

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL081720\
 Data File : VL035433.D
 Acq On : 18 Aug 2020 1:48
 Operator : SY/AP
 Sample : L3699-02DL 10X
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 K-1DL

Manual Integrations
 APPROVED

MMDadoda
 8/20/2020 11:06:01 AM

Quant Time: Aug 19 16:23:37 2020
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL081720AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Mon Aug 18 2020
 QLast Update : Mon Aug 17 19:28:30 2020
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.68	49	1118637	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.19	114	5075402	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.11	117	5055141	10.00	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.45	95	3694678	10.44	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	104.40%

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
3) Chlorodifluoromethane	2.99	51	16824m	0.120	ppbv	
9) Propene	3.02	41	84141	1.492	ppbv #	69
10) Heptane	8.14	43	46535	0.315	ppbv #	80
13) Ethanol	3.61	45	1821969	88.210	ppbv	100
15) Acetone	3.85	43	887130	6.890	ppbv #	84
27) Carbon Disulfide	4.56	76	523840	2.563	ppbv #	85
29) Chloroform	5.76	83	623652	2.195	ppbv	98
34) 2-Butanone	5.26	43	138872	0.819	ppbv #	73
52) Tetrachloroethene	11.25	164	34166	0.150	ppbv #	86
53) Toluene	9.83	91	293162	0.611	ppbv	98
58) Ethyl Benzene	12.74	91	164515	0.270	ppbv	93
59) m/p-Xylene	12.99	91	479147	0.929	ppbv #	84
60) o-Xylene	13.72	91	224848	0.448	ppbv	89
64) n-propylbenzene	15.59	120	69158	0.273	ppbv	66
65) tert-Butylbenzene	16.79	119	169941	0.213	ppbv #	88
70) n-Butylbenzene	18.59	91	93479	0.106	ppbv #	32
72) 4-Ethyltoluene	15.87	105	392018	0.596	ppbv #	92
73) 1,3,5-Trimethylbenzene	16.03	105	343231	0.561	ppbv	90
74) 1,2,4-Trimethylbenzene	16.79	105	1383078	2.079	ppbv #	70
79) Naphthalene	22.25	128	168898	0.180	ppbv	98
80) Naphthalene,2-methyl-	25.01	142	38805	0.100	ppbv	96

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

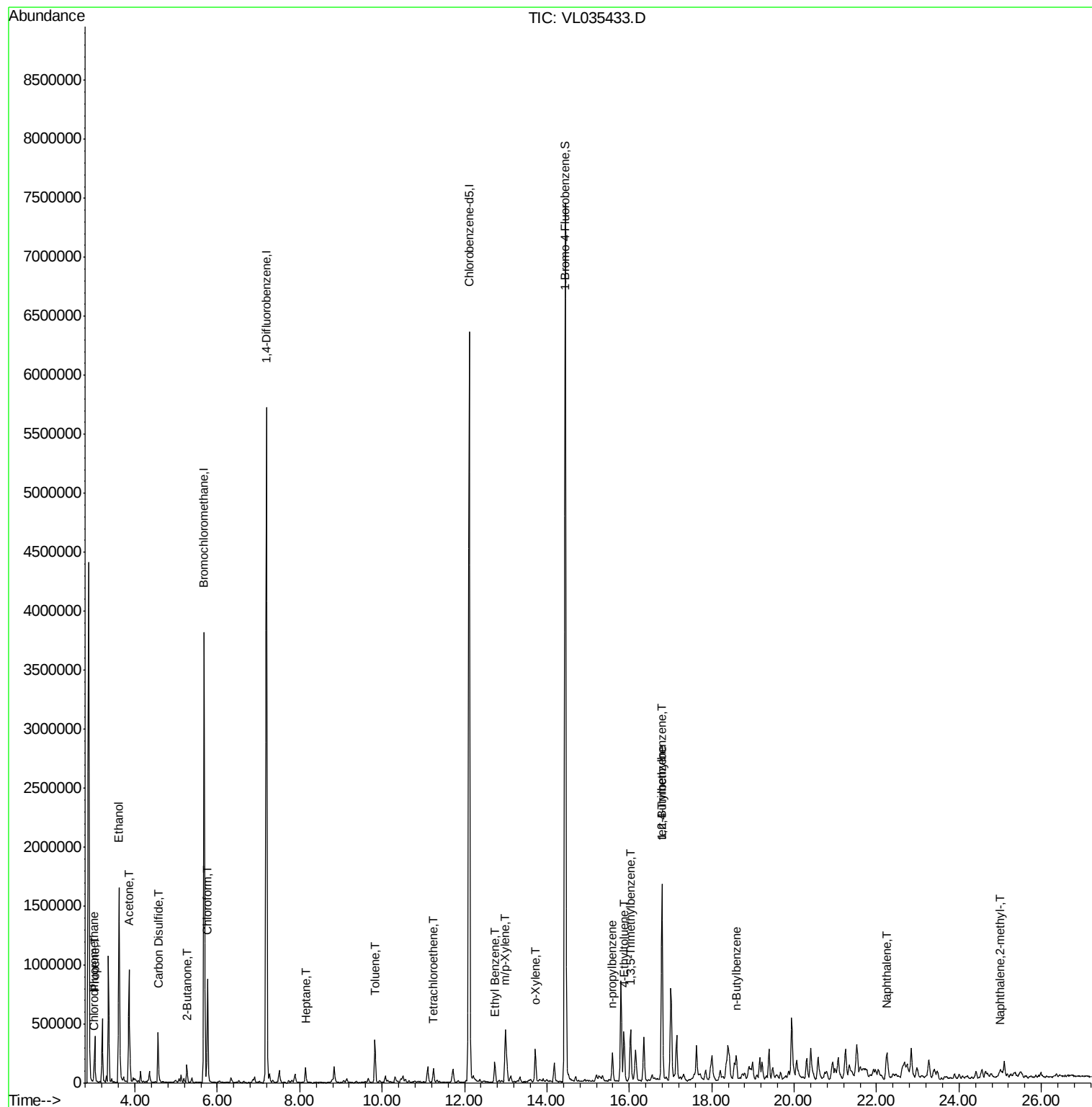
Data Path : Z:\V0ASRV\HPCHEM1\MSVOA L\DATA\VL081720\
Data File : VL035433.D
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Quant Time: Aug 19 16:23:37 2020
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA L\METHODS\VL081720AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Mon Aug
QLast Update : Mon Aug 17 19:28:30 2020
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.68 min Scan# 899

Delta R.T. 0.00 min

Lab File: VL035433.D

Acq: 18 Aug 2020 1:48

Instrument :

MSVOA_L

ClientSampled :

K-1DL

Tot Ion: 49 Resp: 1118637

Ion Ratio Lower Upper

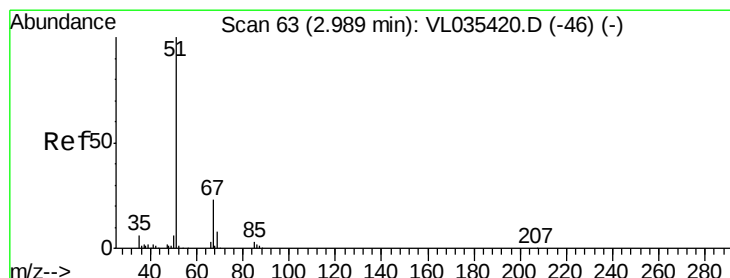
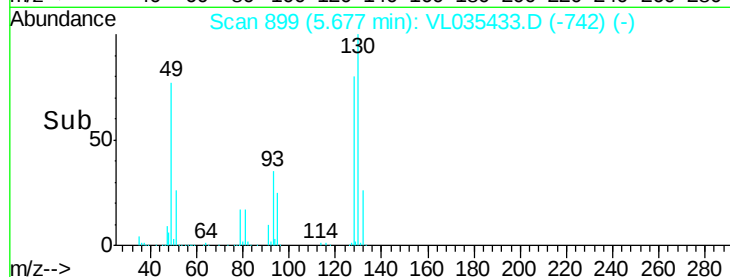
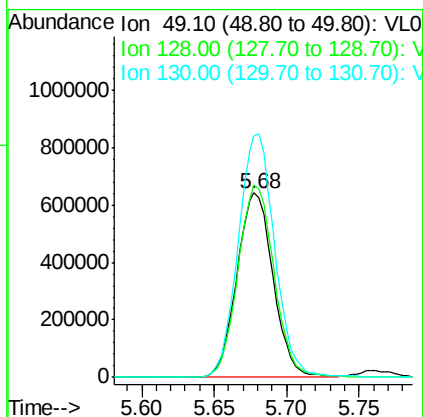
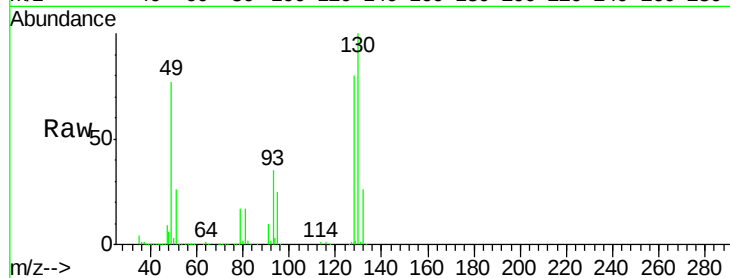
49 100

128 104.4 20.9 62.7#

130 133.5 26.7 80.1#

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#3

Chlorodifluoromethane

Concen: 0.120 ppbv m

RT: 2.99 min Scan# 64

Delta R.T. 0.01 min

Lab File: VL035433.D

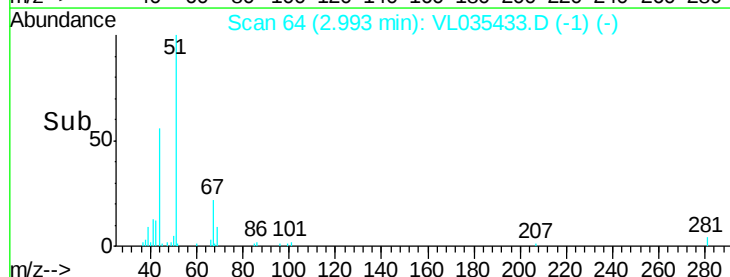
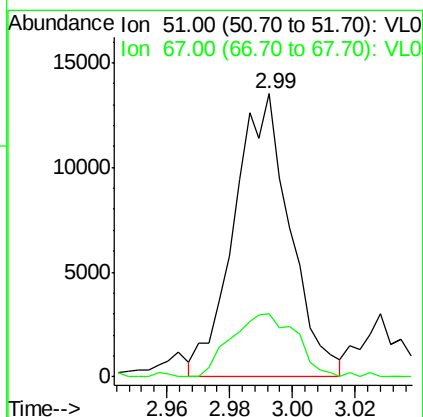
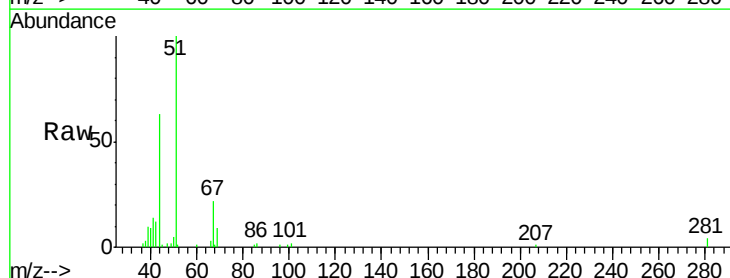
Acq: 18 Aug 2020 1:48

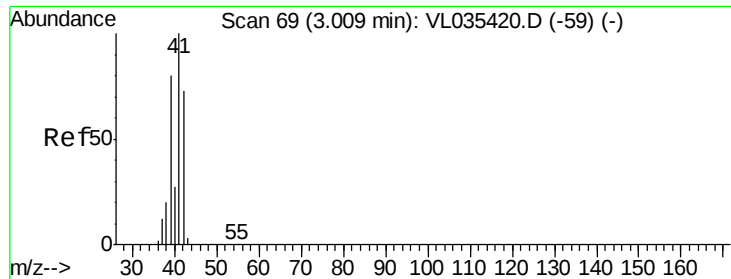
Tgt Ion: 51 Resp: 16824

Ion Ratio Lower Upper

51 100

67 27.2 15.0 22.6#





#9

Propene

Concen: 1.492 ppbv

RT: 3.02 min Scan# 73

Delta R.T. 0.02 min

Lab File: VL035433.D

Acq: 18 Aug 2020 1:48

Instrument :

MSVOA_L

ClientSampleId :

K-1DL

Tot Ion: 41 Resp: 84141

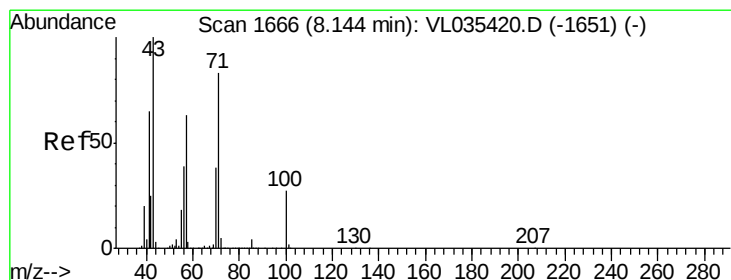
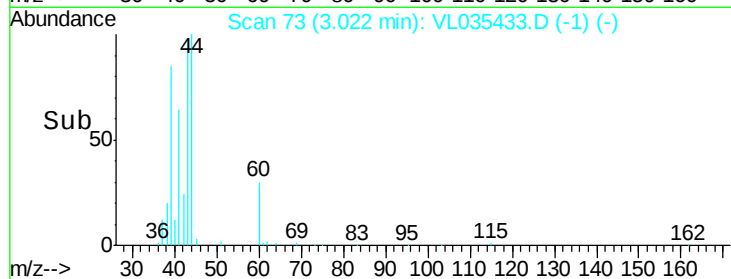
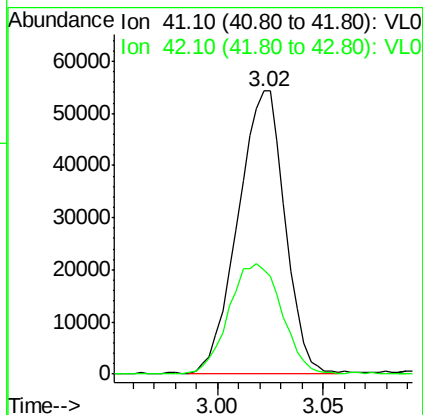
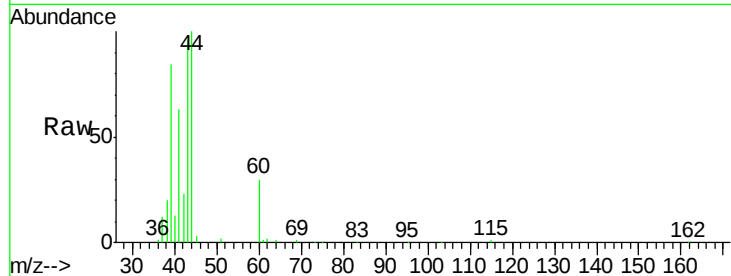
Ion Ratio Lower Upper

41 100

42 44.3 55.5 83.3#

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#10

Heptane

Concen: 0.315 ppbv

RT: 8.14 min Scan# 1665

Delta R.T. 0.00 min

Lab File: VL035433.D

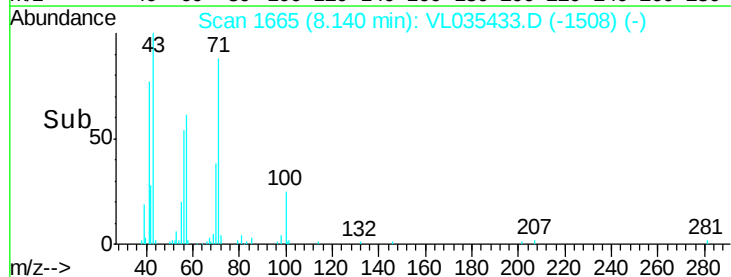
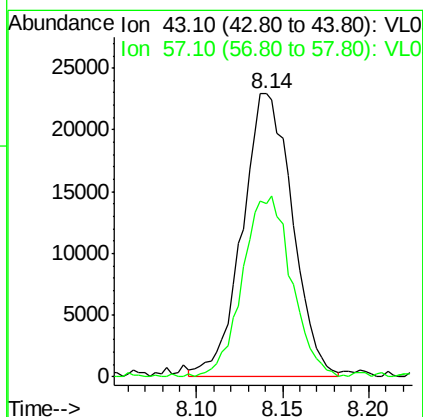
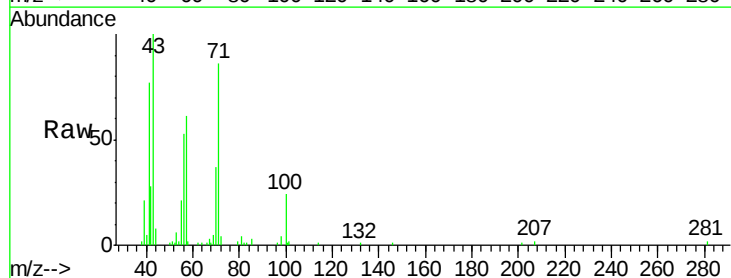
Acq: 18 Aug 2020 1:48

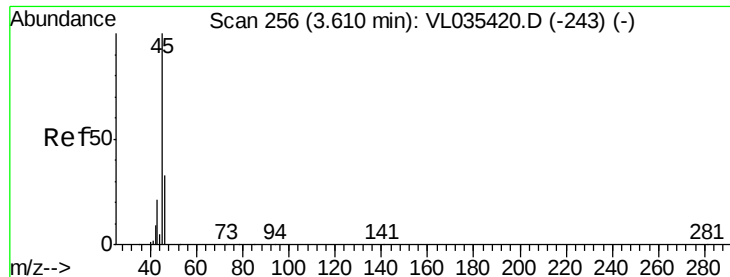
Tgt Ion: 43 Resp: 46535

Ion Ratio Lower Upper

43 100

57 63.4 39.8 59.6#





#13

Ethanol

Concen: 88.210 ppbv

RT: 3.61 min Scan# 257

Delta R.T. 0.01 min

Lab File: VL035433.D

Acq: 18 Aug 2020 1:48

Instrument :

MSVOA_L

ClientSampled :

K-1DL

Tot Ion: 45 Resp: 1821969

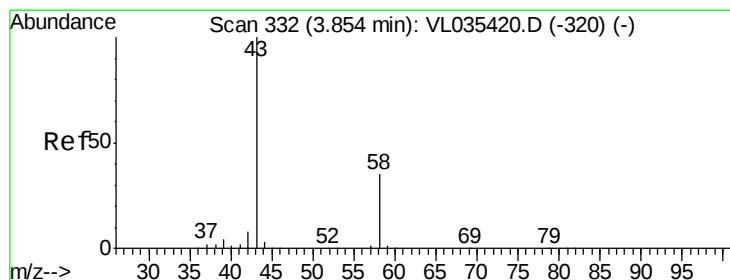
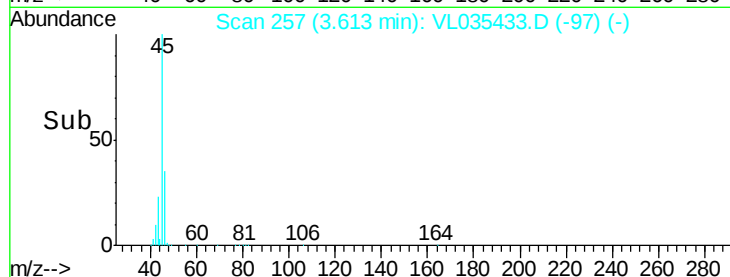
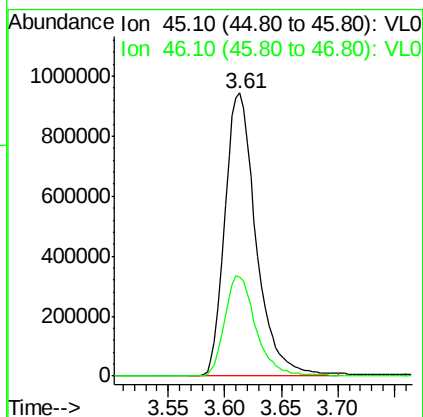
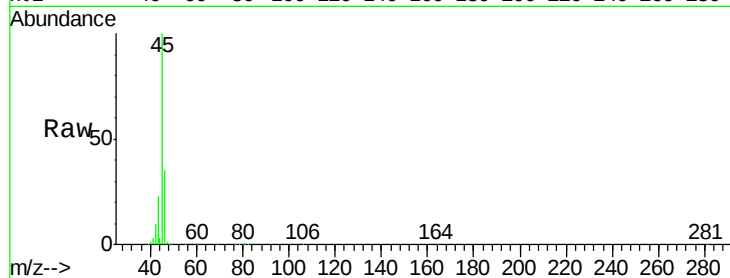
Ion Ratio Lower Upper

45 100

46 35.6 14.2 56.6

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#15

Acetone

Concen: 6.890 ppbv

RT: 3.85 min Scan# 332

Delta R.T. 0.01 min

Lab File: VL035433.D

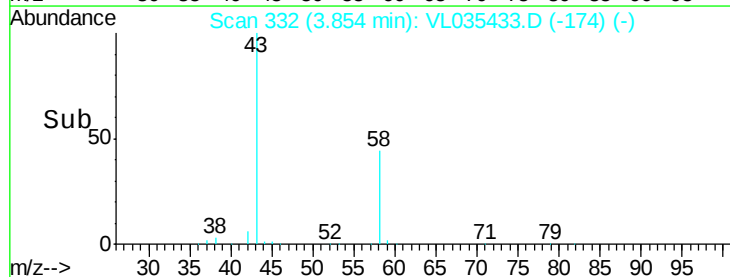
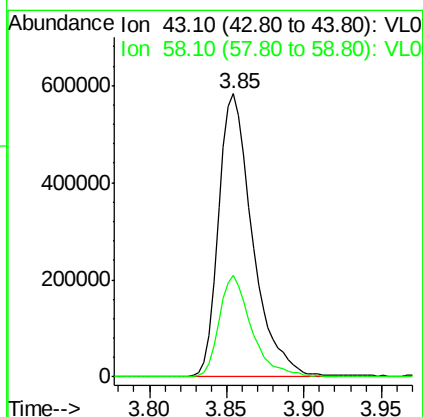
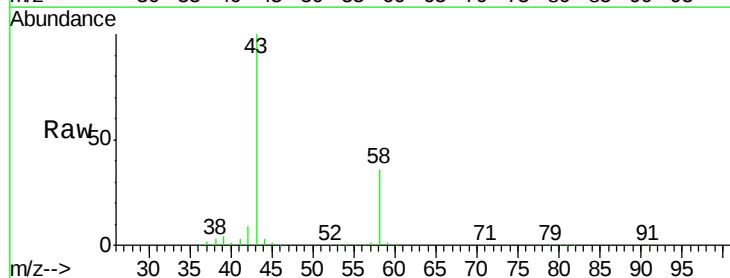
Acq: 18 Aug 2020 1:48

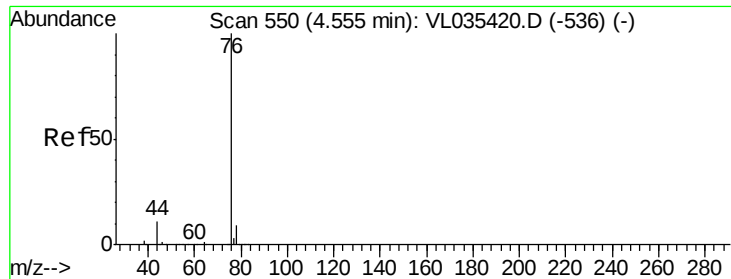
Tgt Ion: 43 Resp: 887130

Ion Ratio Lower Upper

43 100

58 34.6 21.0 31.6#





#27

Carbon Disulfide

Concen: 2.563 ppbv

RT: 4.56 min Scan# 552

Delta R.T. 0.01 min

Lab File: VL035433.D

Acq: 18 Aug 2020 1:48

Instrument :

MSVOA_L

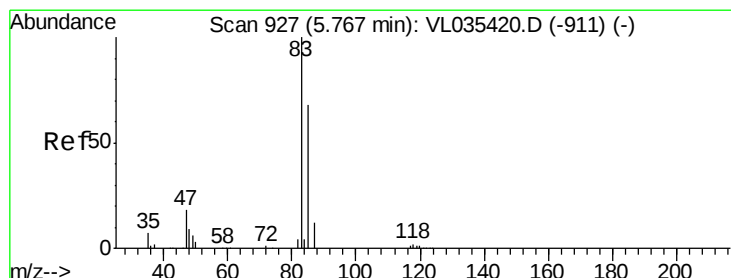
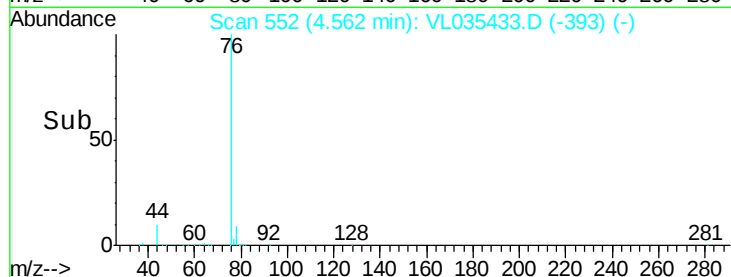
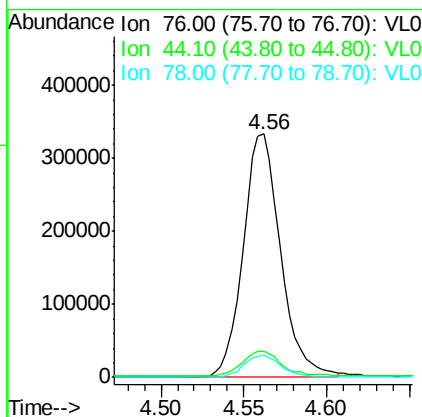
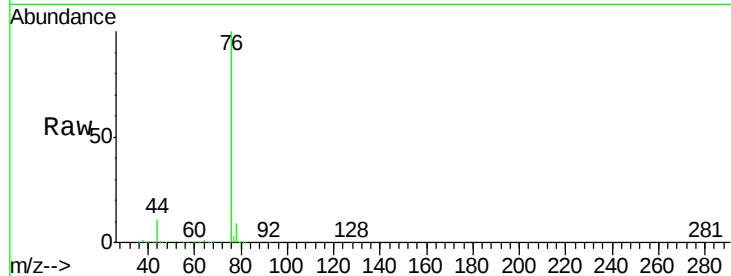
ClientSampled :

K-1DL

Tot Ion:	76	Resp:	523840
Ion Ratio	Lower	Upper	
76	100		
44	10.9	16.8	25.2#
78	9.4	7.3	10.9

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#29

Chloroform

Concen: 2.195 ppbv

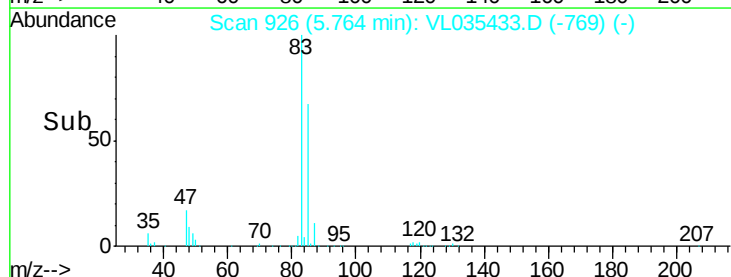
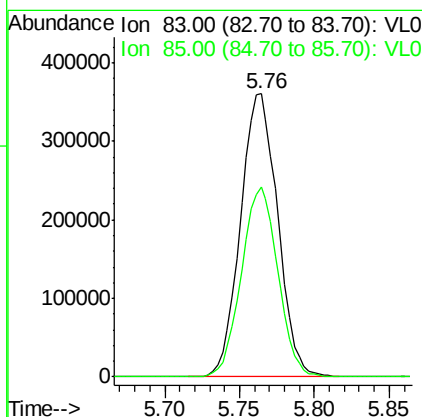
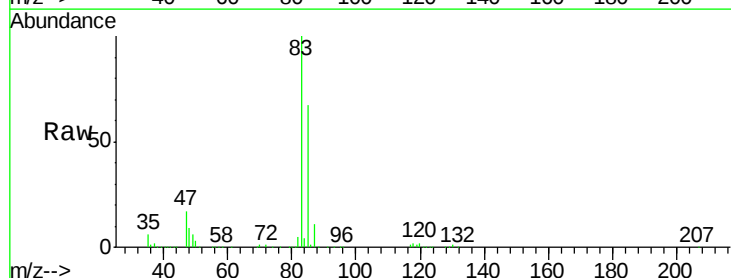
RT: 5.76 min Scan# 926

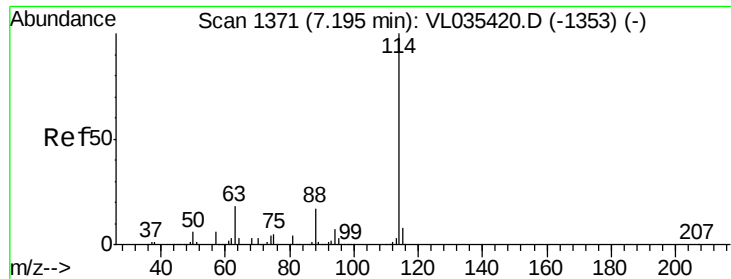
Delta R.T. 0.00 min

Lab File: VL035433.D

Acq: 18 Aug 2020 1:48

Tgt Ion:	83	Resp:	623652
Ion Ratio	Lower	Upper	
83	100		
85	67.2	52.7	79.1





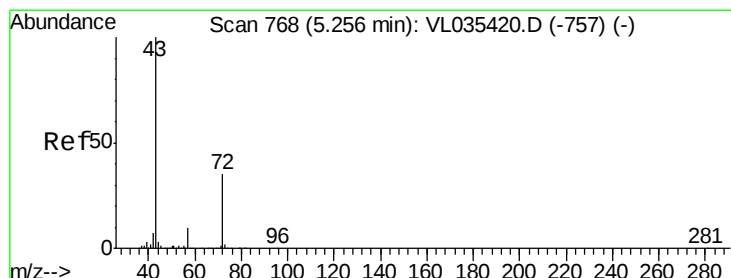
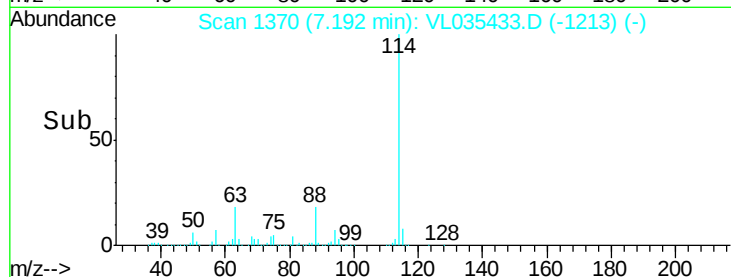
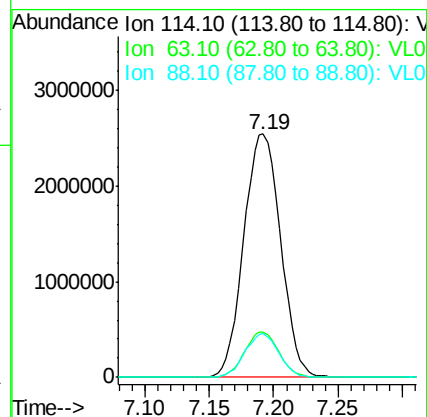
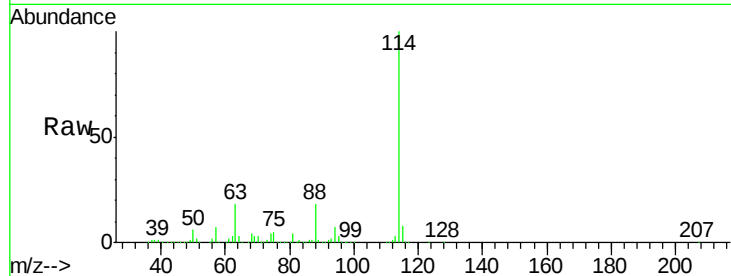
#33
 1,4-Difluorobenzene
 Concen: 10.000 ppbv
 RT: 7.19 min Scan# 1370
 Delta R.T. 0.00 min
 Lab File: VL035433.D
 Acq: 18 Aug 2020 1:48

Instrument :
 MSVOA_L
 ClientSampleId :
 K-1DL

Tot Ion:114 Resp: 5075402
 Ion Ratio Lower Upper
 114 100
 63 17.4 23.1 34.7#
 88 16.6 15.9 23.9

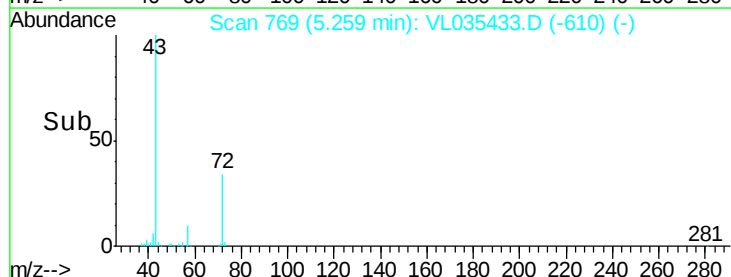
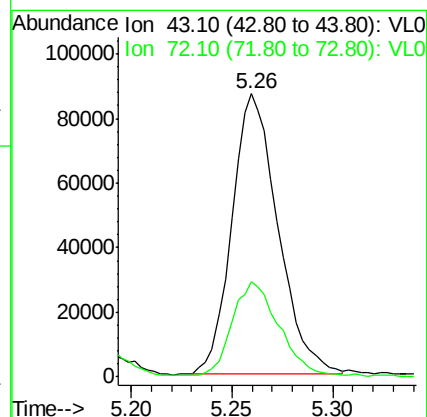
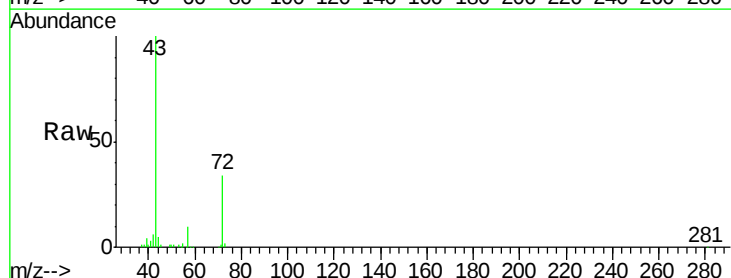
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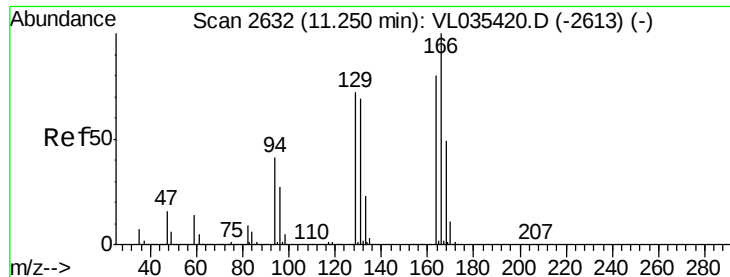
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#34
 2-Butanone
 Concen: 0.819 ppbv
 RT: 5.26 min Scan# 769
 Delta R.T. 0.01 min
 Lab File: VL035433.D
 Acq: 18 Aug 2020 1:48

Tgt Ion: 43 Resp: 138872
 Ion Ratio Lower Upper
 43 100
 72 34.9 17.6 26.4#





#52

Tetrachloroethene

Concen: 0.150 ppbv

RT: 11.25 min Scan# 2631

Delta R.T. 0.00 min

Lab File: VL035433.D

Acq: 18 Aug 2020 1:48

Instrument :

MSVOA_L

ClientSampleId :

K-1DL

Tot Ion:164 Resp: 34166

Ion Ratio Lower Upper

164 100

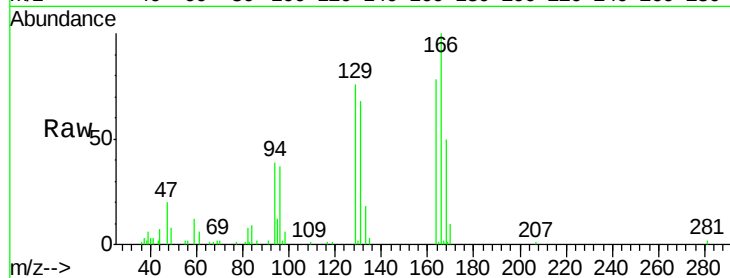
166 126.8 103.4 155.0

129 97.3 90.2 135.4

131 85.1 91.7 137.5#

Manual Integrations
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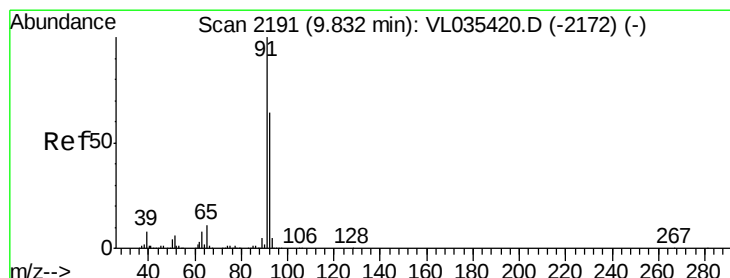
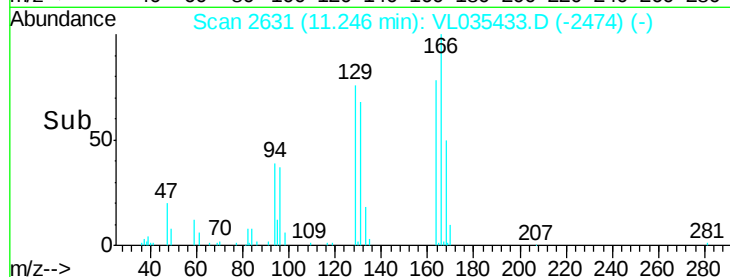
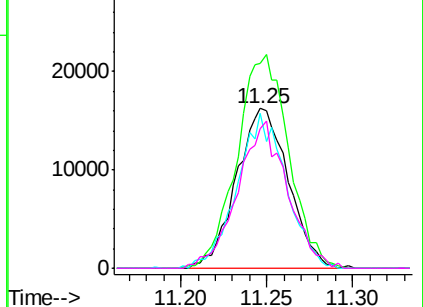


Abundance Ion 163.90 (163.60 to 164.60): V

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: 0.611 ppbv

RT: 9.83 min Scan# 2189

Delta R.T. 0.00 min

Lab File: VL035433.D

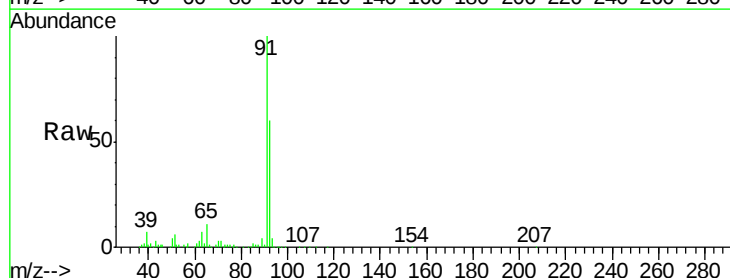
Acq: 18 Aug 2020 1:48

Tgt Ion: 91 Resp: 293162

Ion Ratio Lower Upper

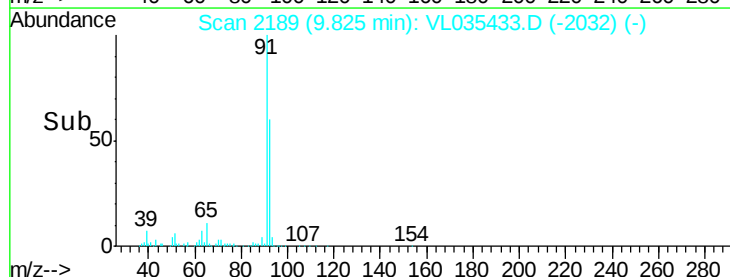
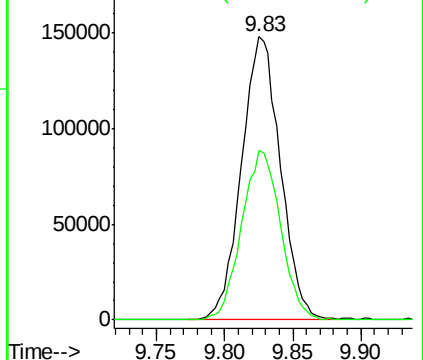
91 100

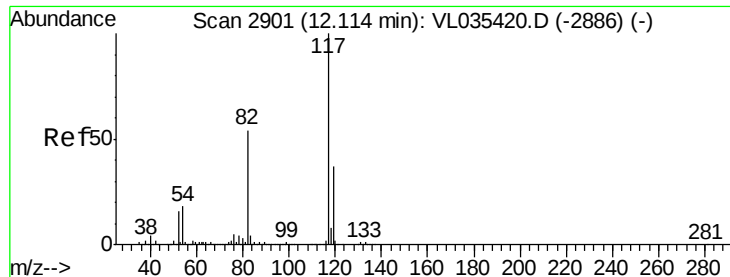
92 60.1 49.1 73.7



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 92.10 (91.80 to 92.80): VL0





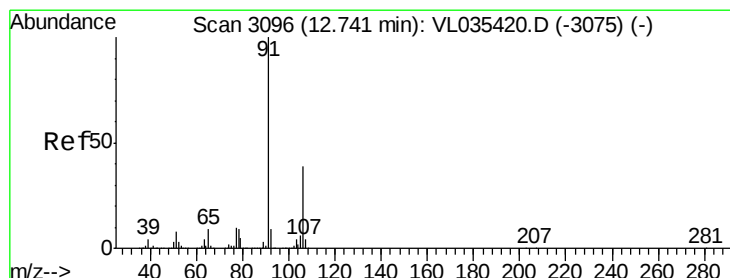
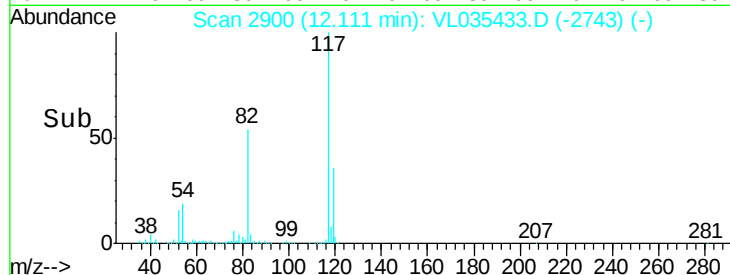
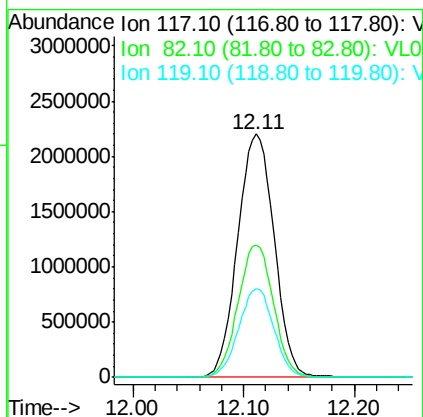
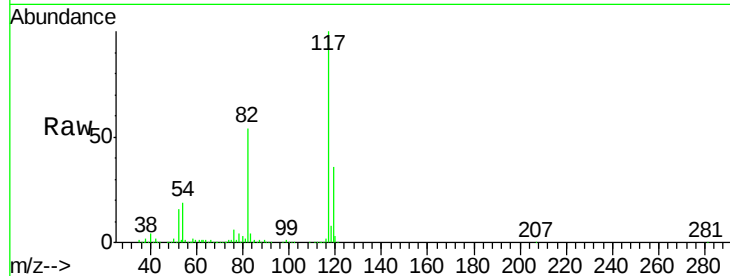
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 12.11 min Scan# 2900
Delta R.T. 0.00 min
Lab File: VL035433.D
Acq: 18 Aug 2020 1:48

Instrument :
MSVOA_L
ClientSampled :
K-1DL

Tot Ion:117 Resp: 5055141
Ion Ratio Lower Upper
117 100
82 52.9 57.4 86.0#
119 35.2 28.4 42.6

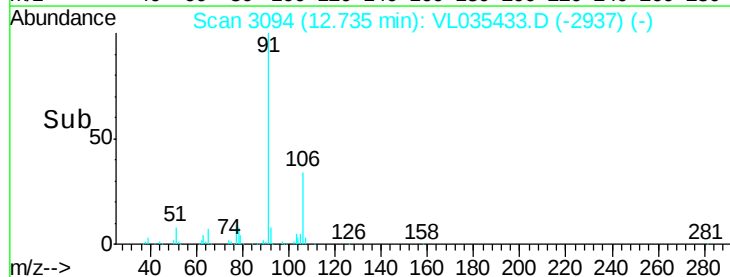
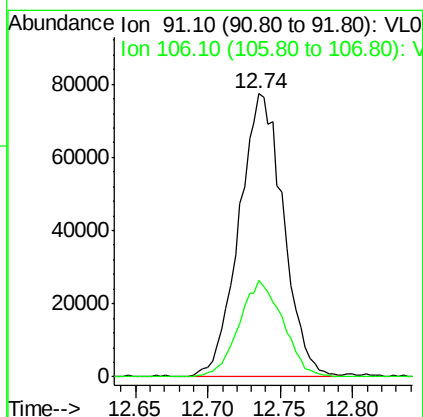
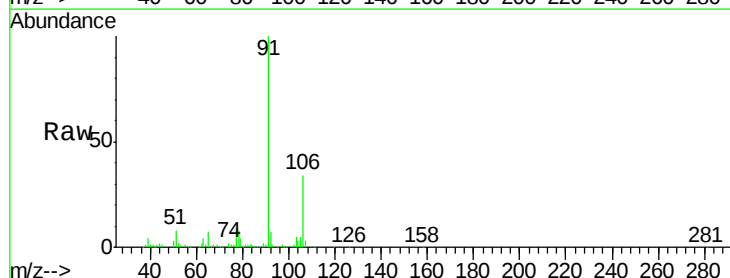
Manual Integrations
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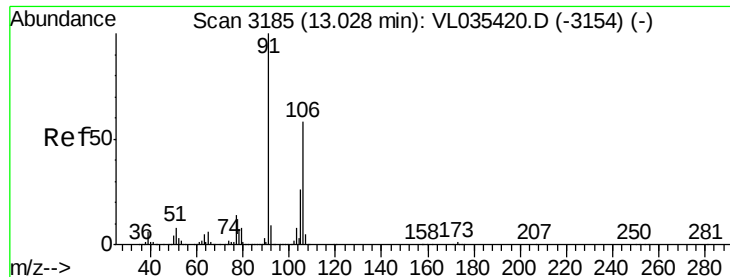
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#58
Ethyl Benzene
Concen: 0.270 ppbv
RT: 12.74 min Scan# 3094
Delta R.T. 0.00 min
Lab File: VL035433.D
Acq: 18 Aug 2020 1:48

Tgt Ion: 91 Resp: 164515
Ion Ratio Lower Upper
91 100
106 34.0 24.1 36.1





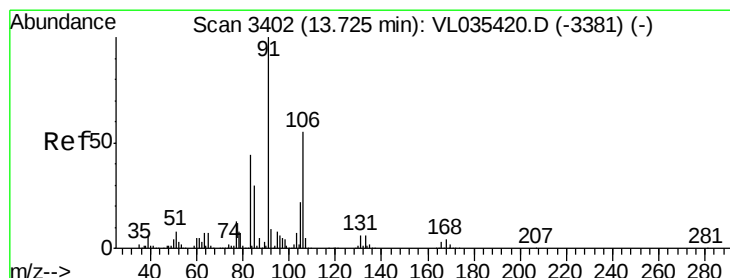
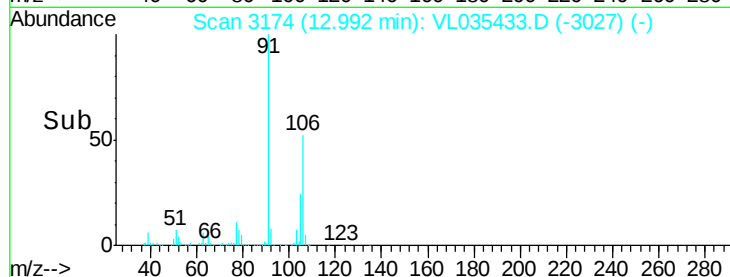
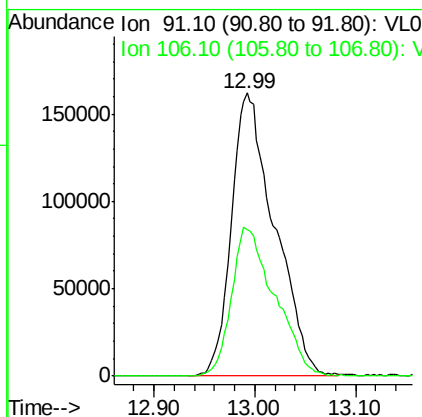
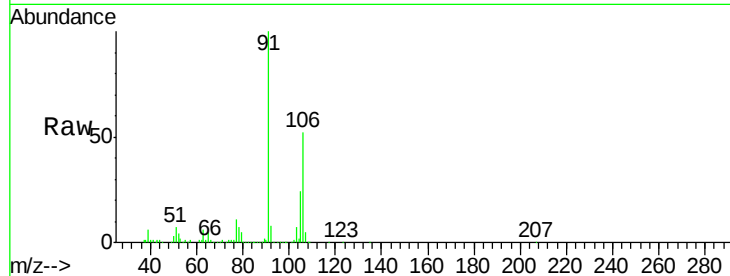
#59
m/p-Xylene
Concen: 0.929 ppbv
RT: 12.99 min Scan# 3174
Delta R.T. -0.03 min
Lab File: VL035433.D
Acq: 18 Aug 2020 1:48

Instrument :
MSVOA_L
ClientSampled :
K-1DL

Tot Ion: 91 Resp: 479147
Ion Ratio Lower Upper
91 100
106 53.0 34.0 51.0#

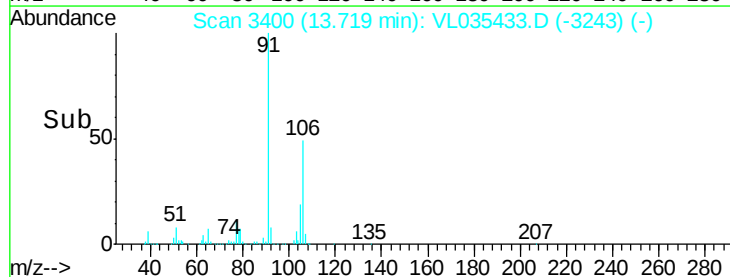
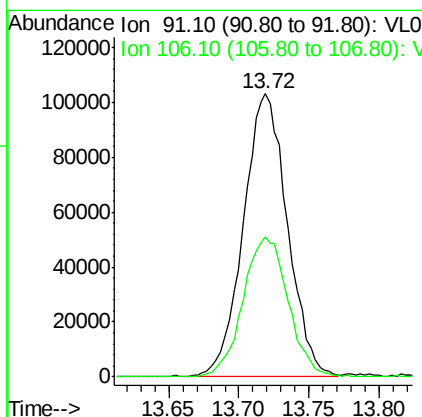
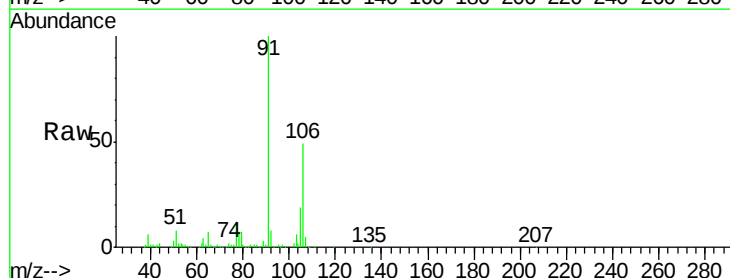
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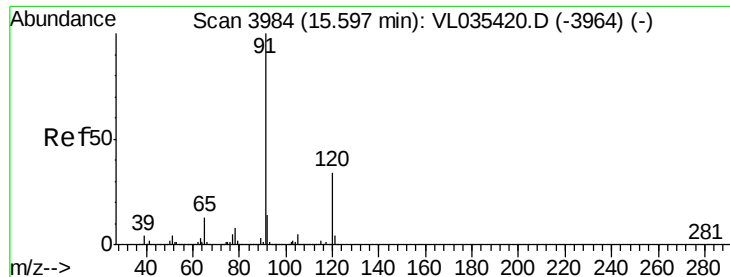
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#60
o-Xylene
Concen: 0.448 ppbv
RT: 13.72 min Scan# 3400
Delta R.T. 0.00 min
Lab File: VL035433.D
Acq: 18 Aug 2020 1:48

Tgt Ion: 91 Resp: 224848
Ion Ratio Lower Upper
91 100
106 50.6 21.8 65.3





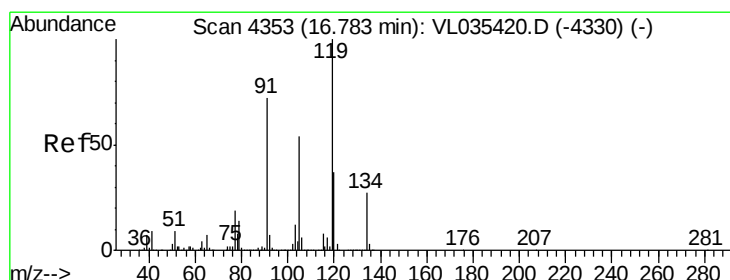
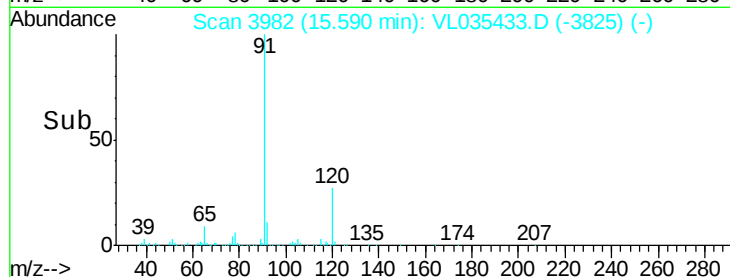
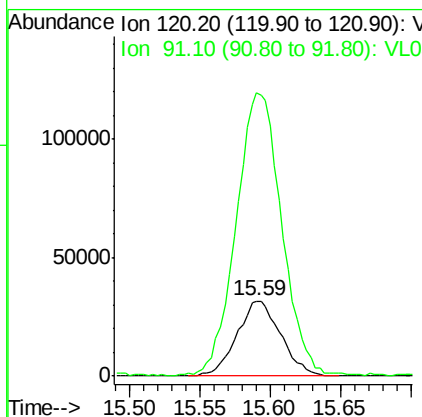
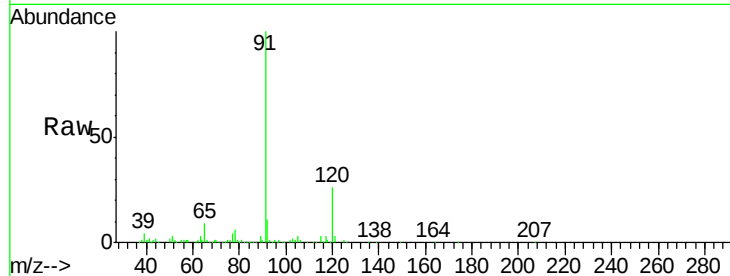
#64
n-propylbenzene
Concen: 0.273 ppbv
RT: 15.59 min Scan# 3982
Delta R.T. 0.00 min
Lab File: VL035433.D
Acq: 18 Aug 2020 1:48

Instrument :
MSVOA_L
ClientSampleId :
K-1DL

Tot Ion	Ion	Ratio	Resp	Lower	Upper
120	100		69158		
91	389.2		385.5	578.3	

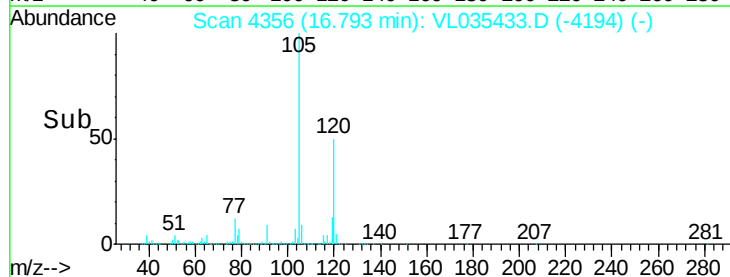
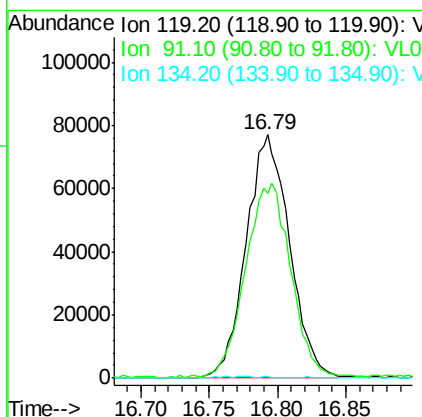
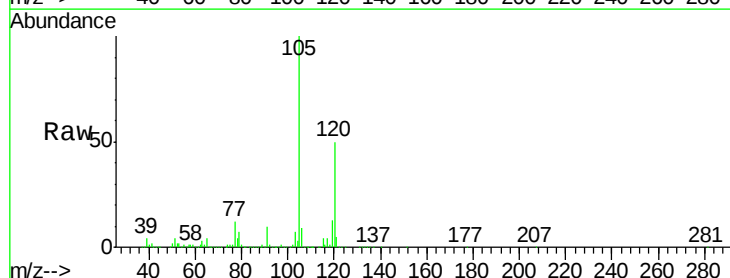
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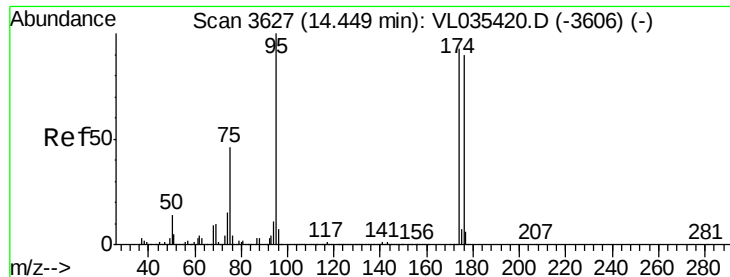
MMDadoda
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#65
tert-Butylbenzene
Concen: 0.213 ppbv
RT: 16.79 min Scan# 4356
Delta R.T. 0.02 min
Lab File: VL035433.D
Acq: 18 Aug 2020 1:48

Tgt Ion	Ion	Ratio	Resp	Lower	Upper
119	100		169941		
91	84.7		72.0	108.0	
134	0.7		15.7	23.5#	





#68

1-Bromo-4-Fluorobenzene

Concen: 10.440 ppbv

RT: 14.45 min Scan# 3626

Delta R.T. 0.01 min

Lab File: VL035433.D

Acq: 18 Aug 2020 1:48

Instrument :

MSVOA_L

ClientSampleId :

K-1DL

Tot Ion: 95 Resp: 3694678

Ion Ratio Lower Upper

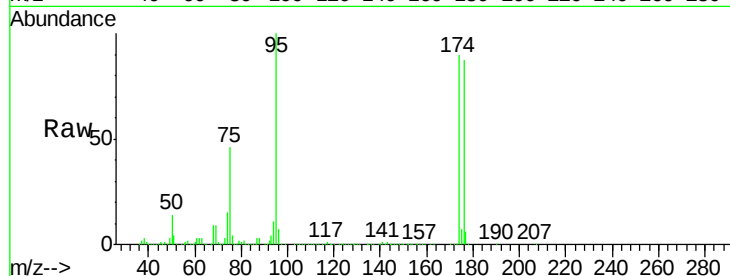
95 100

174 91.9 44.0 66.0#

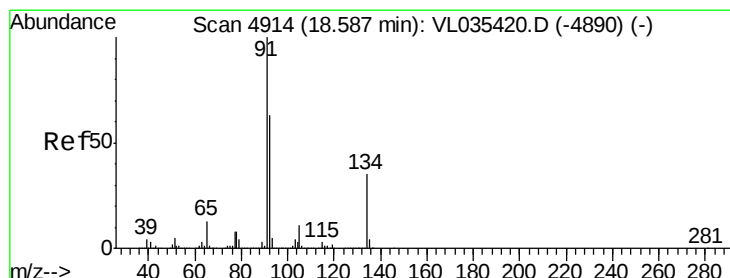
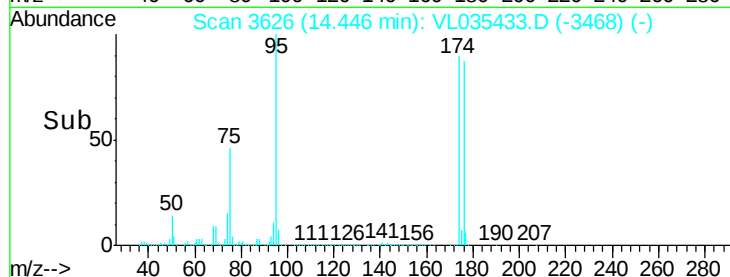
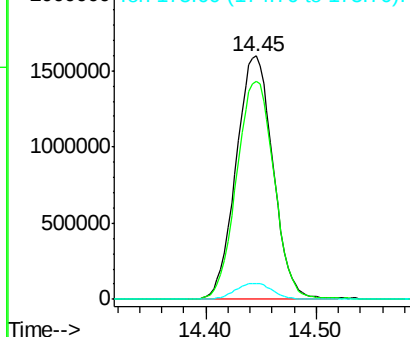
175 6.7 3.2 4.8#

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Abundance Ion 95.10 (94.80 to 95.80): VL0
Ion 174.00 (173.70 to 174.70): V
Ion 175.00 (174.70 to 175.70): V



#70

n-Butylbenzene

Concen: 0.106 ppbv

RT: 18.59 min Scan# 4914

Delta R.T. 0.01 min

Lab File: VL035433.D

Acq: 18 Aug 2020 1:48

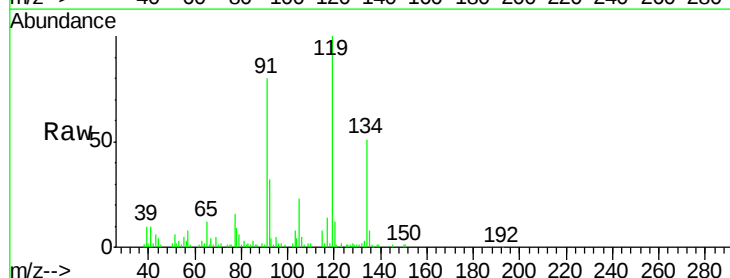
Tgt Ion: 91 Resp: 93479

Ion Ratio Lower Upper

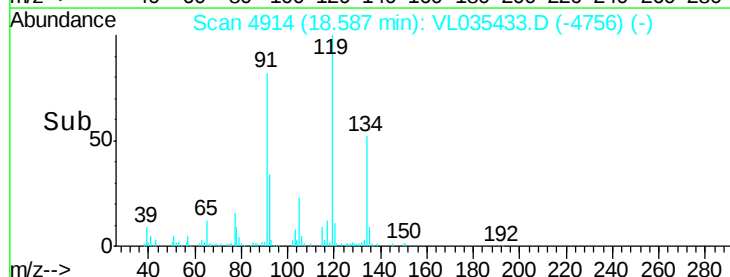
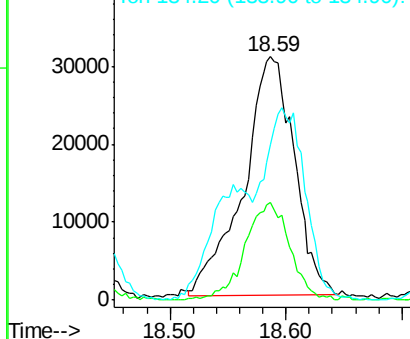
91 100

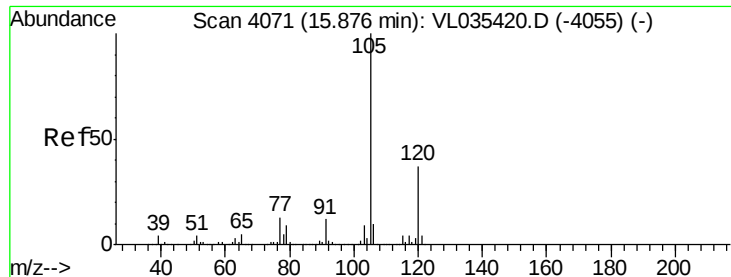
92 36.2 44.8 67.2#

134 103.6 17.3 25.9#



Abundance Ion 91.10 (90.80 to 91.80): VL0
Ion 92.10 (91.80 to 92.80): VL0
Ion 134.20 (133.90 to 134.90): V





#72

4-Ethyltoluene

Concen: 0.596 ppbv

RT: 15.87 min Scan# 4069

Delta R.T. 0.00 min

Lab File: VL035433.D

Acq: 18 Aug 2020 1:48

Instrument :

MSVOA_L

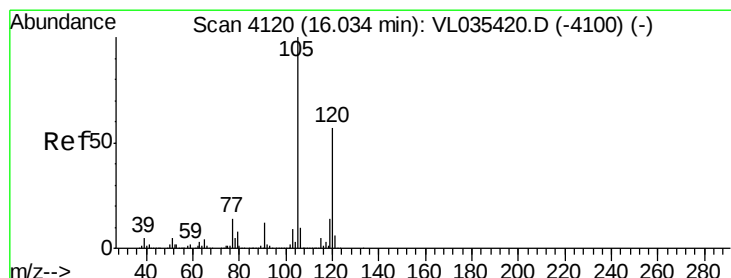
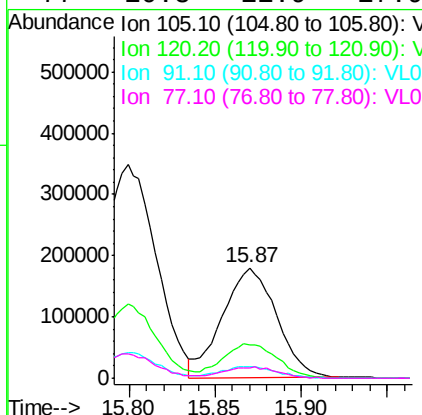
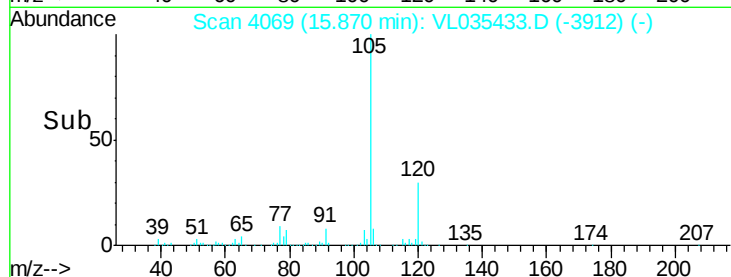
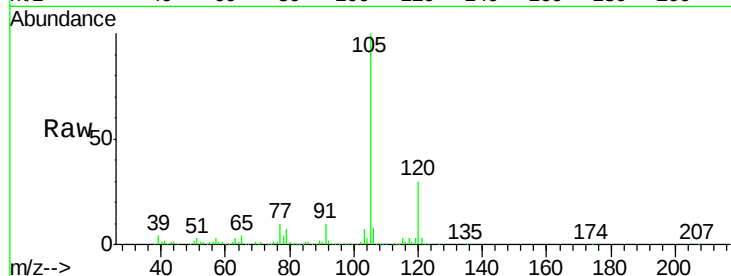
ClientSampleId :

K-1DL

Tot Ion	Ratio	Lower	Upper
105	100		
120	32.7	22.7	34.1
91	10.9	10.8	16.2
77	10.8	11.9	17.9#

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#73

1,3,5-Trimethylbenzene

Concen: 0.561 ppbv

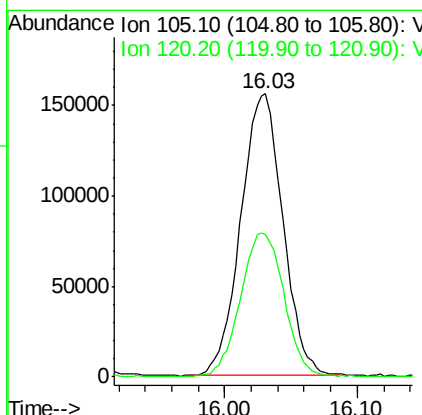
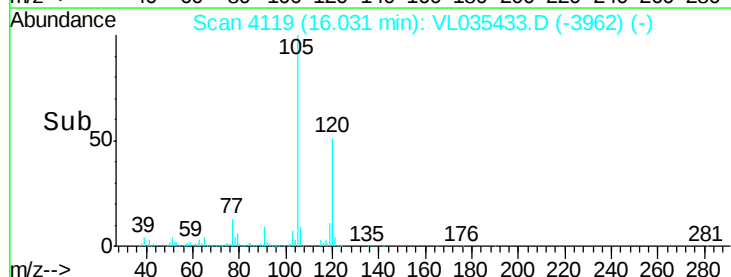
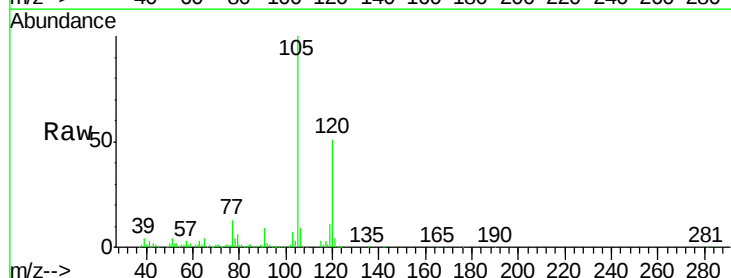
RT: 16.03 min Scan# 4119

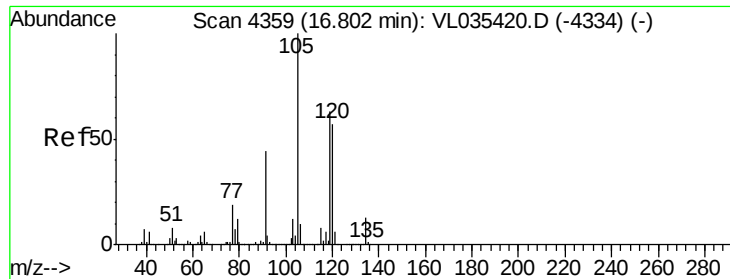
Delta R.T. 0.00 min

Lab File: VL035433.D

Acq: 18 Aug 2020 1:48

Tgt Ion	Ratio	Lower	Upper
105	100		
120	50.7	35.6	53.4





#74

1,2,4-Trimethylbenzene

Concen: 2.079 ppbv

RT: 16.79 min Scan# 4356

Delta R.T. 0.00 min

Lab File: VL035433.D

Acq: 18 Aug 2020 1:48

Instrument :

MSVOA_L

ClientSampleId :

K-1DL

Tot Ion:105 Resp: 1383078

Ion Ratio Lower Upper

105 100

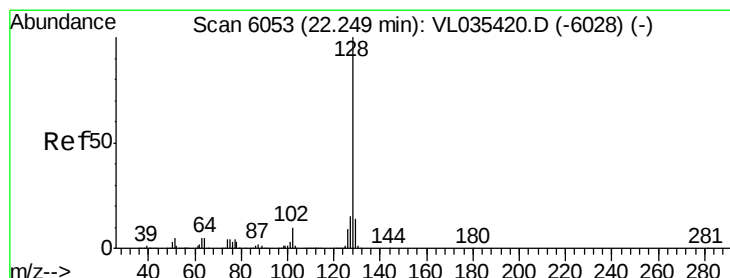
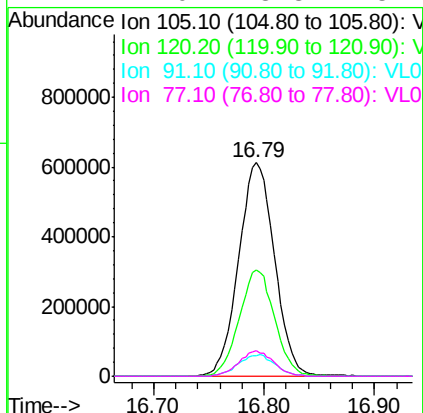
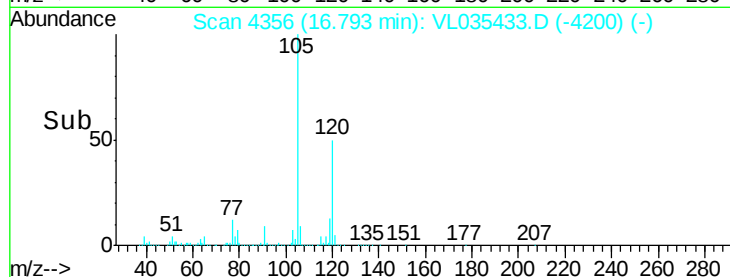
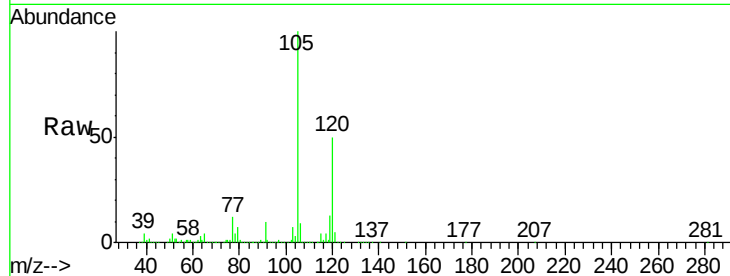
120 49.5 37.8 56.8

91 9.6 40.0 60.0#

77 12.0 18.8 28.2#

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#79

Naphthalene

Concen: 0.180 ppbv

RT: 22.25 min Scan# 6052

Delta R.T. 0.01 min

Lab File: VL035433.D

Acq: 18 Aug 2020 1:48

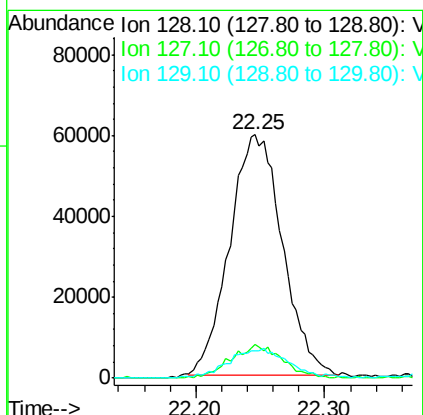
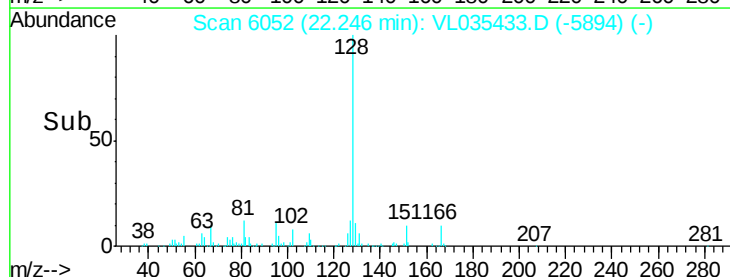
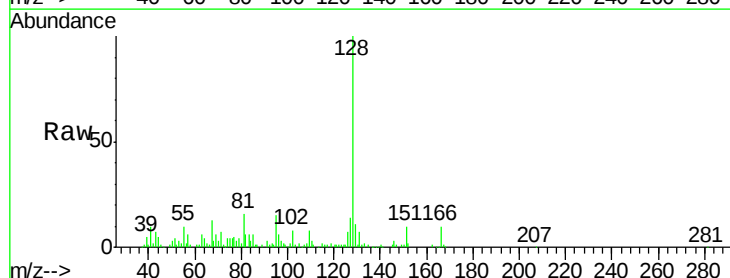
Tgt Ion:128 Resp: 168898

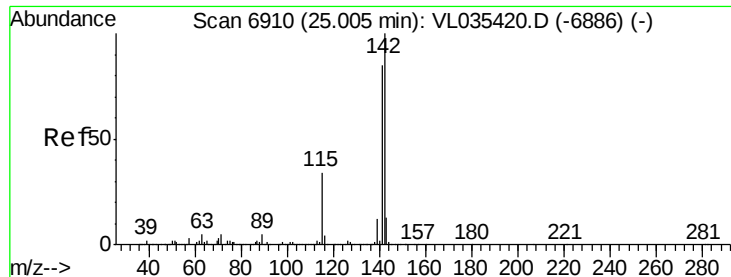
Ion Ratio Lower Upper

128 100

127 13.2 11.4 17.0

129 11.1 9.5 14.3





#80
 Naphthalene, 2-methyl-
 Concen: 0.100 ppbv
 RT: 25.01 min Scan# 6912
 Delta R.T. 0.01 min
 Lab File: VL035433.D
 Acq: 18 Aug 2020 1:48

Instrument :
 MSVOA_L
 ClientSampleId :
 K-1DL

Tot Ion:	142	Resp:	38805
Ion Ratio		Lower	Upper
142	100		
141	87.0	67.1	100.7
115	48.4	36.1	54.1

Manual Integrations
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