

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL040921\
 Data File : VL036777.D
 Acq On : 9 Apr 2021 16:49
 Operator : SY/AP
 Sample : M1987-02
 Misc : 400mL/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 GOI-IA-6(2021)

Manual Integrations
 APPROVED

MMDadoda
 4/12/2021 5:42:49 PM

Quant Time: Apr 10 11:47:13 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 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	5.65	49	1273040	10.00	ppbv	-0.02
33) 1,4-Difluorobenzene	7.16	114	2964182	10.00	ppbv	-0.02
55) Chlorobenzene-d5	12.08	117	2361956	10.00	ppbv	-0.02

System Monitoring Compounds		R.T.	QIon	Response	Conc	Units	Dev(Min)
68) 1-Bromo-4-Fluorobenzene	14.41	95	1501579	7.98	ppbv	-0.02	
Spiked Amount	10.000	Range	65 - 135	Recovery	=	79.80%	

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.04	85	38131	0.184	ppbv	95
3) Chlorodifluoromethane	2.98	51	92084	0.387	ppbv	99
4) Chloromethane	3.13	50	44841	0.534	ppbv	95
9) Propene	3.01	41	752053m	9.918	ppbv	
10) Heptane	8.12	43	23676m	0.123	ppbv	
11) Trichlorofluoromethane	3.94	101	42829m	0.202	ppbv	
13) Ethanol	3.59	45	1277790	141.511	ppbv	94
15) Acetone	3.85	43	296915m	2.370	ppbv	
19) Isopropyl Alcohol	3.96	45	119134m	1.728	ppbv	
20) Methylene Chloride	4.34	84	85930m	1.465	ppbv	
26) Hexane	5.67	57	300943	2.177	ppbv #	48
27) Carbon Disulfide	4.54	76	31745	0.233	ppbv #	63
30) Cyclohexane	7.15	84	35516m	0.317	ppbv	
34) 2-Butanone	5.24	43	99890m	0.690	ppbv	
35) Carbon Tetrachloride	7.00	117	15973m	0.070	ppbv	
36) Benzene	6.88	78	61199	0.224	ppbv	95
44) 2,2,4-Trimethylpentane	7.86	57	86435m	0.180	ppbv	
53) Toluene	9.80	91	510255	1.753	ppbv	98
58) Ethyl Benzene	12.70	91	38554m	0.112	ppbv	
59) m/p-Xylene	12.96	91	129260m	0.431	ppbv	
60) o-Xylene	13.68	91	49143m	0.170	ppbv	

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

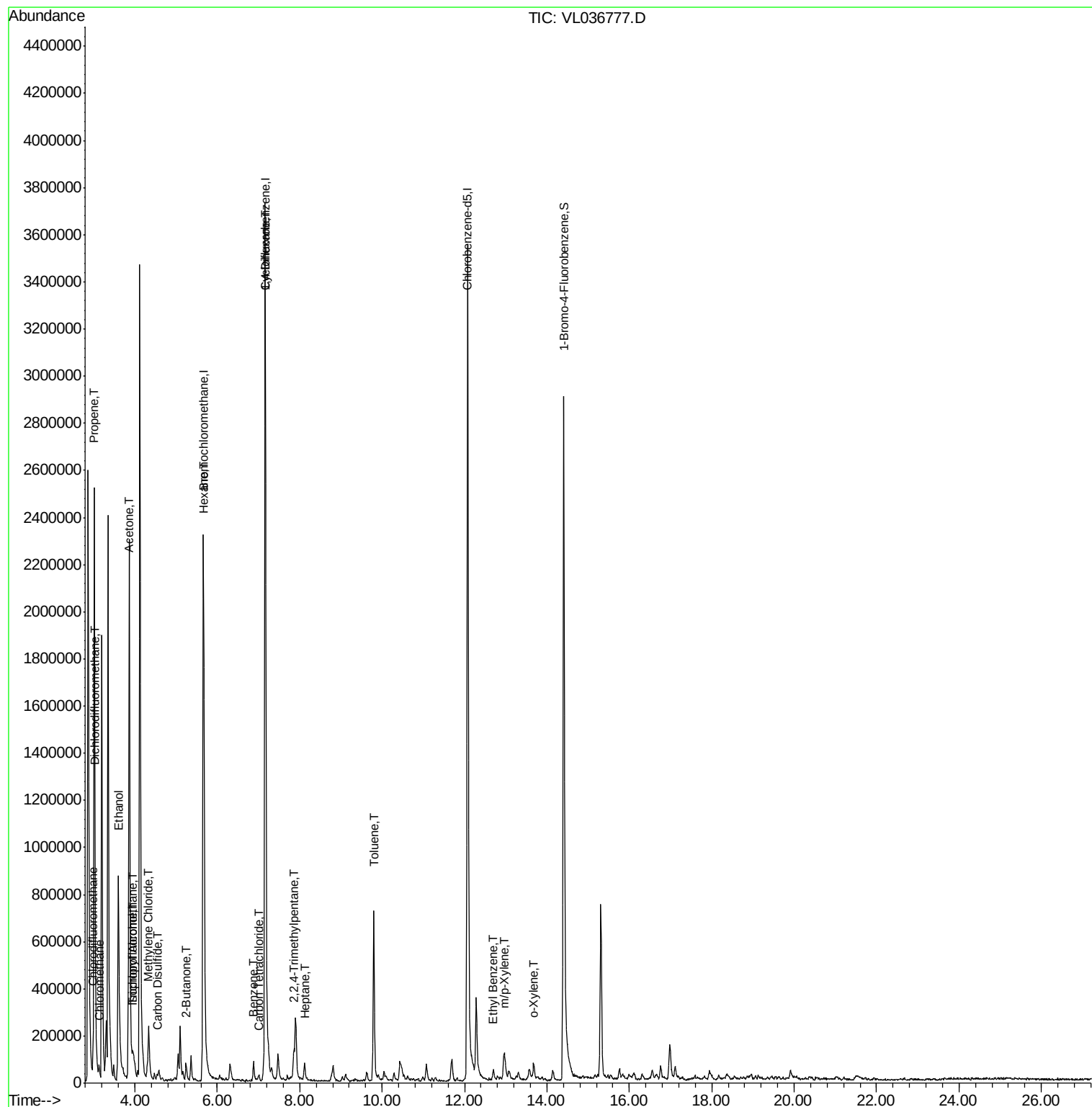
Data Path : Z:\V0ASRV\HPCHEM1\MSVOA L\DATA\VL040921\
Data File : VL036777.D
Acq On : 9 Apr 2021 16:49
Operator : SY/AP
Sample : M1987-02
Misc : 400mL/MSVOA L
ALS Vial : 1 Sample Multiplier: 1

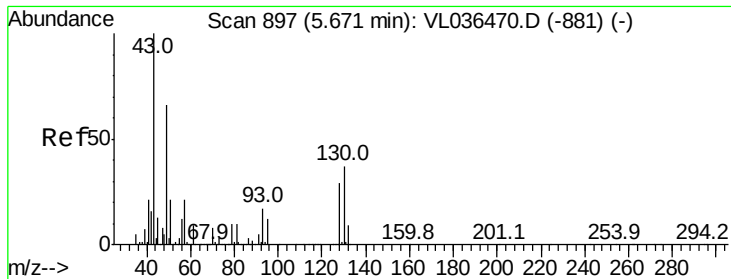
Instrument :
MSVOA_L
ClientSampled :
GOI-IA-6(2021)

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4/12/2021 5:42:49 PM

Quant Time: Apr 10 11:47:13 2021
Quant Method : Z:\V0ASRV\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: 5.65 min Scan# 892

Delta R.T. -0.02 min

Lab File: VL036777.D

Acq: 9 Apr 2021 16:49

Instrument :

MSVOA_L

ClientSampleId :

GOI-IA-6(2021)

Tot Ion: 49 Resp: 1273040

Ion Ratio Lower Upper

49 100

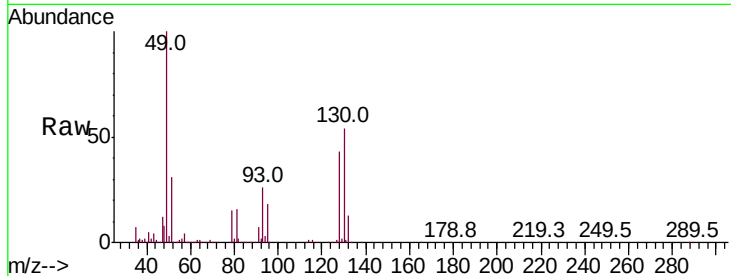
128 44.8 23.5 70.6

130 57.1 29.1 87.4

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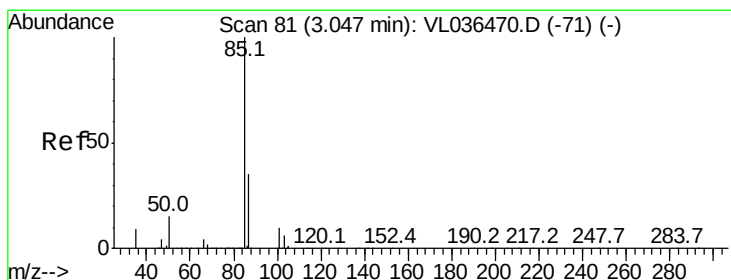
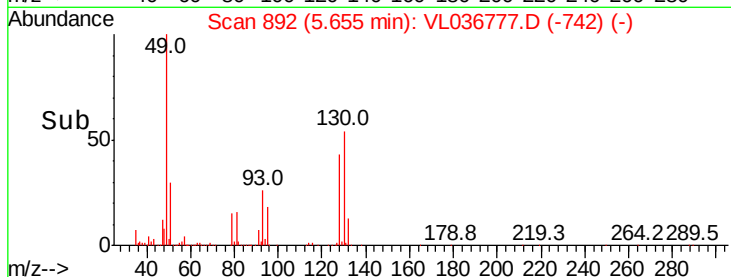
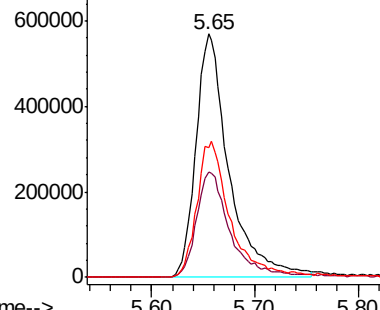
4/12/2021 5:42:49 PM



Abundance Ion 49.10 (48.80 to 49.80): VL0

Ion 128.00 (127.70 to 128.70): VL0

Ion 130.00 (129.70 to 130.70): VL0



#2

Dichlorodifluoromethane

Concen: 0.184 ppbv

RT: 3.04 min Scan# 78

Delta R.T. -0.01 min

Lab File: VL036777.D

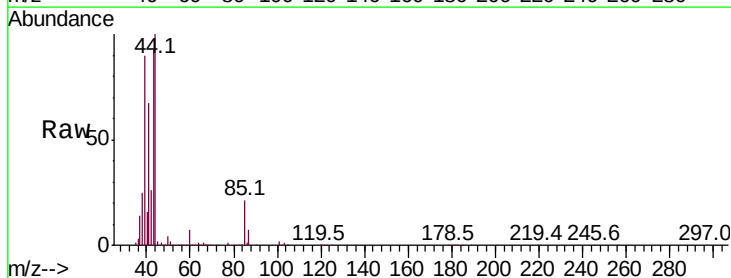
Acq: 9 Apr 2021 16:49

Tgt Ion: 85 Resp: 38131

Ion Ratio Lower Upper

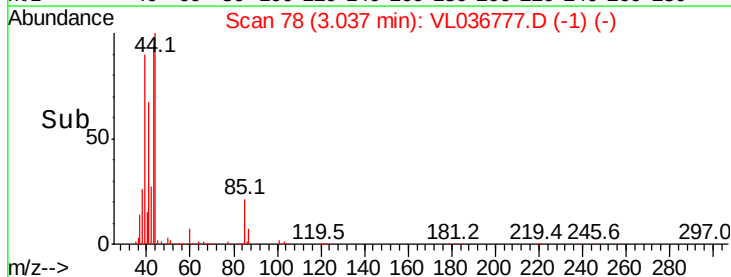
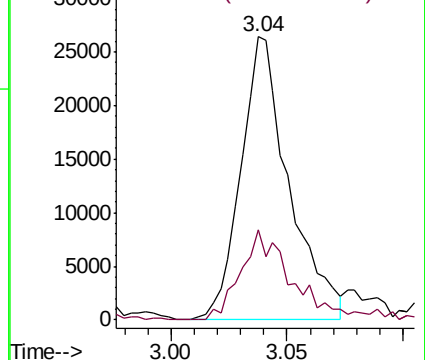
85 100

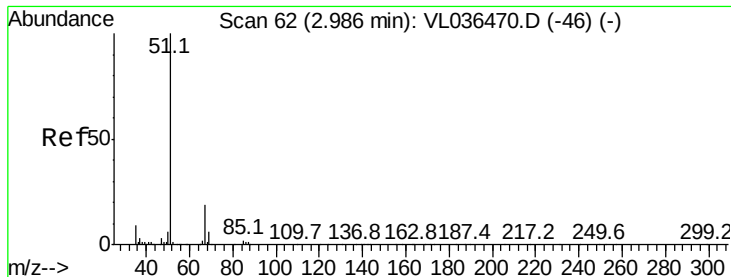
87 31.9 27.8 41.8



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0





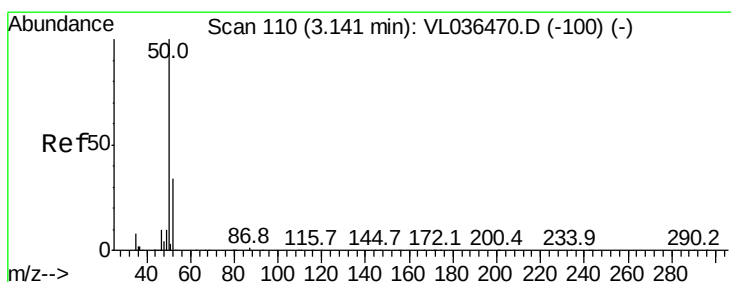
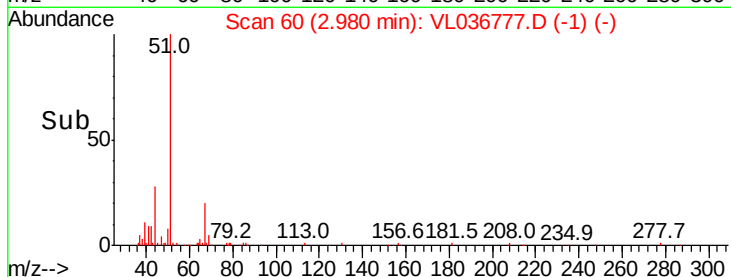
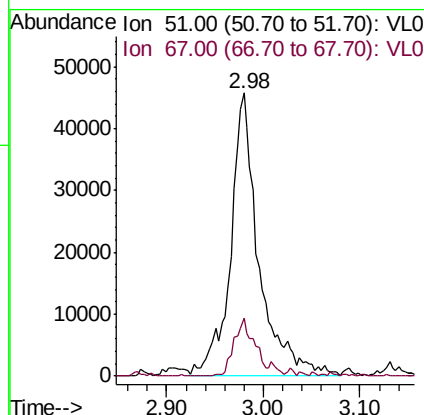
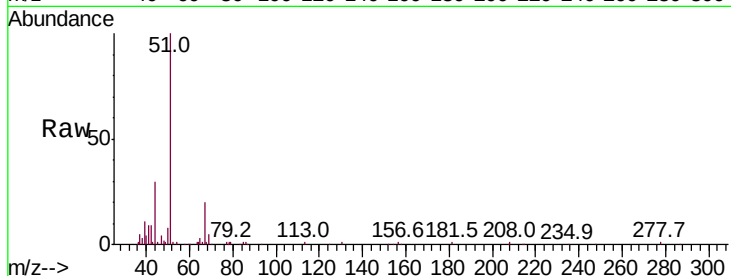
#3
Chlorodifluoromethane
Concen: 0.387 ppbv
RT: 2.98 min Scan# 60
Delta R.T. -0.01 min
Lab File: VL036777.D
Acq: 9 Apr 2021 16:49

Instrument :
MSVOA_L
ClientSampleId :
GOI-IA-6(2021)

Tot Ion	Ratio	Lower	Upper
51	100		
67	17.8	14.7	22.1

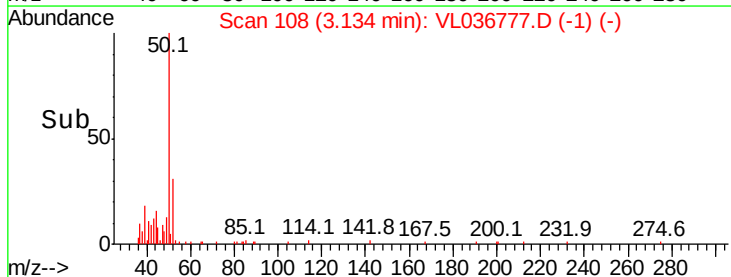
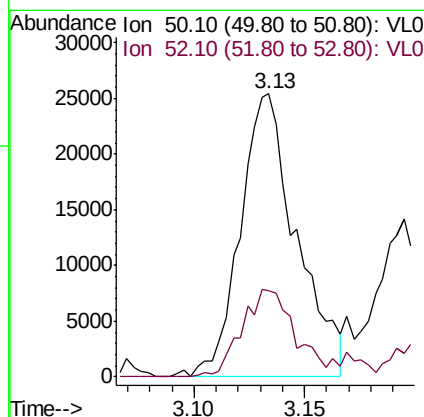
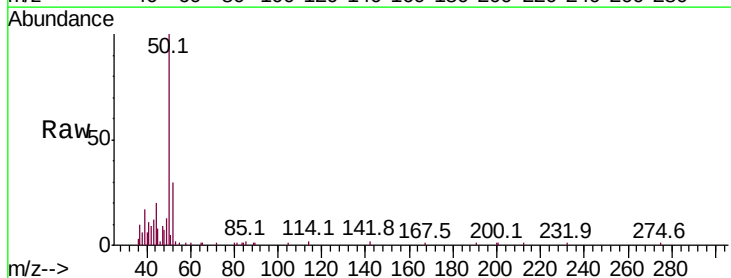
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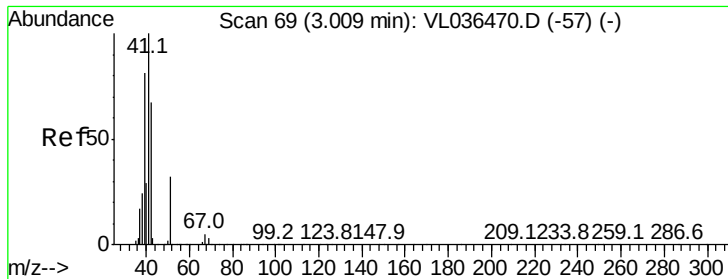
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#4
Chloromethane
Concen: 0.534 ppbv
RT: 3.13 min Scan# 108
Delta R.T. -0.01 min
Lab File: VL036777.D
Acq: 9 Apr 2021 16:49

Tgt Ion	Ratio	Lower	Upper
50	100		
52	31.1	27.0	40.6





#9

Propene

Concen: 9.918 ppbv m

RT: 3.01 min Scan# 70

Delta R.T. 0.00 min

Lab File: VL036777.D

Acq: 9 Apr 2021 16:49

Instrument :

MSVOA_L

ClientSampleId :

GOI-IA-6(2021)

Tot Ion: 41 Resp: 752053

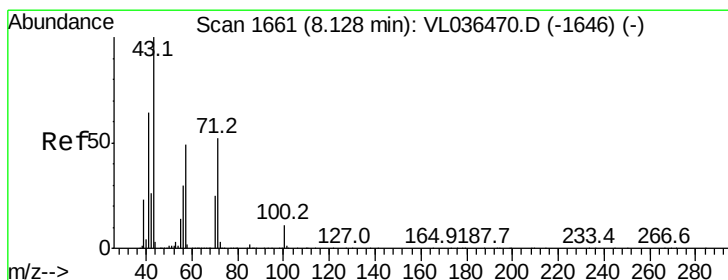
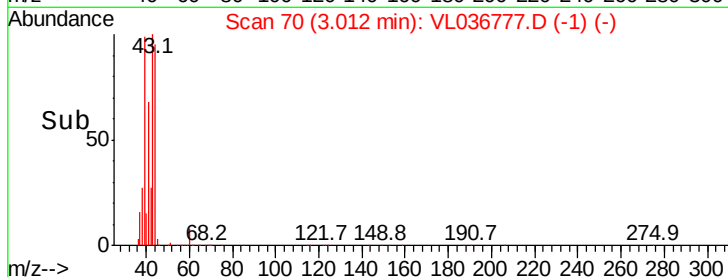
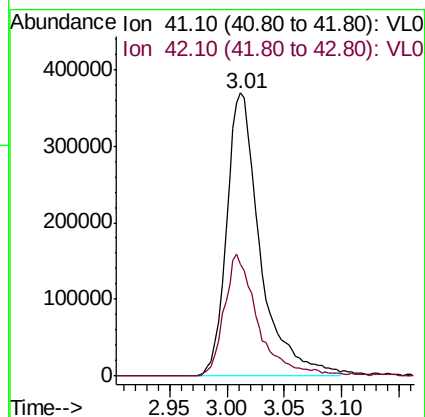
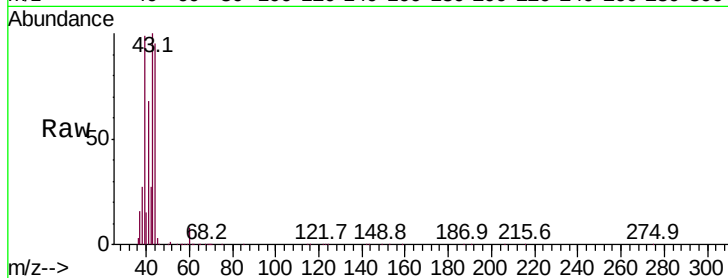
Ion Ratio Lower Upper

41 100

42 59.3 57.0 85.4

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4/12/2021 5:42:49 PM



#10

Heptane

Concen: 0.123 ppbv m

RT: 8.12 min Scan# 1659

Delta R.T. -0.01 min

Lab File: VL036777.D

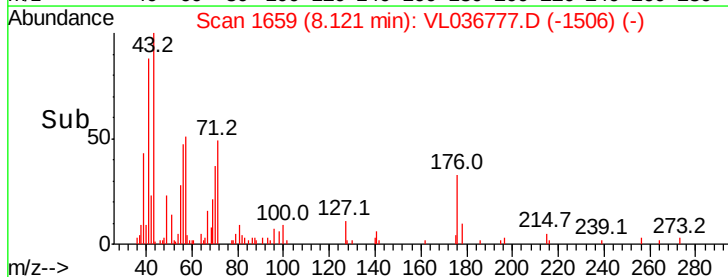
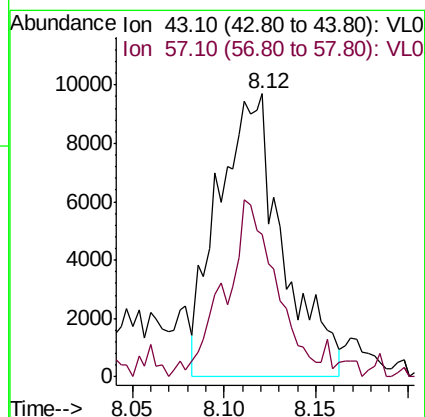
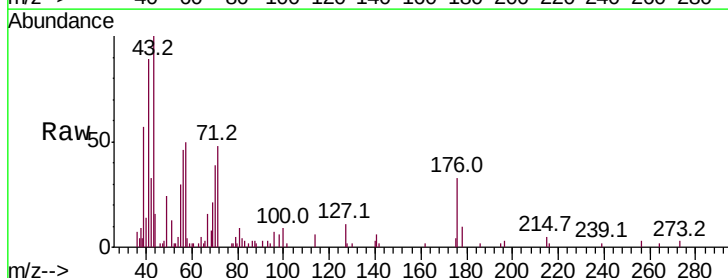
Acq: 9 Apr 2021 16:49

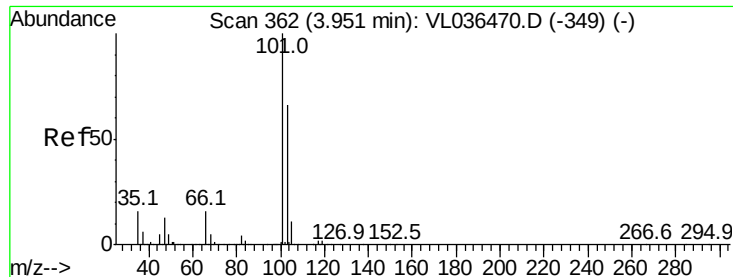
Tgt Ion: 43 Resp: 23676

Ion Ratio Lower Upper

43 100

57 53.1 39.0 58.6





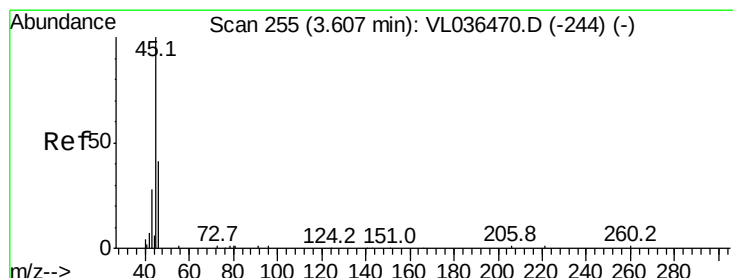
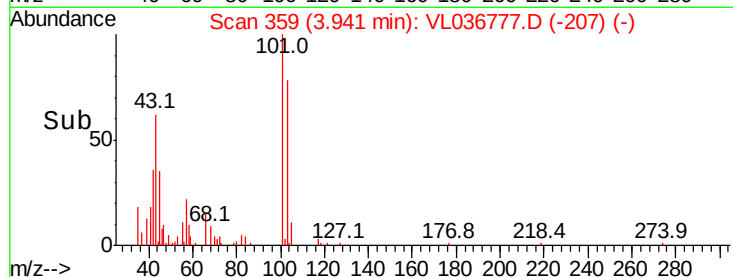
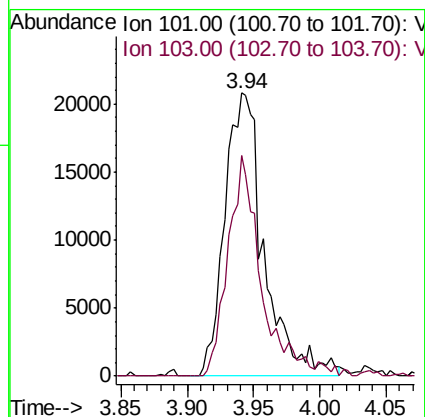
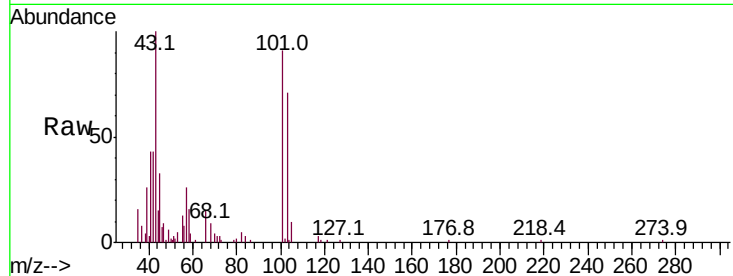
#11
Trichlorofluoromethane
Concen: 0.202 ppbv m
RT: 3.94 min Scan# 359
Delta R.T. -0.01 min
Lab File: VL036777.D
Acq: 9 Apr 2021 16:49

Instrument :
MSVOA_L
ClientSampleId :
GOI-IA-6(2021)

Tot Ion:101 Resp: 42829
Ion Ratio Lower Upper
101 100
103 78.1 52.5 78.7

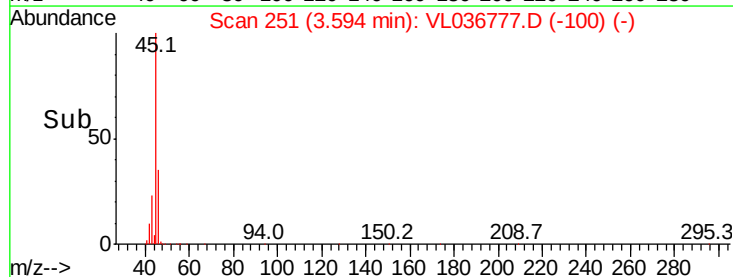
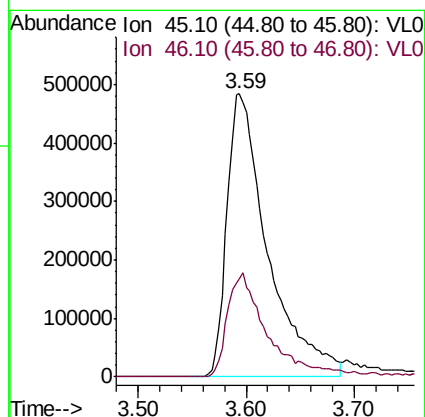
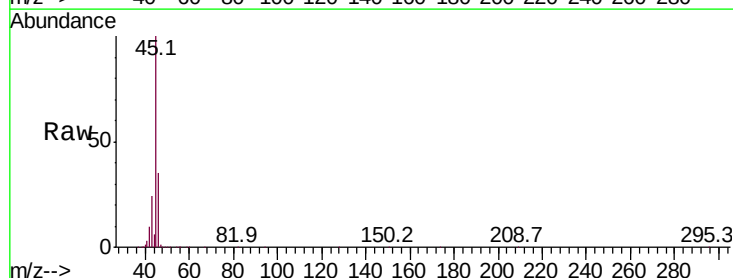
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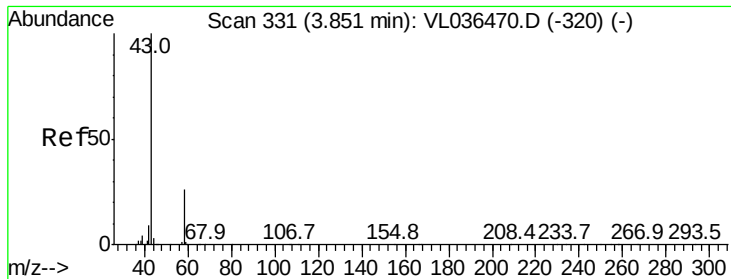
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#13
Ethanol
Concen: 141.511 ppbv
RT: 3.59 min Scan# 251
Delta R.T. -0.01 min
Lab File: VL036777.D
Acq: 9 Apr 2021 16:49

Tgt Ion: 45 Resp: 1277790
Ion Ratio Lower Upper
45 100
46 37.6 16.6 66.2





#15

Acetone

Concen: 2.370 ppbv m

RT: 3.85 min Scan# 330

Delta R.T. -0.00 min

Lab File: VL036777.D

Acq: 9 Apr 2021 16:49

Instrument :

MSVOA_L

ClientSampleId :

GOI-IA-6(2021)

Tot Ion: 43 Resp: 296915

Ion Ratio Lower Upper

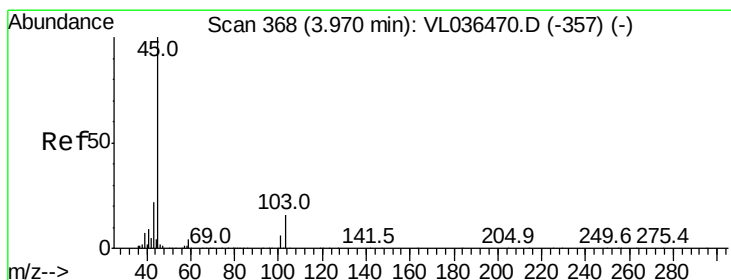
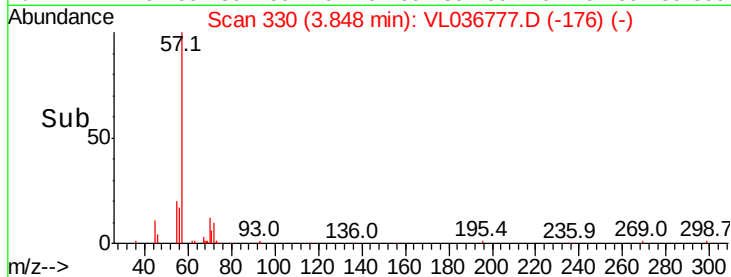
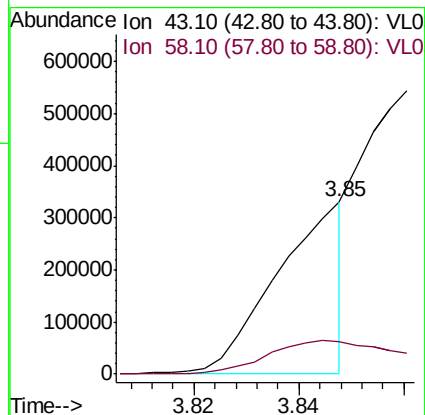
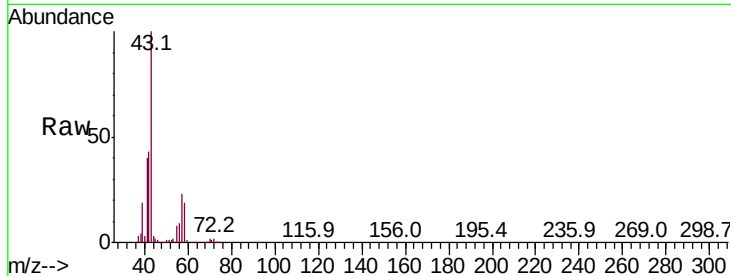
43 100

58 53.9 21.2 31.8#

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4/12/2021 5:42:49 PM



#19

Isopropyl Alcohol

Concen: 1.728 ppbv m

RT: 3.96 min Scan# 365

Delta R.T. -0.01 min

Lab File: VL036777.D

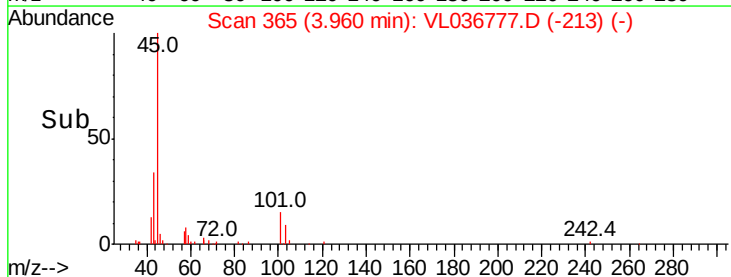
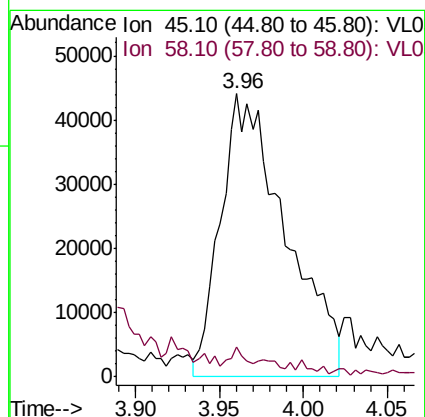
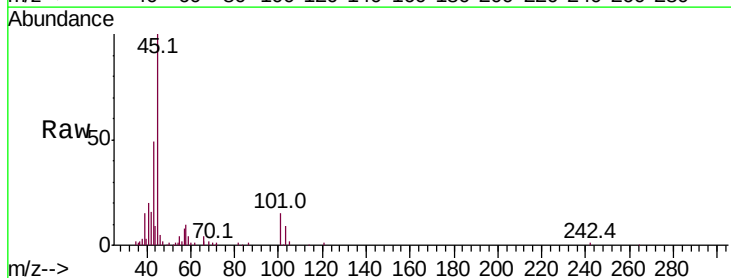
Acq: 9 Apr 2021 16:49

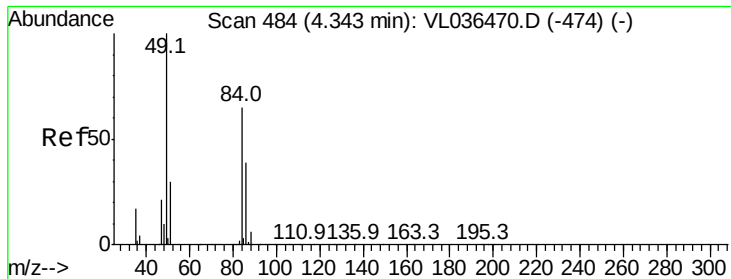
Tgt Ion: 45 Resp: 119134

Ion Ratio Lower Upper

45 100

58 6.3 2.9 4.3#





#20

Methylene Chloride

Concen: 1.465 ppbv m

RT: 4.34 min Scan# 482

Delta R.T. -0.01 min

Lab File: VL036777.D

Acq: 9 Apr 2021 16:49

Instrument :

MSVOA_L

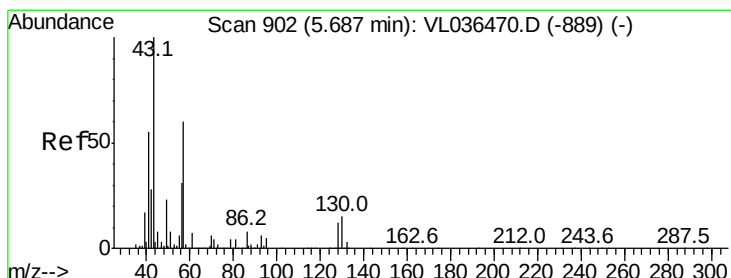
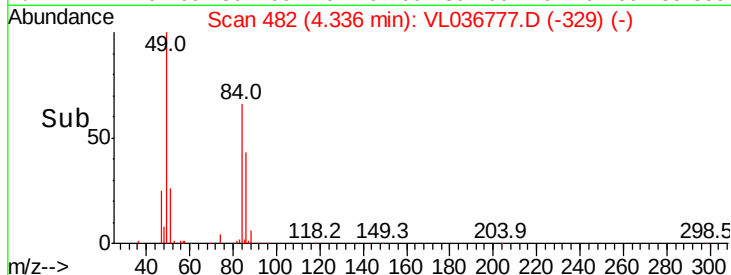
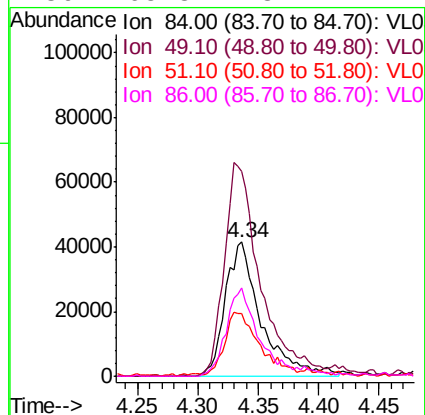
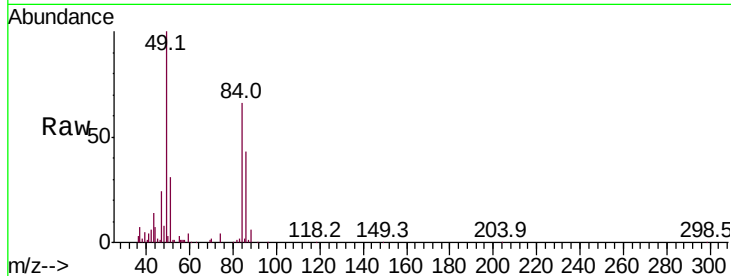
ClientSampleId :

GOI-IA-6(2021)

Tot Ion	84	Resp	85930
Ion	Ratio	Lower	Upper
84	100		
49	152.6	122.9	184.3
51	47.1	36.9	55.3
86	65.8	48.2	72.4

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#26

Hexane

Concen: 2.177 ppbv

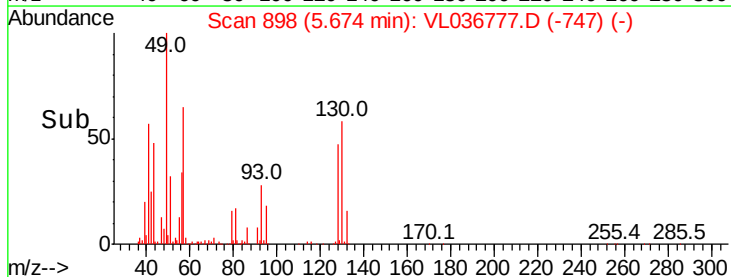
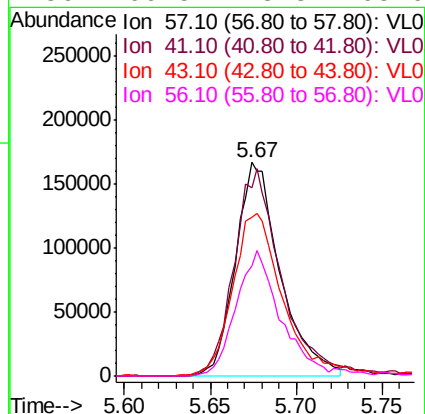
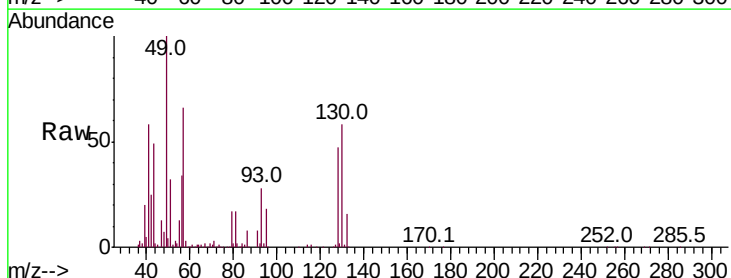
RT: 5.67 min Scan# 898

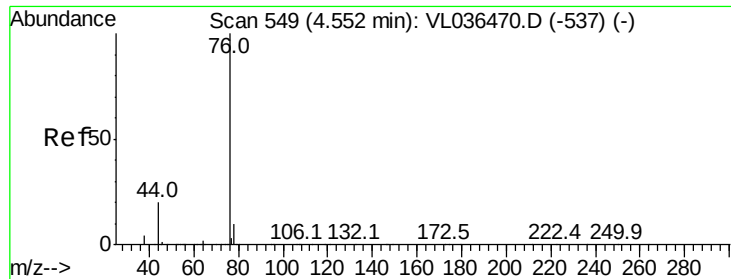
Delta R.T. -0.01 min

Lab File: VL036777.D

Acq: 9 Apr 2021 16:49

Tgt Ion	57	Resp	300943
Ion	Ratio	Lower	Upper
57	100		
41	105.7	77.2	115.8
43	87.5	173.8	260.6#
56	60.5	43.8	65.6





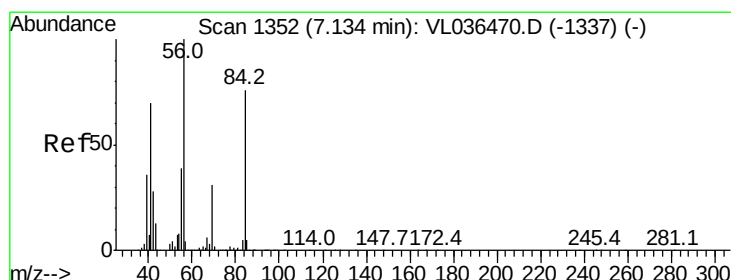
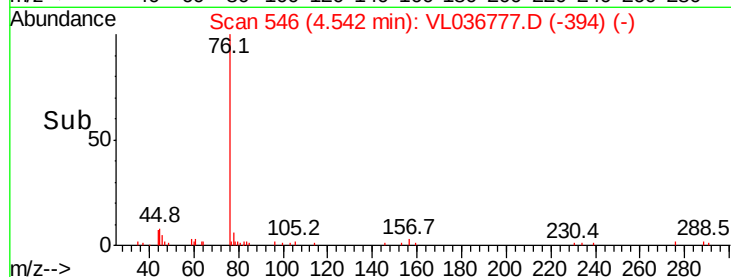
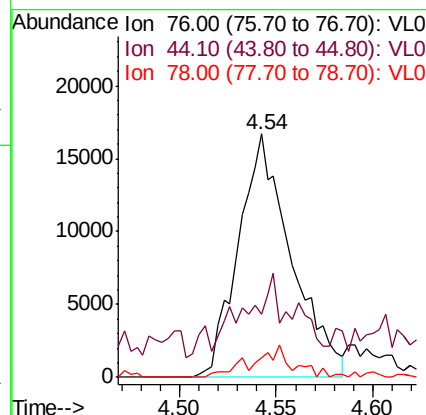
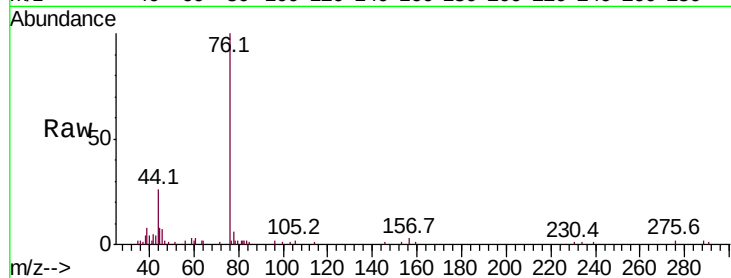
#27
Carbon Disulfide
Concen: 0.233 ppbv
RT: 4.54 min Scan# 546
Delta R.T. -0.01 min
Lab File: VL036777.D
Acq: 9 Apr 2021 16:49

Instrument :
MSVOA_L
ClientSampleId :
GOI-IA-6(2021)

Tot Ion	Ratio	Lower	Upper
76	100		
44	47.7	17.5	26.3#
78	9.9	8.6	13.0

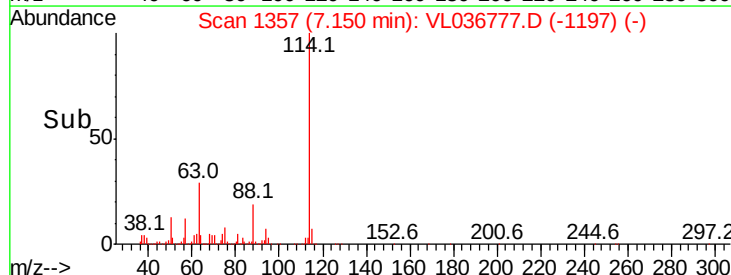
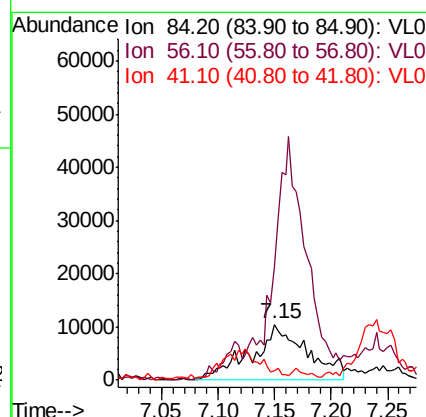
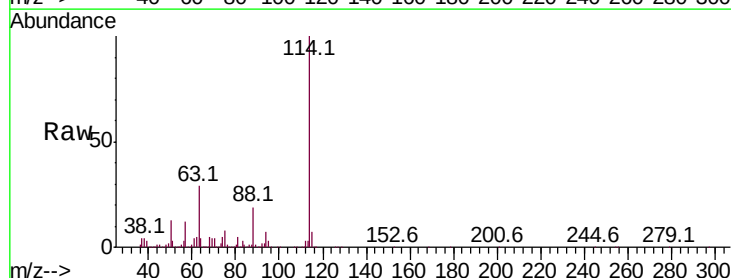
Manual Integrations
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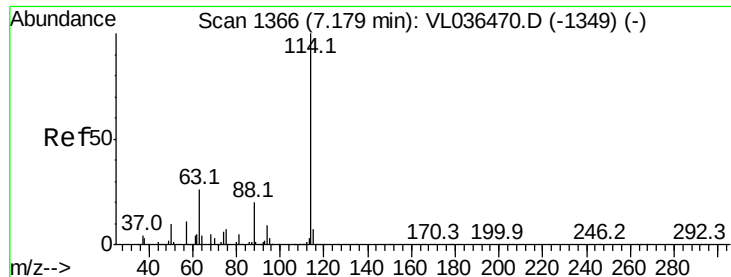
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4/12/2021 5:42:49 PM



#30
Cyclohexane
Concen: 0.317 ppbv m
RT: 7.15 min Scan# 1357
Delta R.T. 0.02 min
Lab File: VL036777.D
Acq: 9 Apr 2021 16:49

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





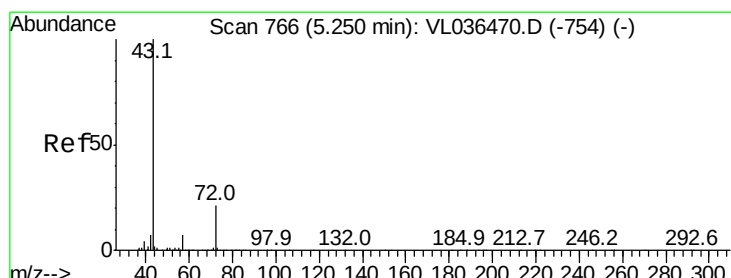
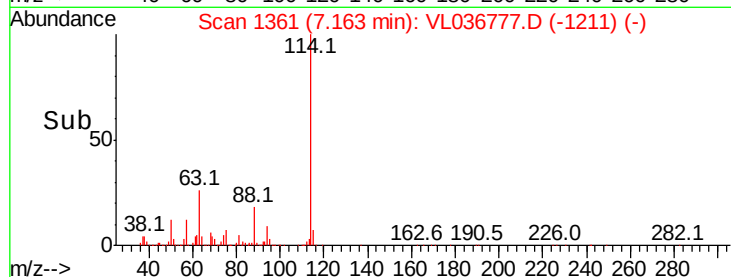
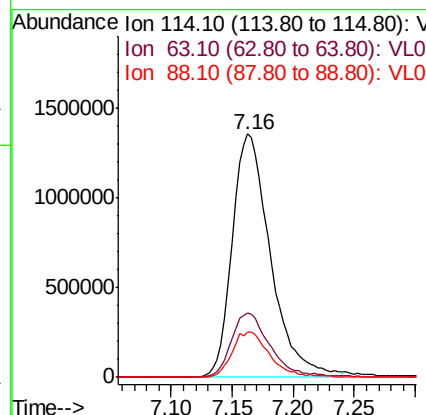
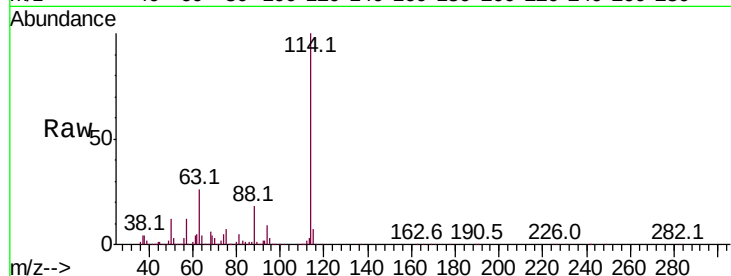
#33
 1,4-Difluorobenzene
 Concen: 10.000 ppbv
 RT: 7.16 min Scan# 1361
 Delta R.T. -0.02 min
 Lab File: VL036777.D
 Acq: 9 Apr 2021 16:49

Instrument :
 MSVOA_L
 ClientSampleId :
 GOI-IA-6(2021)

Tot Ion	Ratio	Lower	Upper
114	100		
63	27.5	22.4	33.6
88	18.5	15.4	23.0

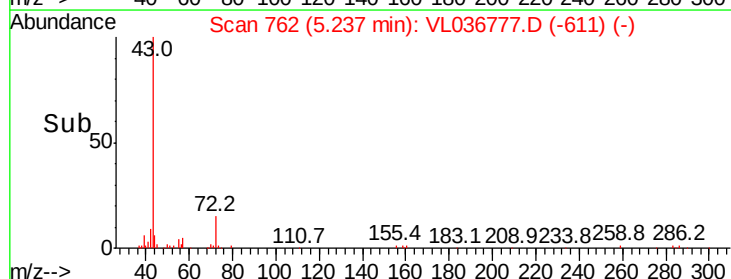
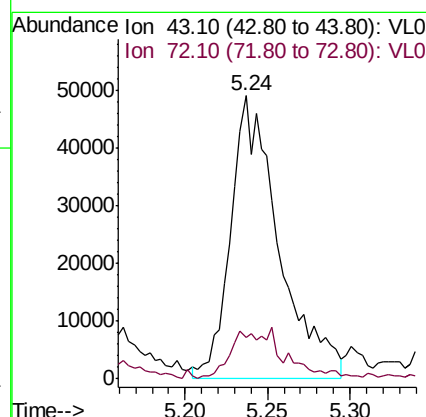
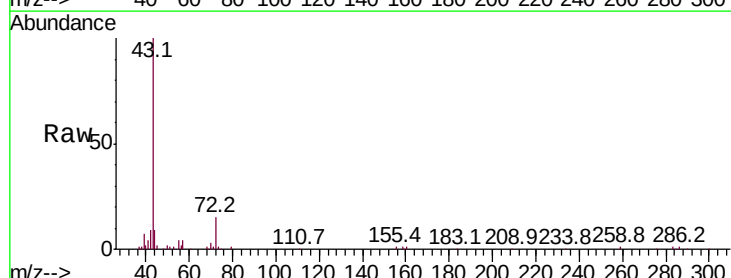
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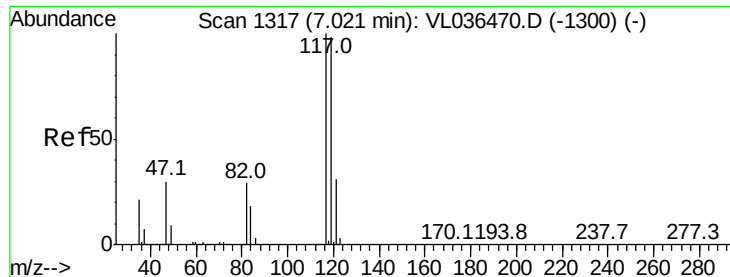
MMDadoda
 4/12/2021 5:42:49 PM



#34
 2-Butanone
 Concen: 0.690 ppbv m
 RT: 5.24 min Scan# 762
 Delta R.T. -0.01 min
 Lab File: VL036777.D
 Acq: 9 Apr 2021 16:49

Tgt Ion	Ratio	Lower	Upper
43	100		
72	20.0	17.0	25.6





#35

Carbon Tetrachloride

Concen: 0.070 ppbv m

RT: 7.00 min Scan# 1311

Delta R.T. -0.02 min

Lab File: VL036777.D

Acq: 9 Apr 2021 16:49

Instrument :

MSVOA_L

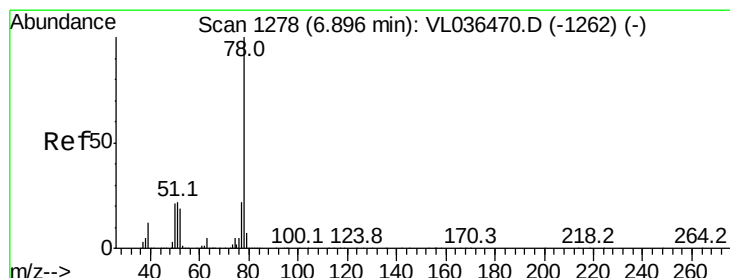
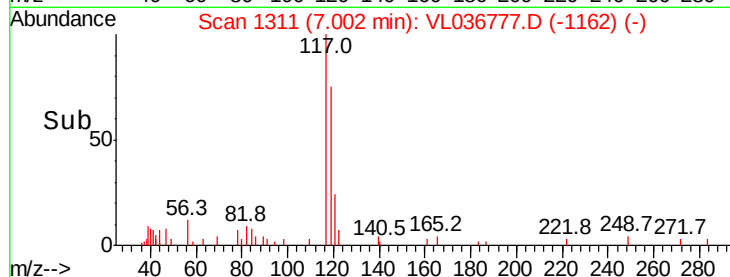
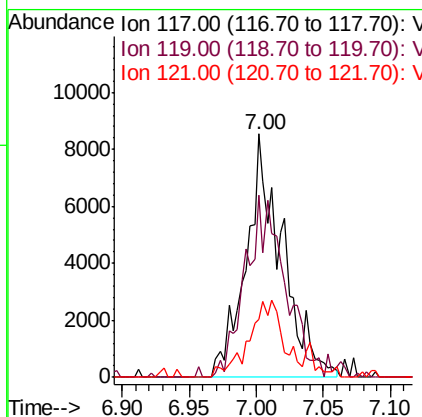
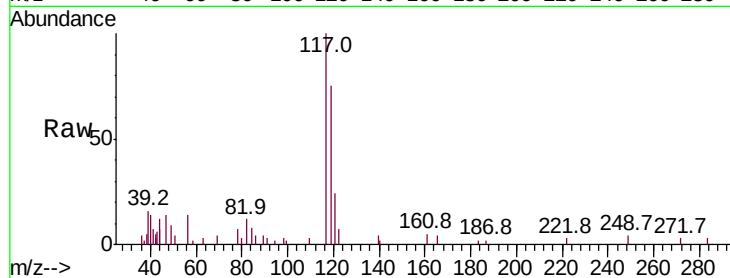
ClientSampleId :

GOI-IA-6(2021)

Tot Ion:	117	Resp:	15973
Ion Ratio	Lower	Upper	
117	100		
119	74.6	78.2	117.2#
121	23.9	24.5	36.7#

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4/12/2021 5:42:49 PM



#36

Benzene

Concen: 0.224 ppbv

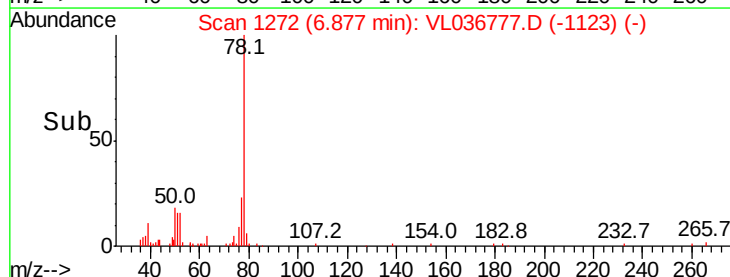
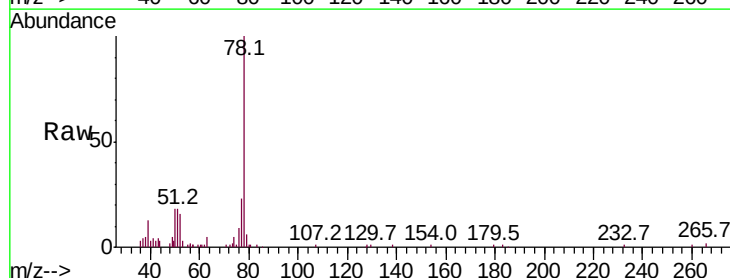
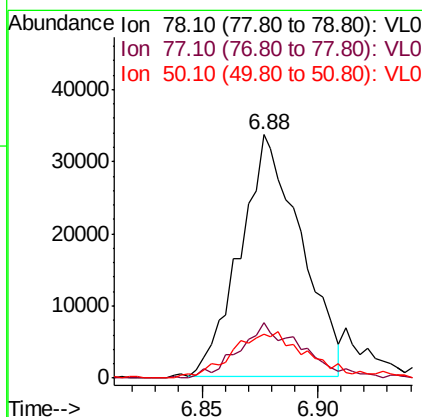
RT: 6.88 min Scan# 1272

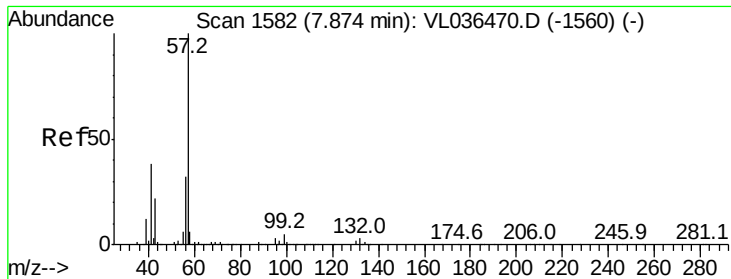
Delta R.T. -0.02 min

Lab File: VL036777.D

Acq: 9 Apr 2021 16:49

Tgt Ion:	78	Resp:	61199
Ion Ratio	Lower	Upper	
78	100		
77	22.9	18.0	27.0
50	16.6	16.5	24.7





#44

2,2,4-Trimethylpentane

Concen: 0.180 ppbv m

RT: 7.86 min Scan# 1579

Delta R.T. -0.01 min

Lab File: VL036777.D

Acq: 9 Apr 2021 16:49

Instrument :

MSVOA_L

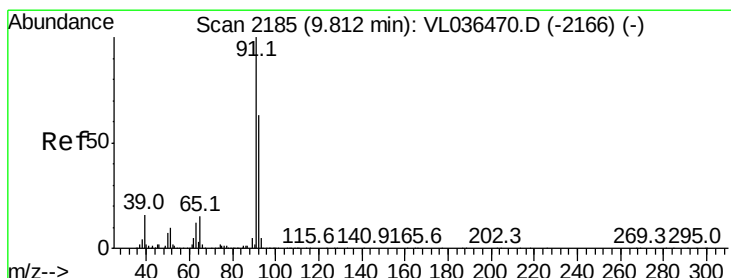
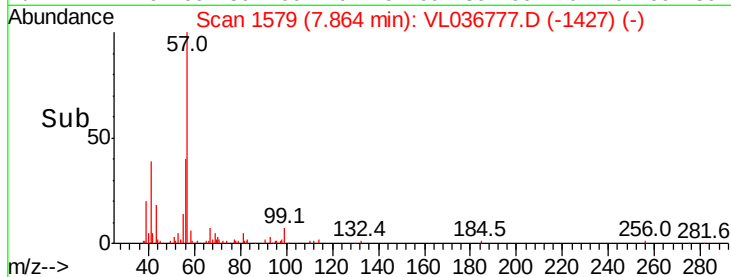
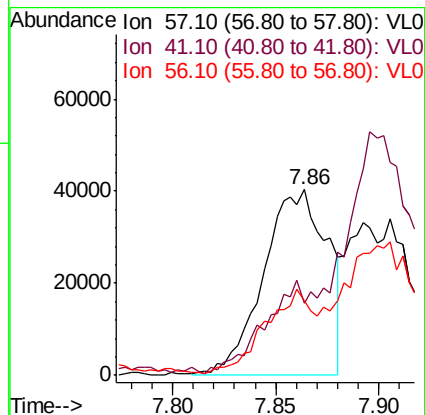
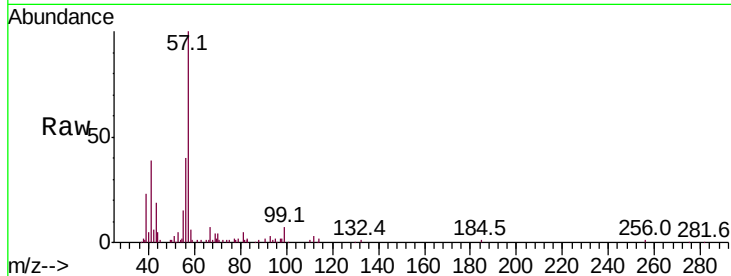
ClientSampleId :

GOI-IA-6(2021)

Tot Ion	57	Resp	86435
Ion Ratio	Lower	Upper	
57	100		
41	0.0	28.8	43.2#
56	0.0	26.1	39.1#

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4/12/2021 5:42:49 PM



#53

Toluene

Concen: 1.753 ppbv

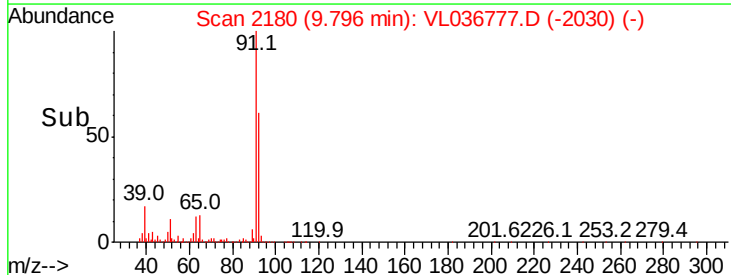
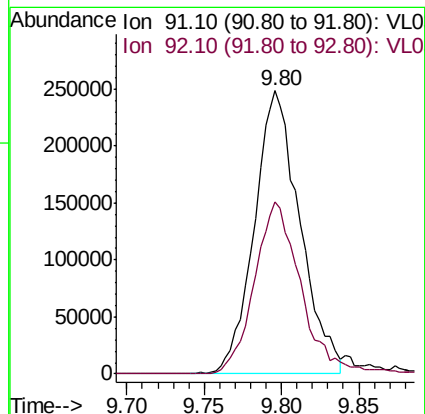
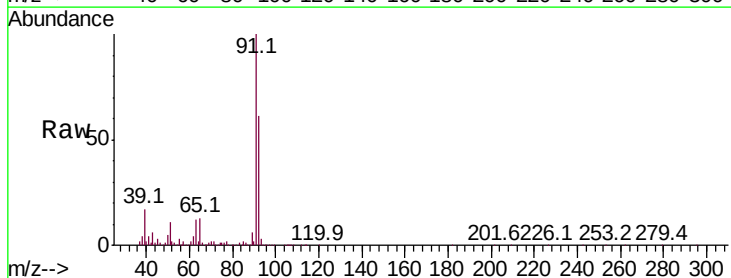
RT: 9.80 min Scan# 2180

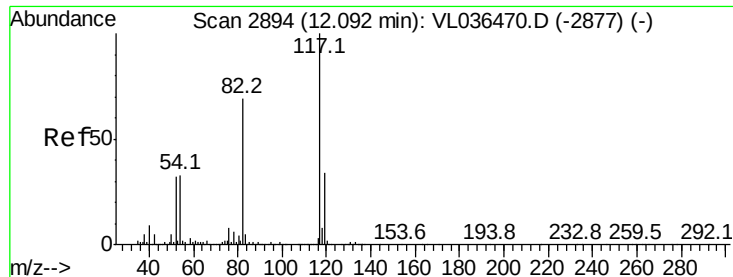
Delta R.T. -0.02 min

Lab File: VL036777.D

Acq: 9 Apr 2021 16:49

Tgt Ion	91	Resp	510255
Ion Ratio	Lower	Upper	
91	100		
92	62.6	48.8	73.2





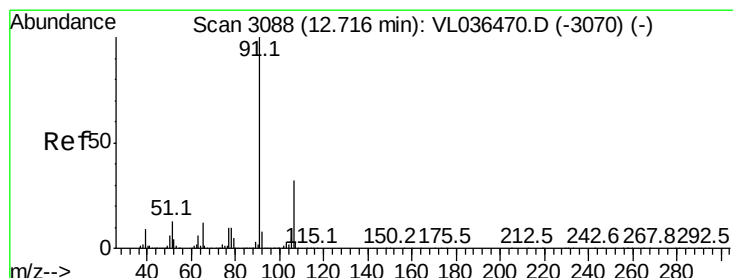
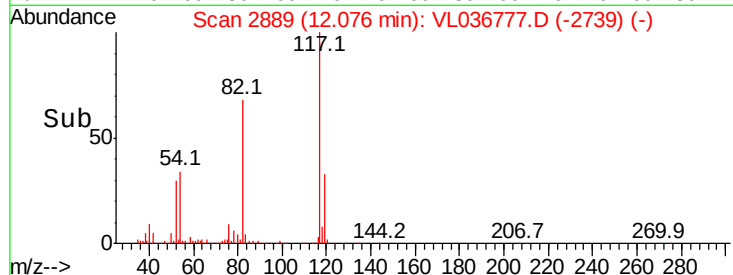
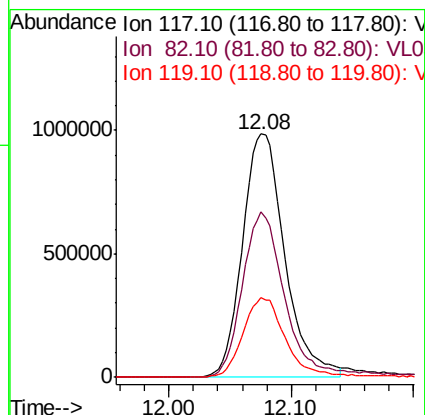
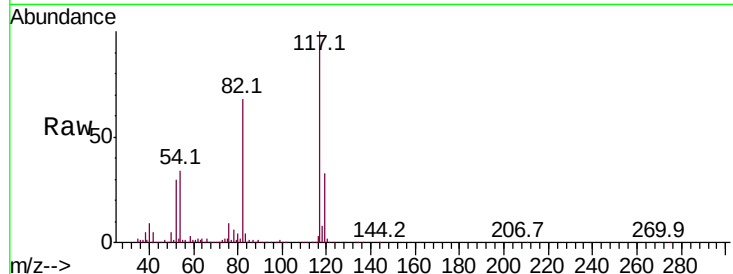
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 12.08 min Scan# 2889
Delta R.T. -0.02 min
Lab File: VL036777.D
Acq: 9 Apr 2021 16:49

Instrument :
MSVOA_L
ClientSampleId :
GOI-IA-6(2021)

Tot Ion	Ratio	Lower	Upper
117	100		
82	70.1	57.4	86.0
119	33.7	47.4	71.0#

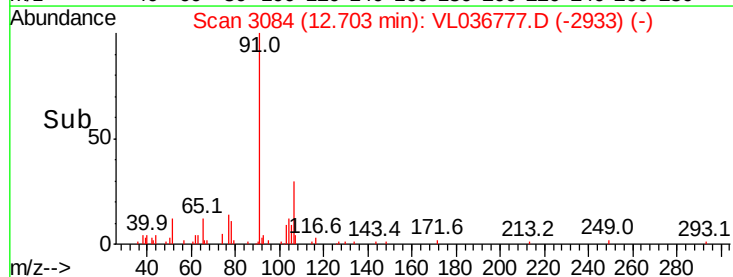
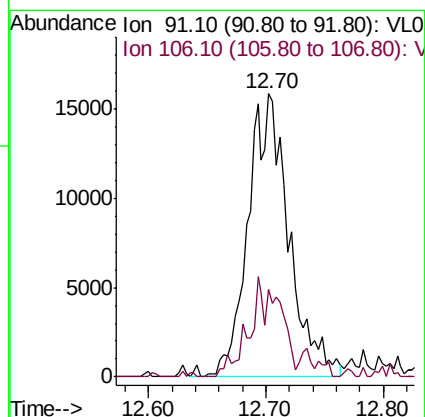
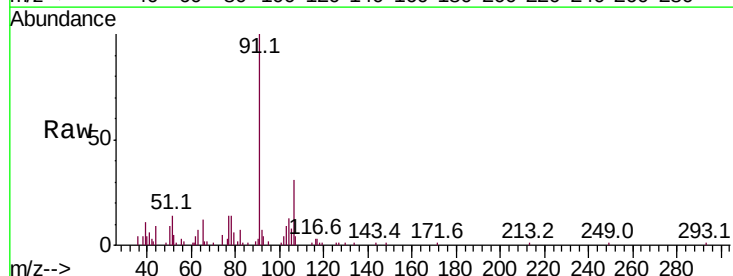
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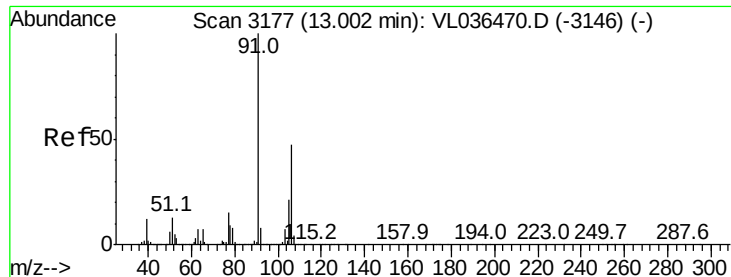
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4/12/2021 5:42:49 PM



#58
Ethyl Benzene
Concen: 0.112 ppbv m
RT: 12.70 min Scan# 3084
Delta R.T. -0.01 min
Lab File: VL036777.D
Acq: 9 Apr 2021 16:49

Tgt Ion	Ratio	Lower	Upper
91	100		
106	31.0	25.3	37.9





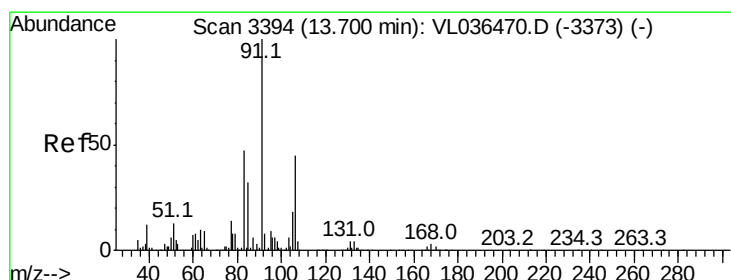
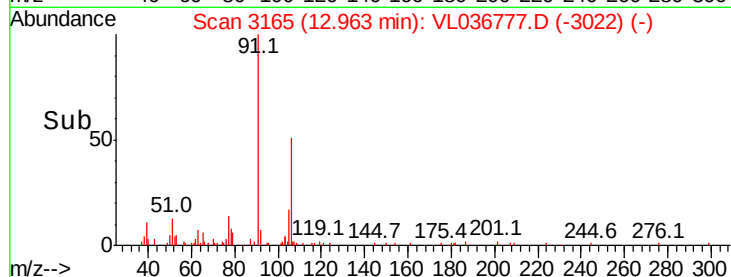
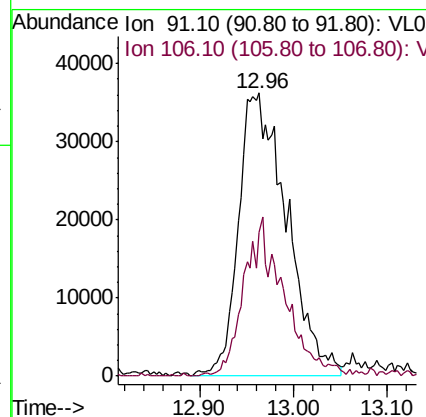
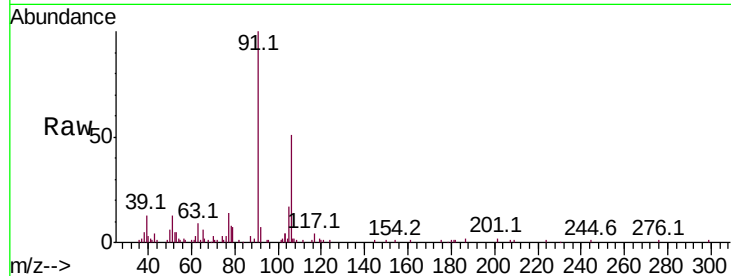
#59
m/p-Xylene
Concen: 0.431 ppbv m
RT: 12.96 min Scan# 3165
Delta R.T. -0.04 min
Lab File: VL036777.D
Acq: 9 Apr 2021 16:49

Instrument :
MSVOA_L
ClientSampleId :
GOI-IA-6(2021)

Tot Ion	Ratio	Lower	Upper
91	100		
106	0.0	35.3	52.9#

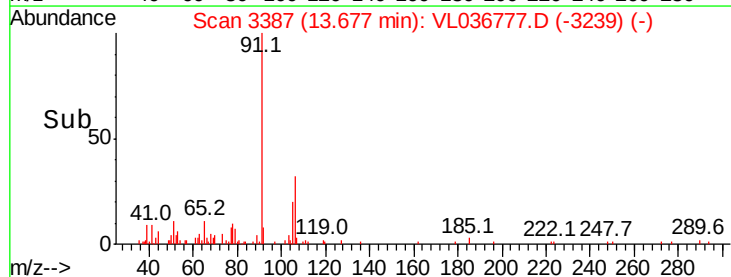
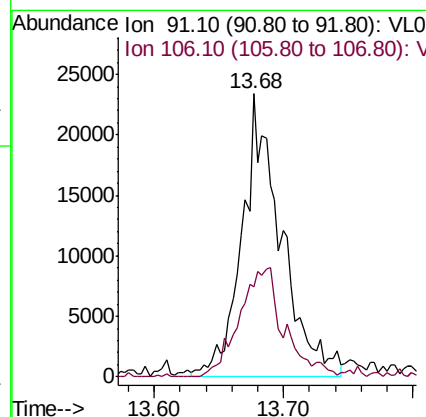
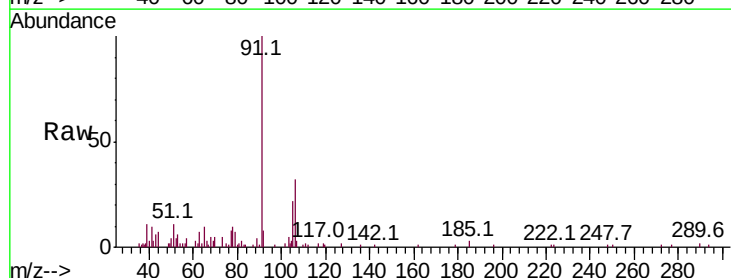
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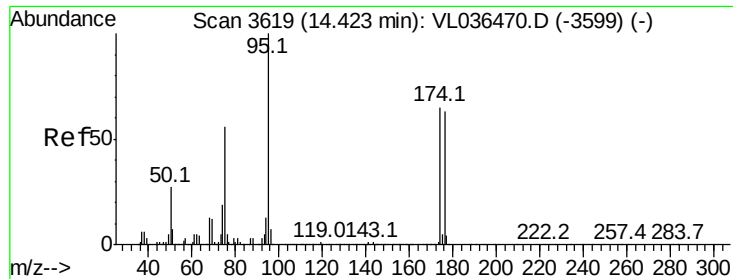
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4/12/2021 5:42:49 PM



#60
o-Xylene
Concen: 0.170 ppbv m
RT: 13.68 min Scan# 3387
Delta R.T. -0.02 min
Lab File: VL036777.D
Acq: 9 Apr 2021 16:49

Tgt Ion	Ratio	Lower	Upper
91	100		
106	0.0	22.3	66.9#





#68

1-Bromo-4-Fluorobenzene

Concen: 7.977 ppbv

RT: 14.41 min Scan# 3614

Delta R.T. -0.02 min

Lab File: VL036777.D

Acq: 9 Apr 2021 16:49

Instrument :

MSVOA_L

ClientSampleId :

GOI-IA-6(2021)

Tot Ion: 95 Resp: 1501579

Ion Ratio Lower Upper

95 100

174 68.0 51.0 76.6

175 4.8 3.9 5.9

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