

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL011321\
 Data File : VL036227.D
 Acq On : 13 Jan 2021 15:59
 Operator : SY/AP
 Sample : M1066-01
 Misc : 400ml/MSVOA L
 ALS Vial : 11 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 0121-SS5

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Quant Time: Jan 16 20:32:55 2021
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL011321AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LThu Jan 1
 QLast Update : Thu Jan 14 16:13:38 2021
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.67	49	1450870	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.18	114	3135602	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.09	117	2803349	10.00	ppbv	0.00

System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	14.42	95	2320297	10.00	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	100.00%

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.05	85	42463	0.218	ppbv	93
4) Chloromethane	3.14	50	32286	0.367	ppbv #	84
9) Propene	3.01	41	228417	2.692	ppbv	90
10) Heptane	8.12	43	44267	0.210	ppbv	94
11) Trichlorofluoromethane	3.95	101	47514	0.240	ppbv	96
13) Ethanol	3.64	45	3812158	286.115	ppbv	84
15) Acetone	3.85	43	6112379	34.399	ppbv	100
17) tert-Butyl alcohol	4.32	59	660537	4.505	ppbv	97
19) Isopropyl Alcohol	4.01	45	321610	3.002	ppbv #	1
20) Methylene Chloride	4.35	84	2003364	35.325	ppbv	96
26) Hexane	5.69	57	2560785	17.241	ppbv #	36
27) Carbon Disulfide	4.55	76	3310401	27.873	ppbv	99
30) Cyclohexane	7.12	84	37427m	0.330	ppbv	
34) 2-Butanone	5.25	43	650281	2.816	ppbv	99
35) Carbon Tetrachloride	7.01	117	22252m	0.112	ppbv	
36) Benzene	6.90	78	140279	0.488	ppbv #	92
44) 2,2,4-Trimethylpentane	7.87	57	82689m	0.157	ppbv	
52) Tetrachloroethene	11.23	164	4327m	0.041	ppbv	
53) Toluene	9.81	91	570709	1.776	ppbv	98
58) Ethyl Benzene	12.72	91	151299m	0.364	ppbv	
59) m/p-Xylene	12.98	91	418735	1.171	ppbv	97
60) o-Xylene	13.70	91	182485	0.530	ppbv	95
61) Styrene	13.53	104	29713m	0.137	ppbv	
69) p-Isopropyltoluene	17.66	119	73414	0.144	ppbv #	87
72) 4-Ethyltoluene	15.84	105	111144m	0.286	ppbv	
73) 1,3,5-Trimethylbenzene	16.00	105	102316m	0.276	ppbv	
74) 1,2,4-Trimethylbenzene	16.77	105	388528	1.022	ppbv #	67
79) Naphthalene	22.21	128	50224m	0.226	ppbv	

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

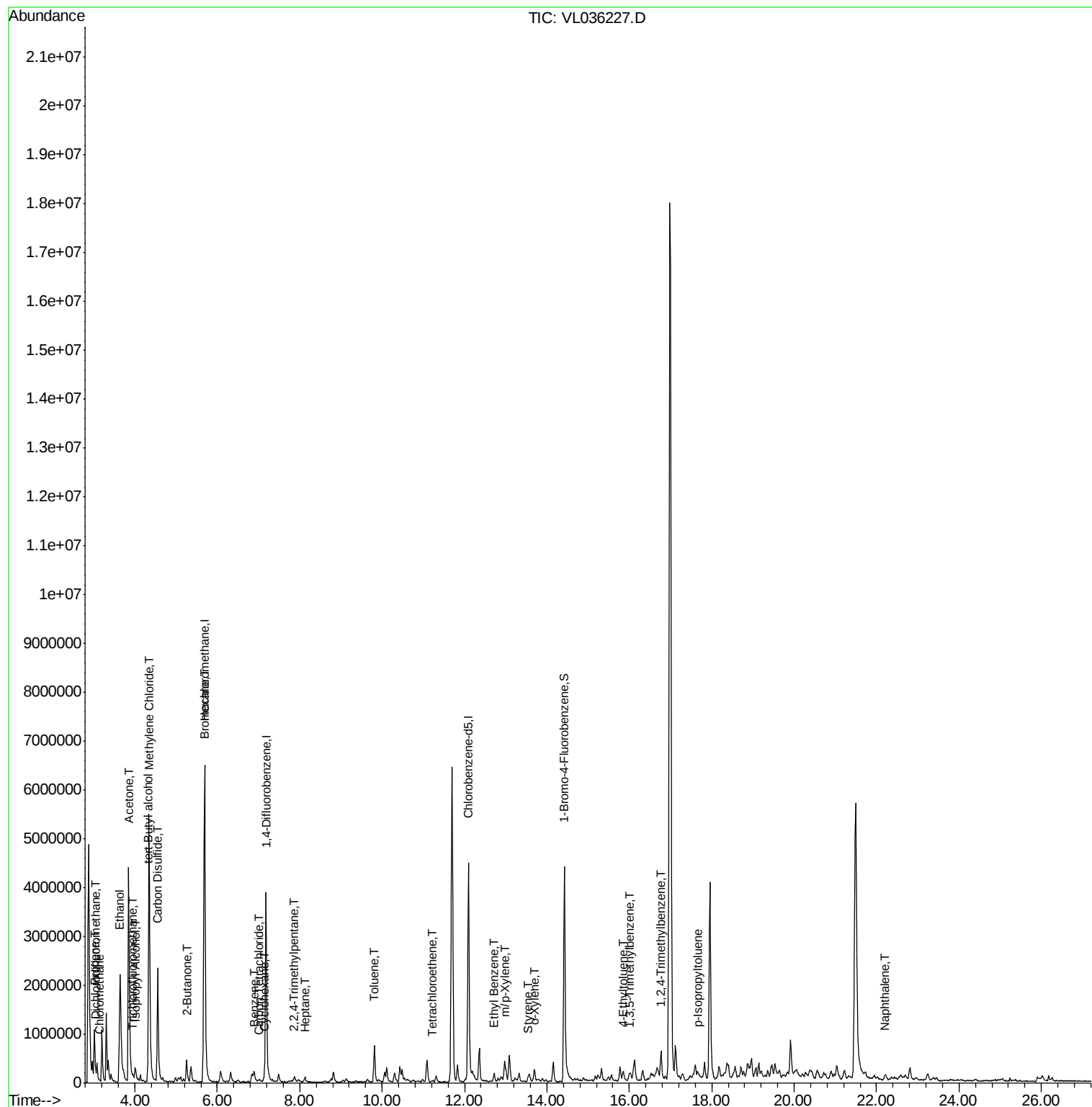
Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL011321\
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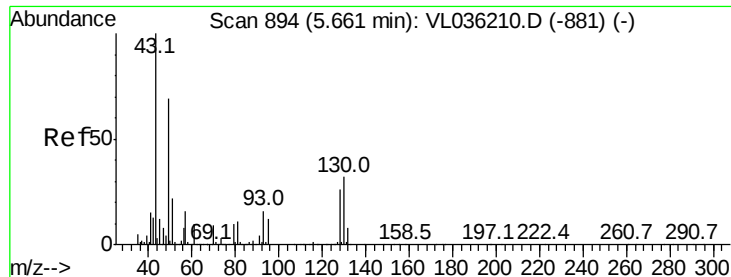
Instrument :
MSVOA_L
ClientSampleId :
0121-SS5

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Quant Time: Jan 16 20:32:55 2021
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL011321AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Thu Jan
QLast Update : Thu Jan 14 16:13:38 2021
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.67 min Scan# 897

Delta R.T. 0.01 min

Lab File: VL036227.D

Acq: 13 Jan 2021 15:59

Instrument :

MSVOA_L

ClientSampleId :

0121-SS5

Tot Ion: 49 Resp: 1450870

Ion Ratio Lower Upper

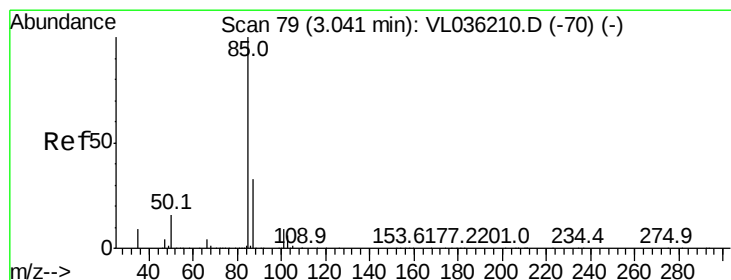
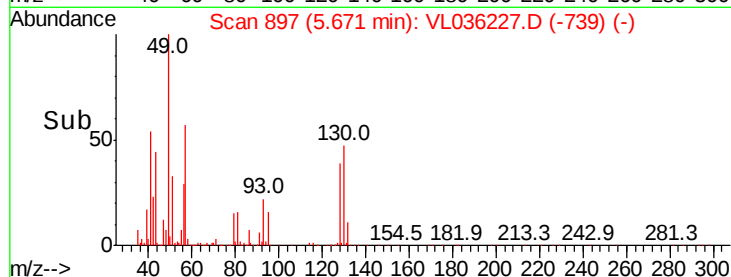
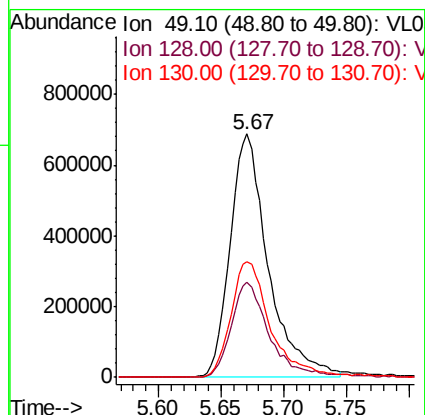
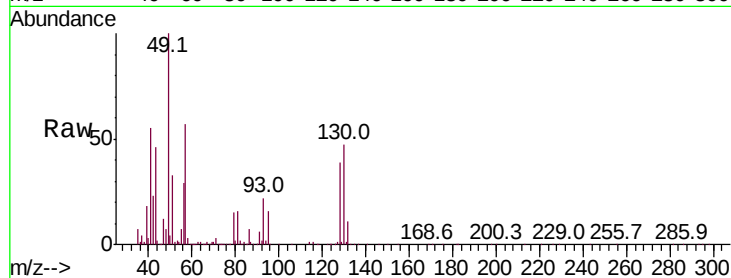
49 100

128 39.7 20.1 60.2

130 50.0 25.3 75.9

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#2

Dichlorodifluoromethane

Concen: 0.218 ppbv

RT: 3.05 min Scan# 81

Delta R.T. 0.01 min

Lab File: VL036227.D

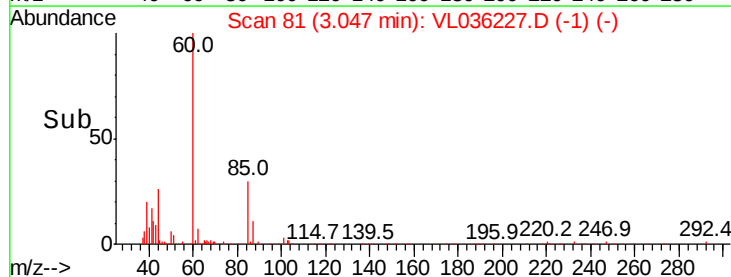
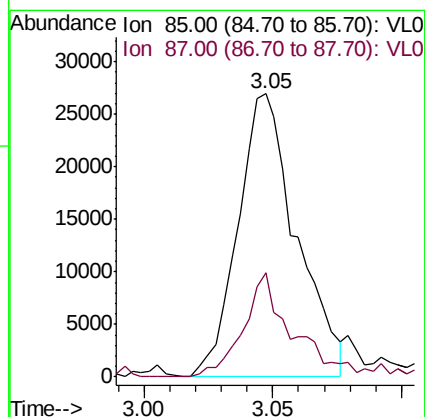
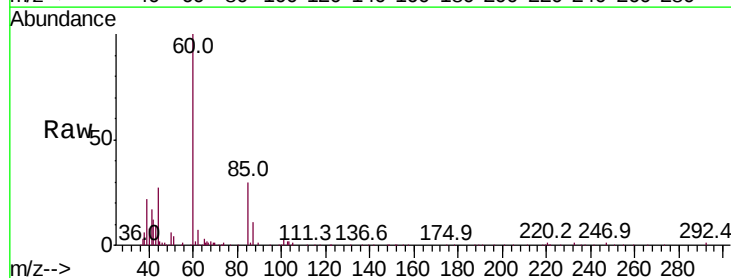
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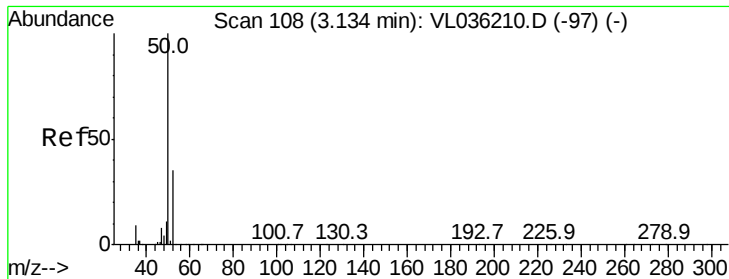
Tgt Ion: 85 Resp: 42463

Ion Ratio Lower Upper

85 100

87 36.8 26.4 39.6





#4

Chloromethane

Concen: 0.367 ppbv

RT: 3.14 min Scan# 110

Delta R.T. 0.01 min

Lab File: VL036227.D

Acq: 13 Jan 2021 15:59

Instrument :

MSVOA_L

ClientSampleId :

0121-SS5

Tot Ion: 50 Resp: 32286

Ion Ratio Lower Upper

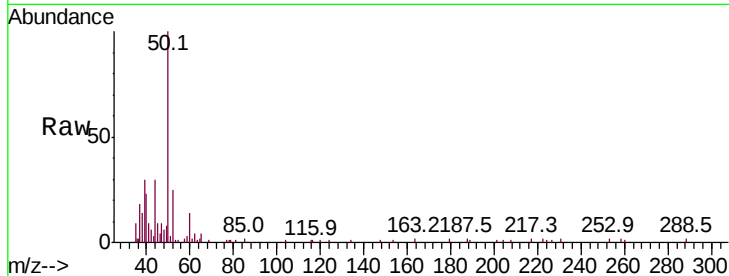
50 100

52 25.5 27.8 41.8#

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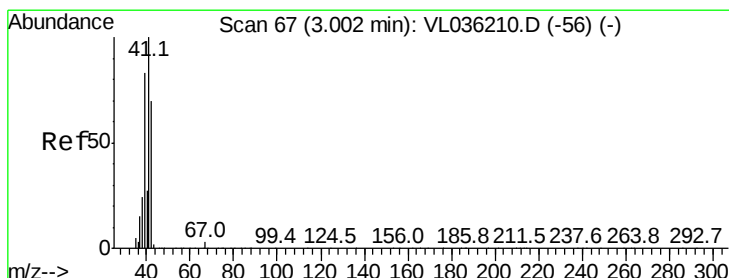
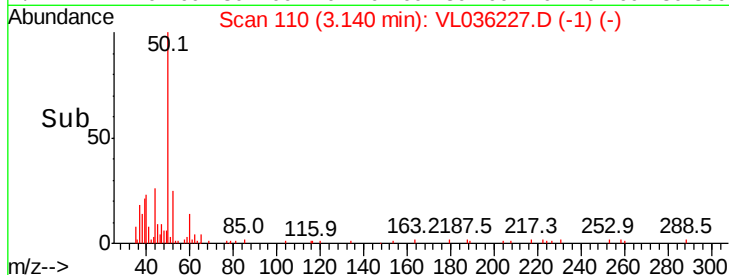
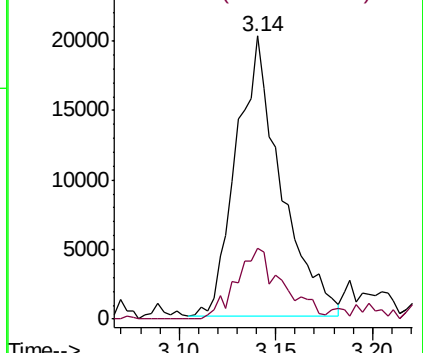
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Abundance Ion 50.10 (49.80 to 50.80): VL0

Ion 52.10 (51.80 to 52.80): VL0



#9

Propene

Concen: 2.692 ppbv

RT: 3.01 min Scan# 70

Delta R.T. 0.01 min

Lab File: VL036227.D

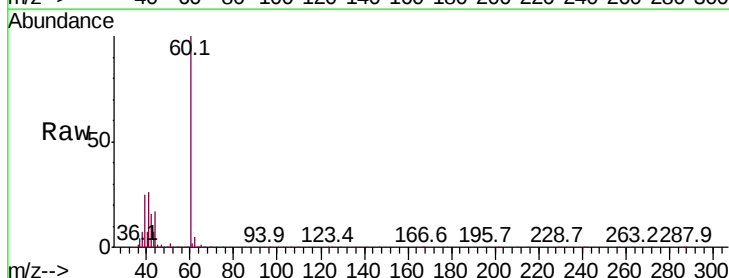
Acq: 13 Jan 2021 15:59

Tgt Ion: 41 Resp: 228417

Ion Ratio Lower Upper

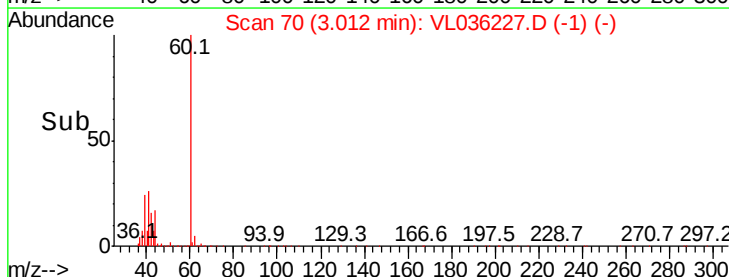
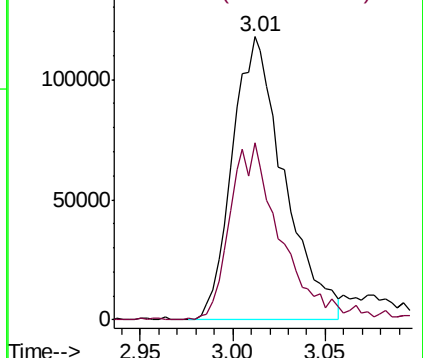
41 100

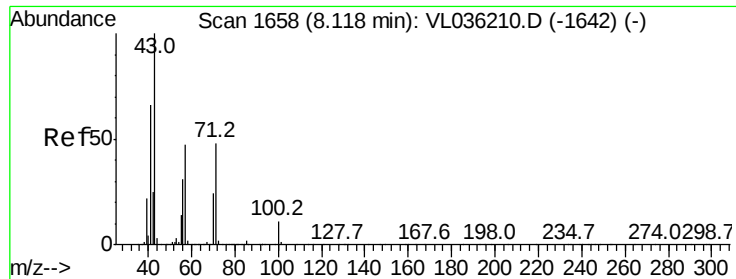
42 62.9 57.1 85.7



Abundance Ion 41.10 (40.80 to 41.80): VL0

Ion 42.10 (41.80 to 42.80): VL0





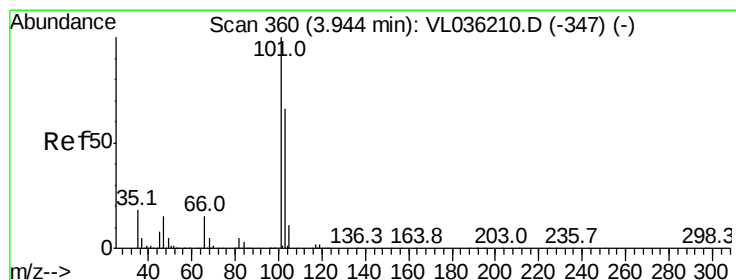
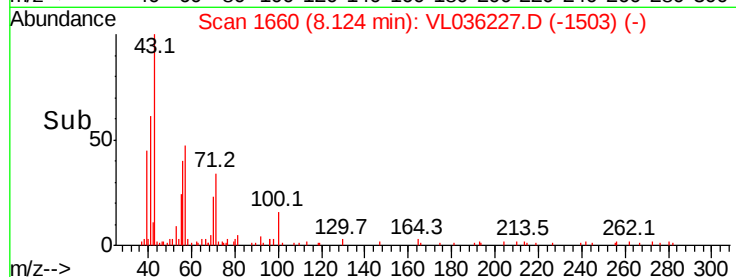
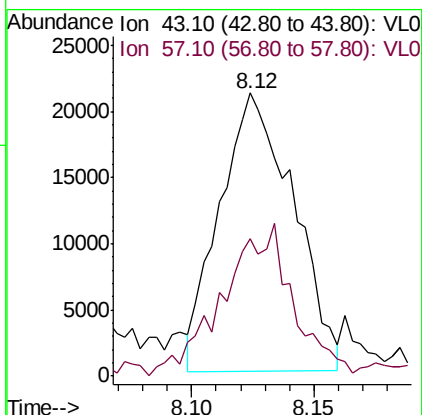
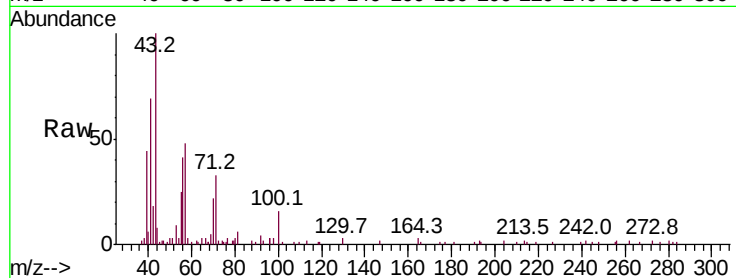
#10
Heptane
Concen: 0.210 ppbv
RT: 8.12 min Scan# 1660
Delta R.T. 0.01 min
Lab File: VL036227.D
Acq: 13 Jan 2021 15:59

Instrument :
MSVOA_L
ClientSampleId :
0121-SS5

Tot Ion	43	Resp	44267
Ion Ratio	100	Lower	Upper
57	51.6	38.1	57.1

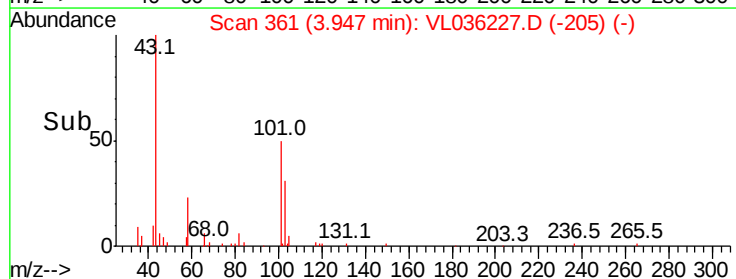
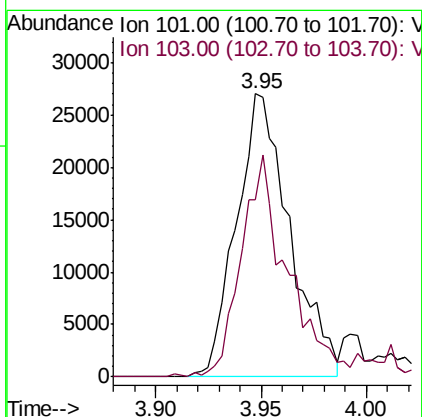
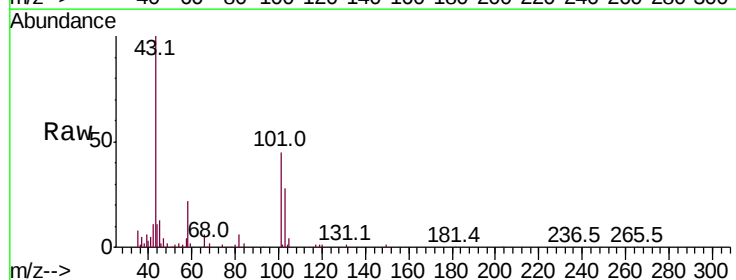
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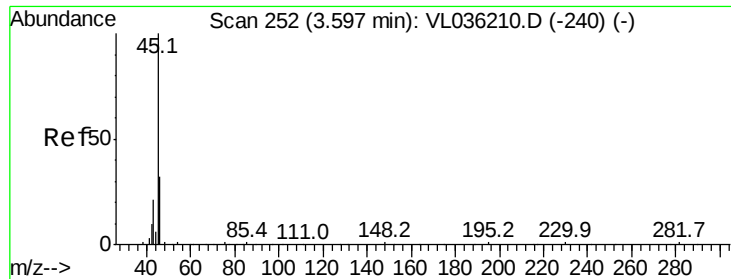
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#11
Trichlorofluoromethane
Concen: 0.240 ppbv
RT: 3.95 min Scan# 361
Delta R.T. 0.00 min
Lab File: VL036227.D
Acq: 13 Jan 2021 15:59

Tgt Ion	101	Resp	47514
Ion Ratio	100	Lower	Upper
103	62.4	52.6	78.8





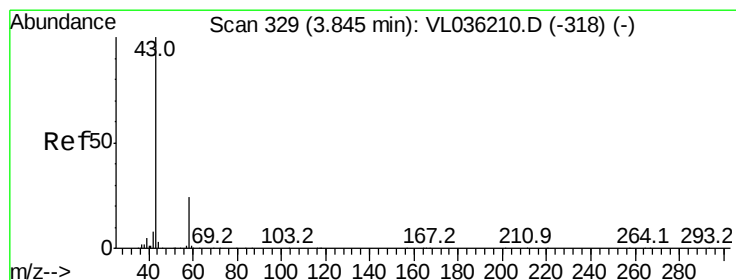
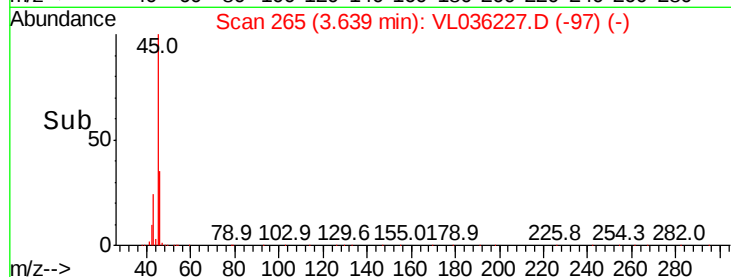
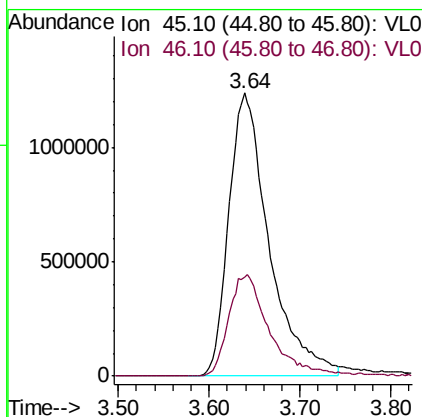
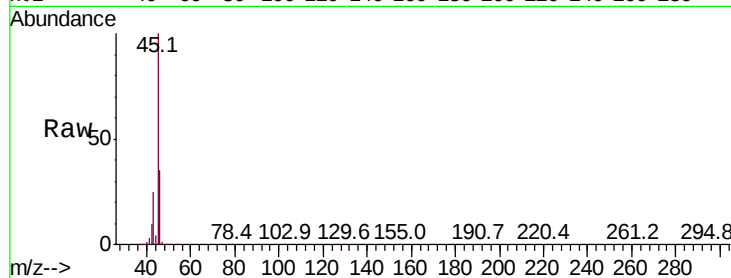
#13
Ethanol
Concen: 286.115 ppbv
RT: 3.64 min Scan# 265
Delta R.T. 0.04 min
Lab File: VL036227.D
Acq: 13 Jan 2021 15:59

Instrument :
MSVOA_L
ClientSampleId :
0121-SS5

Tot Ion: 45 Resp: 3812158
Ion Ratio Lower Upper
45 100
46 37.1 19.2 77.0

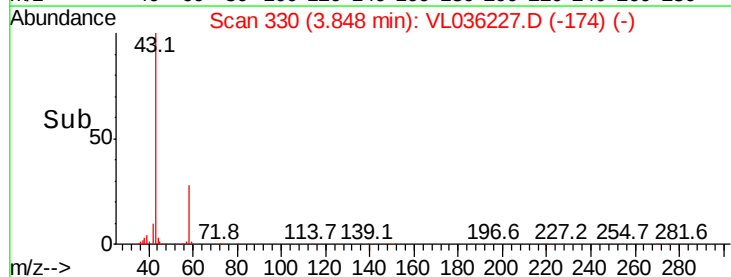
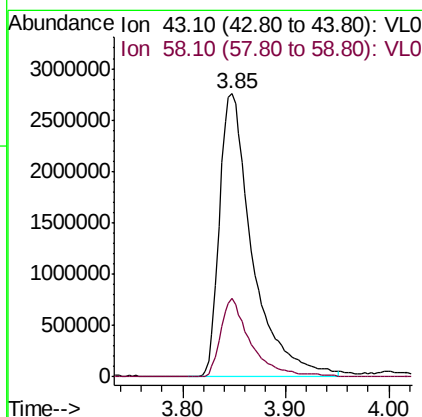
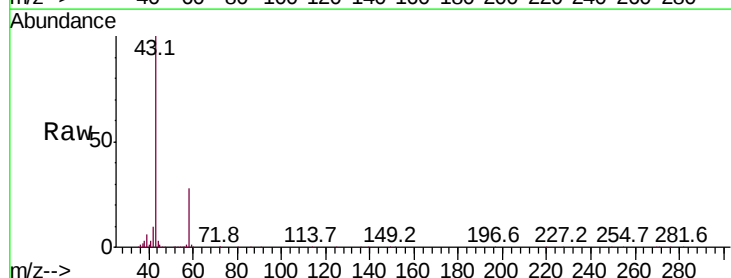
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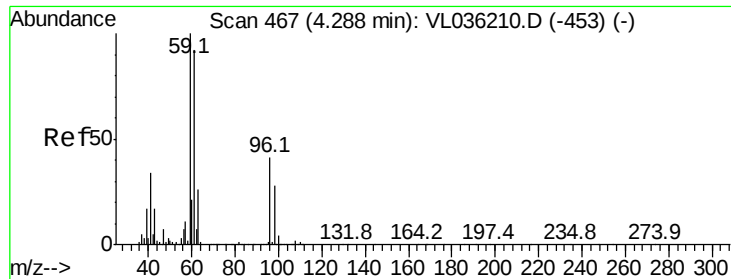
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#15
Acetone
Concen: 34.399 ppbv
RT: 3.85 min Scan# 330
Delta R.T. 0.00 min
Lab File: VL036227.D
Acq: 13 Jan 2021 15:59

Tgt Ion: 43 Resp: 6112379
Ion Ratio Lower Upper
43 100
58 25.9 20.9 31.3





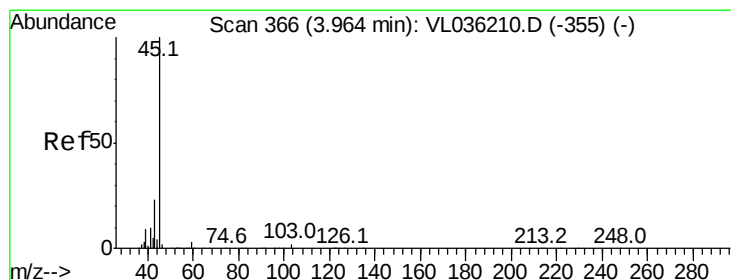
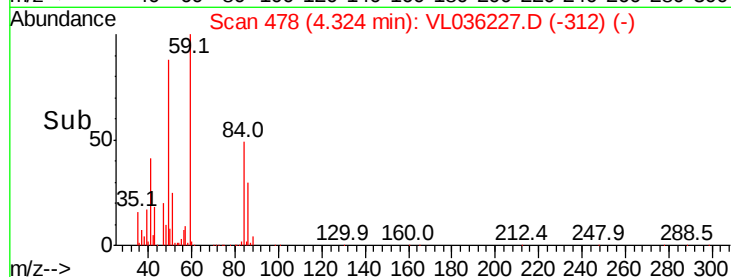
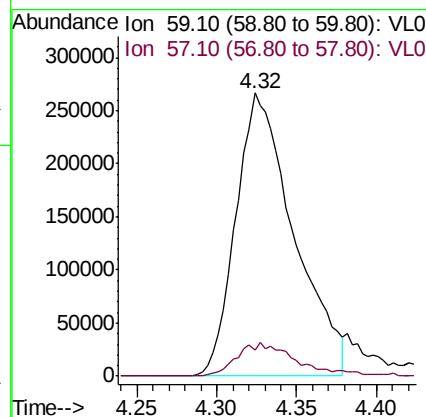
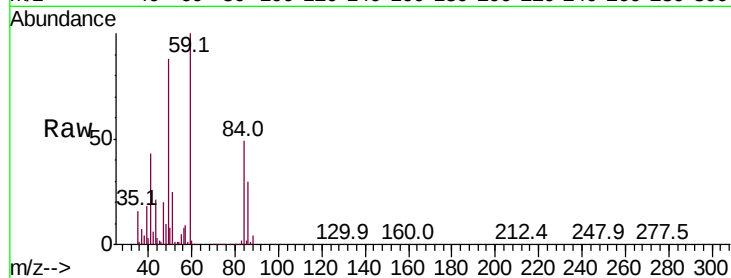
#17
tert-Butyl alcohol
Concen: 4.505 ppbv
RT: 4.32 min Scan# 478
Delta R.T. 0.04 min
Lab File: VL036227.D
Acq: 13 Jan 2021 15:59

Instrument :
MSVOA_L
ClientSampleId :
0121-SS5

Tot Ion	Ratio	Lower	Upper
59	100		
57	12.5	9.2	13.8

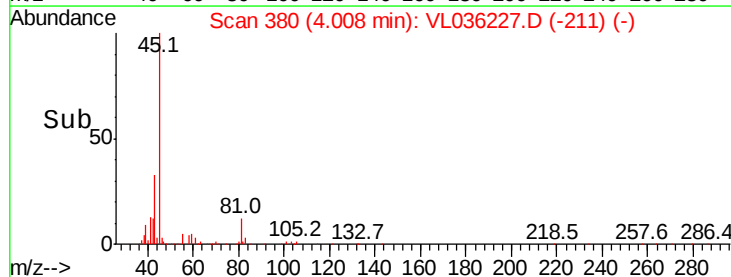
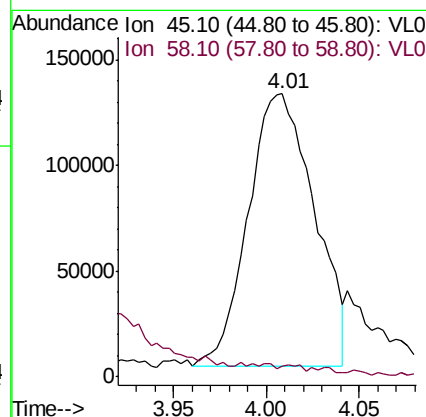
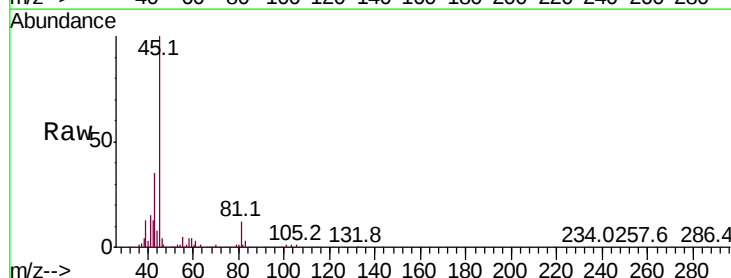
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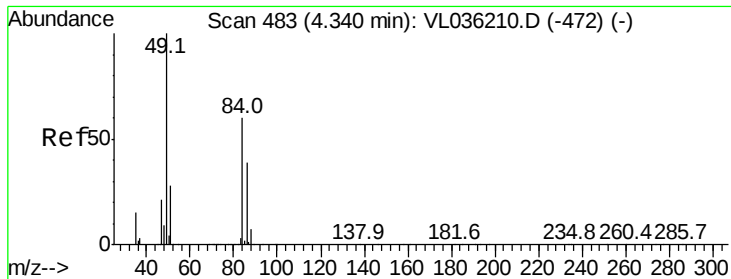
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#19
Isopropyl Alcohol
Concen: 3.002 ppbv
RT: 4.01 min Scan# 380
Delta R.T. 0.04 min
Lab File: VL036227.D
Acq: 13 Jan 2021 15:59

Tgt Ion	Ratio	Lower	Upper
45	100		
58	491.3	1.9	2.9#





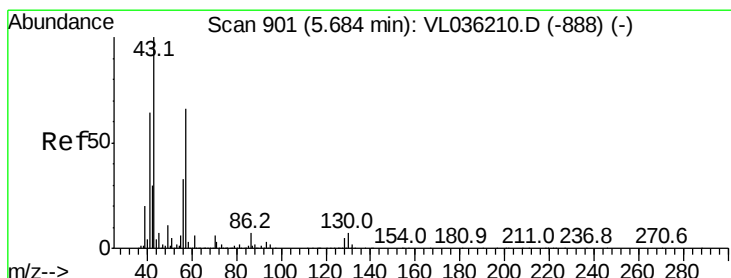
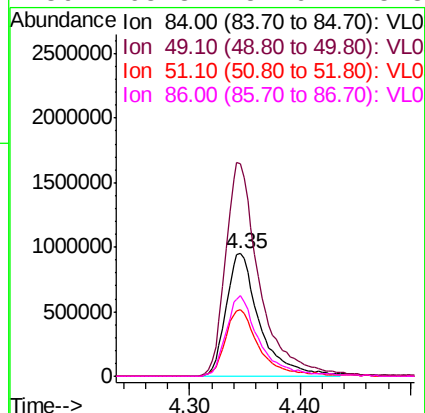
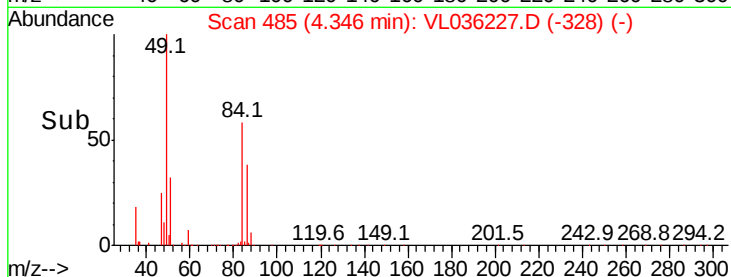
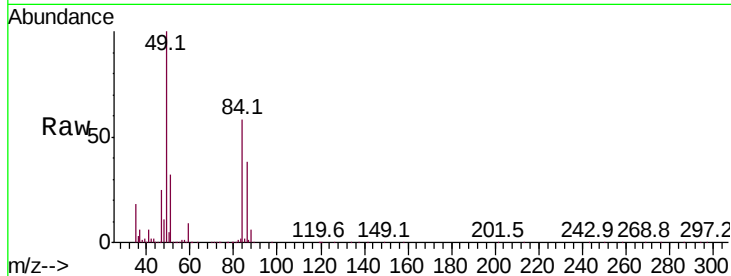
#20
Methvlene Chloride
Concen: 35.325 ppbv
RT: 4.35 min Scan# 485
Delta R.T. 0.01 min
Lab File: VL036227.D
Acq: 13 Jan 2021 15:59

Instrument :
MSVOA_L
ClientSampleId :
0121-SS5

Tot Ion: 84 Resp: 2003364
Ion Ratio Lower Upper
84 100
49 173.0 134.1 201.1
51 54.6 37.4 56.0
86 65.3 52.6 78.8

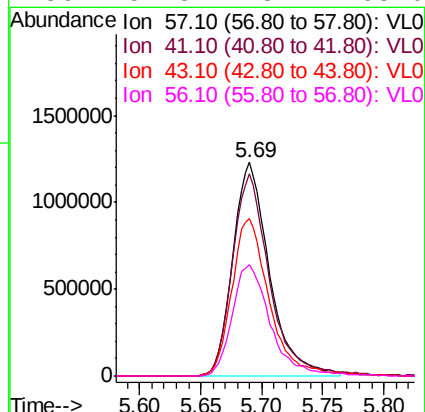
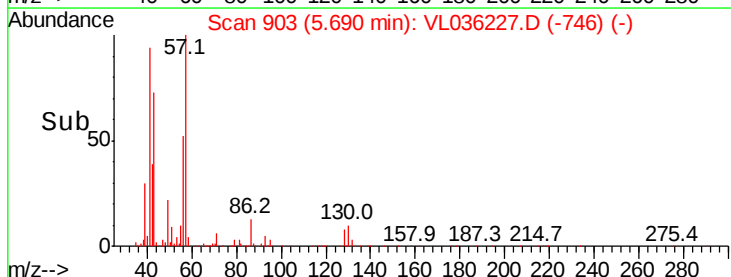
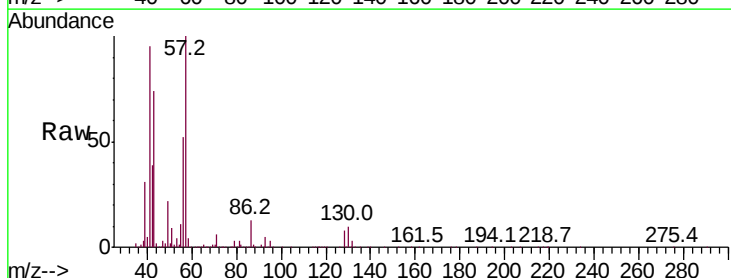
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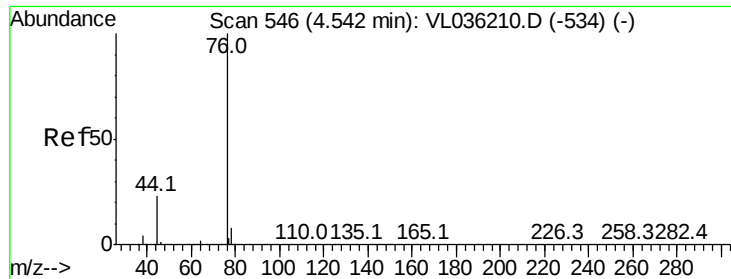
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#26
Hexane
Concen: 17.241 ppbv
RT: 5.69 min Scan# 903
Delta R.T. 0.01 min
Lab File: VL036227.D
Acq: 13 Jan 2021 15:59

Tgt Ion: 57 Resp: 2560785
Ion Ratio Lower Upper
57 100
41 97.0 83.0 124.6
43 75.9 202.4 303.6#
56 54.8 43.4 65.0





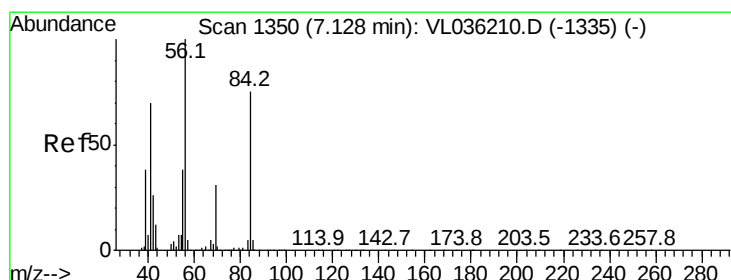
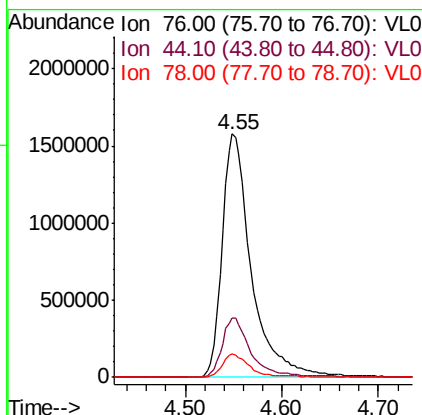
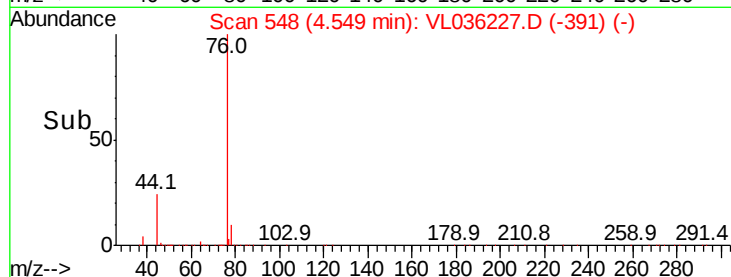
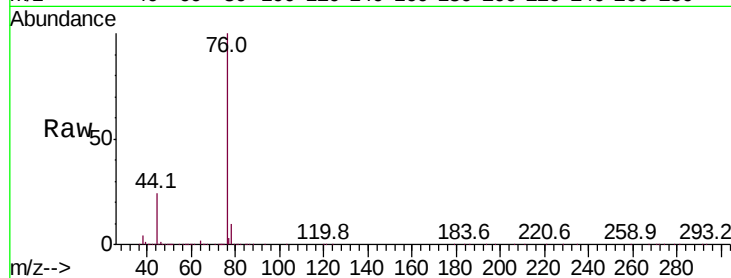
#27
Carbon Disulfide
Concen: 27.873 ppbv
RT: 4.55 min Scan# 548
Delta R.T. 0.01 min
Lab File: VL036227.D
Acq: 13 Jan 2021 15:59

Instrument :
MSVOA_L
ClientSampleId :
0121-SS5

Tot Ion: 76 Resp: 3310401
Ion Ratio Lower Upper
76 100
44 24.3 19.0 28.6
78 9.4 8.0 12.0

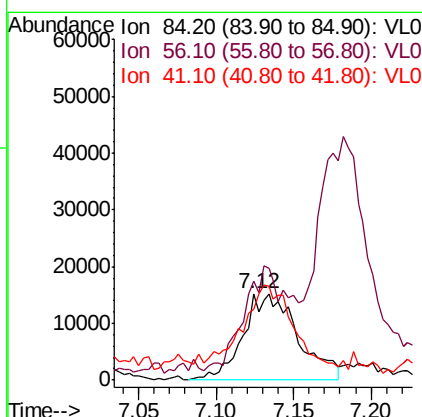
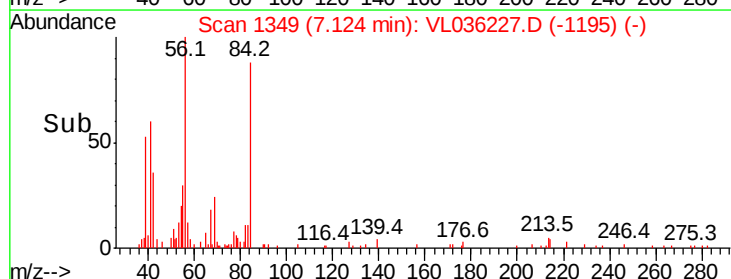
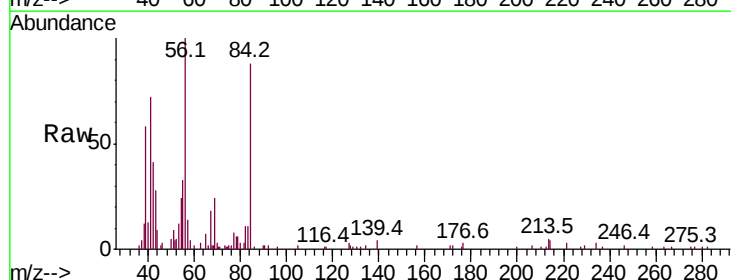
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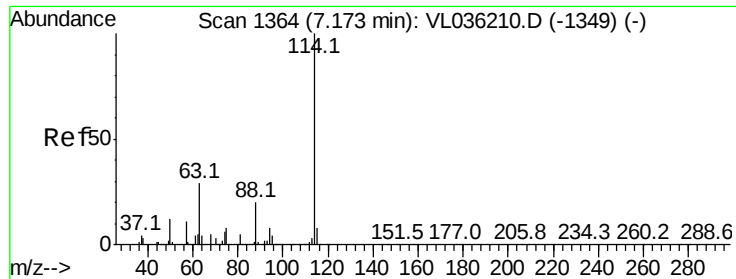
MMDadoda
1/18/2021 3:49:31 PM



#30
Cyclohexane
Concen: 0.330 ppbv m
RT: 7.12 min Scan# 1349
Delta R.T. -0.00 min
Lab File: VL036227.D
Acq: 13 Jan 2021 15:59

Tgt Ion: 84 Resp: 37427
Ion Ratio Lower Upper
84 100
56 73.3 119.4 179.0#
41 115.7 79.4 119.0





#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 7.18 min Scan# 1367

Delta R.T. 0.01 min

Lab File: VL036227.D

Acq: 13 Jan 2021 15:59

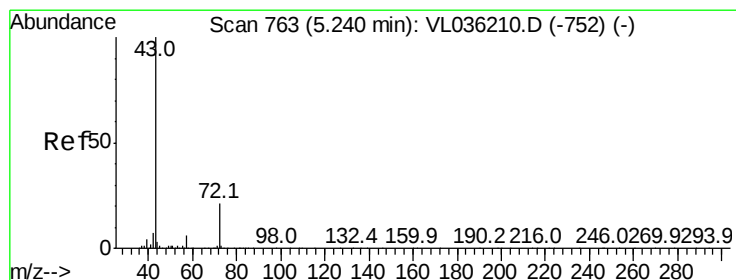
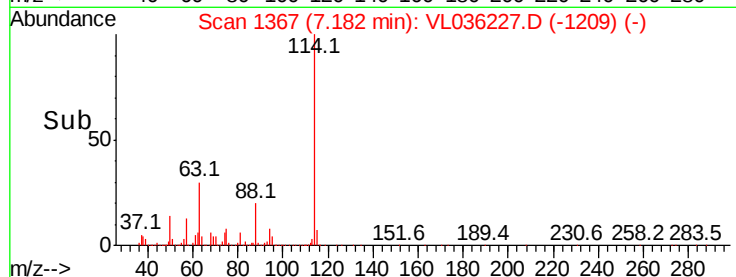
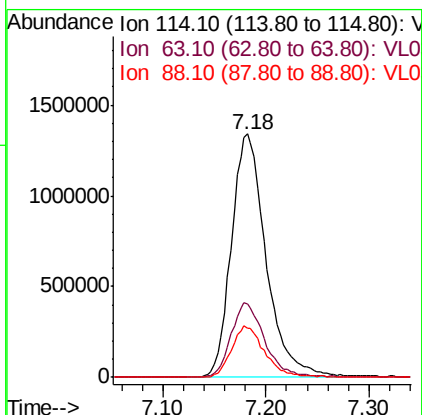
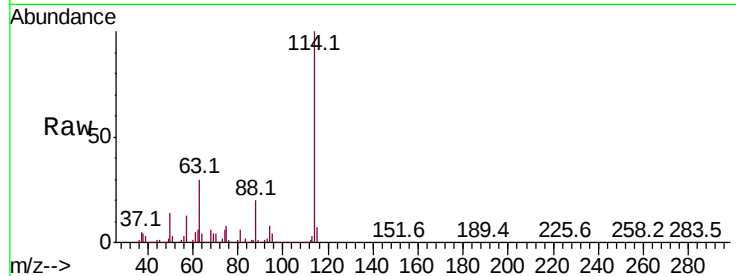
Instrument :
MSVOA_L

ClientSampleId :
0121-SS5

Tot Ion	Ratio	Lower	Upper
114	100		
63	30.3	24.7	37.1
88	20.4	16.6	24.8

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#34

2-Butanone

Concen: 2.816 ppbv

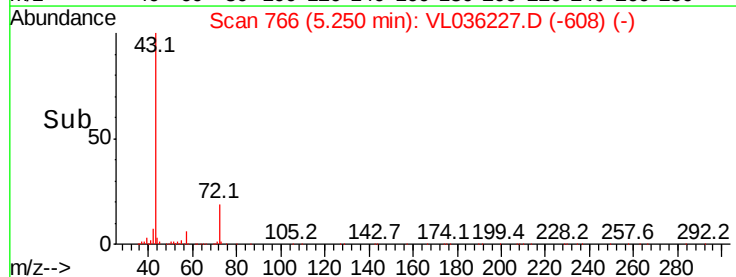
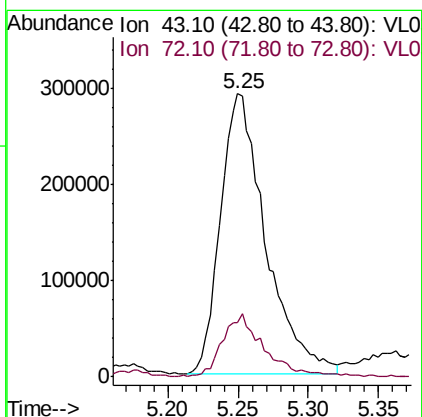
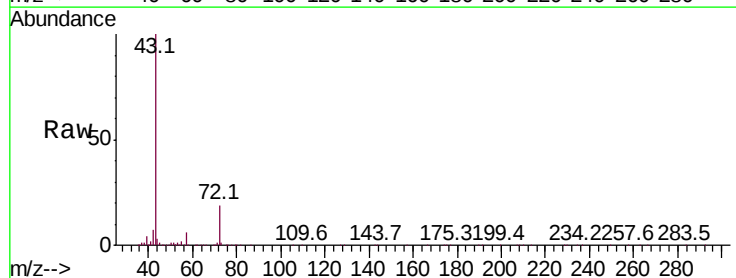
RT: 5.25 min Scan# 766

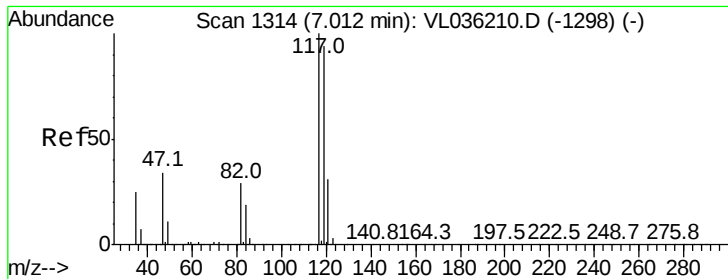
Delta R.T. 0.01 min

Lab File: VL036227.D

Acq: 13 Jan 2021 15:59

Tgt Ion	Ratio	Lower	Upper
43	100		
72	20.8	16.1	24.1





#35

Carbon Tetrachloride

Concen: 0.112 ppbv m

RT: 7.01 min Scan# 1315

Delta R.T. 0.00 min

Lab File: VL036227.D

Acq: 13 Jan 2021 15:59

Instrument :

MSVOA_L

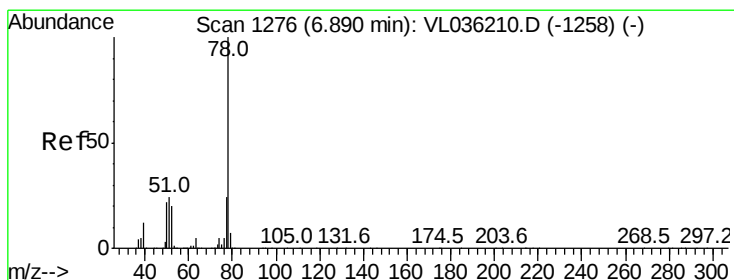
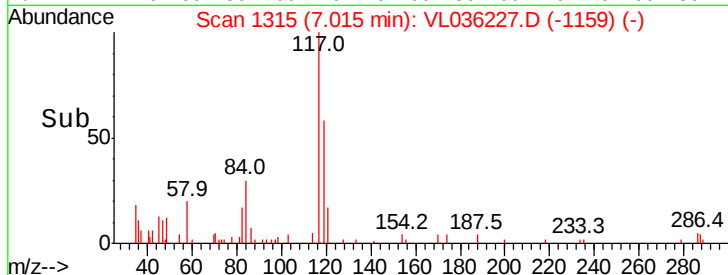
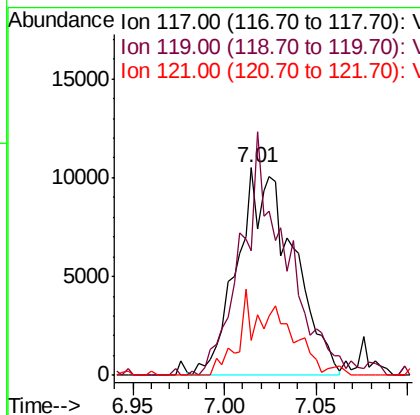
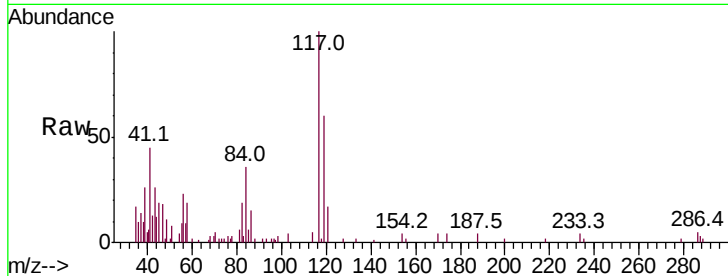
ClientSampleId :

0121-SS5

Tot Ion:	117	Resp:	22252
Ion Ratio	Lower	Upper	
117	100		
119	60.1	74.9	112.3#
121	16.8	25.0	37.6#

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#36

Benzene

Concen: 0.488 ppbv

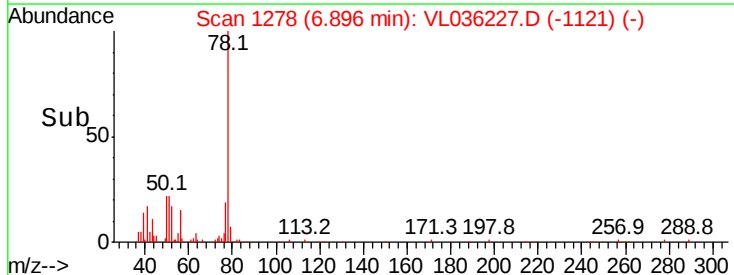
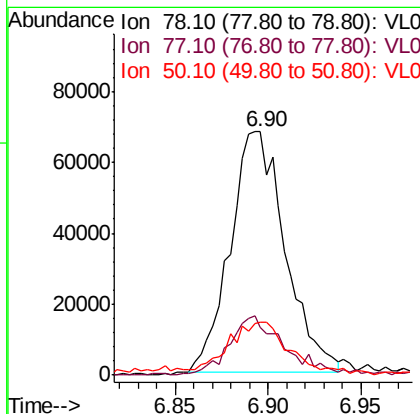
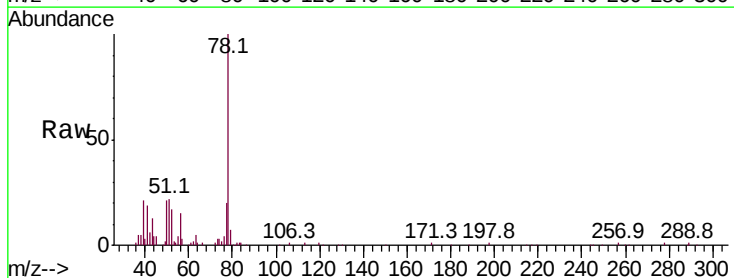
RT: 6.90 min Scan# 1278

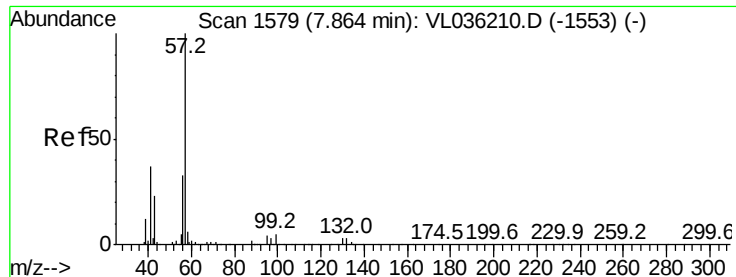
Delta R.T. 0.01 min

Lab File: VL036227.D

Acq: 13 Jan 2021 15:59

Tgt Ion:	78	Resp:	140279
Ion Ratio	Lower	Upper	
78	100		
77	19.2	19.4	29.0#
50	19.5	17.4	26.2





#44

2,2,4-Trimethylpentane

Concen: 0.157 ppbv m

RT: 7.87 min Scan# 1582

Delta R.T. 0.01 min

Lab File: VL036227.D

Acq: 13 Jan 2021 15:59

Instrument :

MSVOA_L

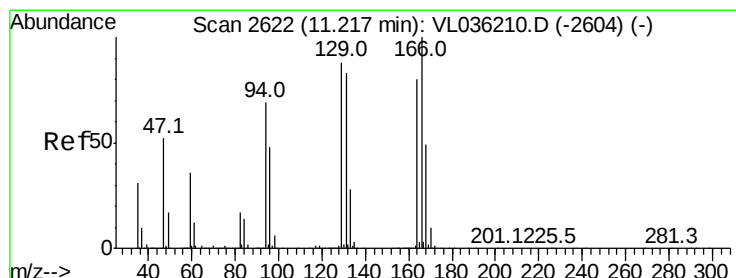
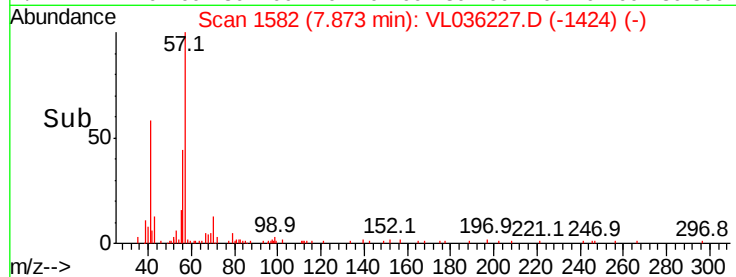
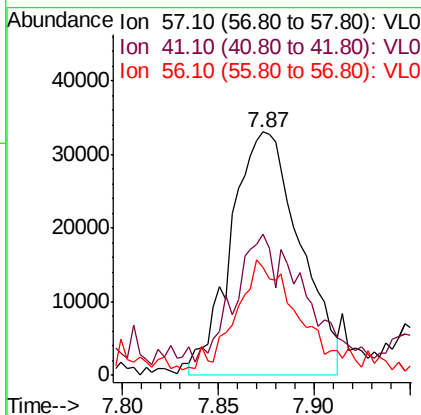
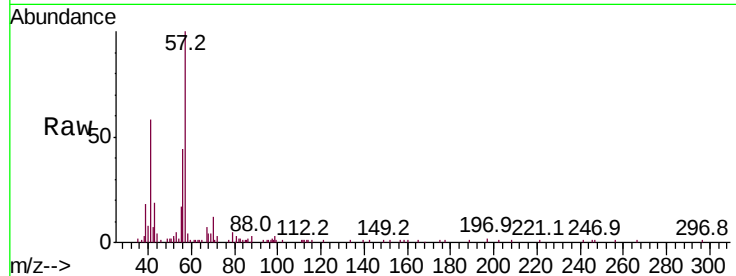
ClientSampleId :

0121-SS5

Tot Ion	Ratio	Lower	Upper
57	100		
41	58.5	28.5	42.7#
56	44.9	25.5	38.3#

Manual Integrations
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#52

Tetrachloroethene

Concen: 0.041 ppbv m

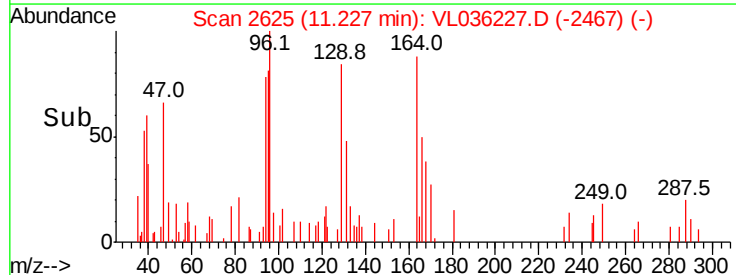
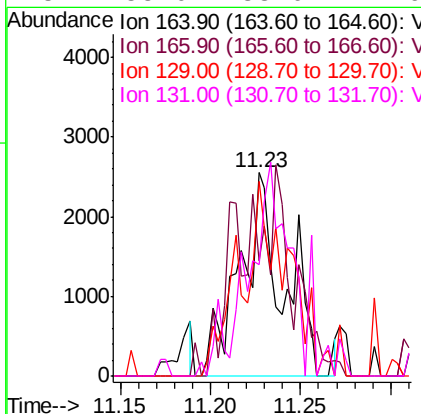
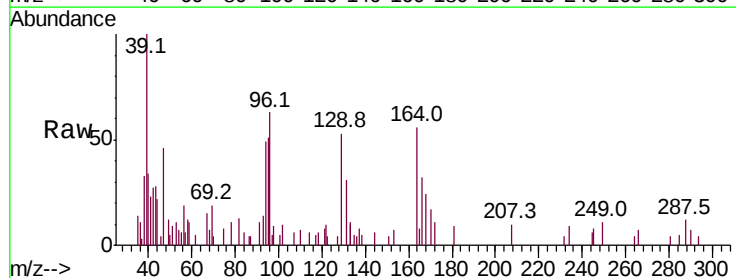
RT: 11.23 min Scan# 2625

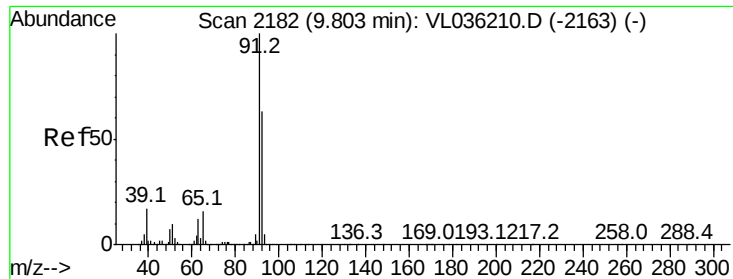
Delta R.T. 0.01 min

Lab File: VL036227.D

Acq: 13 Jan 2021 15:59

Tgt Ion	Ratio	Lower	Upper
164	100		
166	56.8	99.9	149.9#
129	95.6	88.2	132.4
131	55.0	83.0	124.6#





#53

Toluene

Concen: 1.776 ppbv

RT: 9.81 min Scan# 2185

Delta R.T. 0.01 min

Lab File: VL036227.D

Acq: 13 Jan 2021 15:59

Instrument :

MSVOA_L

ClientSampleId :

0121-SS5

Tot Ion: 91 Resp: 570709

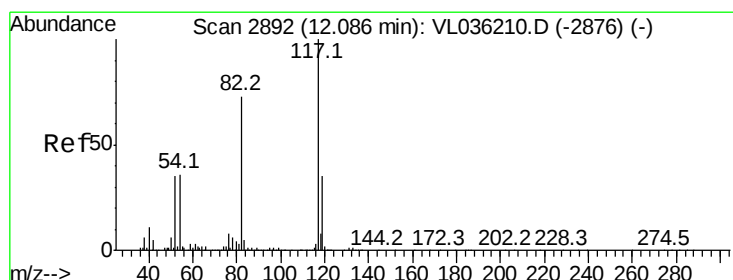
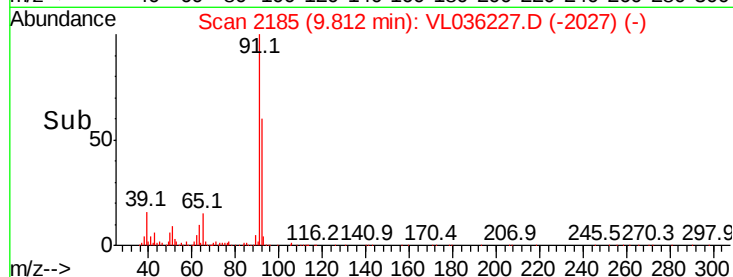
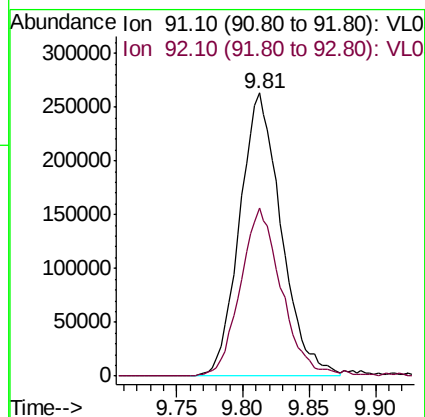
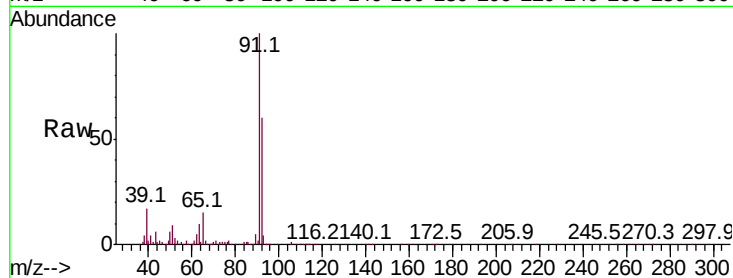
Ion Ratio Lower Upper

91 100

92 59.4 48.5 72.7

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#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.09 min Scan# 2895

Delta R.T. 0.01 min

Lab File: VL036227.D

Acq: 13 Jan 2021 15:59

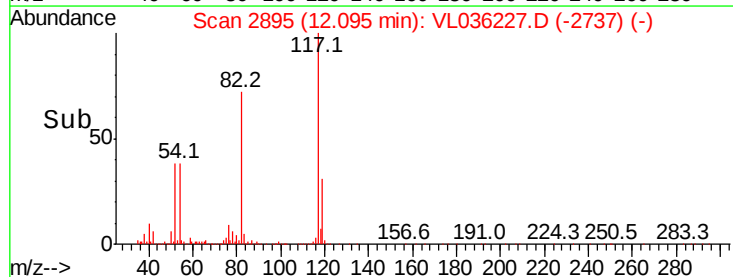
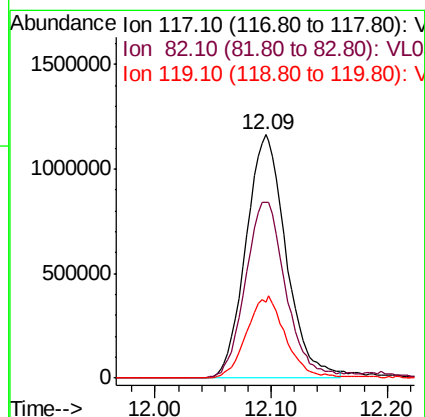
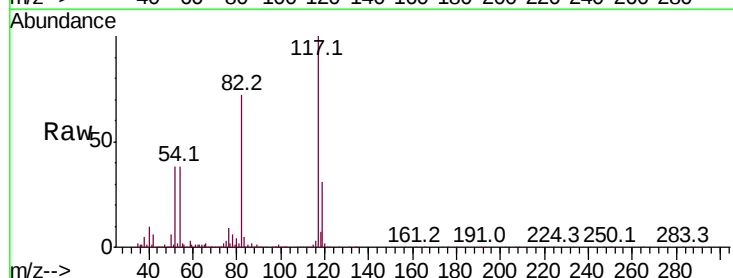
Tgt Ion: 117 Resp: 2803349

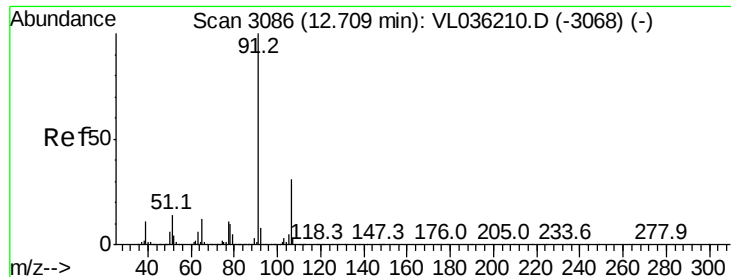
Ion Ratio Lower Upper

117 100

82 76.1 59.7 89.5

119 33.4 28.6 43.0





#58

Ethyl Benzene

Concen: 0.364 ppbv m

RT: 12.72 min Scan# 3089

Delta R.T. 0.01 min

Lab File: VL036227.D

Acq: 13 Jan 2021 15:59

Instrument :

MSVOA_L

ClientSampleId :

0121-SS5

Tot Ion: 91 Resp: 151299

Ion Ratio Lower Upper

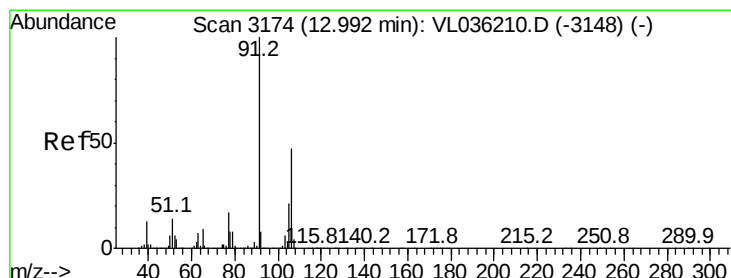
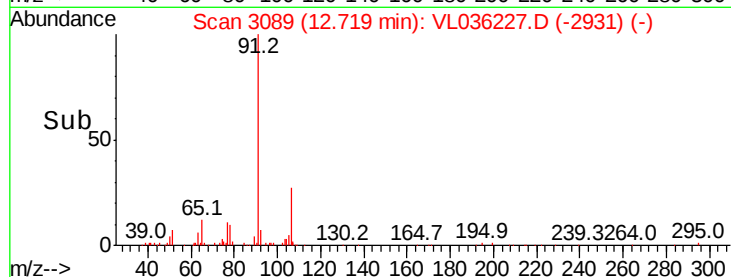
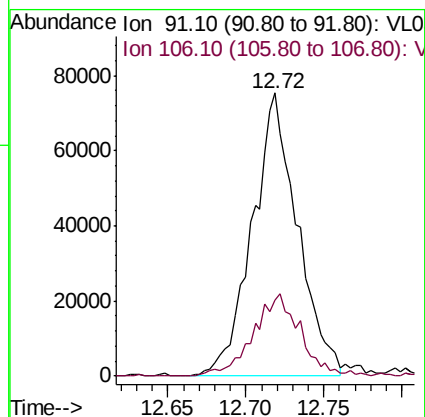
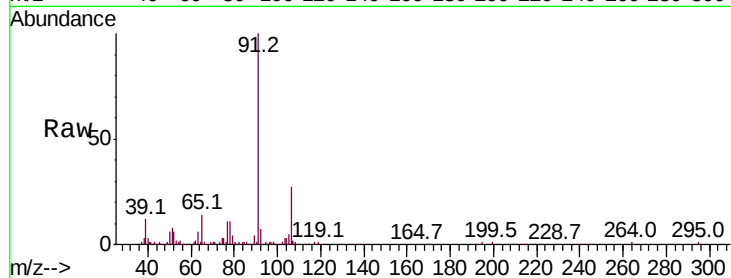
91 100

106 27.0 24.8 37.2

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#59

m/p-Xylene

Concen: 1.171 ppbv

RT: 12.98 min Scan# 3169

Delta R.T. -0.02 min

Lab File: VL036227.D

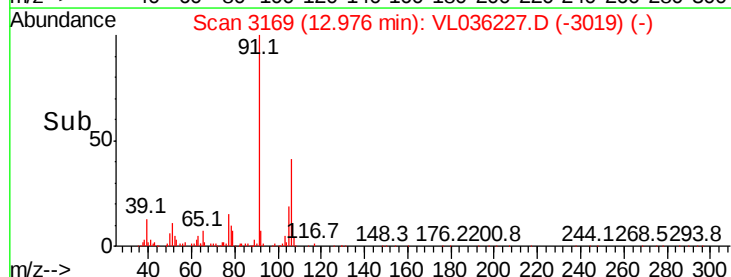
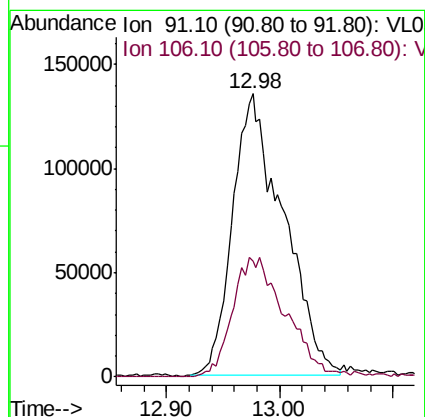
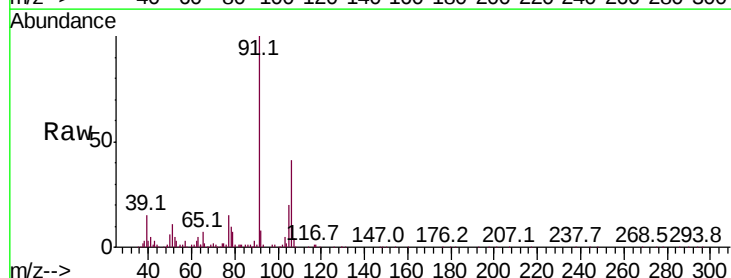
Acq: 13 Jan 2021 15:59

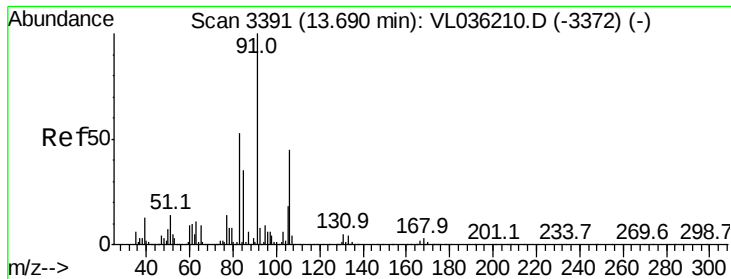
Tgt Ion: 91 Resp: 418735

Ion Ratio Lower Upper

91 100

106 45.0 34.6 51.8





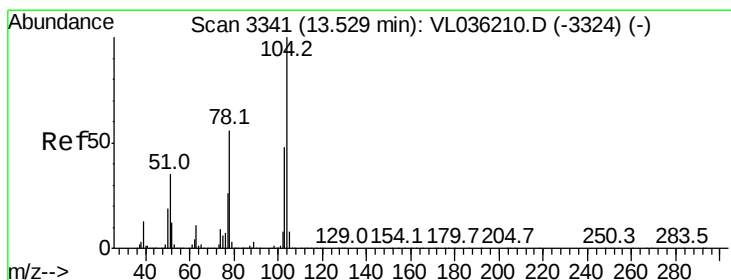
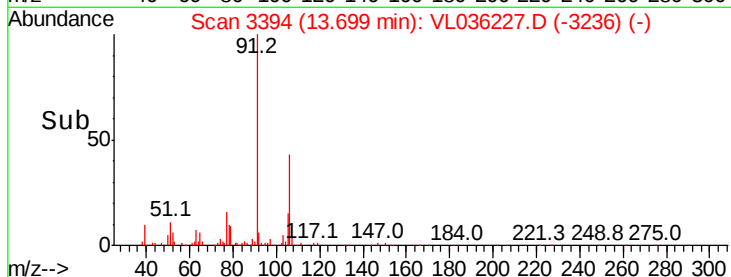
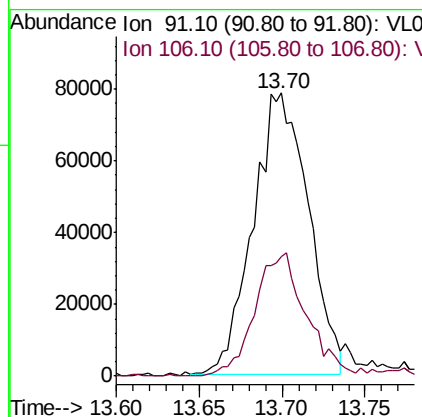
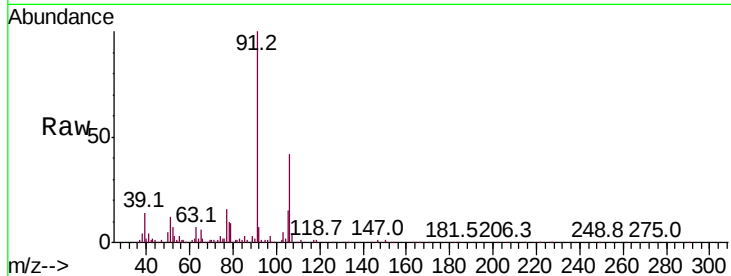
#60
o-Xylene
Concen: 0.530 ppbv
RT: 13.70 min Scan# 3394
Delta R.T. 0.01 min
Lab File: VL036227.D
Acq: 13 Jan 2021 15:59

Instrument :
MSVOA_L
ClientSampleId :
0121-SS5

Tot Ion	Ratio	Resp	Lower	Upper
91	100	182485		
106	40.8	21.9	65.8	

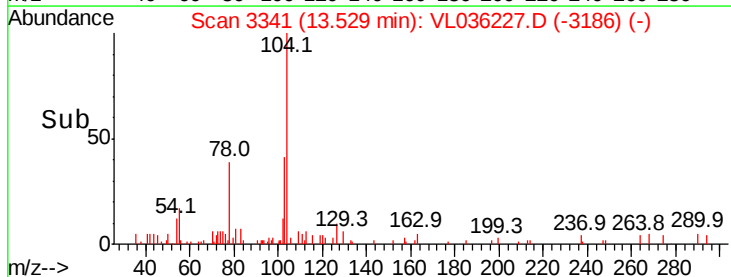
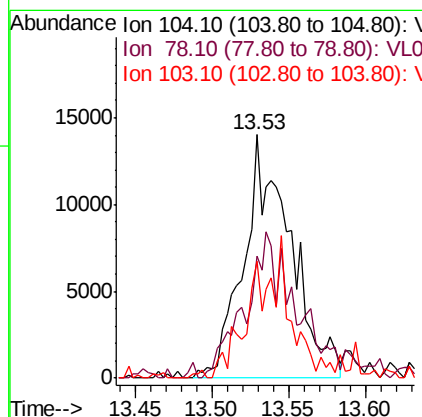
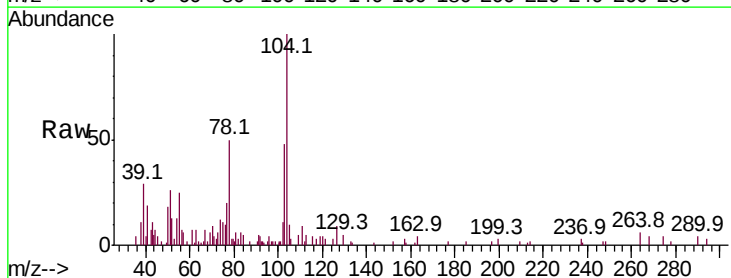
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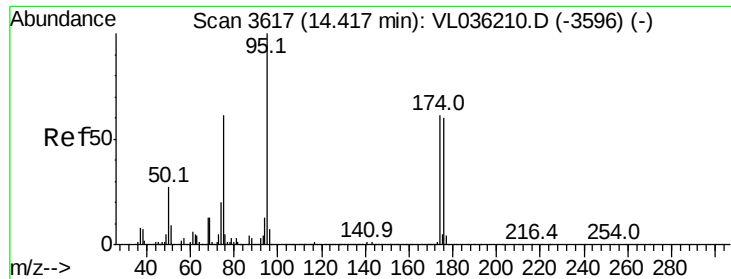
MMDadoda
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#61
Styrene
Concen: 0.137 ppbv m
RT: 13.53 min Scan# 3341
Delta R.T. -0.00 min
Lab File: VL036227.D
Acq: 13 Jan 2021 15:59

Tgt Ion	Ratio	Resp	Lower	Upper
104	100	29713		
78	72.2	46.8	70.2	
103	49.9	38.4	57.6	





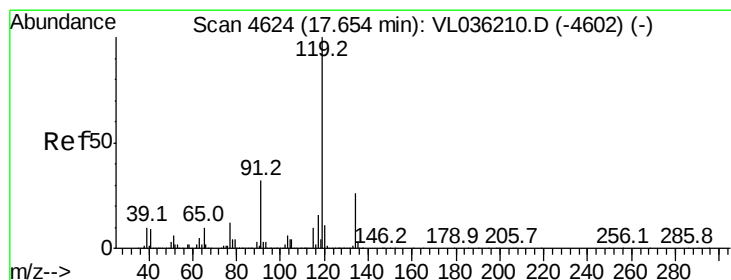
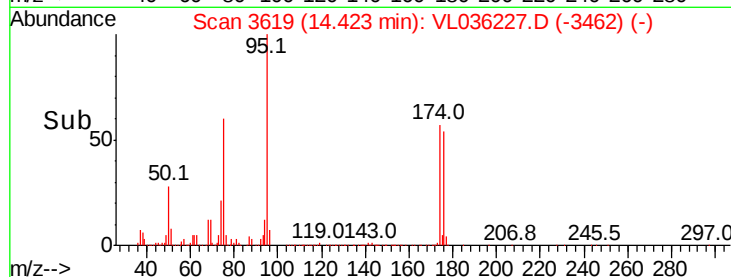
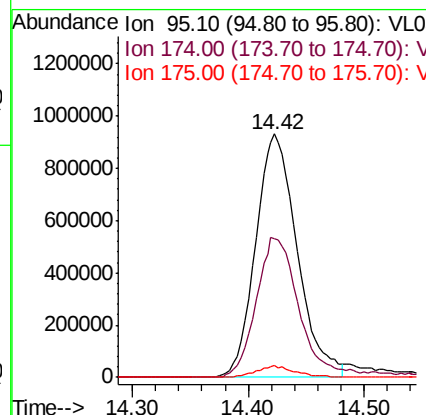
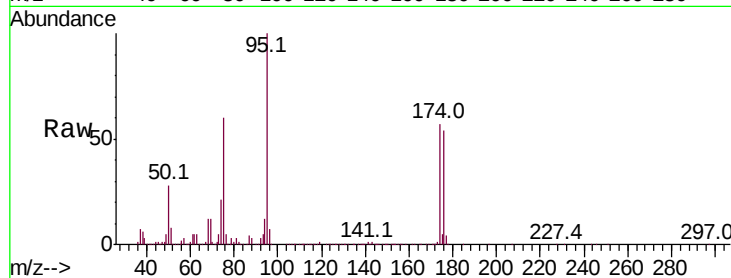
#68
1-Bromo-4-Fluorobenzene
Concen: 10.000 ppbv
RT: 14.42 min Scan# 3619
Delta R.T. 0.01 min
Lab File: VL036227.D
Acq: 13 Jan 2021 15:59

Instrument :
MSVOA_L
ClientSampleId :
0121-SS5

Tot Ion: 95 Resp: 2320297
Ion Ratio Lower Upper
95 100
174 62.0 49.4 74.0
175 4.6 3.8 5.8

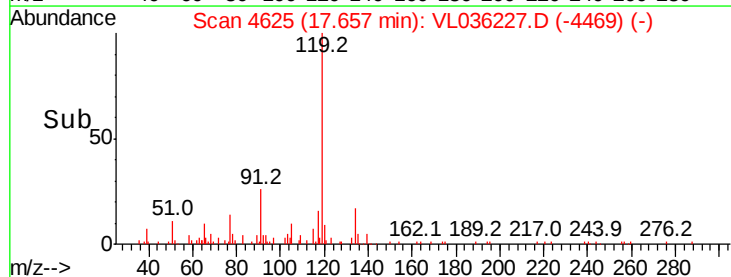
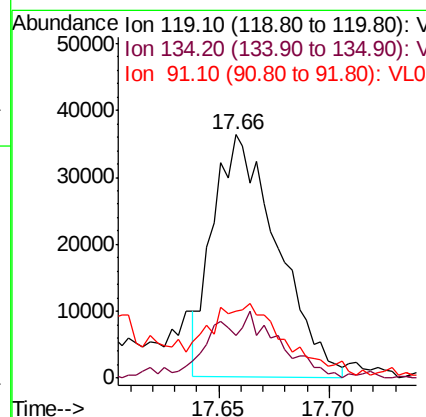
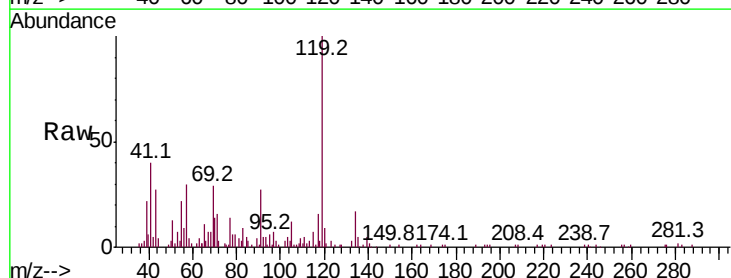
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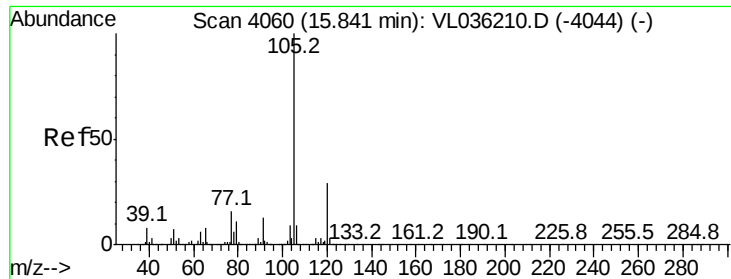
MMDadoda
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#69
p-Isopropyltoluene
Concen: 0.144 ppbv
RT: 17.66 min Scan# 4625
Delta R.T. 0.00 min
Lab File: VL036227.D
Acq: 13 Jan 2021 15:59

Tgt Ion: 119 Resp: 73414
Ion Ratio Lower Upper
119 100
134 31.6 20.2 30.4#
91 40.0 26.0 39.0#





#72

4-Ethyltoluene

Concen: 0.286 ppbv m

RT: 15.84 min Scan# 4061

Delta R.T. 0.00 min

Lab File: VL036227.D

Acq: 13 Jan 2021 15:59

Instrument :

MSVOA_L

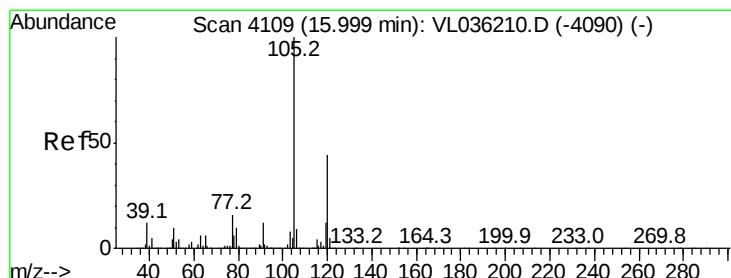
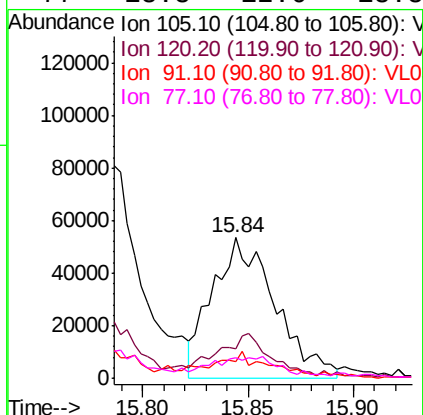
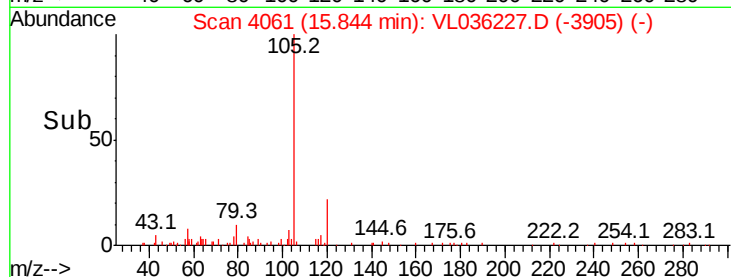
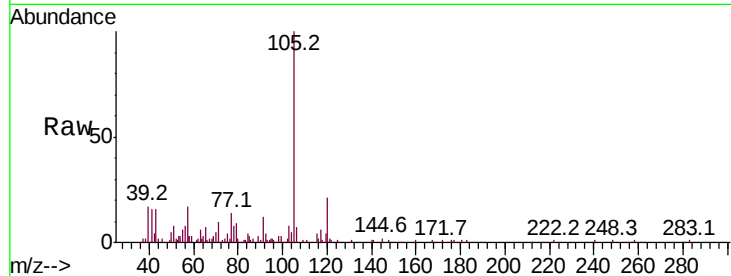
ClientSampleId :

0121-SS5

Tot Ion	Ratio	Resp	Lower	Upper
105	100	111144		
120	32.1	23.7	35.5	
91	17.9	11.9	17.9	
77	18.8	12.6	18.8	

Manual Integrations
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#73

1,3,5-Trimethylbenzene

Concen: 0.276 ppbv m

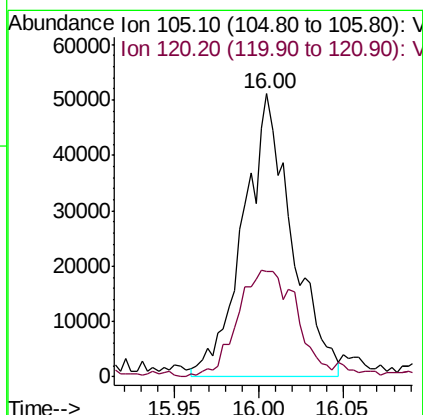
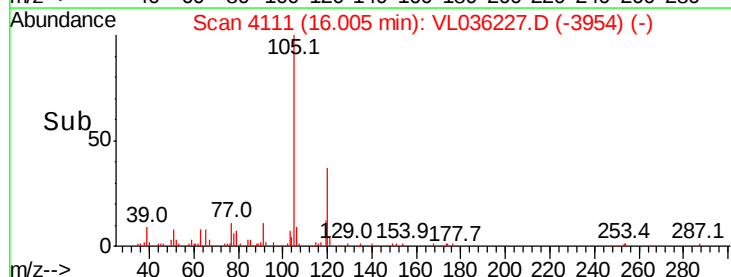
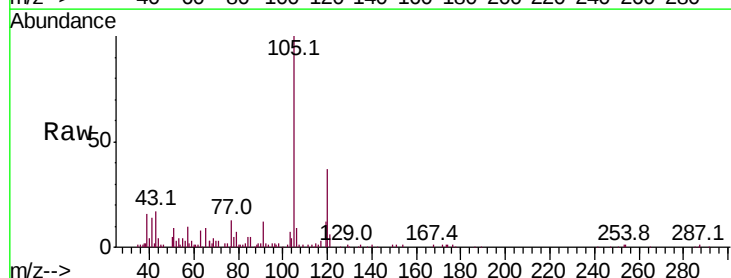
RT: 16.00 min Scan# 4111

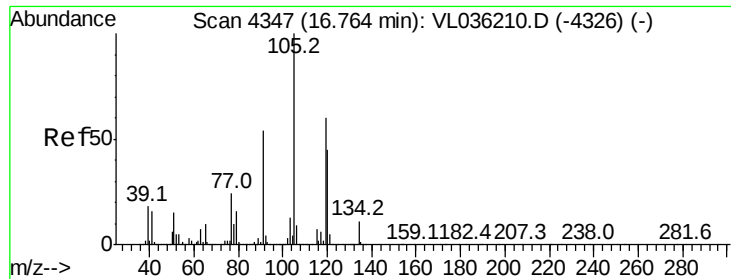
Delta R.T. 0.01 min

Lab File: VL036227.D

Acq: 13 Jan 2021 15:59

Tgt Ion	Ratio	Resp	Lower	Upper
105	100	102316		
120	37.3	35.5	53.3	





#74

1,2,4-Trimethylbenzene

Concen: 1.022 ppbv

RT: 16.77 min Scan# 4348

Delta R.T. 0.00 min

Lab File: VL036227.D

Acq: 13 Jan 2021 15:59

Instrument :

MSVOA_L

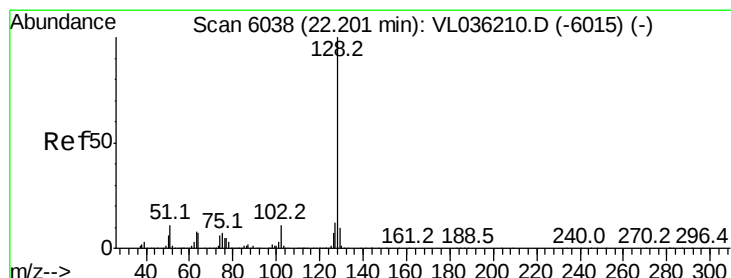
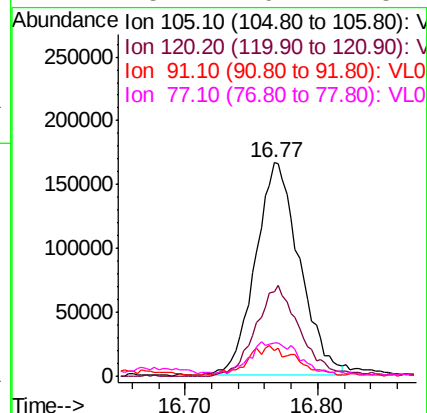
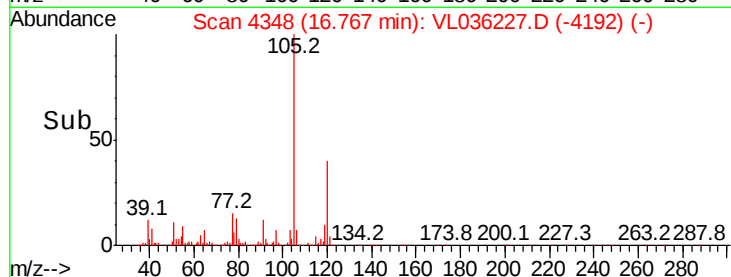
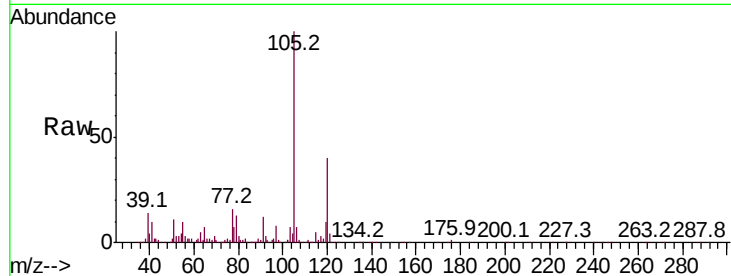
ClientSampleId :

0121-SS5

Tot Ion	Ratio	Lower	Upper
105	100		
120	40.0	36.2	54.2
91	11.6	43.3	64.9#
77	13.7	19.1	28.7#

Manual Integrations
APPROVED

MMDadoda
1/18/2021 3:49:31 PM



#79

Naphthalene

Concen: 0.226 ppbv m

RT: 22.21 min Scan# 6042

Delta R.T. 0.01 min

Lab File: VL036227.D

Acq: 13 Jan 2021 15:59

Tgt Ion	Ratio	Lower	Upper
128	100		
127	20.7	9.9	14.9#
129	10.3	8.4	12.6

