

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL060221\
 Data File : VL037118.D
 Acq On : 3 Jun 2021 2:12
 Operator : SY/AP
 Sample : M2548-16
 Misc : 400mL/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 SGS-9A

Manual Integrations
 APPROVED

MMDadoda
 6/7/2021 3:01:26 PM

Quant Time: Jun 06 20:32:45 2021
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL051821AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Tue May 18 2021
 QLast Update : Tue May 18 12:00:15 2021
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.66	49	1407164	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.17	114	4230704	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.08	117	3804484	10.00	ppbv	0.01

System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	14.40	95	2825318	9.89	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	98.90%

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.04	85	71209	0.298	ppbv	90
11) Trichlorofluoromethane	3.94	101	53366	0.242	ppbv	96
12) 1,1,2-Trichlorotrifluoroet	4.47	101	15180m	0.096	ppbv	
13) Ethanol	3.60	45	2160352	175.401	ppbv	92
15) Acetone	3.84	43	2667497	18.507	ppbv	96
17) tert-Butyl alcohol	4.30	59	85114	0.645	ppbv #	92
19) Isopropyl Alcohol	3.97	45	244952	3.162	ppbv #	46
20) Methylene Chloride	4.34	84	4078989	52.795	ppbv	94
26) Hexane	5.68	57	4139219	23.394	ppbv #	47
29) Chloroform	5.74	83	178313	0.713	ppbv	95
31) cis-1,2-Dichloroethene	5.54	61	33727m	0.213	ppbv	
34) 2-Butanone	5.24	43	243543	1.581	ppbv	96
35) Carbon Tetrachloride	7.01	117	30516m	0.109	ppbv	
38) Trichloroethene	7.83	130	12727867	81.646	ppbv	95
50) 4-Methyl-2-Pentanone	8.74	43	45073	0.177	ppbv	91
52) Tetrachloroethene	11.21	164	156327	1.079	ppbv	90
53) Toluene	9.80	91	206851	0.477	ppbv	97
59) m/p-Xylene	12.95	91	112888m	0.254	ppbv	
60) o-Xylene	13.67	91	54529m	0.129	ppbv	
74) 1,2,4-Trimethylbenzene	16.75	105	106306	0.218	ppbv #	68
79) Naphthalene	22.18	128	39103m	0.102	ppbv	

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

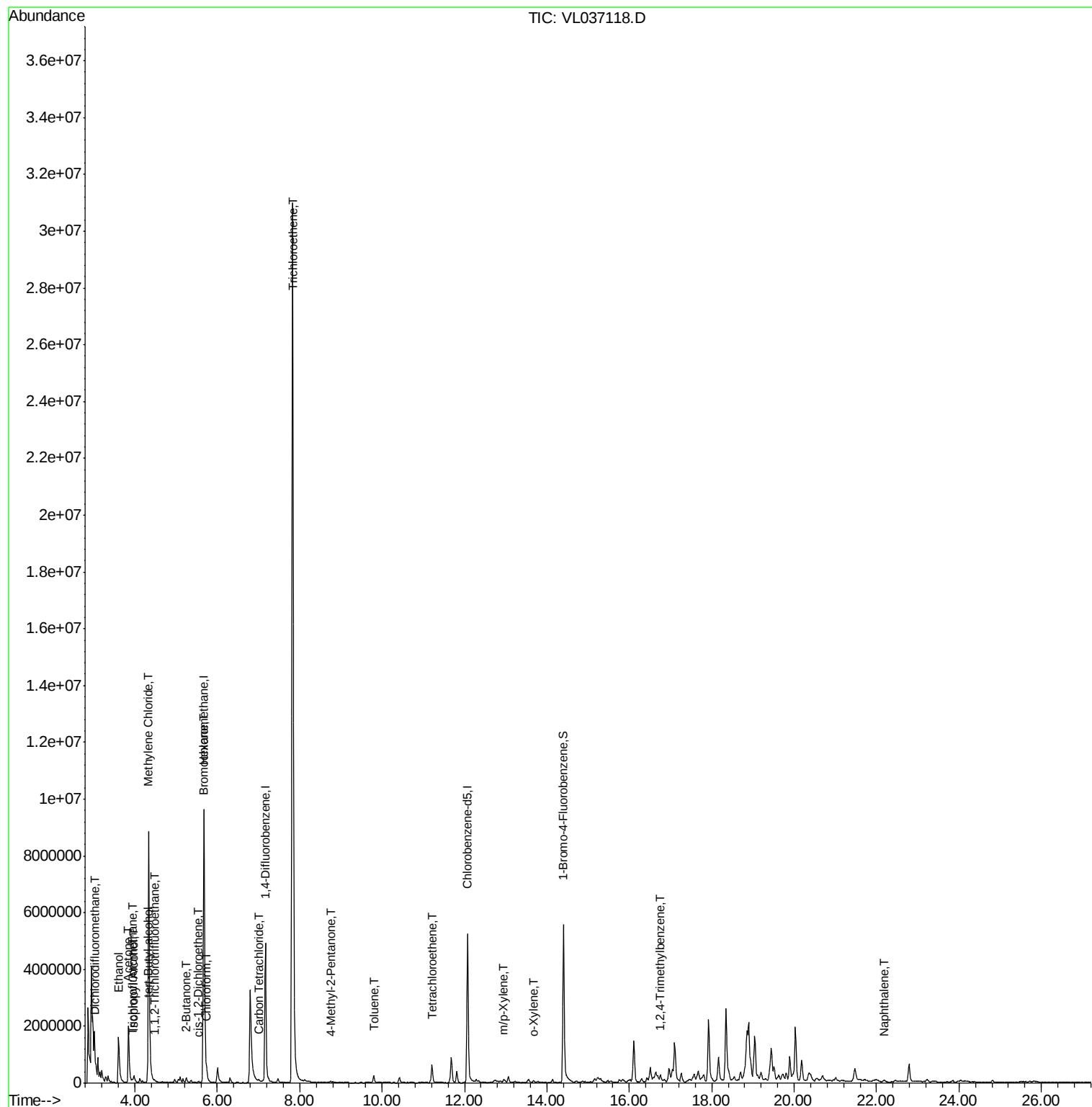
Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL060221\
Data File : VL037118.D
Acq On : 3 Jun 2021 2:12
Operator : SY/AP
Sample : M2548-16
Misc : 400mL/MSVOA L
ALS Vial : 1 Sample Multiplier: 1

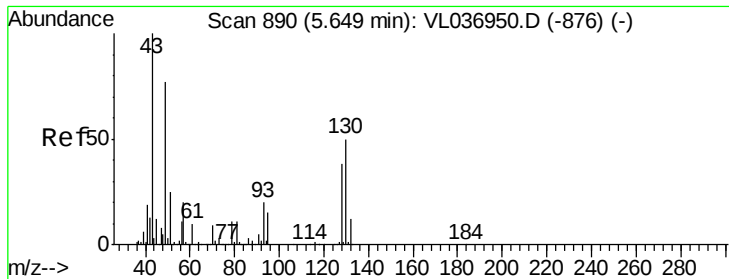
Instrument :
MSVOA_L
ClientSampleId :
SGS-9A

Manual Integrations
APPROVED

MMDadoda
6/7/2021 3:01:26 PM

Quant Time: Jun 06 20:32:45 2021
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL051821AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Tue May
QLast Update : Tue May 18 12:00:15 2021
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.66 min Scan# 893

Delta R.T. 0.01 min

Lab File: VL037118.D

Acq: 3 Jun 2021 2:12

Instrument :

MSVOA_L

ClientSampleId :

SGS-9A

Tot Ion: 49 Resp: 1407164

Ion Ratio Lower Upper

49 100

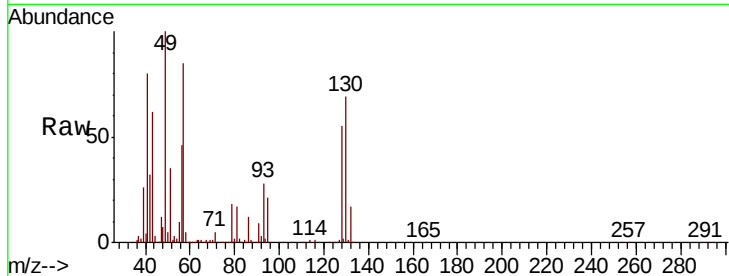
128 56.5 26.9 80.7

130 71.3 33.8 101.4

Manual Integrations
APPROVED

MMDadoda

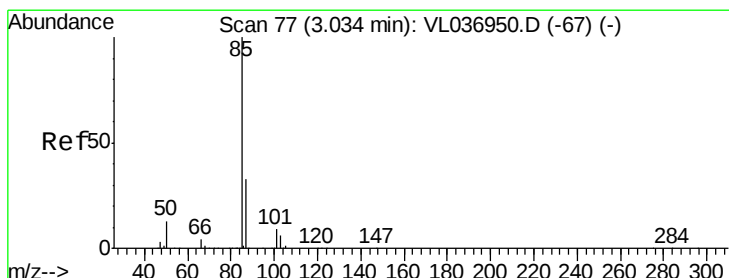
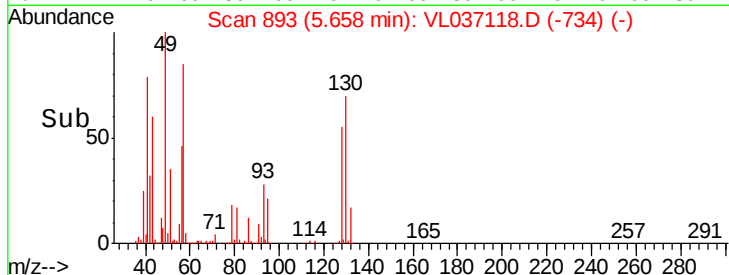
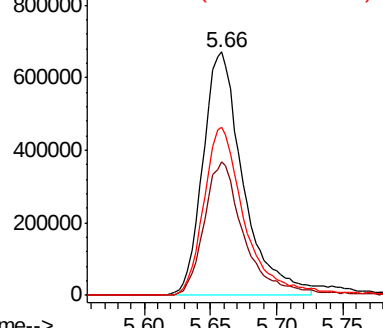
6/7/2021 3:01:26 PM



Abundance Ion 49.10 (48.80 to 49.80): VL0

Ion 128.00 (127.70 to 128.70): V

Ion 130.00 (129.70 to 130.70): V



#2

Dichlorodifluoromethane

Concen: 0.298 ppbv

RT: 3.04 min Scan# 79

Delta R.T. 0.01 min

Lab File: VL037118.D

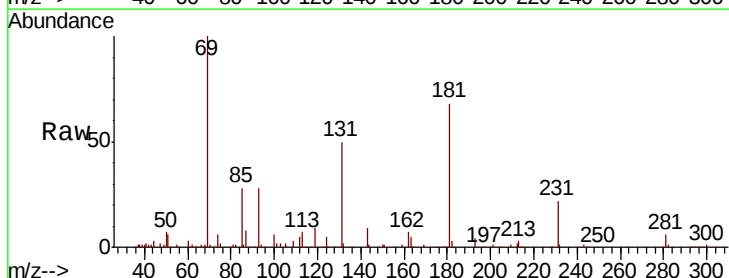
Acq: 3 Jun 2021 2:12

Tgt Ion: 85 Resp: 71209

Ion Ratio Lower Upper

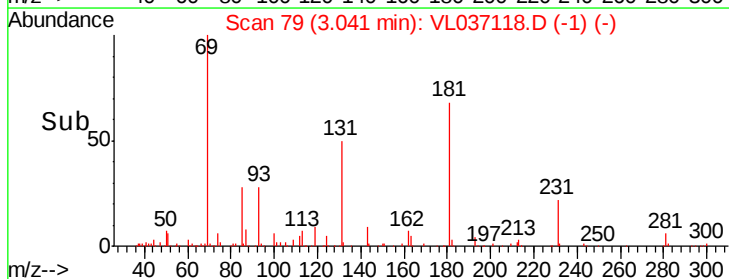
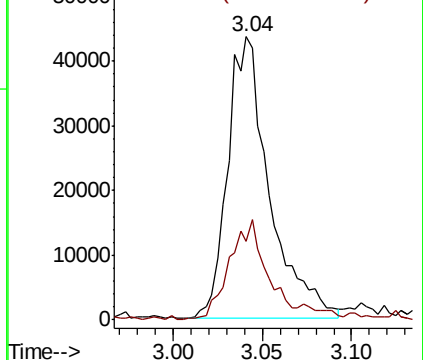
85 100

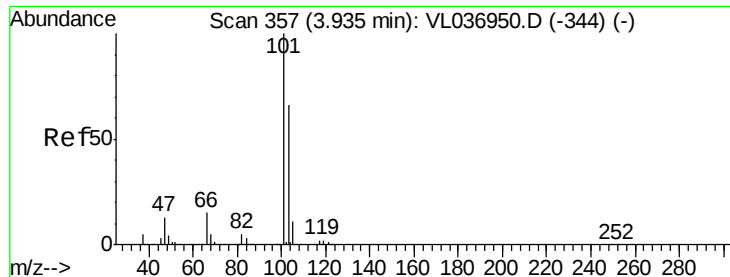
87 27.3 26.6 39.8



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0





#11

Trichlorofluoromethane

Concen: 0.242 ppbv

RT: 3.94 min Scan# 359

Delta R.T. 0.01 min

Lab File: VL037118.D

Acq: 3 Jun 2021 2:12

Instrument :

MSVOA_L

ClientSampleId :

SGS-9A

Tot Ion:101 Resp: 53366

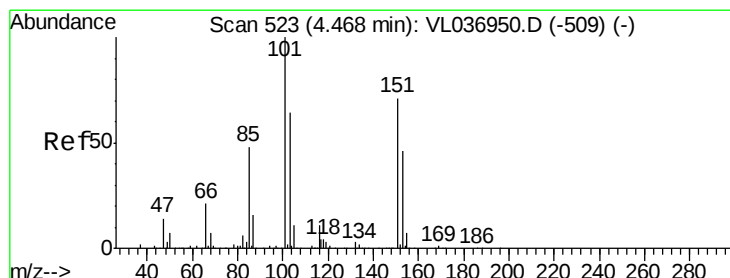
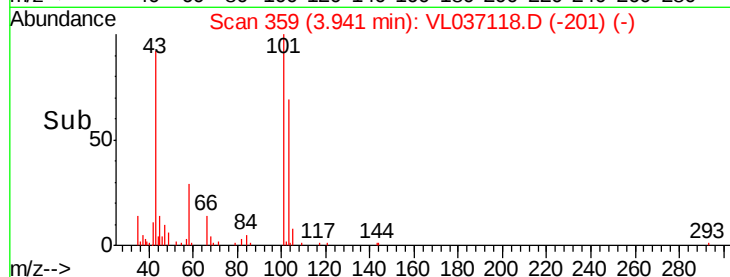
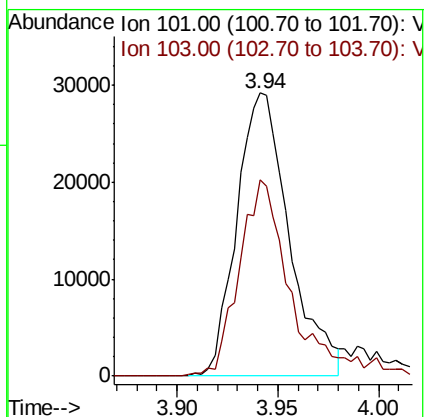
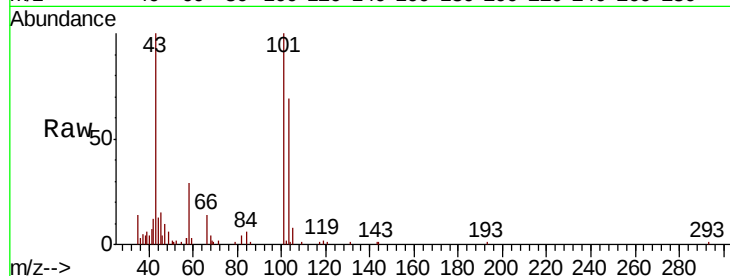
Ion Ratio Lower Upper

101 100

103 68.8 52.6 79.0

Manual Integrations
APPROVED

MMDadoda
6/7/2021 3:01:26 PM



#12

1,1,2-Trichlorotrifluoroethane

Concen: 0.096 ppbv m

RT: 4.47 min Scan# 524

Delta R.T. 0.00 min

Lab File: VL037118.D

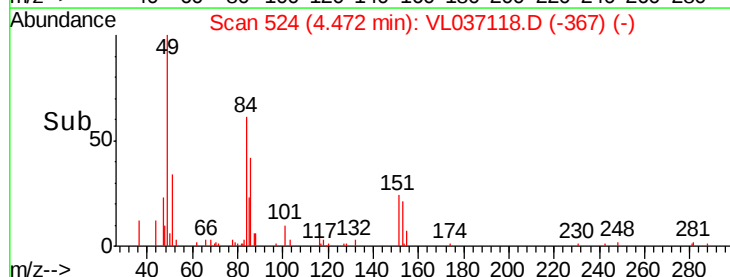
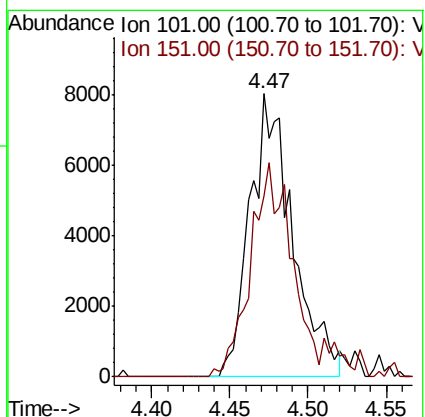
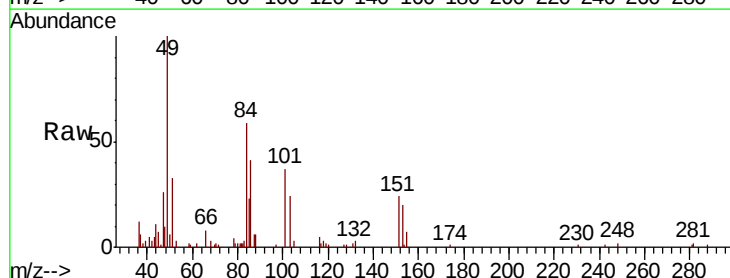
Acq: 3 Jun 2021 2:12

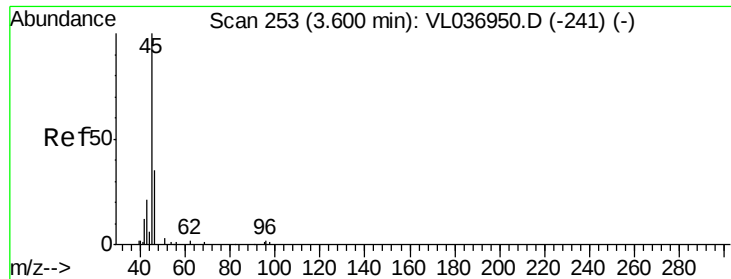
Tgt Ion:101 Resp: 15180

Ion Ratio Lower Upper

101 100

151 80.4 57.7 86.5





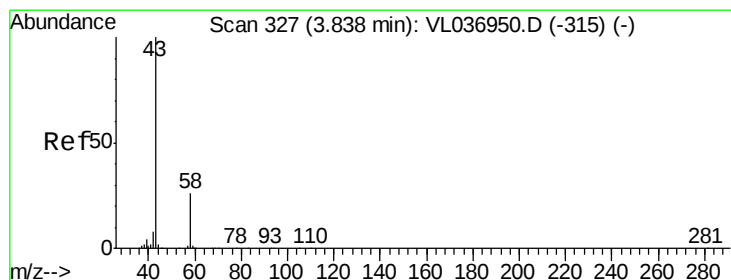
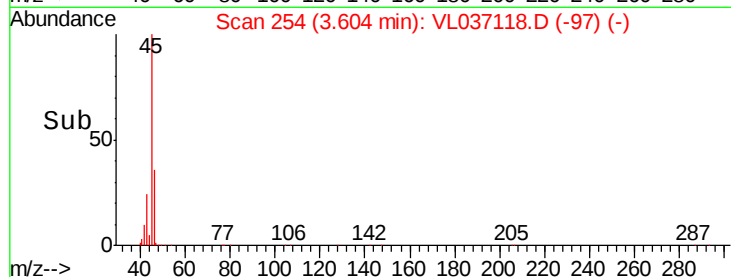
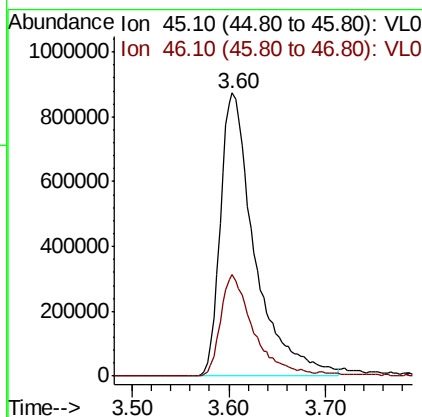
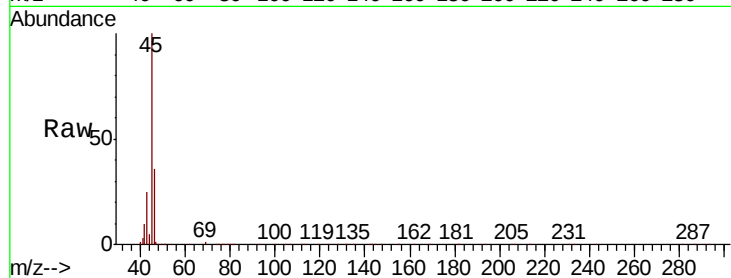
#13
Ethanol
Concen: 175.401 ppbv
RT: 3.60 min Scan# 254
Delta R.T. 0.00 min
Lab File: VL037118.D
Acq: 3 Jun 2021 2:12

Instrument :
MSVOA_L
ClientSampled :
SGS-9A

Tot Ion: 45 Resp: 2160352
Ion Ratio Lower Upper
45 100
46 36.0 16.3 65.3

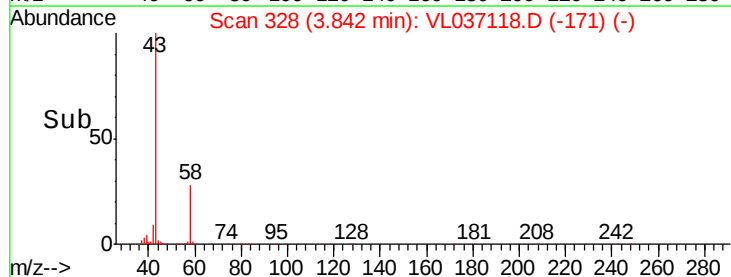
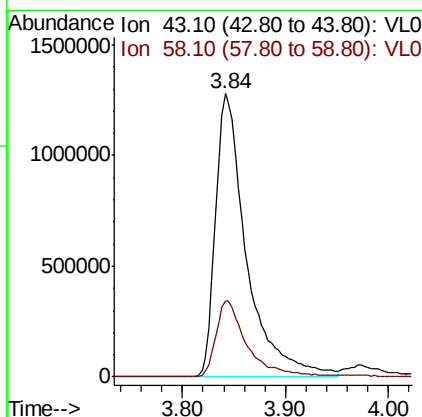
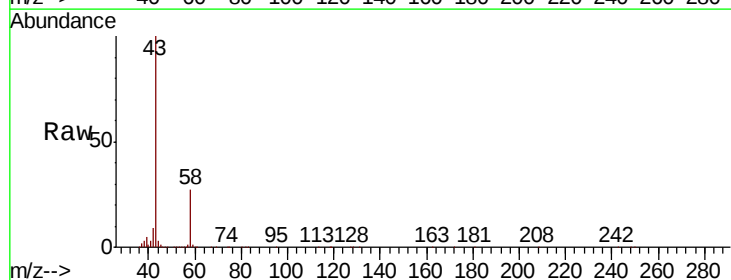
Manual Integrations
APPROVED

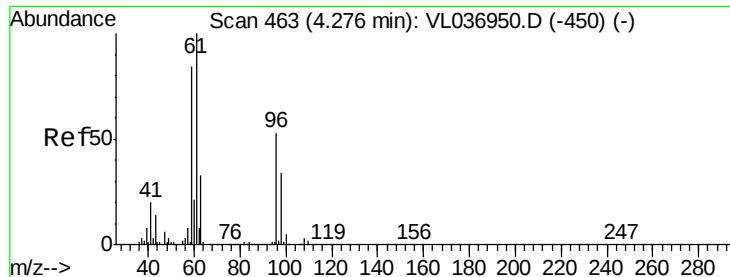
MMDadoda
6/7/2021 3:01:26 PM



#15
Acetone
Concen: 18.507 ppbv
RT: 3.84 min Scan# 328
Delta R.T. 0.00 min
Lab File: VL037118.D
Acq: 3 Jun 2021 2:12

Tgt Ion: 43 Resp: 2667497
Ion Ratio Lower Upper
43 100
58 28.0 24.0 36.0





#17

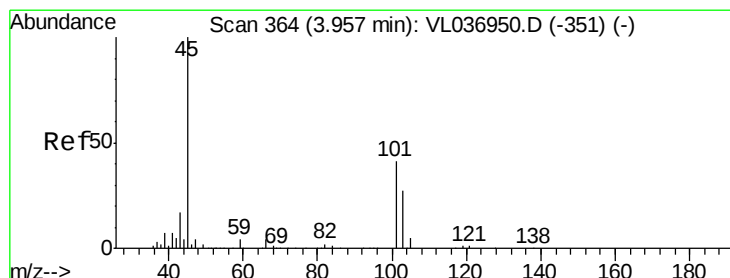
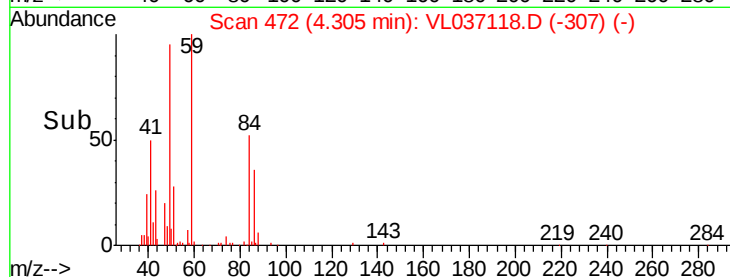
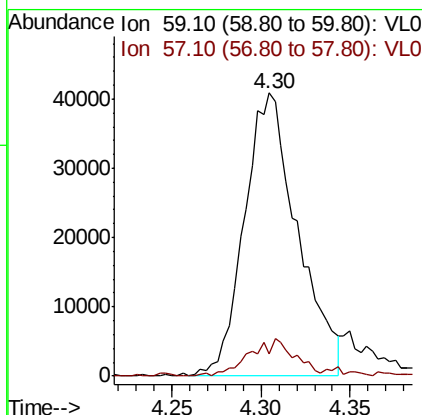
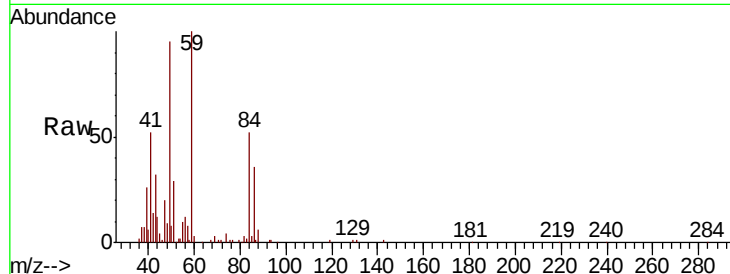
tert-Butyl alcohol
Concen: 0.645 ppbv
RT: 4.30 min Scan# 472
Delta R.T. 0.03 min
Lab File: VL037118.D
Acq: 3 Jun 2021 2:12

Instrument :
MSVOA_L
ClientSampleId :
SGS-9A

Tot Ion	Ratio	Lower	Upper
59	100		
57	13.3	8.3	12.5#

Manual Integrations
APPROVED

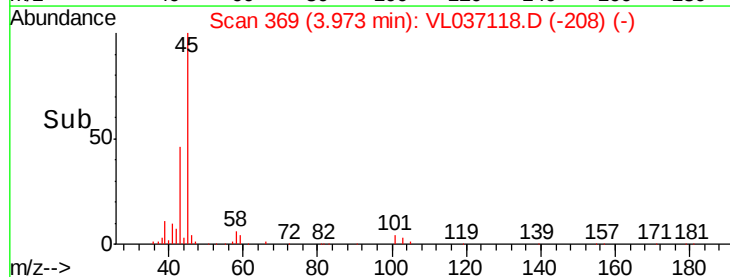
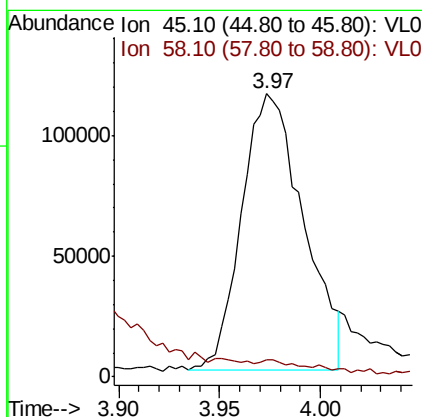
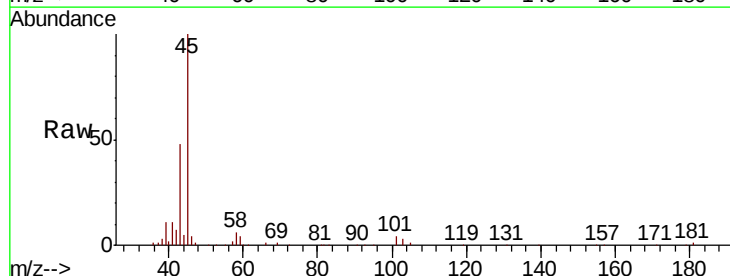
MMDadoda
6/7/2021 3:01:26 PM

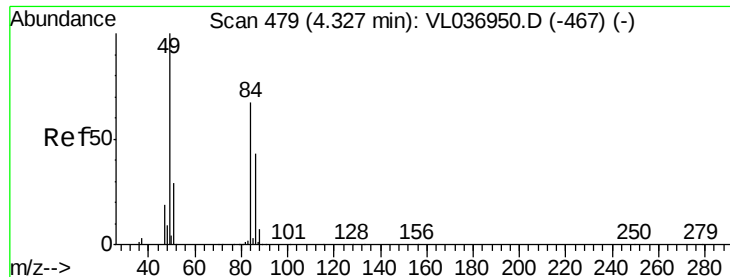


#19

Isopropyl Alcohol
Concen: 3.162 ppbv
RT: 3.97 min Scan# 369
Delta R.T. 0.02 min
Lab File: VL037118.D
Acq: 3 Jun 2021 2:12

Tgt Ion	Ratio	Lower	Upper
45	100		
58	10.7	37.2	55.8#





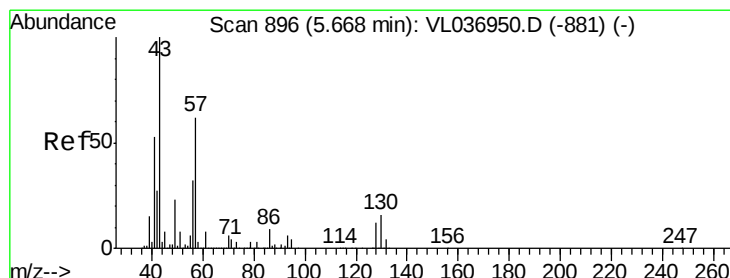
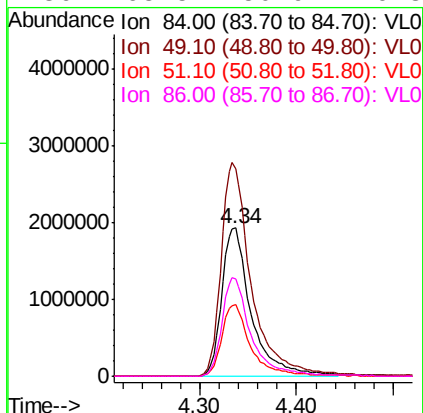
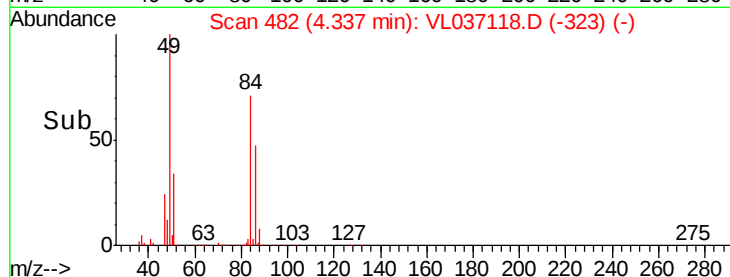
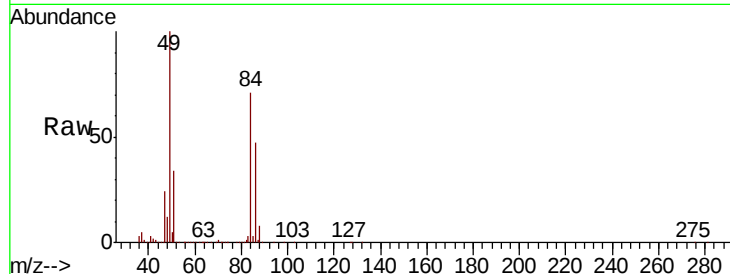
#20
Methvlene Chloride
Concen: 52.795 ppbv
RT: 4.34 min Scan# 482
Delta R.T. 0.01 min
Lab File: VL037118.D
Acq: 3 Jun 2021 2:12

Instrument :
MSVOA_L
ClientSampleId :
SGS-9A

Tot Ion: 84 Resp: 4078989
Ion Ratio Lower Upper
84 100
49 140.0 119.8 179.6
51 48.2 35.1 52.7
86 65.5 50.9 76.3

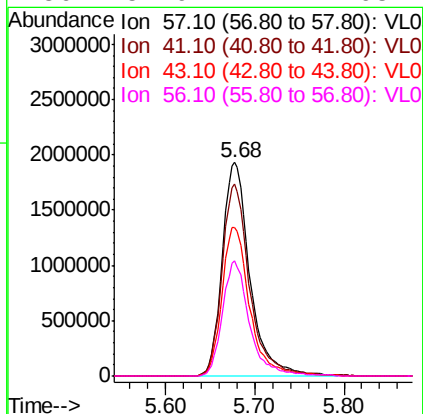
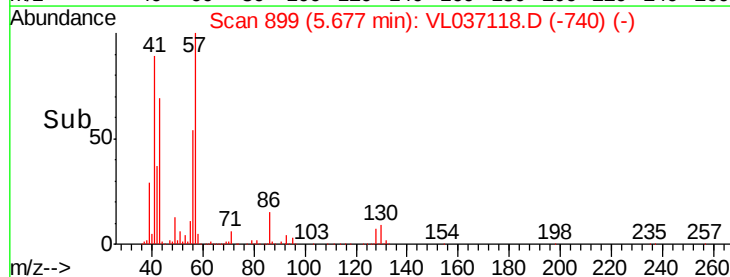
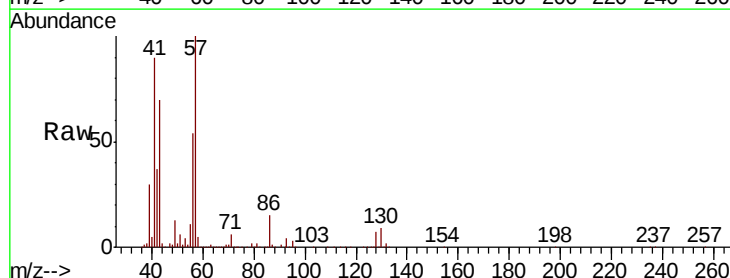
Manual Integrations
APPROVED

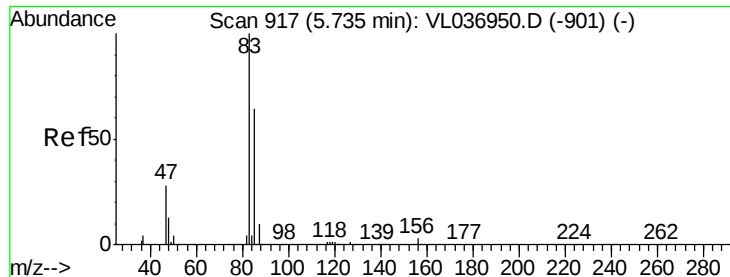
MMDadoda
6/7/2021 3:01:26 PM



#26
Hexane
Concen: 23.394 ppbv
RT: 5.68 min Scan# 899
Delta R.T. 0.01 min
Lab File: VL037118.D
Acq: 3 Jun 2021 2:12

Tgt Ion: 57 Resp: 4139219
Ion Ratio Lower Upper
57 100
41 90.5 70.5 105.7
43 70.3 165.8 248.8#
56 52.9 42.2 63.4





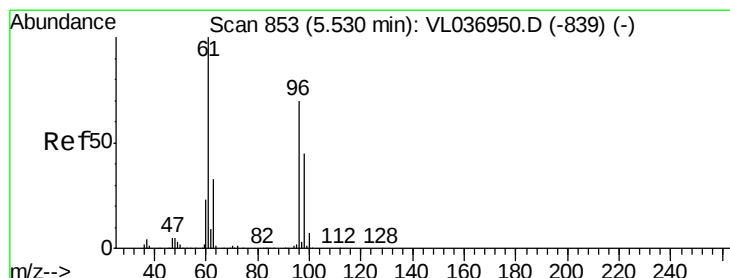
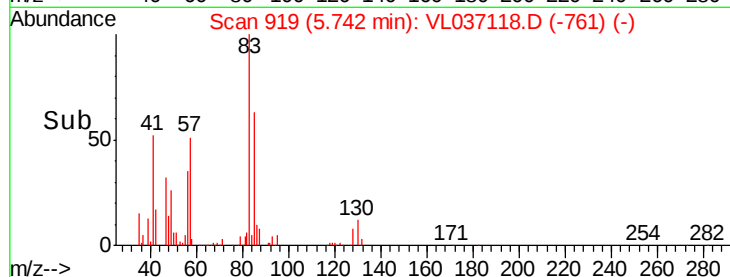
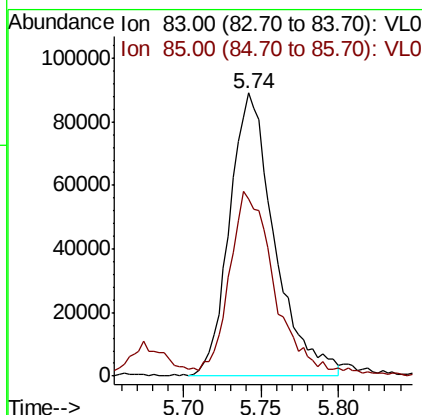
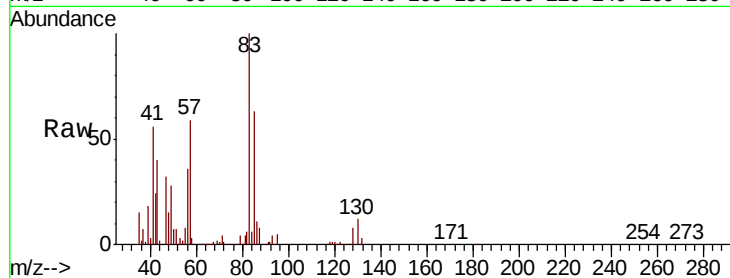
#29
Chloroform
Concen: 0.713 ppbv
RT: 5.74 min Scan# 919
Delta R.T. 0.01 min
Lab File: VL037118.D
Acq: 3 Jun 2021 2:12

Instrument :
MSVOA_L
ClientSampled :
SGS-9A

Tot Ion	83	Resp	178313
Ion Ratio	100	Lower	Upper
85	60.3	51.1	76.7

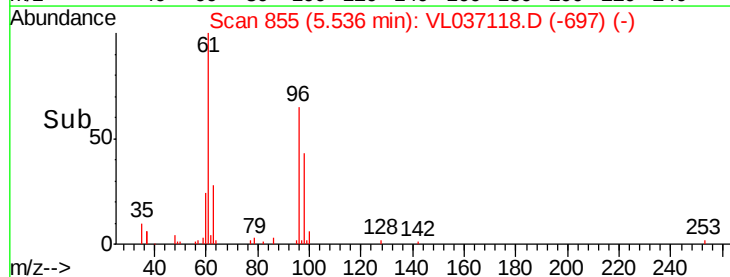
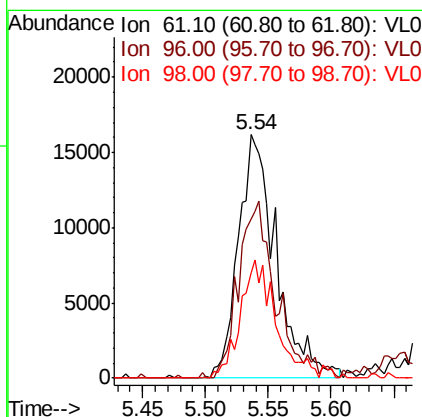
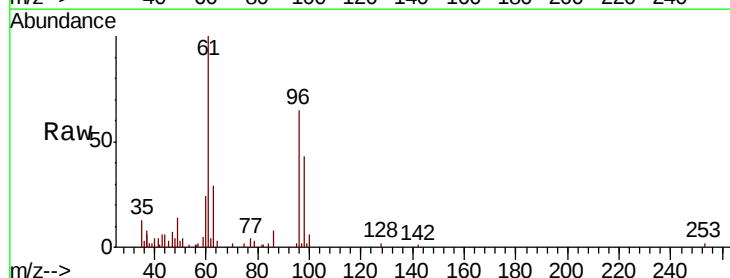
Manual Integrations
APPROVED

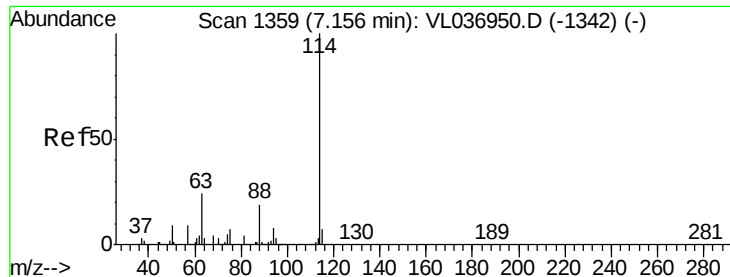
MMDadoda
6/7/2021 3:01:26 PM



#31
cis-1,2-Dichloroethene
Concen: 0.213 ppbv m
RT: 5.54 min Scan# 855
Delta R.T. 0.01 min
Lab File: VL037118.D
Acq: 3 Jun 2021 2:12

Tgt Ion	61	Resp	33727
Ion Ratio	100	Lower	Upper
96	65.2	55.9	83.9
98	43.4	35.6	53.4





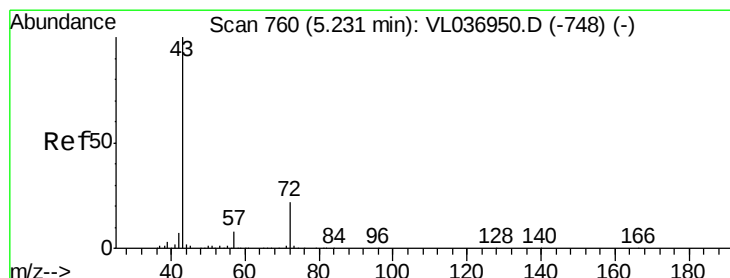
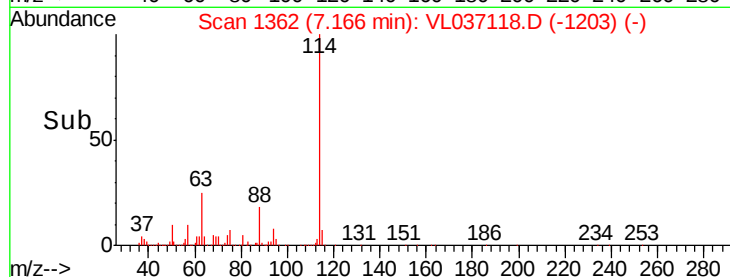
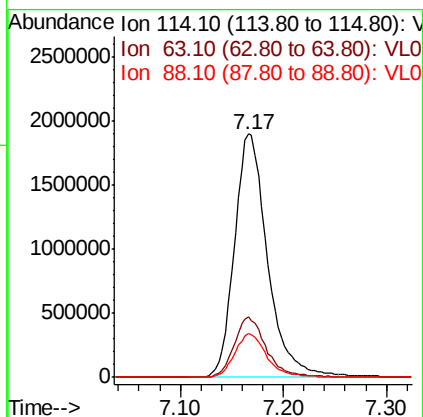
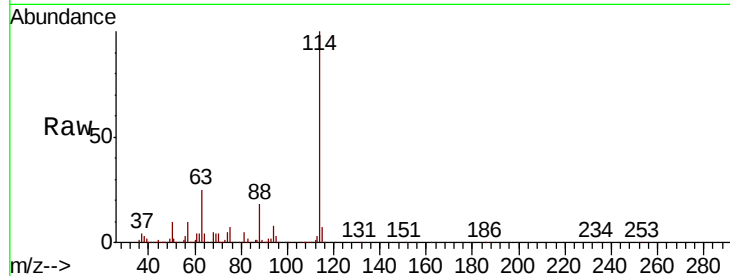
#33
 1,4-Difluorobenzene
 Concen: 10.000 ppbv
 RT: 7.17 min Scan# 1362
 Delta R.T. 0.01 min
 Lab File: VL037118.D
 Acq: 3 Jun 2021 2:12

Instrument :
 MSVOA_L
 ClientSampled :
 SGS-9A

Tot Ion:114 Resp: 4230704
 Ion Ratio Lower Upper
 114 100
 63 24.3 19.6 29.4
 88 17.7 14.6 21.8

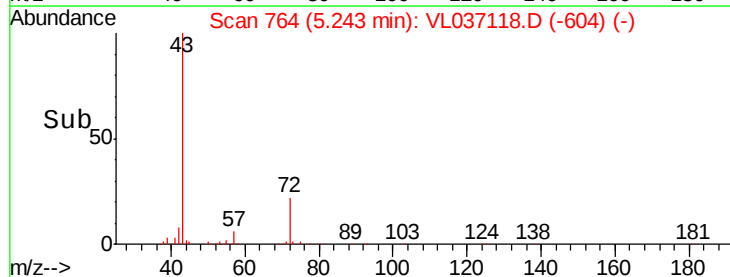
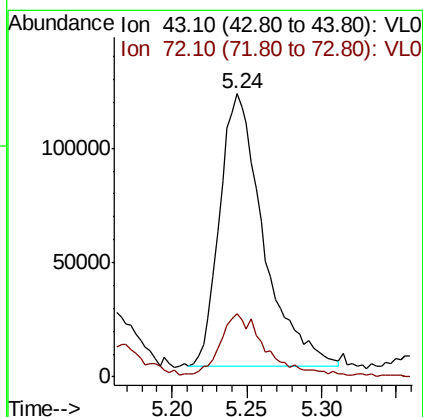
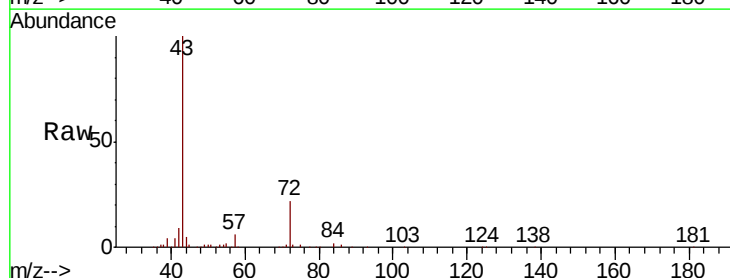
Manual Integrations
 APPROVED

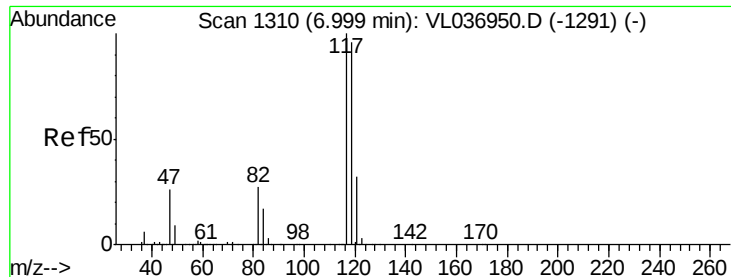
MMDadoda
 6/7/2021 3:01:26 PM



#34
 2-Butanone
 Concen: 1.581 ppbv
 RT: 5.24 min Scan# 764
 Delta R.T. 0.01 min
 Lab File: VL037118.D
 Acq: 3 Jun 2021 2:12

Tgt Ion: 43 Resp: 243543
 Ion Ratio Lower Upper
 43 100
 72 25.9 19.0 28.4





#35

Carbon Tetrachloride

Concen: 0.109 ppbv m

RT: 7.01 min Scan# 1314

Delta R.T. 0.01 min

Lab File: VL037118.D

Acq: 3 Jun 2021 2:12

Instrument :

MSVOA_L

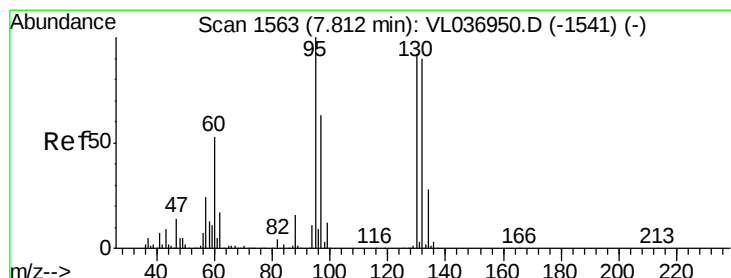
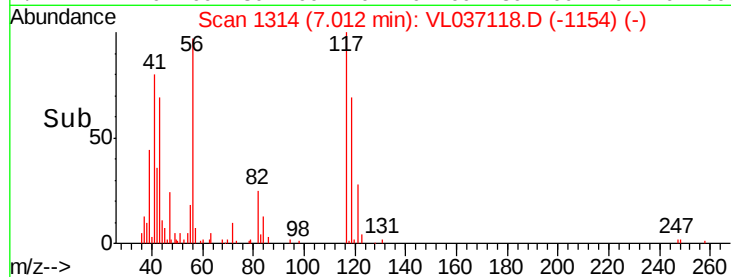
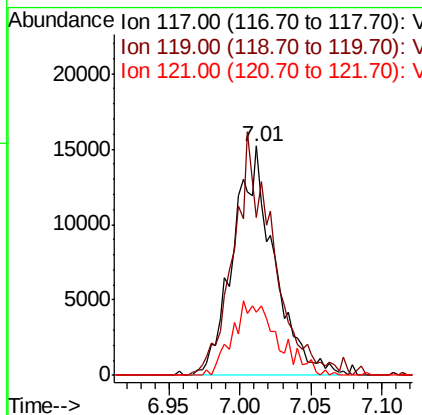
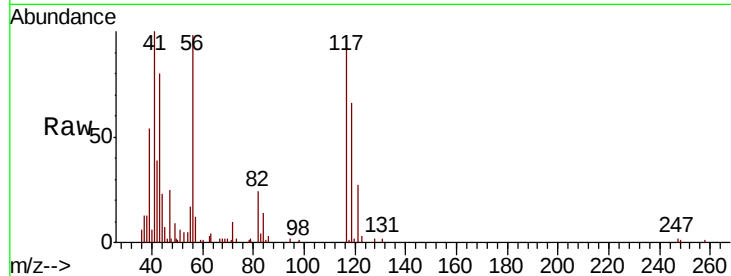
ClientSampleId :

SGS-9A

Tot Ion	Ratio	Lower	Upper
117	100		
119	68.7	76.6	114.8#
121	27.5	25.8	38.6

Manual Integrations
APPROVED

MMDadoda
6/7/2021 3:01:26 PM



#38

Trichloroethene

Concen: 81.646 ppbv

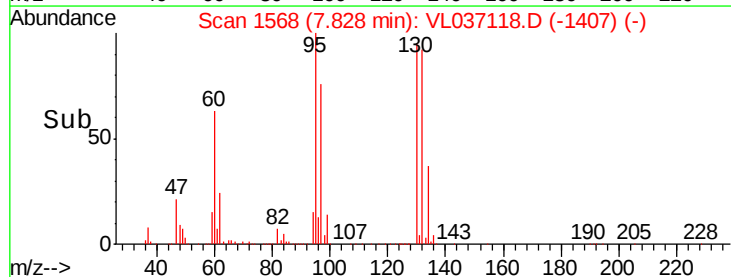
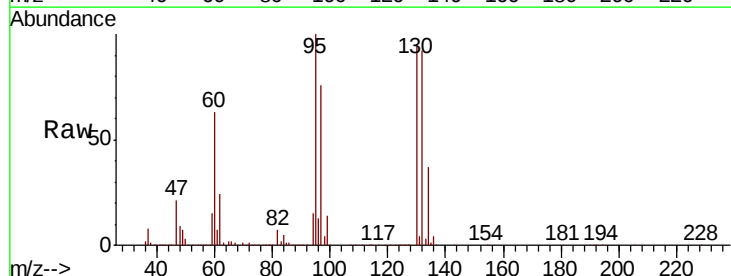
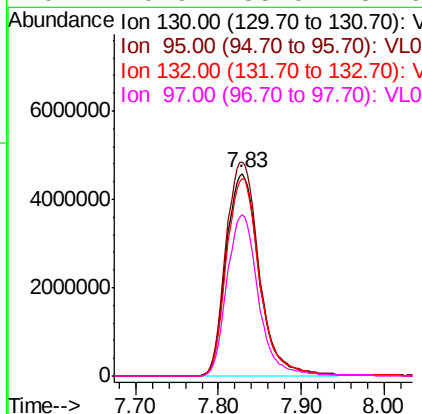
RT: 7.83 min Scan# 1568

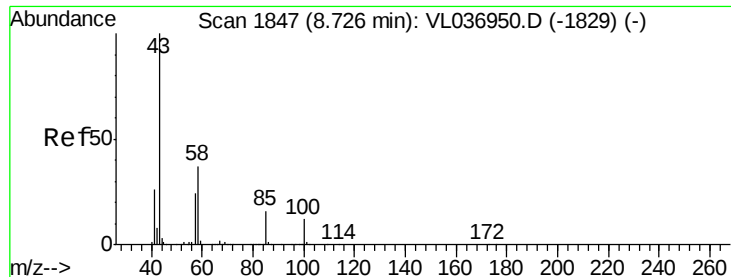
Delta R.T. 0.02 min

Lab File: VL037118.D

Acq: 3 Jun 2021 2:12

Tgt Ion	Ratio	Lower	Upper
130	100		
95	105.4	86.9	130.3
132	97.3	78.4	117.6
97	79.9	55.0	82.6





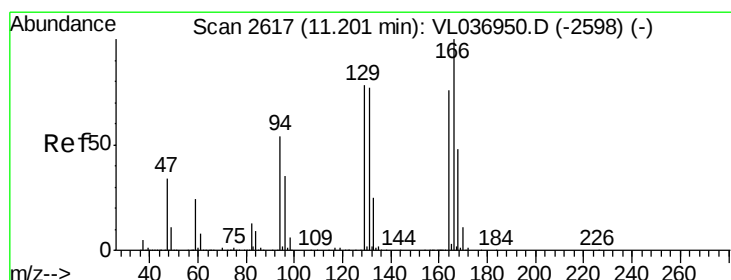
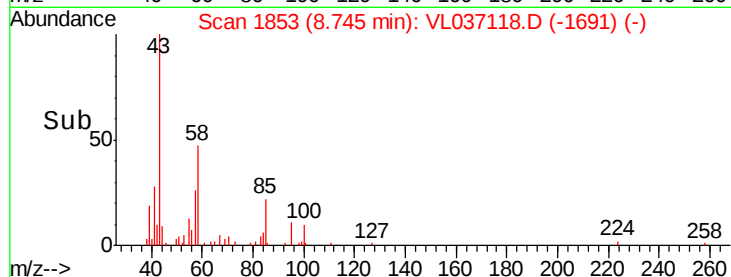
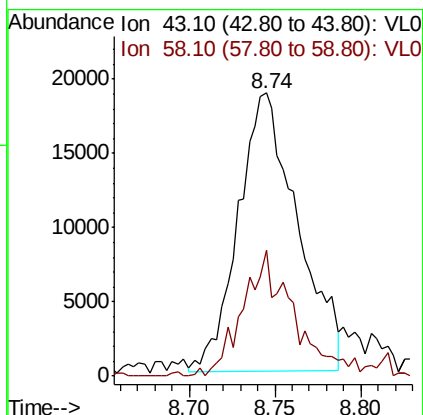
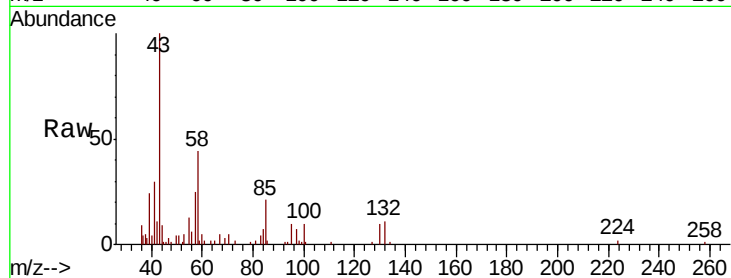
#50
4-Methyl-2-Pentanone
Concen: 0.177 ppbv
RT: 8.74 min Scan# 1853
Delta R.T. 0.02 min
Lab File: VL037118.D
Acq: 3 Jun 2021 2:12

Instrument :
MSVOA_L
ClientSampleId :
SGS-9A

Tot Ion: 43 Resp: 45073
Ion Ratio Lower Upper
43 100
58 42.2 29.4 44.2

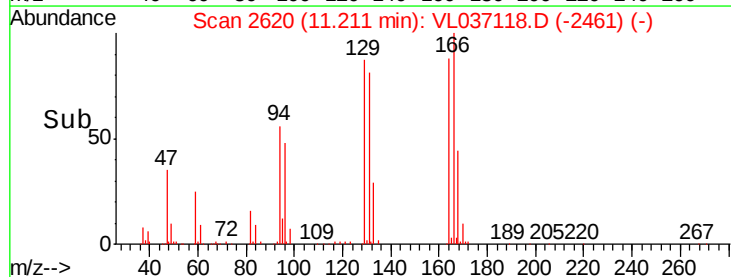
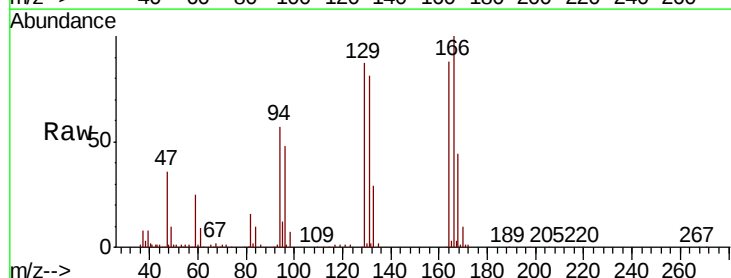
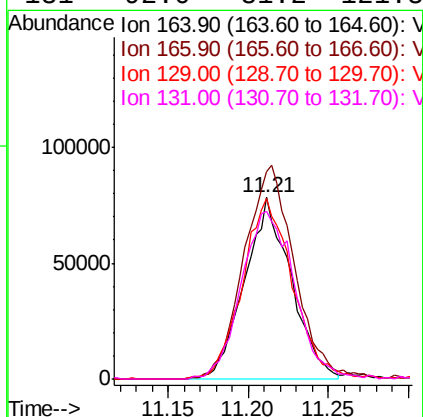
Manual Integrations
APPROVED

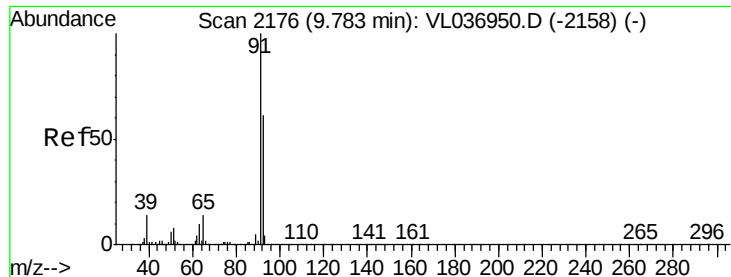
MMDadoda
6/7/2021 3:01:26 PM



#52
Tetrachloroethene
Concen: 1.079 ppbv
RT: 11.21 min Scan# 2620
Delta R.T. 0.01 min
Lab File: VL037118.D
Acq: 3 Jun 2021 2:12

Tgt Ion: 164 Resp: 156327
Ion Ratio Lower Upper
164 100
166 113.7 105.5 158.3
129 98.6 81.8 122.8
131 92.0 81.2 121.8





#53

Toluene

Concen: 0.477 ppbv

RT: 9.80 min Scan# 2180

Delta R.T. 0.01 min

Lab File: VL037118.D

Acq: 3 Jun 2021 2:12

Instrument :

MSVOA_L

ClientSampled :

SGS-9A

Tot Ion: 91 Resp: 206851

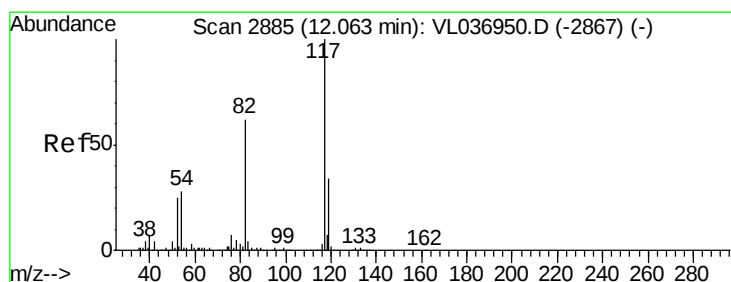
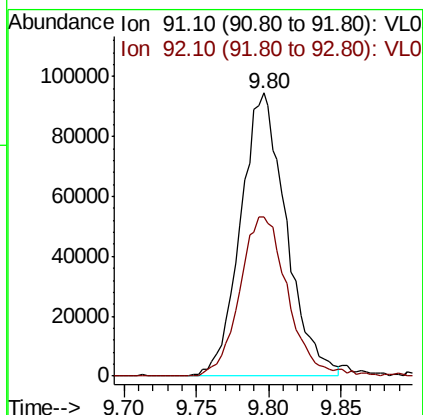
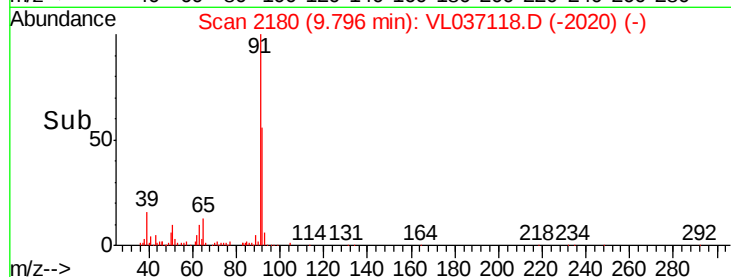
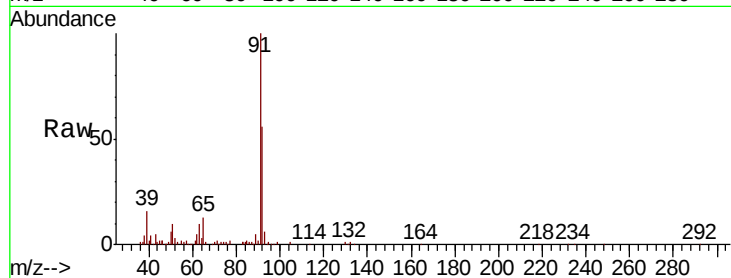
Ion Ratio Lower Upper

91 100

92 59.5 49.5 74.3

Manual Integrations
APPROVED

MMDadoda
6/7/2021 3:01:26 PM



#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.08 min Scan# 2889

Delta R.T. 0.01 min

Lab File: VL037118.D

Acq: 3 Jun 2021 2:12

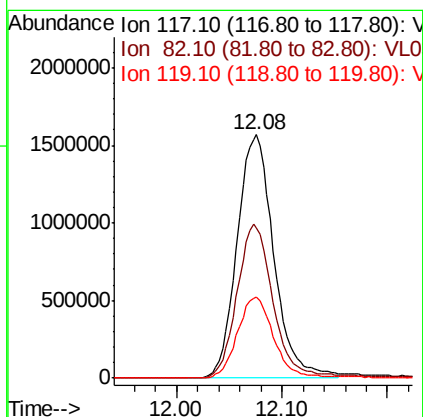
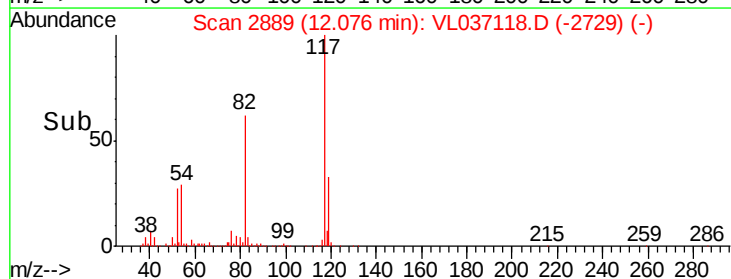
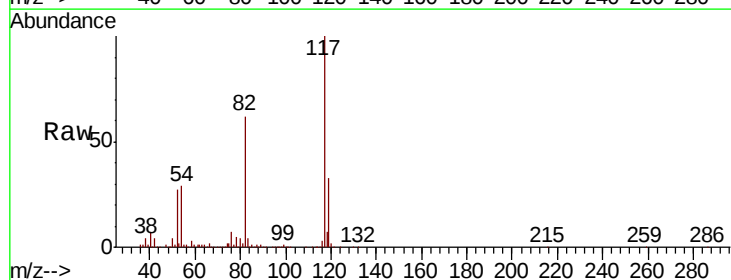
Tgt Ion: 117 Resp: 3804484

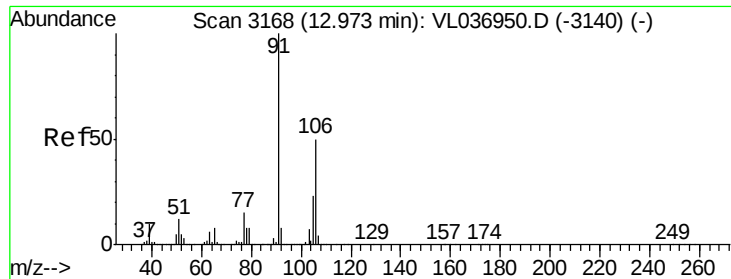
Ion Ratio Lower Upper

117 100

82 63.2 52.6 79.0

119 33.6 46.6 70.0#





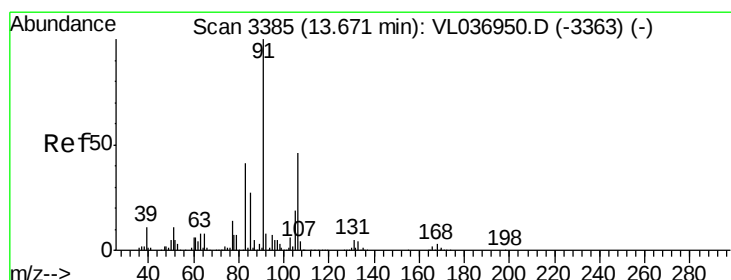
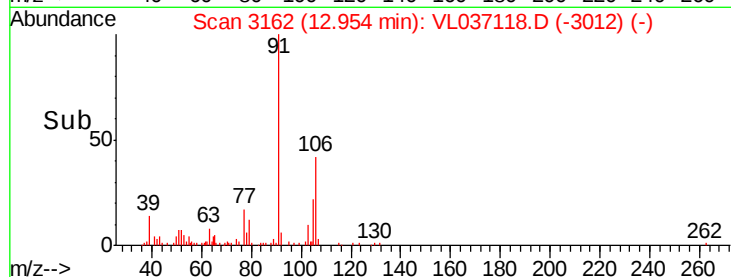
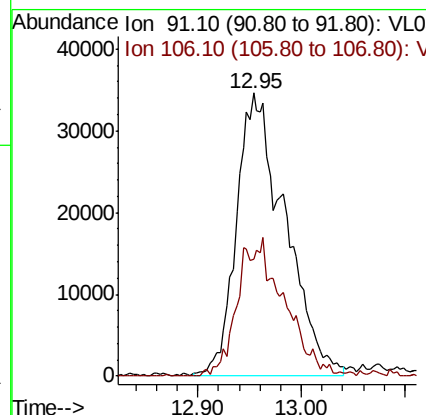
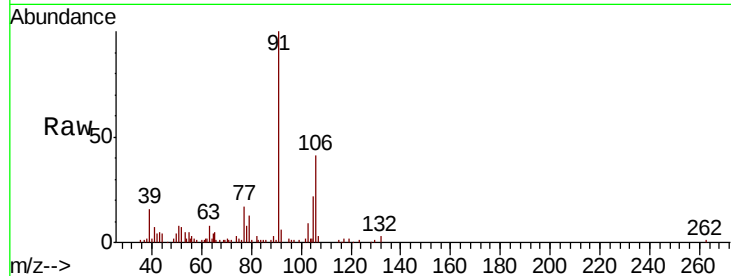
#59
m/p-Xylene
Concen: 0.254 ppbv m
RT: 12.95 min Scan# 3162
Delta R.T. -0.02 min
Lab File: VL037118.D
Acq: 3 Jun 2021 2:12

Instrument :
MSVOA_L
ClientSampleId :
SGS-9A

Tot Ion: 91 Resp: 112888
Ion Ratio Lower Upper
91 100
106 0.0 37.4 56.2#

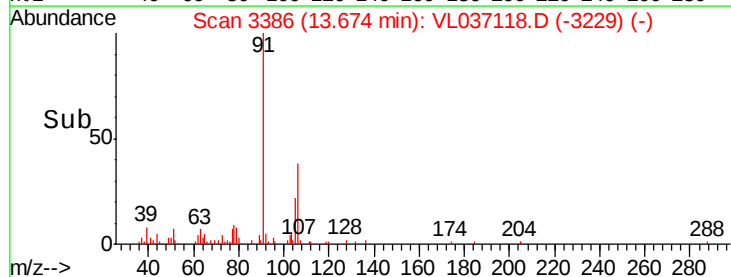
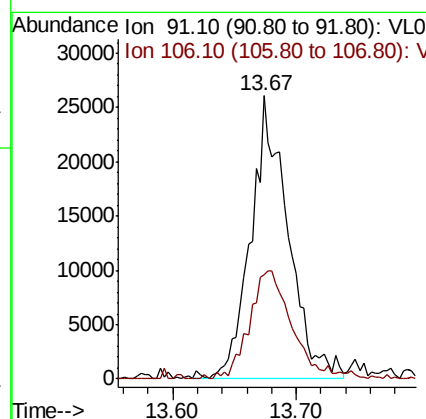
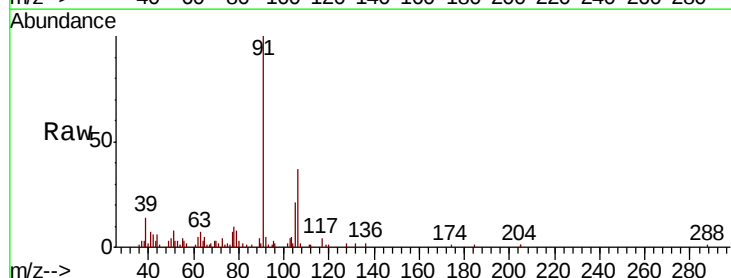
Manual Integrations
APPROVED

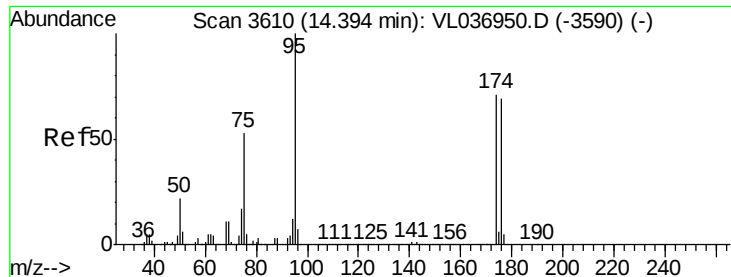
MMDadoda
6/7/2021 3:01:26 PM



#60
o-Xylene
Concen: 0.129 ppbv m
RT: 13.67 min Scan# 3386
Delta R.T. 0.00 min
Lab File: VL037118.D
Acq: 3 Jun 2021 2:12

Tgt Ion: 91 Resp: 54529
Ion Ratio Lower Upper
91 100
106 45.0 23.4 70.3





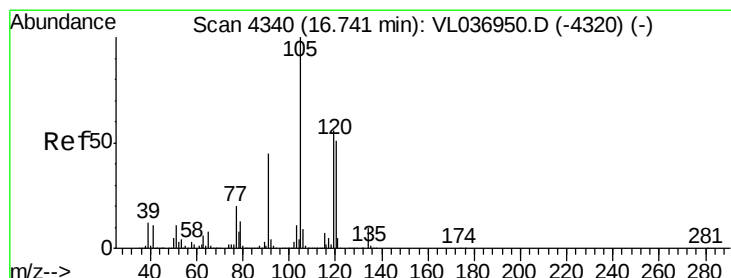
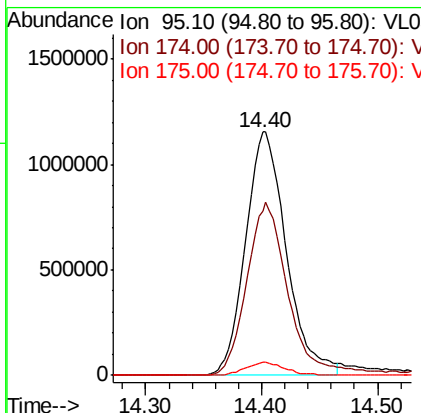
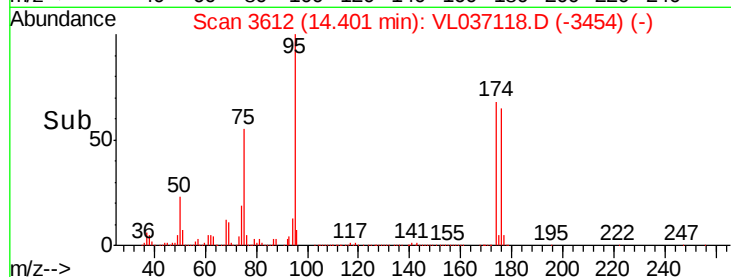
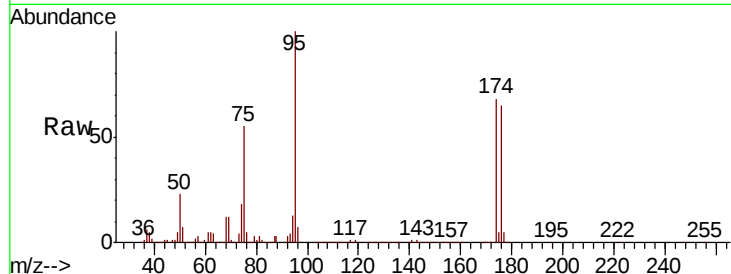
#68
 1-Bromo-4-Fluorobenzene
 Concen: 9.886 ppbv
 RT: 14.40 min Scan# 3612
 Delta R.T. 0.01 min
 Lab File: VL037118.D
 Acq: 3 Jun 2021 2:12

Instrument :
 MSVOA_L
 ClientSampleId :
 SGS-9A

Tot Ion: 95 Resp: 2825318
 Ion Ratio Lower Upper
 95 100
 174 74.8 58.4 87.6
 175 5.5 4.4 6.6

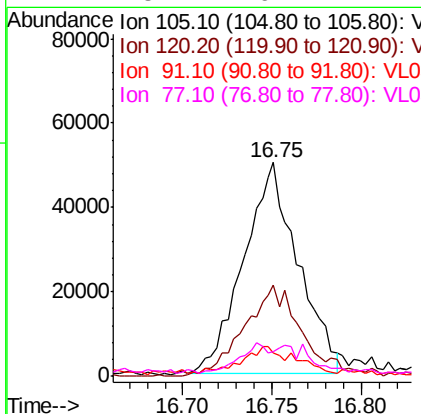
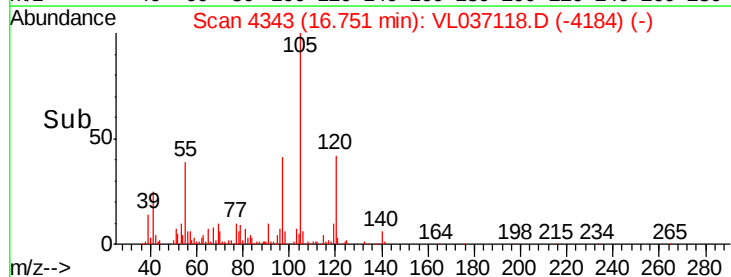
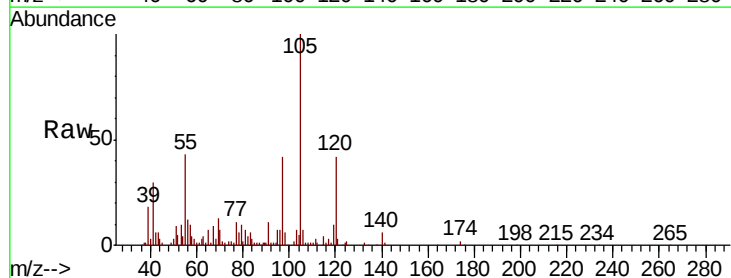
Manual Integrations
 APPROVED

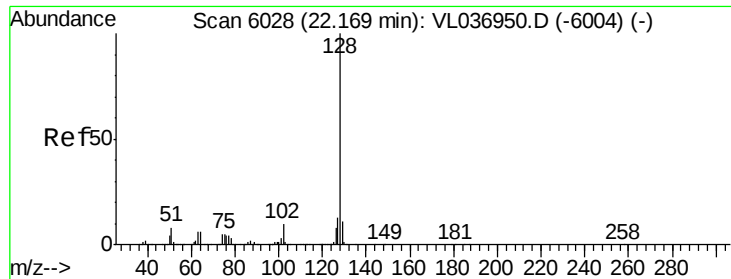
MMDadoda
 6/7/2021 3:01:26 PM



#74
 1,2,4-Trimethylbenzene
 Concen: 0.218 ppbv
 RT: 16.75 min Scan# 4343
 Delta R.T. 0.01 min
 Lab File: VL037118.D
 Acq: 3 Jun 2021 2:12

Tgt Ion: 105 Resp: 106306
 Ion Ratio Lower Upper
 105 100
 120 42.0 40.6 61.0
 91 9.8 37.4 56.0#
 77 8.7 16.2 24.4#





#79
Naphthalene
Concen: 0.102 ppbv m
RT: 22.18 min Scan# 6032
Delta R.T. 0.01 min
Lab File: VL037118.D
Acq: 3 Jun 2021 2:12

Instrument :
MSVOA_L
ClientSampleId :
SGS-9A

Tot Ion:	128	Resp:	39103
Ion Ratio	Lower	Upper	
128	100		
127	16.7	10.4	15.6#
129	7.5	9.0	13.6#

Manual Integrations
APPROVED

MMDadoda
6/7/2021 3:01:26 PM

