

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL031819\
 Data File : VL033364.D
 Acq On : 18 Mar 2019 18:45
 Operator : SY/AP
 Sample : K1827-08
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 A-8

Manual Integrations
 APPROVED

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 3/21/2019 12:14:38 PM

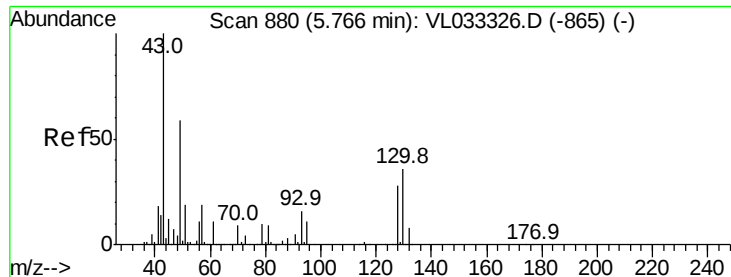
Quant Time: Mar 20 11:02:25 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL031519AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Mar 1
 QLast Update : Fri Mar 15 14:52:14 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.76	49	720832	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.29	114	1583713	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.24	117	1692349	10.00	ppbv	0.00

System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	14.58	95	1286679	10.26	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	102.60%

Target Compounds						Ovalue
2) Dichlorodifluoromethane	3.08	85	34433	0.272	ppbv	91
3) Chlorodifluoromethane	3.01	51	106231m	1.284	ppbv	
4) Chloromethane	3.17	50	30074	0.671	ppbv	96
9) Propene	3.05	41	36287m	0.983	ppbv	
10) Heptane	8.25	43	57160	0.624	ppbv	97
11) Trichlorofluoromethane	4.00	101	31109	0.246	ppbv	97
13) Ethanol	3.65	45	2086334	118.495	ppbv	99
15) Acetone	3.90	43	658946	5.881	ppbv	99
17) tert-Butyl alcohol	4.37	59	21179m	1.343	ppbv	
19) Isopropyl Alcohol	4.03	45	764370m	14.341	ppbv	
20) Methylene Chloride	4.41	84	62082m	1.699	ppbv	
26) Hexane	5.78	57	122619	1.684	ppbv	86
34) 2-Butanone	5.33	43	90236	0.868	ppbv	98
35) Carbon Tetrachloride	7.14	117	8525m	0.076	ppbv	
36) Benzene	7.00	78	33477	0.236	ppbv	97
50) 4-Methyl-2-Pentanone	8.88	43	54430	0.370	ppbv	93
52) Tetrachloroethene	11.38	164	5705m	0.097	ppbv	
53) Toluene	9.94	91	2082370	12.930	ppbv	100
58) Ethyl Benzene	12.87	91	62135	0.260	ppbv #	82
59) m/p-Xylene	13.12	91	57355m	0.279	ppbv	
60) o-Xylene	13.84	91	19582	0.098	ppbv	97

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



#1

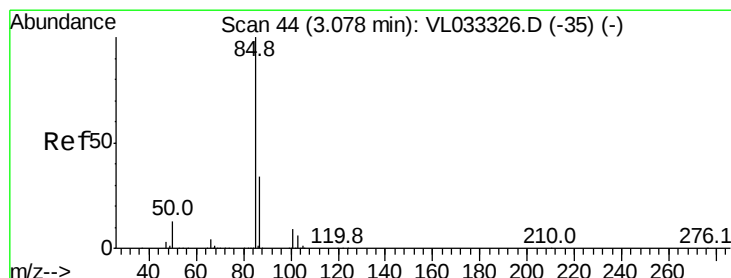
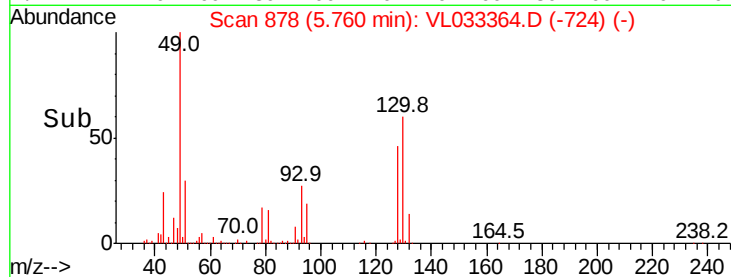
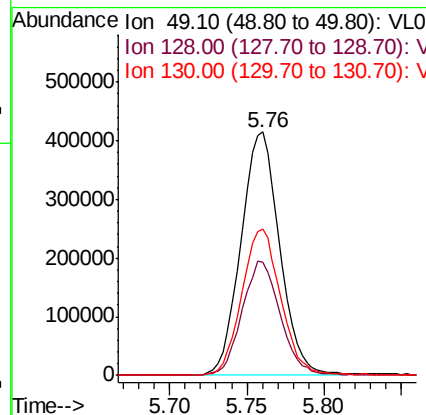
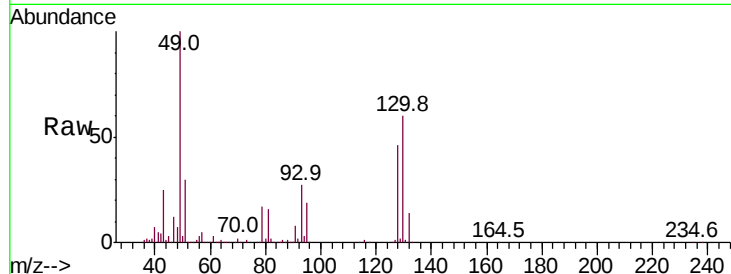
Bromochloromethane
Concen: 10.000 ppbv
RT: 5.76 min Scan# 878
Delta R.T. -0.01 min
Lab File: VL033364.D
Acq: 18 Mar 2019 18:45

Instrument :
MSVOA_L
ClientSampled :
A-8

Tot Ion	Ratio	Lower	Upper
49	100		
128	46.6	23.5	70.6
130	61.0	30.1	90.3

Manual Integrations
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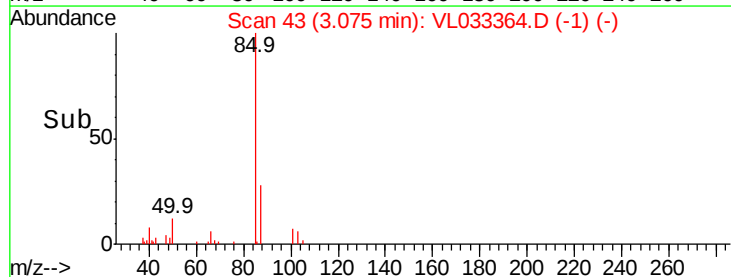
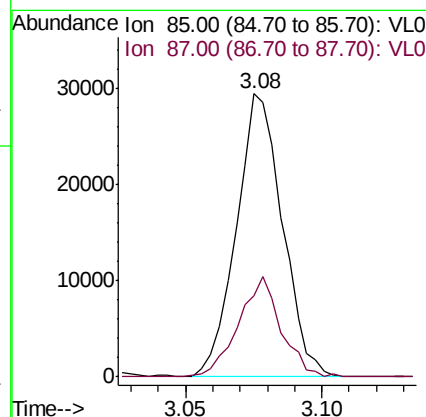
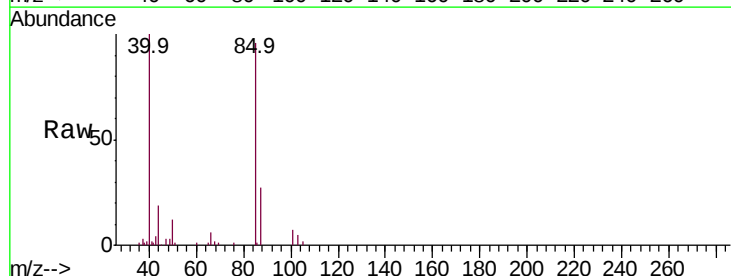
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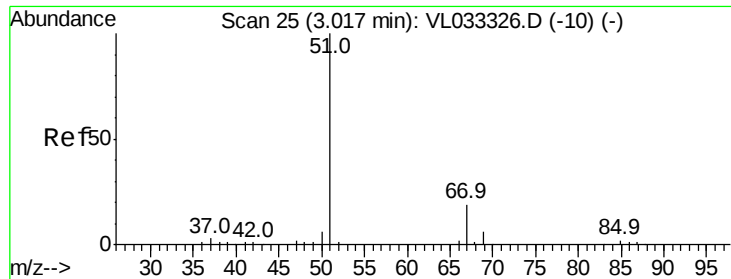


#2

Dichlorodifluoromethane
Concen: 0.272 ppbv
RT: 3.08 min Scan# 43
Delta R.T. -0.00 min
Lab File: VL033364.D
Acq: 18 Mar 2019 18:45

Tgt Ion	Ratio	Lower	Upper
85	100		
87	28.5	26.9	40.3





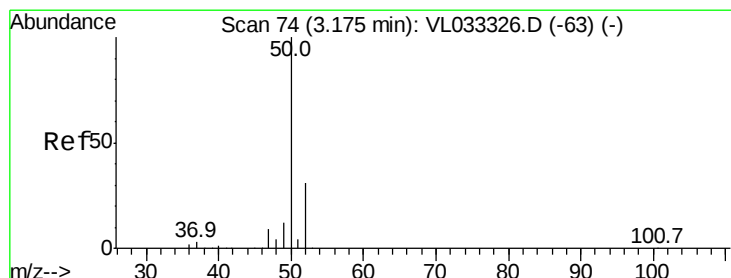
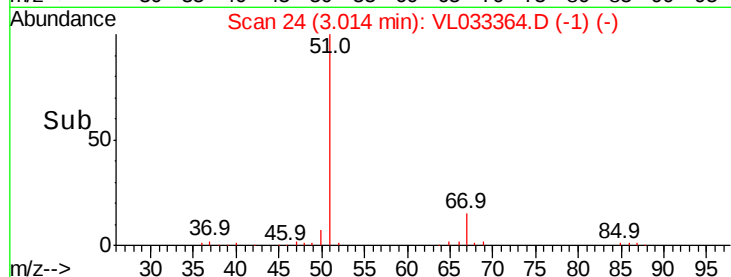
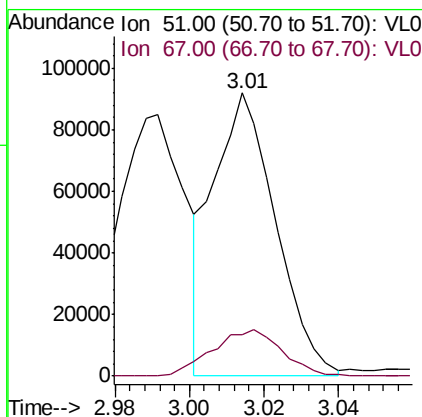
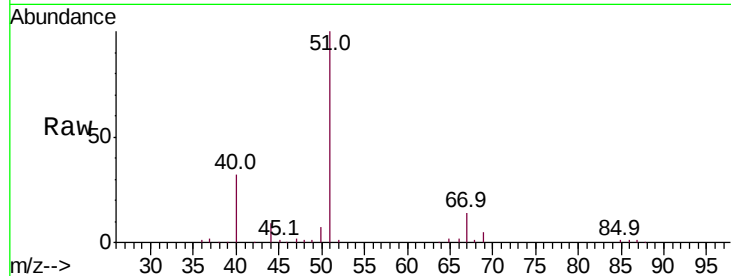
#3
Chlorodifluoromethane
Concen: 1.284 ppbv
RT: 3.01 min Scan# 24
Delta R.T. -0.00 min
Lab File: VL033364.D
Acq: 18 Mar 2019 18:45

Instrument :
MSVOA_L
ClientSampled :
A-8

Tot Ion	Ratio	Lower	Upper
51	100		
67	18.6	14.9	22.3

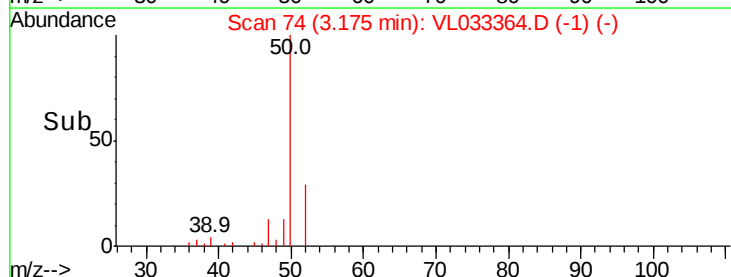
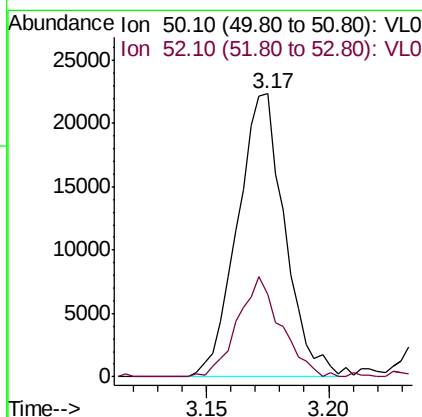
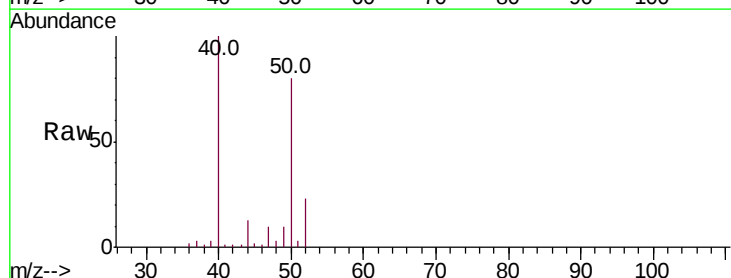
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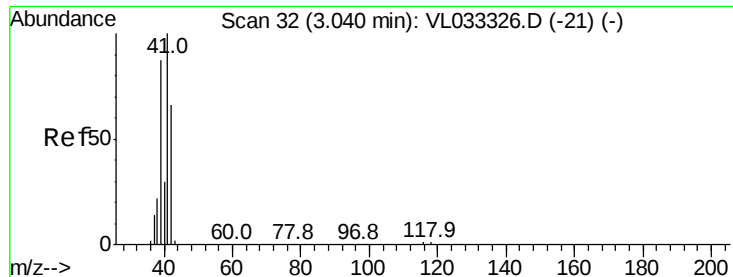
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#4
Chloromethane
Concen: 0.671 ppbv
RT: 3.17 min Scan# 74
Delta R.T. 0.00 min
Lab File: VL033364.D
Acq: 18 Mar 2019 18:45

Tgt Ion	Ratio	Lower	Upper
50	100		
52	29.1	25.0	37.6





#9

Propene

Concen: 0.983 ppbv m

RT: 3.05 min Scan# 35

Delta R.T. 0.01 min

Lab File: VL033364.D

Acq: 18 Mar 2019 18:45

Instrument :

MSVOA_L

ClientSampled :

A-8

Tot Ion: 41 Resp: 36287

Ion Ratio Lower Upper

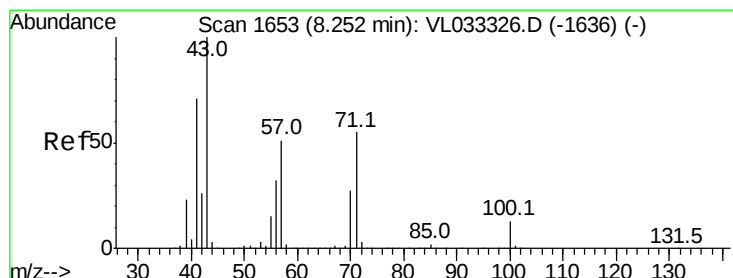
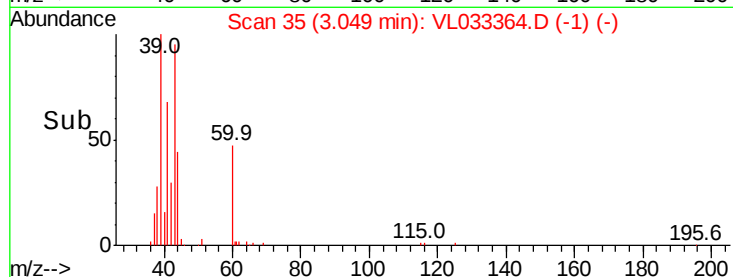
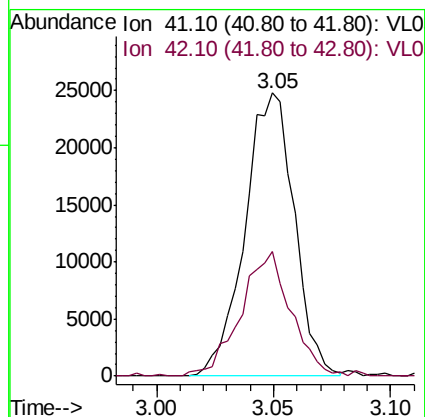
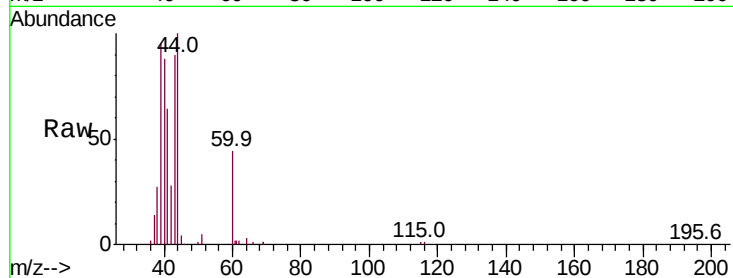
41 100

42 176.0 55.2 82.8#

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#10

Heptane

Concen: 0.624 ppbv

RT: 8.25 min Scan# 1651

Delta R.T. -0.01 min

Lab File: VL033364.D

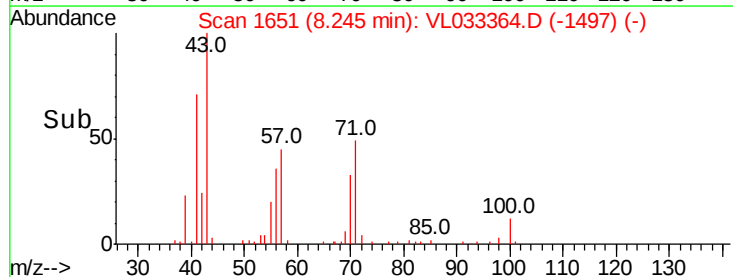
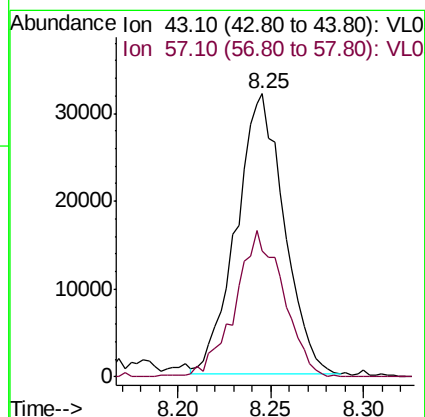
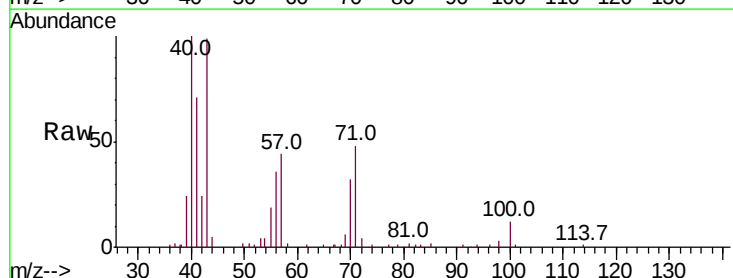
Acq: 18 Mar 2019 18:45

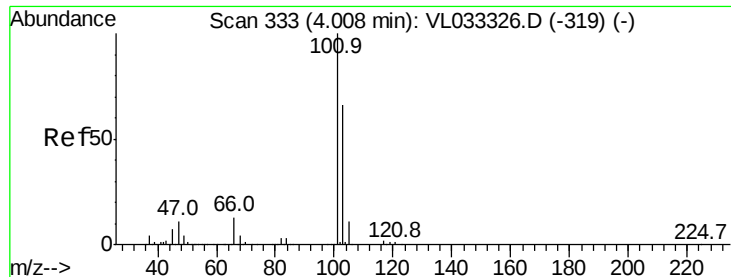
Tgt Ion: 43 Resp: 57160

Ion Ratio Lower Upper

43 100

57 52.8 40.4 60.6





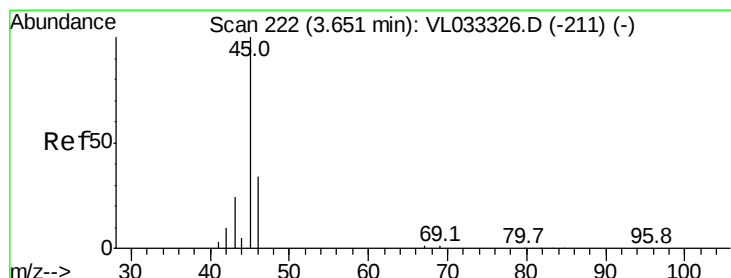
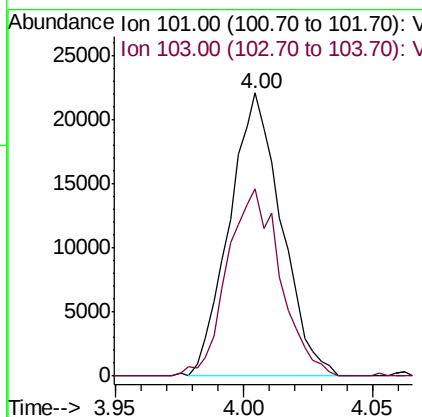
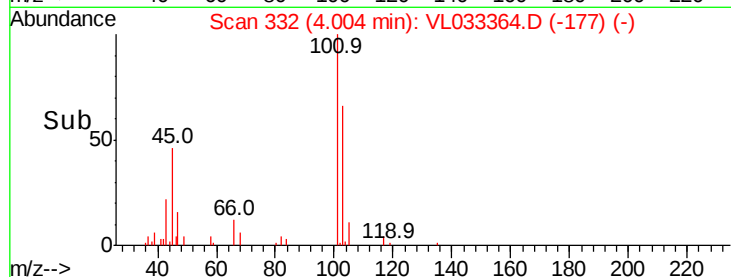
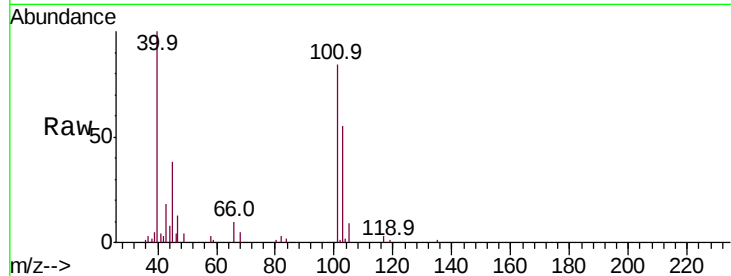
#11
 Trichlorofluoromethane
 Concen: 0.246 ppbv
 RT: 4.00 min Scan# 332
 Delta R.T. -0.00 min
 Lab File: VL033364.D
 Acq: 18 Mar 2019 18:45

Instrument :
 MSVOA_L
 ClientSampled :
 A-8

Tot Ion:101 Resp: 31109
 Ion Ratio Lower Upper
 101 100
 103 68.4 52.9 79.3

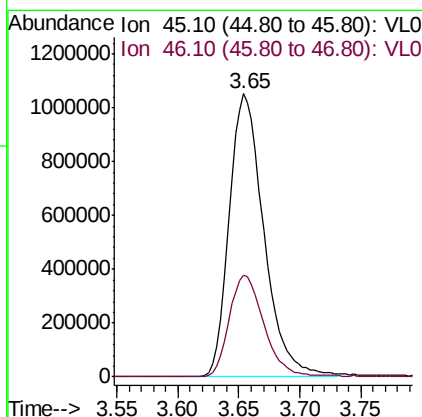
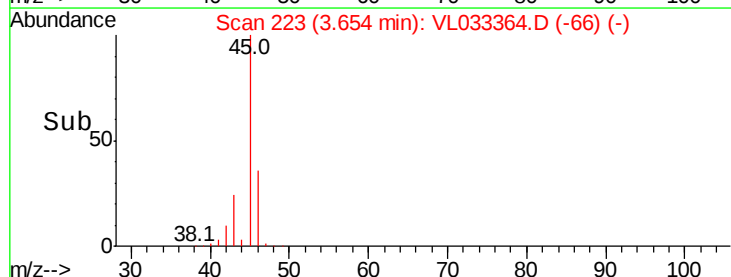
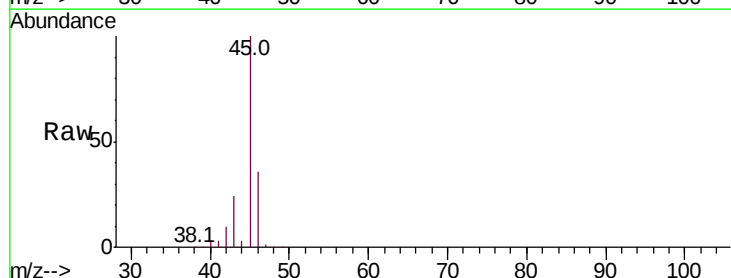
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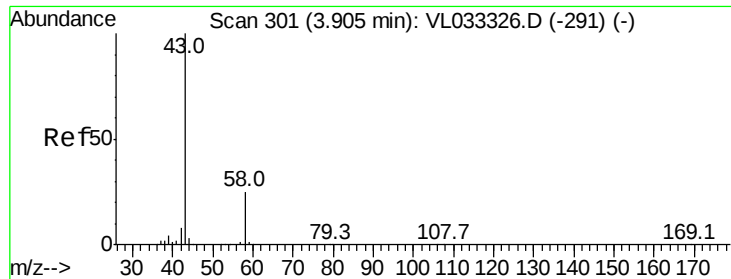
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#13
 Ethanol
 Concen: 118.495 ppbv
 RT: 3.65 min Scan# 223
 Delta R.T. 0.00 min
 Lab File: VL033364.D
 Acq: 18 Mar 2019 18:45

Tgt Ion: 45 Resp: 2086334
 Ion Ratio Lower Upper
 45 100
 46 36.5 14.9 59.7





#15

Acetone

Concen: 5.881 ppbv

RT: 3.90 min Scan# 299

Delta R.T. -0.01 min

Lab File: VL033364.D

Acq: 18 Mar 2019 18:45

Instrument :

MSVOA_L

ClientSampled :

A-8

Tot Ion: 43 Resp: 658946

Ion Ratio Lower Upper

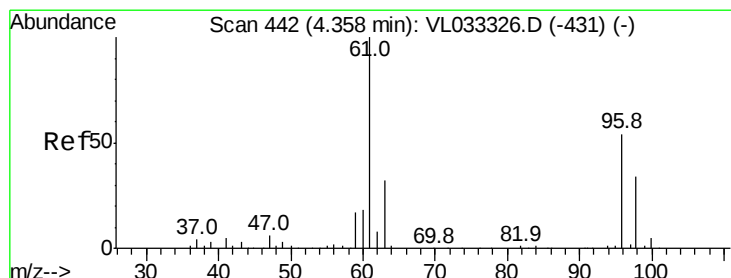
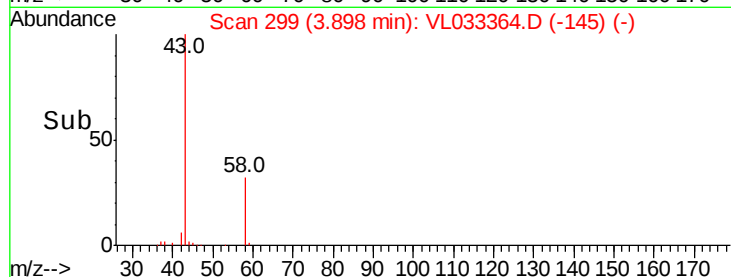
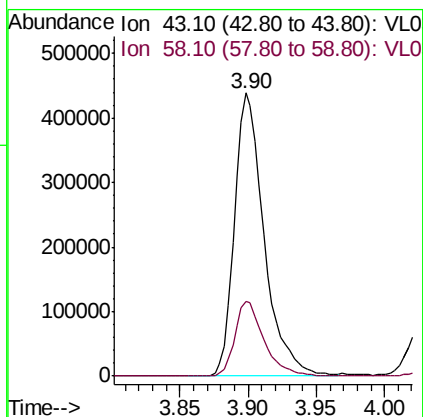
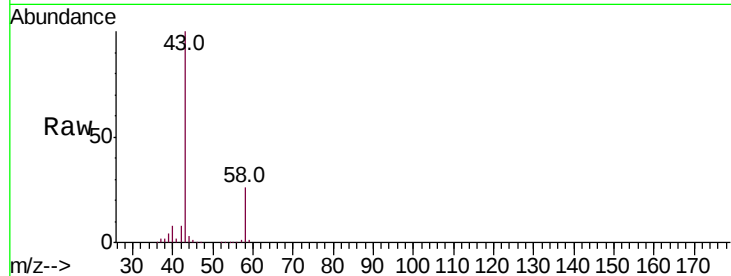
43 100

58 26.2 20.4 30.6

Manual Integrations
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#17

tert-Butyl alcohol

Concen: 1.343 ppbv m

RT: 4.37 min Scan# 446

Delta R.T. 0.01 min

Lab File: VL033364.D

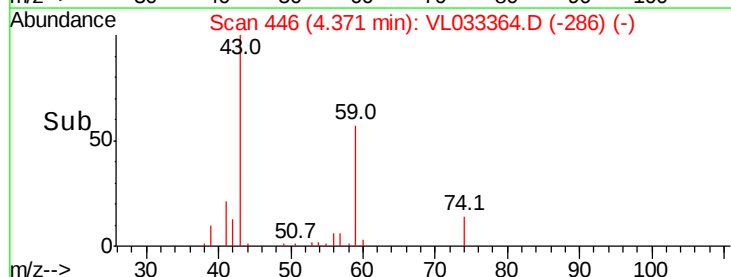
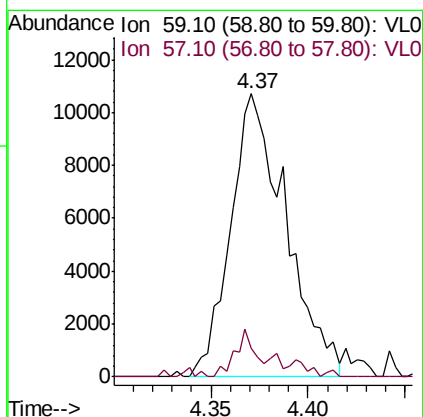
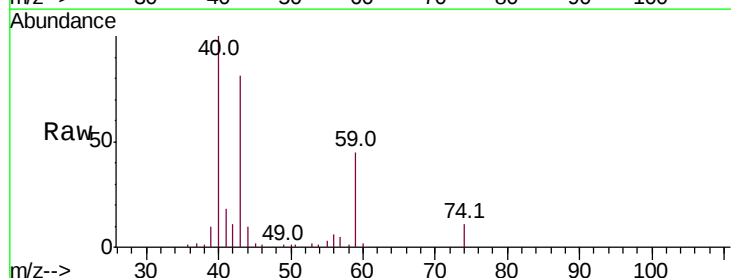
Acq: 18 Mar 2019 18:45

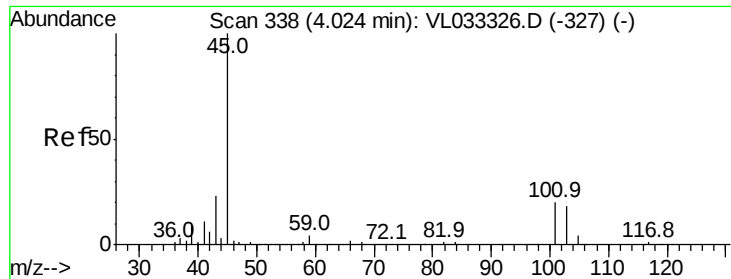
Tgt Ion: 59 Resp: 21179

Ion Ratio Lower Upper

59 100

57 11.1 7.7 11.5





#19

Isopropyl Alcohol

Concen: 14.341 ppbv m

RT: 4.03 min Scan# 340

Delta R.T. 0.01 min

Lab File: VL033364.D

Acq: 18 Mar 2019 18:45

Instrument :

MSVOA_L

ClientSampled :

A-8

Tot Ion: 45 Resp: 764370

Ion Ratio Lower Upper

45 100

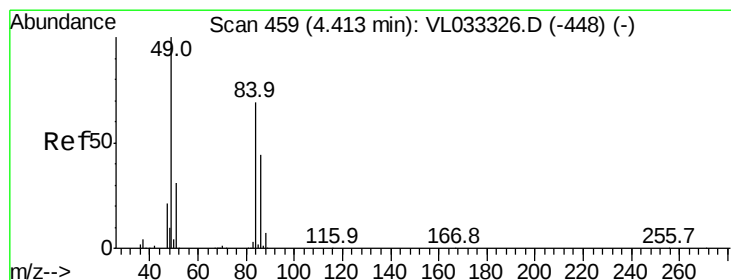
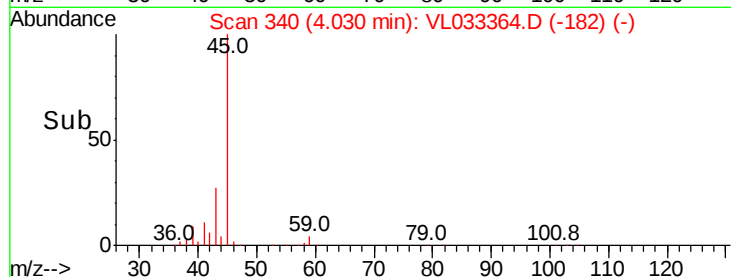
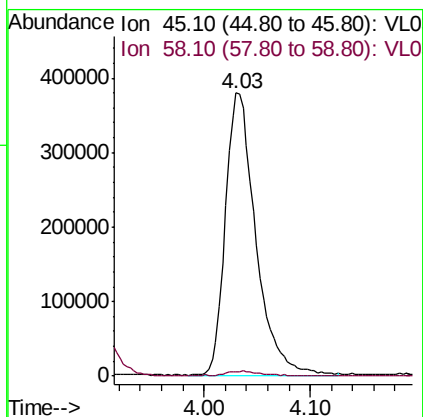
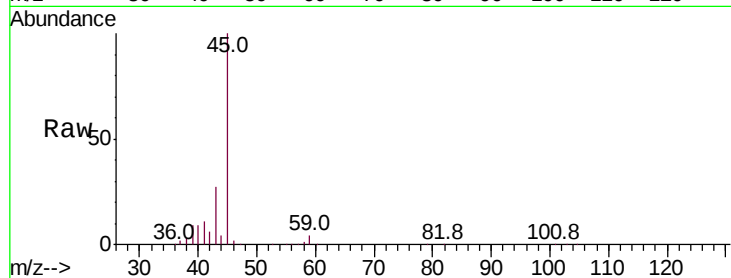
58 0.0 1.5 2.3#

Manual Integrations

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#20

Methylene Chloride

Concen: 1.699 ppbv m

RT: 4.41 min Scan# 457

Delta R.T. -0.01 min

Lab File: VL033364.D

Acq: 18 Mar 2019 18:45

Tgt Ion: 84 Resp: 62082

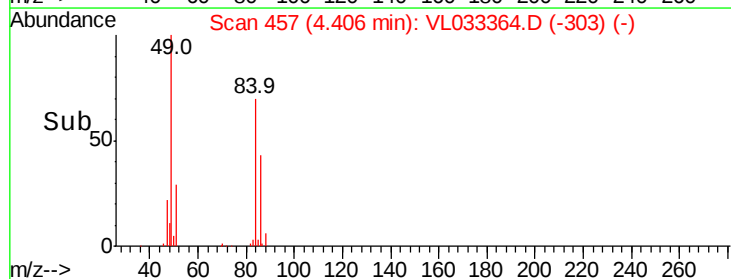
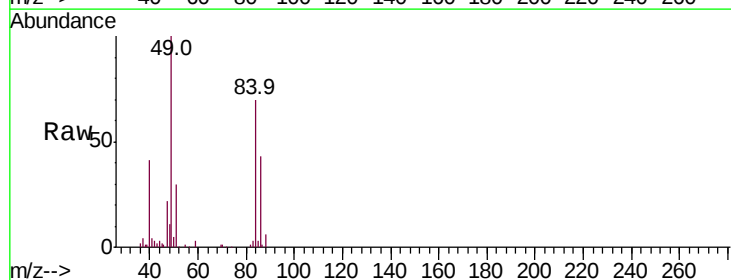
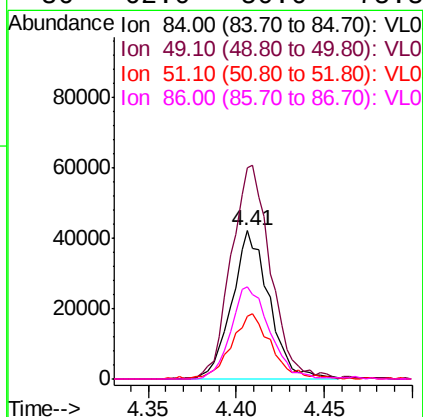
Ion Ratio Lower Upper

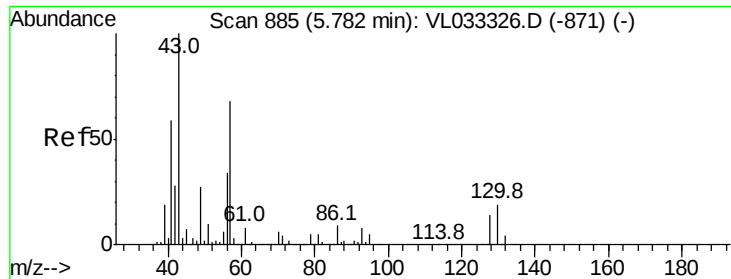
84 100

49 142.5 115.4 173.0

51 42.5 35.8 53.6

86 62.0 50.6 75.8





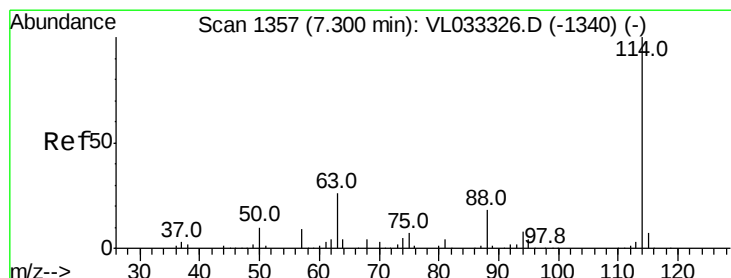
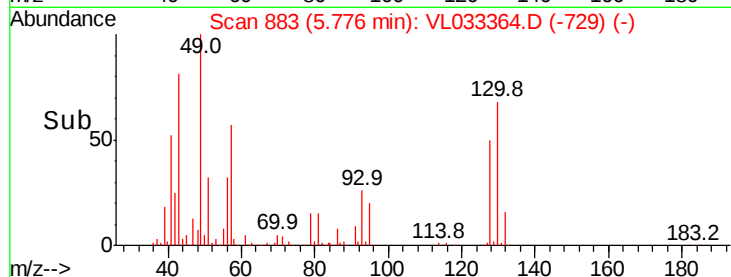
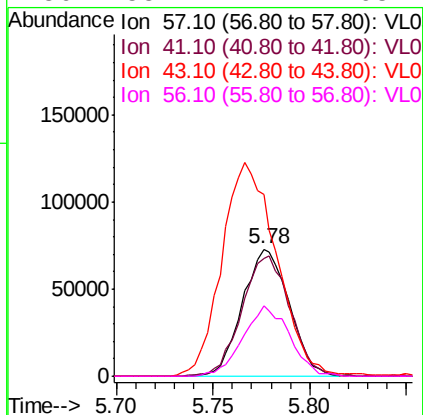
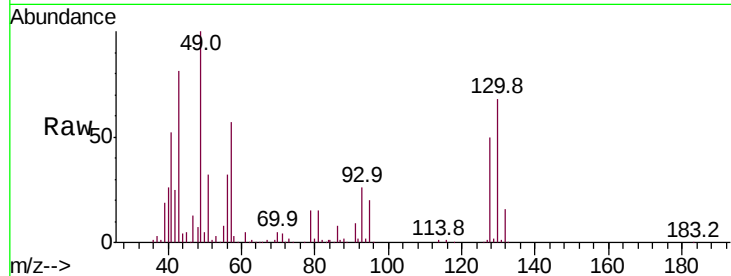
#26
Hexane
Concen: 1.684 ppbv
RT: 5.78 min Scan# 883
Delta R.T. -0.01 min
Lab File: VL033364.D
Acq: 18 Mar 2019 18:45

Instrument :
MSVOA_L
ClientSampled :
A-8

Tot Ion	57	Resp	122619
Ion	Ratio	Lower	Upper
57	100		
41	98.0	70.5	105.7
43	197.3	181.8	272.8
56	55.1	42.2	63.2

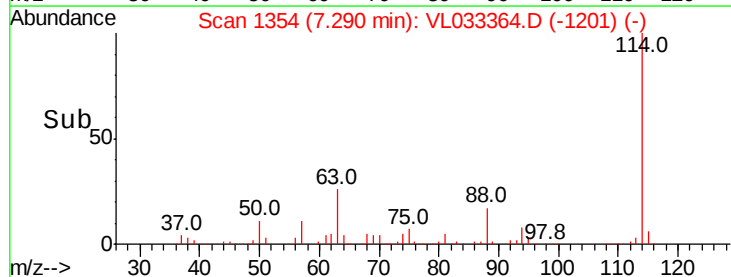
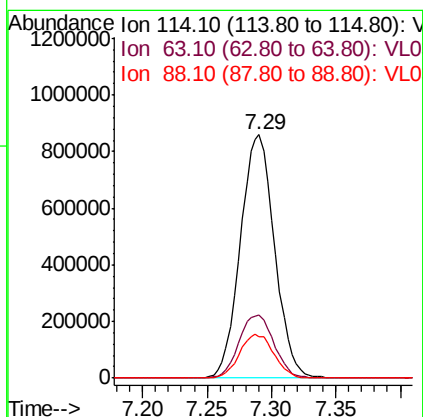
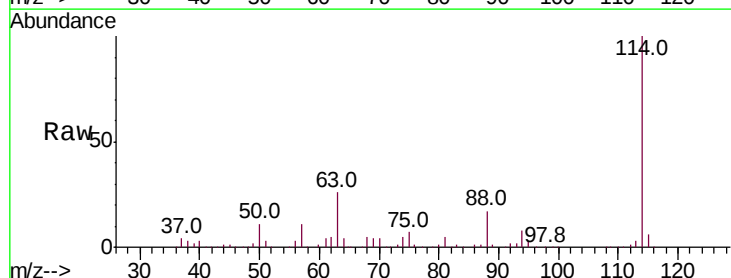
Manual Integrations
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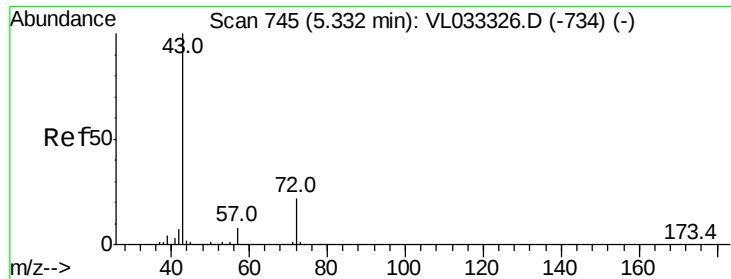
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#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 7.29 min Scan# 1354
Delta R.T. -0.01 min
Lab File: VL033364.D
Acq: 18 Mar 2019 18:45

Tgt Ion	114	Resp	1583713
Ion	Ratio	Lower	Upper
114	100		
63	26.7	21.4	32.2
88	18.2	14.5	21.7





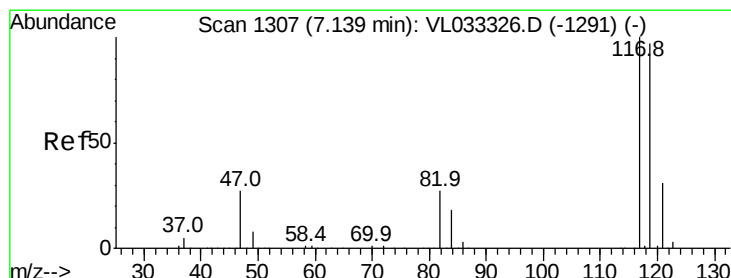
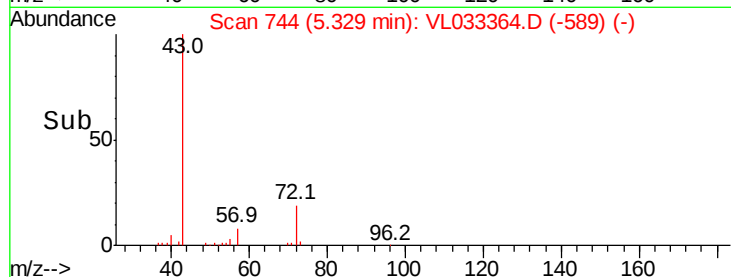
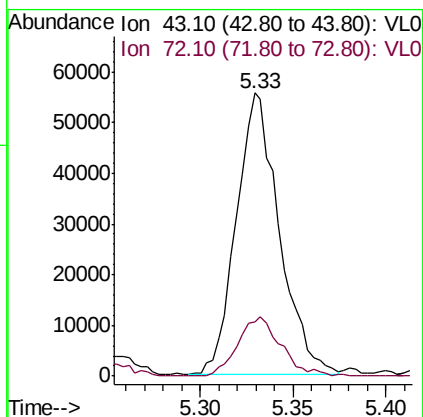
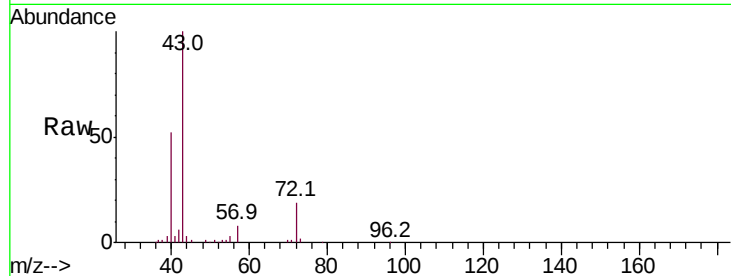
#34
2-Butanone
Concen: 0.868 ppbv
RT: 5.33 min Scan# 744
Delta R.T. -0.00 min
Lab File: VL033364.D
Acq: 18 Mar 2019 18:45

Instrument :
MSVOA_L
ClientSampleId :
A-8

Tot Ion: 43 Resp: 90236
Ion Ratio Lower Upper
43 100
72 21.1 17.7 26.5

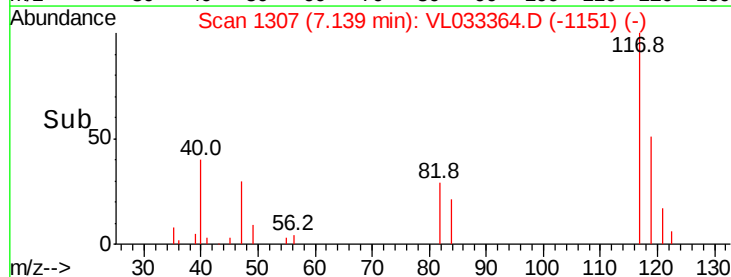
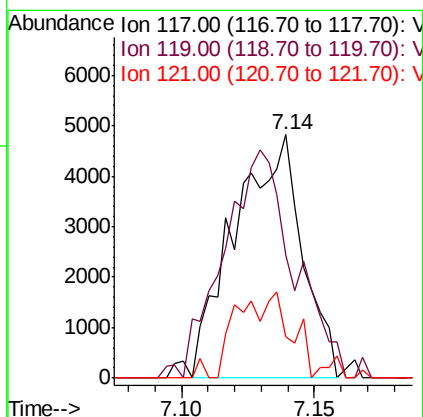
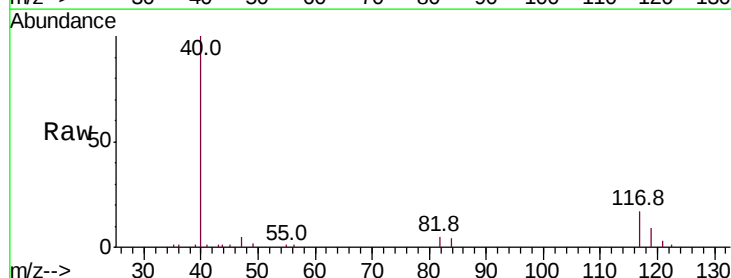
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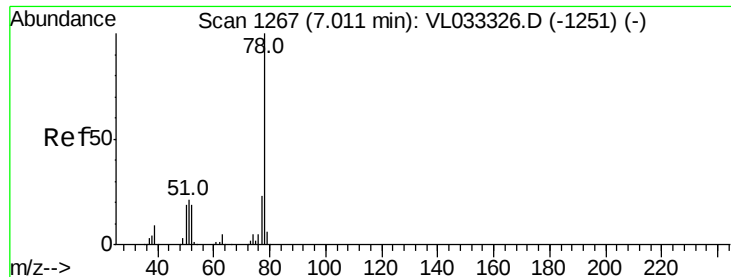
MMDadoda
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#35
Carbon Tetrachloride
Concen: 0.076 ppbv m
RT: 7.14 min Scan# 1307
Delta R.T. 0.00 min
Lab File: VL033364.D
Acq: 18 Mar 2019 18:45

Tgt Ion: 117 Resp: 8525
Ion Ratio Lower Upper
117 100
119 50.6 77.4 116.0#
121 17.1 24.9 37.3#





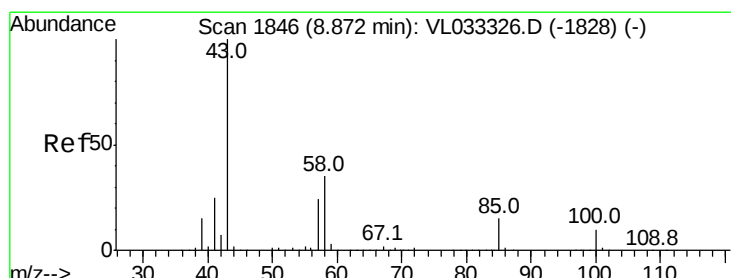
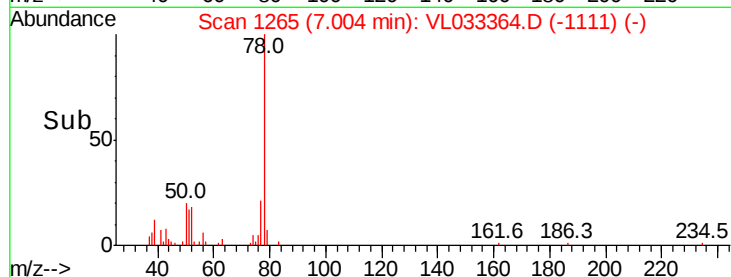
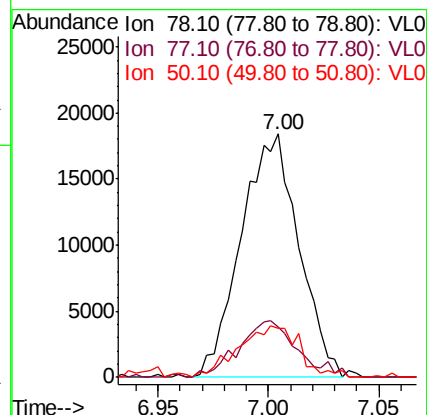
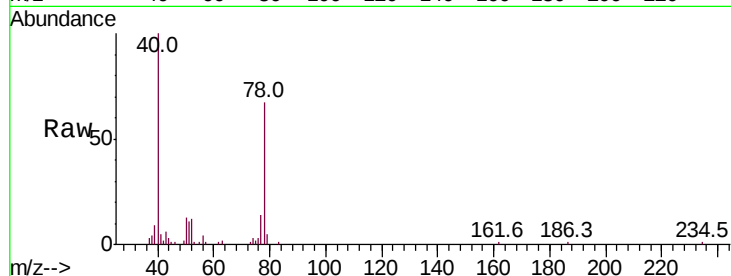
#36
Benzene
Concen: 0.236 ppbv
RT: 7.00 min Scan# 1265
Delta R.T. -0.01 min
Lab File: VL033364.D
Acq: 18 Mar 2019 18:45

Instrument :
MSVOA_L
ClientSampled :
A-8

Tot Ion	Ratio	Lower	Upper
78	100		
77	20.8	18.1	27.1
50	18.2	15.2	22.8

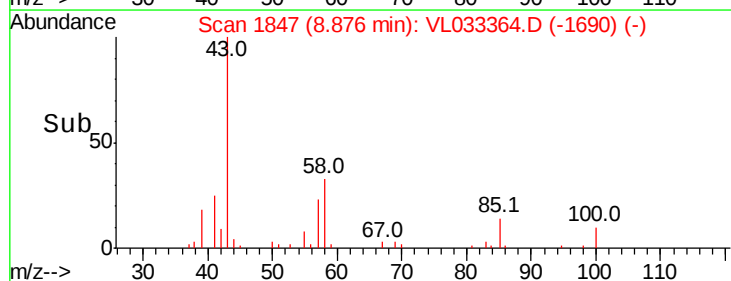
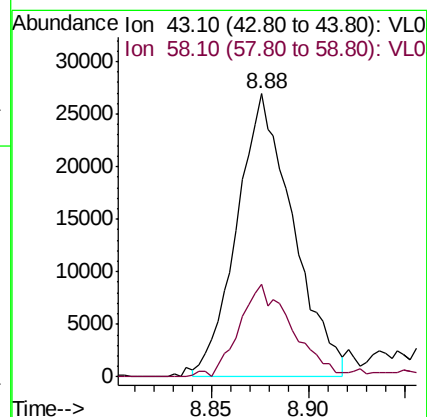
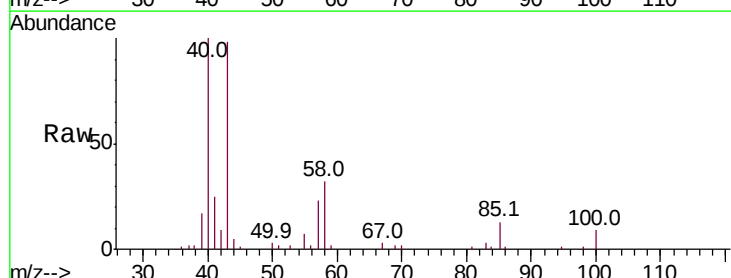
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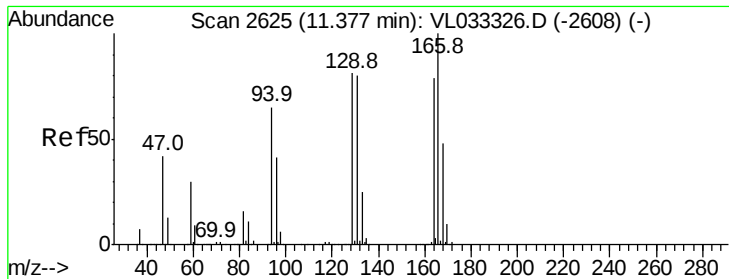
MMDadoda
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#50
4-Methyl-2-Pentanone
Concen: 0.370 ppbv
RT: 8.88 min Scan# 1847
Delta R.T. 0.00 min
Lab File: VL033364.D
Acq: 18 Mar 2019 18:45

Tgt Ion	Ratio	Lower	Upper
43	100		
58	31.4	28.4	42.6





#52

Tetrachloroethene

Concen: 0.097 ppbv m

RT: 11.38 min Scan# 2625

Delta R.T. 0.00 min

Lab File: VL033364.D

Acq: 18 Mar 2019 18:45

Instrument :

MSVOA_L

ClientSampled :

A-8

Tot Ion:164 Resp: 5705

Ion Ratio Lower Upper

164 100

166 103.2 101.5 152.3

129 78.6 82.2 123.2#

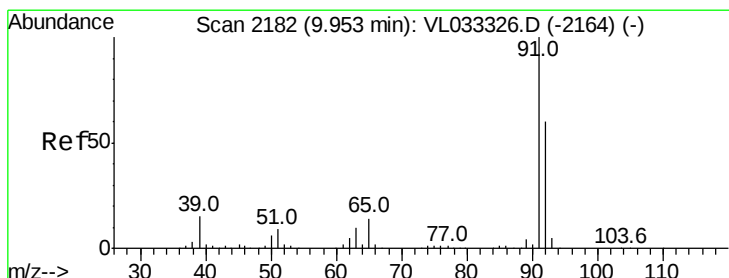
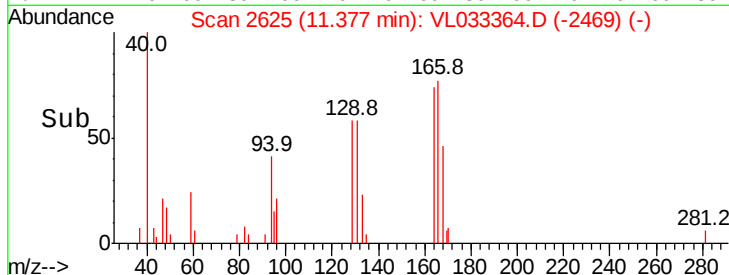
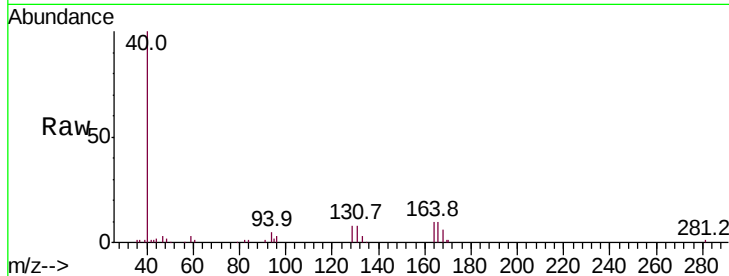
131 77.9 81.1 121.7#

Manual Integrations

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#53

Toluene

Concen: 12.930 ppbv

RT: 9.94 min Scan# 2179

Delta R.T. -0.01 min

Lab File: VL033364.D

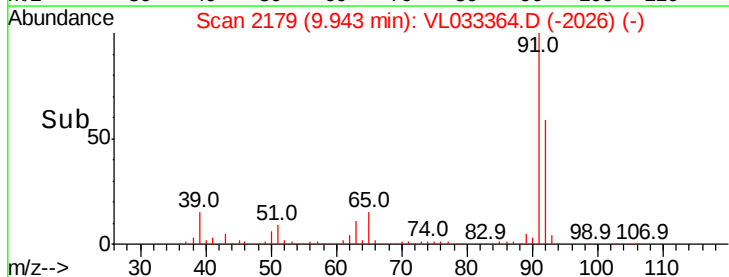
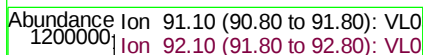
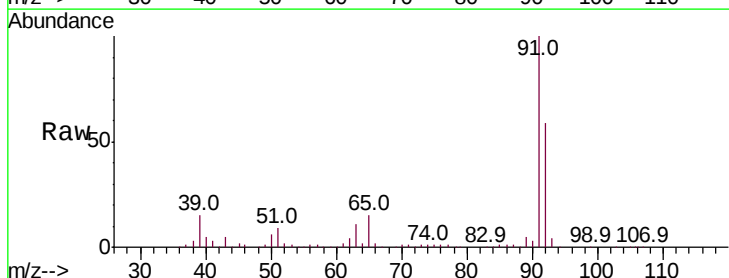
Acq: 18 Mar 2019 18:45

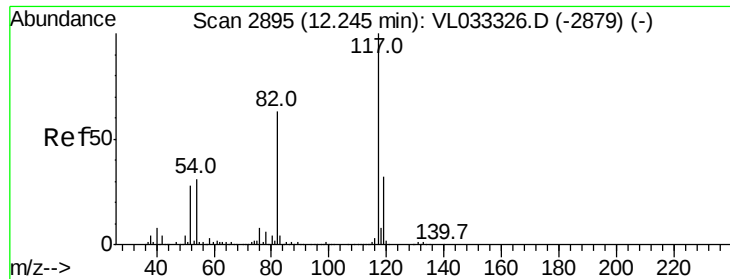
Tgt Ion: 91 Resp: 2082370

Ion Ratio Lower Upper

91 100

92 58.9 47.4 71.0





#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.24 min Scan# 2892

Delta R.T. -0.01 min

Lab File: VL033364.D

Acq: 18 Mar 2019 18:45

Instrument :

MSVOA_L

ClientSampleId :

A-8

Tot Ion:117 Resp: 1692349

Ion Ratio Lower Upper

117 100

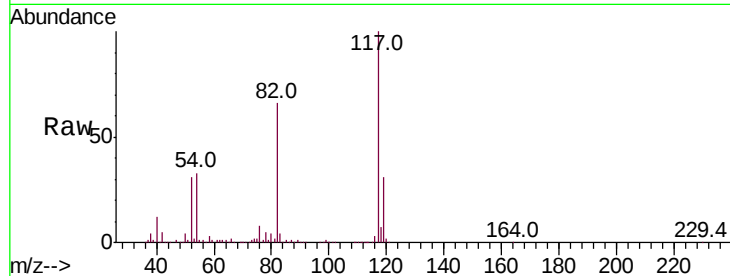
82 67.8 53.4 80.2

119 32.1 27.3 40.9

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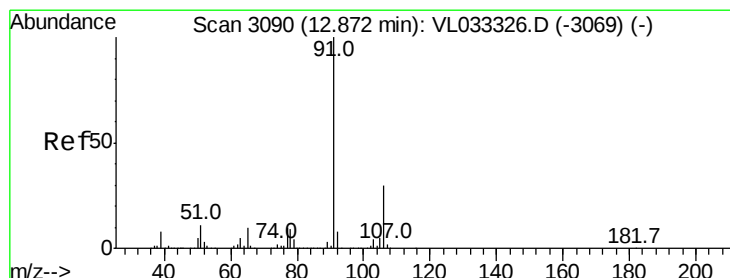
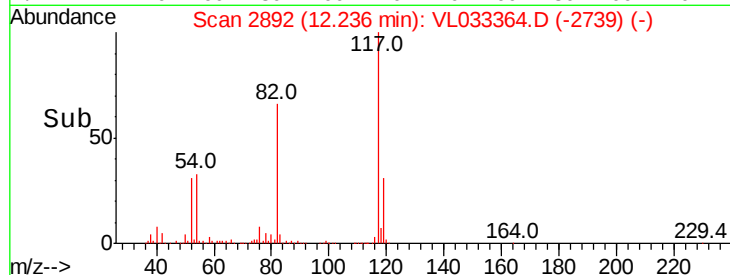
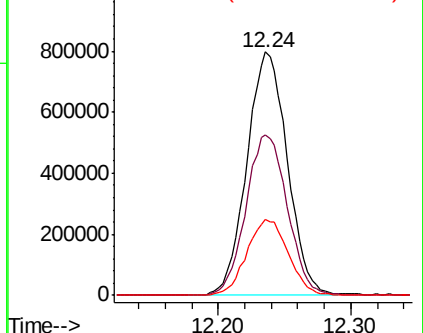
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Abundance Ion 117.10 (116.80 to 117.80): V

Ion 82.10 (81.80 to 82.80): VL0

Ion 119.10 (118.80 to 119.80): V



#58

Ethyl Benzene

Concen: 0.260 ppbv

RT: 12.87 min Scan# 3088

Delta R.T. -0.01 min

Lab File: VL033364.D

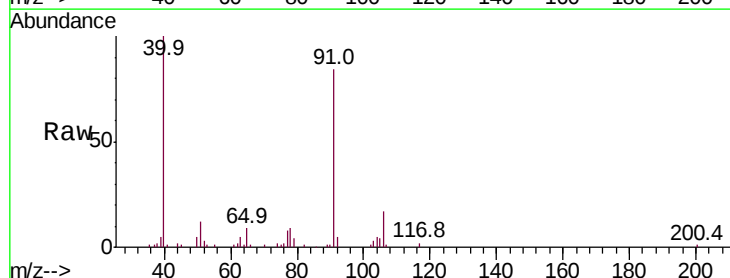
Acq: 18 Mar 2019 18:45

Tgt Ion: 91 Resp: 62135

Ion Ratio Lower Upper

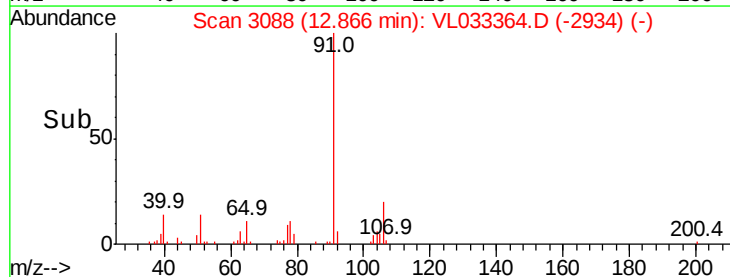
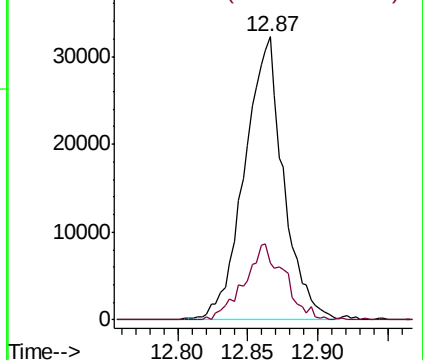
91 100

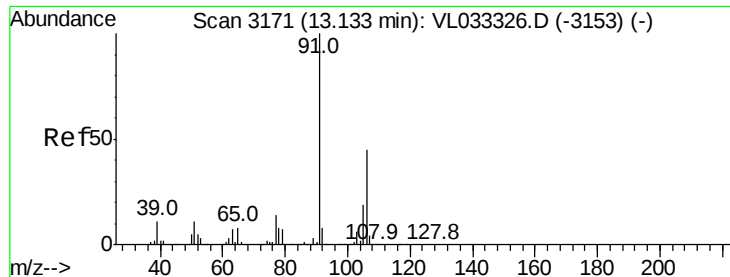
106 20.3 24.2 36.2#



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 106.10 (105.80 to 106.80): V





#59

m/p-Xylene

Concen: 0.279 ppbv m

RT: 13.12 min Scan# 3167

Delta R.T. -0.01 min

Lab File: VL033364.D

Acq: 18 Mar 2019 18:45

Instrument :

MSVOA_L

ClientSampled :

A-8

Tot Ion: 91 Resp: 57355

Ion Ratio Lower Upper

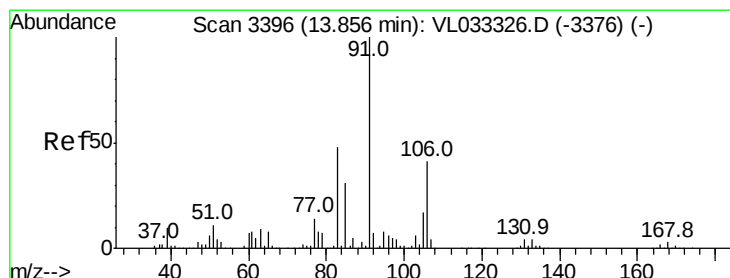
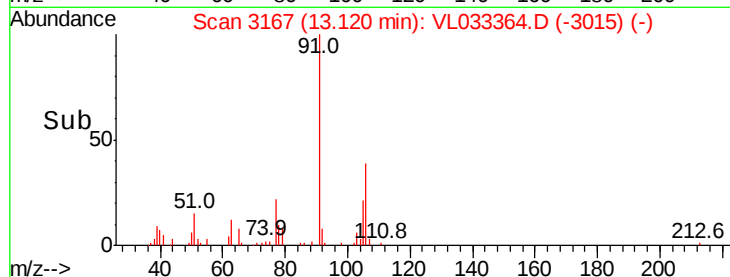
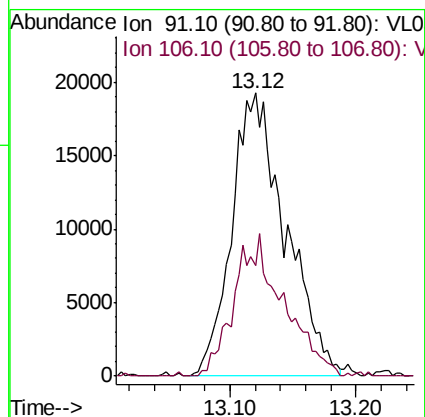
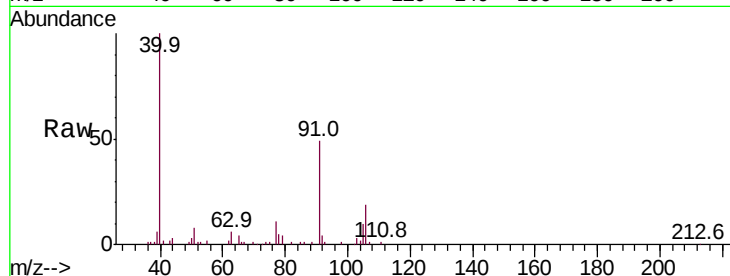
91 100

106 45.9 0.0 0.0#

Manual Integrations
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#60

o-Xylene

Concen: 0.098 ppbv

RT: 13.84 min Scan# 3392

Delta R.T. -0.01 min

Lab File: VL033364.D

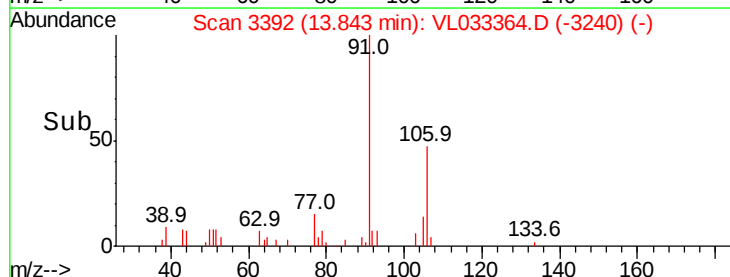
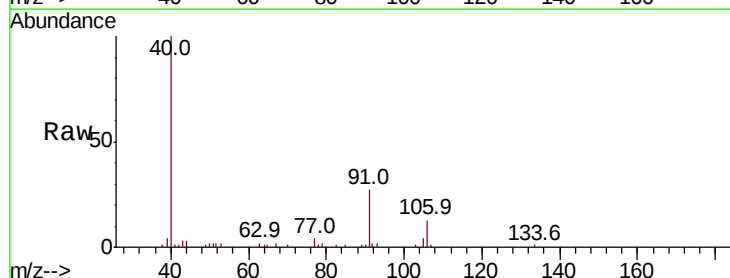
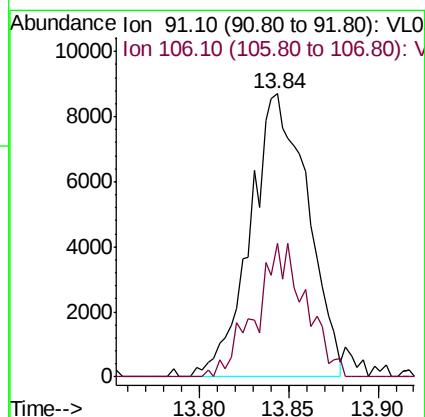
Acq: 18 Mar 2019 18:45

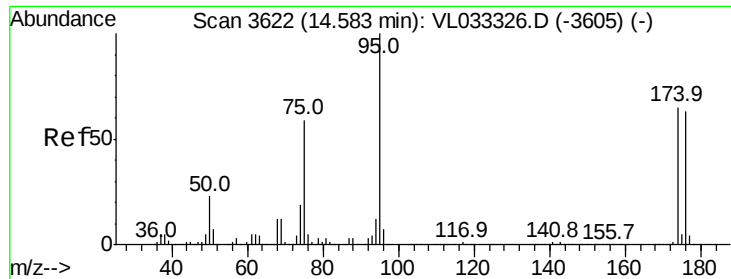
Tgt Ion: 91 Resp: 19582

Ion Ratio Lower Upper

91 100

106 41.0 21.3 63.9





#68

1-Bromo-4-Fluorobenzene

Concen: 10.260 ppbv

RT: 14.58 min Scan# 3620

Delta R.T. -0.01 min

Lab File: VL033364.D

Acq: 18 Mar 2019 18:45

Instrument :

MSVOA_L

ClientSampleId :

A-8

Tot Ion: 95 Resp: 1286679

Ion Ratio Lower Upper

95 100

174 65.1 51.5 77.3

175 4.7 3.8 5.6

Manual Integrations

APPROVED

MMDadoda

3/21/2019 12:14:38 PM

