

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL040721\
 Data File : VL036737.D
 Acq On : 7 Apr 2021 22:02
 Operator : SY/AP
 Sample : M1929-07
 Misc : 400mL/MSVOA L
 ALS Vial : 9 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 FS-SV01

Manual Integrations
 APPROVED

MMDadoda
 4/12/2021 11:16:20 AM

Quant Time: Apr 10 23:19:09 2021

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL032521AIR.M

Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Thu Apr 08 01:58:43 2021

QLast Update : Thu Apr 08 01:58:43 2021

Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.66	49	1295505	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.17	114	3186728	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.09	117	2887836	10.00	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.42	95	2517177	10.94	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	109.40%

Target Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.04	85	44864	0.212	ppbv #	80
3) Chlorodifluoromethane	2.98	51	213373	0.882	ppbv	96
4) Chloromethane	3.14	50	11765	0.138	ppbv	94
9) Propene	3.01	41	231809	3.004	ppbv	89
10) Heptane	8.12	43	964136	4.905	ppbv	98
11) Trichlorofluoromethane	3.94	101	48003	0.223	ppbv	88
13) Ethanol	3.60	45	1003144	109.169	ppbv	93
15) Acetone	3.84	43	493919m	3.874	ppbv	
17) tert-Butyl alcohol	4.30	59	191991m	1.730	ppbv	
20) Methylene Chloride	4.34	84	110347	1.848	ppbv	93
26) Hexane	5.68	57	668044	4.749	ppbv #	46
27) Carbon Disulfide	4.55	76	65703m	0.474	ppbv	
29) Chloroform	5.74	83	57083m	0.254	ppbv	
30) Cyclohexane	7.13	84	154677	1.356	ppbv #	80
34) 2-Butanone	5.25	43	64849	0.417	ppbv #	81
36) Benzene	6.89	78	761419	2.591	ppbv	97
44) 2,2,4-Trimethylpentane	7.87	57	9017336	17.433	ppbv #	74
52) Tetrachloroethene	11.22	164	211364	1.953	ppbv	98
53) Toluene	9.80	91	4183901	13.368	ppbv	100
58) Ethyl Benzene	12.71	91	583765	1.389	ppbv	89
59) m/p-Xylene	12.97	91	2130317	5.813	ppbv	93
60) o-Xylene	13.70	91	1025104	2.893	ppbv	96
62) Isopropylbenzene	14.67	105	129740	0.272	ppbv	98
72) 4-Ethyltoluene	15.85	105	315588	0.813	ppbv #	82
73) 1,3,5-Trimethylbenzene	16.01	105	346419	0.956	ppbv	94
74) 1,2,4-Trimethylbenzene	16.77	105	386547	0.997	ppbv #	72
79) Naphthalene	22.20	128	95110m	0.420	ppbv	

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

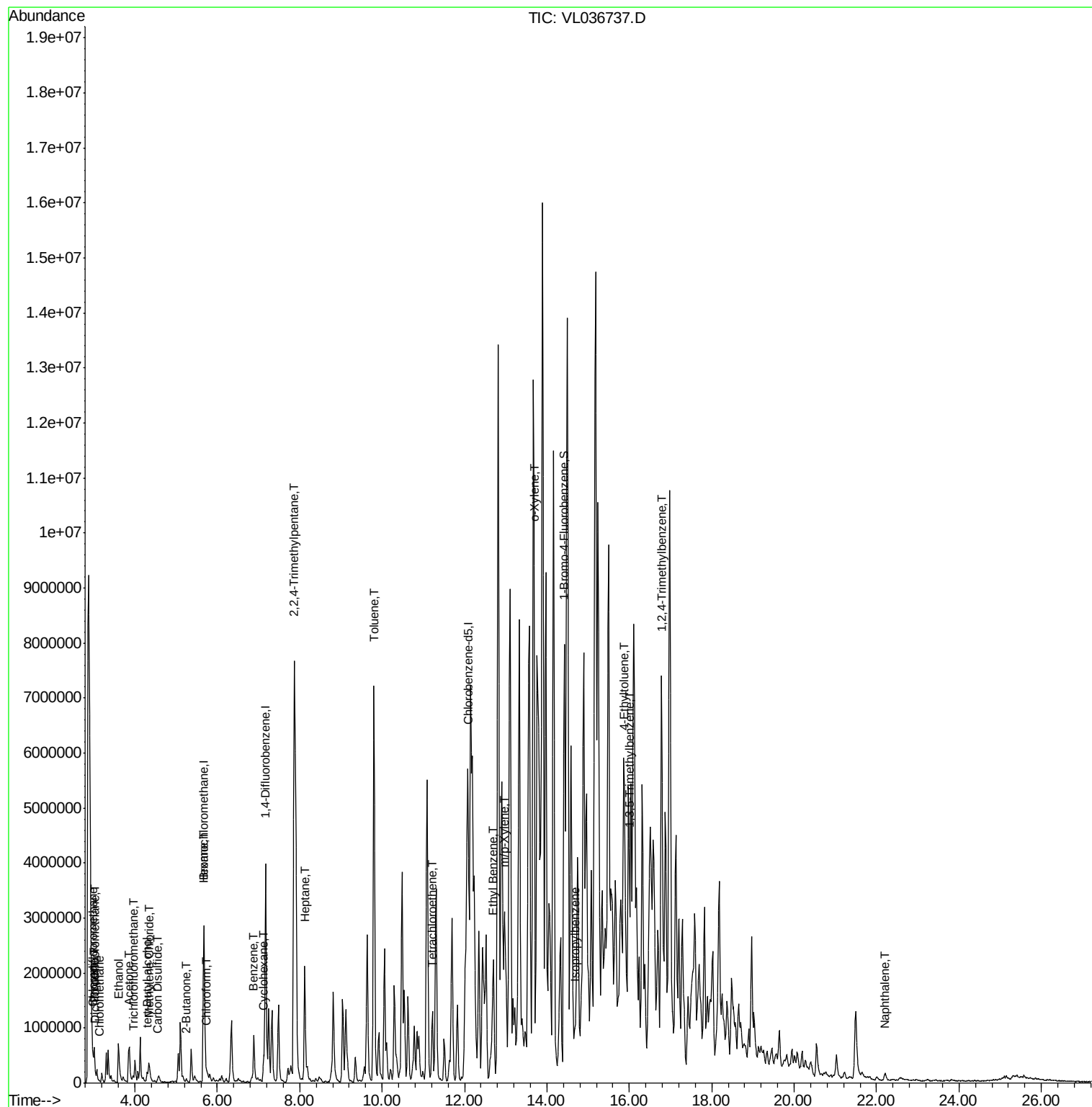
Data Path : Z:\V0ASRV\HPCHEM1\MSVOA L\DATA\VL040721\
Data File : VL036737.D
Acq On : 7 Apr 2021 22:02
Operator : SY/AP
Sample : M1929-07
Misc : 400mL/MSVOA L
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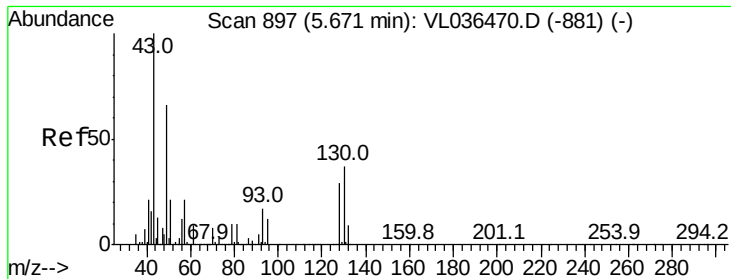
Instrument :
MSVOA_L
ClientSampleId :
FS-SV01

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Quant Time: Apr 10 23:19:09 2021
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA L\METHODS\VL032521AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Thu Apr
QLast Update : Thu Apr 08 01:58:43 2021
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#1

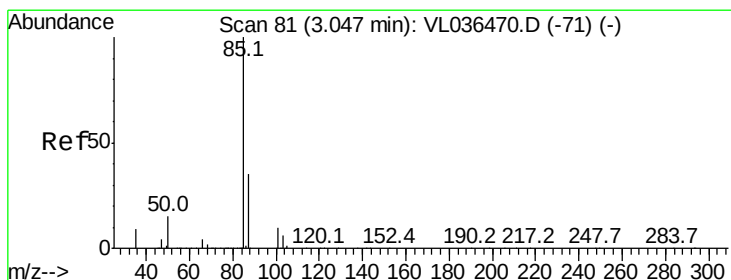
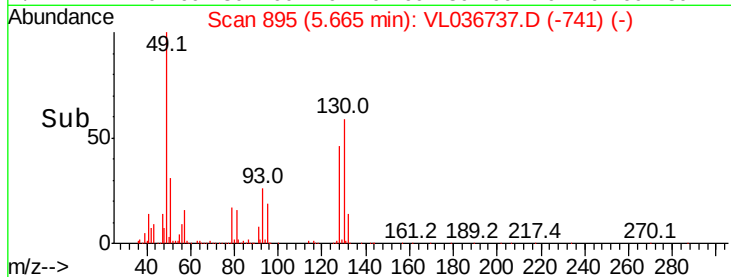
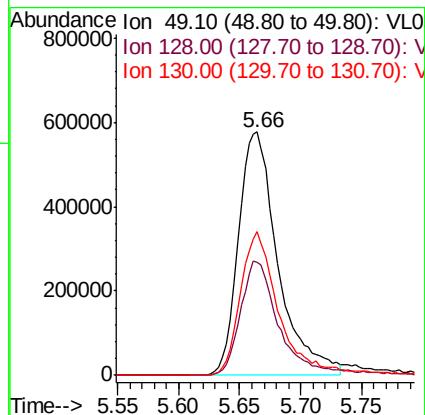
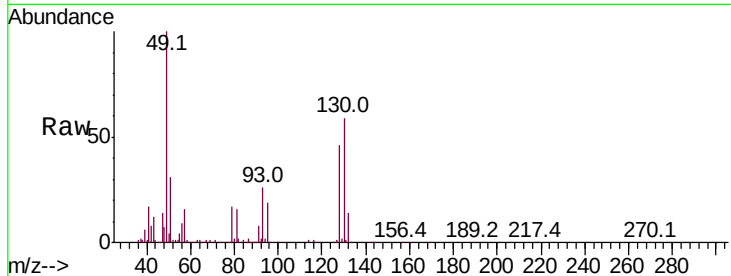
Bromochloromethane
 Concen: 10.000 ppbv
 RT: 5.66 min Scan# 895
 Delta R.T. -0.01 min
 Lab File: VL036737.D
 Acq: 7 Apr 2021 22:02

Instrument :
 MSVOA_L
 ClientSampleId :
 FS-SV01

Tot Ion	Ratio	Lower	Upper
49	100		
128	46.2	23.5	70.6
130	58.9	29.1	87.4

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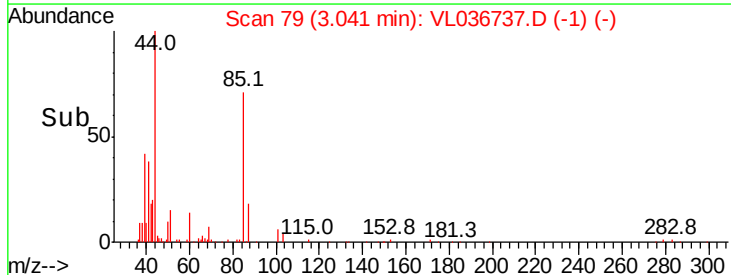
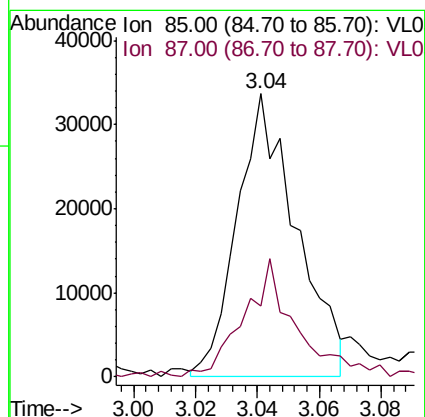
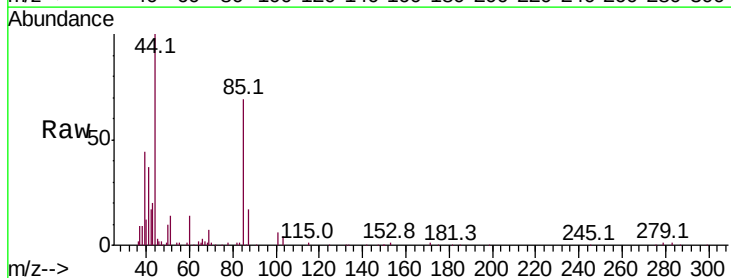
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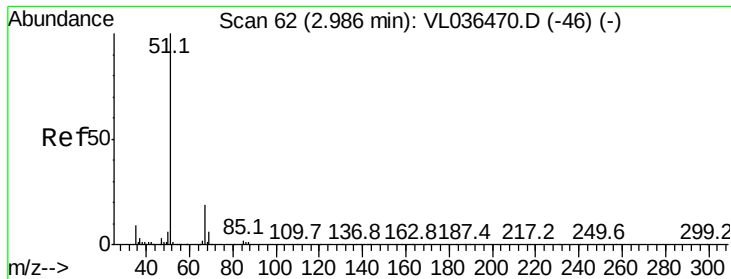


#2

Dichlorodifluoromethane
 Concen: 0.212 ppbv
 RT: 3.04 min Scan# 79
 Delta R.T. -0.01 min
 Lab File: VL036737.D
 Acq: 7 Apr 2021 22:02

Tgt Ion	Ratio	Lower	Upper
85	100		
87	23.0	27.8	41.8#





#3

Chlorodifluoromethane

Concen: 0.882 ppbv

RT: 2.98 min Scan# 61

Delta R.T. -0.00 min

Lab File: VL036737.D

Acq: 7 Apr 2021 22:02

Instrument :

MSVOA_L

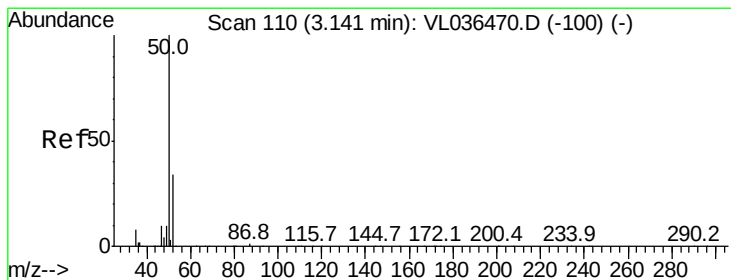
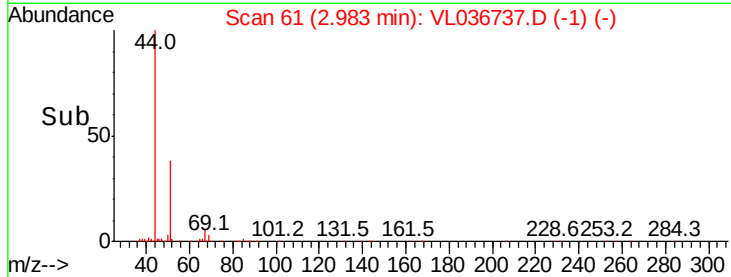
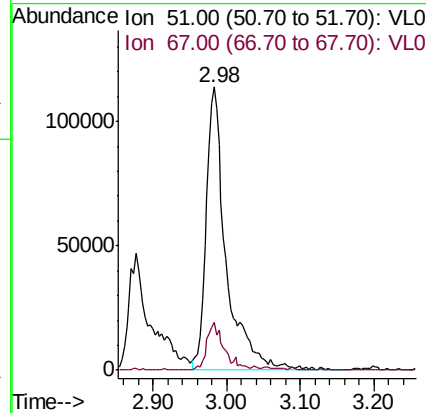
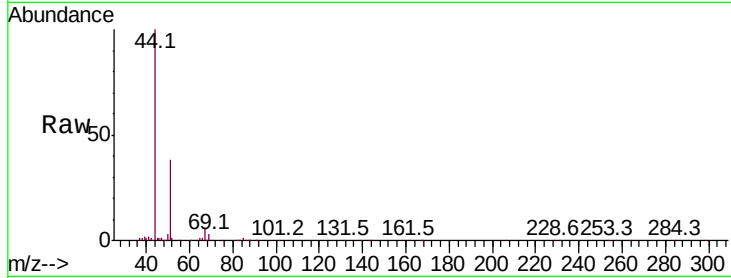
ClientSampled :

FS-SV01

Tot Ion	Ratio	Lower	Upper
51	100		
67	16.4	14.7	22.1

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#4

Chloromethane

Concen: 0.138 ppbv

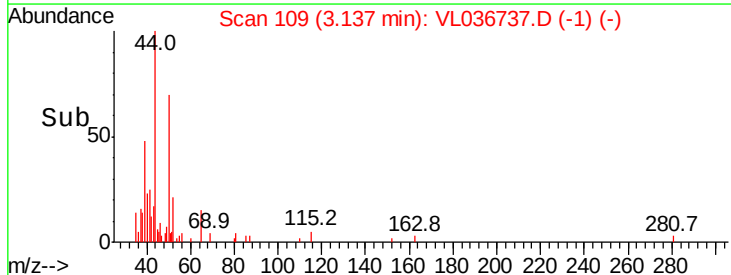
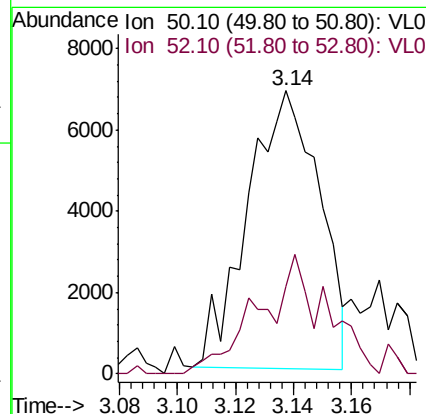
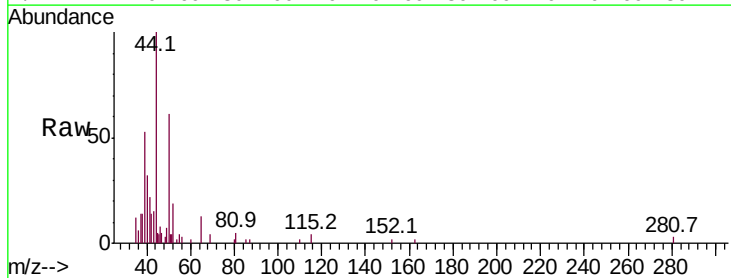
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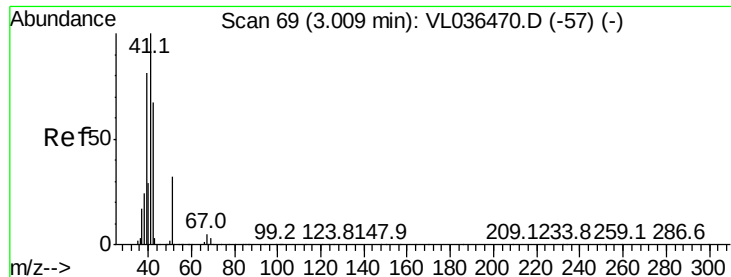
Delta R.T. -0.00 min

Lab File: VL036737.D

Acq: 7 Apr 2021 22:02

Tgt Ion	Ratio	Lower	Upper
50	100		
52	30.3	27.0	40.6





#9

Propene

Concen: 3.004 ppbv

RT: 3.01 min Scan# 68

Delta R.T. -0.00 min

Lab File: VL036737.D

Acq: 7 Apr 2021 22:02

Instrument :

MSVOA_L

ClientSampleId :

FS-SV01

Tot Ion: 41 Resp: 231809

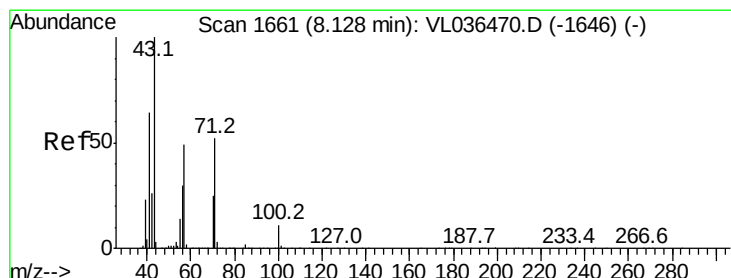
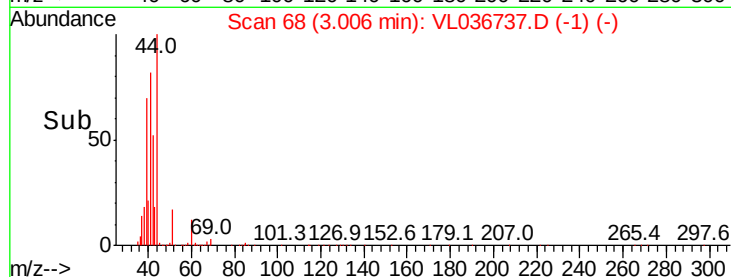
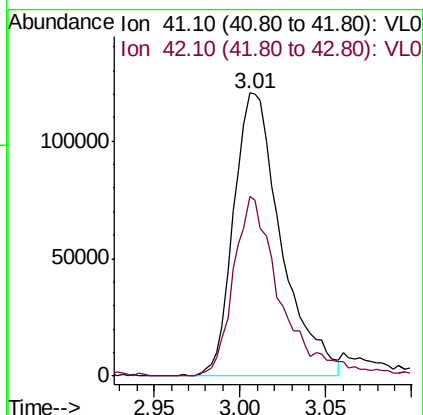
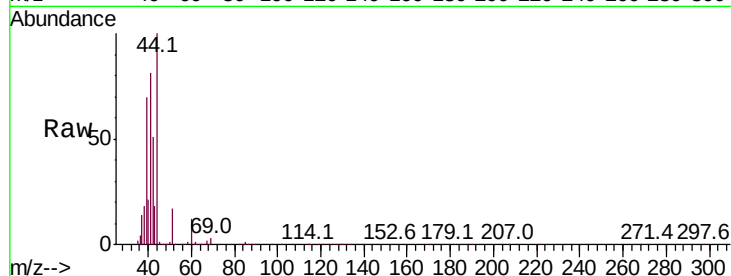
Ion Ratio Lower Upper

41 100

42 62.2 57.0 85.4

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#10

Heptane

Concen: 4.905 ppbv

RT: 8.12 min Scan# 1659

Delta R.T. -0.01 min

Lab File: VL036737.D

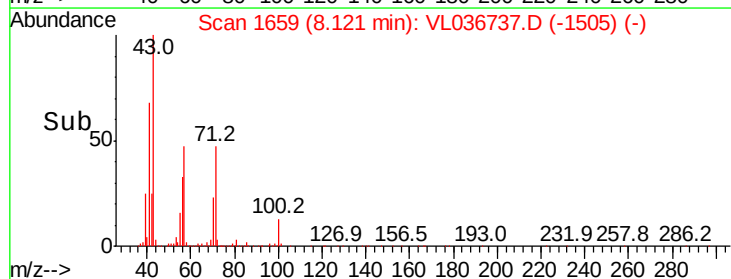
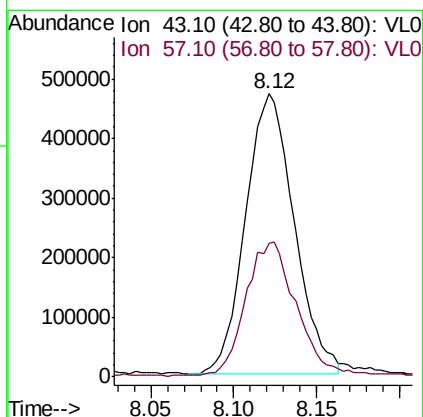
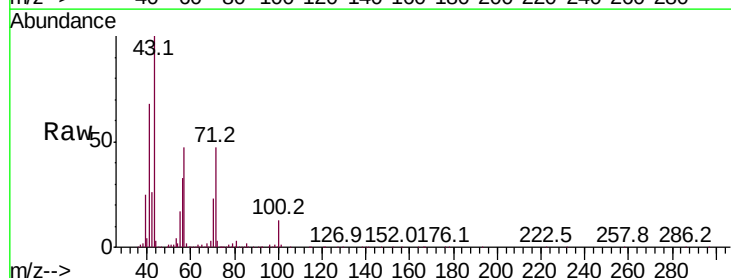
Acq: 7 Apr 2021 22:02

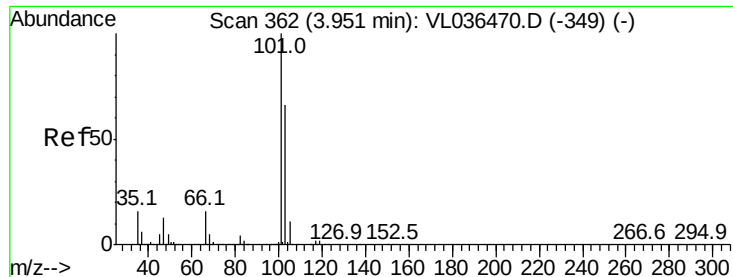
Tgt Ion: 43 Resp: 964136

Ion Ratio Lower Upper

43 100

57 50.3 39.0 58.6





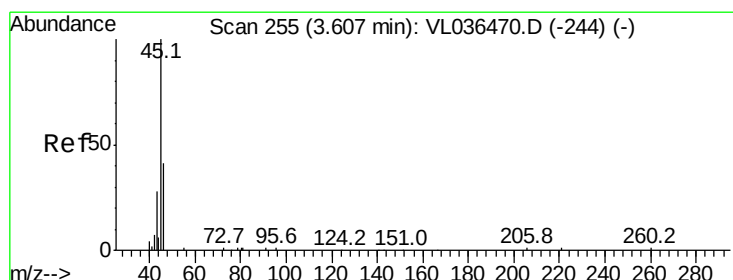
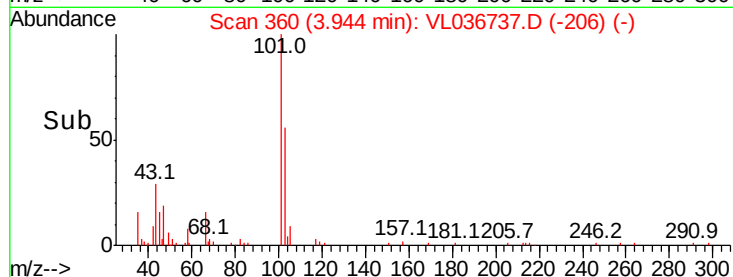
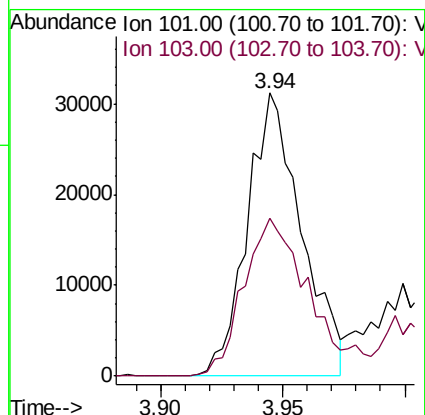
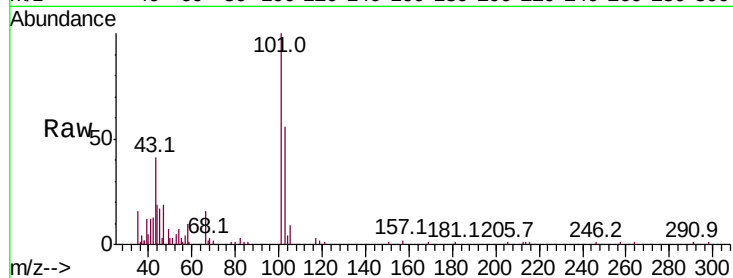
#11
Trichlorofluoromethane
Concen: 0.223 ppbv
RT: 3.94 min Scan# 360
Delta R.T. -0.01 min
Lab File: VL036737.D
Acq: 7 Apr 2021 22:02

Instrument :
MSVOA_L
ClientSampleId :
FS-SV01

Tot Ion:101 Resp: 48003
Ion Ratio Lower Upper
101 100
103 55.7 52.5 78.7

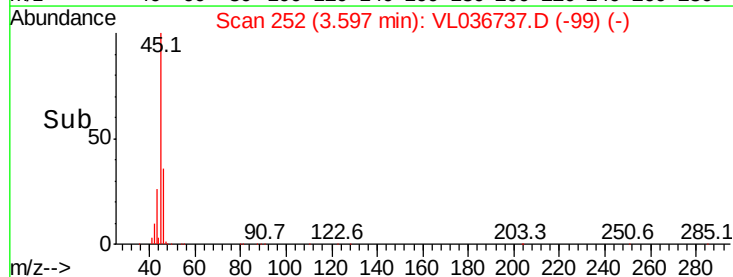
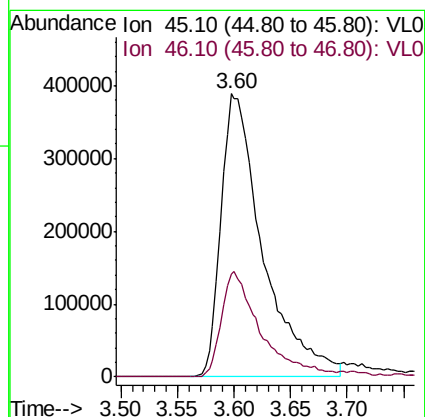
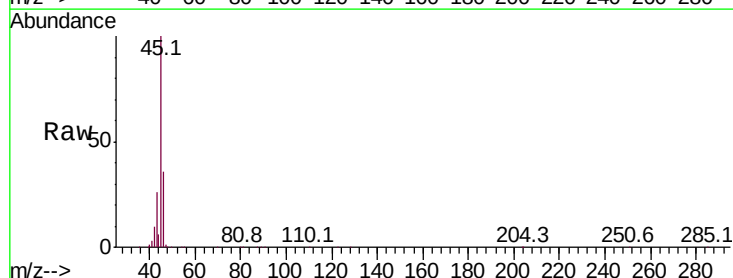
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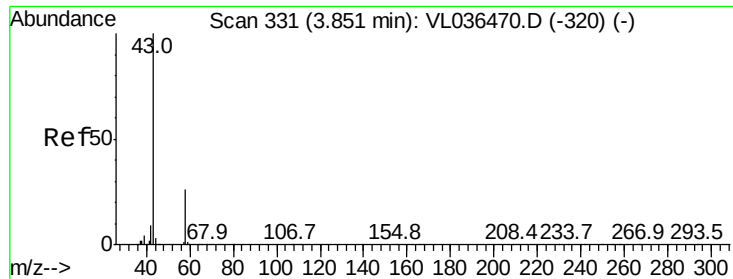
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#13
Ethanol
Concen: 109.169 ppbv
RT: 3.60 min Scan# 252
Delta R.T. -0.01 min
Lab File: VL036737.D
Acq: 7 Apr 2021 22:02

Tgt Ion: 45 Resp: 1003144
Ion Ratio Lower Upper
45 100
46 37.3 16.6 66.2





#15

Acetone

Concen: 3.874 ppbv m

RT: 3.84 min Scan# 329

Delta R.T. -0.01 min

Lab File: VL036737.D

Acq: 7 Apr 2021 22:02

Instrument :

MSVOA_L

ClientSampleId :

FS-SV01

Tot Ion: 43 Resp: 493919

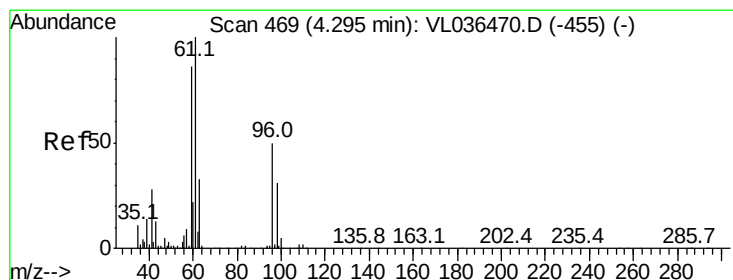
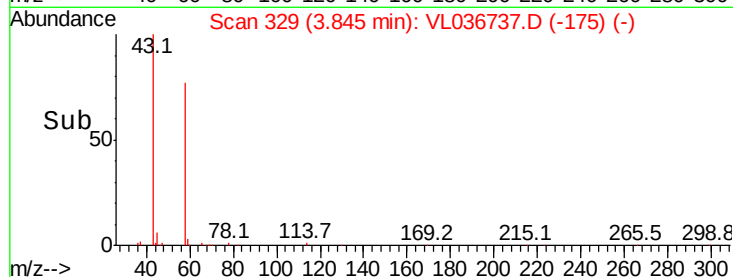
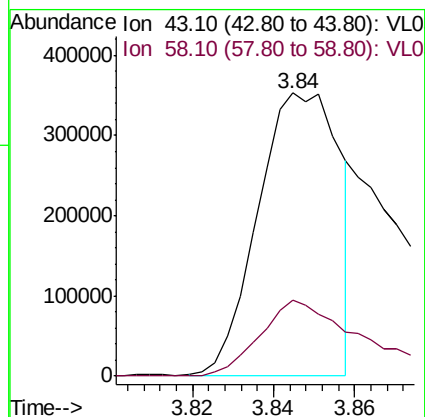
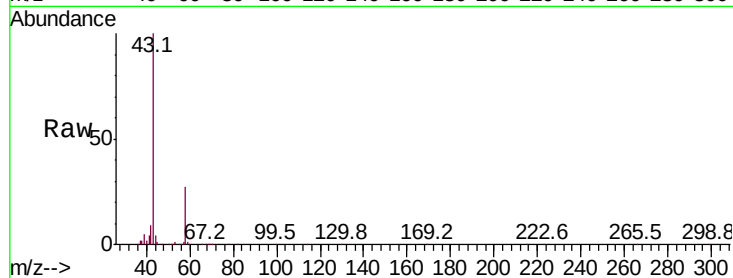
Ion Ratio Lower Upper

43 100

58 40.9 21.2 31.8#

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#17

tert-Butyl alcohol

Concen: 1.730 ppbv m

RT: 4.30 min Scan# 470

Delta R.T. 0.00 min

Lab File: VL036737.D

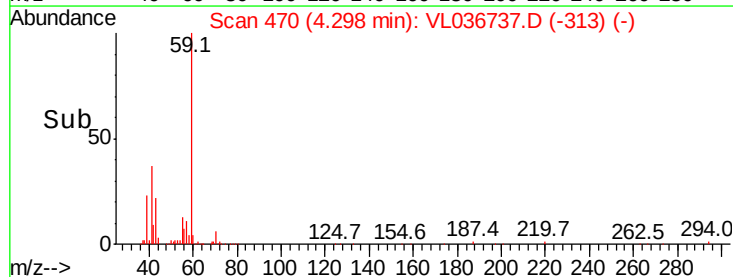
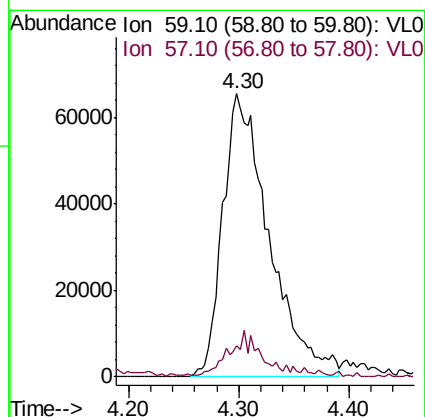
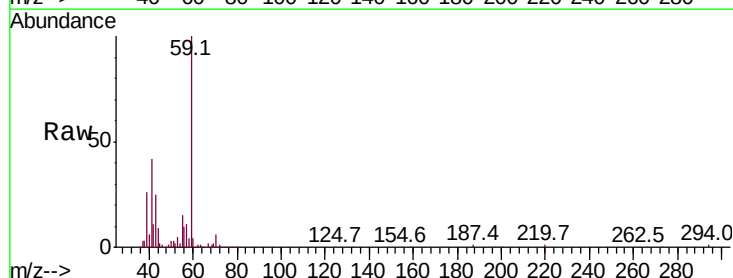
Acq: 7 Apr 2021 22:02

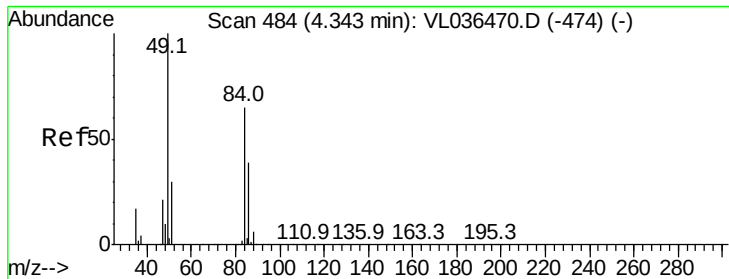
Tgt Ion: 59 Resp: 191991

Ion Ratio Lower Upper

59 100

57 0.0 8.6 12.8#





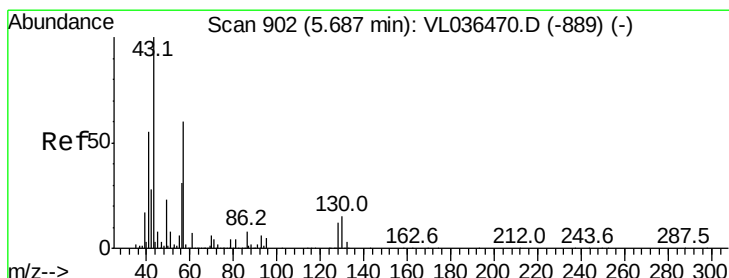
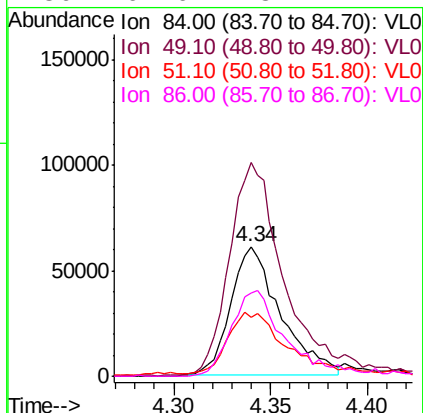
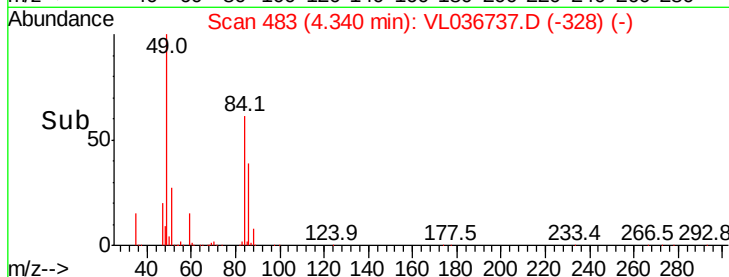
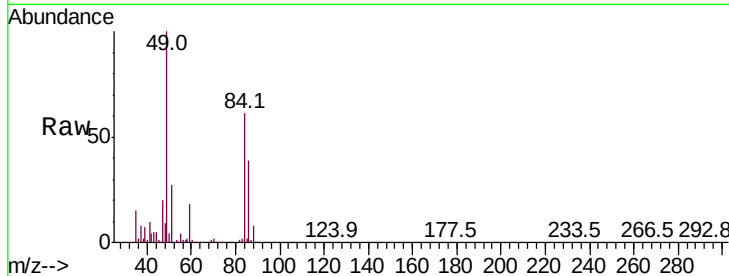
#20
Methylene Chloride
Concen: 1.848 ppbv
RT: 4.34 min Scan# 483
Delta R.T. -0.00 min
Lab File: VL036737.D
Acq: 7 Apr 2021 22:02

Instrument :
MSVOA_L
ClientSampleId :
FS-SV01

Tot Ion:	84	Resp:	110347
Ion Ratio	Lower	Upper	
84	100		
49	163.6	122.9	184.3
51	43.4	36.9	55.3
86	64.6	48.2	72.4

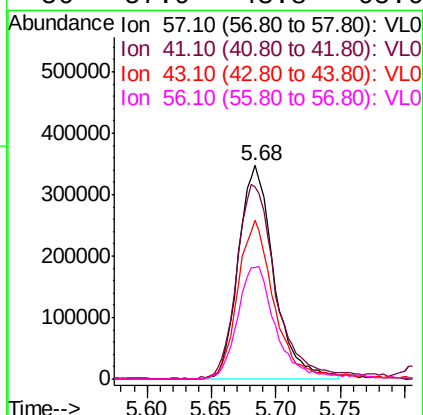
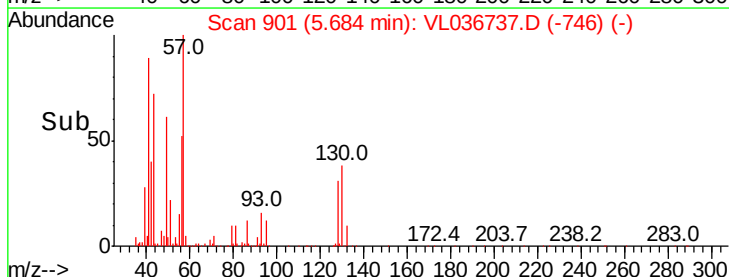
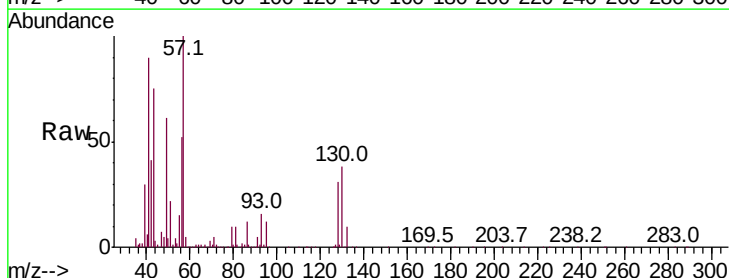
Manual Integrations
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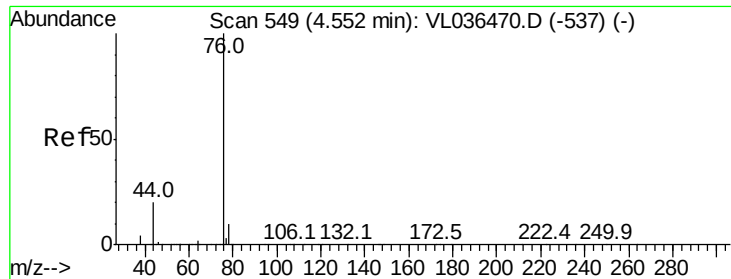
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#26
Hexane
Concen: 4.749 ppbv
RT: 5.68 min Scan# 901
Delta R.T. -0.00 min
Lab File: VL036737.D
Acq: 7 Apr 2021 22:02

Tgt Ion:	57	Resp:	668044
Ion Ratio	Lower	Upper	
57	100		
41	101.5	77.2	115.8
43	75.9	173.8	260.6#
56	57.9	43.8	65.6





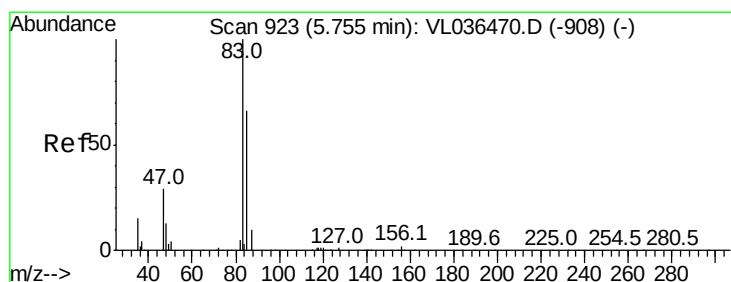
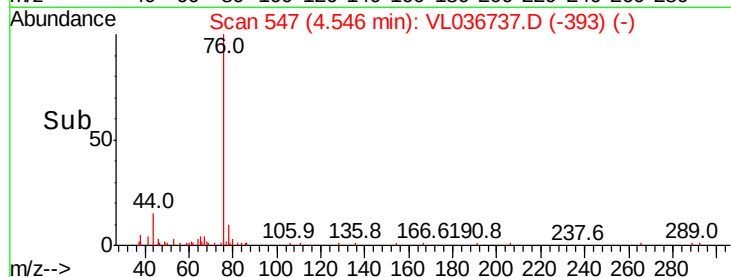
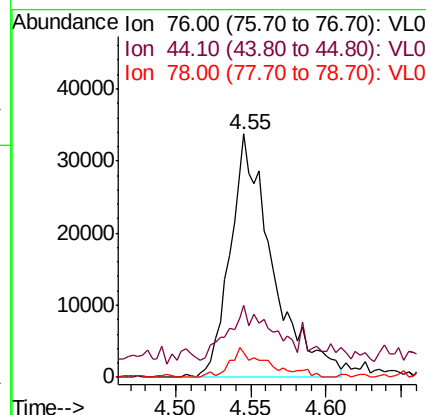
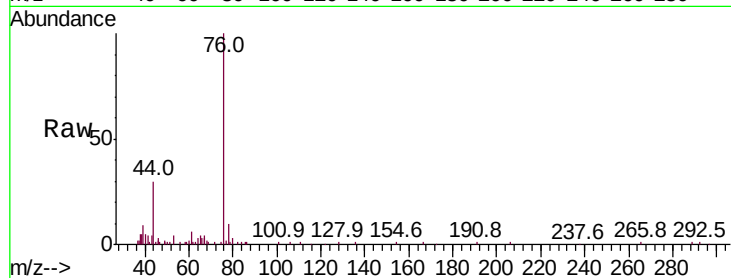
#27
Carbon Disulfide
Concen: 0.474 ppbv m
RT: 4.55 min Scan# 547
Delta R.T. -0.01 min
Lab File: VL036737.D
Acq: 7 Apr 2021 22:02

Instrument :
MSVOA_L
ClientSampleId :
FS-SV01

Tot Ion	Ratio	Lower	Upper
76	100		
44	29.1	17.5	26.3#
78	10.8	8.6	13.0

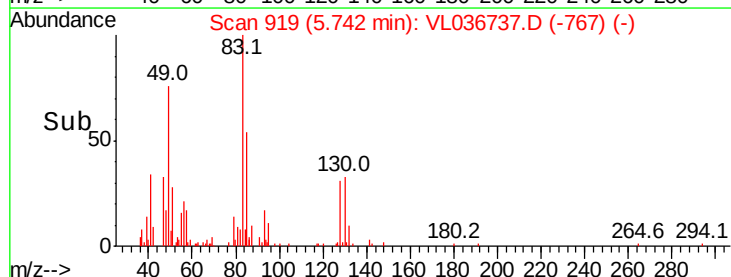
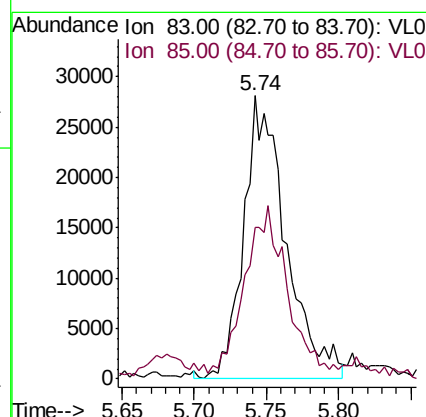
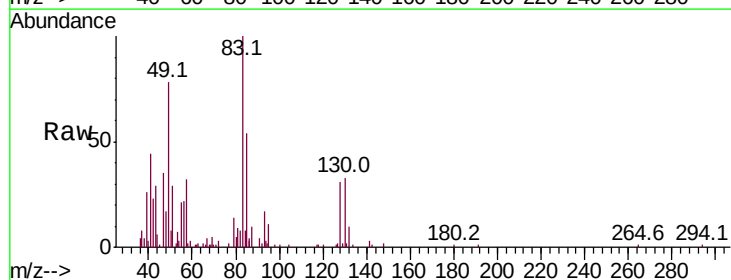
Manual Integrations
APPROVED

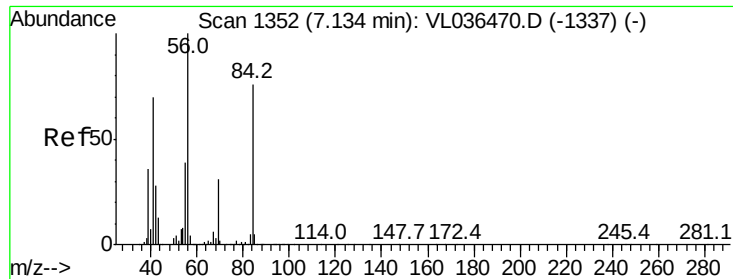
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4/12/2021 11:16:20 AM



#29
Chloroform
Concen: 0.254 ppbv m
RT: 5.74 min Scan# 919
Delta R.T. -0.01 min
Lab File: VL036737.D
Acq: 7 Apr 2021 22:02

Tgt Ion	Ratio	Lower	Upper
83	100		
85	53.7	52.6	78.8





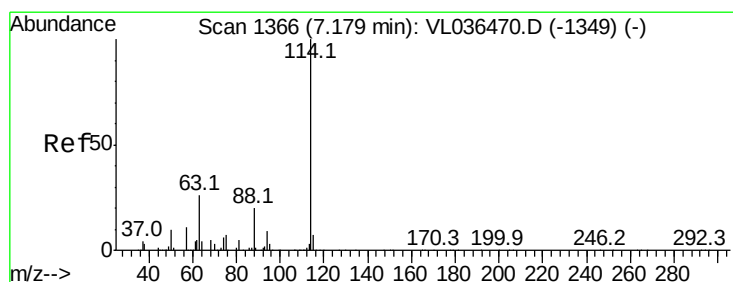
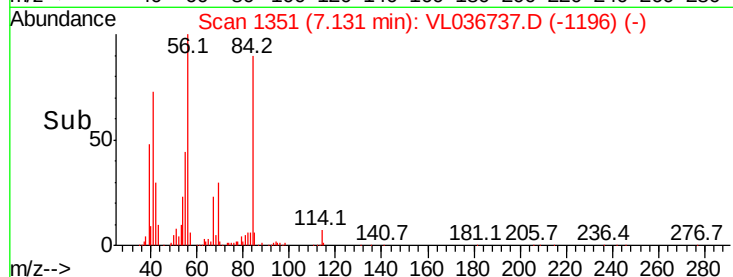
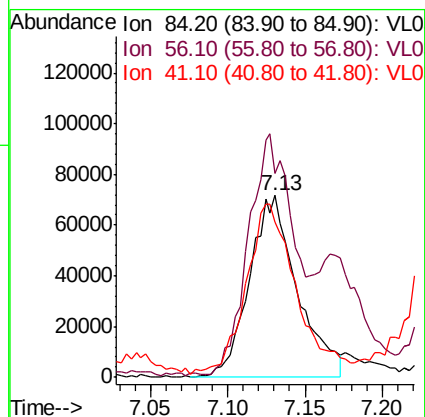
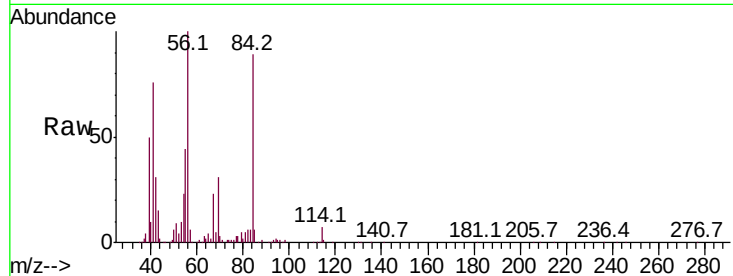
#30
Cyclohexane
Concen: 1.356 ppbv
RT: 7.13 min Scan# 1351
Delta R.T. -0.00 min
Lab File: VL036737.D
Acq: 7 Apr 2021 22:02

Instrument :
MSVOA_L
ClientSampled :
FS-SV01

Tot Ion	Ratio	Lower	Upper
84	100		
56	183.3	114.6	171.8#
41	93.8	75.3	112.9

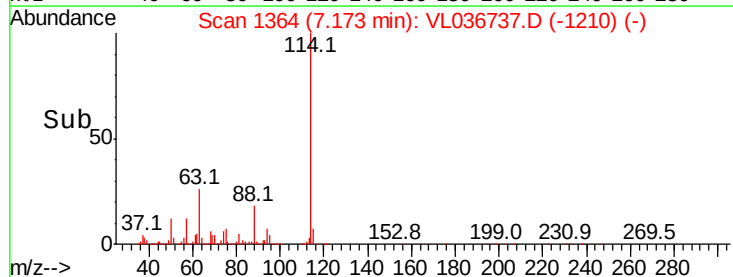
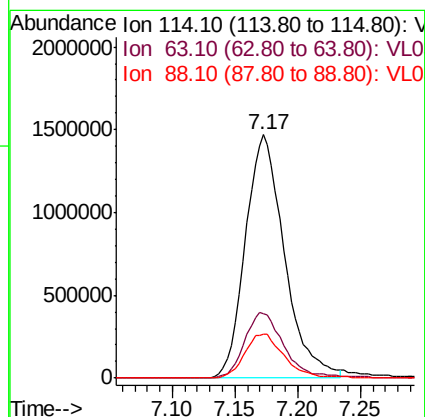
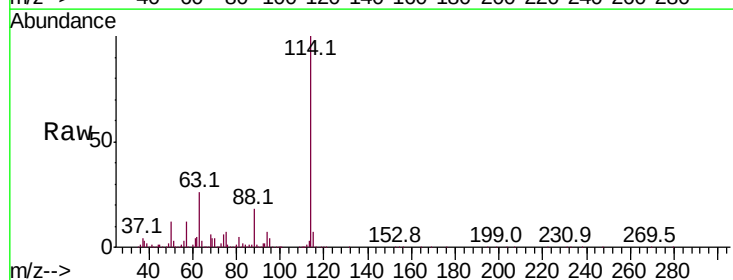
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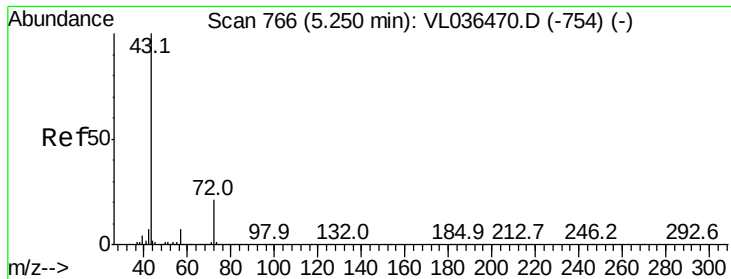
MMDadoda
4/12/2021 11:16:20 AM



#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 7.17 min Scan# 1364
Delta R.T. -0.01 min
Lab File: VL036737.D
Acq: 7 Apr 2021 22:02

Tgt Ion	Ratio	Lower	Upper
114	100		
63	27.9	22.4	33.6
88	18.7	15.4	23.0





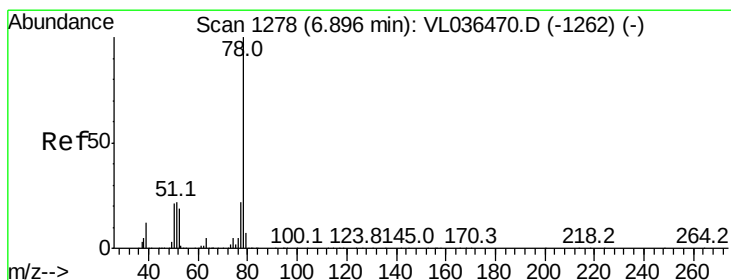
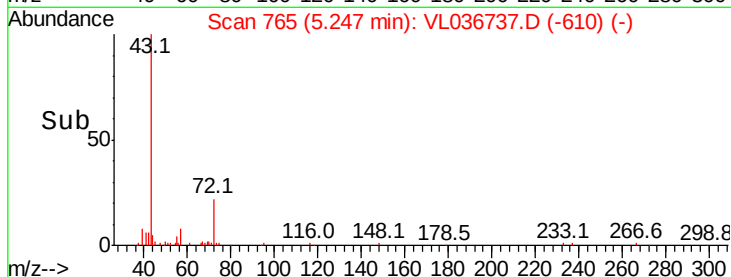
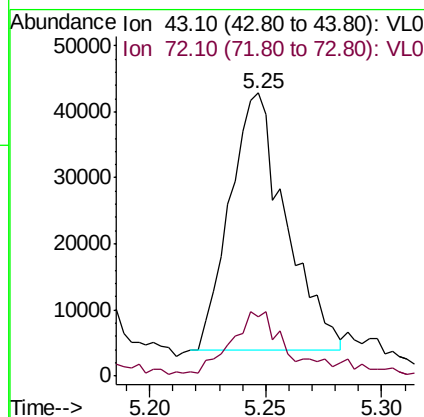
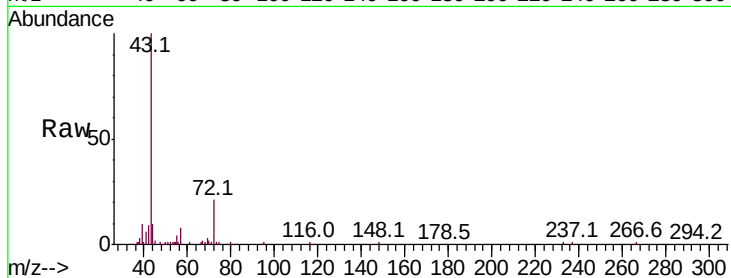
#34
2-Butanone
Concen: 0.417 ppbv
RT: 5.25 min Scan# 765
Delta R.T. -0.00 min
Lab File: VL036737.D
Acq: 7 Apr 2021 22:02

Instrument :
MSVOA_L
ClientSampleId :
FS-SV01

Tot Ion: 43 Resp: 64849
Ion Ratio Lower Upper
43 100
72 30.2 17.0 25.6#

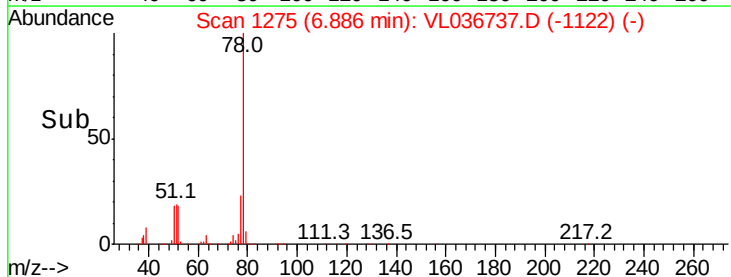
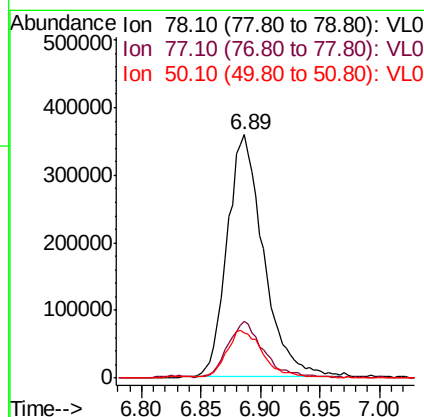
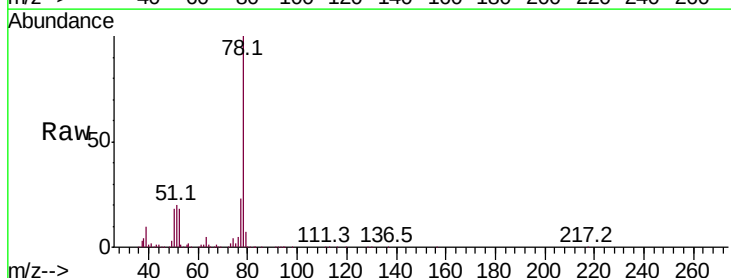
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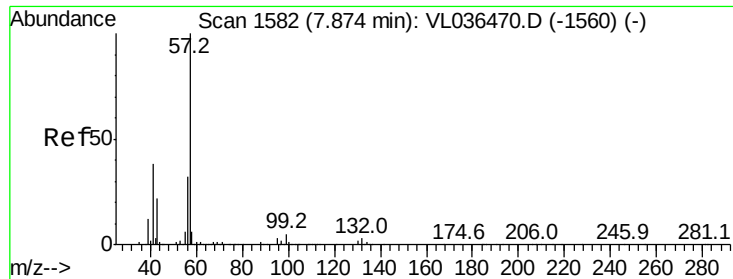
MMDadoda
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#36
Benzene
Concen: 2.591 ppbv
RT: 6.89 min Scan# 1275
Delta R.T. -0.01 min
Lab File: VL036737.D
Acq: 7 Apr 2021 22:02

Tgt Ion: 78 Resp: 761419
Ion Ratio Lower Upper
78 100
77 23.0 18.0 27.0
50 18.1 16.5 24.7





#44

2,2,4-Trimethylpentane

Concen: 17.433 ppbv

RT: 7.87 min Scan# 1580

Delta R.T. -0.01 min

Lab File: VL036737.D

Acq: 7 Apr 2021 22:02

Instrument :

MSVOA_L

ClientSampleId :

FS-SV01

Tot Ion: 57 Resp: 9017336

Ion Ratio Lower Upper

57 100

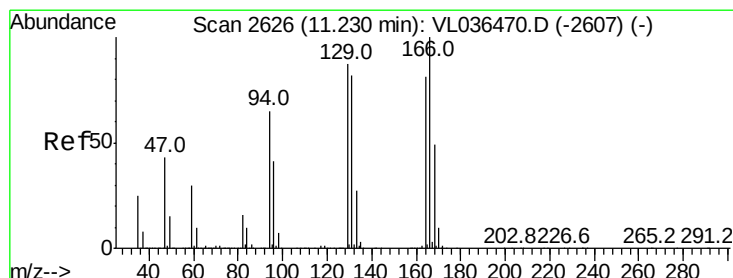
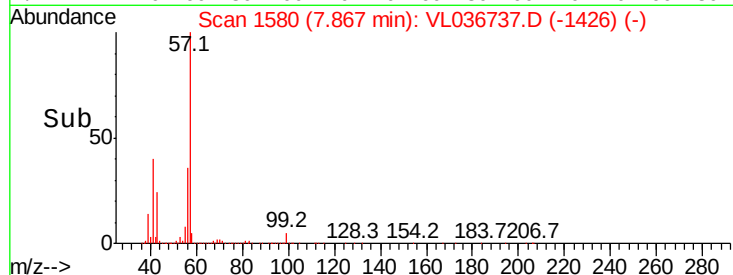
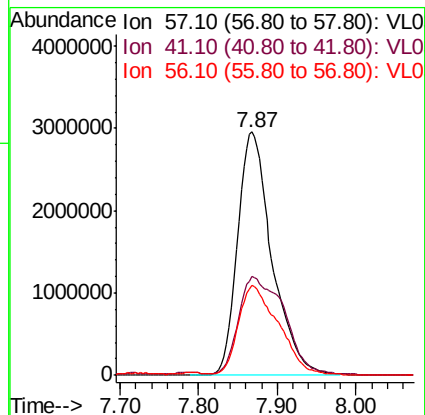
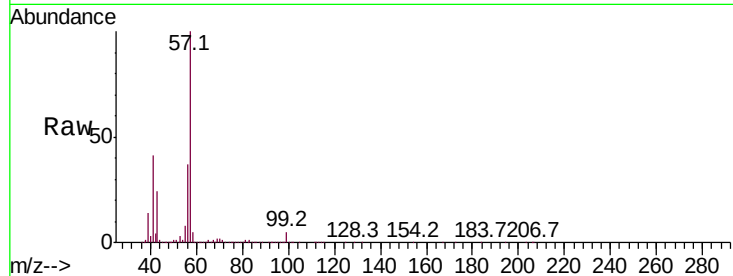
41 54.2 28.8 43.2#

56 43.7 26.1 39.1#

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#52

Tetrachloroethene

Concen: 1.953 ppbv

RT: 11.22 min Scan# 2624

Delta R.T. -0.01 min

Lab File: VL036737.D

Acq: 7 Apr 2021 22:02

Tgt Ion: 164 Resp: 211364

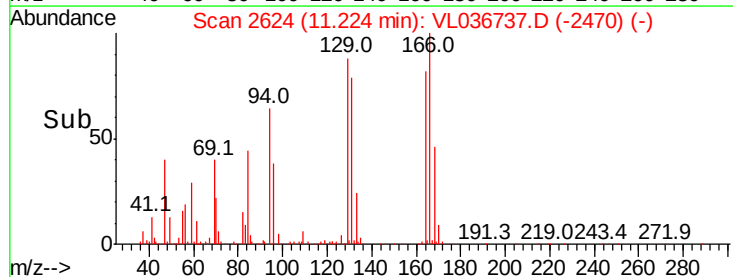
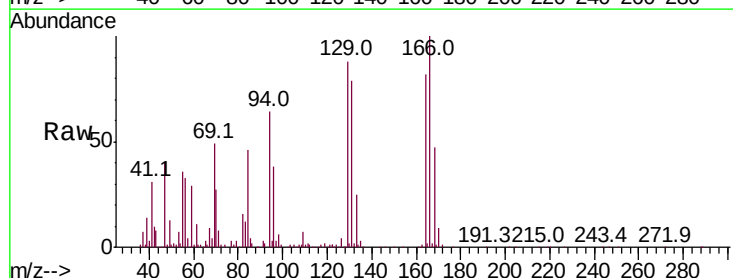
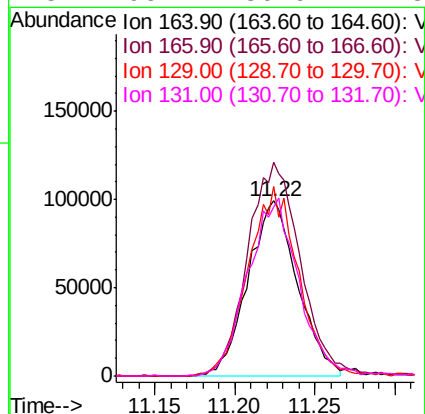
Ion Ratio Lower Upper

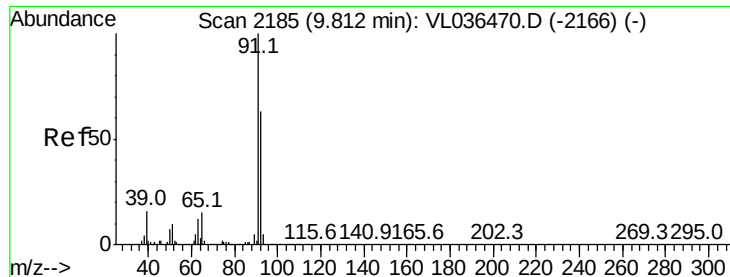
164 100

166 121.9 98.3 147.5

129 107.5 85.8 128.8

131 95.4 80.9 121.3





#53

Toluene

Concen: 13.368 ppbv

RT: 9.80 min Scan# 2182

Delta R.T. -0.01 min

Lab File: VL036737.D

Acq: 7 Apr 2021 22:02

Instrument :

MSVOA_L

ClientSampleId :

FS-SV01

Tot Ion: 91 Resp: 4183901

Ion Ratio Lower Upper

91 100

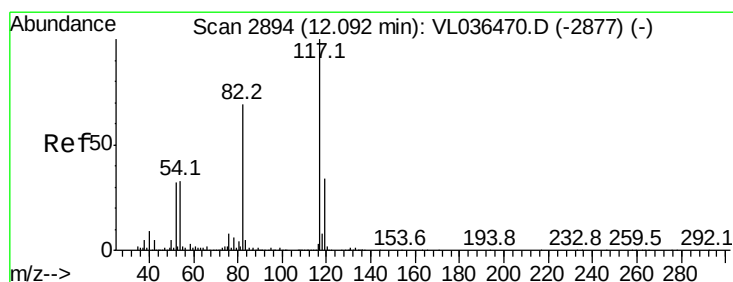
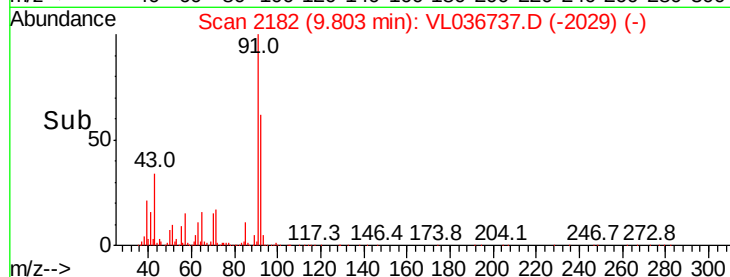
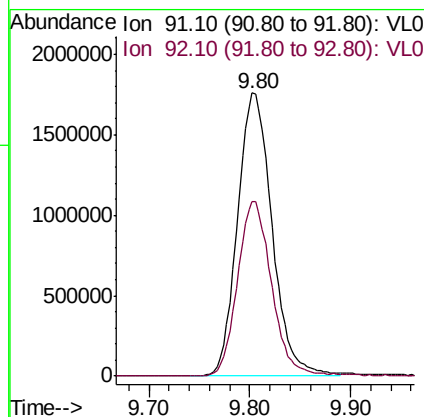
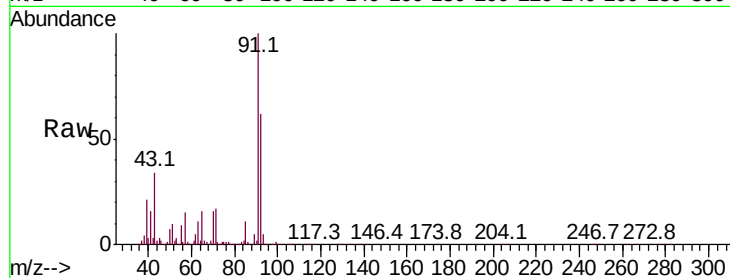
92 61.2 48.8 73.2

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#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.09 min Scan# 2892

Delta R.T. -0.01 min

Lab File: VL036737.D

Acq: 7 Apr 2021 22:02

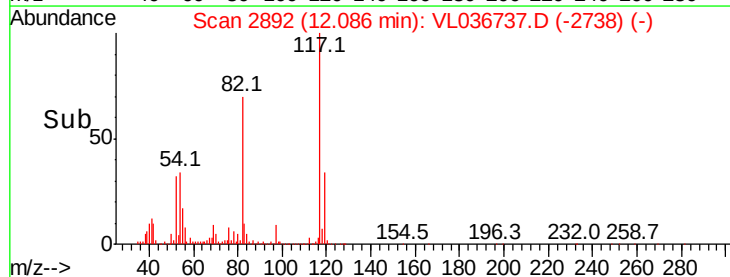
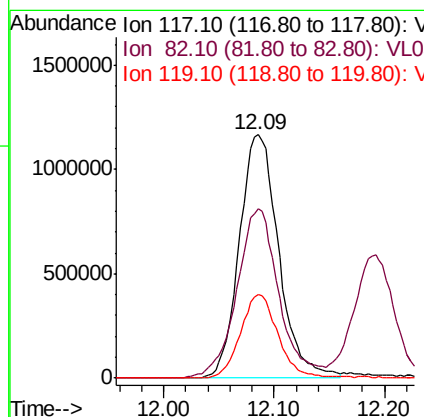
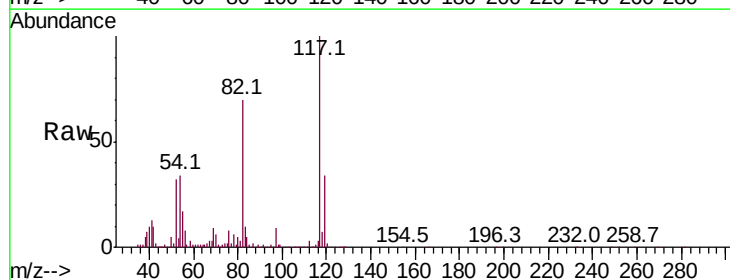
Tgt Ion: 117 Resp: 2887836

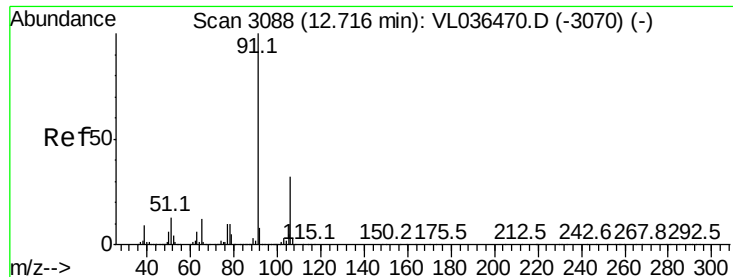
Ion Ratio Lower Upper

117 100

82 73.6 57.4 86.0

119 33.3 47.4 71.0#





#58

Ethyl Benzene

Concen: 1.389 ppbv

RT: 12.71 min Scan# 3086

Delta R.T. -0.01 min

Lab File: VL036737.D

Acq: 7 Apr 2021 22:02

Instrument :

MSVOA_L

ClientSampled :

FS-SV01

Tot Ion: 91 Resp: 583765

Ion Ratio Lower Upper

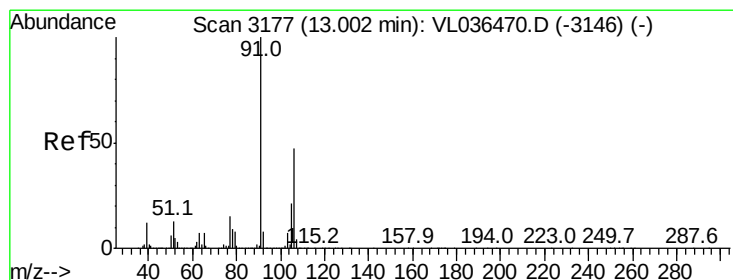
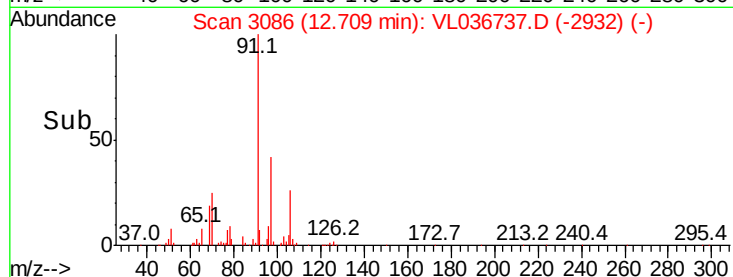
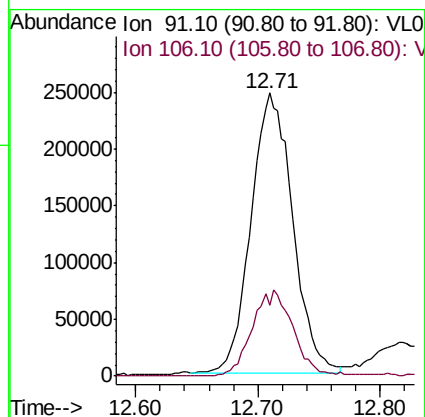
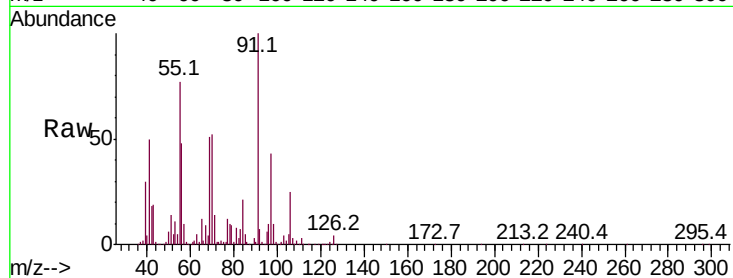
91 100

106 25.4 25.3 37.9

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#59

m/p-Xylene

Concen: 5.813 ppbv

RT: 12.97 min Scan# 3167

Delta R.T. -0.03 min

Lab File: VL036737.D

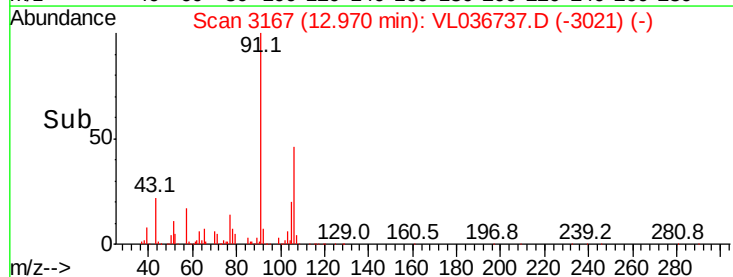
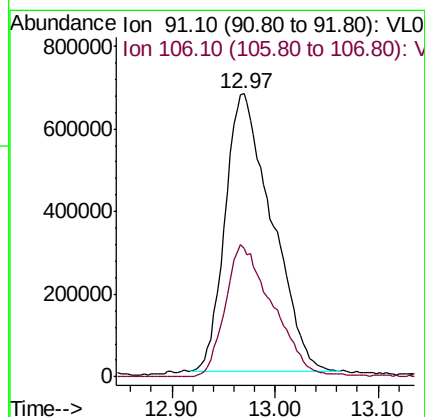
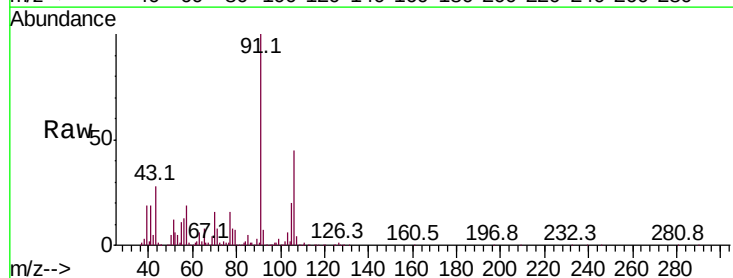
Acq: 7 Apr 2021 22:02

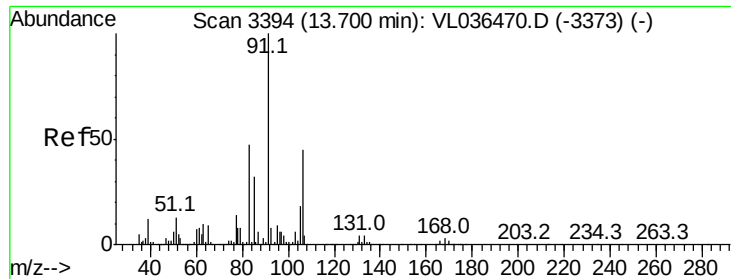
Tgt Ion: 91 Resp: 2130317

Ion Ratio Lower Upper

91 100

106 48.7 35.3 52.9





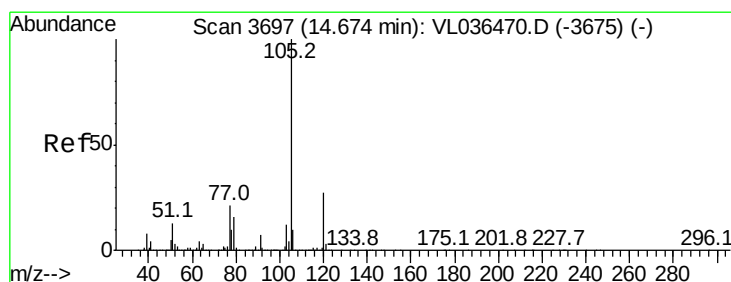
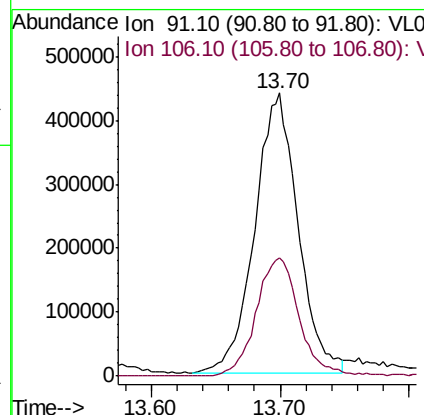
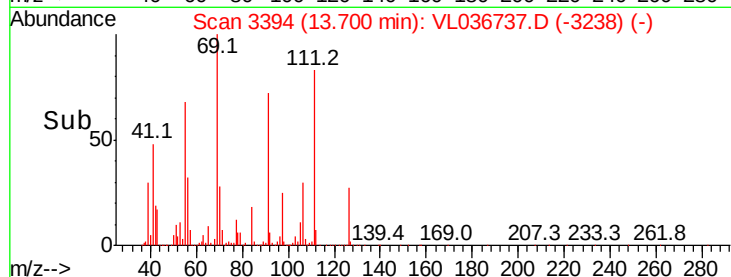
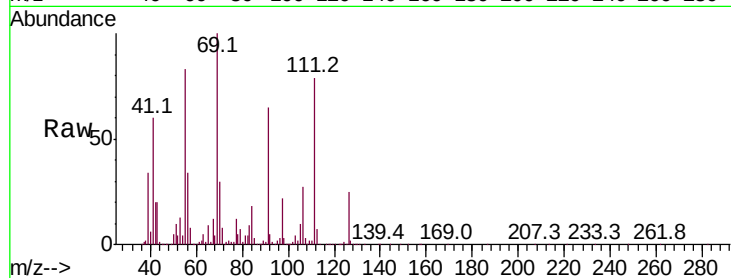
#60
o-Xylene
Concen: 2.893 ppbv
RT: 13.70 min Scan# 3394
Delta R.T. 0.00 min
Lab File: VL036737.D
Acq: 7 Apr 2021 22:02

Instrument :
MSVOA_L
ClientSampleId :
FS-SV01

Tot Ion: 91 Resp: 1025104
Ion Ratio Lower Upper
91 100
106 42.2 22.3 66.9

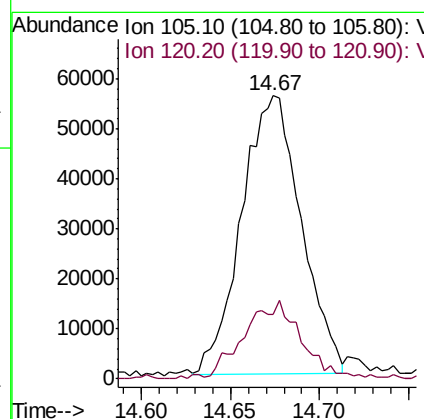
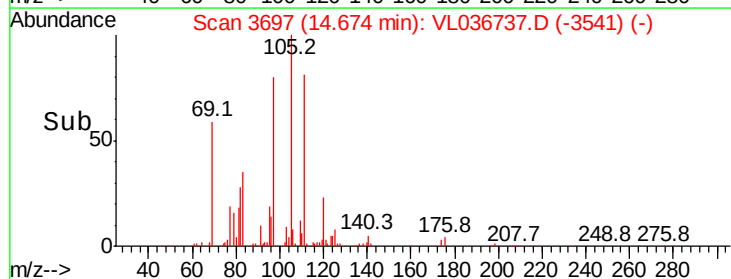
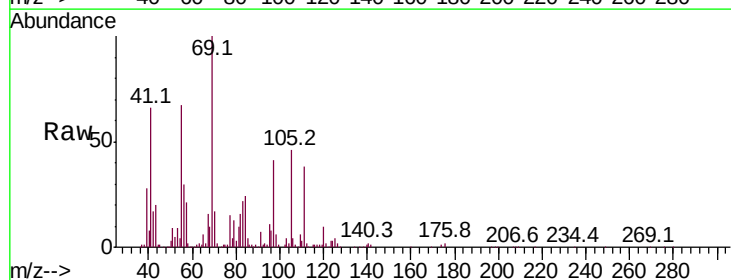
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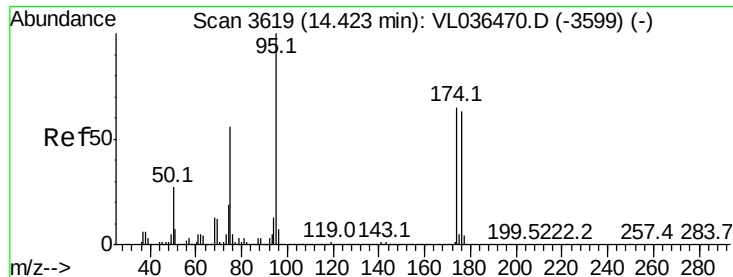
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#62
Isopropylbenzene
Concen: 0.272 ppbv
RT: 14.67 min Scan# 3697
Delta R.T. 0.00 min
Lab File: VL036737.D
Acq: 7 Apr 2021 22:02

Tgt Ion: 105 Resp: 129740
Ion Ratio Lower Upper
105 100
120 26.8 20.6 31.0





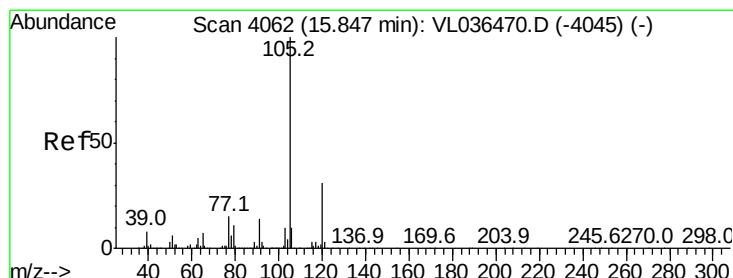
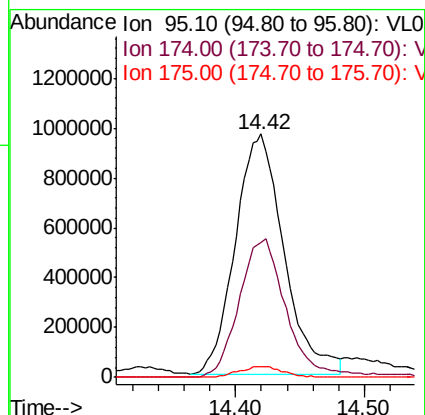
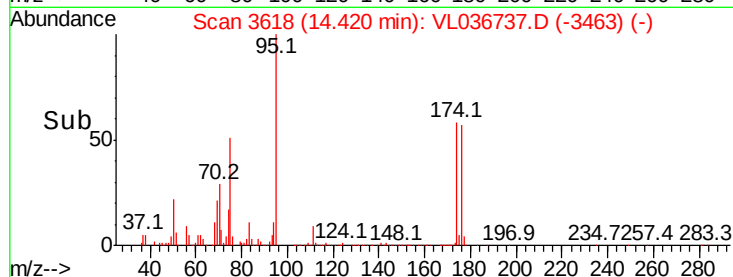
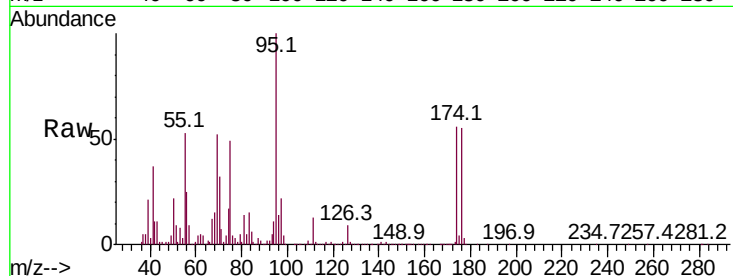
#68
1-Bromo-4-Fluorobenzene
Concen: 10.937 ppbv
RT: 14.42 min Scan# 3618
Delta R.T. -0.00 min
Lab File: VL036737.D
Acq: 7 Apr 2021 22:02

Instrument :
MSVOA_L
ClientSampled :
FS-SV01

Tot Ion	Ratio	Lower	Upper
95	100		
174	58.5	51.0	76.6
175	4.2	3.9	5.9

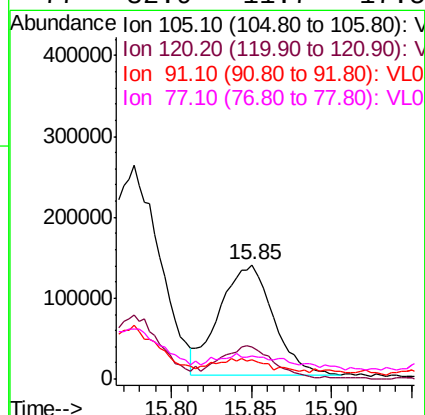
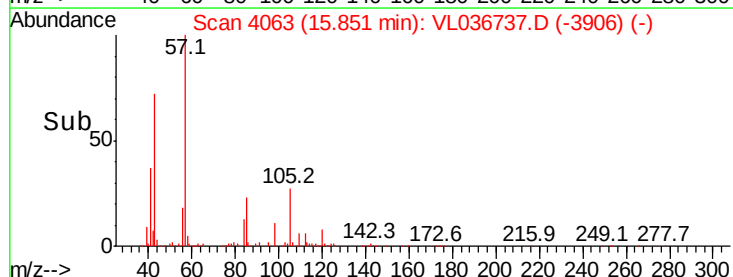
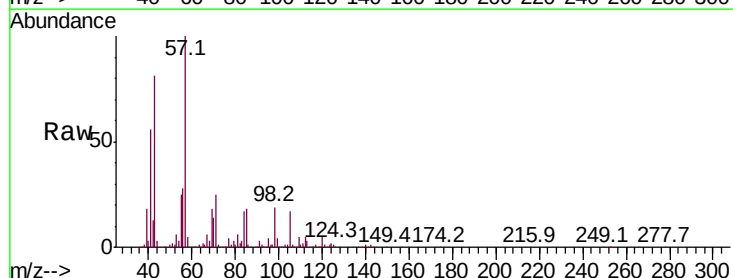
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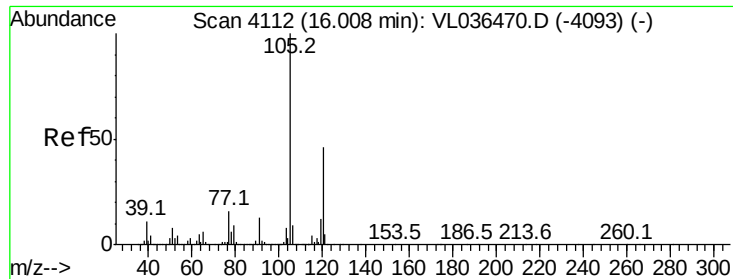
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#72
4-Ethyltoluene
Concen: 0.813 ppbv
RT: 15.85 min Scan# 4063
Delta R.T. 0.00 min
Lab File: VL036737.D
Acq: 7 Apr 2021 22:02

Tgt Ion	Ratio	Lower	Upper
105	100		
120	31.8	24.0	36.0
91	22.4	11.0	16.4#
77	32.9	11.7	17.5#





#73

1,3,5-Trimethylbenzene

Concen: 0.956 ppbv

RT: 16.01 min Scan# 4112

Delta R.T. 0.00 min

Lab File: VL036737.D

Acq: 7 Apr 2021 22:02

Instrument :

MSVOA_L

ClientSampleId :

FS-SV01

Tot Ion:105 Resp: 346419

Ion Ratio Lower Upper

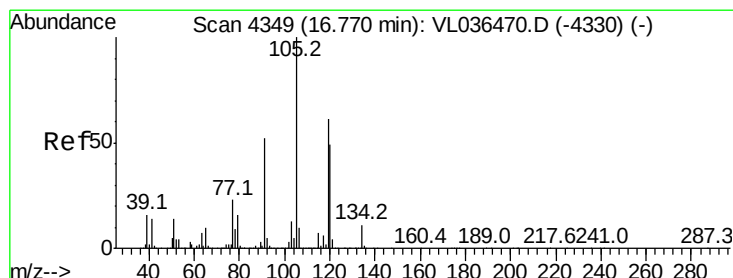
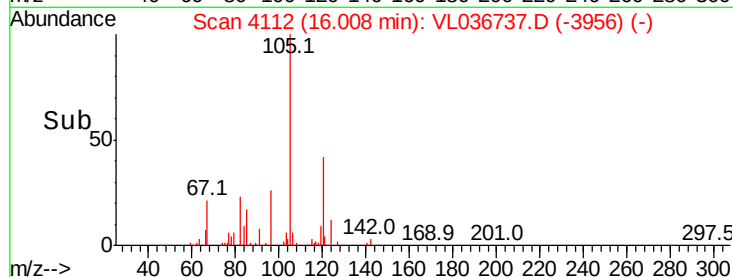
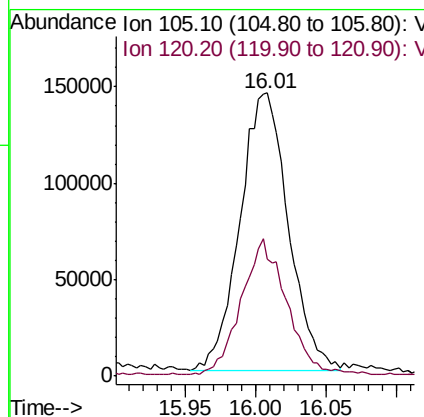
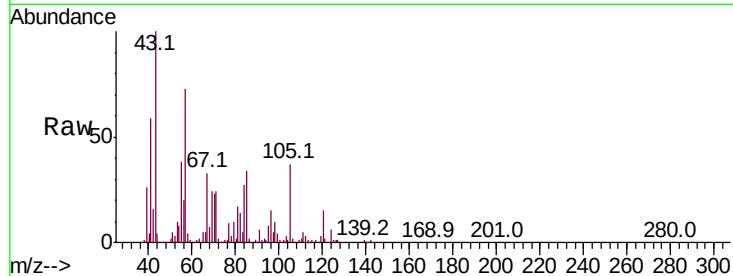
105 100

120 41.9 36.6 54.8

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#74

1,2,4-Trimethylbenzene

Concen: 0.997 ppbv

RT: 16.77 min Scan# 4350

Delta R.T. 0.00 min

Lab File: VL036737.D

Acq: 7 Apr 2021 22:02

Tgt Ion:105 Resp: 386547

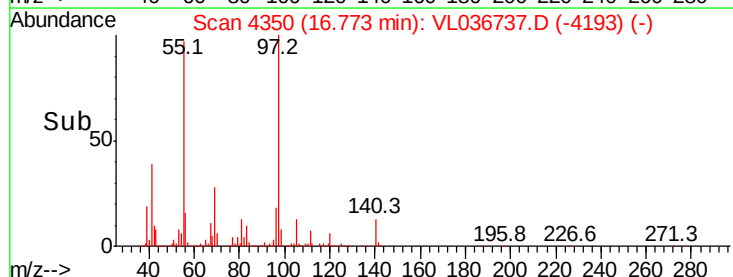
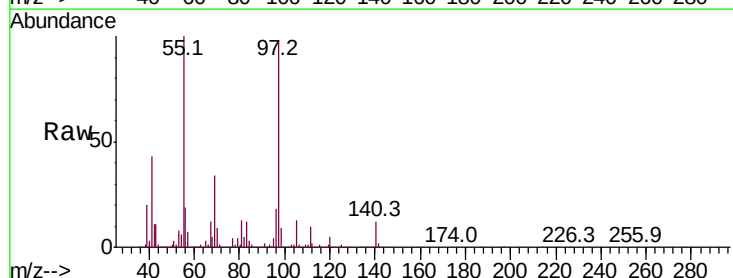
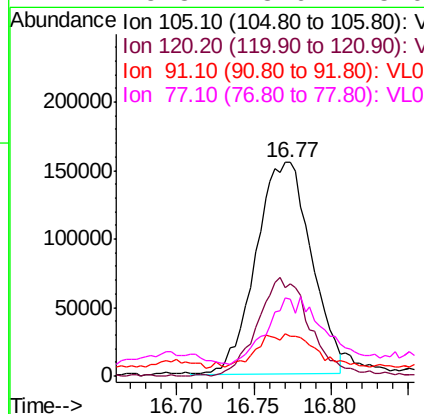
Ion Ratio Lower Upper

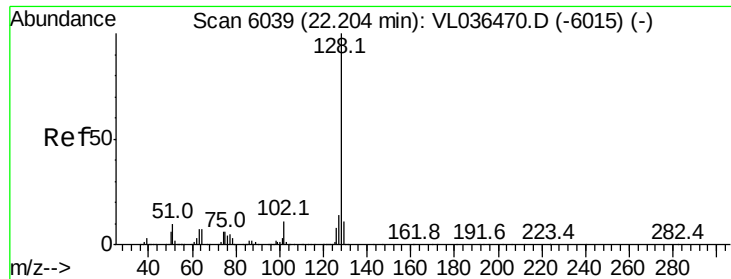
105 100

120 43.4 39.2 58.8

91 12.6 42.6 64.0#

77 25.8 18.6 28.0





#79

Naphthalene

Concen: 0.420 ppbv m

RT: 22.20 min Scan# 6038

Delta R.T. -0.00 min

Lab File: VL036737.D

Acq: 7 Apr 2021 22:02

Instrument :

MSVOA_L

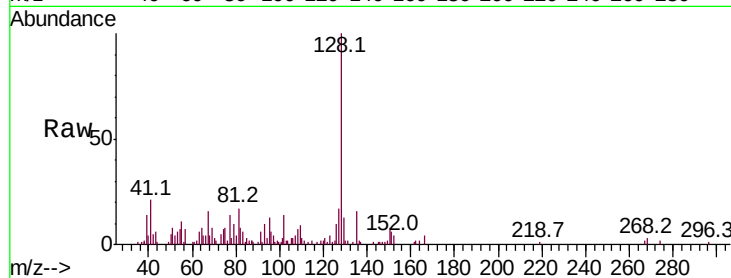
ClientSampleId :

FS-SV01

Tot Ion:	128	Resp:	95110
Ion Ratio	Lower	Upper	
128	100		
127	17.0	10.9	16.3#
129	12.8	9.0	13.4

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Abundance Ion 128.10 (127.80 to 128.80): V
Ion 127.10 (126.80 to 127.80): V
Ion 129.10 (128.80 to 129.80): V

