

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL110420\
 Data File : VL035843.D
 Acq On : 4 Nov 2020 22:01
 Operator : SY/AP
 Sample : L4220-01
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 IA1

Manual Integrations
 APPROVED

MMDadoda
 11/5/2020 2:17:39 PM

Quant Time: Nov 05 05:01:56 2020
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL110320AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LWed 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	874975	10.00	ppbv	-0.04
33) 1,4-Difluorobenzene	7.14	114	3990328	10.00	ppbv	-0.04
55) Chlorobenzene-d5	12.05	117	3597065	10.00	ppbv	-0.05

System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	14.38	95	2532173	9.91	ppbv	-0.05
Spiked Amount	10.000	Range	65 - 135	Recovery	=	99.10%

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.02	85	52635	0.320	ppbv	96
3) Chlorodifluoromethane	2.96	51	46057	0.440	ppbv #	90
4) Chloromethane	3.12	50	21456	0.422	ppbv	91
9) Propene	2.99	41	51870	1.353	ppbv	90
11) Trichlorofluoromethane	3.92	101	49595	0.240	ppbv	85
13) Ethanol	3.59	45	143982m	17.305	ppbv	
15) Acetone	3.82	43	396412	4.238	ppbv	97
19) Isopropyl Alcohol	3.96	45	22844	0.397	ppbv #	1
20) Methylene Chloride	4.31	84	1166143	17.709	ppbv	98
26) Hexane	5.65	57	617364	6.075	ppbv #	44
34) 2-Butanone	5.22	43	20944	0.162	ppbv #	86
35) Carbon Tetrachloride	6.98	117	11694m	0.055	ppbv	
36) Benzene	6.86	78	91269	0.308	ppbv	97
44) 2,2,4-Trimethylpentane	7.83	57	46870	0.119	ppbv #	82
52) Tetrachloroethene	11.19	164	7185m	0.051	ppbv	
53) Toluene	9.77	91	226226	0.632	ppbv	99
59) m/p-Xylene	12.93	91	72769m	0.196	ppbv	
74) 1,2,4-Trimethylbenzene	16.73	105	41098	0.096	ppbv #	67

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

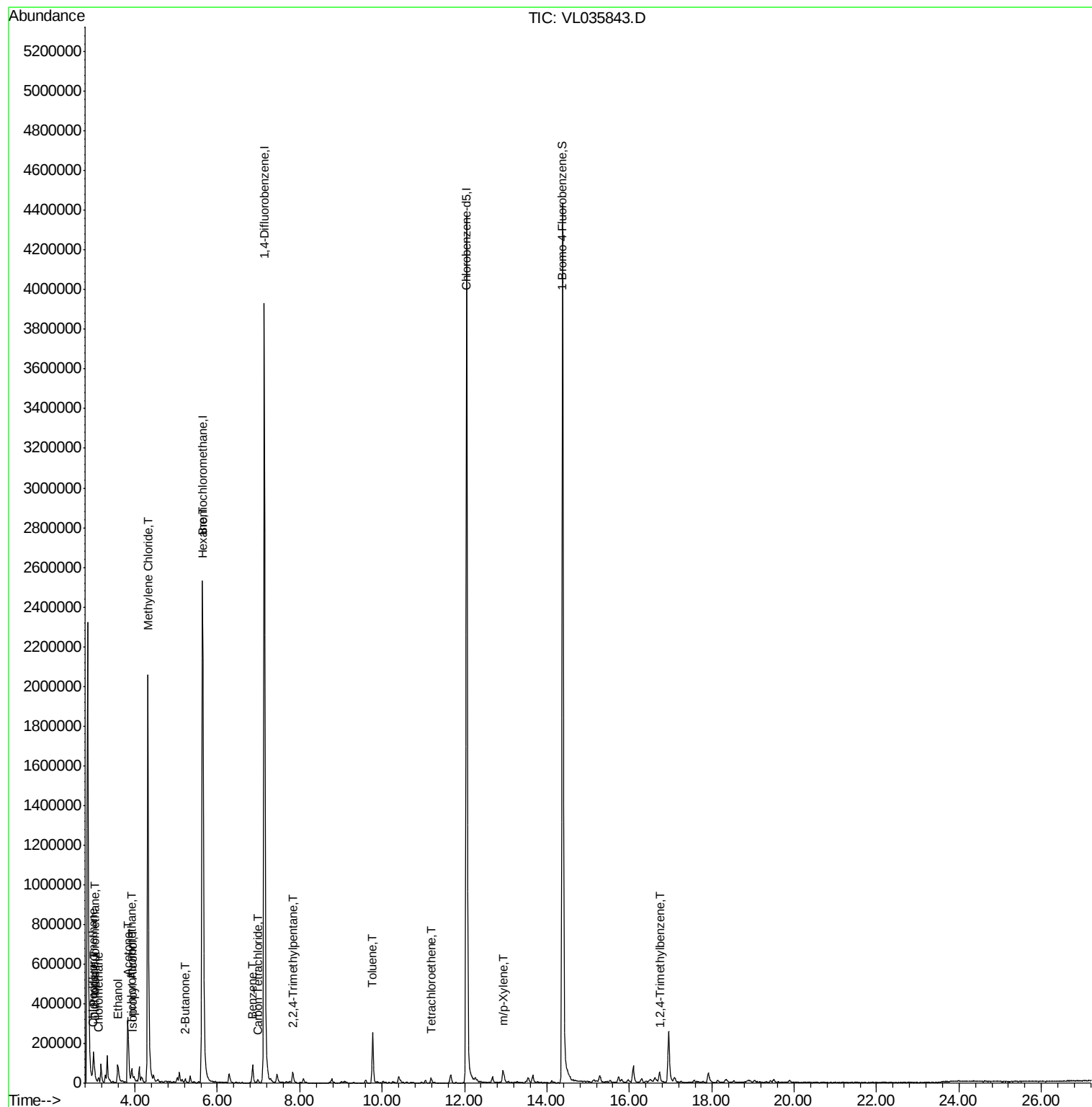
Data Path : Z:\V0ASRV\HPCHEM1\MSVOA L\DATA\VL110420\
Data File : VL035843.D
Acq On : 4 Nov 2020 22:01
Operator : SY/AP
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Manual Integrations
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Quant Time: Nov 05 05:01:56 2020
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA 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# 885

Delta R.T. -0.04 min

Lab File: VL035843.D

Acq: 4 Nov 2020 22:01

Instrument :

MSVOA_L

ClientSampled :

IA1

Tot Ion: 49 Resp: 874975

Ion Ratio Lower Upper

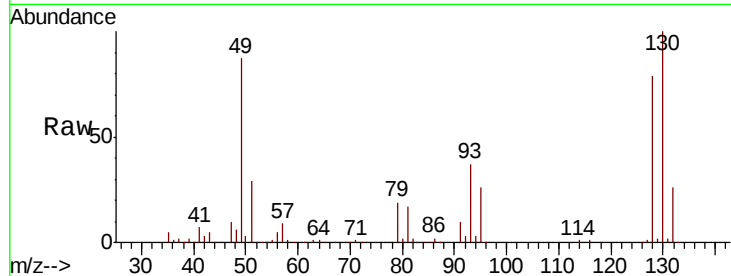
49 100

128 93.0 41.5 124.6

130 118.1 53.7 161.1

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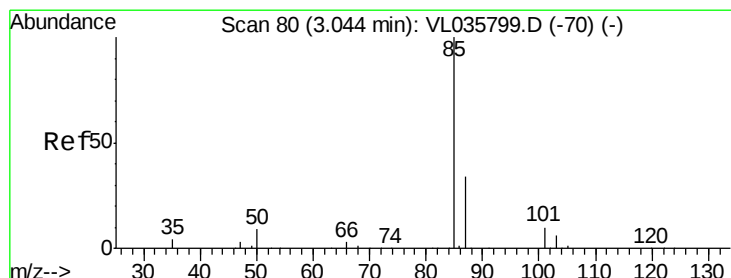
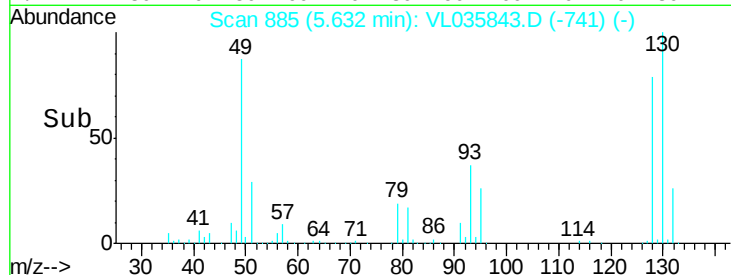
Abundance Ion 49.10 (48.80 to 49.80): VL0

Ion 128.00 (127.70 to 128.70): VL0

Ion 130.00 (129.70 to 130.70): VL0

5.63

Time-->



#2

Dichlorodifluoromethane

Concen: 0.320 ppbv

RT: 3.02 min Scan# 74

Delta R.T. -0.02 min

Lab File: VL035843.D

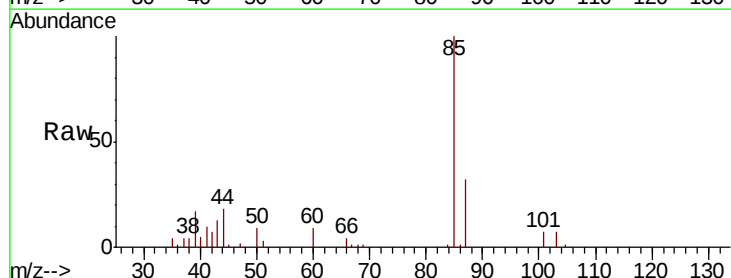
Acq: 4 Nov 2020 22:01

Tgt Ion: 85 Resp: 52635

Ion Ratio Lower Upper

85 100

87 31.6 27.1 40.7

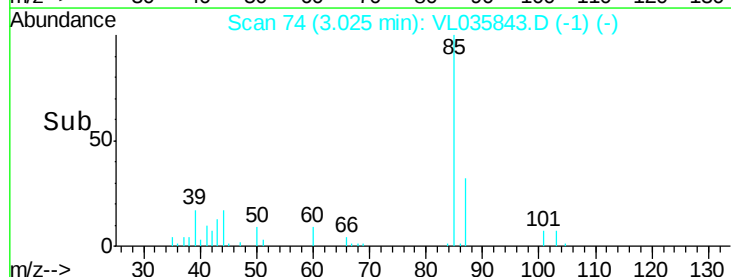


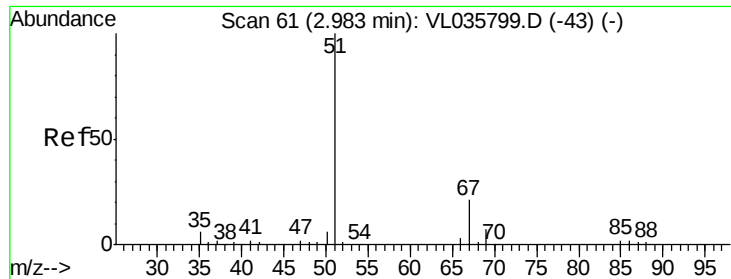
Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0

3.02

Time-->





#3

Chlorodifluoromethane

Concen: 0.440 ppbv

RT: 2.96 min Scan# 55

Delta R.T. -0.02 min

Lab File: VL035843.D

Acq: 4 Nov 2020 22:01

Instrument :

MSVOA_L

ClientSampled :

IA1

Tot Ion: 51 Resp: 46057

Ion Ratio Lower Upper

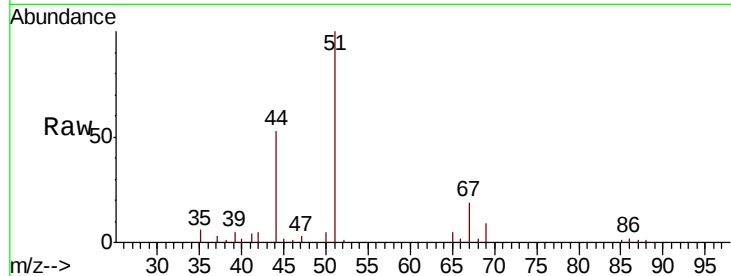
51 100

67 16.6 17.0 25.4#

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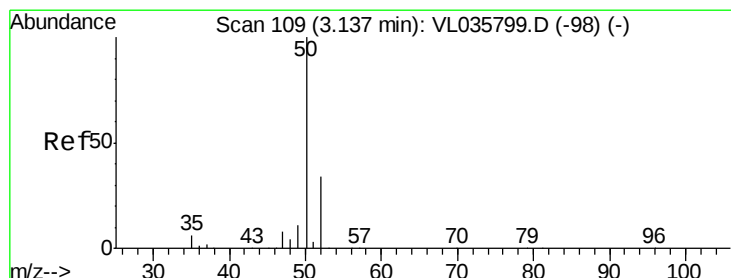
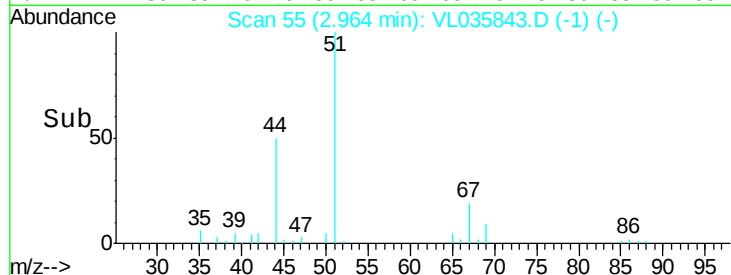
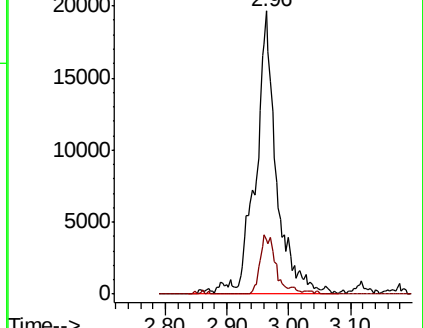
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Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0



#4

Chloromethane

Concen: 0.422 ppbv

RT: 3.12 min Scan# 103

Delta R.T. -0.02 min

Lab File: VL035843.D

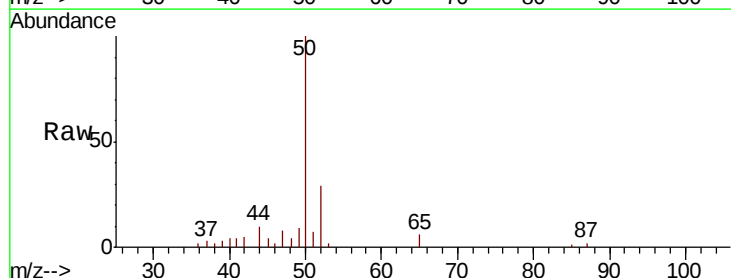
Acq: 4 Nov 2020 22:01

Tgt Ion: 50 Resp: 21456

Ion Ratio Lower Upper

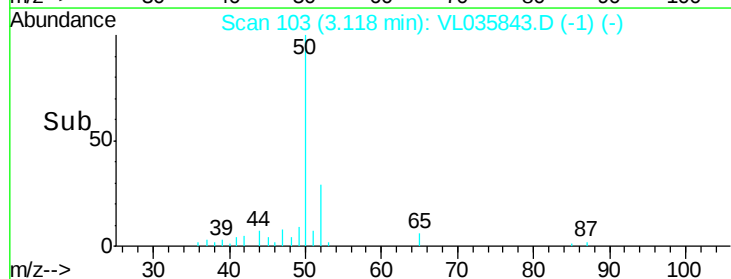
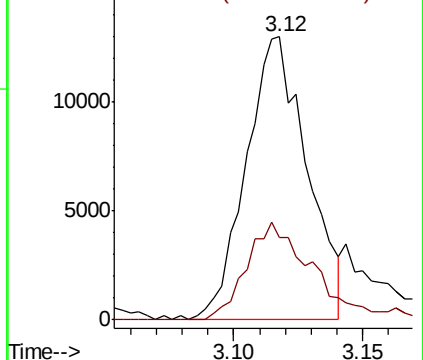
50 100

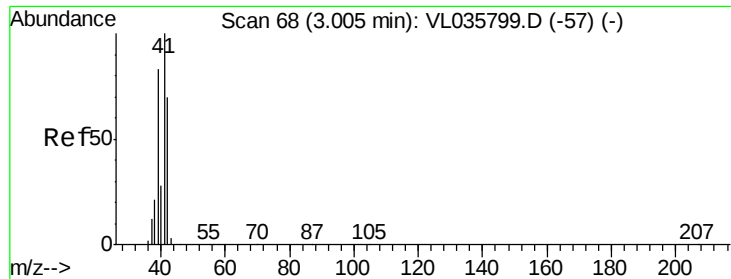
52 29.0 27.1 40.7



Abundance Ion 50.10 (49.80 to 50.80): VL0

Ion 52.10 (51.80 to 52.80): VL0





#9

Propene

Concen: 1.353 ppbv

RT: 2.99 min Scan# 64

Delta R.T. -0.01 min

Lab File: VL035843.D

Acq: 4 Nov 2020 22:01

Instrument :

MSVOA_L

ClientSampled :

IA1

Tot Ion: 41 Resp: 51870

Ion Ratio Lower Upper

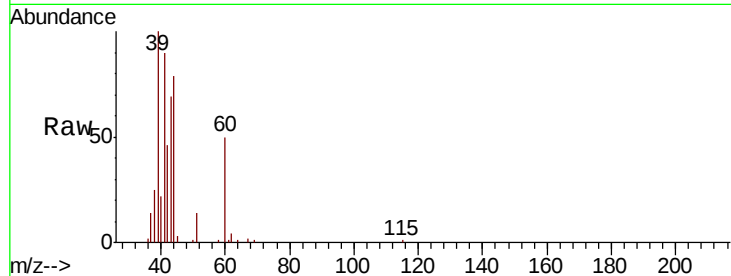
41 100

42 62.2 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

2.99

30000

25000

20000

15000

10000

5000

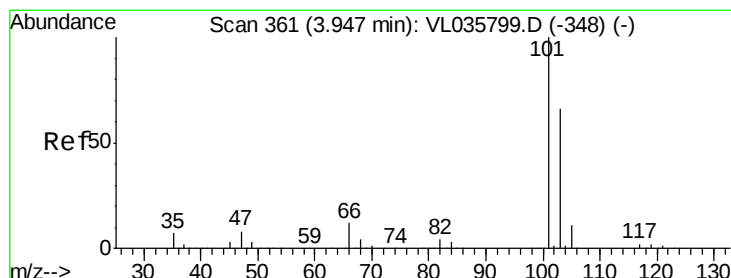
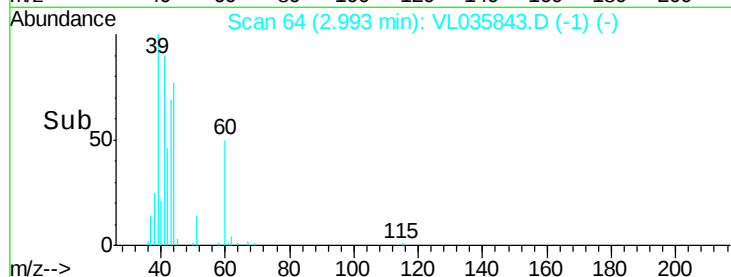
0

Time-->

2.95

3.00

3.05



#11

Trichlorofluoromethane

Concen: 0.240 ppbv

RT: 3.92 min Scan# 353

Delta R.T. -0.03 min

Lab File: VL035843.D

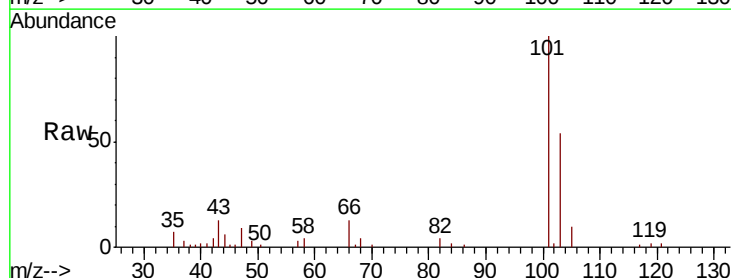
Acq: 4 Nov 2020 22:01

Tgt Ion: 101 Resp: 49595

Ion Ratio Lower Upper

101 100

103 54.2 53.0 79.4



Abundance Ion 101.00 (100.70 to 101.70): V

Ion 103.00 (102.70 to 103.70): V

3.92

30000

20000

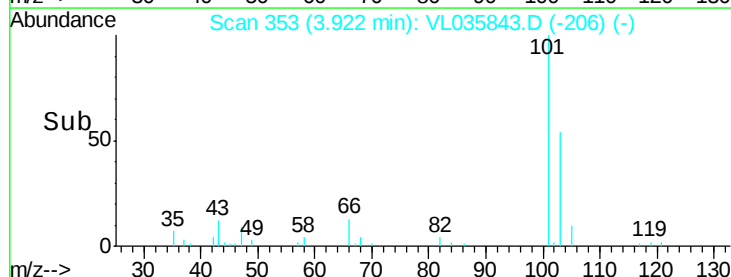
10000

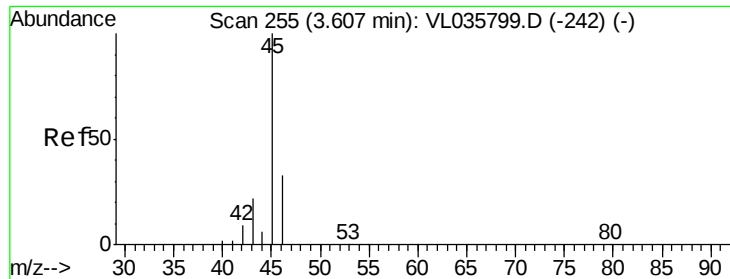
0

Time-->

3.90

3.95





#13

Ethanol

Concen: 17.305 ppbv m

RT: 3.59 min Scan# 250

Delta R.T. -0.02 min

Lab File: VL035843.D

Acq: 4 Nov 2020 22:01

Instrument :

MSVOA_L

ClientSampled :

IA1

Tot Ion: 45 Resp: 143982

Ion Ratio Lower Upper

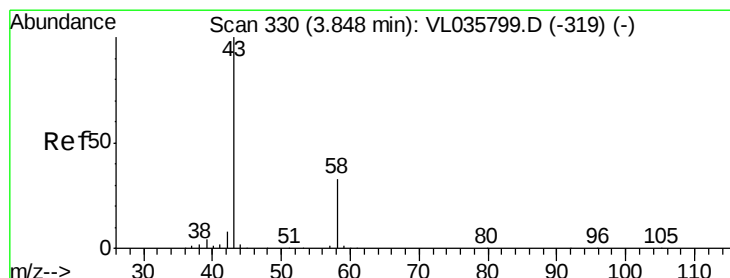
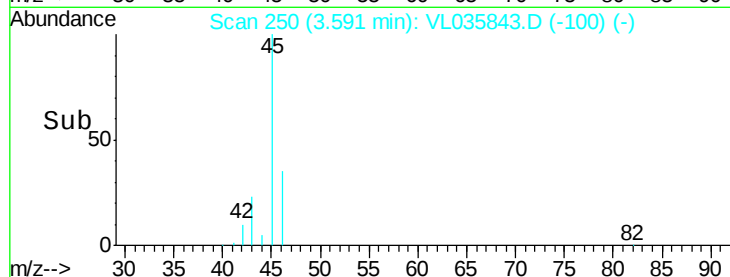
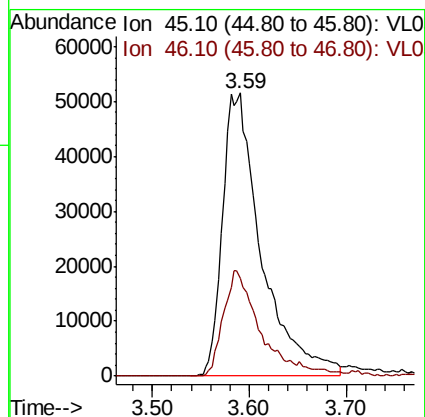
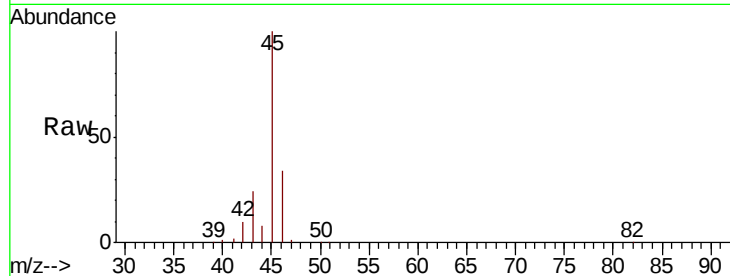
45 100

46 0.0 16.1 64.5#

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#15

Acetone

Concen: 4.238 ppbv

RT: 3.82 min Scan# 322

Delta R.T. -0.03 min

Lab File: VL035843.D

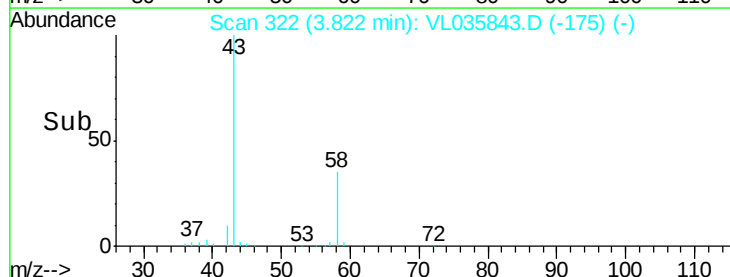
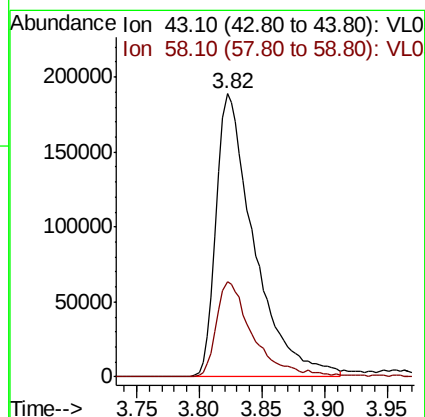
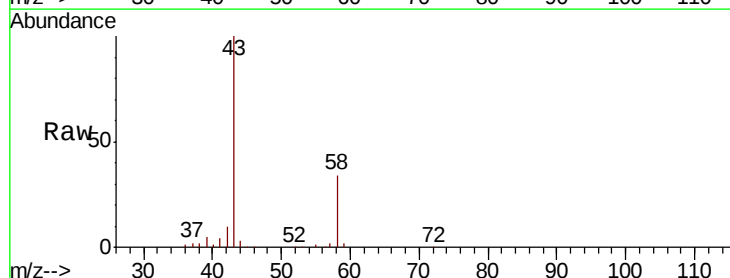
Acq: 4 Nov 2020 22:01

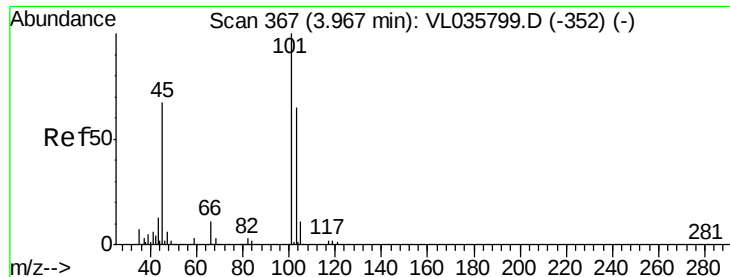
Tgt Ion: 43 Resp: 396412

Ion Ratio Lower Upper

43 100

58 32.6 27.5 41.3





#19

Isopropyl Alcohol

Concen: 0.397 ppbv

RT: 3.96 min Scan# 364

Delta R.T. -0.01 min

Lab File: VL035843.D

Acq: 4 Nov 2020 22:01

Instrument :

MSVOA_L

ClientSampled :

IA1

Tot Ion: 45 Resp: 22844

Ion Ratio Lower Upper

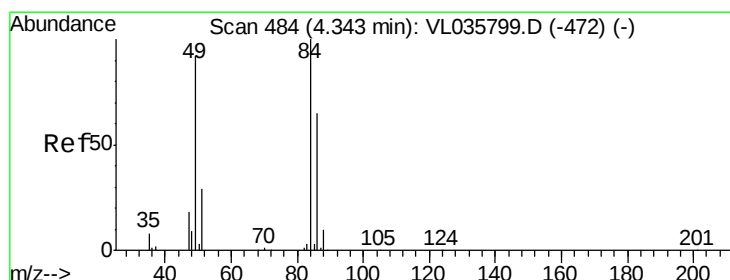
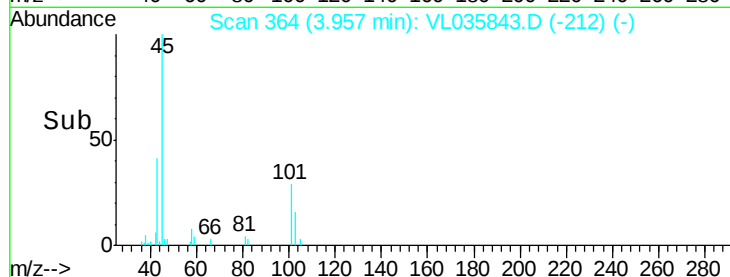
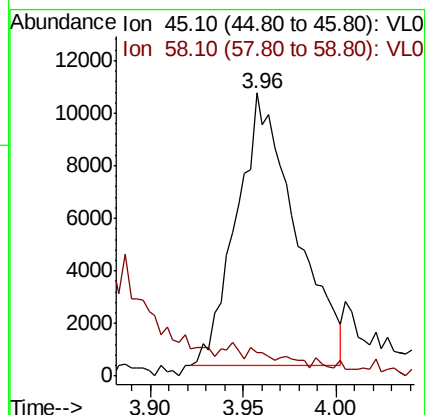
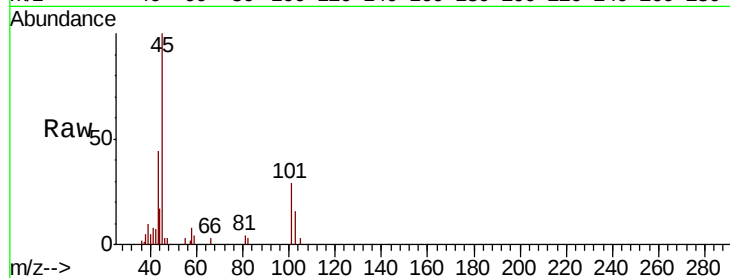
45 100

58 581.7 2.6 3.8#

Manual Integrations
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#20

Methylene Chloride

Concen: 17.709 ppbv

RT: 4.31 min Scan# 475

Delta R.T. -0.03 min

Lab File: VL035843.D

Acq: 4 Nov 2020 22:01

Tgt Ion: 84 Resp: 1166143

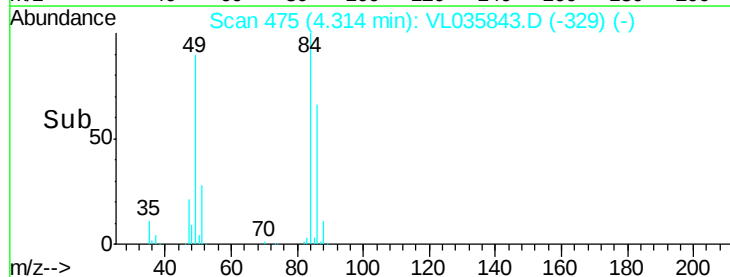
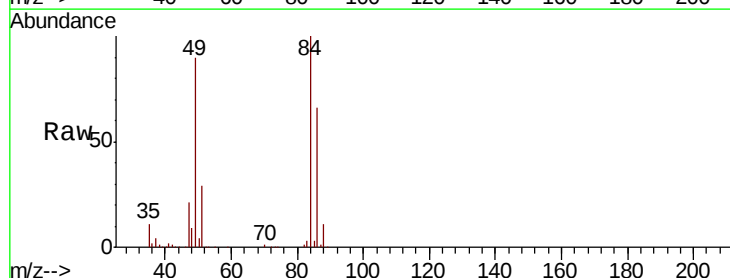
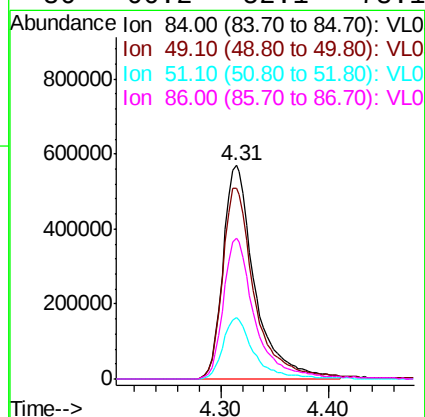
Ion Ratio Lower Upper

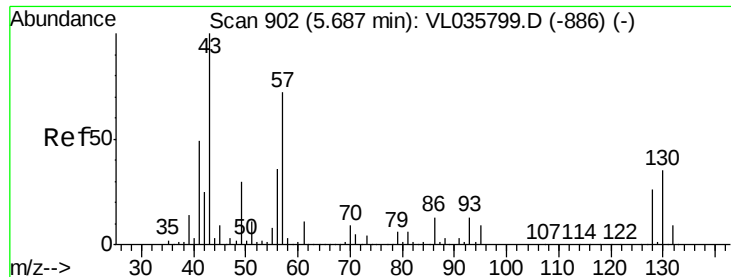
84 100

49 89.5 73.8 110.8

51 28.5 23.0 34.4

86 66.2 52.1 78.1





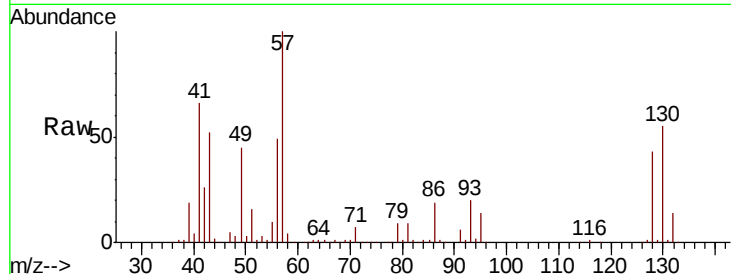
#26
Hexane
Concen: 6.075 ppbv
RT: 5.65 min Scan# 892
Delta R.T. -0.03 min
Lab File: VL035843.D
Acq: 4 Nov 2020 22:01

Instrument :
MSVOA_L
ClientSampled :
IA1

Tot Ion	Ratio	Lower	Upper
57	100		
41	67.9	58.9	88.3
43	54.4	150.2	225.2#
56	52.9	42.4	63.6

Manual Integrations
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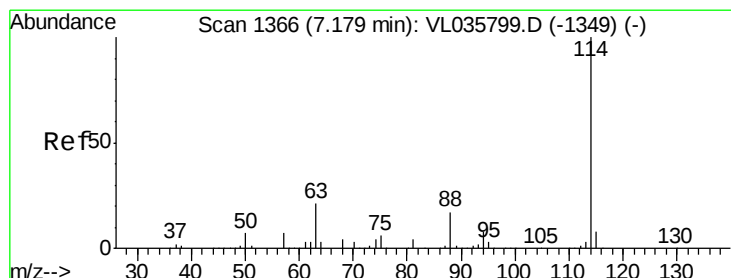
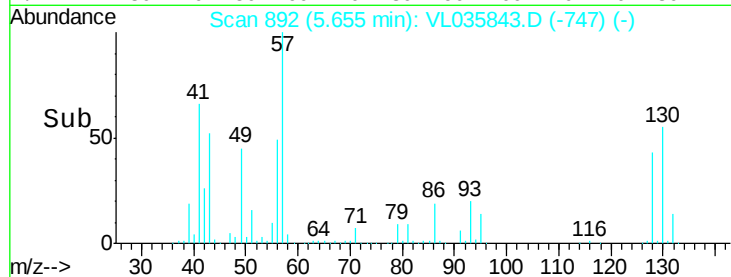
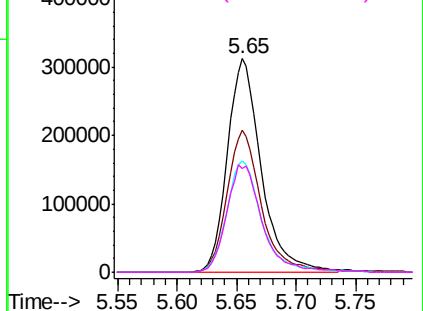
Abundance

Ion 57.10 (56.80 to 57.80): VL0

Ion 41.10 (40.80 to 41.80): VL0

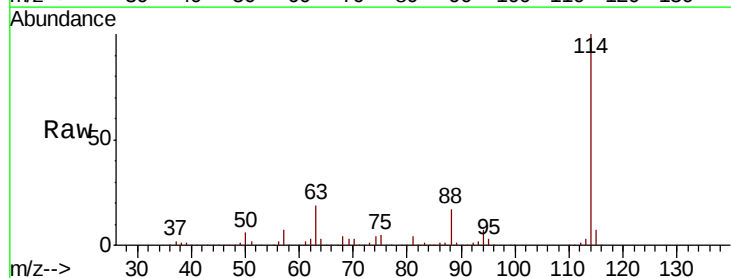
Ion 43.10 (42.80 to 43.80): VL0

Ion 56.10 (55.80 to 56.80): VL0



#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 7.14 min Scan# 1354
Delta R.T. -0.04 min
Lab File: VL035843.D
Acq: 4 Nov 2020 22:01

Tgt Ion	Ratio	Lower	Upper
114	100		
63	18.1	16.1	24.1
88	16.4	13.7	20.5

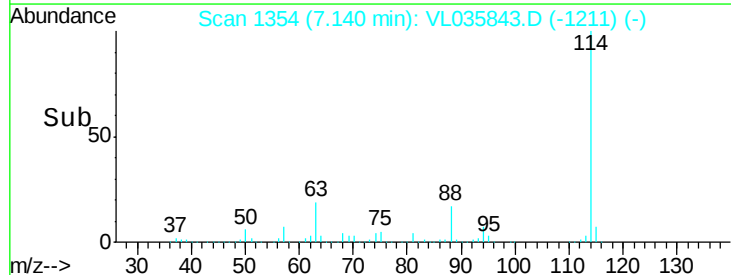
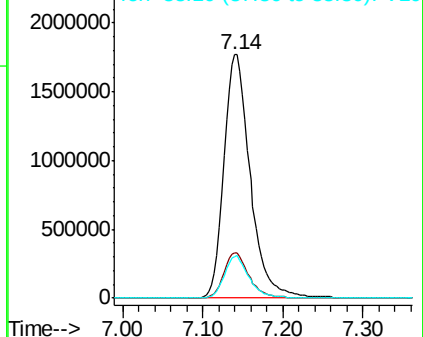


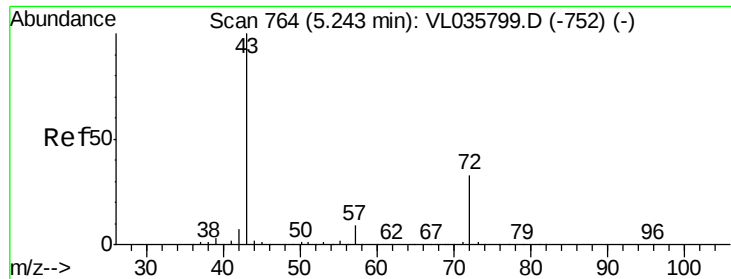
Abundance

Ion 114.10 (113.80 to 114.80): VL0

Ion 63.10 (62.80 to 63.80): VL0

Ion 88.10 (87.80 to 88.80): VL0





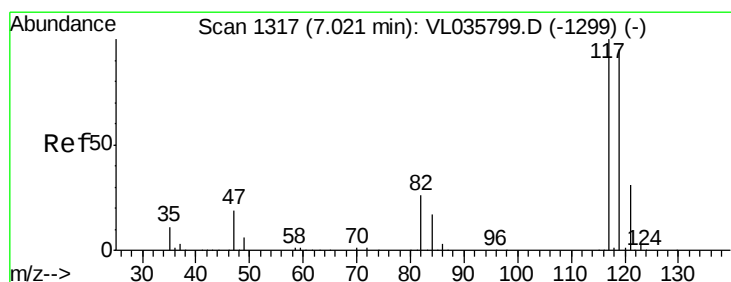
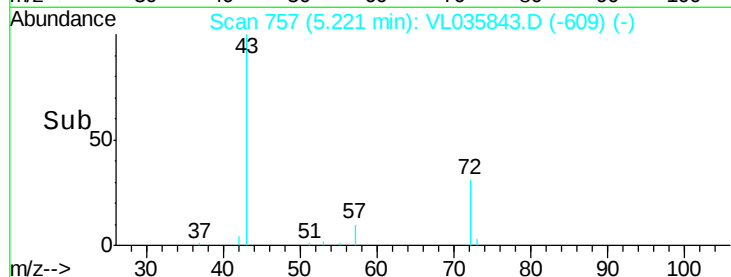
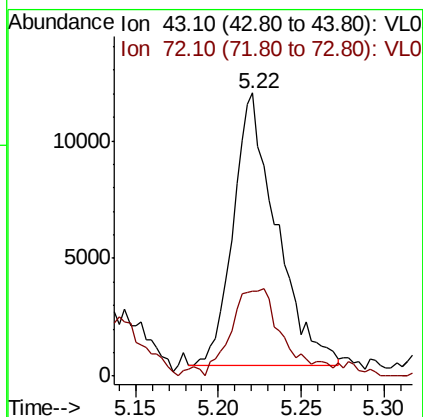
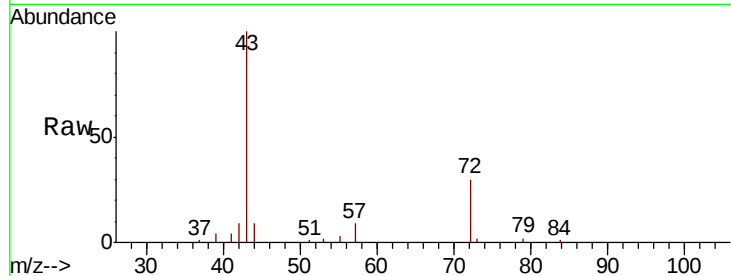
#34
2-Butanone
Concen: 0.162 ppbv
RT: 5.22 min Scan# 757
Delta R.T. -0.02 min
Lab File: VL035843.D
Acq: 4 Nov 2020 22:01

Instrument :
MSVOA_L
ClientSampled :
IA1

Tot Ion: 43 Resp: 20944
Ion Ratio Lower Upper
43 100
72 41.2 26.5 39.7#

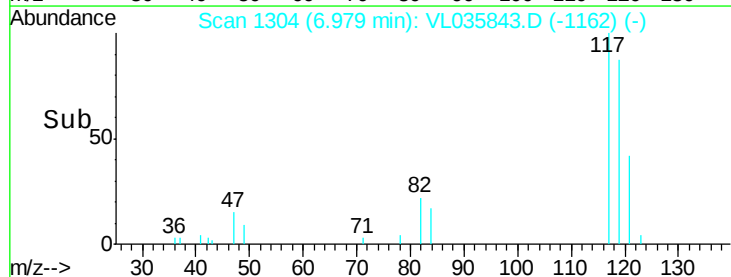
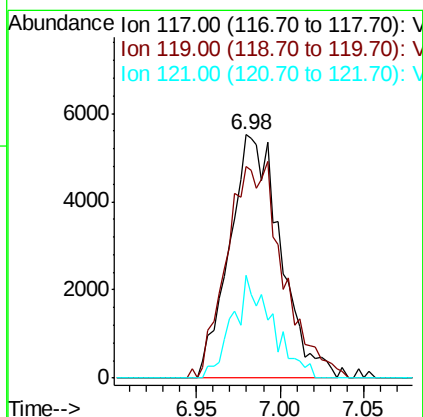
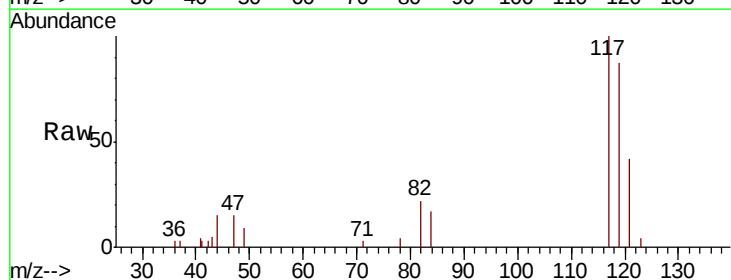
Manual Integrations
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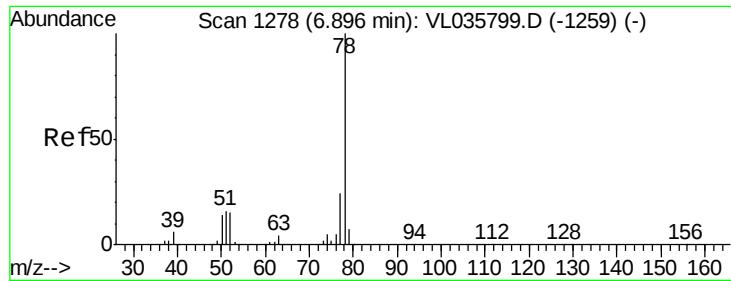
MMDadoda
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#35
Carbon Tetrachloride
Concen: 0.055 ppbv m
RT: 6.98 min Scan# 1304
Delta R.T. -0.04 min
Lab File: VL035843.D
Acq: 4 Nov 2020 22:01

Tgt Ion: 117 Resp: 11694
Ion Ratio Lower Upper
117 100
119 86.7 75.6 113.4
121 42.2 25.1 37.7#





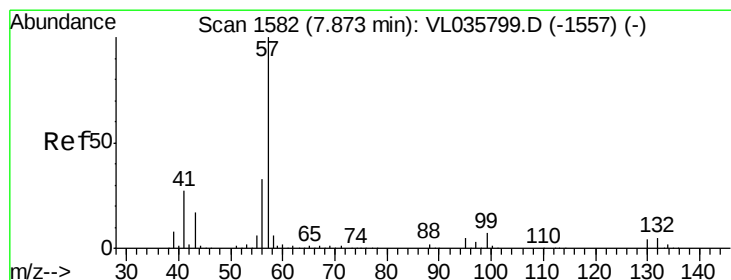
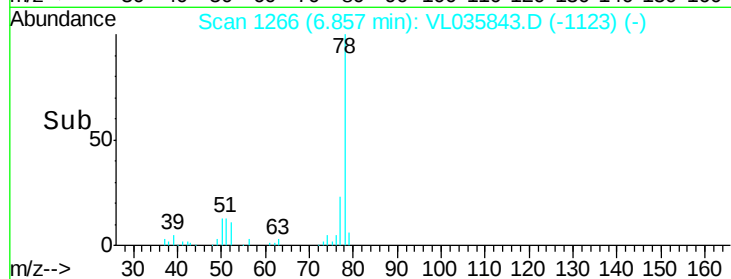
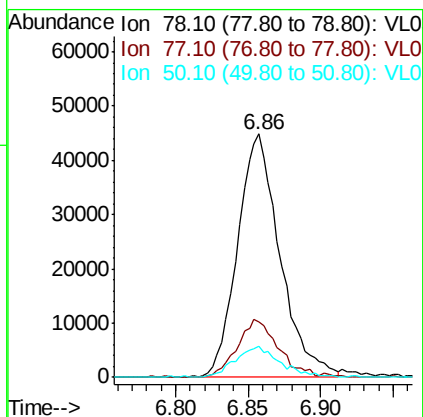
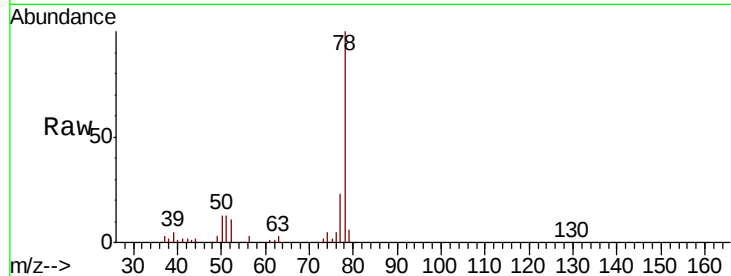
#36
Benzene
Concen: 0.308 ppbv
RT: 6.86 min Scan# 1266
Delta R.T. -0.04 min
Lab File: VL035843.D
Acq: 4 Nov 2020 22:01

Instrument :
MSVOA_L
ClientSampled :
IA1

Tot Ion	Ratio	Lower	Upper
78	100		
77	22.9	19.3	28.9
50	13.0	11.4	17.2

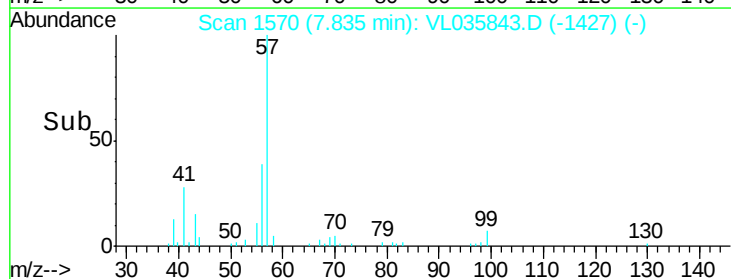
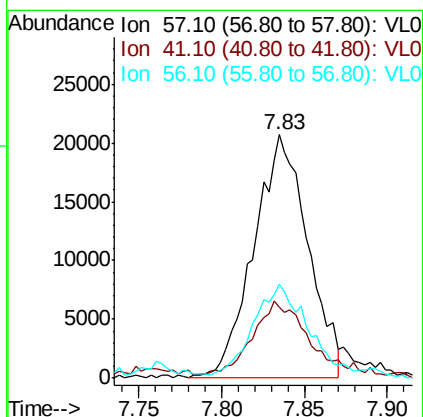
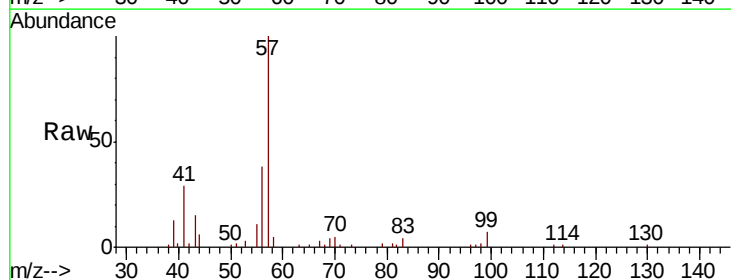
Manual Integrations
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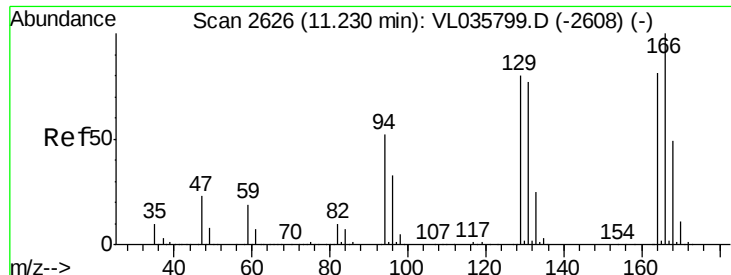
MMDadoda
11/5/2020 2:17:39 PM



#44
2,2,4-Trimethylpentane
Concen: 0.119 ppbv
RT: 7.83 min Scan# 1570
Delta R.T. -0.04 min
Lab File: VL035843.D
Acq: 4 Nov 2020 22:01

Tgt Ion	Ratio	Lower	Upper
57	100		
41	35.8	21.0	31.4#
56	41.5	25.4	38.0#





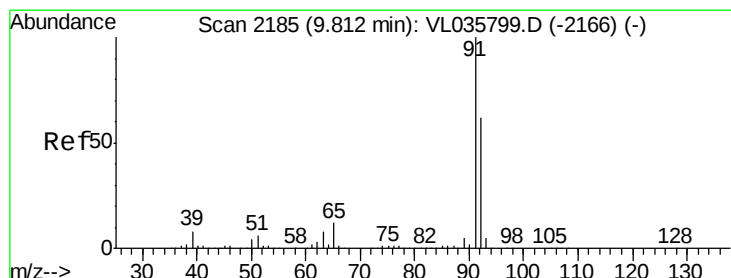
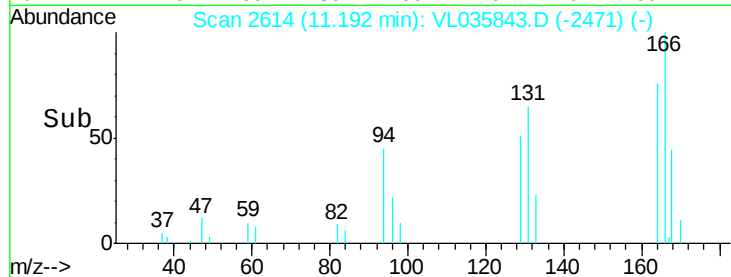
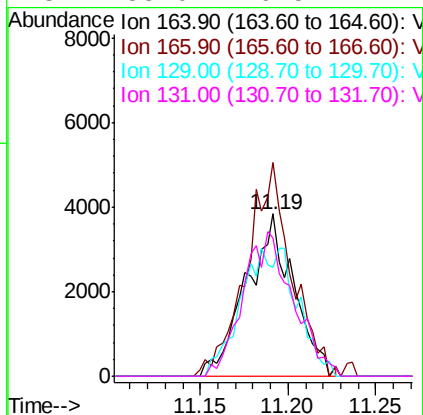
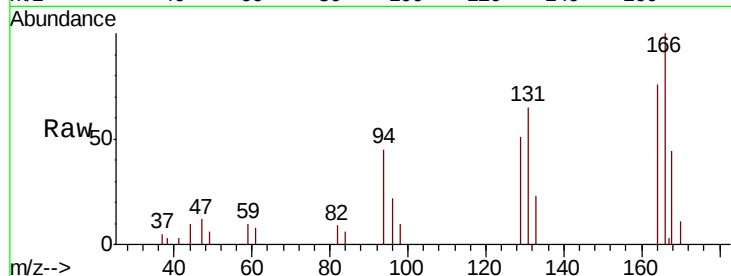
#52
Tetrachloroethene
Concen: 0.051 ppbv m
RT: 11.19 min Scan# 2614
Delta R.T. -0.04 min
Lab File: VL035843.D
Acq: 4 Nov 2020 22:01

Instrument :
MSVOA_L
ClientSampled :
IA1

Tot Ion	Ratio	Lower	Upper
164	100		
166	131.7	99.3	148.9
129	67.3	79.3	118.9#
131	85.0	76.5	114.7

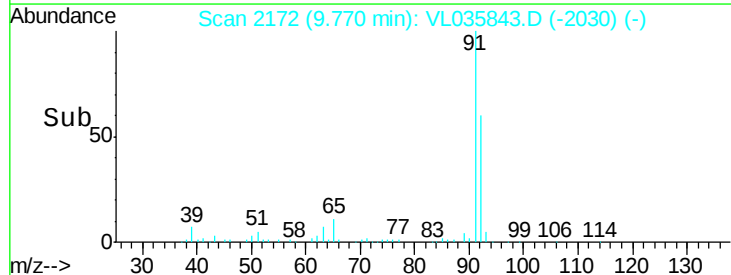
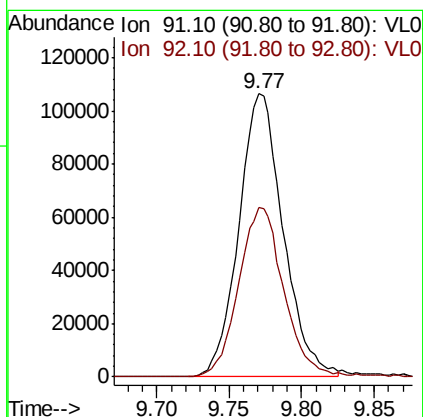
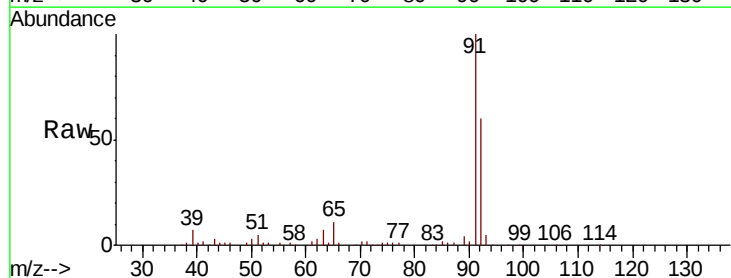
Manual Integrations
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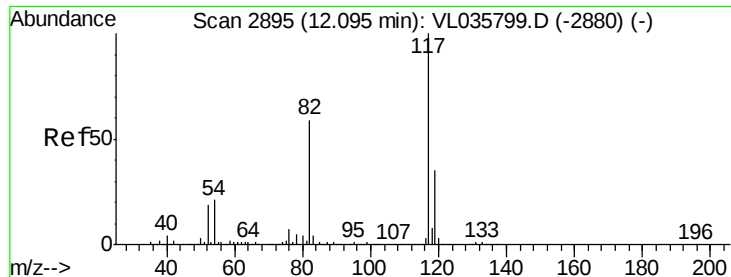
MMDadoda
11/5/2020 2:17:39 PM



#53
Toluene
Concen: 0.632 ppbv
RT: 9.77 min Scan# 2172
Delta R.T. -0.04 min
Lab File: VL035843.D
Acq: 4 Nov 2020 22:01

Tgt Ion	Ratio	Lower	Upper
91	100		
92	61.4	49.8	74.6





#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.05 min Scan# 2881

Delta R.T. -0.05 min

Lab File: VL035843.D

Acq: 4 Nov 2020 22:01

Instrument :

MSVOA_L

ClientSampled :

IA1

Tot Ion:117 Resp: 3597065

Ion Ratio Lower Upper

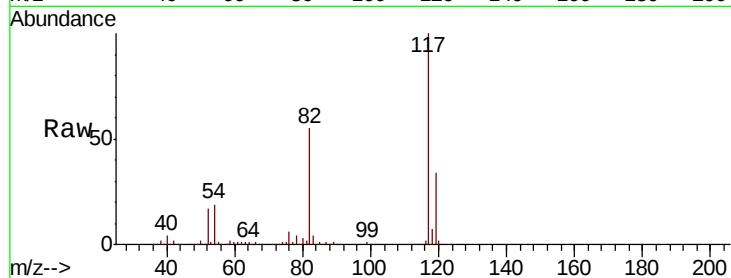
117 100

82 56.1 50.6 76.0

119 34.2 52.6 78.8#

Manual Integrations
APPROVED

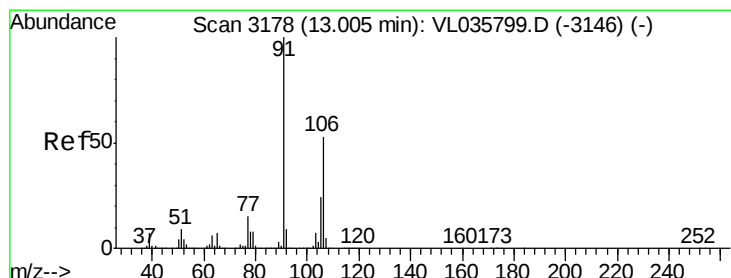
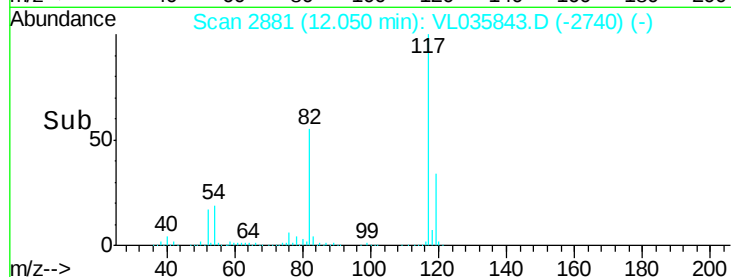
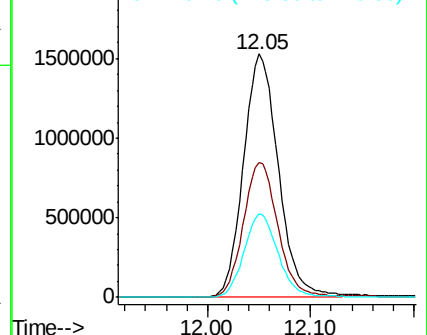
MMDadoda
11/5/2020 2:17:39 PM



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



#59

m/p-Xylene

Concen: 0.196 ppbv m

RT: 12.93 min Scan# 3156

Delta R.T. -0.07 min

Lab File: VL035843.D

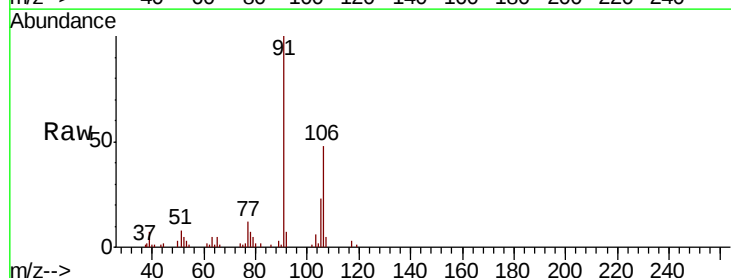
Acq: 4 Nov 2020 22:01

Tgt Ion: 91 Resp: 72769

Ion Ratio Lower Upper

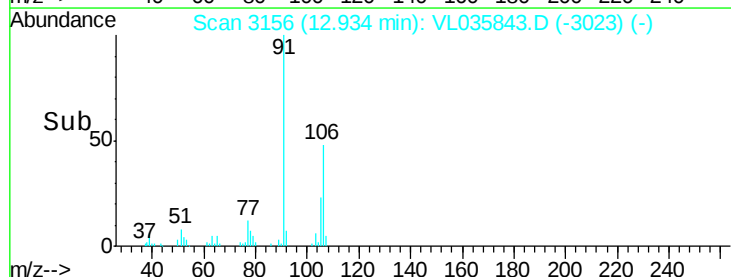
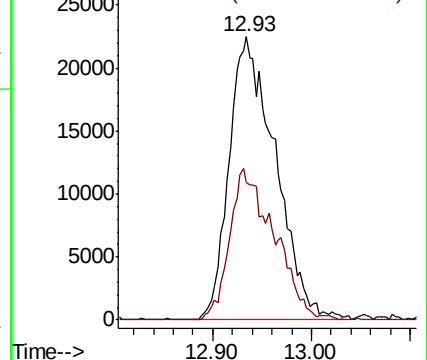
91 100

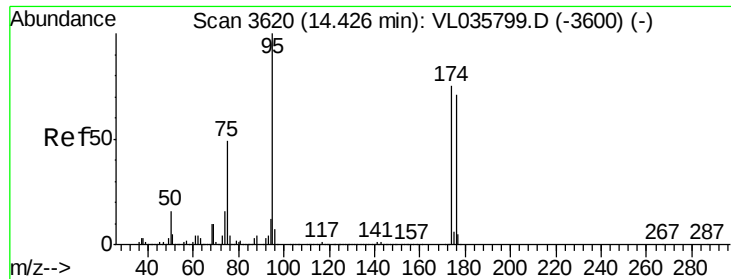
106 51.4 39.5 59.3



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 106.10 (105.80 to 106.80): V





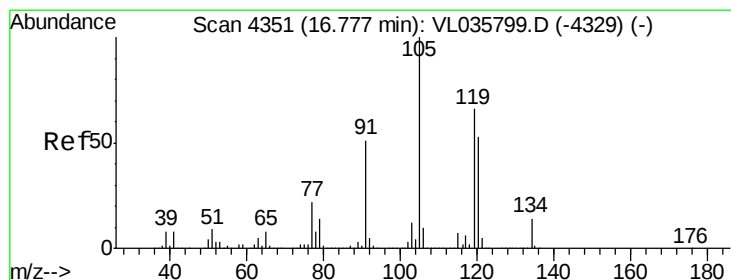
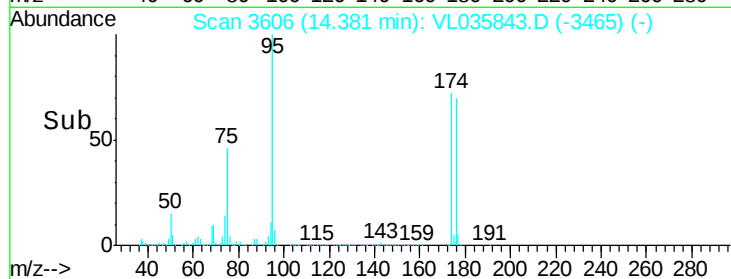
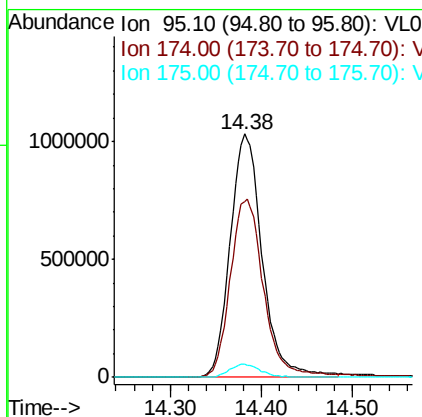
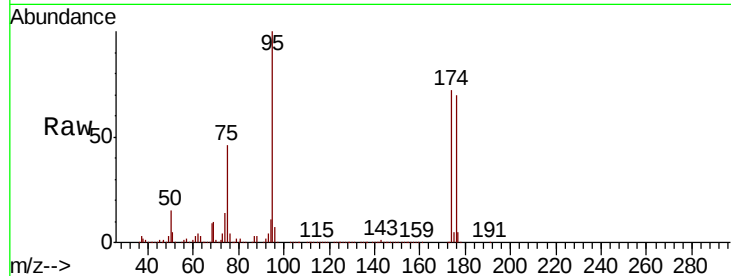
#68
 1-Bromo-4-Fluorobenzene
 Concen: 9.908 ppbv
 RT: 14.38 min Scan# 3606
 Delta R.T. -0.05 min
 Lab File: VL035843.D
 Acq: 4 Nov 2020 22:01

Instrument :
 MSVOA_L
 ClientSampled :
 IA1

Tot Ion: 95 Resp: 2532173
 Ion Ratio Lower Upper
 95 100
 174 77.8 59.8 89.6
 175 5.5 4.3 6.5

Manual Integrations
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 11/5/2020 2:17:39 PM



#74
 1,2,4-Trimethylbenzene
 Concen: 0.096 ppbv
 RT: 16.73 min Scan# 4336
 Delta R.T. -0.05 min
 Lab File: VL035843.D
 Acq: 4 Nov 2020 22:01

Tgt Ion: 105 Resp: 41098
 Ion Ratio Lower Upper
 105 100
 120 42.9 42.0 63.0
 91 9.7 41.0 61.6#
 77 14.6 17.3 25.9#

