

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL040721\
 Data File : VL036739.D
 Acq On : 7 Apr 2021 23:21
 Operator : SY/AP
 Sample : M1929-08
 Misc : 400mL/MSVOA L
 ALS Vial : 10 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 FS-SV02

Manual Integrations
 APPROVED

MMDadoda
 4/12/2021 11:16:28 AM

Quant Time: Apr 10 23:23:51 2021
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL032521AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Thu Apr 08 01:58:43 2021
 QLast Update : Thu Apr 08 01:58:43 2021
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.66	49	1244335	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.17	114	3250607	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.08	117	2903831	10.00	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.42	95	2351301	10.16	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	101.60%

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.04	85	36614	0.180	ppbv	96
9) Propene	3.00	41	13661495	184.325	ppbv	98
10) Heptane	8.12	43	525343	2.782	ppbv	100
11) Trichlorofluoromethane	3.94	101	64100	0.310	ppbv	100
13) Ethanol	3.60	45	1313998	148.878	ppbv	95
20) Methylene Chloride	4.34	84	254195	4.433	ppbv #	89
26) Hexane	5.69	57	6455865	47.779	ppbv #	45
27) Carbon Disulfide	4.55	76	1873303	14.074	ppbv	98
30) Cyclohexane	7.13	84	1442076	13.160	ppbv	97
35) Carbon Tetrachloride	7.02	117	12625m	0.051	ppbv	
36) Benzene	6.89	78	9976570	33.278	ppbv	92
44) 2,2,4-Trimethylpentane	7.87	57	7396604	14.018	ppbv #	84
52) Tetrachloroethene	11.21	164	64893m	0.588	ppbv	
53) Toluene	9.80	91	7455776	23.353	ppbv	98
58) Ethyl Benzene	12.71	91	1316751	3.117	ppbv	100
59) m/p-Xylene	13.00	91	946944	2.570	ppbv	93
60) o-Xylene	13.69	91	442260	1.241	ppbv	99
61) Styrene	13.53	104	17516m	0.098	ppbv	

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

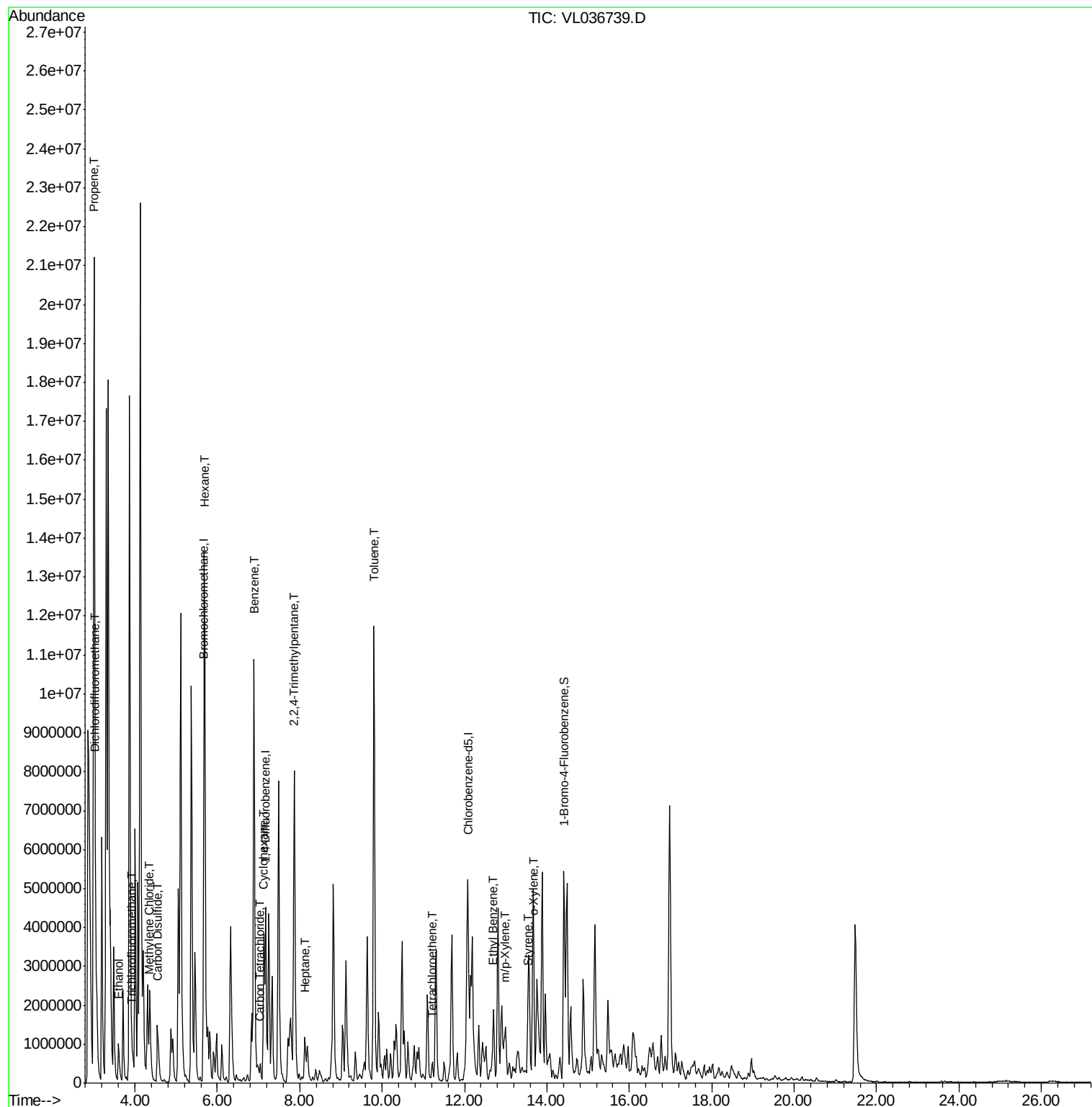
Data Path : Z:\V0ASRV\HPCHEM1\MSVOA L\DATA\VL040721\
Data File : VL036739.D
Acq On : 7 Apr 2021 23:21
Operator : SY/AP
Sample : M1929-08
Misc : 400mL/MSVOA L
ALS Vial : 10 Sample Multiplier: 1

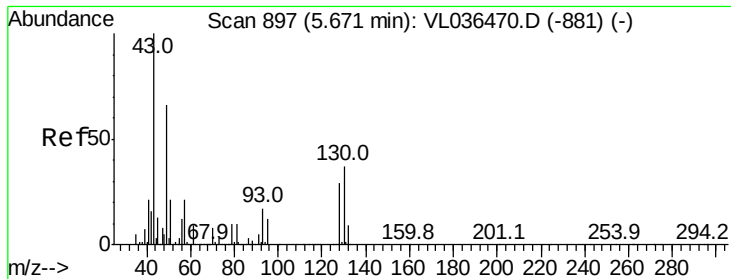
Instrument :
MSVOA_L
ClientSampleId :
FS-SV02

Manual Integrations
APPROVED

MMDadoda
4/12/2021 11:16:28 AM

Quant Time: Apr 10 23:23:51 2021
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA L\METHODS\VL032521AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Thu Apr
QLast Update : Thu Apr 08 01:58:43 2021
Response via : Initial Calibration





#1

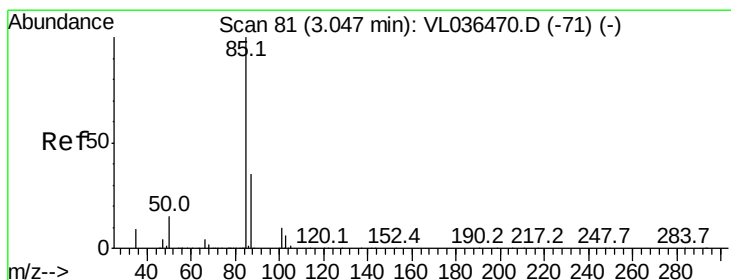
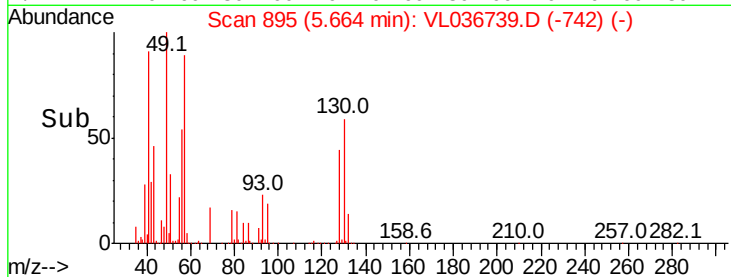
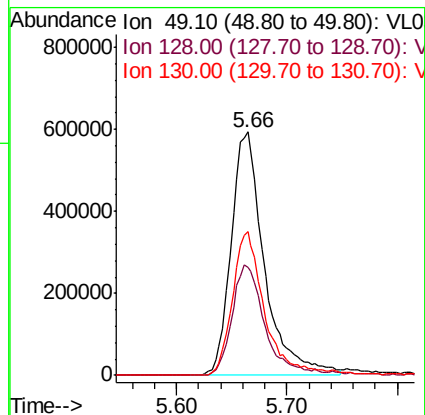
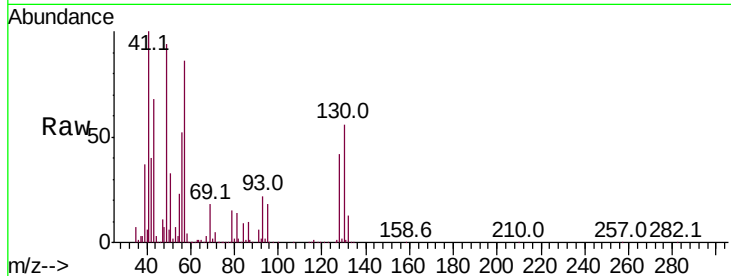
Bromochloromethane
Concen: 10.000 ppbv
RT: 5.66 min Scan# 895
Delta R.T. -0.01 min
Lab File: VL036739.D
Acq: 7 Apr 2021 23:21

Instrument :
MSVOA_L
ClientSampleId :
FS-SV02

Tot Ion	Ratio	Lower	Upper
49	100		
128	46.0	23.5	70.6
130	58.5	29.1	87.4

Manual Integrations
APPROVED

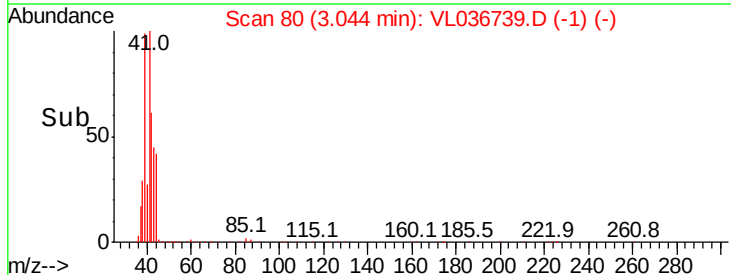
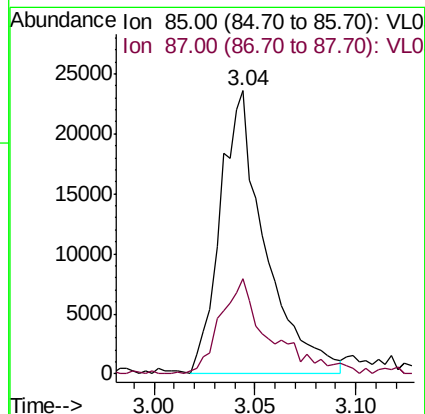
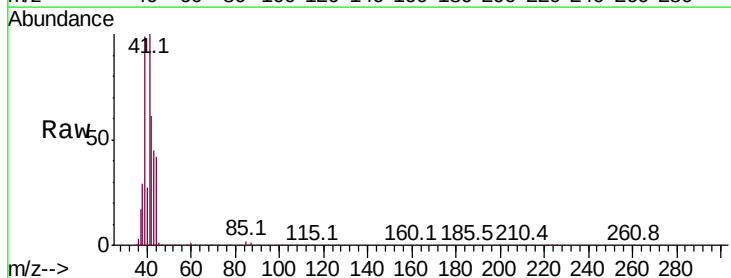
MMDadoda
4/12/2021 11:16:28 AM

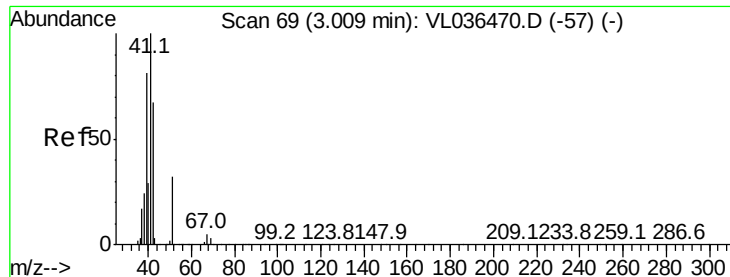


#2

Dichlorodifluoromethane
Concen: 0.180 ppbv
RT: 3.04 min Scan# 80
Delta R.T. -0.00 min
Lab File: VL036739.D
Acq: 7 Apr 2021 23:21

Tgt Ion	Ratio	Lower	Upper
85	100		
87	32.3	27.8	41.8





#9

Propene

Concen: 184.325 ppbv

RT: 3.00 min Scan# 67

Delta R.T. -0.01 min

Lab File: VL036739.D

Acq: 7 Apr 2021 23:21

Instrument :

MSVOA_L

ClientSampleId :

FS-SV02

Tot Ion: 41 Resp: 13661495

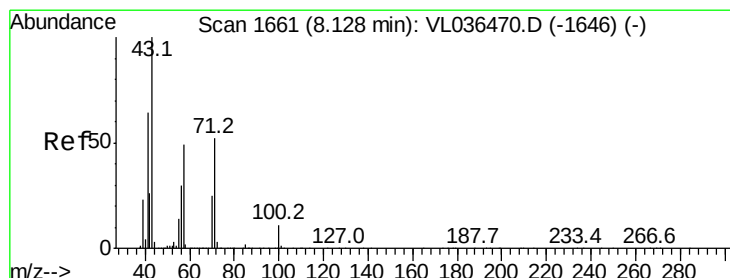
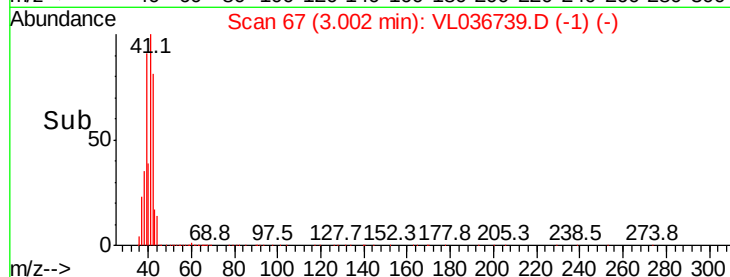
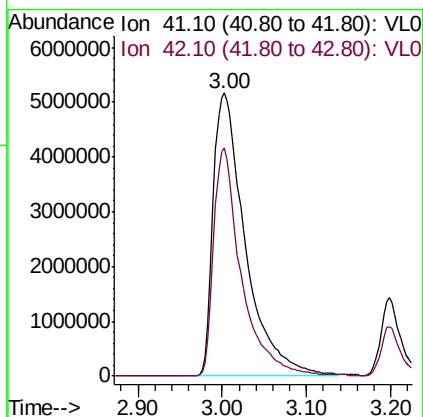
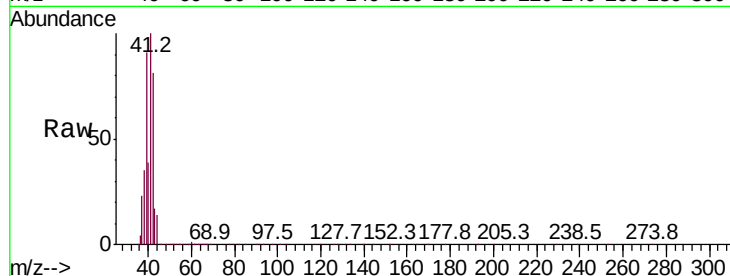
Ion Ratio Lower Upper

41 100

42 69.9 57.0 85.4

Manual Integrations
APPROVED

MMDadoda
4/12/2021 11:16:28 AM



#10

Heptane

Concen: 2.782 ppbv

RT: 8.12 min Scan# 1659

Delta R.T. -0.01 min

Lab File: VL036739.D

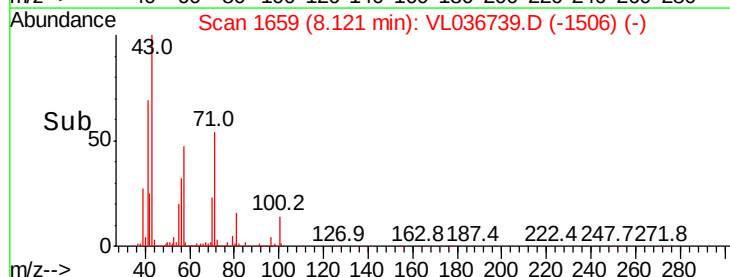
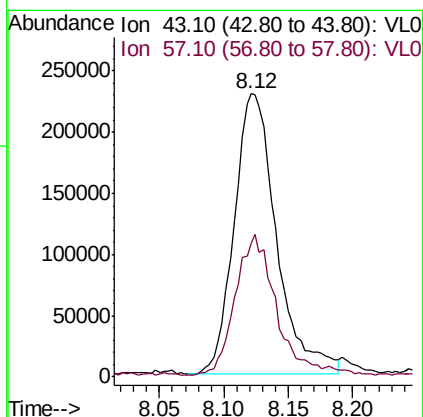
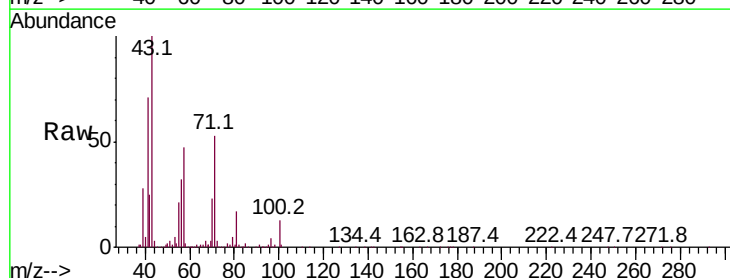
Acq: 7 Apr 2021 23:21

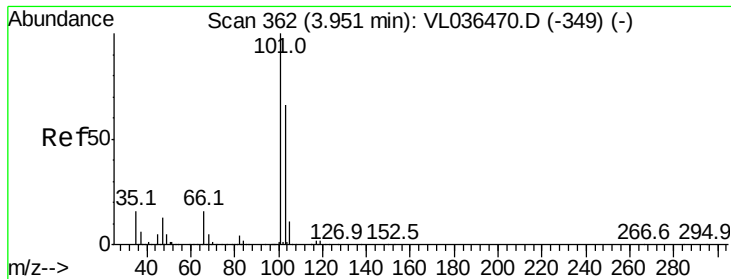
Tgt Ion: 43 Resp: 525343

Ion Ratio Lower Upper

43 100

57 49.0 39.0 58.6





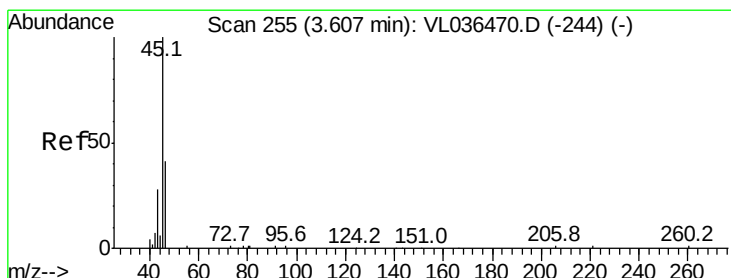
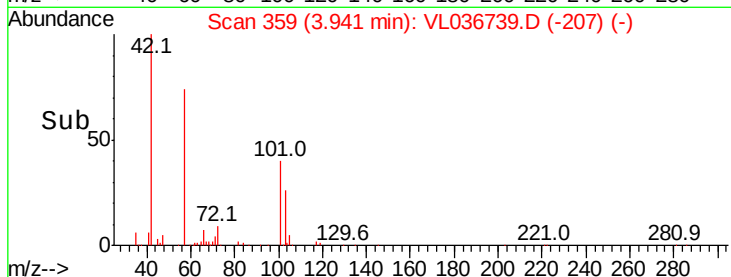
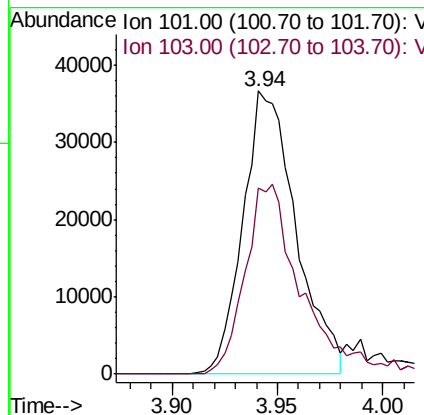
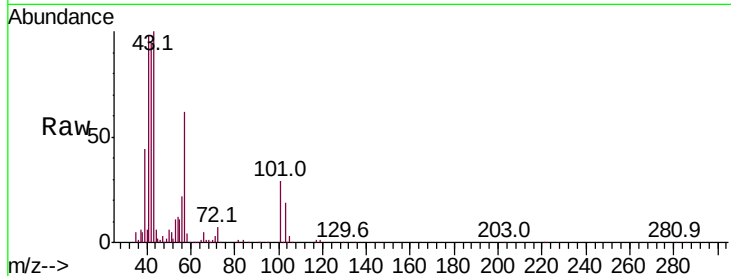
#11
Trichlorofluoromethane
Concen: 0.310 ppbv
RT: 3.94 min Scan# 359
Delta R.T. -0.01 min
Lab File: VL036739.D
Acq: 7 Apr 2021 23:21

Instrument :
MSVOA_L
ClientSampleId :
FS-SV02

Tot Ion:101 Resp: 64100
Ion Ratio Lower Upper
101 100
103 65.8 52.5 78.7

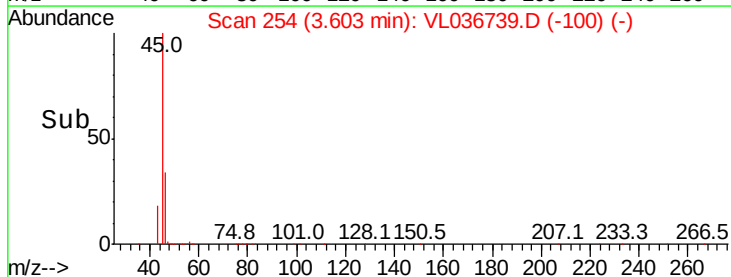
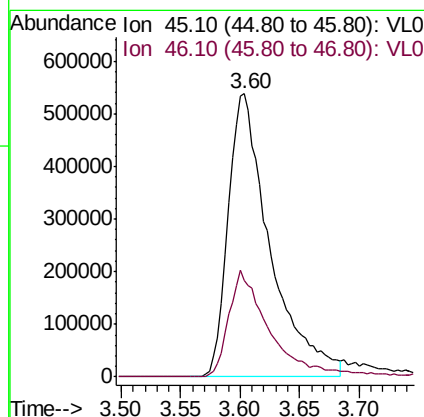
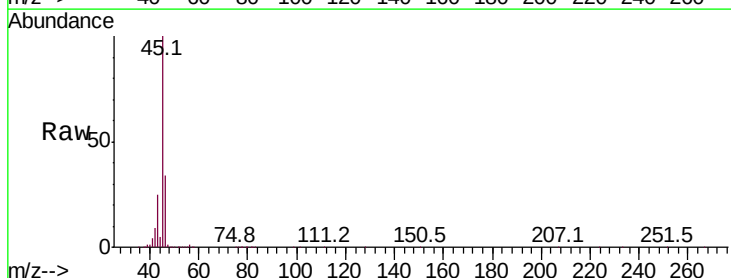
Manual Integrations
APPROVED

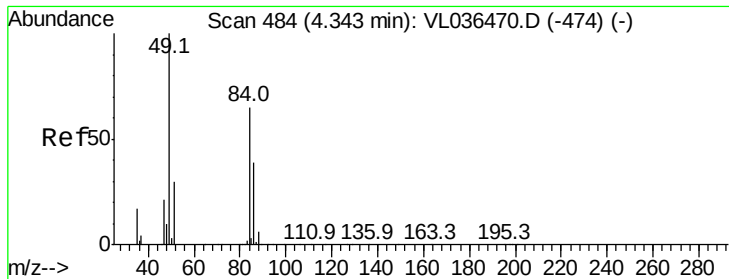
MMDadoda
4/12/2021 11:16:28 AM



#13
Ethanol
Concen: 148.878 ppbv
RT: 3.60 min Scan# 254
Delta R.T. -0.00 min
Lab File: VL036739.D
Acq: 7 Apr 2021 23:21

Tgt Ion: 45 Resp: 1313998
Ion Ratio Lower Upper
45 100
46 38.4 16.6 66.2





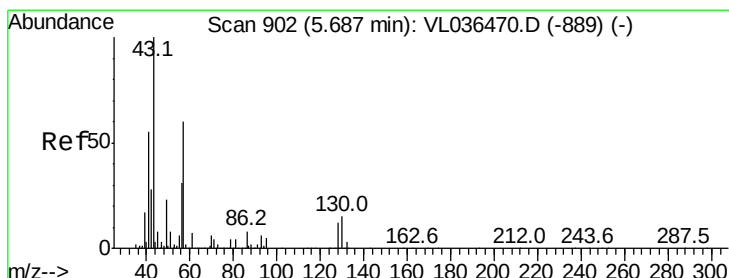
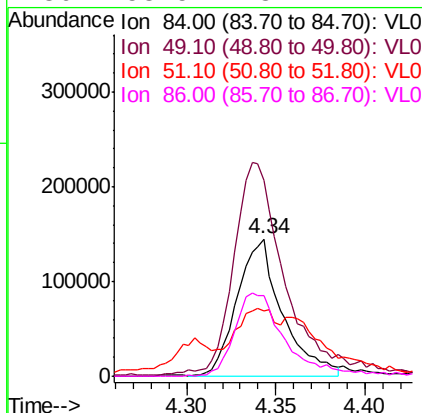
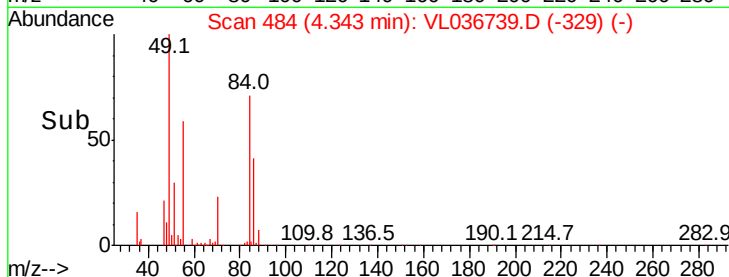
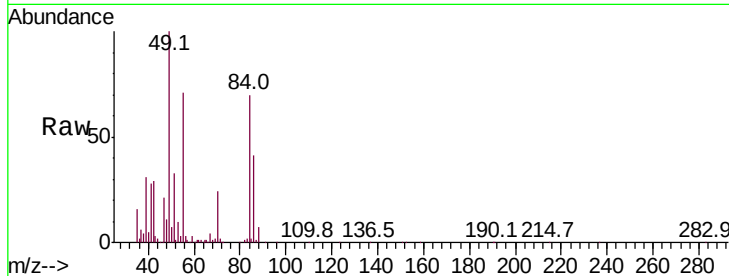
#20
Methylene Chloride
Concen: 4.433 ppbv
RT: 4.34 min Scan# 484
Delta R.T. -0.00 min
Lab File: VL036739.D
Acq: 7 Apr 2021 23:21

Instrument :
MSVOA_L
ClientSampleId :
FS-SV02

Tot Ion	Ion	Ratio	Resp	Lower	Upper
84	100				
49	138.6	122.9	184.3		
51	34.5	36.9	55.3#		
86	58.5	48.2	72.4		

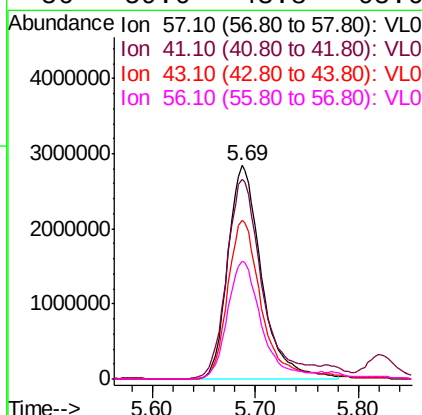
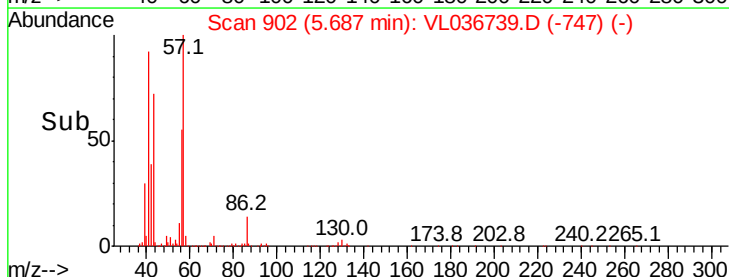
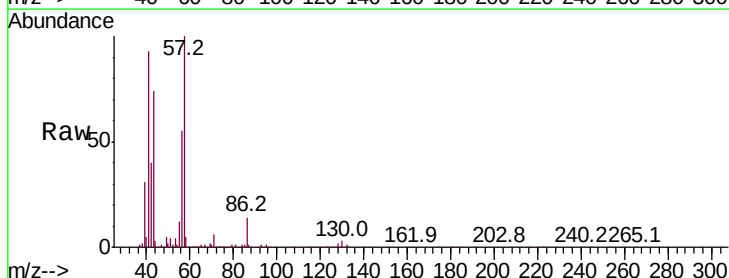
Manual Integrations
APPROVED

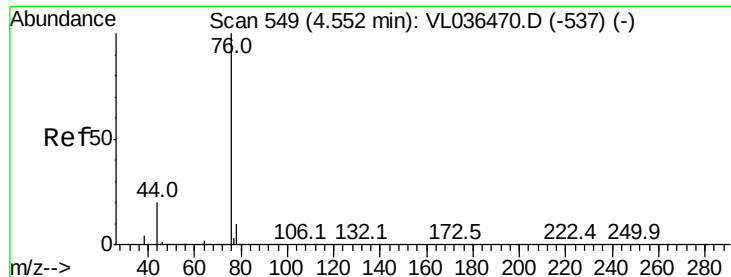
MMDadoda
4/12/2021 11:16:28 AM



#26
Hexane
Concen: 47.779 ppbv
RT: 5.69 min Scan# 902
Delta R.T. -0.00 min
Lab File: VL036739.D
Acq: 7 Apr 2021 23:21

Tgt Ion	Ion	Ratio	Resp	Lower	Upper
57	100				
41	103.4	77.2	115.8		
43	76.1	173.8	260.6#		
56	59.6	43.8	65.6		





#27

Carbon Disulfide

Concen: 14.074 ppbv

RT: 4.55 min Scan# 547

Delta R.T. -0.01 min

Lab File: VL036739.D

Acq: 7 Apr 2021 23:21

Instrument :

MSVOA_L

ClientSampleId :

FS-SV02

Tot Ion: 76 Resp: 1873303

Ion Ratio Lower Upper

76 100

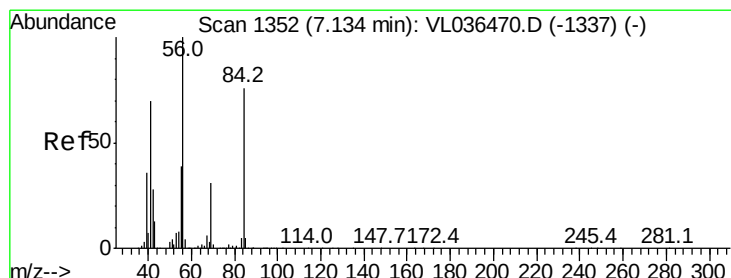
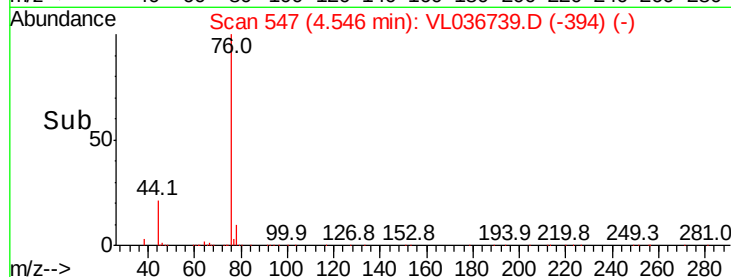
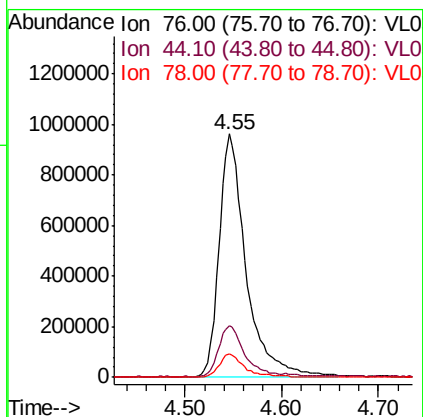
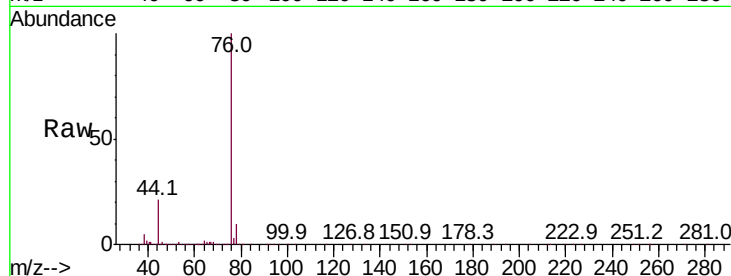
44 21.3 17.5 26.3

78 9.3 8.6 13.0

Manual Integrations
APPROVED

MMDadoda

4/12/2021 11:16:28 AM



#30

Cyclohexane

Concen: 13.160 ppbv

RT: 7.13 min Scan# 1350

Delta R.T. -0.01 min

Lab File: VL036739.D

Acq: 7 Apr 2021 23:21

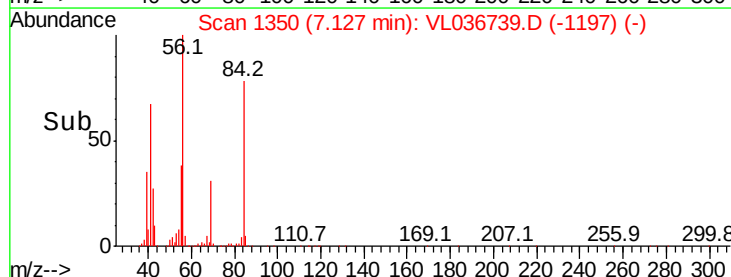
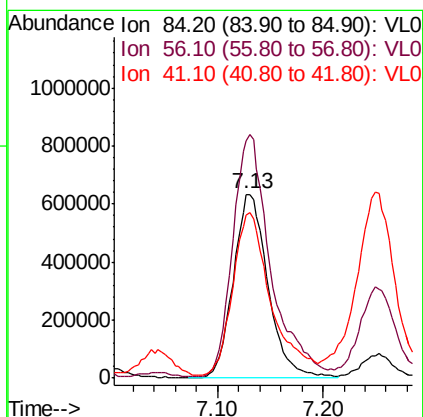
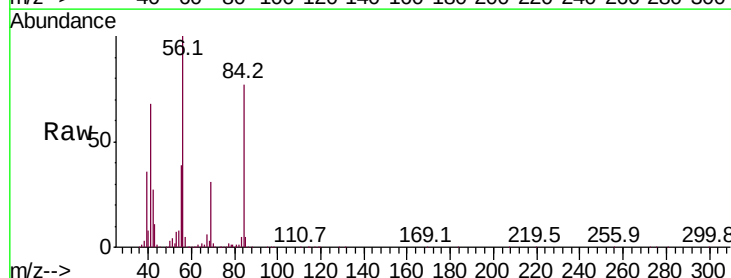
Tgt Ion: 84 Resp: 1442076

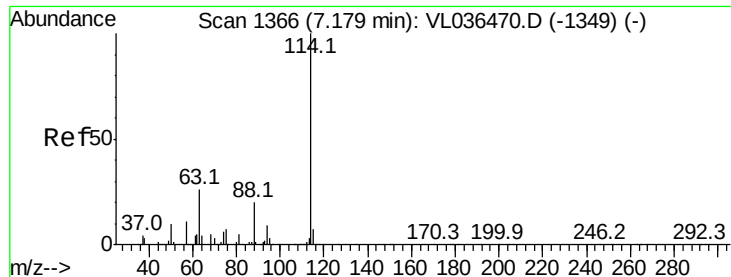
Ion Ratio Lower Upper

84 100

56 144.5 114.6 171.8

41 98.8 75.3 112.9





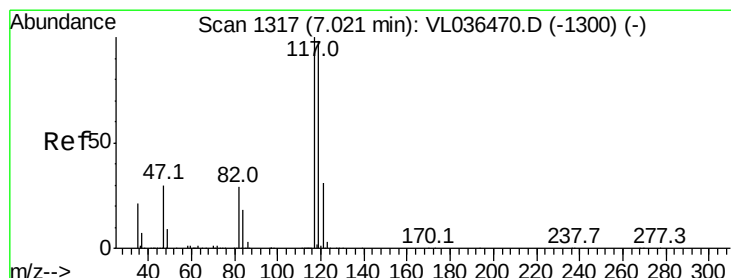
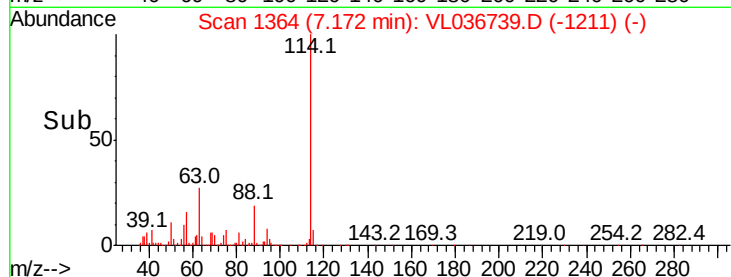
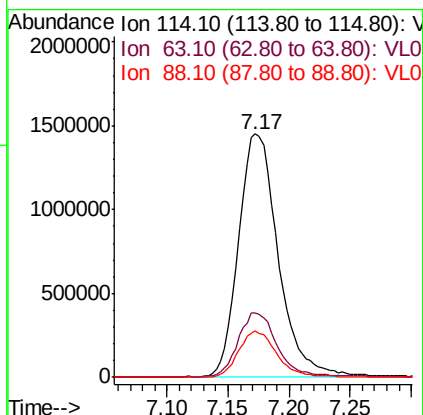
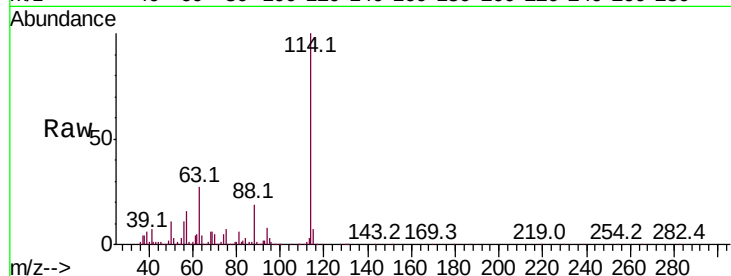
#33
 1,4-Difluorobenzene
 Concen: 10.000 ppbv
 RT: 7.17 min Scan# 1364
 Delta R.T. -0.01 min
 Lab File: VL036739.D
 Acq: 7 Apr 2021 23:21

Instrument :
 MSVOA_L
 ClientSampleId :
 FS-SV02

Tot Ion	Ratio	Lower	Upper
114	100		
63	27.3	22.4	33.6
88	18.5	15.4	23.0

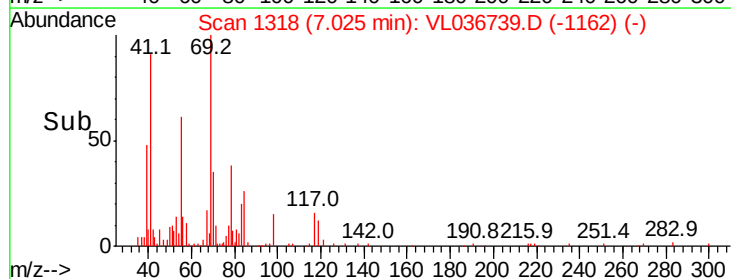
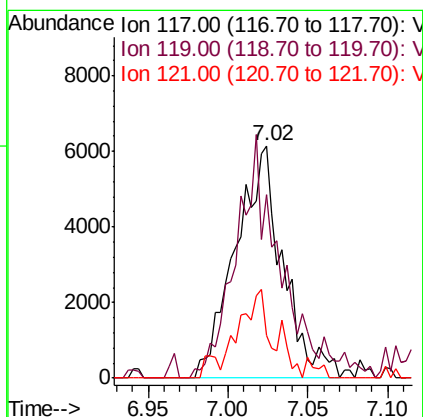
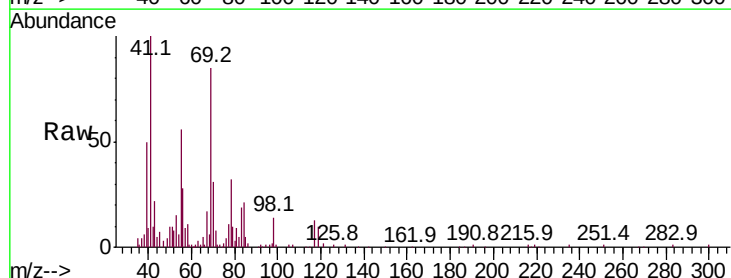
Manual Integrations
 APPROVED

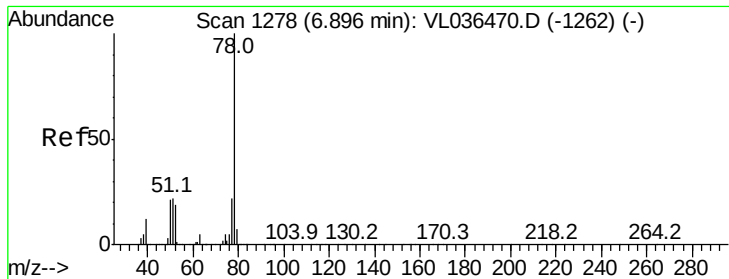
MMDadoda
 4/12/2021 11:16:28 AM



#35
 Carbon Tetrachloride
 Concen: 0.051 ppbv m
 RT: 7.02 min Scan# 1318
 Delta R.T. 0.00 min
 Lab File: VL036739.D
 Acq: 7 Apr 2021 23:21

Tgt Ion	Ratio	Lower	Upper
117	100		
119	78.9	78.2	117.2
121	18.2	24.5	36.7#





#36

Benzene

Concen: 33.278 ppbv

RT: 6.89 min Scan# 1275

Delta R.T. -0.01 min

Lab File: VL036739.D

Acq: 7 Apr 2021 23:21

Instrument :

MSVOA_L

ClientSampled :

FS-SV02

Tot Ion: 78 Resp: 9976570

Ion Ratio Lower Upper

78 100

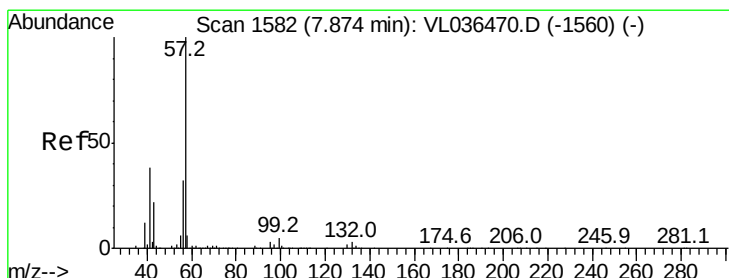
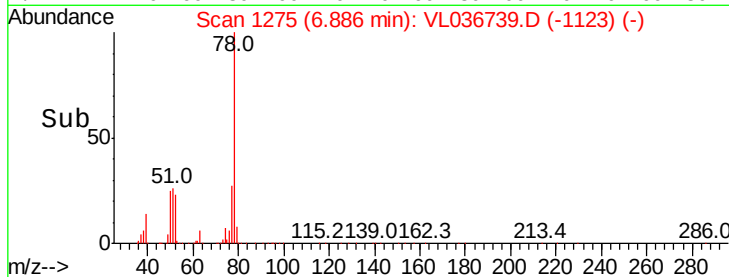
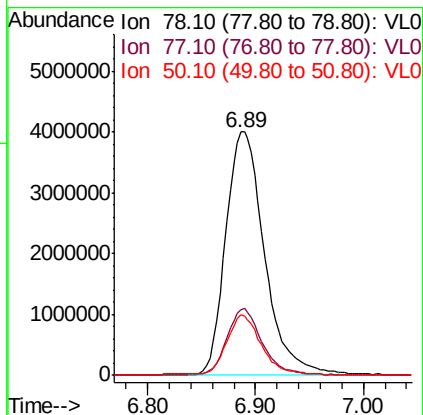
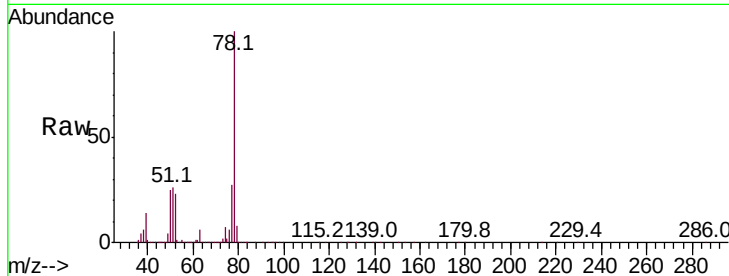
77 26.6 18.0 27.0

50 24.6 16.5 24.7

Manual Integrations
APPROVED

MMDadoda

4/12/2021 11:16:28 AM



#44

2,2,4-Trimethylpentane

Concen: 14.018 ppbv

RT: 7.87 min Scan# 1581

Delta R.T. -0.00 min

Lab File: VL036739.D

Acq: 7 Apr 2021 23:21

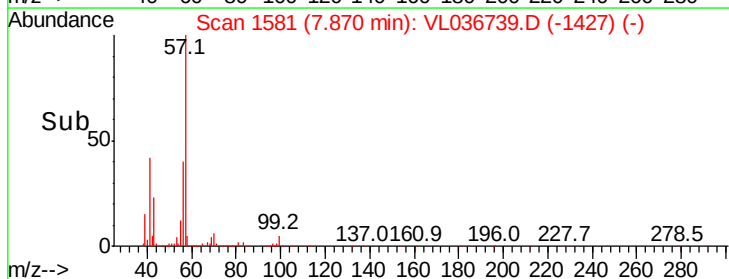
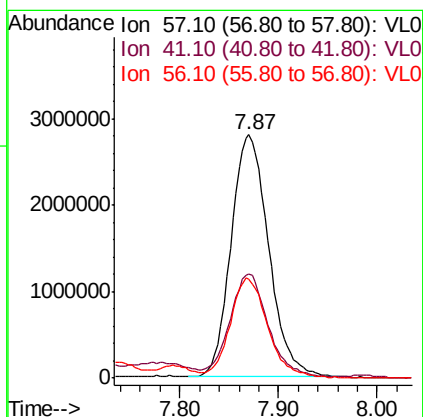
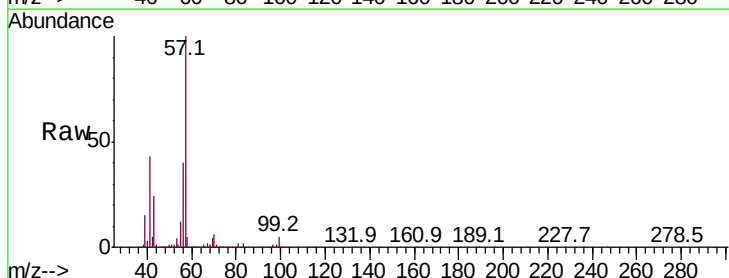
Tgt Ion: 57 Resp: 7396604

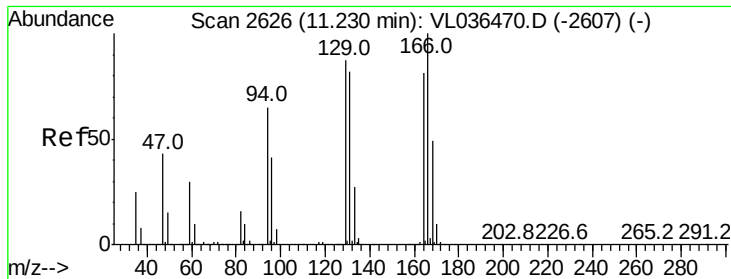
Ion Ratio Lower Upper

57 100

41 44.8 28.8 43.2#

56 42.0 26.1 39.1#





#52

Tetrachloroethene

Concen: 0.588 ppbv m

RT: 11.21 min Scan# 2621

Delta R.T. -0.02 min

Lab File: VL036739.D

Acq: 7 Apr 2021 23:21

Instrument :

MSVOA_L

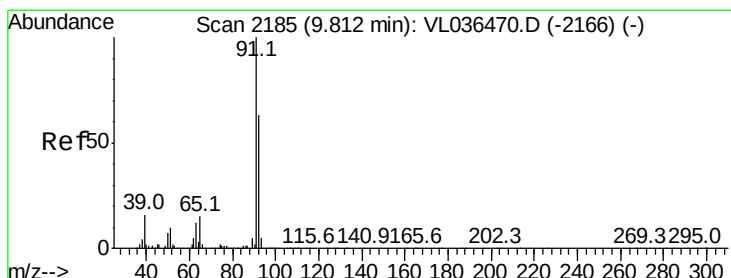
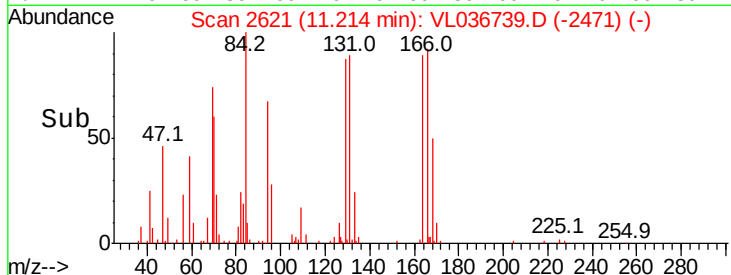
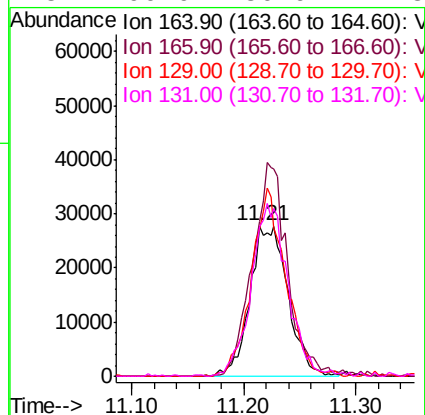
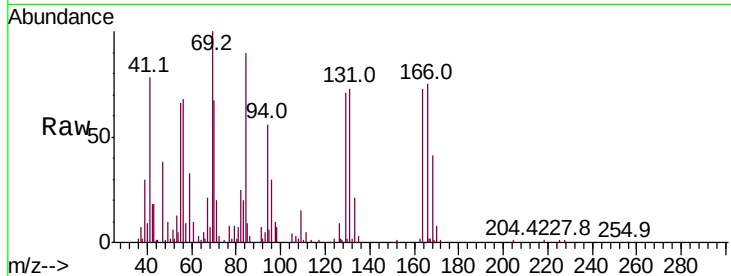
ClientSampled :

FS-SV02

Tot Ion:	164	Resp:	64893
Ion Ratio	Lower	Upper	
164	100		
166	103.3	98.3	147.5
129	97.8	85.8	128.8
131	99.9	80.9	121.3

Manual Integrations
APPROVED

MMDadoda
4/12/2021 11:16:28 AM



#53

Toluene

Concen: 23.353 ppbv

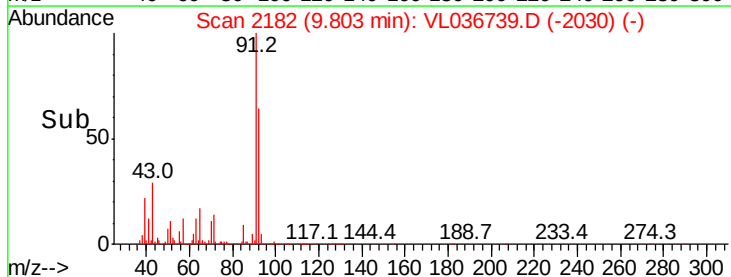
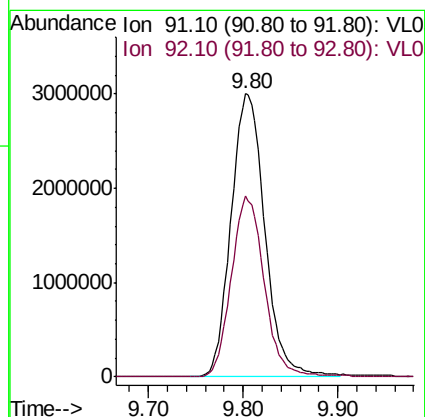
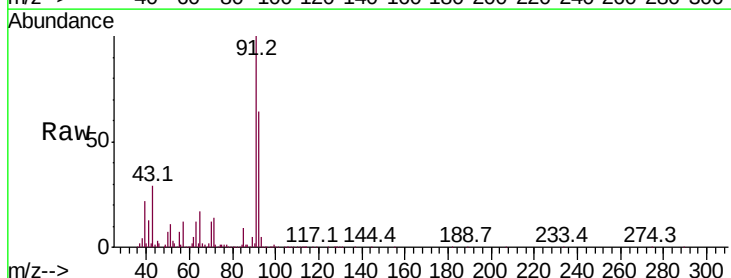
RT: 9.80 min Scan# 2182

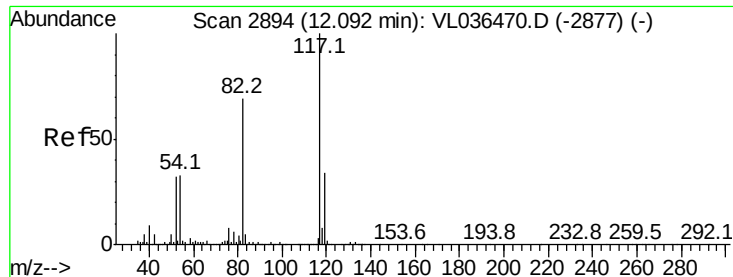
Delta R.T. -0.01 min

Lab File: VL036739.D

Acq: 7 Apr 2021 23:21

Tgt Ion:	91	Resp:	7455776
Ion Ratio	Lower	Upper	
91	100		
92	62.7	48.8	73.2





#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.08 min Scan# 2891

Delta R.T. -0.01 min

Lab File: VL036739.D

Acq: 7 Apr 2021 23:21

Instrument :

MSVOA_L

ClientSampleId :

FS-SV02

Tot Ion:117 Resp: 2903831

Ion Ratio Lower Upper

117 100

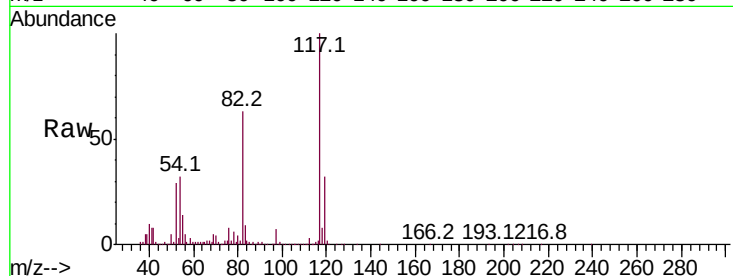
82 69.4 57.4 86.0

119 33.9 47.4 71.0#

Manual Integrations
APPROVED

MMDadoda

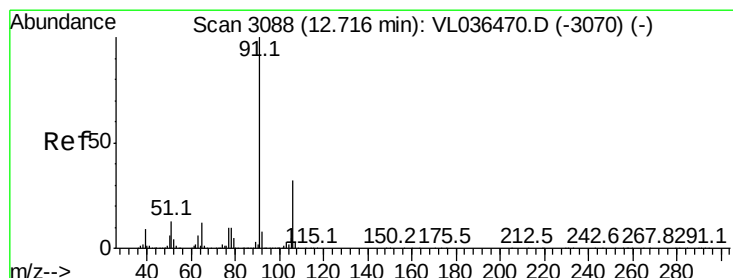
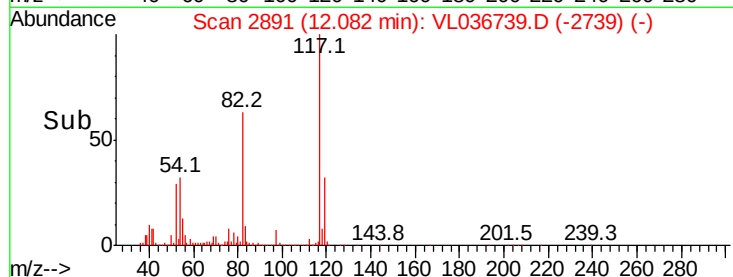
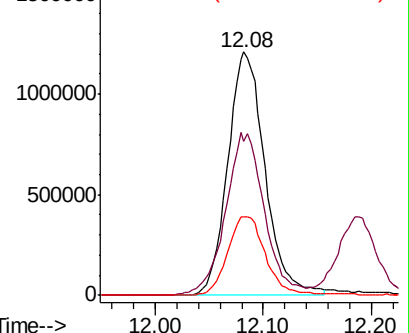
4/12/2021 11:16:28 AM



Abundance Ion 117.10 (116.80 to 117.80): V

Ion 82.10 (81.80 to 82.80): VL0

Ion 119.10 (118.80 to 119.80): V



#58

Ethyl Benzene

Concen: 3.117 ppbv

RT: 12.71 min Scan# 3086

Delta R.T. -0.01 min

Lab File: VL036739.D

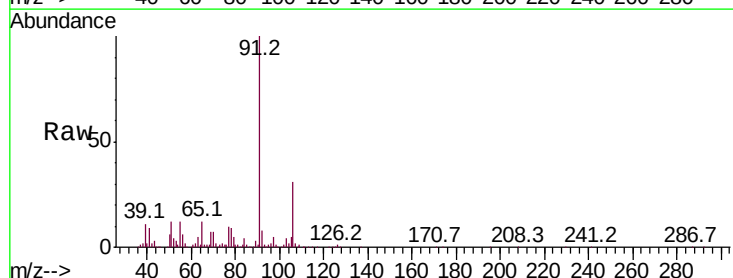
Acq: 7 Apr 2021 23:21

Tgt Ion: 91 Resp: 1316751

Ion Ratio Lower Upper

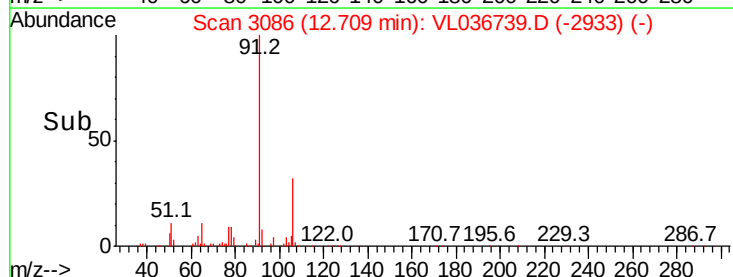
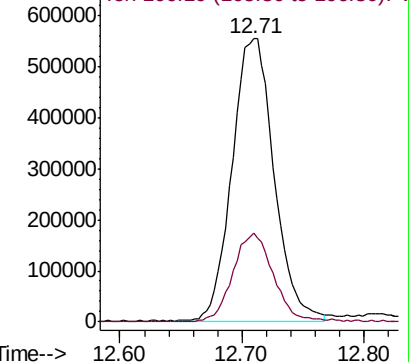
91 100

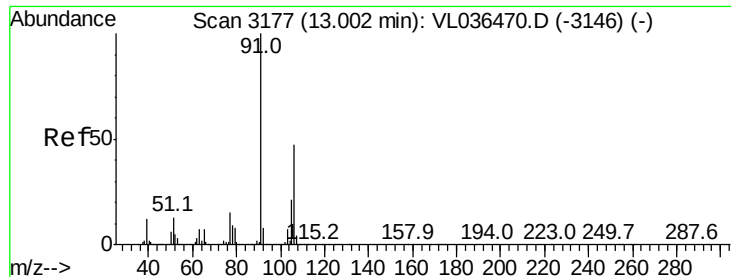
106 31.4 25.3 37.9



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 106.10 (105.80 to 106.80): V





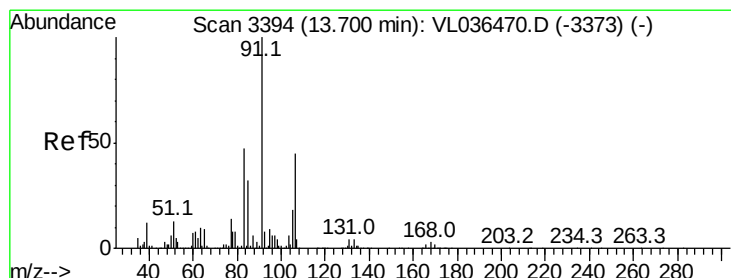
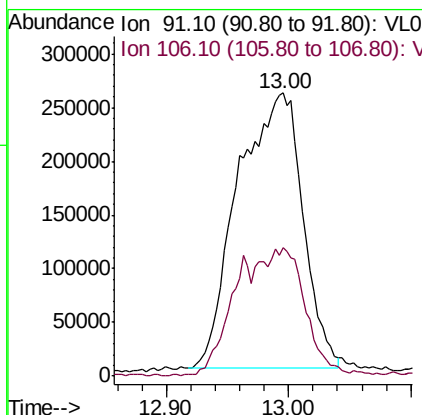
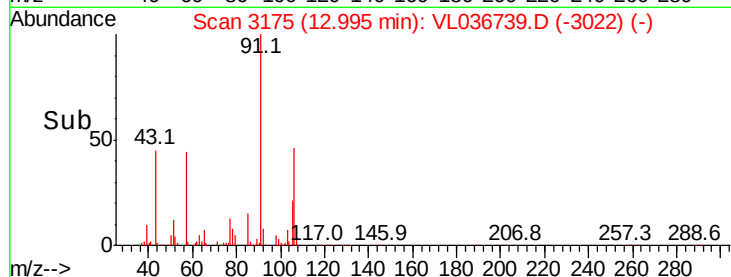
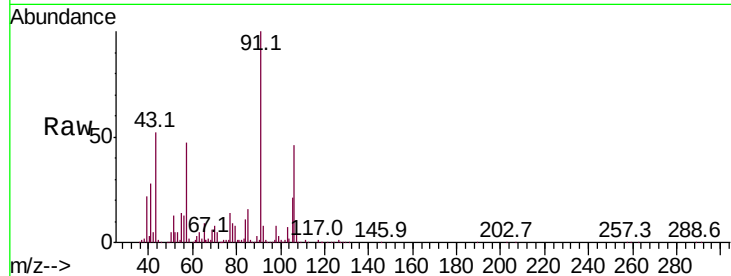
#59
m/p-Xylene
Concen: 2.570 ppbv
RT: 13.00 min Scan# 3175
Delta R.T. -0.01 min
Lab File: VL036739.D
Acq: 7 Apr 2021 23:21

Instrument :
MSVOA_L
ClientSampleId :
FS-SV02

Tot Ion	Ratio	Lower	Upper
91	100		
106	48.6	35.3	52.9

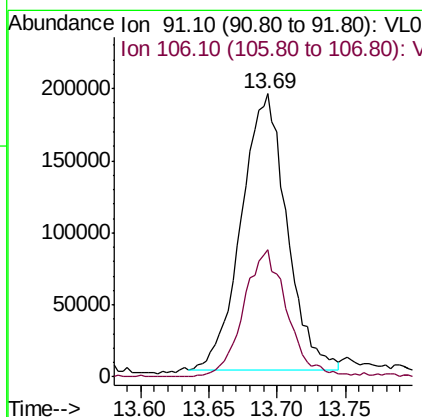
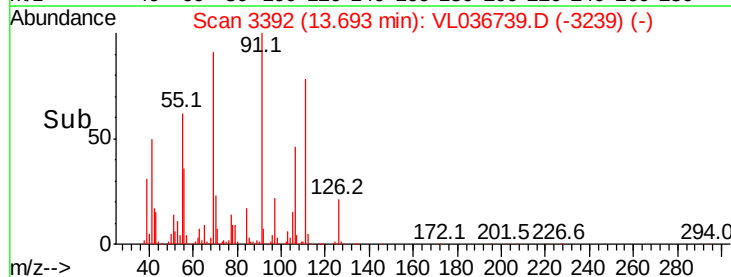
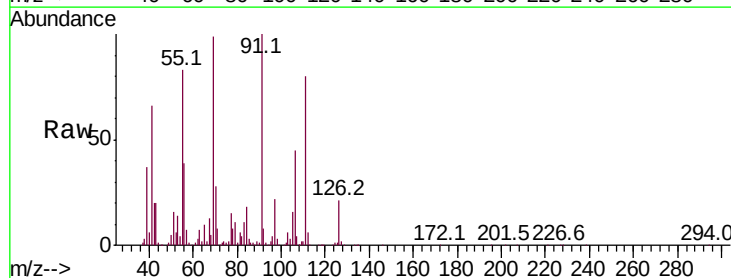
Manual Integrations
APPROVED

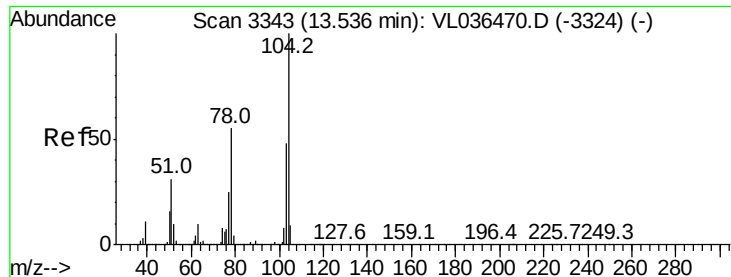
MMDadoda
4/12/2021 11:16:28 AM



#60
o-Xylene
Concen: 1.241 ppbv
RT: 13.69 min Scan# 3392
Delta R.T. -0.01 min
Lab File: VL036739.D
Acq: 7 Apr 2021 23:21

Tgt Ion	Ratio	Lower	Upper
91	100		
106	44.1	22.3	66.9





#61

Stvrene

Concen: 0.098 ppbv m

RT: 13.53 min Scan# 3340

Delta R.T. -0.01 min

Lab File: VL036739.D

Acq: 7 Apr 2021 23:21

Instrument :

MSVOA_L

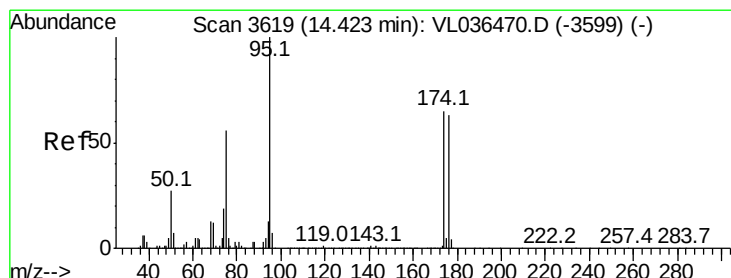
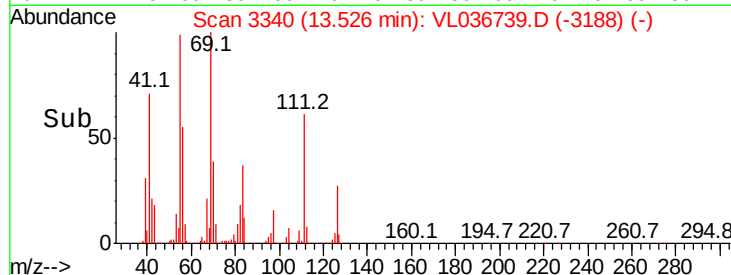
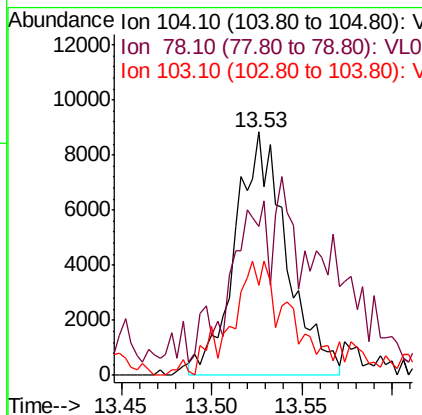
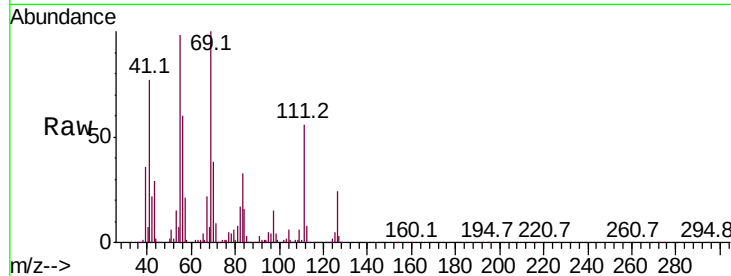
ClientSampled :

FS-SV02

Tot Ion:	104	Resp:	17516
Ion Ratio	Lower	Upper	
104	100		
78	112.8	43.8	65.8#
103	64.0	38.3	57.5#

Manual Integrations
APPROVED

MMDadoda
4/12/2021 11:16:28 AM



#68

1-Bromo-4-Fluorobenzene

Concen: 10.160 ppbv

RT: 14.42 min Scan# 3617

Delta R.T. -0.01 min

Lab File: VL036739.D

Acq: 7 Apr 2021 23:21

Tgt Ion:	95	Resp:	2351301
Ion Ratio	Lower	Upper	
95	100		
174	63.4	51.0	76.6
175	4.9	3.9	5.9

