

Data Path : Z:\VOASRV\HPCHEM1\MSVOA_L\DATA\VL100819\
 Data File : VL034266.D
 Acq On : 9 Oct 2019 2:31
 Operator : SY/AP
 Sample : K5243-03
 Misc : 400ml/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 IA2

Manual Integrations
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Quant Time: Oct 10 21:06:14 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_L\METHODS\VL091719AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Wed Sep 18 2019
 QLast Update : Wed Sep 18 12:53:31 2019
 Response via : Initial Calibration

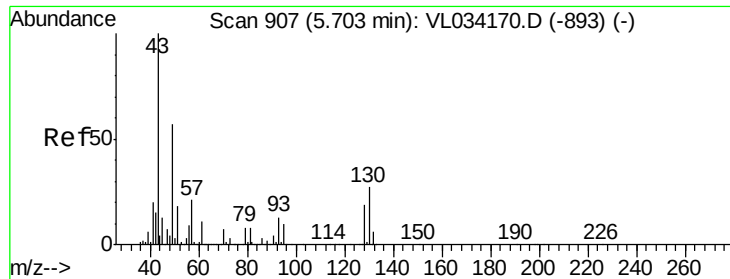
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.69	49	996406	10.00	ppbv	-0.01
33) 1,4-Difluorobenzene	7.21	114	1686502	10.00	ppbv	-0.02
55) Chlorobenzene-d5	12.16	117	1662397	10.00	ppbv	-0.01

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.49	95	1526356	10.57	ppbv	-0.02
Spiked Amount	10.000	Range	65 - 135	Recovery	=	105.70%

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	3.03	85	478203	3.249	ppbv	97
3) Chlorodifluoromethane	2.96	51	65901m	0.564	ppbv	
4) Chloromethane	3.12	50	39866	0.581	ppbv #	85
9) Propene	3.00	41	296531m	5.144	ppbv	
11) Trichlorofluoromethane	3.95	101	162265	1.211	ppbv	100
13) Ethanol	3.61	45	5082066	364.108	ppbv	99
15) Acetone	3.84	43	4769613	35.715	ppbv	91
17) tert-Butyl alcohol	4.32	59	21106m	0.249	ppbv	
19) Isopropyl Alcohol	3.99	45	4471540	54.450	ppbv	99
20) Methylene Chloride	4.35	84	78394	2.036	ppbv #	92
25) Ethyl Acetate	5.70	43	181659	0.719	ppbv #	91
29) Chloroform	5.78	83	136359	0.908	ppbv	93
30) Cyclohexane	7.17	84	221768	2.924	ppbv	90
34) 2-Butanone	5.26	43	169353	0.983	ppbv	98
35) Carbon Tetrachloride	7.05	117	8502m	0.061	ppbv	
36) Benzene	6.93	78	36547m	0.196	ppbv	
37) 1,2-Dichloroethane	6.33	62	16101	0.122	ppbv #	93
38) Trichloroethene	7.89	130	10207m	0.153	ppbv	
52) Tetrachloroethene	11.29	164	17000m	0.276	ppbv	
53) Toluene	9.86	91	242592	1.192	ppbv	98
58) Ethyl Benzene	12.77	91	67125m	0.250	ppbv	
59) m/p-Xylene	13.04	91	144327	0.650	ppbv	95
60) o-Xylene	13.76	91	59198	0.266	ppbv	97
61) Styrene	13.60	104	23548m	0.148	ppbv	
72) 4-Ethyltoluene	15.91	105	39709	0.158	ppbv #	94
74) 1,2,4-Trimethylbenzene	16.83	105	178314	0.693	ppbv #	66
76) 1,4-Dichlorobenzene	17.22	146	27467m	0.194	ppbv	

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



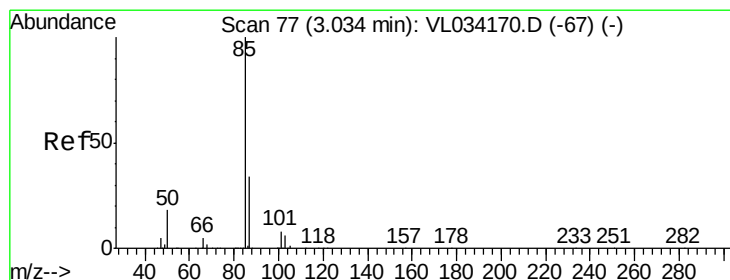
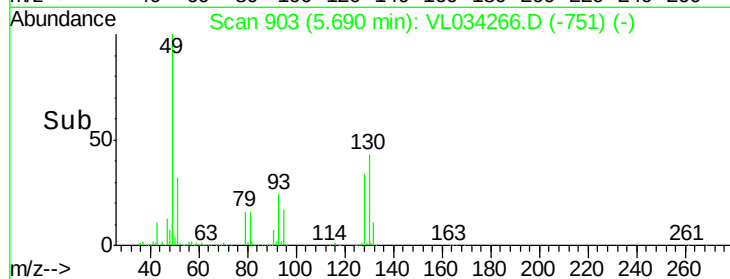
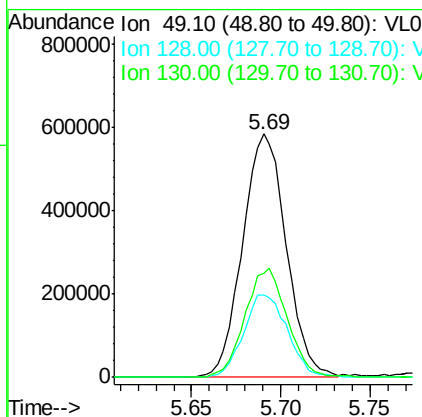
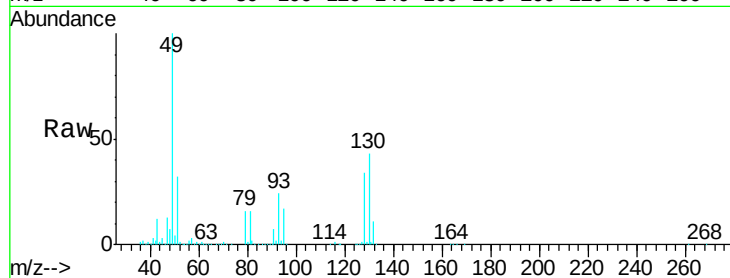
#1
 Bromochloromethane
 Concen: 10.000 ppbv
 RT: 5.69 min Scan# 903
 Delta R.T. -0.01 min
 Lab File: VL034266.D
 Acq: 9 Oct 2019 2:31

Instrument :
 MSVOA_L
 ClientSampled :
 IA2

Tgt Ion	Ratio	Lower	Upper
49	100		
128	34.5	17.6	52.9
130	43.9	22.3	66.9

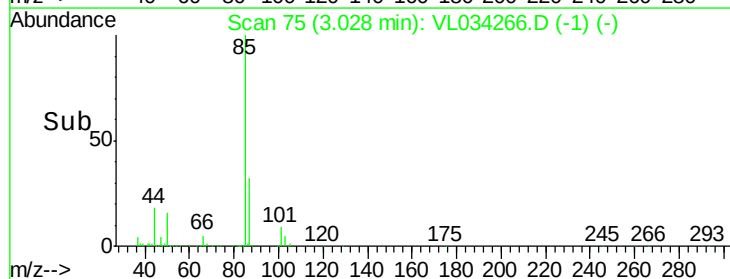
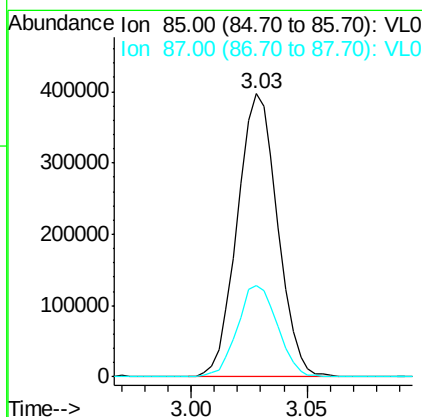
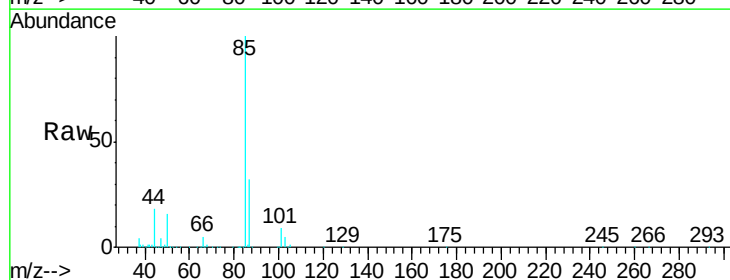
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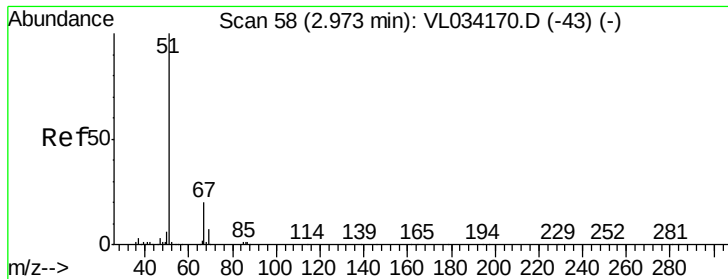
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#2
 Dichlorodifluoromethane
 Concen: 3.249 ppbv
 RT: 3.03 min Scan# 75
 Delta R.T. -0.01 min
 Lab File: VL034266.D
 Acq: 9 Oct 2019 2:31

Tgt Ion	Ratio	Lower	Upper
85	100		
87	32.1	27.2	40.8





#3

Chlorodifluoromethane

Concen: 0.564 ppbv

RT: 2.96 min Scan# 55

Delta R.T. -0.01 min

Lab File: VL034266.D

Acq: 9 Oct 2019 2:31

Instrument :

MSVOA_L

ClientSampled :

IA2

Tgt Ion: 51 Resp: 65901

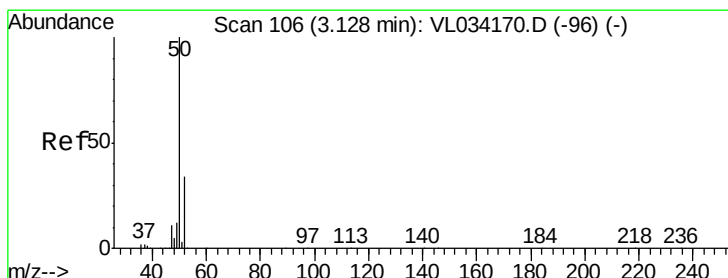
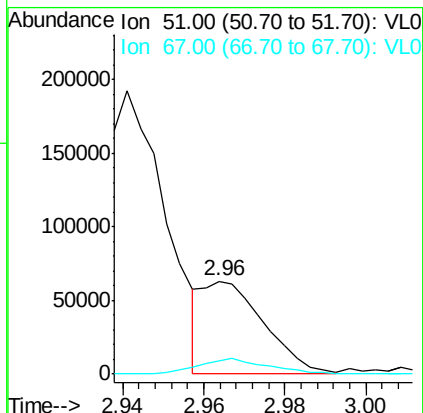
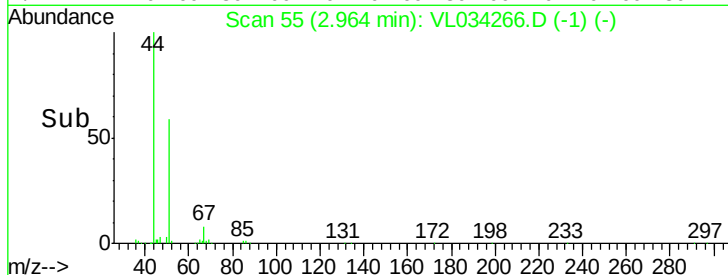
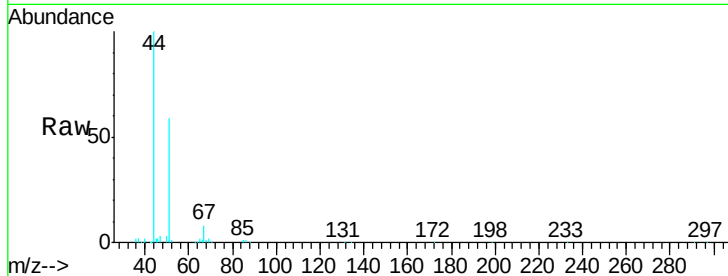
Ion Ratio Lower Upper

51 100

67 19.0 14.8 22.2

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#4

Chloromethane

Concen: 0.581 ppbv

RT: 3.12 min Scan# 105

Delta R.T. -0.00 min

Lab File: VL034266.D

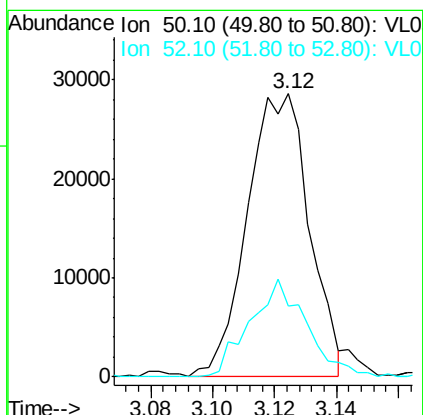
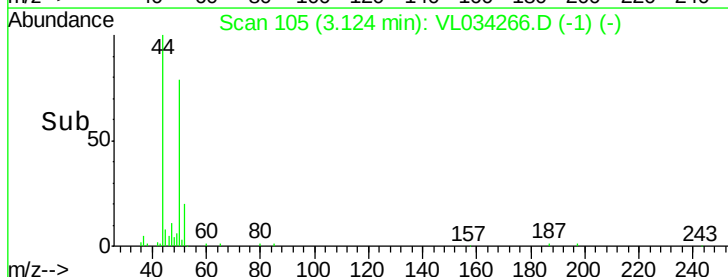
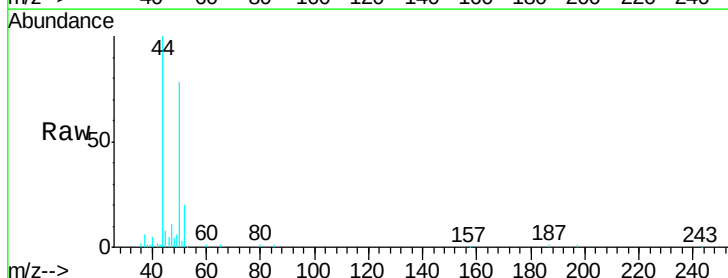
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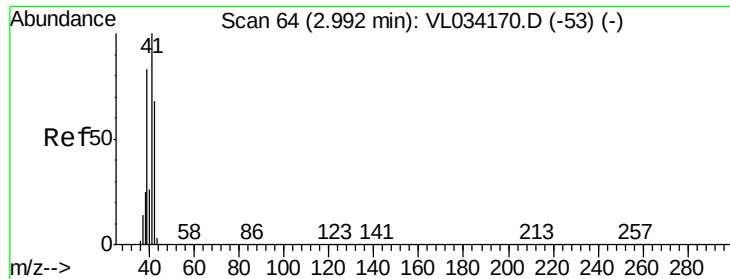
Tgt Ion: 50 Resp: 39866

Ion Ratio Lower Upper

50 100

52 25.6 27.1 40.7#





#9

Propene

Concen: 5.144 ppbv m

RT: 3.00 min Scan# 67

Delta R.T. 0.01 min

Lab File: VL034266.D

Acq: 9 Oct 2019 2:31

Instrument :

MSVOA_L

ClientSampled :

IA2

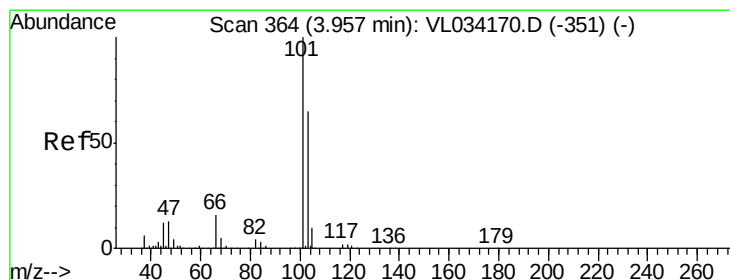
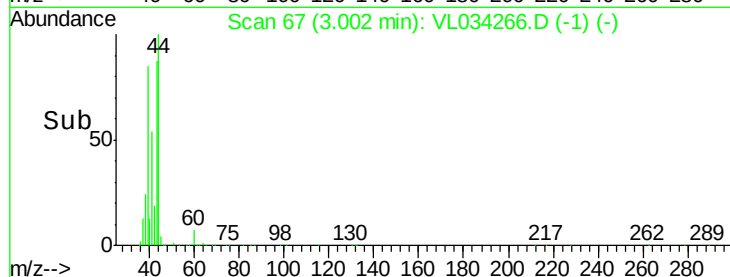
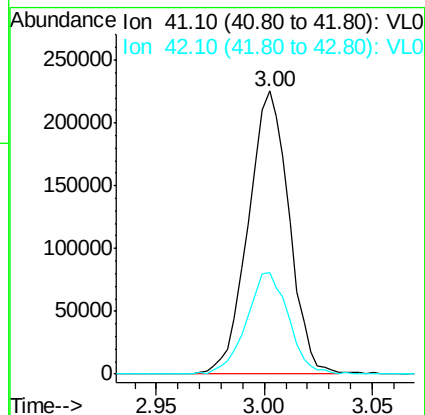
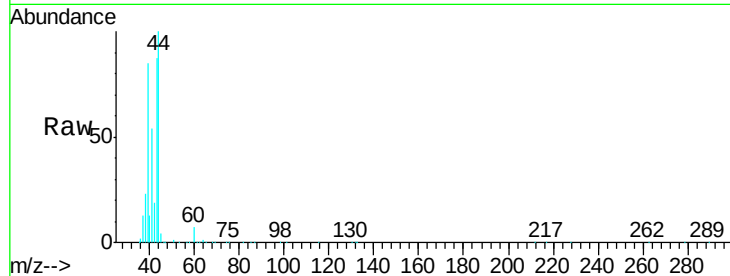
Tgt Ion: 41 Resp: 296531
Ion Ratio Lower Upper

41 100

42 122.8 55.8 83.6#

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#11

Trichlorofluoromethane

Concen: 1.211 ppbv

RT: 3.95 min Scan# 361

Delta R.T. -0.01 min

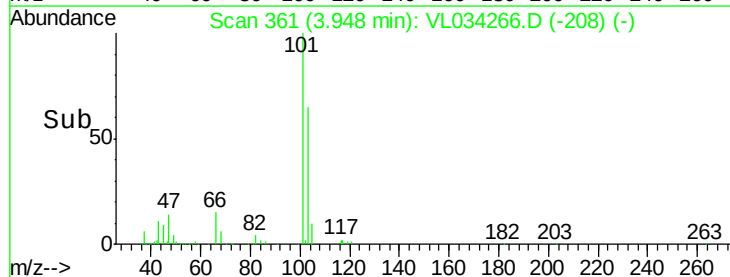
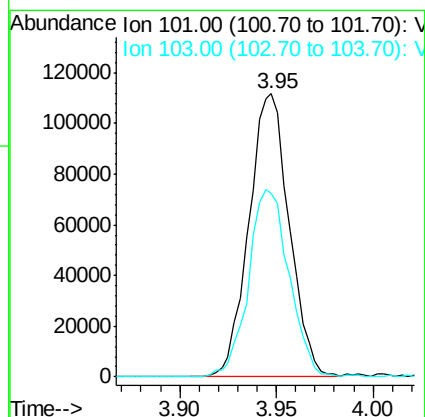
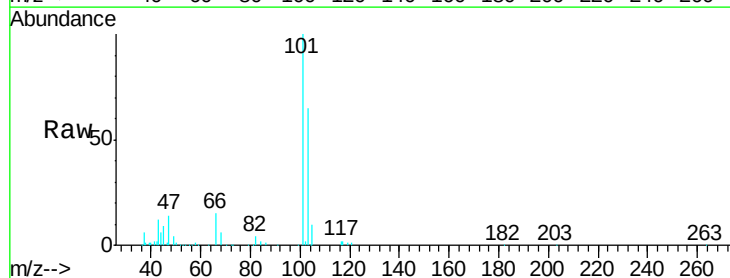
Lab File: VL034266.D

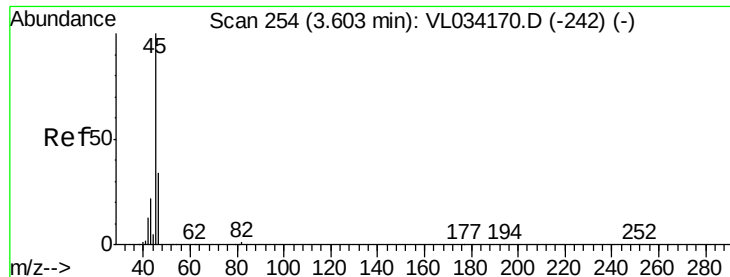
Acq: 9 Oct 2019 2:31

Tgt Ion: 101 Resp: 162265
Ion Ratio Lower Upper

101 100

103 64.9 52.1 78.1





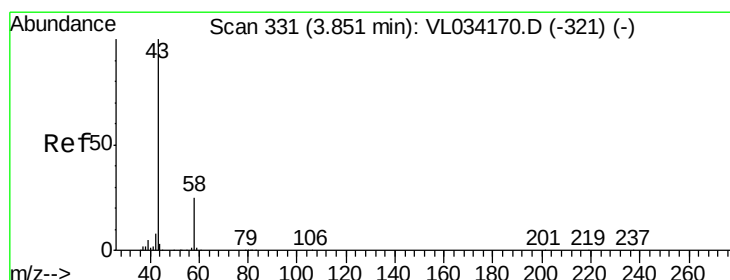
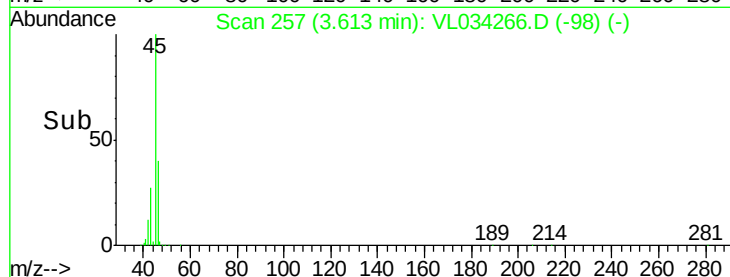
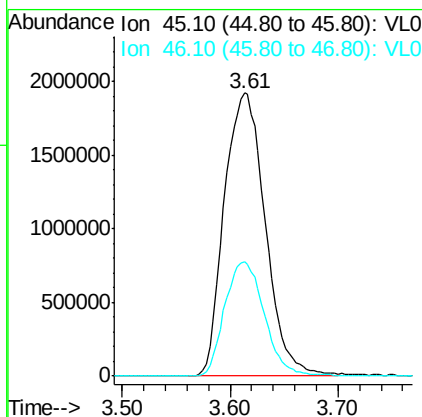
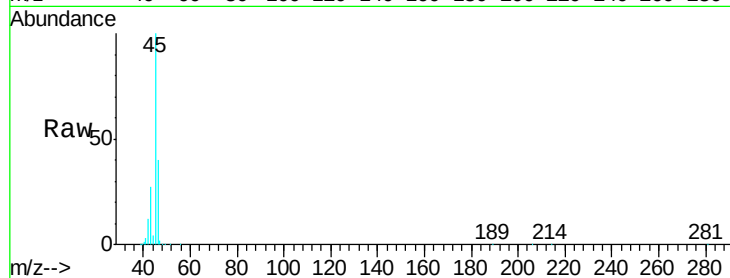
#13
Ethanol
Concen: 364.108 ppbv
RT: 3.61 min Scan# 257
Delta R.T. 0.01 min
Lab File: VL034266.D
Acq: 9 Oct 2019 2:31

Instrument :
MSVOA_L
ClientSampled :
IA2

Tgt Ion: 45 Resp: 5082066
Ion Ratio Lower Upper
45 100
46 39.3 15.5 61.9

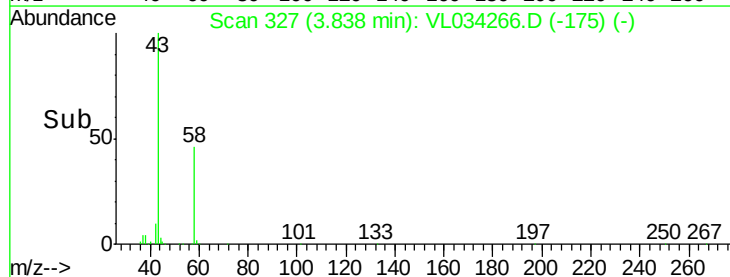
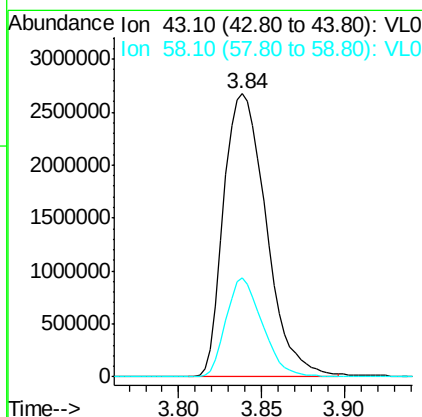
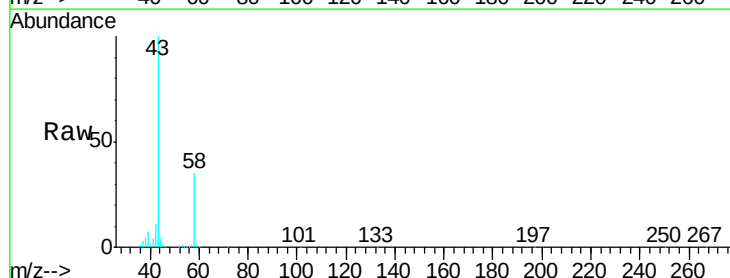
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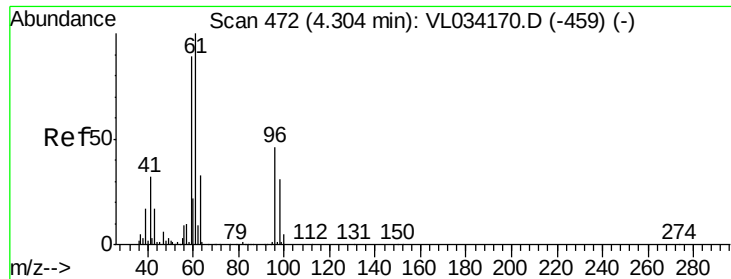
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#15
Acetone
Concen: 35.715 ppbv
RT: 3.84 min Scan# 327
Delta R.T. -0.01 min
Lab File: VL034266.D
Acq: 9 Oct 2019 2:31

Tgt Ion: 43 Resp: 4769613
Ion Ratio Lower Upper
43 100
58 30.2 20.5 30.7





#17

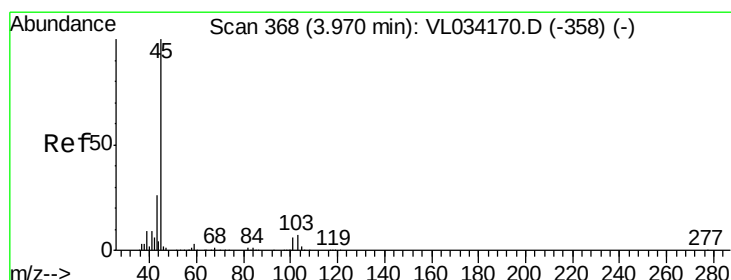
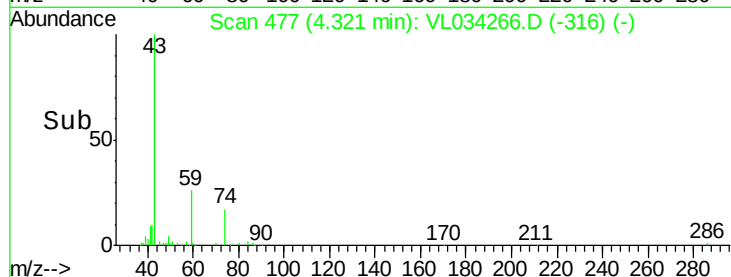
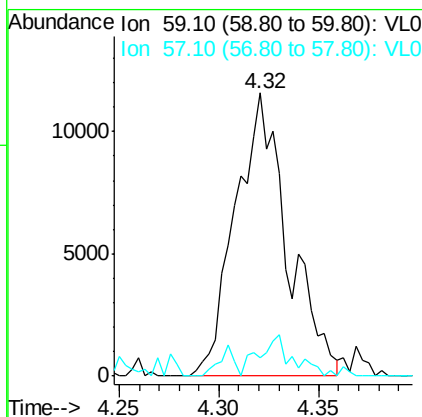
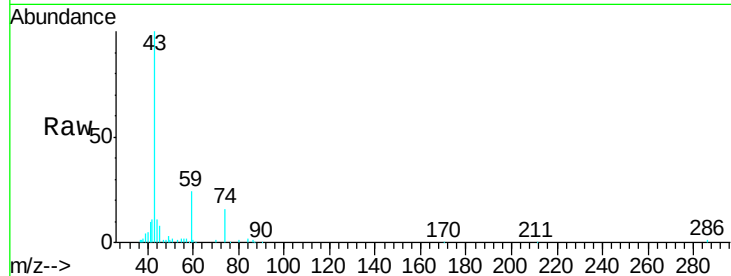
tert-Butyl alcohol
Concen: 0.249 ppbv m
RT: 4.32 min Scan# 477
Delta R.T. 0.02 min
Lab File: VL034266.D
Acq: 9 Oct 2019 2:31

Instrument :
MSVOA_L
ClientSampled :
IA2

Tgt Ion: 59 Resp: 21106
Ion Ratio Lower Upper
59 100
57 18.7 8.7 13.1#

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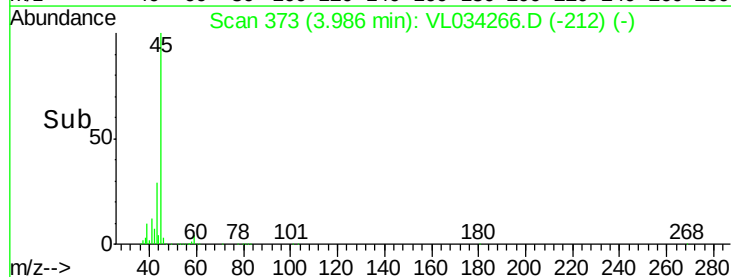
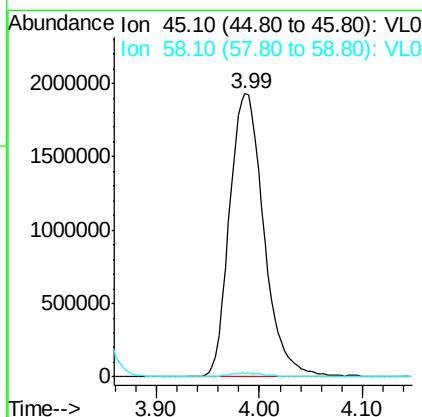
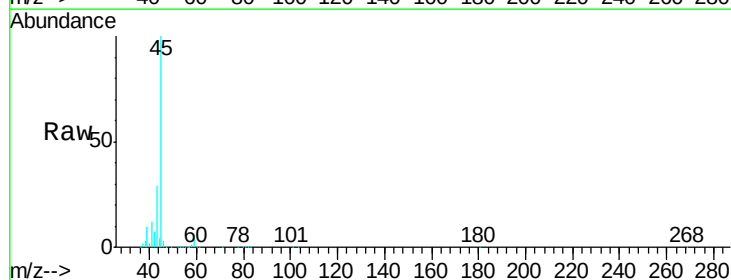
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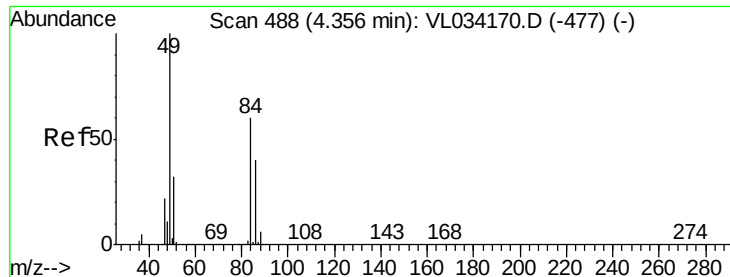


#19

Isopropyl Alcohol
Concen: 54.450 ppbv
RT: 3.99 min Scan# 373
Delta R.T. 0.02 min
Lab File: VL034266.D
Acq: 9 Oct 2019 2:31

Tgt Ion: 45 Resp: 4471540
Ion Ratio Lower Upper
45 100
58 1.4 1.4 2.0





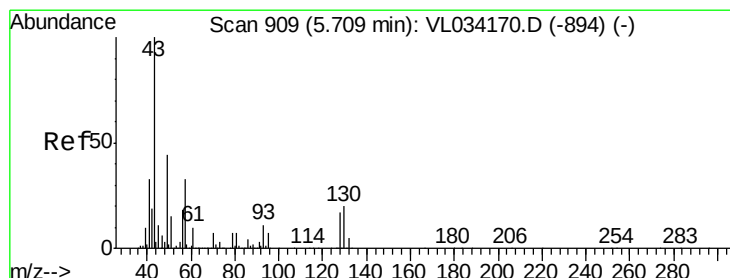
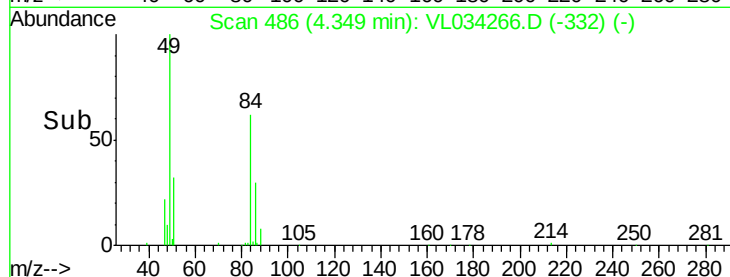
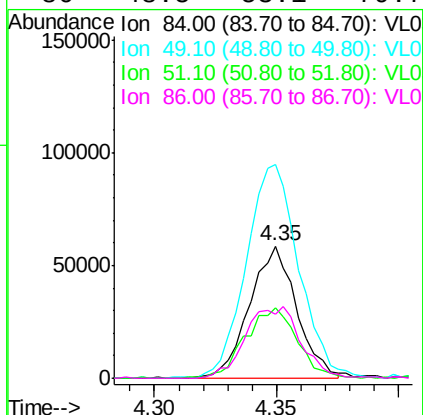
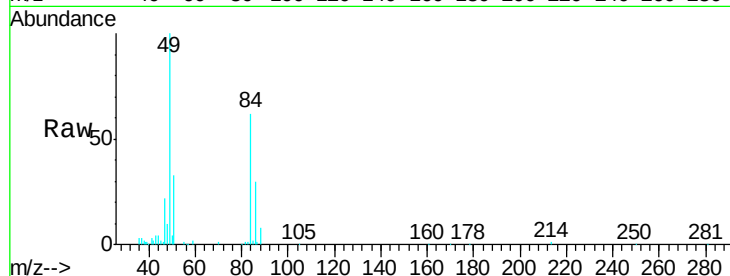
#20
Methylene Chloride
Concen: 2.036 ppbv
RT: 4.35 min Scan# 486
Delta R.T. -0.01 min
Lab File: VL034266.D
Acq: 9 Oct 2019 2:31

Instrument :
MSVOA_L
ClientSampled :
IA2

Tgt Ion	Ratio	Lower	Upper
84	100		
49	160.8	133.8	200.8
51	52.8	43.6	65.4
86	48.5	53.1	79.7#

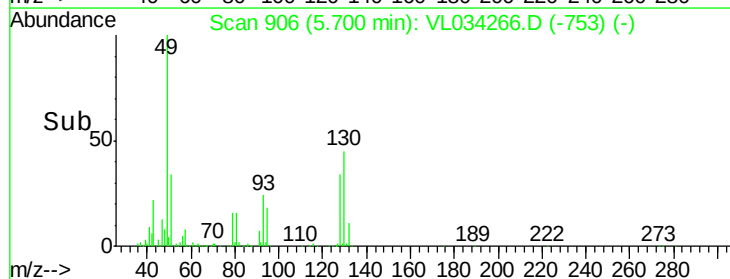
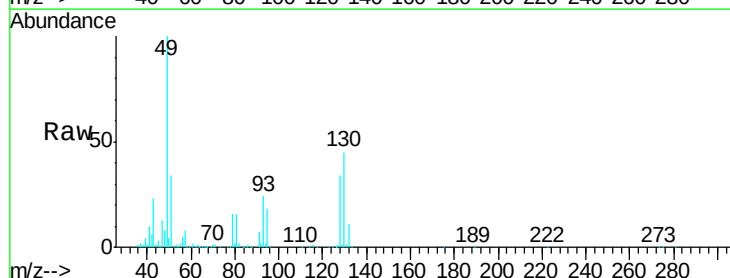
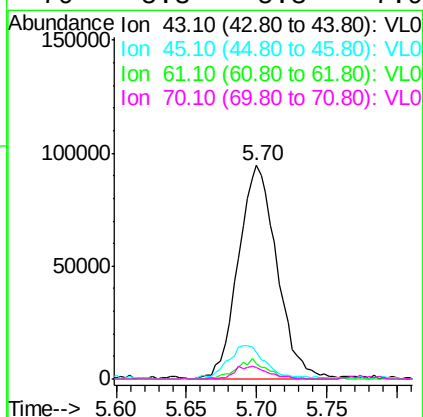
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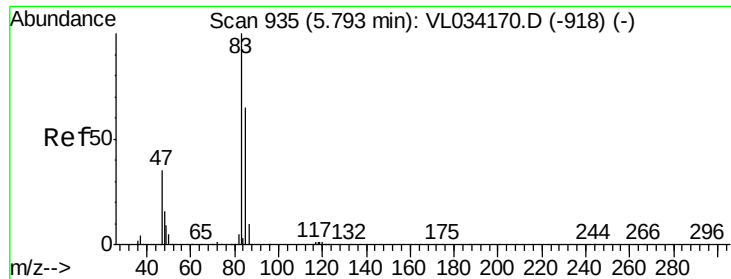
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#25
Ethyl Acetate
Concen: 0.719 ppbv
RT: 5.70 min Scan# 906
Delta R.T. -0.01 min
Lab File: VL034266.D
Acq: 9 Oct 2019 2:31

Tgt Ion	Ratio	Lower	Upper
43	100		
45	16.1	8.4	12.6#
61	7.5	7.2	10.8
70	5.3	5.3	7.9#





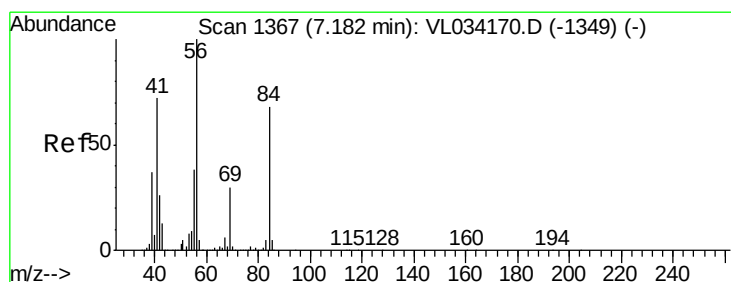
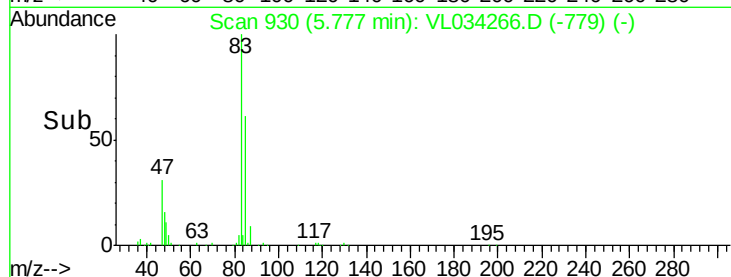
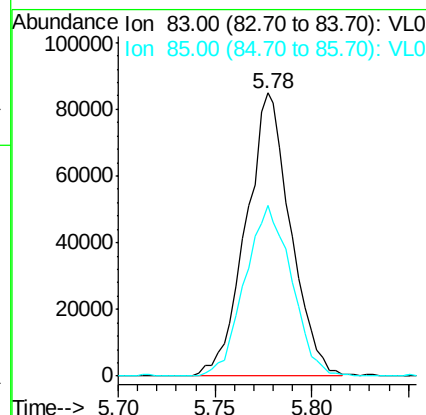
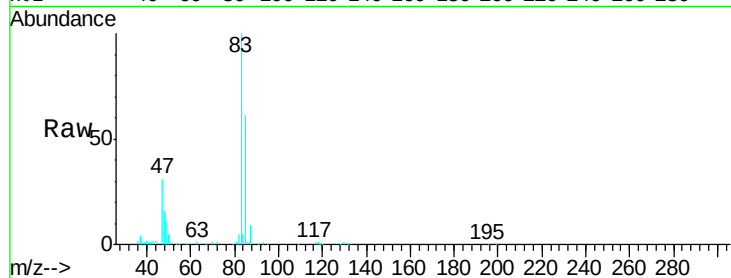
#29
Chloroform
Concen: 0.908 ppbv
RT: 5.78 min Scan# 930
Delta R.T. -0.02 min
Lab File: VL034266.D
Acq: 9 Oct 2019 2:31

Instrument :
MSVOA_L
ClientSampled :
IA2

Tgt Ion: 83 Resp: 136359
Ion Ratio Lower Upper
83 100
85 60.2 52.3 78.5

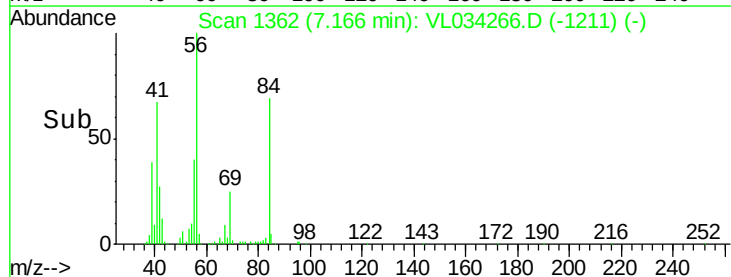
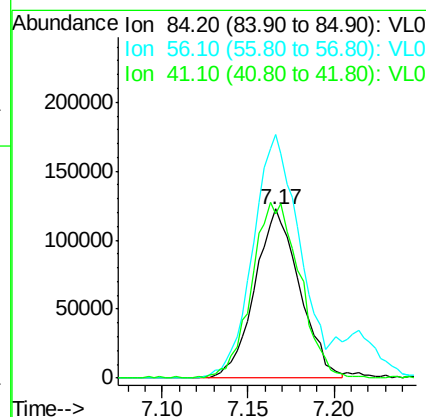
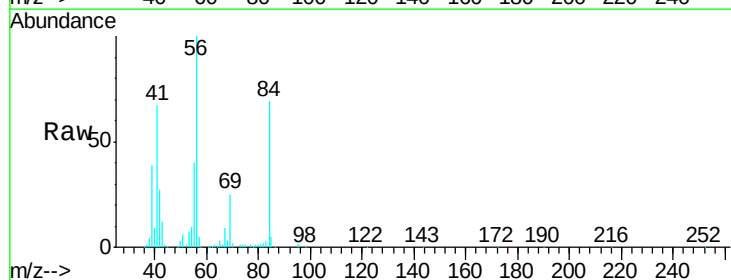
Manual Integrations
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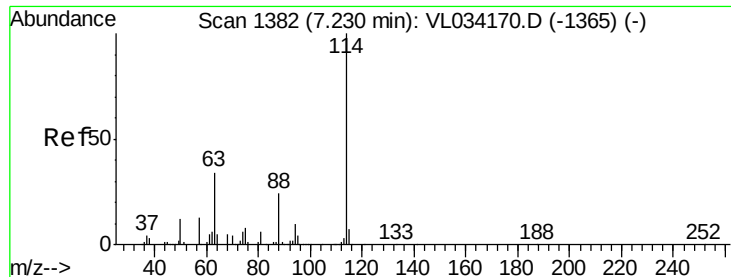
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#30
Cyclohexane
Concen: 2.924 ppbv
RT: 7.17 min Scan# 1362
Delta R.T. -0.02 min
Lab File: VL034266.D
Acq: 9 Oct 2019 2:31

Tgt Ion: 84 Resp: 221768
Ion Ratio Lower Upper
84 100
56 175.5 126.2 189.2
41 112.0 85.8 128.8





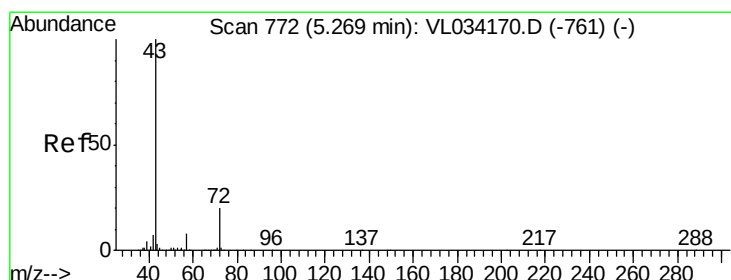
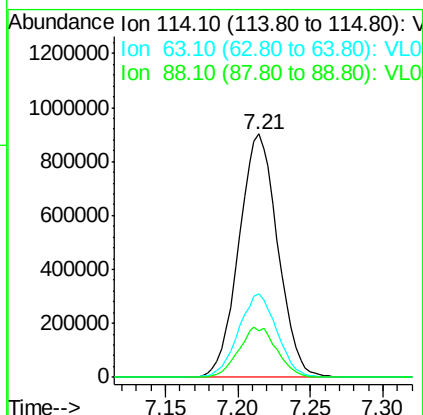
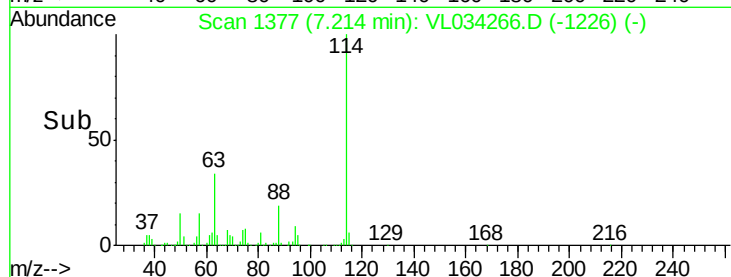
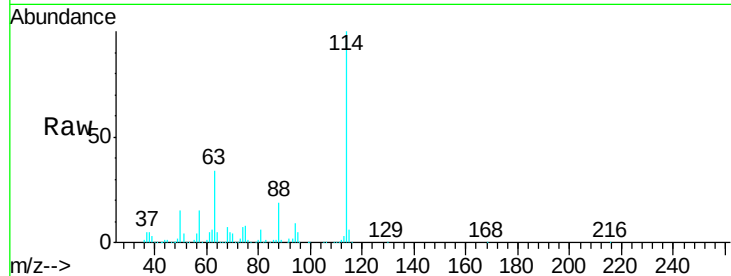
#33
 1,4-Difluorobenzene
 Concen: 10.000 ppbv
 RT: 7.21 min Scan# 1377
 Delta R.T. -0.02 min
 Lab File: VL034266.D
 Acq: 9 Oct 2019 2:31

Instrument :
 MSVOA_L
 ClientSampleId :
 IA2

Tgt Ion: 114 Resp: 1686502
 Ion Ratio Lower Upper
 114 100
 63 34.2 27.8 41.6
 88 20.4 17.1 25.7

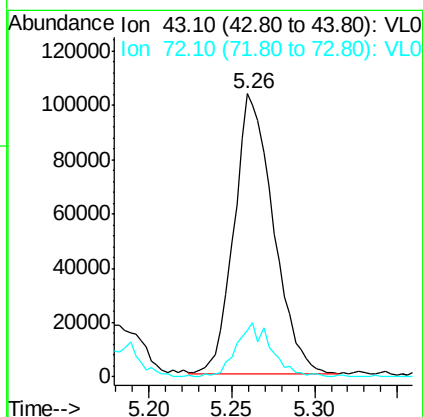
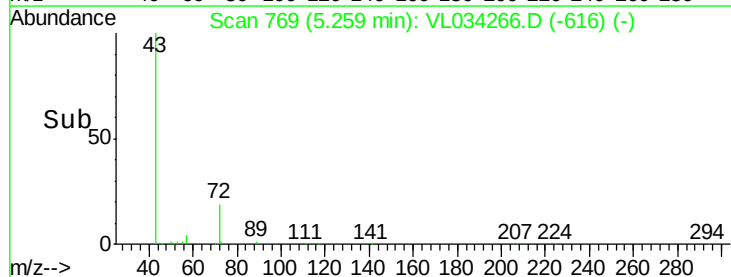
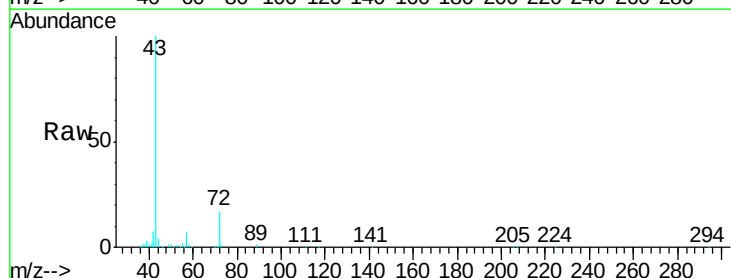
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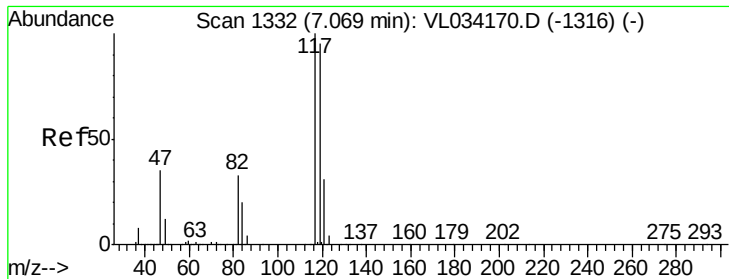
MMDadoda
 10/11/2019 5:08:02 PM



#34
 2-Butanone
 Concen: 0.983 ppbv
 RT: 5.26 min Scan# 769
 Delta R.T. -0.01 min
 Lab File: VL034266.D
 Acq: 9 Oct 2019 2:31

Tgt Ion: 43 Resp: 169353
 Ion Ratio Lower Upper
 43 100
 72 17.9 15.0 22.6





#35

Carbon Tetrachloride

Concen: 0.061 ppbv m

RT: 7.05 min Scan# 1325

Delta R.T. -0.02 min

Lab File: VL034266.D

Acq: 9 Oct 2019 2:31

Instrument :

MSVOA_L

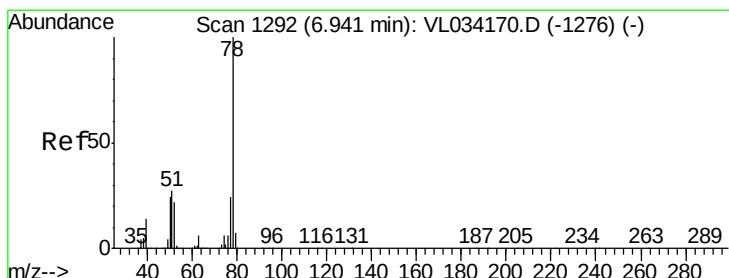
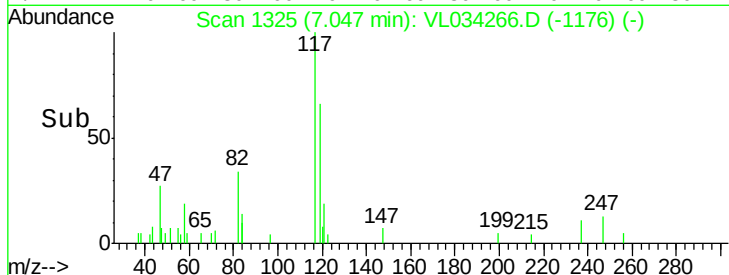
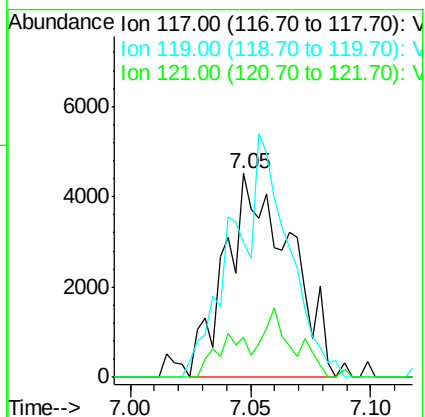
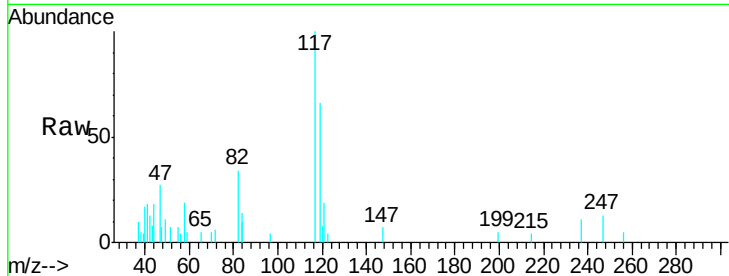
ClientSampled :

IA2

Tgt Ion:	117	Resp:	8502
Ion Ratio	Lower	Upper	
117	100		
119	66.1	75.8	113.6#
121	19.4	25.0	37.6#

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#36

Benzene

Concen: 0.196 ppbv m

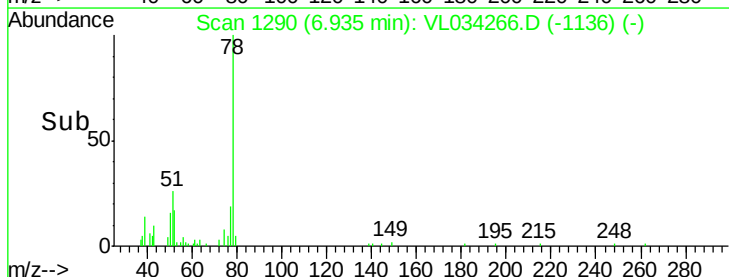
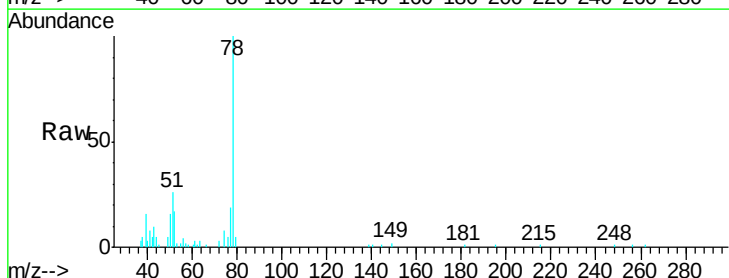
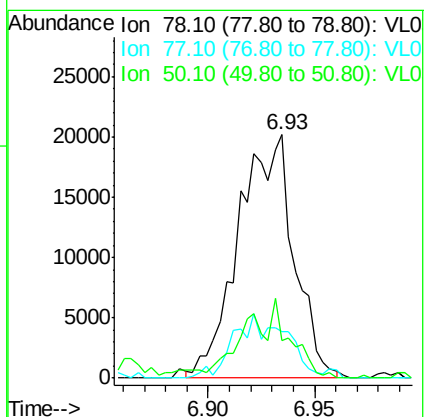
RT: 6.93 min Scan# 1290

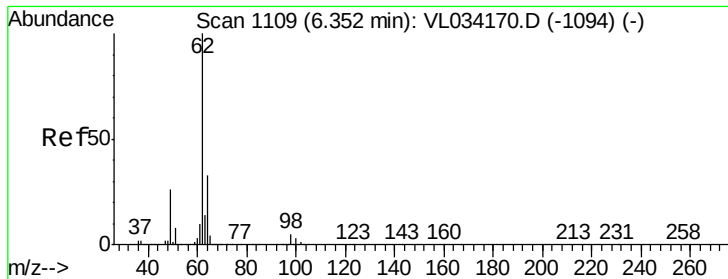
Delta R.T. -0.01 min

Lab File: VL034266.D

Acq: 9 Oct 2019 2:31

Tgt Ion:	78	Resp:	36547
Ion Ratio	Lower	Upper	
78	100		
77	19.0	19.0	28.4
50	15.6	18.9	28.3#





#37

1,2-Dichloroethane

Concen: 0.122 ppbv

RT: 6.33 min Scan# 1103

Delta R.T. -0.02 min

Lab File: VL034266.D

Acq: 9 Oct 2019 2:31

Instrument :

MSVOA_L

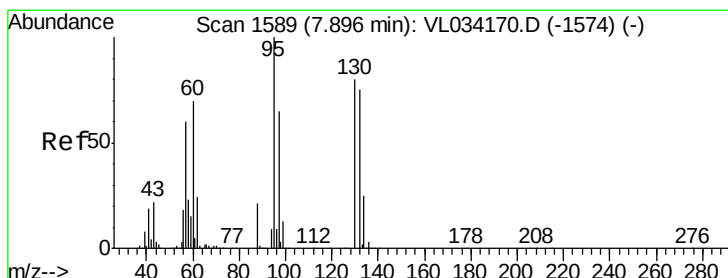
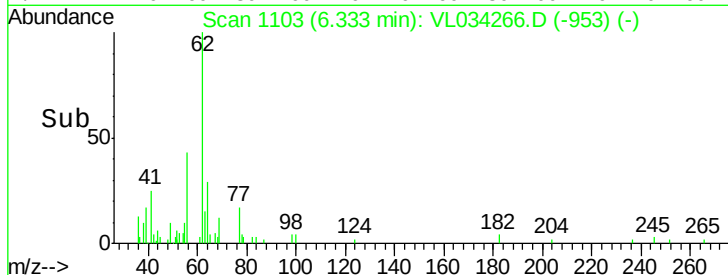
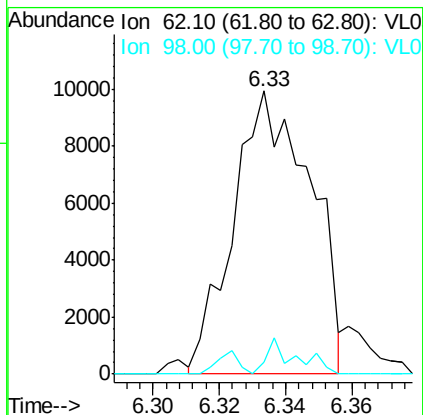
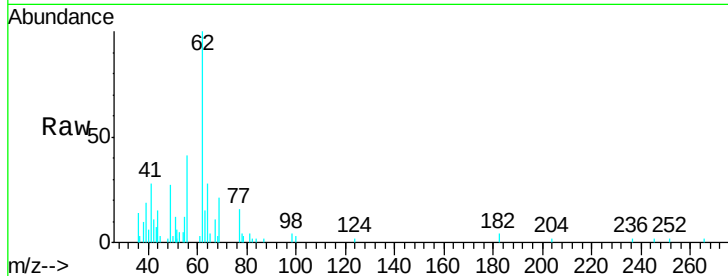
ClientSampled :

IA2

Tgt Ion	Ratio	Resp Lower	Upper
62	100		
98	7.0	3.8	5.8#

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#38

Trichloroethene

Concen: 0.153 ppbv m

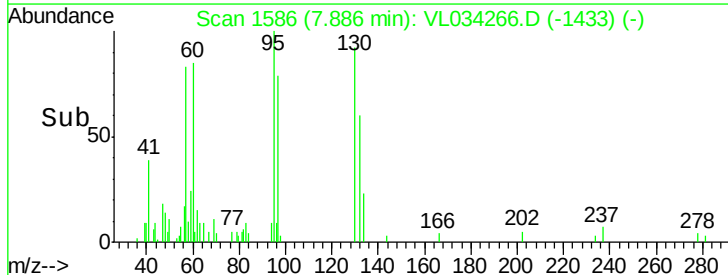
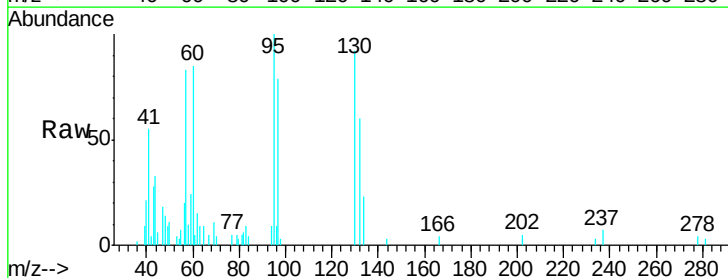
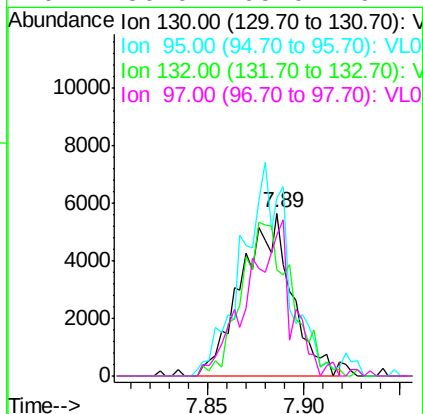
RT: 7.89 min Scan# 1586

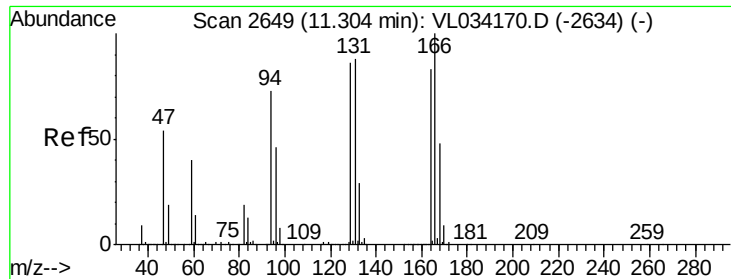
Delta R.T. -0.01 min

Lab File: VL034266.D

Acq: 9 Oct 2019 2:31

Tgt Ion	Ratio	Resp Lower	Upper
130	100		
95	109.1	99.8	149.6
132	65.4	75.2	112.8#
97	86.0	65.0	97.4





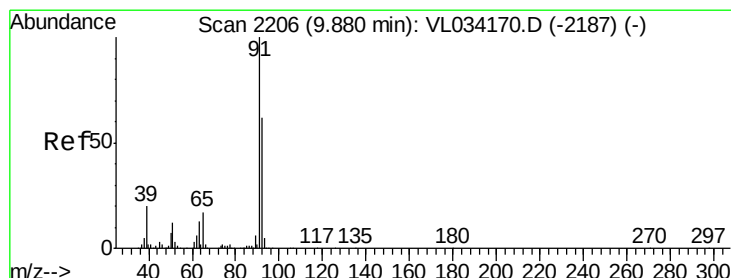
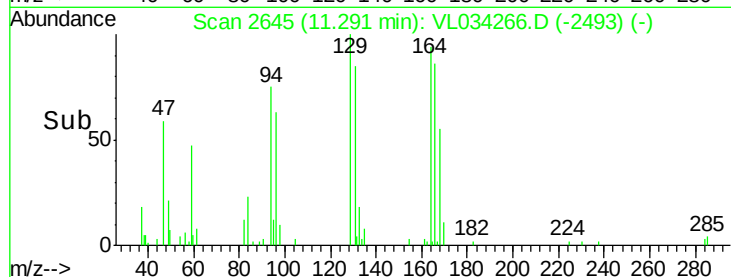
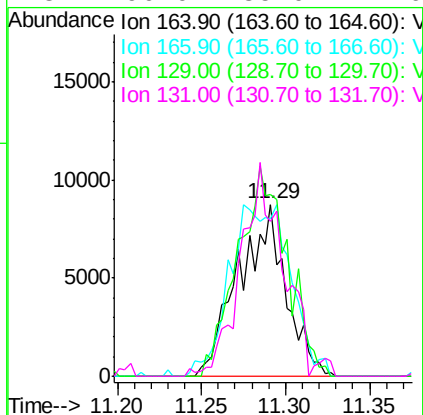
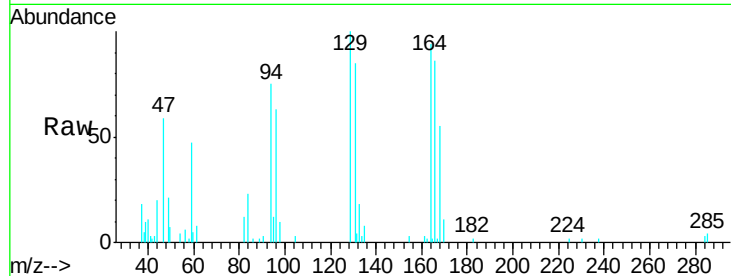
#52
Tetrachloroethene
Concen: 0.276 ppbv m
RT: 11.29 min Scan# 2645
Delta R.T. -0.01 min
Lab File: VL034266.D
Acq: 9 Oct 2019 2:31

Instrument :
MSVOA_L
ClientSampled :
IA2

Tgt Ion	Ratio	Lower	Upper
164	100		
166	91.4	96.7	145.1#
129	106.0	82.8	124.2
131	90.0	85.0	127.6

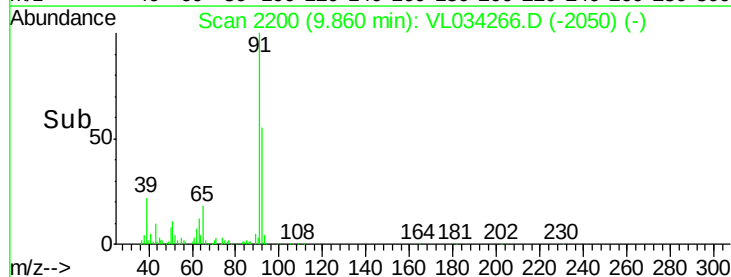
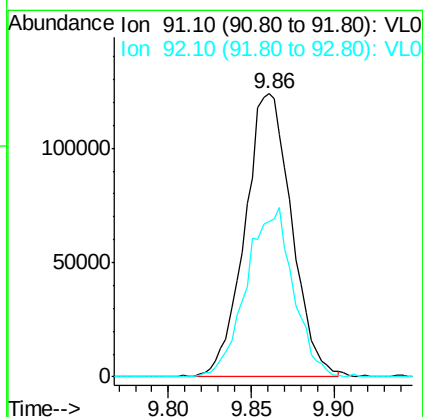
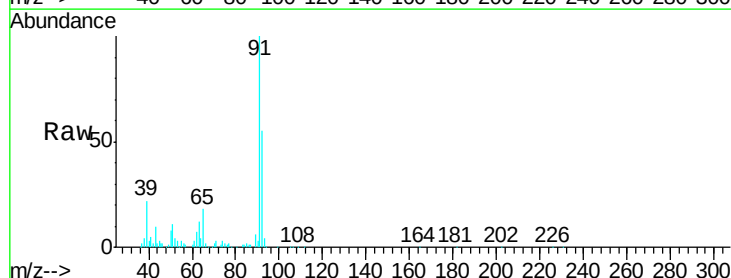
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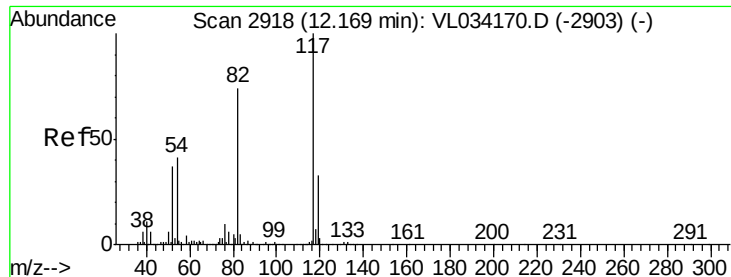
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#53
Toluene
Concen: 1.192 ppbv
RT: 9.86 min Scan# 2200
Delta R.T. -0.02 min
Lab File: VL034266.D
Acq: 9 Oct 2019 2:31

Tgt Ion	Ratio	Lower	Upper
91	100		
92	60.0	49.0	73.6





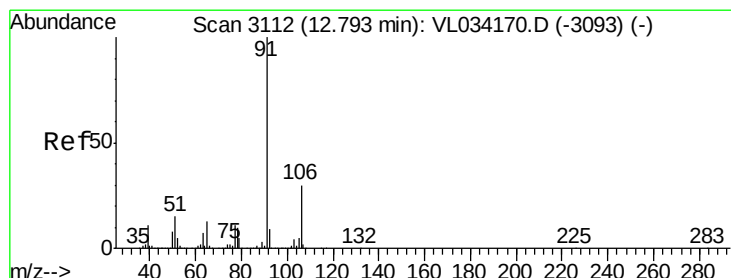
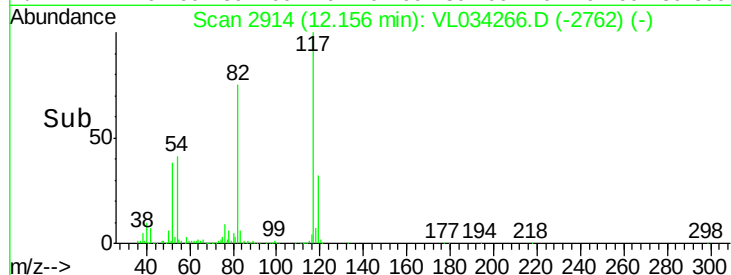
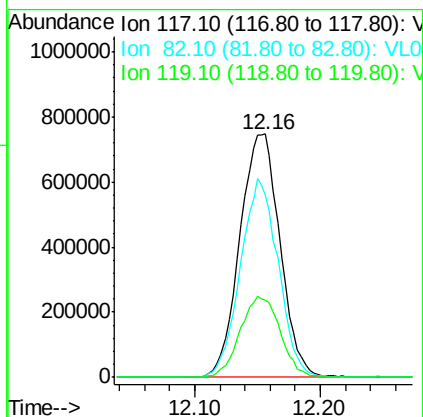
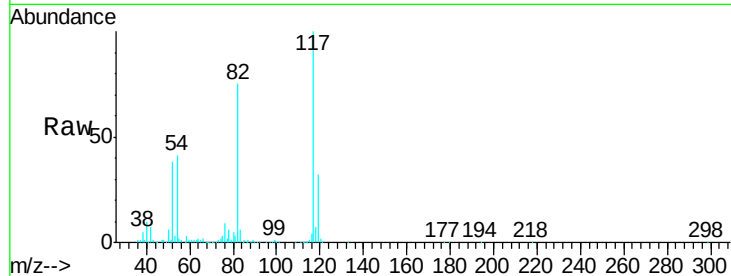
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 12.16 min Scan# 2914
Delta R.T. -0.01 min
Lab File: VL034266.D
Acq: 9 Oct 2019 2:31

Instrument :
MSVOA_L
ClientSampled :
IA2

Tgt Ion: 117 Resp: 1662397
Ion Ratio Lower Upper
117 100
82 77.0 58.2 87.4
119 33.2 23.7 35.5

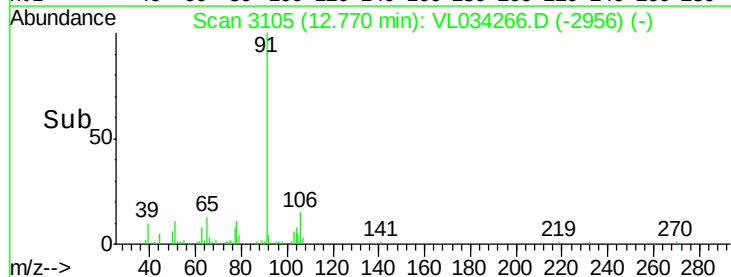
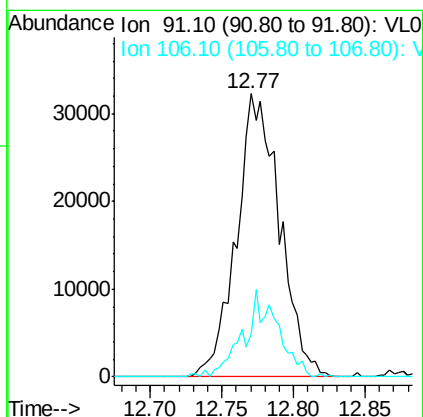
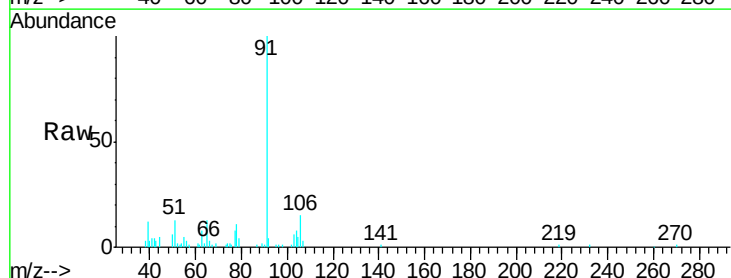
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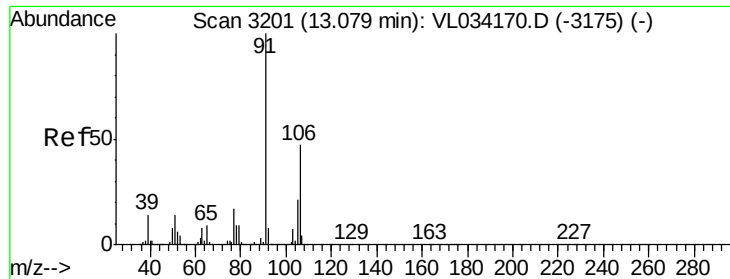
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#58
Ethyl Benzene
Concen: 0.250 ppbv m
RT: 12.77 min Scan# 3105
Delta R.T. -0.02 min
Lab File: VL034266.D
Acq: 9 Oct 2019 2:31

Tgt Ion: 91 Resp: 67125
Ion Ratio Lower Upper
91 100
106 15.1 24.2 36.4#





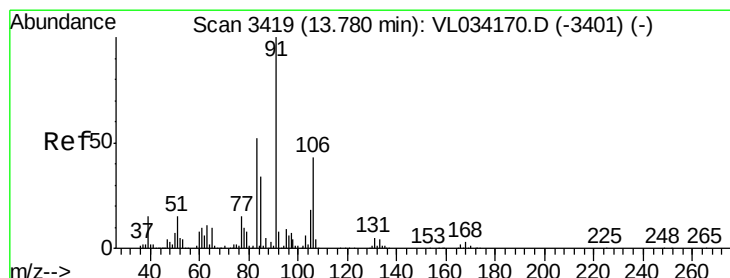
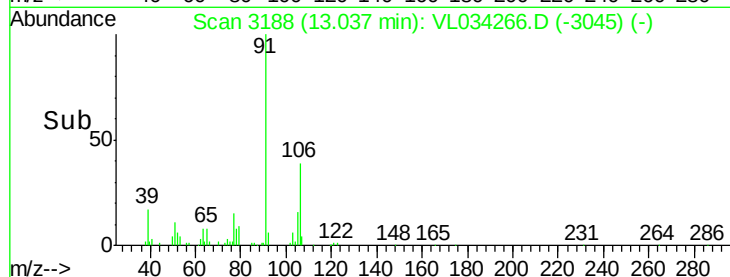
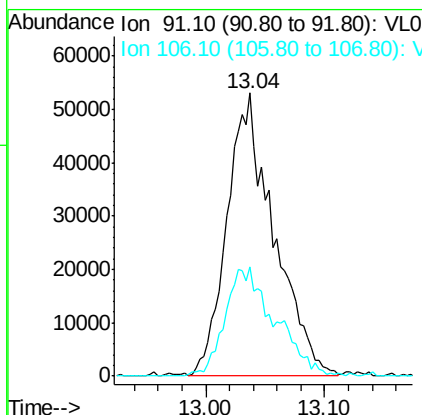
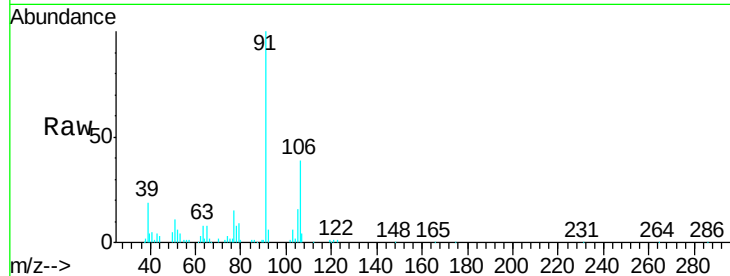
#59
m/p-Xylene
Concen: 0.650 ppbv
RT: 13.04 min Scan# 3188
Delta R.T. -0.04 min
Lab File: VL034266.D
Acq: 9 Oct 2019 2:31

Instrument :
MSVOA_L
ClientSampled :
IA2

Tgt Ion: 91 Resp: 144327
Ion Ratio Lower Upper
91 100
106 41.3 35.5 53.3

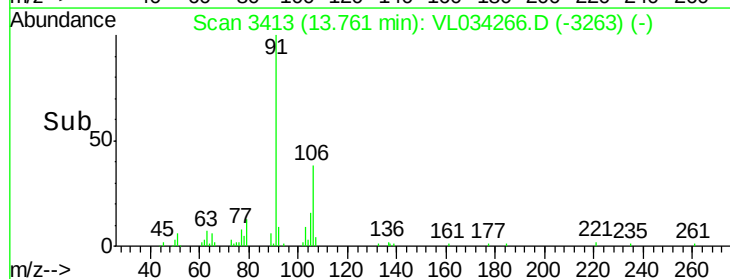
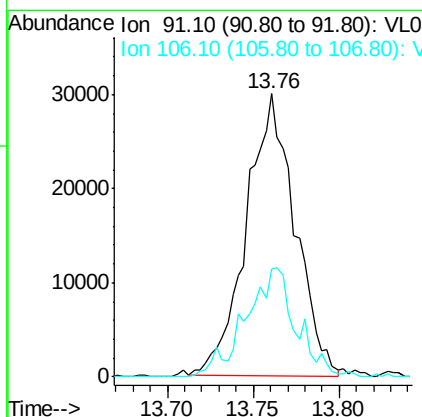
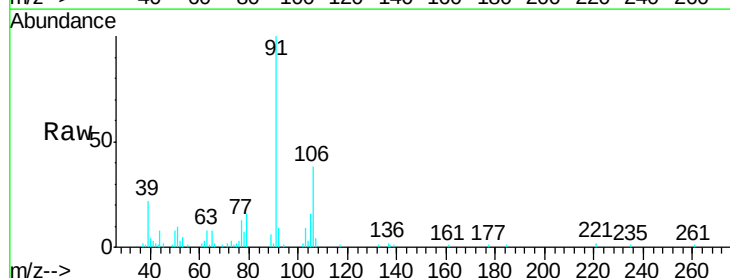
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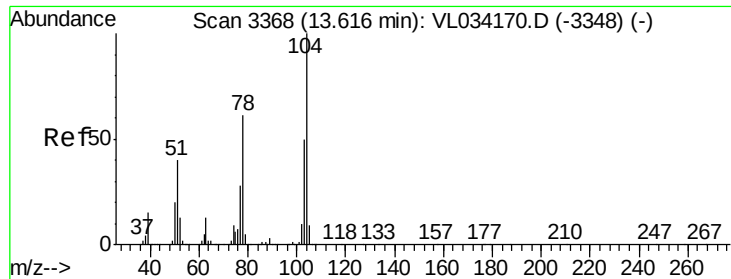
MMDadoda
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#60
o-Xylene
Concen: 0.266 ppbv
RT: 13.76 min Scan# 3413
Delta R.T. -0.02 min
Lab File: VL034266.D
Acq: 9 Oct 2019 2:31

Tgt Ion: 91 Resp: 59198
Ion Ratio Lower Upper
91 100
106 40.4 21.2 63.6





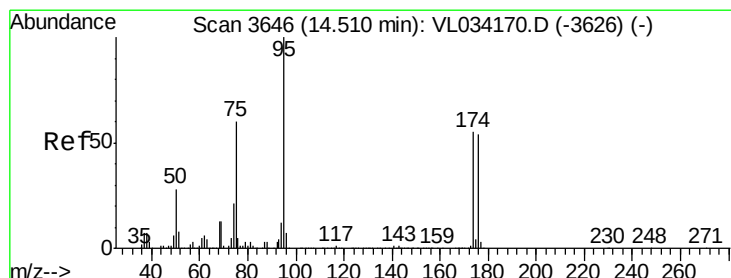
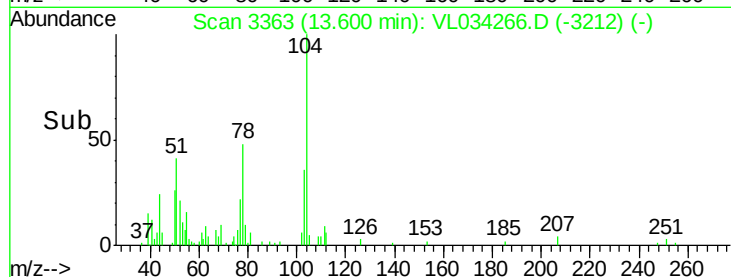
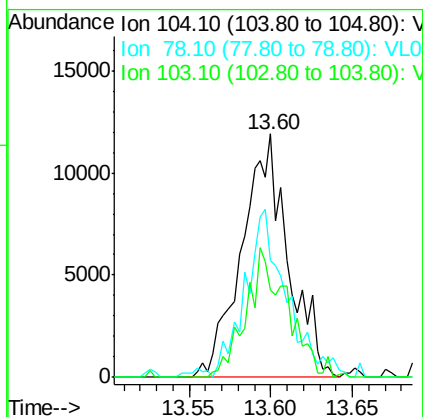
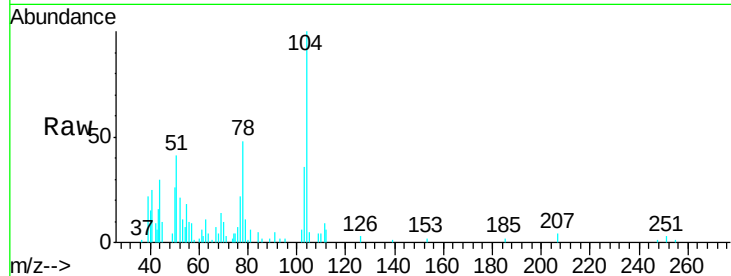
#61
Styrene
Concen: 0.148 ppbv m
RT: 13.60 min Scan# 3363
Delta R.T. -0.02 min
Lab File: VL034266.D
Acq: 9 Oct 2019 2:31

Instrument :
MSVOA_L
ClientSampled :
IA2

Tgt Ion	Ratio	Lower	Upper
104	100		
78	62.9	49.7	74.5
103	0.0	38.4	57.6#

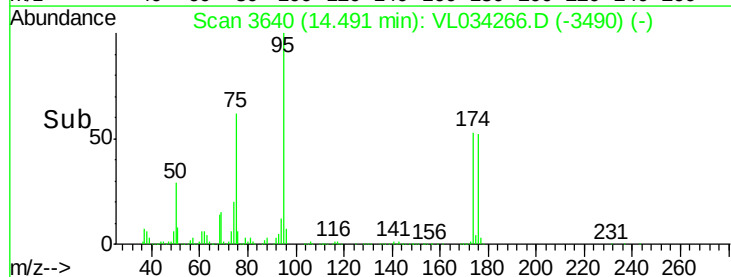
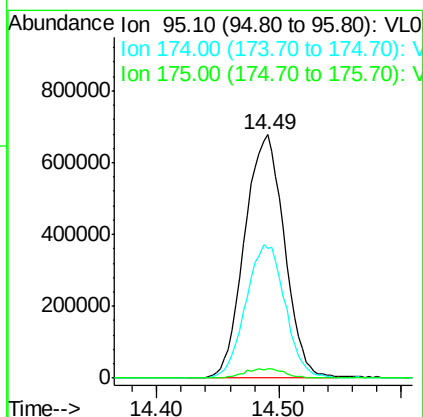
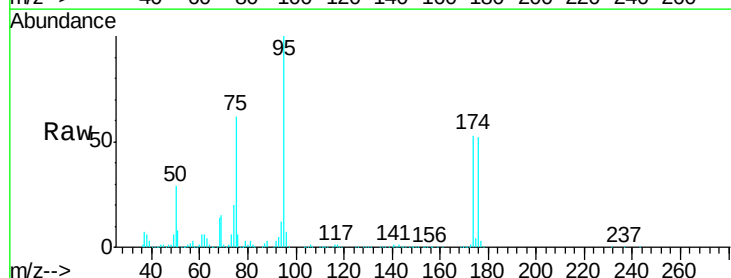
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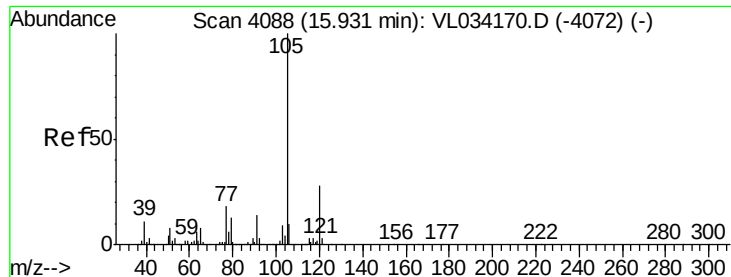
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#68
1-Bromo-4-Fluorobenzene
Concen: 10.567 ppbv
RT: 14.49 min Scan# 3640
Delta R.T. -0.02 min
Lab File: VL034266.D
Acq: 9 Oct 2019 2:31

Tgt Ion	Ratio	Lower	Upper
95	100		
174	54.4	45.1	67.7
175	3.9	3.3	4.9





#72

4-Ethyltoluene

Concen: 0.158 ppbv

RT: 15.91 min Scan# 4083

Delta R.T. -0.02 min

Lab File: VL034266.D

Acq: 9 Oct 2019 2:31

Instrument :

MSVOA_L

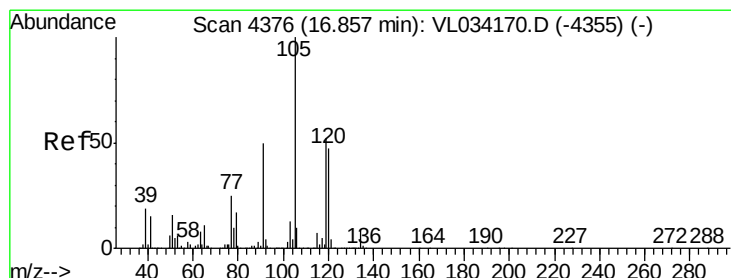
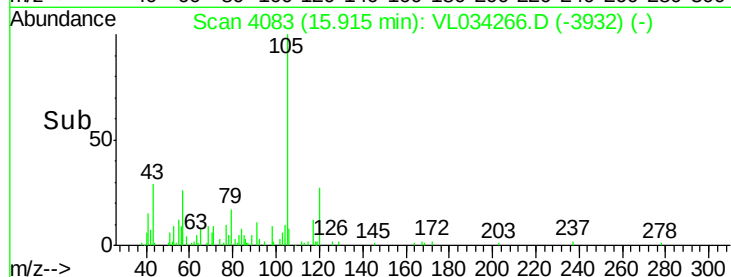
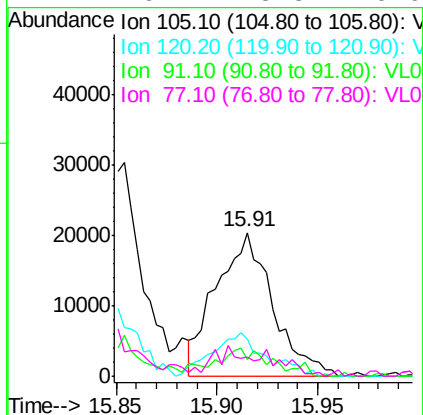
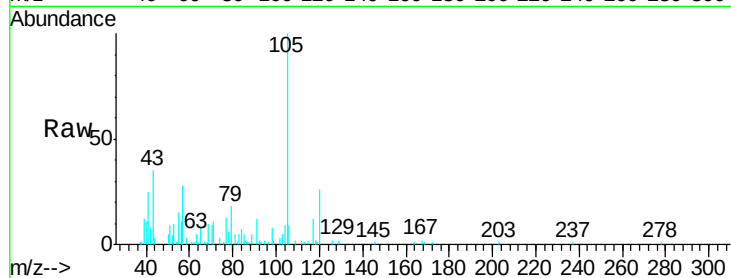
ClientSampleId :

IA2

Tgt Ion	Ratio	Resp	Lower	Upper
105	100	39709		
120	29.0	23.3	34.9	
91	21.1	11.4	17.2#	
77	20.4	13.3	19.9#	

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#74

1,2,4-Trimethylbenzene

Concen: 0.693 ppbv

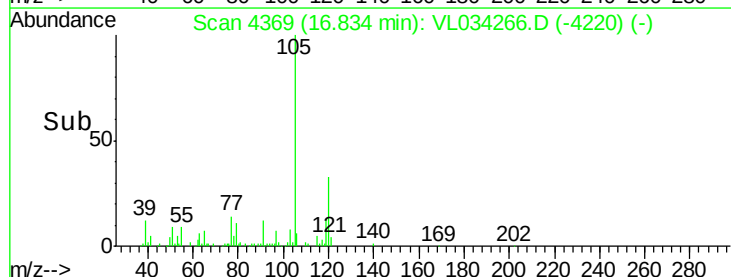
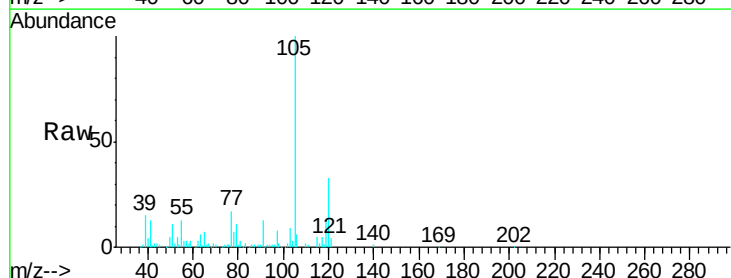
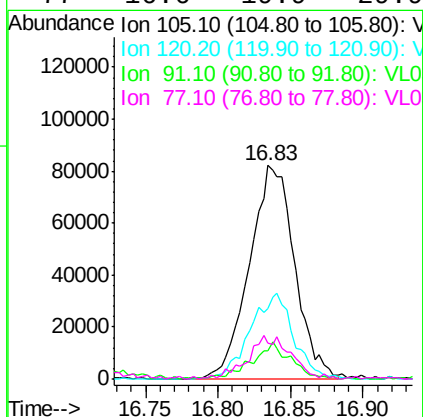
RT: 16.83 min Scan# 4369

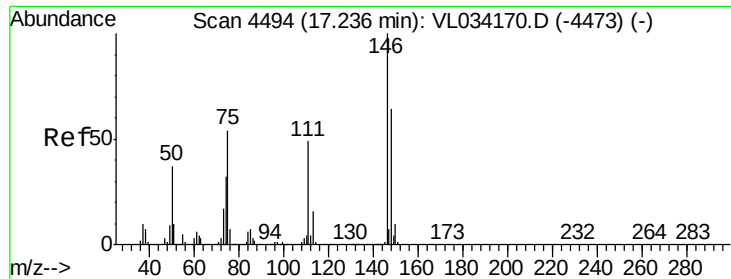
Delta R.T. -0.02 min

Lab File: VL034266.D

Acq: 9 Oct 2019 2:31

Tgt Ion	Ratio	Resp	Lower	Upper
105	100	178314		
120	33.0	37.5	56.3#	
91	13.5	41.1	61.7#	
77	16.6	19.9	29.9#	





#76
 1,4-Dichlorobenzene
 Concen: 0.194 ppbv m
 RT: 17.22 min Scan# 4488
 Delta R.T. -0.02 min
 Lab File: VL034266.D
 Acq: 9 Oct 2019 2:31

Instrument :
 MSVOA_L
 ClientSampleId :
 IA2

Tgt Ion	Ratio	Lower	Upper
146	100		
111	66.4	24.6	74.0
148	71.9	32.4	97.0

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