

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL101419\
 Data File : VL034288.D
 Acq On : 14 Oct 2019 19:18
 Operator : SY/AP
 Sample : K5353-04
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 IA-3

Manual Integrations
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 10/16/2019 12:59:32 AM

Quant Time: Oct 15 07:31:39 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL091719AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LWed 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	1001299	10.00	ppbv	-0.02
33) 1,4-Difluorobenzene	7.21	114	1681036	10.00	ppbv	-0.02
55) Chlorobenzene-d5	12.15	117	1664253	10.00	ppbv	-0.02

System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	14.49	95	1479028	10.23	ppbv	-0.02
Spiked Amount	10.000	Range	65 - 135	Recovery	=	102.30%

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.03	85	93318	0.631	ppbv	88
3) Chlorodifluoromethane	2.97	51	77015m	0.656	ppbv	
4) Chloromethane	3.12	50	26221	0.380	ppbv #	88
9) Propene	3.00	41	46478m	0.802	ppbv	
11) Trichlorofluoromethane	3.95	101	42546	0.316	ppbv	94
13) Ethanol	3.60	45	1530384	109.109	ppbv	97
15) Acetone	3.84	43	703484	5.242	ppbv	98
17) tert-Butyl alcohol	4.32	59	21307m	0.251	ppbv	
19) Isopropyl Alcohol	3.98	45	211414	2.562	ppbv #	95
20) Methylene Chloride	4.35	84	33979	0.878	ppbv	95
26) Hexane	5.71	57	110729	1.049	ppbv #	57
34) 2-Butanone	5.27	43	79385	0.462	ppbv	99
35) Carbon Tetrachloride	7.05	117	9913m	0.071	ppbv	
36) Benzene	6.92	78	43130m	0.232	ppbv	
53) Toluene	9.86	91	141169	0.696	ppbv	94
58) Ethyl Benzene	12.77	91	26595m	0.099	ppbv	
59) m/p-Xylene	13.03	91	82248m	0.370	ppbv	
60) o-Xylene	13.76	91	30893m	0.139	ppbv	
74) 1,2,4-Trimethylbenzene	16.84	105	71921	0.279	ppbv #	66
79) Naphthalene	22.31	128	64966m	0.286	ppbv	

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

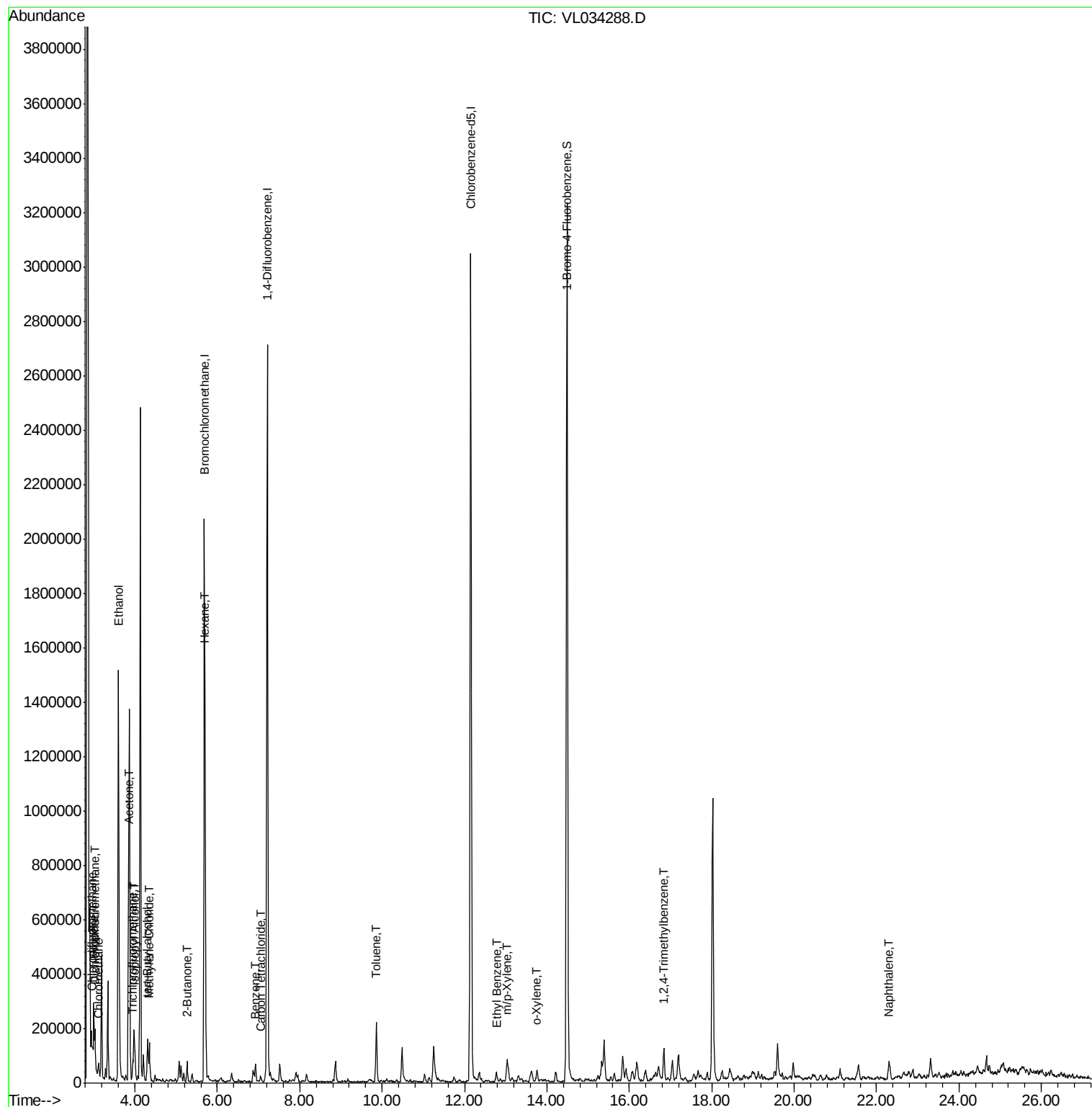
Data Path : Z:\V0ASRV\HPCHEM1\MSVOA L\DATA\VL101419\
Data File : VL034288.D
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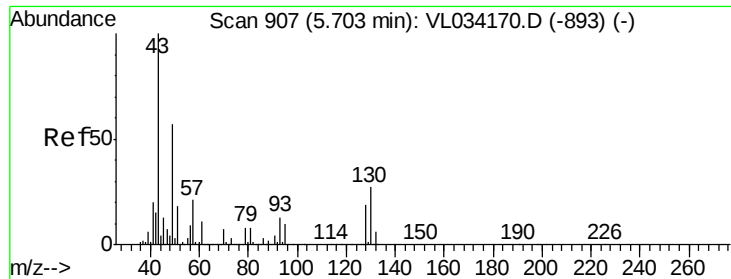
Instrument :
MSVOA_L
ClientSampleId :
IA-3

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Quant Time: Oct 15 07:31:39 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: VL034288.D

Acq: 14 Oct 2019 19:18

Instrument :

MSVOA_L

ClientSampled :

IA-3

Tot Ion: 49 Resp: 1001299

Ion Ratio Lower Upper

49 100

128 35.3 17.6 52.9

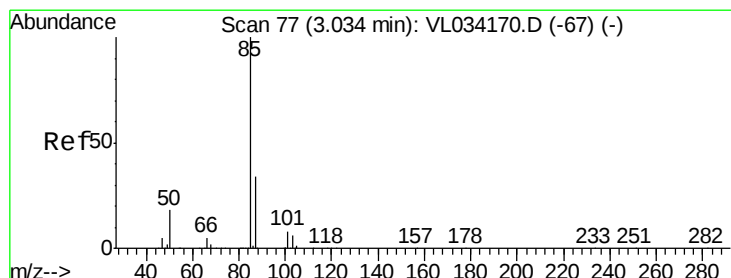
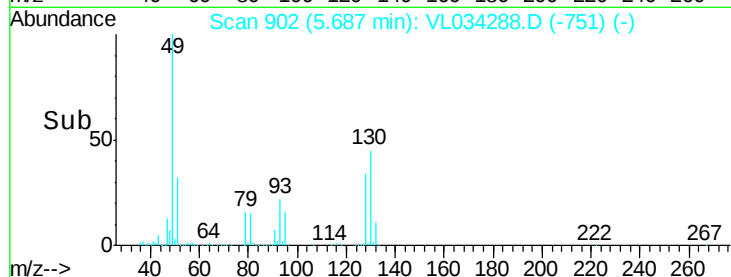
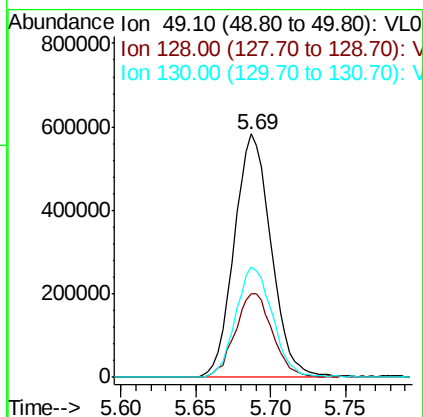
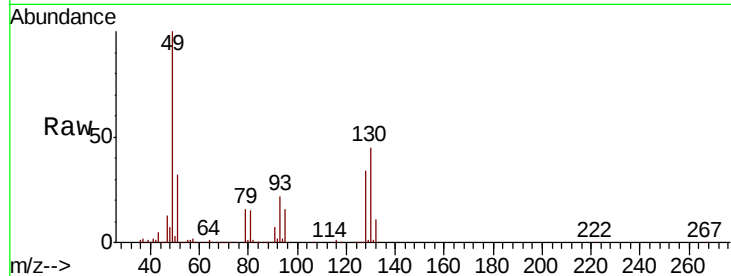
130 45.6 22.3 66.9

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#2

Dichlorodifluoromethane

Concen: 0.631 ppbv

RT: 3.03 min Scan# 75

Delta R.T. -0.01 min

Lab File: VL034288.D

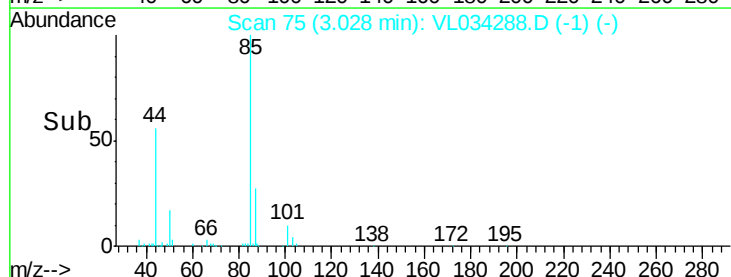
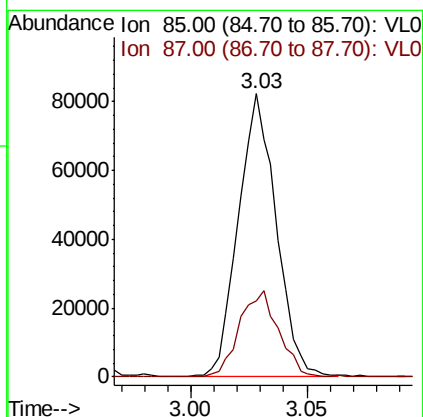
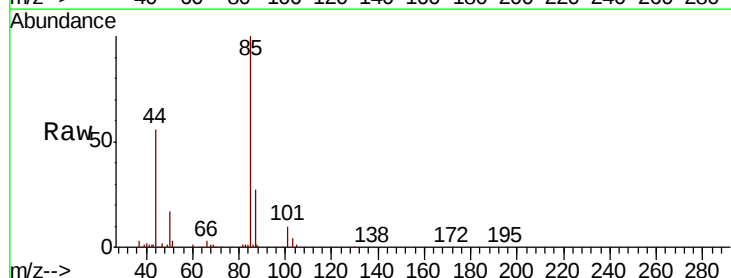
Acq: 14 Oct 2019 19:18

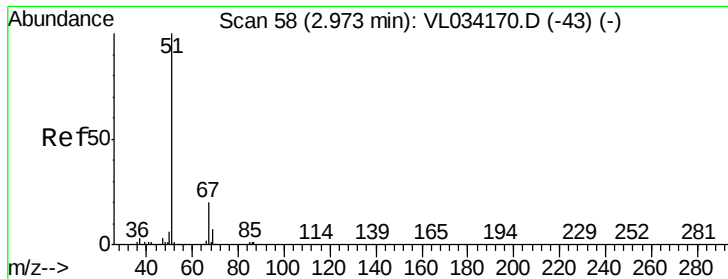
Tgt Ion: 85 Resp: 93318

Ion Ratio Lower Upper

85 100

87 27.4 27.2 40.8





#3

Chlorodifluoromethane

Concen: 0.656 ppbv

RT: 2.97 min Scan# 56

Delta R.T. -0.01 min

Lab File: VL034288.D

Acq: 14 Oct 2019 19:18

Instrument :

MSVOA_L

ClientSampleId :

IA-3

Tot Ion: 51 Resp: 77015

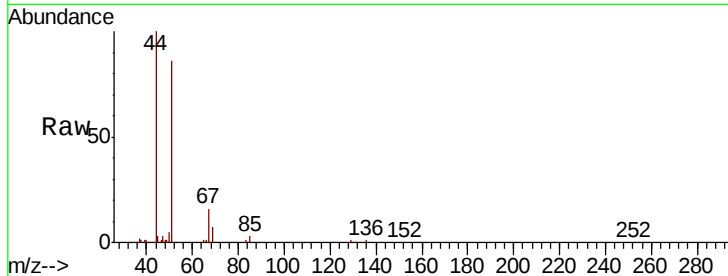
Ion Ratio Lower Upper

51 100

67 20.1 14.8 22.2

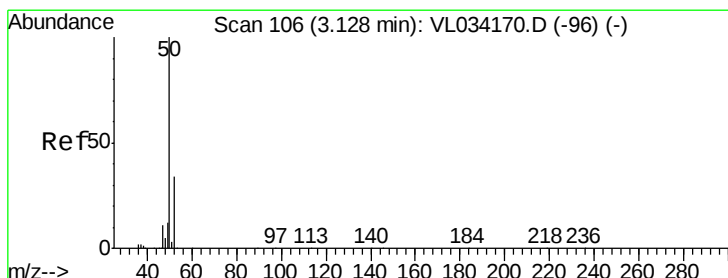
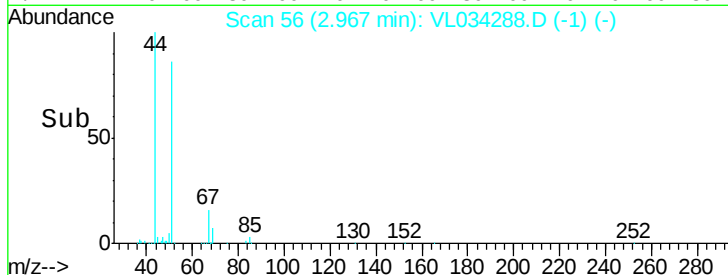
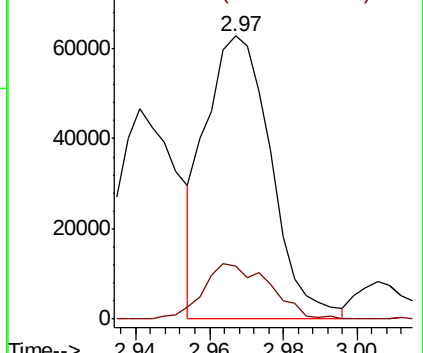
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Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0



#4

Chloromethane

Concen: 0.380 ppbv

RT: 3.12 min Scan# 103

Delta R.T. -0.01 min

Lab File: VL034288.D

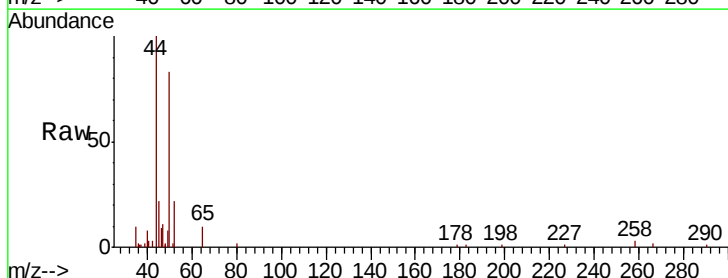
Acq: 14 Oct 2019 19:18

Tgt Ion: 50 Resp: 26221

Ion Ratio Lower Upper

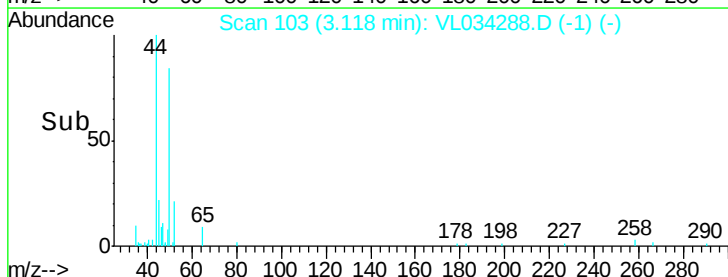
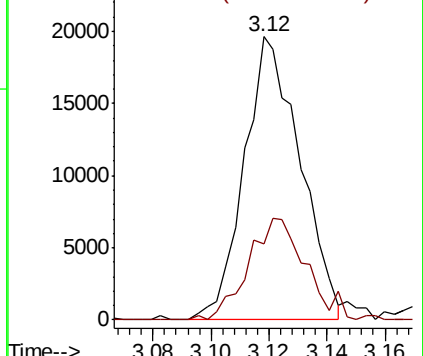
50 100

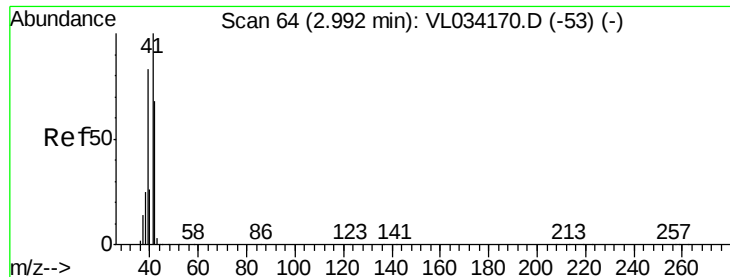
52 27.0 27.1 40.7#



Abundance Ion 50.10 (49.80 to 50.80): VL0

Ion 52.10 (51.80 to 52.80): VL0





#9

Propene

Concen: 0.802 ppbv m

RT: 3.00 min Scan# 66

Delta R.T. 0.01 min

Lab File: VL034288.D

Acq: 14 Oct 2019 19:18

Instrument :

MSVOA_L

ClientSampled :

IA-3

Tot Ion: 41 Resp: 46478

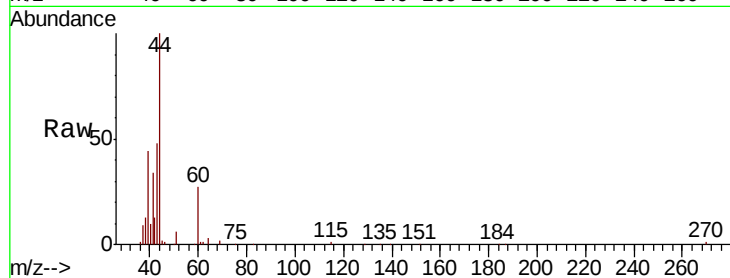
Ion Ratio Lower Upper

41 100

42 149.5 55.8 83.6#

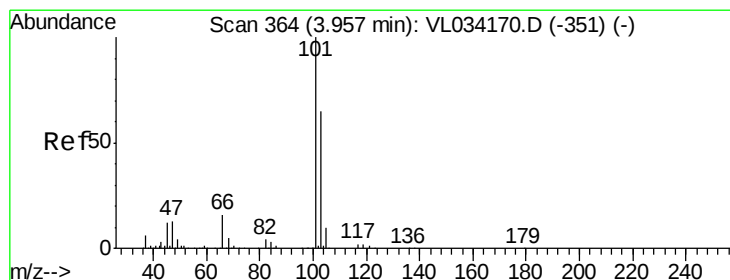
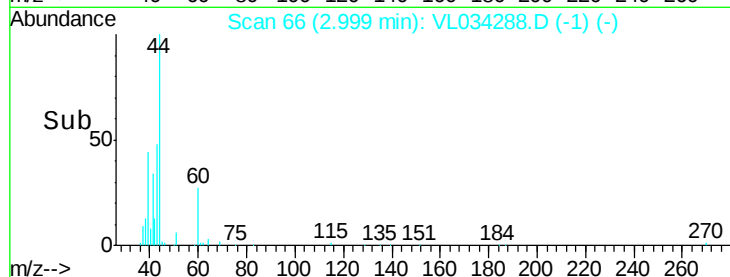
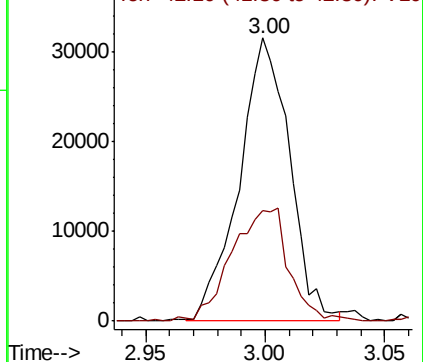
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Abundance Ion 41.10 (40.80 to 41.80): VL0

Ion 42.10 (41.80 to 42.80): VL0



#11

Trichlorofluoromethane

Concen: 0.316 ppbv

RT: 3.95 min Scan# 361

Delta R.T. -0.01 min

Lab File: VL034288.D

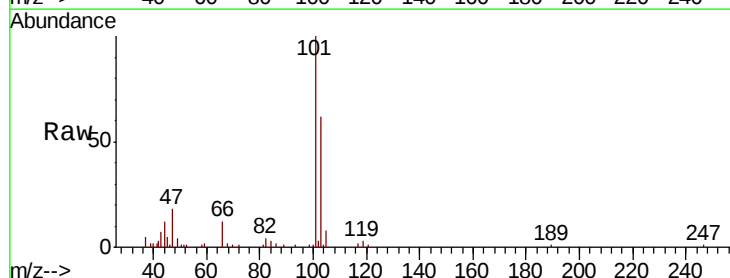
Acq: 14 Oct 2019 19:18

Tgt Ion: 101 Resp: 42546

Ion Ratio Lower Upper

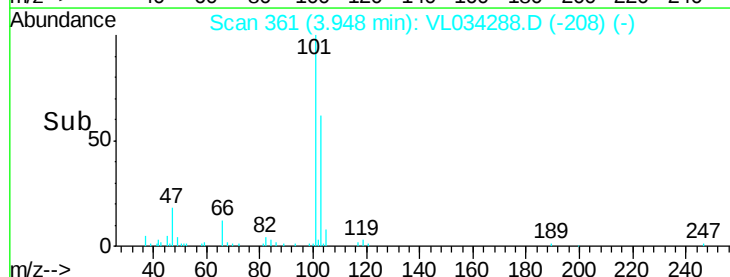
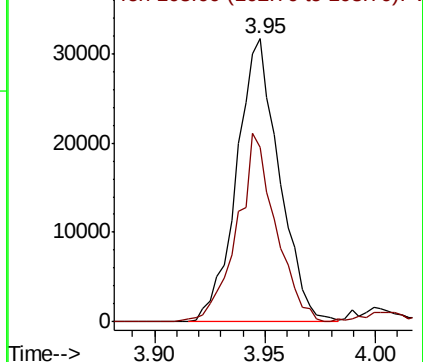
101 100

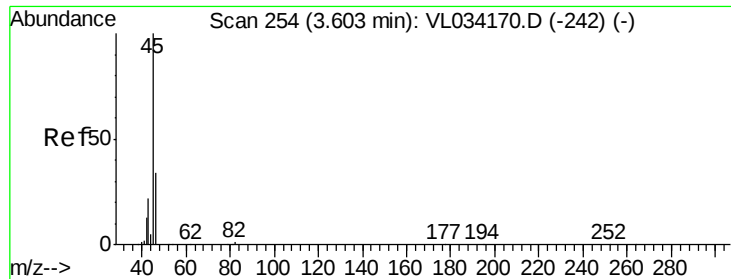
103 60.5 52.1 78.1



Abundance Ion 101.00 (100.70 to 101.70): V

Ion 103.00 (102.70 to 103.70): V





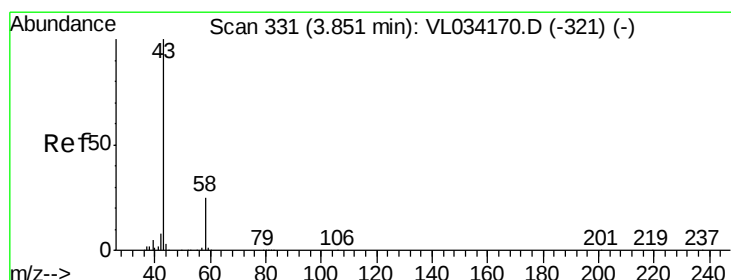
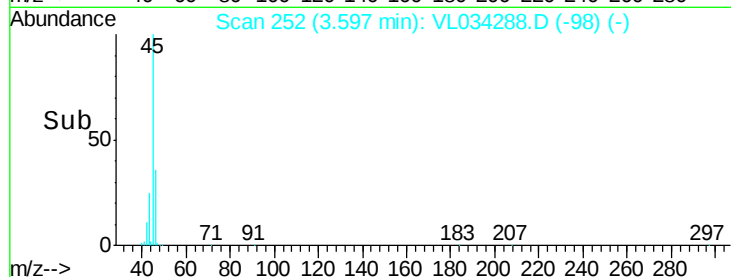
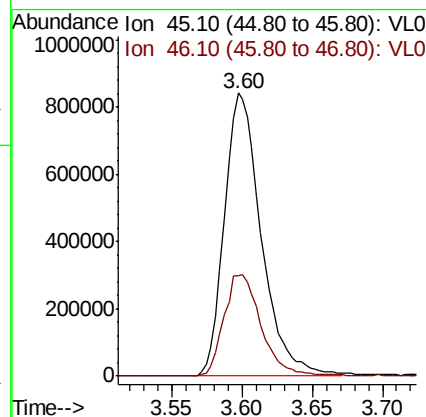
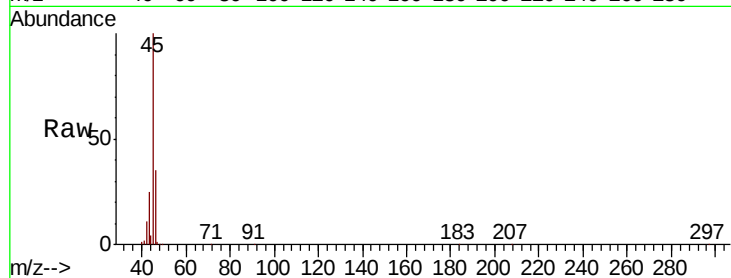
#13
Ethanol
Concen: 109.109 ppbv
RT: 3.60 min Scan# 252
Delta R.T. -0.01 min
Lab File: VL034288.D
Acq: 14 Oct 2019 19:18

Instrument :
MSVOA_L
ClientSampleId :
IA-3

Tot Ion: 45 Resp: 1530384
Ion Ratio Lower Upper
45 100
46 36.8 15.5 61.9

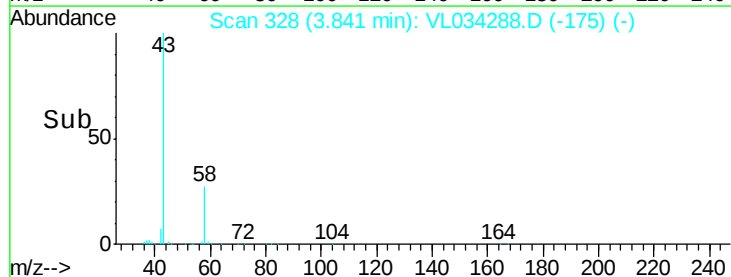
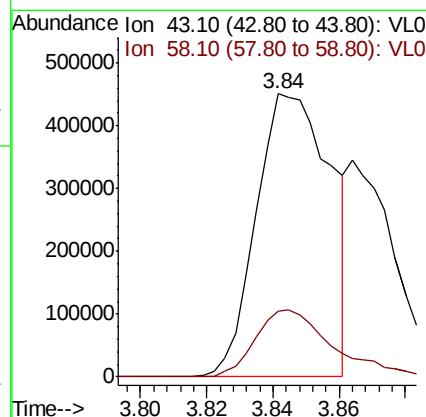
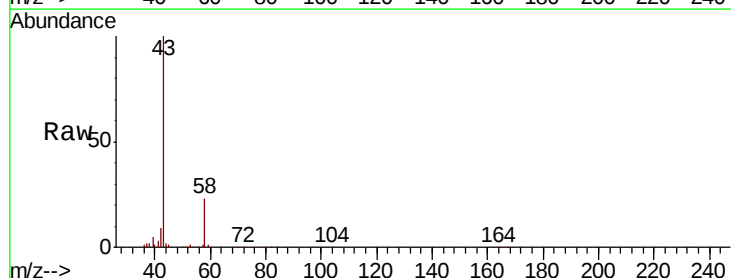
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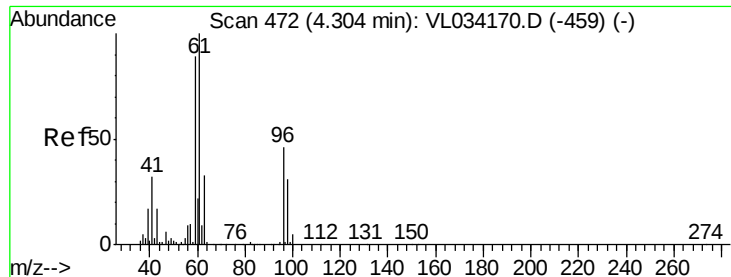
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#15
Acetone
Concen: 5.242 ppbv
RT: 3.84 min Scan# 328
Delta R.T. -0.01 min
Lab File: VL034288.D
Acq: 14 Oct 2019 19:18

Tgt Ion: 43 Resp: 703484
Ion Ratio Lower Upper
43 100
58 24.8 20.5 30.7





#17

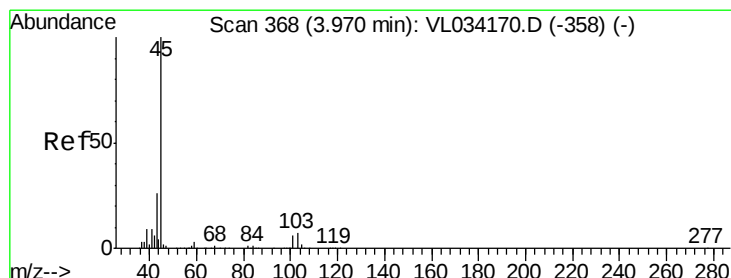
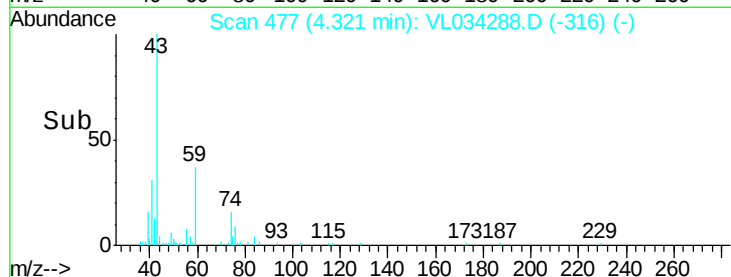
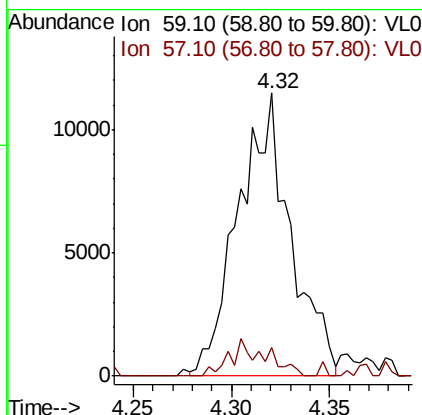
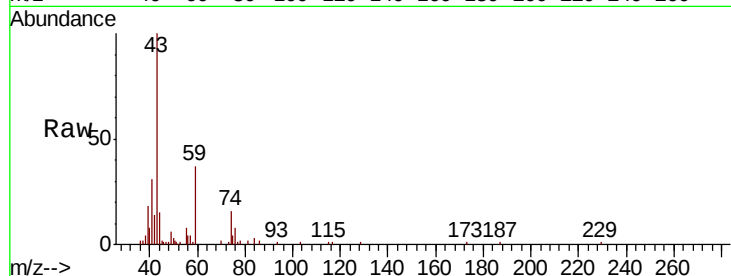
tert-Butyl alcohol
Concen: 0.251 ppbv
RT: 4.32 min Scan# 477
Delta R.T. 0.02 min
Lab File: VL034288.D
Acq: 14 Oct 2019 19:18

Instrument :
MSVOA_L
ClientSampled :
IA-3

Tot Ion: 59 Resp: 21307
Ion Ratio Lower Upper
59 100
57 0.0 8.7 13.1#

Manual Integrations
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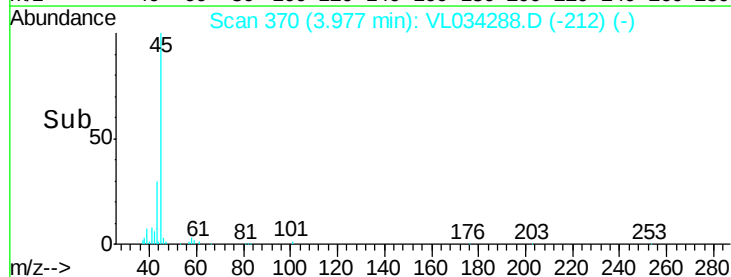
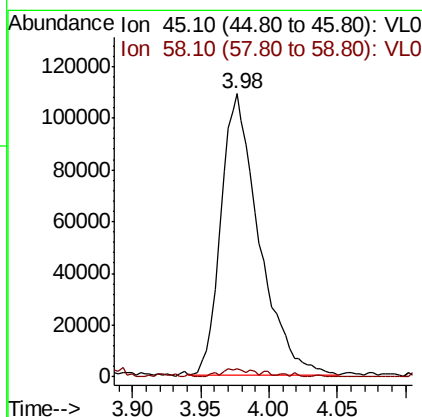
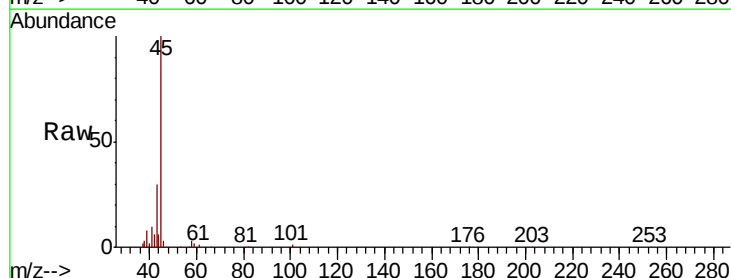
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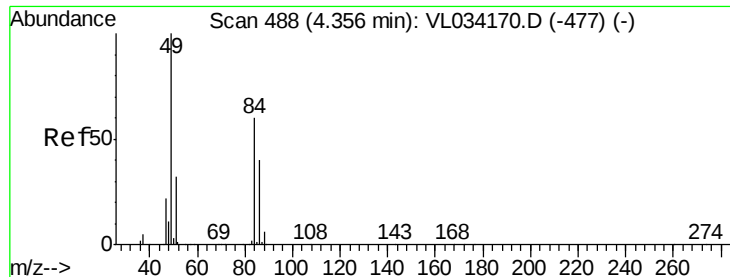


#19

Isopropyl Alcohol
Concen: 2.562 ppbv
RT: 3.98 min Scan# 370
Delta R.T. 0.01 min
Lab File: VL034288.D
Acq: 14 Oct 2019 19:18

Tgt Ion: 45 Resp: 211414
Ion Ratio Lower Upper
45 100
58 3.5 1.4 2.0#





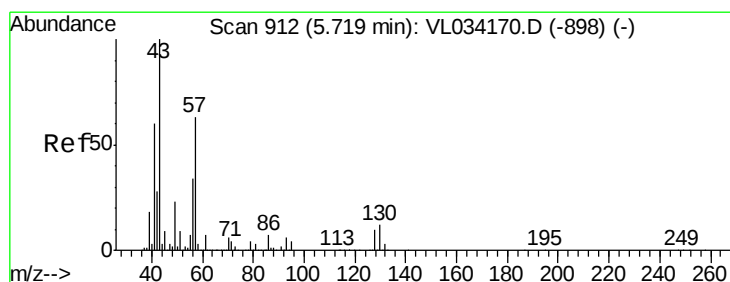
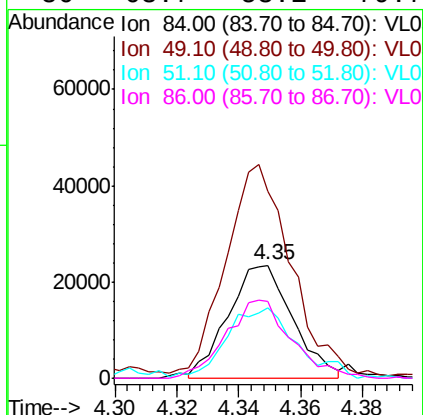
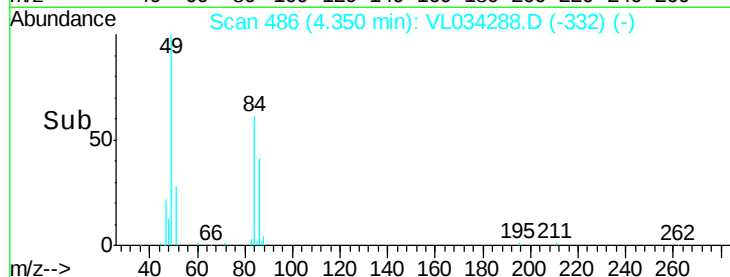
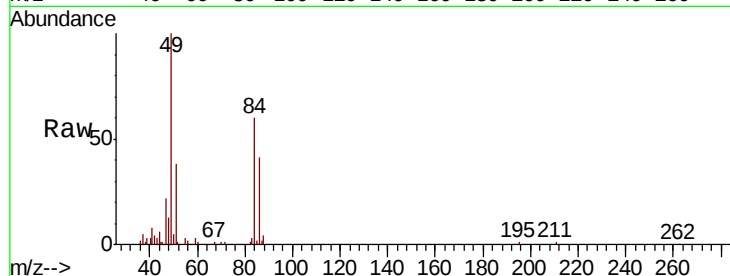
#20
Methvlene Chloride
Concen: 0.878 ppbv
RT: 4.35 min Scan# 486
Delta R.T. -0.01 min
Lab File: VL034288.D
Acq: 14 Oct 2019 19:18

Instrument :
MSVOA_L
ClientSampled :
IA-3

Tot Ion:	84	Resp:	33979
Ion	Ratio	Lower	Upper
84	100		
49	161.6	133.8	200.8
51	61.4	43.6	65.4
86	63.7	53.1	79.7

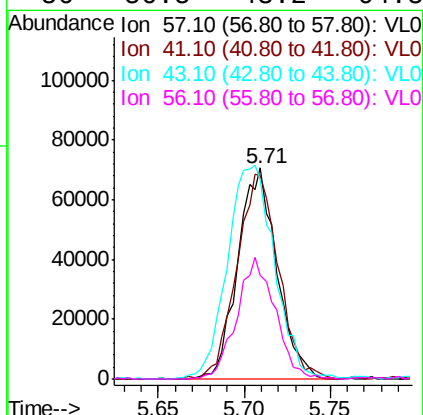
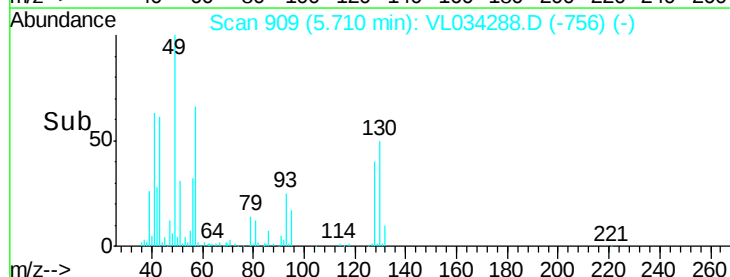
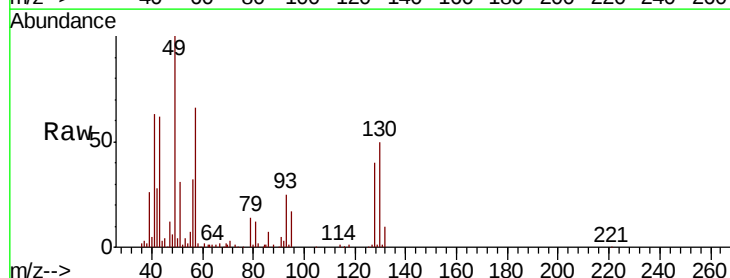
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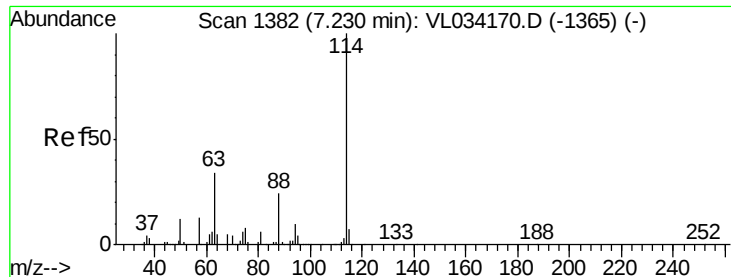
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#26
Hexane
Concen: 1.049 ppbv
RT: 5.71 min Scan# 909
Delta R.T. -0.01 min
Lab File: VL034288.D
Acq: 14 Oct 2019 19:18

Tgt Ion:	57	Resp:	110729
Ion	Ratio	Lower	Upper
57	100		
41	104.5	78.5	117.7
43	124.0	189.5	284.3#
56	56.5	43.2	64.8





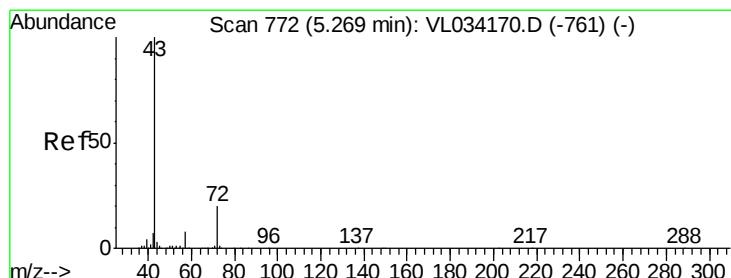
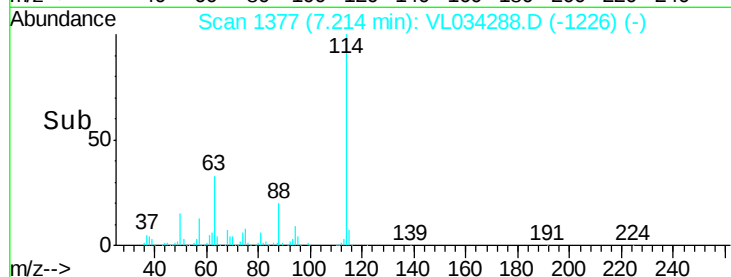
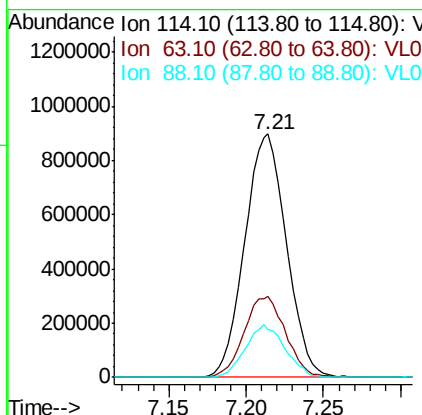
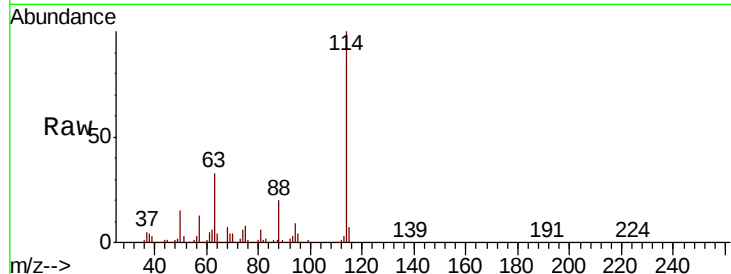
#33
 1,4-Difluorobenzene
 Concen: 10.000 ppbv
 RT: 7.21 min Scan# 1377
 Delta R.T. -0.02 min
 Lab File: VL034288.D
 Acq: 14 Oct 2019 19:18

Instrument :
 MSVOA_L
 ClientSampleId :
 IA-3

Tot Ion	Ratio	Lower	Upper
114	100		
63	33.1	27.8	41.6
88	20.6	17.1	25.7

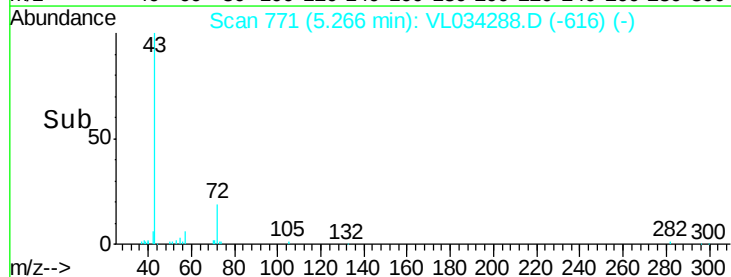
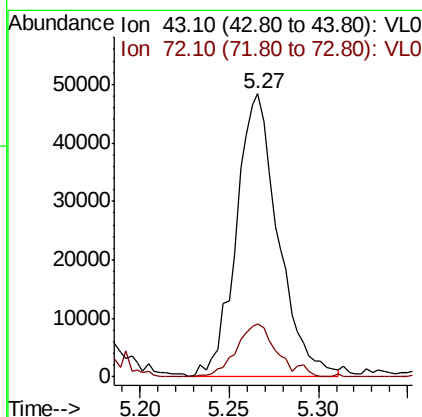
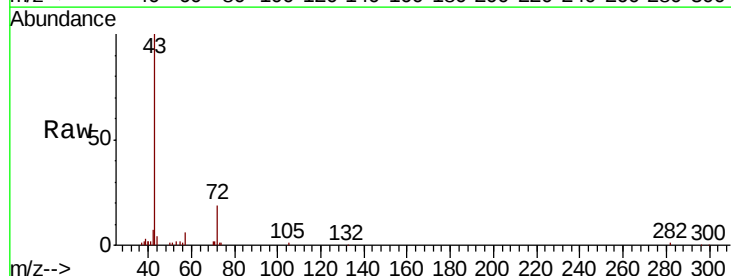
Manual Integrations
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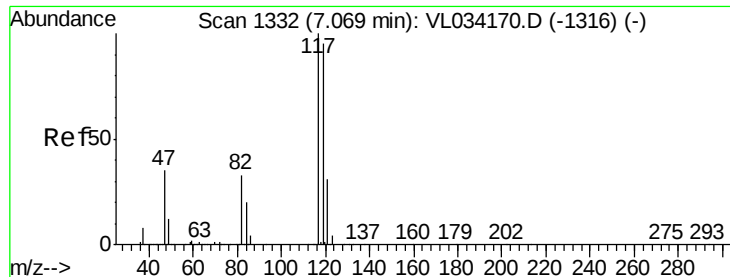
MMDadoda
 10/16/2019 12:59:32 AM



#34
 2-Butanone
 Concen: 0.462 ppbv
 RT: 5.27 min Scan# 771
 Delta R.T. -0.00 min
 Lab File: VL034288.D
 Acq: 14 Oct 2019 19:18

Tgt Ion	Ratio	Lower	Upper
43	100		
72	18.4	15.0	22.6





#35

Carbon Tetrachloride

Concen: 0.071 ppbv m

RT: 7.05 min Scan# 1326

Delta R.T. -0.02 min

Lab File: VL034288.D

Acq: 14 Oct 2019 19:18

Instrument :

MSVOA_L

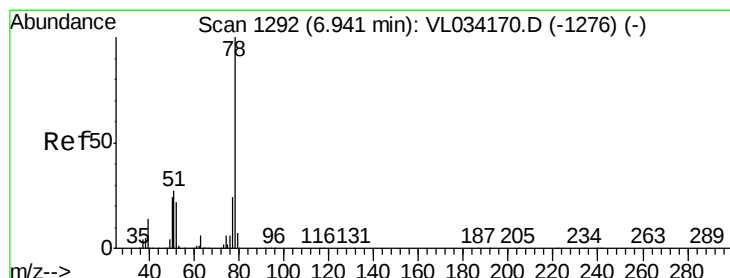
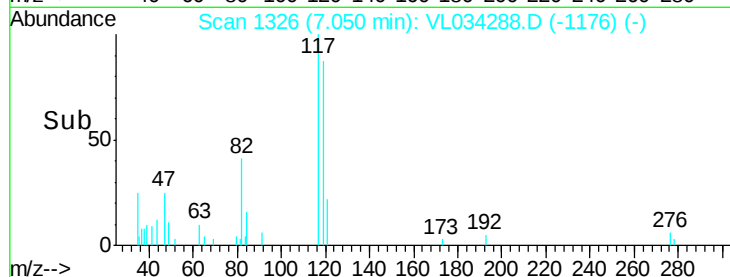
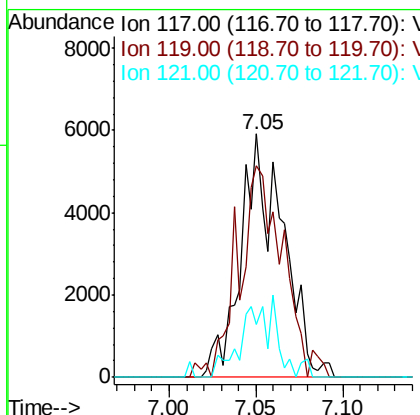
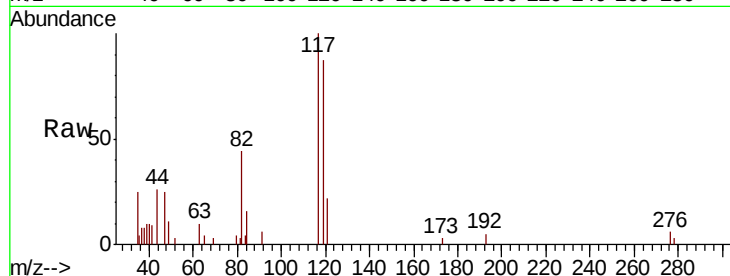
ClientSampled :

IA-3

Tot Ion:	117	Resp:	9913
Ion Ratio	Lower	Upper	
117	100		
119	86.7	75.8	113.6
121	21.6	25.0	37.6#

Manual Integrations
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#36

Benzene

Concen: 0.232 ppbv m

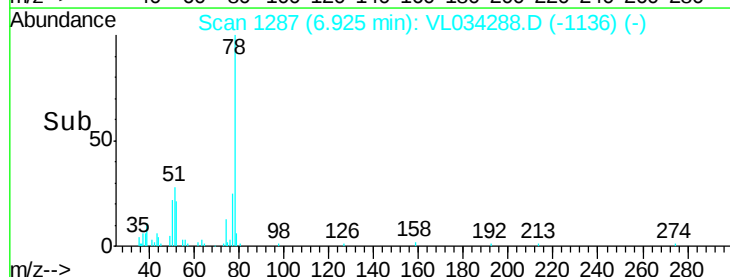
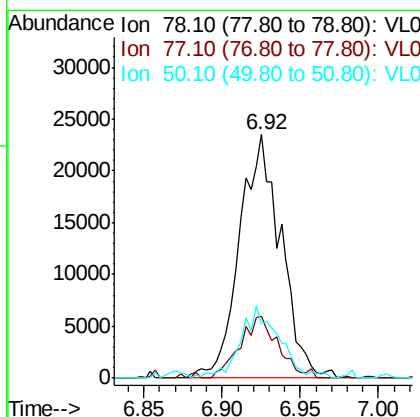
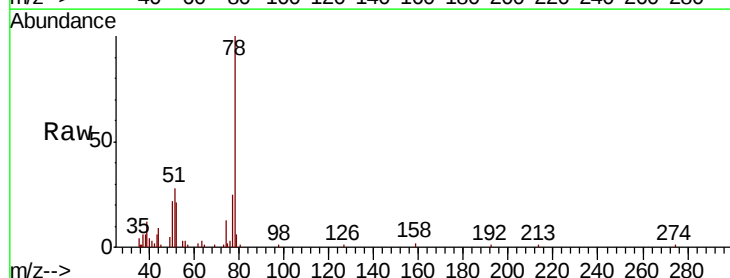
RT: 6.92 min Scan# 1287

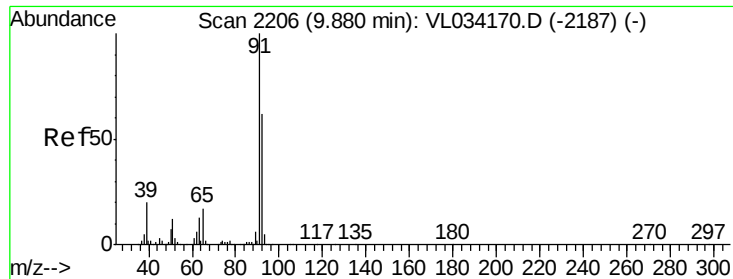
Delta R.T. -0.02 min

Lab File: VL034288.D

Acq: 14 Oct 2019 19:18

Tgt Ion:	78	Resp:	43130
Ion Ratio	Lower	Upper	
78	100		
77	25.4	19.0	28.4
50	22.1	18.9	28.3





#53

Toluene

Concen: 0.696 ppbv

RT: 9.86 min Scan# 2201

Delta R.T. -0.02 min

Lab File: VL034288.D

Acq: 14 Oct 2019 19:18

Instrument :

MSVOA_L

ClientSampleId :

IA-3

Tot Ion: 91 Resp: 141169

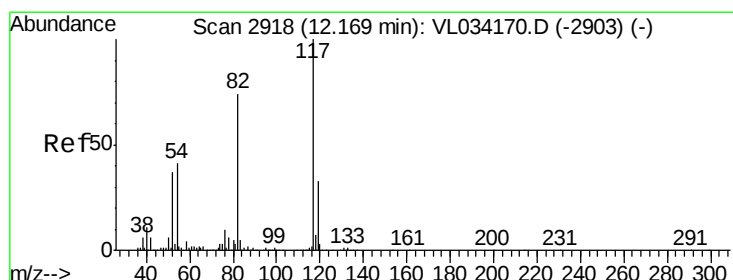
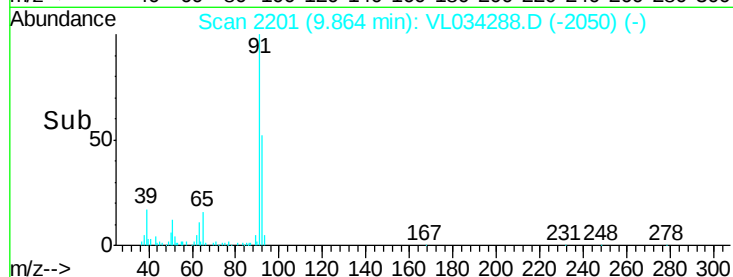
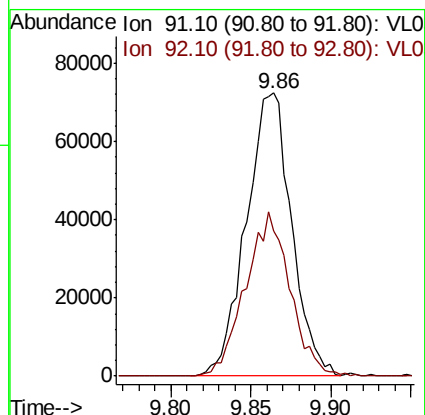
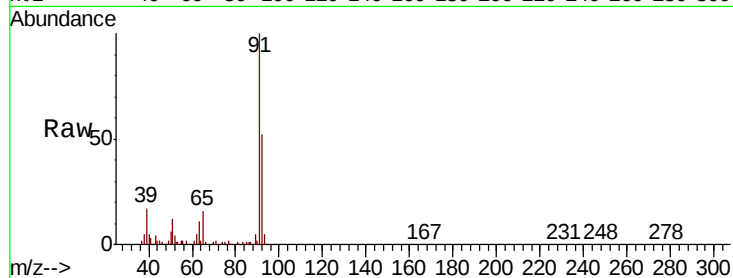
Ion Ratio Lower Upper

91 100

92 56.9 49.0 73.6

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#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.15 min Scan# 2913

Delta R.T. -0.02 min

Lab File: VL034288.D

Acq: 14 Oct 2019 19:18

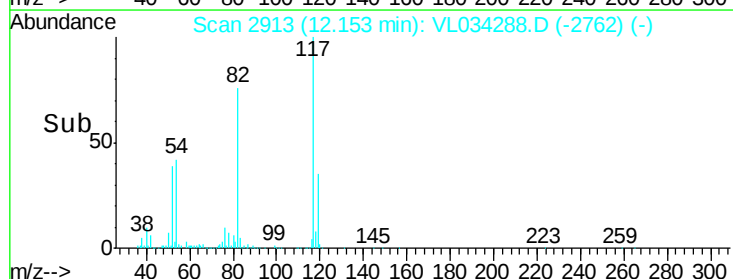
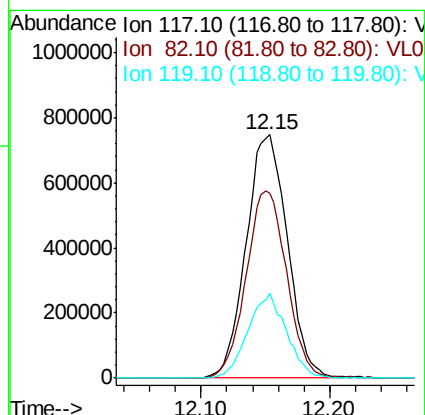
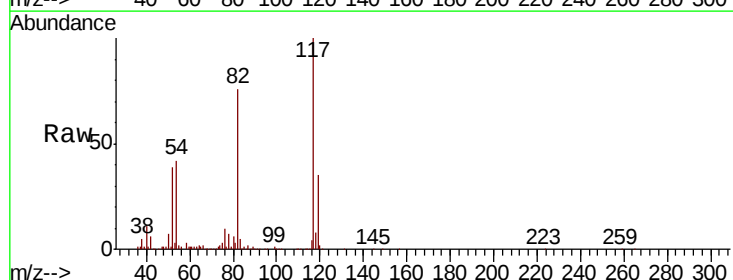
Tgt Ion: 117 Resp: 1664253

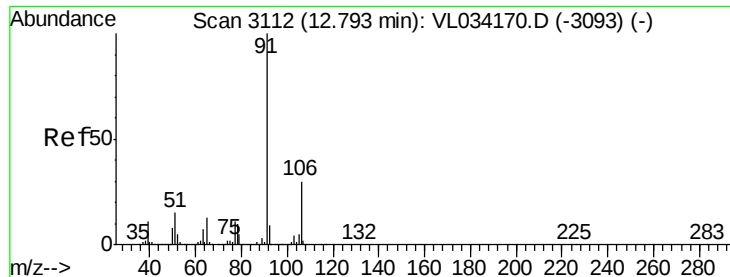
Ion Ratio Lower Upper

117 100

82 75.8 58.2 87.4

119 32.5 23.7 35.5





#58

Ethyl Benzene

Concen: 0.099 ppbv m

RT: 12.77 min Scan# 3106

Delta R.T. -0.02 min

Lab File: VL034288.D

Acq: 14 Oct 2019 19:18

Instrument :

MSVOA_L

ClientSampled :

IA-3

Tot Ion: 91 Resp: 26595

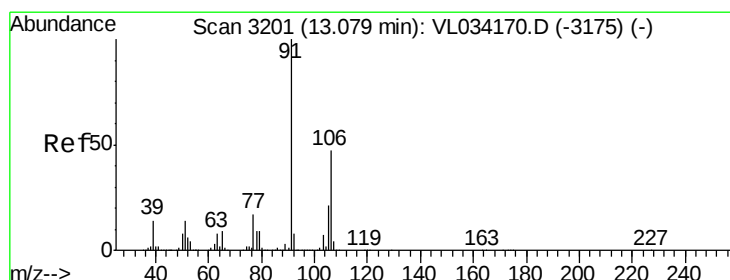
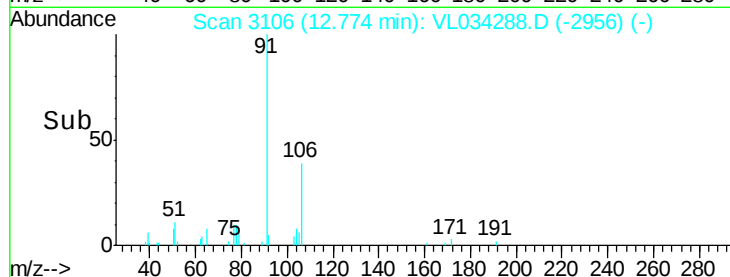
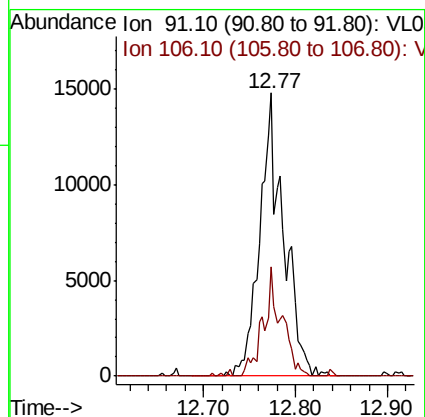
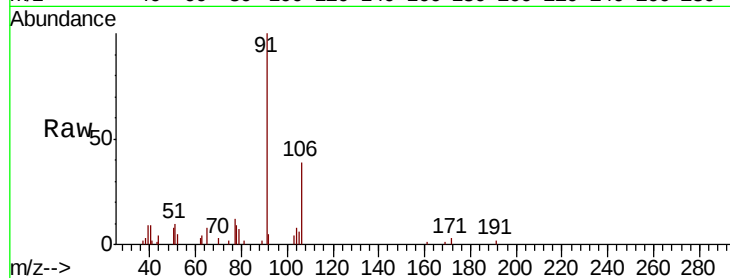
Ion Ratio Lower Upper

91 100

106 38.7 24.2 36.4#

Manual Integrations
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#59

m/p-Xylene

Concen: 0.370 ppbv m

RT: 13.03 min Scan# 3185

Delta R.T. -0.05 min

Lab File: VL034288.D

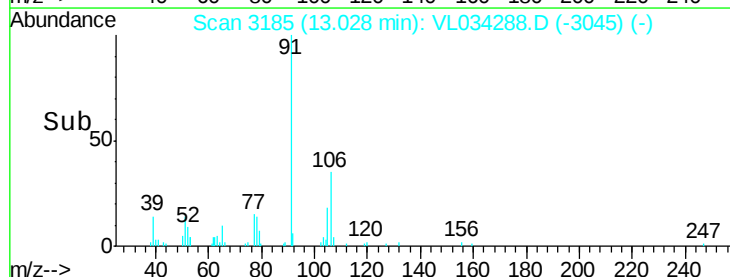
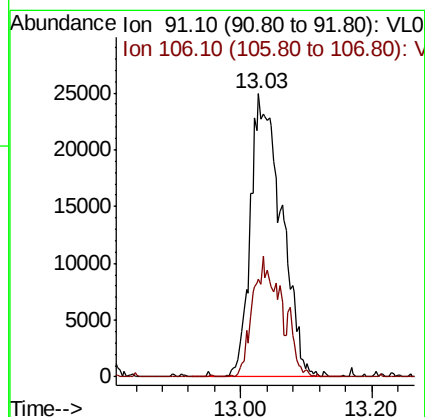
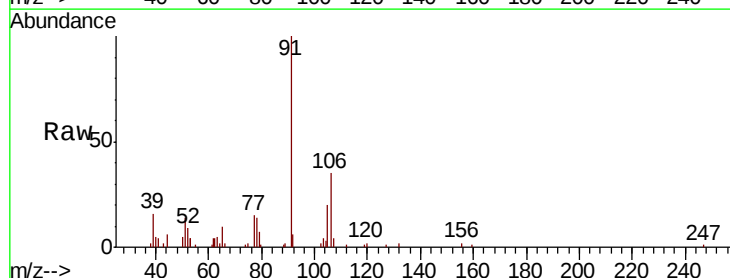
Acq: 14 Oct 2019 19:18

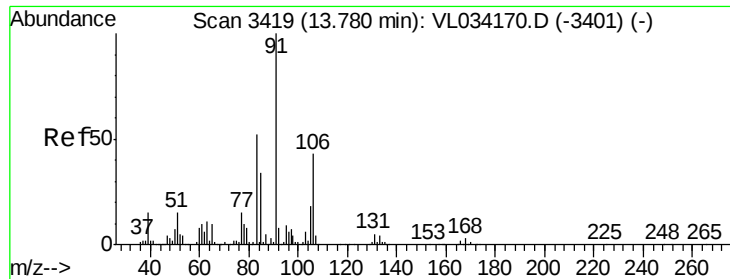
Tgt Ion: 91 Resp: 82248

Ion Ratio Lower Upper

91 100

106 0.0 35.5 53.3#





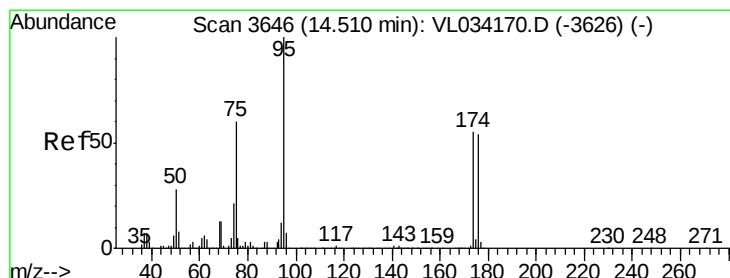
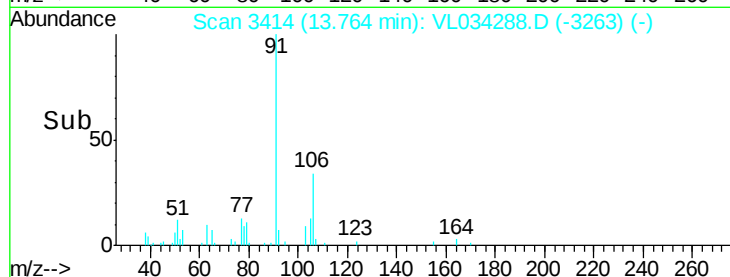
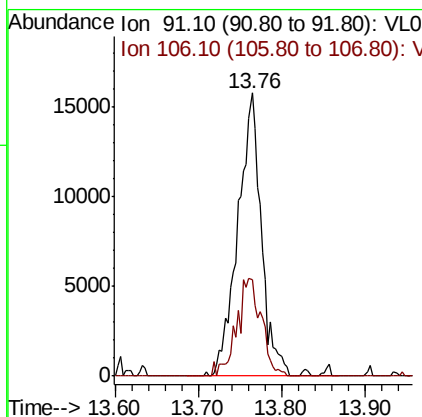
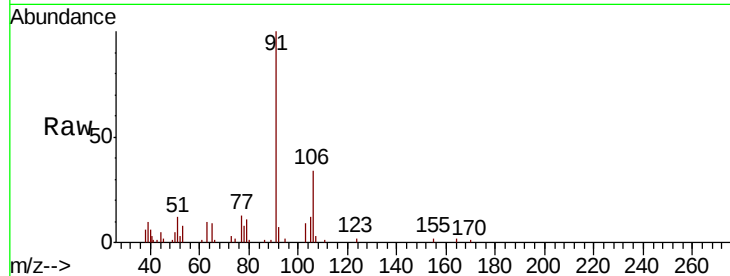
#60
o-Xylene
Concen: 0.139 ppbv m
RT: 13.76 min Scan# 3414
Delta R.T. -0.02 min
Lab File: VL034288.D
Acq: 14 Oct 2019 19:18

Instrument :
MSVOA_L
ClientSampled :
IA-3

Tot Ion: 91 Resp: 30893
Ion Ratio Lower Upper
91 100
106 36.0 21.2 63.6

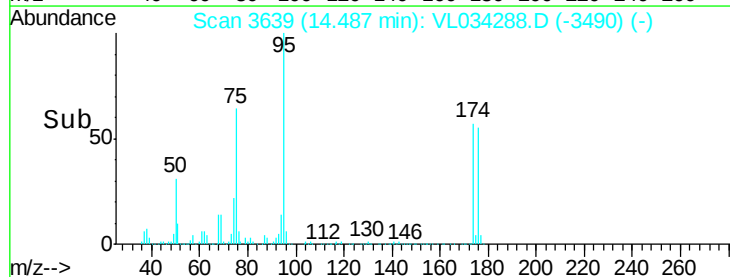
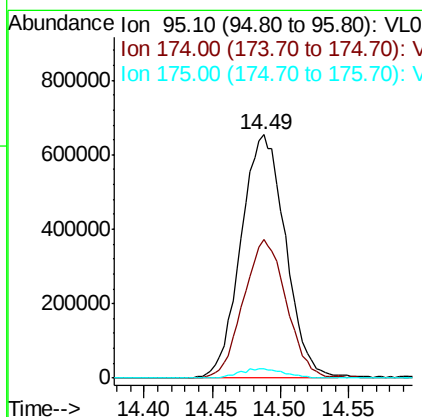
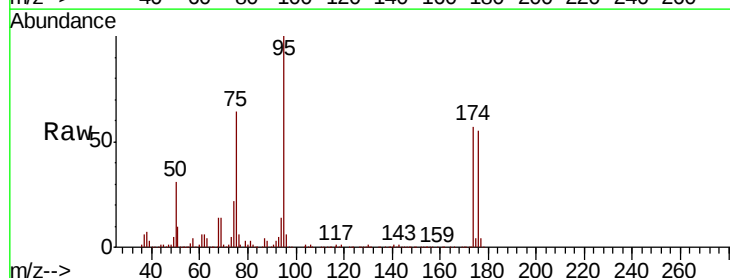
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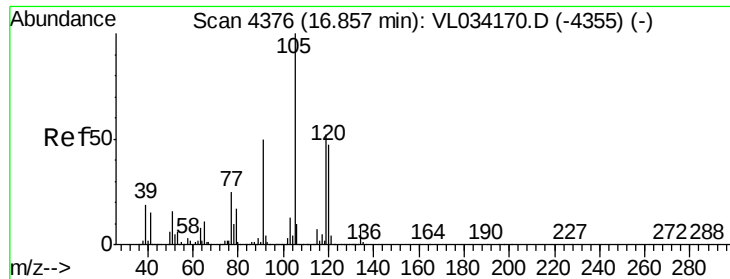
MMDadoda
10/16/2019 12:59:32 AM



#68
1-Bromo-4-Fluorobenzene
Concen: 10.228 ppbv
RT: 14.49 min Scan# 3639
Delta R.T. -0.02 min
Lab File: VL034288.D
Acq: 14 Oct 2019 19:18

Tgt Ion: 95 Resp: 1479028
Ion Ratio Lower Upper
95 100
174 55.3 45.1 67.7
175 3.9 3.3 4.9





#74

1,2,4-Trimethylbenzene

Concen: 0.279 ppbv

RT: 16.84 min Scan# 4370

Delta R.T. -0.02 min

Lab File: VL034288.D

Acq: 14 Oct 2019 19:18

Instrument :

MSVOA_L

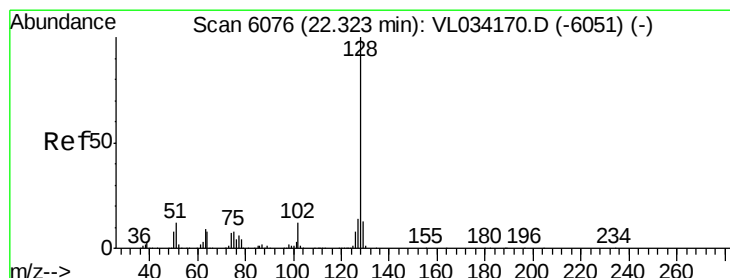
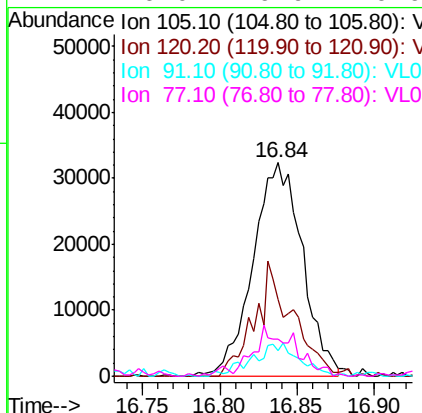
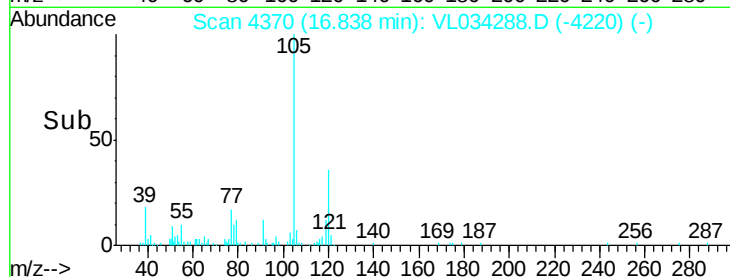
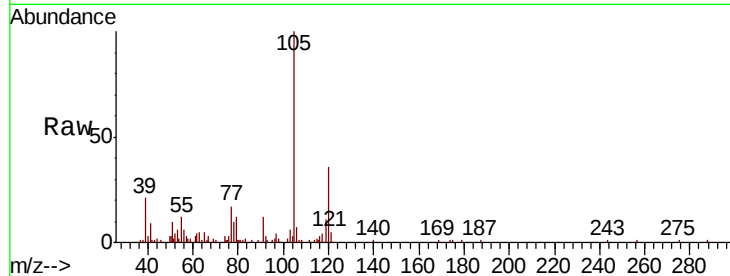
ClientSampled :

IA-3

Tot Ion:	105	Resp:	71921
Ion Ratio	Lower	Upper	
105	100		
120	36.0	37.5	56.3#
91	11.6	41.1	61.7#
77	16.0	19.9	29.9#

Manual Integrations
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#79

Naphthalene

Concen: 0.286 ppbv m

RT: 22.31 min Scan# 6072

Delta R.T. -0.01 min

Lab File: VL034288.D

Acq: 14 Oct 2019 19:18

Tgt Ion:	128	Resp:	64966
Ion Ratio	Lower	Upper	
128	100		
127	11.5	11.1	16.7
129	10.9	10.2	15.4

