

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL082018\
 Data File : VL032418.D
 Acq On : 21 Aug 2018 10:55
 Operator : SY/AP
 Sample : J4576-01
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 IA1

Manual Integrations
 APPROVED

MMDadoda
 8/22/2018 10:50:41 AM

Quant Time: Aug 22 05:18:25 2018
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL081518AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LWed Aug 1
 QLast Update : Wed Aug 15 14:58:02 2018
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.81	49	1763262	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.34	114	3430709	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.30	117	3347986	10.00	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.64	95	2570401	10.06	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	100.60%

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
3) Chlorodifluoromethane	3.04	51	73404m	0.45	ppbv	
4) Chloromethane	3.21	50	58982	0.61	ppbv #	87
9) Propene	3.08	41	160404m	2.29	ppbv	
11) Trichlorofluoromethane	4.05	101	51844	0.26	ppbv	94
13) Ethanol	3.69	45	3829418	213.29	ppbv	98
15) Acetone	3.94	43	3603524	21.51	ppbv	99
17) tert-Butyl alcohol	4.42	59	61279	2.18	ppbv #	74
19) Isopropyl Alcohol	4.08	45	393837	3.49	ppbv #	1
20) Methylene Chloride	4.46	84	119554	1.89	ppbv	94
25) Ethyl Acetate	5.82	43	342971	0.96	ppbv #	95
27) Carbon Disulfide	4.66	76	16116m	0.11	ppbv	
29) Chloroform	5.90	83	116514	0.50	ppbv	97
34) 2-Butanone	5.38	43	338596	1.45	ppbv	96
35) Carbon Tetrachloride	7.19	117	18683m	0.09	ppbv	
36) Benzene	7.06	78	85159	0.29	ppbv #	93
41) Tetrahydrofuran	6.20	42	198114	1.58	ppbv	99
43) Methyl Methacrylate	8.19	69	11412	0.10	ppbv #	67
44) 2,2,4-Trimethylpentane	8.04	57	85766m	0.16	ppbv	
50) 4-Methyl-2-Pentanone	8.94	43	41157m	0.12	ppbv	
52) Tetrachloroethene	11.43	164	26760m	0.31	ppbv	
53) Toluene	10.00	91	329271	1.03	ppbv	99
59) m/p-Xylene	13.18	91	134989	0.39	ppbv	100
60) o-Xylene	13.90	91	62958	0.19	ppbv	99
61) Styrene	13.75	104	158879	0.68	ppbv	98
73) 1,3,5-Trimethylbenzene	16.22	105	119135	0.33	ppbv	98
74) 1,2,4-Trimethylbenzene	16.98	105	160771	0.42	ppbv #	69
79) Naphthalene	22.49	128	60285m	0.49	ppbv	

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

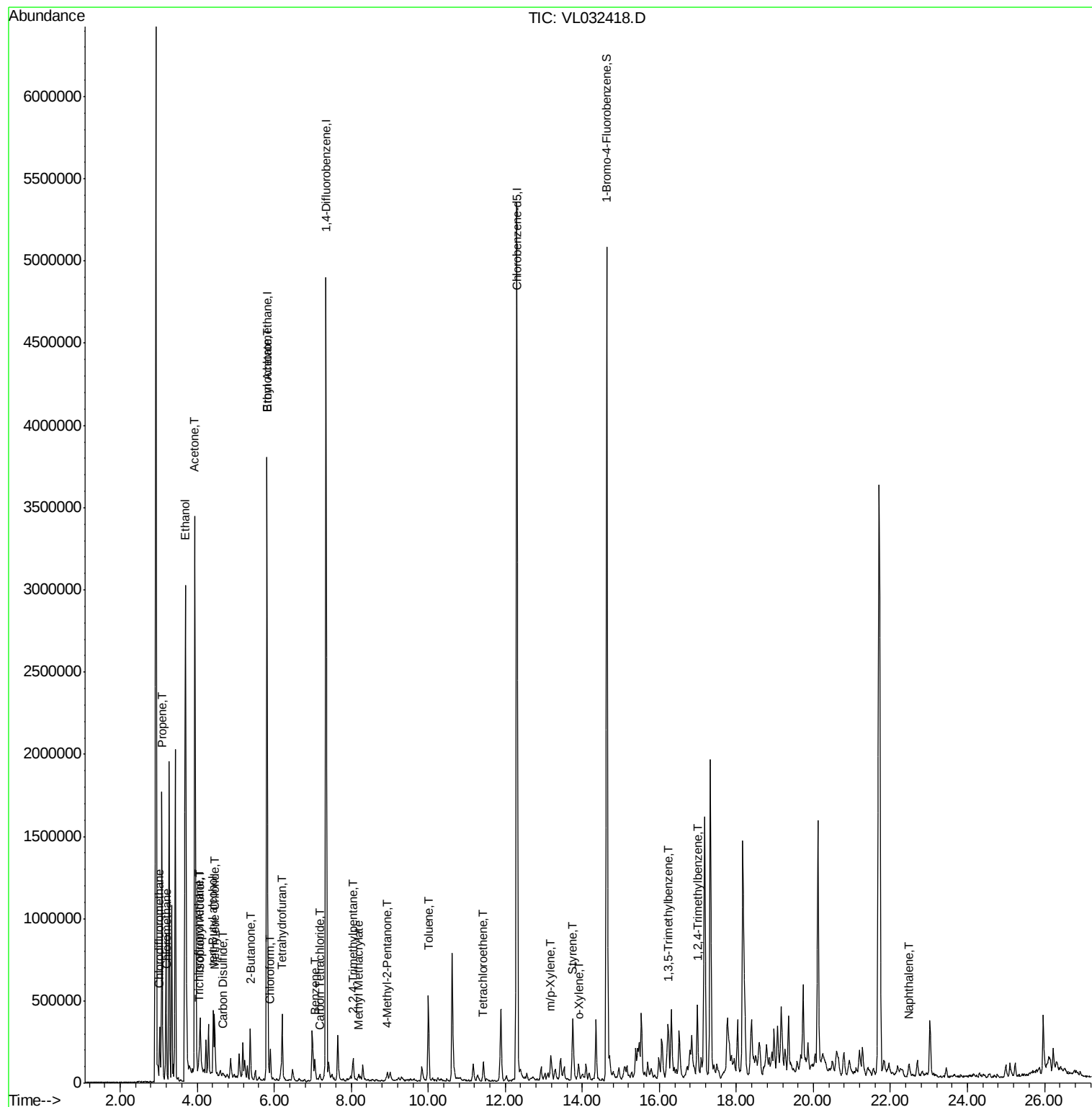
Data Path : Z:\V0ASRV\HPCHEM1\MSVOA L\DATA\VL082018\
Data File : VL032418.D
Acq On : 21 Aug 2018 10:55
Operator : SY/AP
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Misc : 400ml/MSVOA L
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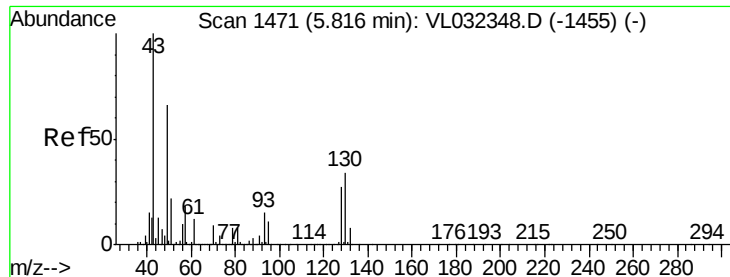
Instrument :
MSVOA_L
ClientSampleId :
IA1

Manual Integrations
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8/22/2018 10:50:41 AM

Quant Time: Aug 22 05:18:25 2018
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA L\METHODS\VL081518AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Wed Aug
QLast Update : Wed Aug 15 14:58:02 2018
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.00 ppbv

RT: 5.81 min Scan# 1470

Delta R.T. -0.00 min

Lab File: VL032418.D

Acq: 21 Aug 2018 10:55

Instrument :

MSVOA_L

ClientSampled :

IA1

Tot Ion: 49 Resp: 1763262

Ion Ratio Lower Upper

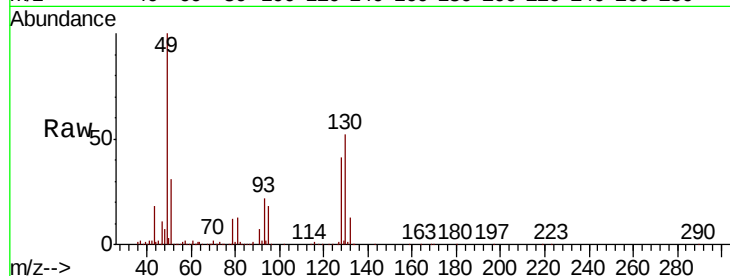
49 100

128 41.7 20.5 61.6

130 52.6 26.2 78.5

Manual Integrations
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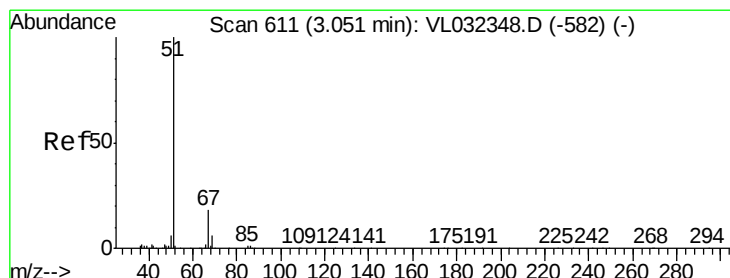
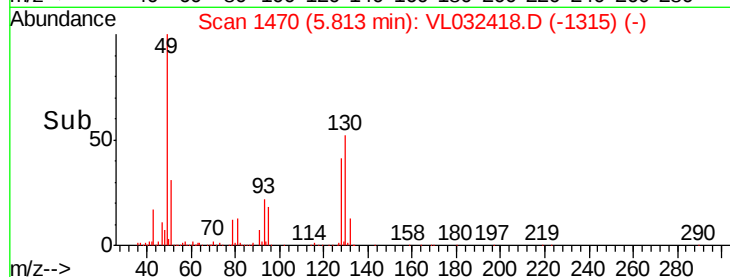
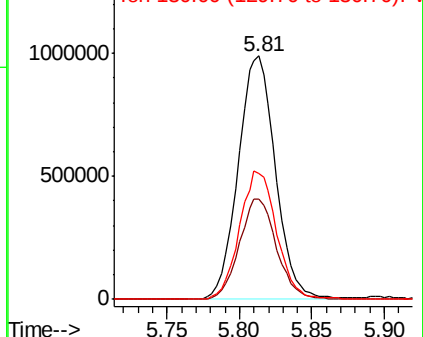
MMDadoda
8/22/2018 10:50:41 AM



Abundance Ion 49.10 (48.80 to 49.80): VL0

Ion 128.00 (127.70 to 128.70): VL0

Ion 130.00 (129.70 to 130.70): VL0



#3

Chlorodifluoromethane

Concen: 0.45 ppbv m

RT: 3.04 min Scan# 606

Delta R.T. -0.02 min

Lab File: VL032418.D

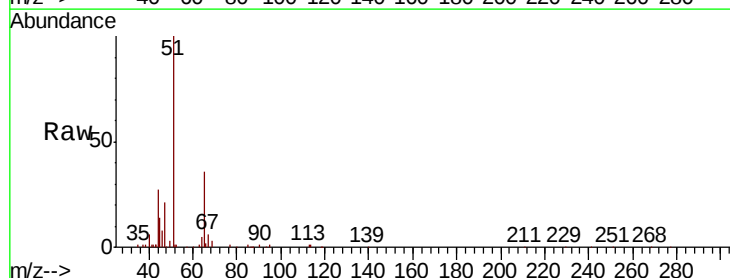
Acq: 21 Aug 2018 10:55

Tgt Ion: 51 Resp: 73404

Ion Ratio Lower Upper

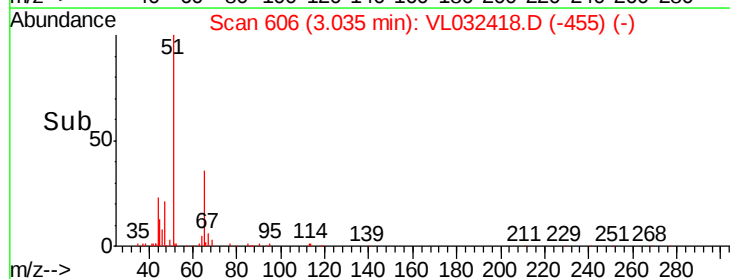
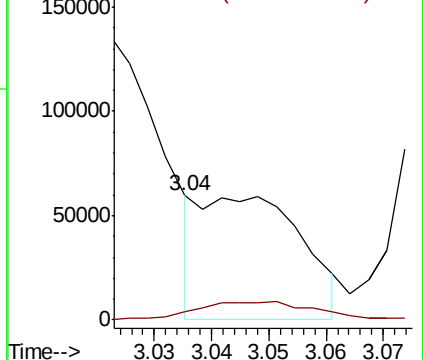
51 100

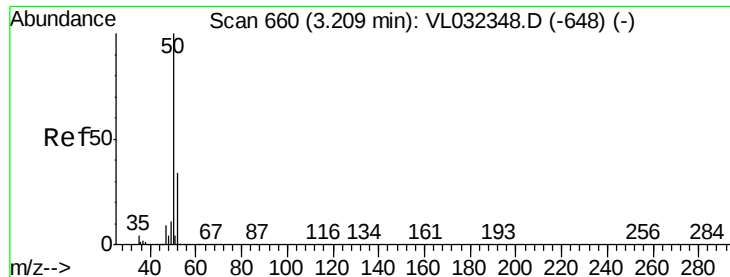
67 17.7 13.7 20.5



Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0





#4

Chloromethane

Concen: 0.61 ppbv

RT: 3.21 min Scan# 660

Delta R.T. -0.00 min

Lab File: VL032418.D

Acq: 21 Aug 2018 10:55

Instrument :

MSVOA_L

ClientSampleId :

IA1

Tot Ion: 50 Resp: 58982

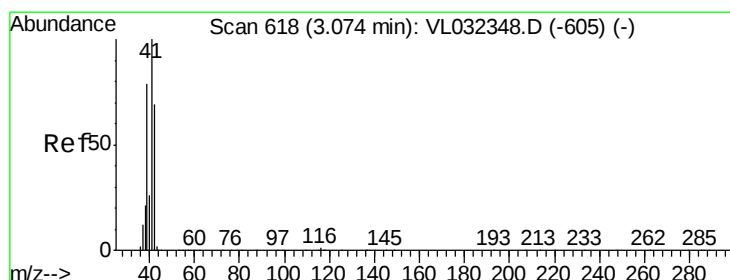
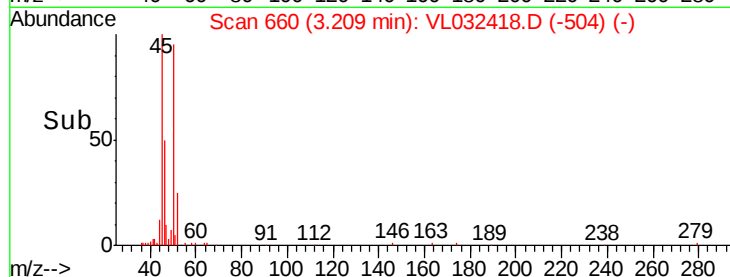
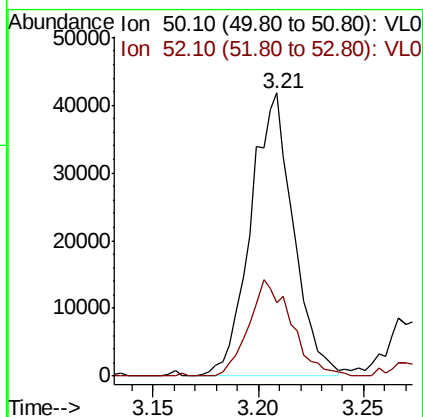
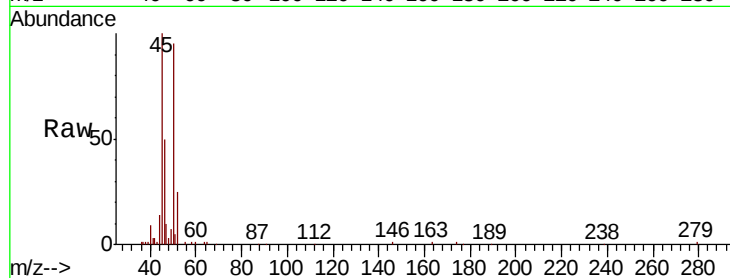
Ion Ratio Lower Upper

50 100

52 25.9 26.8 40.2#

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#9

Propene

Concen: 2.29 ppbv m

RT: 3.08 min Scan# 620

Delta R.T. 0.01 min

Lab File: VL032418.D

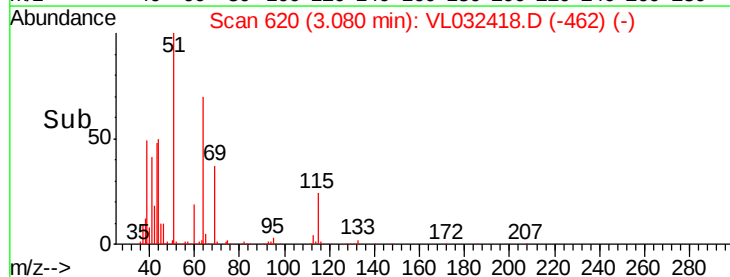
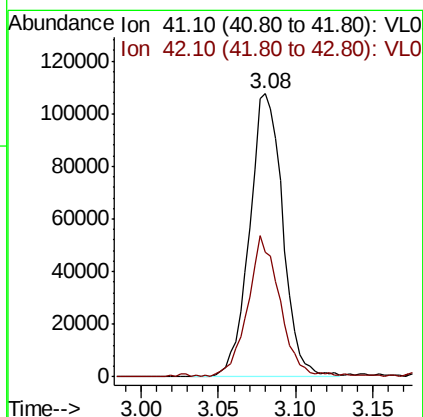
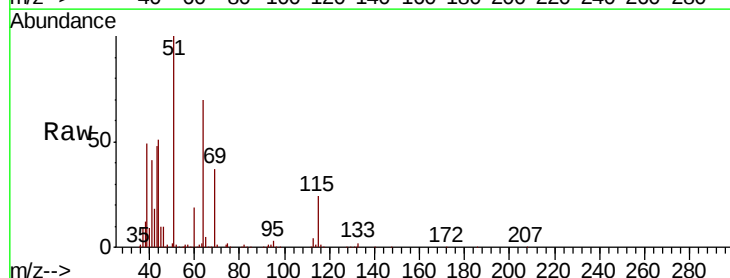
Acq: 21 Aug 2018 10:55

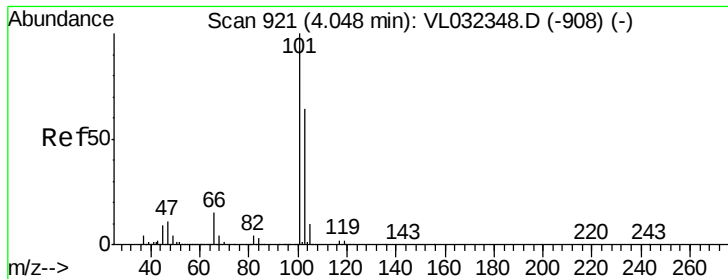
Tgt Ion: 41 Resp: 160404

Ion Ratio Lower Upper

41 100

42 219.1 55.9 83.9#





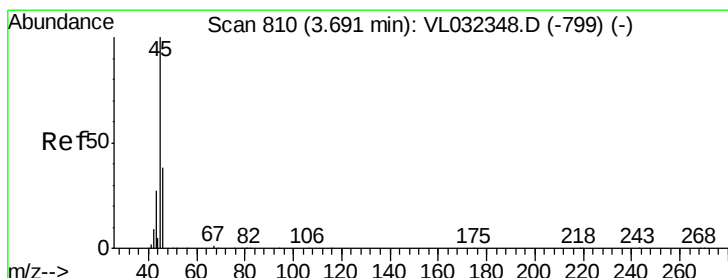
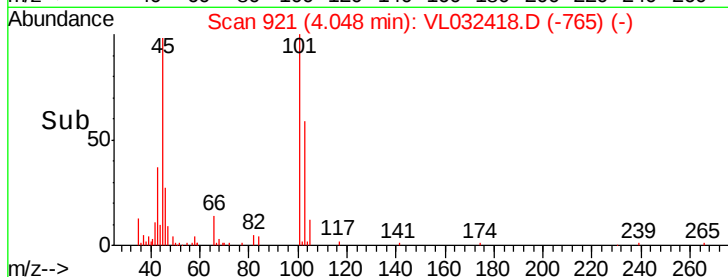
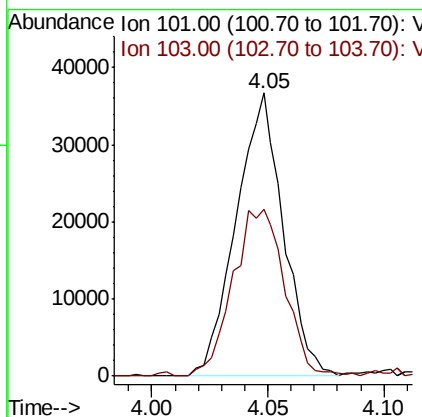
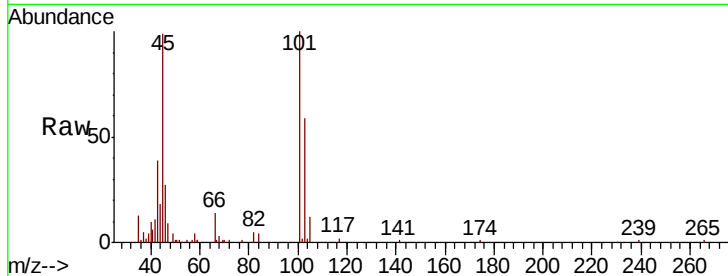
#11
 Trichlorofluoromethane
 Concen: 0.26 ppbv
 RT: 4.05 min Scan# 921
 Delta R.T. -0.00 min
 Lab File: VL032418.D
 Acq: 21 Aug 2018 10:55

Instrument :
 MSVOA_L
 ClientSampled :
 IA1

Tot Ion:101 Resp: 51844
 Ion Ratio Lower Upper
 101 100
 103 59.1 51.4 77.0

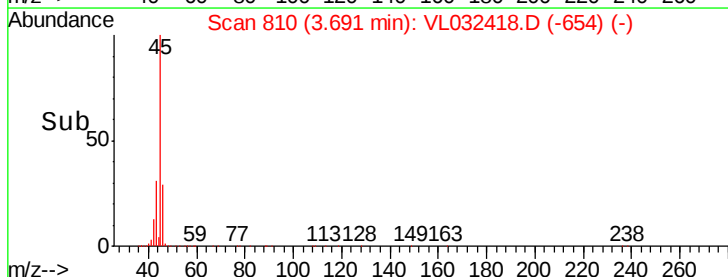
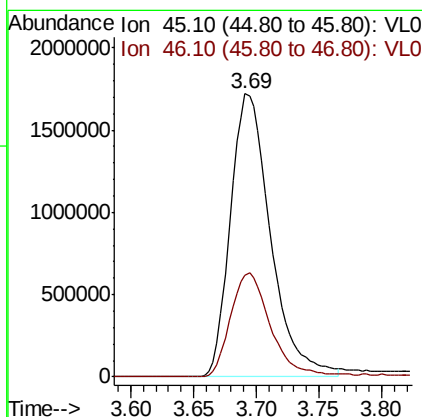
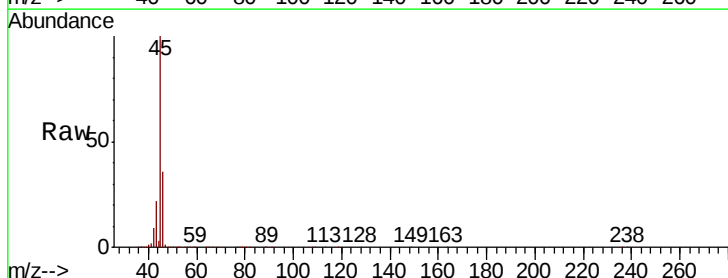
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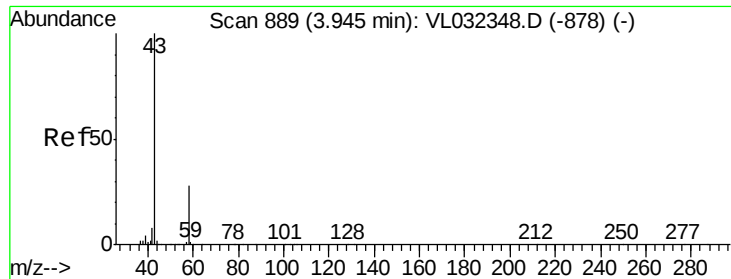
MMDadoda
 8/22/2018 10:50:41 AM



#13
 Ethanol
 Concen: 213.29 ppbv
 RT: 3.69 min Scan# 810
 Delta R.T. -0.00 min
 Lab File: VL032418.D
 Acq: 21 Aug 2018 10:55

Tgt Ion: 45 Resp: 3829418
 Ion Ratio Lower Upper
 45 100
 46 37.9 15.6 62.4





#15

Acetone

Concen: 21.51 ppbv

RT: 3.94 min Scan# 887

Delta R.T. -0.01 min

Lab File: VL032418.D

Acq: 21 Aug 2018 10:55

Instrument :

MSVOA_L

ClientSampled :

IA1

Tot Ion: 43 Resp: 3603524

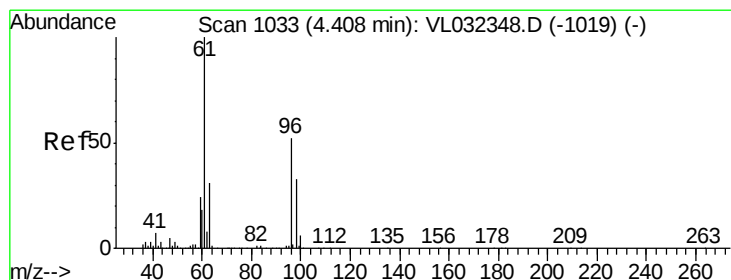
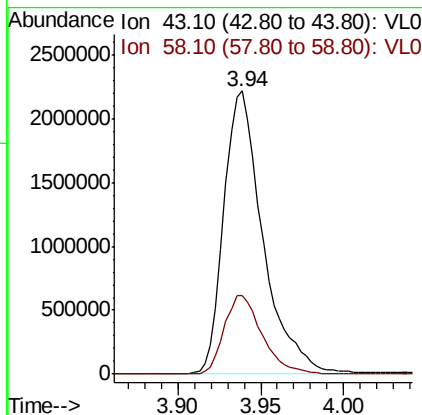
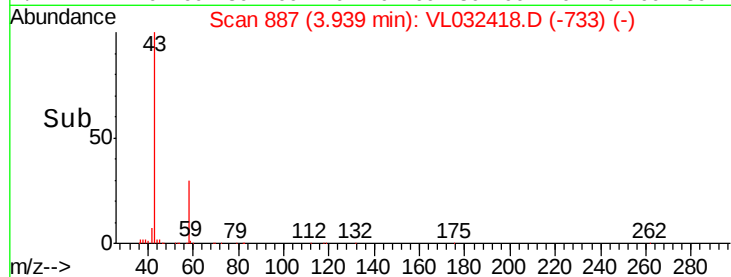
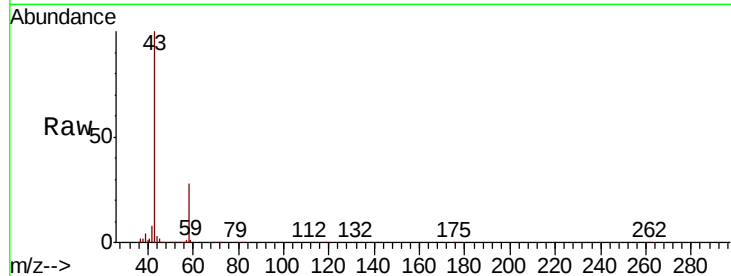
Ion Ratio Lower Upper

43 100

58 27.5 22.4 33.6

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#17

tert-Butyl alcohol

Concen: 2.18 ppbv

RT: 4.42 min Scan# 1037

Delta R.T. 0.01 min

Lab File: VL032418.D

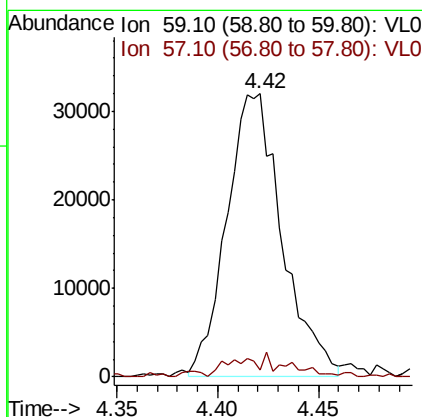
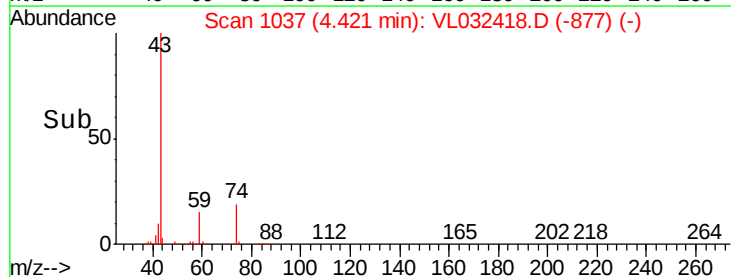
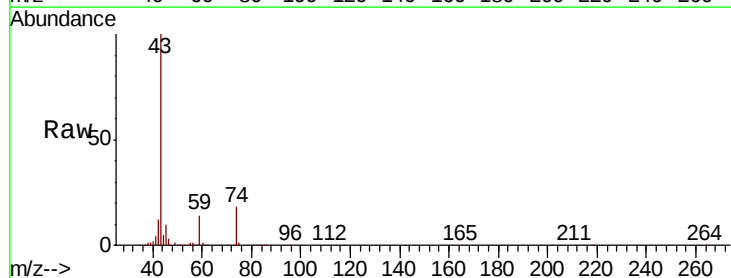
Acq: 21 Aug 2018 10:55

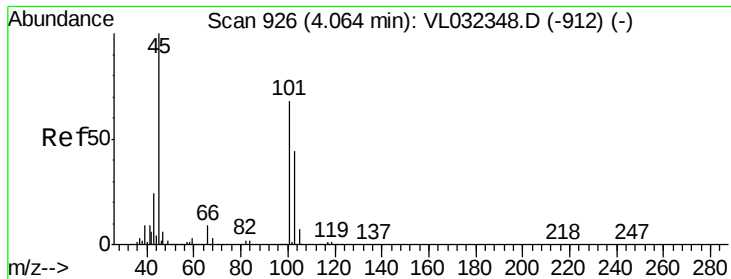
Tgt Ion: 59 Resp: 61279

Ion Ratio Lower Upper

59 100

57 0.0 7.6 11.4#





#19

Isopropyl Alcohol

Concen: 3.49 ppbv

RT: 4.08 min Scan# 930

Delta R.T. 0.01 min

Lab File: VL032418.D

Acq: 21 Aug 2018 10:55

Instrument :

MSVOA_L

ClientSampled :

IA1

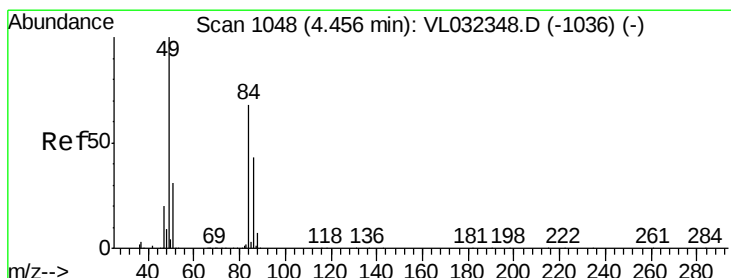
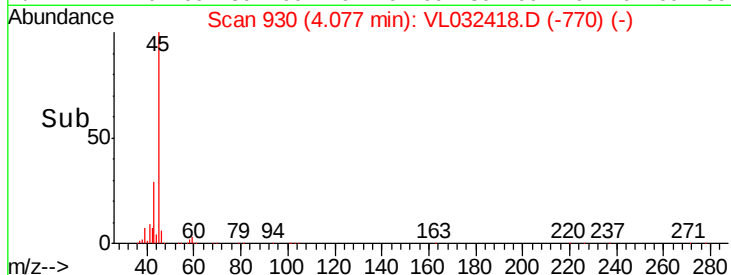
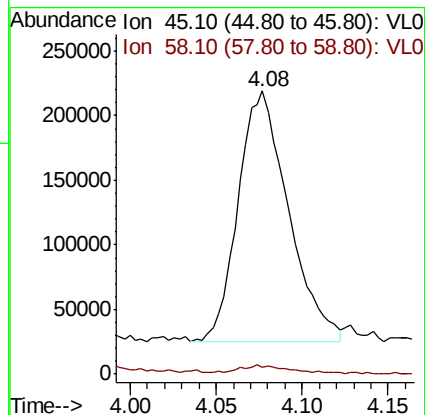
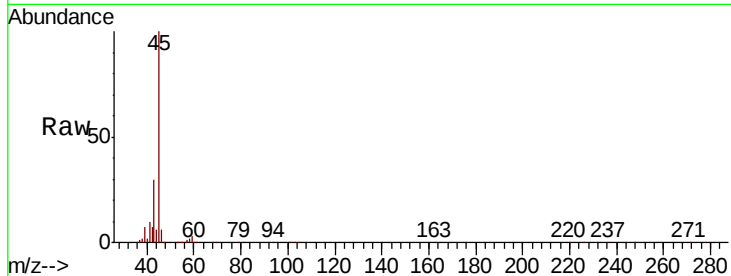
Tot Ion: 45 Resp: 393837
Ion Ratio Lower Upper

45 100

58 252.0 1.4 2.0#

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#20

Methylene Chloride

Concen: 1.89 ppbv

RT: 4.46 min Scan# 1048

Delta R.T. -0.00 min

Lab File: VL032418.D

Acq: 21 Aug 2018 10:55

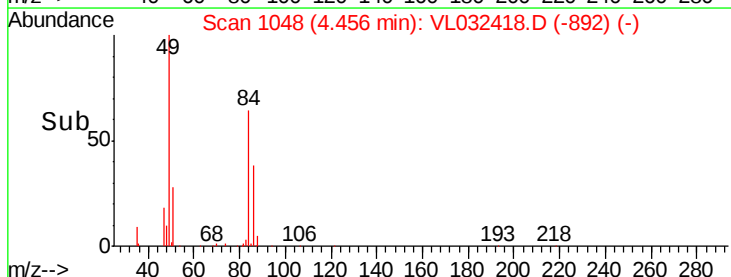
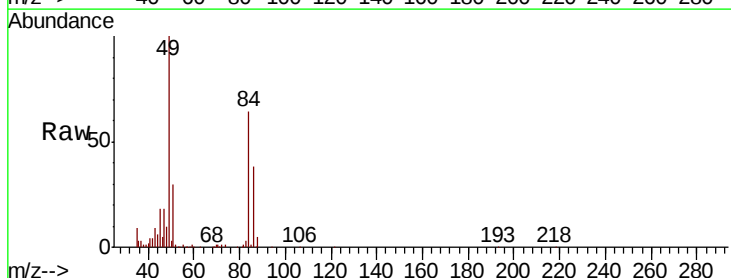
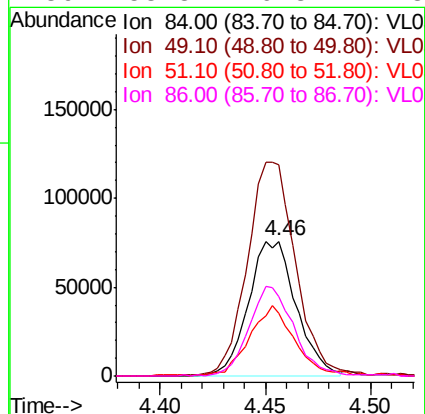
Tgt Ion: 84 Resp: 119554
Ion Ratio Lower Upper

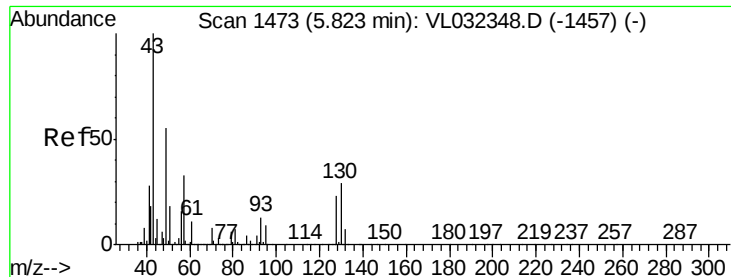
84 100

49 155.9 117.3 175.9

51 46.2 36.6 55.0

86 58.8 49.8 74.8





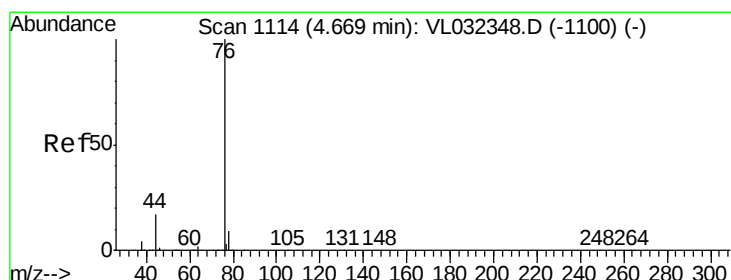
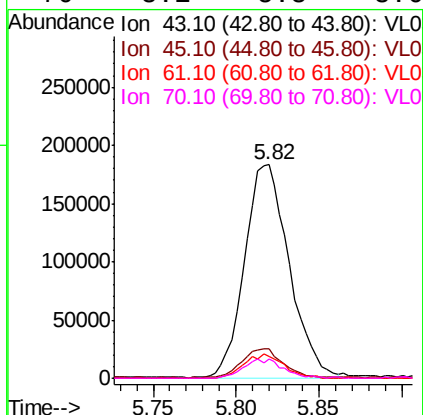
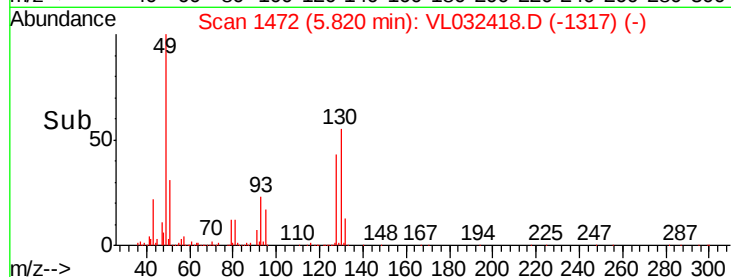
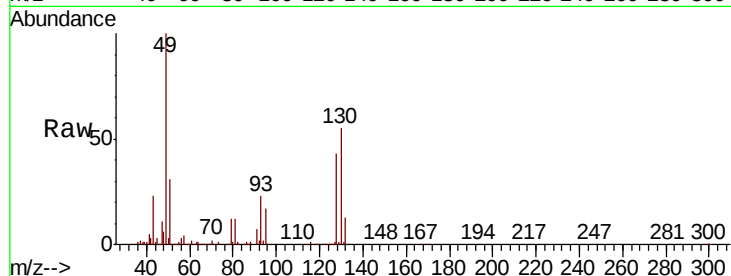
#25
Ethyl Acetate
Concen: 0.96 ppbv
RT: 5.82 min Scan# 1472
Delta R.T. -0.00 min
Lab File: VL032418.D
Acq: 21 Aug 2018 10:55

Instrument :
MSVOA_L
ClientSampled :
IA1

Tot Ion	Ratio	Lower	Upper
43	100		
45	13.2	7.9	11.9#
61	10.1	7.4	11.2
70	8.1	5.8	8.6

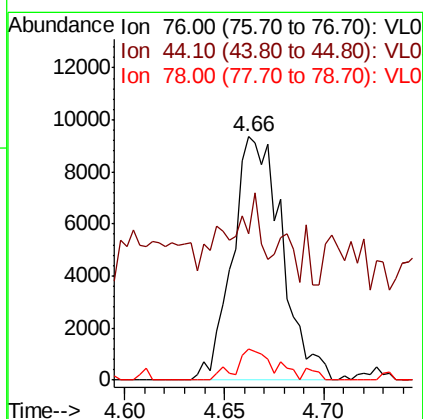
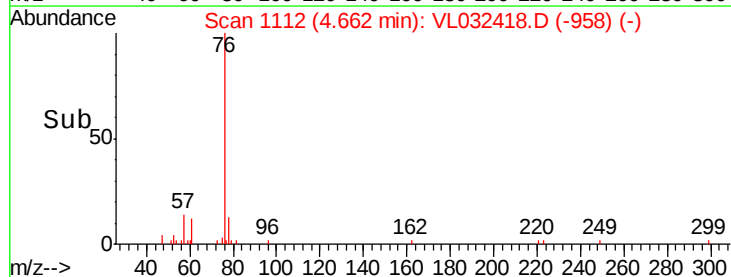
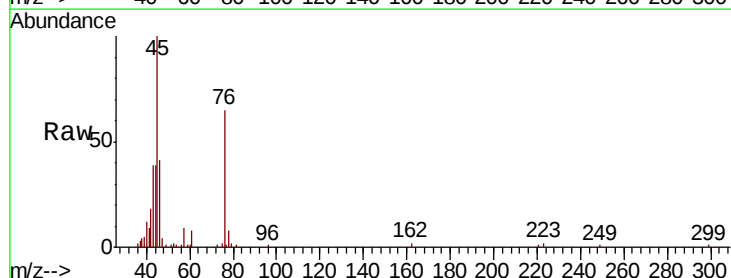
Manual Integrations
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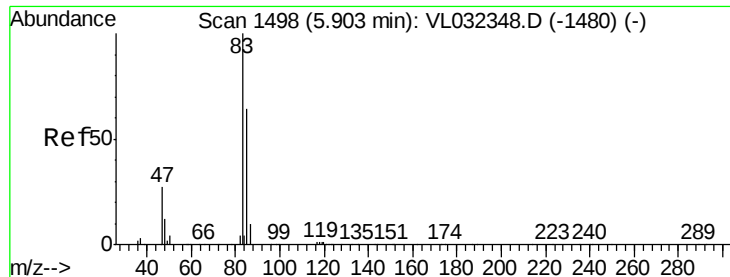
MMDadoda
8/22/2018 10:50:41 AM



#27
Carbon Disulfide
Concen: 0.11 ppbv m
RT: 4.66 min Scan# 1112
Delta R.T. -0.01 min
Lab File: VL032418.D
Acq: 21 Aug 2018 10:55

Tgt Ion	Ratio	Lower	Upper
76	100		
44	56.7	14.4	21.6#
78	11.1	7.4	11.0#





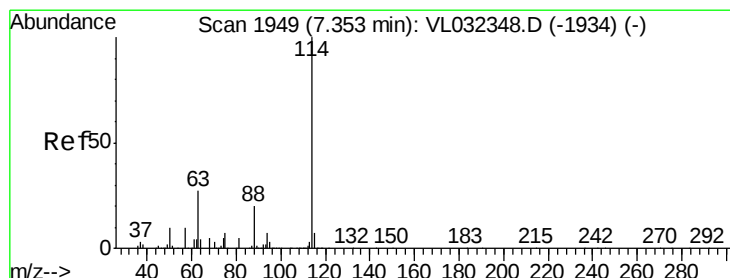
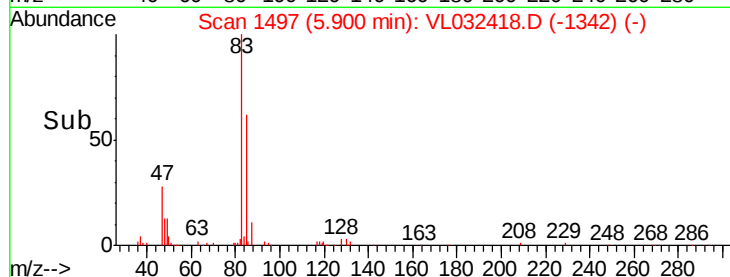
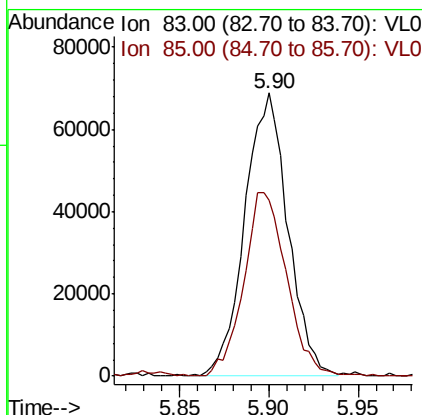
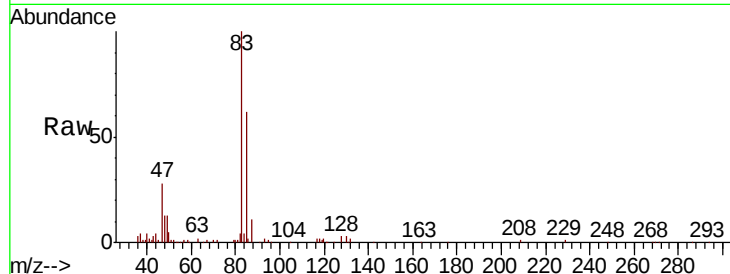
#29
Chloroform
Concen: 0.50 ppbv
RT: 5.90 min Scan# 1497
Delta R.T. -0.00 min
Lab File: VL032418.D
Acq: 21 Aug 2018 10:55

Instrument :
MSVOA_L
ClientSampleId :
IA1

Tot Ion	83	Resp	116514
Ion Ratio	100	Lower	Upper
85	62.2	51.6	77.4

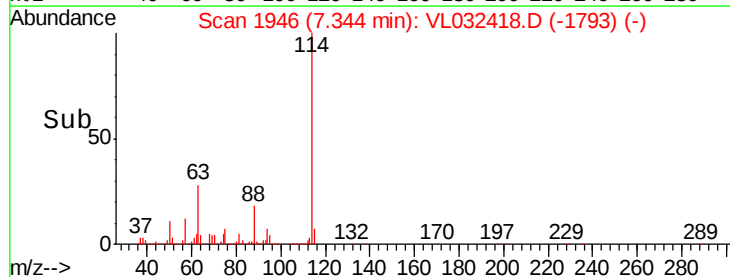
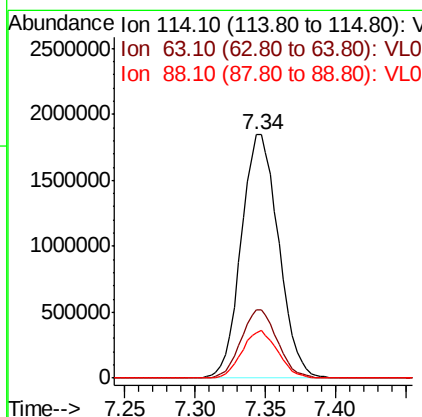
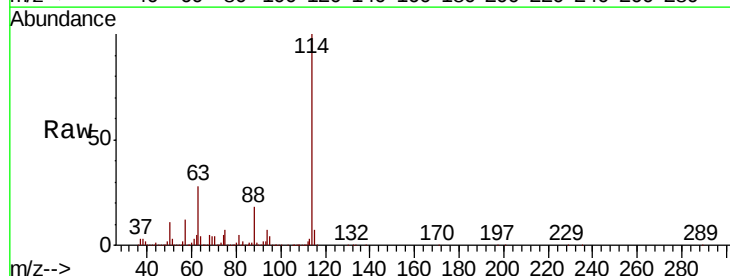
Manual Integrations
APPROVED

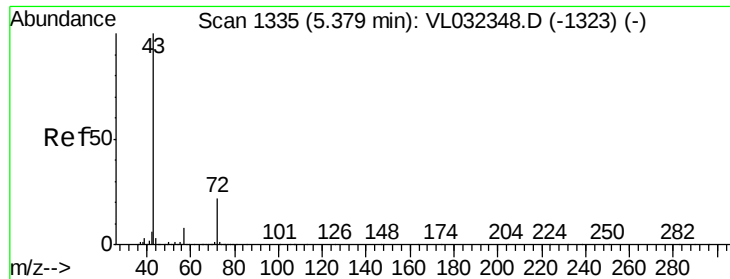
MMDadoda
8/22/2018 10:50:41 AM



#33
1,4-Difluorobenzene
Concen: 10.00 ppbv
RT: 7.34 min Scan# 1946
Delta R.T. -0.01 min
Lab File: VL032418.D
Acq: 21 Aug 2018 10:55

Tgt Ion	114	Resp	3430709
Ion Ratio	100	Lower	Upper
63	27.3	22.0	33.0
88	18.8	15.3	22.9





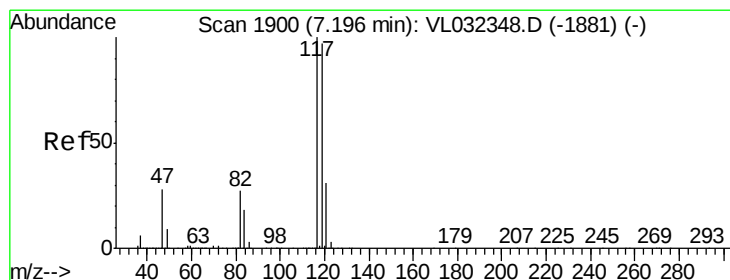
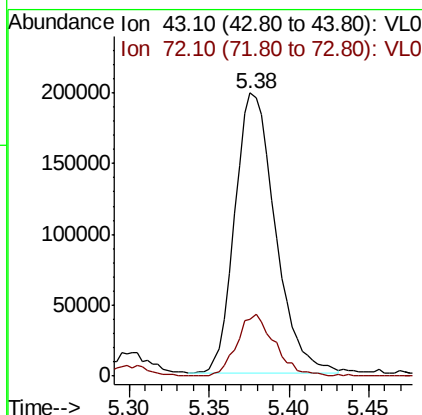
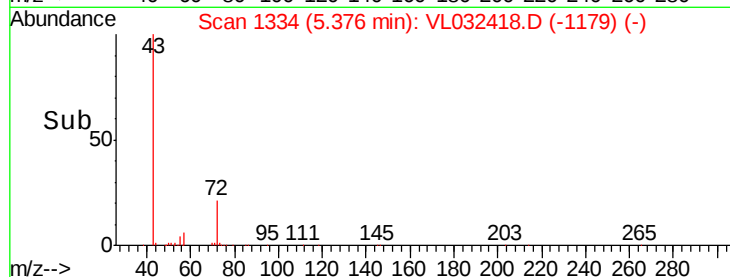
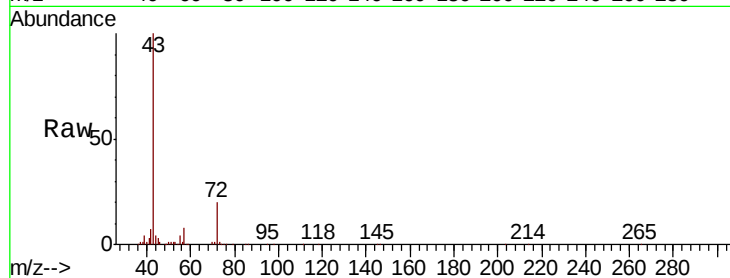
#34
2-Butanone
Concen: 1.45 ppbv
RT: 5.38 min Scan# 1334
Delta R.T. -0.00 min
Lab File: VL032418.D
Acq: 21 Aug 2018 10:55

Instrument :
MSVOA_L
ClientSampled :
IA1

Tot Ion	43	Resp	338596
Ion Ratio	100	Lower	Upper
43	100		
72	20.6	17.9	26.9

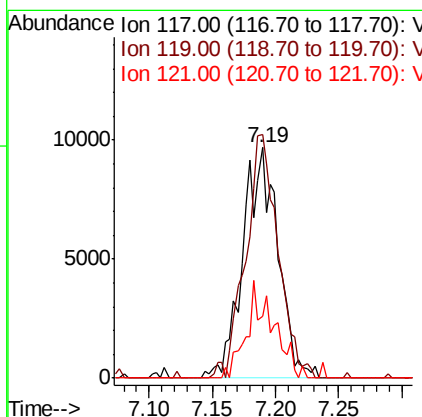
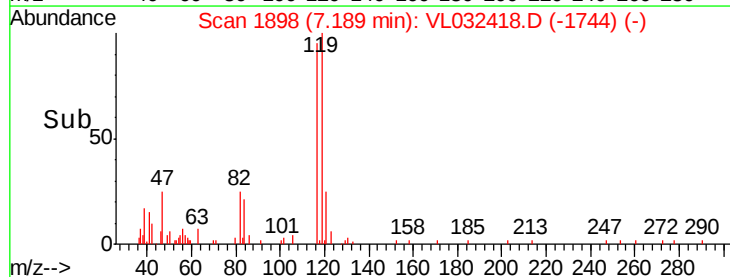
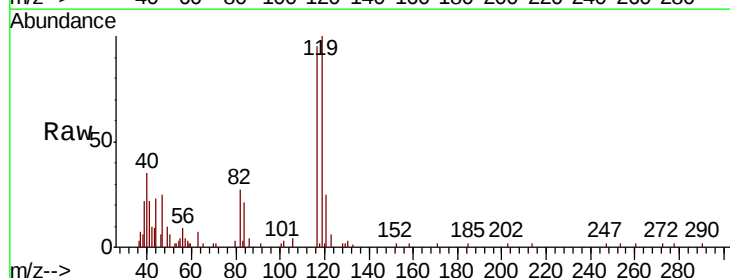
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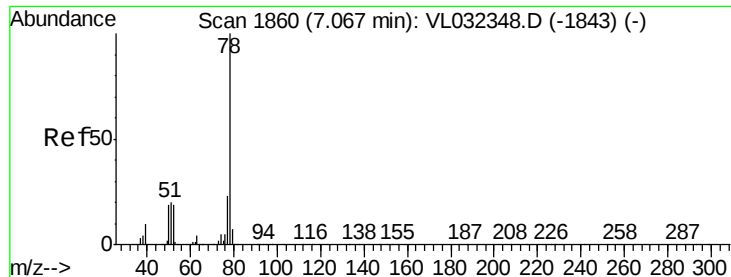
MMDadoda
8/22/2018 10:50:41 AM



#35
Carbon Tetrachloride
Concen: 0.09 ppbv m
RT: 7.19 min Scan# 1898
Delta R.T. -0.01 min
Lab File: VL032418.D
Acq: 21 Aug 2018 10:55

Tgt Ion	117	Resp	18683
Ion Ratio	100	Lower	Upper
117	100		
119	105.6	77.2	115.8
121	26.6	25.1	37.7





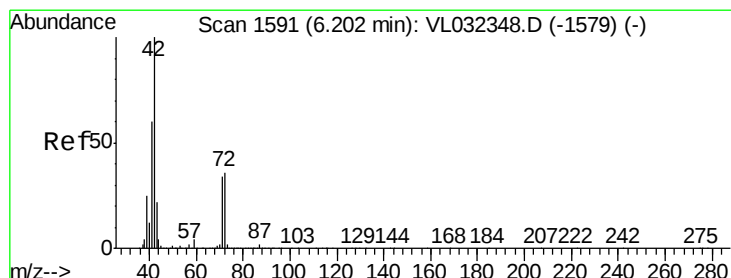
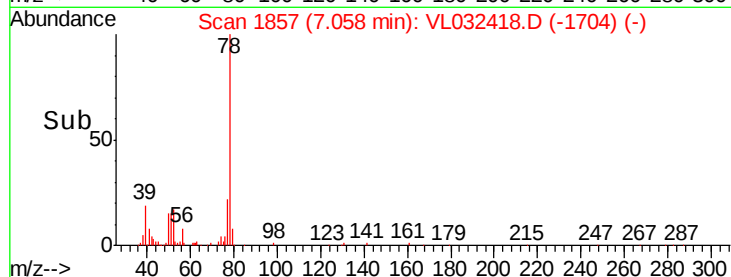
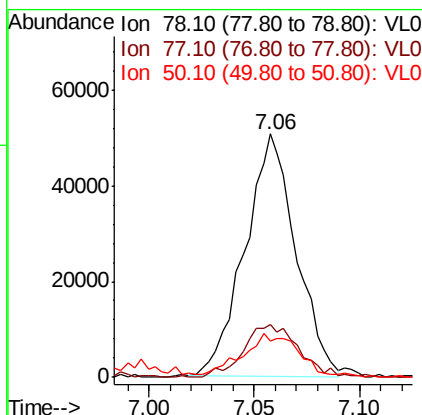
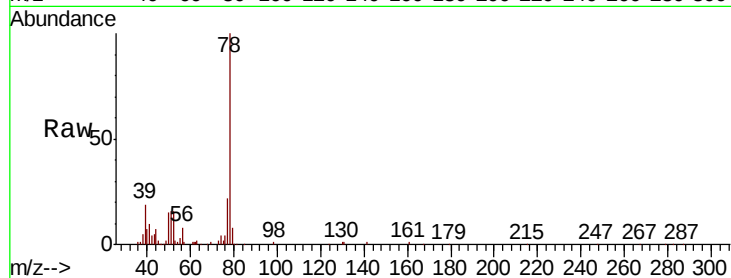
#36
Benzene
Concen: 0.29 ppbv
RT: 7.06 min Scan# 1857
Delta R.T. -0.01 min
Lab File: VL032418.D
Acq: 21 Aug 2018 10:55

Instrument :
MSVOA_L
ClientSampleId :
IA1

Tot Ion	Ratio	Lower	Upper
78	100		
77	21.3	18.0	27.0
50	13.7	15.1	22.7#

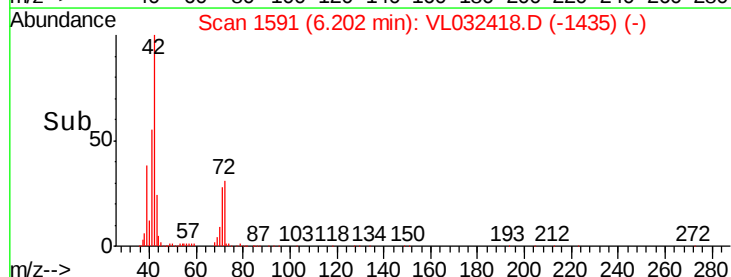
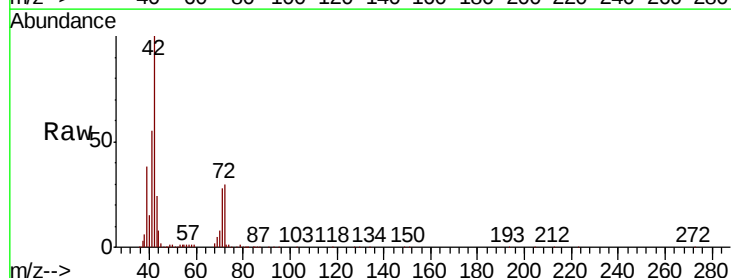
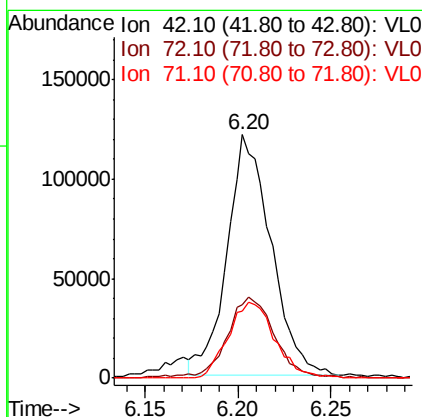
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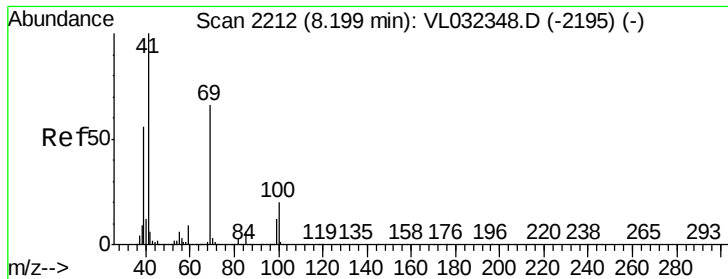
MMDadoda
8/22/2018 10:50:41 AM



#41
Tetrahydrofuran
Concen: 1.58 ppbv
RT: 6.20 min Scan# 1591
Delta R.T. -0.00 min
Lab File: VL032418.D
Acq: 21 Aug 2018 10:55

Tgt Ion	Ratio	Lower	Upper
42	100		
72	37.2	29.8	44.6
71	34.1	28.2	42.2





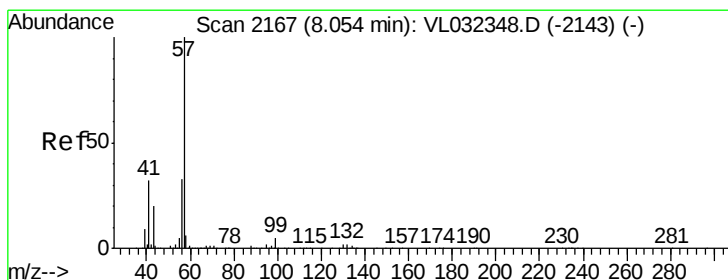
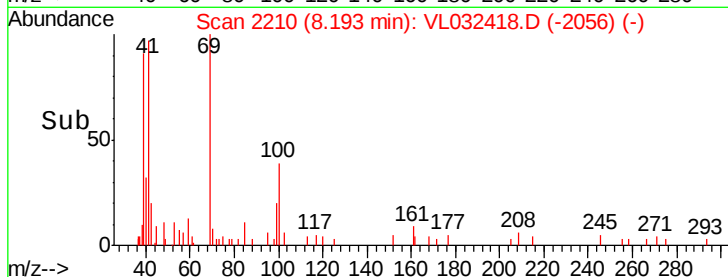
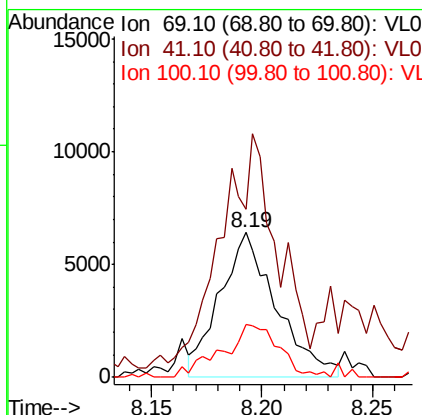
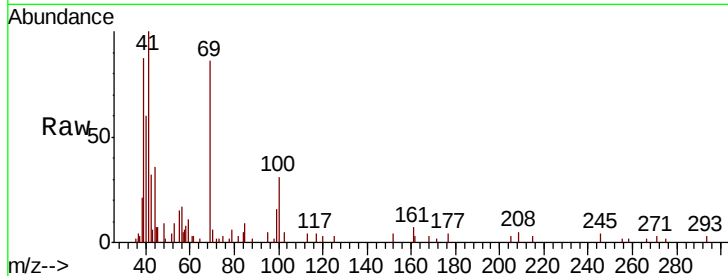
#43
Methvl Methacrvlate
Concen: 0.10 ppbv
RT: 8.19 min Scan# 2210
Delta R.T. -0.01 min
Lab File: VL032418.D
Acq: 21 Aug 2018 10:55

Instrument :
MSVOA_L
ClientSampled :
IA1

Tot Ion	Ratio	Lower	Upper
69	100		
41	193.6	118.6	177.8#
100	39.2	23.4	35.2#

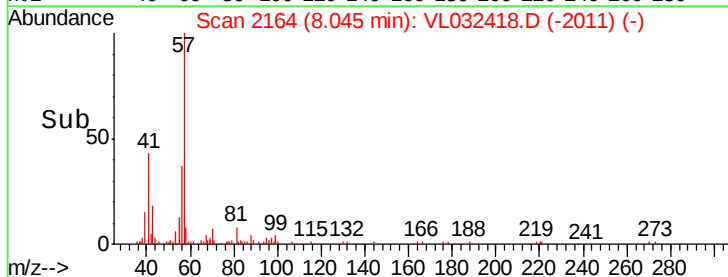
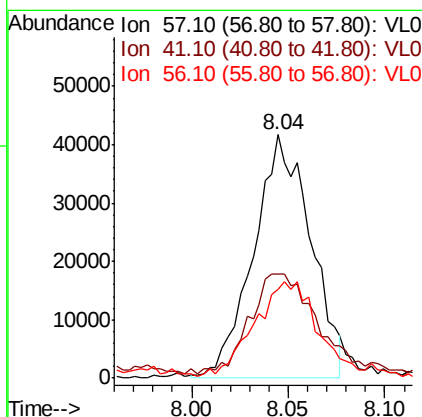
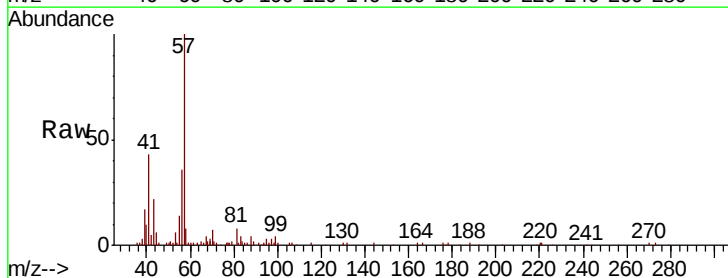
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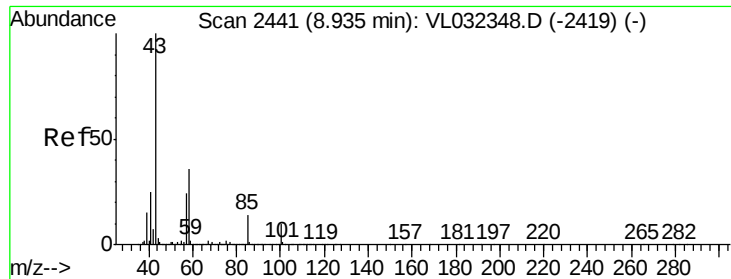
MMDadoda
8/22/2018 10:50:41 AM



#44
2,2,4-Trimethylpentane
Concen: 0.16 ppbv m
RT: 8.04 min Scan# 2164
Delta R.T. -0.01 min
Lab File: VL032418.D
Acq: 21 Aug 2018 10:55

Tgt Ion	Ratio	Lower	Upper
57	100		
41	0.0	24.3	36.5#
56	47.6	25.7	38.5#





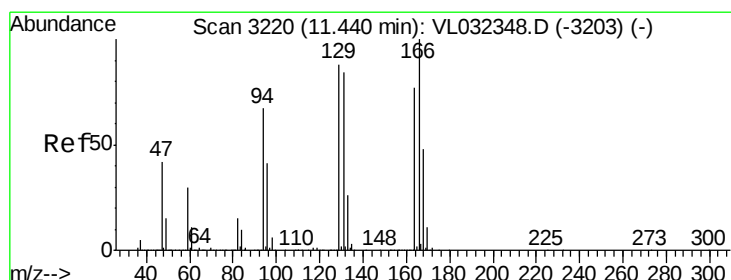
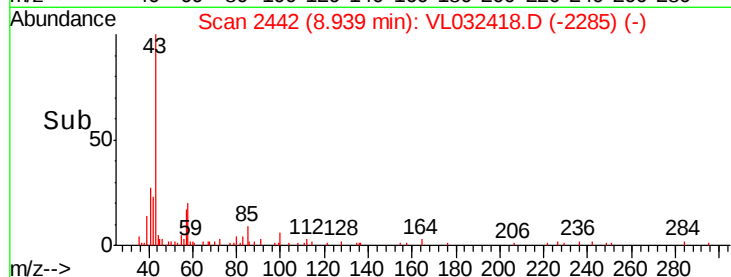
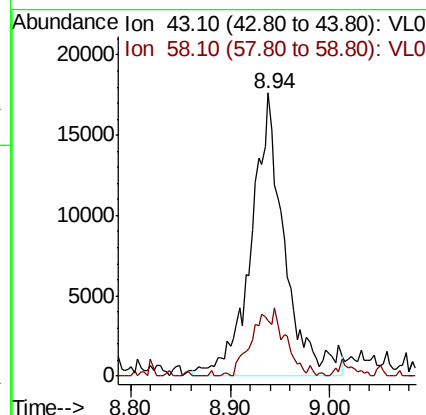
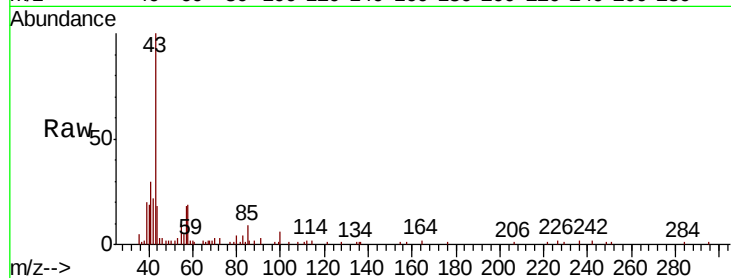
#50
4-Methyl-2-Pentanone
Concen: 0.12 ppbv m
RT: 8.94 min Scan# 2442
Delta R.T. 0.00 min
Lab File: VL032418.D
Acq: 21 Aug 2018 10:55

Instrument :
MSVOA_L
ClientSampleId :
IA1

Tot Ion	Ratio	Lower	Upper
43	100		
58	0.0	28.9	43.3#

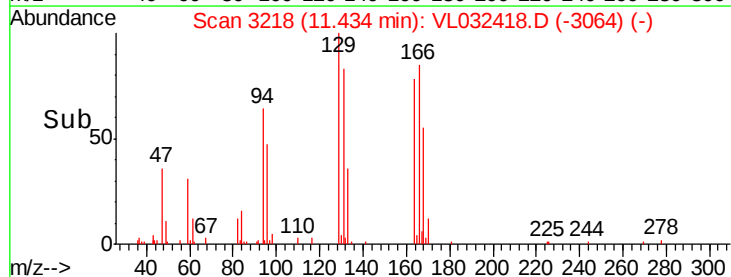
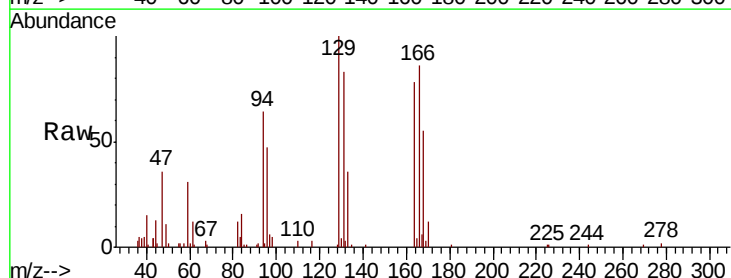
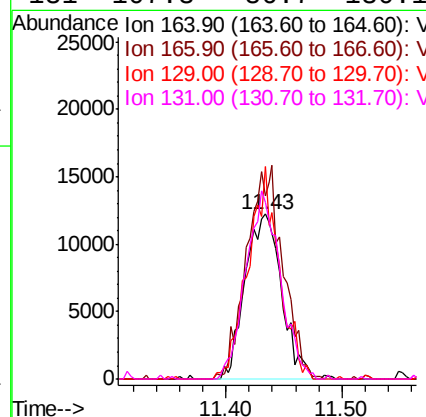
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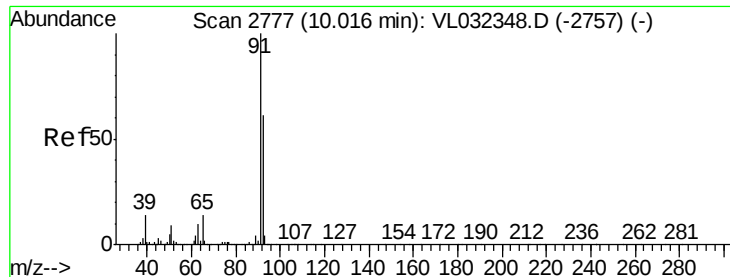
MMDadoda
8/22/2018 10:50:41 AM



#52
Tetrachloroethene
Concen: 0.31 ppbv m
RT: 11.43 min Scan# 3218
Delta R.T. -0.01 min
Lab File: VL032418.D
Acq: 21 Aug 2018 10:55

Tgt Ion	Ratio	Lower	Upper
164	100		
166	111.1	103.5	155.3
129	128.7	90.9	136.3
131	107.3	86.7	130.1





#53

Toluene

Concen: 1.03 ppbv

RT: 10.00 min Scan# 2773

Delta R.T. -0.01 min

Lab File: VL032418.D

Acq: 21 Aug 2018 10:55

Instrument :

MSVOA_L

ClientSampleId :

IA1

Tot Ion: 91 Resp: 329271

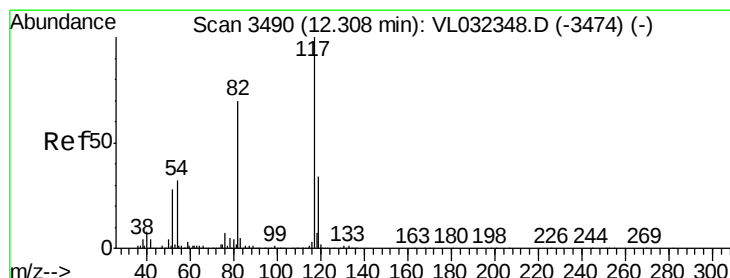
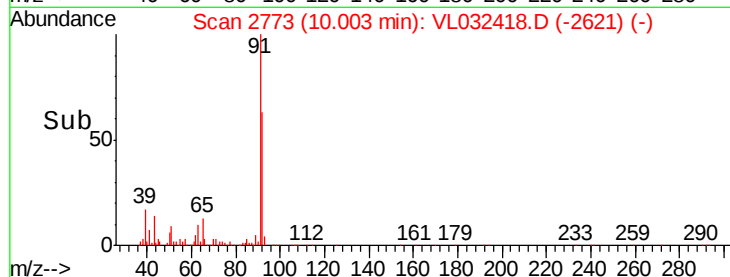
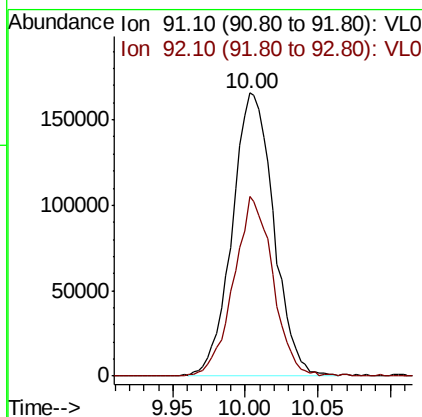
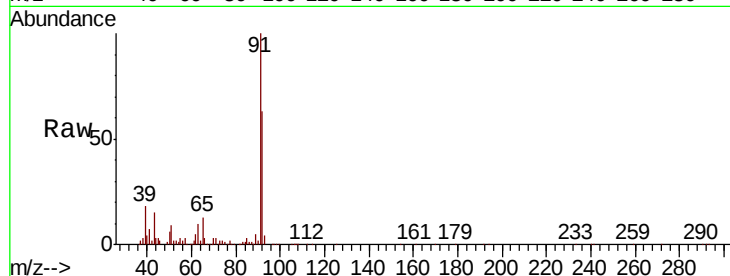
Ion Ratio Lower Upper

91 100

92 60.2 48.7 73.1

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#55

Chlorobenzene-d5

Concen: 10.00 ppbv

RT: 12.30 min Scan# 3487

Delta R.T. -0.01 min

Lab File: VL032418.D

Acq: 21 Aug 2018 10:55

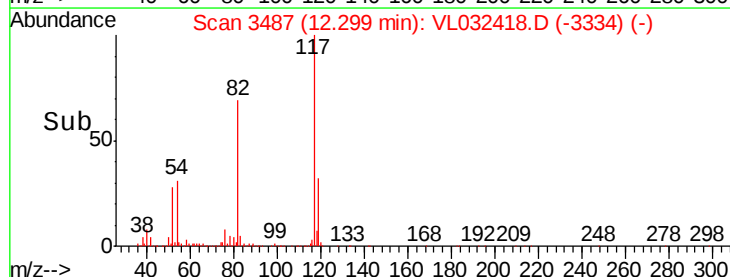
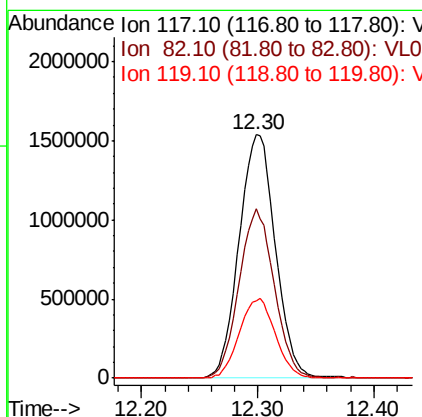
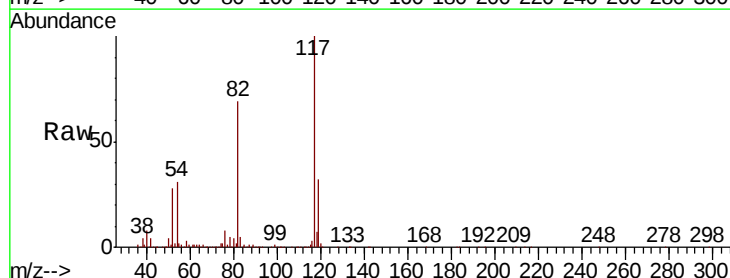
Tgt Ion: 117 Resp: 3347986

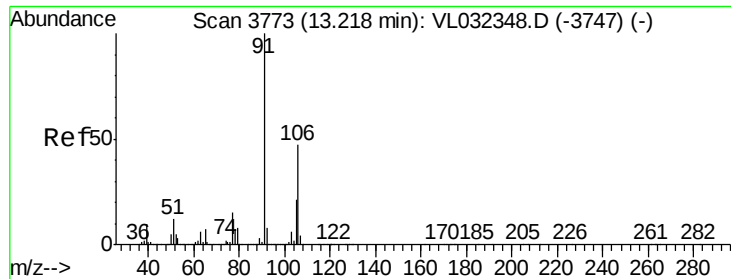
Ion Ratio Lower Upper

117 100

82 67.3 55.1 82.7

119 32.4 46.0 69.0#





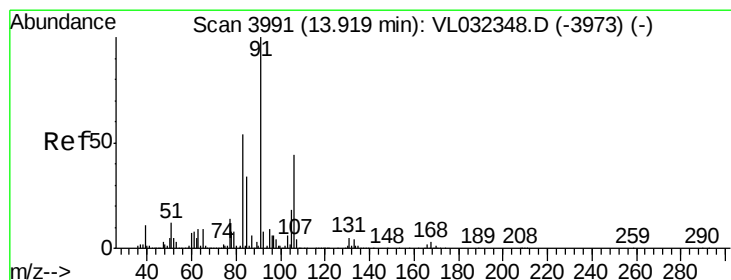
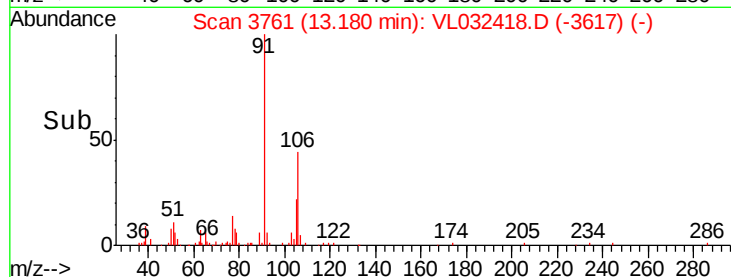
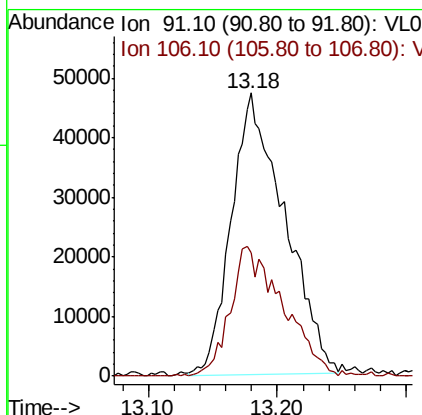
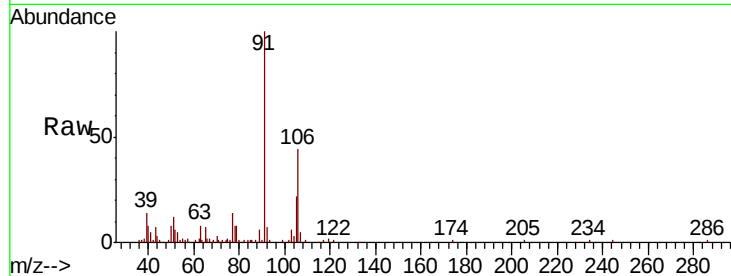
#59
m/p-Xylene
Concen: 0.39 ppbv
RT: 13.18 min Scan# 3761
Delta R.T. -0.04 min
Lab File: VL032418.D
Acq: 21 Aug 2018 10:55

Instrument :
MSVOA_L
ClientSampled :
IA1

Tot Ion	Ratio	Lower	Upper
91	100		
106	46.2	37.0	55.4

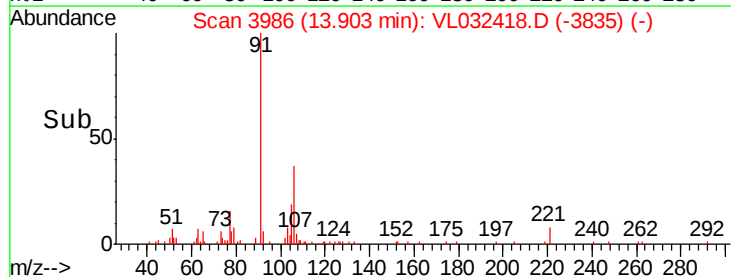
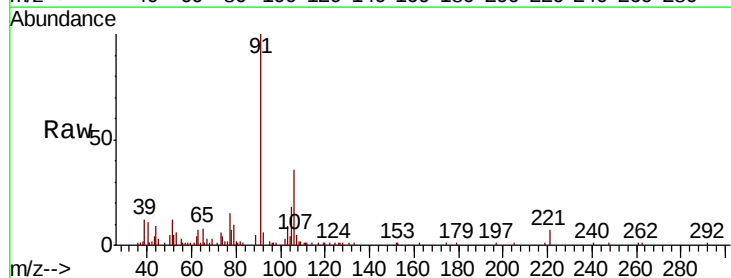
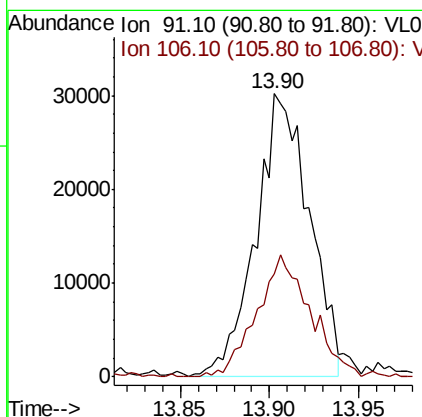
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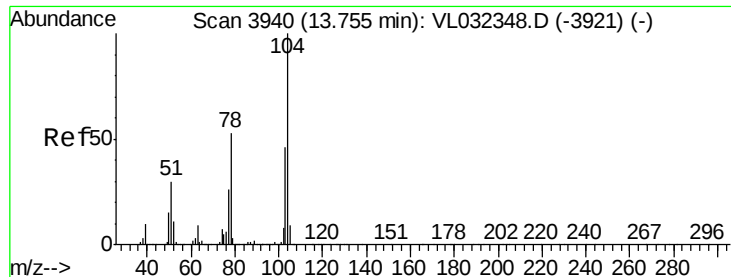
MMDadoda
8/22/2018 10:50:41 AM



#60
o-Xylene
Concen: 0.19 ppbv
RT: 13.90 min Scan# 3986
Delta R.T. -0.02 min
Lab File: VL032418.D
Acq: 21 Aug 2018 10:55

Tgt Ion	Ratio	Lower	Upper
91	100		
106	43.6	22.3	66.8





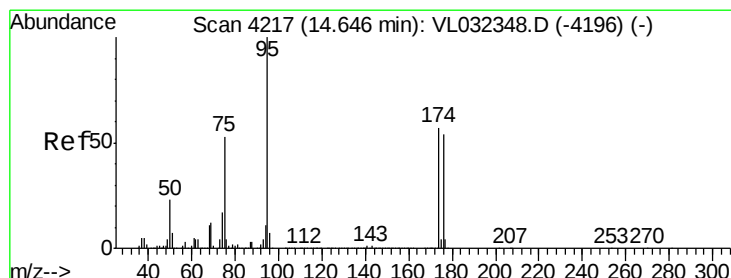
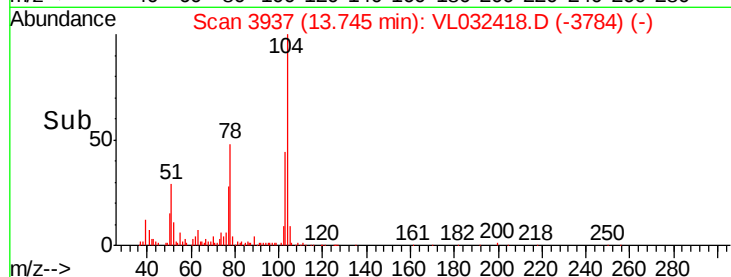
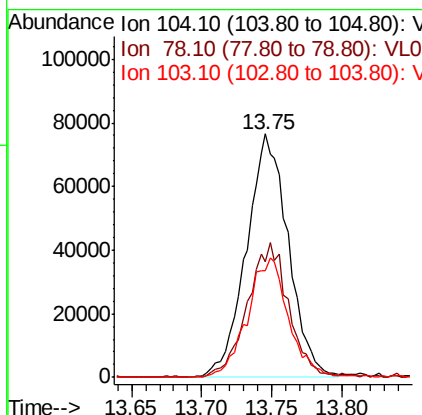
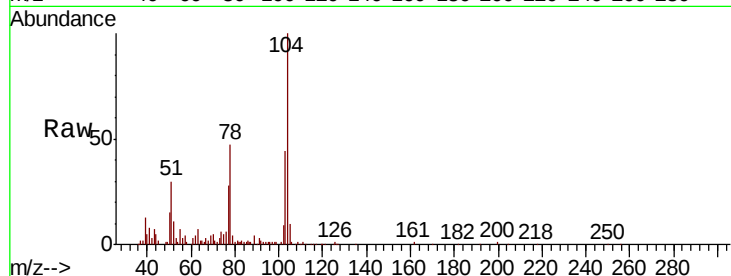
#61
Stvrene
Concen: 0.68 ppbv
RT: 13.75 min Scan# 3937
Delta R.T. -0.01 min
Lab File: VL032418.D
Acq: 21 Aug 2018 10:55

Instrument :
MSVOA_L
ClientSampled :
IA1

Tot Ion	Ratio	Lower	Upper
104	100		
78	54.5	42.6	64.0
103	48.6	38.0	57.0

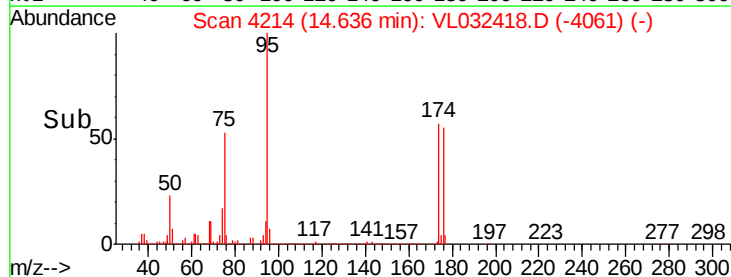
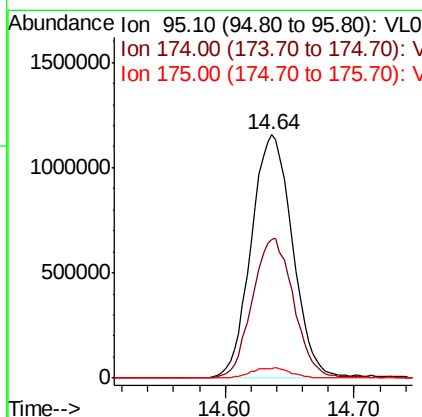
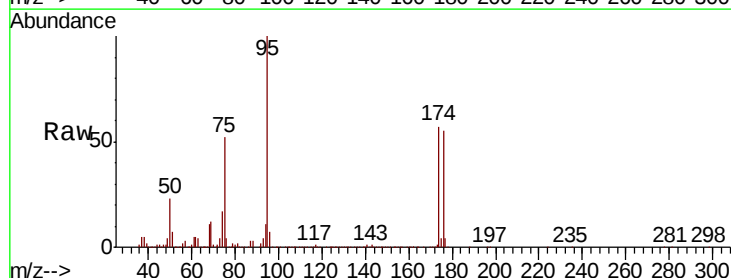
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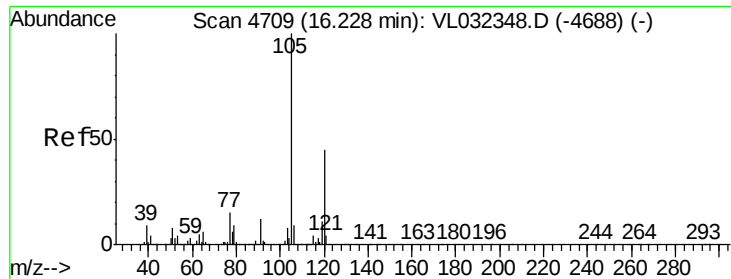
MMDadoda
8/22/2018 10:50:41 AM



#68
1-Bromo-4-Fluorobenzene
Concen: 10.06 ppbv
RT: 14.64 min Scan# 4214
Delta R.T. -0.01 min
Lab File: VL032418.D
Acq: 21 Aug 2018 10:55

Tgt Ion	Ratio	Lower	Upper
95	100		
174	58.1	46.2	69.4
175	4.2	3.4	5.0





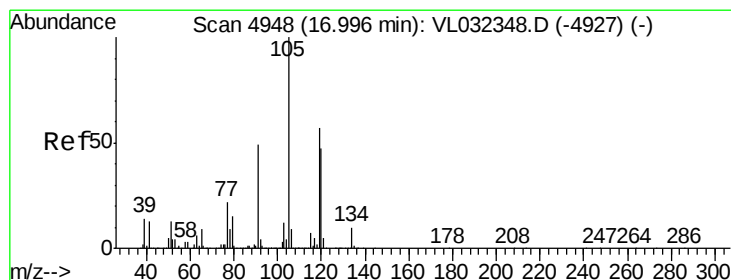
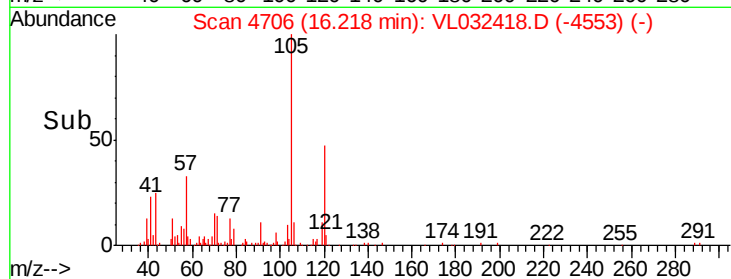
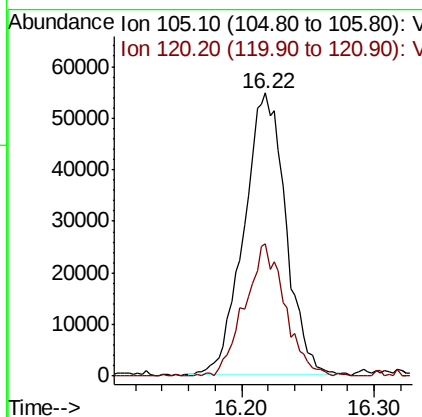
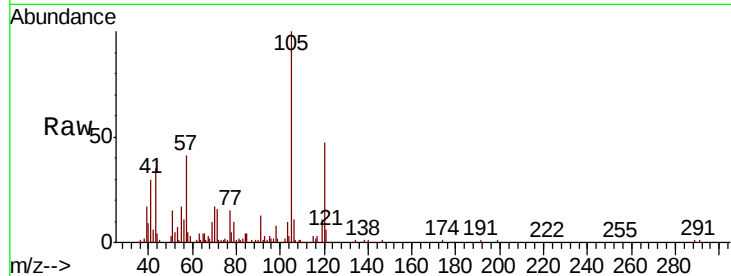
#73
 1,3,5-Trimethylbenzene
 Concen: 0.33 ppbv
 RT: 16.22 min Scan# 4706
 Delta R.T. -0.01 min
 Lab File: VL032418.D
 Acq: 21 Aug 2018 10:55

Instrument :
 MSVOA_L
 ClientSampleId :
 IA1

Tot Ion	Ratio	Lower	Upper
105	100		
120	47.0	36.3	54.5

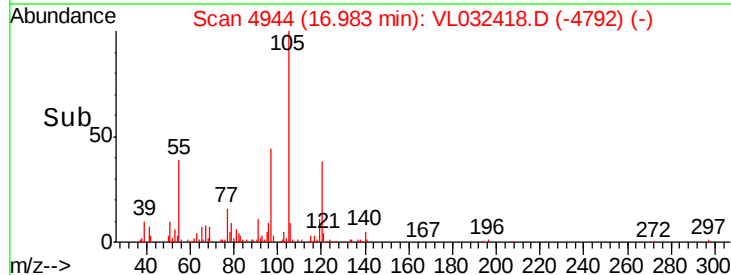
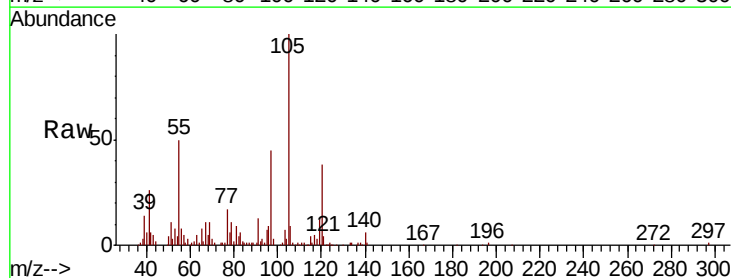
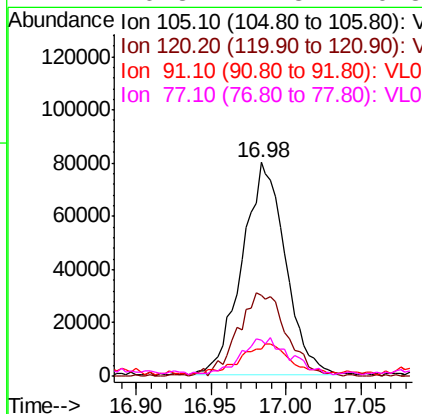
Manual Integrations
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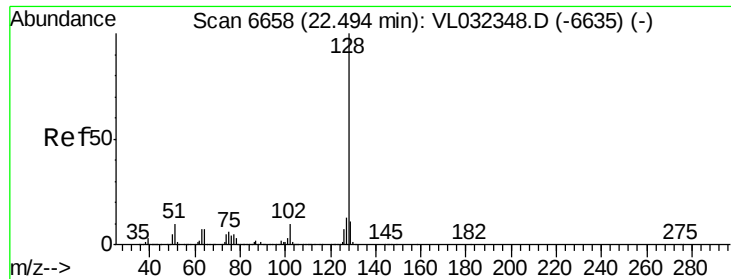
MMDadoda
 8/22/2018 10:50:41 AM



#74
 1,2,4-Trimethylbenzene
 Concen: 0.42 ppbv
 RT: 16.98 min Scan# 4944
 Delta R.T. -0.01 min
 Lab File: VL032418.D
 Acq: 21 Aug 2018 10:55

Tgt Ion	Ratio	Lower	Upper
105	100		
120	37.9	37.6	56.4
91	12.0	39.9	59.9#
77	16.3	17.8	26.8#





#79

Naphthalene

Concen: 0.49 ppbv m

RT: 22.49 min Scan# 6656

Delta R.T. -0.01 min

Lab File: VL032418.D

Acq: 21 Aug 2018 10:55

Instrument :

MSVOA_L

ClientSampleId :

IA1

Tot Ion:	128	Resp:	60285
Ion Ratio		Lower	Upper
128	100		
127	8.0	10.3	15.5#
129	15.8	8.6	13.0#

Manual Integrations
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MMDadoda
8/22/2018 10:50:41 AM

