

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL042721\
 Data File : VL036867.D
 Acq On : 27 Apr 2021 21:11
 Operator : SY/AP
 Sample : M2172-09
 Misc : 400mL/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :

Quant Time: Apr 28 05:26:41 2021
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL042721AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LTue Apr 27 16:56:35 2021
 QLast Update : Tue Apr 27 16:56:35 2021
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.67	49	1428460	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.18	114	3373078	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.10	117	2930259	10.00	ppbv	0.01

System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	14.43	95	2232186	9.49	ppbv	0.02
Spiked Amount	10.000	Range	65 - 135	Recovery	=	94.90%

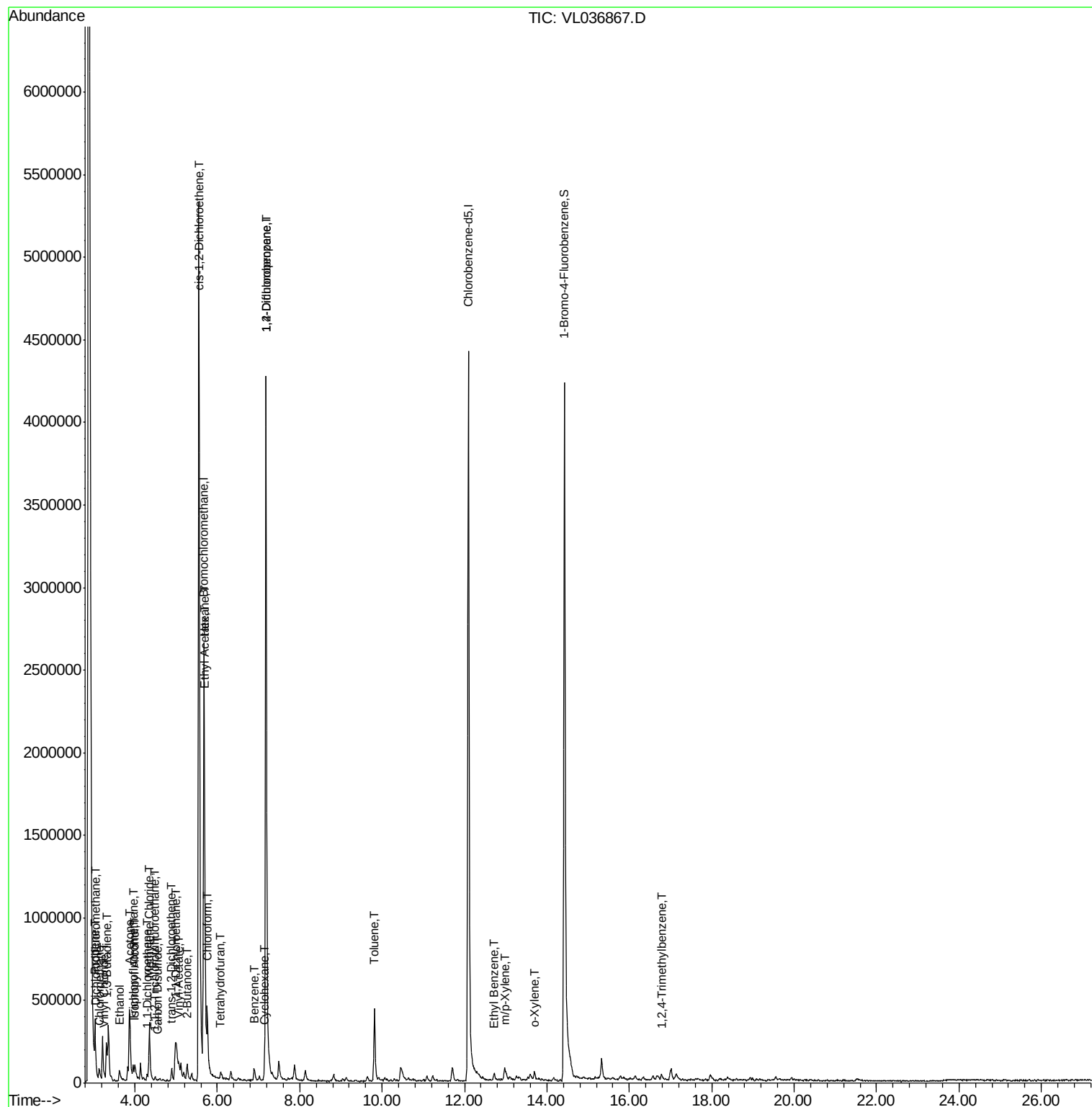
Target Compounds					Ovalue
2) Dichlorodifluoromethane	3.05	85	38772	0.172	ppbv 92
4) Chloromethane	3.15	50	30092	0.352	ppbv 92
5) Vinyl Chloride	3.26	62	7748	0.090	ppbv # 82
9) Propene	3.02	41	69851	0.881	ppbv 94
11) Trichlorofluoromethane	3.96	101	53216	0.265	ppbv 84
12) 1,1,2-Trichlorotrifluoroet	4.48	101	4744	0.035	ppbv # 11
13) Ethanol	3.62	45	41394	4.094	ppbv # 13
15) Acetone	3.86	43	552255	4.102	ppbv 96
16) 1,3-Butadiene	3.31	39	75672	0.879	ppbv # 20
18) 1,1-Dichloroethene	4.29	96	6570	0.112	ppbv # 85
19) Isopropyl Alcohol	3.99	45	58420	0.876	ppbv # 62
20) Methylene Chloride	4.35	84	121112	1.881	ppbv 97
22) trans-1,2-Dichloroethene	4.90	96	21024	0.359	ppbv # 78
23) Vinyl Acetate	5.08	43	14650	0.080	ppbv # 45
24) 1,1-Dichloroethane	5.01	63	50496	0.388	ppbv # 94
25) Ethyl Acetate	5.69	43	191069	0.581	ppbv # 89
26) Hexane	5.69	57	64671	0.420	ppbv # 1
27) Carbon Disulfide	4.56	76	6776	0.051	ppbv # 66
29) Chloroform	5.75	83	232215	0.968	ppbv 98
30) Cyclohexane	7.13	84	5298	0.043	ppbv # 1
31) cis-1,2-Dichloroethene	5.55	61	3530508	25.562	ppbv 98
34) 2-Butanone	5.27	43	133869	0.906	ppbv 99
36) Benzene	6.89	78	60874	0.214	ppbv # 94
39) 1,2-Dichloropropane	7.18	63	899308	7.898	ppbv # 24
41) Tetrahydrofuran	6.08	42	16077	0.249	ppbv # 48
53) Toluene	9.82	91	319951	1.076	ppbv 99
58) Ethyl Benzene	12.72	91	22645	0.061	ppbv 97
59) m/p-Xylene	13.00	91	17233	0.052	ppbv # 31
60) o-Xylene	13.71	91	16462	0.051	ppbv # 31
74) 1,2,4-Trimethylbenzene	16.78	105	14797	0.042	ppbv # 68

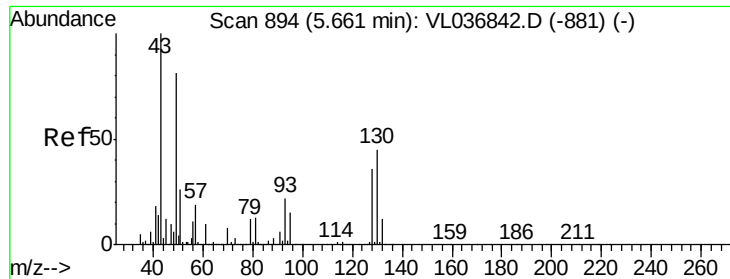
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA L\DATA\VL042721\
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Misc : 400mL/MSVOA L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :

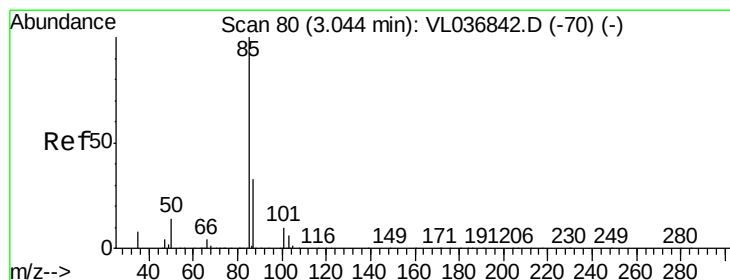
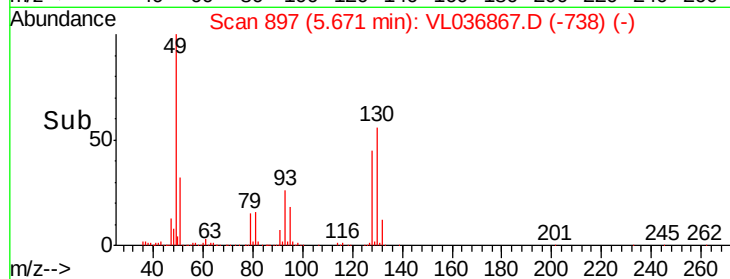
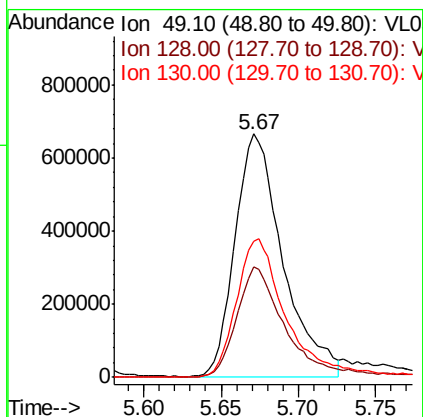
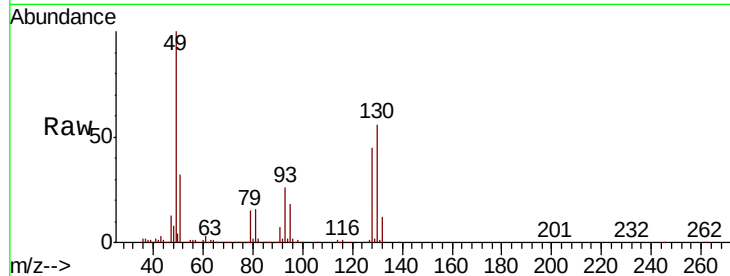
Quant Time: Apr 28 05:26:41 2021
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA L\METHODS\VL042721AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Tue Apr 27 16:56:35 2021
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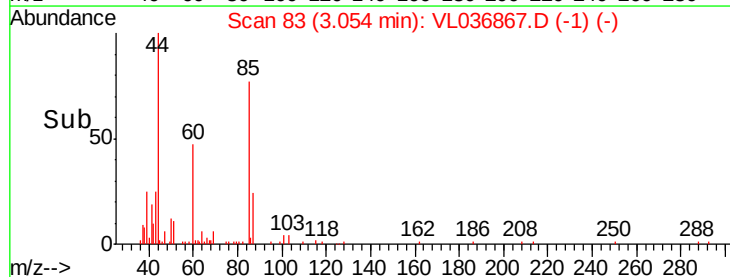
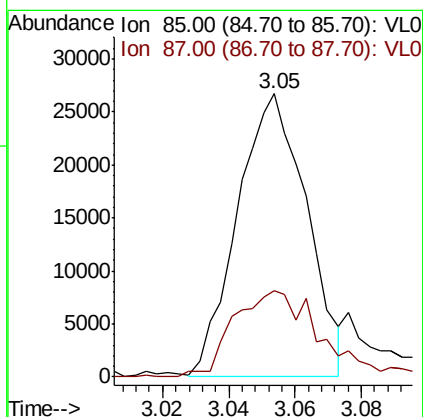
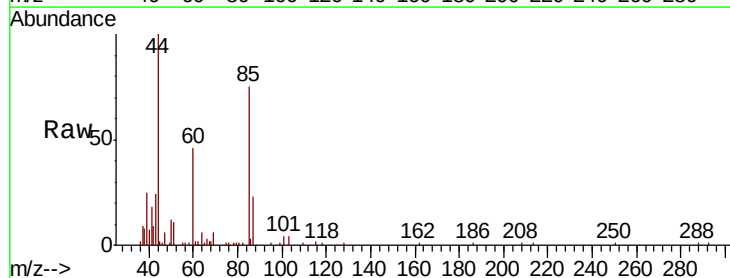
#1
 Bromochloromethane
 Concen: 10.000 ppbv
 RT: 5.67
 Instrument: MSVOA_1
 Delta R.T.:
 Lab File: ClientSampleId:
 Acq: 27 Apr 2021 21:11

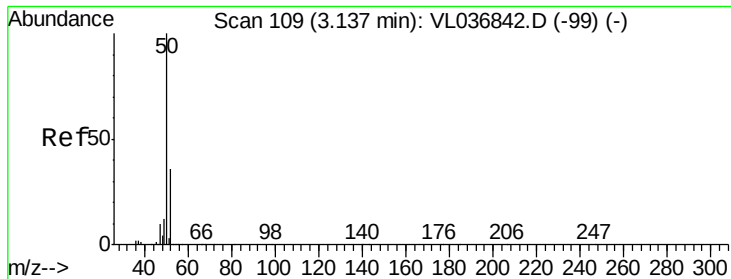
Tot Ion: 49 Resp: 1428460
 Ion Ratio Lower Upper
 49 100
 128 48.0 24.4 73.2
 130 61.0 30.3 90.8



#2
 Dichlorodifluoromethane
 Concen: 0.172 ppbv
 RT: 3.05 min Scan# 83
 Delta R.T. 0.01 min
 Lab File: VL036867.D
 Acq: 27 Apr 2021 21:11

Tgt Ion: 85 Resp: 38772
 Ion Ratio Lower Upper
 85 100
 87 28.4 26.2 39.2





#4

Chloromethane

Concen: 0.352 ppbv

RT: 3.15 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

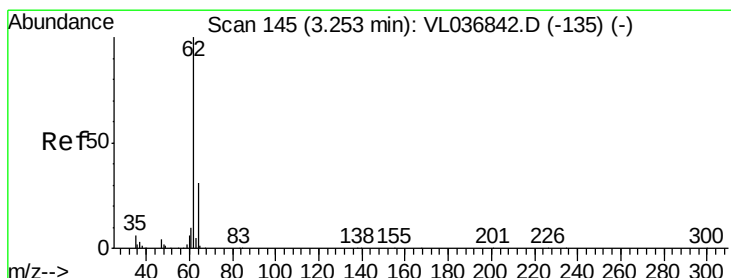
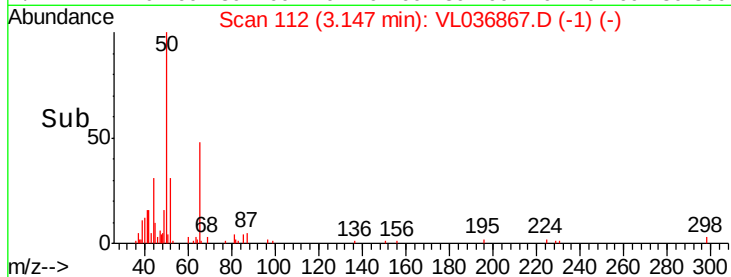
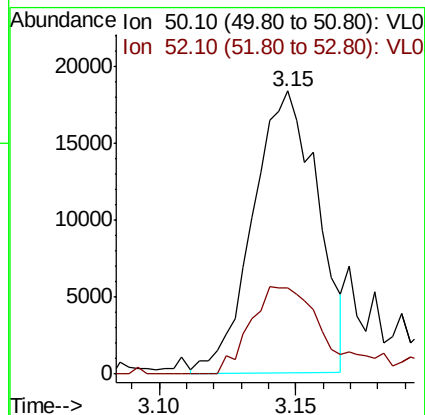
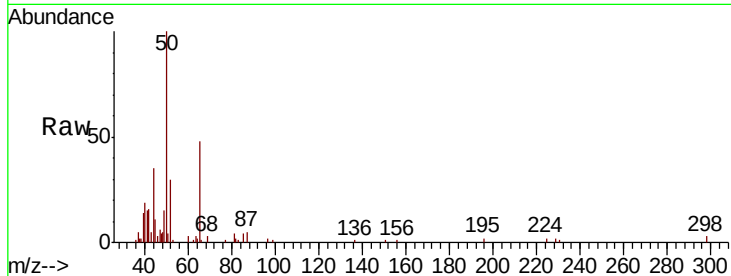
Acq: 27 Apr 2021 21:11

Tot Ion: 50 Resp: 30092

Ion Ratio Lower Upper

50 100

52 30.8 28.5 42.7



#5

Vinyl Chloride

Concen: 0.090 ppbv

RT: 3.26 min Scan# 147

Delta R.T. 0.01 min

Lab File: VL036867.D

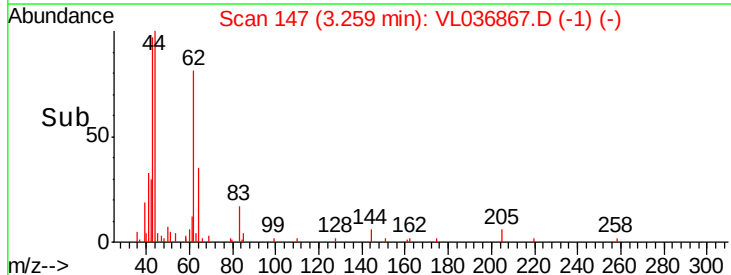
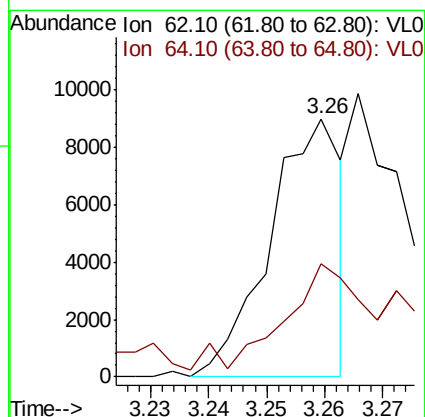
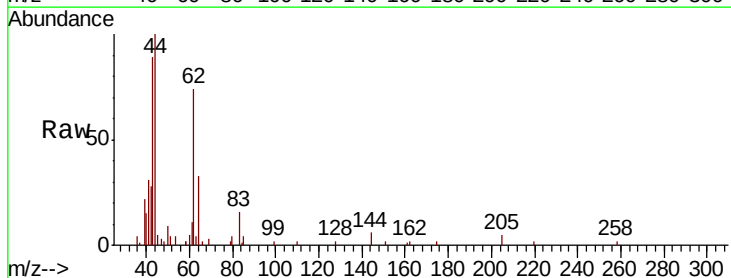
Acq: 27 Apr 2021 21:11

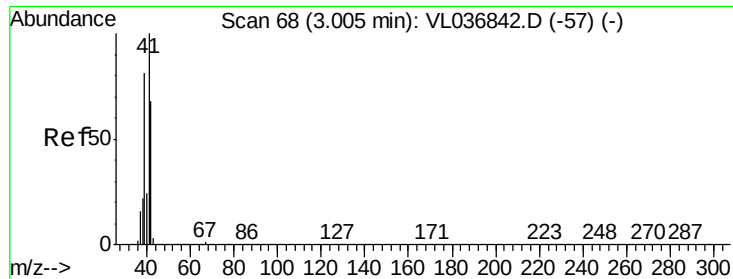
Tgt Ion: 62 Resp: 7748

Ion Ratio Lower Upper

62 100

64 40.9 25.0 37.4#





#9

Propene

Concen: 0.881 ppbv

RT: 3.02 Instrument:

Delta R.T. MSVOA.L

Lab File: ClientSampleId:

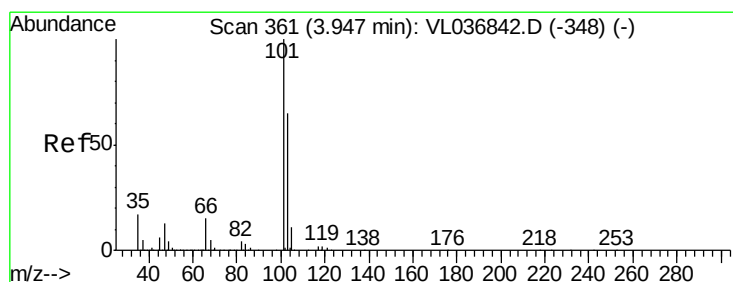
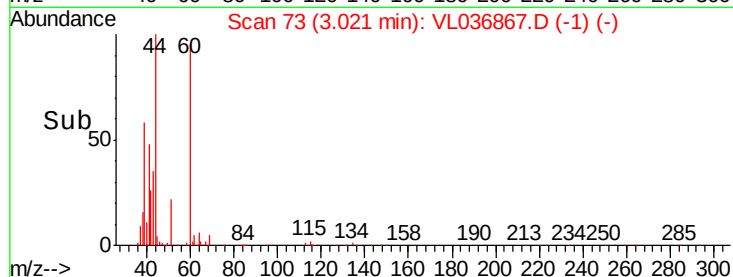
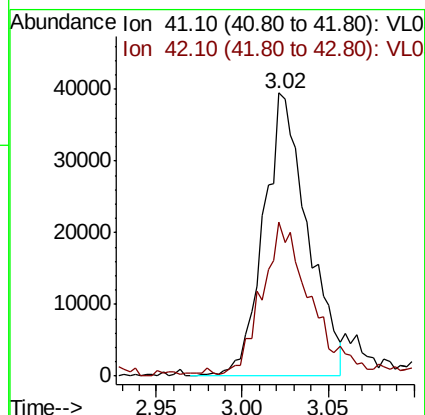
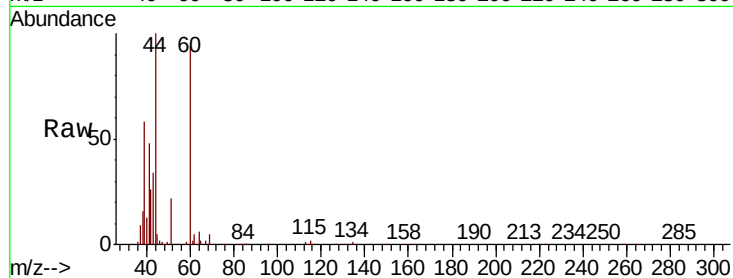
Acq: 27 Apr 2021 21:11

Tot Ion: 41 Resp: 69851

Ion Ratio Lower Upper

41 100

42 65.3 56.0 84.0



#11

Trichlorofluoromethane

Concen: 0.265 ppbv

RT: 3.96 min Scan# 364

Delta R.T. 0.01 min

Lab File: VL036867.D

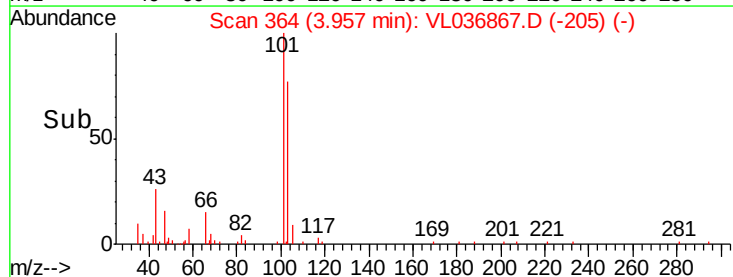
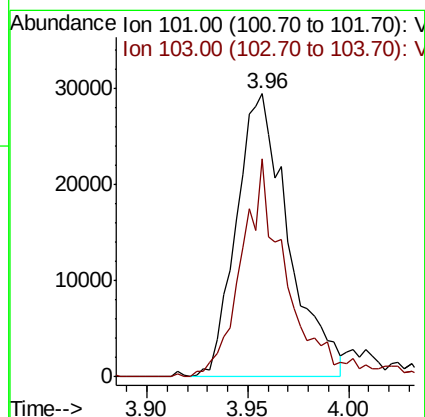
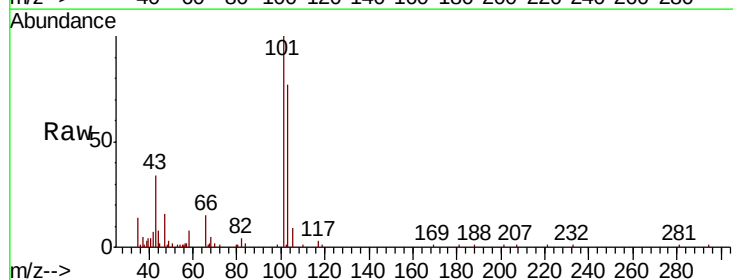
Acq: 27 Apr 2021 21:11

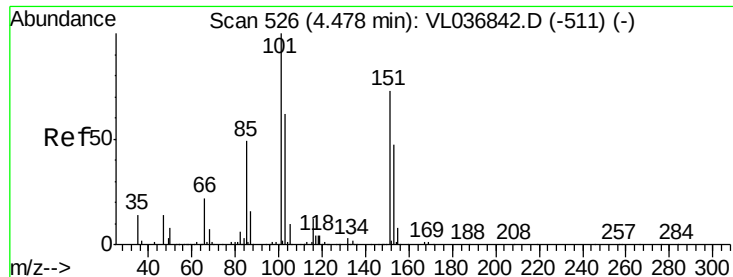
Tgt Ion: 101 Resp: 53216

Ion Ratio Lower Upper

101 100

103 77.0 51.6 77.4





#12

1,1,2-Trichlorotrifluoroethane

Concen: 0.035 ppbv

RT: 4.48 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

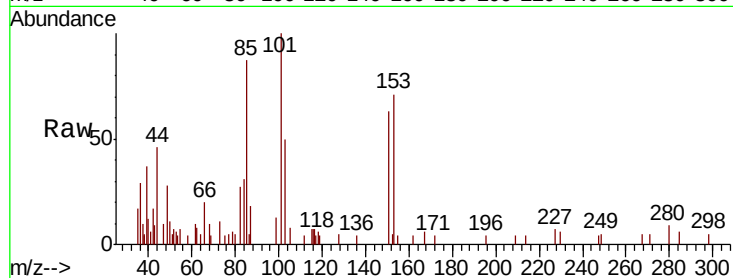
Acq: 27 Apr 2021 21:11

Tot Ion:101 Resp: 4744

Ion Ratio Lower Upper

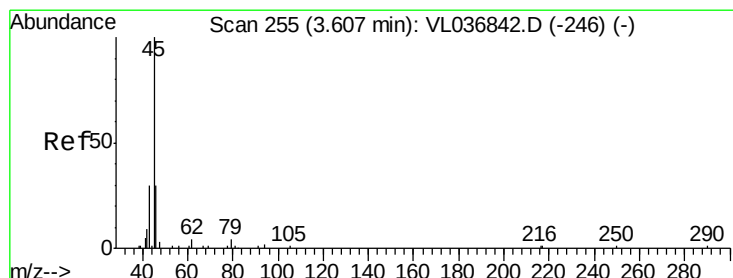
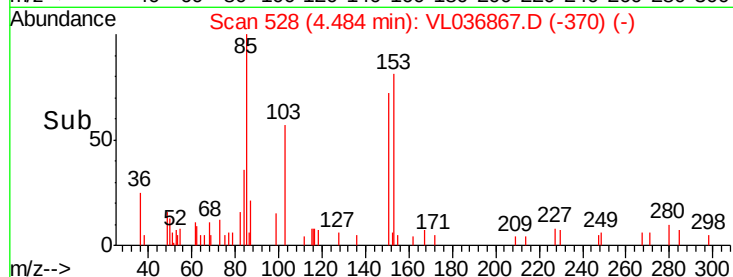
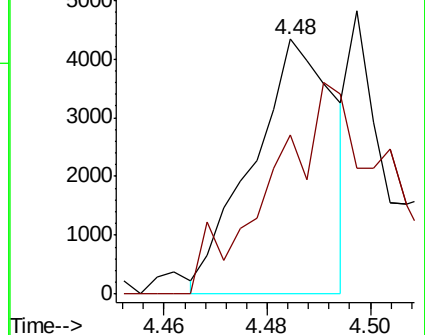
101 100

151 0.0 61.1 91.7#



Abundance Ion 101.00 (100.70 to 101.70): V

Ion 151.00 (150.70 to 151.70): V



#13

Ethanol

Concen: 4.094 ppbv

RT: 3.62 min Scan# 260

Delta R.T. 0.02 min

Lab File: VL036867.D

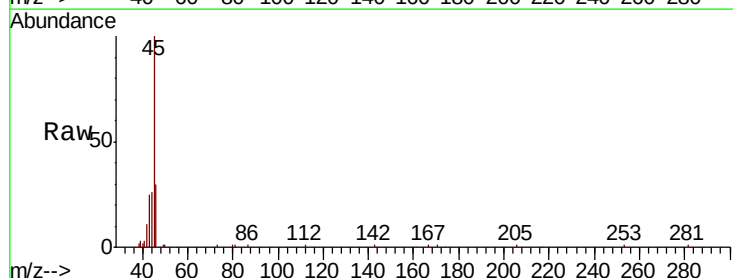
Acq: 27 Apr 2021 21:11

Tgt Ion: 45 Resp: 41394

Ion Ratio Lower Upper

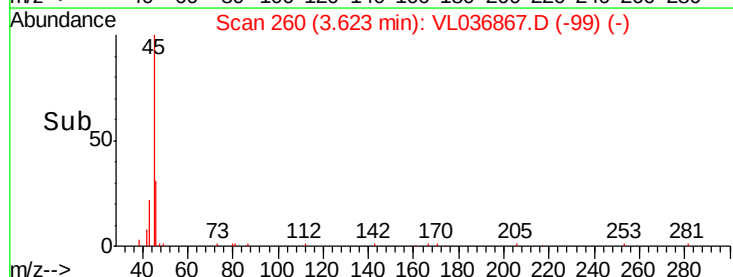
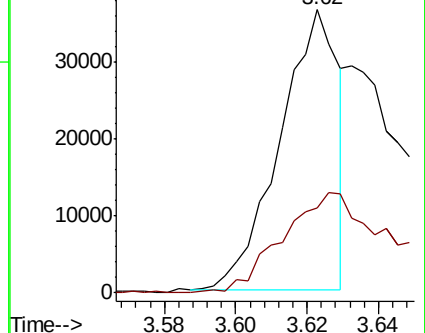
45 100

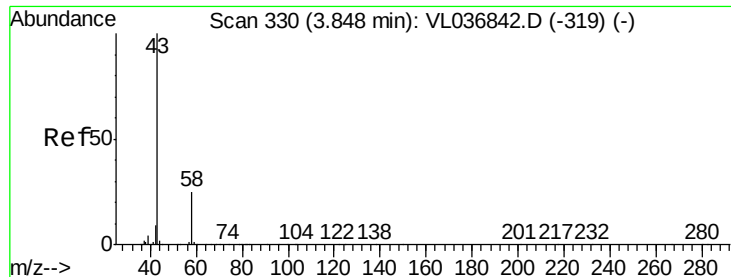
46 97.0 16.8 67.4#



Abundance Ion 45.10 (44.80 to 45.80): VL0

Ion 46.10 (45.80 to 46.80): VL0





#15

Acetone

Concen: 4.102 ppbv

RT: 3.86 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

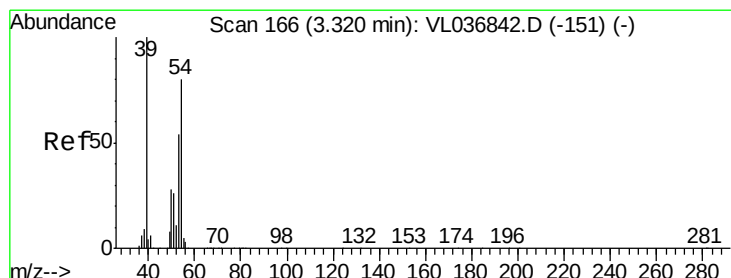
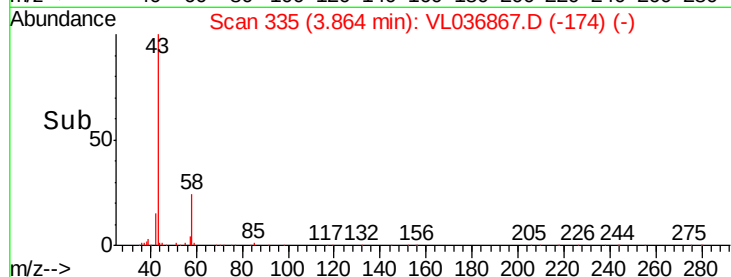
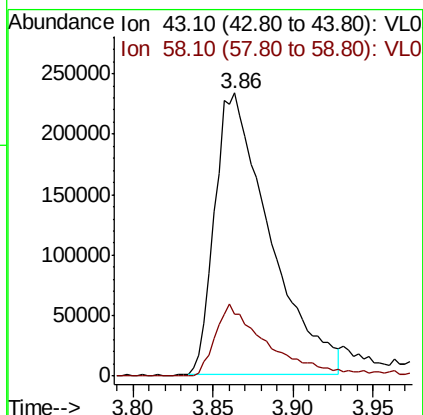
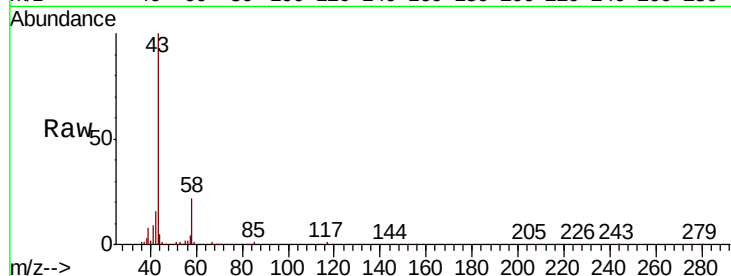
Acq: 27 Apr 2021 21:11

Tot Ion: 43 Resp: 552255

Ion Ratio Lower Upper

43 100

58 24.9 21.7 32.5



#16

1,3-Butadiene

Concen: 0.879 ppbv

RT: 3.31 min Scan# 163

Delta R.T. -0.01 min

Lab File: VL036867.D

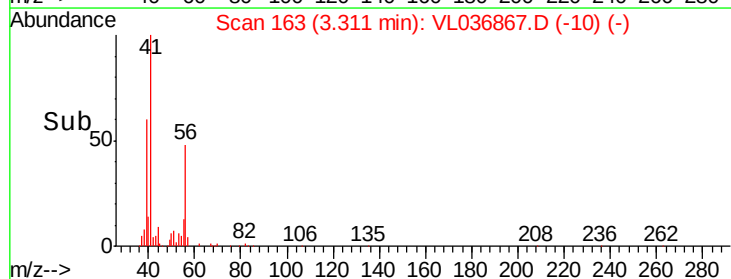
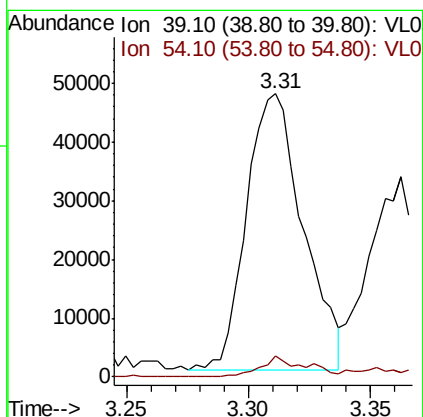
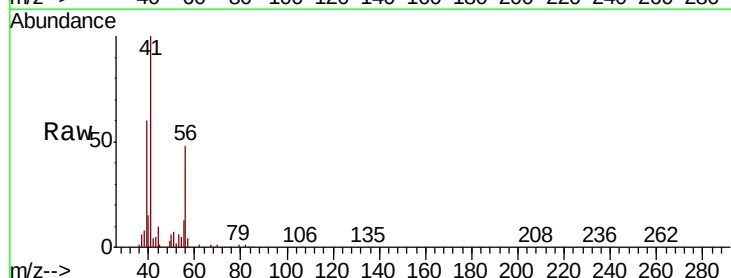
Acq: 27 Apr 2021 21:11

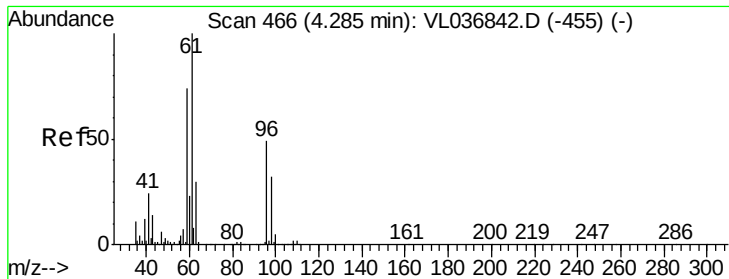
Tgt Ion: 39 Resp: 75672

Ion Ratio Lower Upper

39 100

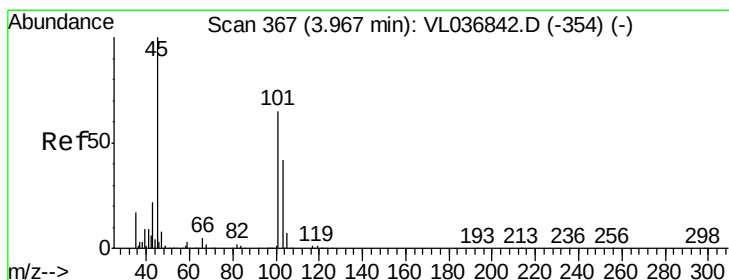
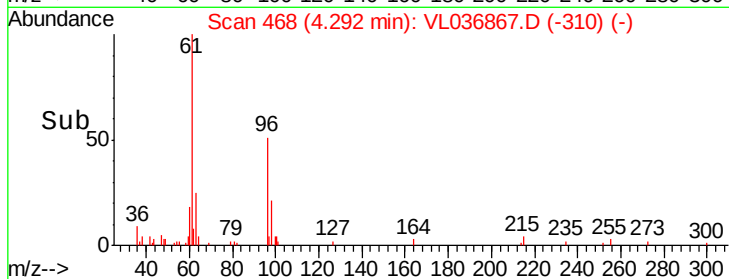
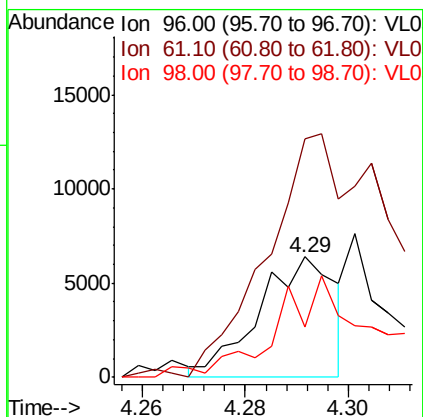
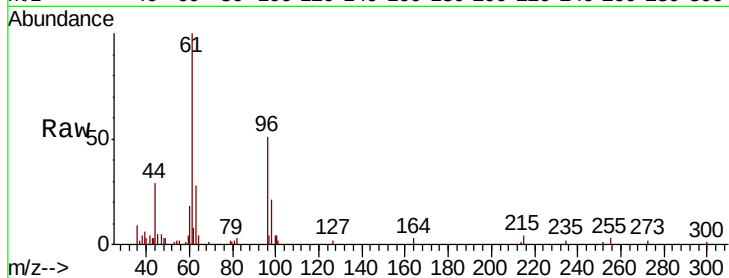
54 6.6 59.6 89.4#





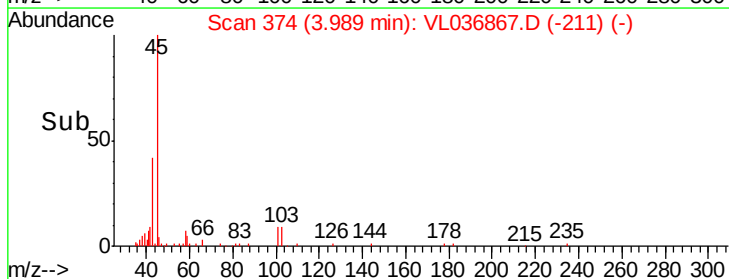
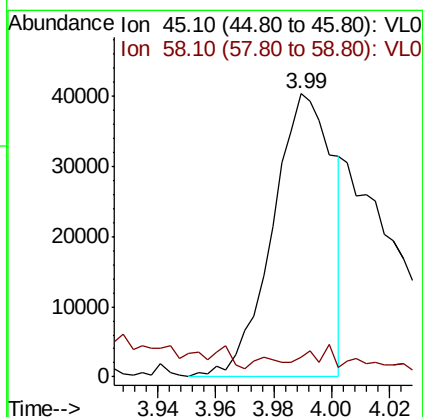
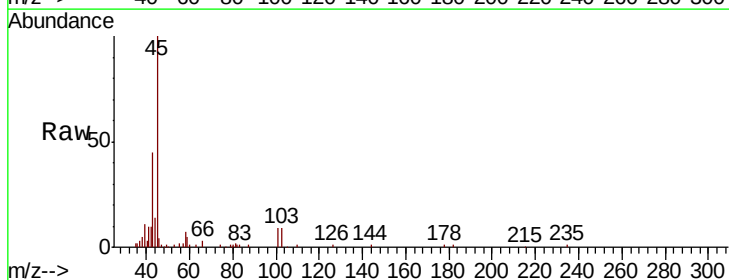
#18
 1,1-Dichloroethene
 Concen: 0.112 ppbv
 RT: 4.29 Instrument :
 Delta R.T. MSVOA_L
 Lab File: ClientSampleId :
 Acq: 27 Apr 2021 21:11

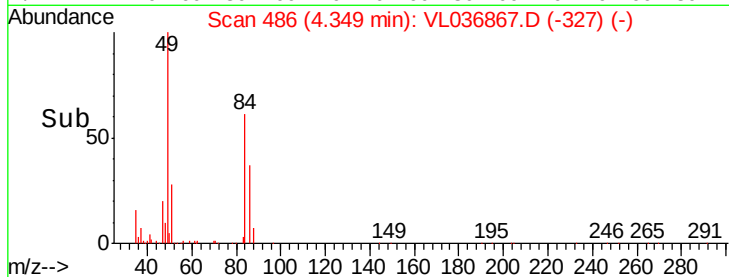
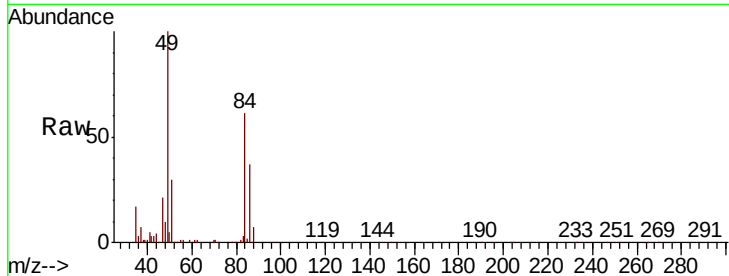
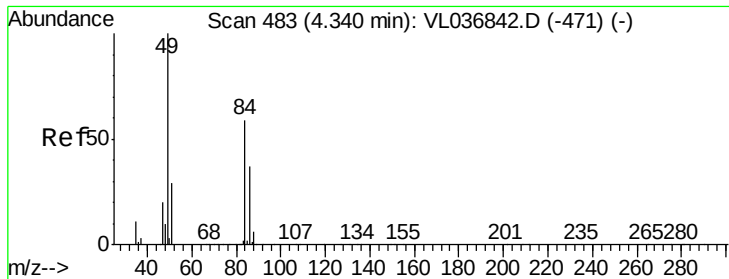
Tot Ion: 96 Resp: 6570
 Ion Ratio Lower Upper
 96 100
 61 216.7 162.2 243.2
 98 37.9 51.8 77.6#



#19
 Isopropyl Alcohol
 Concen: 0.876 ppbv
 RT: 3.99 min Scan# 374
 Delta R.T. 0.02 min
 Lab File: VL036867.D
 Acq: 27 Apr 2021 21:11

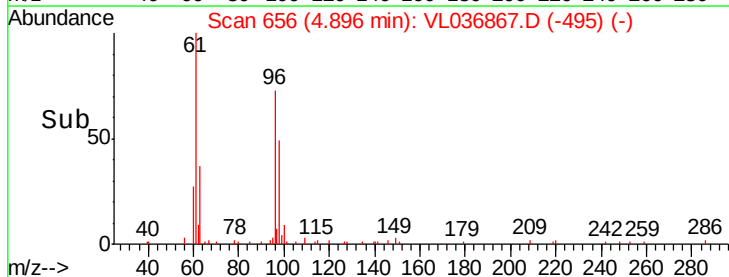
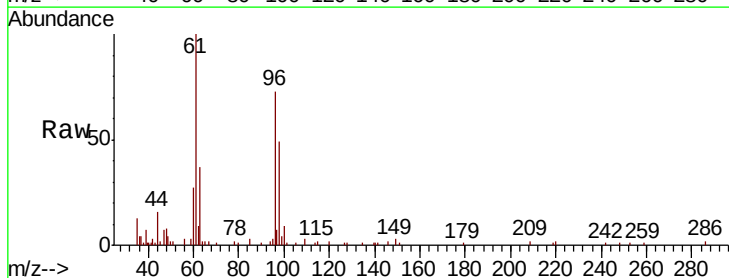
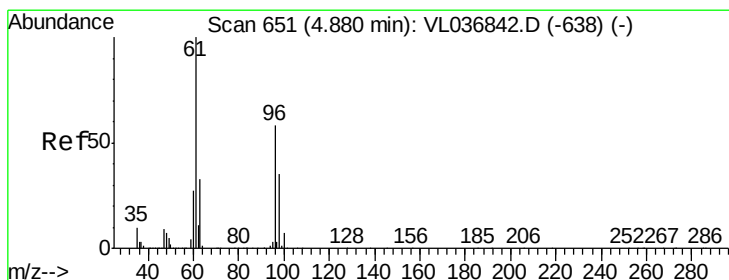
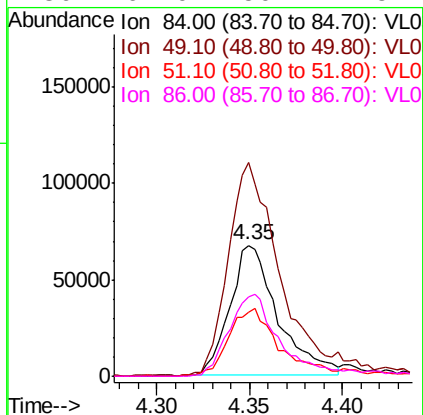
Tgt Ion: 45 Resp: 58420
 Ion Ratio Lower Upper
 45 100
 58 16.0 2.8 4.2#





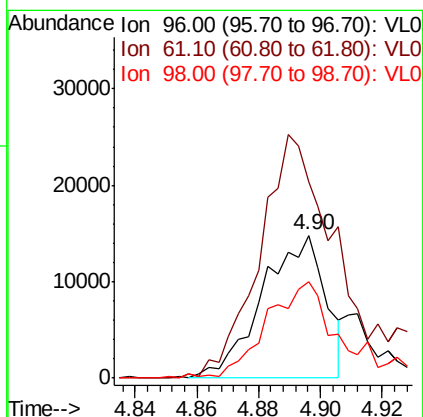
#20
Methvlene Chloride
Concen: 1.881 ppbv
RT: 4.35
Instrument: MSVOA_1
Delta R.T.:
Lab File: ClientSampleId :
Acq: 27 Apr 2021 21:11

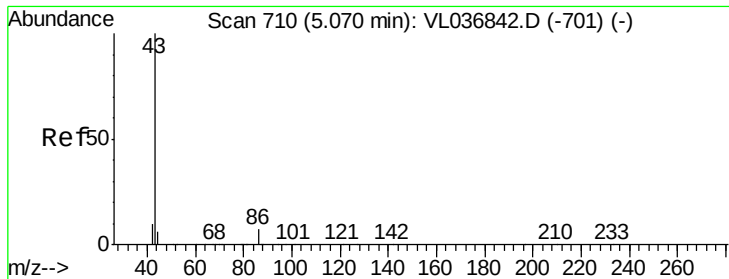
Tot Ion:	84	Resp:	121112
Ion	Ratio	Lower	Upper
84	100		
49	163.3	135.4	203.0
51	48.5	39.3	58.9
86	61.0	50.2	75.2



#22
trans-1,2-Dichloroethene
Concen: 0.359 ppbv
RT: 4.90 min Scan# 656
Delta R.T. 0.02 min
Lab File: VL036867.D
Acq: 27 Apr 2021 21:11

Tgt Ion:	96	Resp:	21024
Ion	Ratio	Lower	Upper
96	100		
61	133.8	138.6	207.8#
98	64.2	48.1	72.1





#23

Vinyl Acetate

Concen: 0.080 ppbv

RT: 5.08 Instrument:

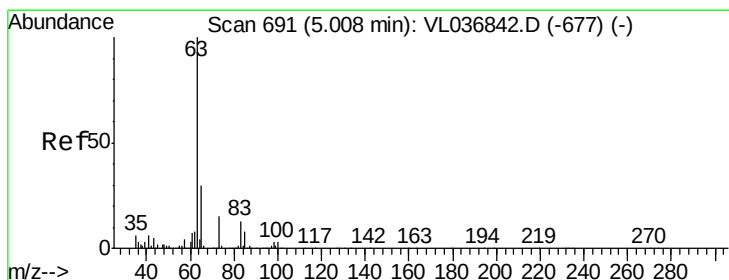
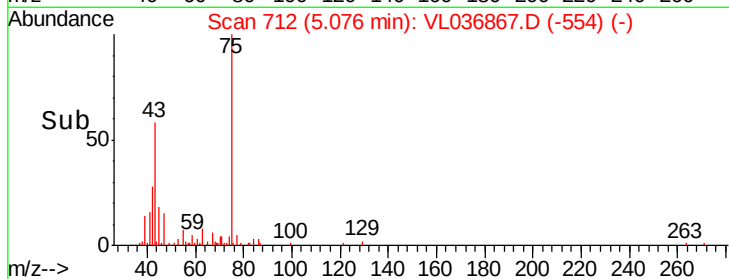
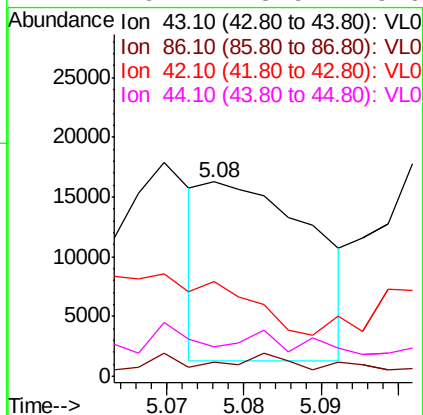
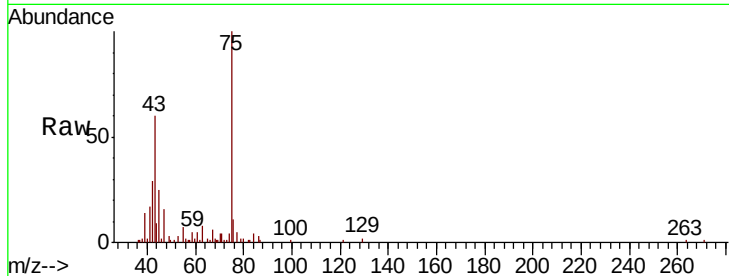
Delta R.T. MSVOA_L

Lab File: ClientSampleId:

Acq: 27 Apr 2021 21:11

Tot Ion: 43 Resp: 14650

Ion	Ratio	Lower	Upper
43	100		
86	6.3	5.3	7.9
42	51.4	8.7	13.1#
44	0.7	3.9	5.9#



#24

1,1-Dichloroethane

Concen: 0.388 ppbv

RT: 5.01 min Scan# 693

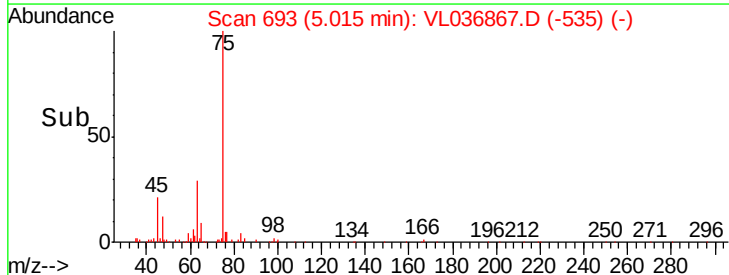
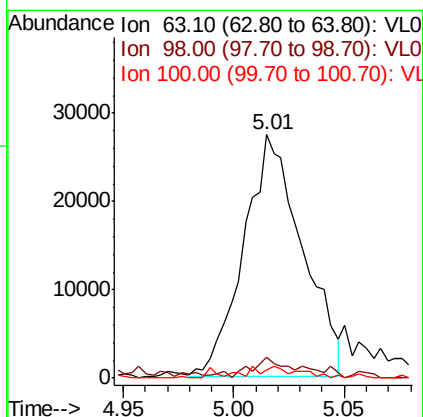
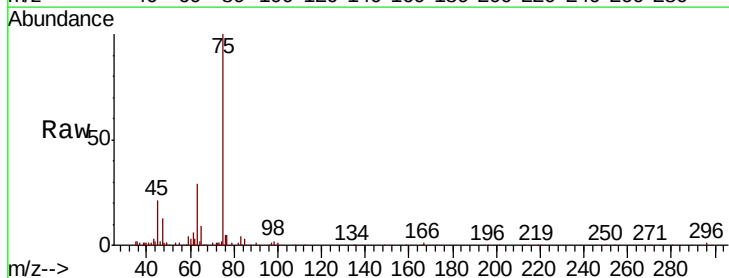
Delta R.T. 0.01 min

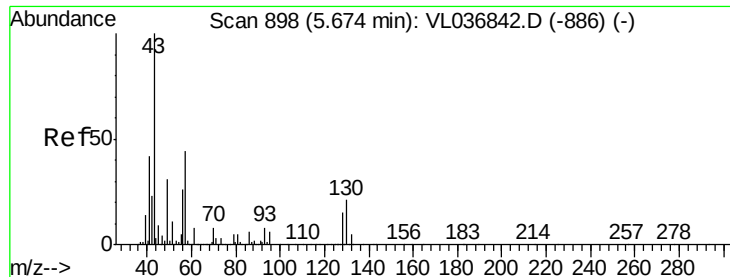
Lab File: VL036867.D

Acq: 27 Apr 2021 21:11

Tgt Ion: 63 Resp: 50496

Ion	Ratio	Lower	Upper
63	100		
98	6.5	1.7	5.1#
100	3.2	1.3	3.8





#25

Ethyl Acetate

Concen: 0.581 ppbv

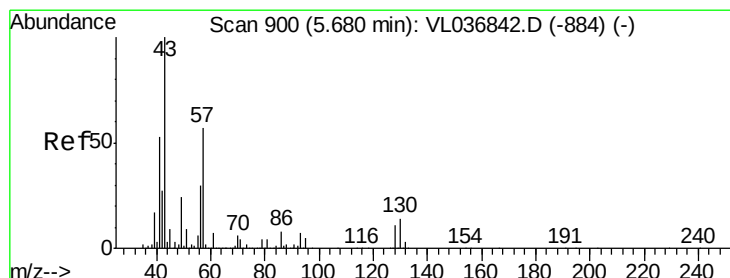
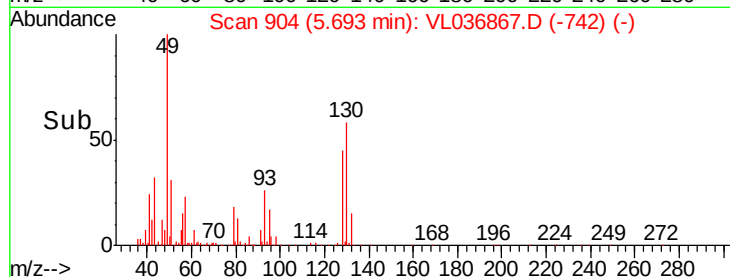
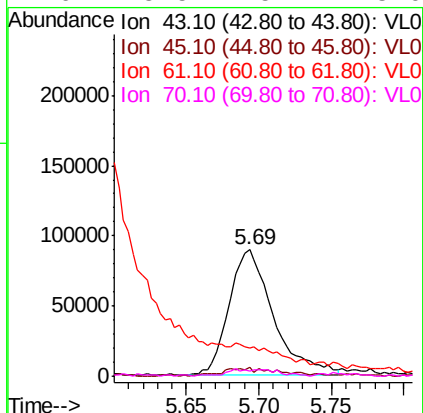
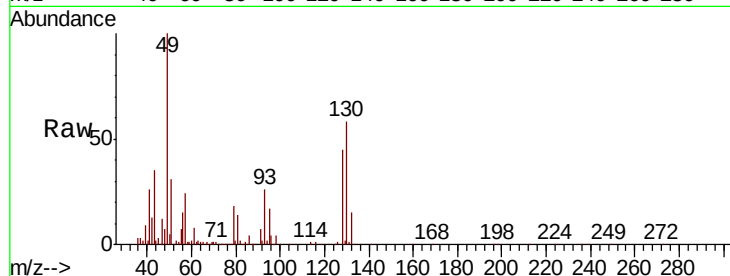
RT: 5.69 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

Acq: 27 Apr 2021 21:11

Tot Ion:	43	Resp:	191069
Ion	Ratio	Lower	Upper
43	100		
45	11.1	7.8	11.8
61	0.0	7.4	11.0#
70	5.5	5.4	8.0



#26

Hexane

Concen: 0.420 ppbv

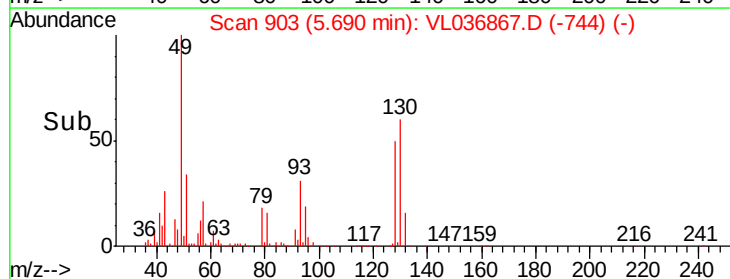
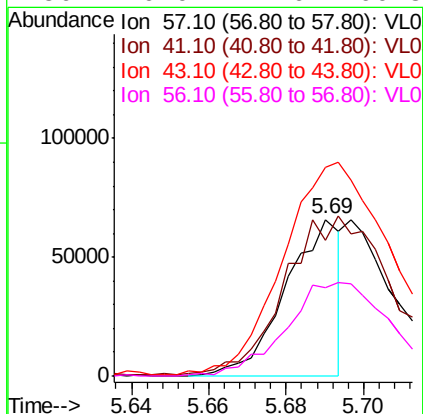
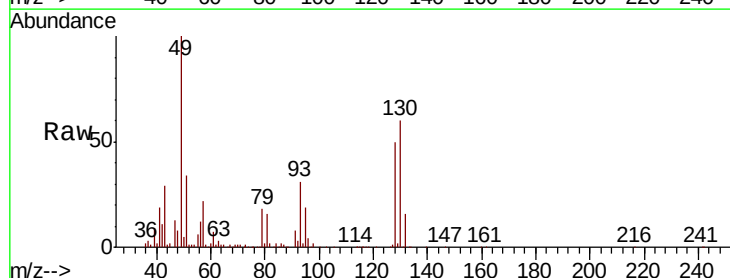
RT: 5.69 min Scan# 903

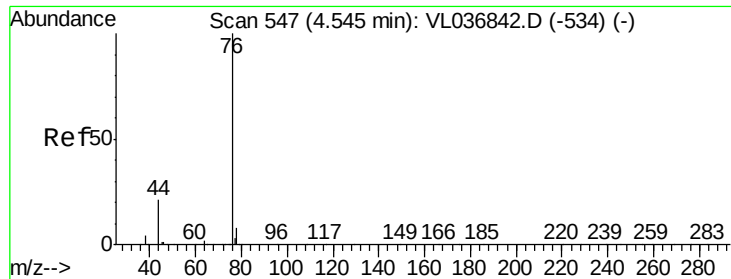
Delta R.T. 0.01 min

Lab File: VL036867.D

Acq: 27 Apr 2021 21:11

Tgt Ion:	57	Resp:	64671
Ion	Ratio	Lower	Upper
57	100		
41	0.0	77.7	116.5#
43	0.0	180.5	270.7#
56	0.0	44.6	66.8#





#27

Carbon Disulfide

Concen: 0.051 ppbv

RT: 4.56 Instrument:

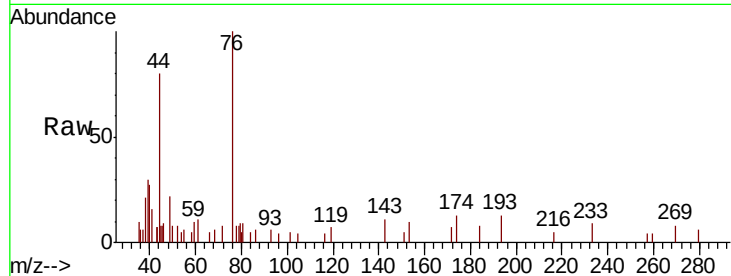
Delta R.T. MSVOA_L

Lab File: ClientSampleId:

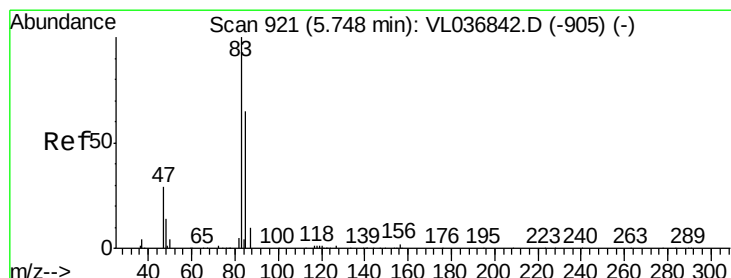
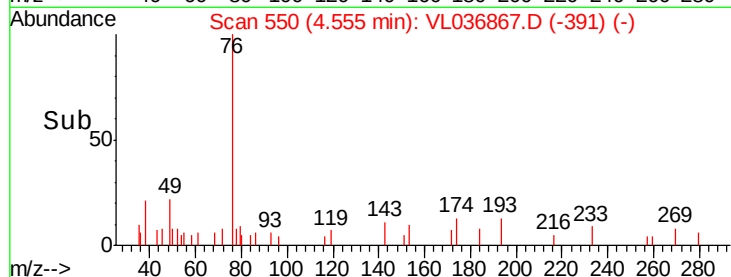
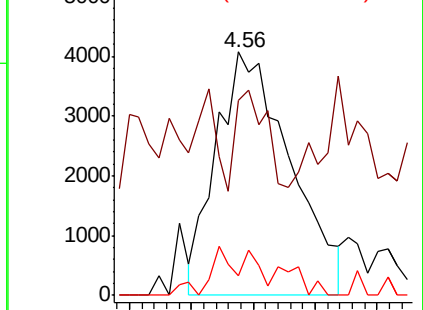
Acq: 27 Apr 2021 21:11

Tot Ion: 76 Resp: 6776

Ion	Ratio	Lower	Upper
76	100		
44	44.0	16.9	25.3#
78	10.6	7.9	11.9



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: 0.968 ppbv

RT: 5.75 min Scan# 923

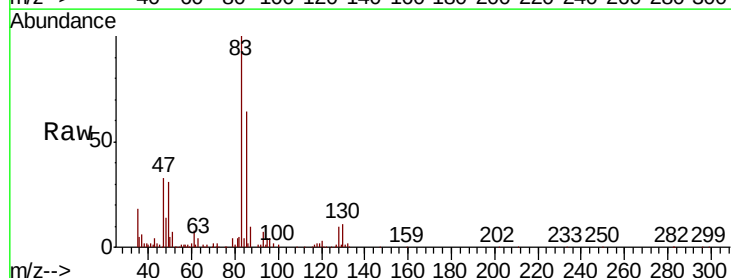
Delta R.T. 0.01 min

Lab File: VL036867.D

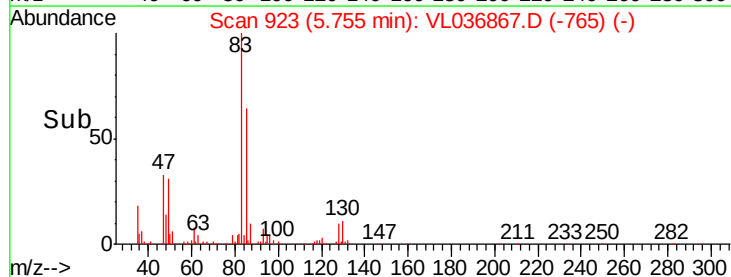
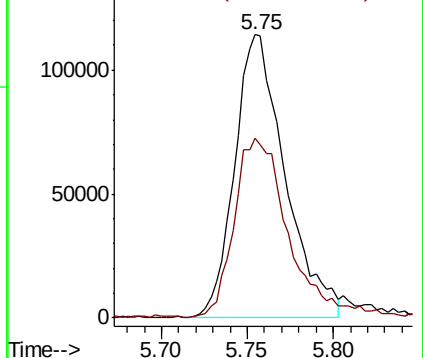
Acq: 27 Apr 2021 21:11

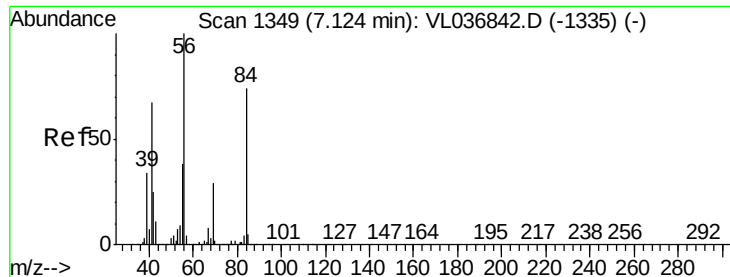
Tgt Ion: 83 Resp: 232215

Ion	Ratio	Lower	Upper
83	100		
85	63.4	52.2	78.4



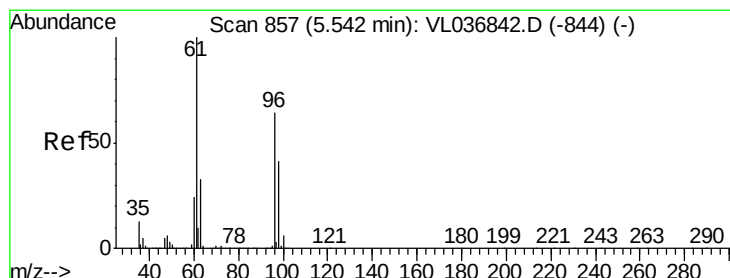
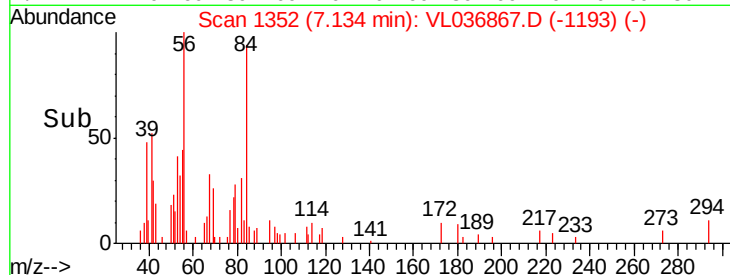
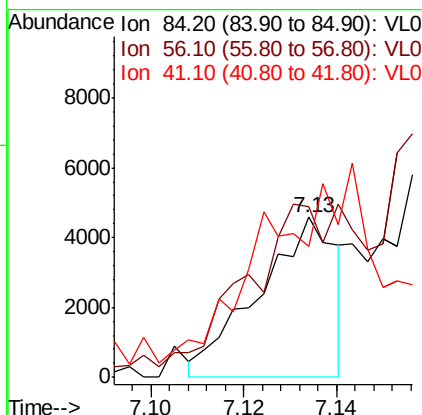
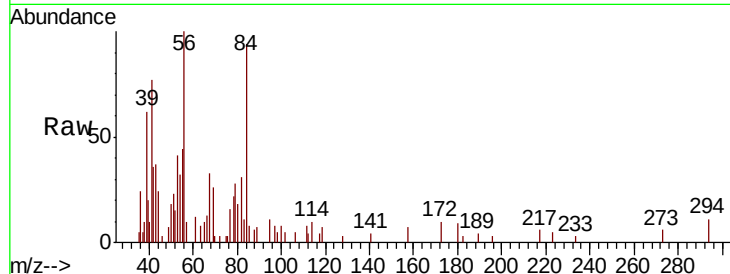
Abundance Ion 83.00 (82.70 to 83.70): VL0
Ion 85.00 (84.70 to 85.70): VL0





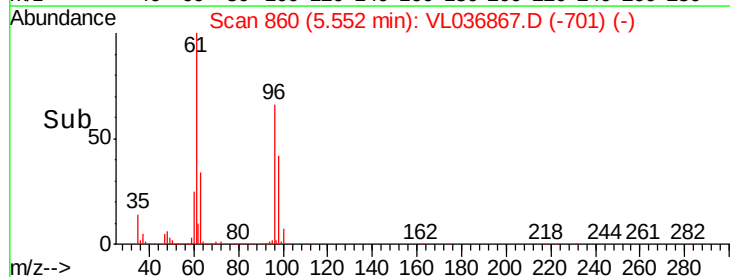
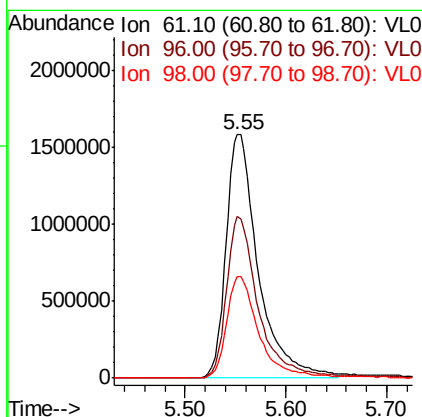
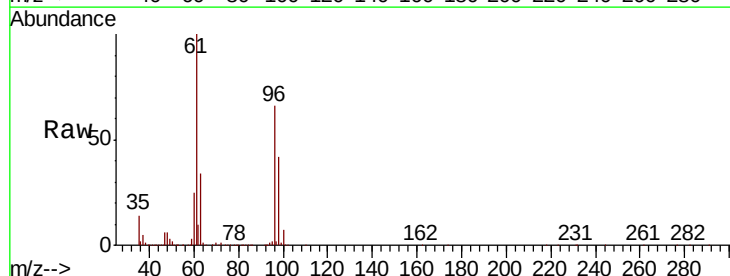
#30
Cvclohexane
Concen: 0.043 ppbv
RT: 7.13
Delta R.T. MSVOA_L
Lab File: ClientSampleId :
Acq: 27 Apr 2021 21:11

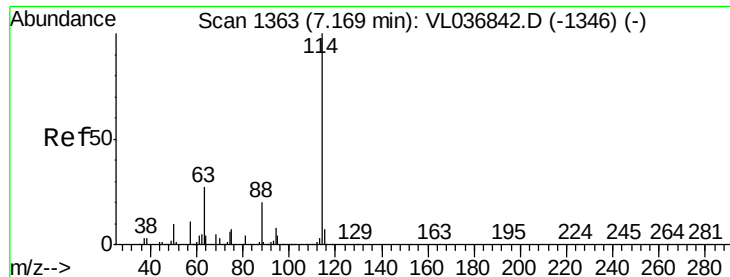
Tot Ion: 84 Resp: 5298
Ion Ratio Lower Upper
84 100
56 0.0 115.8 173.6#
41 263.9 74.6 111.8#



#31
cis-1,2-Dichloroethene
Concen: 25.562 ppbv
RT: 5.55 min Scan# 860
Delta R.T. 0.01 min
Lab File: VL036867.D
Acq: 27 Apr 2021 21:11

Tgt Ion: 61 Resp: 3530508
Ion Ratio Lower Upper
61 100
96 66.2 51.0 76.6
98 41.9 32.7 49.1

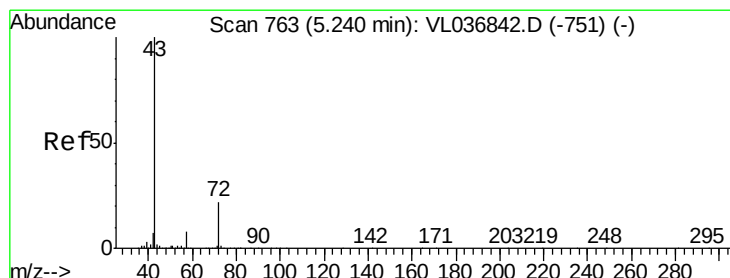
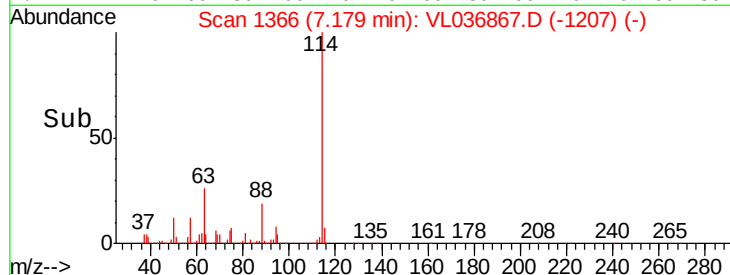
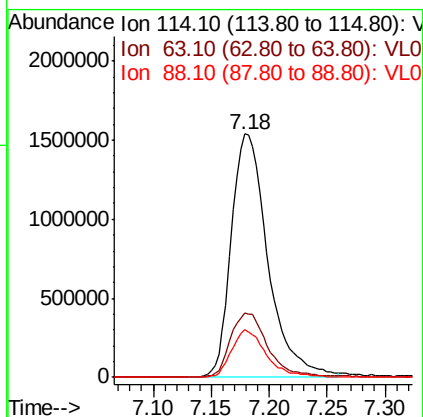
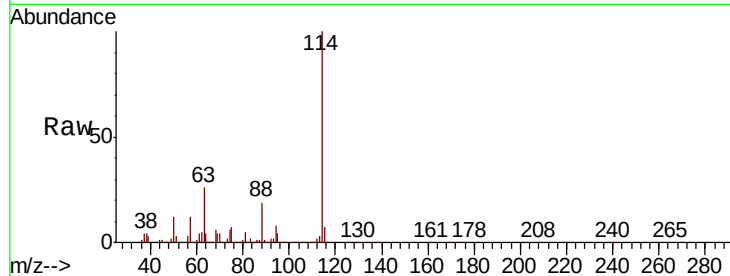




#33
 1,4-Difluorobenzene
 Concen: 10.000 ppbv
 RT: 7.18 min
 Instrument: MSVOA_L
 Delta R.T.:
 Lab File: ClientSampleId:
 Acq: 27 Apr 2021 21:11

Tot Ion: 114 Resp: 3373078

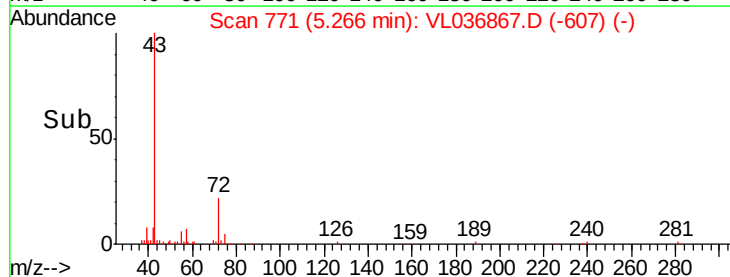
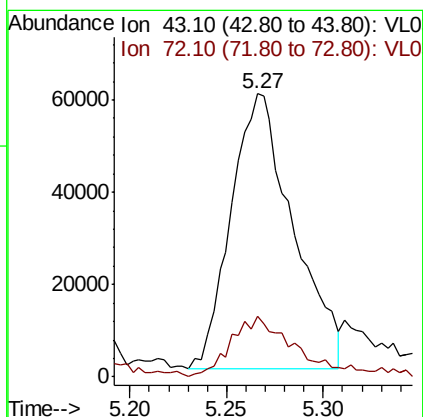
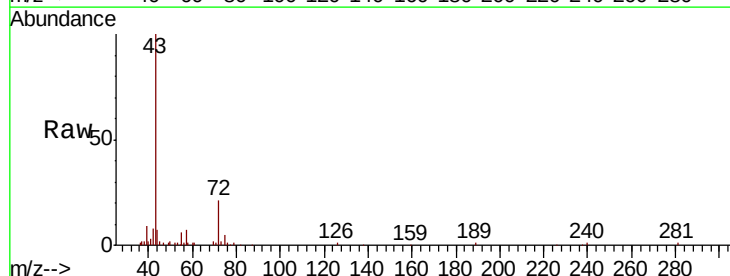
Ion	Ratio	Lower	Upper
114	100		
63	27.3	21.9	32.9
88	18.7	15.1	22.7

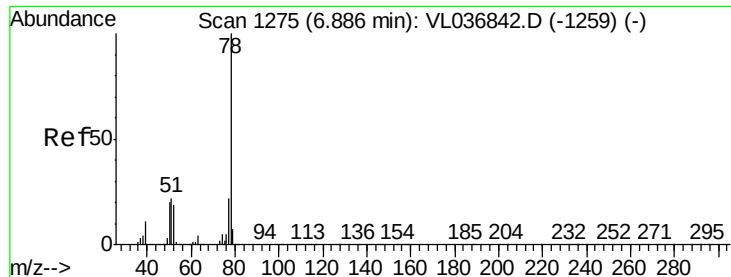


#34
 2-Butanone
 Concen: 0.906 ppbv
 RT: 5.27 min Scan# 771
 Delta R.T.: 0.03 min
 Lab File: VL036867.D
 Acq: 27 Apr 2021 21:11

Tgt Ion: 43 Resp: 133869

Ion	Ratio	Lower	Upper
43	100		
72	22.4	17.6	26.4





#36

Benzene

Concen: 0.214 ppbv

RT: 6.89 Instrument:

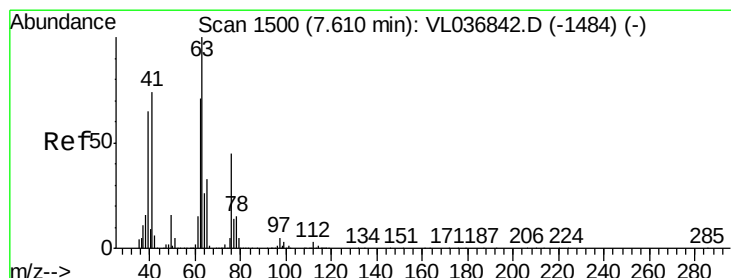
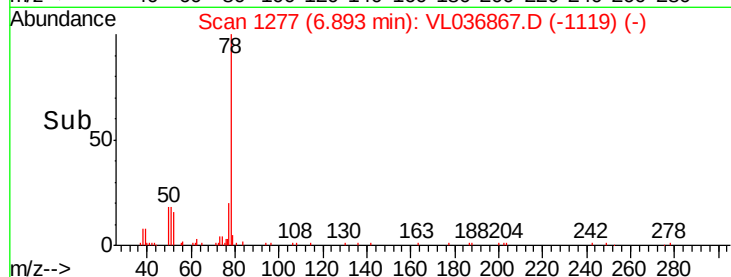
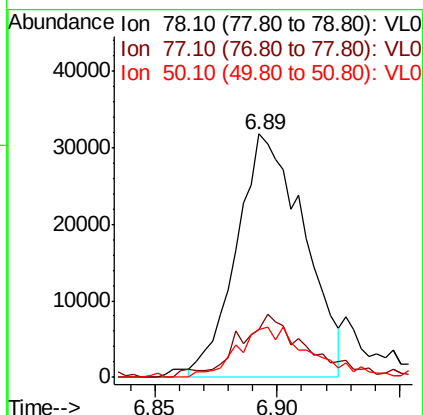
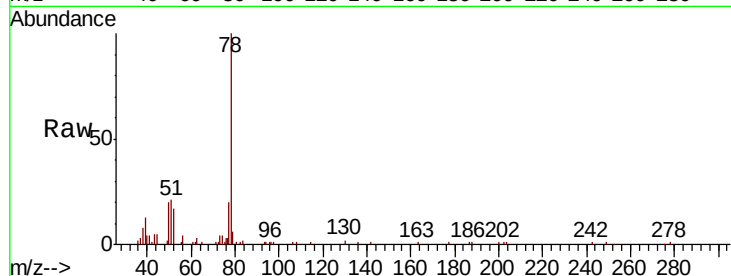
Delta R.T. MSVOA_L

Lab File: ClientSampleId:

Acq: 27 Apr 2021 21:11

Tot Ion: 78 Resp: 60874

Ion	Ratio	Lower	Upper
78	100		
77	16.6	17.6	26.4#
50	20.2	16.3	24.5



#39

1,2-Dichloropropane

Concen: 7.898 ppbv

RT: 7.18 min Scan# 1366

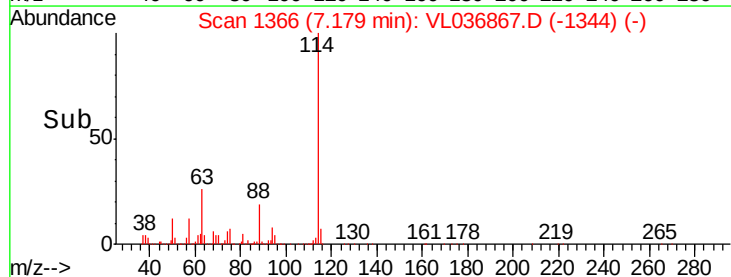
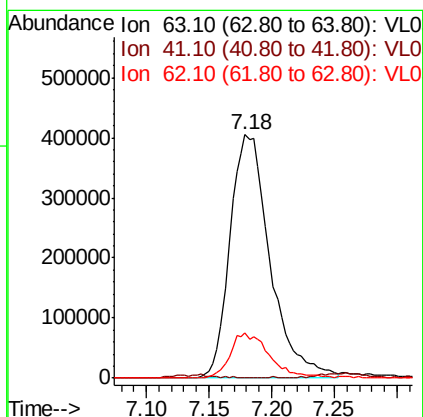
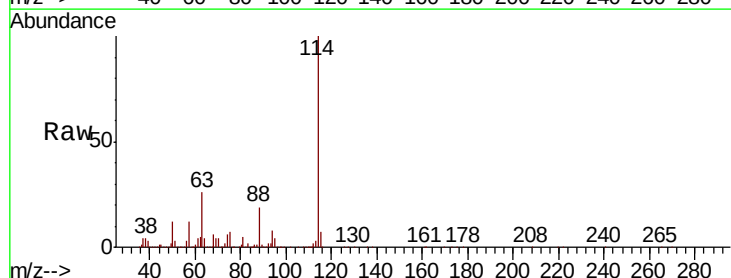
Delta R.T. -0.43 min

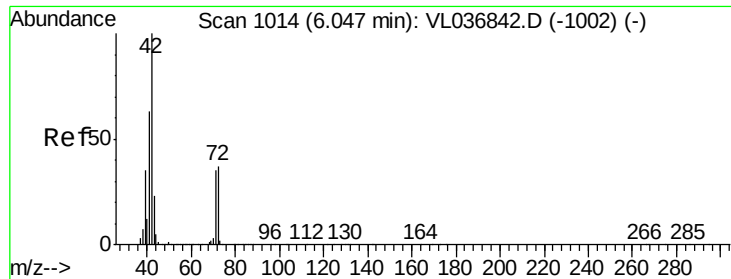
Lab File: VL036867.D

Acq: 27 Apr 2021 21:11

Tgt Ion: 63 Resp: 899308

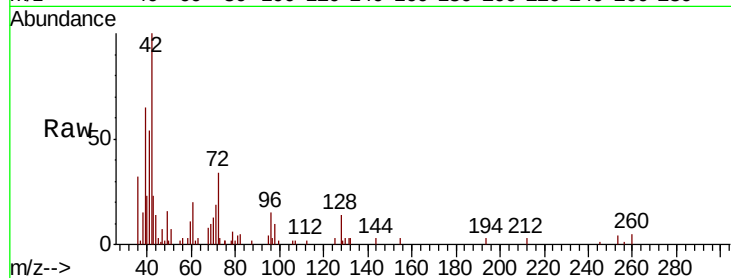
Ion	Ratio	Lower	Upper
63	100		
41	0.0	59.1	88.7#
62	18.9	56.9	85.3#



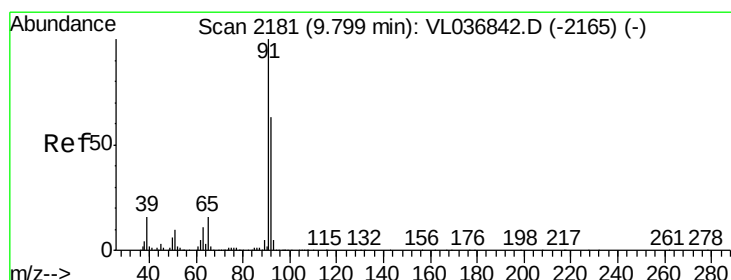
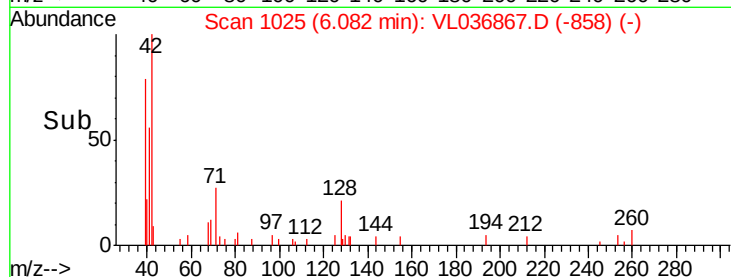
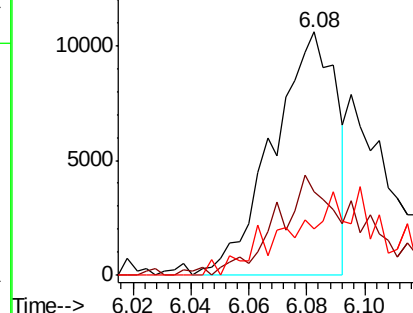


#41
Tetrahydrofuran
Concen: 0.249 ppbv
RT: 6.08 min
Instrument: MSVOA_1
Delta R.T.:
Lab File: ClientSampleId:
Acq: 27 Apr 2021 21:11

Tot Ion	Ratio	Lower	Upper
42	100		
72	62.2	29.7	44.5#
71	0.0	29.0	43.6#

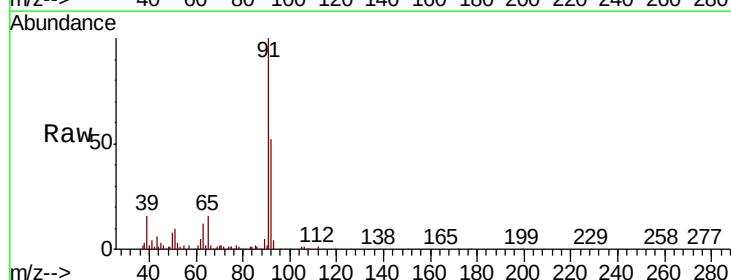


Abundance Ion 42.10 (41.80 to 42.80): VL0
Ion 72.10 (71.80 to 72.80): VL0
Ion 71.10 (70.80 to 71.80): VL0

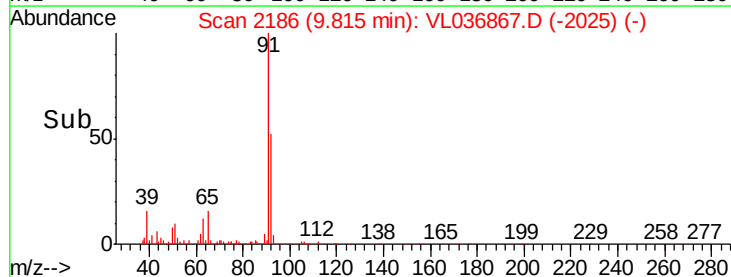
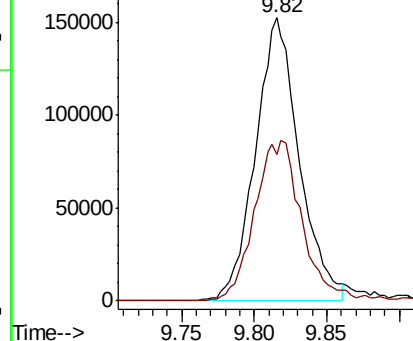


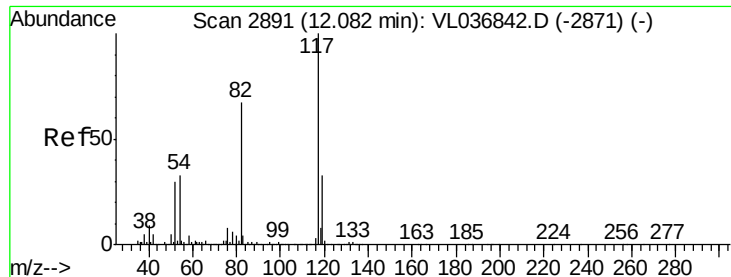
#53
Toluene
Concen: 1.076 ppbv
RT: 9.82 min Scan# 2186
Delta R.T.: 0.02 min
Lab File: VL036867.D
Acq: 27 Apr 2021 21:11

Tgt Ion	Ratio	Lower	Upper
91	100		
92	62.1	49.0	73.4



Abundance Ion 91.10 (90.80 to 91.80): VL0
Ion 92.10 (91.80 to 92.80): VL0

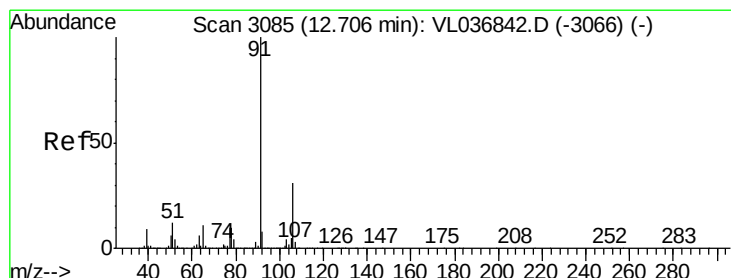
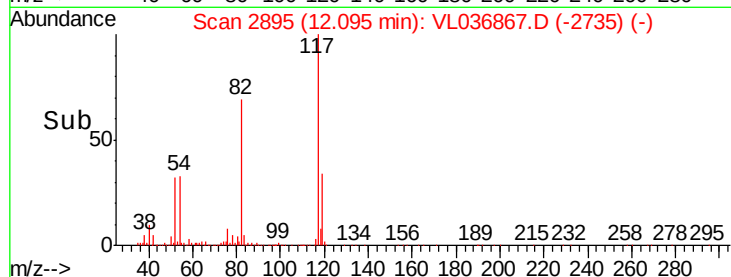
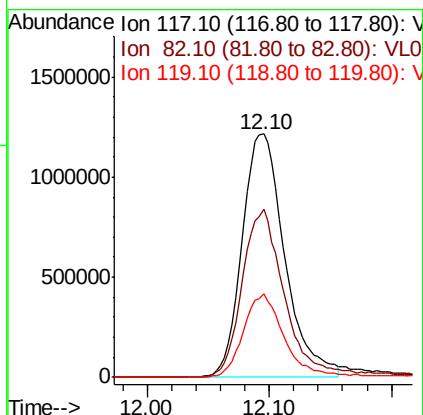
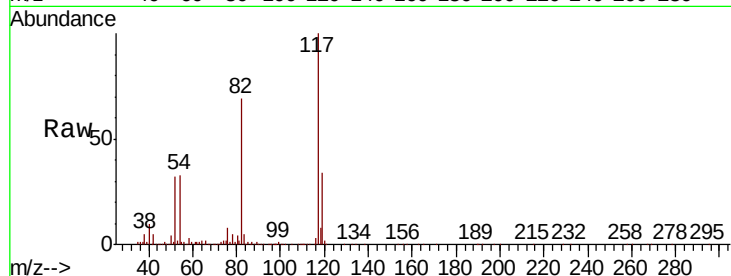




#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 12.10 min
Instrument: MSVOA_1
Delta R.T.:
Lab File: ClientSampleId:
Acq: 27 Apr 2021 21:11

Tot Ion: 117 Resp: 2930259

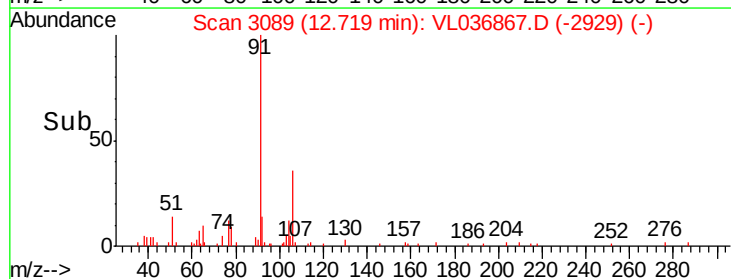
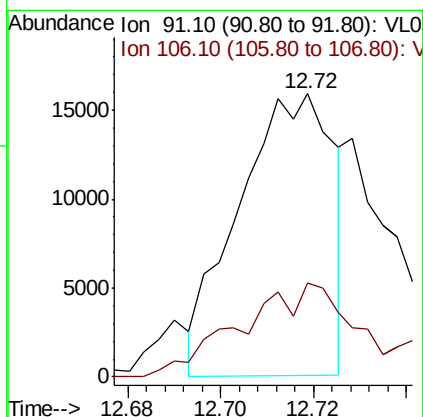
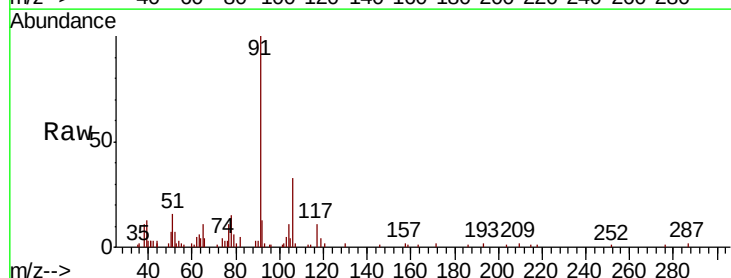
Ion	Ratio	Lower	Upper
117	100		
82	71.2	53.5	80.3
119	33.8	25.6	38.4

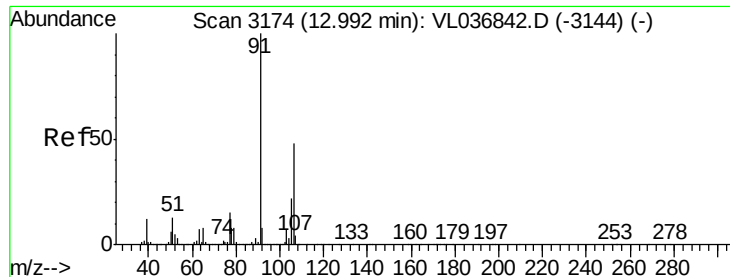


#58
Ethyl Benzene
Concen: 0.061 ppbv
RT: 12.72 min Scan# 3089
Delta R.T.: 0.01 min
Lab File: VL036867.D
Acq: 27 Apr 2021 21:11

Tgt Ion: 91 Resp: 22645

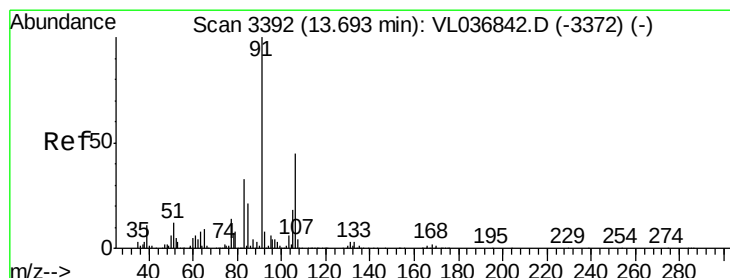
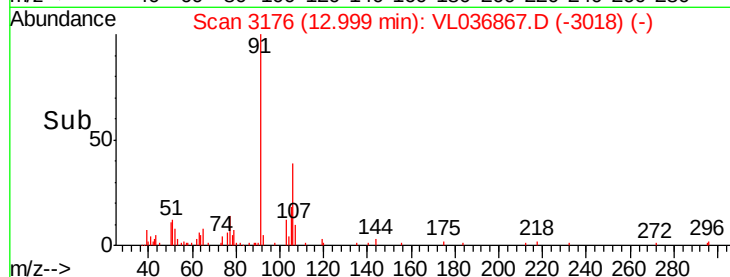
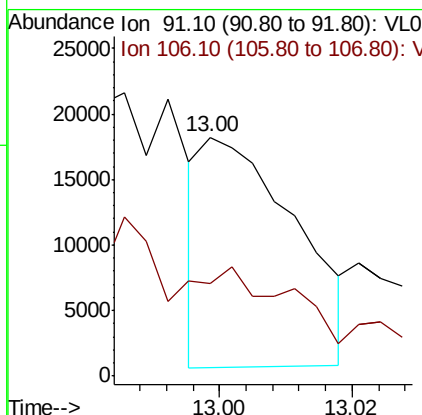
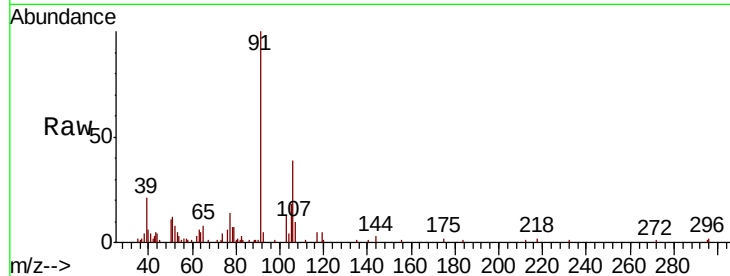
Ion	Ratio	Lower	Upper
91	100		
106	33.2	25.1	37.7





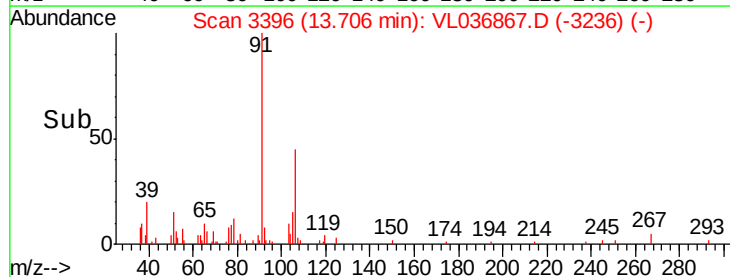
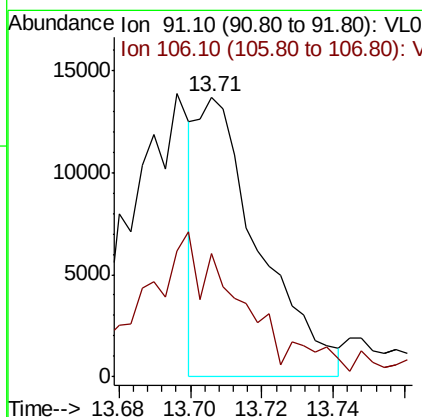
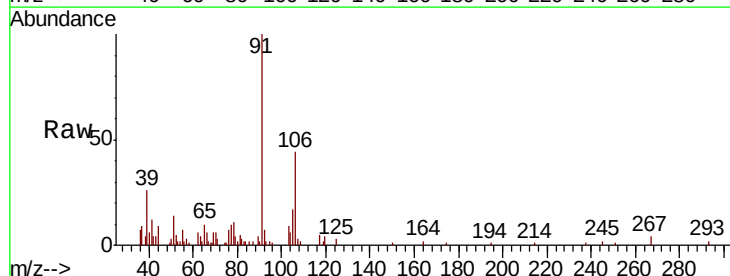
#59
m/p-Xylene
Concen: 0.052 ppbv
RT: 13.00 min
Delta R.T. MSVOA_L
Lab File: ClientSampleId :
Acq: 27 Apr 2021 21:11

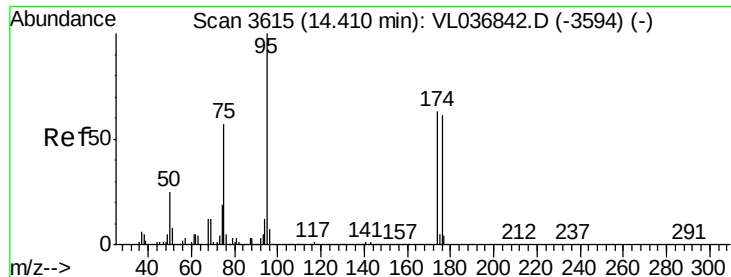
Tot Ion: 91 Resp: 17233
Ion Ratio Lower Upper
91 100
106 0.0 35.8 53.6#



#60
o-Xylene
Concen: 0.051 ppbv
RT: 13.71 min Scan# 3396
Delta R.T. 0.01 min
Lab File: VL036867.D
Acq: 27 Apr 2021 21:11

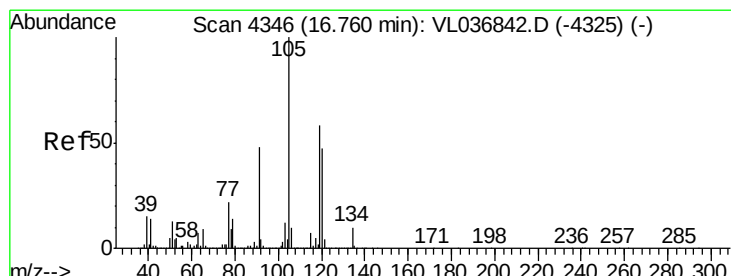
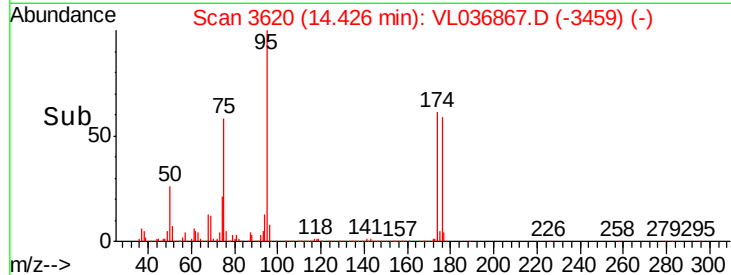
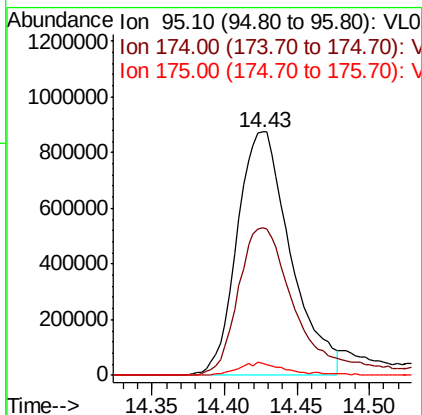
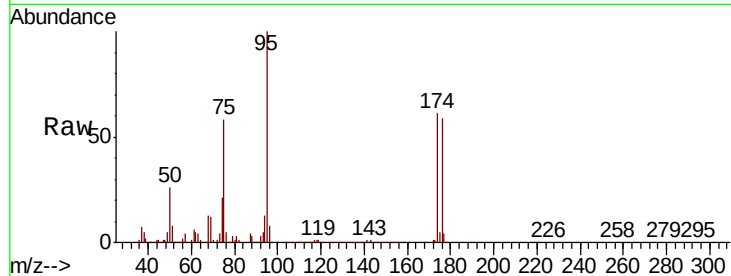
Tgt Ion: 91 Resp: 16462
Ion Ratio Lower Upper
91 100
106 0.0 22.6 67.7#





#68
 1-Bromo-4-Fluorobenzene
 Concen: 9.490 ppbv
 RT: 14.43 min
 Delta R.T. MSVOA_L
 Lab File: ClientSampleId :
 Acq: 27 Apr 2021 21:11

Tot Ion	95	Resp	2232186
Ion Ratio	100		
Lower	52.2		
Upper	78.2		
174	70.3		
175	5.0		
	4.0		
	6.0		



#74
 1,2,4-Trimethylbenzene
 Concen: 0.042 ppbv
 RT: 16.78 min Scan# 4353
 Delta R.T. 0.02 min
 Lab File: VL036867.D
 Acq: 27 Apr 2021 21:11

Tgt Ion	105	Resp	14797
Ion Ratio	100		
Lower	37.6		
Upper	56.4#		
120	33.0		
91	28.0		
77	49.2		
	17.4		
	26.0#		

