

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL040621\
 Data File : VL036723.D
 Acq On : 7 Apr 2021 10:24
 Operator : SY/AP
 Sample : M1877-08
 Misc : 400mL/MSVOA L
 ALS Vial : 7 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 UP-SG-5(2021)

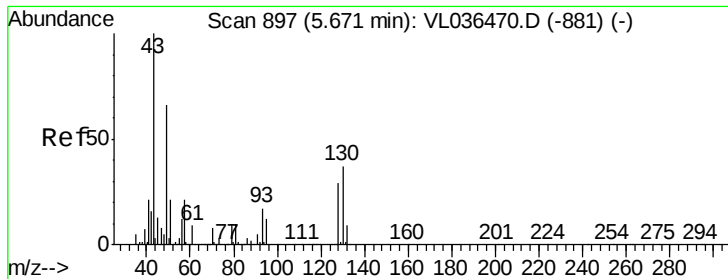
Quant Time: Apr 08 01:29:42 2021
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL032521AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Thu Mar 25 09:42:40 2021
 QLast Update : Thu Mar 25 09:42:40 2021
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.67	49	1221171	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.18	114	3005087	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.09	117	2654804	10.00	ppbv	0.00

System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	14.42	95	2085528	9.86	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	98.60%

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.05	85	26430	0.133	ppbv	90
3) Chlorodifluoromethane	2.98	51	61748	0.271	ppbv #	91
4) Chloromethane	3.13	50	48295	0.599	ppbv #	85
9) Propene	3.02	41	71087	0.977	ppbv	85
10) Heptane	8.12	43	121897	0.658	ppbv #	28
11) Trichlorofluoromethane	3.95	101	37998	0.187	ppbv	88
13) Ethanol	3.61	45	1909998	220.511	ppbv	91
15) Acetone	3.84	43	17278181	143.755	ppbv	92
16) 1,3-Butadiene	3.30	39	13598	0.163	ppbv #	13
17) tert-Butyl alcohol	4.29	59	3582	0.034	ppbv #	72
19) Isopropyl Alcohol	3.97	45	6224708	94.147	ppbv #	97
20) Methylene Chloride	4.34	84	449932	7.995	ppbv	89
21) Allyl Chloride	4.37	41	138546	1.446	ppbv #	54
23) Vinyl Acetate	5.05	43	675682	3.287	ppbv #	1
25) Ethyl Acetate	5.67	43	3190995	11.167	ppbv #	93
26) Hexane	5.68	57	705000	5.317	ppbv #	6
30) Cyclohexane	7.13	84	27069	0.252	ppbv #	7
31) cis-1,2-Dichloroethene	5.67	61	347386	2.709	ppbv #	27
34) 2-Butanone	5.25	43	34973	0.238	ppbv #	27
36) Benzene	6.89	78	83857	0.303	ppbv	99
37) 1,2-Dichloroethane	6.30	62	5239	0.032	ppbv #	82
39) 1,2-Dichloropropane	7.17	63	780833	6.945	ppbv #	24
41) Tetrahydrofuran	6.33	42	86467	1.278	ppbv #	41
43) Methyl Methacrylate	8.01	69	1751369	18.819	ppbv	97
44) 2,2,4-Trimethylpentane	7.87	57	3278907	6.722	ppbv	100
51) 2-Hexanone	10.05	43	12930	0.121	ppbv #	57
53) Toluene	9.81	91	53510	0.181	ppbv #	1

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



#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.67 min Scan# 896

Delta R.T. -0.00 min

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Instrument :

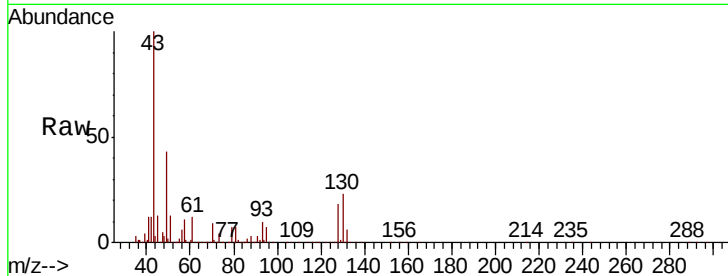
MSVOA_L

ClientSampleId :

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Tot Ion: 49 Resp: 1221171

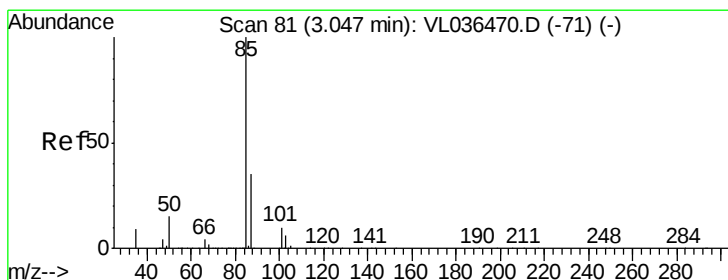
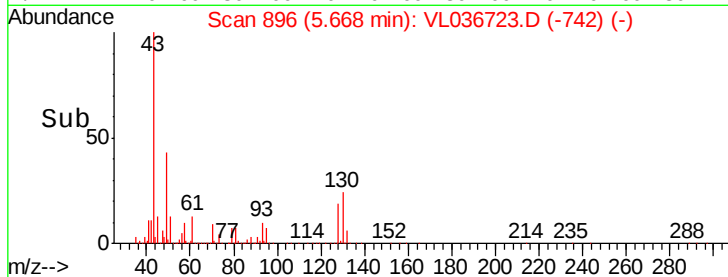
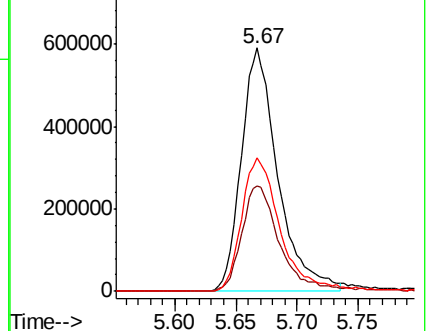
Ion	Ratio	Lower	Upper
49	100		
128	45.7	23.5	70.6
130	58.9	29.1	87.4



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: 0.133 ppbv

RT: 3.05 min Scan# 81

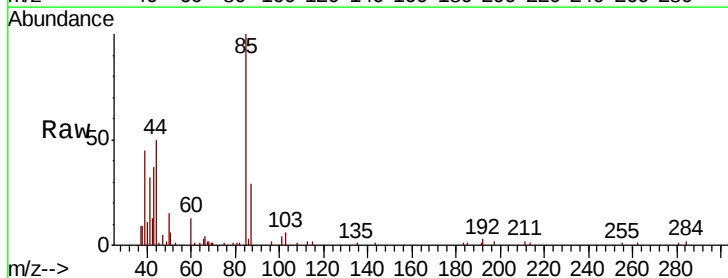
Delta R.T. -0.00 min

Lab File: VL036723.D

Acq: 7 Apr 2021 10:24

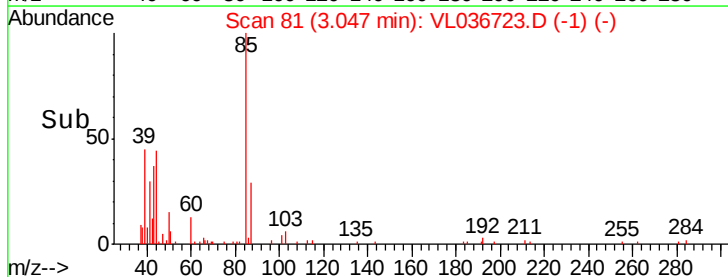
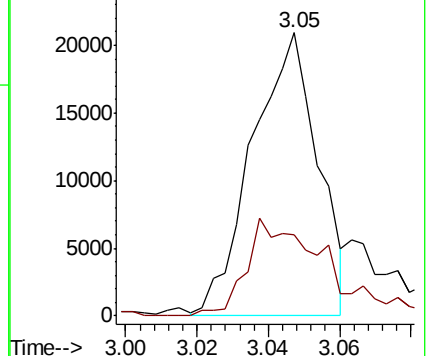
Tgt Ion: 85 Resp: 26430

Ion	Ratio	Lower	Upper
85	100		
87	28.9	27.8	41.8



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0

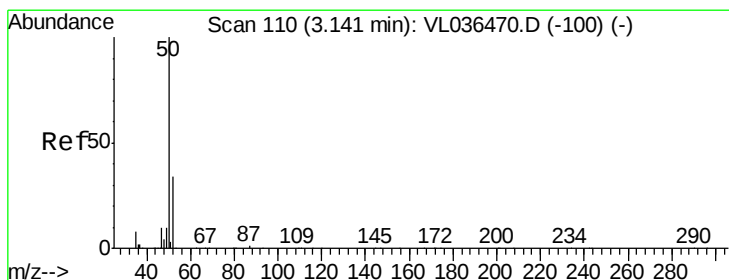
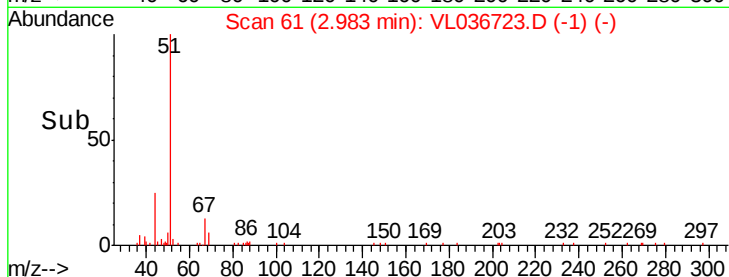
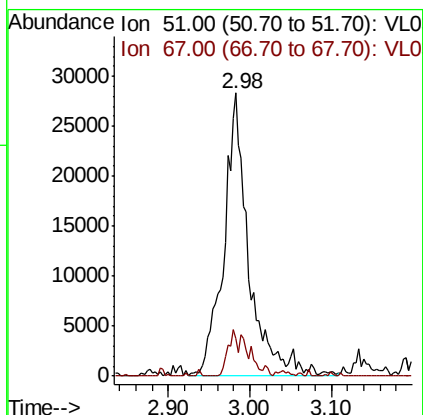
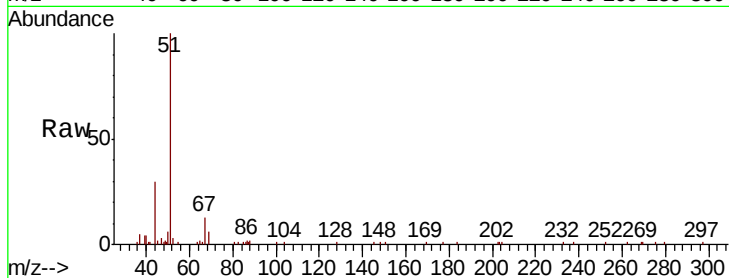




#3
Chlorodifluoromethane
Concen: 0.271 ppbv
RT: 2.98 min Scan# 61
Delta R.T. -0.00 min
Lab File: VL036723.D
Acq: 7 Apr 2021 10:24

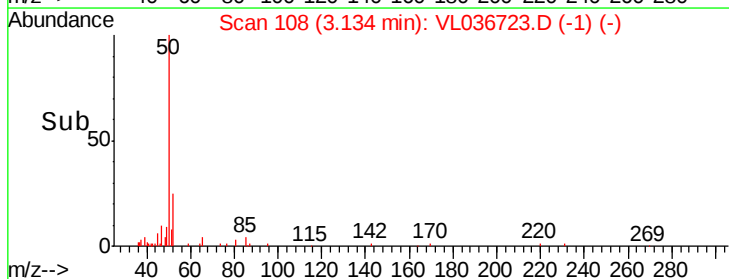
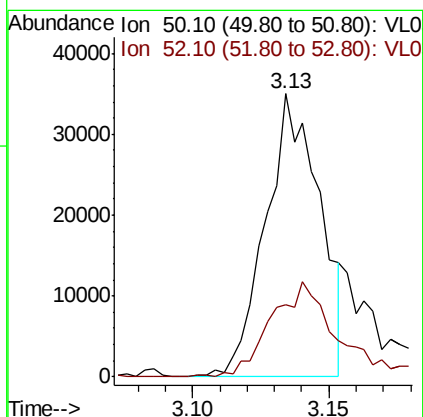
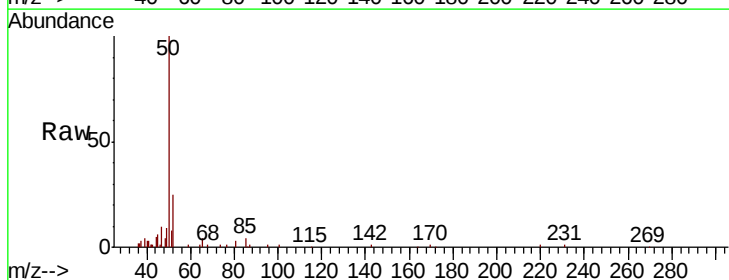
Instrument :
MSVOA_L
ClientSampleId :
UP-SG-5(2021)

Tot Ion: 51 Resp: 61748
Ion Ratio Lower Upper
51 100
67 14.2 14.7 22.1#



#4
Chloromethane
Concen: 0.599 ppbv
RT: 3.13 min Scan# 108
Delta R.T. -0.01 min
Lab File: VL036723.D
Acq: 7 Apr 2021 10:24

Tgt Ion: 50 Resp: 48295
Ion Ratio Lower Upper
50 100
52 25.5 27.0 40.6#





#9

Propene

Concen: 0.977 ppbv

RT: 3.02 min Scan# 72

Delta R.T. 0.01 min

Lab File: VL036723.D

Acq: 7 Apr 2021 10:24

Instrument :

MSVOA_L

ClientSampleId :

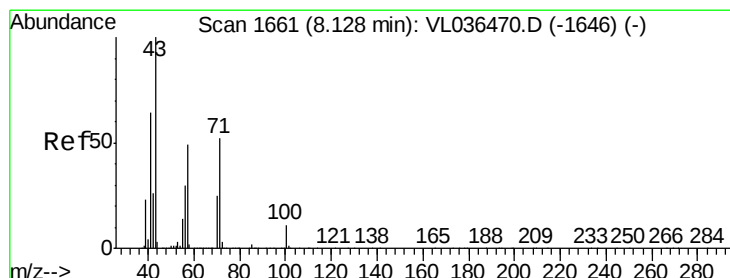
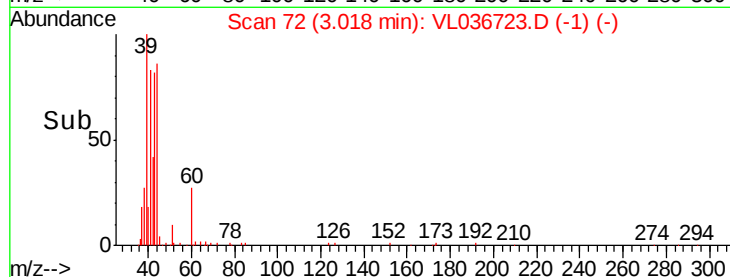
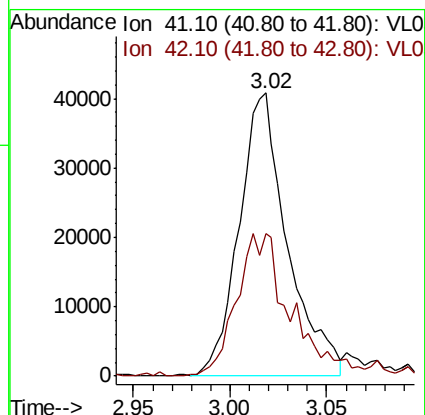
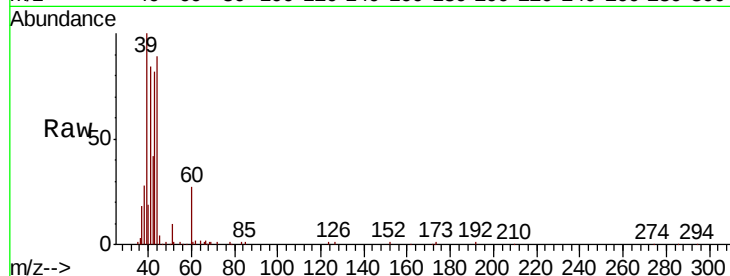
UP-SG-5(2021)

Tot Ion: 41 Resp: 71087

Ion Ratio Lower Upper

41 100

42 58.8 57.0 85.4



#10

Heptane

Concen: 0.658 ppbv

RT: 8.12 min Scan# 1658

Delta R.T. -0.01 min

Lab File: VL036723.D

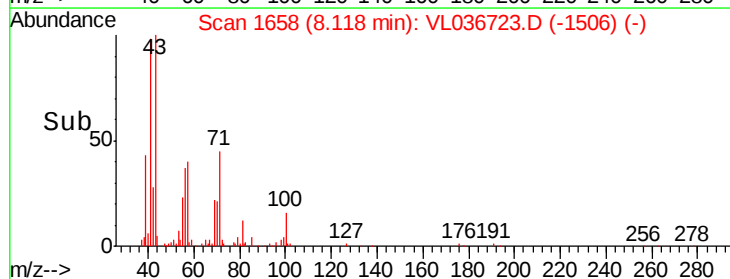
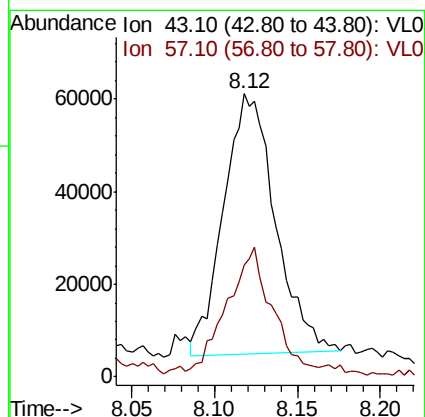
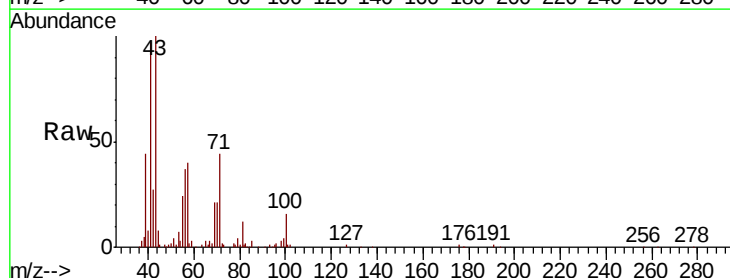
Acq: 7 Apr 2021 10:24

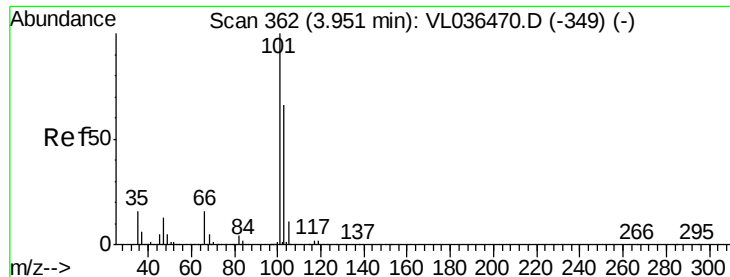
Tgt Ion: 43 Resp: 121897

Ion Ratio Lower Upper

43 100

57 0.0 39.0 58.6#

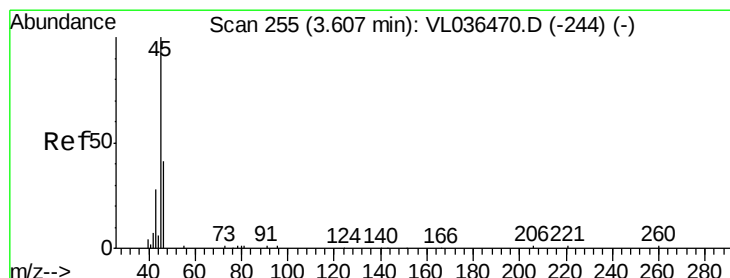
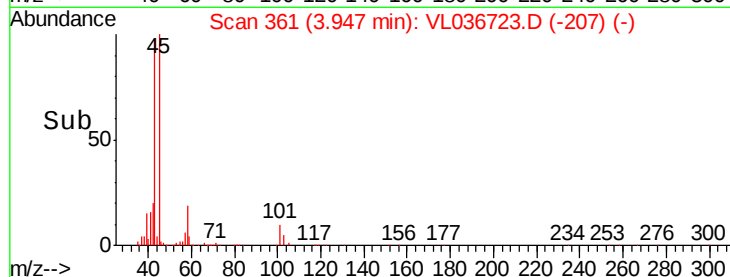
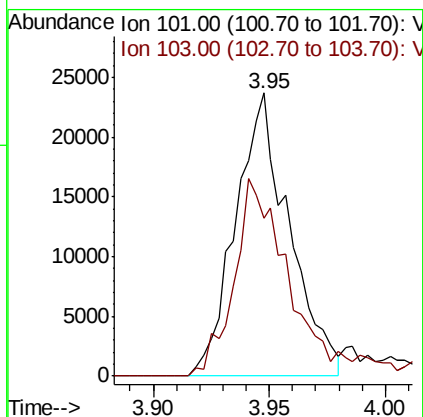
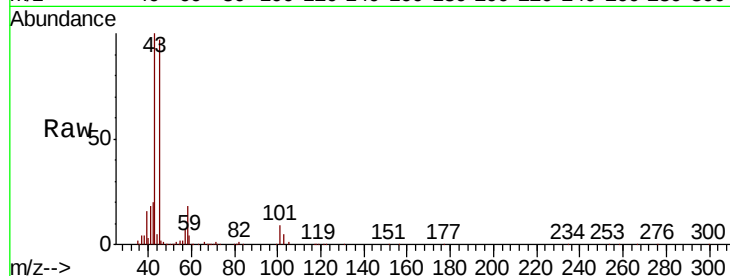




#11
 Trichlorofluoromethane
 Concen: 0.187 ppbv
 RT: 3.95 min Scan# 361
 Delta R.T. -0.00 min
 Lab File: VL036723.D
 Acq: 7 Apr 2021 10:24

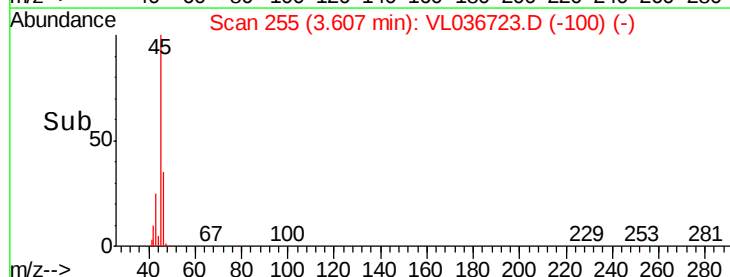
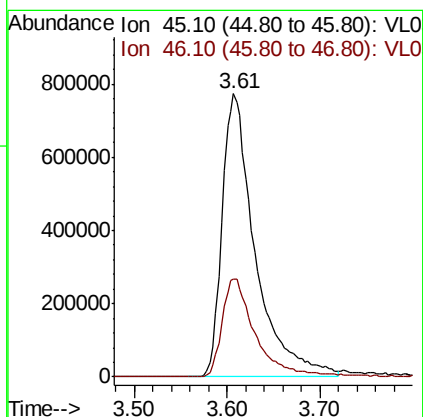
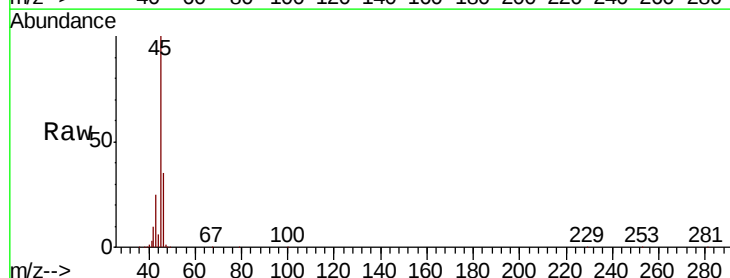
Instrument :
 MSVOA_L
 ClientSampleId :
 UP-SG-5(2021)

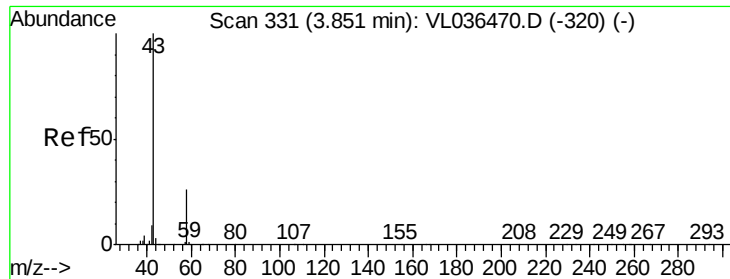
Tot Ion:101 Resp: 37998
 Ion Ratio Lower Upper
 101 100
 103 55.7 52.5 78.7



#13
 Ethanol
 Concen: 220.511 ppbv
 RT: 3.61 min Scan# 255
 Delta R.T. -0.00 min
 Lab File: VL036723.D
 Acq: 7 Apr 2021 10:24

Tgt Ion: 45 Resp: 1909998
 Ion Ratio Lower Upper
 45 100
 46 35.6 16.6 66.2





#15

Acetone

Concen: 143.755 ppbv

RT: 3.84 min Scan# 328

Delta R.T. -0.01 min

Lab File: VL036723.D

Acq: 7 Apr 2021 10:24

Instrument :

MSVOA_L

ClientSampleId :

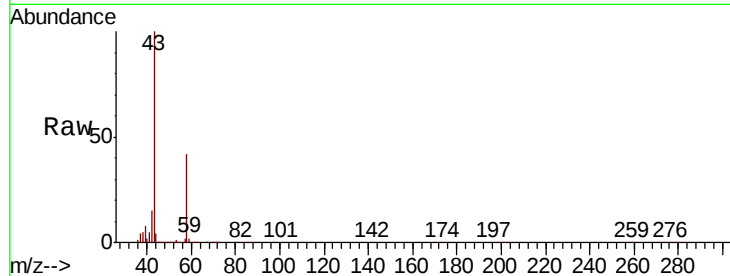
UP-SG-5(2021)

Tot Ion: 43 Resp:17278181

Ion Ratio Lower Upper

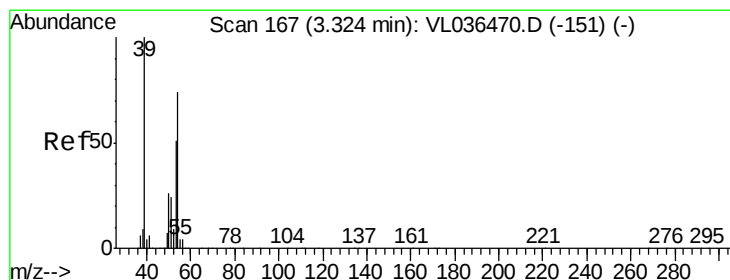
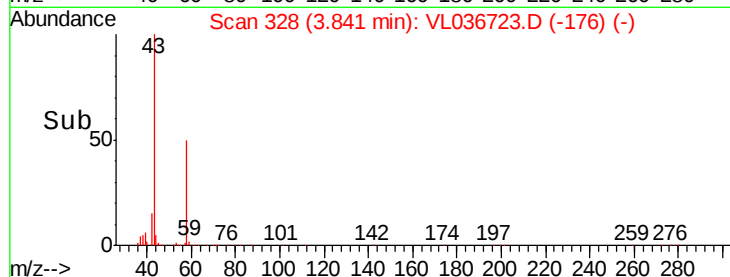
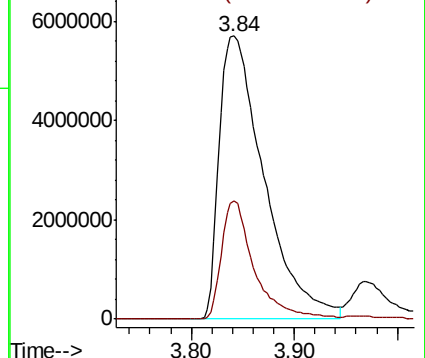
43 100

58 30.6 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: 0.163 ppbv

RT: 3.30 min Scan# 160

Delta R.T. -0.02 min

Lab File: VL036723.D

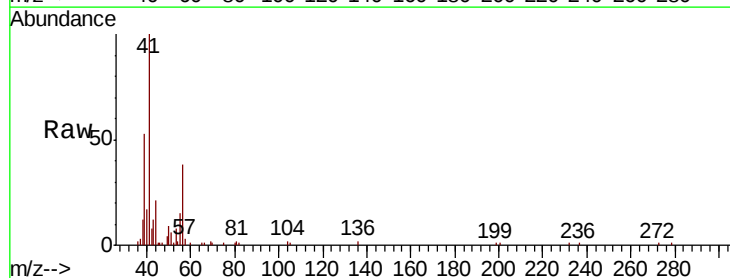
Acq: 7 Apr 2021 10:24

Tgt Ion: 39 Resp: 13598

Ion Ratio Lower Upper

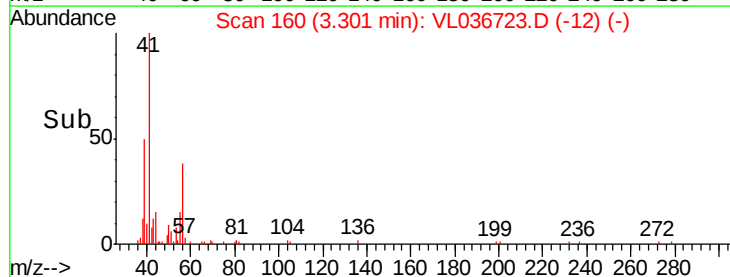
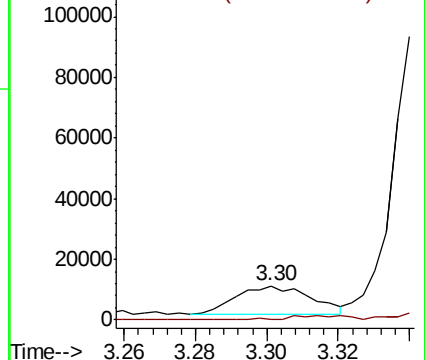
39 100

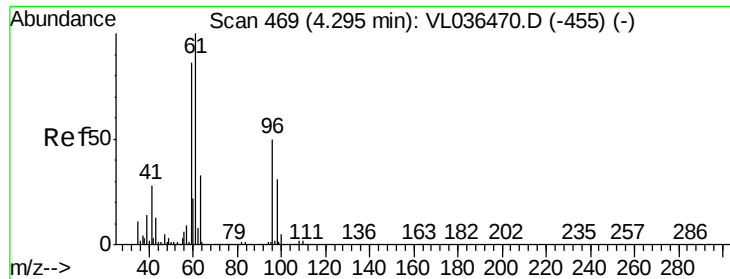
54 0.0 58.8 88.2#



Abundance Ion 39.10 (38.80 to 39.80): VL0

Ion 54.10 (53.80 to 54.80): VL0



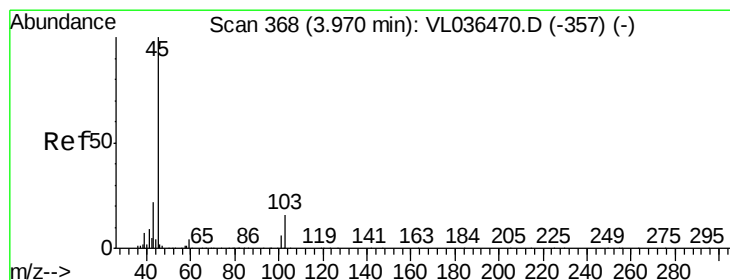
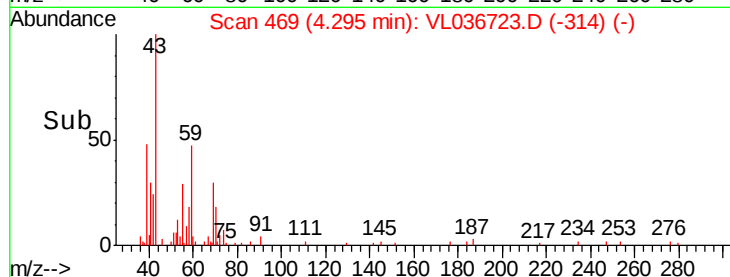
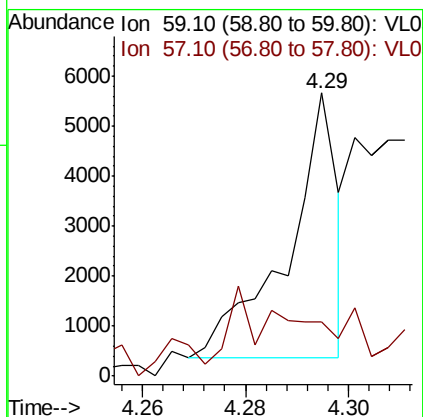
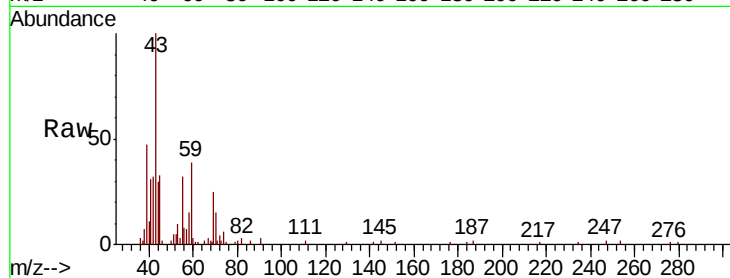


#17

tert-Butyl alcohol
Concen: 0.034 ppbv
RT: 4.29 min Scan# 469
Delta R.T. -0.00 min
Lab File: VL036723.D
Acq: 7 Apr 2021 10:24

Instrument :
MSVOA_L
ClientSampleId :
UP-SG-5(2021)

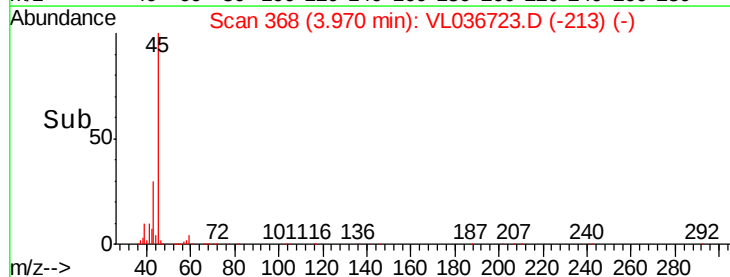
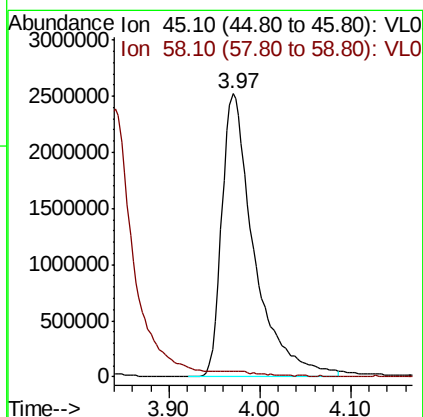
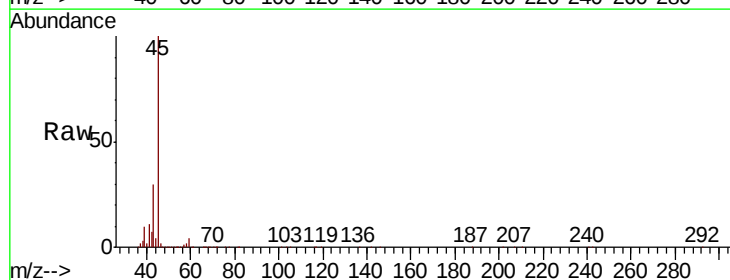
Tot Ion: 59 Resp: 3582
Ion Ratio Lower Upper
59 100
57 0.0 8.6 12.8#

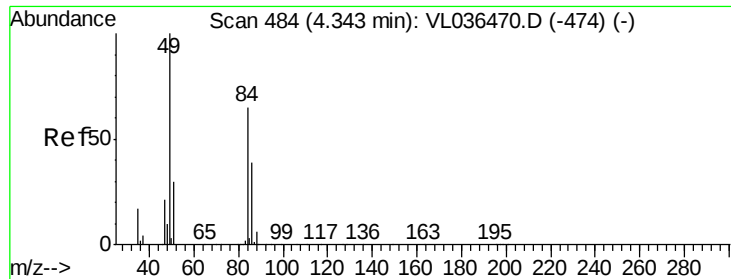


#19

Isopropyl Alcohol
Concen: 94.147 ppbv
RT: 3.97 min Scan# 368
Delta R.T. -0.00 min
Lab File: VL036723.D
Acq: 7 Apr 2021 10:24

Tgt Ion: 45 Resp: 6224708
Ion Ratio Lower Upper
45 100
58 2.6 2.9 4.3#

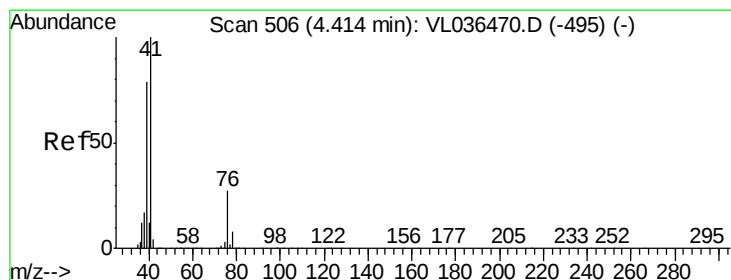
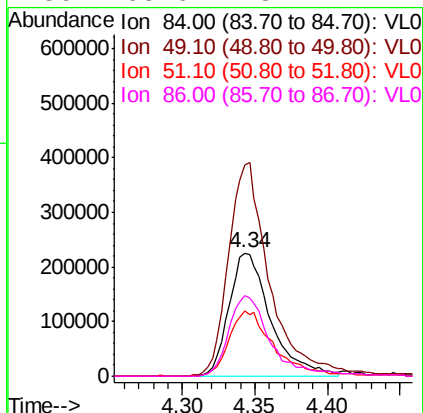
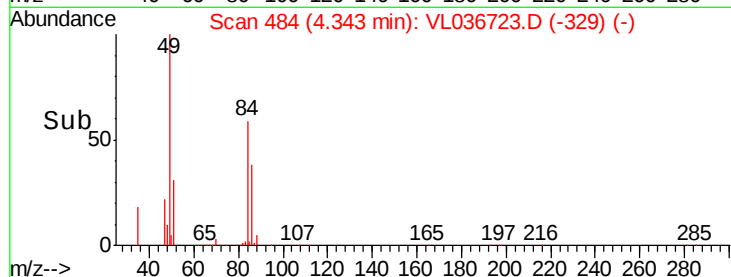
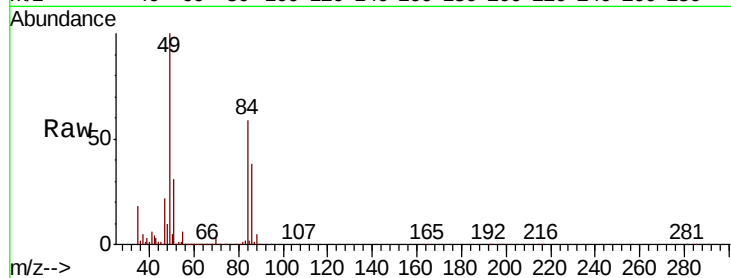




#20
Methylene Chloride
Concen: 7.995 ppbv
RT: 4.34 min Scan# 484
Delta R.T. -0.00 min
Lab File: VL036723.D
Acq: 7 Apr 2021 10:24

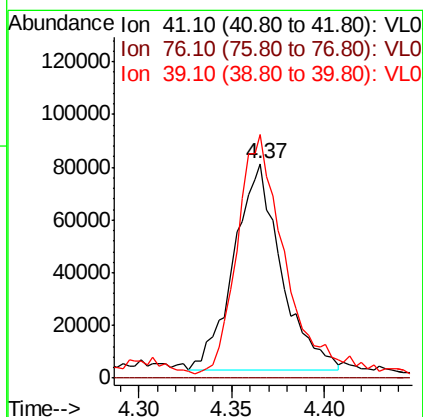
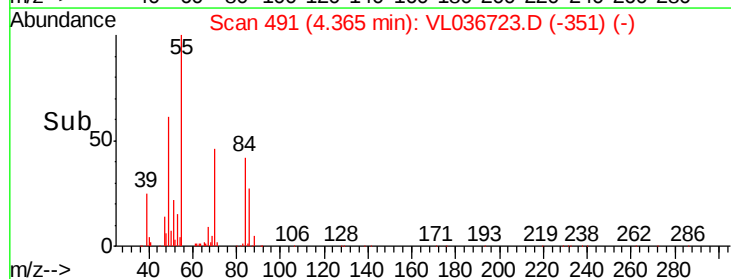
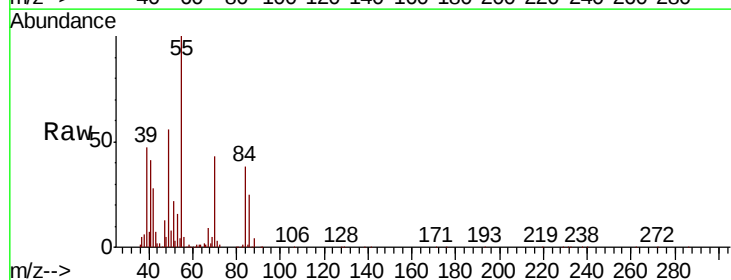
Instrument :
MSVOA_L
ClientSampleId :
UP-SG-5(2021)

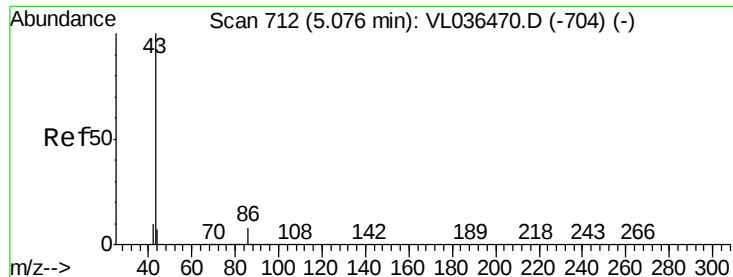
Tot Ion:	84	Resp:	449932
Ion	Ratio	Lower	Upper
84	100		
49	170.6	122.9	184.3
51	52.9	36.9	55.3
86	65.6	48.2	72.4



#21
Allyl Chloride
Concen: 1.446 ppbv
RT: 4.37 min Scan# 491
Delta R.T. -0.05 min
Lab File: VL036723.D
Acq: 7 Apr 2021 10:24

Tgt Ion:	41	Resp:	138546
Ion	Ratio	Lower	Upper
41	100		
76	0.0	22.9	34.3#
39	123.1	67.3	100.9#

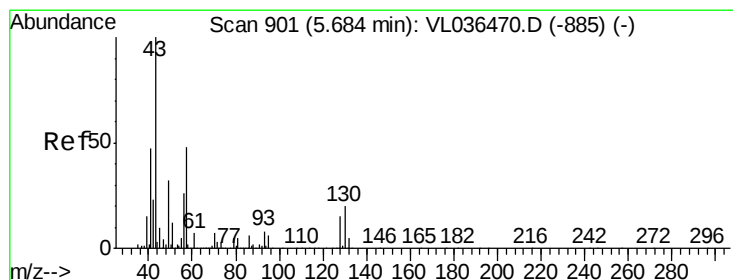
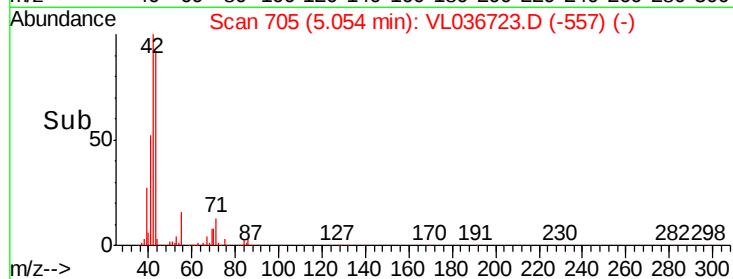
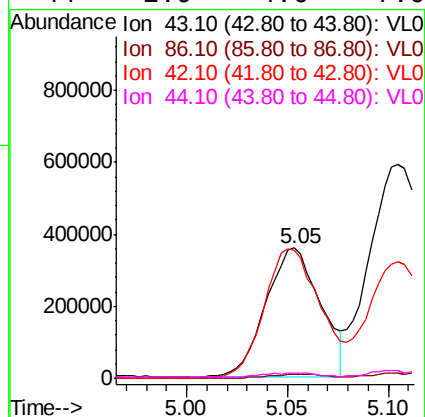
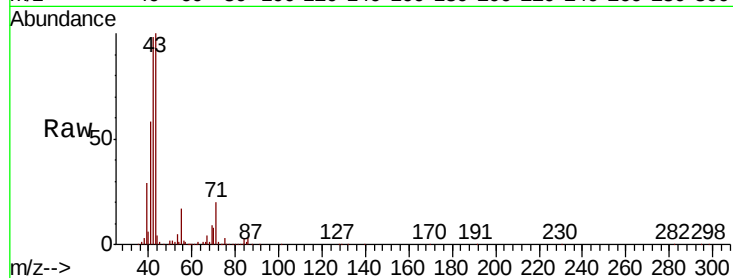




#23
 Vinyl Acetate
 Concen: 3.287 ppbv
 RT: 5.05 min Scan# 705
 Delta R.T. -0.02 min
 Lab File: VL036723.D
 Acq: 7 Apr 2021 10:24

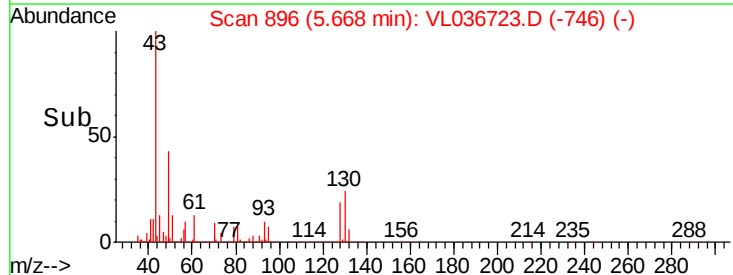
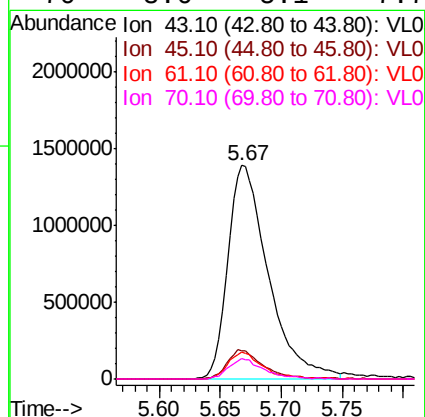
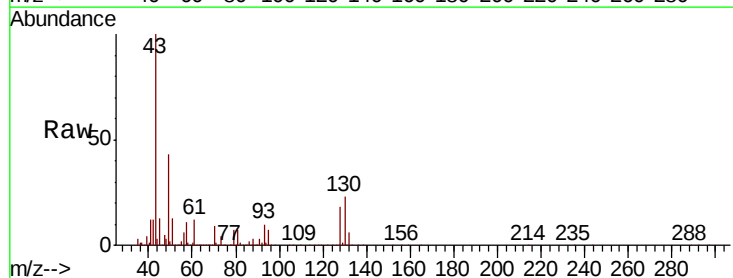
Instrument :
 MSVOA_L
 ClientSampleId :
 UP-SG-5(2021)

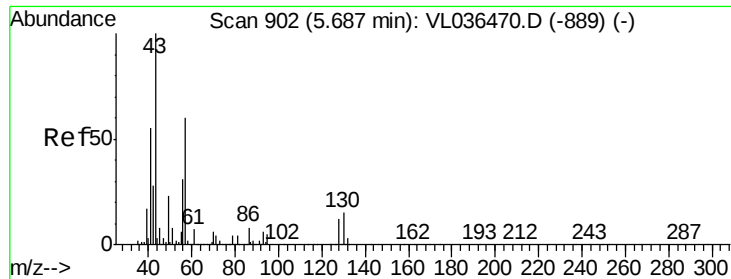
Tot Ion:	43	Resp:	675682
Ion	Ratio	Lower	Upper
43	100		
86	2.9	5.4	8.0#
42	98.6	8.5	12.7#
44	2.9	4.6	7.0#



#25
 Ethyl Acetate
 Concen: 11.167 ppbv
 RT: 5.67 min Scan# 896
 Delta R.T. -0.02 min
 Lab File: VL036723.D
 Acq: 7 Apr 2021 10:24

Tgt Ion:	43	Resp:	3190995
Ion	Ratio	Lower	Upper
43	100		
45	12.5	7.9	11.9#
61	11.5	7.4	11.2#
70	8.6	5.1	7.7#

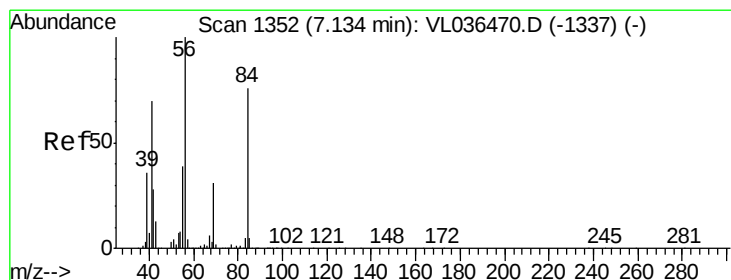
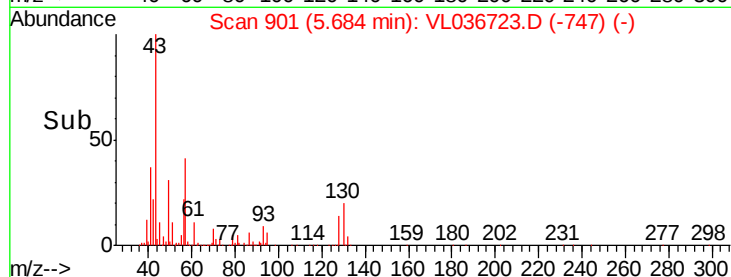
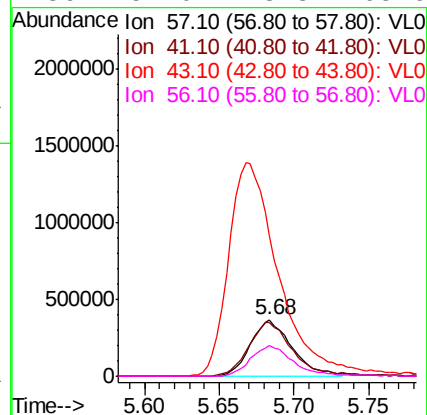
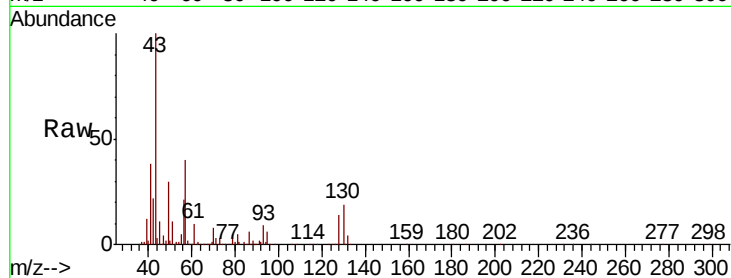




#26
Hexane
Concen: 5.317 ppbv
RT: 5.68 min Scan# 901
Delta R.T. -0.00 min
Lab File: VL036723.D
Acq: 7 Apr 2021 10:24

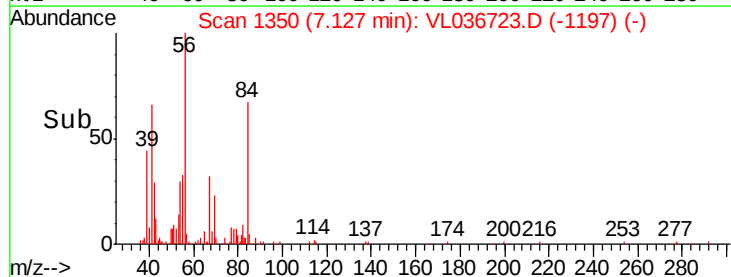
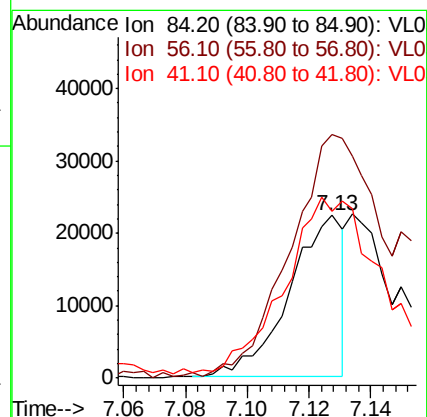
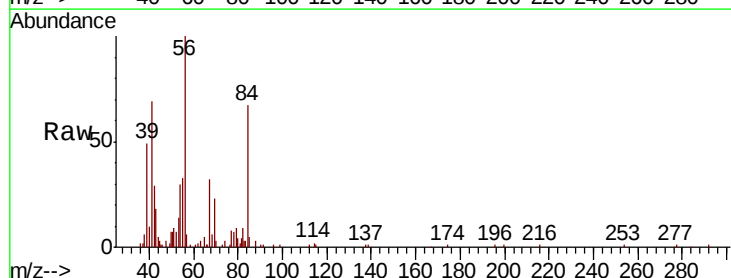
Instrument :
MSVOA_L
ClientSampleId :
UP-SG-5(2021)

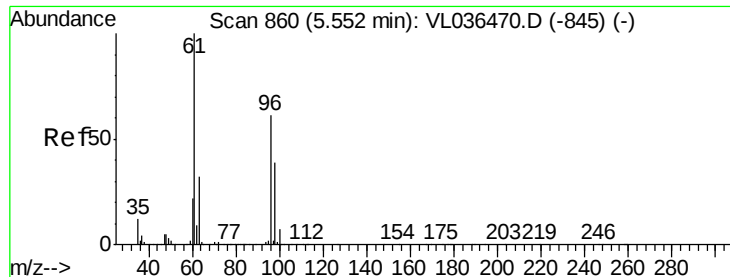
Tot Ion	57	Resp	705000
Ion	Ratio	Lower	Upper
57	100		
41	102.4	77.2	115.8
43	466.6	173.8	260.6#
56	57.0	43.8	65.6



#30
Cyclohexane
Concen: 0.252 ppbv
RT: 7.13 min Scan# 1350
Delta R.T. -0.01 min
Lab File: VL036723.D
Acq: 7 Apr 2021 10:24

Tgt Ion	84	Resp	27069
Ion	Ratio	Lower	Upper
84	100		
56	241.2	114.6	171.8#
41	204.9	75.3	112.9#



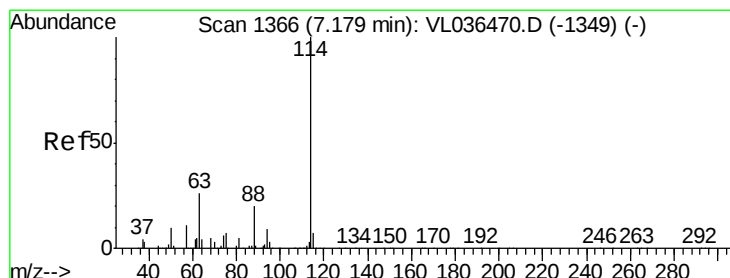
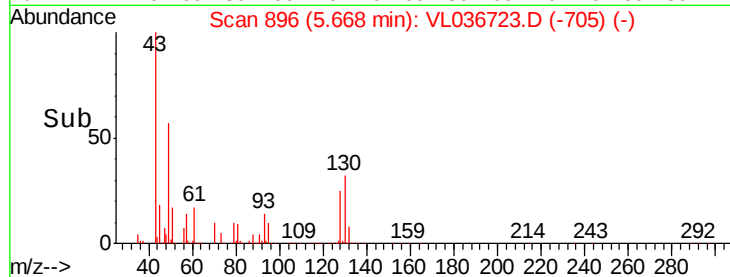
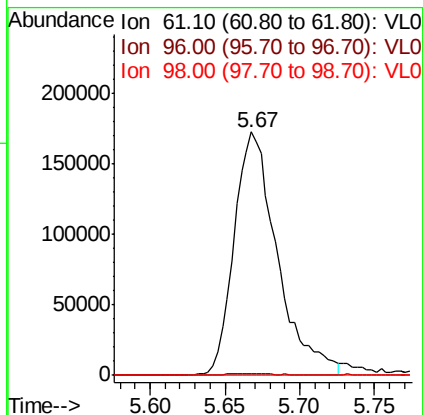
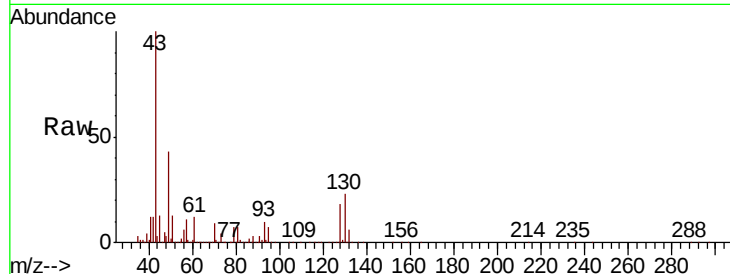


#31

cis-1,2-Dichloroethene
 Concen: 2.709 ppbv
 RT: 5.67 min Scan# 896
 Delta R.T. 0.12 min
 Lab File: VL036723.D
 Acq: 7 Apr 2021 10:24

Instrument :
 MSVOA_L
 ClientSampleId :
 UP-SG-5(2021)

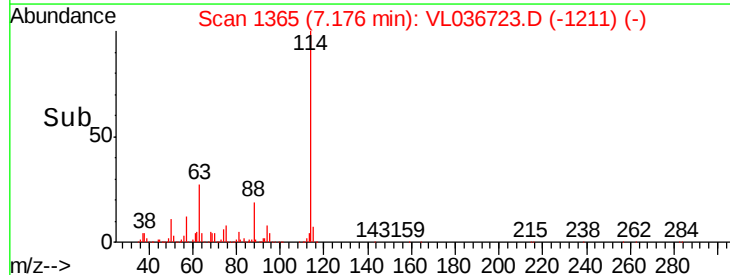
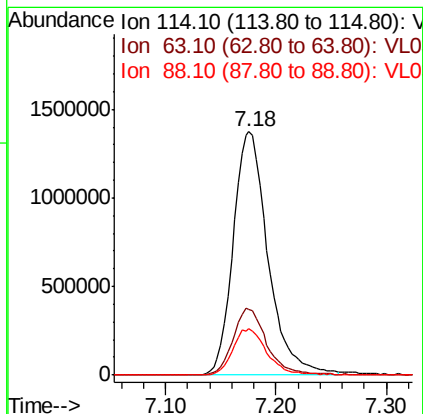
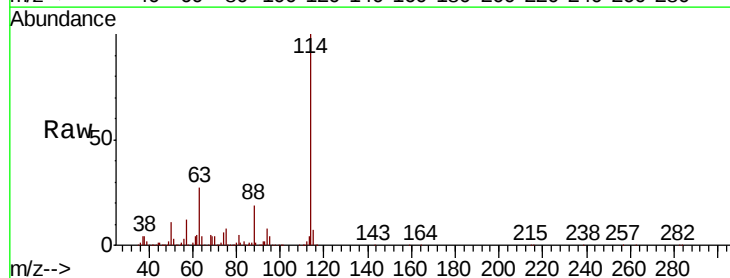
Tot Ion	Ratio	Lower	Upper
61	100		
96	0.8	48.7	73.1#
98	0.1	31.4	47.0#

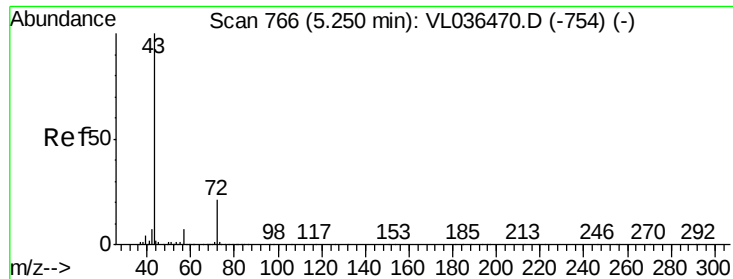


#33

1,4-Difluorobenzene
 Concen: 10.000 ppbv
 RT: 7.18 min Scan# 1365
 Delta R.T. -0.00 min
 Lab File: VL036723.D
 Acq: 7 Apr 2021 10:24

Tgt Ion	Ratio	Lower	Upper
114	100		
63	26.9	22.4	33.6
88	18.8	15.4	23.0

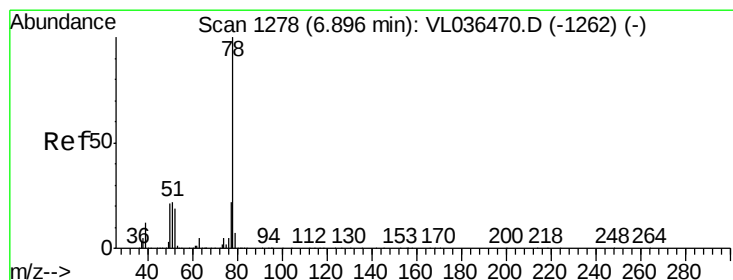
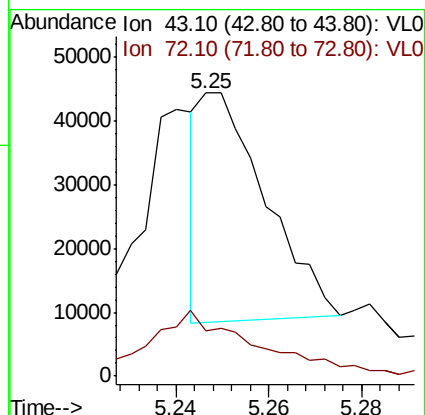
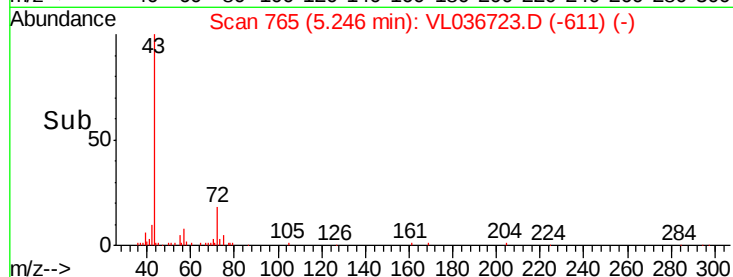
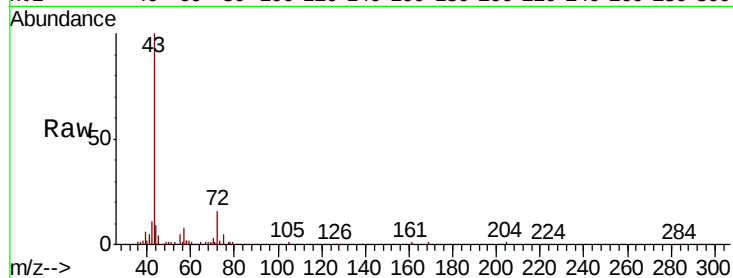




#34
2-Butanone
Concen: 0.238 ppbv
RT: 5.25 min Scan# 765
Delta R.T. -0.00 min
Lab File: VL036723.D
Acq: 7 Apr 2021 10:24

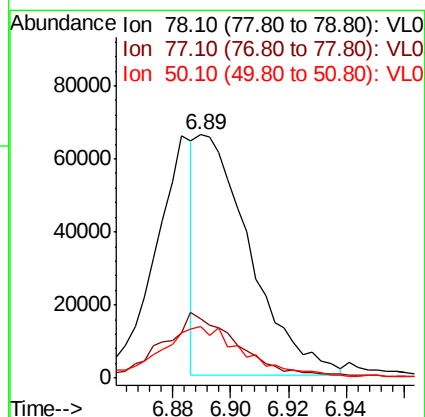
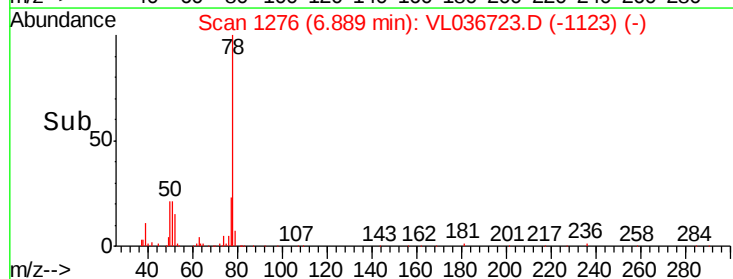
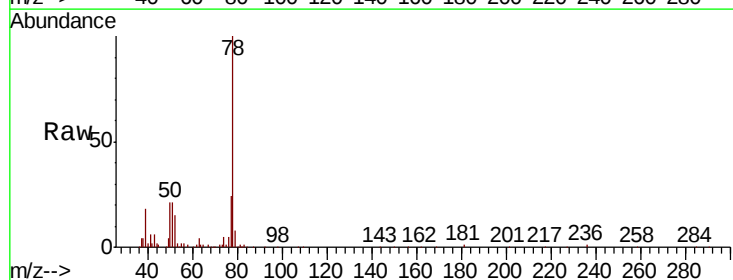
Instrument :
MSVOA_L
ClientSampleId :
UP-SG-5(2021)

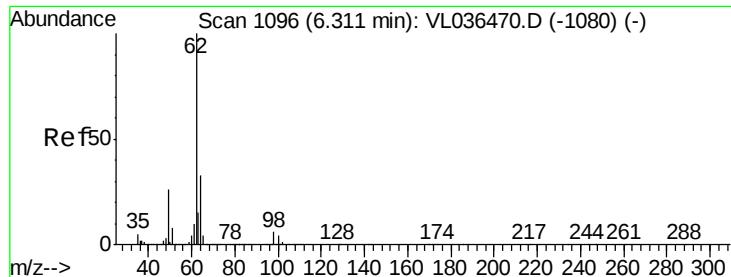
Tot Ion: 43 Resp: 34973
Ion Ratio Lower Upper
43 100
72 55.6 17.0 25.6#



#36
Benzene
Concen: 0.303 ppbv
RT: 6.89 min Scan# 1276
Delta R.T. -0.01 min
Lab File: VL036723.D
Acq: 7 Apr 2021 10:24

Tgt Ion: 78 Resp: 83857
Ion Ratio Lower Upper
78 100
77 23.5 18.0 27.0
50 20.5 16.5 24.7

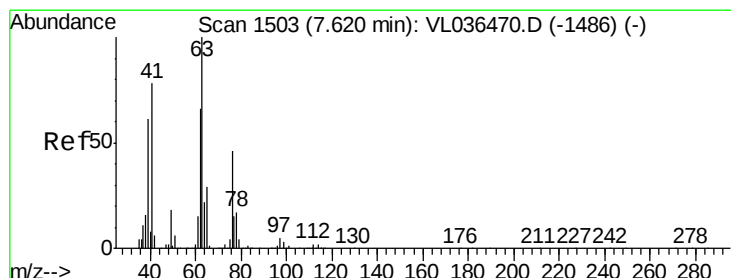
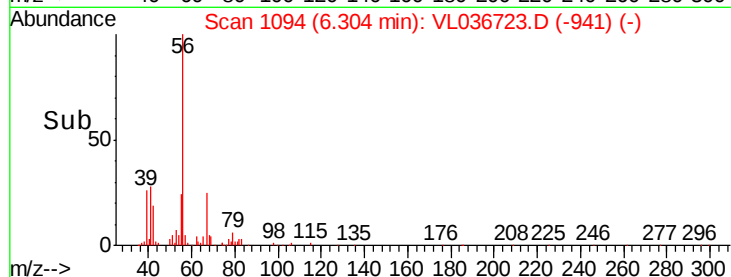
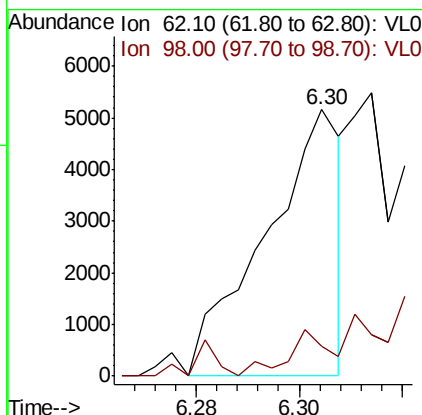
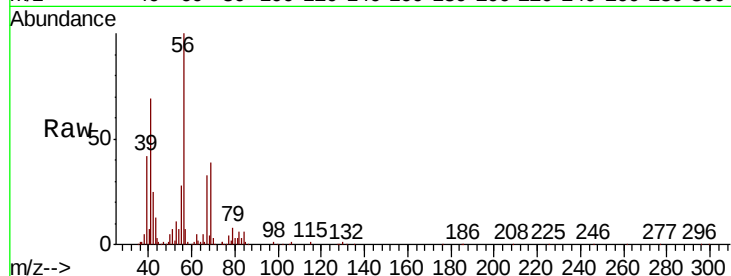




#37
 1,2-Dichloroethane
 Concen: 0.032 ppbv
 RT: 6.30 min Scan# 1094
 Delta R.T. -0.01 min
 Lab File: VL036723.D
 Acq: 7 Apr 2021 10:24

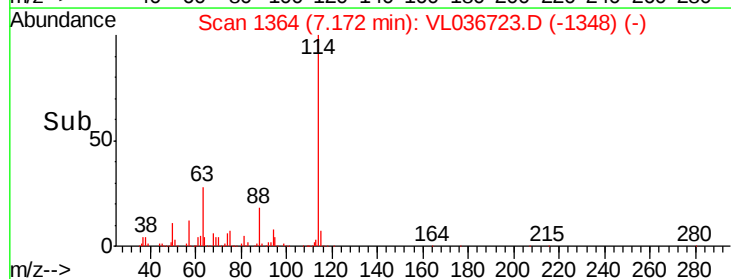
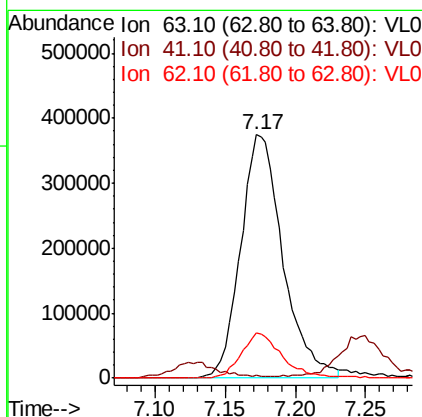
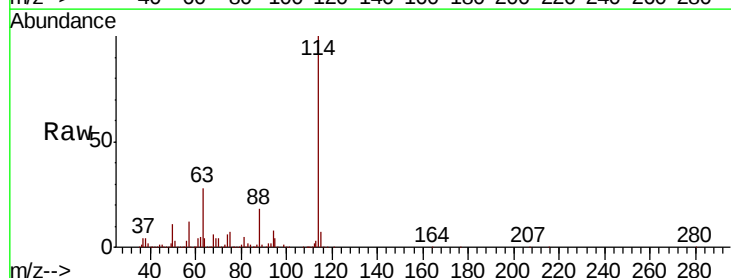
Instrument :
 MSVOA_L
 ClientSampleId :
 UP-SG-5(2021)

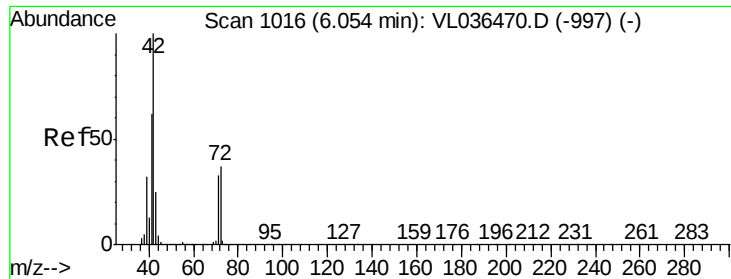
Tot Ion: 62 Resp: 5239
 Ion Ratio Lower Upper
 62 100
 98 0.0 4.9 7.3#



#39
 1,2-Dichloropropane
 Concen: 6.945 ppbv
 RT: 7.17 min Scan# 1364
 Delta R.T. -0.45 min
 Lab File: VL036723.D
 Acq: 7 Apr 2021 10:24

Tgt Ion: 63 Resp: 780833
 Ion Ratio Lower Upper
 63 100
 41 0.0 62.4 93.6#
 62 18.3 52.8 79.2#

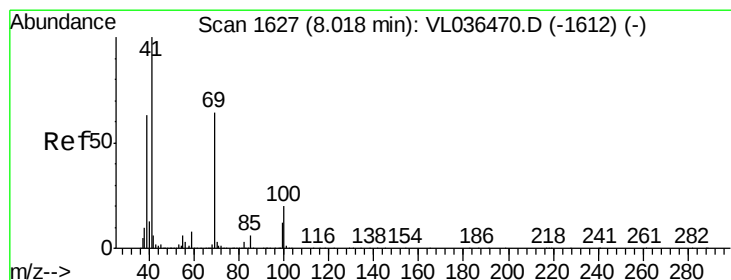
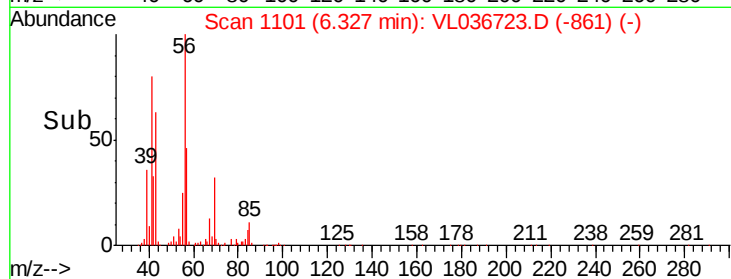
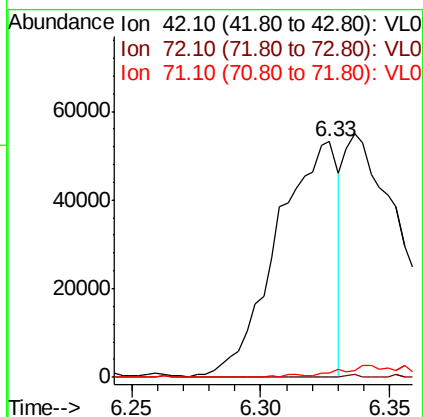
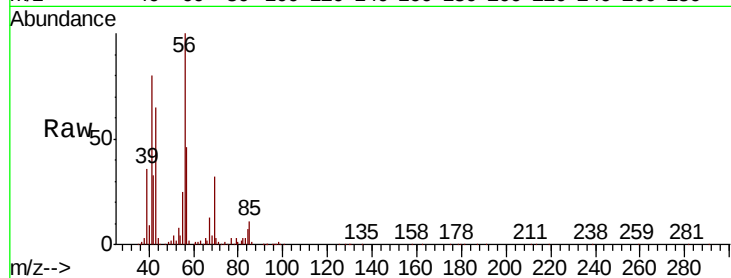




#41
Tetrahydrofuran
Concen: 1.278 ppbv
RT: 6.33 min Scan# 1101
Delta R.T. 0.27 min
Lab File: VL036723.D
Acq: 7 Apr 2021 10:24

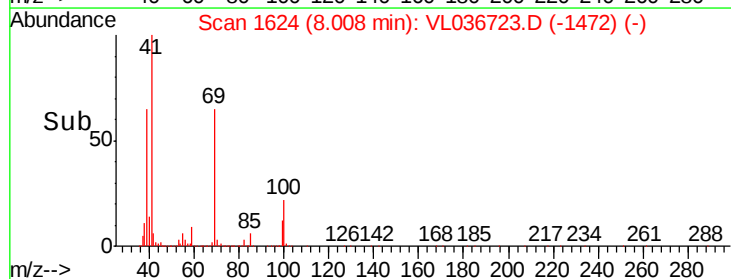
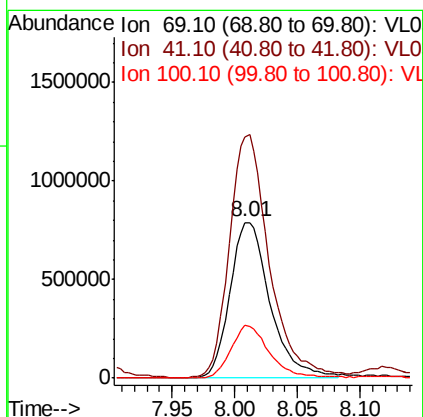
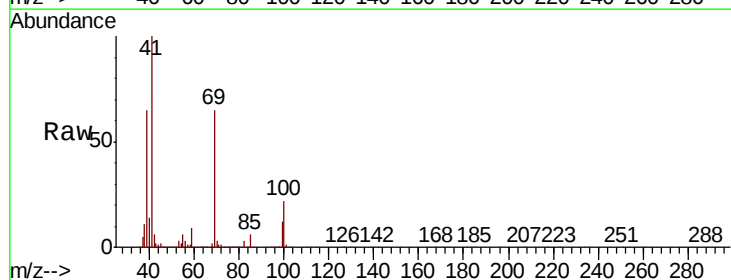
Instrument :
MSVOA_L
ClientSampleId :
UP-SG-5(2021)

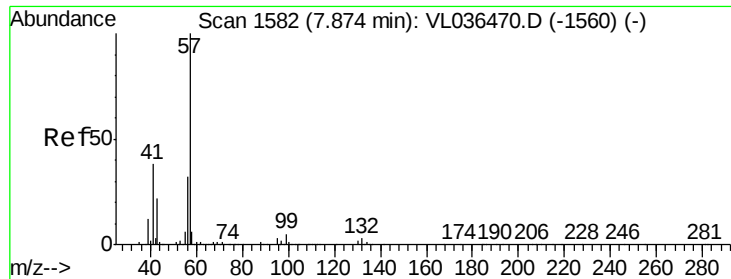
Tot Ion	Ratio	Lower	Upper
42	100		
72	0.2	27.6	41.4#
71	0.0	27.0	40.4#



#43
Methyl Methacrylate
Concen: 18.819 ppbv
RT: 8.01 min Scan# 1624
Delta R.T. -0.01 min
Lab File: VL036723.D
Acq: 7 Apr 2021 10:24

Tgt Ion	Ratio	Lower	Upper
69	100		
41	154.7	126.8	190.2
100	32.7	24.9	37.3





#44

2,2,4-Trimethylpentane

Concen: 6.722 ppbv

RT: 7.87 min Scan# 1581

Delta R.T. -0.00 min

Lab File: VL036723.D

Acq: 7 Apr 2021 10:24

Instrument :

MSVOA_L

ClientSampleId :

UP-SG-5(2021)

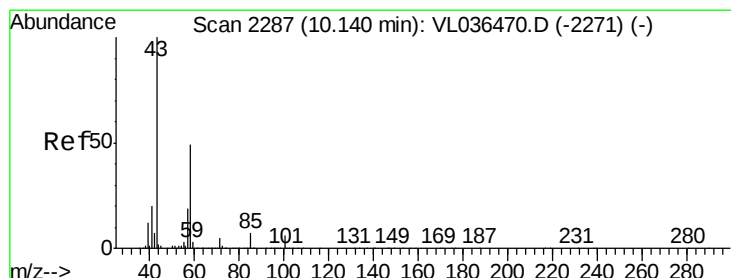
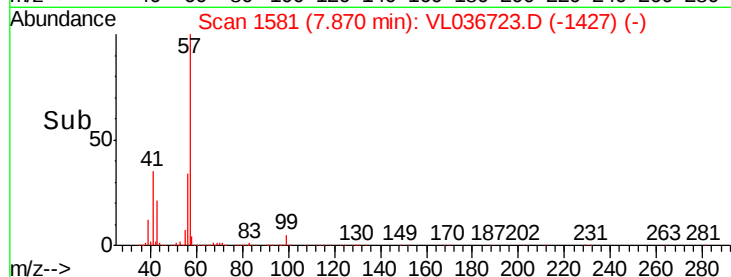
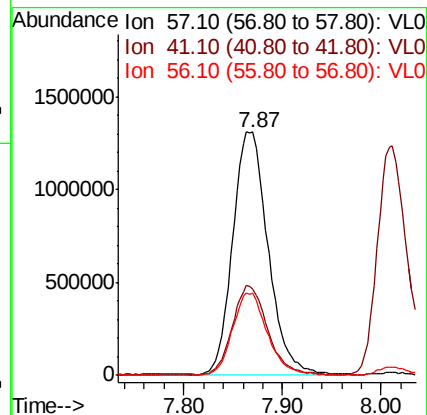
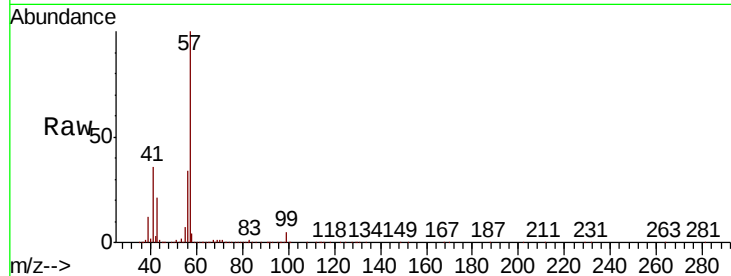
Tot Ion: 57 Resp: 3278907

Ion	Ratio	Lower	Upper
57	100		
41	35.9	28.8	43.2
56	33.0	26.1	39.1

57 100

41 35.9 28.8 43.2

56 33.0 26.1 39.1



#51

2-Hexanone

Concen: 0.121 ppbv

RT: 10.05 min Scan# 2259

Delta R.T. -0.09 min

Lab File: VL036723.D

Acq: 7 Apr 2021 10:24

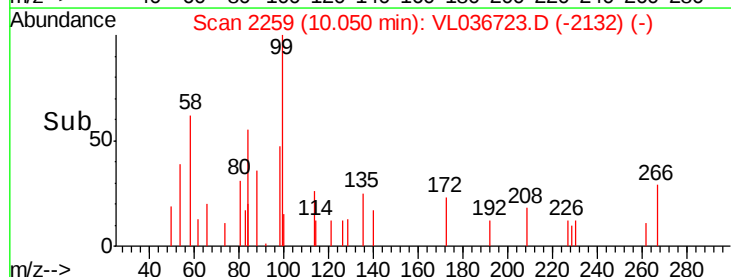
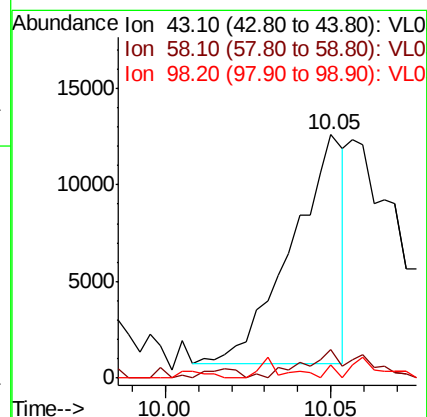
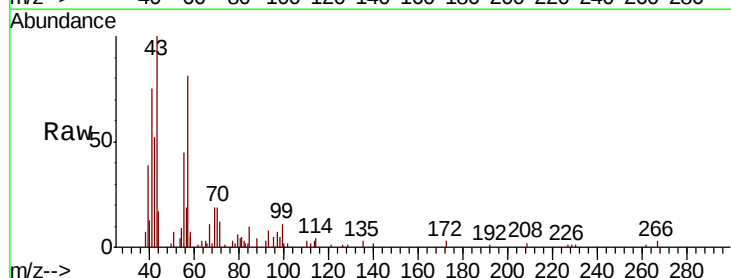
Tgt Ion: 43 Resp: 12930

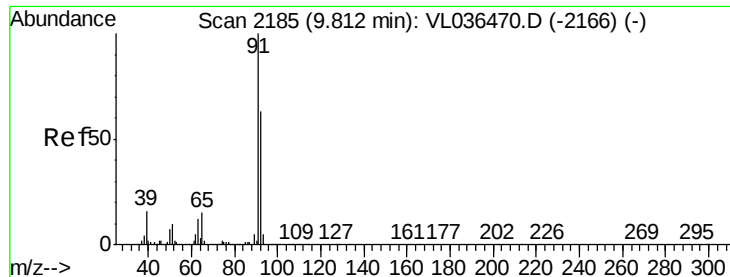
Ion	Ratio	Lower	Upper
43	100		
58	18.2	37.7	56.5#
98	11.7	0.2	0.2#

43 100

58 18.2 37.7 56.5#

98 11.7 0.2 0.2#





#53

Toluene

Concen: 0.181 ppbv

RT: 9.81 min Scan# 2185

Delta R.T. -0.00 min

Lab File: VL036723.D

Acq: 7 Apr 2021 10:24

Instrument :

MSVOA_L

ClientSampleId :

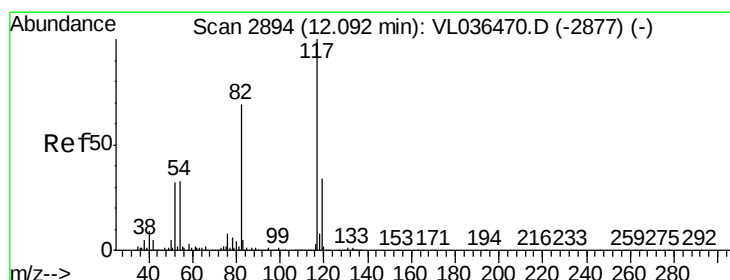
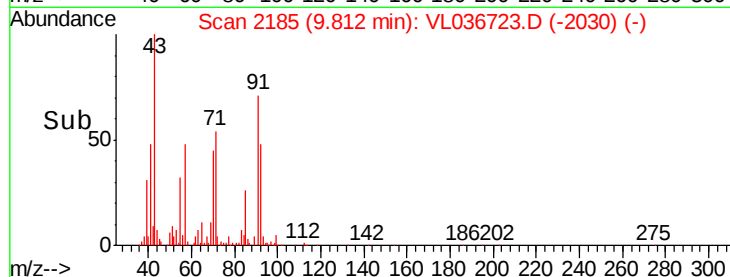
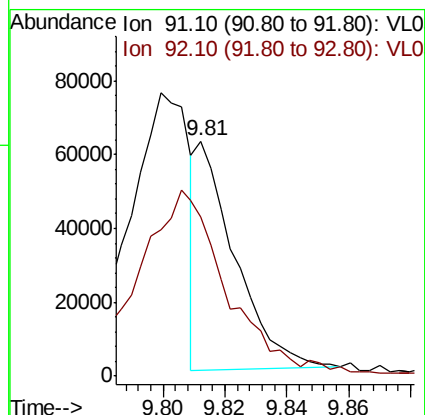
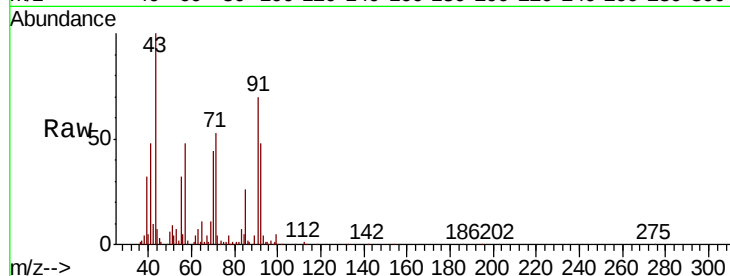
UP-SG-5(2021)

Tot Ion: 91 Resp: 53510

Ion Ratio Lower Upper

91 100

92 193.4 48.8 73.2#



#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.09 min Scan# 2892

Delta R.T. -0.01 min

Lab File: VL036723.D

Acq: 7 Apr 2021 10:24

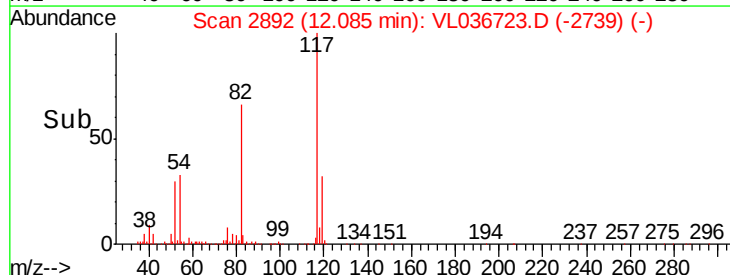
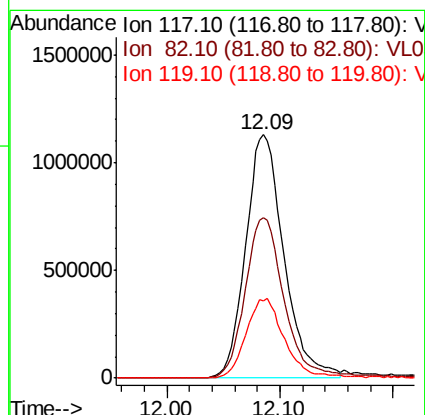
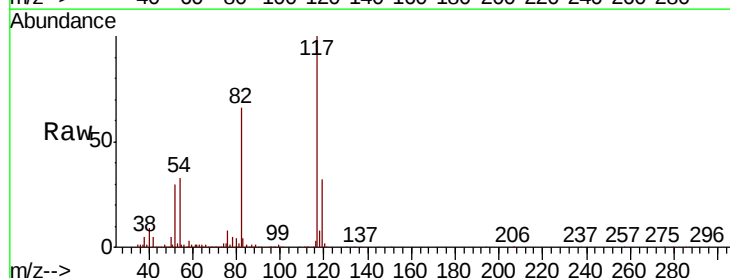
Tgt Ion: 117 Resp: 2654804

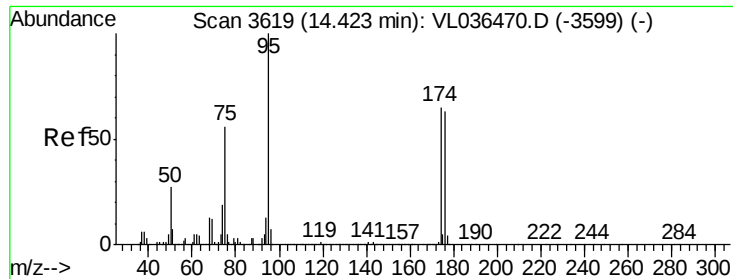
Ion Ratio Lower Upper

117 100

82 69.0 57.4 86.0

119 33.4 47.4 71.0#





#68

1-Bromo-4-Fluorobenzene

Concen: 9.856 ppbv

RT: 14.42 min Scan# 3617

Delta R.T. -0.01 min

Lab File: VL036723.D

Acq: 7 Apr 2021 10:24

Instrument :

MSVOA_L

ClientSampleId :

UP-SG-5(2021)

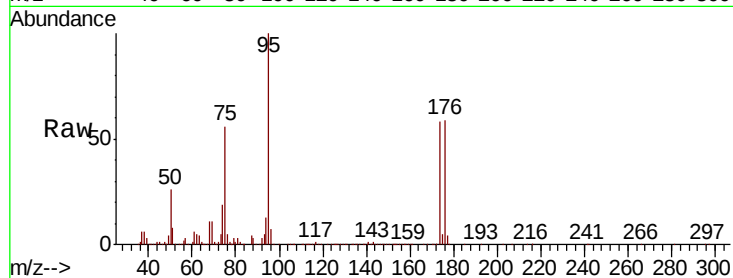
Tot Ion: 95 Resp: 2085528

Ion Ratio Lower Upper

95 100

174 63.5 51.0 76.6

175 4.8 3.9 5.9



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

