

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL021920\
 Data File : VL034662.D
 Acq On : 20 Feb 2020 2:18
 Operator : SY/AP
 Sample : L1554-01
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 SS-1

Manual Integrations
 APPROVED

MMDadoda
 2/21/2020 3:24:33 PM

Quant Time: Feb 20 08:29:59 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	5.65	49	728306	10.00	ppbv	-0.01
33) 1,4-Difluorobenzene	7.18	114	1532932	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.11	117	1838886	10.00	ppbv	0.00

System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	14.45	95	1672900	10.76	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	107.60%

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.01	85	39627	0.247	ppbv #	80
3) Chlorodifluoromethane	2.95	51	27789m	0.316	ppbv	
11) Trichlorofluoromethane	3.92	101	42364	0.291	ppbv #	81
13) Ethanol	3.57	45	204340	22.264	ppbv	99
15) Acetone	3.82	43	509055	4.756	ppbv	95
17) tert-Butyl alcohol	4.27	59	147199	1.870	ppbv #	93
19) Isopropyl Alcohol	3.94	45	48681m	0.779	ppbv	
20) Methylene Chloride	4.32	84	117880	2.892	ppbv	93
26) Hexane	5.68	57	45152	0.622	ppbv #	53
27) Carbon Disulfide	4.53	76	487425	4.977	ppbv	98
34) 2-Butanone	5.22	43	1733981	15.579	ppbv	99
35) Carbon Tetrachloride	7.01	117	9453m	0.065	ppbv	
36) Benzene	6.88	78	19928m	0.146	ppbv	
52) Tetrachloroethene	11.25	164	21840m	0.399	ppbv	
53) Toluene	9.82	91	979979	6.544	ppbv	97
58) Ethyl Benzene	12.73	91	1425739	5.794	ppbv	99
59) m/p-Xylene	13.00	91	1823591	8.384	ppbv	99
60) o-Xylene	13.73	91	641140	2.935	ppbv	96
61) Stvrene	13.56	104	10500827	72.092	ppbv #	88
62) Isopropylbenzene	14.71	105	13928839	49.204	ppbv #	72
64) n-propylbenzene	15.59	120	23669m	0.325	ppbv	
72) 4-Ethyltoluene	15.87	105	113510	0.473	ppbv #	96
73) 1,3,5-Trimethylbenzene	16.03	105	53610	0.229	ppbv	96
74) 1,2,4-Trimethylbenzene	16.80	105	246302	0.949	ppbv #	70

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

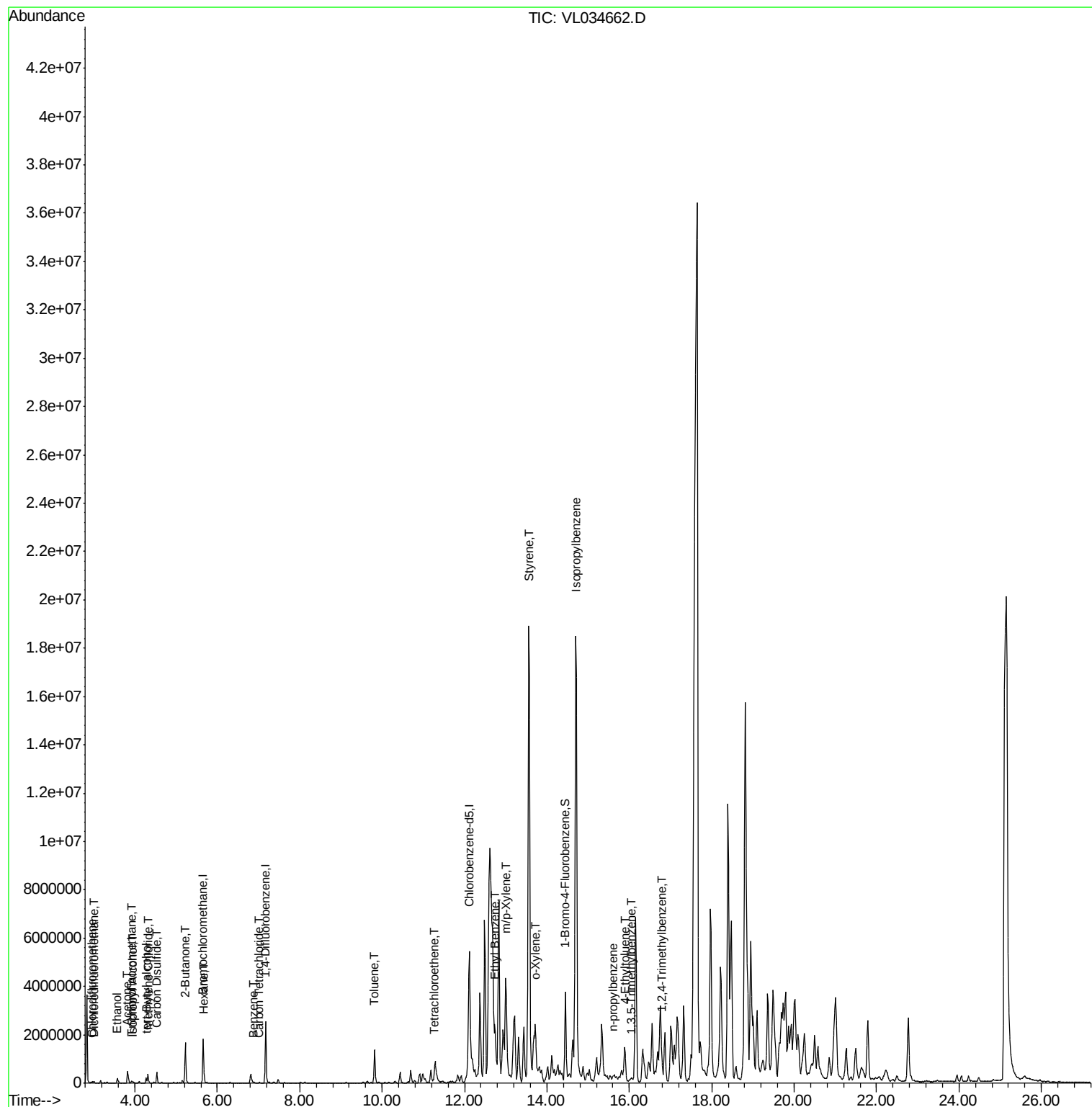
Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL021920\
Data File : VL034662.D
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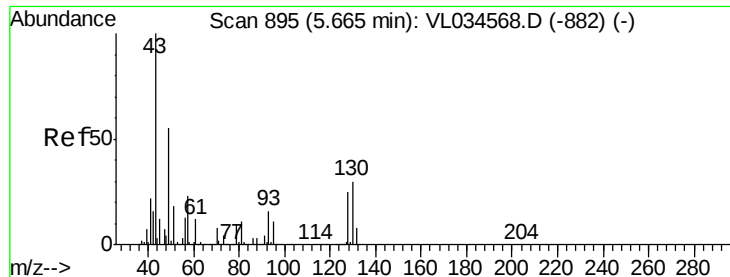
Instrument :
MSVOA_L
ClientSampleId :
SS-1

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Quant Time: Feb 20 08:29:59 2020
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL013020AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Thu Jan
QLast Update : Thu Jan 30 17:16:44 2020
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.65 min Scan# 891

Delta R.T. -0.01 min

Lab File: VL034662.D

Acq: 20 Feb 2020 2:18

Instrument :

MSVOA_L

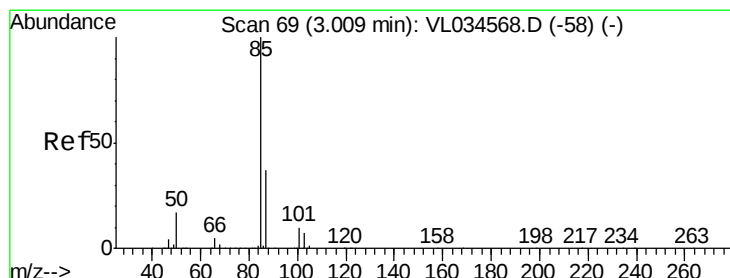
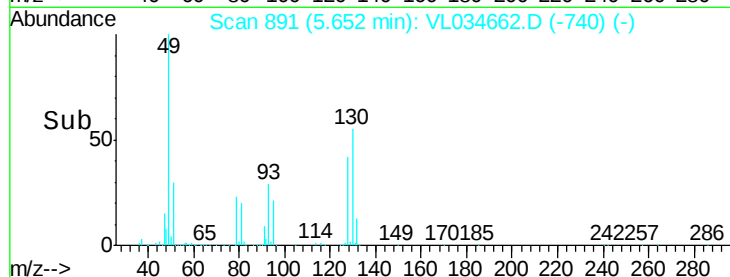
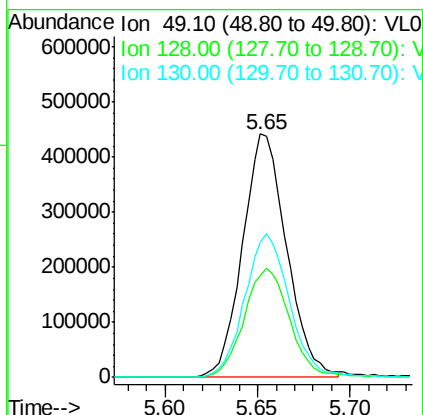
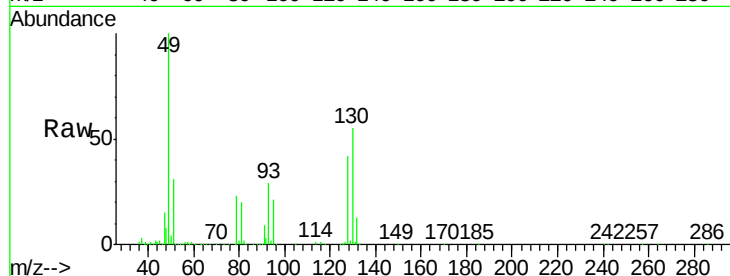
ClientSampled :

SS-1

Tot Ion:	49	Resp:	728306
Ion Ratio	Lower	Upper	
49	100		
128	46.5	22.7	68.1
130	60.6	28.6	85.8

Manual Integrations
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#2

Dichlorodifluoromethane

Concen: 0.247 ppbv

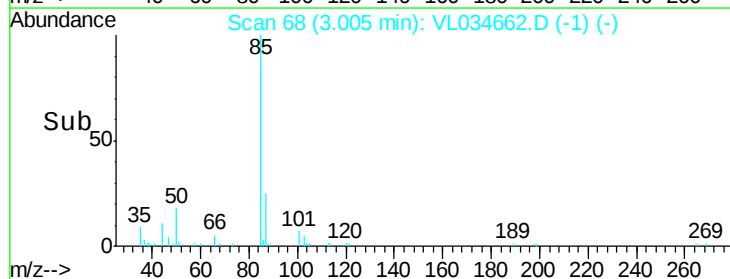
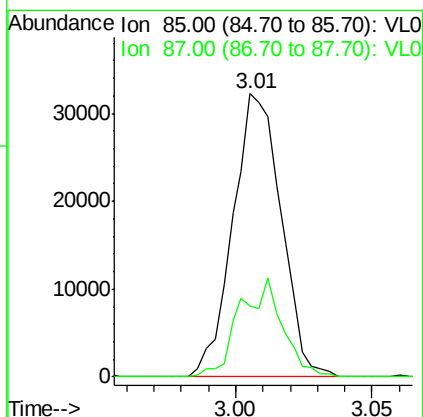
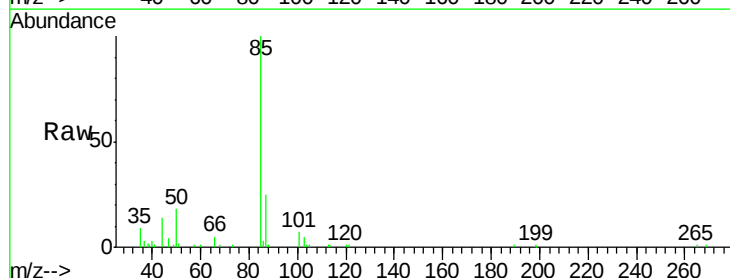
RT: 3.01 min Scan# 68

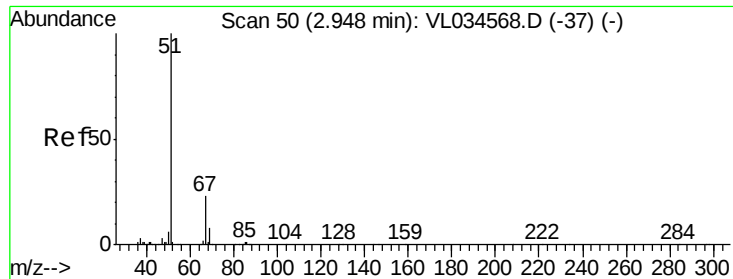
Delta R.T. -0.00 min

Lab File: VL034662.D

Acq: 20 Feb 2020 2:18

Tgt Ion:	85	Resp:	39627
Ion Ratio	Lower	Upper	
85	100		
87	25.2	29.5	44.3#





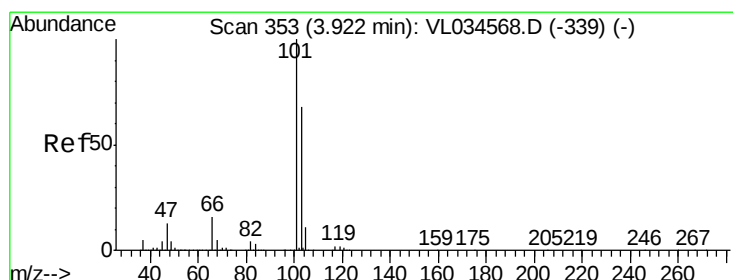
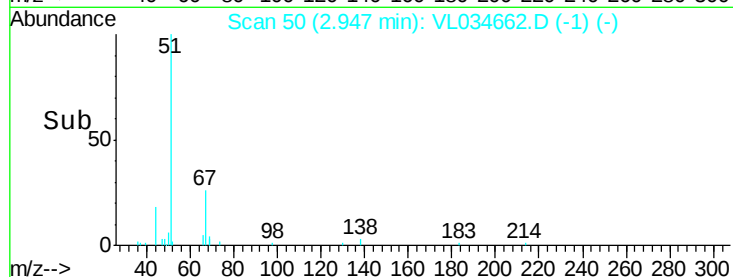
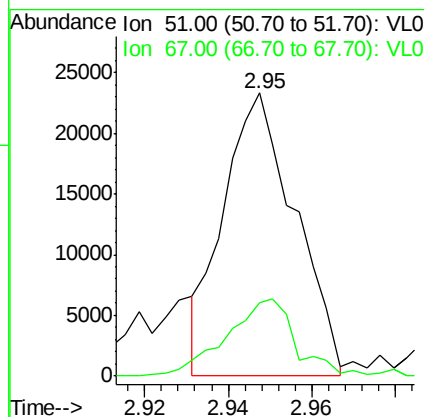
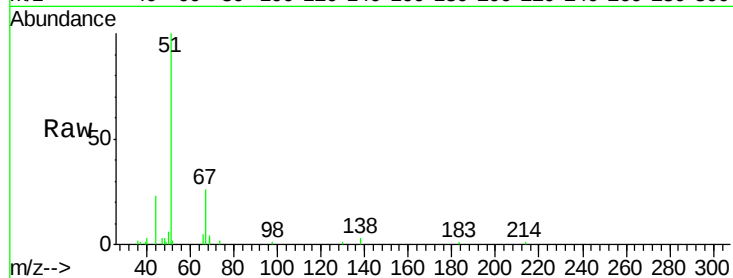
#3
Chlorodifluoromethane
Concen: 0.316 ppbv m
RT: 2.95 min Scan# 50
Delta R.T. -0.00 min
Lab File: VL034662.D
Acq: 20 Feb 2020 2:18

Instrument :
MSVOA_L
ClientSampled :
SS-1

Tot Ion	Ratio	Lower	Upper
51	100		
67	27.0	17.8	26.8#

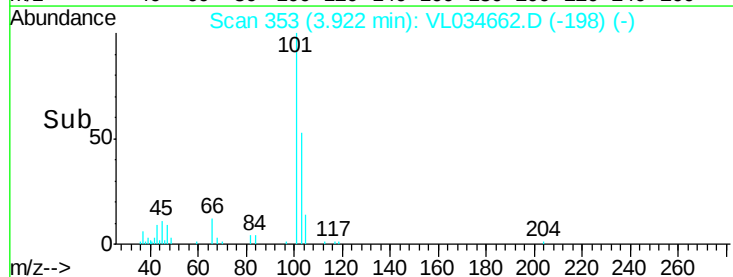
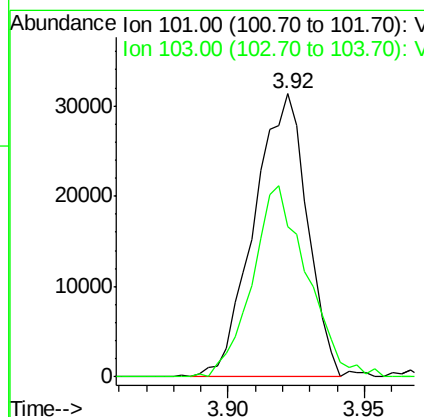
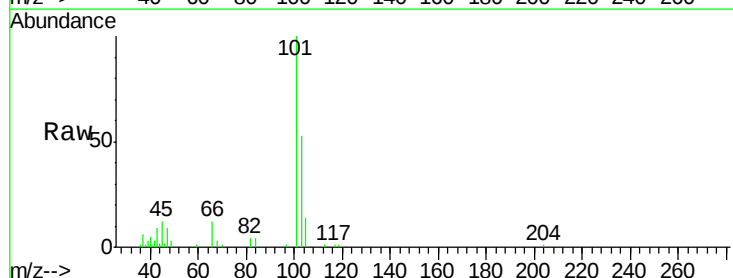
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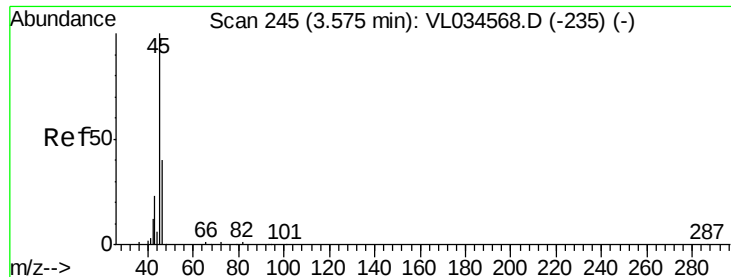
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#11
Trichlorofluoromethane
Concen: 0.291 ppbv
RT: 3.92 min Scan# 353
Delta R.T. -0.00 min
Lab File: VL034662.D
Acq: 20 Feb 2020 2:18

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





#13

Ethanol

Concen: 22.264 ppbv

RT: 3.57 min Scan# 244

Delta R.T. -0.00 min

Lab File: VL034662.D

Acq: 20 Feb 2020 2:18

Instrument :

MSVOA_L

ClientSampleId :

SS-1

Tot Ion: 45 Resp: 204340

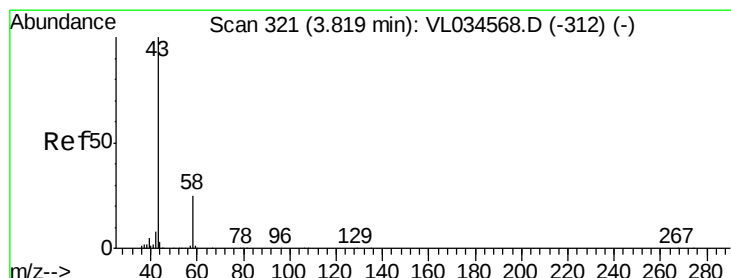
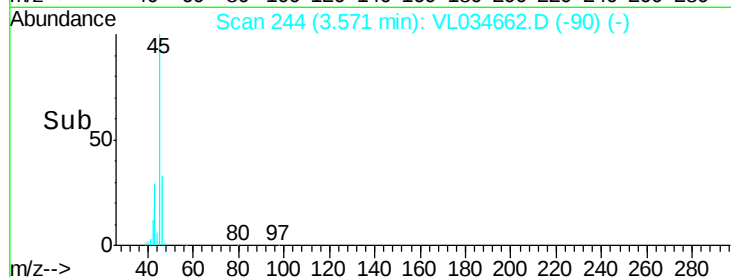
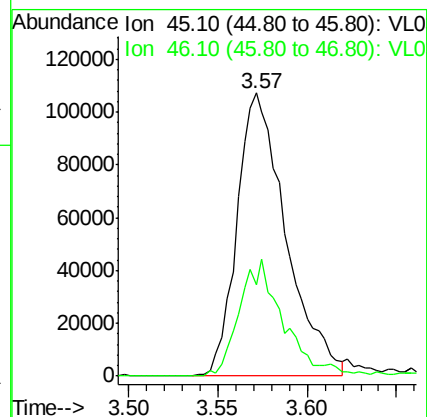
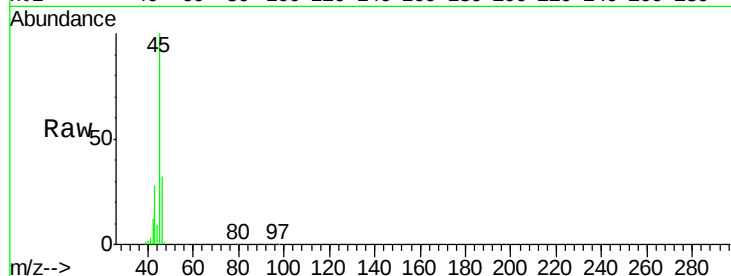
Ion Ratio Lower Upper

45 100

46 37.5 14.8 59.2

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#15

Acetone

Concen: 4.756 ppbv

RT: 3.82 min Scan# 320

Delta R.T. -0.00 min

Lab File: VL034662.D

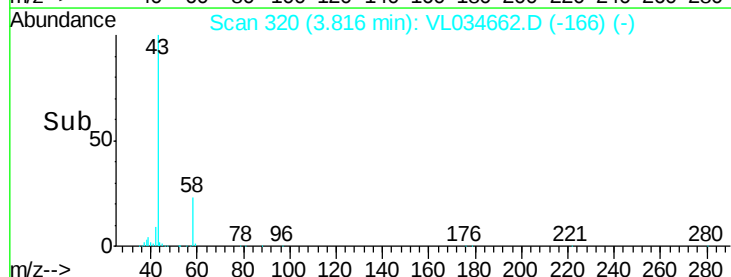
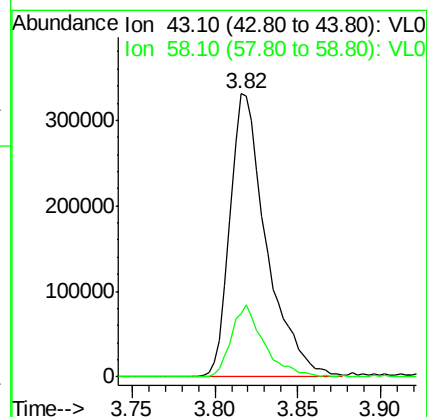
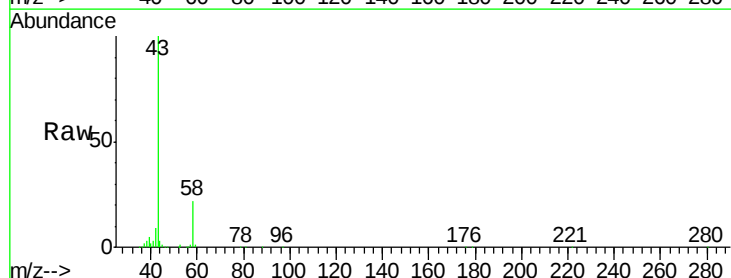
Acq: 20 Feb 2020 2:18

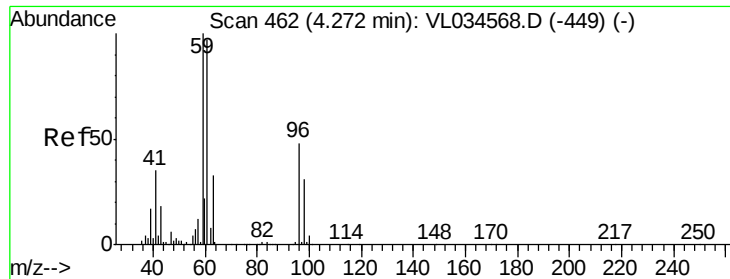
Tgt Ion: 43 Resp: 509055

Ion Ratio Lower Upper

43 100

58 23.0 20.3 30.5





#17

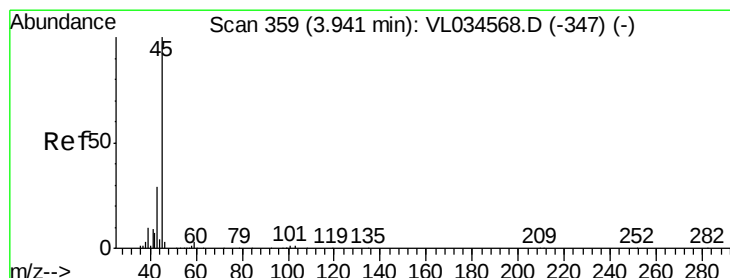
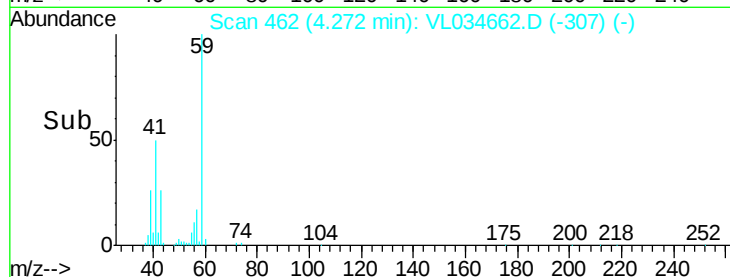
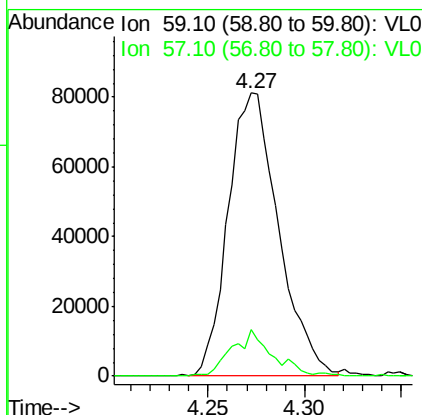
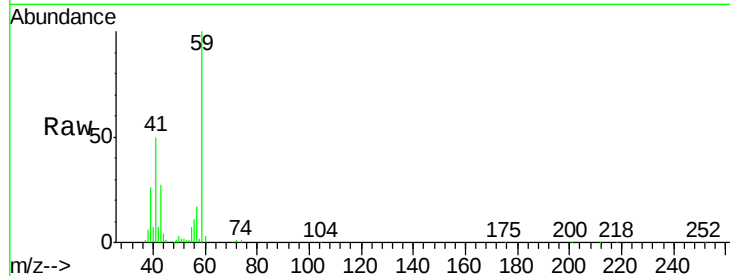
tert-Butyl alcohol
 Concen: 1.870 ppbv
 RT: 4.27 min Scan# 462
 Delta R.T. -0.00 min
 Lab File: VL034662.D
 Acq: 20 Feb 2020 2:18

Instrument :
 MSVOA_L
 ClientSampleId :
 SS-1

Tot Ion: 59 Resp: 147199
 Ion Ratio Lower Upper
 59 100
 57 13.5 8.7 13.1#

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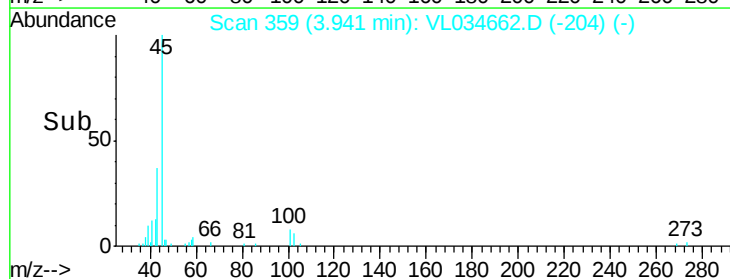
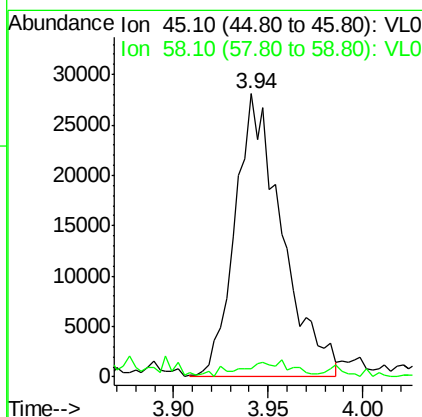
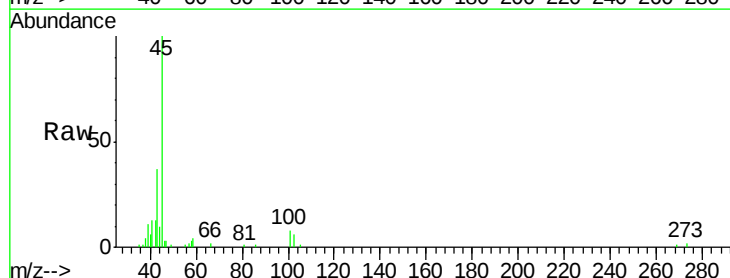
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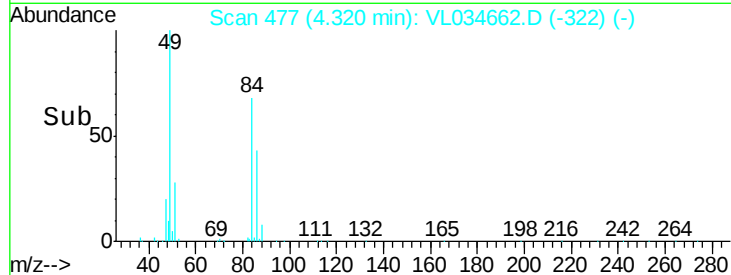
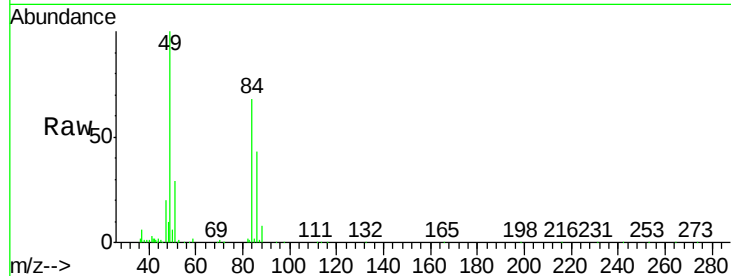
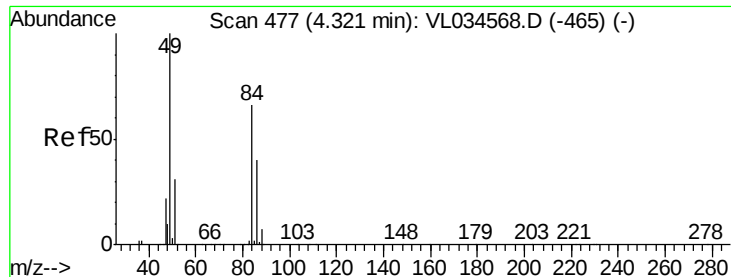


#19

Isopropyl Alcohol
 Concen: 0.779 ppbv m
 RT: 3.94 min Scan# 359
 Delta R.T. -0.00 min
 Lab File: VL034662.D
 Acq: 20 Feb 2020 2:18

Tgt Ion: 45 Resp: 48681
 Ion Ratio Lower Upper
 45 100
 58 240.6 1.7 2.5#





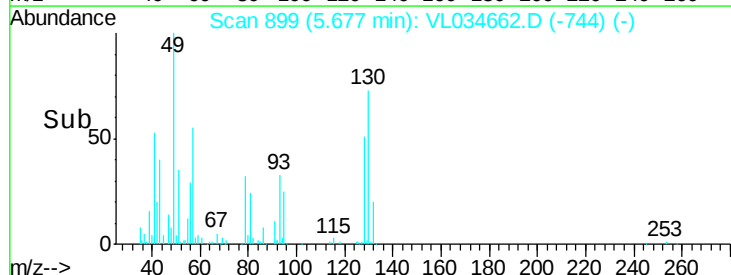
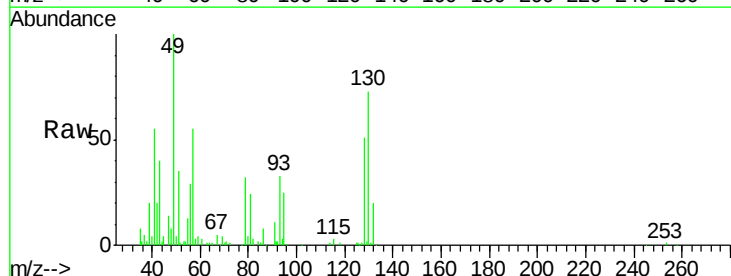
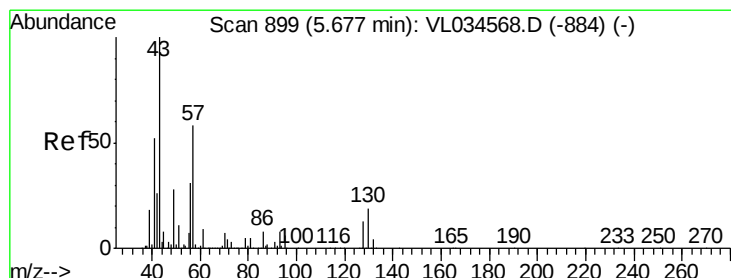
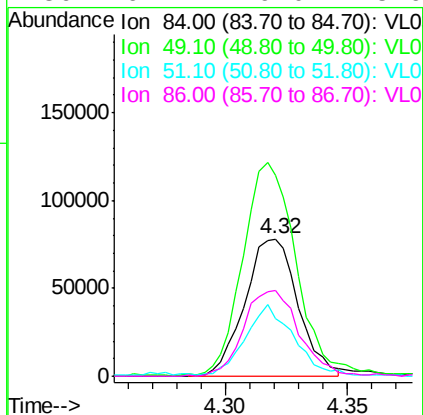
#20
Methvlene Chloride
Concen: 2.892 ppbv
RT: 4.32 min Scan# 477
Delta R.T. -0.00 min
Lab File: VL034662.D
Acq: 20 Feb 2020 2:18

Tot Ion	84	Resp	117880
Ion Ratio	Lower	Upper	
84	100		
49	143.0	122.4	183.6
51	40.1	38.6	57.8
86	61.7	49.0	73.6

Instrument :
MSVOA_L
ClientSampled :
SS-1

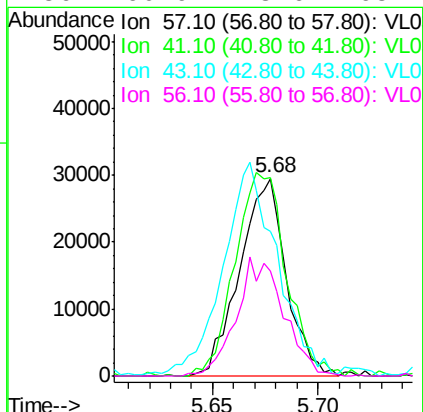
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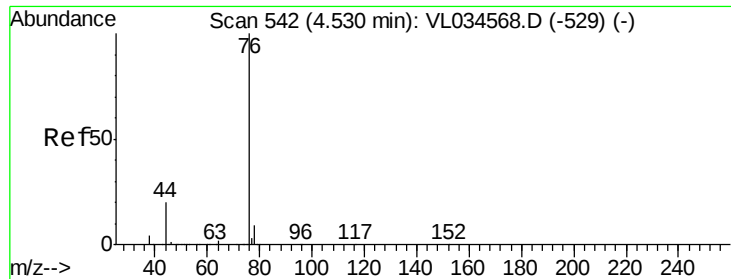
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#26
Hexane
Concen: 0.622 ppbv
RT: 5.68 min Scan# 899
Delta R.T. -0.00 min
Lab File: VL034662.D
Acq: 20 Feb 2020 2:18

Tgt Ion	57	Resp	45152
Ion Ratio	Lower	Upper	
57	100		
41	115.7	76.2	114.2#
43	126.2	189.9	284.9#
56	60.9	43.6	65.4





#27

Carbon Disulfide

Concen: 4.977 ppbv

RT: 4.53 min Scan# 542

Delta R.T. -0.00 min

Lab File: VL034662.D

Acq: 20 Feb 2020 2:18

Instrument :

MSVOA_L

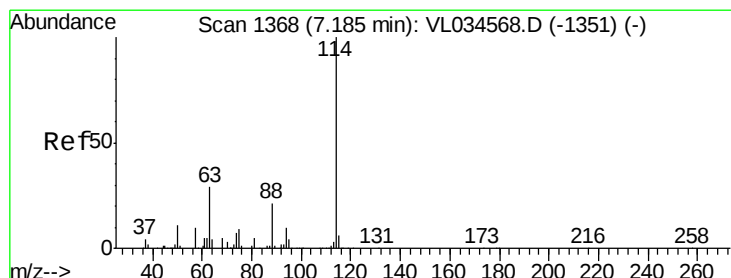
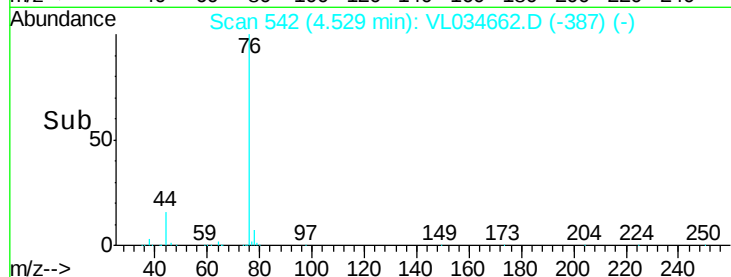
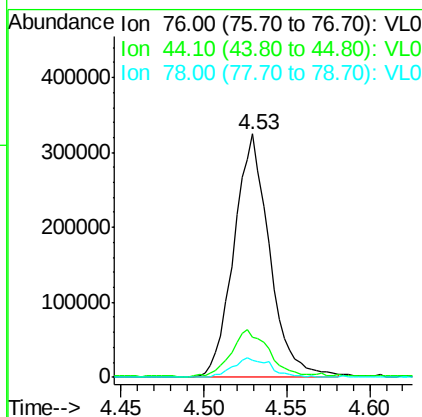
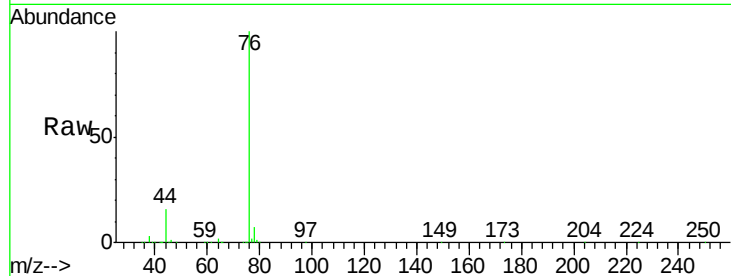
ClientSampleId :

SS-1

Tot Ion:	76	Resp:	487425
Ion	Ratio	Lower	Upper
76	100		
44	21.5	16.3	24.5
78	8.8	7.4	11.2

Manual Integrations
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#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

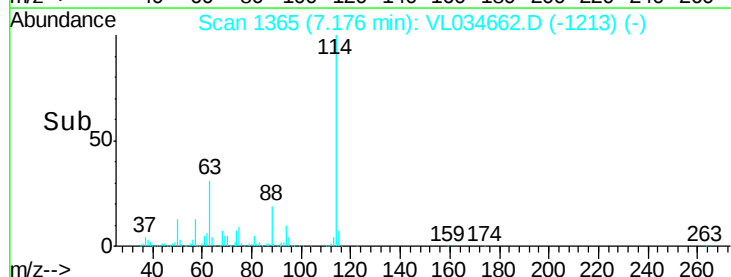
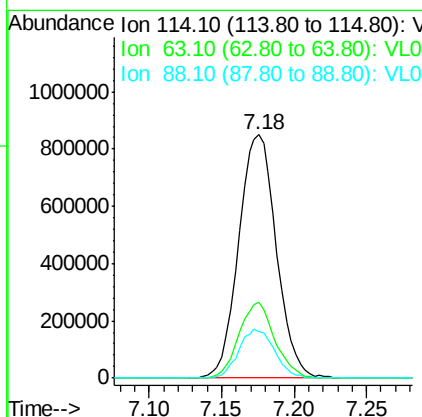
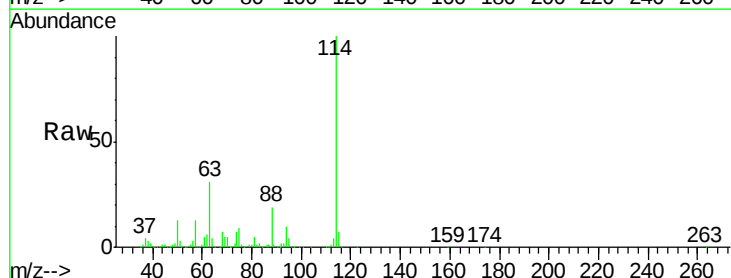
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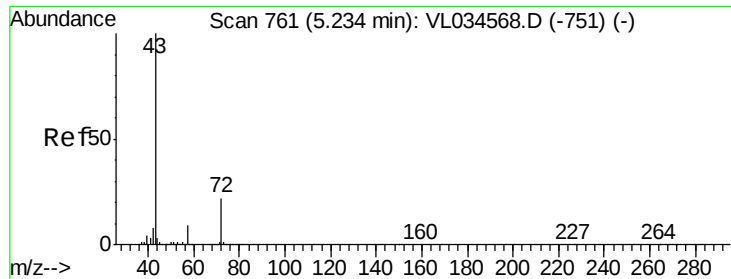
Delta R.T. -0.01 min

Lab File: VL034662.D

Acq: 20 Feb 2020 2:18

Tgt Ion:	114	Resp:	1532932
Ion	Ratio	Lower	Upper
114	100		
63	29.9	24.1	36.1
88	19.2	15.9	23.9





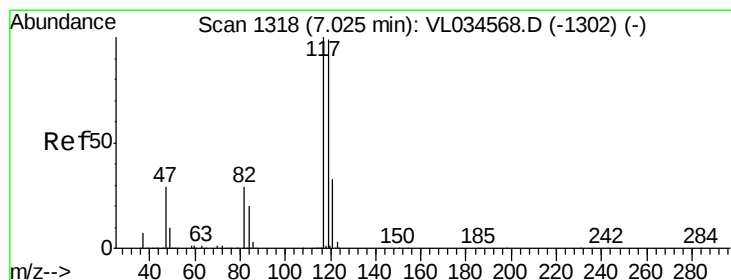
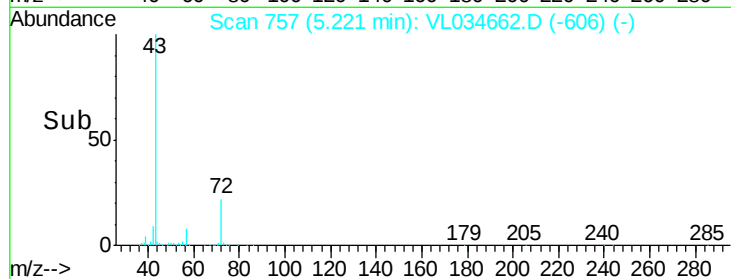
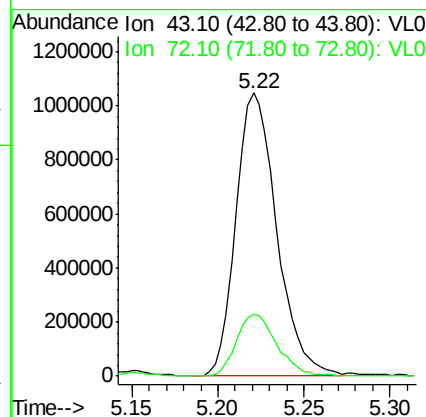
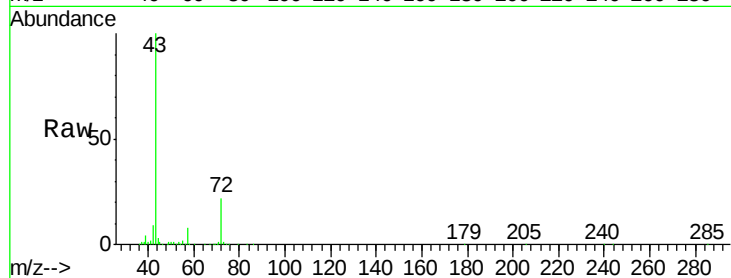
#34
2-Butanone
Concen: 15.579 ppbv
RT: 5.22 min Scan# 757
Delta R.T. -0.01 min
Lab File: VL034662.D
Acq: 20 Feb 2020 2:18

Instrument :
MSVOA_L
ClientSampleId :
SS-1

Tot Ion: 43 Resp: 1733981
Ion Ratio Lower Upper
43 100
72 22.0 17.2 25.8

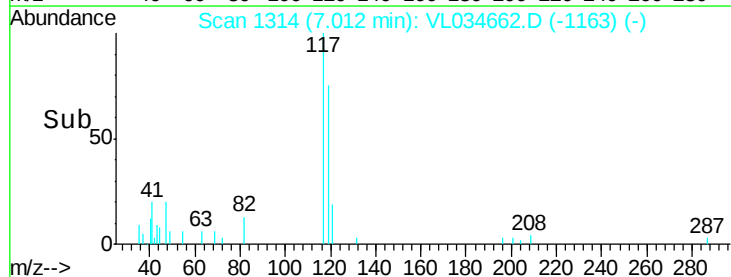
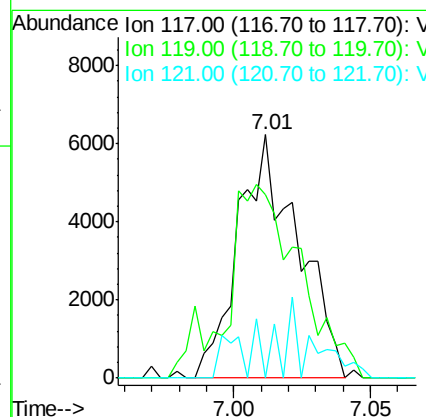
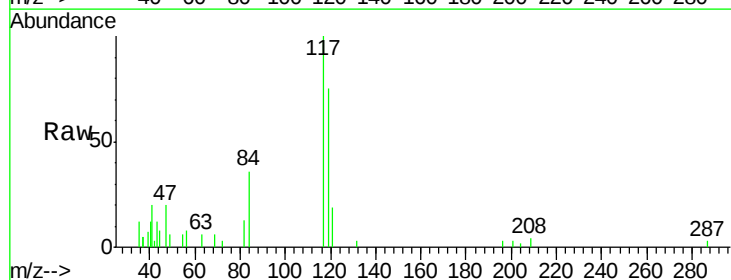
Manual Integrations
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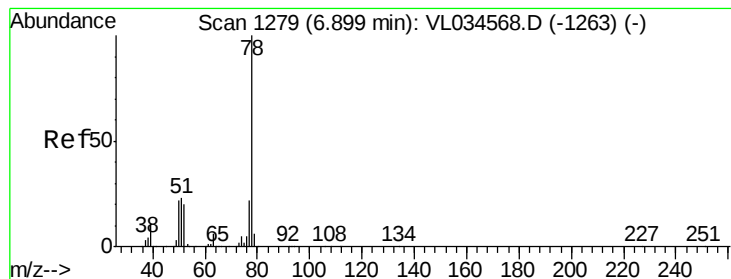
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#35
Carbon Tetrachloride
Concen: 0.065 ppbv m
RT: 7.01 min Scan# 1314
Delta R.T. -0.01 min
Lab File: VL034662.D
Acq: 20 Feb 2020 2:18

Tgt Ion: 117 Resp: 9453
Ion Ratio Lower Upper
117 100
119 75.3 79.5 119.3#
121 0.0 26.2 39.2#





#36

Benzene

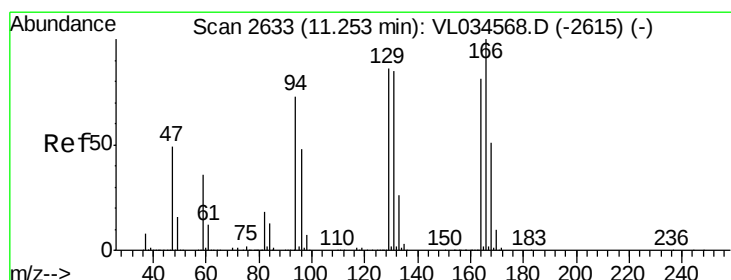
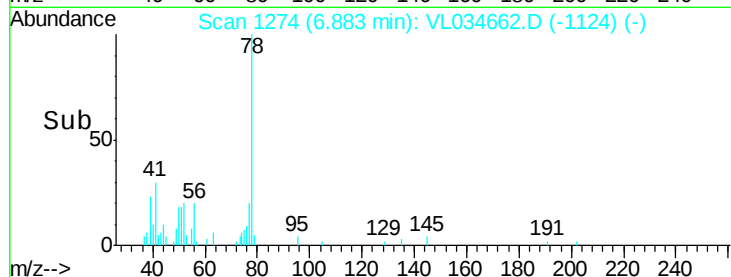
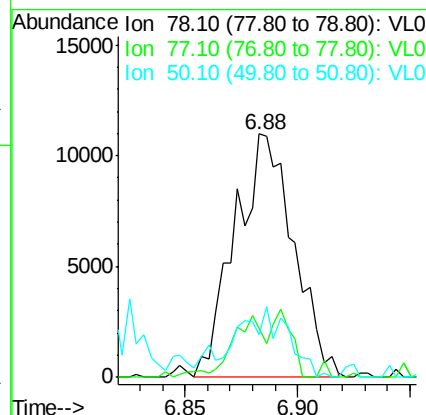
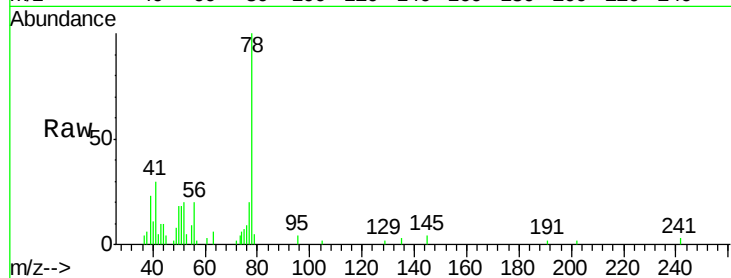
Concen: 0.146 ppbv m
RT: 6.88 min Scan# 1274
Delta R.T. -0.02 min
Lab File: VL034662.D
Acq: 20 Feb 2020 2:18

Instrument :
MSVOA_L
ClientSampled :
SS-1

Tot Ion	Ratio	Lower	Upper
78	100		
77	20.3	17.3	25.9
50	17.6	17.4	26.2

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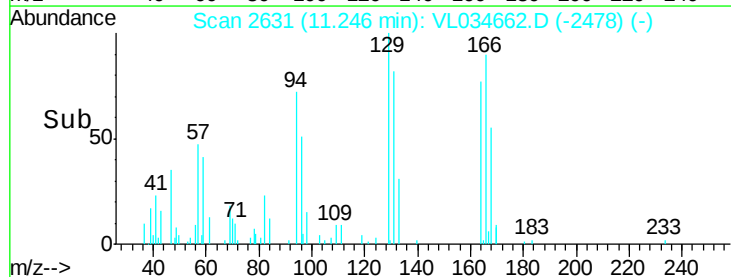
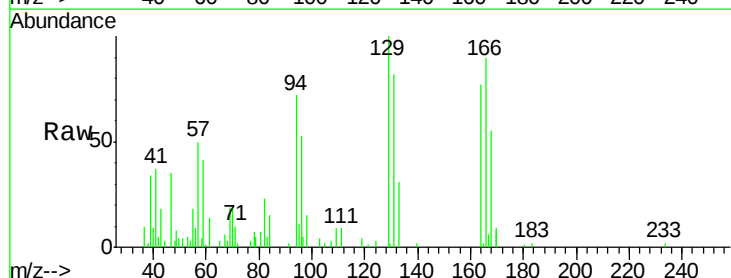
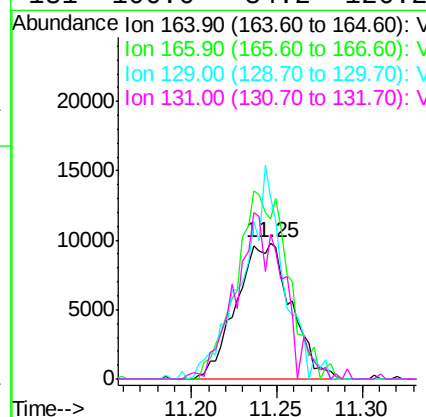


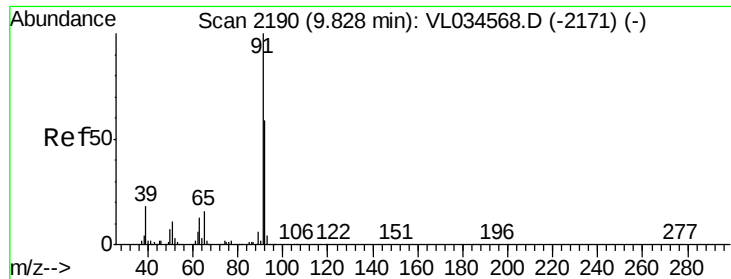
#52

Tetrachloroethene

Concen: 0.399 ppbv m
RT: 11.25 min Scan# 2631
Delta R.T. -0.01 min
Lab File: VL034662.D
Acq: 20 Feb 2020 2:18

Tgt Ion	Ratio	Lower	Upper
164	100		
166	117.0	99.0	148.4
129	129.9	85.3	127.9#
131	106.6	84.2	126.2





#53

Toluene

Concen: 6.544 ppbv

RT: 9.82 min Scan# 2186

Delta R.T. -0.01 min

Lab File: VL034662.D

Acq: 20 Feb 2020 2:18

Instrument :

MSVOA_L

ClientSampleId :

SS-1

Tot Ion: 91 Resp: 979979

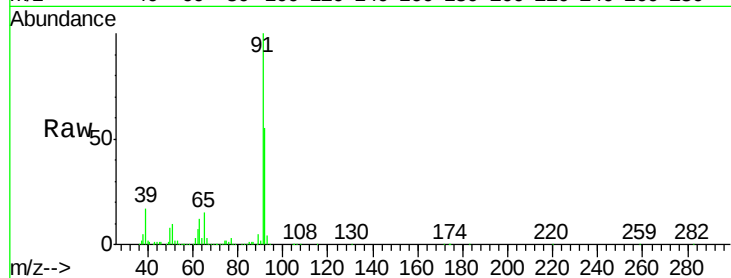
Ion Ratio Lower Upper

91 100

92 57.8 48.2 72.2

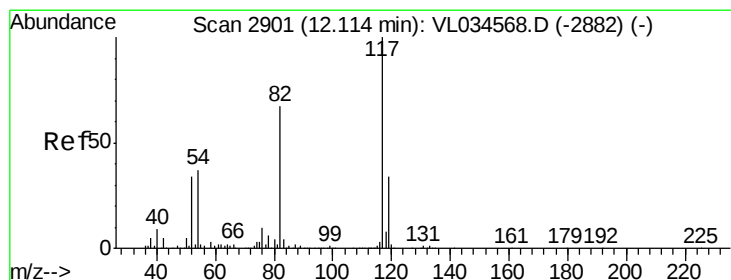
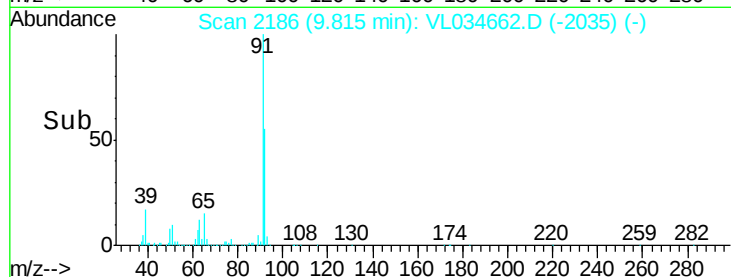
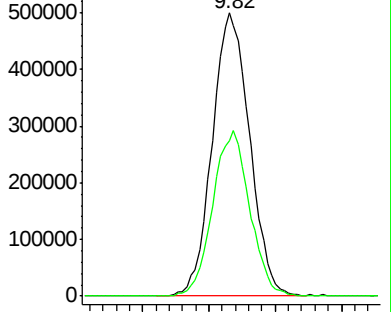
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Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 92.10 (91.80 to 92.80): VL0



#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.11 min Scan# 2899

Delta R.T. -0.01 min

Lab File: VL034662.D

Acq: 20 Feb 2020 2:18

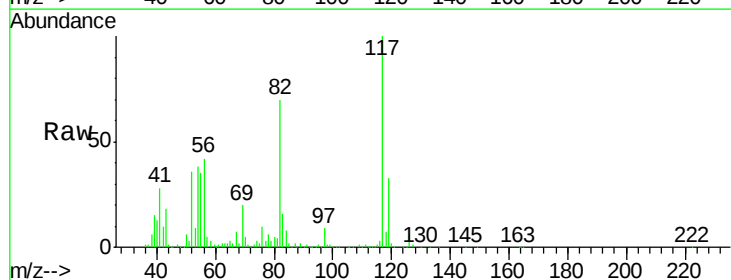
Tgt Ion: 117 Resp: 1838886

Ion Ratio Lower Upper

117 100

82 74.3 54.2 81.4

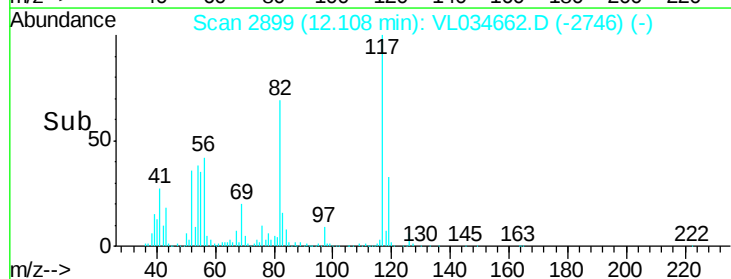
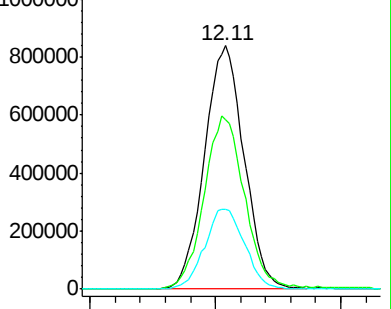
119 33.4 26.1 39.1

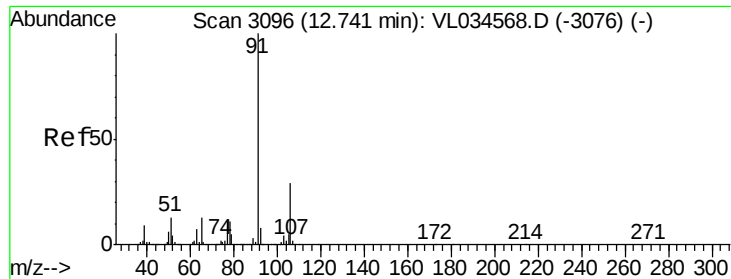


Abundance Ion 117.10 (116.80 to 117.80): V

Ion 82.10 (81.80 to 82.80): VL0

Ion 119.10 (118.80 to 119.80): V





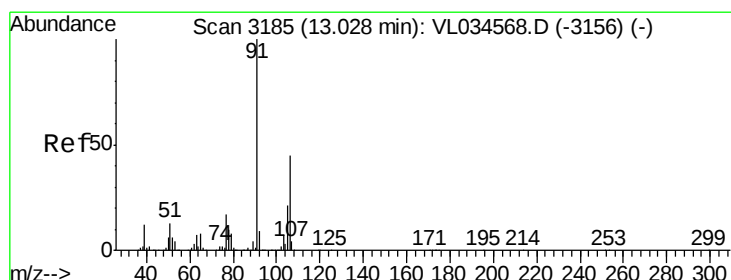
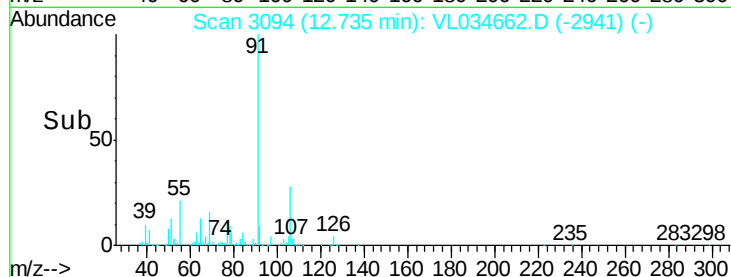
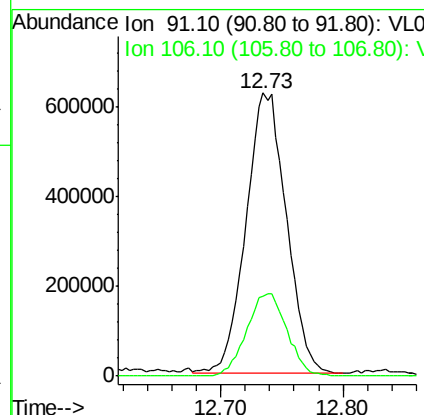
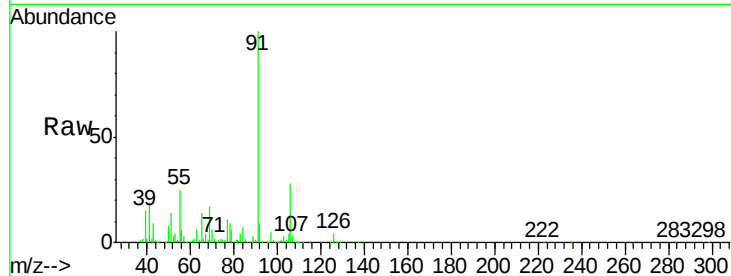
#58
Ethyl Benzene
Concen: 5.794 ppbv
RT: 12.73 min Scan# 3094
Delta R.T. -0.01 min
Lab File: VL034662.D
Acq: 20 Feb 2020 2:18

Instrument :
MSVOA_L
ClientSampleId :
SS-1

Tot Ion: 91 Resp: 1425739
Ion Ratio Lower Upper
91 100
106 28.6 23.3 34.9

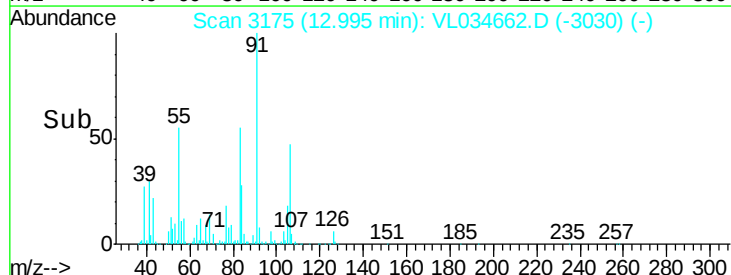
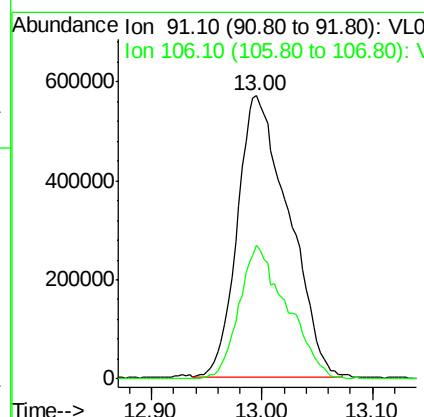
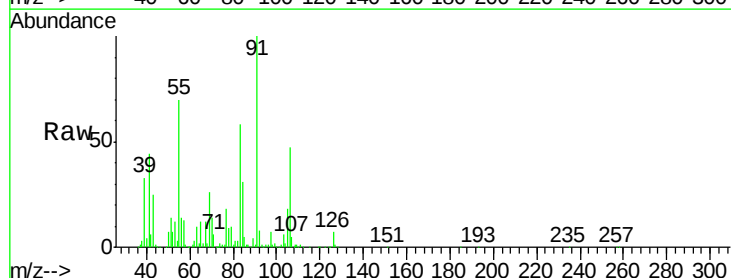
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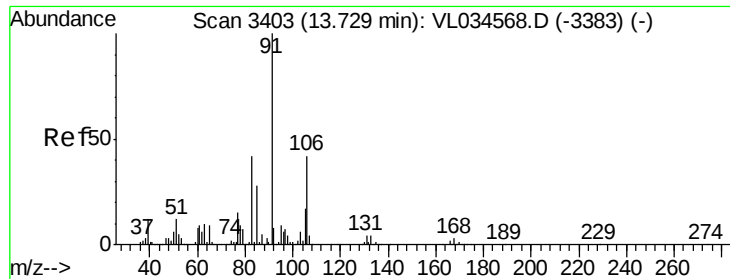
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#59
m/p-Xylene
Concen: 8.384 ppbv
RT: 13.00 min Scan# 3175
Delta R.T. -0.03 min
Lab File: VL034662.D
Acq: 20 Feb 2020 2:18

Tgt Ion: 91 Resp: 1823591
Ion Ratio Lower Upper
91 100
106 44.5 35.3 52.9





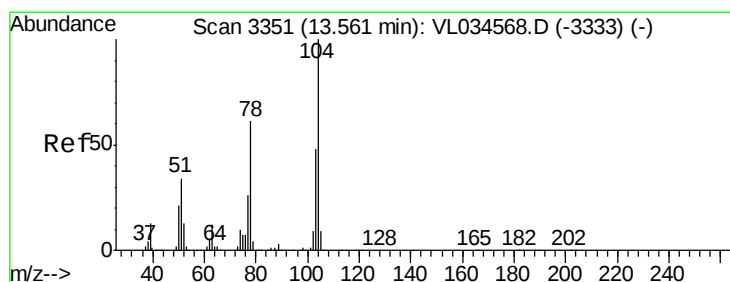
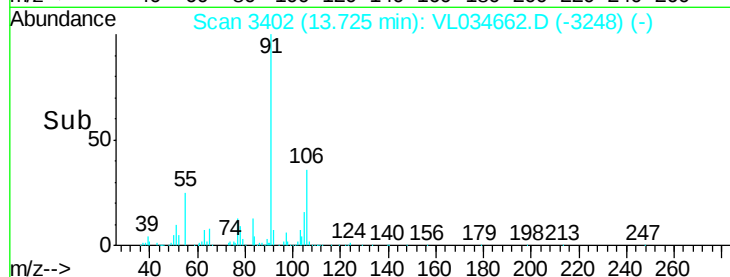
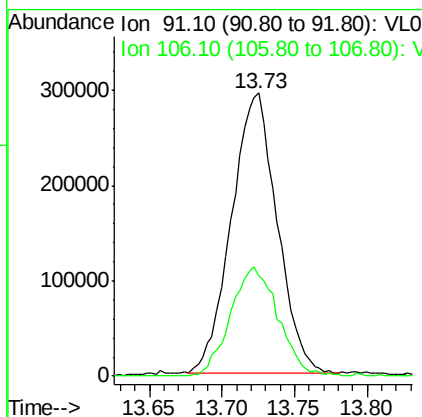
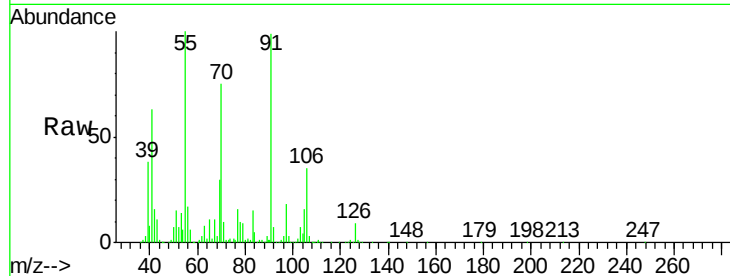
#60
o-Xylene
Concen: 2.935 ppbv
RT: 13.73 min Scan# 3402
Delta R.T. -0.00 min
Lab File: VL034662.D
Acq: 20 Feb 2020 2:18

Instrument :
MSVOA_L
ClientSampleId :
SS-1

Tot Ion: 91 Resp: 641140
Ion Ratio Lower Upper
91 100
106 40.8 21.6 65.0

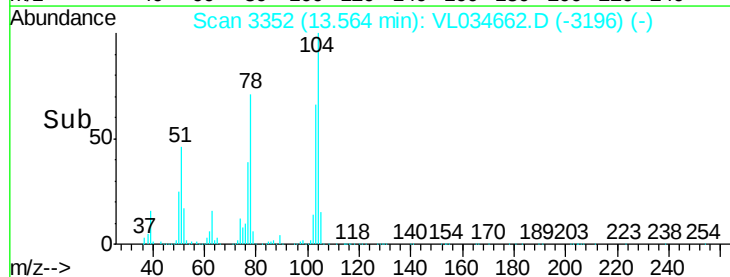
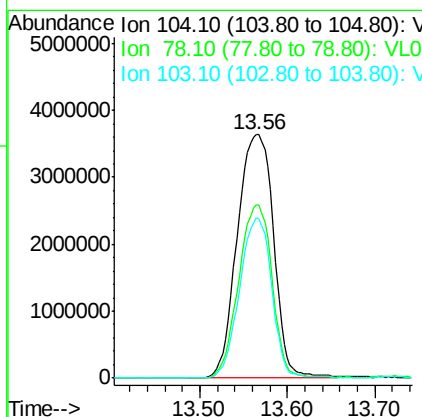
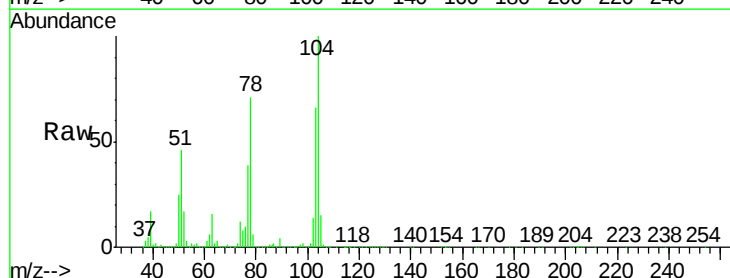
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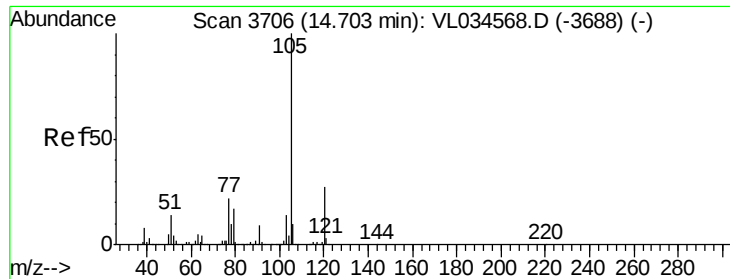
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#61
Styrene
Concen: 72.092 ppbv
RT: 13.56 min Scan# 3352
Delta R.T. 0.00 min
Lab File: VL034662.D
Acq: 20 Feb 2020 2:18

Tgt Ion:104 Resp:10500827
Ion Ratio Lower Upper
104 100
78 65.9 47.0 70.6
103 58.5 38.5 57.7#





#62

Isopropylbenzene

Concen: 49.204 ppbv

RT: 14.71 min Scan# 3707

Delta R.T. 0.00 min

Lab File: VL034662.D

Acq: 20 Feb 2020 2:18

Instrument :

MSVOA_L

ClientSampleId :

SS-1

Tot Ion:105 Resp:13928839

Ion Ratio Lower Upper

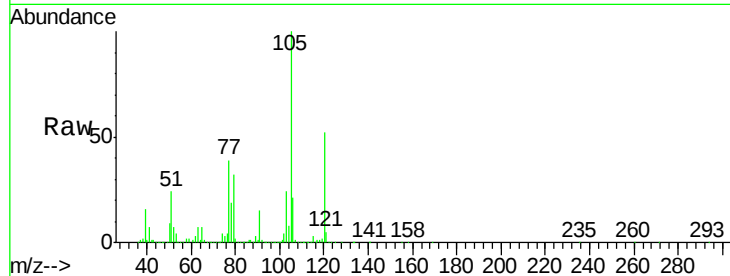
105 100

120 40.2 20.7 31.1#

Manual Integrations
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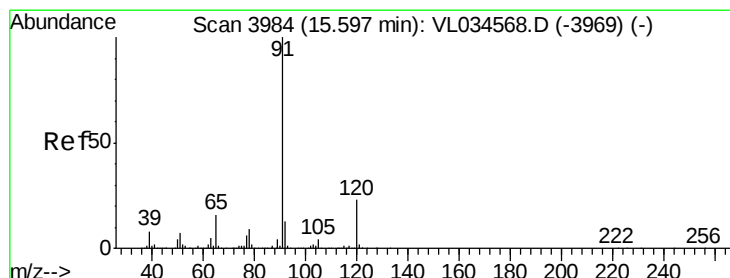
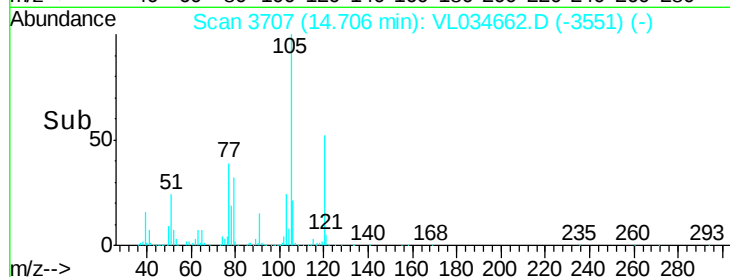
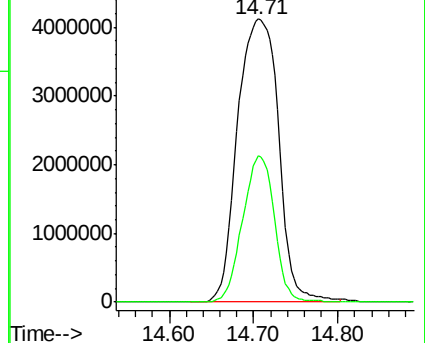
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Abundance Ion 105.10 (104.80 to 105.80): V

Ion 120.20 (119.90 to 120.90): V



#64

n-propylbenzene

Concen: 0.325 ppbv m

RT: 15.59 min Scan# 3983

Delta R.T. -0.00 min

Lab File: VL034662.D

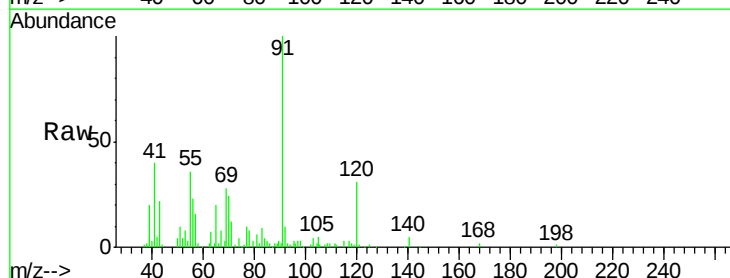
Acq: 20 Feb 2020 2:18

Tgt Ion:120 Resp: 23669

Ion Ratio Lower Upper

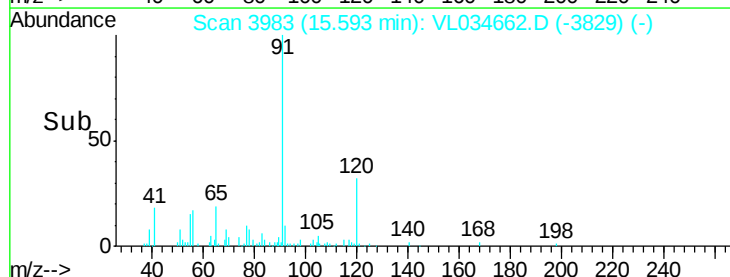
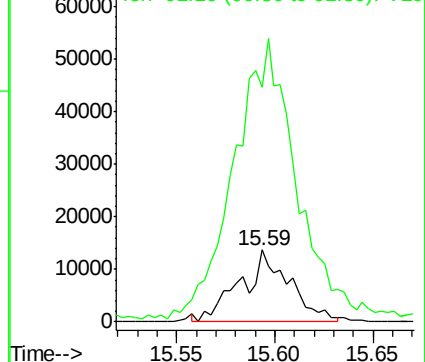
120 100

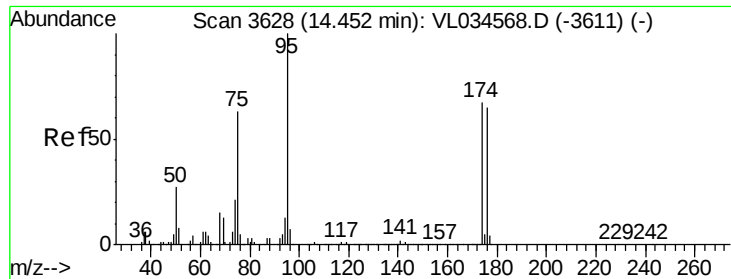
91 0.0 365.3 547.9#



Abundance Ion 120.20 (119.90 to 120.90): V

Ion 91.10 (90.80 to 91.80): VL0





#68

1-Bromo-4-Fluorobenzene

Concen: 10.764 ppbv

RT: 14.45 min Scan# 3627

Delta R.T. -0.00 min

Lab File: VL034662.D

Acq: 20 Feb 2020 2:18

Instrument :

MSVOA_L

ClientSampleId :

SS-1

Tot Ion: 95 Resp: 1672900

Ion Ratio Lower Upper

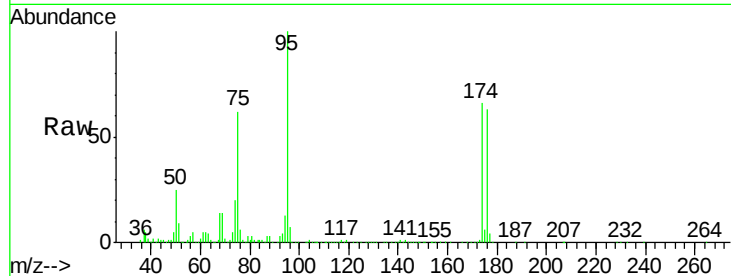
95 100

174 66.5 52.3 78.5

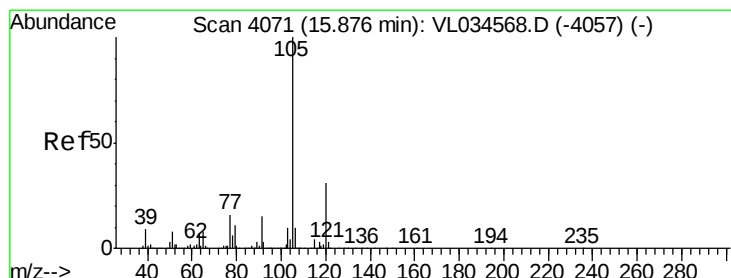
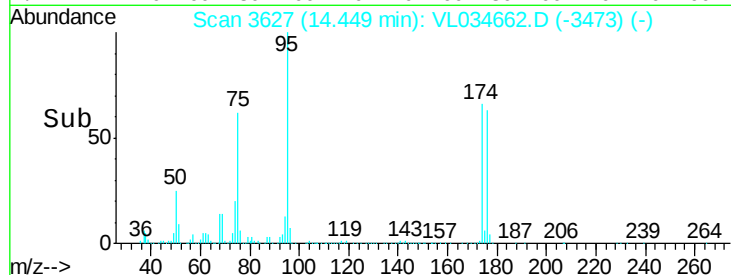
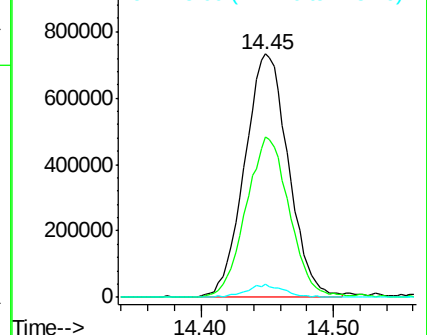
175 4.8 3.8 5.6

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Abundance Ion 95.10 (94.80 to 95.80): VL0
Ion 174.00 (173.70 to 174.70): V
Ion 175.00 (174.70 to 175.70): V



#72

4-Ethyltoluene

Concen: 0.473 ppbv

RT: 15.87 min Scan# 4070

Delta R.T. -0.00 min

Lab File: VL034662.D

Acq: 20 Feb 2020 2:18

Tgt Ion: 105 Resp: 113510

Ion Ratio Lower Upper

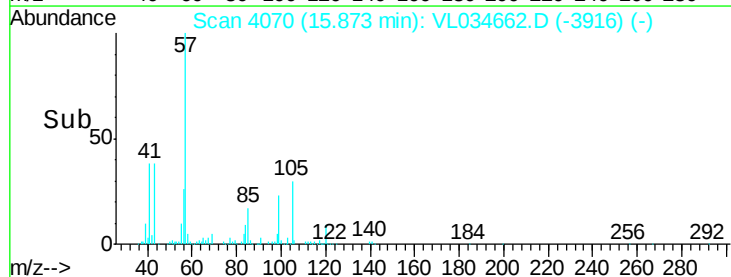
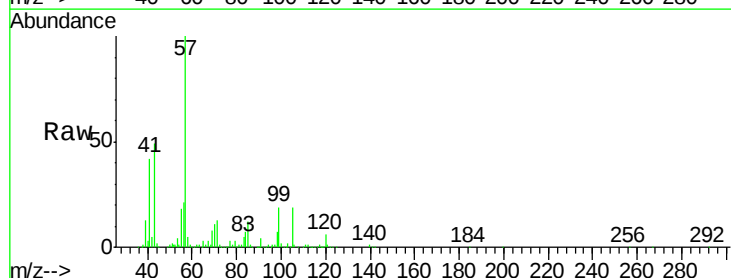
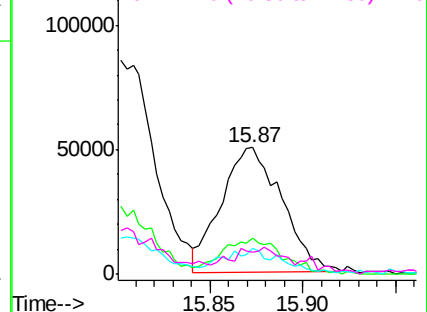
105 100

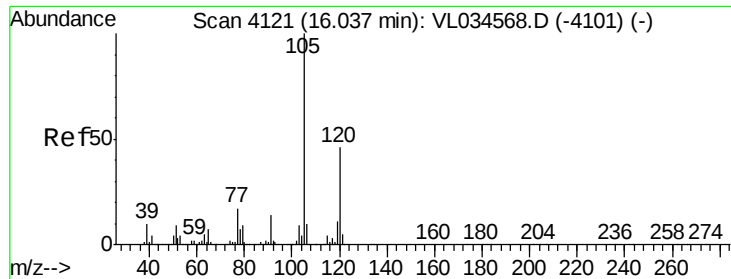
120 29.1 23.8 35.6

91 17.4 11.8 17.8

77 19.6 13.0 19.6#

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: 0.229 ppbv

RT: 16.03 min Scan# 4119

Delta R.T. -0.01 min

Lab File: VL034662.D

Acq: 20 Feb 2020 2:18

Instrument :

MSVOA_L

ClientSampled :

SS-1

Tot Ion:105 Resp: 53610

Ion Ratio Lower Upper

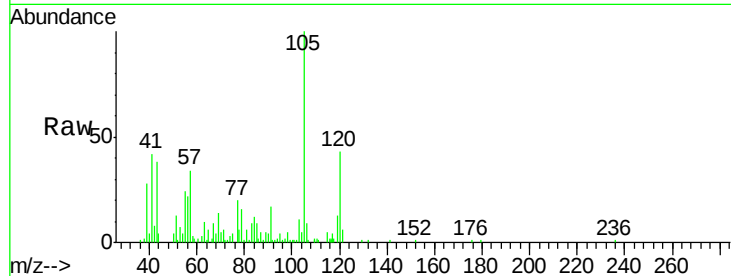
105 100

120 43.9 37.0 55.6

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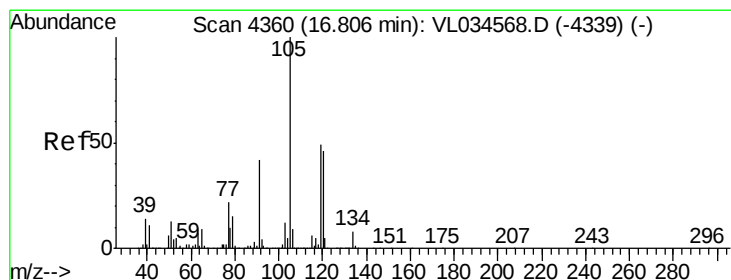
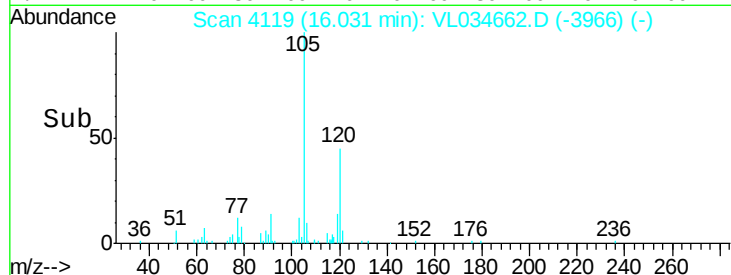
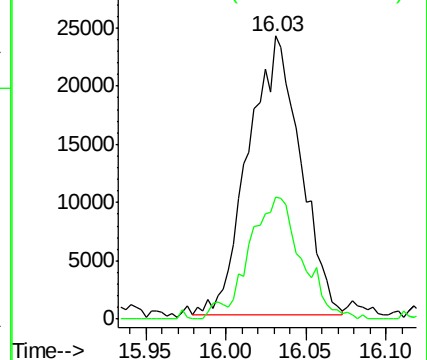
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Abundance Ion 105.10 (104.80 to 105.80): V

Ion 120.20 (119.90 to 120.90): V



#74

1,2,4-Trimethylbenzene

Concen: 0.949 ppbv

RT: 16.80 min Scan# 4358

Delta R.T. -0.01 min

Lab File: VL034662.D

Acq: 20 Feb 2020 2:18

Tgt Ion:105 Resp: 246302

Ion Ratio Lower Upper

105 100

120 36.1 37.1 55.7#

91 8.5 34.3 51.5#

77 16.4 17.5 26.3#

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

