

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL040621\
 Data File : VL036722.D
 Acq On : 7 Apr 2021 9:38
 Operator : SY/AP
 Sample : M1877-12
 Misc : 400mL/MSVOA L
 ALS Vial : 7 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 UP-SG-9(2021)

Quant Time: Apr 08 01:29:24 2021
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL032521AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Thu Mar 25 09:42:40 2021
 QLast Update : Thu Mar 25 09:42:40 2021
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.66	49	1219870	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.17	114	2944003	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.09	117	2665209	10.00	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.42	95	2111195	9.94	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	99.40%

Target Compounds					Ovalue
2) Dichlorodifluoromethane	3.04	85	86873	0.437	ppbv 91
3) Chlorodifluoromethane	2.96	51	5881404	25.805	ppbv # 59
4) Chloromethane	3.13	50	23684	0.294	ppbv # 83
9) Propene	3.20	41	1129744	15.549	ppbv 94
11) Trichlorofluoromethane	3.94	101	47898	0.236	ppbv 88
12) 1,1,2-Trichlorotrifluoroet	4.48	101	6218	0.048	ppbv # 79
13) Ethanol	3.63	45	13308091	1538.070	ppbv 96
15) Acetone	3.84	43	1606735	13.382	ppbv 97
16) 1,3-Butadiene	3.29	39	17052	0.204	ppbv # 30
17) tert-Butyl alcohol	4.00	59	1034509	9.898	ppbv 96
19) Isopropyl Alcohol	3.99	45	21584060	326.801	ppbv # 94
20) Methylene Chloride	4.34	84	1329744	23.655	ppbv 93
21) Allyl Chloride	4.34	41	66432	0.694	ppbv # 17
23) Vinyl Acetate	5.06	43	45847	0.223	ppbv # 22
25) Ethyl Acetate	5.68	43	1089659	3.817	ppbv # 79
26) Hexane	5.68	57	1446997	10.924	ppbv # 48
34) 2-Butanone	5.25	43	114448	0.796	ppbv 92
36) Benzene	6.89	78	58735	0.216	ppbv # 92
39) 1,2-Dichloropropane	7.17	63	784235	7.120	ppbv # 24
41) Tetrahydrofuran	5.68	42	585400	8.835	ppbv # 53
44) 2,2,4-Trimethylpentane	7.87	57	254048	0.532	ppbv # 88
53) Toluene	9.80	91	210626	0.728	ppbv 98
74) 1,2,4-Trimethylbenzene	16.76	105	13987	0.039	ppbv # 62

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



#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.66 min Scan# 894

Delta R.T. -0.01 min

Lab File: VL036722.D

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UP-SG-9(2021)

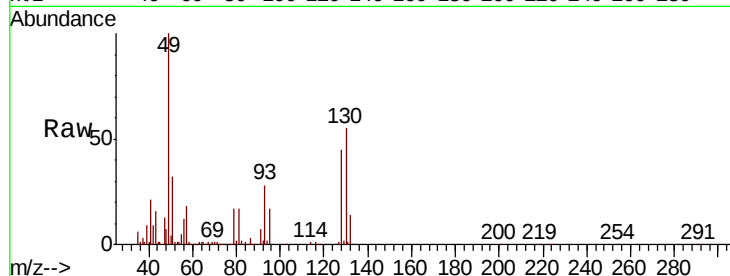
Tot Ion: 49 Resp: 1219870

Ion Ratio Lower Upper

49 100

128 46.6 23.5 70.6

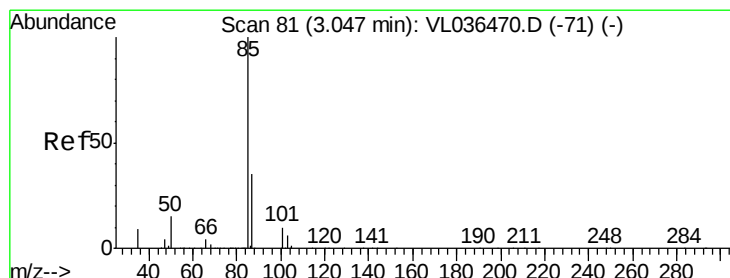
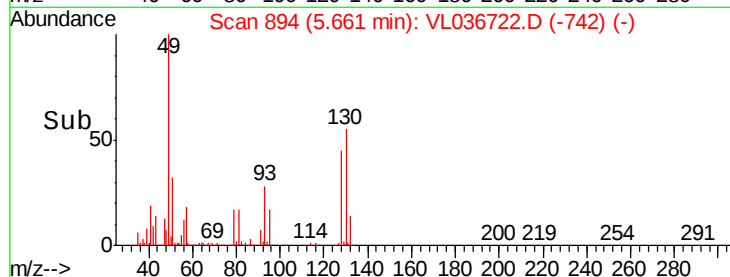
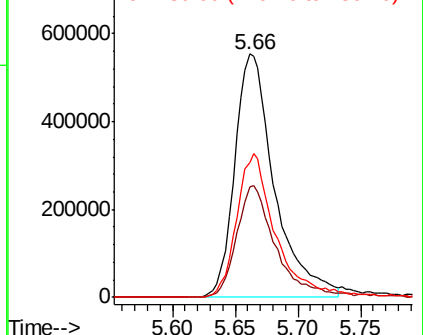
130 58.7 29.1 87.4



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: 0.437 ppbv

RT: 3.04 min Scan# 80

Delta R.T. -0.00 min

Lab File: VL036722.D

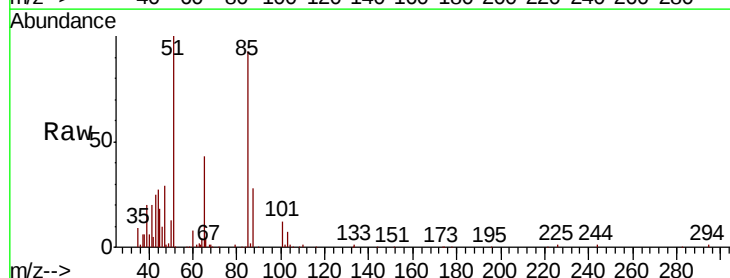
Acq: 7 Apr 2021 9:38

Tgt Ion: 85 Resp: 86873

Ion Ratio Lower Upper

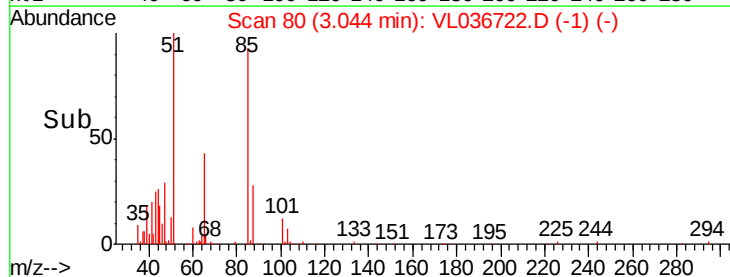
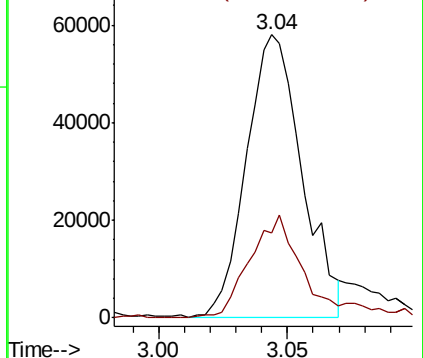
85 100

87 29.8 27.8 41.8



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0

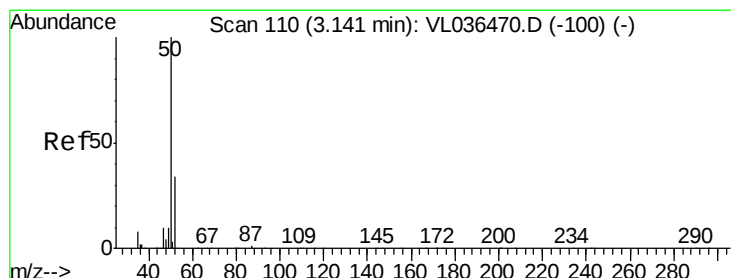
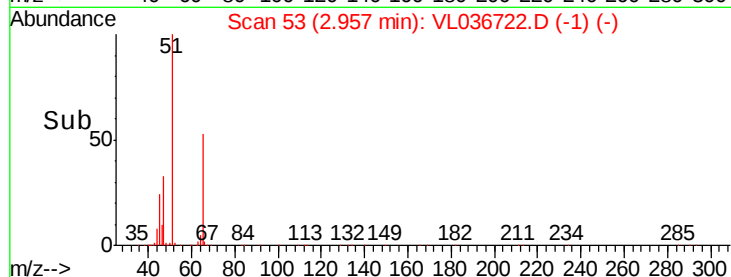
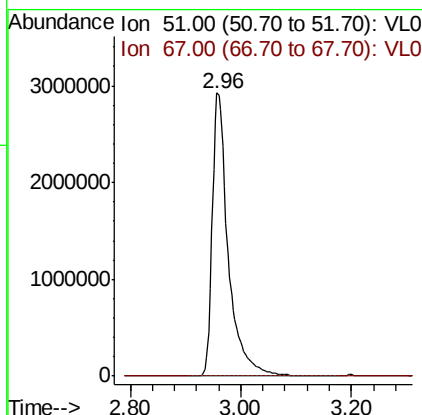
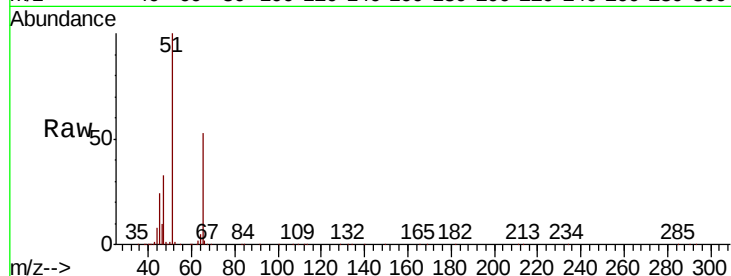




#3
Chlorodifluoromethane
Concen: 25.805 ppbv
RT: 2.96 min Scan# 53
Delta R.T. -0.03 min
Lab File: VL036722.D
Acq: 7 Apr 2021 9:38

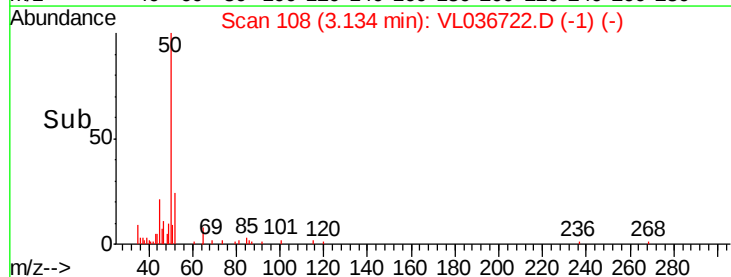
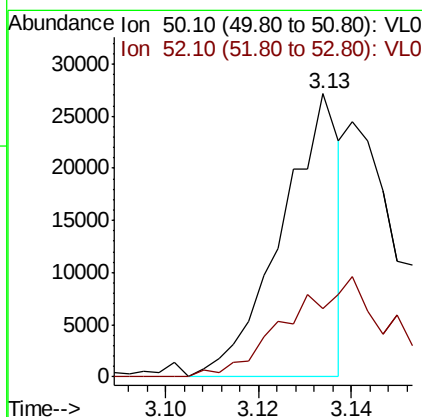
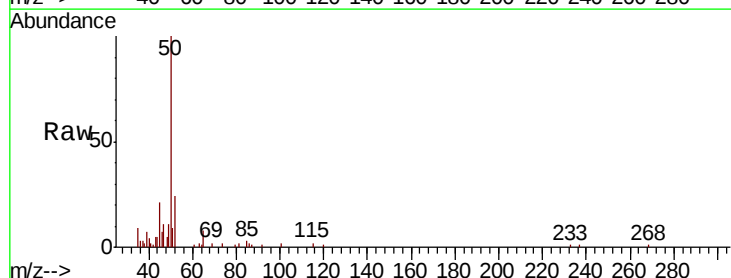
Instrument :
MSVOA_L
ClientSampleId :
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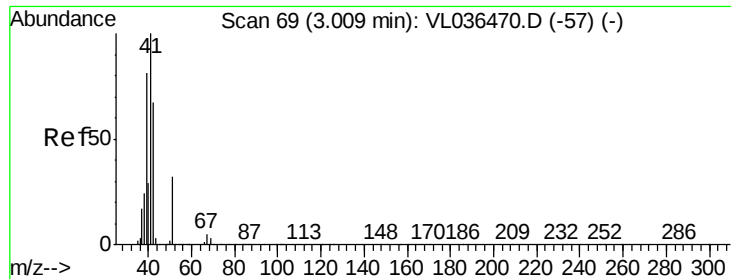
Tot Ion: 51 Resp: 5881404
Ion Ratio Lower Upper
51 100
67 0.3 14.7 22.1#



#4
Chloromethane
Concen: 0.294 ppbv
RT: 3.13 min Scan# 108
Delta R.T. -0.01 min
Lab File: VL036722.D
Acq: 7 Apr 2021 9:38

Tgt Ion: 50 Resp: 23684
Ion Ratio Lower Upper
50 100
52 24.0 27.0 40.6#





#9

Propene

Concen: 15.549 ppbv

RT: 3.20 min Scan# 129

Delta R.T. 0.19 min

Lab File: VL036722.D

Acq: 7 Apr 2021 9:38

Instrument :

MSVOA_L

ClientSampleId :

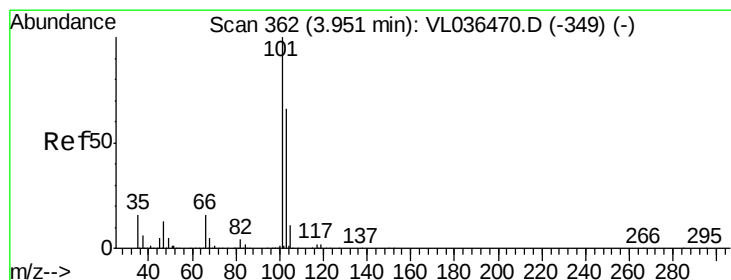
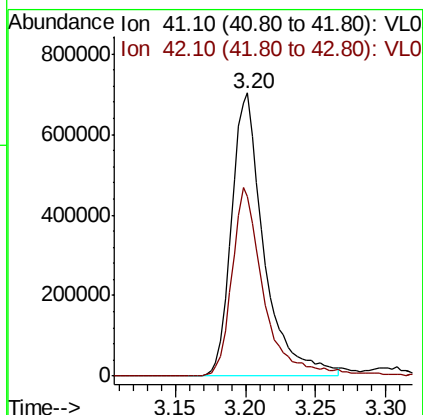
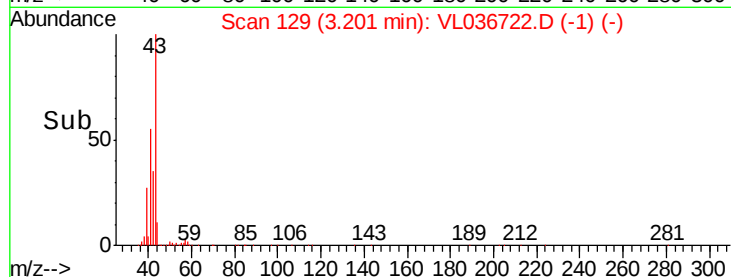
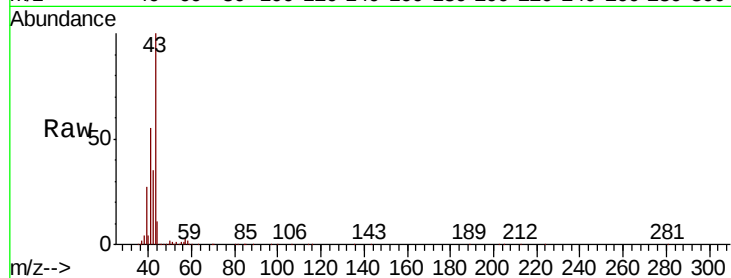
UP-SG-9(2021)

Tot Ion: 41 Resp: 1129744

Ion Ratio Lower Upper

41 100

42 66.4 57.0 85.4



#11

Trichlorofluoromethane

Concen: 0.236 ppbv

RT: 3.94 min Scan# 360

Delta R.T. -0.01 min

Lab File: VL036722.D

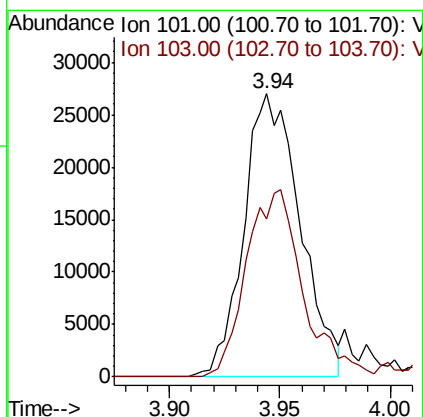
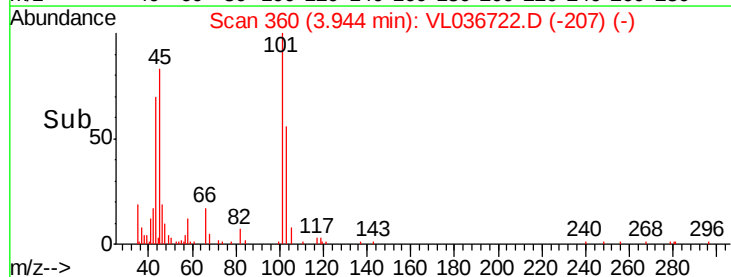
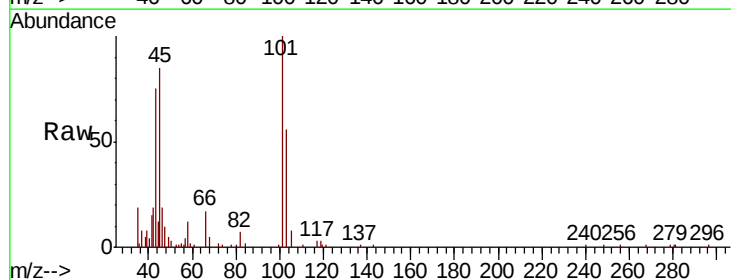
Acq: 7 Apr 2021 9:38

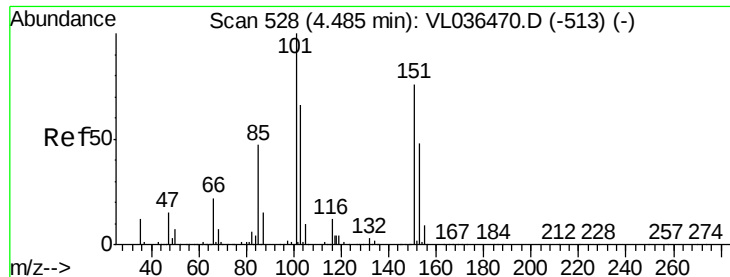
Tgt Ion: 101 Resp: 47898

Ion Ratio Lower Upper

101 100

103 55.9 52.5 78.7





#12

1,1,2-Trichlorotrifluoroethane

Concen: 0.048 ppbv

RT: 4.48 min Scan# 527

Delta R.T. -0.00 min

Lab File: VL036722.D

Acq: 7 Apr 2021 9:38

Instrument :

MSVOA_L

ClientSampleId :

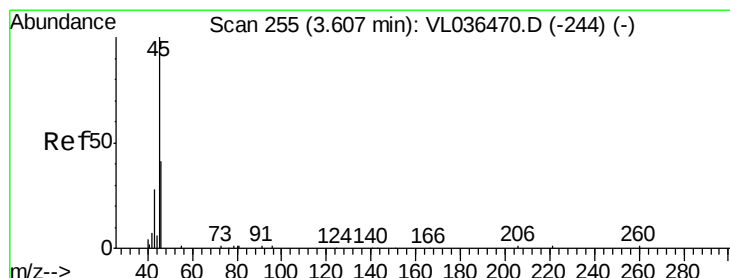
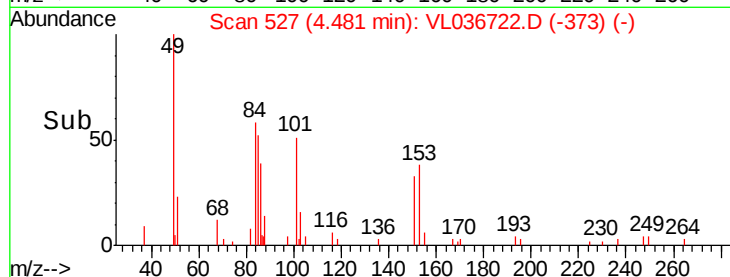
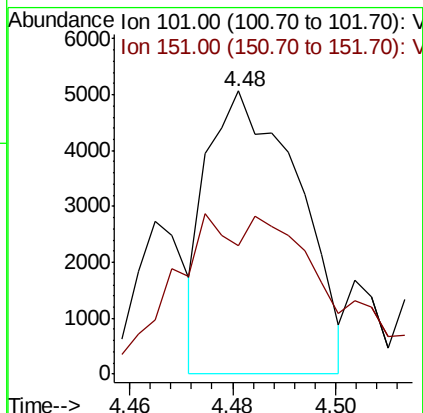
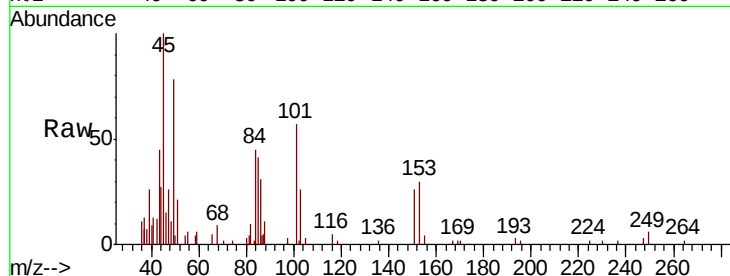
UP-SG-9(2021)

Tot Ion:101 Resp: 6218

Ion Ratio Lower Upper

101 100

151 94.0 60.9 91.3#



#13

Ethanol

Concen: 1538.070 ppbv

RT: 3.63 min Scan# 263

Delta R.T. 0.03 min

Lab File: VL036722.D

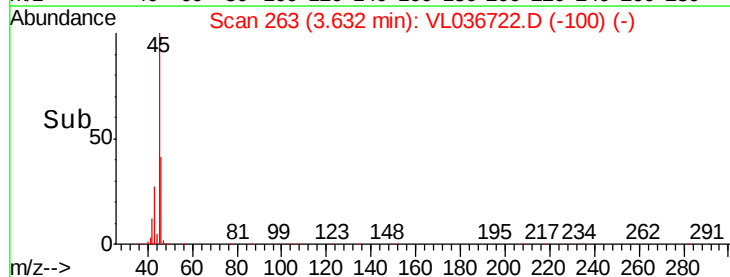
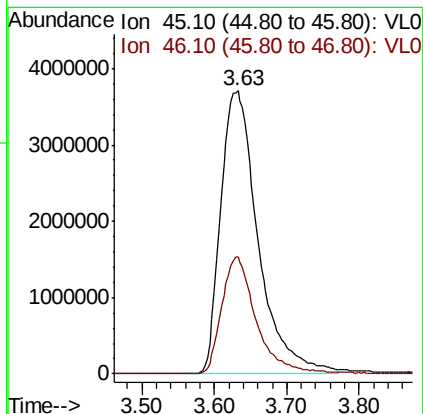
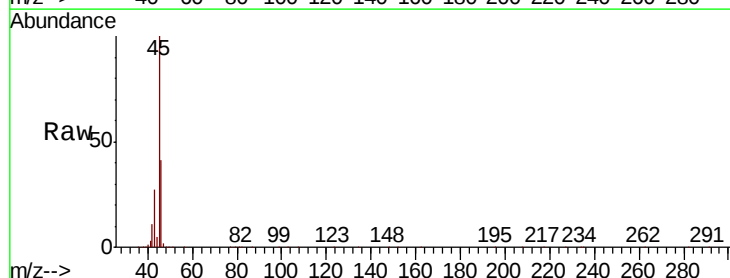
Acq: 7 Apr 2021 9:38

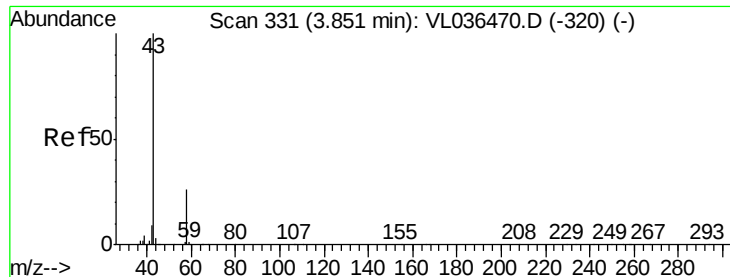
Tgt Ion: 45 Resp:13308091

Ion Ratio Lower Upper

45 100

46 38.7 16.6 66.2





#15

Acetone

Concen: 13.382 ppbv

RT: 3.84 min Scan# 329

Delta R.T. -0.01 min

Lab File: VL036722.D

Acq: 7 Apr 2021 9:38

Instrument :

MSVOA_L

ClientSampleId :

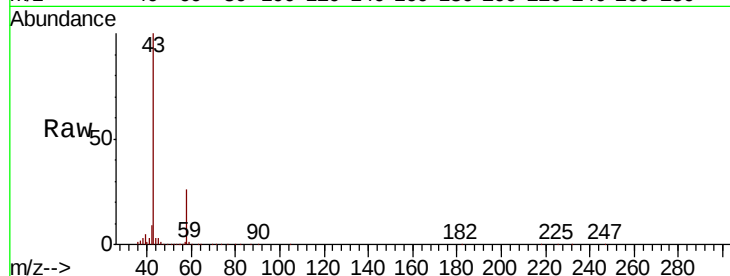
UP-SG-9(2021)

Tot Ion: 43 Resp: 1606735

Ion Ratio Lower Upper

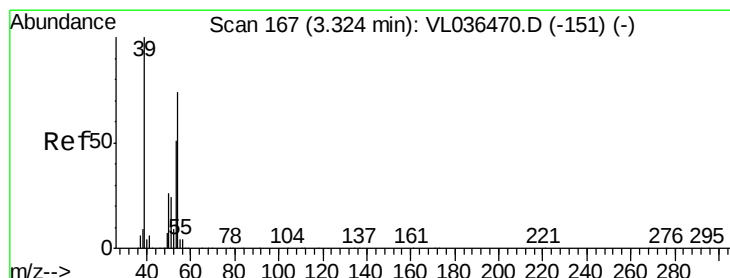
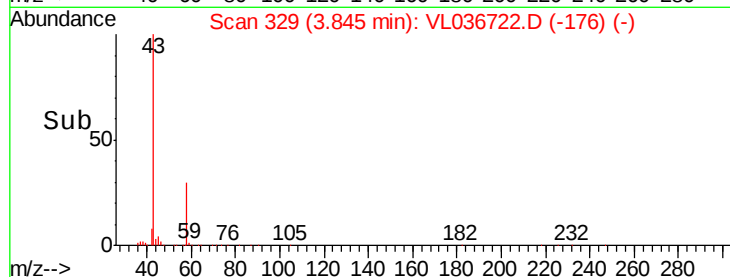
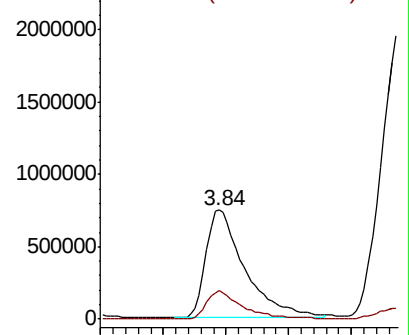
43 100

58 25.1 21.2 31.8



Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 58.10 (57.80 to 58.80): VL0



#16

1,3-Butadiene

Concen: 0.204 ppbv

RT: 3.29 min Scan# 158

Delta R.T. -0.03 min

Lab File: VL036722.D

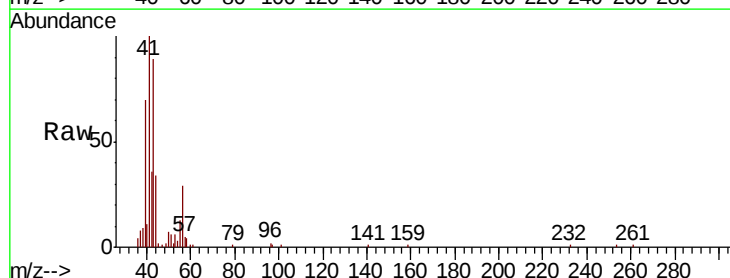
Acq: 7 Apr 2021 9:38

Tgt Ion: 39 Resp: 17052

Ion Ratio Lower Upper

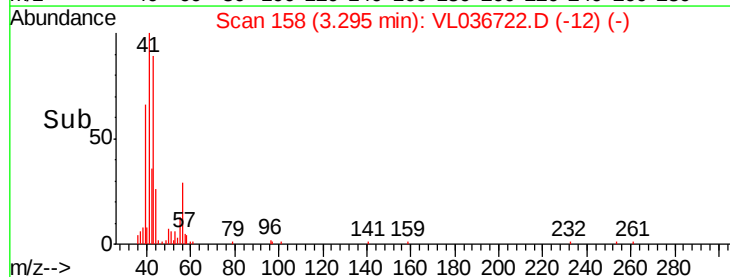
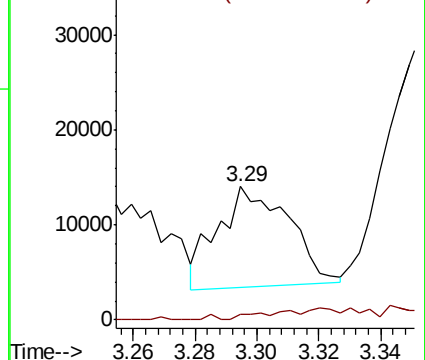
39 100

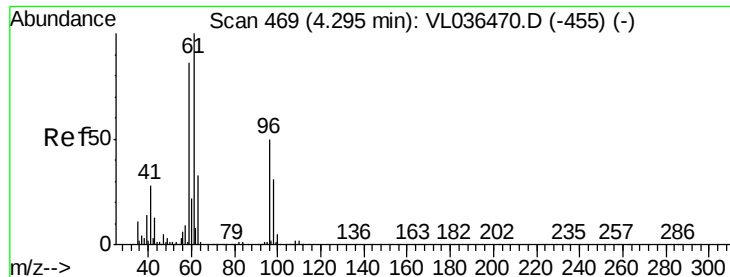
54 14.9 58.8 88.2#



Abundance Ion 39.10 (38.80 to 39.80): VL0

Ion 54.10 (53.80 to 54.80): VL0



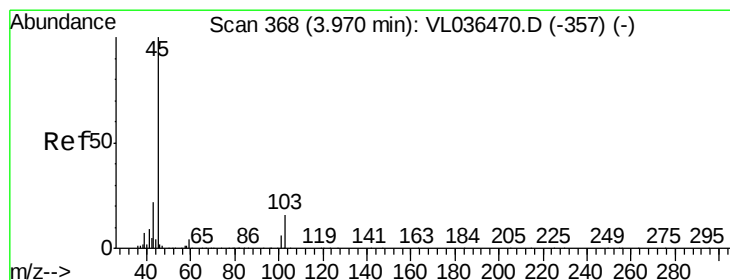
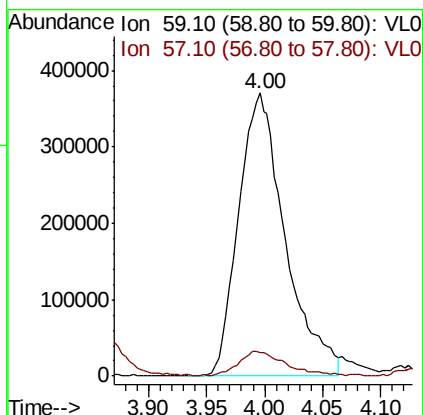
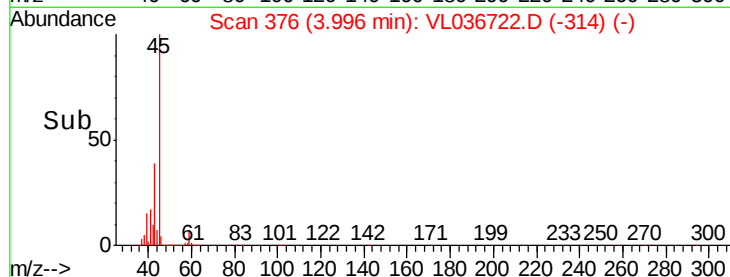
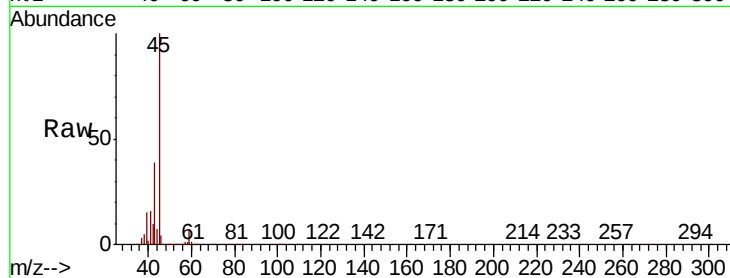


#17

tert-Butyl alcohol
Concen: 9.898 ppbv
RT: 4.00 min Scan# 376
Delta R.T. -0.30 min
Lab File: VL036722.D
Acq: 7 Apr 2021 9:38

Instrument :
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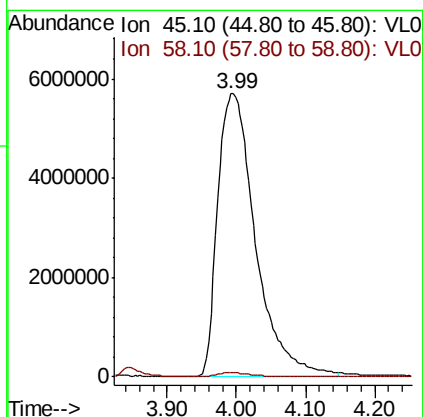
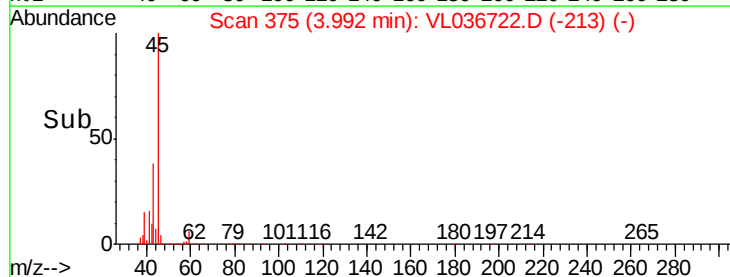
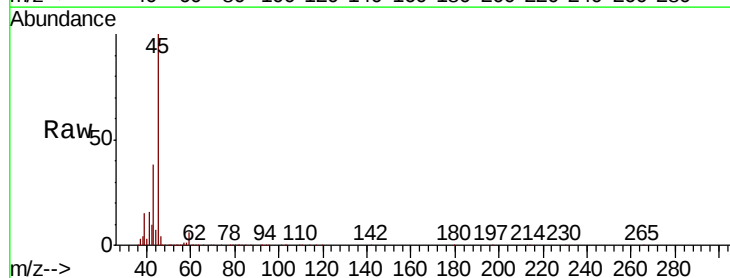
Tot Ion: 59 Resp: 1034509
Ion Ratio Lower Upper
59 100
57 9.3 8.6 12.8

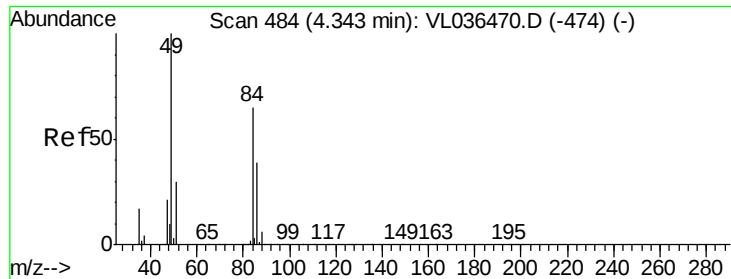


#19

Isopropyl Alcohol
Concen: 326.801 ppbv
RT: 3.99 min Scan# 375
Delta R.T. 0.02 min
Lab File: VL036722.D
Acq: 7 Apr 2021 9:38

Tgt Ion: 45 Resp: 21584060
Ion Ratio Lower Upper
45 100
58 1.5 2.9 4.3#

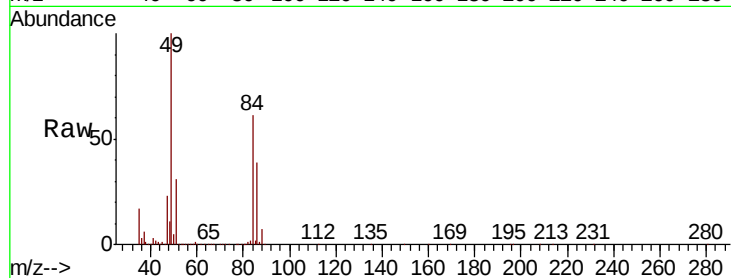




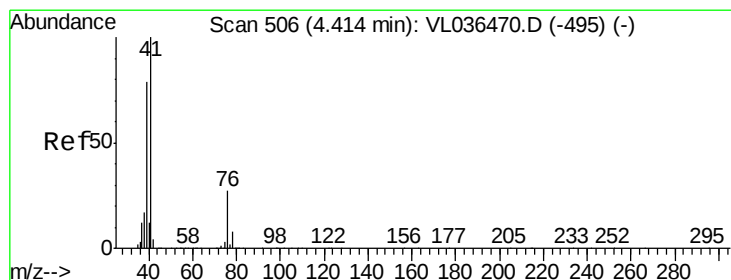
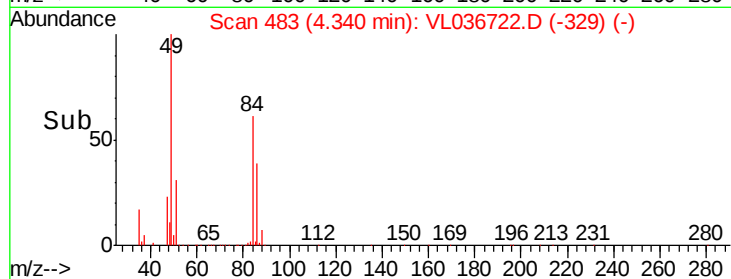
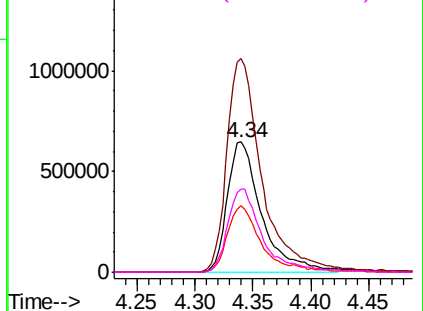
#20
Methylene Chloride
Concen: 23.655 ppbv
RT: 4.34 min Scan# 483
Delta R.T. -0.00 min
Lab File: VL036722.D
Acq: 7 Apr 2021 9:38

Instrument :
MSVOA_L
ClientSampleId :
UP-SG-9(2021)

Tot Ion:	84	Resp:	1329744
Ion	Ratio	Lower	Upper
84	100		
49	164.2	122.9	184.3
51	51.0	36.9	55.3
86	63.7	48.2	72.4

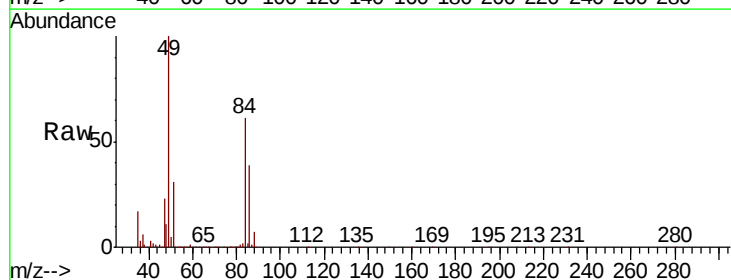


Abundance Ion 84.00 (83.70 to 84.70): VL0
Ion 49.10 (48.80 to 49.80): VL0
Ion 51.10 (50.80 to 51.80): VL0
Ion 86.00 (85.70 to 86.70): VL0

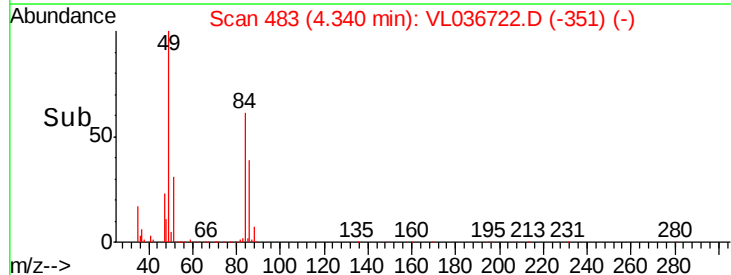
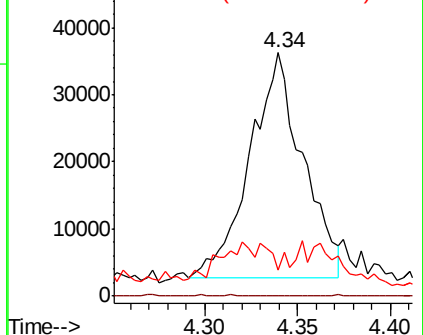


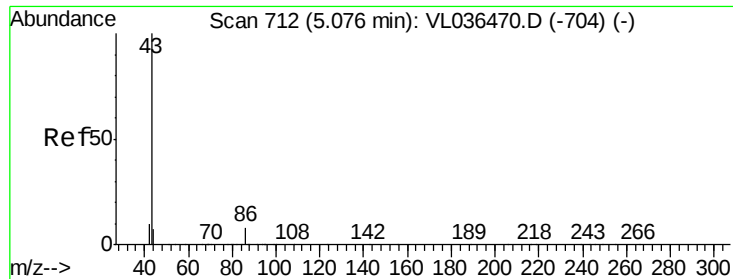
#21
Allyl Chloride
Concen: 0.694 ppbv
RT: 4.34 min Scan# 483
Delta R.T. -0.07 min
Lab File: VL036722.D
Acq: 7 Apr 2021 9:38

Tgt Ion:	41	Resp:	66432
Ion	Ratio	Lower	Upper
41	100		
76	0.2	22.9	34.3#
39	0.0	67.3	100.9#



Abundance Ion 41.10 (40.80 to 41.80): VL0
Ion 76.10 (75.80 to 76.80): VL0
Ion 39.10 (38.80 to 39.80): VL0

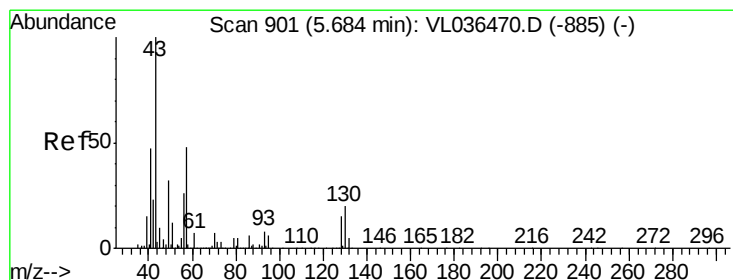
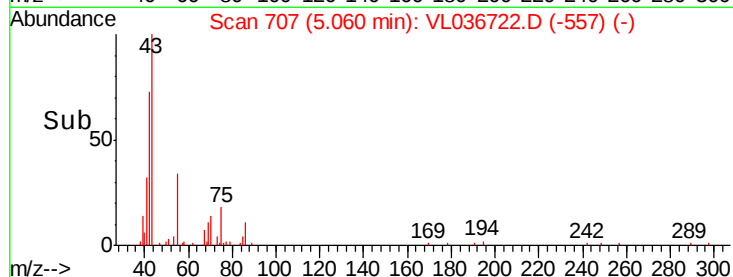
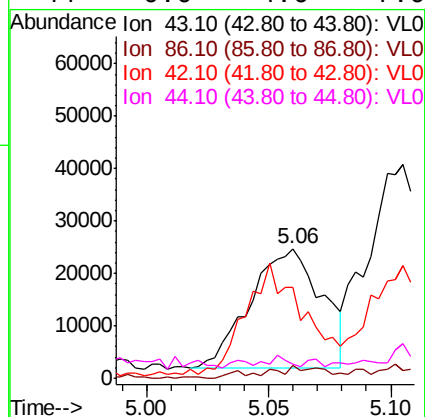
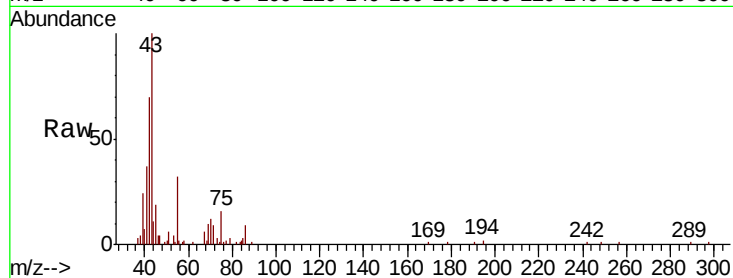




#23
 Vinyl Acetate
 Concen: 0.223 ppbv
 RT: 5.06 min Scan# 707
 Delta R.T. -0.02 min
 Lab File: VL036722.D
 Acq: 7 Apr 2021 9:38

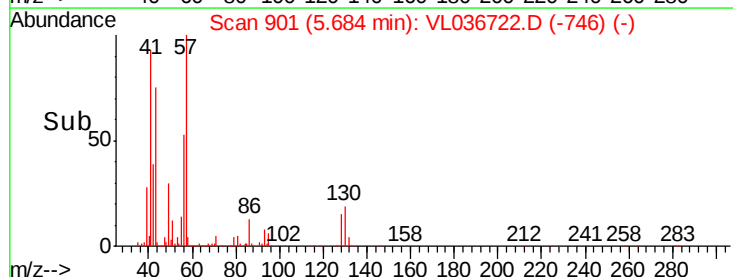
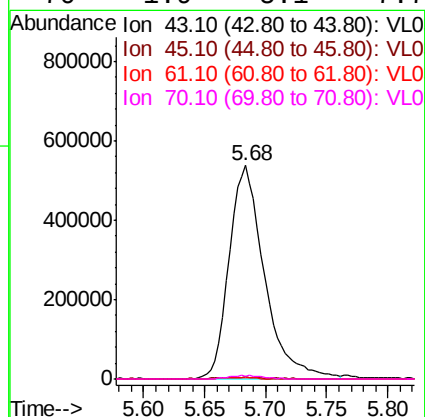
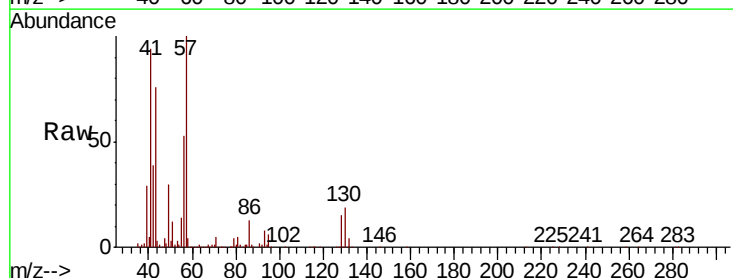
Instrument :
 MSVOA_L
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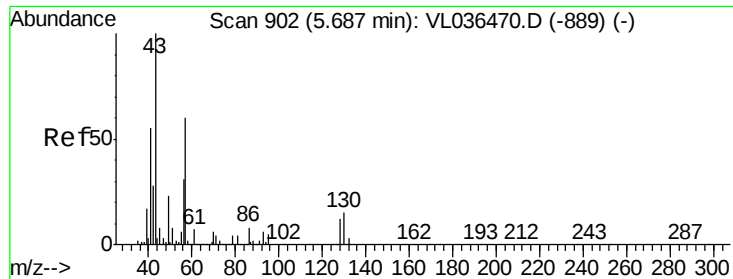
Tot Ion:	43	Resp:	45847
Ion	Ratio	Lower	Upper
43	100		
86	9.2	5.4	8.0#
42	69.4	8.5	12.7#
44	0.0	4.6	7.0#



#25
 Ethyl Acetate
 Concen: 3.817 ppbv
 RT: 5.68 min Scan# 901
 Delta R.T. -0.00 min
 Lab File: VL036722.D
 Acq: 7 Apr 2021 9:38

Tgt Ion:	43	Resp:	1089659
Ion	Ratio	Lower	Upper
43	100		
45	1.3	7.9	11.9#
61	0.7	7.4	11.2#
70	1.9	5.1	7.7#



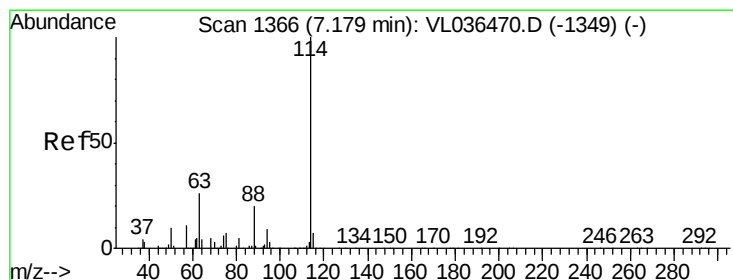
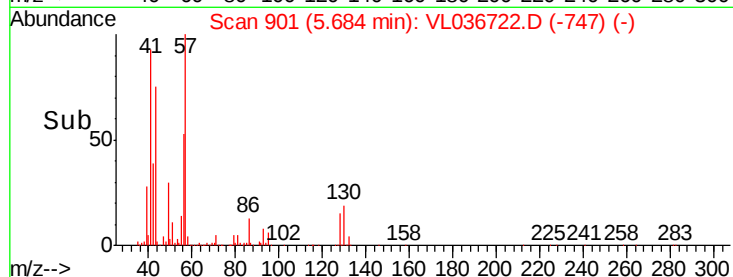
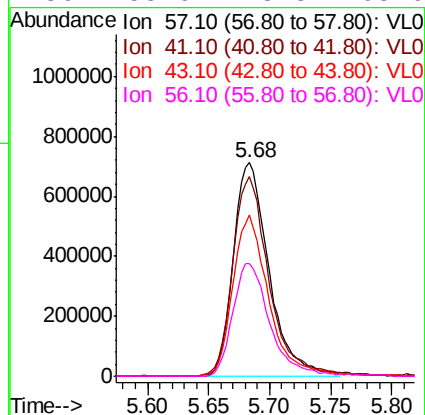
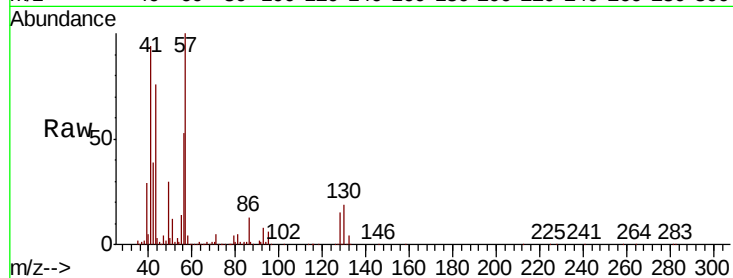


#26
Hexane
Concen: 10.924 ppbv
RT: 5.68 min Scan# 901
Delta R.T. -0.00 min
Lab File: VL036722.D
Acq: 7 Apr 2021 9:38

Instrument :
MSVOA_L
ClientSampleId :
UP-SG-9(2021)

Tot Ion: 57 Resp: 1446997

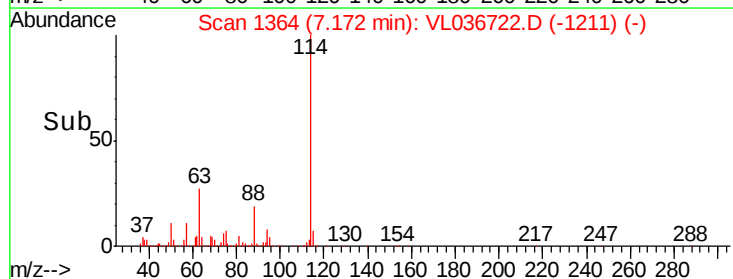
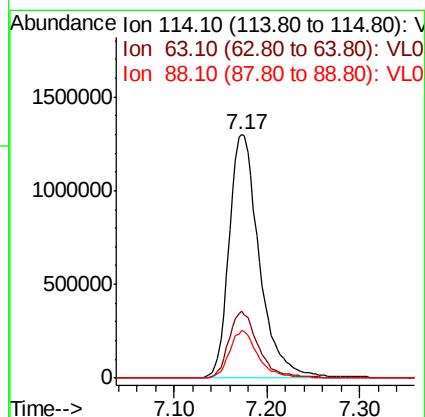
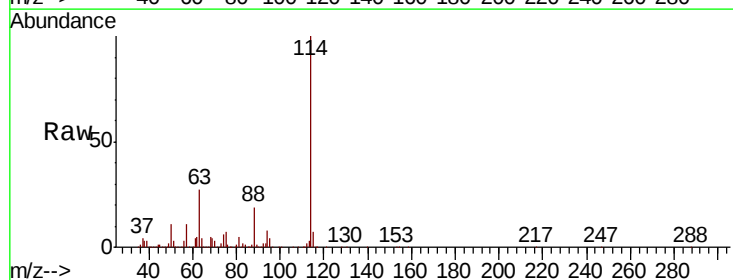
Ion	Ratio	Lower	Upper
57	100		
41	96.8	77.2	115.8
43	76.6	173.8	260.6#
56	55.6	43.8	65.6

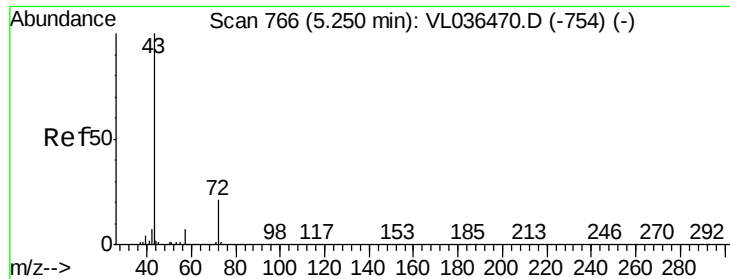


#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 7.17 min Scan# 1364
Delta R.T. -0.01 min
Lab File: VL036722.D
Acq: 7 Apr 2021 9:38

Tgt Ion: 114 Resp: 2944003

Ion	Ratio	Lower	Upper
114	100		
63	27.1	22.4	33.6
88	18.6	15.4	23.0

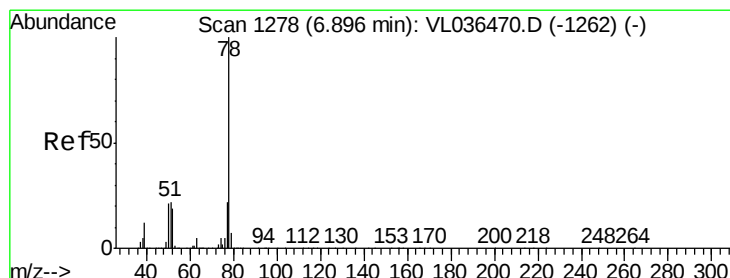
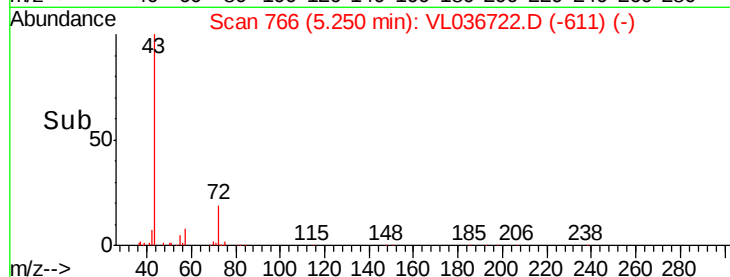
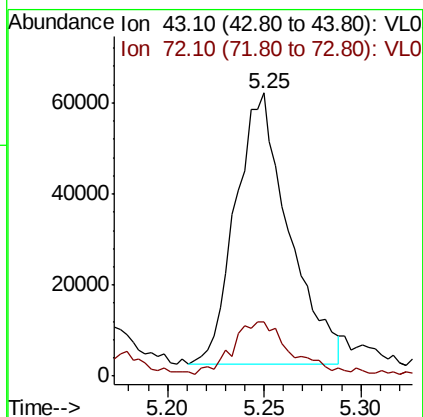
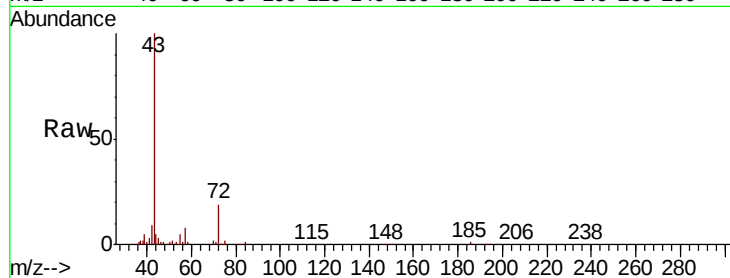




#34
2-Butanone
Concen: 0.796 ppbv
RT: 5.25 min Scan# 766
Delta R.T. -0.00 min
Lab File: VL036722.D
Acq: 7 Apr 2021 9:38

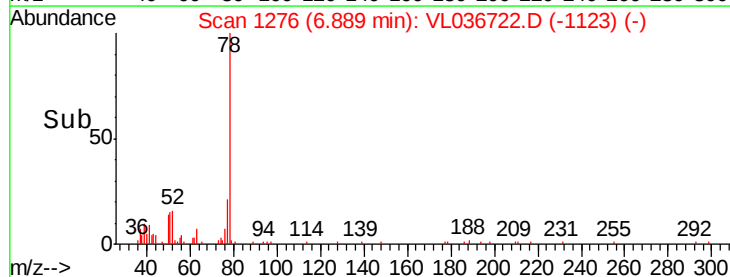
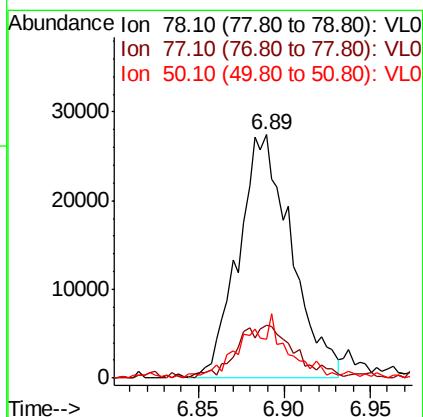
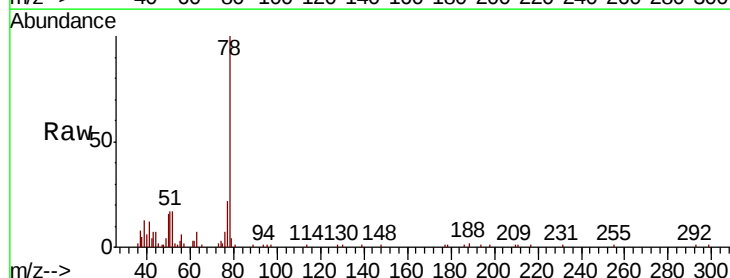
Instrument :
MSVOA_L
ClientSampleId :
UP-SG-9(2021)

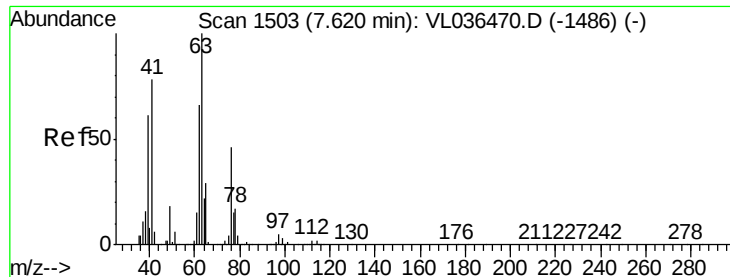
Tot Ion: 43 Resp: 114448
Ion Ratio Lower Upper
43 100
72 25.1 17.0 25.6



#36
Benzene
Concen: 0.216 ppbv
RT: 6.89 min Scan# 1276
Delta R.T. -0.01 min
Lab File: VL036722.D
Acq: 7 Apr 2021 9:38

Tgt Ion: 78 Resp: 58735
Ion Ratio Lower Upper
78 100
77 20.7 18.0 27.0
50 14.7 16.5 24.7#





#39

1,2-Dichloropropane

Concen: 7.120 ppbv

RT: 7.17 min Scan# 1364

Delta R.T. -0.45 min

Lab File: VL036722.D

Acq: 7 Apr 2021 9:38

Instrument :

MSVOA_L

ClientSampleId :

UP-SG-9(2021)

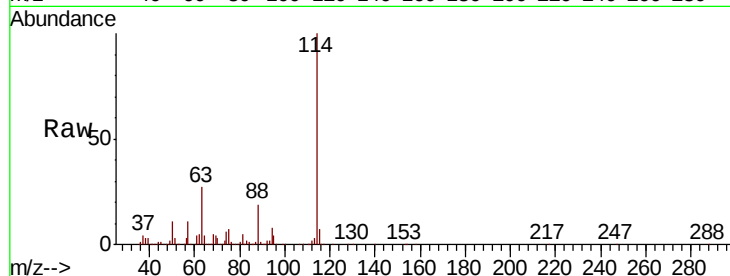
Tot Ion: 63 Resp: 784235

Ion Ratio Lower Upper

63 100

41 0.0 62.4 93.6#

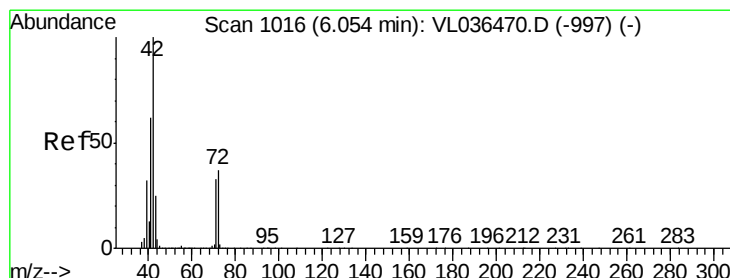
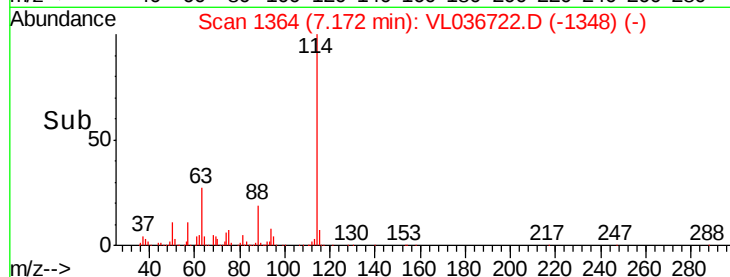
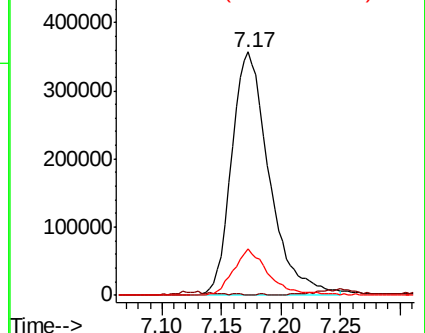
62 18.9 52.8 79.2#



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



#41

Tetrahydrofuran

Concen: 8.835 ppbv

RT: 5.68 min Scan# 900

Delta R.T. -0.37 min

Lab File: VL036722.D

Acq: 7 Apr 2021 9:38

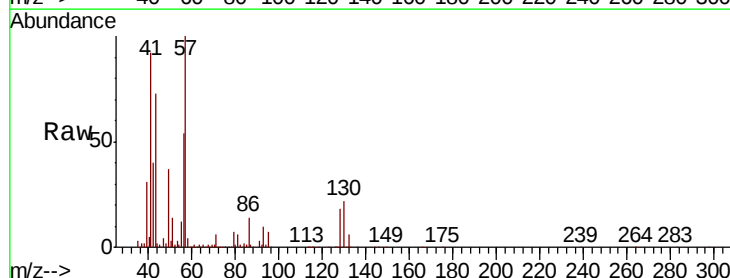
Tgt Ion: 42 Resp: 585400

Ion Ratio Lower Upper

42 100

72 1.0 27.6 41.4#

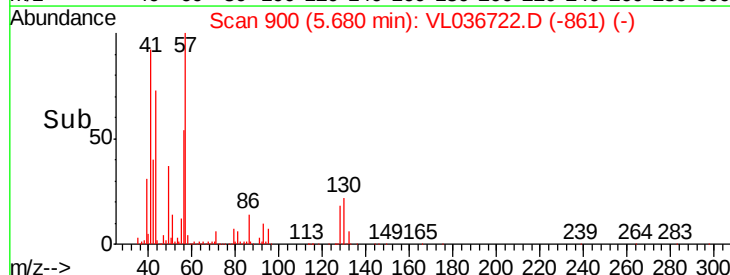
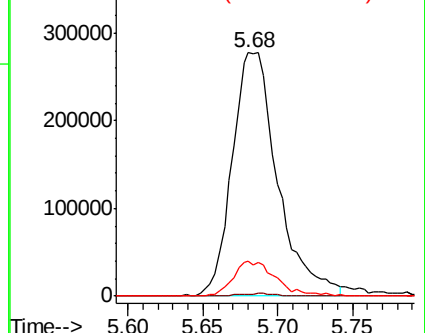
71 13.9 27.0 40.4#

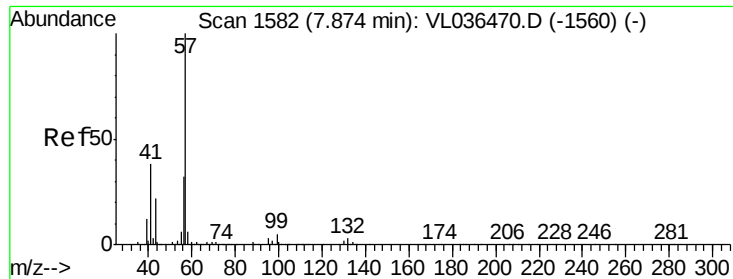


Abundance Ion 42.10 (41.80 to 42.80): VL0

Ion 72.10 (71.80 to 72.80): VL0

Ion 71.10 (70.80 to 71.80): VL0

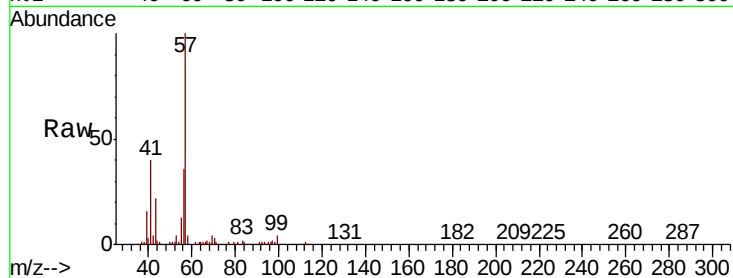




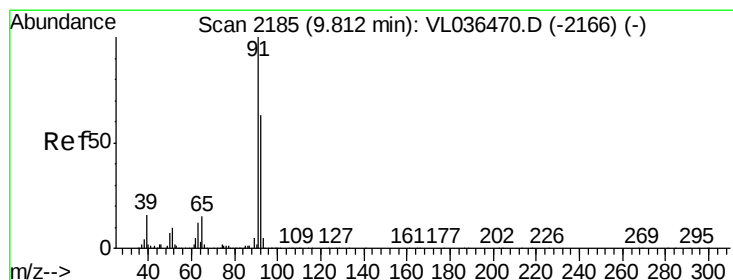
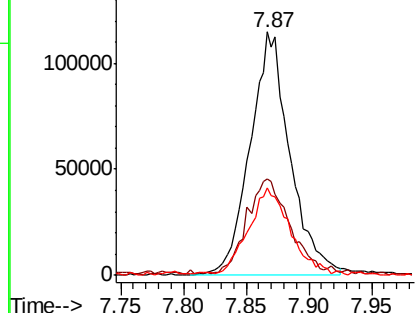
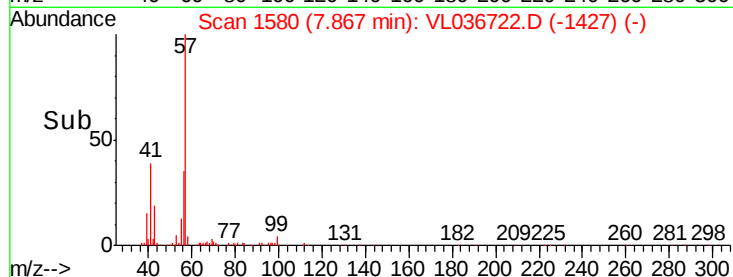
#44
 2,2,4-Trimethylpentane
 Concen: 0.532 ppbv
 RT: 7.87 min Scan# 1580
 Delta R.T. -0.01 min
 Lab File: VL036722.D
 Acq: 7 Apr 2021 9:38

Instrument :
 MSVOA_L
 ClientSampleId :
 UP-SG-9(2021)

Tot Ion: 57 Resp: 254048
 Ion Ratio Lower Upper
 57 100
 41 44.0 28.8 43.2#
 56 38.3 26.1 39.1

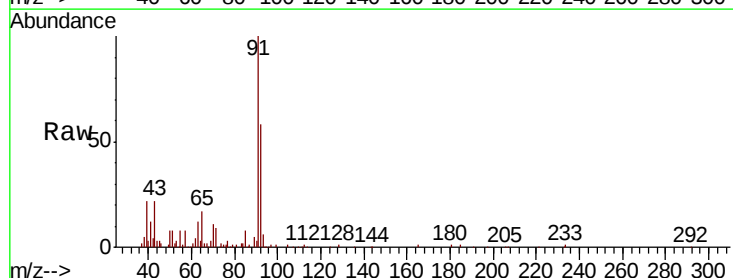


Abundance Ion 57.10 (56.80 to 57.80): VL0
 Ion 41.10 (40.80 to 41.80): VL0
 Ion 56.10 (55.80 to 56.80): VL0

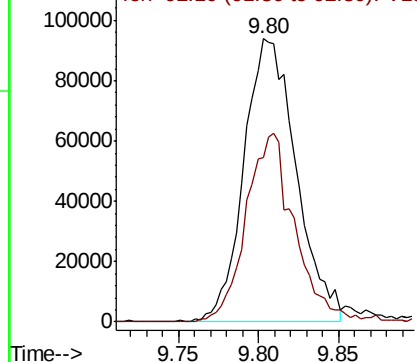
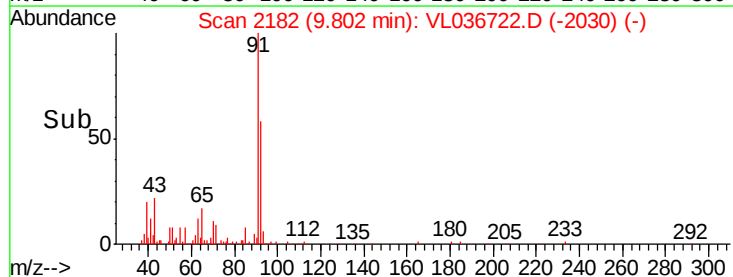


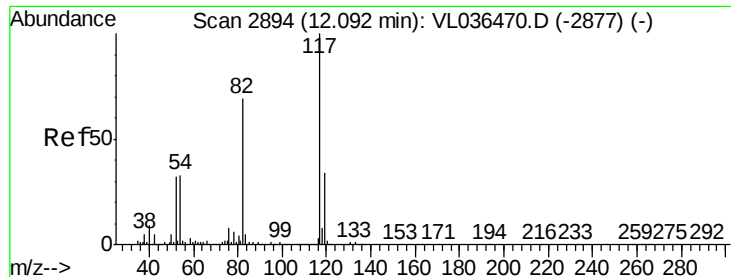
#53
 Toluene
 Concen: 0.728 ppbv
 RT: 9.80 min Scan# 2182
 Delta R.T. -0.01 min
 Lab File: VL036722.D
 Acq: 7 Apr 2021 9:38

Tgt Ion: 91 Resp: 210626
 Ion Ratio Lower Upper
 91 100
 92 62.3 48.8 73.2



Abundance Ion 91.10 (90.80 to 91.80): VL0
 Ion 92.10 (91.80 to 92.80): VL0

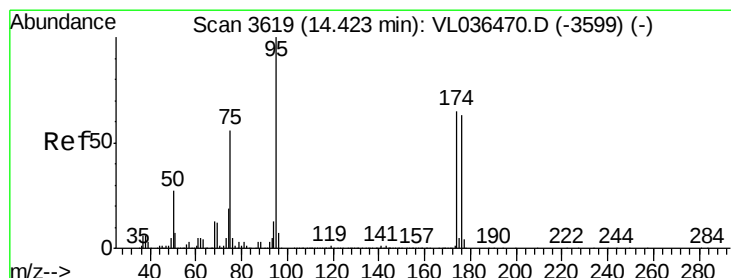
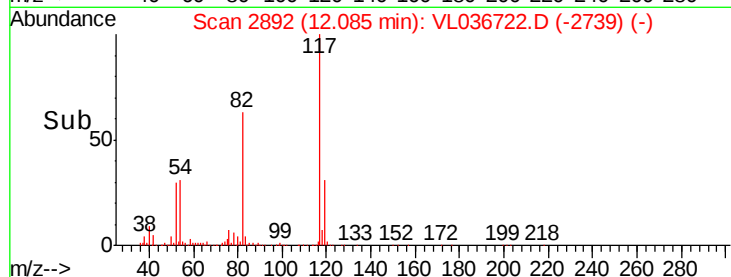
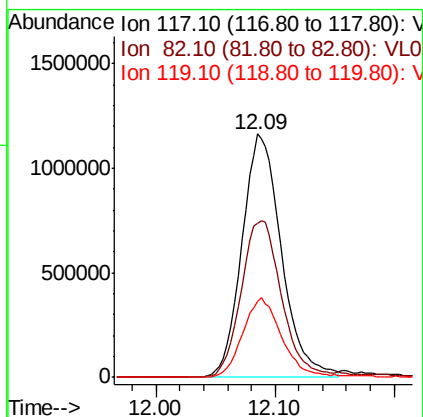
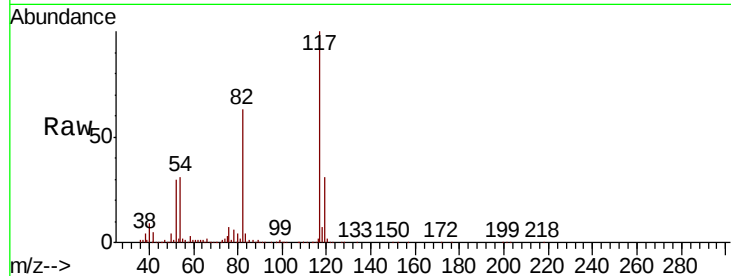




#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 12.09 min Scan# 2892
Delta R.T. -0.01 min
Lab File: VL036722.D
Acq: 7 Apr 2021 9:38

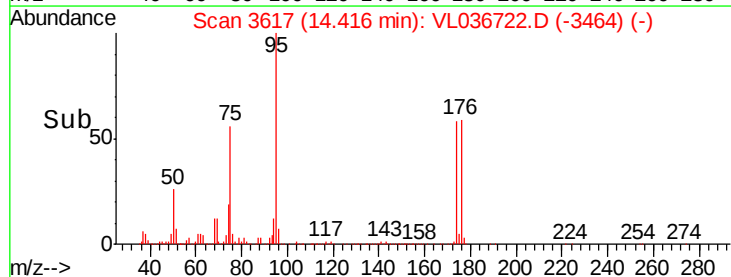
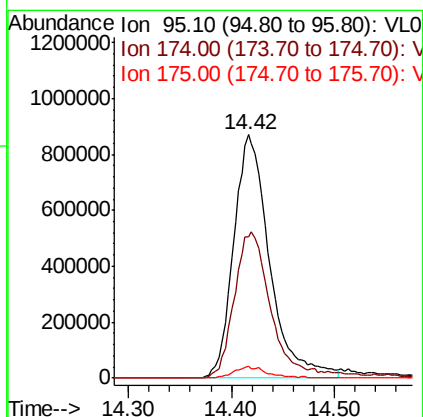
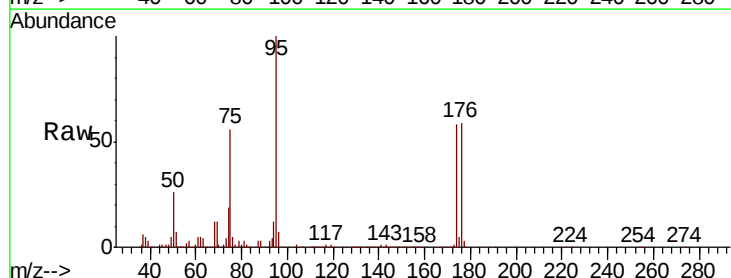
Instrument :
MSVOA_L
ClientSampleId :
UP-SG-9(2021)

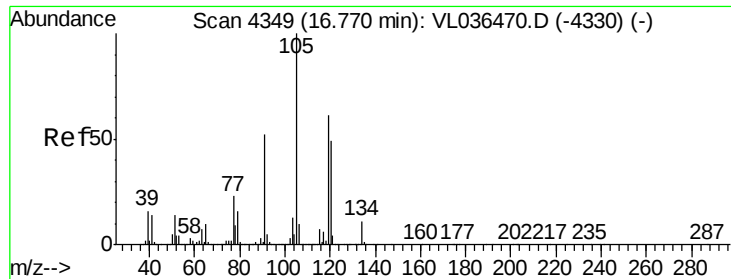
Tot Ion:117 Resp: 2665209
Ion Ratio Lower Upper
117 100
82 69.2 57.4 86.0
119 33.5 47.4 71.0#



#68
1-Bromo-4-Fluorobenzene
Concen: 9.939 ppbv
RT: 14.42 min Scan# 3617
Delta R.T. -0.01 min
Lab File: VL036722.D
Acq: 7 Apr 2021 9:38

Tgt Ion: 95 Resp: 2111195
Ion Ratio Lower Upper
95 100
174 64.5 51.0 76.6
175 4.6 3.9 5.9





#74
 1,2,4-Trimethylbenzene
 Concen: 0.039 ppbv
 RT: 16.76 min Scan# 4345
 Delta R.T. -0.01 min
 Lab File: VL036722.D
 Acq: 7 Apr 2021 9:38

Instrument :
 MSVOA_L
 ClientSampleId :
 UP-SG-9(2021)

Tot Ion:105	Resp:	13987
Ion Ratio	Lower	Upper
105	100	
120	33.3	39.2 58.8#
91	5.0	42.6 64.0#
77	22.8	18.6 28.0

