

Data Path : Z:\VOASRV\HPCHEM1\MSVOA_L\DATA\VL100719\
 Data File : VL034229.D
 Acq On : 7 Oct 2019 19:38
 Operator : SY/AP
 Sample : K5225-02
 Misc : 400ml/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 IA3

Manual Integrations
 APPROVED

MMDadoda
 10/11/2019 5:05:02 PM

Quant Time: Oct 10 20:31:52 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_L\METHODS\VL091719AIR.M
 Quant Title : AIR ANALYSIS BY METHOD T0-15 Instrument: MSVOA_L Wed Sep 18 2019
 QLast Update : Wed Sep 18 12:53:31 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.69	49	1161342	10.00	ppbv	-0.02
33) 1,4-Difluorobenzene	7.22	114	1880646	10.00	ppbv	-0.01
55) Chlorobenzene-d5	12.16	117	1958899	10.00	ppbv	-0.01
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	14.49	95	1781915	10.47	ppbv	-0.02
Spiked Amount	10.000	Range	65 - 135	Recovery	=	104.70%
Target Compounds			Qvalue			
2) Dichlorodifluoromethane	3.03	85	104629	0.610	ppbv	89
3) Chlorodifluoromethane	2.97	51	1772741	13.019	ppbv	99
4) Chloromethane	3.12	50	34873	0.436	ppbv	89
7) Chloroethane	3.55	64	15399m	0.602	ppbv	
9) Propene	3.00	41	84524	1.258	ppbv	# 78
10) Heptane	8.16	43	60427m	0.345	ppbv	
11) Trichlorofluoromethane	3.95	101	40882	0.262	ppbv	# 80
12) 1,1,2-Trichlorotrifluoroet	4.49	101	8249m	0.081	ppbv	
13) Ethanol	3.60	45	1732831	106.518	ppbv	98
15) Acetone	3.84	43	1378071	8.854	ppbv	98
19) Isopropyl Alcohol	3.97	45	800376	8.362	ppbv	# 98
20) Methylene Chloride	4.35	84	37146m	0.828	ppbv	
29) Chloroform	5.77	83	49437m	0.283	ppbv	
34) 2-Butanone	5.26	43	94002	0.490	ppbv	98
35) Carbon Tetrachloride	7.06	117	12722m	0.081	ppbv	
36) Benzene	6.92	78	44953	0.216	ppbv	95
43) Methyl Methacrylate	8.06	69	154599	1.802	ppbv	100
52) Tetrachloroethene	11.29	164	3462m	0.050	ppbv	
53) Toluene	9.86	91	148472	0.654	ppbv	99
58) Ethyl Benzene	12.77	91	38289m	0.121	ppbv	
59) m/p-Xylene	13.04	91	130250m	0.498	ppbv	
60) o-Xylene	13.77	91	35122m	0.134	ppbv	
69) p-Isopropyltoluene	17.73	119	47942m	0.140	ppbv	
74) 1,2,4-Trimethylbenzene	16.84	105	59090m	0.195	ppbv	
76) 1,4-Dichlorobenzene	17.27	146	19250254	115.478	ppbv	74
79) Naphthalene	22.30	128	113835m	0.426	ppbv	

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

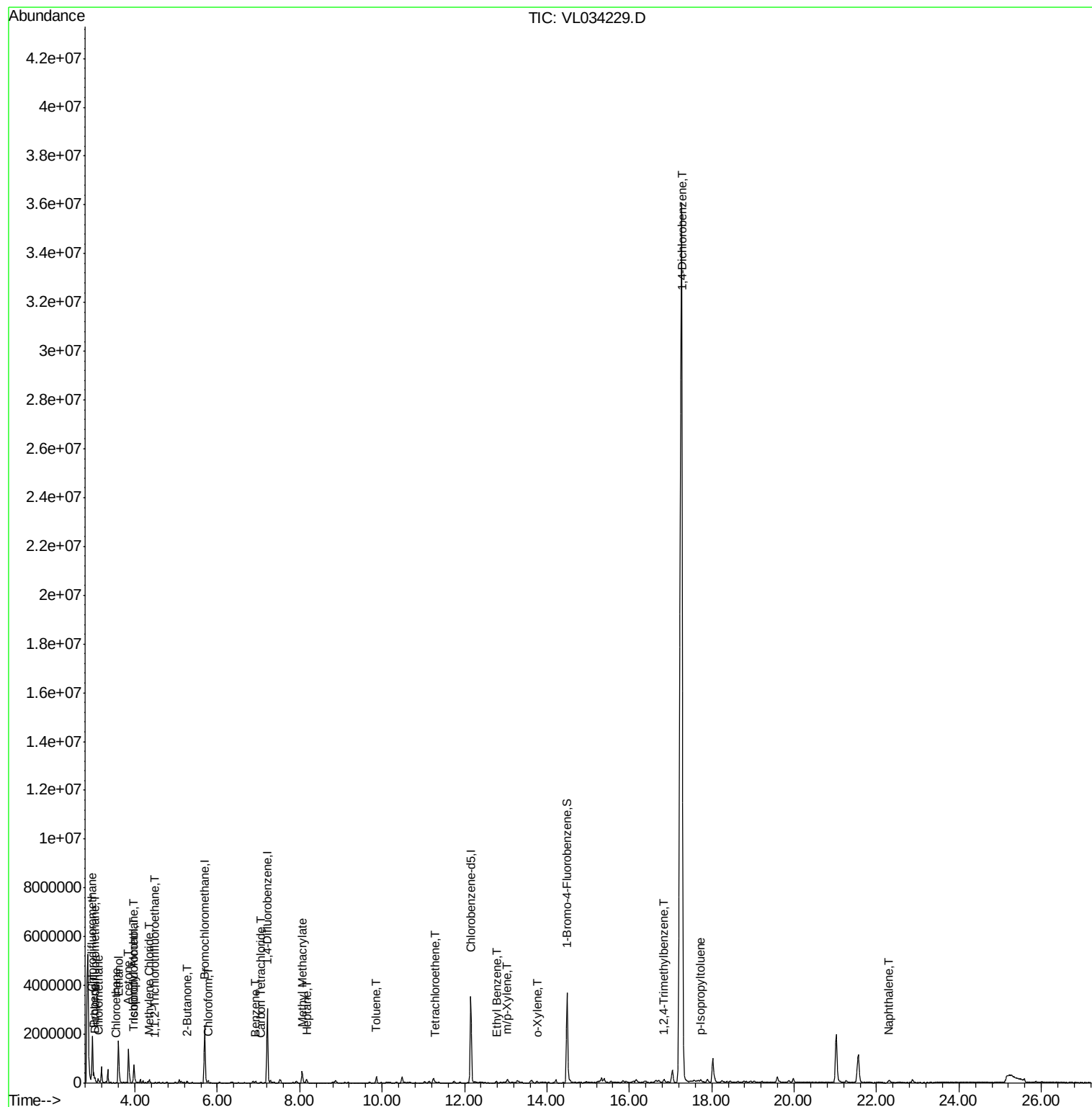
Data Path : Z:\V0ASRV\HPCHEM1\MSVOA_L\DATA\VL100719\
Data File : VL034229.D
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Operator : SY/AP
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Misc : 400ml/MSVOA_L
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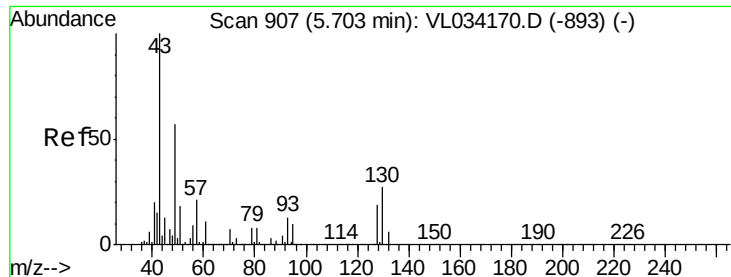
Instrument :
MSVOA_L
ClientSampleId :
IA3

Manual Integrations
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Quant Time: Oct 10 20:31:52 2019
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA_L\METHODS\VL091719AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Wed Sep
QLast Update : Wed Sep 18 12:53:31 2019
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.69 min Scan# 902

Delta R.T. -0.02 min

Lab File: VL034229.D

Acq: 7 Oct 2019 19:38

Instrument :

MSVOA_L

ClientSampled :

IA3

Tgt Ion: 49 Resp: 1161342

Ion Ratio Lower Upper

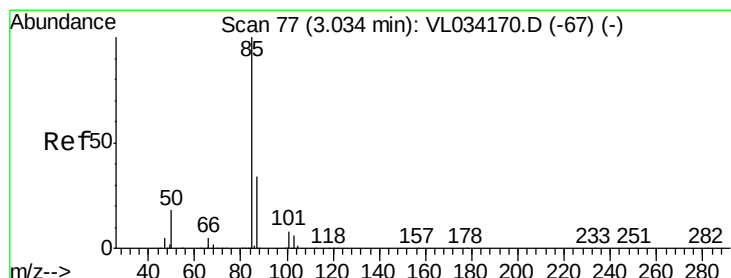
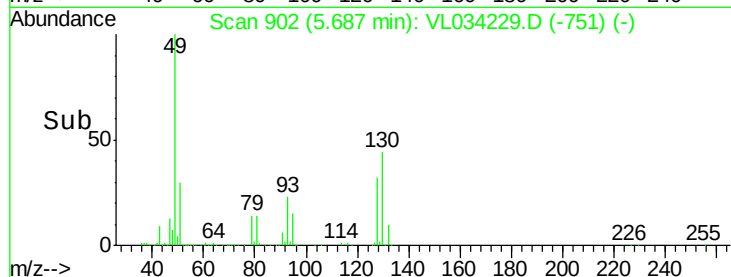
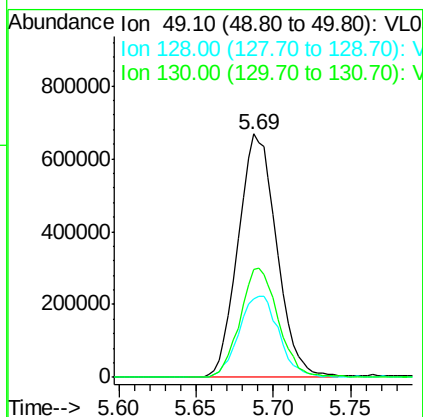
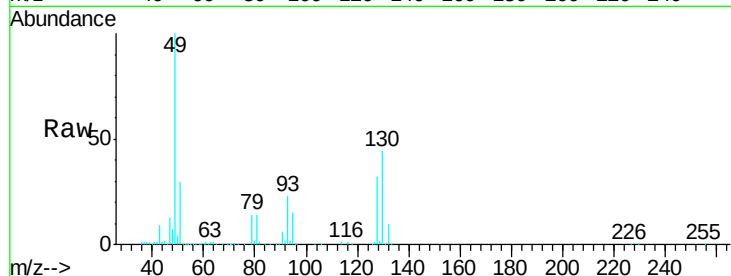
49 100

128 34.7 17.6 52.9

130 44.6 22.3 66.9

Manual Integrations
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#2

Dichlorodifluoromethane

Concen: 0.610 ppbv

RT: 3.03 min Scan# 75

Delta R.T. -0.01 min

Lab File: VL034229.D

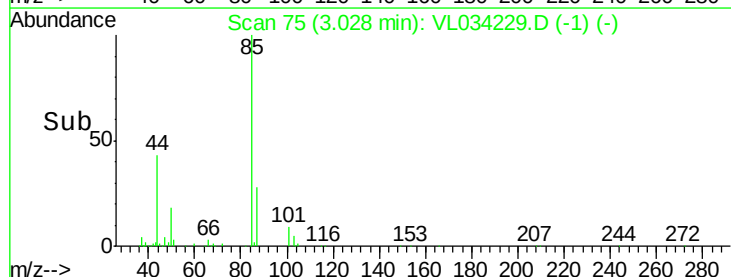
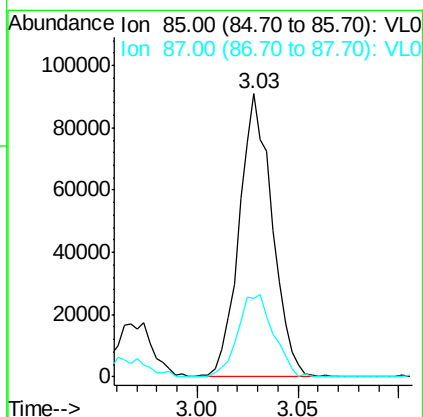
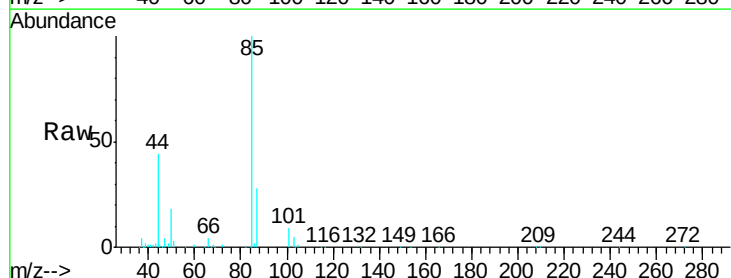
Acq: 7 Oct 2019 19:38

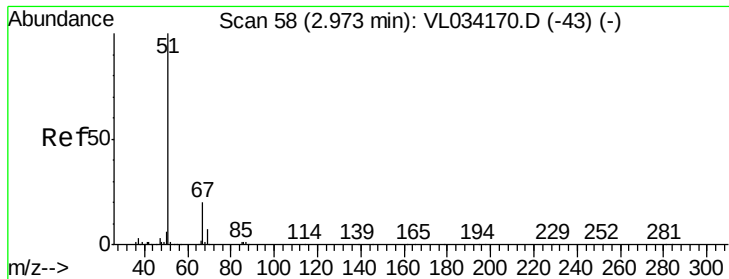
Tgt Ion: 85 Resp: 104629

Ion Ratio Lower Upper

85 100

87 27.9 27.2 40.8





#3

Chlorodifluoromethane

Concen: 13.019 ppbv

RT: 2.97 min Scan# 56

Delta R.T. -0.01 min

Lab File: VL034229.D

Acq: 7 Oct 2019 19:38

Instrument :

MSVOA_L

ClientSampled :

IA3

Tgt Ion: 51 Resp: 1772741

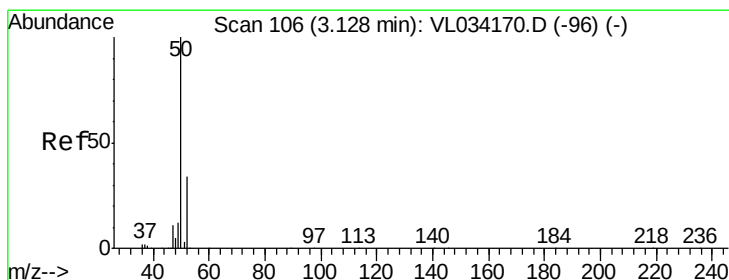
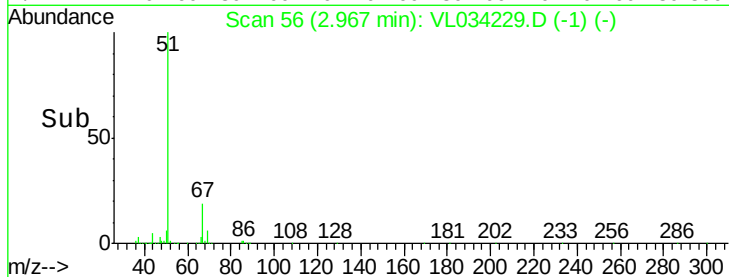
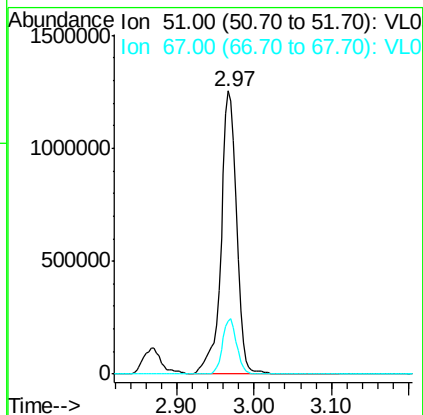
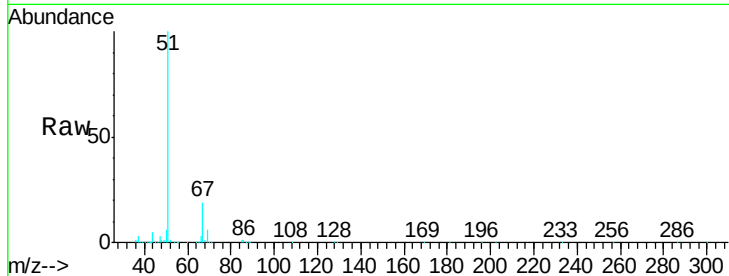
Ion Ratio Lower Upper

51 100

67 17.9 14.8 22.2

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#4

Chloromethane

Concen: 0.436 ppbv

RT: 3.12 min Scan# 104

Delta R.T. -0.01 min

Lab File: VL034229.D

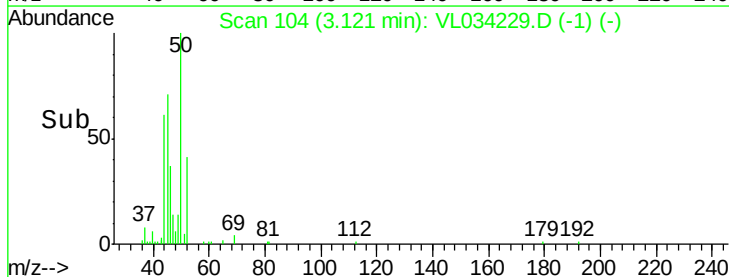
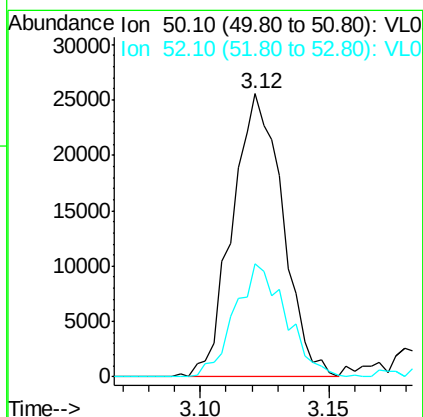
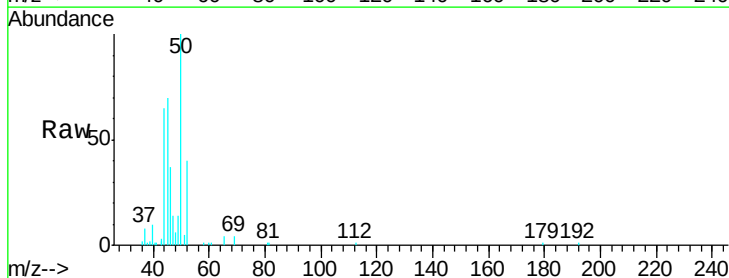
Acq: 7 Oct 2019 19:38

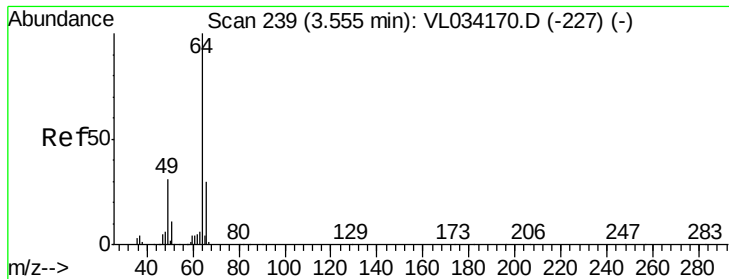
Tgt Ion: 50 Resp: 34873

Ion Ratio Lower Upper

50 100

52 40.1 27.1 40.7





#7

Chloroethane

Concen: 0.602 ppbv m

RT: 3.55 min Scan# 237

Delta R.T. -0.01 min

Lab File: VL034229.D

Acq: 7 Oct 2019 19:38

Instrument :

MSVOA_L

ClientSampleId :

IA3

Tgt Ion: 64 Resp: 15399

Ion Ratio Lower Upper

64 100

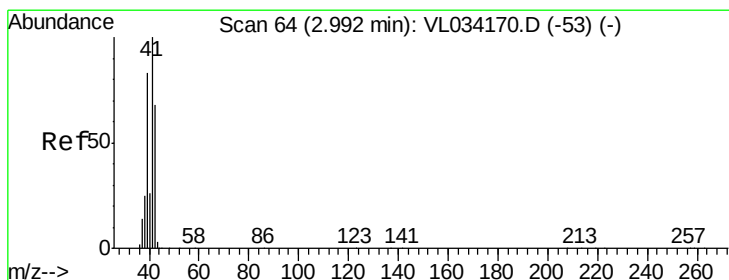
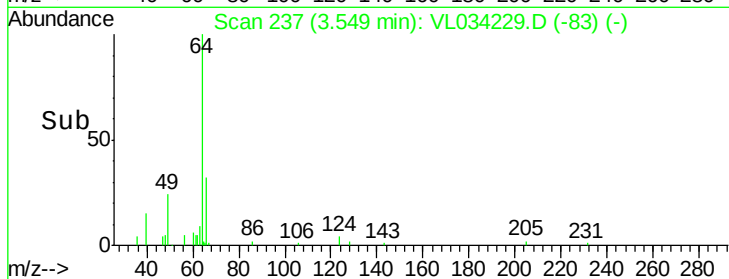
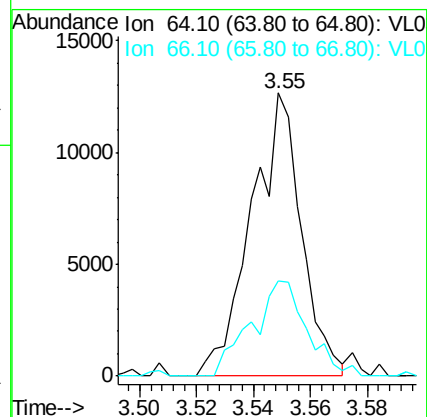
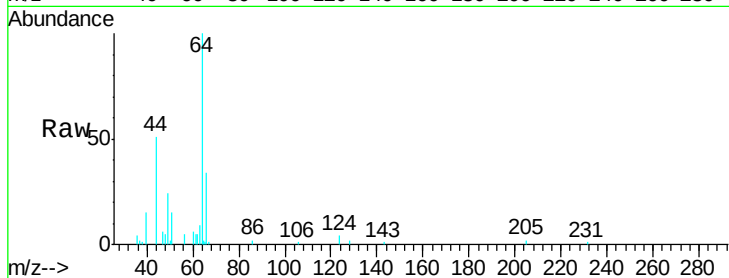
66 33.6 24.2 36.4

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#9

Propene

Concen: 1.258 ppbv

RT: 3.00 min Scan# 66

Delta R.T. 0.01 min

Lab File: VL034229.D

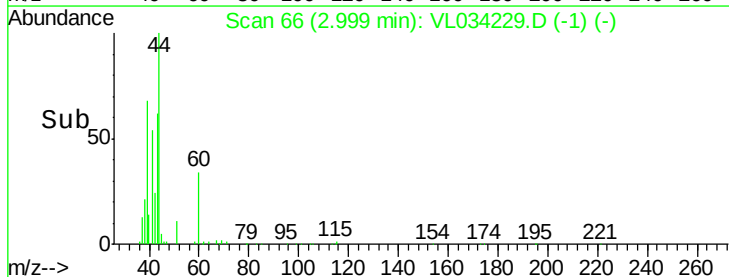
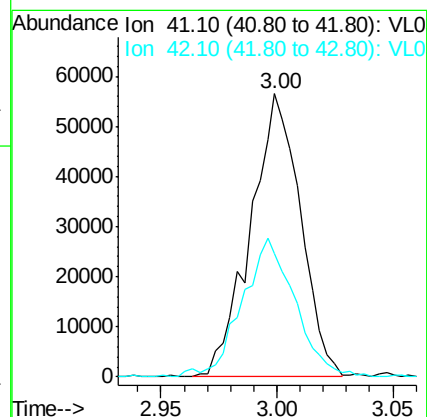
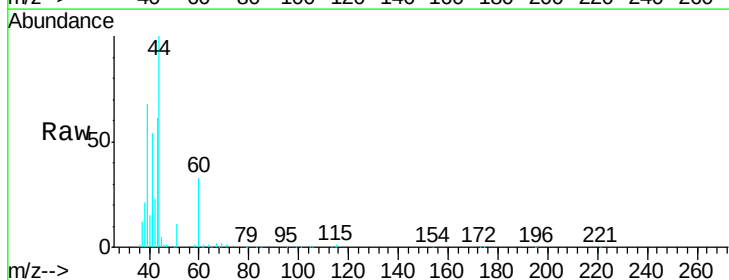
Acq: 7 Oct 2019 19:38

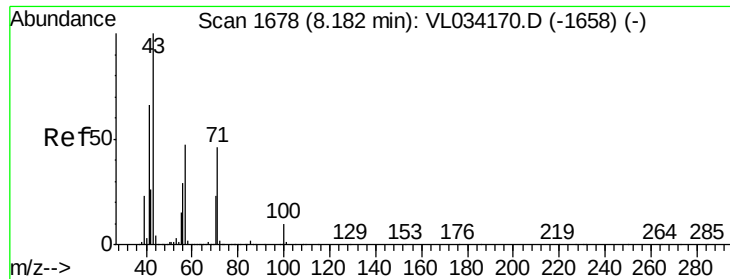
Tgt Ion: 41 Resp: 84524

Ion Ratio Lower Upper

41 100

42 52.0 55.8 83.6#





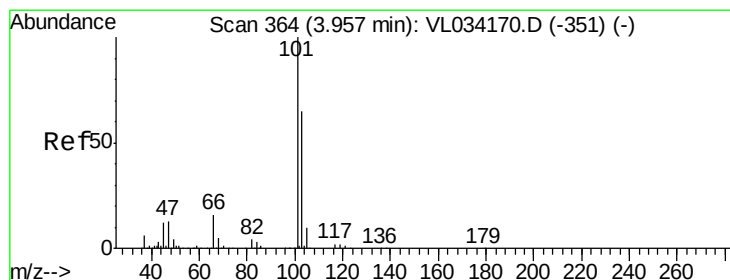
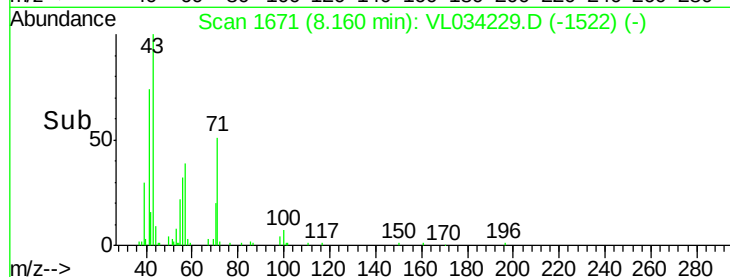
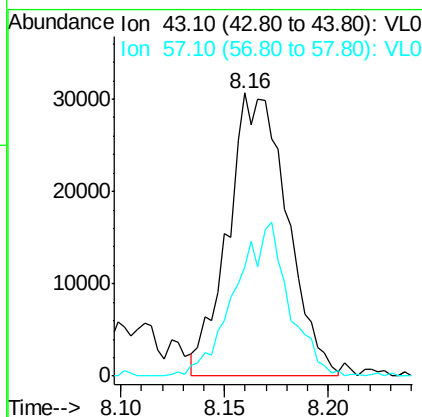
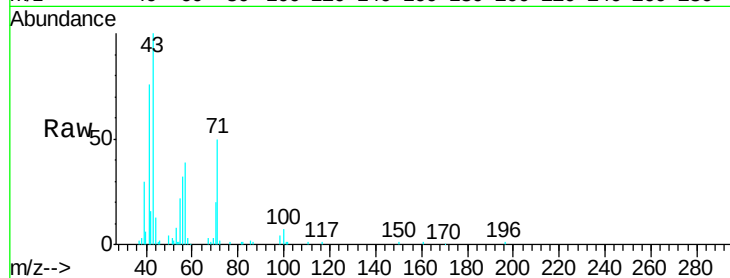
#10
 Heptane
 Concen: 0.345 ppbv m
 RT: 8.16 min Scan# 1671
 Delta R.T. -0.02 min
 Lab File: VL034229.D
 Acq: 7 Oct 2019 19:38

Instrument :
 MSVOA_L
 ClientSampled :
 IA3

Tgt Ion: 43 Resp: 60427
 Ion Ratio Lower Upper
 43 100
 57 0.0 37.5 56.3#

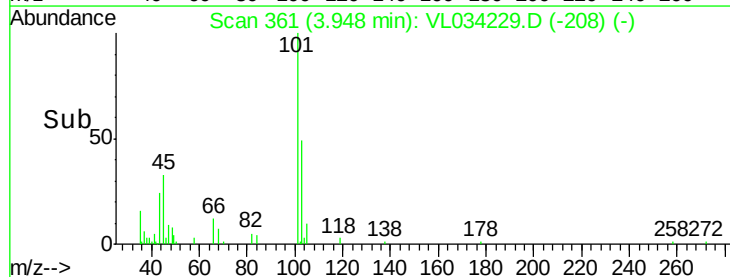
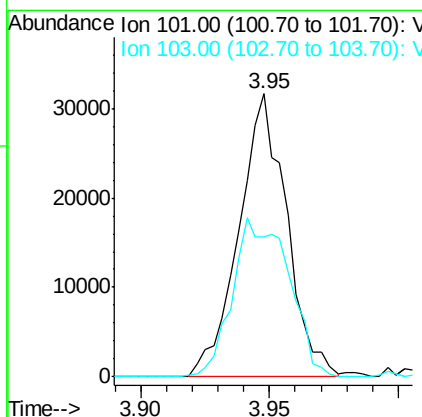
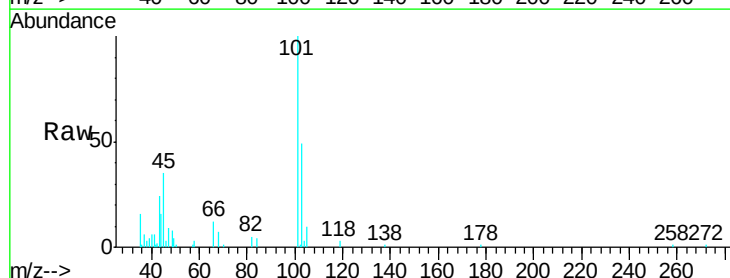
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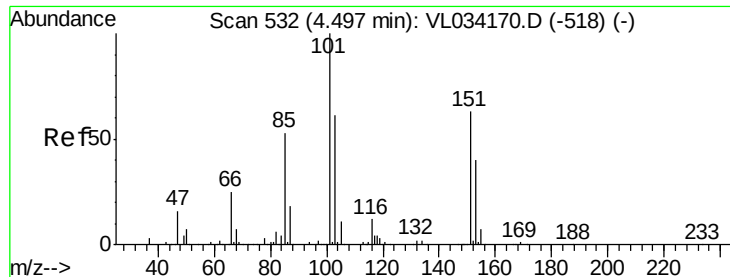
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#11
 Trichlorofluoromethane
 Concen: 0.262 ppbv
 RT: 3.95 min Scan# 361
 Delta R.T. -0.01 min
 Lab File: VL034229.D
 Acq: 7 Oct 2019 19:38

Tgt Ion: 101 Resp: 40882
 Ion Ratio Lower Upper
 101 100
 103 49.5 52.1 78.1#





#12

1,1,2-Trichlorotrifluoroethane

Concen: 0.081 ppbv m

RT: 4.49 min Scan# 530

Delta R.T. -0.01 min

Lab File: VL034229.D

Acq: 7 Oct 2019 19:38

Instrument :

MSVOA_L

ClientSampled :

IA3

Tgt Ion:101 Resp: 8249

Ion Ratio Lower Upper

101 100

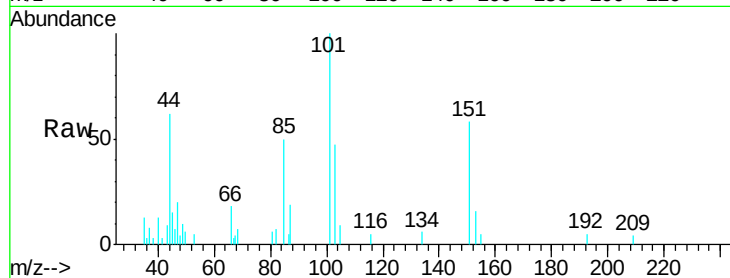
151 62.3 51.8 77.8

Manual Integrations

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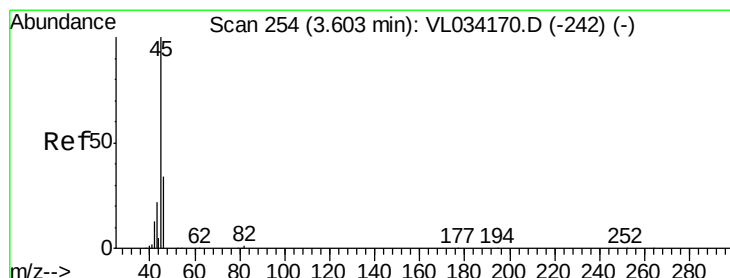
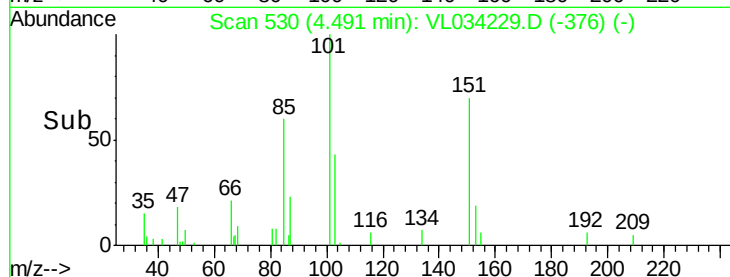
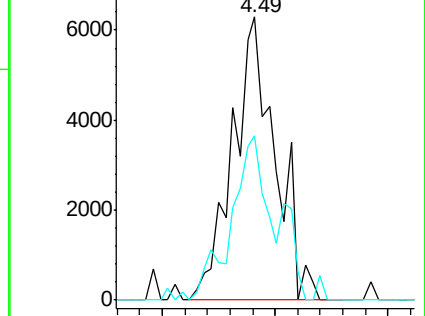
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Abundance Ion 101.00 (100.70 to 101.70): V

Ion 151.00 (150.70 to 151.70): V



#13

Ethanol

Concen: 106.518 ppbv

RT: 3.60 min Scan# 253

Delta R.T. -0.00 min

Lab File: VL034229.D

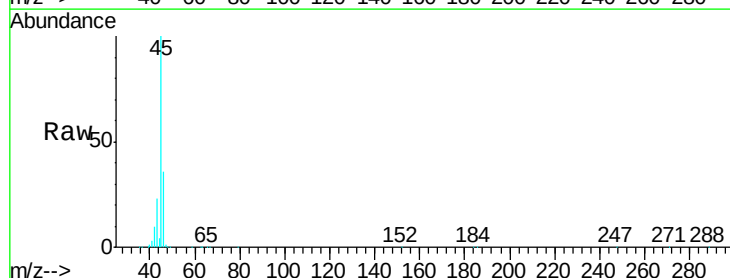
Acq: 7 Oct 2019 19:38

Tgt Ion: 45 Resp: 1732831

Ion Ratio Lower Upper

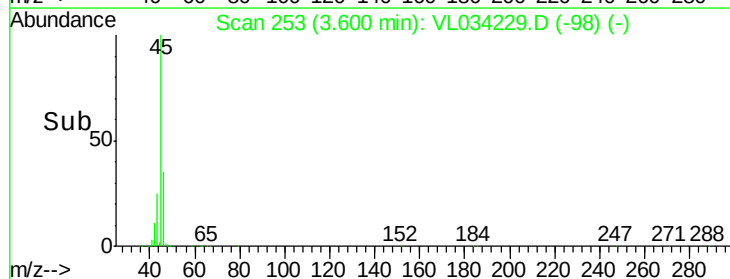
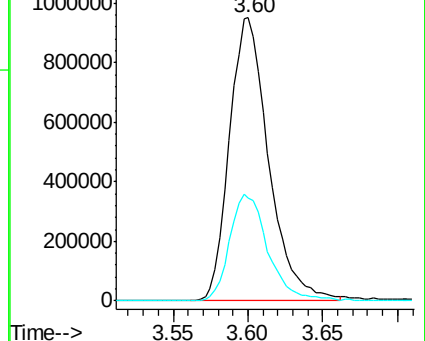
45 100

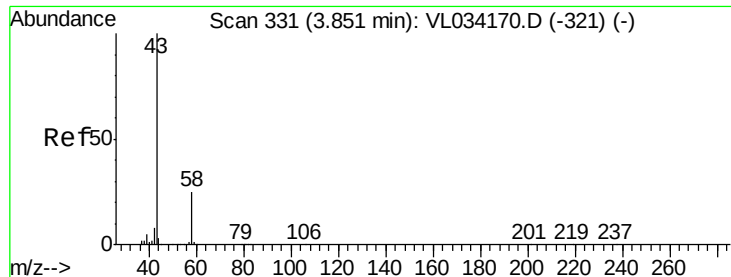
46 37.3 15.5 61.9



Abundance Ion 45.10 (44.80 to 45.80): VL0

Ion 46.10 (45.80 to 46.80): VL0





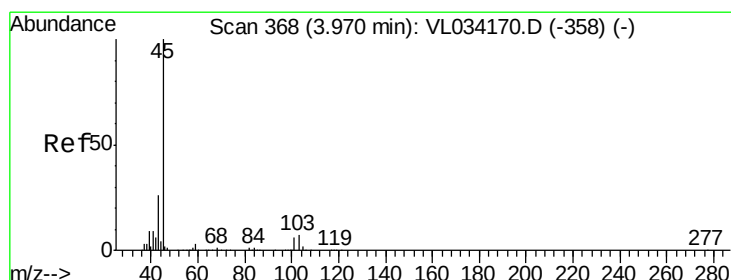
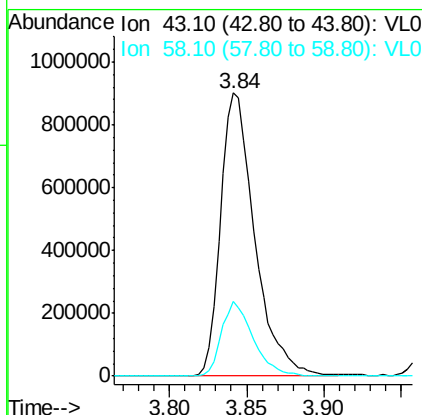
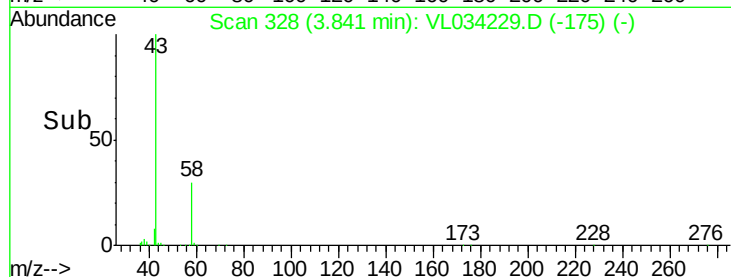
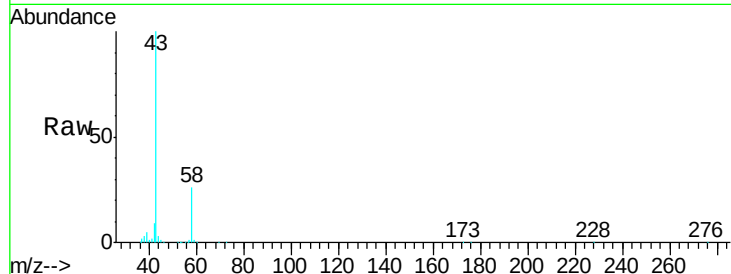
#15
Acetone
Concen: 8.854 ppbv
RT: 3.84 min Scan# 328
Delta R.T. -0.01 min
Lab File: VL034229.D
Acq: 7 Oct 2019 19:38

Instrument :
MSVOA_L
ClientSampled :
IA3

Tgt Ion: 43 Resp: 1378071
Ion Ratio Lower Upper
43 100
58 24.7 20.5 30.7

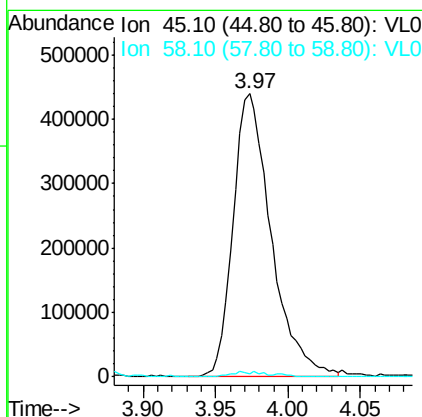
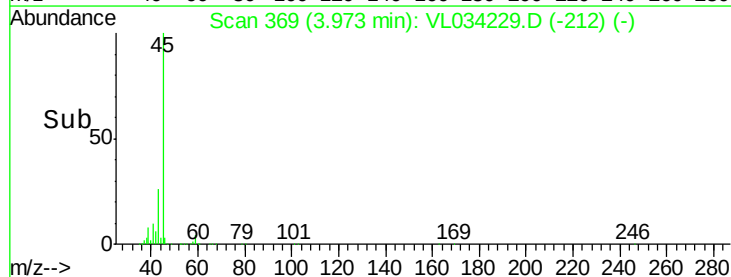
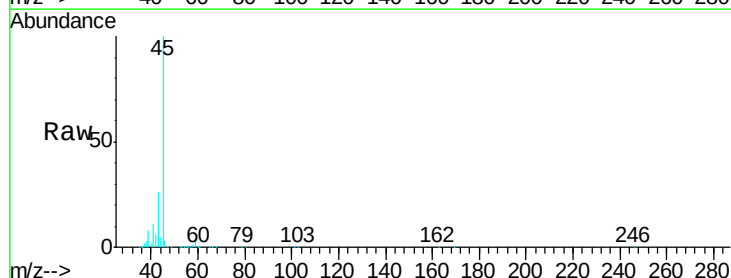
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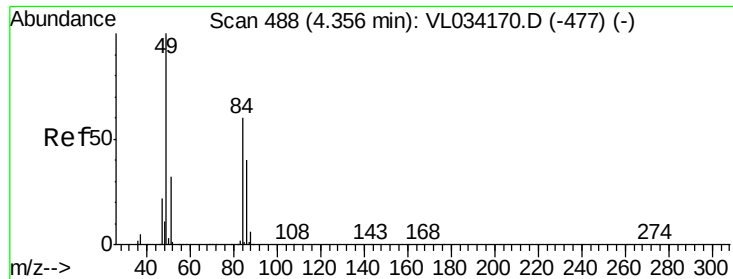
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#19
Isopropyl Alcohol
Concen: 8.362 ppbv
RT: 3.97 min Scan# 369
Delta R.T. 0.00 min
Lab File: VL034229.D
Acq: 7 Oct 2019 19:38

Tgt Ion: 45 Resp: 800376
Ion Ratio Lower Upper
45 100
58 2.3 1.4 2.0#





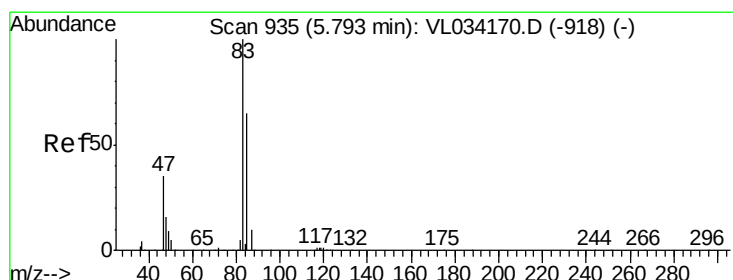
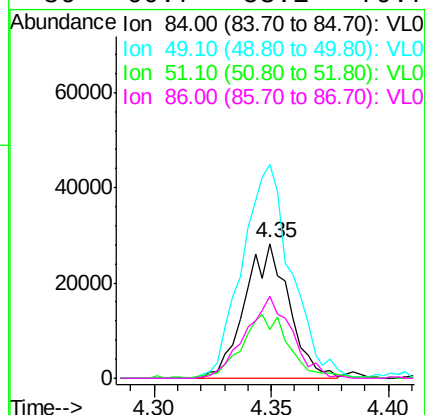
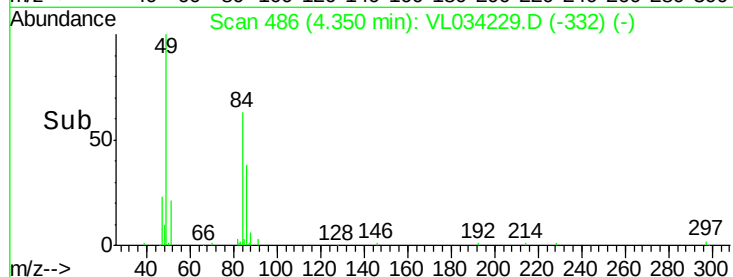
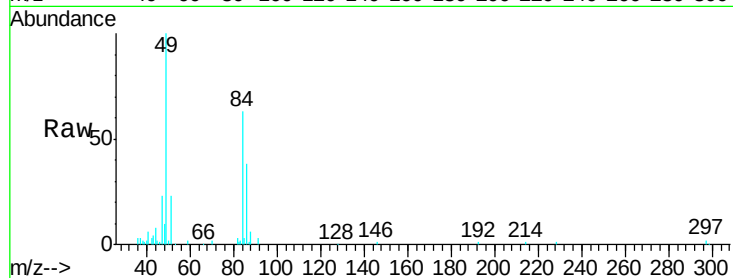
#20
Methylene Chloride
Concen: 0.828 ppbv m
RT: 4.35 min Scan# 486
Delta R.T. -0.01 min
Lab File: VL034229.D
Acq: 7 Oct 2019 19:38

Instrument :
MSVOA_L
ClientSampled :
IA3

Tgt Ion: 84 Resp: 37146
Ion Ratio Lower Upper
84 100
49 158.8 133.8 200.8
51 36.1 43.6 65.4#
86 60.7 53.1 79.7

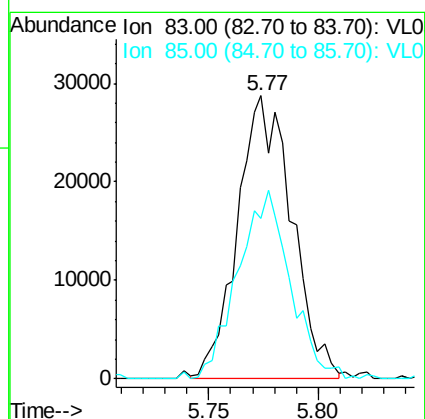
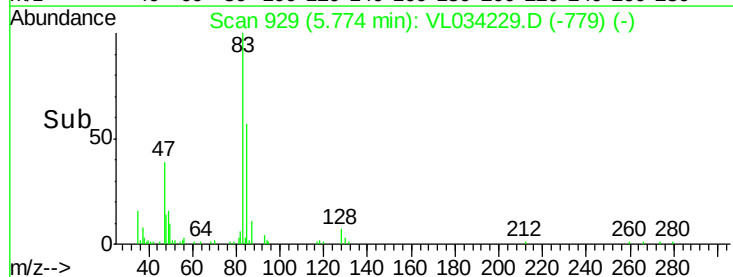
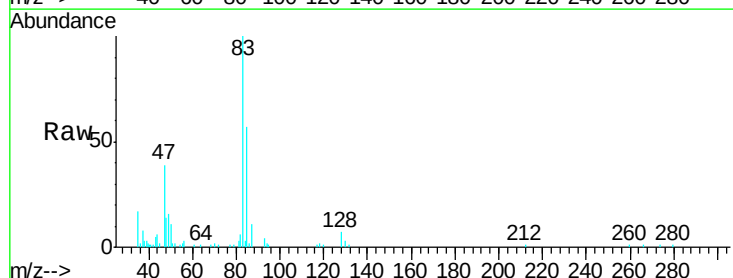
Manual Integrations
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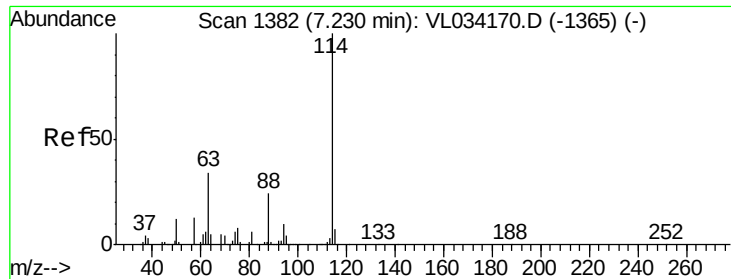
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#29
Chloroform
Concen: 0.283 ppbv m
RT: 5.77 min Scan# 929
Delta R.T. -0.02 min
Lab File: VL034229.D
Acq: 7 Oct 2019 19:38

Tgt Ion: 83 Resp: 49437
Ion Ratio Lower Upper
83 100
85 56.9 52.3 78.5





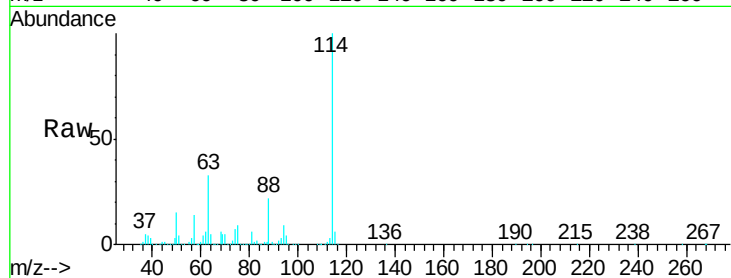
#33
 1,4-Difluorobenzene
 Concen: 10.000 ppbv
 RT: 7.22 min Scan# 1378
 Delta R.T. -0.01 min
 Lab File: VL034229.D
 Acq: 7 Oct 2019 19:38

Instrument :
 MSVOA_L
 ClientSampleId :
 IA3

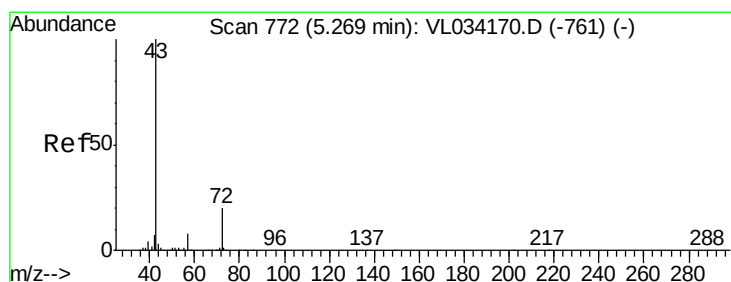
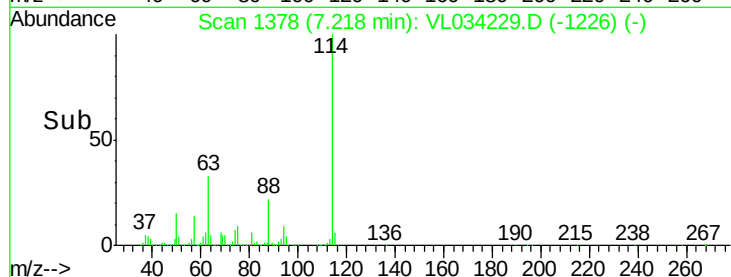
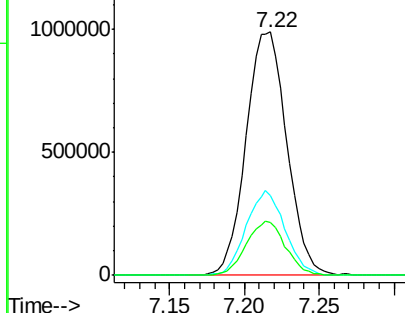
Tgt Ion	Ratio	Lower	Upper
114	100		
63	33.1	27.8	41.6
88	21.5	17.1	25.7

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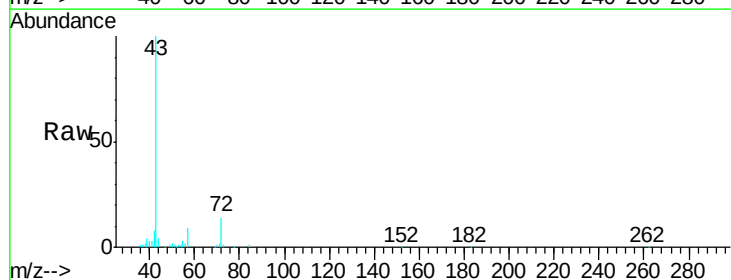


Abundance Ion 114.10 (113.80 to 114.80): VL0
 Ion 63.10 (62.80 to 63.80): VL0
 Ion 88.10 (87.80 to 88.80): VL0

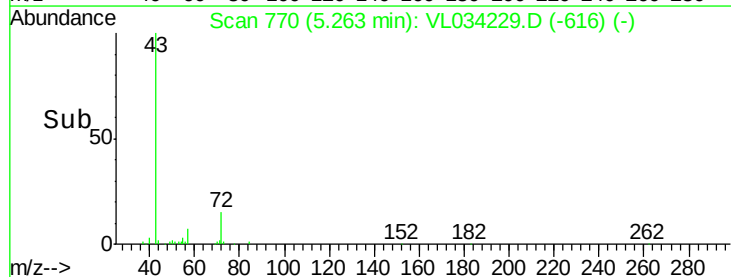
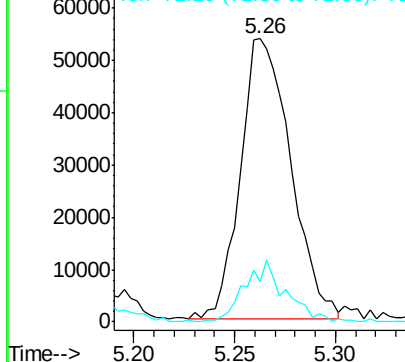


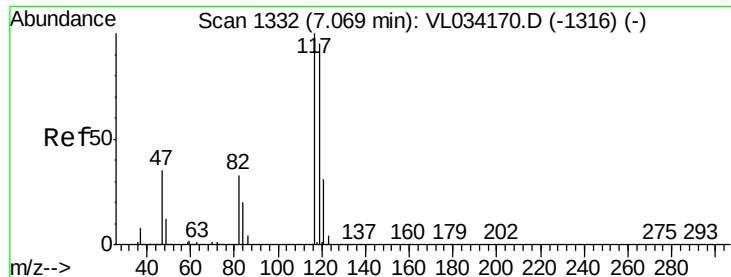
#34
 2-Butanone
 Concen: 0.490 ppbv
 RT: 5.26 min Scan# 770
 Delta R.T. -0.01 min
 Lab File: VL034229.D
 Acq: 7 Oct 2019 19:38

Tgt Ion	Ratio	Lower	Upper
43	100		
72	17.9	15.0	22.6



Abundance Ion 43.10 (42.80 to 43.80): VL0
 Ion 72.10 (71.80 to 72.80): VL0





#35

Carbon Tetrachloride

Concen: 0.081 ppbv m

RT: 7.06 min Scan# 1328

Delta R.T. -0.01 min

Lab File: VL034229.D

Acq: 7 Oct 2019 19:38

Instrument :

MSVOA_L

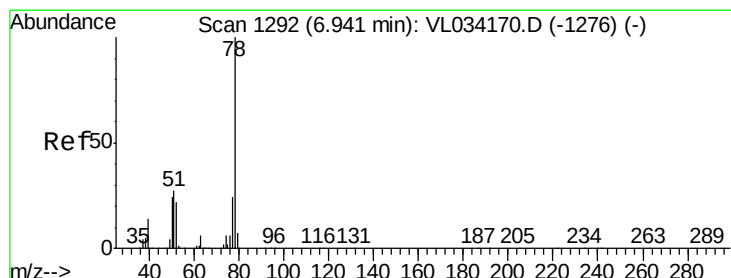
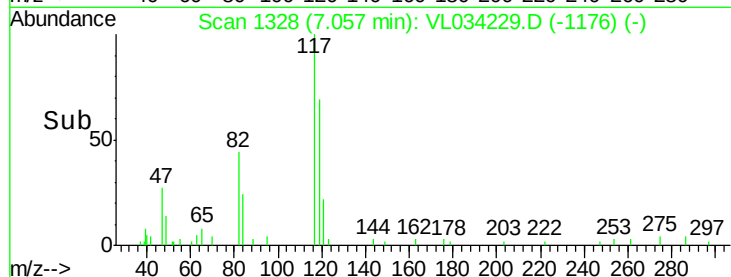
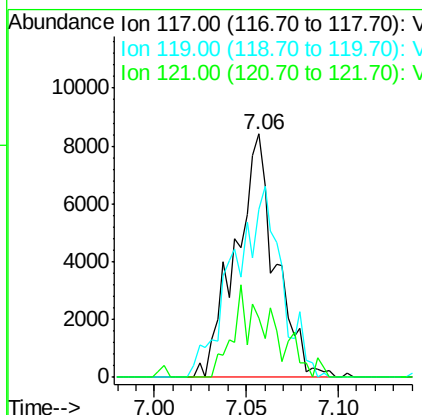
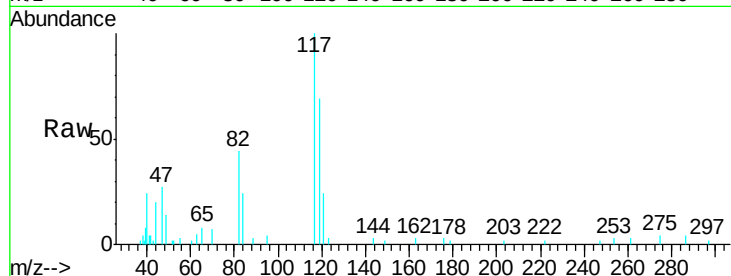
ClientSampled :

IA3

Tgt Ion	Ratio	Lower	Upper
117	100		
119	69.0	75.8	113.6#
121	24.3	25.0	37.6#

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#36

Benzene

Concen: 0.216 ppbv

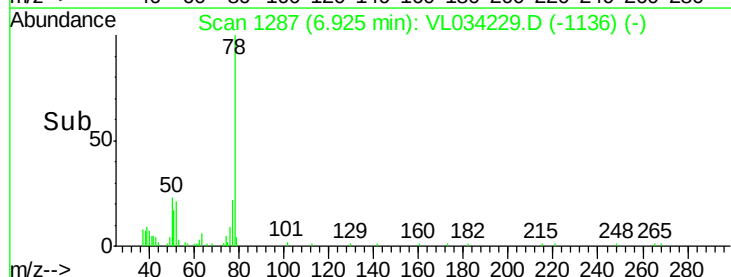
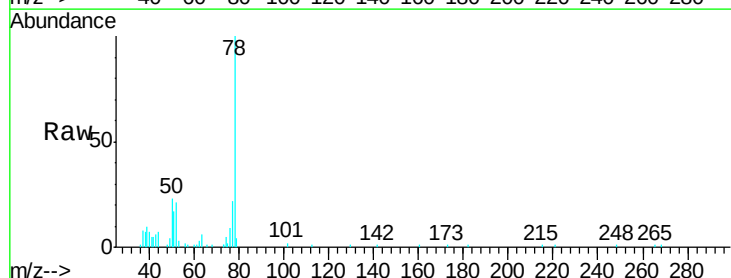
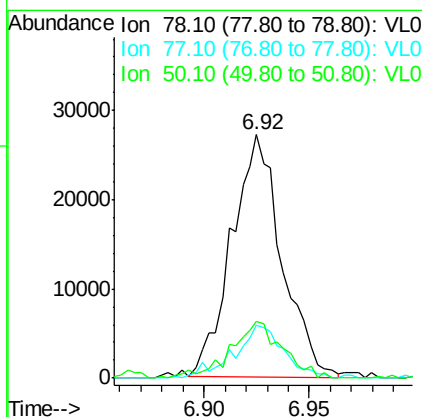
RT: 6.92 min Scan# 1287

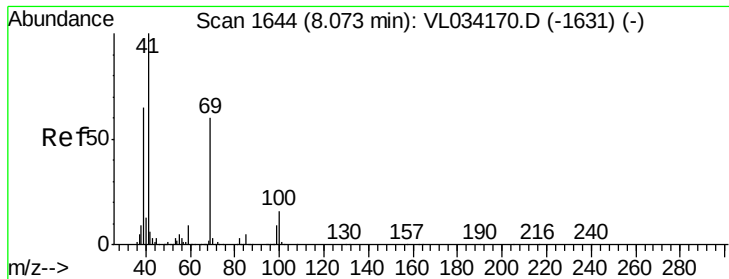
Delta R.T. -0.02 min

Lab File: VL034229.D

Acq: 7 Oct 2019 19:38

Tgt Ion	Ratio	Lower	Upper
78	100		
77	21.8	19.0	28.4
50	20.5	18.9	28.3





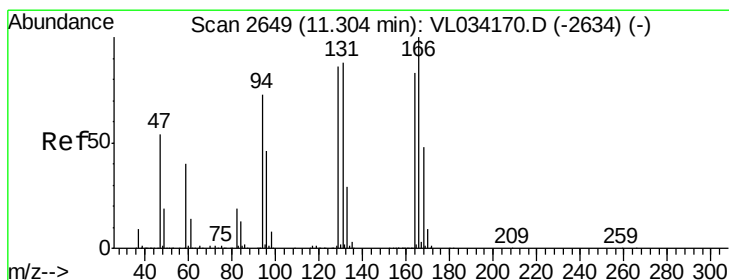
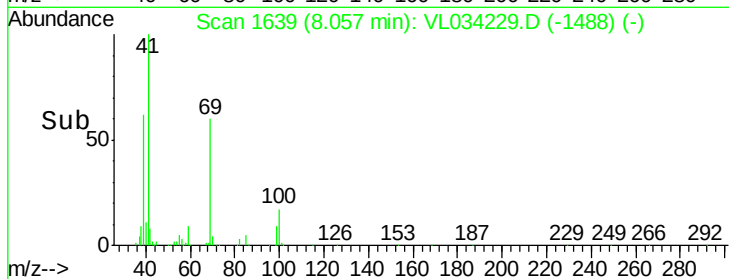
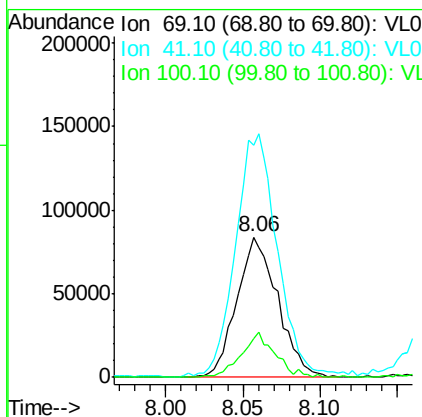
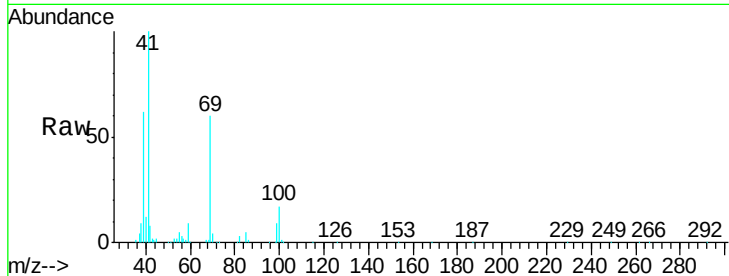
#43
Methyl Methacrylate
Concen: 1.802 ppbv
RT: 8.06 min Scan# 1639
Delta R.T. -0.02 min
Lab File: VL034229.D
Acq: 7 Oct 2019 19:38

Instrument :
MSVOA_L
ClientSampled :
IA3

Tgt Ion	Ratio	Lower	Upper
69	100		
41	175.6	140.4	210.6
100	26.6	21.9	32.9

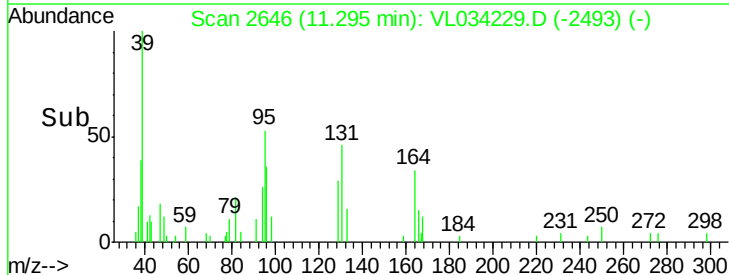
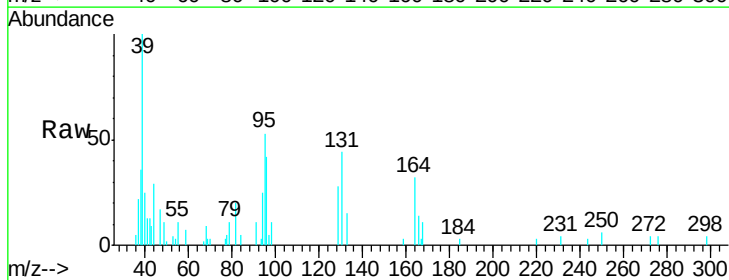
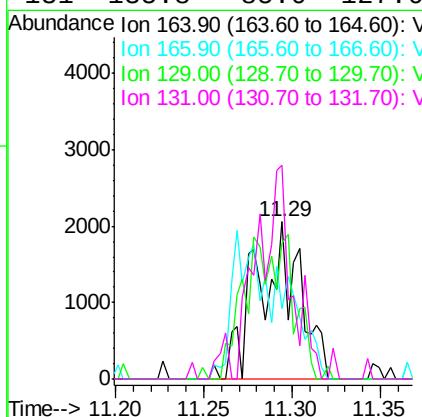
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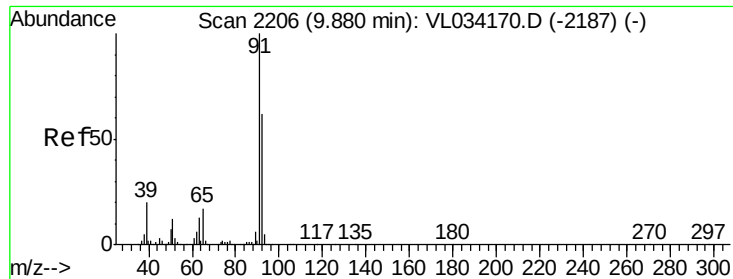
MMDadoda
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#52
Tetrachloroethene
Concen: 0.050 ppbv m
RT: 11.29 min Scan# 2646
Delta R.T. -0.01 min
Lab File: VL034229.D
Acq: 7 Oct 2019 19:38

Tgt Ion	Ratio	Lower	Upper
164	100		
166	44.9	96.7	145.1#
129	86.4	82.8	124.2
131	135.8	85.0	127.6#





#53

Toluene

Concen: 0.654 ppbv

RT: 9.86 min Scan# 2200

Delta R.T. -0.02 min

Lab File: VL034229.D

Acq: 7 Oct 2019 19:38

Instrument :

MSVOA_L

ClientSampled :

IA3

Tgt Ion: 91 Resp: 148472

Ion Ratio Lower Upper

91 100

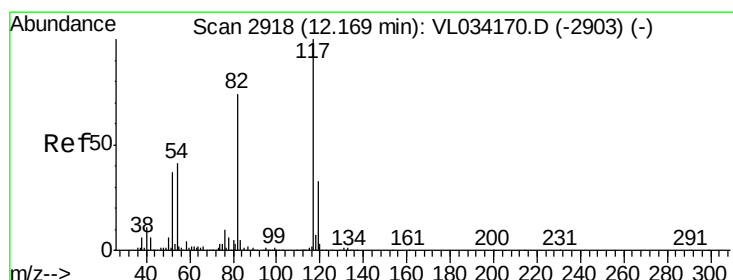
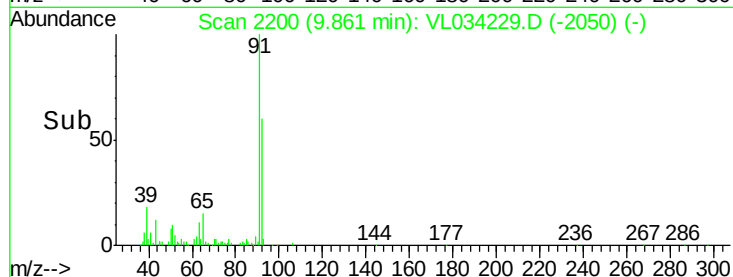
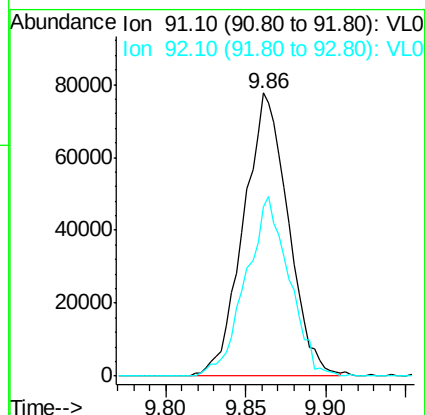
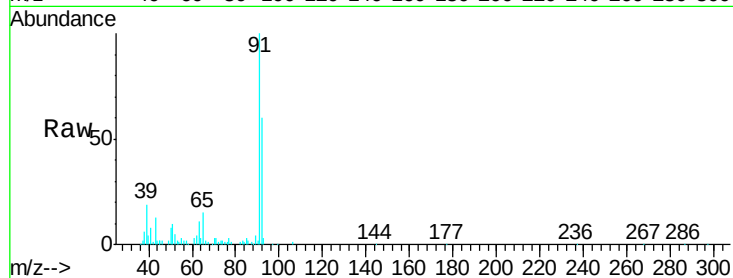
92 61.8 49.0 73.6

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#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.16 min Scan# 2914

Delta R.T. -0.01 min

Lab File: VL034229.D

Acq: 7 Oct 2019 19:38

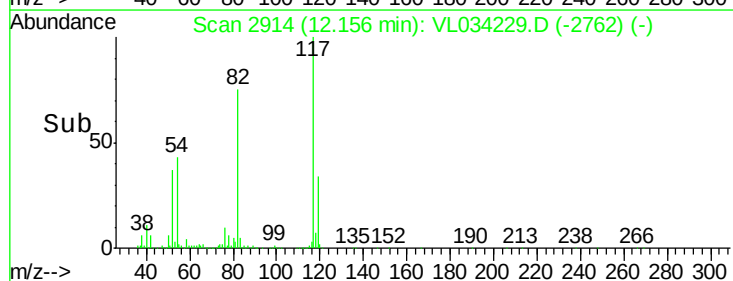
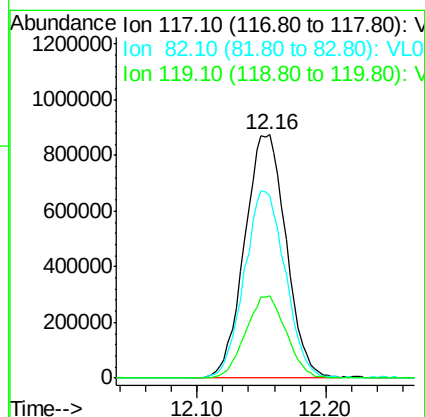
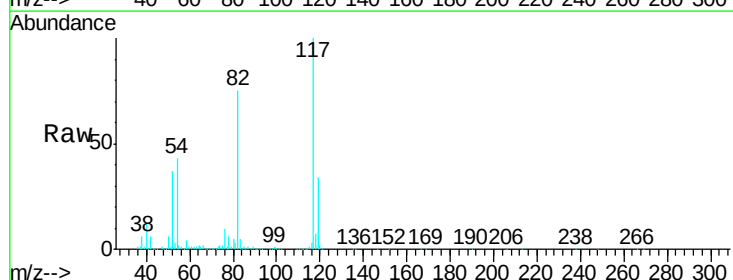
Tgt Ion: 117 Resp: 1958899

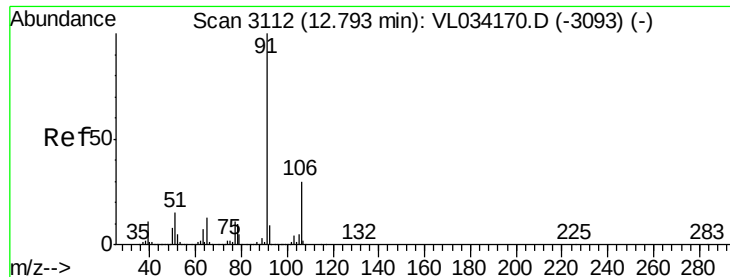
Ion Ratio Lower Upper

117 100

82 76.1 58.2 87.4

119 32.9 23.7 35.5





#58

Ethyl Benzene

Concen: 0.121 ppbv m

RT: 12.77 min Scan# 3106

Delta R.T. -0.02 min

Lab File: VL034229.D

Acq: 7 Oct 2019 19:38

Instrument :

MSVOA_L

ClientSampled :

IA3

Tgt Ion: 91 Resp: 38289

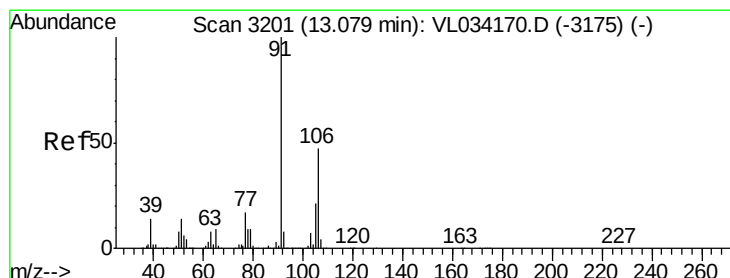
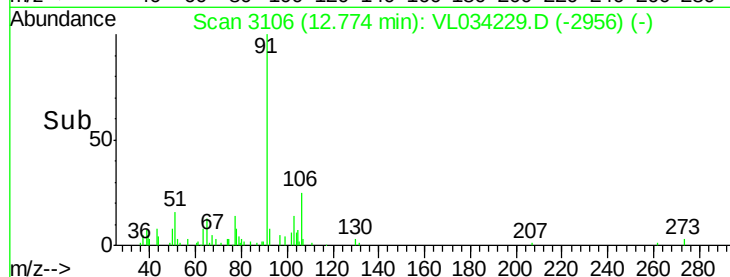
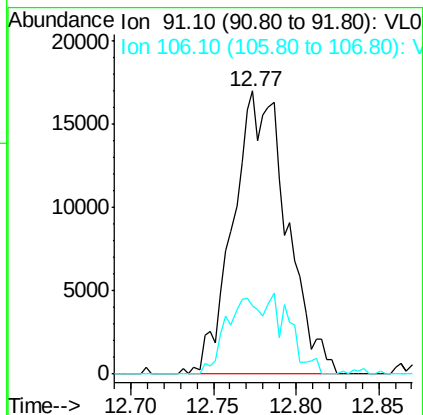
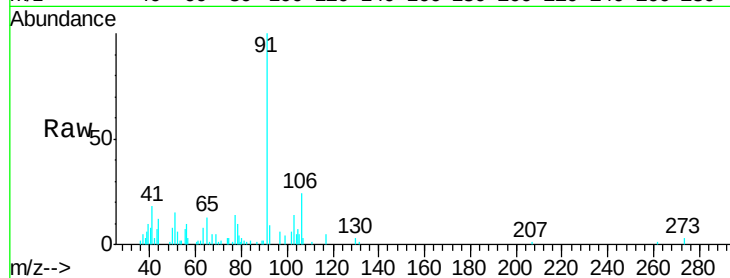
Ion Ratio Lower Upper

91 100

106 24.3 24.2 36.4

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#59

m/p-Xylene

Concen: 0.498 ppbv m

RT: 13.04 min Scan# 3188

Delta R.T. -0.04 min

Lab File: VL034229.D

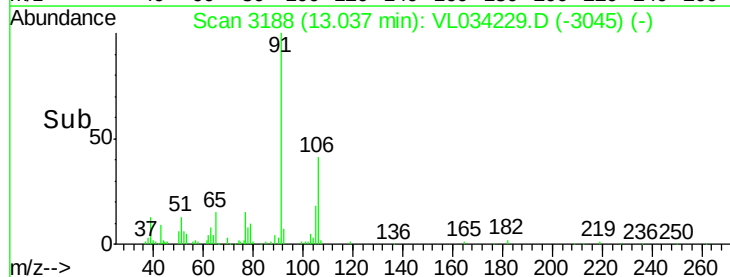
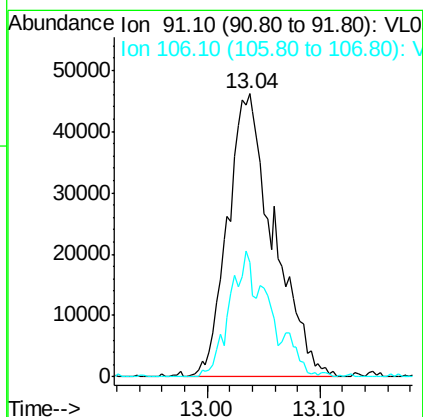
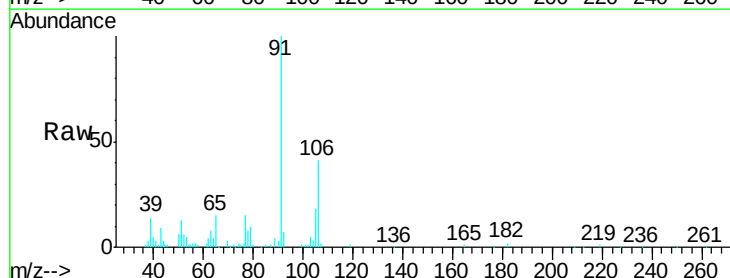
Acq: 7 Oct 2019 19:38

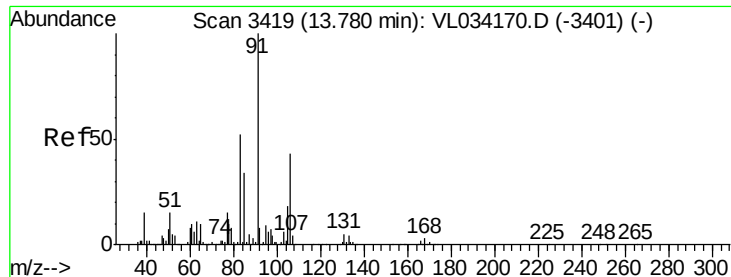
Tgt Ion: 91 Resp: 130250

Ion Ratio Lower Upper

91 100

106 0.0 35.5 53.3#





#60

o-Xylene

Concen: 0.134 ppbv m

RT: 13.77 min Scan# 3415

Delta R.T. -0.01 min

Lab File: VL034229.D

Acq: 7 Oct 2019 19:38

Instrument :

MSVOA_L

ClientSampleId :

IA3

Tgt Ion: 91 Resp: 35122

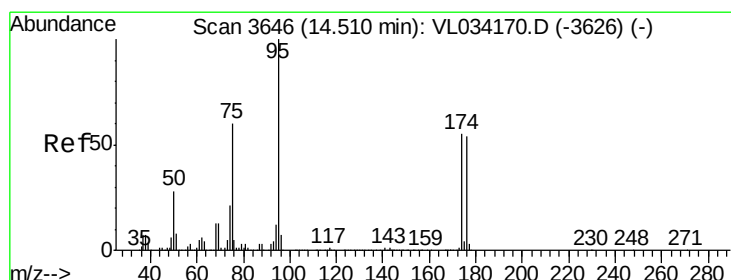
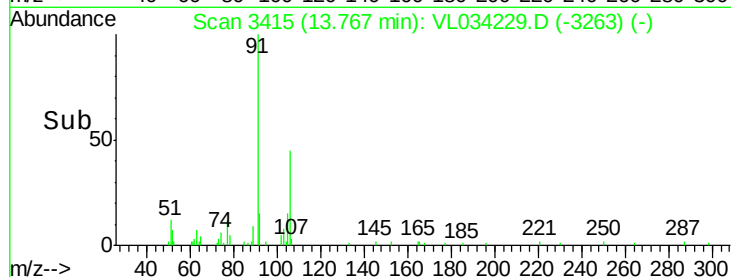
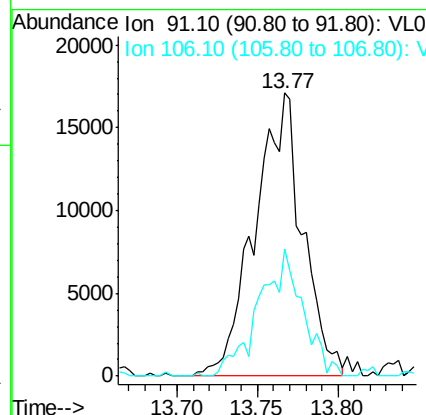
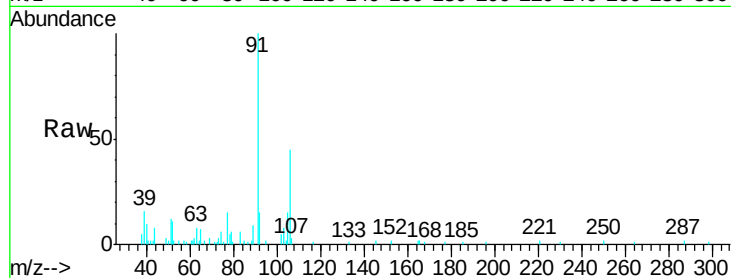
Ion Ratio Lower Upper

91 100

106 41.6 21.2 63.6

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#68

1-Bromo-4-Fluorobenzene

Concen: 10.469 ppbv

RT: 14.49 min Scan# 3641

Delta R.T. -0.02 min

Lab File: VL034229.D

Acq: 7 Oct 2019 19:38

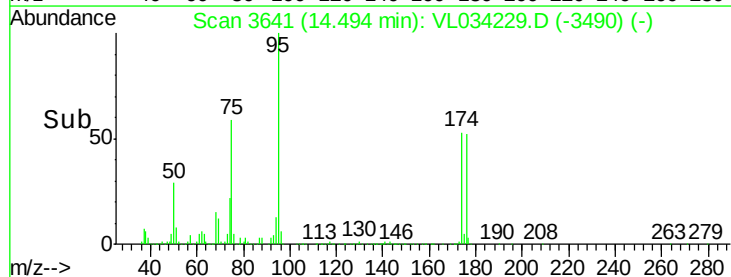
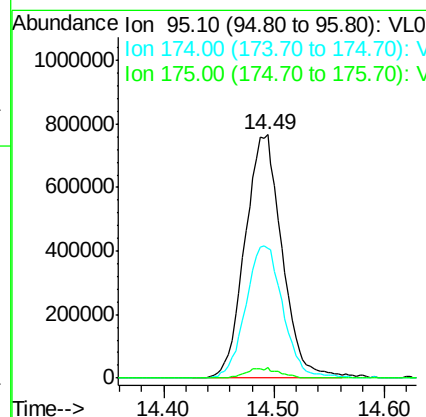
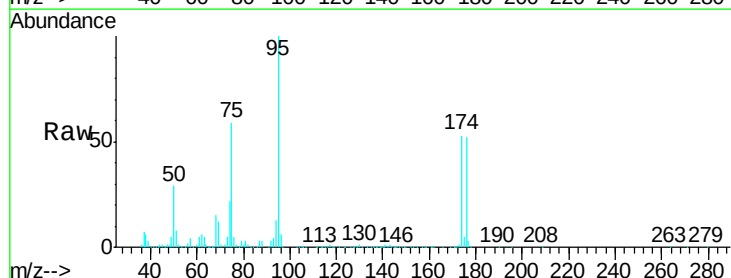
Tgt Ion: 95 Resp: 1781915

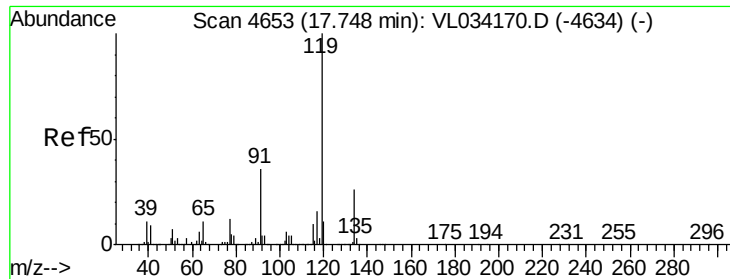
Ion Ratio Lower Upper

95 100

174 55.0 45.1 67.7

175 4.0 3.3 4.9





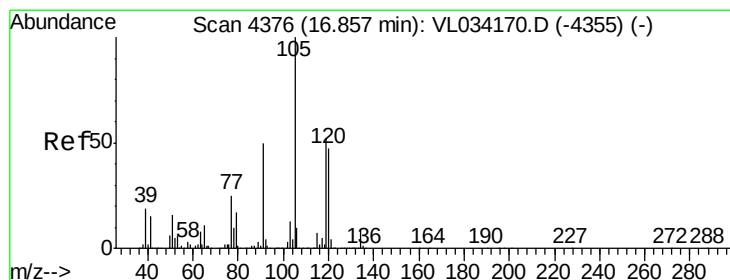
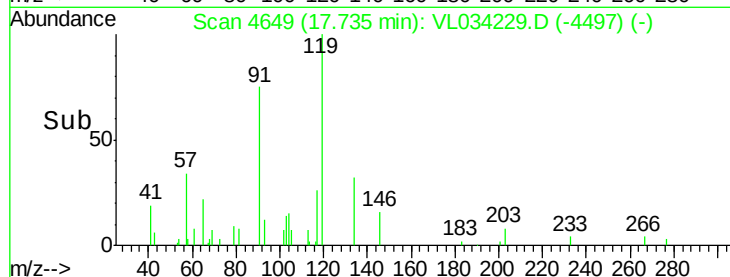
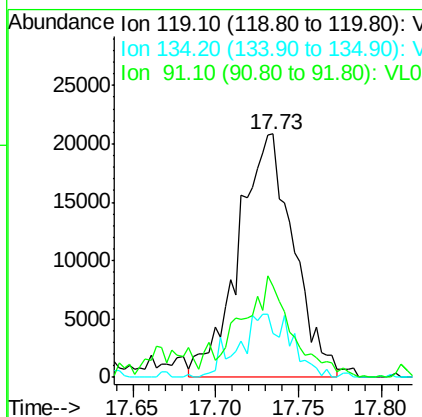
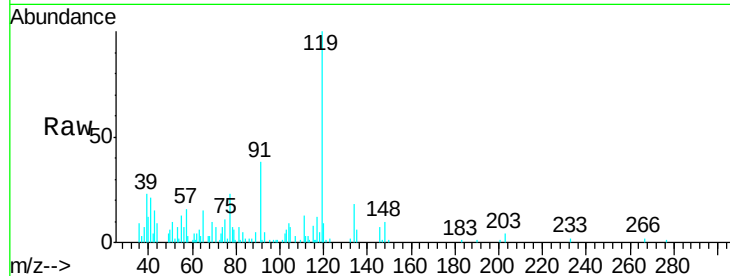
#69
 p-Isopropyltoluene
 Concen: 0.140 ppbv m
 RT: 17.73 min Scan# 4649
 Delta R.T. -0.01 min
 Lab File: VL034229.D
 Acq: 7 Oct 2019 19:38

Instrument :
 MSVOA_L
 ClientSampled :
 IA3

Tgt Ion	Ratio	Lower	Upper
119	100		
134	25.0	20.6	30.8
91	37.2	27.6	41.4

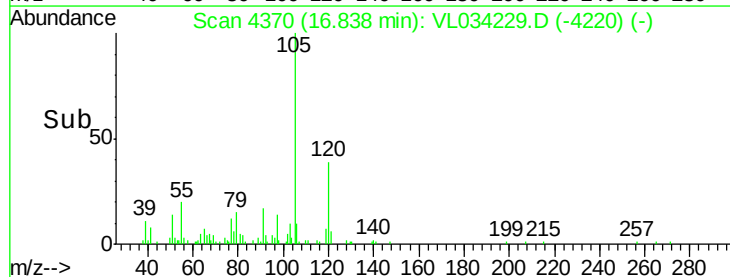
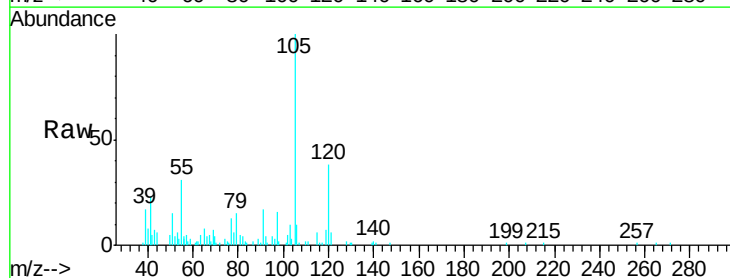
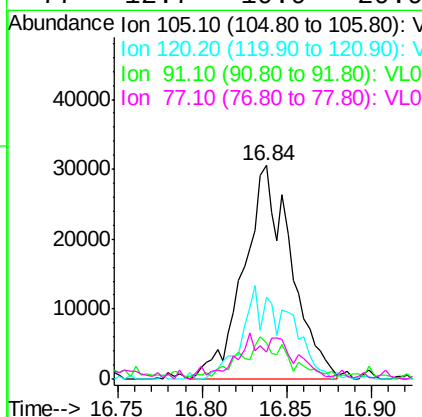
Manual Integrations
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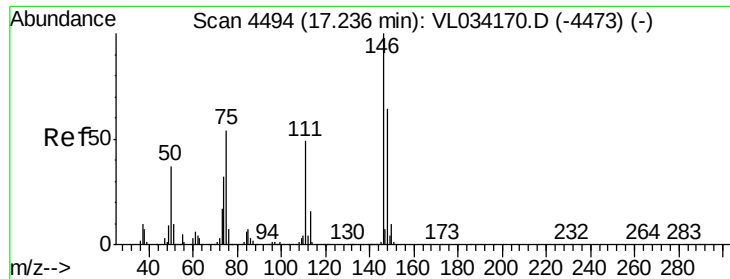
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#74
 1,2,4-Trimethylbenzene
 Concen: 0.195 ppbv m
 RT: 16.84 min Scan# 4370
 Delta R.T. -0.02 min
 Lab File: VL034229.D
 Acq: 7 Oct 2019 19:38

Tgt Ion	Ratio	Lower	Upper
105	100		
120	38.4	37.5	56.3
91	16.7	41.1	61.7#
77	12.7	19.9	29.9#





#76

1,4-Dichlorobenzene

Concen: 115.478 ppbv

RT: 17.27 min Scan# 4505

Delta R.T. 0.04 min

Lab File: VL034229.D

Acq: 7 Oct 2019 19:38

Instrument :

MSVOA_L

ClientSampled :

IA3

Tgt Ion:146 Resp:19250254

Ion Ratio Lower Upper

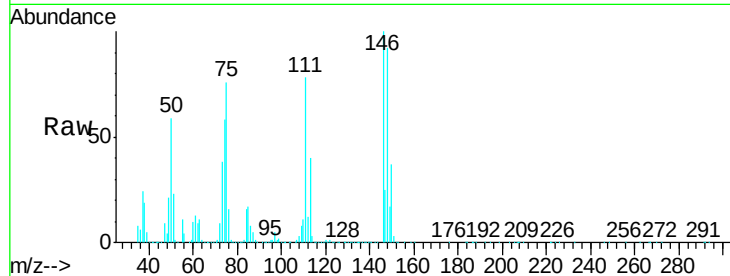
146 100

111 68.2 24.6 74.0

148 84.0 32.4 97.0

Manual Integrations
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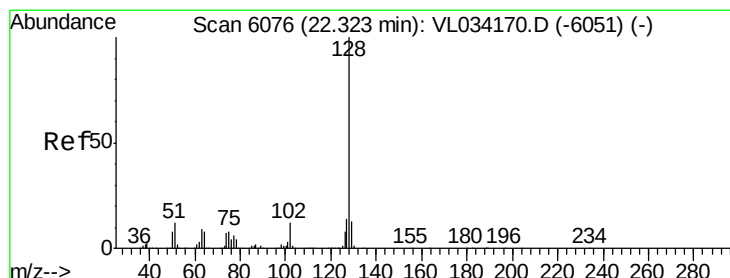
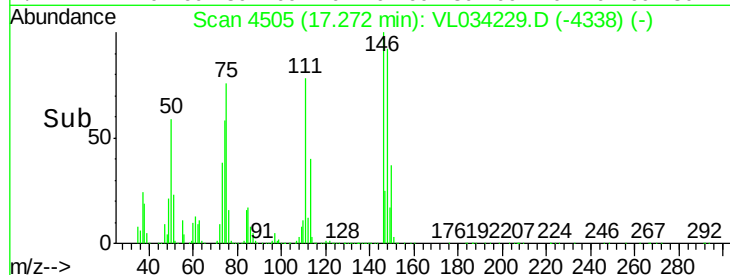
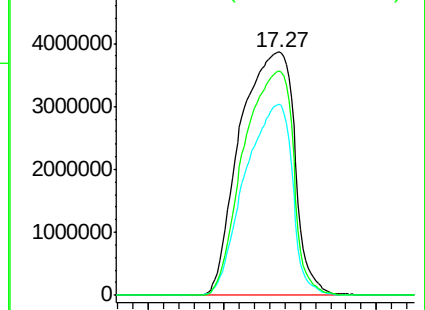


Abundance

Ion 146.00 (145.70 to 146.70): V

Ion 111.10 (110.80 to 111.80): V

Ion 148.00 (147.70 to 148.70): V



#79

Naphthalene

Concen: 0.426 ppbv m

RT: 22.30 min Scan# 6070

Delta R.T. -0.02 min

Lab File: VL034229.D

Acq: 7 Oct 2019 19:38

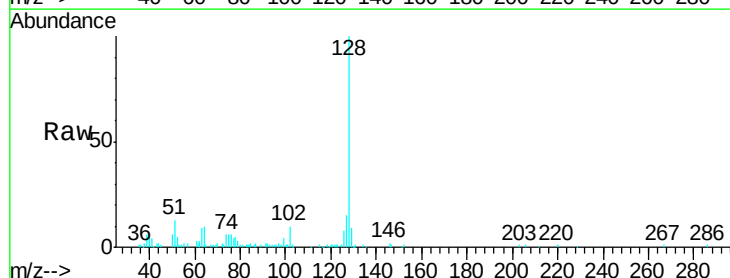
Tgt Ion:128 Resp: 113835

Ion Ratio Lower Upper

128 100

127 15.4 11.1 16.7

129 8.5 10.2 15.4#



Abundance

Ion 128.10 (127.80 to 128.80): V

Ion 127.10 (126.80 to 127.80): V

Ion 129.10 (128.80 to 129.80): V

