

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL061521\
 Data File : VL037160.D
 Acq On : 15 Jun 2021 17:10
 Operator : SY/AP
 Sample : M2702-03
 Misc : 400mL/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 OA1

Manual Integrations
 APPROVED

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 6/16/2021 5:01:38 PM

Quant Time: Jun 16 02:21:36 2021
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL061421AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Mon Jun 14 2021
 QLast Update : Mon Jun 14 16:49:11 2021
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.68	49	1390759	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.19	114	4006038	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.10	117	3550373	10.00	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.43	95	2694230	10.30	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	103.00%

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.06	85	50846	0.230	ppbv	94
3) Chlorodifluoromethane	3.00	51	170830	0.655	ppbv #	90
4) Chloromethane	3.15	50	51605	0.581	ppbv	93
9) Propene	3.03	41	76270	0.886	ppbv	95
10) Heptane	8.14	43	36227	0.177	ppbv	96
11) Trichlorofluoromethane	3.96	101	79815	0.318	ppbv	95
13) Ethanol	3.62	45	936557	78.767	ppbv	99
15) Acetone	3.86	43	1673218	10.054	ppbv	95
19) Isopropyl Alcohol	3.99	45	1000603	10.957	ppbv #	97
20) Methylene Chloride	4.36	84	2199657	30.328	ppbv	95
26) Hexane	5.70	57	837005	5.161	ppbv #	49
29) Chloroform	5.77	83	39603	0.151	ppbv	99
30) Cyclohexane	7.15	84	18049m	0.128	ppbv	
34) 2-Butanone	5.27	43	86016	0.572	ppbv #	88
35) Carbon Tetrachloride	7.04	117	14899m	0.061	ppbv	
36) Benzene	6.91	78	88776	0.279	ppbv	95
44) 2,2,4-Trimethylpentane	7.89	57	176082	0.331	ppbv #	90
52) Tetrachloroethene	11.24	164	29031m	0.221	ppbv	
53) Toluene	9.83	91	339800	0.899	ppbv	99
58) Ethyl Benzene	12.73	91	55925	0.116	ppbv	93
59) m/p-Xylene	12.99	91	146424m	0.358	ppbv	
60) o-Xylene	13.71	91	58265	0.148	ppbv	91
74) 1,2,4-Trimethylbenzene	16.78	105	107756m	0.245	ppbv	
76) 1,4-Dichlorobenzene	17.17	146	51890m	0.193	ppbv	
79) Naphthalene	22.23	128	43359m	0.164	ppbv	

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

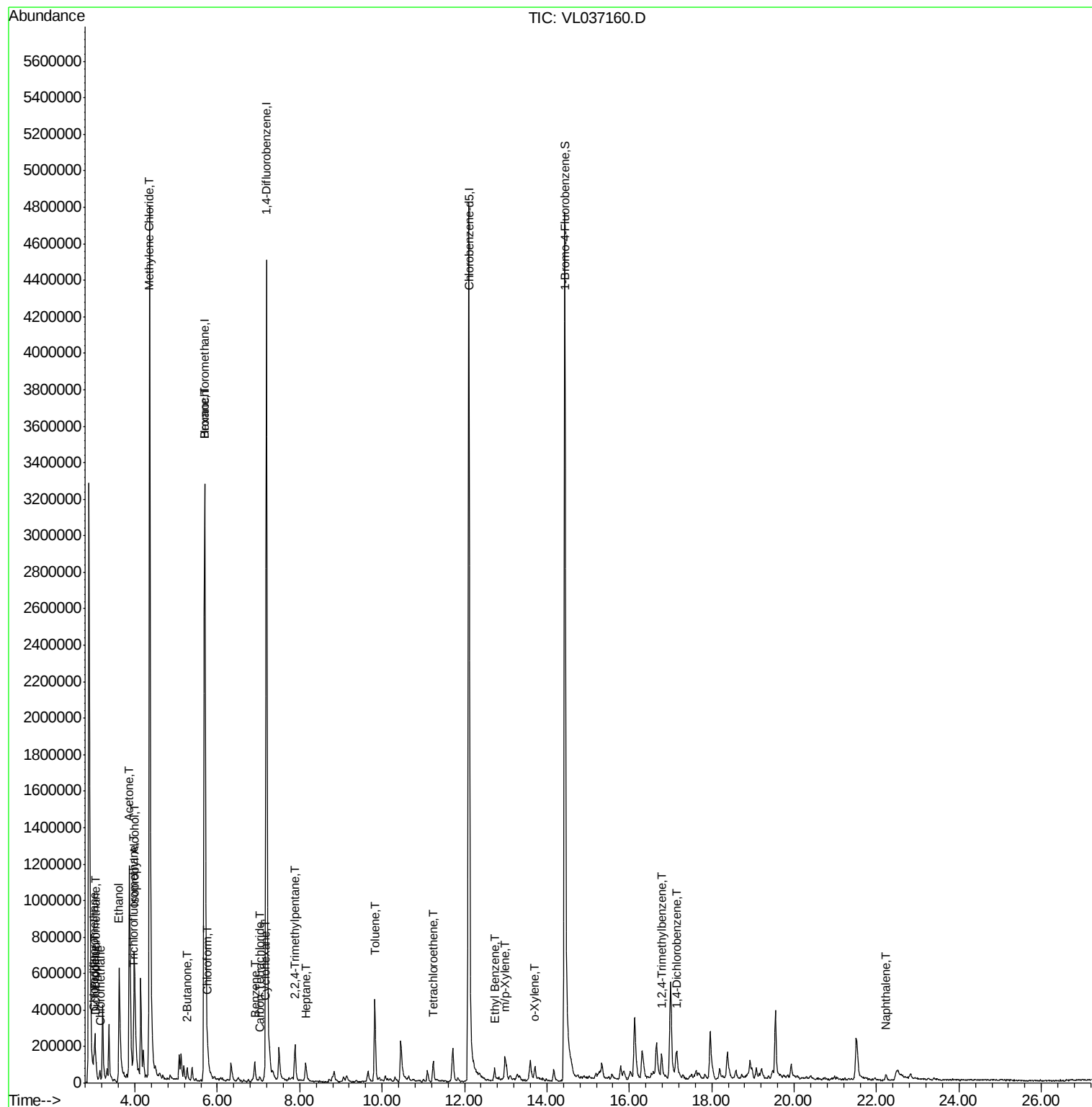
Data Path : Z:\V0ASRV\HPCHEM1\MSVOA L\DATA\VL061521\
Data File : VL037160.D
Acq On : 15 Jun 2021 17:10
Operator : SY/AP
Sample : M2702-03
Misc : 400mL/MSVOA L
ALS Vial : 1 Sample Multiplier: 1

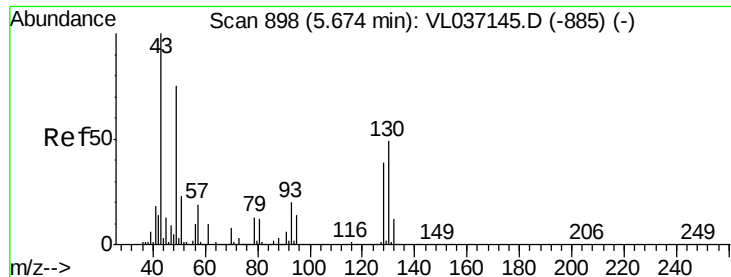
Instrument :
MSVOA_L
ClientSampled :
OA1

Manual Integrations
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Quant Time: Jun 16 02:21:36 2021
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA L\METHODS\VL061421AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Mon Jun
QLast Update : Mon Jun 14 16:49:11 2021
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.68 min Scan# 900

Delta R.T. 0.01 min

Lab File: VL037160.D

Acq: 15 Jun 2021 17:10

Instrument :

MSVOA_L

ClientSampleId :

QA1

Tot Ion: 49 Resp: 1390759

Ion Ratio Lower Upper

49 100

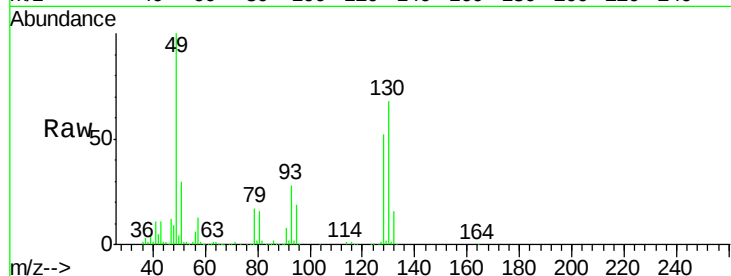
128 56.3 28.8 86.5

130 73.3 36.0 108.0

Manual Integrations
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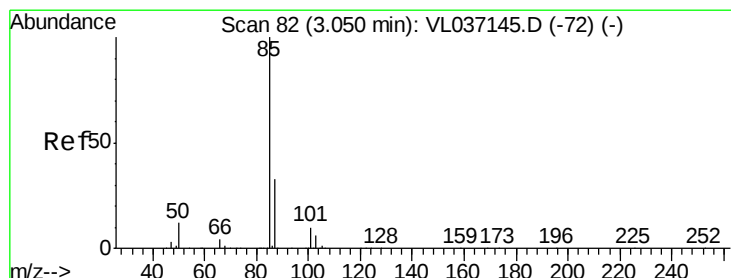
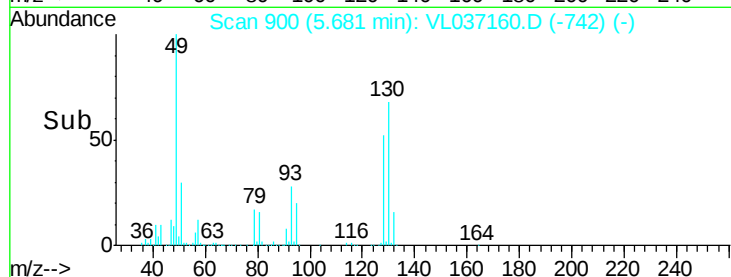
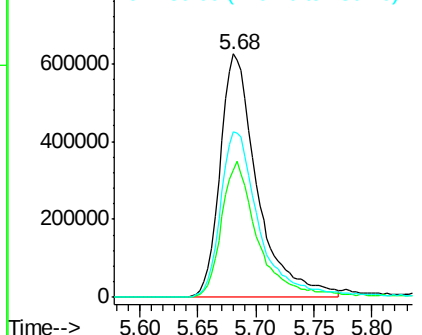
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Abundance Ion 49.10 (48.80 to 49.80): VL0

Ion 128.00 (127.70 to 128.70): VL0

Ion 130.00 (129.70 to 130.70): VL0



#2

Dichlorodifluoromethane

Concen: 0.230 ppbv

RT: 3.06 min Scan# 85

Delta R.T. 0.01 min

Lab File: VL037160.D

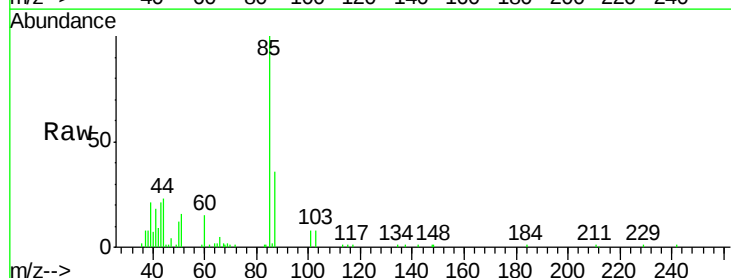
Acq: 15 Jun 2021 17:10

Tgt Ion: 85 Resp: 50846

Ion Ratio Lower Upper

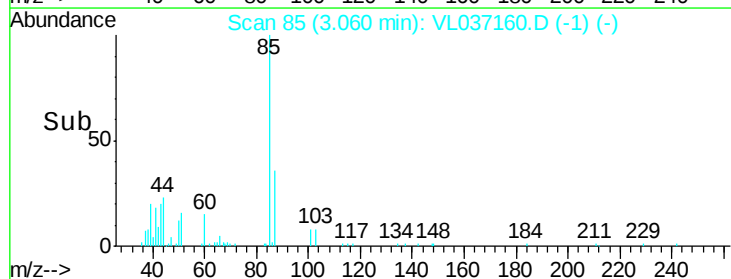
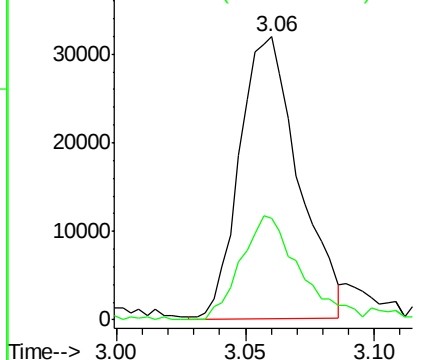
85 100

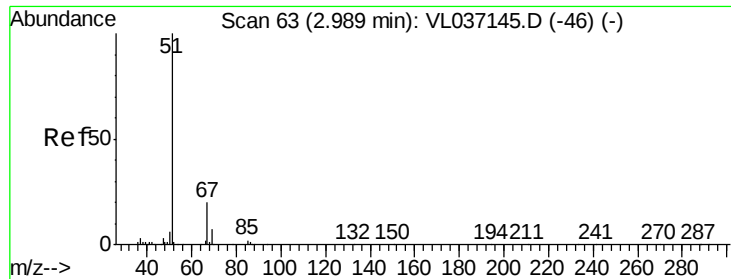
87 36.5 26.4 39.6



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0





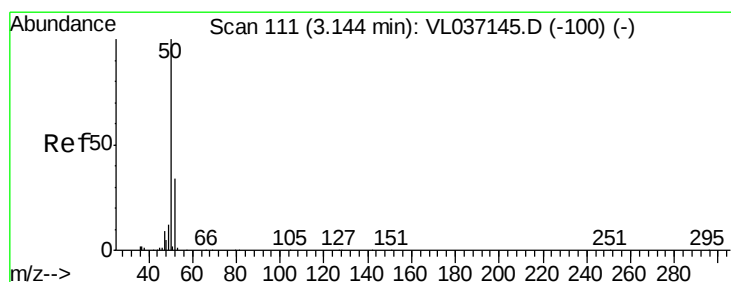
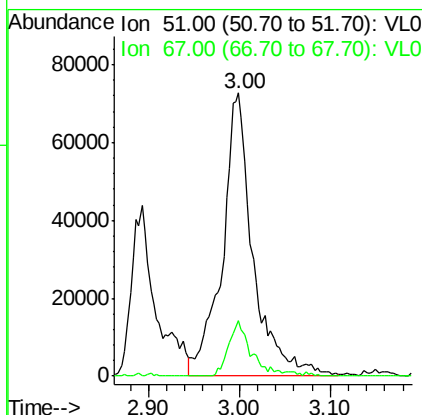
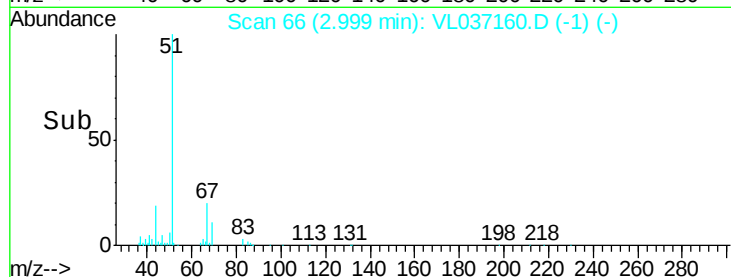
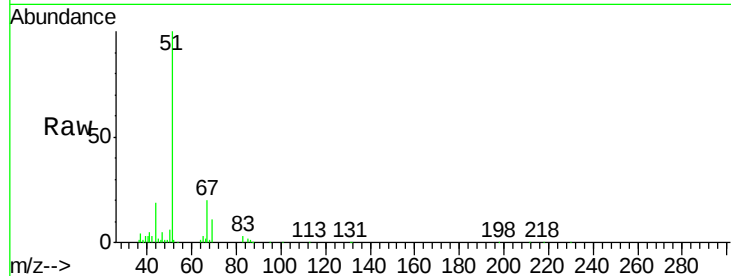
#3
Chlorodifluoromethane
Concen: 0.655 ppbv
RT: 3.00 min Scan# 66
Delta R.T. 0.01 min
Lab File: VL037160.D
Acq: 15 Jun 2021 17:10

Instrument :
MSVOA_L
ClientSampleId :
OA1

Tot Ion	Ratio	Lower	Upper
51	100		
67	15.2	15.9	23.9#

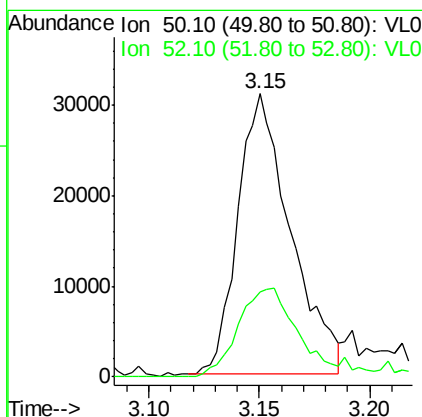
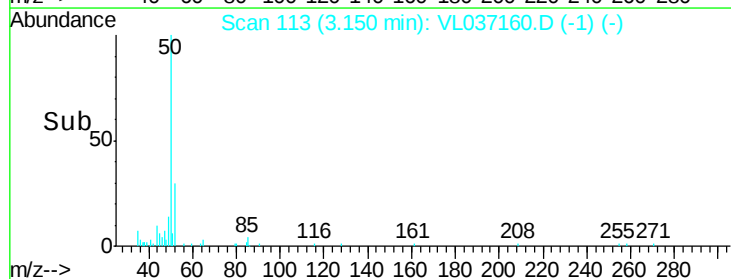
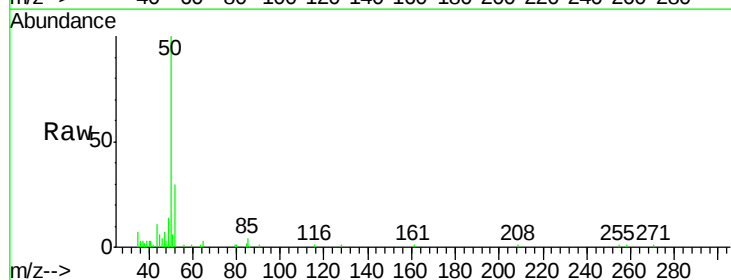
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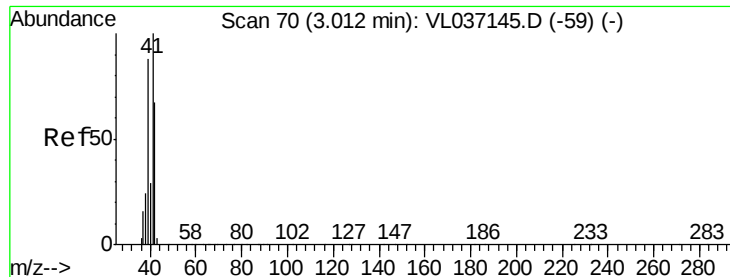
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#4
Chloromethane
Concen: 0.581 ppbv
RT: 3.15 min Scan# 113
Delta R.T. 0.01 min
Lab File: VL037160.D
Acq: 15 Jun 2021 17:10

Tgt Ion	Ratio	Lower	Upper
50	100		
52	30.5	27.4	41.2





#9

Propene

Concen: 0.886 ppbv

RT: 3.03 min Scan# 75

Delta R.T. 0.02 min

Lab File: VL037160.D

Acq: 15 Jun 2021 17:10

Instrument :

MSVOA_L

ClientSampleId :

QA1

Tot Ion: 41 Resp: 76270

Ion Ratio Lower Upper

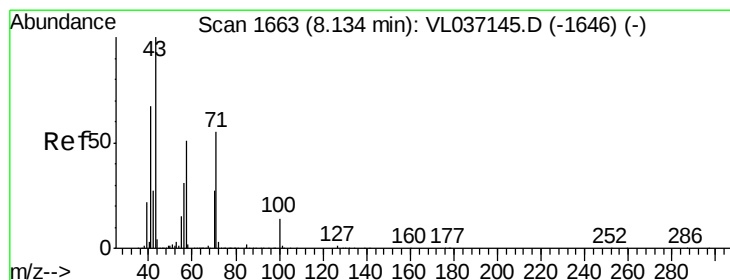
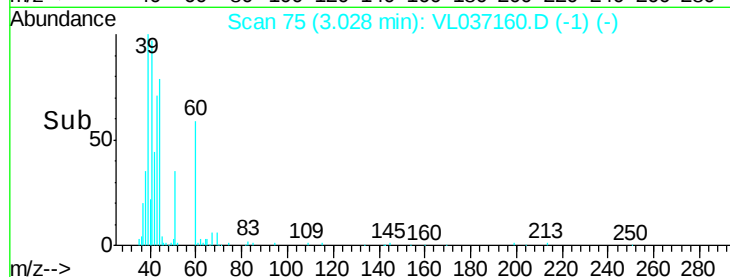
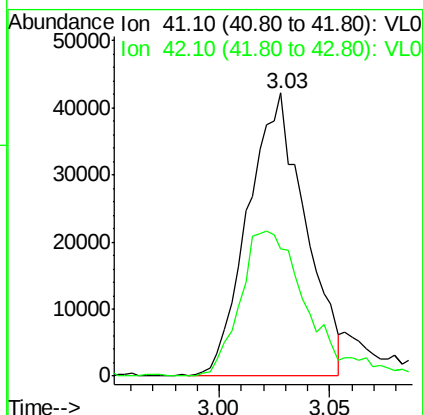
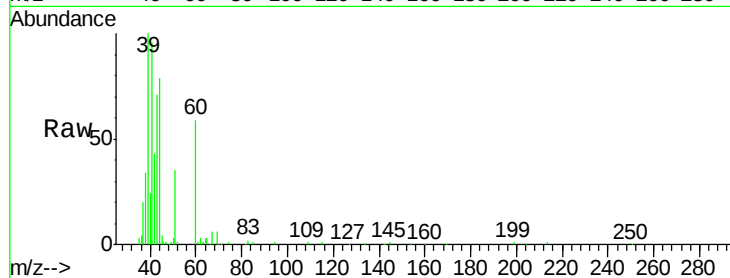
41 100

42 63.2 53.8 80.8

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#10

Heptane

Concen: 0.177 ppbv

RT: 8.14 min Scan# 1666

Delta R.T. 0.01 min

Lab File: VL037160.D

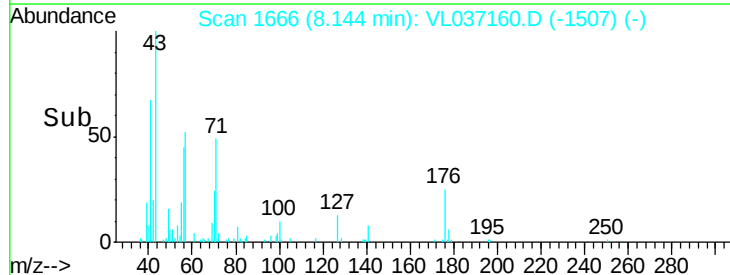
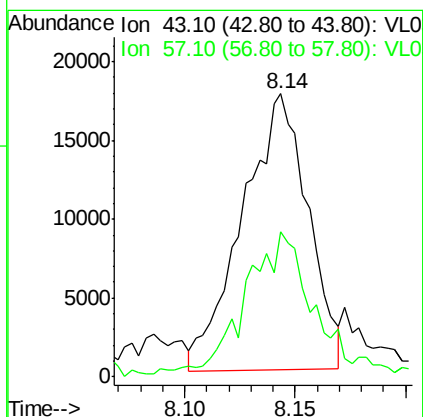
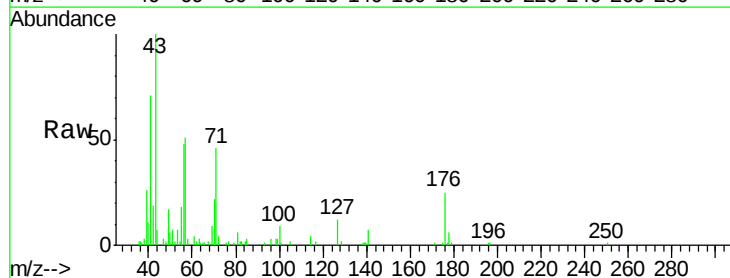
Acq: 15 Jun 2021 17:10

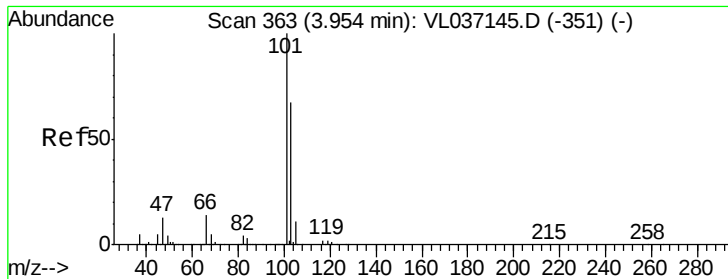
Tgt Ion: 43 Resp: 36227

Ion Ratio Lower Upper

43 100

57 53.5 40.5 60.7





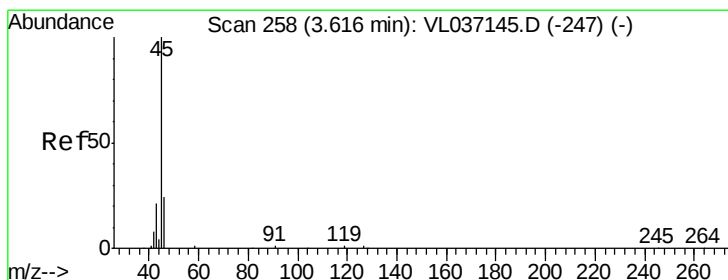
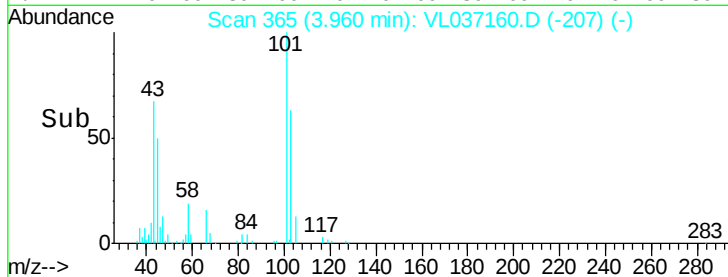
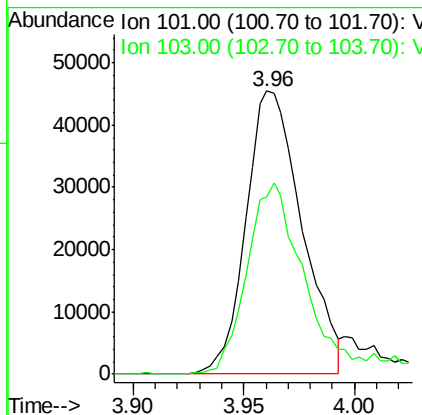
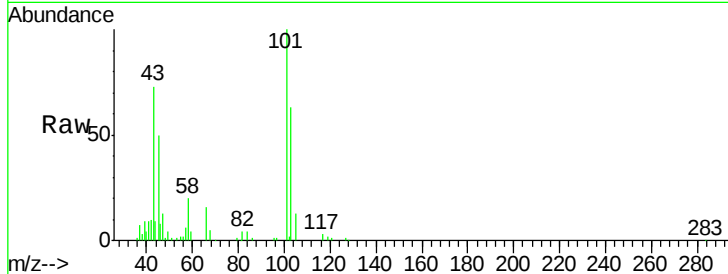
#11
 Trichlorofluoromethane
 Concen: 0.318 ppbv
 RT: 3.96 min Scan# 365
 Delta R.T. 0.01 min
 Lab File: VL037160.D
 Acq: 15 Jun 2021 17:10

Instrument :
 MSVOA_L
 ClientSampled :
 OA1

Tot Ion	Ratio	Lower	Upper
101	100		
103	62.7	53.6	80.4

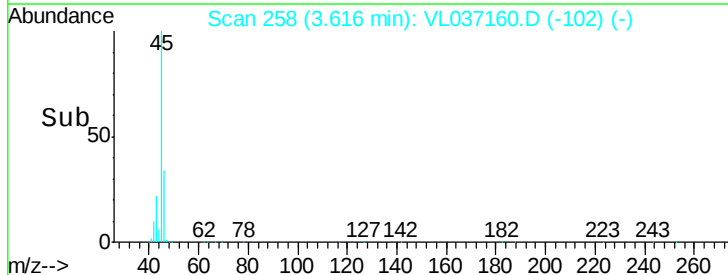
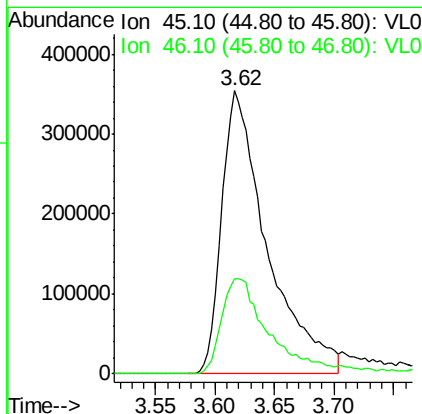
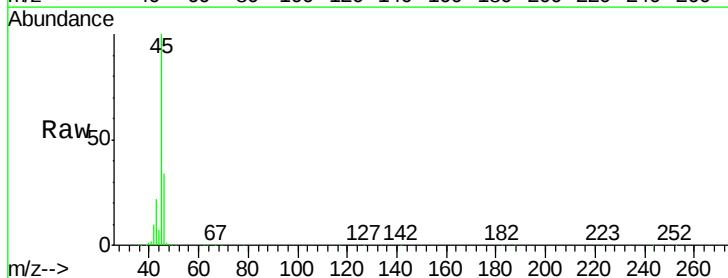
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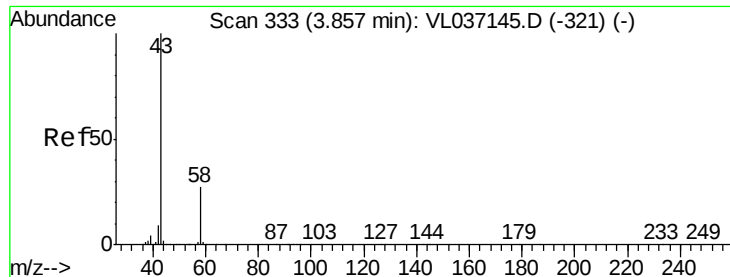
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#13
 Ethanol
 Concen: 78.767 ppbv
 RT: 3.62 min Scan# 258
 Delta R.T. 0.00 min
 Lab File: VL037160.D
 Acq: 15 Jun 2021 17:10

Tgt Ion	Ratio	Lower	Upper
45	100		
46	38.2	15.4	61.8





#15

Acetone

Concen: 10.054 ppbv

RT: 3.86 min Scan# 334

Delta R.T. 0.00 min

Lab File: VL037160.D

Acq: 15 Jun 2021 17:10

Instrument :

MSVOA_L

ClientSampleId :

QA1

Tot Ion: 43 Resp: 1673218

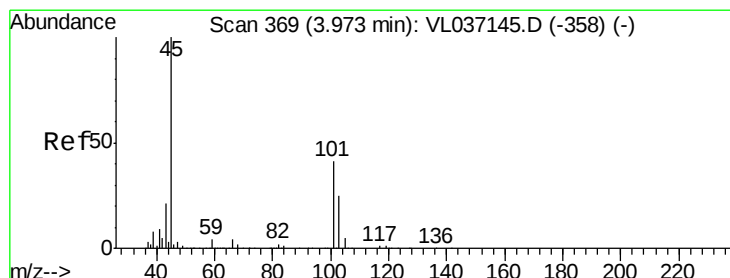
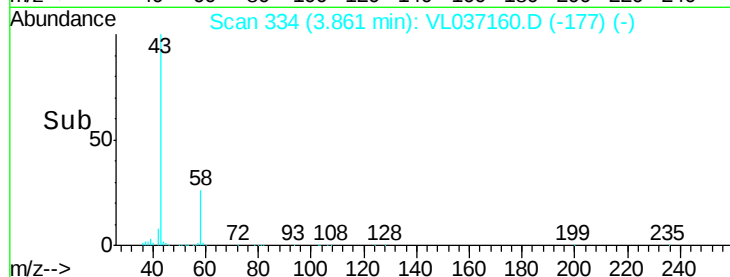
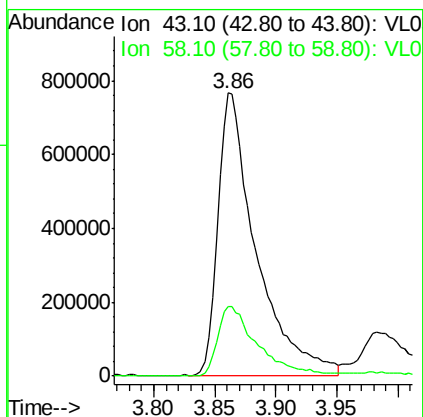
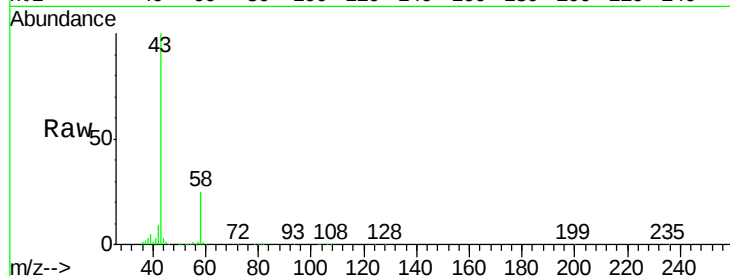
Ion Ratio Lower Upper

43 100

58 26.1 23.0 34.6

Manual Integrations
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#19

Isopropyl Alcohol

Concen: 10.957 ppbv

RT: 3.99 min Scan# 373

Delta R.T. 0.01 min

Lab File: VL037160.D

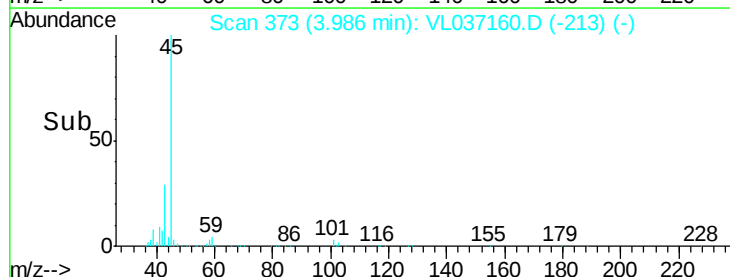
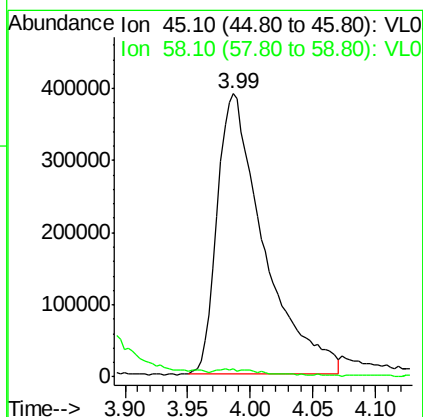
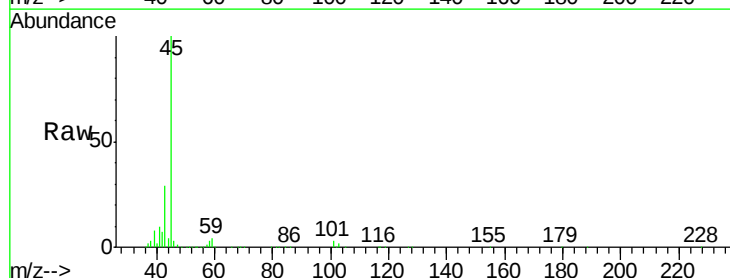
Acq: 15 Jun 2021 17:10

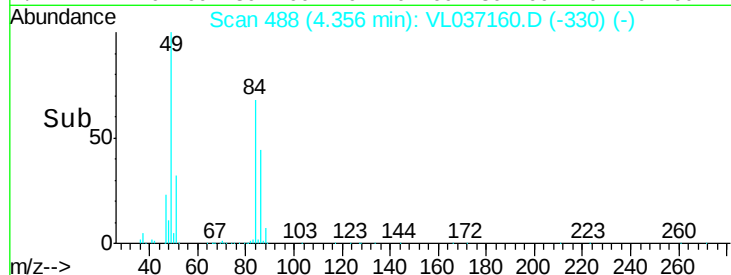
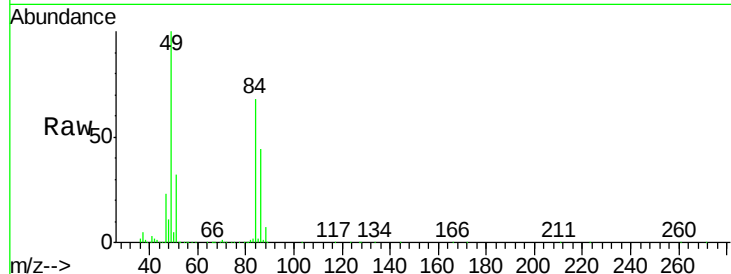
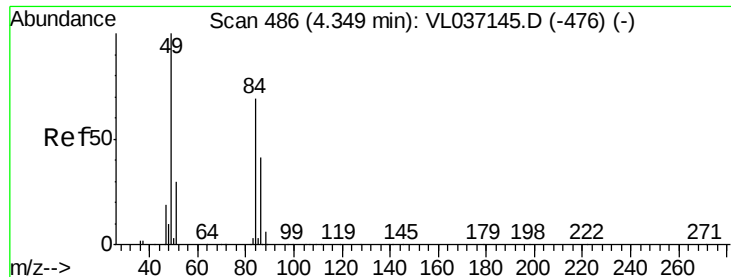
Tgt Ion: 45 Resp: 1000603

Ion Ratio Lower Upper

45 100

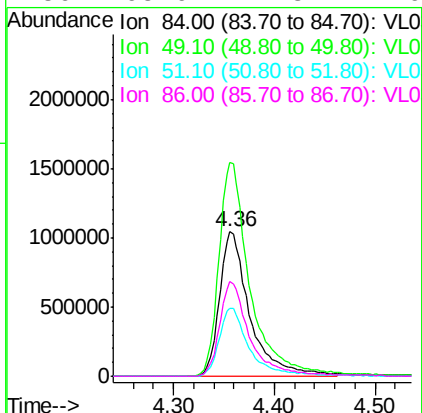
58 2.9 1.4 2.2#





#20
Methvlene Chloride
Concen: 30.328 ppbv
RT: 4.36 min Scan# 488
Delta R.T. 0.01 min
Lab File: VL037160.D
Acq: 15 Jun 2021 17:10

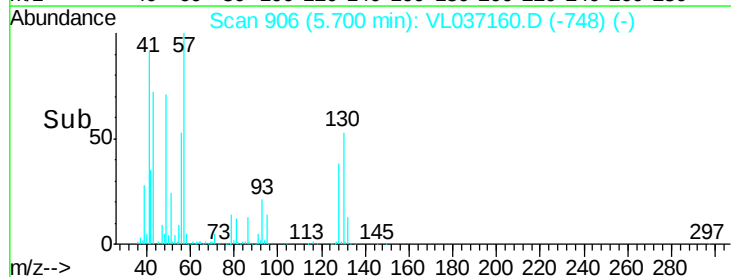
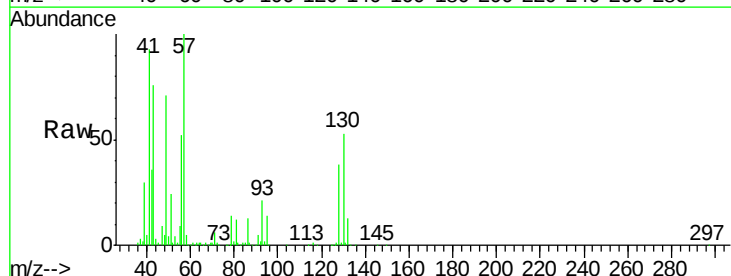
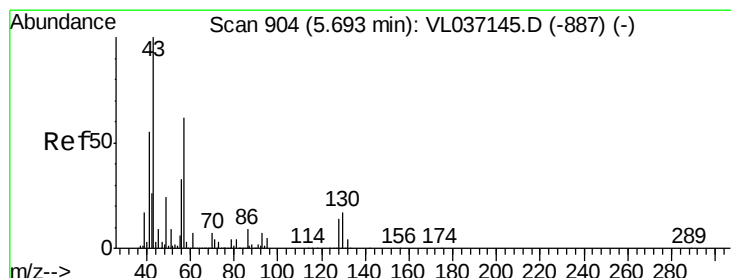
Tot Ion	84	Resp	2199657
Ion	Ratio	Lower	Upper
84	100		
49	148.0	115.3	172.9
51	47.2	34.2	51.4
86	65.6	47.8	71.6



Instrument :
MSVOA_L
ClientSampleId :
QA1

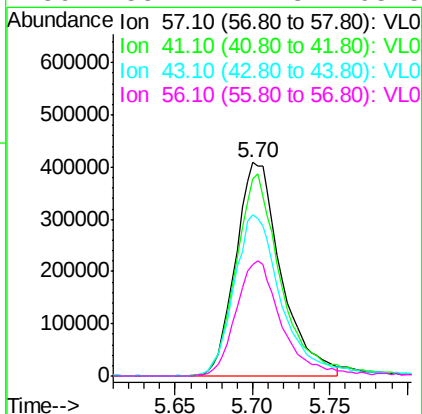
Manual Integrations
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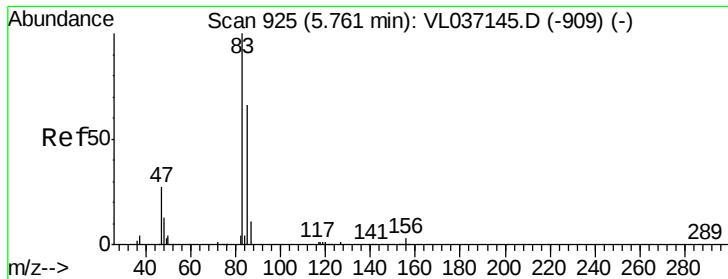
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#26
Hexane
Concen: 5.161 ppbv
RT: 5.70 min Scan# 906
Delta R.T. 0.01 min
Lab File: VL037160.D
Acq: 15 Jun 2021 17:10

Tgt Ion	57	Resp	837005
Ion	Ratio	Lower	Upper
57	100		
41	94.8	73.6	110.4
43	79.5	168.8	253.2#
56	55.2	42.3	63.5





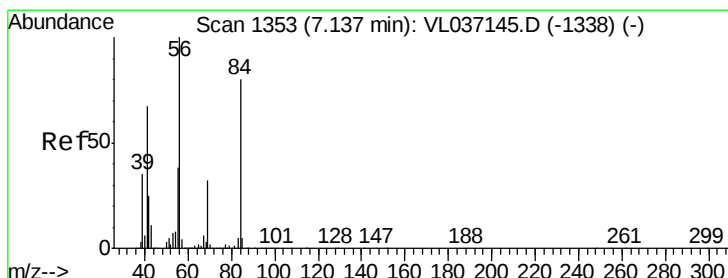
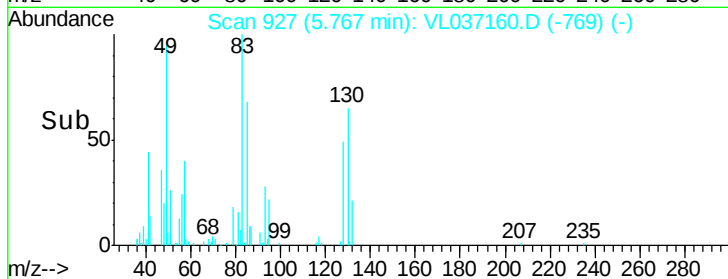
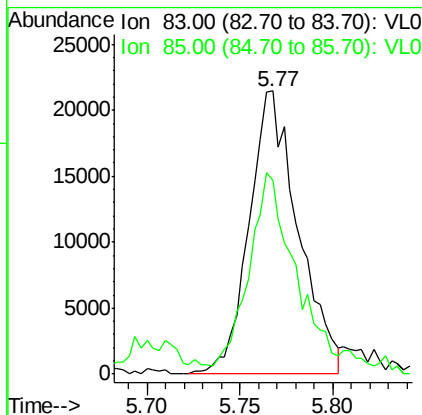
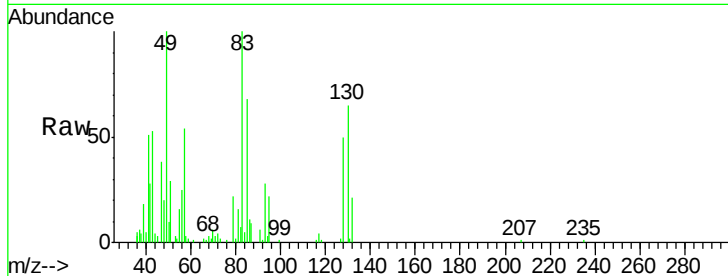
#29
Chloroform
Concen: 0.151 ppbv
RT: 5.77 min Scan# 927
Delta R.T. 0.01 min
Lab File: VL037160.D
Acq: 15 Jun 2021 17:10

Instrument :
MSVOA_L
ClientSampleId :
OA1

Tot Ion	83	Resp	39603
Ion Ratio	100	Lower	Upper
85	65.0	52.6	78.8

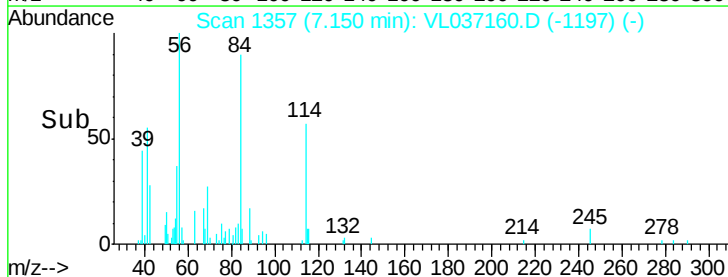
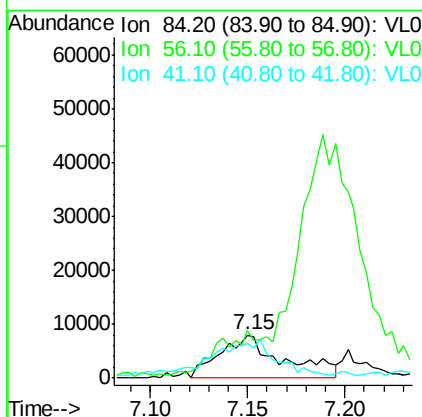
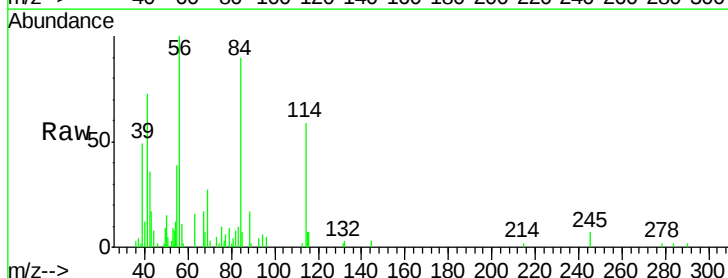
Manual Integrations
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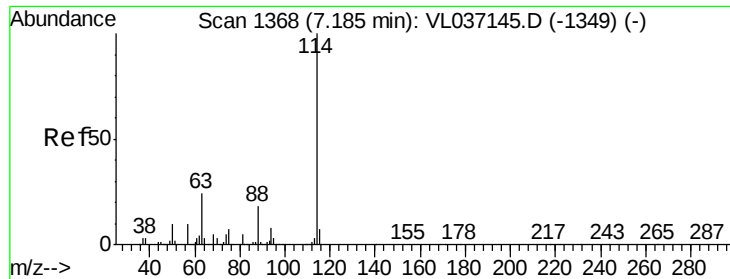
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#30
Cyclohexane
Concen: 0.128 ppbv m
RT: 7.15 min Scan# 1357
Delta R.T. 0.01 min
Lab File: VL037160.D
Acq: 15 Jun 2021 17:10

Tgt Ion	84	Resp	18049
Ion Ratio	100	Lower	Upper
56	0.0	103.9	155.9#
41	0.0	66.5	99.7#





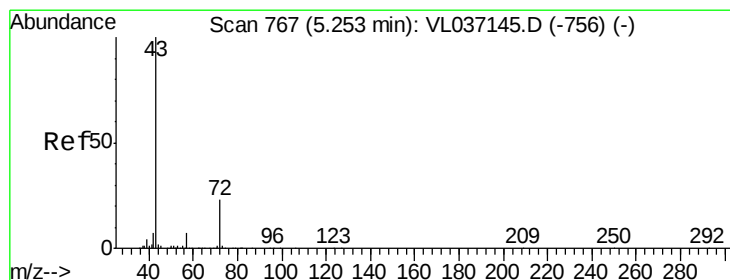
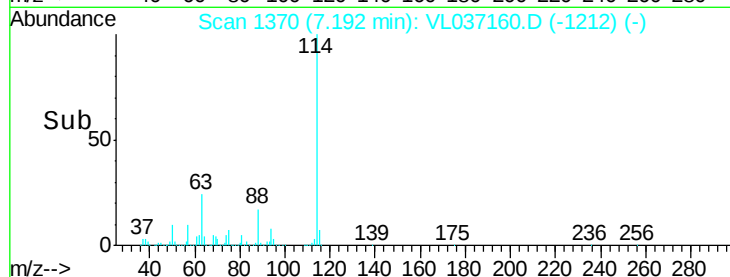
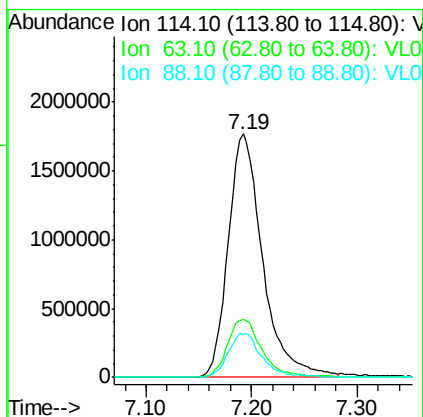
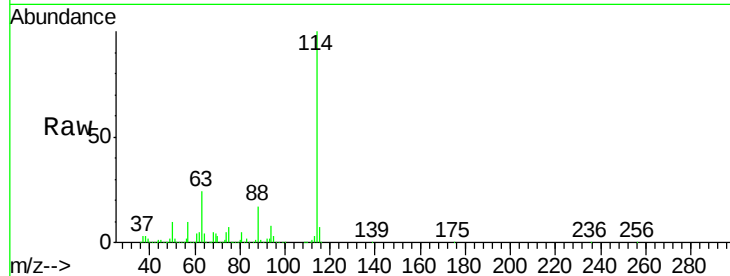
#33
 1,4-Difluorobenzene
 Concen: 10.000 ppbv
 RT: 7.19 min Scan# 1370
 Delta R.T. 0.01 min
 Lab File: VL037160.D
 Acq: 15 Jun 2021 17:10

Instrument :
 MSVOA_L
 ClientSampleId :
 OA1

Tot Ion	Ratio	Lower	Upper
114	100		
63	24.3	19.8	29.6
88	18.1	14.3	21.5

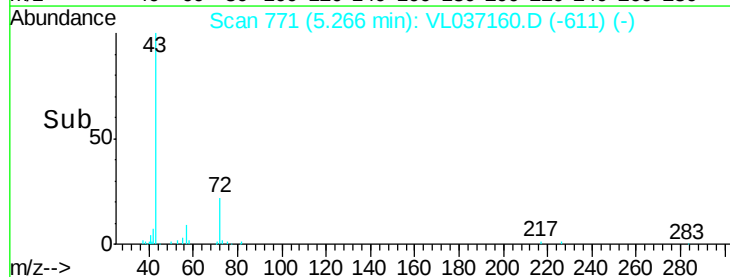
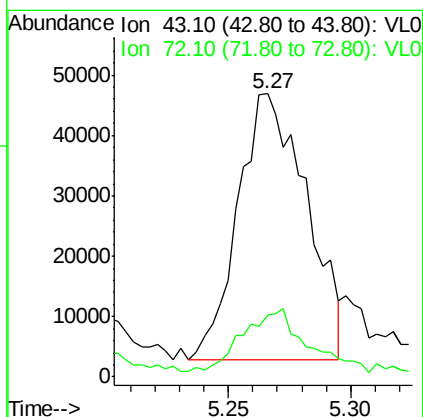
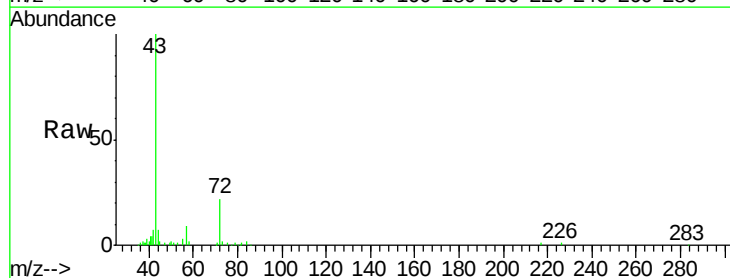
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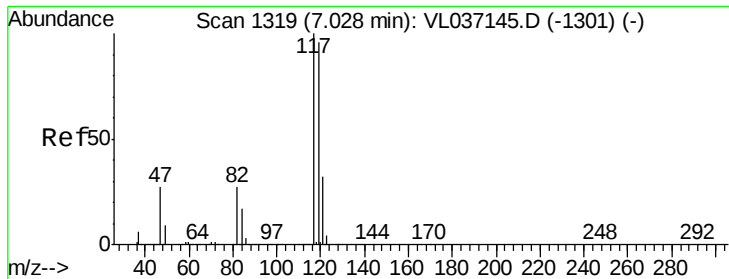
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#34
 2-Butanone
 Concen: 0.572 ppbv
 RT: 5.27 min Scan# 771
 Delta R.T. 0.01 min
 Lab File: VL037160.D
 Acq: 15 Jun 2021 17:10

Tgt Ion	Ratio	Lower	Upper
43	100		
72	29.4	18.6	28.0#





#35

Carbon Tetrachloride

Concen: 0.061 ppbv m

RT: 7.04 min Scan# 1322

Delta R.T. 0.01 min

Lab File: VL037160.D

Acq: 15 Jun 2021 17:10

Instrument :

MSVOA_L

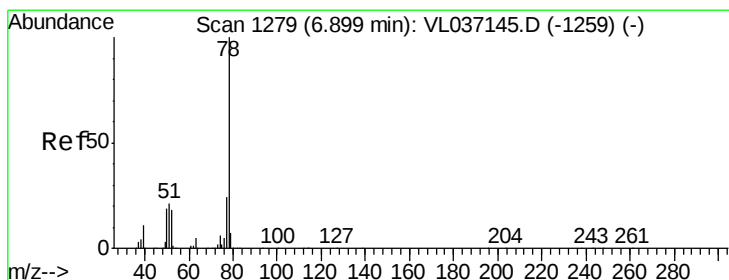
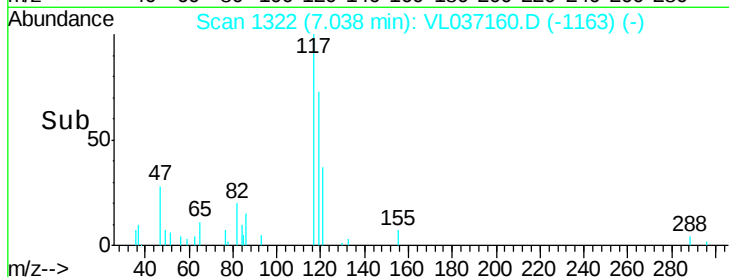
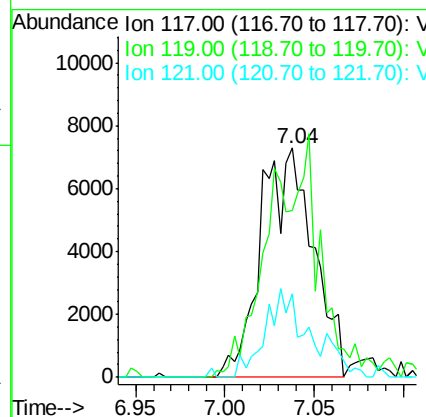
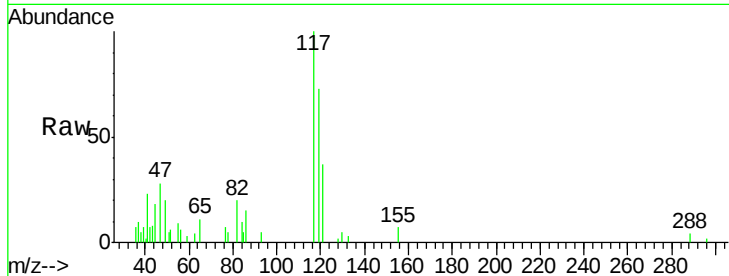
ClientSampleId :

QA1

Tot Ion	Ratio	Lower	Upper
117	100		
119	72.6	77.0	115.4#
121	36.7	25.4	38.0

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#36

Benzene

Concen: 0.279 ppbv

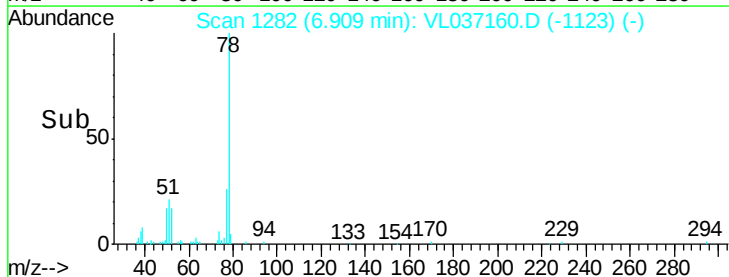
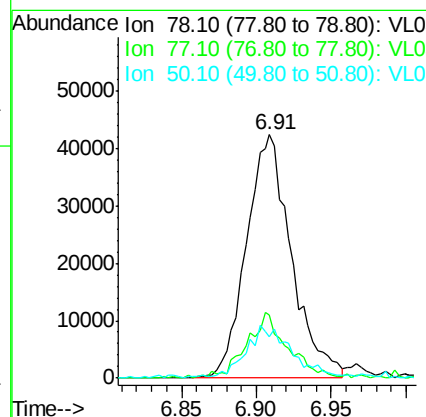
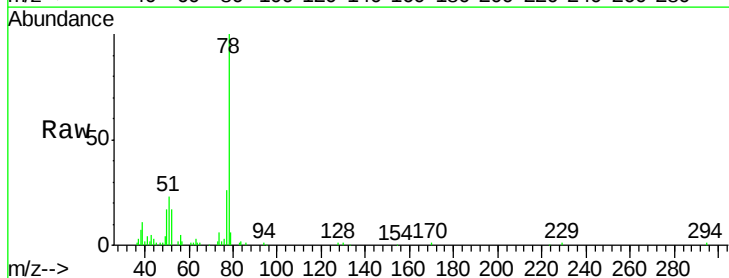
RT: 6.91 min Scan# 1282

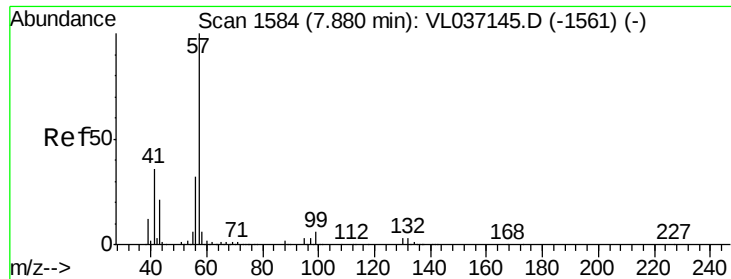
Delta R.T. 0.01 min

Lab File: VL037160.D

Acq: 15 Jun 2021 17:10

Tgt Ion	Ratio	Lower	Upper
78	100		
77	25.6	19.5	29.3
50	16.0	15.5	23.3





#44

2,2,4-Trimethylpentane

Concen: 0.331 ppbv

RT: 7.89 min Scan# 1586

Delta R.T. 0.01 min

Lab File: VL037160.D

Acq: 15 Jun 2021 17:10

Instrument :

MSVOA_L

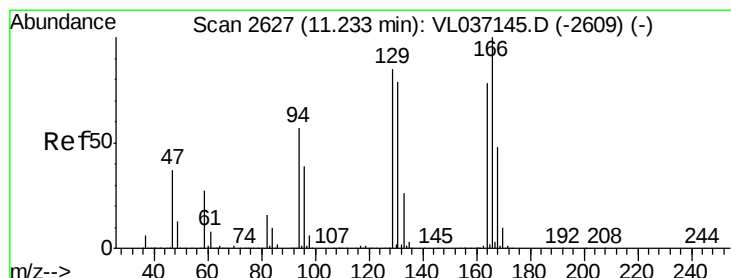
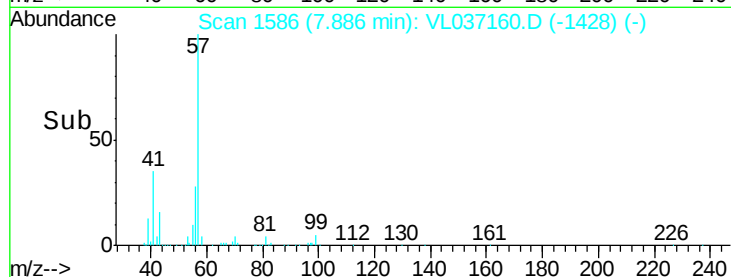
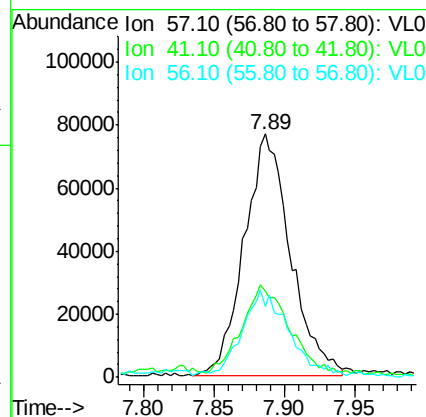
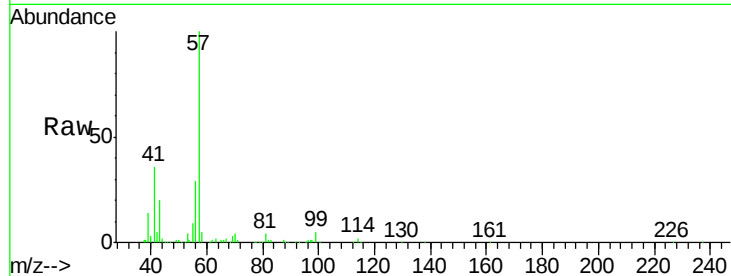
ClientSampled :

QA1

Tot Ion:	57	Resp:	176082
Ion Ratio	Lower	Upper	
57	100		
41	39.3	28.1	42.1
56	39.1	25.4	38.2#

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#52

Tetrachloroethene

Concen: 0.221 ppbv m

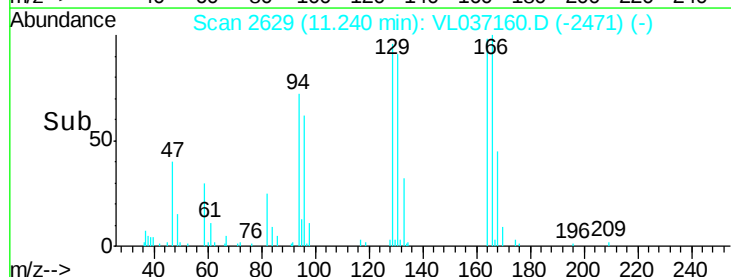
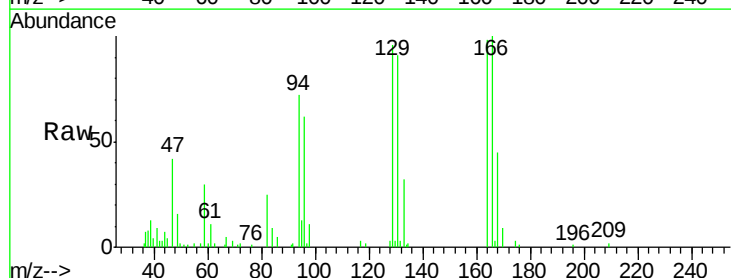
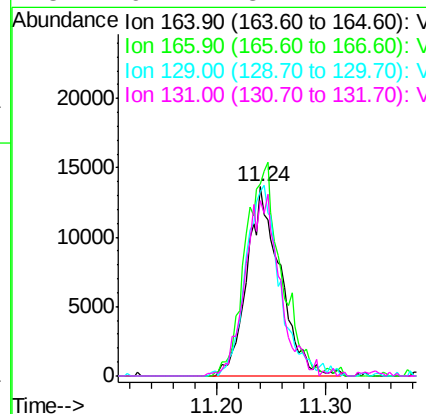
RT: 11.24 min Scan# 2629

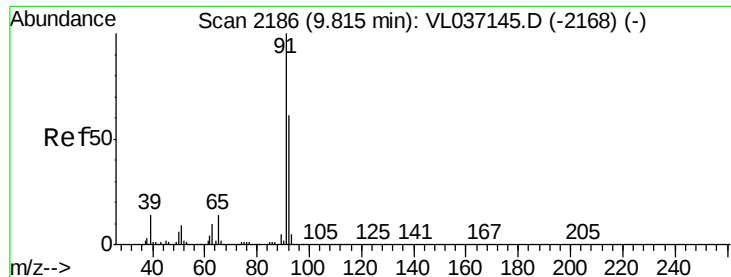
Delta R.T. 0.01 min

Lab File: VL037160.D

Acq: 15 Jun 2021 17:10

Tgt Ion:	164	Resp:	29031
Ion Ratio	Lower	Upper	
164	100		
166	101.6	102.6	154.0#
129	97.2	87.4	131.2
131	92.7	81.4	122.2





#53

Toluene

Concen: 0.899 ppbv

RT: 9.83 min Scan# 2189

Delta R.T. 0.01 min

Lab File: VL037160.D

Acq: 15 Jun 2021 17:10

Instrument :

MSVOA_L

ClientSampleId :

QA1

Tot Ion: 91 Resp: 339800

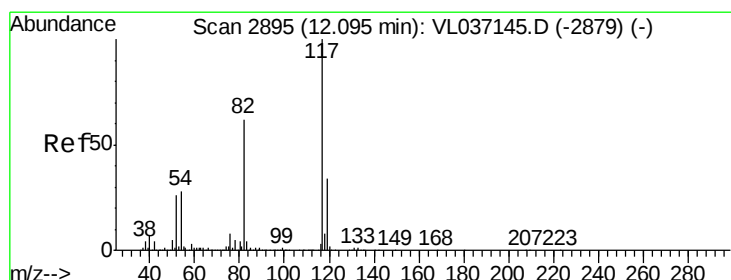
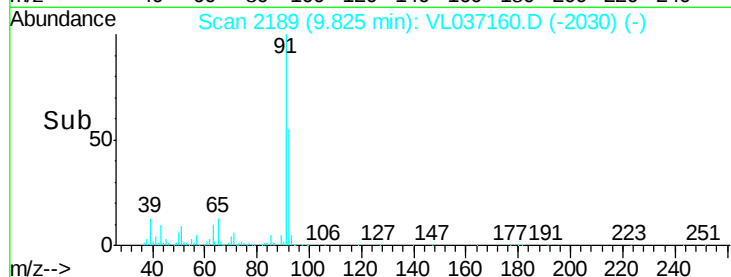
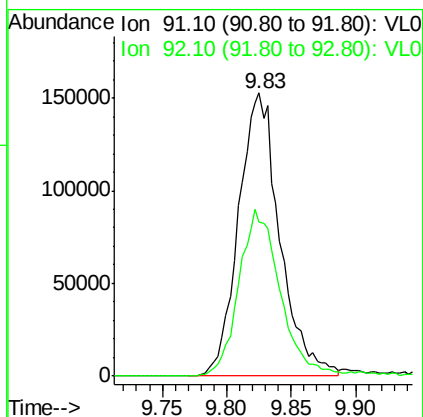
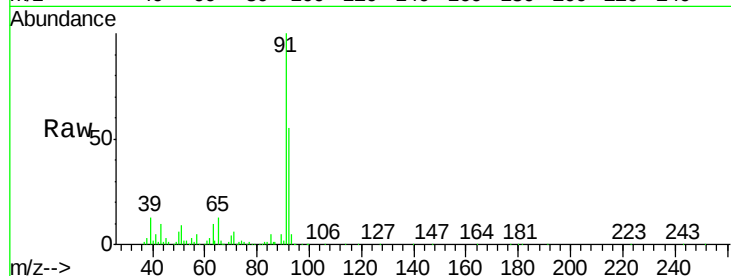
Ion Ratio Lower Upper

91 100

92 60.1 48.6 73.0

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#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.10 min Scan# 2898

Delta R.T. 0.01 min

Lab File: VL037160.D

Acq: 15 Jun 2021 17:10

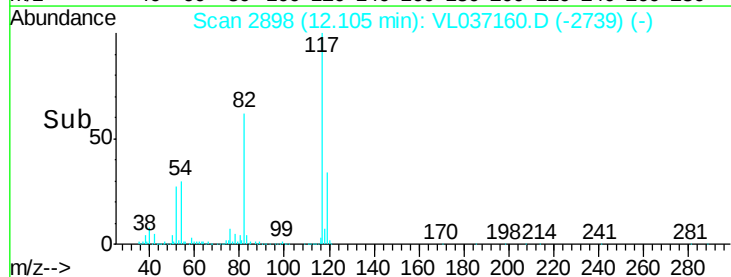
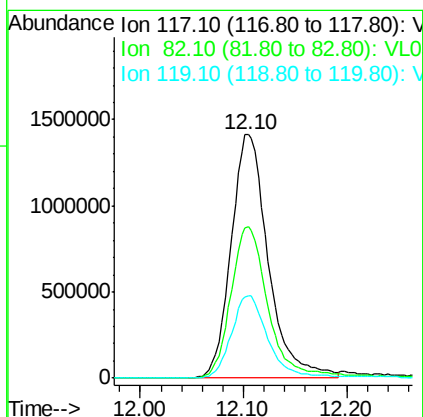
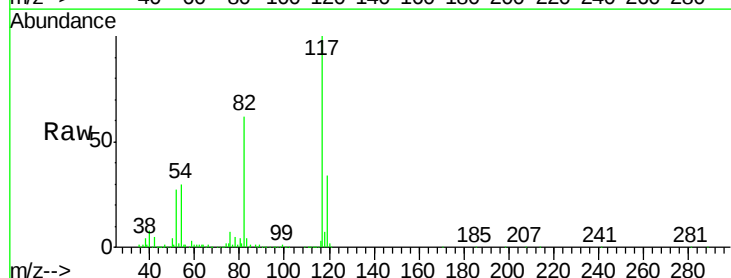
Tgt Ion: 117 Resp: 3550373

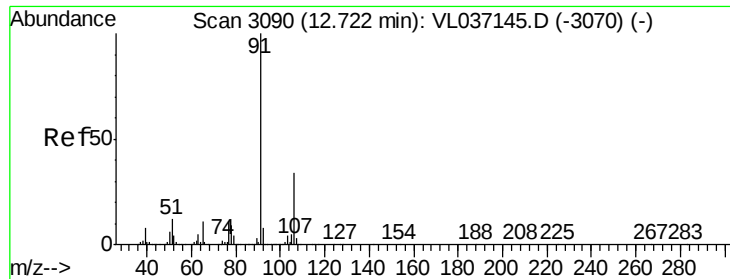
Ion Ratio Lower Upper

117 100

82 63.9 50.6 76.0

119 34.9 27.1 40.7





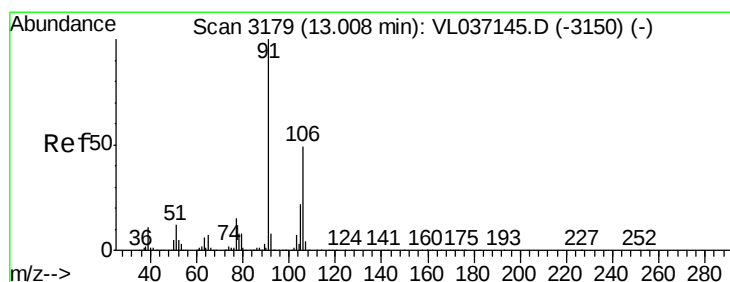
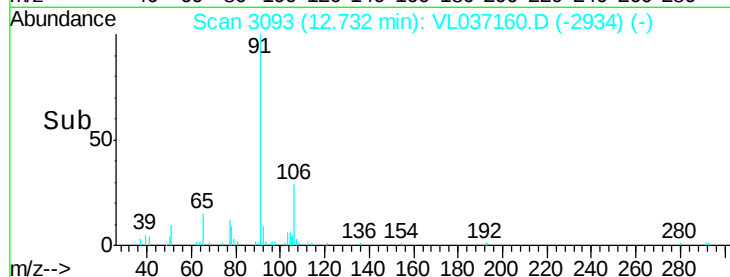
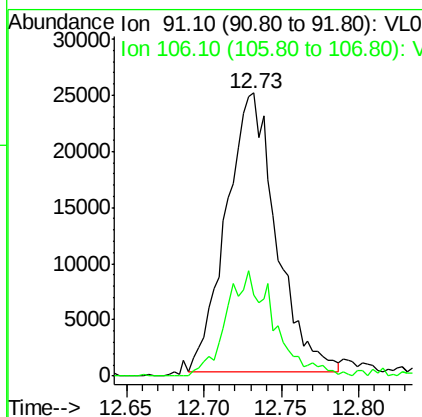
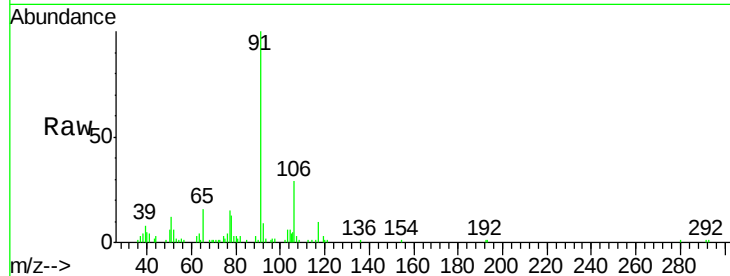
#58
Ethyl Benzene
Concen: 0.116 ppbv
RT: 12.73 min Scan# 3093
Delta R.T. 0.01 min
Lab File: VL037160.D
Acq: 15 Jun 2021 17:10

Instrument :
MSVOA_L
ClientSampleId :
QA1

Tot Ion: 91 Resp: 55925
Ion Ratio Lower Upper
91 100
106 29.3 26.8 40.2

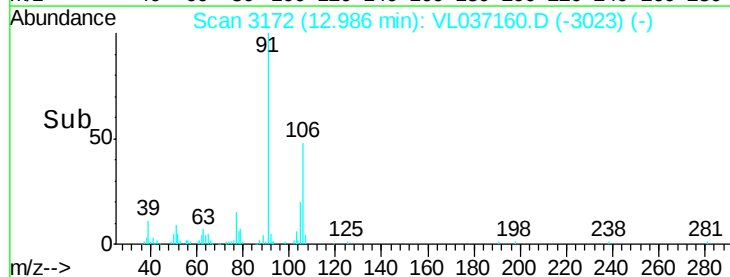
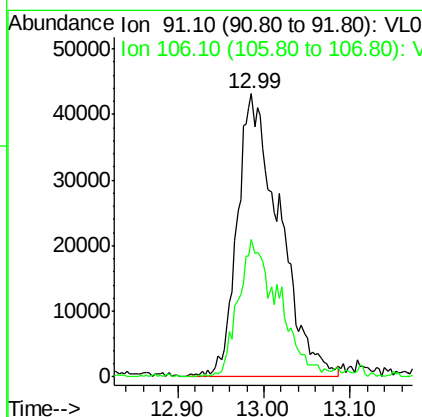
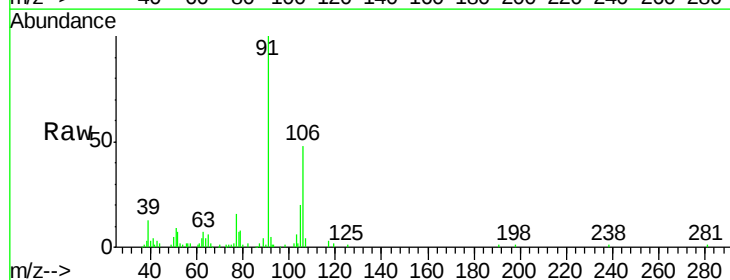
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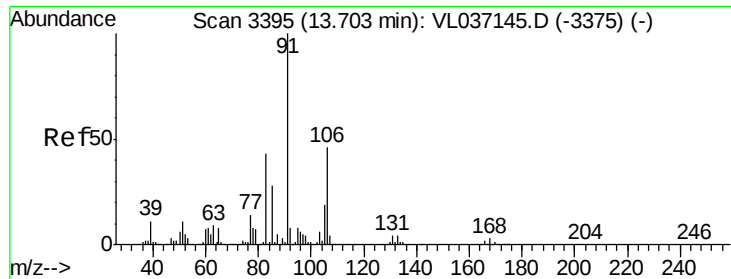
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#59
m/p-Xylene
Concen: 0.358 ppbv m
RT: 12.99 min Scan# 3172
Delta R.T. -0.02 min
Lab File: VL037160.D
Acq: 15 Jun 2021 17:10

Tgt Ion: 91 Resp: 146424
Ion Ratio Lower Upper
91 100
106 0.0 36.9 55.3#





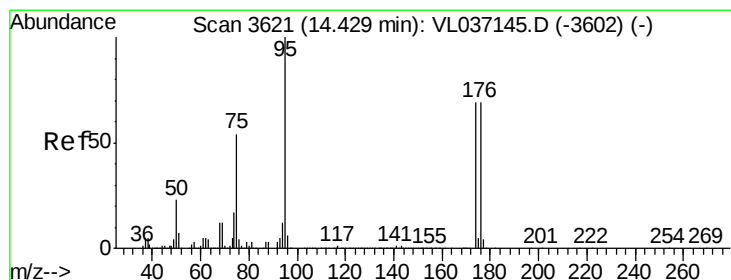
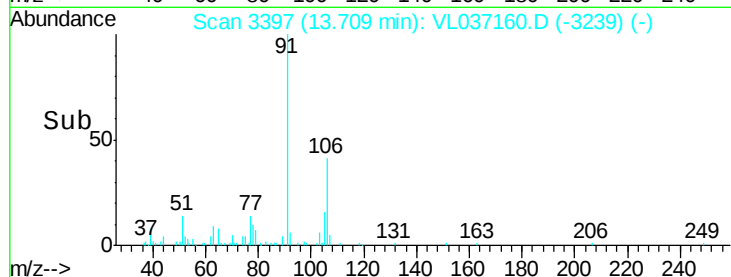
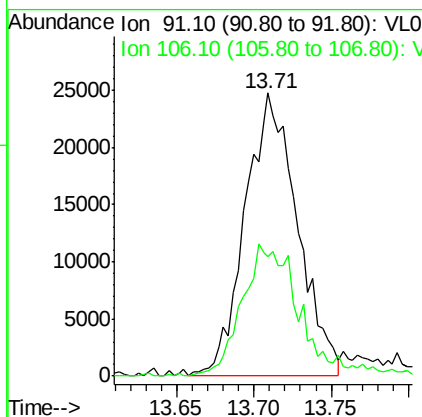
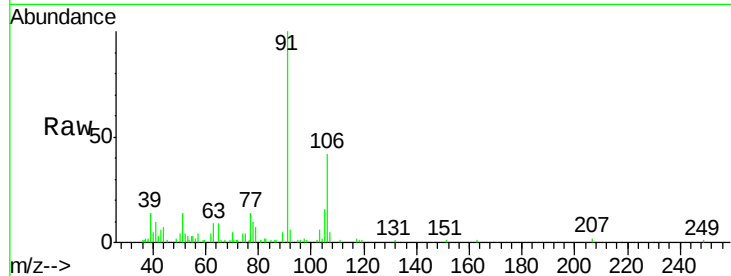
#60
o-Xylene
Concen: 0.148 ppbv
RT: 13.71 min Scan# 3397
Delta R.T. 0.01 min
Lab File: VL037160.D
Acq: 15 Jun 2021 17:10

Instrument :
MSVOA_L
ClientSampled :
OA1

Tot Ion	91	106	Ratio	Lower	Upper
Resp	58265				
Ion	91	106	100	23.1	69.3

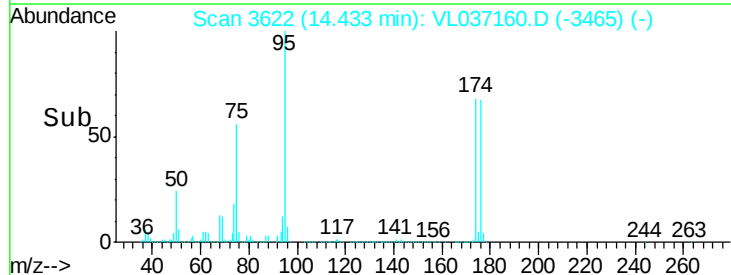
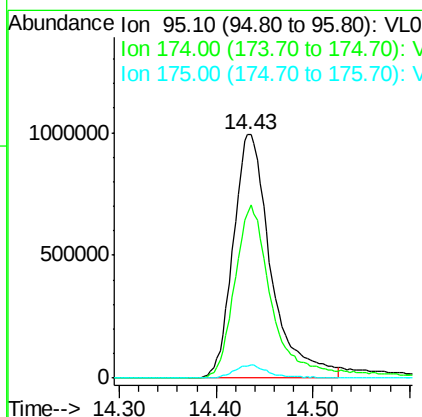
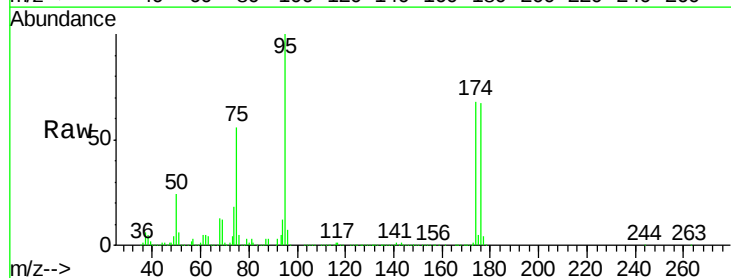
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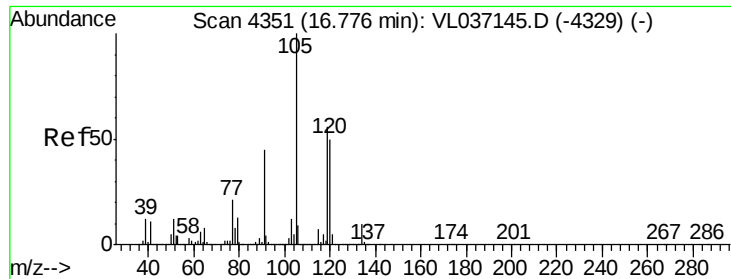
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#68
1-Bromo-4-Fluorobenzene
Concen: 10.303 ppbv
RT: 14.43 min Scan# 3622
Delta R.T. 0.00 min
Lab File: VL037160.D
Acq: 15 Jun 2021 17:10

Tgt Ion	95	174	175	Ratio	Lower	Upper
Resp	2694230					
Ion	95	174	175	100	57.6	86.4
					4.4	6.6





#74

1,2,4-Trimethylbenzene

Concen: 0.245 ppbv m

RT: 16.78 min Scan# 4352

Delta R.T. 0.00 min

Lab File: VL037160.D

Acq: 15 Jun 2021 17:10

Instrument :

MSVOA_L

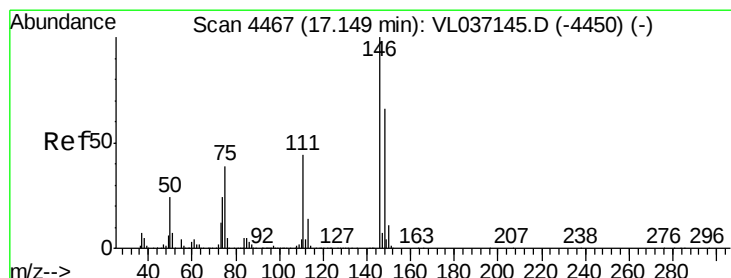
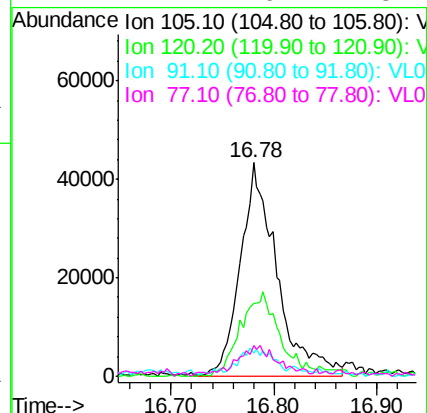
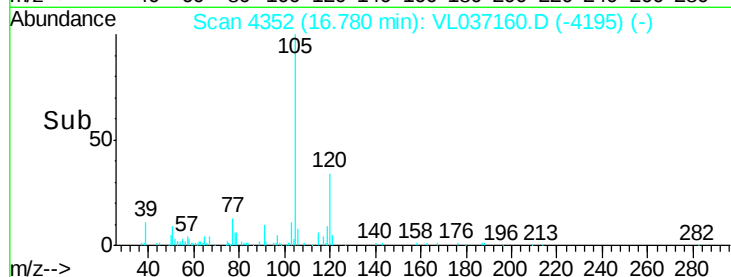
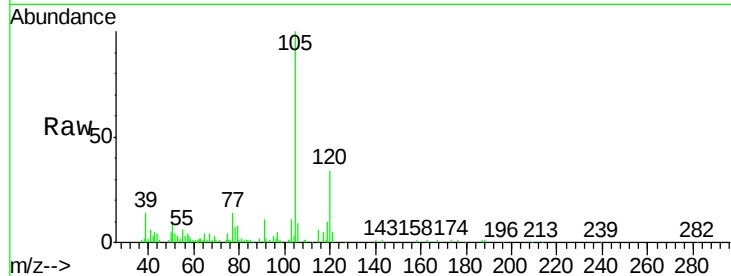
ClientSampled :

QA1

Tot Ion	Ratio	Resp	Lower	Upper
105	100	107756		
120	34.3	39.7	59.5#	
91	11.1	35.8	53.8#	
77	14.2	16.7	25.1#	

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#76

1,4-Dichlorobenzene

Concen: 0.193 ppbv m

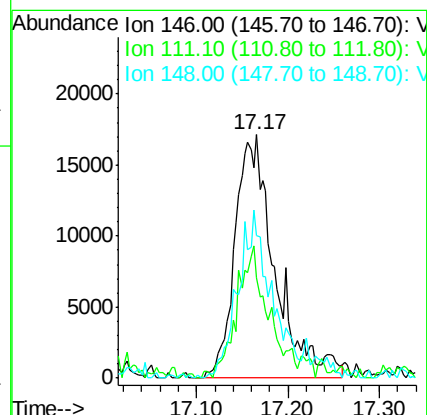
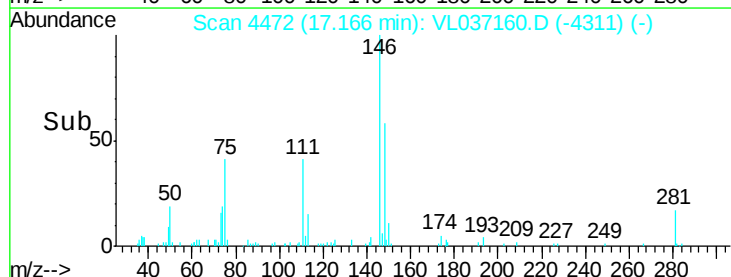
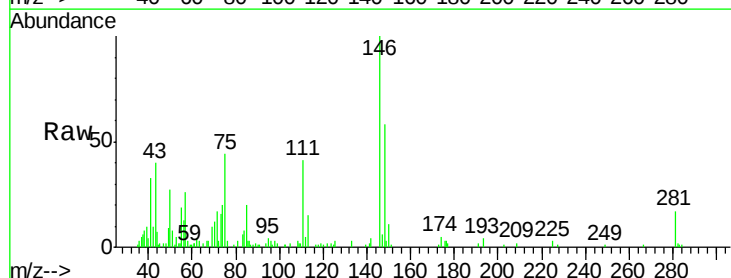
RT: 17.17 min Scan# 4472

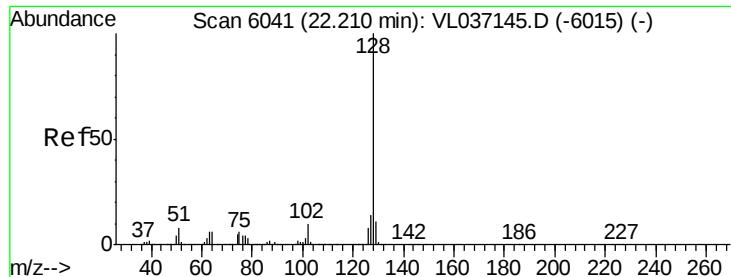
Delta R.T. 0.02 min

Lab File: VL037160.D

Acq: 15 Jun 2021 17:10

Tgt Ion	Ratio	Resp	Lower	Upper
146	100	51890		
111	48.9	21.9	65.5	
148	59.6	32.4	97.0	





#79

Naphthalene

Concen: 0.164 ppbv m

RT: 22.23 min Scan# 6047

Delta R.T. 0.02 min

Lab File: VL037160.D

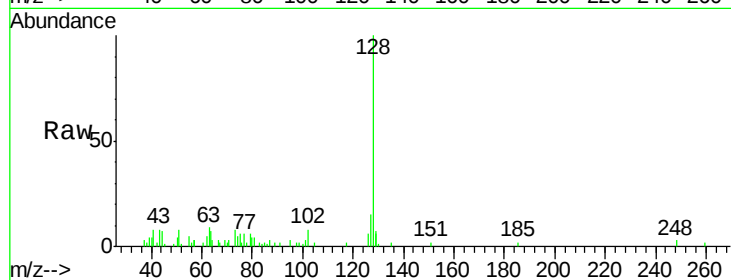
Acq: 15 Jun 2021 17:10

Instrument :

MSVOA_L

ClientSampleId :

QA1



Tot Ion:	128	Resp:	43359
Ion Ratio	Lower	Upper	
128	100		
127	14.7	10.9	16.3
129	6.7	9.0	13.4

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