

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL040419\
 Data File : VL033554.D
 Acq On : 5 Apr 2019 4:48
 Operator : SY/AP
 Sample : K2226-03
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 SV3

Manual Integrations
 APPROVED

MMDadoda
 4/8/2019 3:22:32 AM

Quant Time: Apr 05 06:55:15 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL032519AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Tue Mar 2
 QLast Update : Tue Mar 26 16:00:50 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.76	49	1206593	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.29	114	3047967	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.24	117	3038232	10.00	ppbv	0.00

System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	14.57	95	2391693	10.04	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	100.40%

Target Compounds					Ovalue
2) Dichlorodifluoromethane	3.07	85	72189	0.410 ppbv	98
4) Chloromethane	3.17	50	18700	0.254 ppbv	92
9) Propene	3.03	41	3286876	56.344 ppbv	98
10) Heptane	8.24	43	357498	2.293 ppbv	97
11) Trichlorofluoromethane	4.01	101	42184	0.195 ppbv	99
13) Ethanol	3.65	45	391858	25.958 ppbv	66
15) Acetone	3.89	43	7684778	52.969 ppbv	91
17) tert-Butyl alcohol	4.36	59	447916	16.791 ppbv	96
19) Isopropyl Alcohol	4.03	45	131122	1.429 ppbv #	95
20) Methylene Chloride	4.41	84	54665	0.888 ppbv #	89
26) Hexane	5.78	57	542892	4.536 ppbv	94
27) Carbon Disulfide	4.62	76	96097	0.675 ppbv #	90
29) Chloroform	5.85	83	34597m	0.169 ppbv	
30) Cyclohexane	7.24	84	55819	0.590 ppbv #	28
34) 2-Butanone	5.33	43	365049	1.993 ppbv	96
36) Benzene	7.00	78	870278	3.403 ppbv #	95
50) 4-Methyl-2-Pentanone	8.87	43	164719	0.614 ppbv	95
52) Tetrachloroethene	11.37	164	23038	0.239 ppbv	97
53) Toluene	9.94	91	1210729	4.074 ppbv	100
58) Ethyl Benzene	12.86	91	354793	0.874 ppbv	97
59) m/p-Xylene	13.12	91	640501	1.767 ppbv #	100
60) o-Xylene	13.85	91	163378	0.466 ppbv	98
72) 4-Ethyltoluene	16.00	105	48826	0.124 ppbv #	83
74) 1,2,4-Trimethylbenzene	16.92	105	60444	0.150 ppbv #	68

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

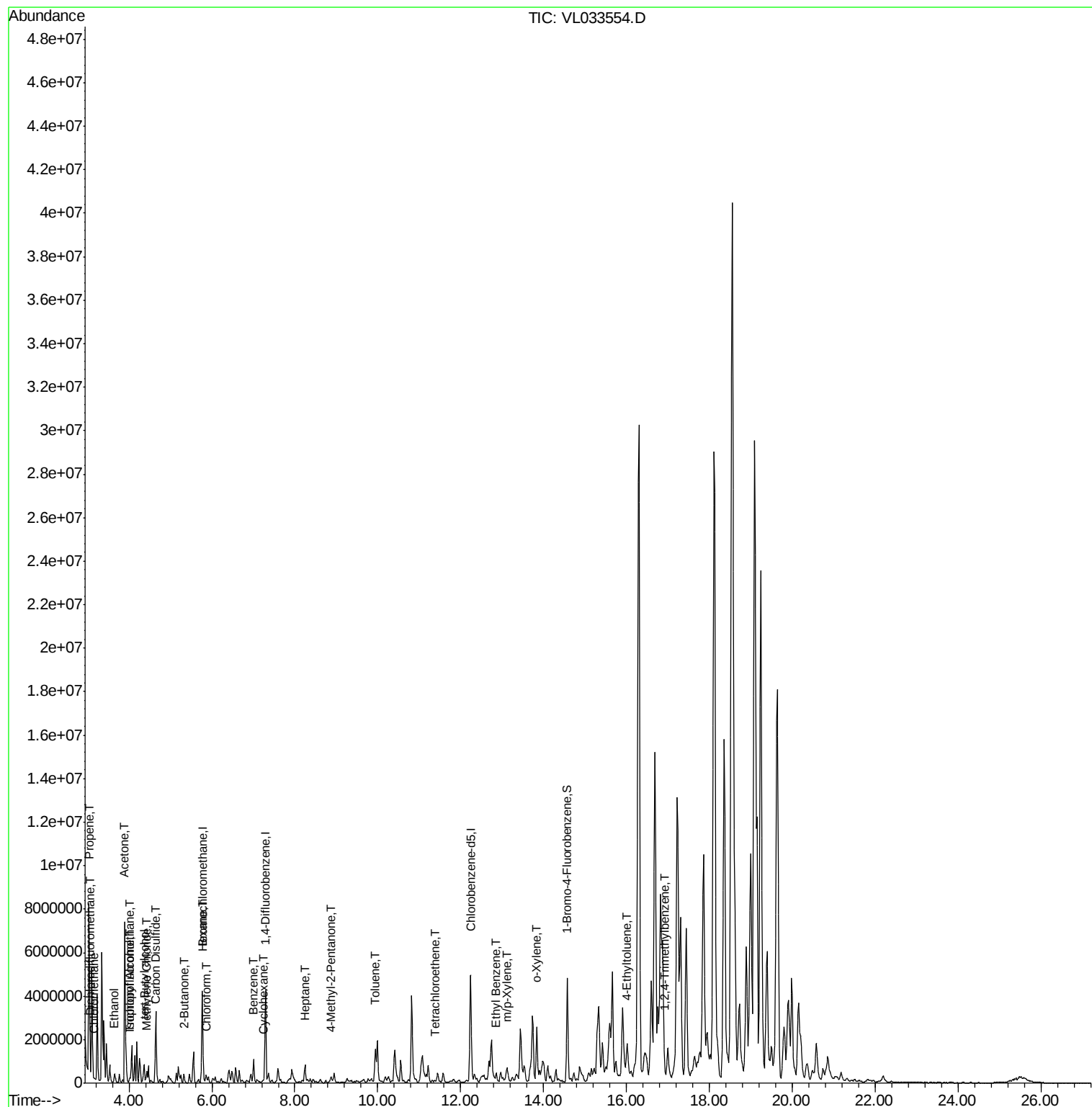
Data Path : Z:\V0ASRV\HPCHEM1\MSVOA L\DATA\VL040419\
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Quant Time: Apr 05 06:55:15 2019
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA L\METHODS\VL032519AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LTue Mar
QLast Update : Tue Mar 26 16:00:50 2019
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.76 min Scan# 879

Delta R.T. -0.00 min

Lab File: VL033554.D

Acq: 5 Apr 2019 4:48

Instrument :

MSVOA_L

ClientSampleId :

SV3

Tot Ion: 49 Resp: 1206593

Ion Ratio Lower Upper

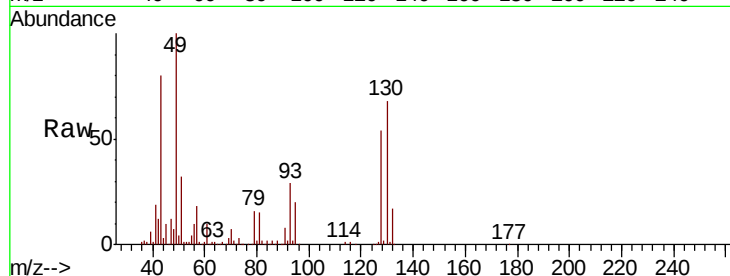
49 100

128 53.3 24.0 72.0

130 67.9 31.2 93.6

Manual Integrations
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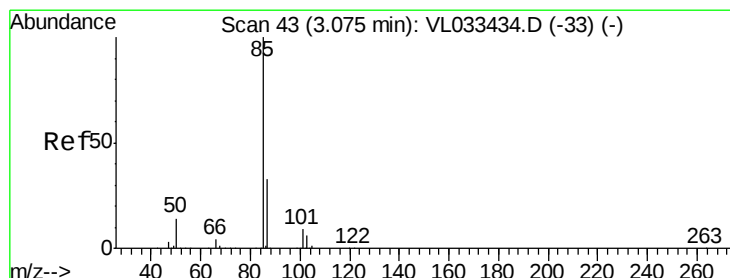
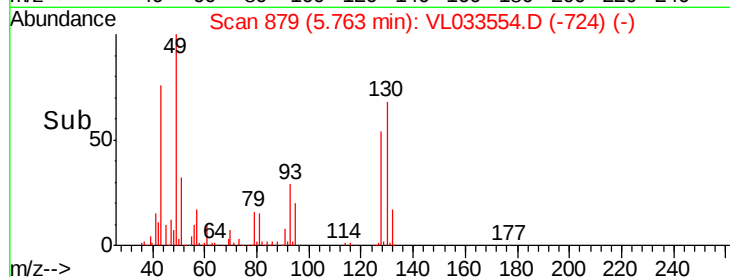
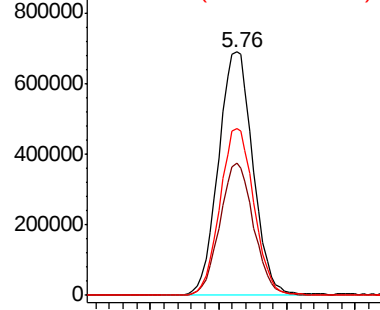
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Abundance Ion 49.10 (48.80 to 49.80): VL0

Ion 128.00 (127.70 to 128.70): VL0

Ion 130.00 (129.70 to 130.70): VL0



#2

Dichlorodifluoromethane

Concen: 0.410 ppbv

RT: 3.07 min Scan# 42

Delta R.T. -0.00 min

Lab File: VL033554.D

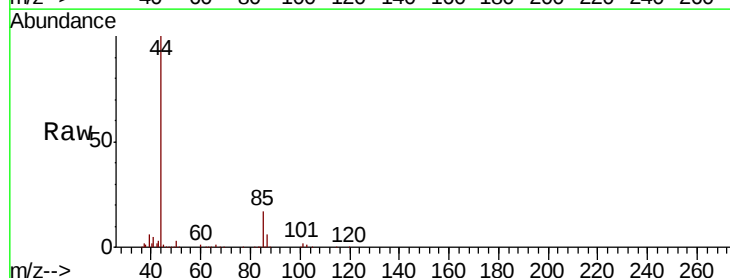
Acq: 5 Apr 2019 4:48

Tgt Ion: 85 Resp: 72189

Ion Ratio Lower Upper

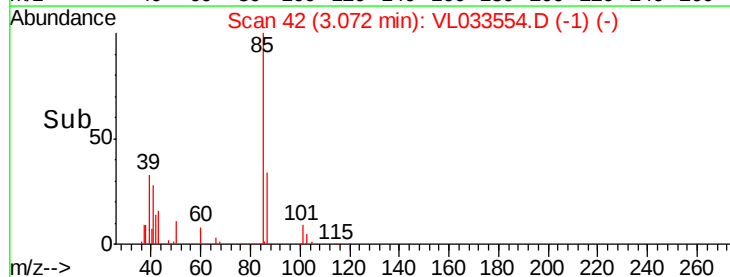
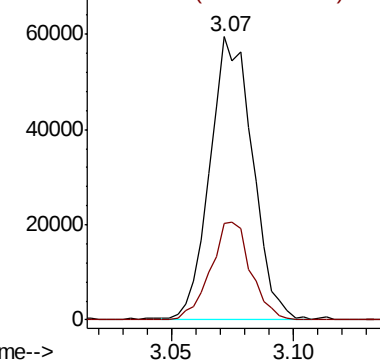
85 100

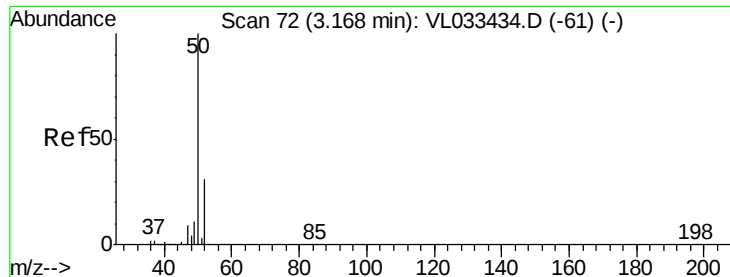
87 34.3 26.7 40.1



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0





#4

Chloromethane

Concen: 0.254 ppbv

RT: 3.17 min Scan# 72

Delta R.T. -0.00 min

Lab File: VL033554.D

Acq: 5 Apr 2019 4:48

Instrument :

MSVOA_L

ClientSampleId :

SV3

Tot Ion: 50 Resp: 18700

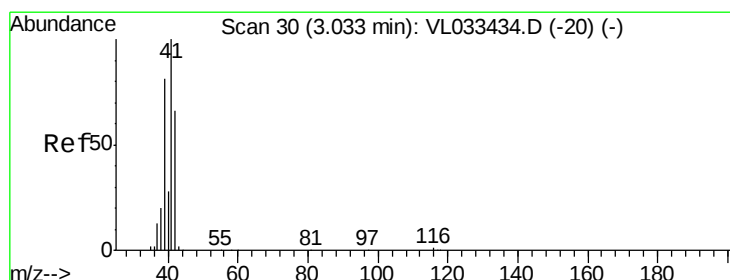
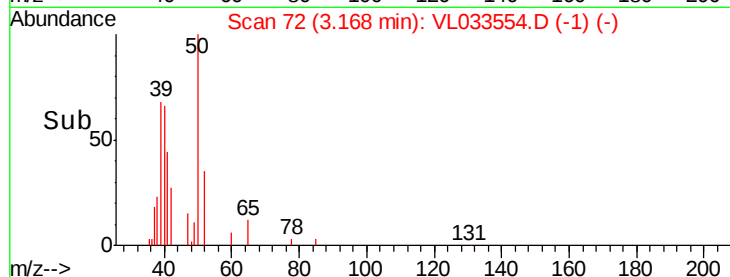
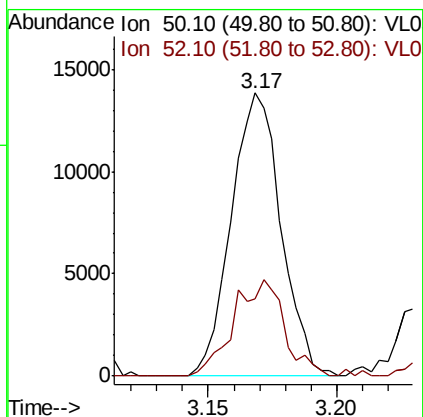
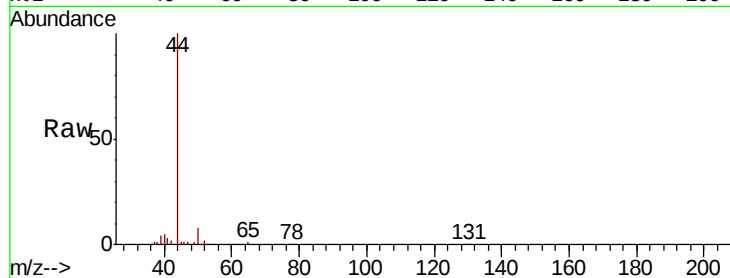
Ion Ratio Lower Upper

50 100

52 26.8 25.0 37.6

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#9

Propene

Concen: 56.344 ppbv

RT: 3.03 min Scan# 30

Delta R.T. -0.00 min

Lab File: VL033554.D

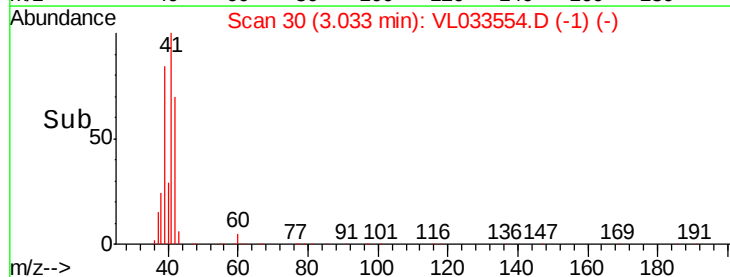
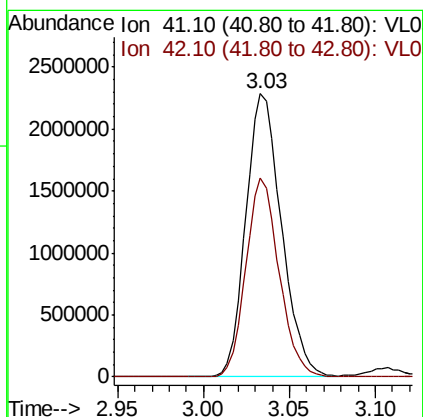
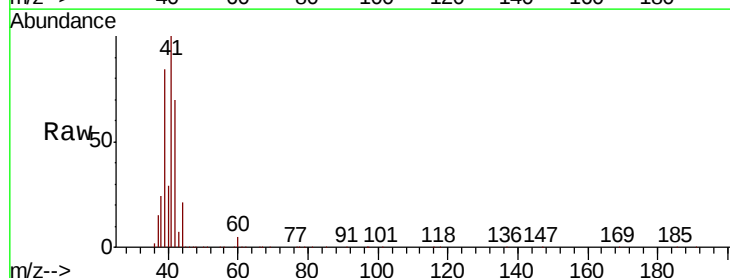
Acq: 5 Apr 2019 4:48

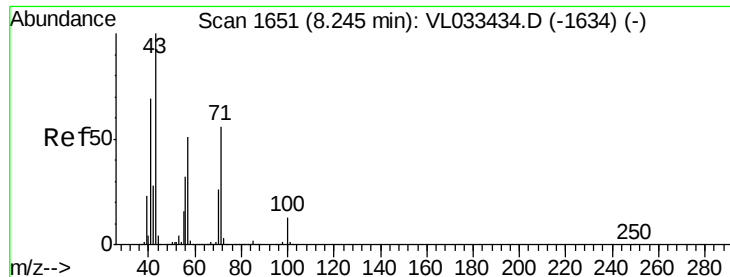
Tgt Ion: 41 Resp: 3286876

Ion Ratio Lower Upper

41 100

42 65.6 53.9 80.9





#10

Heptane

Concen: 2.293 ppbv

RT: 8.24 min Scan# 1650

Delta R.T. -0.00 min

Lab File: VL033554.D

Acq: 5 Apr 2019 4:48

Instrument :

MSVOA_L

ClientSampled :

SV3

Tot Ion: 43 Resp: 357498

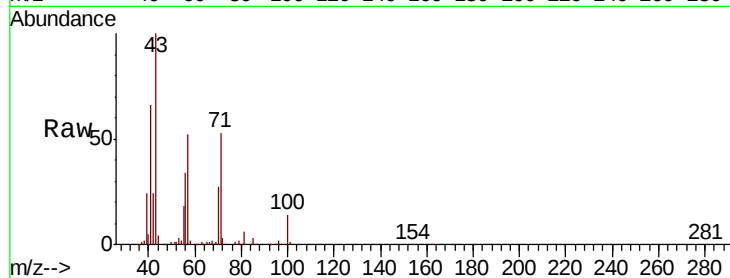
Ion Ratio Lower Upper

43 100

57 52.5 40.6 60.8

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Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 57.10 (56.80 to 57.80): VL0

8.24

200000

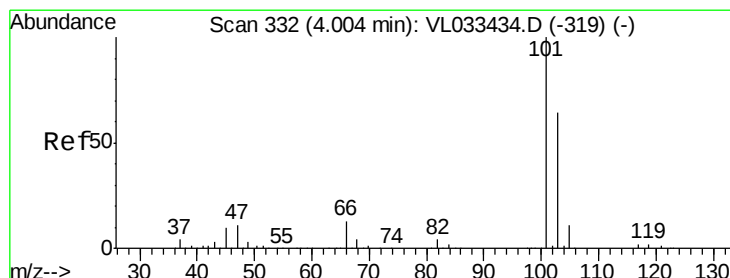
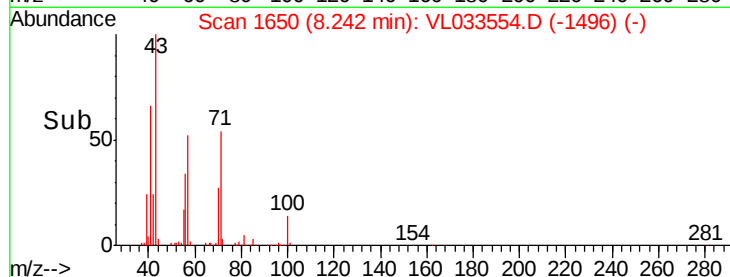
150000

100000

50000

0

Time-->



#11

Trichlorofluoromethane

Concen: 0.195 ppbv

RT: 4.01 min Scan# 333

Delta R.T. 0.00 min

Lab File: VL033554.D

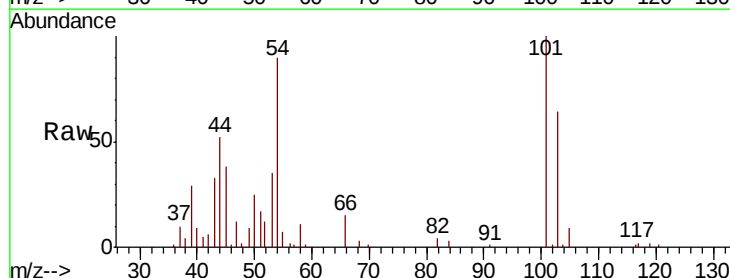
Acq: 5 Apr 2019 4:48

Tgt Ion: 101 Resp: 42184

Ion Ratio Lower Upper

101 100

103 63.0 51.3 76.9



Abundance Ion 101.00 (100.70 to 101.70): V

Ion 103.00 (102.70 to 103.70): V

4.01

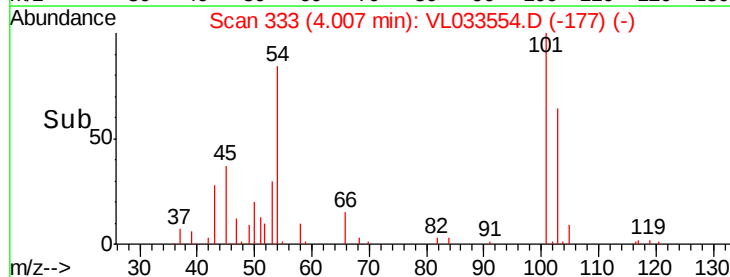
30000

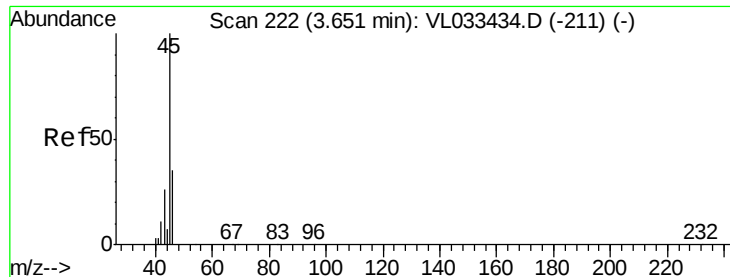
20000

10000

0

Time-->





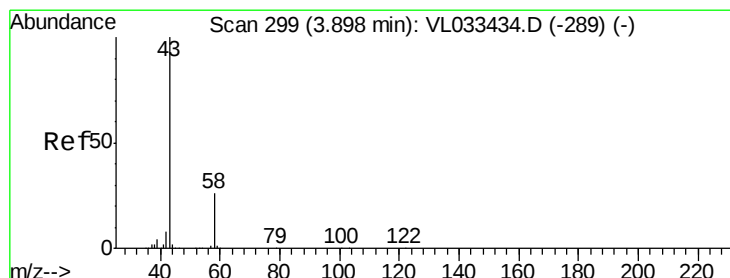
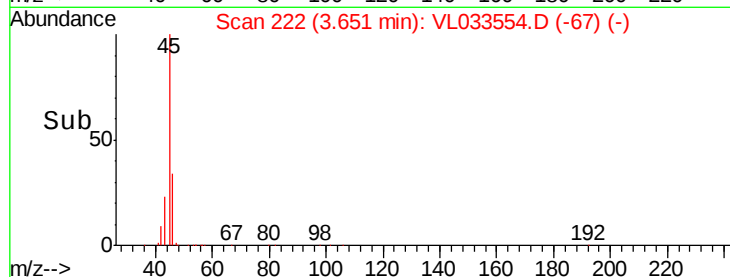
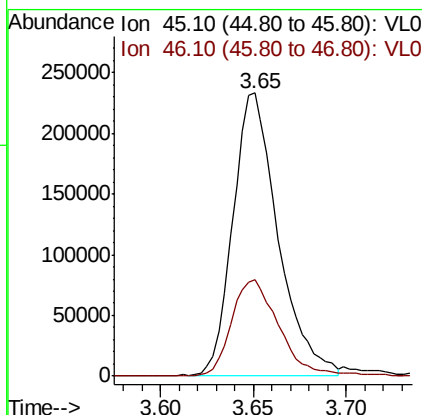
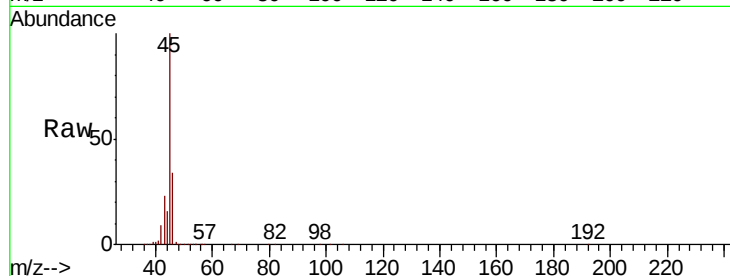
#13
Ethanol
Concen: 25.958 ppbv
RT: 3.65 min Scan# 222
Delta R.T. -0.00 min
Lab File: VL033554.D
Acq: 5 Apr 2019 4:48

Instrument :
MSVOA_L
ClientSampled :
SV3

Tot Ion	45	Resp	391858
Ion Ratio	100	Lower	Upper
46	36.8	25.4	101.8

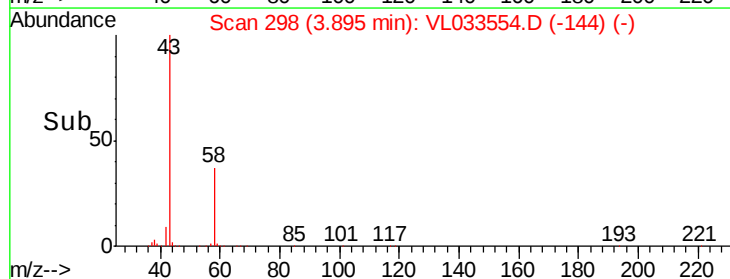
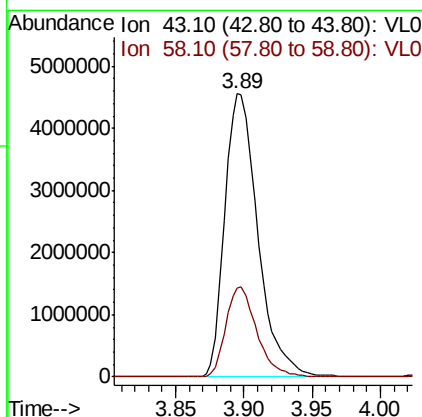
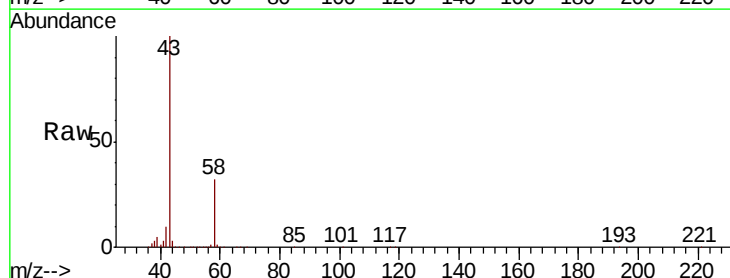
Manual Integrations
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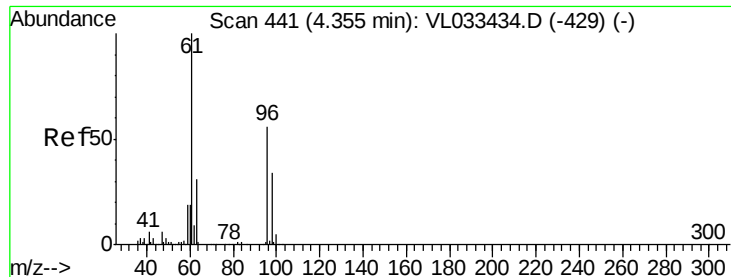
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#15
Acetone
Concen: 52.969 ppbv
RT: 3.89 min Scan# 298
Delta R.T. -0.00 min
Lab File: VL033554.D
Acq: 5 Apr 2019 4:48

Tgt Ion	43	Resp	7684778
Ion Ratio	100	Lower	Upper
58	30.1	20.5	30.7





#17

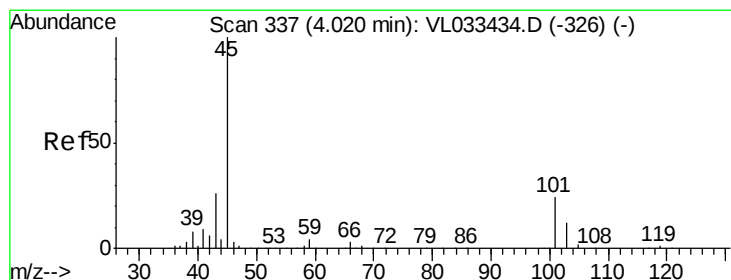
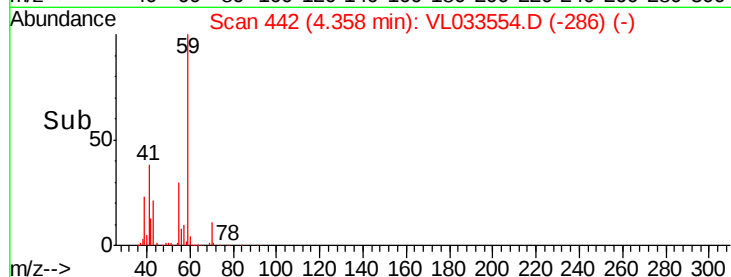
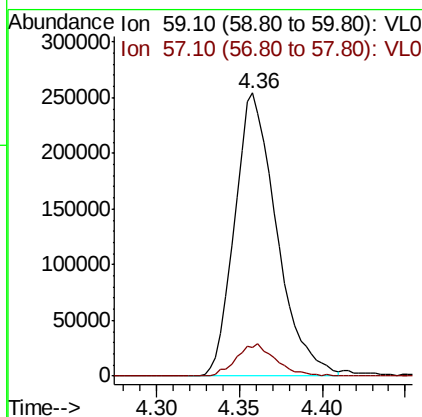
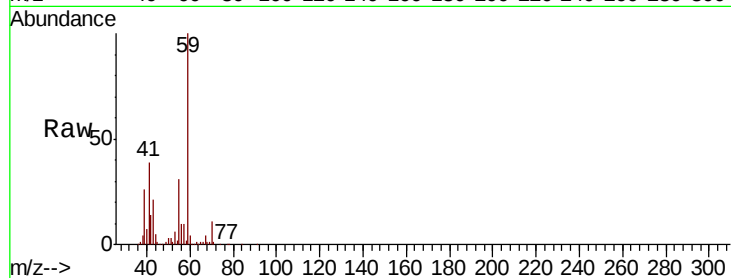
tert-Butyl alcohol
Concen: 16.791 ppbv
RT: 4.36 min Scan# 442
Delta R.T. 0.00 min
Lab File: VL033554.D
Acq: 5 Apr 2019 4:48

Instrument :
MSVOA_L
ClientSampled :
SV3

Tot Ion	59	Resp	447916
Ion	Ratio	Lower	Upper
59	100		
57	11.1	7.8	11.8

Manual Integrations
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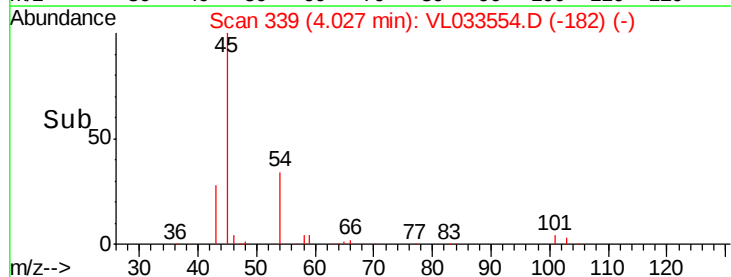
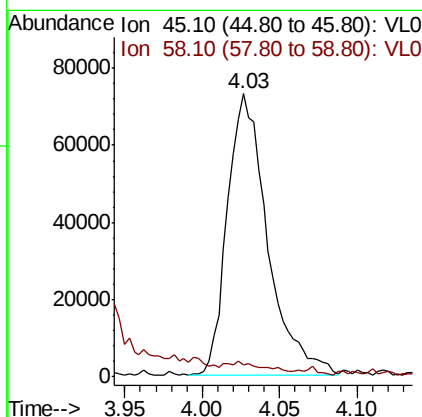
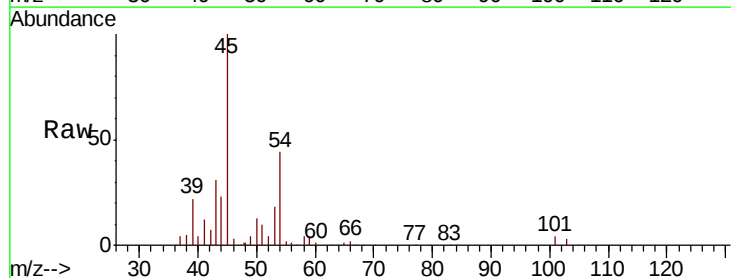
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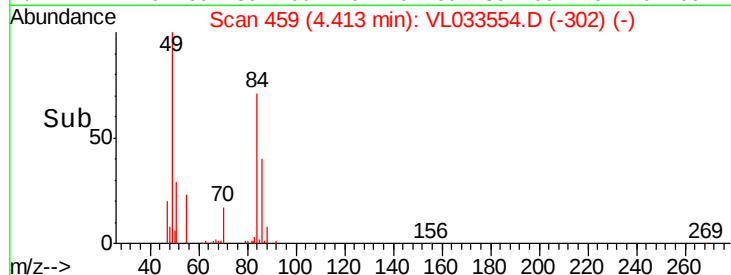
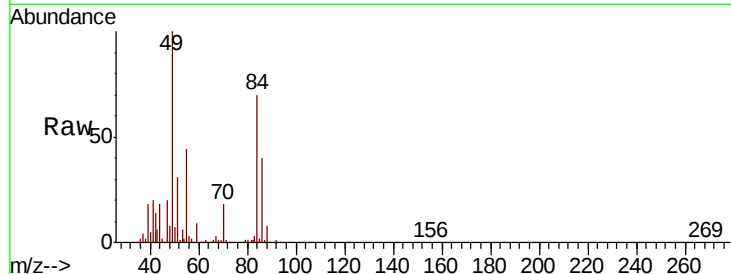
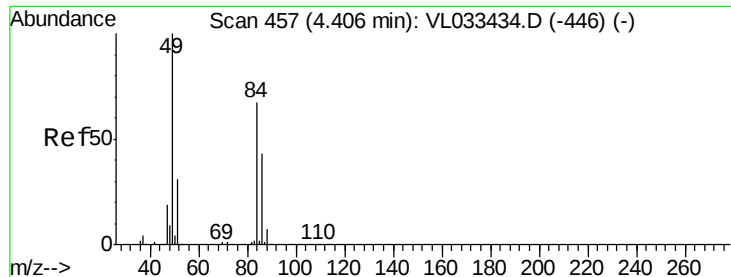


#19

Isopropyl Alcohol
Concen: 1.429 ppbv
RT: 4.03 min Scan# 339
Delta R.T. 0.01 min
Lab File: VL033554.D
Acq: 5 Apr 2019 4:48

Tgt Ion	45	Resp	131122
Ion	Ratio	Lower	Upper
45	100		
58	0.0	1.4	2.2#





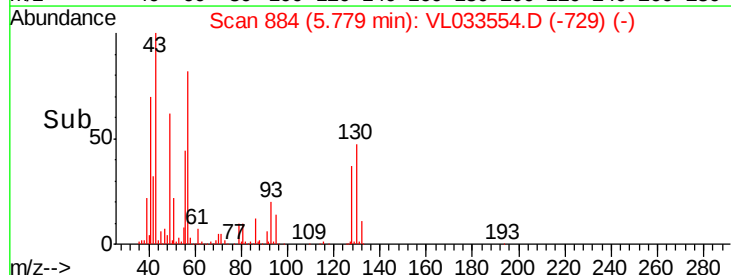
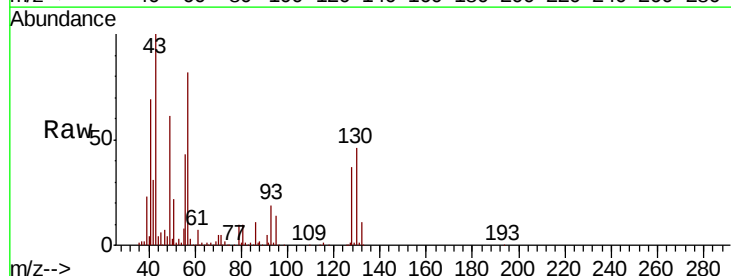
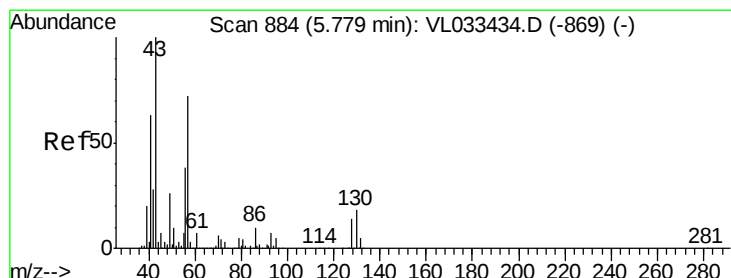
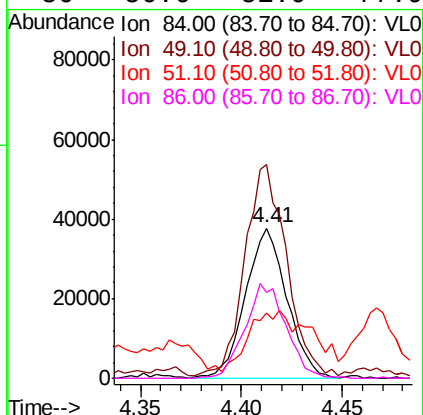
#20
Methvlene Chloride
Concen: 0.888 ppbv
RT: 4.41 min Scan# 459
Delta R.T. 0.01 min
Lab File: VL033554.D
Acq: 5 Apr 2019 4:48

Tot Ion	84	Resp	54665
Ion Ratio	Lower	Upper	
84	100		
49	140.1	120.0	180.0
51	32.3	36.7	55.1#
86	56.6	51.9	77.9

Instrument :
MSVOA_L
ClientSampleId :
SV3

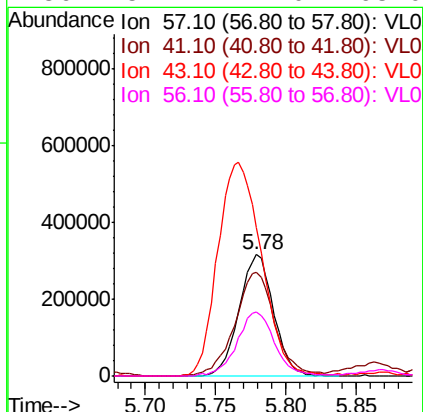
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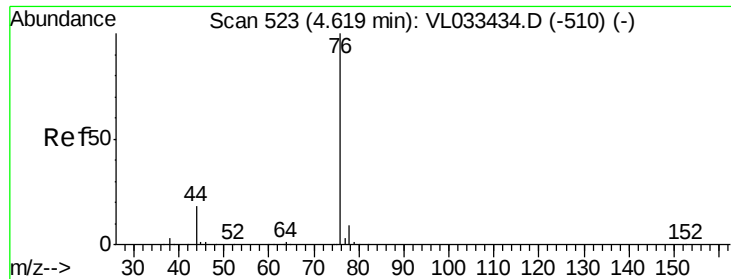
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#26
Hexane
Concen: 4.536 ppbv
RT: 5.78 min Scan# 884
Delta R.T. -0.00 min
Lab File: VL033554.D
Acq: 5 Apr 2019 4:48

Tgt Ion	57	Resp	542892
Ion Ratio	Lower	Upper	
57	100		
41	98.6	70.7	106.1
43	221.3	182.6	274.0
56	57.4	42.0	63.0





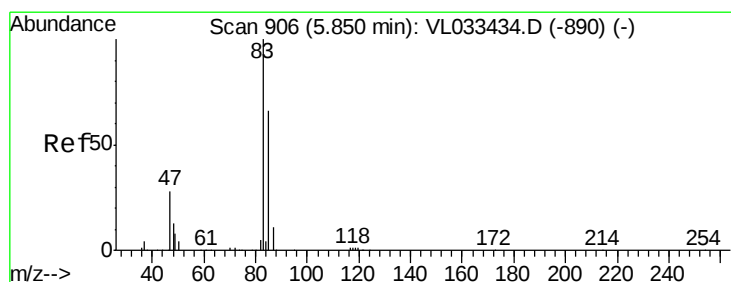
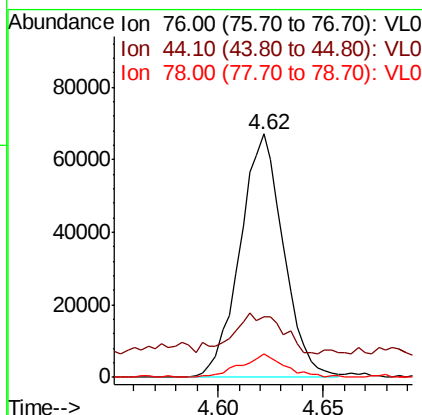
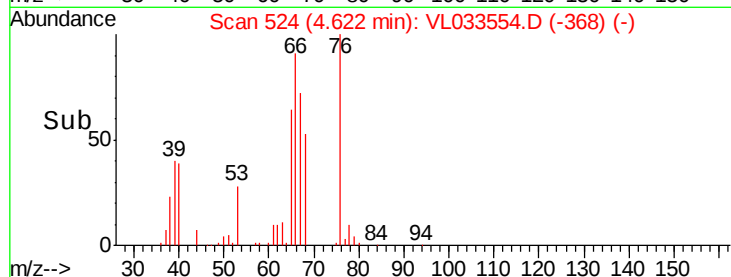
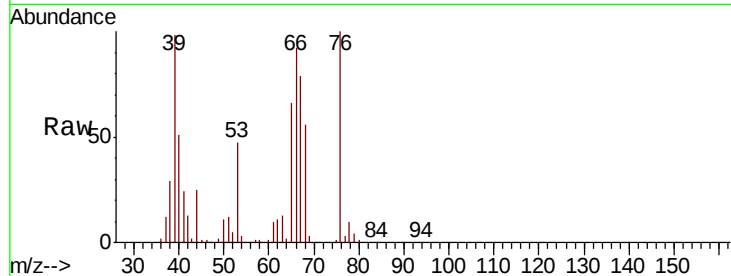
#27
Carbon Disulfide
Concen: 0.675 ppbv
RT: 4.62 min Scan# 524
Delta R.T. 0.00 min
Lab File: VL033554.D
Acq: 5 Apr 2019 4:48

Instrument :
MSVOA_L
ClientSampleId :
SV3

Tot Ion	Ratio	Lower	Upper
76	100		
44	24.6	14.8	22.2#
78	10.3	7.6	11.4

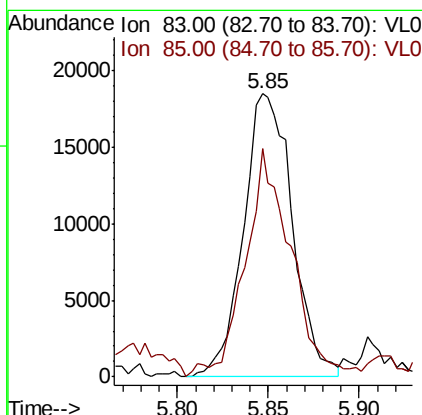
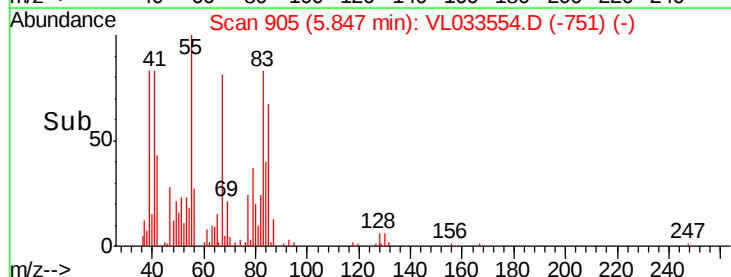
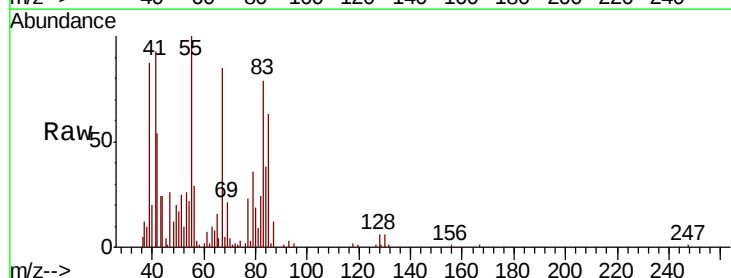
Manual Integrations
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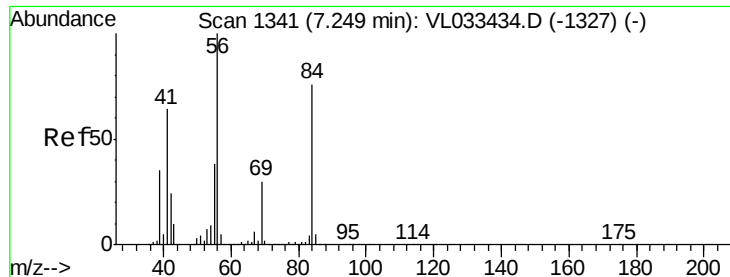
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#29
Chloroform
Concen: 0.169 ppbv m
RT: 5.85 min Scan# 905
Delta R.T. -0.00 min
Lab File: VL033554.D
Acq: 5 Apr 2019 4:48

Tgt Ion	Ratio	Lower	Upper
83	100		
85	80.6	52.6	79.0#





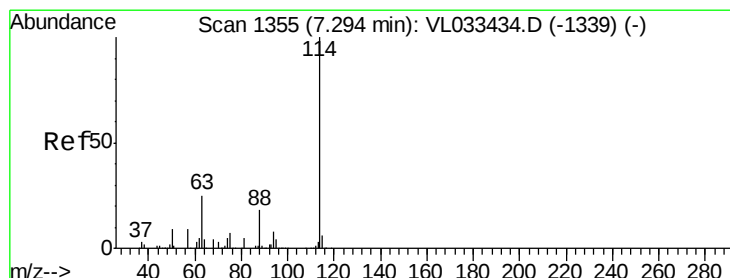
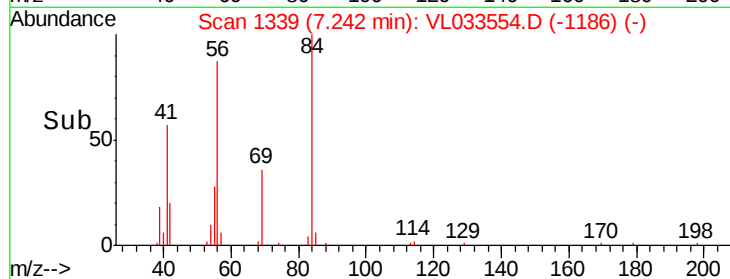
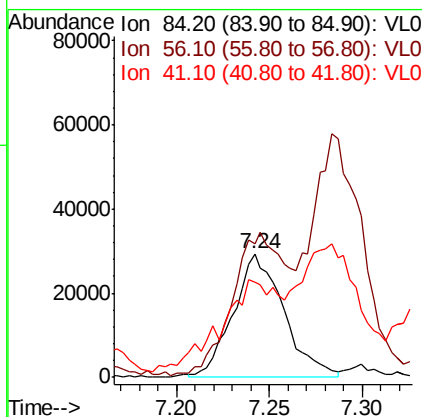
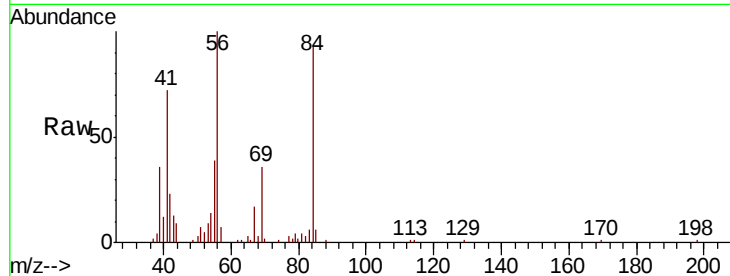
#30
Cvclohexane
Concen: 0.590 ppbv
RT: 7.24 min Scan# 1339
Delta R.T. -0.01 min
Lab File: VL033554.D
Acq: 5 Apr 2019 4:48

Instrument :
MSVOA_L
ClientSampled :
SV3

Tot Ion	Ratio	Lower	Upper
84	100		
56	0.0	109.7	164.5#
41	80.4	68.2	102.2

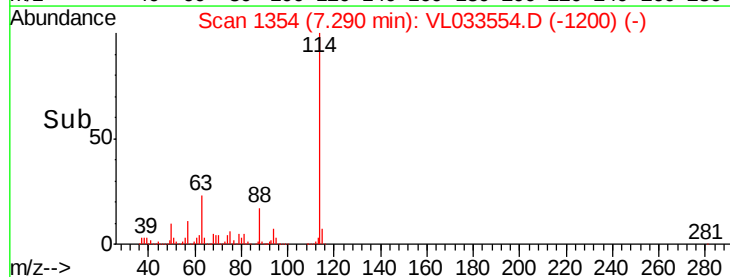
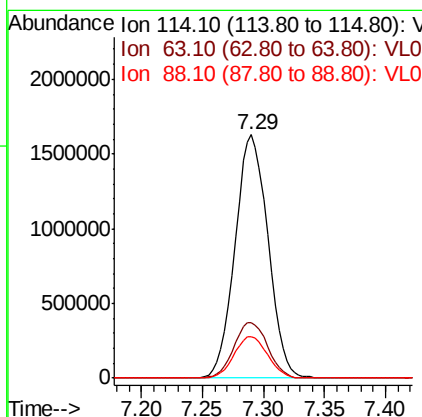
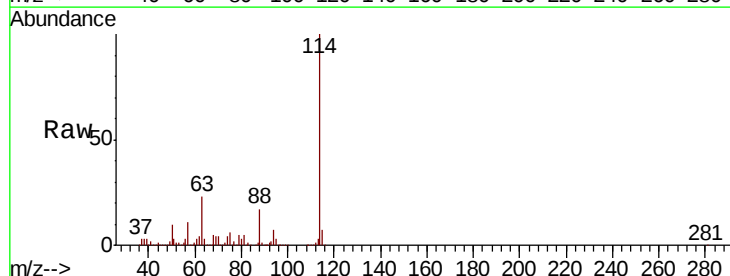
Manual Integrations
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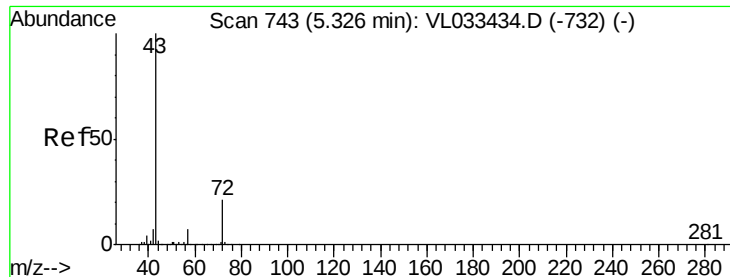
MMDadoda
4/8/2019 3:22:32 AM



#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 7.29 min Scan# 1354
Delta R.T. -0.00 min
Lab File: VL033554.D
Acq: 5 Apr 2019 4:48

Tgt Ion	Ratio	Lower	Upper
114	100		
63	23.6	21.5	32.3
88	17.3	14.5	21.7





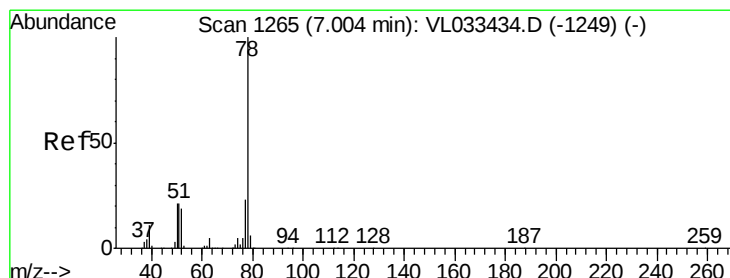
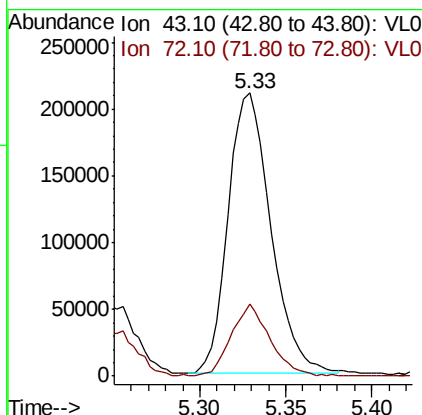
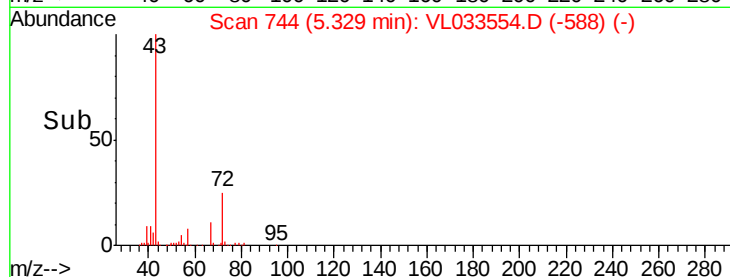
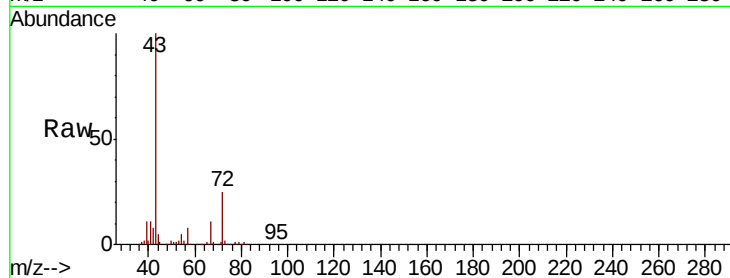
#34
2-Butanone
Concen: 1.993 ppbv
RT: 5.33 min Scan# 744
Delta R.T. 0.00 min
Lab File: VL033554.D
Acq: 5 Apr 2019 4:48

Instrument :
MSVOA_L
ClientSampleId :
SV3

Tot Ion: 43 Resp: 365049
Ion Ratio Lower Upper
43 100
72 23.6 17.4 26.2

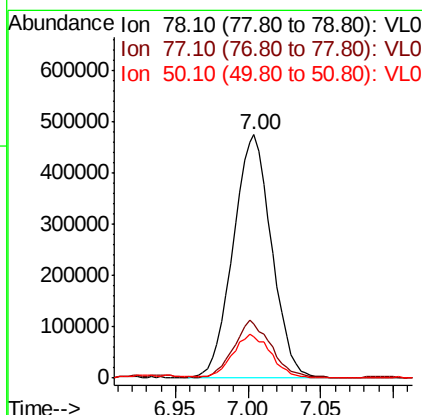
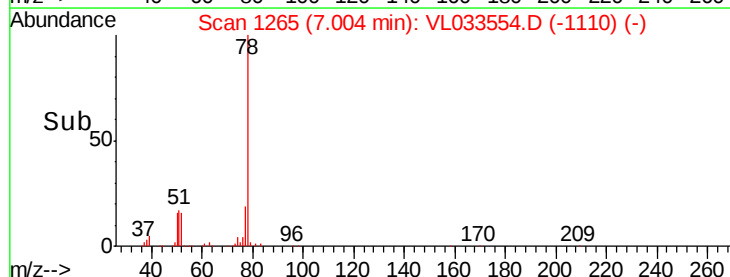
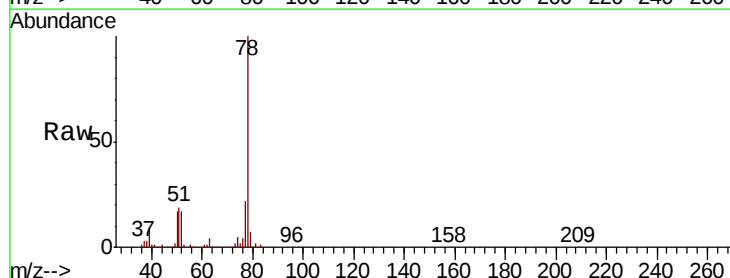
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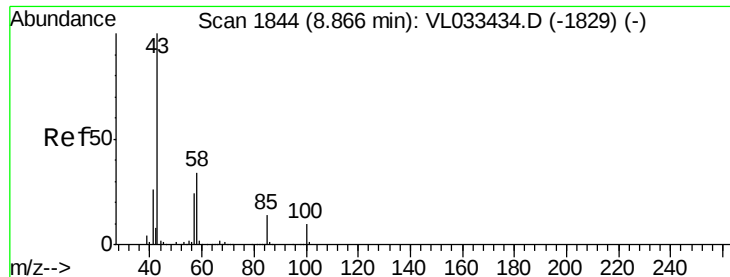
MMDadoda
4/8/2019 3:22:32 AM



#36
Benzene
Concen: 3.403 ppbv
RT: 7.00 min Scan# 1265
Delta R.T. -0.00 min
Lab File: VL033554.D
Acq: 5 Apr 2019 4:48

Tgt Ion: 78 Resp: 870278
Ion Ratio Lower Upper
78 100
77 21.8 18.1 27.1
50 16.6 16.7 25.1#





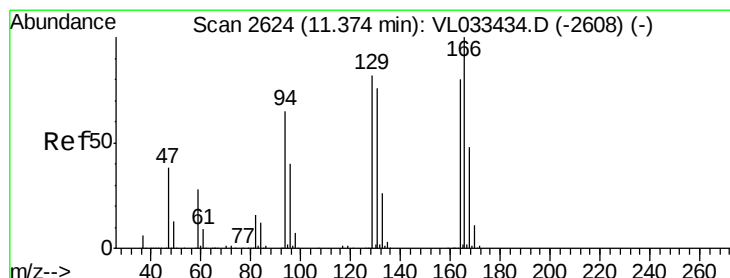
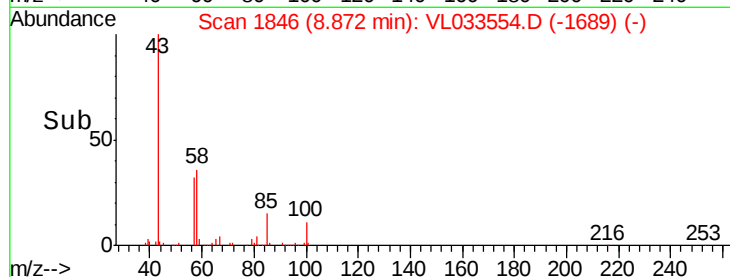
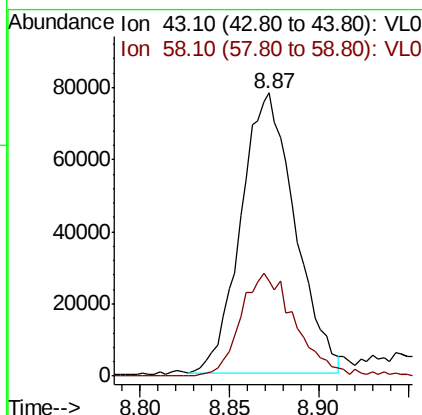
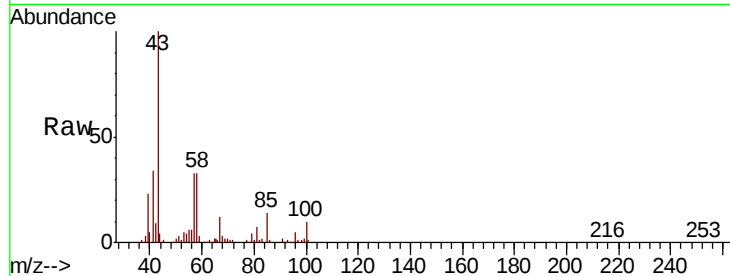
#50
4-Methyl-2-Pentanone
Concen: 0.614 ppbv
RT: 8.87 min Scan# 1846
Delta R.T. 0.01 min
Lab File: VL033554.D
Acq: 5 Apr 2019 4:48

Instrument :
MSVOA_L
ClientSampleId :
SV3

Tot Ion	43	Resp	164719
Ion Ratio	100	Lower	Upper
43	100		
58	37.9	28.0	42.0

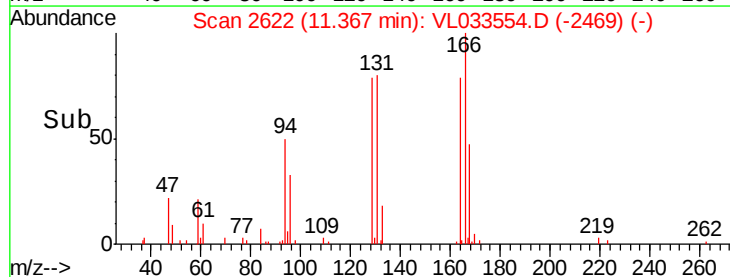
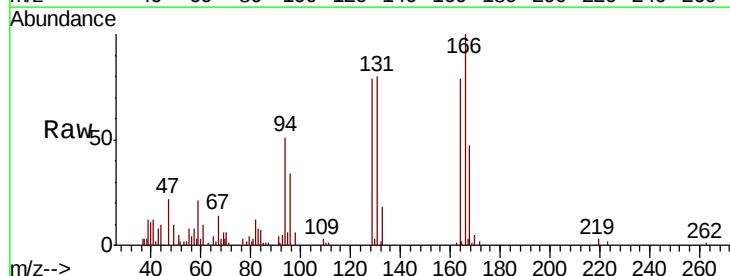
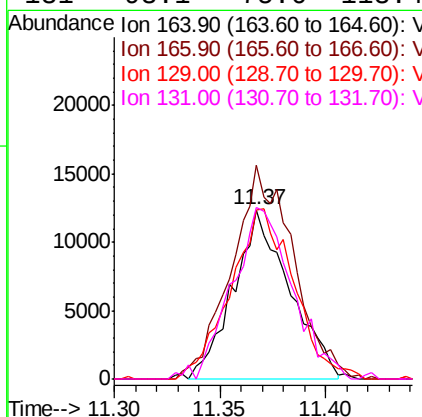
Manual Integrations
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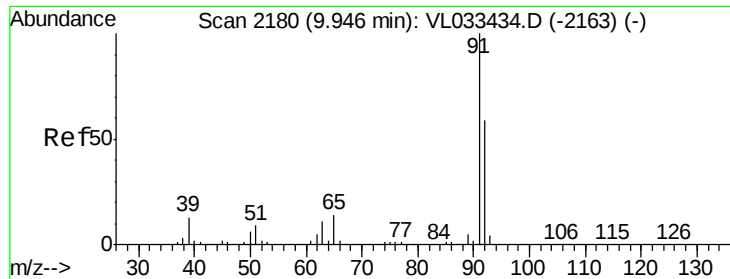
MMDadoda
4/8/2019 3:22:32 AM



#52
Tetrachloroethene
Concen: 0.239 ppbv
RT: 11.37 min Scan# 2622
Delta R.T. -0.01 min
Lab File: VL033554.D
Acq: 5 Apr 2019 4:48

Tgt Ion	164	Resp	23038
Ion Ratio	100	Lower	Upper
164	100		
166	119.5	99.5	149.3
129	98.2	81.4	122.2
131	93.1	75.6	113.4





#53

Toluene

Concen: 4.074 ppbv

RT: 9.94 min Scan# 2179

Delta R.T. -0.00 min

Lab File: VL033554.D

Acq: 5 Apr 2019 4:48

Instrument :

MSVOA_L

ClientSampled :

SV3

Tot Ion: 91 Resp: 1210729

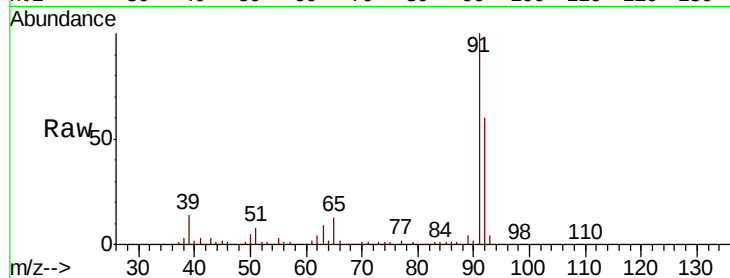
Ion Ratio Lower Upper

91 100

92 59.5 47.4 71.0

Manual Integrations
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Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 92.10 (91.80 to 92.80): VL0

600000

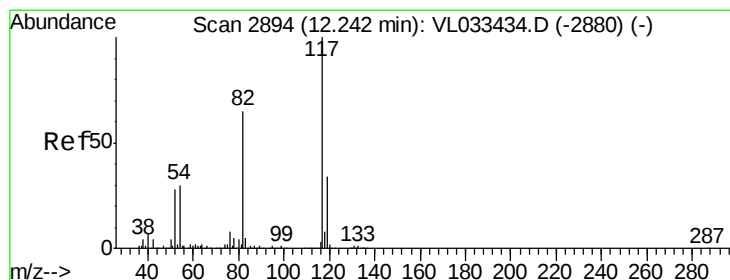
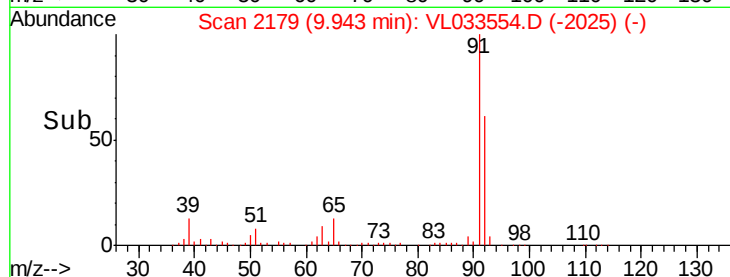
400000

200000

0

9.85 9.90 9.95 10.00

Time-->



#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.24 min Scan# 2892

Delta R.T. -0.01 min

Lab File: VL033554.D

Acq: 5 Apr 2019 4:48

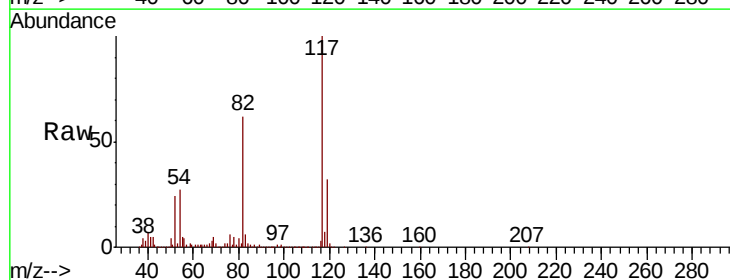
Tgt Ion: 117 Resp: 3038232

Ion Ratio Lower Upper

117 100

82 63.2 51.5 77.3

119 32.6 25.5 38.3



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

1500000

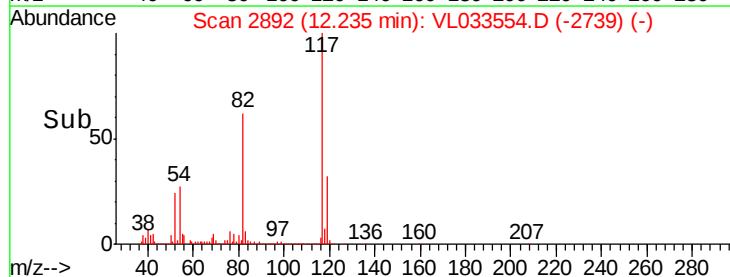
1000000

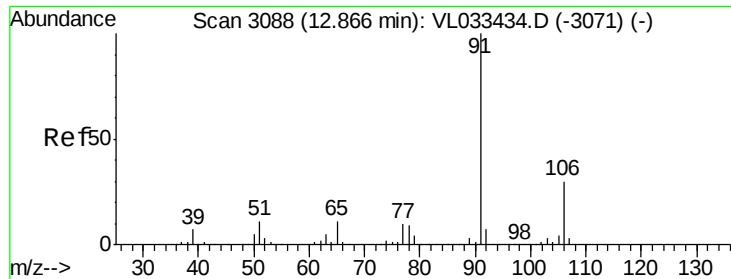
500000

0

12.20 12.24 12.28

Time-->





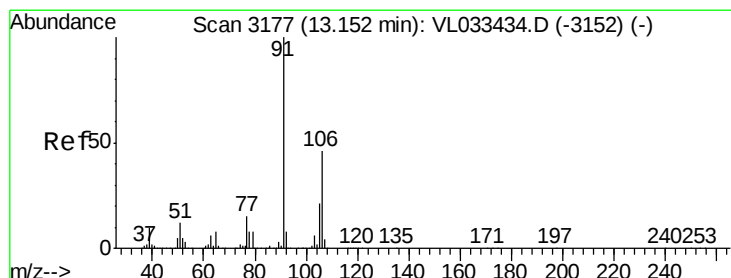
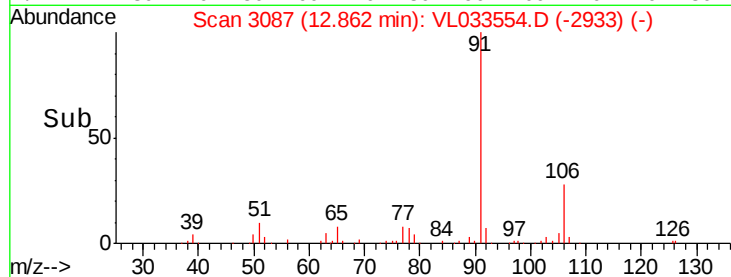
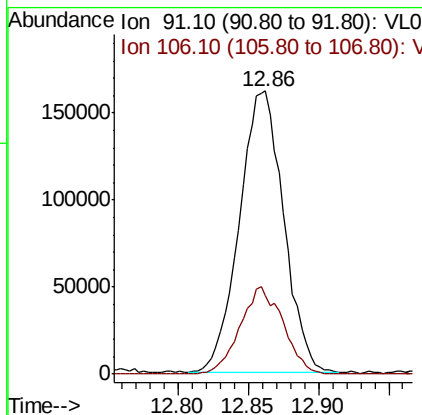
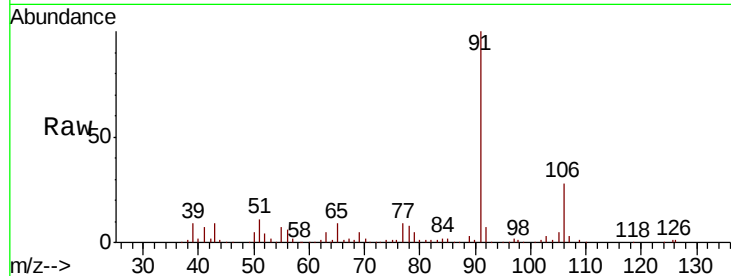
#58
Ethyl Benzene
Concen: 0.874 ppbv
RT: 12.86 min Scan# 3087
Delta R.T. -0.00 min
Lab File: VL033554.D
Acq: 5 Apr 2019 4:48

Instrument :
MSVOA_L
ClientSampled :
SV3

Tot Ion: 91 Resp: 354793
Ion Ratio Lower Upper
91 100
106 28.0 23.8 35.6

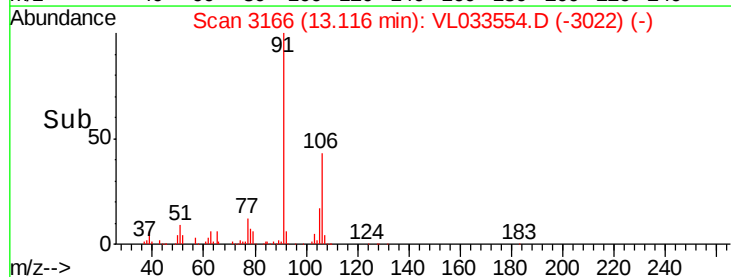
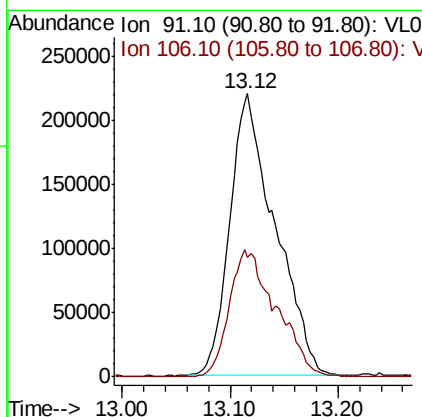
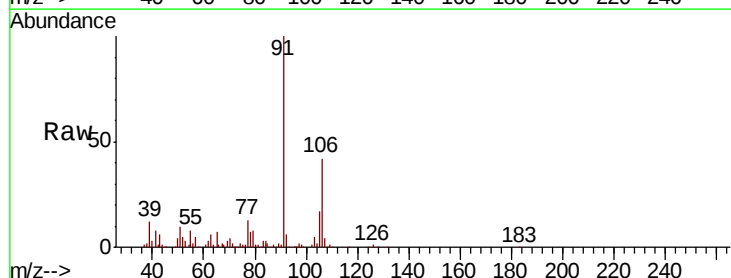
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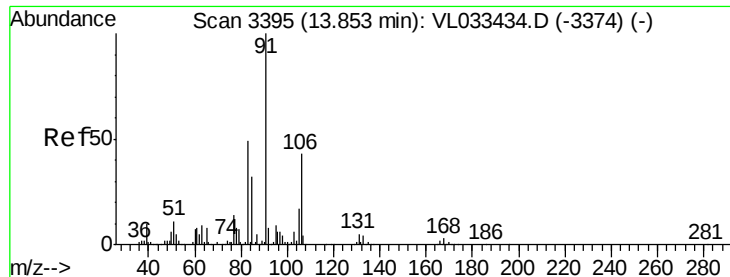
MMDadoda
4/8/2019 3:22:32 AM



#59
m/p-Xylene
Concen: 1.767 ppbv
RT: 13.12 min Scan# 3166
Delta R.T. -0.04 min
Lab File: VL033554.D
Acq: 5 Apr 2019 4:48

Tgt Ion: 91 Resp: 640501
Ion Ratio Lower Upper
91 100
106 46.9 0.0 0.0#





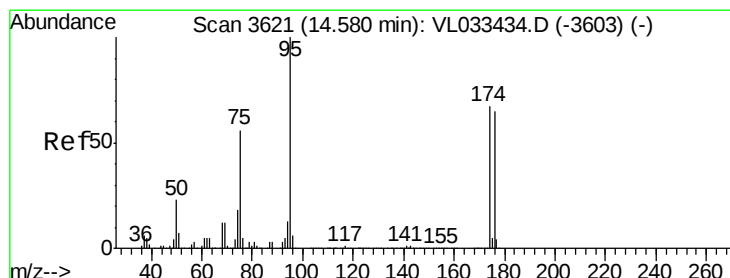
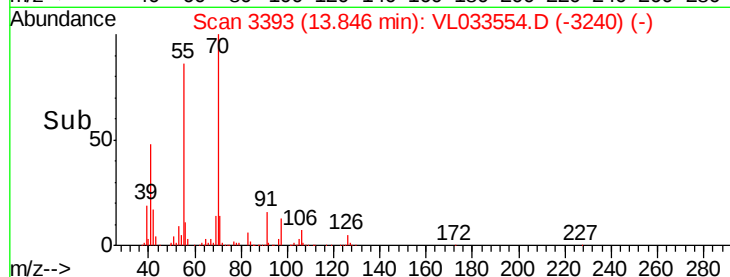
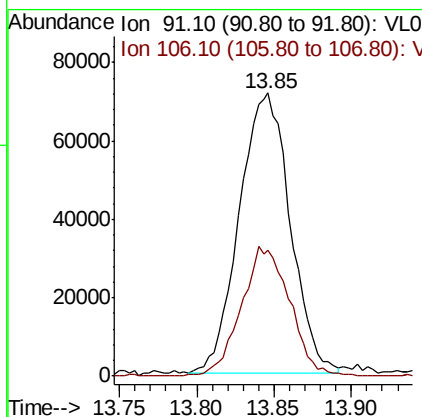
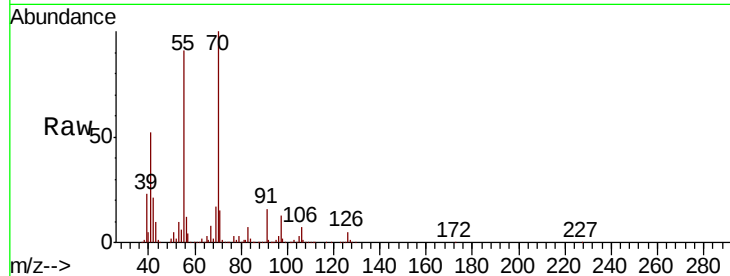
#60
o-Xylene
Concen: 0.466 ppbv
RT: 13.85 min Scan# 3393
Delta R.T. -0.01 min
Lab File: VL033554.D
Acq: 5 Apr 2019 4:48

Instrument :
MSVOA_L
ClientSampleId :
SV3

Tot Ion: 91 Resp: 163378
Ion Ratio Lower Upper
91 100
106 44.1 21.4 64.3

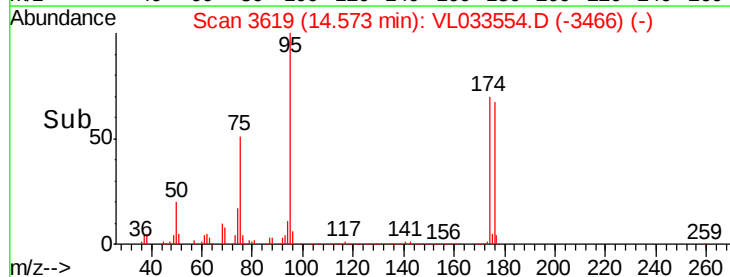
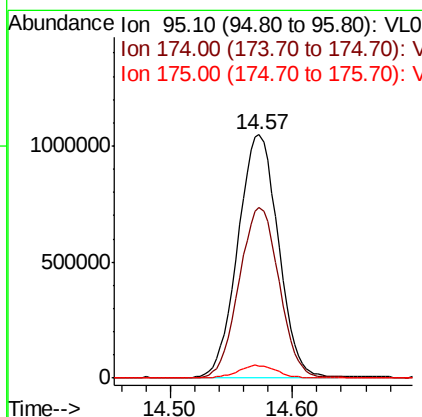
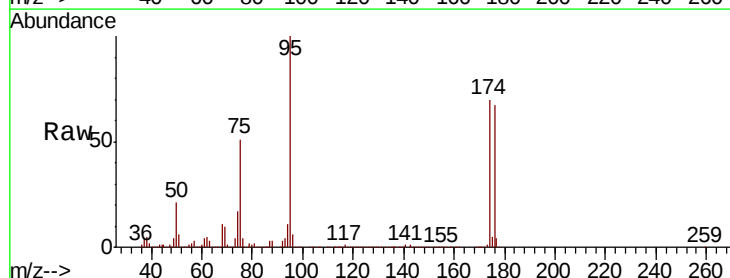
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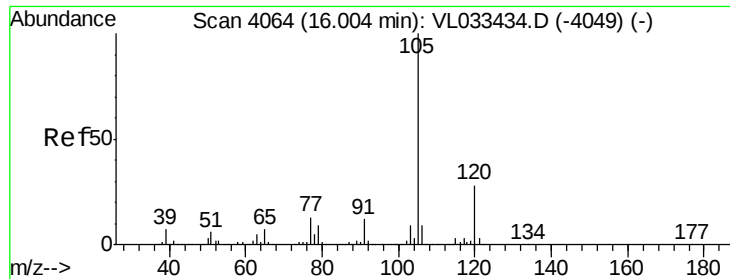
MMDadoda
4/8/2019 3:22:32 AM



#68
1-Bromo-4-Fluorobenzene
Concen: 10.041 ppbv
RT: 14.57 min Scan# 3619
Delta R.T. -0.01 min
Lab File: VL033554.D
Acq: 5 Apr 2019 4:48

Tgt Ion: 95 Resp: 2391693
Ion Ratio Lower Upper
95 100
174 70.3 52.9 79.3
175 5.1 3.8 5.6





#72

4-Ethyltoluene

Concen: 0.124 ppbv

RT: 16.00 min Scan# 4064

Delta R.T. -0.00 min

Lab File: VL033554.D

Acq: 5 Apr 2019 4:48

Instrument :

MSVOA_L

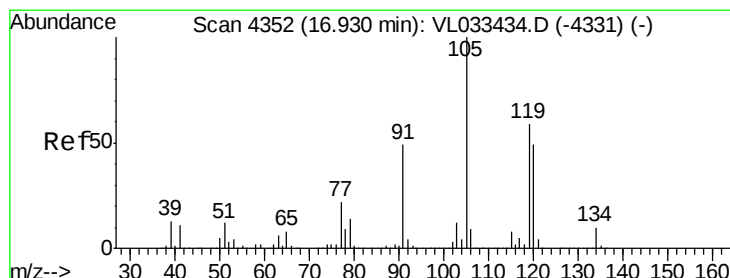
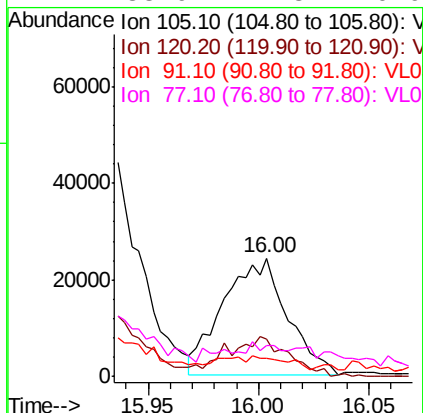
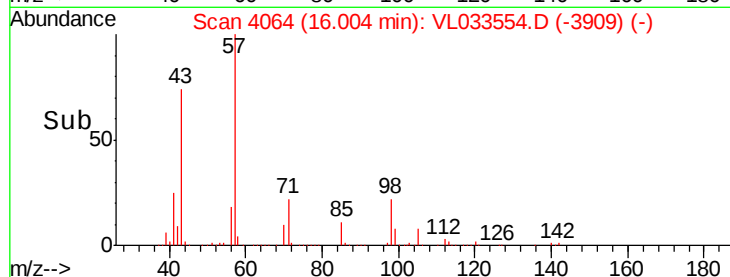
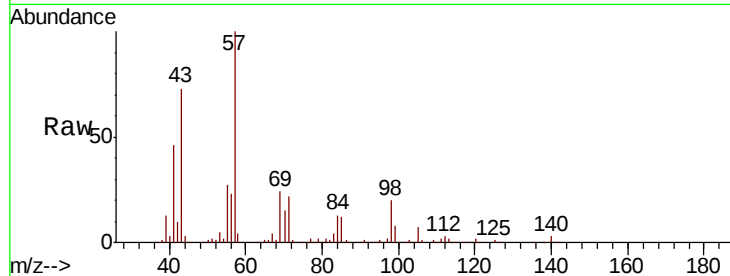
ClientSampled :

SV3

Tot Ion:	105	Resp:	48826
Ion Ratio	Lower	Upper	
105	100		
120	33.1	23.2	34.8
91	14.1	10.4	15.6
77	33.9	11.3	16.9#

Manual Integrations
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MMDadoda
4/8/2019 3:22:32 AM



#74

1,2,4-Trimethylbenzene

Concen: 0.150 ppbv

RT: 16.92 min Scan# 4350

Delta R.T. -0.01 min

Lab File: VL033554.D

Acq: 5 Apr 2019 4:48

Tgt Ion:	105	Resp:	60444
Ion Ratio	Lower	Upper	
105	100		
120	40.9	39.0	58.6
91	12.4	40.0	60.0#
77	8.4	17.5	26.3#

