

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL032521\
 Data File : VL036483.D
 Acq On : 25 Mar 2021 12:59
 Operator :
 Sample : M1801-05DUP
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :

Quant Time: Mar 26 03:49:39 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	1400909	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.17	114	3217596	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.08	117	2857151	10.00	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.41	95	2238147	9.83	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	98.30%

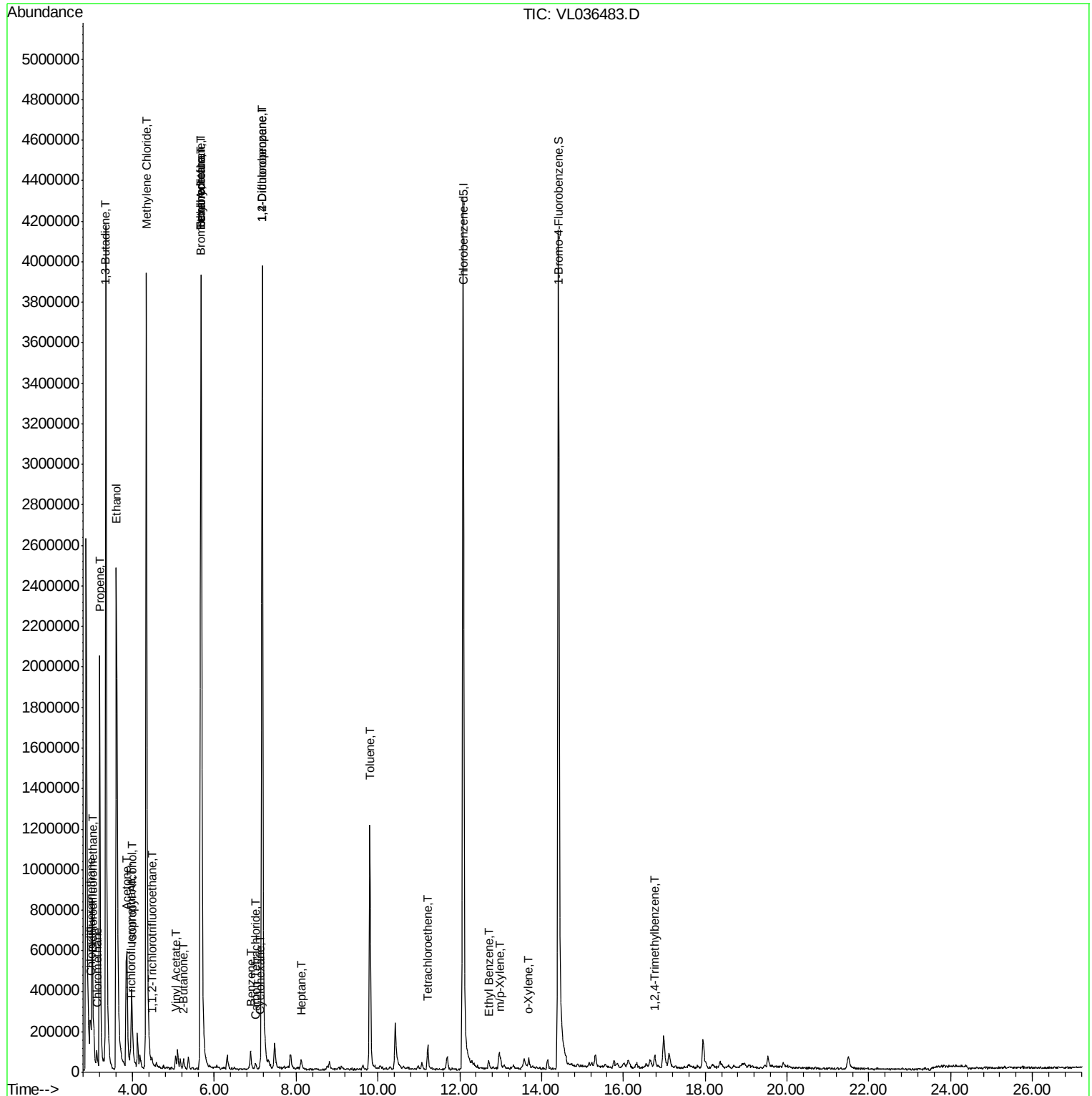
Target Compounds					Ovalue
2) Dichlorodifluoromethane	3.04	85	28720	0.126	ppbv 91
3) Chlorodifluoromethane	2.98	51	373937	1.429	ppbv # 82
4) Chloromethane	3.14	50	38511	0.417	ppbv 99
9) Propene	3.20	41	682613	8.181	ppbv 97
10) Heptane	8.11	43	14615	0.069	ppbv # 86
11) Trichlorofluoromethane	3.94	101	30820	0.132	ppbv 96
12) 1,1,2-Trichlorotrifluoroet	4.48	101	5777	0.039	ppbv # 24
13) Ethanol	3.61	45	3656155	367.950	ppbv 92
15) Acetone	3.85	43	789190	5.724	ppbv 95
16) 1,3-Butadiene	3.35	39	725641	7.559	ppbv # 16
19) Isopropyl Alcohol	3.98	45	479507	6.322	ppbv 99
20) Methylene Chloride	4.34	84	1562709	24.207	ppbv 91
23) Vinyl Acetate	5.06	43	11550	0.049	ppbv # 42
25) Ethyl Acetate	5.68	43	978487	2.985	ppbv # 86
26) Hexane	5.68	57	1225716	8.057	ppbv # 49
30) Cyclohexane	7.12	84	3827	0.031	ppbv # 1
34) 2-Butanone	5.25	43	52485	0.334	ppbv # 88
35) Carbon Tetrachloride	7.01	117	9703	0.039	ppbv # 87
36) Benzene	6.89	78	71035	0.239	ppbv 98
39) 1,2-Dichloropropane	7.17	63	888905	7.384	ppbv # 24
41) Tetrahydrofuran	5.68	42	513298	7.088	ppbv # 53
52) Tetrachloroethene	11.22	164	15950	0.146	ppbv 90
53) Toluene	9.80	91	951759	3.012	ppbv 100
58) Ethyl Benzene	12.71	91	18470	0.044	ppbv 89
59) m/p-Xylene	12.99	91	12381	0.034	ppbv # 32
60) o-Xylene	13.69	91	7292	0.021	ppbv # 1
74) 1,2,4-Trimethylbenzene	16.76	105	16610	0.043	ppbv # 47

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

```
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Operator  :  
Sample    : M1801-05DUP  
Misc      : 400ml/MSVOA L  
ALS Vial  : 1 Sample Multiplier: 1
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Instrument :
MSVOA_L
ClientSampleId :

Quant Time: Mar 26 03:49:39 2021
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA L\METHODS\VL032521AIR.M
Quant Title : AIR ANALYSIS BY METHOD T0-15 Instrument: MSVOA_LThu Mar 25 09:42:40 2021
QLast Update : Thu Mar 25 09:42:40 2021
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.66 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

Acq: 25 Mar 2021 12:59

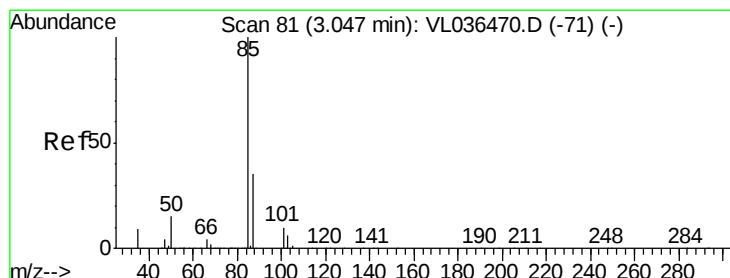
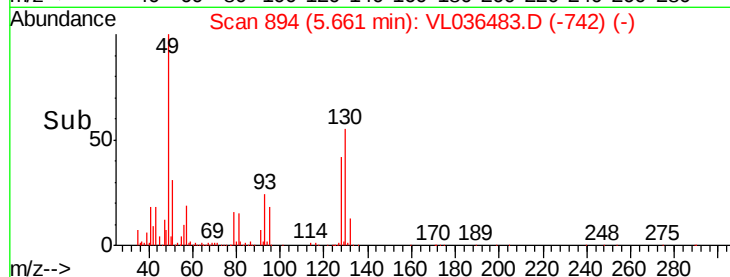
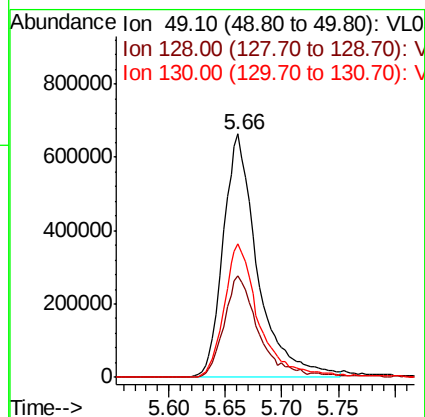
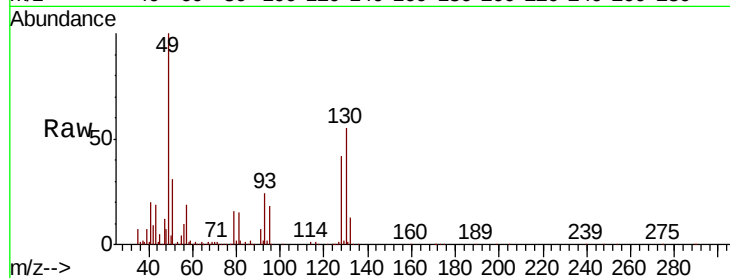
Tot Ion: 49 Resp: 1400909

Ion Ratio Lower Upper

49 100

128 42.8 23.5 70.6

130 56.3 29.1 87.4



#2

Dichlorodifluoromethane

Concen: 0.126 ppbv

RT: 3.04 min Scan# 79

Delta R.T. -0.01 min

Lab File: VL036483.D

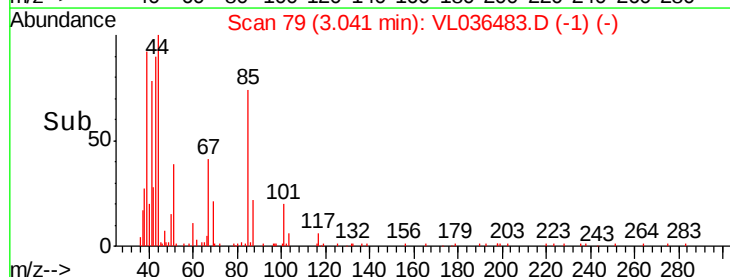
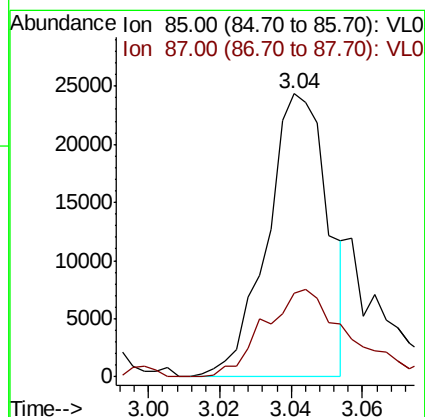
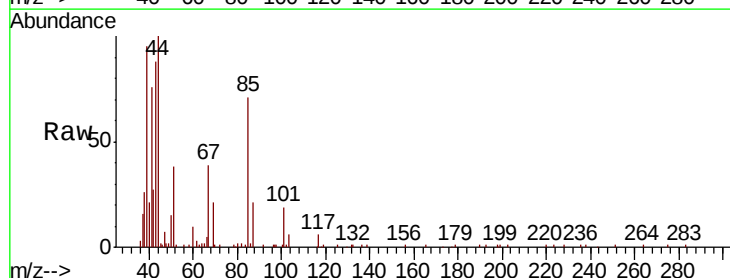
Acq: 25 Mar 2021 12:59

Tgt Ion: 85 Resp: 28720

Ion Ratio Lower Upper

85 100

87 29.5 27.8 41.8





#3

Chlorodifluoromethane

Concen: 1.429 ppbv

RT: 2.98 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

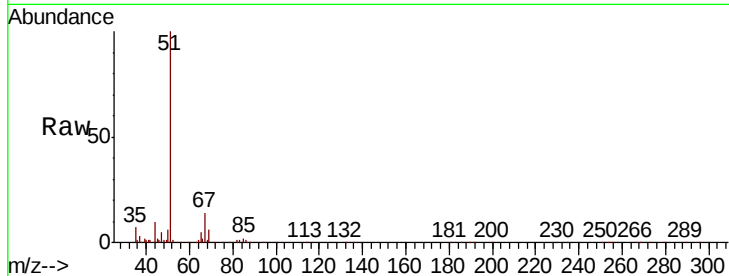
Acq: 25 Mar 2021 12:59

Tot Ion: 51 Resp: 373937

Ion Ratio Lower Upper

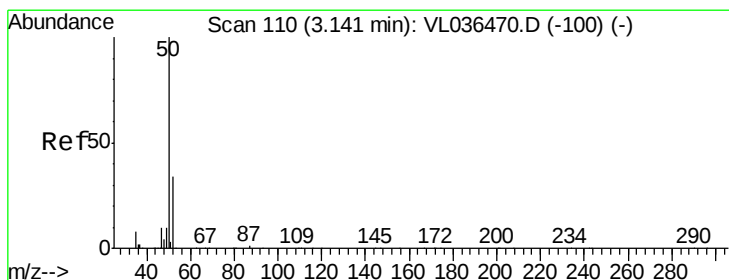
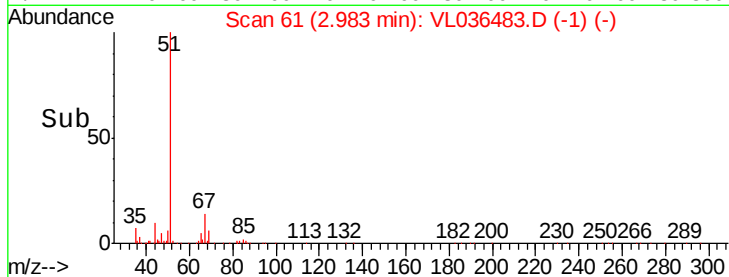
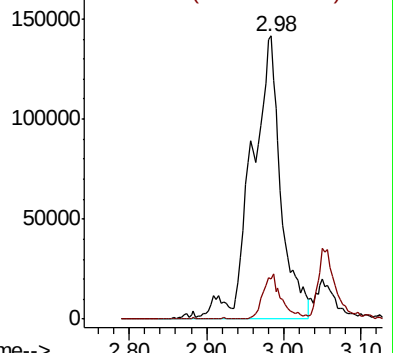
51 100

67 10.2 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: 0.417 ppbv

RT: 3.14 min Scan# 109

Delta R.T. -0.00 min

Lab File: VL036483.D

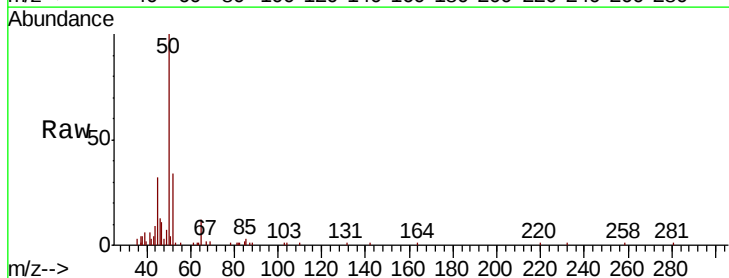
Acq: 25 Mar 2021 12:59

Tgt Ion: 50 Resp: 38511

Ion Ratio Lower Upper

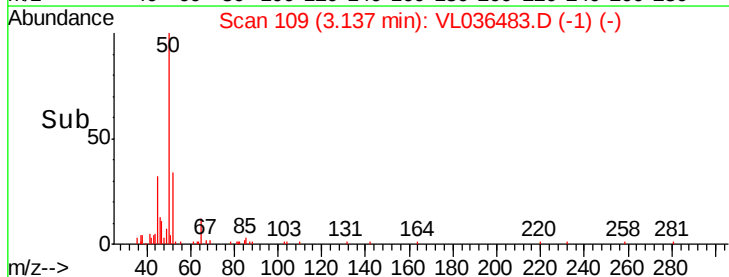
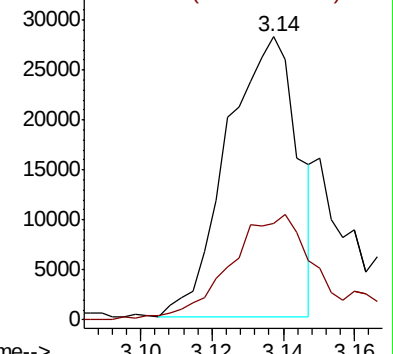
50 100

52 33.0 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: 8.181 ppbv

RT: 3.20 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

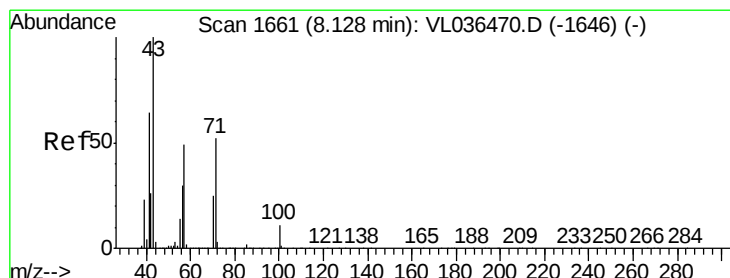
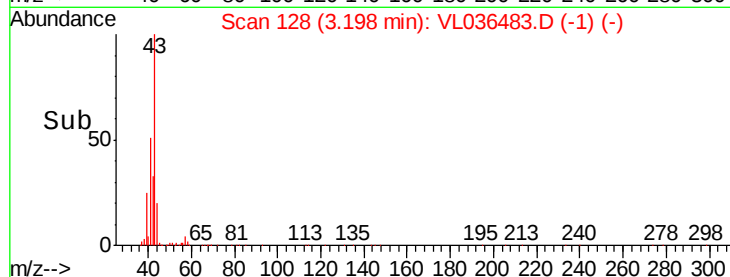
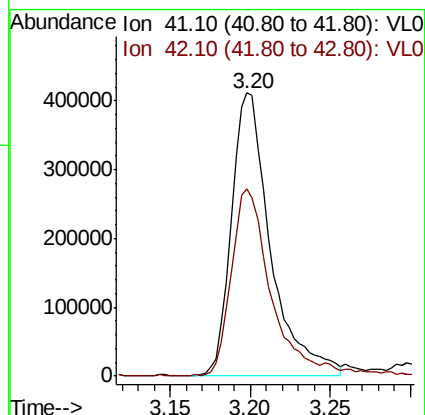
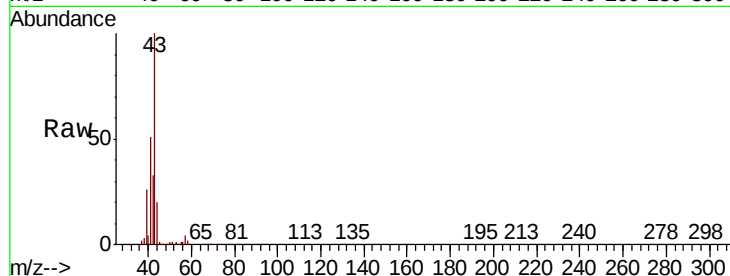
Acq: 25 Mar 2021 12:59

Tot Ion: 41 Resp: 682613

Ion Ratio Lower Upper

41 100

42 68.4 57.0 85.4



#10

Heptane

Concen: 0.069 ppbv

RT: 8.11 min Scan# 1657

Delta R.T. -0.01 min

Lab File: VL036483.D

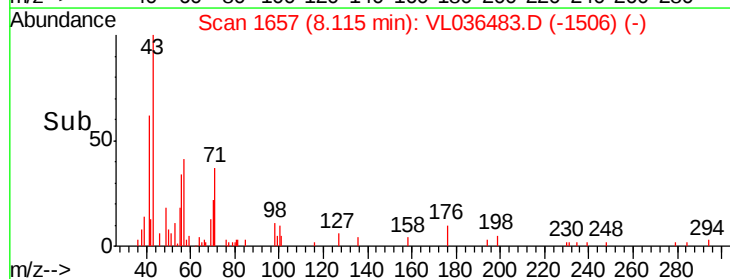
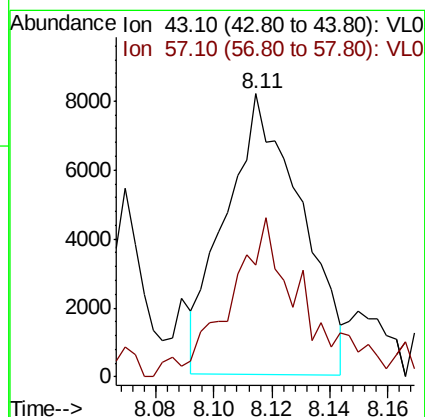
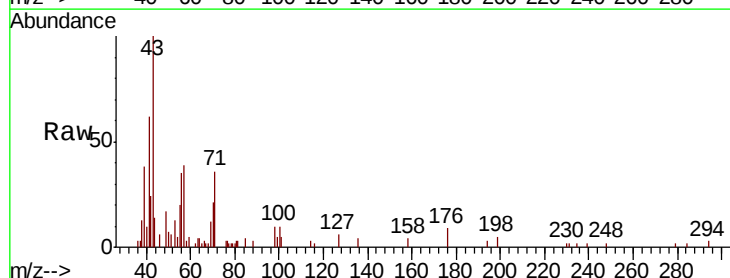
Acq: 25 Mar 2021 12:59

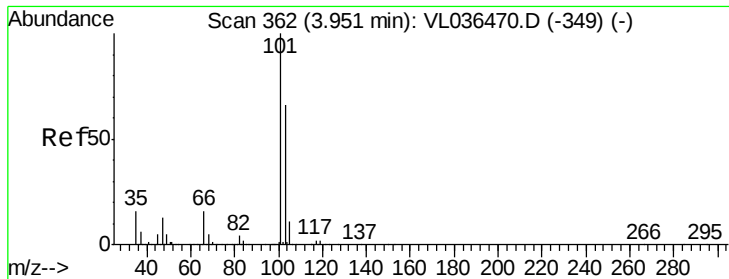
Tgt Ion: 43 Resp: 14615

Ion Ratio Lower Upper

43 100

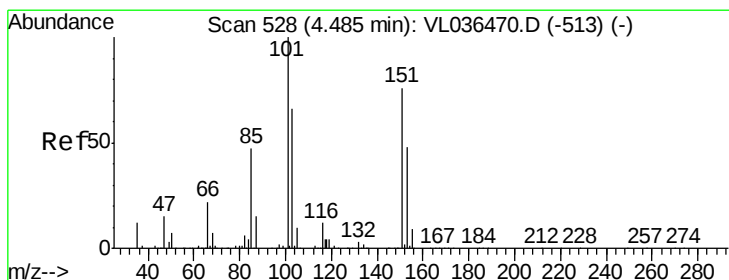
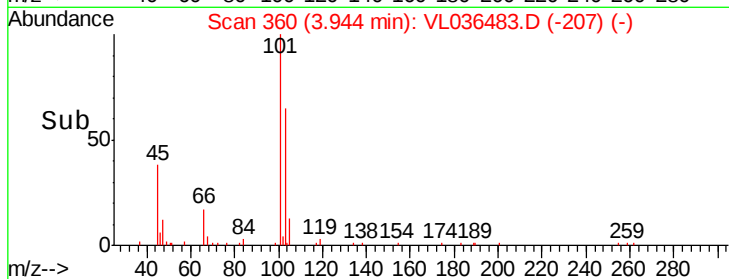
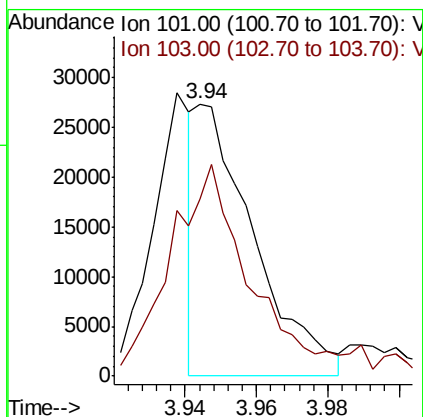
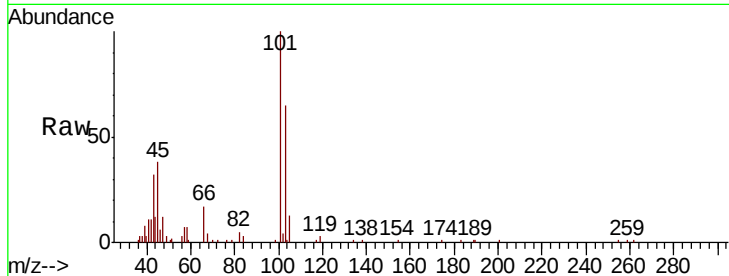
57 58.7 39.0 58.6#





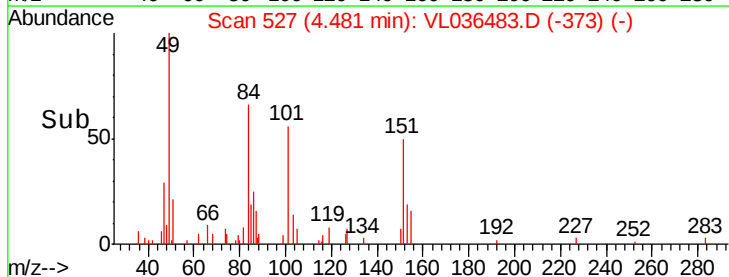
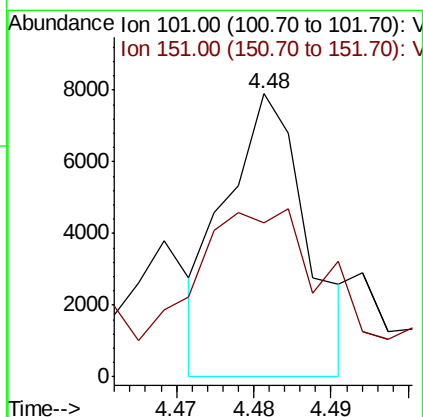
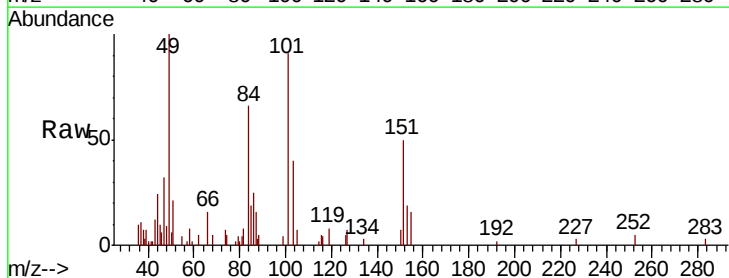
#11
 Trichlorofluoromethane
 Concen: 0.132 ppbv
 RT: 3.94 Instrument :
 Delta R.T. MSVOA_1
 Lab File: ClientSampleId :
 Acq: 25 Mar 2021 12:59

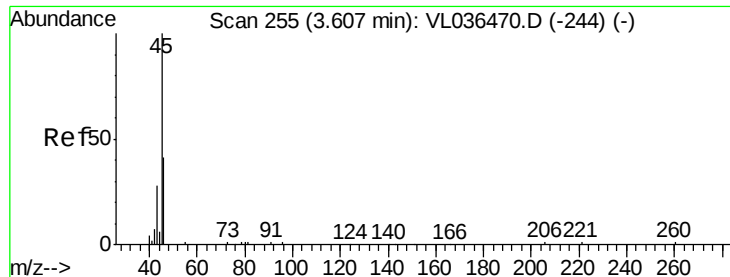
Tot Ion:101 Resp: 30820
 Ion Ratio Lower Upper
 101 100
 103 62.3 52.5 78.7



#12
 1,1,2-Trichlorotrifluoroethane
 Concen: 0.039 ppbv
 RT: 4.48 min Scan# 527
 Delta R.T. -0.00 min
 Lab File: VL036483.D
 Acq: 25 Mar 2021 12:59

Tgt Ion:101 Resp: 5777
 Ion Ratio Lower Upper
 101 100
 151 141.7 60.9 91.3#





#13

Ethanol

Concen: 367.950 ppbv

RT: 3.61 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

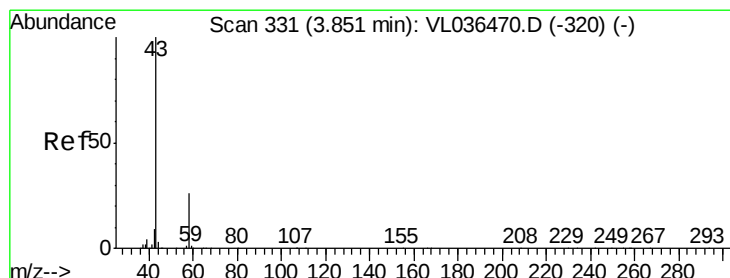
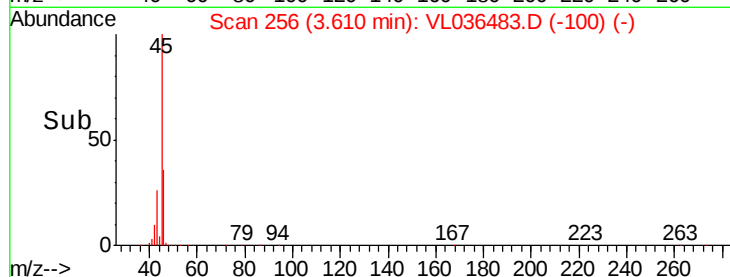
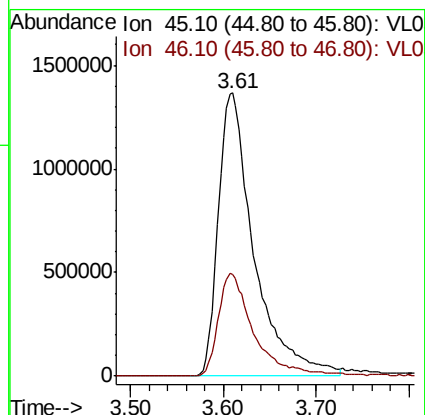
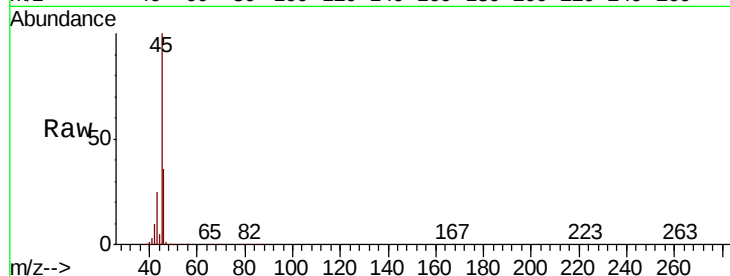
Acq: 25 Mar 2021 12:59

Tot Ion: 45 Resp: 3656155

Ion Ratio Lower Upper

45 100

46 36.6 16.6 66.2



#15

Acetone

Concen: 5.724 ppbv

RT: 3.85 min Scan# 330

Delta R.T. -0.00 min

Lab File: VL036483.D

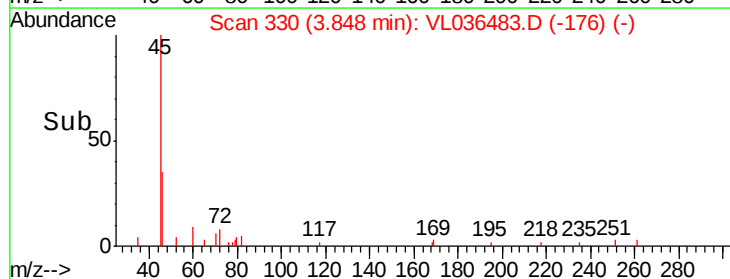
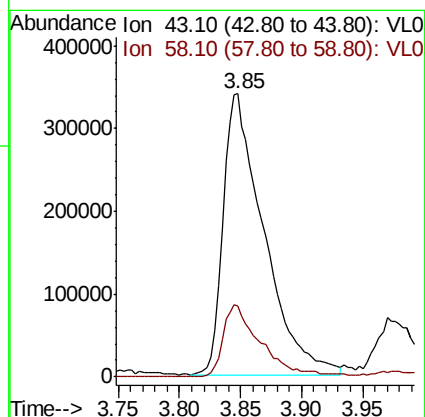
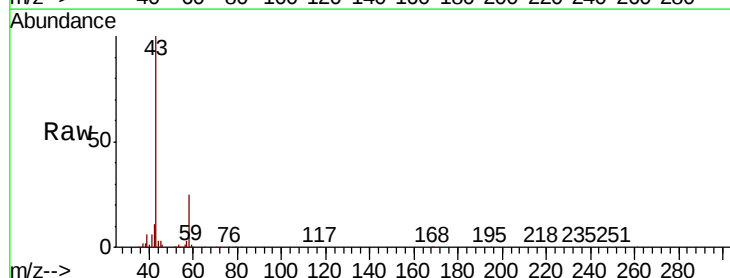
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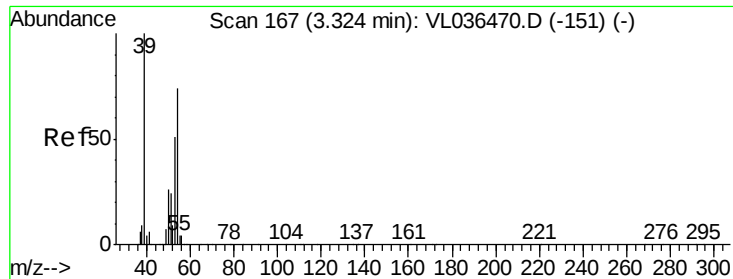
Tgt Ion: 43 Resp: 789190

Ion Ratio Lower Upper

43 100

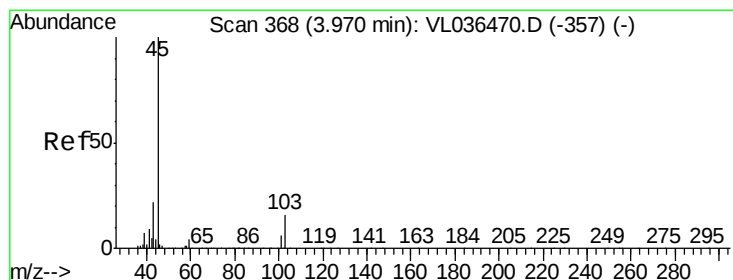
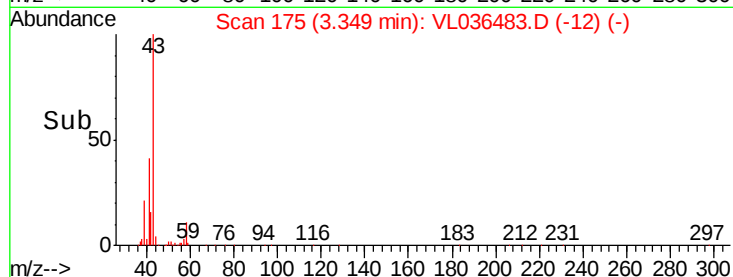
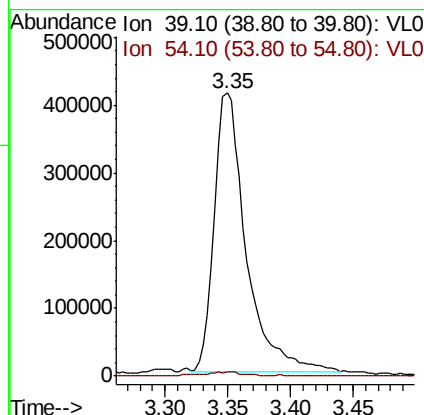
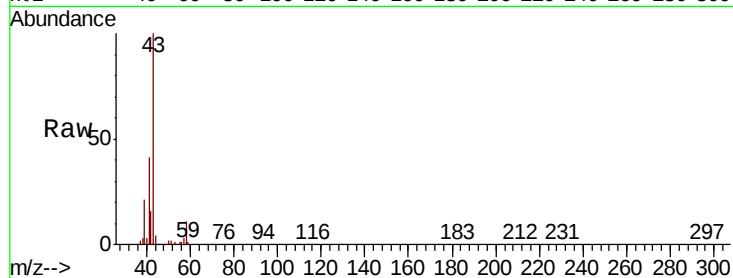
58 24.0 21.2 31.8





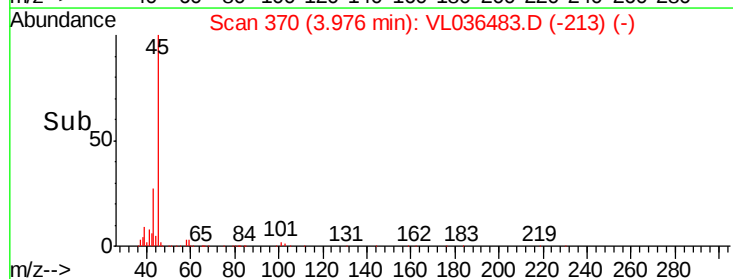
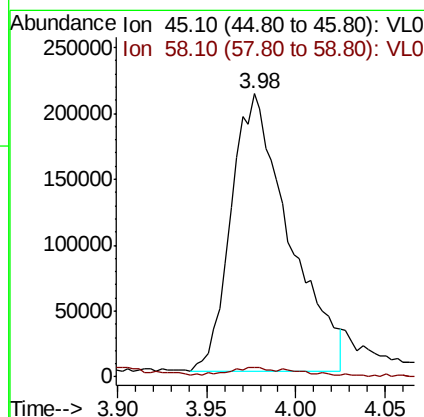
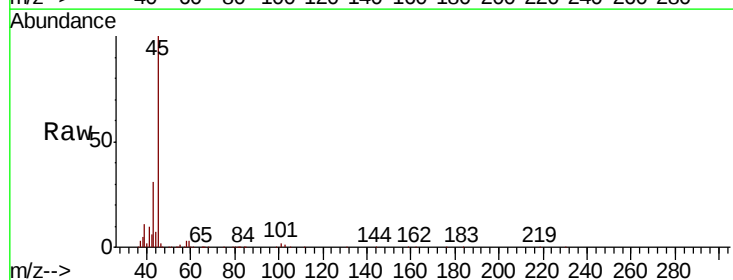
#16
 1,3-Butadiene
 Concen: 7.559 ppbv
 RT: 3.35
 Instrument: MSVOA_L
 Delta R.T.:
 Lab File: ClientSampleId:
 Acq: 25 Mar 2021 12:59

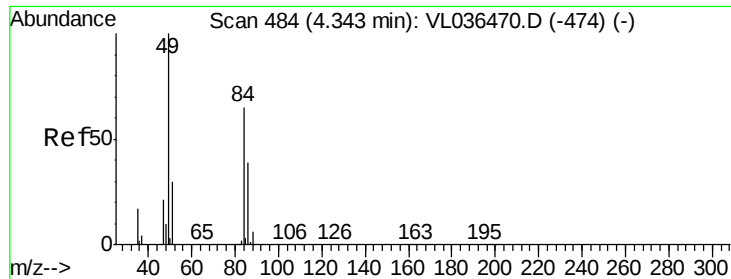
Tot Ion: 39 Resp: 725641
 Ion Ratio Lower Upper
 39 100
 54 2.4 58.8 88.2#



#19
 Isopropyl Alcohol
 Concen: 6.322 ppbv
 RT: 3.98 min Scan# 370
 Delta R.T. 0.01 min
 Lab File: VL036483.D
 Acq: 25 Mar 2021 12:59

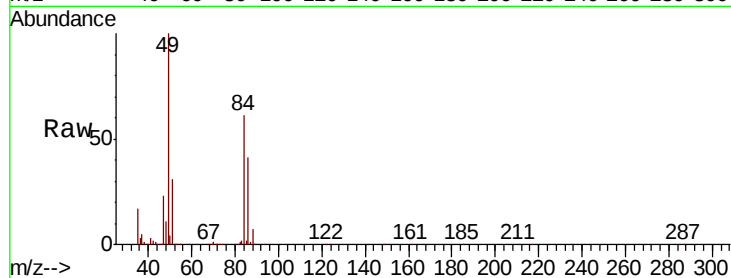
Tgt Ion: 45 Resp: 479507
 Ion Ratio Lower Upper
 45 100
 58 4.1 2.9 4.3





#20
Methylene Chloride
Concen: 24.207 ppbv
RT: 4.34
Instrument: MSVOA_1
Delta R.T.:
Lab File: ClientSampleId:
Acq: 25 Mar 2021 12:59

Tot Ion:	84	Resp:	1562709
Ion	Ratio	Lower	Upper
84	100		
49	164.8	122.9	184.3
51	51.6	36.9	55.3
86	67.6	48.2	72.4



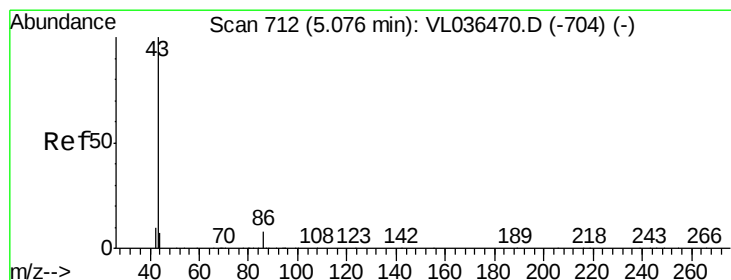
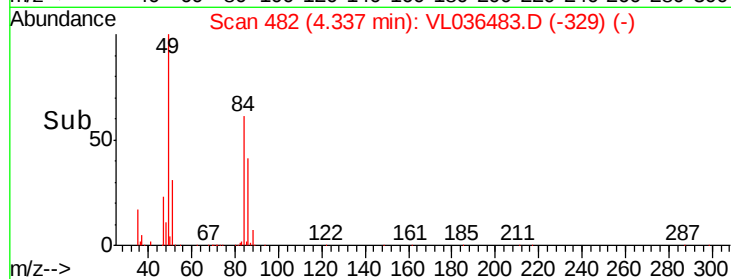
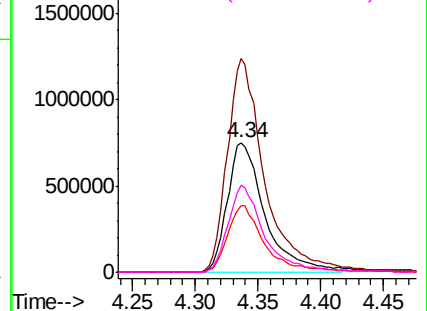
Abundance

Ion 84.00 (83.70 to 84.70): VL0

Ion 49.10 (48.80 to 49.80): VL0

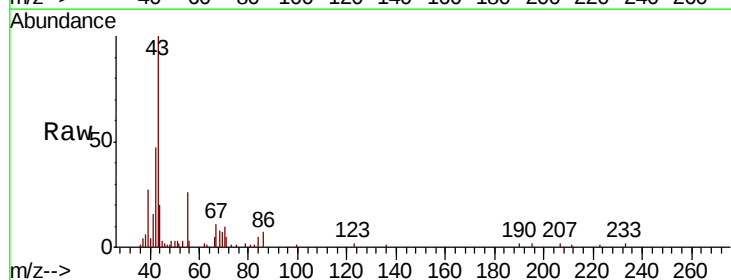
Ion 51.10 (50.80 to 51.80): VL0

Ion 86.00 (85.70 to 86.70): VL0



#23
Vinyl Acetate
Concen: 0.049 ppbv
RT: 5.06 min Scan# 708
Delta R.T. -0.01 min
Lab File: VL036483.D
Acq: 25 Mar 2021 12:59

Tgt Ion:	43	Resp:	11550
Ion	Ratio	Lower	Upper
43	100		
86	2.9	5.4	8.0#
42	49.5	8.5	12.7#
44	15.9	4.6	7.0#



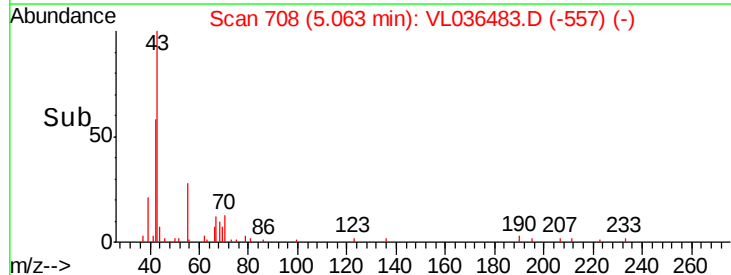
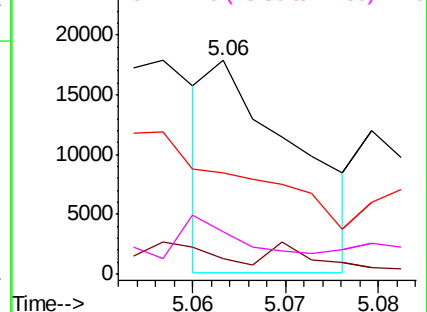
Abundance

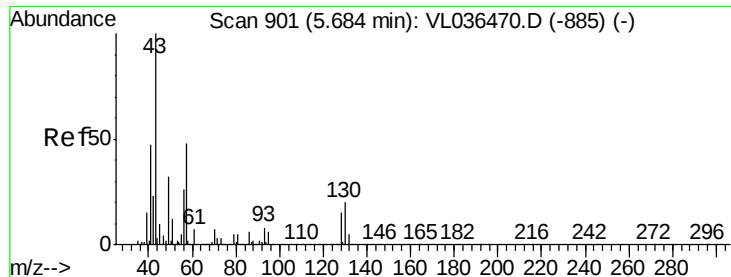
Ion 43.10 (42.80 to 43.80): VL0

Ion 86.10 (85.80 to 86.80): VL0

Ion 42.10 (41.80 to 42.80): VL0

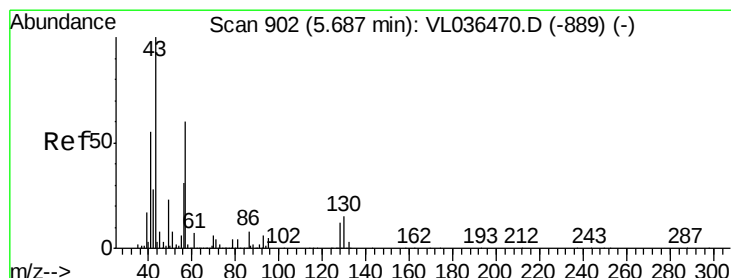
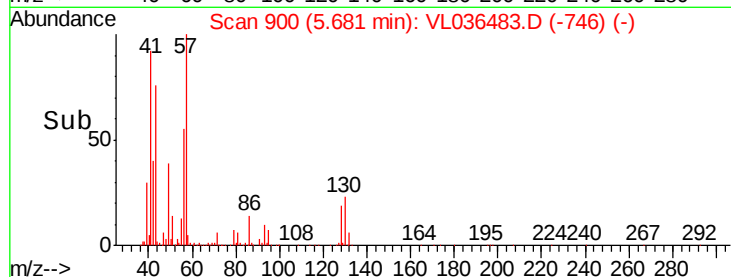
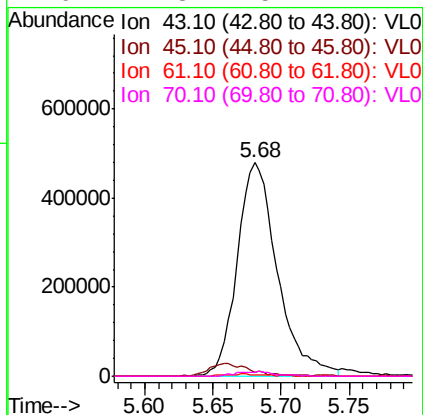
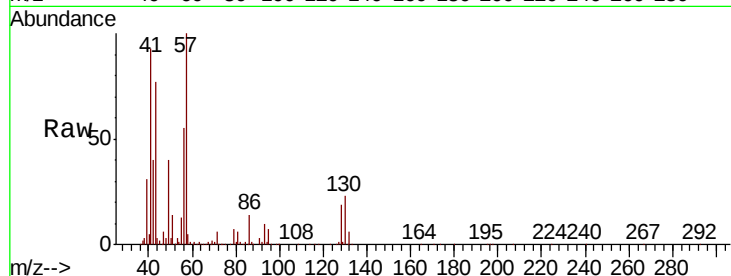
Ion 44.10 (43.80 to 44.80): VL0





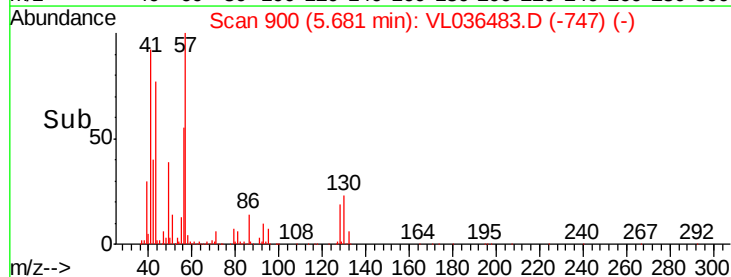
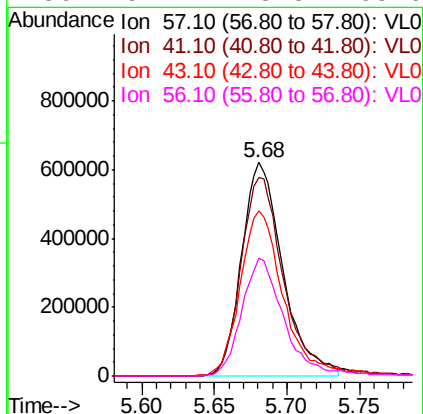
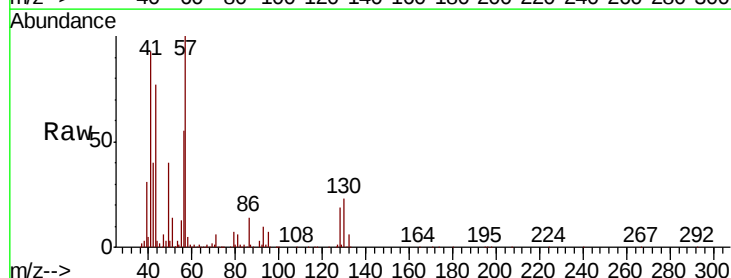
#25
Ethyl Acetate
Concen: 2.985 ppbv
RT: 5.68 min
Delta R.T. MSVOA_L
Lab File: ClientSampleId :
Acq: 25 Mar 2021 12:59

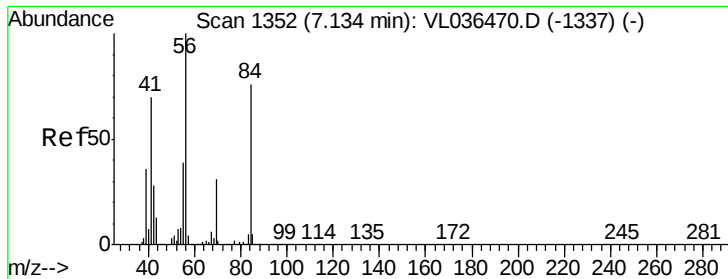
Tot Ion:	43	Resp:	978487
Ion	Ratio	Lower	Upper
43	100		
45	6.8	7.9	11.9#
61	1.5	7.4	11.2#
70	2.3	5.1	7.7#



#26
Hexane
Concen: 8.057 ppbv
RT: 5.68 min Scan# 900
Delta R.T. -0.01 min
Lab File: VL036483.D
Acq: 25 Mar 2021 12:59

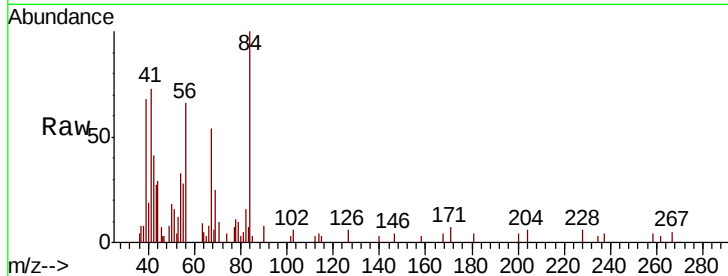
Tgt Ion:	57	Resp:	1225716
Ion	Ratio	Lower	Upper
57	100		
41	99.3	77.2	115.8
43	82.4	173.8	260.6#
56	57.2	43.8	65.6





#30
Cvclohexane
Concen: 0.031 ppbv
RT: 7.12 min
Instrument: MSVOA_1
Delta R.T.:
Lab File: ClientSampleId:
Acq: 25 Mar 2021 12:59

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

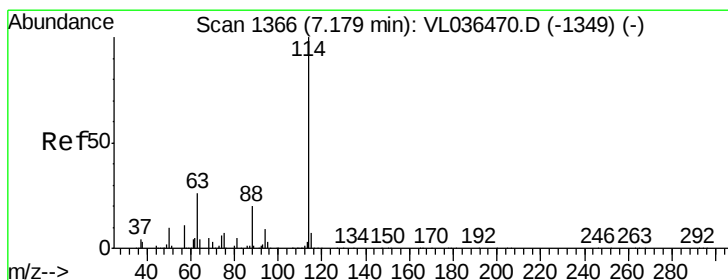
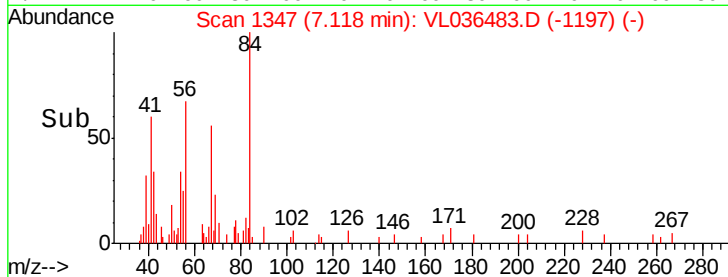
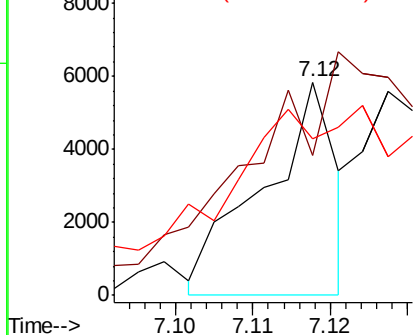


Abundance

Ion 84.20 (83.90 to 84.90): VL0

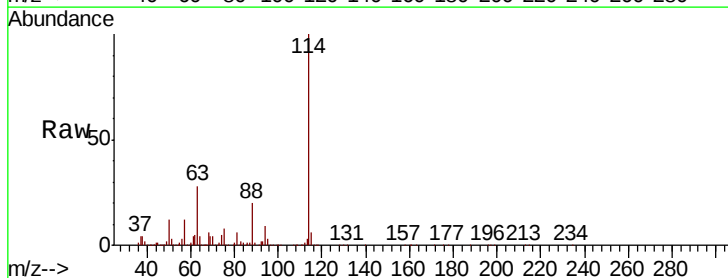
Ion 56.10 (55.80 to 56.80): VL0

Ion 41.10 (40.80 to 41.80): VL0



#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 7.17 min Scan# 1363
Delta R.T. -0.01 min
Lab File: VL036483.D
Acq: 25 Mar 2021 12:59

Tgt Ion	Ratio	Lower	Upper
114	100		
63	27.8	22.4	33.6
88	19.4	15.4	23.0

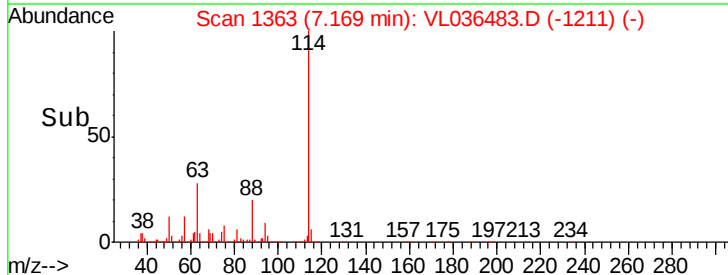
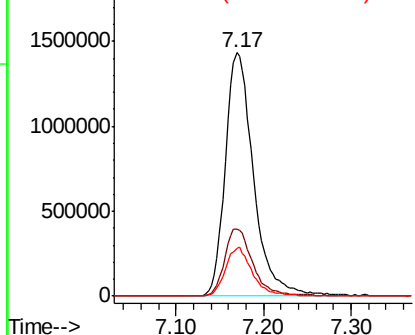


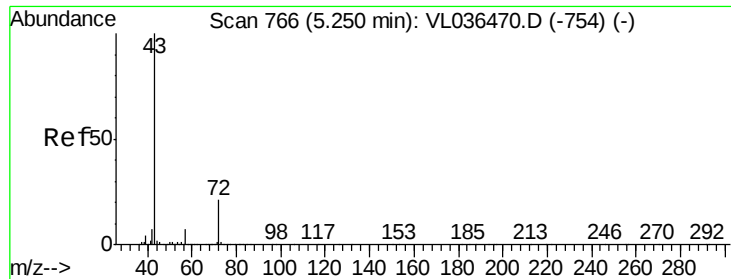
Abundance

Ion 114.10 (113.80 to 114.80): VL0

Ion 63.10 (62.80 to 63.80): VL0

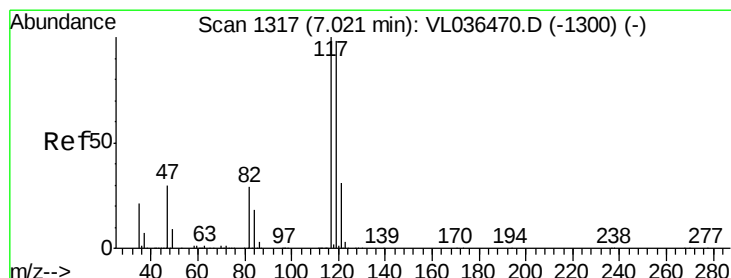
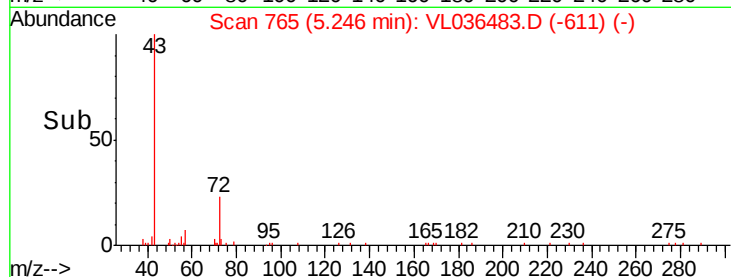
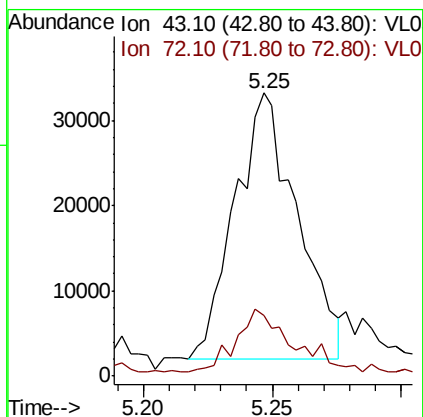
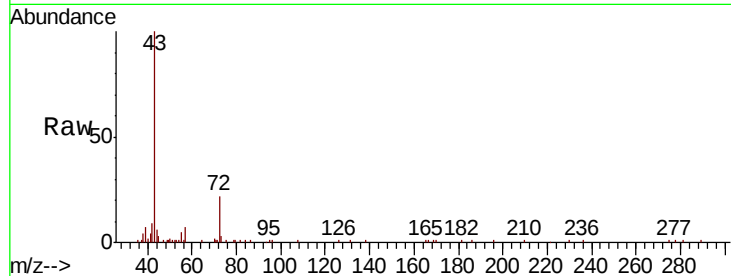
Ion 88.10 (87.80 to 88.80): VL0





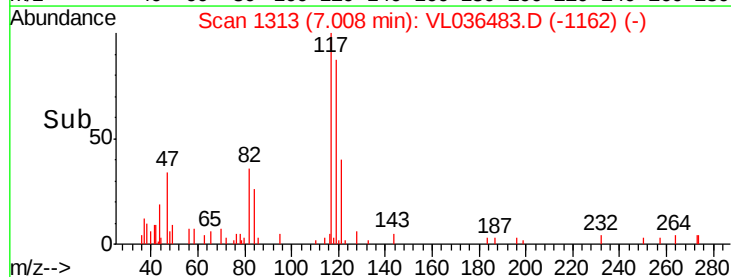
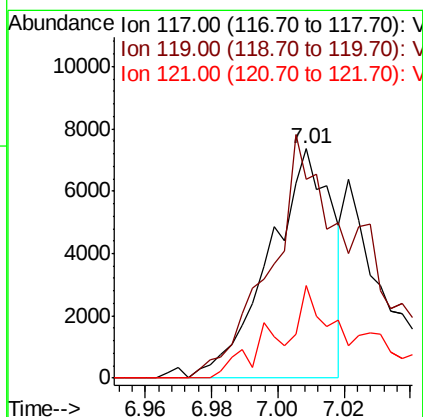
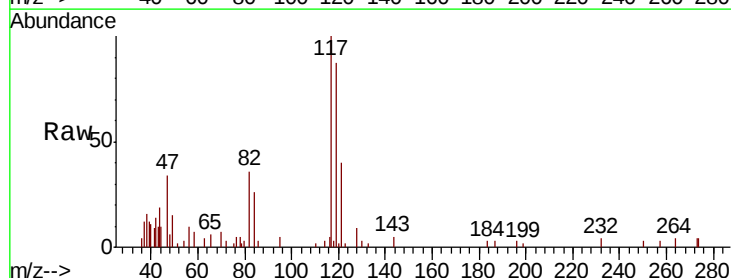
#34
 2-Butanone
 Concen: 0.334 ppbv
 RT: 5.25 Instrument: MSVOA_1
 Delta R.T.:
 Lab File: ClientSampleId:
 Acq: 25 Mar 2021 12:59

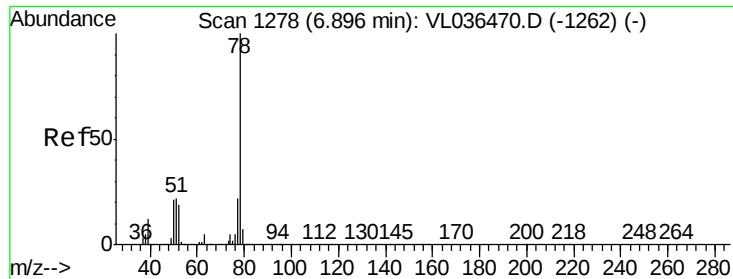
Tot Ion: 43 Resp: 52485
 Ion Ratio Lower Upper
 43 100
 72 26.7 17.0 25.6#



#35
 Carbon Tetrachloride
 Concen: 0.039 ppbv
 RT: 7.01 min Scan# 1313
 Delta R.T. -0.01 min
 Lab File: VL036483.D
 Acq: 25 Mar 2021 12:59

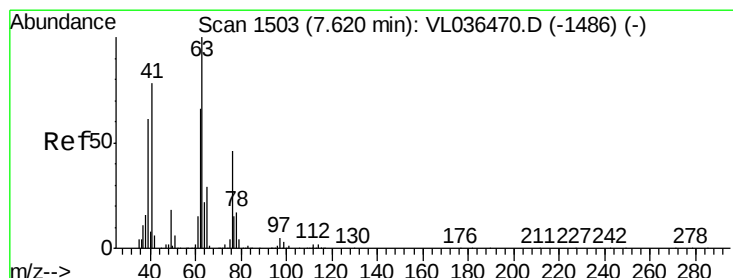
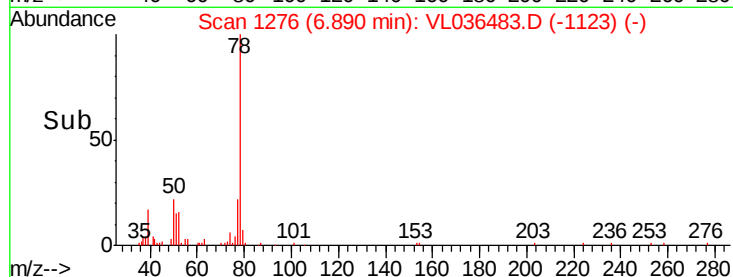
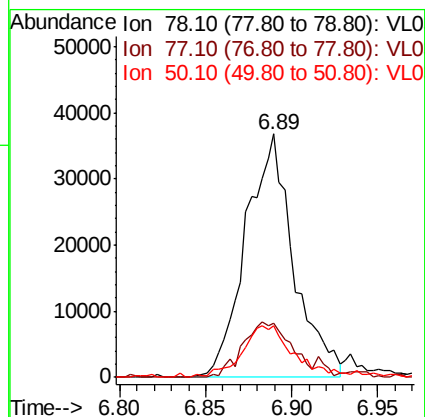
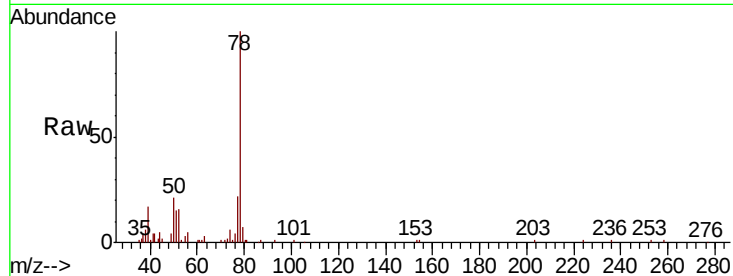
Tgt Ion: 117 Resp: 9703
 Ion Ratio Lower Upper
 117 100
 119 86.9 78.2 117.2
 121 40.3 24.5 36.7#





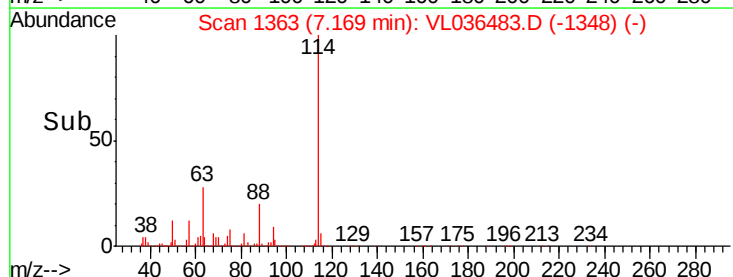
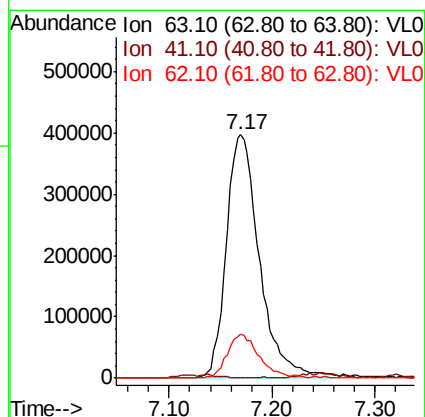
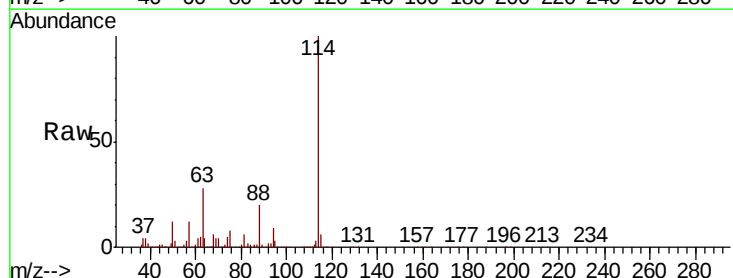
#36
Benzene
Concen: 0.239 ppbv
RT: 6.89
Delta R.T. MSVOA_L
Lab File: ClientSampleId :
Acq: 25 Mar 2021 12:59

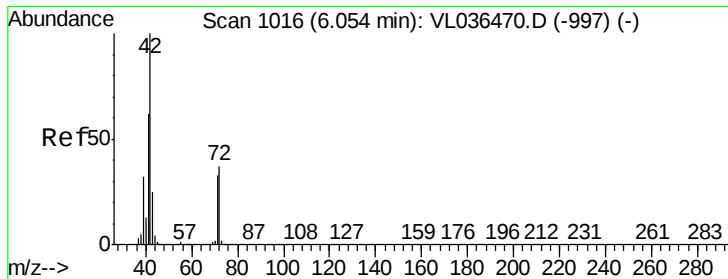
Tot Ion:	78	Resp:	71035
Ion	Ratio	Lower	Upper
78	100		
77	21.6	18.0	27.0
50	21.4	16.5	24.7



#39
1,2-Dichloropropane
Concen: 7.384 ppbv
RT: 7.17 min Scan# 1363
Delta R.T. -0.45 min
Lab File: VL036483.D
Acq: 25 Mar 2021 12:59

Tgt Ion:	63	Resp:	888905
Ion	Ratio	Lower	Upper
63	100		
41	0.0	62.4	93.6#
62	18.2	52.8	79.2#





#41

Tetrahydrofuran

Concen: 7.088 ppbv

RT: 5.68 Instrument:

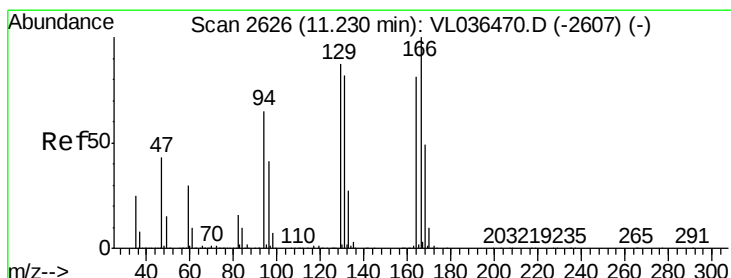
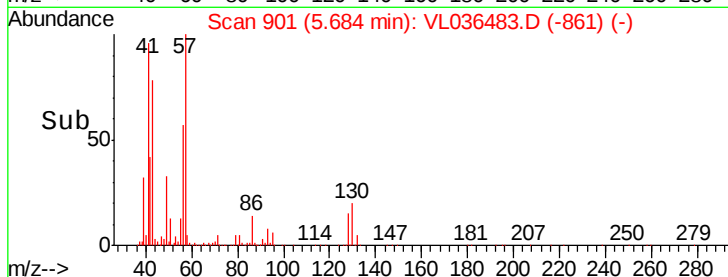
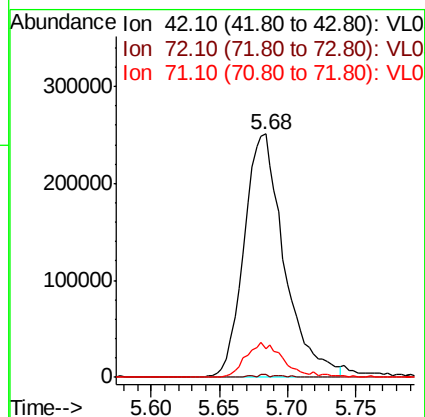
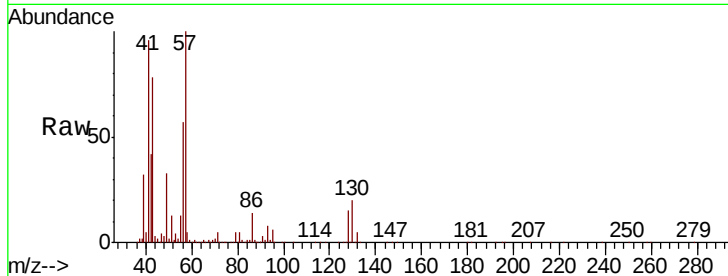
Delta R.T. MSVOA_L

Lab File: ClientSampleId:

Acq: 25 Mar 2021 12:59

Tot Ion: 42 Resp: 513298

Ion	Ratio	Lower	Upper
42	100		
72	0.9	27.6	41.4#
71	13.8	27.0	40.4#



#52

Tetrachloroethene

Concen: 0.146 ppbv

RT: 11.22 min Scan# 2623

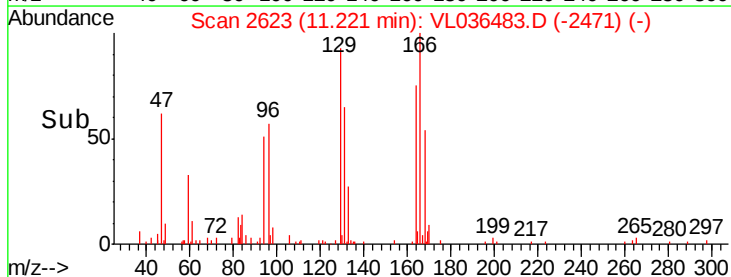
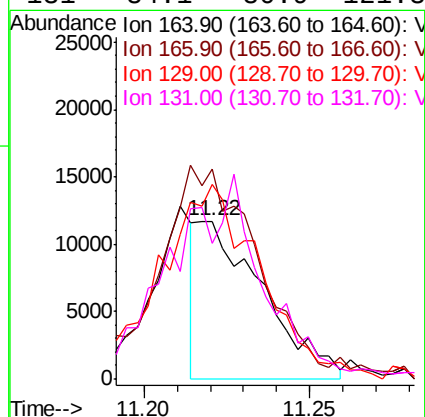
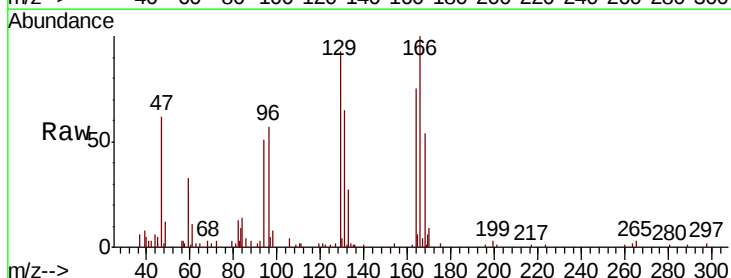
Delta R.T. -0.01 min

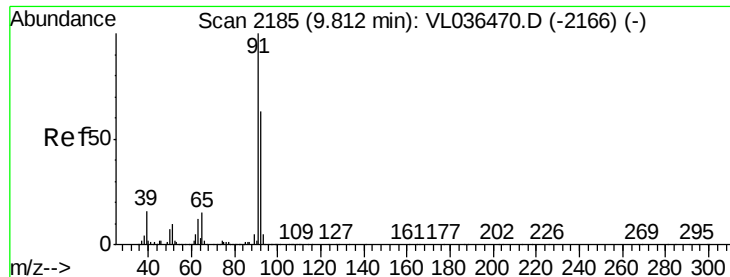
Lab File: VL036483.D

Acq: 25 Mar 2021 12:59

Tgt Ion: 164 Resp: 15950

Ion	Ratio	Lower	Upper
164	100		
166	126.2	98.3	147.5
129	118.7	85.8	128.8
131	84.1	80.9	121.3





#53

Toluene

Concen: 3.012 ppbv

RT: 9.80 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

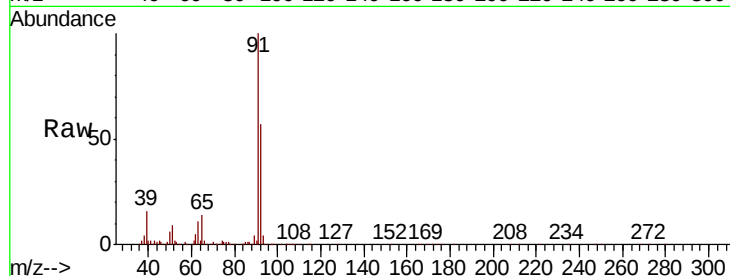
Acq: 25 Mar 2021 12:59

Tot Ion: 91 Resp: 951759

Ion Ratio Lower Upper

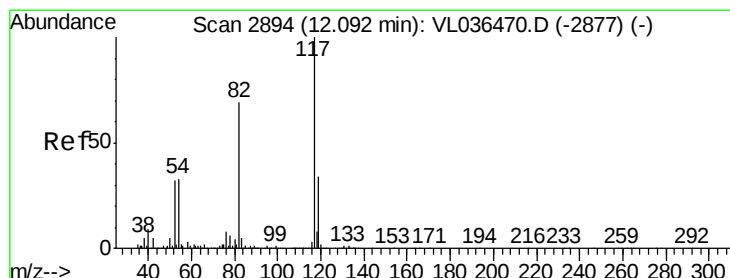
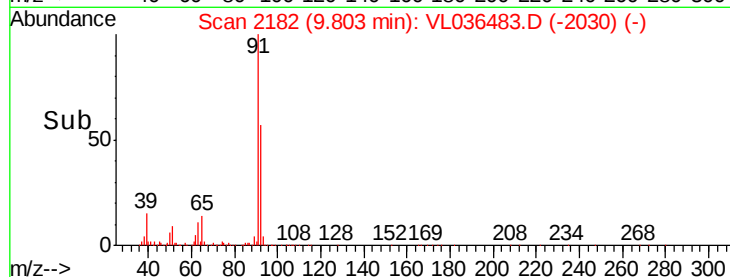
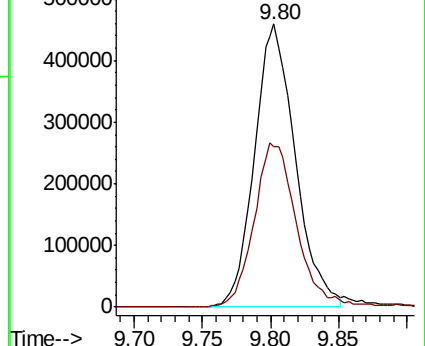
91 100

92 61.1 48.8 73.2



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 92.10 (91.80 to 92.80): VL0



#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.08 min Scan# 2891

Delta R.T. -0.01 min

Lab File: VL036483.D

Acq: 25 Mar 2021 12:59

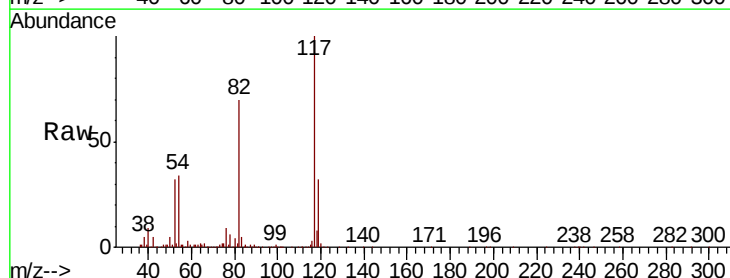
Tgt Ion: 117 Resp: 2857151

Ion Ratio Lower Upper

117 100

82 71.8 57.4 86.0

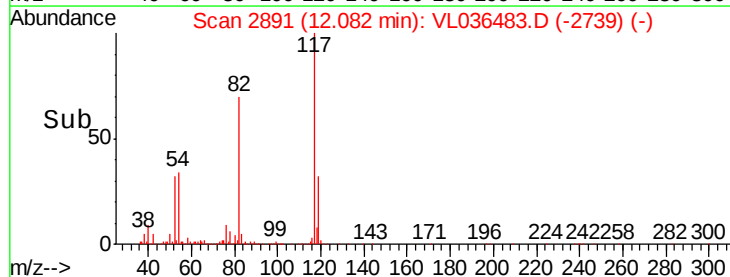
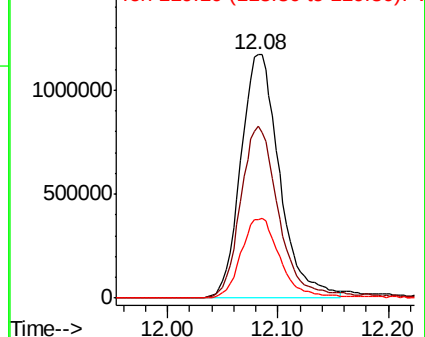
119 34.3 47.4 71.0#

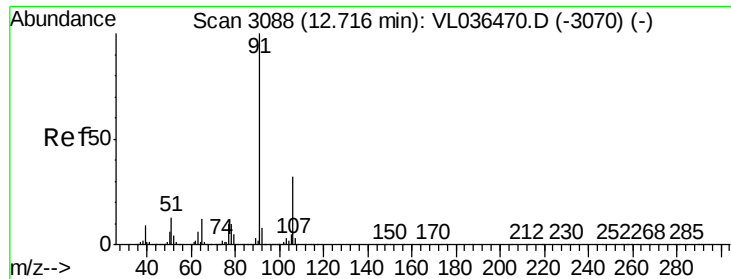


Abundance Ion 117.10 (116.80 to 117.80): V

Ion 82.10 (81.80 to 82.80): VL0

Ion 119.10 (118.80 to 119.80): V





#58

Ethyl Benzene

Concen: 0.044 ppbv

RT: 12.71 min

Delta R.T. MSVOA_L

Lab File: ClientSampleId :

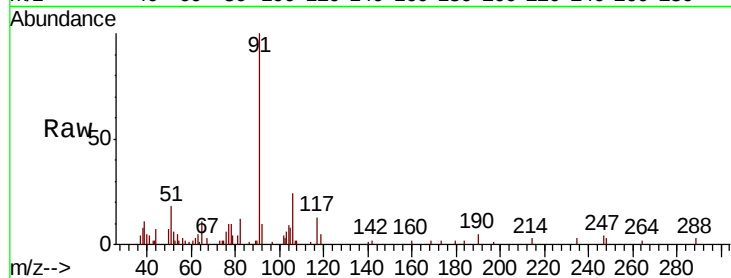
Acq: 25 Mar 2021 12:59

Tot Ion: 91 Resp: 18470

Ion Ratio Lower Upper

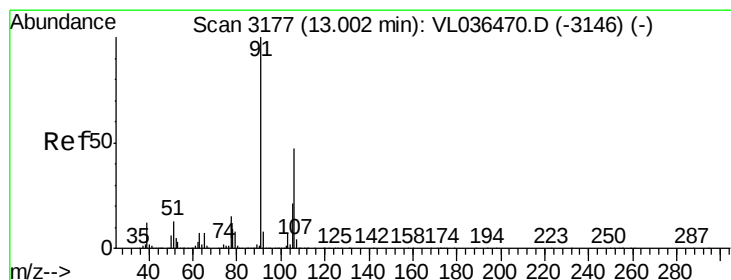
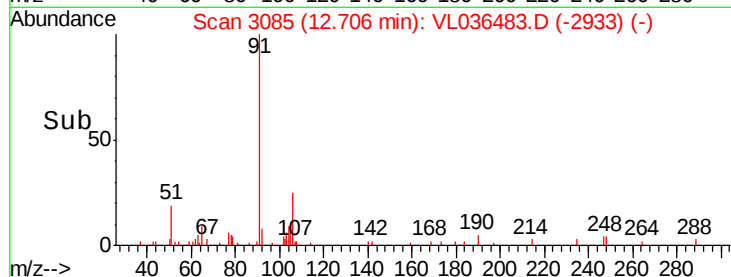
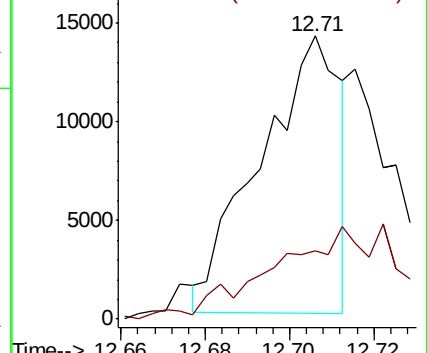
91 100

106 25.7 25.3 37.9



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 106.10 (105.80 to 106.80): V



#59

m/p-Xylene

Concen: 0.034 ppbv

RT: 12.99 min Scan# 3173

Delta R.T. -0.01 min

Lab File: VL036483.D

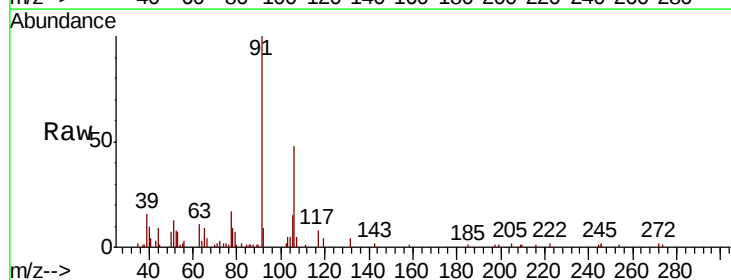
Acq: 25 Mar 2021 12:59

Tgt Ion: 91 Resp: 12381

Ion Ratio Lower Upper

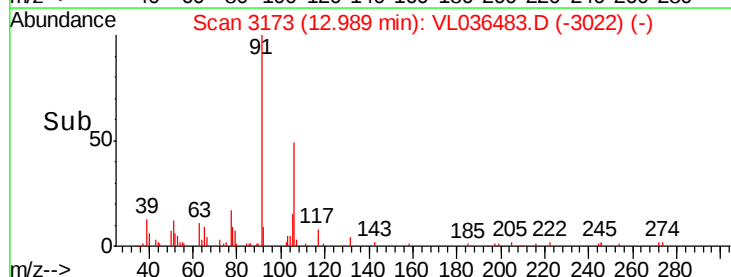
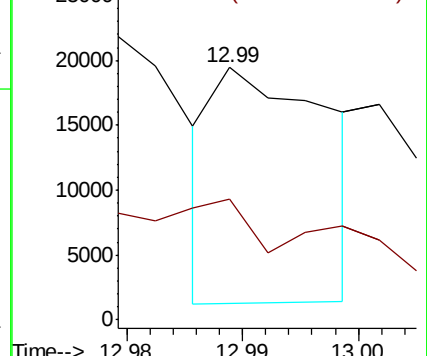
91 100

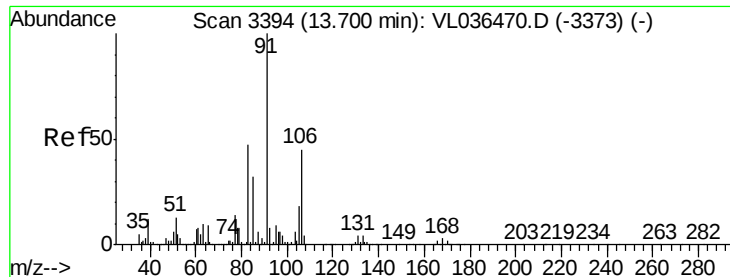
106 0.0 35.3 52.9#



Abundance Ion 91.10 (90.80 to 91.80): VL0

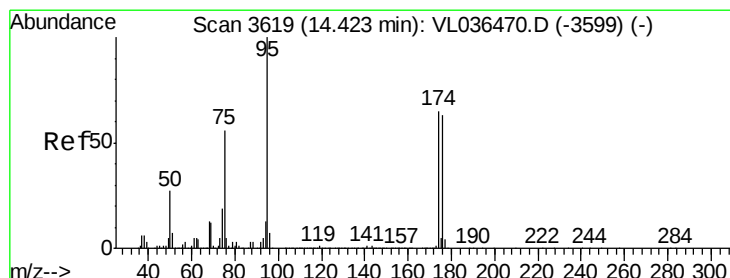
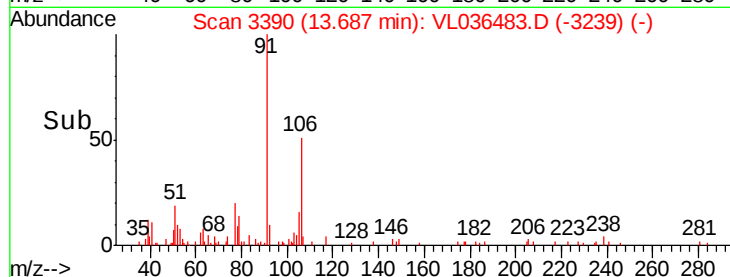
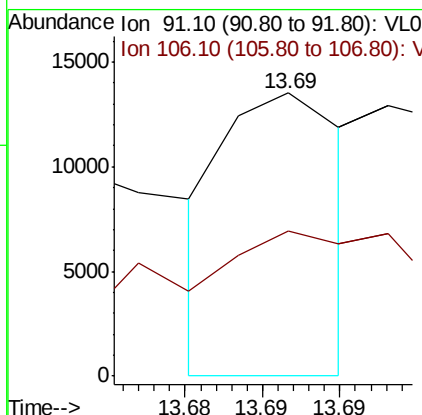
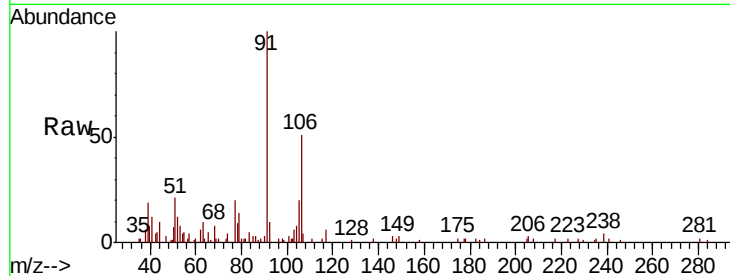
Ion 106.10 (105.80 to 106.80): V





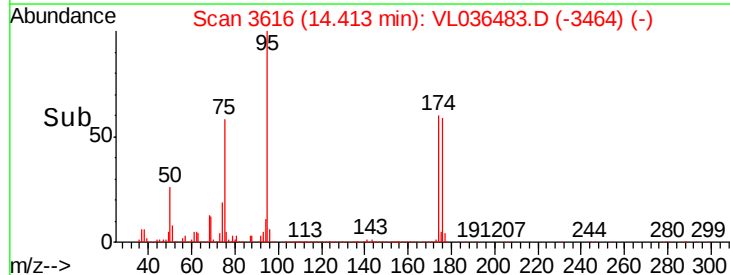
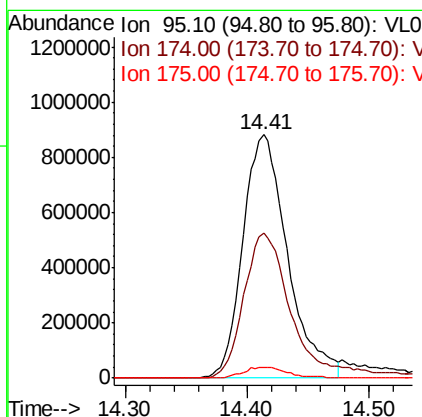
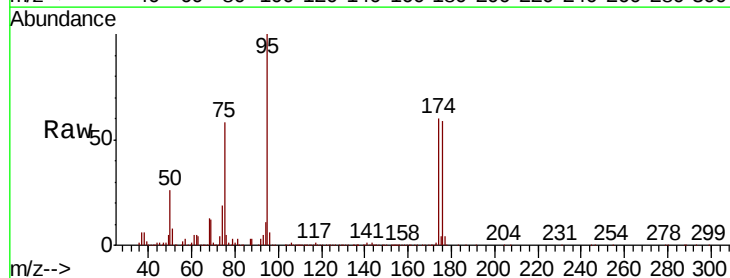
#60
o-Xylene
Concen: 0.021 ppbv
RT: 13.69
Delta R.T. MSVOA_L
Lab File: ClientSampleId :
Acq: 25 Mar 2021 12:59

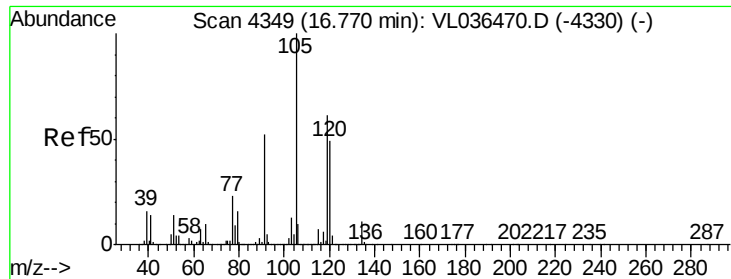
Tot Ion: 91 Resp: 7292
Ion Ratio Lower Upper
91 100
106 218.7 22.3 66.9#



#68
1-Bromo-4-Fluorobenzene
Concen: 9.829 ppbv
RT: 14.41 min Scan# 3616
Delta R.T. -0.01 min
Lab File: VL036483.D
Acq: 25 Mar 2021 12:59

Tgt Ion: 95 Resp: 2238147
Ion Ratio Lower Upper
95 100
174 66.6 51.0 76.6
175 5.0 3.9 5.9





#74
 1,2,4-Trimethylbenzene
 Concen: 0.043 ppbv
 RT: 16.76
 Delta R.T: MSVOA_L
 Lab File: ClientSampleId :
 Acq: 25 Mar 2021 12:39

Tot Ion:	105	Resp:	16610
Ion Ratio	Lower	Upper	
105	100		
120	22.9	39.2	58.8#
91	0.0	42.6	64.0#
77	7.0	18.6	28.0#

