

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL050620\
 Data File : VL034956.D
 Acq On : 7 May 2020 5:26
 Operator : SY/AP
 Sample : L2507-03
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :

Quant Time: May 07 08:13:26 2020
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL050620AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LWed May 06 14:49:39 2020
 QLast Update : Wed May 06 14:49:39 2020
 Response via : Initial Calibration

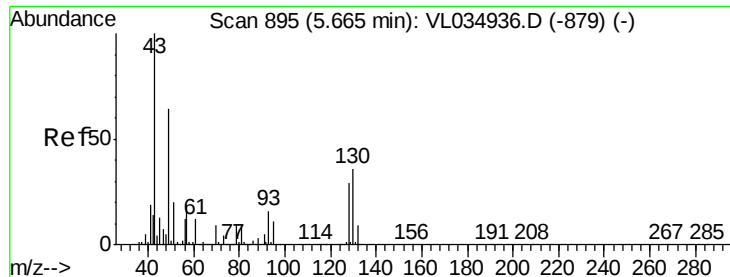
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.66	49	1008572	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.19	114	2338844	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.12	117	2142729	10.00	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.46	95	1773725	10.23	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	102.30%

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.01	85	41447	0.290	ppbv	99
3) Chlorodifluoromethane	2.95	51	40704	0.353	ppbv	93
4) Chloromethane	3.11	50	35170	0.533	ppbv	94
9) Propene	2.98	41	19844	0.397	ppbv	100
11) Trichlorofluoromethane	3.92	101	36298	0.246	ppbv	89
12) 1,1,2-Trichlorotrifluoroet	4.46	101	3448	0.033	ppbv #	1
13) Ethanol	3.58	45	298136	18.082	ppbv	98
15) Acetone	3.83	43	332608	2.494	ppbv	92
16) 1,3-Butadiene	3.28	39	6977	0.122	ppbv #	8
17) tert-Butyl alcohol	4.74	59	27648	0.233	ppbv	96
19) Isopropyl Alcohol	3.95	45	122541	1.378	ppbv #	90
20) Methylene Chloride	4.33	84	47581	1.078	ppbv	85
23) Vinyl Acetate	5.05	43	14882	0.088	ppbv #	18
25) Ethyl Acetate	5.69	43	27182	0.121	ppbv #	89
26) Hexane	5.68	57	33262	0.343	ppbv #	40
29) Chloroform	5.75	83	9381	0.059	ppbv	88
34) 2-Butanone	5.24	43	20780	0.143	ppbv	99
35) Carbon Tetrachloride	7.03	117	3115	0.021	ppbv #	75
36) Benzene	6.90	78	30695	0.159	ppbv #	90
39) 1,2-Dichloropropane	7.19	63	651484	8.428	ppbv #	26
44) 2,2,4-Trimethylpentane	7.89	57	25626	0.075	ppbv #	42
53) Toluene	9.83	91	24677	0.121	ppbv #	20

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



#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.66 min Scan# 895

Delta R.T. -0.00 min

Lab File: VL034956.D

Acq: 7 May 2020 5:26

Instrument :
MSVOA_L
ClientSampleId :

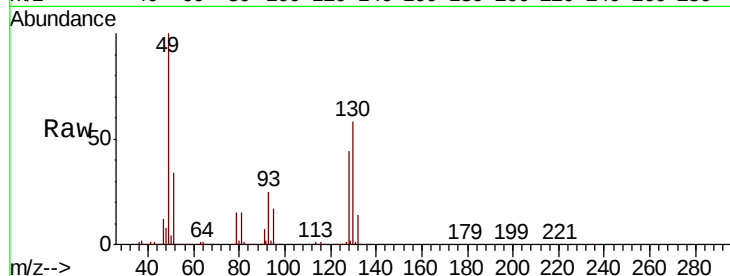
Tot Ion: 49 Resp: 1008572

Ion Ratio Lower Upper

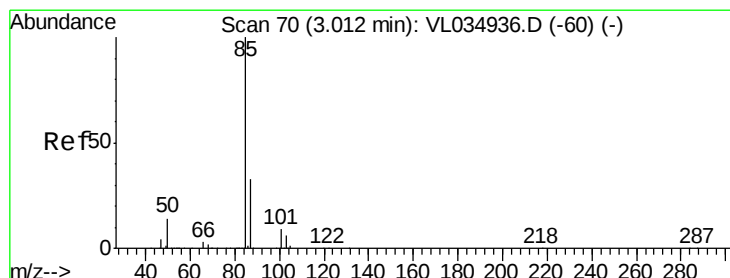
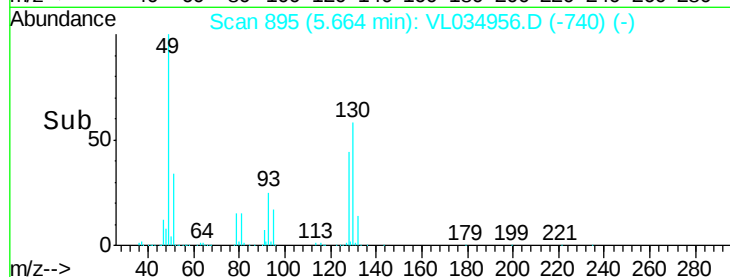
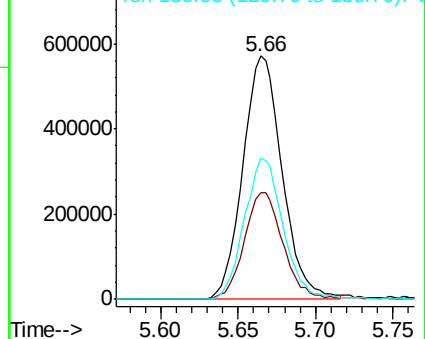
49 100

128 43.8 22.1 66.5

130 58.1 29.1 87.3



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: 0.290 ppbv

RT: 3.01 min Scan# 71

Delta R.T. 0.00 min

Lab File: VL034956.D

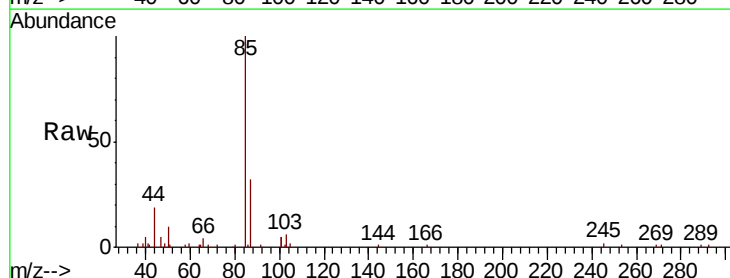
Acq: 7 May 2020 5:26

Tgt Ion: 85 Resp: 41447

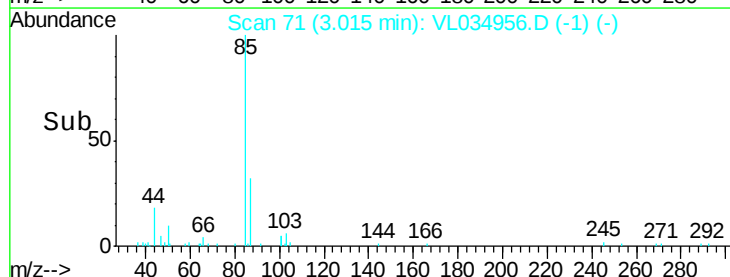
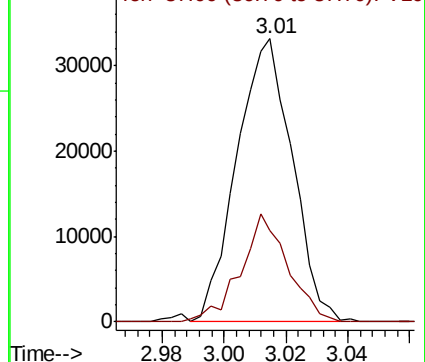
Ion Ratio Lower Upper

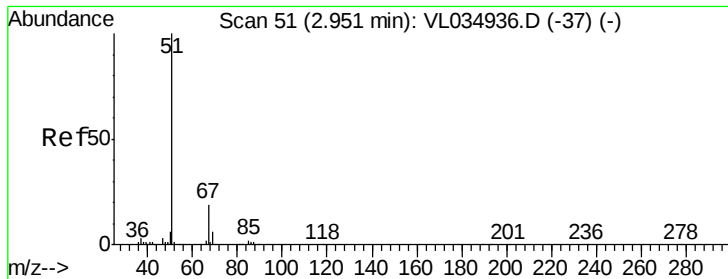
85 100

87 32.1 26.2 39.2



Abundance Ion 85.00 (84.70 to 85.70): VL0
Ion 87.00 (86.70 to 87.70): VL0





#3

Chlorodifluoromethane

Concen: 0.353 ppbv

RT: 2.95 min Scan# 52

Delta R.T. 0.00 min

Lab File: VL034956.D

Acq: 7 May 2020 5:26

Instrument :

MSVOA_L

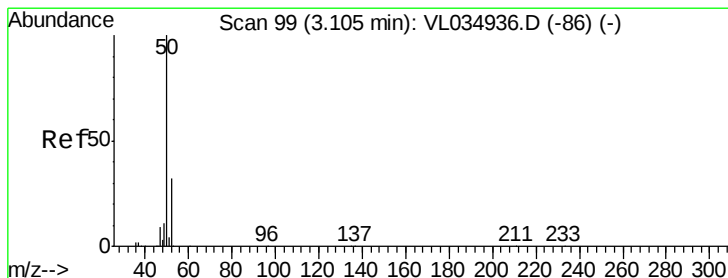
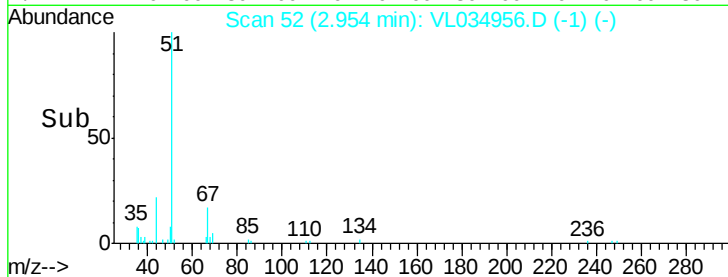
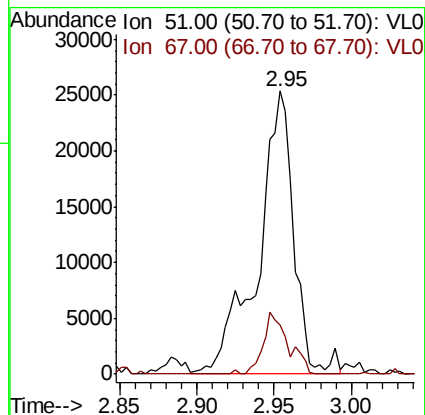
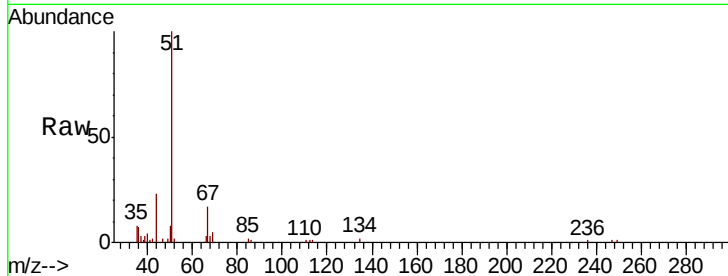
ClientSampleId :

Tot Ion: 51 Resp: 40704

Ion Ratio Lower Upper

51 100

67 15.5 15.0 22.6



#4

Chloromethane

Concen: 0.533 ppbv

RT: 3.11 min Scan# 100

Delta R.T. 0.00 min

Lab File: VL034956.D

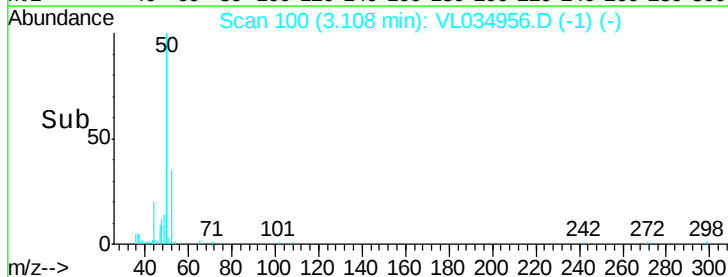
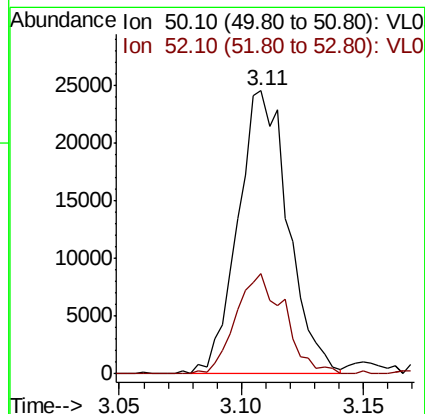
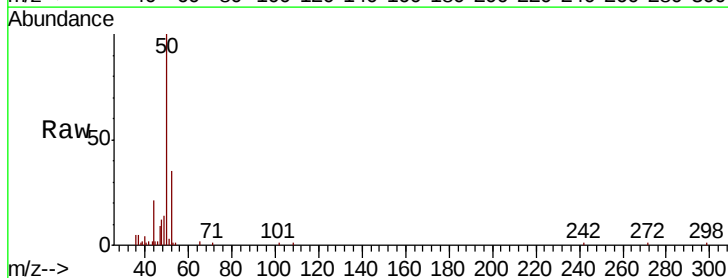
Acq: 7 May 2020 5:26

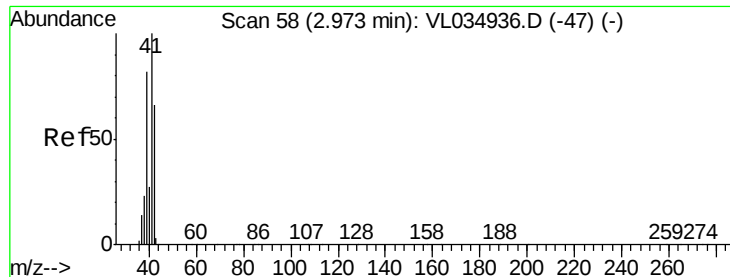
Tgt Ion: 50 Resp: 35170

Ion Ratio Lower Upper

50 100

52 35.3 25.4 38.2





#9

Propene

Concen: 0.397 ppbv

RT: 2.98 min Scan# 61

Delta R.T. 0.01 min

Lab File: VL034956.D

Acq: 7 May 2020 5:26

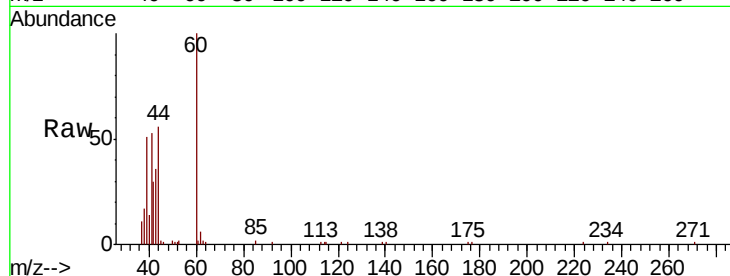
Instrument :
MSVOA_L
ClientSampleId :

Tot Ion: 41 Resp: 19844

Ion Ratio Lower Upper

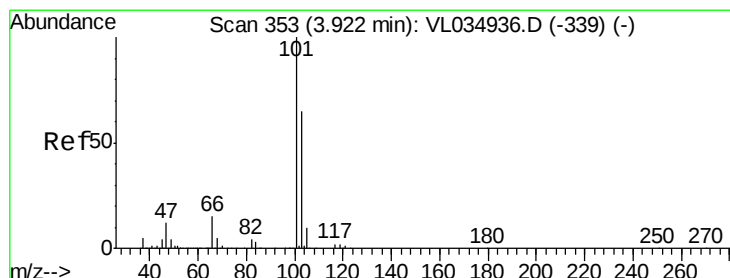
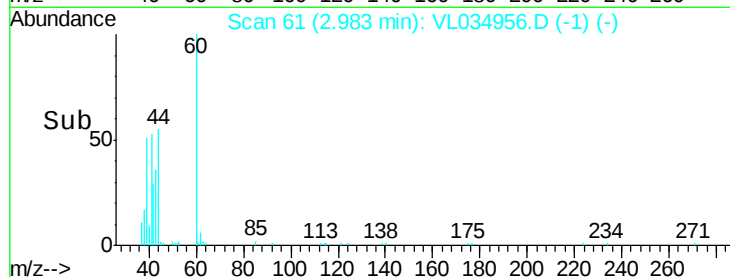
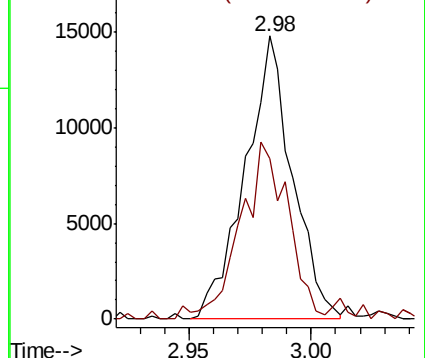
41 100

42 67.8 54.5 81.7



Abundance Ion 41.10 (40.80 to 41.80): VL0

Ion 42.10 (41.80 to 42.80): VL0



#11

Trichlorofluoromethane

Concen: 0.246 ppbv

RT: 3.92 min Scan# 354

Delta R.T. 0.00 min

Lab File: VL034956.D

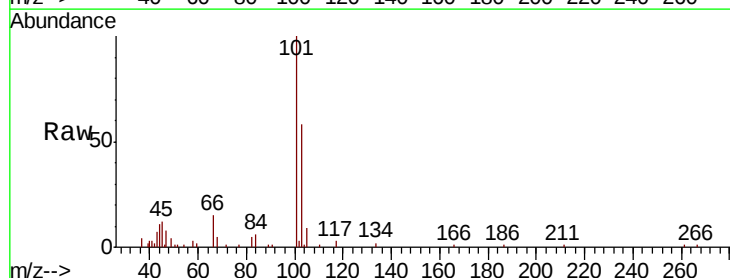
Acq: 7 May 2020 5:26

Tgt Ion: 101 Resp: 36298

Ion Ratio Lower Upper

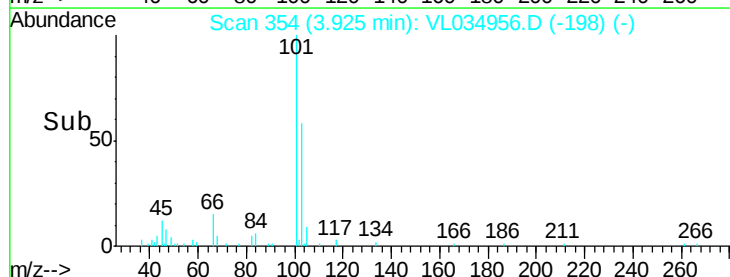
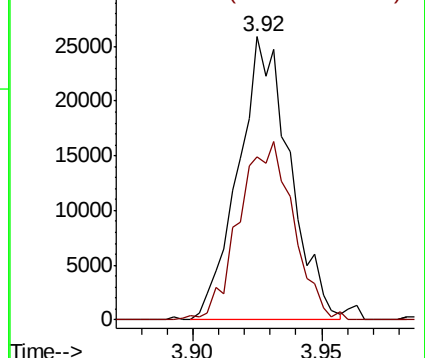
101 100

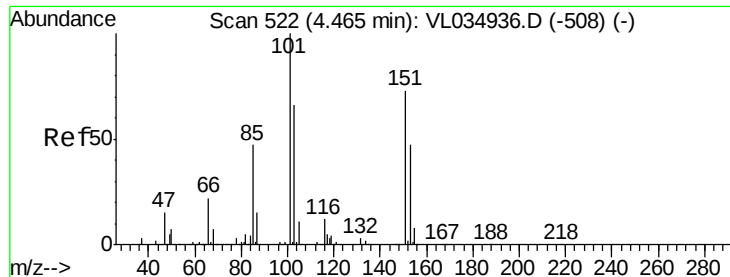
103 56.1 51.9 77.9



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: 0.033 ppbv

RT: 4.46 min Scan# 521

Delta R.T. -0.00 min

Lab File: VL034956.D

Acq: 7 May 2020 5:26

Instrument :

MSVOA_L

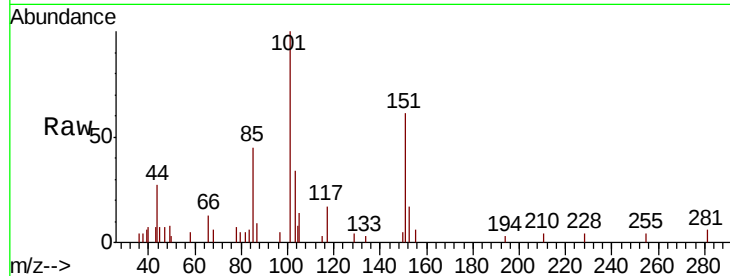
ClientSampled :

Tot Ion:101 Resp: 3448

Ion Ratio Lower Upper

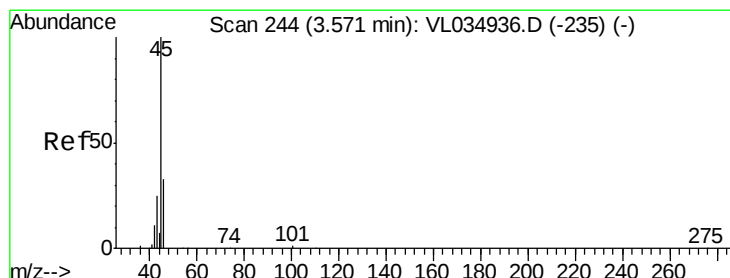
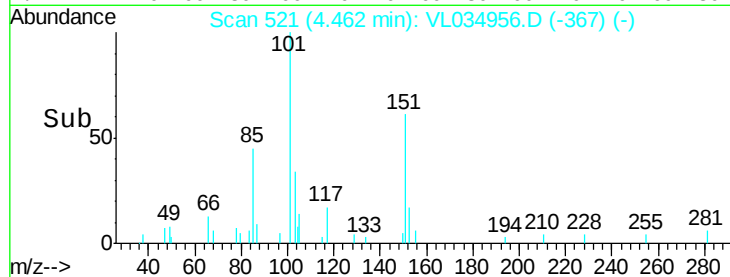
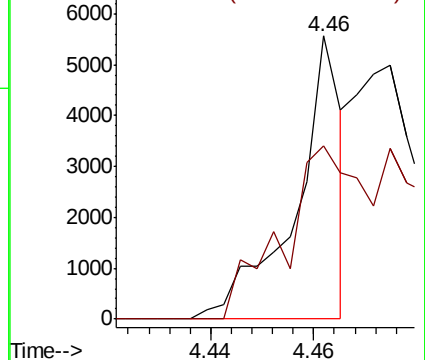
101 100

151 184.2 57.6 86.4#



Abundance Ion 101.00 (100.70 to 101.70): V

Ion 151.00 (150.70 to 151.70): V



#13

Ethanol

Concen: 18.082 ppbv

RT: 3.58 min Scan# 247

Delta R.T. 0.01 min

Lab File: VL034956.D

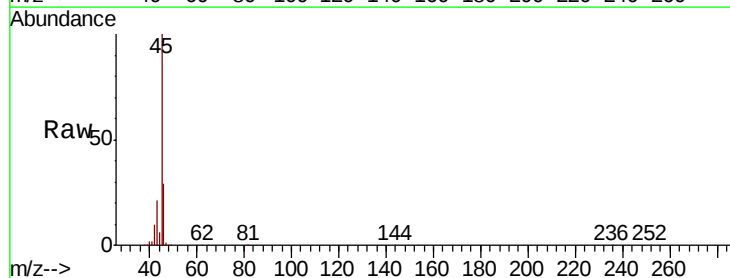
Acq: 7 May 2020 5:26

Tgt Ion: 45 Resp: 298136

Ion Ratio Lower Upper

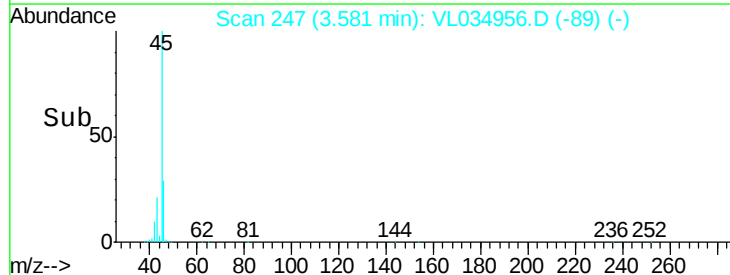
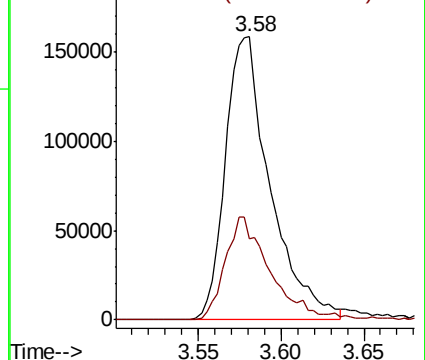
45 100

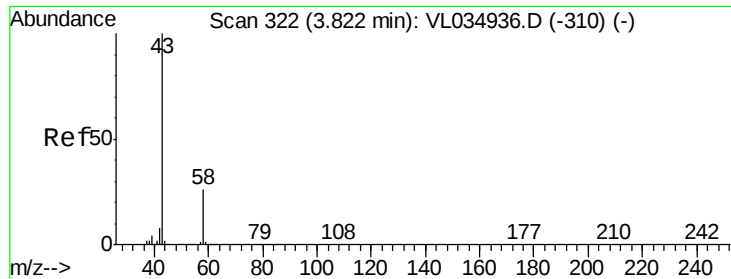
46 37.0 14.3 57.3



Abundance Ion 45.10 (44.80 to 45.80): VL0

Ion 46.10 (45.80 to 46.80): VL0

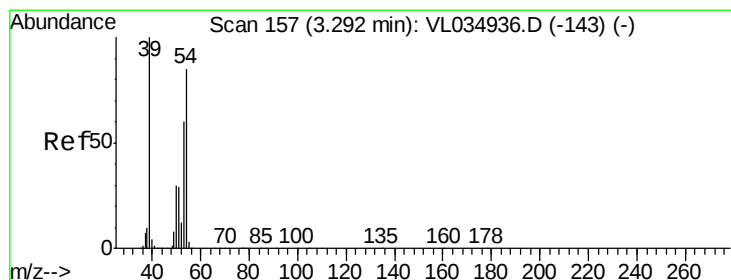
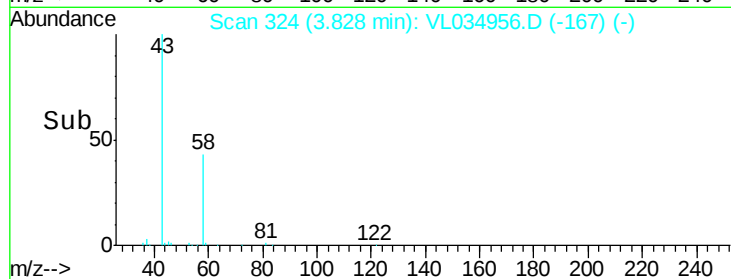
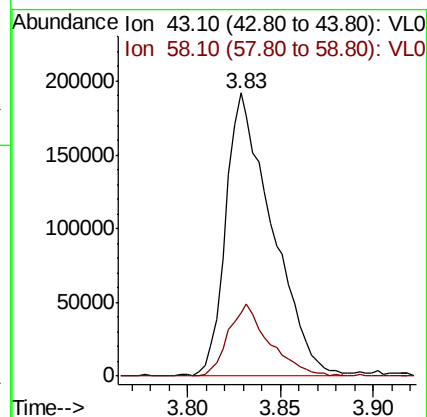
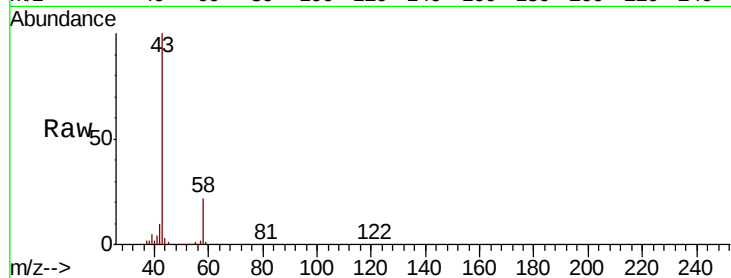




#15
Acetone
Concen: 2.494 ppbv
RT: 3.83 min Scan# 324
Delta R.T. 0.01 min
Lab File: VL034956.D
Acq: 7 May 2020 5:26

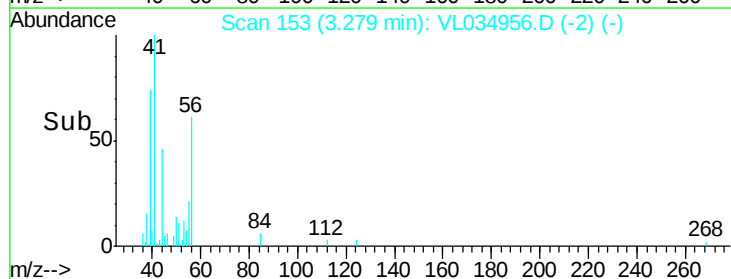
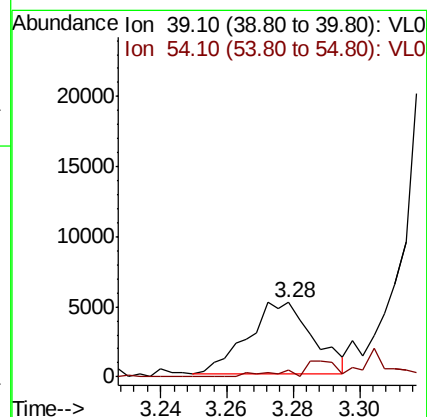
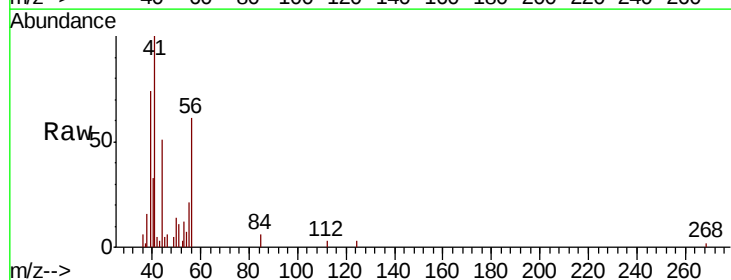
Instrument :
MSVOA_L
ClientSampleId :

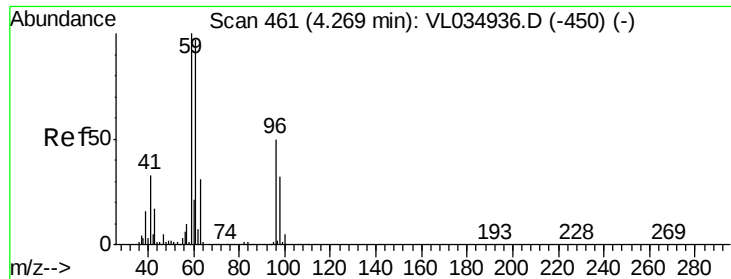
Tot Ion: 43 Resp: 332608
Ion Ratio Lower Upper
43 100
58 22.9 21.7 32.5



#16
1,3-Butadiene
Concen: 0.122 ppbv
RT: 3.28 min Scan# 153
Delta R.T. -0.01 min
Lab File: VL034956.D
Acq: 7 May 2020 5:26

Tgt Ion: 39 Resp: 6977
Ion Ratio Lower Upper
39 100
54 0.0 66.6 100.0#



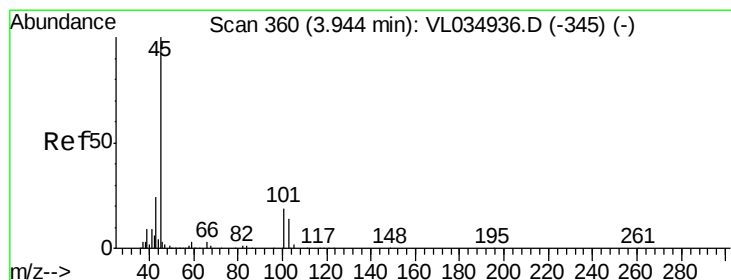
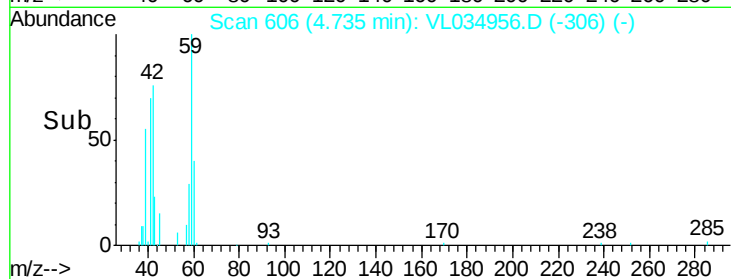
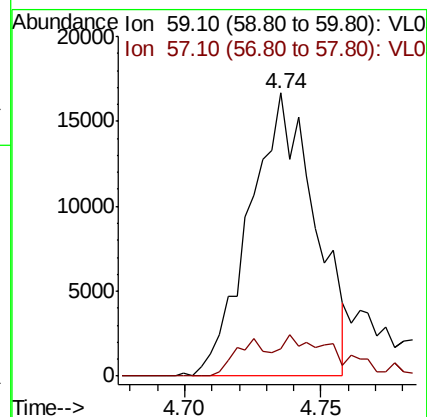
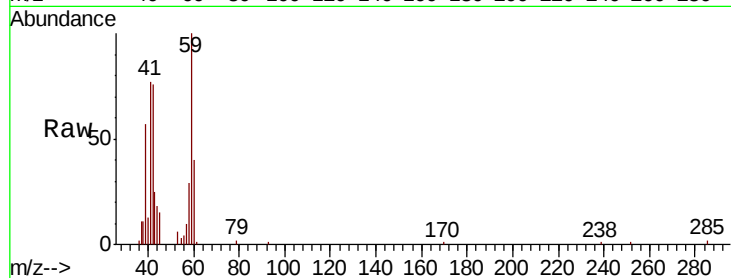


#17

tert-Butyl alcohol
 Concen: 0.233 ppbv
 RT: 4.74 min Scan# 606
 Delta R.T. 0.47 min
 Lab File: VL034956.D
 Acq: 7 May 2020 5:26

Instrument :
 MSVOA_L
 ClientSampled :

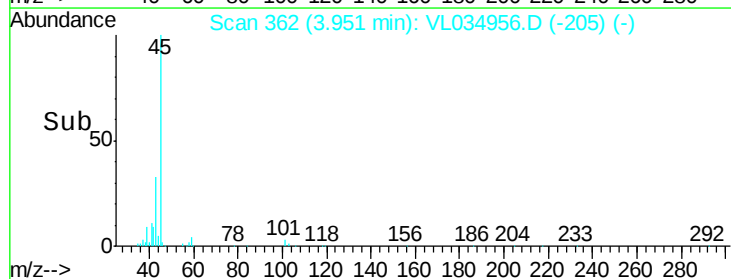
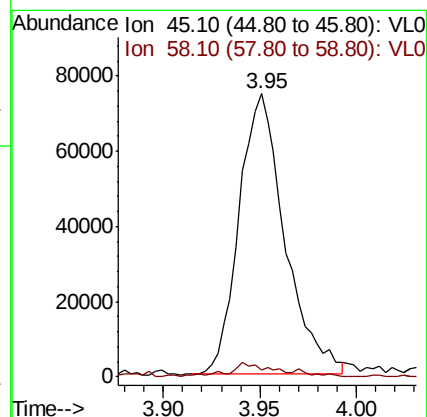
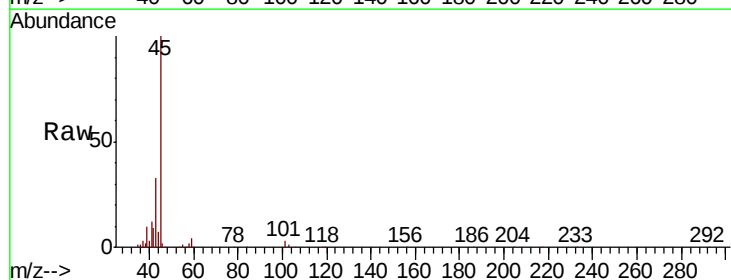
Tot Ion: 59 Resp: 27648
 Ion Ratio Lower Upper
 59 100
 57 12.6 8.7 13.1

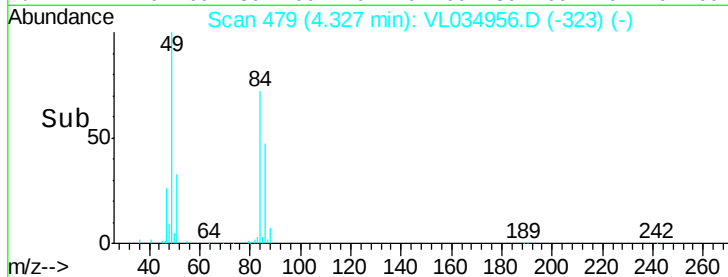
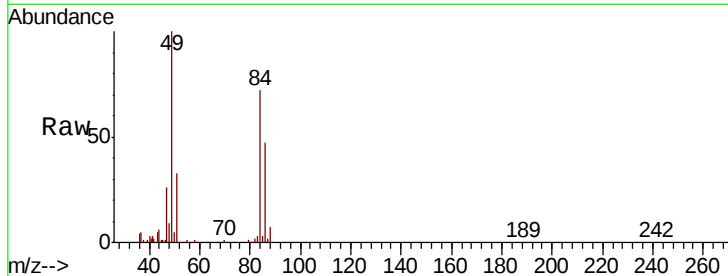
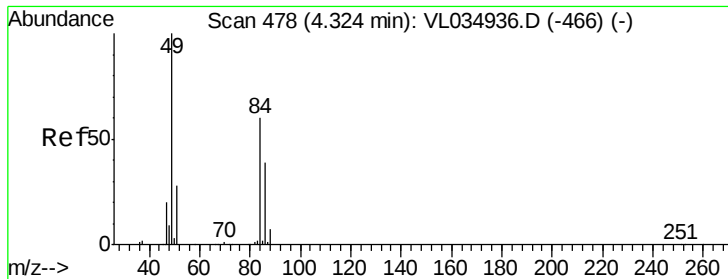


#19

Isopropyl Alcohol
 Concen: 1.378 ppbv
 RT: 3.95 min Scan# 362
 Delta R.T. 0.01 min
 Lab File: VL034956.D
 Acq: 7 May 2020 5:26

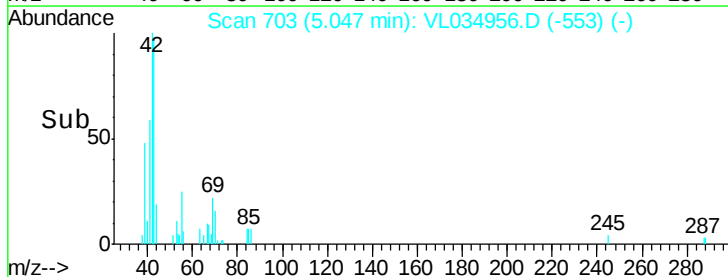
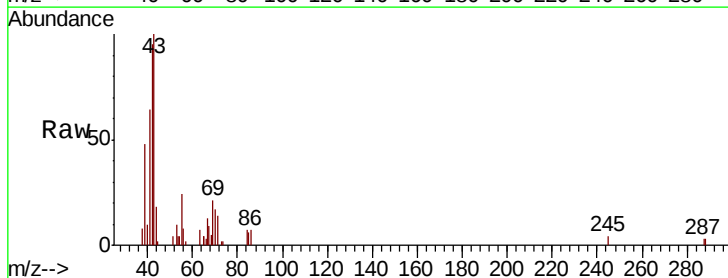
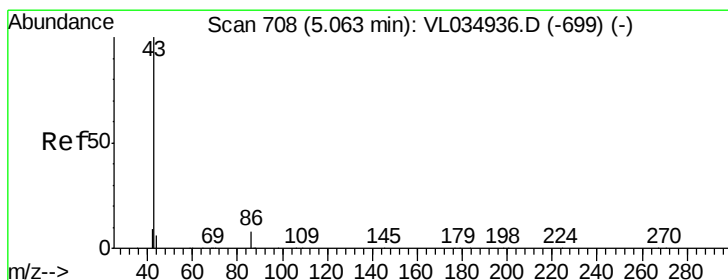
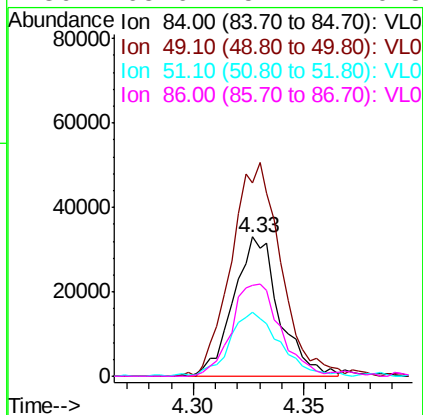
Tgt Ion: 45 Resp: 122541
 Ion Ratio Lower Upper
 45 100
 58 5.7 1.7 2.5#





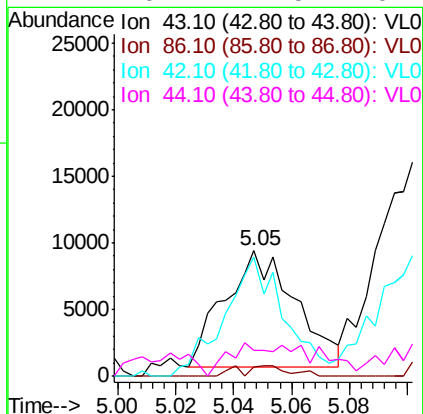
#20
Methvlene Chloride
Concen: 1.078 ppbv
RT: 4.33 min Scan# 479
Delta R.T. 0.00 min
Lab File: VL034956.D
Acq: 7 May 2020 5:26

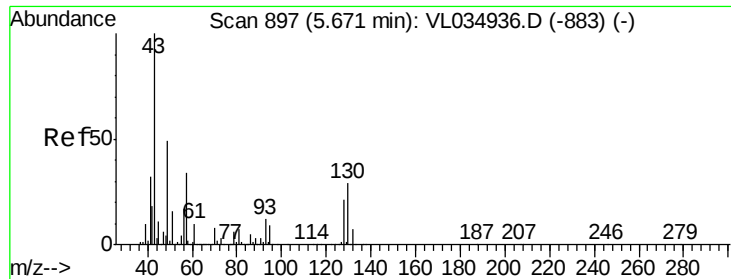
Tot Ion:	84	Resp:	47581
Ion	Ratio	Lower	Upper
84	100		
49	135.3	132.5	198.7
51	45.3	38.4	57.6
86	65.6	51.2	76.8



#23
Vinyl Acetate
Concen: 0.088 ppbv
RT: 5.05 min Scan# 703
Delta R.T. -0.02 min
Lab File: VL034956.D
Acq: 7 May 2020 5:26

Tgt Ion:	43	Resp:	14882
Ion	Ratio	Lower	Upper
43	100		
86	6.2	5.5	8.3
42	77.6	8.0	12.0#
44	6.2	4.5	6.7

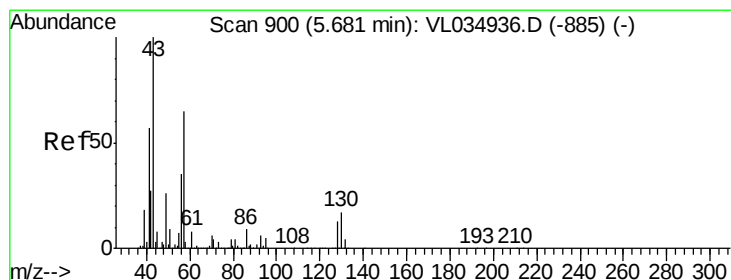
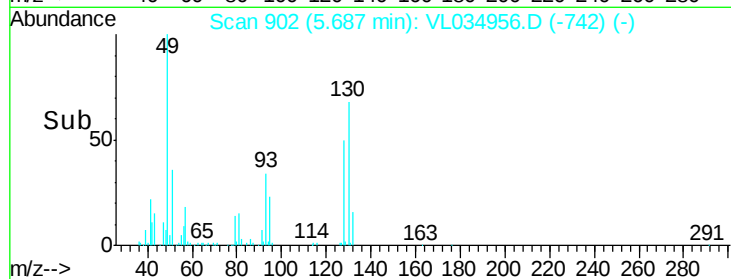
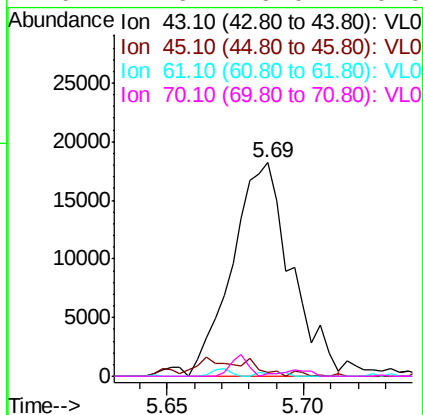
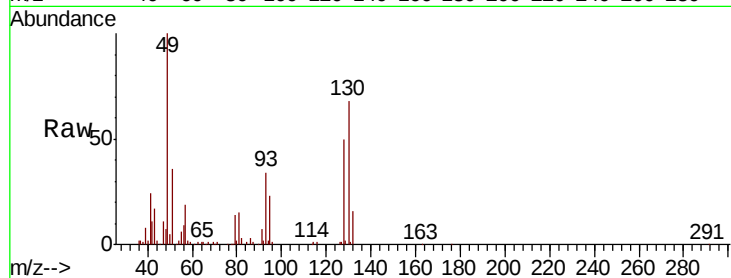




#25
Ethyl Acetate
Concen: 0.121 ppbv
RT: 5.69 min Scan# 902
Delta R.T. 0.02 min
Lab File: VL034956.D
Acq: 7 May 2020 5:26

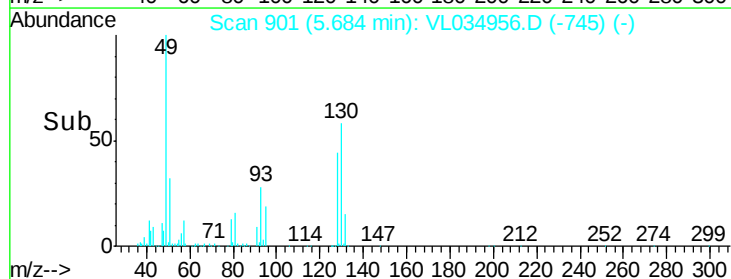
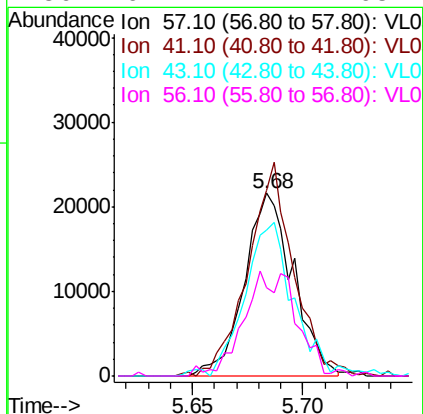
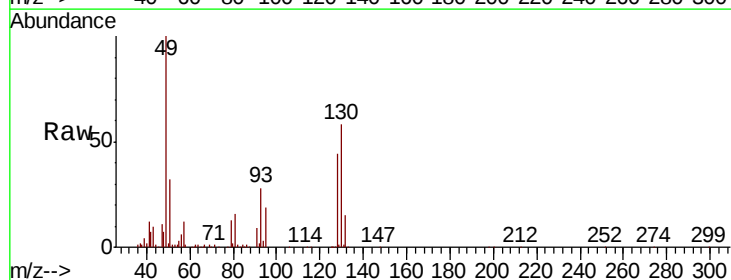
Instrument :
MSVOA_L
ClientSampleId :

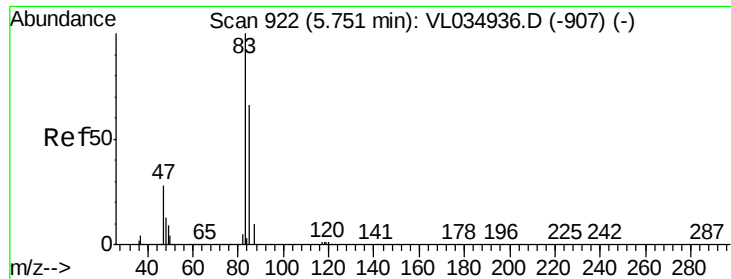
Tot Ion:	43	Resp:	27182
Ion	Ratio	Lower	Upper
43	100		
45	8.9	8.1	12.1
61	1.9	7.8	11.8#
70	4.6	6.0	9.0#



#26
Hexane
Concen: 0.343 ppbv
RT: 5.68 min Scan# 901
Delta R.T. 0.00 min
Lab File: VL034956.D
Acq: 7 May 2020 5:26

Tgt Ion:	57	Resp:	33262
Ion	Ratio	Lower	Upper
57	100		
41	109.6	72.7	109.1#
43	84.6	182.1	273.1#
56	62.7	42.2	63.2





#29

Chloroform

Concen: 0.059 ppbv

RT: 5.75 min Scan# 921

Delta R.T. -0.00 min

Lab File: VL034956.D

Acq: 7 May 2020 5:26

Instrument :

MSVOA_L

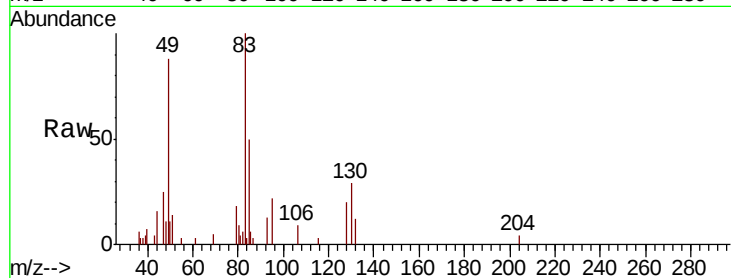
ClientSampleId :

Tot Ion: 83 Resp: 9381

Ion Ratio Lower Upper

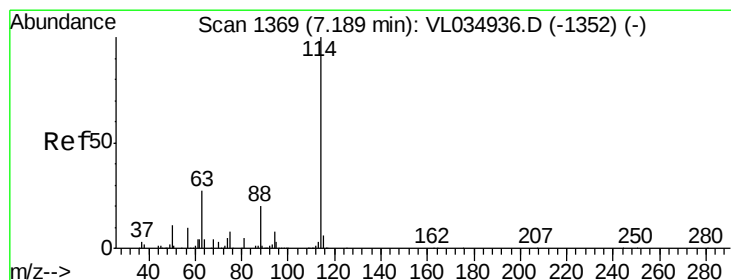
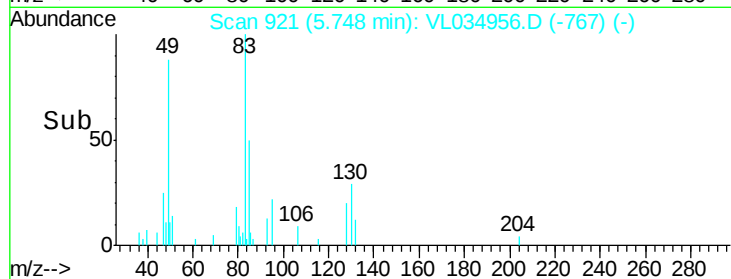
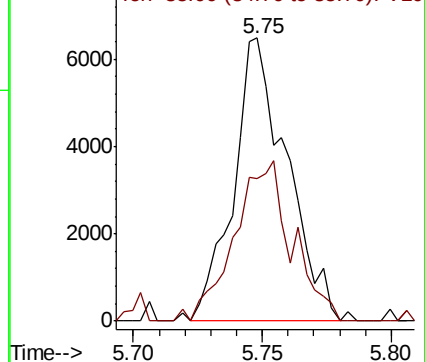
83 100

85 56.3 53.0 79.6



Abundance Ion 83.00 (82.70 to 83.70): VL0

Ion 85.00 (84.70 to 85.70): VL0



#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 7.19 min Scan# 1369

Delta R.T. -0.00 min

Lab File: VL034956.D

Acq: 7 May 2020 5:26

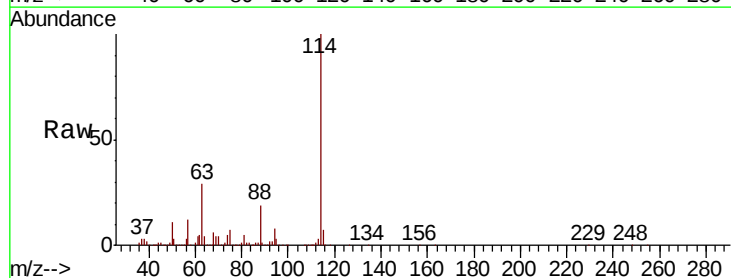
Tgt Ion: 114 Resp: 2338844

Ion Ratio Lower Upper

114 100

63 28.0 22.2 33.4

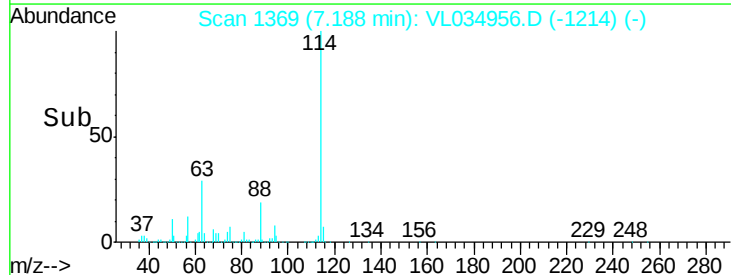
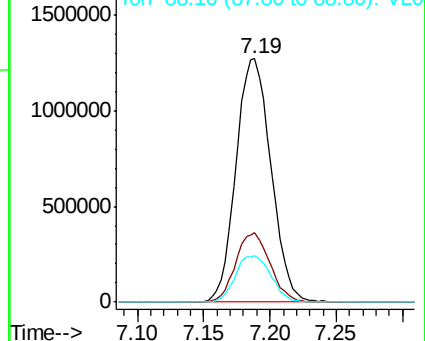
88 19.4 15.5 23.3

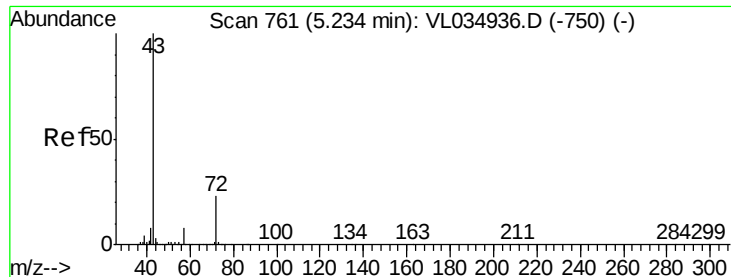


Abundance Ion 114.10 (113.80 to 114.80): V

Ion 63.10 (62.80 to 63.80): VL0

Ion 88.10 (87.80 to 88.80): VL0

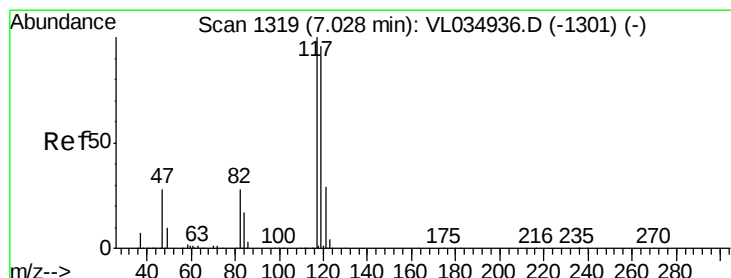
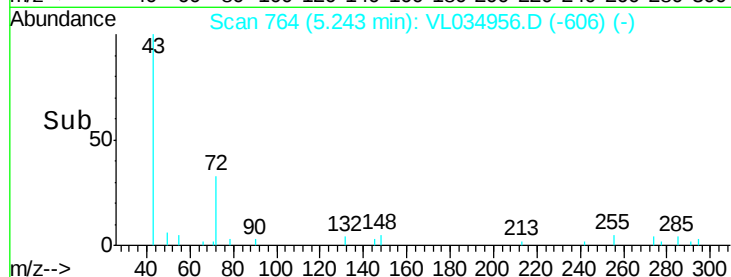
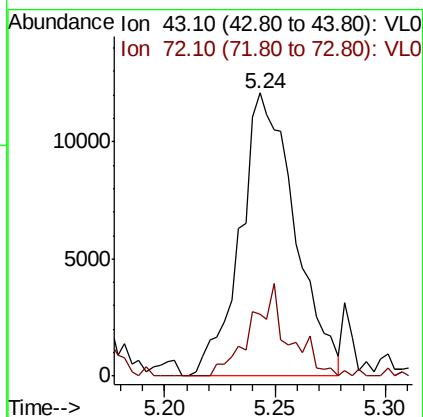
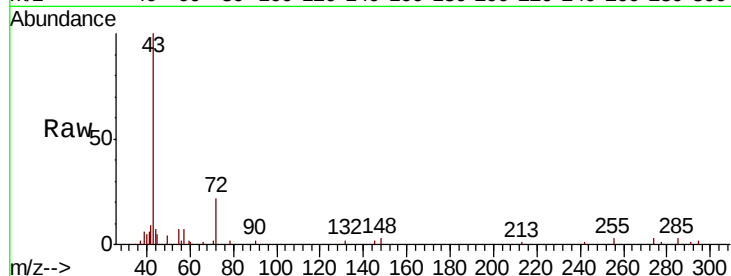




#34
2-Butanone
Concen: 0.143 ppbv
RT: 5.24 min Scan# 764
Delta R.T. 0.01 min
Lab File: VL034956.D
Acq: 7 May 2020 5:26

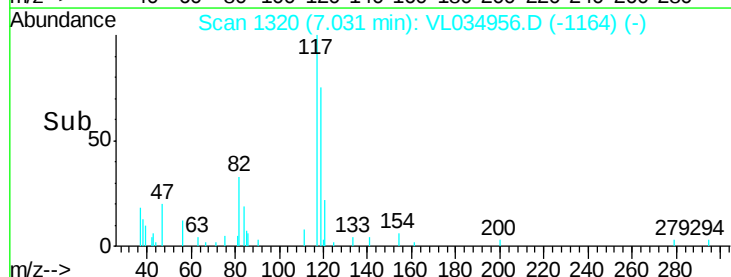
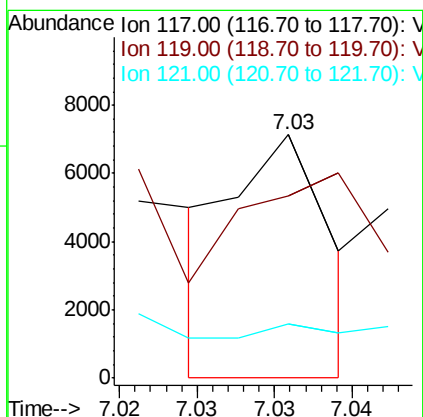
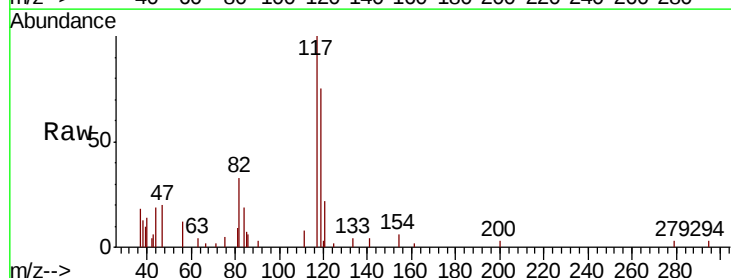
Instrument :
MSVOA_L
ClientSampleId :

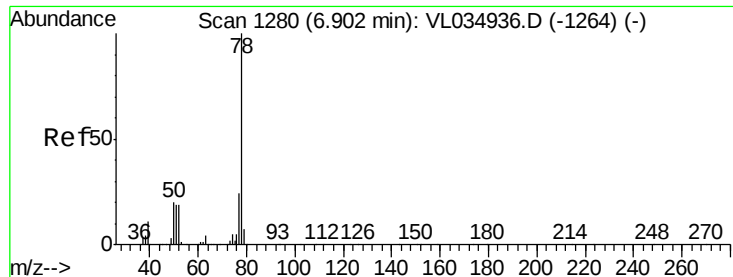
Tot Ion: 43 Resp: 20780
Ion Ratio Lower Upper
43 100
72 22.8 18.0 27.0



#35
Carbon Tetrachloride
Concen: 0.021 ppbv
RT: 7.03 min Scan# 1320
Delta R.T. 0.00 min
Lab File: VL034956.D
Acq: 7 May 2020 5:26

Tgt Ion: 117 Resp: 3115
Ion Ratio Lower Upper
117 100
119 73.8 77.0 115.6#
121 11.7 23.0 34.6#





#36

Benzene

Concen: 0.159 ppbv

RT: 6.90 min Scan# 1280

Delta R.T. -0.00 min

Lab File: VL034956.D

Acq: 7 May 2020 5:26

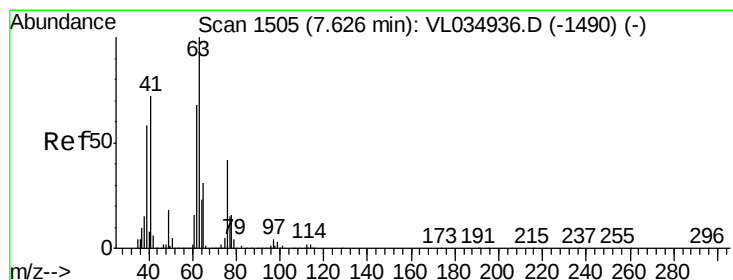
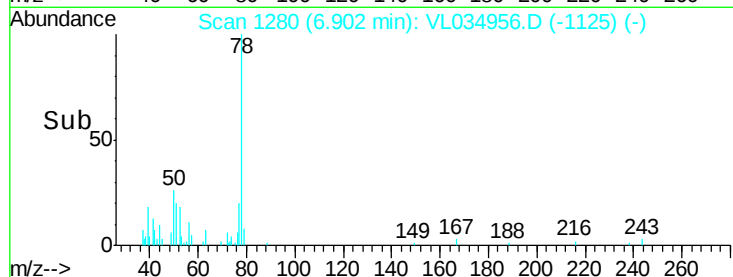
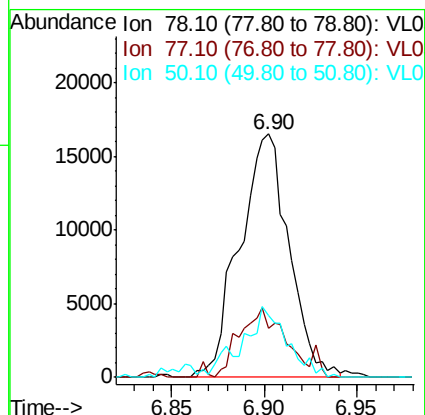
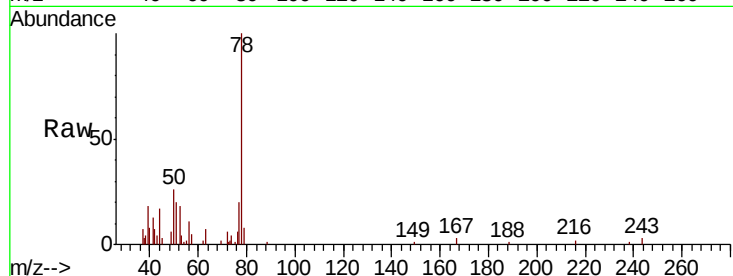
Instrument :

MSVOA_L

ClientSampleId :

Tot Ion: 78 Resp: 30695

Ion	Ratio	Lower	Upper
78	100		
77	20.3	19.0	28.6
50	25.6	15.8	23.8#



#39

1,2-Dichloropropane

Concen: 8.428 ppbv

RT: 7.19 min Scan# 1369

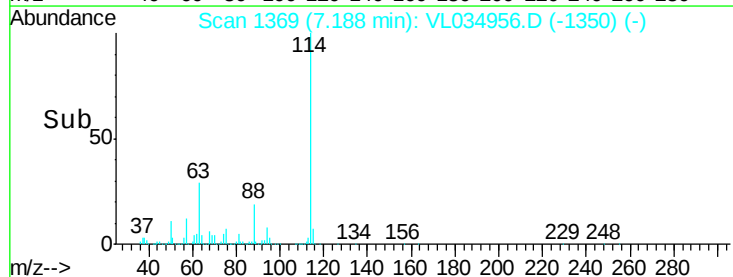
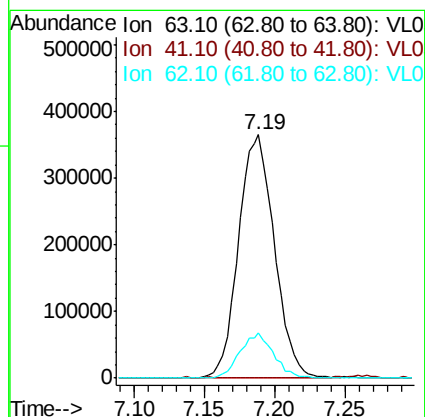
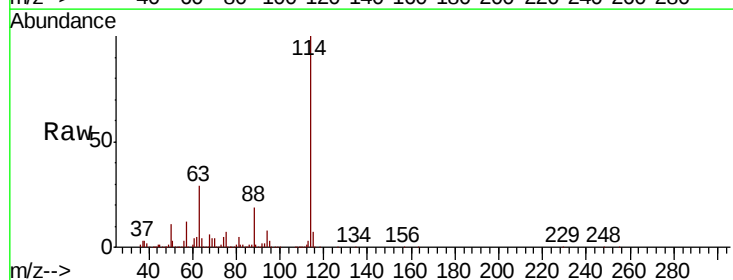
Delta R.T. -0.44 min

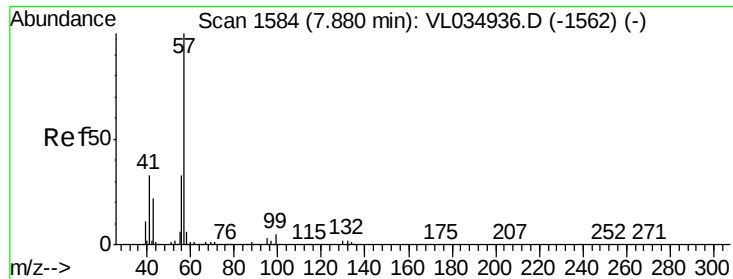
Lab File: VL034956.D

Acq: 7 May 2020 5:26

Tgt Ion: 63 Resp: 651484

Ion	Ratio	Lower	Upper
63	100		
41	0.0	57.8	86.8#
62	18.5	54.2	81.2#

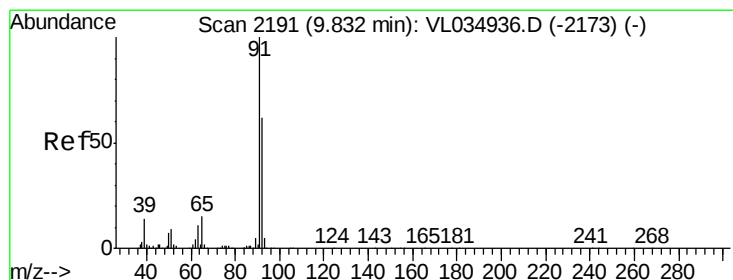
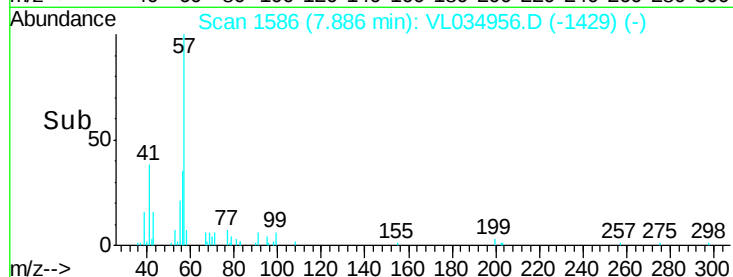
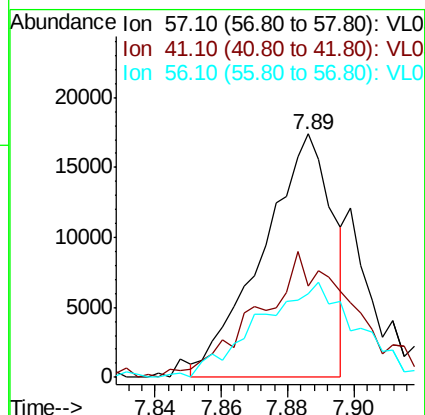
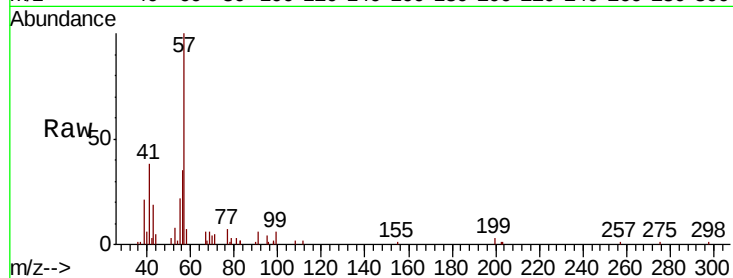




#44
 2,2,4-Trimethylpentane
 Concen: 0.075 ppbv
 RT: 7.89 min Scan# 1586
 Delta R.T. 0.01 min
 Lab File: VL034956.D
 Acq: 7 May 2020 5:26

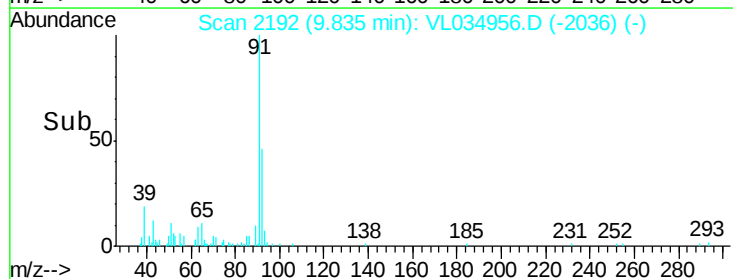
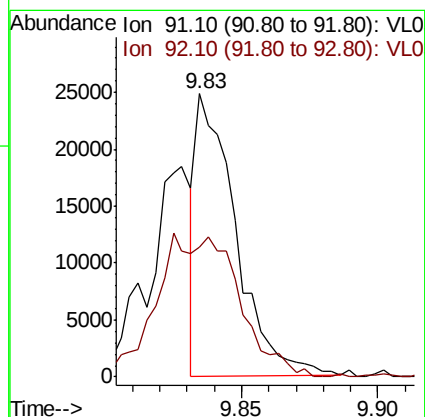
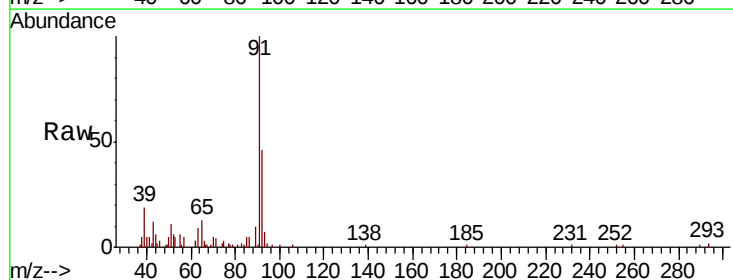
Instrument :
 MSVOA_L
 ClientSampleId :

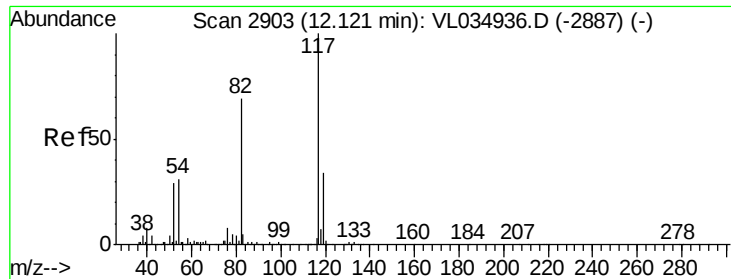
Tot Ion	57	Resp	25626
Ion Ratio	Lower	Upper	
57	100		
41	73.9	26.4	39.6#
56	55.5	25.5	38.3#



#53
 Toluene
 Concen: 0.121 ppbv
 RT: 9.83 min Scan# 2192
 Delta R.T. 0.00 min
 Lab File: VL034956.D
 Acq: 7 May 2020 5:26

Tgt Ion	91	Resp	24677
Ion Ratio	Lower	Upper	
91	100		
92	0.0	48.6	73.0#





#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.12 min Scan# 2904

Delta R.T. 0.00 min

Lab File: VL034956.D

Acq: 7 May 2020 5:26

Instrument :

MSVOA_L

ClientSampleId :

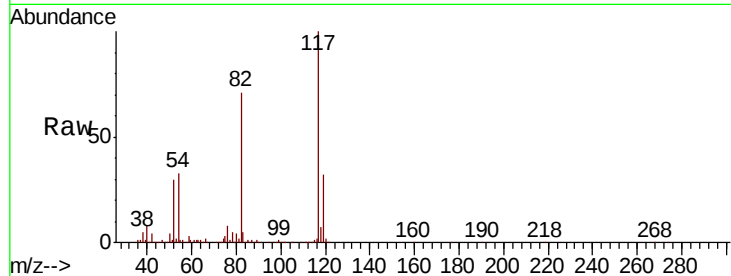
Tot Ion:117 Resp: 2142729

Ion Ratio Lower Upper

117 100

82 70.2 53.1 79.7

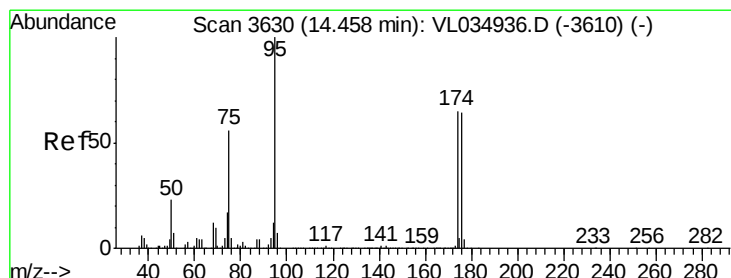
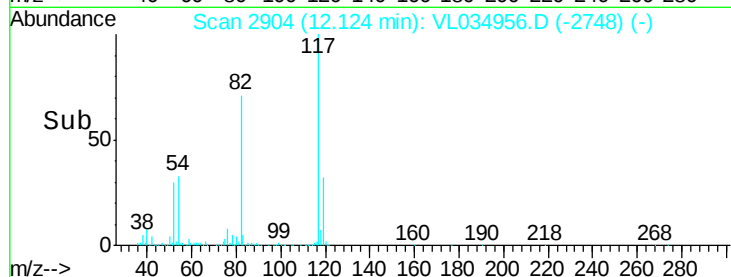
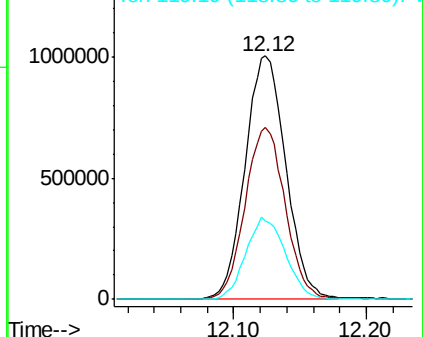
119 33.0 26.7 40.1



Abundance Ion 117.10 (116.80 to 117.80): V

Ion 82.10 (81.80 to 82.80): VL0

Ion 119.10 (118.80 to 119.80): V



#68

1-Bromo-4-Fluorobenzene

Concen: 10.227 ppbv

RT: 14.46 min Scan# 3631

Delta R.T. 0.00 min

Lab File: VL034956.D

Acq: 7 May 2020 5:26

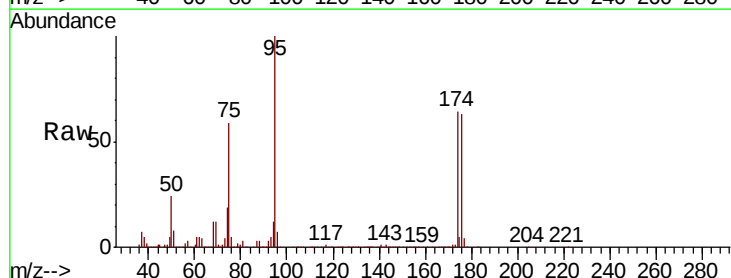
Tgt Ion: 95 Resp: 1773725

Ion Ratio Lower Upper

95 100

174 64.3 51.5 77.3

175 4.9 3.8 5.8



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

