

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL020420\
 Data File : VL034585.D
 Acq On : 4 Feb 2020 18:34
 Operator : SY/AP
 Sample : L1357-01
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 IA-2

Manual Integrations
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 2/5/2020 2:50:35 PM

Quant Time: Feb 05 14:21:23 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

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	5.66	49	958863	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.19	114	1938274	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.12	117	1836582	10.00	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.46	95	1630589	10.51	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	105.10%

Target Compounds

	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.02	85	43440	0.206	ppbv	100
3) Chlorodifluoromethane	2.95	51	47085m	0.406	ppbv	
4) Chloromethane	3.11	50	29468	0.416	ppbv	100
9) Propene	2.98	41	137009m	3.037	ppbv	
10) Heptane	8.14	43	16150m	0.142	ppbv	
11) Trichlorofluoromethane	3.93	101	46260	0.241	ppbv	89
13) Ethanol	3.59	45	3201507	264.949	ppbv	98
15) Acetone	3.82	43	1047940	7.436	ppbv	99
19) Isopropyl Alcohol	3.96	45	7103024	86.371	ppbv #	98
20) Methylene Chloride	4.32	84	63758m	1.188	ppbv	
26) Hexane	5.68	57	85090	0.890	ppbv	87
29) Chloroform	5.75	83	16280m	0.096	ppbv	
34) 2-Butanone	5.24	43	169921	1.207	ppbv	96
35) Carbon Tetrachloride	7.02	117	14210m	0.077	ppbv	
36) Benzene	6.90	78	64432	0.374	ppbv	97
41) Tetrahydrofuran	6.06	42	23240m	0.317	ppbv	
44) 2,2,4-Trimethylpentane	7.88	57	77510	0.248	ppbv #	71
52) Tetrachloroethene	11.25	164	5176m	0.075	ppbv	
53) Toluene	9.83	91	356388	1.882	ppbv	99
59) m/p-Xylene	13.00	91	47313m	0.218	ppbv	

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

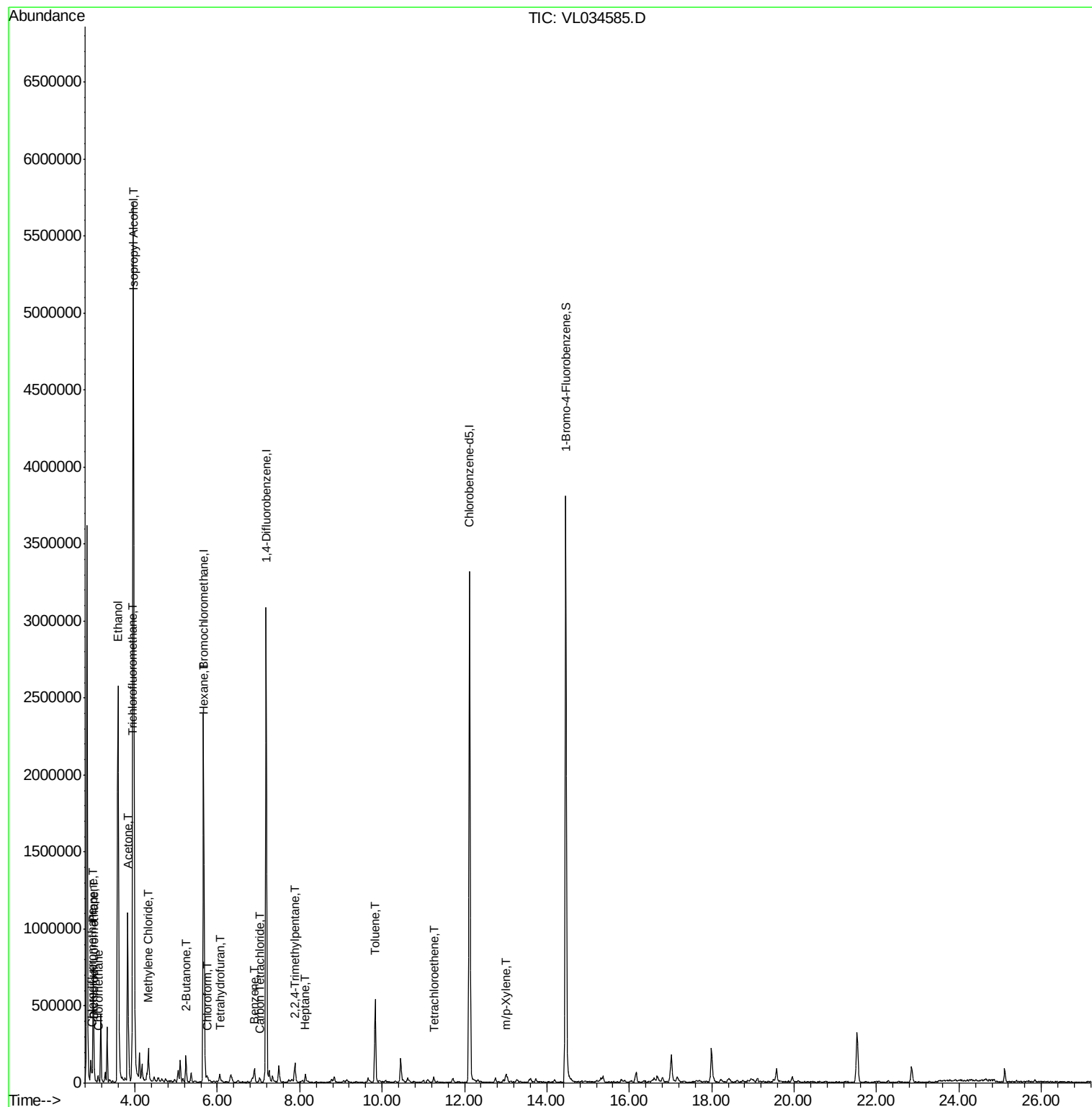
Data Path : Z:\V0ASRV\HPCHEM1\MSVOA L\DATA\VL020420\
Data File : VL034585.D
Acq On : 4 Feb 2020 18:34
Operator : SY/AP
Sample : L1357-01
Misc : 400ml/MSVOA L
ALS Vial : 1 Sample Multiplier: 1

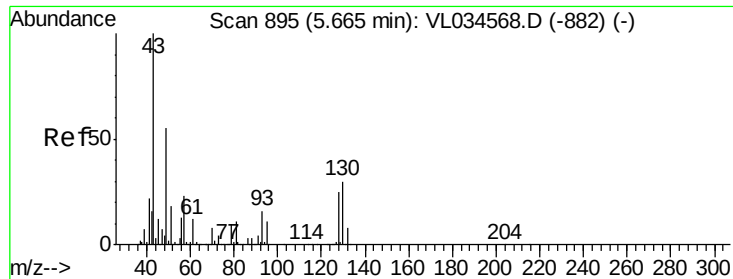
Instrument :
MSVOA_L
ClientSampleId :
IA-2

Manual Integrations
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Quant Time: Feb 05 14:21:23 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: 5.66 min Scan# 895

Delta R.T. -0.00 min

Lab File: VL034585.D

Acq: 4 Feb 2020 18:34

Instrument :

MSVOA_L

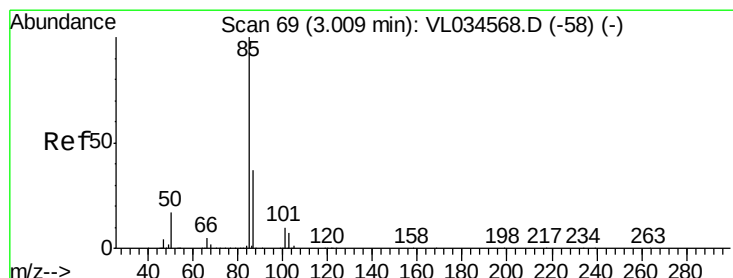
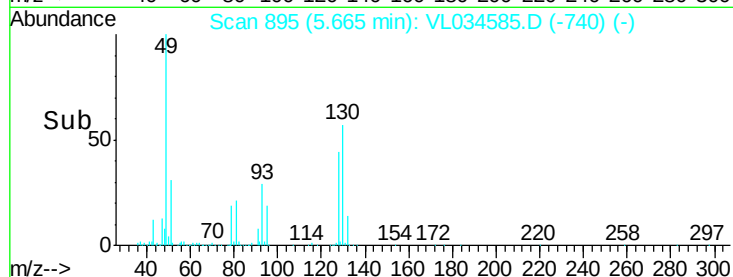
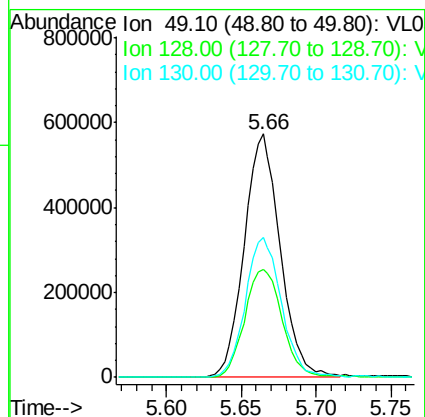
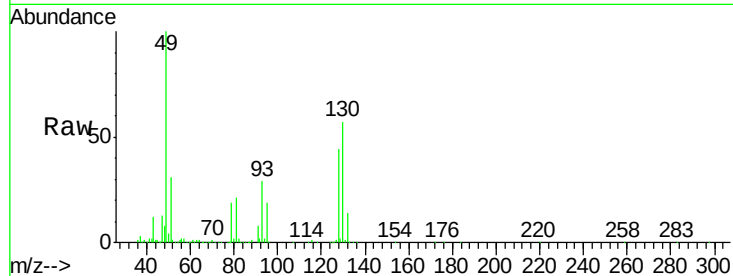
ClientSampleId :

IA-2

Tot Ion:	49	Resp:	958863
Ion	Ratio	Lower	Upper
49	100		
128	46.7	22.7	68.1
130	57.6	28.6	85.8

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#2

Dichlorodifluoromethane

Concen: 0.206 ppbv

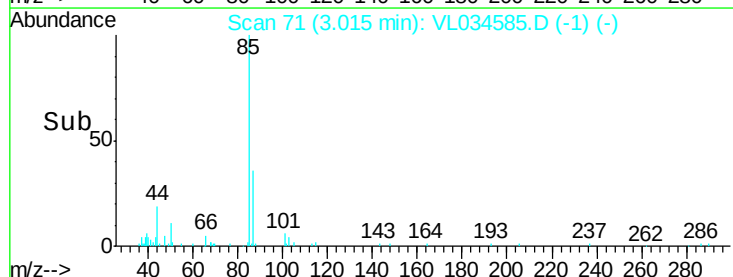
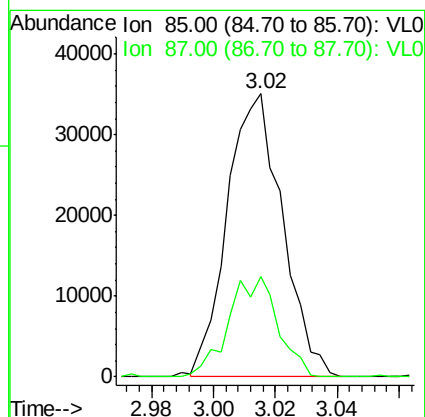
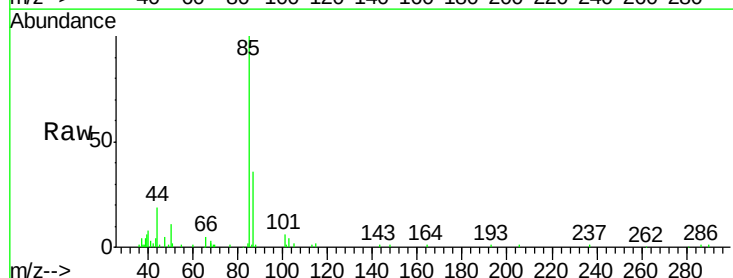
RT: 3.02 min Scan# 71

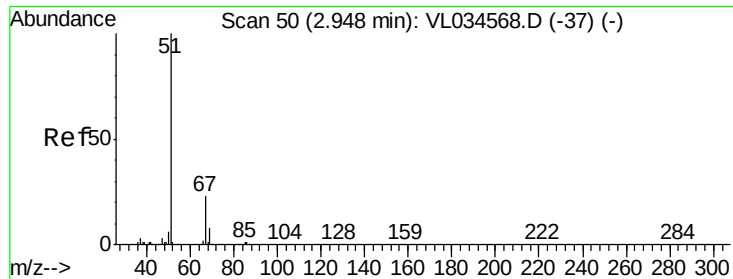
Delta R.T. 0.01 min

Lab File: VL034585.D

Acq: 4 Feb 2020 18:34

Tgt Ion:	85	Resp:	43440
Ion	Ratio	Lower	Upper
85	100		
87	36.7	29.5	44.3





#3

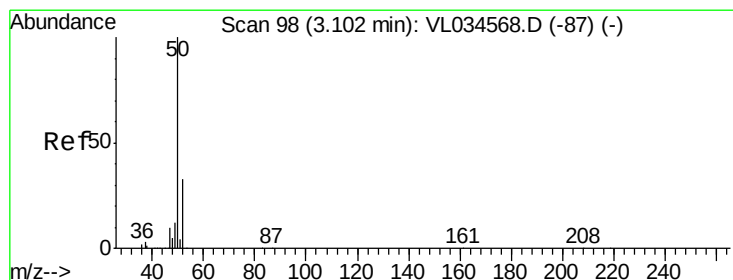
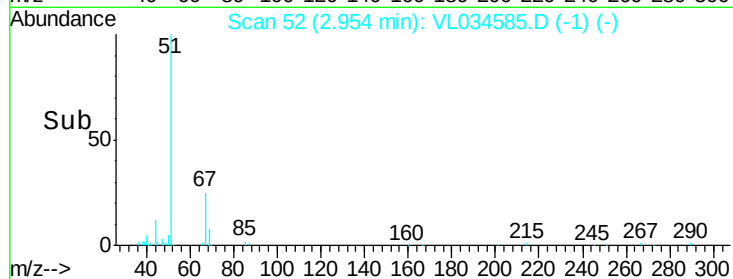
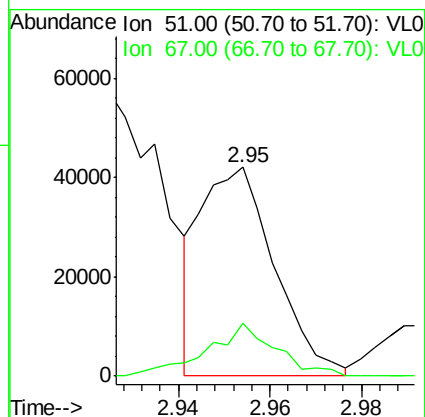
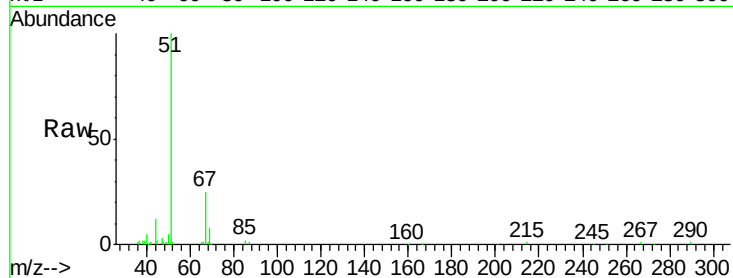
Chlorodifluoromethane
Concen: 0.406 ppbv
RT: 2.95 min Scan# 52
Delta R.T. 0.01 min
Lab File: VL034585.D
Acq: 4 Feb 2020 18:34

Instrument :
MSVOA_L
ClientSampled :
IA-2

Tot Ion	Ratio	Lower	Upper
51	100		
67	24.0	17.8	26.8

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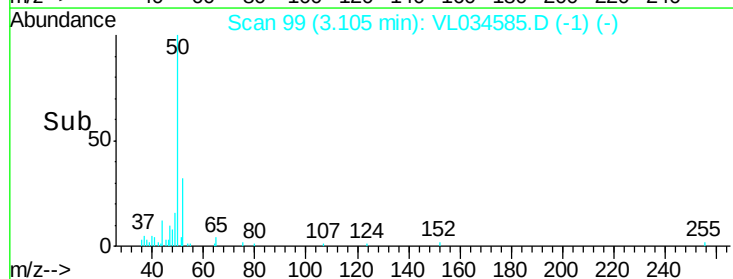
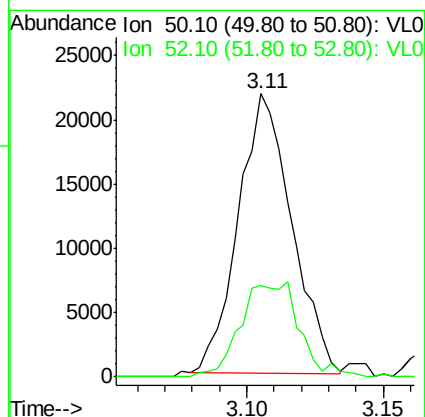
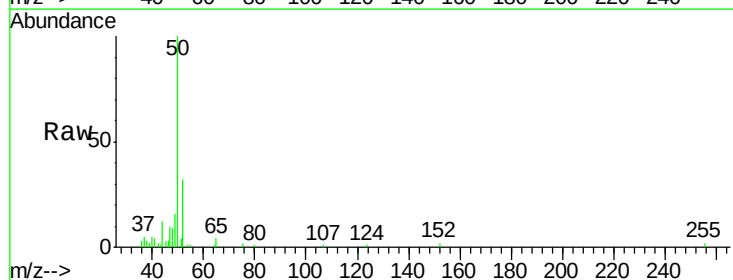
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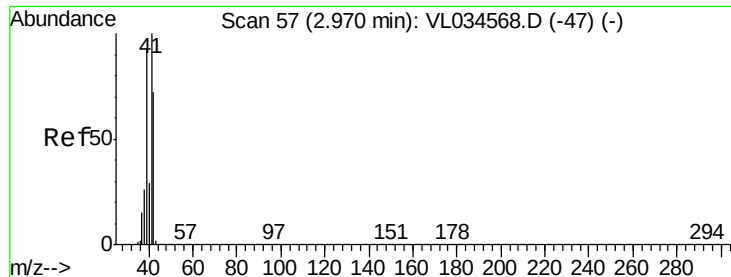


#4

Chloromethane
Concen: 0.416 ppbv
RT: 3.11 min Scan# 99
Delta R.T. 0.00 min
Lab File: VL034585.D
Acq: 4 Feb 2020 18:34

Tgt Ion	Ratio	Lower	Upper
50	100		
52	33.1	26.6	39.8





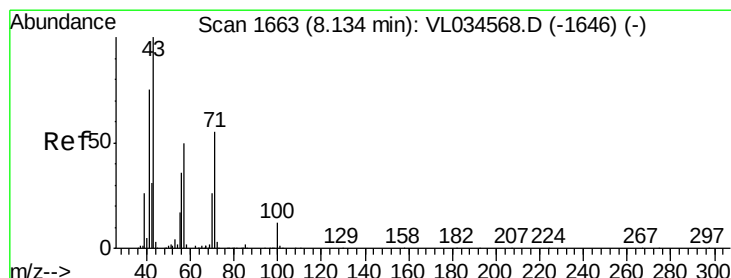
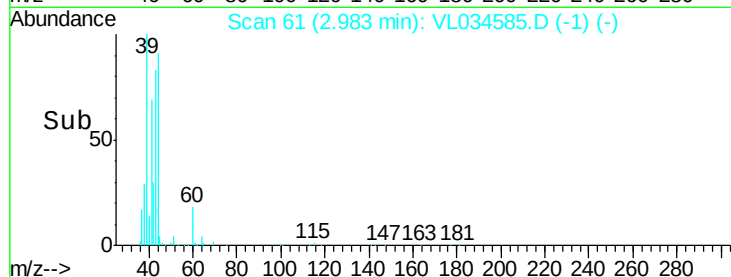
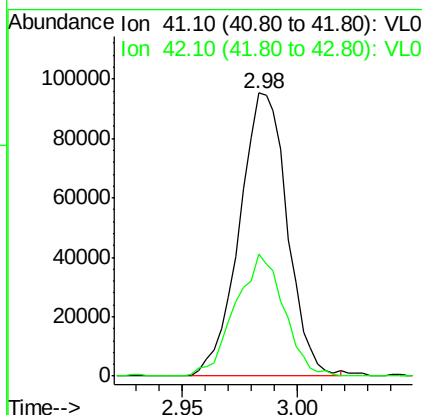
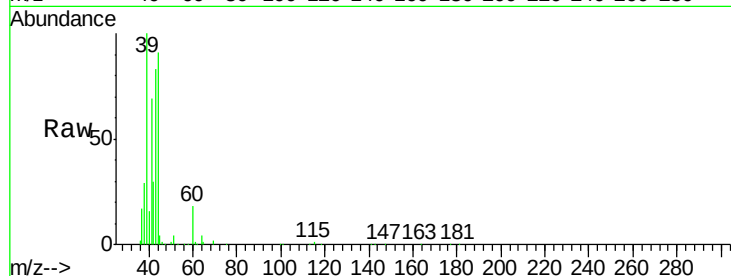
#9
 Propene
 Concen: 3.037 ppbv m
 RT: 2.98 min Scan# 61
 Delta R.T. 0.01 min
 Lab File: VL034585.D
 Acq: 4 Feb 2020 18:34

Instrument :
 MSVOA_L
 ClientSampled :
 IA-2

Tot Ion: 41 Resp: 137009
 Ion Ratio Lower Upper
 41 100
 42 53.8 57.0 85.4#

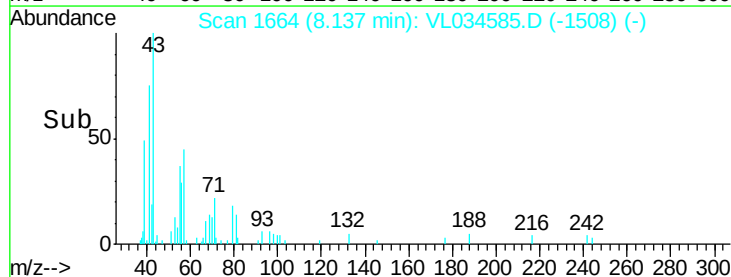
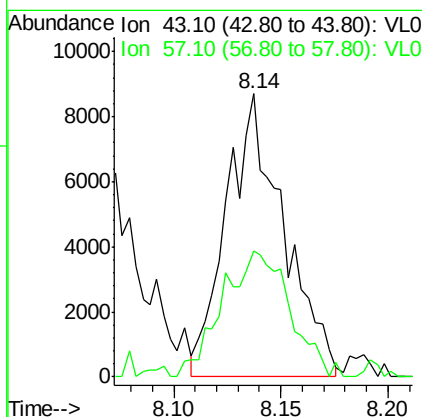
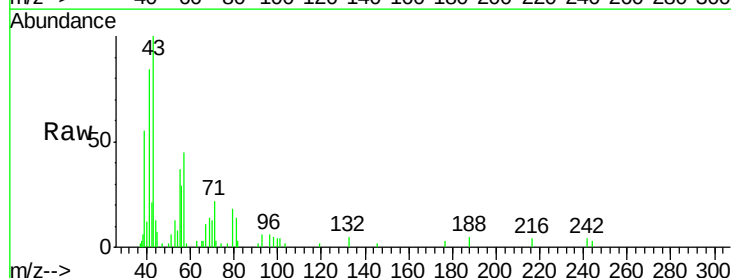
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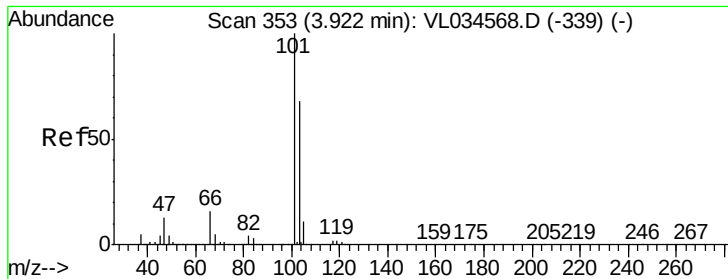
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#10
 Heptane
 Concen: 0.142 ppbv m
 RT: 8.14 min Scan# 1664
 Delta R.T. 0.00 min
 Lab File: VL034585.D
 Acq: 4 Feb 2020 18:34

Tgt Ion: 43 Resp: 16150
 Ion Ratio Lower Upper
 43 100
 57 54.5 41.2 61.8





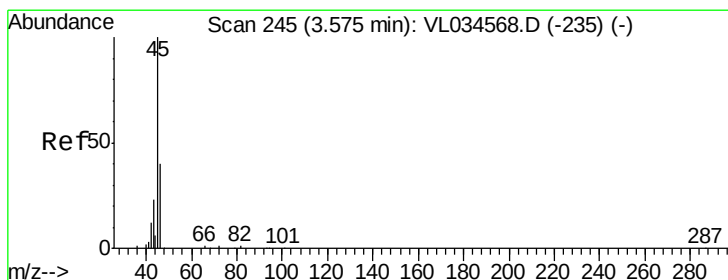
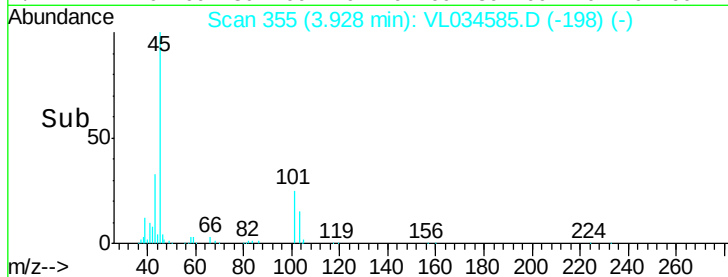
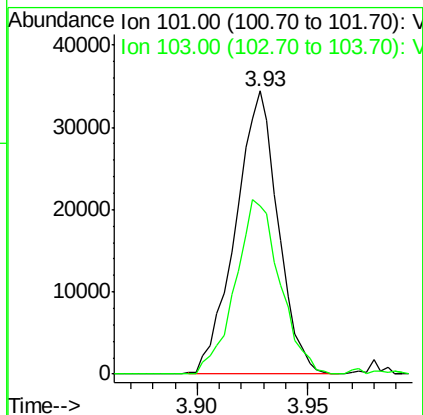
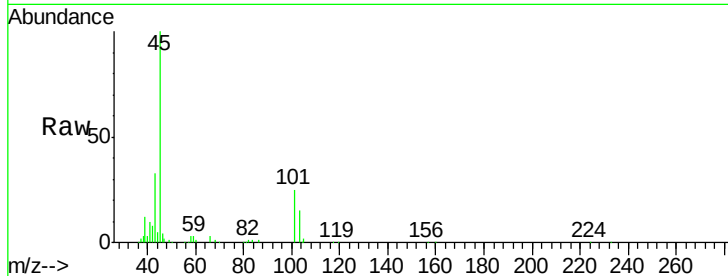
#11
 Trichlorofluoromethane
 Concen: 0.241 ppbv
 RT: 3.93 min Scan# 355
 Delta R.T. 0.01 min
 Lab File: VL034585.D
 Acq: 4 Feb 2020 18:34

Instrument :
 MSVOA_L
 ClientSampleId :
 IA-2

Tot Ion	Ion	Ratio	Resp	Lower	Upper
46260	101	100			
	103	59.2		54.4	81.6

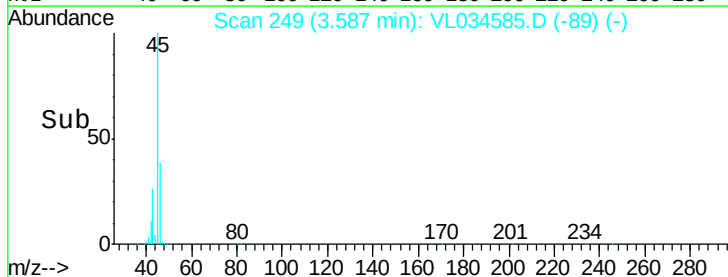
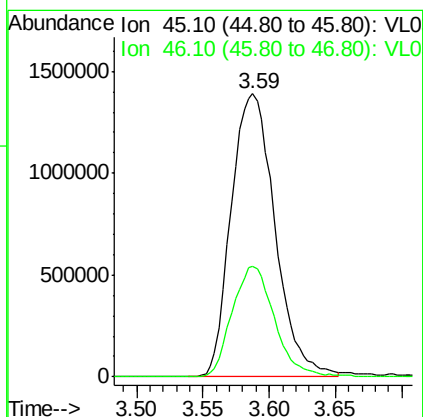
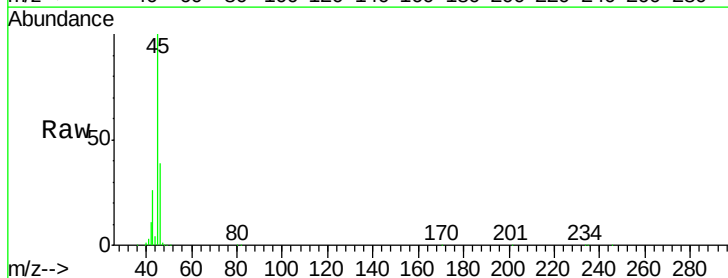
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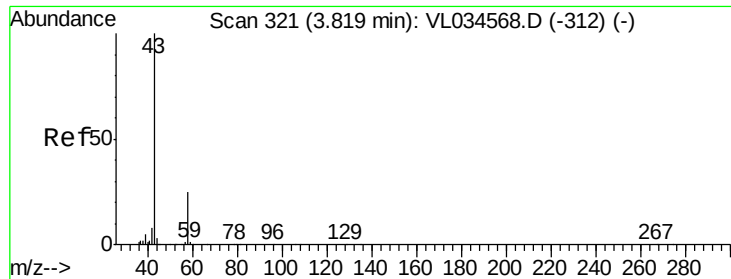
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#13
 Ethanol
 Concen: 264.949 ppbv
 RT: 3.59 min Scan# 249
 Delta R.T. 0.01 min
 Lab File: VL034585.D
 Acq: 4 Feb 2020 18:34

Tgt Ion	Ion	Ratio	Resp	Lower	Upper
3201507	45	100			
	46	38.0		14.8	59.2





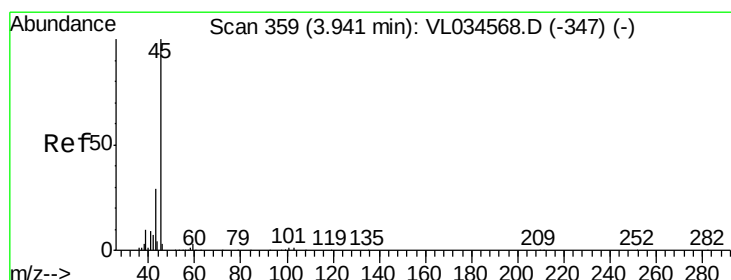
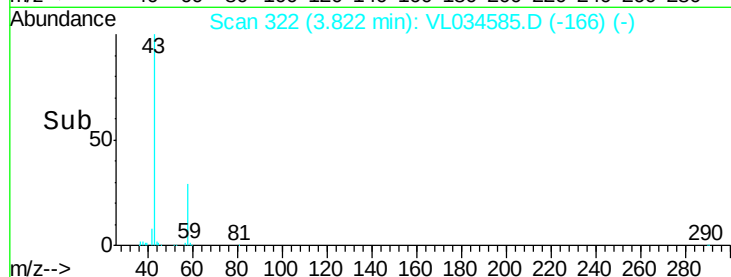
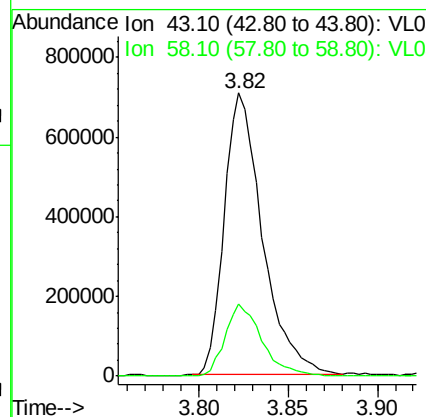
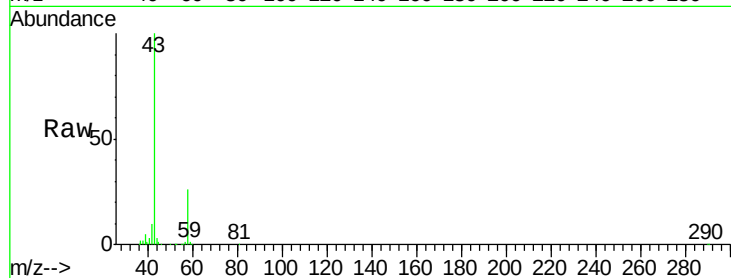
#15
Acetone
Concen: 7.436 ppbv
RT: 3.82 min Scan# 322
Delta R.T. 0.00 min
Lab File: VL034585.D
Acq: 4 Feb 2020 18:34

Instrument :
MSVOA_L
ClientSampleId :
IA-2

Tot Ion: 43 Resp: 1047940
Ion Ratio Lower Upper
43 100
58 25.0 20.3 30.5

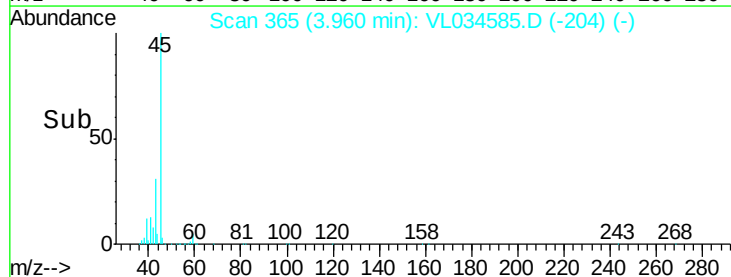
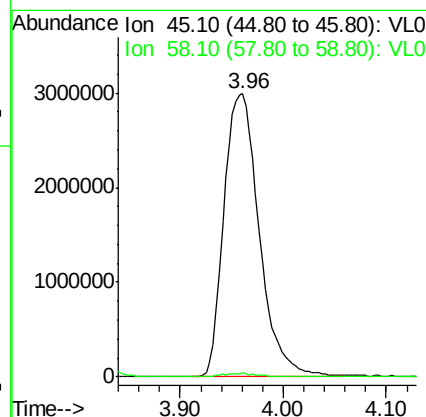
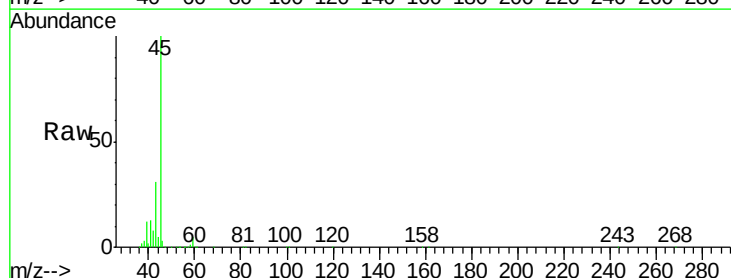
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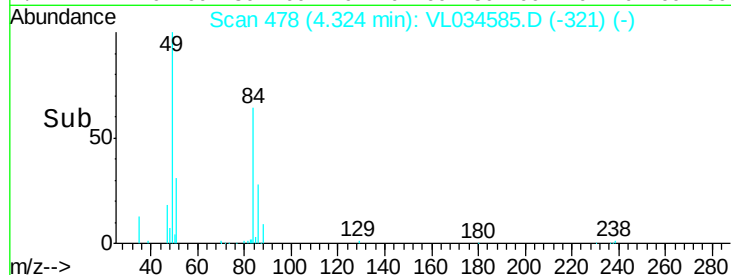
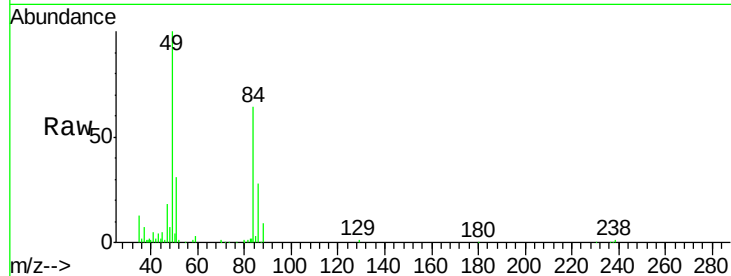
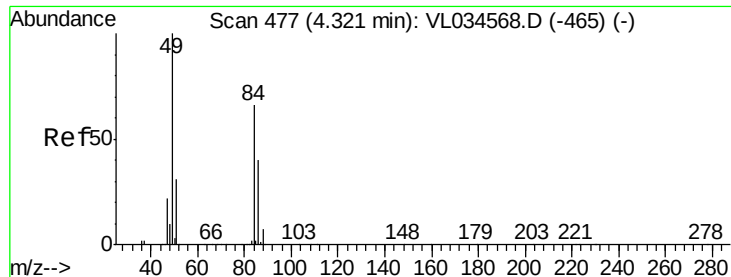
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#19
Isopropyl Alcohol
Concen: 86.371 ppbv
RT: 3.96 min Scan# 365
Delta R.T. 0.02 min
Lab File: VL034585.D
Acq: 4 Feb 2020 18:34

Tgt Ion: 45 Resp: 7103024
Ion Ratio Lower Upper
45 100
58 1.3 1.7 2.5#





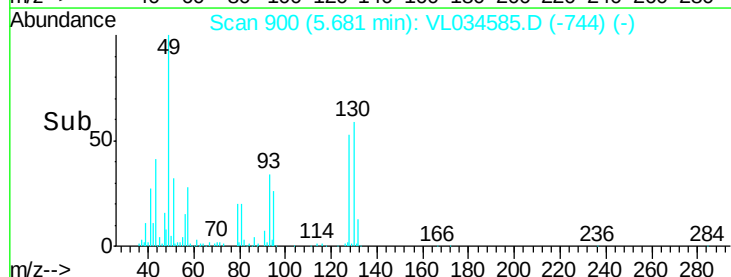
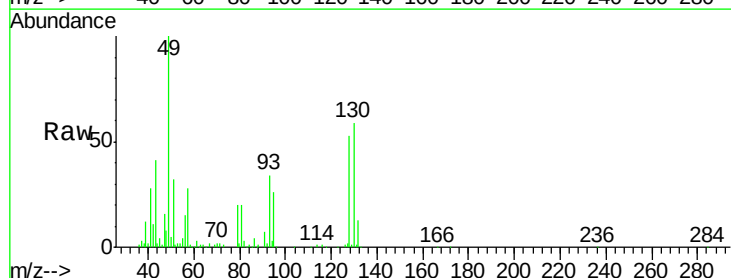
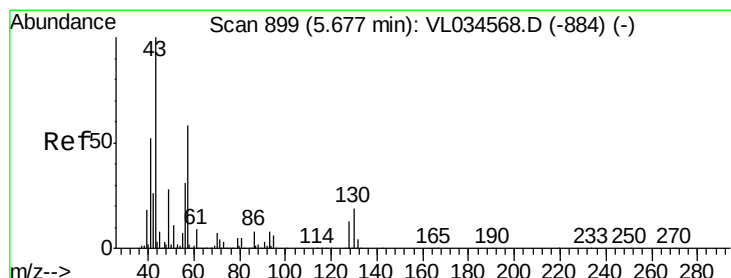
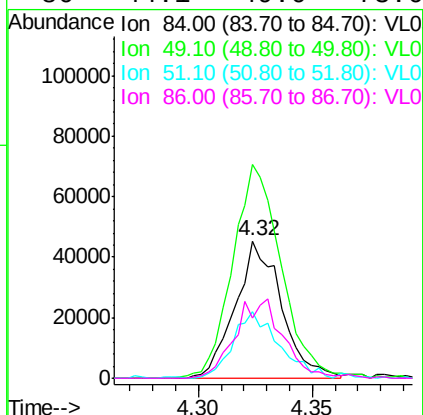
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Methylene Chloride
Concen: 1.188 ppbv
RT: 4.32 min Scan# 478
Delta R.T. 0.00 min
Lab File: VL034585.D
Acq: 4 Feb 2020 18:34

Tot Ion	Ion	Ratio	Resp	Lower	Upper
84	100				
49	155.7	122.4	183.6		
51	48.9	38.6	57.8		
86	44.1	49.0	73.6		

Instrument :
MSVOA_L
ClientSampled :
IA-2

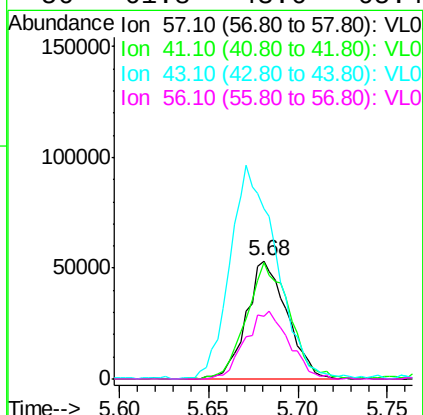
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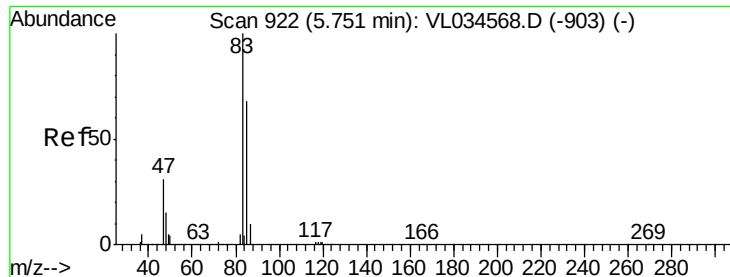
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#26
Hexane
Concen: 0.890 ppbv
RT: 5.68 min Scan# 900
Delta R.T. 0.00 min
Lab File: VL034585.D
Acq: 4 Feb 2020 18:34

Tgt Ion	Ion	Ratio	Resp	Lower	Upper
57	100				
41	104.5	76.2	114.2		
43	211.6	189.9	284.9		
56	61.8	43.6	65.4		





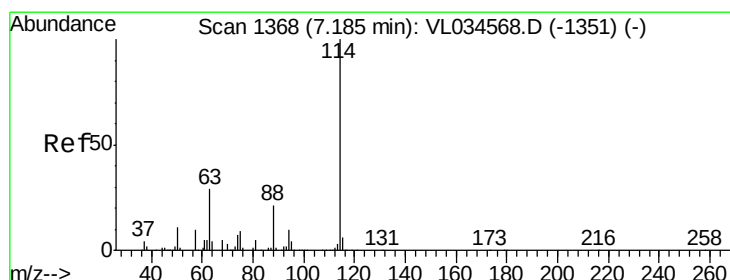
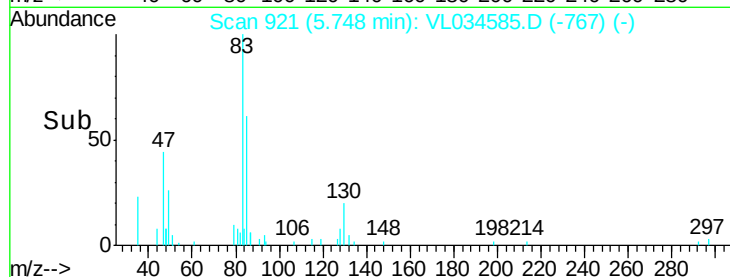
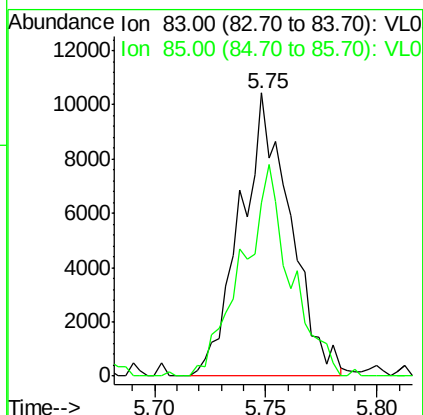
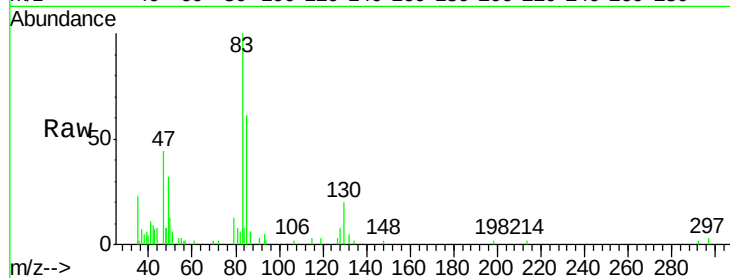
#29
Chloroform
Concen: 0.096 ppbv m
RT: 5.75 min Scan# 921
Delta R.T. -0.00 min
Lab File: VL034585.D
Acq: 4 Feb 2020 18:34

Instrument :
MSVOA_L
ClientSampled :
IA-2

Tot Ion	83	Resp	16280
Ion Ratio	100	Lower	Upper
83	100		
85	61.1	54.0	81.0

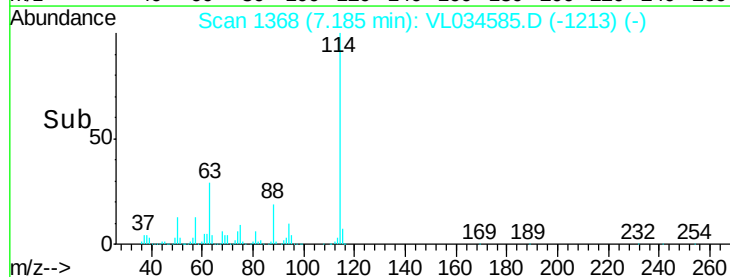
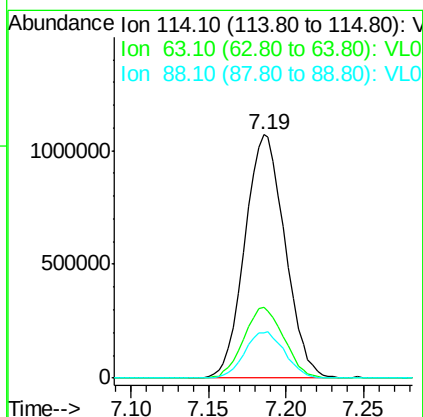
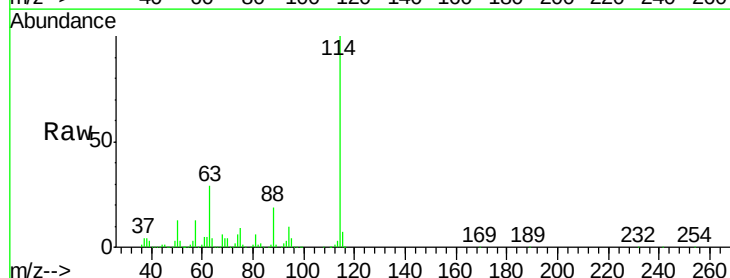
Manual Integrations
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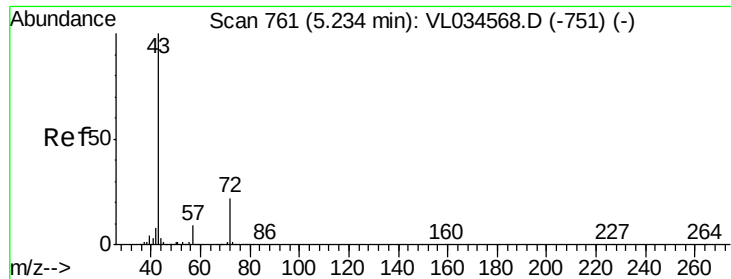
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#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 7.19 min Scan# 1368
Delta R.T. -0.00 min
Lab File: VL034585.D
Acq: 4 Feb 2020 18:34

Tgt Ion	114	Resp	1938274
Ion Ratio	100	Lower	Upper
114	100		
63	29.2	24.1	36.1
88	19.0	15.9	23.9





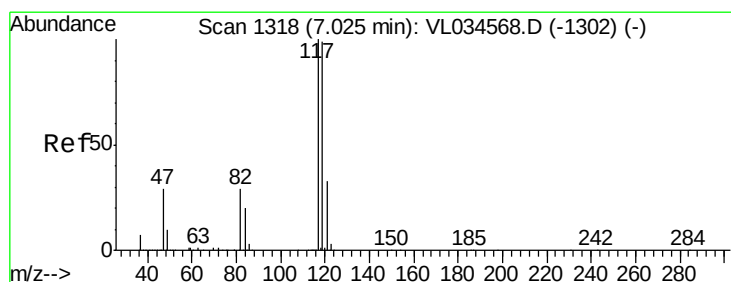
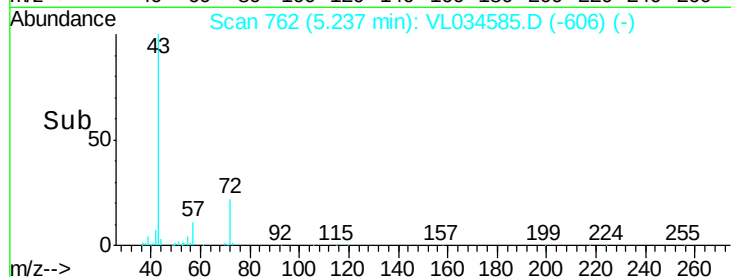
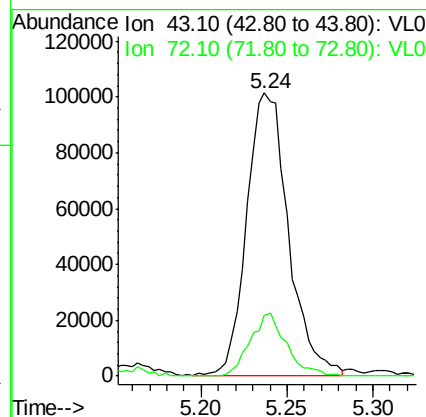
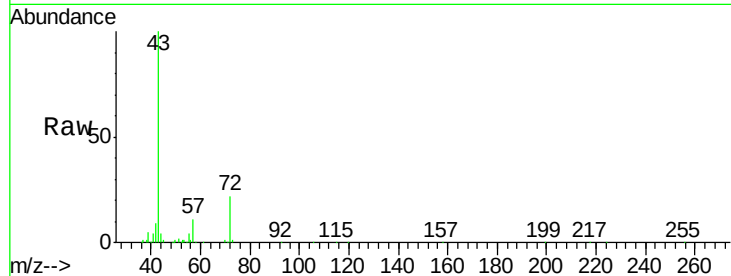
#34
2-Butanone
Concen: 1.207 ppbv
RT: 5.24 min Scan# 762
Delta R.T. 0.00 min
Lab File: VL034585.D
Acq: 4 Feb 2020 18:34

Instrument :
MSVOA_L
ClientSampled :
IA-2

Tot Ion	Ratio	Lower	Upper
43	100		
72	19.6	17.2	25.8

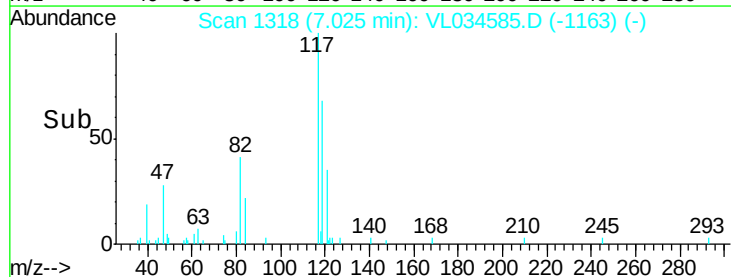
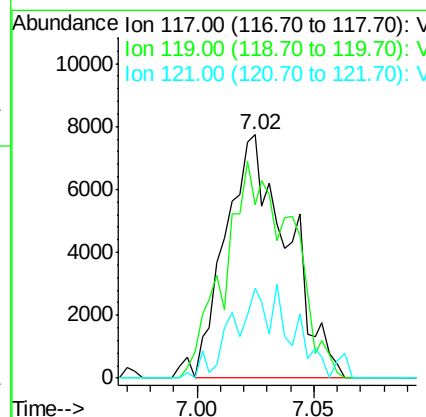
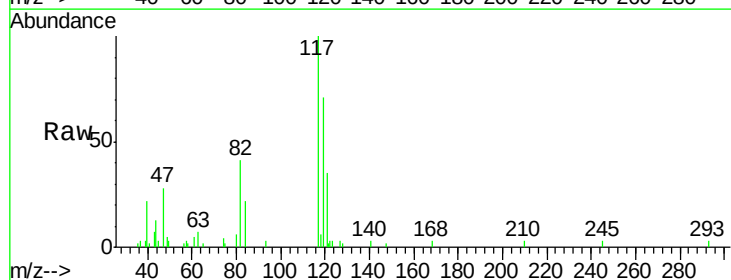
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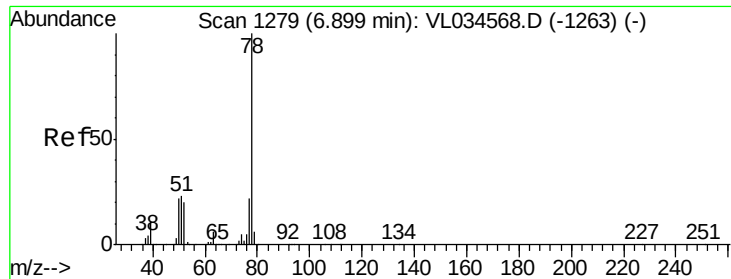
MMDadoda
2/5/2020 2:50:35 PM



#35
Carbon Tetrachloride
Concen: 0.077 ppbv m
RT: 7.02 min Scan# 1318
Delta R.T. -0.00 min
Lab File: VL034585.D
Acq: 4 Feb 2020 18:34

Tgt Ion	Ratio	Lower	Upper
117	100		
119	70.9	79.5	119.3#
121	35.0	26.2	39.2





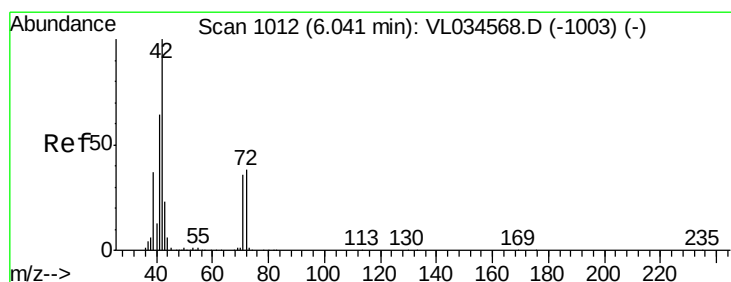
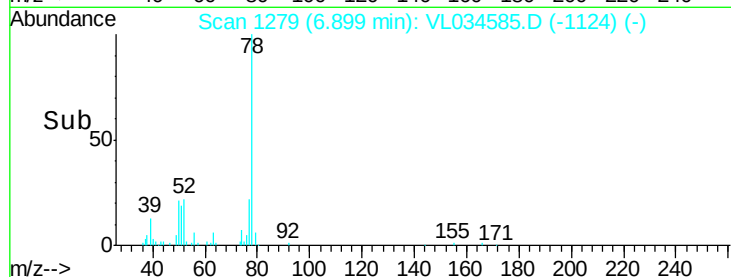
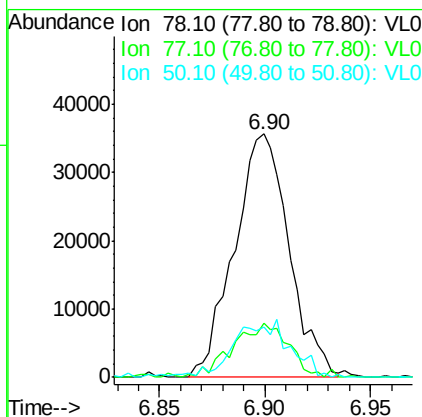
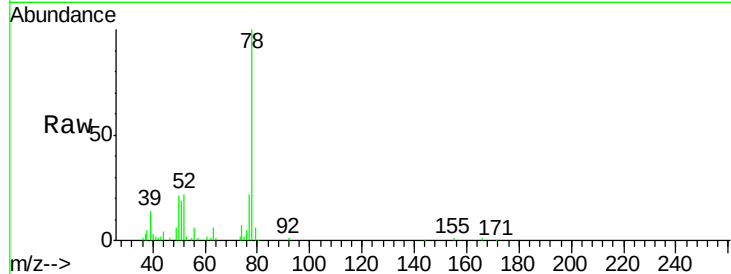
#36
Benzene
Concen: 0.374 ppbv
RT: 6.90 min Scan# 1279
Delta R.T. -0.00 min
Lab File: VL034585.D
Acq: 4 Feb 2020 18:34

Instrument :
MSVOA_L
ClientSampleId :
IA-2

Tot Ion	Ratio	Lower	Upper
78	100		
77	22.1	17.3	25.9
50	19.0	17.4	26.2

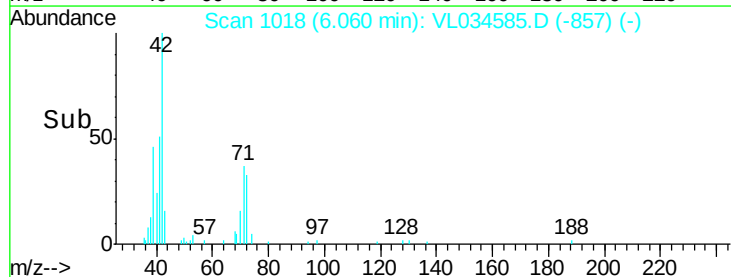
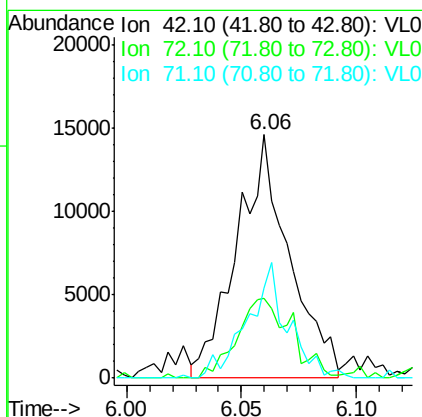
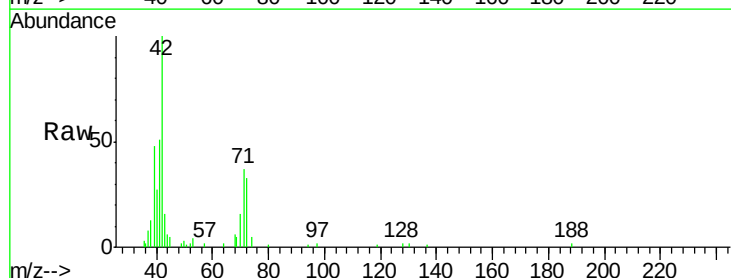
Manual Integrations
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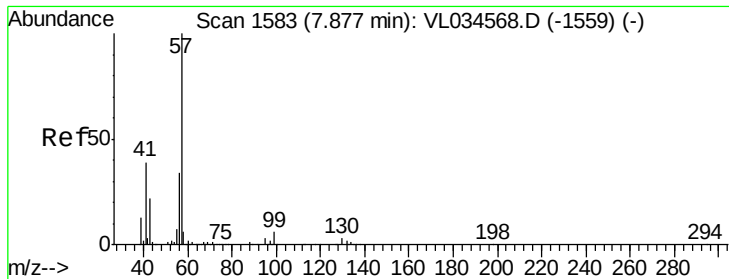
MMDadoda
2/5/2020 2:50:35 PM



#41
Tetrahydrofuran
Concen: 0.317 ppbv m
RT: 6.06 min Scan# 1018
Delta R.T. 0.02 min
Lab File: VL034585.D
Acq: 4 Feb 2020 18:34

Tgt Ion	Ratio	Lower	Upper
42	100		
72	0.0	31.8	47.8#
71	0.0	30.2	45.4#





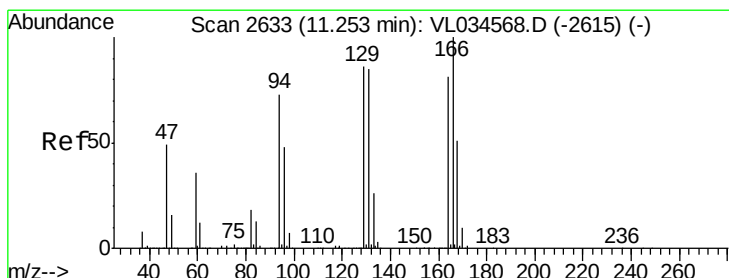
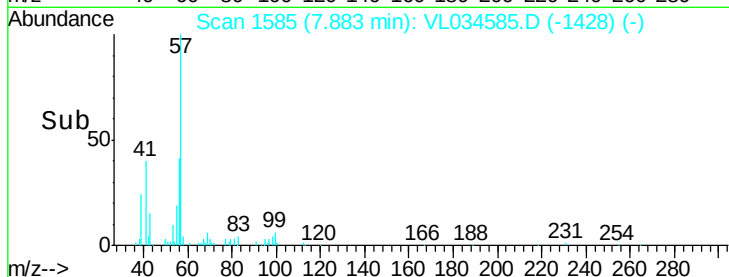
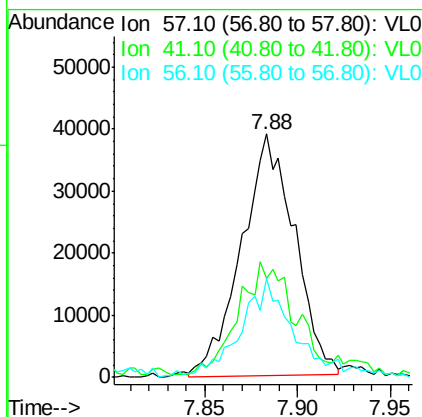
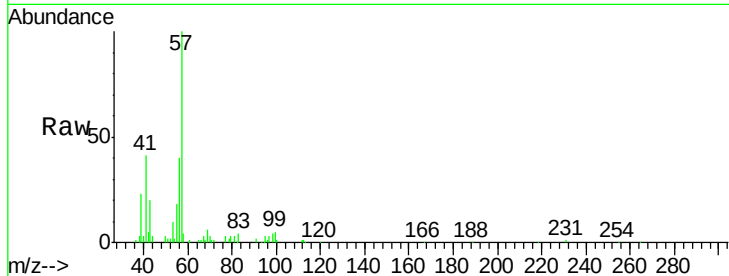
#44
 2,2,4-Trimethylpentane
 Concen: 0.248 ppbv
 RT: 7.88 min Scan# 1585
 Delta R.T. 0.01 min
 Lab File: VL034585.D
 Acq: 4 Feb 2020 18:34

Instrument :
 MSVOA_L
 ClientSampled :
 IA-2

Tot Ion	Ratio	Lower	Upper
57	100		
41	58.9	28.9	43.3#
56	42.2	25.5	38.3#

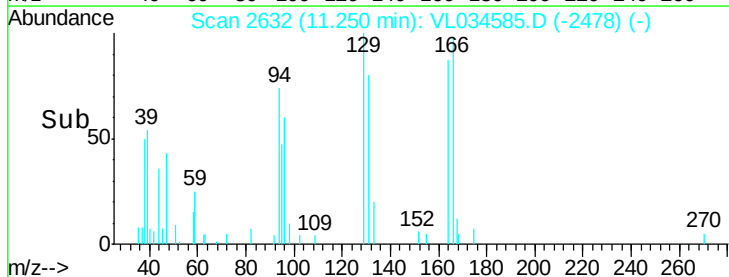
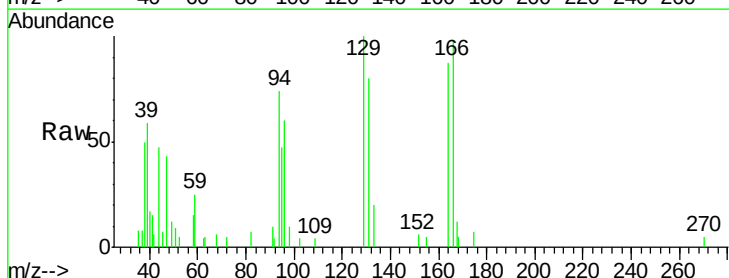
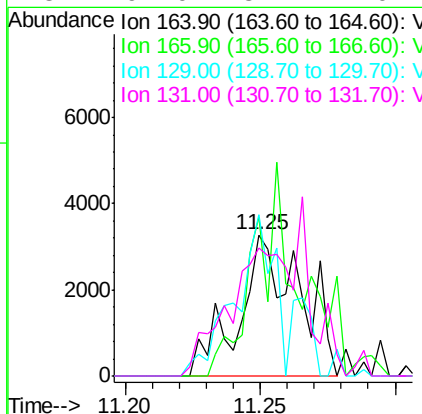
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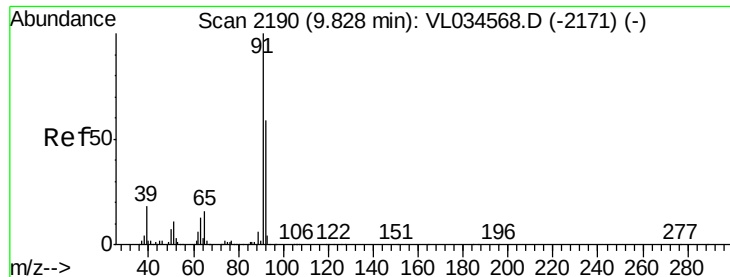
MMDadoda
 2/5/2020 2:50:35 PM



#52
 Tetrachloroethene
 Concen: 0.075 ppbv m
 RT: 11.25 min Scan# 2632
 Delta R.T. -0.00 min
 Lab File: VL034585.D
 Acq: 4 Feb 2020 18:34

Tgt Ion	Ratio	Lower	Upper
164	100		
166	112.0	99.0	148.4
129	114.4	85.3	127.9
131	91.0	84.2	126.2





#53

Toluene

Concen: 1.882 ppbv

RT: 9.83 min Scan# 2191

Delta R.T. 0.00 min

Lab File: VL034585.D

Acq: 4 Feb 2020 18:34

Instrument :

MSVOA_L

ClientSampleId :

IA-2

Tot Ion: 91 Resp: 356388

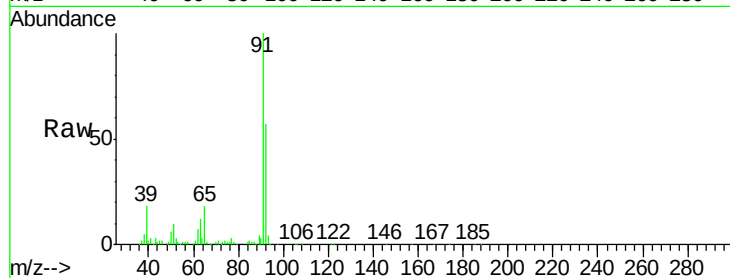
Ion Ratio Lower Upper

91 100

92 59.2 48.2 72.2

Manual Integrations
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2/5/2020 2:50:35 PM



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 92.10 (91.80 to 92.80): VL0

9.83

200000

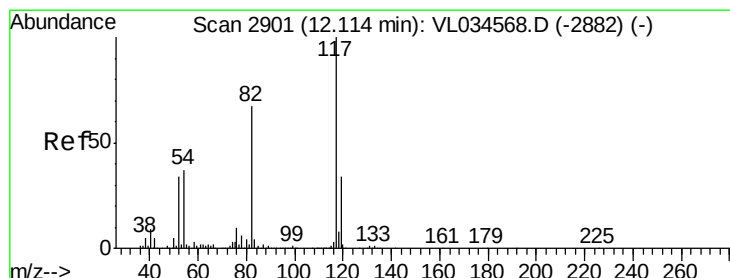
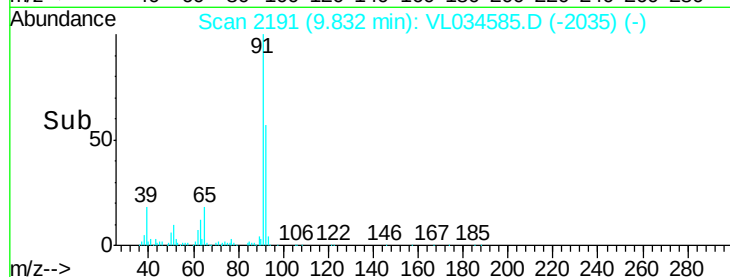
150000

100000

50000

0

Time--> 9.75 9.80 9.85 9.90



#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.12 min Scan# 2903

Delta R.T. 0.01 min

Lab File: VL034585.D

Acq: 4 Feb 2020 18:34

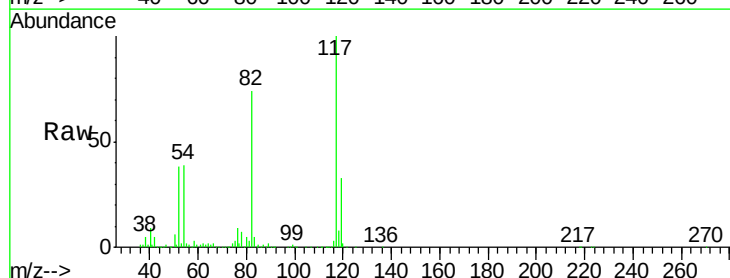
Tgt Ion: 117 Resp: 1836582

Ion Ratio Lower Upper

117 100

82 72.5 54.2 81.4

119 34.3 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

12.12

1000000

800000

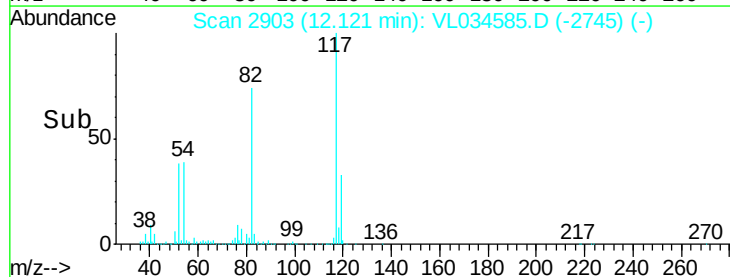
600000

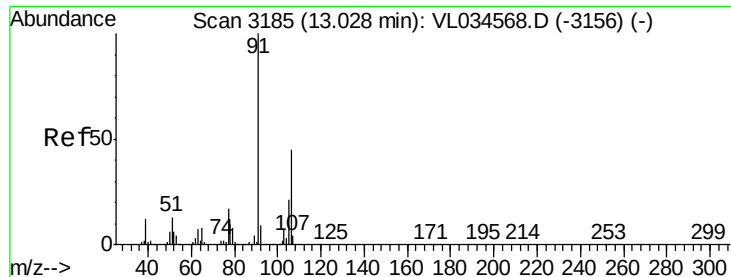
400000

200000

0

Time--> 12.10 12.20





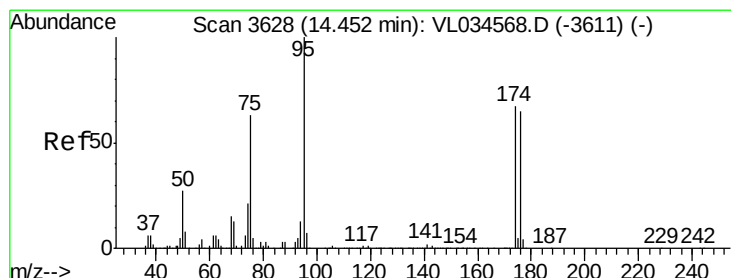
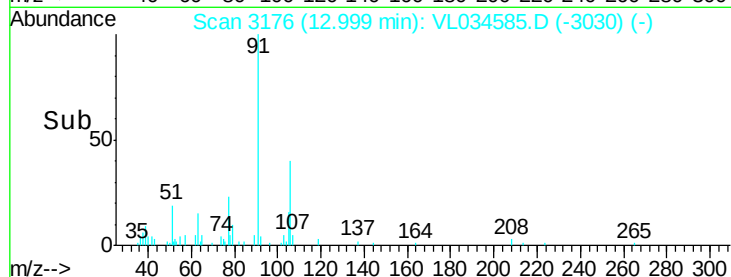
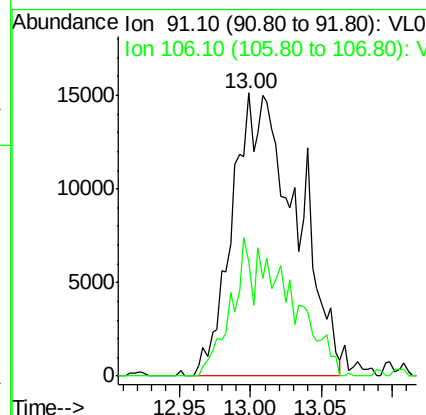
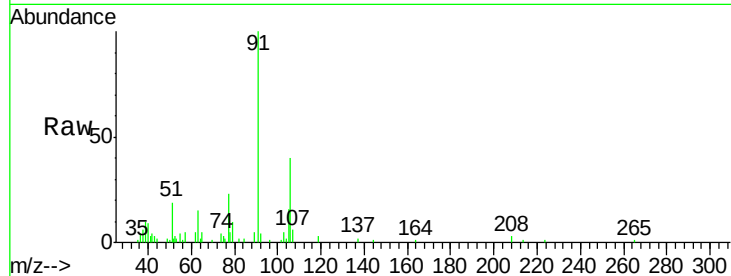
#59
m/p-Xylene
Concen: 0.218 ppbv m
RT: 13.00 min Scan# 3176
Delta R.T. -0.03 min
Lab File: VL034585.D
Acq: 4 Feb 2020 18:34

Instrument :
MSVOA_L
ClientSampled :
IA-2

Tot Ion: 91 Resp: 47313
Ion Ratio Lower Upper
91 100
106 0.0 35.3 52.9#

Manual Integrations
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2/5/2020 2:50:35 PM



#68
1-Bromo-4-Fluorobenzene
Concen: 10.505 ppbv
RT: 14.46 min Scan# 3630
Delta R.T. 0.01 min
Lab File: VL034585.D
Acq: 4 Feb 2020 18:34

Tgt Ion: 95 Resp: 1630589
Ion Ratio Lower Upper
95 100
174 64.2 52.3 78.5
175 4.5 3.8 5.6

