

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL121020\
 Data File : VL036145.D
 Acq On : 11 Dec 2020 2:06
 Operator : SY/AP
 Sample : L4948-10
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 SS-7B

Manual Integrations
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 12/15/2020 7:23:18 PM

Quant Time: Dec 14 22:19:49 2020
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL120720AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Mon Dec 0
 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	5.65	49	1303850	10.00	ppbv	-0.04
33) 1,4-Difluorobenzene	7.16	114	2584344	10.00	ppbv	-0.04
55) Chlorobenzene-d5	12.07	117	2265899	10.00	ppbv	-0.05

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.40	95	2006166	11.15	ppbv	-0.05
Spiked Amount	10.000	Range	65 - 135	Recovery	=	111.50%

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.03	85	52139m	0.343	ppbv	
3) Chlorodifluoromethane	2.97	51	189370	1.273	ppbv	93
4) Chloromethane	3.13	50	33782	0.463	ppbv	94
9) Propene	3.00	41	141156m	1.894	ppbv	
10) Heptane	8.10	43	116247	0.611	ppbv	94
11) Trichlorofluoromethane	3.93	101	249459	1.396	ppbv	92
13) Ethanol	3.60	45	880792	85.737	ppbv	89
15) Acetone	3.83	43	3193537m	20.380	ppbv	
17) tert-Butyl alcohol	4.29	59	327319m	2.156	ppbv	
19) Isopropyl Alcohol	3.96	45	197986	2.067	ppbv #	100
20) Methylene Chloride	4.33	84	353628	5.507	ppbv	99
26) Hexane	5.67	57	276369	1.962	ppbv #	45
27) Carbon Disulfide	4.53	76	140129m	1.001	ppbv	
29) Chloroform	5.73	83	117077m	0.633	ppbv	
30) Cyclohexane	7.11	84	213096m	2.059	ppbv	
34) 2-Butanone	5.23	43	565097	3.296	ppbv	100
35) Carbon Tetrachloride	7.00	117	11806m	0.078	ppbv	
36) Benzene	6.87	78	112090	0.512	ppbv	95
41) Tetrahydrofuran	6.05	42	64984	0.638	ppbv	94
44) 2,2,4-Trimethylpentane	7.85	57	101015	0.255	ppbv #	73
53) Toluene	9.79	91	305705	1.243	ppbv	97
58) Ethyl Benzene	12.69	91	212633	0.685	ppbv	93
59) m/p-Xylene	12.95	91	851771m	3.257	ppbv	
60) o-Xylene	13.68	91	307146	1.246	ppbv	95
73) 1,3,5-Trimethylbenzene	15.99	105	55904m	0.219	ppbv	
74) 1,2,4-Trimethylbenzene	16.75	105	147154	0.575	ppbv #	60
79) Naphthalene	22.19	128	138377m	1.064	ppbv	

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

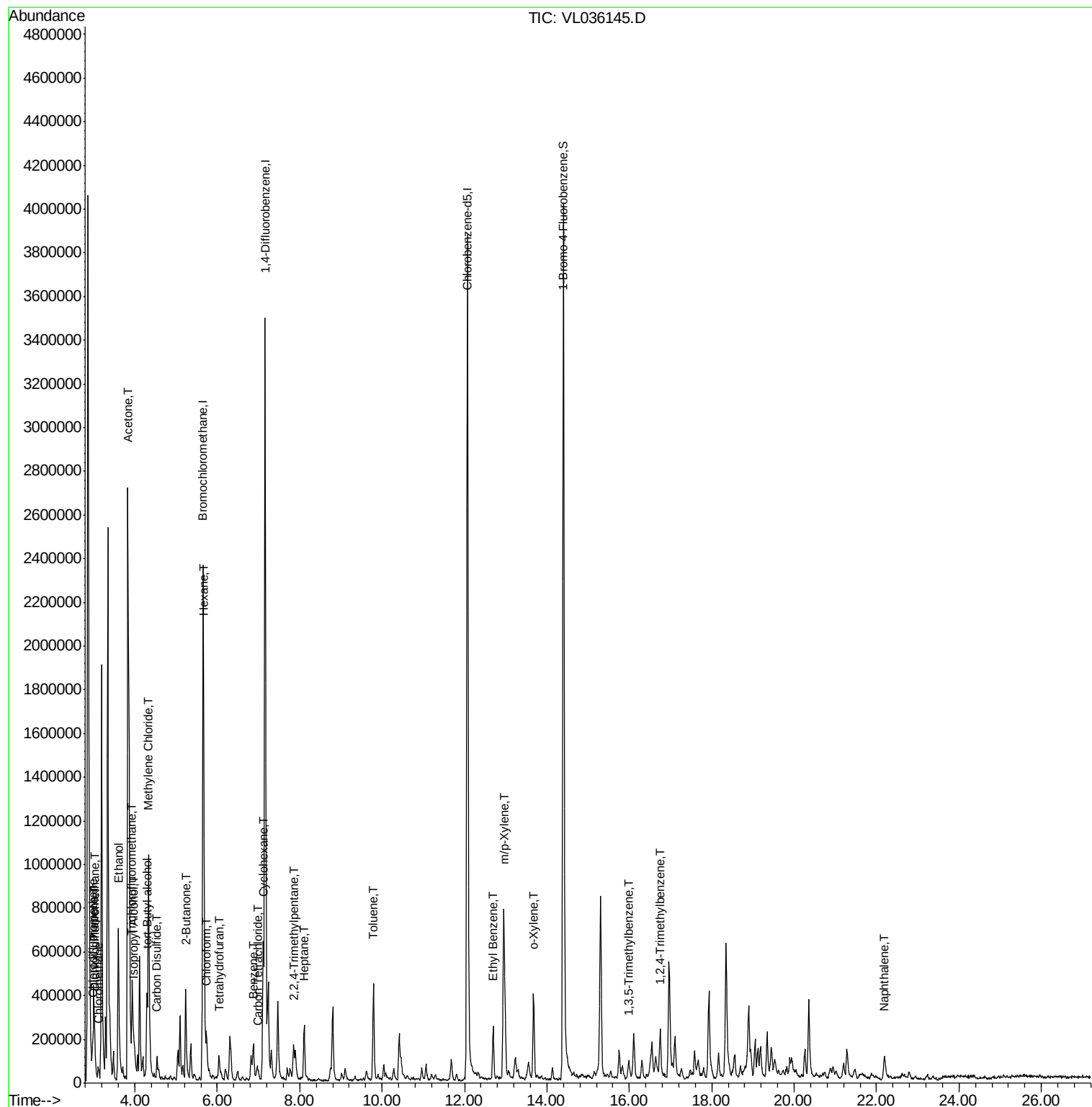
Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL121020\
Data File : VL036145.D
Acq On : 11 Dec 2020 2:06
Operator : SY/AP
Sample : L4948-10
Misc : 400ml/MSVOA L
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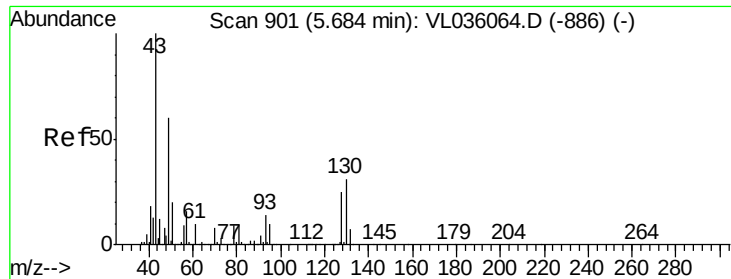
Instrument :
MSVOA_L
ClientSampleId :
SS-7B

Quant Time: Dec 14 22:19:49 2020
Quant Method : Z:\VOASRV\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

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#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.65 min Scan# 890

Delta R.T. -0.04 min

Lab File: VL036145.D

Acq: 11 Dec 2020 2:06

Instrument :

MSVOA_L

ClientSampleId :

SS-7B

Tot Ion: 49 Resp: 1303850

Ion Ratio Lower Upper

49 100

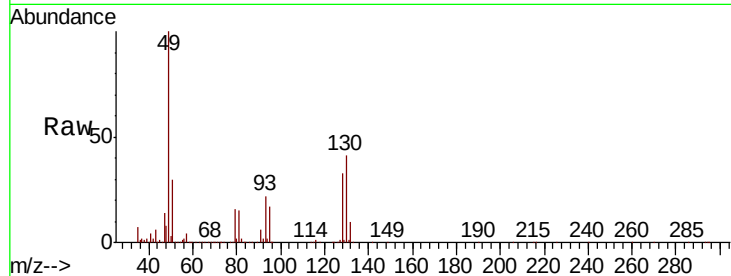
128 35.7 21.1 63.1

130 44.3 27.1 81.3

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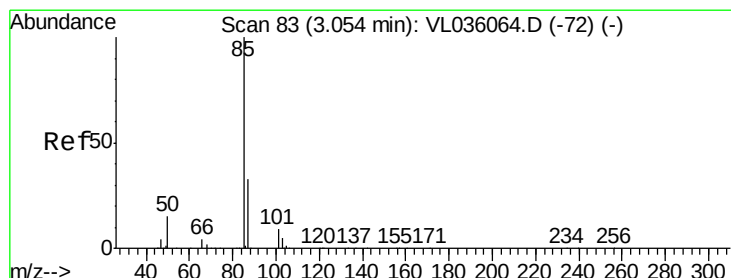
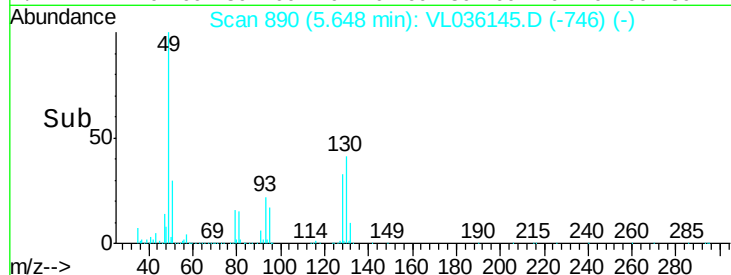
Abundance Ion 49.10 (48.80 to 49.80): VL0

Ion 128.00 (127.70 to 128.70): VL0

Ion 130.00 (129.70 to 130.70): VL0

5.65

Time-->



#2

Dichlorodifluoromethane

Concen: 0.343 ppbv m

RT: 3.03 min Scan# 76

Delta R.T. -0.02 min

Lab File: VL036145.D

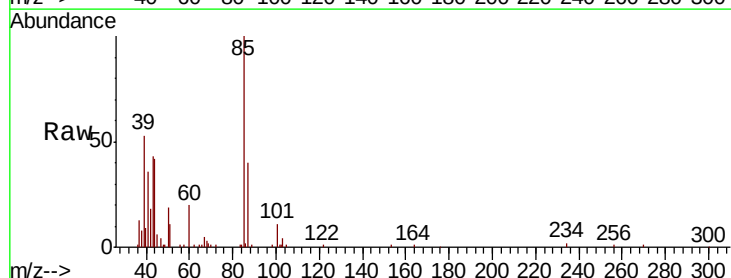
Acq: 11 Dec 2020 2:06

Tgt Ion: 85 Resp: 52139

Ion Ratio Lower Upper

85 100

87 39.9 26.5 39.7#

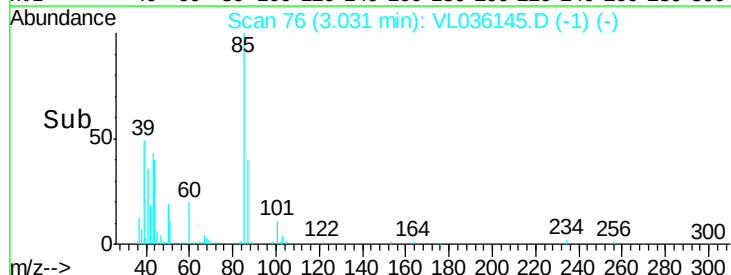


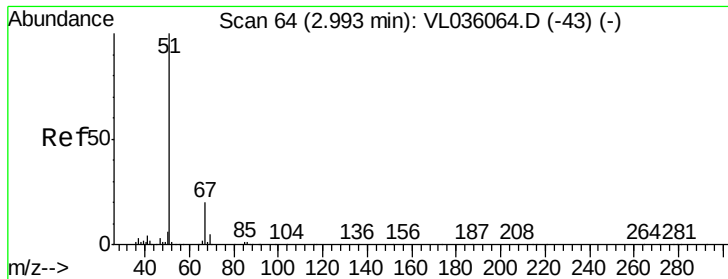
Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0

3.03

Time-->





#3

Chlorodifluoromethane

Concen: 1.273 ppbv

RT: 2.97 min Scan# 58

Delta R.T. -0.02 min

Lab File: VL036145.D

Acq: 11 Dec 2020 2:06

Instrument :

MSVOA_L

ClientSampleId :

SS-7B

Tot Ion: 51 Resp: 189370

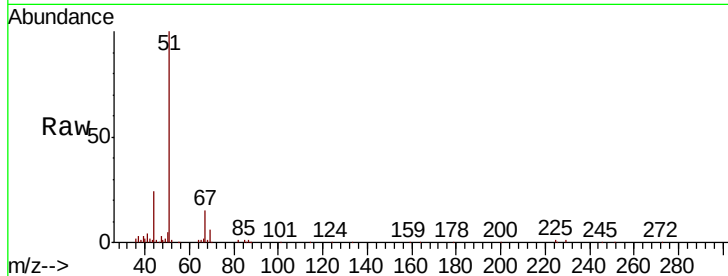
Ion Ratio Lower Upper

51 100

67 14.6 14.3 21.5

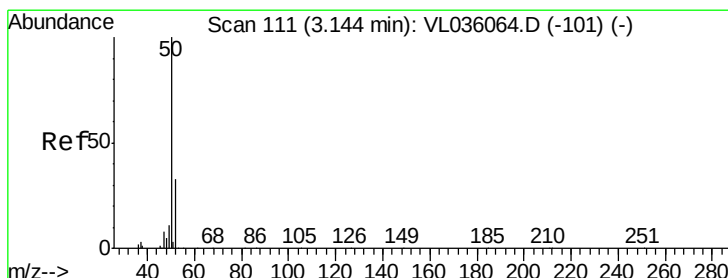
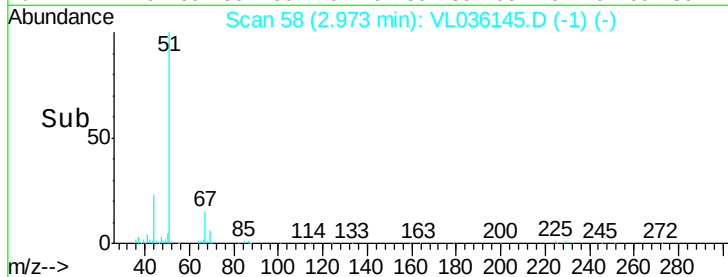
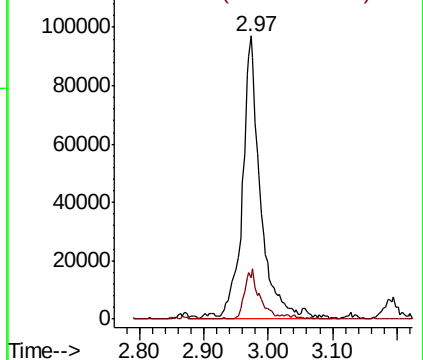
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Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0



#4

Chloromethane

Concen: 0.463 ppbv

RT: 3.13 min Scan# 106

Delta R.T. -0.02 min

Lab File: VL036145.D

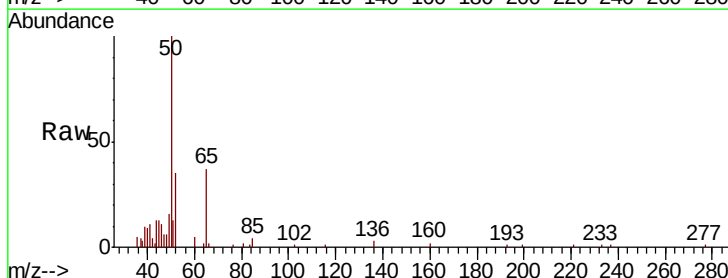
Acq: 11 Dec 2020 2:06

Tgt Ion: 50 Resp: 33782

Ion Ratio Lower Upper

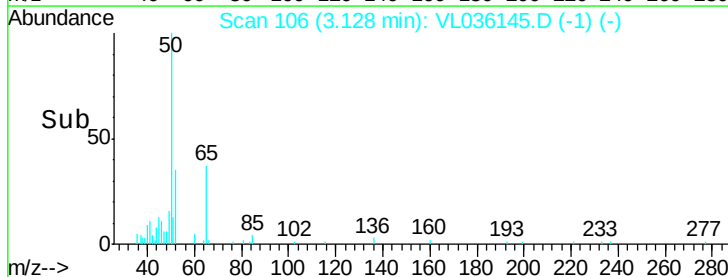
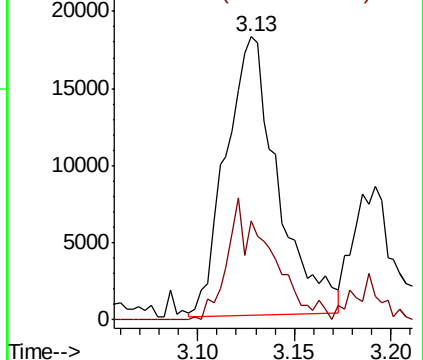
50 100

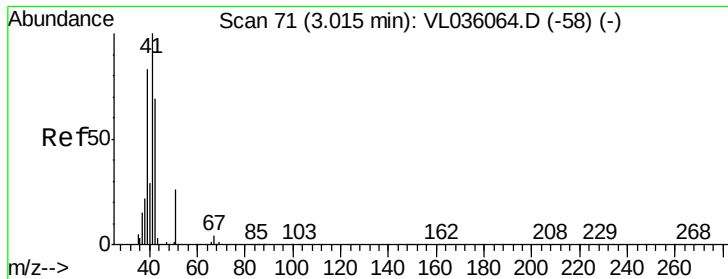
52 36.1 26.1 39.1



Abundance Ion 50.10 (49.80 to 50.80): VL0

Ion 52.10 (51.80 to 52.80): VL0





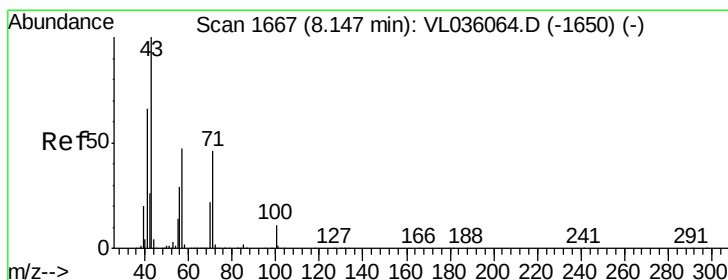
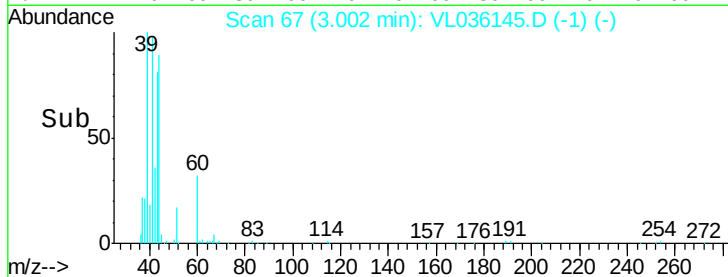
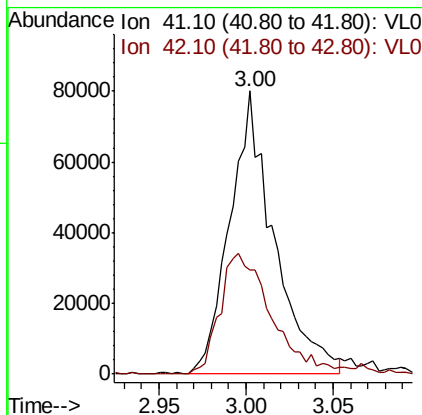
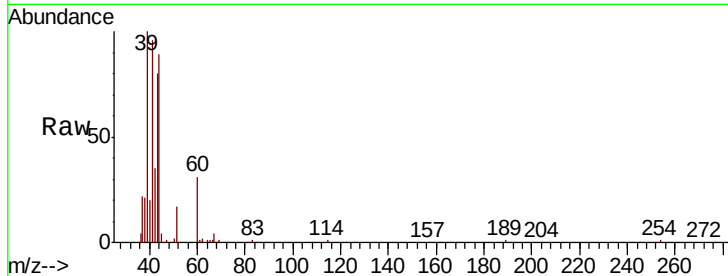
#9
 Propene
 Concen: 1.894 ppbv m
 RT: 3.00 min Scan# 67
 Delta R.T. -0.01 min
 Lab File: VL036145.D
 Acq: 11 Dec 2020 2:06

Instrument :
 MSVOA_L
 ClientSampled :
 SS-7B

Tot Ion: 41 Resp: 141156
 Ion Ratio Lower Upper
 41 100
 42 307.5 57.0 85.6#

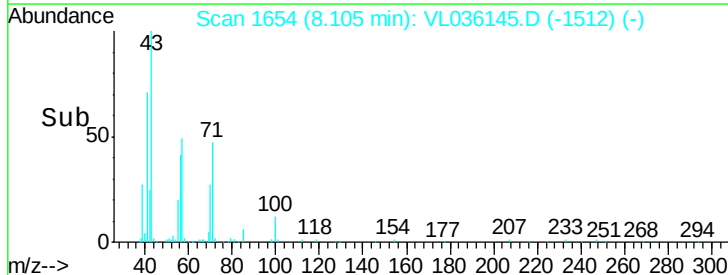
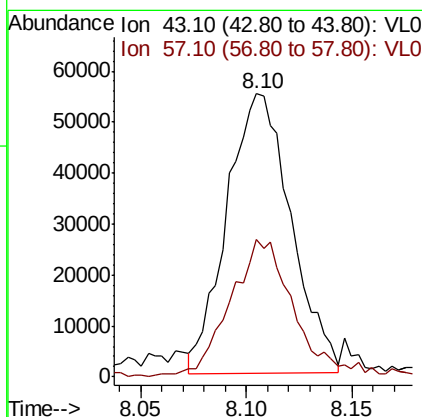
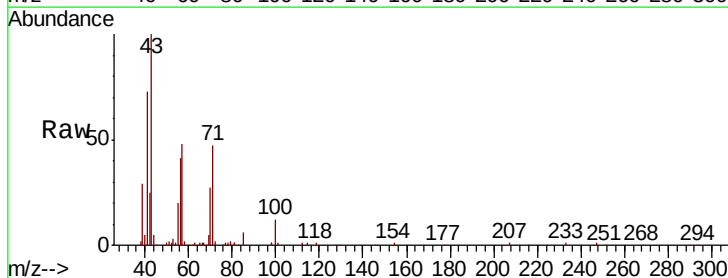
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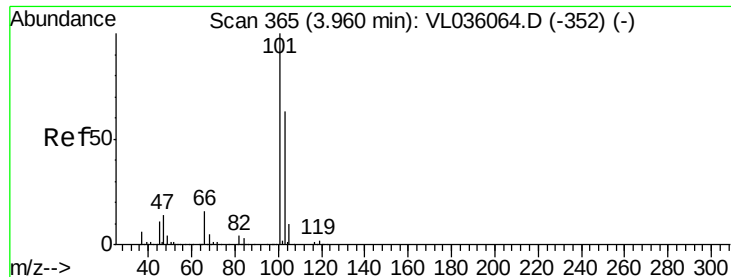
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#10
 Heptane
 Concen: 0.611 ppbv
 RT: 8.10 min Scan# 1654
 Delta R.T. -0.04 min
 Lab File: VL036145.D
 Acq: 11 Dec 2020 2:06

Tgt Ion: 43 Resp: 116247
 Ion Ratio Lower Upper
 43 100
 57 51.4 37.9 56.9





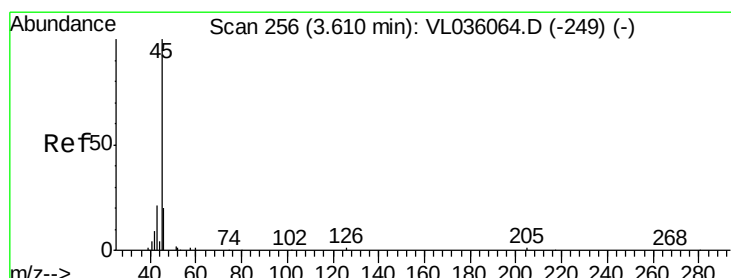
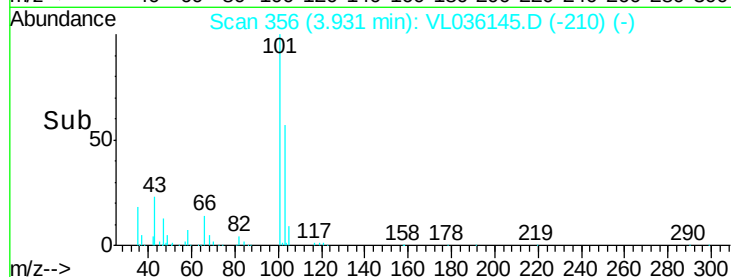
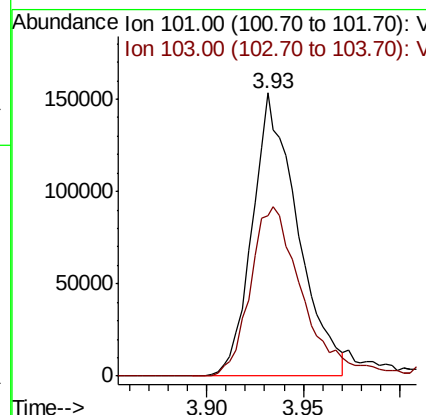
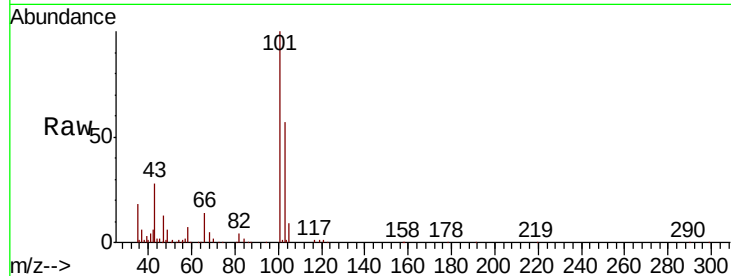
#11
Trichlorofluoromethane
Concen: 1.396 ppbv
RT: 3.93 min Scan# 356
Delta R.T. -0.03 min
Lab File: VL036145.D
Acq: 11 Dec 2020 2:06

Instrument :
MSVOA_L
ClientSampleId :
SS-7B

Tot Ion: 101 Resp: 249459
Ion Ratio Lower Upper
101 100
103 56.5 50.3 75.5

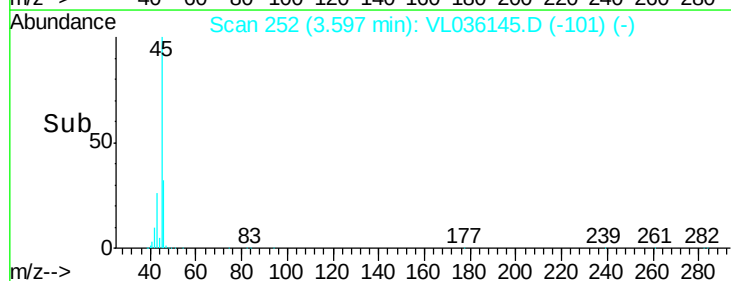
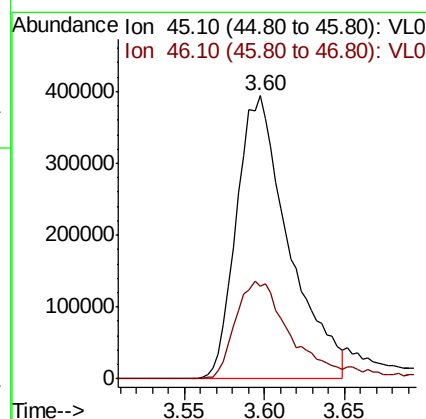
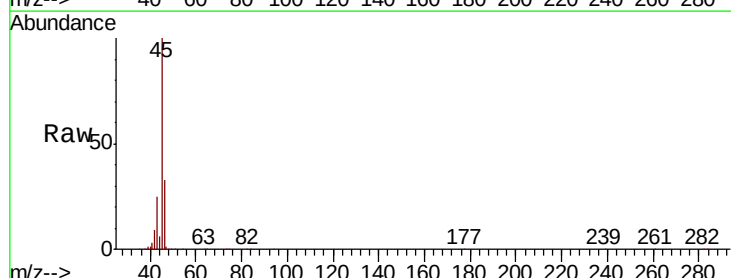
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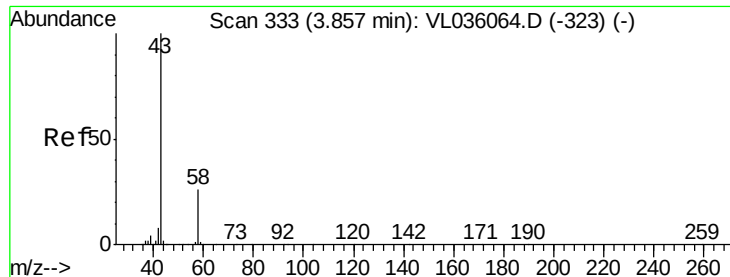
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#13
Ethanol
Concen: 85.737 ppbv
RT: 3.60 min Scan# 252
Delta R.T. -0.01 min
Lab File: VL036145.D
Acq: 11 Dec 2020 2:06

Tgt Ion: 45 Resp: 880792
Ion Ratio Lower Upper
45 100
46 39.9 19.0 75.8





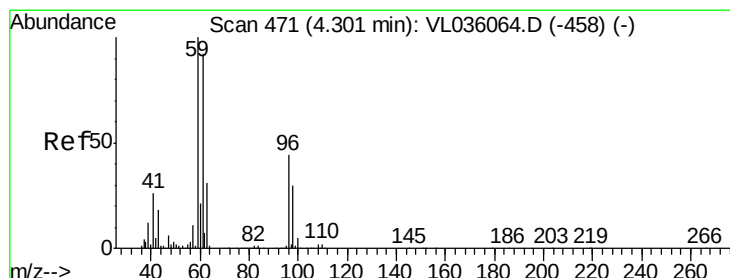
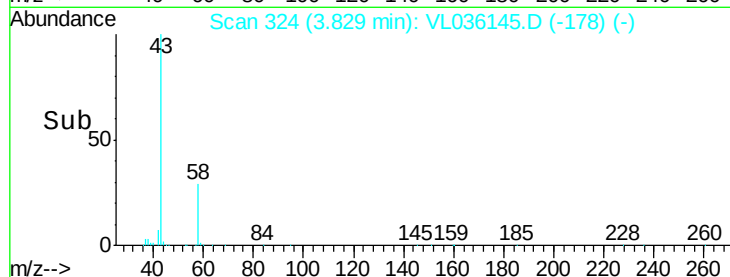
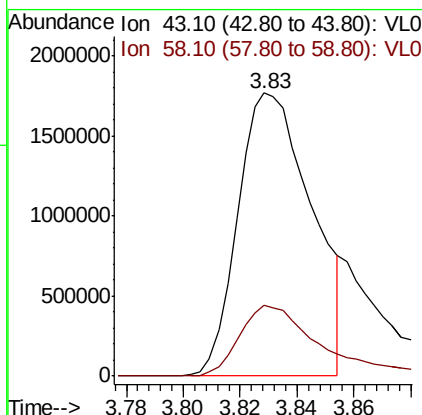
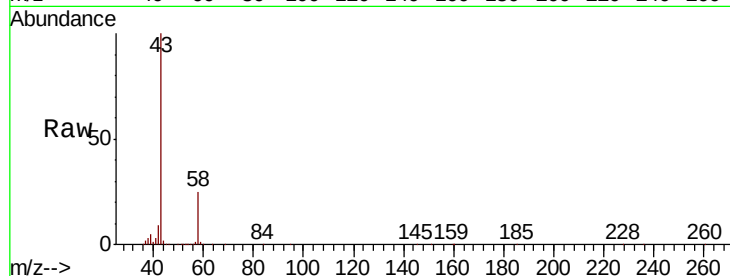
#15
Acetone
Concen: 20.380 ppbv m
RT: 3.83 min Scan# 324
Delta R.T. -0.03 min
Lab File: VL036145.D
Acq: 11 Dec 2020 2:06

Instrument :
MSVOA_L
ClientSampleId :
SS-7B

Tot Ion: 43 Resp: 3193537
Ion Ratio Lower Upper
43 100
58 29.5 20.9 31.3

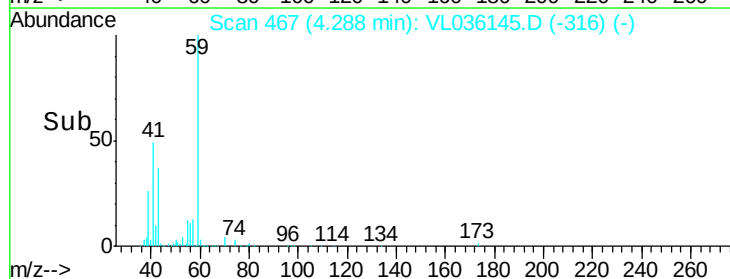
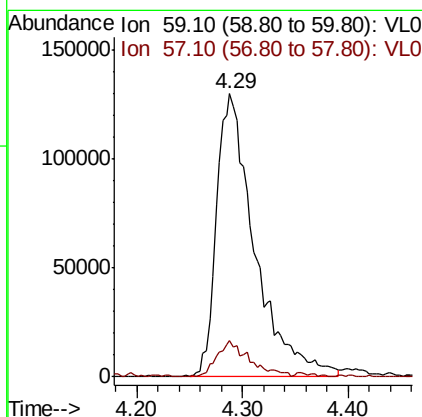
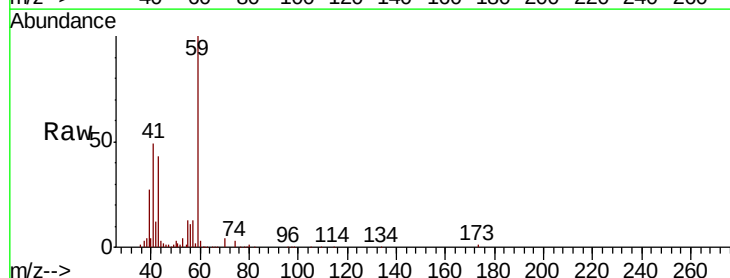
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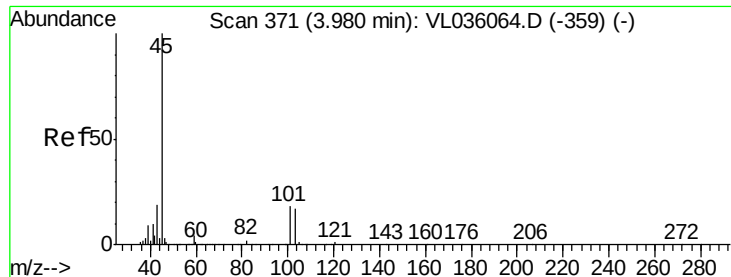
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#17
tert-Butyl alcohol
Concen: 2.156 ppbv m
RT: 4.29 min Scan# 467
Delta R.T. -0.01 min
Lab File: VL036145.D
Acq: 11 Dec 2020 2:06

Tgt Ion: 59 Resp: 327319
Ion Ratio Lower Upper
59 100
57 10.1 8.7 13.1





#19

Isopropyl Alcohol

Concen: 2.067 ppbv

RT: 3.96 min Scan# 366

Delta R.T. -0.02 min

Lab File: VL036145.D

Acq: 11 Dec 2020 2:06

Instrument :

MSVOA_L

ClientSampleId :

SS-7B

Tot Ion: 45 Resp: 197986

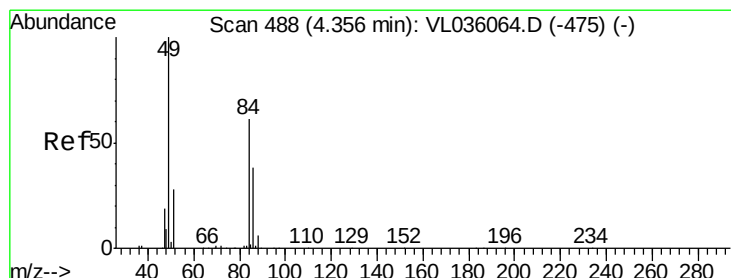
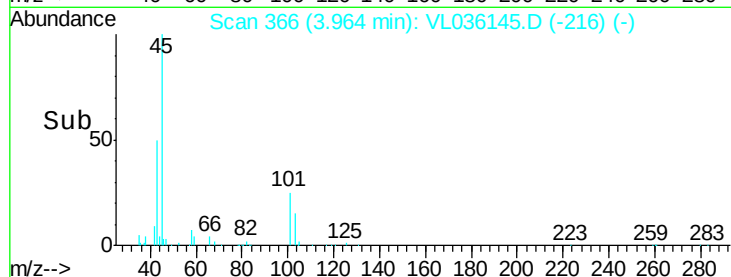
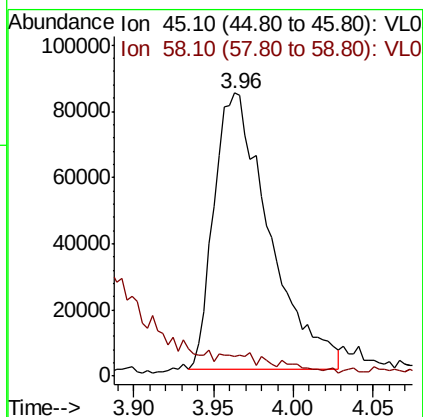
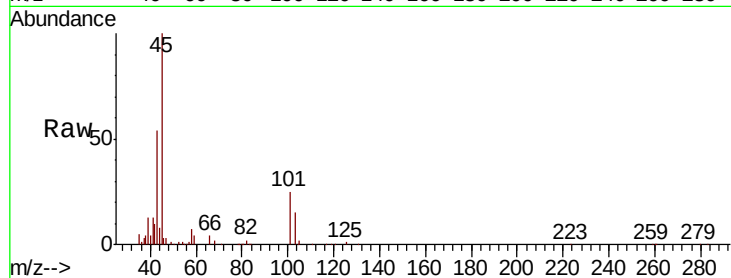
Ion Ratio Lower Upper

45 100

58 466.4 0.0 0.0#

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#20

Methylene Chloride

Concen: 5.507 ppbv

RT: 4.33 min Scan# 480

Delta R.T. -0.03 min

Lab File: VL036145.D

Acq: 11 Dec 2020 2:06

Tgt Ion: 84 Resp: 353628

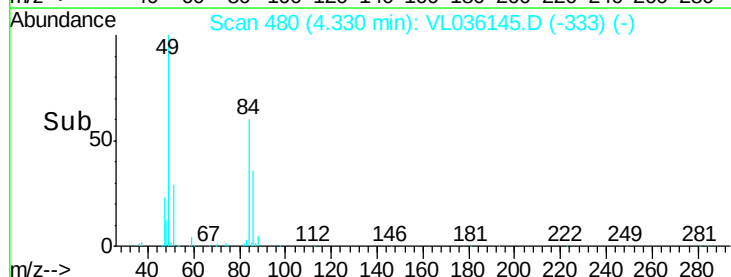
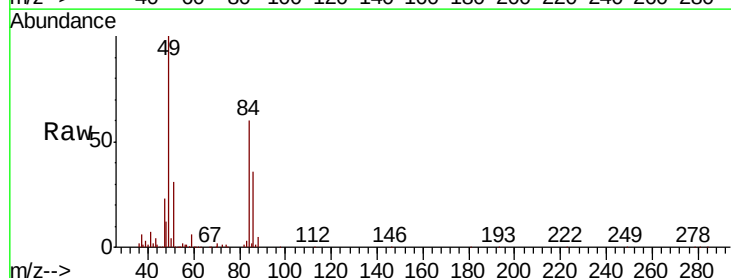
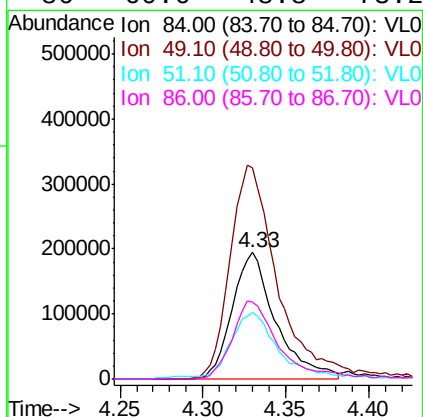
Ion Ratio Lower Upper

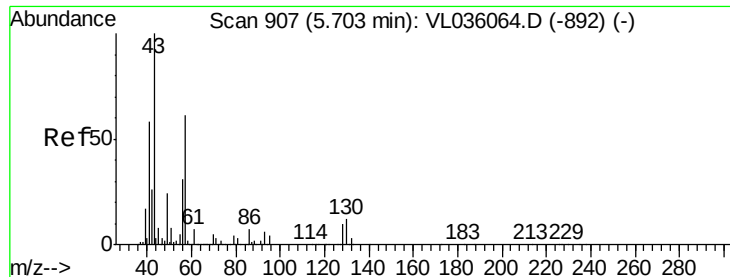
84 100

49 167.1 133.0 199.4

51 50.9 38.9 58.3

86 60.6 48.8 73.2





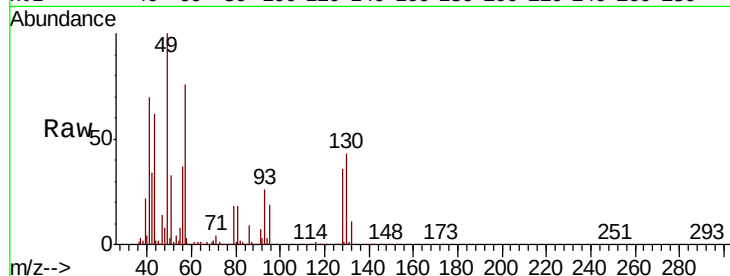
#26
Hexane
Concen: 1.962 ppbv
RT: 5.67 min Scan# 898
Delta R.T. -0.03 min
Lab File: VL036145.D
Acq: 11 Dec 2020 2:06

Instrument :
MSVOA_L
ClientSampleId :
SS-7B

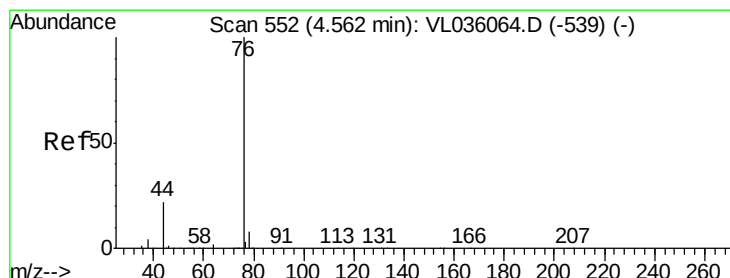
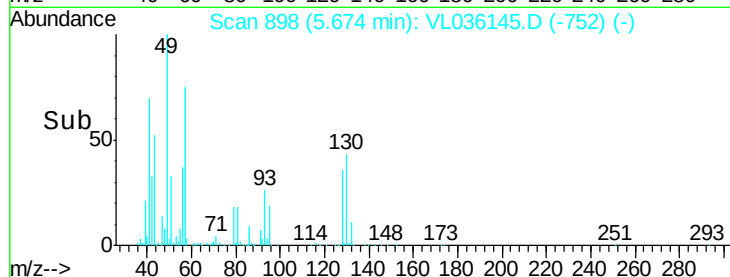
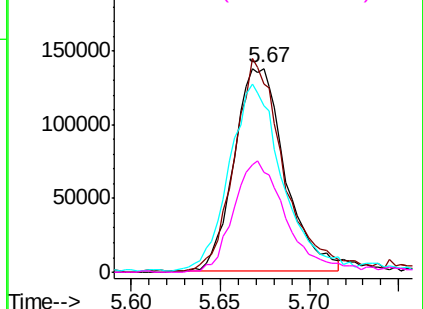
Tot Ion	57	Resp	276369
Ion	Ratio	Lower	Upper
57	100		
41	107.3	82.9	124.3
43	97.7	199.9	299.9#
56	56.9	43.1	64.7

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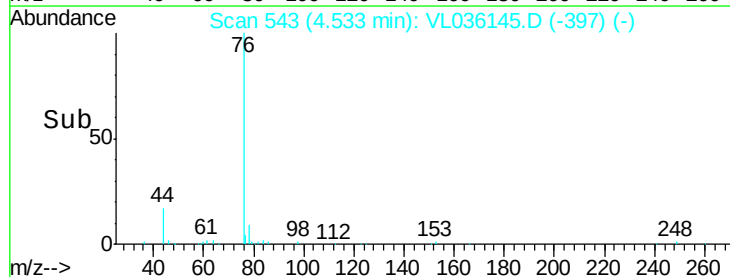
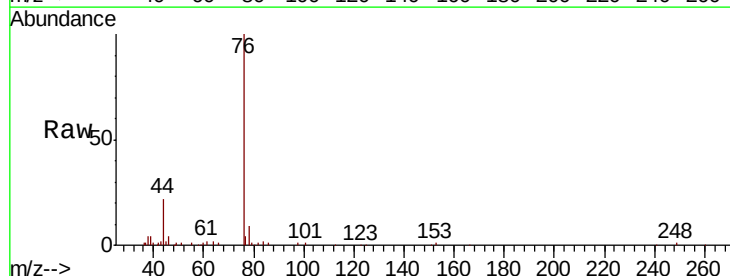
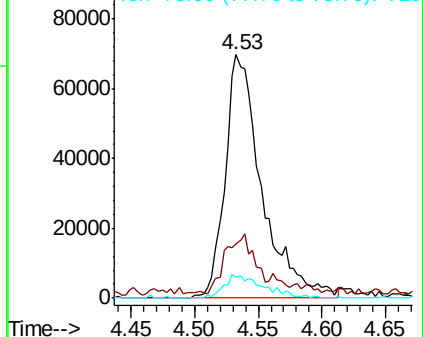
Abundance Ion 57.10 (56.80 to 57.80): VL0
Ion 41.10 (40.80 to 41.80): VL0
Ion 43.10 (42.80 to 43.80): VL0
Ion 56.10 (55.80 to 56.80): VL0

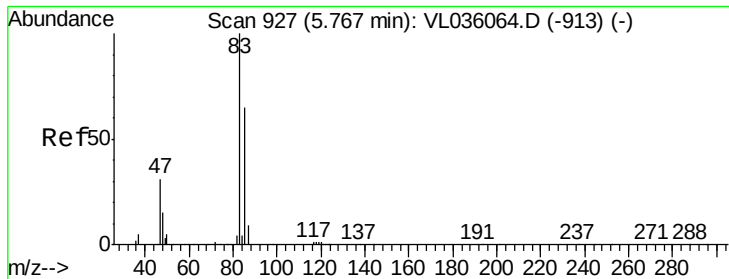


#27
Carbon Disulfide
Concen: 1.001 ppbv m
RT: 4.53 min Scan# 543
Delta R.T. -0.03 min
Lab File: VL036145.D
Acq: 11 Dec 2020 2:06

Tgt Ion	76	Resp	140129
Ion	Ratio	Lower	Upper
76	100		
44	26.6	17.9	26.9
78	10.4	7.8	11.8

Abundance Ion 76.00 (75.70 to 76.70): VL0
Ion 44.10 (43.80 to 44.80): VL0
Ion 78.00 (77.70 to 78.70): VL0





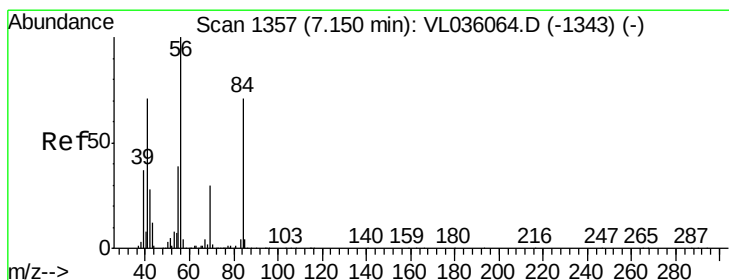
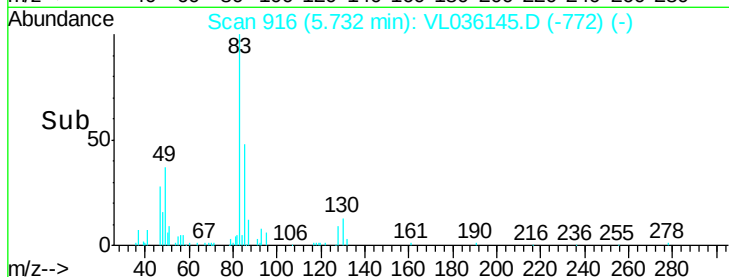
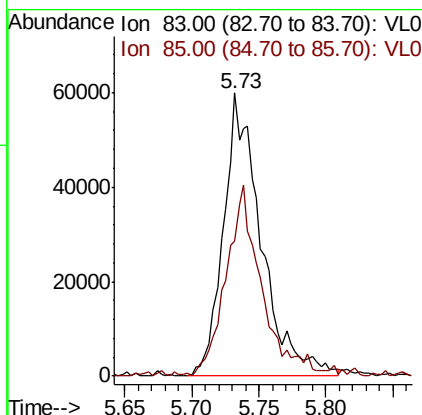
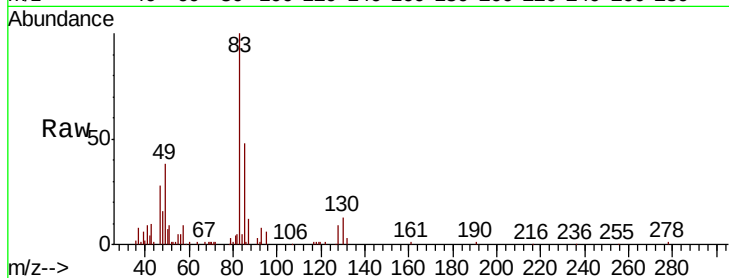
#29
Chloroform
Concen: 0.633 ppbv m
RT: 5.73 min Scan# 916
Delta R.T. -0.04 min
Lab File: VL036145.D
Acq: 11 Dec 2020 2:06

Instrument :
MSVOA_L
ClientSampled :
SS-7B

Tot Ion: 83 Resp: 117077
Ion Ratio Lower Upper
83 100
85 47.8 51.8 77.6#

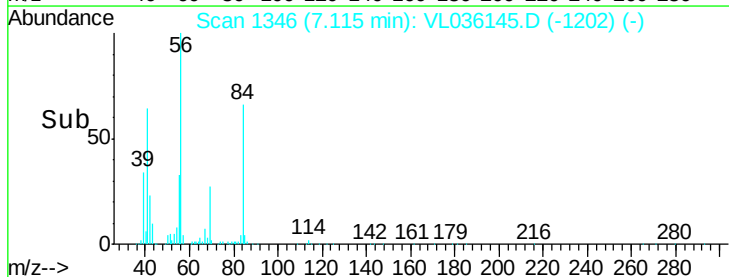
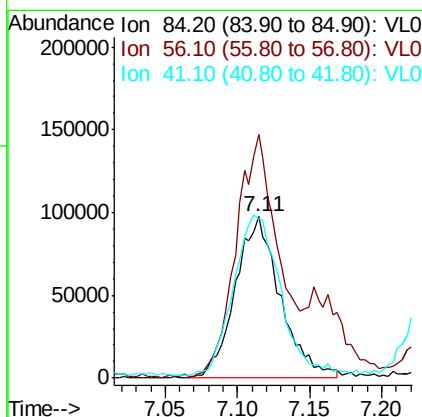
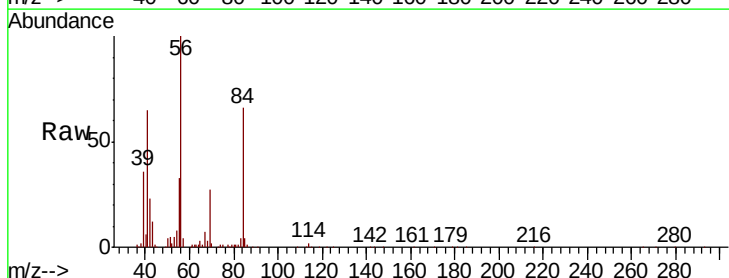
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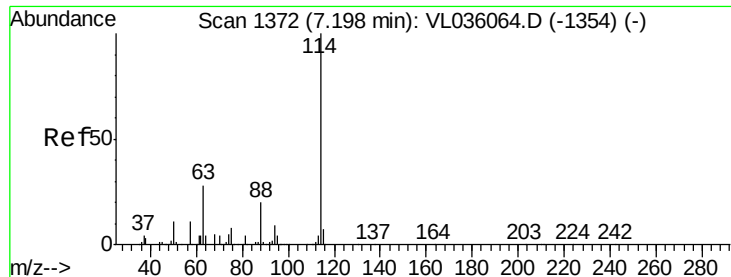
MMDadoda
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#30
Cyclohexane
Concen: 2.059 ppbv m
RT: 7.11 min Scan# 1346
Delta R.T. -0.04 min
Lab File: VL036145.D
Acq: 11 Dec 2020 2:06

Tgt Ion: 84 Resp: 213096
Ion Ratio Lower Upper
84 100
56 0.0 128.0 192.0#
41 0.0 81.3 121.9#





#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 7.16 min Scan# 1360

Delta R.T. -0.04 min

Lab File: VL036145.D

Acq: 11 Dec 2020 2:06

Instrument :

MSVOA_L

ClientSampleId :

SS-7B

Tot Ion:114 Resp: 2584344

Ion Ratio Lower Upper

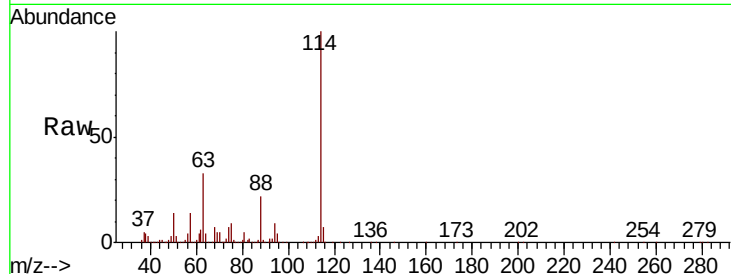
114 100

63 32.9 23.6 35.4

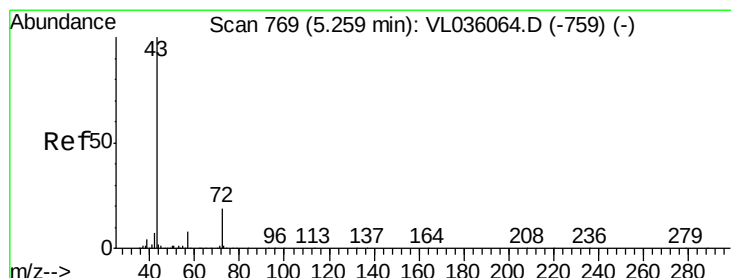
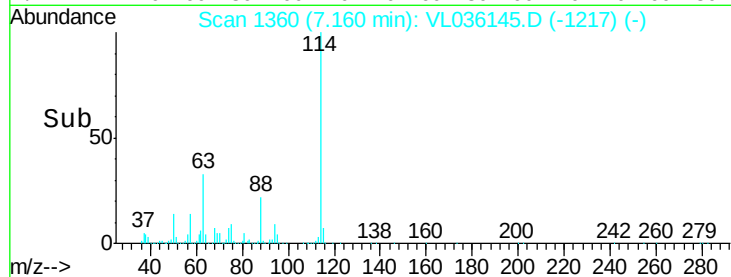
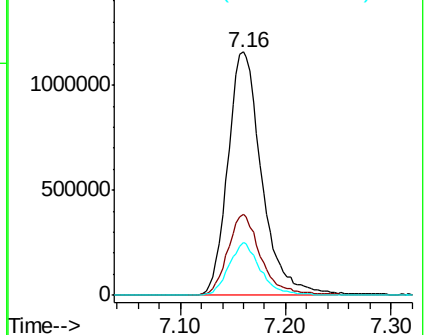
88 20.6 15.8 23.6

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Abundance Ion 114.10 (113.80 to 114.80): VL0
Ion 63.10 (62.80 to 63.80): VL0
Ion 88.10 (87.80 to 88.80): VL0



#34

2-Butanone

Concen: 3.296 ppbv

RT: 5.23 min Scan# 759

Delta R.T. -0.03 min

Lab File: VL036145.D

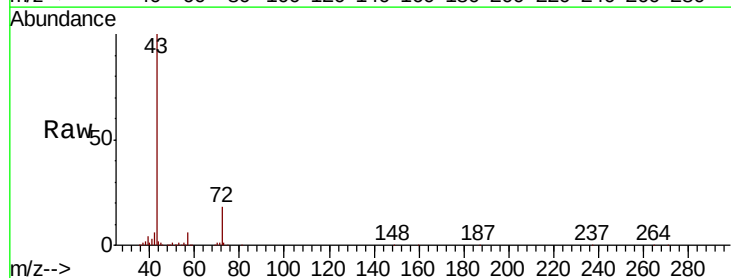
Acq: 11 Dec 2020 2:06

Tgt Ion: 43 Resp: 565097

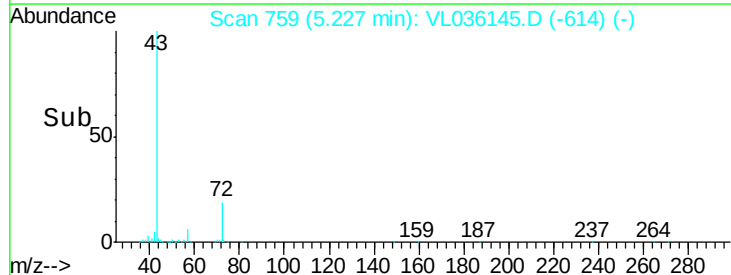
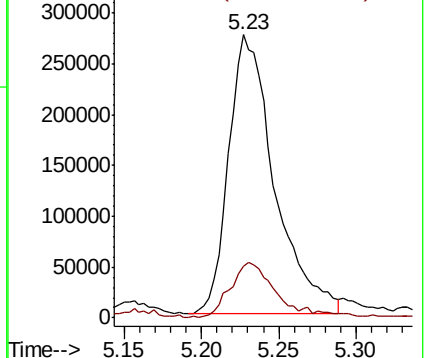
Ion Ratio Lower Upper

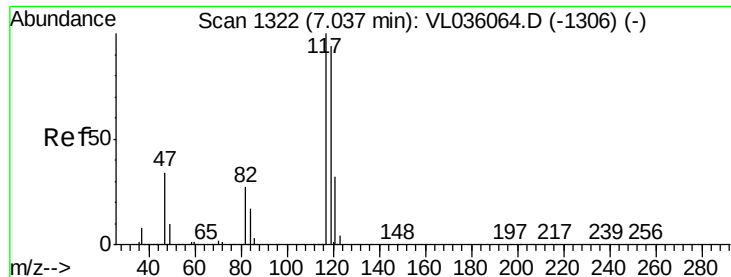
43 100

72 20.8 16.5 24.7



Abundance Ion 43.10 (42.80 to 43.80): VL0
Ion 72.10 (71.80 to 72.80): VL0





#35

Carbon Tetrachloride

Concen: 0.078 ppbv m

RT: 7.00 min Scan# 1309

Delta R.T. -0.04 min

Lab File: VL036145.D

Acq: 11 Dec 2020 2:06

Instrument :

MSVOA_L

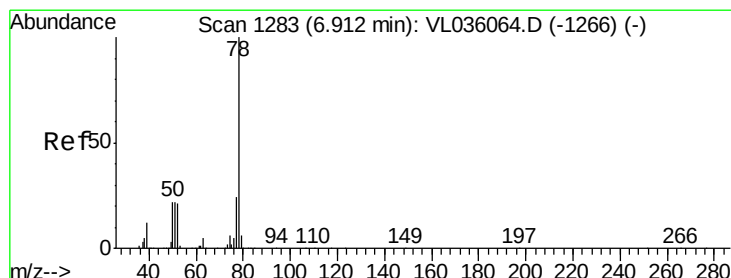
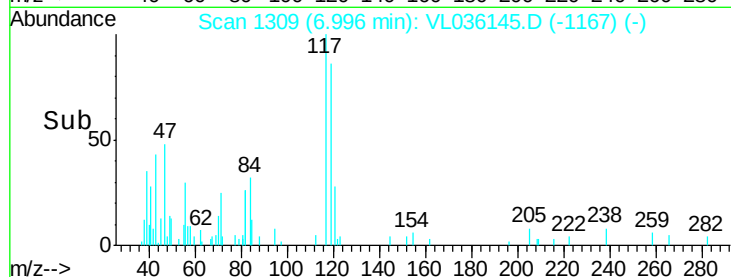
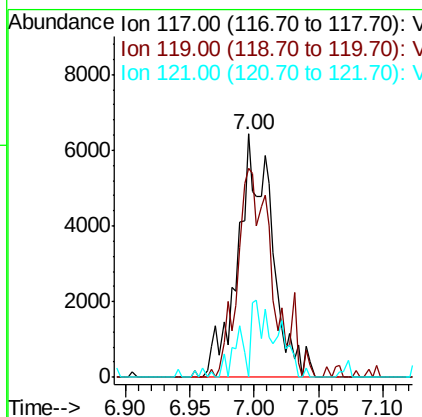
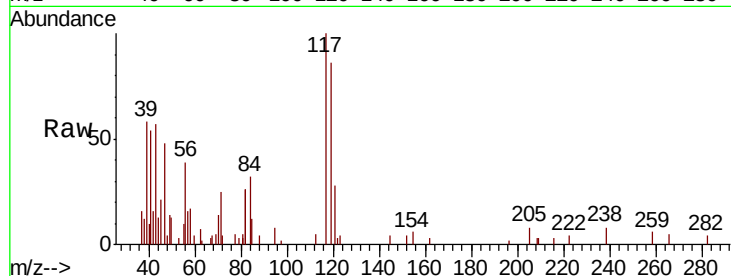
ClientSampled :

SS-7B

Tot Ion	Ratio	Lower	Upper
117	100		
119	86.0	75.1	112.7
121	0.0	25.6	38.4#

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#36

Benzene

Concen: 0.512 ppbv

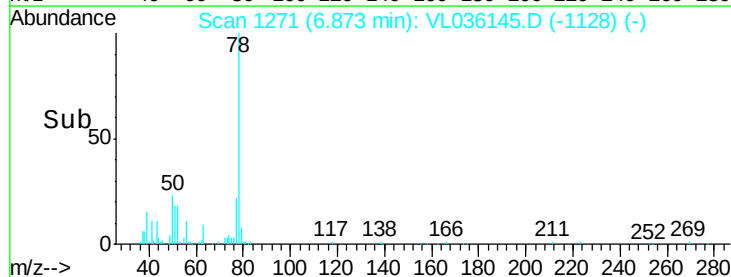
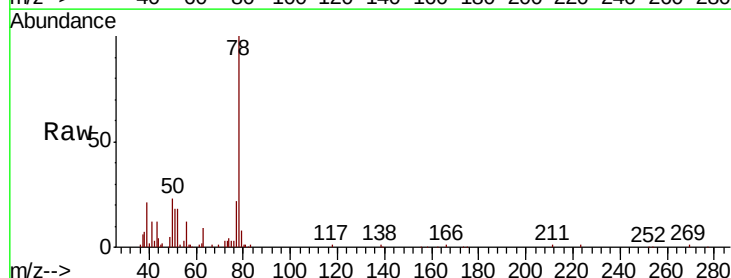
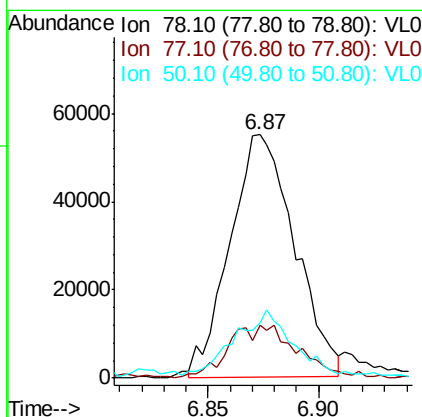
RT: 6.87 min Scan# 1271

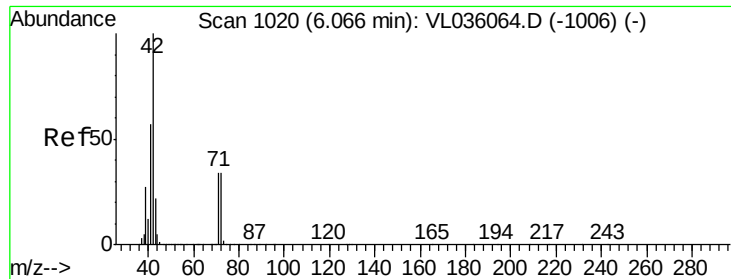
Delta R.T. -0.04 min

Lab File: VL036145.D

Acq: 11 Dec 2020 2:06

Tgt Ion	Ratio	Lower	Upper
78	100		
77	20.4	19.4	29.2
50	21.1	17.8	26.8





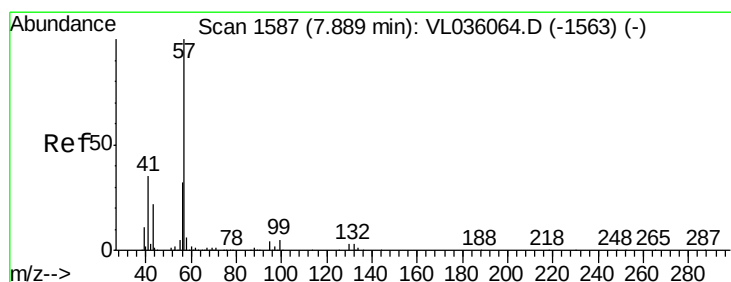
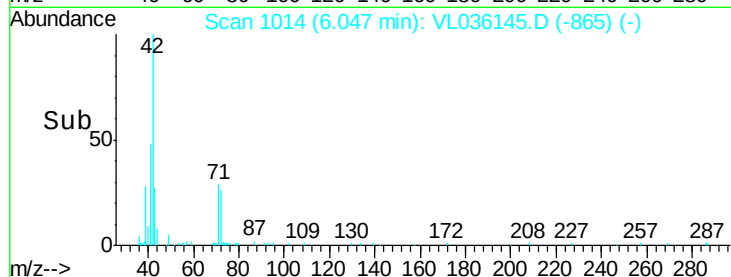
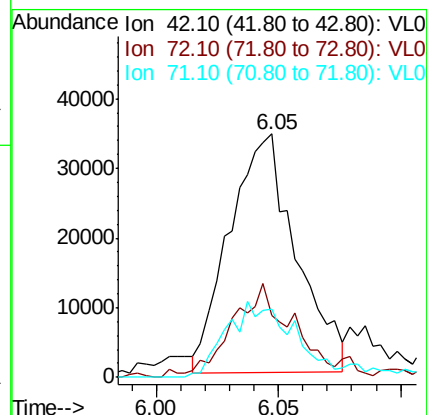
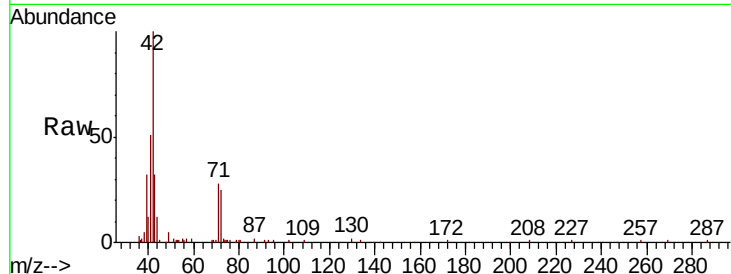
#41
Tetrahydrofuran
Concen: 0.638 ppbv
RT: 6.05 min Scan# 1014
Delta R.T. -0.02 min
Lab File: VL036145.D
Acq: 11 Dec 2020 2:06

Instrument :
MSVOA_L
ClientSampleId :
SS-7B

Tot Ion	Ratio	Lower	Upper
42	100		
72	39.8	28.3	42.5
71	36.2	27.3	40.9

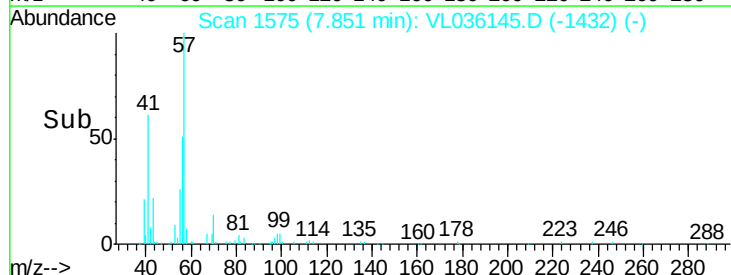
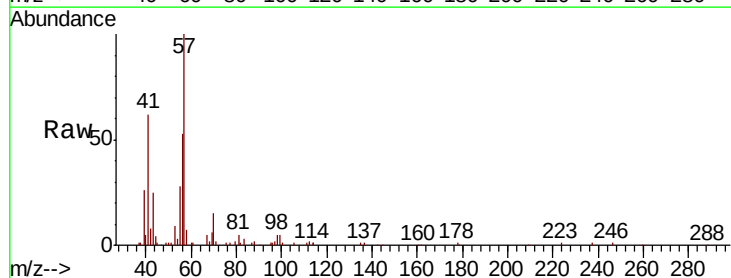
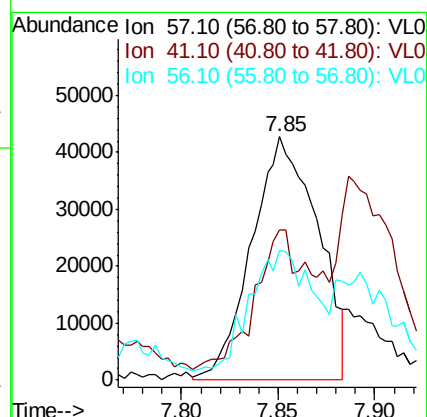
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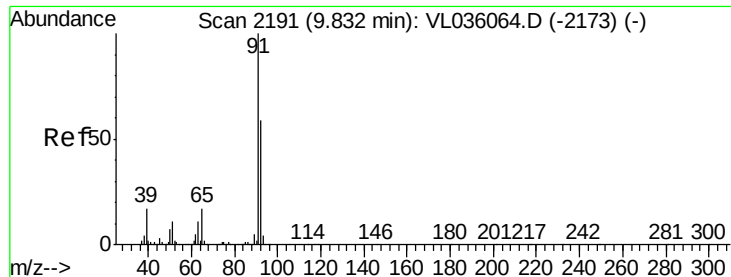
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#44
2,2,4-Trimethylpentane
Concen: 0.255 ppbv
RT: 7.85 min Scan# 1575
Delta R.T. -0.04 min
Lab File: VL036145.D
Acq: 11 Dec 2020 2:06

Tgt Ion	Ratio	Lower	Upper
57	100		
41	48.9	28.9	43.3#
56	49.5	25.3	37.9#





#53

Toluene

Concen: 1.243 ppbv

RT: 9.79 min Scan# 2178

Delta R.T. -0.04 min

Lab File: VL036145.D

Acq: 11 Dec 2020 2:06

Instrument :

MSVOA_L

ClientSampleId :

SS-7B

Tot Ion: 91 Resp: 305705

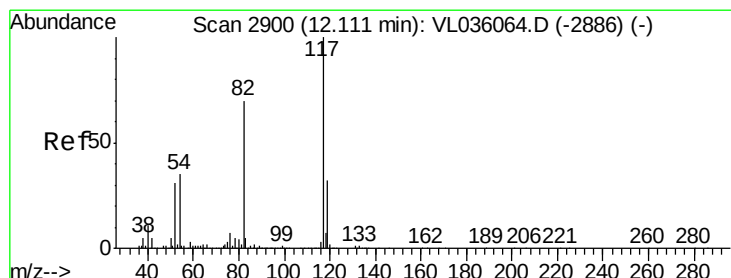
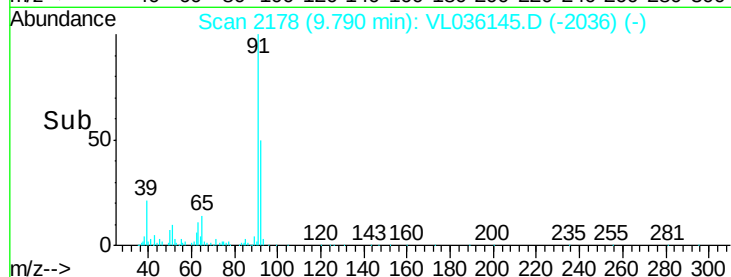
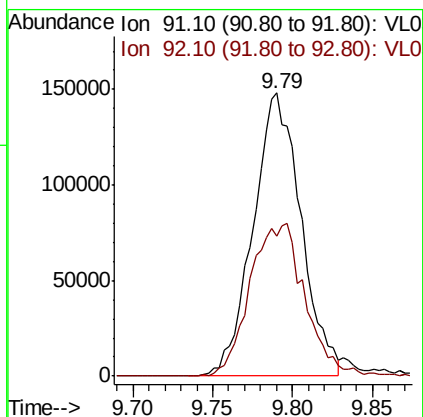
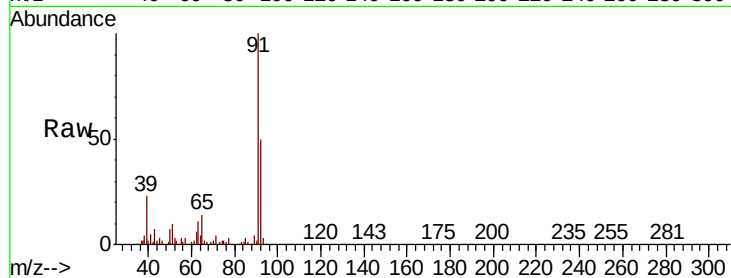
Ion Ratio Lower Upper

91 100

92 62.3 48.2 72.2

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#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.07 min Scan# 2886

Delta R.T. -0.05 min

Lab File: VL036145.D

Acq: 11 Dec 2020 2:06

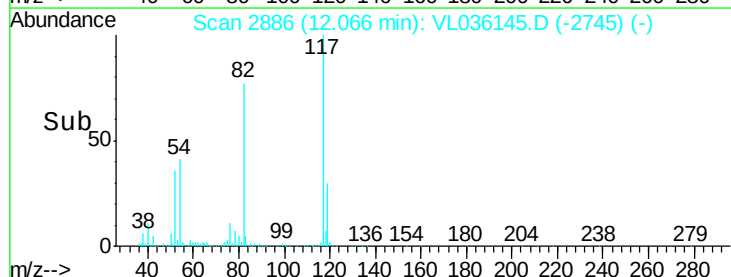
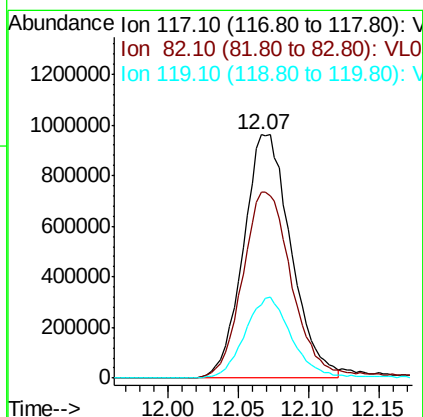
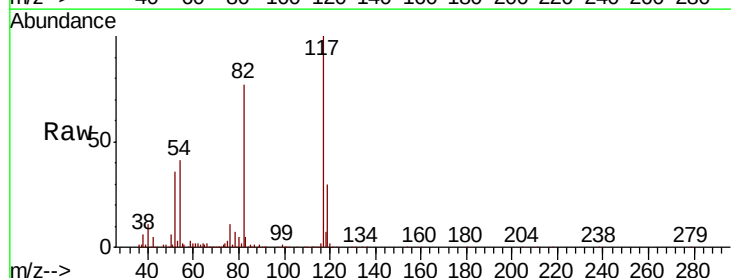
Tgt Ion: 117 Resp: 2265899

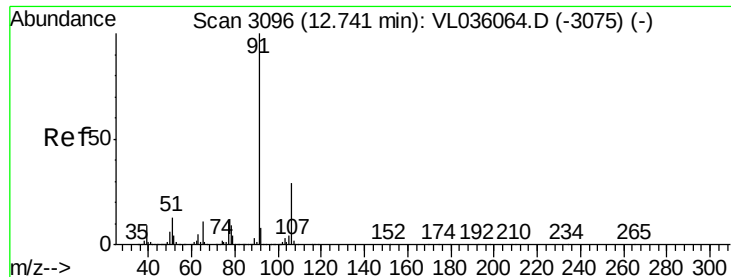
Ion Ratio Lower Upper

117 100

82 81.1 0.0 0.0#

119 33.7 0.0 0.0#





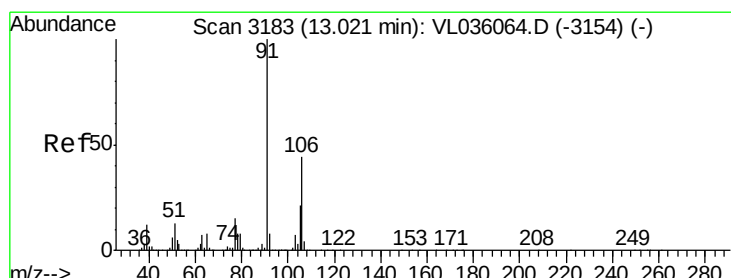
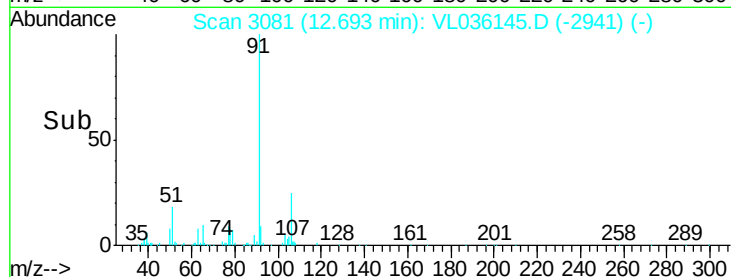
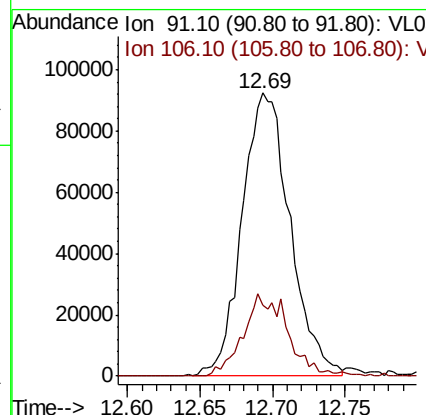
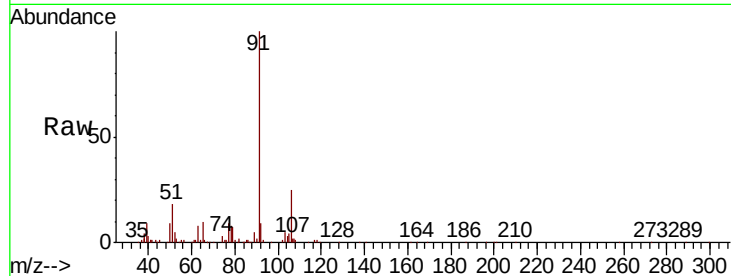
#58
Ethyl Benzene
Concen: 0.685 ppbv
RT: 12.69 min Scan# 3081
Delta R.T. -0.05 min
Lab File: VL036145.D
Acq: 11 Dec 2020 2:06

Instrument :
MSVOA_L
ClientSampled :
SS-7B

Tot Ion: 91 Resp: 212633
Ion Ratio Lower Upper
91 100
106 25.2 23.0 34.4

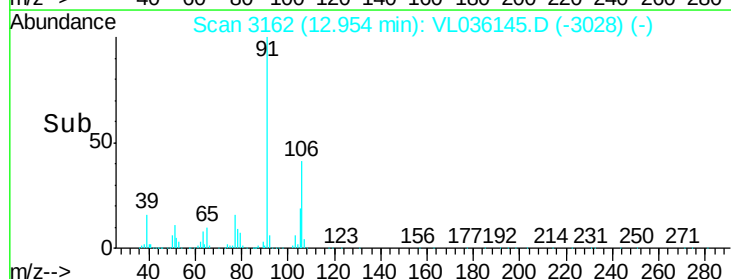
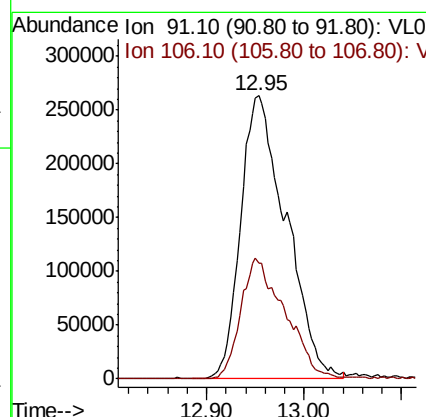
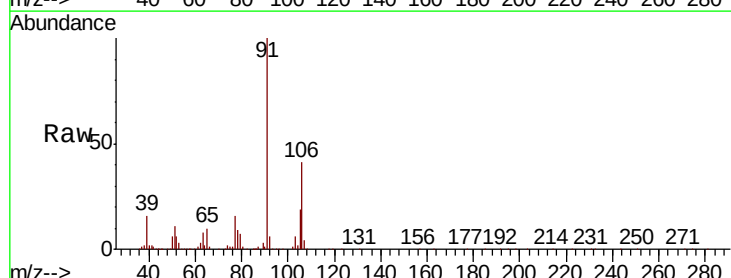
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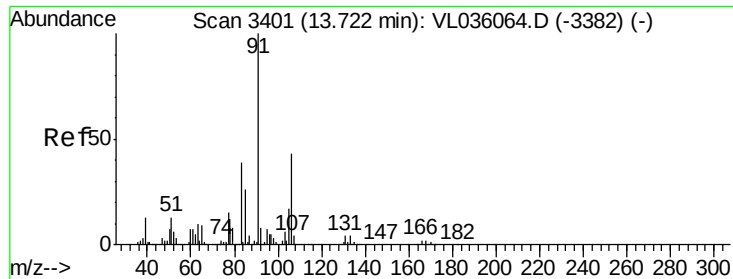
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#59
m/p-Xylene
Concen: 3.257 ppbv m
RT: 12.95 min Scan# 3162
Delta R.T. -0.07 min
Lab File: VL036145.D
Acq: 11 Dec 2020 2:06

Tgt Ion: 91 Resp: 851771
Ion Ratio Lower Upper
91 100
106 0.0 33.6 50.4#





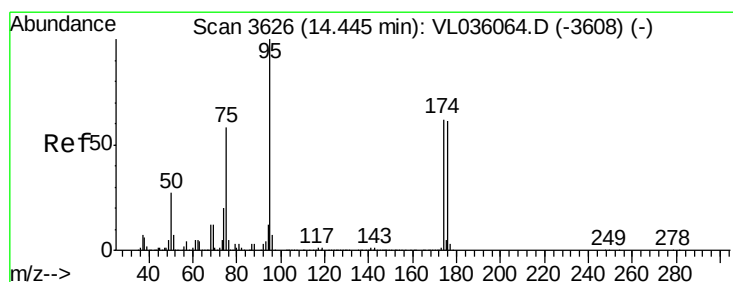
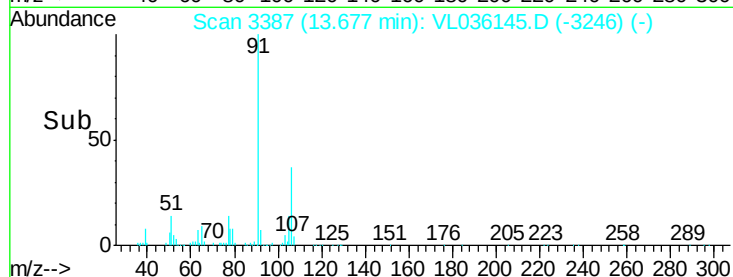
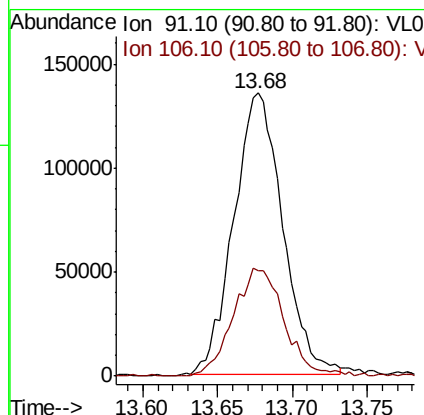
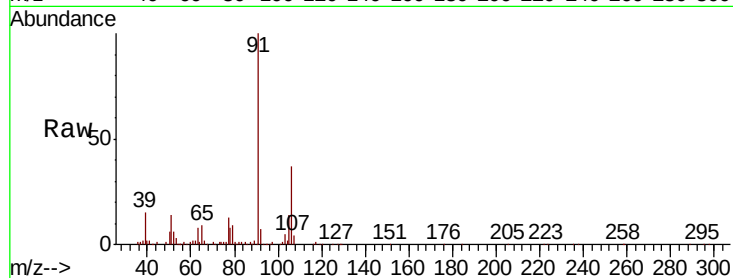
#60
o-Xylene
Concen: 1.246 ppbv
RT: 13.68 min Scan# 3387
Delta R.T. -0.05 min
Lab File: VL036145.D
Acq: 11 Dec 2020 2:06

Instrument :
MSVOA_L
ClientSampleId :
SS-7B

Tot Ion: 91 Resp: 307146
Ion Ratio Lower Upper
91 100
106 40.1 21.6 64.6

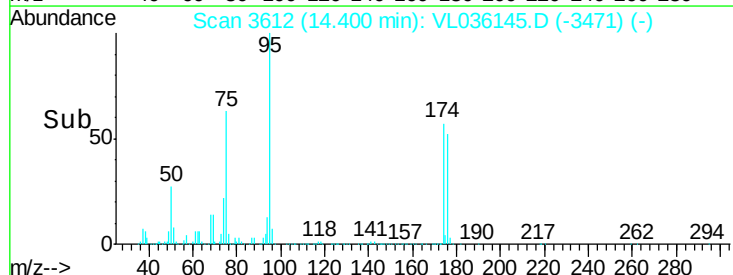
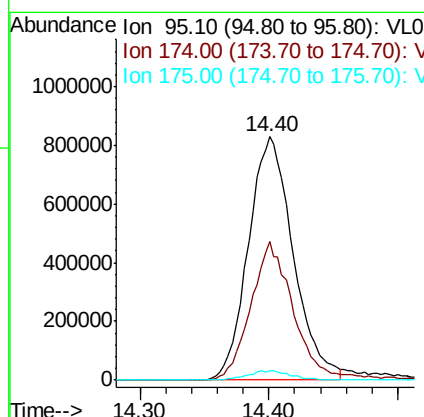
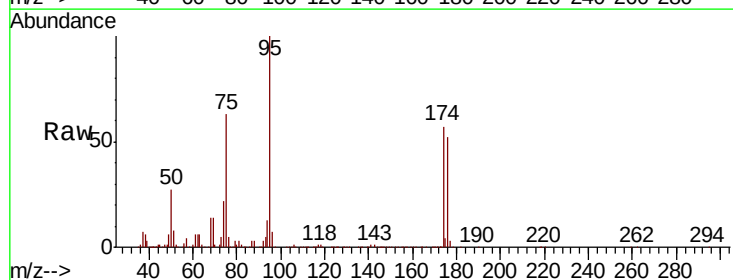
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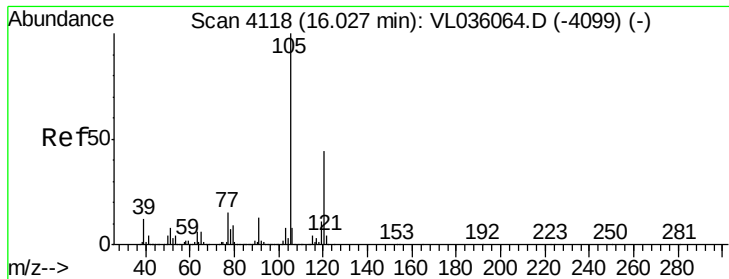
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#68
1-Bromo-4-Fluorobenzene
Concen: 11.150 ppbv
RT: 14.40 min Scan# 3612
Delta R.T. -0.05 min
Lab File: VL036145.D
Acq: 11 Dec 2020 2:06

Tgt Ion: 95 Resp: 2006166
Ion Ratio Lower Upper
95 100
174 54.7 50.7 76.1
175 4.0 4.0 6.0#





#73

1,3,5-Trimethylbenzene

Concen: 0.219 ppbv m

RT: 15.99 min Scan# 4105

Delta R.T. -0.04 min

Lab File: VL036145.D

Acq: 11 Dec 2020 2:06

Instrument :

MSVOA_L

ClientSampled :

SS-7B

Tot Ion:105 Resp: 55904

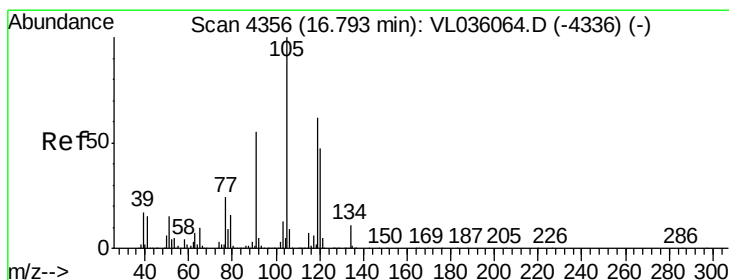
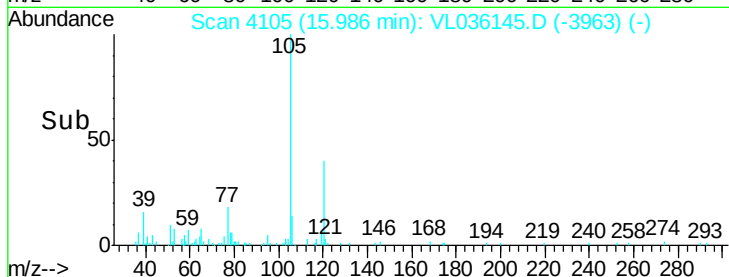
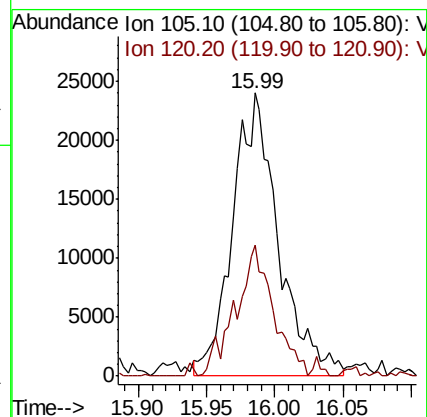
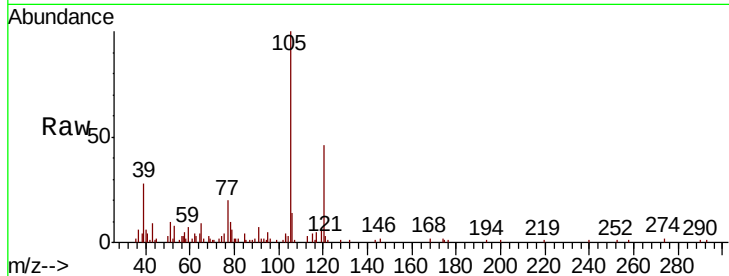
Ion Ratio Lower Upper

105 100

120 46.5 35.4 53.2

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#74

1,2,4-Trimethylbenzene

Concen: 0.575 ppbv

RT: 16.75 min Scan# 4343

Delta R.T. -0.04 min

Lab File: VL036145.D

Acq: 11 Dec 2020 2:06

Tgt Ion:105 Resp: 147154

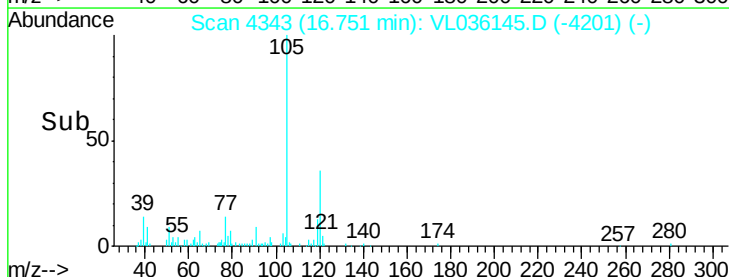
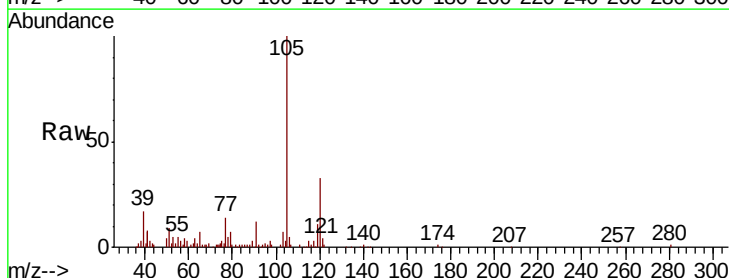
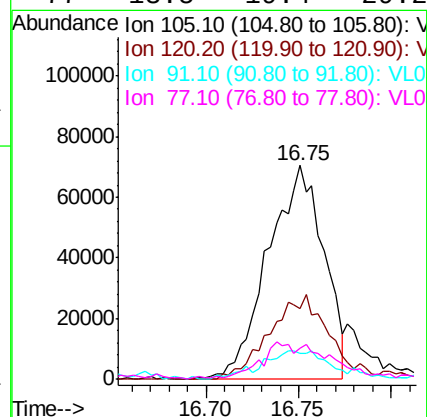
Ion Ratio Lower Upper

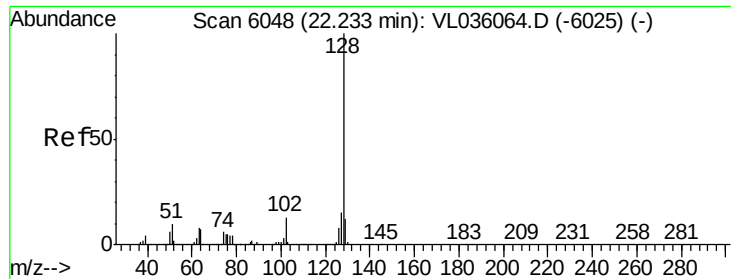
105 100

120 32.8 37.4 56.0#

91 10.5 45.6 68.4#

77 13.5 19.4 29.2#





#79

Naphthalene

Concen: 1.064 ppbv m

RT: 22.19 min Scan# 6035

Delta R.T. -0.04 min

Lab File: VL036145.D

Acq: 11 Dec 2020 2:06

Instrument :

MSVOA_L

ClientSampleId :

SS-7B

Tot Ion:	128	Resp:	138377
Ion Ratio	Lower	Upper	
128	100		
127	14.1	11.7	17.5
129	7.5	9.3	13.9#

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