

Data Path : Z:\VOASRV\HPCHEM1\MSVOA_L\DATA\VL120718\
 Data File : VL032931.D
 Acq On : 7 Dec 2018 12:34
 Operator : SY/AP
 Sample : J6176-03 1.2X
 Misc : 400ml/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 MMSV-08

Manual Integrations
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MMDadoda
 12/11/2018 10:08:40 AM

Quant Time: Dec 08 03:14:34 2018
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_L\METHODS\VL120718AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Dec 0
 QLast Update : Fri Dec 07 09:35:17 2018
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.77	49	1061163	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.30	114	2691054	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.25	117	2652258	10.00	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.58	95	1972956	10.07	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	100.70%

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	3.07	85	23812	0.168	ppbv	98
3) Chlorodifluoromethane	3.02	51	32231m	0.401	ppbv	
4) Chloromethane	3.17	50	16082	0.344	ppbv	97
9) Propene	3.04	41	403304	12.691	ppbv	97
10) Heptane	8.25	43	23487	0.197	ppbv	91
11) Trichlorofluoromethane	4.00	101	35795m	0.268	ppbv	
13) Ethanol	3.66	45	399600	36.522	ppbv	97
15) Acetone	3.90	43	2875122	31.566	ppbv #	77
20) Methylene Chloride	4.42	84	240848	5.410	ppbv	97
26) Hexane	5.79	57	500355	5.037	ppbv #	43
27) Carbon Disulfide	4.62	76	62829	0.506	ppbv #	82
29) Chloroform	5.86	83	23567	0.133	ppbv #	84
34) 2-Butanone	5.33	43	10125214	86.380	ppbv	96
35) Carbon Tetrachloride	7.14	117	16462	0.078	ppbv	95
36) Benzene	7.01	78	37810	0.191	ppbv #	89
38) Trichloroethene	7.97	130	9195m	0.112	ppbv	
51) 2-Hexanone	10.27	43	988153	7.773	ppbv #	99
52) Tetrachloroethene	11.37	164	13882m	0.193	ppbv	
53) Toluene	9.95	91	149848	0.714	ppbv	99
58) Ethyl Benzene	12.87	91	53402m	0.189	ppbv	
59) m/p-Xylene	13.13	91	106798m	0.416	ppbv	
60) o-Xylene	13.86	91	59096m	0.228	ppbv	
61) Styrene	13.70	104	36521	0.212	ppbv #	91
69) p-Isopropyltoluene	17.82	119	42108m	0.105	ppbv	
72) 4-Ethyltoluene	16.00	105	35449m	0.123	ppbv	
73) 1,3,5-Trimethylbenzene	16.17	105	27775	0.098	ppbv	99
74) 1,2,4-Trimethylbenzene	16.93	105	70352	0.221	ppbv #	72
79) Naphthalene	22.42	128	25825m	0.125	ppbv	

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

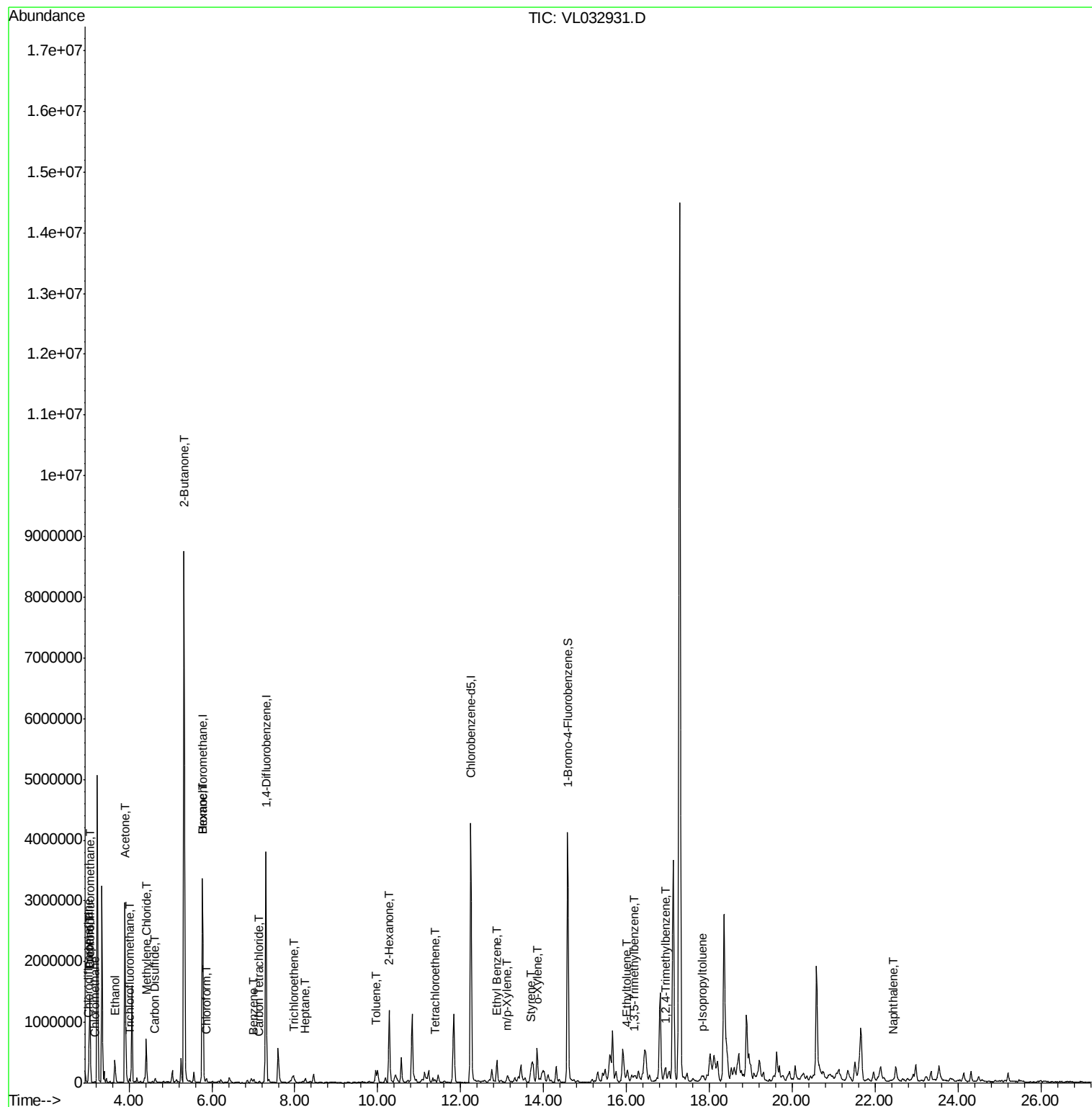
Data Path : Z:\V0ASRV\HPCHEM1\MSVOA_L\DATA\VL120718\
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Quant Time: Dec 08 03:14:34 2018
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA_L\METHODS\VL120718AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Dec
QLast Update : Fri Dec 07 09:35:17 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: VL032931.D

Acq: 7 Dec 2018 12:34

Instrument :

MSVOA_L

ClientSampleId :

MMSV-08

Tgt Ion: 49 Resp: 1061163

Ion Ratio Lower Upper

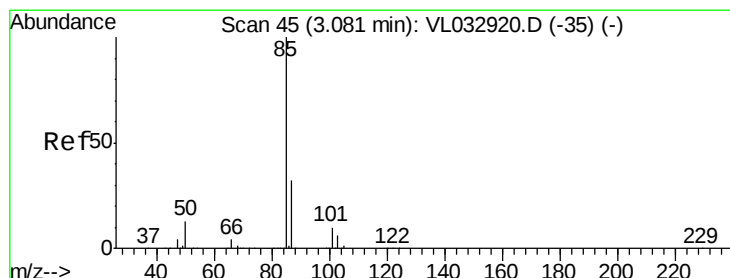
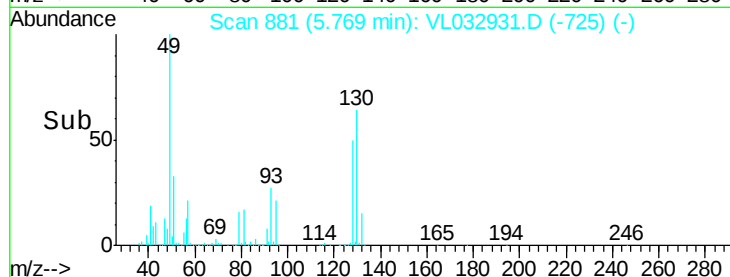
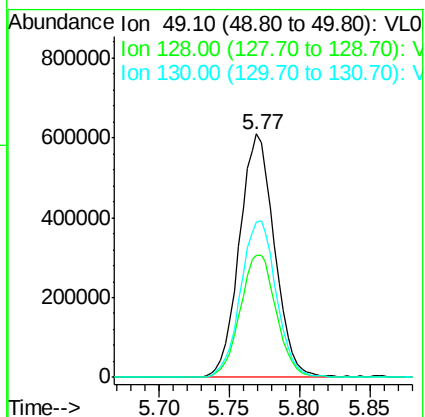
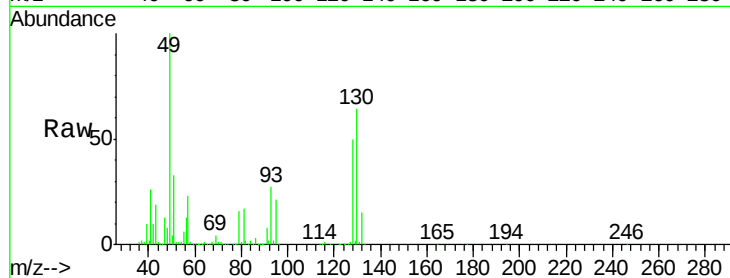
49 100

128 52.0 26.3 78.8

130 65.8 33.9 101.7

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#2

Dichlorodifluoromethane

Concen: 0.168 ppbv

RT: 3.07 min Scan# 43

Delta R.T. -0.01 min

Lab File: VL032931.D

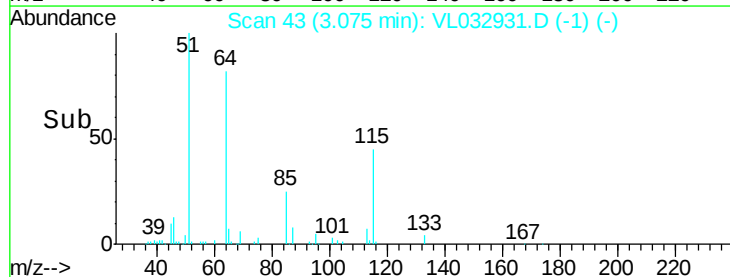
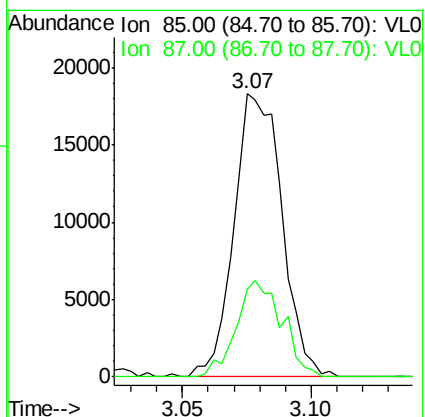
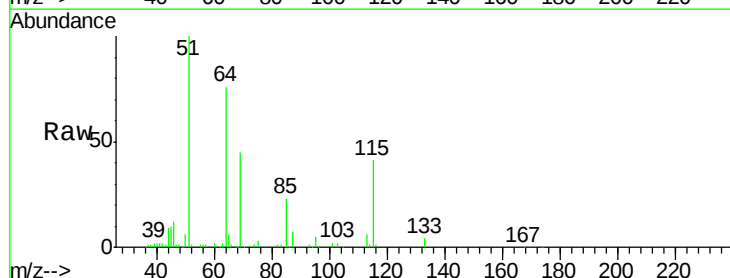
Acq: 7 Dec 2018 12:34

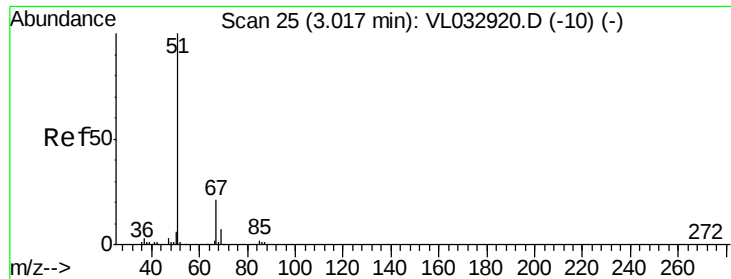
Tgt Ion: 85 Resp: 23812

Ion Ratio Lower Upper

85 100

87 31.1 25.7 38.5





#3

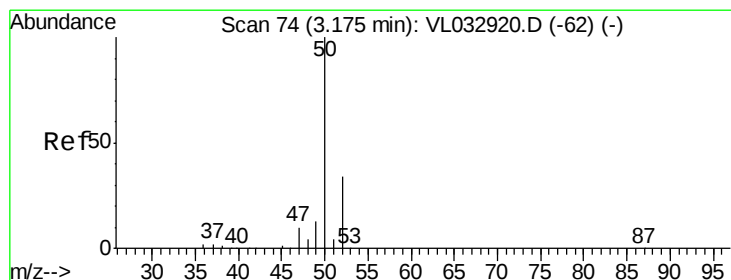
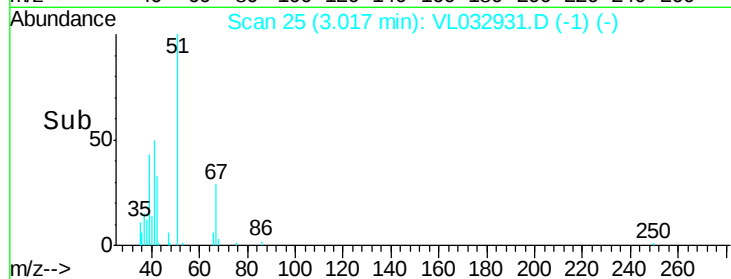
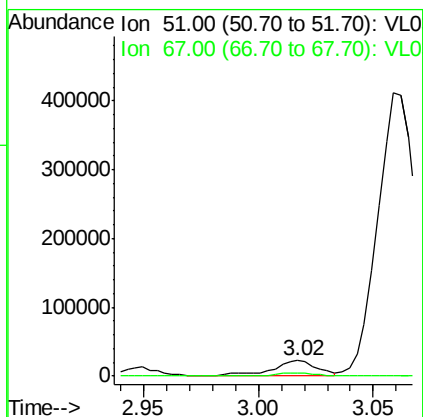
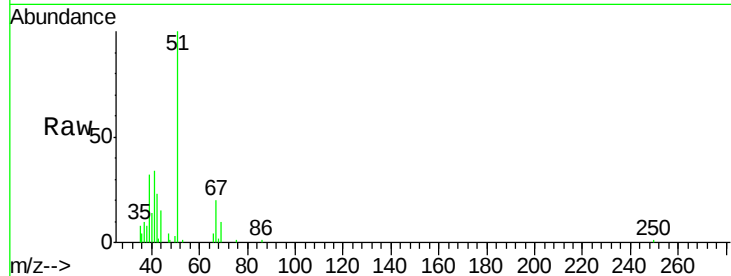
Chlorodifluoromethane
Concen: 0.401 ppbv
RT: 3.02 min Scan# 25
Delta R.T. 0.00 min
Lab File: VL032931.D
Acq: 7 Dec 2018 12:34

Instrument :
MSVOA_L
ClientSampleId :
MMSV-08

Tgt Ion: 51 Resp: 32231
Ion Ratio Lower Upper
51 100
67 0.7 16.8 25.2#

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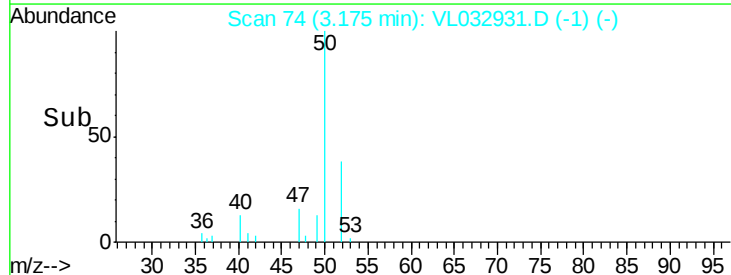
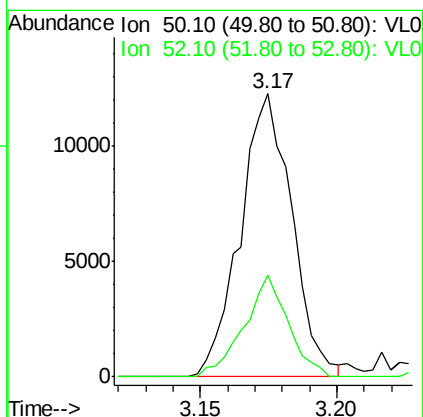
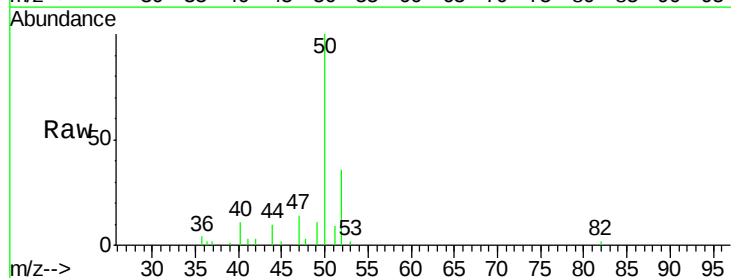
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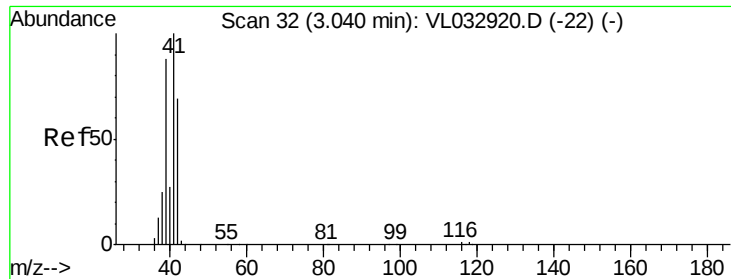


#4

Chloromethane
Concen: 0.344 ppbv
RT: 3.17 min Scan# 74
Delta R.T. 0.00 min
Lab File: VL032931.D
Acq: 7 Dec 2018 12:34

Tgt Ion: 50 Resp: 16082
Ion Ratio Lower Upper
50 100
52 35.7 27.3 40.9





#9

Propene

Concen: 12.691 ppbv

RT: 3.04 min Scan# 32

Delta R.T. 0.00 min

Lab File: VL032931.D

Acq: 7 Dec 2018 12:34

Instrument :

MSVOA_L

ClientSampleId :

MMSV-08

Tgt Ion: 41 Resp: 403304

Ion Ratio Lower Upper

41 100

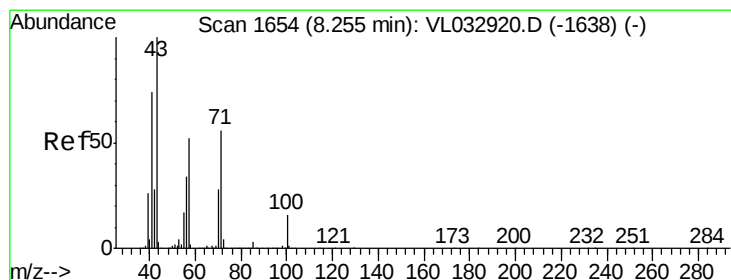
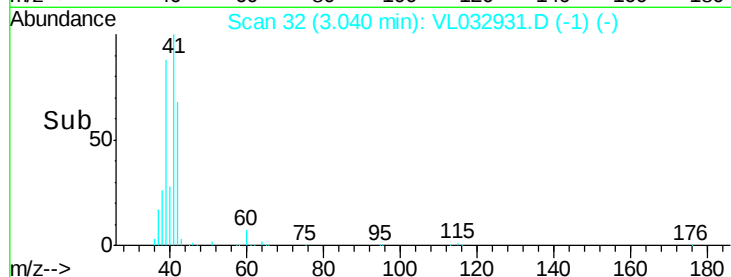
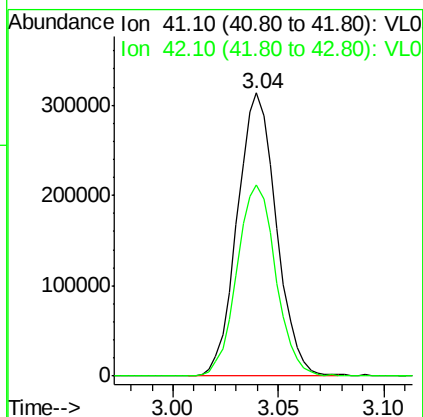
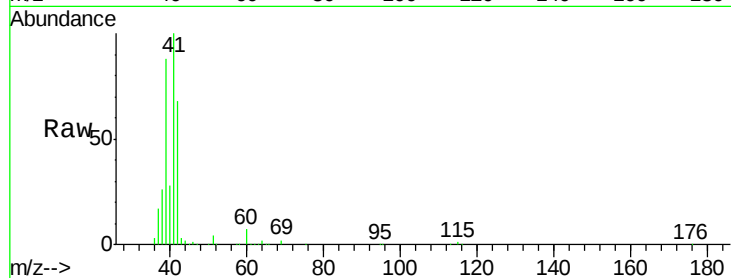
42 67.5 56.2 84.2

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#10

Heptane

Concen: 0.197 ppbv

RT: 8.25 min Scan# 1651

Delta R.T. -0.01 min

Lab File: VL032931.D

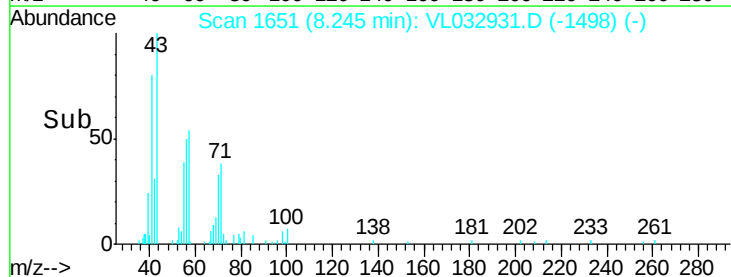
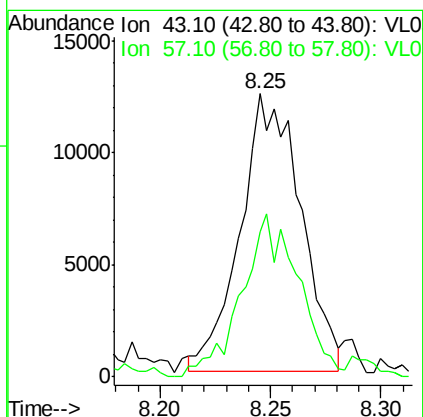
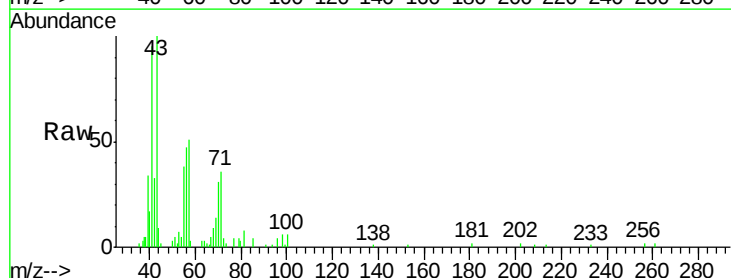
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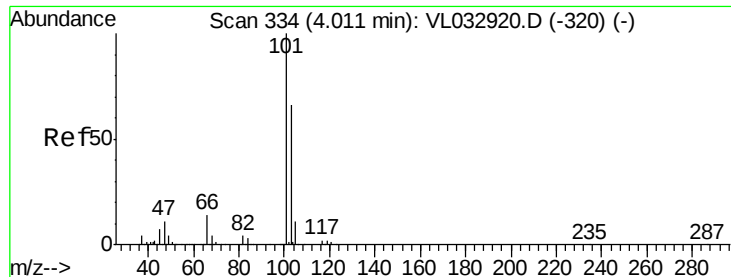
Tgt Ion: 43 Resp: 23487

Ion Ratio Lower Upper

43 100

57 58.5 41.8 62.6





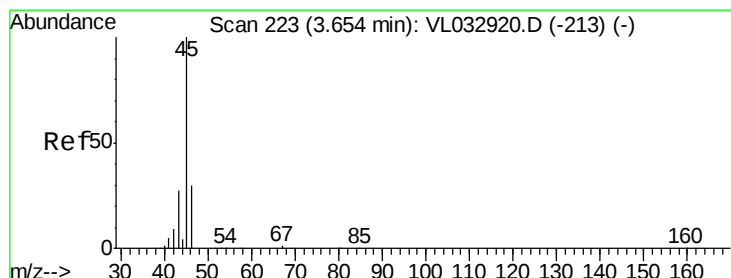
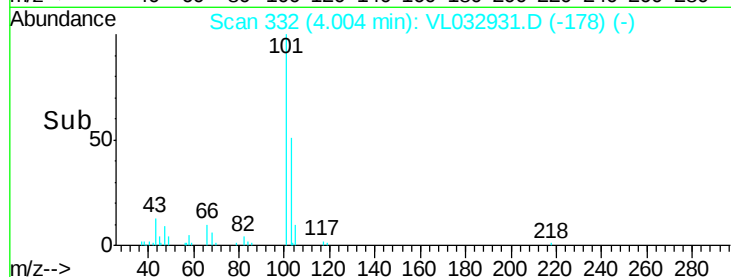
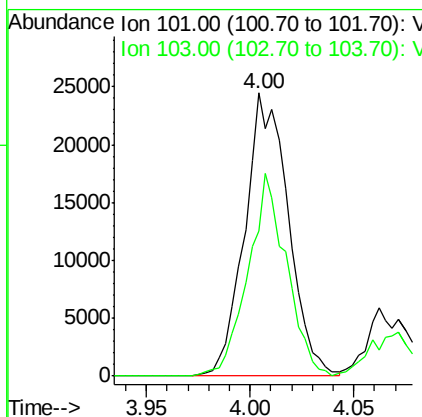
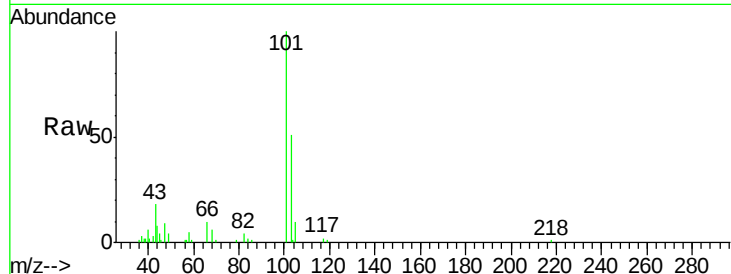
#11
 Trichlorofluoromethane
 Concen: 0.268 ppbv
 RT: 4.00 min Scan# 332
 Delta R.T. -0.01 min
 Lab File: VL032931.D
 Acq: 7 Dec 2018 12:34

Instrument :
 MSVOA_L
 ClientSampleId :
 MMSV-08

Tgt Ion: 101 Resp: 35795
 Ion Ratio Lower Upper
 101 100
 103 51.1 52.7 79.1#

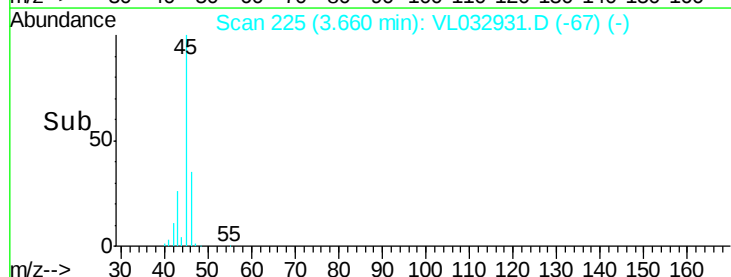
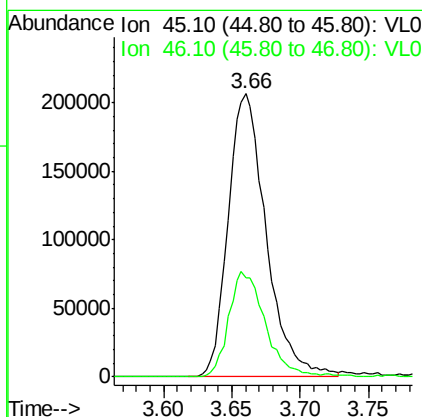
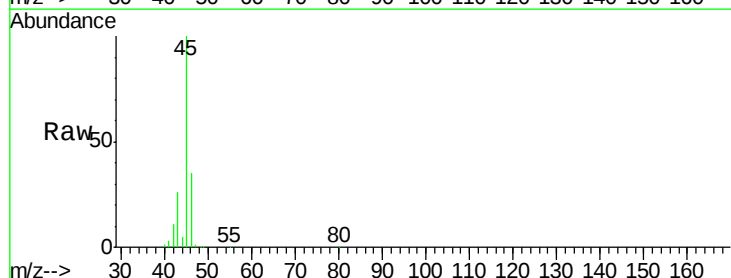
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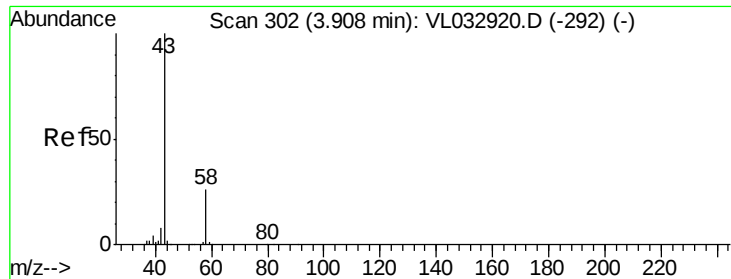
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#13
 Ethanol
 Concen: 36.522 ppbv
 RT: 3.66 min Scan# 225
 Delta R.T. 0.01 min
 Lab File: VL032931.D
 Acq: 7 Dec 2018 12:34

Tgt Ion: 45 Resp: 399600
 Ion Ratio Lower Upper
 45 100
 46 36.4 13.8 55.4





#15

Acetone

Concen: 31.566 ppbv

RT: 3.90 min Scan# 300

Delta R.T. -0.01 min

Lab File: VL032931.D

Acq: 7 Dec 2018 12:34

Instrument :

MSVOA_L

ClientSampleId :

MMSV-08

Tgt Ion: 43 Resp: 2875122

Ion Ratio Lower Upper

43 100

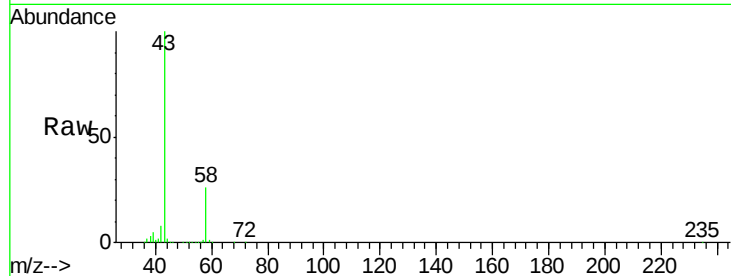
58 37.4 20.6 30.8#

Manual Integrations

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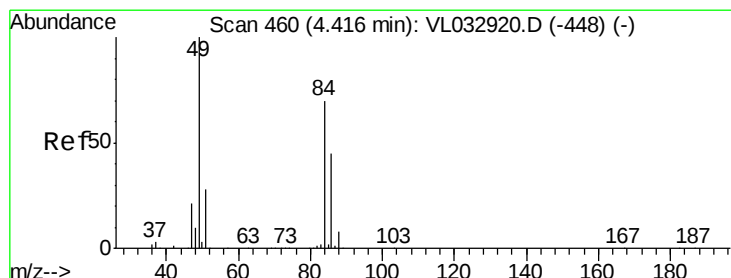
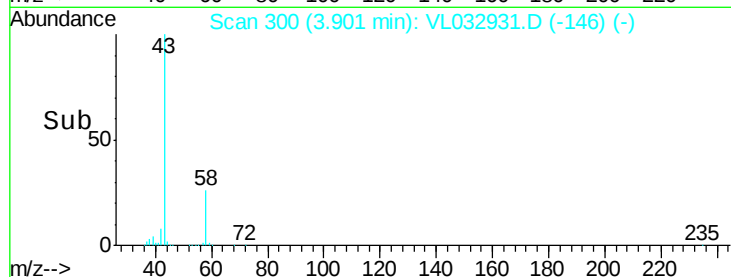
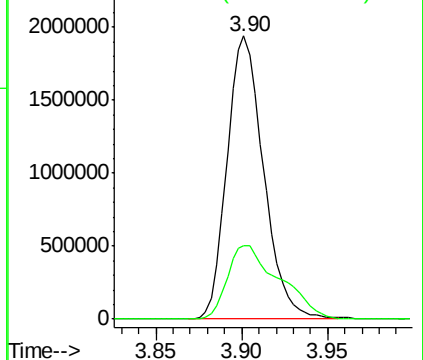
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Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 58.10 (57.80 to 58.80): VL0



#20

Methylene Chloride

Concen: 5.410 ppbv

RT: 4.42 min Scan# 460

Delta R.T. 0.00 min

Lab File: VL032931.D

Acq: 7 Dec 2018 12:34

Tgt Ion: 84 Resp: 240848

Ion Ratio Lower Upper

84 100

49 140.4 113.8 170.8

51 43.7 31.8 47.8

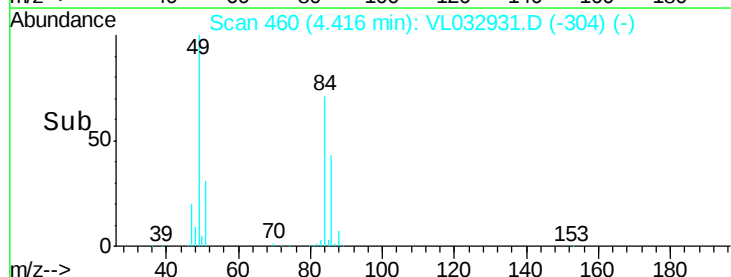
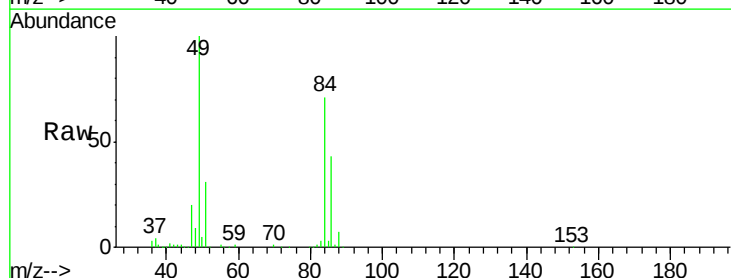
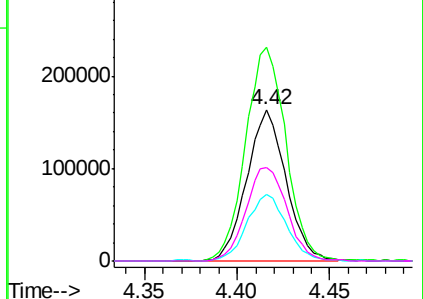
86 61.4 50.8 76.2

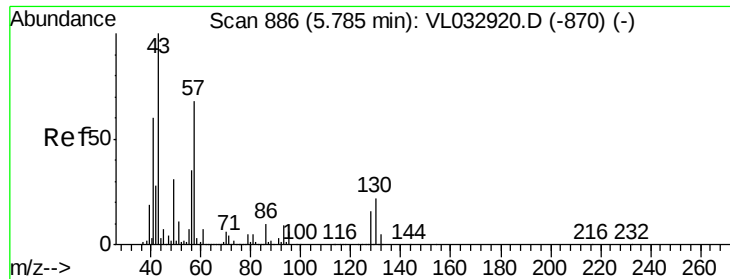
Abundance Ion 84.00 (83.70 to 84.70): VL0

Ion 49.10 (48.80 to 49.80): VL0

Ion 51.10 (50.80 to 51.80): VL0

Ion 86.00 (85.70 to 86.70): VL0





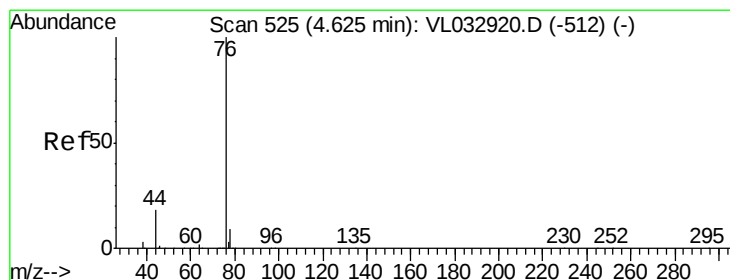
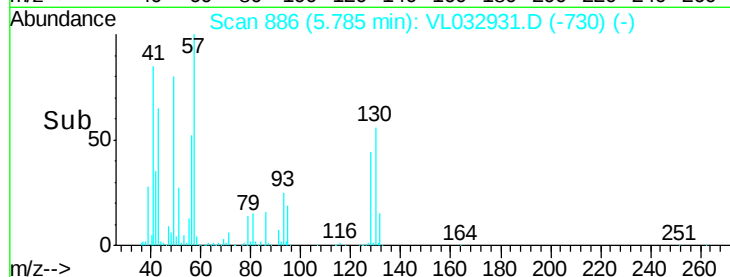
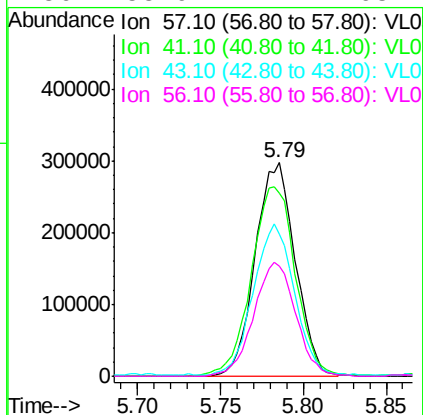
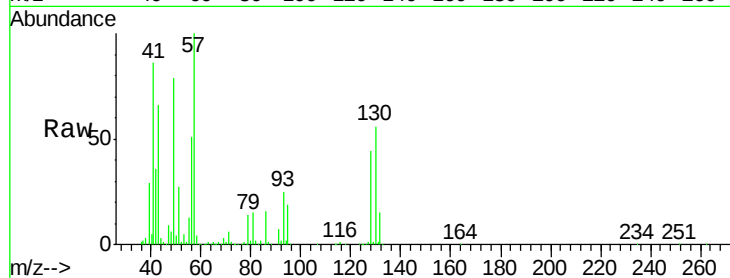
#26
Hexane
Concen: 5.037 ppbv
RT: 5.79 min Scan# 886
Delta R.T. 0.00 min
Lab File: VL032931.D
Acq: 7 Dec 2018 12:34

Instrument :
MSVOA_L
ClientSampleId :
MMSV-08

Tgt Ion	Ratio	Lower	Upper
57	100		
41	97.8	72.2	108.2
43	72.7	171.9	257.9#
56	55.9	42.2	63.2

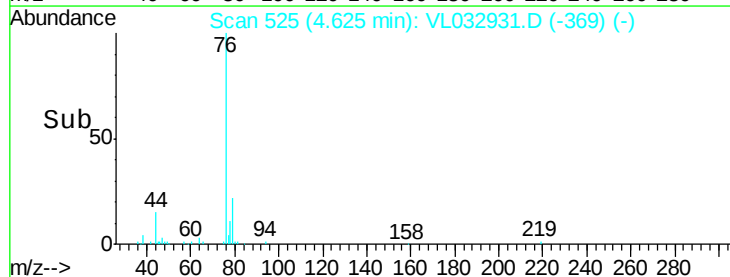
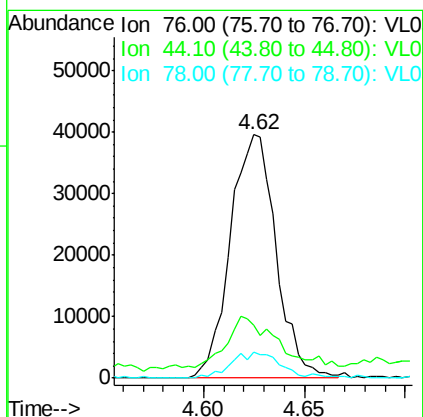
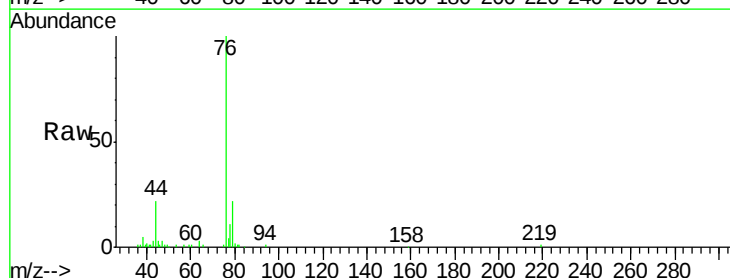
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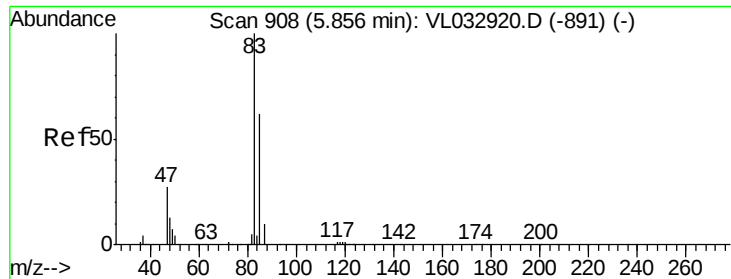
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#27
Carbon Disulfide
Concen: 0.506 ppbv
RT: 4.62 min Scan# 525
Delta R.T. 0.00 min
Lab File: VL032931.D
Acq: 7 Dec 2018 12:34

Tgt Ion	Ratio	Lower	Upper
76	100		
44	28.9	14.7	22.1#
78	12.1	7.4	11.2#





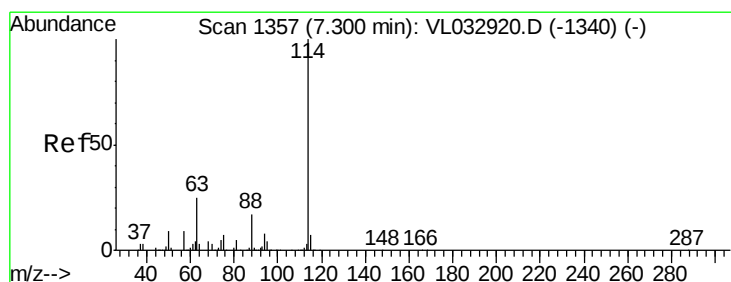
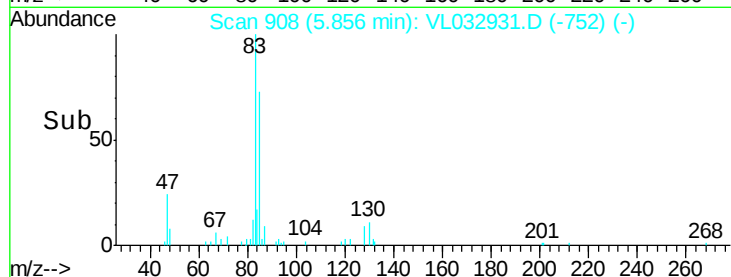
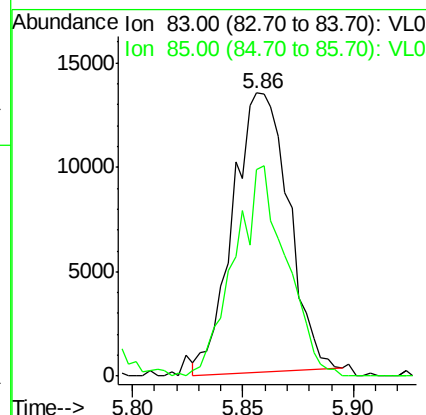
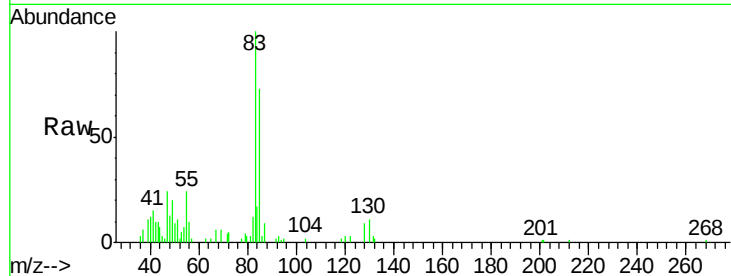
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Chloroform
Concen: 0.133 ppbv
RT: 5.86 min Scan# 908
Delta R.T. 0.00 min
Lab File: VL032931.D
Acq: 7 Dec 2018 12:34

Instrument :
MSVOA_L
ClientSampleId :
MMSV-08

Tgt Ion: 83 Resp: 23567
Ion Ratio Lower Upper
83 100
85 75.0 49.8 74.8#

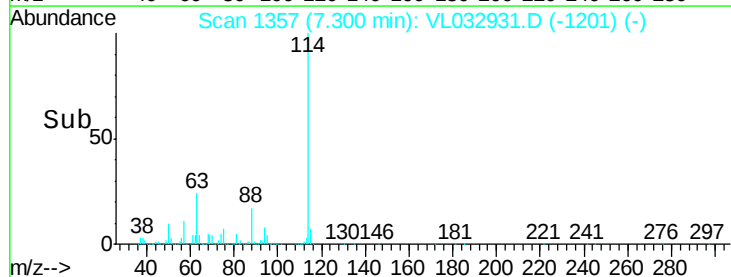
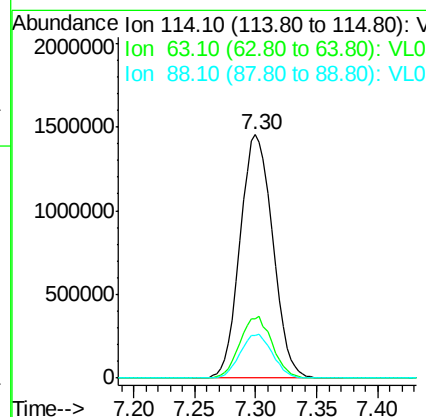
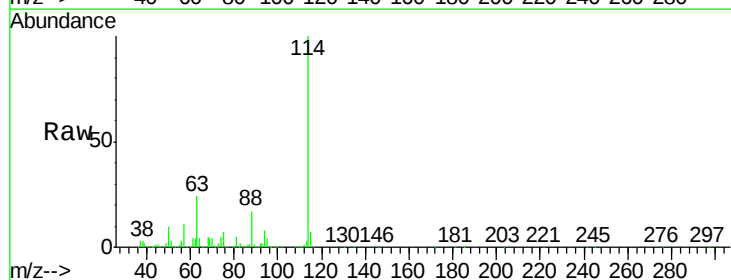
Manual Integrations
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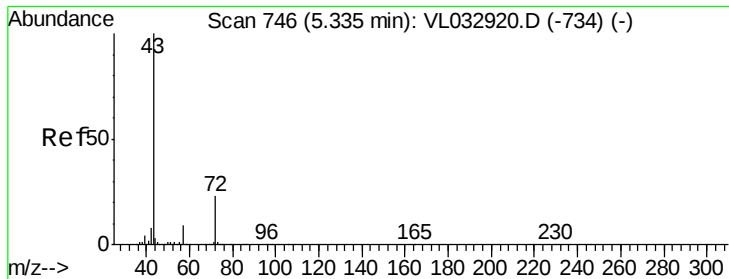
MMDadoda
12/11/2018 10:08:40 AM



#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 7.30 min Scan# 1357
Delta R.T. 0.00 min
Lab File: VL032931.D
Acq: 7 Dec 2018 12:34

Tgt Ion: 114 Resp: 2691054
Ion Ratio Lower Upper
114 100
63 25.1 20.1 30.1
88 17.8 14.2 21.4





#34

2-Butanone

Concen: 86.380 ppbv

RT: 5.33 min Scan# 744

Delta R.T. -0.01 min

Lab File: VL032931.D

Acq: 7 Dec 2018 12:34

Instrument :

MSVOA_L

ClientSampleId :

MMSV-08

Tgt Ion: 43 Resp:10125214

Ion Ratio Lower Upper

43 100

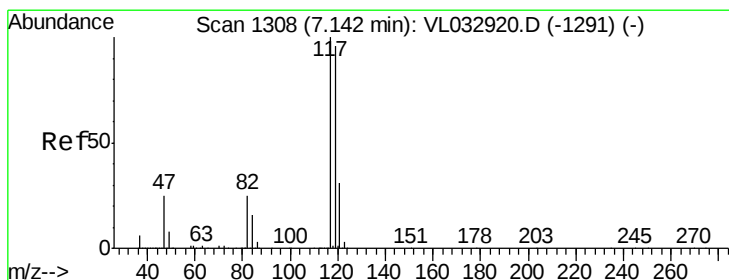
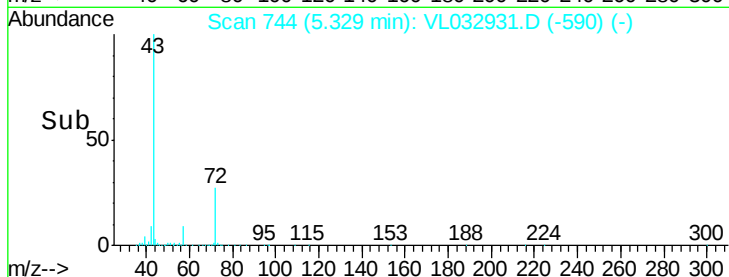
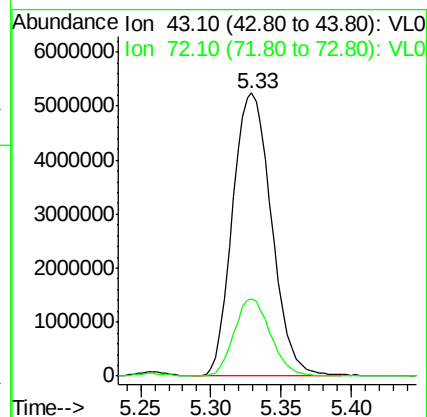
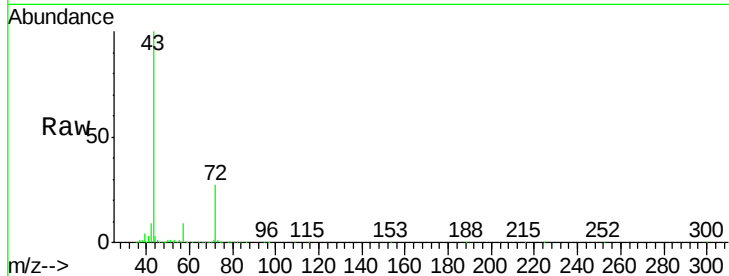
72 25.7 18.8 28.2

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#35

Carbon Tetrachloride

Concen: 0.078 ppbv

RT: 7.14 min Scan# 1306

Delta R.T. -0.01 min

Lab File: VL032931.D

Acq: 7 Dec 2018 12:34

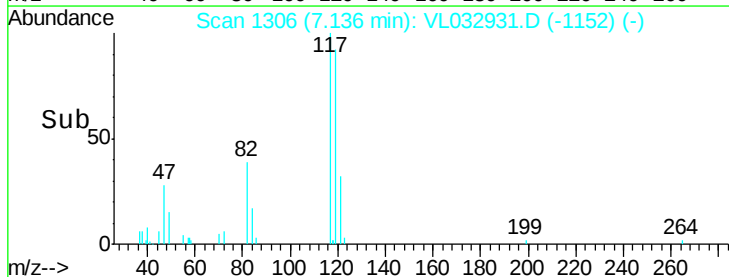
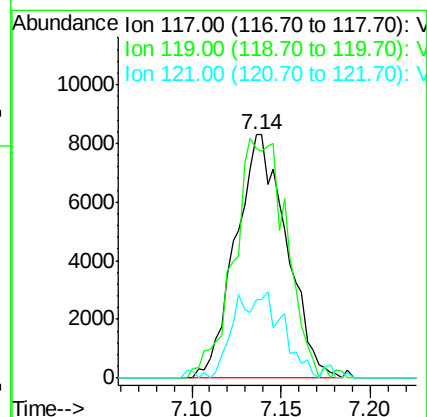
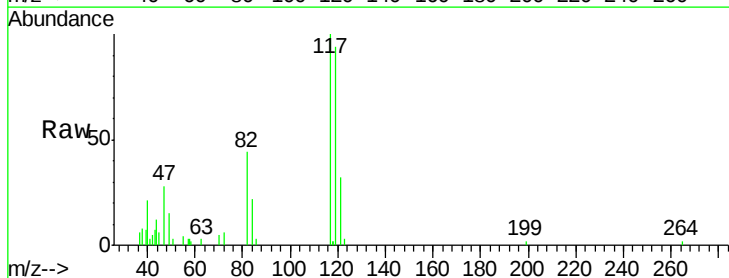
Tgt Ion:117 Resp: 16462

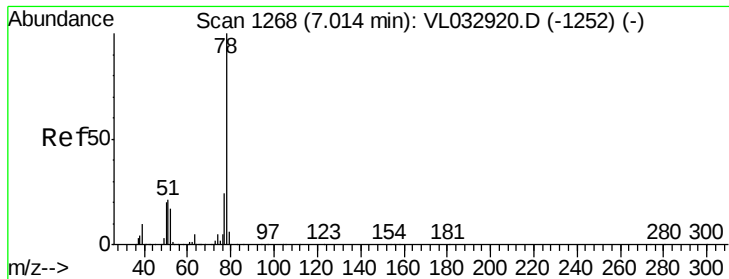
Ion Ratio Lower Upper

117 100

119 89.6 76.5 114.7

121 31.5 24.5 36.7





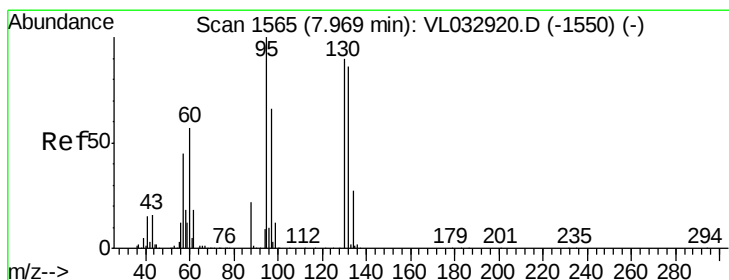
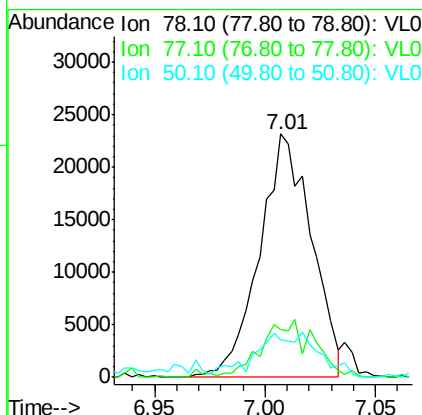
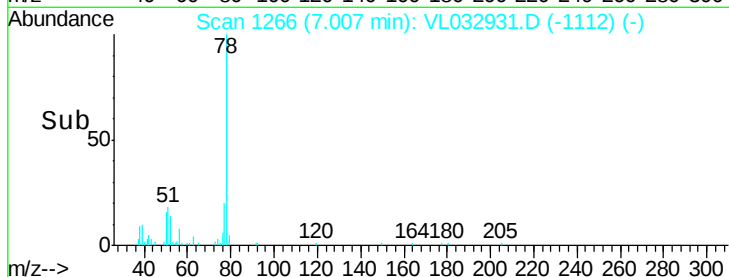
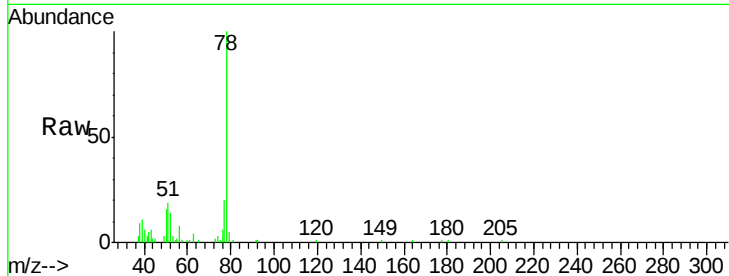
#36
Benzene
Concen: 0.191 ppbv
RT: 7.01 min Scan# 1266
Delta R.T. -0.01 min
Lab File: VL032931.D
Acq: 7 Dec 2018 12:34

Instrument :
MSVOA_L
ClientSampleId :
MMSV-08

Tgt Ion	Ratio	Lower	Upper
78	100		
77	19.8	18.9	28.3
50	13.8	16.1	24.1#

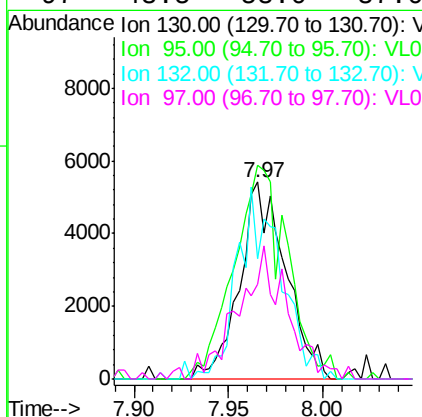
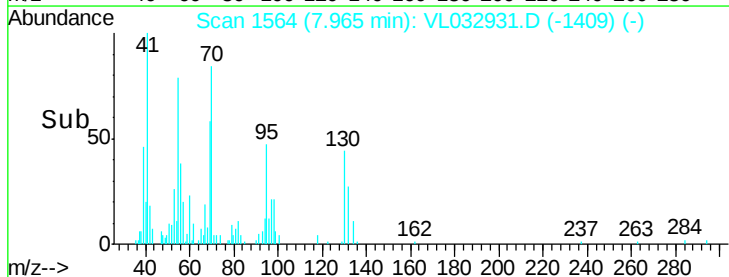
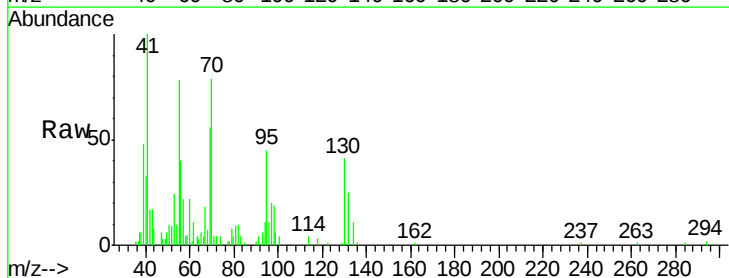
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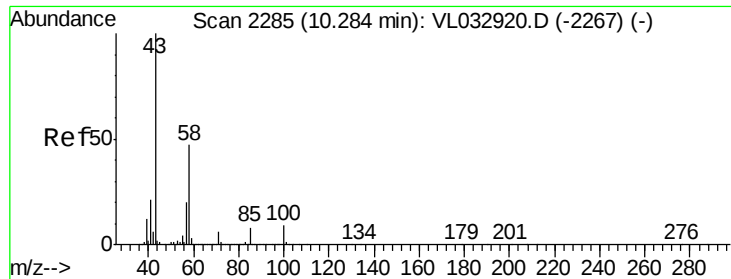
MMDadoda
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#38
Trichloroethene
Concen: 0.112 ppbv m
RT: 7.97 min Scan# 1564
Delta R.T. -0.00 min
Lab File: VL032931.D
Acq: 7 Dec 2018 12:34

Tgt Ion	Ratio	Lower	Upper
130	100		
95	108.7	88.6	132.8
132	61.5	76.1	114.1#
97	48.5	58.0	87.0#





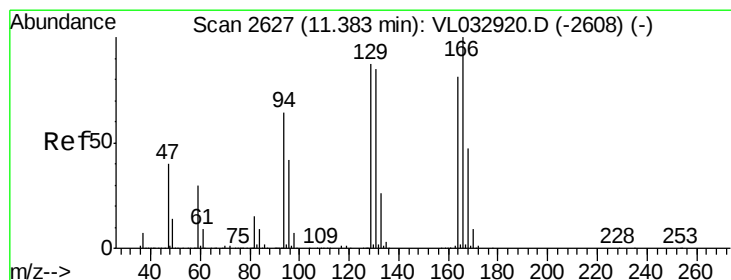
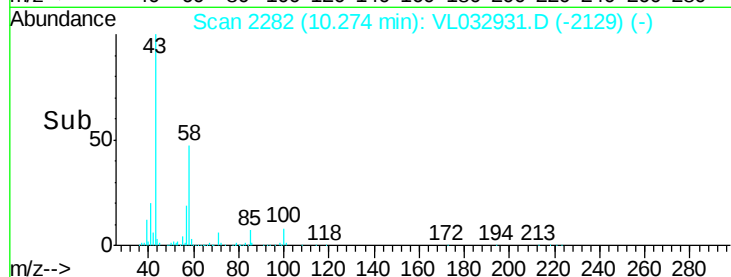
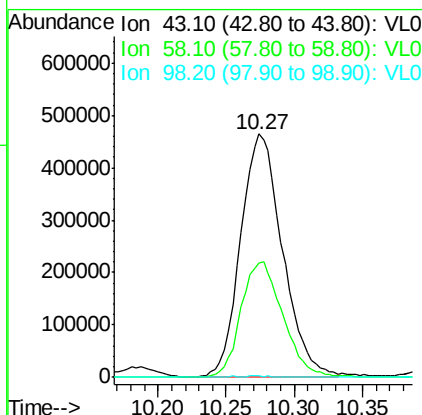
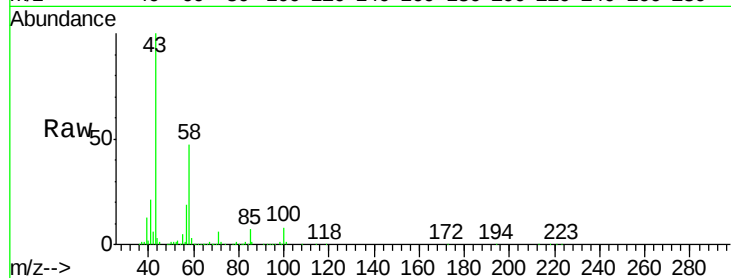
#51
2-Hexanone
Concen: 7.773 ppbv
RT: 10.27 min Scan# 2282
Delta R.T. -0.01 min
Lab File: VL032931.D
Acq: 7 Dec 2018 12:34

Instrument :
MSVOA_L
ClientSampleId :
MMSV-08

Tgt Ion	Ratio	Lower	Upper
43	100		
58	48.0	38.1	57.1
98	0.8	0.4	0.6

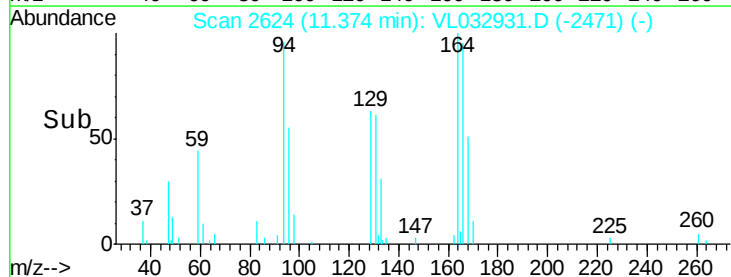
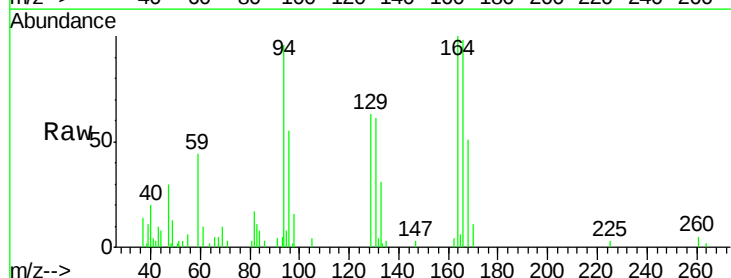
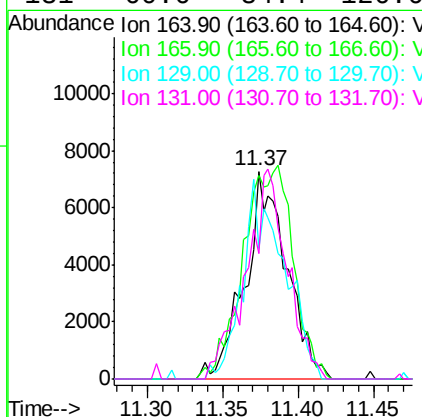
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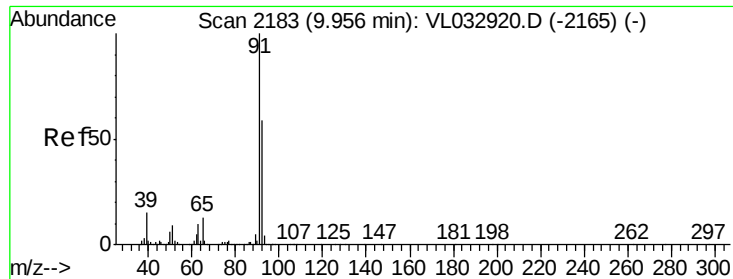
MMDadoda
12/11/2018 10:08:40 AM



#52
Tetrachloroethene
Concen: 0.193 ppbv m
RT: 11.37 min Scan# 2624
Delta R.T. -0.01 min
Lab File: VL032931.D
Acq: 7 Dec 2018 12:34

Tgt Ion	Ratio	Lower	Upper
164	100		
166	97.9	98.8	148.2#
129	62.7	85.5	128.3#
131	60.6	84.4	126.6#





#53

Toluene

Concen: 0.714 ppbv

RT: 9.95 min Scan# 2181

Delta R.T. -0.01 min

Lab File: VL032931.D

Acq: 7 Dec 2018 12:34

Instrument :

MSVOA_L

ClientSampleId :

MMSV-08

Tgt Ion: 91 Resp: 149848

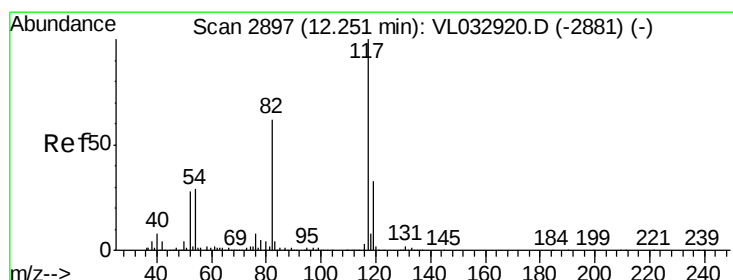
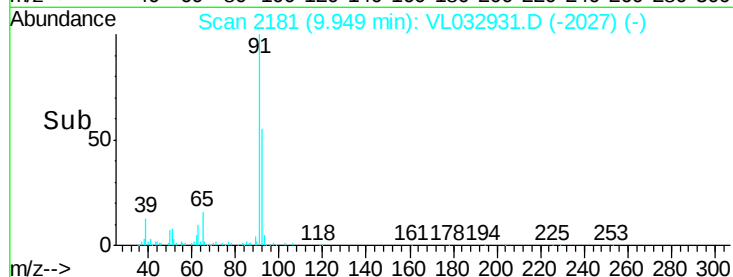
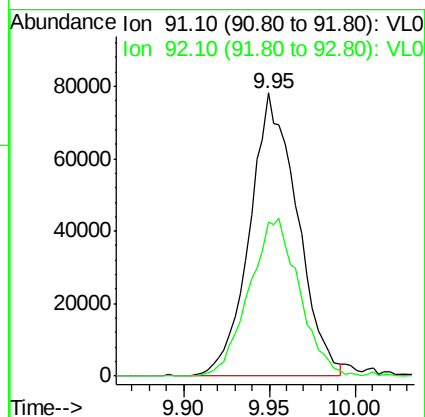
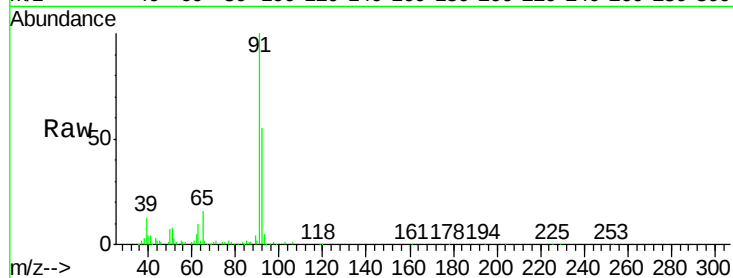
Ion Ratio Lower Upper

91 100

92 58.7 47.4 71.0

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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: VL032931.D

Acq: 7 Dec 2018 12:34

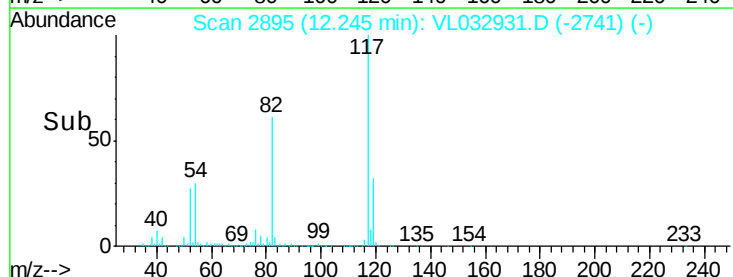
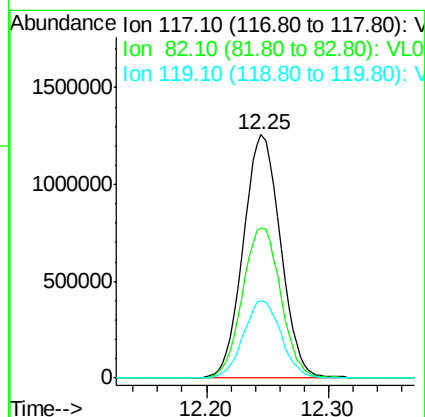
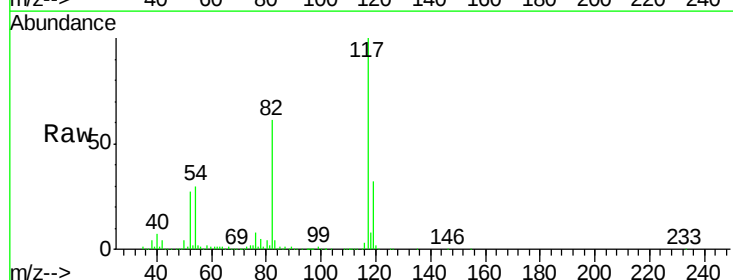
Tgt Ion: 117 Resp: 2652258

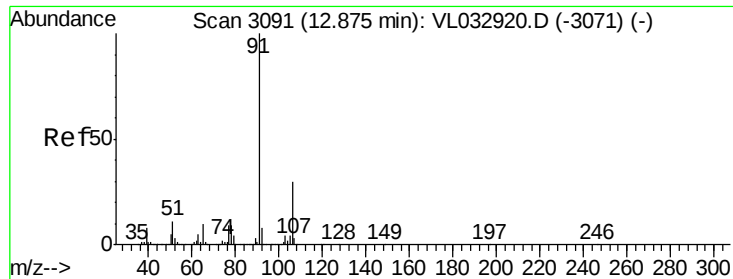
Ion Ratio Lower Upper

117 100

82 63.9 47.8 71.8

119 32.3 43.1 64.7#





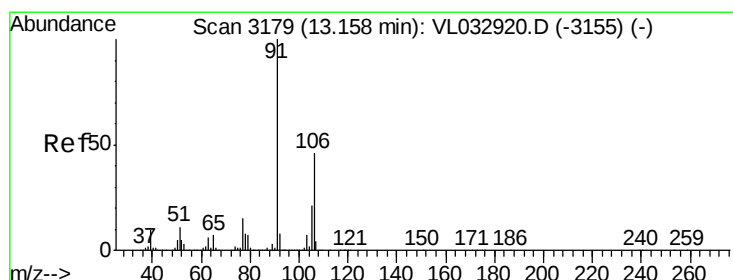
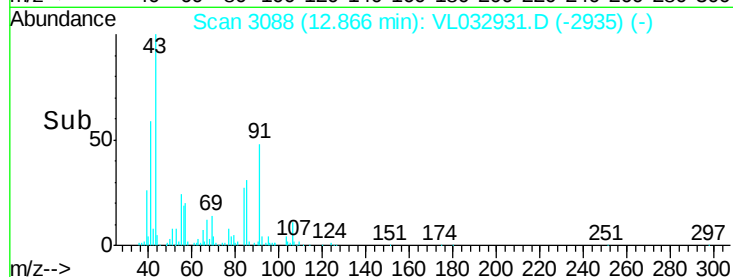
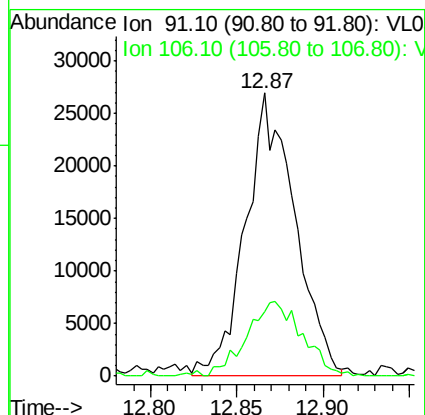
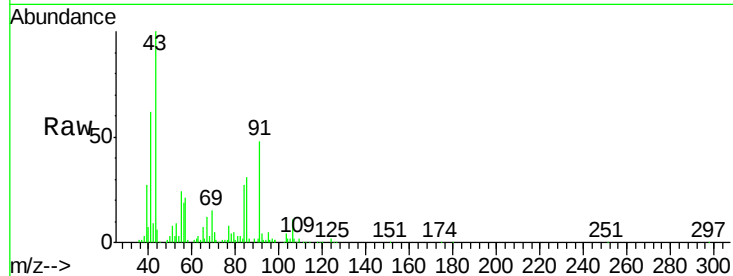
#58
Ethyl Benzene
Concen: 0.189 ppbv m
RT: 12.87 min Scan# 3088
Delta R.T. -0.01 min
Lab File: VL032931.D
Acq: 7 Dec 2018 12:34

Instrument :
MSVOA_L
ClientSampleId :
MMSV-08

Tgt Ion: 91 Resp: 53402
Ion Ratio Lower Upper
91 100
106 22.9 23.9 35.9#

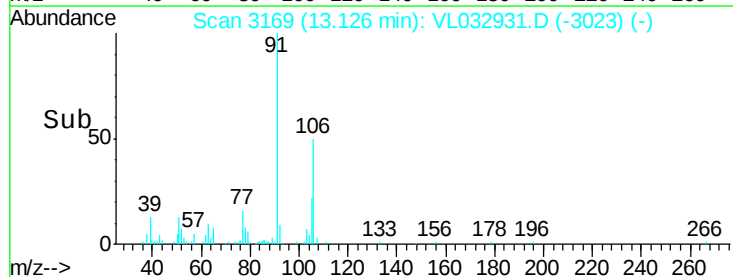
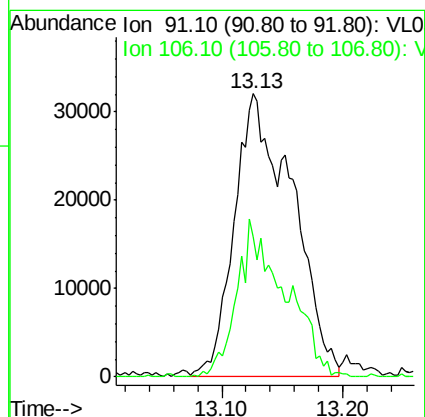
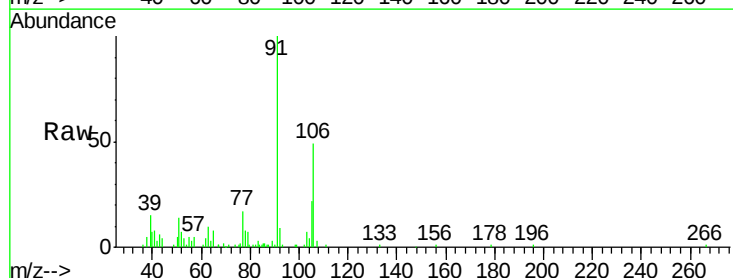
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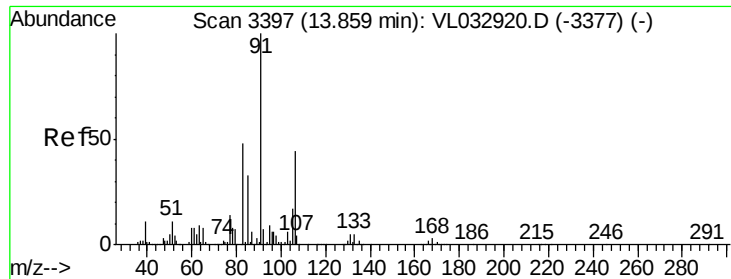
MMDadoda
12/11/2018 10:08:40 AM



#59
m/p-Xylene
Concen: 0.416 ppbv m
RT: 13.13 min Scan# 3169
Delta R.T. -0.03 min
Lab File: VL032931.D
Acq: 7 Dec 2018 12:34

Tgt Ion: 91 Resp: 106798
Ion Ratio Lower Upper
91 100
106 0.0 0.0 0.0





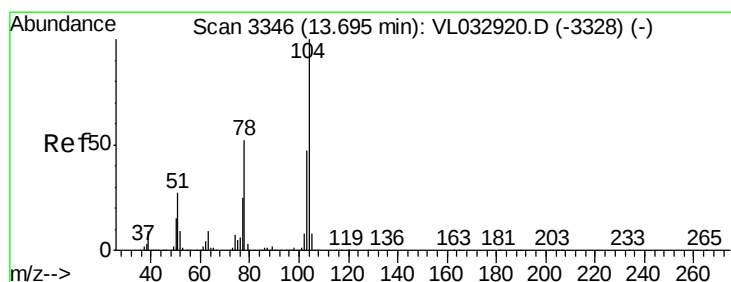
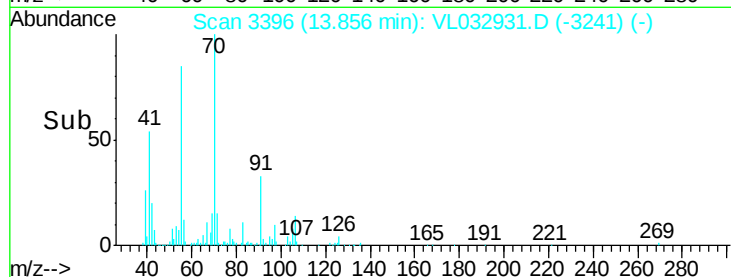
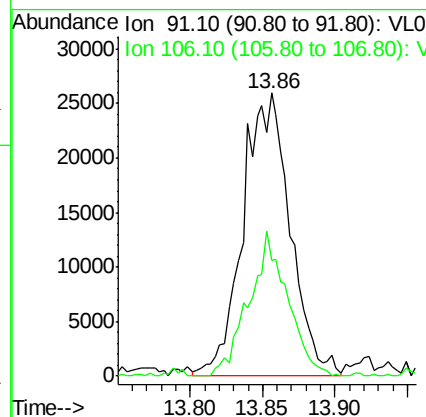
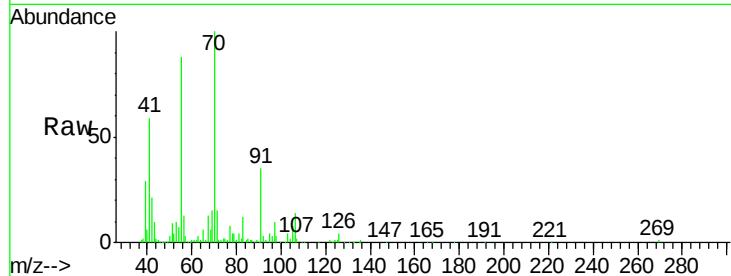
#60
o-Xylene
Concen: 0.228 ppbv m
RT: 13.86 min Scan# 3396
Delta R.T. -0.00 min
Lab File: VL032931.D
Acq: 7 Dec 2018 12:34

Instrument :
MSVOA_L
ClientSampleId :
MMSV-08

Tgt Ion: 91 Resp: 59096
Ion Ratio Lower Upper
91 100
106 0.0 21.9 65.8#

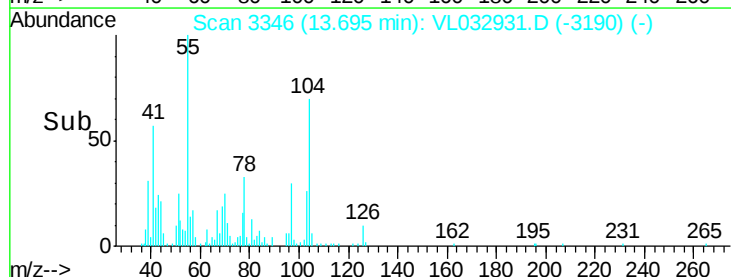
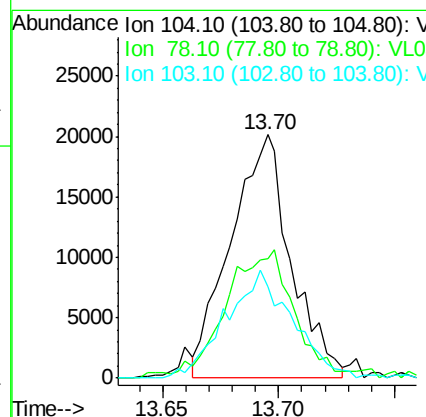
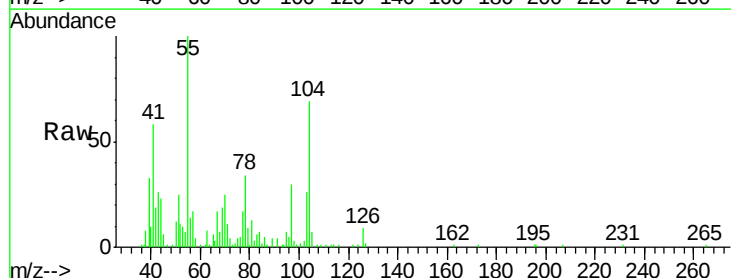
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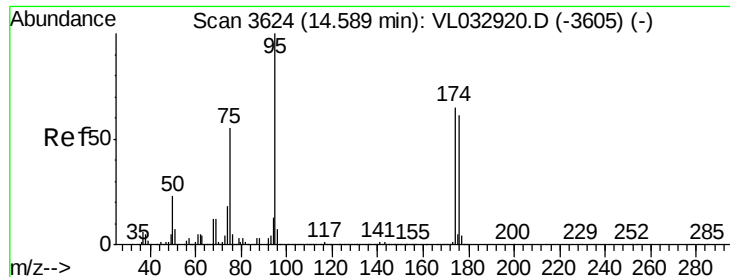
MMDadoda
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#61
Styrene
Concen: 0.212 ppbv
RT: 13.70 min Scan# 3346
Delta R.T. 0.00 min
Lab File: VL032931.D
Acq: 7 Dec 2018 12:34

Tgt Ion: 104 Resp: 36521
Ion Ratio Lower Upper
104 100
78 63.4 42.0 63.0#
103 48.9 38.3 57.5





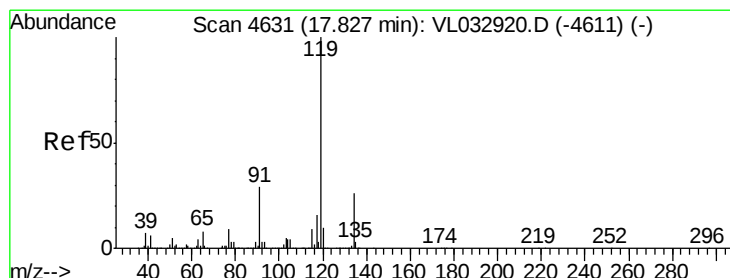
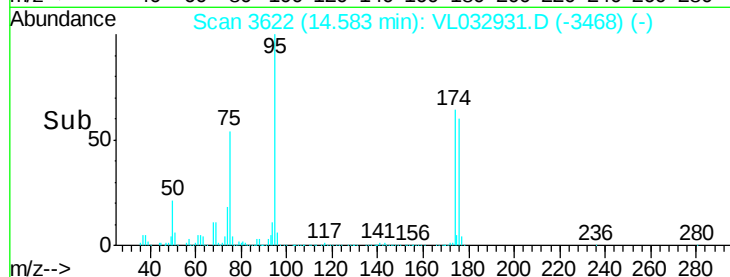
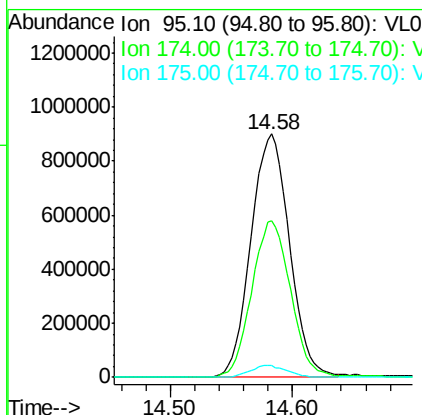
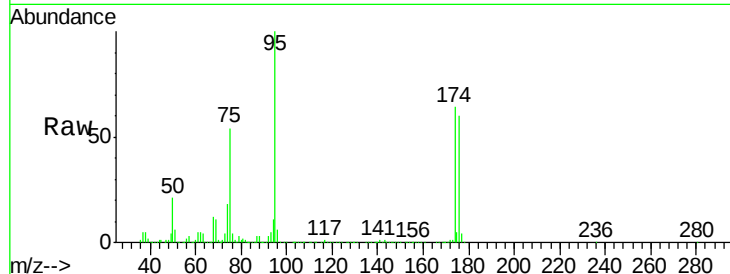
#68
 1-Bromo-4-Fluorobenzene
 Concen: 10.069 ppbv
 RT: 14.58 min Scan# 3622
 Delta R.T. -0.01 min
 Lab File: VL032931.D
 Acq: 7 Dec 2018 12:34

Instrument :
 MSVOA_L
 ClientSampleId :
 MMSV-08

Tgt Ion: 95 Resp: 1972956
 Ion Ratio Lower Upper
 95 100
 174 65.7 51.4 77.0
 175 4.8 3.8 5.6

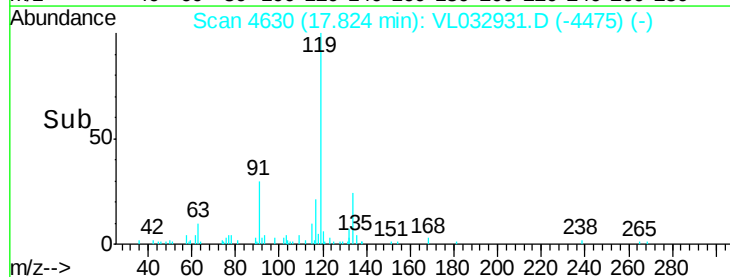
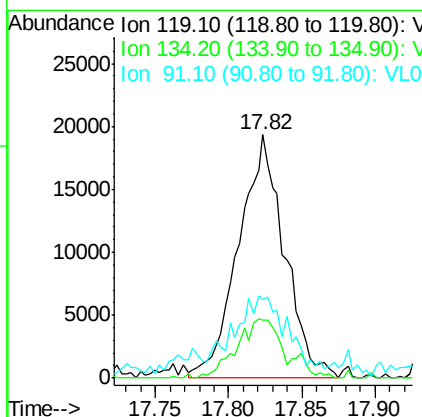
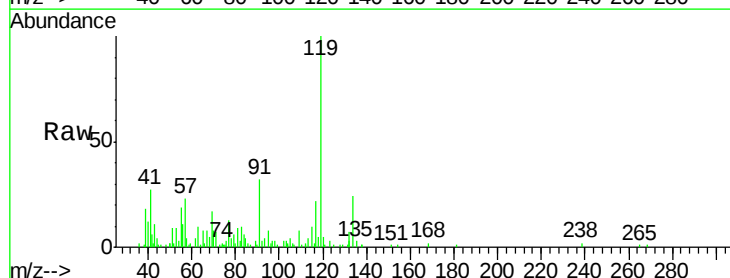
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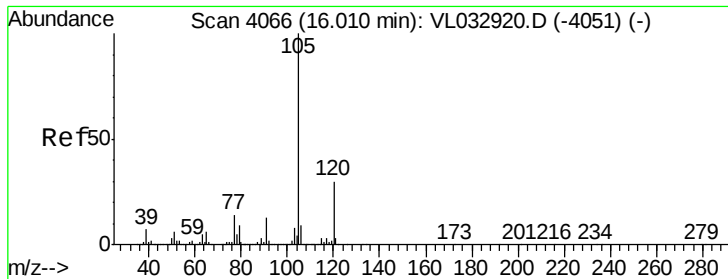
MMDadoda
 12/11/2018 10:08:40 AM



#69
 p-Isopropyltoluene
 Concen: 0.105 ppbv m
 RT: 17.82 min Scan# 4630
 Delta R.T. -0.00 min
 Lab File: VL032931.D
 Acq: 7 Dec 2018 12:34

Tgt Ion: 119 Resp: 42108
 Ion Ratio Lower Upper
 119 100
 134 25.9 20.2 30.2
 91 51.8 22.9 34.3#





#72

4-Ethyltoluene

Concen: 0.123 ppbv m

RT: 16.00 min Scan# 4063

Delta R.T. -0.01 min

Lab File: VL032931.D

Acq: 7 Dec 2018 12:34

Instrument :

MSVOA_L

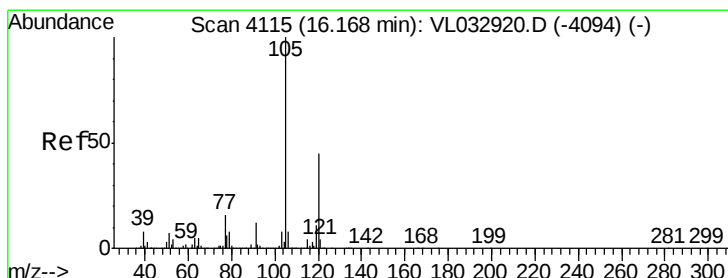
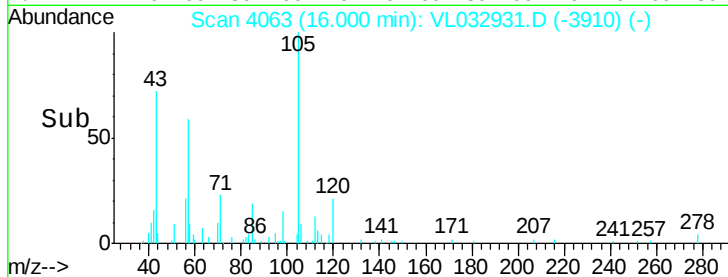
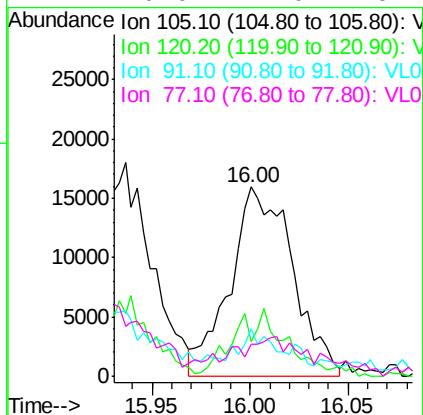
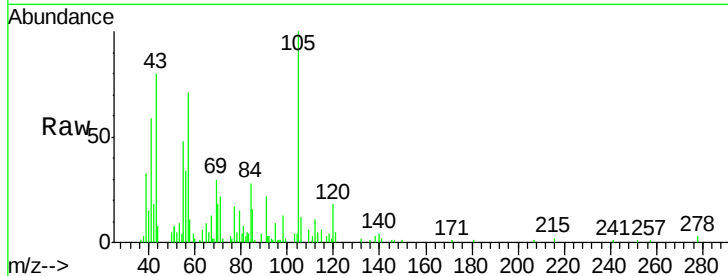
ClientSampleId :

MMSV-08

Tgt Ion:	105	Resp:	35449
Ion Ratio	Lower	Upper	
105	100		
120	0.0	23.0	34.4#
91	15.2	10.4	15.6
77	0.0	11.0	16.4#

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#73

1,3,5-Trimethylbenzene

Concen: 0.098 ppbv

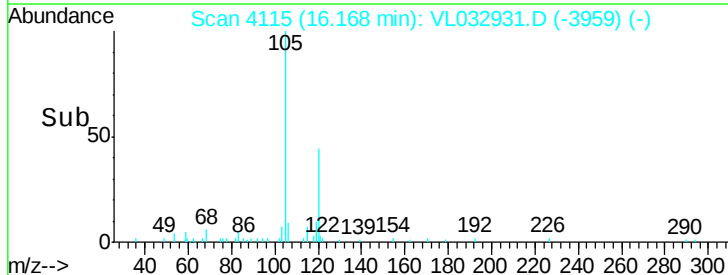
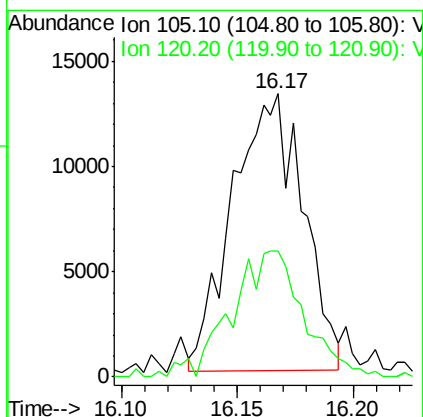
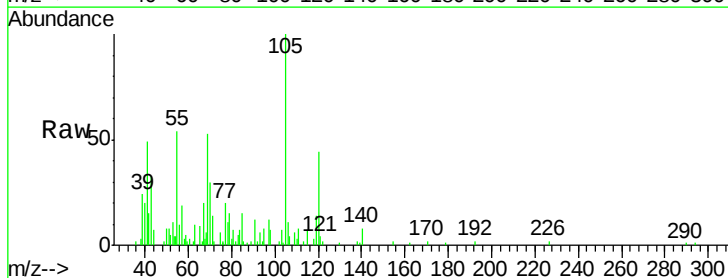
RT: 16.17 min Scan# 4115

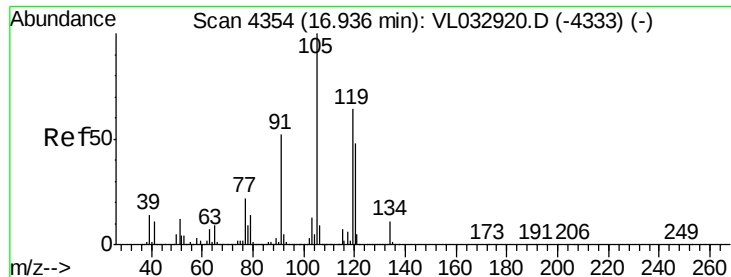
Delta R.T. 0.00 min

Lab File: VL032931.D

Acq: 7 Dec 2018 12:34

Tgt Ion:	105	Resp:	27775
Ion Ratio	Lower	Upper	
105	100		
120	44.5	36.0	54.0





#74

1,2,4-Trimethylbenzene

Concen: 0.221 ppbv

RT: 16.93 min Scan# 4352

Delta R.T. -0.01 min

Lab File: VL032931.D

Acq: 7 Dec 2018 12:34

Instrument :

MSVOA_L

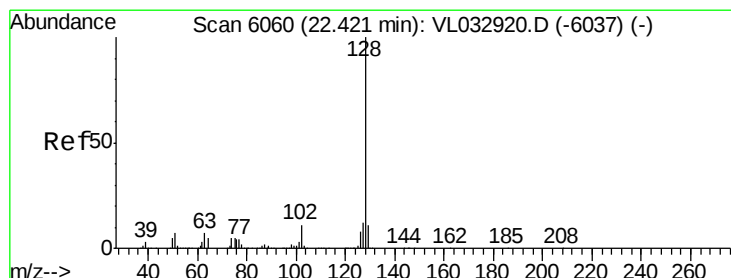
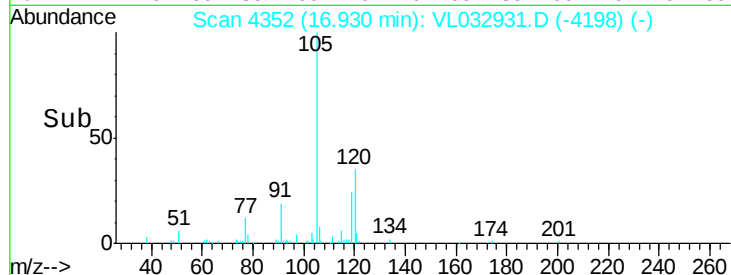
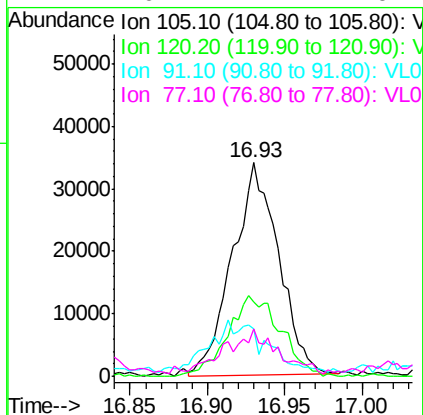
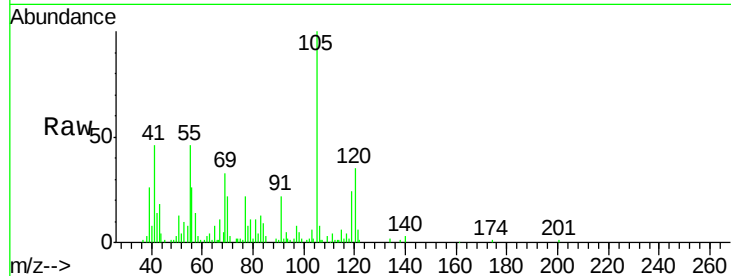
ClientSampleId :

MMSV-08

Tgt Ion	Ratio	Resp Lower	Upper
105	100		
120	35.1	38.6	58.0#
91	20.1	41.7	62.5#
77	20.2	17.4	26.2

Manual Integrations
APPROVED

MMDadoda
12/11/2018 10:08:40 AM



#79

Naphthalene

Concen: 0.125 ppbv m

RT: 22.42 min Scan# 6059

Delta R.T. -0.00 min

Lab File: VL032931.D

Acq: 7 Dec 2018 12:34

Tgt Ion	Ratio	Resp Lower	Upper
128	100		
127	11.3	9.9	14.9
129	12.7	8.6	13.0

