

Data Path : Z:\VOASRV\HPCHEM1\MSVOA_L\DATA\VL121620\
 Data File : VL036180.D
 Acq On : 16 Dec 2020 23:50
 Operator : SY/AP
 Sample : L5084-01
 Misc : 400ml/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 IA1

Manual Integrations
 APPROVED

MMDadoda
 12/17/2020 3:56:44 PM

Quant Time: Dec 17 14:04:07 2020

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_L\METHODS\VL120720AIR.M

Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Mon Dec 07 2020

QLast Update : Mon Dec 07 16:56:49 2020

Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.67	49	1367157	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.19	114	2671263	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.10	117	2331997	10.00	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.44	95	2121460	11.46	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	114.60%

Target Compounds

						Qvalue
2) Dichlorodifluoromethane	3.05	85	42098	0.264	ppbv	94
3) Chlorodifluoromethane	2.99	51	103106m	0.661	ppbv	
4) Chloromethane	3.14	50	42022m	0.549	ppbv	
5) Vinyl Chloride	3.27	62	7364m	0.086	ppbv	
9) Propene	3.02	41	62228	0.796	ppbv	95
10) Heptane	8.13	43	24048m	0.120	ppbv	
11) Trichlorofluoromethane	3.95	101	53521m	0.286	ppbv	
13) Ethanol	3.61	45	3442534	319.581	ppbv	86
15) Acetone	3.85	43	583570	3.552	ppbv	93
19) Isopropyl Alcohol	3.98	45	219598m	2.187	ppbv	
20) Methylene Chloride	4.35	84	465346	6.911	ppbv	96
26) Hexane	5.69	57	806409	5.459	ppbv #	42
29) Chloroform	5.76	83	235868m	1.216	ppbv	
31) cis-1,2-Dichloroethene	5.55	61	23942m	0.178	ppbv	
34) 2-Butanone	5.26	43	50441	0.285	ppbv	91
35) Carbon Tetrachloride	7.03	117	12982m	0.083	ppbv	
36) Benzene	6.90	78	117923m	0.521	ppbv	
38) Trichloroethene	7.84	130	3263m	0.039	ppbv	
44) 2,2,4-Trimethylpentane	7.88	57	65708	0.160	ppbv #	68
52) Tetrachloroethene	11.24	164	11053m	0.135	ppbv	
53) Toluene	9.82	91	449321	1.768	ppbv	98
58) Ethyl Benzene	12.73	91	30953m	0.097	ppbv	
59) m/p-Xylene	12.99	91	83382m	0.310	ppbv	
60) o-Xylene	13.72	91	31160m	0.123	ppbv	
74) 1,2,4-Trimethylbenzene	16.78	105	44864m	0.170	ppbv	

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

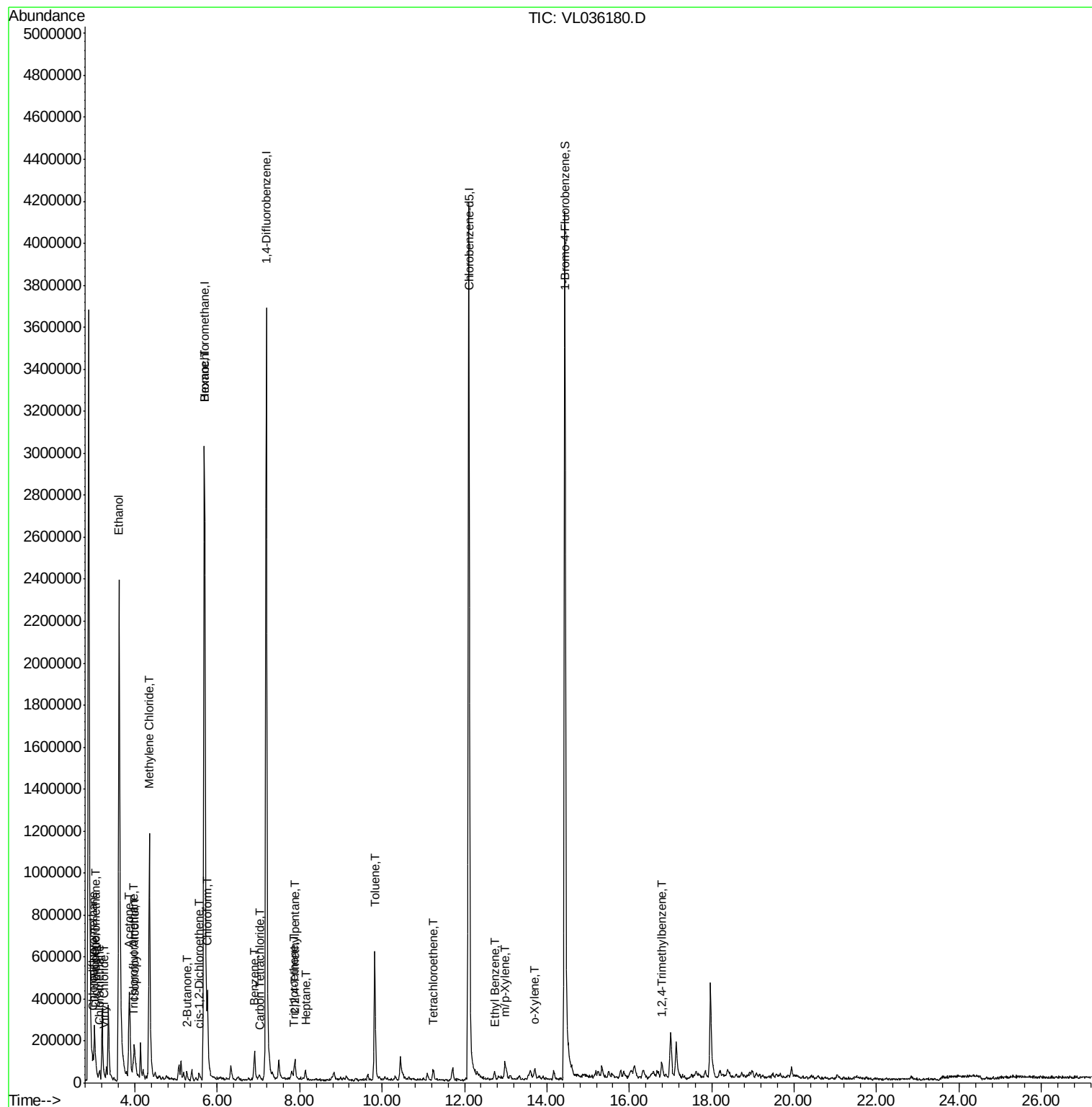
Data Path : Z:\V0ASRV\HPCHEM1\MSVOA_L\DATA\VL121620\
Data File : VL036180.D
Acq On : 16 Dec 2020 23:50
Operator : SY/AP
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Misc : 400ml/MSVOA_L
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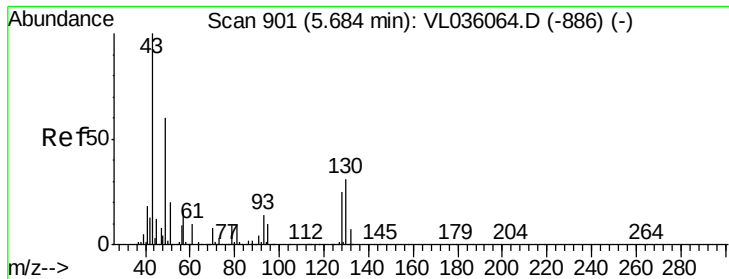
Instrument :
MSVOA_L
ClientSampleId :
IA1

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Quant Time: Dec 17 14:04:07 2020
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA_L\METHODS\VL120720AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Mon Dec
QLast Update : Mon Dec 07 16:56:49 2020
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.67 min Scan# 898

Delta R.T. -0.01 min

Lab File: VL036180.D

Acq: 16 Dec 2020 23:50

Instrument :

MSVOA_L

ClientSampled :

IA1

Tgt Ion: 49 Resp: 1367157

Ion Ratio Lower Upper

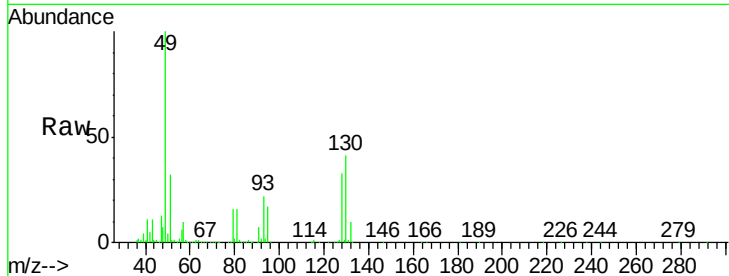
49 100

128 36.1 21.1 63.1

130 45.3 27.1 81.3

Manual Integrations
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Abundance Ion 49.10 (48.80 to 49.80): VL0

Ion 128.00 (127.70 to 128.70): VL0

Ion 130.00 (129.70 to 130.70): VL0

800000

600000

400000

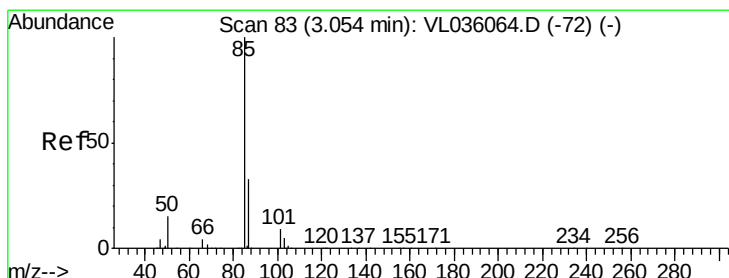
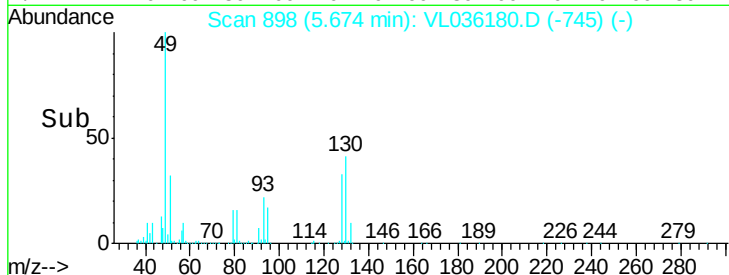
200000

0

5.60 5.65 5.70 5.75

5.67

Time-->



#2

Dichlorodifluoromethane

Concen: 0.264 ppbv

RT: 3.05 min Scan# 81

Delta R.T. -0.01 min

Lab File: VL036180.D

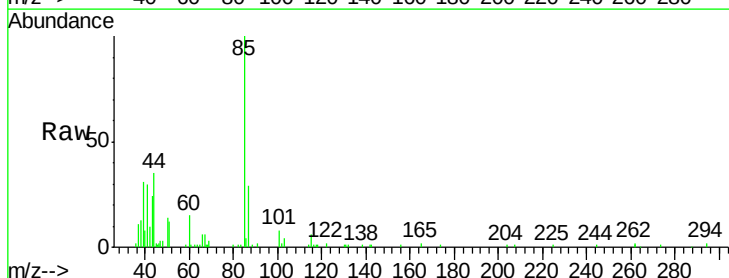
Acq: 16 Dec 2020 23:50

Tgt Ion: 85 Resp: 42098

Ion Ratio Lower Upper

85 100

87 29.7 26.5 39.7



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0

30000

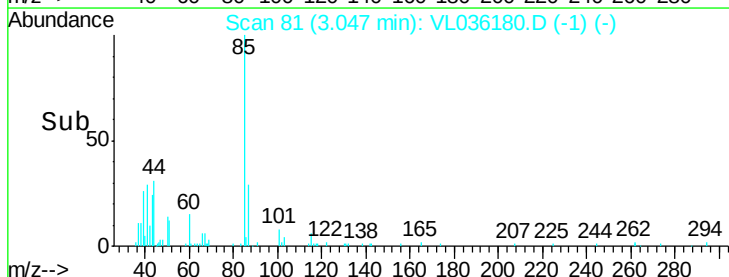
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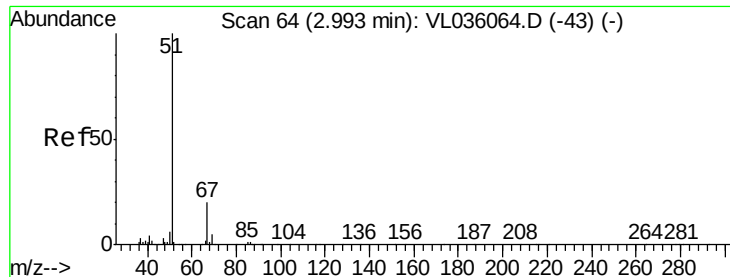
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3.00 3.05

Time-->





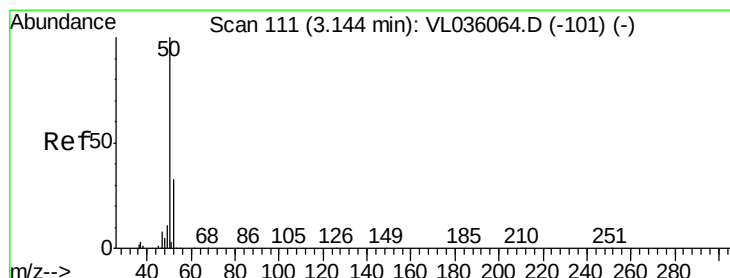
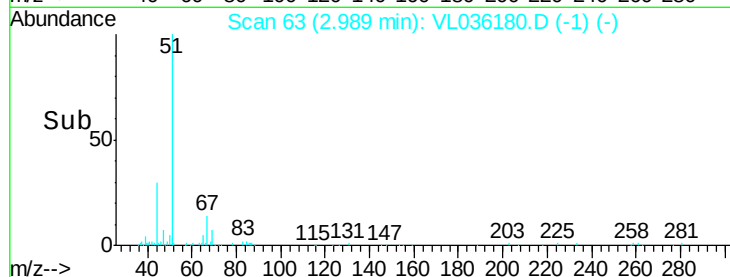
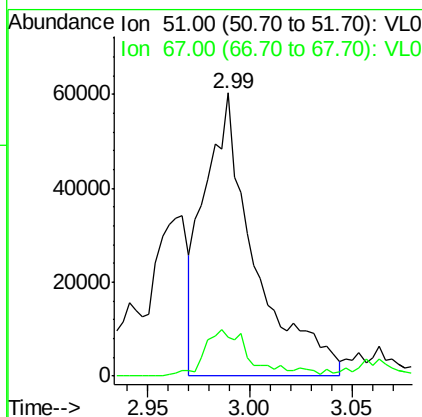
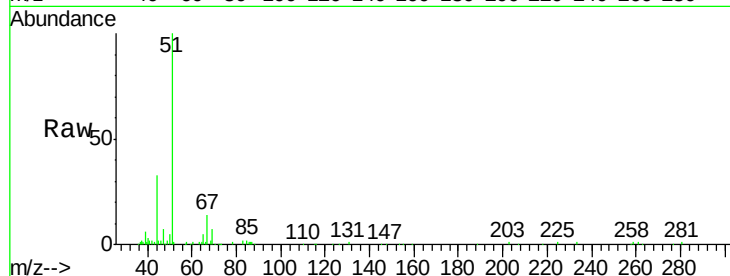
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Chlorodifluoromethane
Concen: 0.661 ppbv m
RT: 2.99 min Scan# 63
Delta R.T. -0.00 min
Lab File: VL036180.D
Acq: 16 Dec 2020 23:50

Instrument :
MSVOA_L
ClientSampled :
IA1

Tgt Ion	Ratio	Lower	Upper
51	100		
67	15.6	14.3	21.5

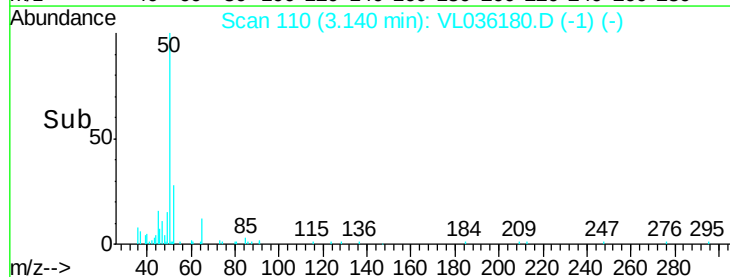
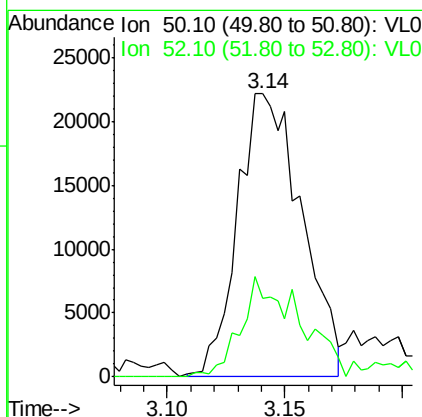
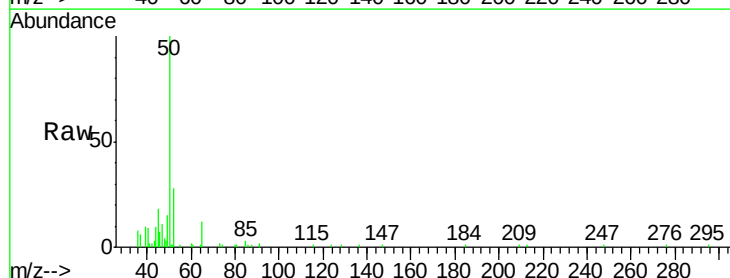
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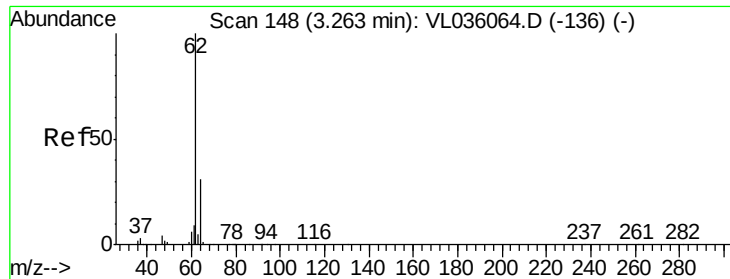
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#4
Chloromethane
Concen: 0.549 ppbv m
RT: 3.14 min Scan# 110
Delta R.T. -0.00 min
Lab File: VL036180.D
Acq: 16 Dec 2020 23:50

Tgt Ion	Ratio	Lower	Upper
50	100		
52	27.6	26.1	39.1





#5

Vinyl Chloride

Concen: 0.086 ppbv m

RT: 3.27 min Scan# 149

Delta R.T. 0.00 min

Lab File: VL036180.D

Acq: 16 Dec 2020 23:50

Instrument :

MSVOA_L

ClientSampleId :

IA1

Tgt Ion: 62 Resp: 7364

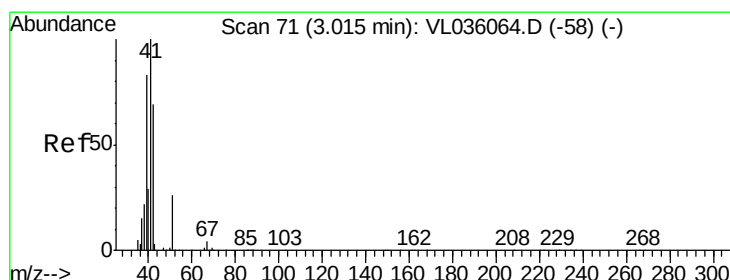
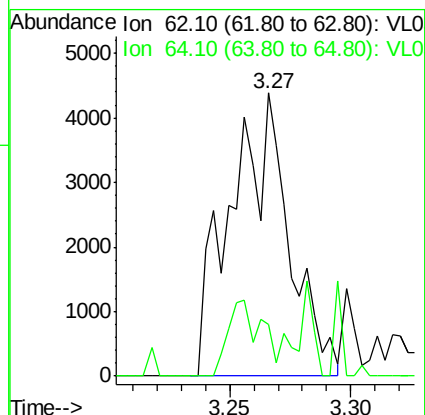
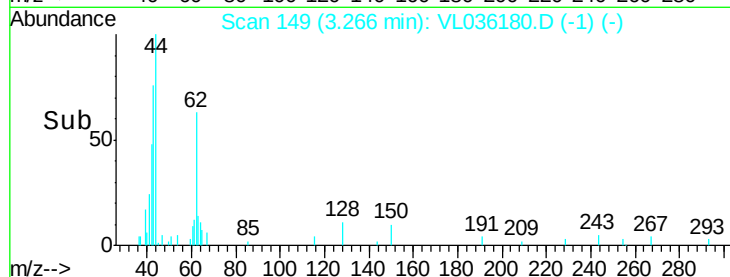
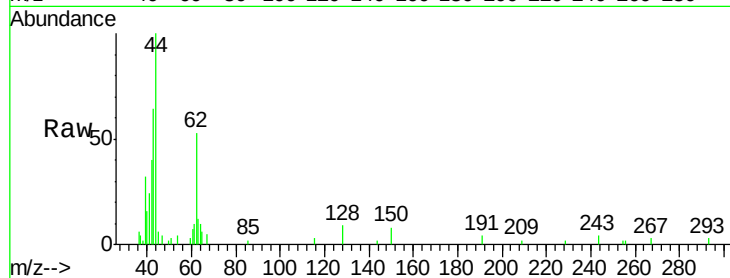
Ion Ratio Lower Upper

62 100

64 18.1 24.5 36.7#

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#9

Propene

Concen: 0.796 ppbv

RT: 3.02 min Scan# 73

Delta R.T. 0.01 min

Lab File: VL036180.D

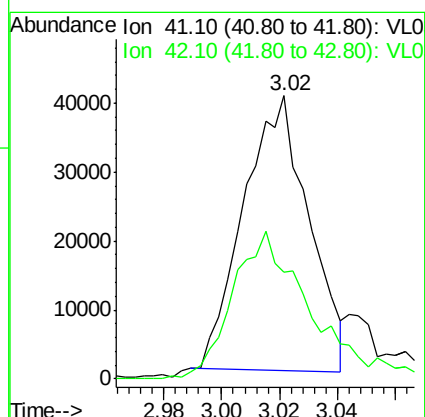
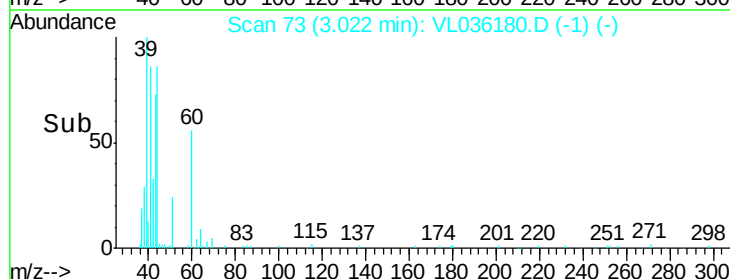
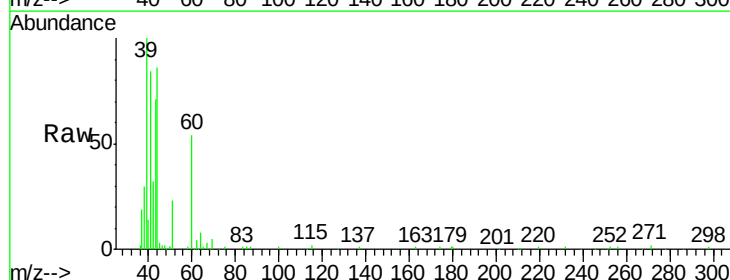
Acq: 16 Dec 2020 23:50

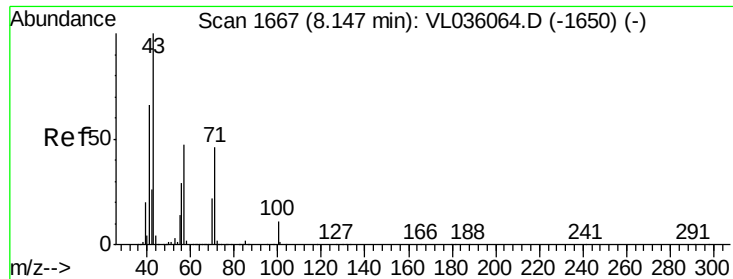
Tgt Ion: 41 Resp: 62228

Ion Ratio Lower Upper

41 100

42 67.5 57.0 85.6





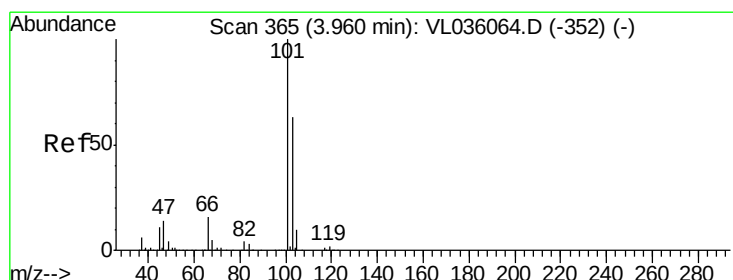
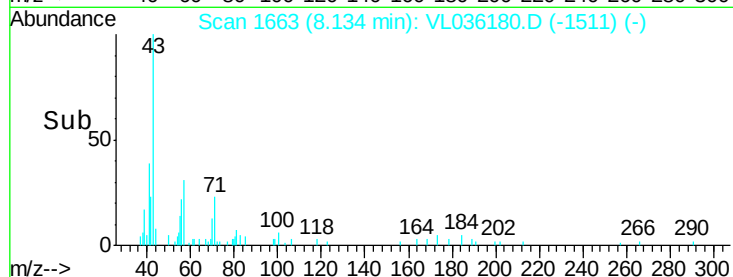
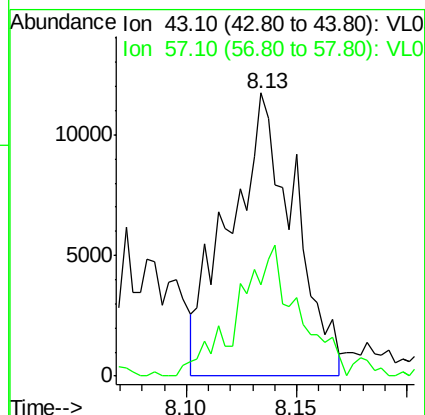
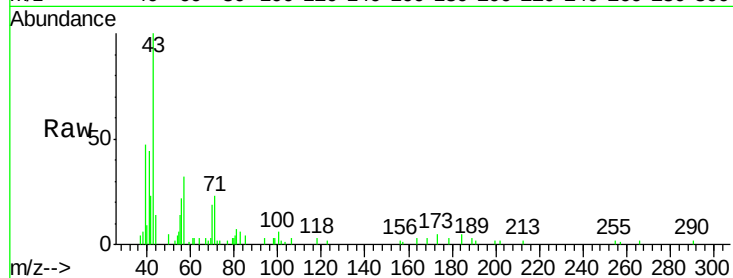
#10
Heptane
Concen: 0.120 ppbv m
RT: 8.13 min Scan# 1663
Delta R.T. -0.01 min
Lab File: VL036180.D
Acq: 16 Dec 2020 23:50

Instrument :
MSVOA_L
ClientSampleId :
IA1

Tgt Ion: 43 Resp: 24048
Ion Ratio Lower Upper
43 100
57 44.9 37.9 56.9

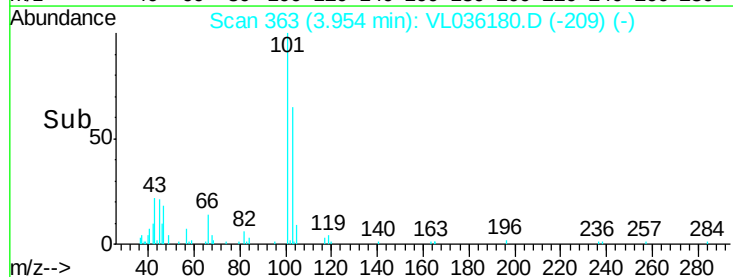
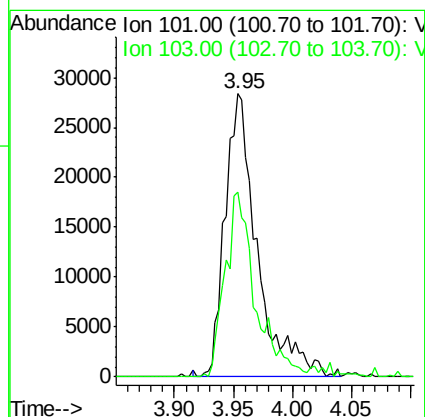
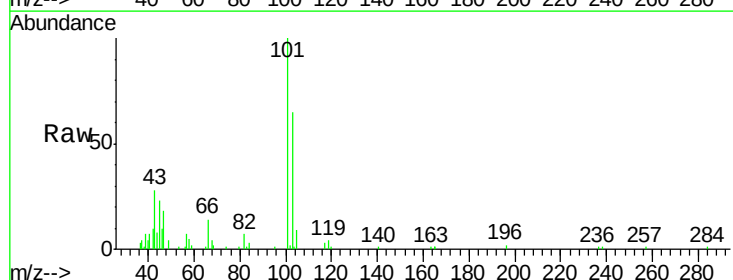
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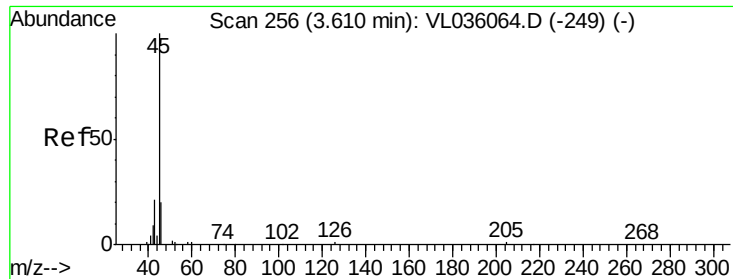
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#11
Trichlorofluoromethane
Concen: 0.286 ppbv m
RT: 3.95 min Scan# 363
Delta R.T. -0.01 min
Lab File: VL036180.D
Acq: 16 Dec 2020 23:50

Tgt Ion: 101 Resp: 53521
Ion Ratio Lower Upper
101 100
103 65.3 50.3 75.5





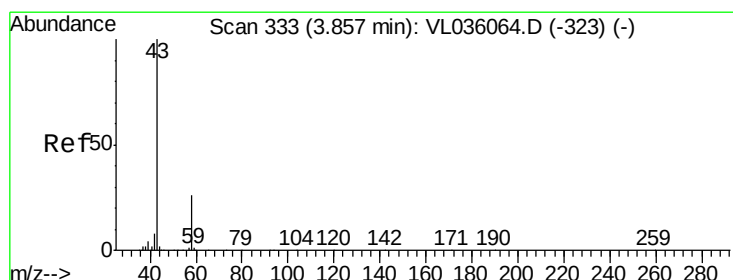
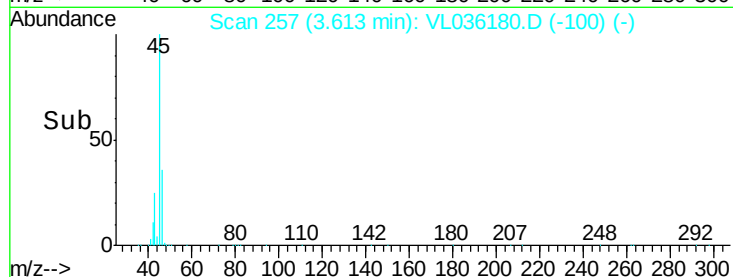
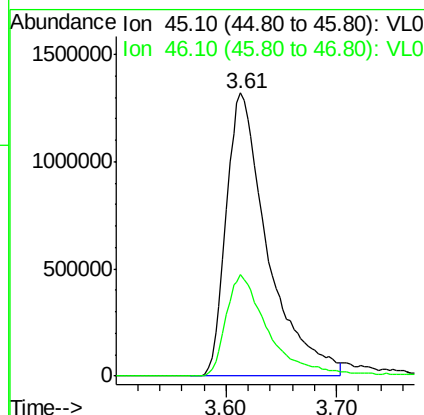
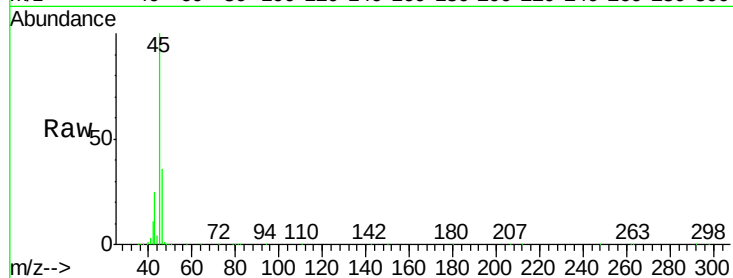
#13
Ethanol
Concen: 319.581 ppbv
RT: 3.61 min Scan# 257
Delta R.T. 0.00 min
Lab File: VL036180.D
Acq: 16 Dec 2020 23:50

Instrument :
MSVOA_L
ClientSampled :
IA1

Tgt Ion: 45 Resp: 3442534
Ion Ratio Lower Upper
45 100
46 37.9 19.0 75.8

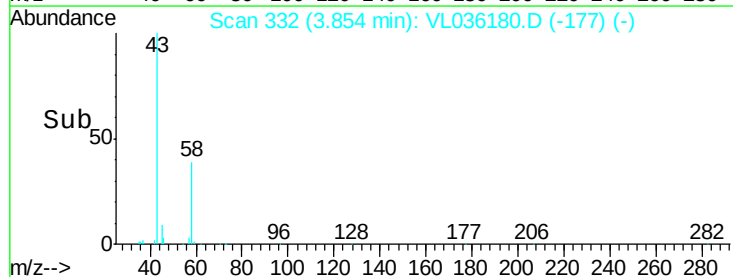
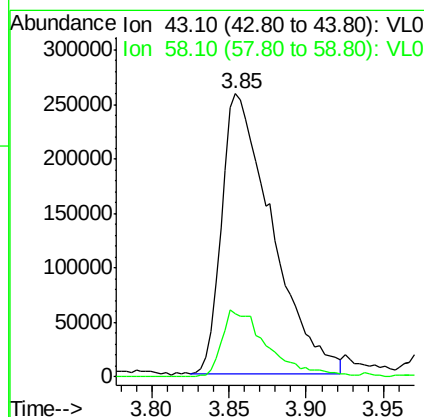
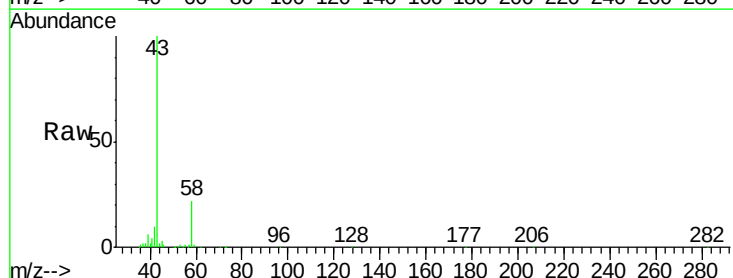
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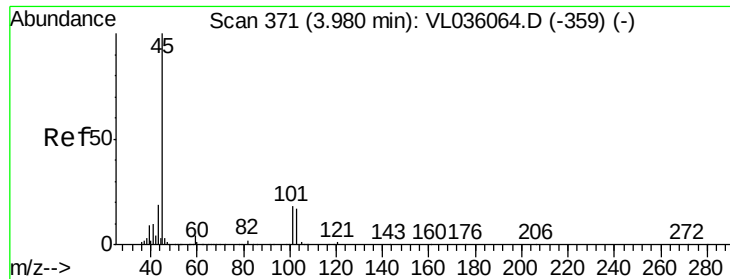
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#15
Acetone
Concen: 3.552 ppbv
RT: 3.85 min Scan# 332
Delta R.T. -0.00 min
Lab File: VL036180.D
Acq: 16 Dec 2020 23:50

Tgt Ion: 43 Resp: 583570
Ion Ratio Lower Upper
43 100
58 22.3 20.9 31.3





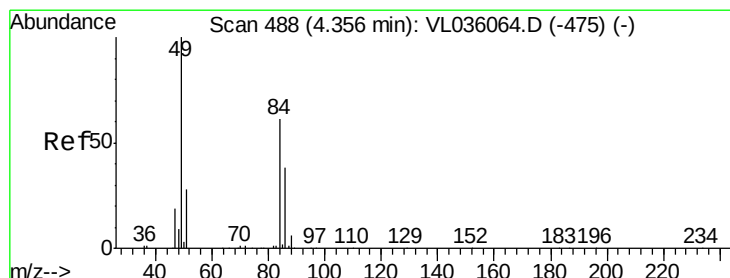
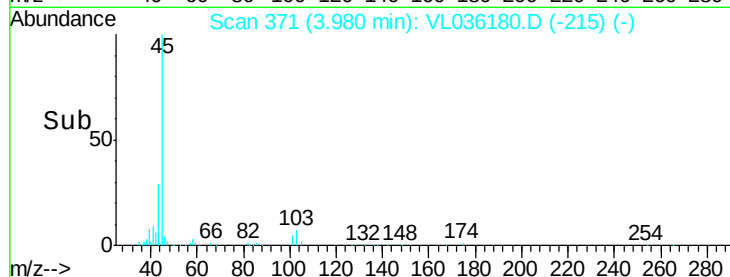
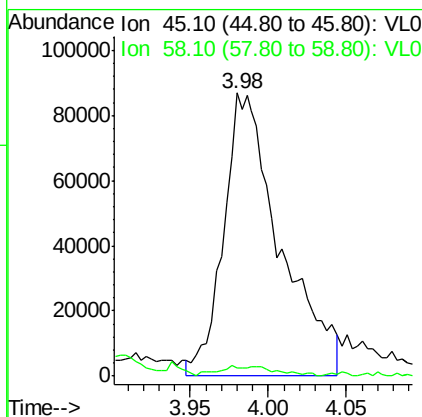
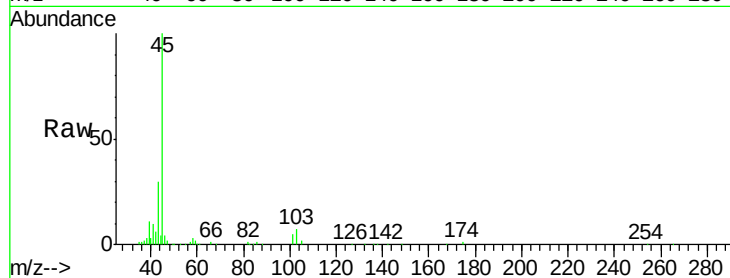
#19
Isopropyl Alcohol
Concen: 2.187 ppbv
RT: 3.98 min Scan# 371
Delta R.T. -0.00 min
Lab File: VL036180.D
Acq: 16 Dec 2020 23:50

Instrument :
MSVOA_L
ClientSampled :
IA1

Tgt Ion: 45 Resp: 219598
Ion Ratio Lower Upper
45 100
58 3.5 0.0 0.0#

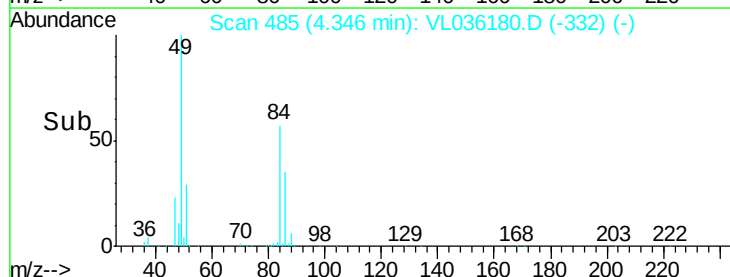
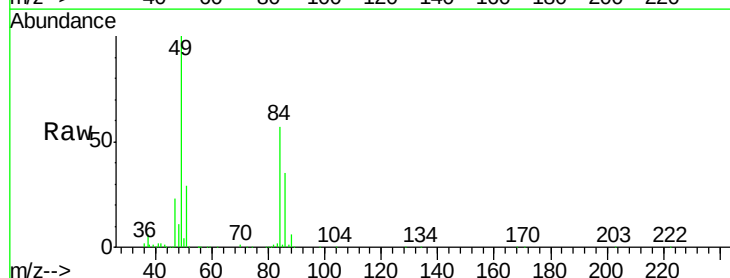
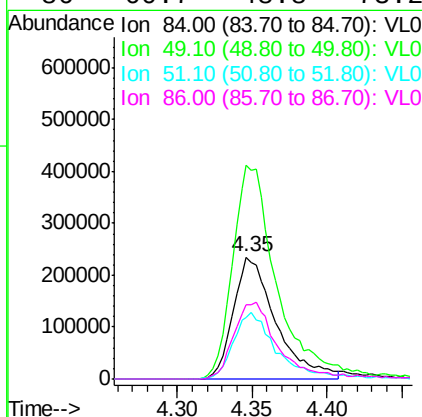
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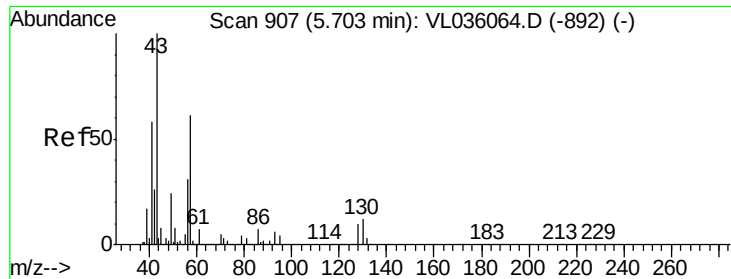
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#20
Methylene Chloride
Concen: 6.911 ppbv
RT: 4.35 min Scan# 485
Delta R.T. -0.01 min
Lab File: VL036180.D
Acq: 16 Dec 2020 23:50

Tgt Ion: 84 Resp: 465346
Ion Ratio Lower Upper
84 100
49 174.4 133.0 199.4
51 50.5 38.9 58.3
86 60.7 48.8 73.2





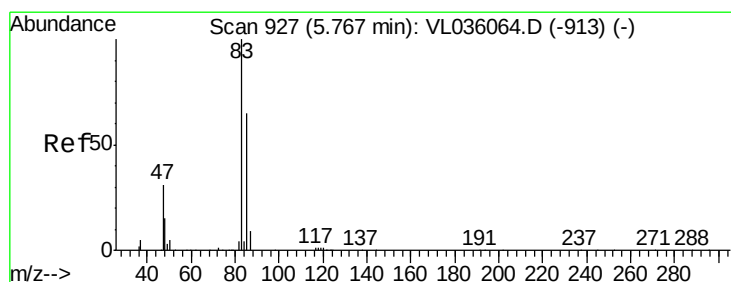
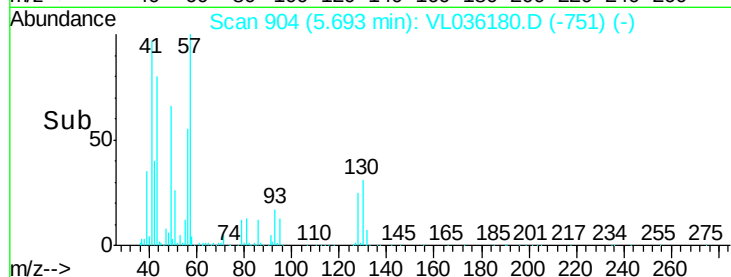
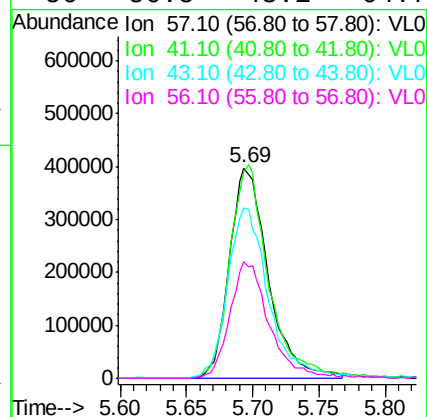
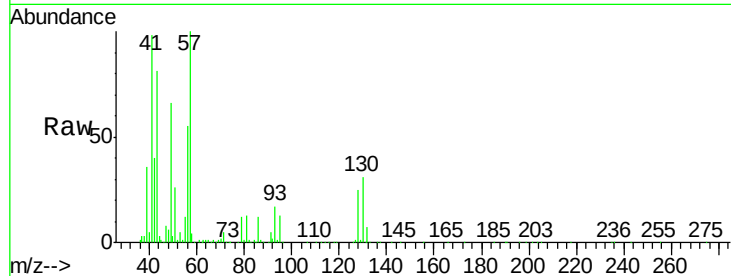
#26
Hexane
Concen: 5.459 ppbv
RT: 5.69 min Scan# 904
Delta R.T. -0.01 min
Lab File: VL036180.D
Acq: 16 Dec 2020 23:50

Instrument :
MSVOA_L
ClientSampleId :
IA1

Tgt Ion	Ratio	Lower	Upper
57	100		
41	101.9	82.9	124.3
43	86.4	199.9	299.9#
56	56.5	43.1	64.7

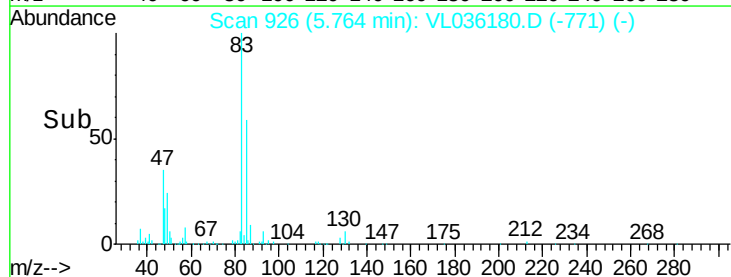
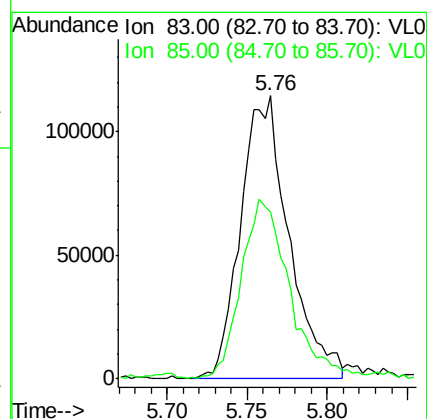
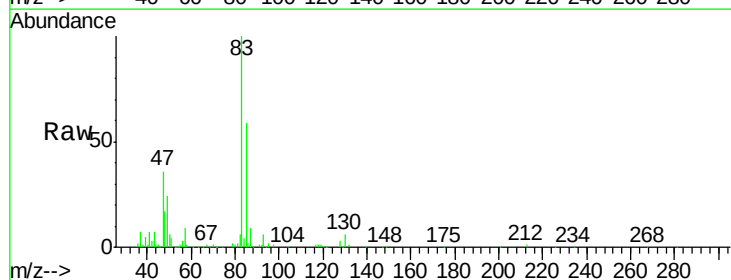
Manual Integrations
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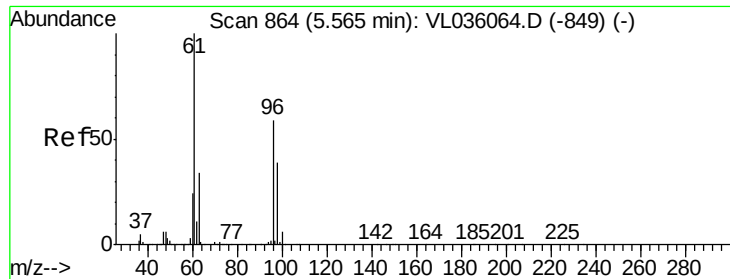
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#29
Chloroform
Concen: 1.216 ppbv m
RT: 5.76 min Scan# 926
Delta R.T. -0.00 min
Lab File: VL036180.D
Acq: 16 Dec 2020 23:50

Tgt Ion	Ratio	Lower	Upper
83	100		
85	58.9	51.8	77.6





#31

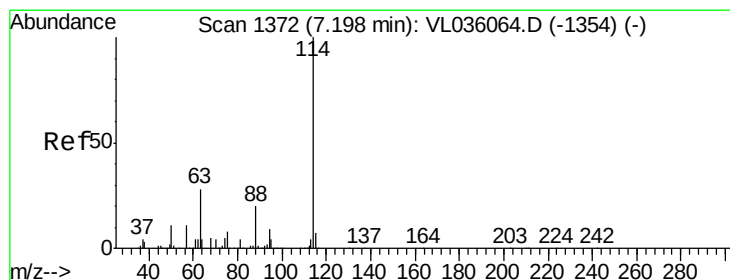
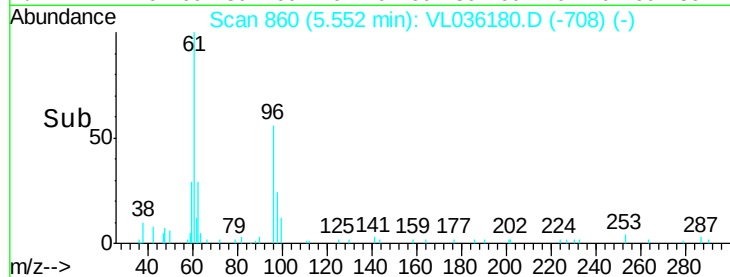
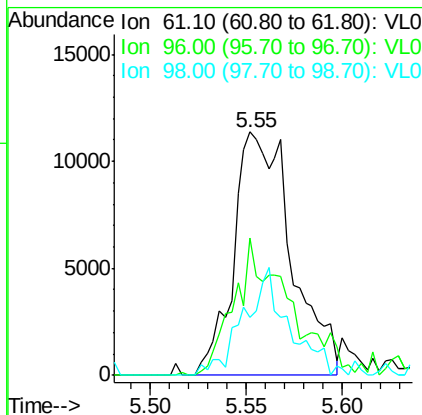
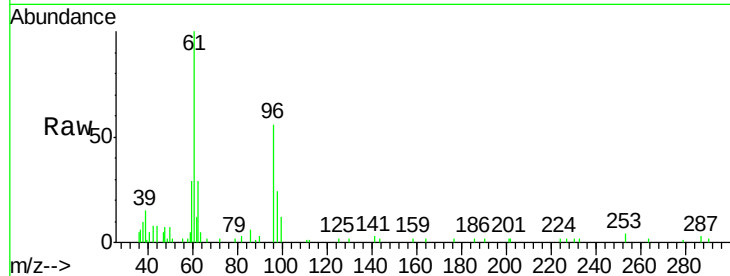
cis-1,2-Dichloroethene
Concen: 0.178 ppbv m
RT: 5.55 min Scan# 860
Delta R.T. -0.01 min
Lab File: VL036180.D
Acq: 16 Dec 2020 23:50

Instrument :
MSVOA_L
ClientSampled :
IA1

Tgt Ion	Ratio	Lower	Upper
61	100		
96	56.2	47.3	70.9
98	24.0	31.4	47.0

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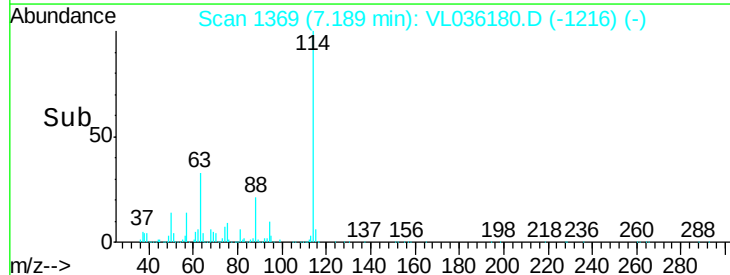
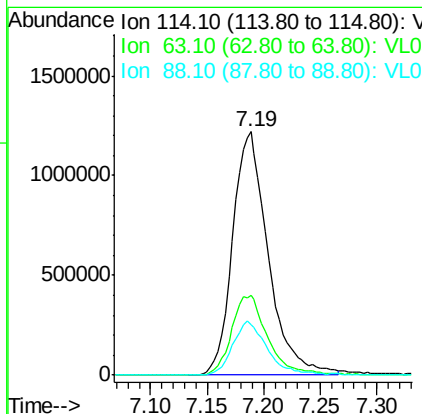
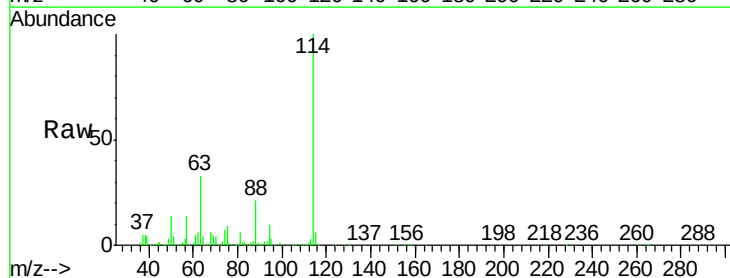
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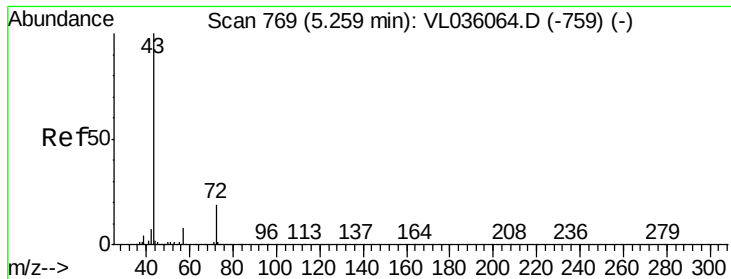


#33

1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 7.19 min Scan# 1369
Delta R.T. -0.01 min
Lab File: VL036180.D
Acq: 16 Dec 2020 23:50

Tgt Ion	Ratio	Lower	Upper
114	100		
63	33.7	23.6	35.4
88	21.7	15.8	23.6





#34

2-Butanone

Concen: 0.285 ppbv

RT: 5.26 min Scan# 768

Delta R.T. -0.00 min

Lab File: VL036180.D

Acq: 16 Dec 2020 23:50

Instrument :

MSVOA_L

ClientSampleId :

IA1

Tgt Ion: 43 Resp: 50441

Ion Ratio Lower Upper

43 100

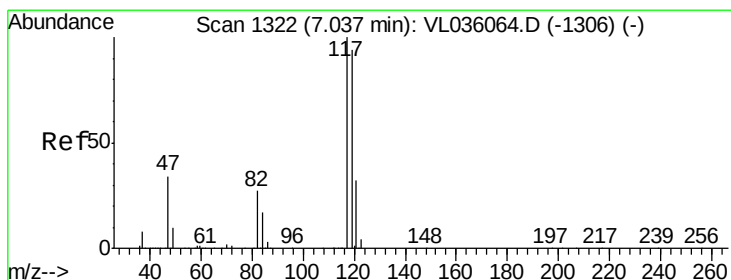
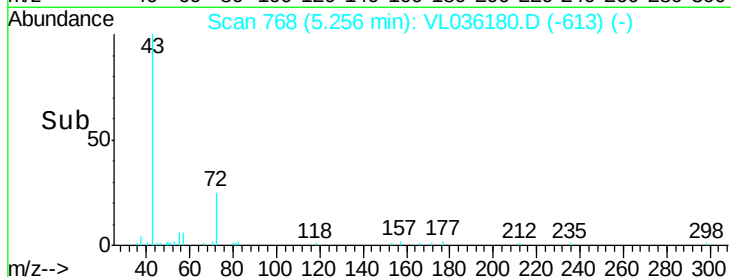
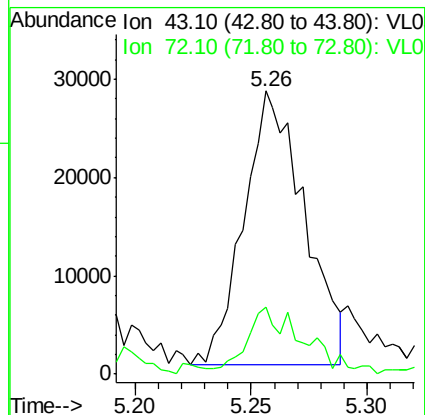
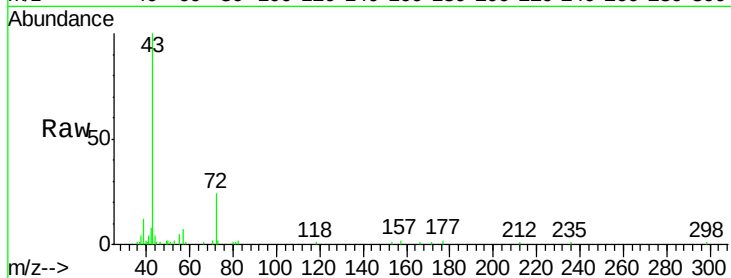
72 24.6 16.5 24.7

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#35

Carbon Tetrachloride

Concen: 0.083 ppbv m

RT: 7.03 min Scan# 1320

Delta R.T. -0.01 min

Lab File: VL036180.D

Acq: 16 Dec 2020 23:50

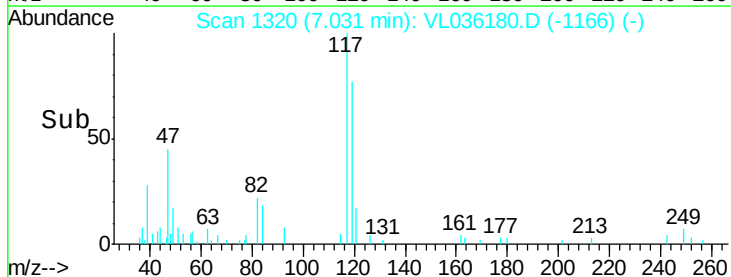
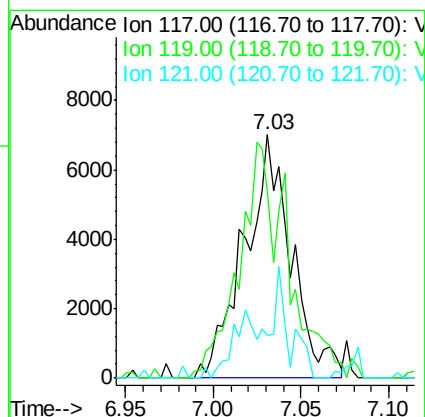
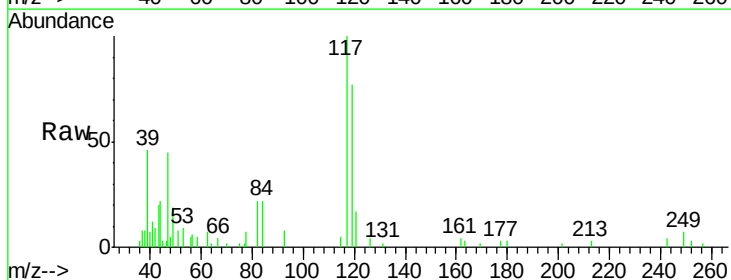
Tgt Ion: 117 Resp: 12982

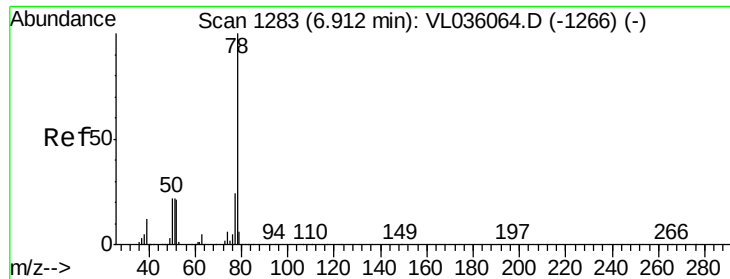
Ion Ratio Lower Upper

117 100

119 76.7 75.1 112.7

121 17.4 25.6 38.4#





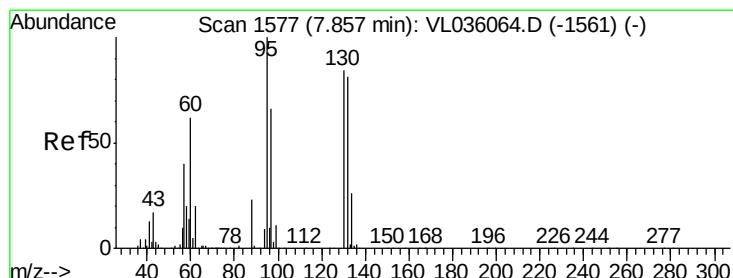
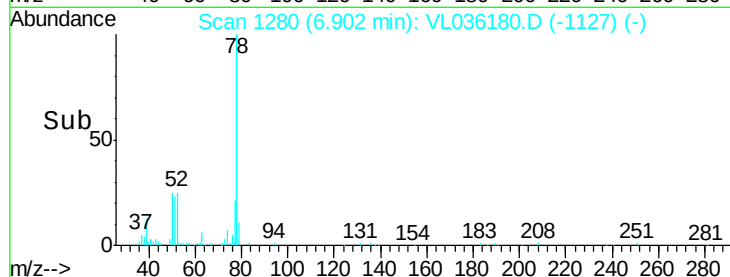
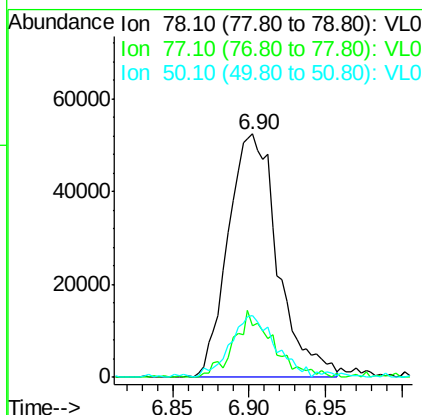
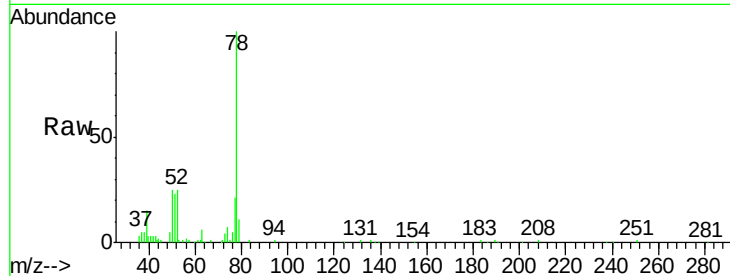
#36
Benzene
Concen: 0.521 ppbv m
RT: 6.90 min Scan# 1280
Delta R.T. -0.01 min
Lab File: VL036180.D
Acq: 16 Dec 2020 23:50

Instrument :
MSVOA_L
ClientSampleId :
IA1

Tgt Ion	Ratio	Lower	Upper
78	100		
77	21.2	19.4	29.2
50	25.4	17.8	26.8

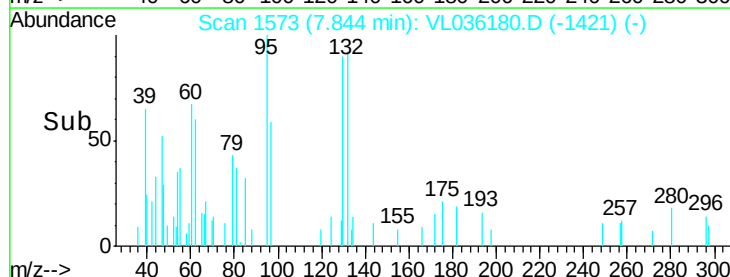
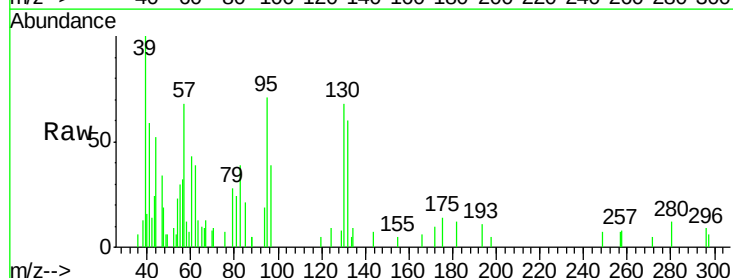
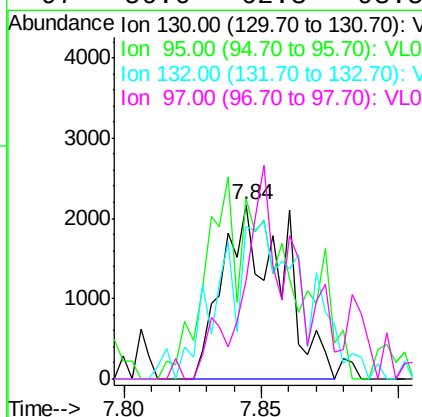
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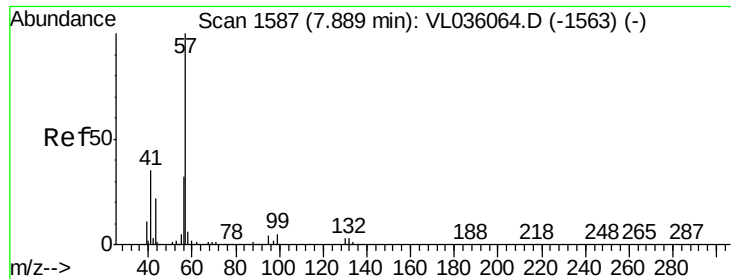
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#38
Trichloroethene
Concen: 0.039 ppbv m
RT: 7.84 min Scan# 1573
Delta R.T. -0.01 min
Lab File: VL036180.D
Acq: 16 Dec 2020 23:50

Tgt Ion	Ratio	Lower	Upper
130	100		
95	103.7	95.2	142.8
132	87.9	76.9	115.3
97	56.6	62.3	93.5





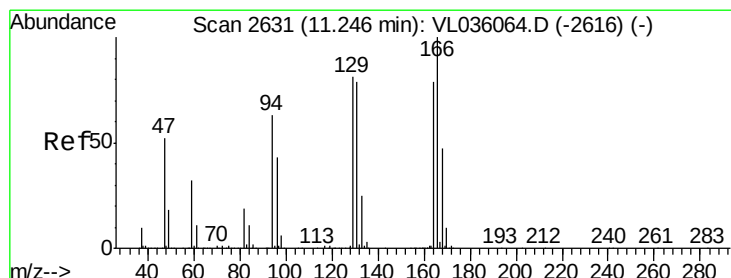
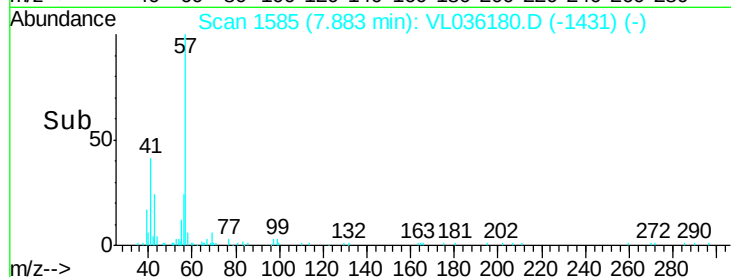
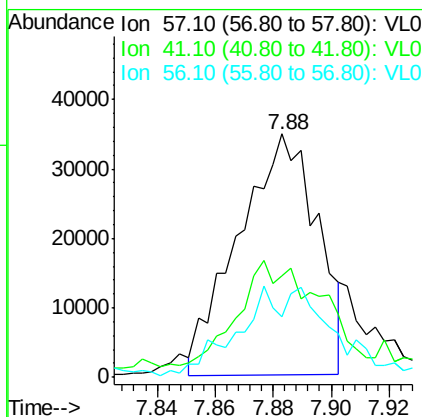
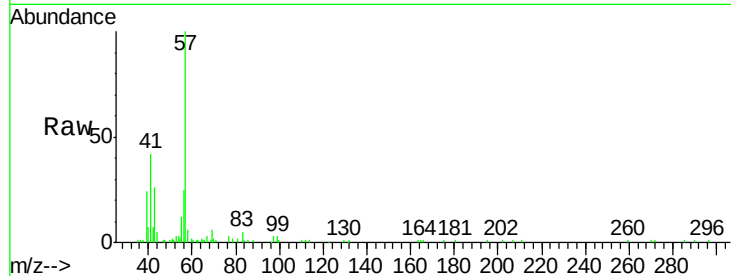
#44
 2,2,4-Trimethylpentane
 Concen: 0.160 ppbv
 RT: 7.88 min Scan# 1585
 Delta R.T. -0.01 min
 Lab File: VL036180.D
 Acq: 16 Dec 2020 23:50

Instrument :
 MSVOA_L
 ClientSampleId :
 IA1

Tgt Ion	Ratio	Lower	Upper
57	100		
41	59.4	28.9	43.3#
56	45.1	25.3	37.9#

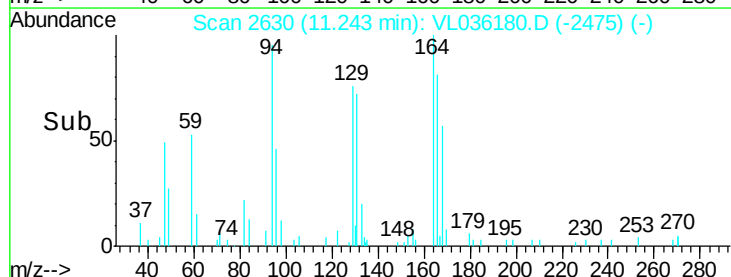
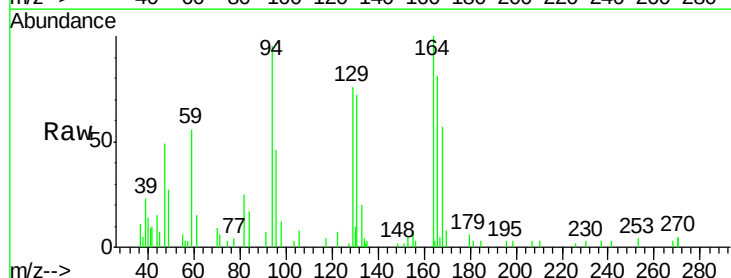
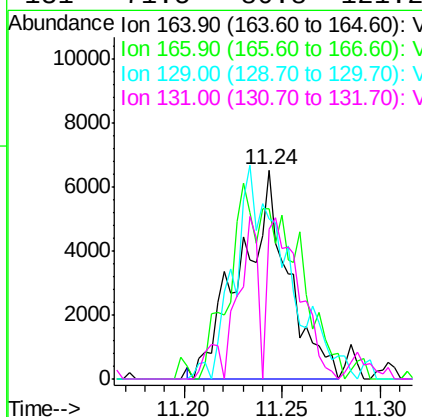
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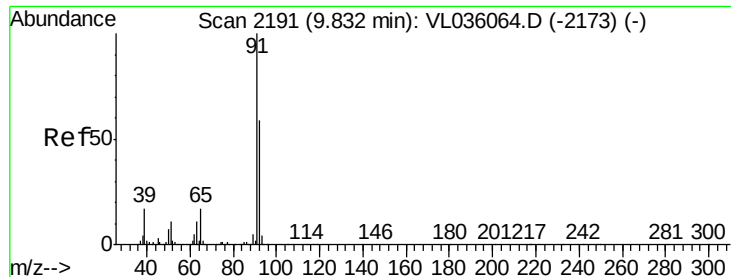
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#52
 Tetrachloroethene
 Concen: 0.135 ppbv m
 RT: 11.24 min Scan# 2630
 Delta R.T. -0.00 min
 Lab File: VL036180.D
 Acq: 16 Dec 2020 23:50

Tgt Ion	Ratio	Lower	Upper
164	100		
166	81.4	101.9	152.9#
129	76.3	82.1	123.1#
131	71.5	80.8	121.2#





#53

Toluene

Concen: 1.768 ppbv

RT: 9.82 min Scan# 2188

Delta R.T. -0.01 min

Lab File: VL036180.D

Acq: 16 Dec 2020 23:50

Instrument :

MSVOA_L

ClientSampleId :

IA1

Tgt Ion: 91 Resp: 449321

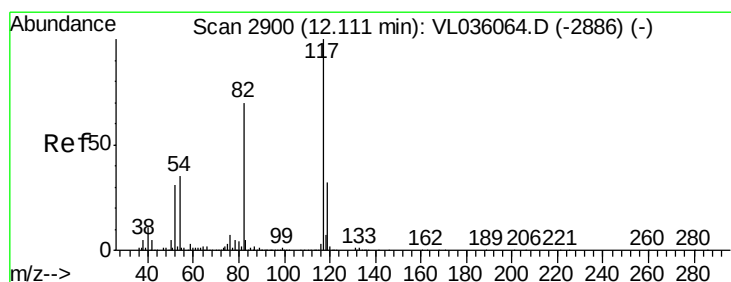
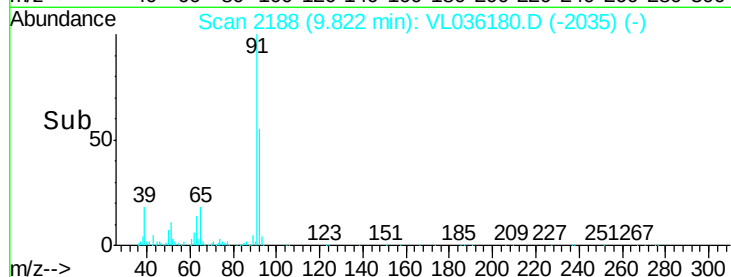
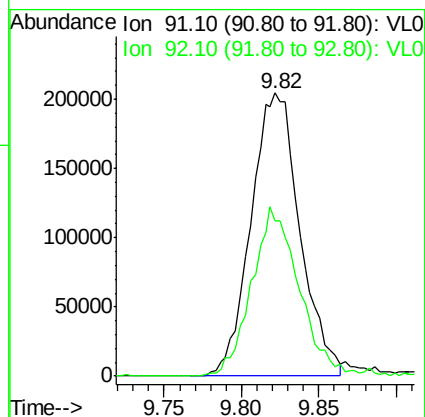
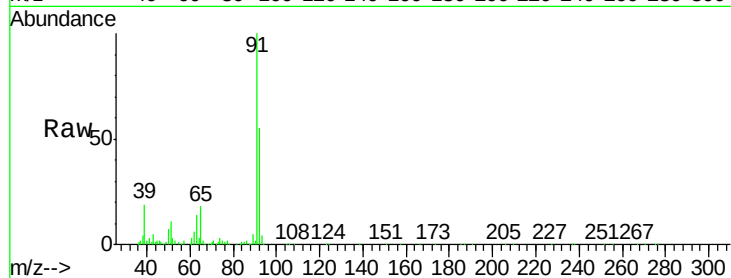
Ion Ratio Lower Upper

91 100

92 58.7 48.2 72.2

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#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.10 min Scan# 2898

Delta R.T. -0.01 min

Lab File: VL036180.D

Acq: 16 Dec 2020 23:50

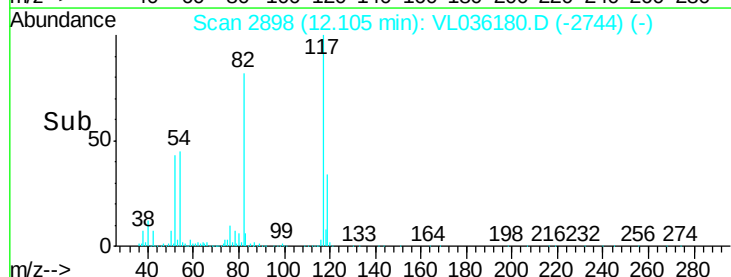
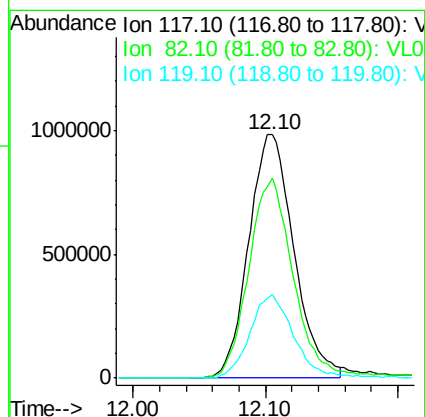
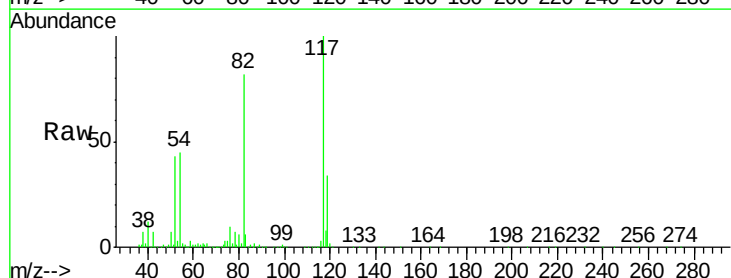
Tgt Ion: 117 Resp: 2331997

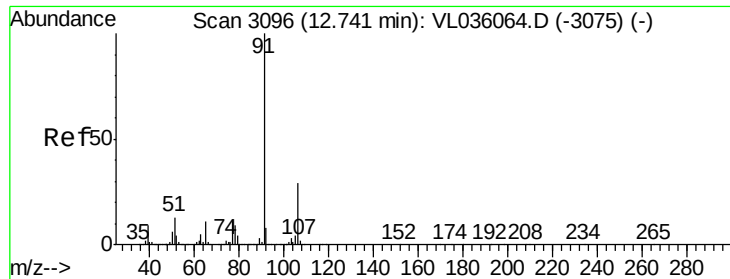
Ion Ratio Lower Upper

117 100

82 83.4 0.0 0.0#

119 33.6 0.0 0.0#





#58

Ethyl Benzene

Concen: 0.097 ppbv m

RT: 12.73 min Scan# 3093

Delta R.T. -0.01 min

Lab File: VL036180.D

Acq: 16 Dec 2020 23:50

Instrument :

MSVOA_L

ClientSampled :

IA1

Tgt Ion: 91 Resp: 30953

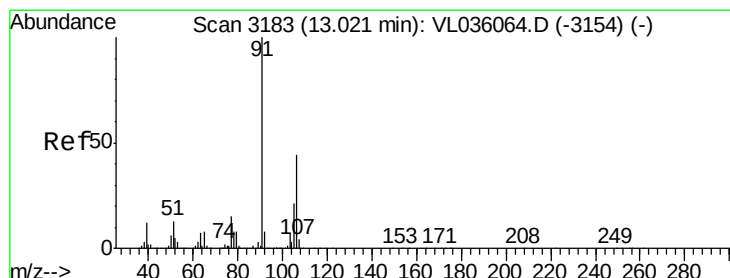
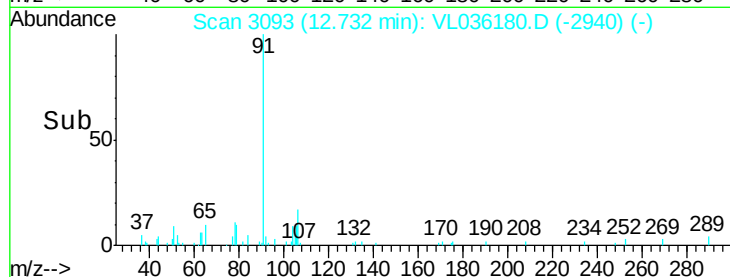
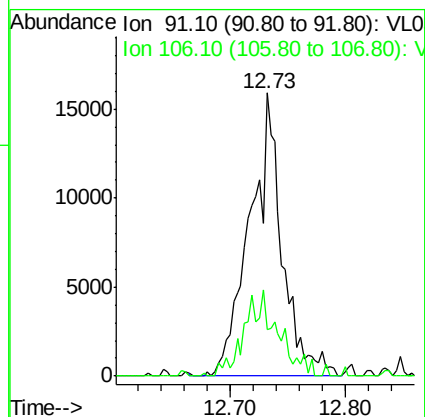
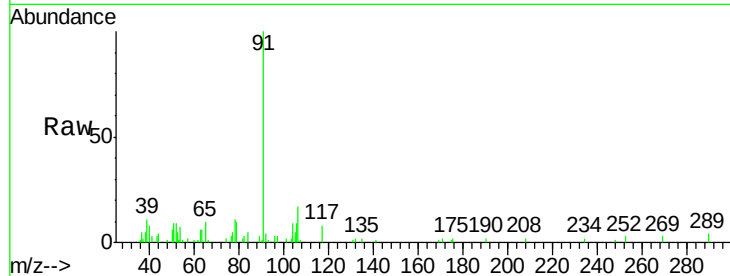
Ion Ratio Lower Upper

91 100

106 16.6 23.0 34.4#

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#59

m/p-Xylene

Concen: 0.310 ppbv m

RT: 12.99 min Scan# 3174

Delta R.T. -0.03 min

Lab File: VL036180.D

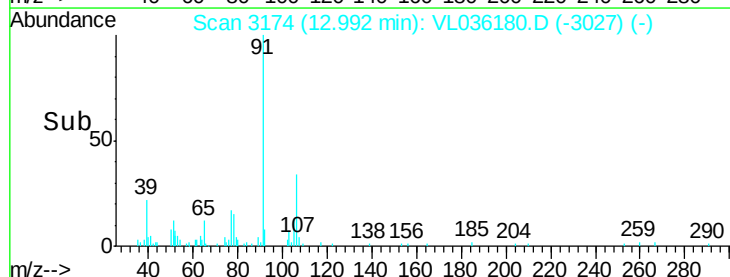
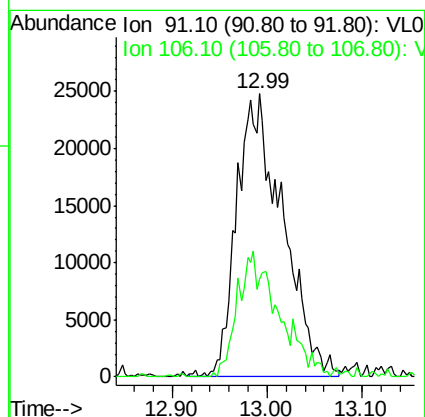
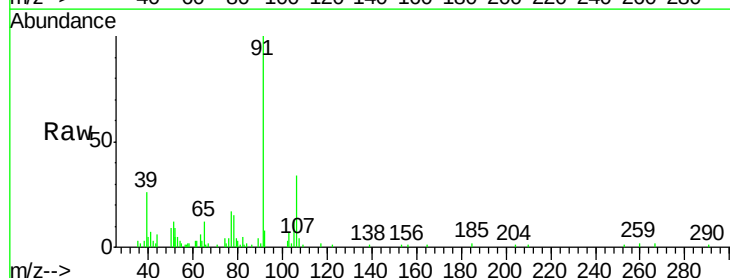
Acq: 16 Dec 2020 23:50

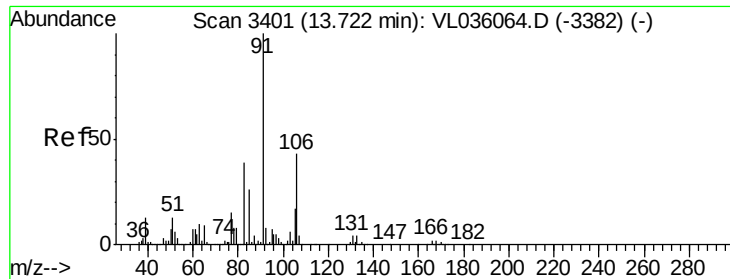
Tgt Ion: 91 Resp: 83382

Ion Ratio Lower Upper

91 100

106 0.0 33.6 50.4#





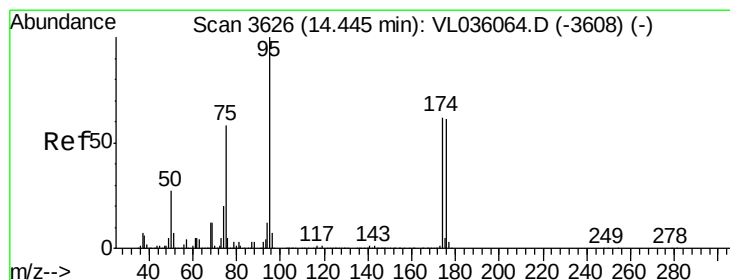
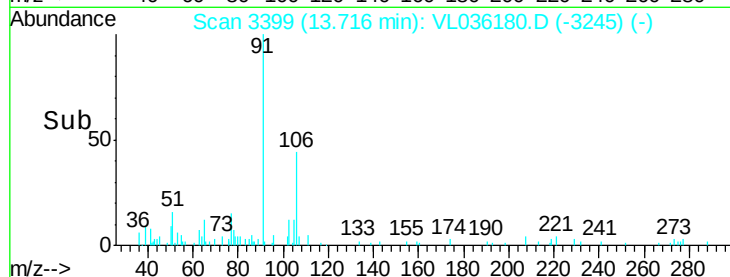
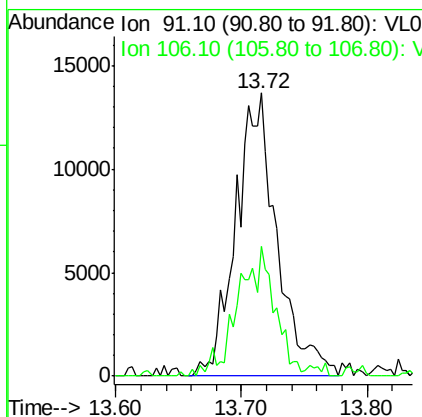
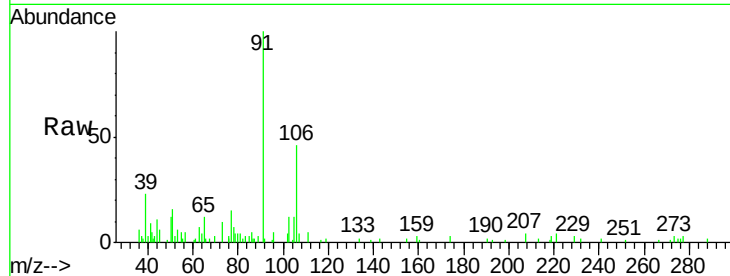
#60
o-Xylene
Concen: 0.123 ppbv m
RT: 13.72 min Scan# 3399
Delta R.T. -0.01 min
Lab File: VL036180.D
Acq: 16 Dec 2020 23:50

Instrument :
MSVOA_L
ClientSampled :
IA1

Tgt Ion: 91 Resp: 31160
Ion Ratio Lower Upper
91 100
106 42.8 21.6 64.6

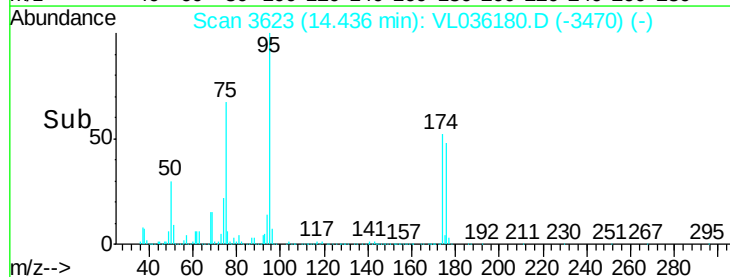
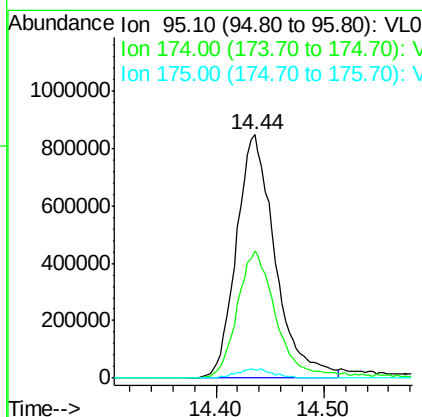
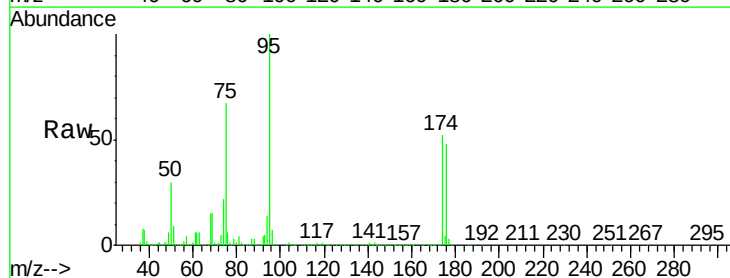
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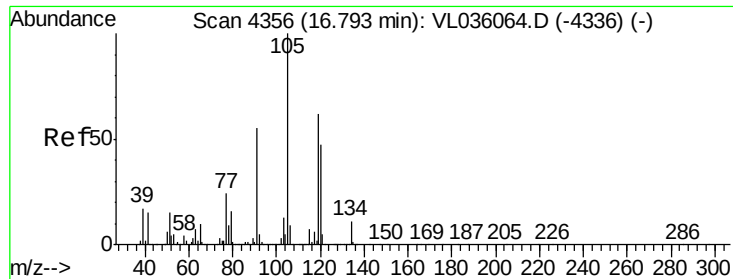
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#68
1-Bromo-4-Fluorobenzene
Concen: 11.457 ppbv
RT: 14.44 min Scan# 3623
Delta R.T. -0.01 min
Lab File: VL036180.D
Acq: 16 Dec 2020 23:50

Tgt Ion: 95 Resp: 2121460
Ion Ratio Lower Upper
95 100
174 54.7 50.7 76.1
175 3.7 4.0 6.0#





#74
 1,2,4-Trimethylbenzene
 Concen: 0.170 ppbv m
 RT: 16.78 min Scan# 4353
 Delta R.T. -0.01 min
 Lab File: VL036180.D
 Acq: 16 Dec 2020 23:50

Instrument :
 MSVOA_L
 ClientSampleId :
 IA1

Tgt Ion:	105	Resp:	44864
Ion Ratio	Lower	Upper	
105	100		
120	38.0	37.4	56.0
91	14.7	45.6	68.4#
77	8.8	19.4	29.2#

Manual Integrations
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