

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL042821\
 Data File : VL036879.D
 Acq On : 28 Apr 2021 14:42
 Operator : SY/AP
 Sample : M2201-01
 Misc : 400mL/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 IA1

Manual Integrations
 APPROVED

MMDadoda
 4/29/2021 5:53:44 PM

Quant Time: Apr 29 12:01:49 2021
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL042721AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Tue Apr 29 2021
 QLast Update : Tue Apr 27 16:56:35 2021
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.68	49	1531876	10.00	ppbv	0.02
33) 1,4-Difluorobenzene	7.19	114	3539671	10.00	ppbv	0.02
55) Chlorobenzene-d5	12.11	117	3202898	10.00	ppbv	0.03

System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	14.44	95	2532373	9.85	ppbv	0.03
Spiked Amount	10.000	Range	65 - 135	Recovery	=	98.50%

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.06	85	51775	0.215	ppbv	91
3) Chlorodifluoromethane	3.00	51	81036	0.290	ppbv #	88
4) Chloromethane	3.15	50	51206	0.558	ppbv #	84
9) Propene	3.03	41	2580093m	30.344	ppbv	
11) Trichlorofluoromethane	3.96	101	42021	0.195	ppbv	89
13) Ethanol	3.73	45	77375945	7135.761	ppbv #	34
15) Acetone	3.86	43	4101050	28.404	ppbv	99
17) tert-Butyl alcohol	4.40	59	524915m	4.479	ppbv	
20) Methylene Chloride	4.36	84	393110	5.694	ppbv	94
26) Hexane	5.70	57	284264	1.723	ppbv #	45
29) Chloroform	5.76	83	41293	0.161	ppbv	99
30) Cyclohexane	7.18	84	12773m	0.098	ppbv	
34) 2-Butanone	5.27	43	92180m	0.594	ppbv	
35) Carbon Tetrachloride	7.03	117	16259m	0.068	ppbv	
36) Benzene	6.91	78	52835	0.177	ppbv #	89
52) Tetrachloroethene	11.24	164	3372m	0.033	ppbv	
53) Toluene	9.83	91	465173	1.491	ppbv	100

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

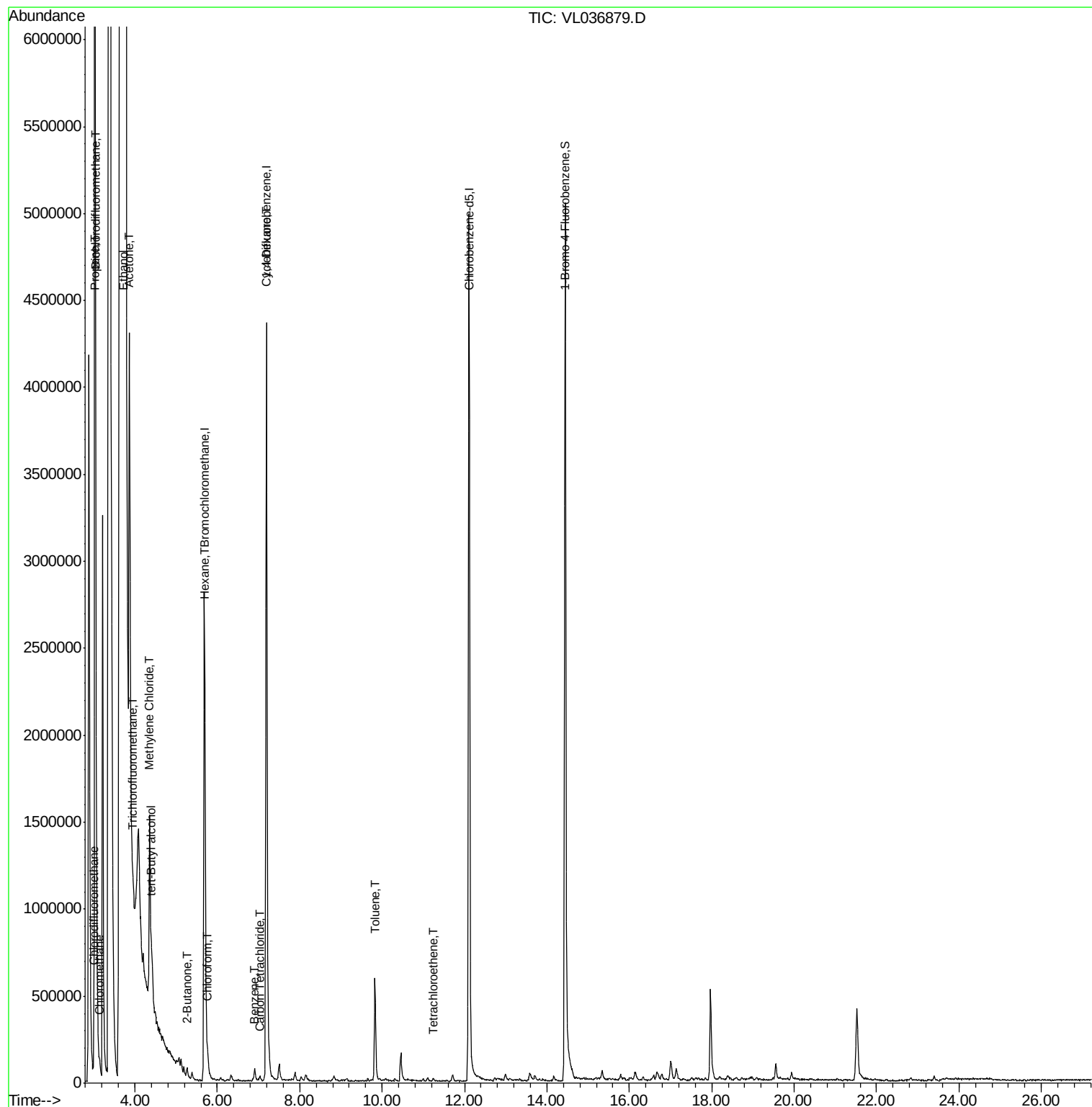
Data Path : Z:\V0ASRV\HPCHEM1\MSVOA L\DATA\VL042821\
Data File : VL036879.D
Acq On : 28 Apr 2021 14:42
Operator : SY/AP
Sample : M2201-01
Misc : 400mL/MSVOA L
ALS Vial : 1 Sample Multiplier: 1

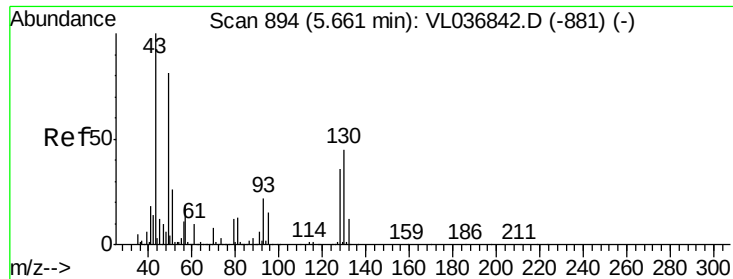
Instrument :
MSVOA_L
ClientSampleId :
IA1

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4/29/2021 5:53:44 PM

Quant Time: Apr 29 12:01:49 2021
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA L\METHODS\VL042721AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Tue Apr
QLast Update : Tue Apr 27 16:56:35 2021
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.68 min Scan# 901

Delta R.T. 0.02 min

Lab File: VL036879.D

Acq: 28 Apr 2021 14:42

Instrument :

MSVOA_L

ClientSampled :

IA1

Tot Ion: 49 Resp: 1531876

Ion Ratio Lower Upper

49 100

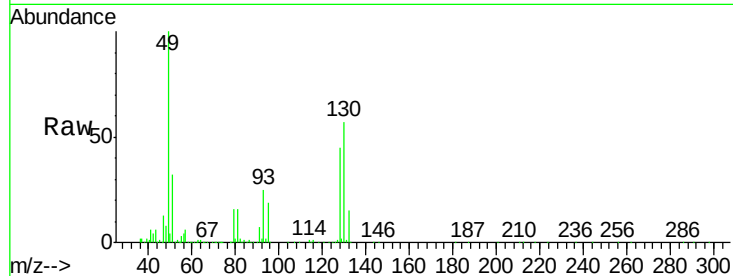
128 47.0 24.4 73.2

130 59.3 30.3 90.8

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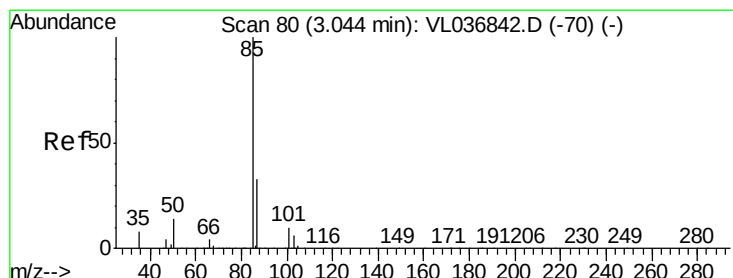
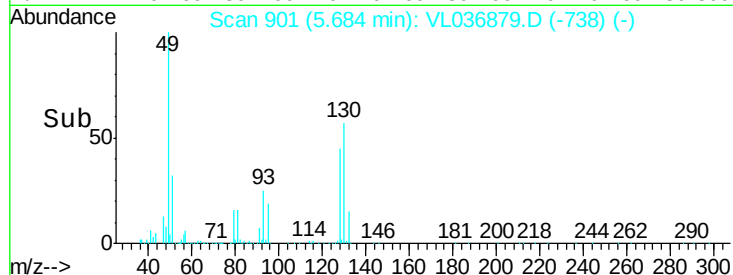
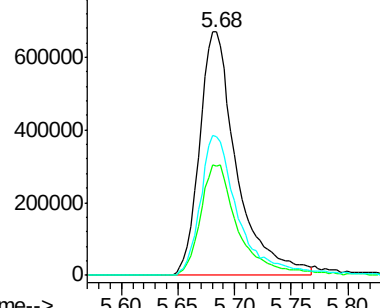
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Abundance Ion 49.10 (48.80 to 49.80): VL0

Ion 128.00 (127.70 to 128.70): VL0

Ion 130.00 (129.70 to 130.70): VL0



#2

Dichlorodifluoromethane

Concen: 0.215 ppbv

RT: 3.06 min Scan# 84

Delta R.T. 0.01 min

Lab File: VL036879.D

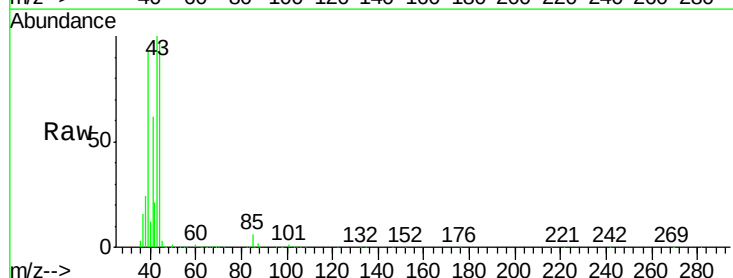
Acq: 28 Apr 2021 14:42

Tgt Ion: 85 Resp: 51775

Ion Ratio Lower Upper

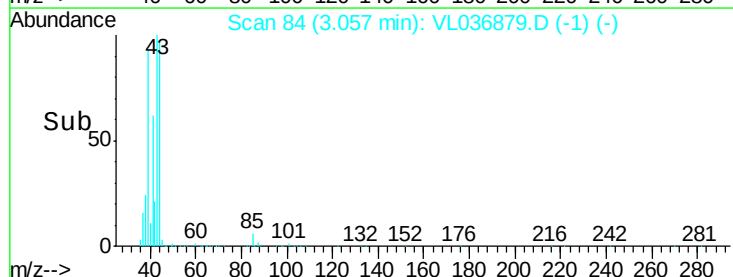
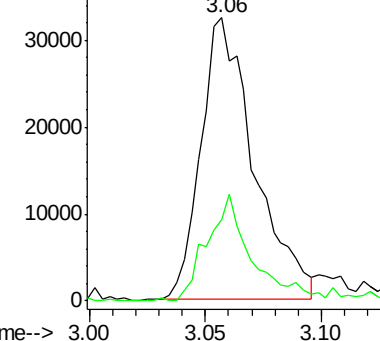
85 100

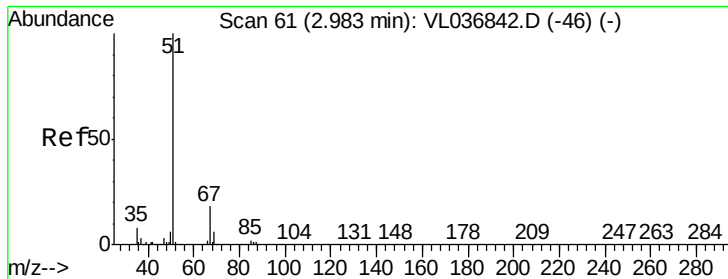
87 27.6 26.2 39.2



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0





#3

Chlorodifluoromethane

Concen: 0.290 ppbv

RT: 3.00 min Scan# 66

Delta R.T. 0.02 min

Lab File: VL036879.D

Acq: 28 Apr 2021 14:42

Instrument :

MSVOA_L

ClientSampled :

IA1

Tot Ion: 51 Resp: 81036

Ion Ratio Lower Upper

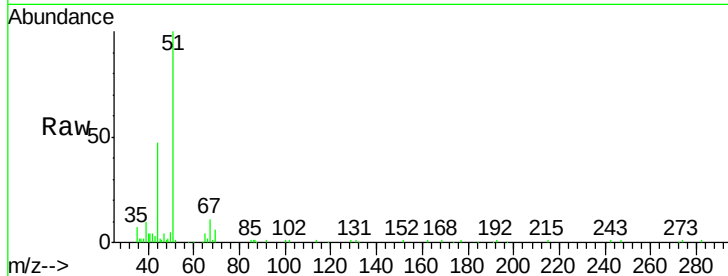
51 100

67 13.0 14.8 22.2#

Manual Integrations
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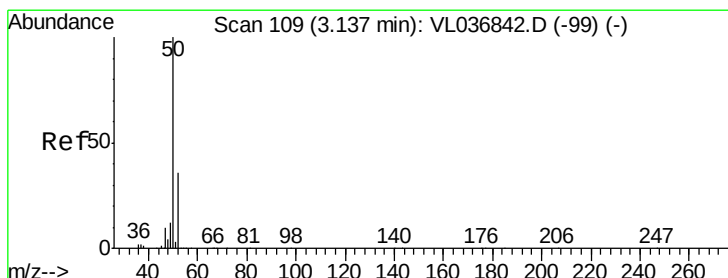
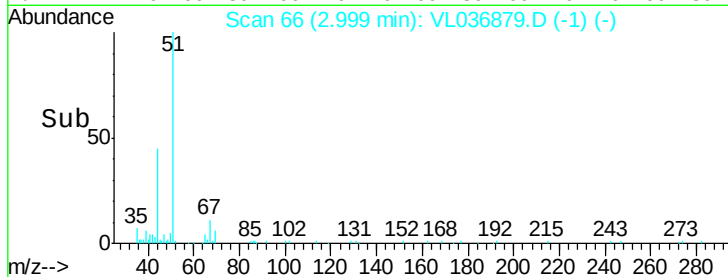
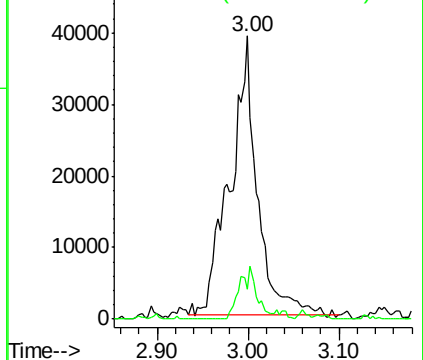
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Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0



#4

Chloromethane

Concen: 0.558 ppbv

RT: 3.15 min Scan# 113

Delta R.T. 0.01 min

Lab File: VL036879.D

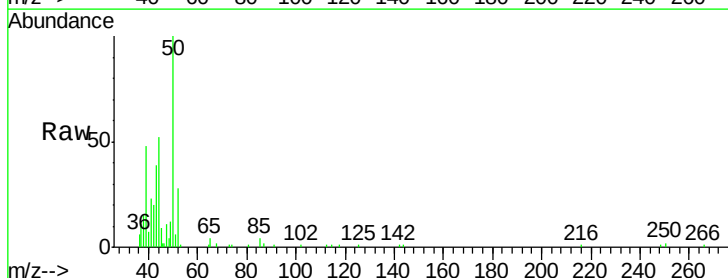
Acq: 28 Apr 2021 14:42

Tgt Ion: 50 Resp: 51206

Ion Ratio Lower Upper

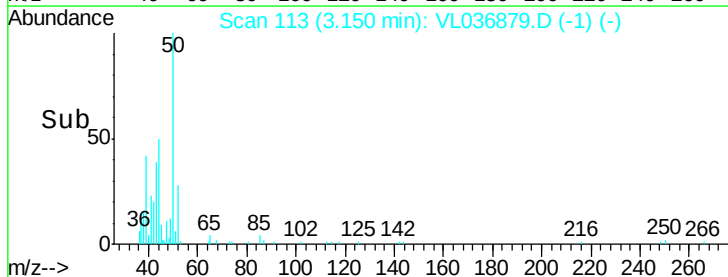
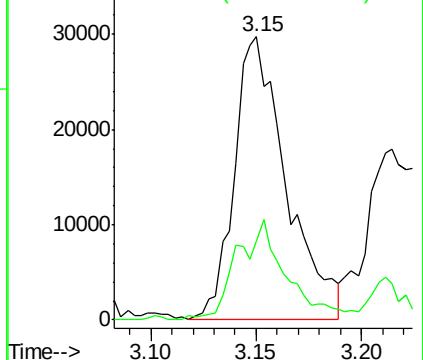
50 100

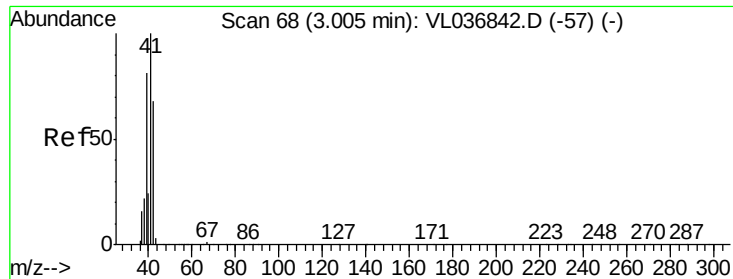
52 26.1 28.5 42.7#



Abundance Ion 50.10 (49.80 to 50.80): VL0

Ion 52.10 (51.80 to 52.80): VL0





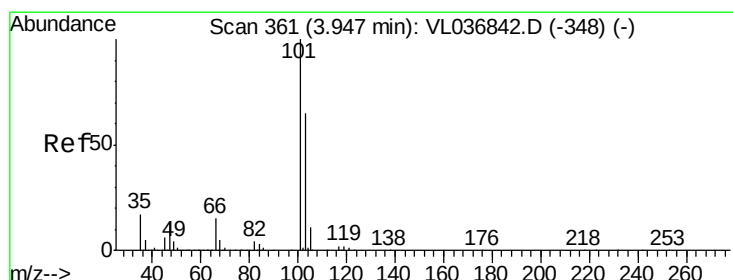
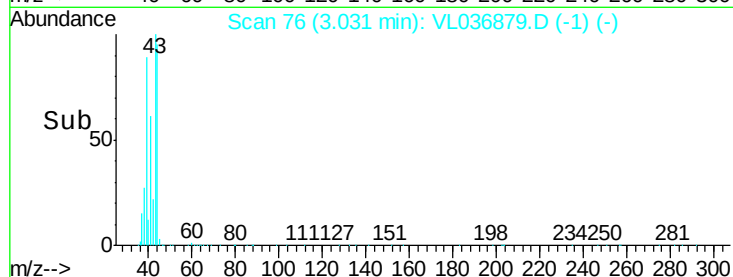
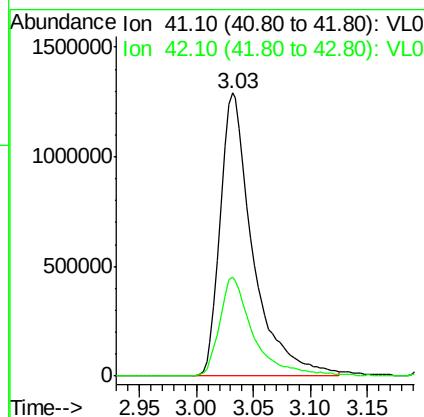
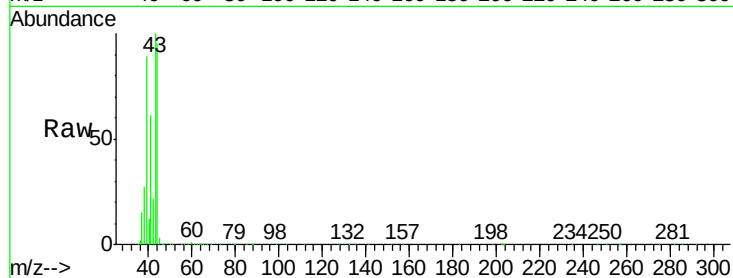
#9
 Propene
 Concen: 30.344 ppbv m
 RT: 3.03 min Scan# 76
 Delta R.T. 0.03 min
 Lab File: VL036879.D
 Acq: 28 Apr 2021 14:42

Instrument :
 MSVOA_L
 ClientSampled :
 IA1

Tot Ion: 41 Resp: 2580093
 Ion Ratio Lower Upper
 41 100
 42 29.6 56.0 84.0#

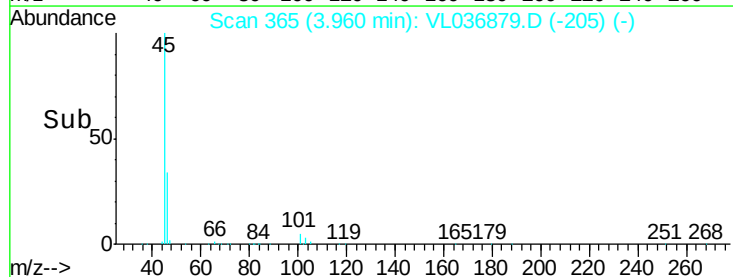
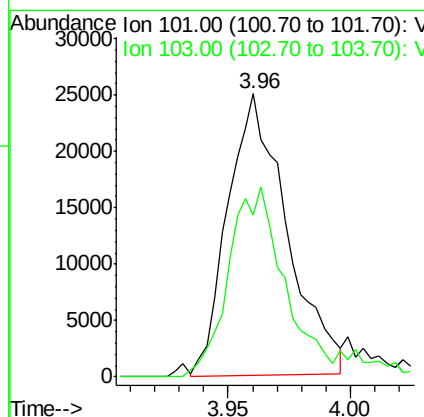
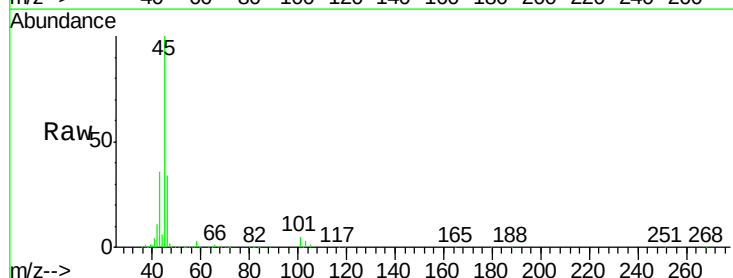
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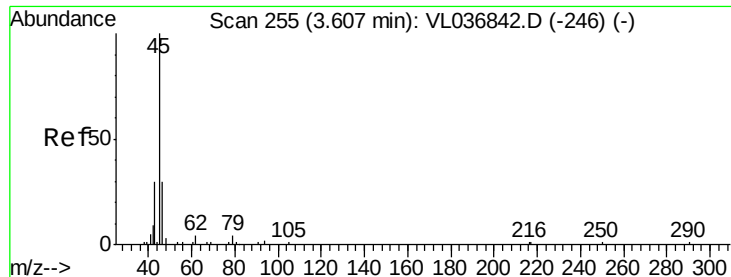
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#11
 Trichlorofluoromethane
 Concen: 0.195 ppbv
 RT: 3.96 min Scan# 365
 Delta R.T. 0.01 min
 Lab File: VL036879.D
 Acq: 28 Apr 2021 14:42

Tgt Ion: 101 Resp: 42021
 Ion Ratio Lower Upper
 101 100
 103 55.6 51.6 77.4





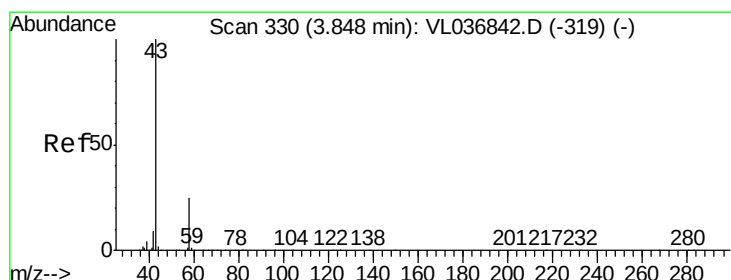
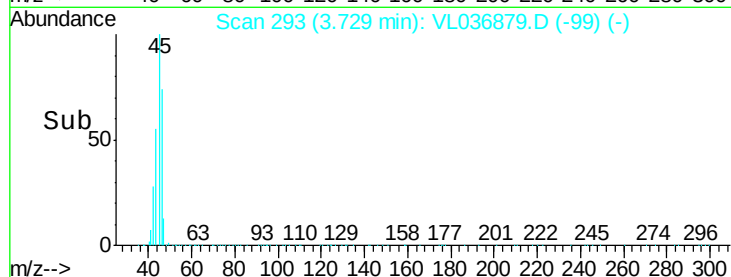
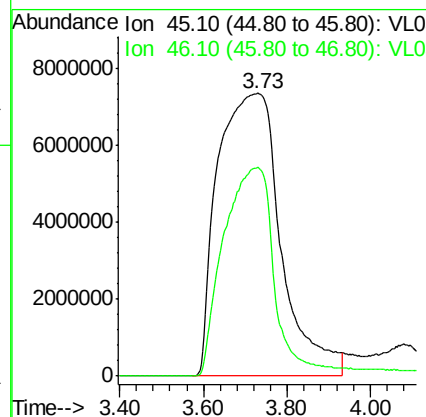
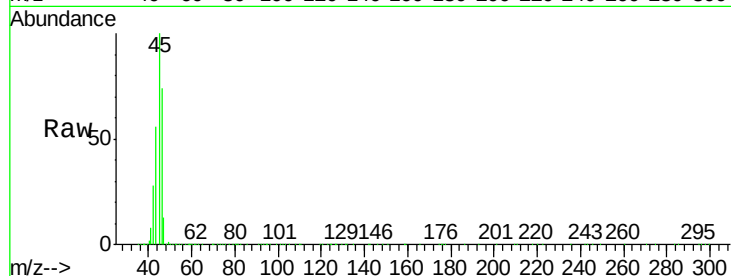
#13
Ethanol
Concen: 7135.761 ppbv
RT: 3.73 min Scan# 293
Delta R.T. 0.12 min
Lab File: VL036879.D
Acq: 28 Apr 2021 14:42

Instrument :
MSVOA_L
ClientSampleId :
IA1

Tot Ion: 45 Resp: 77375945
Ion Ratio Lower Upper
45 100
46 0.0 16.8 67.4#

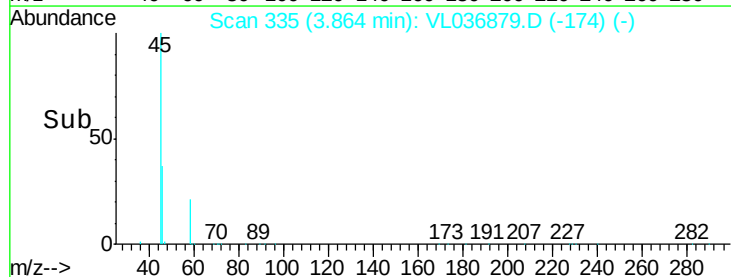
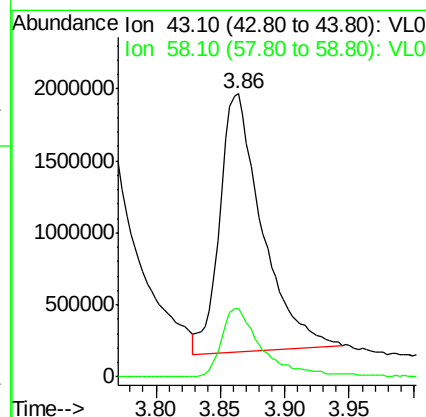
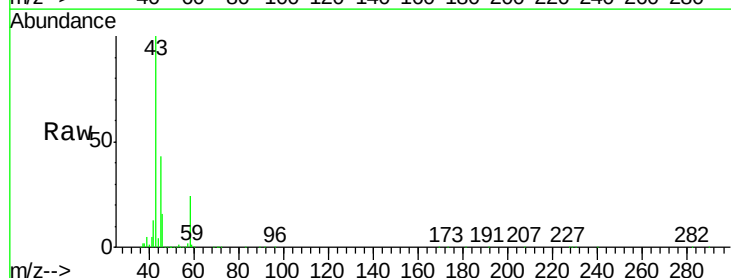
Manual Integrations
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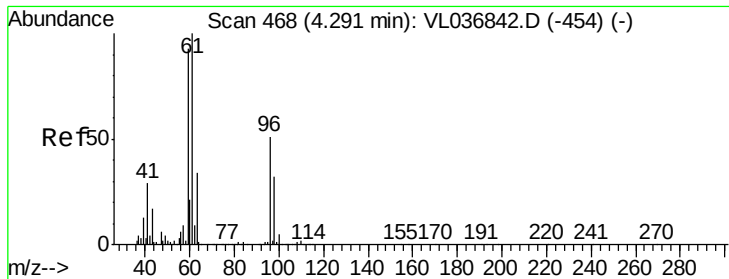
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#15
Acetone
Concen: 28.404 ppbv
RT: 3.86 min Scan# 335
Delta R.T. 0.02 min
Lab File: VL036879.D
Acq: 28 Apr 2021 14:42

Tgt Ion: 43 Resp: 4101050
Ion Ratio Lower Upper
43 100
58 26.4 21.7 32.5





#17

tert-Butyl alcohol

Concen: 4.479 ppbv

RT: 4.40 min Scan# 503

Delta R.T. 0.11 min

Lab File: VL036879.D

Acq: 28 Apr 2021 14:42

Instrument :

MSVOA_L

ClientSampled :

IA1

Tot Ion: 59 Resp: 524915

Ion Ratio Lower Upper

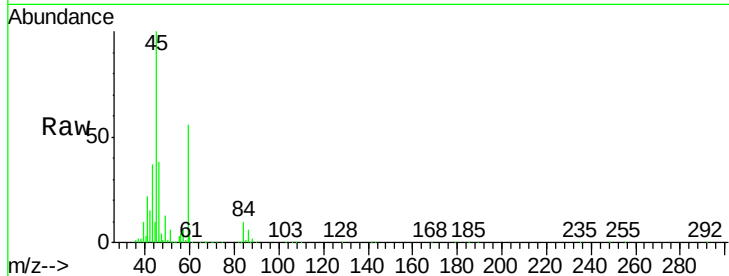
59 100

57 0.0 8.3 12.5#

Manual Integrations
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Abundance Ion 59.10 (58.80 to 59.80): VL0

Ion 57.10 (56.80 to 57.80): VL0

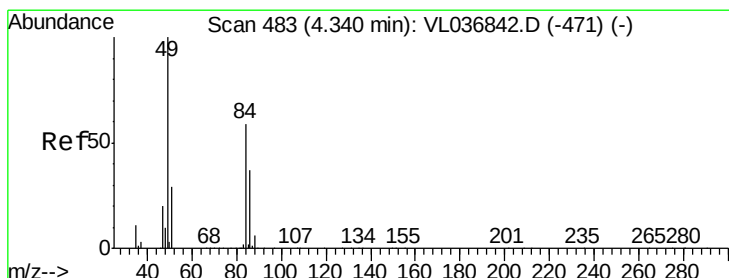
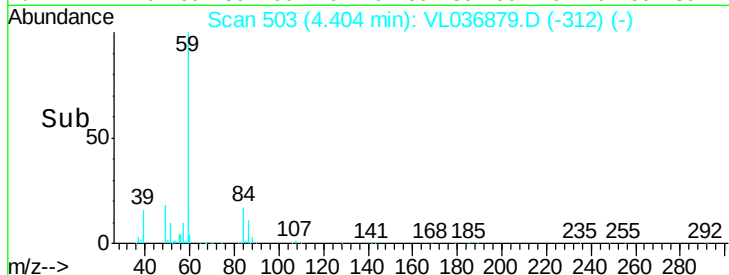
4.40

100000

50000

0

Time--> 4.20 4.30 4.40 4.50 4.60



#20

Methylene Chloride

Concen: 5.694 ppbv

RT: 4.36 min Scan# 488

Delta R.T. 0.02 min

Lab File: VL036879.D

Acq: 28 Apr 2021 14:42

Tgt Ion: 84 Resp: 393110

Ion Ratio Lower Upper

84 100

49 157.4 135.4 203.0

51 48.2 39.3 58.9

86 60.8 50.2 75.2

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

500000

400000

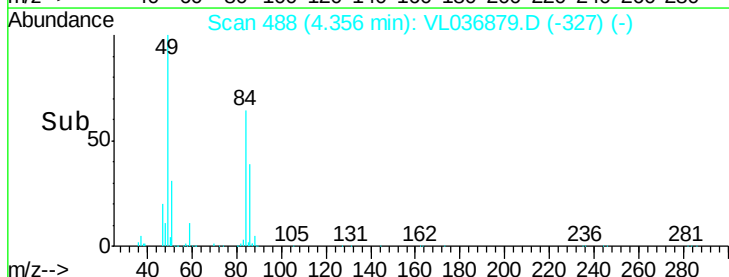
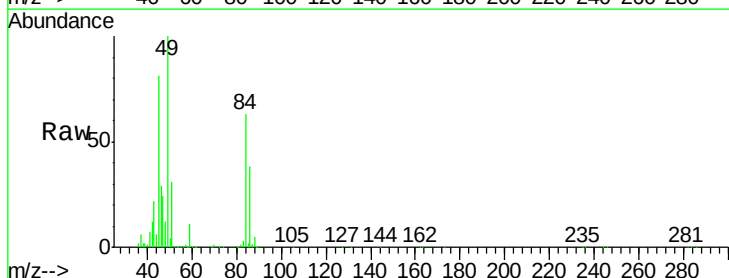
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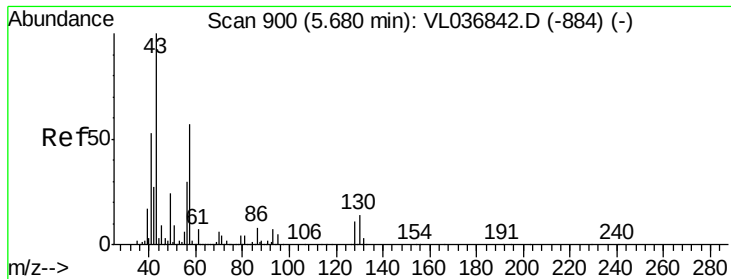
200000

100000

0

Time--> 4.30 4.35 4.40





#26

Hexane

Concen: 1.723 ppbv

RT: 5.70 min Scan# 907

Delta R.T. 0.02 min

Lab File: VL036879.D

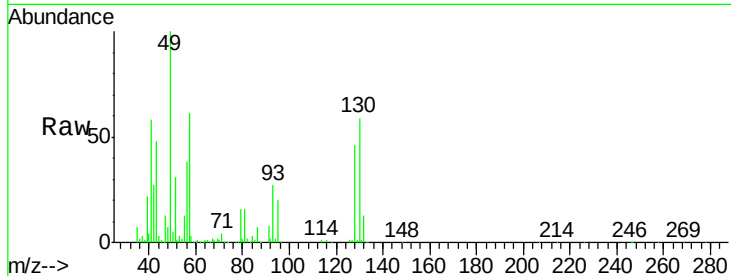
Acq: 28 Apr 2021 14:42

Instrument :

MSVOA_L

ClientSampled :

IA1



Tot Ion: 57 Resp: 284264

Ion Ratio Lower Upper

57 100

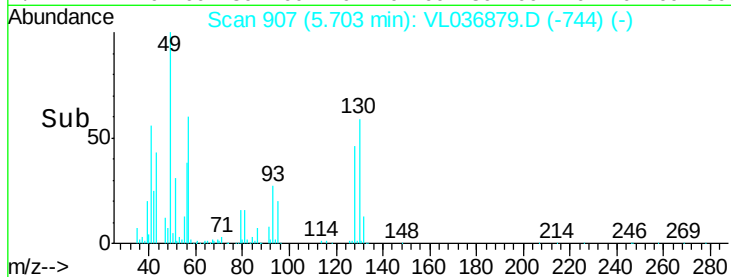
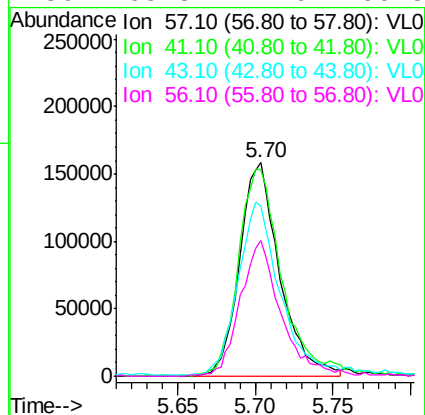
41 108.1 77.7 116.5

43 88.1 180.5 270.7#

56 65.3 44.6 66.8

Manual Integrations
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#29

Chloroform

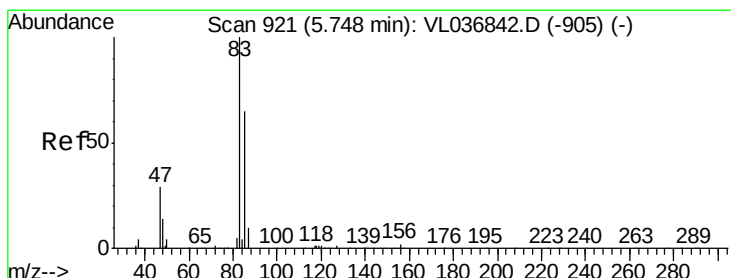
Concen: 0.161 ppbv

RT: 5.76 min Scan# 926

Delta R.T. 0.02 min

Lab File: VL036879.D

Acq: 28 Apr 2021 14:42

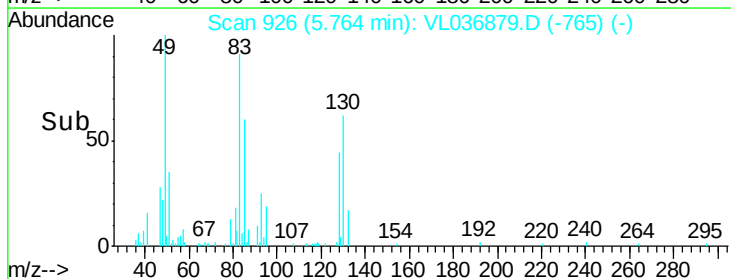
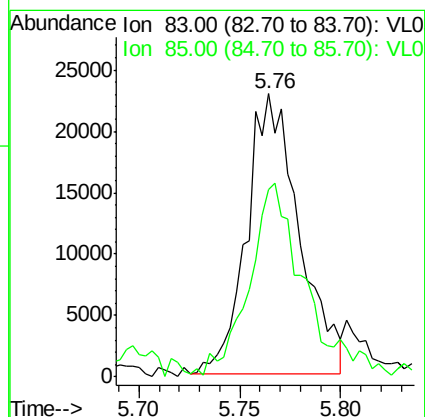
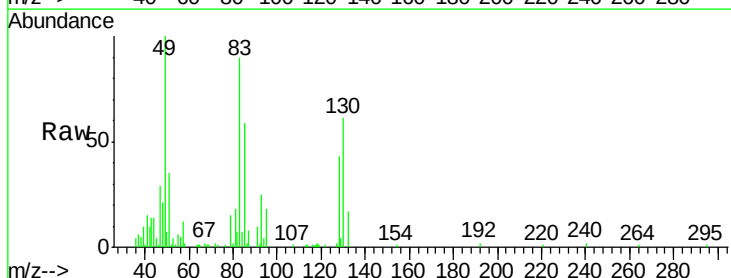


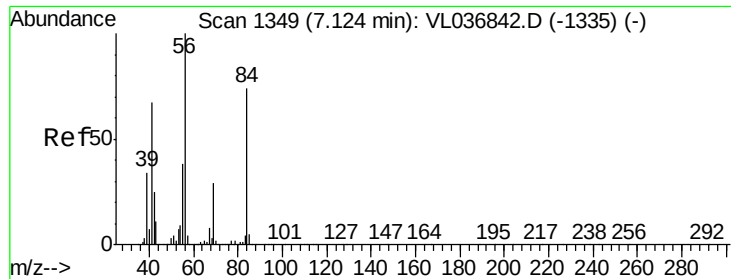
Tgt Ion: 83 Resp: 41293

Ion Ratio Lower Upper

83 100

85 65.9 52.2 78.4





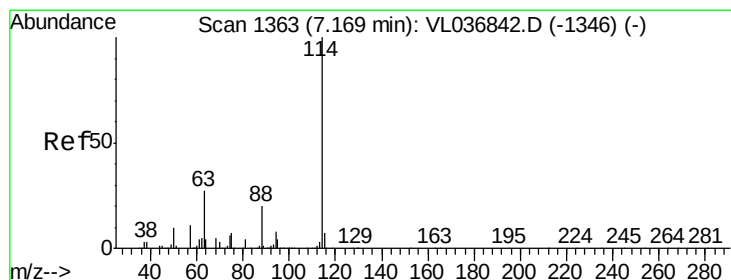
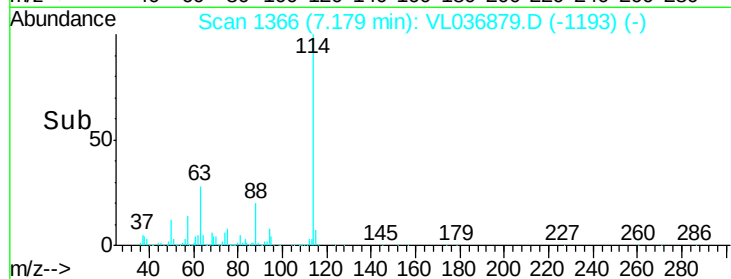
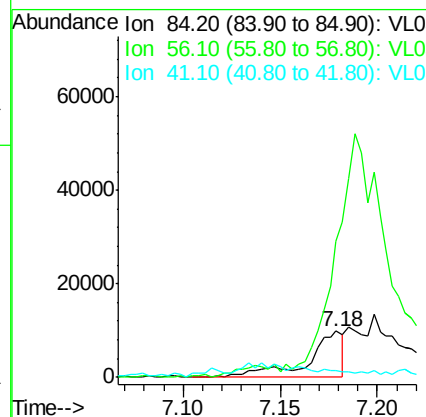
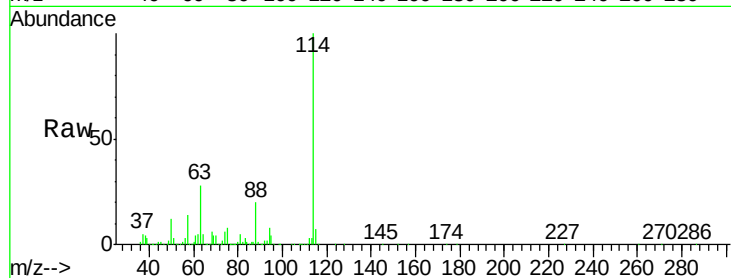
#30
Cvclohexane
Concen: 0.098 ppbv m
RT: 7.18 min Scan# 1366
Delta R.T. 0.05 min
Lab File: VL036879.D
Acq: 28 Apr 2021 14:42

Instrument :
MSVOA_L
ClientSampleId :
IA1

Tot Ion	Ratio	Lower	Upper
84	100		
56	0.0	115.8	173.6#
41	22.2	74.6	111.8#

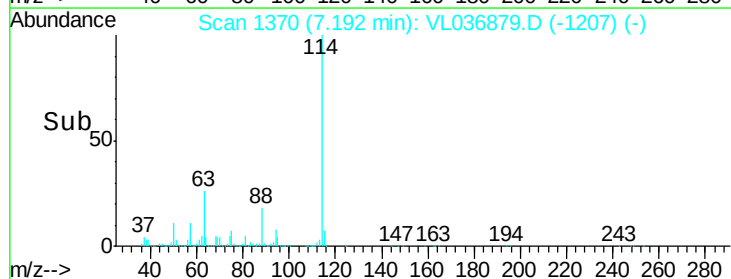
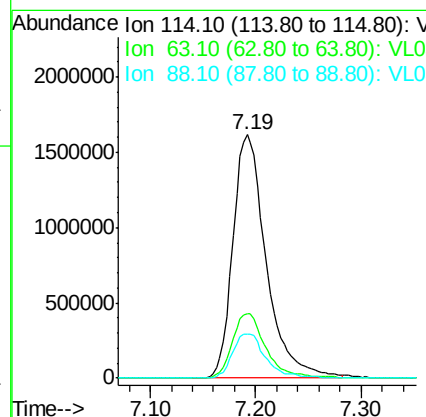
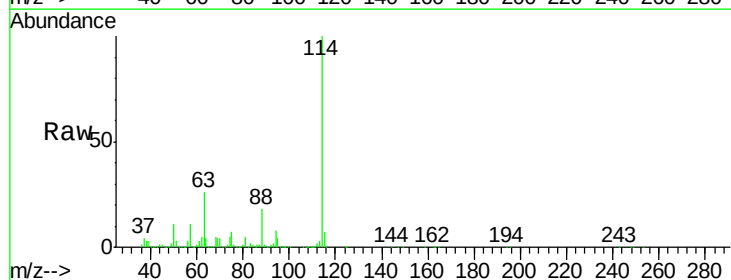
Manual Integrations
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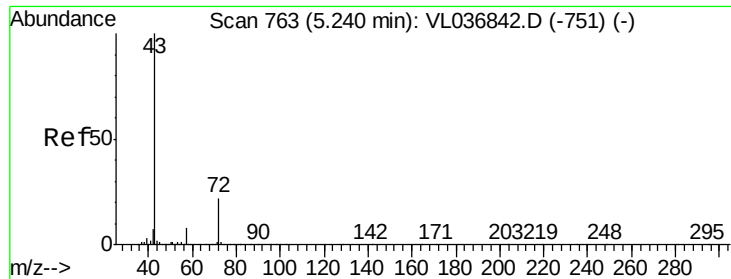
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#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 7.19 min Scan# 1370
Delta R.T. 0.02 min
Lab File: VL036879.D
Acq: 28 Apr 2021 14:42

Tgt Ion	Ratio	Lower	Upper
114	100		
63	26.8	21.9	32.9
88	18.5	15.1	22.7





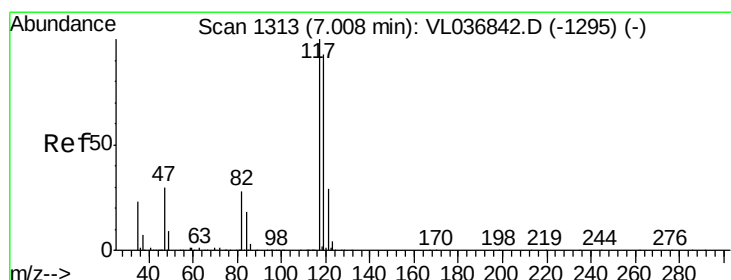
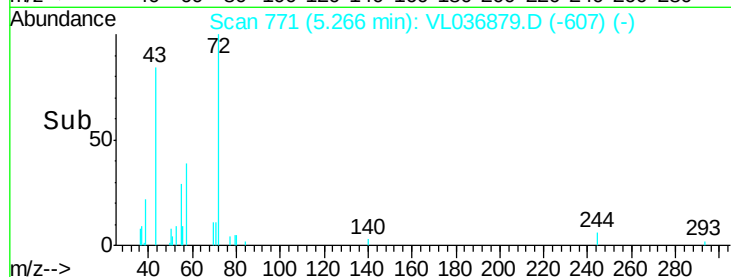
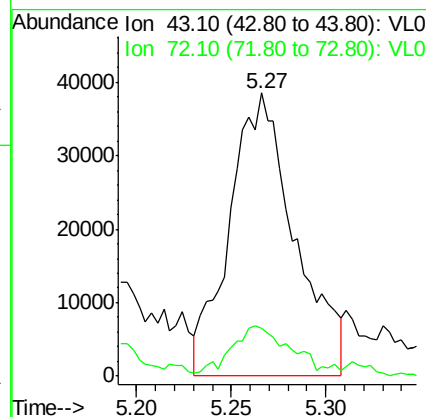
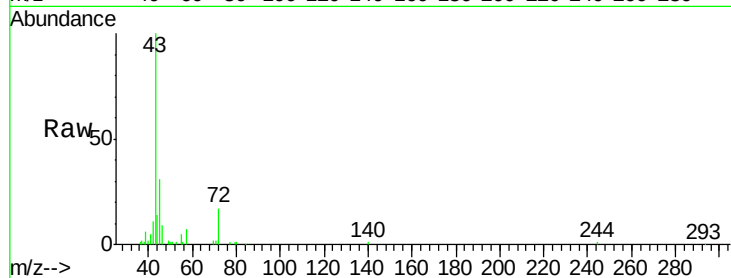
#34
2-Butanone
Concen: 0.594 ppbv m
RT: 5.27 min Scan# 771
Delta R.T. 0.03 min
Lab File: VL036879.D
Acq: 28 Apr 2021 14:42

Instrument :
MSVOA_L
ClientSampled :
IA1

Tot Ion: 43 Resp: 92180
Ion Ratio Lower Upper
43 100
72 0.0 17.6 26.4#

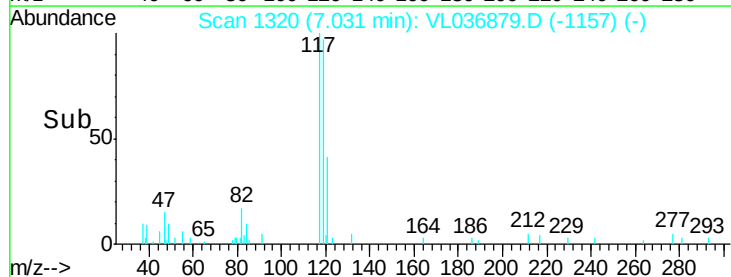
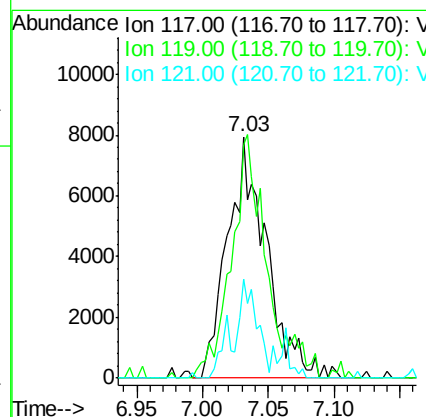
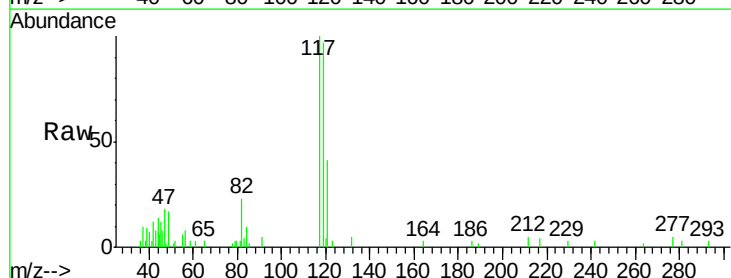
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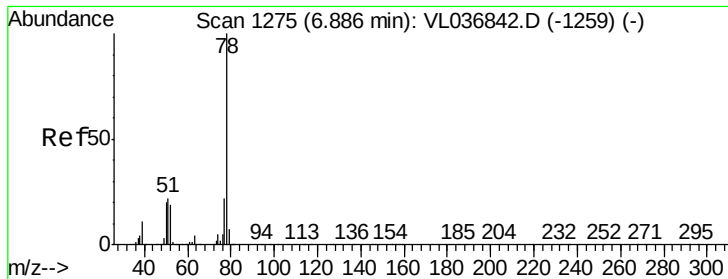
MMDadoda
4/29/2021 5:53:44 PM



#35
Carbon Tetrachloride
Concen: 0.068 ppbv m
RT: 7.03 min Scan# 1320
Delta R.T. 0.02 min
Lab File: VL036879.D
Acq: 28 Apr 2021 14:42

Tgt Ion: 117 Resp: 16259
Ion Ratio Lower Upper
117 100
119 96.8 74.6 111.8
121 40.9 23.3 34.9#





#36

Benzene

Concen: 0.177 ppbv

RT: 6.91 min Scan# 1281

Delta R.T. 0.02 min

Lab File: VL036879.D

Acq: 28 Apr 2021 14:42

Instrument :

MSVOA_L

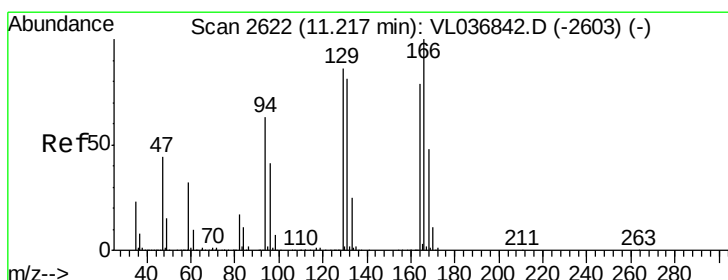
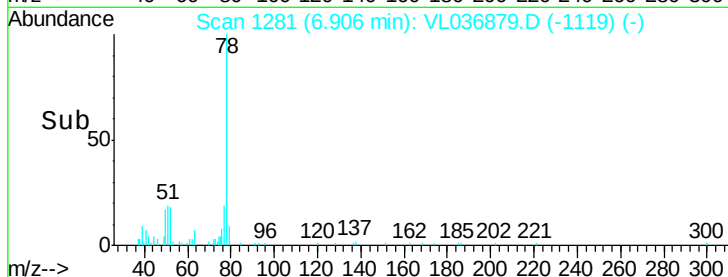
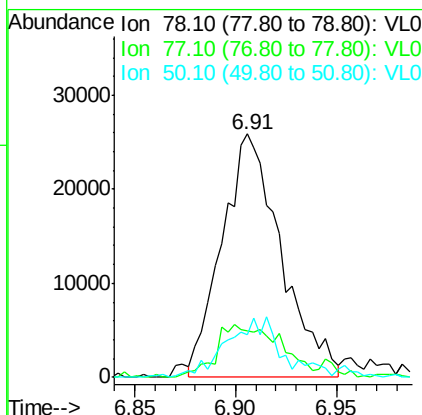
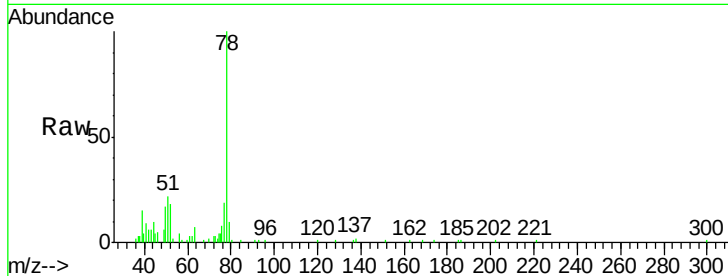
ClientSampleId :

IA1

Tot Ion:	78	Resp:	52835
Ion Ratio	Lower	Upper	
78	100		
77	17.4	17.6	26.4#
50	14.9	16.3	24.5#

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#52

Tetrachloroethene

Concen: 0.033 ppbv m

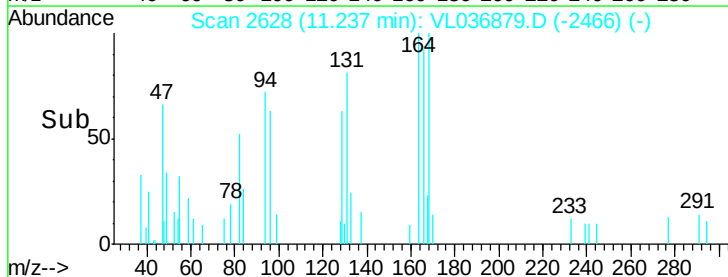
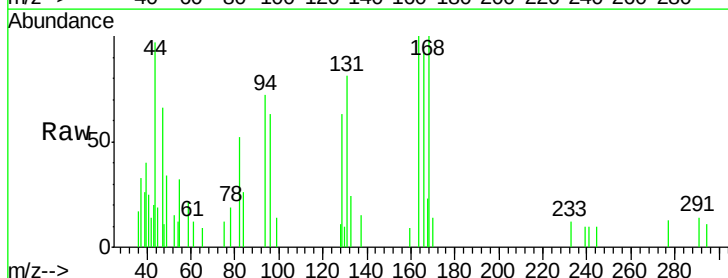
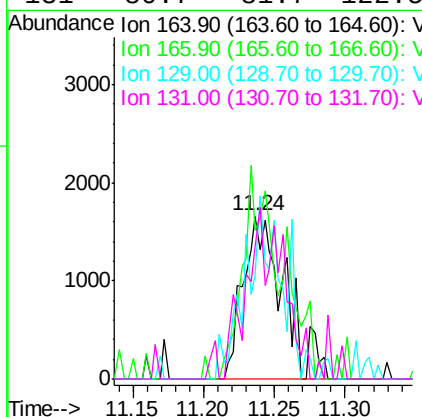
RT: 11.24 min Scan# 2628

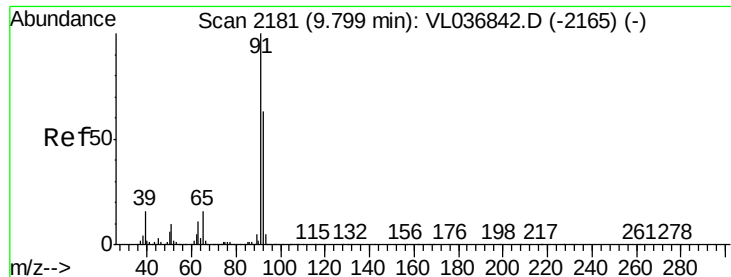
Delta R.T. 0.02 min

Lab File: VL036879.D

Acq: 28 Apr 2021 14:42

Tgt Ion:	164	Resp:	3372
Ion Ratio	Lower	Upper	
164	100		
166	91.5	100.9	151.3#
129	63.4	87.0	130.4#
131	80.7	81.7	122.5#





#53

Toluene

Concen: 1.491 ppbv

RT: 9.83 min Scan# 2190

Delta R.T. 0.03 min

Lab File: VL036879.D

Acq: 28 Apr 2021 14:42

Instrument :

MSVOA_L

ClientSampleId :

IA1

Tot Ion: 91 Resp: 465173

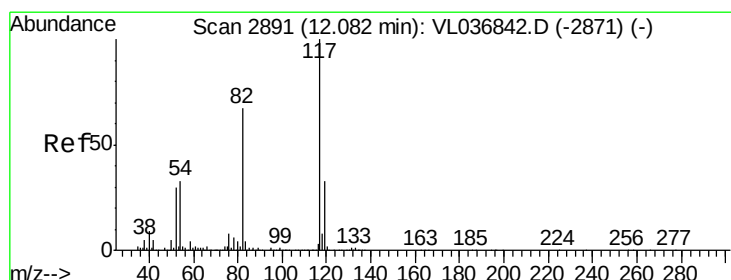
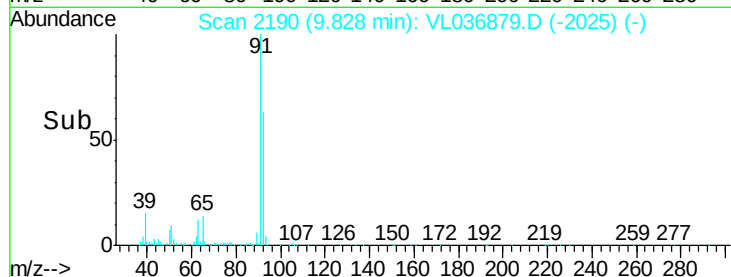
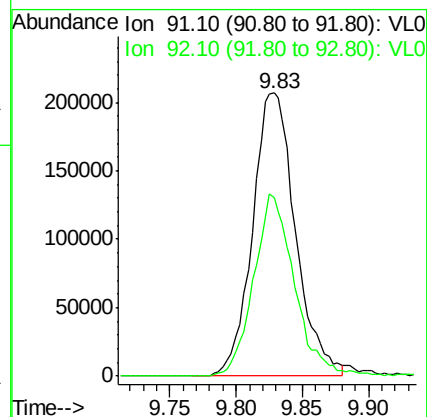
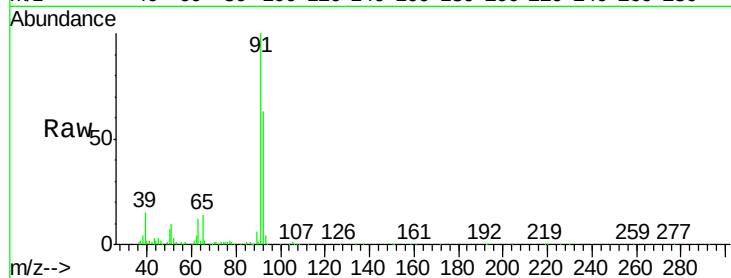
Ion Ratio Lower Upper

91 100

92 61.5 49.0 73.4

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#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.11 min Scan# 2899

Delta R.T. 0.03 min

Lab File: VL036879.D

Acq: 28 Apr 2021 14:42

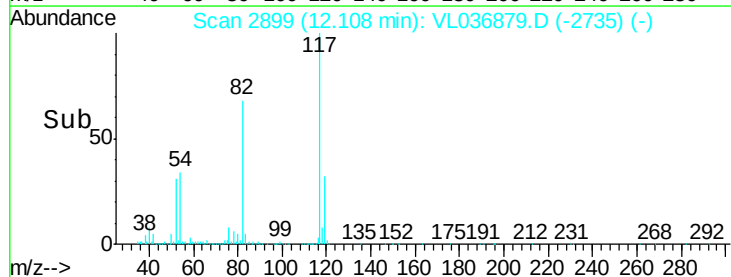
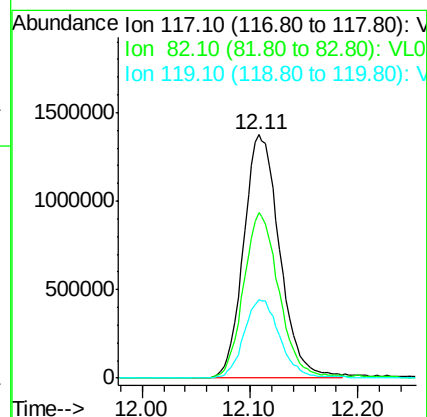
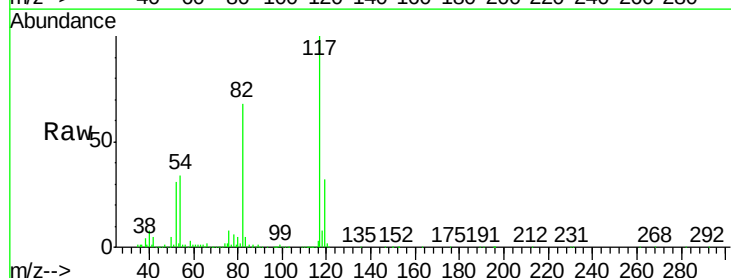
Tgt Ion: 117 Resp: 3202898

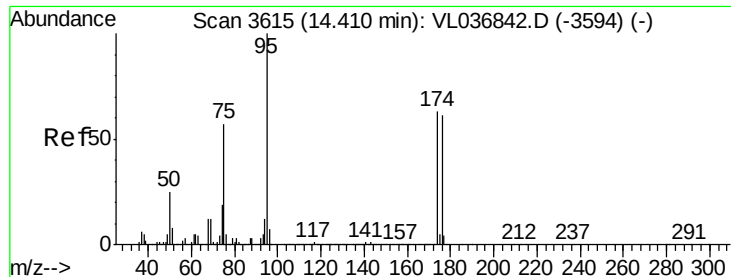
Ion Ratio Lower Upper

117 100

82 68.2 53.5 80.3

119 32.5 25.6 38.4





#68
 1-Bromo-4-Fluorobenzene
 Concen: 9.849 ppbv
 RT: 14.44 min Scan# 3625
 Delta R.T. 0.03 min
 Lab File: VL036879.D
 Acq: 28 Apr 2021 14:42

Instrument :
 MSVOA_L
 ClientSampleId :
 IA1

Tot Ion	Ratio	Lower	Upper
95	100		
174	64.5	52.2	78.2
175	4.8	4.0	6.0

Manual Integrations
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MMDadoda
 4/29/2021 5:53:44 PM

