

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL040221\
 Data File : VL036645.D
 Acq On : 2 Apr 2021 15:07
 Operator : SY/AP
 Sample : M1797-05
 Misc : 400mL/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 MF-SG-06(2021)

Manual Integrations
 APPROVED

apatel
 4/5/2021 1:13:53 PM

Quant Time: Apr 04 16:36:50 2021
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL032521AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Thu Mar 2
 QLast Update : Thu Mar 25 09:42:40 2021
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.65	49	1263510	10.00	ppbv	-0.02
33) 1,4-Difluorobenzene	7.16	114	3265102	10.00	ppbv	-0.02
55) Chlorobenzene-d5	12.07	117	2942120	10.00	ppbv	-0.02

System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	14.40	95	2327078	9.92	ppbv	-0.02
Spiked Amount	10.000	Range	65 - 135	Recovery	=	99.20%

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.04	85	32185	0.156	ppbv	90
3) Chlorodifluoromethane	2.98	51	56766m	0.240	ppbv	
4) Chloromethane	3.13	50	28543	0.342	ppbv #	74
9) Propene	3.01	41	88535m	1.176	ppbv	
11) Trichlorofluoromethane	3.94	101	44807m	0.213	ppbv	
13) Ethanol	3.60	45	2144584	239.298	ppbv	92
15) Acetone	3.84	43	3013710	24.234	ppbv	100
17) tert-Butyl alcohol	4.31	59	74241m	0.686	ppbv	
19) Isopropyl Alcohol	3.97	45	1151037	16.826	ppbv #	1
20) Methylene Chloride	4.33	84	2242165	38.508	ppbv	96
22) trans-1,2-Dichloroethene	4.88	96	9247m	0.167	ppbv	
26) Hexane	5.67	57	1934703	14.101	ppbv #	46
29) Chloroform	5.74	83	55376m	0.252	ppbv	
34) 2-Butanone	5.24	43	90833	0.570	ppbv #	85
35) Carbon Tetrachloride	7.01	117	13962m	0.056	ppbv	
38) Trichloroethene	7.82	130	4983m	0.043	ppbv	
50) 4-Methyl-2-Pentanone	8.74	43	31399m	0.136	ppbv	
51) 2-Hexanone	10.13	43	46936m	0.403	ppbv	
52) Tetrachloroethene	11.21	164	22883m	0.206	ppbv	
53) Toluene	9.80	91	108329	0.338	ppbv	100
59) m/p-Xylene	12.95	91	77832m	0.208	ppbv	
69) p-Isopropyltoluene	17.64	119	65109	0.140	ppbv #	89
74) 1,2,4-Trimethylbenzene	16.75	105	78631m	0.199	ppbv	
79) Naphthalene	22.19	128	33180m	0.144	ppbv	
80) Naphthalene,2-methyl-	24.96	142	11050	0.243	ppbv #	88

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

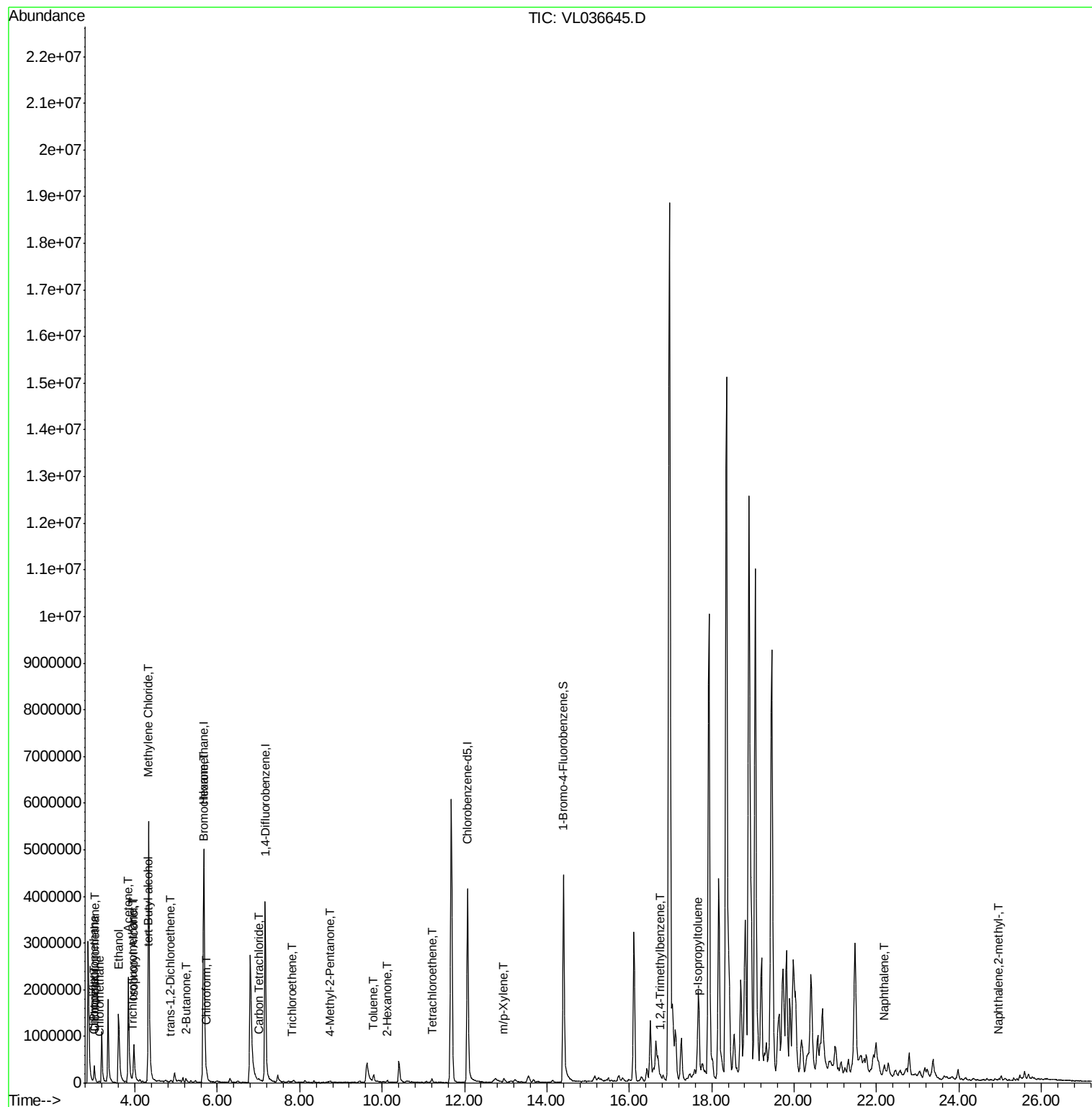
Data Path : Z:\V0ASRV\HPCHEM1\MSVOA L\DATA\VL040221\
Data File : VL036645.D
Acq On : 2 Apr 2021 15:07
Operator : SY/AP
Sample : M1797-05
Misc : 400mL/MSVOA L
ALS Vial : 1 Sample Multiplier: 1

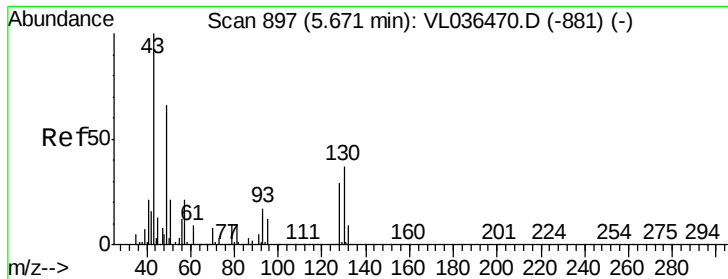
Instrument :
MSVOA_L
ClientSampleId :
MF-SG-06(2021)

Manual Integrations
APPROVED

apatel
4/5/2021 1:13:53 PM

Quant Time: Apr 04 16:36:50 2021
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA L\METHODS\VL032521AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Thu Mar
QLast Update : Thu Mar 25 09:42:40 2021
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.65 min Scan# 891

Delta R.T. -0.02 min

Lab File: VL036645.D

Acq: 2 Apr 2021 15:07

Instrument :

MSVOA_L

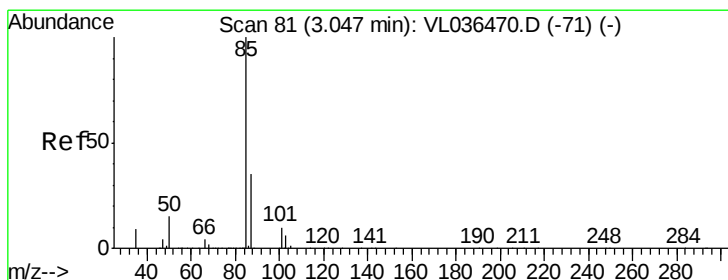
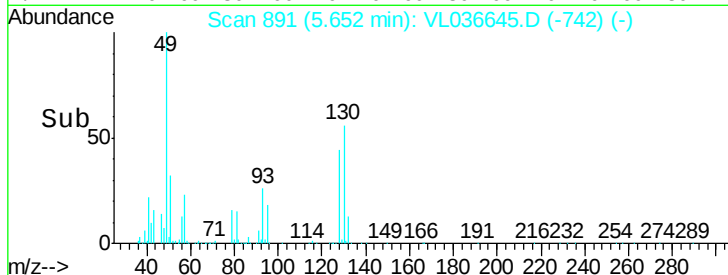
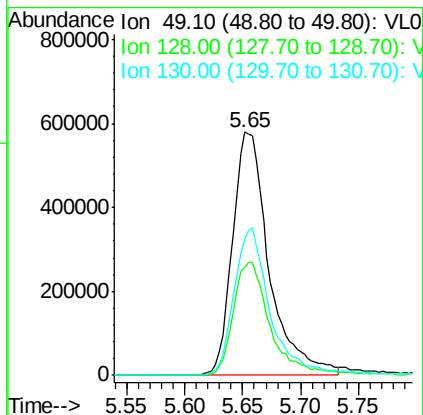
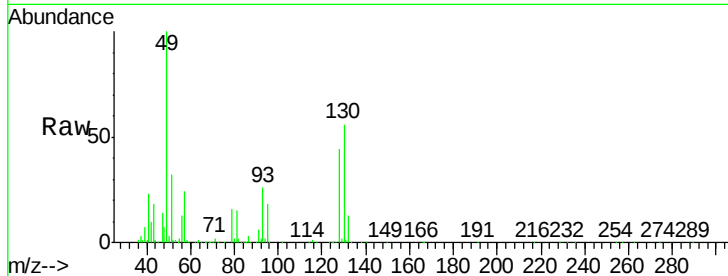
ClientSampleId :

MF-SG-06(2021)

Tot Ion:	49	Resp:	1263510
Ion	Ratio	Lower	Upper
49	100		
128	47.6	23.5	70.6
130	61.5	29.1	87.4

Manual Integrations
APPROVED

apatel
4/5/2021 1:13:53 PM



#2

Dichlorodifluoromethane

Concen: 0.156 ppbv

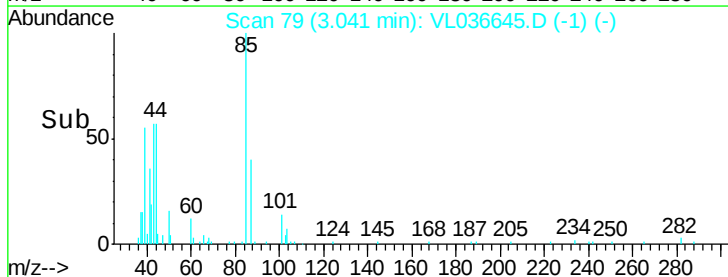
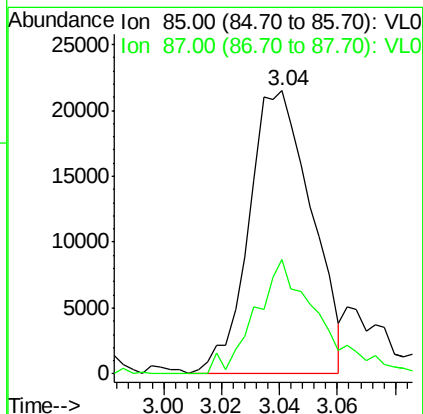
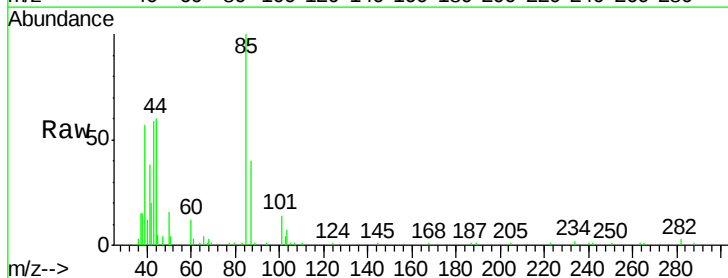
RT: 3.04 min Scan# 79

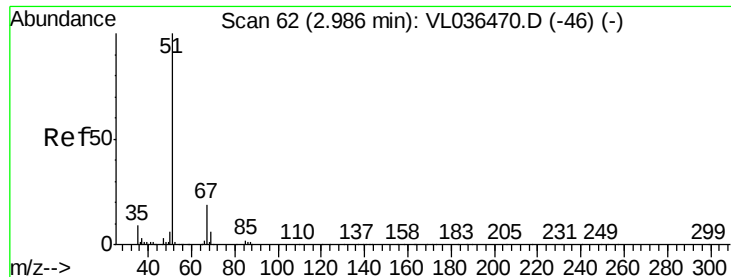
Delta R.T. -0.01 min

Lab File: VL036645.D

Acq: 2 Apr 2021 15:07

Tgt Ion:	85	Resp:	32185
Ion	Ratio	Lower	Upper
85	100		
87	40.4	27.8	41.8





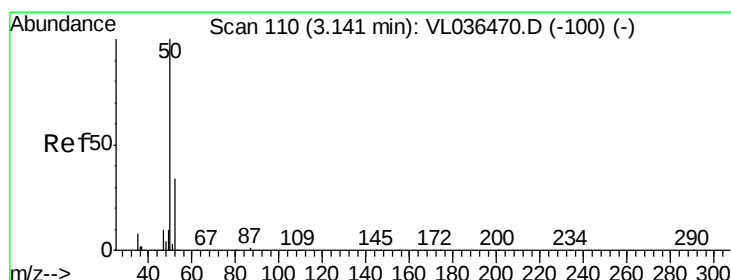
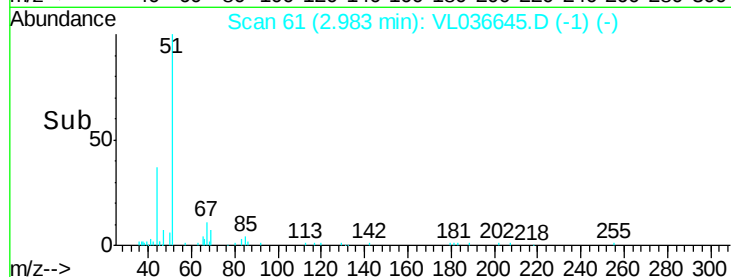
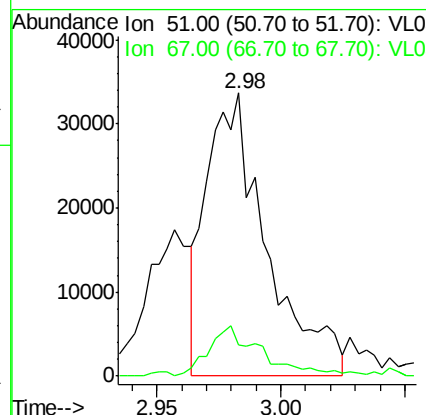
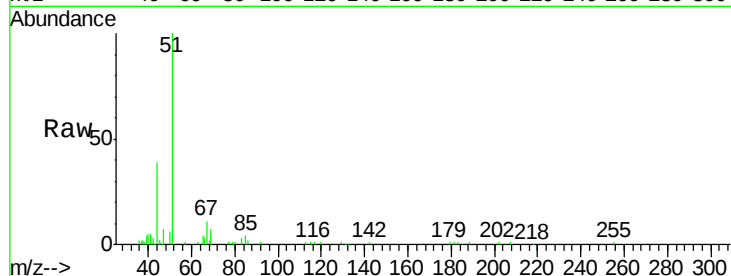
#3
Chlorodifluoromethane
Concen: 0.240 ppbv
RT: 2.98 min Scan# 61
Delta R.T. -0.00 min
Lab File: VL036645.D
Acq: 2 Apr 2021 15:07

Instrument :
MSVOA_L
ClientSampleId :
MF-SG-06(2021)

Tot Ion	Ratio	Lower	Upper
51	100		
67	4.1	14.7	22.1#

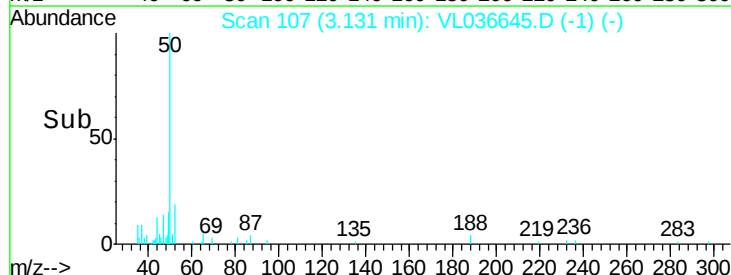
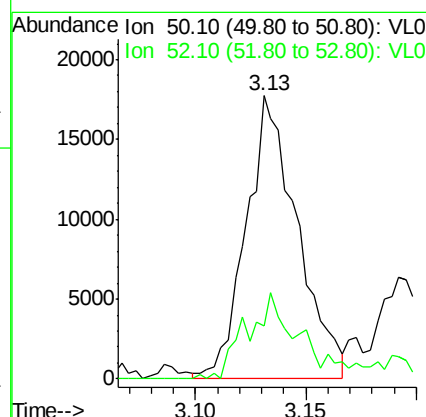
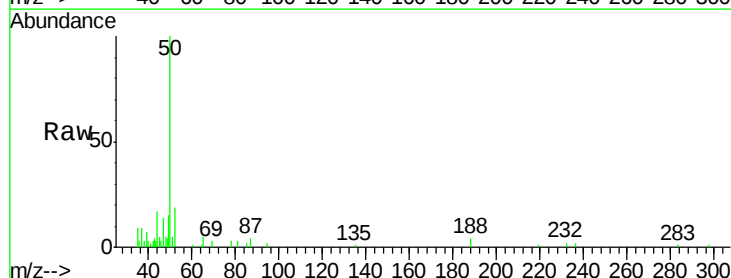
Manual Integrations
APPROVED

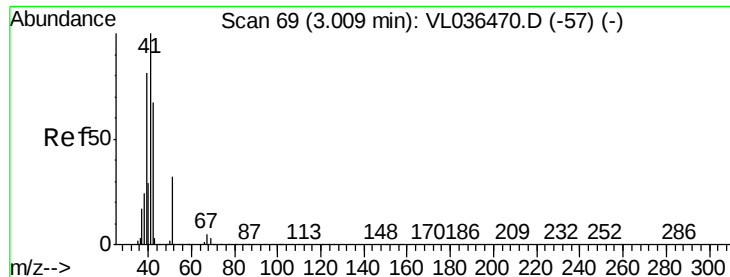
apatel
4/5/2021 1:13:53 PM



#4
Chloromethane
Concen: 0.342 ppbv
RT: 3.13 min Scan# 107
Delta R.T. -0.01 min
Lab File: VL036645.D
Acq: 2 Apr 2021 15:07

Tgt Ion	Ratio	Lower	Upper
50	100		
52	18.9	27.0	40.6#





#9

Propene

Concen: 1.176 ppbv m

RT: 3.01 min Scan# 70

Delta R.T. 0.00 min

Lab File: VL036645.D

Acq: 2 Apr 2021 15:07

Instrument :

MSVOA_L

ClientSampleId :

MF-SG-06(2021)

Tot Ion: 41 Resp: 88535

Ion Ratio Lower Upper

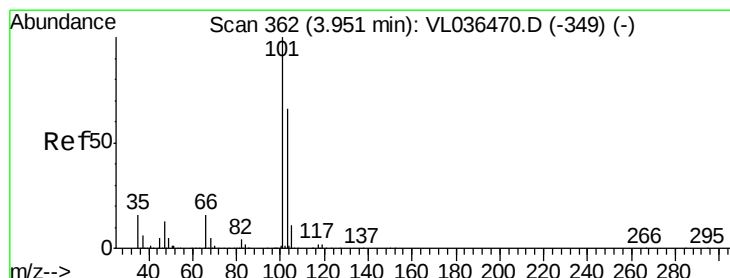
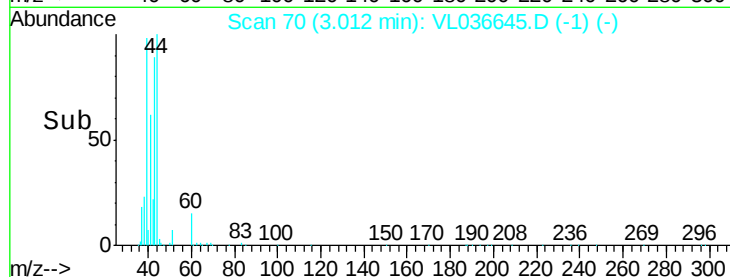
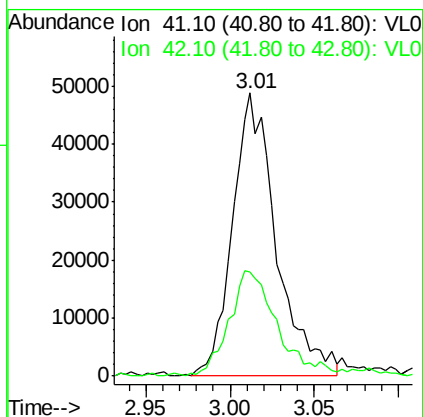
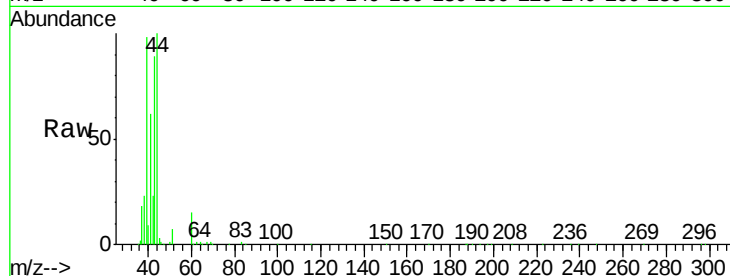
41 100

42 288.6 57.0 85.4#

Manual Integrations
APPROVED

apatel

4/5/2021 1:13:53 PM



#11

Trichlorofluoromethane

Concen: 0.213 ppbv m

RT: 3.94 min Scan# 358

Delta R.T. -0.01 min

Lab File: VL036645.D

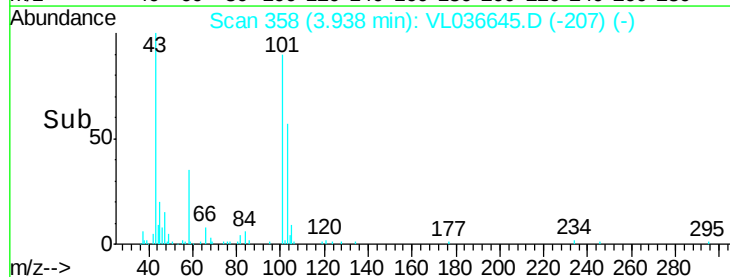
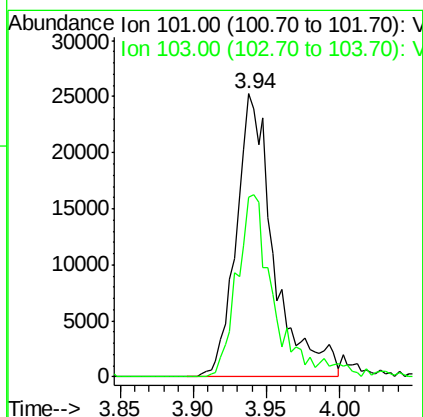
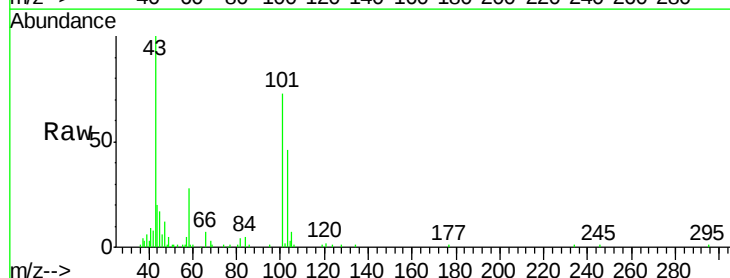
Acq: 2 Apr 2021 15:07

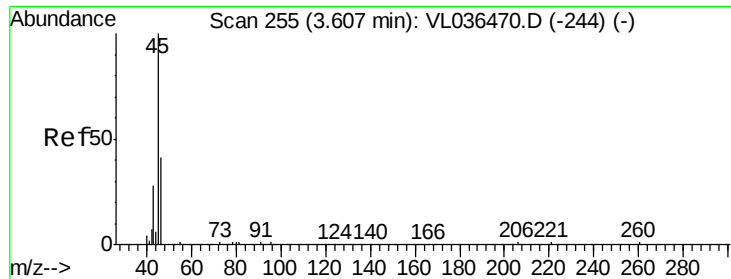
Tgt Ion: 101 Resp: 44807

Ion Ratio Lower Upper

101 100

103 63.5 52.5 78.7





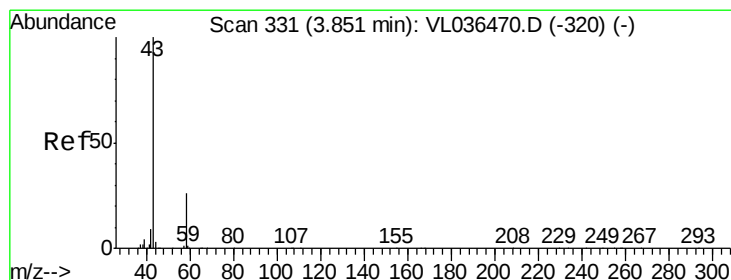
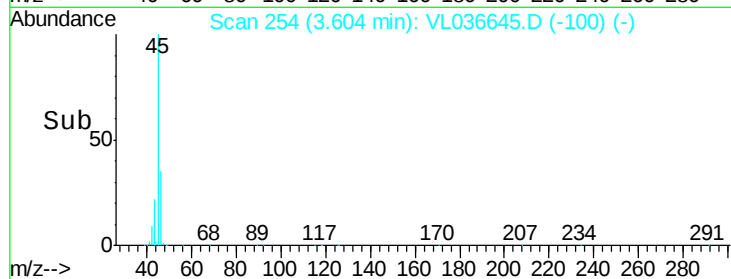
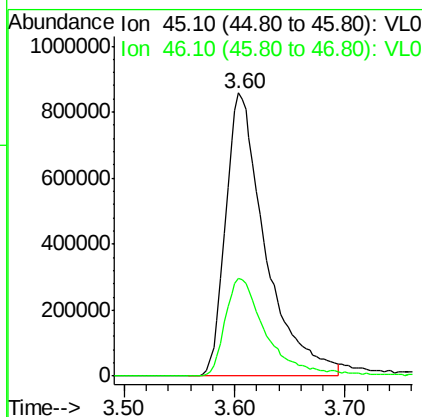
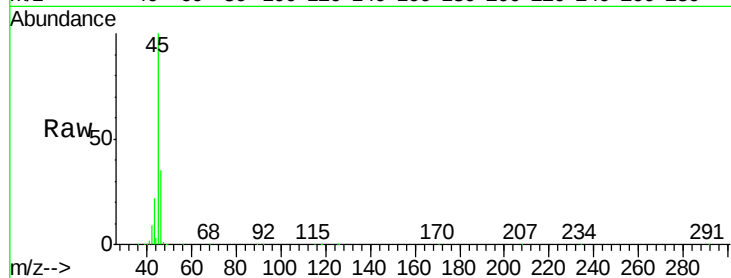
#13
Ethanol
Concen: 239.298 ppbv
RT: 3.60 min Scan# 254
Delta R.T. -0.00 min
Lab File: VL036645.D
Acq: 2 Apr 2021 15:07

Instrument :
MSVOA_L
ClientSampleId :
MF-SG-06(2021)

Tot Ion: 45 Resp: 2144584
Ion Ratio Lower Upper
45 100
46 36.1 16.6 66.2

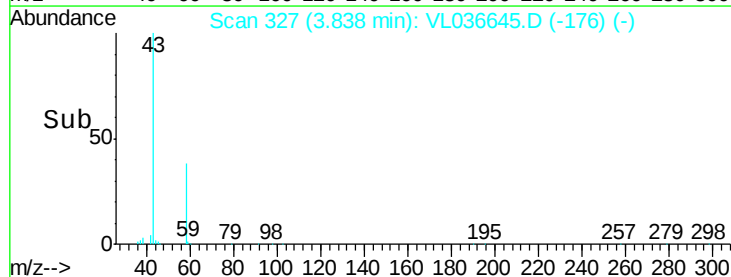
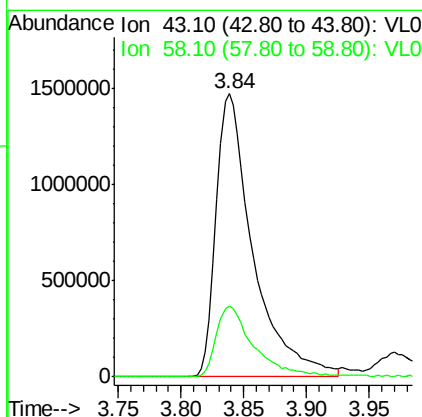
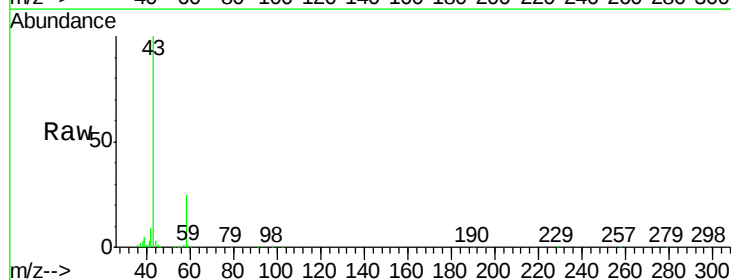
Manual Integrations
APPROVED

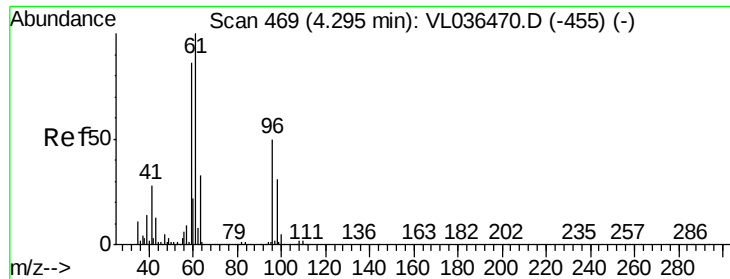
apatel
4/5/2021 1:13:53 PM



#15
Acetone
Concen: 24.234 ppbv
RT: 3.84 min Scan# 327
Delta R.T. -0.01 min
Lab File: VL036645.D
Acq: 2 Apr 2021 15:07

Tgt Ion: 43 Resp: 3013710
Ion Ratio Lower Upper
43 100
58 26.5 21.2 31.8





#17

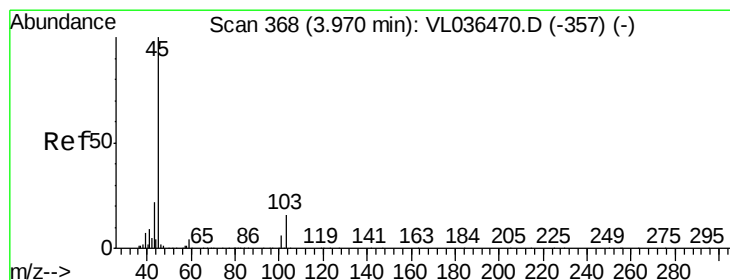
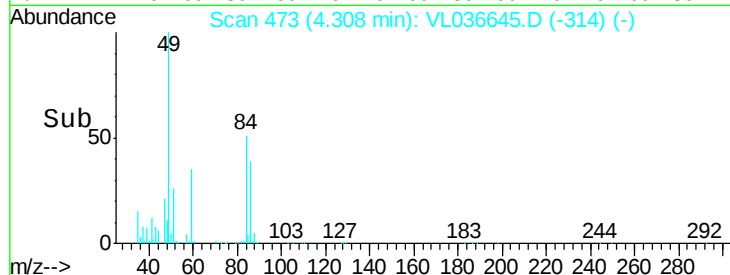
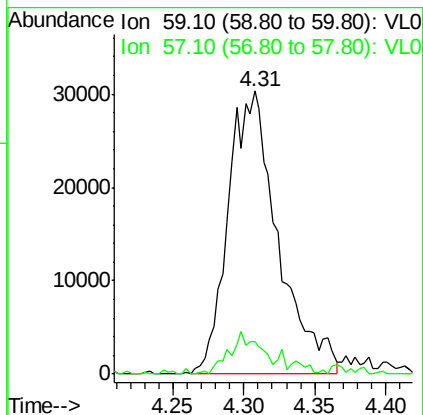
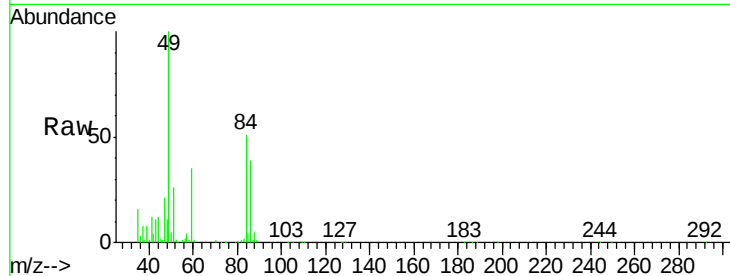
tert-Butyl alcohol
 Concen: 0.686 ppbv
 RT: 4.31 min Scan# 473
 Delta R.T. 0.01 min
 Lab File: VL036645.D
 Acq: 2 Apr 2021 15:07

Instrument :
 MSVOA_L
 ClientSampleId :
 MF-SG-06(2021)

Tot Ion	Ratio	Lower	Upper
59	100		
57	12.0	8.6	12.8

Manual Integrations
 APPROVED

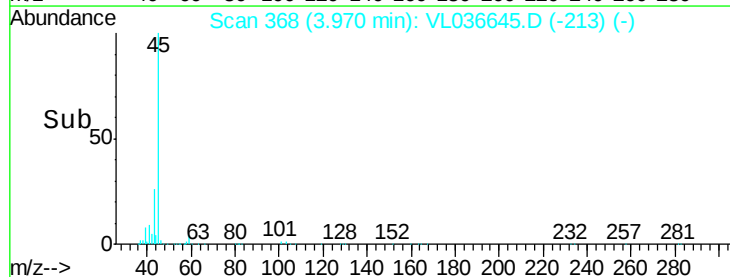
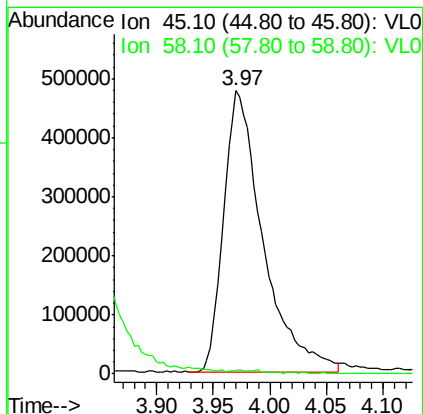
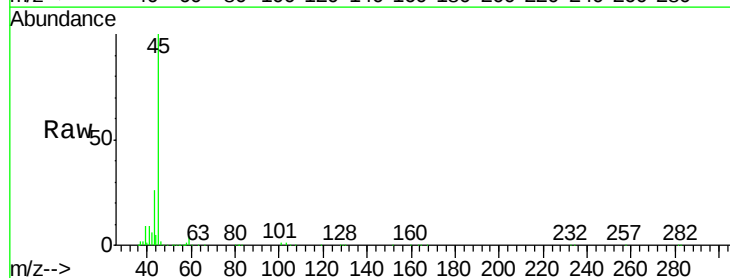
apatel
 4/5/2021 1:13:53 PM

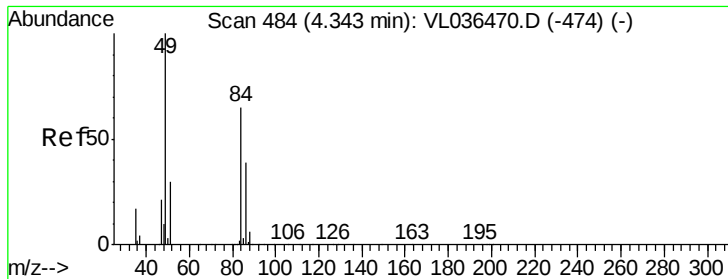


#19

Isopropyl Alcohol
 Concen: 16.826 ppbv
 RT: 3.97 min Scan# 368
 Delta R.T. -0.00 min
 Lab File: VL036645.D
 Acq: 2 Apr 2021 15:07

Tgt Ion	Ratio	Lower	Upper
45	100		
58	68.0	2.9	4.3#





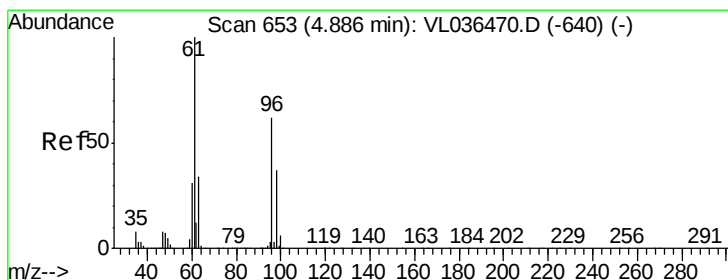
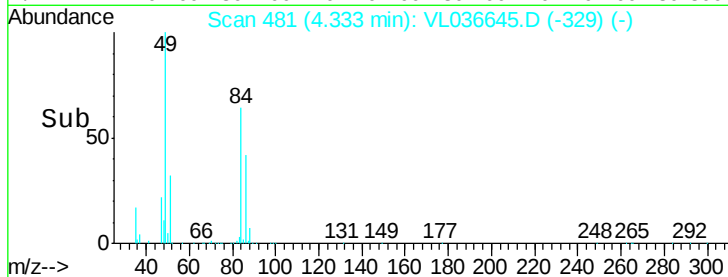
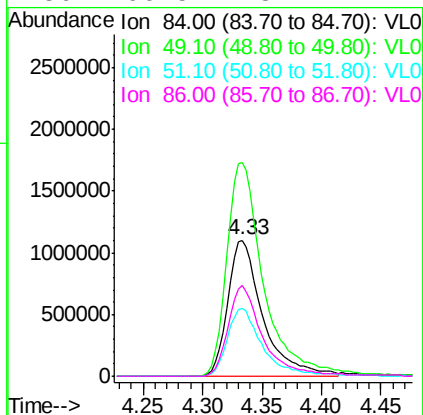
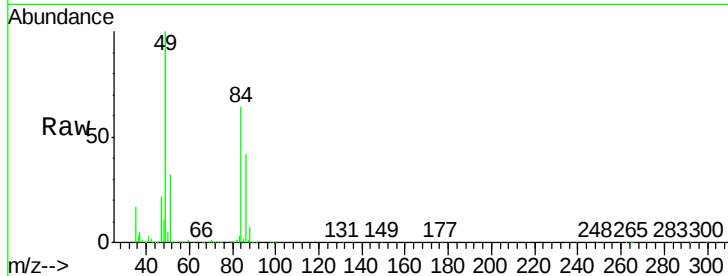
#20
Methvlene Chloride
Concen: 38.508 ppbv
RT: 4.33 min Scan# 481
Delta R.T. -0.01 min
Lab File: VL036645.D
Acq: 2 Apr 2021 15:07

Instrument :
MSVOA_L
ClientSampleId :
MF-SG-06(2021)

Tot Ion:	84	Resp:	2242165
Ion	Ratio	Lower	Upper
84	100		
49	156.7	122.9	184.3
51	49.9	36.9	55.3
86	66.5	48.2	72.4

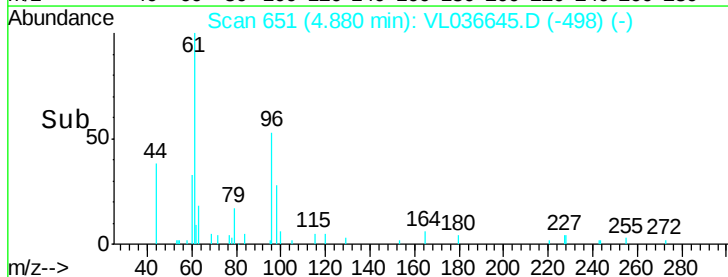
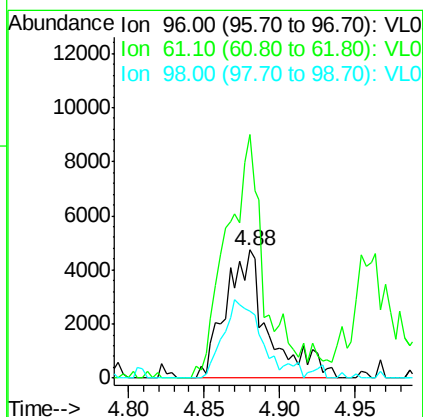
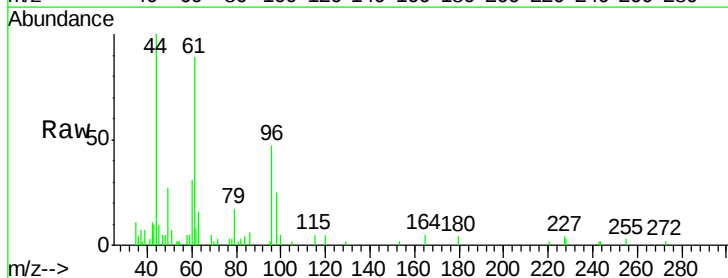
Manual Integrations
APPROVED

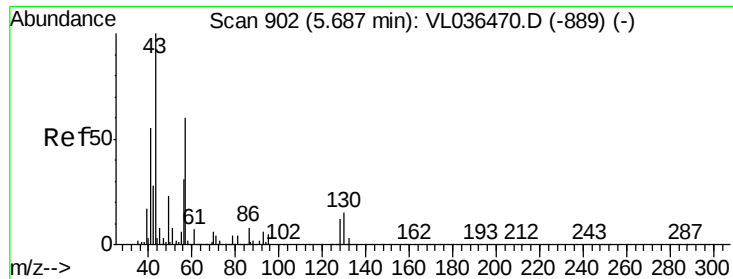
apatel
4/5/2021 1:13:53 PM



#22
trans-1,2-Dichloroethene
Concen: 0.167 ppbv m
RT: 4.88 min Scan# 651
Delta R.T. -0.01 min
Lab File: VL036645.D
Acq: 2 Apr 2021 15:07

Tgt Ion:	96	Resp:	9247
Ion	Ratio	Lower	Upper
96	100		
61	190.2	129.4	194.0
98	52.5	48.2	72.4





#26

Hexane

Concen: 14.101 ppbv

RT: 5.67 min Scan# 898

Delta R.T. -0.01 min

Lab File: VL036645.D

Acq: 2 Apr 2021 15:07

Instrument :

MSVOA_L

ClientSampleId :

MF-SG-06(2021)

Tot Ion: 57 Resp: 1934703

Ion Ratio Lower Upper

57 100

41 93.2 77.2 115.8

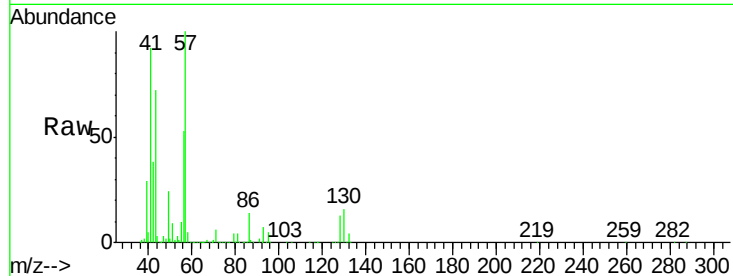
43 73.1 173.8 260.6#

56 53.3 43.8 65.6

Manual Integrations
APPROVED

apatel

4/5/2021 1:13:53 PM

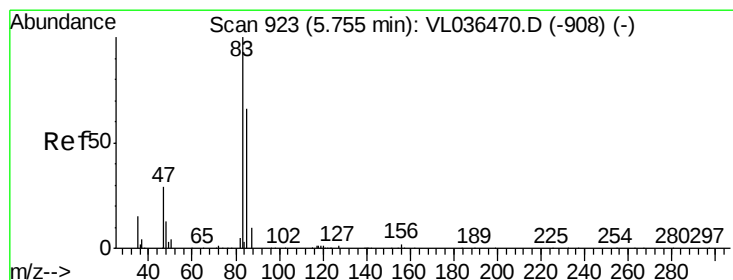
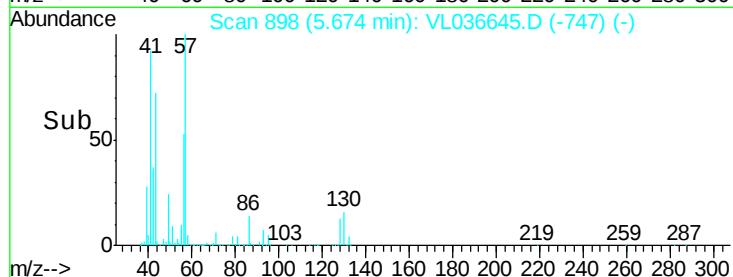
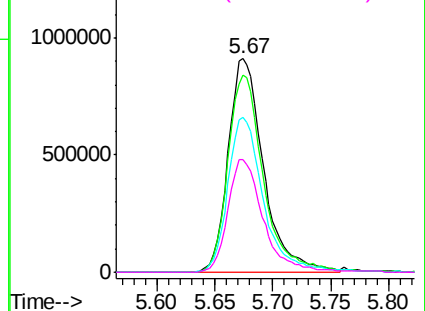


Abundance Ion 57.10 (56.80 to 57.80): VL0

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



#29

Chloroform

Concen: 0.252 ppbv m

RT: 5.74 min Scan# 919

Delta R.T. -0.01 min

Lab File: VL036645.D

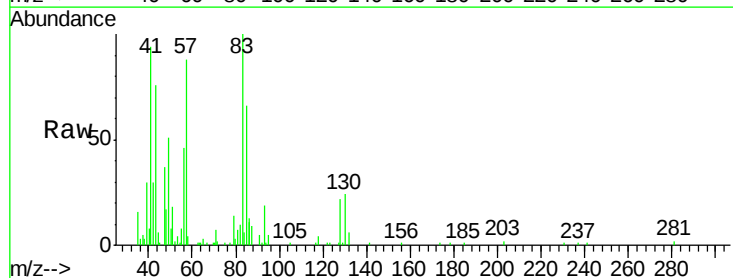
Acq: 2 Apr 2021 15:07

Tgt Ion: 83 Resp: 55376

Ion Ratio Lower Upper

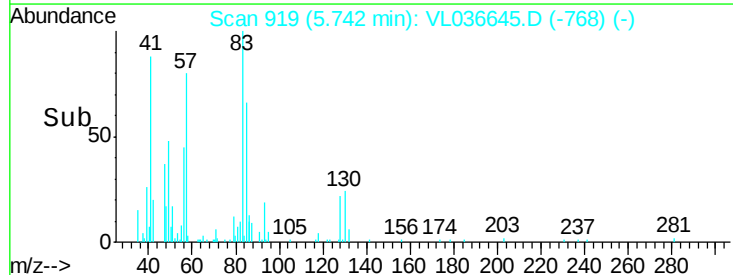
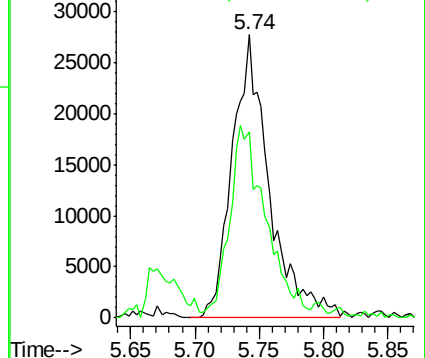
83 100

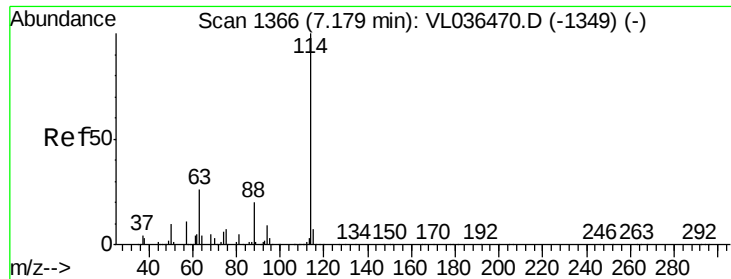
85 65.9 52.6 78.8



Abundance Ion 83.00 (82.70 to 83.70): VL0

Ion 85.00 (84.70 to 85.70): VL0





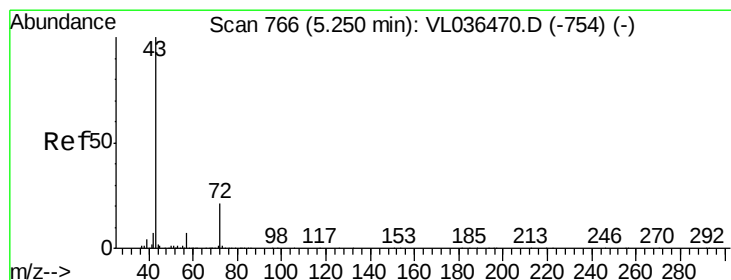
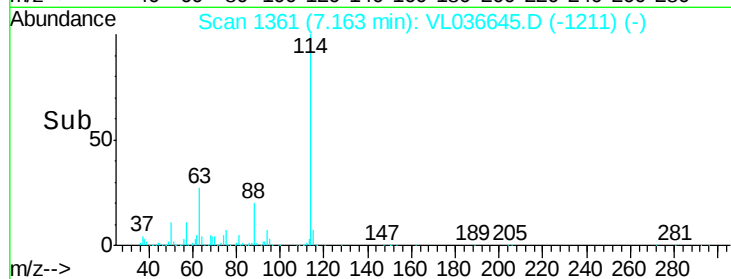
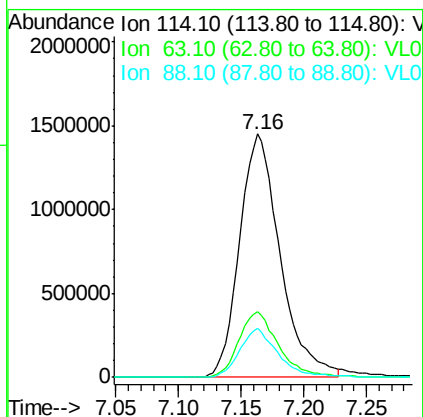
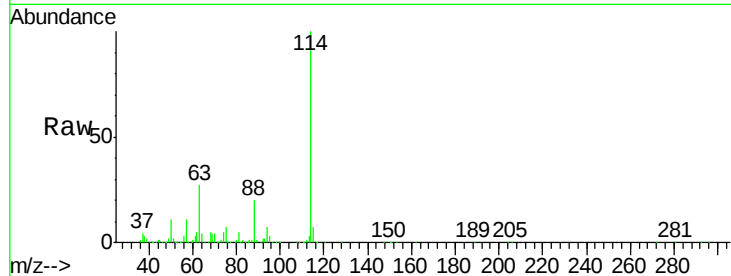
#33
 1,4-Difluorobenzene
 Concen: 10.000 ppbv
 RT: 7.16 min Scan# 1361
 Delta R.T. -0.02 min
 Lab File: VL036645.D
 Acq: 2 Apr 2021 15:07

Instrument :
 MSVOA_L
 ClientSampleId :
 MF-SG-06(2021)

Tot Ion	Ratio	Lower	Upper
114	100		
63	27.0	22.4	33.6
88	19.3	15.4	23.0

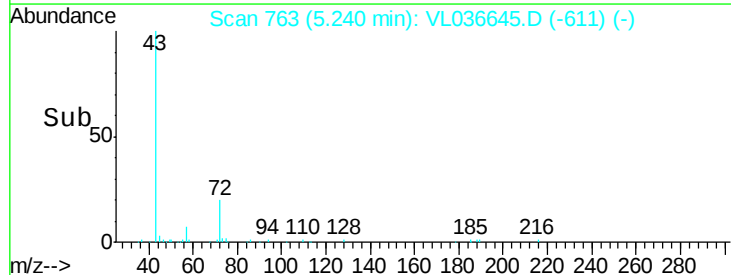
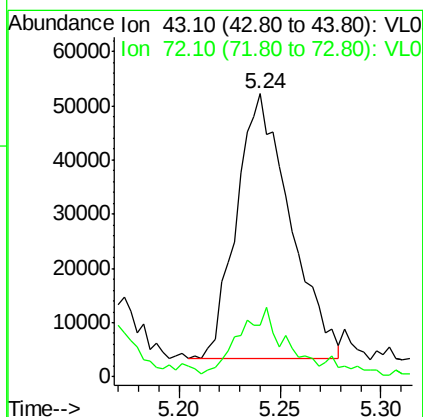
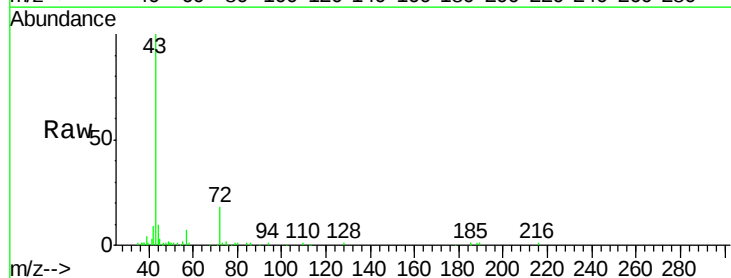
Manual Integrations
 APPROVED

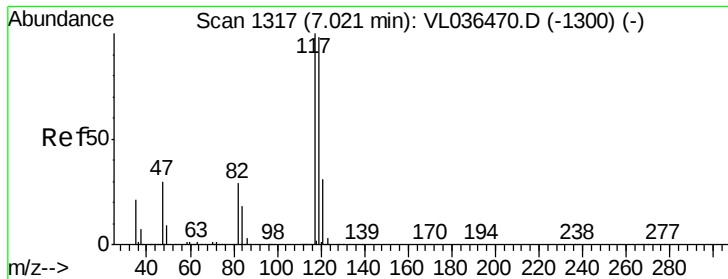
apatel
 4/5/2021 1:13:53 PM



#34
 2-Butanone
 Concen: 0.570 ppbv
 RT: 5.24 min Scan# 763
 Delta R.T. -0.01 min
 Lab File: VL036645.D
 Acq: 2 Apr 2021 15:07

Tgt Ion	Ratio	Lower	Upper
43	100		
72	28.5	17.0	25.6





#35

Carbon Tetrachloride

Concen: 0.056 ppbv m

RT: 7.01 min Scan# 1314

Delta R.T. -0.01 min

Lab File: VL036645.D

Acq: 2 Apr 2021 15:07

Instrument :

MSVOA_L

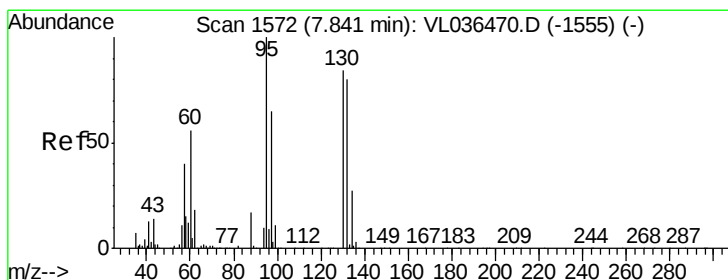
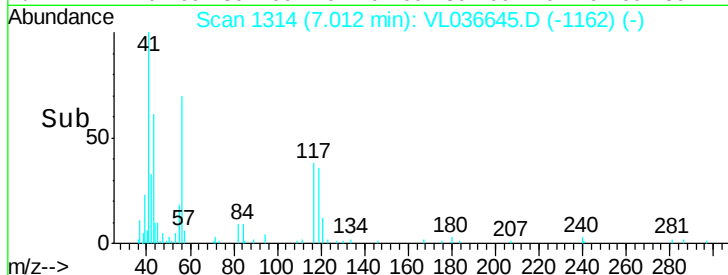
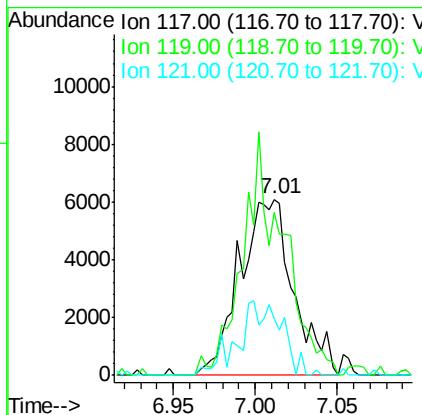
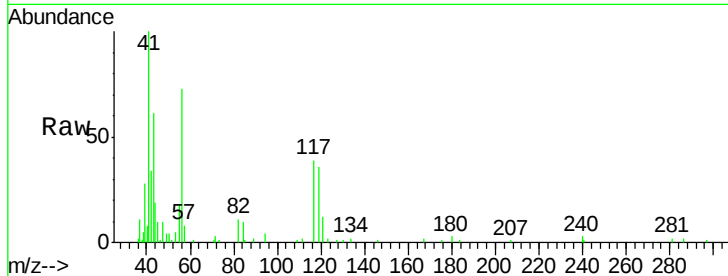
ClientSampleId :

MF-SG-06(2021)

Tot Ion:	117	Resp:	13962
Ion Ratio	Lower	Upper	
117	100		
119	92.5	78.2	117.2
121	32.4	24.5	36.7

Manual Integrations
APPROVED

apatel
4/5/2021 1:13:53 PM



#38

Trichloroethene

Concen: 0.043 ppbv m

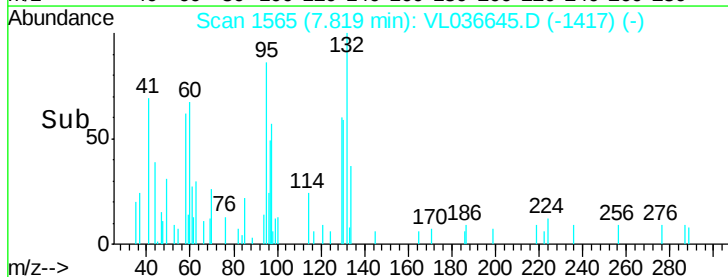
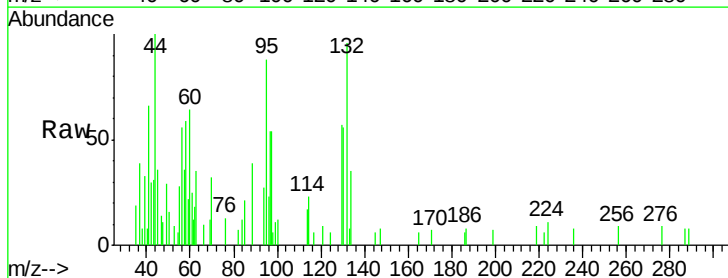
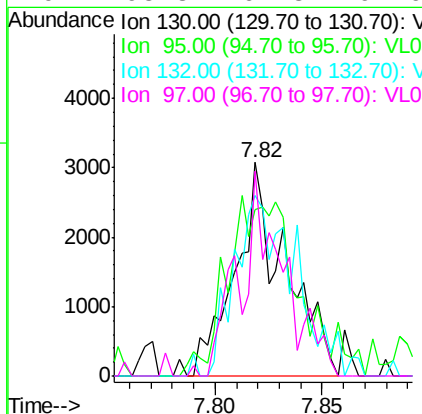
RT: 7.82 min Scan# 1565

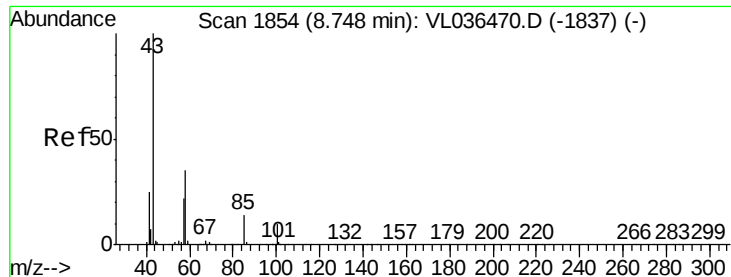
Delta R.T. -0.02 min

Lab File: VL036645.D

Acq: 2 Apr 2021 15:07

Tgt Ion:	130	Resp:	4983
Ion Ratio	Lower	Upper	
130	100		
95	154.8	95.7	143.5#
132	167.6	76.2	114.4#
97	95.3	61.8	92.6#





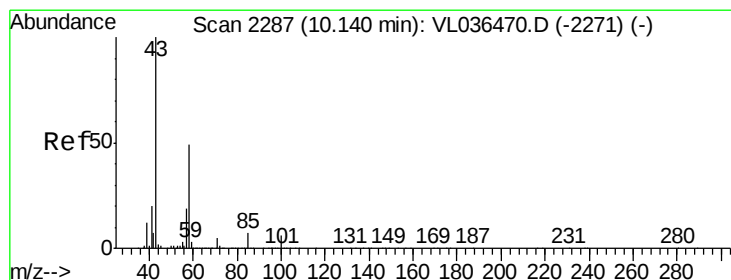
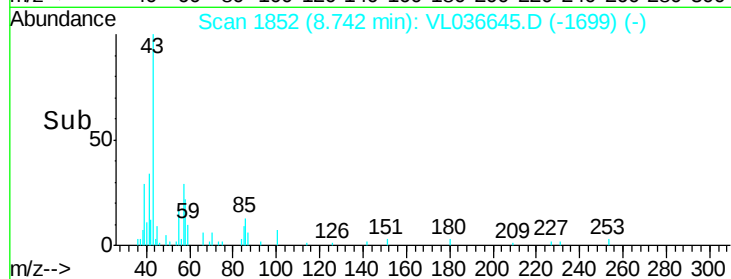
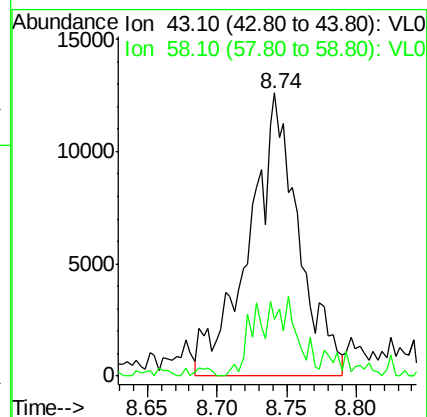
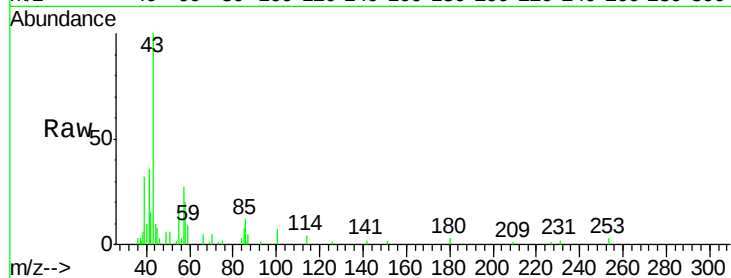
#50
 4-Methyl-2-Pentanone
 Concen: 0.136 ppbv m
 RT: 8.74 min Scan# 1852
 Delta R.T. -0.01 min
 Lab File: VL036645.D
 Acq: 2 Apr 2021 15:07

Instrument :
 MSVOA_L
 ClientSampleId :
 MF-SG-06(2021)

Tot Ion	Ratio	Lower	Upper
43	100		
58	0.0	28.2	42.2#

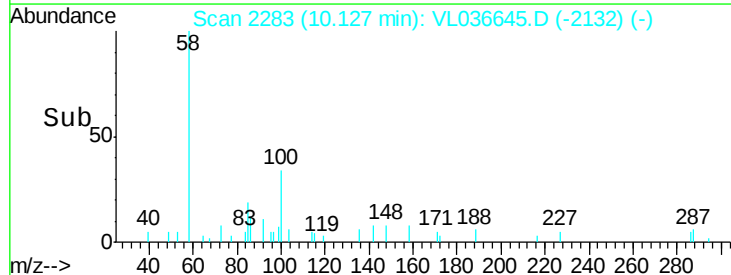
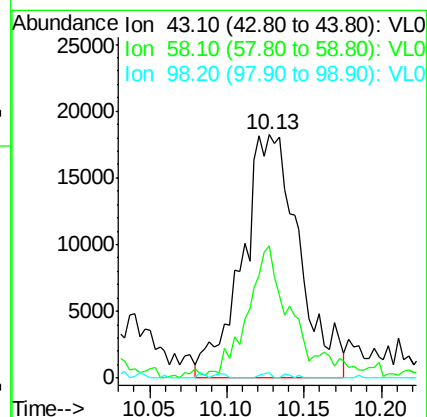
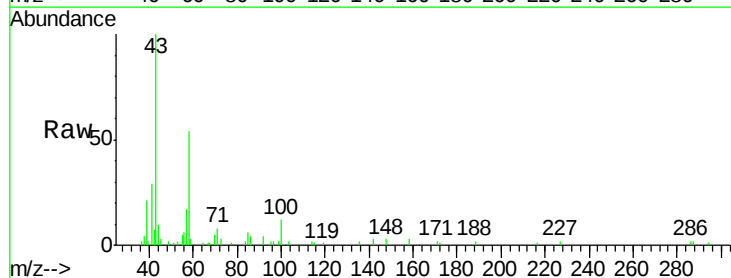
Manual Integrations
 APPROVED

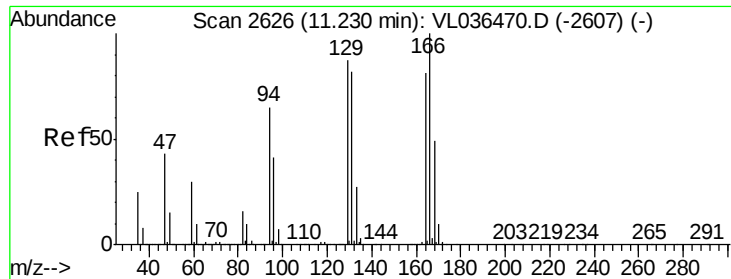
apatel
 4/5/2021 1:13:53 PM



#51
 2-Hexanone
 Concen: 0.403 ppbv m
 RT: 10.13 min Scan# 2283
 Delta R.T. -0.01 min
 Lab File: VL036645.D
 Acq: 2 Apr 2021 15:07

Tgt Ion	Ratio	Lower	Upper
43	100		
58	0.0	37.7	56.5#
98	0.0	0.2	0.2#





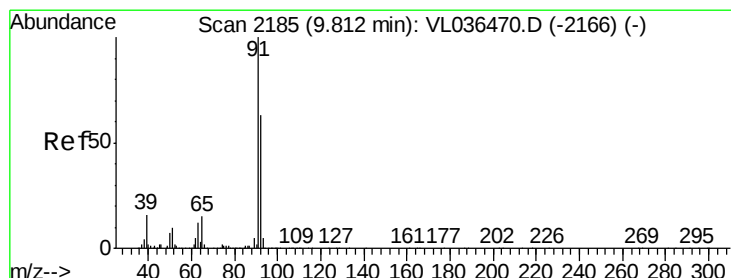
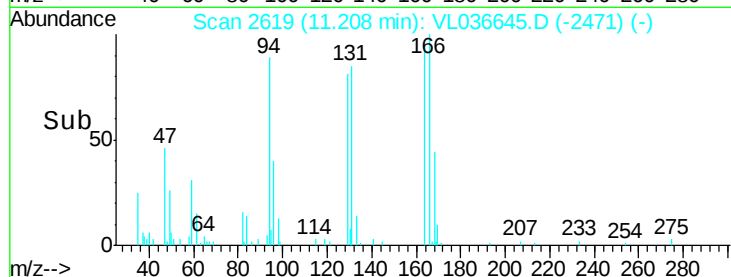
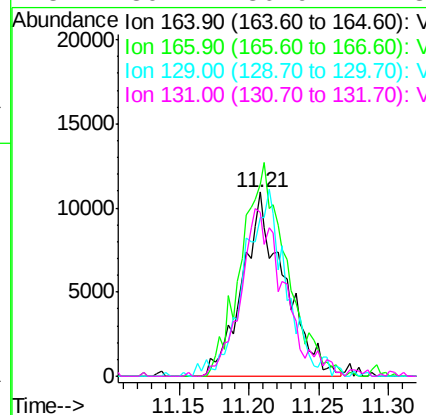
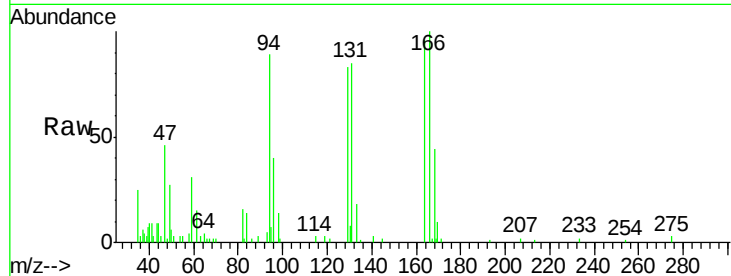
#52
Tetrachloroethene
Concen: 0.206 ppbv m
RT: 11.21 min Scan# 2619
Delta R.T. -0.02 min
Lab File: VL036645.D
Acq: 2 Apr 2021 15:07

Instrument :
MSVOA_L
ClientSampleId :
MF-SG-06(2021)

Tot Ion	Ratio	Lower	Upper
164	100		
166	104.3	98.3	147.5
129	86.3	85.8	128.8
131	89.1	80.9	121.3

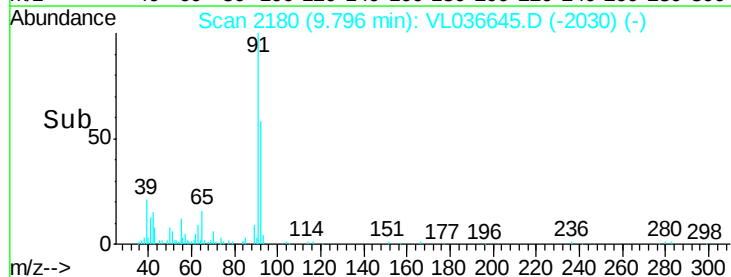
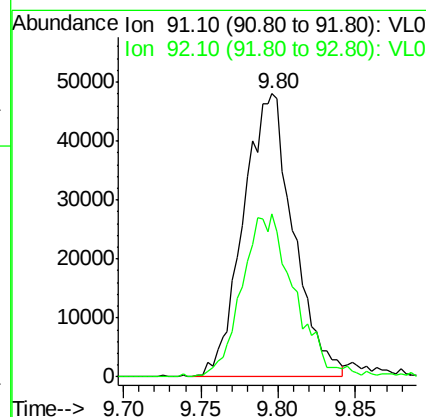
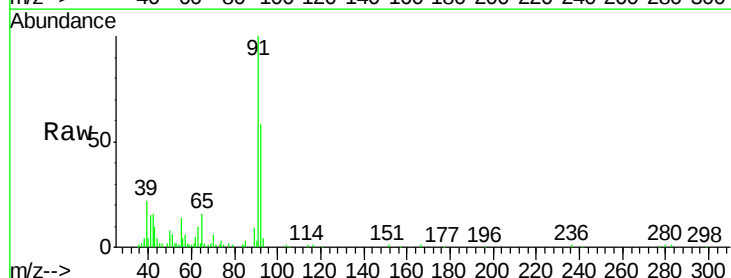
Manual Integrations
APPROVED

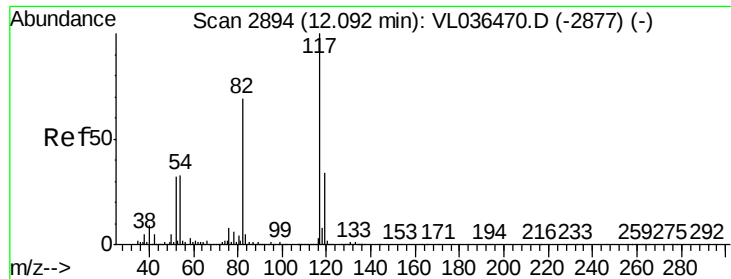
apatel
4/5/2021 1:13:53 PM



#53
Toluene
Concen: 0.338 ppbv
RT: 9.80 min Scan# 2180
Delta R.T. -0.02 min
Lab File: VL036645.D
Acq: 2 Apr 2021 15:07

Tgt Ion	Ratio	Lower	Upper
91	100		
92	61.4	48.8	73.2





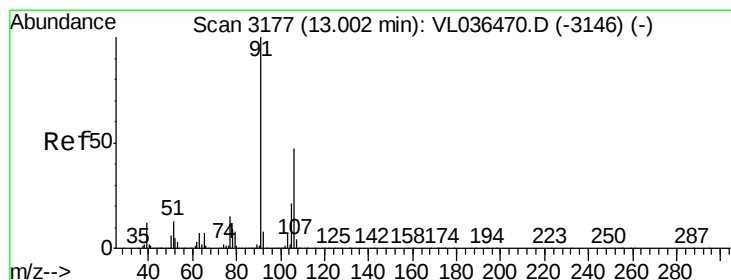
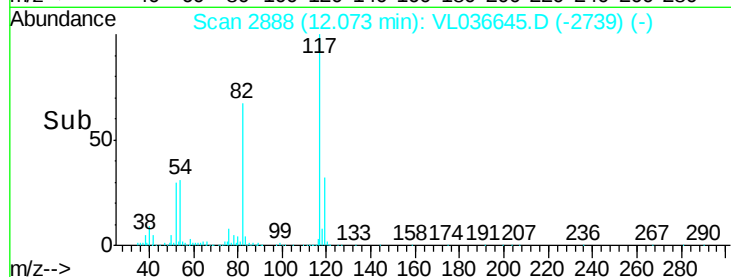
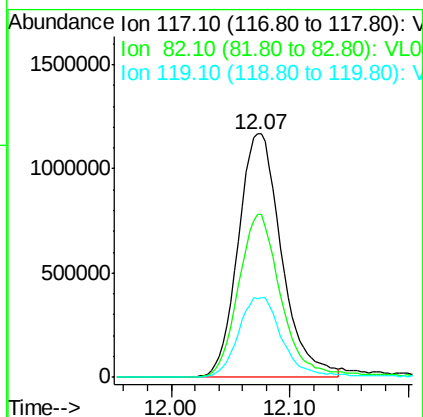
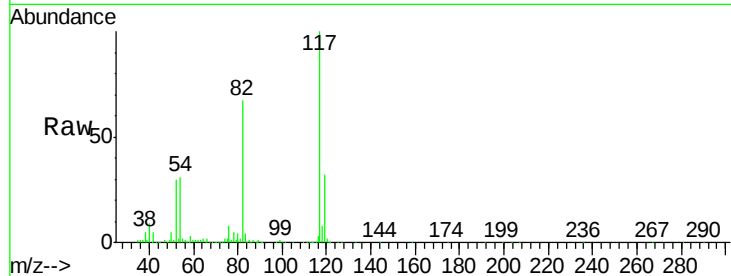
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 12.07 min Scan# 2888
Delta R.T. -0.02 min
Lab File: VL036645.D
Acq: 2 Apr 2021 15:07

Instrument :
MSVOA_L
ClientSampleId :
MF-SG-06(2021)

Tot Ion	Ratio	Lower	Upper
117	100		
82	68.8	57.4	86.0
119	33.6	47.4	71.0

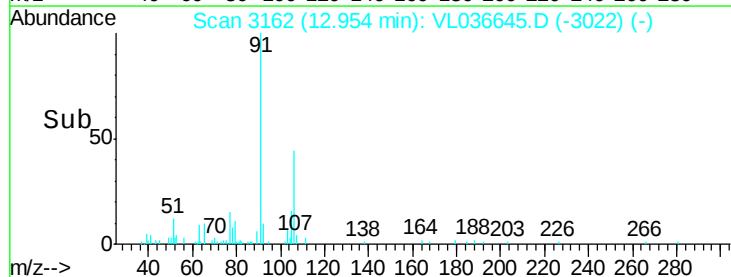
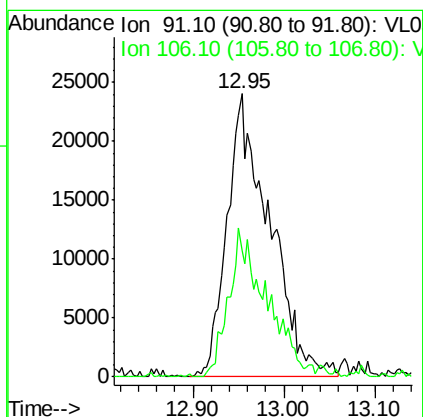
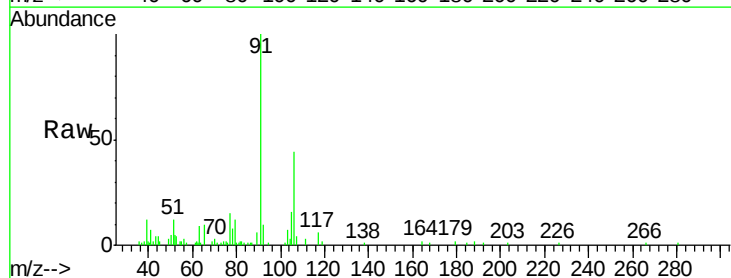
Manual Integrations
APPROVED

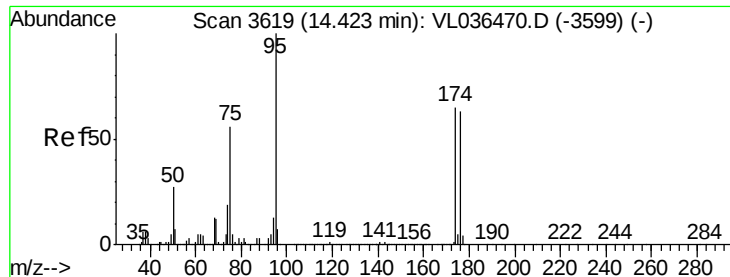
apatel
4/5/2021 1:13:53 PM



#59
m/p-Xylene
Concen: 0.208 ppbv m
RT: 12.95 min Scan# 3162
Delta R.T. -0.05 min
Lab File: VL036645.D
Acq: 2 Apr 2021 15:07

Tgt Ion	Ratio	Lower	Upper
91	100		
106	0.0	35.3	52.9





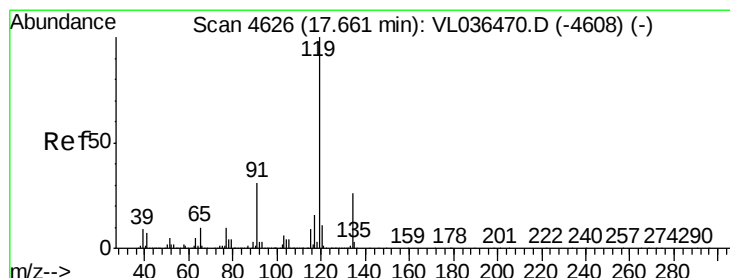
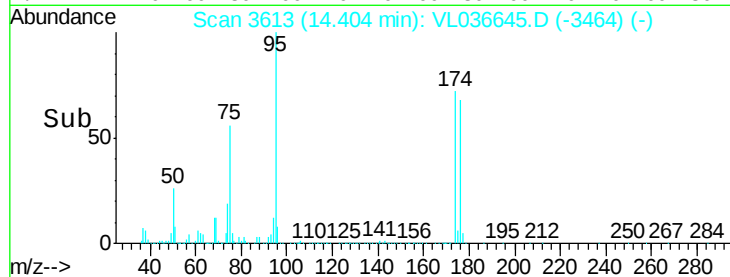
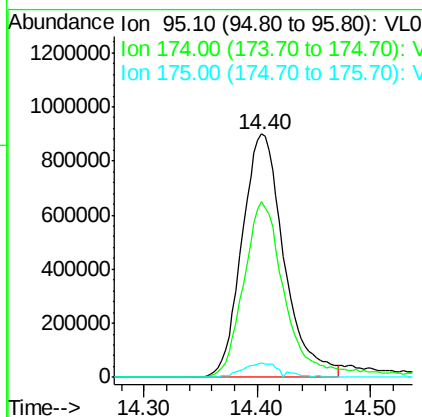
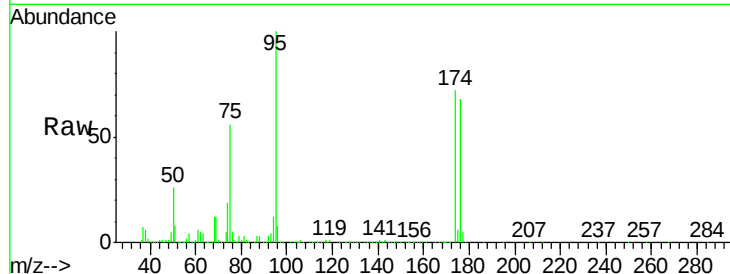
#68
 1-Bromo-4-Fluorobenzene
 Concen: 9.924 ppbv
 RT: 14.40 min Scan# 3613
 Delta R.T. -0.02 min
 Lab File: VL036645.D
 Acq: 2 Apr 2021 15:07

Instrument :
 MSVOA_L
 ClientSampleId :
 MF-SG-06(2021)

Tot Ion: 95 Resp: 2327078
 Ion Ratio Lower Upper
 95 100
 174 73.9 51.0 76.6
 175 5.7 3.9 5.9

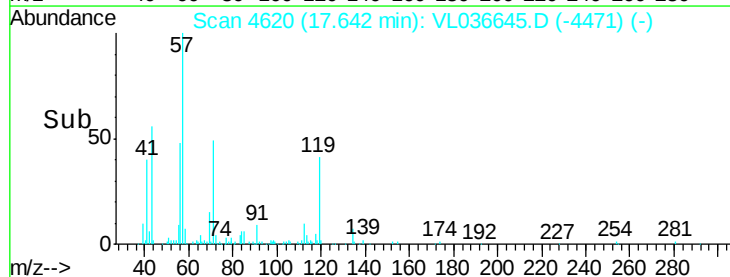
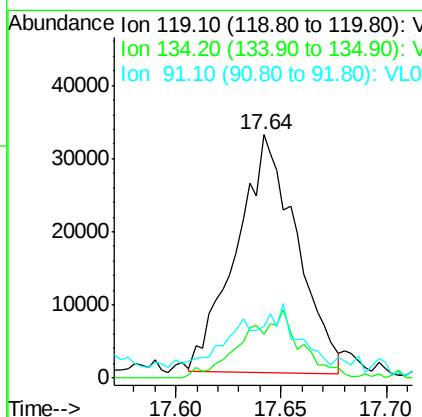
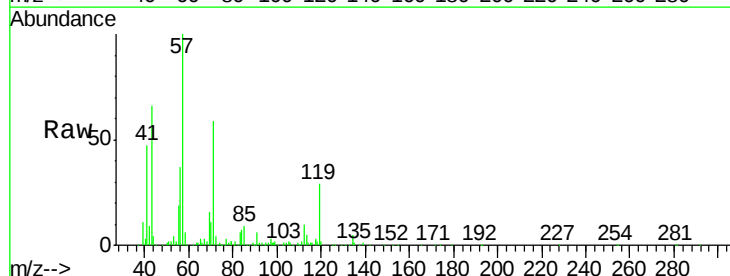
Manual Integrations
 APPROVED

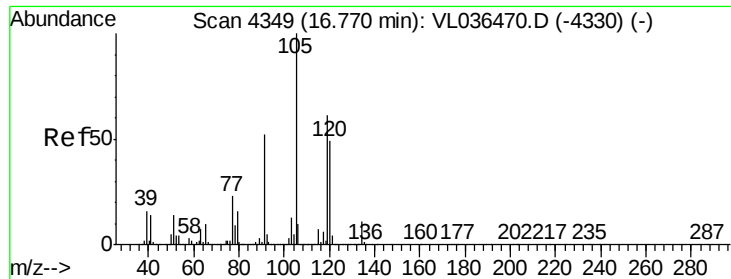
apatel
 4/5/2021 1:13:53 PM



#69
 p-Isopropyltoluene
 Concen: 0.140 ppbv
 RT: 17.64 min Scan# 4620
 Delta R.T. -0.02 min
 Lab File: VL036645.D
 Acq: 2 Apr 2021 15:07

Tgt Ion: 119 Resp: 65109
 Ion Ratio Lower Upper
 119 100
 134 27.0 20.6 30.8
 91 40.9 25.0 37.6#





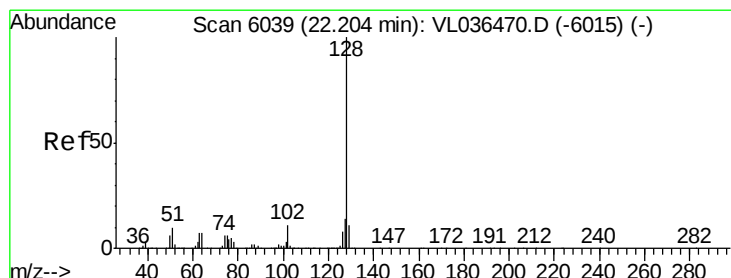
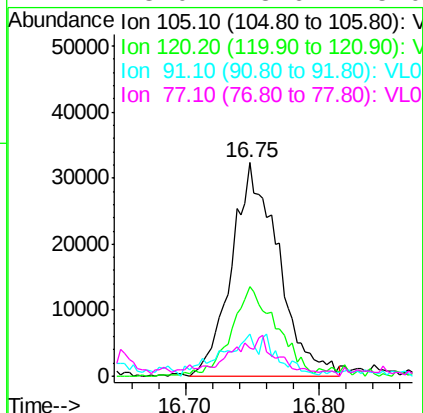
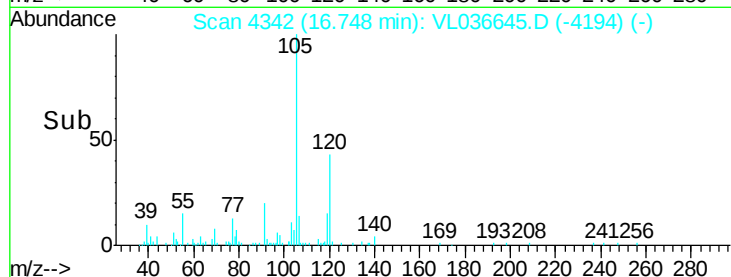
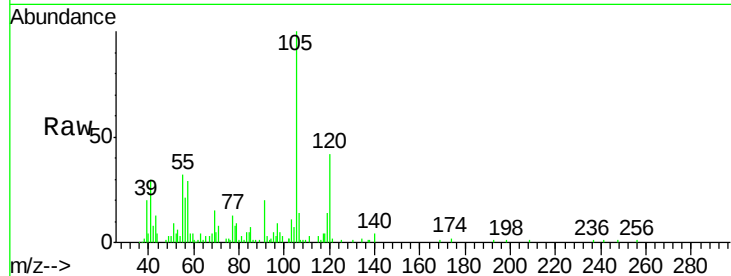
#74
 1,2,4-Trimethylbenzene
 Concen: 0.199 ppbv m
 RT: 16.75 min Scan# 4342
 Delta R.T. -0.02 min
 Lab File: VL036645.D
 Acq: 2 Apr 2021 15:07

Instrument :
 MSVOA_L
 ClientSampleId :
 MF-SG-06(2021)

Tot Ion	Ratio	Resp	Lower	Upper
105	100	78631		
120	42.1	39.2	58.8	
91	19.7	42.6	64.0	
77	13.0	18.6	28.0	

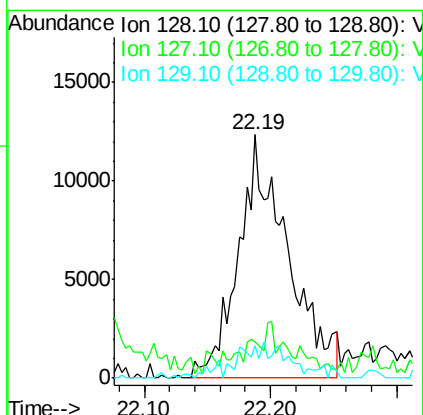
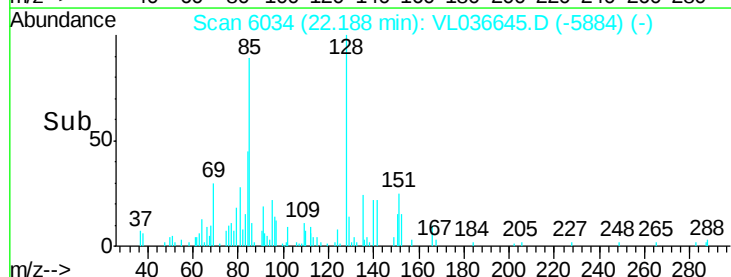
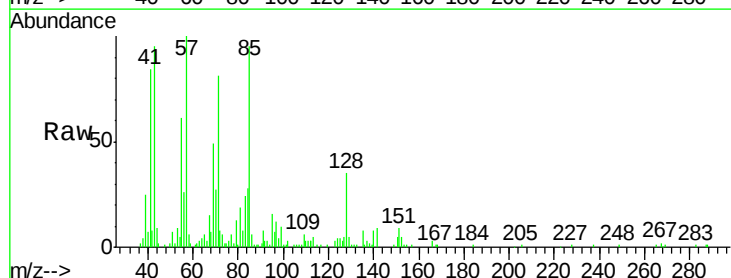
Manual Integrations
 APPROVED

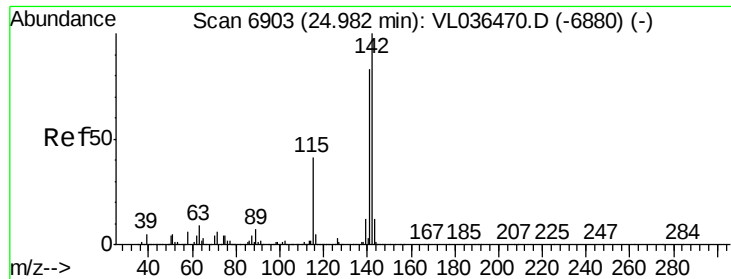
apatel
 4/5/2021 1:13:53 PM



#79
 Naphthalene
 Concen: 0.144 ppbv m
 RT: 22.19 min Scan# 6034
 Delta R.T. -0.02 min
 Lab File: VL036645.D
 Acq: 2 Apr 2021 15:07

Tgt Ion	Ratio	Resp	Lower	Upper
128	100	33180		
127	14.6	10.9	16.3	
129	13.4	9.0	13.4	





#80
 Naphthalene, 2-methyl-
 Concen: 0.243 ppbv
 RT: 24.96 min Scan# 6896
 Delta R.T. -0.02 min
 Lab File: VL036645.D
 Acq: 2 Apr 2021 15:07

Instrument :
 MSVOA_L
 ClientSampleId :
 MF-SG-06(2021)

Tot Ion	Ratio	Lower	Upper
142	100		
141	89.7	67.8	101.8
115	58.3	34.0	51.0

Manual Integrations
 APPROVED

apatel
 4/5/2021 1:13:53 PM

