

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL120418\
 Data File : VL032888.D
 Acq On : 4 Dec 2018 22:42
 Operator : SY/AP
 Sample : J6175-06
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 MMSV-03

Manual Integrations
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 12/10/2018 1:01:05 PM

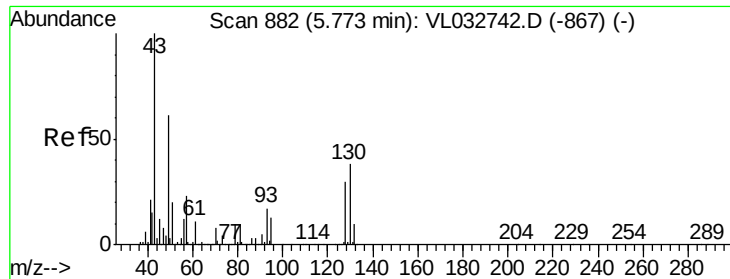
Quant Time: Dec 05 07:24:33 2018
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL111418AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Wed Nov 14 07:24:33 2018
 QLast Update : Wed Nov 14 07:00:23 2018
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.77	49	1390573	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.30	114	3495296	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.25	117	3566374	10.00	ppbv	0.00

System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	14.58	95	2584620	9.69	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	96.90%

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.08	85	84131	0.421	ppbv	95
3) Chlorodifluoromethane	3.02	51	2371759	21.513	ppbv	96
9) Propene	3.04	41	850978	19.289	ppbv	96
10) Heptane	8.25	43	51755	0.307	ppbv	96
11) Trichlorofluoromethane	4.01	101	184633	0.980	ppbv	98
13) Ethanol	3.66	45	276384	19.126	ppbv	98
15) Acetone	3.90	43	2618893	20.623	ppbv #	81
20) Methylene Chloride	4.42	84	873561	13.288	ppbv	99
26) Hexane	5.79	57	753288	5.717	ppbv #	41
27) Carbon Disulfide	4.62	76	249256	1.492	ppbv	98
34) 2-Butanone	5.33	43	8606837	47.476	ppbv	96
36) Benzene	7.01	78	510121	1.833	ppbv	97
41) Tetrahydrofuran	6.15	42	1789187	17.206	ppbv	100
44) 2,2,4-Trimethylpentane	7.99	57	87869	0.189	ppbv #	56
51) 2-Hexanone	10.28	43	910728	4.992	ppbv	100
52) Tetrachloroethene	11.37	164	23671m	0.244	ppbv	
53) Toluene	9.95	91	646160	2.225	ppbv	99
58) Ethyl Benzene	12.87	91	134211m	0.313	ppbv	
59) m/p-Xylene	13.13	91	264066m	0.691	ppbv	
60) o-Xylene	13.85	91	133174	0.347	ppbv	100
61) Styrene	13.69	104	57579m	0.230	ppbv	
72) 4-Ethyltoluene	16.00	105	48385	0.115	ppbv #	92
73) 1,3,5-Trimethylbenzene	16.16	105	59540	0.145	ppbv #	84
74) 1,2,4-Trimethylbenzene	16.94	105	141222m	0.321	ppbv	

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



#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.77 min Scan# 881

Delta R.T. -0.00 min

Lab File: VL032888.D

Acq: 4 Dec 2018 22:42

Instrument :

MSVOA_L

ClientSampleId :

MMSV-03

Tot Ion: 49 Resp: 1390573

Ion Ratio Lower Upper

49 100

128 52.3 24.9 74.6

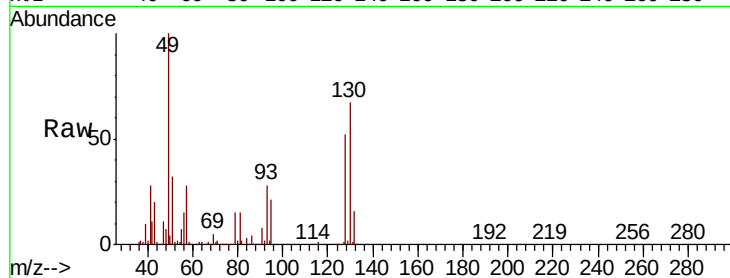
130 66.8 31.4 94.2

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Abundance Ion 49.10 (48.80 to 49.80): VL0

Ion 128.00 (127.70 to 128.70): V

Ion 130.00 (129.70 to 130.70): V

1000000

800000

600000

400000

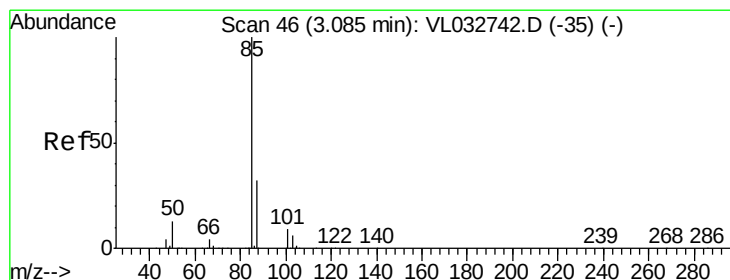
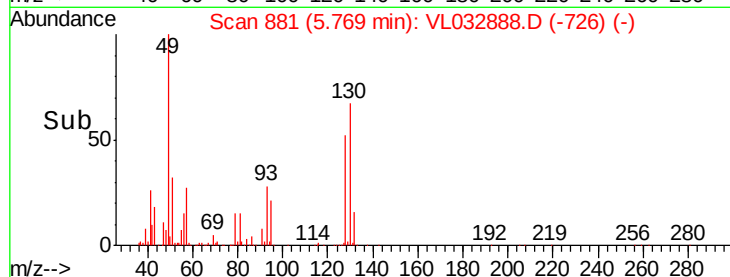
200000

0

5.77

5.70 5.75 5.80

Time-->



#2

Dichlorodifluoromethane

Concen: 0.421 ppbv

RT: 3.08 min Scan# 44

Delta R.T. -0.01 min

Lab File: VL032888.D

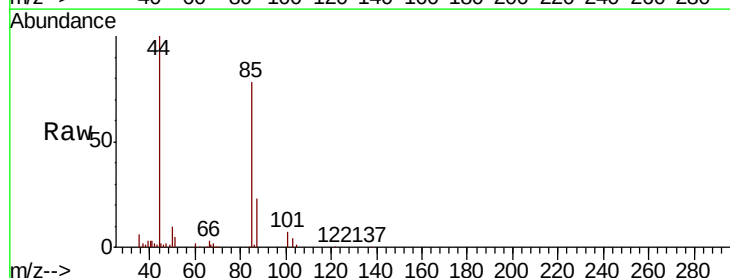
Acq: 4 Dec 2018 22:42

Tgt Ion: 85 Resp: 84131

Ion Ratio Lower Upper

85 100

87 29.5 26.0 39.0



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0

80000

60000

40000

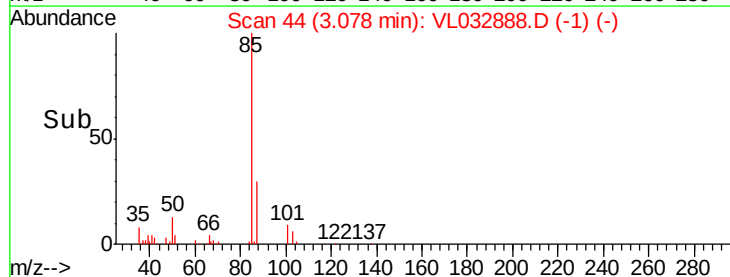
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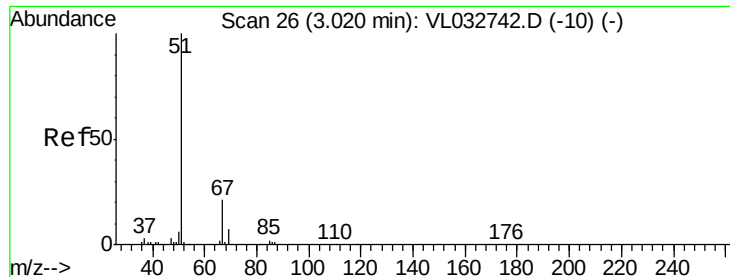
0

3.08

3.05 3.10

Time-->





#3

Chlorodifluoromethane

Concen: 21.513 ppbv

RT: 3.02 min Scan# 25

Delta R.T. -0.00 min

Lab File: VL032888.D

Acq: 4 Dec 2018 22:42

Instrument :

MSVOA_L

ClientSampleId :

MMSV-03

Tot Ion: 51 Resp: 2371759

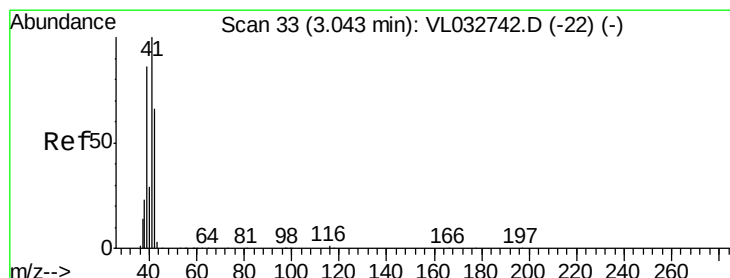
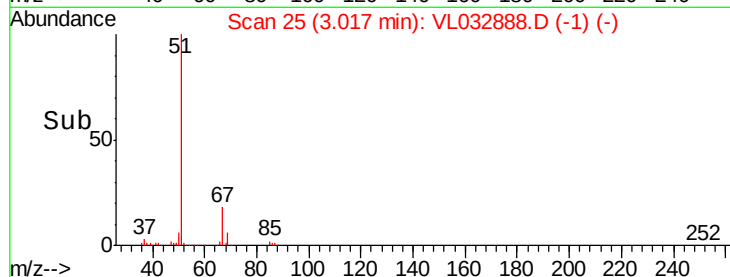
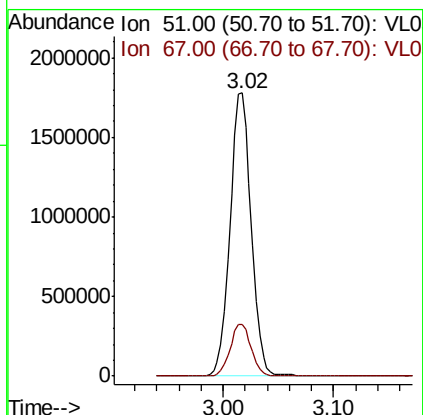
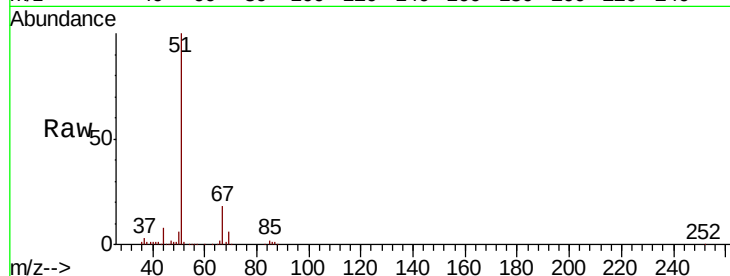
Ion Ratio Lower Upper

51 100

67 18.4 16.1 24.1

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#9

Propene

Concen: 19.289 ppbv

RT: 3.04 min Scan# 32

Delta R.T. -0.00 min

Lab File: VL032888.D

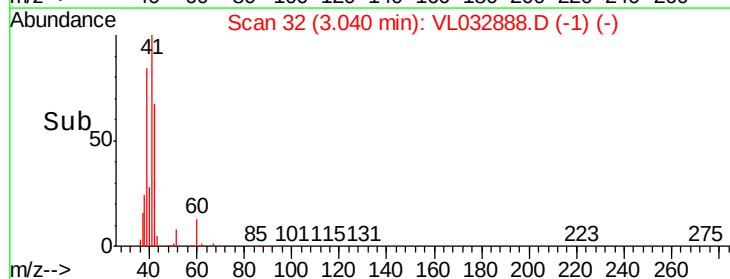
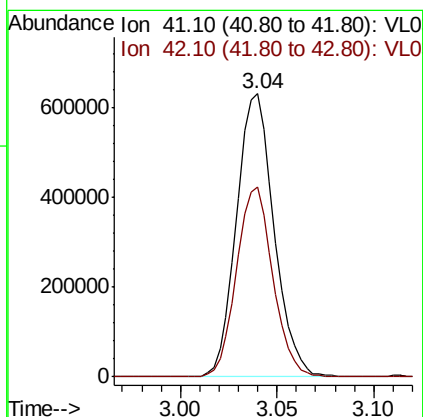
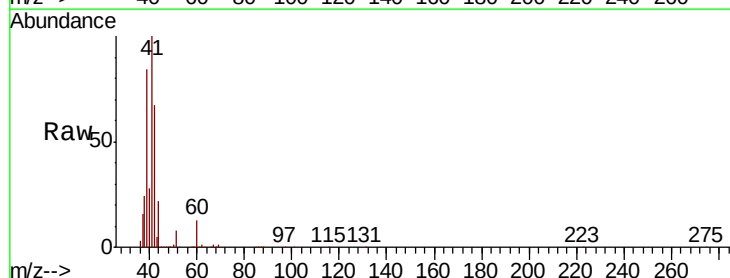
Acq: 4 Dec 2018 22:42

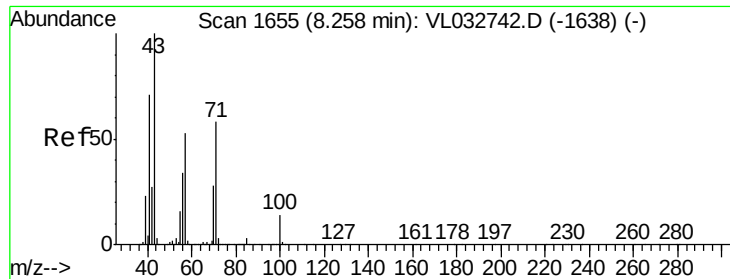
Tgt Ion: 41 Resp: 850978

Ion Ratio Lower Upper

41 100

42 65.3 55.0 82.6





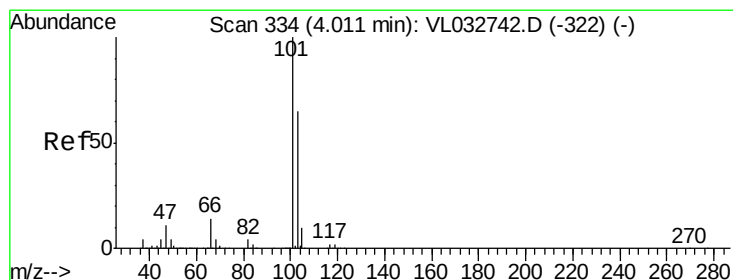
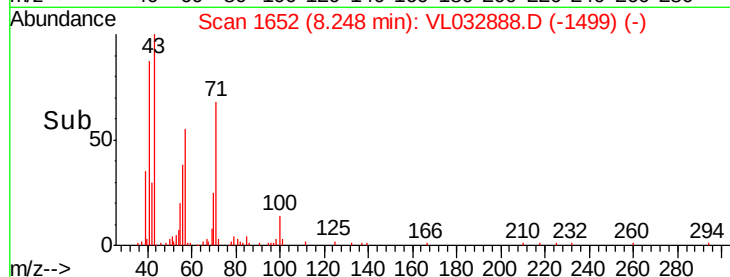
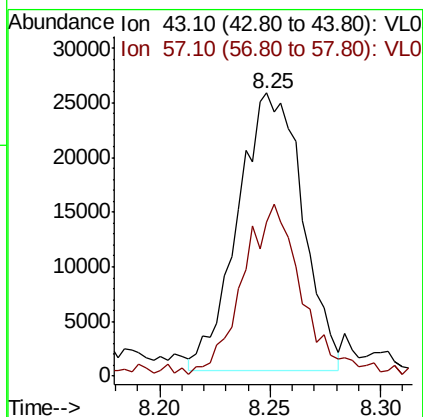
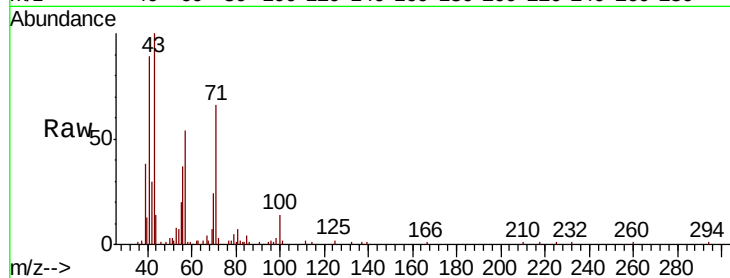
#10
 Heptane
 Concen: 0.307 ppbv
 RT: 8.25 min Scan# 1652
 Delta R.T. -0.01 min
 Lab File: VL032888.D
 Acq: 4 Dec 2018 22:42

Instrument :
 MSVOA_L
 ClientSampleId :
 MMSV-03

Tot Ion: 43 Resp: 51755
 Ion Ratio Lower Upper
 43 100
 57 55.3 41.8 62.8

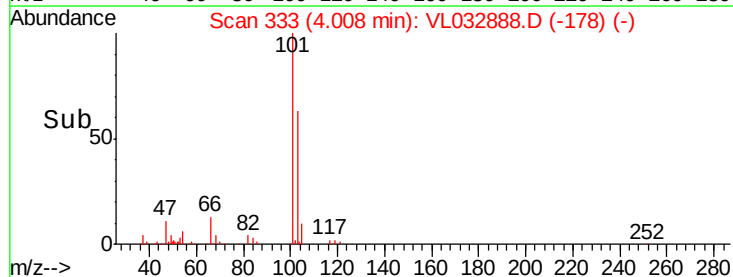
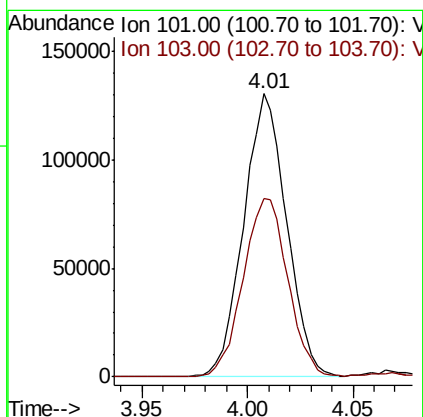
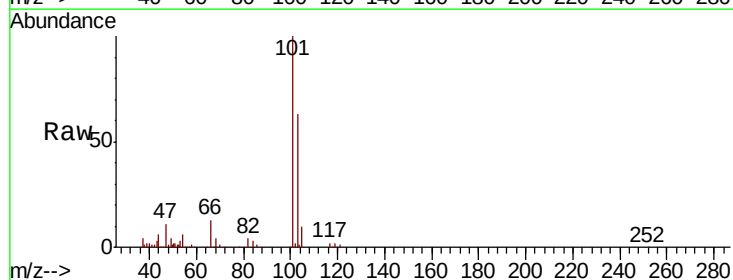
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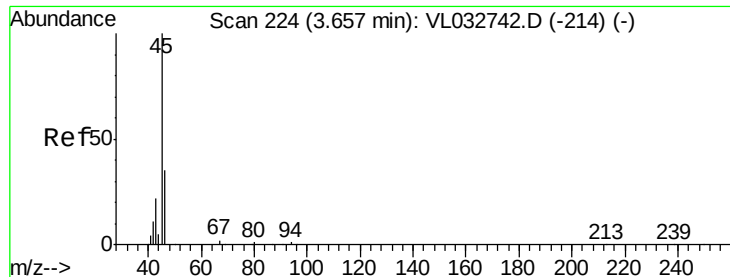
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#11
 Trichlorofluoromethane
 Concen: 0.980 ppbv
 RT: 4.01 min Scan# 333
 Delta R.T. -0.00 min
 Lab File: VL032888.D
 Acq: 4 Dec 2018 22:42

Tgt Ion: 101 Resp: 184633
 Ion Ratio Lower Upper
 101 100
 103 62.7 51.6 77.4





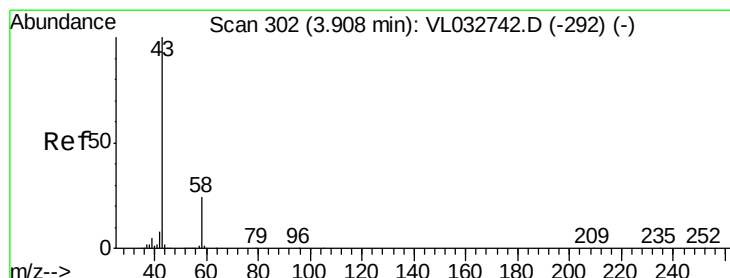
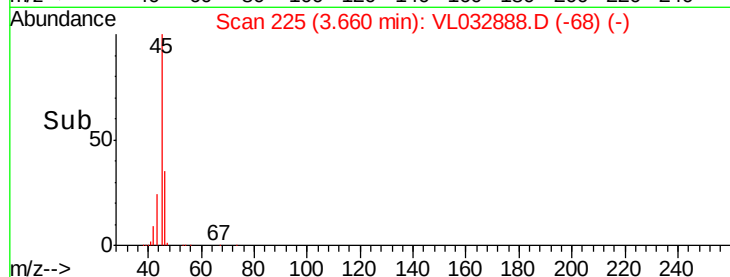
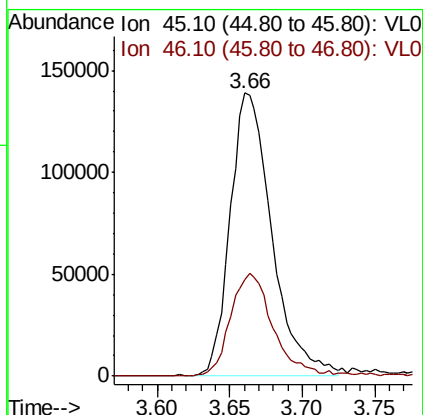
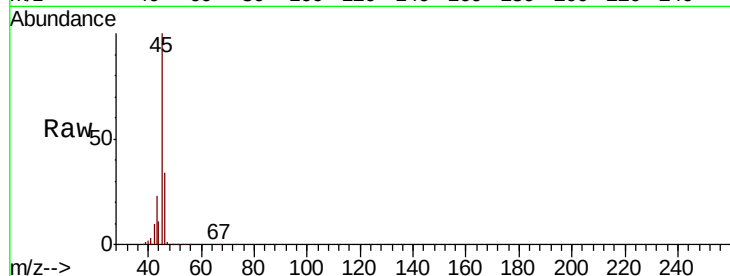
#13
Ethanol
Concen: 19.126 ppbv
RT: 3.66 min Scan# 225
Delta R.T. 0.00 min
Lab File: VL032888.D
Acq: 4 Dec 2018 22:42

Instrument :
MSVOA_L
ClientSampleId :
MMSV-03

Tot Ion: 45 Resp: 276384
Ion Ratio Lower Upper
45 100
46 37.6 14.5 57.9

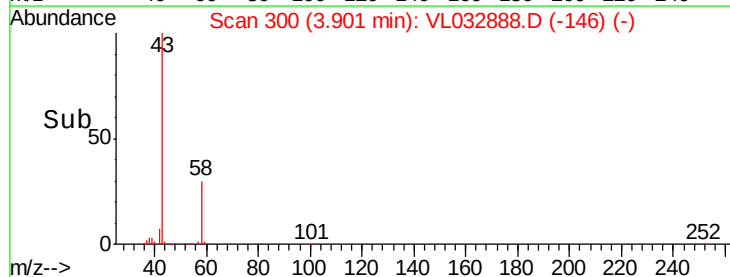
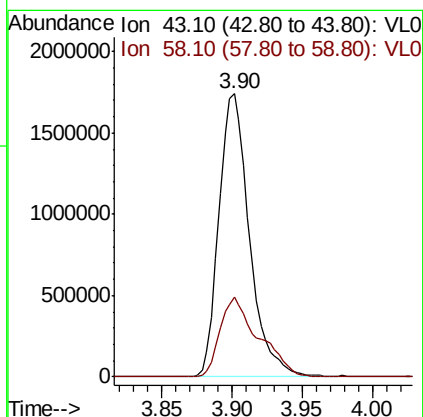
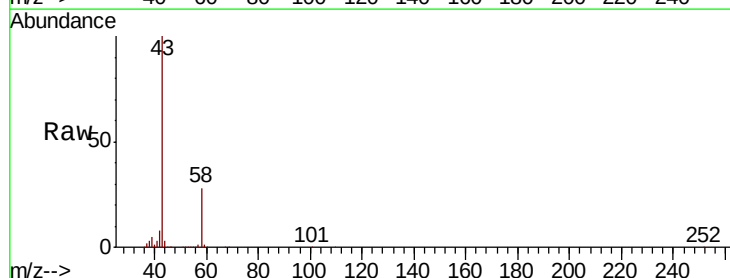
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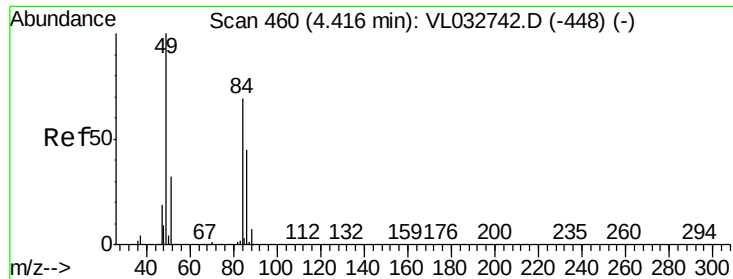
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#15
Acetone
Concen: 20.623 ppbv
RT: 3.90 min Scan# 300
Delta R.T. -0.01 min
Lab File: VL032888.D
Acq: 4 Dec 2018 22:42

Tgt Ion: 43 Resp: 2618893
Ion Ratio Lower Upper
43 100
58 36.2 21.1 31.7#





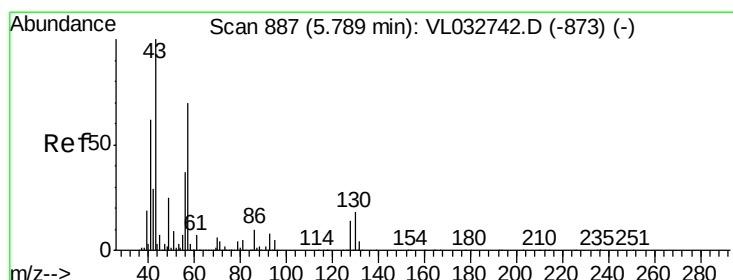
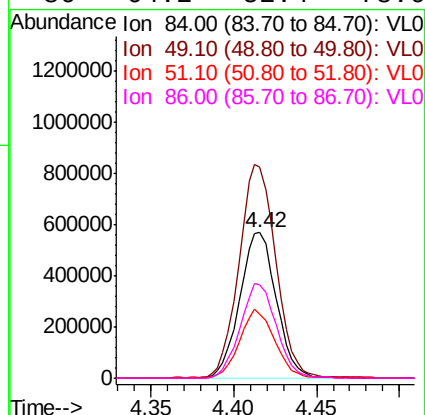
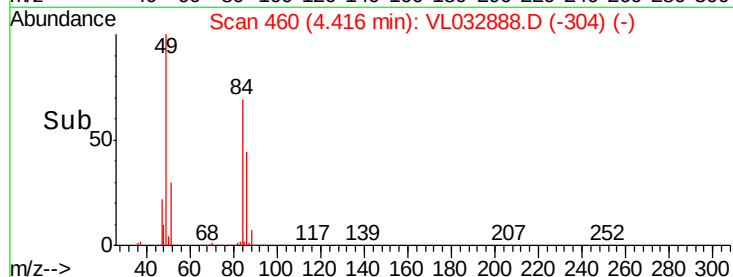
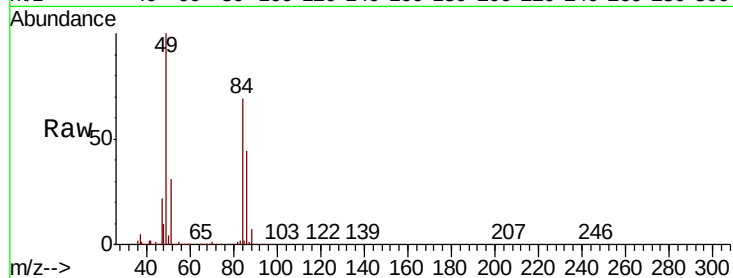
#20
Methvlene Chloride
Concen: 13.288 ppbv
RT: 4.42 min Scan# 460
Delta R.T. 0.00 min
Lab File: VL032888.D
Acq: 4 Dec 2018 22:42

Instrument :
MSVOA_L
ClientSampleId :
MMSV-03

Tot Ion	Ion	Ratio	Lower	Upper
84	100			
49	144.8	115.8	173.6	
51	43.5	36.9	55.3	
86	64.2	52.4	78.6	

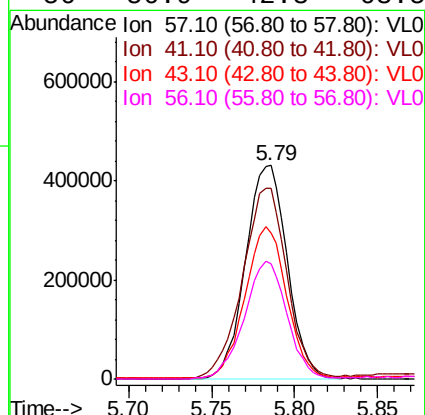
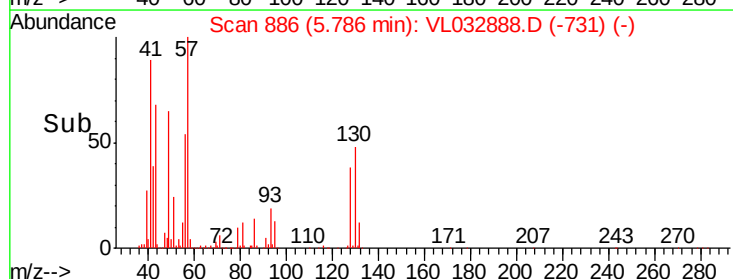
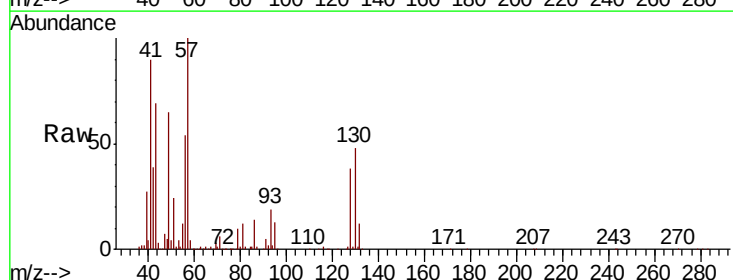
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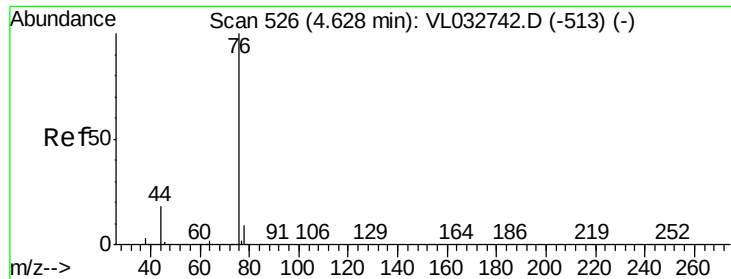
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#26
Hexane
Concen: 5.717 ppbv
RT: 5.79 min Scan# 886
Delta R.T. -0.00 min
Lab File: VL032888.D
Acq: 4 Dec 2018 22:42

Tgt Ion	Ion	Ratio	Lower	Upper
57	100			
41	95.6	70.3	105.5	
43	71.1	174.0	261.0#	
56	56.9	42.3	63.5	





#27

Carbon Disulfide

Concen: 1.492 ppbv

RT: 4.62 min Scan# 524

Delta R.T. -0.01 min

Lab File: VL032888.D

Acq: 4 Dec 2018 22:42

Instrument :

MSVOA_L

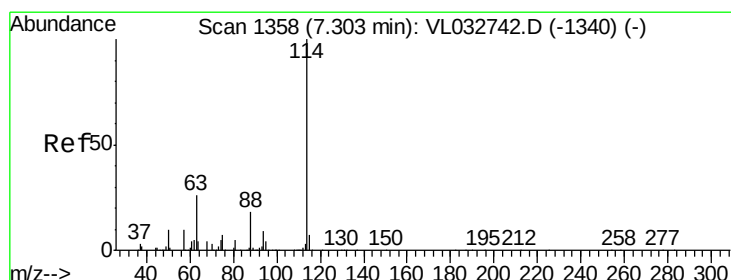
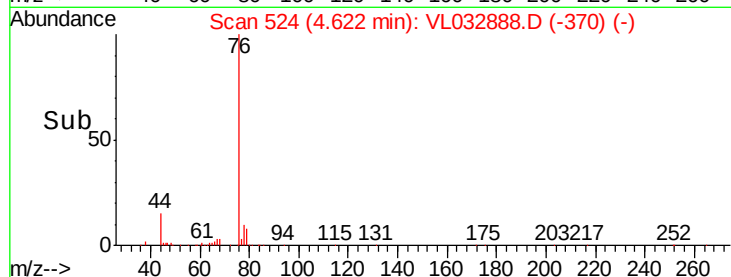
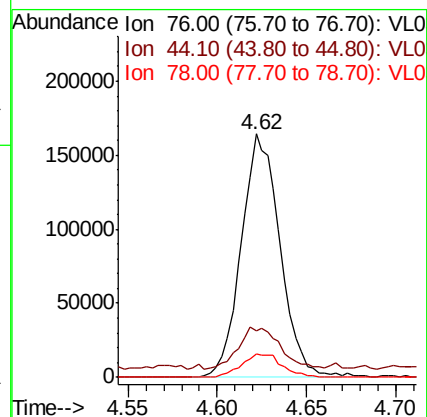
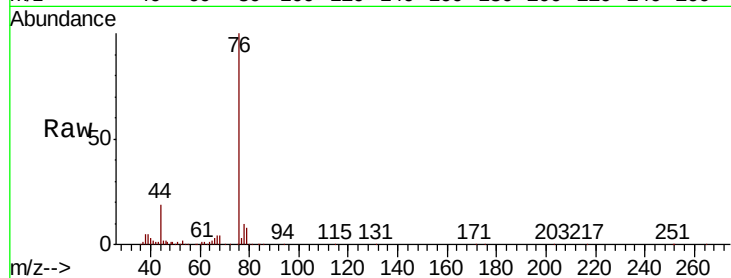
ClientSampleId :

MMSV-03

Tot Ion:	76	Resp:	249256
Ion Ratio	Lower	Upper	
76	100		
44	19.0	14.4	21.6
78	10.4	7.7	11.5

Manual Integrations
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#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

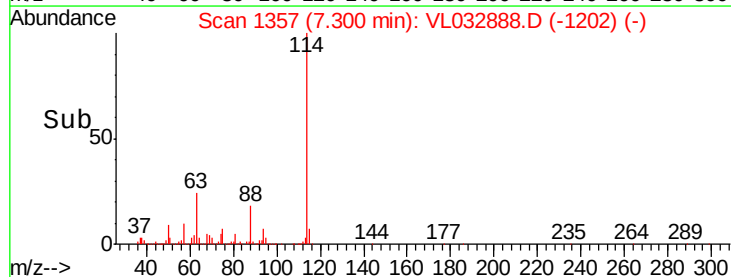
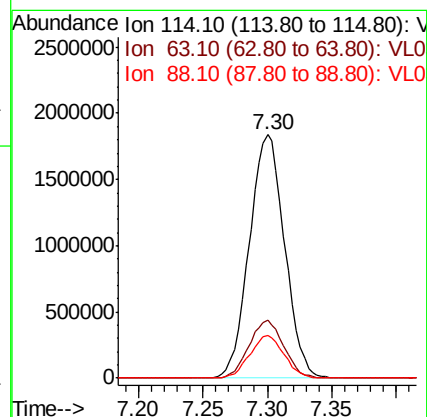
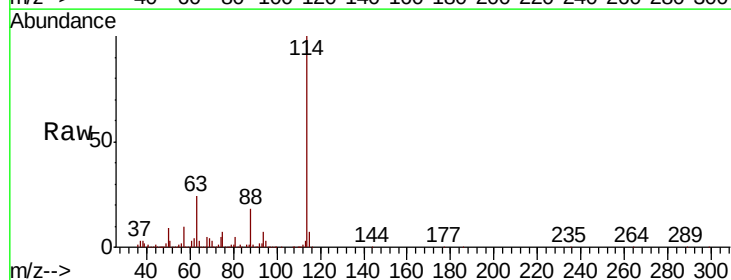
RT: 7.30 min Scan# 1357

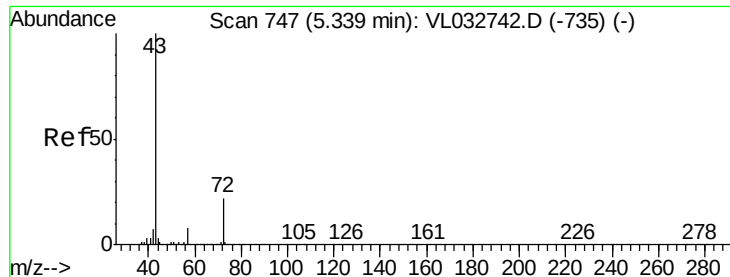
Delta R.T. -0.00 min

Lab File: VL032888.D

Acq: 4 Dec 2018 22:42

Tgt Ion:	114	Resp:	3495296
Ion Ratio	Lower	Upper	
114	100		
63	23.5	20.9	31.3
88	17.1	14.4	21.6





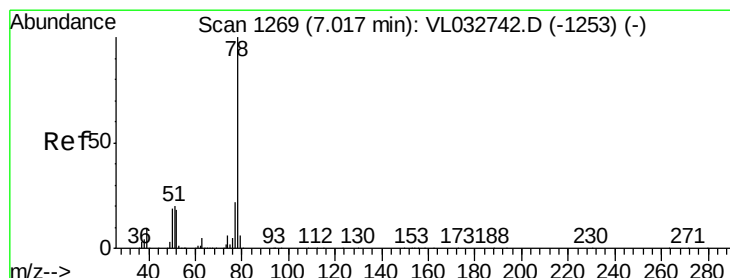
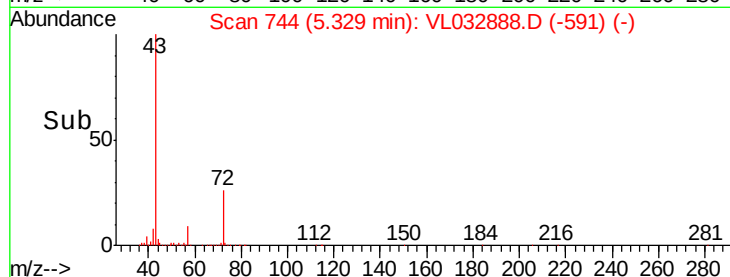
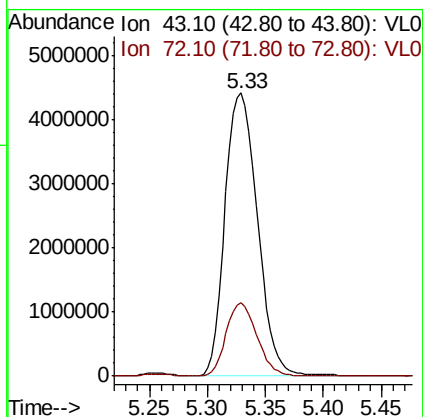
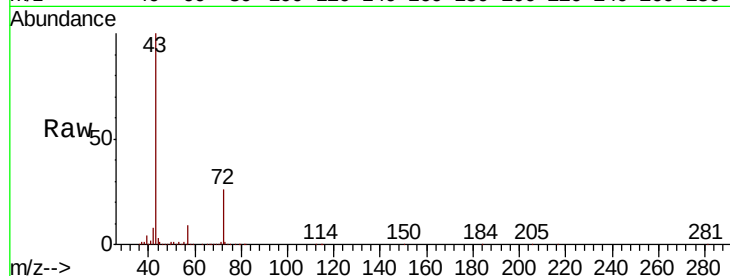
#34
2-Butanone
Concen: 47.476 ppbv
RT: 5.33 min Scan# 744
Delta R.T. -0.01 min
Lab File: VL032888.D
Acq: 4 Dec 2018 22:42

Instrument :
MSVOA_L
ClientSampleId :
MMSV-03

Tot Ion: 43 Resp: 8606837
Ion Ratio Lower Upper
43 100
72 24.8 18.4 27.6

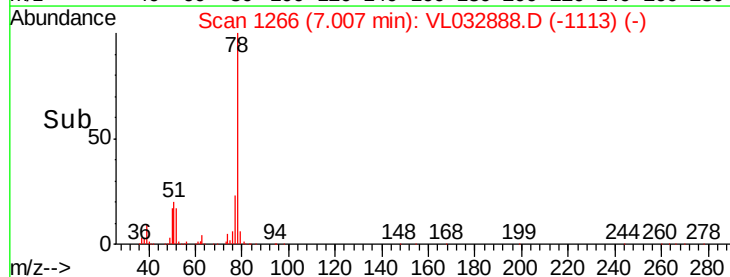
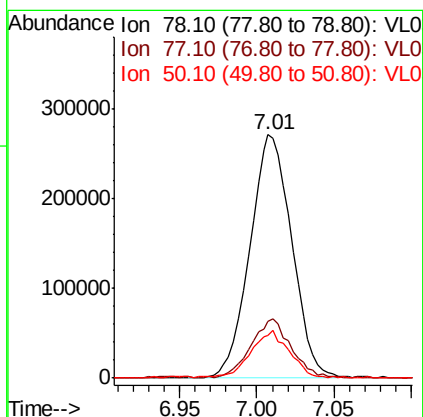
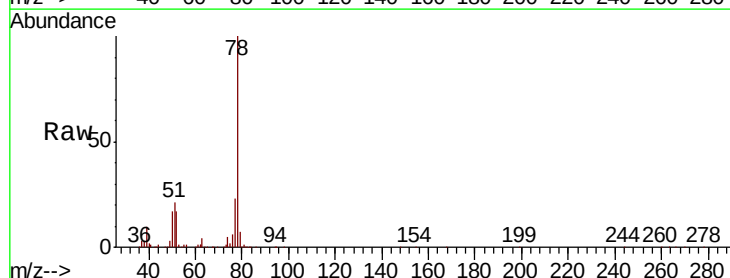
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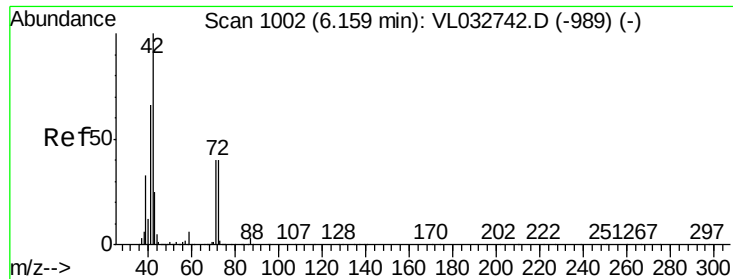
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#36
Benzene
Concen: 1.833 ppbv
RT: 7.01 min Scan# 1266
Delta R.T. -0.01 min
Lab File: VL032888.D
Acq: 4 Dec 2018 22:42

Tgt Ion: 78 Resp: 510121
Ion Ratio Lower Upper
78 100
77 22.7 17.8 26.8
50 17.1 15.4 23.0





#41

Tetrahydrofuran

Concen: 17.206 ppbv

RT: 6.15 min Scan# 998

Delta R.T. -0.01 min

Lab File: VL032888.D

Acq: 4 Dec 2018 22:42

Instrument :

MSVOA_L

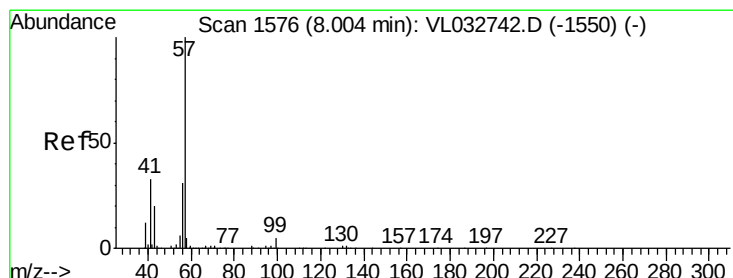
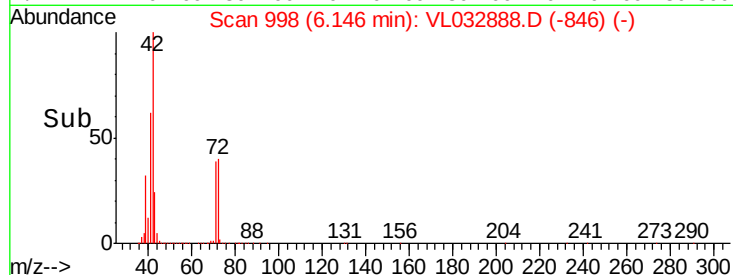
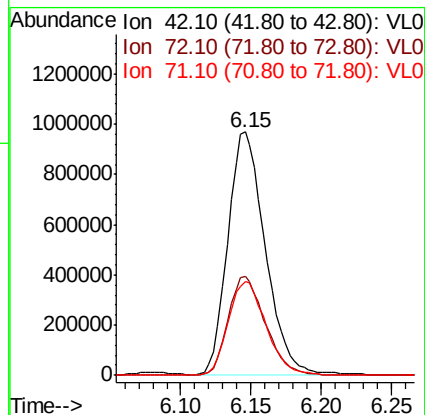
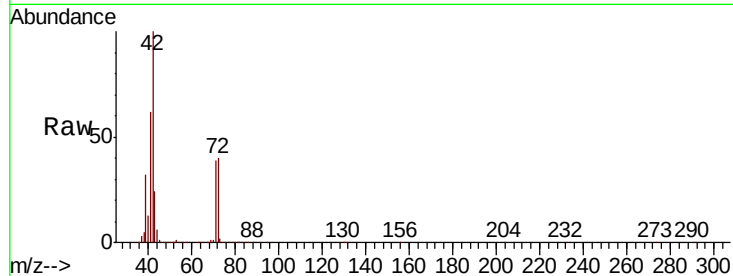
ClientSampleId :

MMSV-03

Tot Ion:	42	Resp:	1789187
Ion	Ratio	Lower	Upper
42	100		
72	40.8	32.4	48.6
71	39.4	31.6	47.4

Manual Integrations
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#44

2,2,4-Trimethylpentane

Concen: 0.189 ppbv

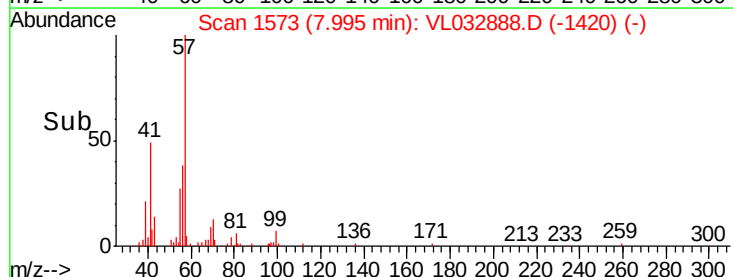
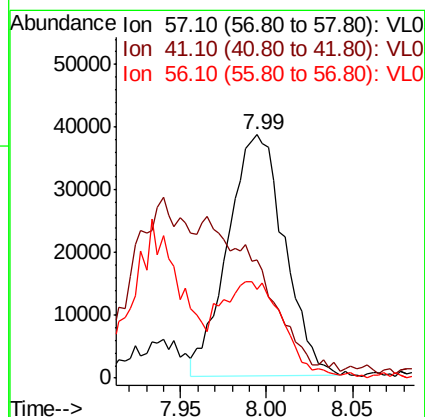
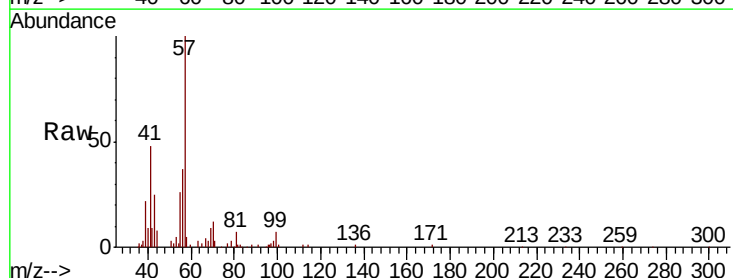
RT: 7.99 min Scan# 1573

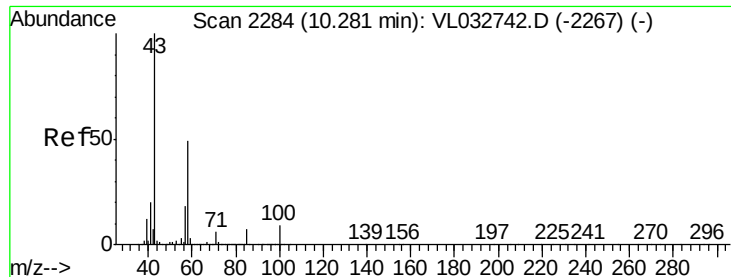
Delta R.T. -0.01 min

Lab File: VL032888.D

Acq: 4 Dec 2018 22:42

Tgt Ion:	57	Resp:	87869
Ion	Ratio	Lower	Upper
57	100		
41	0.0	26.6	39.8#
56	46.7	24.8	37.2#





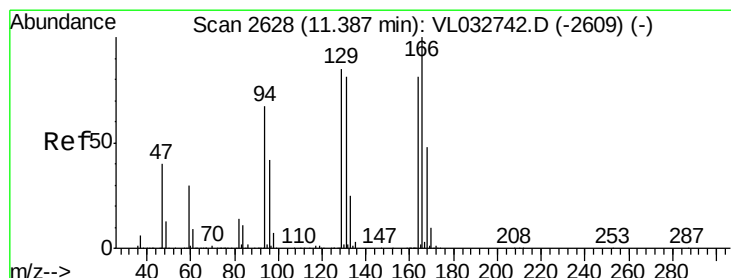
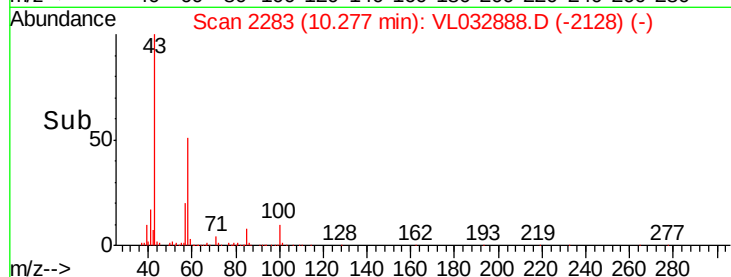
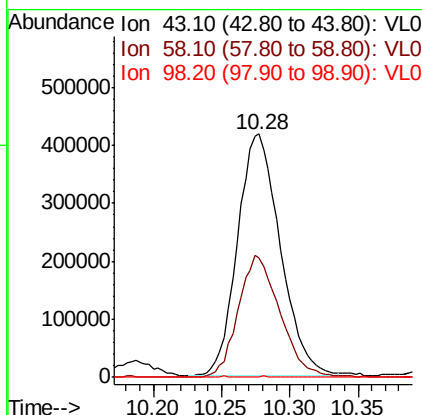
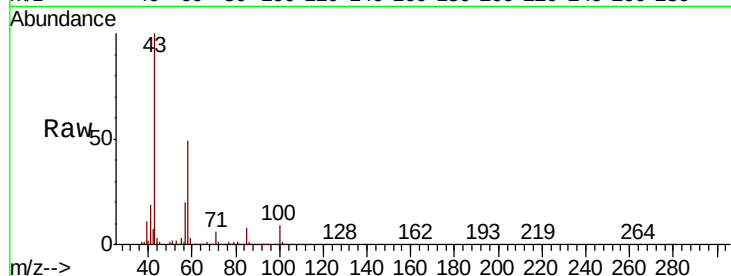
#51
2-Hexanone
Concen: 4.992 ppbv
RT: 10.28 min Scan# 2283
Delta R.T. -0.00 min
Lab File: VL032888.D
Acq: 4 Dec 2018 22:42

Instrument :
MSVOA_L
ClientSampleId :
MMSV-03

Tot Ion	Ratio	Lower	Upper
43	100		
58	48.8	38.9	58.3
98	0.3	0.2	0.4

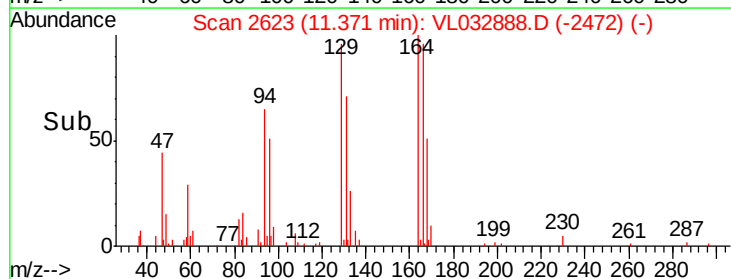
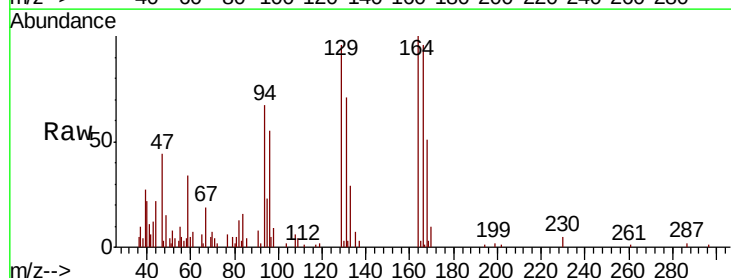
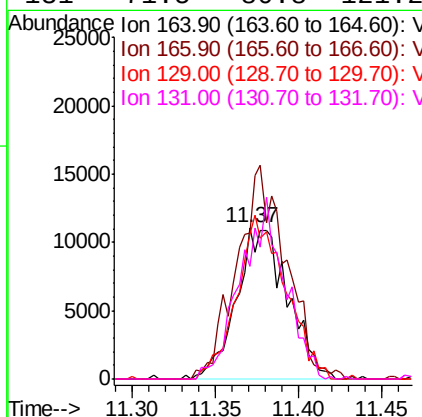
Manual Integrations
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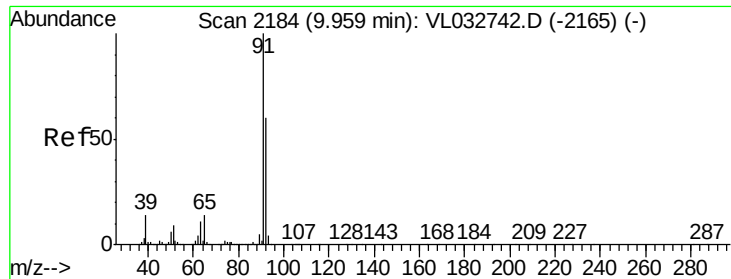
MMDadoda
12/10/2018 1:01:05 PM



#52
Tetrachloroethene
Concen: 0.244 ppbv m
RT: 11.37 min Scan# 2623
Delta R.T. -0.02 min
Lab File: VL032888.D
Acq: 4 Dec 2018 22:42

Tgt Ion	Ratio	Lower	Upper
164	100		
166	96.4	99.3	148.9#
129	95.6	83.9	125.9
131	71.5	80.8	121.2#





#53

Toluene

Concen: 2.225 ppbv

RT: 9.95 min Scan# 2182

Delta R.T. -0.01 min

Lab File: VL032888.D

Acq: 4 Dec 2018 22:42

Instrument :

MSVOA_L

ClientSampleId :

MMSV-03

Tot Ion: 91 Resp: 646160

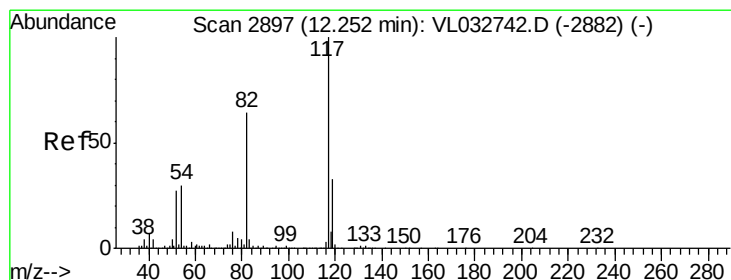
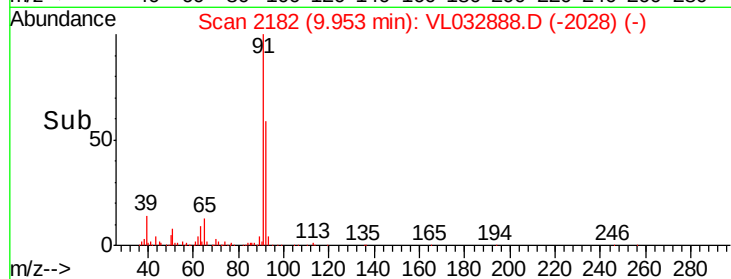
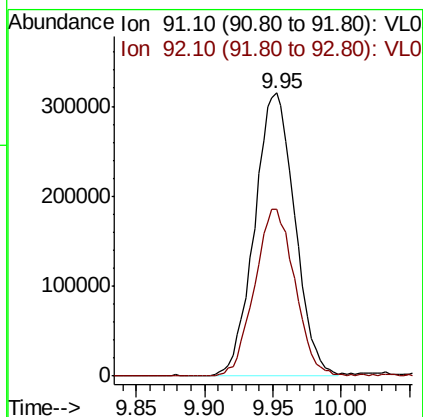
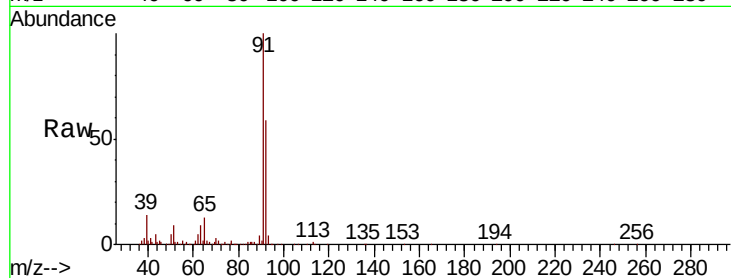
Ion Ratio Lower Upper

91 100

92 58.9 47.9 71.9

Manual Integrations
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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: VL032888.D

Acq: 4 Dec 2018 22:42

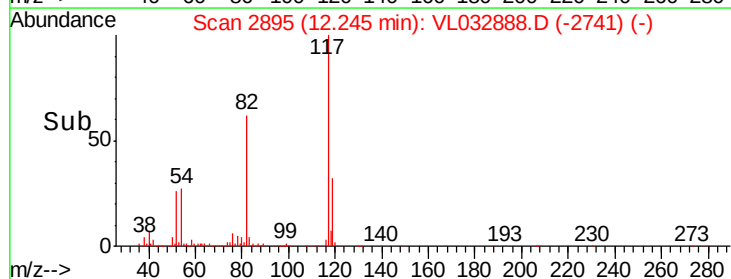
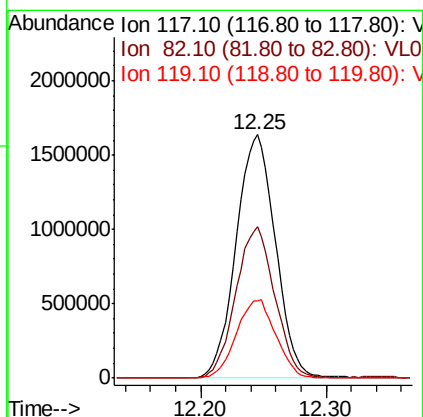
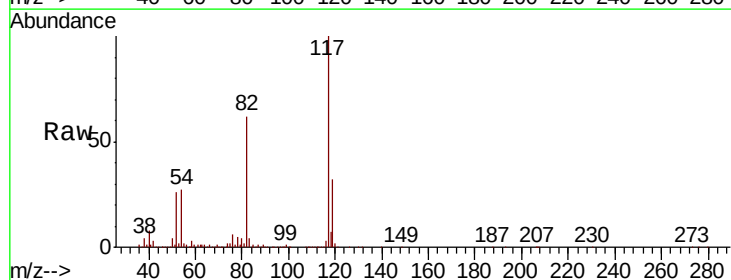
Tgt Ion: 117 Resp: 3566374

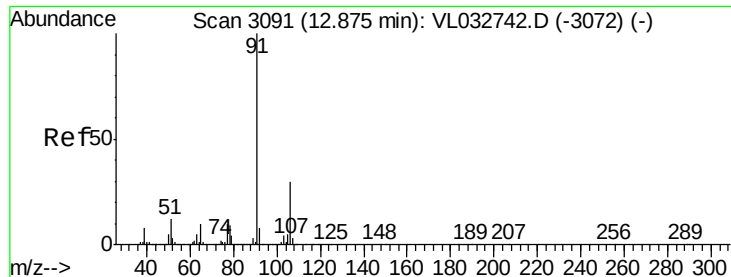
Ion Ratio Lower Upper

117 100

82 61.9 51.0 76.6

119 32.6 28.0 42.0





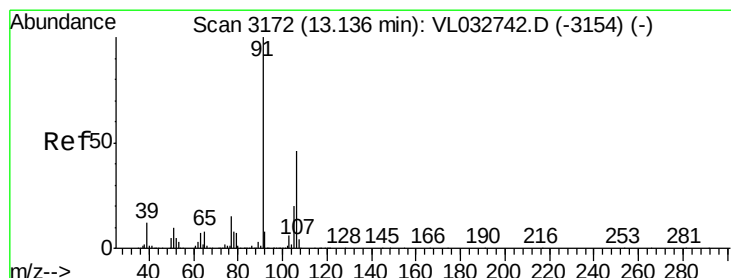
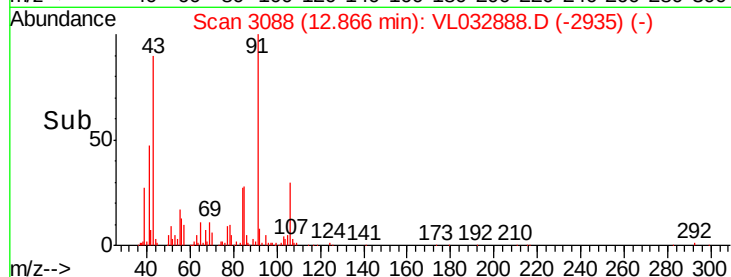
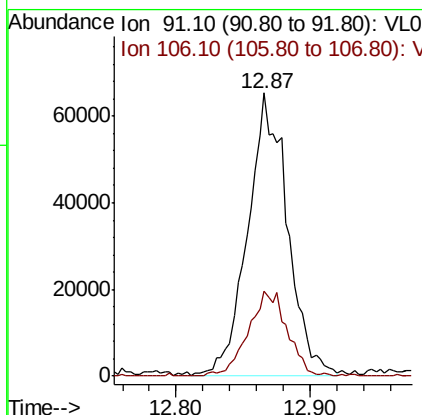
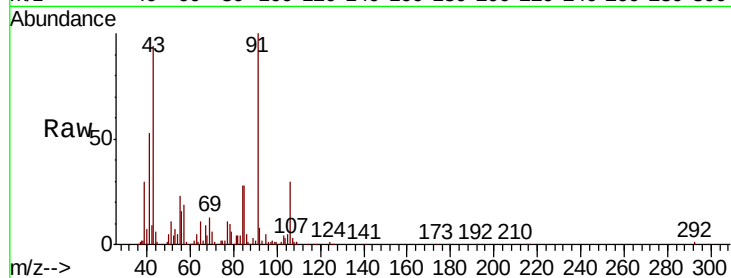
#58
Ethyl Benzene
Concen: 0.313 ppbv m
RT: 12.87 min Scan# 3088
Delta R.T. -0.01 min
Lab File: VL032888.D
Acq: 4 Dec 2018 22:42

Instrument :
MSVOA_L
ClientSampleId :
MMSV-03

Tot Ion	Ion	Ratio	Lower	Upper
91	100			
106	30.0	23.6	35.4	

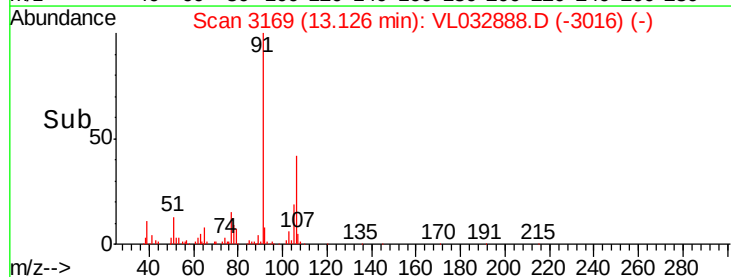
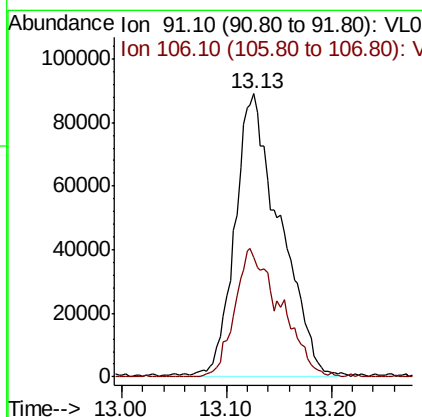
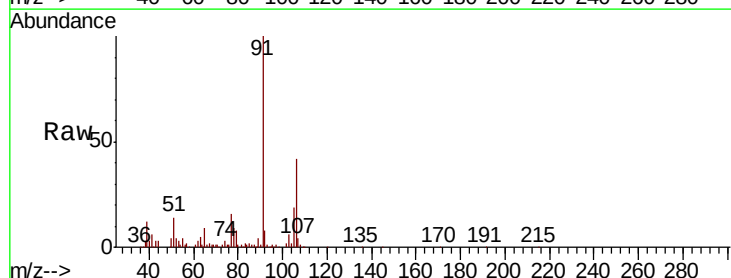
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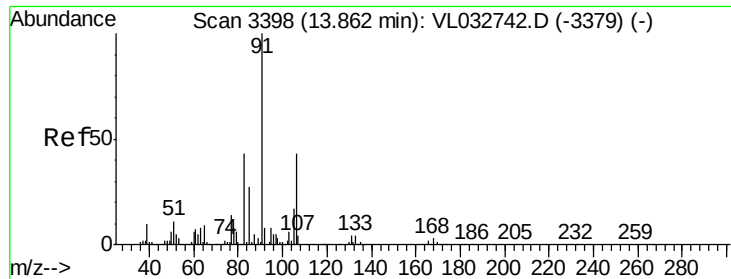
MMDadoda
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#59
m/p-Xylene
Concen: 0.691 ppbv m
RT: 13.13 min Scan# 3169
Delta R.T. -0.01 min
Lab File: VL032888.D
Acq: 4 Dec 2018 22:42

Tgt Ion	Ion	Ratio	Lower	Upper
91	100			
106	46.3	36.1	54.1	





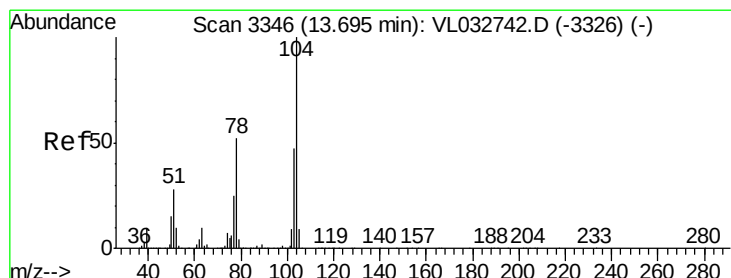
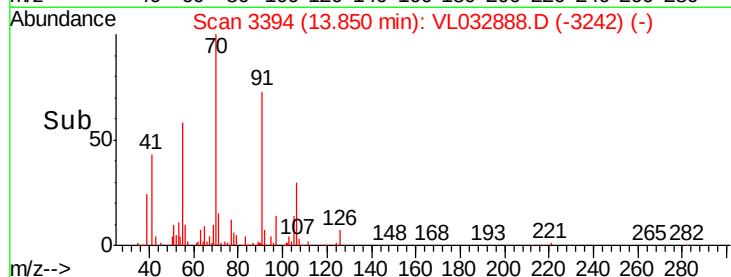
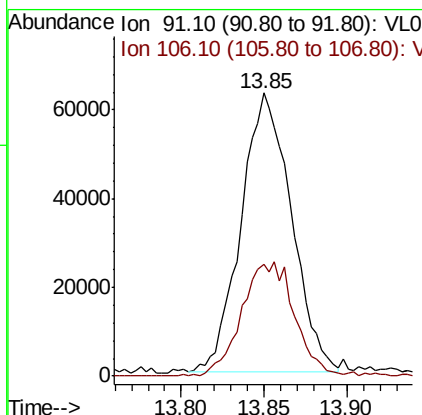
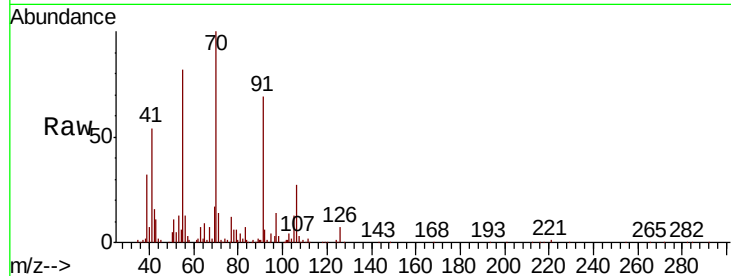
#60
o-Xylene
Concen: 0.347 ppbv
RT: 13.85 min Scan# 3394
Delta R.T. -0.01 min
Lab File: VL032888.D
Acq: 4 Dec 2018 22:42

Instrument :
MSVOA_L
ClientSampleId :
MMSV-03

Tot Ion: 91 Resp: 133174
Ion Ratio Lower Upper
91 100
106 43.8 21.9 65.7

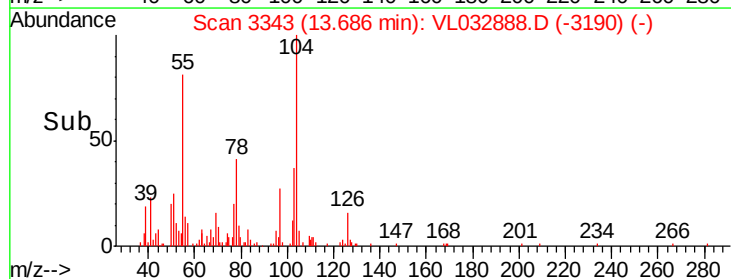
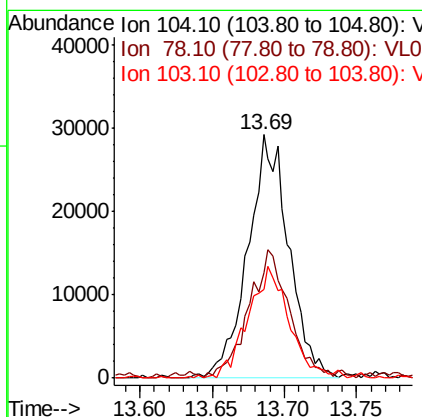
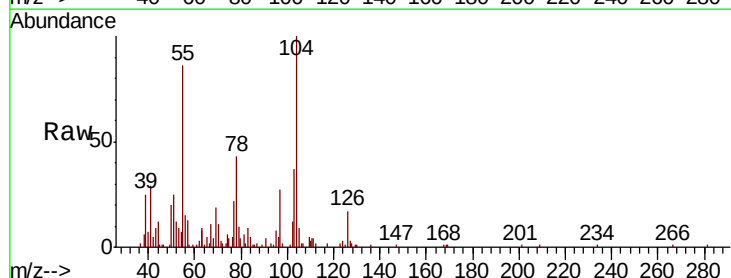
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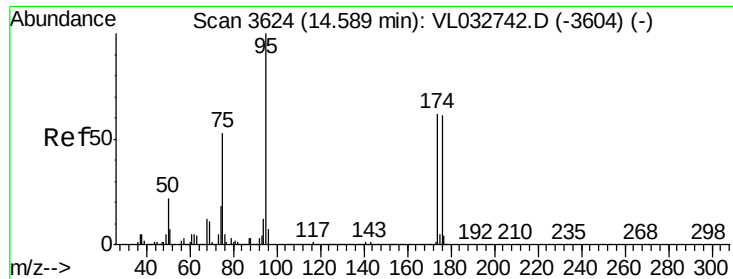
MMDadoda
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#61
Styrene
Concen: 0.230 ppbv m
RT: 13.69 min Scan# 3343
Delta R.T. -0.01 min
Lab File: VL032888.D
Acq: 4 Dec 2018 22:42

Tgt Ion: 104 Resp: 57579
Ion Ratio Lower Upper
104 100
78 50.0 42.2 63.4
103 47.0 38.2 57.2





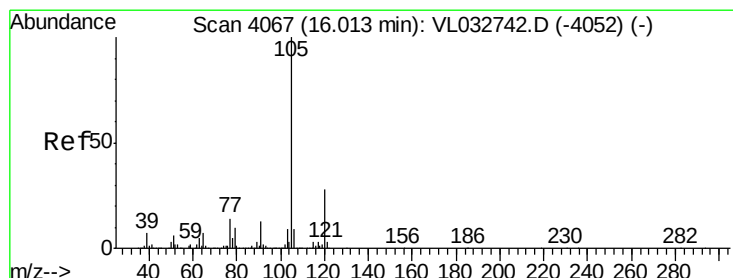
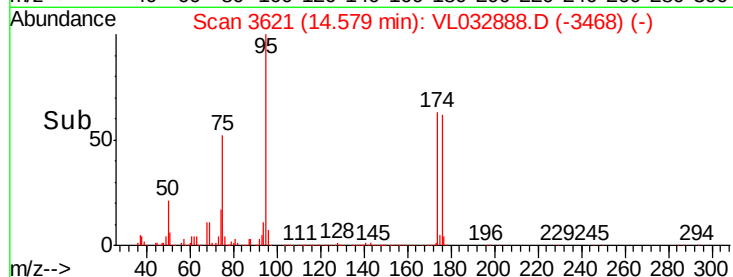
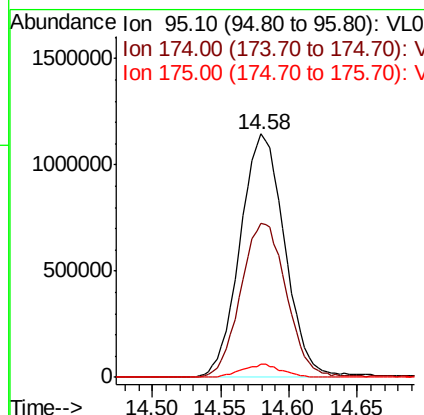
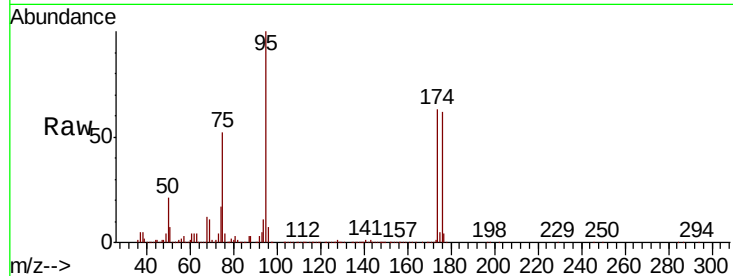
#68
 1-Bromo-4-Fluorobenzene
 Concen: 9.689 ppbv
 RT: 14.58 min Scan# 3621
 Delta R.T. -0.01 min
 Lab File: VL032888.D
 Acq: 4 Dec 2018 22:42

Instrument :
 MSVOA_L
 ClientSampleId :
 MMSV-03

Tot Ion: 95 Resp: 2584620
 Ion Ratio Lower Upper
 95 100
 174 65.6 50.7 76.1
 175 4.9 3.8 5.6

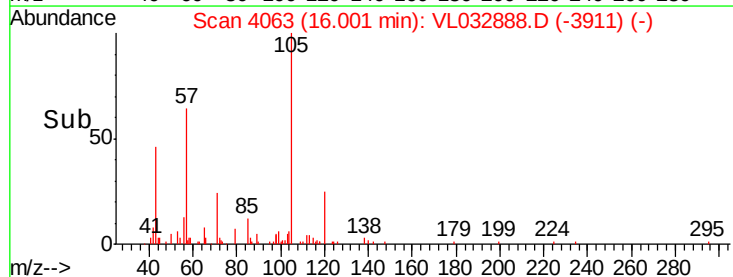
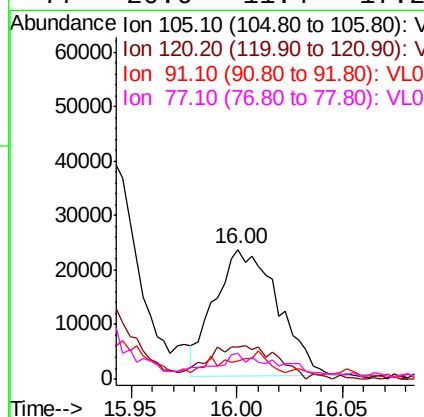
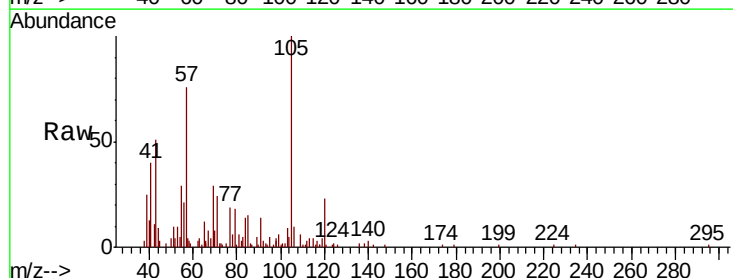
Manual Integrations
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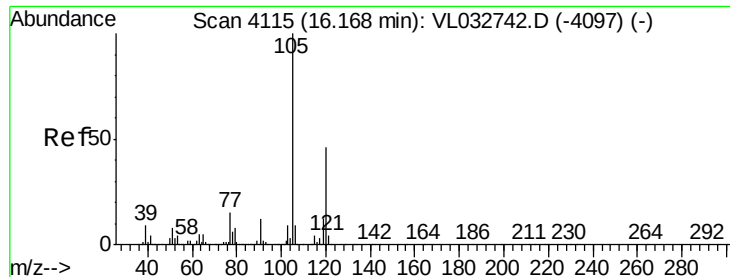
MMDadoda
 12/10/2018 1:01:05 PM



#72
 4-Ethyltoluene
 Concen: 0.115 ppbv
 RT: 16.00 min Scan# 4063
 Delta R.T. -0.01 min
 Lab File: VL032888.D
 Acq: 4 Dec 2018 22:42

Tgt Ion: 105 Resp: 48385
 Ion Ratio Lower Upper
 105 100
 120 29.2 22.9 34.3
 91 19.7 10.6 15.8#
 77 20.6 11.4 17.2#





#73

1,3,5-Trimethylbenzene

Concen: 0.145 ppbv

RT: 16.16 min Scan# 4114

Delta R.T. -0.00 min

Lab File: VL032888.D

Acq: 4 Dec 2018 22:42

Instrument :

MSVOA_L

ClientSampleId :

MMSV-03

Tot Ion:105 Resp: 59540

Ion Ratio Lower Upper

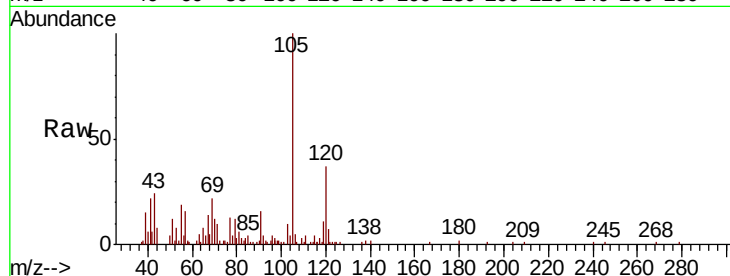
105 100

120 35.6 36.6 55.0#

Manual Integrations
APPROVED

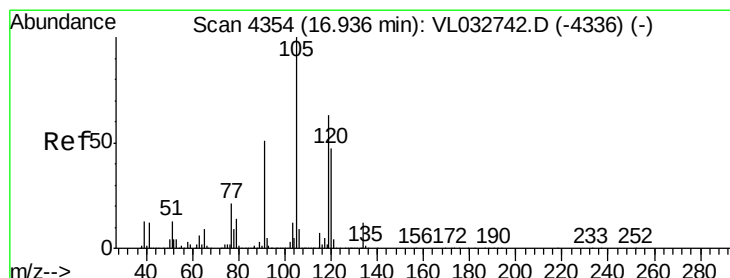
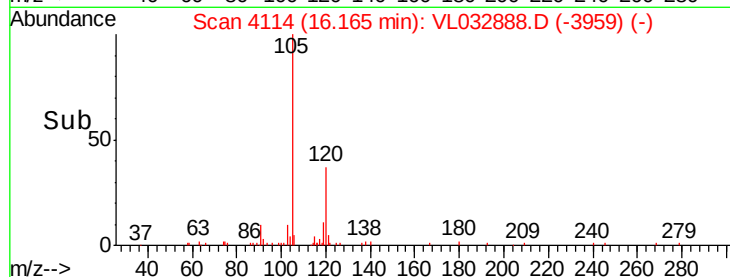
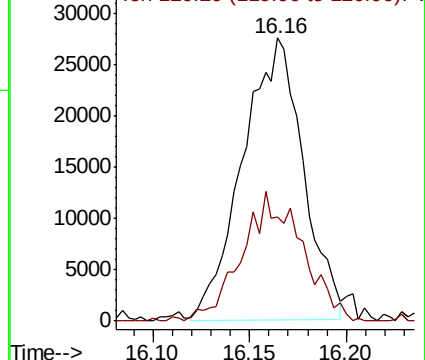
MMDadoda

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Abundance Ion 105.10 (104.80 to 105.80): V

Ion 120.20 (119.90 to 120.90): V



#74

1,2,4-Trimethylbenzene

Concen: 0.321 ppbv m

RT: 16.94 min Scan# 4354

Delta R.T. 0.00 min

Lab File: VL032888.D

Acq: 4 Dec 2018 22:42

Tgt Ion:105 Resp: 141222

Ion Ratio Lower Upper

105 100

120 42.5 37.6 56.4

91 14.0 42.5 63.7#

77 12.3 17.4 26.2#

Abundance Ion 105.10 (104.80 to 105.80): V

Ion 120.20 (119.90 to 120.90): V

Ion 91.10 (90.80 to 91.80): VL0

Ion 77.10 (76.80 to 77.80): VL0

