

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL032621\
 Data File : VL036511.D
 Acq On : 26 Mar 2021 12:55
 Operator : SY/AP
 Sample : M1748-36
 Misc : 400mL/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 GOI-SG-4(2021)

Manual Integrations
 APPROVED

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 3/29/2021 4:38:41 PM

Quant Time: Mar 28 20:20:14 2021
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL032521AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Thu Mar 28 20:20:14 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	5.70	49	1589181	10.00	ppbv	0.03
33) 1,4-Difluorobenzene	7.21	114	3536868	10.00	ppbv	0.03
55) Chlorobenzene-d5	12.12	117	3203331	10.00	ppbv	0.03

System Monitoring Compounds		R.T.	QIon	Response	Conc	Units	Dev(Min)
68) 1-Bromo-4-Fluorobenzene	14.45	95	2526738	9.90	ppbv	0.03	
Spiked Amount	10.000	Range	65 - 135	Recovery	=	99.00%	

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.06	85	48675m	0.188	ppbv	
3) Chlorodifluoromethane	3.01	51	142472	0.480	ppbv #	91
4) Chloromethane	3.16	50	41488m	0.396	ppbv	
9) Propene	3.04	41	361267m	3.817	ppbv	
10) Heptane	8.16	43	22997m	0.095	ppbv	
11) Trichlorofluoromethane	3.97	101	94781m	0.359	ppbv	
13) Ethanol	3.65	45	1427187	126.614	ppbv	93
15) Acetone	3.87	43	4624220	29.564	ppbv	97
19) Isopropyl Alcohol	4.01	45	164835m	1.916	ppbv	
20) Methylene Chloride	4.37	84	2256052	30.807	ppbv	93
26) Hexane	5.71	57	2484048	14.395	ppbv #	48
30) Cyclohexane	7.19	84	21561m	0.154	ppbv	
32) 1,1,1-Trichloroethane	6.55	97	10921m	0.039	ppbv	
34) 2-Butanone	5.28	43	168904	0.978	ppbv	99
35) Carbon Tetrachloride	7.05	117	16626m	0.061	ppbv	
36) Benzene	6.92	78	64353m	0.197	ppbv	
38) Trichloroethene	7.87	130	1415520	11.151	ppbv	99
44) 2,2,4-Trimethylpentane	7.90	57	100761	0.176	ppbv #	68
52) Tetrachloroethene	11.26	164	39703m	0.331	ppbv	
53) Toluene	9.84	91	203353m	0.585	ppbv	
59) m/p-Xylene	13.00	91	99189m	0.244	ppbv	
74) 1,2,4-Trimethylbenzene	16.80	105	71905m	0.167	ppbv	

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

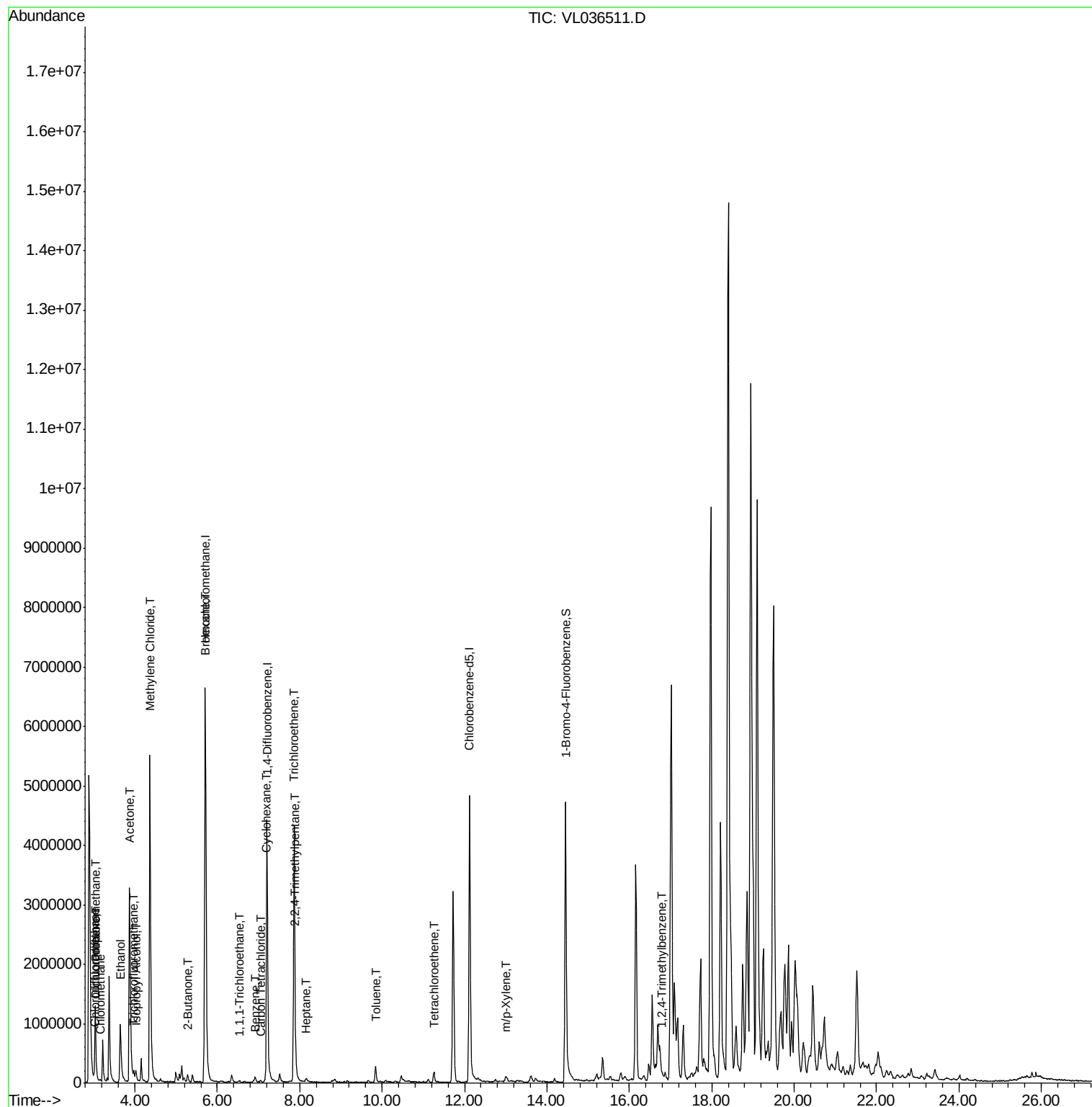
Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL032621\
Data File : VL036511.D
Acq On : 26 Mar 2021 12:55
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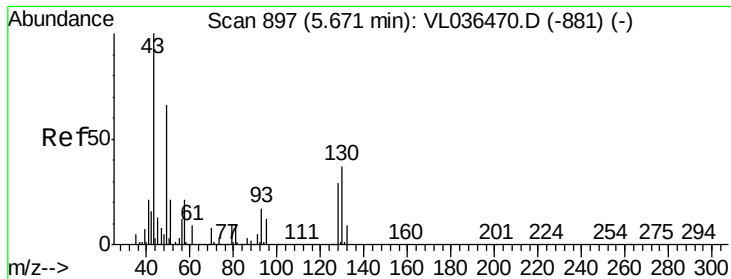
Instrument :
MSVOA_L
ClientSampleId :
GOI-SG-4(2021)

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Quant Time: Mar 28 20:20:14 2021
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL032521AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Thu Mar
QLast Update : Thu Mar 25 09:42:40 2021
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.70 min Scan# 905

Delta R.T. 0.03 min

Lab File: VL036511.D

Acq: 26 Mar 2021 12:55

Instrument :

MSVOA_L

ClientSampleId :

GOI-SG-4(2021)

Tot Ion: 49 Resp: 1589181

Ion Ratio Lower Upper

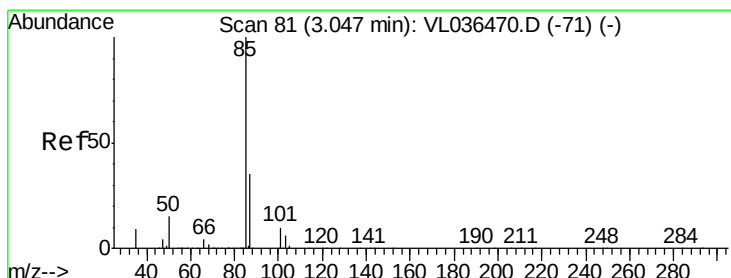
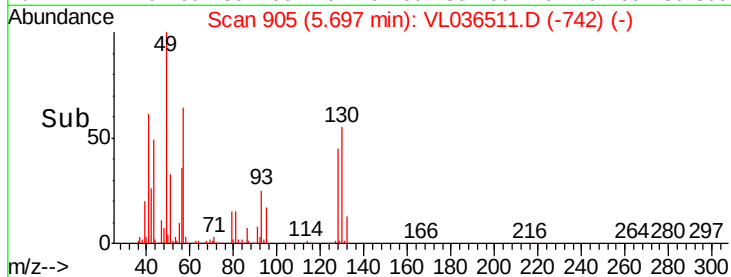
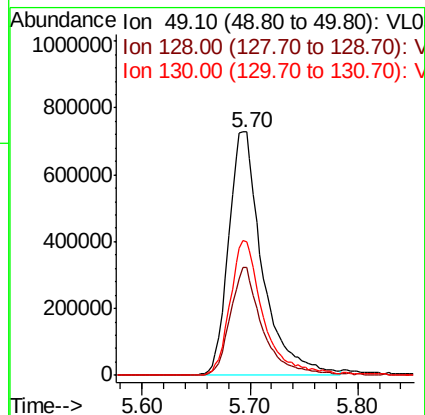
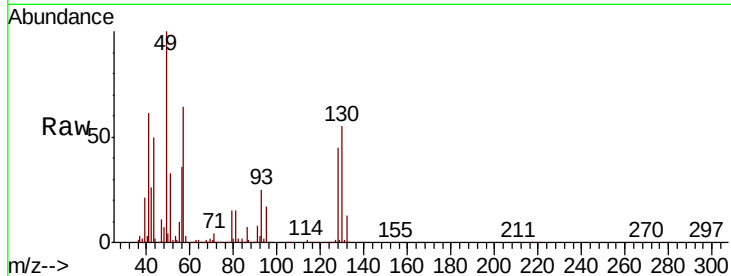
49 100

128 42.9 23.5 70.6

130 55.3 29.1 87.4

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#2

Dichlorodifluoromethane

Concen: 0.188 ppbv m

RT: 3.06 min Scan# 85

Delta R.T. 0.01 min

Lab File: VL036511.D

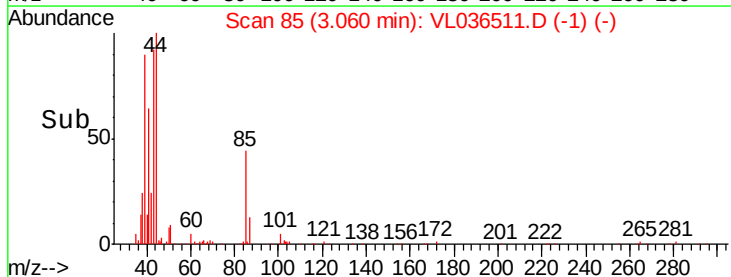
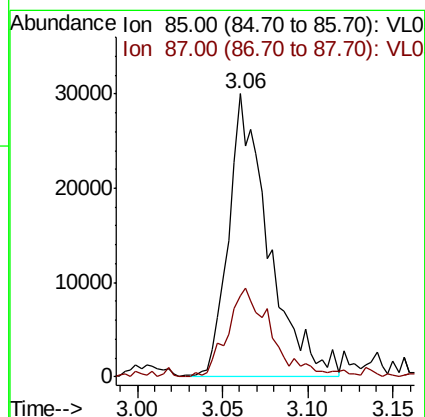
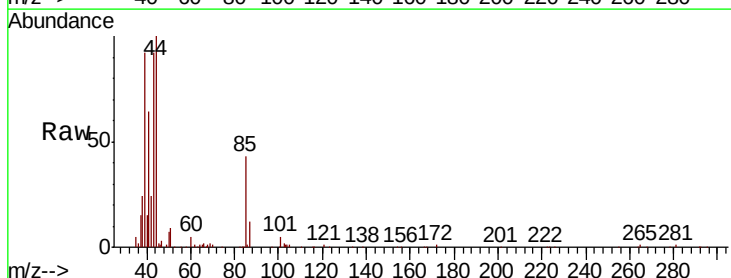
Acq: 26 Mar 2021 12:55

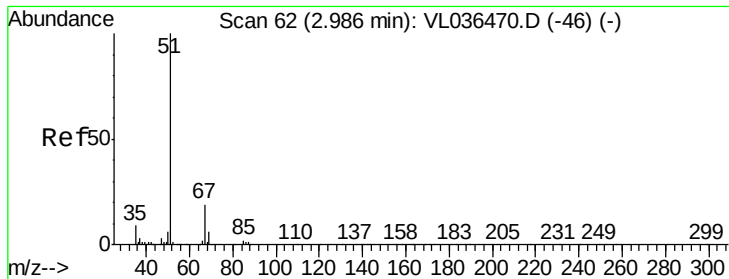
Tgt Ion: 85 Resp: 48675

Ion Ratio Lower Upper

85 100

87 28.9 27.8 41.8





#3

Chlorodifluoromethane

Concen: 0.480 ppbv

RT: 3.01 min Scan# 68

Delta R.T. 0.02 min

Lab File: VL036511.D

Acq: 26 Mar 2021 12:55

Instrument :

MSVOA_L

ClientSampleId :

GOI-SG-4(2021)

Tot Ion: 51 Resp: 142472

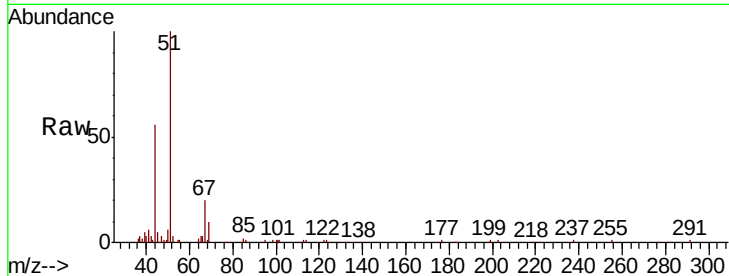
Ion Ratio Lower Upper

51 100

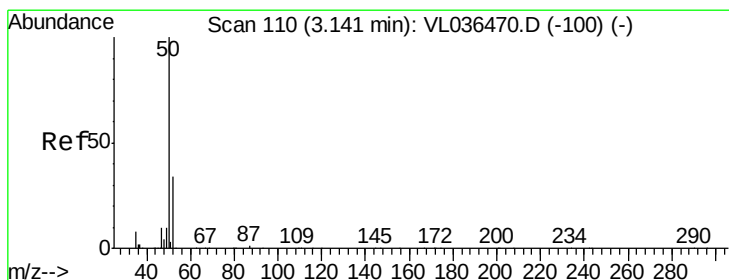
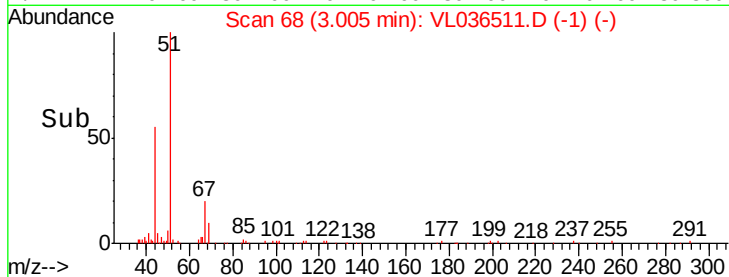
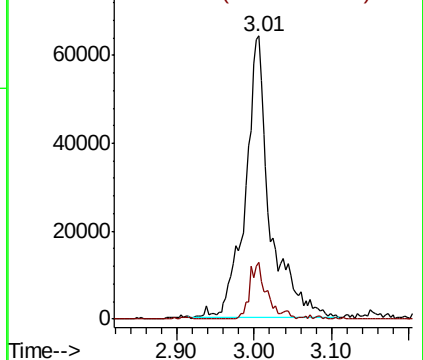
67 14.3 14.7 22.1#

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



#4

Chloromethane

Concen: 0.396 ppbv m

RT: 3.16 min Scan# 117

Delta R.T. 0.02 min

Lab File: VL036511.D

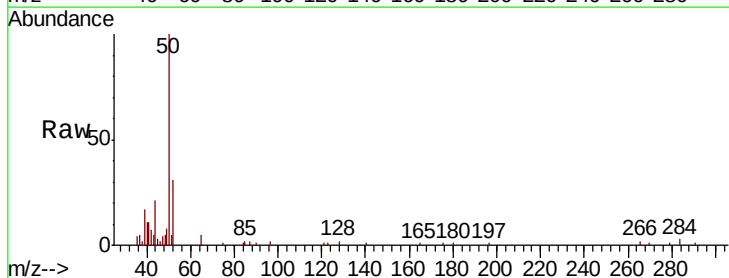
Acq: 26 Mar 2021 12:55

Tgt Ion: 50 Resp: 41488

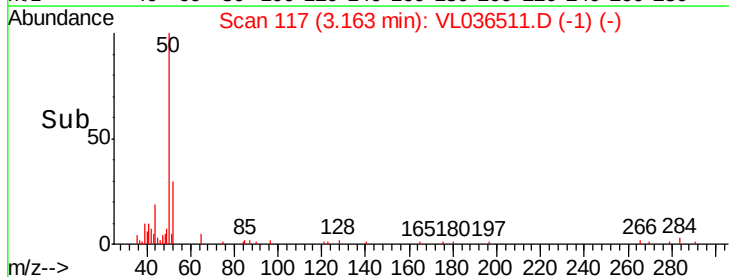
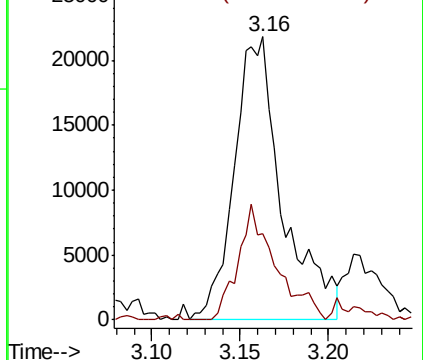
Ion Ratio Lower Upper

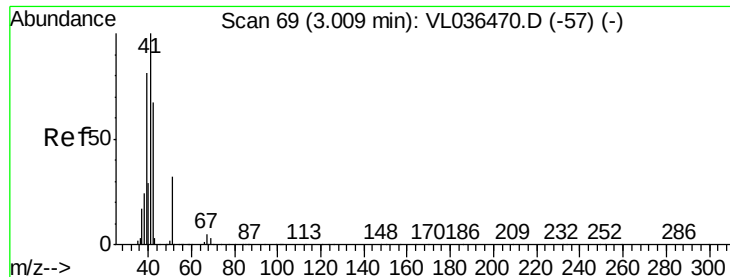
50 100

52 30.6 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: 3.817 ppbv m

RT: 3.04 min Scan# 78

Delta R.T. 0.03 min

Lab File: VL036511.D

Acq: 26 Mar 2021 12:55

Instrument :

MSVOA_L

ClientSampleId :

GOI-SG-4(2021)

Tot Ion: 41 Resp: 361267

Ion Ratio Lower Upper

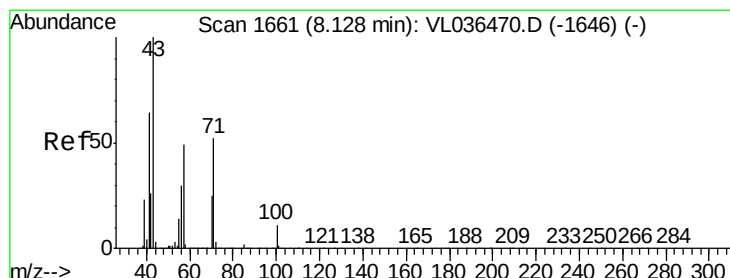
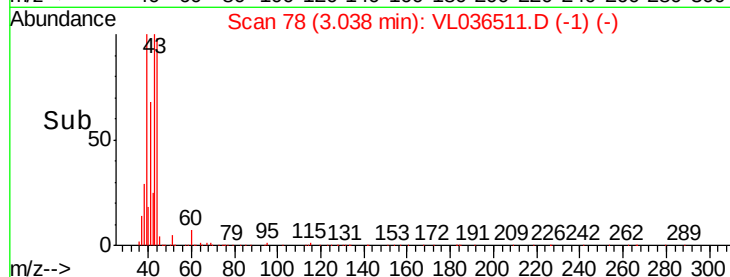
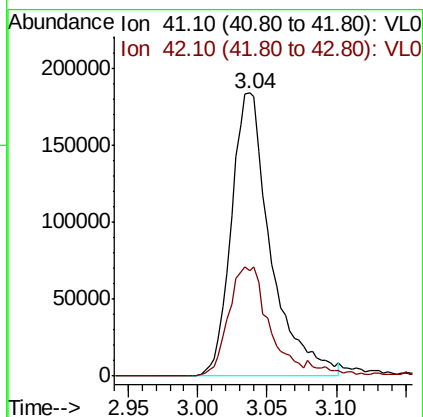
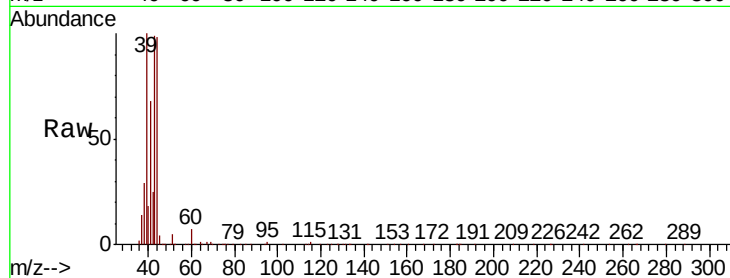
41 100

42 41.9 57.0 85.4#

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#10

Heptane

Concen: 0.095 ppbv m

RT: 8.16 min Scan# 1670

Delta R.T. 0.03 min

Lab File: VL036511.D

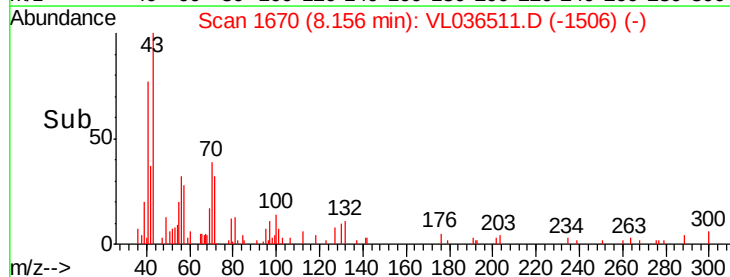
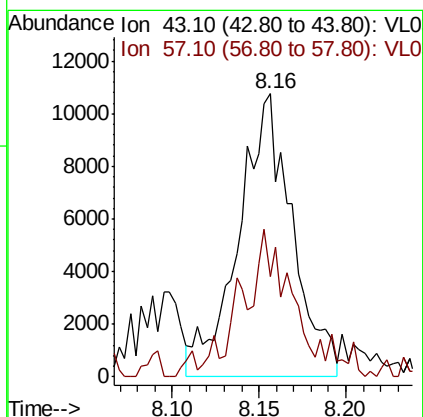
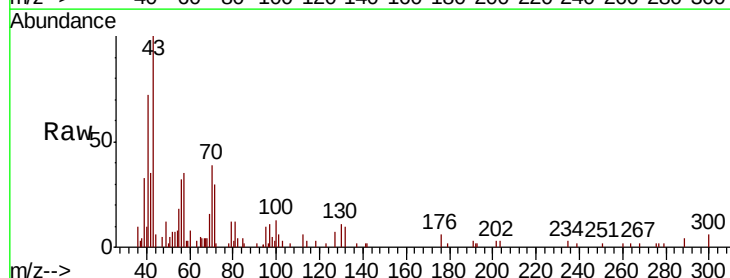
Acq: 26 Mar 2021 12:55

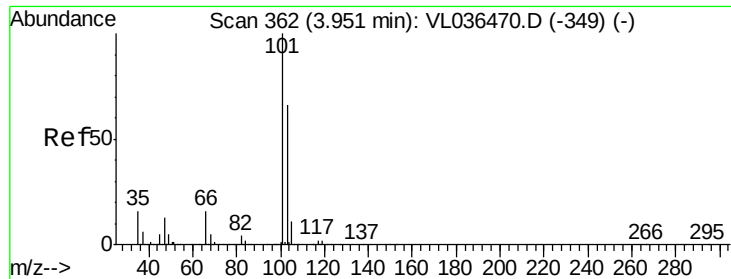
Tgt Ion: 43 Resp: 22997

Ion Ratio Lower Upper

43 100

57 55.3 39.0 58.6





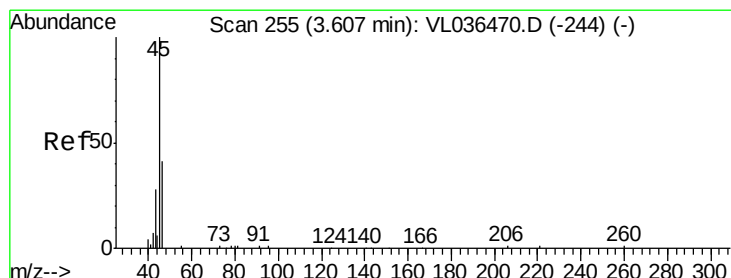
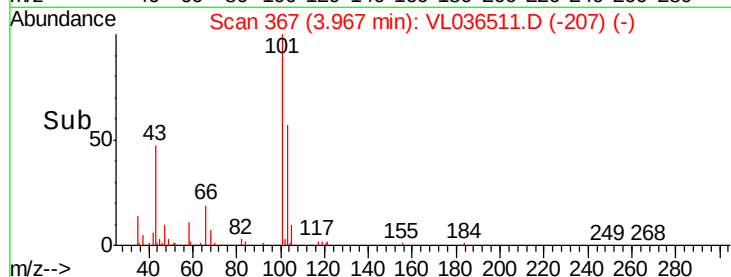
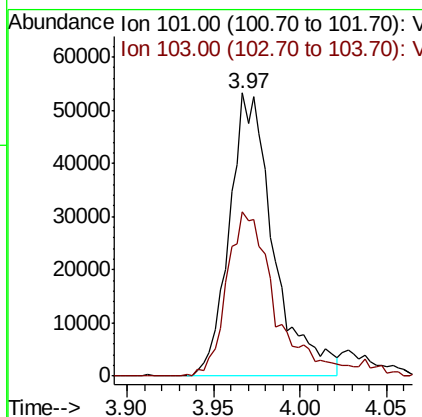
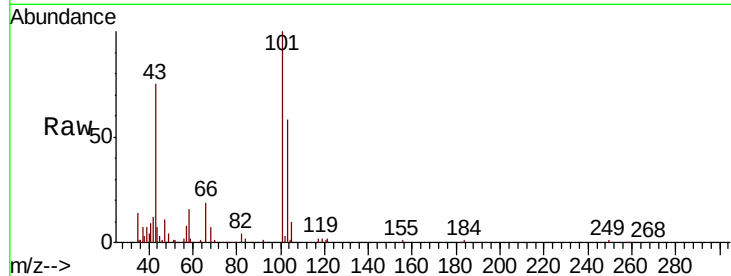
#11
 Trichlorofluoromethane
 Concen: 0.359 ppbv m
 RT: 3.97 min Scan# 367
 Delta R.T. 0.02 min
 Lab File: VL036511.D
 Acq: 26 Mar 2021 12:55

Instrument :
 MSVOA_L
 ClientSampleId :
 GOI-SG-4(2021)

Tot Ion	Ion	Ratio	Lower	Upper
101	100			
103	58.1	52.5	78.7	

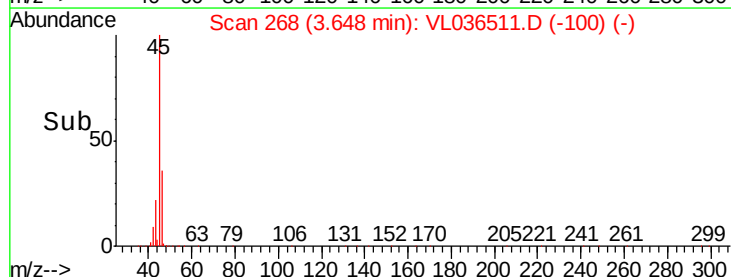
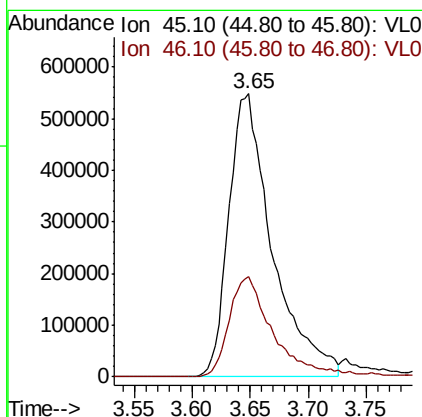
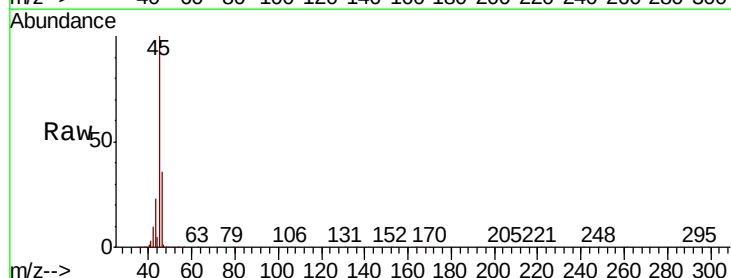
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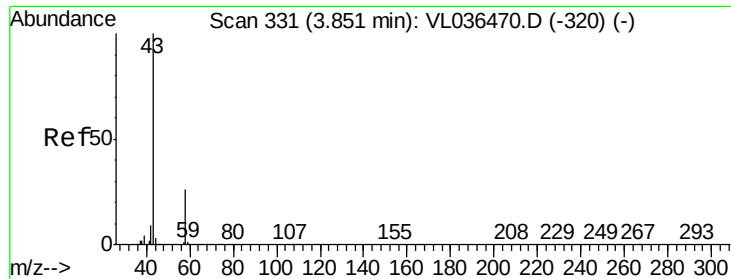
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#13
 Ethanol
 Concen: 126.614 ppbv
 RT: 3.65 min Scan# 268
 Delta R.T. 0.04 min
 Lab File: VL036511.D
 Acq: 26 Mar 2021 12:55

Tgt Ion	Ion	Ratio	Lower	Upper
45	100			
46	37.1	16.6	66.2	





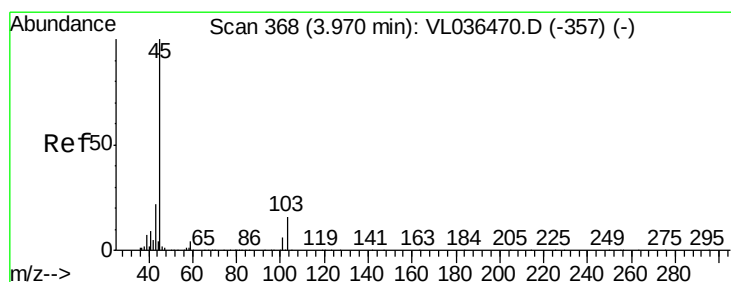
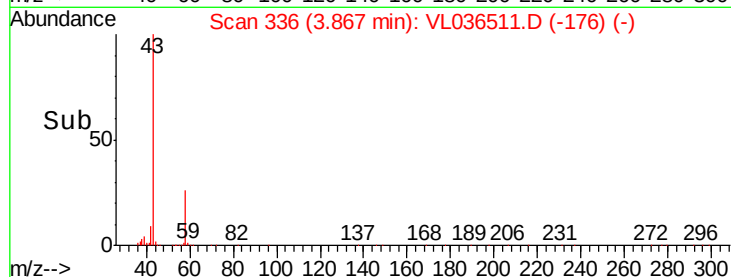
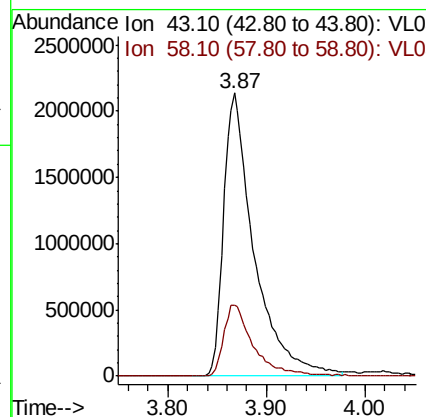
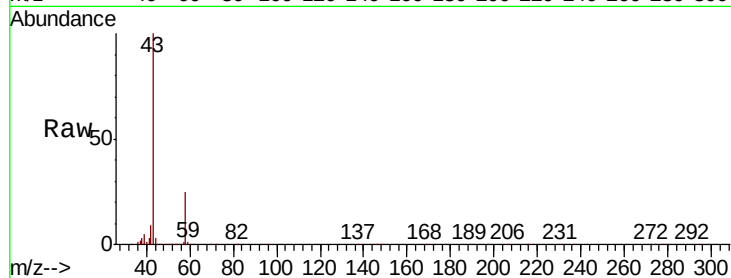
#15
Acetone
Concen: 29.564 ppbv
RT: 3.87 min Scan# 336
Delta R.T. 0.02 min
Lab File: VL036511.D
Acq: 26 Mar 2021 12:55

Instrument :
MSVOA_L
ClientSampleId :
GOI-SG-4(2021)

Tot Ion: 43 Resp: 4624220
Ion Ratio Lower Upper
43 100
58 24.9 21.2 31.8

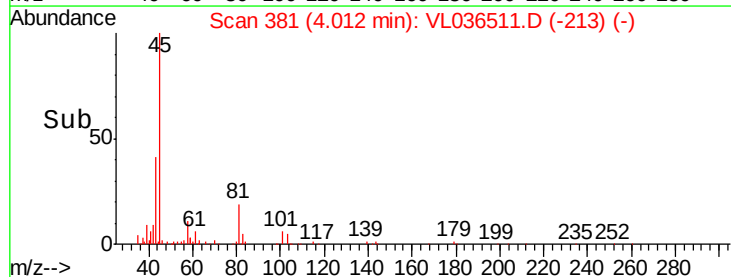
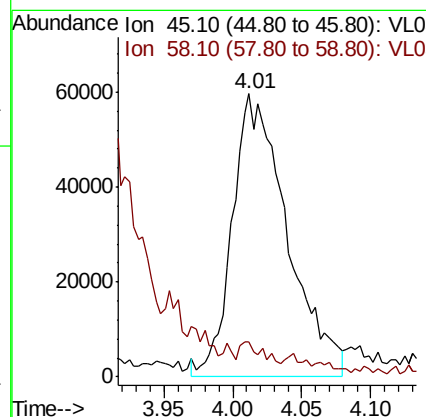
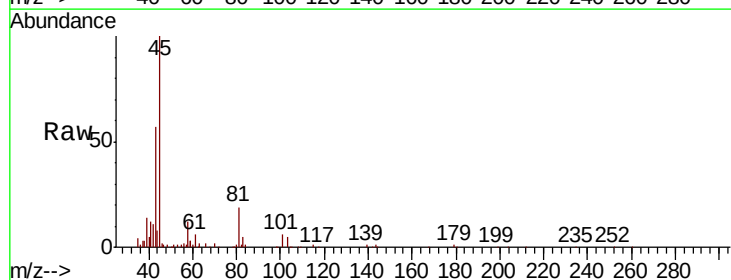
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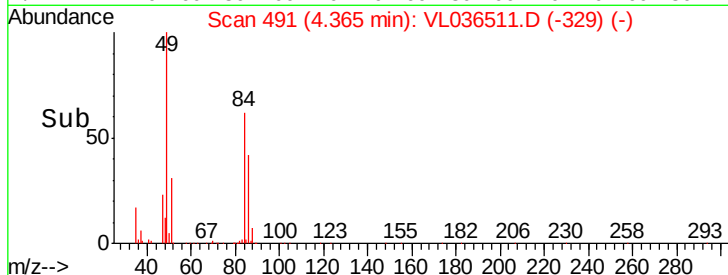
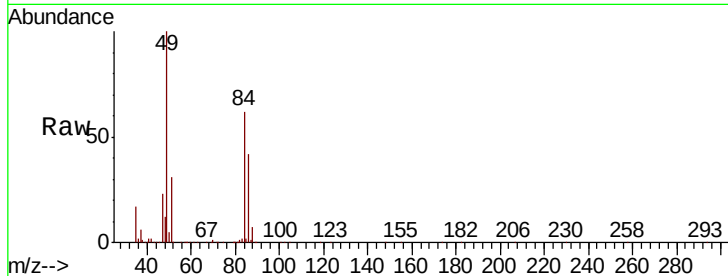
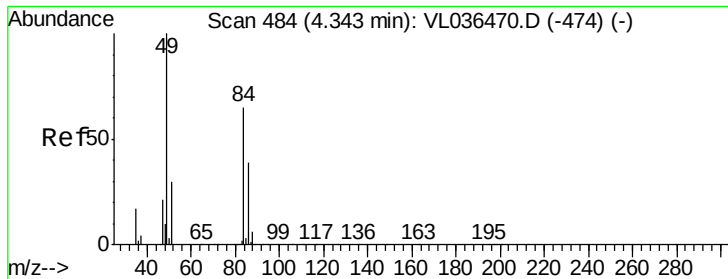
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#19
Isopropyl Alcohol
Concen: 1.916 ppbv m
RT: 4.01 min Scan# 381
Delta R.T. 0.04 min
Lab File: VL036511.D
Acq: 26 Mar 2021 12:55

Tgt Ion: 45 Resp: 164835
Ion Ratio Lower Upper
45 100
58 0.0 2.9 4.3#





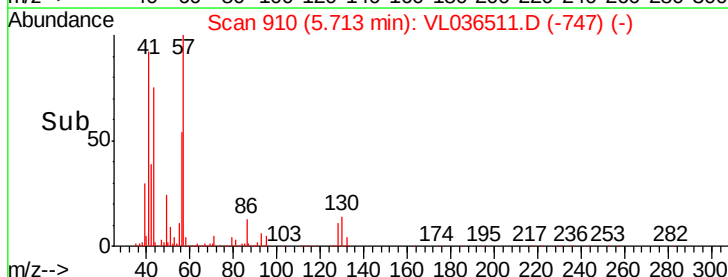
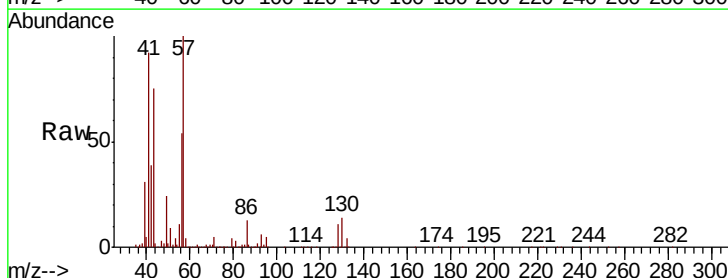
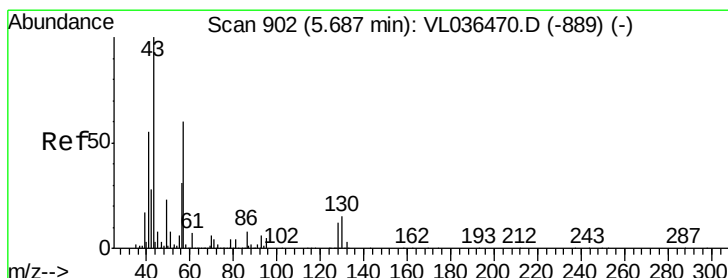
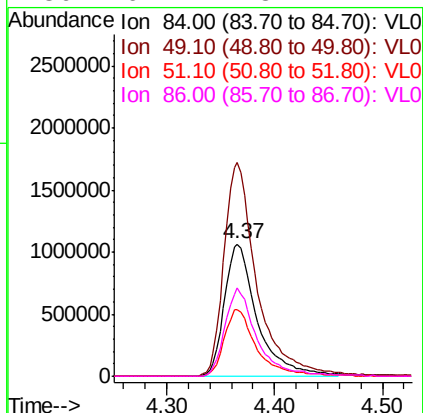
#20
Methvlene Chloride
Concen: 30.807 ppbv
RT: 4.37 min Scan# 491
Delta R.T. 0.02 min
Lab File: VL036511.D
Acq: 26 Mar 2021 12:55

Tot Ion	Ratio	Lower	Upper
84	100		
49	161.5	122.9	184.3
51	50.5	36.9	55.3
86	67.2	48.2	72.4

Instrument :
MSVOA_L
ClientSampleId :
GOI-SG-4(2021)

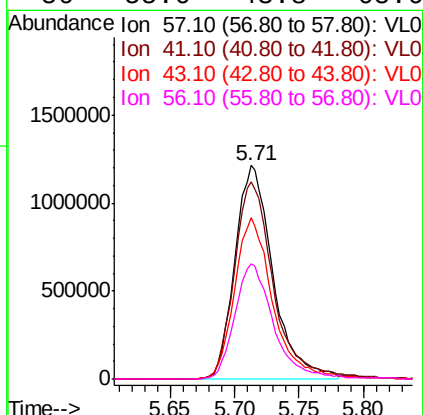
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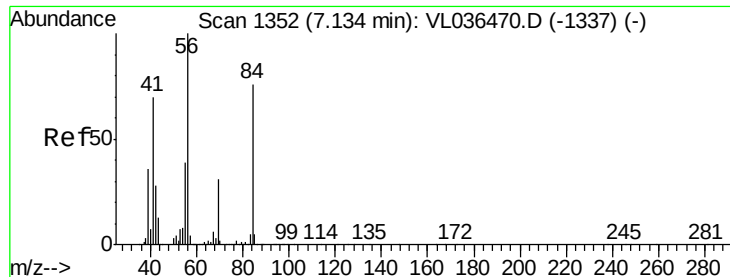
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#26
Hexane
Concen: 14.395 ppbv
RT: 5.71 min Scan# 910
Delta R.T. 0.03 min
Lab File: VL036511.D
Acq: 26 Mar 2021 12:55

Tgt Ion	Ratio	Lower	Upper
57	100		
41	95.9	77.2	115.8
43	76.5	173.8	260.6#
56	55.6	43.8	65.6





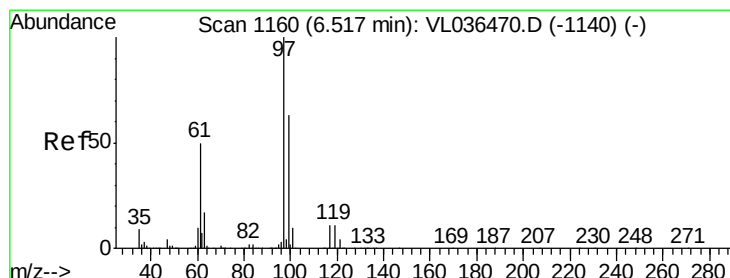
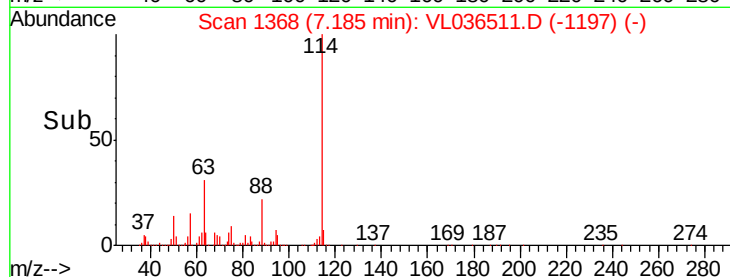
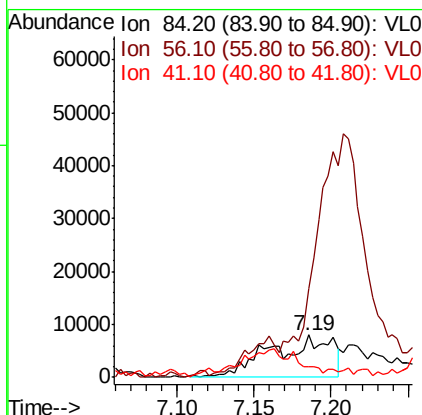
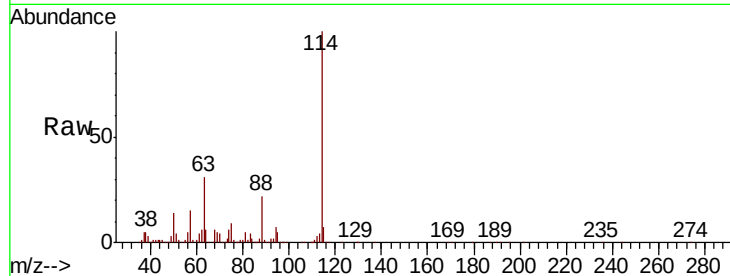
#30
Cyclohexane
Concen: 0.154 ppbv m
RT: 7.19 min Scan# 1368
Delta R.T. 0.05 min
Lab File: VL036511.D
Acq: 26 Mar 2021 12:55

Instrument :
MSVOA_L
ClientSampleId :
GOI-SG-4(2021)

Tot Ion	Ratio	Lower	Upper
84	100		
56	0.0	114.6	171.8#
41	67.0	75.3	112.9#

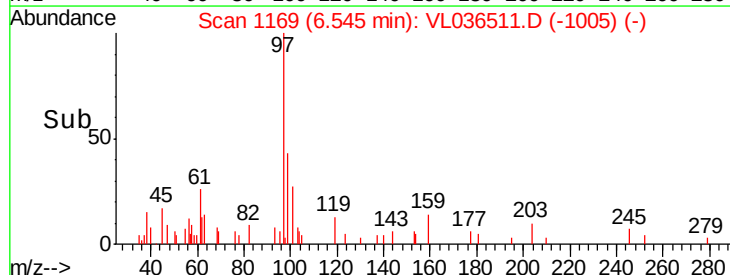
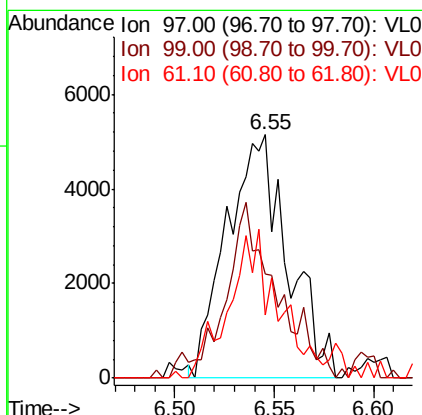
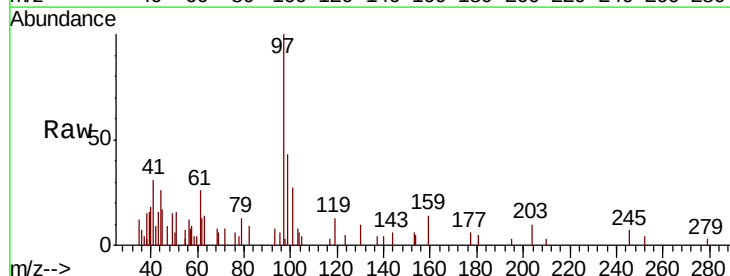
Manual Integrations
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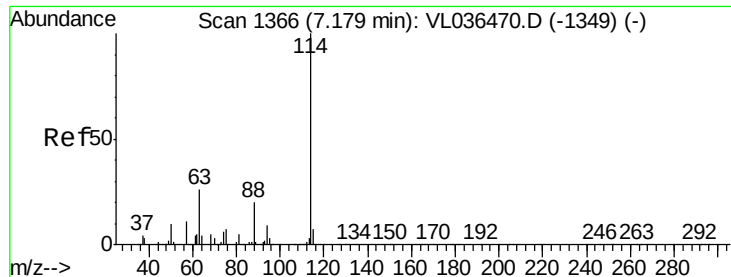
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#32
1,1,1-Trichloroethane
Concen: 0.039 ppbv m
RT: 6.55 min Scan# 1169
Delta R.T. 0.03 min
Lab File: VL036511.D
Acq: 26 Mar 2021 12:55

Tgt Ion	Ratio	Lower	Upper
97	100		
99	65.2	51.4	77.0
61	54.0	40.6	60.8





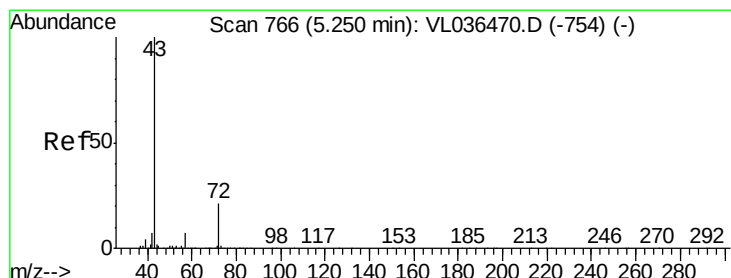
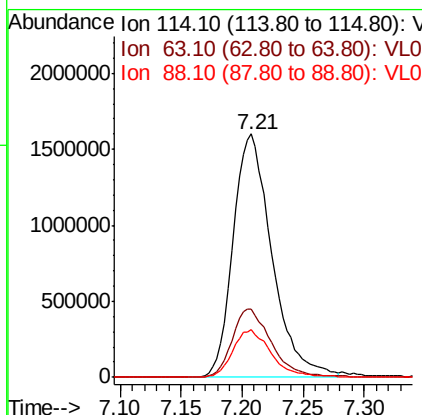
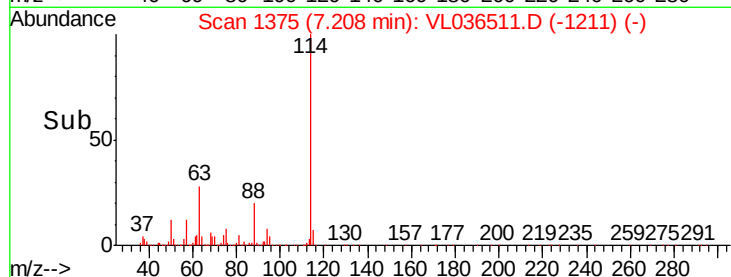
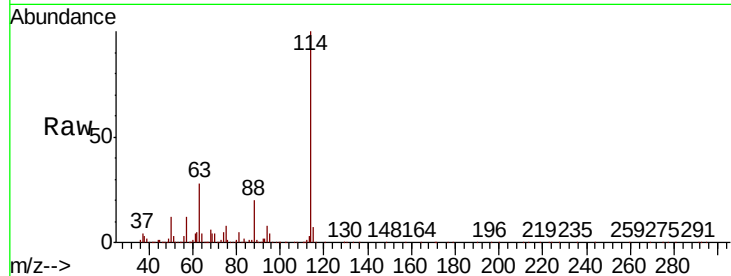
#33
 1,4-Difluorobenzene
 Concen: 10.000 ppbv
 RT: 7.21 min Scan# 1375
 Delta R.T. 0.03 min
 Lab File: VL036511.D
 Acq: 26 Mar 2021 12:55

Instrument :
 MSVOA_L
 ClientSampleId :
 GOI-SG-4(2021)

Tot Ion	Ratio	Lower	Upper
114	100		
63	28.6	22.4	33.6
88	19.6	15.4	23.0

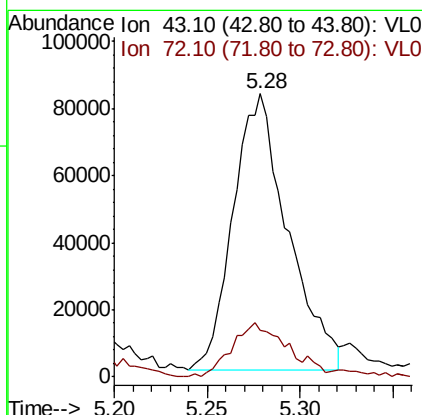
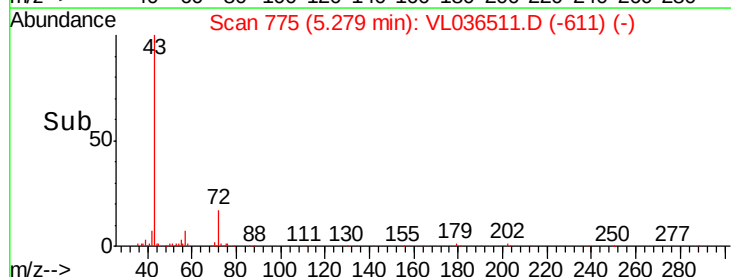
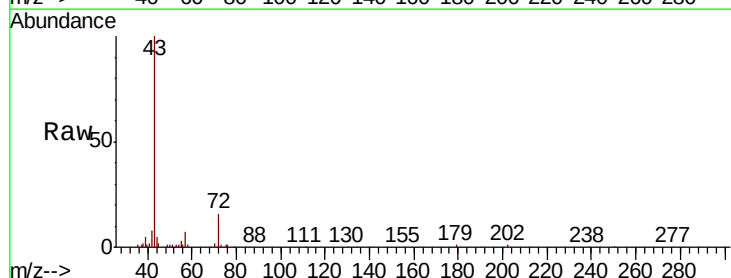
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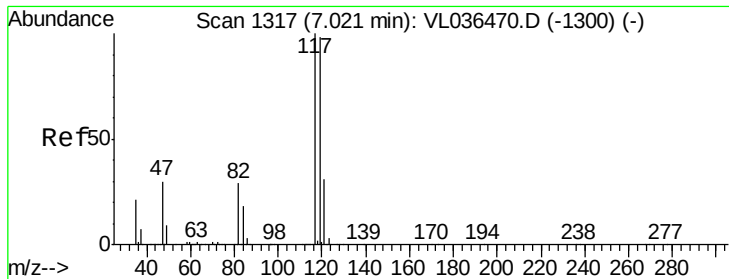
MMDadoda
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#34
 2-Butanone
 Concen: 0.978 ppbv
 RT: 5.28 min Scan# 775
 Delta R.T. 0.03 min
 Lab File: VL036511.D
 Acq: 26 Mar 2021 12:55

Tgt Ion	Ratio	Lower	Upper
43	100		
72	21.9	17.0	25.6





#35

Carbon Tetrachloride

Concen: 0.061 ppbv m

RT: 7.05 min Scan# 1326

Delta R.T. 0.03 min

Lab File: VL036511.D

Acq: 26 Mar 2021 12:55

Instrument :

MSVOA_L

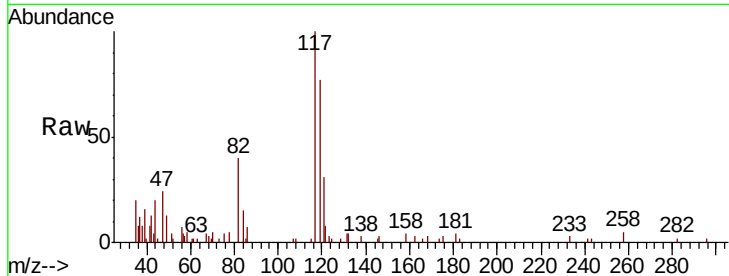
ClientSampleId :

GOI-SG-4(2021)

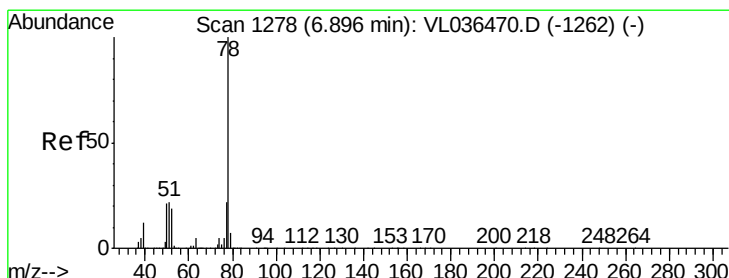
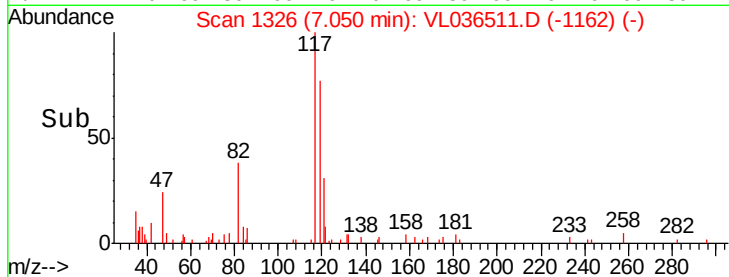
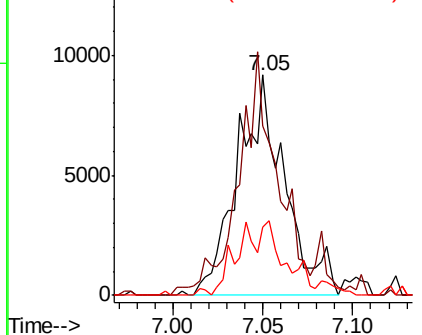
Tot Ion:	117	Resp:	16626
Ion Ratio	Lower	Upper	
117	100		
119	77.2	78.2	117.2#
121	30.8	24.5	36.7

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Abundance Ion 117.00 (116.70 to 117.70): V
Ion 119.00 (118.70 to 119.70): V
Ion 121.00 (120.70 to 121.70): V



#36

Benzene

Concen: 0.197 ppbv m

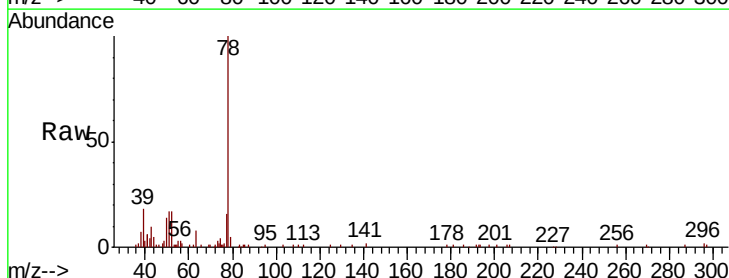
RT: 6.92 min Scan# 1284

Delta R.T. 0.02 min

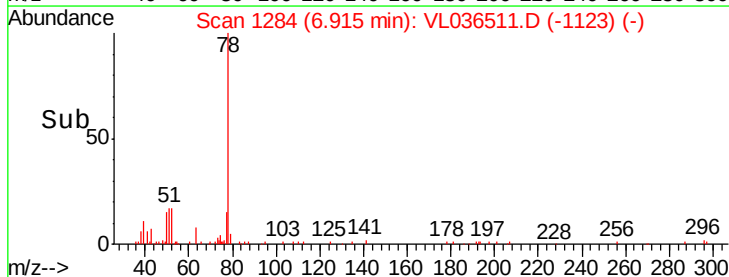
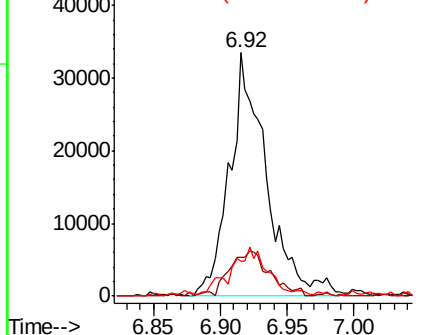
Lab File: VL036511.D

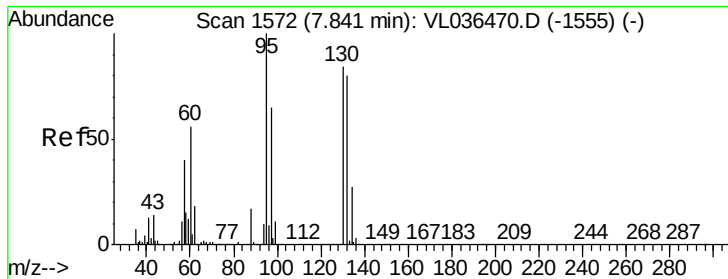
Acq: 26 Mar 2021 12:55

Tgt Ion:	78	Resp:	64353
Ion Ratio	Lower	Upper	
78	100		
77	15.9	18.0	27.0#
50	14.4	16.5	24.7#



Abundance Ion 78.10 (77.80 to 78.80): VL0
Ion 77.10 (76.80 to 77.80): VL0
Ion 50.10 (49.80 to 50.80): VL0





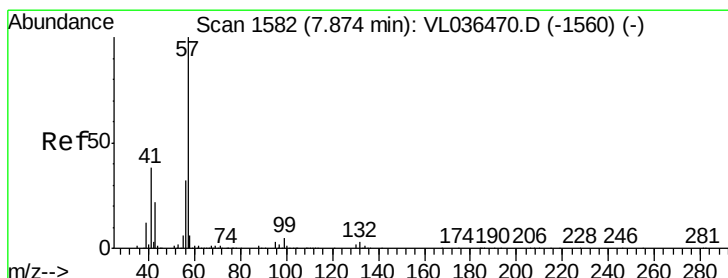
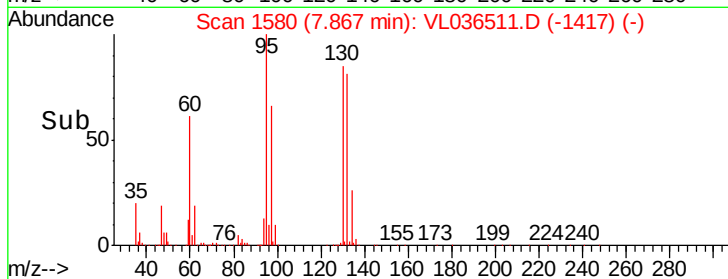
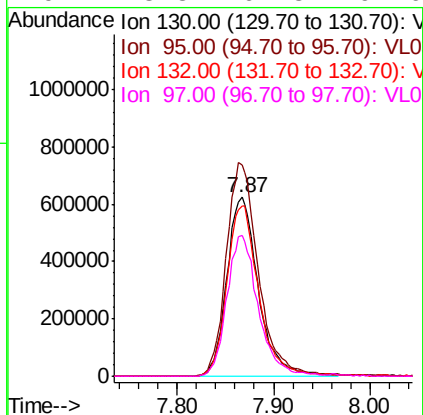
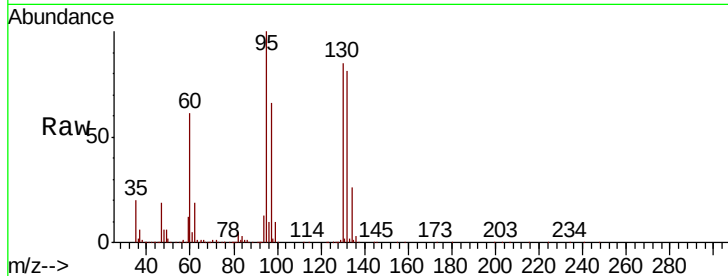
#38
 Trichloroethene
 Concen: 11.151 ppbv
 RT: 7.87 min Scan# 1580
 Delta R.T. 0.03 min
 Lab File: VL036511.D
 Acq: 26 Mar 2021 12:55

Instrument :
 MSVOA_L
 ClientSampleId :
 GOI-SG-4(2021)

Tot Ion	Ion	Ratio	Lower	Upper
130	100			
95	118.1	95.7	143.5	
132	95.2	76.2	114.4	
97	78.3	61.8	92.6	

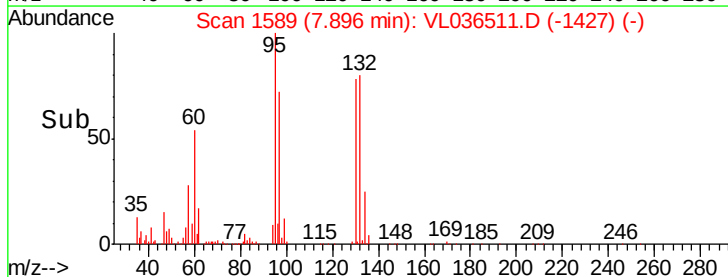
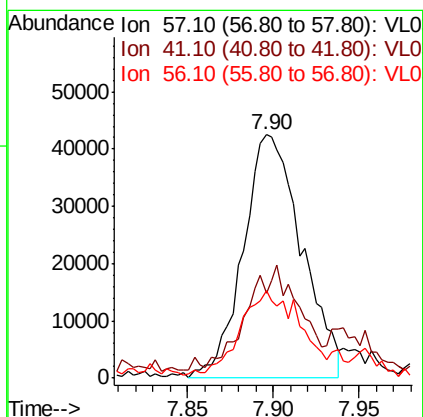
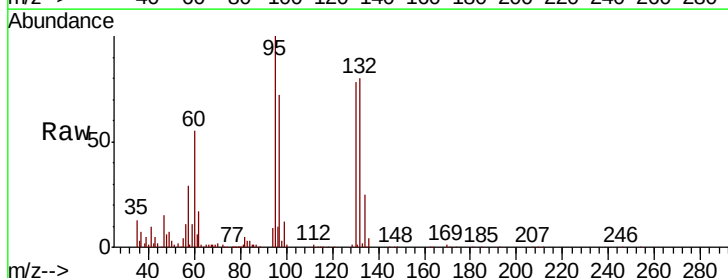
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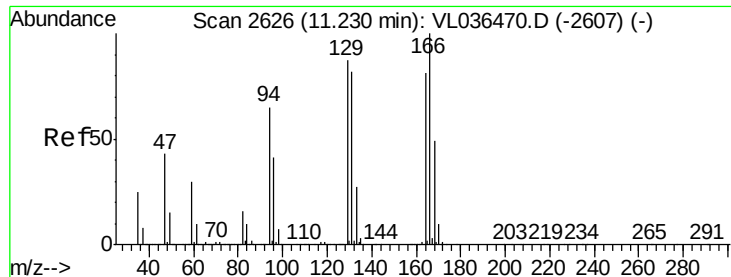
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#44
 2,2,4-Trimethylpentane
 Concen: 0.176 ppbv
 RT: 7.90 min Scan# 1589
 Delta R.T. 0.02 min
 Lab File: VL036511.D
 Acq: 26 Mar 2021 12:55

Tgt Ion	Ion	Ratio	Lower	Upper
57	100			
41	58.7	28.8	43.2#	
56	46.1	26.1	39.1#	





#52

Tetrachloroethene

Concen: 0.331 ppbv m

RT: 11.26 min Scan# 2636

Delta R.T. 0.03 min

Lab File: VL036511.D

Acq: 26 Mar 2021 12:55

Instrument :

MSVOA_L

ClientSampleId :

GOI-SG-4(2021)

Tot Ion:164 Resp: 39703

Ion Ratio Lower Upper

164 100

166 130.8 98.3 147.5

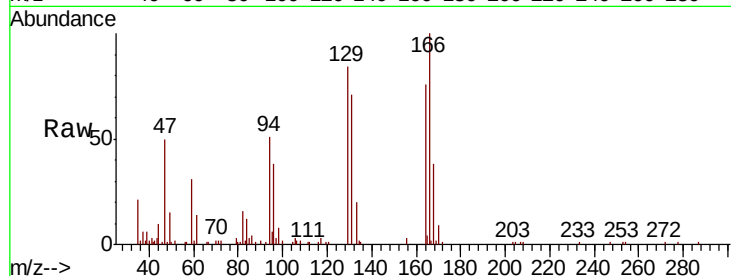
129 109.8 85.8 128.8

131 93.0 80.9 121.3

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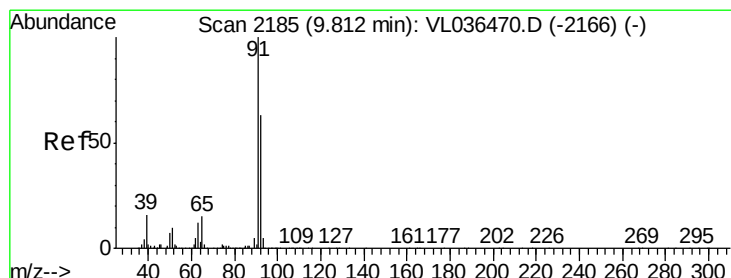
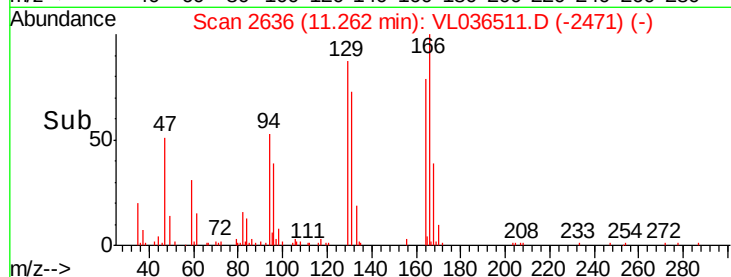
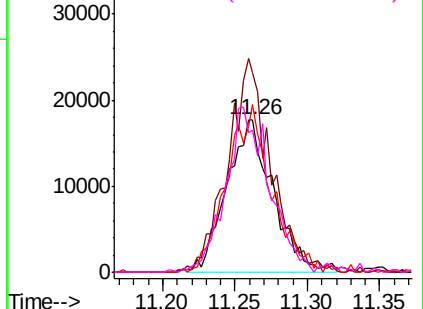


Abundance Ion 163.90 (163.60 to 164.60): V

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: 0.585 ppbv m

RT: 9.84 min Scan# 2194

Delta R.T. 0.03 min

Lab File: VL036511.D

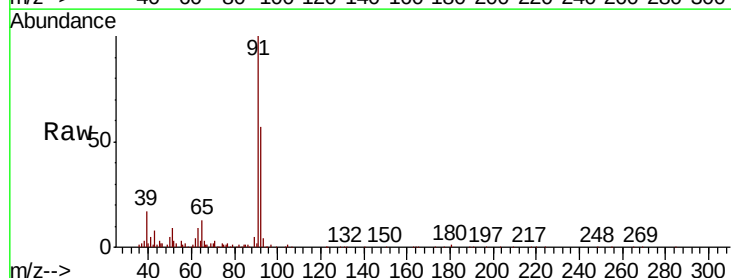
Acq: 26 Mar 2021 12:55

Tgt Ion: 91 Resp: 203353

Ion Ratio Lower Upper

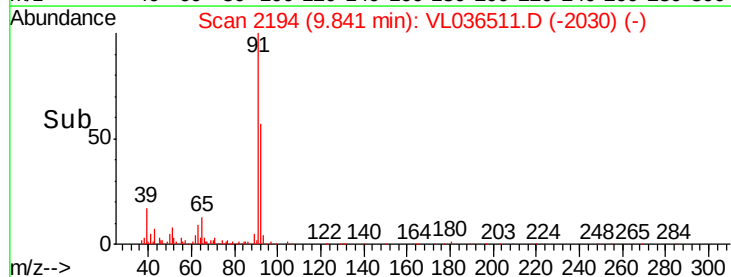
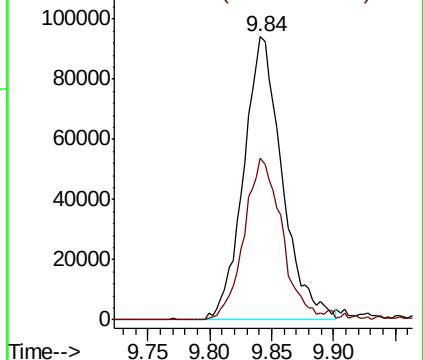
91 100

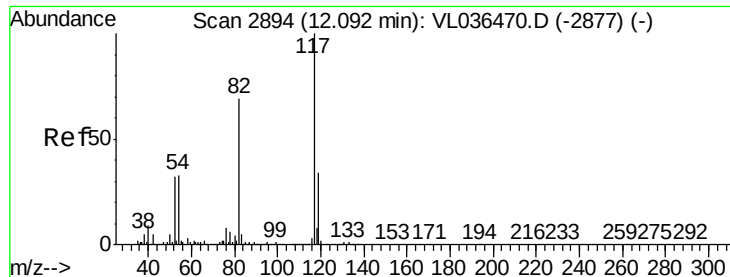
92 58.4 48.8 73.2



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 92.10 (91.80 to 92.80): VL0





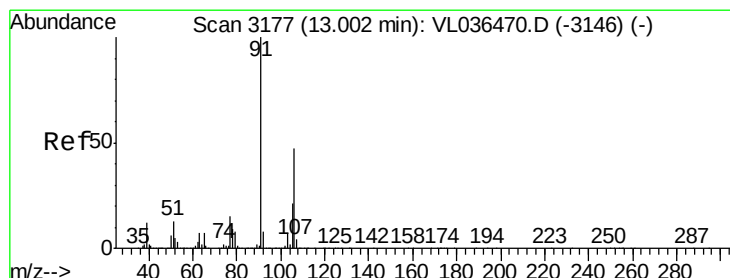
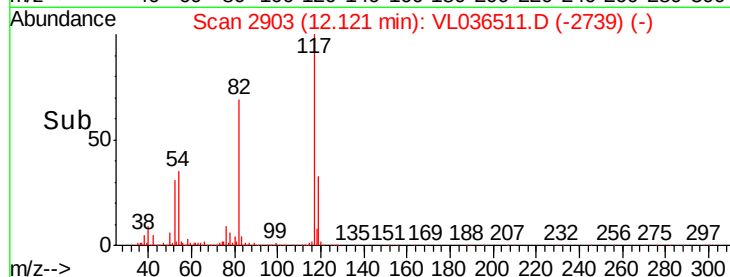
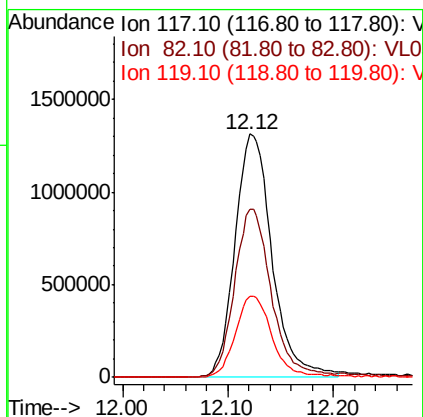
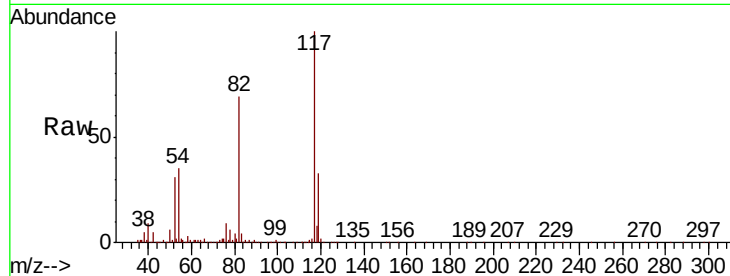
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 12.12 min Scan# 2903
Delta R.T. 0.03 min
Lab File: VL036511.D
Acq: 26 Mar 2021 12:55

Instrument :
MSVOA_L
ClientSampleId :
GOI-SG-4(2021)

Tot Ion	Ratio	Lower	Upper
117	100		
82	71.1	57.4	86.0
119	34.0	47.4	71.0

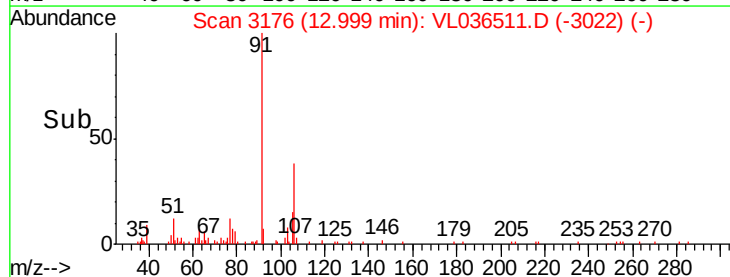
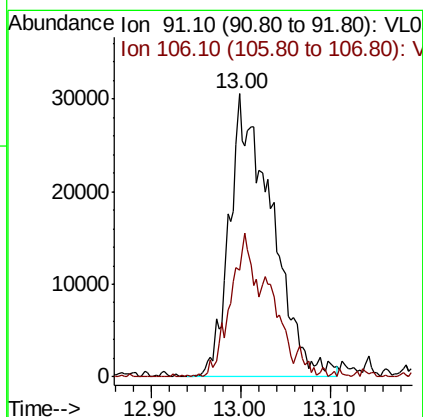
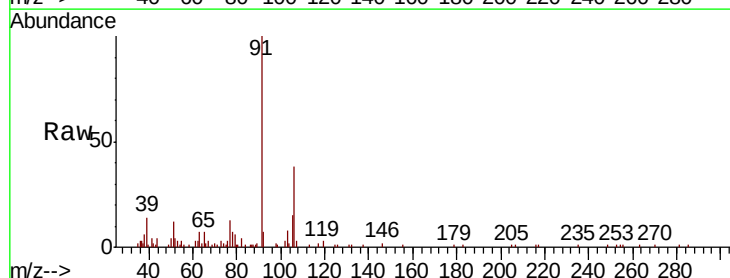
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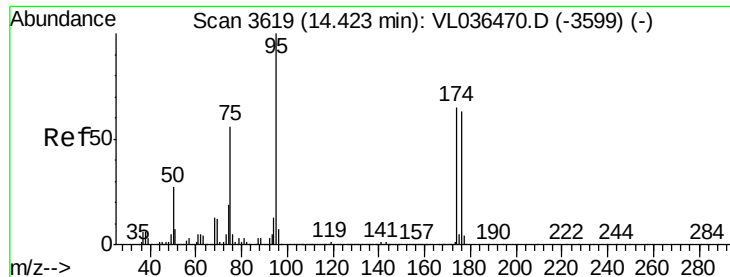
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#59
m/p-Xylene
Concen: 0.244 ppbv m
RT: 13.00 min Scan# 3176
Delta R.T. -0.00 min
Lab File: VL036511.D
Acq: 26 Mar 2021 12:55

Tgt Ion	Ratio	Lower	Upper
91	100		
106	0.0	35.3	52.9





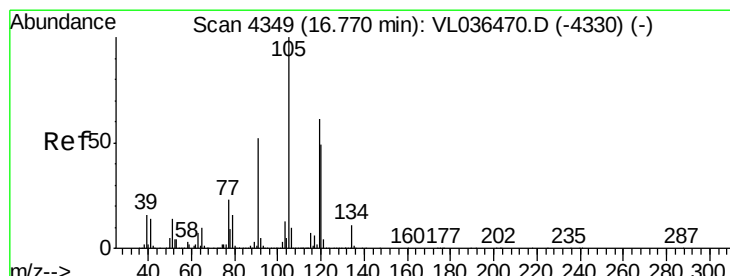
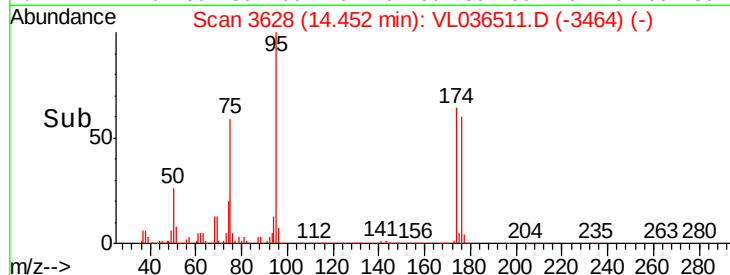
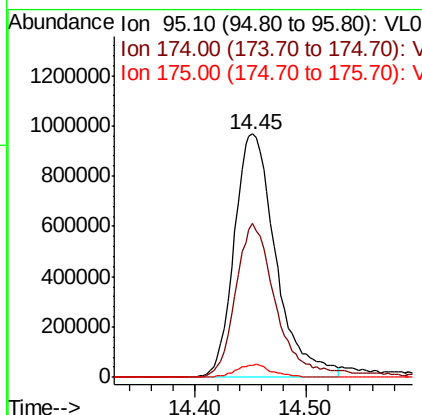
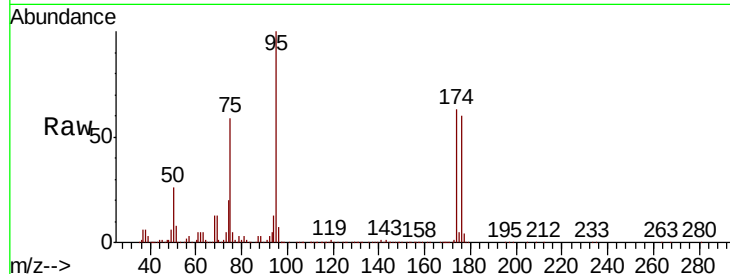
#68
 1-Bromo-4-Fluorobenzene
 Concen: 9.897 ppbv
 RT: 14.45 min Scan# 3628
 Delta R.T. 0.03 min
 Lab File: VL036511.D
 Acq: 26 Mar 2021 12:55

Instrument :
 MSVOA_L
 ClientSampleId :
 GOI-SG-4(2021)

Tot Ion: 95 Resp: 2526738
 Ion Ratio Lower Upper
 95 100
 174 64.7 51.0 76.6
 175 4.8 3.9 5.9

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#74
 1,2,4-Trimethylbenzene
 Concen: 0.167 ppbv m
 RT: 16.80 min Scan# 4358
 Delta R.T. 0.03 min
 Lab File: VL036511.D
 Acq: 26 Mar 2021 12:55

Tgt Ion: 105 Resp: 71905
 Ion Ratio Lower Upper
 105 100
 120 32.0 39.2 58.8#
 91 13.3 42.6 64.0#
 77 15.5 18.6 28.0#

