

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL031620\
 Data File : VL034893.D
 Acq On : 16 Mar 2020 16:45
 Operator : SY/AP
 Sample : L1924-03
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 IA-01

Manual Integrations
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 3/17/2020 12:15:56 PM

Quant Time: Mar 17 05:11:42 2020
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL030920AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Mon Mar 0
 QLast Update : Mon Mar 09 16:42:53 2020
 Response via : Initial Calibration

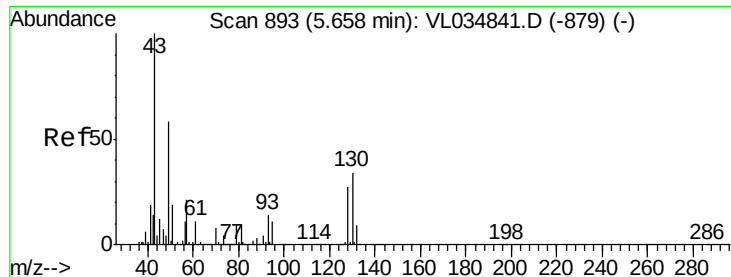
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.65	49	901714	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.17	114	1983805	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.10	117	1944802	10.00	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.44	95	1589571	10.48	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	104.80%

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.01	85	82368	0.667	ppbv	94
3) Chlorodifluoromethane	2.94	51	34894m	0.346	ppbv	
4) Chloromethane	3.10	50	29363	0.516	ppbv #	84
9) Propene	2.98	41	71118m	1.479	ppbv	
10) Heptane	8.12	43	19590m	0.166	ppbv	
11) Trichlorofluoromethane	3.91	101	37803	0.288	ppbv	92
12) 1,1,2-Trichlorotrifluoroet	4.46	101	16969	0.185	ppbv	96
13) Ethanol	3.57	45	535639	36.635	ppbv	93
15) Acetone	3.82	43	635791m	5.440	ppbv	
19) Isopropyl Alcohol	3.94	45	153917	2.085	ppbv #	42
20) Methylene Chloride	4.31	84	151932	4.112	ppbv	96
26) Hexane	5.67	57	185879	2.073	ppbv #	56
30) Cyclohexane	7.12	84	11200m	0.150	ppbv	
34) 2-Butanone	5.23	43	53022	0.402	ppbv	98
35) Carbon Tetrachloride	7.01	117	9150m	0.074	ppbv	
36) Benzene	6.88	78	72620	0.411	ppbv #	92
38) Trichloroethene	7.83	130	7106m	0.106	ppbv	
44) 2,2,4-Trimethylpentane	7.86	57	112515	0.377	ppbv #	81
52) Tetrachloroethene	11.23	164	7223m	0.103	ppbv	
53) Toluene	9.81	91	766118	3.752	ppbv	98
59) m/p-Xylene	12.98	91	41080m	0.186	ppbv	
61) Styrene	13.54	104	15736m	0.104	ppbv	

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



#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.65 min Scan# 890

Delta R.T. -0.01 min

Lab File: VL034893.D

Acq: 16 Mar 2020 16:45

Instrument :

MSVOA_L

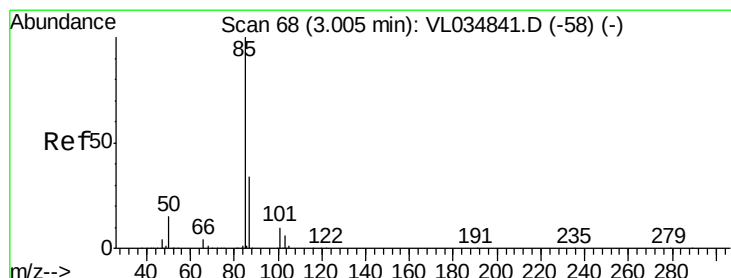
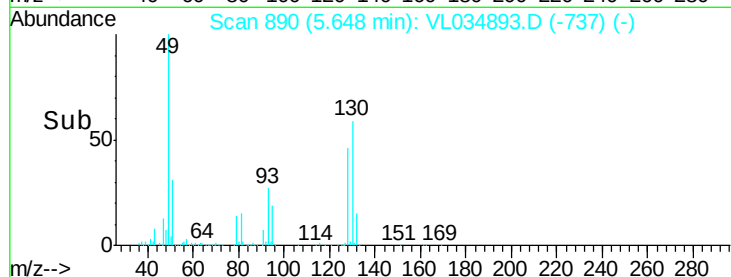
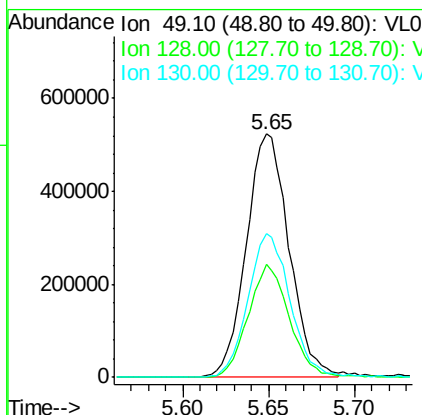
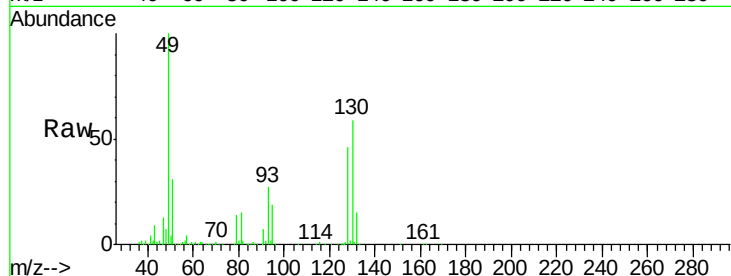
ClientSampleId :

IA-01

Tot Ion	Ratio	Lower	Upper
49	100		
128	44.9	23.4	70.3
130	59.2	30.0	90.0

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#2

Dichlorodifluoromethane

Concen: 0.667 ppbv

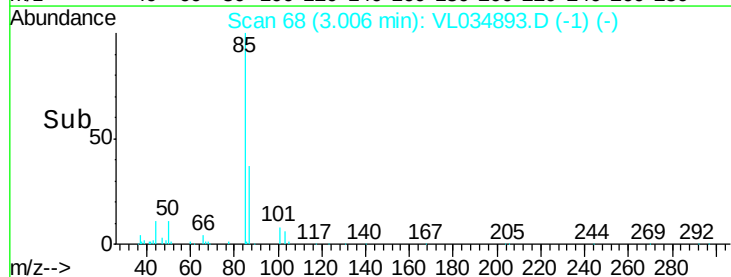
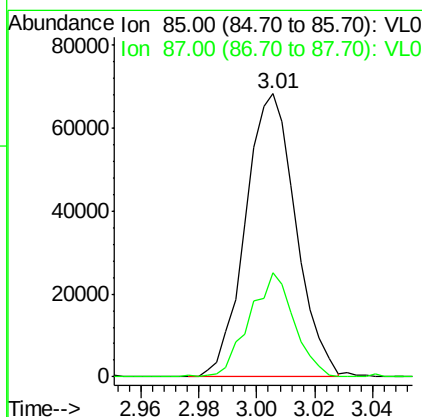
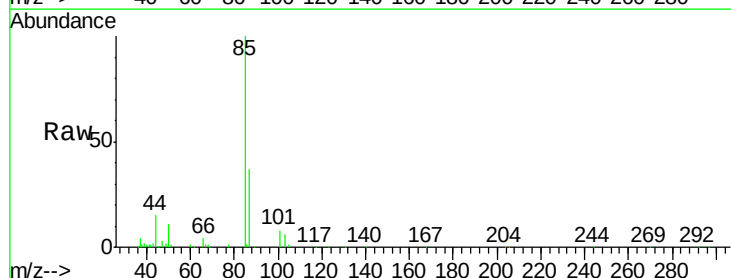
RT: 3.01 min Scan# 68

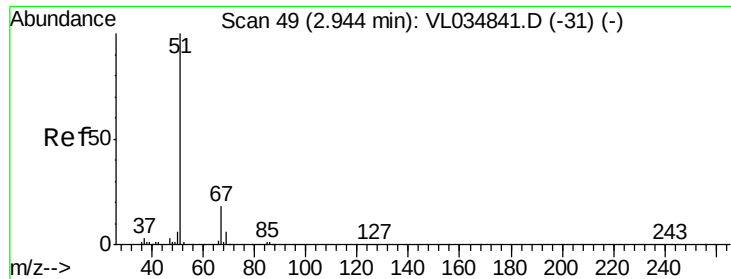
Delta R.T. 0.00 min

Lab File: VL034893.D

Acq: 16 Mar 2020 16:45

Tgt Ion	Ratio	Lower	Upper
85	100		
87	36.7	26.9	40.3





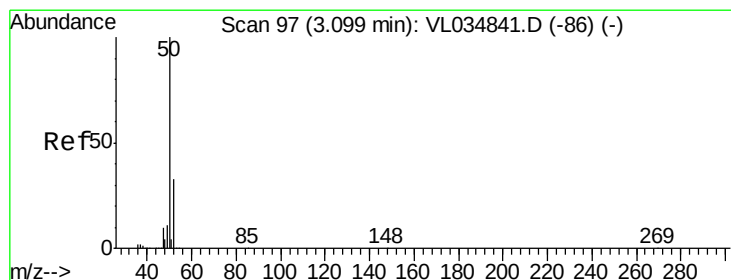
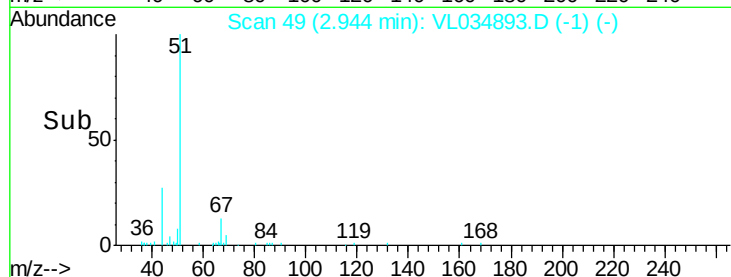
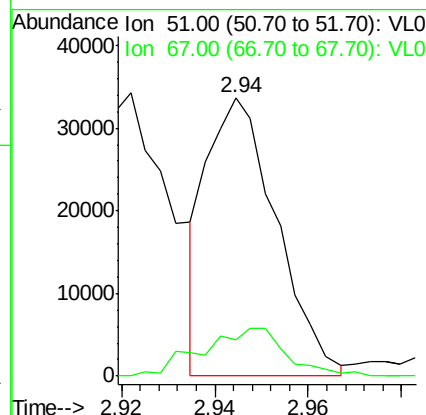
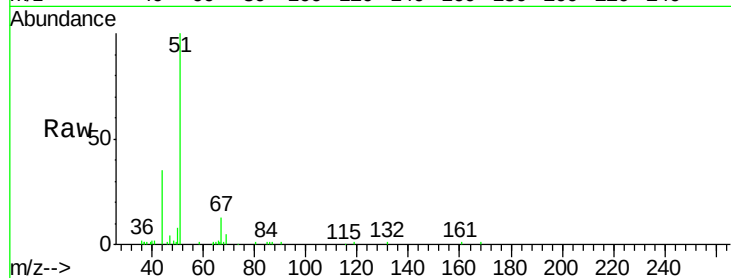
#3
Chlorodifluoromethane
Concen: 0.346 ppbv m
RT: 2.94 min Scan# 49
Delta R.T. 0.00 min
Lab File: VL034893.D
Acq: 16 Mar 2020 16:45

Instrument :
MSVOA_L
ClientSampleId :
IA-01

Tot Ion	Ratio	Lower	Upper
51	100		
67	21.1	14.3	21.5

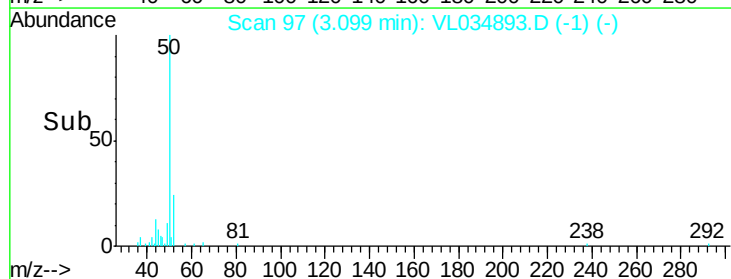
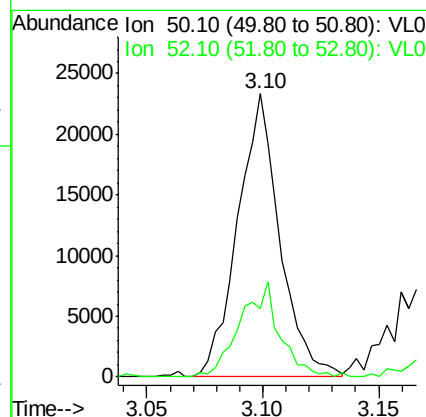
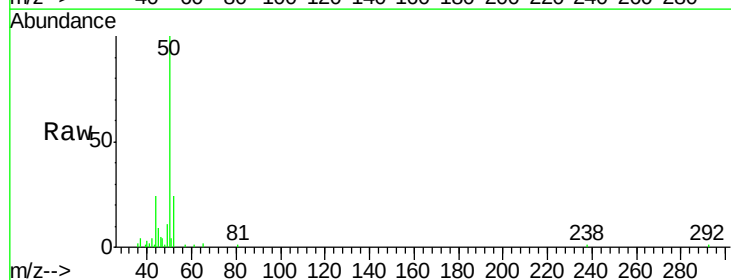
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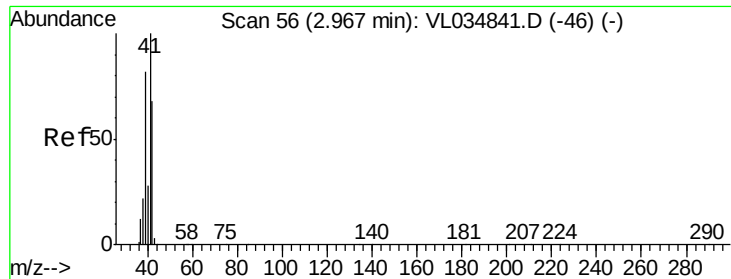
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#4
Chloromethane
Concen: 0.516 ppbv
RT: 3.10 min Scan# 97
Delta R.T. 0.00 min
Lab File: VL034893.D
Acq: 16 Mar 2020 16:45

Tgt Ion	Ratio	Lower	Upper
50	100		
52	24.3	26.8	40.2#





#9

Propene

Concen: 1.479 ppbv m

RT: 2.98 min Scan# 60

Delta R.T. 0.01 min

Lab File: VL034893.D

Acq: 16 Mar 2020 16:45

Instrument :

MSVOA_L

ClientSampled :

IA-01

Tot Ion: 41 Resp: 71118

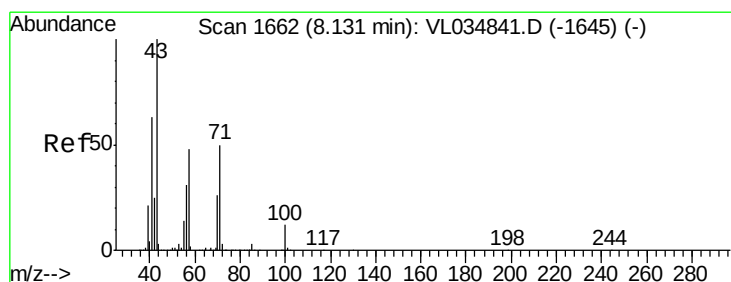
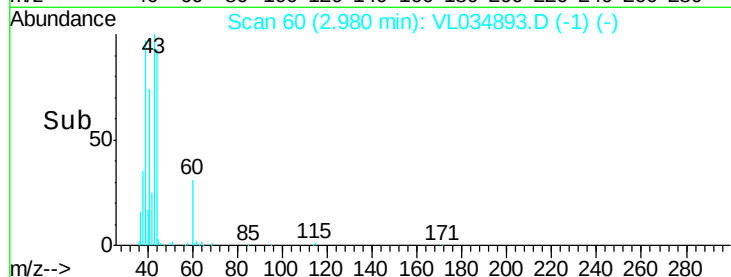
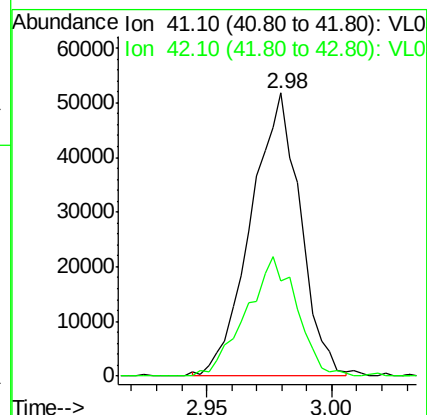
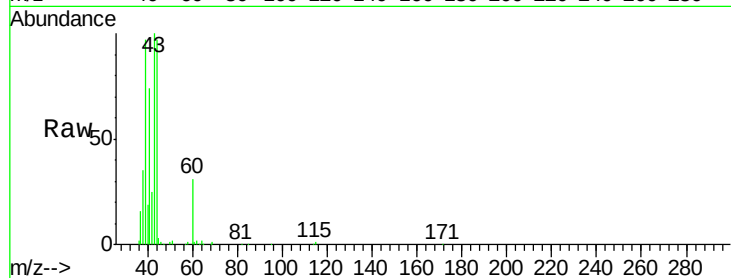
Ion Ratio Lower Upper

41 100

42 251.5 55.2 82.8#

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#10

Heptane

Concen: 0.166 ppbv m

RT: 8.12 min Scan# 1659

Delta R.T. -0.01 min

Lab File: VL034893.D

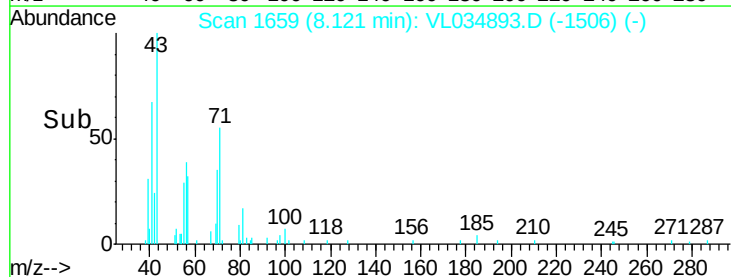
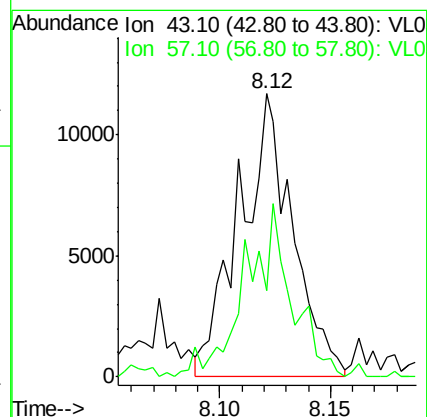
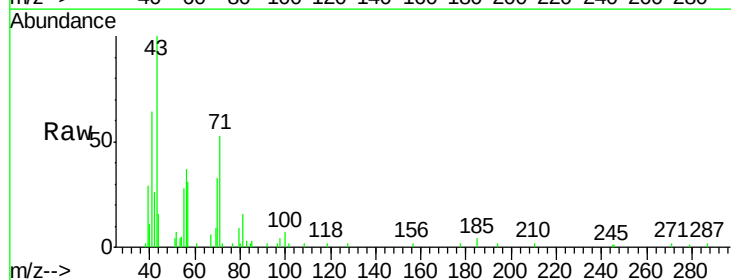
Acq: 16 Mar 2020 16:45

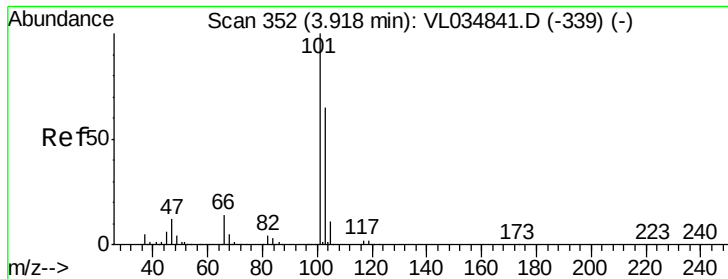
Tgt Ion: 43 Resp: 19590

Ion Ratio Lower Upper

43 100

57 57.1 39.7 59.5





#11

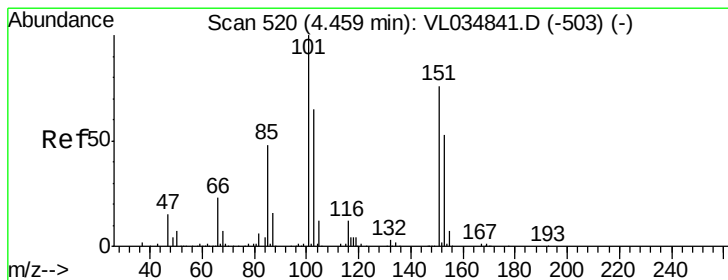
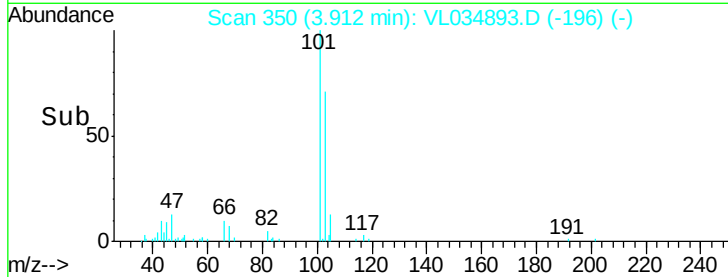
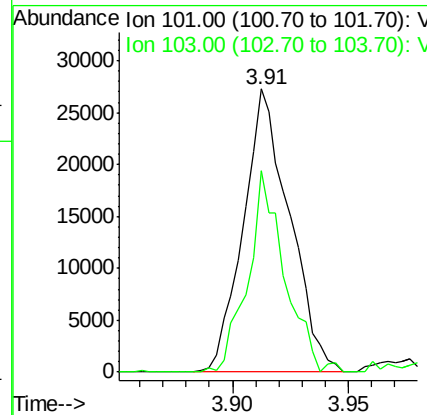
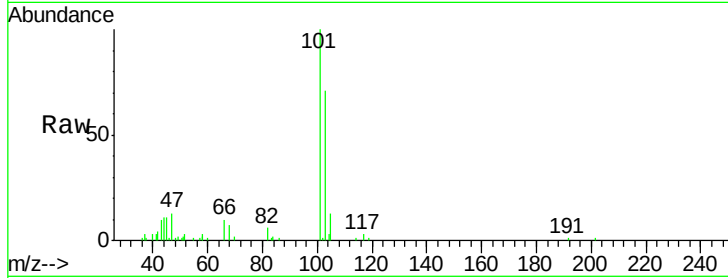
Trichlorofluoromethane
Concen: 0.288 ppbv
RT: 3.91 min Scan# 350
Delta R.T. -0.01 min
Lab File: VL034893.D
Acq: 16 Mar 2020 16:45

Instrument :
MSVOA_L
ClientSampled :
IA-01

Tot Ion	Ratio	Lower	Upper
101	100		
103	71.1	51.8	77.8

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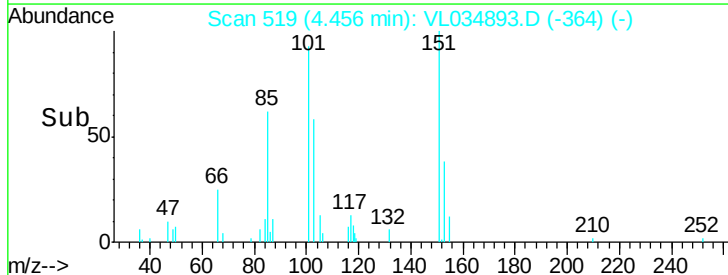
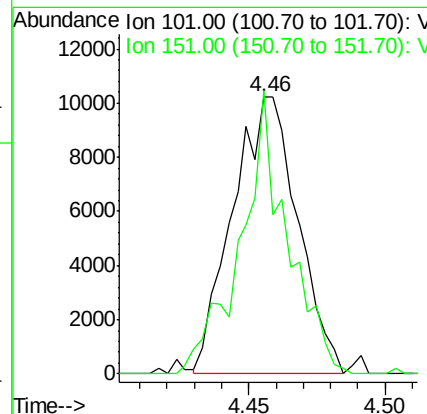
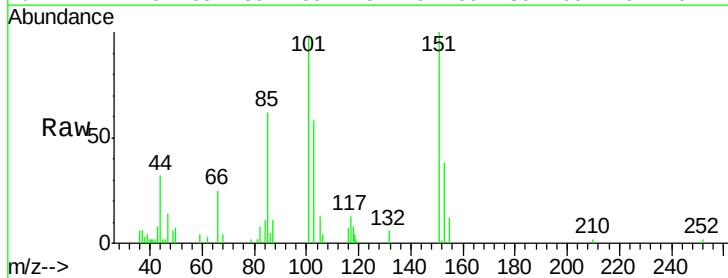
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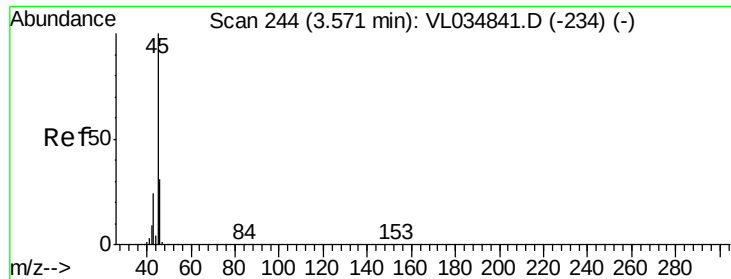


#12

1,1,2-Trichlorotrifluoroethane
Concen: 0.185 ppbv
RT: 4.46 min Scan# 519
Delta R.T. -0.00 min
Lab File: VL034893.D
Acq: 16 Mar 2020 16:45

Tgt Ion	Ratio	Lower	Upper
101	100		
151	72.9	60.8	91.2





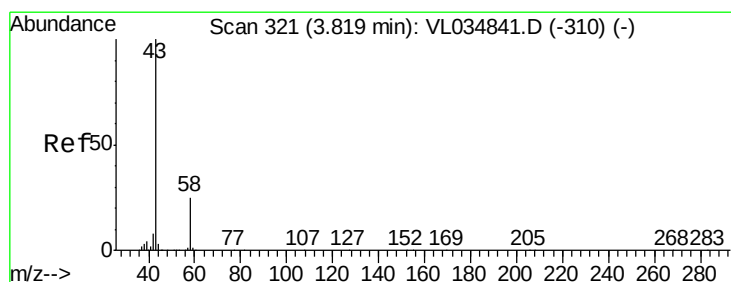
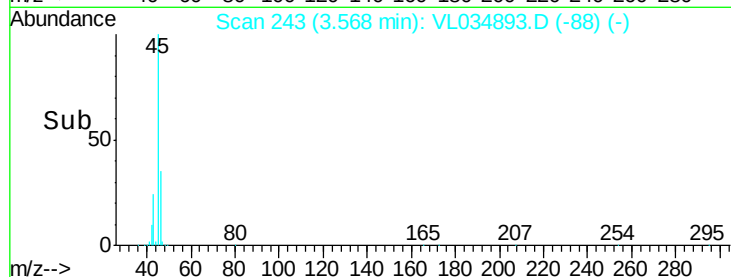
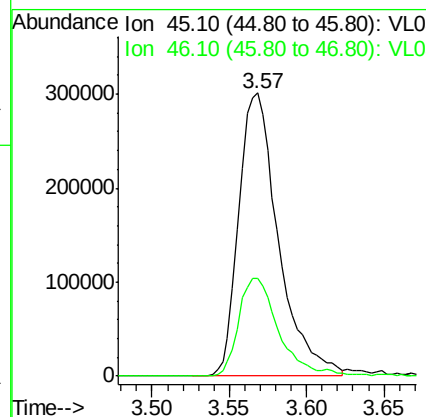
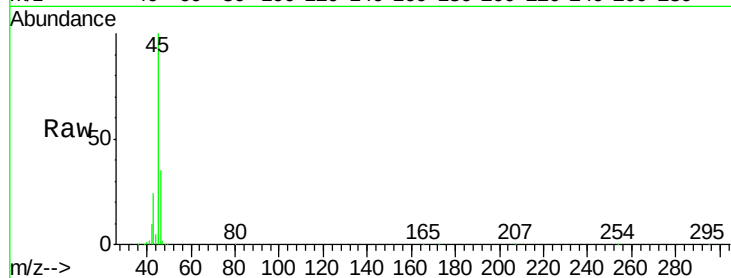
#13
Ethanol
Concen: 36.635 ppbv
RT: 3.57 min Scan# 243
Delta R.T. -0.00 min
Lab File: VL034893.D
Acq: 16 Mar 2020 16:45

Instrument :
MSVOA_L
ClientSampled :
IA-01

Tot Ion	45	Resp	535639
Ion Ratio	100	Lower	Upper
46	35.9	16.0	64.0

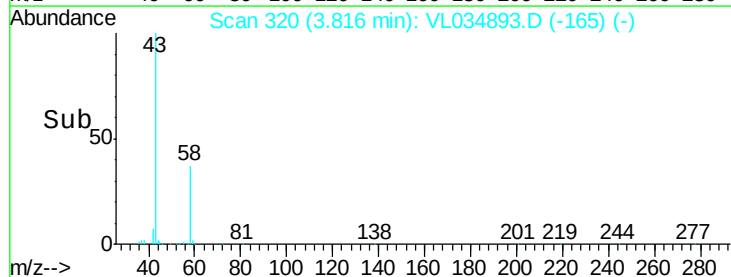
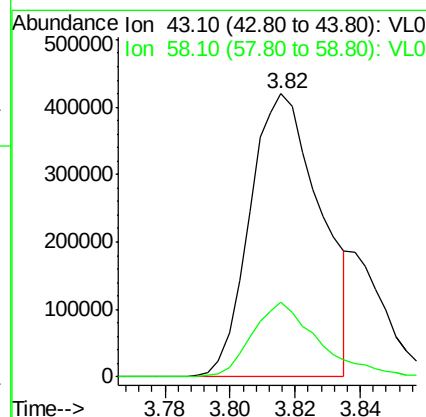
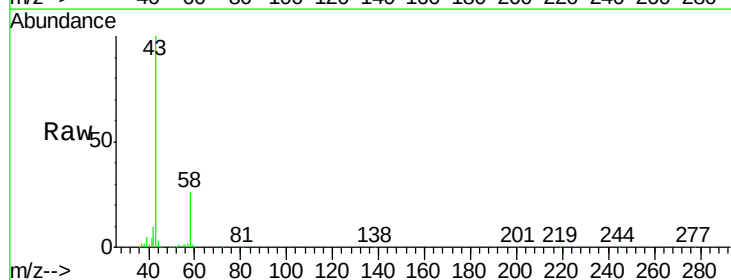
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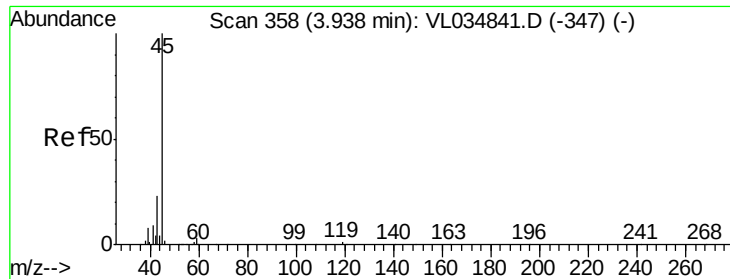
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#15
Acetone
Concen: 5.440 ppbv m
RT: 3.82 min Scan# 320
Delta R.T. -0.00 min
Lab File: VL034893.D
Acq: 16 Mar 2020 16:45

Tgt Ion	43	Resp	635791
Ion Ratio	100	Lower	Upper
58	25.3	21.0	31.6





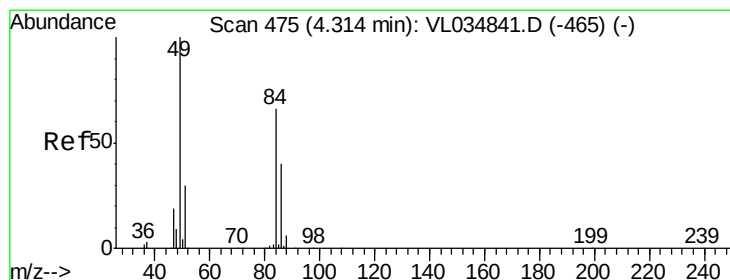
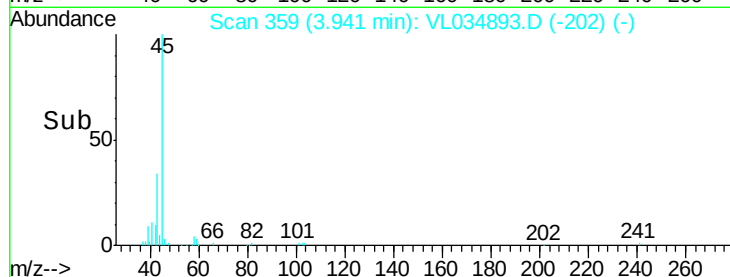
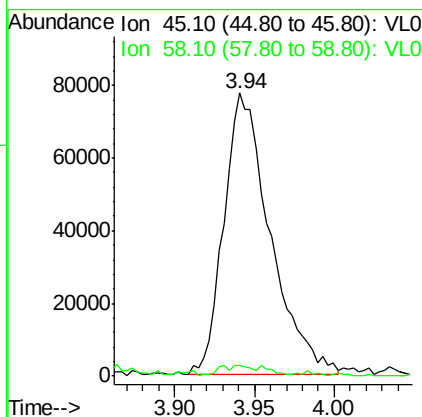
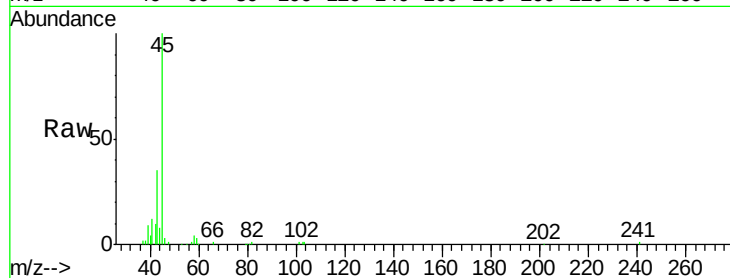
#19
Isopropyl Alcohol
Concen: 2.085 ppbv
RT: 3.94 min Scan# 359
Delta R.T. 0.00 min
Lab File: VL034893.D
Acq: 16 Mar 2020 16:45

Instrument :
MSVOA_L
ClientSampled :
IA-01

Tot Ion: 45 Resp: 153917
Ion Ratio Lower Upper
45 100
58 3.3 30.5 45.7#

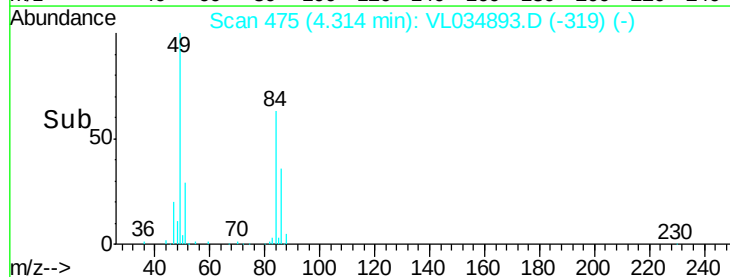
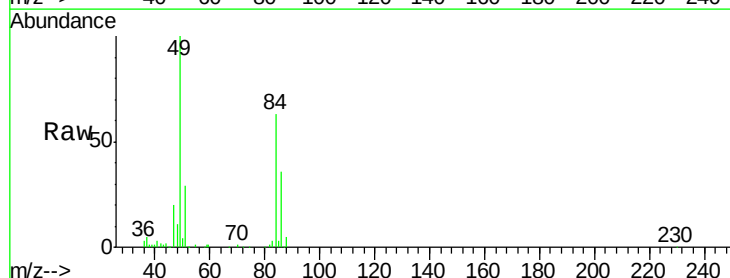
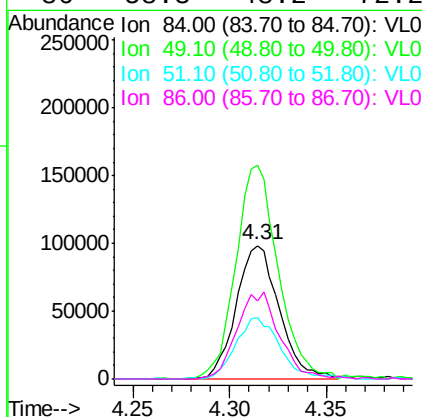
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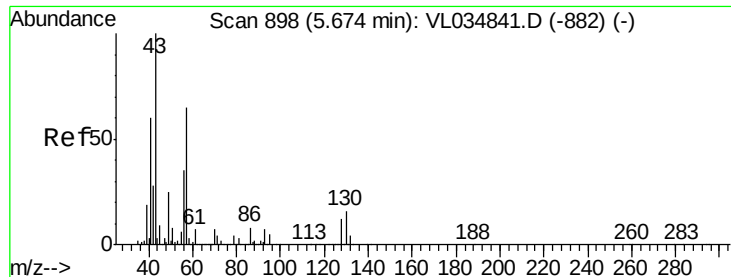
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#20
Methylene Chloride
Concen: 4.112 ppbv
RT: 4.31 min Scan# 475
Delta R.T. 0.00 min
Lab File: VL034893.D
Acq: 16 Mar 2020 16:45

Tgt Ion: 84 Resp: 151932
Ion Ratio Lower Upper
84 100
49 159.1 121.5 182.3
51 45.1 36.6 55.0
86 58.3 48.2 72.2





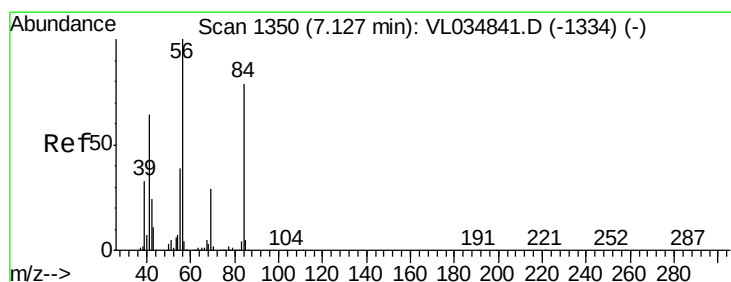
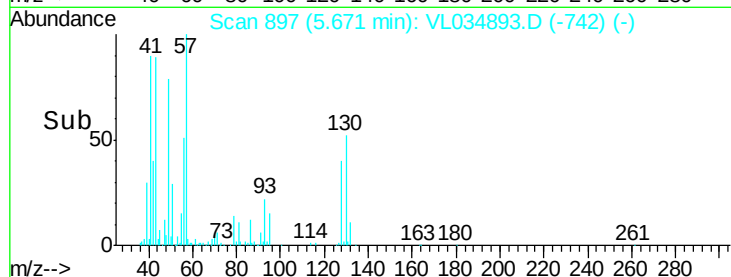
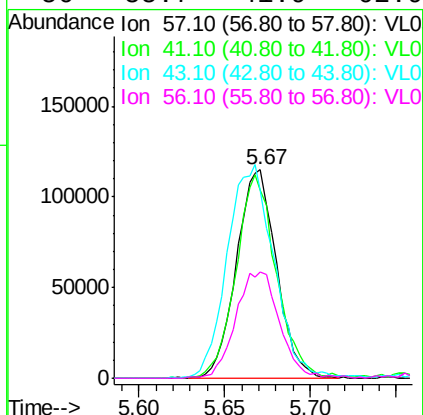
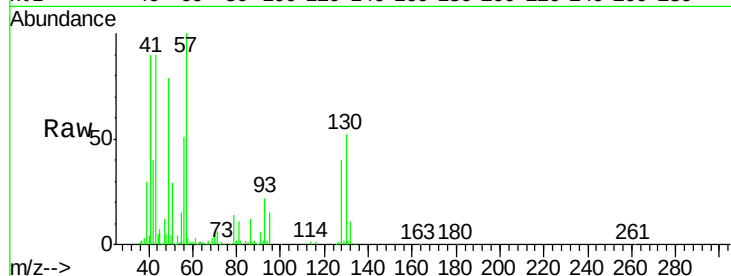
#26
Hexane
Concen: 2.073 ppbv
RT: 5.67 min Scan# 897
Delta R.T. -0.00 min
Lab File: VL034893.D
Acq: 16 Mar 2020 16:45

Instrument :
MSVOA_L
ClientSampled :
IA-01

Tot Ion	Ratio	Lower	Upper
57	100		
41	99.1	72.6	109.0
43	120.3	183.8	275.6#
56	55.7	41.9	62.9

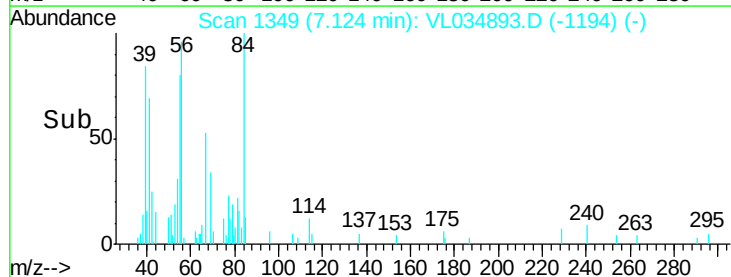
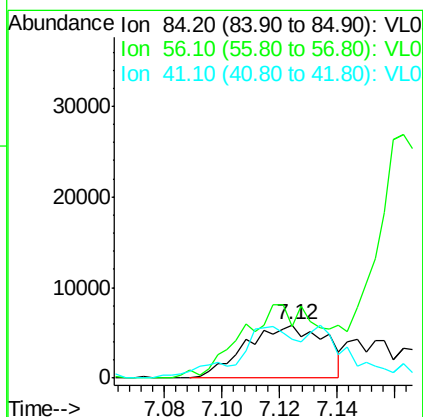
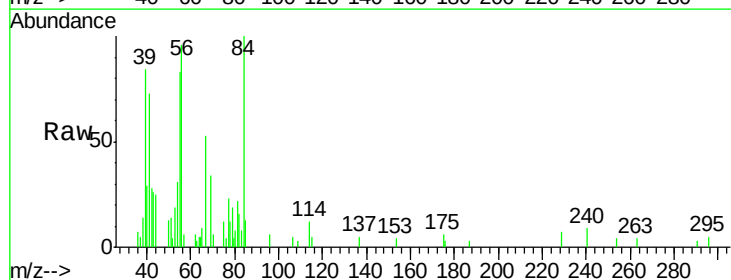
Manual Integrations
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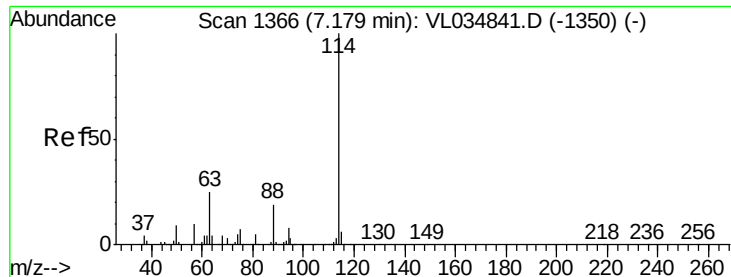
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#30
Cyclohexane
Concen: 0.150 ppbv m
RT: 7.12 min Scan# 1349
Delta R.T. -0.00 min
Lab File: VL034893.D
Acq: 16 Mar 2020 16:45

Tgt Ion	Ratio	Lower	Upper
84	100		
56	131.6	110.5	165.7
41	0.0	68.2	102.4#





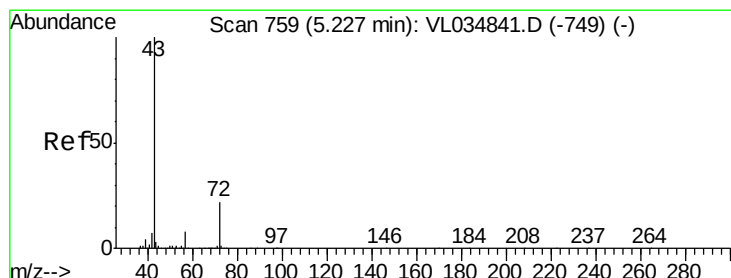
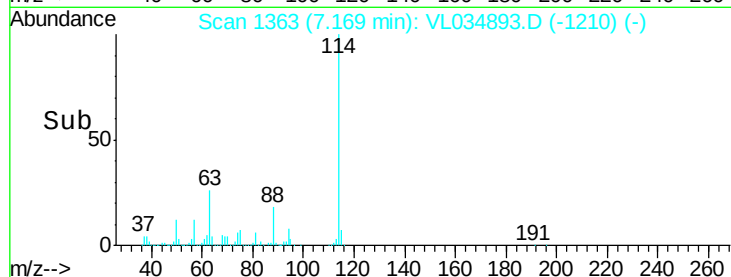
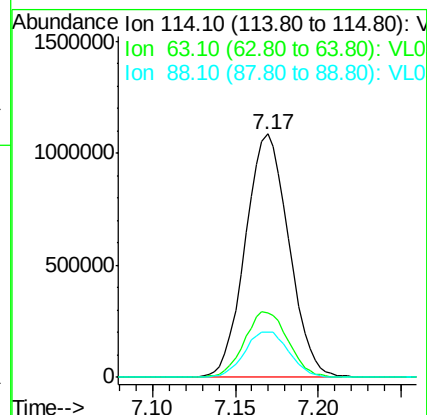
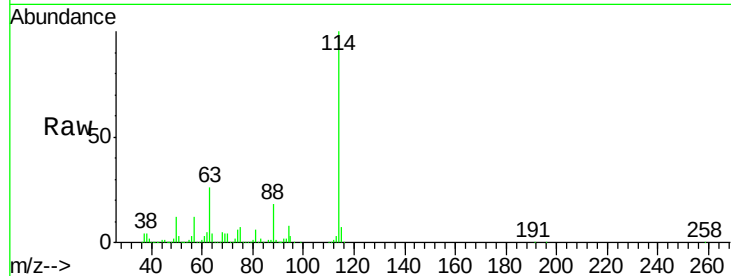
#33
 1,4-Difluorobenzene
 Concen: 10.000 ppbv
 RT: 7.17 min Scan# 1363
 Delta R.T. -0.01 min
 Lab File: VL034893.D
 Acq: 16 Mar 2020 16:45

Instrument :
 MSVOA_L
 ClientSampleId :
 IA-01

Tot Ion	Ratio	Lower	Upper
114	100		
63	27.4	20.6	31.0
88	19.3	15.0	22.6

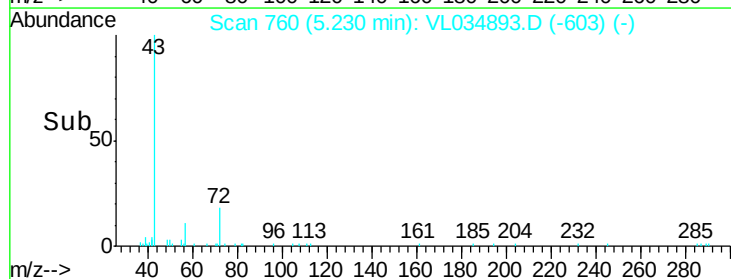
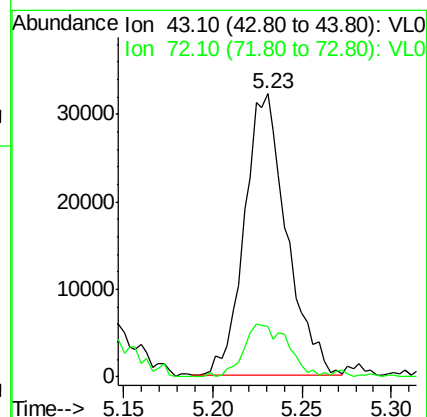
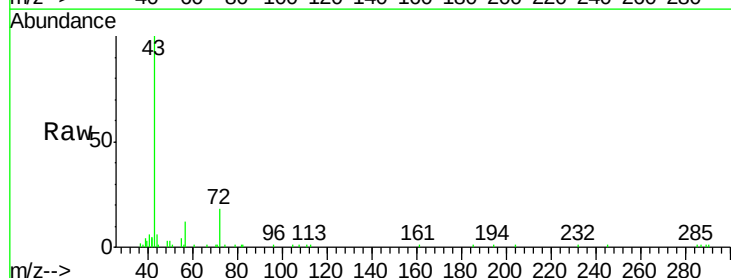
Manual Integrations
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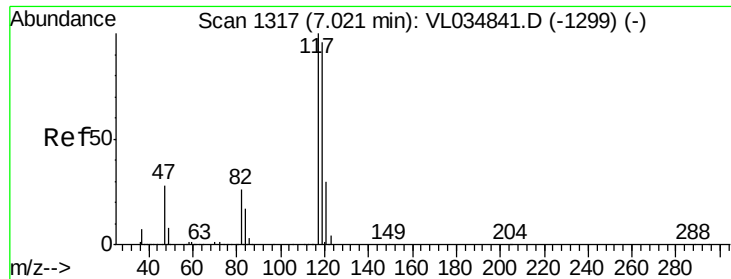
MMDadoda
 3/17/2020 12:15:56 PM



#34
 2-Butanone
 Concen: 0.402 ppbv
 RT: 5.23 min Scan# 760
 Delta R.T. 0.00 min
 Lab File: VL034893.D
 Acq: 16 Mar 2020 16:45

Tgt Ion	Ratio	Lower	Upper
43	100		
72	20.9	17.6	26.4





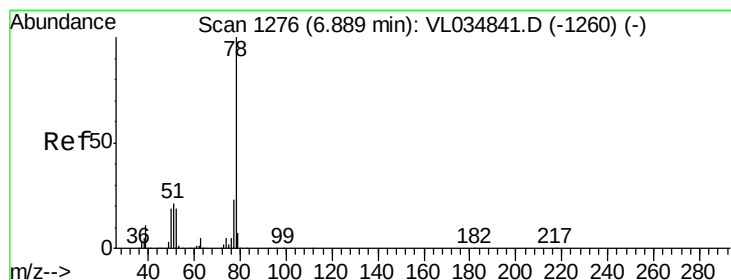
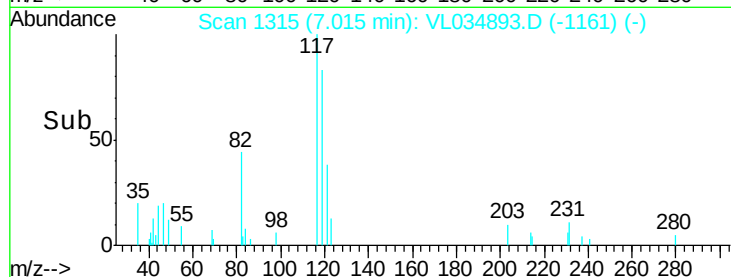
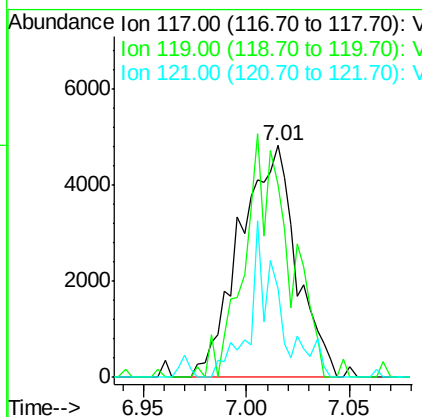
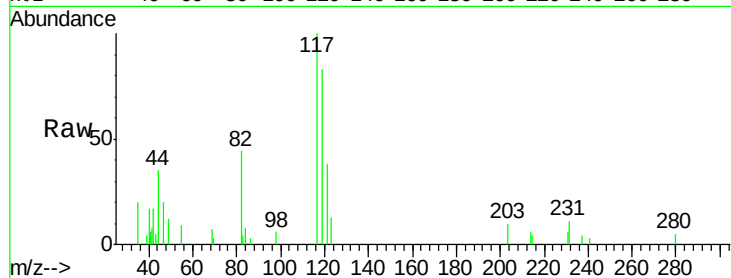
#35
Carbon Tetrachloride
Concen: 0.074 ppbv m
RT: 7.01 min Scan# 1315
Delta R.T. -0.01 min
Lab File: VL034893.D
Acq: 16 Mar 2020 16:45

Instrument :
MSVOA_L
ClientSampled :
IA-01

Tot Ion	Ratio	Lower	Upper
117	100		
119	83.2	77.0	115.4
121	38.0	24.0	36.0#

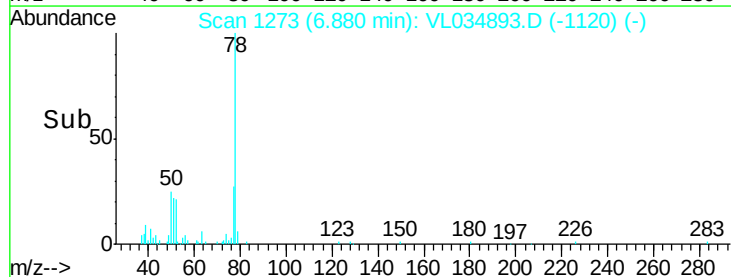
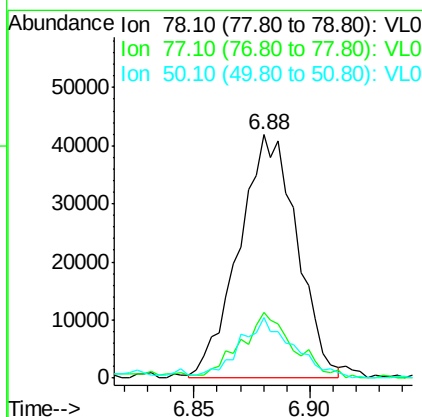
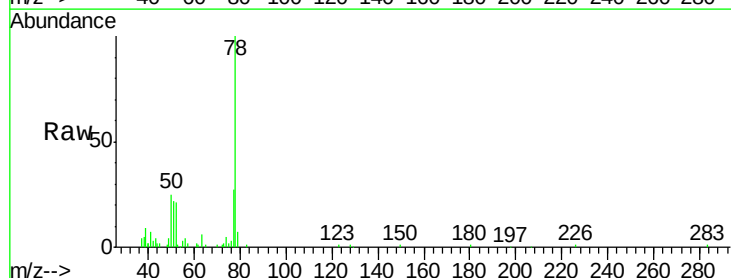
Manual Integrations
APPROVED

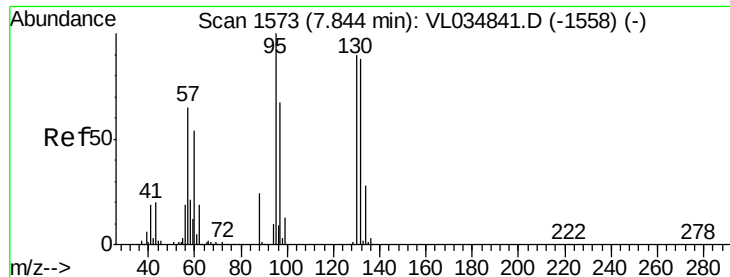
MMDadoda
3/17/2020 12:15:56 PM



#36
Benzene
Concen: 0.411 ppbv
RT: 6.88 min Scan# 1273
Delta R.T. -0.01 min
Lab File: VL034893.D
Acq: 16 Mar 2020 16:45

Tgt Ion	Ratio	Lower	Upper
78	100		
77	25.9	18.2	27.2
50	23.8	15.2	22.8#





#38

Trichloroethene

Concen: 0.106 ppbv m

RT: 7.83 min Scan# 1569

Delta R.T. -0.01 min

Lab File: VL034893.D

Acq: 16 Mar 2020 16:45

Instrument :

MSVOA_L

ClientSampled :

IA-01

Tot Ion:130 Resp: 7106

Ion Ratio Lower Upper

130 100

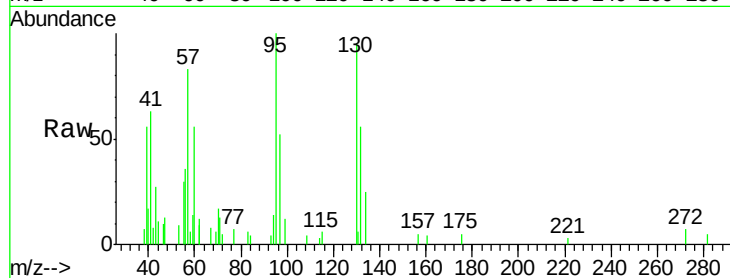
95 105.1 88.5 132.7

132 59.1 78.0 117.0#

97 54.6 59.3 88.9#

Manual Integrations
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MMDadoda
3/17/2020 12:15:56 PM

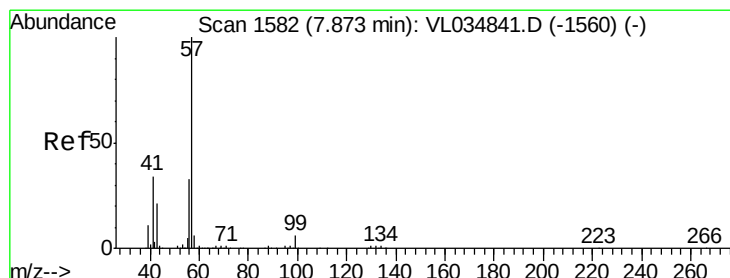
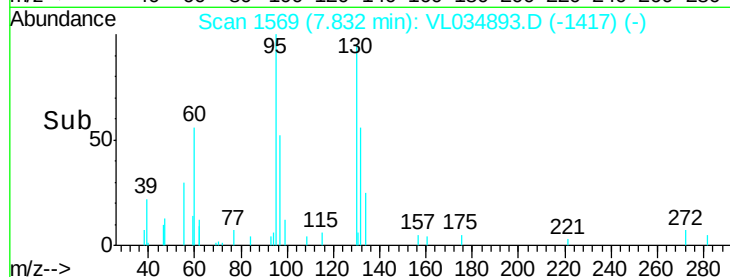
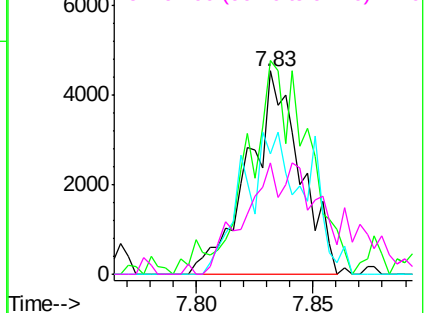


Abundance Ion 130.00 (129.70 to 130.70): V

Ion 95.00 (94.70 to 95.70): VL0

Ion 132.00 (131.70 to 132.70): V

Ion 97.00 (96.70 to 97.70): VL0



#44

2,2,4-Trimethylpentane

Concen: 0.377 ppbv

RT: 7.86 min Scan# 1579

Delta R.T. -0.01 min

Lab File: VL034893.D

Acq: 16 Mar 2020 16:45

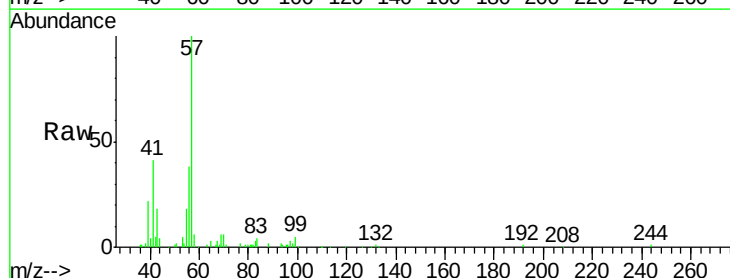
Tgt Ion: 57 Resp: 112515

Ion Ratio Lower Upper

57 100

41 45.1 26.2 39.4#

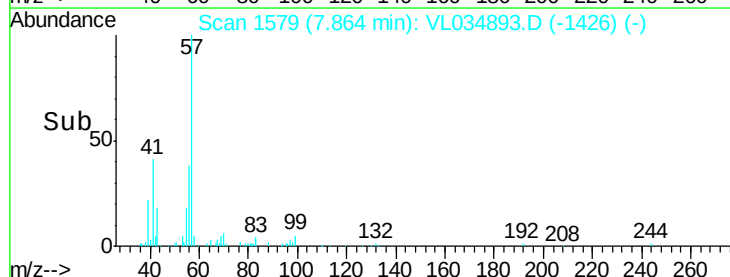
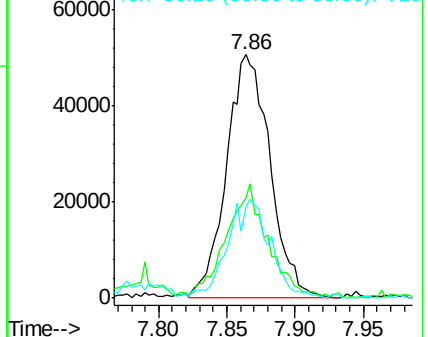
56 39.6 25.0 37.4#

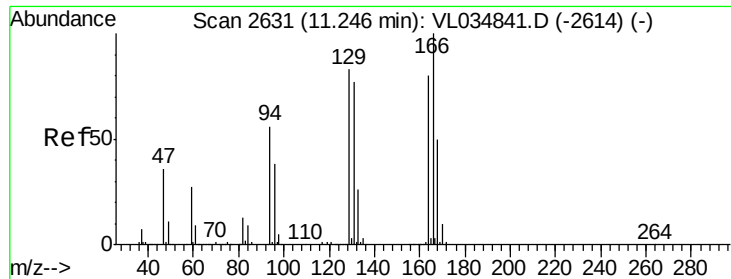


Abundance Ion 57.10 (56.80 to 57.80): VL0

Ion 41.10 (40.80 to 41.80): VL0

Ion 56.10 (55.80 to 56.80): VL0





#52

Tetrachloroethene

Concen: 0.103 ppbv m

RT: 11.23 min Scan# 2625

Delta R.T. -0.02 min

Lab File: VL034893.D

Acq: 16 Mar 2020 16:45

Instrument :

MSVOA_L

ClientSampleId :

IA-01

Tot Ion:164 Resp: 7223

Ion Ratio Lower Upper

164 100

166 97.6 100.0 150.0#

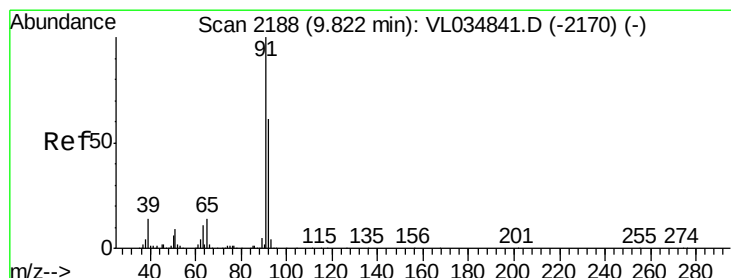
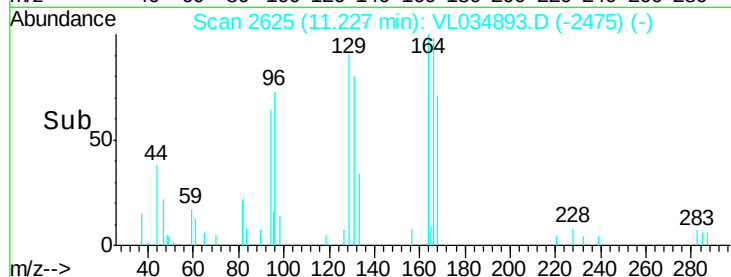
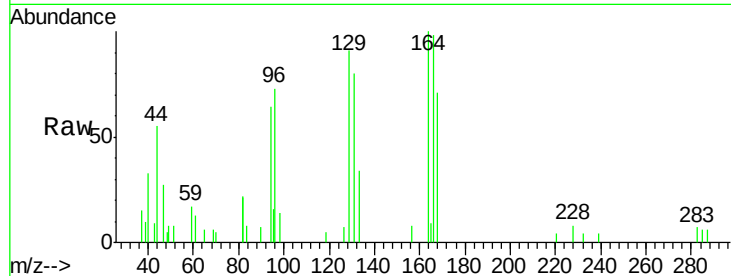
129 91.4 83.1 124.7

131 80.1 77.2 115.8

Manual Integrations
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#53

Toluene

Concen: 3.752 ppbv

RT: 9.81 min Scan# 2185

Delta R.T. -0.01 min

Lab File: VL034893.D

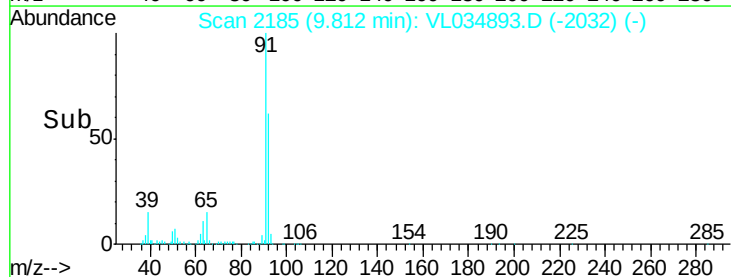
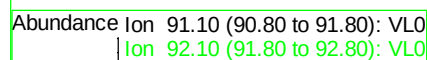
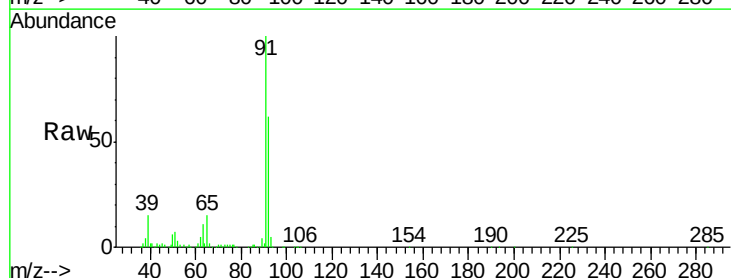
Acq: 16 Mar 2020 16:45

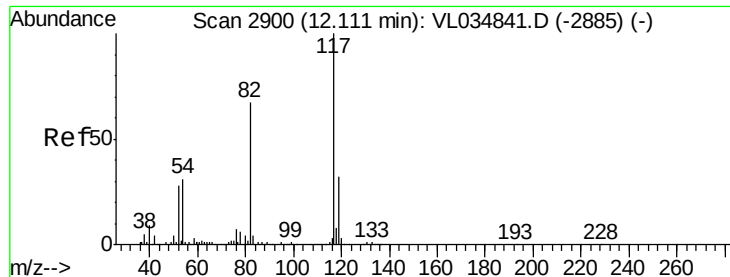
Tgt Ion: 91 Resp: 766118

Ion Ratio Lower Upper

91 100

92 59.1 48.6 72.8





#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.10 min Scan# 2897

Delta R.T. -0.01 min

Lab File: VL034893.D

Acq: 16 Mar 2020 16:45

Instrument :

MSVOA_L

ClientSampled :

IA-01

Tot Ion:117 Resp: 1944802

Ion Ratio Lower Upper

117 100

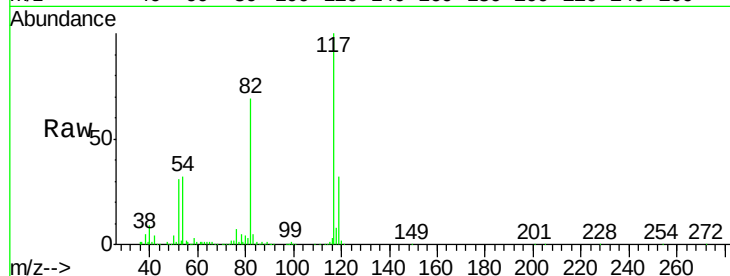
82 68.9 51.1 76.7

119 32.5 27.3 40.9

Manual Integrations
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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

12.10

1000000

800000

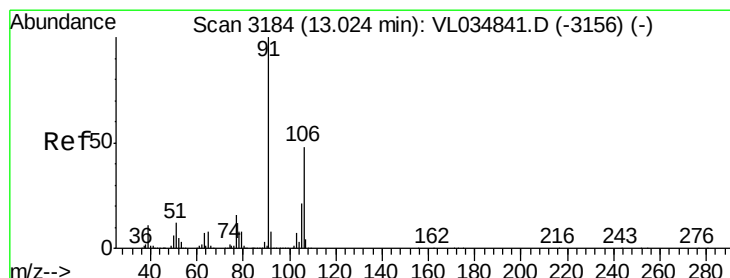
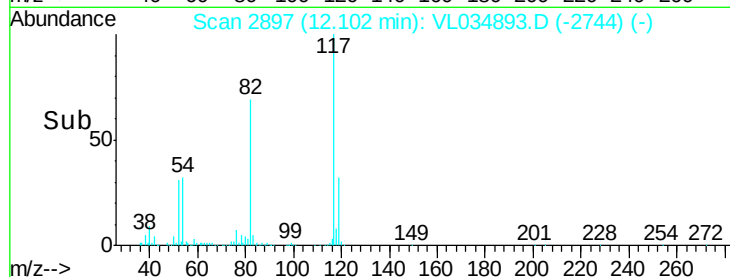
600000

400000

200000

0

Time-->



#59

m/p-Xylene

Concen: 0.186 ppbv m

RT: 12.98 min Scan# 3171

Delta R.T. -0.04 min

Lab File: VL034893.D

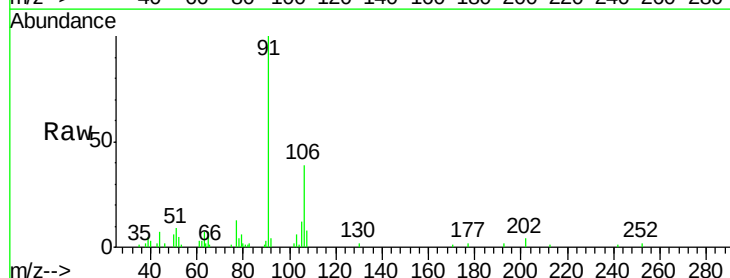
Acq: 16 Mar 2020 16:45

Tgt Ion: 91 Resp: 41080

Ion Ratio Lower Upper

91 100

106 0.0 37.1 55.7#



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 106.10 (105.80 to 106.80): V

20000

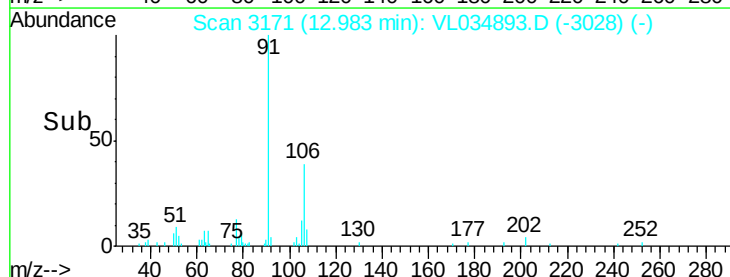
15000

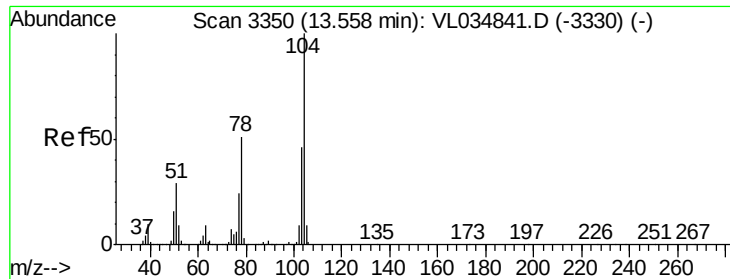
10000

5000

0

Time-->





#61

Stvrene

Concen: 0.104 ppbv m

RT: 13.54 min Scan# 3343

Delta R.T. -0.02 min

Lab File: VL034893.D

Acq: 16 Mar 2020 16:45

Instrument :

MSVOA_L

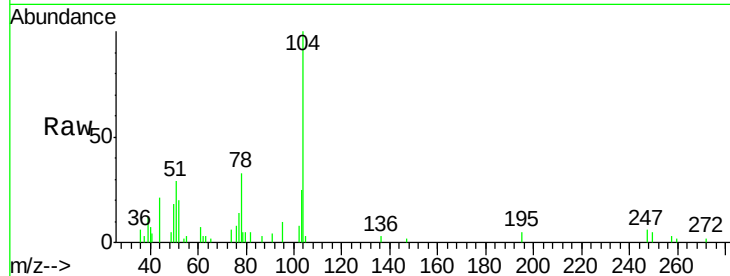
ClientSampled :

IA-01

Tot Ion:	104	Resp:	15736
Ion Ratio	Lower	Upper	
104	100		
78	58.5	41.8	62.6
103	52.9	37.8	56.6

Manual Integrations
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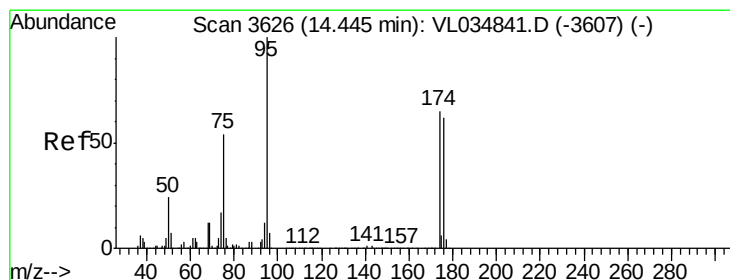
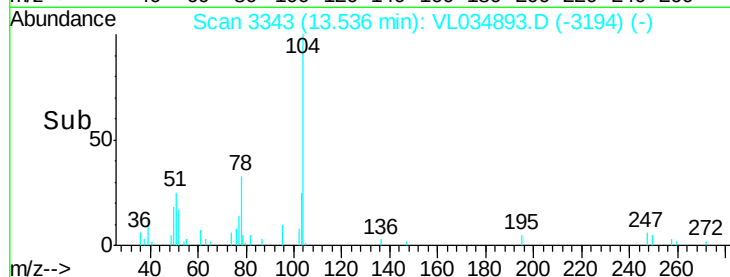
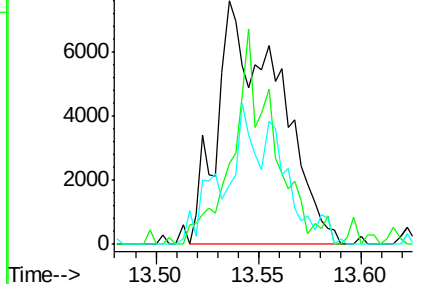
MMDadoda
3/17/2020 12:15:56 PM



Abundance Ion 104.10 (103.80 to 104.80): V

Ion 78.10 (77.80 to 78.80): VL0

Ion 103.10 (102.80 to 103.80): V



#68

1-Bromo-4-Fluorobenzene

Concen: 10.480 ppbv

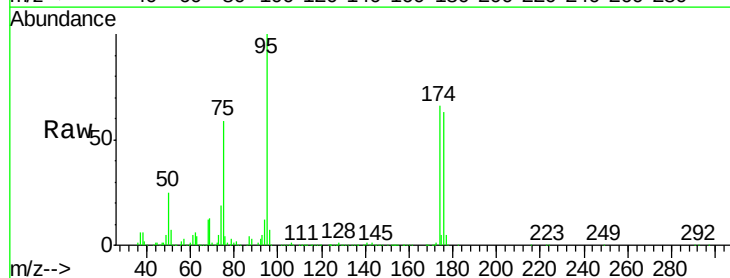
RT: 14.44 min Scan# 3623

Delta R.T. -0.01 min

Lab File: VL034893.D

Acq: 16 Mar 2020 16:45

Tgt Ion:	95	Resp:	1589571
Ion Ratio	Lower	Upper	
95	100		
174	64.1	55.2	82.8
175	4.6	4.3	6.5



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

