

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL111220\
 Data File : VL035917.D
 Acq On : 12 Nov 2020 17:23
 Operator : SY/AP
 Sample : L4720-03
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 CVS-3

Manual Integrations
 APPROVED

Quant Time: Nov 14 21:35:26 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 02:40:06 2020
 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	5.66	49	1158147	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.17	114	4010315	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.09	117	3680560	10.00	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.42	95	2661370	10.18	ppbv	0.00	MMDadoda
Spiked Amount	10.000	Range	65 - 135	Recovery	=	101.80%	

Target Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.04	85	41604m	0.191	ppbv	
4) Chloromethane	3.13	50	39802	0.591	ppbv	98
7) Chloroethane	3.55	64	4091	0.135	ppbv	90
9) Propene	3.01	41	68752m	1.354	ppbv	
10) Heptane	8.12	43	29535	0.211	ppbv	98
11) Trichlorofluoromethane	3.94	101	68232	0.249	ppbv	95
13) Ethanol	3.65	45	27511120m	2498.123	ppbv	
15) Acetone	3.84	43	2650916m	21.410	ppbv	
19) Isopropyl Alcohol	4.03	45	11489360	150.999	ppbv #	97
20) Methylene Chloride	4.34	84	622971	7.147	ppbv	98
26) Hexane	5.68	57	795003	5.910	ppbv #	59
30) Cyclohexane	7.16	84	40094m	0.274	ppbv	
34) 2-Butanone	5.24	43	82465	0.634	ppbv	100
35) Carbon Tetrachloride	7.01	117	18451	0.086	ppbv	94
36) Benzene	6.89	78	103167	0.346	ppbv	94
37) 1,2-Dichloroethane	6.30	62	19908	0.147	ppbv #	95
38) Trichloroethene	7.82	130	4744m	0.033	ppbv	
41) Tetrahydrofuran	6.06	42	17639m	0.239	ppbv	
44) 2,2,4-Trimethylpentane	7.86	57	113445m	0.288	ppbv	
52) Tetrachloroethene	11.22	164	6576m	0.047	ppbv	
53) Toluene	9.80	91	1784801	4.961	ppbv	97
58) Ethyl Benzene	12.71	91	48009	0.107	ppbv	90
59) m/p-Xylene	12.97	91	116374m	0.307	ppbv	
60) o-Xylene	13.70	91	41482	0.112	ppbv	99

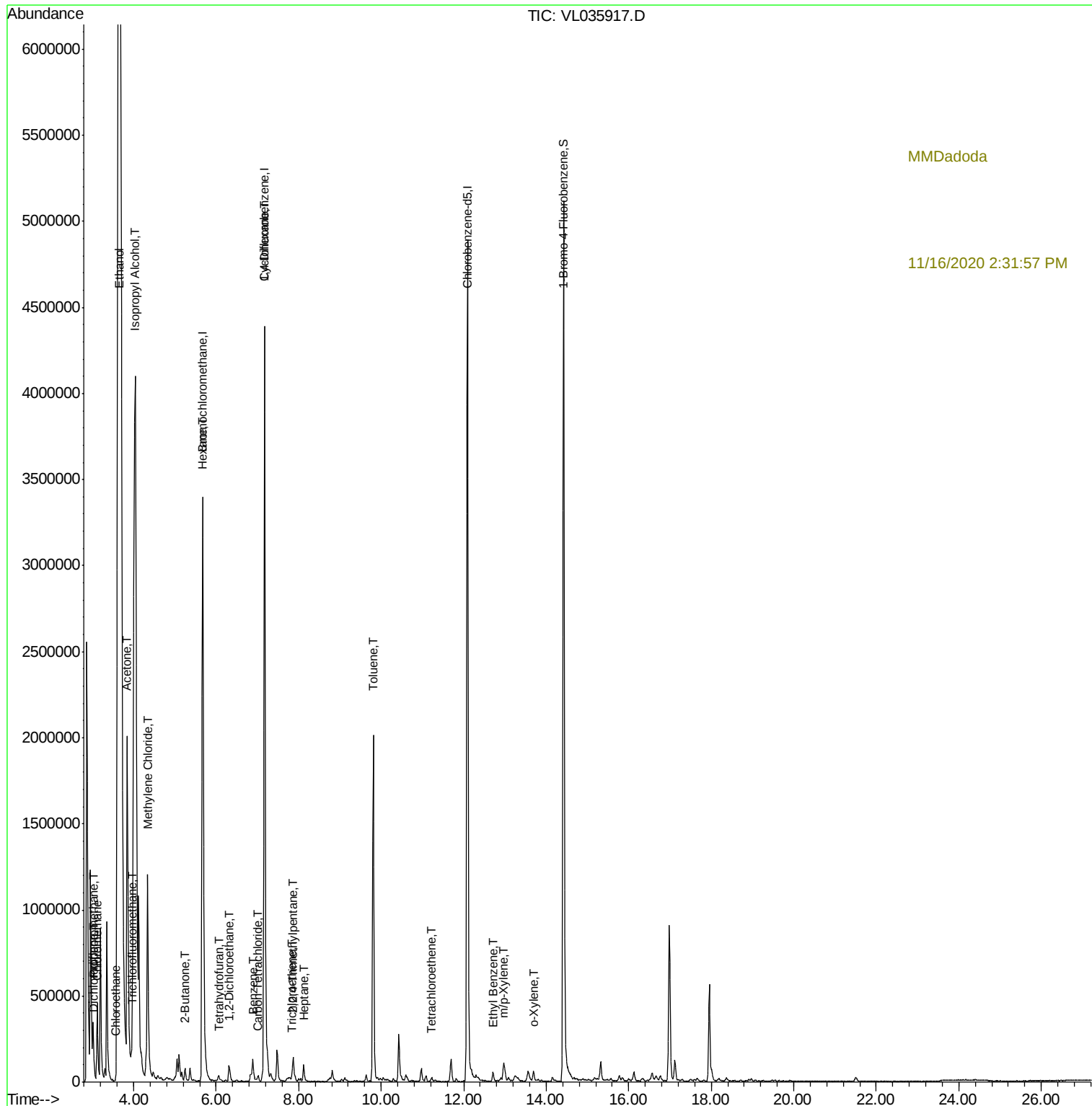
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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Data File : VL035917.D
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Manual Integrations
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Quant Time: Nov 14 21:35:26 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



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#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.66 min Scan# 894

Delta R.T. -0.01 min

Lab File: VL035917.D

Acq: 12 Nov 2020 17:23

Instrument :

MSVOA_L

ClientSampled :

CVS-3

Tot Ion: 49 Resp: 1158147

Ion Ratio Lower Upper

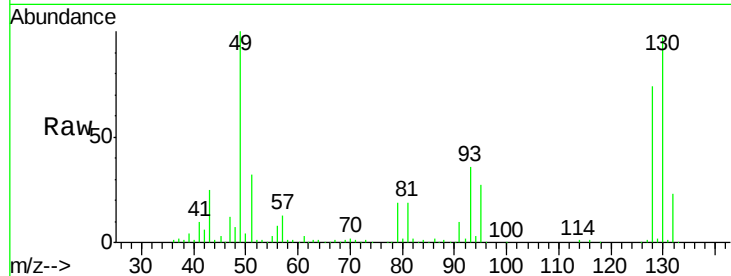
49 100

128 75.9 41.5 124.6

130 97.1 53.7 161.1

Manual Integrations

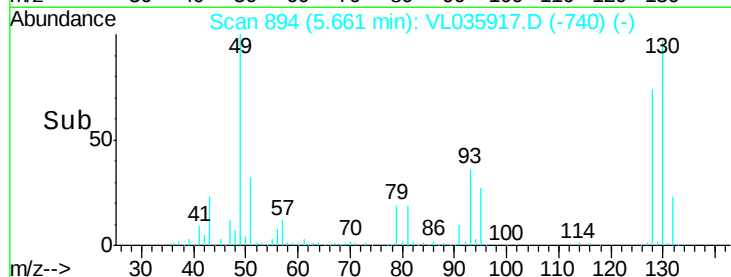
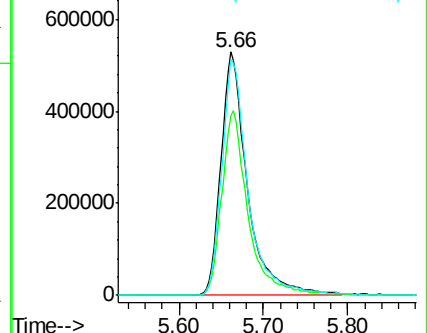
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Abundance Ion 49.10 (48.80 to 49.80): VL0

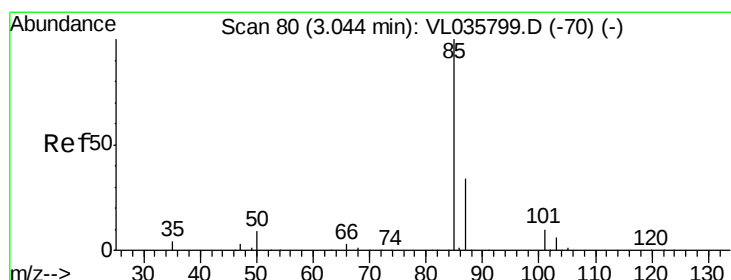
Ion 128.00 (127.70 to 128.70): VL0

Ion 130.00 (129.70 to 130.70): VL0



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#2

Dichlorodifluoromethane

Concen: 0.191 ppbv m

RT: 3.04 min Scan# 80

Delta R.T. 0.00 min

Lab File: VL035917.D

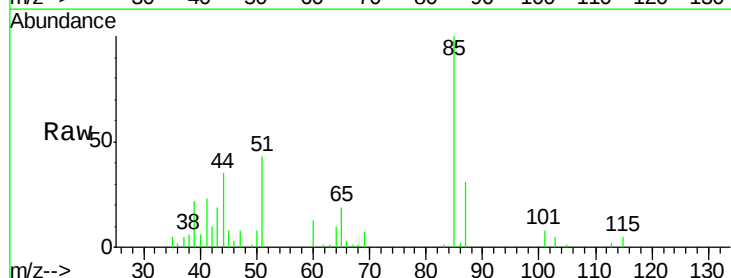
Acq: 12 Nov 2020 17:23

Tgt Ion: 85 Resp: 41604

Ion Ratio Lower Upper

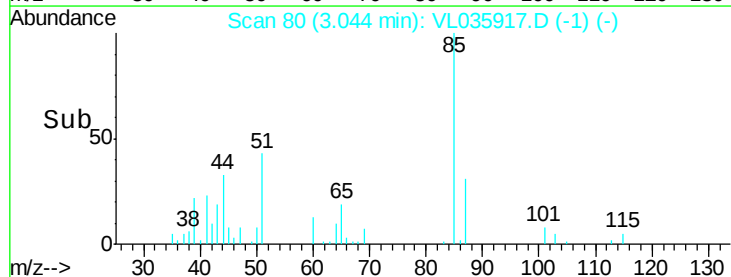
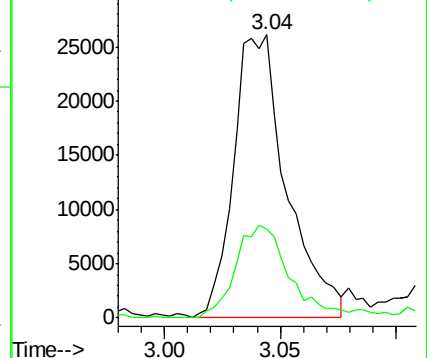
85 100

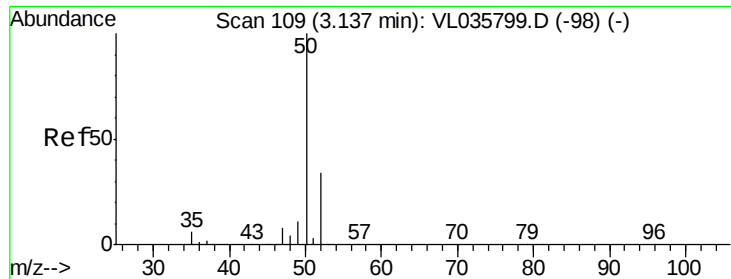
87 31.5 27.1 40.7



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0



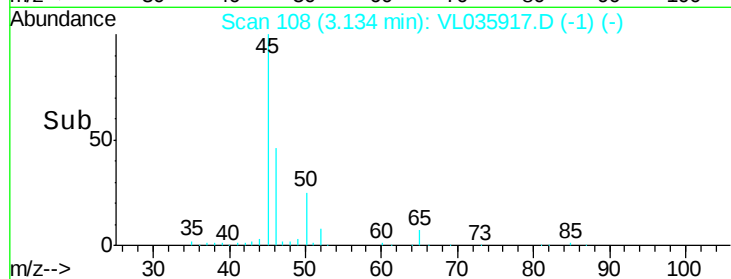
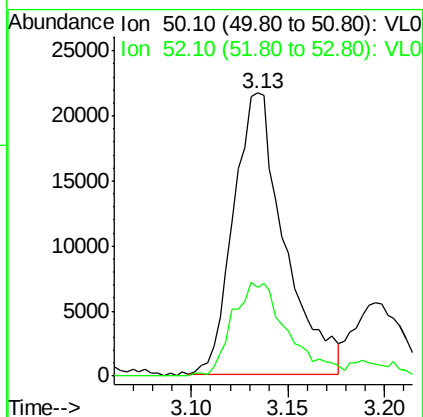
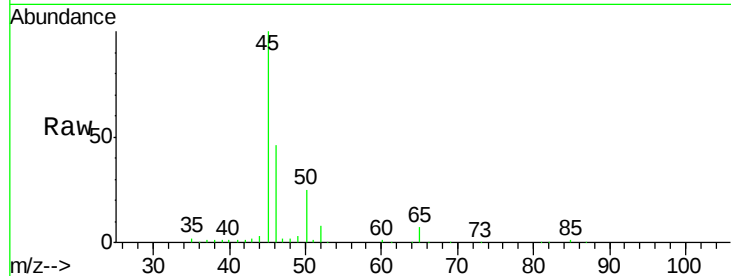


#4
Chloromethane
Concen: 0.591 ppbv
RT: 3.13 min Scan# 108
Delta R.T. -0.00 min
Lab File: VL035917.D
Acq: 12 Nov 2020 17:23

Instrument :
MSVOA_L
ClientSampleId :
CVS-3

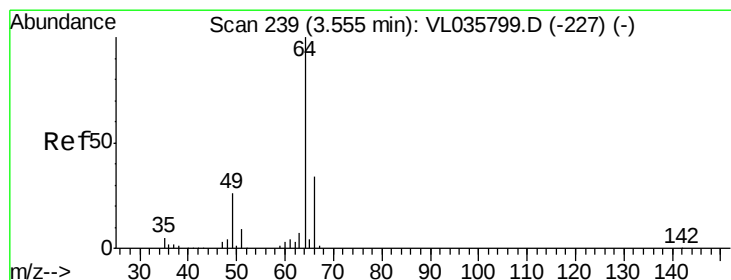
Tot Ion	Ratio	Lower	Upper
50	100		
52	32.5	27.1	40.7

Manual Integrations
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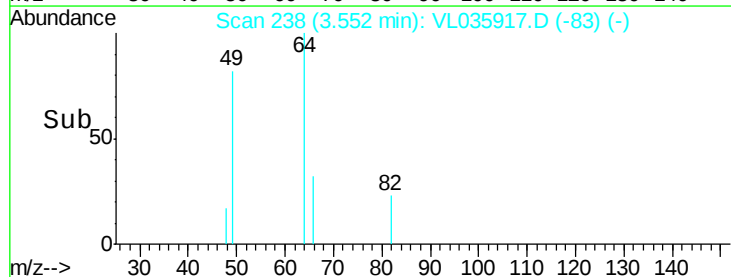
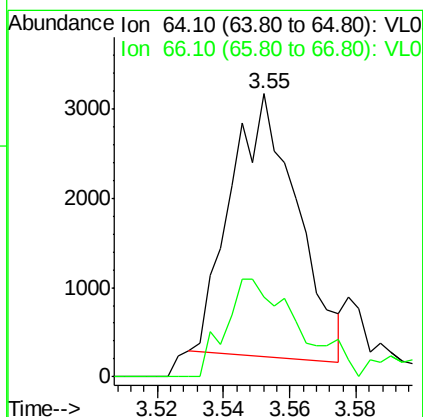
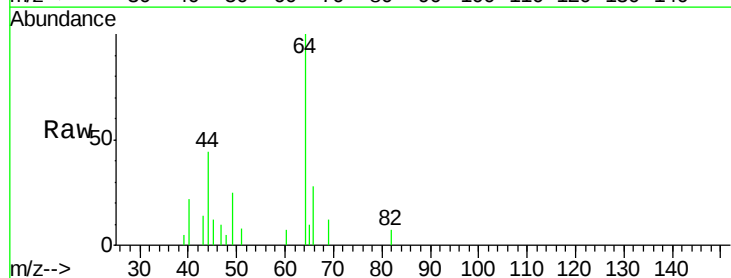
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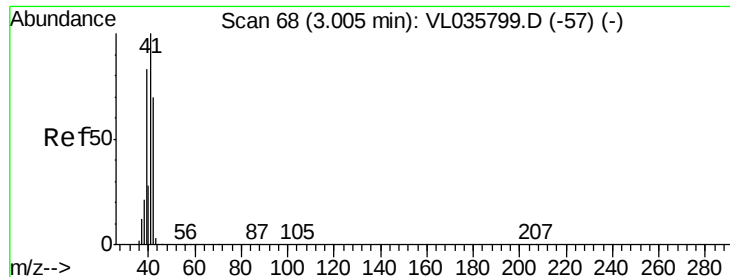
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#7
Chloroethane
Concen: 0.135 ppbv
RT: 3.55 min Scan# 238
Delta R.T. -0.00 min
Lab File: VL035917.D
Acq: 12 Nov 2020 17:23

Tgt Ion	Ratio	Lower	Upper
64	100		
66	28.3	27.0	40.6





#9

Propene

Concen: 1.354 ppbv m

RT: 3.01 min Scan# 70

Delta R.T. 0.01 min

Lab File: VL035917.D

Acq: 12 Nov 2020 17:23

Instrument :

MSVOA_L

ClientSampleId :

CVS-3

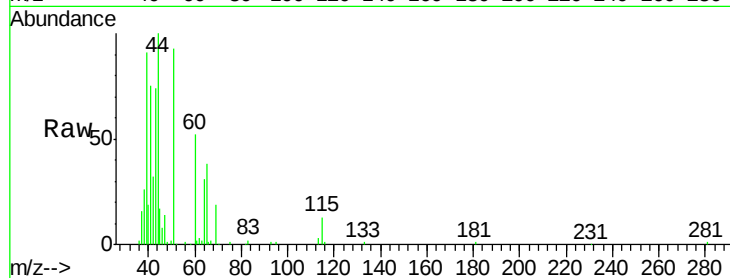
Tot Ion: 41 Resp: 68752

Ion Ratio Lower Upper

41 100

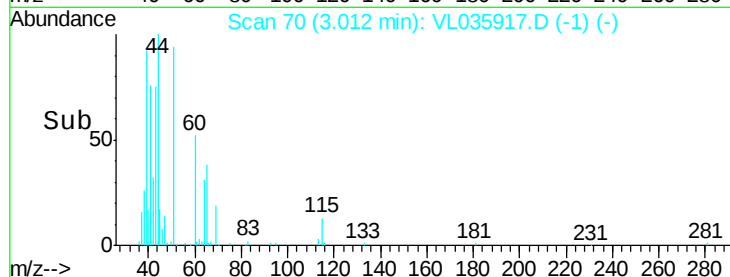
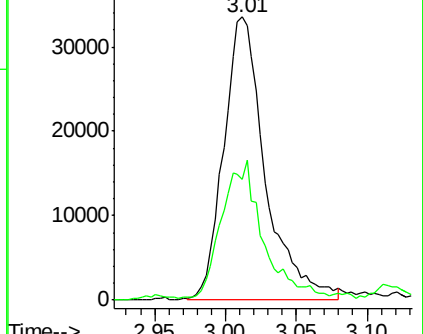
42 294.0 56.2 84.4#

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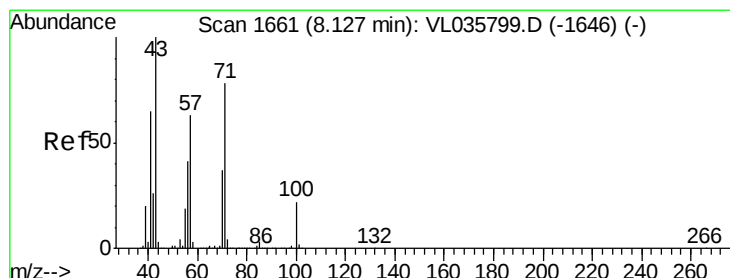
Abundance Ion 41.10 (40.80 to 41.80): VL0

Ion 42.10 (41.80 to 42.80): VL0



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11/16/2020 2:31:57 PM



#10

Heptane

Concen: 0.211 ppbv

RT: 8.12 min Scan# 1659

Delta R.T. -0.01 min

Lab File: VL035917.D

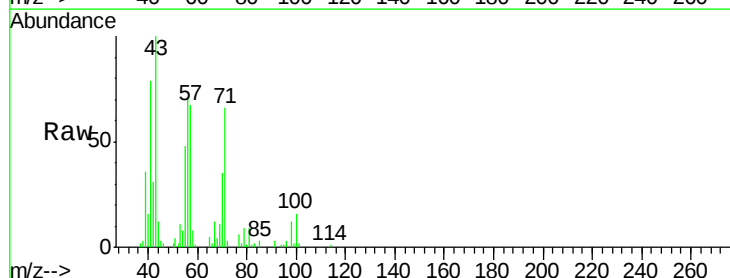
Acq: 12 Nov 2020 17:23

Tgt Ion: 43 Resp: 29535

Ion Ratio Lower Upper

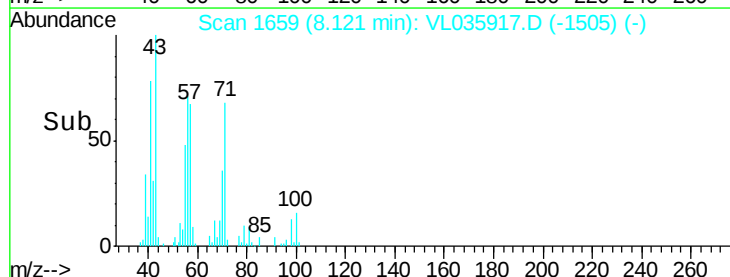
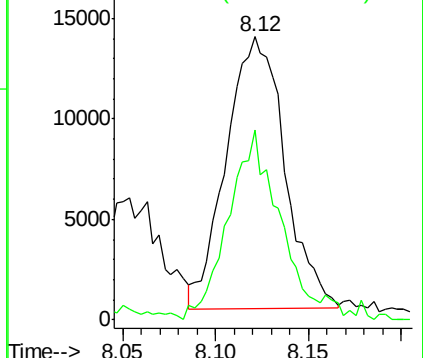
43 100

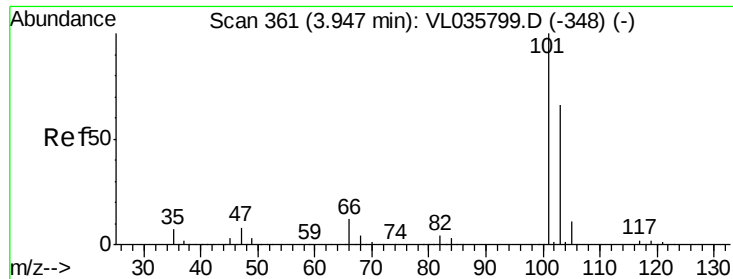
57 64.1 50.0 75.0



Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 57.10 (56.80 to 57.80): VL0



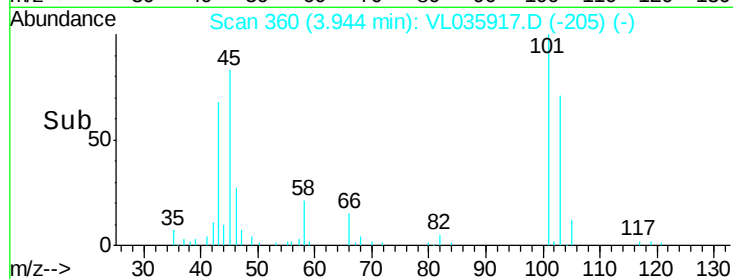
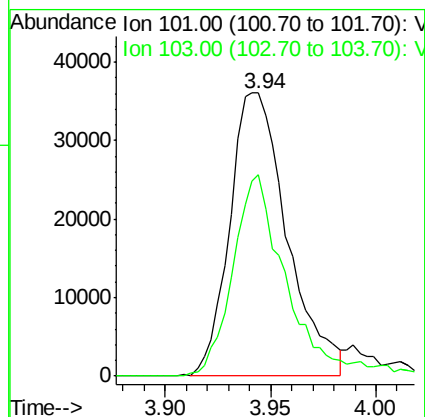
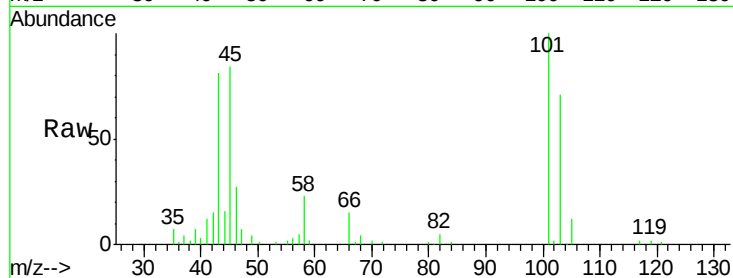


#11
 Trichlorofluoromethane
 Concen: 0.249 ppbv
 RT: 3.94 min Scan# 360
 Delta R.T. -0.00 min
 Lab File: VL035917.D
 Acq: 12 Nov 2020 17:23

Instrument :
 MSVOA_L
 ClientSampleId :
 CVS-3

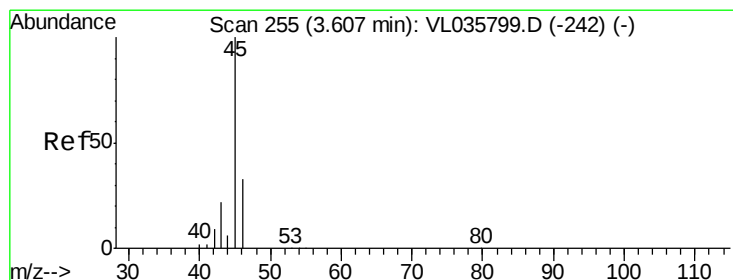
Tot Ion:101 Resp: 68232
 Ion Ratio Lower Upper
 101 100
 103 70.2 53.0 79.4

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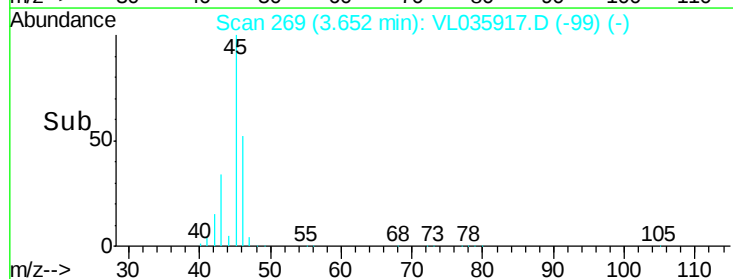
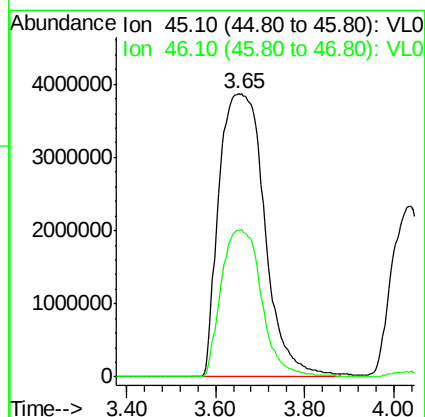
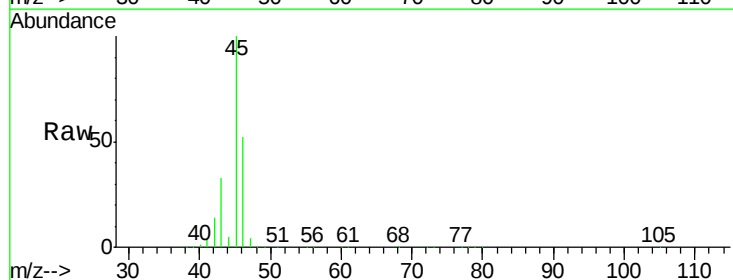
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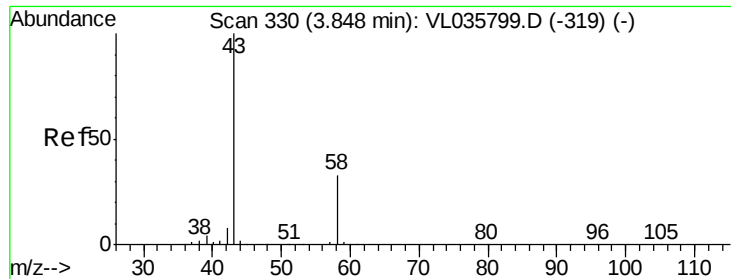
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#13
 Ethanol
 Concen: 2498.123 ppbv m
 RT: 3.65 min Scan# 269
 Delta R.T. 0.05 min
 Lab File: VL035917.D
 Acq: 12 Nov 2020 17:23

Tgt Ion: 45 Resp:27511120
 Ion Ratio Lower Upper
 45 100
 46 46.2 16.1 64.5





#15

Acetone

Concen: 21.410 ppbv m

RT: 3.84 min Scan# 328

Delta R.T. -0.01 min

Lab File: VL035917.D

Acq: 12 Nov 2020 17:23

Instrument :

MSVOA_L

ClientSampleId :

CVS-3

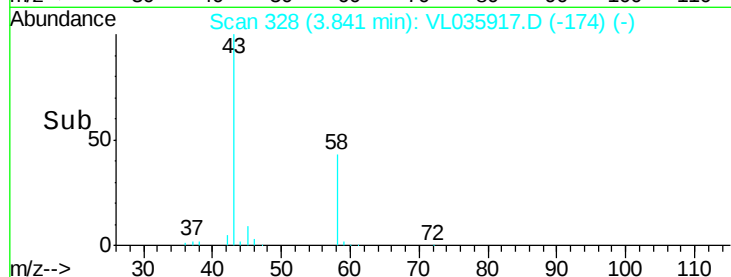
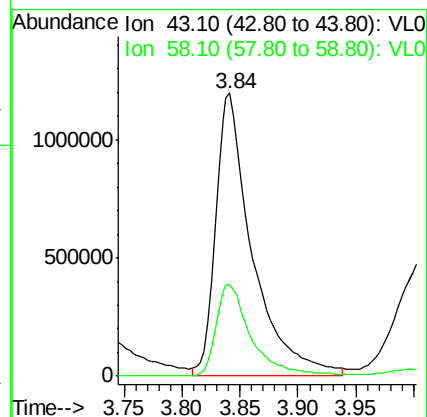
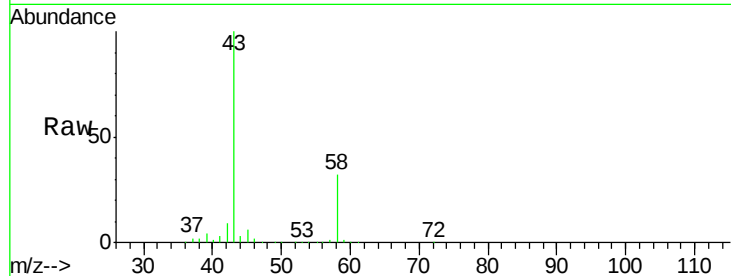
Tot Ion: 43 Resp: 2650916

Ion Ratio Lower Upper

43 100

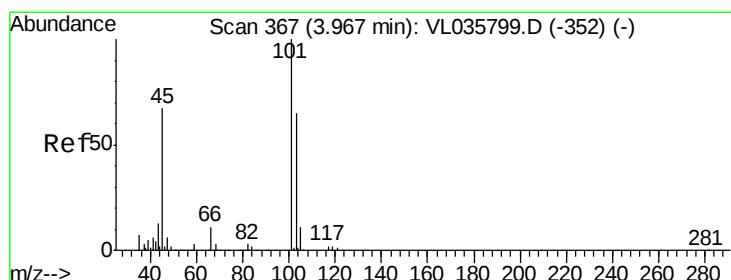
58 31.2 27.5 41.3

Manual Integrations
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11/16/2020 2:31:57 PM



#19

Isopropyl Alcohol

Concen: 150.999 ppbv

RT: 4.03 min Scan# 388

Delta R.T. 0.07 min

Lab File: VL035917.D

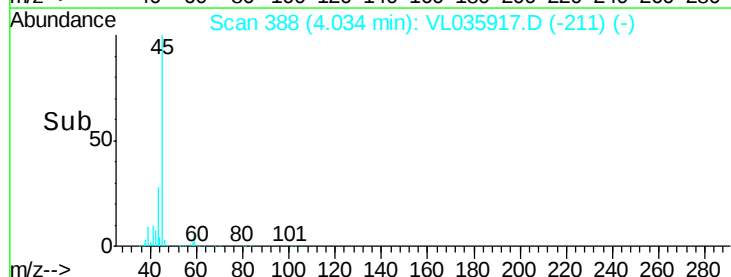
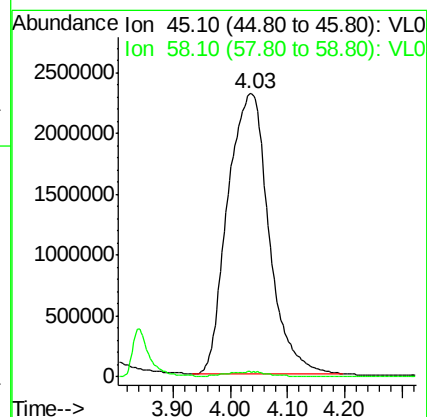
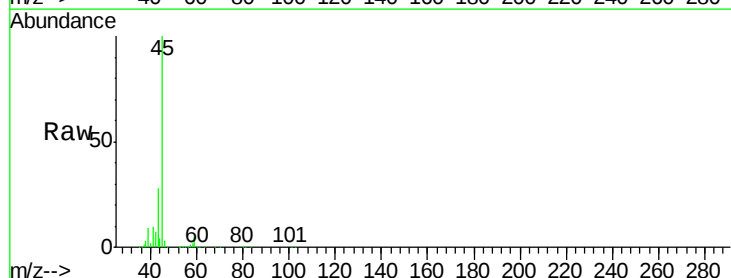
Acq: 12 Nov 2020 17:23

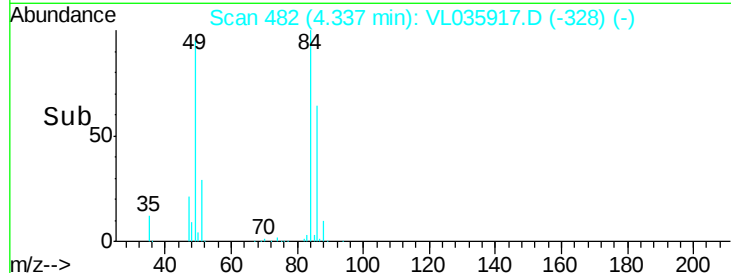
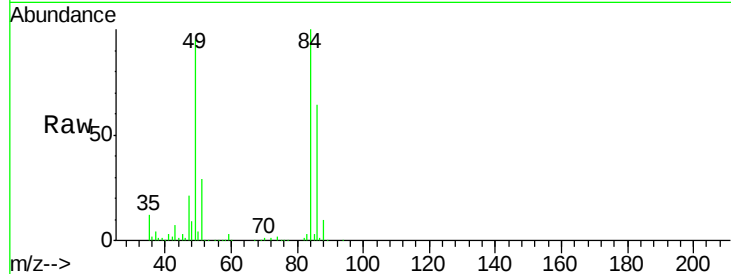
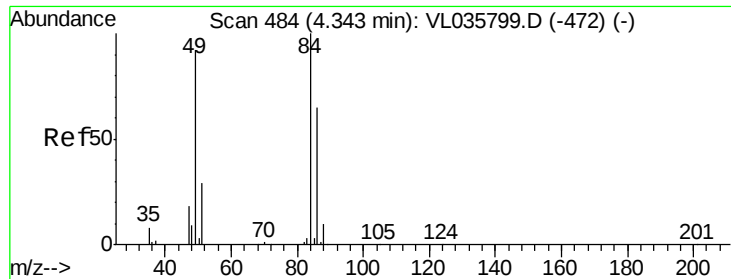
Tgt Ion: 45 Resp: 11489360

Ion Ratio Lower Upper

45 100

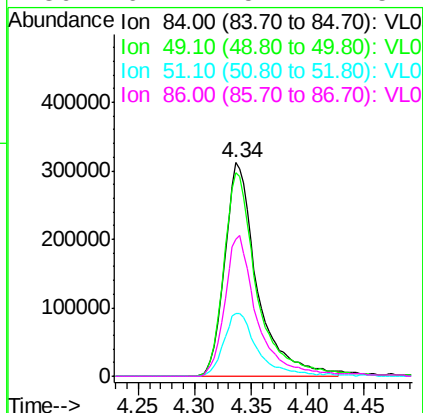
58 2.1 2.6 3.8#





#20
Methvlene Chloride
Concen: 7.147 ppbv
RT: 4.34 min Scan# 482
Delta R.T. -0.01 min
Lab File: VL035917.D
Acq: 12 Nov 2020 17:23

Tot Ion	84	Resp	622971
Ion Ratio	Lower	Upper	
84	100		
49	95.3	73.8	110.8
51	29.3	23.0	34.4
86	64.4	52.1	78.1

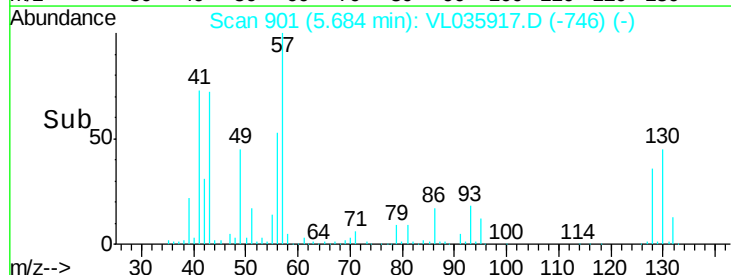
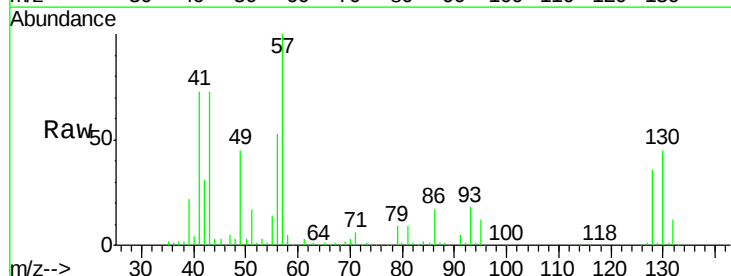
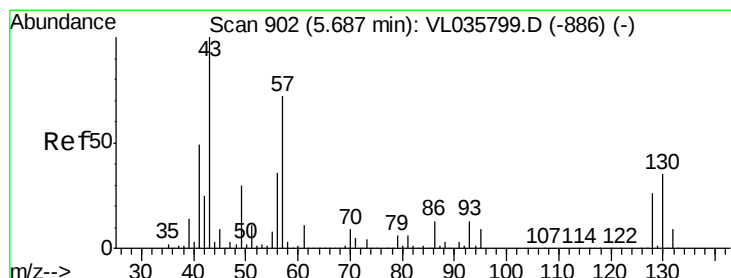


Instrument :
MSVOA_L
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CVS-3

Manual Integrations
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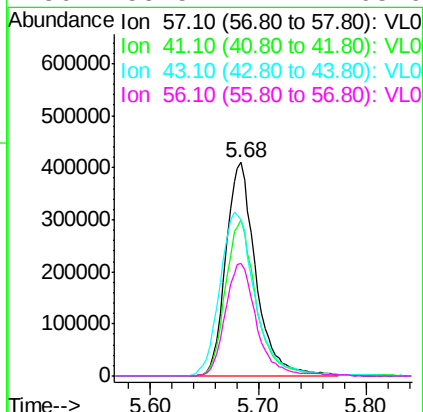
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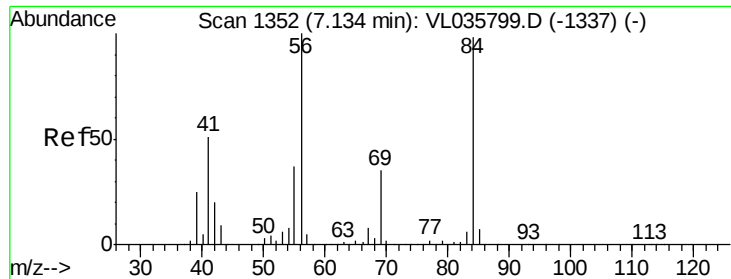
11/16/2020 2:31:57 PM



#26
Hexane
Concen: 5.910 ppbv
RT: 5.68 min Scan# 901
Delta R.T. -0.00 min
Lab File: VL035917.D
Acq: 12 Nov 2020 17:23

Tgt Ion	57	Resp	795003
Ion Ratio	Lower	Upper	
57	100		
41	76.2	58.9	88.3
43	90.0	150.2	225.2#
56	55.5	42.4	63.6



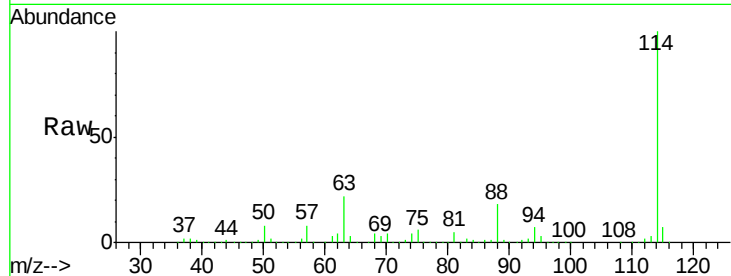


#30
Cvclohexane
Concen: 0.274 ppbv m
RT: 7.16 min Scan# 1361
Delta R.T. 0.03 min
Lab File: VL035917.D
Acq: 12 Nov 2020 17:23

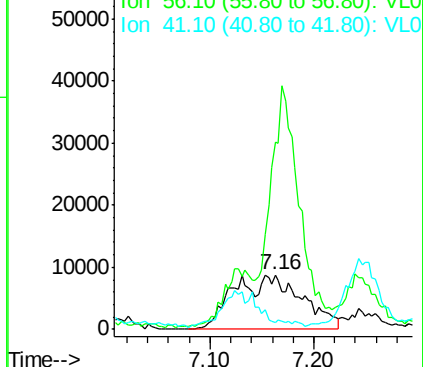
Instrument :
MSVOA_L
ClientSampled :
CVS-3

Tot Ion	Ratio	Lower	Upper
84	100		
56	0.0	86.4	129.6#
41	37.9	42.1	63.1#

Manual Integrations
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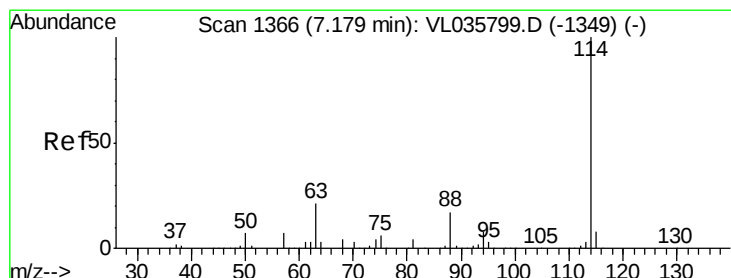
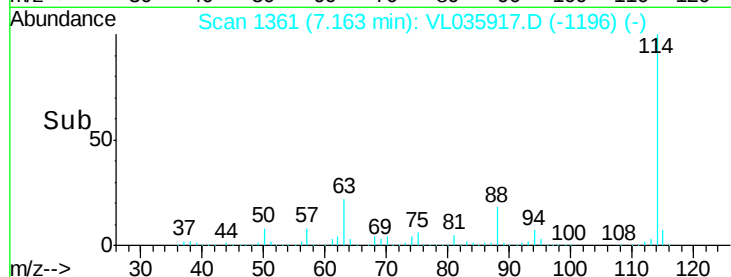


Abundance Ion 84.20 (83.90 to 84.90): VL0
Ion 56.10 (55.80 to 56.80): VL0
Ion 41.10 (40.80 to 41.80): VL0



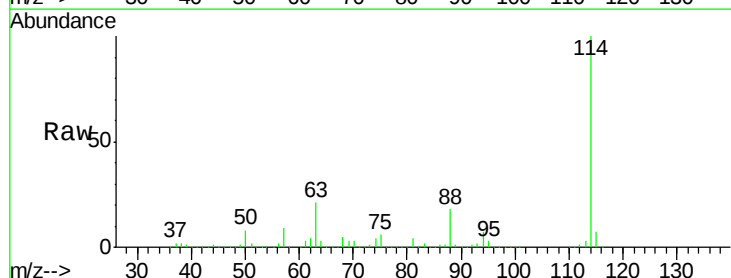
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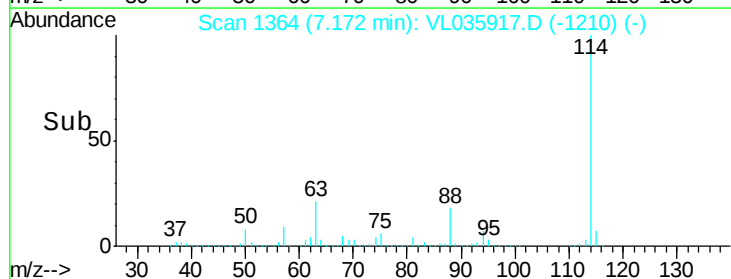
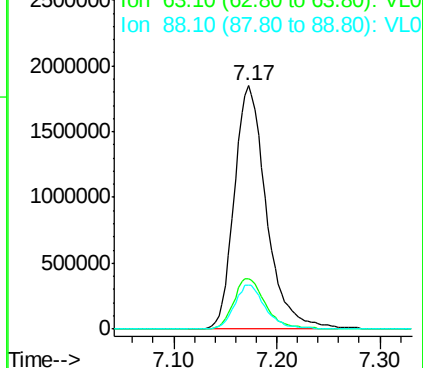


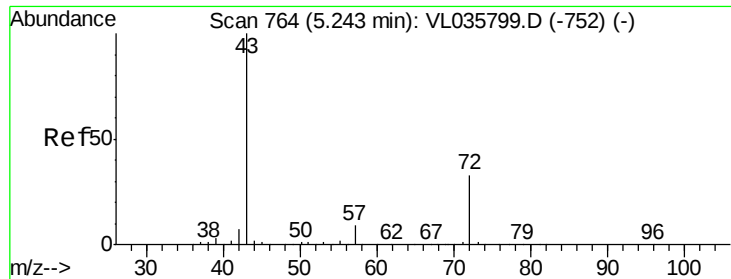
#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 7.17 min Scan# 1364
Delta R.T. -0.01 min
Lab File: VL035917.D
Acq: 12 Nov 2020 17:23

Tgt Ion	Ratio	Lower	Upper
114	100		
63	20.9	16.1	24.1
88	17.7	13.7	20.5



Abundance Ion 114.10 (113.80 to 114.80): V
Ion 63.10 (62.80 to 63.80): VL0
Ion 88.10 (87.80 to 88.80): VL0





#34

2-Butanone

Concen: 0.634 ppbv

RT: 5.24 min Scan# 764

Delta R.T. 0.00 min

Lab File: VL035917.D

Acq: 12 Nov 2020 17:23

Instrument :

MSVOA_L

ClientSampled :

CVS-3

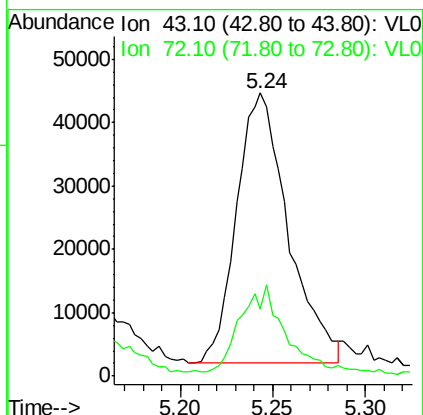
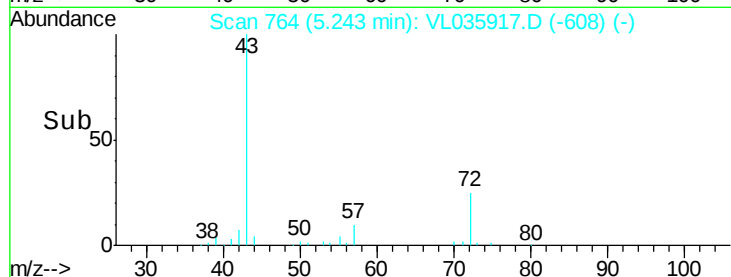
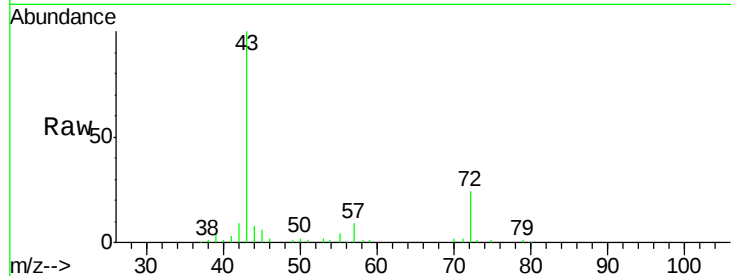
Tot Ion: 43 Resp: 82465

Ion Ratio Lower Upper

43 100

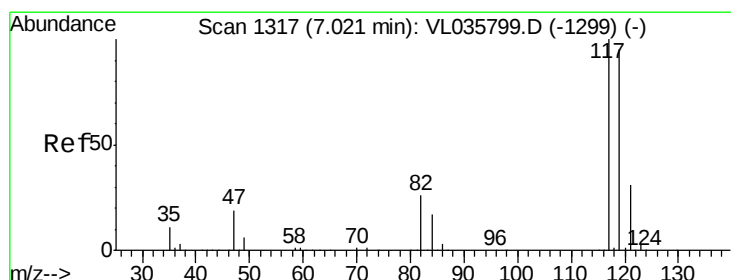
72 32.9 26.5 39.7

Manual Integrations
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#35

Carbon Tetrachloride

Concen: 0.086 ppbv

RT: 7.01 min Scan# 1314

Delta R.T. -0.01 min

Lab File: VL035917.D

Acq: 12 Nov 2020 17:23

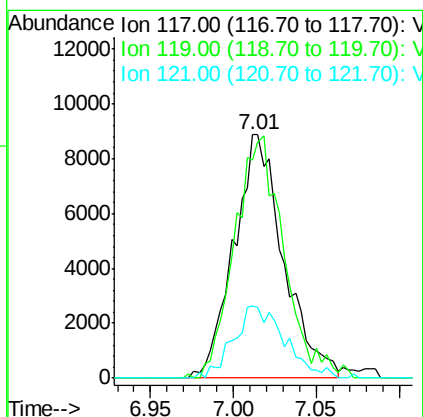
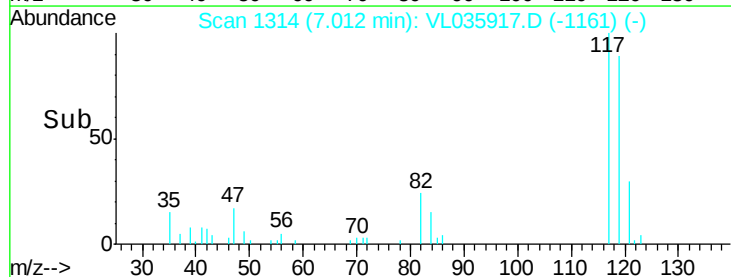
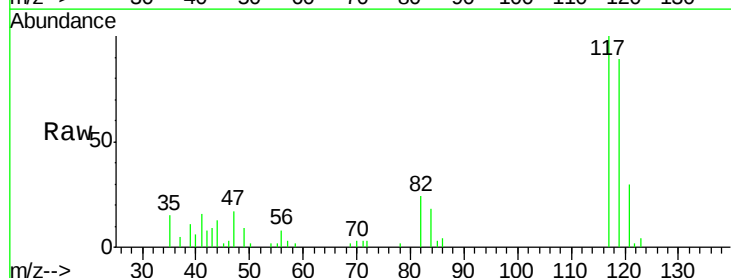
Tgt Ion: 117 Resp: 18451

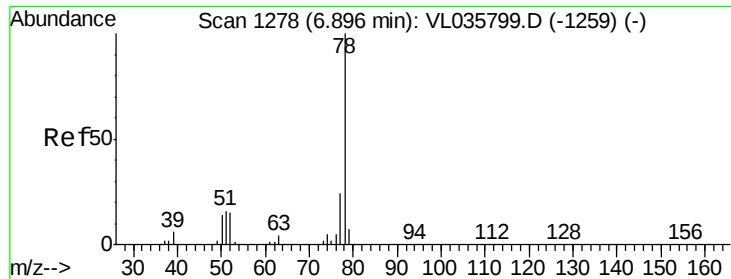
Ion Ratio Lower Upper

117 100

119 87.5 75.6 113.4

121 29.9 25.1 37.7





#36

Benzene

Concen: 0.346 ppbv

RT: 6.89 min Scan# 1276

Delta R.T. -0.01 min

Lab File: VL035917.D

Acq: 12 Nov 2020 17:23

Instrument :

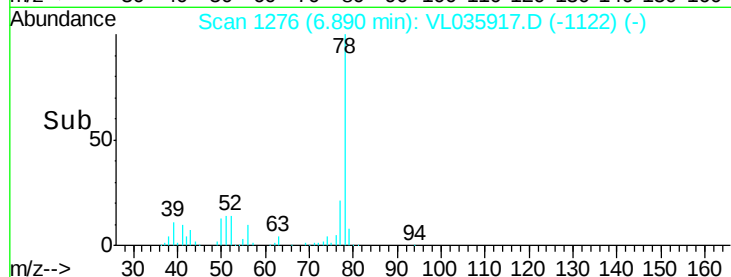
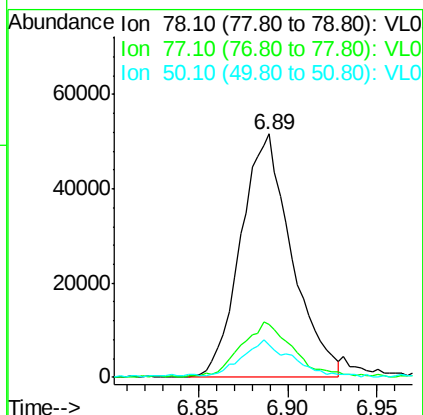
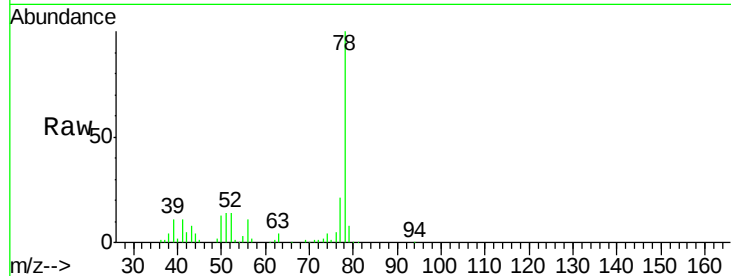
MSVOA_L

ClientSampled :

CVS-3

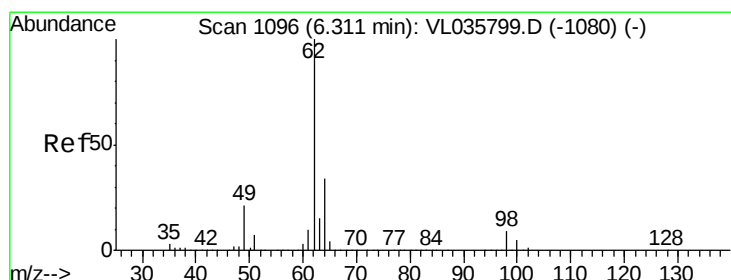
Tot Ion:	78	Resp:	103167
Ion	Ratio	Lower	Upper
78	100		
77	20.9	19.3	28.9
50	12.2	11.4	17.2

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#37

1,2-Dichloroethane

Concen: 0.147 ppbv

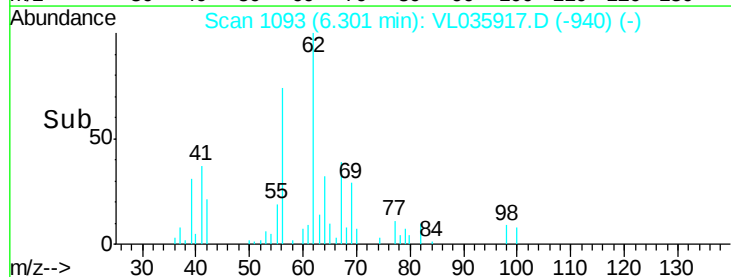
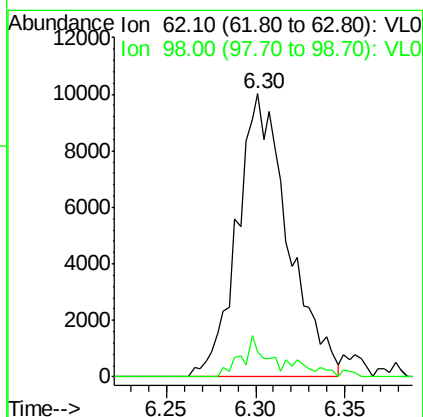
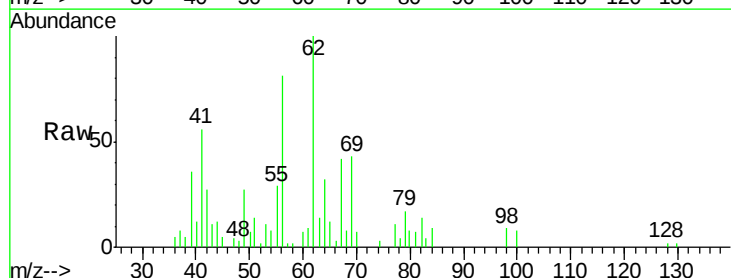
RT: 6.30 min Scan# 1093

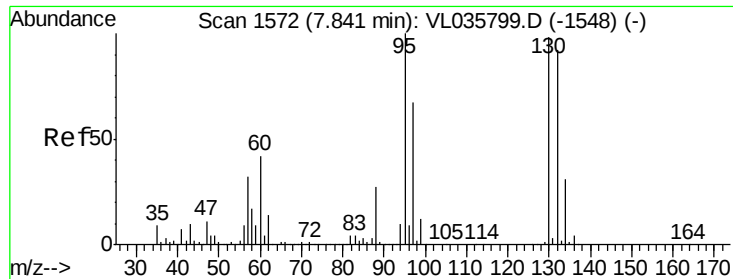
Delta R.T. -0.01 min

Lab File: VL035917.D

Acq: 12 Nov 2020 17:23

Tgt Ion:	62	Resp:	19908
Ion	Ratio	Lower	Upper
62	100		
98	10.5	6.9	10.3#



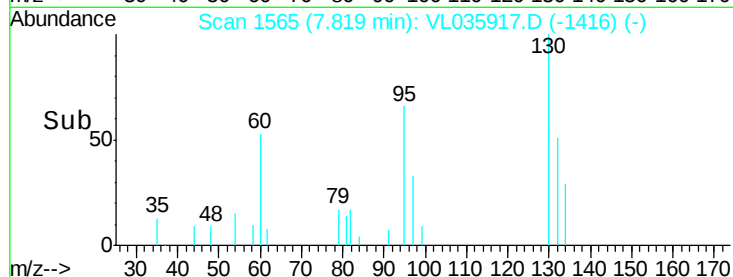
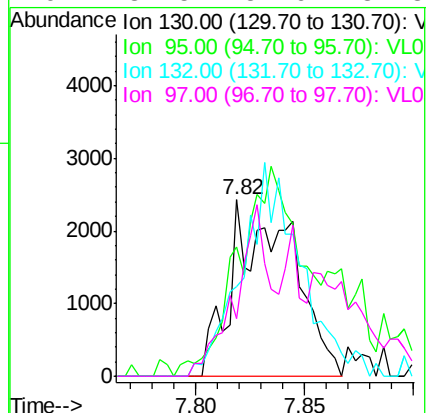
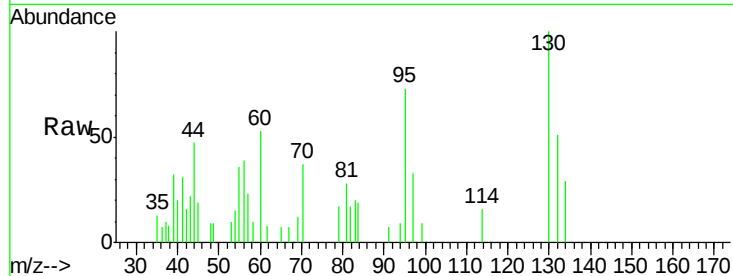


#38
 Trichloroethene
 Concen: 0.033 ppbv m
 RT: 7.82 min Scan# 1565
 Delta R.T. -0.02 min
 Lab File: VL035917.D
 Acq: 12 Nov 2020 17:23

Instrument :
 MSVOA_L
 ClientSampled :
 CVS-3

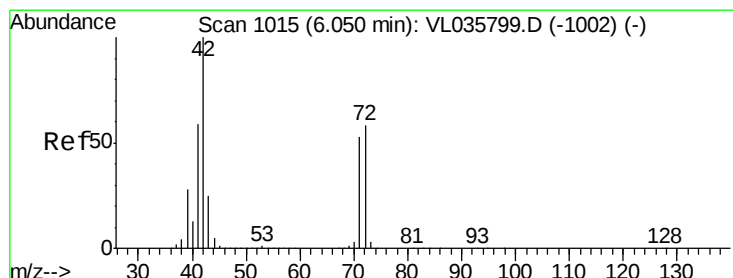
Tot Ion	Ratio	Lower	Upper
130	100		
95	73.4	81.6	122.4#
132	51.2	75.1	112.7#
97	32.5	54.6	81.8#

Manual Integrations
 APPROVED



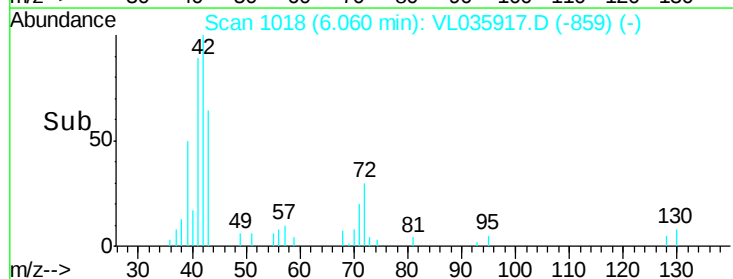
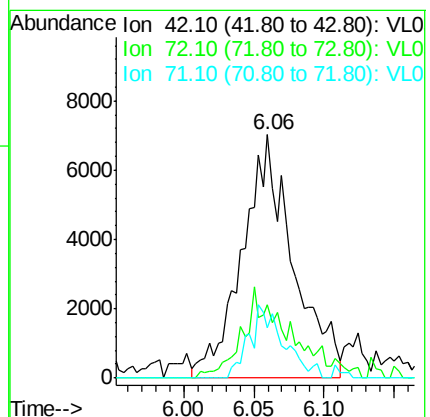
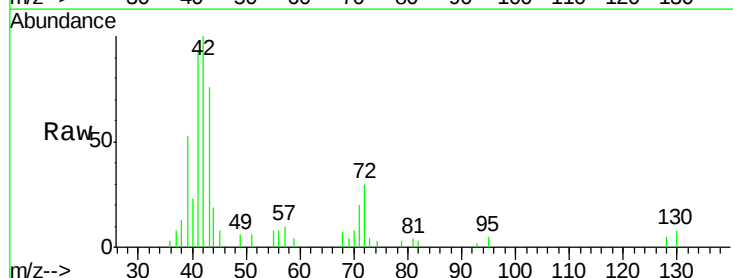
MMDadoda

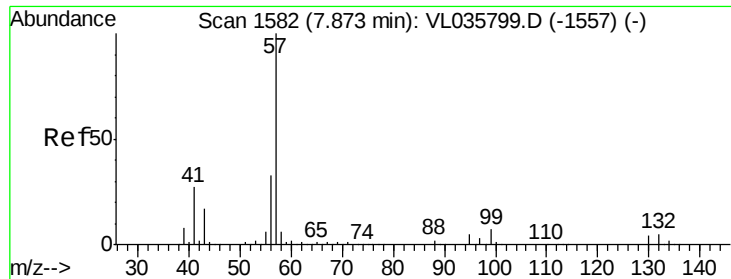
11/16/2020 2:31:57 PM



#41
 Tetrahydrofuran
 Concen: 0.239 ppbv m
 RT: 6.06 min Scan# 1018
 Delta R.T. 0.01 min
 Lab File: VL035917.D
 Acq: 12 Nov 2020 17:23

Tgt Ion	Ratio	Lower	Upper
42	100		
72	35.1	45.4	68.0#
71	21.2	43.4	65.2#



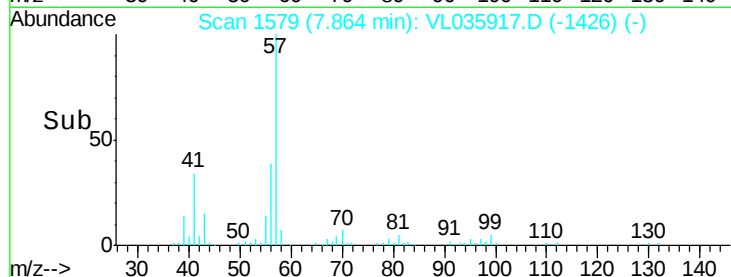
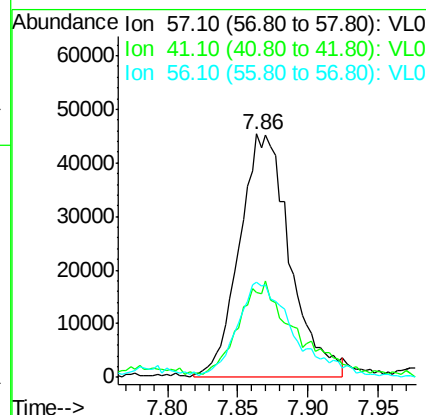
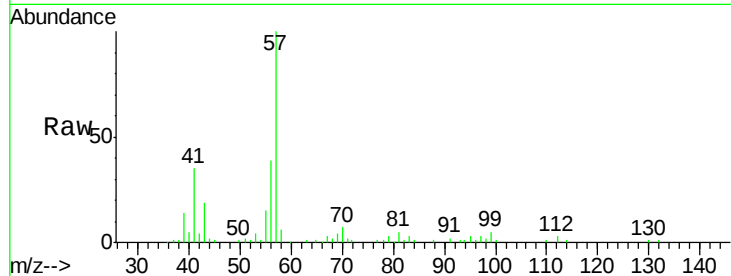


#44
2,2,4-Trimethylpentane
Concen: 0.288 ppbv m
RT: 7.86 min Scan# 1579
Delta R.T. -0.01 min
Lab File: VL035917.D
Acq: 12 Nov 2020 17:23

Instrument :
MSVOA_L
ClientSampled :
CVS-3

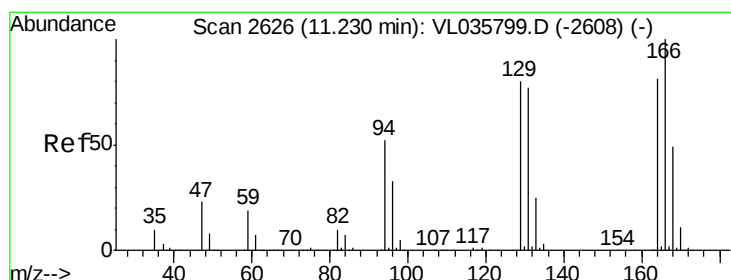
Tot Ion	Ratio	Lower	Upper
57	100		
41	0.0	21.0	31.4#
56	43.2	25.4	38.0#

Manual Integrations
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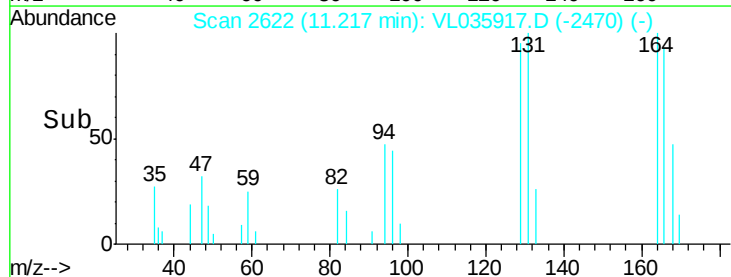
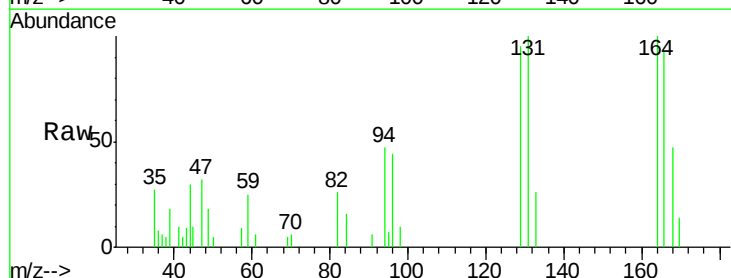
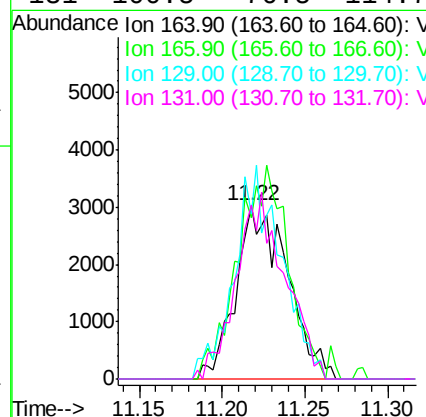
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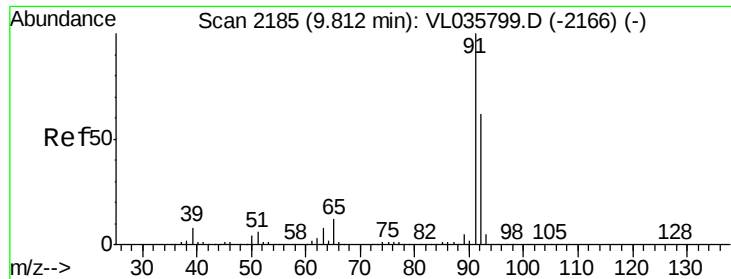
11/16/2020 2:31:57 PM



#52
Tetrachloroethene
Concen: 0.047 ppbv m
RT: 11.22 min Scan# 2622
Delta R.T. -0.01 min
Lab File: VL035917.D
Acq: 12 Nov 2020 17:23

Tgt Ion	Ratio	Lower	Upper
164	100		
166	93.3	99.3	148.9#
129	95.6	79.3	118.9
131	100.5	76.5	114.7





#53

Toluene

Concen: 4.961 ppbv

RT: 9.80 min Scan# 2182

Delta R.T. -0.01 min

Lab File: VL035917.D

Acq: 12 Nov 2020 17:23

Instrument :

MSVOA_L

ClientSampleId :

CVS-3

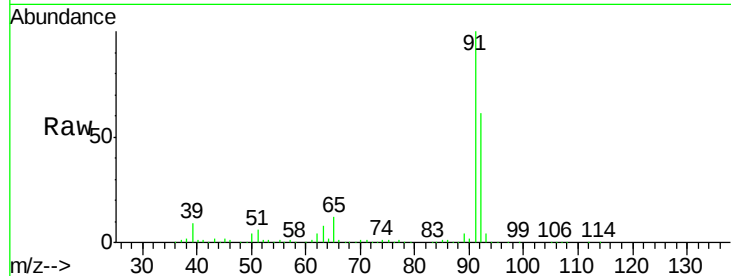
Tot Ion: 91 Resp: 1784801

Ion Ratio Lower Upper

91 100

92 60.1 49.8 74.6

Manual Integrations
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Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 92.10 (91.80 to 92.80): VL0

9.80

800000

600000

400000

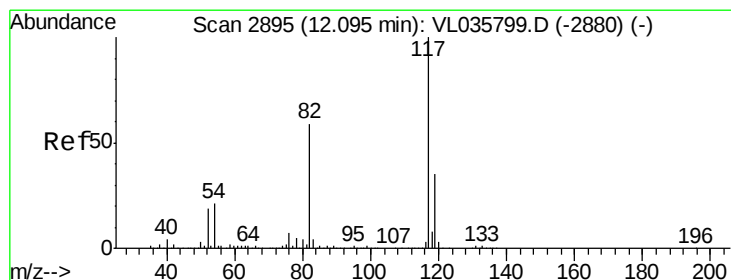
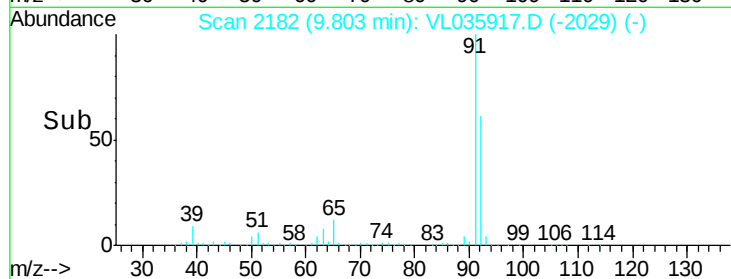
200000

0

Time-->

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11/16/2020 2:31:57 PM



#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.09 min Scan# 2893

Delta R.T. -0.01 min

Lab File: VL035917.D

Acq: 12 Nov 2020 17:23

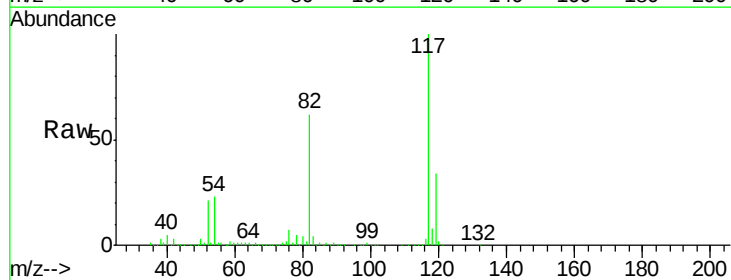
Tgt Ion: 117 Resp: 3680560

Ion Ratio Lower Upper

117 100

82 61.3 50.6 76.0

119 33.8 52.6 78.8#



Abundance Ion 117.10 (116.80 to 117.80): V

Ion 82.10 (81.80 to 82.80): VL0

Ion 119.10 (118.80 to 119.80): V

12.09

2000000

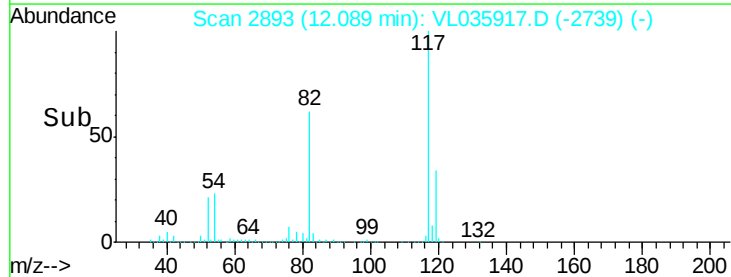
1500000

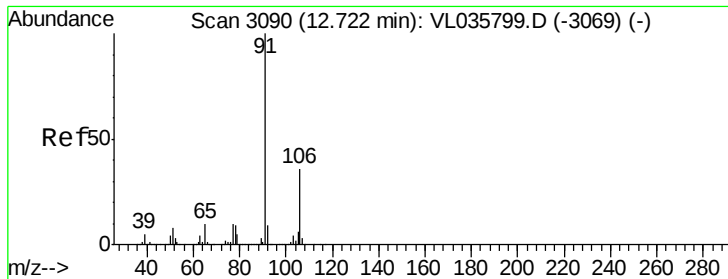
1000000

500000

0

Time-->





#58

Ethyl Benzene

Concen: 0.107 ppbv

RT: 12.71 min Scan# 3087

Delta R.T. -0.01 min

Lab File: VL035917.D

Acq: 12 Nov 2020 17:23

Instrument :

MSVOA_L

ClientSampleId :

CVS-3

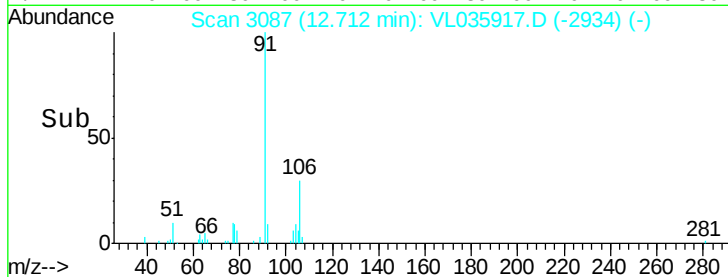
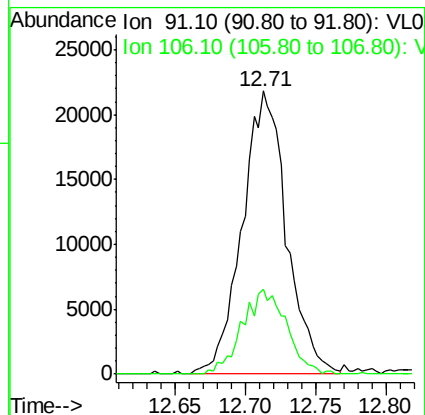
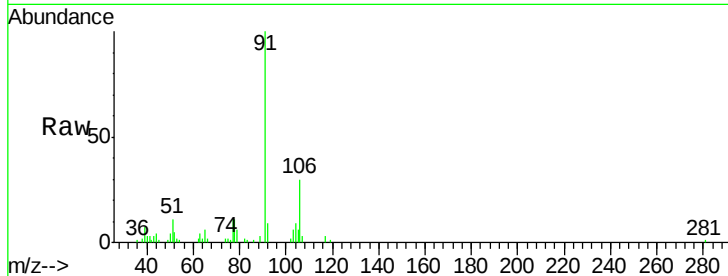
Tot Ion: 91 Resp: 48009

Ion Ratio Lower Upper

91 100

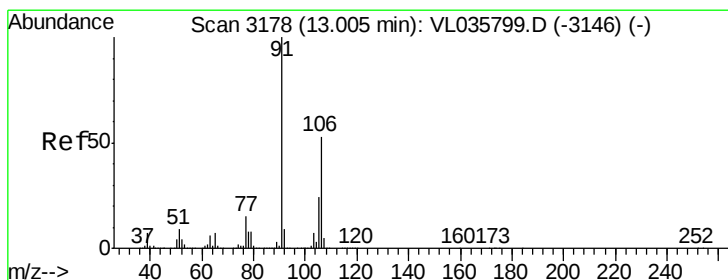
106 29.9 28.6 43.0

Manual Integrations
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11/16/2020 2:31:57 PM



#59

m/p-Xylene

Concen: 0.307 ppbv m

RT: 12.97 min Scan# 3167

Delta R.T. -0.04 min

Lab File: VL035917.D

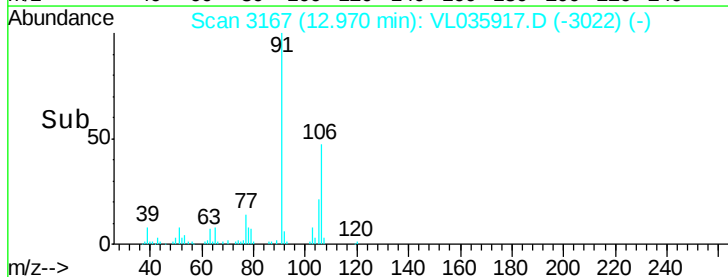
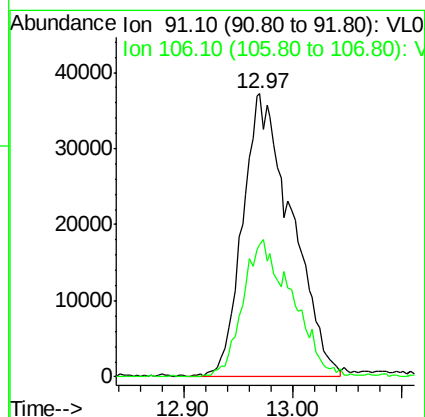
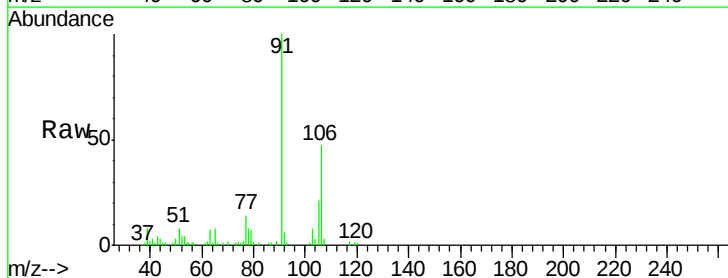
Acq: 12 Nov 2020 17:23

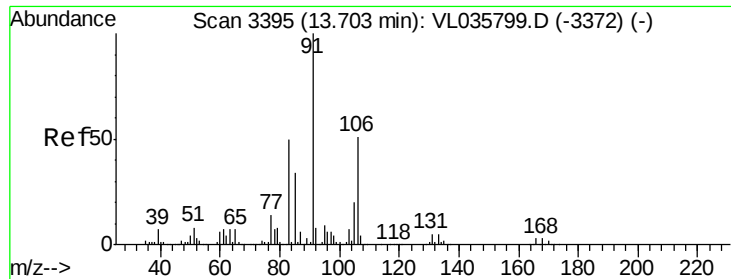
Tgt Ion: 91 Resp: 116374

Ion Ratio Lower Upper

91 100

106 0.0 39.5 59.3#



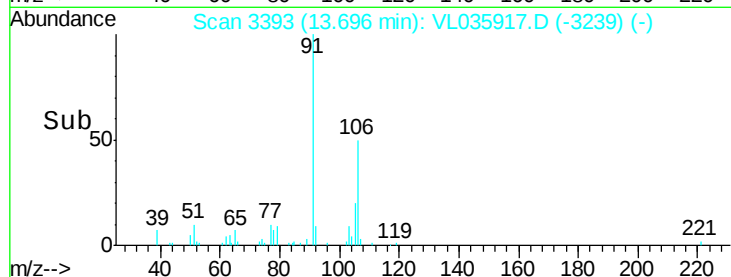
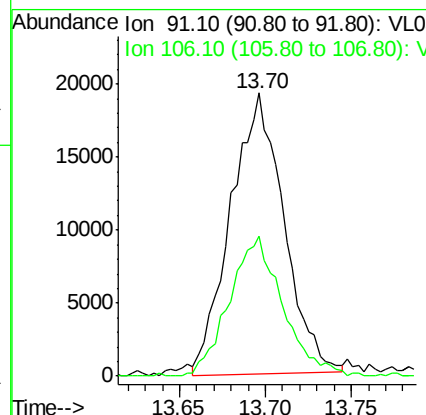
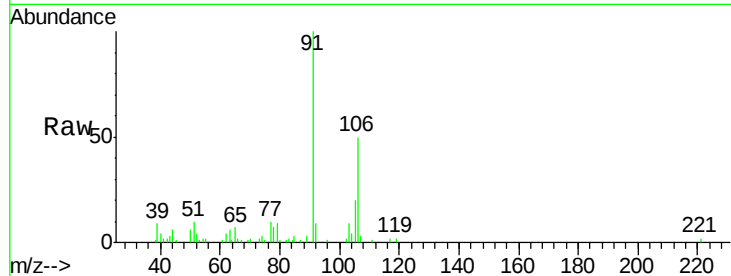


#60
o-Xylene
Concen: 0.112 ppbv
RT: 13.70 min Scan# 3393
Delta R.T. -0.01 min
Lab File: VL035917.D
Acq: 12 Nov 2020 17:23

Instrument :
MSVOA_L
ClientSampled :
CVS-3

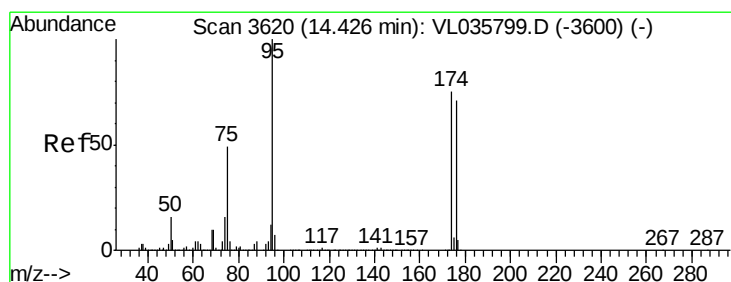
Tot Ion: 91 Resp: 41482
Ion Ratio Lower Upper
91 100
106 50.2 24.8 74.4

Manual Integrations
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#68
1-Bromo-4-Fluorobenzene
Concen: 10.177 ppbv
RT: 14.42 min Scan# 3618
Delta R.T. -0.01 min
Lab File: VL035917.D
Acq: 12 Nov 2020 17:23

Tgt Ion: 95 Resp: 2661370
Ion Ratio Lower Upper
95 100
174 73.9 59.8 89.6
175 5.3 4.3 6.5

