

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL012821\
 Data File : VL036278.D
 Acq On : 28 Jan 2021 19:17
 Operator : SY/AP
 Sample : M1245-04DL 10X
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :

Quant Time: Jan 29 02:27:07 2021
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL011321AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Thu Jan 14 16:13:38 2021
 QLast Update : Thu Jan 14 16:13:38 2021
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.65	49	1607398	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.16	114	3430907	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.07	117	3175077	10.00	ppbv	-0.01

System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	14.40	95	2631883	10.01	ppbv	-0.01
Spiked Amount	10.000	Range	65 - 135	Recovery	=	100.10%

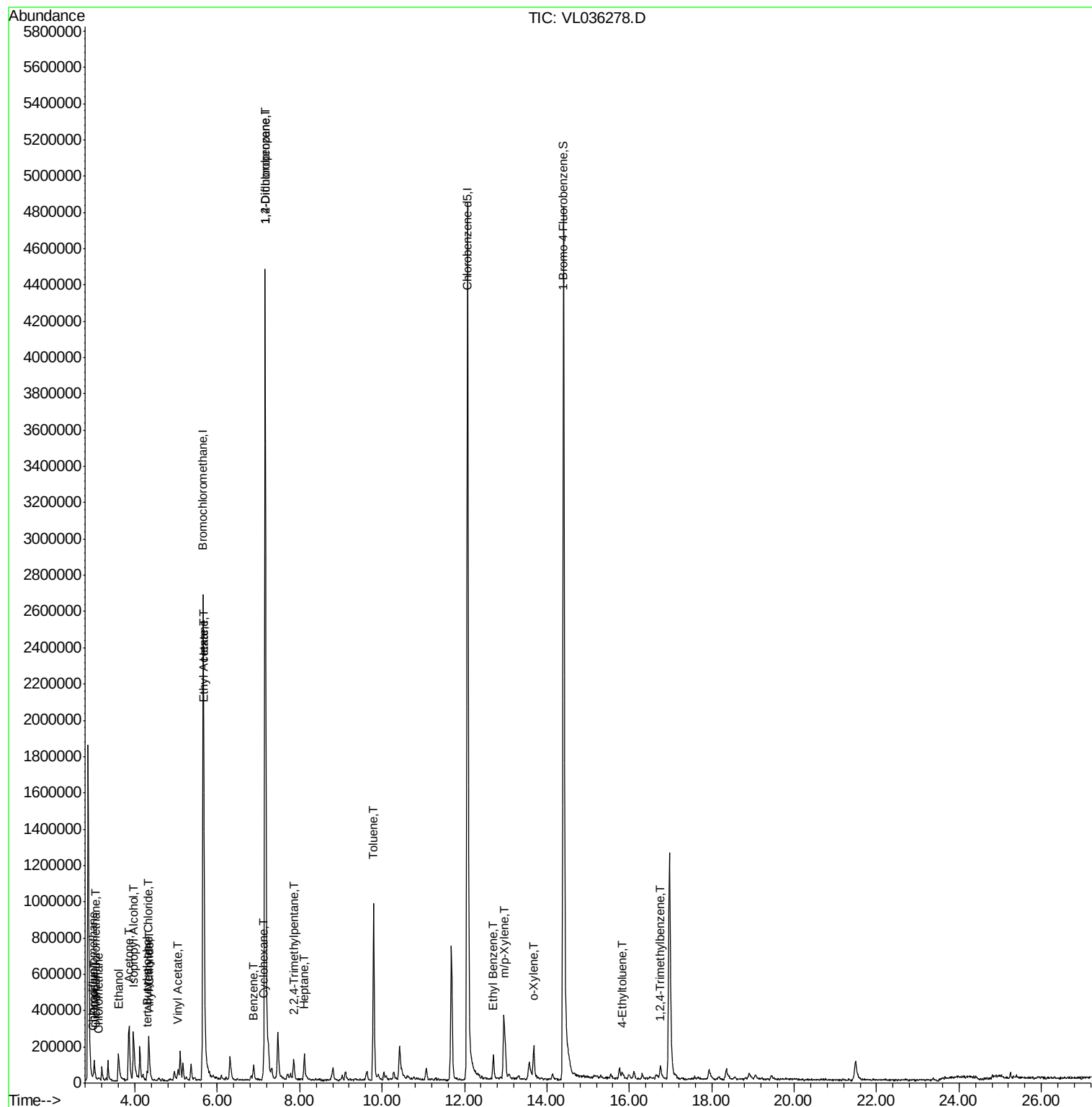
Target Compounds					Ovalue
2) Dichlorodifluoromethane	3.04	85	10830	0.050 ppbv	99
3) Chlorodifluoromethane	2.98	51	21226	0.108 ppbv	94
4) Chloromethane	3.13	50	3979	0.041 ppbv #	49
9) Propene	3.01	41	24591	0.262 ppbv	87
10) Heptane	8.11	43	54629	0.234 ppbv	88
13) Ethanol	3.60	45	196099	13.285 ppbv	91
15) Acetone	3.84	43	354105	1.799 ppbv	97
17) tert-Butyl alcohol	4.29	59	12861	0.079 ppbv #	70
19) Isopropyl Alcohol	3.96	45	166074	1.399 ppbv #	89
20) Methylene Chloride	4.34	84	80604	1.283 ppbv	90
21) Allyl Chloride	4.36	41	3311	0.031 ppbv #	1
23) Vinyl Acetate	5.05	43	14123	0.059 ppbv #	1
25) Ethyl Acetate	5.68	43	59342	0.150 ppbv #	85
26) Hexane	5.68	57	175552	1.067 ppbv #	38
30) Cyclohexane	7.12	84	4490	0.036 ppbv #	1
36) Benzene	6.88	78	38989	0.124 ppbv #	92
39) 1,2-Dichloropropane	7.16	63	1020303	7.994 ppbv #	22
44) 2,2,4-Trimethylpentane	7.86	57	59823	0.104 ppbv #	56
53) Toluene	9.79	91	733362	2.085 ppbv	100
58) Ethyl Benzene	12.70	91	117937	0.250 ppbv	91
59) m/p-Xylene	12.98	91	47852	0.118 ppbv #	33
60) o-Xylene	13.68	91	127058	0.326 ppbv	96
72) 4-Ethyltoluene	15.82	105	18758	0.043 ppbv #	77
74) 1,2,4-Trimethylbenzene	16.75	105	29844	0.069 ppbv #	72

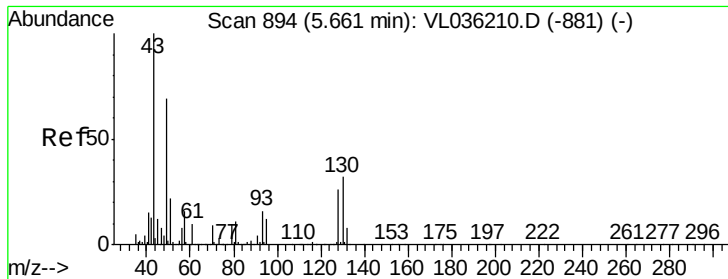
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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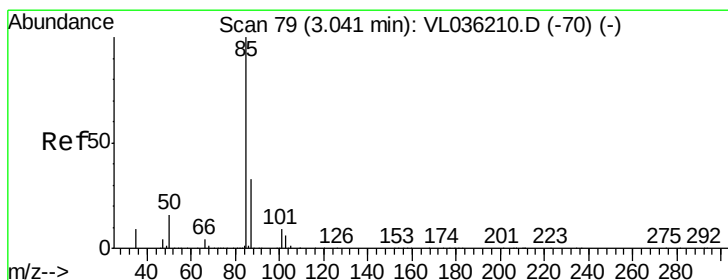
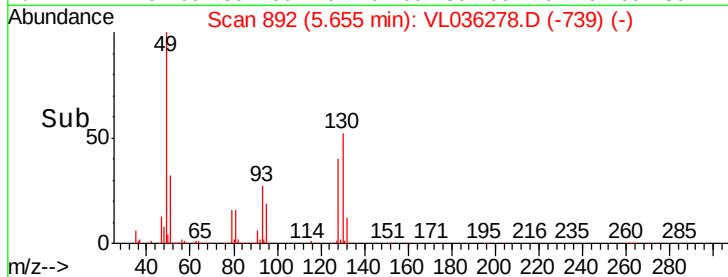
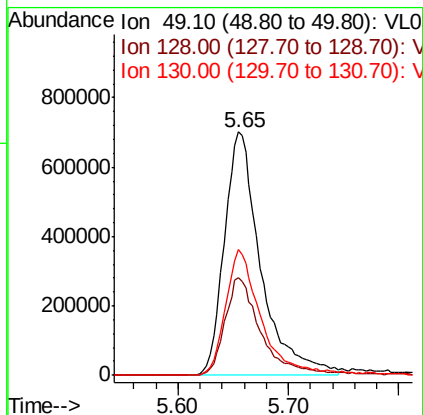
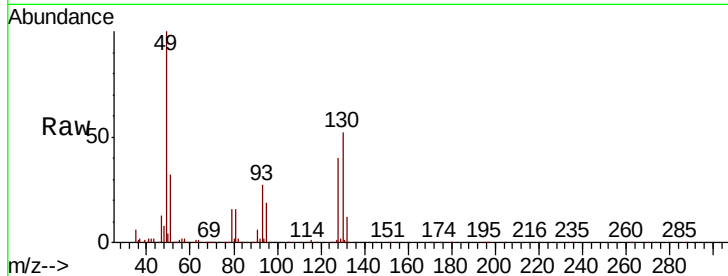




#1
 Bromochloromethane
 Concen: 10.000 ppbv
 RT: 5.65 min Scan# 892
 Delta R.T. -0.01 min
 Lab File: VL036278.D
 Acq: 28 Jan 2021 19:17

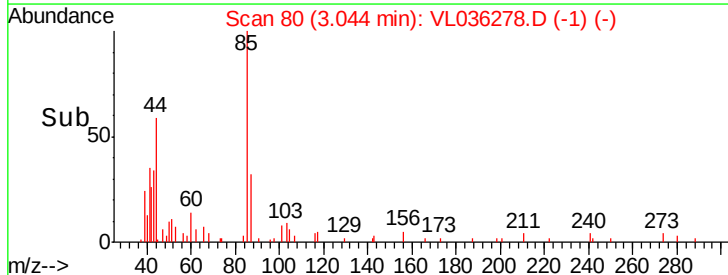
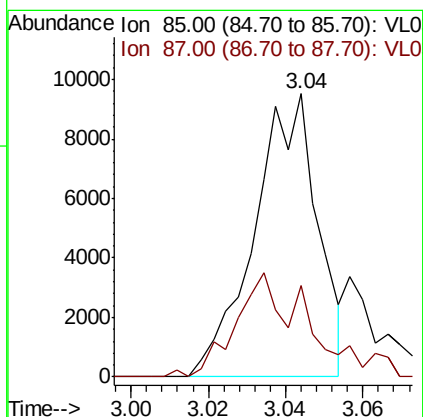
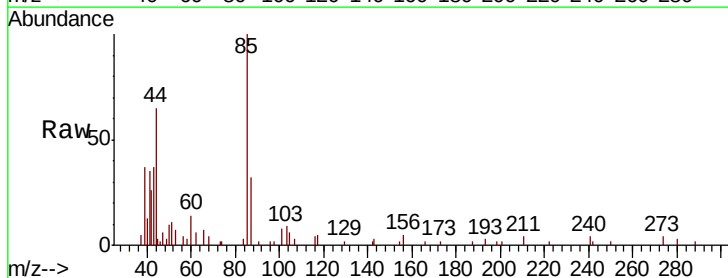
Instrument :
 MSVOA_L
 ClientSampled :

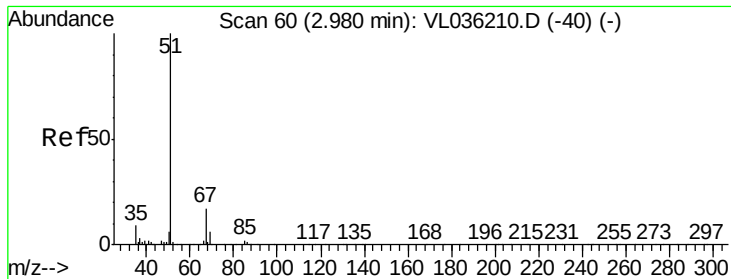
Tot Ion: 49 Resp: 1607398
 Ion Ratio Lower Upper
 49 100
 128 40.9 20.1 60.2
 130 51.4 25.3 75.9



#2
 Dichlorodifluoromethane
 Concen: 0.050 ppbv
 RT: 3.04 min Scan# 80
 Delta R.T. 0.00 min
 Lab File: VL036278.D
 Acq: 28 Jan 2021 19:17

Tgt Ion: 85 Resp: 10830
 Ion Ratio Lower Upper
 85 100
 87 32.2 26.4 39.6





#3

Chlorodifluoromethane

Concen: 0.108 ppbv

RT: 2.98 min Scan# 60

Delta R.T. -0.00 min

Lab File: VL036278.D

Acq: 28 Jan 2021 19:17

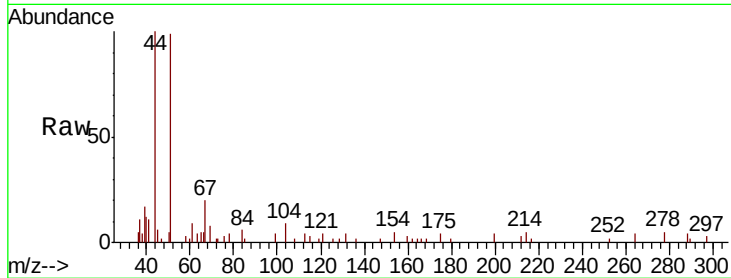
Instrument :
MSVOA_L
ClientSampleId :

Tot Ion: 51 Resp: 21226

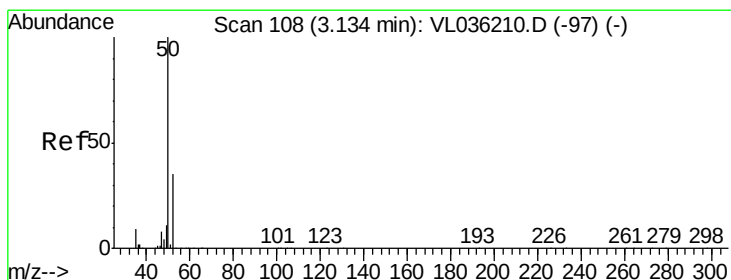
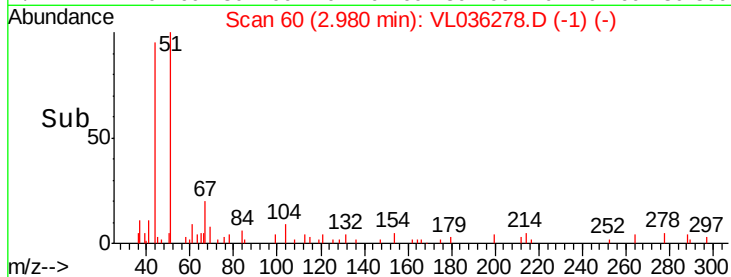
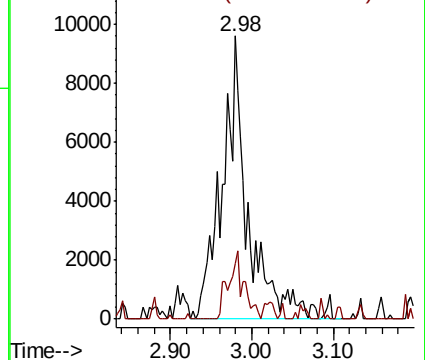
Ion Ratio Lower Upper

51 100

67 14.8 14.0 21.0



Abundance Ion 51.00 (50.70 to 51.70): VL0
Ion 67.00 (66.70 to 67.70): VL0



#4

Chloromethane

Concen: 0.041 ppbv

RT: 3.13 min Scan# 108

Delta R.T. -0.00 min

Lab File: VL036278.D

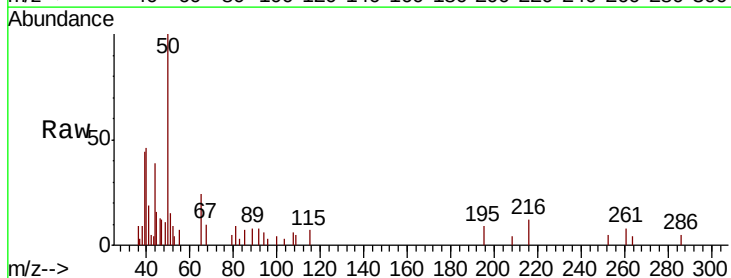
Acq: 28 Jan 2021 19:17

Tgt Ion: 50 Resp: 3979

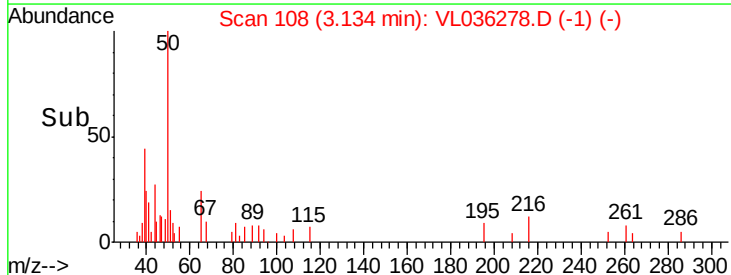
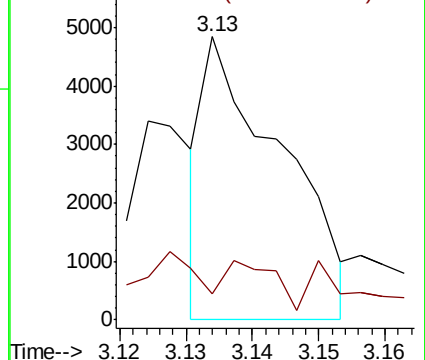
Ion Ratio Lower Upper

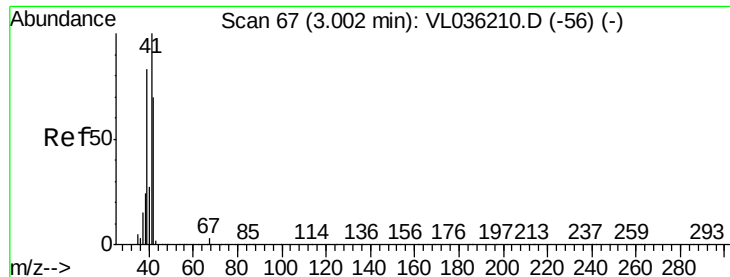
50 100

52 5.0 27.8 41.8#



Abundance Ion 50.10 (49.80 to 50.80): VL0
Ion 52.10 (51.80 to 52.80): VL0





#9

Propene

Concen: 0.262 ppbv

RT: 3.01 min Scan# 70

Delta R.T. 0.01 min

Lab File: VL036278.D

Acq: 28 Jan 2021 19:17

Instrument :

MSVOA_L

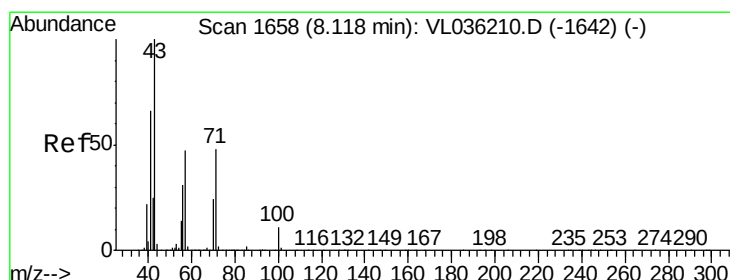
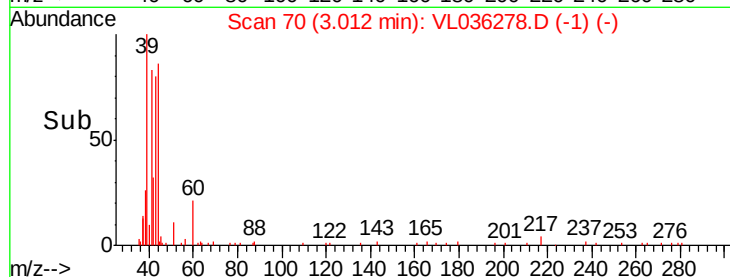
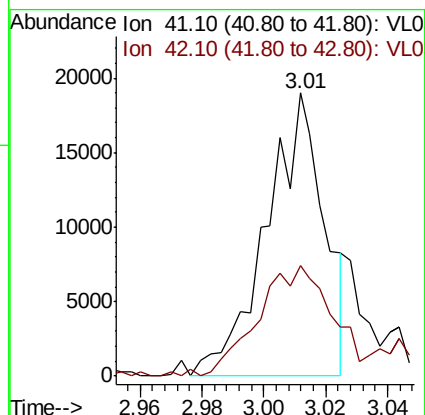
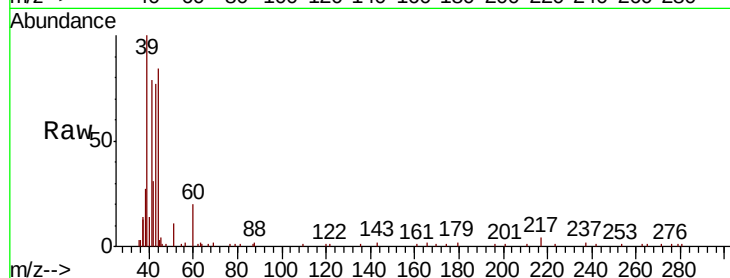
ClientSampleId :

Tot Ion: 41 Resp: 24591

Ion Ratio Lower Upper

41 100

42 60.7 57.1 85.7



#10

Heptane

Concen: 0.234 ppbv

RT: 8.11 min Scan# 1657

Delta R.T. -0.00 min

Lab File: VL036278.D

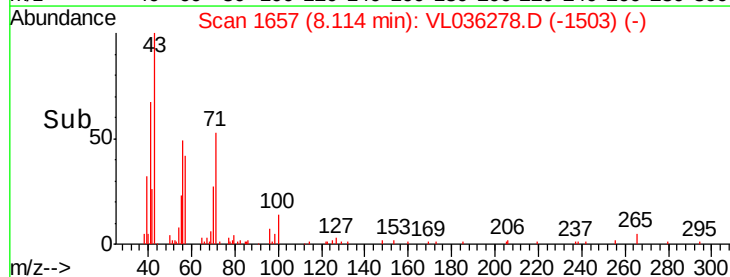
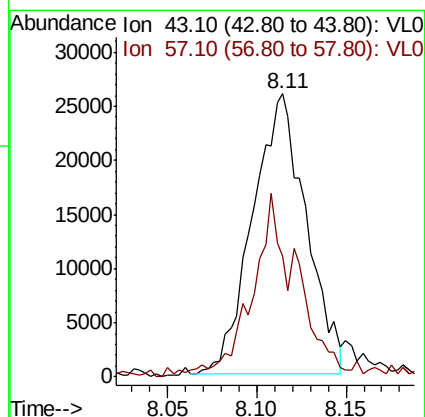
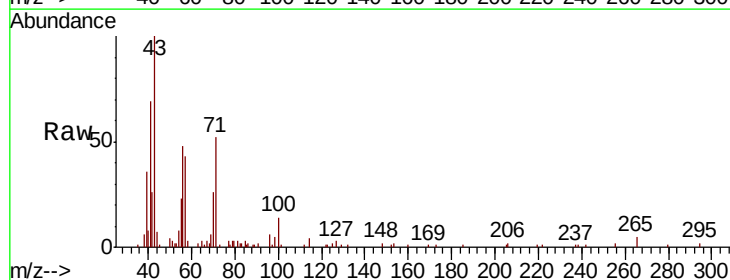
Acq: 28 Jan 2021 19:17

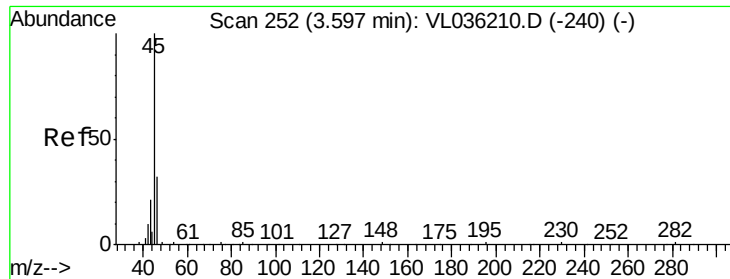
Tgt Ion: 43 Resp: 54629

Ion Ratio Lower Upper

43 100

57 55.6 38.1 57.1

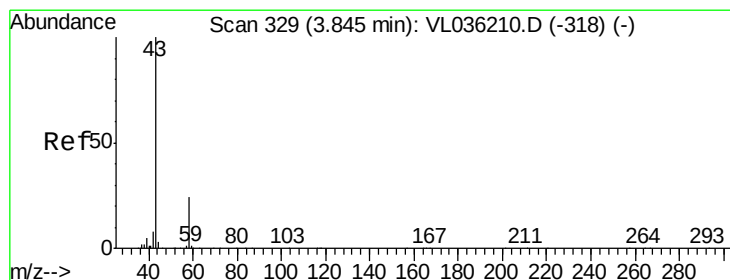
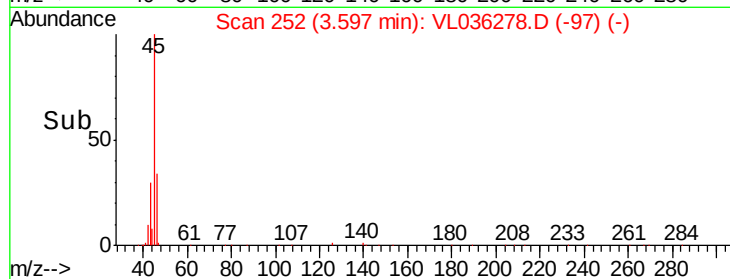
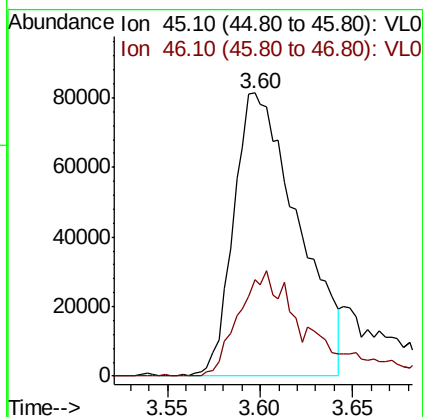
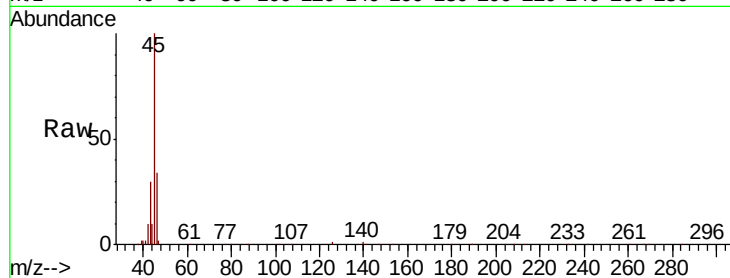




#13
Ethanol
Concen: 13.285 ppbv
RT: 3.60 min Scan# 252
Delta R.T. -0.00 min
Lab File: VL036278.D
Acq: 28 Jan 2021 19:17

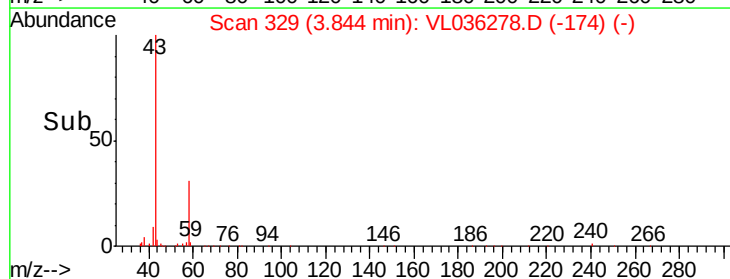
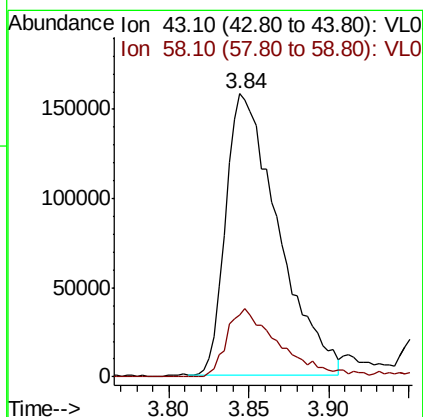
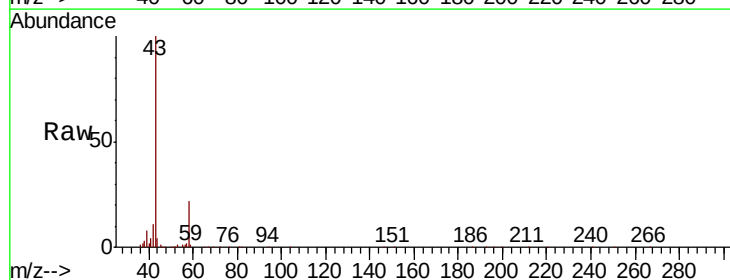
Instrument :
MSVOA_L
ClientSampleId :

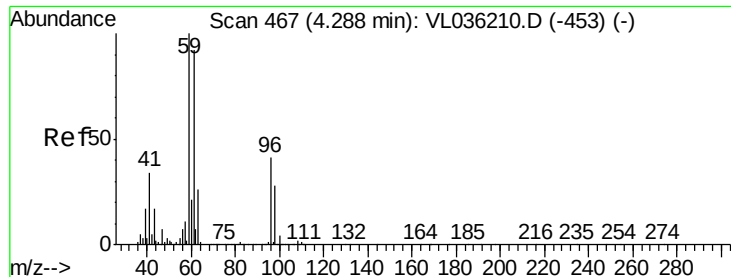
Tot Ion: 45 Resp: 196099
Ion Ratio Lower Upper
45 100
46 42.0 19.2 77.0



#15
Acetone
Concen: 1.799 ppbv
RT: 3.84 min Scan# 329
Delta R.T. -0.00 min
Lab File: VL036278.D
Acq: 28 Jan 2021 19:17

Tgt Ion: 43 Resp: 354105
Ion Ratio Lower Upper
43 100
58 24.5 20.9 31.3



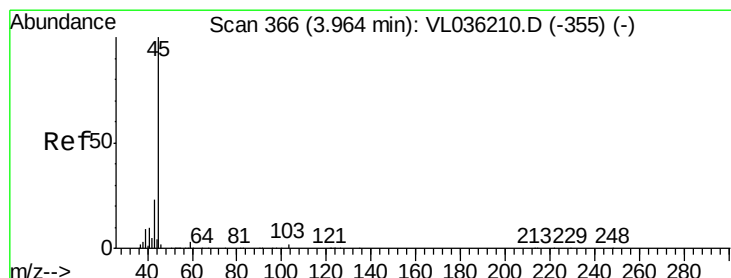
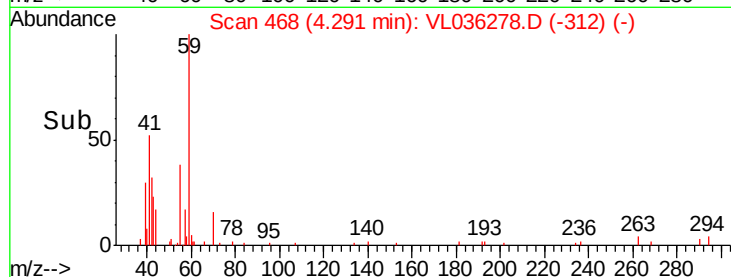
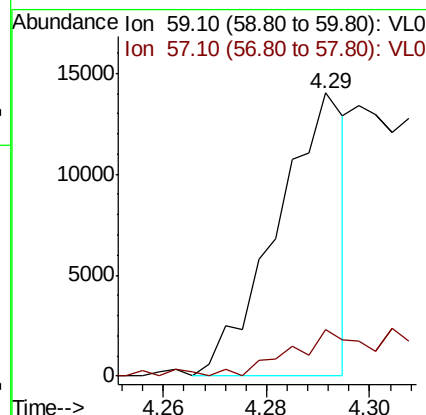
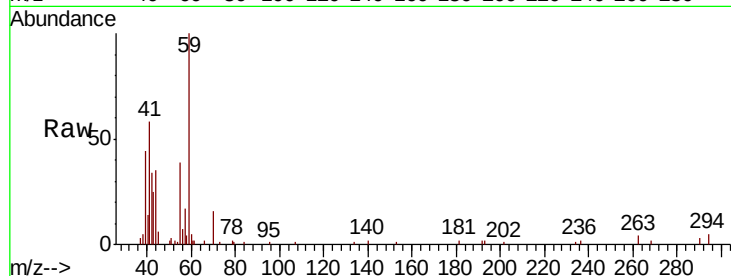


#17

tert-Butyl alcohol
Concen: 0.079 ppbv
RT: 4.29 min Scan# 468
Delta R.T. 0.00 min
Lab File: VL036278.D
Acq: 28 Jan 2021 19:17

Instrument :
MSVOA_L
ClientSampled :

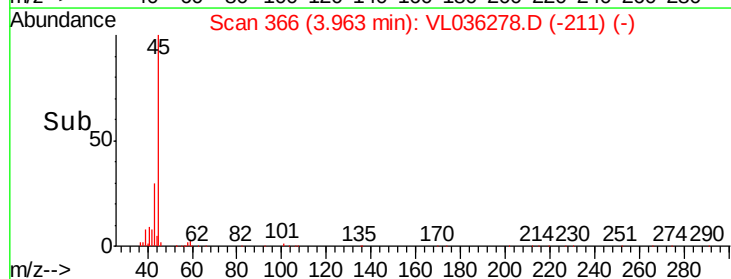
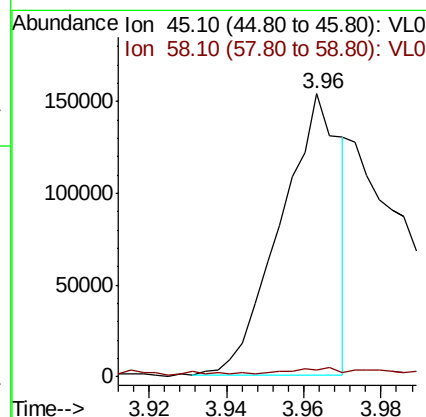
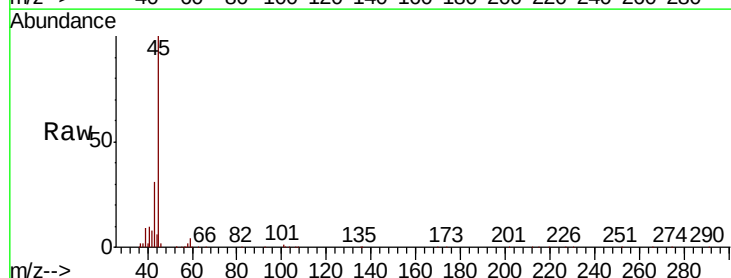
Tot Ion: 59 Resp: 12861
Ion Ratio Lower Upper
59 100
57 0.0 9.2 13.8#

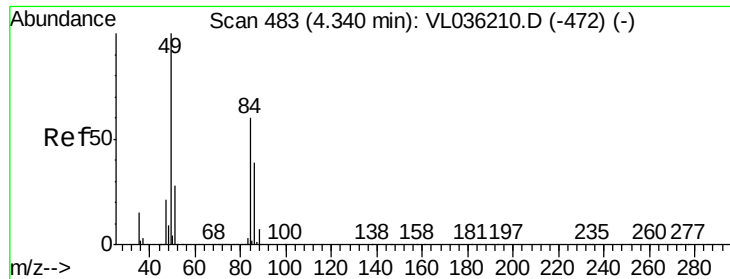


#19

Isopropyl Alcohol
Concen: 1.399 ppbv
RT: 3.96 min Scan# 366
Delta R.T. -0.00 min
Lab File: VL036278.D
Acq: 28 Jan 2021 19:17

Tgt Ion: 45 Resp: 166074
Ion Ratio Lower Upper
45 100
58 6.3 1.9 2.9#

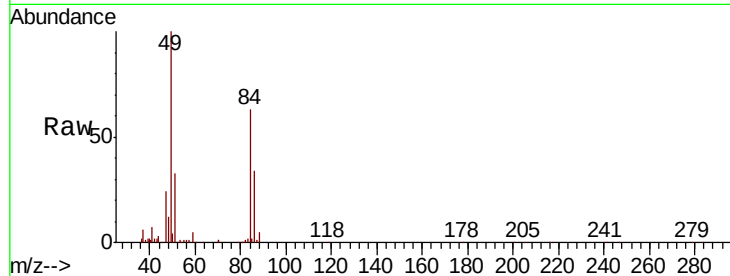




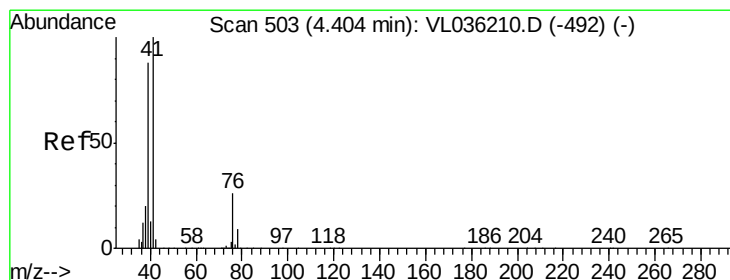
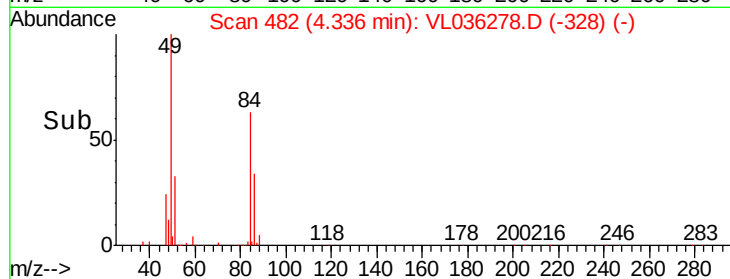
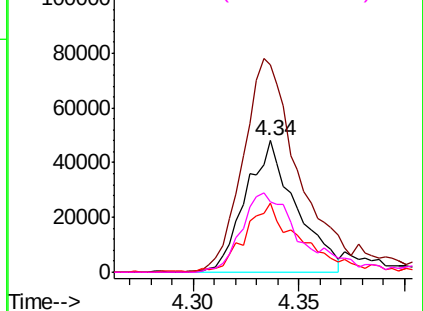
#20
Methylene Chloride
Concen: 1.283 ppbv
RT: 4.34 min Scan# 482
Delta R.T. -0.00 min
Lab File: VL036278.D
Acq: 28 Jan 2021 19:17

Instrument :
MSVOA_L
ClientSampled :

Tot Ion:	84	Resp:	80604
Ion	Ratio	Lower	Upper
84	100		
49	157.1	134.1	201.1
51	51.9	37.4	56.0
86	53.5	52.6	78.8

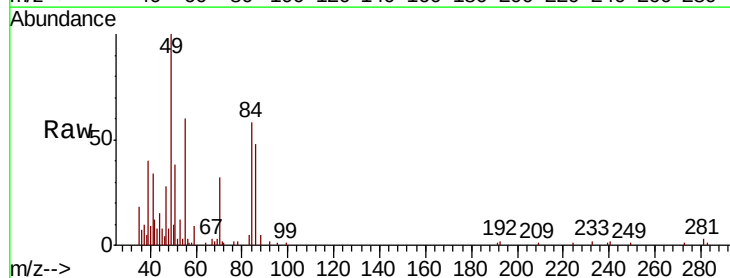


Abundance Ion 84.00 (83.70 to 84.70): VL0
Ion 49.10 (48.80 to 49.80): VL0
Ion 51.10 (50.80 to 51.80): VL0
Ion 86.00 (85.70 to 86.70): VL0

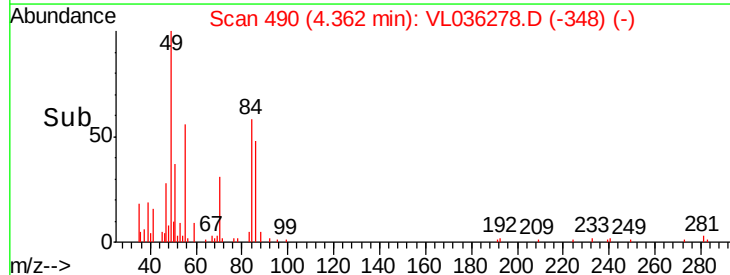
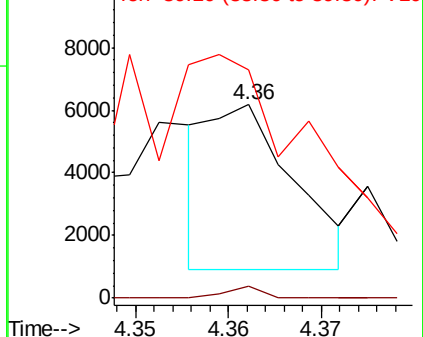


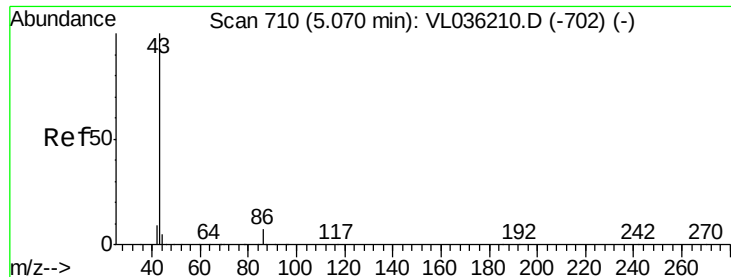
#21
Allyl Chloride
Concen: 0.031 ppbv
RT: 4.36 min Scan# 490
Delta R.T. -0.04 min
Lab File: VL036278.D
Acq: 28 Jan 2021 19:17

Tgt Ion:	41	Resp:	3311
Ion	Ratio	Lower	Upper
41	100		
76	0.0	20.5	30.7#
39	459.7	67.8	101.8#



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: 0.059 ppbv

RT: 5.05 min Scan# 704

Delta R.T. -0.02 min

Lab File: VL036278.D

Acq: 28 Jan 2021 19:17

Instrument :

MSVOA_L

ClientSampleId :

Tot Ion: 43 Resp: 14123

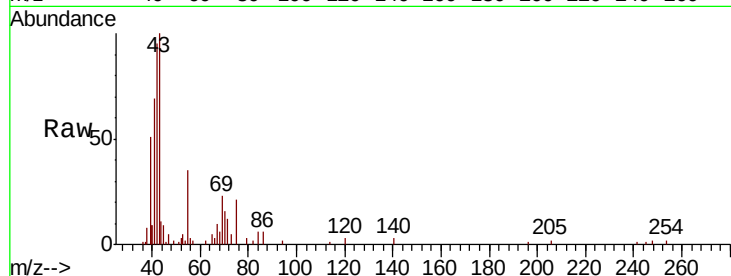
Ion Ratio Lower Upper

43 100

86 10.6 4.9 7.3#

42 112.9 7.8 11.6#

44 0.0 3.7 5.5#

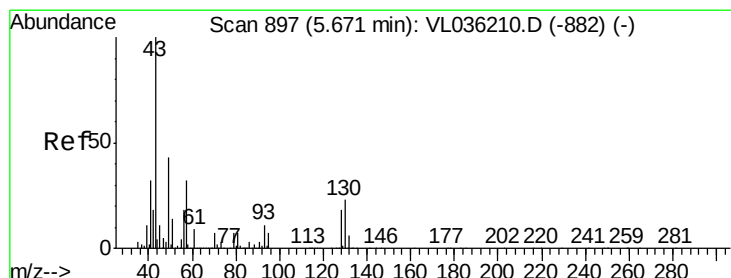
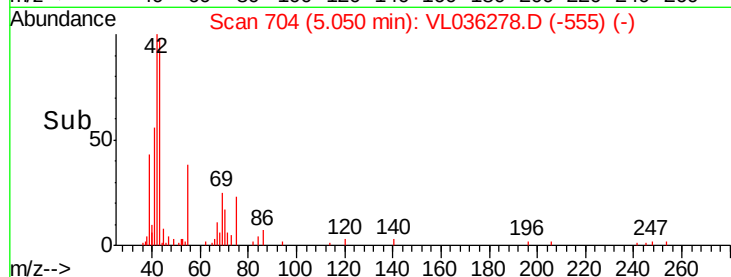
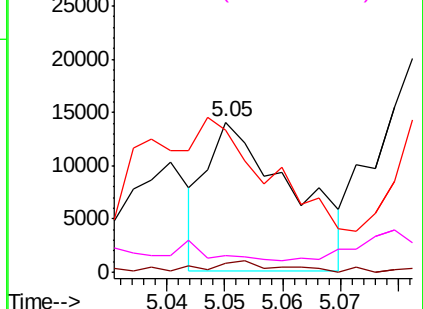


Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 86.10 (85.80 to 86.80): VL0

Ion 42.10 (41.80 to 42.80): VL0

Ion 44.10 (43.80 to 44.80): VL0



#25

Ethyl Acetate

Concen: 0.150 ppbv

RT: 5.68 min Scan# 900

Delta R.T. 0.01 min

Lab File: VL036278.D

Acq: 28 Jan 2021 19:17

Tgt Ion: 43 Resp: 59342

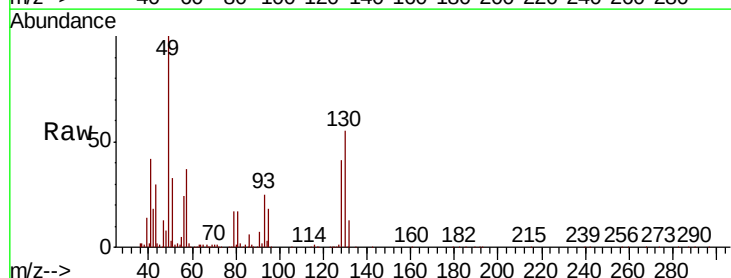
Ion Ratio Lower Upper

43 100

45 5.3 8.3 12.5#

61 1.7 7.4 11.2#

70 4.2 5.5 8.3#

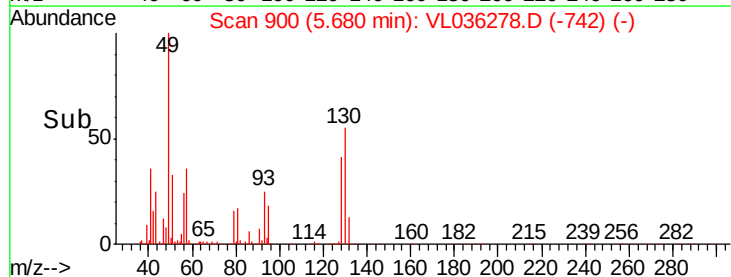
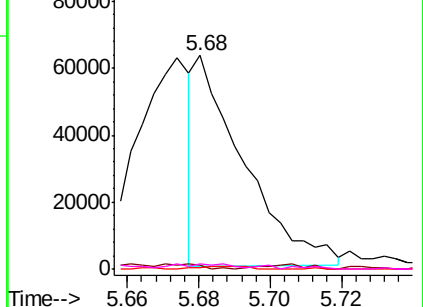


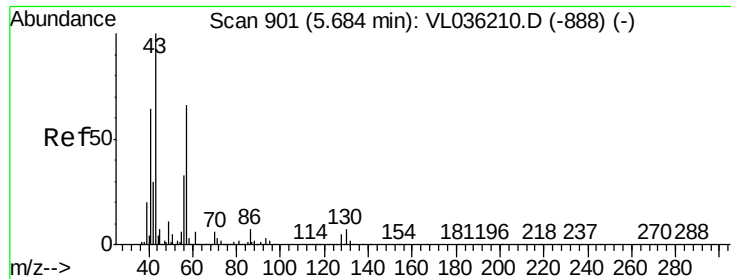
Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 45.10 (44.80 to 45.80): VL0

Ion 61.10 (60.80 to 61.80): VL0

Ion 70.10 (69.80 to 70.80): VL0





#26

Hexane

Concen: 1.067 ppbv

RT: 5.68 min Scan# 899

Delta R.T. -0.01 min

Lab File: VL036278.D

Acq: 28 Jan 2021 19:17

Instrument :

MSVOA_L

ClientSampleId :

Tot Ion: 57 Resp: 175552

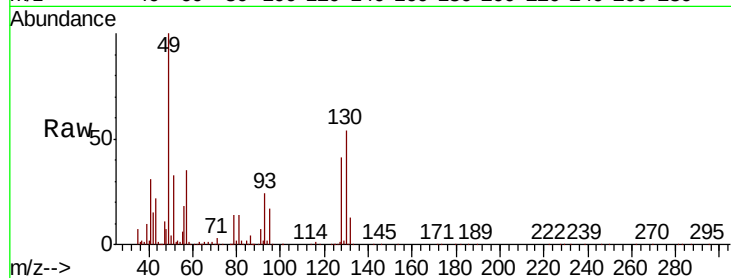
Ion Ratio Lower Upper

57 100

41 107.2 83.0 124.6

43 81.3 202.4 303.6#

56 58.9 43.4 65.0

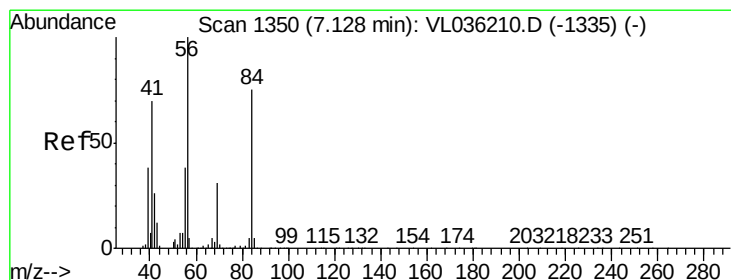
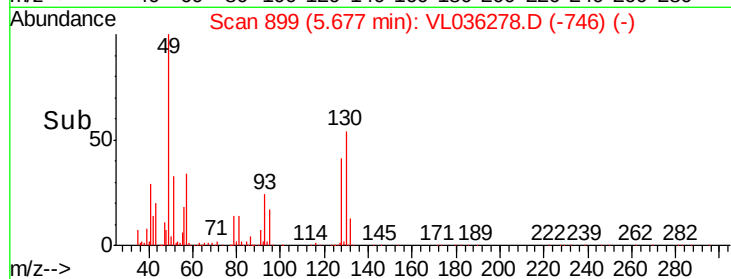
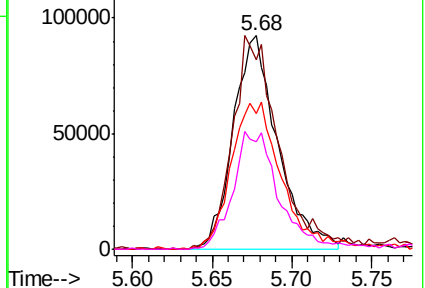


Abundance Ion 57.10 (56.80 to 57.80): VL0

Ion 41.10 (40.80 to 41.80): VL0

Ion 43.10 (42.80 to 43.80): VL0

Ion 56.10 (55.80 to 56.80): VL0



#30

Cyclohexane

Concen: 0.036 ppbv

RT: 7.12 min Scan# 1348

Delta R.T. -0.01 min

Lab File: VL036278.D

Acq: 28 Jan 2021 19:17

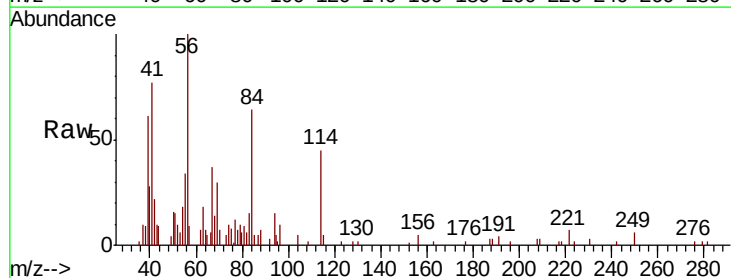
Tgt Ion: 84 Resp: 4490

Ion Ratio Lower Upper

84 100

56 0.0 119.4 179.0#

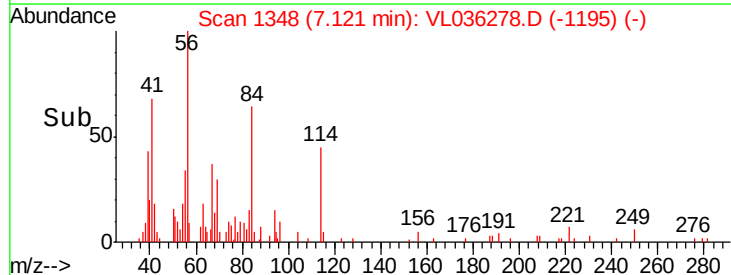
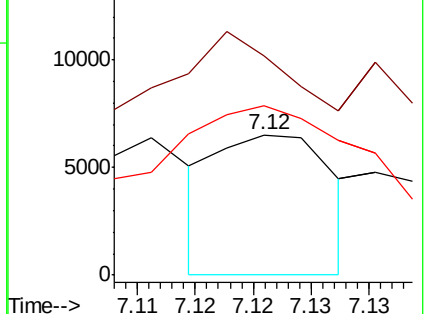
41 402.4 79.4 119.0#

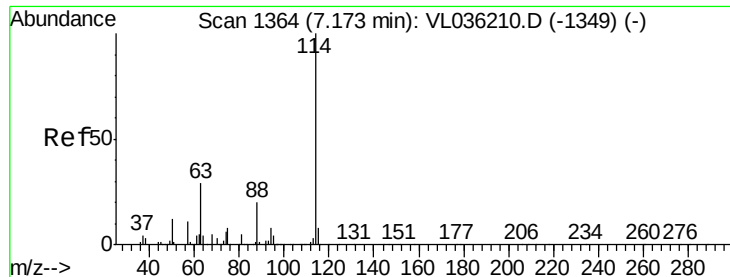


Abundance Ion 84.20 (83.90 to 84.90): VL0

Ion 56.10 (55.80 to 56.80): VL0

Ion 41.10 (40.80 to 41.80): VL0

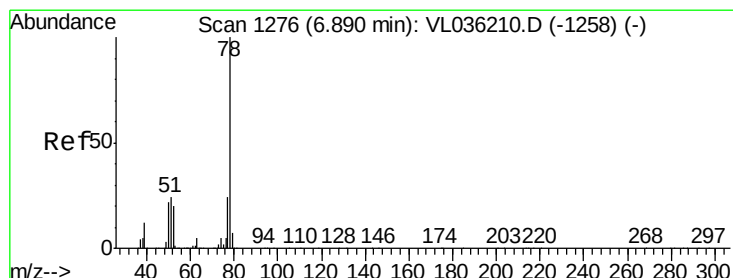
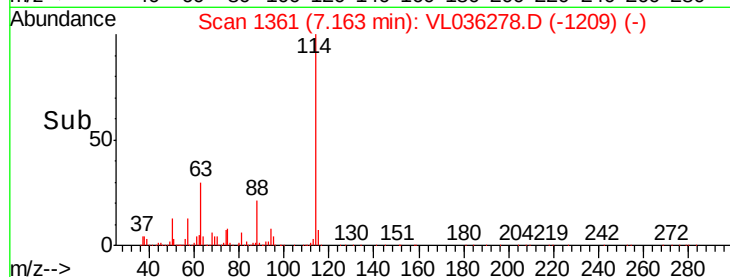
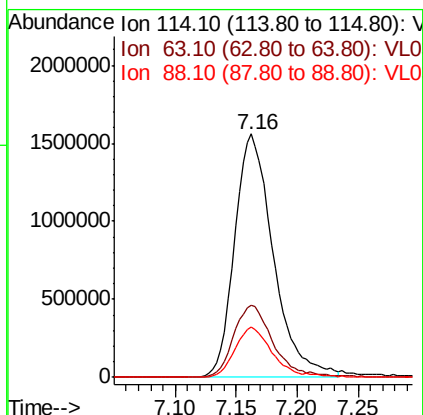
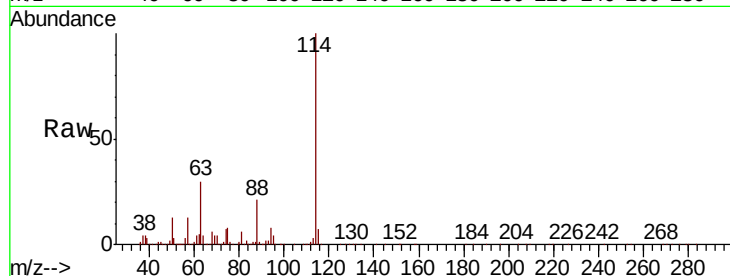




#33
 1,4-Difluorobenzene
 Concen: 10.000 ppbv
 RT: 7.16 min Scan# 1361
 Delta R.T. -0.01 min
 Lab File: VL036278.D
 Acq: 28 Jan 2021 19:17

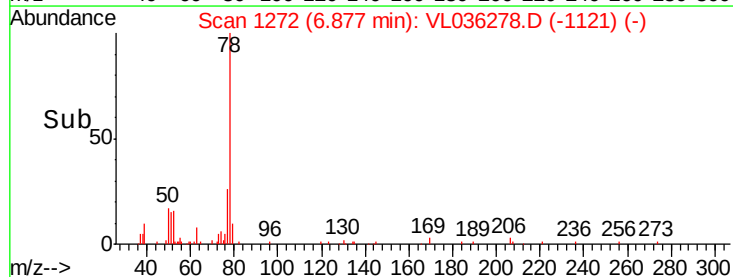
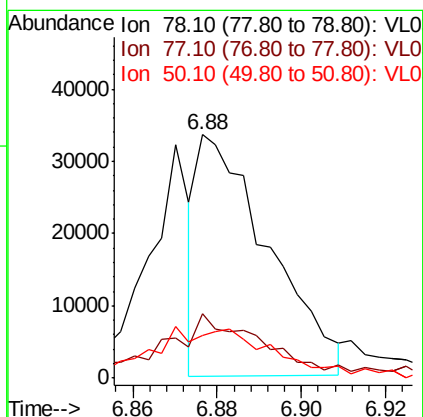
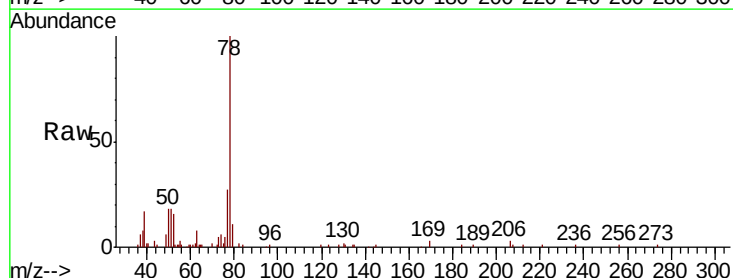
Instrument :
 MSVOA_L
 ClientSampleId :

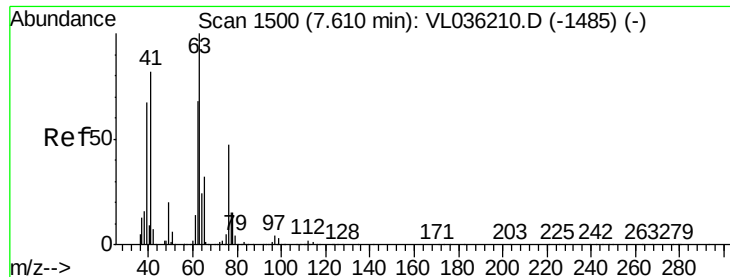
Tot Ion:114 Resp: 3430907
 Ion Ratio Lower Upper
 114 100
 63 30.7 24.7 37.1
 88 20.5 16.6 24.8



#36
 Benzene
 Concen: 0.124 ppbv
 RT: 6.88 min Scan# 1272
 Delta R.T. -0.01 min
 Lab File: VL036278.D
 Acq: 28 Jan 2021 19:17

Tgt Ion: 78 Resp: 38989
 Ion Ratio Lower Upper
 78 100
 77 25.1 19.4 29.0
 50 14.9 17.4 26.2#

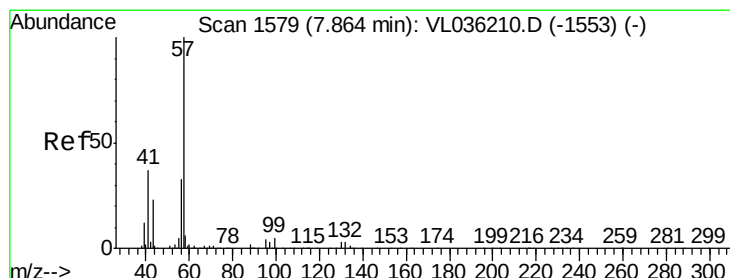
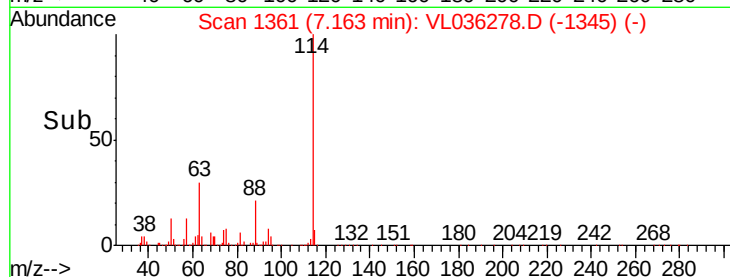
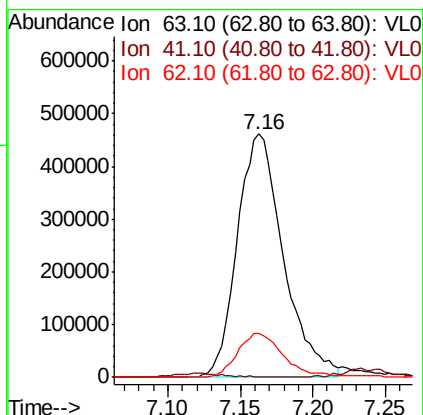
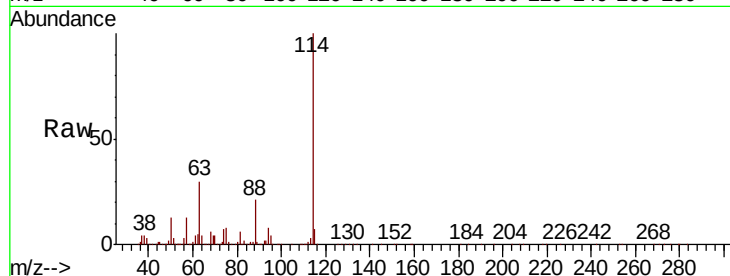




#39
 1,2-Dichloropropane
 Concen: 7.994 ppbv
 RT: 7.16 min Scan# 1361
 Delta R.T. -0.45 min
 Lab File: VL036278.D
 Acq: 28 Jan 2021 19:17

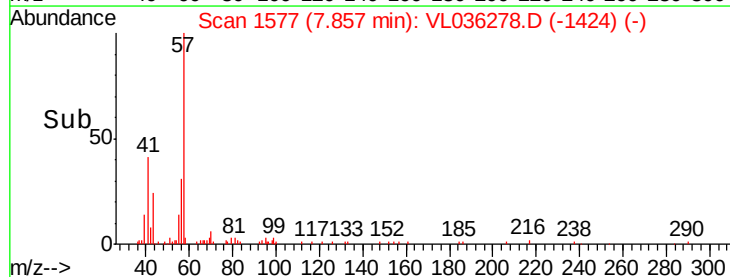
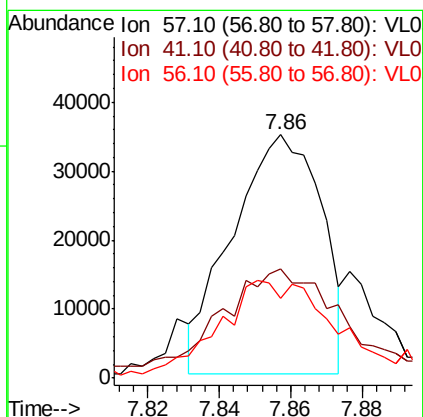
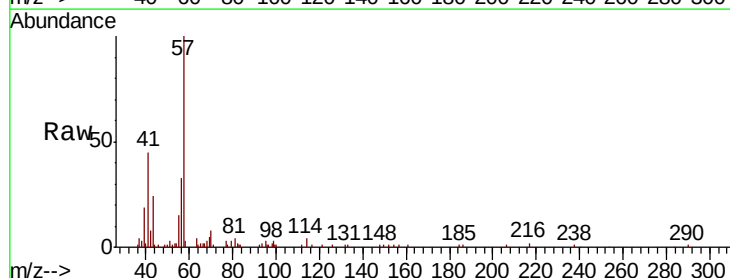
Instrument :
 MSVOA_L
 ClientSampleId :

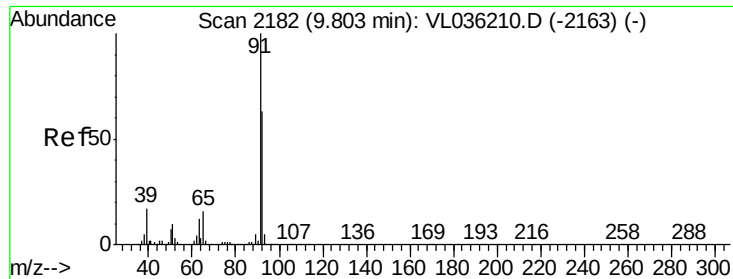
Tot Ion: 63 Resp: 1020303
 Ion Ratio Lower Upper
 63 100
 41 0.0 66.1 99.1#
 62 18.1 54.8 82.2#



#44
 2,2,4-Trimethylpentane
 Concen: 0.104 ppbv
 RT: 7.86 min Scan# 1577
 Delta R.T. -0.01 min
 Lab File: VL036278.D
 Acq: 28 Jan 2021 19:17

Tgt Ion: 57 Resp: 59823
 Ion Ratio Lower Upper
 57 100
 41 62.3 28.5 42.7#
 56 55.5 25.5 38.3#





#53

Toluene

Concen: 2.085 ppbv

RT: 9.79 min Scan# 2179

Delta R.T. -0.01 min

Lab File: VL036278.D

Acq: 28 Jan 2021 19:17

Instrument :

MSVOA_L

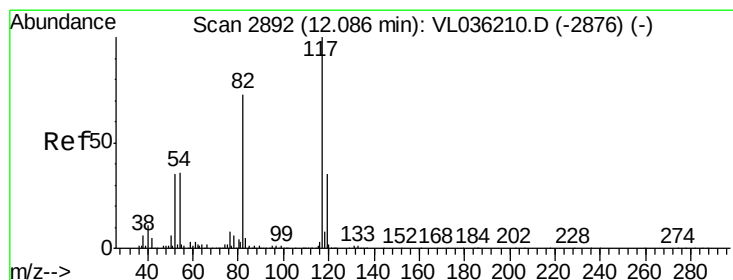
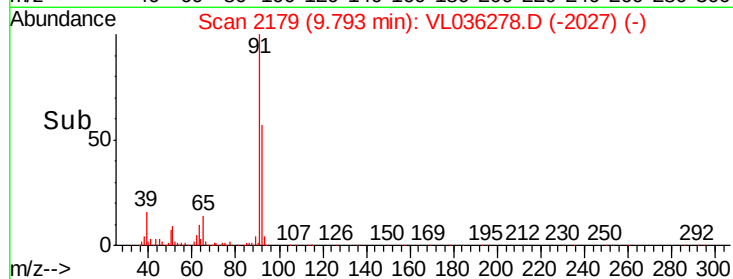
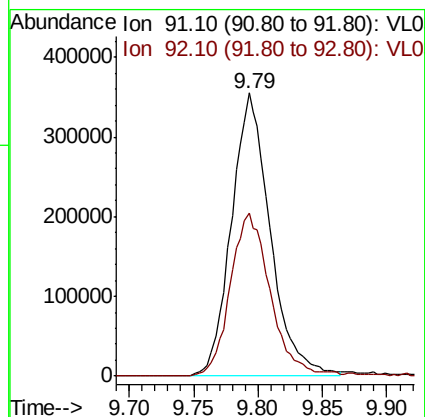
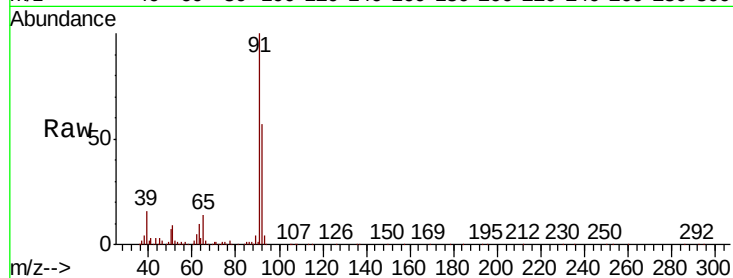
ClientSampleId :

Tot Ion: 91 Resp: 733362

Ion Ratio Lower Upper

91 100

92 60.8 48.5 72.7



#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.07 min Scan# 2888

Delta R.T. -0.01 min

Lab File: VL036278.D

Acq: 28 Jan 2021 19:17

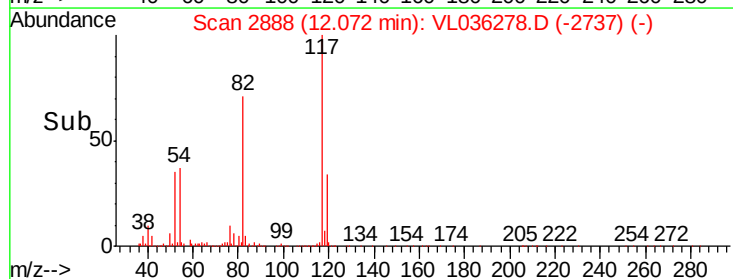
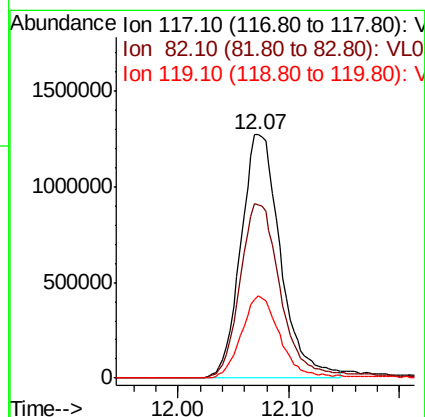
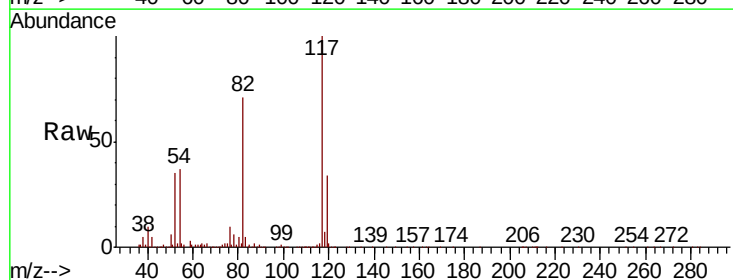
Tgt Ion: 117 Resp: 3175077

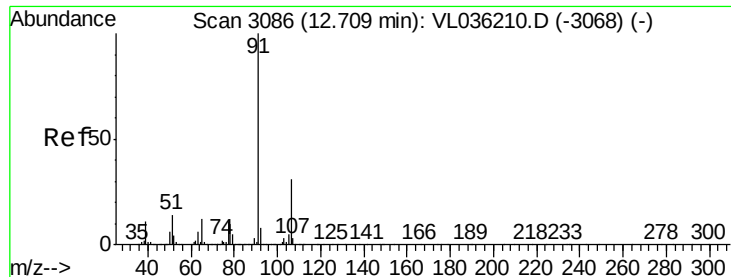
Ion Ratio Lower Upper

117 100

82 75.0 59.7 89.5

119 33.9 28.6 43.0





#58

Ethyl Benzene

Concen: 0.250 ppbv

RT: 12.70 min Scan# 3084

Delta R.T. -0.01 min

Lab File: VL036278.D

Acq: 28 Jan 2021 19:17

Instrument :

MSVOA_L

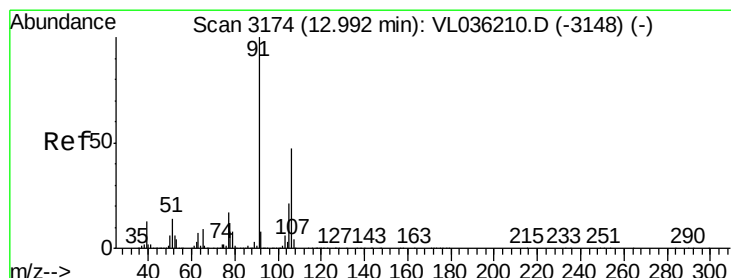
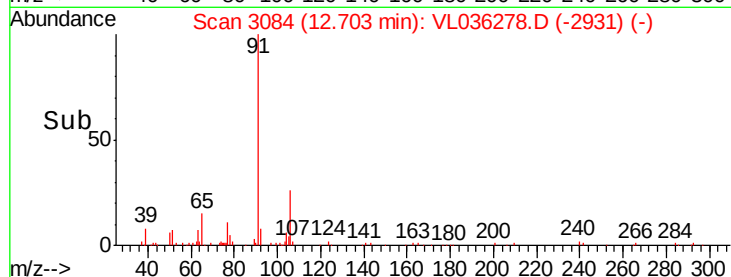
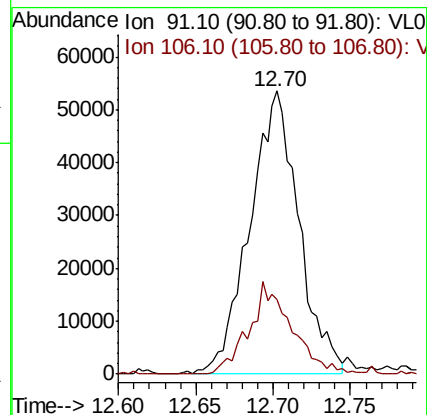
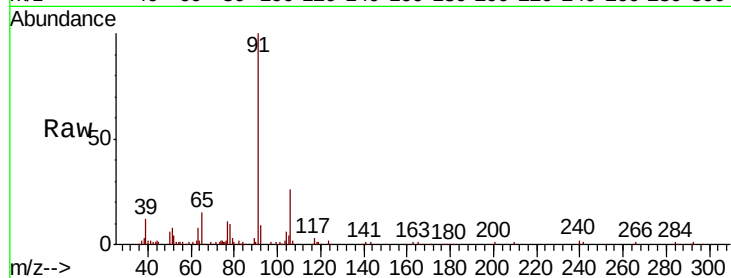
ClientSampleId :

Tot Ion: 91 Resp: 117937

Ion Ratio Lower Upper

91 100

106 26.0 24.8 37.2



#59

m/p-Xylene

Concen: 0.118 ppbv

RT: 12.98 min Scan# 3169

Delta R.T. -0.02 min

Lab File: VL036278.D

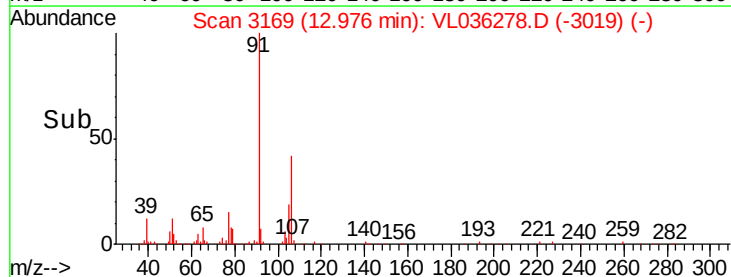
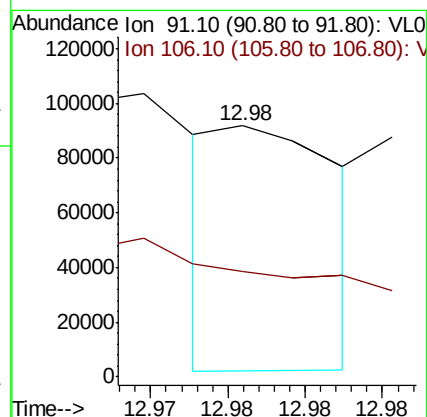
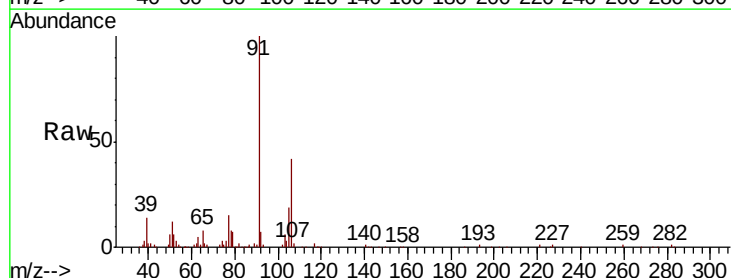
Acq: 28 Jan 2021 19:17

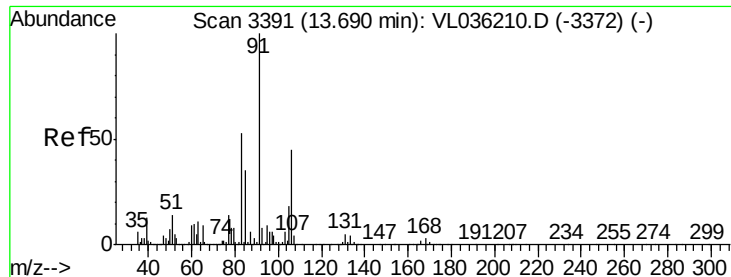
Tgt Ion: 91 Resp: 47852

Ion Ratio Lower Upper

91 100

106 0.0 34.6 51.8#

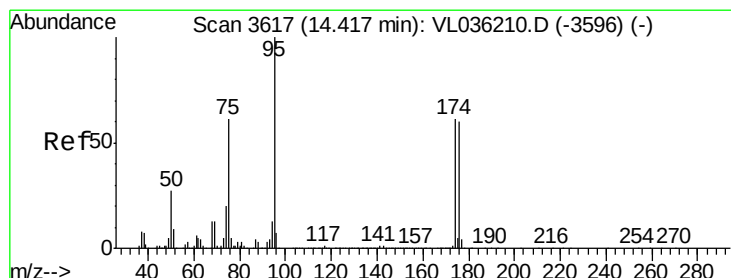
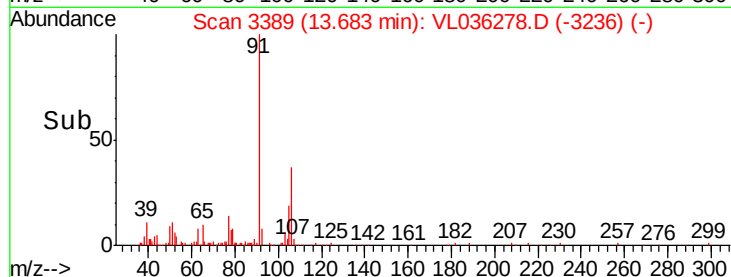
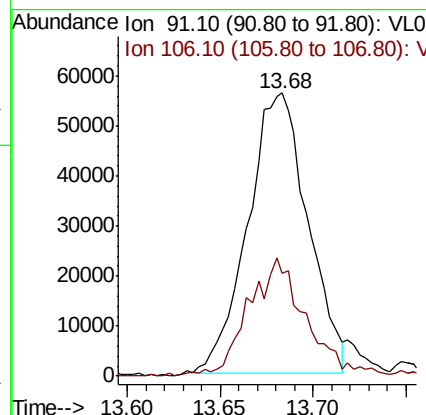
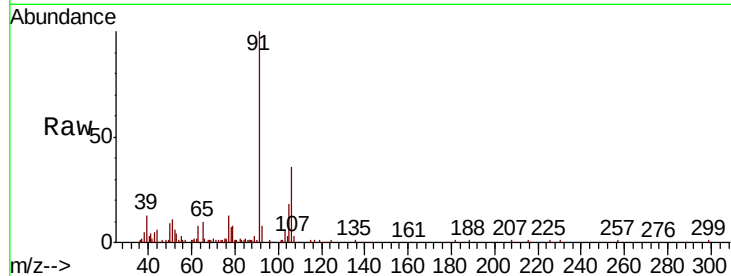




#60
o-Xylene
Concen: 0.326 ppbv
RT: 13.68 min Scan# 3389
Delta R.T. -0.01 min
Lab File: VL036278.D
Acq: 28 Jan 2021 19:17

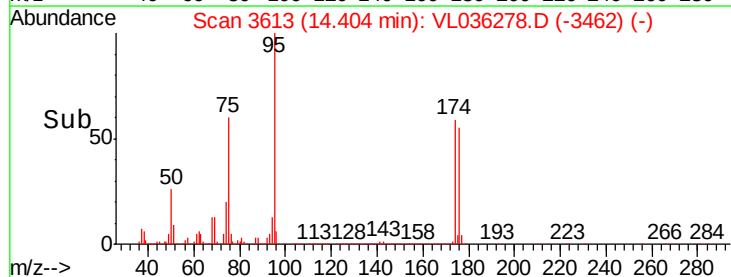
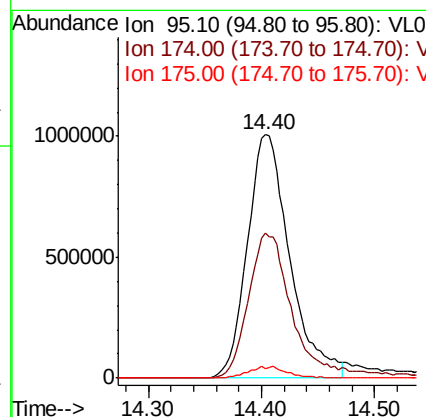
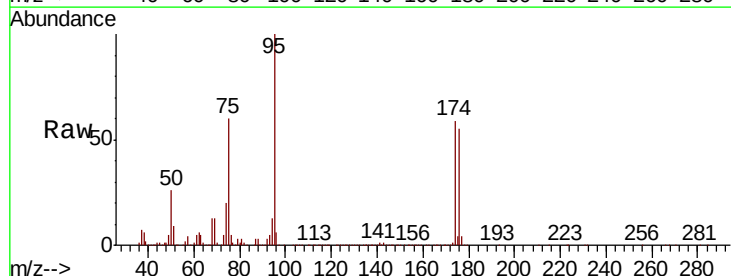
Instrument :
MSVOA_L
ClientSampled :

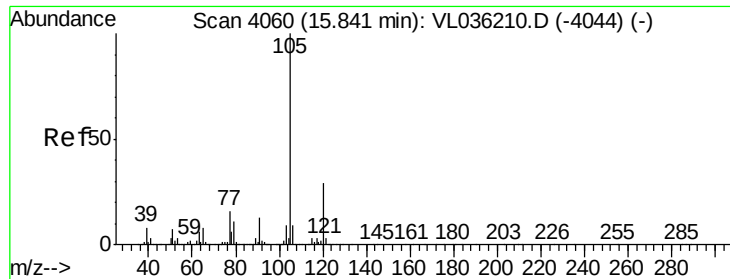
Tot Ion: 91 Resp: 127058
Ion Ratio Lower Upper
91 100
106 41.1 21.9 65.8



#68
1-Bromo-4-Fluorobenzene
Concen: 10.014 ppbv
RT: 14.40 min Scan# 3613
Delta R.T. -0.01 min
Lab File: VL036278.D
Acq: 28 Jan 2021 19:17

Tgt Ion: 95 Resp: 2631883
Ion Ratio Lower Upper
95 100
174 64.0 49.4 74.0
175 4.6 3.8 5.8





#72

4-Ethyltoluene

Concen: 0.043 ppbv

RT: 15.82 min Scan# 4055

Delta R.T. -0.02 min

Lab File: VL036278.D

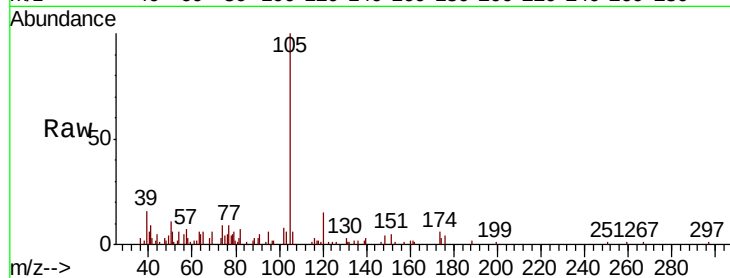
Acq: 28 Jan 2021 19:17

Instrument :

MSVOA_L

ClientSampleId :

Tot Ion:	105	Resp:	18758
Ion	Ratio	Lower	Upper
105	100		
120	43.8	23.7	35.5#
91	0.0	11.9	17.9#
77	17.6	12.6	18.8



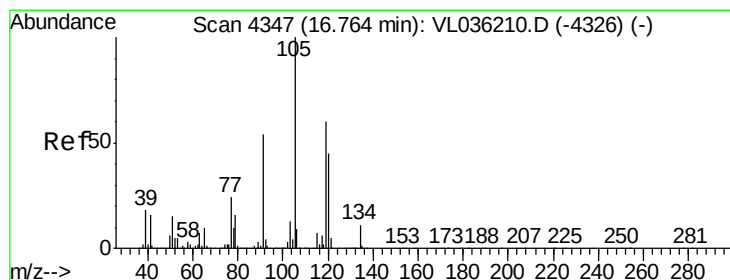
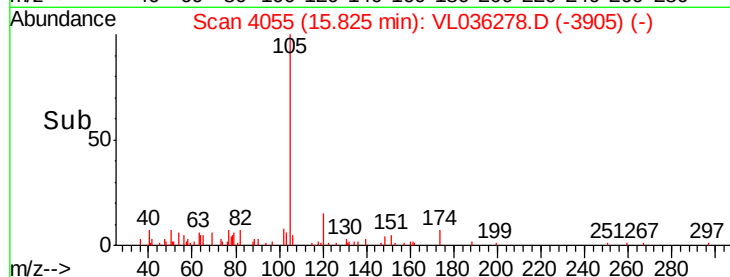
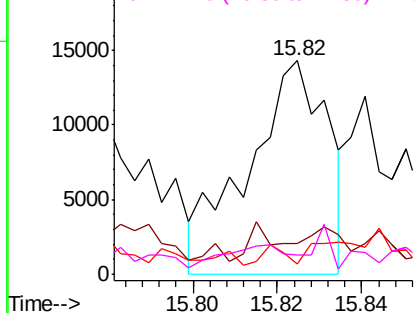
Abundance

Ion 105.10 (104.80 to 105.80): V

Ion 120.20 (119.90 to 120.90): V

Ion 91.10 (90.80 to 91.80): VL0

Ion 77.10 (76.80 to 77.80): VL0



#74

1,2,4-Trimethylbenzene

Concen: 0.069 ppbv

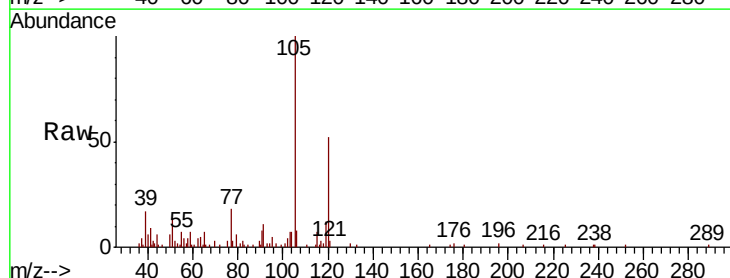
RT: 16.75 min Scan# 4344

Delta R.T. -0.01 min

Lab File: VL036278.D

Acq: 28 Jan 2021 19:17

Tgt Ion:	105	Resp:	29844
Ion	Ratio	Lower	Upper
105	100		
120	50.2	36.2	54.2
91	17.3	43.3	64.9#
77	16.9	19.1	28.7#



Abundance

Ion 105.10 (104.80 to 105.80): V

Ion 120.20 (119.90 to 120.90): V

Ion 91.10 (90.80 to 91.80): VL0

Ion 77.10 (76.80 to 77.80): VL0

