

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL121118\
 Data File : VL032964.D
 Acq On : 11 Dec 2018 21:19
 Operator : SY/AP
 Sample : J6264-14
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 A55G3

Manual Integrations
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 12/13/2018 7:58:45 AM

Quant Time: Dec 12 16:13:44 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	1367555	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.30	114	3537728	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.25	117	3397293	10.00	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.59	95	2557510	10.19	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	101.90%

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.08	85	47341	0.259	ppbv	96
3) Chlorodifluoromethane	3.01	51	32513m	0.314	ppbv	
4) Chloromethane	3.17	50	40422	0.670	ppbv	96
9) Propene	3.04	41	319968m	7.813	ppbv	
10) Heptane	8.25	43	1370333	8.908	ppbv	100
11) Trichlorofluoromethane	4.01	101	1193612	6.939	ppbv	100
13) Ethanol	3.66	45	998378	70.805	ppbv	95
15) Acetone	3.90	43	15853686	135.062	ppbv #	83
17) tert-Butyl alcohol	4.37	59	166971	5.587	ppbv #	98
19) Isopropyl Alcohol	4.04	45	828792	11.243	ppbv #	95
20) Methylene Chloride	4.42	84	214281	3.735	ppbv #	92
26) Hexane	5.79	57	1797936	14.044	ppbv #	44
27) Carbon Disulfide	4.62	76	686413	4.288	ppbv	100
30) Cyclohexane	7.25	84	314201	2.961	ppbv	85
34) 2-Butanone	5.33	43	2424836	15.736	ppbv	99
36) Benzene	7.01	78	2782212	10.692	ppbv	97
38) Trichloroethene	7.97	130	9198m	0.085	ppbv	
40) 1,4-Dioxane	7.96	88	457478m	12.586	ppbv	
44) 2,2,4-Trimethylpentane	8.00	57	2078199	4.705	ppbv	93
50) 4-Methyl-2-Pentanone	8.88	43	195548	0.794	ppbv	99
52) Tetrachloroethene	11.38	164	9710m	0.103	ppbv	
53) Toluene	9.95	91	6353090	23.021	ppbv	98
58) Ethyl Benzene	12.87	91	819701	2.262	ppbv	99
59) m/p-Xylene	13.13	91	1377516	4.192	ppbv #	100
60) o-Xylene	13.86	91	450474m	1.358	ppbv	
61) Styrene	13.70	104	255328m	1.157	ppbv	
62) Isopropylbenzene	14.84	105	15424034	33.317	ppbv	94
74) 1,2,4-Trimethylbenzene	16.94	105	144980	0.355	ppbv #	71

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



#1

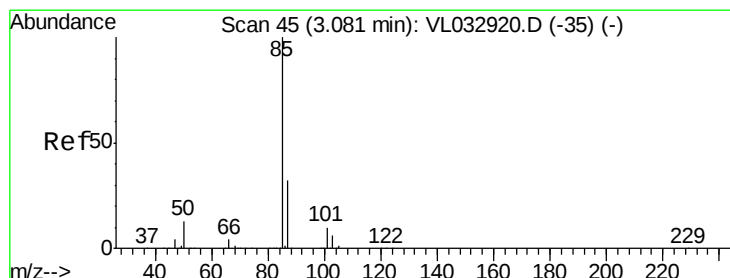
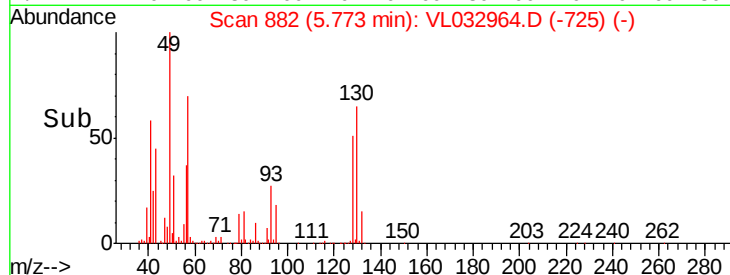
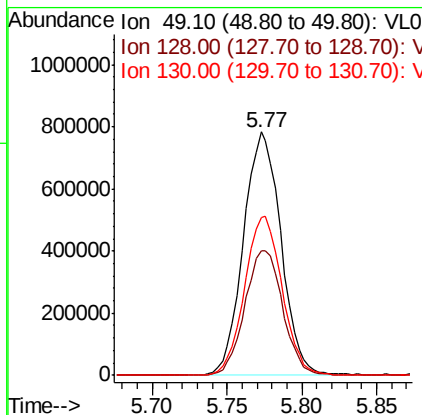
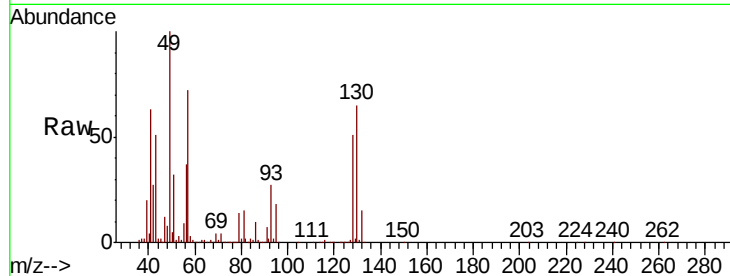
Bromochloromethane
Concen: 10.000 ppbv
RT: 5.77 min Scan# 882
Delta R.T. 0.00 min
Lab File: VL032964.D
Acq: 11 Dec 2018 21:19

Instrument :
MSVOA_L
ClientSampled :
A55G3

Tot Ion: 49 Resp: 1367555
Ion Ratio Lower Upper
49 100
128 52.2 26.3 78.8
130 65.5 33.9 101.7

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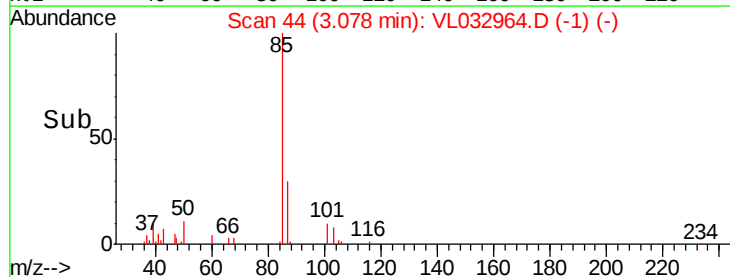
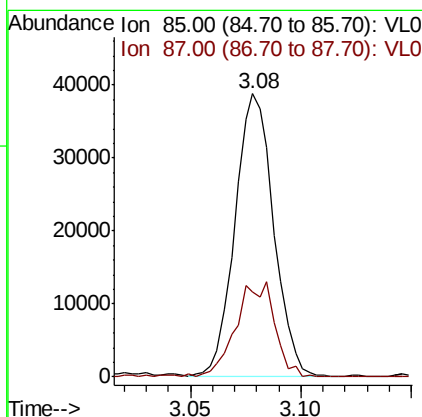
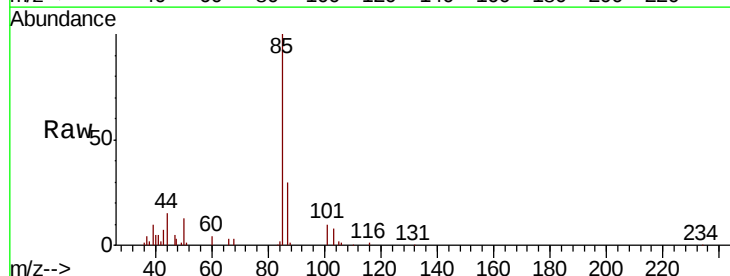
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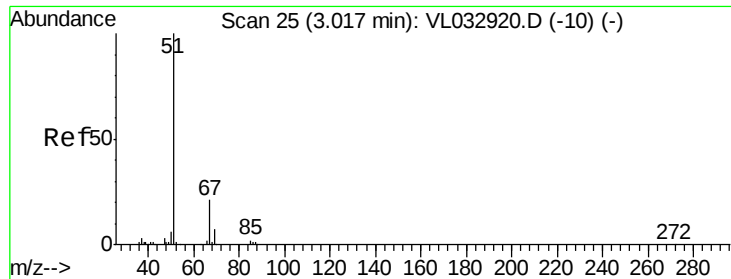


#2

Dichlorodifluoromethane
Concen: 0.259 ppbv
RT: 3.08 min Scan# 44
Delta R.T. -0.00 min
Lab File: VL032964.D
Acq: 11 Dec 2018 21:19

Tgt Ion: 85 Resp: 47341
Ion Ratio Lower Upper
85 100
87 30.1 25.7 38.5





#3

Chlorodifluoromethane

Concen: 0.314 ppbv

RT: 3.01 min Scan# 24

Delta R.T. -0.00 min

Lab File: VL032964.D

Acq: 11 Dec 2018 21:19

Instrument :

MSVOA_L

ClientSampleId :

A55G3

Tot Ion: 51 Resp: 32513

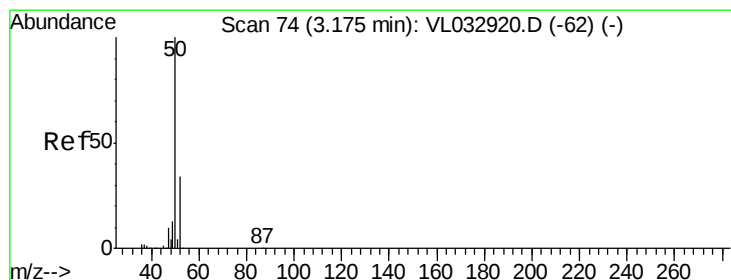
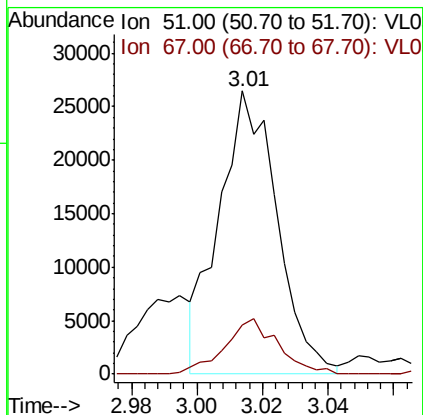
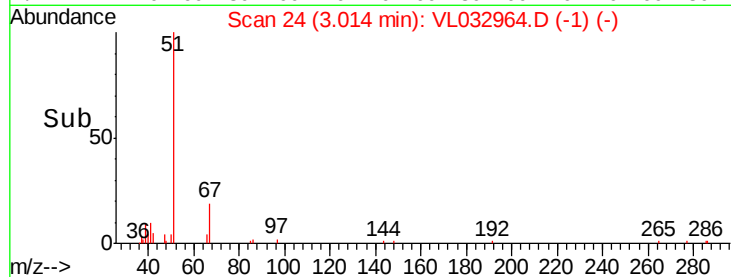
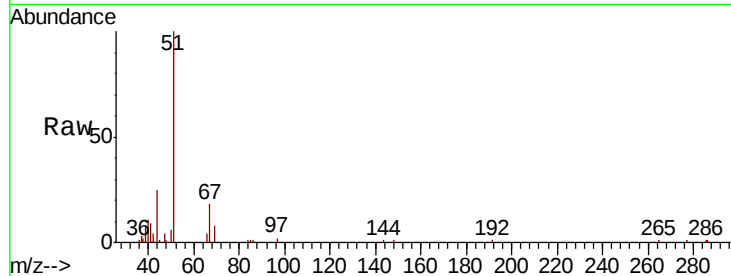
Ion Ratio Lower Upper

51 100

67 18.1 16.8 25.2

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#4

Chloromethane

Concen: 0.670 ppbv

RT: 3.17 min Scan# 73

Delta R.T. -0.00 min

Lab File: VL032964.D

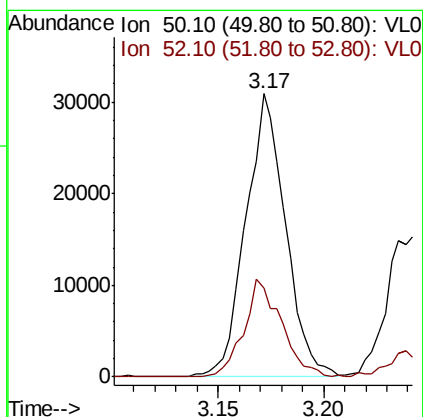
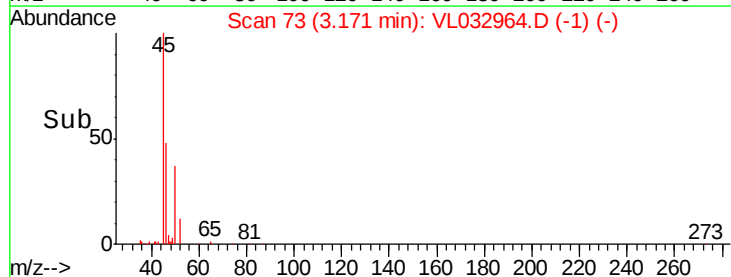
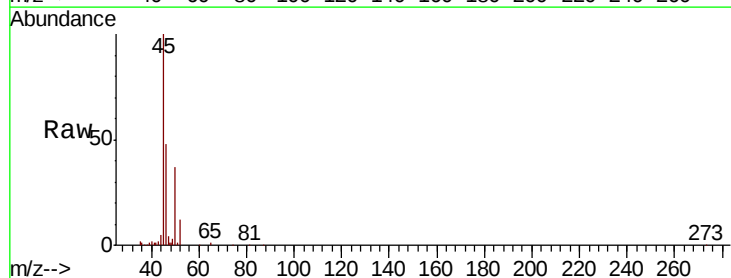
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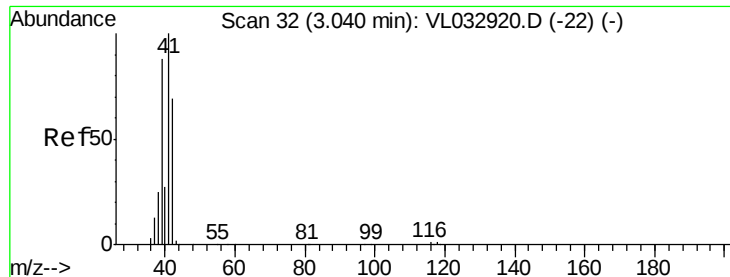
Tgt Ion: 50 Resp: 40422

Ion Ratio Lower Upper

50 100

52 31.5 27.3 40.9





#9

Propene

Concen: 7.813 ppbv m

RT: 3.04 min Scan# 33

Delta R.T. 0.00 min

Lab File: VL032964.D

Acq: 11 Dec 2018 21:19

Instrument :

MSVOA_L

ClientSampleId :

A55G3

Tot Ion: 41 Resp: 319968

Ion Ratio Lower Upper

41 100

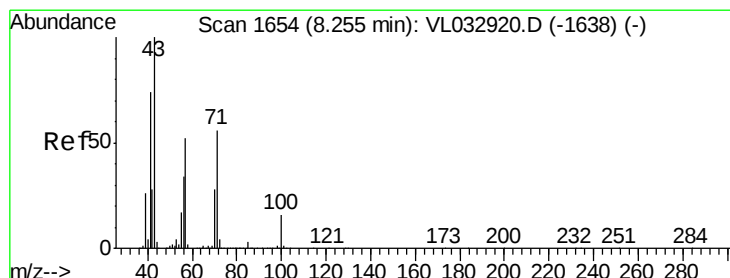
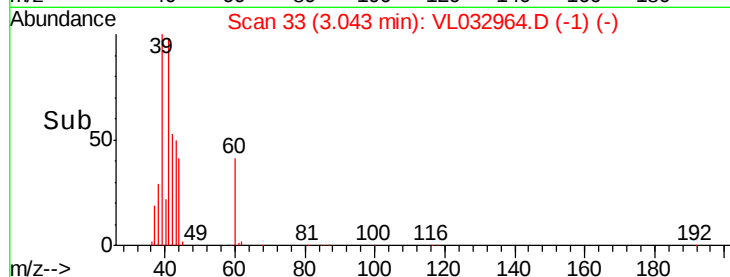
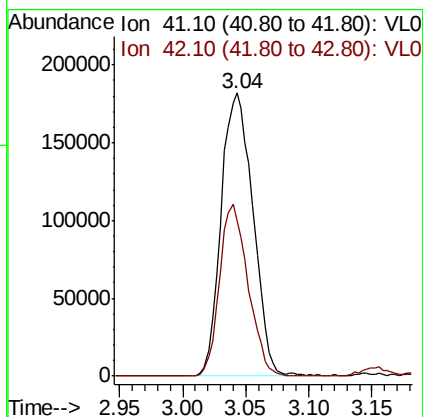
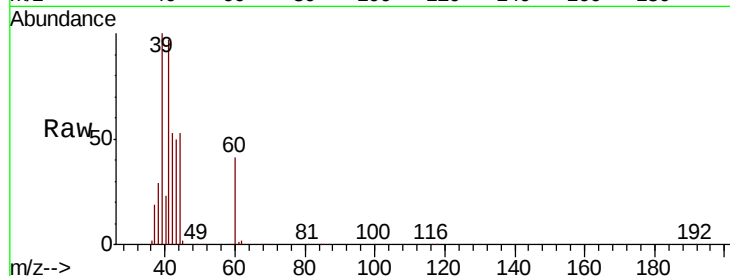
42 217.1 56.2 84.2#

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#10

Heptane

Concen: 8.908 ppbv

RT: 8.25 min Scan# 1653

Delta R.T. -0.00 min

Lab File: VL032964.D

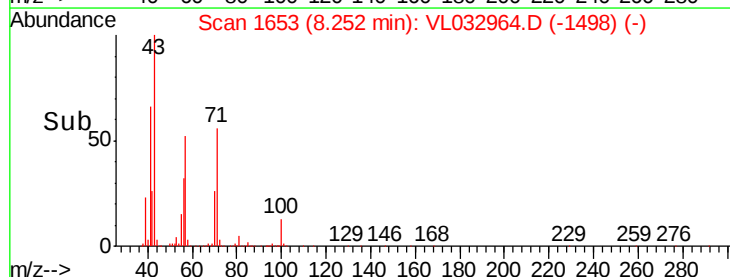
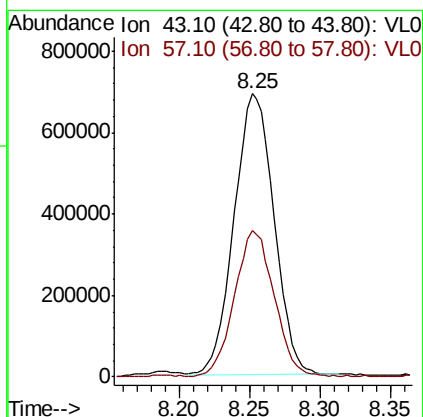
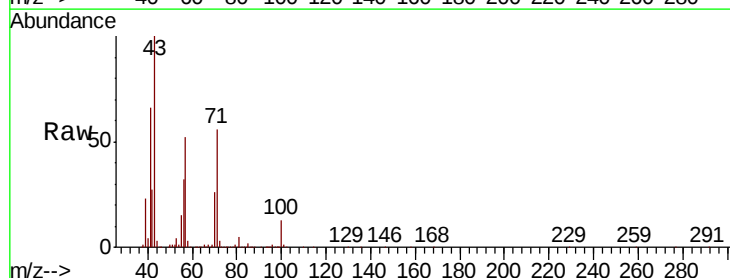
Acq: 11 Dec 2018 21:19

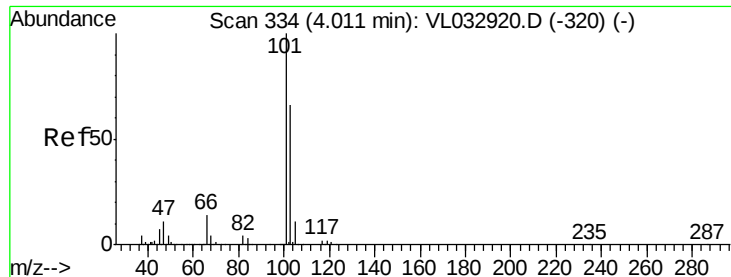
Tgt Ion: 43 Resp: 1370333

Ion Ratio Lower Upper

43 100

57 52.1 41.8 62.6





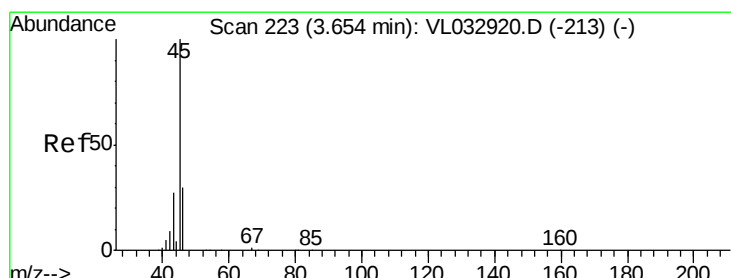
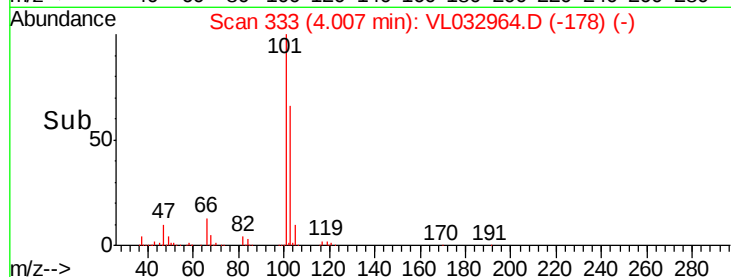
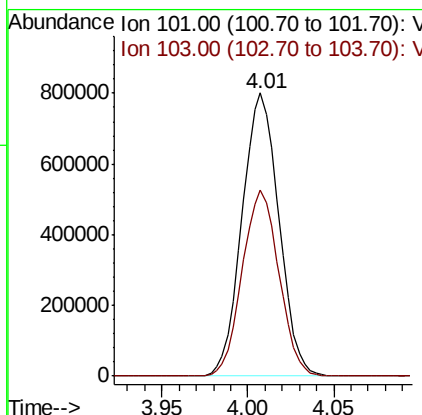
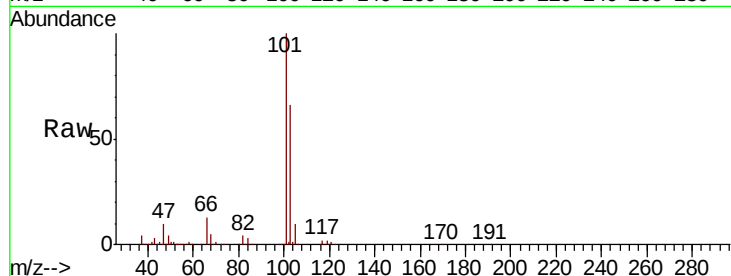
#11
Trichlorofluoromethane
Concen: 6.939 ppbv
RT: 4.01 min Scan# 333
Delta R.T. -0.00 min
Lab File: VL032964.D
Acq: 11 Dec 2018 21:19

Instrument :
MSVOA_L
ClientSampleId :
A55G3

Tot Ion:101 Resp: 1193612
Ion Ratio Lower Upper
101 100
103 65.6 52.7 79.1

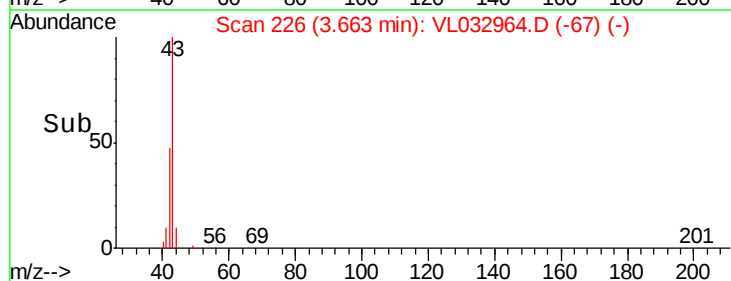
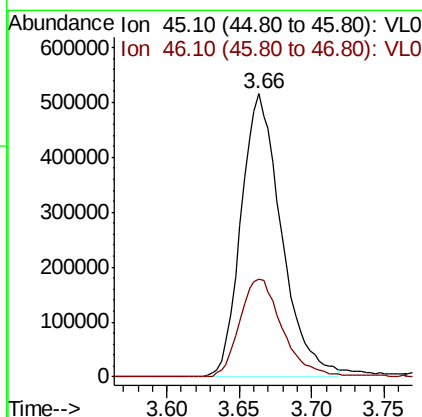
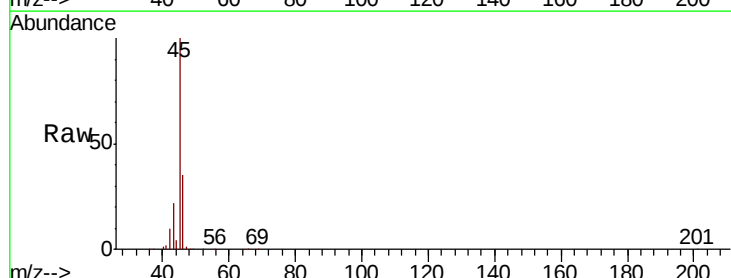
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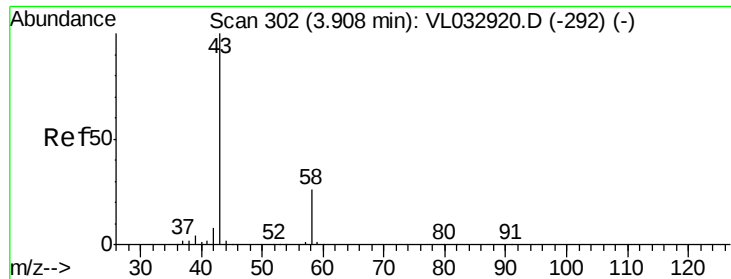
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#13
Ethanol
Concen: 70.805 ppbv
RT: 3.66 min Scan# 226
Delta R.T. 0.01 min
Lab File: VL032964.D
Acq: 11 Dec 2018 21:19

Tgt Ion: 45 Resp: 998378
Ion Ratio Lower Upper
45 100
46 37.4 13.8 55.4





#15

Acetone

Concen: 135.062 ppbv

RT: 3.90 min Scan# 300

Delta R.T. -0.01 min

Lab File: VL032964.D

Acq: 11 Dec 2018 21:19

Instrument :

MSVOA_L

ClientSampleId :

A55G3

Tot Ion: 43 Resp:15853686

Ion Ratio Lower Upper

43 100

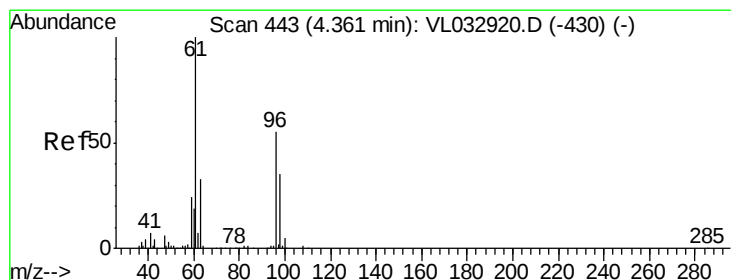
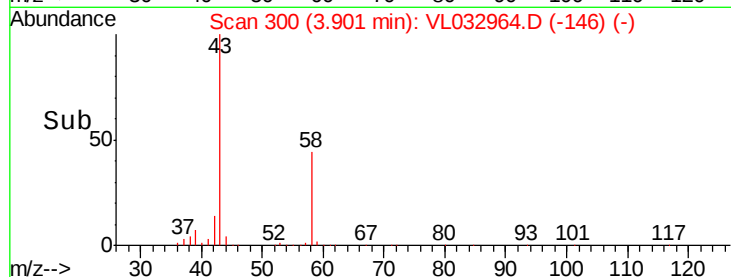
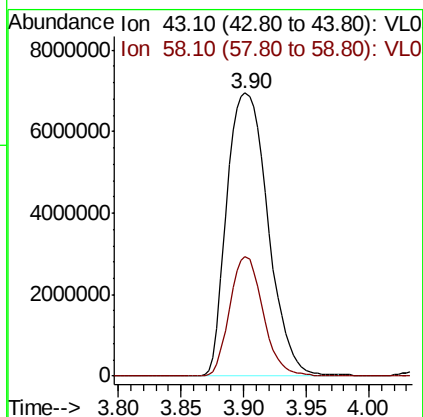
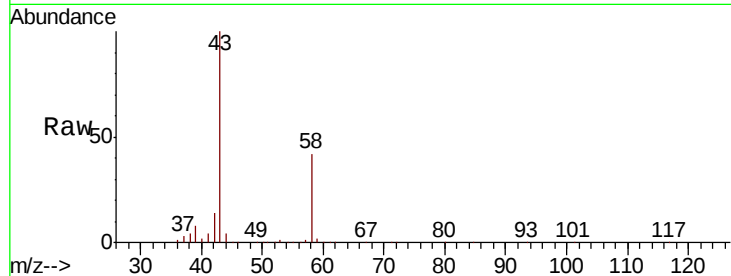
58 34.4 20.6 30.8#

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#17

tert-Butyl alcohol

Concen: 5.587 ppbv

RT: 4.37 min Scan# 447

Delta R.T. 0.01 min

Lab File: VL032964.D

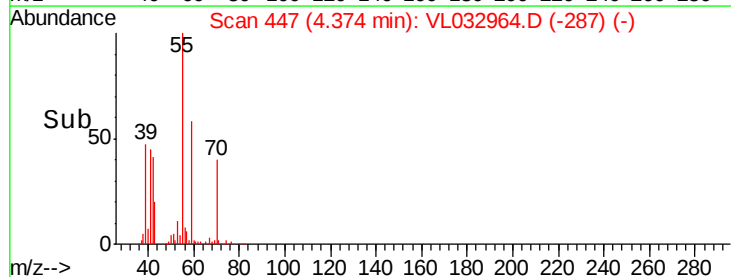
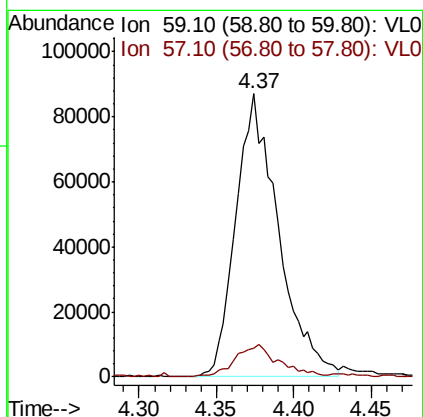
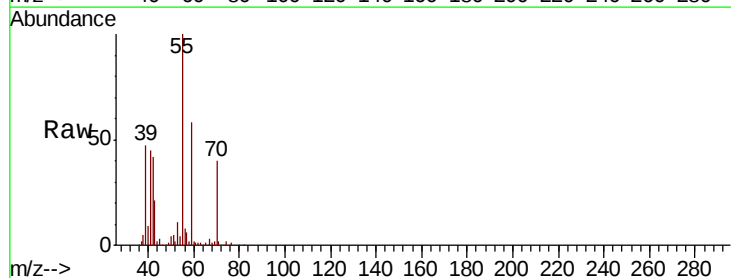
Acq: 11 Dec 2018 21:19

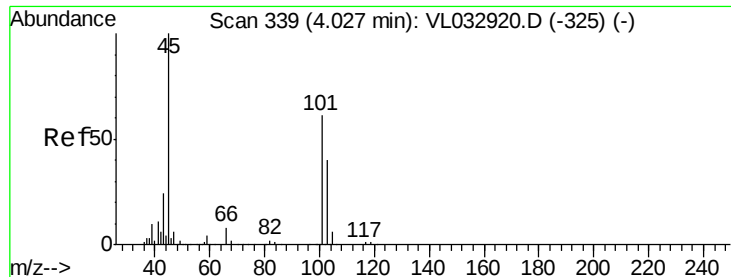
Tgt Ion: 59 Resp: 166971

Ion Ratio Lower Upper

59 100

57 0.0 0.6 1.0#





#19

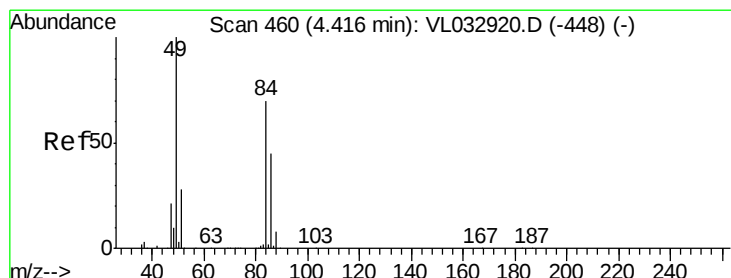
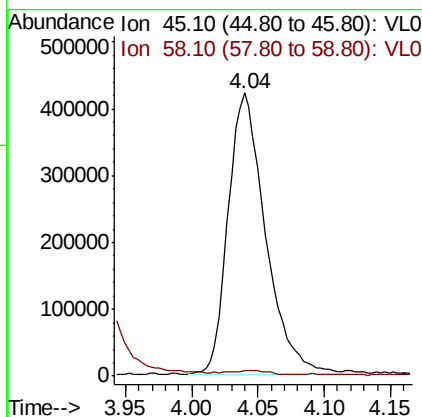
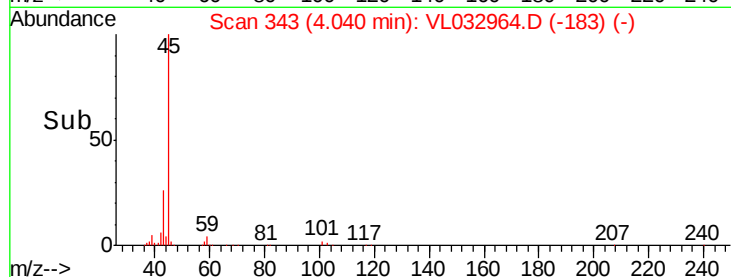
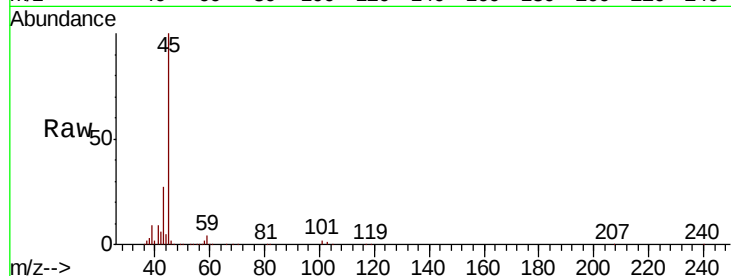
Isopropyl Alcohol
 Concen: 11.243 ppbv
 RT: 4.04 min Scan# 343
 Delta R.T. 0.01 min
 Lab File: VL032964.D
 Acq: 11 Dec 2018 21:19

Instrument :
 MSVOA_L
 ClientSampleID :
 A55G3

Tot Ion: 45 Resp: 828792
 Ion Ratio Lower Upper
 45 100
 58 0.0 1.4 2.2#

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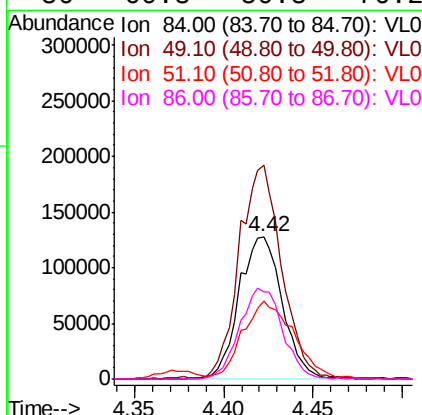
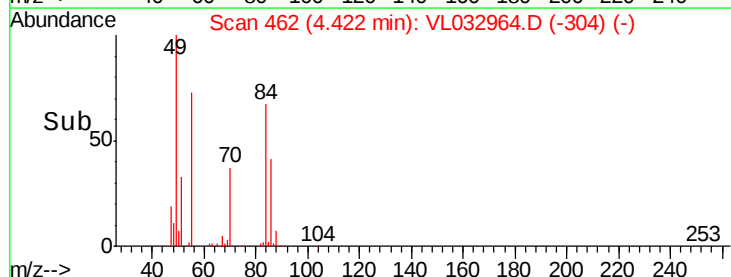
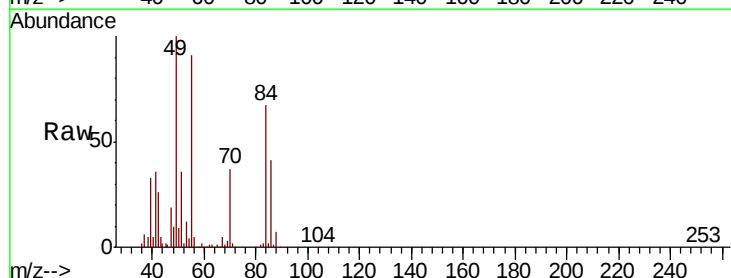
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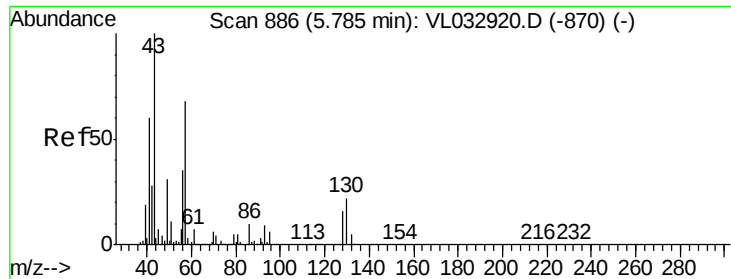


#20

Methylene Chloride
 Concen: 3.735 ppbv
 RT: 4.42 min Scan# 462
 Delta R.T. 0.01 min
 Lab File: VL032964.D
 Acq: 11 Dec 2018 21:19

Tgt Ion: 84 Resp: 214281
 Ion Ratio Lower Upper
 84 100
 49 149.4 113.8 170.8
 51 53.3 31.8 47.8#
 86 60.8 50.8 76.2





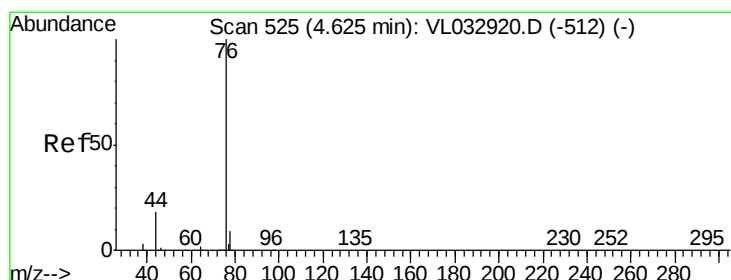
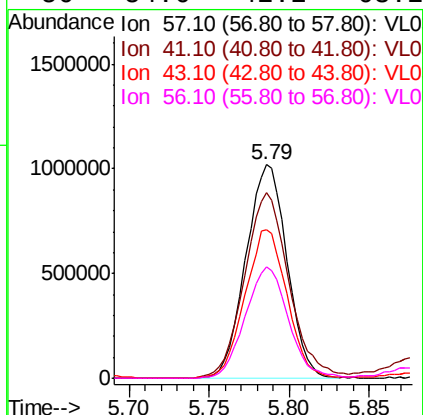
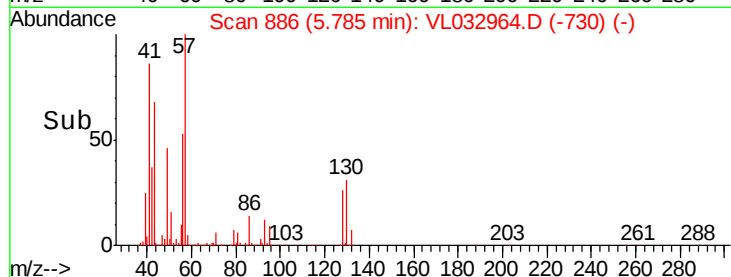
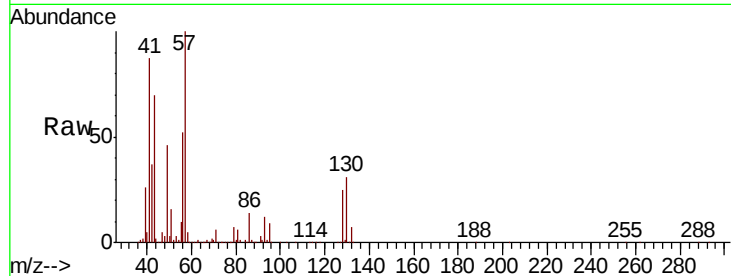
#26
Hexane
Concen: 14.044 ppbv
RT: 5.79 min Scan# 886
Delta R.T. 0.00 min
Lab File: VL032964.D
Acq: 11 Dec 2018 21:19

Instrument :
MSVOA_L
ClientSampleId :
A55G3

Tot Ion	57	Resp	1797936
Ion	Ratio	Lower	Upper
57	100		
41	94.1	72.2	108.2
43	70.9	171.9	257.9#
56	54.6	42.2	63.2

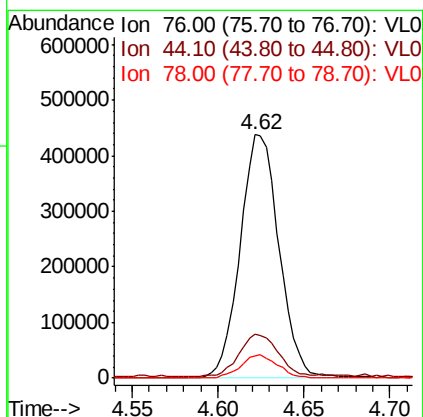
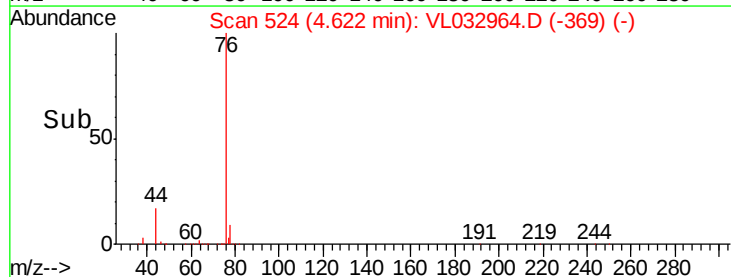
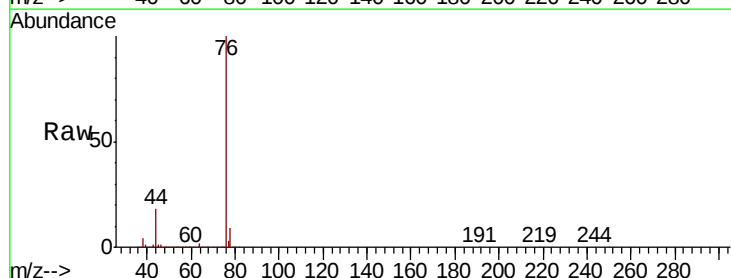
Manual Integrations
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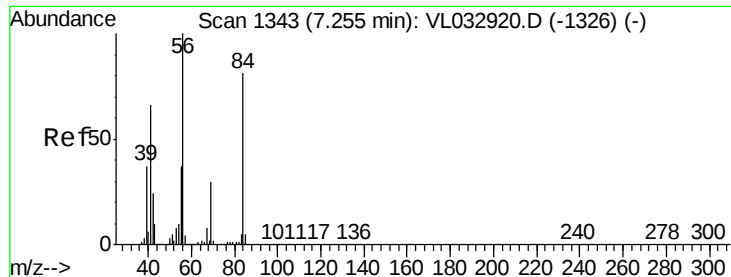
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12/13/2018 7:58:45 AM



#27
Carbon Disulfide
Concen: 4.288 ppbv
RT: 4.62 min Scan# 524
Delta R.T. -0.00 min
Lab File: VL032964.D
Acq: 11 Dec 2018 21:19

Tgt Ion	76	Resp	686413
Ion	Ratio	Lower	Upper
76	100		
44	18.2	14.7	22.1
78	9.3	7.4	11.2





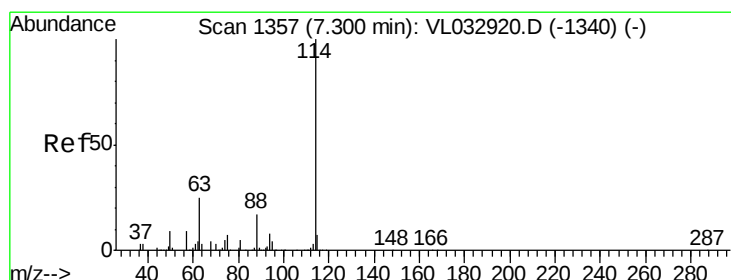
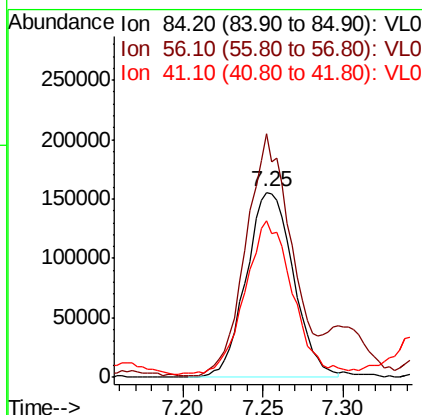
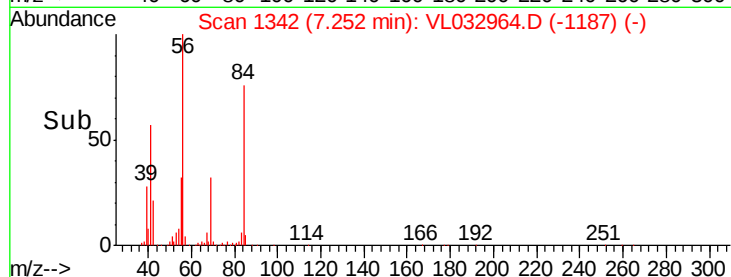
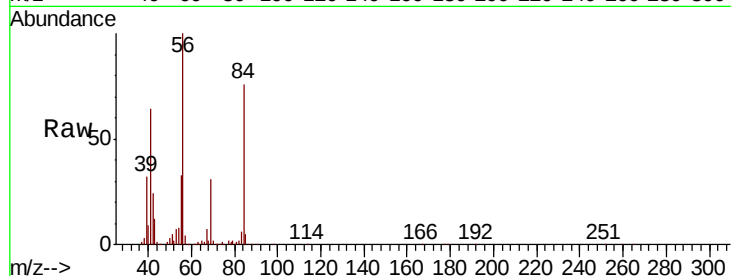
#30
Cvclohexane
Concen: 2.961 ppbv
RT: 7.25 min Scan# 1342
Delta R.T. -0.00 min
Lab File: VL032964.D
Acq: 11 Dec 2018 21:19

Instrument :
MSVOA_L
ClientSampleId :
A55G3

Tot Ion	Ratio	Lower	Upper
84	100		
56	150.9	102.5	153.7
41	87.5	64.1	96.1

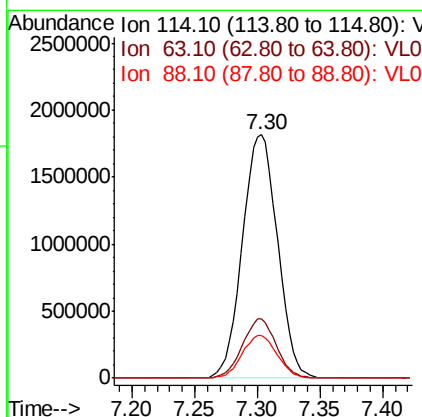
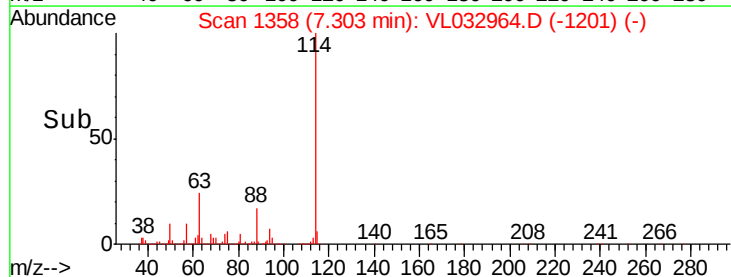
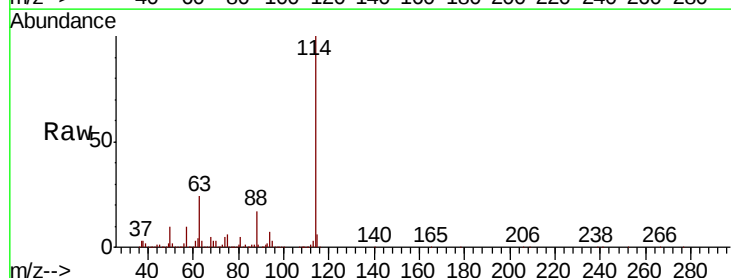
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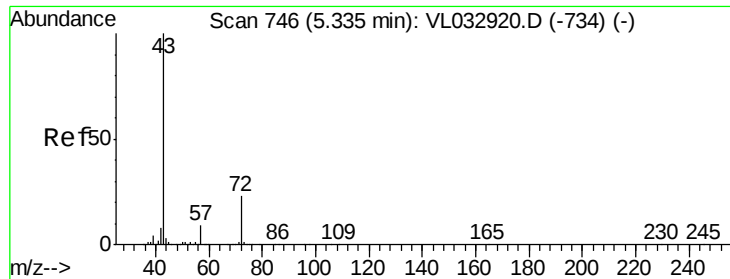
MMDadoda
12/13/2018 7:58:45 AM



#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 7.30 min Scan# 1358
Delta R.T. 0.00 min
Lab File: VL032964.D
Acq: 11 Dec 2018 21:19

Tgt Ion	Ratio	Lower	Upper
114	100		
63	23.8	20.1	30.1
88	17.4	14.2	21.4





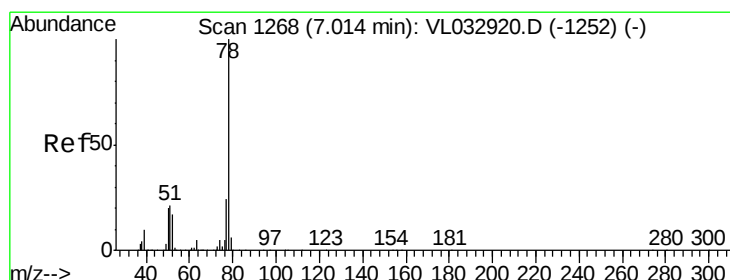
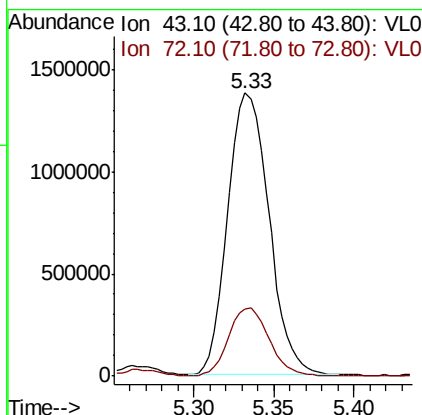
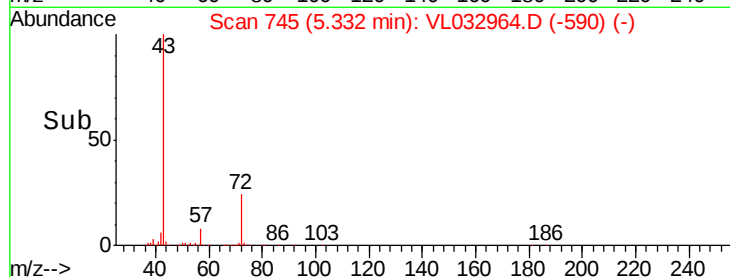
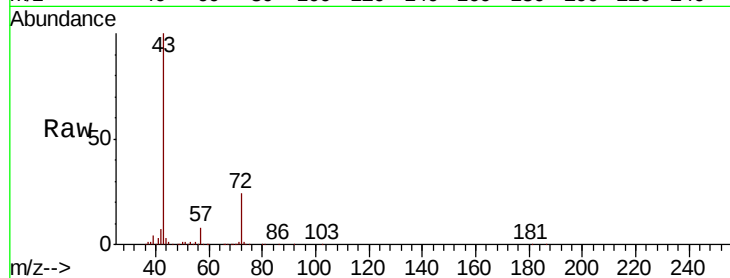
#34
2-Butanone
Concen: 15.736 ppbv
RT: 5.33 min Scan# 745
Delta R.T. -0.00 min
Lab File: VL032964.D
Acq: 11 Dec 2018 21:19

Instrument :
MSVOA_L
ClientSampled :
A55G3

Tot Ion: 43 Resp: 2424836
Ion Ratio Lower Upper
43 100
72 23.8 18.8 28.2

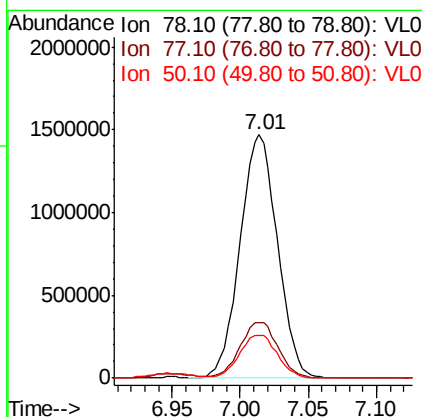
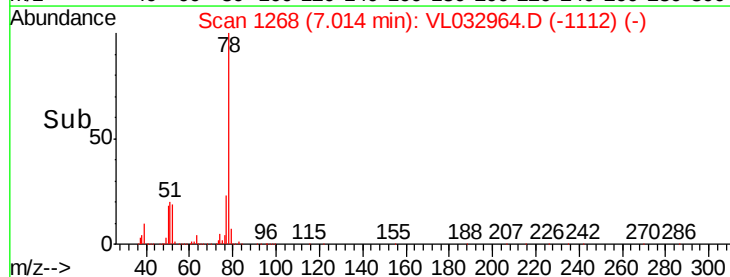
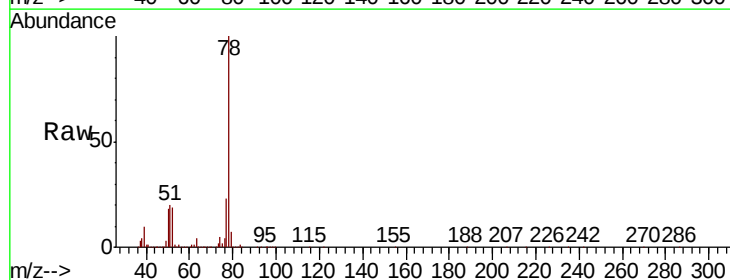
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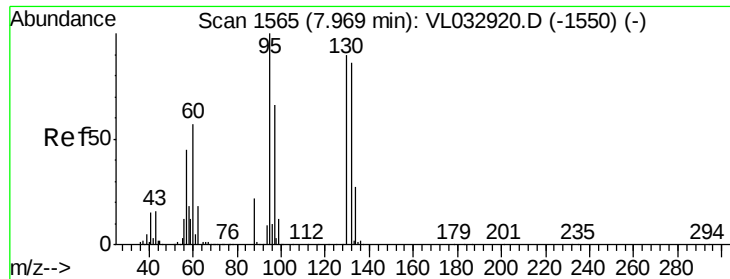
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#36
Benzene
Concen: 10.692 ppbv
RT: 7.01 min Scan# 1268
Delta R.T. 0.00 min
Lab File: VL032964.D
Acq: 11 Dec 2018 21:19

Tgt Ion: 78 Resp: 2782212
Ion Ratio Lower Upper
78 100
77 22.8 18.9 28.3
50 17.7 16.1 24.1





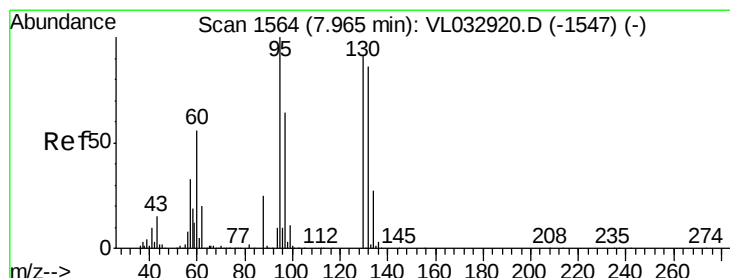
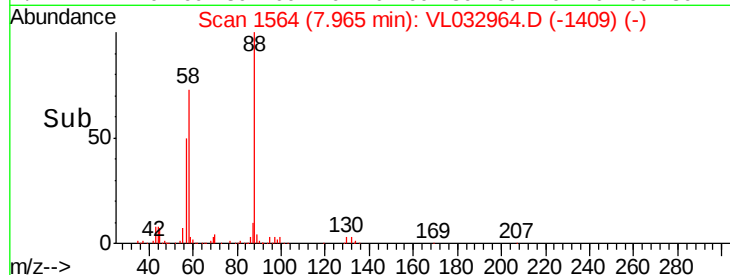
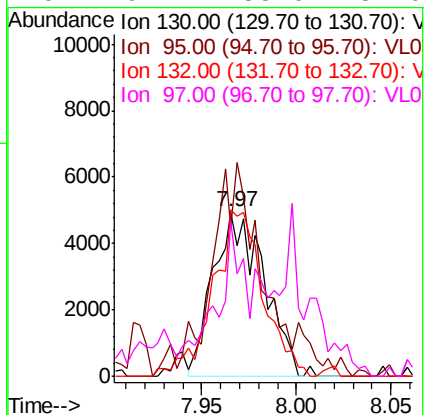
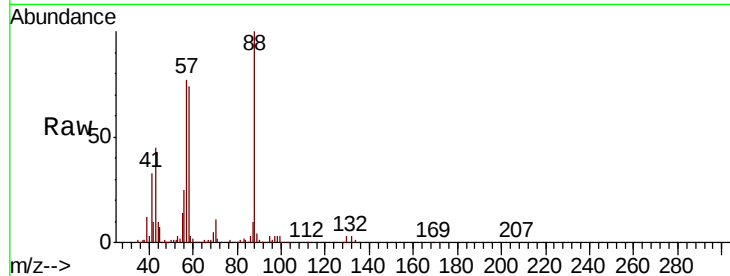
#38
 Trichloroethene
 Concen: 0.085 ppbv m
 RT: 7.97 min Scan# 1564
 Delta R.T. -0.00 min
 Lab File: VL032964.D
 Acq: 11 Dec 2018 21:19

Instrument :
 MSVOA_L
 ClientSampleId :
 A55G3

Tot Ion	Ratio	Lower	Upper
130	100		
95	90.6	88.6	132.8
132	101.6	76.1	114.1
97	94.4	58.0	87.0#

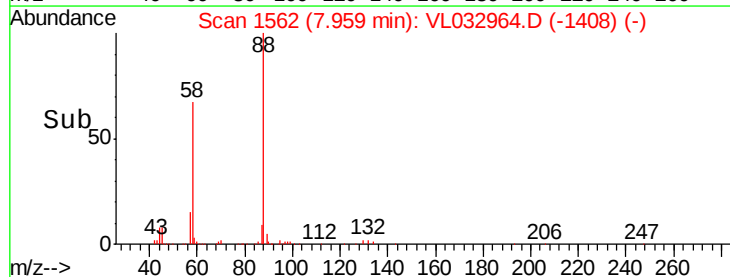
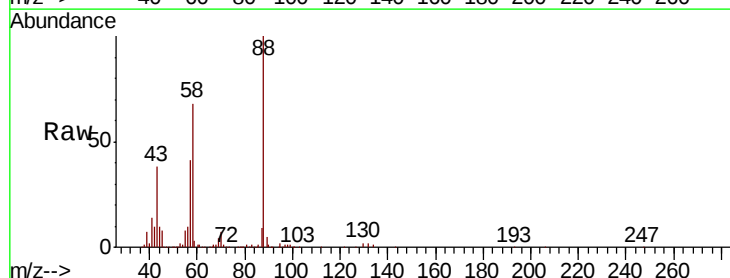
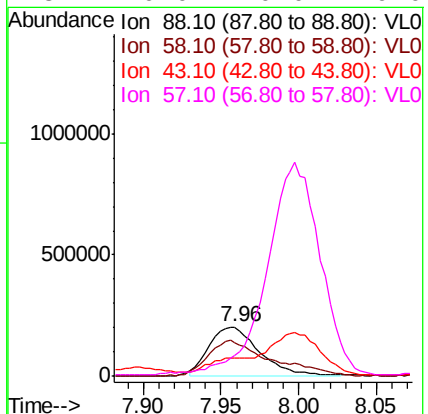
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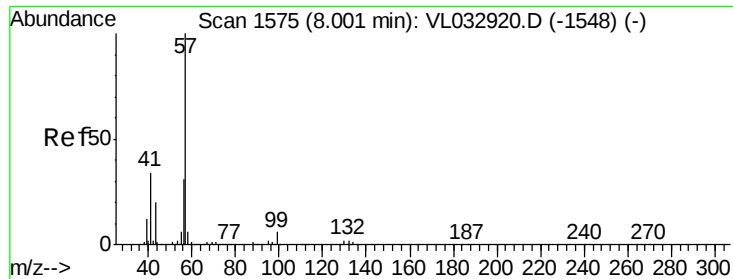
MMDadoda
 12/13/2018 7:58:45 AM



#40
 1,4-Dioxane
 Concen: 12.586 ppbv m
 RT: 7.96 min Scan# 1562
 Delta R.T. -0.01 min
 Lab File: VL032964.D
 Acq: 11 Dec 2018 21:19

Tgt Ion	Ratio	Lower	Upper
88	100		
58	0.0	107.4	161.2#
43	0.0	0.0	0.0
57	0.0	0.0	0.0





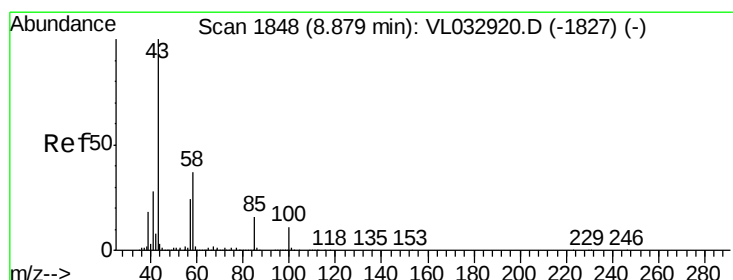
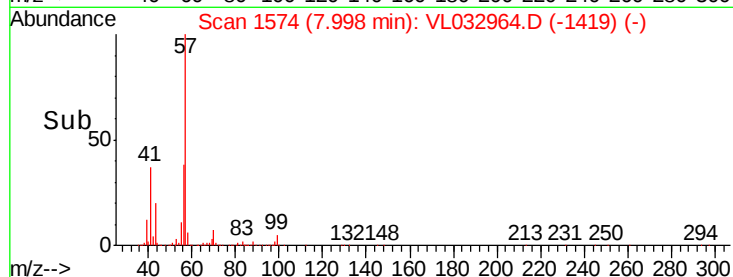
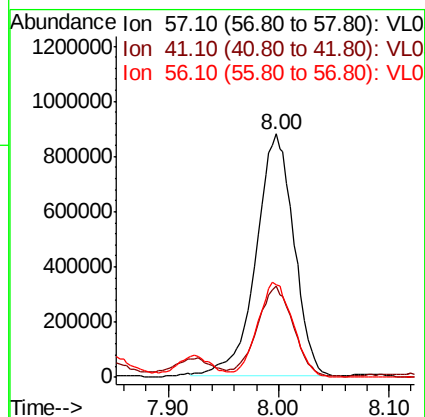
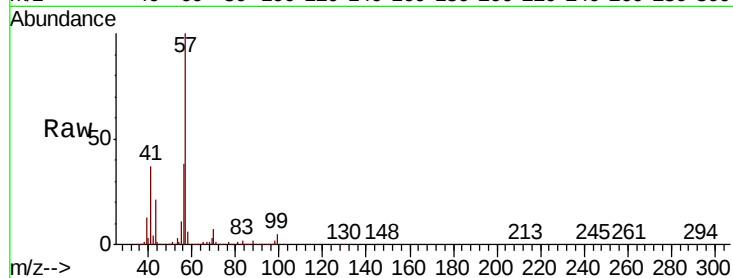
#44
 2,2,4-Trimethylpentane
 Concen: 4.705 ppbv
 RT: 8.00 min Scan# 1574
 Delta R.T. -0.00 min
 Lab File: VL032964.D
 Acq: 11 Dec 2018 21:19

Instrument :
 MSVOA_L
 ClientSampled :
 A55G3

Tot Ion	Ratio	Lower	Upper
57	100		
41	35.9	27.0	40.4
56	36.9	24.6	37.0

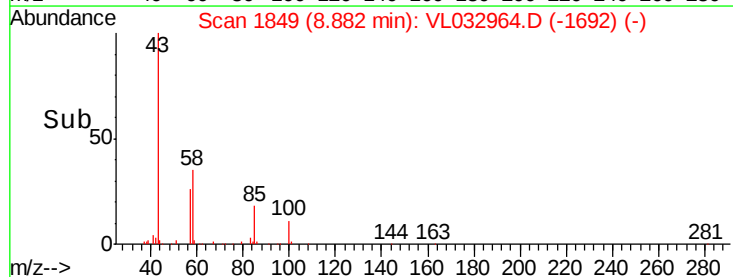
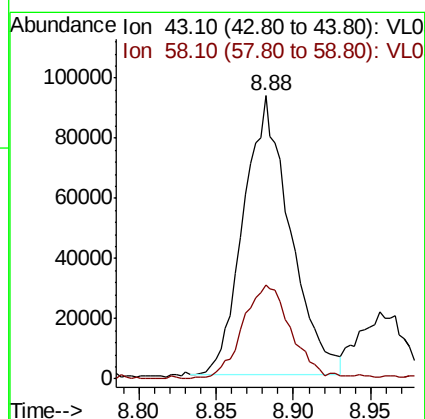
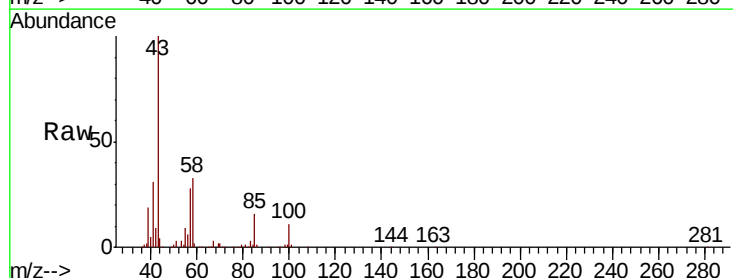
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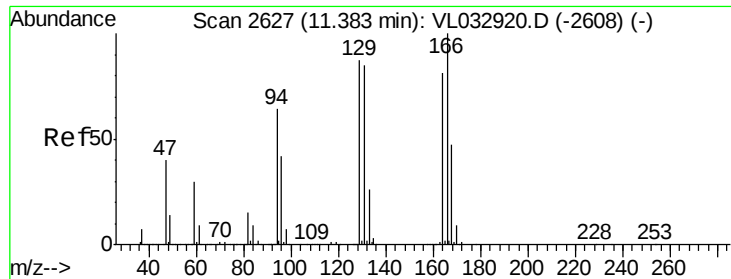
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 12/13/2018 7:58:45 AM



#50
 4-Methyl-2-Pentanone
 Concen: 0.794 ppbv
 RT: 8.88 min Scan# 1849
 Delta R.T. 0.00 min
 Lab File: VL032964.D
 Acq: 11 Dec 2018 21:19

Tgt Ion	Ratio	Lower	Upper
43	100		
58	36.5	29.0	43.4





#52

Tetrachloroethene

Concen: 0.103 ppbv m

RT: 11.38 min Scan# 2626

Delta R.T. -0.00 min

Lab File: VL032964.D

Acq: 11 Dec 2018 21:19

Instrument :

MSVOA_L

ClientSampleId :

A55G3

Tot Ion:164 Resp: 9710

Ion Ratio Lower Upper

164 100

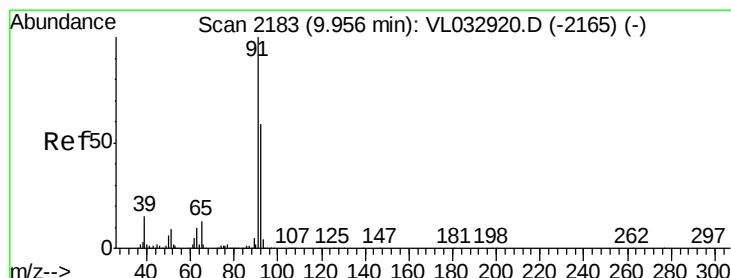
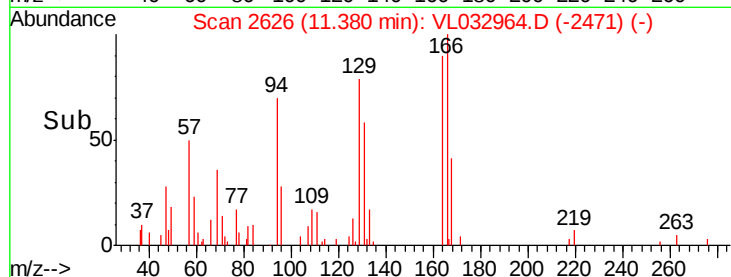
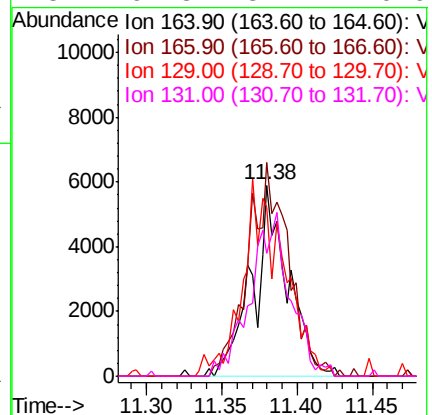
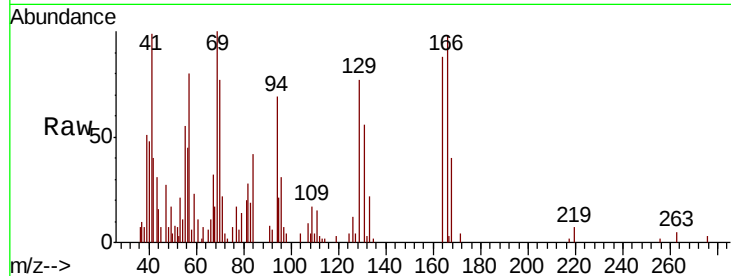
166 111.7 98.8 148.2

129 88.3 85.5 128.3

131 64.3 84.4 126.6#

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12/13/2018 7:58:45 AM



#53

Toluene

Concen: 23.021 ppbv

RT: 9.95 min Scan# 2182

Delta R.T. -0.00 min

Lab File: VL032964.D

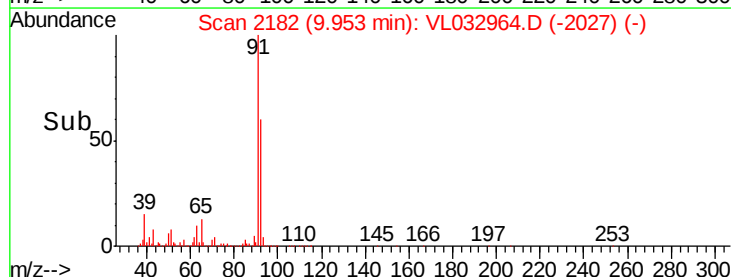
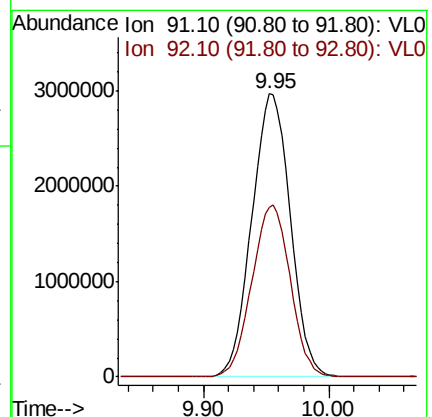
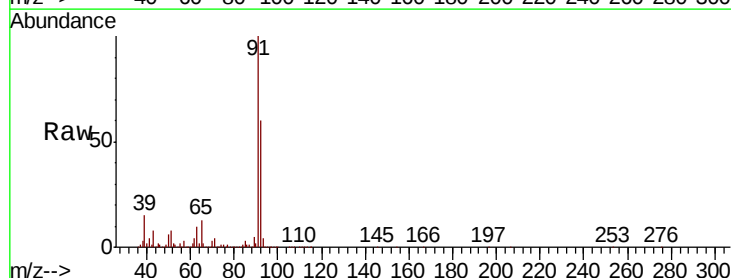
Acq: 11 Dec 2018 21:19

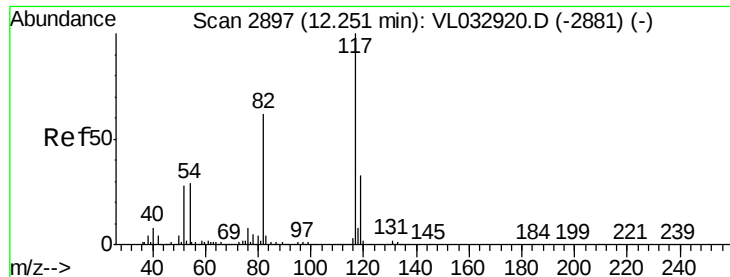
Tgt Ion: 91 Resp: 6353090

Ion Ratio Lower Upper

91 100

92 60.6 47.4 71.0





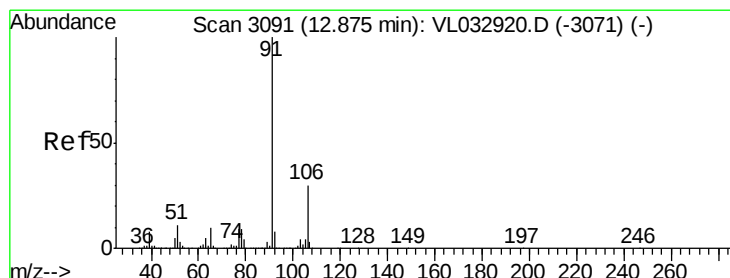
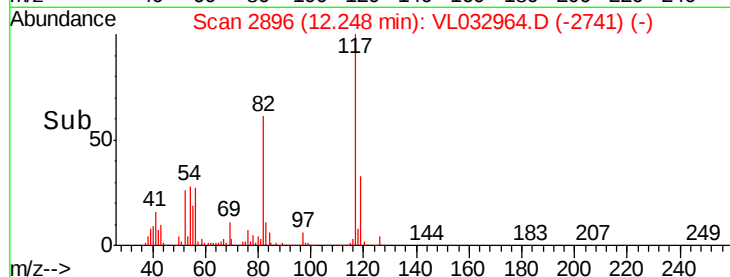
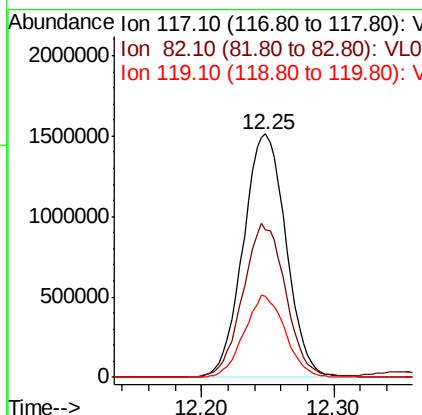
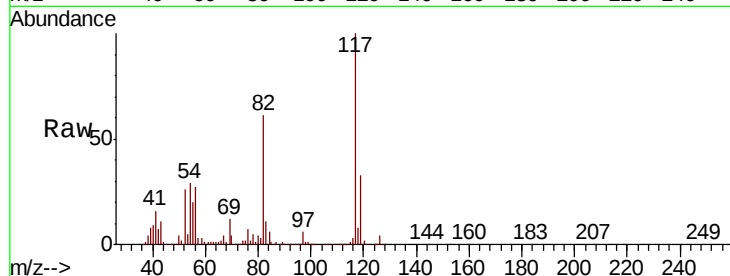
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 12.25 min Scan# 2896
Delta R.T. -0.00 min
Lab File: VL032964.D
Acq: 11 Dec 2018 21:19

Instrument :
MSVOA_L
ClientSampleId :
A55G3

Tot Ion	Ratio	Lower	Upper
117	100		
82	63.1	47.8	71.8
119	32.5	43.1	64.7#

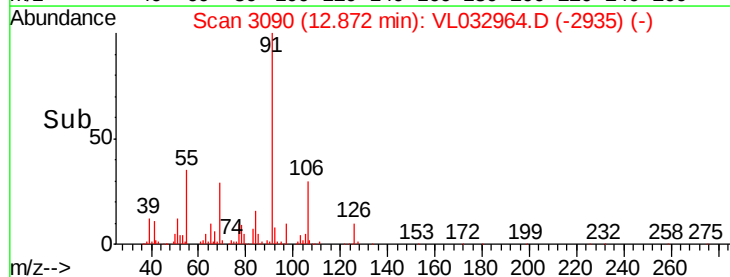
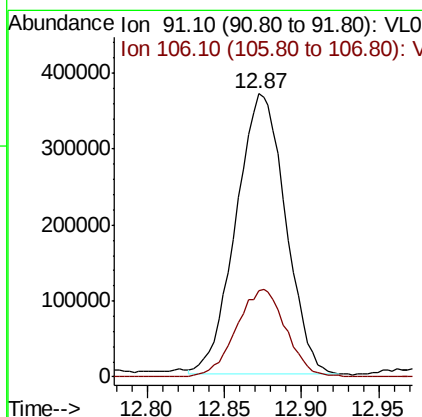
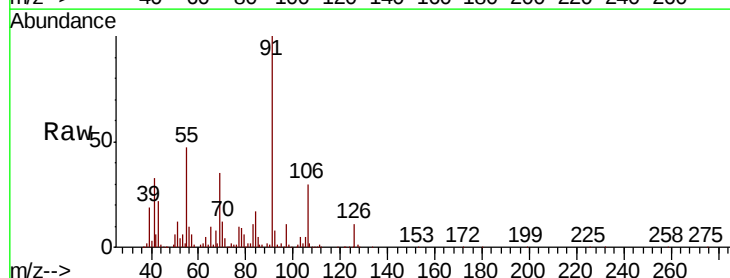
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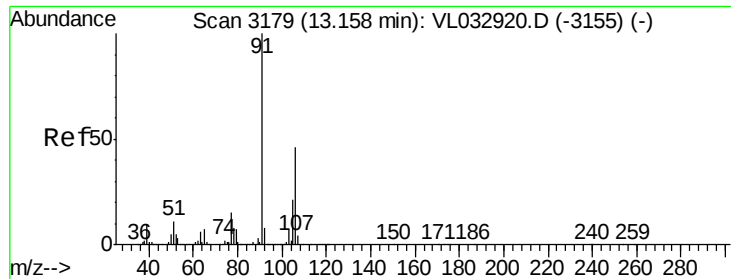
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#58
Ethyl Benzene
Concen: 2.262 ppbv
RT: 12.87 min Scan# 3090
Delta R.T. -0.00 min
Lab File: VL032964.D
Acq: 11 Dec 2018 21:19

Tgt Ion	Ratio	Lower	Upper
91	100		
106	30.3	23.9	35.9





#59

m/p-Xylene

Concen: 4.192 ppbv

RT: 13.13 min Scan# 3170

Delta R.T. -0.03 min

Lab File: VL032964.D

Acq: 11 Dec 2018 21:19

Instrument :

MSVOA_L

ClientSampleId :

A55G3

Tot Ion: 91 Resp: 1377516

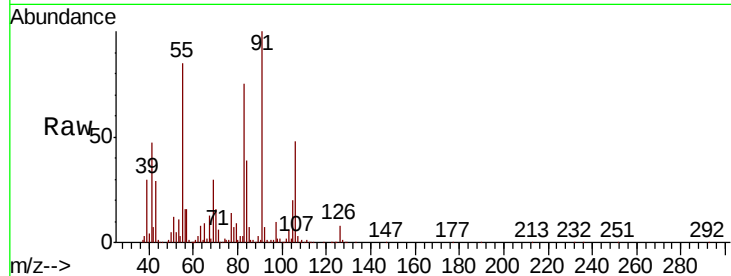
Ion Ratio Lower Upper

91 100

106 47.6 0.0 0.0#

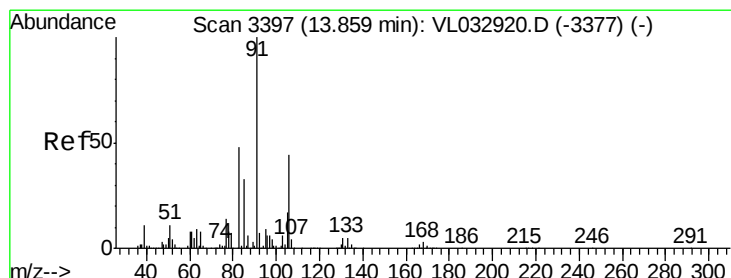
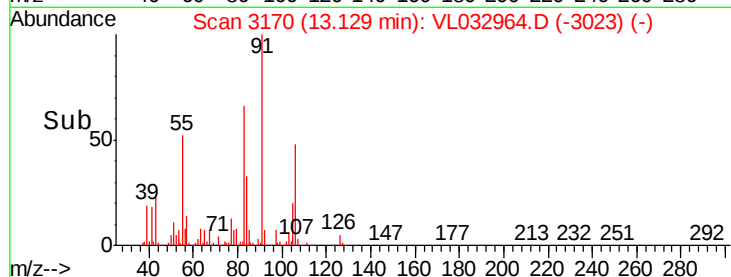
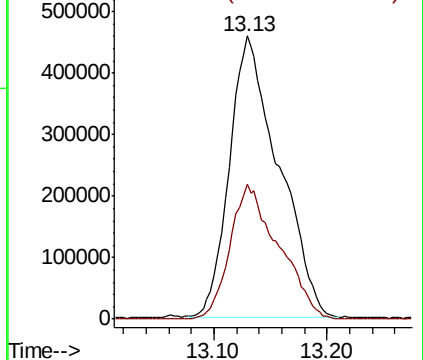
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Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 106.10 (105.80 to 106.80): V



#60

o-Xylene

Concen: 1.358 ppbv m

RT: 13.86 min Scan# 3398

Delta R.T. 0.00 min

Lab File: VL032964.D

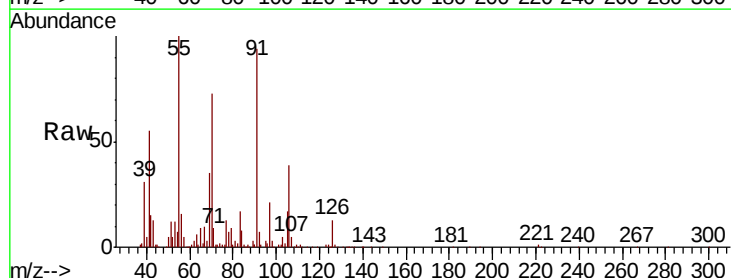
Acq: 11 Dec 2018 21:19

Tgt Ion: 91 Resp: 450474

Ion Ratio Lower Upper

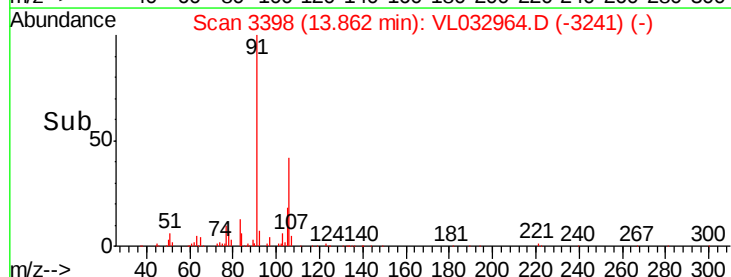
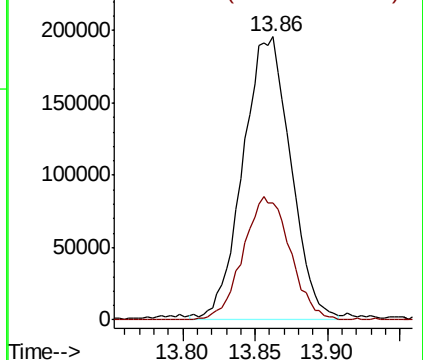
91 100

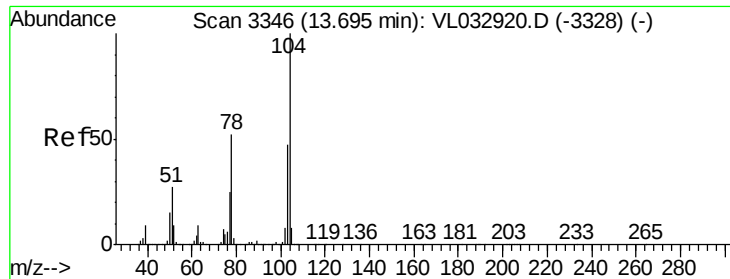
106 43.0 21.9 65.8



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 106.10 (105.80 to 106.80): V





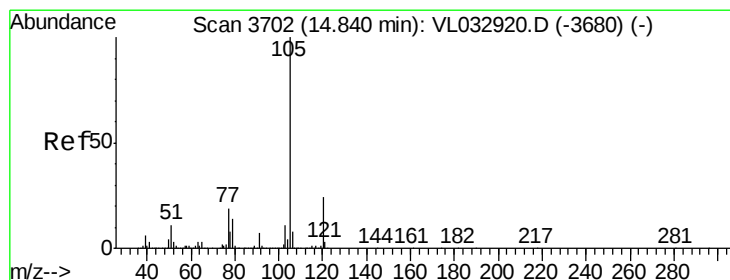
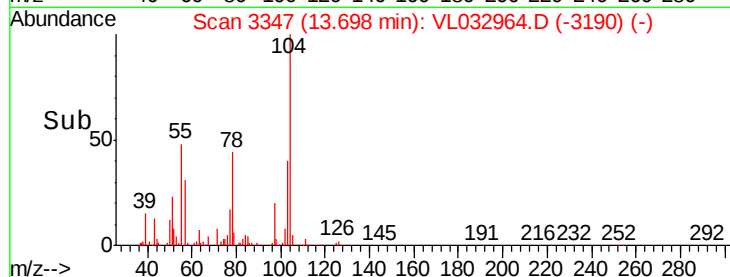
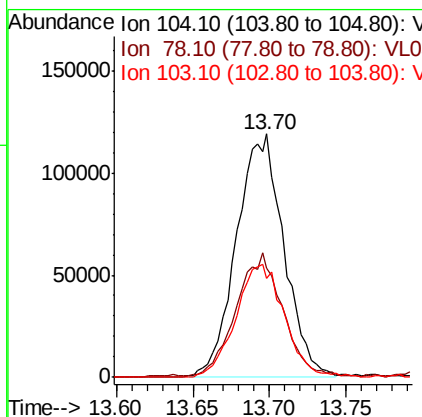
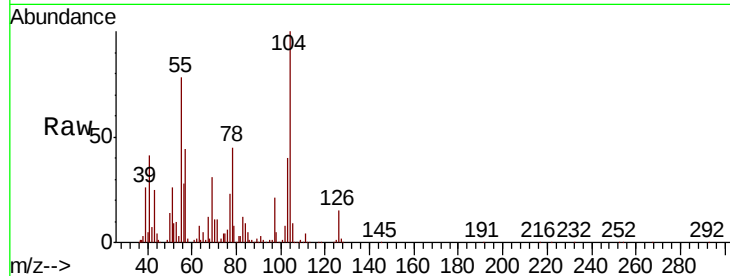
#61
Stvrene
Concen: 1.157 ppbv m
RT: 13.70 min Scan# 3347
Delta R.T. 0.00 min
Lab File: VL032964.D
Acq: 11 Dec 2018 21:19

Instrument :
MSVOA_L
ClientSampleId :
A55G3

Tot Ion	Ratio	Lower	Upper
104	100		
78	0.0	42.0	63.0#
103	0.0	38.3	57.5#

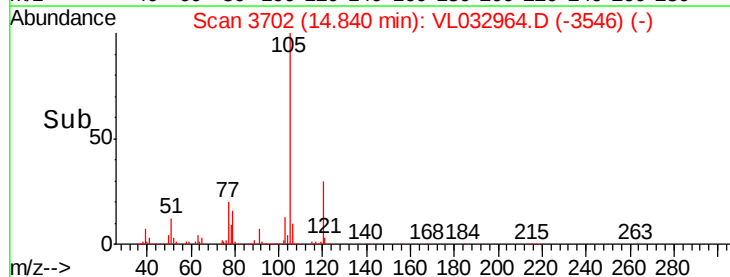
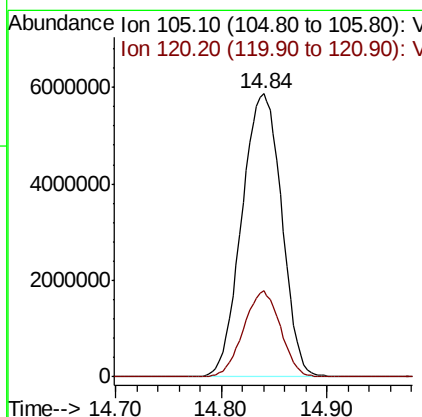
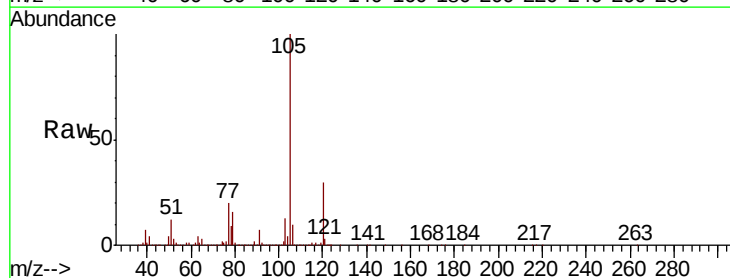
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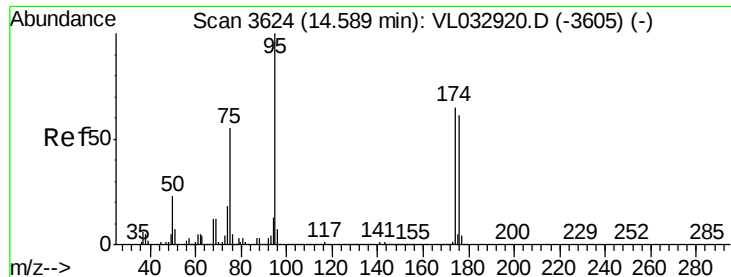
MMDadoda
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#62
Isopropylbenzene
Concen: 33.317 ppbv
RT: 14.84 min Scan# 3702
Delta R.T. 0.00 min
Lab File: VL032964.D
Acq: 11 Dec 2018 21:19

Tgt Ion	Ratio	Lower	Upper
105	100		
120	28.2	20.3	30.5





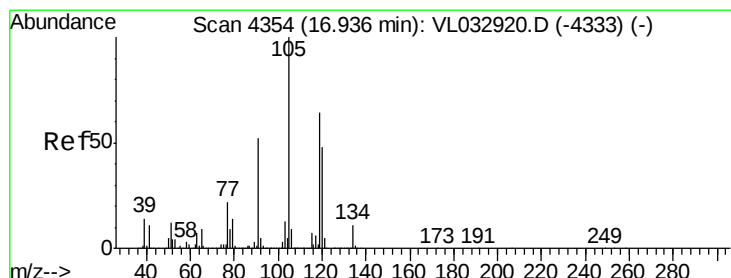
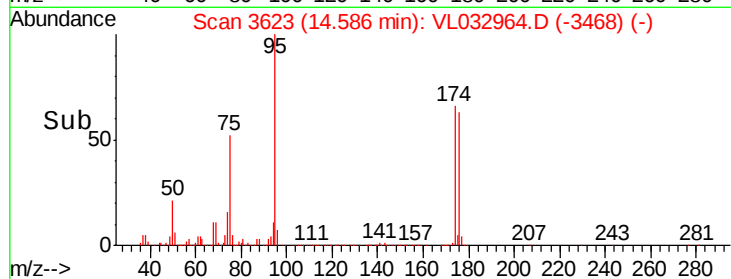
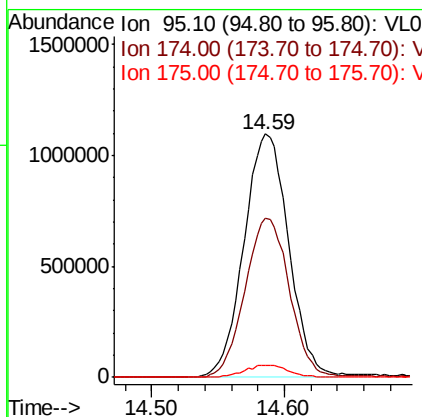
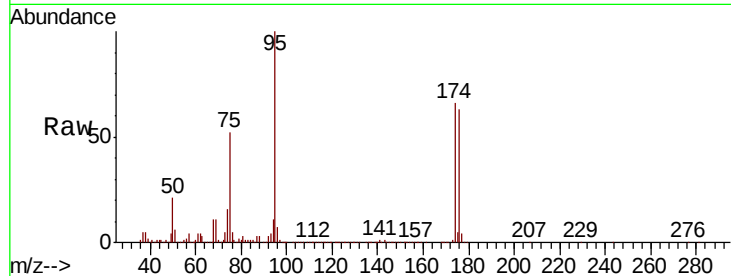
#68
 1-Bromo-4-Fluorobenzene
 Concen: 10.190 ppbv
 RT: 14.59 min Scan# 3623
 Delta R.T. -0.00 min
 Lab File: VL032964.D
 Acq: 11 Dec 2018 21:19

Instrument :
 MSVOA_L
 ClientSampled :
 A55G3

Tot Ion: 95 Resp: 2557510
 Ion Ratio Lower Upper
 95 100
 174 66.5 51.4 77.0
 175 5.0 3.8 5.6

Manual Integrations
 APPROVED

MMDadoda
 12/13/2018 7:58:45 AM



#74
 1,2,4-Trimethylbenzene
 Concen: 0.355 ppbv
 RT: 16.94 min Scan# 4354
 Delta R.T. 0.00 min
 Lab File: VL032964.D
 Acq: 11 Dec 2018 21:19

Tgt Ion: 105 Resp: 144980
 Ion Ratio Lower Upper
 105 100
 120 48.3 38.6 58.0
 91 12.0 41.7 62.5#
 77 9.0 17.4 26.2#

