

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL020420\
 Data File : VL034593.D
 Acq On : 4 Feb 2020 23:51
 Operator : SY/AP
 Sample : L1359-01
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 SG-1

Manual Integrations
 APPROVED

MMDadoda
 2/5/2020 2:51:01 PM

Quant Time: Feb 05 07:33:59 2020
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL013020AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Thu Jan 30 2020
 QLast Update : Thu Jan 30 17:16:44 2020
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.67	49	900548	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.19	114	1862805	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.13	117	1906635	10.00	ppbv	0.01

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.46	95	1727849	10.72	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	107.20%

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.01	85	43743m	0.221	ppbv	
3) Chlorodifluoromethane	2.95	51	41288m	0.379	ppbv	
9) Propene	2.99	41	16789m	0.396	ppbv	
10) Heptane	8.14	43	134312	1.260	ppbv	96
11) Trichlorofluoromethane	3.93	101	46113	0.256	ppbv #	81
13) Ethanol	3.58	45	162973	14.361	ppbv	96
15) Acetone	3.83	43	1103006	8.334	ppbv	98
17) tert-Butyl alcohol	4.29	59	91687	0.942	ppbv #	92
19) Isopropyl Alcohol	3.95	45	56118m	0.727	ppbv	
20) Methylene Chloride	4.33	84	49108	0.974	ppbv #	89
26) Hexane	5.69	57	41567	0.463	ppbv #	44
27) Carbon Disulfide	4.54	76	68009	0.562	ppbv #	82
34) 2-Butanone	5.24	43	236940	1.752	ppbv	97
35) Carbon Tetrachloride	7.03	117	10363m	0.058	ppbv	
36) Benzene	6.90	78	44750m	0.270	ppbv	
38) Trichloroethene	7.86	130	3758m	0.054	ppbv	
44) 2,2,4-Trimethylpentane	7.88	57	29226m	0.097	ppbv	
52) Tetrachloroethene	11.26	164	5119m	0.077	ppbv	
53) Toluene	9.83	91	488152	2.682	ppbv	97
58) Ethyl Benzene	12.75	91	161006	0.631	ppbv	91
59) m/p-Xylene	13.00	91	622390m	2.760	ppbv	
60) o-Xylene	13.73	91	252461	1.115	ppbv	95
72) 4-Ethyltoluene	15.89	105	80800m	0.325	ppbv	
73) 1,3,5-Trimethylbenzene	16.04	105	48011	0.197	ppbv	95
74) 1,2,4-Trimethylbenzene	16.81	105	242164	0.900	ppbv #	78

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

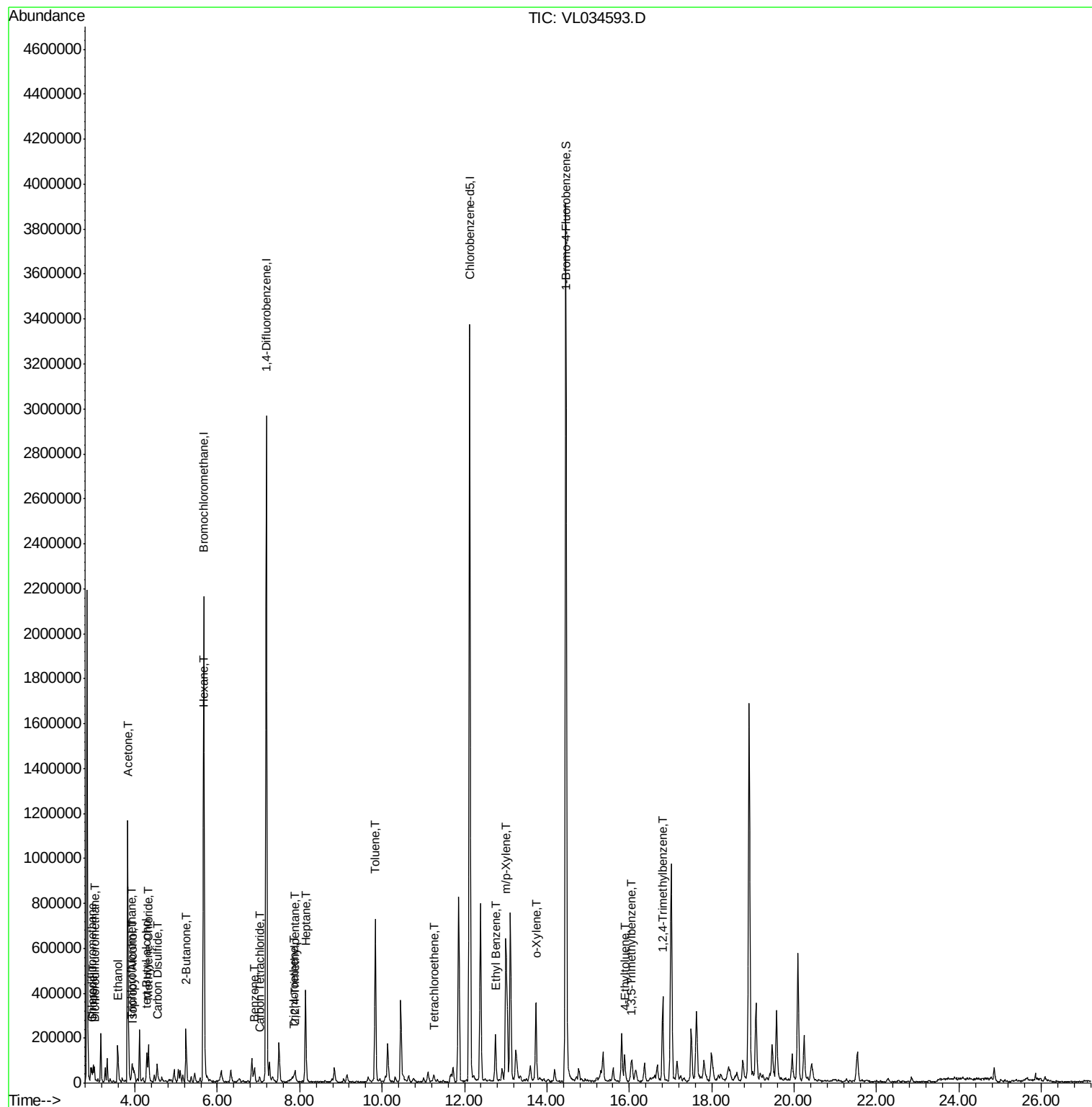
Data Path : Z:\V0ASRV\HPCHEM1\MSVOA L\DATA\VL020420\
Data File : VL034593.D
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Operator : SY/AP
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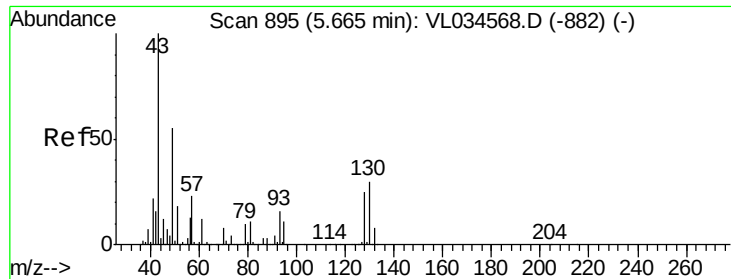
Instrument :
MSVOA_L
ClientSampleId :
SG-1

Manual Integrations
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Quant Time: Feb 05 07:33:59 2020
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA L\METHODS\VL013020AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Thu Jan
QLast Update : Thu Jan 30 17:16:44 2020
Response via : Initial Calibration





#1

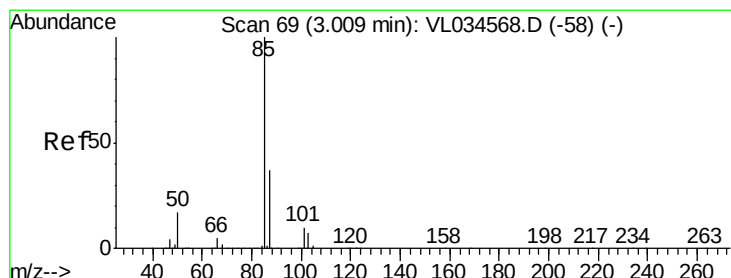
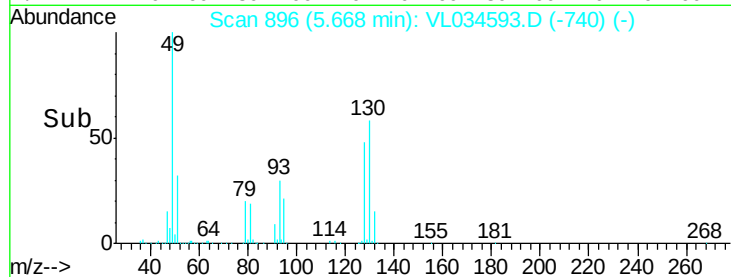
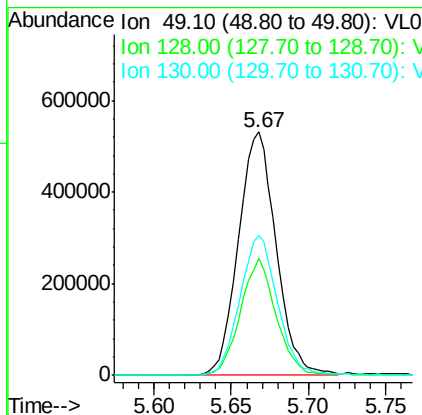
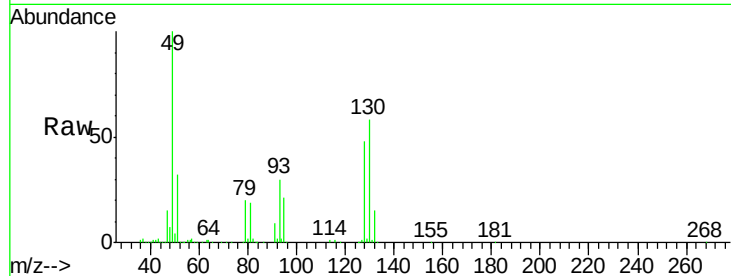
Bromochloromethane
 Concen: 10.000 ppbv
 RT: 5.67 min Scan# 896
 Delta R.T. 0.00 min
 Lab File: VL034593.D
 Acq: 4 Feb 2020 23:51

Instrument :
 MSVOA_L
 ClientSampled :
 SG-1

Tot Ion	49	Resp	900548
Ion	Ratio	Lower	Upper
49	100		
128	45.7	22.7	68.1
130	57.9	28.6	85.8

Manual Integrations
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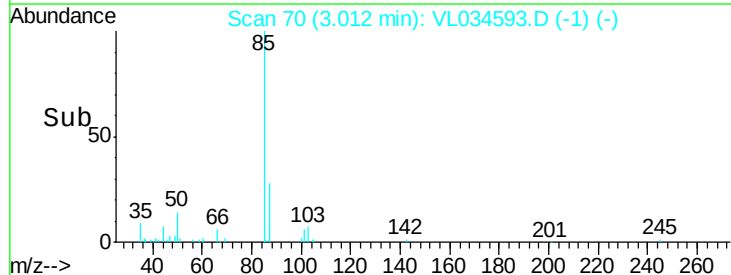
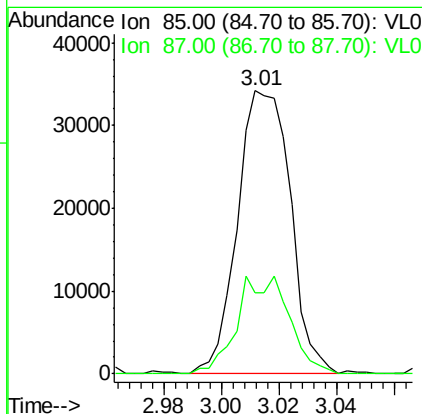
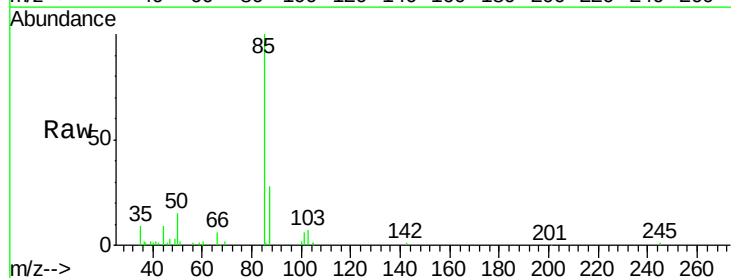
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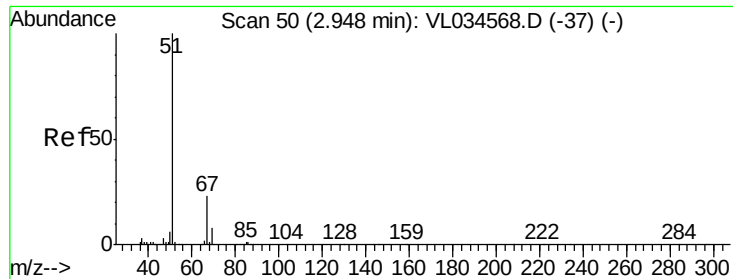


#2

Dichlorodifluoromethane
 Concen: 0.221 ppbv m
 RT: 3.01 min Scan# 70
 Delta R.T. 0.00 min
 Lab File: VL034593.D
 Acq: 4 Feb 2020 23:51

Tgt Ion	85	Resp	43743
Ion	Ratio	Lower	Upper
85	100		
87	28.5	29.5	44.3#





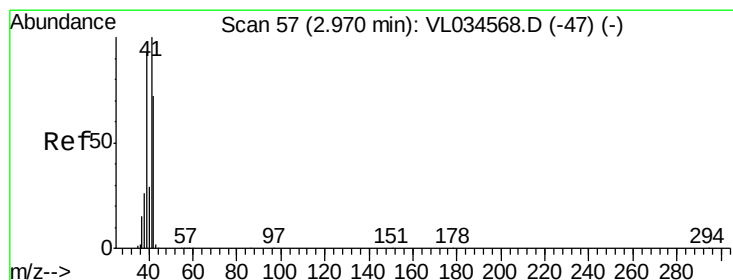
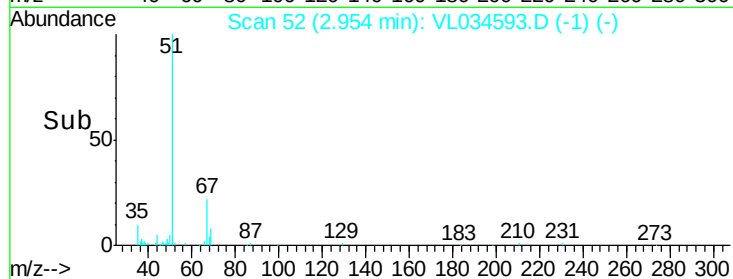
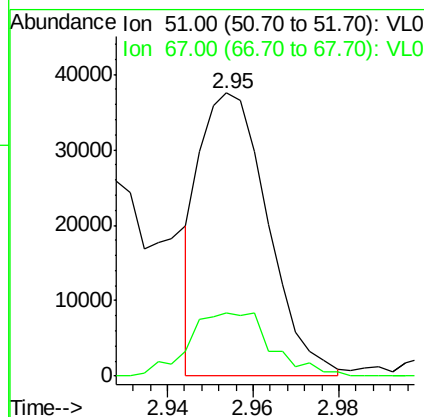
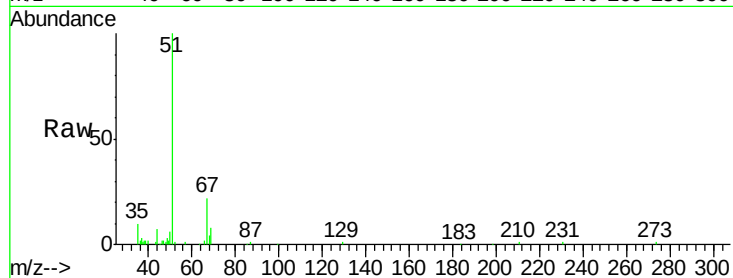
#3
Chlorodifluoromethane
Concen: 0.379 ppbv m
RT: 2.95 min Scan# 52
Delta R.T. 0.01 min
Lab File: VL034593.D
Acq: 4 Feb 2020 23:51

Instrument :
MSVOA_L
ClientSampleId :
SG-1

Tot Ion: 51 Resp: 41288
Ion Ratio Lower Upper
51 100
67 27.2 17.8 26.8#

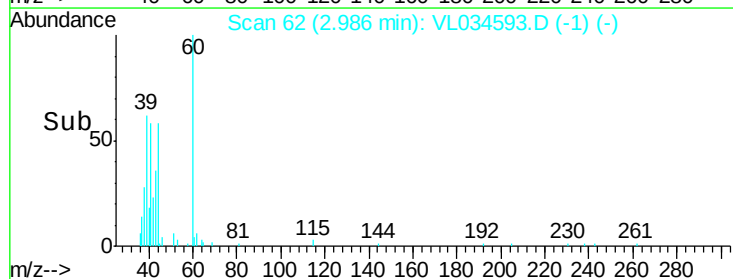
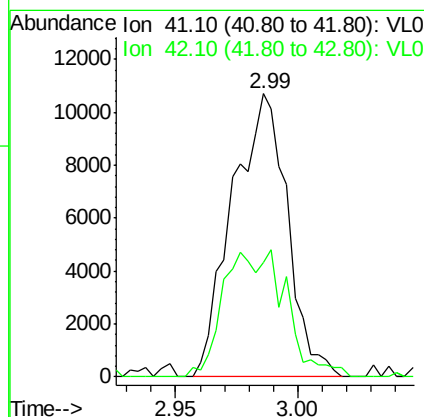
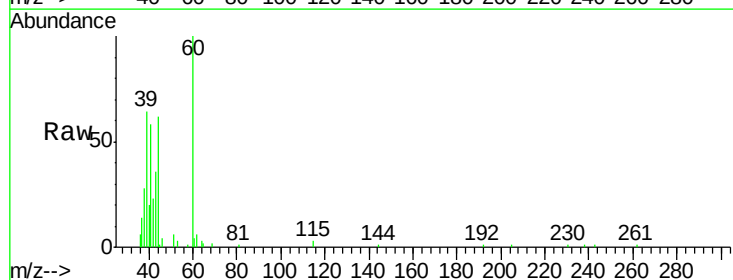
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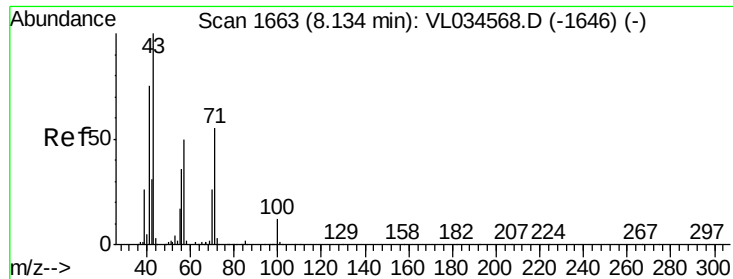
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#9
Propene
Concen: 0.396 ppbv m
RT: 2.99 min Scan# 62
Delta R.T. 0.02 min
Lab File: VL034593.D
Acq: 4 Feb 2020 23:51

Tgt Ion: 41 Resp: 16789
Ion Ratio Lower Upper
41 100
42 50.6 57.0 85.4#





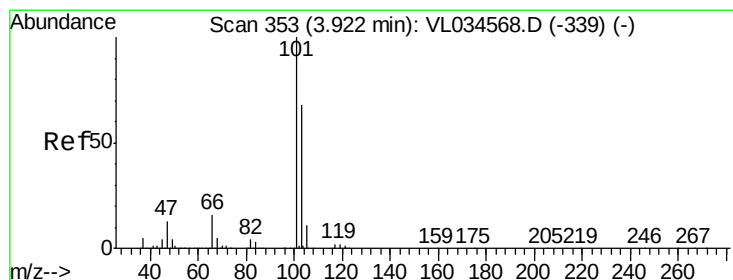
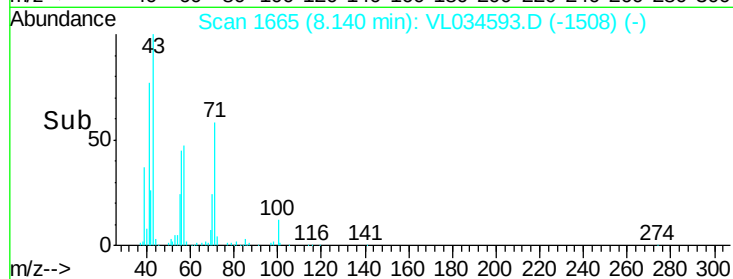
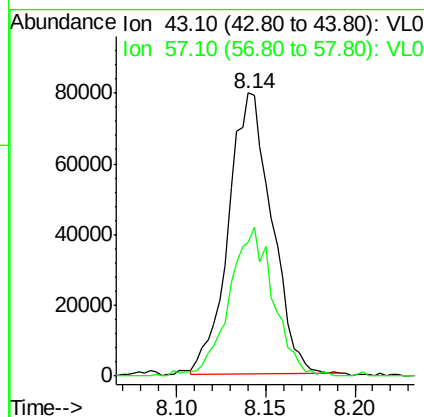
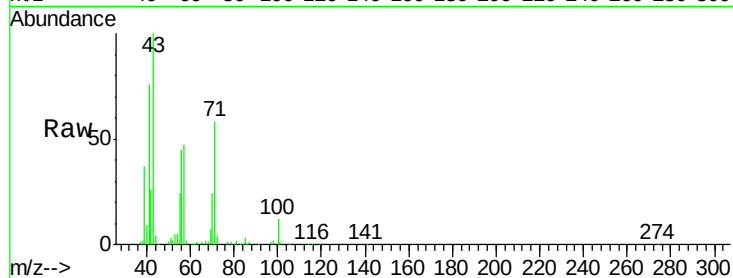
#10
Heptane
Concen: 1.260 ppbv
RT: 8.14 min Scan# 1665
Delta R.T. 0.01 min
Lab File: VL034593.D
Acq: 4 Feb 2020 23:51

Instrument :
MSVOA_L
ClientSampled :
SG-1

Tot Ion: 43 Resp: 134312
Ion Ratio Lower Upper
43 100
57 54.6 41.2 61.8

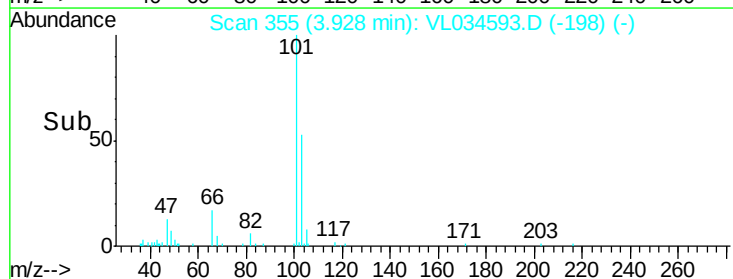
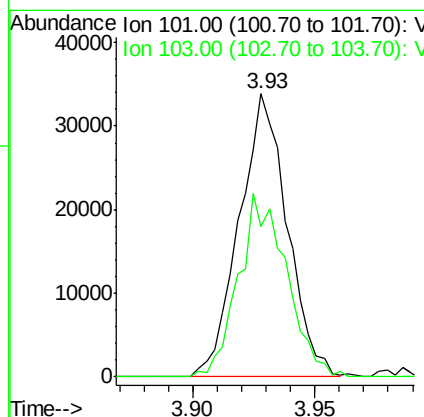
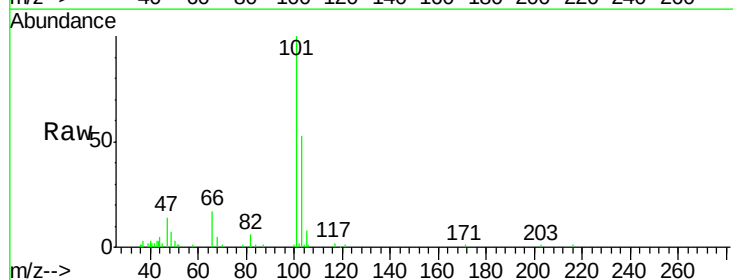
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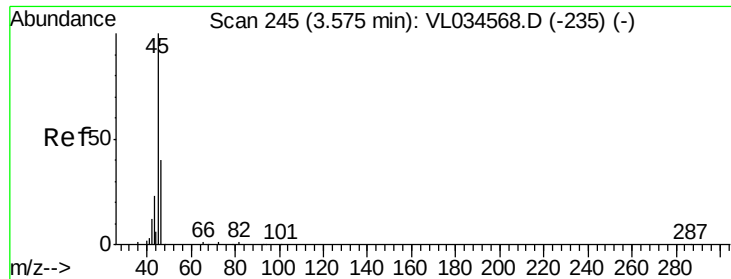
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#11
Trichlorofluoromethane
Concen: 0.256 ppbv
RT: 3.93 min Scan# 355
Delta R.T. 0.01 min
Lab File: VL034593.D
Acq: 4 Feb 2020 23:51

Tgt Ion: 101 Resp: 46113
Ion Ratio Lower Upper
101 100
103 52.9 54.4 81.6#





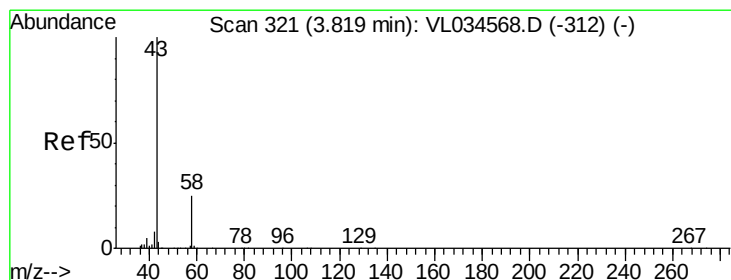
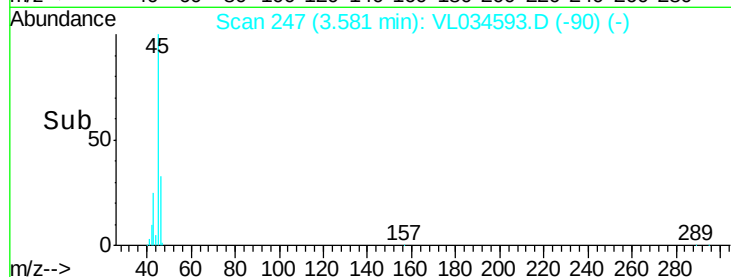
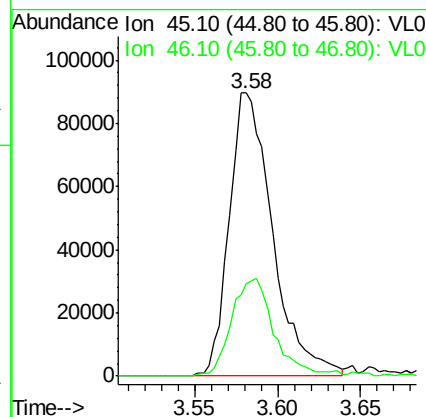
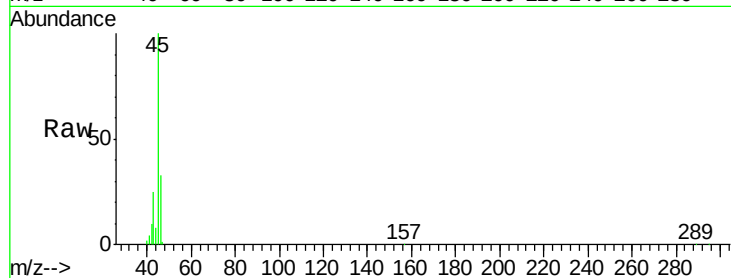
#13
Ethanol
Concen: 14.361 ppbv
RT: 3.58 min Scan# 247
Delta R.T. 0.01 min
Lab File: VL034593.D
Acq: 4 Feb 2020 23:51

Instrument :
MSVOA_L
ClientSampled :
SG-1

Tot Ion	45	Resp	162973
Ion Ratio	100	Lower	Upper
45	100		
46	34.8	14.8	59.2

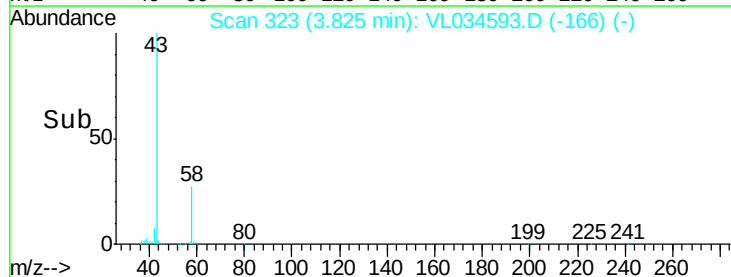
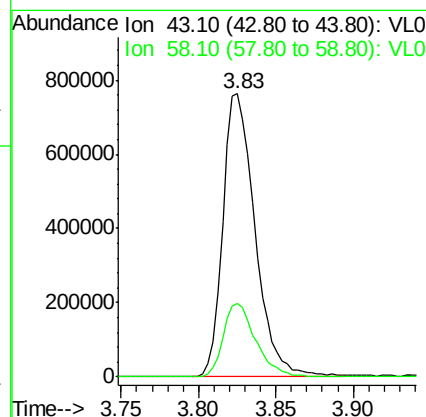
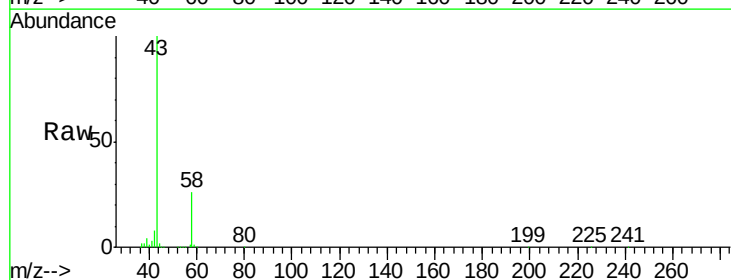
Manual Integrations
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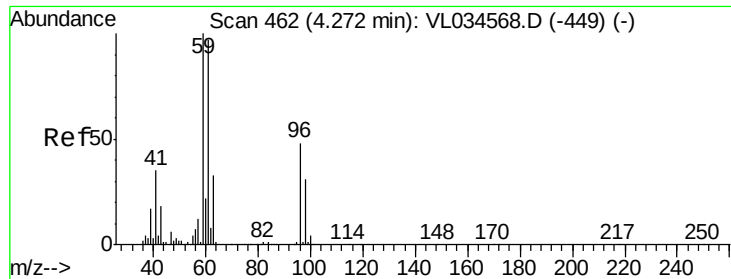
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#15
Acetone
Concen: 8.334 ppbv
RT: 3.83 min Scan# 323
Delta R.T. 0.01 min
Lab File: VL034593.D
Acq: 4 Feb 2020 23:51

Tgt Ion	43	Resp	1103006
Ion Ratio	100	Lower	Upper
43	100		
58	26.5	20.3	30.5





#17

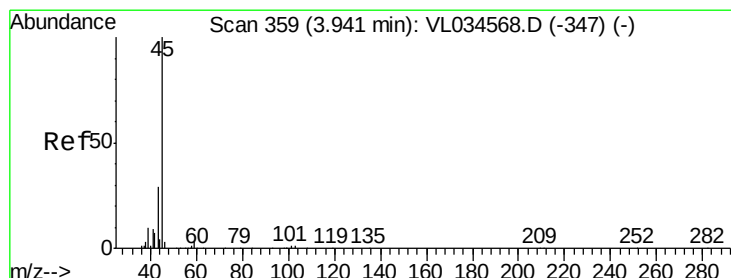
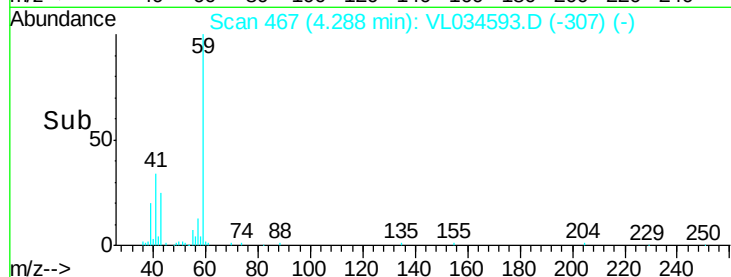
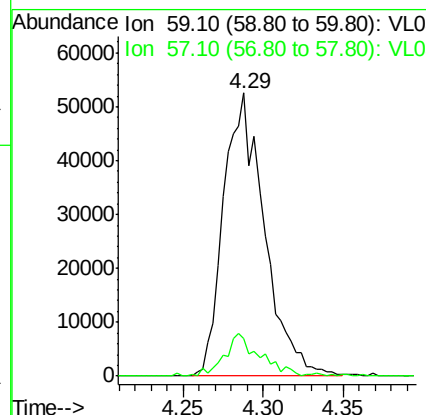
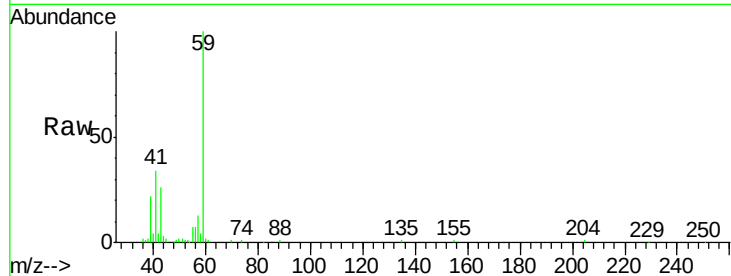
tert-Butyl alcohol
Concen: 0.942 ppbv
RT: 4.29 min Scan# 467
Delta R.T. 0.02 min
Lab File: VL034593.D
Acq: 4 Feb 2020 23:51

Instrument :
MSVOA_L
ClientSampled :
SG-1

Tot Ion: 59 Resp: 91687
Ion Ratio Lower Upper
59 100
57 13.8 8.7 13.1#

Manual Integrations
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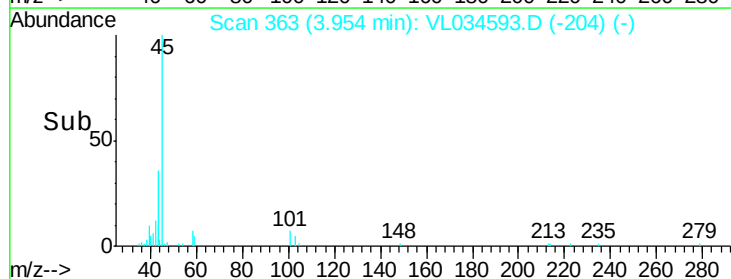
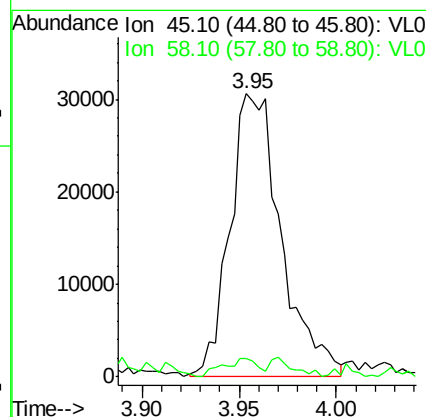
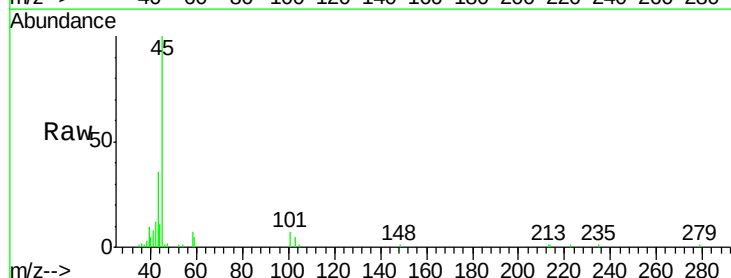
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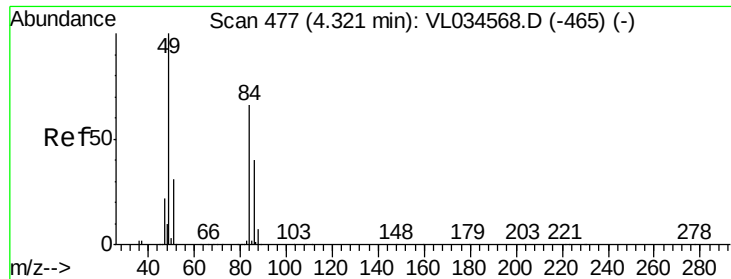


#19

Isopropyl Alcohol
Concen: 0.727 ppbv m
RT: 3.95 min Scan# 363
Delta R.T. 0.01 min
Lab File: VL034593.D
Acq: 4 Feb 2020 23:51

Tgt Ion: 45 Resp: 56118
Ion Ratio Lower Upper
45 100
58 0.0 1.7 2.5#





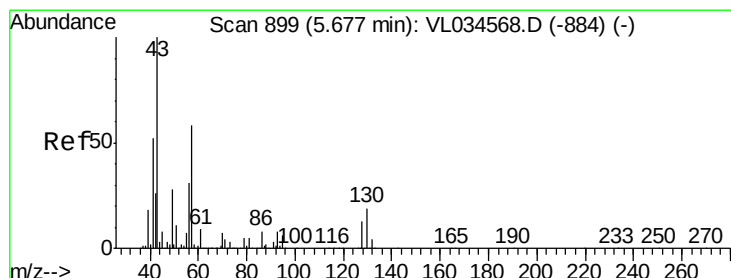
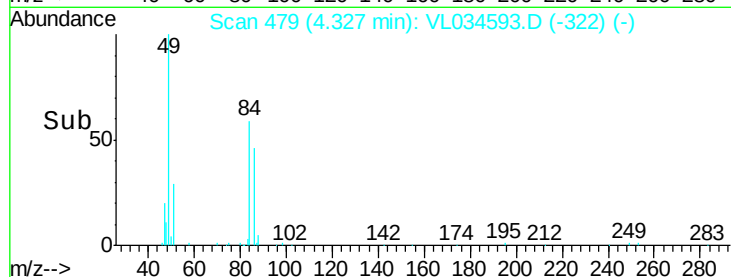
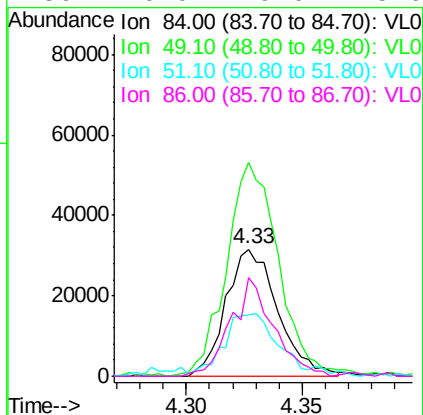
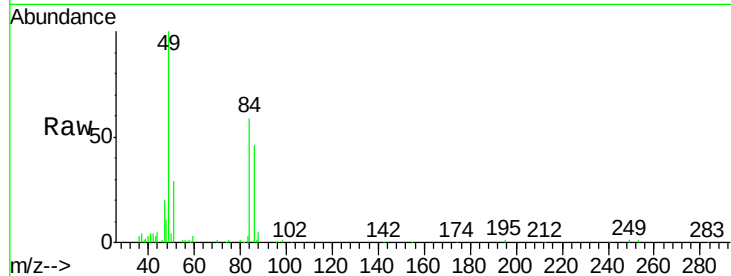
#20
Methvlene Chloride
Concen: 0.974 ppbv
RT: 4.33 min Scan# 479
Delta R.T. 0.01 min
Lab File: VL034593.D
Acq: 4 Feb 2020 23:51

Instrument :
MSVOA_L
ClientSampled :
SG-1

Tot Ion:	84	Resp:	49108
Ion	Ratio	Lower	Upper
84	100		
49	165.5	122.4	183.6
51	45.5	38.6	57.8
86	76.0	49.0	73.6#

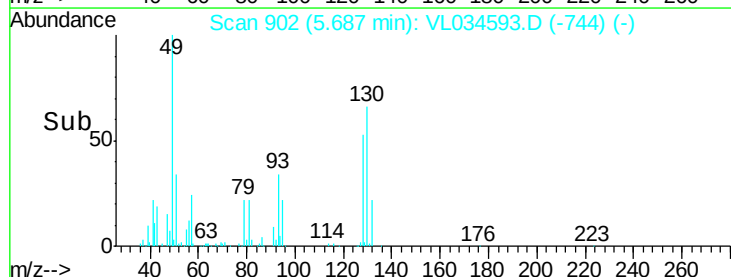
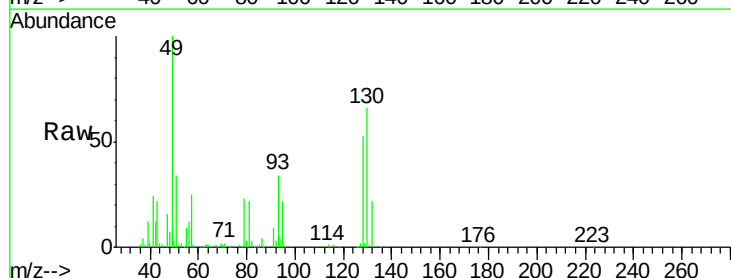
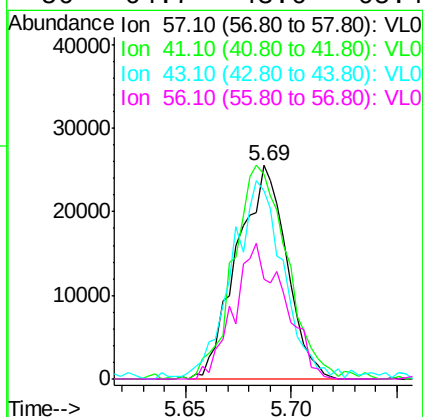
Manual Integrations
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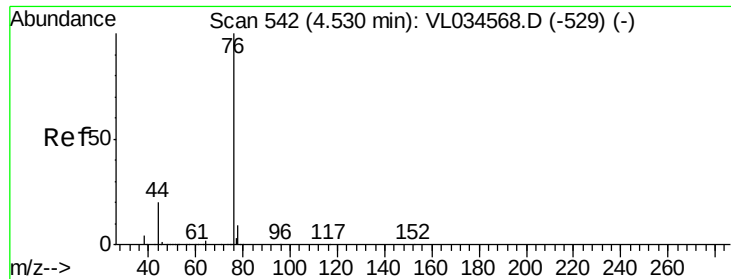
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#26
Hexane
Concen: 0.463 ppbv
RT: 5.69 min Scan# 902
Delta R.T. 0.01 min
Lab File: VL034593.D
Acq: 4 Feb 2020 23:51

Tgt Ion:	57	Resp:	41567
Ion	Ratio	Lower	Upper
57	100		
41	110.0	76.2	114.2
43	100.3	189.9	284.9#
56	64.7	43.6	65.4





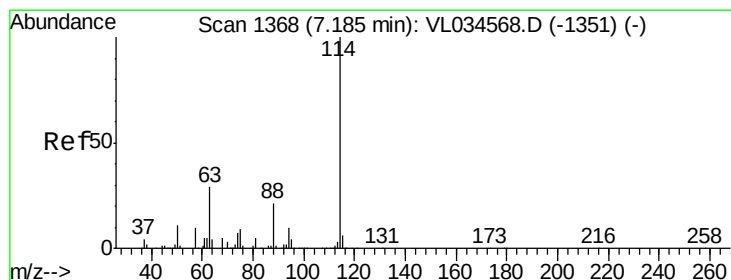
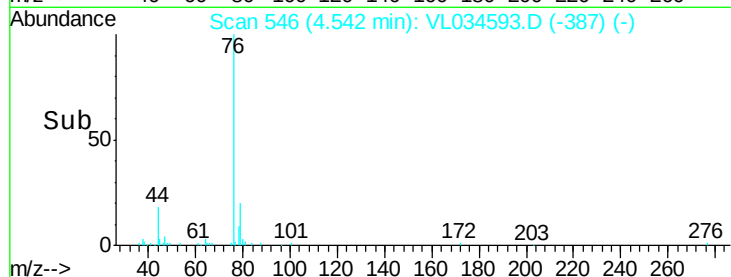
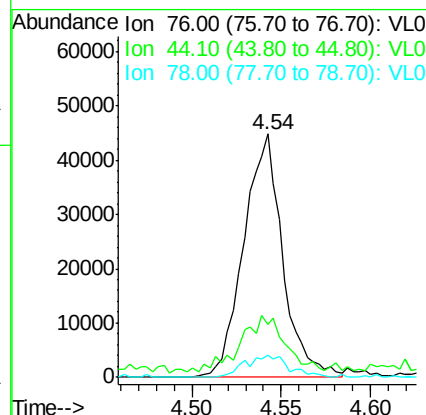
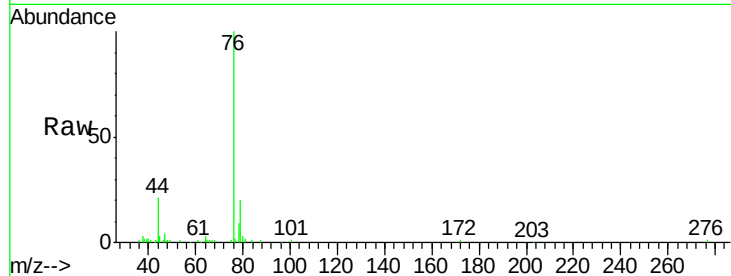
#27
Carbon Disulfide
Concen: 0.562 ppbv
RT: 4.54 min Scan# 546
Delta R.T. 0.01 min
Lab File: VL034593.D
Acq: 4 Feb 2020 23:51

Instrument :
MSVOA_L
ClientSampled :
SG-1

Tot Ion	Ratio	Lower	Upper
76	100		
44	31.6	16.3	24.5#
78	10.5	7.4	11.2

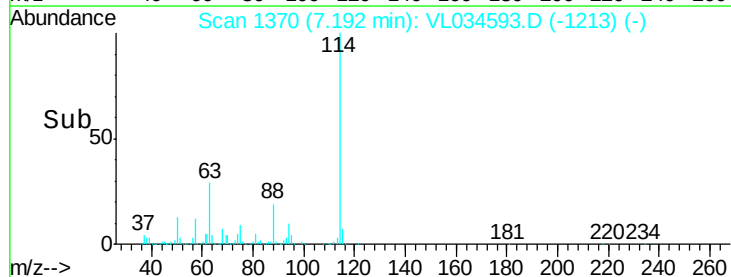
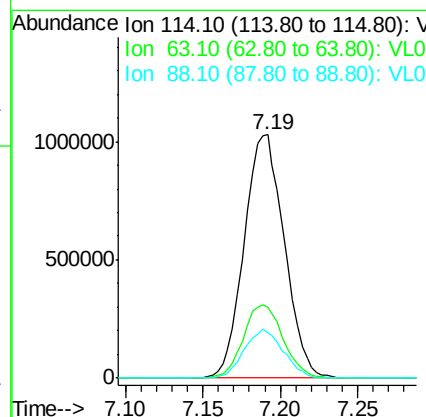
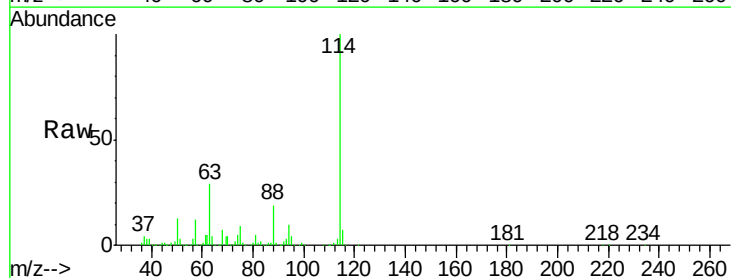
Manual Integrations
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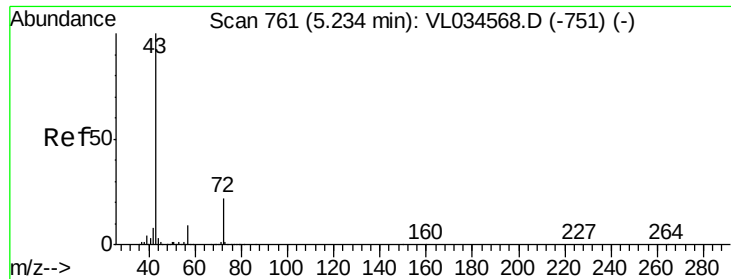
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#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 7.19 min Scan# 1370
Delta R.T. 0.01 min
Lab File: VL034593.D
Acq: 4 Feb 2020 23:51

Tgt Ion	Ratio	Lower	Upper
114	100		
63	29.8	24.1	36.1
88	19.5	15.9	23.9





#34

2-Butanone

Concen: 1.752 ppbv

RT: 5.24 min Scan# 763

Delta R.T. 0.01 min

Lab File: VL034593.D

Acq: 4 Feb 2020 23:51

Instrument :

MSVOA_L

ClientSampleId :

SG-1

Tot Ion: 43 Resp: 236940

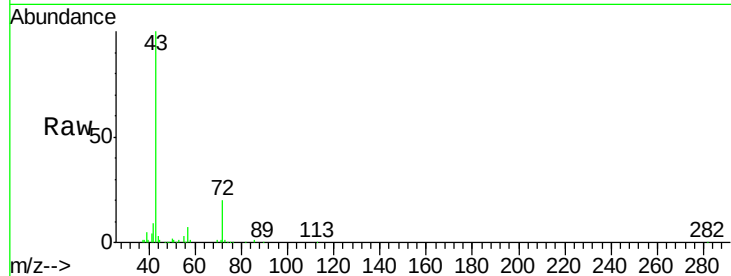
Ion Ratio Lower Upper

43 100

72 20.2 17.2 25.8

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Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 72.10 (71.80 to 72.80): VL0

5.24

150000

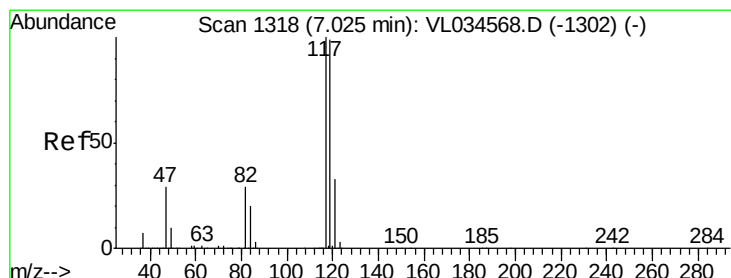
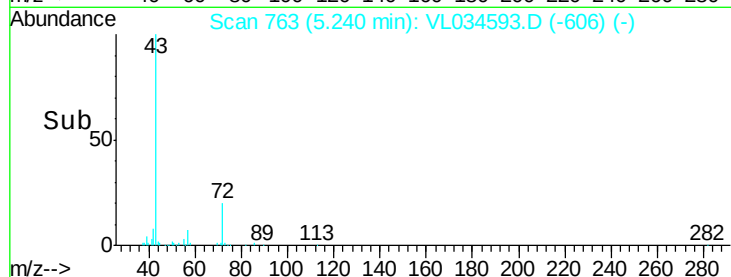
100000

50000

0

Time-->

5.20 5.25 5.30



#35

Carbon Tetrachloride

Concen: 0.058 ppbv m

RT: 7.03 min Scan# 1320

Delta R.T. 0.01 min

Lab File: VL034593.D

Acq: 4 Feb 2020 23:51

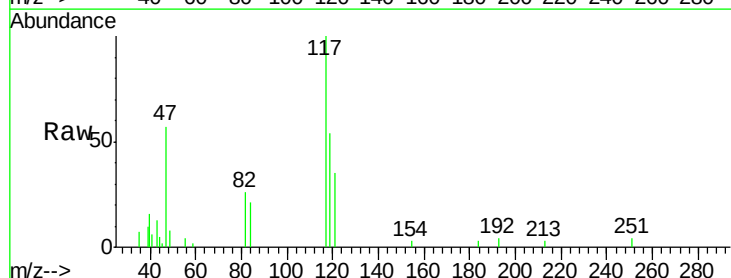
Tgt Ion: 117 Resp: 10363

Ion Ratio Lower Upper

117 100

119 53.9 79.5 119.3#

121 35.4 26.2 39.2



Abundance Ion 117.00 (116.70 to 117.70): V

Ion 119.00 (118.70 to 119.70): V

Ion 121.00 (120.70 to 121.70): V

8000

6000

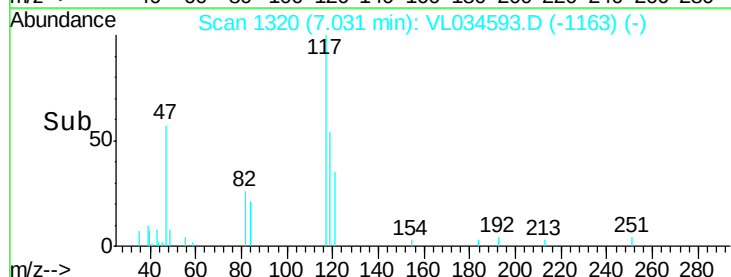
4000

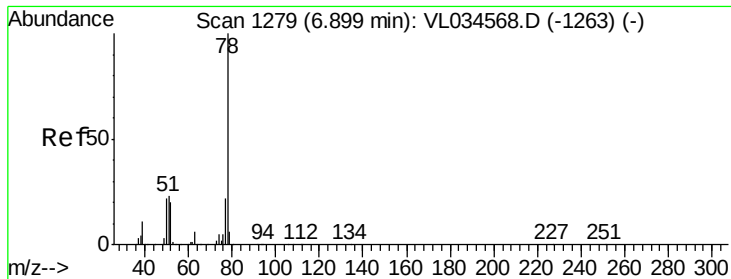
2000

0

Time-->

7.00 7.05





#36

Benzene

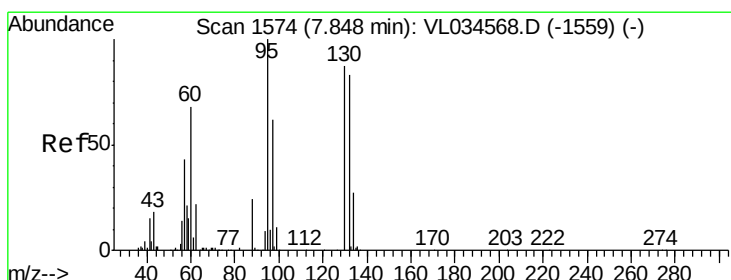
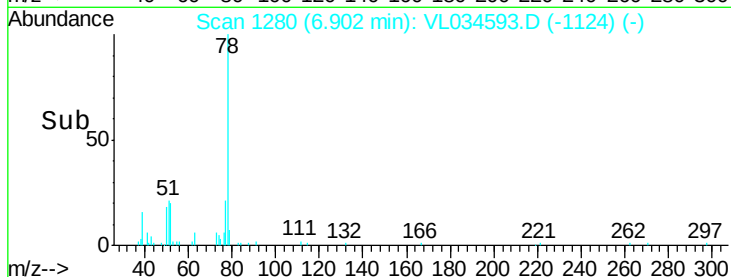
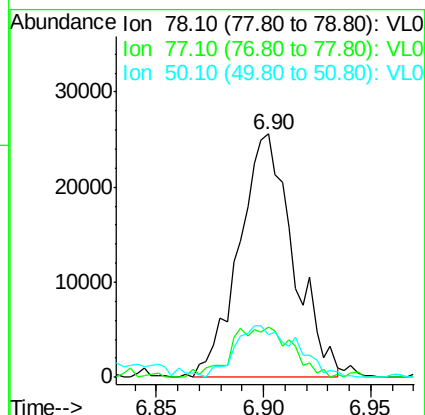
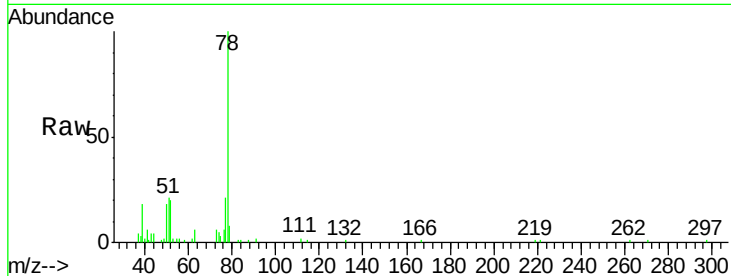
Concen: 0.270 ppbv m
RT: 6.90 min Scan# 1280
Delta R.T. 0.00 min
Lab File: VL034593.D
Acq: 4 Feb 2020 23:51

Instrument :
MSVOA_L
ClientSampleId :
SG-1

Tot Ion	Ratio	Lower	Upper
78	100		
77	20.5	17.3	25.9
50	17.7	17.4	26.2

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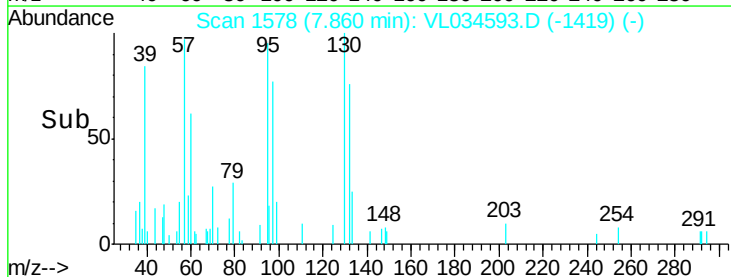
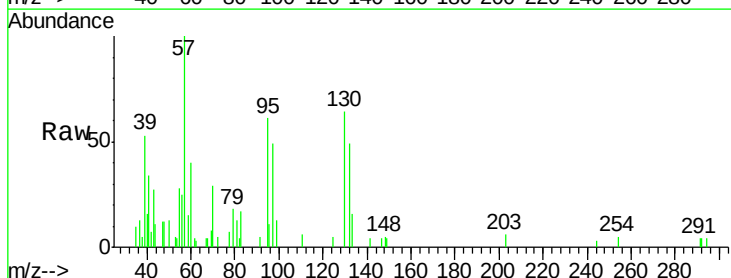
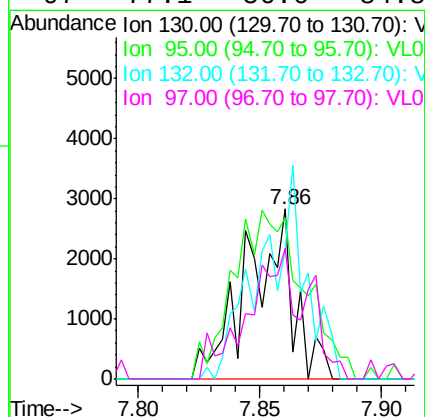


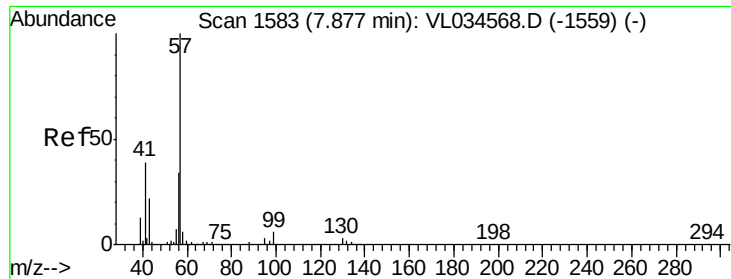
#38

Trichloroethene

Concen: 0.054 ppbv m
RT: 7.86 min Scan# 1578
Delta R.T. 0.01 min
Lab File: VL034593.D
Acq: 4 Feb 2020 23:51

Tgt Ion	Ratio	Lower	Upper
130	100		
95	94.9	91.6	137.4
132	76.2	76.1	114.1
97	77.1	56.6	84.8





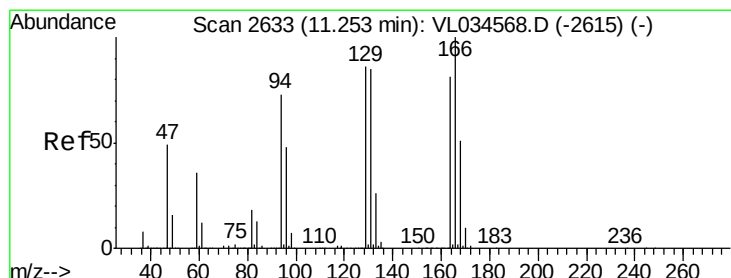
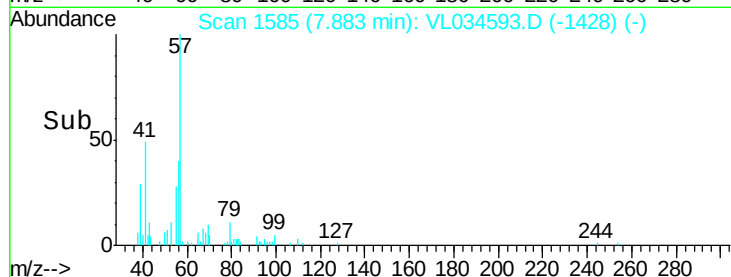
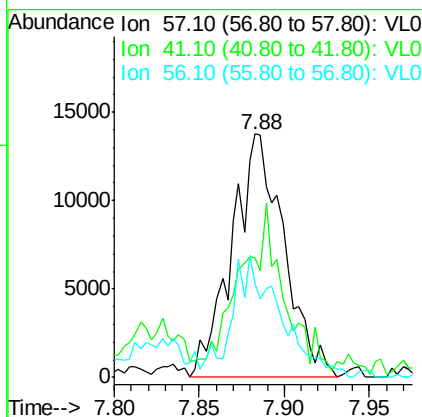
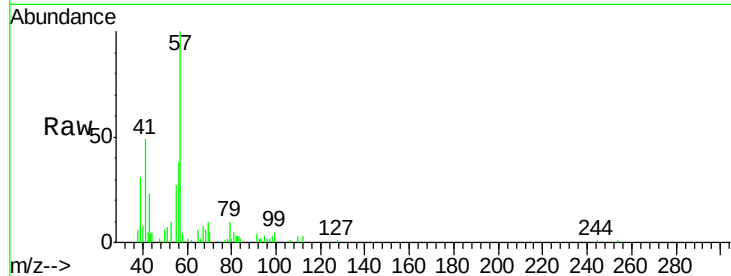
#44
 2,2,4-Trimethylpentane
 Concen: 0.097 ppbv m
 RT: 7.88 min Scan# 1585
 Delta R.T. 0.01 min
 Lab File: VL034593.D
 Acq: 4 Feb 2020 23:51

Instrument :
 MSVOA_L
 ClientSampled :
 SG-1

Tot Ion	Ratio	Lower	Upper
57	100		
41	0.0	28.9	43.3#
56	47.5	25.5	38.3#

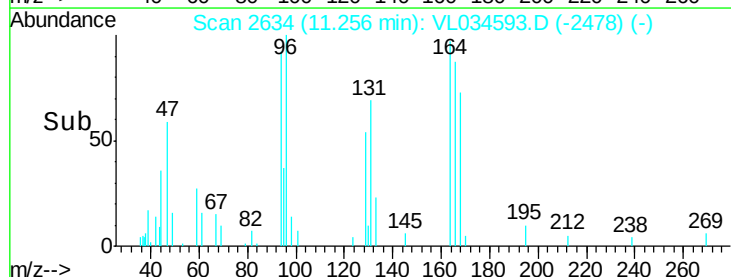
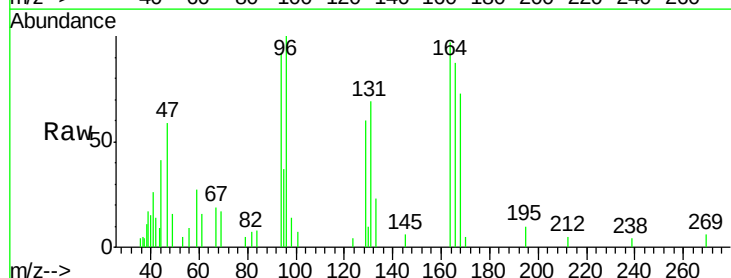
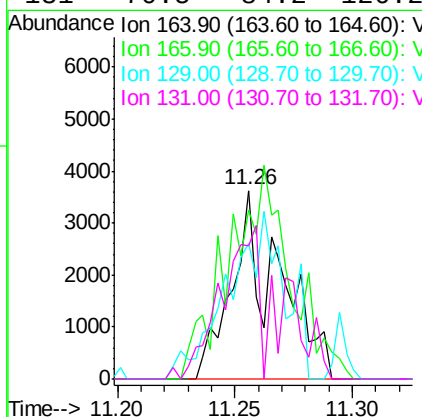
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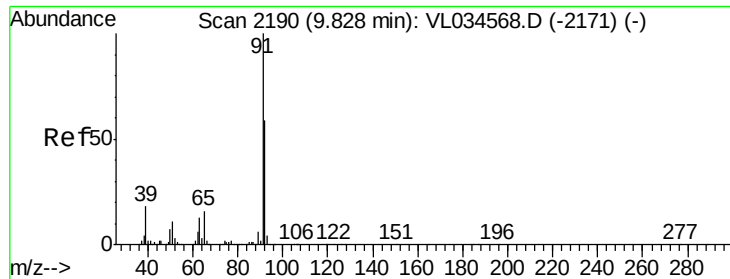
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#52
 Tetrachloroethene
 Concen: 0.077 ppbv m
 RT: 11.26 min Scan# 2634
 Delta R.T. 0.00 min
 Lab File: VL034593.D
 Acq: 4 Feb 2020 23:51

Tgt Ion	Ratio	Lower	Upper
164	100		
166	90.0	99.0	148.4#
129	62.2	85.3	127.9#
131	70.5	84.2	126.2#





#53

Toluene

Concen: 2.682 ppbv

RT: 9.83 min Scan# 2192

Delta R.T. 0.01 min

Lab File: VL034593.D

Acq: 4 Feb 2020 23:51

Instrument :

MSVOA_L

ClientSampled :

SG-1

Tot Ion: 91 Resp: 488152

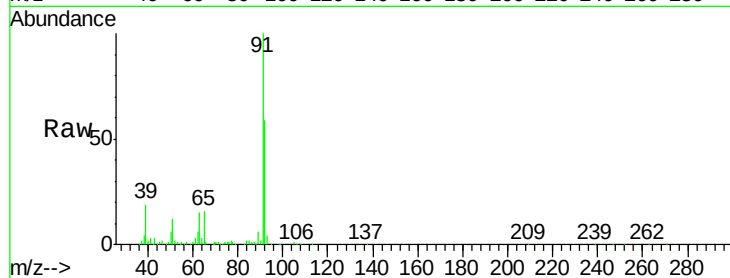
Ion Ratio Lower Upper

91 100

92 57.6 48.2 72.2

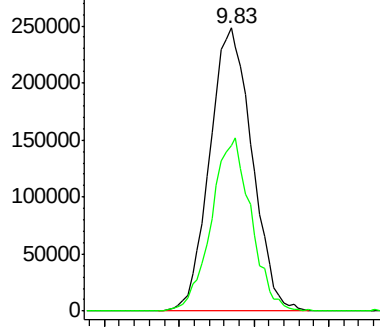
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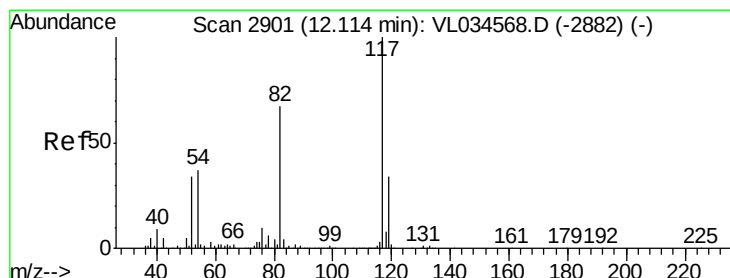
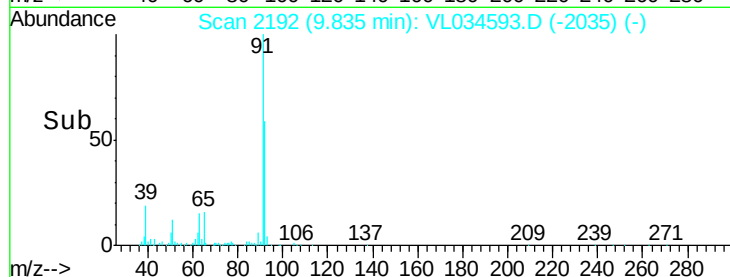


Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 92.10 (91.80 to 92.80): VL0



Time-->



#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.13 min Scan# 2905

Delta R.T. 0.01 min

Lab File: VL034593.D

Acq: 4 Feb 2020 23:51

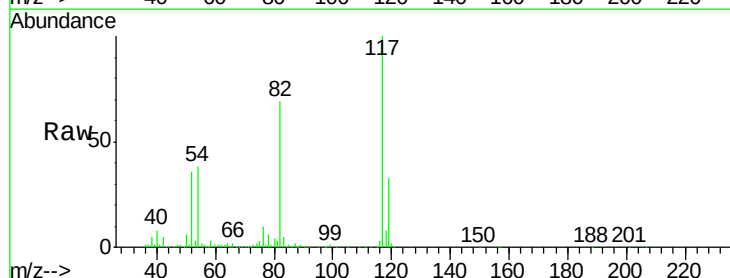
Tgt Ion: 117 Resp: 1906635

Ion Ratio Lower Upper

117 100

82 70.1 54.2 81.4

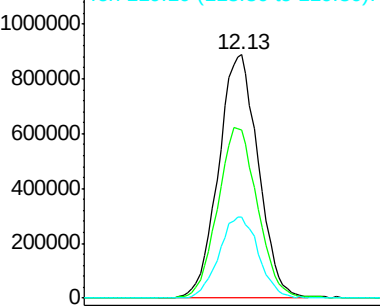
119 33.2 26.1 39.1



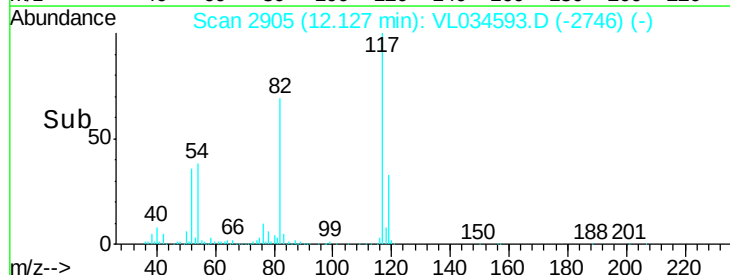
Abundance Ion 117.10 (116.80 to 117.80): V

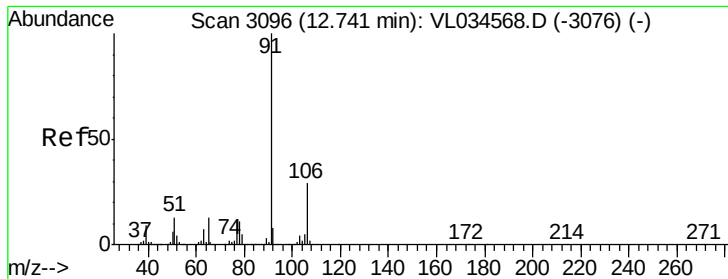
Ion 82.10 (81.80 to 82.80): VL0

Ion 119.10 (118.80 to 119.80): V



Time-->





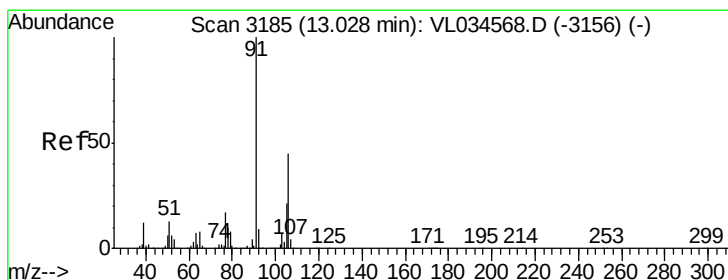
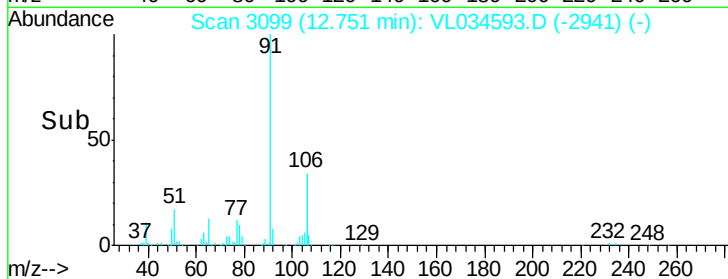
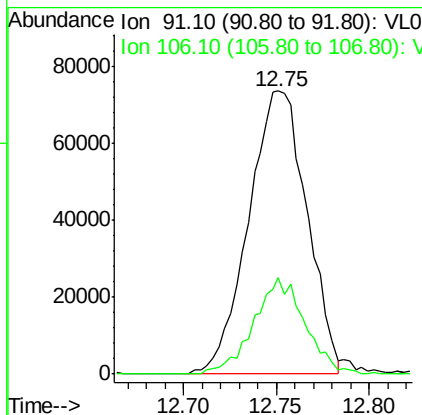
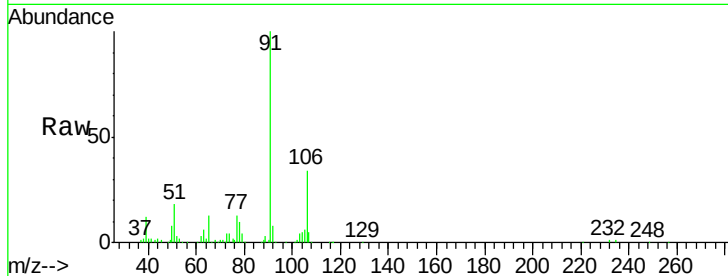
#58
Ethyl Benzene
Concen: 0.631 ppbv
RT: 12.75 min Scan# 3099
Delta R.T. 0.01 min
Lab File: VL034593.D
Acq: 4 Feb 2020 23:51

Instrument :
MSVOA_L
ClientSampled :
SG-1

Tot Ion: 91 Resp: 161006
Ion Ratio Lower Upper
91 100
106 34.0 23.3 34.9

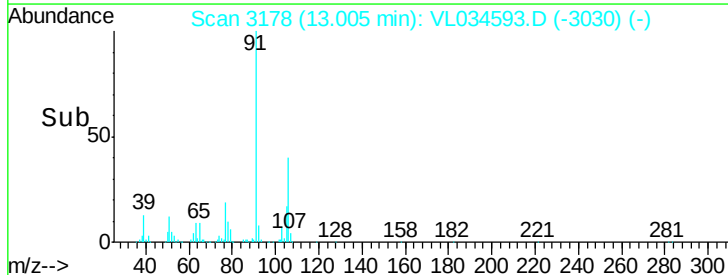
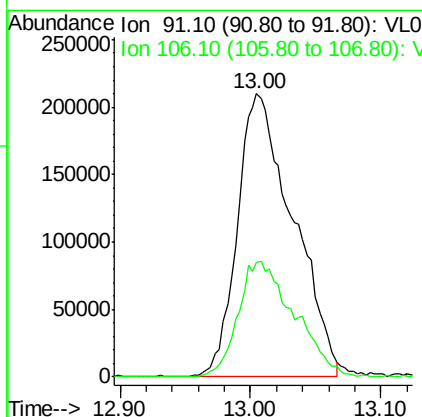
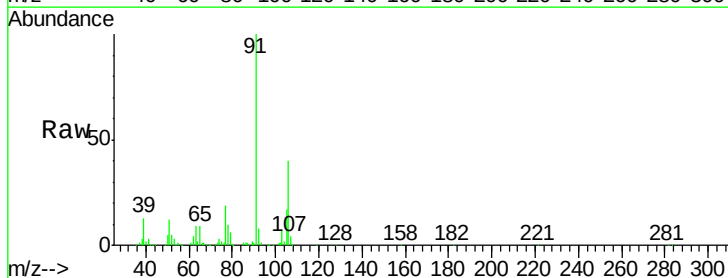
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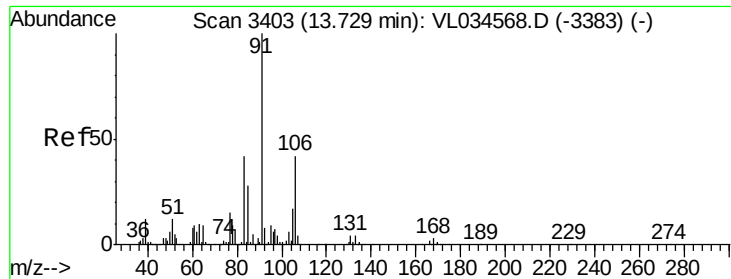
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#59
m/p-Xylene
Concen: 2.760 ppbv m
RT: 13.00 min Scan# 3178
Delta R.T. -0.02 min
Lab File: VL034593.D
Acq: 4 Feb 2020 23:51

Tgt Ion: 91 Resp: 622390
Ion Ratio Lower Upper
91 100
106 41.3 35.3 52.9





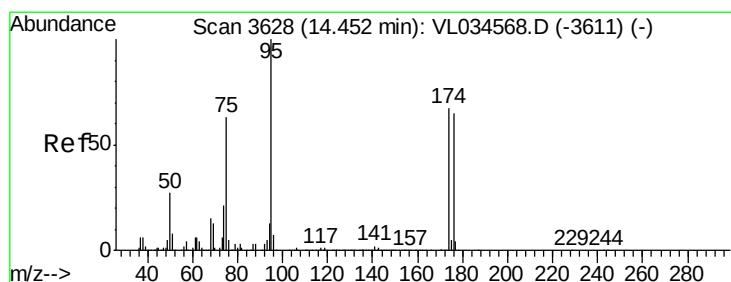
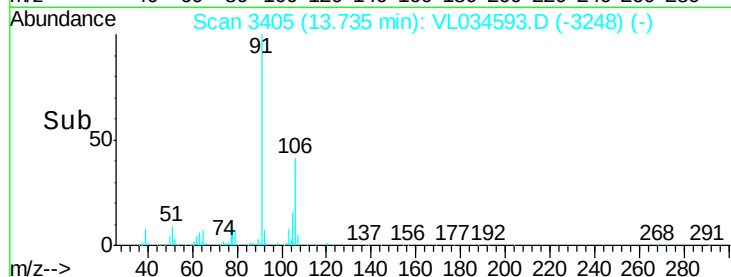
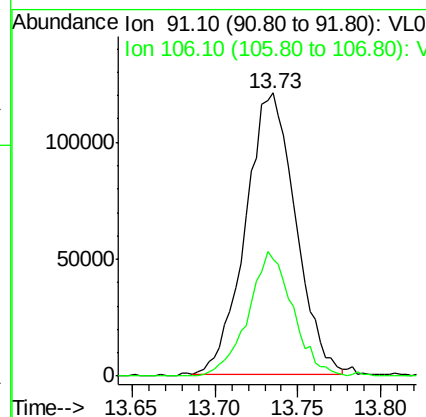
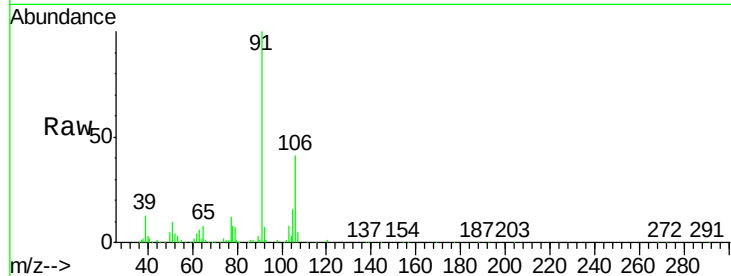
#60
o-Xylene
Concen: 1.115 ppbv
RT: 13.73 min Scan# 3405
Delta R.T. 0.01 min
Lab File: VL034593.D
Acq: 4 Feb 2020 23:51

Instrument :
MSVOA_L
ClientSampled :
SG-1

Tot Ion: 91 Resp: 252461
Ion Ratio Lower Upper
91 100
106 39.9 21.6 65.0

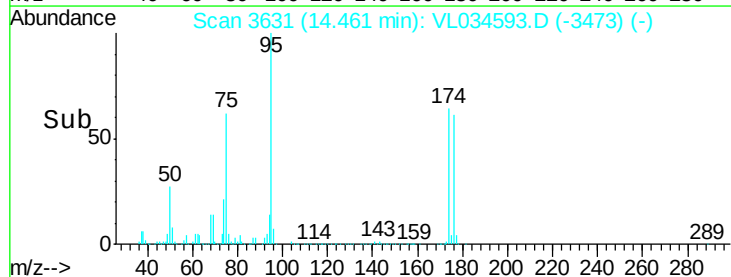
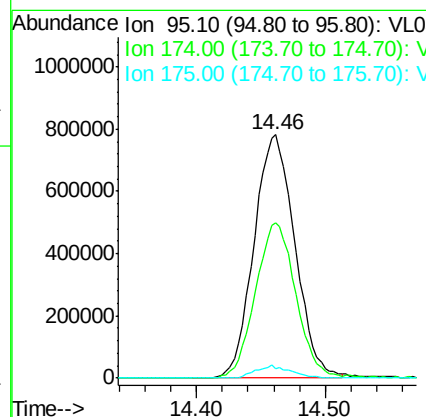
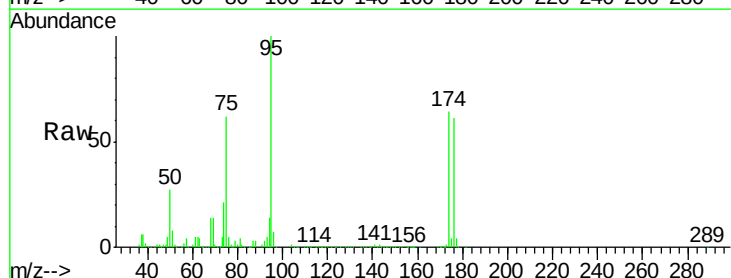
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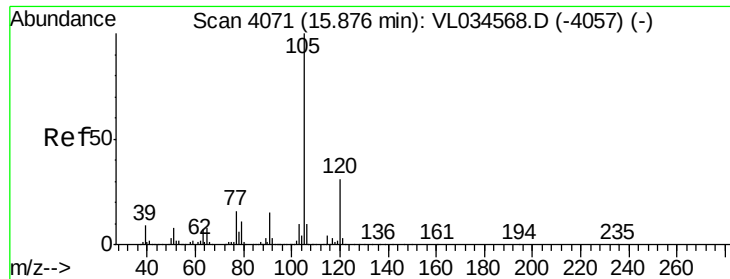
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#68
1-Bromo-4-Fluorobenzene
Concen: 10.723 ppbv
RT: 14.46 min Scan# 3631
Delta R.T. 0.01 min
Lab File: VL034593.D
Acq: 4 Feb 2020 23:51

Tgt Ion: 95 Resp: 1727849
Ion Ratio Lower Upper
95 100
174 63.8 52.3 78.5
175 4.6 3.8 5.6





#72

4-Ethyltoluene

Concen: 0.325 ppbv m

RT: 15.89 min Scan# 4074

Delta R.T. 0.01 min

Lab File: VL034593.D

Acq: 4 Feb 2020 23:51

Instrument :

MSVOA_L

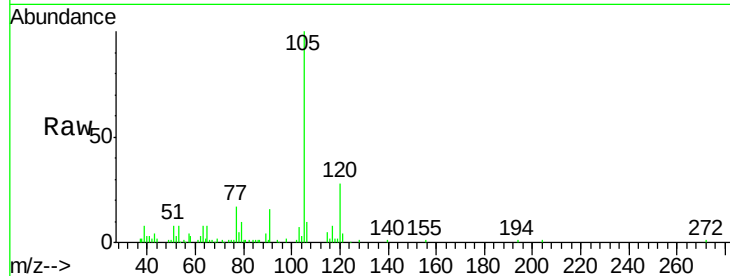
ClientSampled :

SG-1

Tot Ion:	105	Resp:	80800
Ion Ratio	Lower	Upper	
105	100		
120	0.0	23.8	35.6#
91	0.0	11.8	17.8#
77	0.0	13.0	19.6#

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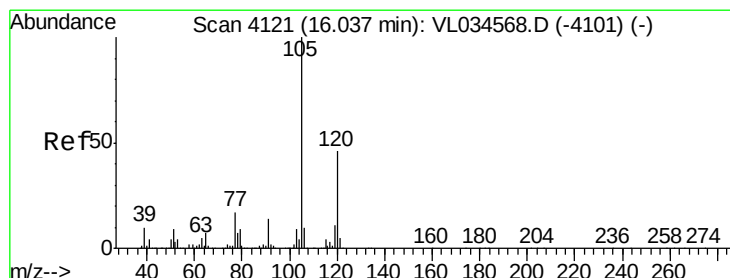
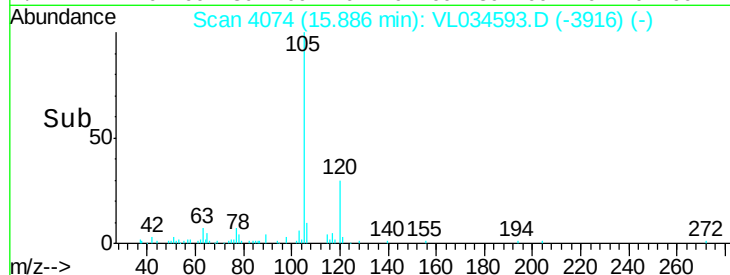
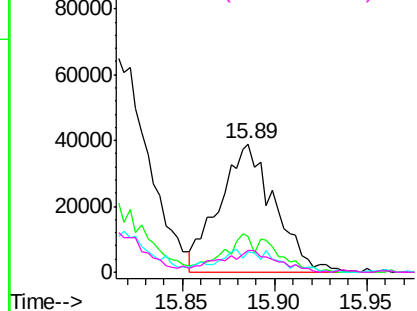


Abundance Ion 105.10 (104.80 to 105.80): V

Ion 120.20 (119.90 to 120.90): V

Ion 91.10 (90.80 to 91.80): VL0

Ion 77.10 (76.80 to 77.80): VL0



#73

1,3,5-Trimethylbenzene

Concen: 0.197 ppbv

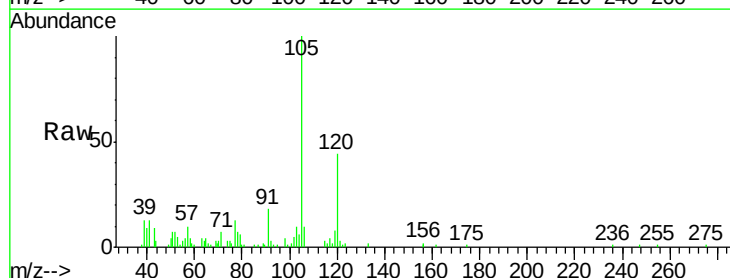
RT: 16.04 min Scan# 4123

Delta R.T. 0.01 min

Lab File: VL034593.D

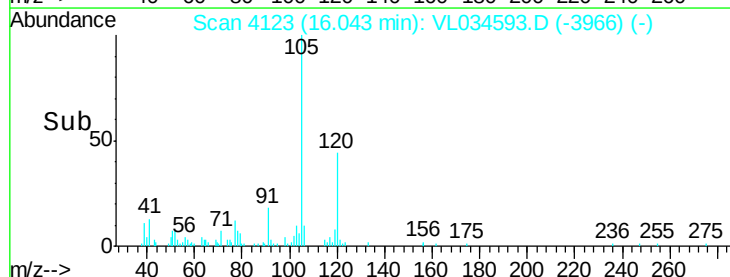
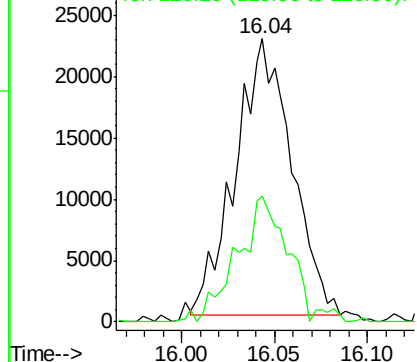
Acq: 4 Feb 2020 23:51

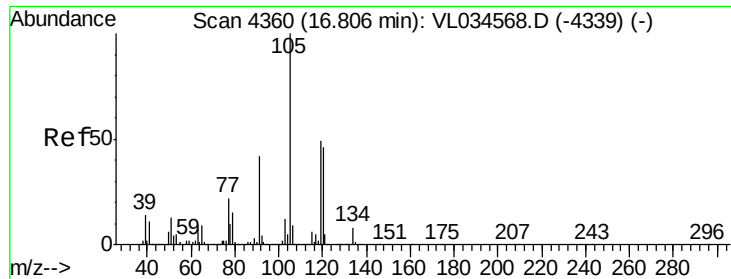
Tgt Ion:	105	Resp:	48011
Ion Ratio	Lower	Upper	
105	100		
120	42.7	37.0	55.6



Abundance Ion 105.10 (104.80 to 105.80): V

Ion 120.20 (119.90 to 120.90): V





#74
 1,2,4-Trimethylbenzene
 Concen: 0.900 ppbv
 RT: 16.81 min Scan# 4362
 Delta R.T. 0.01 min
 Lab File: VL034593.D
 Acq: 4 Feb 2020 23:51

Instrument :
 MSVOA_L
 ClientSampleId :
 SG-1

Tot Ion:	105	Resp:	242164
Ion Ratio		Lower	Upper
105	100		
120	42.0	37.1	55.7
91	13.4	34.3	51.5#
77	18.6	17.5	26.3

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