

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL112420\
 Data File : VL036012.D
 Acq On : 25 Nov 2020 2:59
 Operator : SY/AP
 Sample : L4883-02
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 OA1

Manual Integrations
 APPROVED

MMDadoda
 11/27/2020 1:15:52 PM

Quant Time: Nov 25 07:33:21 2020
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL110320AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Wed Nov 04 02:40:06 2020
 QLast Update : Wed Nov 04 02:40:06 2020
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.64	49	1231427	10.00	ppbv	-0.03
33) 1,4-Difluorobenzene	7.15	114	4359573	10.00	ppbv	-0.03
55) Chlorobenzene-d5	12.06	117	3996747	10.00	ppbv	-0.04

System Monitoring Compounds		R.T.	QIon	Response	Conc	Units	Dev(Min)
68) 1-Bromo-4-Fluorobenzene	14.39	95	3073602	10.82	ppbv	-0.04	
Spiked Amount	10.000	Range	65 - 135	Recovery	=	108.20%	

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.02	85	61288	0.264	ppbv	93
3) Chlorodifluoromethane	2.96	51	70115m	0.475	ppbv	
4) Chloromethane	3.12	50	42197	0.589	ppbv #	87
9) Propene	3.00	41	90564	1.678	ppbv #	80
11) Trichlorofluoromethane	3.92	101	68323	0.235	ppbv	94
13) Ethanol	3.59	45	4050644	345.927	ppbv	96
15) Acetone	3.83	43	1184547	8.998	ppbv	98
19) Isopropyl Alcohol	3.96	45	109802	1.357	ppbv #	1
20) Methylene Chloride	4.32	84	5135883	55.416	ppbv #	93
26) Hexane	5.66	57	2188664	15.302	ppbv #	46
30) Cyclohexane	7.13	84	38600m	0.248	ppbv	
34) 2-Butanone	5.23	43	107176	0.757	ppbv	97
35) Carbon Tetrachloride	6.99	117	14056m	0.060	ppbv	
36) Benzene	6.86	78	84252	0.260	ppbv	98
44) 2,2,4-Trimethylpentane	7.84	57	51779	0.121	ppbv #	77
50) 4-Methyl-2-Pentanone	8.73	43	190502	0.881	ppbv	93
52) Tetrachloroethene	11.19	164	26107m	0.170	ppbv	
53) Toluene	9.78	91	1510329	3.862	ppbv	97
59) m/p-Xylene	12.94	91	66150m	0.161	ppbv	
76) 1,4-Dichlorobenzene	17.11	146	33863m	0.116	ppbv	

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

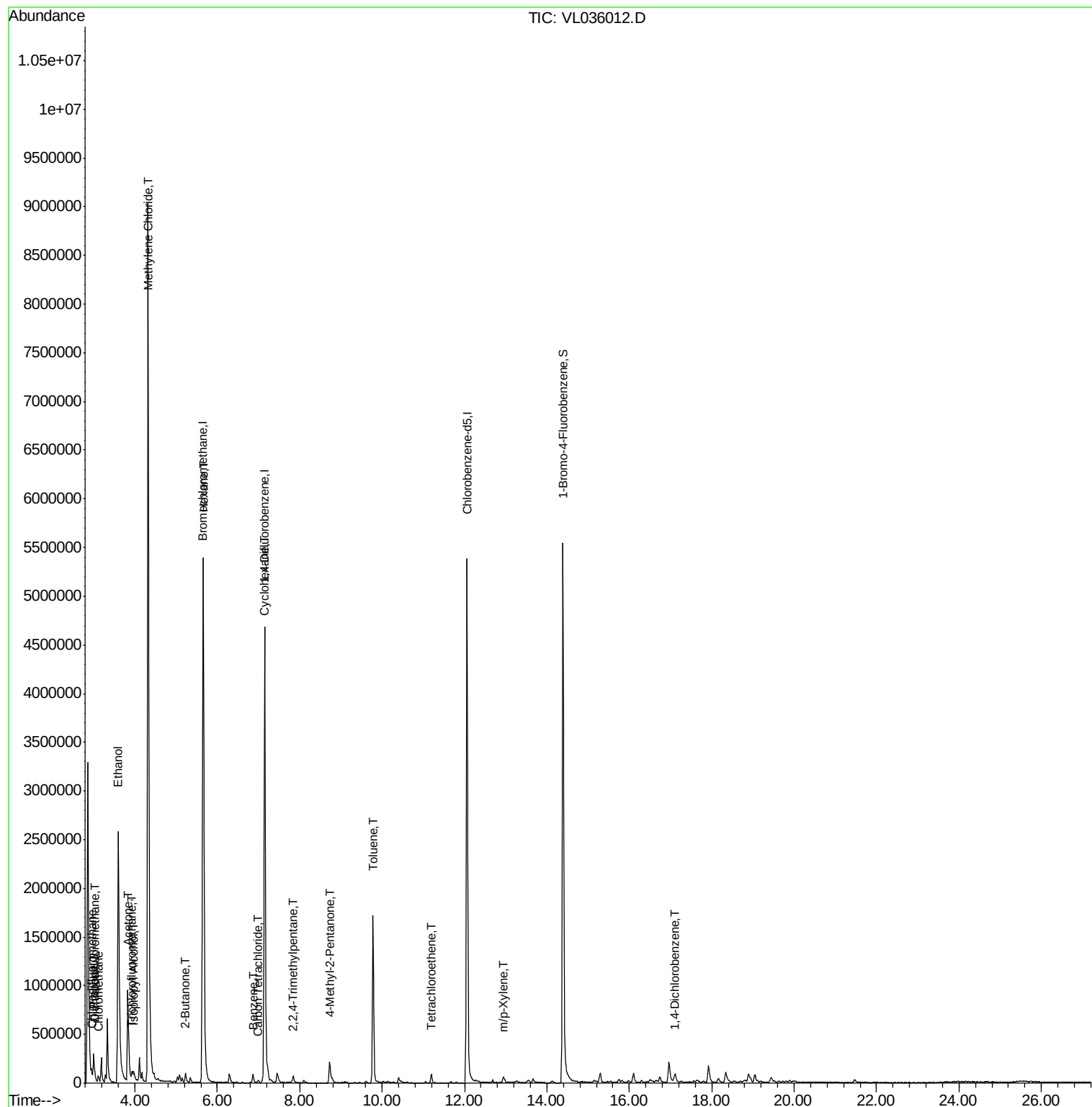
Data Path : Z:\V0ASRV\HPCHEM1\MSVOA L\DATA\VL112420\
Data File : VL036012.D
Acq On : 25 Nov 2020 2:59
Operator : SY/AP
Sample : L4883-02
Misc : 400ml/MSVOA L
ALS Vial : 1 Sample Multiplier: 1

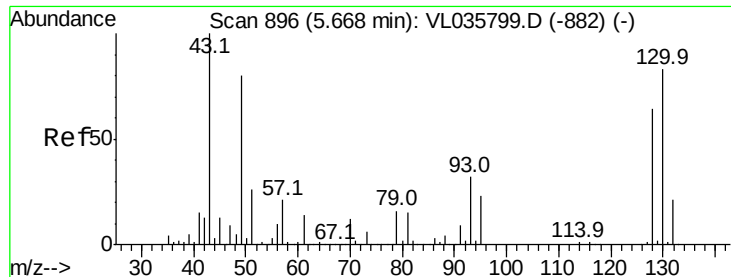
Instrument :
MSVOA_L
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OA1

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Quant Time: Nov 25 07:33:21 2020
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA L\METHODS\VL110320AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Wed Nov
QLast Update : Wed Nov 04 02:40:06 2020
Response via : Initial Calibration





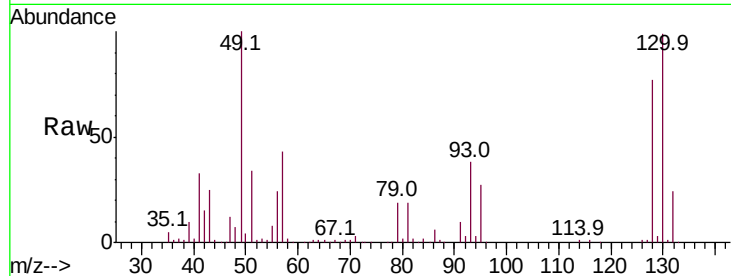
#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 5.64 min Scan# 888
Delta R.T. -0.03 min
Lab File: VL036012.D
Acq: 25 Nov 2020 2:59

Instrument :
MSVOA_L
ClientSampled :
QA1

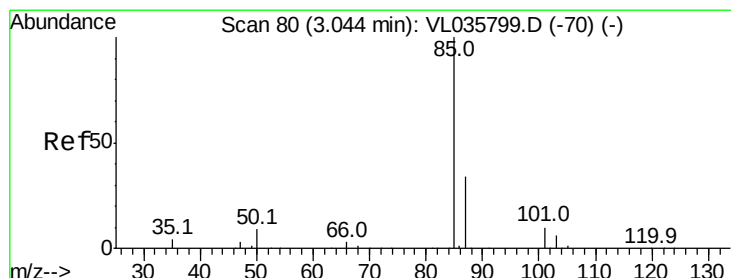
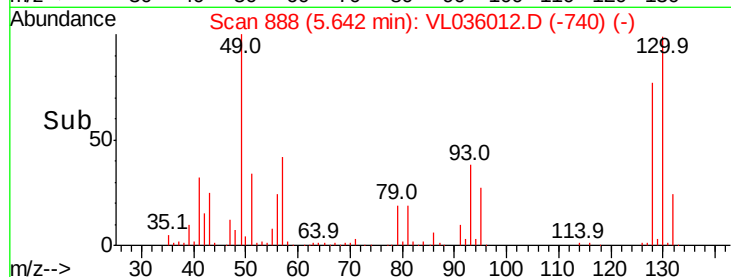
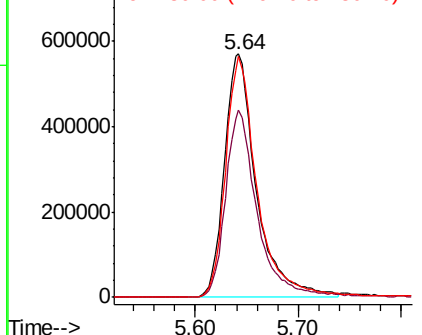
Tot Ion: 49 Resp: 1231427
Ion Ratio Lower Upper
49 100
128 77.0 41.5 124.6
130 99.2 53.7 161.1

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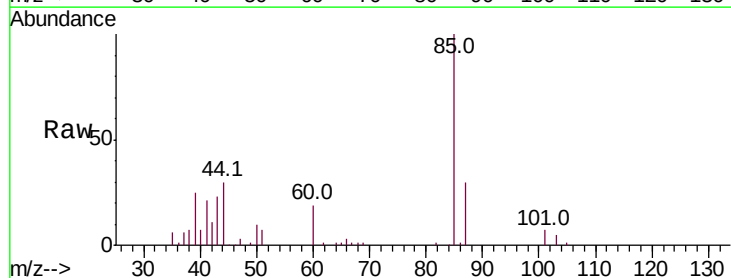


Abundance Ion 49.10 (48.80 to 49.80): VL0
Ion 128.00 (127.70 to 128.70): V
Ion 130.00 (129.70 to 130.70): V

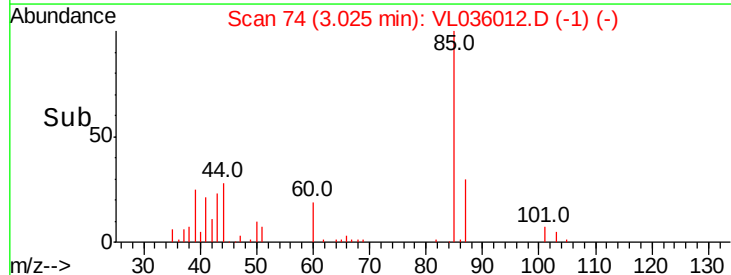
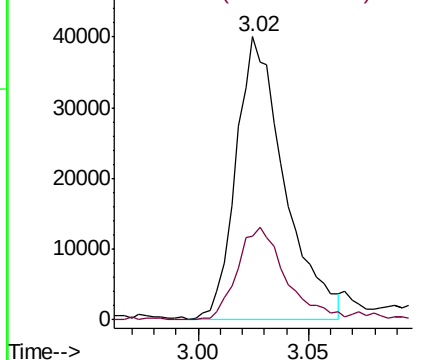


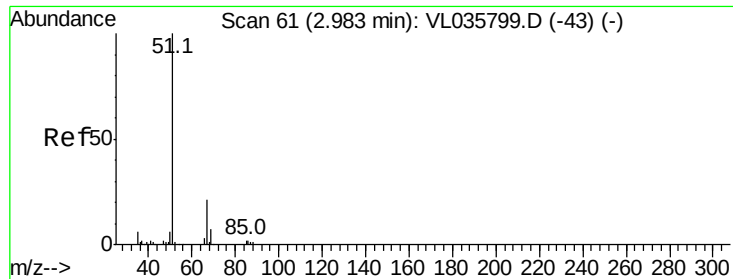
#2
Dichlorodifluoromethane
Concen: 0.264 ppbv
RT: 3.02 min Scan# 74
Delta R.T. -0.02 min
Lab File: VL036012.D
Acq: 25 Nov 2020 2:59

Tgt Ion: 85 Resp: 61288
Ion Ratio Lower Upper
85 100
87 29.6 27.1 40.7



Abundance Ion 85.00 (84.70 to 85.70): VL0
Ion 87.00 (86.70 to 87.70): VL0





#3

Chlorodifluoromethane

Concen: 0.475 ppbv

RT: 2.96 min Scan# 55

Delta R.T. -0.02 min

Lab File: VL036012.D

Acq: 25 Nov 2020 2:59

Instrument :

MSVOA_L

ClientSampleId :

QA1

Tot Ion: 51 Resp: 70115

Ion Ratio Lower Upper

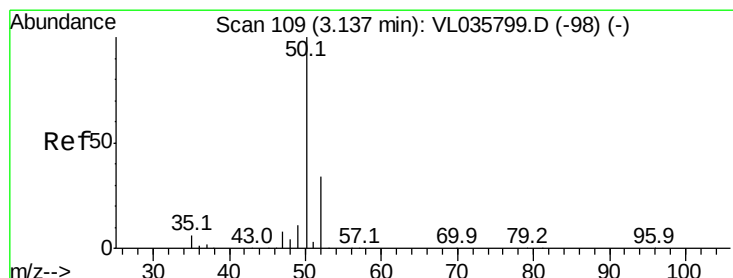
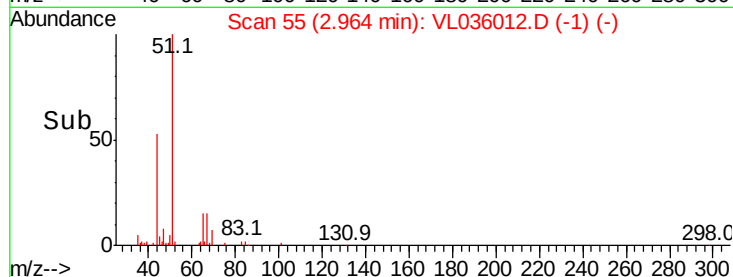
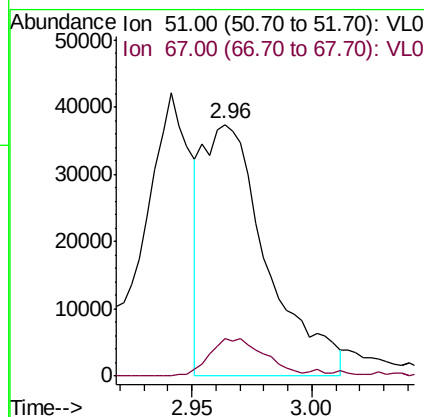
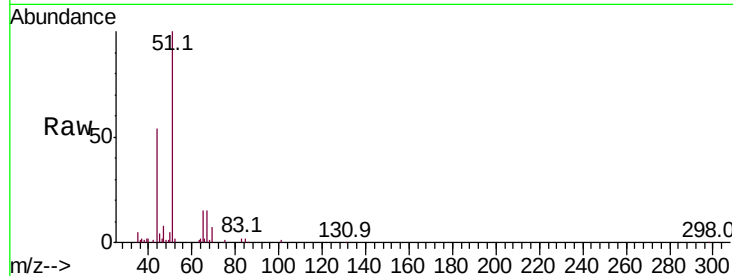
51 100

67 14.7 17.0 25.4#

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#4

Chloromethane

Concen: 0.589 ppbv

RT: 3.12 min Scan# 104

Delta R.T. -0.02 min

Lab File: VL036012.D

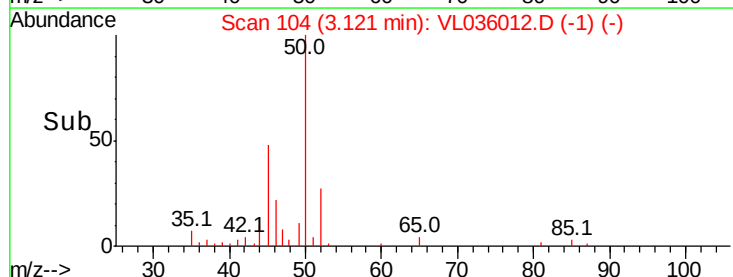
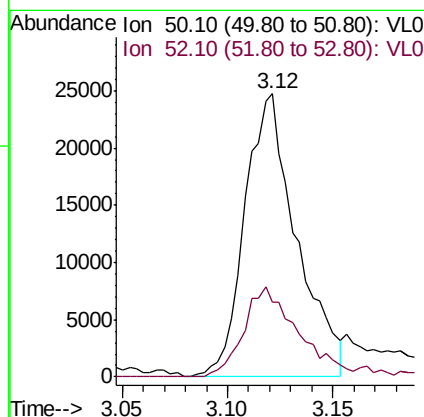
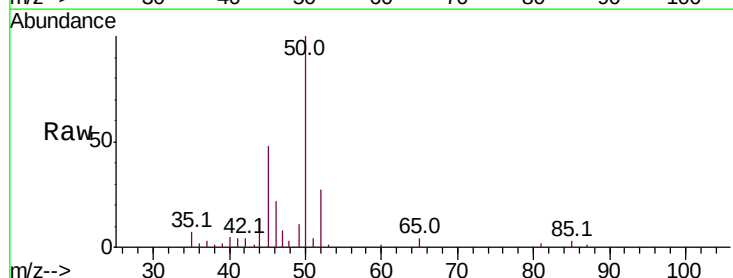
Acq: 25 Nov 2020 2:59

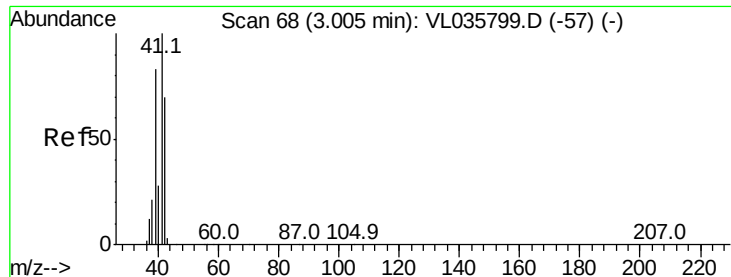
Tgt Ion: 50 Resp: 42197

Ion Ratio Lower Upper

50 100

52 26.6 27.1 40.7#





#9

Propene

Concen: 1.678 ppbv

RT: 3.00 min Scan# 66

Delta R.T. -0.01 min

Lab File: VL036012.D

Acq: 25 Nov 2020 2:59

Instrument :

MSVOA_L

ClientSampled :

QA1

Tot Ion: 41 Resp: 90564

Ion Ratio Lower Upper

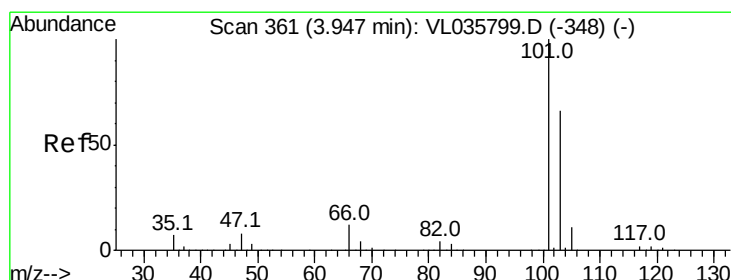
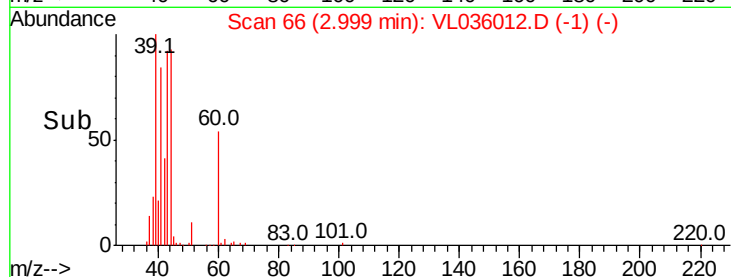
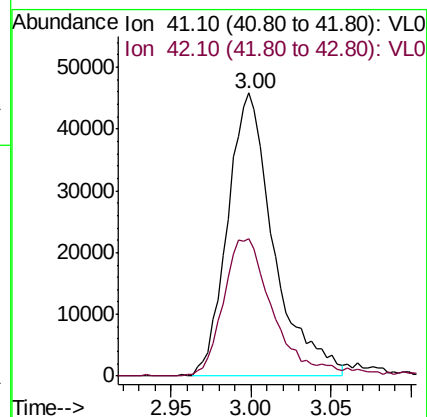
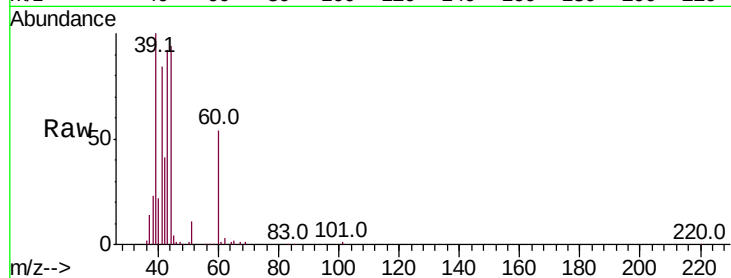
41 100

42 54.0 56.2 84.4#

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#11

Trichlorofluoromethane

Concen: 0.235 ppbv

RT: 3.92 min Scan# 354

Delta R.T. -0.02 min

Lab File: VL036012.D

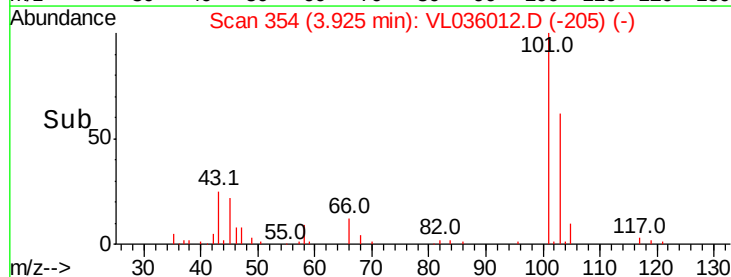
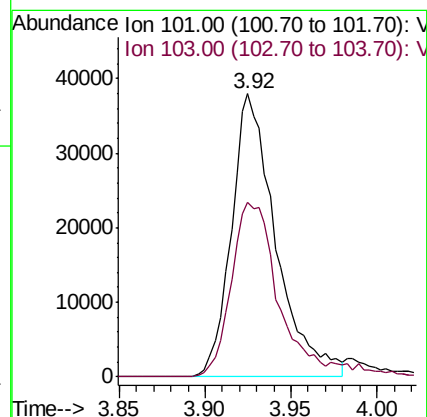
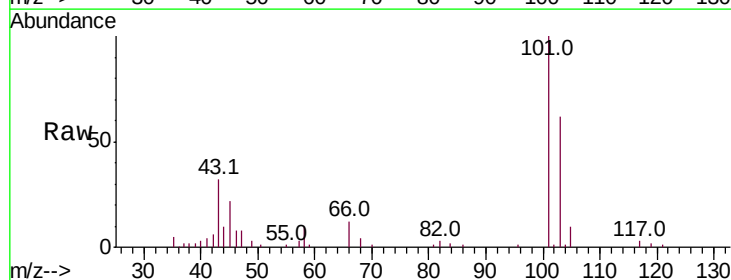
Acq: 25 Nov 2020 2:59

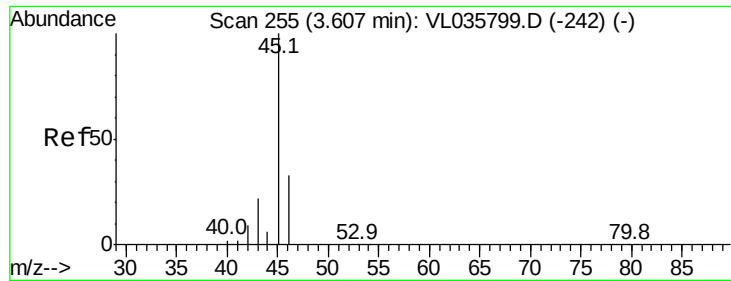
Tgt Ion: 101 Resp: 68323

Ion Ratio Lower Upper

101 100

103 61.8 53.0 79.4





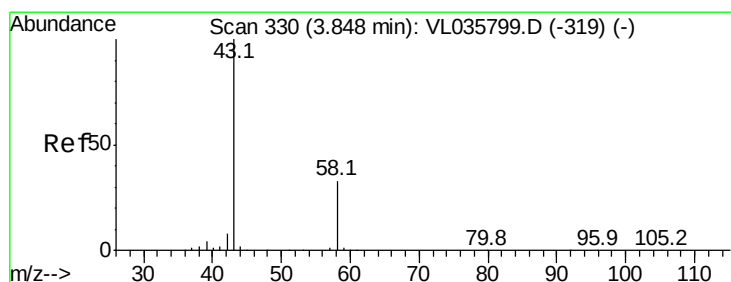
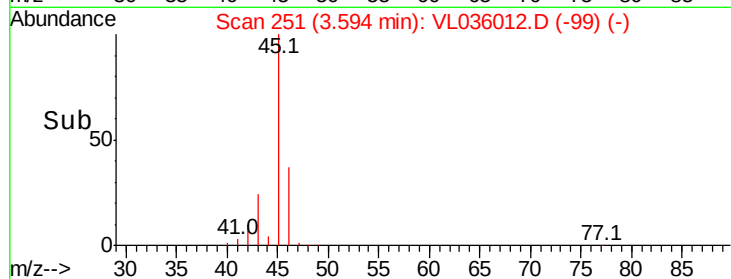
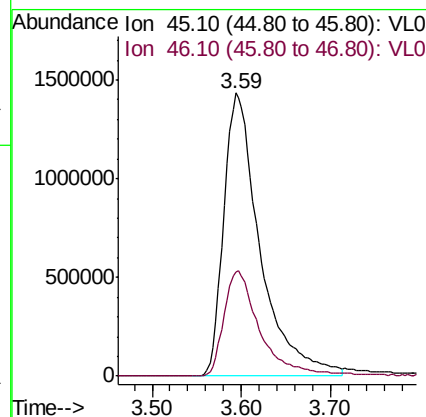
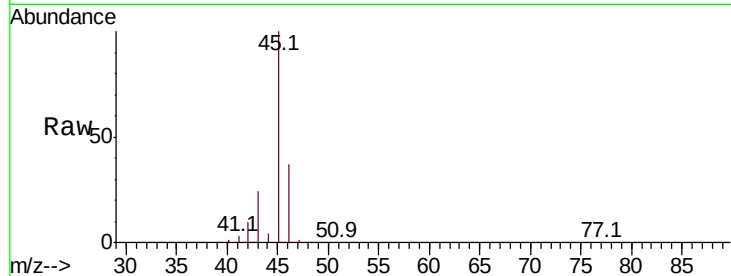
#13
Ethanol
Concen: 345.927 ppbv
RT: 3.59 min Scan# 251
Delta R.T. -0.01 min
Lab File: VL036012.D
Acq: 25 Nov 2020 2:59

Instrument :
MSVOA_L
ClientSampled :
QA1

Tot Ion: 45 Resp: 4050644
Ion Ratio Lower Upper
45 100
46 37.8 16.1 64.5

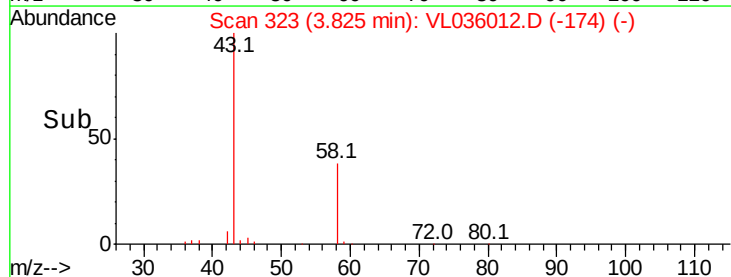
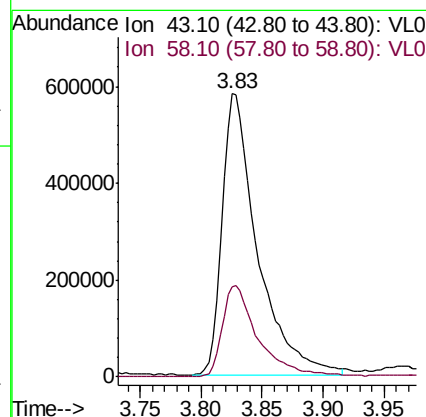
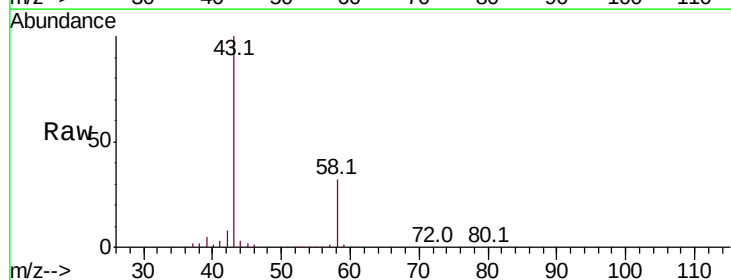
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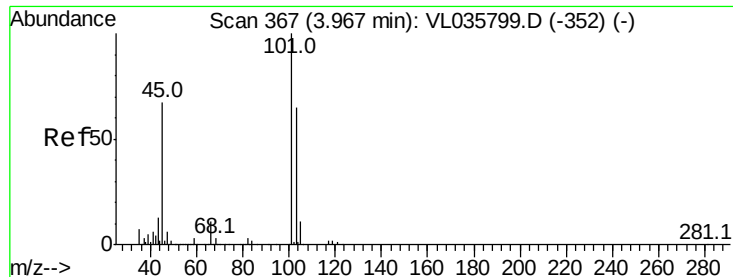
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#15
Acetone
Concen: 8.998 ppbv
RT: 3.83 min Scan# 323
Delta R.T. -0.02 min
Lab File: VL036012.D
Acq: 25 Nov 2020 2:59

Tgt Ion: 43 Resp: 1184547
Ion Ratio Lower Upper
43 100
58 33.5 27.5 41.3





#19

Isopropyl Alcohol

Concen: 1.357 ppbv

RT: 3.96 min Scan# 366

Delta R.T. -0.00 min

Lab File: VL036012.D

Acq: 25 Nov 2020 2:59

Instrument :

MSVOA_L

ClientSampled :

QA1

Tot Ion: 45 Resp: 109802

Ion Ratio Lower Upper

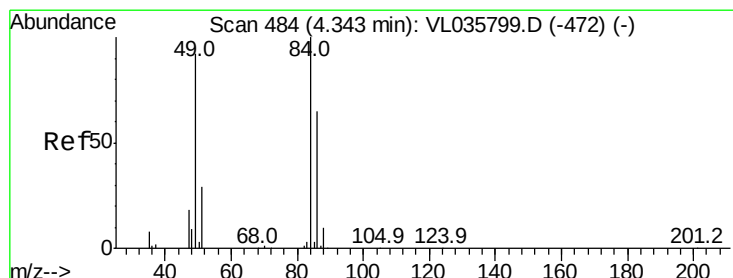
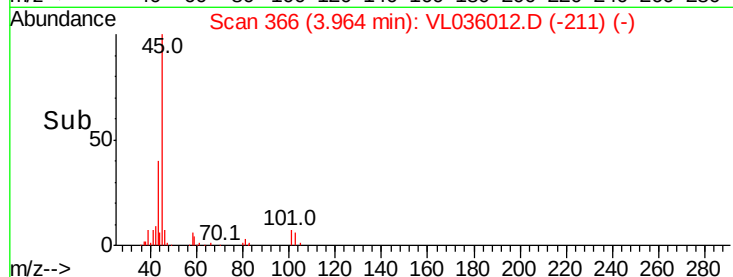
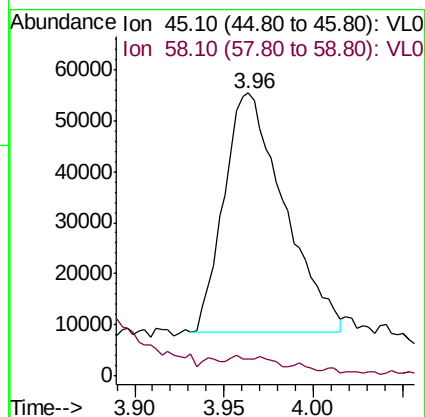
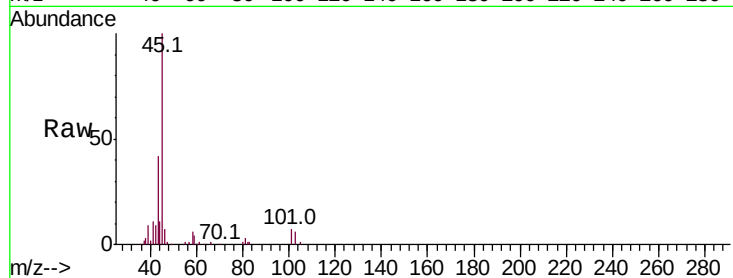
45 100

58 359.0 2.6 3.8#

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11/27/2020 1:15:52 PM



#20

Methylene Chloride

Concen: 55.416 ppbv

RT: 4.32 min Scan# 477

Delta R.T. -0.02 min

Lab File: VL036012.D

Acq: 25 Nov 2020 2:59

Tgt Ion: 84 Resp: 5135883

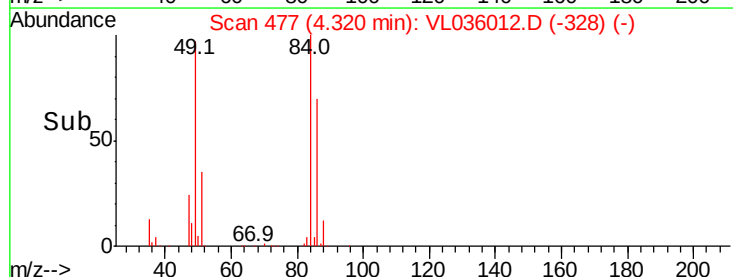
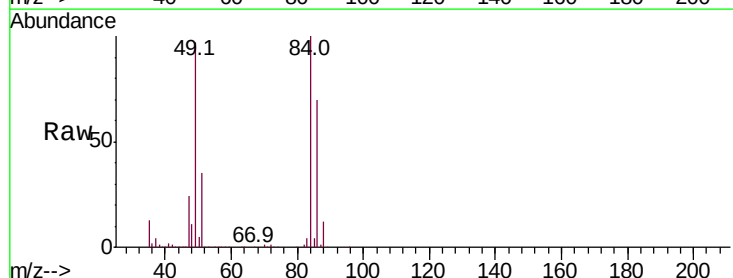
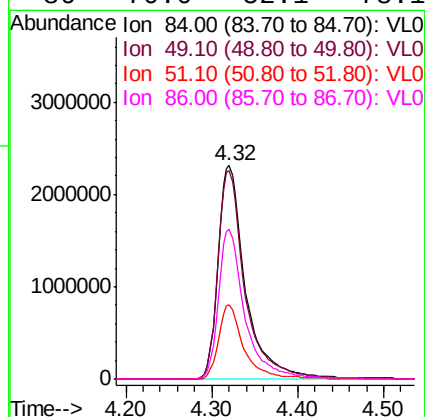
Ion Ratio Lower Upper

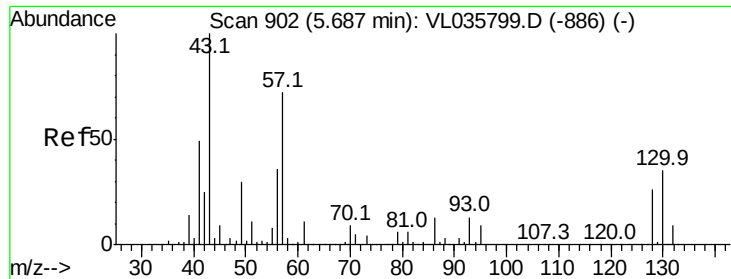
84 100

49 97.5 73.8 110.8

51 34.6 23.0 34.4#

86 70.0 52.1 78.1





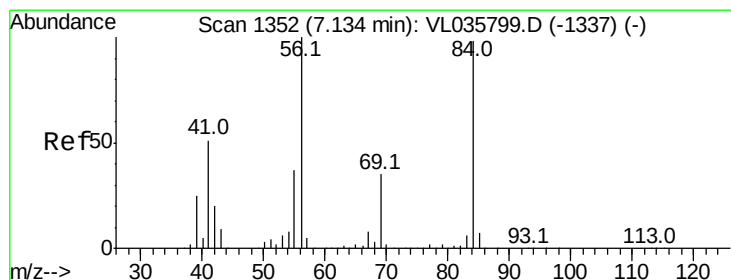
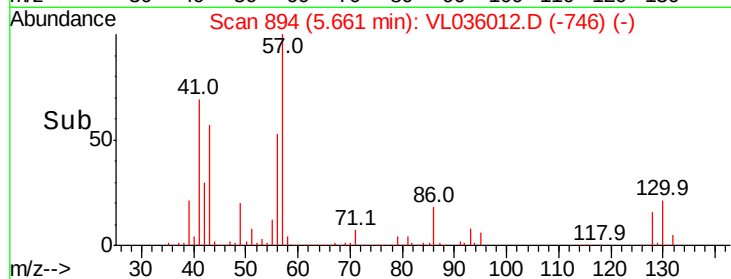
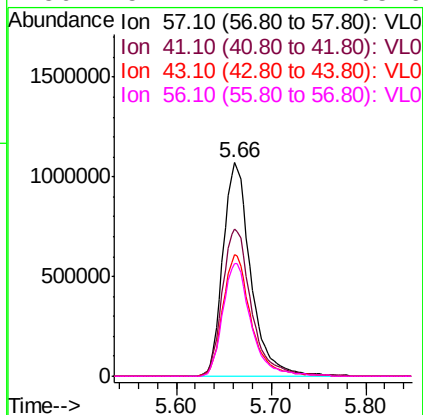
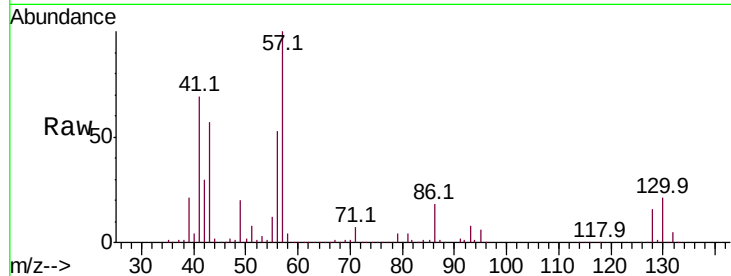
#26
Hexane
Concen: 15.302 ppbv
RT: 5.66 min Scan# 894
Delta R.T. -0.03 min
Lab File: VL036012.D
Acq: 25 Nov 2020 2:59

Instrument :
MSVOA_L
ClientSampled :
QA1

Tot Ion	57	Resp	2188664
Ion	Ratio	Lower	Upper
57	100		
41	72.5	58.9	88.3
43	57.8	150.2	225.2#
56	54.1	42.4	63.6

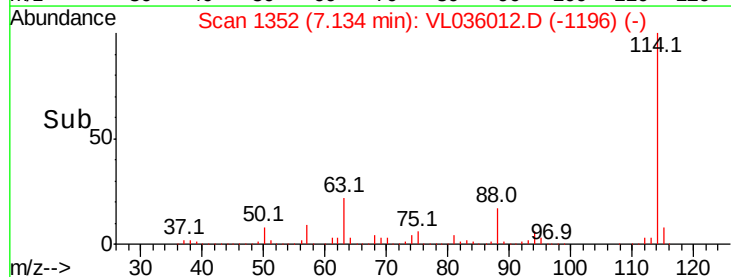
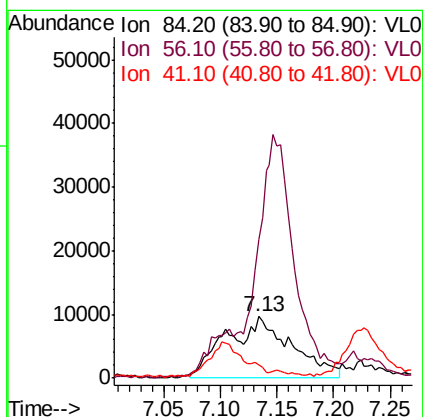
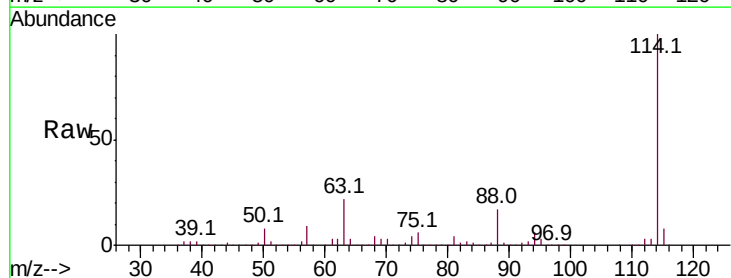
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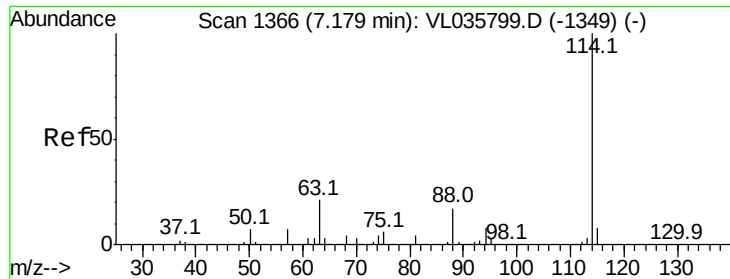
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#30
Cyclohexane
Concen: 0.248 ppbv m
RT: 7.13 min Scan# 1352
Delta R.T. 0.00 min
Lab File: VL036012.D
Acq: 25 Nov 2020 2:59

Tgt Ion	84	Resp	38600
Ion	Ratio	Lower	Upper
84	100		
56	0.0	86.4	129.6#
41	38.9	42.1	63.1#





#33
 1,4-Difluorobenzene
 Concen: 10.000 ppbv
 RT: 7.15 min Scan# 1357
 Delta R.T. -0.03 min
 Lab File: VL036012.D
 Acq: 25 Nov 2020 2:59

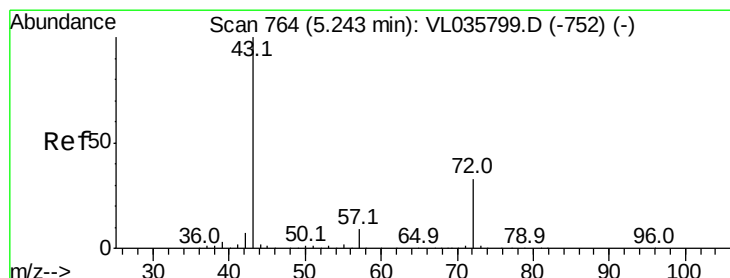
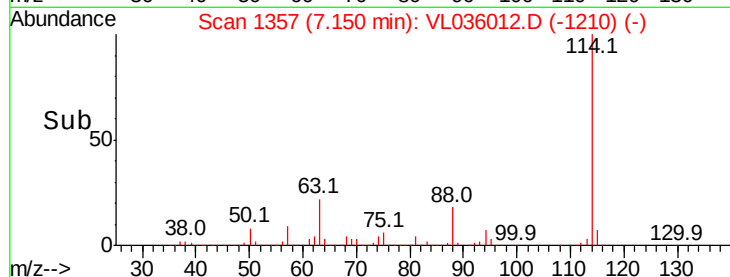
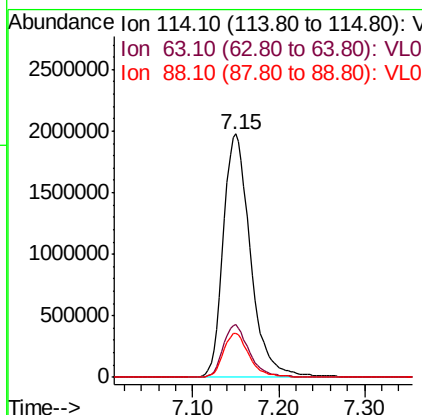
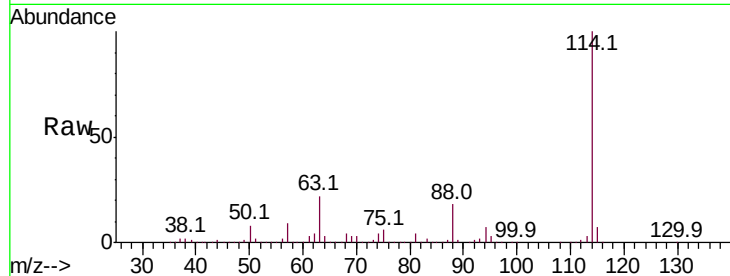
Instrument :
 MSVOA_L
 ClientSampled :
 OA1

Tot Ion:114 Resp: 4359573

Ion	Ratio	Lower	Upper
114	100		
63	21.0	16.1	24.1
88	17.6	13.7	20.5

Manual Integrations
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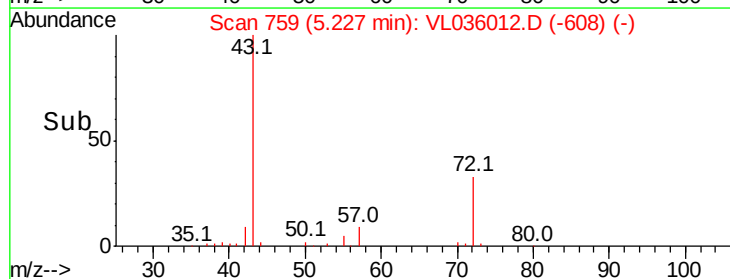
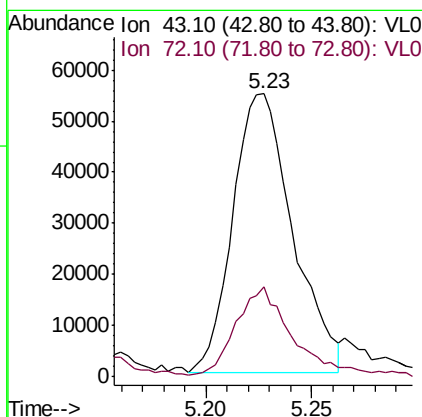
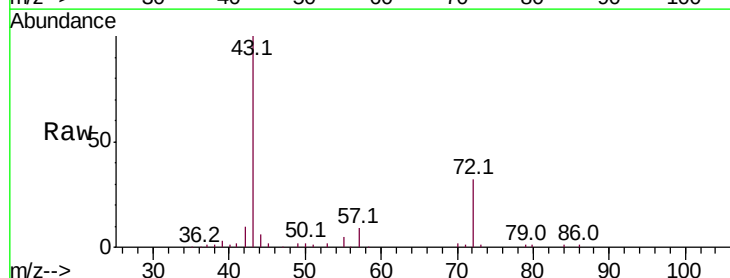
MMDadoda
 11/27/2020 1:15:52 PM

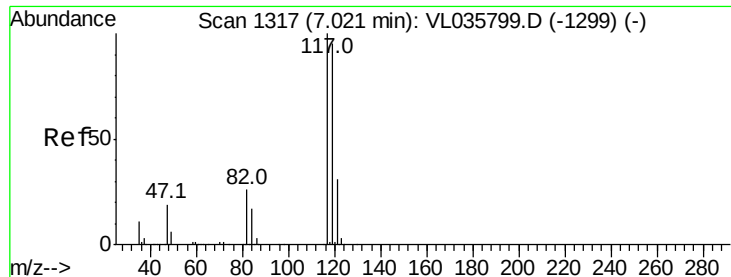


#34
 2-Butanone
 Concen: 0.757 ppbv
 RT: 5.23 min Scan# 759
 Delta R.T. -0.02 min
 Lab File: VL036012.D
 Acq: 25 Nov 2020 2:59

Tgt Ion: 43 Resp: 107176

Ion	Ratio	Lower	Upper
43	100		
72	31.4	26.5	39.7





#35

Carbon Tetrachloride

Concen: 0.060 ppbv m

RT: 6.99 min Scan# 1308

Delta R.T. -0.03 min

Lab File: VL036012.D

Acq: 25 Nov 2020 2:59

Instrument :

MSVOA_L

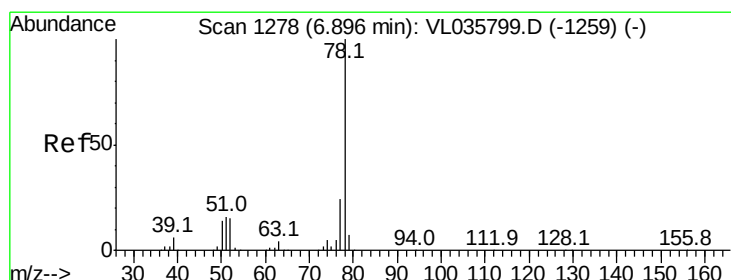
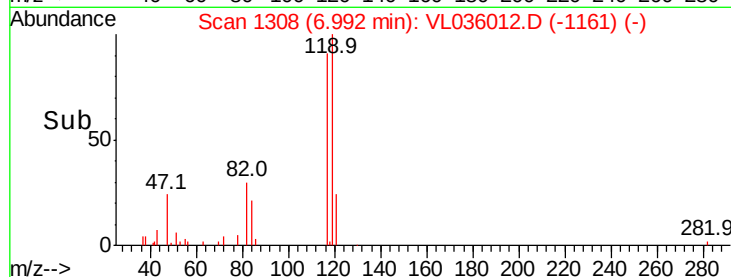
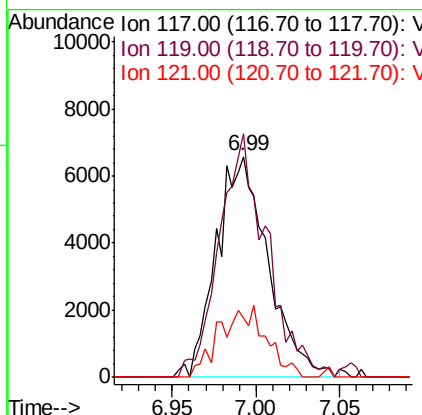
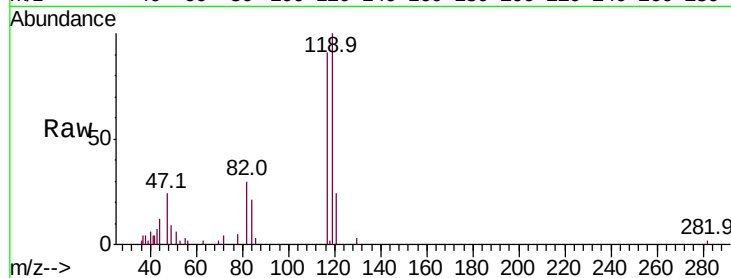
ClientSampled :

QA1

Tot Ion	Ratio	Lower	Upper
117	100		
119	110.3	75.6	113.4
121	26.7	25.1	37.7

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11/27/2020 1:15:52 PM



#36

Benzene

Concen: 0.260 ppbv

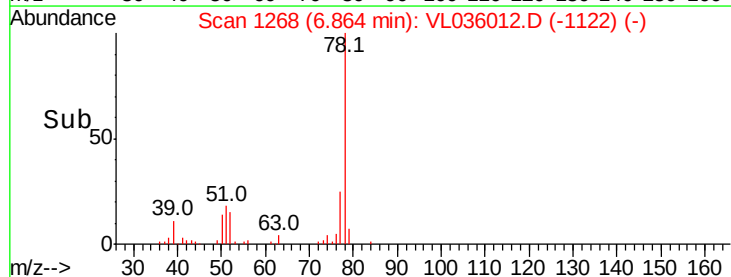
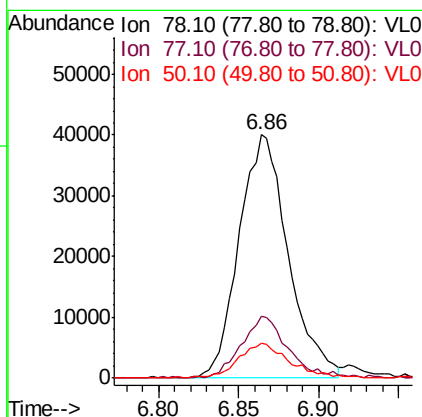
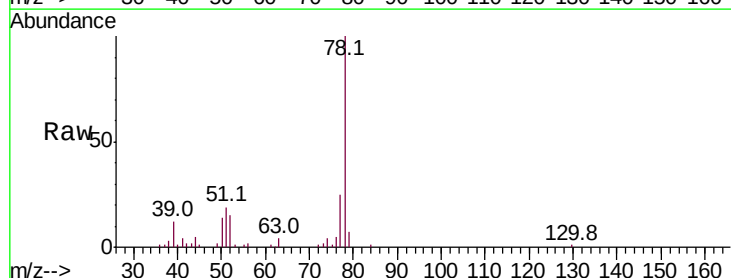
RT: 6.86 min Scan# 1268

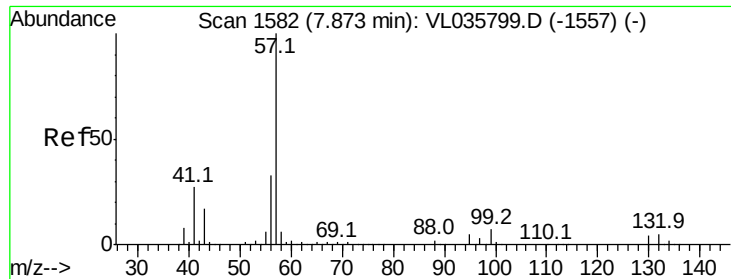
Delta R.T. -0.03 min

Lab File: VL036012.D

Acq: 25 Nov 2020 2:59

Tgt Ion	Ratio	Lower	Upper
78	100		
77	25.4	19.3	28.9
50	14.4	11.4	17.2





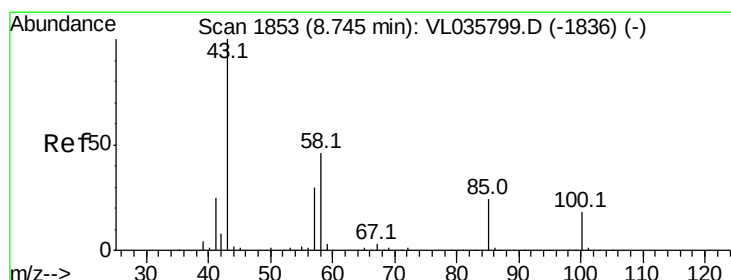
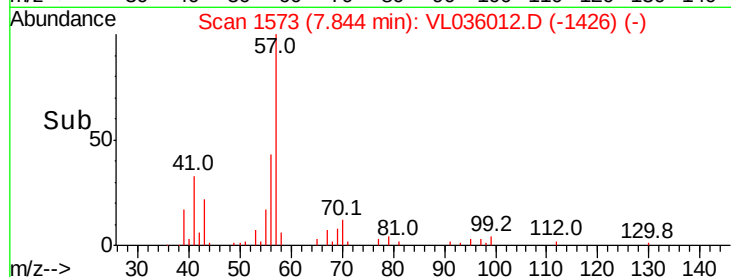
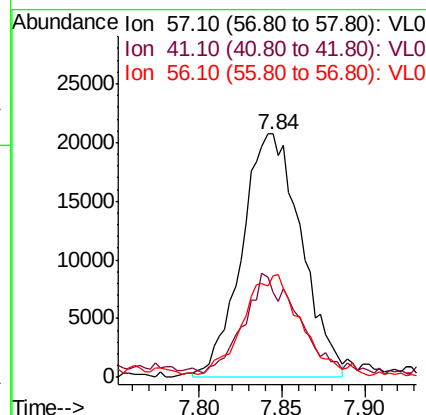
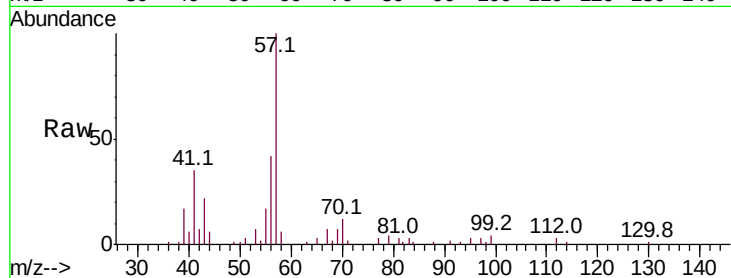
#44
 2,2,4-Trimethylpentane
 Concen: 0.121 ppbv
 RT: 7.84 min Scan# 1573
 Delta R.T. -0.03 min
 Lab File: VL036012.D
 Acq: 25 Nov 2020 2:59

Instrument :
 MSVOA_L
 ClientSampled :
 OA1

Tot Ion	Ratio	Lower	Upper
57	100		
41	39.4	21.0	31.4#
56	42.7	25.4	38.0#

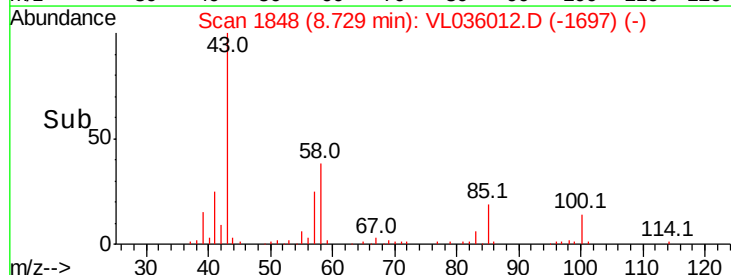
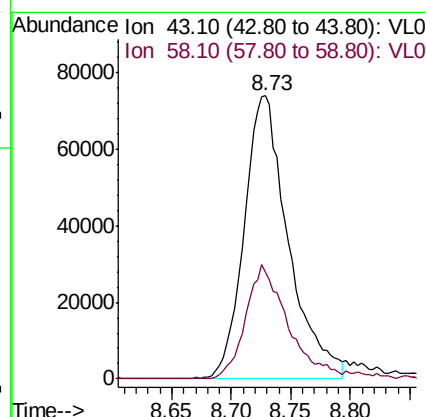
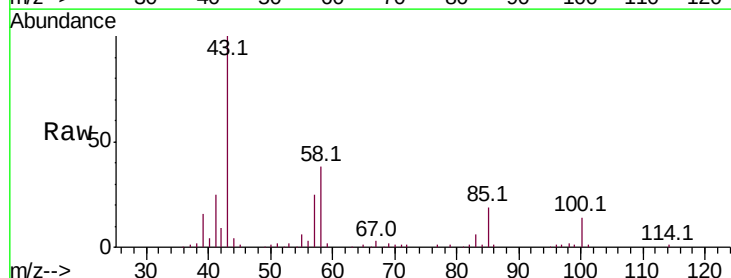
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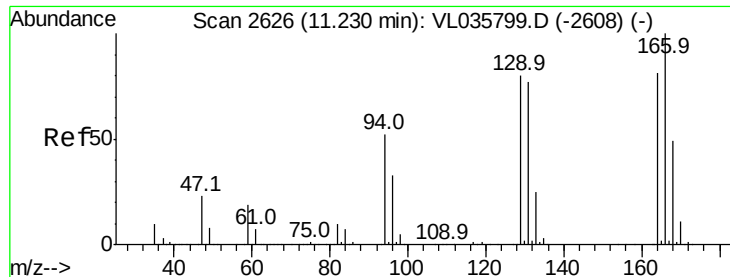
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#50
 4-Methyl-2-Pentanone
 Concen: 0.881 ppbv
 RT: 8.73 min Scan# 1848
 Delta R.T. -0.02 min
 Lab File: VL036012.D
 Acq: 25 Nov 2020 2:59

Tgt Ion	Ratio	Lower	Upper
43	100		
58	40.6	36.0	54.0





#52

Tetrachloroethene

Concen: 0.170 ppbv m

RT: 11.19 min Scan# 2615

Delta R.T. -0.04 min

Lab File: VL036012.D

Acq: 25 Nov 2020 2:59

Instrument :

MSVOA_L

ClientSampleId :

QA1

Tot Ion:164 Resp: 26107

Ion Ratio Lower Upper

164 100

166 108.7 99.3 148.9

129 97.9 79.3 118.9

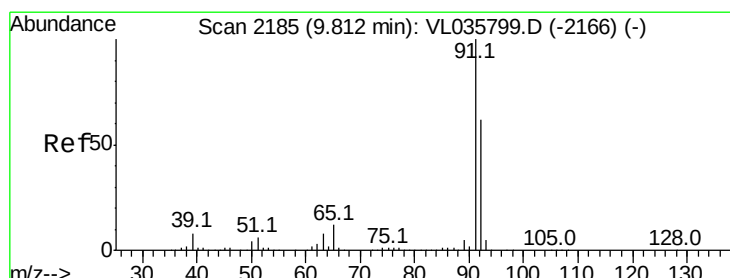
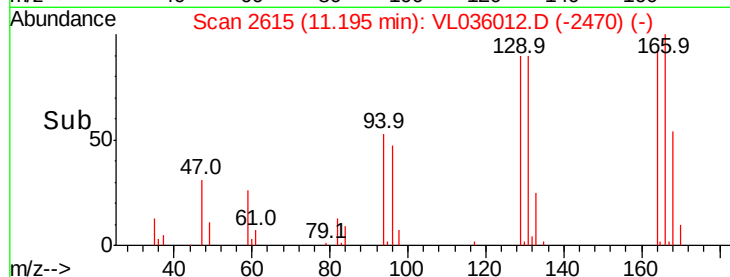
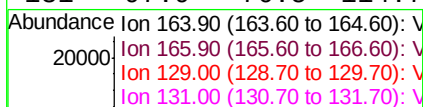
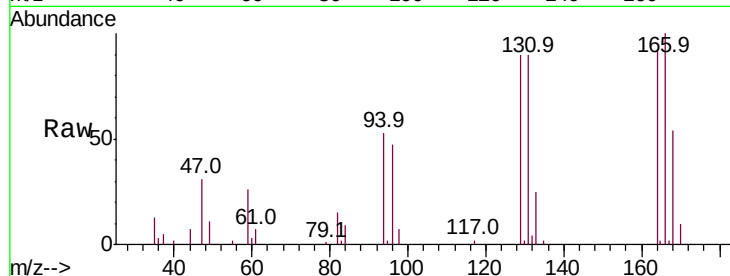
131 97.9 76.5 114.7

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11/27/2020 1:15:52 PM



#53

Toluene

Concen: 3.862 ppbv

RT: 9.78 min Scan# 2175

Delta R.T. -0.03 min

Lab File: VL036012.D

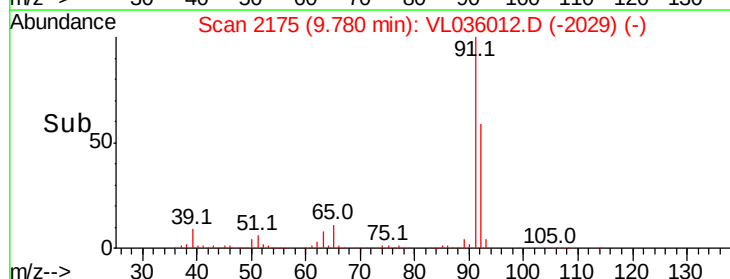
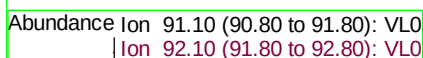
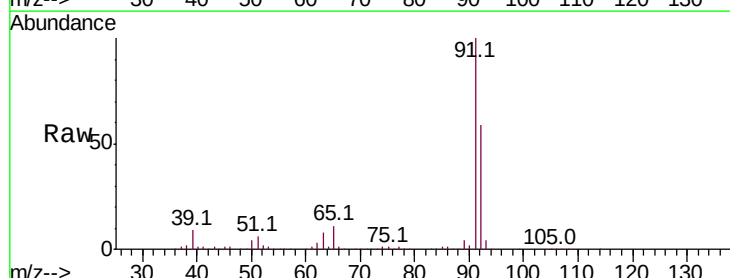
Acq: 25 Nov 2020 2:59

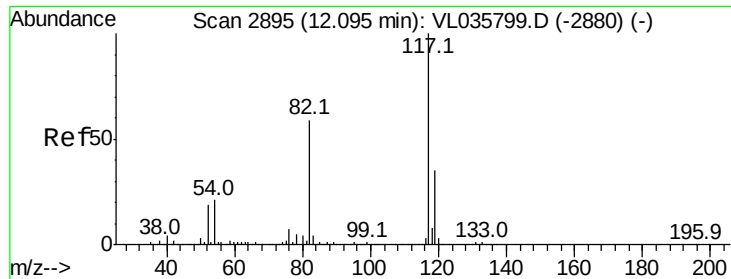
Tgt Ion: 91 Resp: 1510329

Ion Ratio Lower Upper

91 100

92 60.2 49.8 74.6





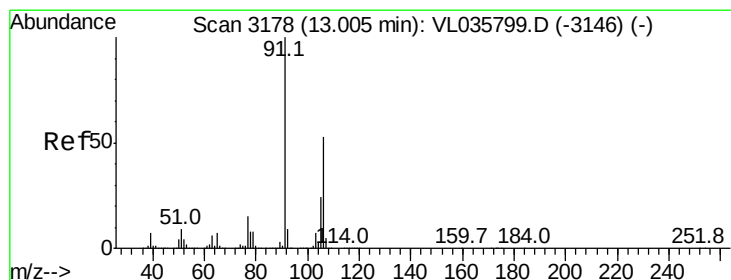
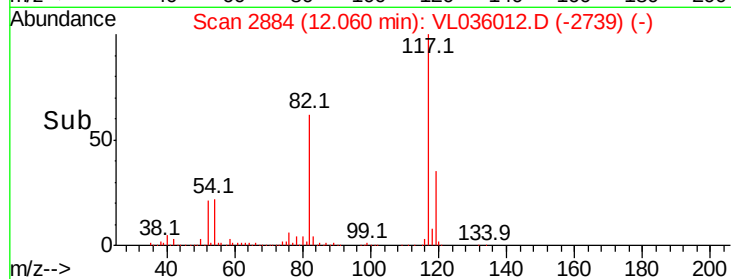
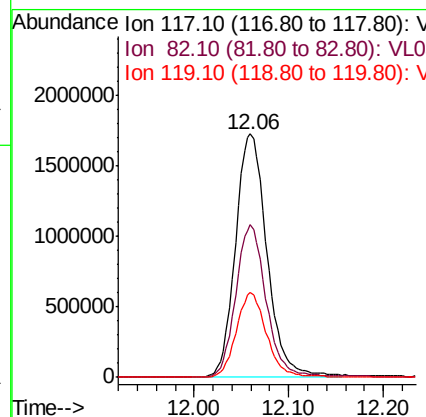
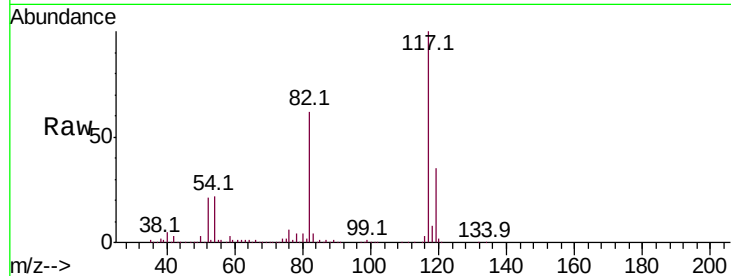
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 12.06 min Scan# 2884
Delta R.T. -0.04 min
Lab File: VL036012.D
Acq: 25 Nov 2020 2:59

Instrument :
MSVOA_L
ClientSampleId :
QA1

Tot Ion:117 Resp: 3996747
Ion Ratio Lower Upper
117 100
82 61.4 50.6 76.0
119 34.1 52.6 78.8#

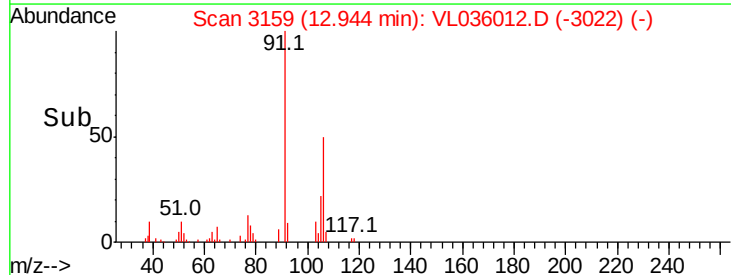
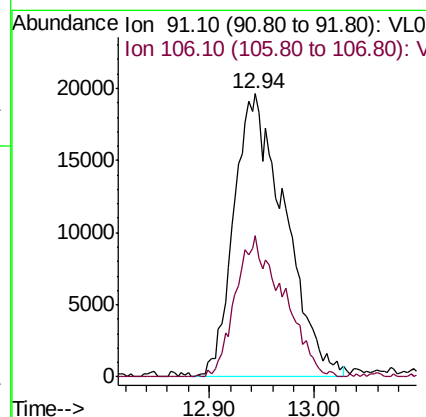
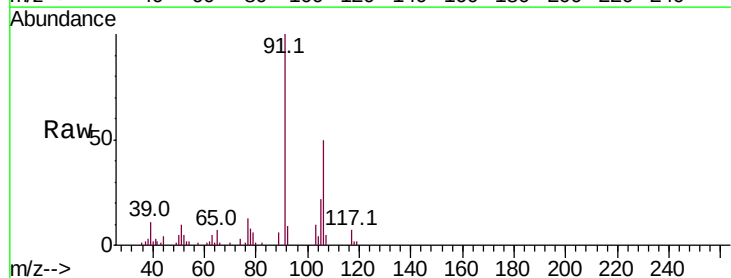
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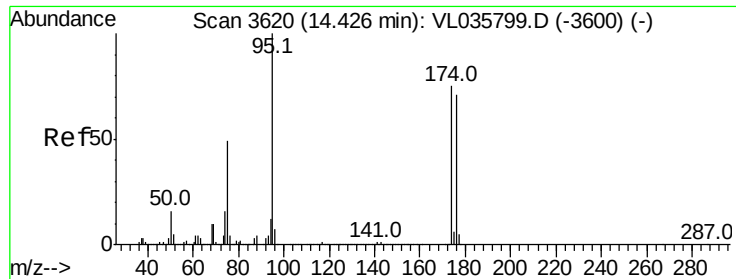
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11/27/2020 1:15:52 PM



#59
m/p-Xylene
Concen: 0.161 ppbv m
RT: 12.94 min Scan# 3159
Delta R.T. -0.06 min
Lab File: VL036012.D
Acq: 25 Nov 2020 2:59

Tgt Ion: 91 Resp: 66150
Ion Ratio Lower Upper
91 100
106 0.0 39.5 59.3#





#68

1-Bromo-4-Fluorobenzene

Concen: 10.824 ppbv

RT: 14.39 min Scan# 3609

Delta R.T. -0.04 min

Lab File: VL036012.D

Acq: 25 Nov 2020 2:59

Instrument :

MSVOA_L

ClientSampled :

QA1

Tot Ion: 95 Resp: 3073602

Ion Ratio Lower Upper

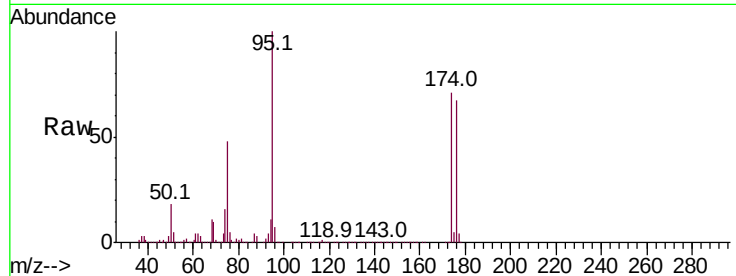
95 100

174 69.9 59.8 89.6

175 5.0 4.3 6.5

Manual Integrations
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11/27/2020 1:15:52 PM



Abundance Ion 95.10 (94.80 to 95.80): VL035799.D (-3600) (-)

Ion 174.00 (173.70 to 174.70): VL035799.D (-3600) (-)

Ion 175.00 (174.70 to 175.70): VL035799.D (-3600) (-)

14.39

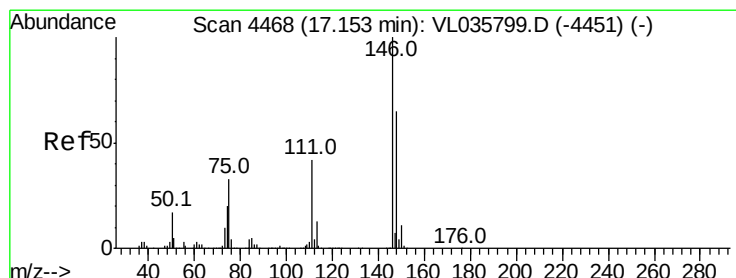
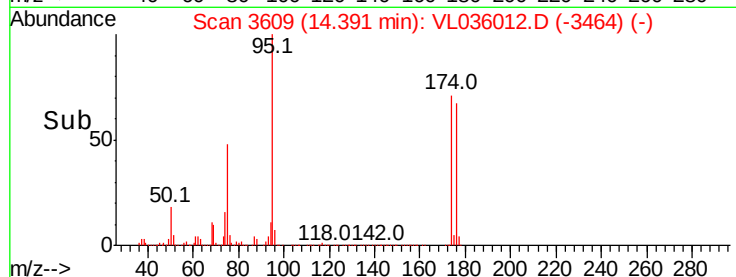
1000000

500000

0

14.30 14.40 14.50

Time-->



#76

1,4-Dichlorobenzene

Concen: 0.116 ppbv m

RT: 17.11 min Scan# 4456

Delta R.T. -0.04 min

Lab File: VL036012.D

Acq: 25 Nov 2020 2:59

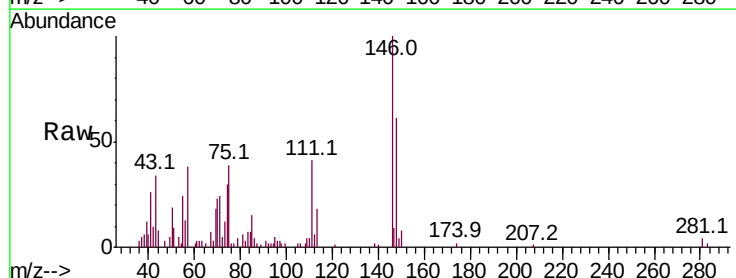
Tgt Ion: 146 Resp: 33863

Ion Ratio Lower Upper

146 100

111 47.8 21.3 63.7

148 70.3 33.0 99.0



Abundance Ion 146.00 (145.70 to 146.70): VL035799.D (-4451) (-)

Ion 111.10 (110.80 to 111.80): VL035799.D (-4451) (-)

Ion 148.00 (147.70 to 148.70): VL035799.D (-4451) (-)

17.11

15000

10000

5000

0

17.10 17.20

Time-->

