

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL041321\
 Data File : VL036811.D
 Acq On : 13 Apr 2021 20:14
 Operator : SY/AP
 Sample : M2018-03
 Misc : 400mL/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :

Quant Time: Apr 14 04:42:02 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	1444908	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.17	114	3594030	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.09	117	2769015	10.00	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.42	95	1798192	8.15	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	81.50%

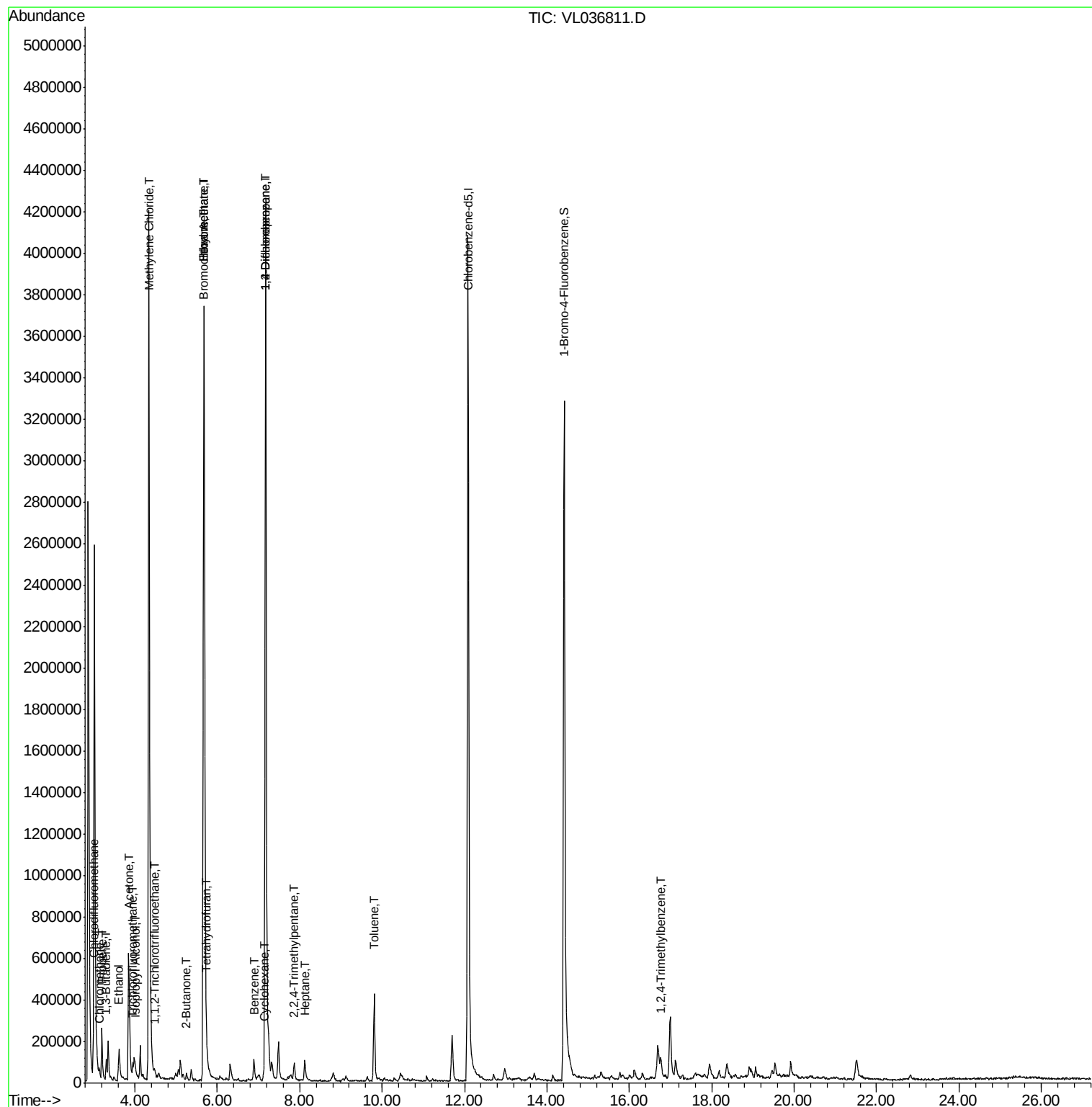
Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
3) Chlorodifluoromethane	2.98	51	63205	0.234	ppbv #	90
4) Chloromethane	3.14	50	42945	0.450	ppbv	99
9) Propene	3.20	41	66567	0.773	ppbv	96
10) Heptane	8.12	43	17681	0.081	ppbv #	28
11) Trichlorofluoromethane	3.94	101	40439	0.168	ppbv	88
12) 1,1,2-Trichlorotrifluoroet	4.48	101	4831	0.031	ppbv #	11
13) Ethanol	3.61	45	229460	22.389	ppbv	94
15) Acetone	3.85	43	826452	5.811	ppbv	98
16) 1,3-Butadiene	3.30	39	21273	0.215	ppbv #	73
19) Isopropyl Alcohol	4.01	45	34541	0.442	ppbv #	89
20) Methylene Chloride	4.34	84	1703924	25.590	ppbv	92
25) Ethyl Acetate	5.68	43	855912	2.532	ppbv #	78
26) Hexane	5.68	57	1187648	7.569	ppbv #	46
30) Cyclohexane	7.12	84	5735	0.045	ppbv #	1
34) 2-Butanone	5.26	43	16078	0.092	ppbv #	1
36) Benzene	6.89	78	58006	0.175	ppbv	99
39) 1,2-Dichloropropane	7.17	63	948961	7.058	ppbv #	23
41) Tetrahydrofuran	5.74	42	4965	0.061	ppbv #	45
44) 2,2,4-Trimethylpentane	7.87	57	53321	0.091	ppbv #	63
53) Toluene	9.81	91	330152	0.935	ppbv	98
74) 1,2,4-Trimethylbenzene	16.76	105	46925	0.126	ppbv #	64

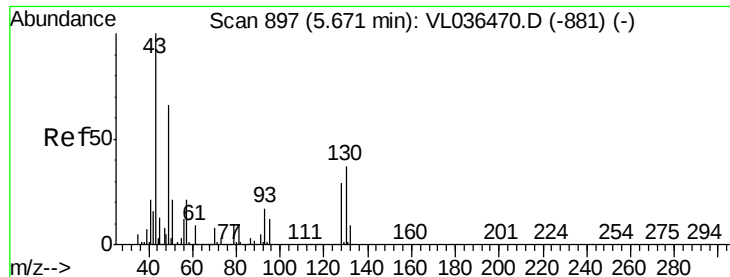
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.66 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

Acq: 13 Apr 2021 20:14

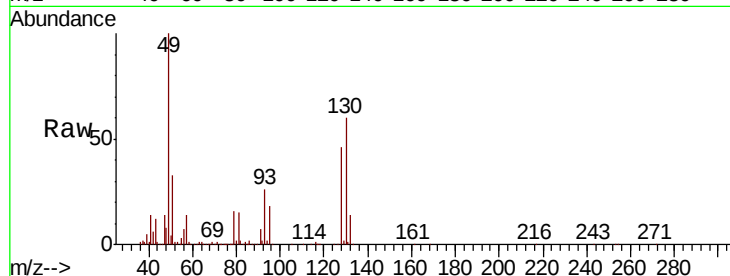
Tot Ion: 49 Resp: 1444908

Ion Ratio Lower Upper

49 100

128 47.6 23.5 70.6

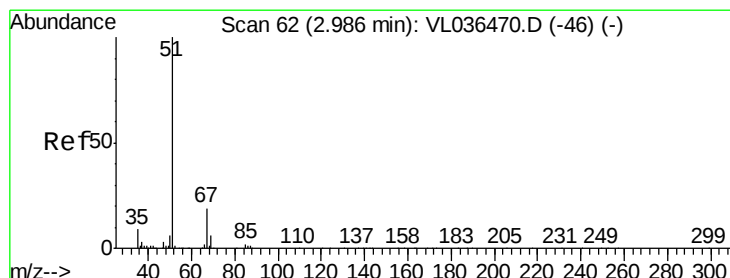
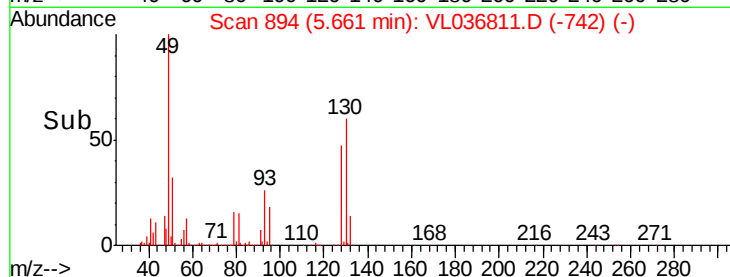
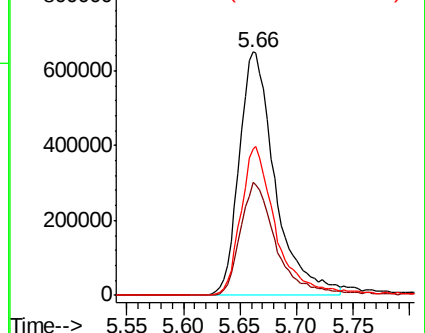
130 61.3 29.1 87.4



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



#3

Chlorodifluoromethane

Concen: 0.234 ppbv

RT: 2.98 min Scan# 61

Delta R.T. -0.00 min

Lab File: VL036811.D

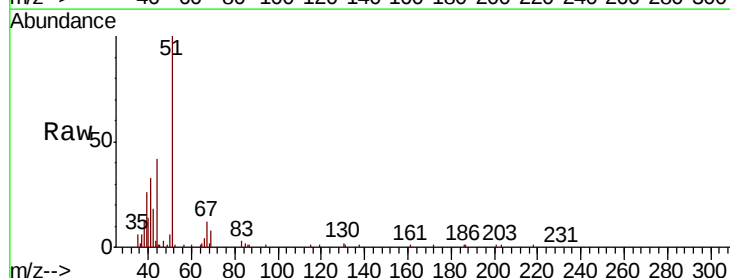
Acq: 13 Apr 2021 20:14

Tgt Ion: 51 Resp: 63205

Ion Ratio Lower Upper

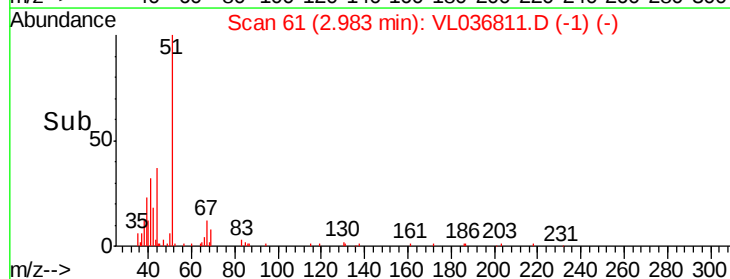
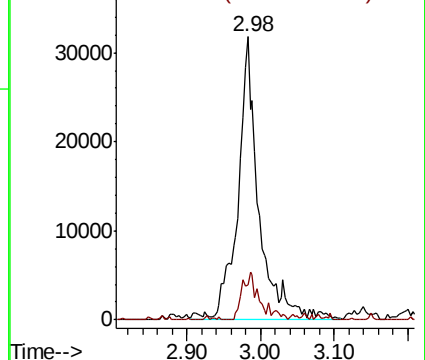
51 100

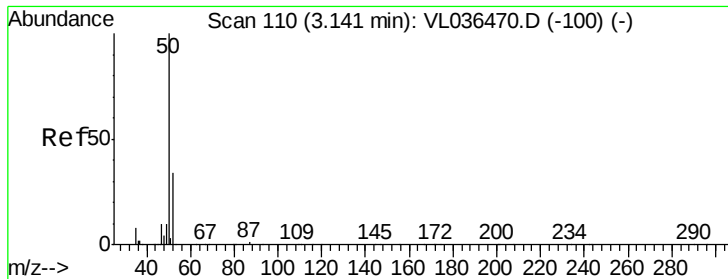
67 13.9 14.7 22.1#



Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0





#4

Chloromethane

Concen: 0.450 ppbv

RT: 3.14 Instrument:

Delta R.T. MSVOA_L

Lab File:

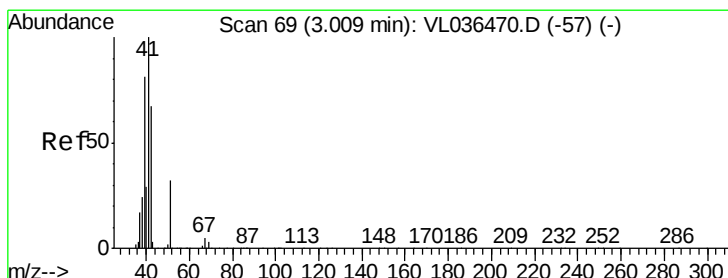
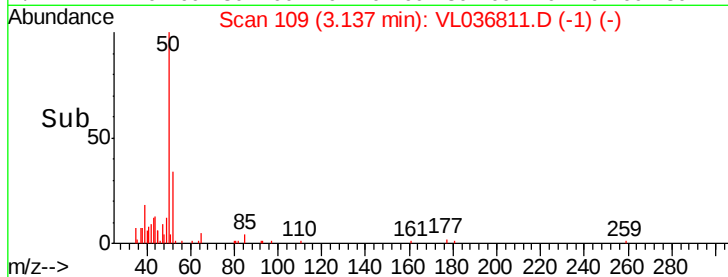
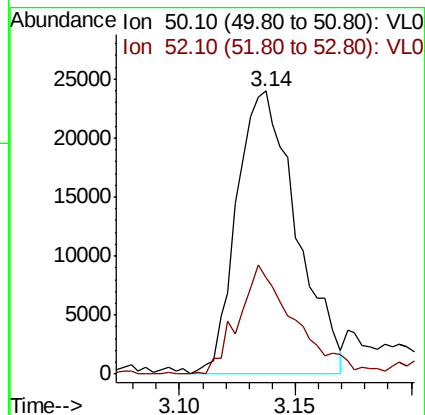
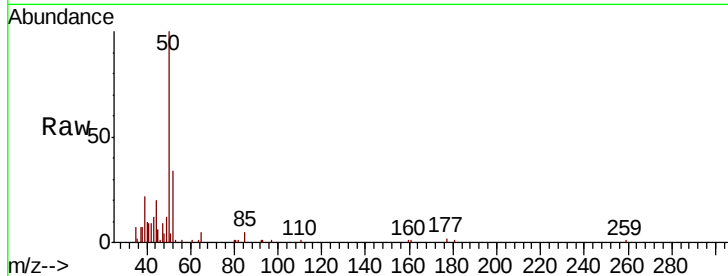
Acq: 13 Apr 2021 20:14

Tot Ion: 50 Resp: 42945

Ion Ratio Lower Upper

50 100

52 34.2 27.0 40.6



#9

Propene

Concen: 0.773 ppbv

RT: 3.20 min Scan# 128

Delta R.T. 0.19 min

Lab File: VL036811.D

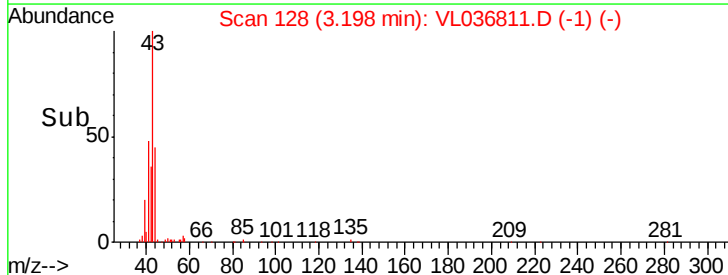
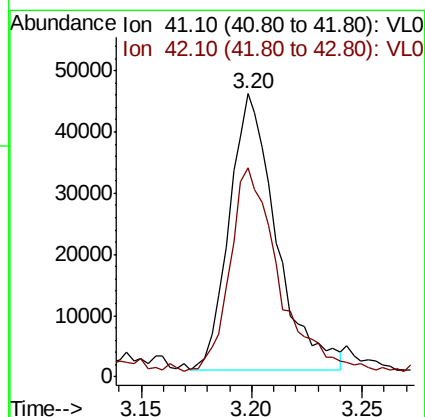
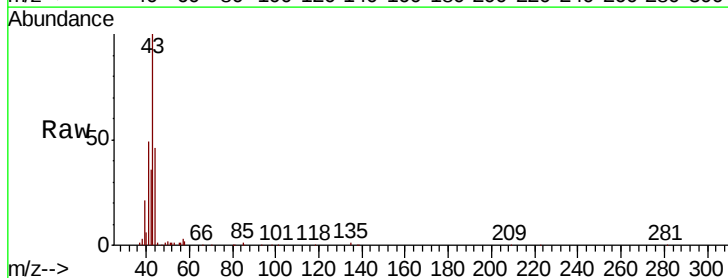
Acq: 13 Apr 2021 20:14

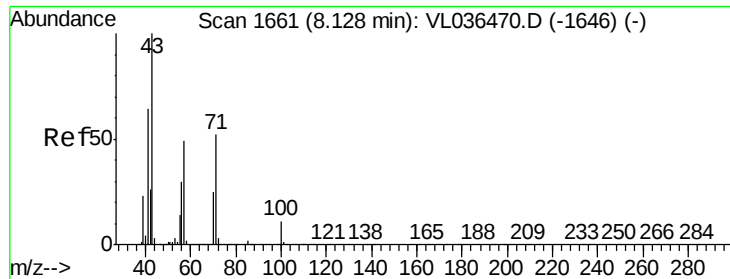
Tgt Ion: 41 Resp: 66567

Ion Ratio Lower Upper

41 100

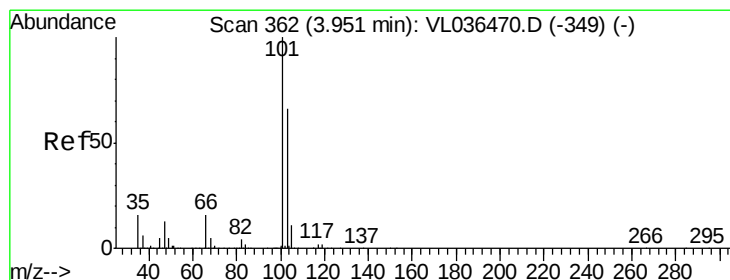
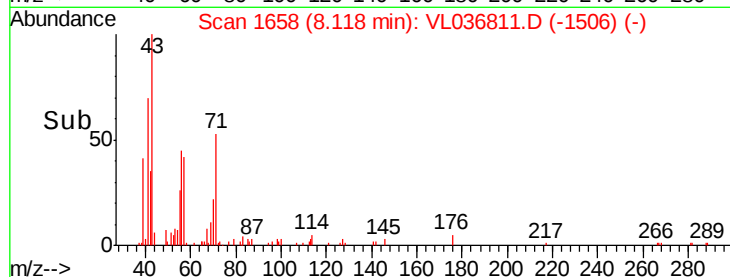
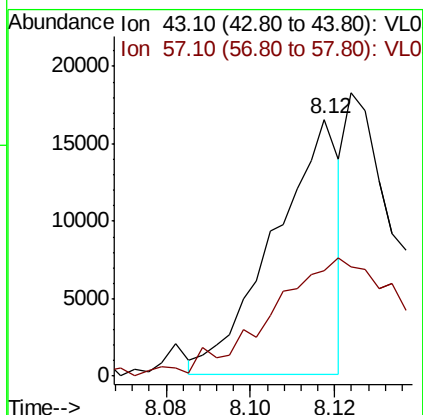
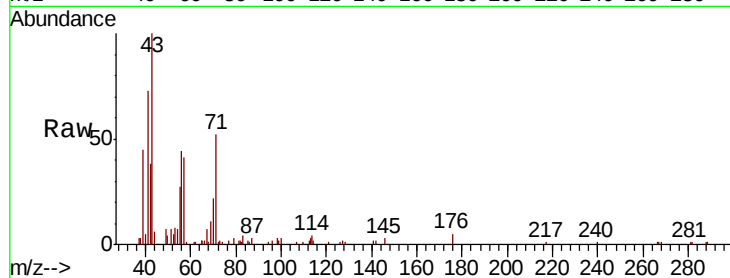
42 74.8 57.0 85.4





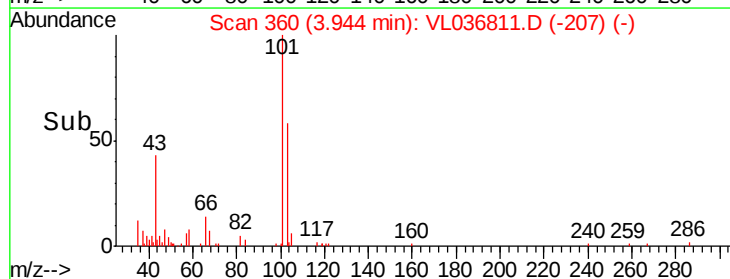
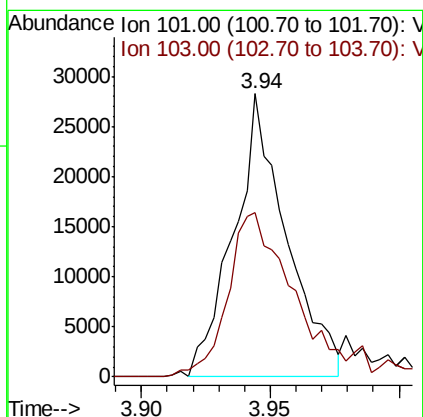
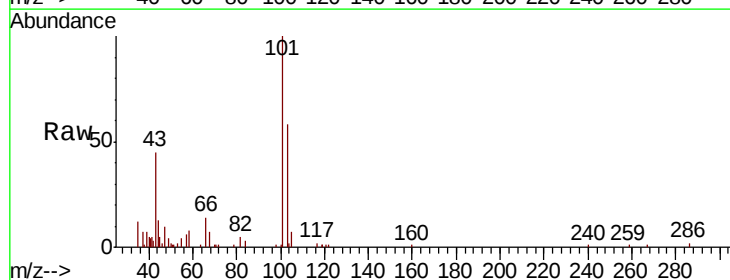
#10
 Heptane
 Concen: 0.081 ppbv
 RT: 8.12
 Instrument: MSVOA_L
 Delta R.T.:
 Lab File: ClientSampleId:
 Acq: 13 Apr 2021 20:14

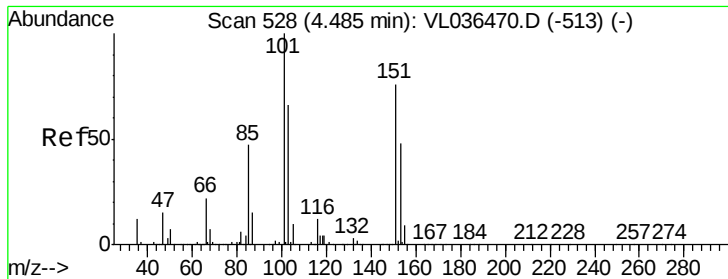
Tot Ion: 43 Resp: 17681
 Ion Ratio Lower Upper
 43 100
 57 0.0 39.0 58.6#



#11
 Trichlorofluoromethane
 Concen: 0.168 ppbv
 RT: 3.94 min Scan# 360
 Delta R.T. -0.01 min
 Lab File: VL036811.D
 Acq: 13 Apr 2021 20:14

Tgt Ion:101 Resp: 40439
 Ion Ratio Lower Upper
 101 100
 103 55.8 52.5 78.7





#12

1,1,2-Trichlorotrifluoroethane

Concen: 0.031 ppbv

RT: 4.48 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

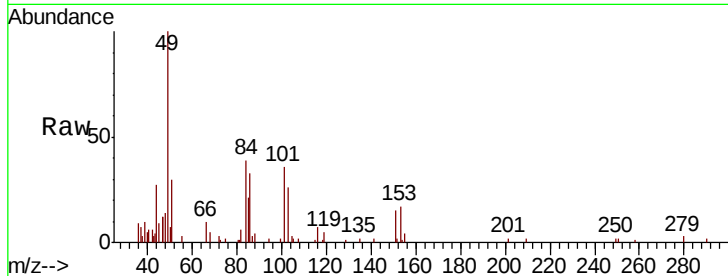
Acq: 13 Apr 2021 20:14

Tot Ion:101 Resp: 4831

Ion Ratio Lower Upper

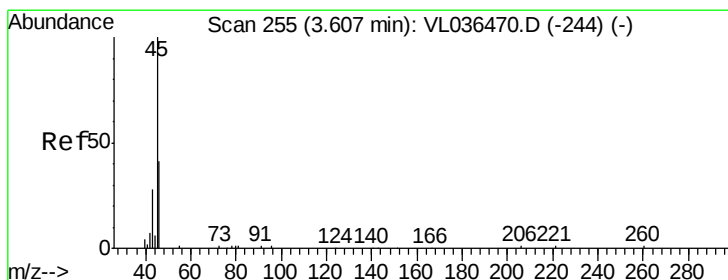
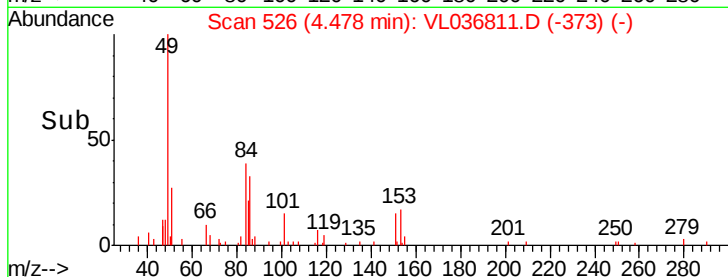
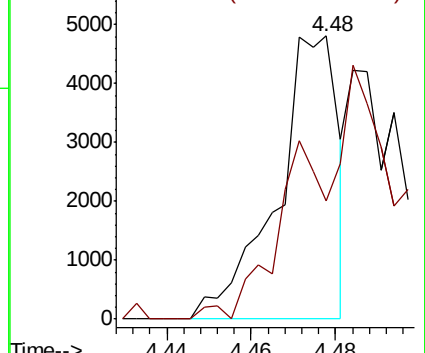
101 100

151 0.0 60.9 91.3#



Abundance Ion 101.00 (100.70 to 101.70): V

Ion 151.00 (150.70 to 151.70): V



#13

Ethanol

Concen: 22.389 ppbv

RT: 3.61 min Scan# 256

Delta R.T. 0.00 min

Lab File: VL036811.D

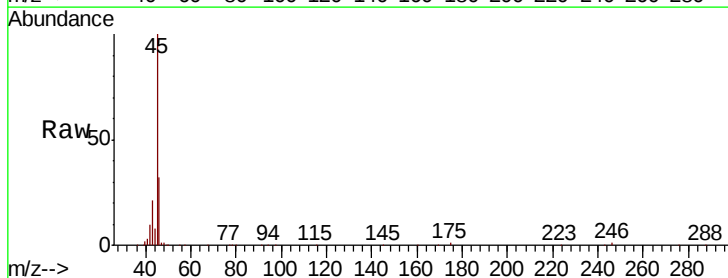
Acq: 13 Apr 2021 20:14

Tgt Ion: 45 Resp: 229460

Ion Ratio Lower Upper

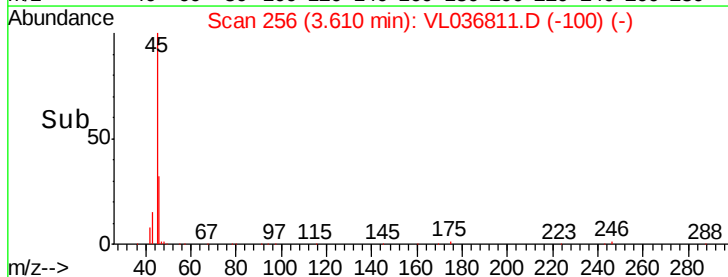
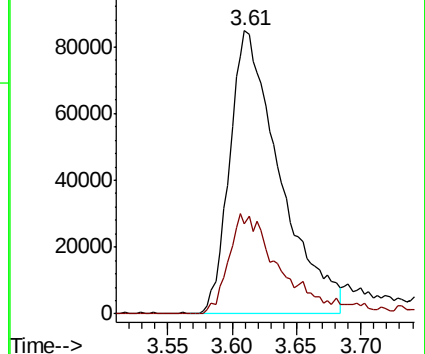
45 100

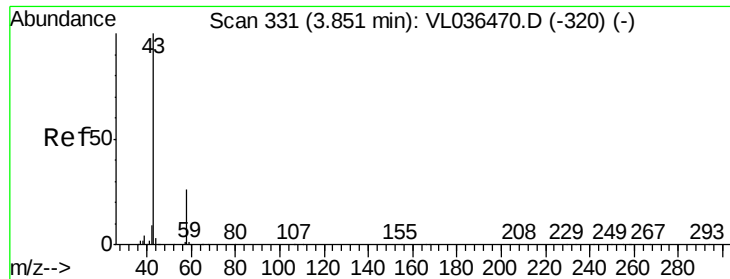
46 37.4 16.6 66.2



Abundance Ion 45.10 (44.80 to 45.80): VL0

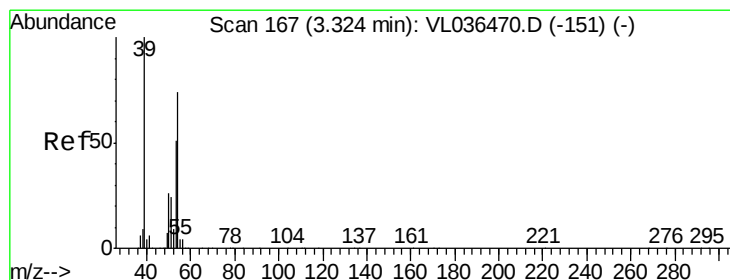
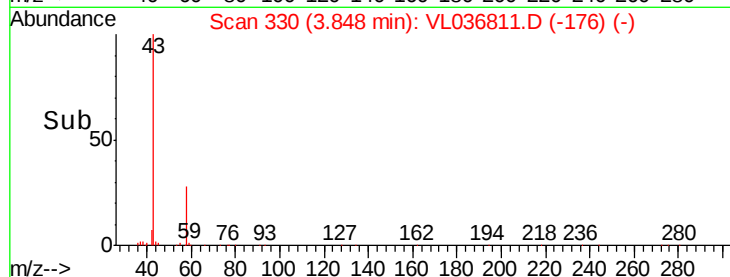
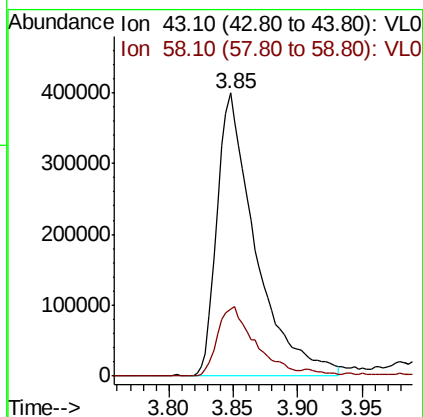
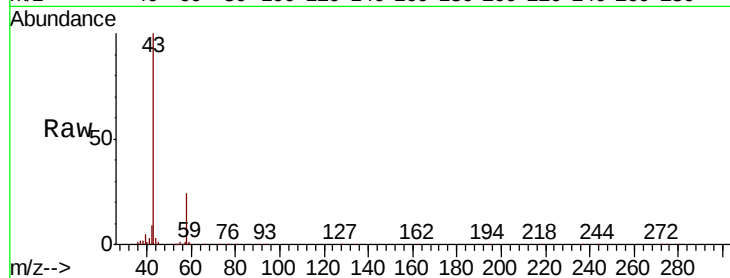
Ion 46.10 (45.80 to 46.80): VL0





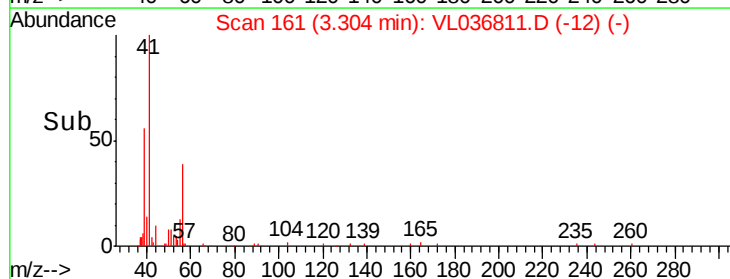
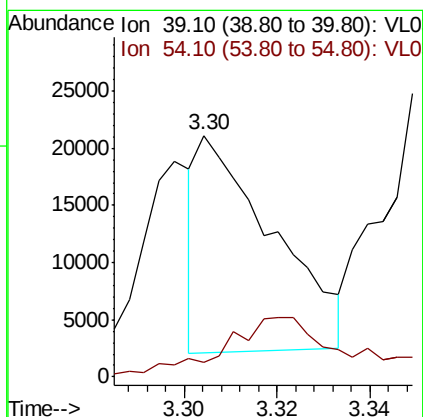
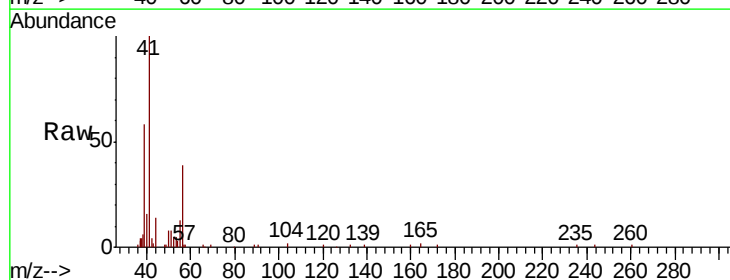
#15
Acetone
Concen: 5.811 ppbv
RT: 3.85
Delta R.T. MSVOA_L
Lab File: ClientSampleId :
Acq: 13 Apr 2021 20:14

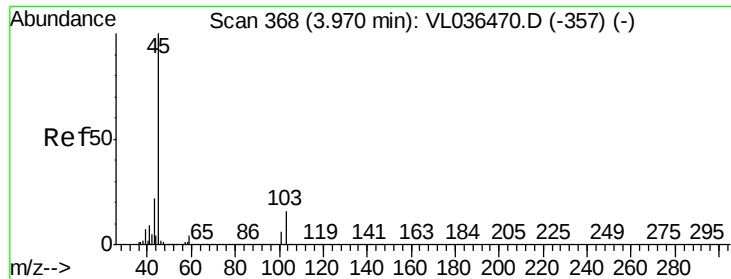
Tot Ion: 43 Resp: 826452
Ion Ratio Lower Upper
43 100
58 25.6 21.2 31.8



#16
1,3-Butadiene
Concen: 0.215 ppbv
RT: 3.30 min Scan# 161
Delta R.T. -0.02 min
Lab File: VL036811.D
Acq: 13 Apr 2021 20:14

Tgt Ion: 39 Resp: 21273
Ion Ratio Lower Upper
39 100
54 51.1 58.8 88.2#





#19

Isopropyl Alcohol

Concen: 0.442 ppbv

RT: 4.01

Delta R.T. MSVOA_L

Lab File: ClientSampleId :

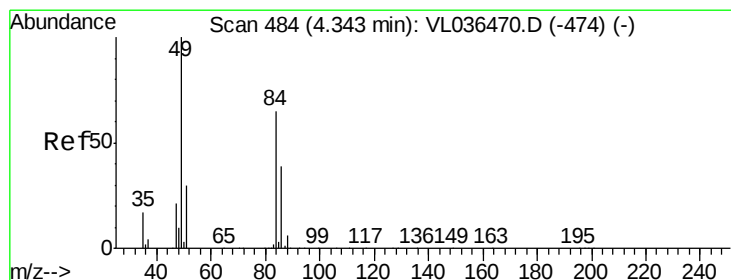
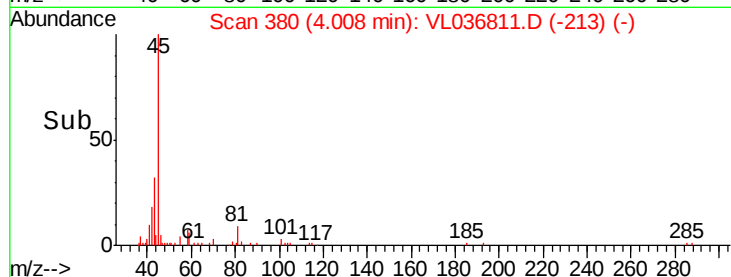
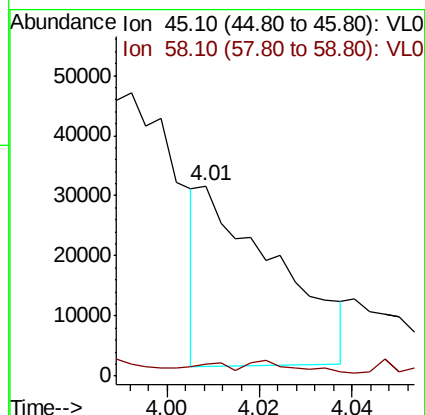
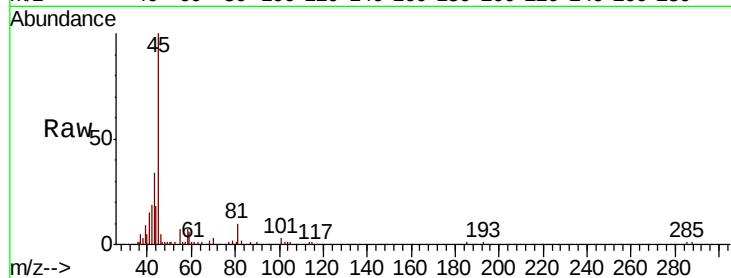
Acq: 13 Apr 2021 20:14

Tot Ion: 45 Resp: 34541

Ion Ratio Lower Upper

45 100

58 0.0 2.9 4.3#



#20

Methylene Chloride

Concen: 25.590 ppbv

RT: 4.34 min Scan# 483

Delta R.T. -0.00 min

Lab File: VL036811.D

Acq: 13 Apr 2021 20:14

Tgt Ion: 84 Resp: 1703924

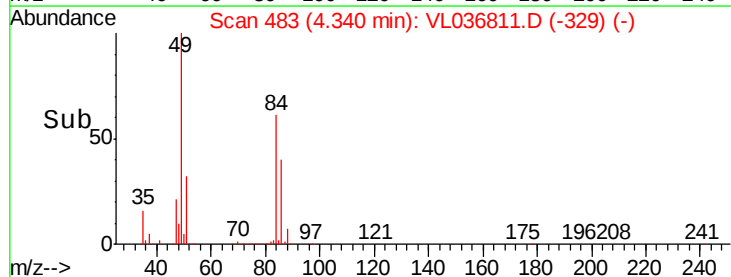
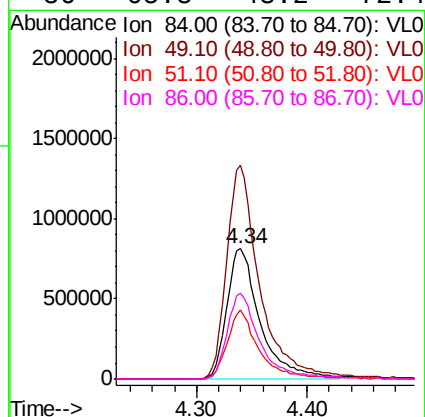
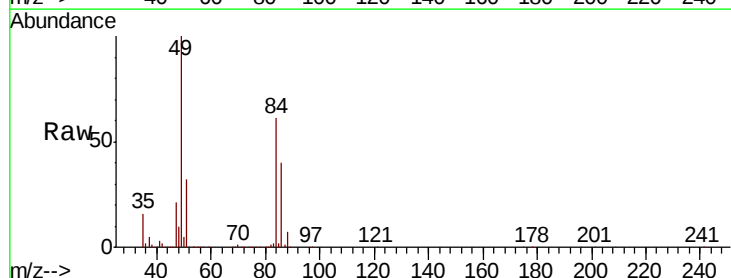
Ion Ratio Lower Upper

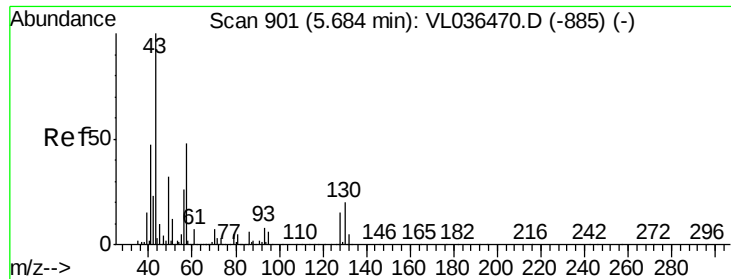
84 100

49 163.6 122.9 184.3

51 52.7 36.9 55.3

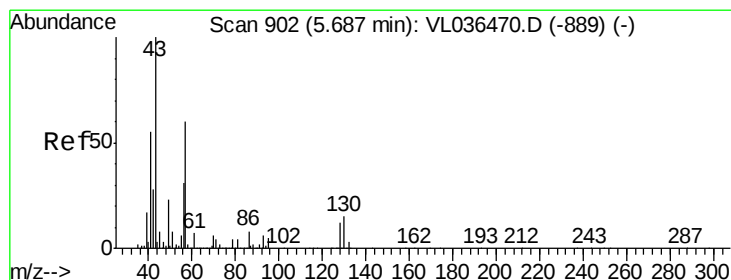
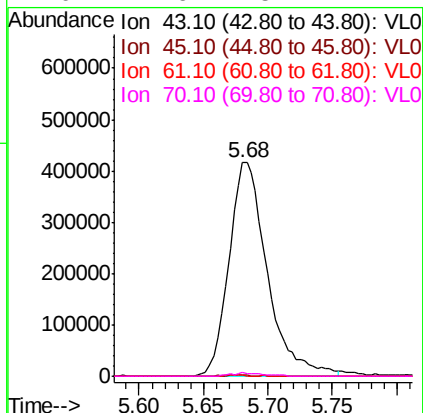
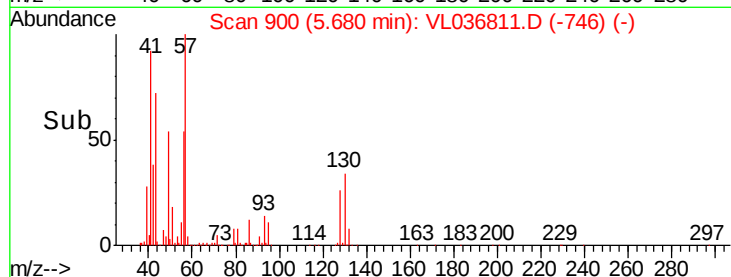
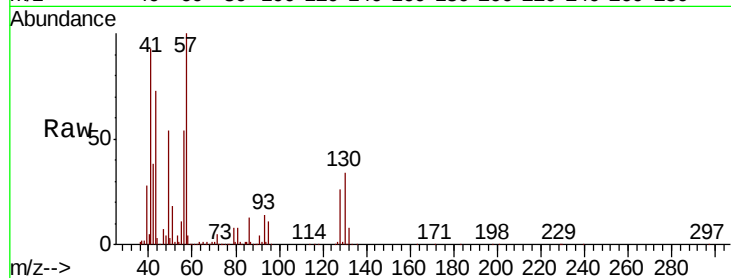
86 65.8 48.2 72.4





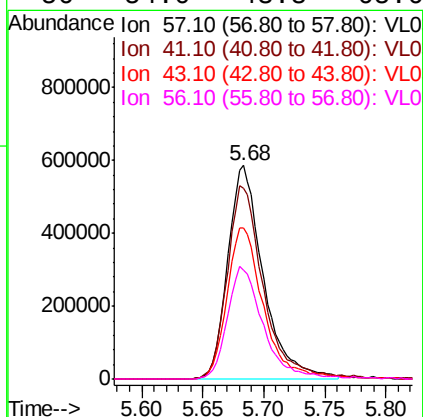
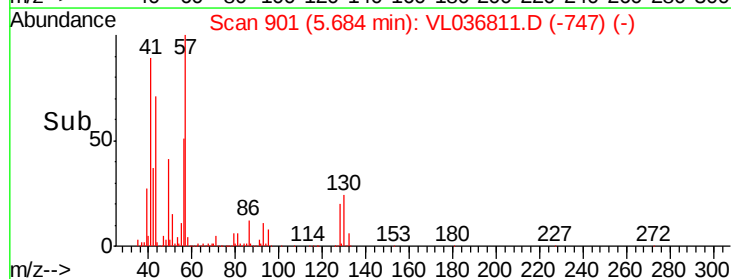
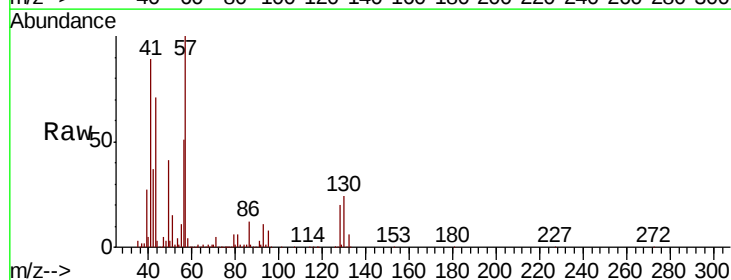
#25
Ethyl Acetate
Concen: 2.532 ppbv
RT: 5.68 min
Instrument: MSVOA_1
Delta R.T.:
Lab File: ClientSampleId:
Acq: 13 Apr 2021 20:14

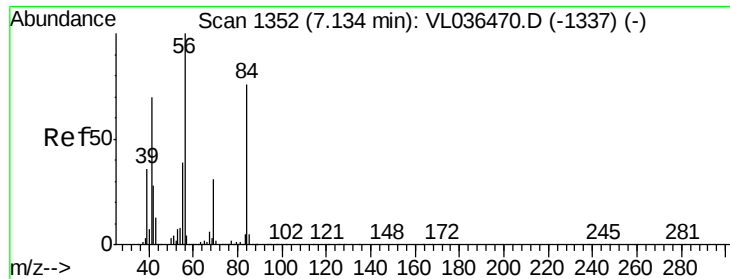
Tot Ion:	43	Resp:	855912
Ion	Ratio	Lower	Upper
43	100		
45	0.7	7.9	11.9#
61	0.4	7.4	11.2#
70	1.6	5.1	7.7#



#26
Hexane
Concen: 7.569 ppbv
RT: 5.68 min Scan# 901
Delta R.T.: -0.00 min
Lab File: VL036811.D
Acq: 13 Apr 2021 20:14

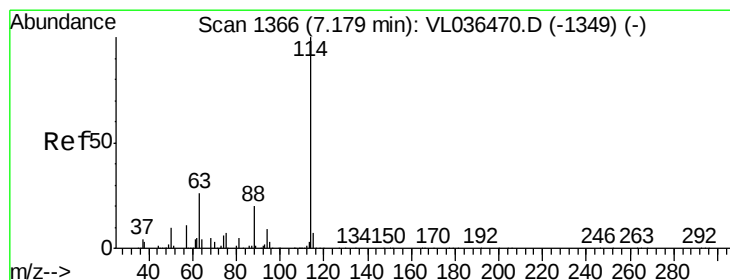
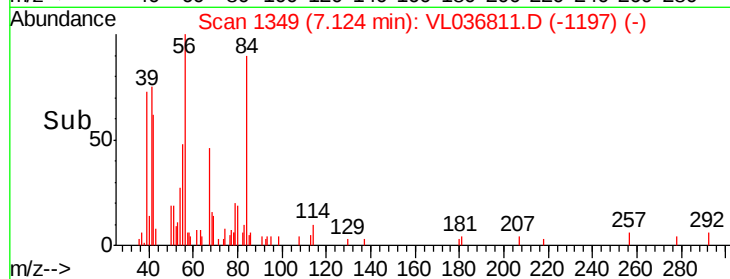
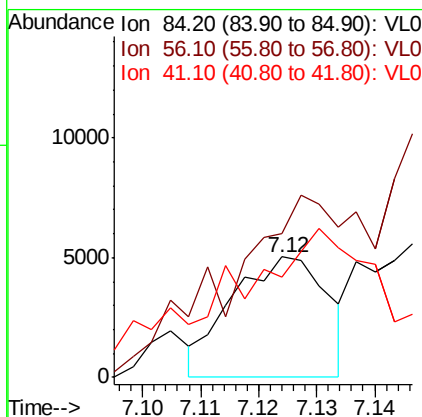
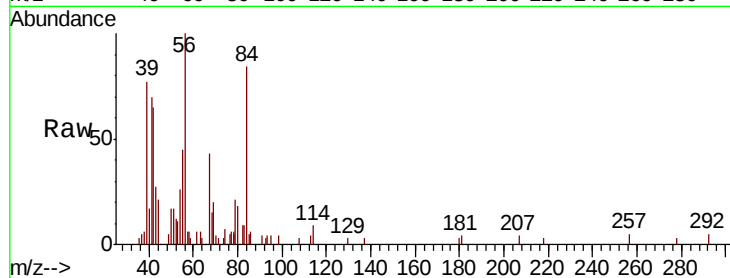
Tgt Ion:	57	Resp:	1187648
Ion	Ratio	Lower	Upper
57	100		
41	93.7	77.2	115.8
43	73.6	173.8	260.6#
56	54.0	43.8	65.6





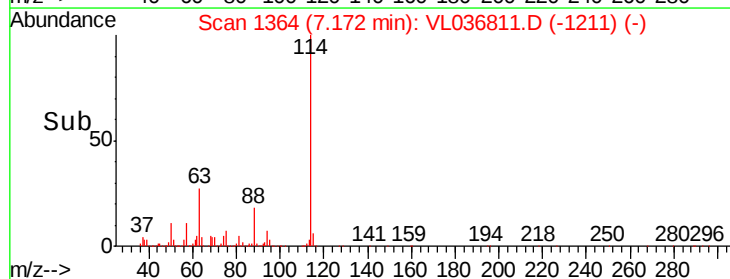
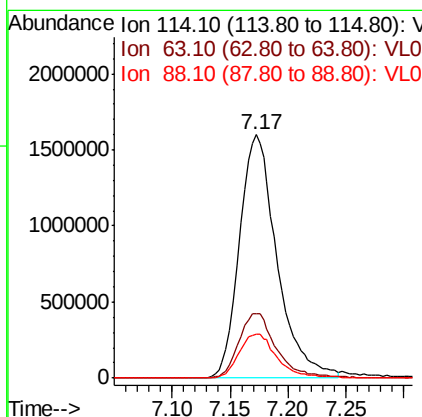
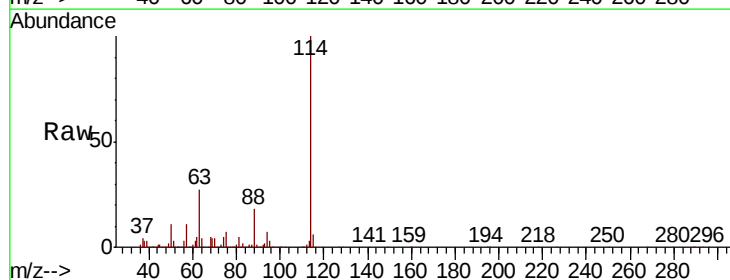
#30
Cvclohexane
Concen: 0.045 ppbv
RT: 7.12 min
Instrument: MSVOA_1
Delta R.T.:
Lab File: ClientSampleId:
Acq: 13 Apr 2021 20:14

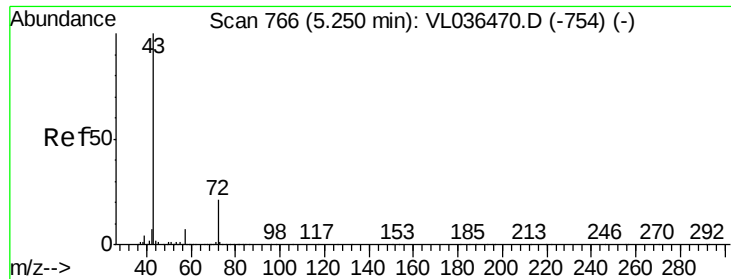
Tot Ion	84	Resp	5735
Ion	Ratio	Lower	Upper
84	100		
56	0.0	114.6	171.8#
41	252.5	75.3	112.9#



#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 7.17 min Scan# 1364
Delta R.T. -0.01 min
Lab File: VL036811.D
Acq: 13 Apr 2021 20:14

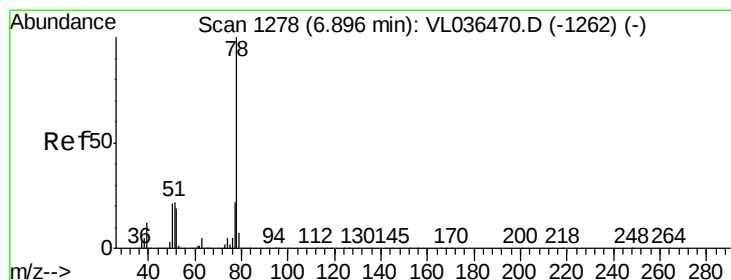
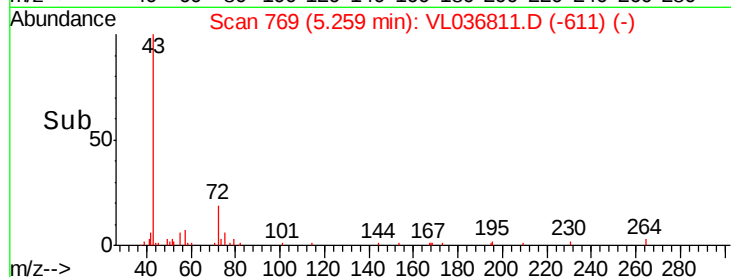
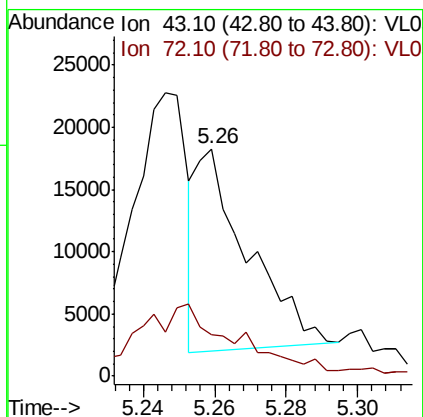
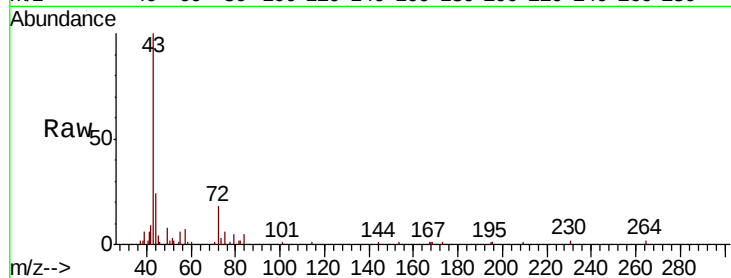
Tgt Ion	114	Resp	3594030
Ion	Ratio	Lower	Upper
114	100		
63	26.9	22.4	33.6
88	18.7	15.4	23.0





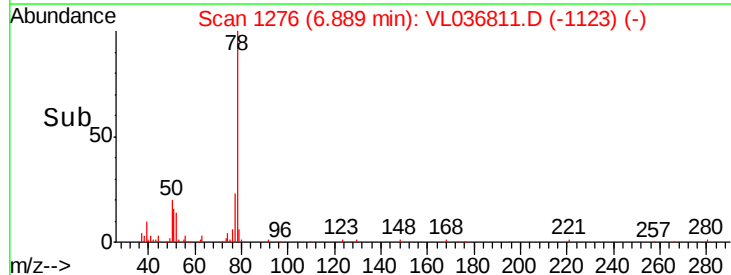
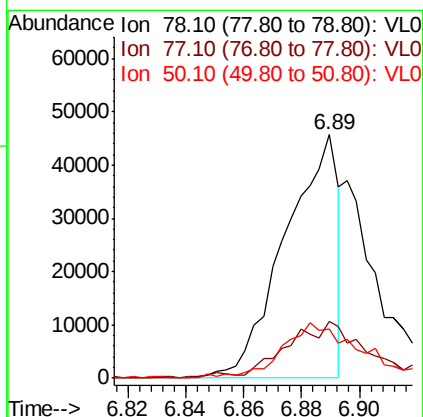
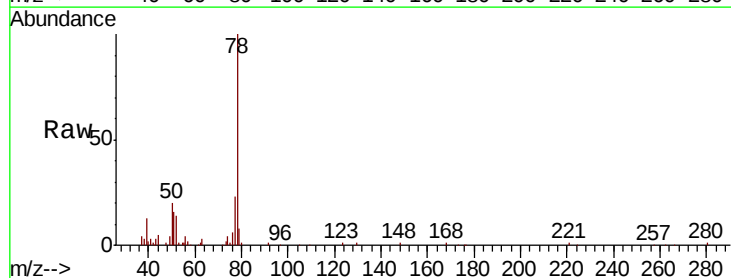
#34
 2-Butanone
 Concen: 0.092 ppbv
 RT: 5.26
 Delta R.T. MSVOA_L
 Lab File: ClientSampleId :
 Acq: 13 Apr 2021 20:14

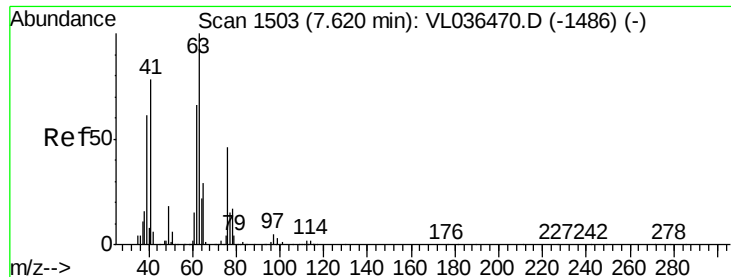
Tot Ion: 43 Resp: 16078
 Ion Ratio Lower Upper
 43 100
 72 74.8 17.0 25.6#



#36
 Benzene
 Concen: 0.175 ppbv
 RT: 6.89 min Scan# 1276
 Delta R.T. -0.01 min
 Lab File: VL036811.D
 Acq: 13 Apr 2021 20:14

Tgt Ion: 78 Resp: 58006
 Ion Ratio Lower Upper
 78 100
 77 22.7 18.0 27.0
 50 19.7 16.5 24.7





#39

1,2-Dichloropropane

Concen: 7.058 ppbv

RT: 7.17 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

Acq: 13 Apr 2021 20:14

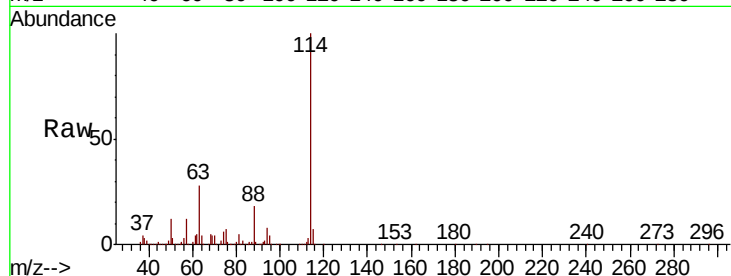
Tot Ion: 63 Resp: 948961

Ion Ratio Lower Upper

63 100

41 0.0 62.4 93.6#

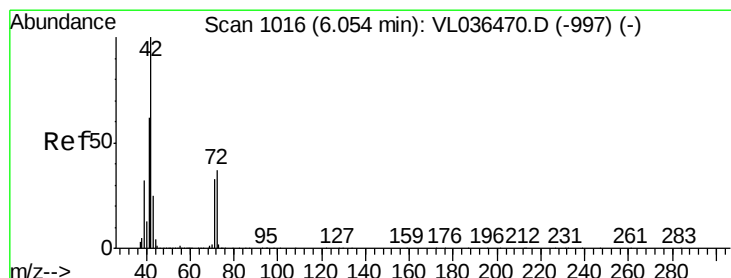
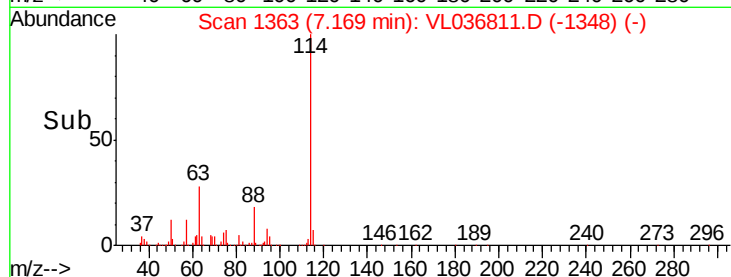
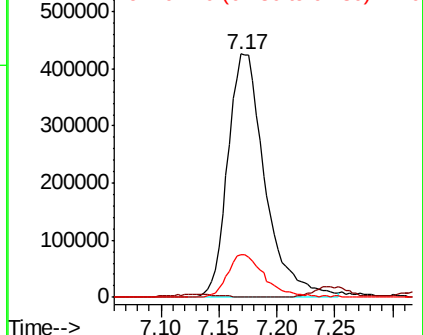
62 17.5 52.8 79.2#



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: 0.061 ppbv

RT: 5.74 min Scan# 918

Delta R.T. -0.32 min

Lab File: VL036811.D

Acq: 13 Apr 2021 20:14

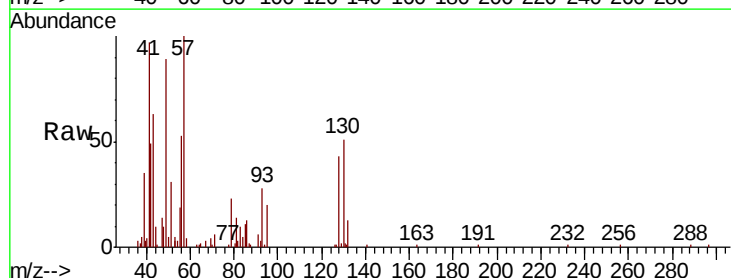
Tgt Ion: 42 Resp: 4965

Ion Ratio Lower Upper

42 100

72 5.4 27.6 41.4#

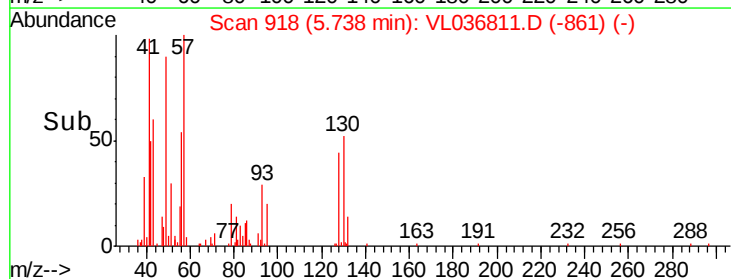
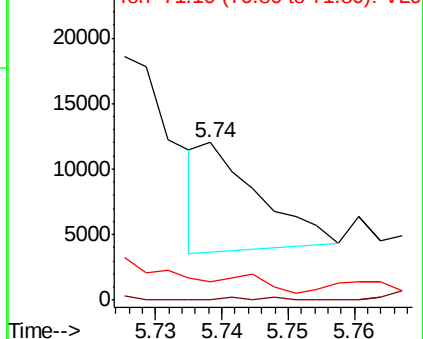
71 0.0 27.0 40.4#

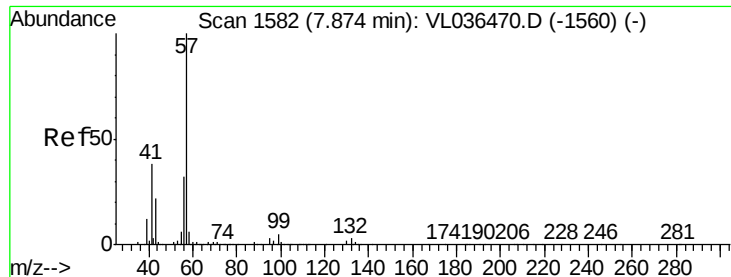


Abundance Ion 42.10 (41.80 to 42.80): VL0

Ion 72.10 (71.80 to 72.80): VL0

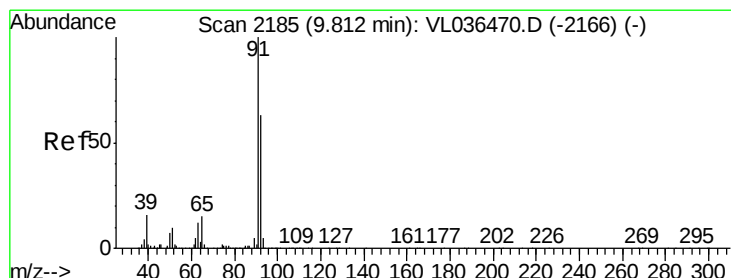
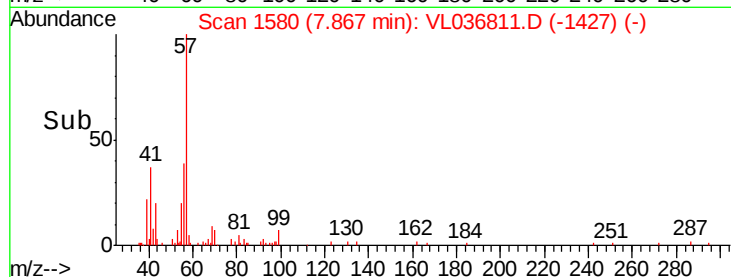
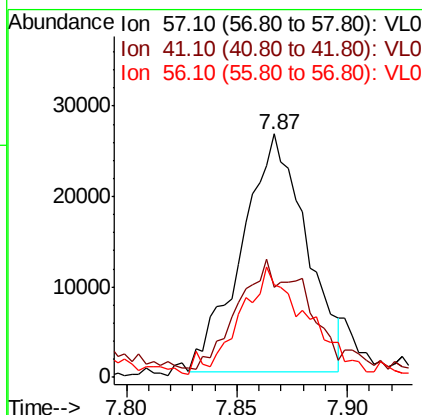
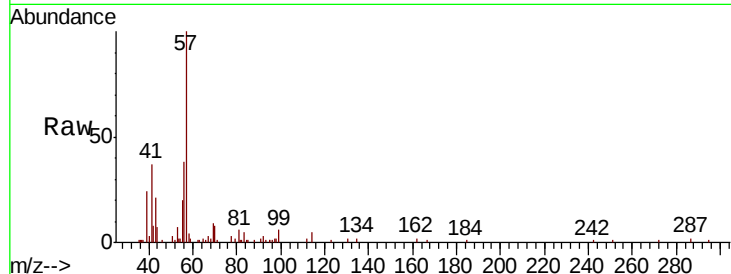
Ion 71.10 (70.80 to 71.80): VL0





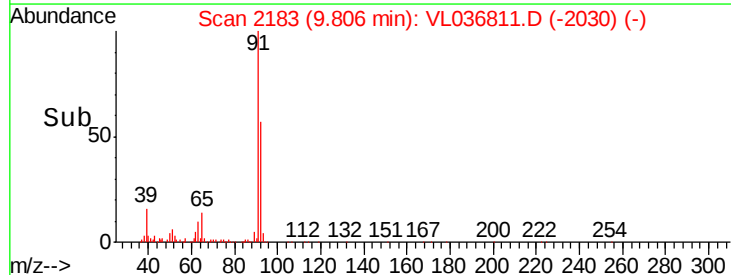
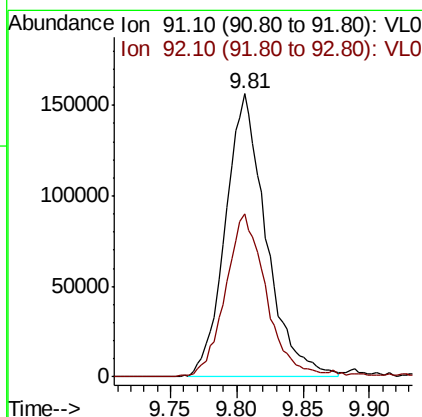
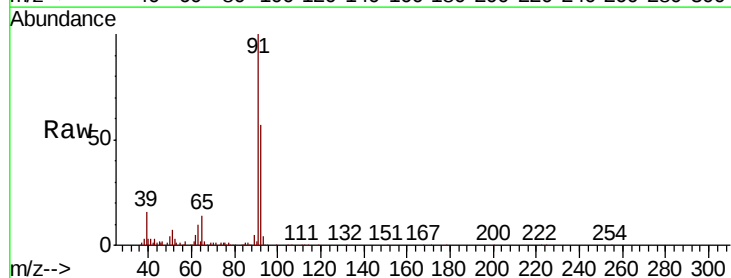
#44
 2,2,4-Trimethylpentane
 Concen: 0.091 ppbv
 RT: 7.87 min
 Delta R.T. MSVOA.L
 Lab File: ClientSampleId :
 Acq: 13 Apr 2021 20:14

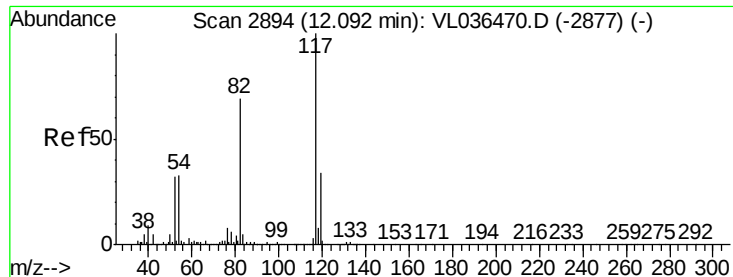
Tot Ion	57	Resp	53321
Ion	Ratio	Lower	Upper
57	100		
41	60.0	28.8	43.2#
56	51.5	26.1	39.1#



#53
 Toluene
 Concen: 0.935 ppbv
 RT: 9.81 min Scan# 2183
 Delta R.T. -0.01 min
 Lab File: VL036811.D
 Acq: 13 Apr 2021 20:14

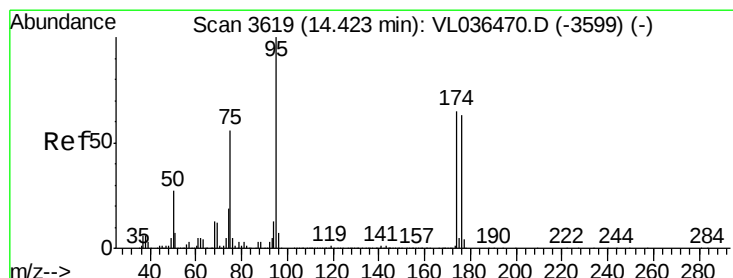
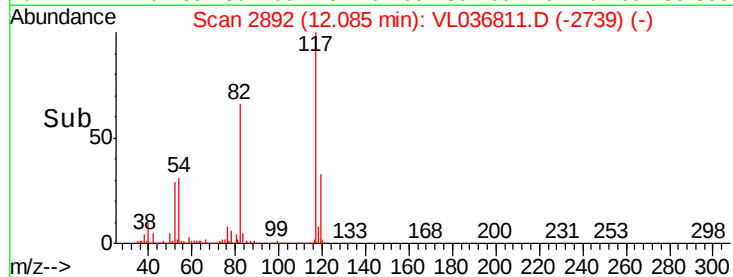
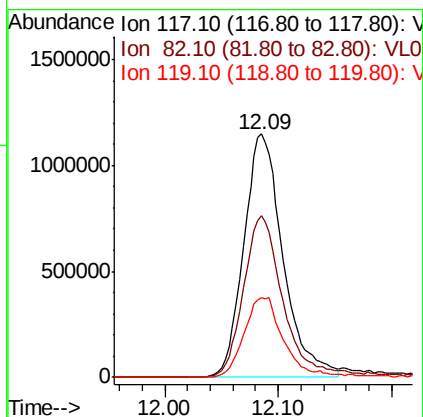
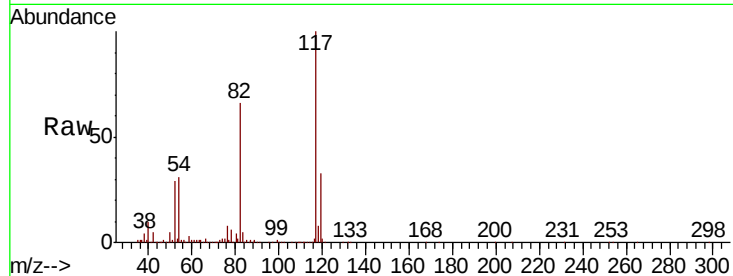
Tgt Ion	91	Resp	330152
Ion	Ratio	Lower	Upper
91	100		
92	59.3	48.8	73.2





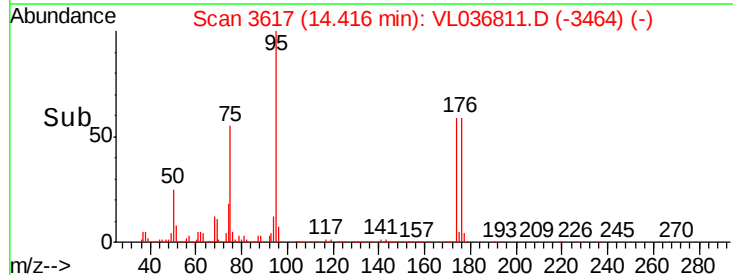
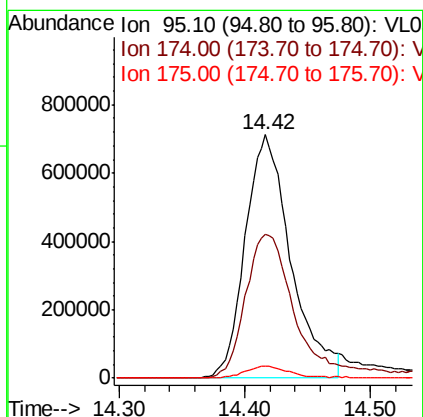
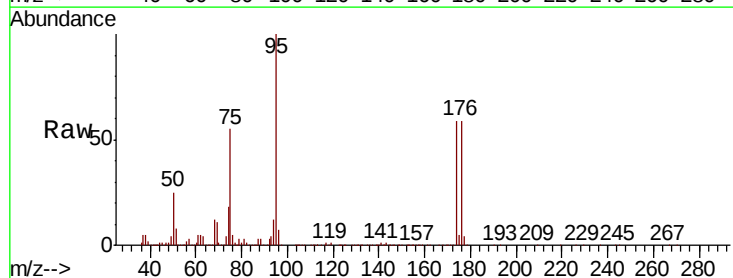
#55
 Chlorobenzene-d5
 Concen: 10.000 ppbv
 RT: 12.09 min
 Instrument: MSVOA_1
 Delta R.T.:
 Lab File: ClientSampleId:
 Acq: 13 Apr 2021 20:14

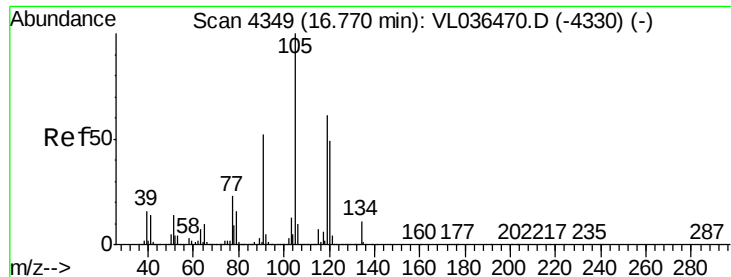
Tot Ion: 117 Resp: 2769015
 Ion Ratio Lower Upper
 117 100
 82 69.3 57.4 86.0
 119 34.6 47.4 71.0#



#68
 1-Bromo-4-Fluorobenzene
 Concen: 8.148 ppbv
 RT: 14.42 min Scan# 3617
 Delta R.T.: -0.01 min
 Lab File: VL036811.D
 Acq: 13 Apr 2021 20:14

Tgt Ion: 95 Resp: 1798192
 Ion Ratio Lower Upper
 95 100
 174 69.1 51.0 76.6
 175 5.0 3.9 5.9





#74
 1,2,4-Trimethylbenzene
 Concen: 0.126 ppbv
 RT: 16.76
 Delta R.T: MSVOA_L
 Lab File: ClientSampleId :
 Acq: 13 Apr 2021 20:14

Tot Ion:	105	Resp:	46925
Ion Ratio	Lower	Upper	
105	100		
120	28.2	39.2	58.8#
91	20.2	42.6	64.0#
77	13.1	18.6	28.0#

