

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL020420\
 Data File : VL034580.D
 Acq On : 4 Feb 2020 15:15
 Operator : SY/AP
 Sample : L1356-01
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 IA-1

Manual Integrations
 APPROVED

Quant Time: Feb 05 06:17:07 2020

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL013020AIR.M

Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Thu Jan 3

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	954464	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.19	114	1932903	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.12	117	1859926	10.00	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.46	95	1634239	10.40	ppbv	0.00	MMDadoda
Spiked Amount	10.000	Range	65 - 135	Recovery	=	104.00%	

Target Compounds

						Ovalue
2) Dichlorodifluoromethane	3.02	85	104139	0.495	ppbv	# 82
3) Chlorodifluoromethane	2.95	51	46499m	0.403	ppbv	2/5/2020 2:50:12 PM
4) Chloromethane	3.11	50	31908m	0.452	ppbv	
9) Propene	2.99	41	103579m	2.307	ppbv	
11) Trichlorofluoromethane	3.93	101	61904	0.324	ppbv	# 81
13) Ethanol	3.59	45	3477253	289.095	ppbv	97
15) Acetone	3.83	43	631951	4.505	ppbv	97
19) Isopropyl Alcohol	3.97	45	196951m	2.406	ppbv	
20) Methylene Chloride	4.33	84	324832	6.081	ppbv	97
26) Hexane	5.69	57	314267	3.304	ppbv	# 55
29) Chloroform	5.75	83	68611	0.408	ppbv	93
34) 2-Butanone	5.25	43	64093m	0.457	ppbv	
35) Carbon Tetrachloride	7.03	117	15101m	0.082	ppbv	
36) Benzene	6.91	78	67767m	0.394	ppbv	
44) 2,2,4-Trimethylpentane	7.89	57	36337m	0.117	ppbv	
52) Tetrachloroethene	11.27	164	4319m	0.063	ppbv	
53) Toluene	9.84	91	246978	1.308	ppbv	98
59) m/p-Xylene	13.01	91	49269m	0.224	ppbv	

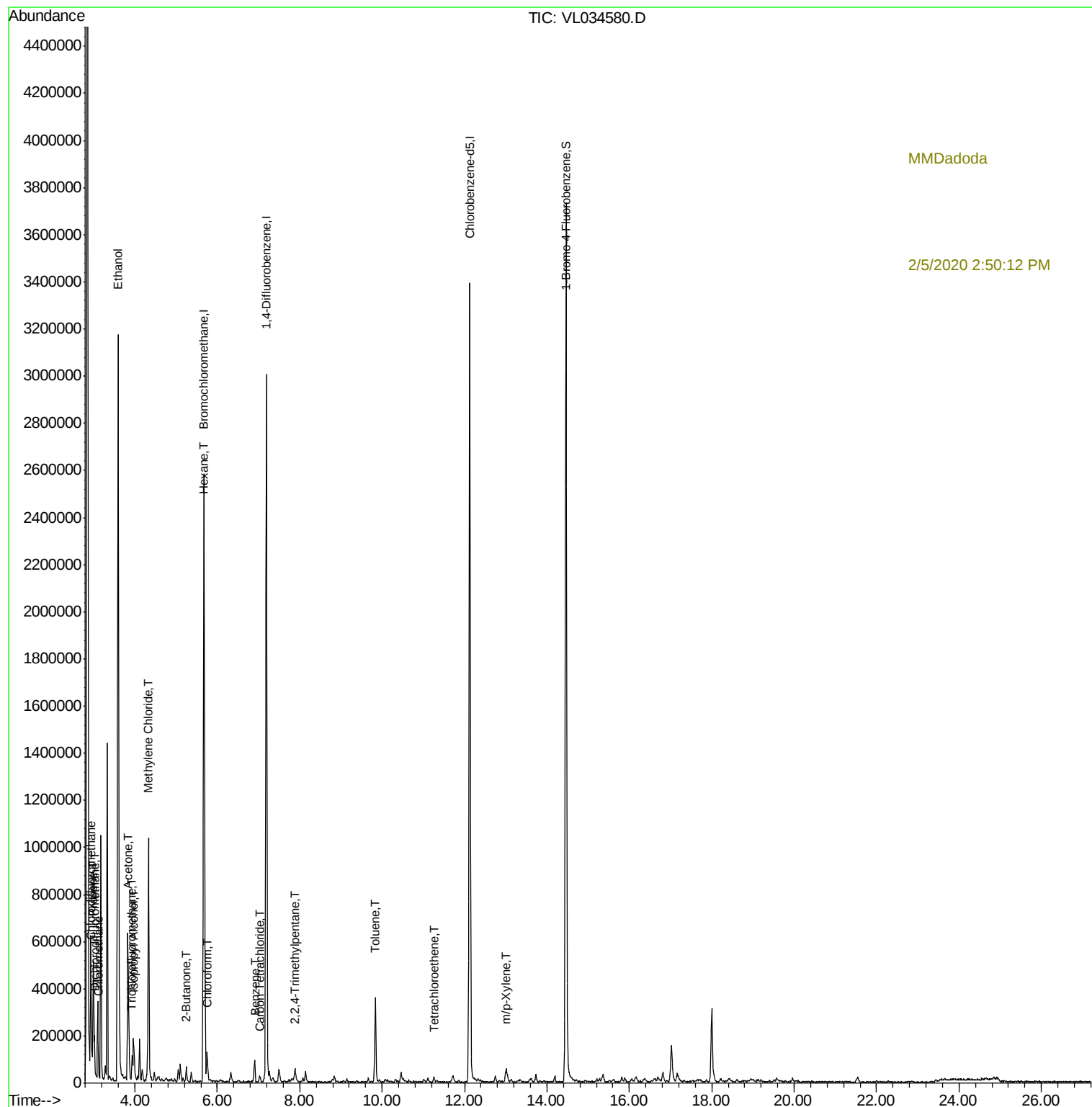
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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IA-1

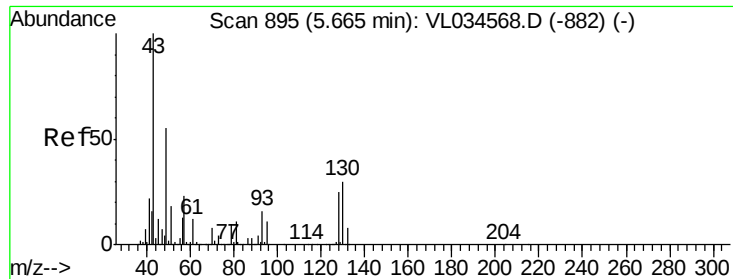
Manual Integrations
APPROVED

Quant Time: Feb 05 06:17:07 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
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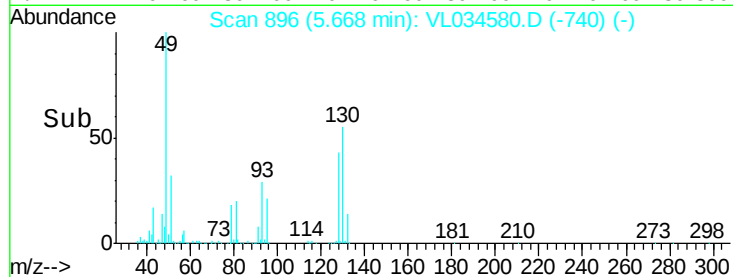
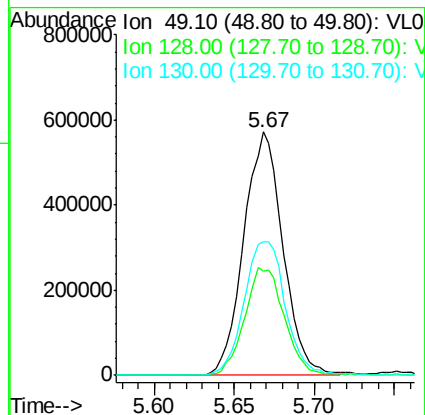
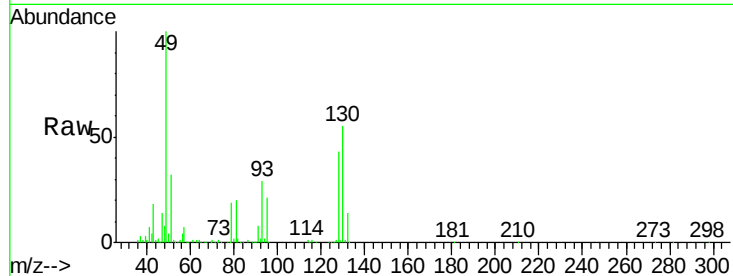
#1

Bromochloromethane
 Concen: 10.000 ppbv
 RT: 5.67 min Scan# 896
 Delta R.T. 0.00 min
 Lab File: VL034580.D
 Acq: 4 Feb 2020 15:15

Instrument :
 MSVOA_L
 ClientSampled :
 IA-1

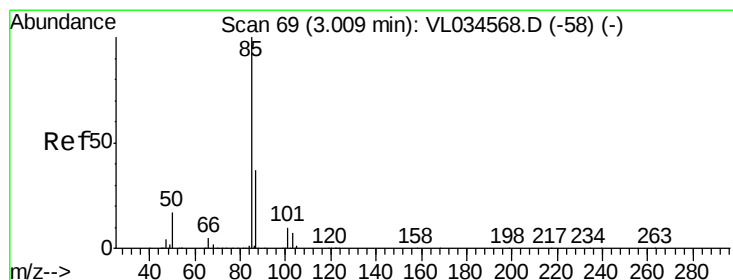
Tot Ion	49	Resp	954464
Ion	Ratio	Lower	Upper
49	100		
128	45.5	22.7	68.1
130	58.6	28.6	85.8

Manual Integrations
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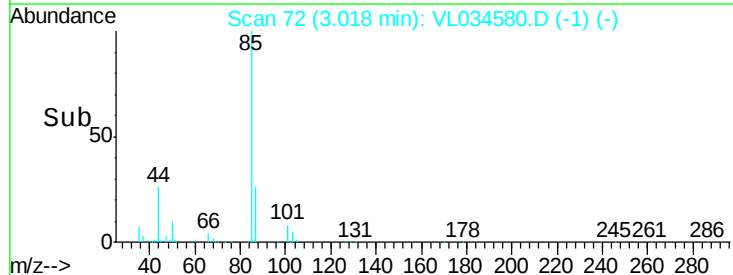
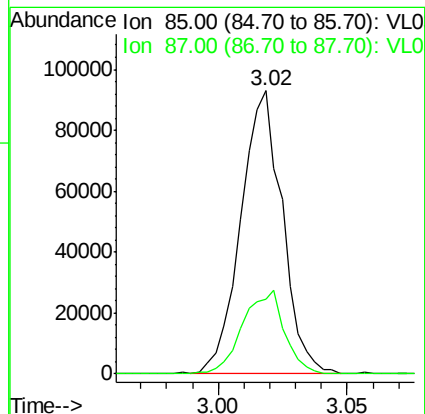
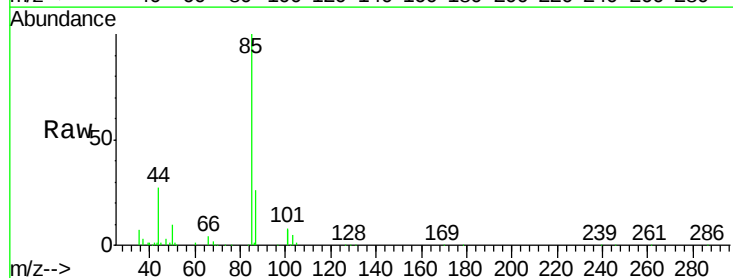
2/5/2020 2:50:12 PM

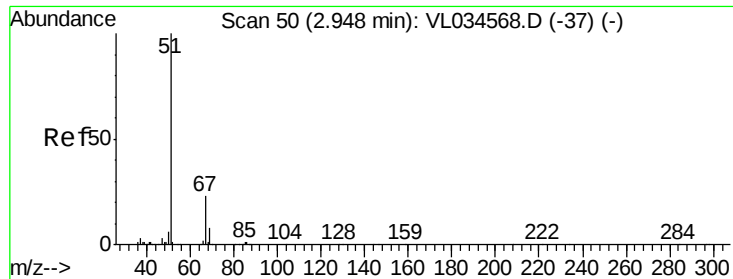


#2

Dichlorodifluoromethane
 Concen: 0.495 ppbv
 RT: 3.02 min Scan# 72
 Delta R.T. 0.01 min
 Lab File: VL034580.D
 Acq: 4 Feb 2020 15:15

Tgt Ion	85	Resp	104139
Ion	Ratio	Lower	Upper
85	100		
87	26.2	29.5	44.3





#3

Chlorodifluoromethane

Concen: 0.403 ppbv m

RT: 2.95 min Scan# 50

Delta R.T. -0.00 min

Lab File: VL034580.D

Acq: 4 Feb 2020 15:15

Instrument :

MSVOA_L

ClientSampleId :

IA-1

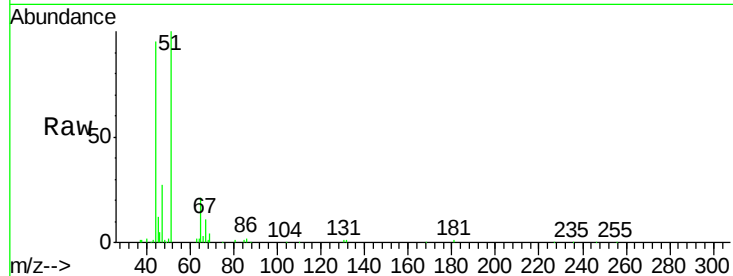
Tot Ion: 51 Resp: 46499

Ion Ratio Lower Upper

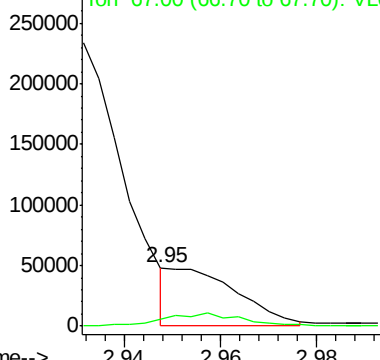
51 100

67 25.9 17.8 26.8

Manual Integrations
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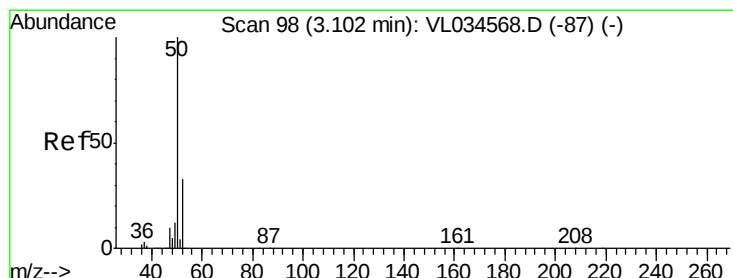
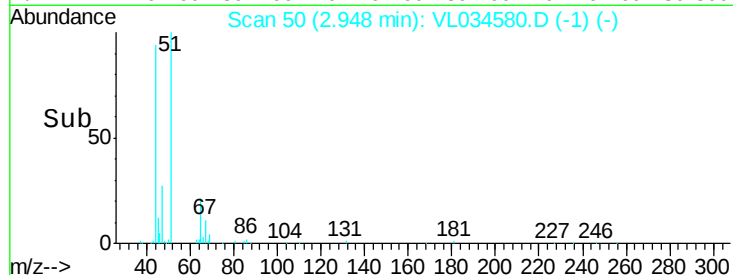


Abundance Ion 51.00 (50.70 to 51.70): VL0
Ion 67.00 (66.70 to 67.70): VL0



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#4

Chloromethane

Concen: 0.452 ppbv m

RT: 3.11 min Scan# 102

Delta R.T. 0.01 min

Lab File: VL034580.D

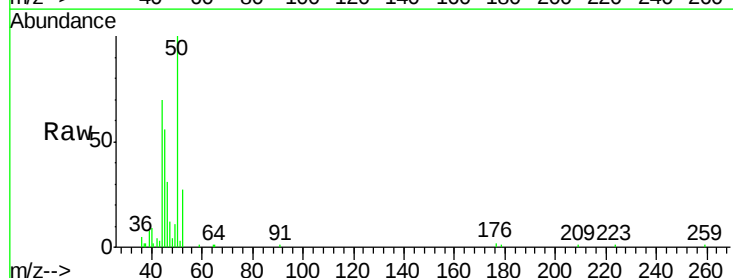
Acq: 4 Feb 2020 15:15

Tgt Ion: 50 Resp: 31908

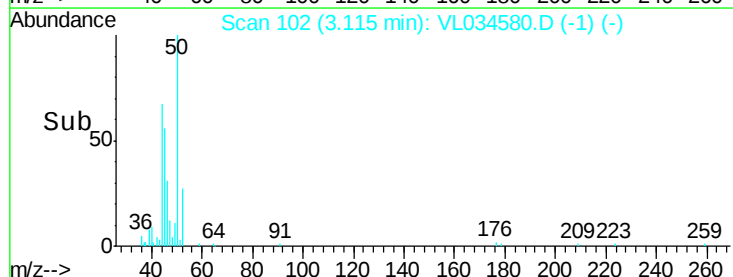
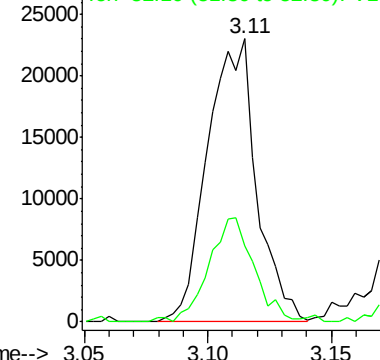
Ion Ratio Lower Upper

50 100

52 27.0 26.6 39.8



Abundance Ion 50.10 (49.80 to 50.80): VL0
Ion 52.10 (51.80 to 52.80): VL0



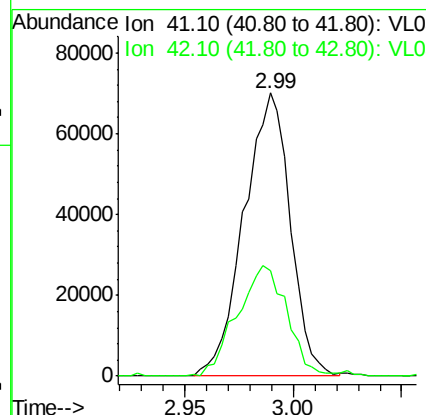
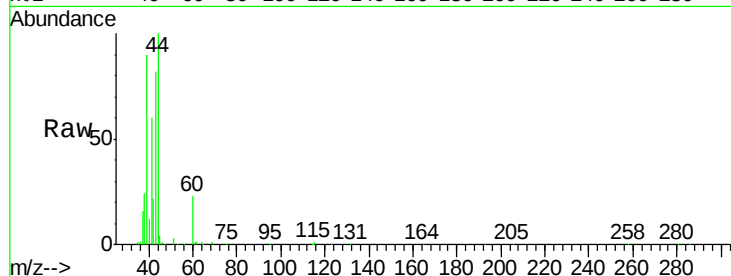


#9
 Propene
 Concen: 2.307 ppbv m
 RT: 2.99 min Scan# 63
 Delta R.T. 0.02 min
 Lab File: VL034580.D
 Acq: 4 Feb 2020 15:15

Instrument :
 MSVOA_L
 ClientSampleId :
 IA-1

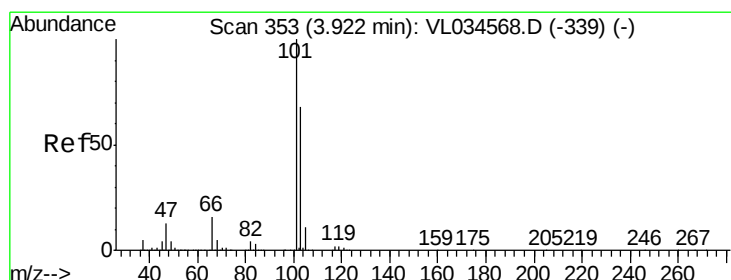
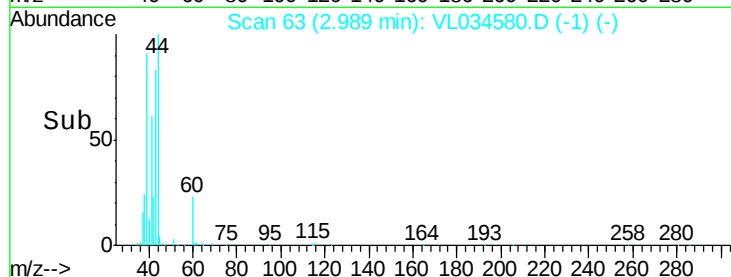
Tot Ion: 41 Resp: 103579
 Ion Ratio Lower Upper
 41 100
 42 166.4 57.0 85.4#

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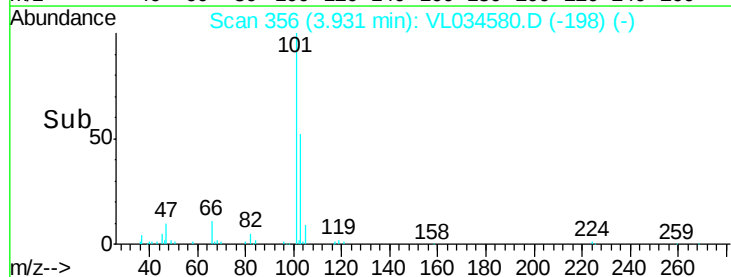
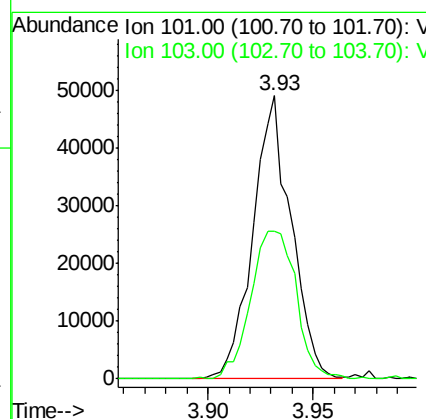
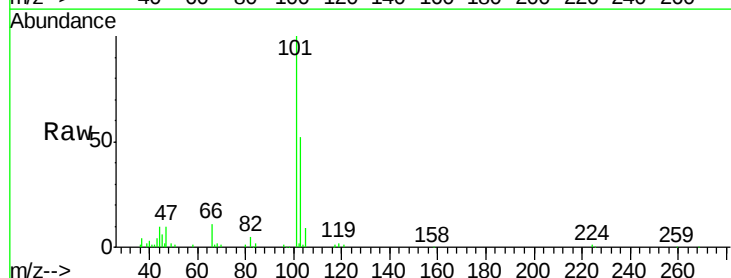
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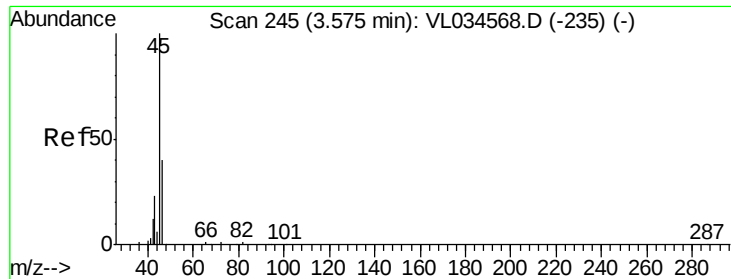
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#11
 Trichlorofluoromethane
 Concen: 0.324 ppbv
 RT: 3.93 min Scan# 356
 Delta R.T. 0.01 min
 Lab File: VL034580.D
 Acq: 4 Feb 2020 15:15

Tgt Ion: 101 Resp: 61904
 Ion Ratio Lower Upper
 101 100
 103 52.4 54.4 81.6#



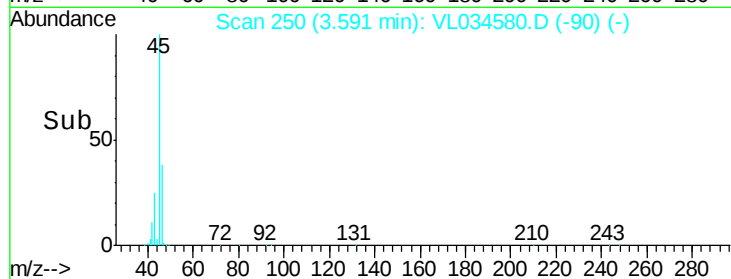
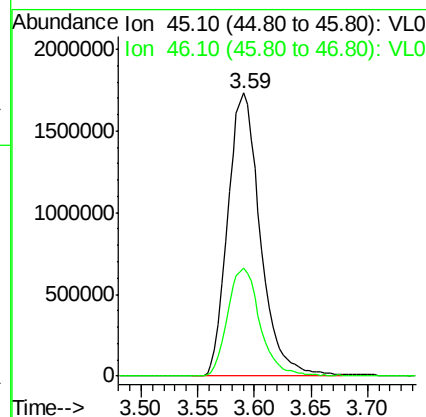
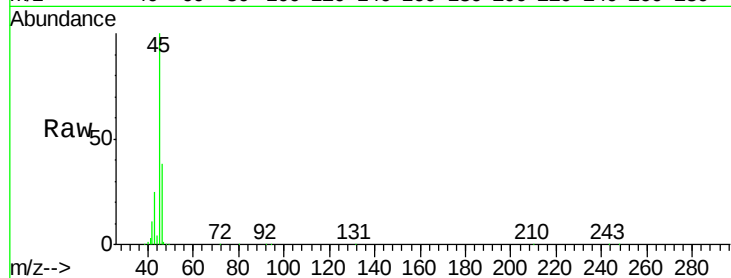


#13
Ethanol
Concen: 289.095 ppbv
RT: 3.59 min Scan# 250
Delta R.T. 0.02 min
Lab File: VL034580.D
Acq: 4 Feb 2020 15:15

Instrument :
MSVOA_L
ClientSampled :
IA-1

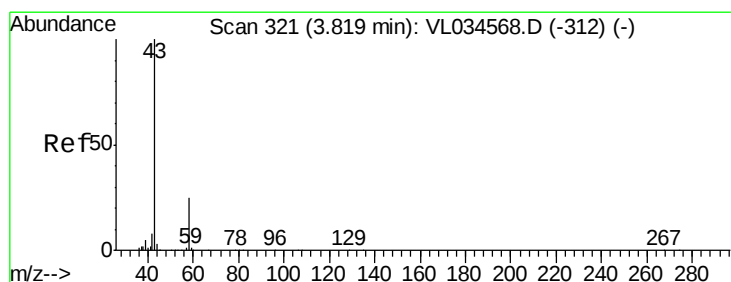
Tot Ion: 45 Resp: 3477253
Ion Ratio Lower Upper
45 100
46 38.5 14.8 59.2

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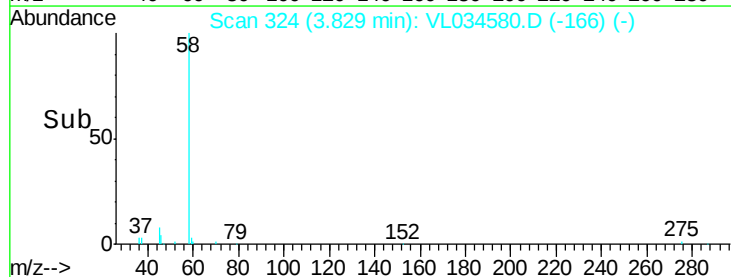
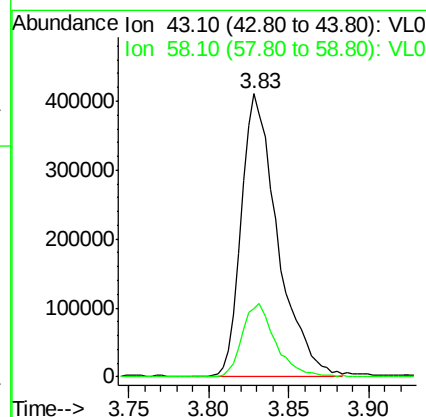
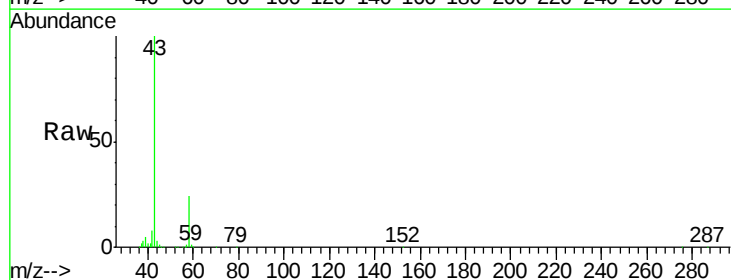
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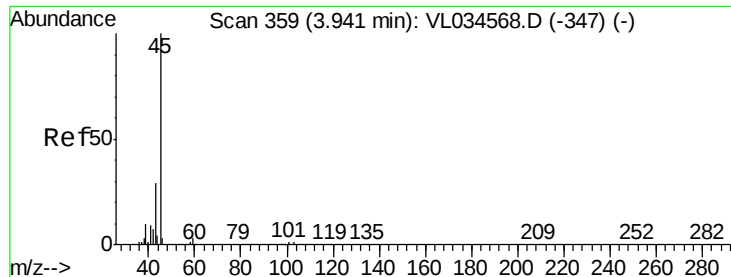
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#15
Acetone
Concen: 4.505 ppbv
RT: 3.83 min Scan# 324
Delta R.T. 0.01 min
Lab File: VL034580.D
Acq: 4 Feb 2020 15:15

Tgt Ion: 43 Resp: 631951
Ion Ratio Lower Upper
43 100
58 24.0 20.3 30.5





#19

Isopropyl Alcohol

Concen: 2.406 ppbv

RT: 3.97 min Scan# 367

Delta R.T. 0.03 min

Lab File: VL034580.D

Acq: 4 Feb 2020 15:15

Instrument :

MSVOA_L

ClientSampled :

IA-1

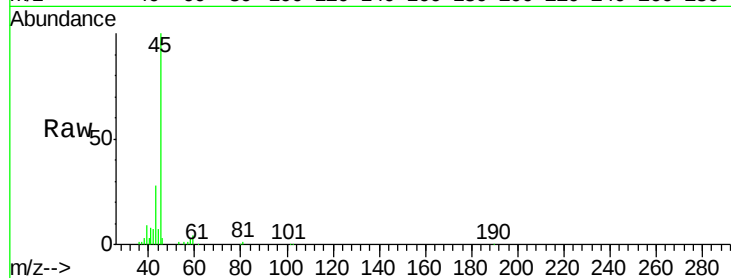
Tot Ion: 45 Resp: 196951

Ion Ratio Lower Upper

45 100

58 3.3 1.7 2.5#

Manual Integrations
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Abundance Ion 45.10 (44.80 to 45.80): VL0

Ion 58.10 (57.80 to 58.80): VL0

3.97

120000

100000

80000

60000

40000

20000

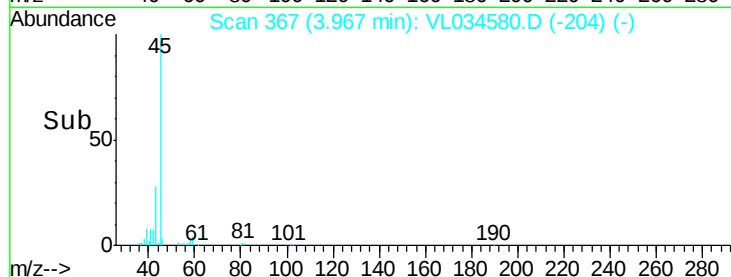
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Time-->

3.90

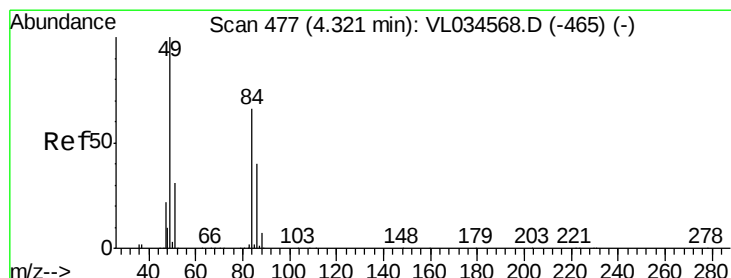
3.95

4.00



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#20

Methylene Chloride

Concen: 6.081 ppbv

RT: 4.33 min Scan# 479

Delta R.T. 0.01 min

Lab File: VL034580.D

Acq: 4 Feb 2020 15:15

Tgt Ion: 84 Resp: 324832

Ion Ratio Lower Upper

84 100

49 158.4 122.4 183.6

51 45.1 38.6 57.8

86 61.2 49.0 73.6

Abundance Ion 84.00 (83.70 to 84.70): VL0

Ion 49.10 (48.80 to 49.80): VL0

Ion 51.10 (50.80 to 51.80): VL0

Ion 86.00 (85.70 to 86.70): VL0

500000

400000

300000

200000

100000

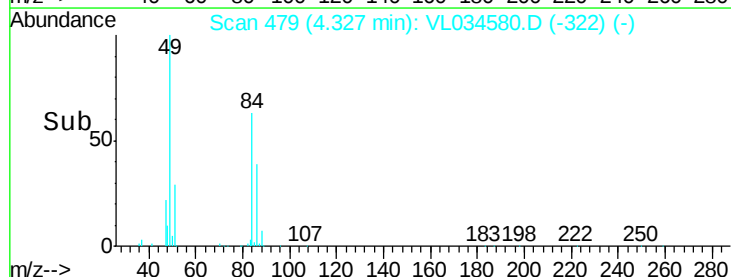
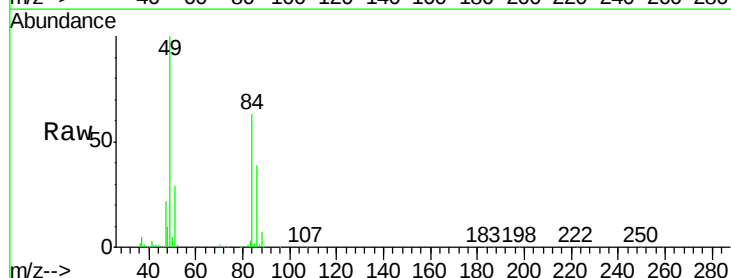
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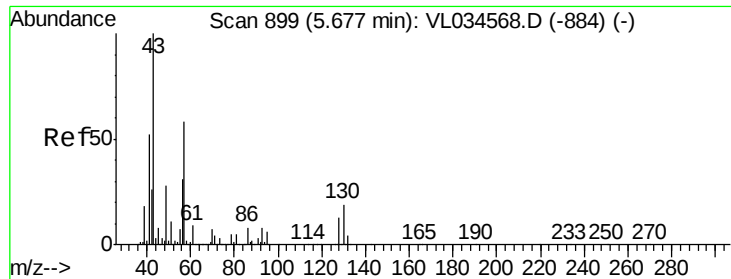
Time-->

4.30

4.35

4.40



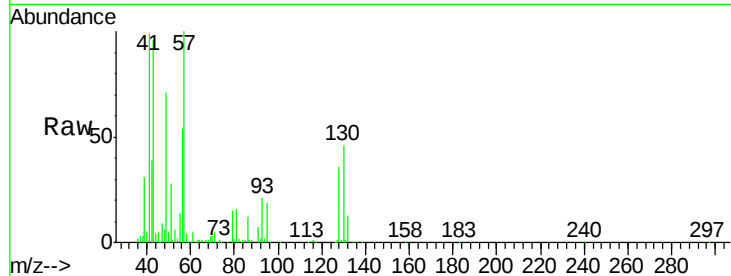


#26
Hexane
Concen: 3.304 ppbv
RT: 5.69 min Scan# 902
Delta R.T. 0.01 min
Lab File: VL034580.D
Acq: 4 Feb 2020 15:15

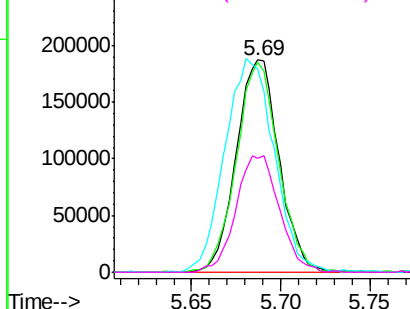
Instrument :
MSVOA_L
ClientSampled :
IA-1

Tot Ion	57	Resp	314267
Ion Ratio	Lower	Upper	
57	100		
41	98.1	76.2	114.2
43	116.0	189.9	284.9#
56	55.7	43.6	65.4

Manual Integrations
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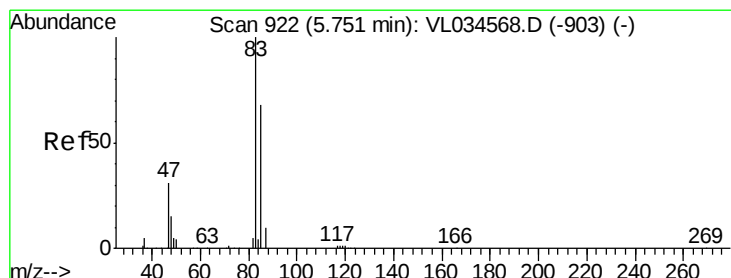
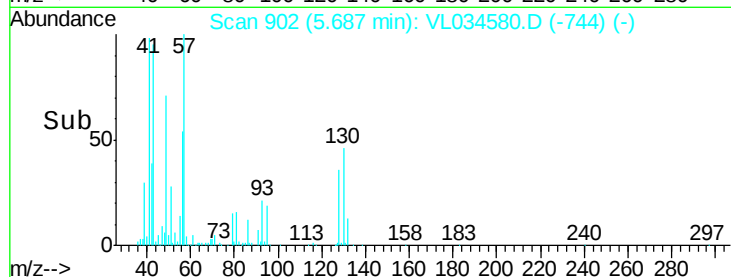


Abundance Ion 57.10 (56.80 to 57.80): VL0
Ion 41.10 (40.80 to 41.80): VL0
Ion 43.10 (42.80 to 43.80): VL0
Ion 56.10 (55.80 to 56.80): VL0



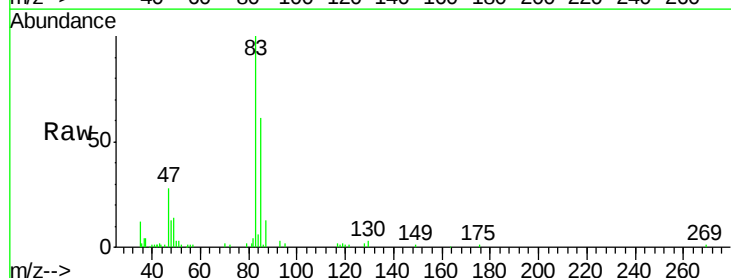
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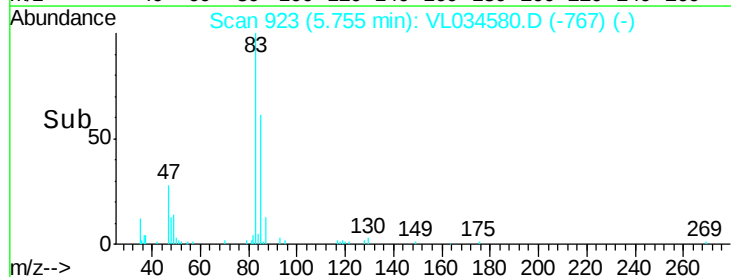
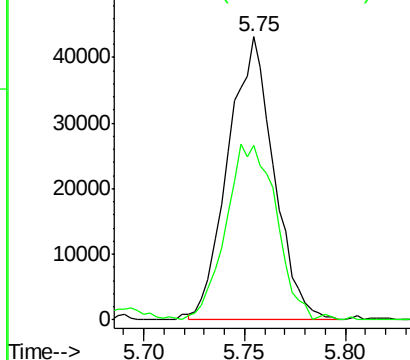


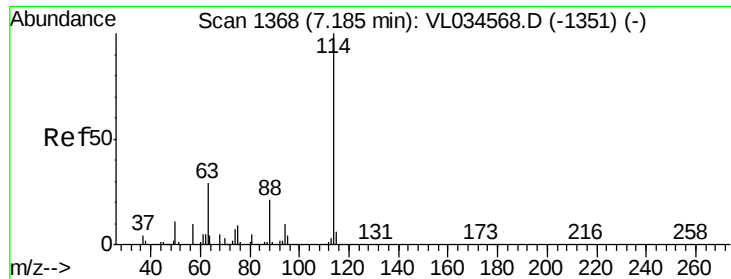
#29
Chloroform
Concen: 0.408 ppbv
RT: 5.75 min Scan# 923
Delta R.T. 0.00 min
Lab File: VL034580.D
Acq: 4 Feb 2020 15:15

Tgt Ion	83	Resp	68611
Ion Ratio	Lower	Upper	
83	100		
85	61.5	54.0	81.0



Abundance Ion 83.00 (82.70 to 83.70): VL0
Ion 85.00 (84.70 to 85.70): VL0



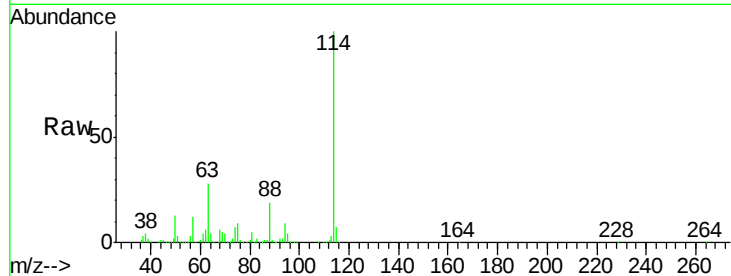


#33
 1,4-Difluorobenzene
 Concen: 10.000 ppbv
 RT: 7.19 min Scan# 1369
 Delta R.T. 0.00 min
 Lab File: VL034580.D
 Acq: 4 Feb 2020 15:15

Instrument :
 MSVOA_L
 ClientSampleId :
 IA-1

Tot Ion	Ratio	Lower	Upper
114	100		
63	28.6	24.1	36.1
88	19.4	15.9	23.9

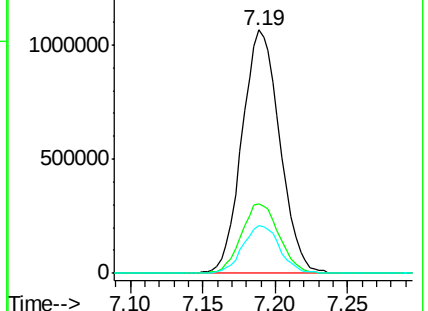
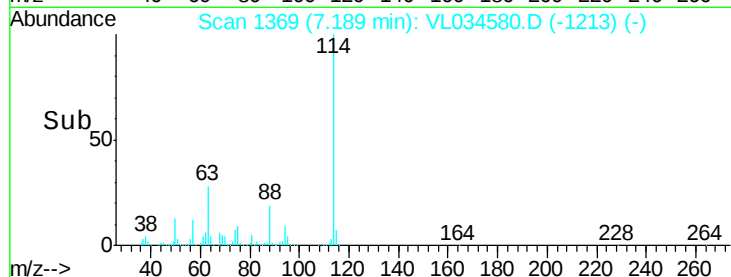
Manual Integrations
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Abundance Ion 114.10 (113.80 to 114.80): VL034580.D (-1213) (-)

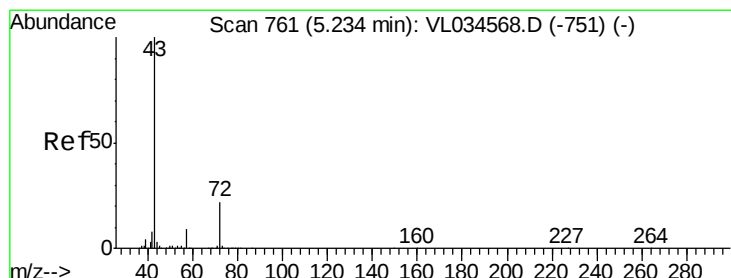
Ion 63.10 (62.80 to 63.80): VL034580.D (-1213) (-)

Ion 88.10 (87.80 to 88.80): VL034580.D (-1213) (-)



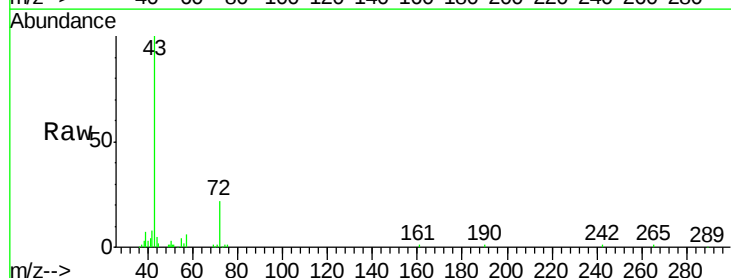
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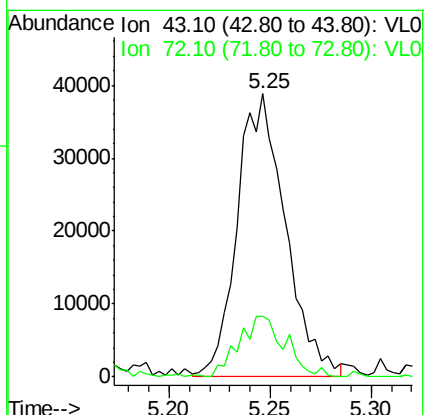
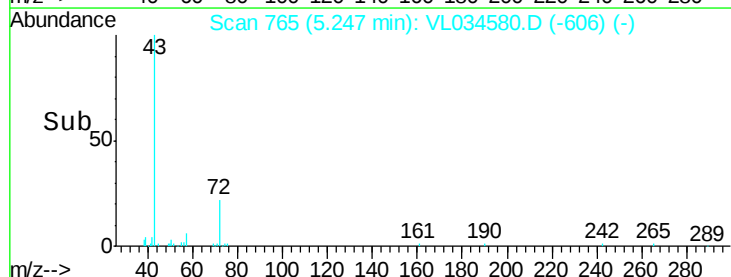
#34
 2-Butanone
 Concen: 0.457 ppbv m
 RT: 5.25 min Scan# 765
 Delta R.T. 0.01 min
 Lab File: VL034580.D
 Acq: 4 Feb 2020 15:15

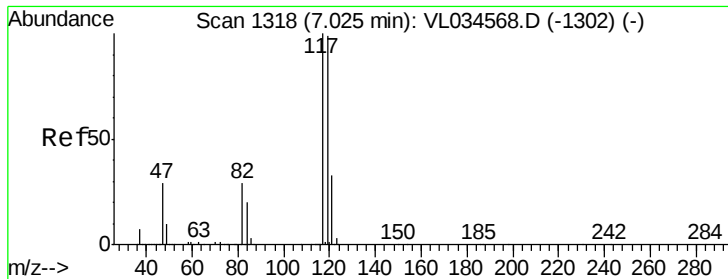
Tgt Ion	Ratio	Lower	Upper
43	100		
72	21.1	17.2	25.8



Abundance Ion 43.10 (42.80 to 43.80): VL034580.D (-606) (-)

Ion 72.10 (71.80 to 72.80): VL034580.D (-606) (-)



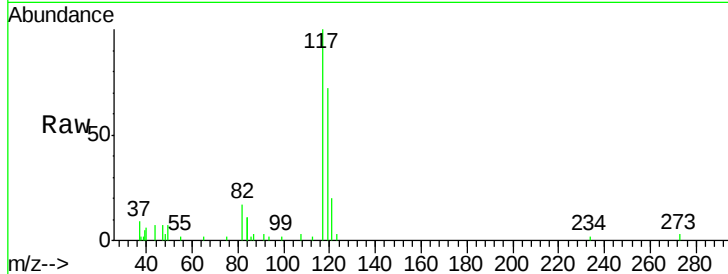


#35
Carbon Tetrachloride
Concen: 0.082 ppbv m
RT: 7.03 min Scan# 1320
Delta R.T. 0.01 min
Lab File: VL034580.D
Acq: 4 Feb 2020 15:15

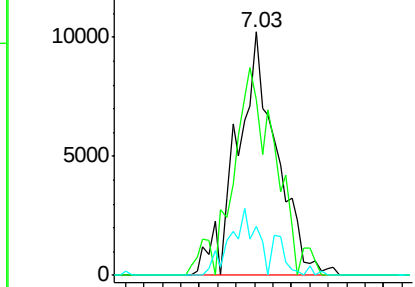
Instrument :
MSVOA_L
ClientSampled :
IA-1

Tot Ion	Ratio	Lower	Upper
117	100		
119	72.3	79.5	119.3#
121	20.0	26.2	39.2#

Manual Integrations
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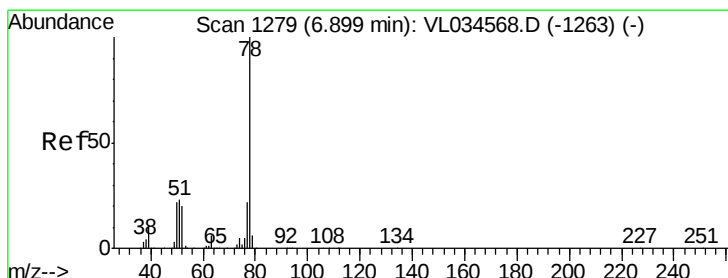
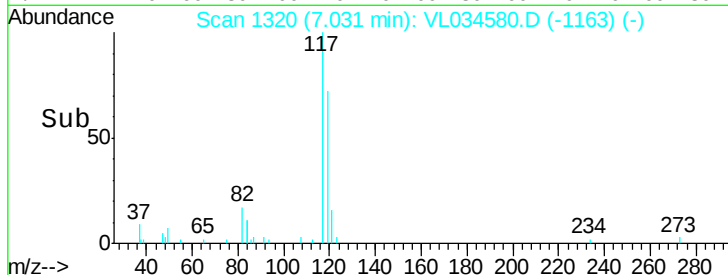


Abundance Ion 117.00 (116.70 to 117.70): V
Ion 119.00 (118.70 to 119.70): V
Ion 121.00 (120.70 to 121.70): V



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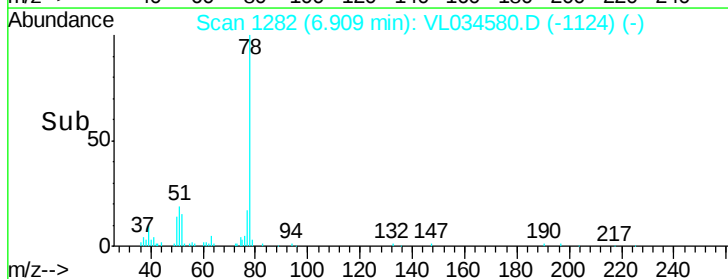
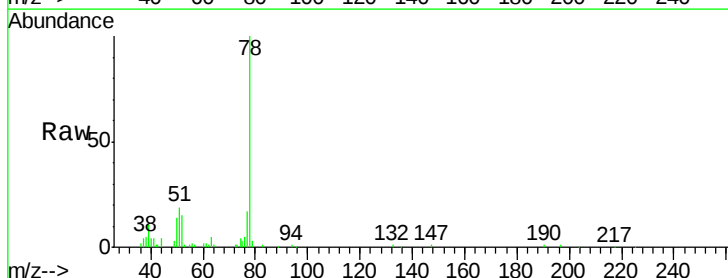
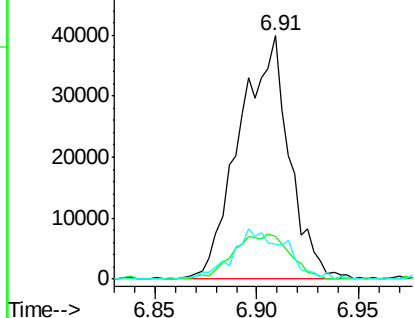
2/5/2020 2:50:12 PM

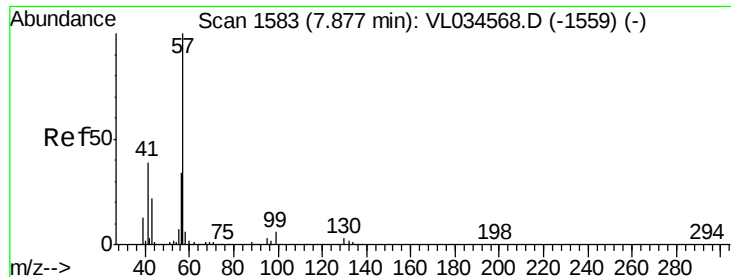


#36
Benzene
Concen: 0.394 ppbv m
RT: 6.91 min Scan# 1282
Delta R.T. 0.01 min
Lab File: VL034580.D
Acq: 4 Feb 2020 15:15

Tgt Ion	Ratio	Lower	Upper
78	100		
77	17.3	17.3	25.9
50	14.4	17.4	26.2#

Abundance Ion 78.10 (77.80 to 78.80): VL0
Ion 77.10 (76.80 to 77.80): VL0
Ion 50.10 (49.80 to 50.80): VL0



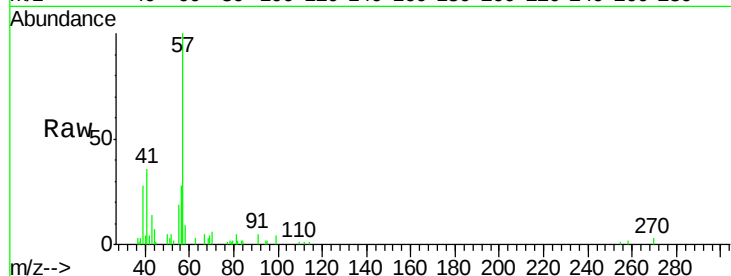


#44
2,2,4-Trimethylpentane
Concen: 0.117 ppbv m
RT: 7.89 min Scan# 1586
Delta R.T. 0.01 min
Lab File: VL034580.D
Acq: 4 Feb 2020 15:15

Instrument :
MSVOA_L
ClientSampled :
IA-1

Tot Ion	Ratio	Lower	Upper
57	100		
41	58.3	28.9	43.3#
56	46.4	25.5	38.3#

Manual Integrations
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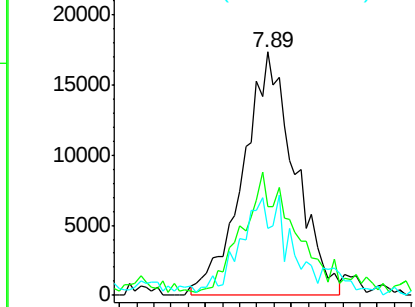


Abundance

Ion 57.10 (56.80 to 57.80): VL0

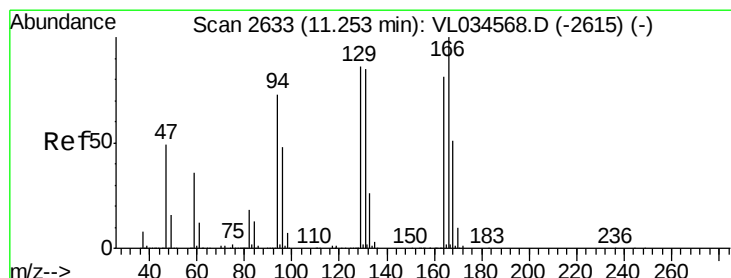
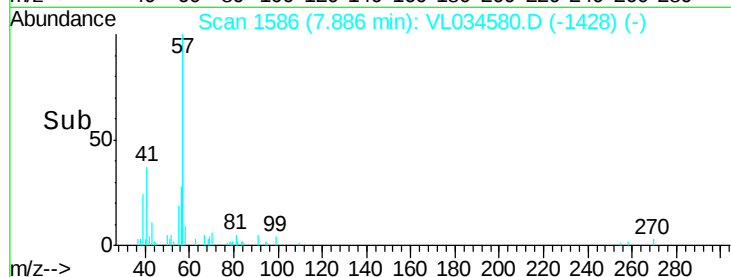
Ion 41.10 (40.80 to 41.80): VL0

Ion 56.10 (55.80 to 56.80): VL0



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#52
Tetrachloroethene
Concen: 0.063 ppbv m
RT: 11.27 min Scan# 2637
Delta R.T. 0.01 min
Lab File: VL034580.D
Acq: 4 Feb 2020 15:15

Tgt Ion	Ratio	Lower	Upper
164	100		
166	64.7	99.0	148.4#
129	66.7	85.3	127.9#
131	77.1	84.2	126.2#

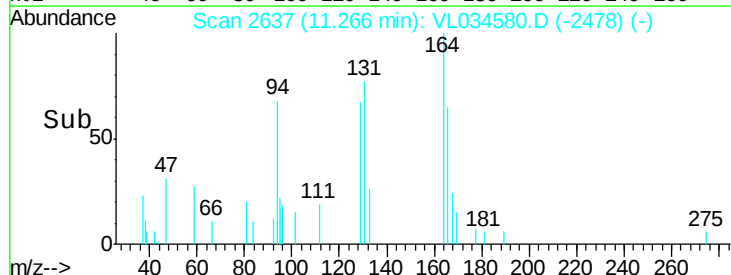
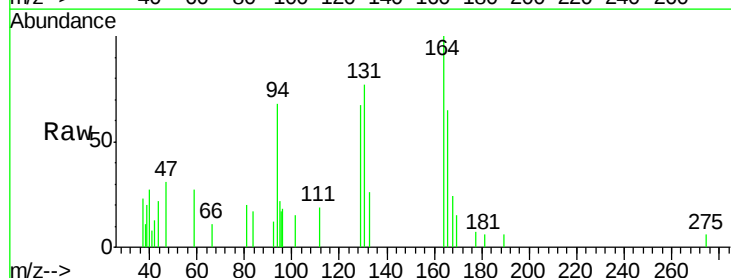
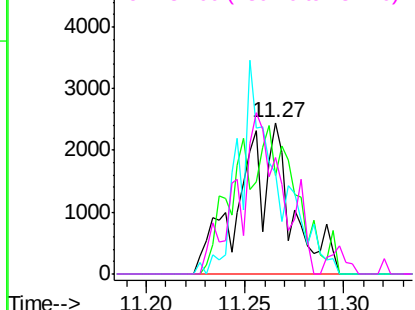
Abundance

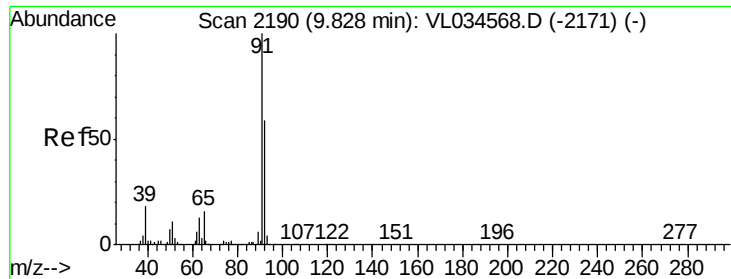
Ion 163.90 (163.60 to 164.60): V

Ion 165.90 (165.60 to 166.60): V

Ion 129.00 (128.70 to 129.70): V

Ion 131.00 (130.70 to 131.70): V





#53

Toluene

Concen: 1.308 ppbv

RT: 9.84 min Scan# 2193

Delta R.T. 0.01 min

Lab File: VL034580.D

Acq: 4 Feb 2020 15:15

Instrument :

MSVOA_L

ClientSampled :

IA-1

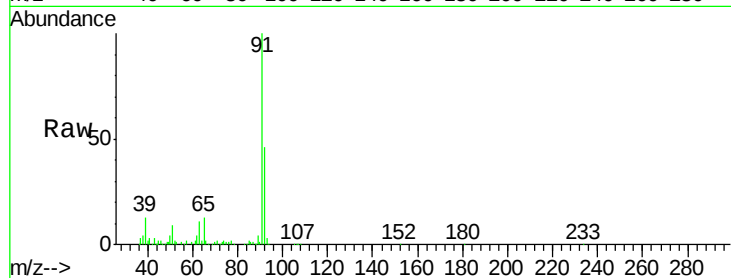
Tot Ion: 91 Resp: 246978

Ion Ratio Lower Upper

91 100

92 58.8 48.2 72.2

Manual Integrations
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Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 92.10 (91.80 to 92.80): VL0

150000

100000

50000

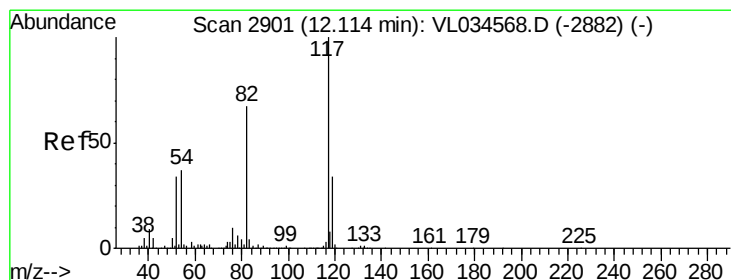
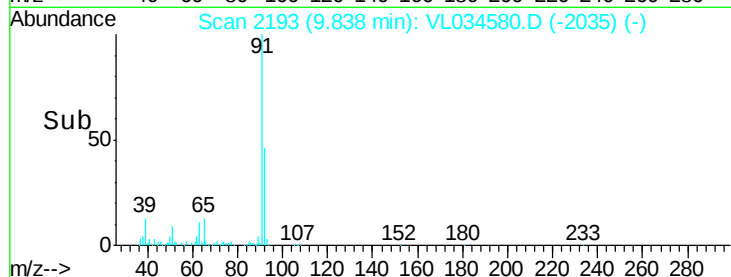
0

9.75 9.80 9.85 9.90

Time-->

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#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.12 min Scan# 2904

Delta R.T. 0.01 min

Lab File: VL034580.D

Acq: 4 Feb 2020 15:15

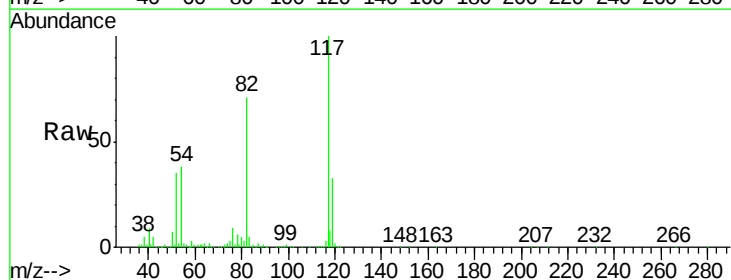
Tgt Ion: 117 Resp: 1859926

Ion Ratio Lower Upper

117 100

82 71.2 54.2 81.4

119 33.6 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

1200000

1000000

800000

600000

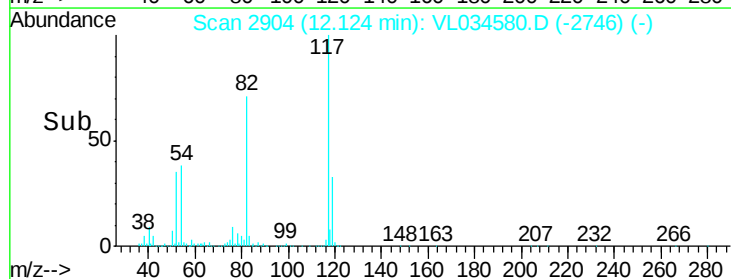
400000

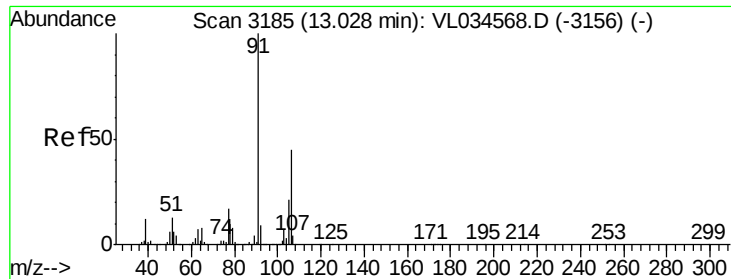
200000

0

12.10 12.20

Time-->



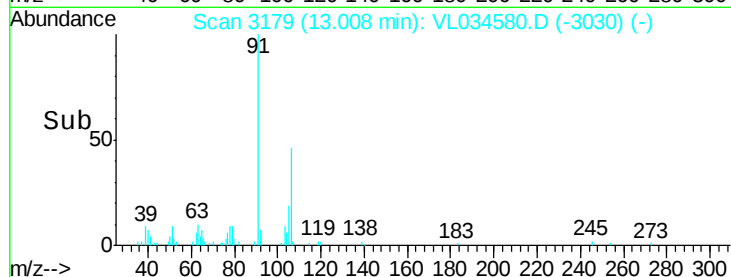
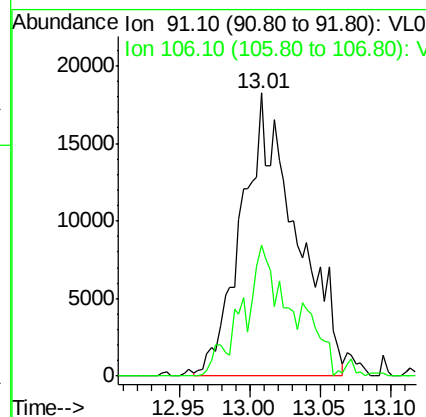
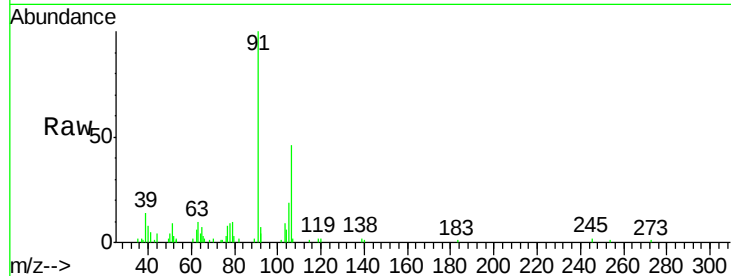


#59
m/p-Xylene
Concen: 0.224 ppbv
RT: 13.01 min Scan# 3179
Delta R.T. -0.02 min
Lab File: VL034580.D
Acq: 4 Feb 2020 15:15

Instrument :
MSVOA_L
ClientSampled :
IA-1

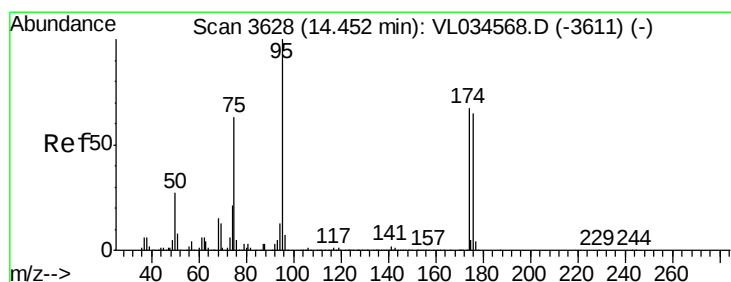
Tot Ion: 91 Resp: 49269
Ion Ratio Lower Upper
91 100
106 0.0 35.3 52.9#

Manual Integrations
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#68
1-Bromo-4-Fluorobenzene
Concen: 10.397 ppbv
RT: 14.46 min Scan# 3630
Delta R.T. 0.01 min
Lab File: VL034580.D
Acq: 4 Feb 2020 15:15

Tgt Ion: 95 Resp: 1634239
Ion Ratio Lower Upper
95 100
174 64.7 52.3 78.5
175 4.6 3.8 5.6

