

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL120418\
 Data File : VL032890.D
 Acq On : 5 Dec 2018 00:01
 Operator : SY/AP
 Sample : J6176-01
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 MMSV-07

Manual Integrations
 APPROVED

MMDadoda
 12/10/2018 1:01:15 PM

Quant Time: Dec 05 15:35:24 2018
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL111418AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Wed Nov 14 07:00:23 2018
 QLast Update : Wed Nov 14 07:00:23 2018
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.77	49	1345588	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.30	114	3518428	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.25	117	3696193	10.00	ppbv	0.00

System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	14.58	95	2695805	9.75	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	97.50%

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.08	85	61208	0.316	ppbv	98
3) Chlorodifluoromethane	3.02	51	472452	4.429	ppbv	95
9) Propene	3.04	41	5470480	128.141	ppbv	97
10) Heptane	8.25	43	467636	2.869	ppbv	98
11) Trichlorofluoromethane	4.01	101	122335	0.671	ppbv	97
13) Ethanol	3.66	45	694879	49.694	ppbv	99
15) Acetone	3.90	43	3150536m	25.639	ppbv	
17) tert-Butyl alcohol	4.37	59	254748	6.610	ppbv #	93
20) Methylene Chloride	4.42	84	285884	4.494	ppbv	95
26) Hexane	5.79	57	2039567	15.998	ppbv #	44
27) Carbon Disulfide	4.62	76	868135	5.370	ppbv	99
29) Chloroform	5.86	83	218144	0.960	ppbv	93
30) Cyclohexane	7.25	84	353910	3.174	ppbv	85
34) 2-Butanone	5.33	43	2851812	15.627	ppbv	100
35) Carbon Tetrachloride	7.14	117	13892m	0.049	ppbv	
36) Benzene	7.01	78	3361333	11.997	ppbv	98
41) Tetrahydrofuran	6.15	42	1481497	14.153	ppbv	98
44) 2,2,4-Trimethylpentane	8.00	57	1856842	3.966	ppbv #	82
51) 2-Hexanone	10.28	43	307214	1.673	ppbv #	92
52) Tetrachloroethene	11.38	164	14785m	0.152	ppbv	
53) Toluene	9.95	91	3634297	12.434	ppbv	99
58) Ethyl Benzene	12.87	91	700744	1.575	ppbv	100
59) m/p-Xylene	13.12	91	797144	2.013	ppbv	97
60) o-Xylene	13.85	91	326386	0.820	ppbv	97
61) Styrene	13.69	104	86465	0.334	ppbv	96
69) p-Isopropyltoluene	17.82	119	62760	0.114	ppbv #	87
72) 4-Ethyltoluene	16.00	105	69723m	0.160	ppbv	
73) 1,3,5-Trimethylbenzene	16.16	105	66825m	0.157	ppbv	
74) 1,2,4-Trimethylbenzene	16.93	105	157097	0.344	ppbv #	70

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

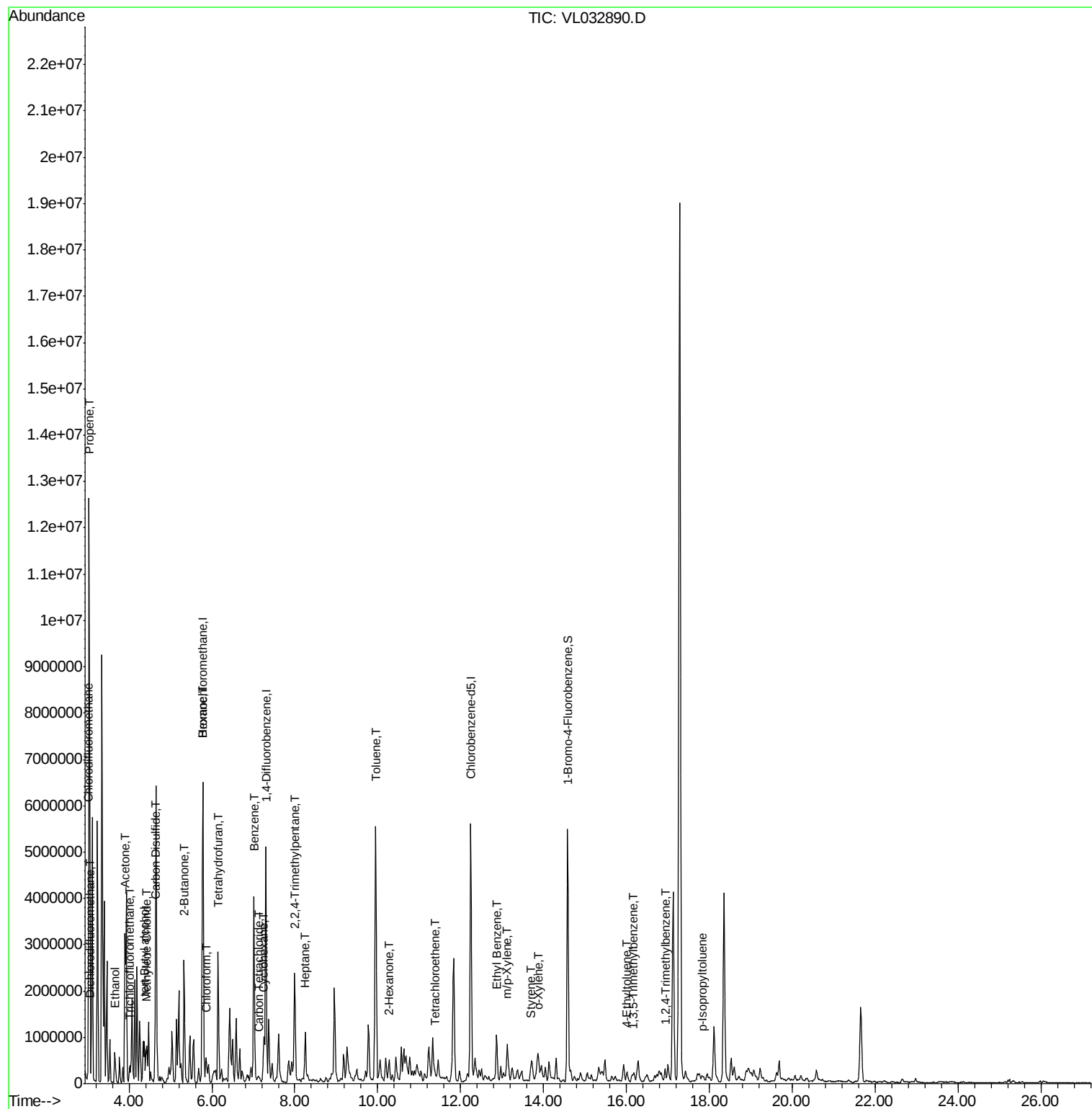
Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL120418\
Data File : VL032890.D
Acq On : 5 Dec 2018 00:01
Operator : SY/AP
Sample : J6176-01
Misc : 400ml/MSVOA L
ALS Vial : 1 Sample Multiplier: 1

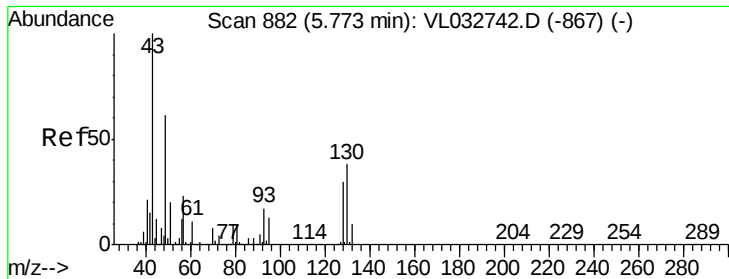
Instrument :
MSVOA_L
ClientSampleId :
MMSV-07

Manual Integrations
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Quant Time: Dec 05 15:35:24 2018
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL111418AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Wed Nov
QLast Update : Wed Nov 14 07:00:23 2018
Response via : Initial Calibration





#1

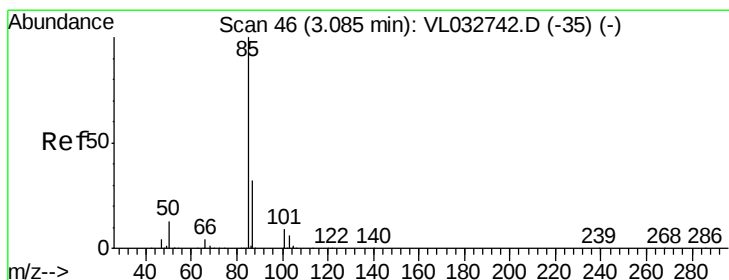
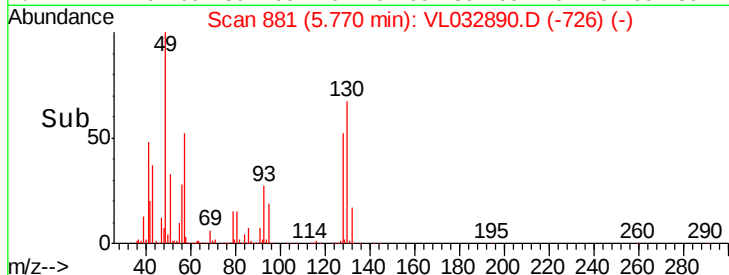
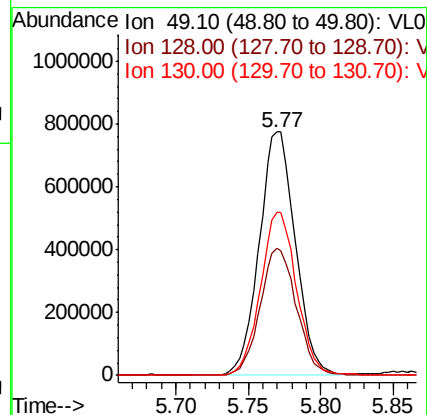
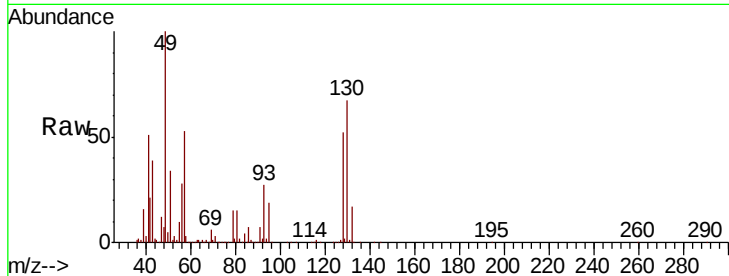
Bromochloromethane
 Concen: 10.000 ppbv
 RT: 5.77 min Scan# 881
 Delta R.T. -0.00 min
 Lab File: VL032890.D
 Acq: 5 Dec 2018 00:01

Instrument :
 MSVOA_L
 ClientSampleId :
 MMSV-07

Tot Ion: 49 Resp: 1345588
 Ion Ratio Lower Upper
 49 100
 128 52.8 24.9 74.6
 130 67.0 31.4 94.2

Manual Integrations
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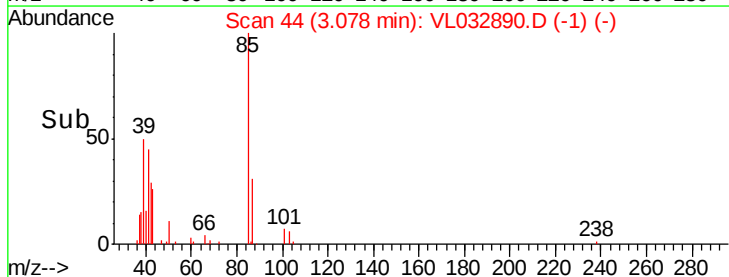
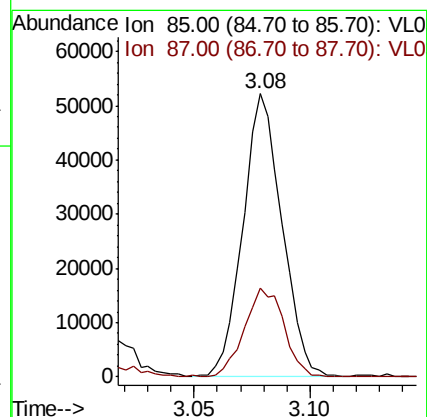
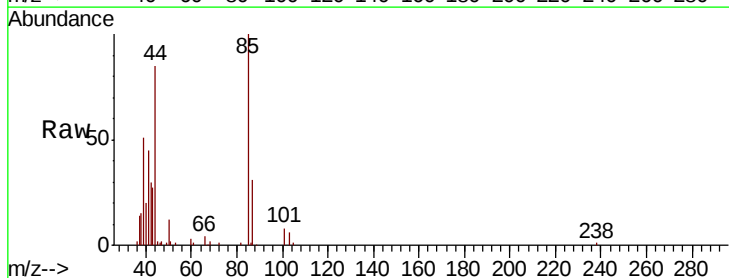
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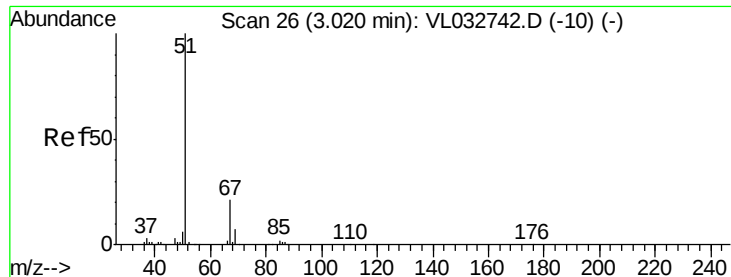


#2

Dichlorodifluoromethane
 Concen: 0.316 ppbv
 RT: 3.08 min Scan# 44
 Delta R.T. -0.01 min
 Lab File: VL032890.D
 Acq: 5 Dec 2018 00:01

Tgt Ion: 85 Resp: 61208
 Ion Ratio Lower Upper
 85 100
 87 31.2 26.0 39.0





#3

Chlorodifluoromethane

Concen: 4.429 ppbv

RT: 3.02 min Scan# 25

Delta R.T. -0.00 min

Lab File: VL032890.D

Acq: 5 Dec 2018 00:01

Instrument :

MSVOA_L

ClientSampleId :

MMSV-07

Tot Ion: 51 Resp: 472452

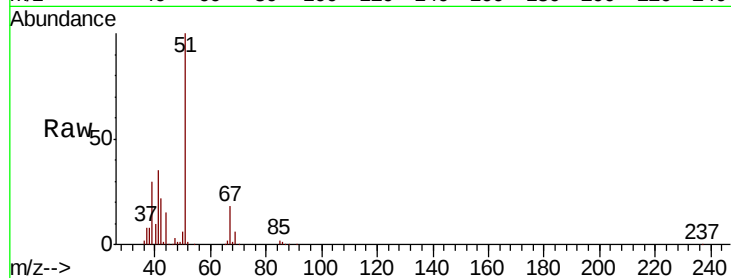
Ion Ratio Lower Upper

51 100

67 18.0 16.1 24.1

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

Ion 67.00 (66.70 to 67.70): VL0

3.02

400000

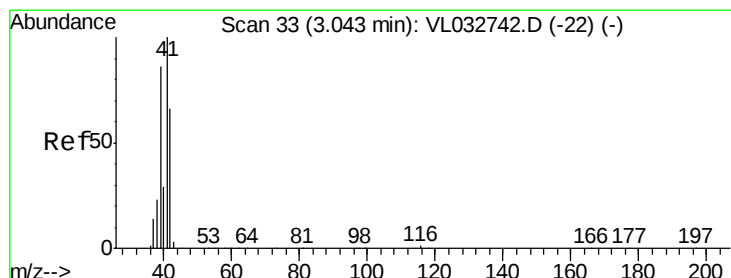
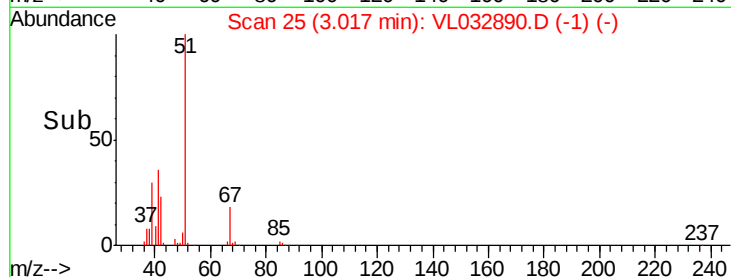
300000

200000

100000

0

Time-->



#9

Propene

Concen: 128.141 ppbv

RT: 3.04 min Scan# 32

Delta R.T. -0.00 min

Lab File: VL032890.D

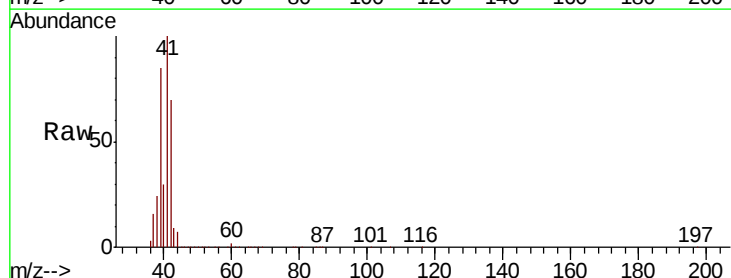
Acq: 5 Dec 2018 00:01

Tgt Ion: 41 Resp: 5470480

Ion Ratio Lower Upper

41 100

42 66.5 55.0 82.6



Abundance Ion 41.10 (40.80 to 41.80): VL0

Ion 42.10 (41.80 to 42.80): VL0

3.04

4000000

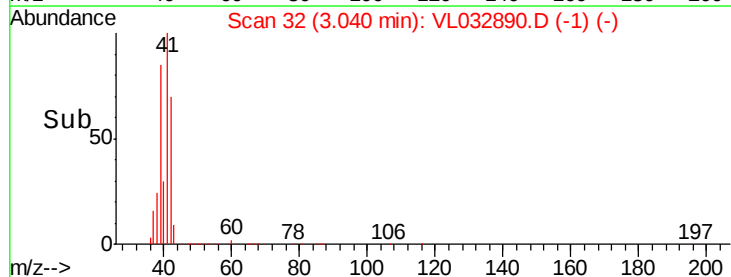
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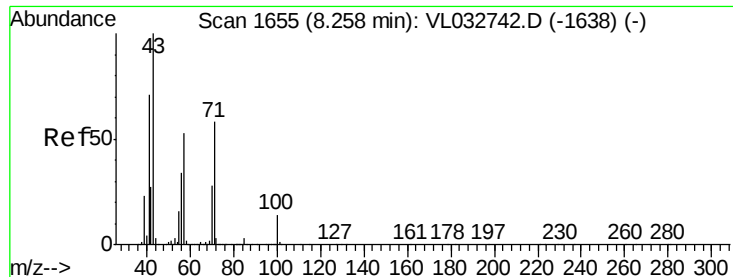
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1000000

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Time-->





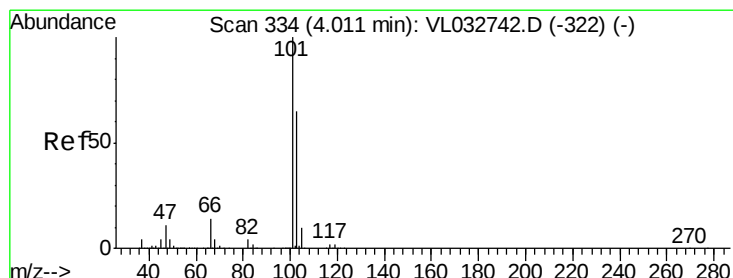
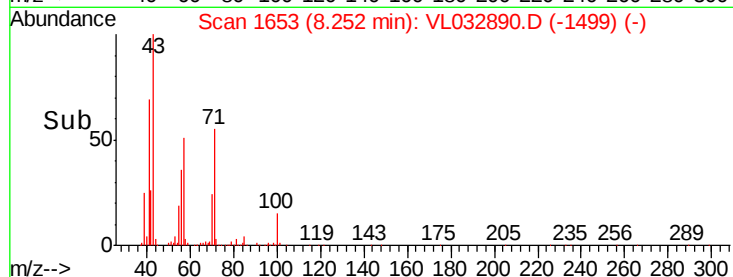
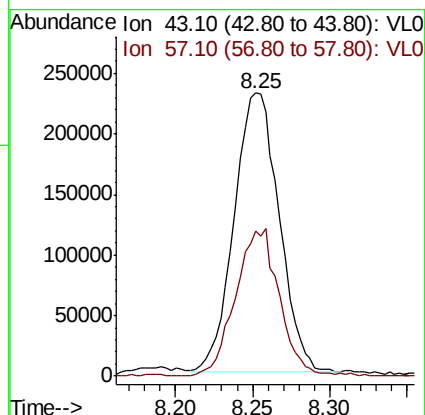
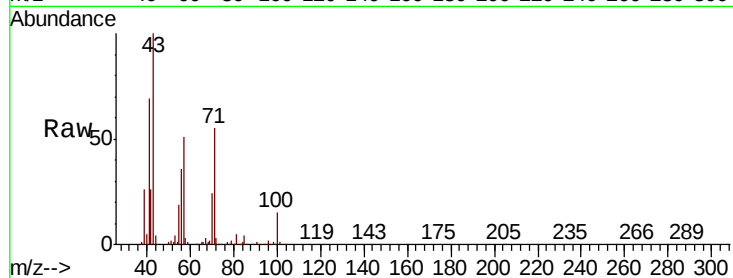
#10
 Heptane
 Concen: 2.869 ppbv
 RT: 8.25 min Scan# 1653
 Delta R.T. -0.01 min
 Lab File: VL032890.D
 Acq: 5 Dec 2018 00:01

Instrument :
 MSVOA_L
 ClientSampled :
 MMSV-07

Tot Ion: 43 Resp: 467636
 Ion Ratio Lower Upper
 43 100
 57 51.0 41.8 62.8

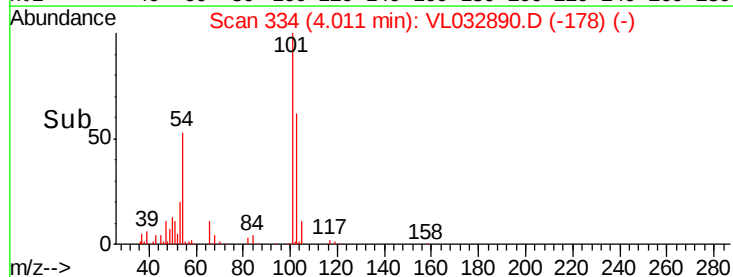
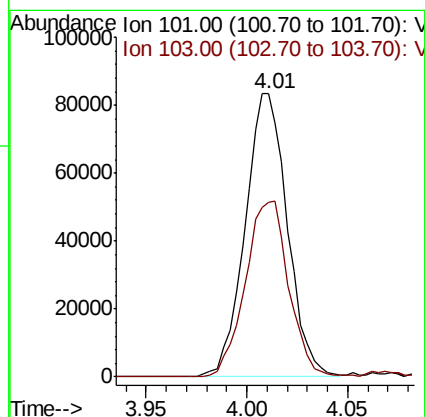
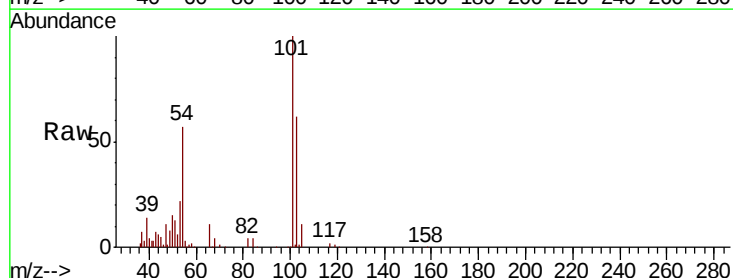
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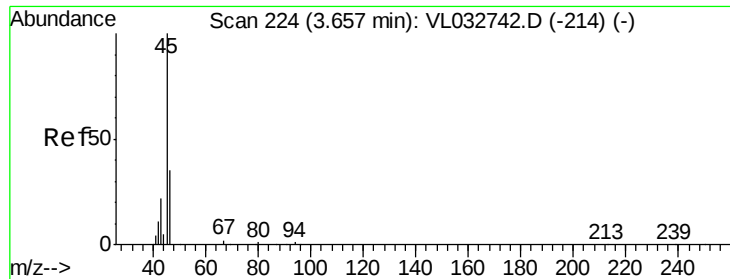
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#11
 Trichlorofluoromethane
 Concen: 0.671 ppbv
 RT: 4.01 min Scan# 334
 Delta R.T. 0.00 min
 Lab File: VL032890.D
 Acq: 5 Dec 2018 00:01

Tgt Ion: 101 Resp: 122335
 Ion Ratio Lower Upper
 101 100
 103 61.9 51.6 77.4





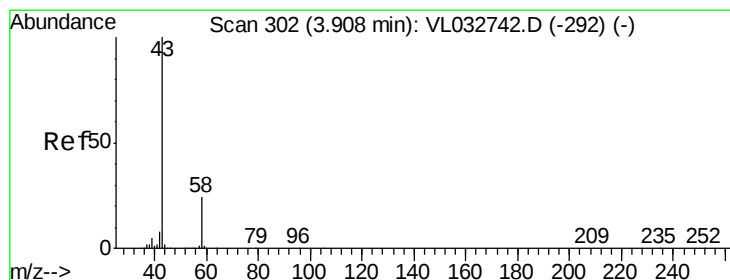
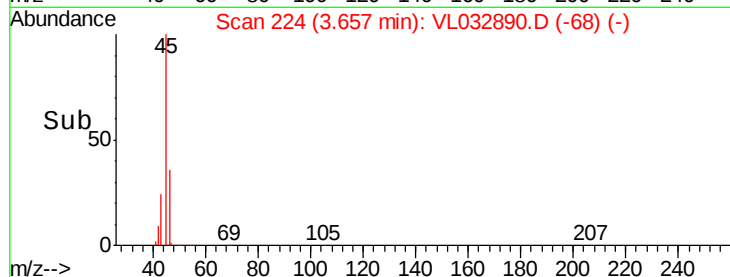
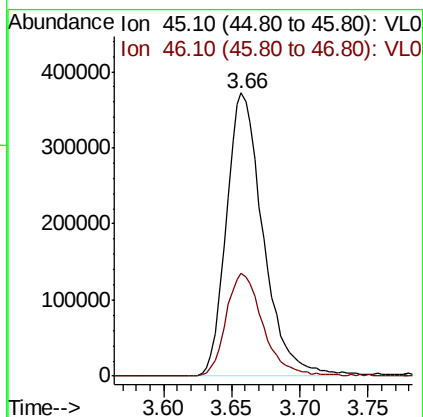
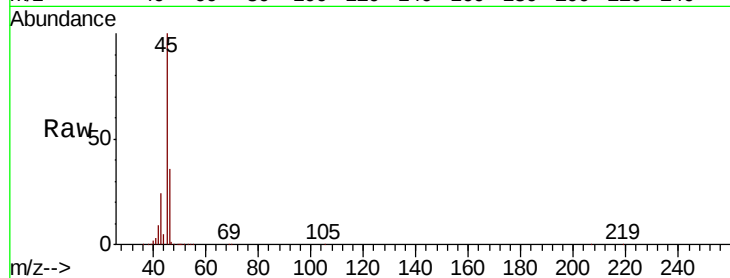
#13
Ethanol
Concen: 49.694 ppbv
RT: 3.66 min Scan# 224
Delta R.T. 0.00 min
Lab File: VL032890.D
Acq: 5 Dec 2018 00:01

Instrument :
MSVOA_L
ClientSampleId :
MMSV-07

Tot Ion: 45 Resp: 694879
Ion Ratio Lower Upper
45 100
46 37.1 14.5 57.9

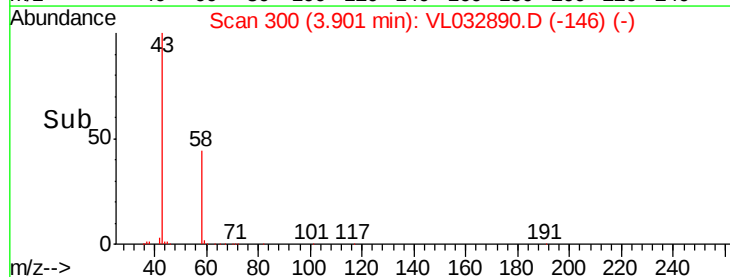
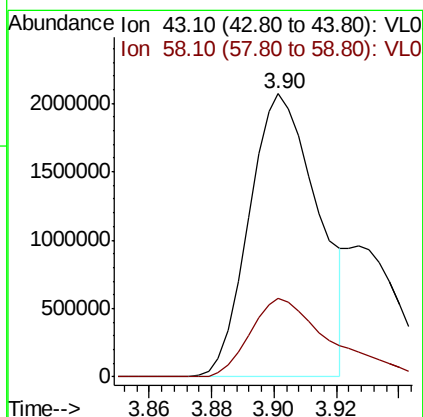
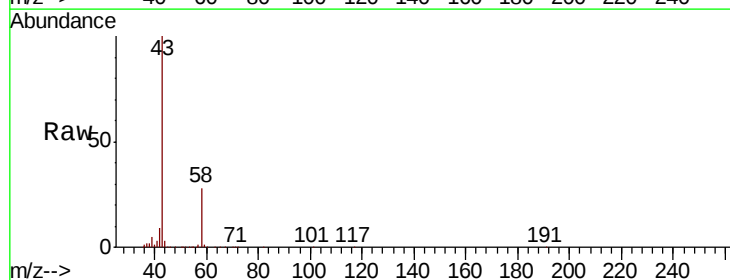
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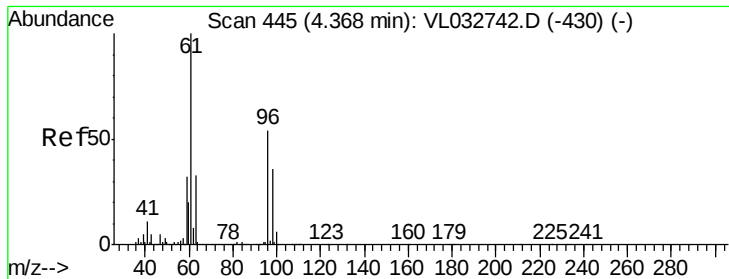
MMDadoda
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#15
Acetone
Concen: 25.639 ppbv m
RT: 3.90 min Scan# 300
Delta R.T. -0.01 min
Lab File: VL032890.D
Acq: 5 Dec 2018 00:01

Tgt Ion: 43 Resp: 3150536
Ion Ratio Lower Upper
43 100
58 32.9 21.1 31.7#





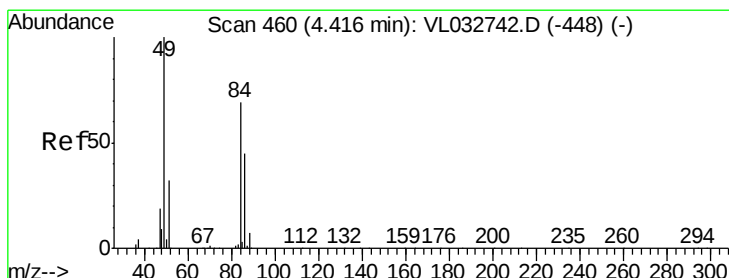
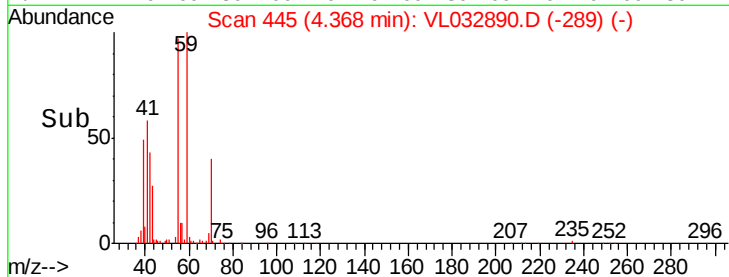
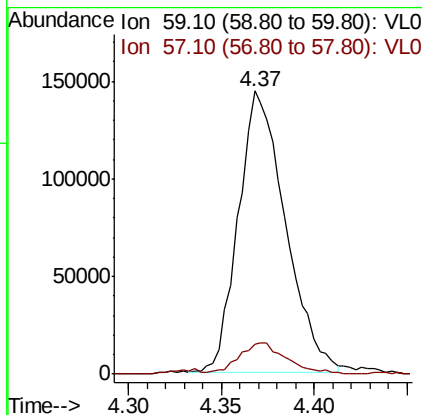
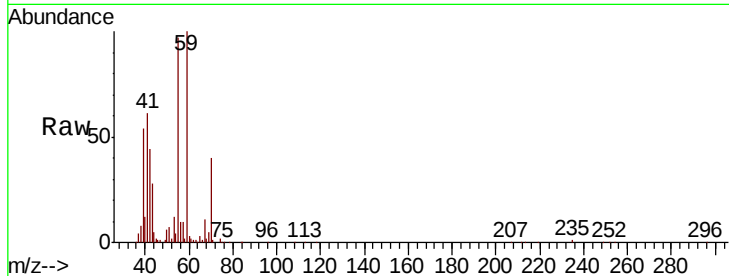
#17
 tert-Butyl alcohol
 Concen: 6.610 ppbv
 RT: 4.37 min Scan# 445
 Delta R.T. 0.00 min
 Lab File: VL032890.D
 Acq: 5 Dec 2018 00:01

Instrument :
 MSVOA_L
 ClientSampleId :
 MMSV-07

Tot Ion: 59 Resp: 254748
 Ion Ratio Lower Upper
 59 100
 57 12.3 7.8 11.8#

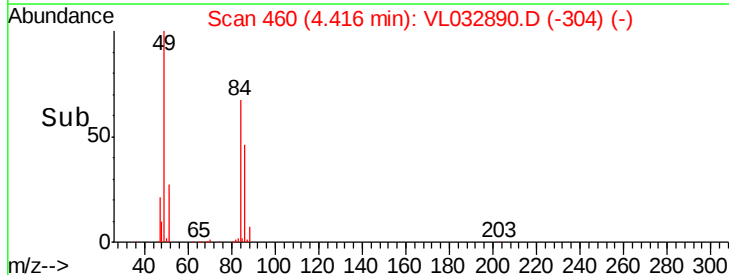
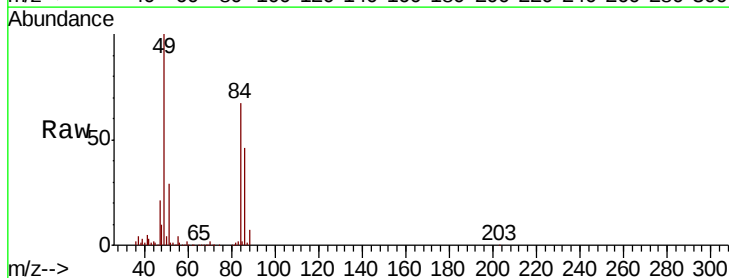
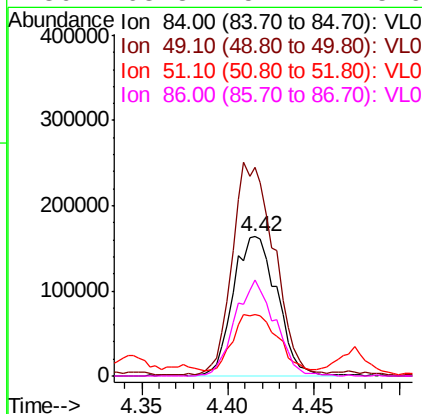
Manual Integrations
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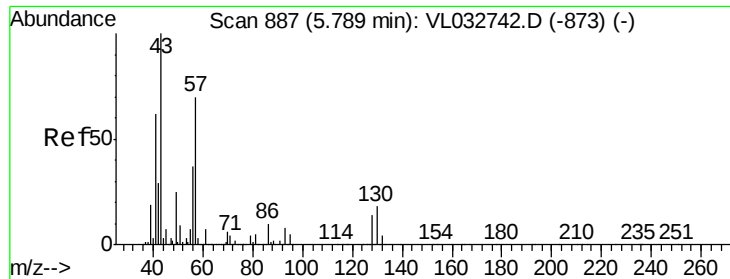
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#20
 Methylene Chloride
 Concen: 4.494 ppbv
 RT: 4.42 min Scan# 460
 Delta R.T. 0.00 min
 Lab File: VL032890.D
 Acq: 5 Dec 2018 00:01

Tgt Ion: 84 Resp: 285884
 Ion Ratio Lower Upper
 84 100
 49 148.5 115.8 173.6
 51 37.5 36.9 55.3
 86 68.8 52.4 78.6





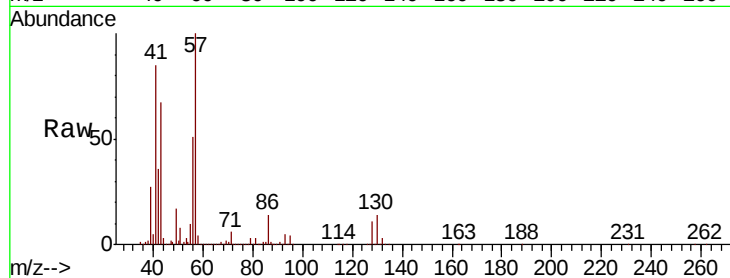
#26
Hexane
Concen: 15.998 ppbv
RT: 5.79 min Scan# 887
Delta R.T. 0.00 min
Lab File: VL032890.D
Acq: 5 Dec 2018 00:01

Instrument :
MSVOA_L
ClientSampleId :
MMSV-07

Tot Ion	Ratio	Lower	Upper
57	100		
41	89.1	70.3	105.5
43	69.9	174.0	261.0#
56	53.1	42.3	63.5

Manual Integrations
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12/10/2018 1:01:15 PM



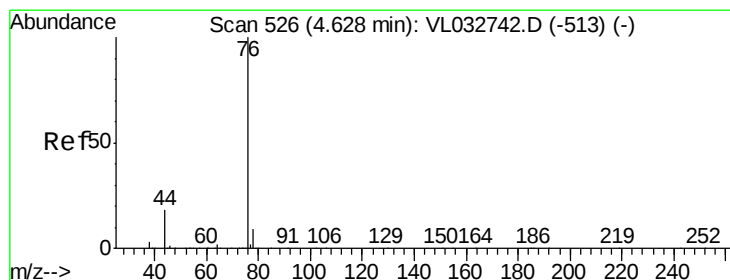
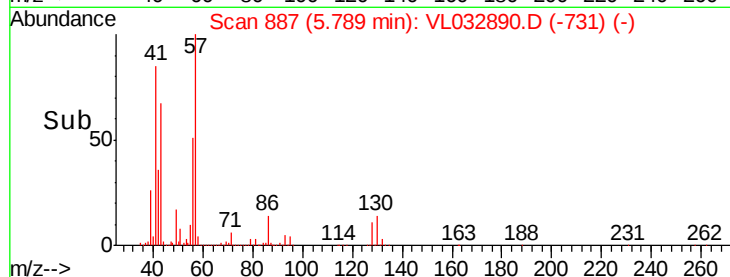
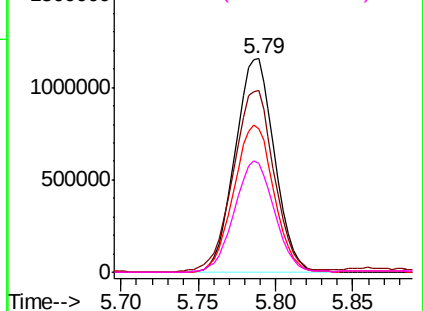
Abundance

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



#27
Carbon Disulfide
Concen: 5.370 ppbv
RT: 4.62 min Scan# 525
Delta R.T. -0.00 min
Lab File: VL032890.D
Acq: 5 Dec 2018 00:01

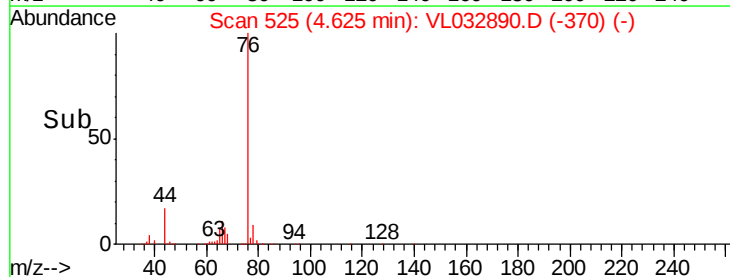
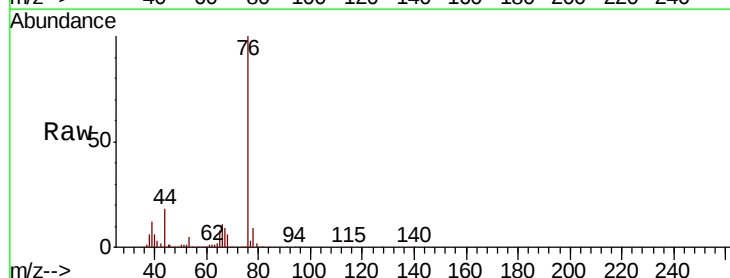
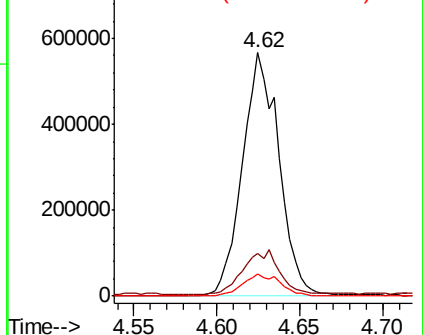
Tgt Ion	Ratio	Lower	Upper
76	100		
44	18.8	14.4	21.6
78	9.6	7.7	11.5

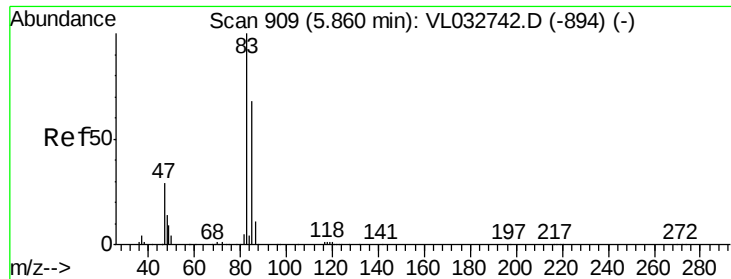
Abundance

Ion 76.00 (75.70 to 76.70): VL0

Ion 44.10 (43.80 to 44.80): VL0

Ion 78.00 (77.70 to 78.70): VL0





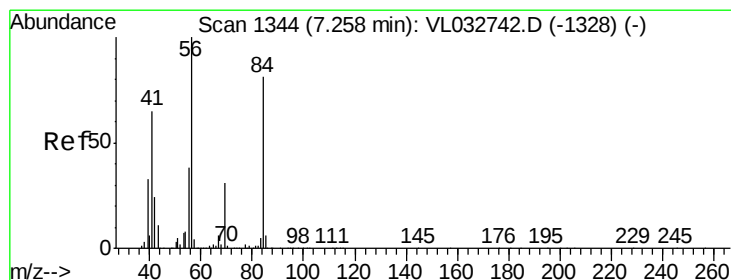
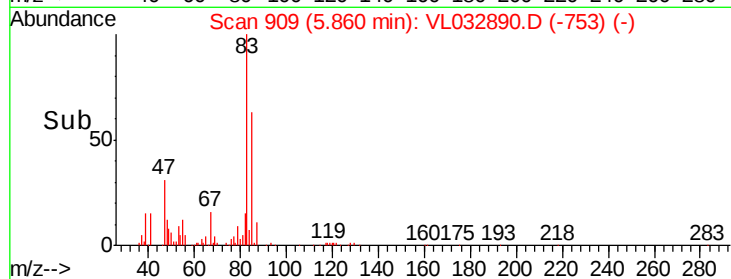
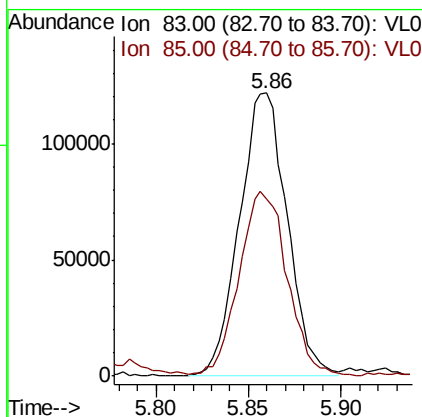
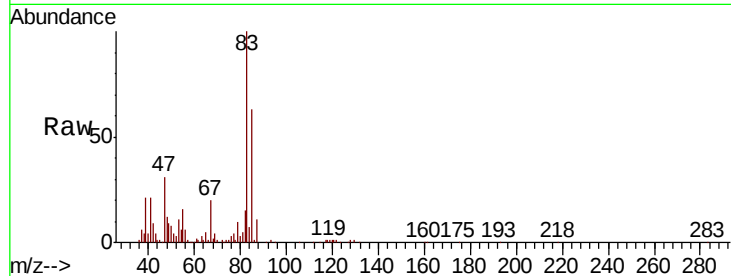
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Chloroform
Concen: 0.960 ppbv
RT: 5.86 min Scan# 909
Delta R.T. 0.00 min
Lab File: VL032890.D
Acq: 5 Dec 2018 00:01

Instrument :
MSVOA_L
ClientSampleId :
MMSV-07

Tot Ion	83	Resp	218144
Ion Ratio	100	Lower	Upper
83	100		
85	62.2	54.2	81.4

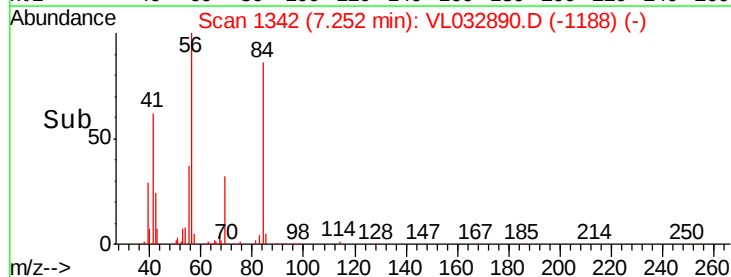
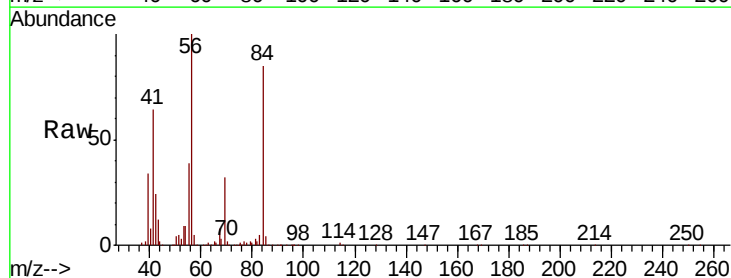
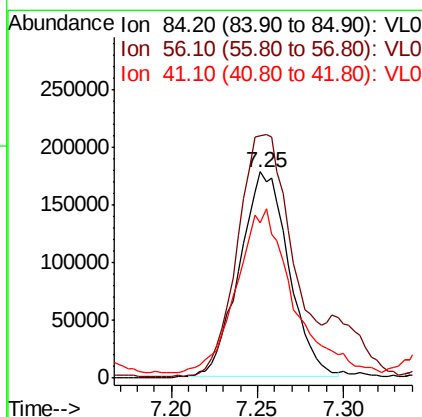
Manual Integrations
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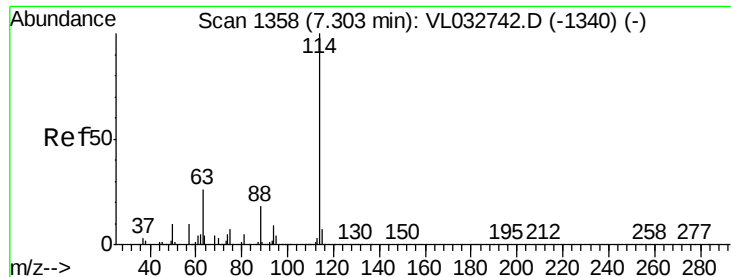
MMDadoda
12/10/2018 1:01:15 PM



#30
Cyclohexane
Concen: 3.174 ppbv
RT: 7.25 min Scan# 1342
Delta R.T. -0.01 min
Lab File: VL032890.D
Acq: 5 Dec 2018 00:01

Tgt Ion	84	Resp	353910
Ion Ratio	100	Lower	Upper
84	100		
56	150.5	105.0	157.4
41	94.0	65.3	97.9





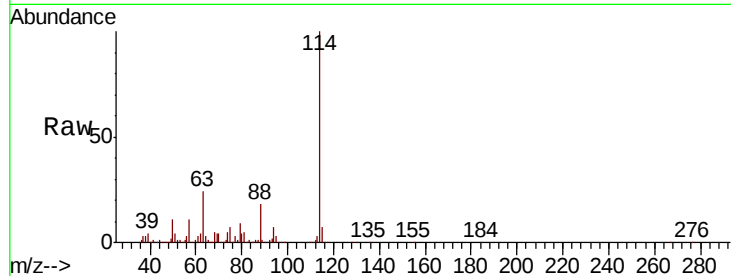
#33
 1,4-Difluorobenzene
 Concen: 10.000 ppbv
 RT: 7.30 min Scan# 1357
 Delta R.T. -0.00 min
 Lab File: VL032890.D
 Acq: 5 Dec 2018 00:01

Instrument :
 MSVOA_L
 ClientSampleId :
 MMSV-07

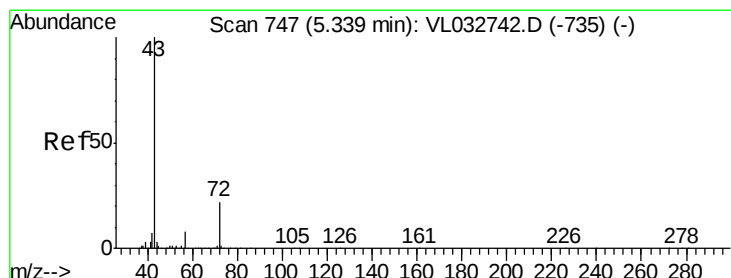
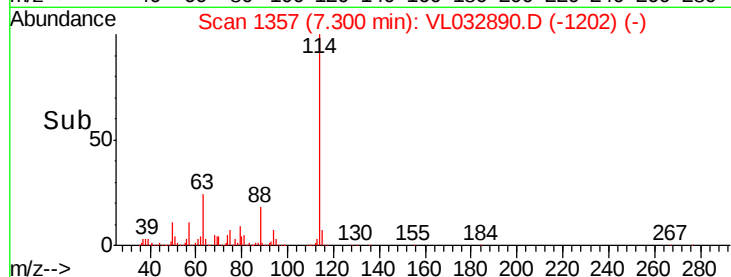
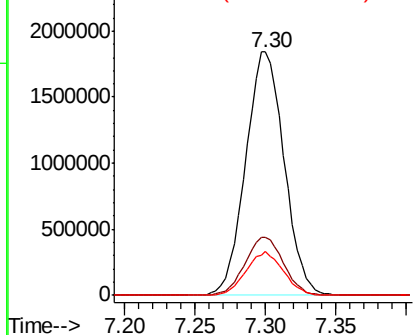
Tot Ion	Ratio	Lower	Upper
114	100		
63	24.2	20.9	31.3
88	17.4	14.4	21.6

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MMDadoda
 12/10/2018 1:01:15 PM

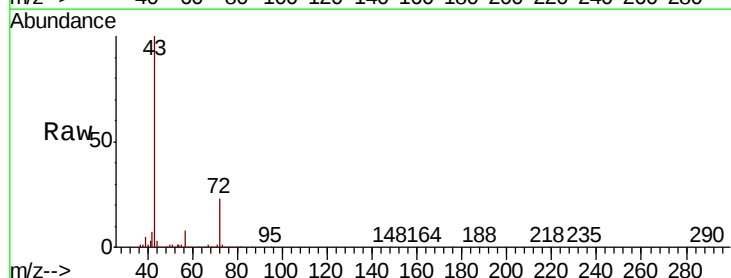


Abundance Ion 114.10 (113.80 to 114.80): VL0
 Ion 63.10 (62.80 to 63.80): VL0
 Ion 88.10 (87.80 to 88.80): VL0

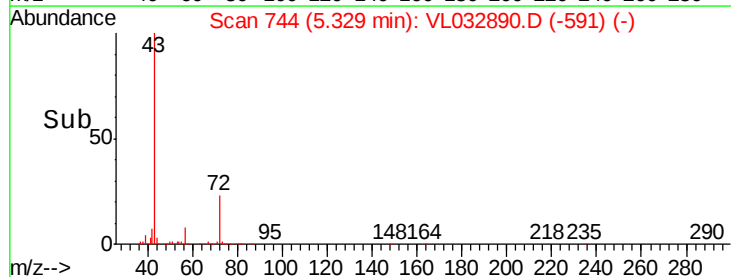
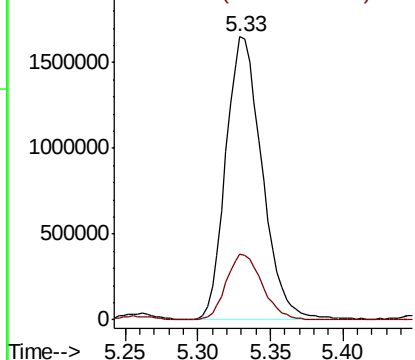


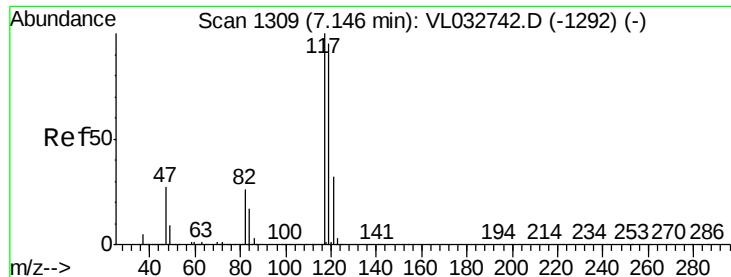
#34
 2-Butanone
 Concen: 15.627 ppbv
 RT: 5.33 min Scan# 744
 Delta R.T. -0.01 min
 Lab File: VL032890.D
 Acq: 5 Dec 2018 00:01

Tgt Ion	Ratio	Lower	Upper
43	100		
72	23.2	18.4	27.6



Abundance Ion 43.10 (42.80 to 43.80): VL0
 Ion 72.10 (71.80 to 72.80): VL0





#35

Carbon Tetrachloride

Concen: 0.049 ppbv m

RT: 7.14 min Scan# 1306

Delta R.T. -0.01 min

Lab File: VL032890.D

Acq: 5 Dec 2018 00:01

Instrument :

MSVOA_L

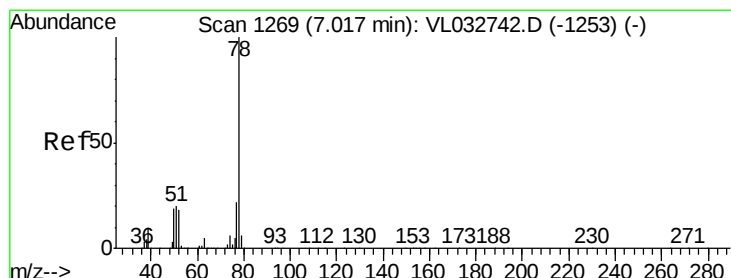
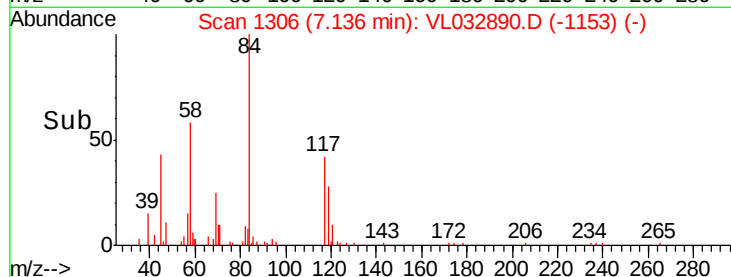
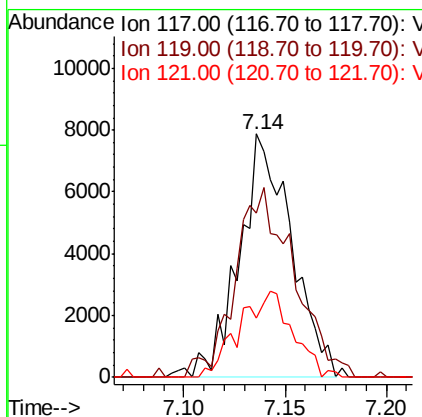
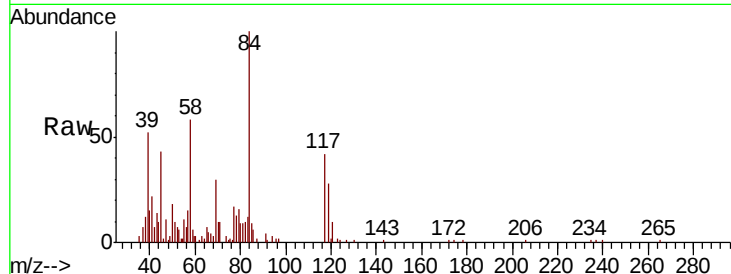
ClientSampled :

MMSV-07

Tot Ion	Ratio	Lower	Upper
117	100		
119	67.4	76.1	114.1#
121	24.6	25.4	38.0#

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#36

Benzene

Concen: 11.997 ppbv

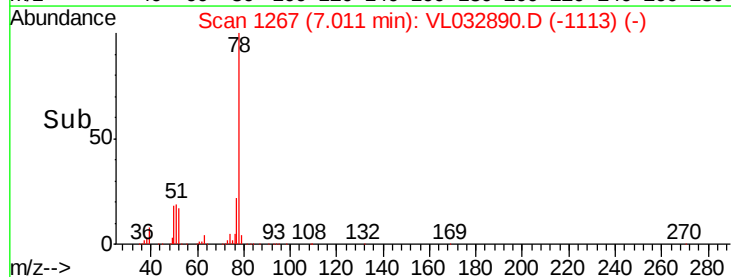
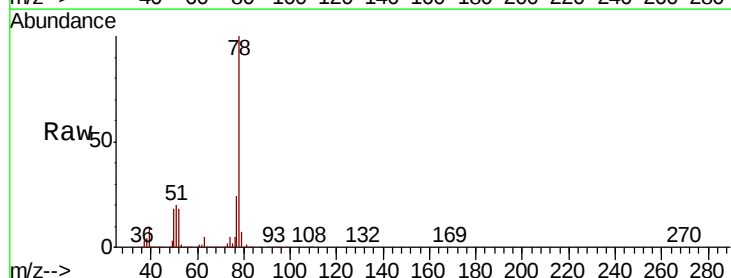
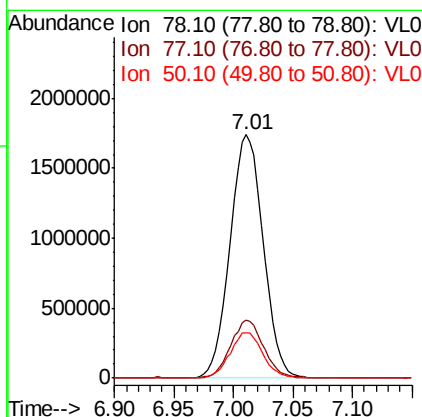
RT: 7.01 min Scan# 1267

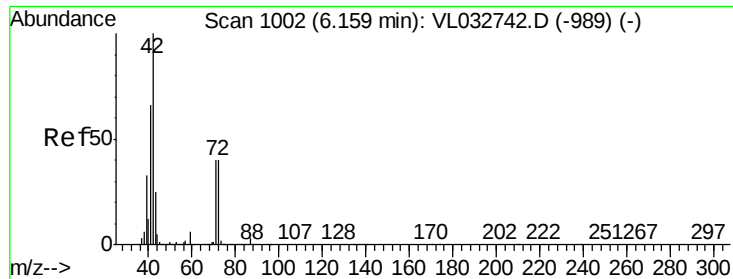
Delta R.T. -0.01 min

Lab File: VL032890.D

Acq: 5 Dec 2018 00:01

Tgt Ion	Ratio	Lower	Upper
78	100		
77	23.6	17.8	26.8
50	18.4	15.4	23.0





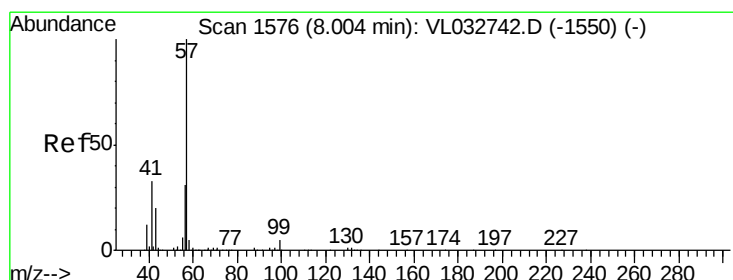
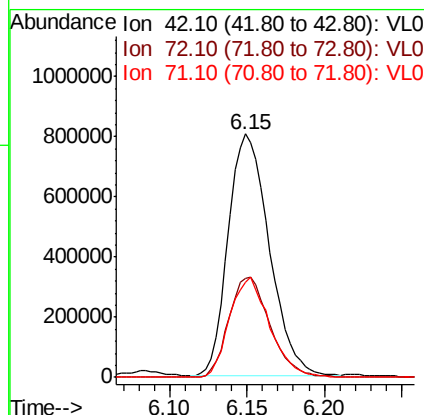
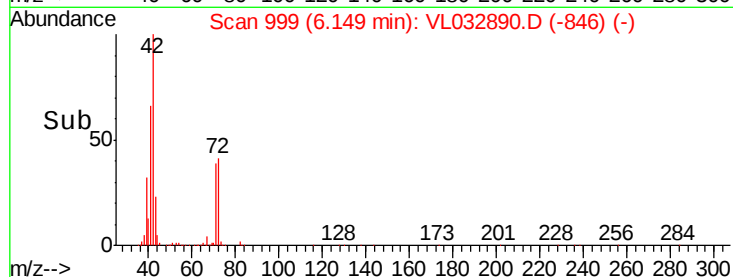
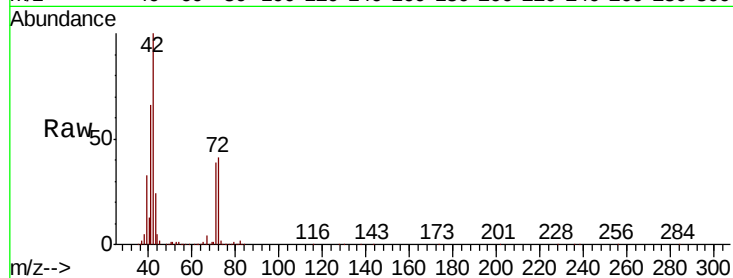
#41
Tetrahydrofuran
Concen: 14.153 ppbv
RT: 6.15 min Scan# 999
Delta R.T. -0.01 min
Lab File: VL032890.D
Acq: 5 Dec 2018 00:01

Instrument :
MSVOA_L
ClientSampleId :
MMSV-07

Tot Ion: 42 Resp: 1481497
Ion Ratio Lower Upper
42 100
72 41.9 32.4 48.6
71 40.5 31.6 47.4

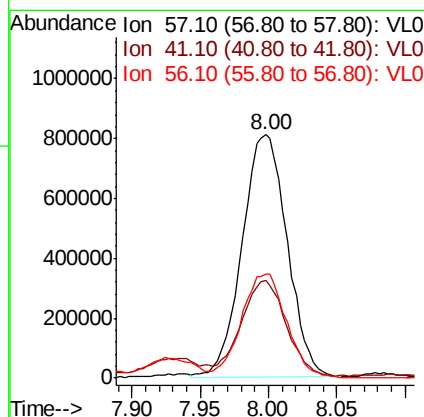
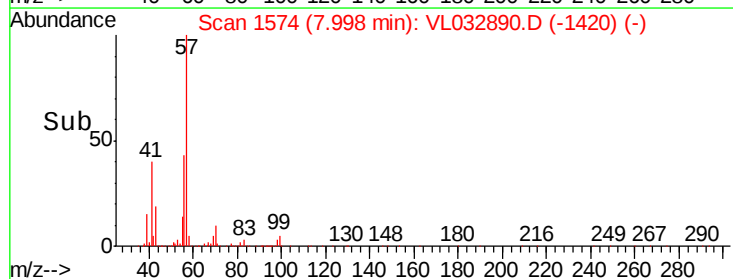
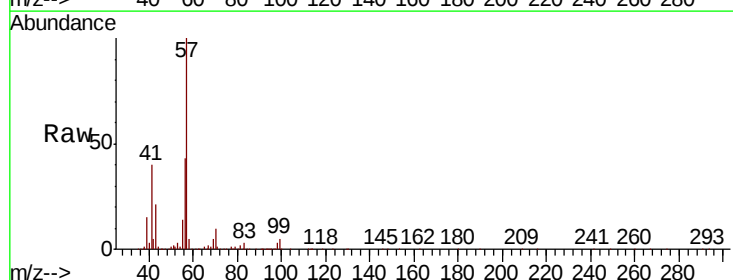
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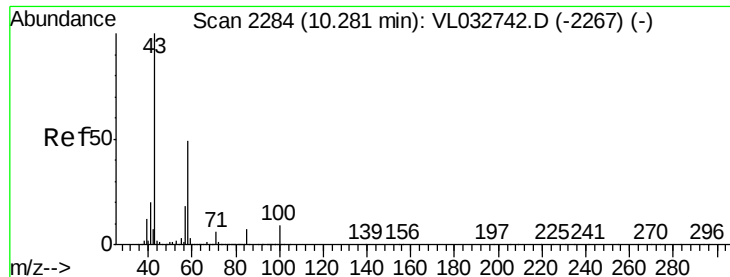
MMDadoda
12/10/2018 1:01:15 PM



#44
2,2,4-Trimethylpentane
Concen: 3.966 ppbv
RT: 8.00 min Scan# 1574
Delta R.T. -0.01 min
Lab File: VL032890.D
Acq: 5 Dec 2018 00:01

Tgt Ion: 57 Resp: 1856842
Ion Ratio Lower Upper
57 100
41 41.6 26.6 39.8#
56 43.1 24.8 37.2#





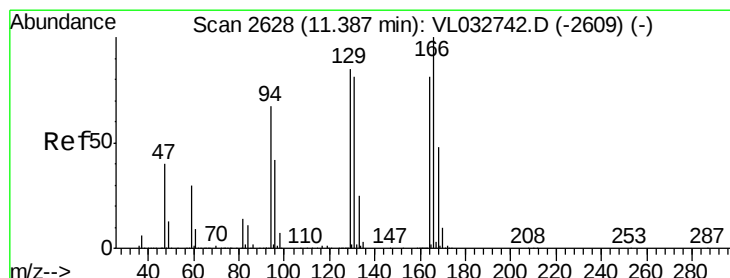
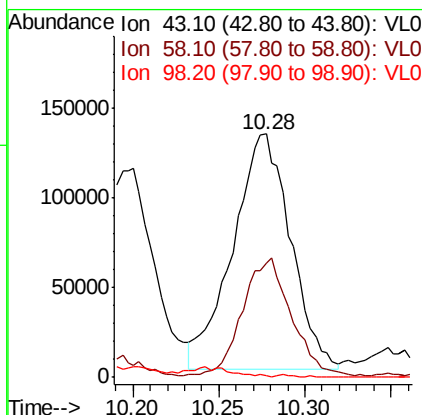
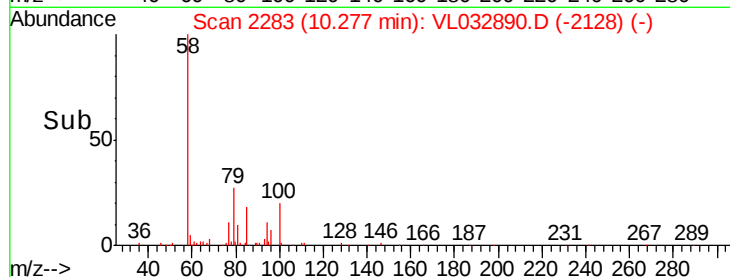
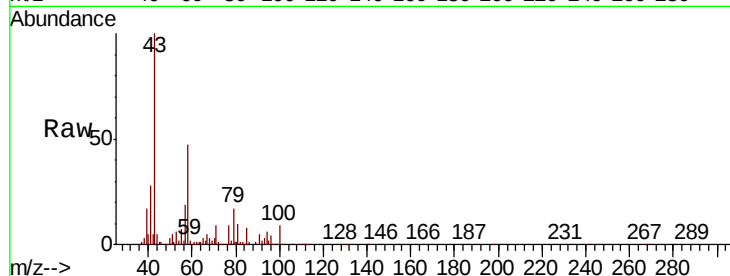
#51
2-Hexanone
Concen: 1.673 ppbv
RT: 10.28 min Scan# 2283
Delta R.T. -0.00 min
Lab File: VL032890.D
Acq: 5 Dec 2018 00:01

Instrument :
MSVOA_L
ClientSampleId :
MMSV-07

Tot Ion	Ratio	Lower	Upper
43	100		
58	43.0	38.9	58.3
98	3.9	0.2	0.4#

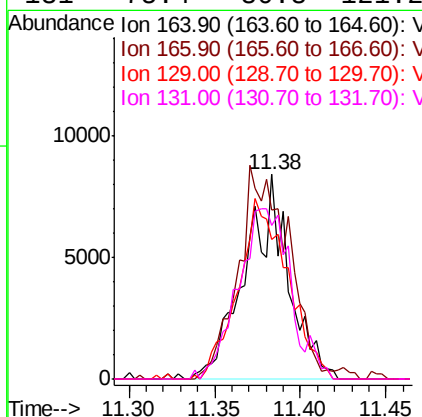
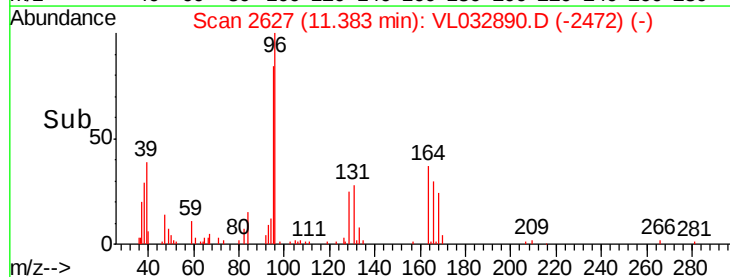
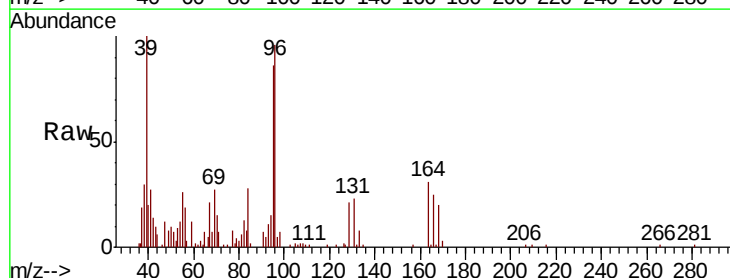
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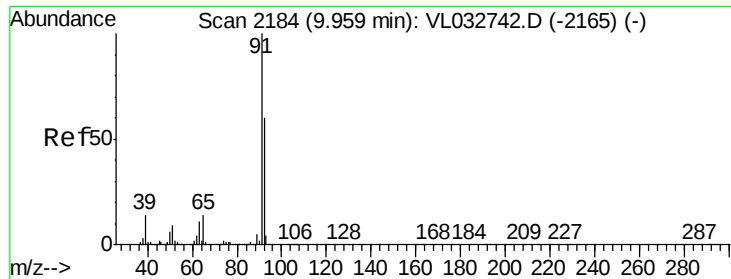
MMDadoda
12/10/2018 1:01:15 PM



#52
Tetrachloroethene
Concen: 0.152 ppbv m
RT: 11.38 min Scan# 2627
Delta R.T. -0.00 min
Lab File: VL032890.D
Acq: 5 Dec 2018 00:01

Tgt Ion	Ratio	Lower	Upper
164	100		
166	82.9	99.3	148.9#
129	68.3	83.9	125.9#
131	75.4	80.8	121.2#





#53

Toluene

Concen: 12.434 ppbv

RT: 9.95 min Scan# 2182

Delta R.T. -0.01 min

Lab File: VL032890.D

Acq: 5 Dec 2018 00:01

Instrument :

MSVOA_L

ClientSampleId :

MMSV-07

Tot Ion: 91 Resp: 3634297

Ion Ratio Lower Upper

91 100

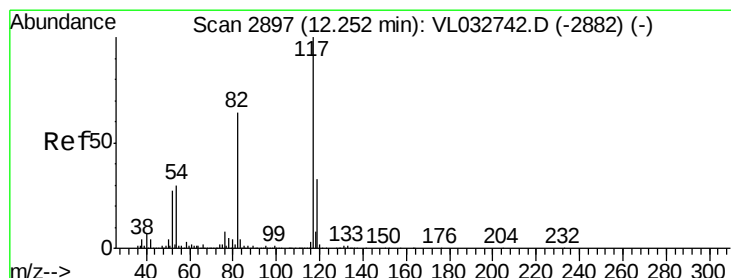
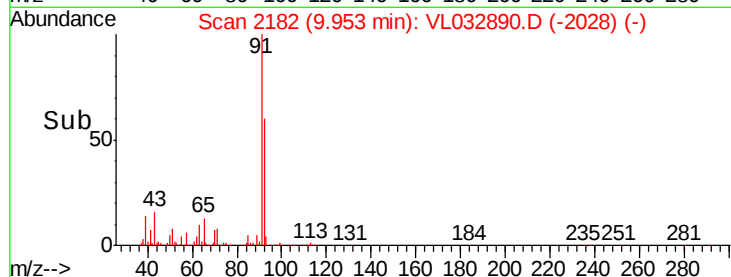
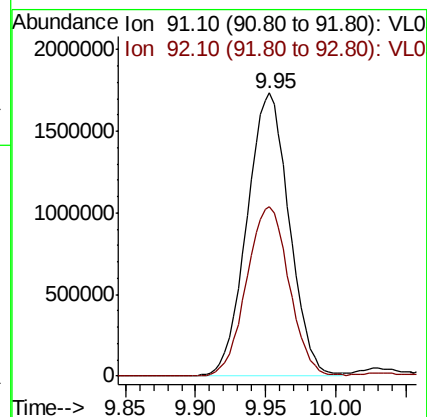
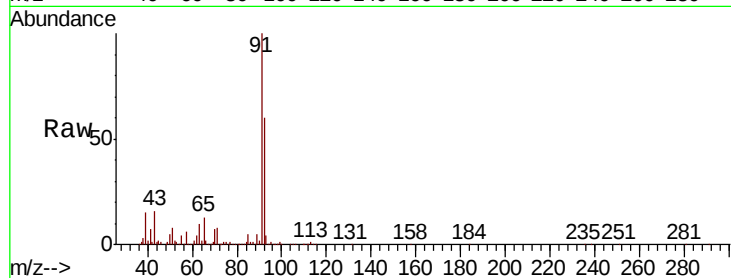
92 60.3 47.9 71.9

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#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.25 min Scan# 2895

Delta R.T. -0.01 min

Lab File: VL032890.D

Acq: 5 Dec 2018 00:01

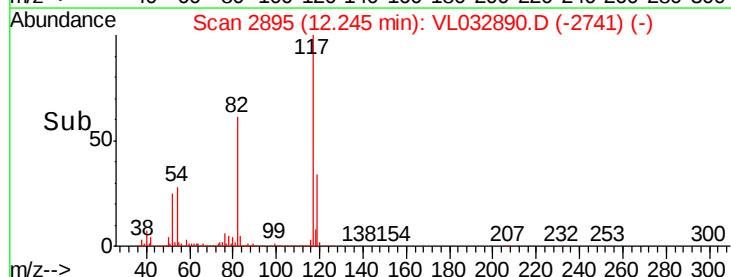
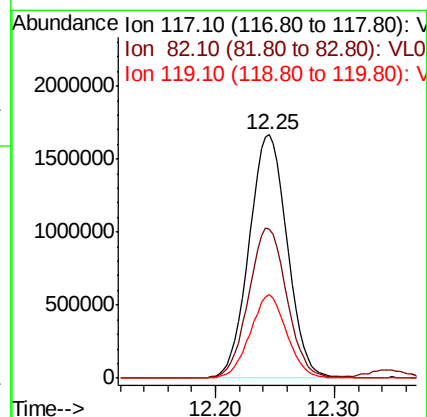
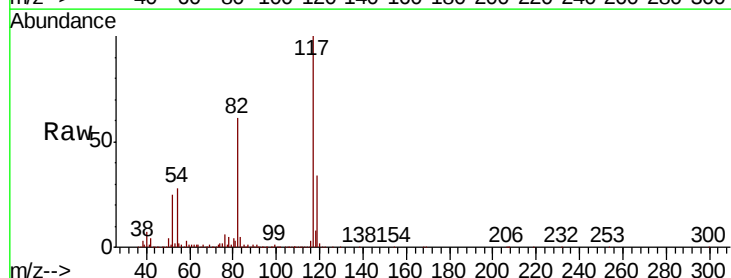
Tgt Ion: 117 Resp: 3696193

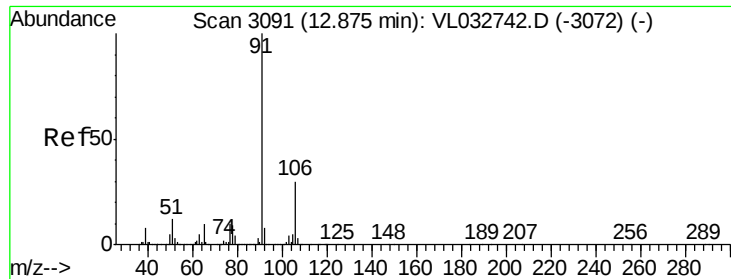
Ion Ratio Lower Upper

117 100

82 61.7 51.0 76.6

119 32.9 28.0 42.0





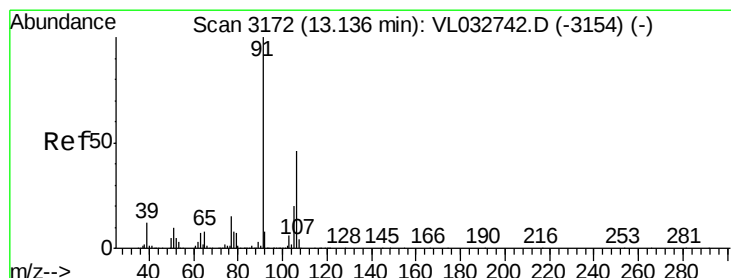
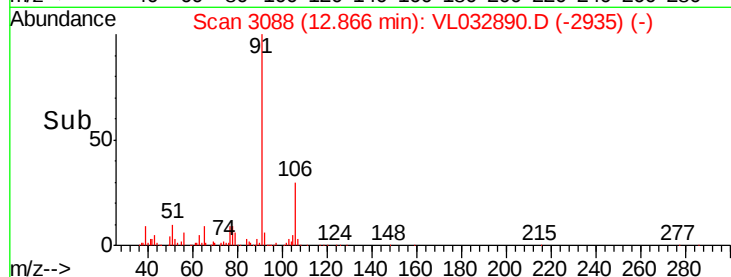
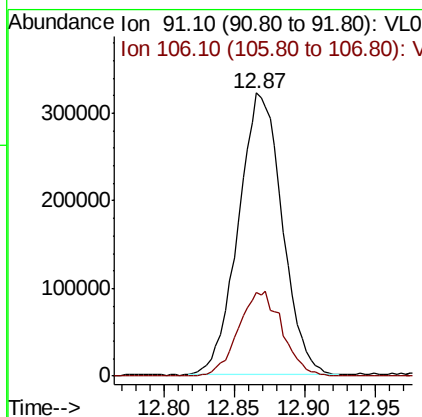
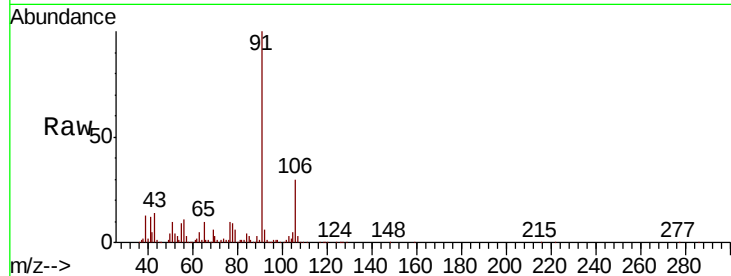
#58
Ethyl Benzene
Concen: 1.575 ppbv
RT: 12.87 min Scan# 3088
Delta R.T. -0.01 min
Lab File: VL032890.D
Acq: 5 Dec 2018 00:01

Instrument :
MSVOA_L
ClientSampleId :
MMSV-07

Tot Ion: 91 Resp: 700744
Ion Ratio Lower Upper
91 100
106 29.7 23.6 35.4

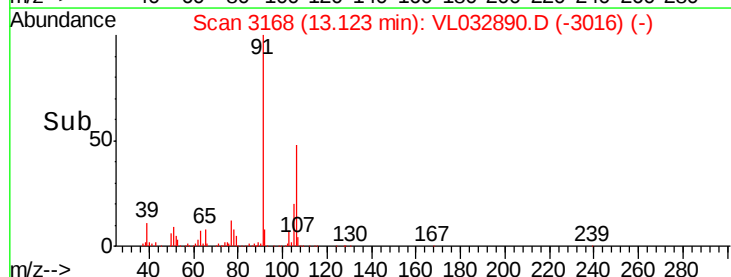
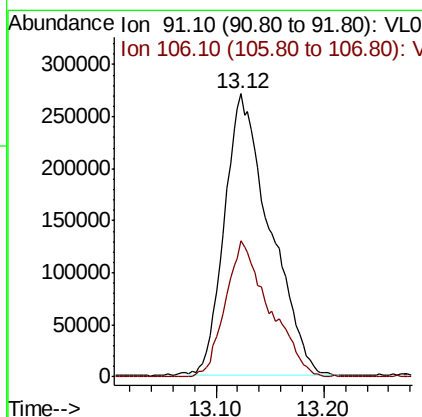
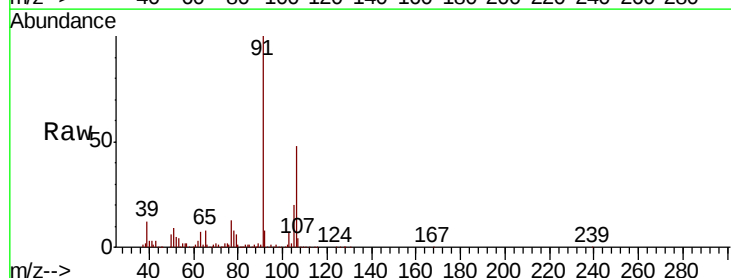
Manual Integrations
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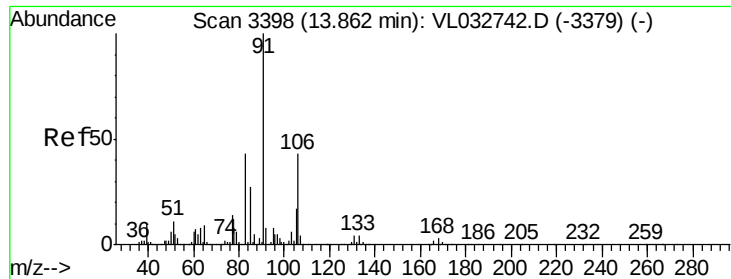
MMDadoda
12/10/2018 1:01:15 PM



#59
m/p-Xylene
Concen: 2.013 ppbv
RT: 13.12 min Scan# 3168
Delta R.T. -0.01 min
Lab File: VL032890.D
Acq: 5 Dec 2018 00:01

Tgt Ion: 91 Resp: 797144
Ion Ratio Lower Upper
91 100
106 46.7 36.1 54.1





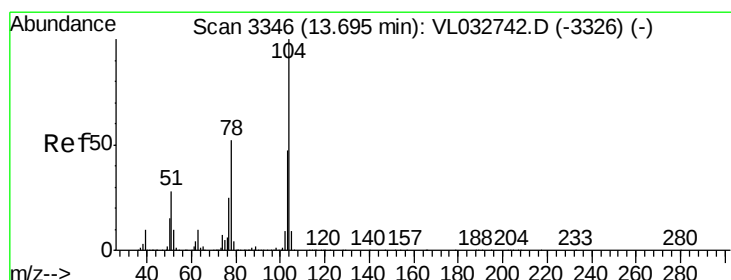
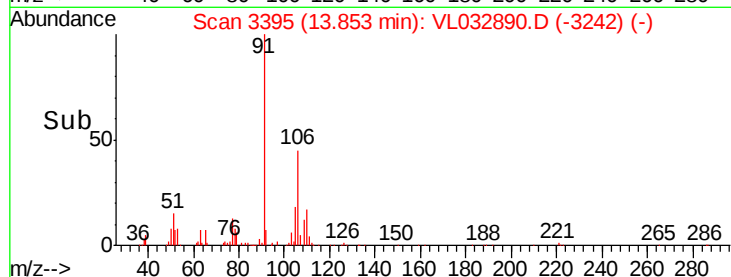
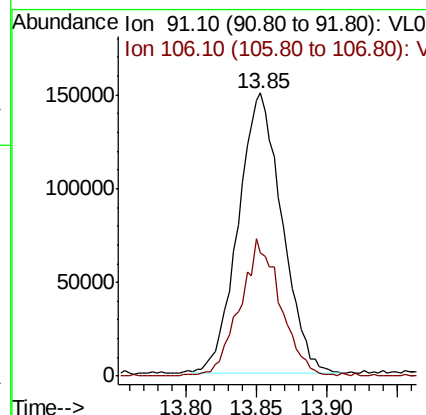
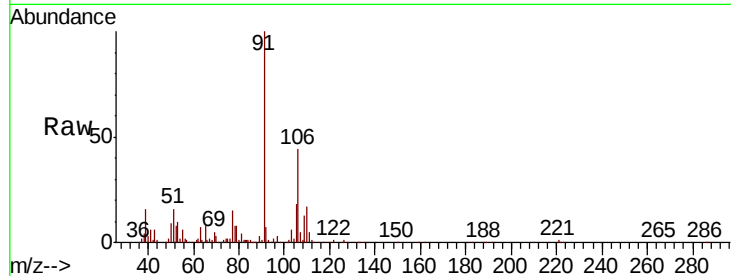
#60
o-Xylene
Concen: 0.820 ppbv
RT: 13.85 min Scan# 3395
Delta R.T. -0.01 min
Lab File: VL032890.D
Acq: 5 Dec 2018 00:01

Instrument :
MSVOA_L
ClientSampleId :
MMSV-07

Tot Ion	Ratio	Lower	Upper
91	100		
106	45.5	21.9	65.7

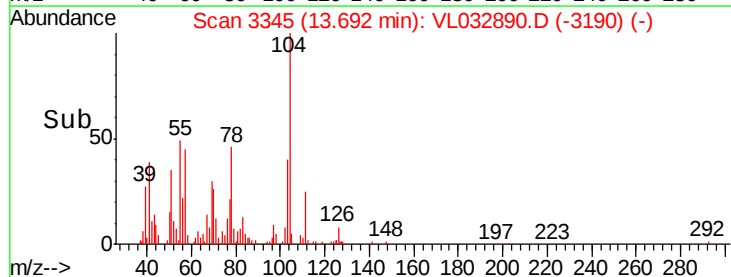
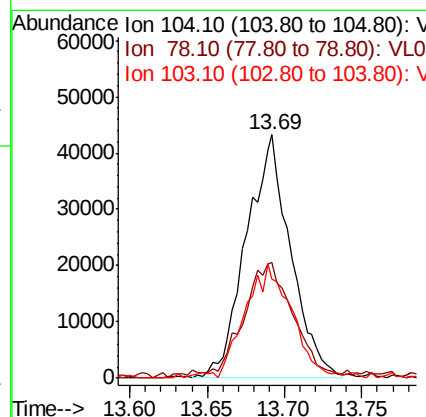
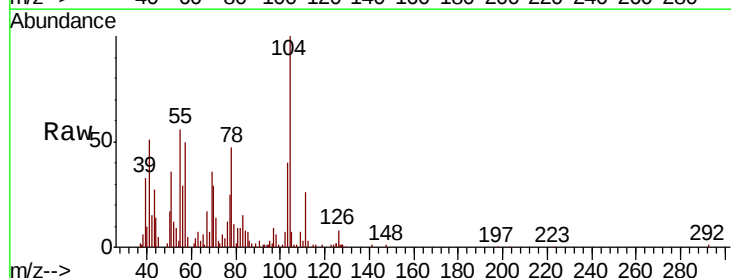
Manual Integrations
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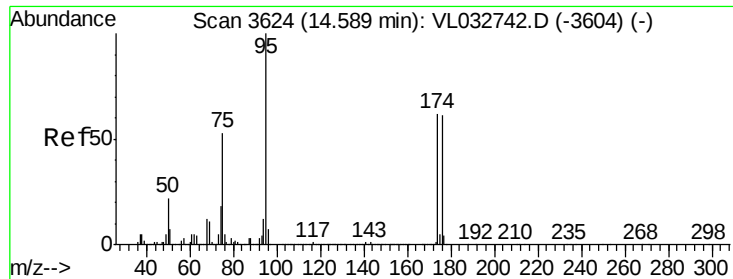
MMDadoda
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#61
Styrene
Concen: 0.334 ppbv
RT: 13.69 min Scan# 3345
Delta R.T. -0.00 min
Lab File: VL032890.D
Acq: 5 Dec 2018 00:01

Tgt Ion	Ratio	Lower	Upper
104	100		
78	55.3	42.2	63.4
103	50.0	38.2	57.2





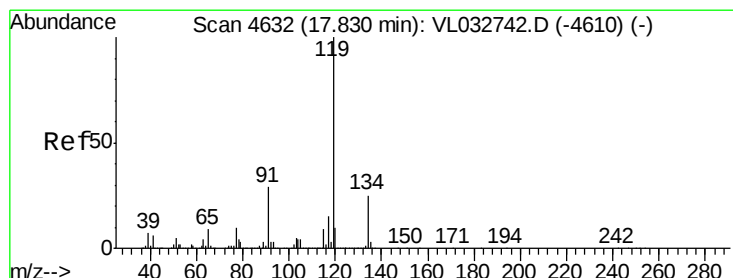
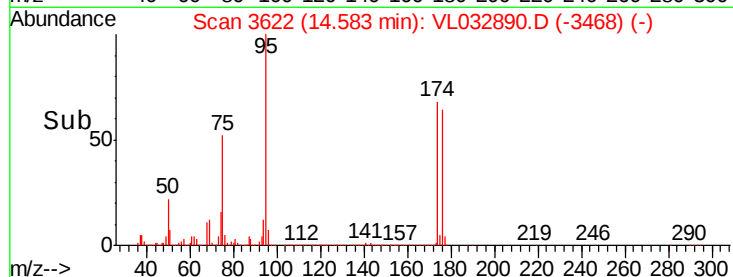
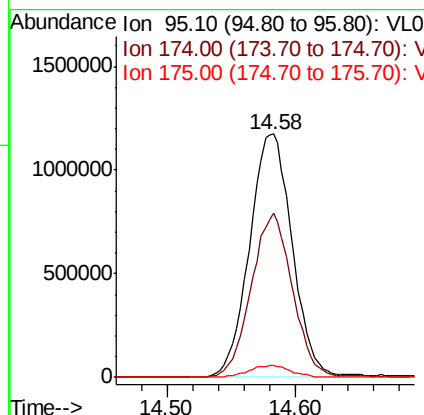
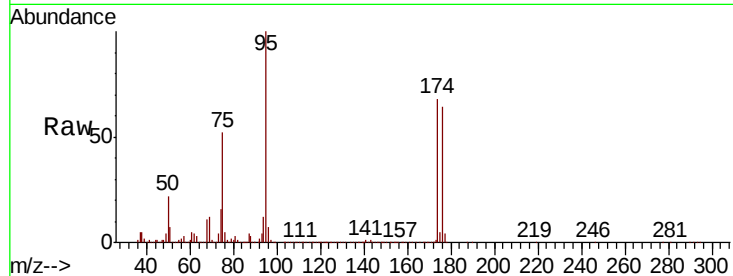
#68
1-Bromo-4-Fluorobenzene
Concen: 9.751 ppbv
RT: 14.58 min Scan# 3622
Delta R.T. -0.01 min
Lab File: VL032890.D
Acq: 5 Dec 2018 00:01

Instrument :
MSVOA_L
ClientSampleId :
MMSV-07

Tot Ion: 95 Resp: 2695805
Ion Ratio Lower Upper
95 100
174 66.1 50.7 76.1
175 4.9 3.8 5.6

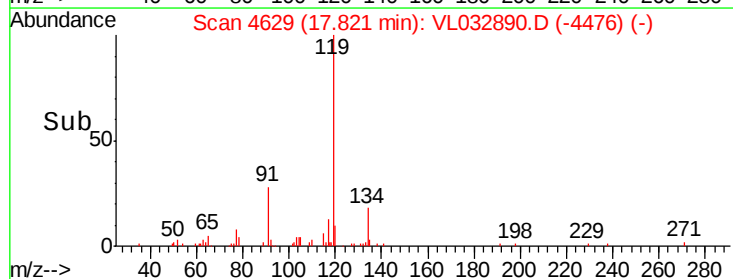
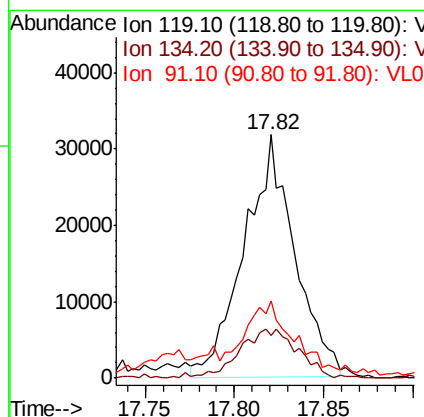
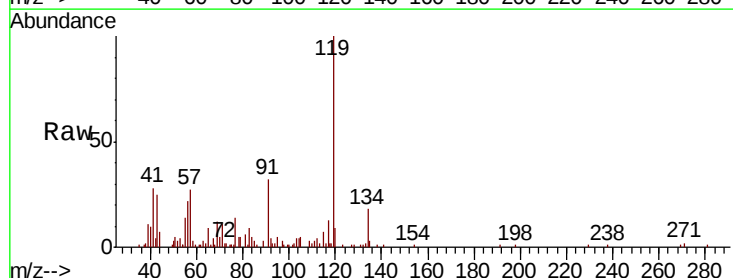
Manual Integrations
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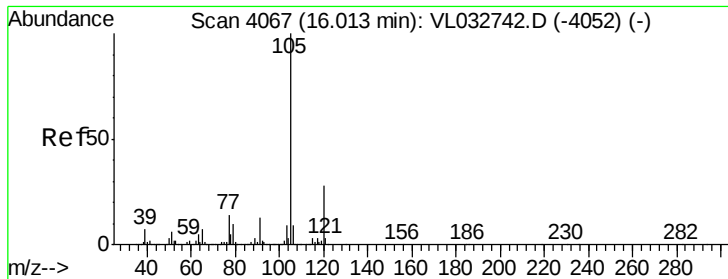
MMDadoda
12/10/2018 1:01:15 PM



#69
p-Isopropyltoluene
Concen: 0.114 ppbv
RT: 17.82 min Scan# 4629
Delta R.T. -0.01 min
Lab File: VL032890.D
Acq: 5 Dec 2018 00:01

Tgt Ion: 119 Resp: 62760
Ion Ratio Lower Upper
119 100
134 24.0 20.2 30.4
91 41.2 23.5 35.3#





#72

4-Ethyltoluene

Concen: 0.160 ppbv m

RT: 16.00 min Scan# 4064

Delta R.T. -0.01 min

Lab File: VL032890.D

Acq: 5 Dec 2018 00:01

Instrument :

MSVOA_L

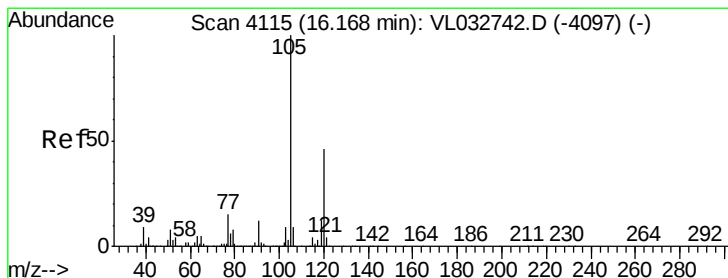
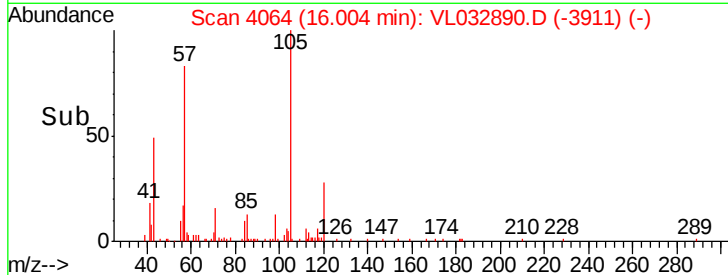
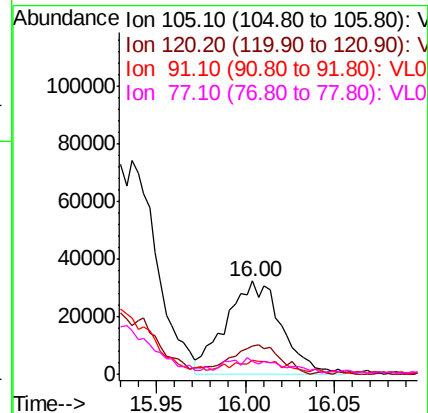
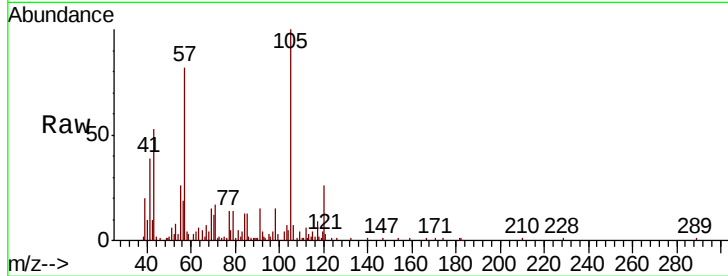
ClientSampleId :

MMSV-07

Tot Ion:	105	Resp:	69723
Ion Ratio	Lower	Upper	
105	100		
120	0.0	22.9	34.3#
91	14.1	10.6	15.8
77	16.9	11.4	17.2

Manual Integrations
APPROVED

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#73

1,3,5-Trimethylbenzene

Concen: 0.157 ppbv m

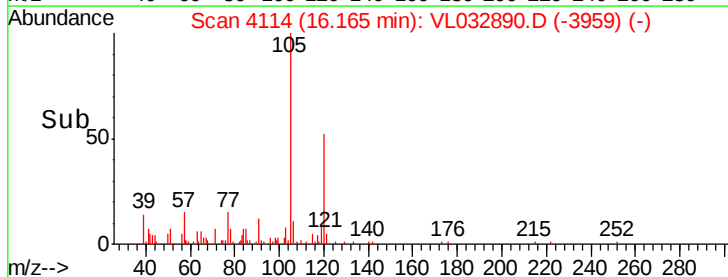
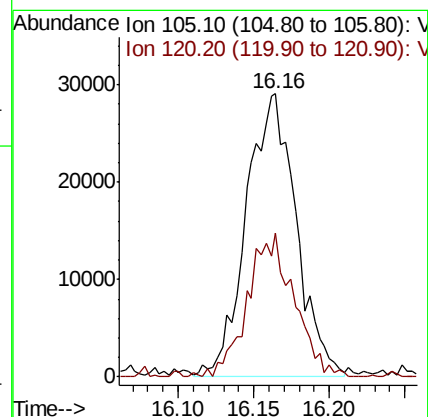
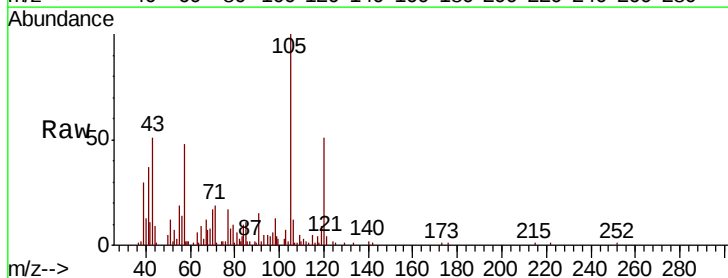
RT: 16.16 min Scan# 4114

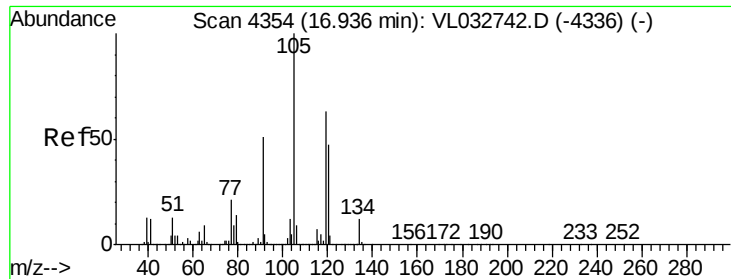
Delta R.T. -0.00 min

Lab File: VL032890.D

Acq: 5 Dec 2018 00:01

Tgt Ion:	105	Resp:	66825
Ion Ratio	Lower	Upper	
105	100		
120	50.6	36.6	55.0





#74
 1,2,4-Trimethylbenzene
 Concen: 0.344 ppbv
 RT: 16.93 min Scan# 4352
 Delta R.T. -0.01 min
 Lab File: VL032890.D
 Acq: 5 Dec 2018 00:01

Instrument :
 MSVOA_L
 ClientSampleId :
 MMSV-07

Tot Ion:	105	Resp:	157097
Ion Ratio	Lower	Upper	
105	100		
120	44.0	37.6	56.4
91	11.7	42.5	63.7#
77	13.5	17.4	26.2#

Manual Integrations
 APPROVED

MMDadoda
 12/10/2018 1:01:15 PM

