

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL050620\
 Data File : VL034958.D
 Acq On : 7 May 2020 6:47
 Operator : SY/AP
 Sample : L2507-03
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 SV-1

Manual Integrations
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Quant Time: May 07 10:52:38 2020
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL050620AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LWed May 0
 QLast Update : Wed May 06 14:49:39 2020
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.68	49	1099373	10.00	ppbv	0.01
33) 1,4-Difluorobenzene	7.20	114	2448231	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.13	117	2412074	10.00	ppbv	0.00

System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	14.46	95	2006985	10.28	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	102.80%

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.02	85	37519	0.240	ppbv	95
3) Chlorodifluoromethane	2.95	51	17873	0.142	ppbv	97
9) Propene	2.98	41	330318	6.065	ppbv #	80
10) Heptane	8.14	43	252404	1.850	ppbv	98
11) Trichlorofluoromethane	3.93	101	33909m	0.211	ppbv	
13) Ethanol	3.58	45	85776	4.773	ppbv	96
15) Acetone	3.82	43	13253404	91.188	ppbv #	52
17) tert-Butyl alcohol	4.28	59	249430	1.929	ppbv	99
20) Methylene Chloride	4.33	84	20272m	0.421	ppbv	
26) Hexane	5.68	57	189755	1.793	ppbv #	27
29) Chloroform	5.76	83	103800	0.599	ppbv	92
30) Cyclohexane	7.14	84	12952m	0.159	ppbv	
34) 2-Butanone	5.24	43	2933375	19.278	ppbv	99
36) Benzene	6.91	78	101872	0.505	ppbv #	89
44) 2,2,4-Trimethylpentane	7.89	57	1103900	3.076	ppbv	98
51) 2-Hexanone	10.15	43	1158396	6.826	ppbv #	98
52) Tetrachloroethene	11.25	164	14894m	0.208	ppbv	
53) Toluene	9.83	91	974180	4.553	ppbv	99
58) Ethyl Benzene	12.75	91	450668	1.511	ppbv	98
59) m/p-Xylene	13.01	91	1601185	6.101	ppbv #	59
60) o-Xylene	13.73	91	681463	2.632	ppbv	99
62) Isopropylbenzene	14.72	105	60113m	0.155	ppbv	
64) n-propylbenzene	15.61	120	45805m	0.462	ppbv	
65) tert-Butylbenzene	16.82	119	102859	0.307	ppbv #	70
72) 4-Ethyltoluene	15.89	105	271034	0.938	ppbv #	89
73) 1,3,5-Trimethylbenzene	16.05	105	216215m	0.769	ppbv	
74) 1,2,4-Trimethylbenzene	16.82	105	878227m	2.862	ppbv	

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

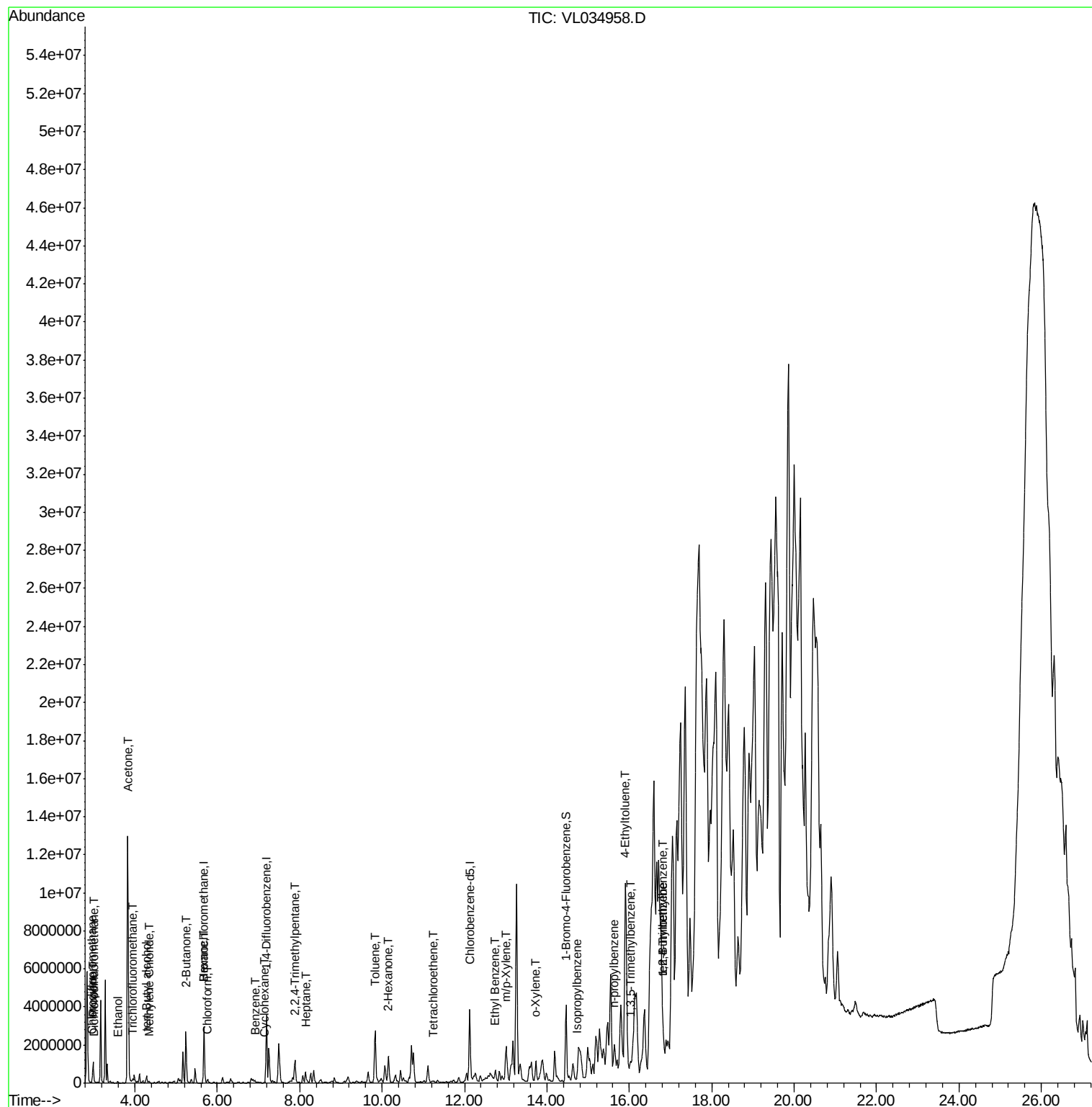
Data Path : Z:\V0ASRV\HPCHEM1\MSVOA L\DATA\VL050620\
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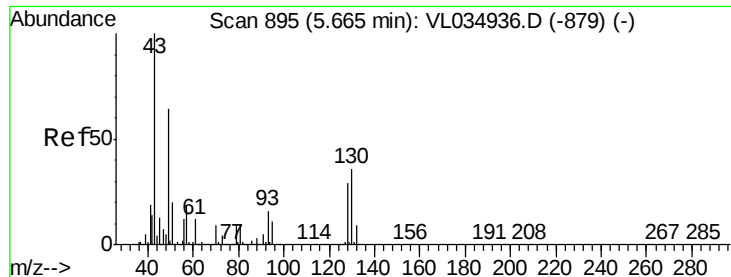
Instrument :
MSVOA_L
ClientSampled :
SV-1

Manual Integrations
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Quant Time: May 07 10:52:38 2020
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA L\METHODS\VL050620AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Wed May
QLast Update : Wed May 06 14:49:39 2020
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.68 min Scan# 899

Delta R.T. 0.01 min

Lab File: VL034958.D

Acq: 7 May 2020 6:47

Instrument :

MSVOA_L

ClientSampled :

SV-1

Tot Ion: 49 Resp: 1099373

Ion Ratio Lower Upper

49 100

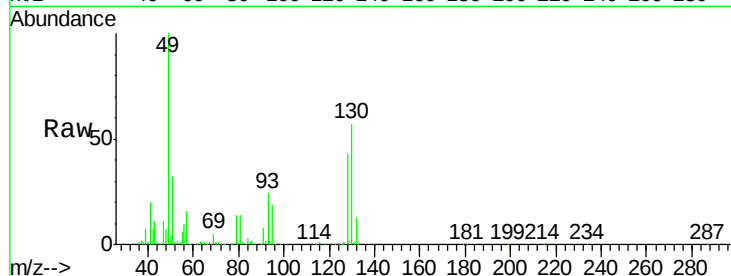
128 44.1 22.1 66.5

130 56.3 29.1 87.3

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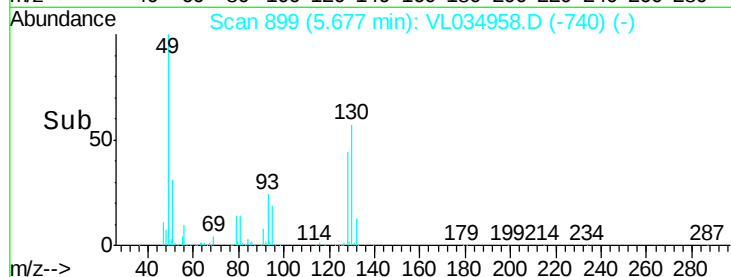
Abundance Ion 49.10 (48.80 to 49.80): VL0

Ion 128.00 (127.70 to 128.70): VL0

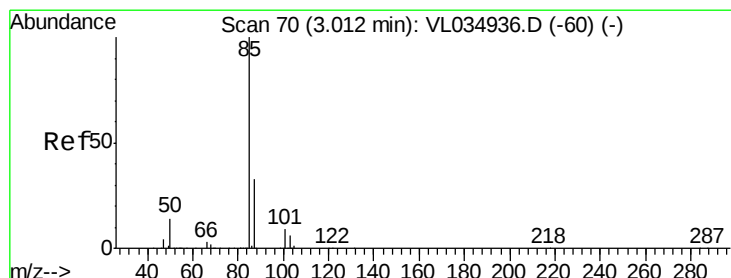
Ion 130.00 (129.70 to 130.70): VL0

5.68

Time-->



Time-->



#2

Dichlorodifluoromethane

Concen: 0.240 ppbv

RT: 3.02 min Scan# 71

Delta R.T. 0.00 min

Lab File: VL034958.D

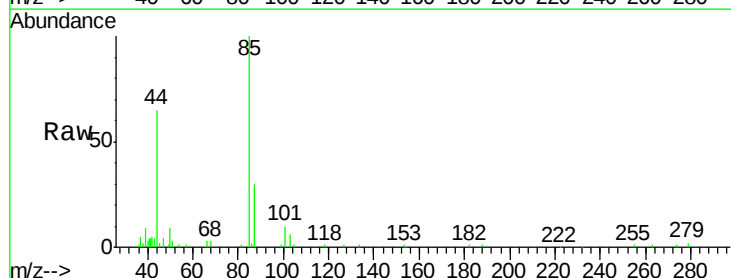
Acq: 7 May 2020 6:47

Tgt Ion: 85 Resp: 37519

Ion Ratio Lower Upper

85 100

87 29.7 26.2 39.2

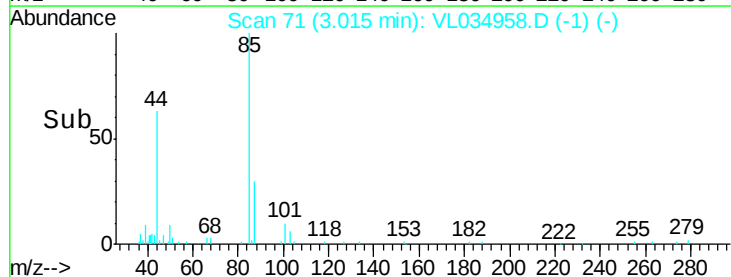


Abundance Ion 85.00 (84.70 to 85.70): VL0

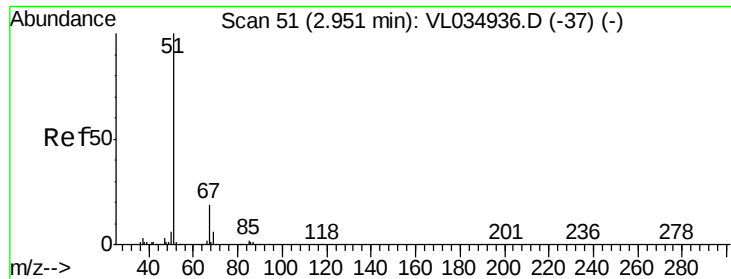
Ion 87.00 (86.70 to 87.70): VL0

3.02

Time-->



Time-->



#3

Chlorodifluoromethane

Concen: 0.142 ppbv

RT: 2.95 min Scan# 52

Delta R.T. 0.00 min

Lab File: VL034958.D

Acq: 7 May 2020 6:47

Instrument :

MSVOA_L

ClientSampleId :

SV-1

Tot Ion: 51 Resp: 17873

Ion Ratio Lower Upper

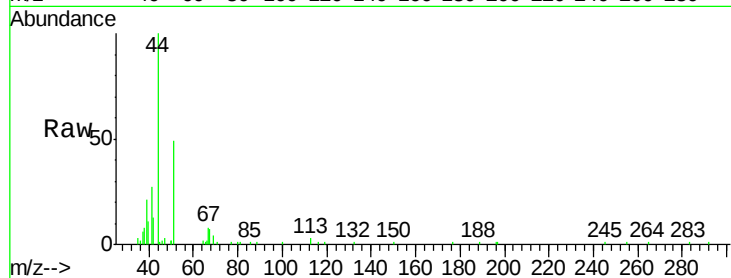
51 100

67 20.3 15.0 22.6

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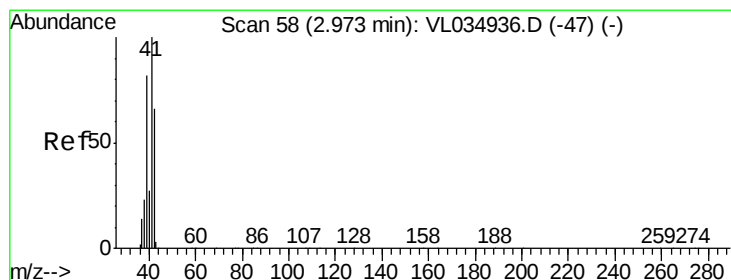
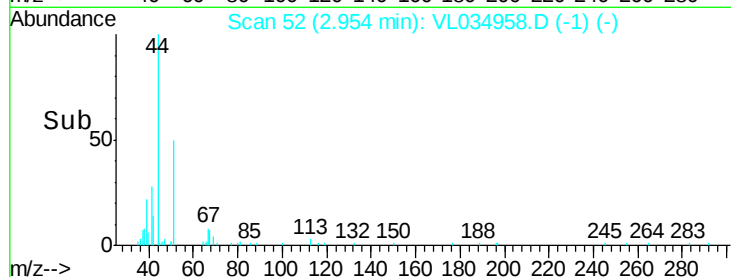
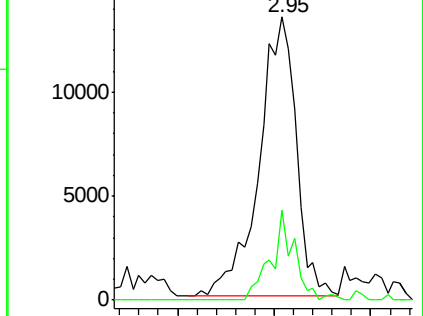
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Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0



#9

Propene

Concen: 6.065 ppbv

RT: 2.98 min Scan# 60

Delta R.T. 0.01 min

Lab File: VL034958.D

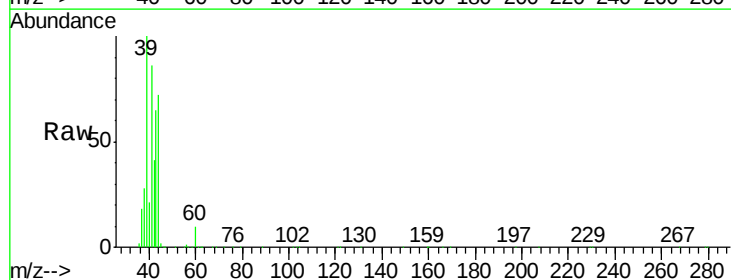
Acq: 7 May 2020 6:47

Tgt Ion: 41 Resp: 330318

Ion Ratio Lower Upper

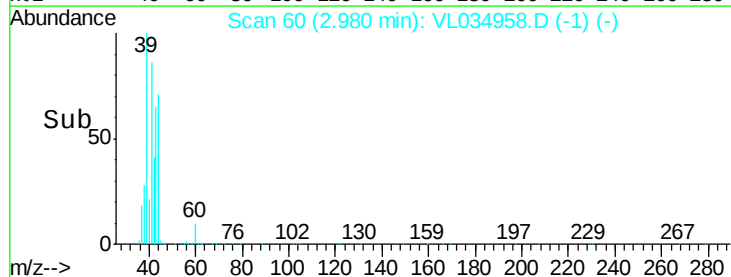
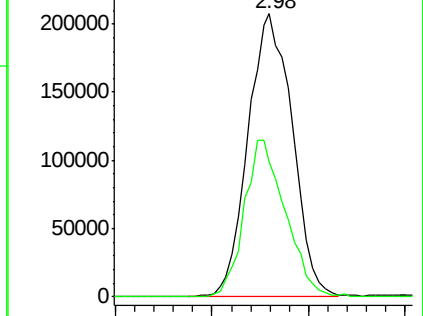
41 100

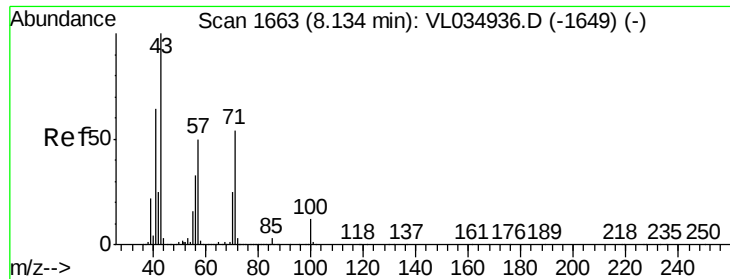
42 51.7 54.5 81.7#



Abundance Ion 41.10 (40.80 to 41.80): VL0

Ion 42.10 (41.80 to 42.80): VL0





#10

Heptane

Concen: 1.850 ppbv

RT: 8.14 min Scan# 1665

Delta R.T. 0.01 min

Lab File: VL034958.D

Acq: 7 May 2020 6:47

Instrument :

MSVOA_L

ClientSampleId :

SV-1

Tot Ion: 43 Resp: 252404

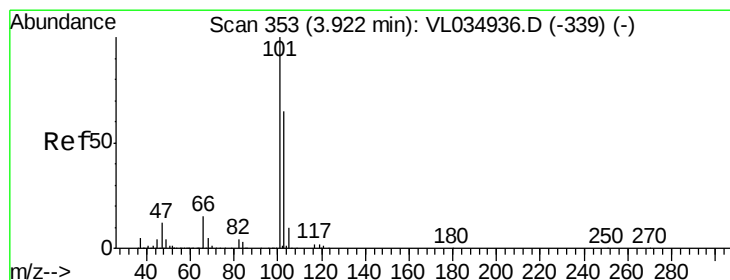
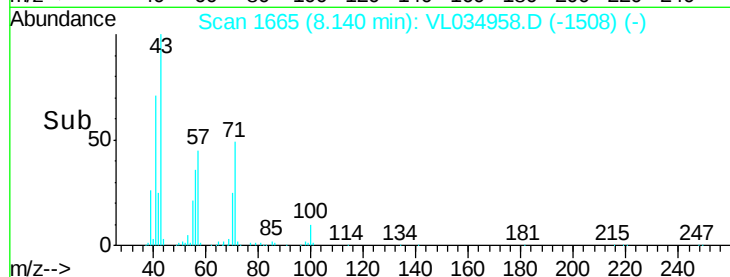
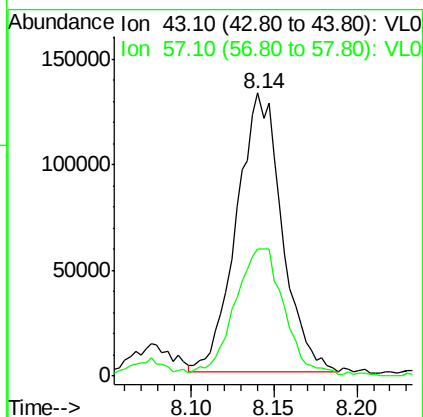
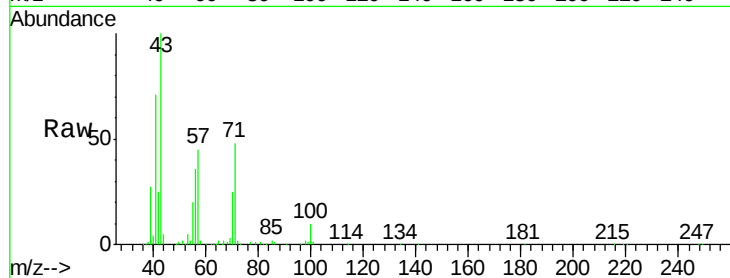
Ion Ratio Lower Upper

43 100

57 50.1 41.1 61.7

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#11

Trichlorofluoromethane

Concen: 0.211 ppbv m

RT: 3.93 min Scan# 355

Delta R.T. 0.01 min

Lab File: VL034958.D

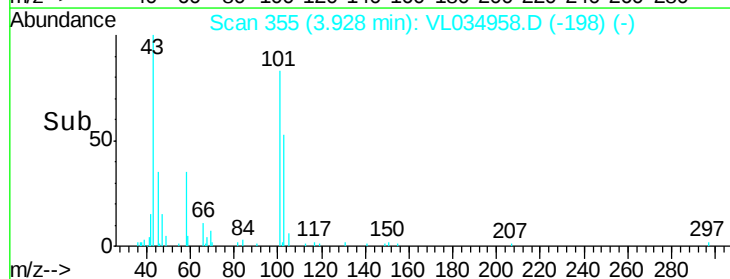
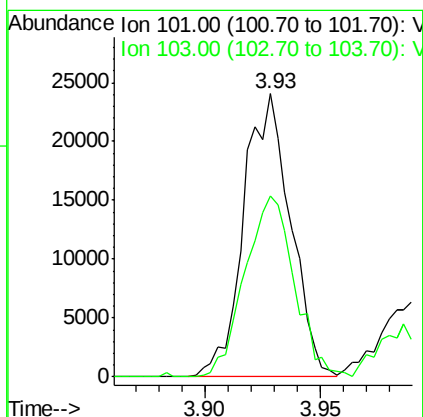
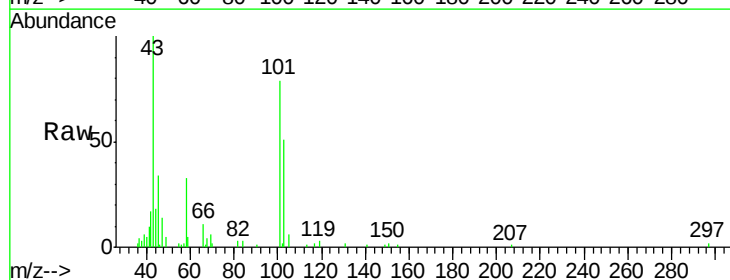
Acq: 7 May 2020 6:47

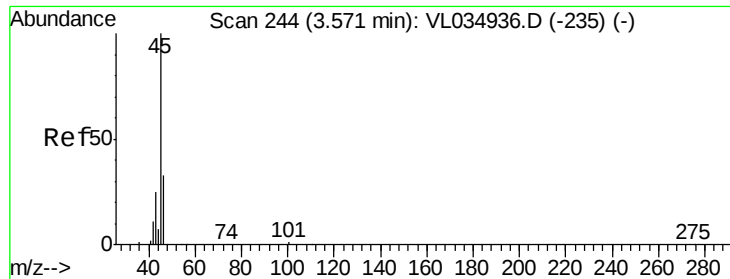
Tgt Ion: 101 Resp: 33909

Ion Ratio Lower Upper

101 100

103 64.0 51.9 77.9





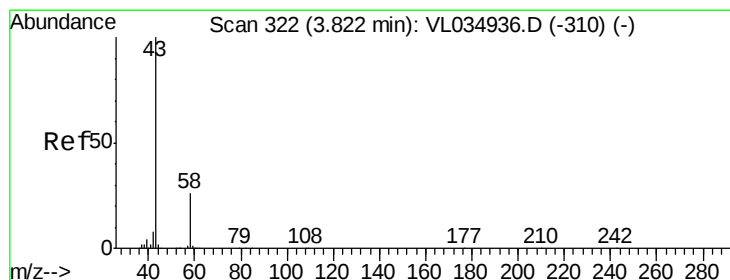
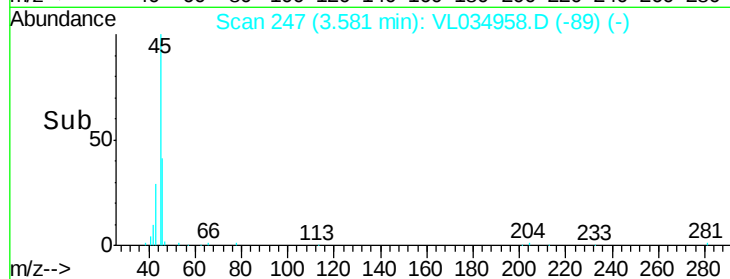
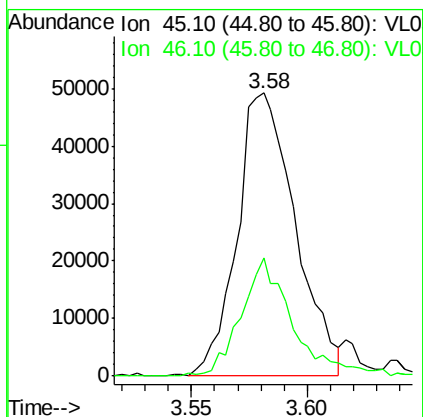
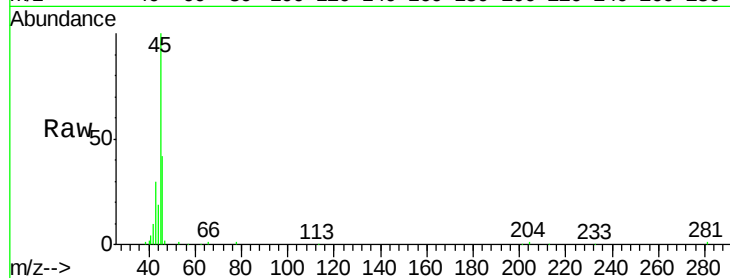
#13
Ethanol
Concen: 4.773 ppbv
RT: 3.58 min Scan# 247
Delta R.T. 0.01 min
Lab File: VL034958.D
Acq: 7 May 2020 6:47

Instrument :
MSVOA_L
ClientSampled :
SV-1

Tot Ion	45	46	Ratio	Lower	Upper
85776	100	38.2		14.3	57.3

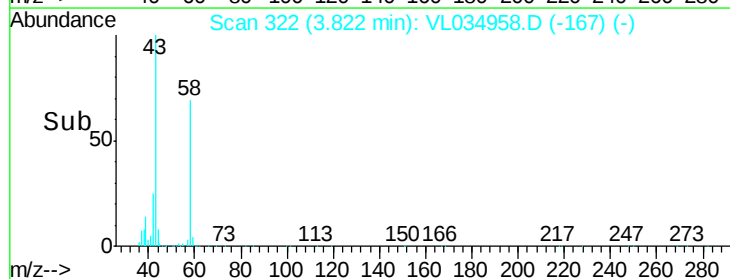
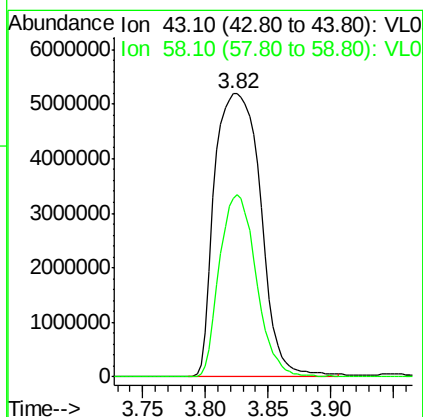
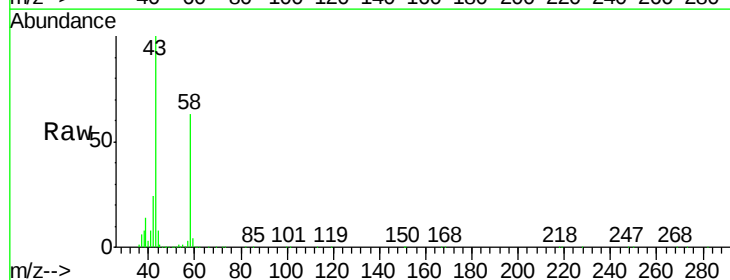
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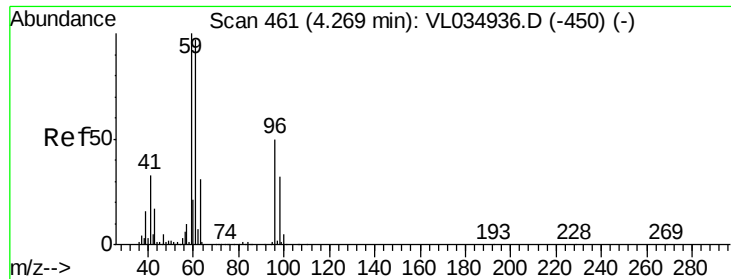
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#15
Acetone
Concen: 91.188 ppbv
RT: 3.82 min Scan# 322
Delta R.T. -0.00 min
Lab File: VL034958.D
Acq: 7 May 2020 6:47

Tgt Ion	43	58	Ratio	Lower	Upper
13253404	100	51.9		21.7	32.5#





#17

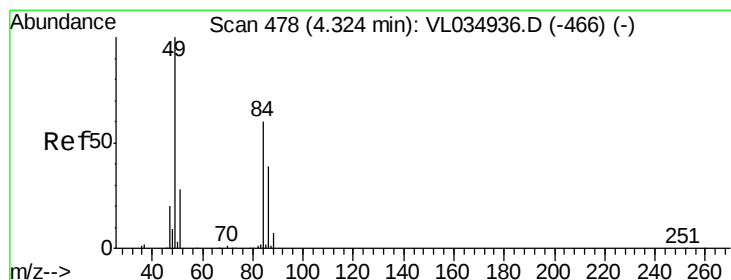
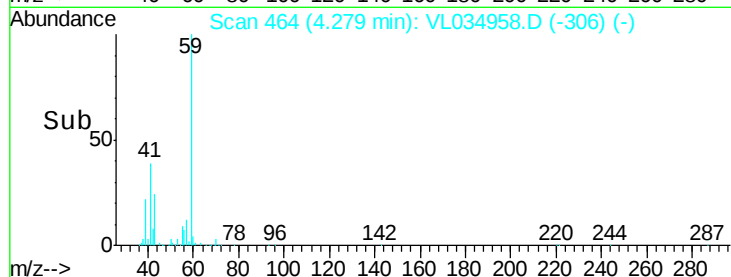
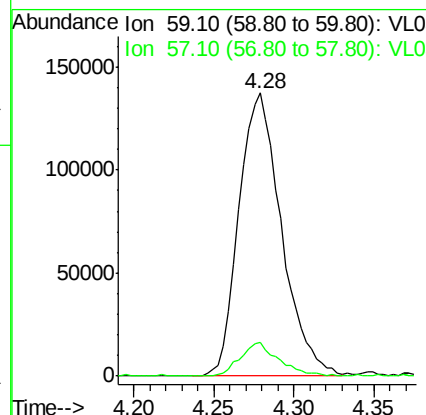
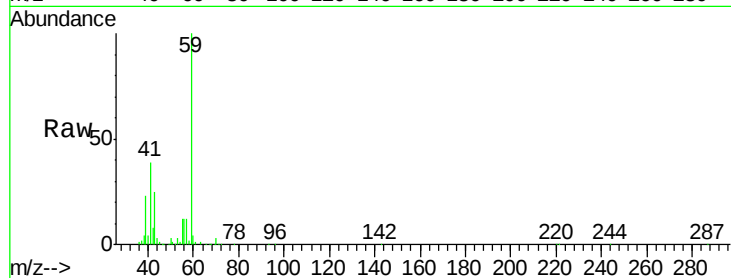
tert-Butyl alcohol
 Concen: 1.929 ppbv
 RT: 4.28 min Scan# 464
 Delta R.T. 0.01 min
 Lab File: VL034958.D
 Acq: 7 May 2020 6:47

Instrument :
 MSVOA_L
 ClientSampled :
 SV-1

Tot Ion	59	57	Ratio	100	11.2	Resp	249430	Lower	8.7	Upper	13.1
Ion											

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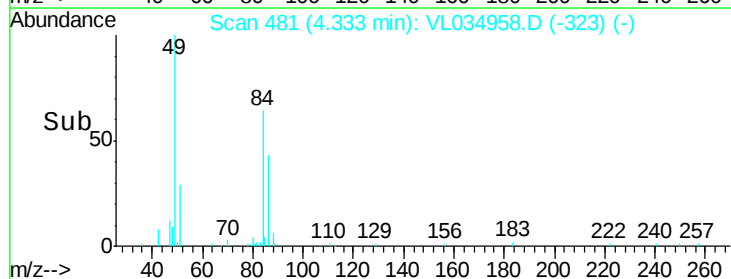
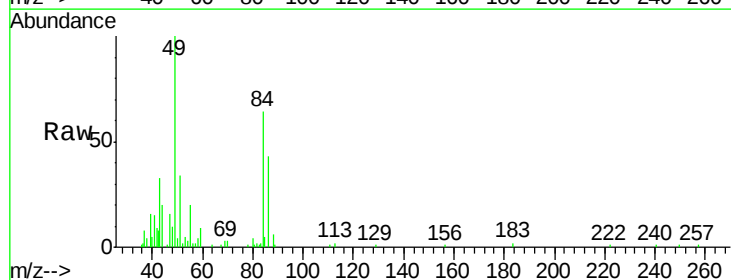
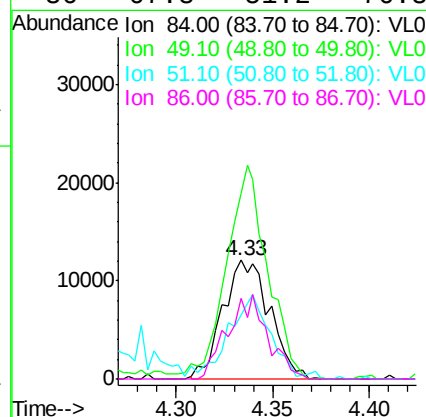
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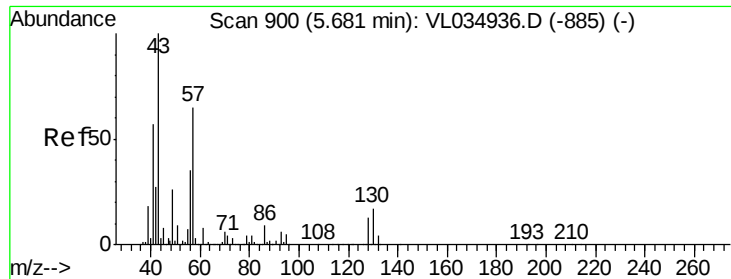


#20

Methylene Chloride
 Concen: 0.421 ppbv m
 RT: 4.33 min Scan# 481
 Delta R.T. 0.01 min
 Lab File: VL034958.D
 Acq: 7 May 2020 6:47

Tgt Ion	84	49	51	86	Ratio	100	156.0	53.4	67.8	Resp	20272	Lower	132.5	38.4	51.2	Upper	198.7	57.6	76.8
Ion																			





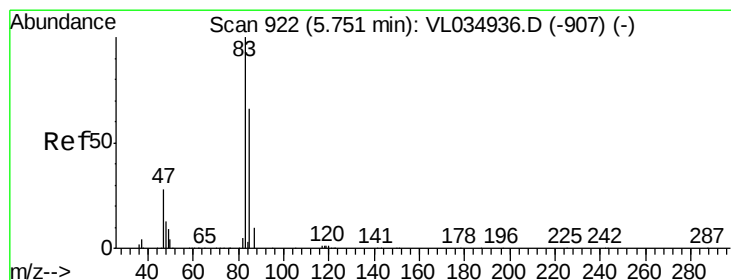
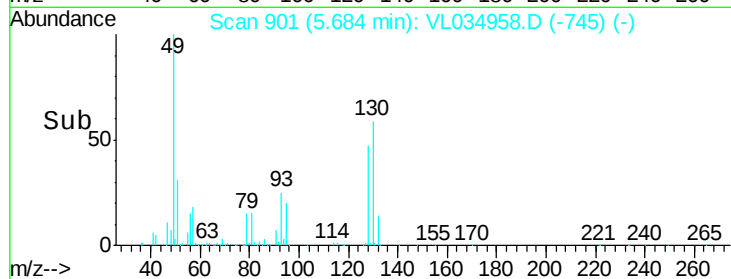
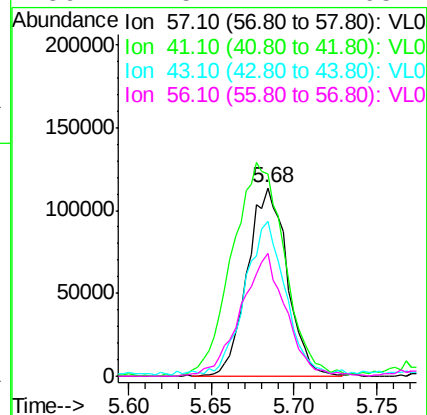
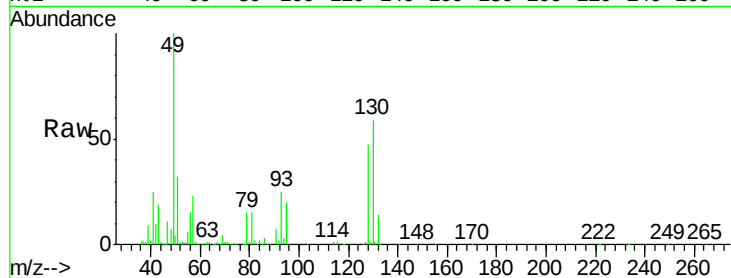
#26
Hexane
Concen: 1.793 ppbv
RT: 5.68 min Scan# 901
Delta R.T. 0.00 min
Lab File: VL034958.D
Acq: 7 May 2020 6:47

Instrument :
MSVOA_L
ClientSampleId :
SV-1

Tot Ion	Ratio	Lower	Upper
57	100		
41	148.1	72.7	109.1#
43	84.2	182.1	273.1#
56	74.5	42.2	63.2#

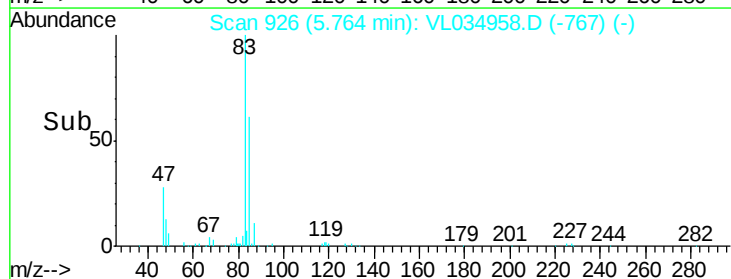
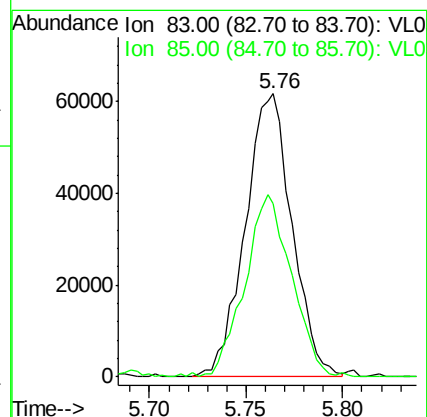
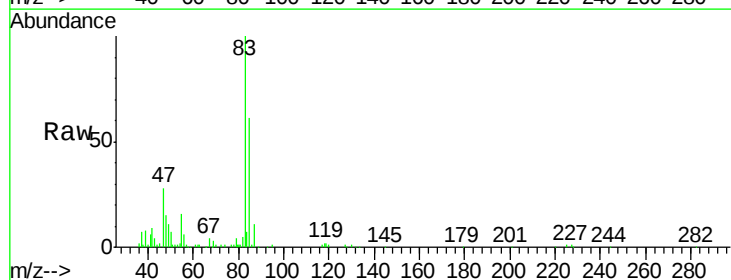
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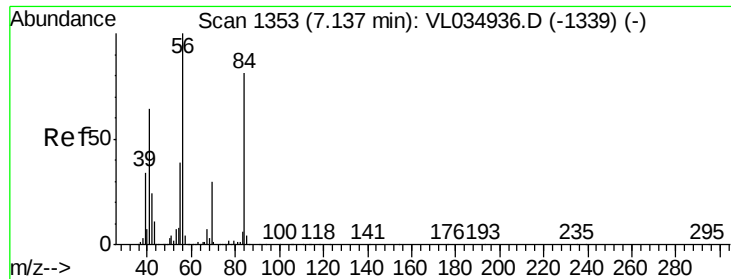
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#29
Chloroform
Concen: 0.599 ppbv
RT: 5.76 min Scan# 926
Delta R.T. 0.01 min
Lab File: VL034958.D
Acq: 7 May 2020 6:47

Tgt Ion	Ratio	Lower	Upper
83	100		
85	59.7	53.0	79.6





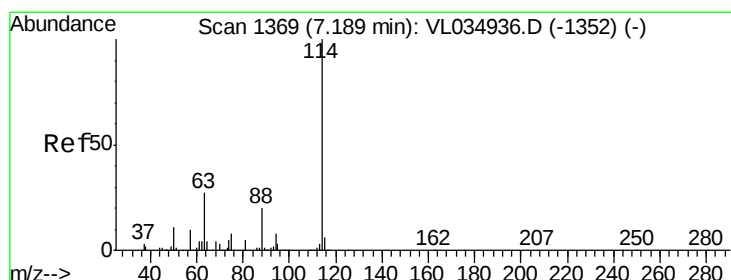
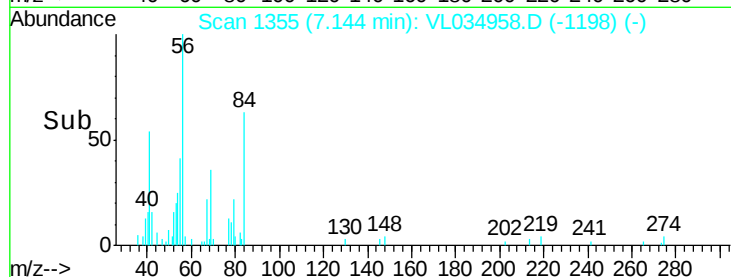
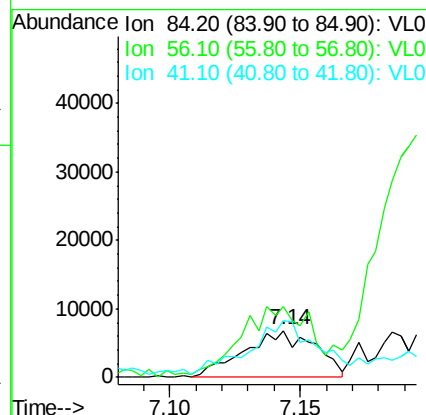
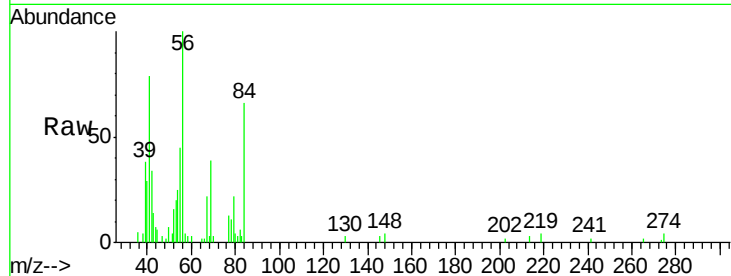
#30
Cyclohexane
Concen: 0.159 ppbv m
RT: 7.14 min Scan# 1355
Delta R.T. 0.01 min
Lab File: VL034958.D
Acq: 7 May 2020 6:47

Instrument :
MSVOA_L
ClientSampleId :
SV-1

Tot Ion	Ratio	Lower	Upper
84	100		
56	0.0	111.4	167.2#
41	0.0	66.7	100.1#

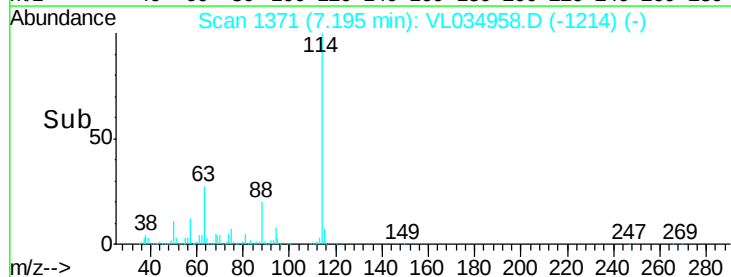
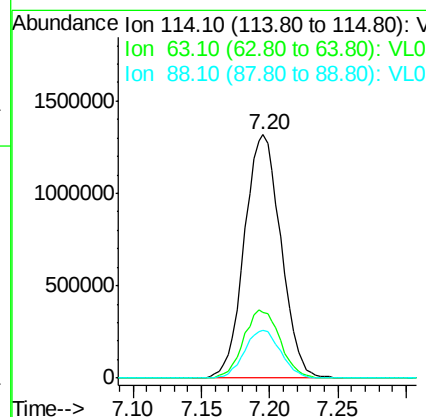
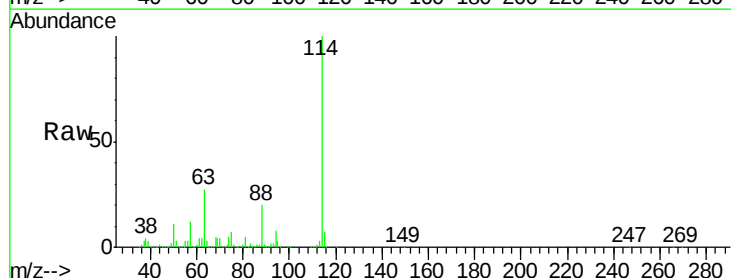
Manual Integrations
APPROVED

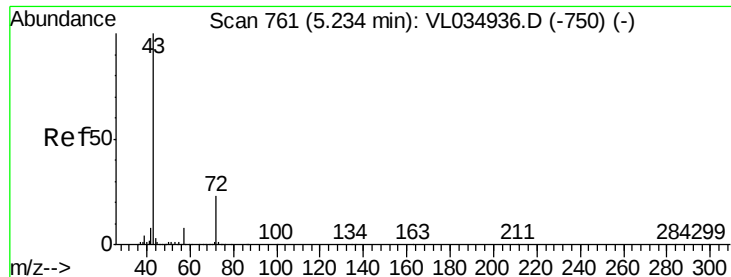
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#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 7.20 min Scan# 1371
Delta R.T. 0.01 min
Lab File: VL034958.D
Acq: 7 May 2020 6:47

Tgt Ion	Ratio	Lower	Upper
114	100		
63	28.2	22.2	33.4
88	19.5	15.5	23.3





#34

2-Butanone

Concen: 19.278 ppbv

RT: 5.24 min Scan# 762

Delta R.T. 0.00 min

Lab File: VL034958.D

Acq: 7 May 2020 6:47

Instrument :

MSVOA_L

ClientSampleId :

SV-1

Tot Ion: 43 Resp: 2933375

Ion Ratio Lower Upper

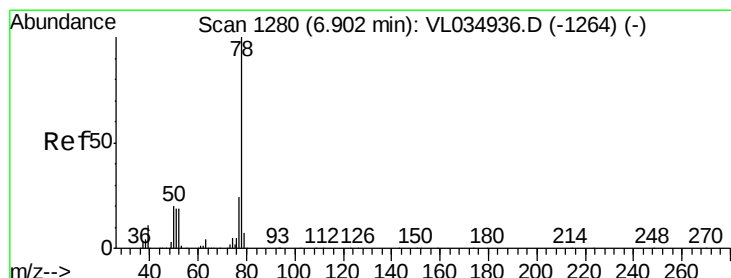
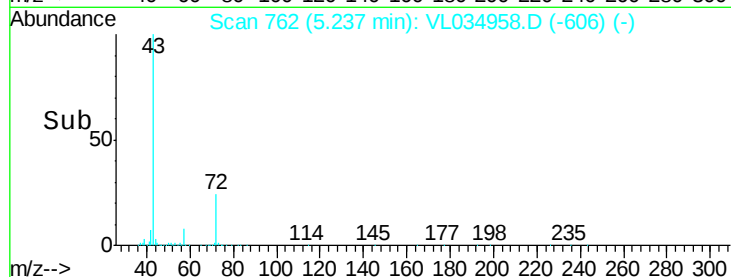
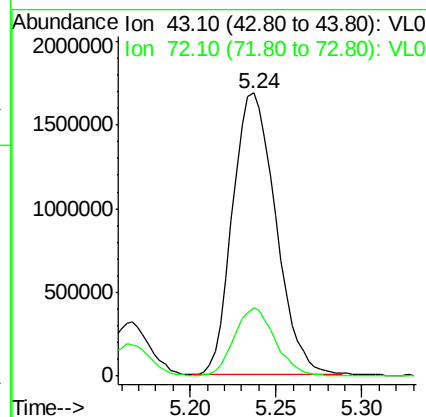
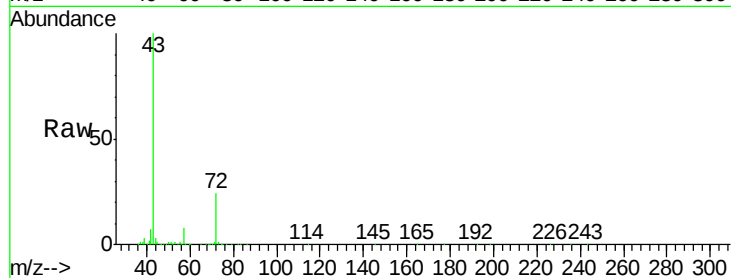
43 100

72 23.1 18.0 27.0

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#36

Benzene

Concen: 0.505 ppbv

RT: 6.91 min Scan# 1281

Delta R.T. 0.00 min

Lab File: VL034958.D

Acq: 7 May 2020 6:47

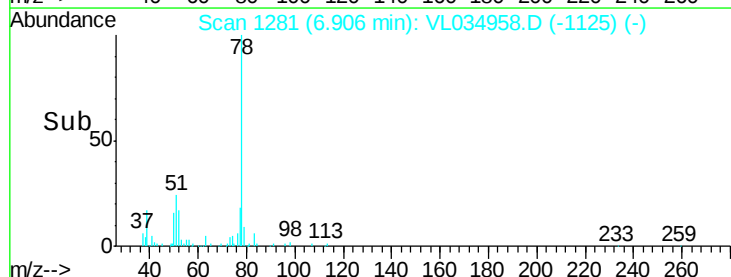
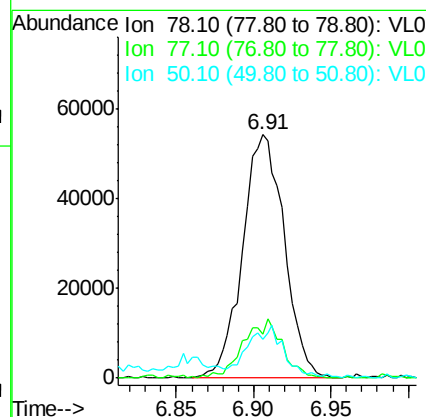
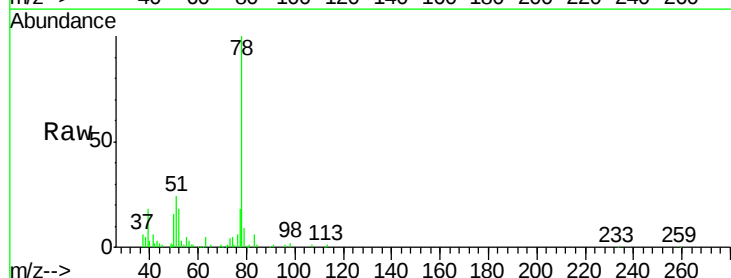
Tgt Ion: 78 Resp: 101872

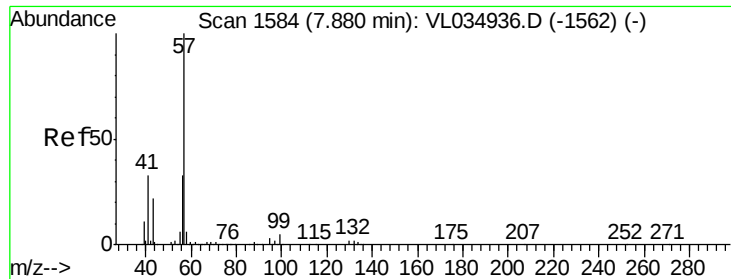
Ion Ratio Lower Upper

78 100

77 17.5 19.0 28.6#

50 16.2 15.8 23.8





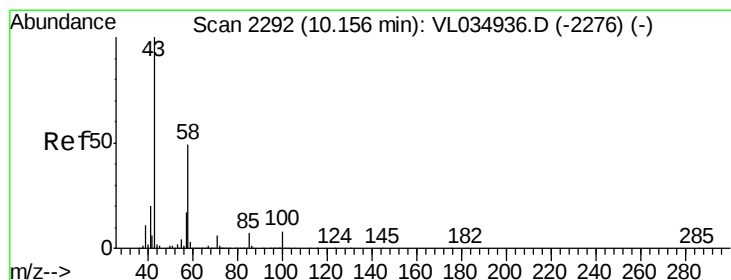
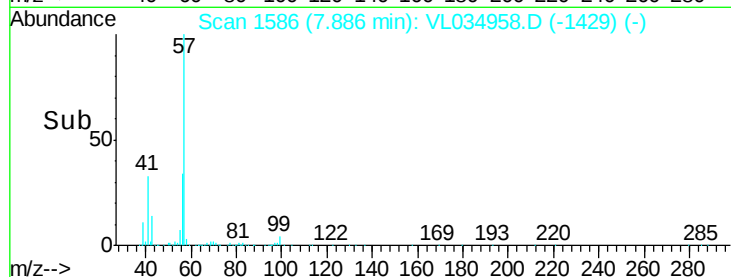
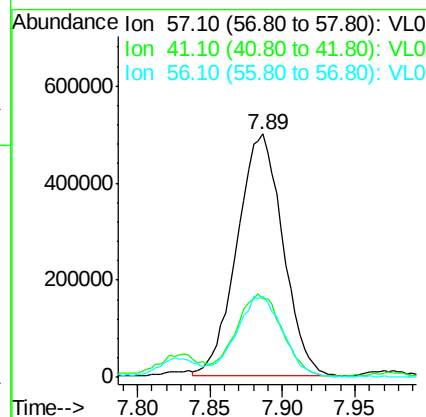
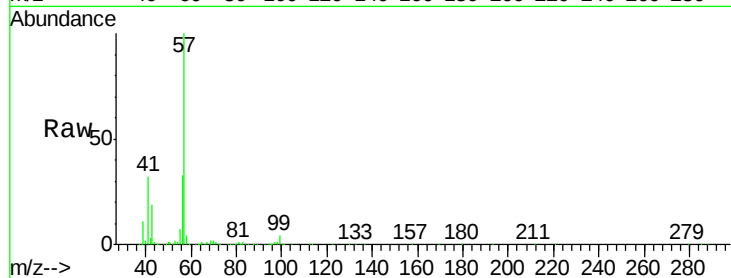
#44
 2,2,4-Trimethylpentane
 Concen: 3.076 ppbv
 RT: 7.89 min Scan# 1586
 Delta R.T. 0.01 min
 Lab File: VL034958.D
 Acq: 7 May 2020 6:47

Instrument :
 MSVOA_L
 ClientSampleId :
 SV-1

Tot Ion	Ratio	Lower	Upper
57	100		
41	34.2	26.4	39.6
56	33.5	25.5	38.3

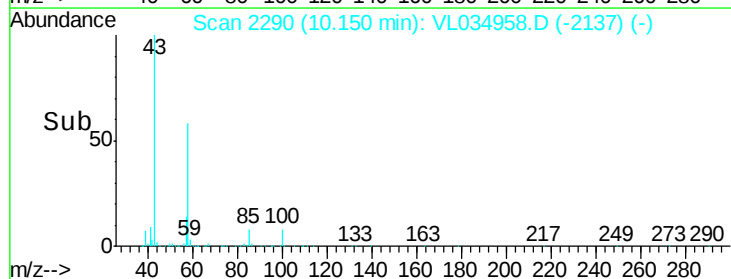
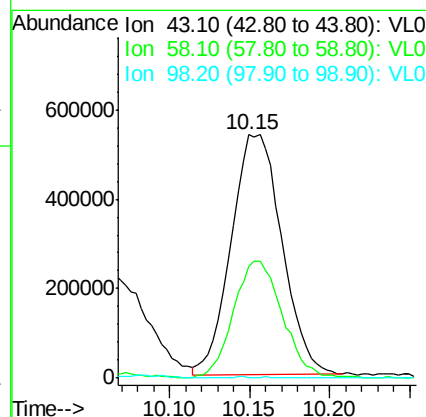
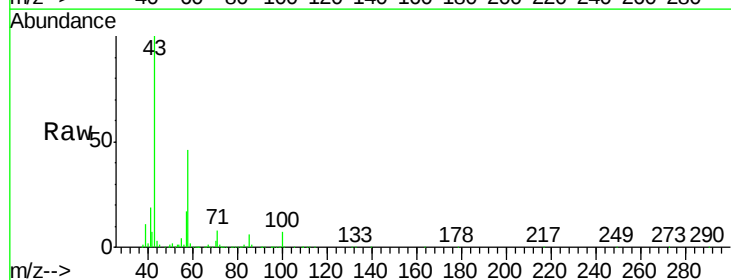
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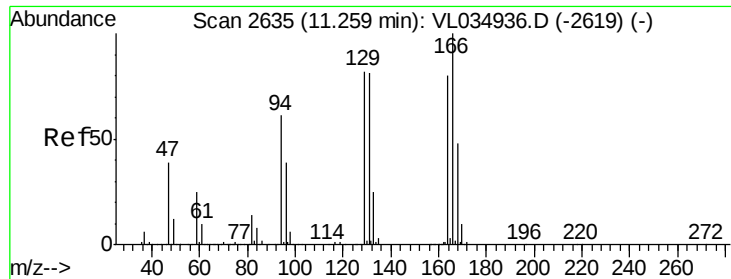
MMDadoda
 5/7/2020 2:32:38 PM



#51
 2-Hexanone
 Concen: 6.826 ppbv
 RT: 10.15 min Scan# 2290
 Delta R.T. -0.01 min
 Lab File: VL034958.D
 Acq: 7 May 2020 6:47

Tgt Ion	Ratio	Lower	Upper
43	100		
58	47.4	39.1	58.7
98	0.6	0.3	0.5#





#52

Tetrachloroethene

Concen: 0.208 ppbv m

RT: 11.25 min Scan# 2631

Delta R.T. -0.01 min

Lab File: VL034958.D

Acq: 7 May 2020 6:47

Instrument :

MSVOA_L

ClientSampled :

SV-1

Tot Ion:164 Resp: 14894

Ion Ratio Lower Upper

164 100

166 91.6 100.7 151.1#

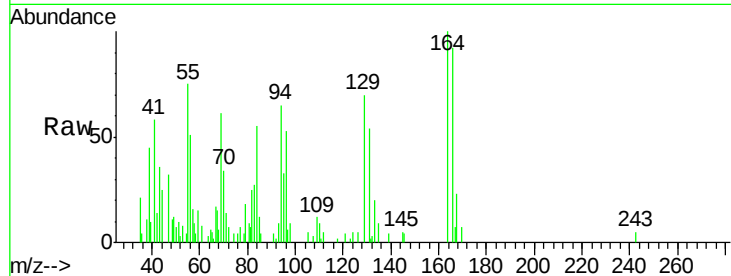
129 69.5 83.0 124.4#

131 54.0 81.0 121.4#

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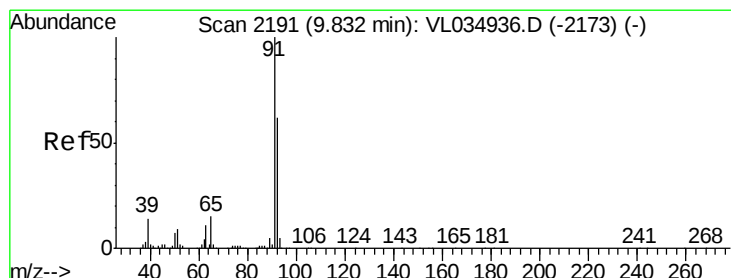
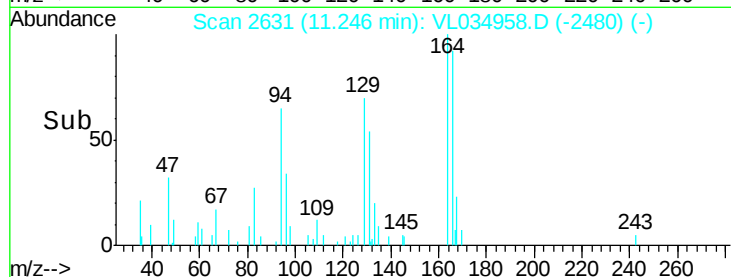
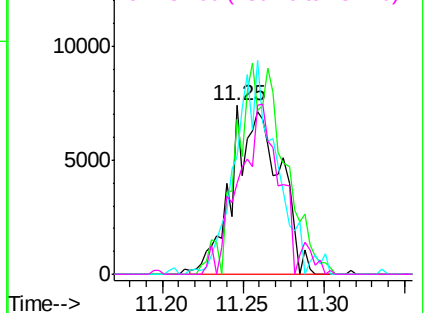


Abundance Ion 163.90 (163.60 to 164.60): V

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: 4.553 ppbv

RT: 9.83 min Scan# 2192

Delta R.T. 0.00 min

Lab File: VL034958.D

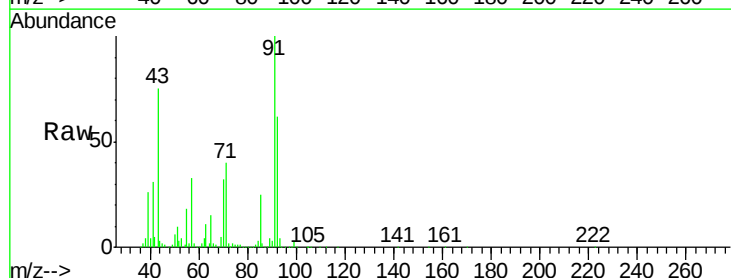
Acq: 7 May 2020 6:47

Tgt Ion: 91 Resp: 974180

Ion Ratio Lower Upper

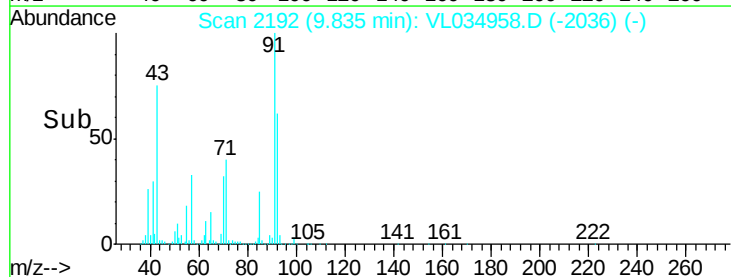
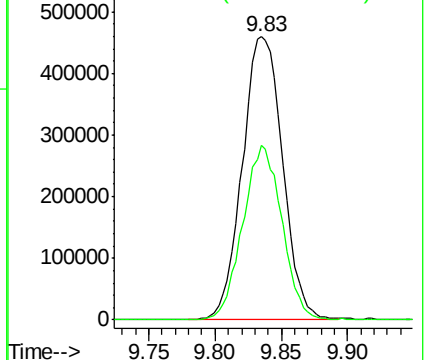
91 100

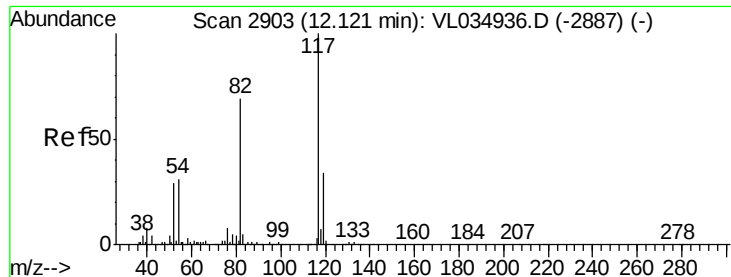
92 59.8 48.6 73.0



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 92.10 (91.80 to 92.80): VL0





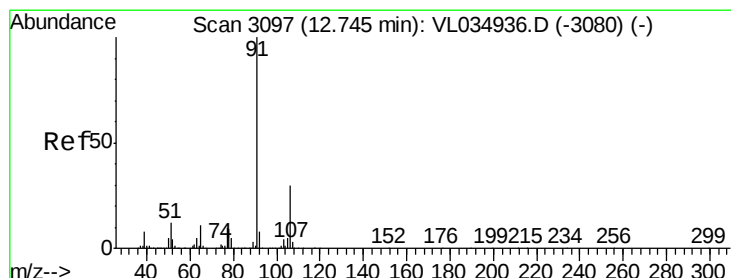
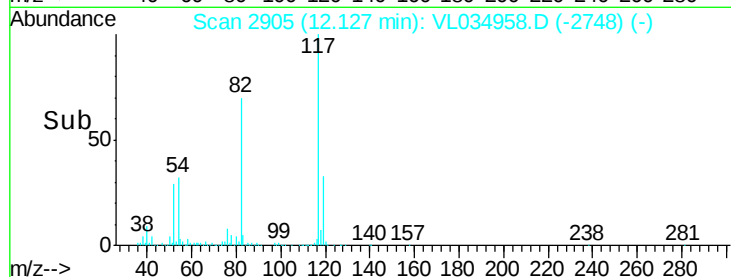
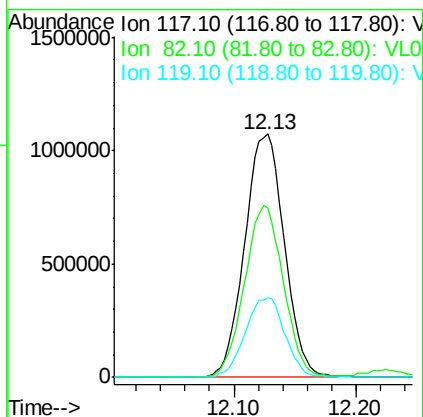
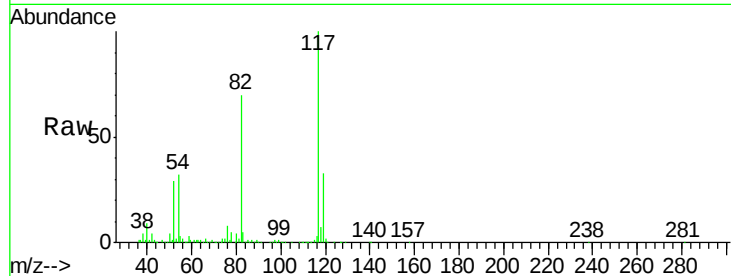
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 12.13 min Scan# 2905
Delta R.T. 0.01 min
Lab File: VL034958.D
Acq: 7 May 2020 6:47

Instrument :
MSVOA_L
ClientSampled :
SV-1

Tot Ion	Ratio	Lower	Upper
117	100		
82	69.3	53.1	79.7
119	32.7	26.7	40.1

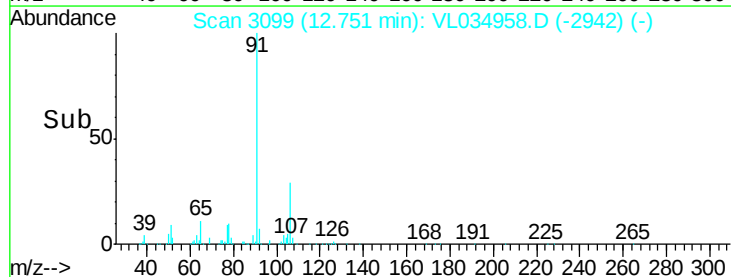
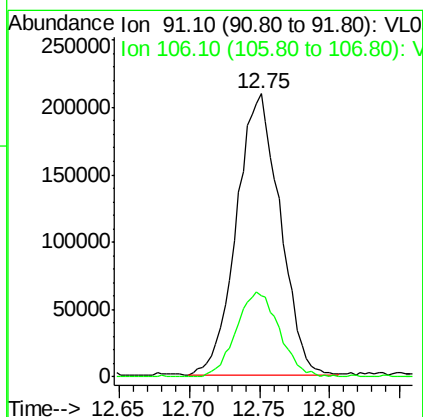
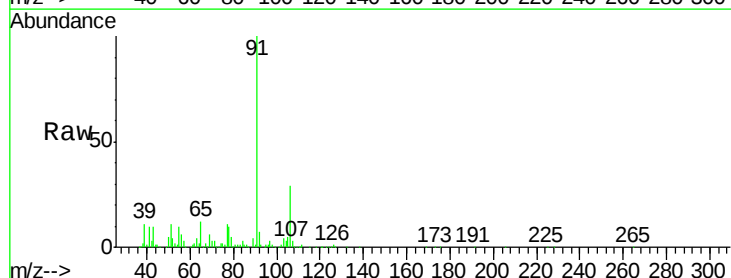
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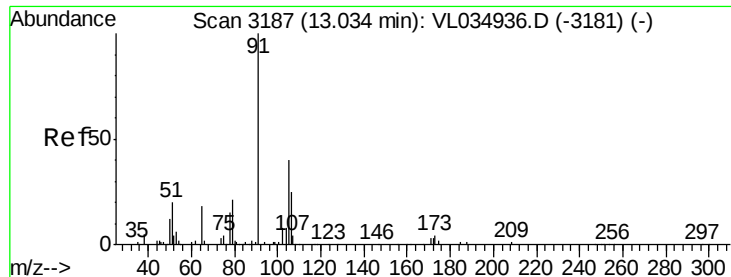
MMDadoda
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#58
Ethyl Benzene
Concen: 1.511 ppbv
RT: 12.75 min Scan# 3099
Delta R.T. 0.01 min
Lab File: VL034958.D
Acq: 7 May 2020 6:47

Tgt Ion	Ratio	Lower	Upper
91	100		
106	29.0	24.2	36.4





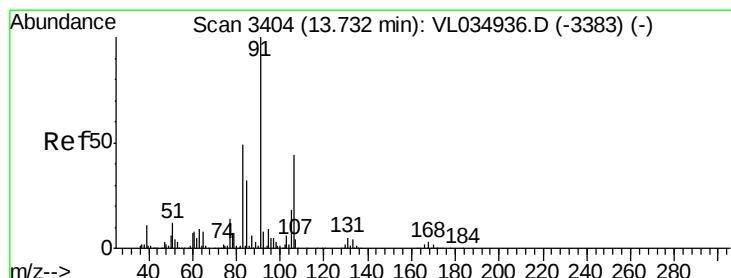
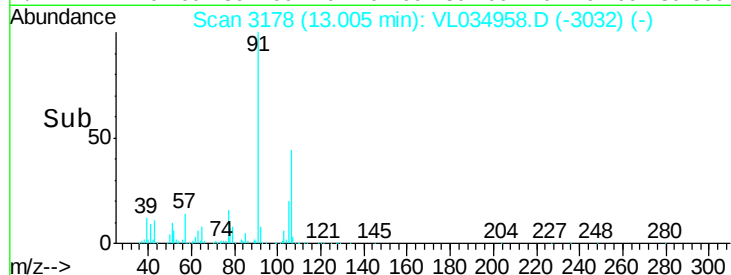
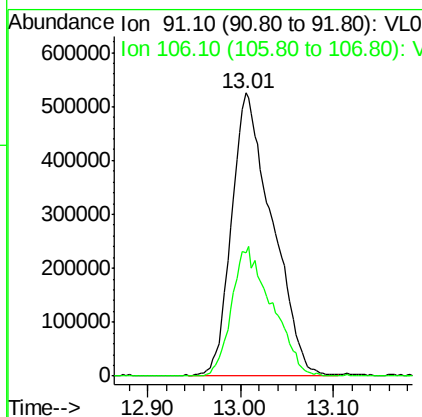
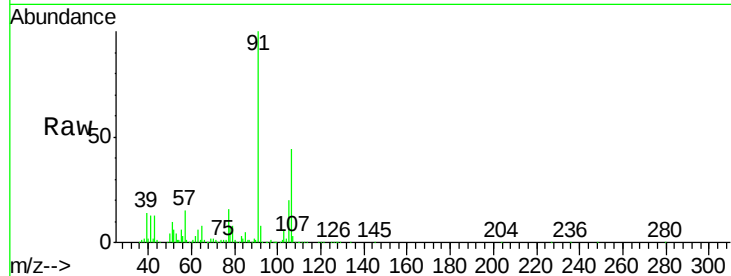
#59
m/p-Xylene
Concen: 6.101 ppbv
RT: 13.01 min Scan# 3178
Delta R.T. -0.03 min
Lab File: VL034958.D
Acq: 7 May 2020 6:47

Instrument :
MSVOA_L
ClientSampled :
SV-1

Tot Ion: 91 Resp: 1601185
Ion Ratio Lower Upper
91 100
106 45.3 66.0 99.0#

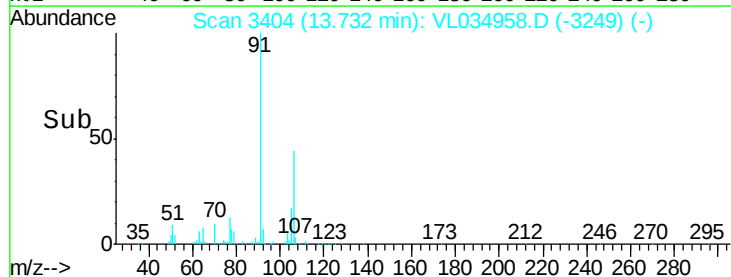
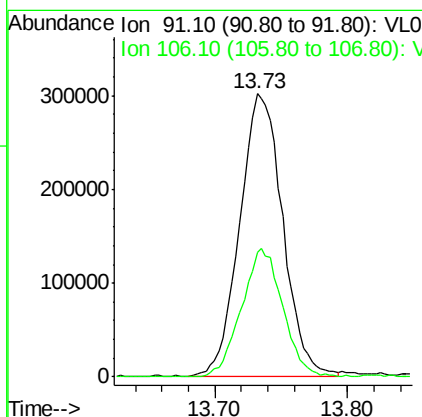
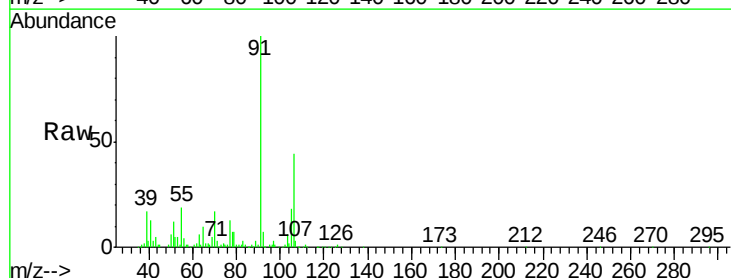
Manual Integrations
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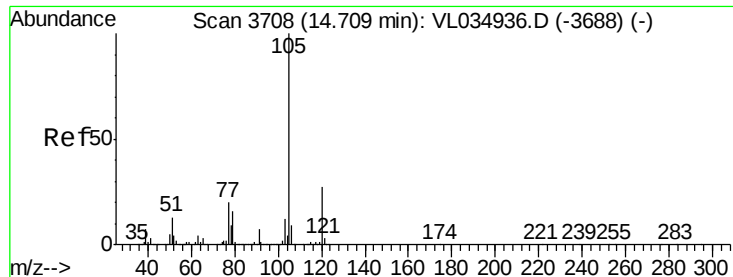
MMDadoda
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#60
o-Xylene
Concen: 2.632 ppbv
RT: 13.73 min Scan# 3404
Delta R.T. -0.00 min
Lab File: VL034958.D
Acq: 7 May 2020 6:47

Tgt Ion: 91 Resp: 681463
Ion Ratio Lower Upper
91 100
106 44.0 21.9 65.5





#62

Isopropylbenzene

Concen: 0.155 ppbv m

RT: 14.72 min Scan# 3710

Delta R.T. 0.01 min

Lab File: VL034958.D

Acq: 7 May 2020 6:47

Instrument :

MSVOA_L

ClientSampleId :

SV-1

Tot Ion:105 Resp: 60113

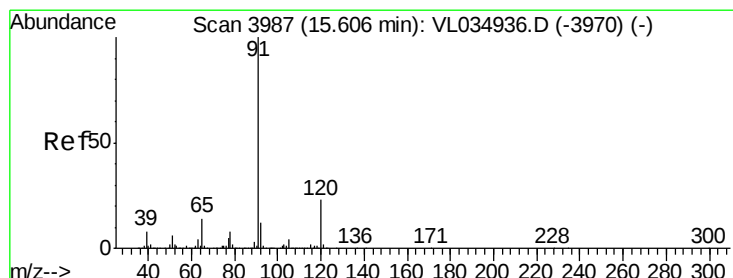
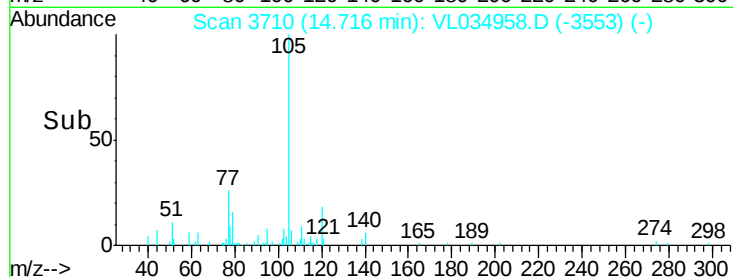
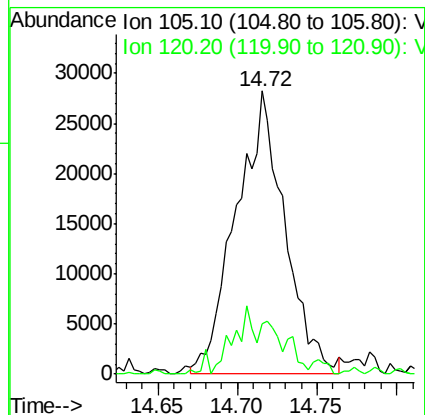
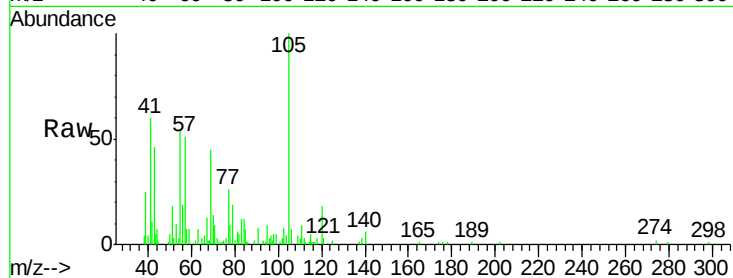
Ion Ratio Lower Upper

105 100

120 0.0 20.6 31.0#

Manual Integrations
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#64

n-propylbenzene

Concen: 0.462 ppbv m

RT: 15.61 min Scan# 3989

Delta R.T. 0.01 min

Lab File: VL034958.D

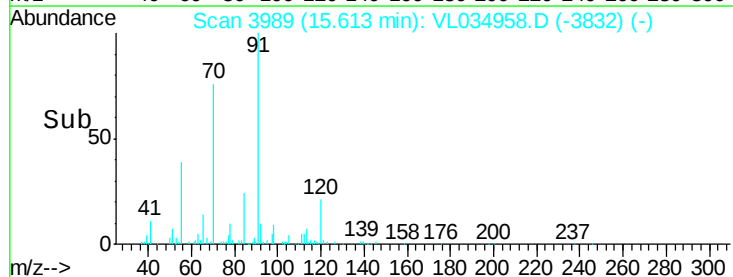
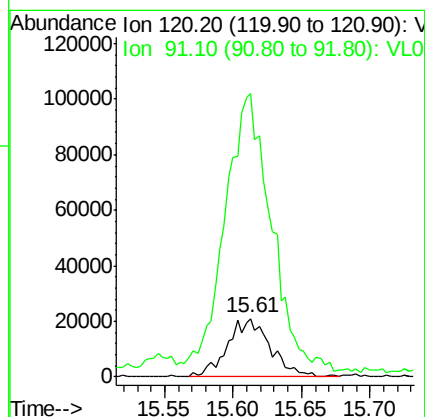
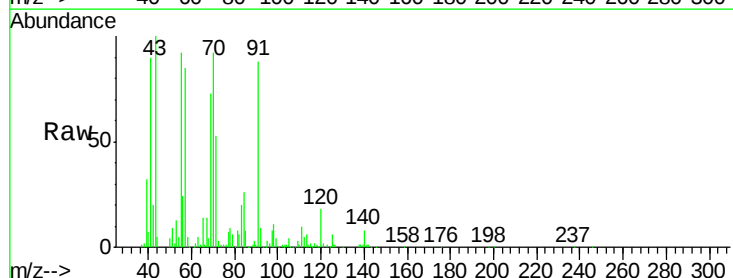
Acq: 7 May 2020 6:47

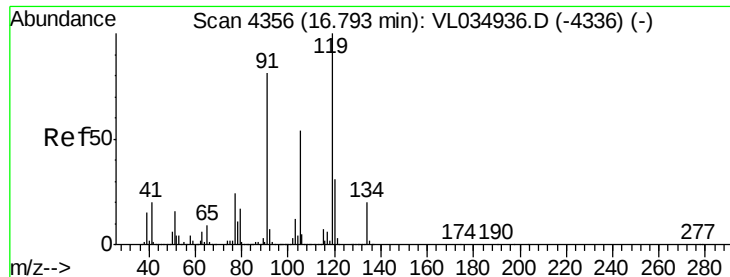
Tgt Ion:120 Resp: 45805

Ion Ratio Lower Upper

120 100

91 18.8 373.5 560.3#





#65

tert-Butylbenzene

Concen: 0.307 ppbv

RT: 16.82 min Scan# 4365

Delta R.T. 0.03 min

Lab File: VL034958.D

Acq: 7 May 2020 6:47

Instrument :

MSVOA_L

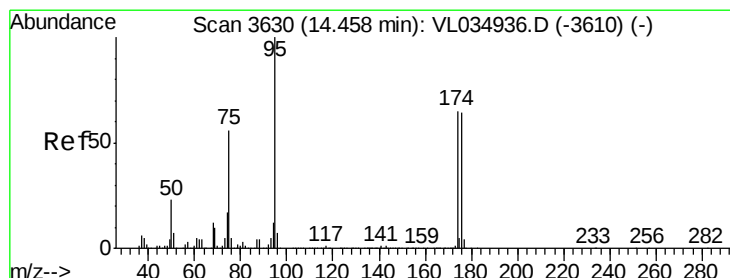
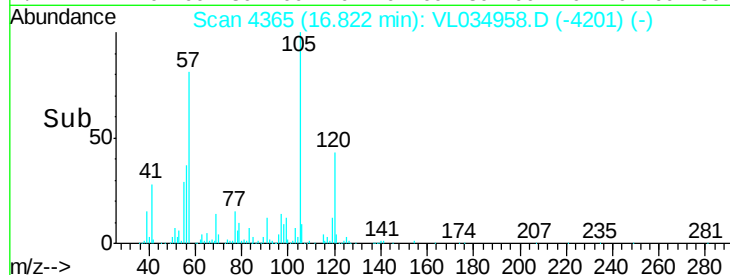
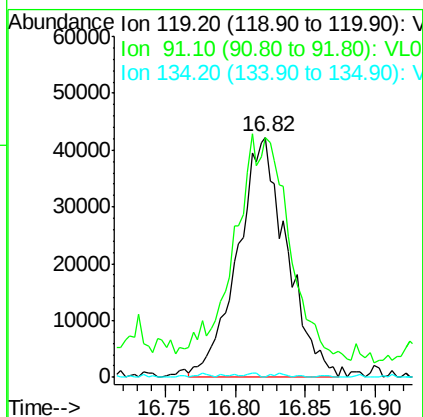
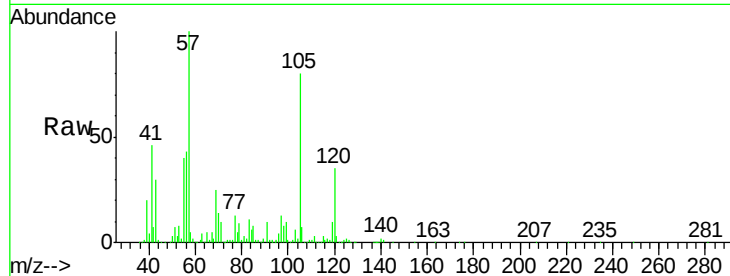
ClientSampled :

SV-1

Tot Ion	Ratio	Lower	Upper
119	100		
91	109.6	67.5	101.3#
134	2.0	16.1	24.1#

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#68

1-Bromo-4-Fluorobenzene

Concen: 10.279 ppbv

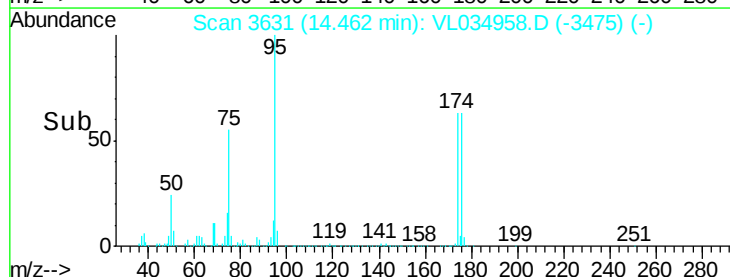
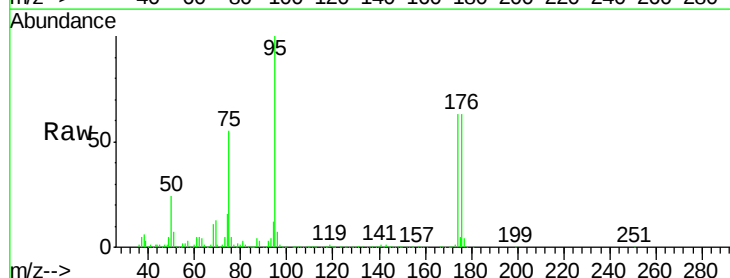
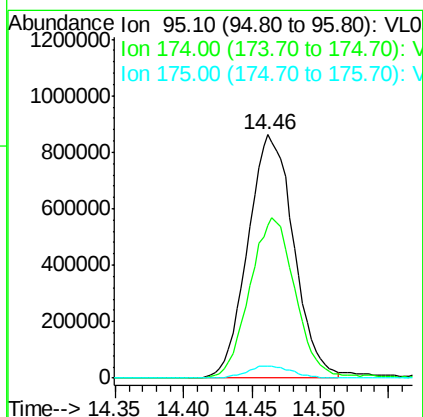
RT: 14.46 min Scan# 3631

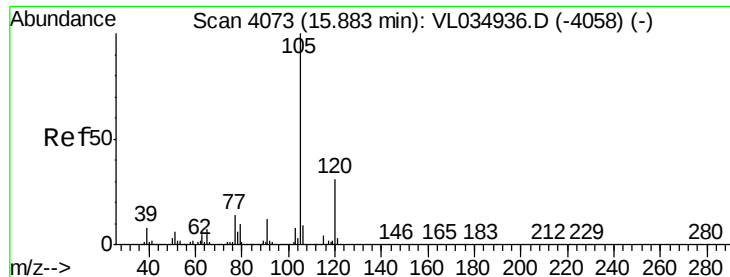
Delta R.T. 0.00 min

Lab File: VL034958.D

Acq: 7 May 2020 6:47

Tgt Ion	Ratio	Lower	Upper
95	100		
174	66.6	51.5	77.3
175	5.0	3.8	5.8





#72

4-Ethyltoluene

Concen: 0.938 ppbv

RT: 15.89 min Scan# 4074

Delta R.T. 0.00 min

Lab File: VL034958.D

Acq: 7 May 2020 6:47

Instrument :

MSVOA_L

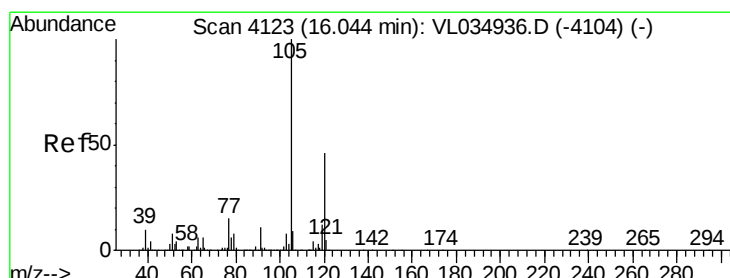
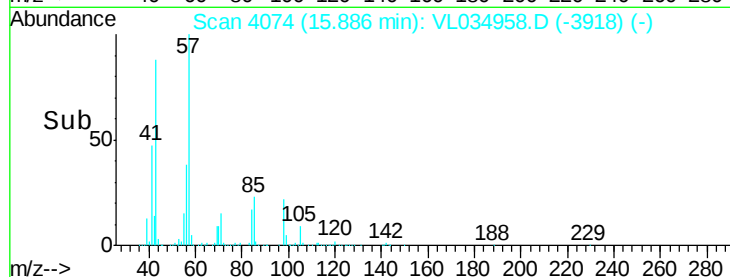
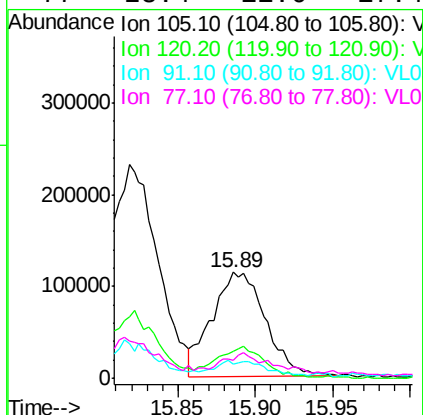
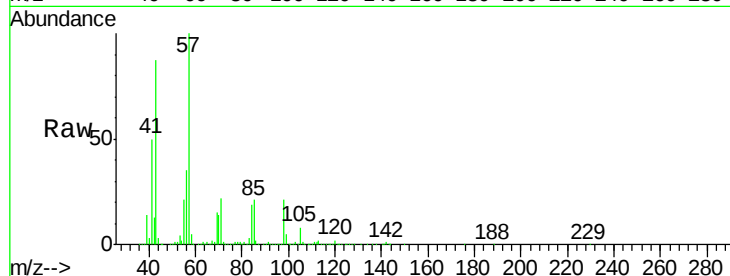
ClientSampled :

SV-1

Tot Ion	Ion	Ratio	Resp	Lower	Upper
105	100				
120	30.3	23.8	35.8		
91	16.7	10.6	15.8		
77	28.4	11.6	17.4		

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#73

1,3,5-Trimethylbenzene

Concen: 0.769 ppbv m

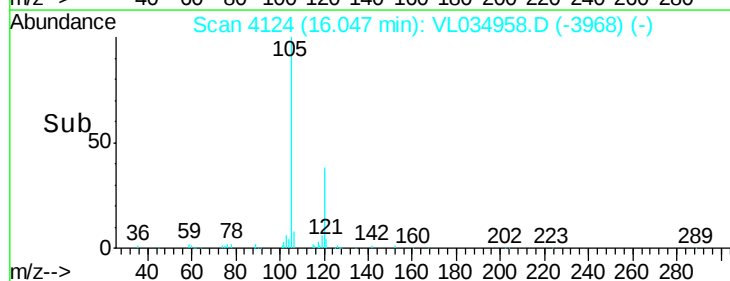
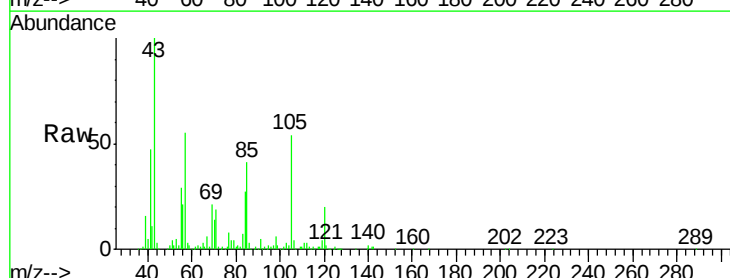
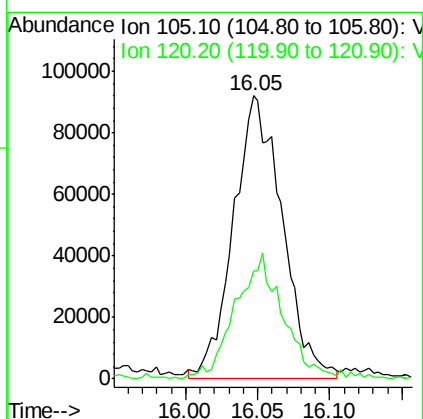
RT: 16.05 min Scan# 4124

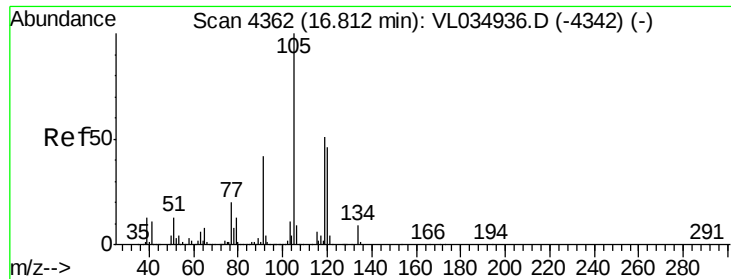
Delta R.T. 0.00 min

Lab File: VL034958.D

Acq: 7 May 2020 6:47

Tgt Ion	Ion	Ratio	Resp	Lower	Upper
105	100				
120	38.0	36.4	54.6		





#74
 1,2,4-Trimethylbenzene
 Concen: 2.862 ppbv m
 RT: 16.82 min Scan# 4365
 Delta R.T. 0.01 min
 Lab File: VL034958.D
 Acq: 7 May 2020 6:47

Instrument :
 MSVOA_L
 ClientSampleId :
 SV-1

Tot Ion	Ratio	Resp Lower	Upper
105	100		
120	43.3	36.8	55.2
91	12.4	35.4	53.0#
77	16.0	16.2	24.2#

Manual Integrations
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