
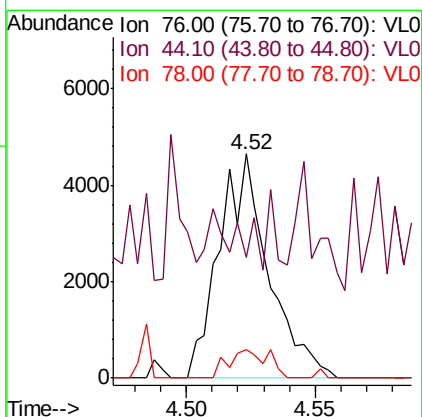
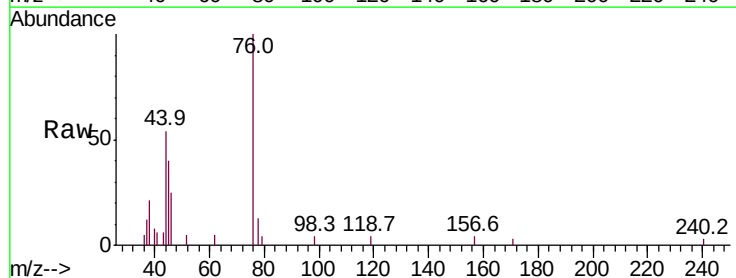
Instrument :
MSVOA_L
ClientSampleId :
FD-01

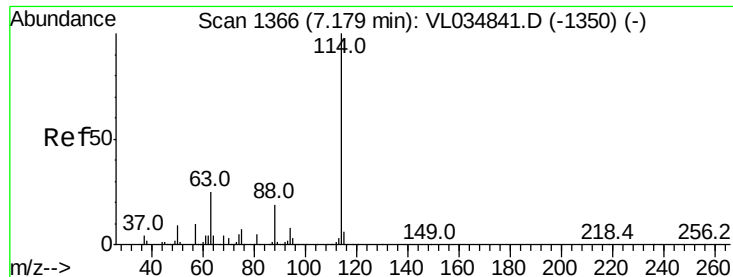
Tot Ion: 57 Resp: 56803
Ion Ratio Lower Upper
57 100
41 107.2 72.6 109.0
43 89.5 183.8 275.6#
56 62.1 41.9 62.9



#27
Carbon Disulfide
Concen: 0.064 ppbv
RT: 4.52 min Scan# 540
Delta R.T. -0.00 min
Lab File: VL034909.D
Acq: 17 Mar 2020 3:16

Tgt Ion: 76 Resp: 6185
Ion Ratio Lower Upper
76 100
44 59.3 16.2 24.2#
78 11.1 7.8 11.6



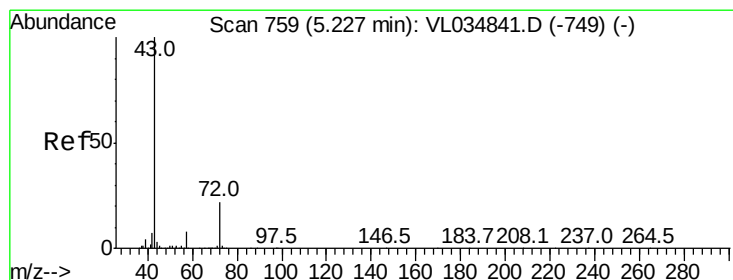
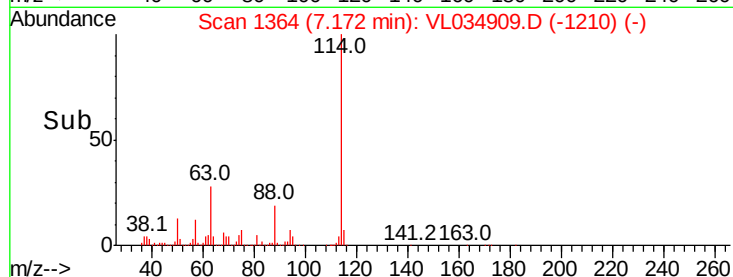
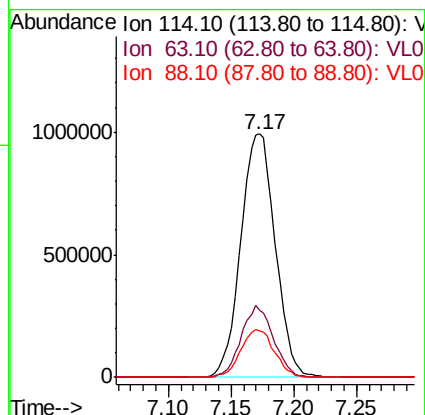
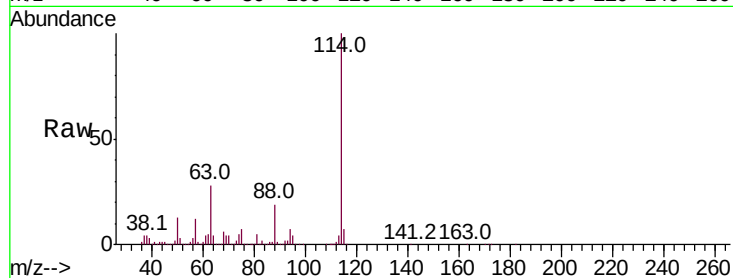


#33
 1,4-Difluorobenzene
 Concen: 10.000 ppbv
 RT: 7.17 min Scan# 1364
 Delta R.T. -0.01 min
 Lab File: VL034909.D
 Acq: 17 Mar 2020 3:16

Instrument :
 MSVOA_L
 ClientSampleId :
 FD-01

Tot Ion:114 Resp: 1894668

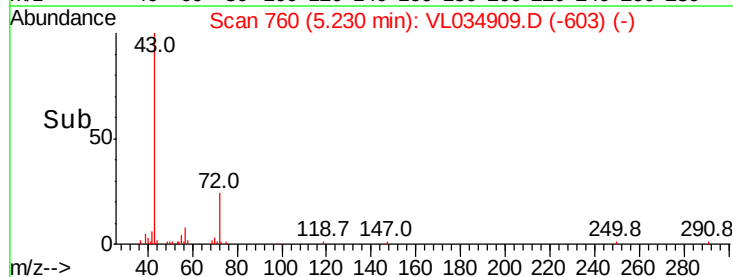
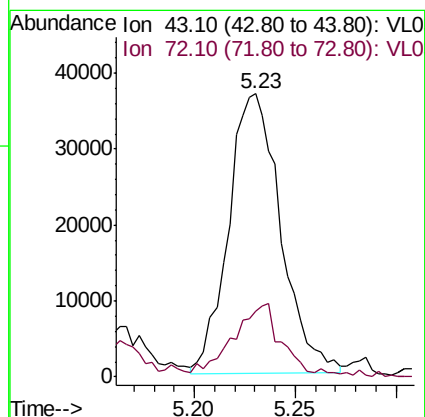
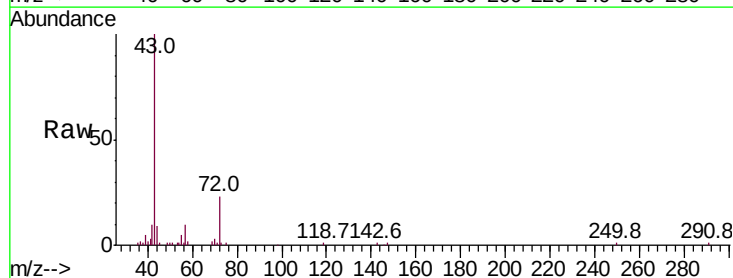
Ion	Ratio	Lower	Upper
114	100		
63	27.8	20.6	31.0
88	19.2	15.0	22.6

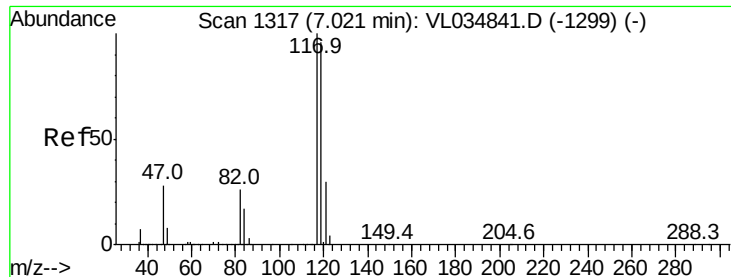


#34
 2-Butanone
 Concen: 0.529 ppbv
 RT: 5.23 min Scan# 760
 Delta R.T. 0.00 min
 Lab File: VL034909.D
 Acq: 17 Mar 2020 3:16

Tgt Ion: 43 Resp: 66647

Ion	Ratio	Lower	Upper
43	100		
72	25.9	17.6	26.4





#35

Carbon Tetrachloride

Concen: 0.031 ppbv

RT: 7.01 min Scan# 1315

Delta R.T. -0.01 min

Lab File: VL034909.D

Acq: 17 Mar 2020 3:16

Instrument :

MSVOA_L

ClientSampled :

FD-01

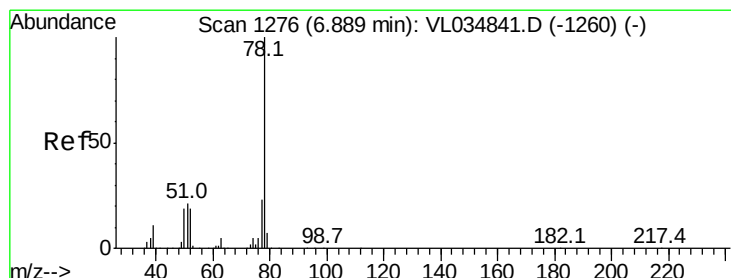
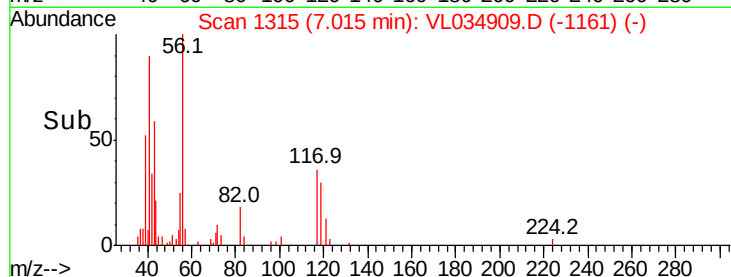
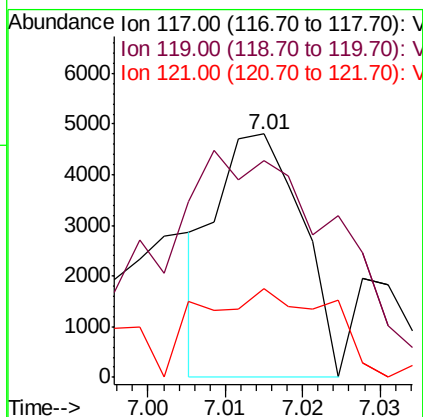
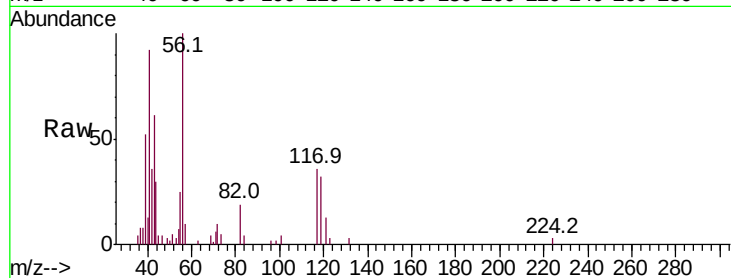
Tot Ion:117 Resp: 3680

Ion Ratio Lower Upper

117 100

119 22.5 77.0 115.4#

121 5.0 24.0 36.0#



#36

Benzene

Concen: 0.260 ppbv

RT: 6.88 min Scan# 1274

Delta R.T. -0.01 min

Lab File: VL034909.D

Acq: 17 Mar 2020 3:16

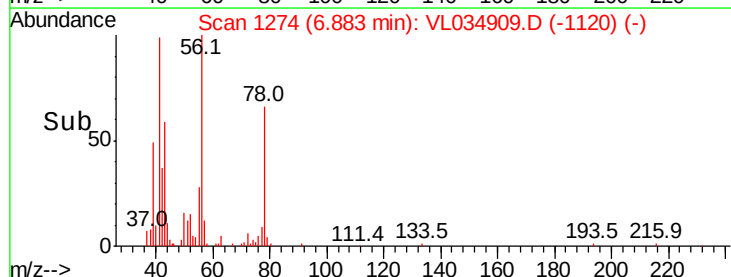
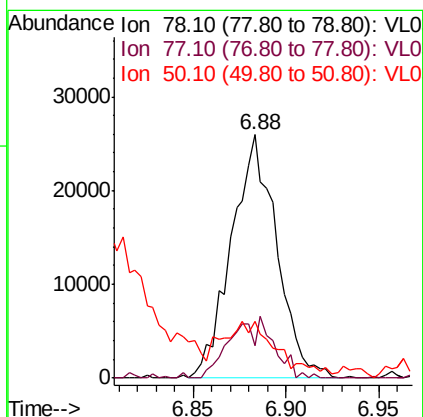
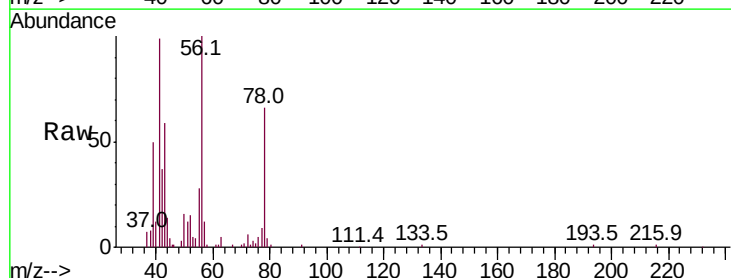
Tgt Ion: 78 Resp: 43955

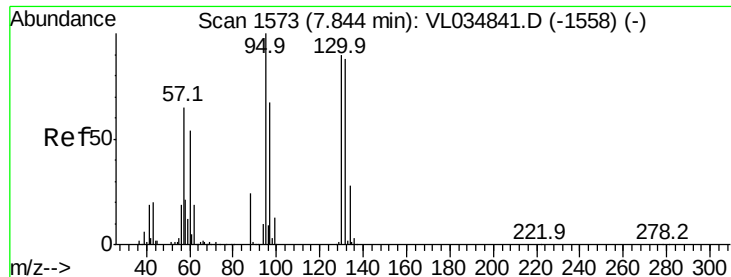
Ion Ratio Lower Upper

78 100

77 13.1 18.2 27.2#

50 21.4 15.2 22.8





#38

Trichloroethene

Concen: 6.919 ppbv

RT: 7.83 min Scan# 1570

Delta R.T. -0.01 min

Lab File: VL034909.D

Acq: 17 Mar 2020 3:16

Instrument :

MSVOA_L

ClientSampleId :

FD-01

Tot Ion:130 Resp: 443783

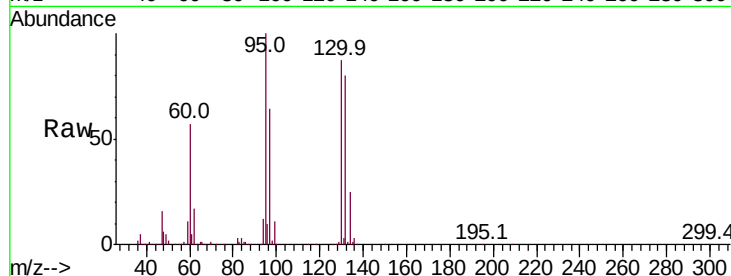
Ion Ratio Lower Upper

130 100

95 114.5 88.5 132.7

132 91.4 78.0 117.0

97 73.3 59.3 88.9

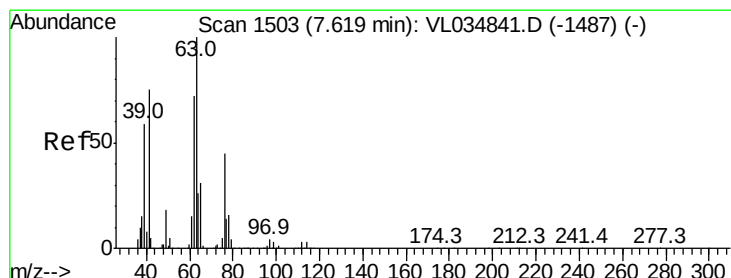
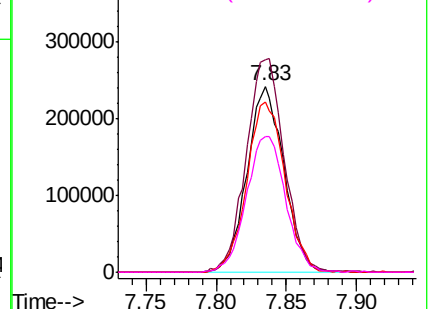
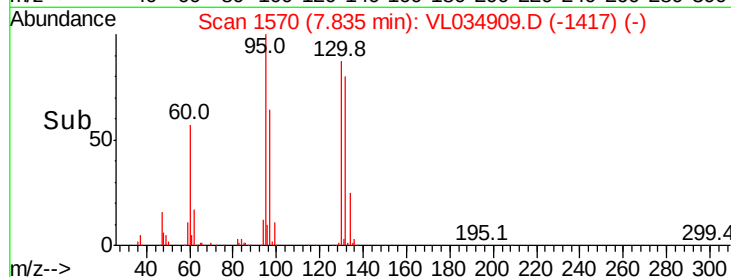


Abundance Ion 130.00 (129.70 to 130.70): V

Ion 95.00 (94.70 to 95.70): VL0

Ion 132.00 (131.70 to 132.70): V

Ion 97.00 (96.70 to 97.70): VL0



#39

1,2-Dichloropropane

Concen: 7.832 ppbv

RT: 7.17 min Scan# 1363

Delta R.T. -0.45 min

Lab File: VL034909.D

Acq: 17 Mar 2020 3:16

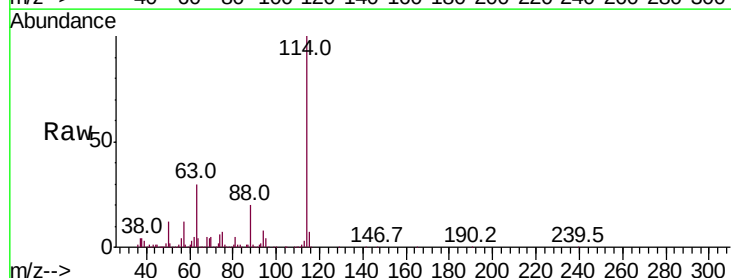
Tgt Ion: 63 Resp: 524062

Ion Ratio Lower Upper

63 100

41 0.5 59.8 89.8#

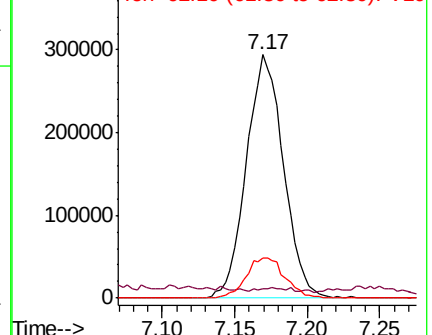
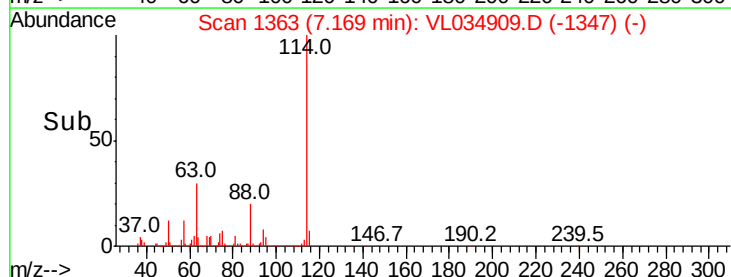
62 16.6 57.6 86.4#

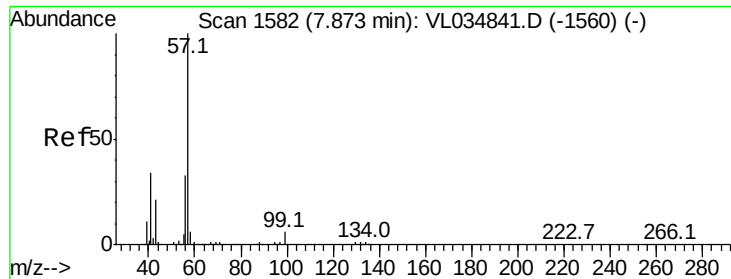


Abundance Ion 63.10 (62.80 to 63.80): VL0

Ion 41.10 (40.80 to 41.80): VL0

Ion 62.10 (61.80 to 62.80): VL0

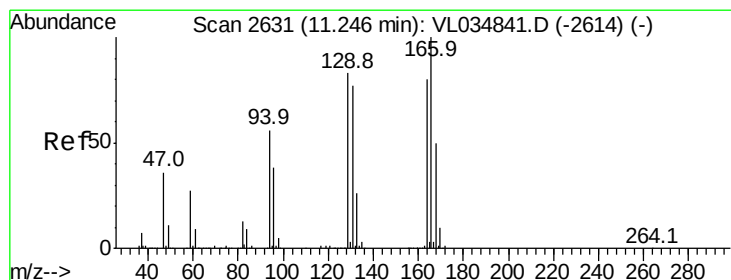
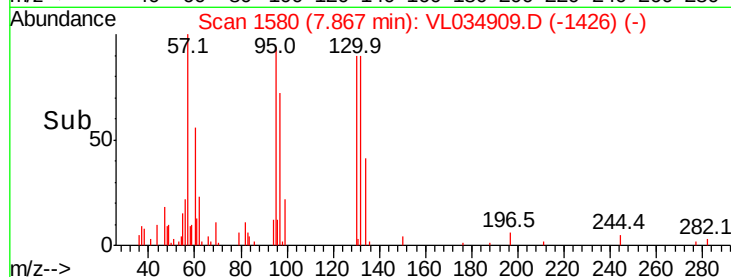
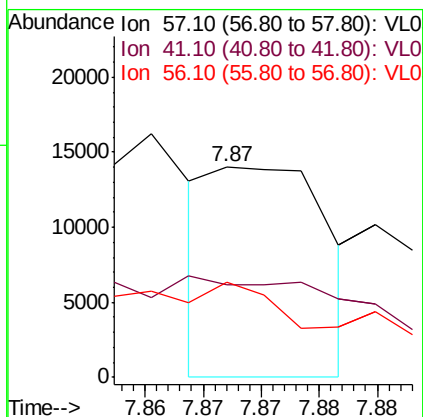
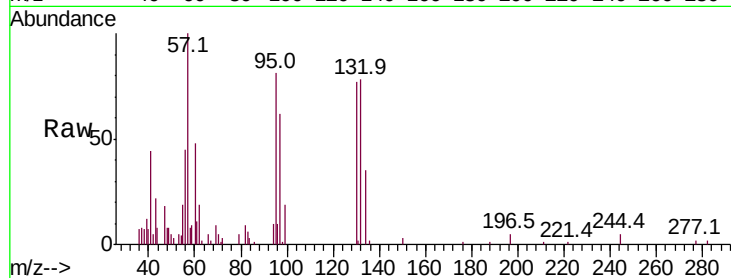




#44
2,2,4-Trimethylpentane
Concen: 0.034 ppbv
RT: 7.87 min Scan# 1580
Delta R.T. -0.01 min
Lab File: VL034909.D
Acq: 17 Mar 2020 3:16

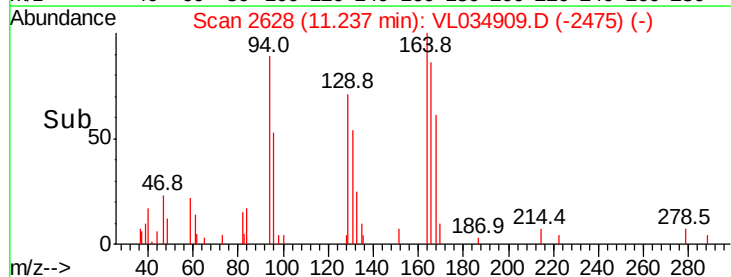
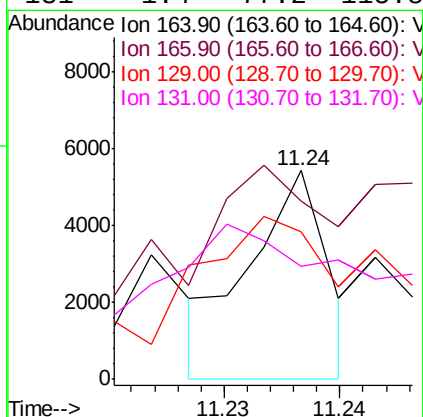
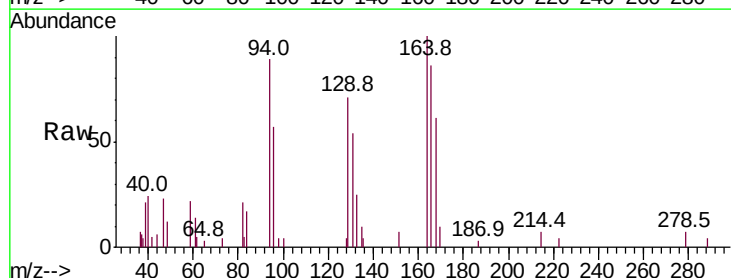
Instrument :
MSVOA_L
ClientSampleId :
FD-01

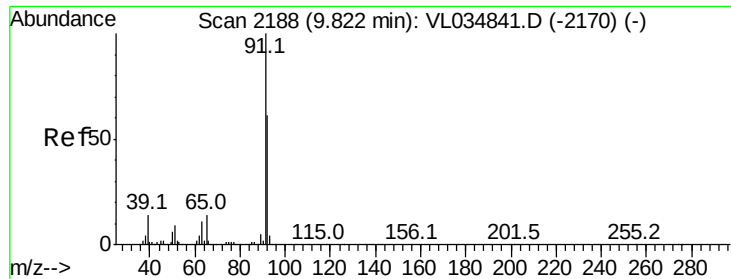
Tot Ion: 57 Resp: 9737
Ion Ratio Lower Upper
57 100
41 166.3 26.2 39.4#
56 114.9 25.0 37.4#



#52
Tetrachloroethene
Concen: 0.038 ppbv
RT: 11.24 min Scan# 2628
Delta R.T. -0.01 min
Lab File: VL034909.D
Acq: 17 Mar 2020 3:16

Tgt Ion:164 Resp: 2534
Ion Ratio Lower Upper
164 100
166 66.3 100.0 150.0#
129 43.6 83.1 124.7#
131 1.4 77.2 115.8#





#53

Toluene

Concen: 0.754 ppbv

RT: 9.81 min Scan# 2185

Delta R.T. -0.01 min

Lab File: VL034909.D

Acq: 17 Mar 2020 3:16

Instrument :

MSVOA_L

ClientSampled :

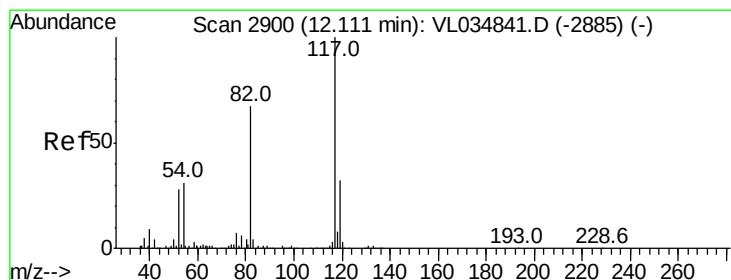
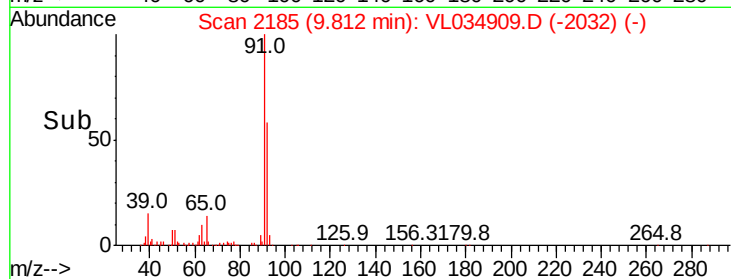
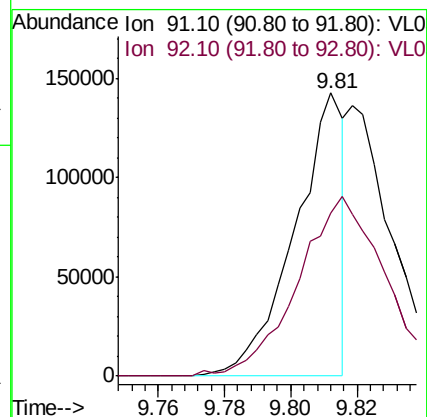
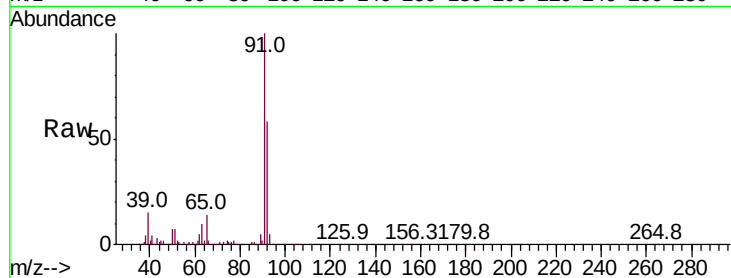
FD-01

Tot Ion: 91 Resp: 147142

Ion Ratio Lower Upper

91 100

92 0.0 48.6 72.8#



#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.10 min Scan# 2897

Delta R.T. -0.01 min

Lab File: VL034909.D

Acq: 17 Mar 2020 3:16

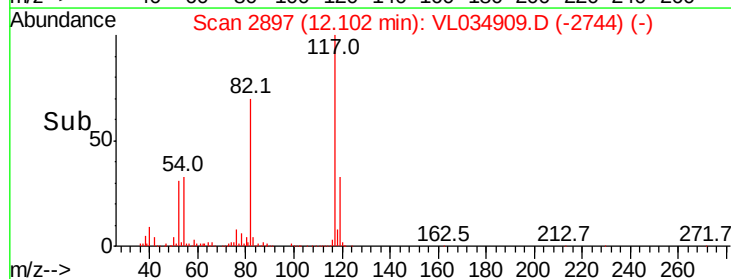
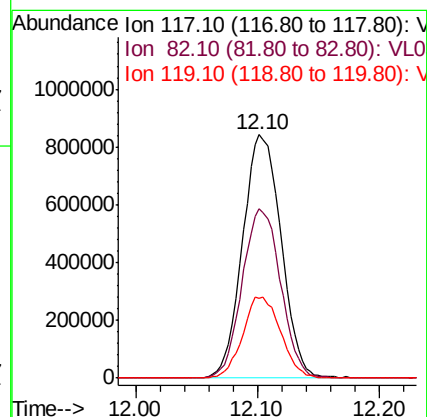
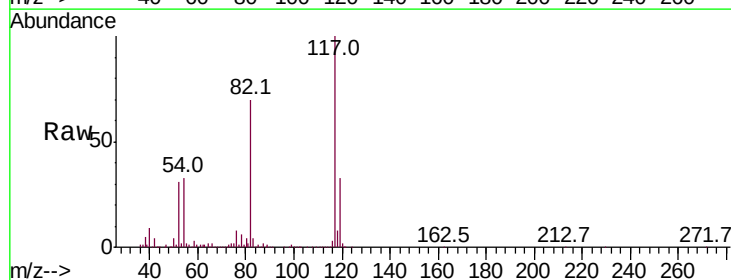
Tgt Ion: 117 Resp: 1838573

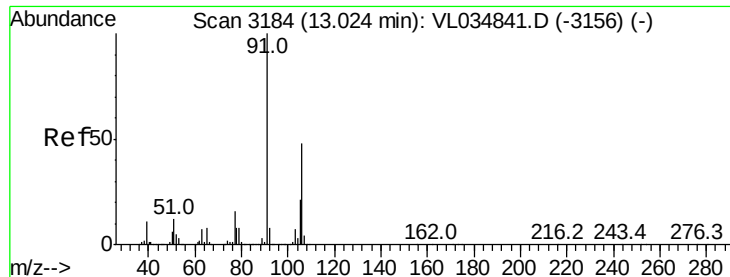
Ion Ratio Lower Upper

117 100

82 69.5 51.1 76.7

119 32.9 27.3 40.9





#59

m/p-Xylene

Concen: 0.044 ppbv

RT: 13.01 min Scan# 3179

Delta R.T. -0.02 min

Lab File: VL034909.D

Acq: 17 Mar 2020 3:16

Instrument :

MSVOA_L

ClientSampleId :

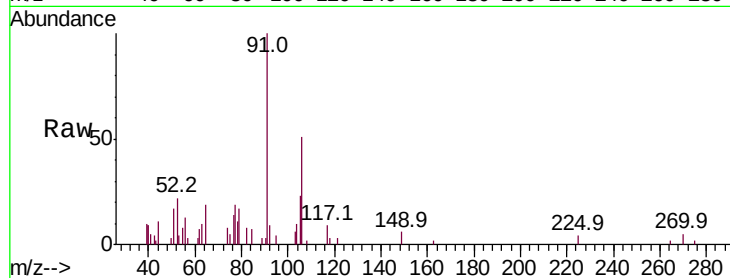
FD-01

Tot Ion: 91 Resp: 9268

Ion Ratio Lower Upper

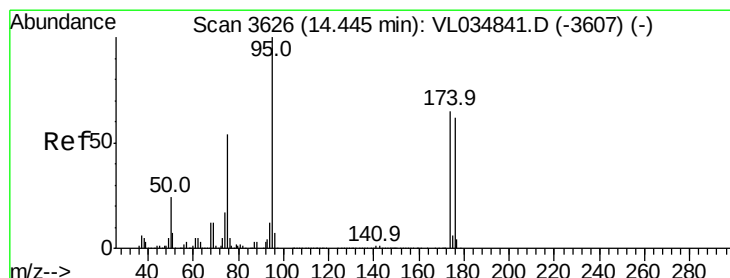
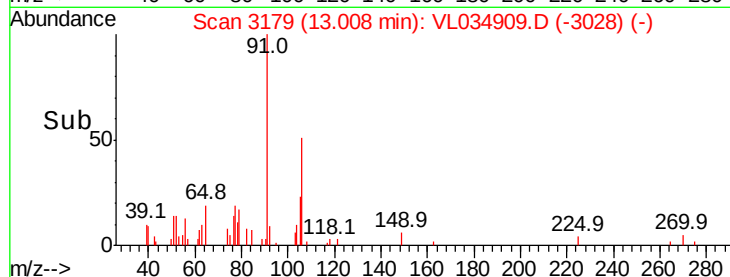
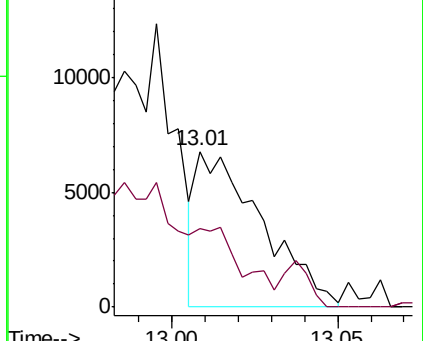
91 100

106 0.0 37.1 55.7#



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 106.10 (105.80 to 106.80): V



#68

1-Bromo-4-Fluorobenzene

Concen: 10.469 ppbv

RT: 14.44 min Scan# 3623

Delta R.T. -0.01 min

Lab File: VL034909.D

Acq: 17 Mar 2020 3:16

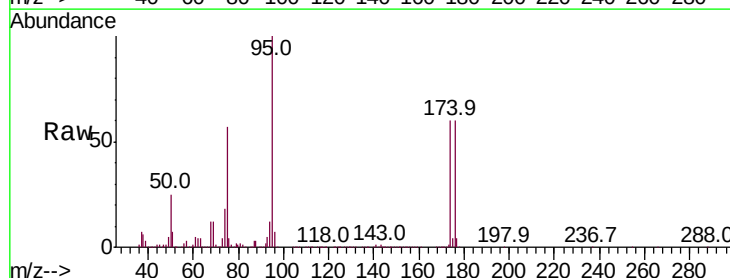
Tgt Ion: 95 Resp: 1501145

Ion Ratio Lower Upper

95 100

174 65.0 55.2 82.8

175 4.6 4.3 6.5



Abundance Ion 95.10 (94.80 to 95.80): VL0

Ion 174.00 (173.70 to 174.70): V

Ion 175.00 (174.70 to 175.70): V

