

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL111820\
 Data File : VL035980.D
 Acq On : 18 Nov 2020 19:26
 Operator : SY/AP
 Sample : L4781-01
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 IA1

Manual Integrations
 APPROVED

MMDadoda
 11/20/2020 12:27:33 PM

Quant Time: Nov 19 09:06:05 2020
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL110320AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Wed Nov 04
 QLast Update : Wed Nov 04 02:40:06 2020
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.63	49	1059503	10.00	ppbv	-0.04
33) 1,4-Difluorobenzene	7.13	114	3779503	10.00	ppbv	-0.04
55) Chlorobenzene-d5	12.04	117	3449483	10.00	ppbv	-0.05

System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	14.37	95	2543466	10.38	ppbv	-0.05
Spiked Amount	10.000	Range	65 - 135	Recovery	=	103.80%

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.02	85	39157	0.196	ppbv	90
3) Chlorodifluoromethane	2.95	51	66233	0.522	ppbv #	84
4) Chloromethane	3.11	50	34934	0.567	ppbv #	85
9) Propene	2.99	41	38897	0.838	ppbv	89
11) Trichlorofluoromethane	3.91	101	66880	0.267	ppbv	100
13) Ethanol	3.57	45	972017	96.481	ppbv	93
15) Acetone	3.82	43	881667	7.784	ppbv	94
19) Isopropyl Alcohol	3.94	45	152700	2.194	ppbv #	76
20) Methylene Chloride	4.31	84	1875359	23.519	ppbv	99
26) Hexane	5.65	57	1169846	9.506	ppbv #	47
29) Chloroform	5.71	83	38939	0.161	ppbv	87
30) Cyclohexane	7.12	84	31256m	0.233	ppbv	
34) 2-Butanone	5.21	43	22267	0.182	ppbv	95
35) Carbon Tetrachloride	6.98	117	13926	0.069	ppbv	87
36) Benzene	6.85	78	70184	0.250	ppbv #	96
44) 2,2,4-Trimethylpentane	7.82	57	43077m	0.116	ppbv	
52) Tetrachloroethene	11.18	164	15598m	0.117	ppbv	
53) Toluene	9.76	91	1195095	3.525	ppbv	97
59) m/p-Xylene	12.92	91	45494m	0.128	ppbv	

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

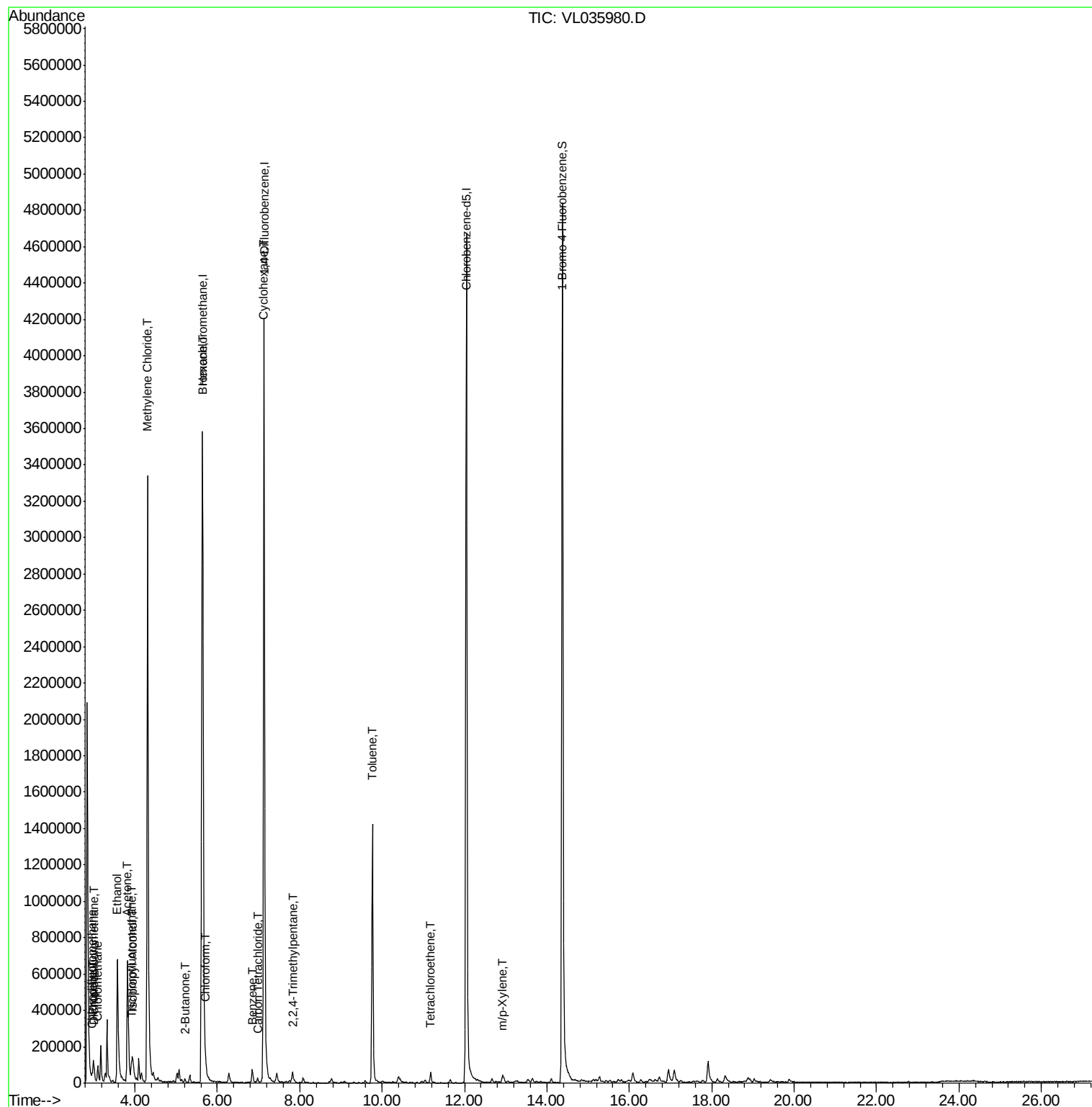
Data Path : Z:\V0ASRV\HPCHEM1\MSVOA L\DATA\VL111820\
Data File : VL035980.D
Acq On : 18 Nov 2020 19:26
Operator : SY/AP
Sample : L4781-01
Misc : 400ml/MSVOA L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA1

Manual Integrations
APPROVED

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11/20/2020 12:27:33 PM

Quant Time: Nov 19 09:06:05 2020
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA L\METHODS\VL110320AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Wed Nov
QLast Update : Wed Nov 04 02:40:06 2020
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.63 min Scan# 883

Delta R.T. -0.04 min

Lab File: VL035980.D

Acq: 18 Nov 2020 19:26

Instrument :

MSVOA_L

ClientSampleId :

IA1

Tot Ion: 49 Resp: 1059503

Ion Ratio Lower Upper

49 100

128 78.4 41.5 124.6

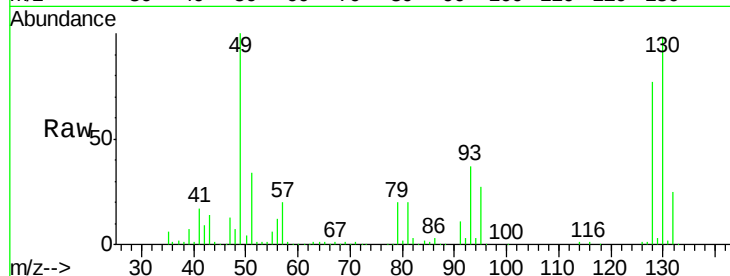
130 99.6 53.7 161.1

Manual Integrations

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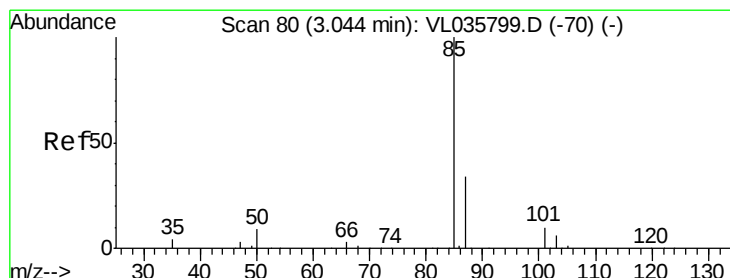
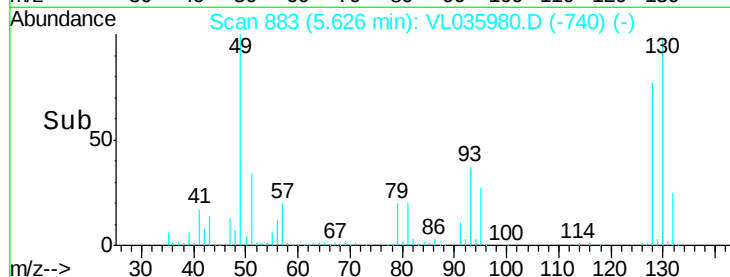
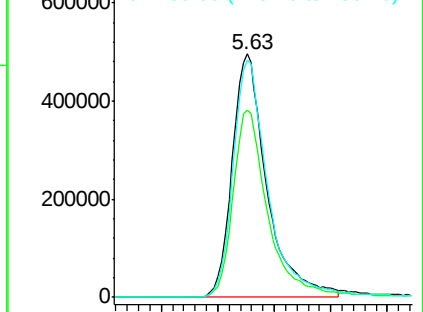
11/20/2020 12:27:33 PM



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: 0.196 ppbv

RT: 3.02 min Scan# 71

Delta R.T. -0.03 min

Lab File: VL035980.D

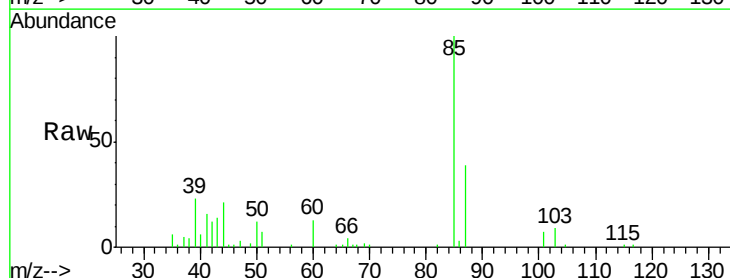
Acq: 18 Nov 2020 19:26

Tgt Ion: 85 Resp: 39157

Ion Ratio Lower Upper

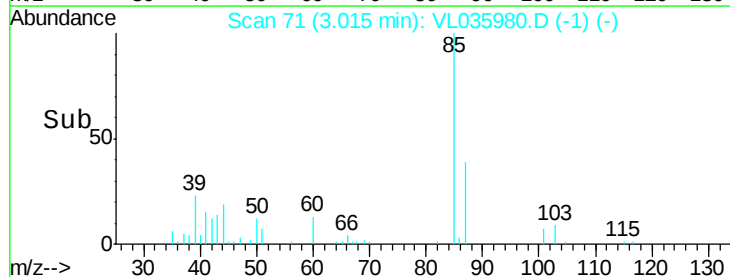
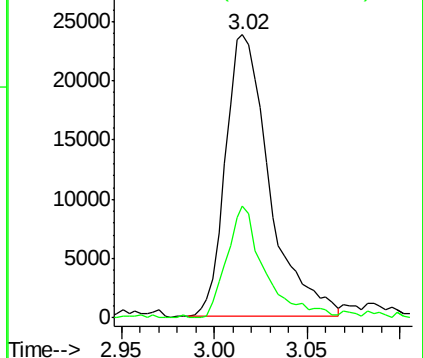
85 100

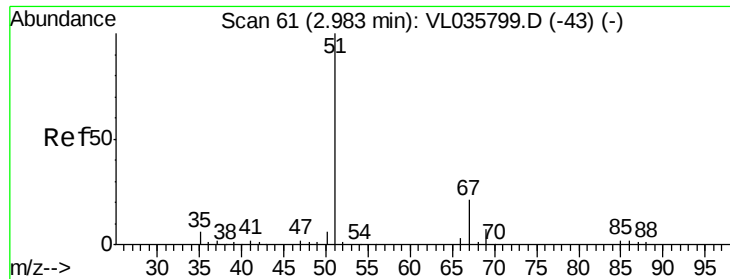
87 39.7 27.1 40.7



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0





#3

Chlorodifluoromethane

Concen: 0.522 ppbv

RT: 2.95 min Scan# 52

Delta R.T. -0.03 min

Lab File: VL035980.D

Acq: 18 Nov 2020 19:26

Instrument :

MSVOA_L

ClientSampled :

IA1

Tot Ion: 51 Resp: 66233

Ion Ratio Lower Upper

51 100

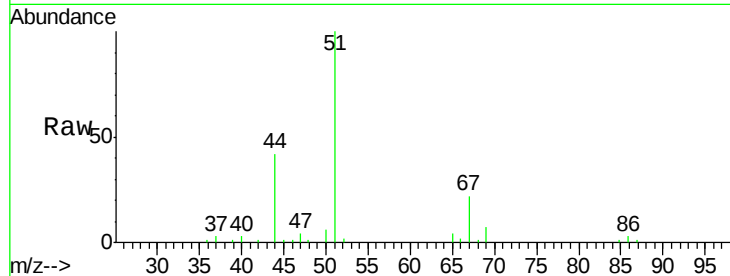
67 13.6 17.0 25.4#

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Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0

2.95

30000

25000

20000

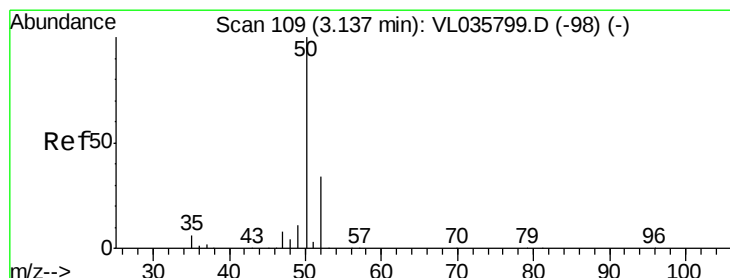
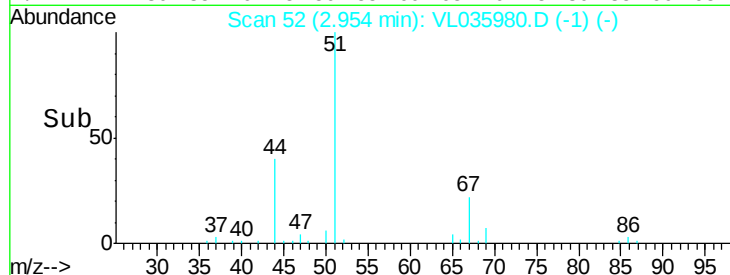
15000

10000

5000

0

Time-->



#4

Chloromethane

Concen: 0.567 ppbv

RT: 3.11 min Scan# 100

Delta R.T. -0.03 min

Lab File: VL035980.D

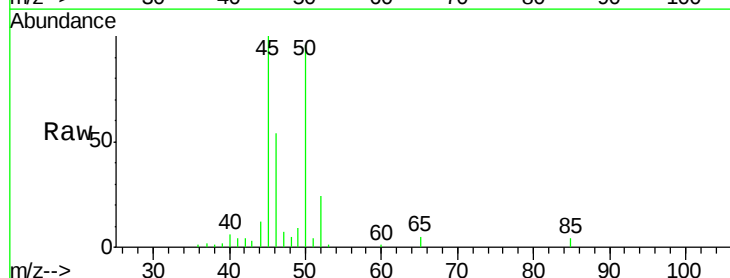
Acq: 18 Nov 2020 19:26

Tgt Ion: 50 Resp: 34934

Ion Ratio Lower Upper

50 100

52 25.6 27.1 40.7#



Abundance Ion 50.10 (49.80 to 50.80): VL0

Ion 52.10 (51.80 to 52.80): VL0

3.11

20000

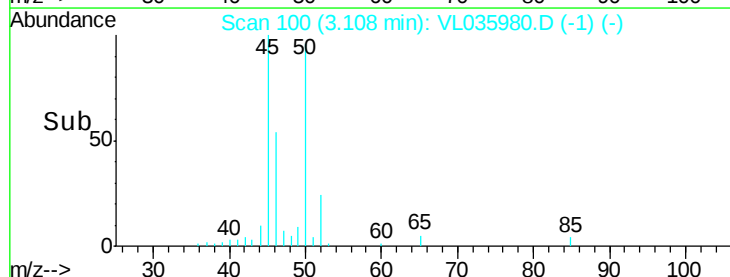
15000

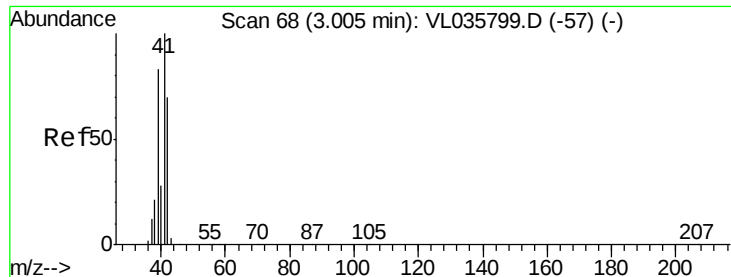
10000

5000

0

Time-->





#9

Propene

Concen: 0.838 ppbv

RT: 2.99 min Scan# 63

Delta R.T. -0.02 min

Lab File: VL035980.D

Acq: 18 Nov 2020 19:26

Instrument :

MSVOA_L

ClientSampled :

IA1

Tot Ion: 41 Resp: 38897

Ion Ratio Lower Upper

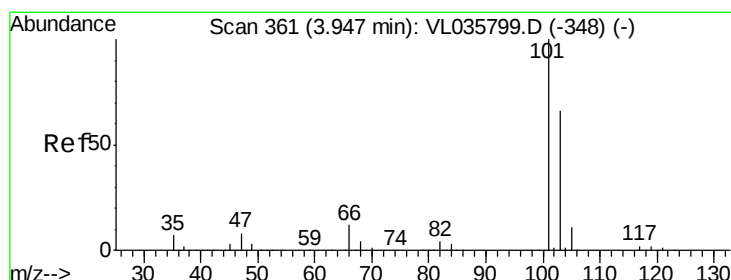
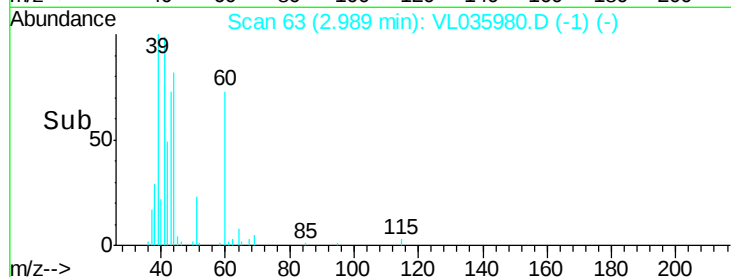
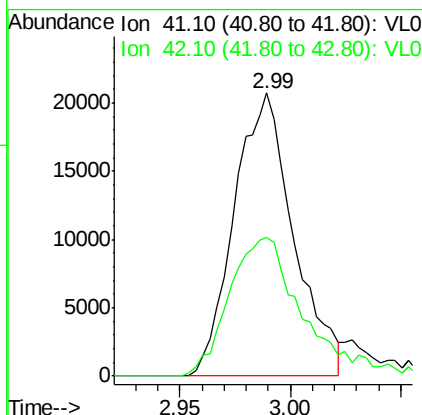
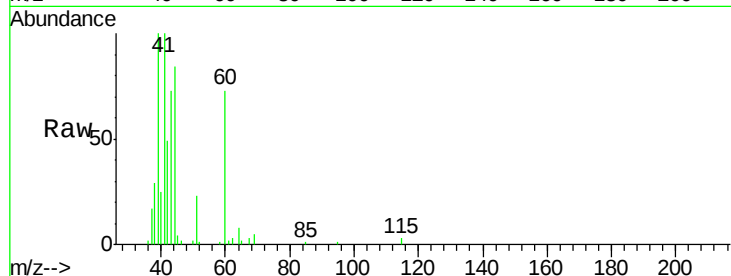
41 100

42 61.5 56.2 84.4

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#11

Trichlorofluoromethane

Concen: 0.267 ppbv

RT: 3.91 min Scan# 350

Delta R.T. -0.04 min

Lab File: VL035980.D

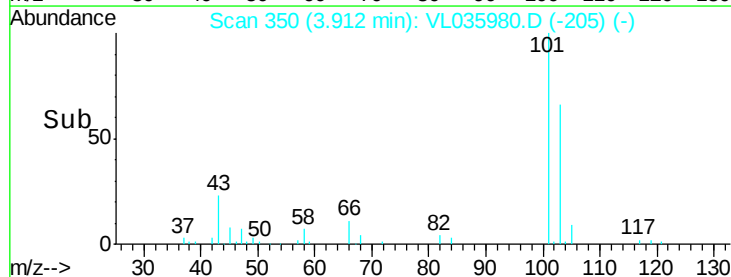
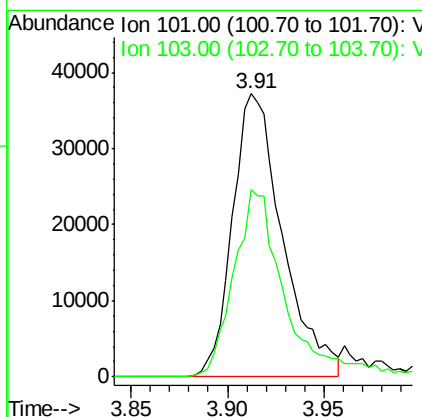
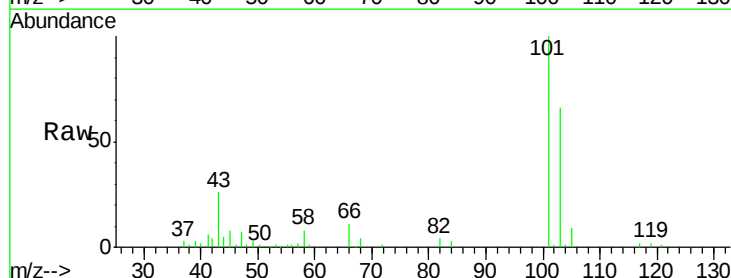
Acq: 18 Nov 2020 19:26

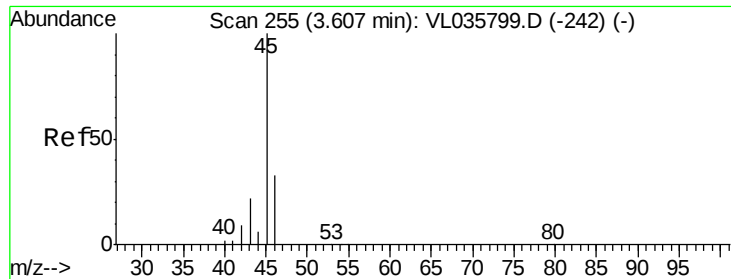
Tgt Ion: 101 Resp: 66880

Ion Ratio Lower Upper

101 100

103 66.1 53.0 79.4





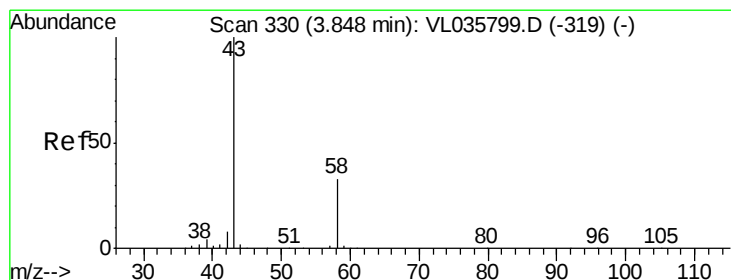
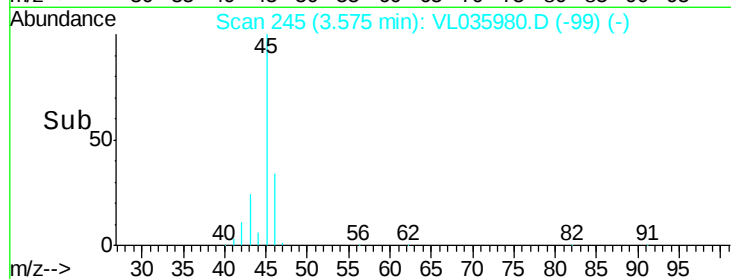
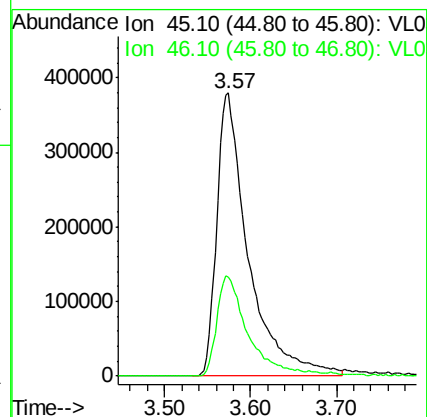
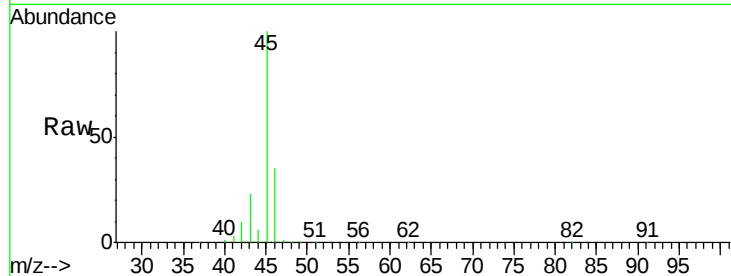
#13
Ethanol
Concen: 96.481 ppbv
RT: 3.57 min Scan# 245
Delta R.T. -0.03 min
Lab File: VL035980.D
Acq: 18 Nov 2020 19:26

Instrument :
MSVOA_L
ClientSampled :
IA1

Tot Ion	45	46	Ratio	Lower	Upper
Resp: 972017	100	36.2		16.1	64.5

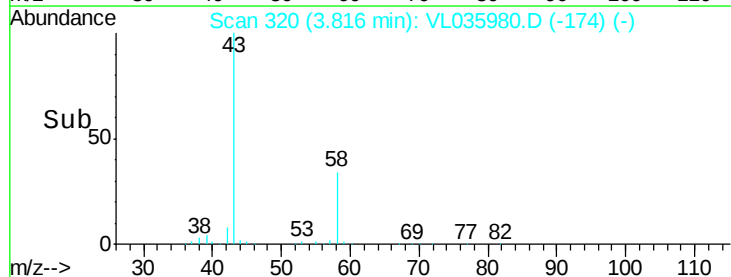
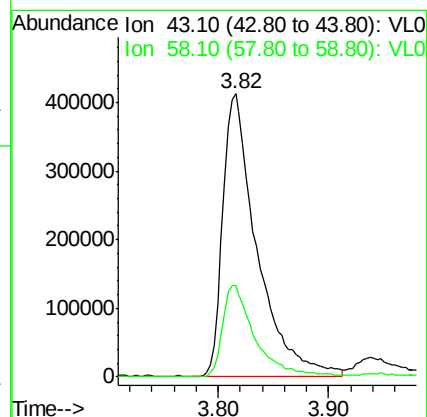
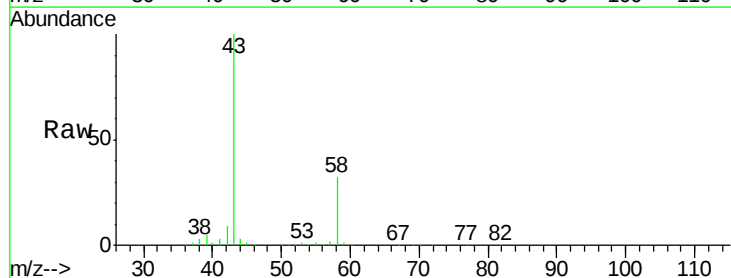
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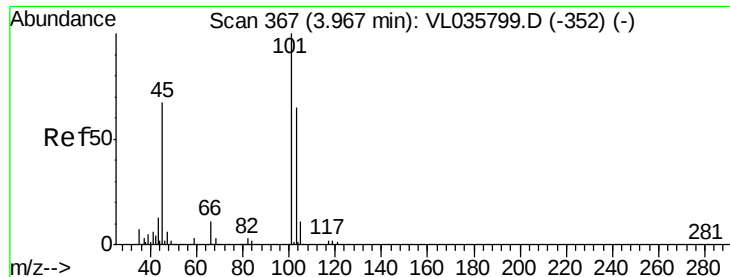
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#15
Acetone
Concen: 7.784 ppbv
RT: 3.82 min Scan# 320
Delta R.T. -0.03 min
Lab File: VL035980.D
Acq: 18 Nov 2020 19:26

Tgt Ion	43	58	Ratio	Lower	Upper
Resp: 881667	100	31.0		27.5	41.3





#19

Isopropyl Alcohol

Concen: 2.194 ppbv

RT: 3.94 min Scan# 360

Delta R.T. -0.02 min

Lab File: VL035980.D

Acq: 18 Nov 2020 19:26

Instrument :

MSVOA_L

ClientSampleId :

IA1

Tot Ion: 45 Resp: 152700

Ion Ratio Lower Upper

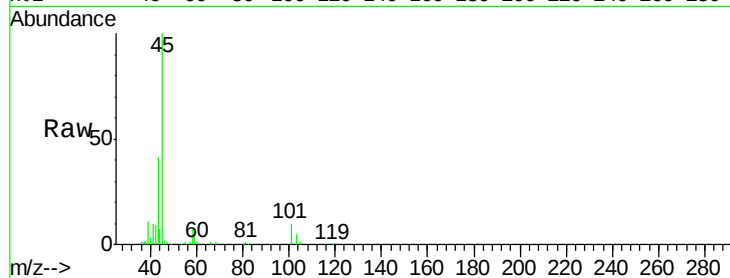
45 100

58 11.0 2.6 3.8#

Manual Integrations
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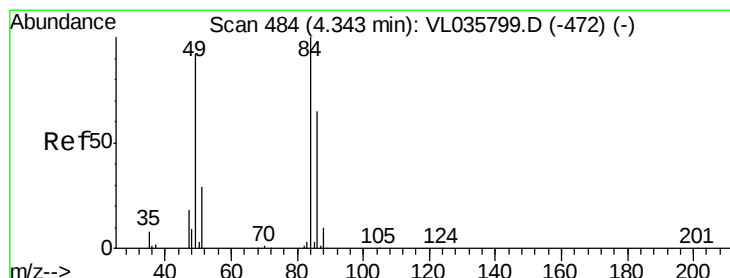
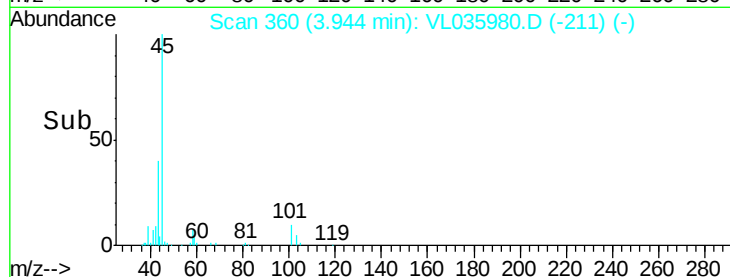
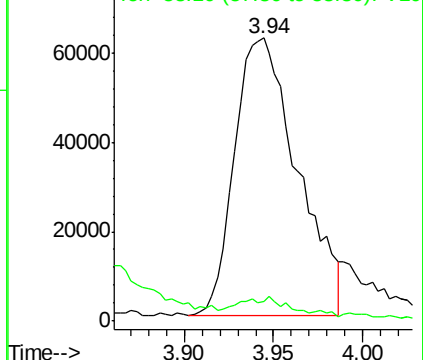
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Abundance Ion 45.10 (44.80 to 45.80): VL0

Ion 58.10 (57.80 to 58.80): VL0



#20

Methylene Chloride

Concen: 23.519 ppbv

RT: 4.31 min Scan# 473

Delta R.T. -0.04 min

Lab File: VL035980.D

Acq: 18 Nov 2020 19:26

Tgt Ion: 84 Resp: 1875359

Ion Ratio Lower Upper

84 100

49 92.2 73.8 110.8

51 29.6 23.0 34.4

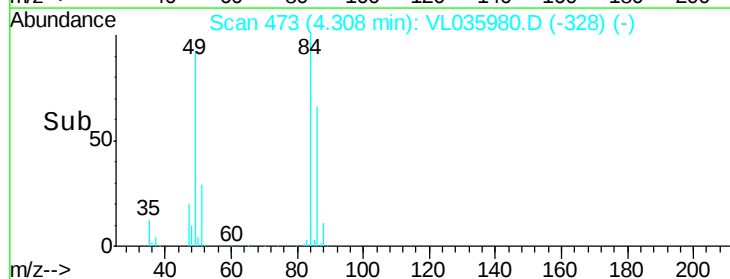
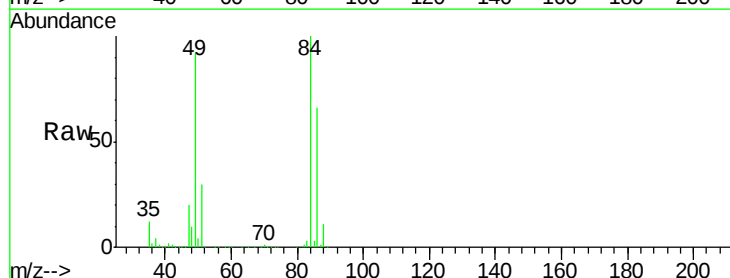
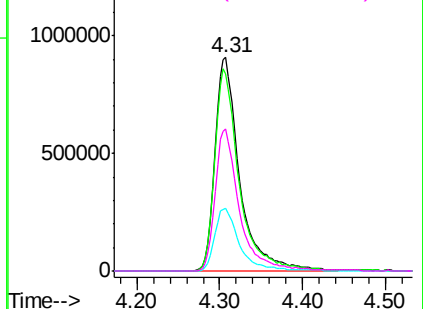
86 66.5 52.1 78.1

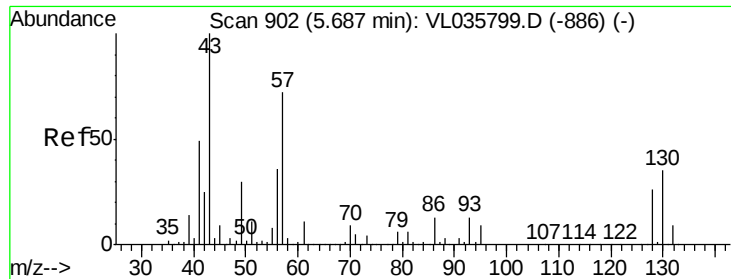
Abundance Ion 84.00 (83.70 to 84.70): VL0

Ion 49.10 (48.80 to 49.80): VL0

Ion 51.10 (50.80 to 51.80): VL0

Ion 86.00 (85.70 to 86.70): VL0





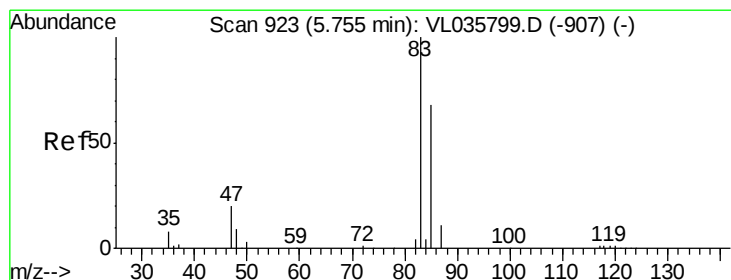
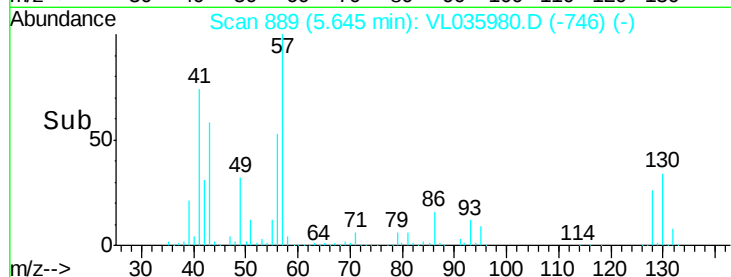
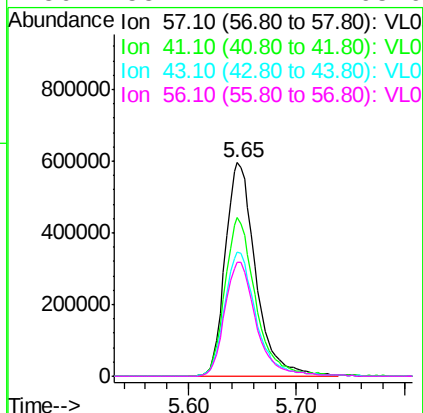
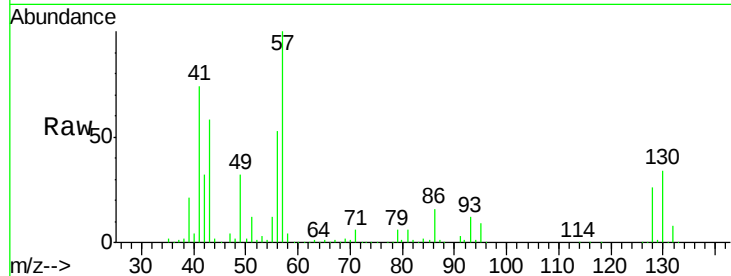
#26
Hexane
Concen: 9.506 ppbv
RT: 5.65 min Scan# 889
Delta R.T. -0.04 min
Lab File: VL035980.D
Acq: 18 Nov 2020 19:26

Instrument :
MSVOA_L
ClientSampled :
IA1

Tot Ion: 57 Resp: 1169846
Ion Ratio Lower Upper
57 100
41 75.6 58.9 88.3
43 60.4 150.2 225.2#
56 55.4 42.4 63.6

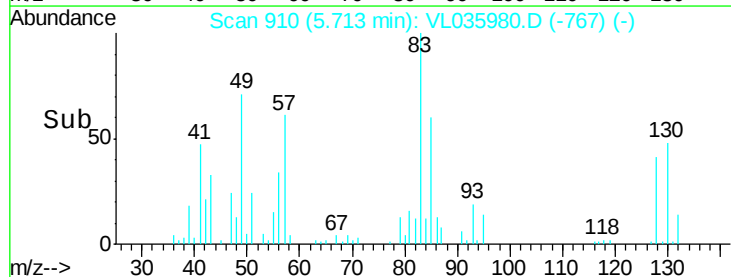
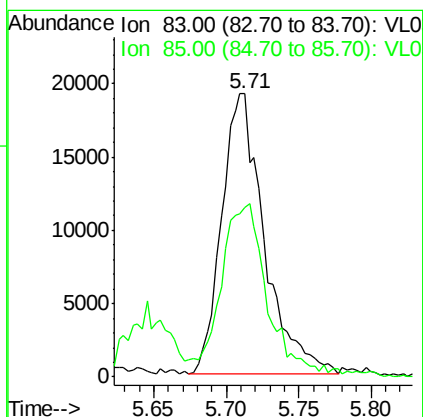
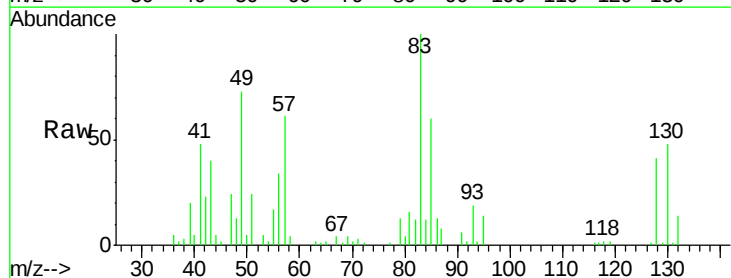
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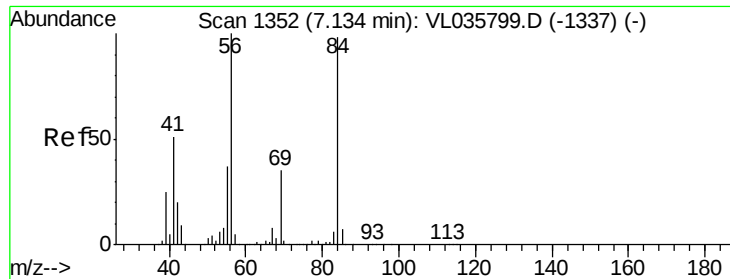
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#29
Chloroform
Concen: 0.161 ppbv
RT: 5.71 min Scan# 910
Delta R.T. -0.04 min
Lab File: VL035980.D
Acq: 18 Nov 2020 19:26

Tgt Ion: 83 Resp: 38939
Ion Ratio Lower Upper
83 100
85 57.8 54.6 81.8





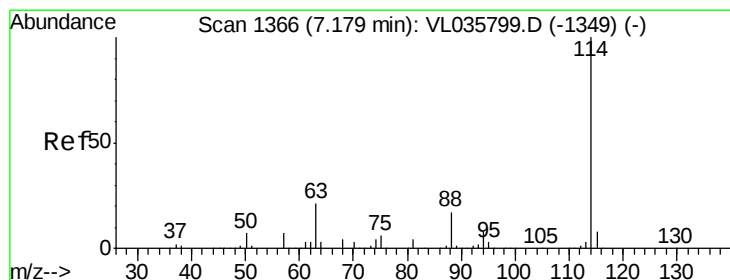
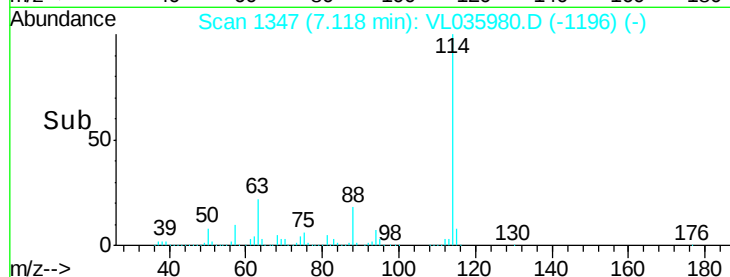
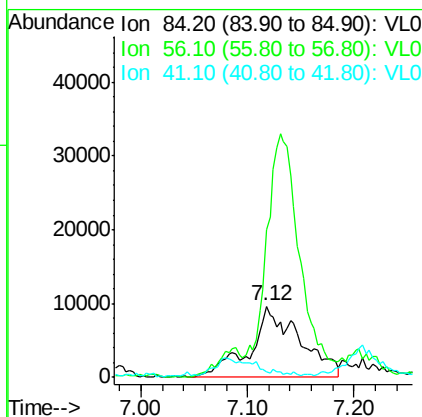
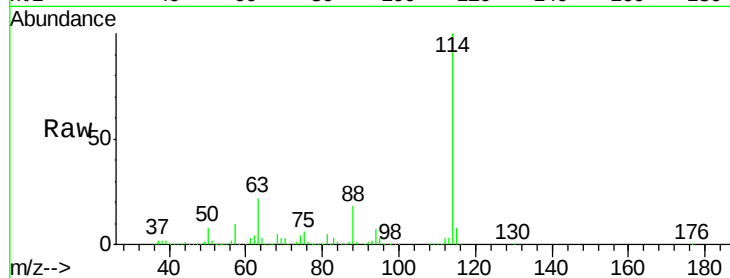
#30
Cvclohexane
Concen: 0.233 ppbv m
RT: 7.12 min Scan# 1347
Delta R.T. -0.02 min
Lab File: VL035980.D
Acq: 18 Nov 2020 19:26

Instrument :
MSVOA_L
ClientSampled :
IA1

Tot Ion	Ratio	Lower	Upper
84	100		
56	0.0	86.4	129.6#
41	21.9	42.1	63.1#

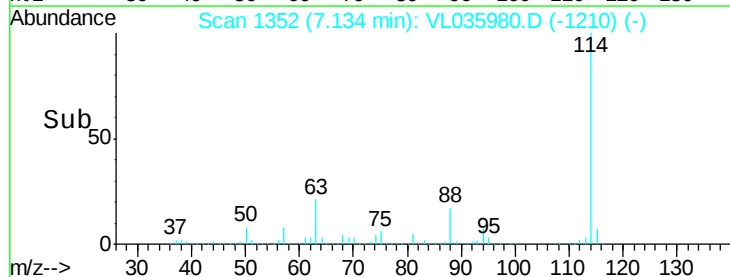
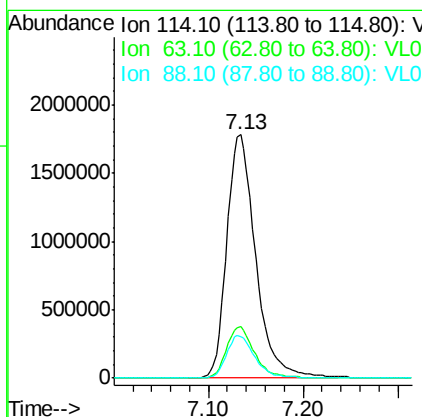
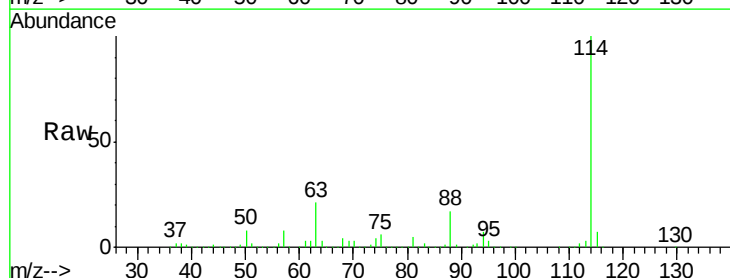
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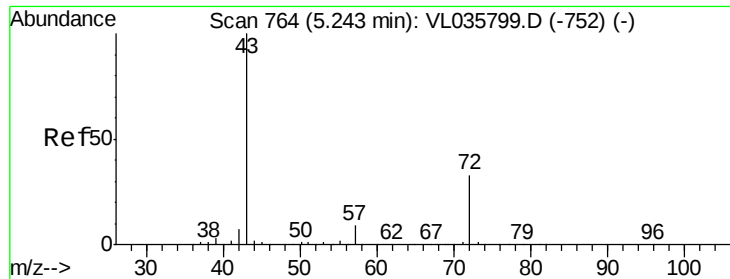
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#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 7.13 min Scan# 1352
Delta R.T. -0.04 min
Lab File: VL035980.D
Acq: 18 Nov 2020 19:26

Tgt Ion	Ratio	Lower	Upper
114	100		
63	20.7	16.1	24.1
88	17.3	13.7	20.5





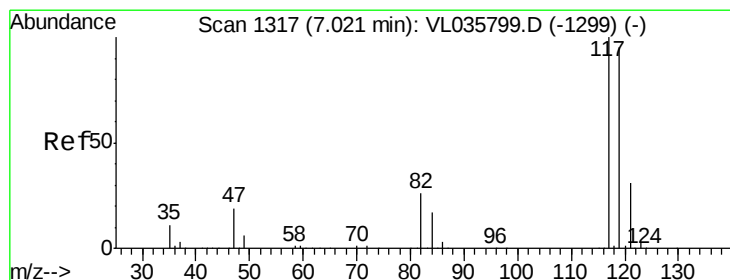
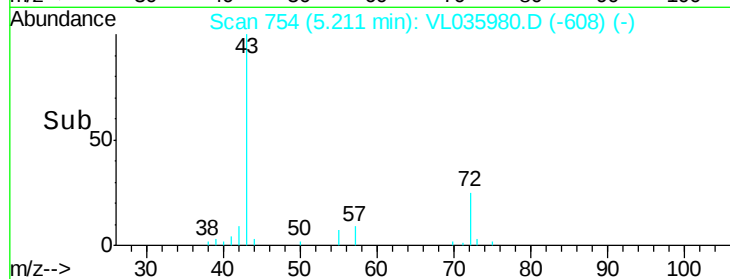
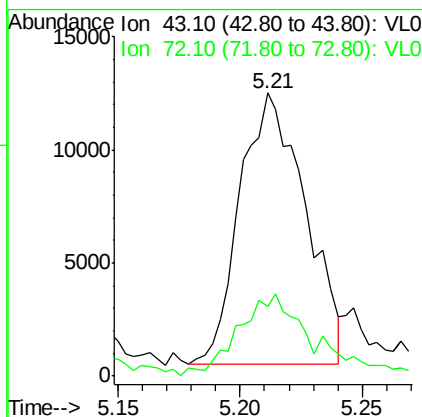
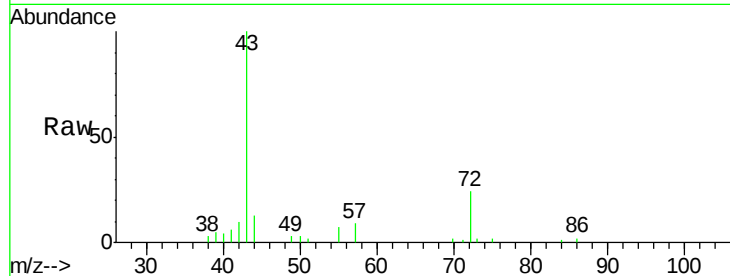
#34
2-Butanone
Concen: 0.182 ppbv
RT: 5.21 min Scan# 754
Delta R.T. -0.03 min
Lab File: VL035980.D
Acq: 18 Nov 2020 19:26

Instrument :
MSVOA_L
ClientSampled :
IA1

Tot Ion	Ion	Ratio	Lower	Upper
43	100			
72	35.9	26.5	39.7	

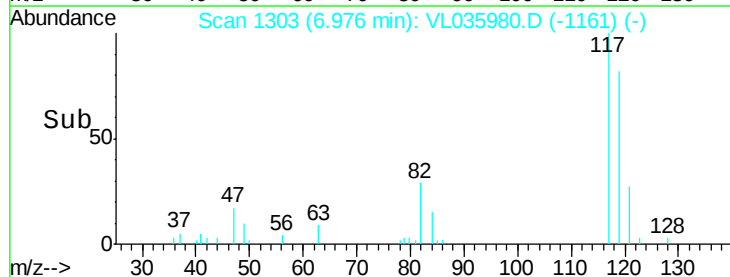
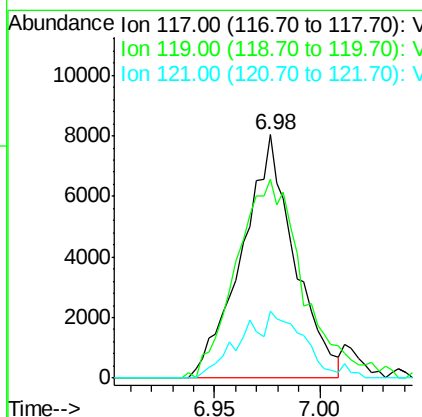
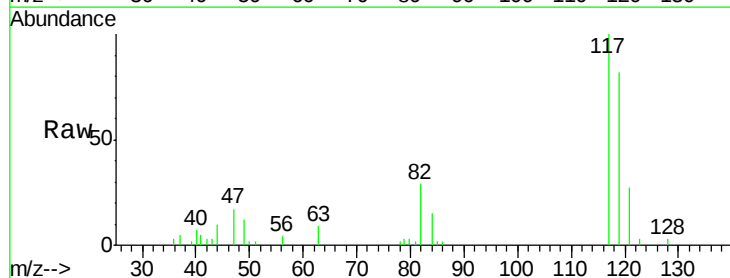
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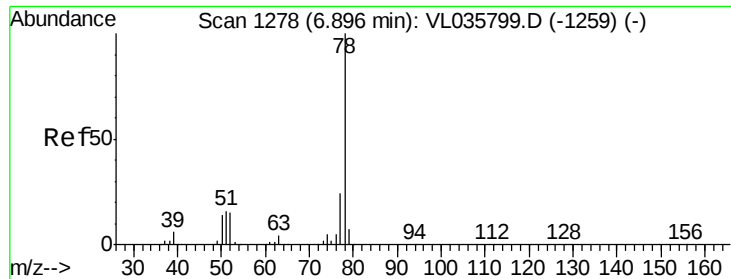
MMDadoda
11/20/2020 12:27:33 PM



#35
Carbon Tetrachloride
Concen: 0.069 ppbv
RT: 6.98 min Scan# 1303
Delta R.T. -0.04 min
Lab File: VL035980.D
Acq: 18 Nov 2020 19:26

Tgt Ion	Ion	Ratio	Lower	Upper
117	100			
119	79.7	75.6	113.4	
121	27.5	25.1	37.7	





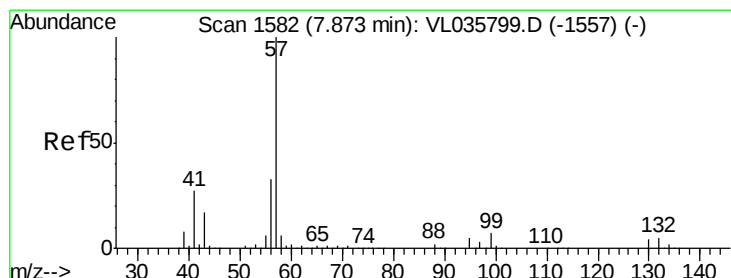
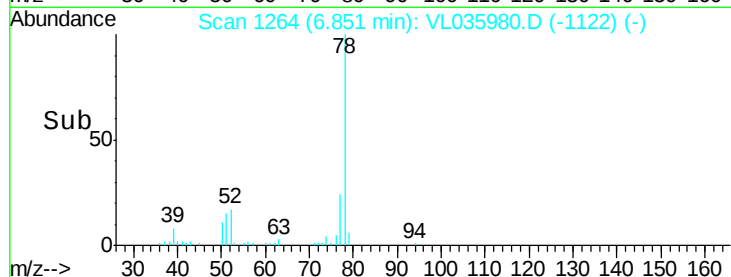
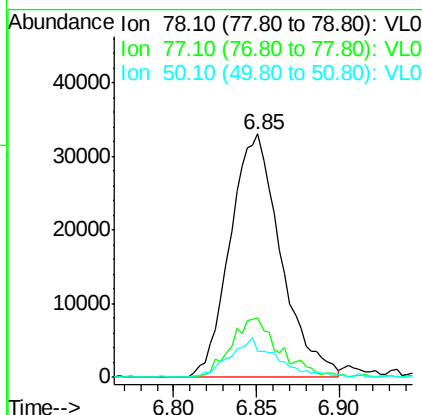
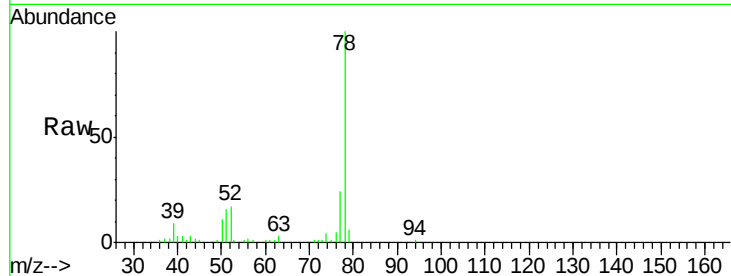
#36
Benzene
Concen: 0.250 ppbv
RT: 6.85 min Scan# 1264
Delta R.T. -0.04 min
Lab File: VL035980.D
Acq: 18 Nov 2020 19:26

Instrument :
MSVOA_L
ClientSampled :
IA1

Tot Ion	Ratio	Lower	Upper
78	100		
77	24.3	19.3	28.9
50	10.7	11.4	17.2#

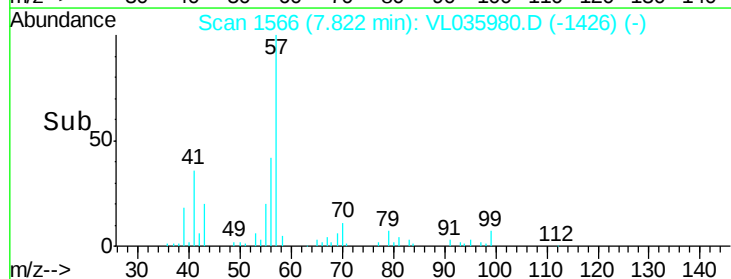
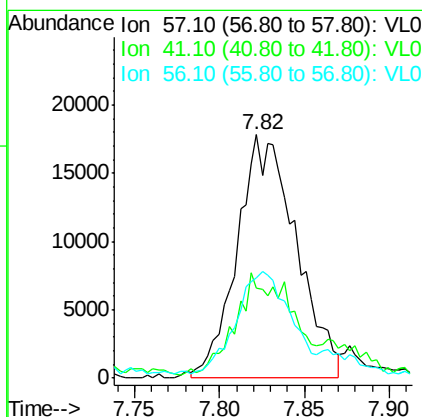
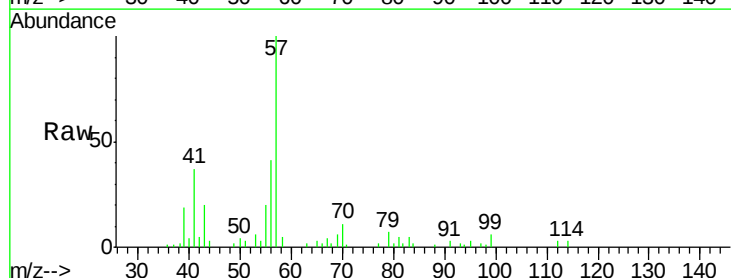
Manual Integrations
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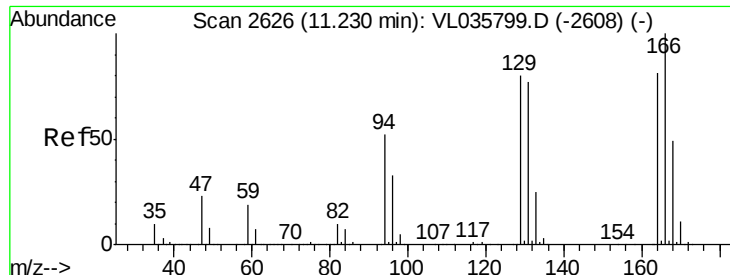
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11/20/2020 12:27:33 PM



#44
2,2,4-Trimethylpentane
Concen: 0.116 ppbv m
RT: 7.82 min Scan# 1566
Delta R.T. -0.05 min
Lab File: VL035980.D
Acq: 18 Nov 2020 19:26

Tgt Ion	Ratio	Lower	Upper
57	100		
41	0.0	21.0	31.4#
56	53.6	25.4	38.0#





#52

Tetrachloroethene

Concen: 0.117 ppbv m

RT: 11.18 min Scan# 2610

Delta R.T. -0.05 min

Lab File: VL035980.D

Acq: 18 Nov 2020 19:26

Instrument :

MSVOA_L

ClientSampled :

IA1

Tot Ion:164 Resp: 15598

Ion Ratio Lower Upper

164 100

166 87.7 99.3 148.9#

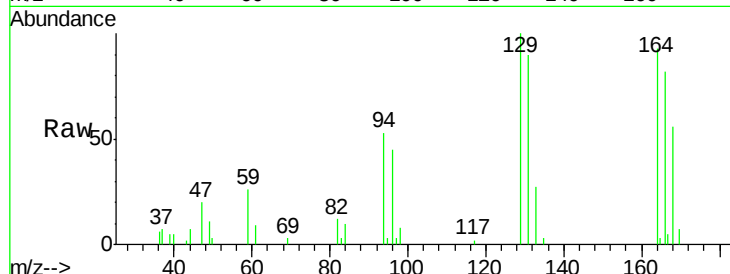
129 107.2 79.3 118.9

131 96.5 76.5 114.7

Manual Integrations
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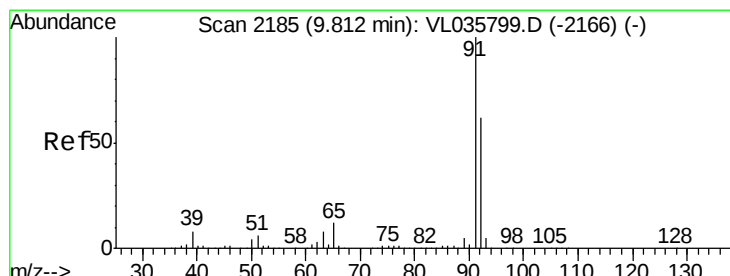
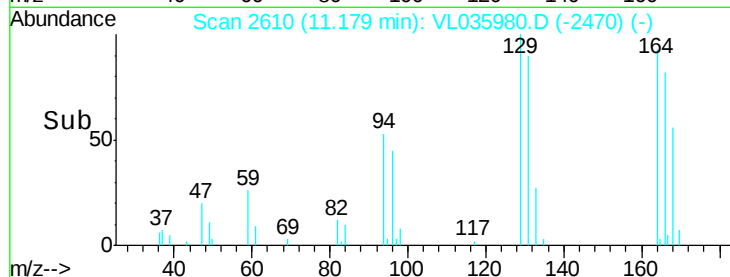
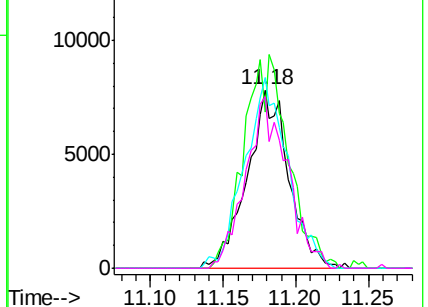


Abundance Ion 163.90 (163.60 to 164.60): V

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: 3.525 ppbv

RT: 9.76 min Scan# 2169

Delta R.T. -0.05 min

Lab File: VL035980.D

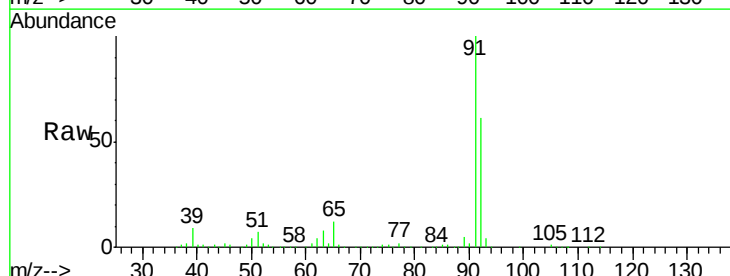
Acq: 18 Nov 2020 19:26

Tgt Ion: 91 Resp: 1195095

Ion Ratio Lower Upper

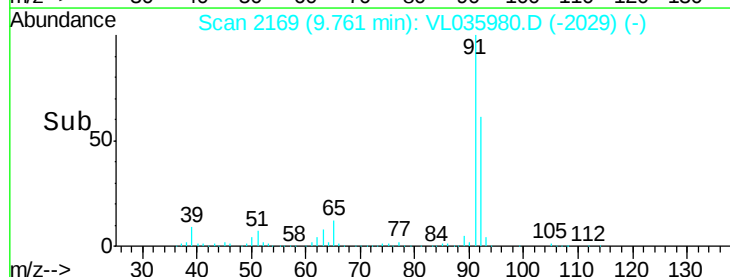
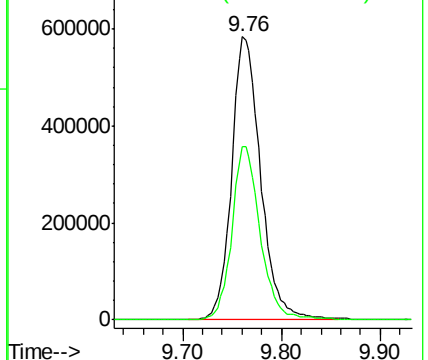
91 100

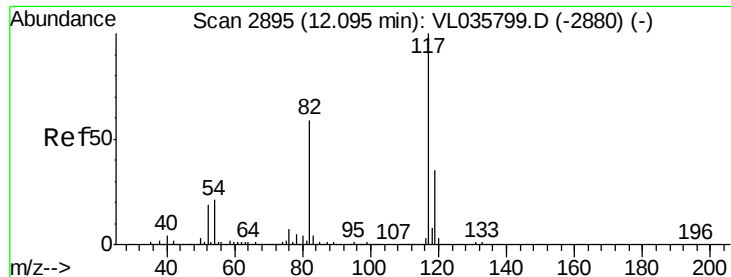
92 60.1 49.8 74.6



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 92.10 (91.80 to 92.80): VL0





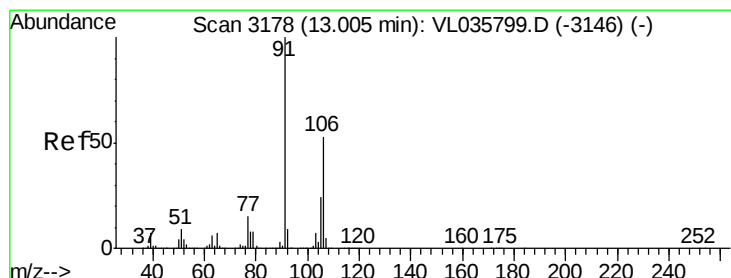
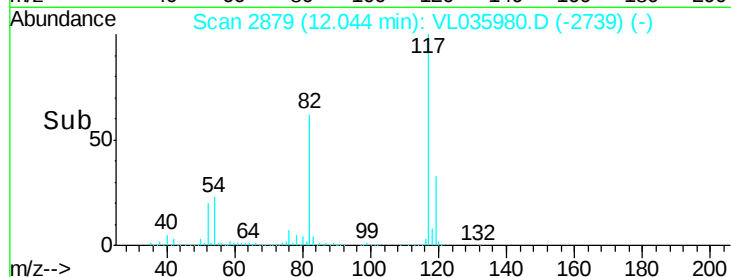
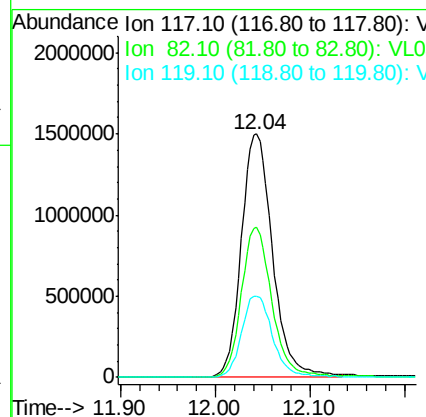
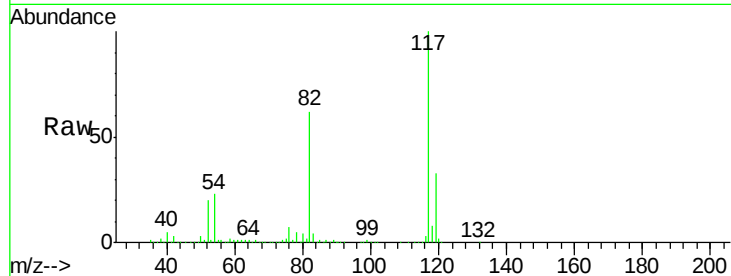
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 12.04 min Scan# 2879
Delta R.T. -0.05 min
Lab File: VL035980.D
Acq: 18 Nov 2020 19:26

Instrument :
MSVOA_L
ClientSampled :
IA1

Tot Ion	Ratio	Lower	Upper
117	100		
82	61.5	50.6	76.0
119	33.8	52.6	78.8

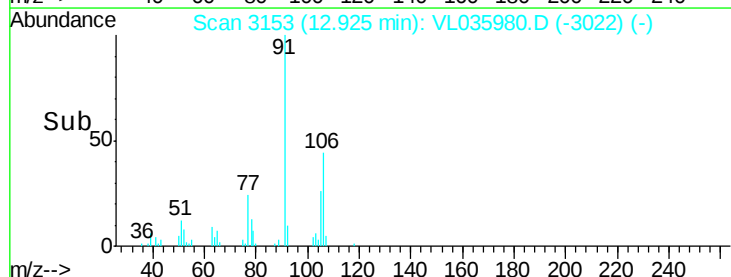
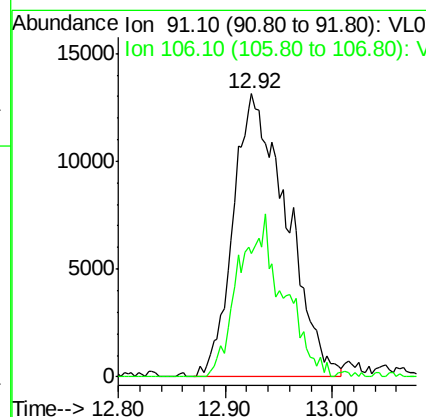
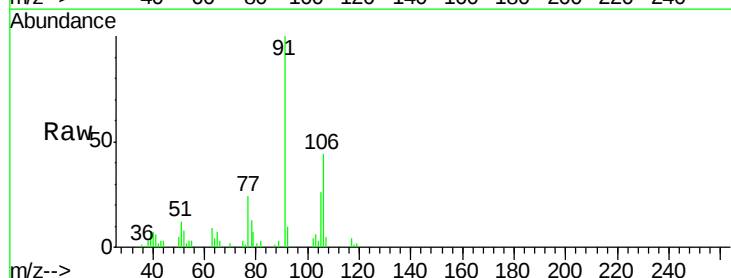
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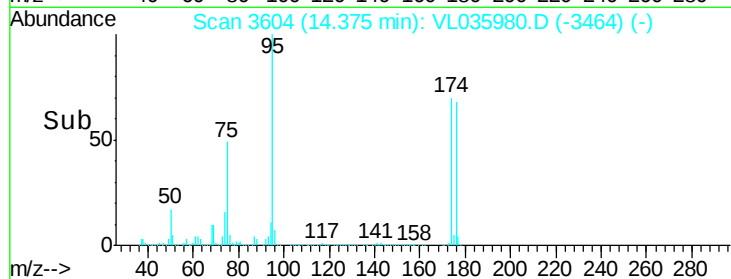
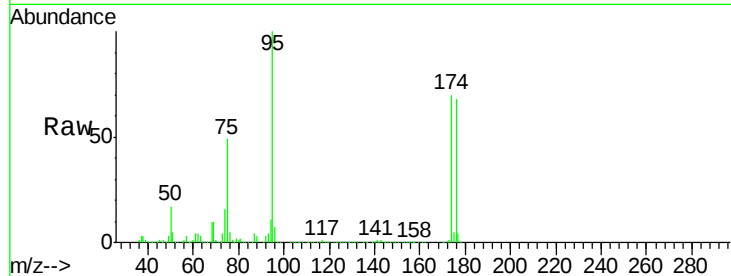
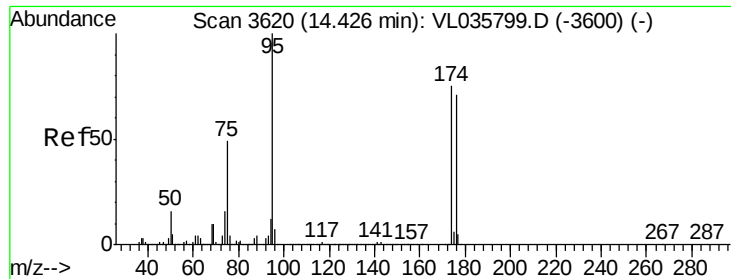
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11/20/2020 12:27:33 PM



#59
m/p-Xylene
Concen: 0.128 ppbv m
RT: 12.92 min Scan# 3153
Delta R.T. -0.08 min
Lab File: VL035980.D
Acq: 18 Nov 2020 19:26

Tgt Ion	Ratio	Lower	Upper
91	100		
106	48.1	39.5	59.3





#68

1-Bromo-4-Fluorobenzene

Concen: 10.378 ppbv

RT: 14.37 min Scan# 3604

Delta R.T. -0.05 min

Lab File: VL035980.D

Acq: 18 Nov 2020 19:26

Tot Ion: 95 Resp: 2543466

Ion Ratio Lower Upper

95 100

174 72.6 59.8 89.6

175 5.0 4.3 6.5

Instrument :

MSVOA_L

ClientSampleId :

IA1

Manual Integrations

APPROVED

MMDadoda

11/20/2020 12:27:33 PM

