

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL032521\
 Data File : VL036480.D
 Acq On : 25 Mar 2021 10:50
 Operator :
 Sample : M1801-04
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :

Quant Time: Mar 26 03:48:46 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

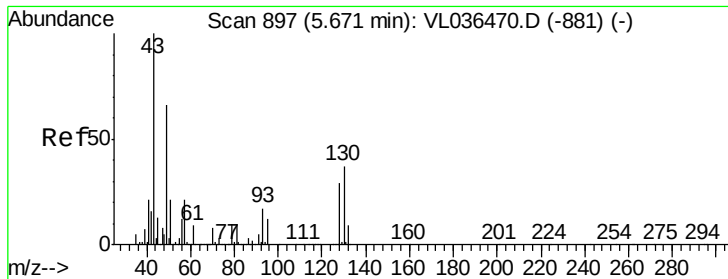
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.66	49	1421729	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.17	114	3235917	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.08	117	2860918	10.00	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.41	95	2289569	10.04	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	100.40%

Target Compounds					Ovalue
2) Dichlorodifluoromethane	3.04	85	36880	0.159 ppbv	89
3) Chlorodifluoromethane	2.98	51	449390	1.692 ppbv #	80
4) Chloromethane	3.13	50	47535	0.507 ppbv #	87
9) Propene	3.20	41	255482	3.017 ppbv	92
10) Heptane	8.12	43	44427	0.206 ppbv	93
11) Trichlorofluoromethane	3.94	101	49352	0.209 ppbv	90
13) Ethanol	3.60	45	1637129	162.345 ppbv	92
15) Acetone	3.84	43	961822	6.874 ppbv	99
16) 1,3-Butadiene	3.31	39	4735	0.049 ppbv #	1
19) Isopropyl Alcohol	3.97	45	568444	7.385 ppbv	100
20) Methylene Chloride	4.34	84	259424	3.960 ppbv	97
23) Vinyl Acetate	5.07	43	10319	0.043 ppbv #	63
25) Ethyl Acetate	5.68	43	321234	0.966 ppbv #	1
26) Hexane	5.68	57	365365	2.367 ppbv #	52
29) Chloroform	5.74	83	41383	0.168 ppbv	98
30) Cyclohexane	7.12	84	10383	0.083 ppbv #	1
31) cis-1,2-Dichloroethene	5.54	61	12383	0.083 ppbv #	87
34) 2-Butanone	5.24	43	105555	0.668 ppbv	95
35) Carbon Tetrachloride	7.01	117	6544	0.026 ppbv #	72
36) Benzene	6.88	78	77536	0.260 ppbv	95
39) 1,2-Dichloropropane	7.17	63	872925	7.211 ppbv #	24
41) Tetrahydrofuran	6.30	42	4111	0.056 ppbv #	45
44) 2,2,4-Trimethylpentane	7.86	57	221046	0.421 ppbv #	83
52) Tetrachloroethene	11.22	164	208365	1.896 ppbv	92
53) Toluene	9.80	91	805958	2.536 ppbv	98
58) Ethyl Benzene	12.71	91	56837	0.137 ppbv	96
59) m/p-Xylene	12.98	91	187730	0.517 ppbv #	32
60) o-Xylene	13.69	91	72850	0.208 ppbv #	30
64) n-propylbenzene	15.56	120	2695	0.023 ppbv #	1
72) 4-Ethyltoluene	15.84	105	13359	0.035 ppbv #	47
73) 1,3,5-Trimethylbenzene	16.00	105	8758	0.024 ppbv #	37
74) 1,2,4-Trimethylbenzene	16.76	105	8282	0.022 ppbv #	53

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



#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.66 Instrument:

Delta R.T. MSVOA_L

Lab File:

Acq: 25 Mar 2021 10:50

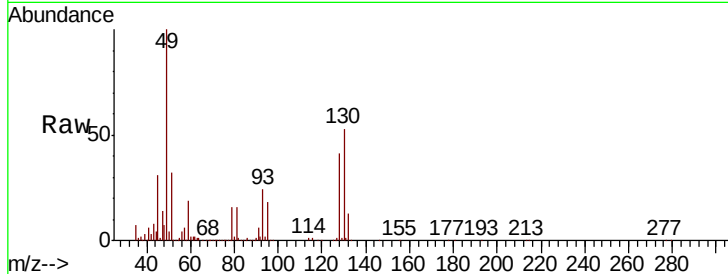
Tot Ion: 49 Resp: 1421729

Ion Ratio Lower Upper

49 100

128 43.4 23.5 70.6

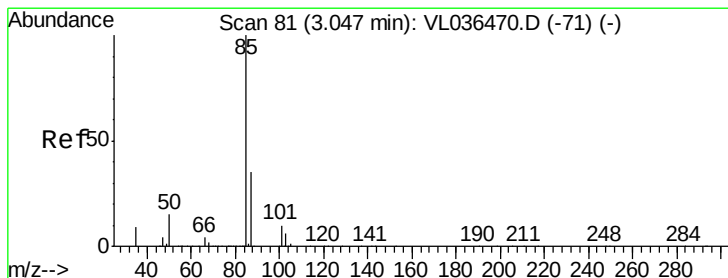
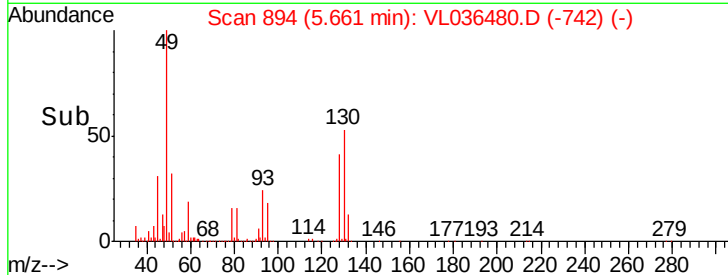
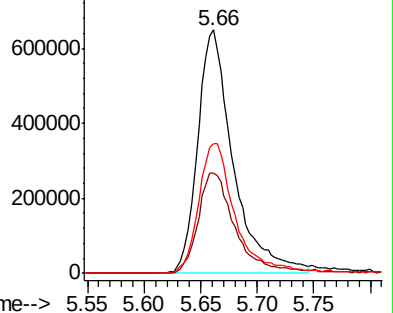
130 55.8 29.1 87.4



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: 0.159 ppbv

RT: 3.04 min Scan# 80

Delta R.T. -0.00 min

Lab File: VL036480.D

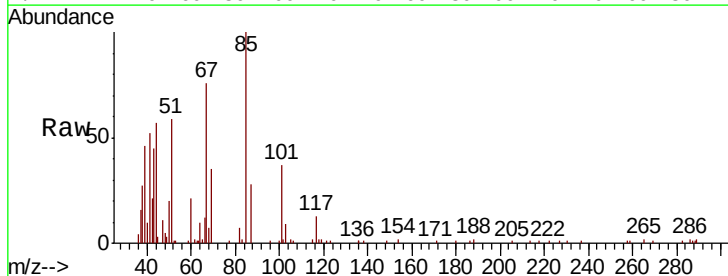
Acq: 25 Mar 2021 10:50

Tgt Ion: 85 Resp: 36880

Ion Ratio Lower Upper

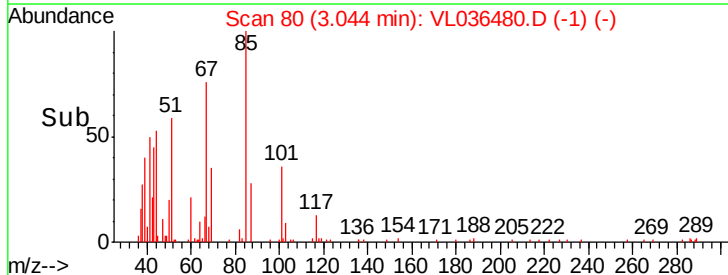
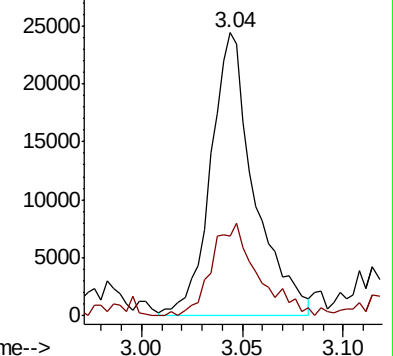
85 100

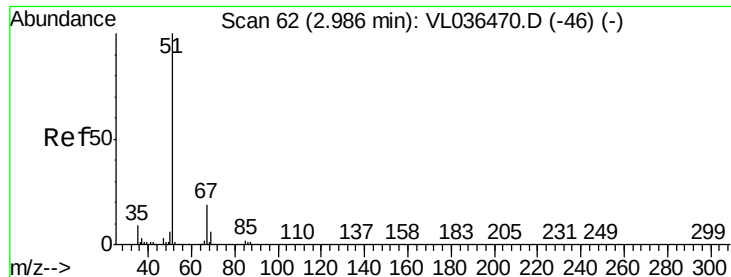
87 28.7 27.8 41.8



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0





#3

Chlorodifluoromethane

Concen: 1.692 ppbv

RT: 2.98 Instrument:

Delta R.T. MSVOA.L

Lab File: ClientSampleId:

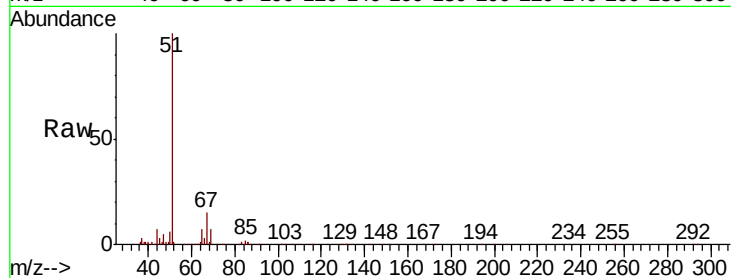
Acq: 25 Mar 2021 10:50

Tot Ion: 51 Resp: 449390

Ion Ratio Lower Upper

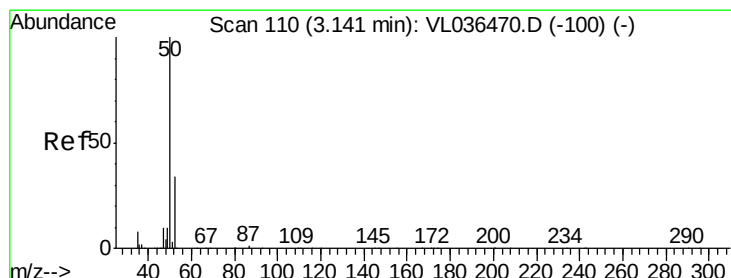
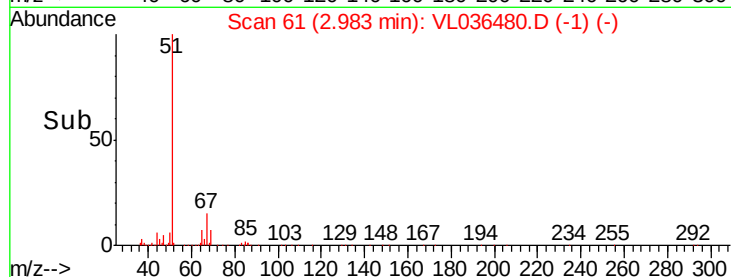
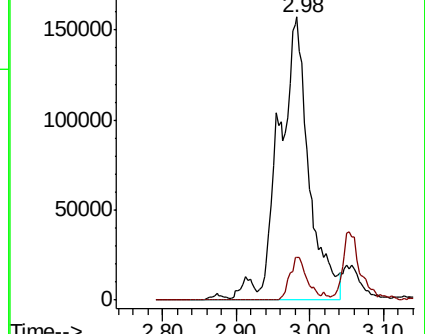
51 100

67 9.3 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: 0.507 ppbv

RT: 3.13 min Scan# 108

Delta R.T. -0.01 min

Lab File: VL036480.D

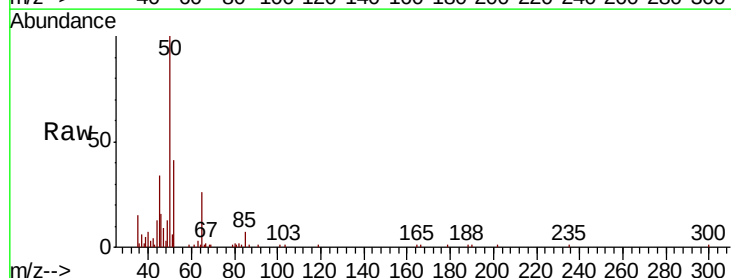
Acq: 25 Mar 2021 10:50

Tgt Ion: 50 Resp: 47535

Ion Ratio Lower Upper

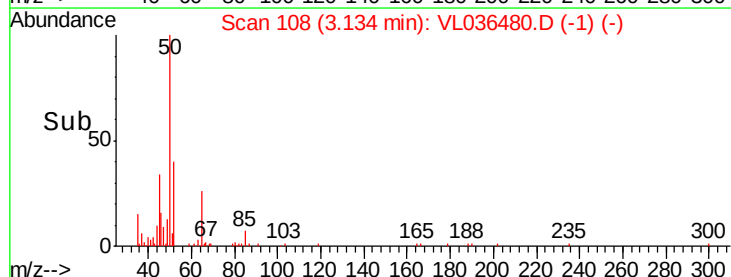
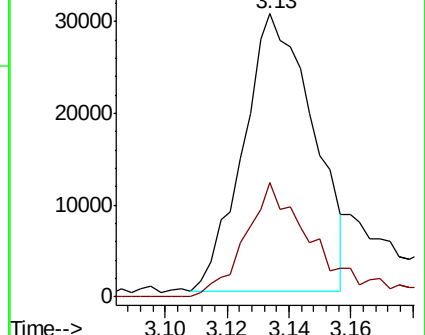
50 100

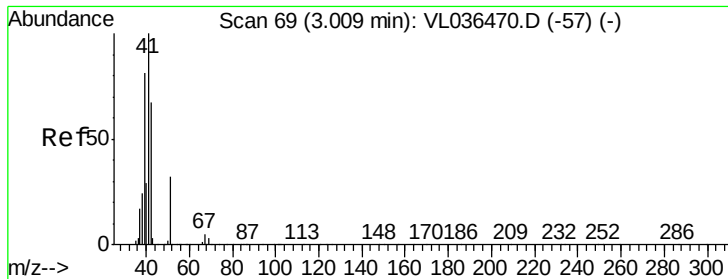
52 41.4 27.0 40.6#



Abundance Ion 50.10 (49.80 to 50.80): VL0

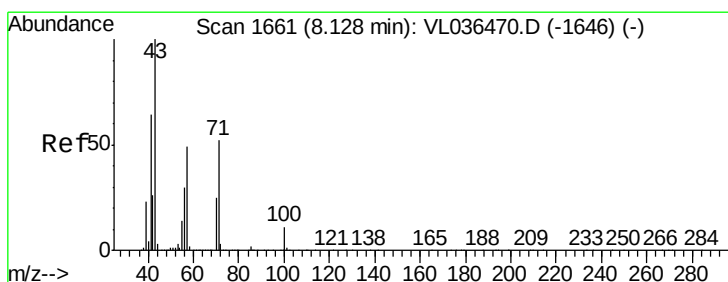
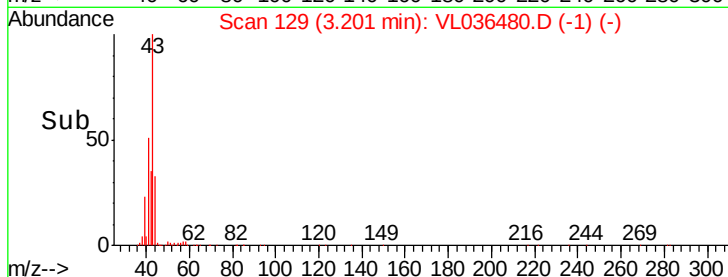
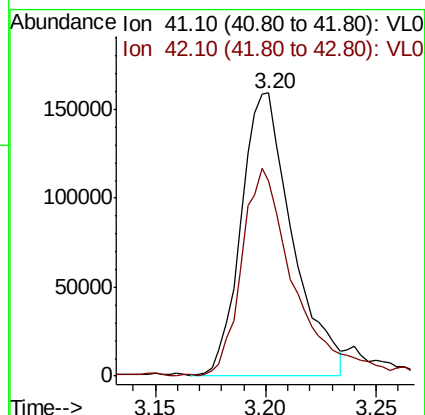
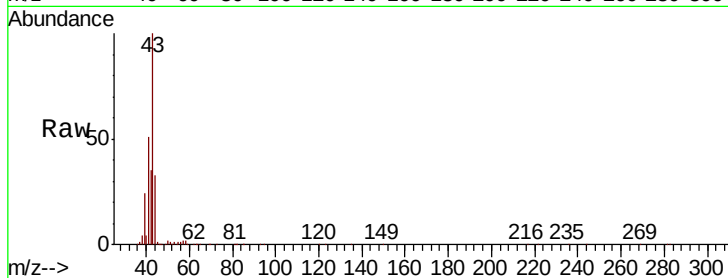
Ion 52.10 (51.80 to 52.80): VL0





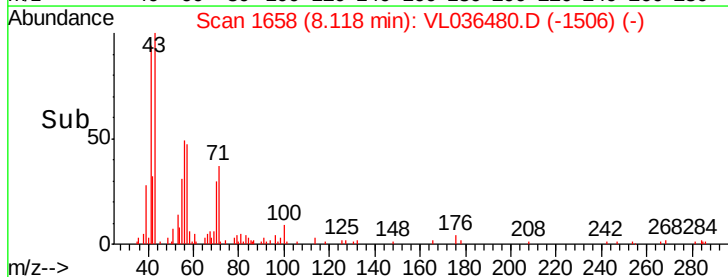
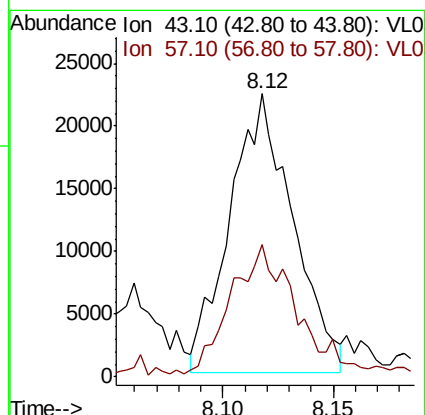
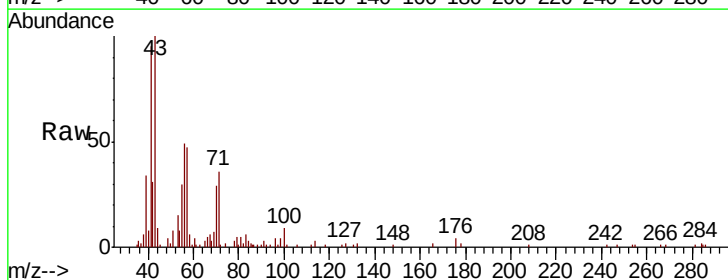
#9
 Propene
 Concen: 3.017 ppbv
 RT: 3.20
 Delta R.T. MSVOA_L
 Lab File: ClientSampleId :
 Acq: 25 Mar 2021 10:50

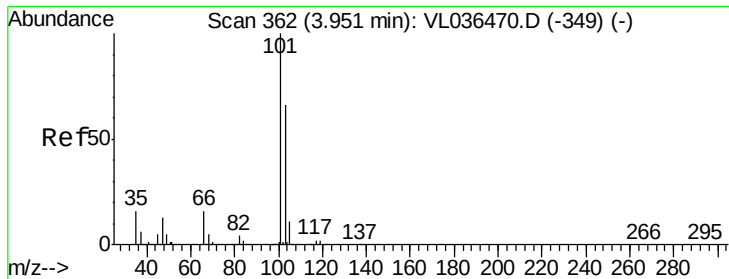
Tot Ion: 41 Resp: 255482
 Ion Ratio Lower Upper
 41 100
 42 77.6 57.0 85.4



#10
 Heptane
 Concen: 0.206 ppbv
 RT: 8.12 min Scan# 1658
 Delta R.T. -0.01 min
 Lab File: VL036480.D
 Acq: 25 Mar 2021 10:50

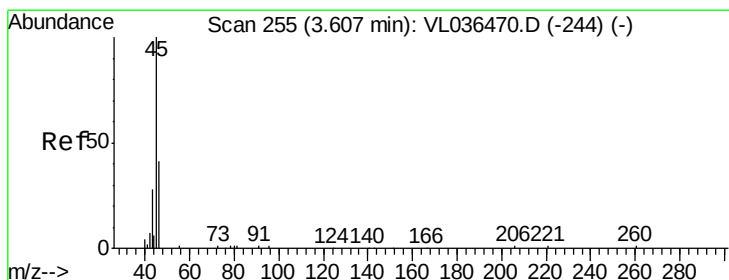
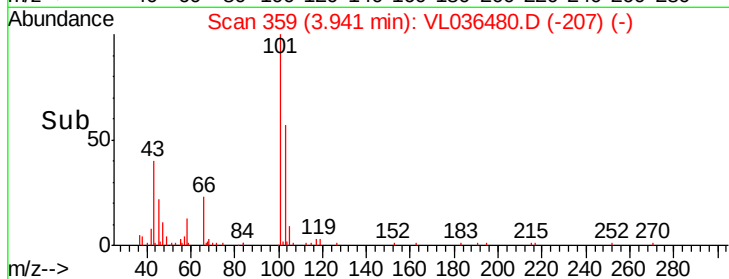
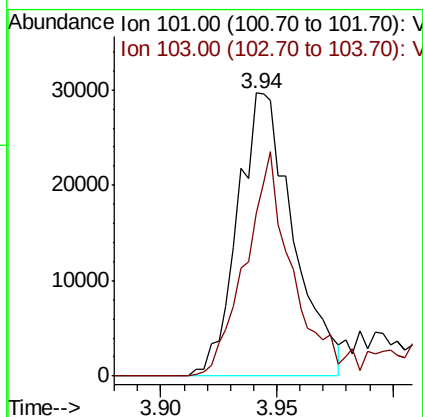
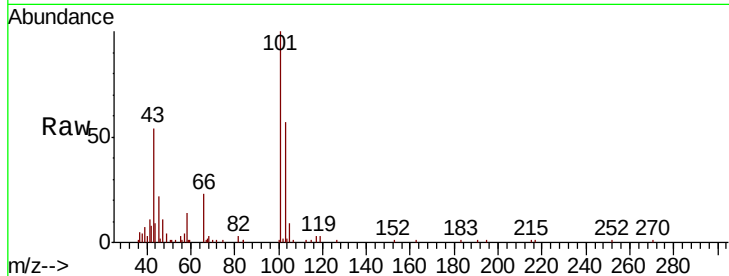
Tgt Ion: 43 Resp: 44427
 Ion Ratio Lower Upper
 43 100
 57 53.4 39.0 58.6





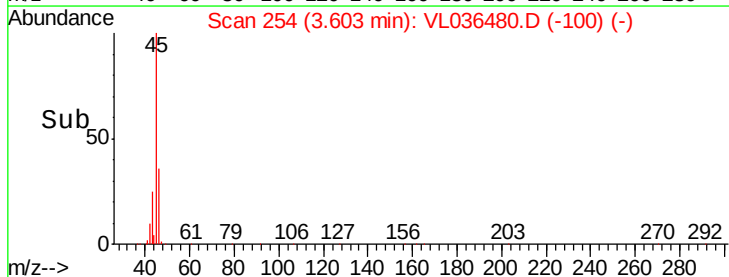
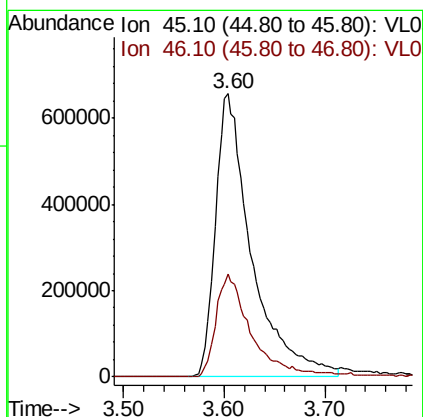
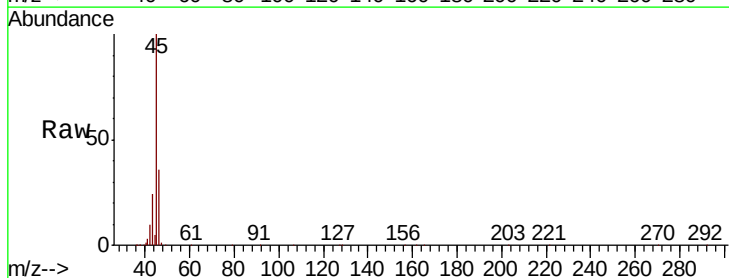
#11
 Trichlorofluoromethane
 Concen: 0.209 ppbv
 RT: 3.94
 Instrument: MSVOA_L
 Delta R.T.:
 Lab File: ClientSampleId:
 Acq: 25 Mar 2021 10:50

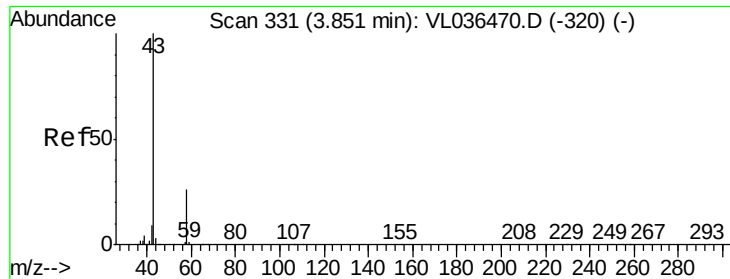
Tot Ion: 101 Resp: 49352
 Ion Ratio Lower Upper
 101 100
 103 57.5 52.5 78.7



#13
 Ethanol
 Concen: 162.345 ppbv
 RT: 3.60 min Scan# 254
 Delta R.T. -0.00 min
 Lab File: VL036480.D
 Acq: 25 Mar 2021 10:50

Tgt Ion: 45 Resp: 1637129
 Ion Ratio Lower Upper
 45 100
 46 36.3 16.6 66.2





#15

Acetone

Concen: 6.874 ppbv

RT: 3.84 Instrument :

Delta R.T. MSVOA_L

Lab File: ClientSampleId :

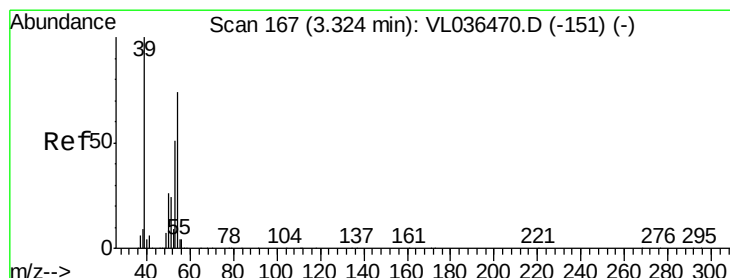
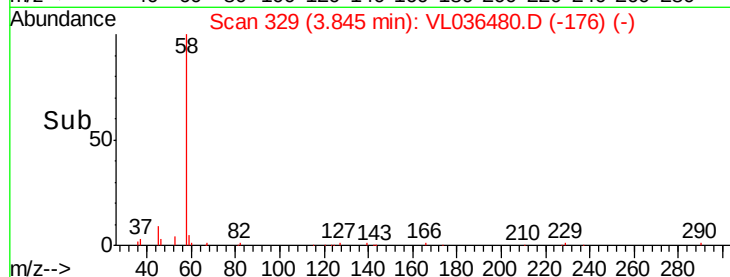
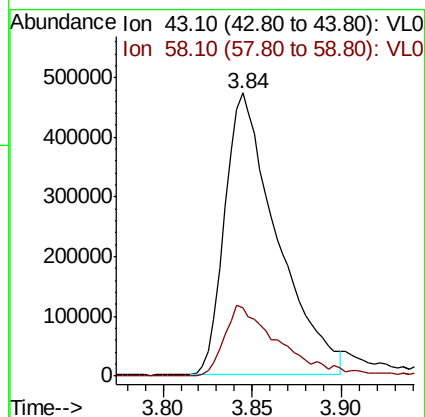
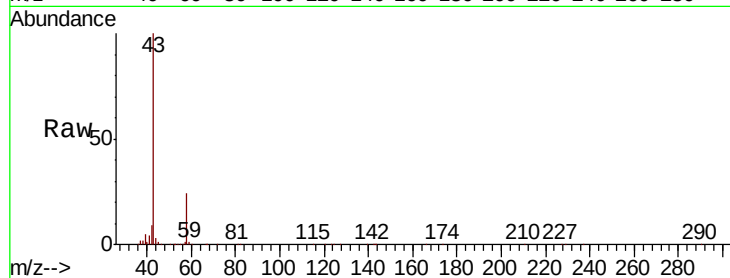
Acq: 25 Mar 2021 10:50

Tot Ion: 43 Resp: 961822

Ion Ratio Lower Upper

43 100

58 27.1 21.2 31.8



#16

1,3-Butadiene

Concen: 0.049 ppbv

RT: 3.31 min Scan# 163

Delta R.T. -0.01 min

Lab File: VL036480.D

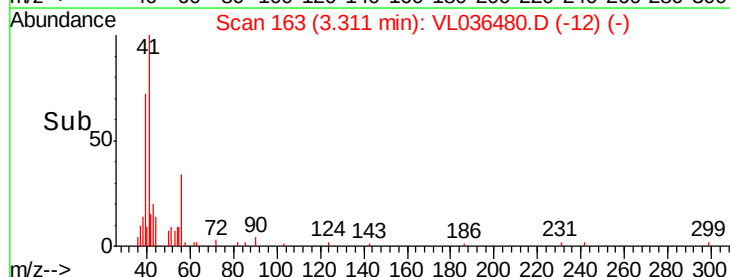
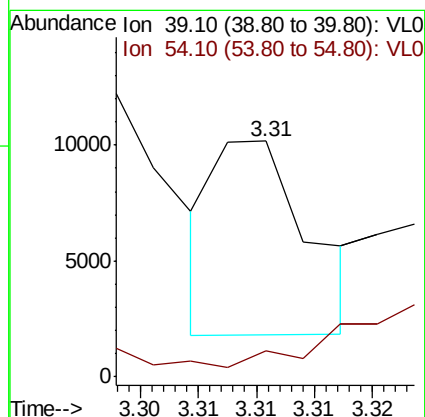
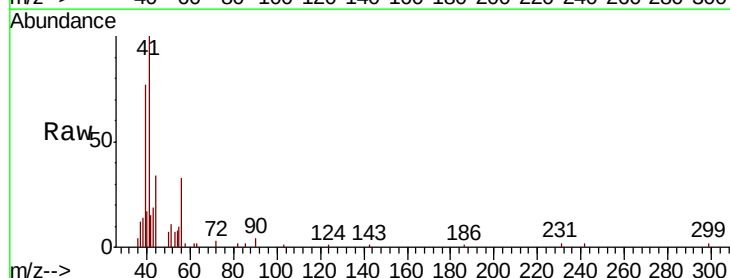
Acq: 25 Mar 2021 10:50

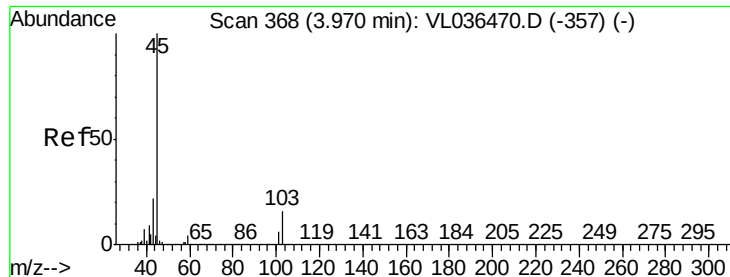
Tgt Ion: 39 Resp: 4735

Ion Ratio Lower Upper

39 100

54 189.1 58.8 88.2#





#19

Isopropyl Alcohol

Concen: 7.385 ppbv

RT: 3.97 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

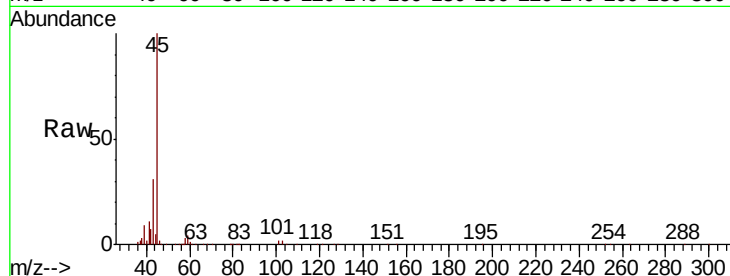
Acq: 25 Mar 2021 10:50

Tot Ion: 45 Resp: 568444

Ion Ratio Lower Upper

45 100

58 3.5 2.9 4.3



Abundance Ion 45.10 (44.80 to 45.80): VL0

Ion 58.10 (57.80 to 58.80): VL0

3.97

250000

200000

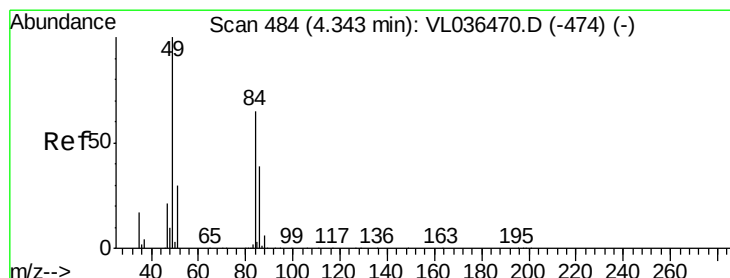
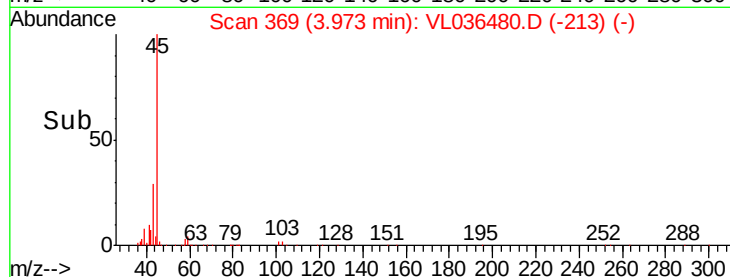
150000

100000

50000

0

Time-->



#20

Methylene Chloride

Concen: 3.960 ppbv

RT: 4.34 min Scan# 483

Delta R.T. -0.00 min

Lab File: VL036480.D

Acq: 25 Mar 2021 10:50

Tgt Ion: 84 Resp: 259424

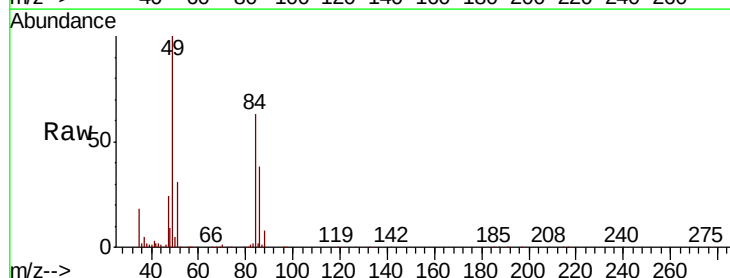
Ion Ratio Lower Upper

84 100

49 158.3 122.9 184.3

51 48.3 36.9 55.3

86 59.6 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

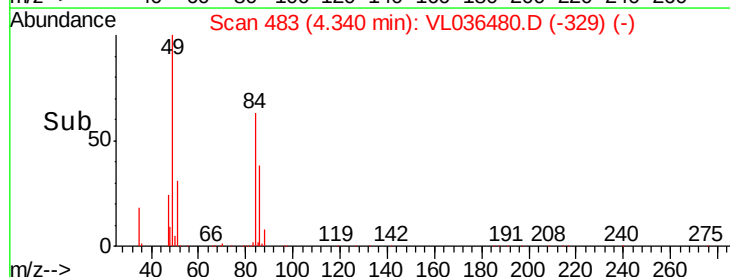
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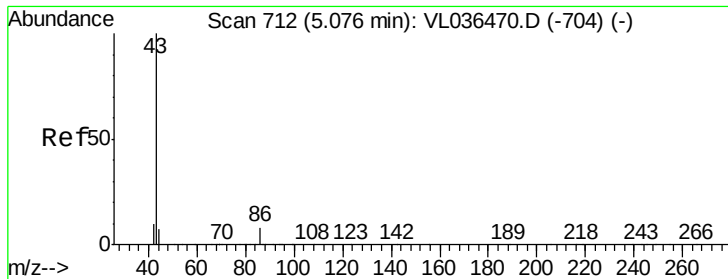
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100000

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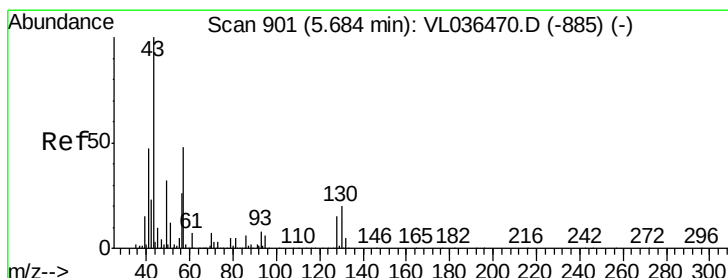
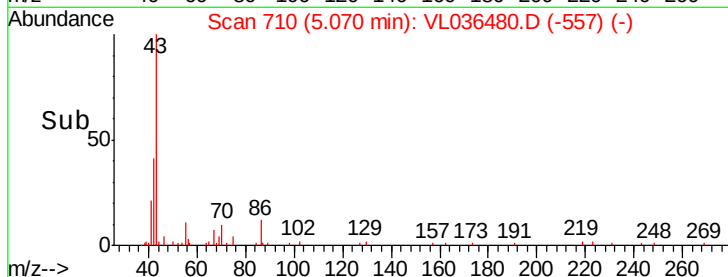
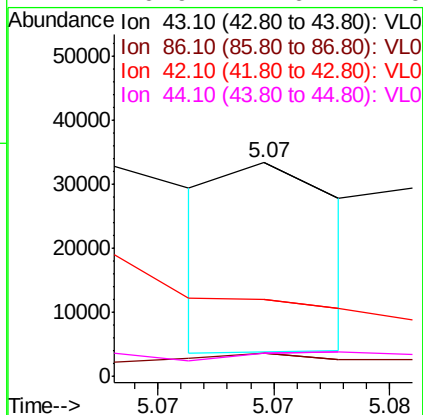
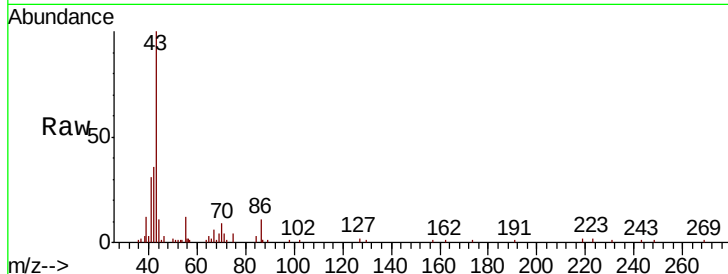
Time-->





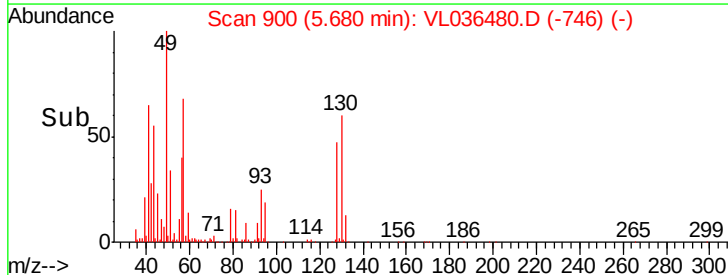
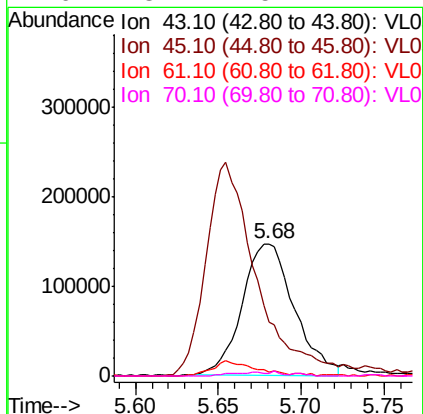
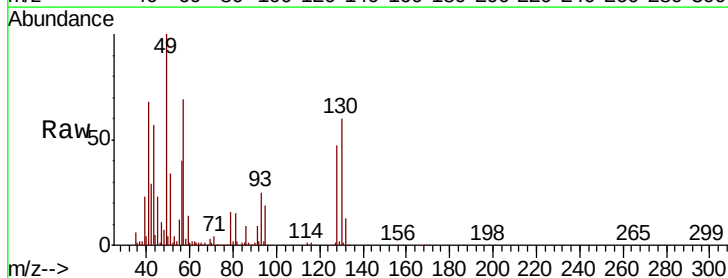
#23
 Vinyl Acetate
 Concen: 0.043 ppbv
 RT: 5.07
 Delta R.T. MSVOA_L
 Lab File: ClientSampleId :
 Acq: 25 Mar 2021 10:50

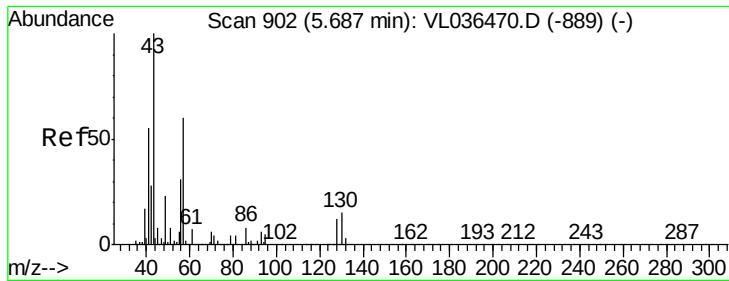
Tot Ion:	43	Resp:	10319
Ion	Ratio	Lower	Upper
43	100		
86	15.1	5.4	8.0#
42	26.0	8.5	12.7#
44	20.9	4.6	7.0#



#25
 Ethyl Acetate
 Concen: 0.966 ppbv
 RT: 5.68 min Scan# 900
 Delta R.T. -0.00 min
 Lab File: VL036480.D
 Acq: 25 Mar 2021 10:50

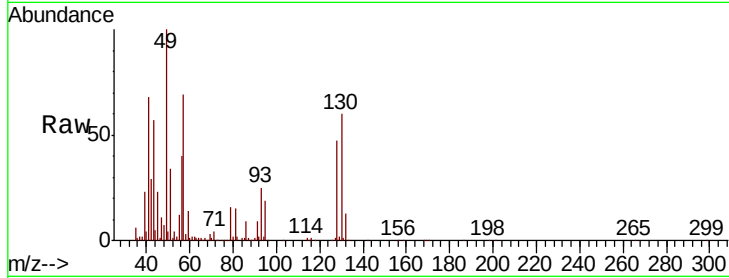
Tgt Ion:	43	Resp:	321234
Ion	Ratio	Lower	Upper
43	100		
45	165.1	7.9	11.9#
61	10.2	7.4	11.2
70	3.4	5.1	7.7#



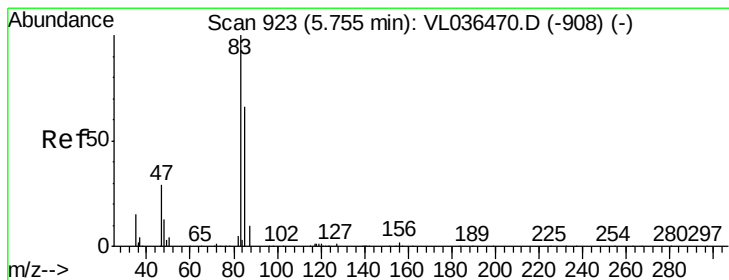
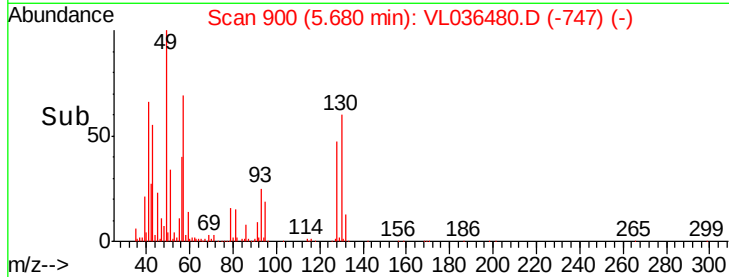
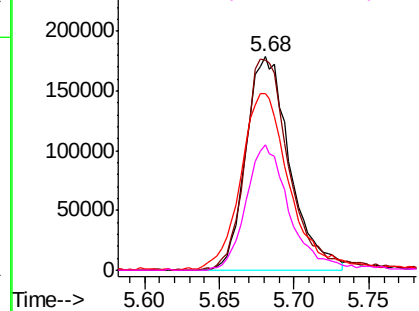


#26
Hexane
Concen: 2.367 ppbv
RT: 5.68
Delta R.T. MSVOA_L
Lab File: ClientSampleId :
Acq: 25 Mar 2021 10:50

Tot Ion:	57	Resp:	365365
Ion Ratio	Lower	Upper	
57	100		
41	101.6	77.2	115.8
43	93.0	173.8	260.6#
56	59.4	43.8	65.6

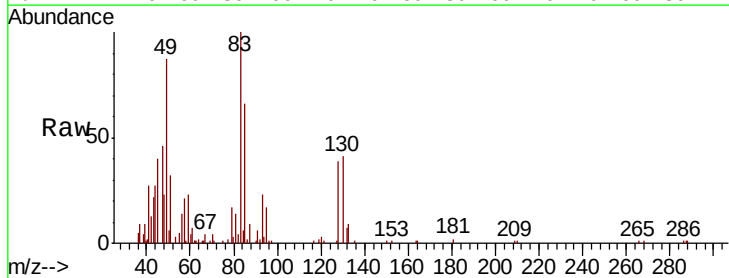


Abundance Ion 57.10 (56.80 to 57.80): VL0
Ion 41.10 (40.80 to 41.80): VL0
Ion 43.10 (42.80 to 43.80): VL0
Ion 56.10 (55.80 to 56.80): VL0

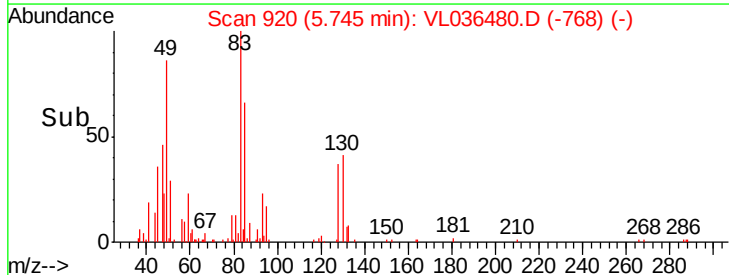
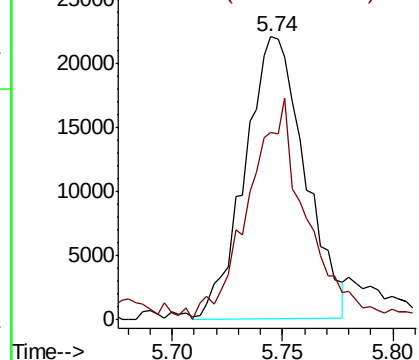


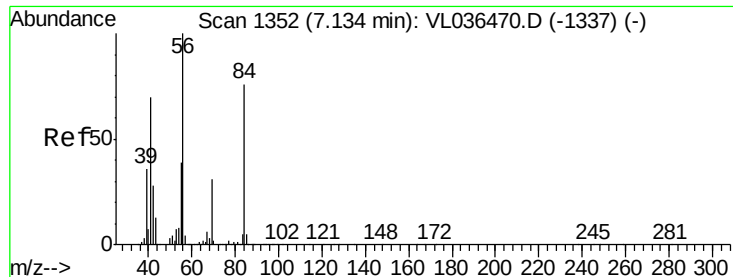
#29
Chloroform
Concen: 0.168 ppbv
RT: 5.74 min Scan# 920
Delta R.T. -0.01 min
Lab File: VL036480.D
Acq: 25 Mar 2021 10:50

Tgt Ion:	83	Resp:	41383
Ion Ratio	Lower	Upper	
83	100		
85	66.9	52.6	78.8



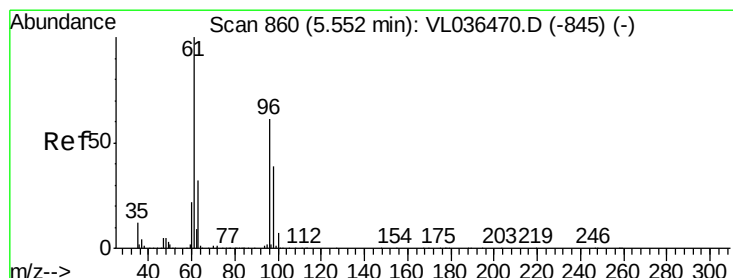
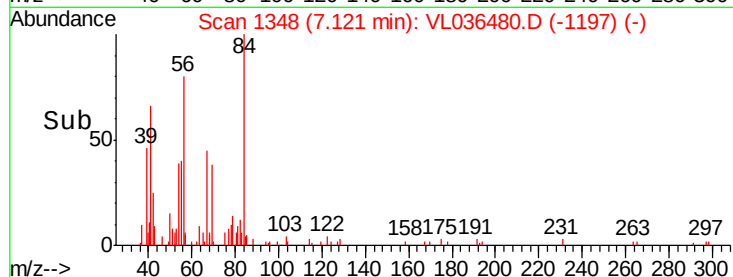
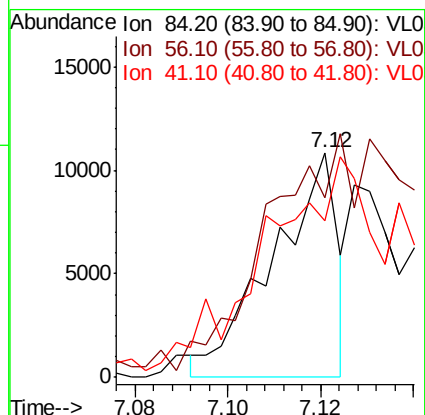
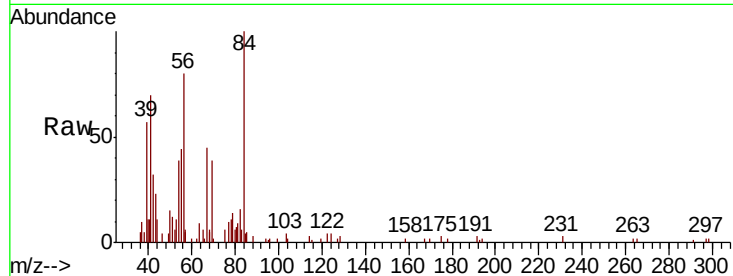
Abundance Ion 83.00 (82.70 to 83.70): VL0
Ion 85.00 (84.70 to 85.70): VL0





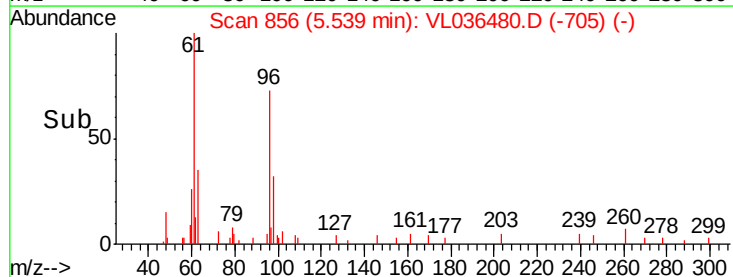
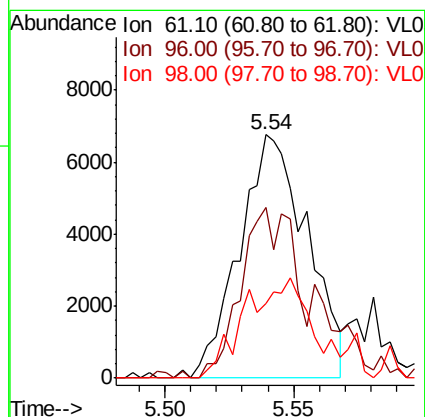
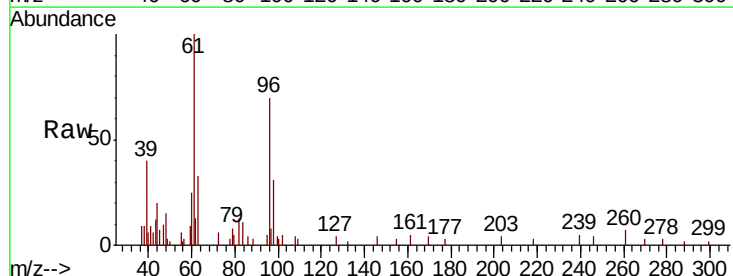
#30
Cyclohexane
Concen: 0.083 ppbv
RT: 7.12
Instrument: MSVOA_1
Delta R.T.:
Lab File: ClientSampleId:
Acq: 25 Mar 2021 10:50

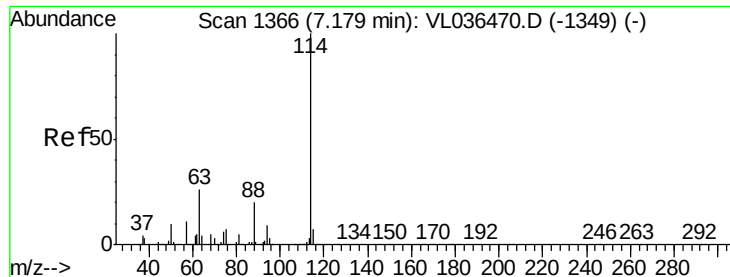
Tot Ion	84	Resp	10383
Ion Ratio	Lower	Upper	
84	100		
56	0.0	114.6	171.8#
41	0.0	75.3	112.9#



#31
cis-1,2-Dichloroethene
Concen: 0.083 ppbv
RT: 5.54 min Scan# 856
Delta R.T.: -0.01 min
Lab File: VL036480.D
Acq: 25 Mar 2021 10:50

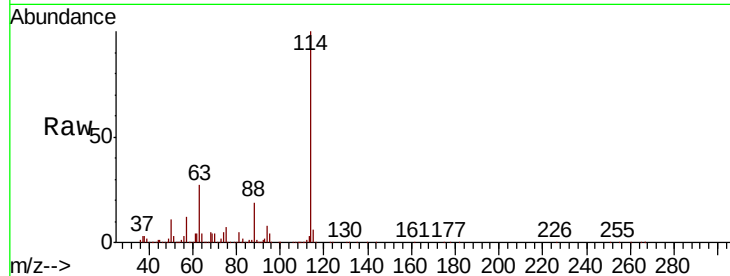
Tgt Ion	61	Resp	12383
Ion Ratio	Lower	Upper	
61	100		
96	70.3	48.7	73.1
98	30.6	31.4	47.0#



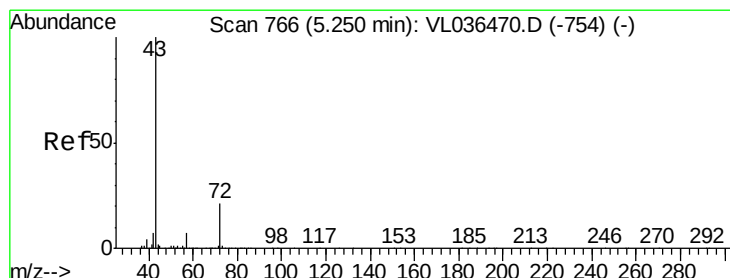
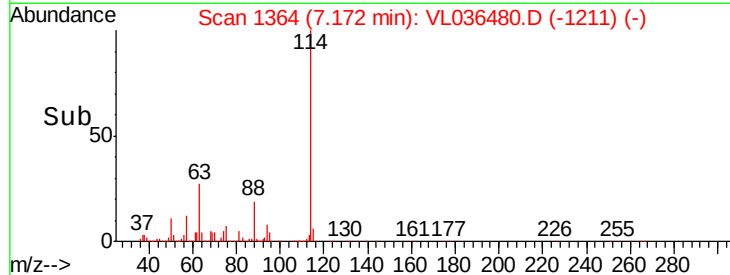
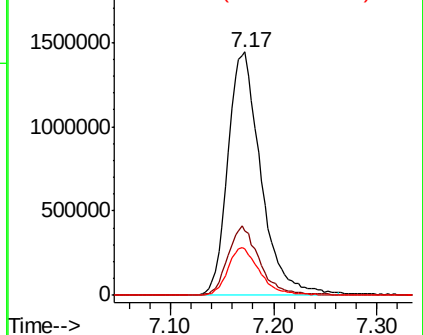


#33
 1,4-Difluorobenzene
 Concen: 10.000 ppbv
 RT: 7.17
 Delta R.T. MSVOA_L
 Lab File: ClientSampleId :
 Acq: 25 Mar 2021 10:50

Tot Ion:	114	Resp:	3235917
Ion	Ratio	Lower	Upper
114	100		
63	27.7	22.4	33.6
88	19.0	15.4	23.0

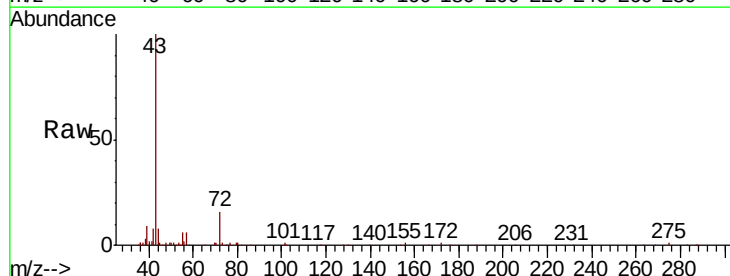


Abundance Ion 114.10 (113.80 to 114.80): VL0
 Ion 63.10 (62.80 to 63.80): VL0
 Ion 88.10 (87.80 to 88.80): VL0

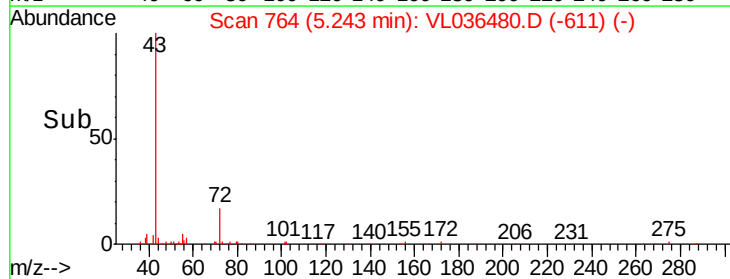
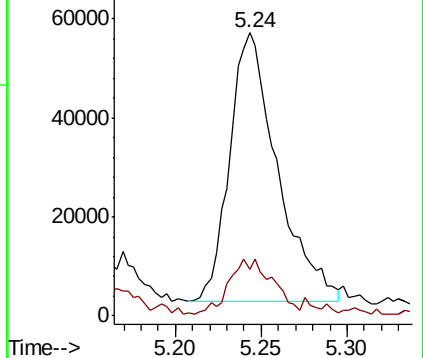


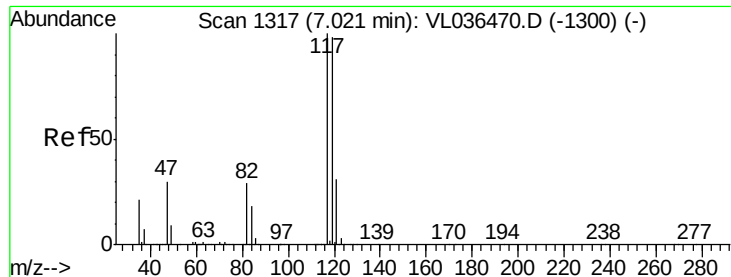
#34
 2-Butanone
 Concen: 0.668 ppbv
 RT: 5.24 min Scan# 764
 Delta R.T. -0.01 min
 Lab File: VL036480.D
 Acq: 25 Mar 2021 10:50

Tgt Ion:	43	Resp:	105555
Ion	Ratio	Lower	Upper
43	100		
72	23.7	17.0	25.6



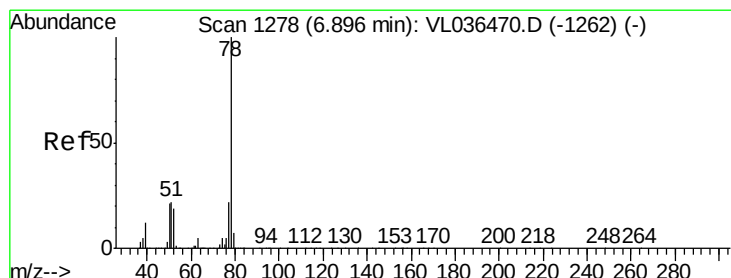
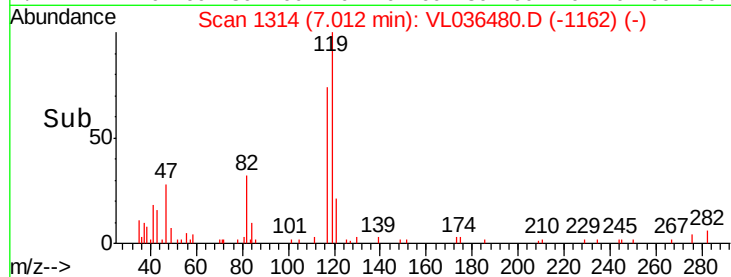
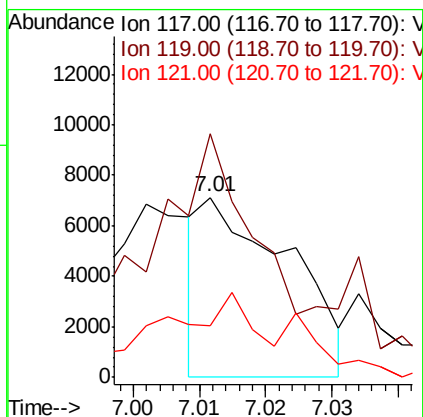
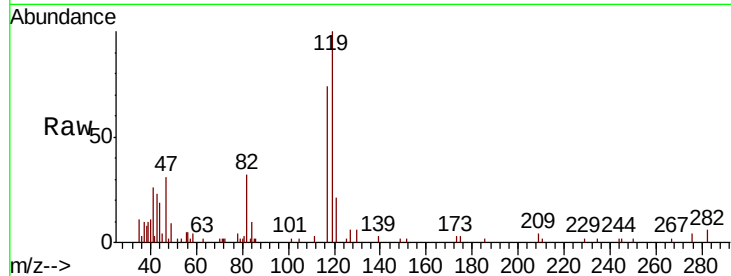
Abundance Ion 43.10 (42.80 to 43.80): VL0
 Ion 72.10 (71.80 to 72.80): VL0





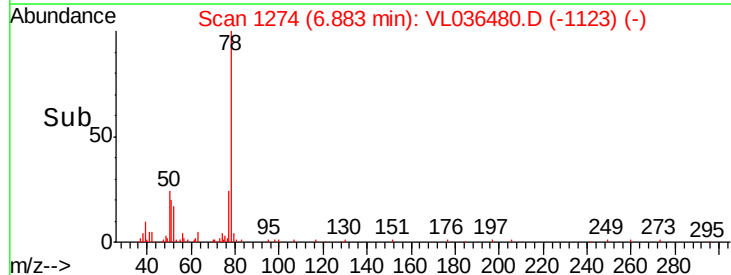
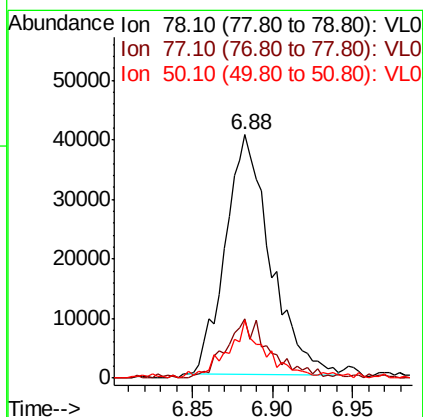
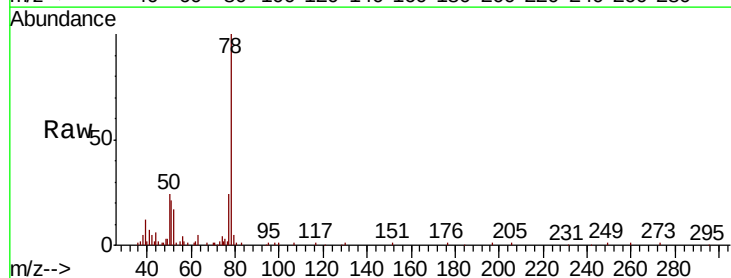
#35
Carbon Tetrachloride
Concen: 0.026 ppbv
RT: 7.01 min
Instrument: MSVOA_1
Delta R.T.:
Lab File: ClientSampleId:
Acq: 25 Mar 2021 10:50

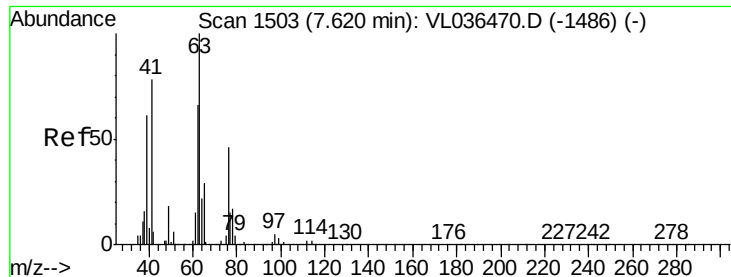
Tot Ion	Ratio	Lower	Upper
117	100		
119	133.3	78.2	117.2#
121	28.7	24.5	36.7



#36
Benzene
Concen: 0.260 ppbv
RT: 6.88 min Scan# 1274
Delta R.T.: -0.01 min
Lab File: VL036480.D
Acq: 25 Mar 2021 10:50

Tgt Ion	Ratio	Lower	Upper
78	100		
77	24.9	18.0	27.0
50	23.0	16.5	24.7





#39

1,2-Dichloropropane

Concen: 7.211 ppbv

RT: 7.17 Instrument:

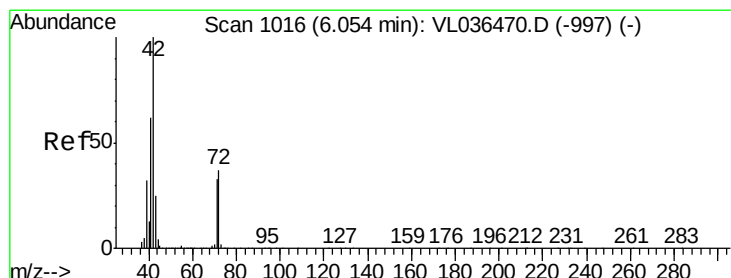
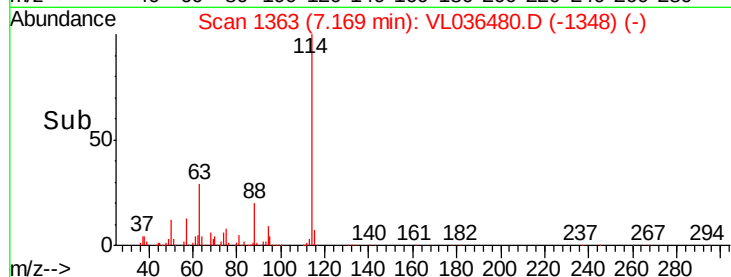
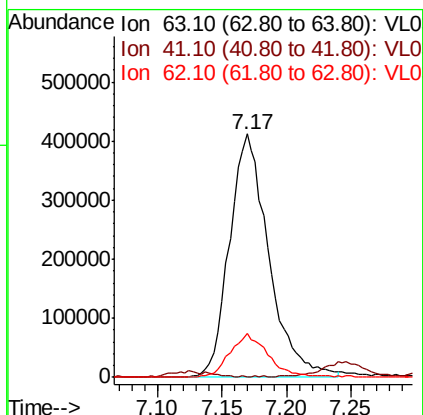
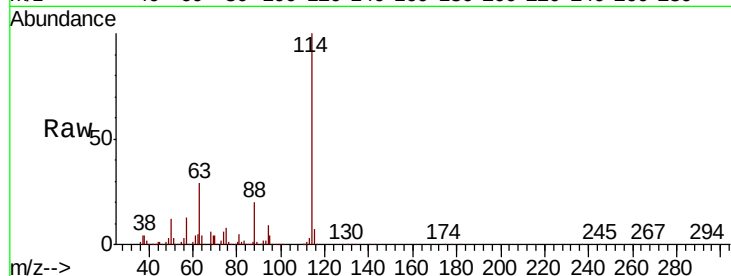
Delta R.T. MSVOA_L

Lab File: ClientSampleId:

Acq: 25 Mar 2021 10:50

Tot Ion: 63 Resp: 872925

Ion	Ratio	Lower	Upper
63	100		
41	0.0	62.4	93.6#
62	18.1	52.8	79.2#



#41

Tetrahydrofuran

Concen: 0.056 ppbv

RT: 6.30 min Scan# 1093

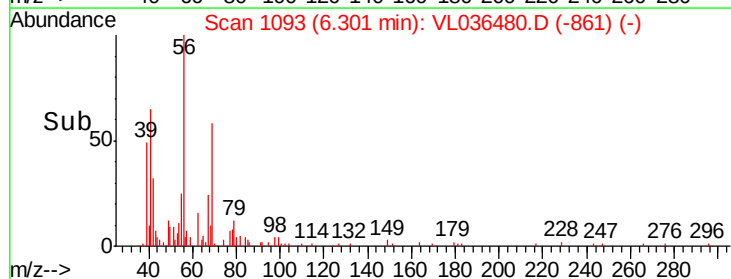
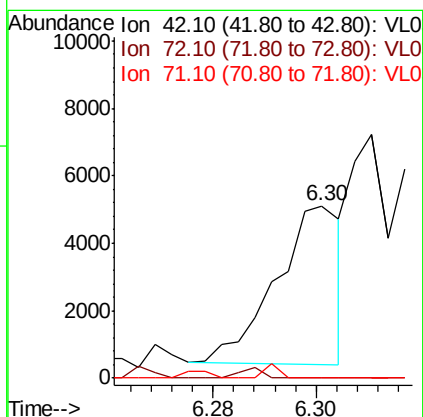
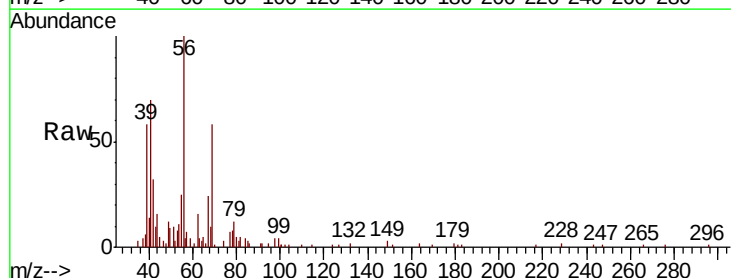
Delta R.T. 0.25 min

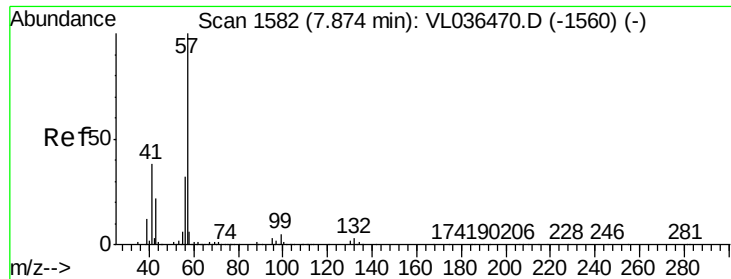
Lab File: VL036480.D

Acq: 25 Mar 2021 10:50

Tgt Ion: 42 Resp: 4111

Ion	Ratio	Lower	Upper
42	100		
72	4.9	27.6	41.4#
71	0.0	27.0	40.4#





#44

2,2,4-Trimethylpentane

Concen: 0.421 ppbv

RT: 7.86 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

Acq: 25 Mar 2021 10:50

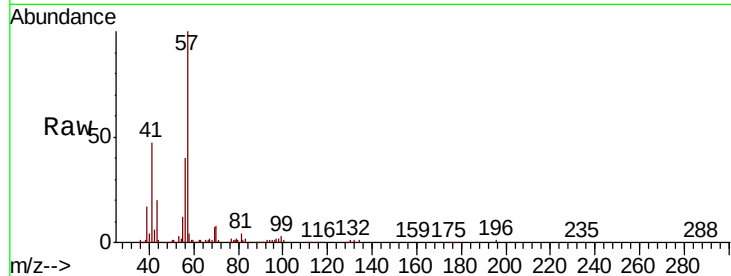
Tot Ion: 57 Resp: 221046

Ion Ratio Lower Upper

57 100

41 43.8 28.8 43.2#

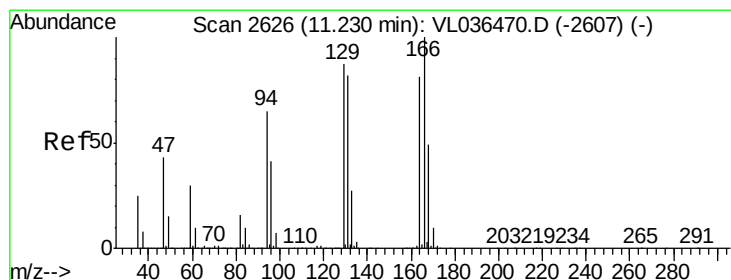
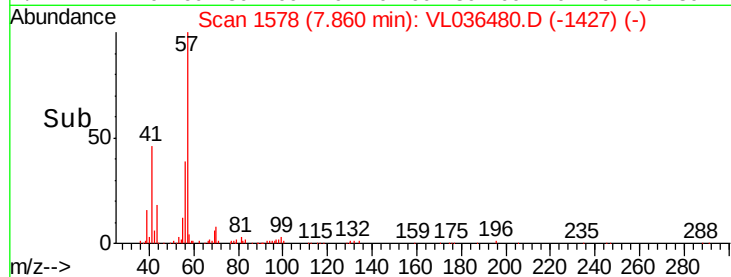
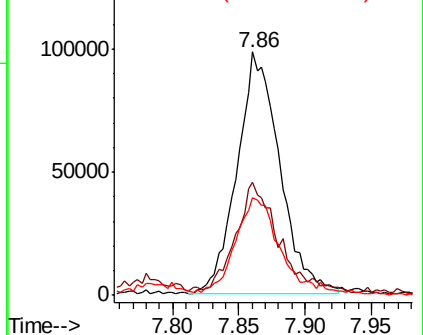
56 44.0 26.1 39.1#



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



#52

Tetrachloroethene

Concen: 1.896 ppbv

RT: 11.22 min Scan# 2622

Delta R.T. -0.01 min

Lab File: VL036480.D

Acq: 25 Mar 2021 10:50

Tgt Ion: 164 Resp: 208365

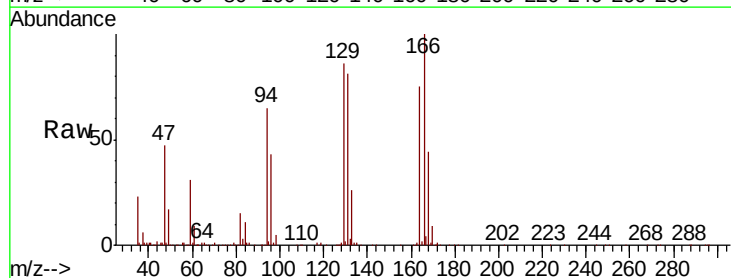
Ion Ratio Lower Upper

164 100

166 133.0 98.3 147.5

129 115.9 85.8 128.8

131 108.2 80.9 121.3

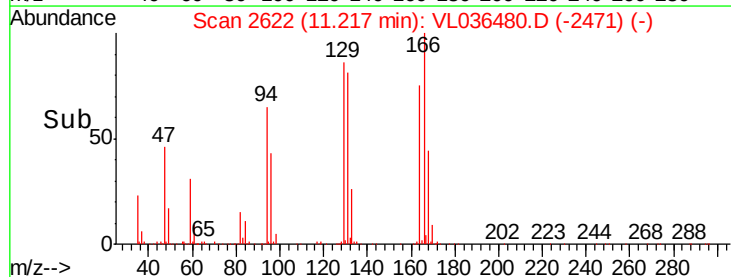
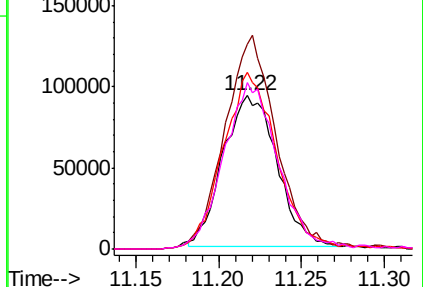


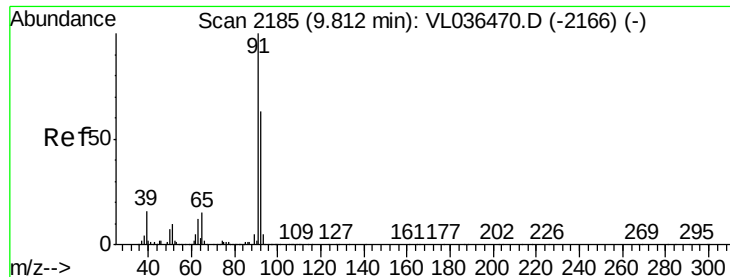
Abundance Ion 163.90 (163.60 to 164.60): V

Ion 165.90 (165.60 to 166.60): V

Ion 129.00 (128.70 to 129.70): V

Ion 131.00 (130.70 to 131.70): V





#53

Toluene

Concen: 2.536 ppbv

RT: 9.80 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

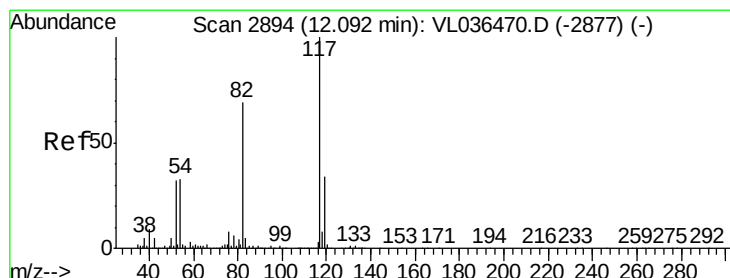
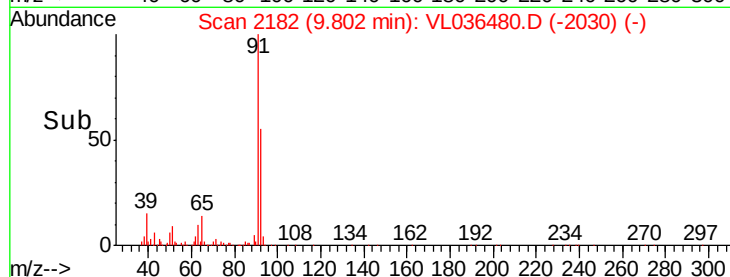
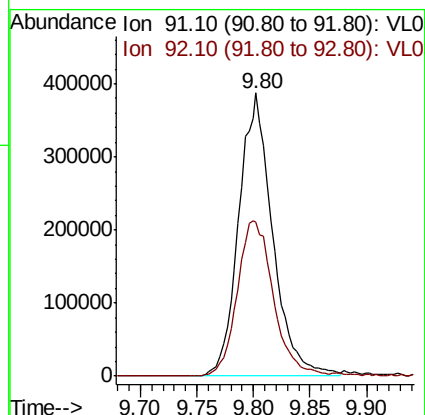
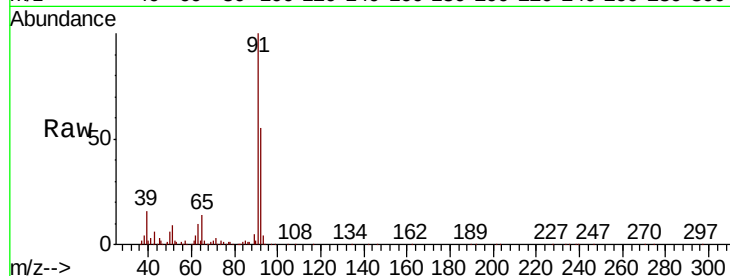
Acq: 25 Mar 2021 10:50

Tot Ion: 91 Resp: 805958

Ion Ratio Lower Upper

91 100

92 59.9 48.8 73.2



#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.08 min Scan# 2891

Delta R.T. -0.01 min

Lab File: VL036480.D

Acq: 25 Mar 2021 10:50

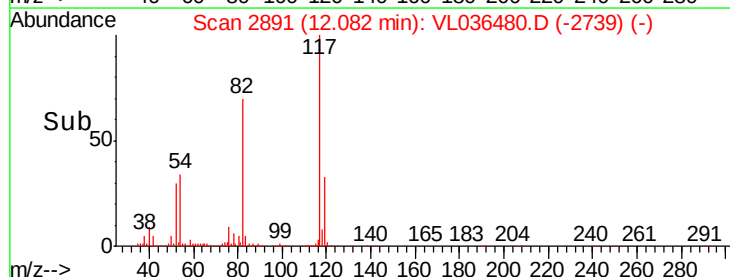
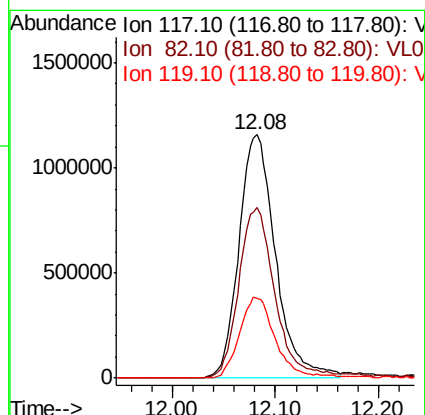
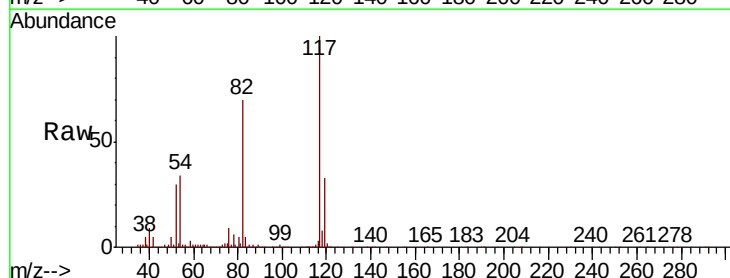
Tgt Ion: 117 Resp: 2860918

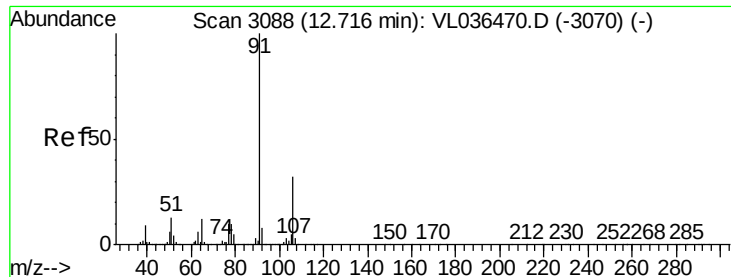
Ion Ratio Lower Upper

117 100

82 71.7 57.4 86.0

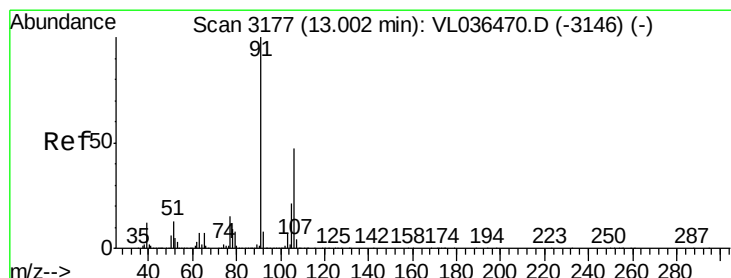
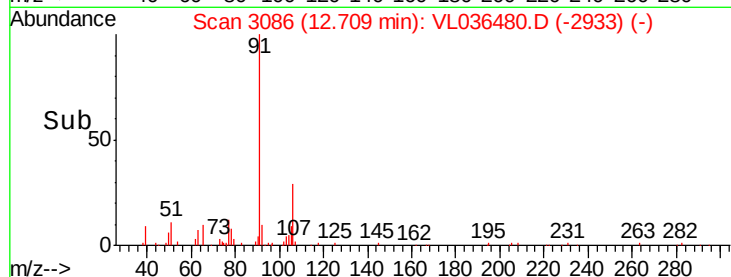
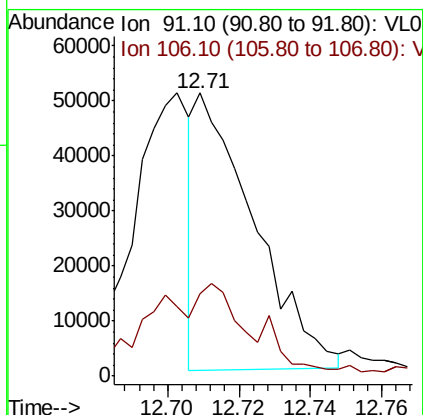
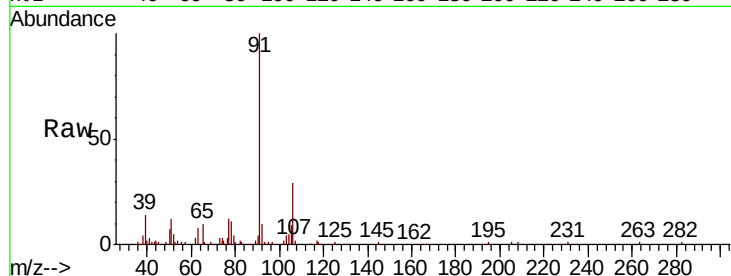
119 33.0 47.4 71.0#





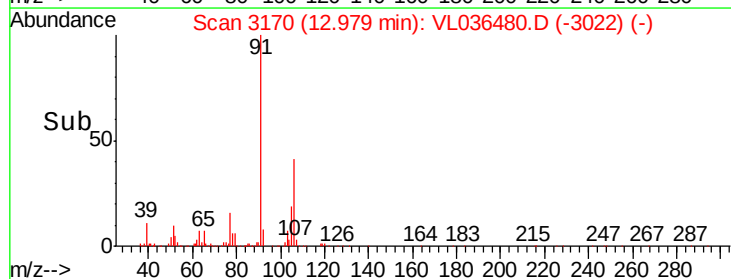
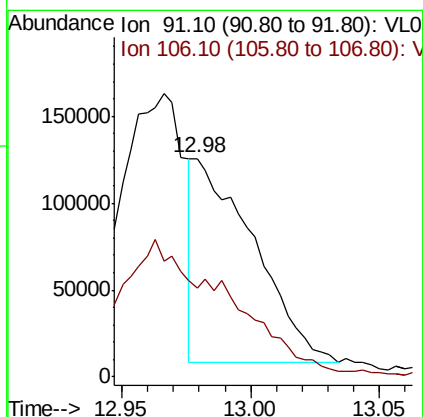
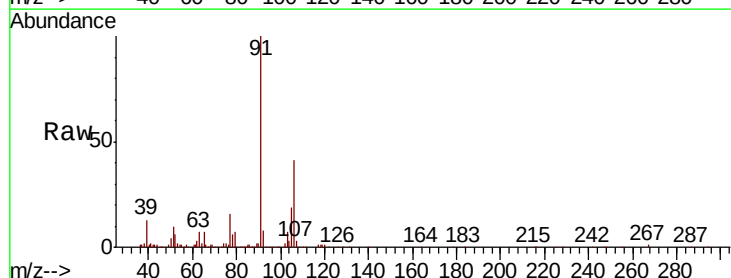
#58
Ethyl Benzene
Concen: 0.137 ppbv
RT: 12.71 min
Delta R.T. MSVOA_L
Lab File: ClientSampleId :
Acq: 25 Mar 2021 10:50

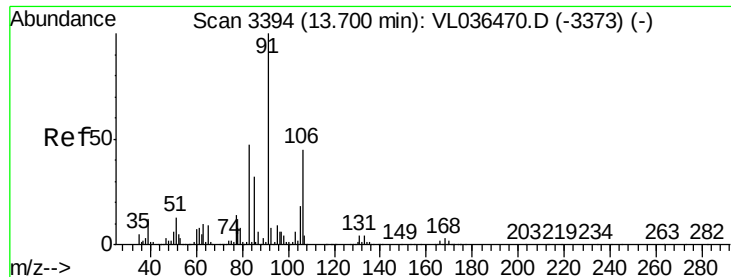
Tot Ion: 91 Resp: 56837
Ion Ratio Lower Upper
91 100
106 29.1 25.3 37.9



#59
m/p-Xylene
Concen: 0.517 ppbv
RT: 12.98 min Scan# 3170
Delta R.T. -0.02 min
Lab File: VL036480.D
Acq: 25 Mar 2021 10:50

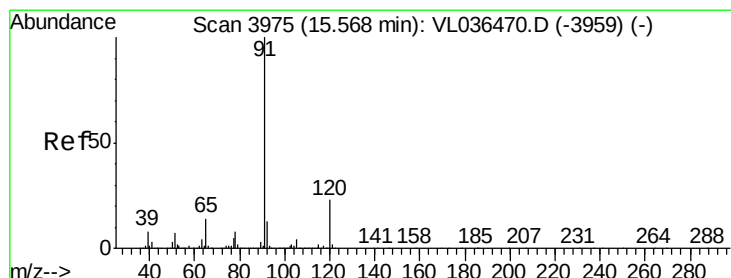
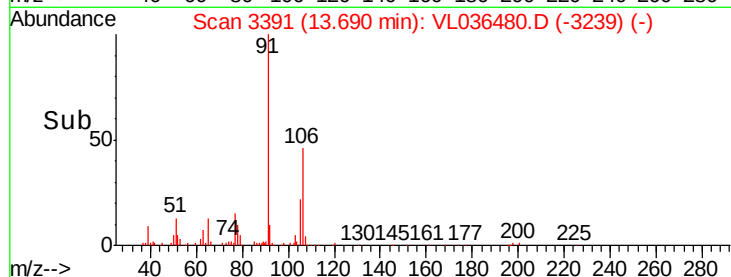
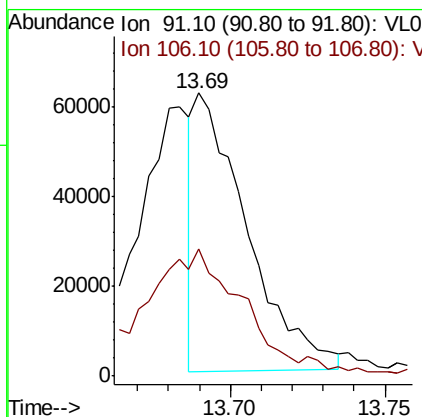
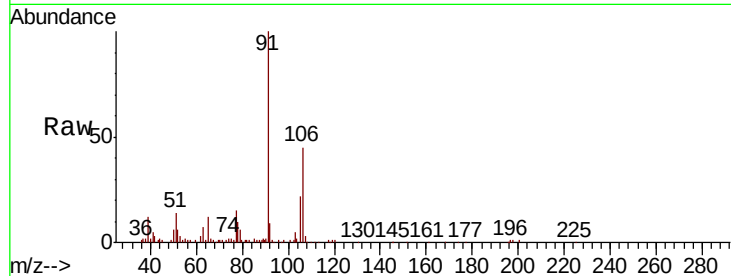
Tgt Ion: 91 Resp: 187730
Ion Ratio Lower Upper
91 100
106 0.0 35.3 52.9#





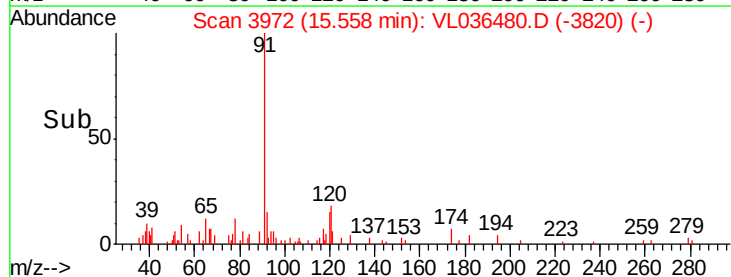
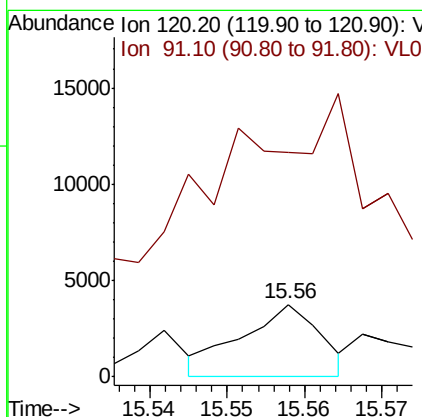
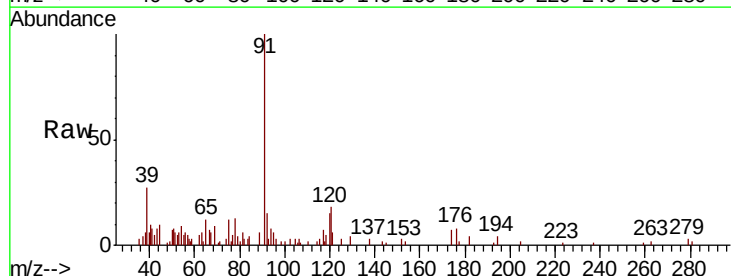
#60
o-Xylene
Concen: 0.208 ppbv
RT: 13.69
Instrument: MSVOA_1
Delta R.T.:
Lab File: ClientSampleId:
Acq: 25 Mar 2021 10:50

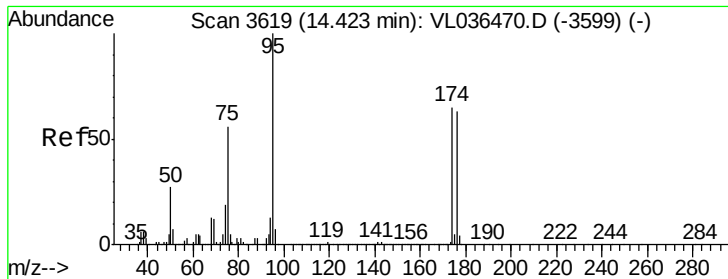
Tot Ion: 91 Resp: 72850
Ion Ratio Lower Upper
91 100
106 89.9 22.3 66.9#



#64
n-propylbenzene
Concen: 0.023 ppbv
RT: 15.56 min Scan# 3972
Delta R.T. -0.01 min
Lab File: VL036480.D
Acq: 25 Mar 2021 10:50

Tgt Ion: 120 Resp: 2695
Ion Ratio Lower Upper
120 100
91 0.0 377.4 566.2#





#68

1-Bromo-4-Fluorobenzene

Concen: 10.041 ppbv

RT: 14.41 min

Delta R.T. MSVOA_L

Lab File: ClientSampleId :

Acq: 25 Mar 2021 10:50

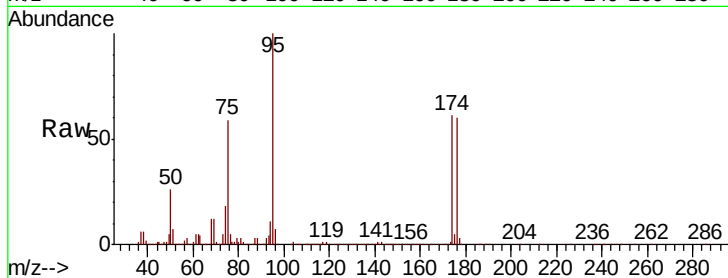
Tot Ion: 95 Resp: 2289569

Ion Ratio Lower Upper

95 100

174 65.1 51.0 76.6

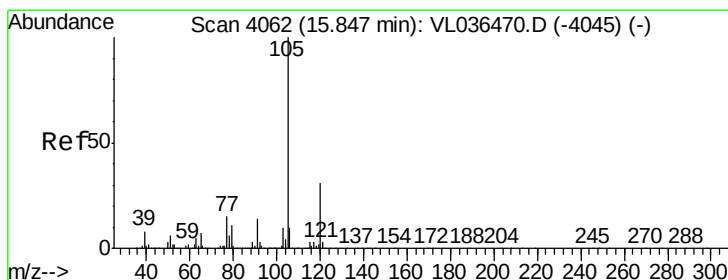
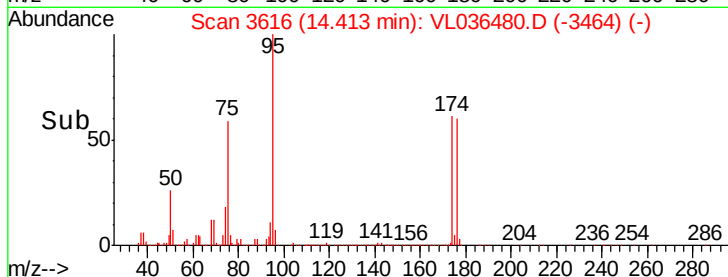
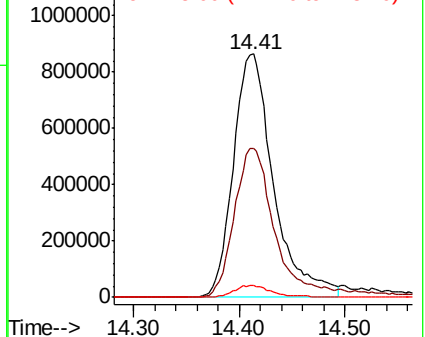
175 4.9 3.9 5.9



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



#72

4-Ethyltoluene

Concen: 0.035 ppbv

RT: 15.84 min Scan# 4059

Delta R.T. -0.01 min

Lab File: VL036480.D

Acq: 25 Mar 2021 10:50

Tgt Ion: 105 Resp: 13359

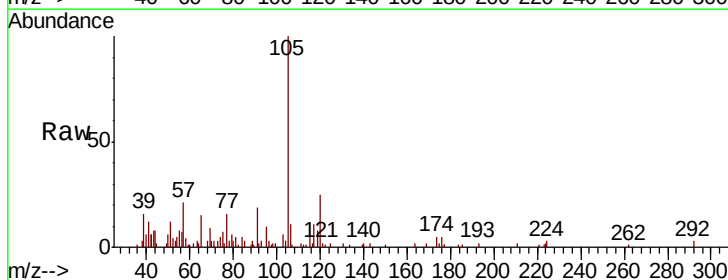
Ion Ratio Lower Upper

105 100

120 0.0 24.0 36.0#

91 0.0 11.0 16.4#

77 41.7 11.7 17.5#

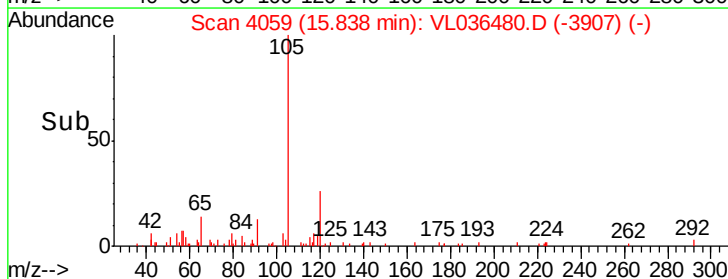
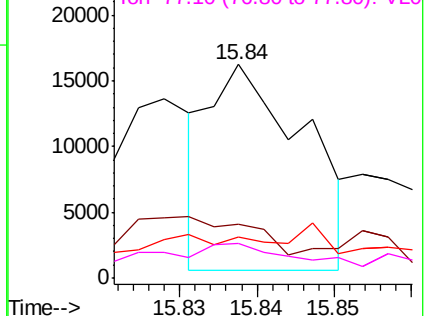


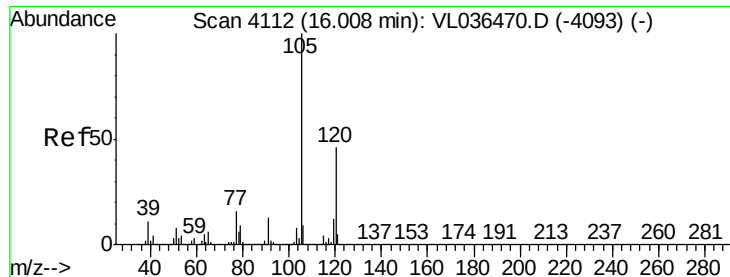
Abundance Ion 105.10 (104.80 to 105.80): V

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





#73

1,3,5-Trimethylbenzene

Concen: 0.024 ppbv

RT: 16.00 min

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

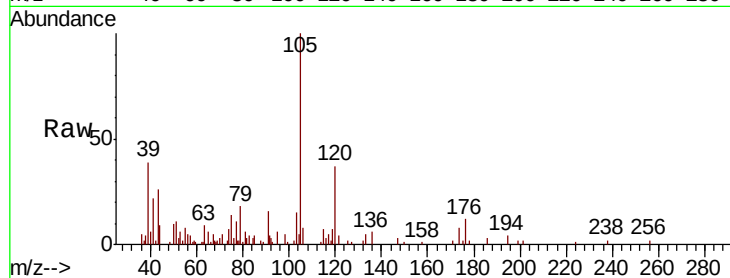
Acq: 25 Mar 2021 10:50

Tot Ion:105 Resp: 8758

Ion Ratio Lower Upper

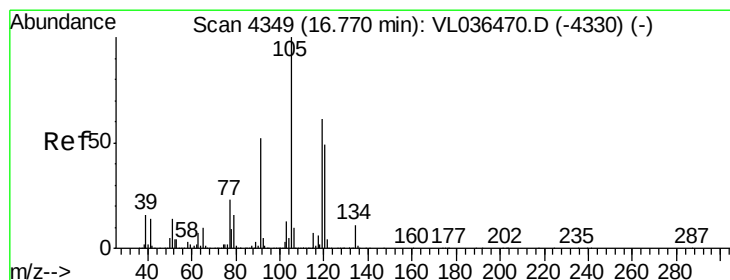
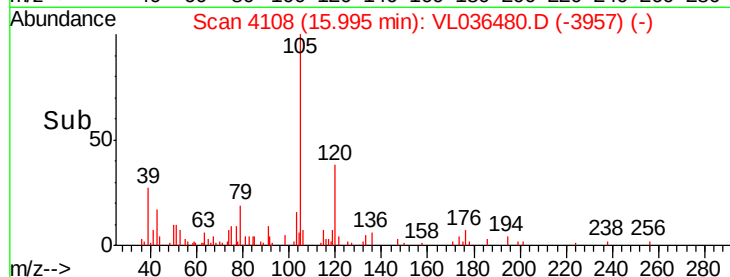
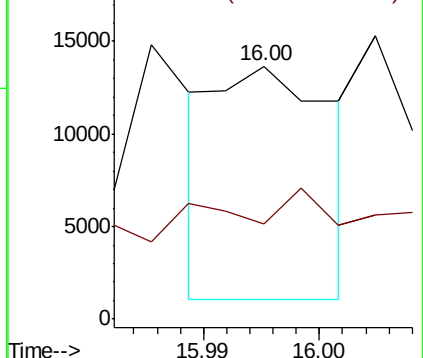
105 100

120 4.0 36.6 54.8#



Abundance Ion 105.10 (104.80 to 105.80): V

Ion 120.20 (119.90 to 120.90): V



#74

1,2,4-Trimethylbenzene

Concen: 0.022 ppbv

RT: 16.76 min Scan# 4345

Delta R.T. -0.01 min

Lab File: VL036480.D

Acq: 25 Mar 2021 10:50

Tgt Ion:105 Resp: 8282

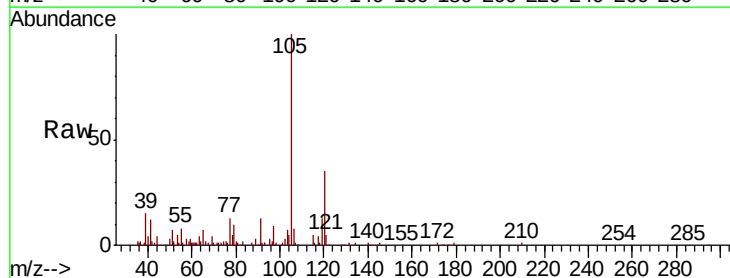
Ion Ratio Lower Upper

105 100

120 23.7 39.2 58.8#

91 13.8 42.6 64.0#

77 0.0 18.6 28.0#



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

