

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL040621\
 Data File : VL036709.D
 Acq On : 6 Apr 2021 22:27
 Operator : SY/AP
 Sample : M1877-09
 Misc : 400mL/MSVOA L
 ALS Vial : 11 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 UP-SG-6(2021)

Manual Integrations
 APPROVED

MMDadoda
 4/12/2021 11:11:18 AM

Quant Time: Apr 07 06:18:33 2021
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL032521AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Thu Mar 25 2021
 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	5.67	49	1267858	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.18	114	3137356	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.09	117	2777473	10.00	ppbv	0.00

System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	14.42	95	2161916	9.77	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	97.70%

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.05	85	44089	0.213	ppbv	98
3) Chlorodifluoromethane	2.99	51	71980	0.304	ppbv #	84
4) Chloromethane	3.14	50	25703	0.307	ppbv #	87
9) Propene	3.01	41	36661	0.485	ppbv	90
11) Trichlorofluoromethane	3.95	101	77228	0.366	ppbv	95
13) Ethanol	3.61	45	271518	30.193	ppbv	95
15) Acetone	3.84	43	1916751	15.360	ppbv	99
17) tert-Butyl alcohol	4.32	59	77258m	0.711	ppbv	
19) Isopropyl Alcohol	3.99	45	92277	1.344	ppbv #	1
20) Methylene Chloride	4.34	84	1055490	18.066	ppbv	90
26) Hexane	5.69	57	720288	5.232	ppbv #	48
29) Chloroform	5.75	83	209332	0.951	ppbv	95
34) 2-Butanone	5.25	43	104081	0.680	ppbv #	89
35) Carbon Tetrachloride	7.02	117	10622m	0.044	ppbv	
36) Benzene	6.89	78	29979m	0.104	ppbv	
38) Trichloroethene	7.84	130	4218m	0.037	ppbv	
53) Toluene	9.81	91	106471	0.346	ppbv	98
59) m/p-Xylene	12.97	91	54413m	0.154	ppbv	
69) p-Isopropyltoluene	17.67	119	51072m	0.116	ppbv	
70) n-Butylbenzene	18.57	91	50286m	0.111	ppbv	
72) 4-Ethyltoluene	15.85	105	38612m	0.103	ppbv	
73) 1,3,5-Trimethylbenzene	16.00	105	34165m	0.098	ppbv	
74) 1,2,4-Trimethylbenzene	16.76	105	104476m	0.280	ppbv	

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

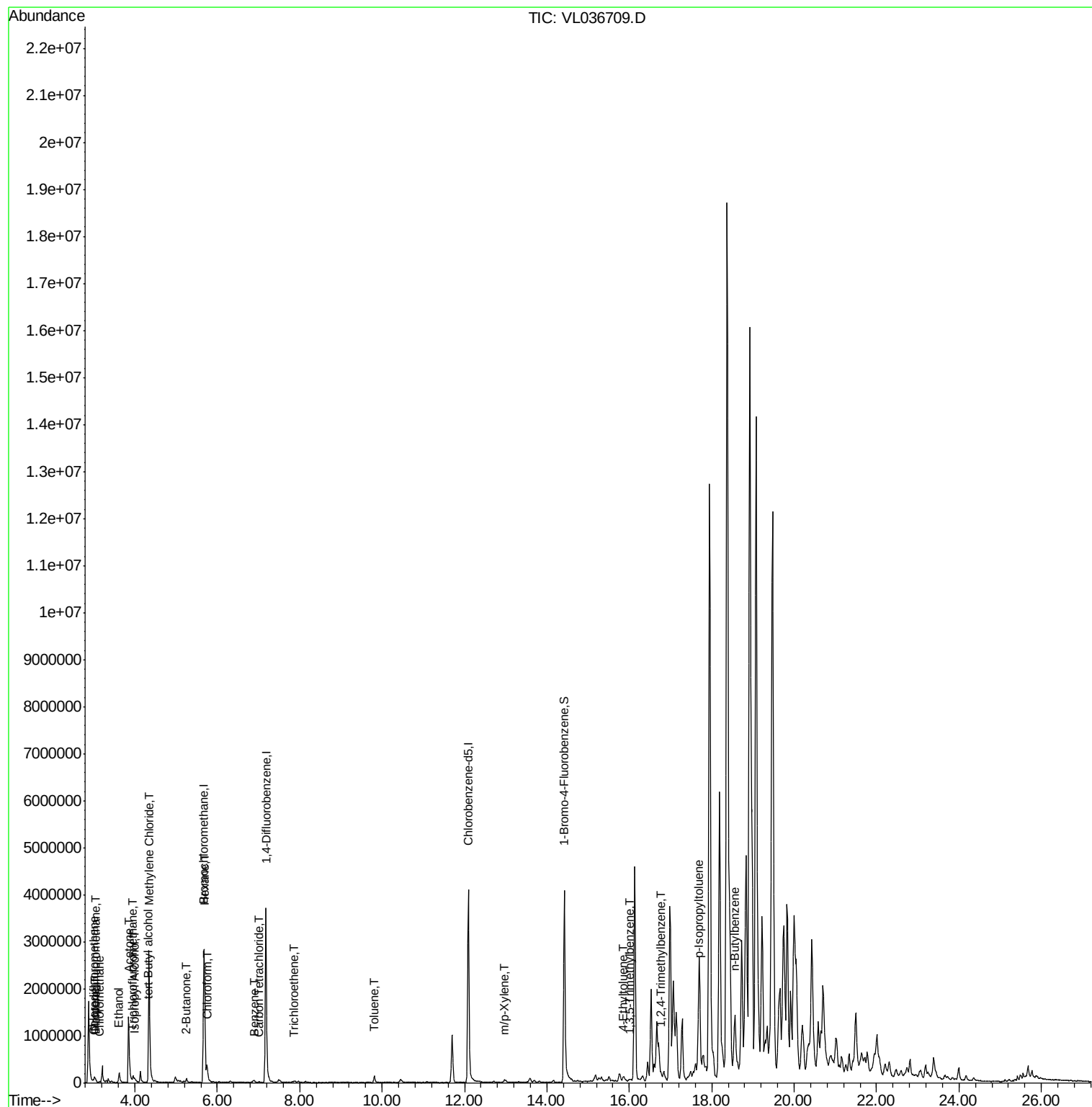
Data Path : Z:\V0ASRV\HPCHEM1\MSVOA L\DATA\VL040621\
Data File : VL036709.D
Acq On : 6 Apr 2021 22:27
Operator : SY/AP
Sample : M1877-09
Misc : 400mL/MSVOA L
ALS Vial : 11 Sample Multiplier: 1

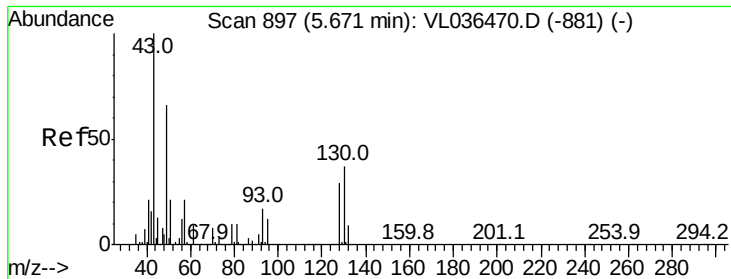
Instrument :
MSVOA_L
ClientSampleId :
UP-SG-6(2021)

Manual Integrations
APPROVED

MMDadoda
4/12/2021 11:11:18 AM

Quant Time: Apr 07 06:18:33 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: 5.67 min Scan# 896

Delta R.T. -0.00 min

Lab File: VL036709.D

Acq: 6 Apr 2021 22:27

Instrument :

MSVOA_L

ClientSampleId :

UP-SG-6(2021)

Tot Ion: 49 Resp: 1267858

Ion Ratio Lower Upper

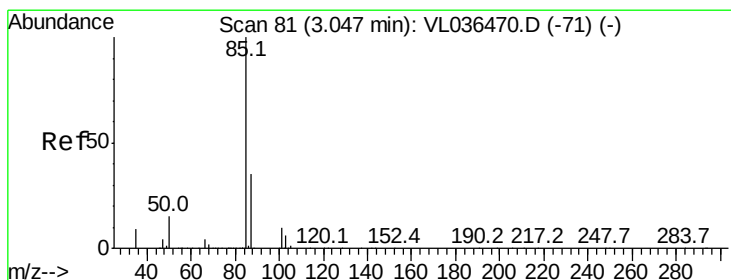
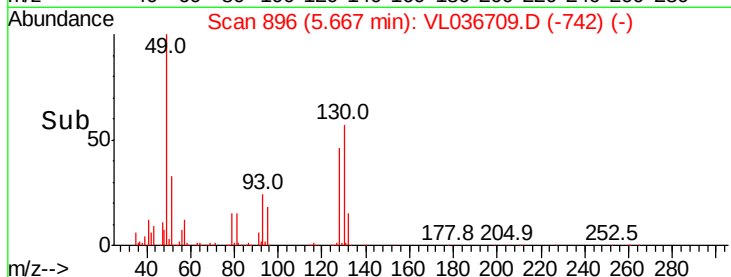
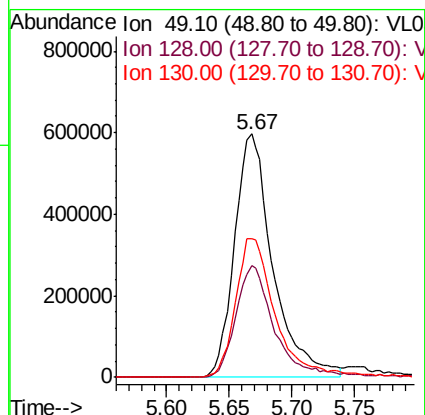
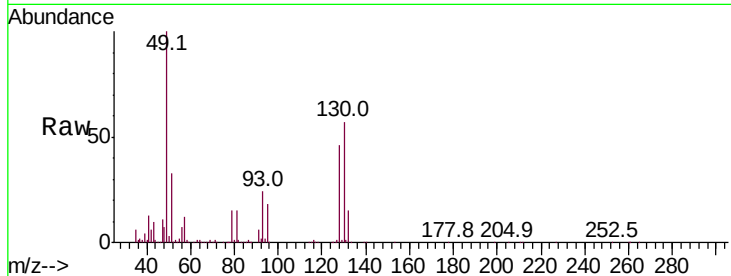
49 100

128 47.2 23.5 70.6

130 60.5 29.1 87.4

Manual Integrations
APPROVED

MMDadoda
4/12/2021 11:11:18 AM



#2

Dichlorodifluoromethane

Concen: 0.213 ppbv

RT: 3.05 min Scan# 82

Delta R.T. 0.00 min

Lab File: VL036709.D

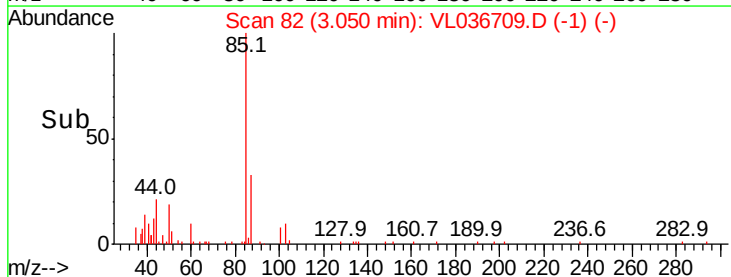
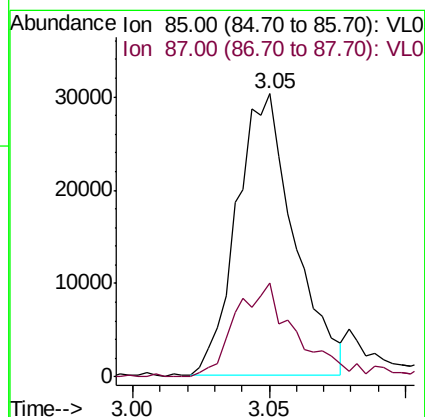
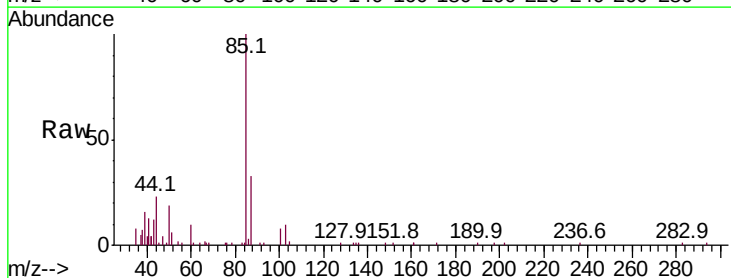
Acq: 6 Apr 2021 22:27

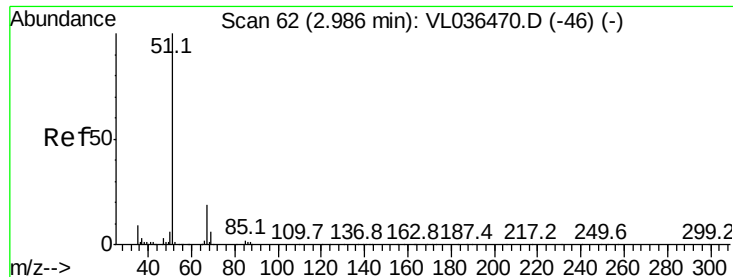
Tgt Ion: 85 Resp: 44089

Ion Ratio Lower Upper

85 100

87 33.5 27.8 41.8





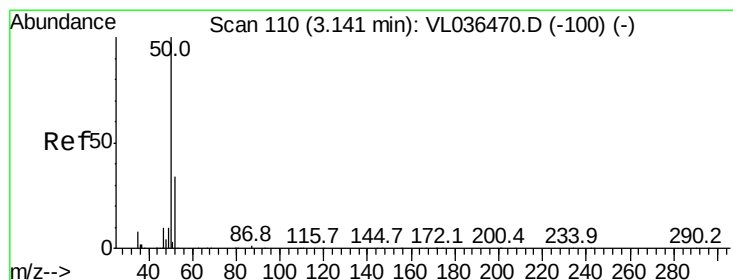
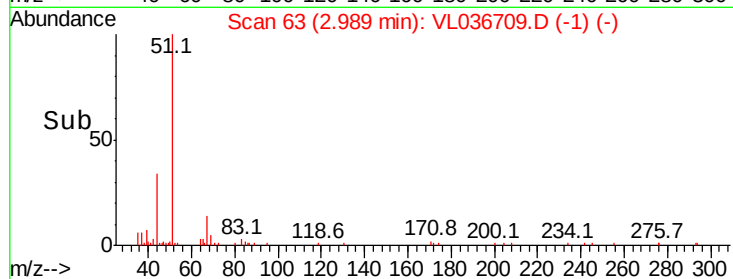
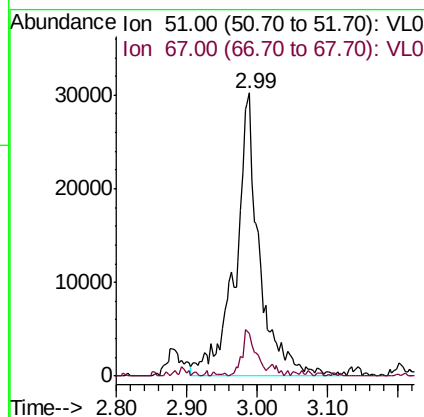
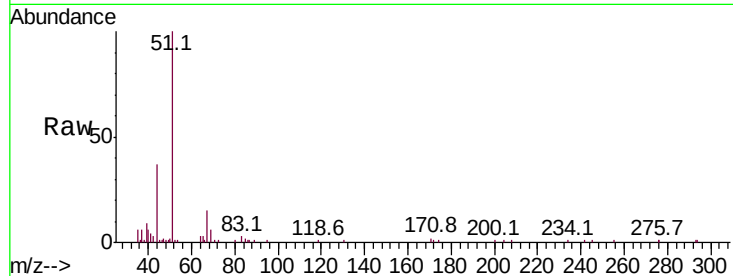
#3
Chlorodifluoromethane
Concen: 0.304 ppbv
RT: 2.99 min Scan# 63
Delta R.T. 0.00 min
Lab File: VL036709.D
Acq: 6 Apr 2021 22:27

Instrument :
MSVOA_L
ClientSampleId :
UP-SG-6(2021)

Tot Ion: 51 Resp: 71980
Ion Ratio Lower Upper
51 100
67 11.3 14.7 22.1#

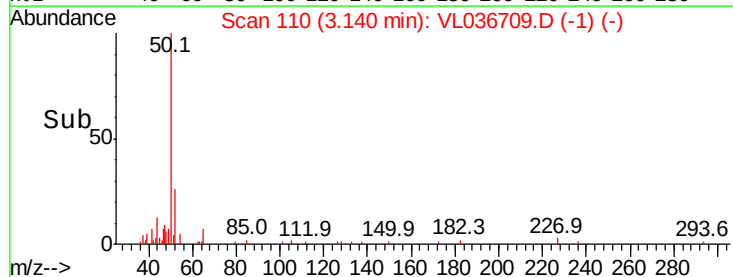
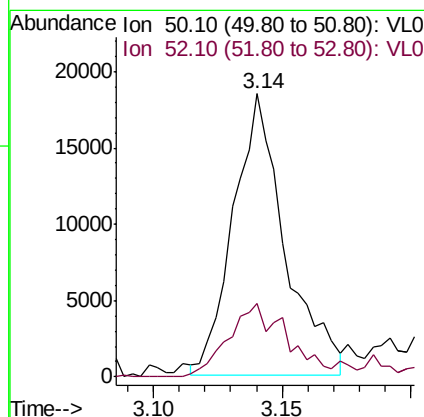
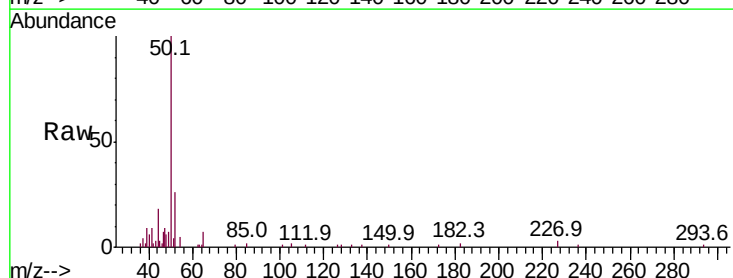
Manual Integrations
APPROVED

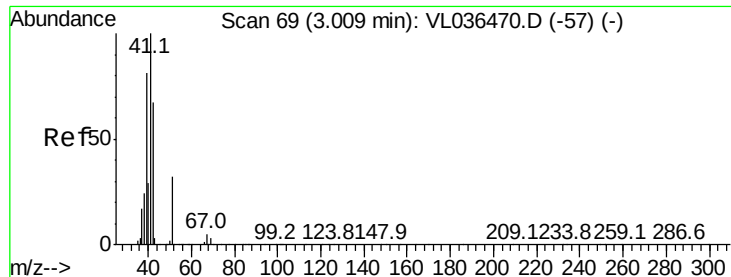
MMDadoda
4/12/2021 11:11:18 AM



#4
Chloromethane
Concen: 0.307 ppbv
RT: 3.14 min Scan# 110
Delta R.T. -0.00 min
Lab File: VL036709.D
Acq: 6 Apr 2021 22:27

Tgt Ion: 50 Resp: 25703
Ion Ratio Lower Upper
50 100
52 26.2 27.0 40.6#





#9

Propene

Concen: 0.485 ppbv

RT: 3.01 min Scan# 70

Delta R.T. 0.00 min

Lab File: VL036709.D

Acq: 6 Apr 2021 22:27

Instrument :

MSVOA_L

ClientSampleId :

UP-SG-6(2021)

Tot Ion: 41 Resp: 36661

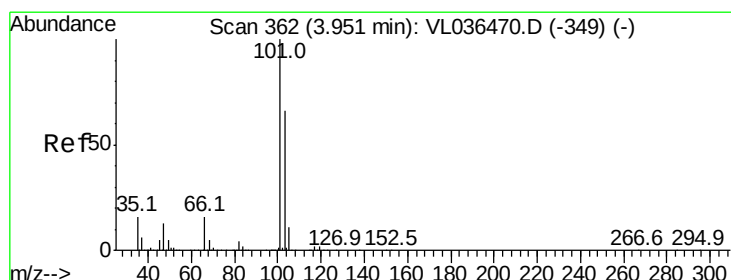
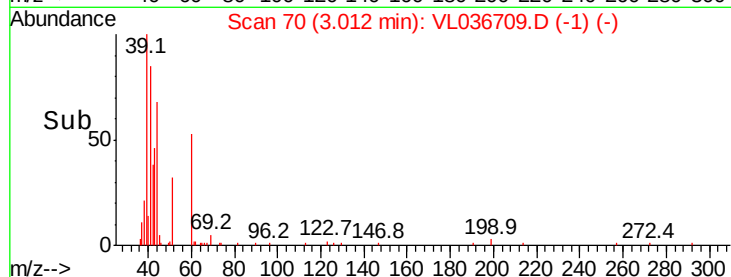
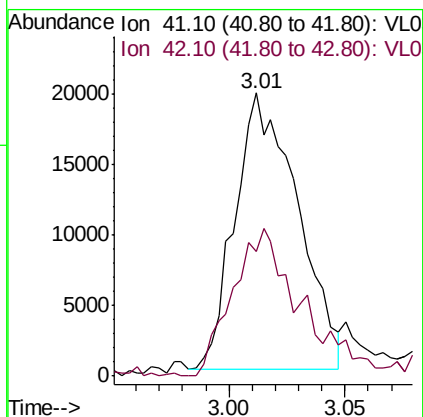
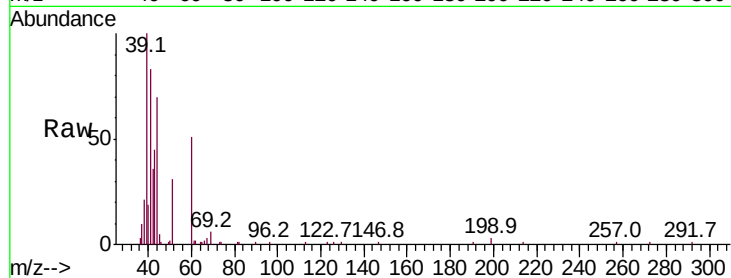
Ion Ratio Lower Upper

41 100

42 63.2 57.0 85.4

Manual Integrations
APPROVED

MMDadoda
4/12/2021 11:11:18 AM



#11

Trichlorofluoromethane

Concen: 0.366 ppbv

RT: 3.95 min Scan# 361

Delta R.T. -0.00 min

Lab File: VL036709.D

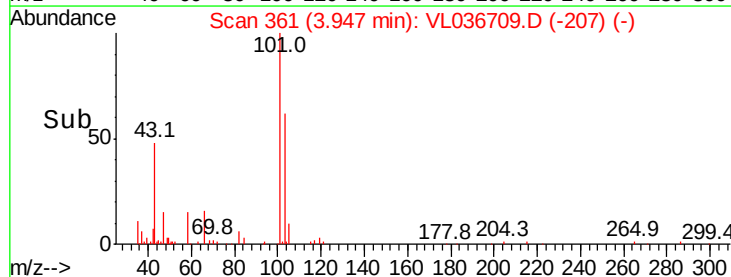
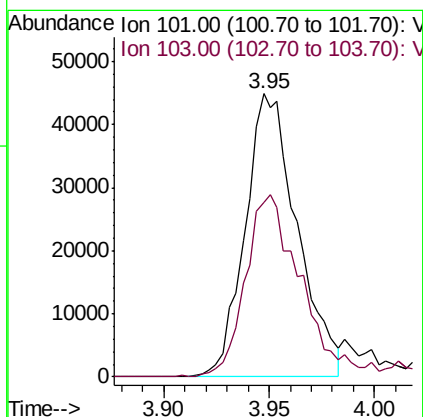
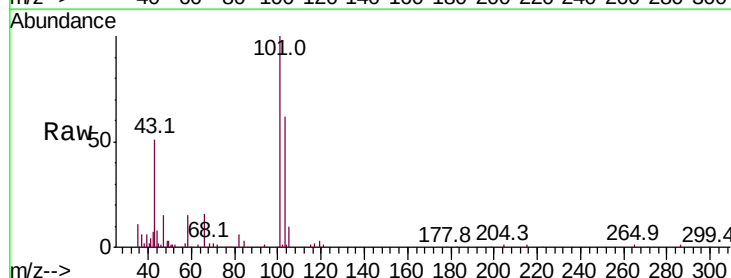
Acq: 6 Apr 2021 22:27

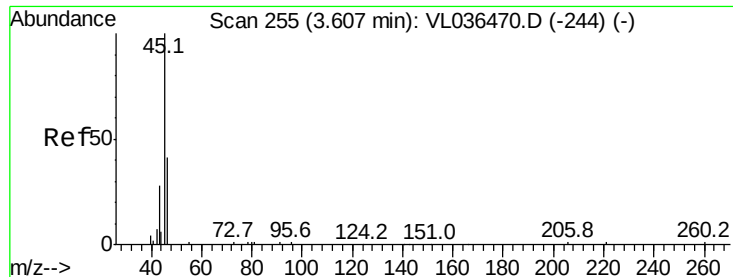
Tgt Ion: 101 Resp: 77228

Ion Ratio Lower Upper

101 100

103 61.5 52.5 78.7





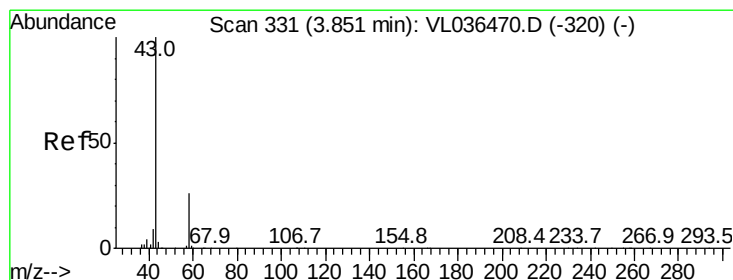
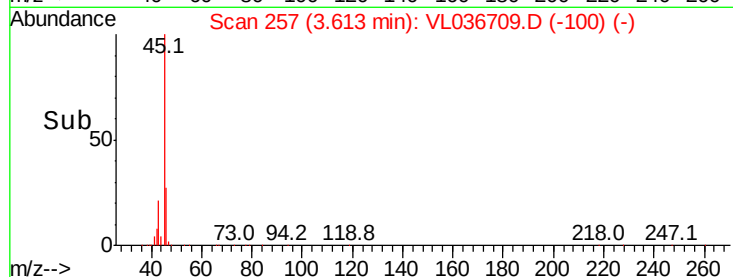
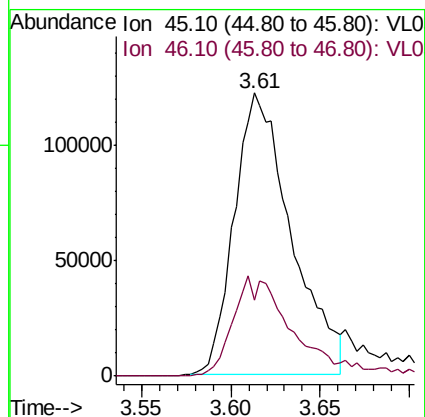
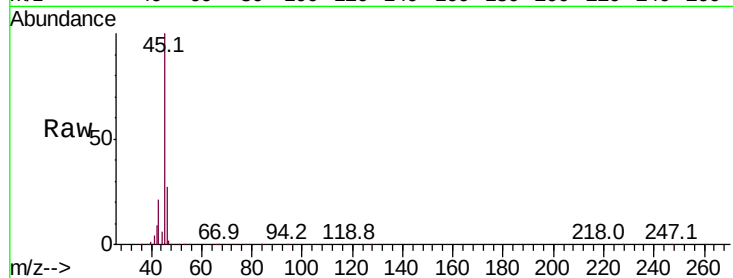
#13
Ethanol
Concen: 30.193 ppbv
RT: 3.61 min Scan# 257
Delta R.T. 0.01 min
Lab File: VL036709.D
Acq: 6 Apr 2021 22:27

Instrument :
MSVOA_L
ClientSampleId :
UP-SG-6(2021)

Tot Ion	Ratio	Lower	Upper
45	100		
46	38.2	16.6	66.2

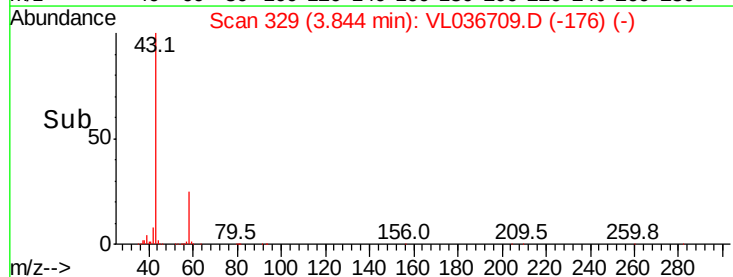
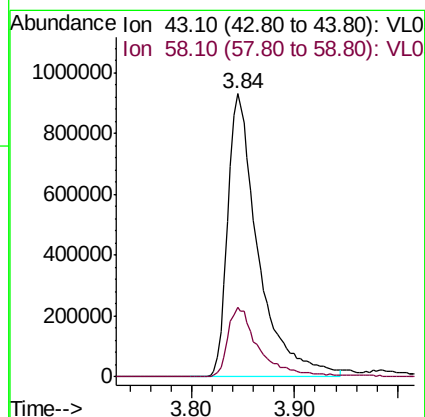
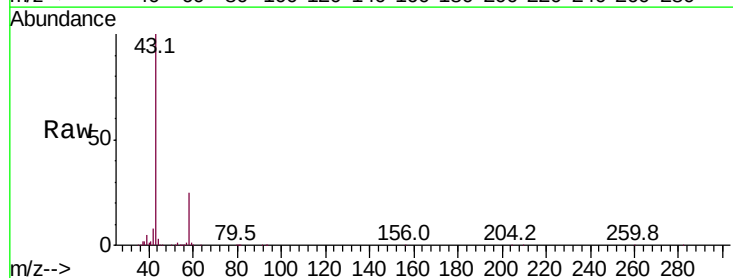
Manual Integrations
APPROVED

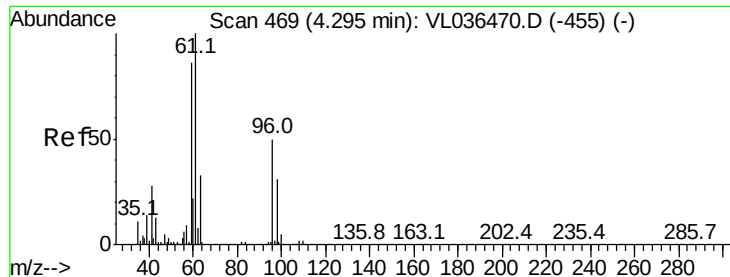
MMDadoda
4/12/2021 11:11:18 AM



#15
Acetone
Concen: 15.360 ppbv
RT: 3.84 min Scan# 329
Delta R.T. -0.01 min
Lab File: VL036709.D
Acq: 6 Apr 2021 22:27

Tgt Ion	Ratio	Lower	Upper
43	100		
58	26.2	21.2	31.8





#17

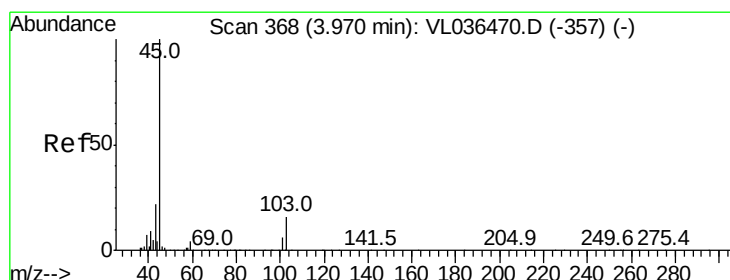
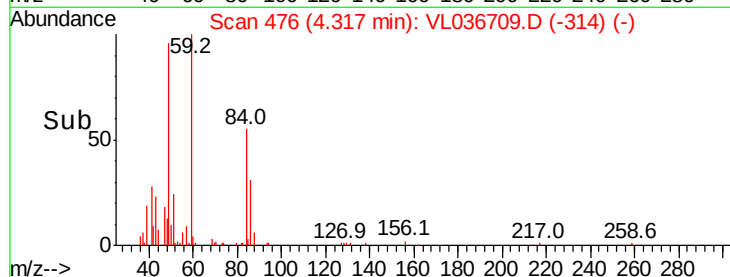
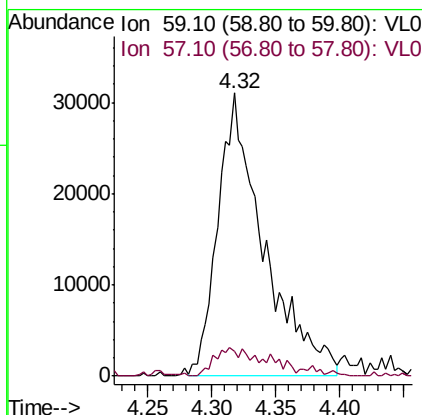
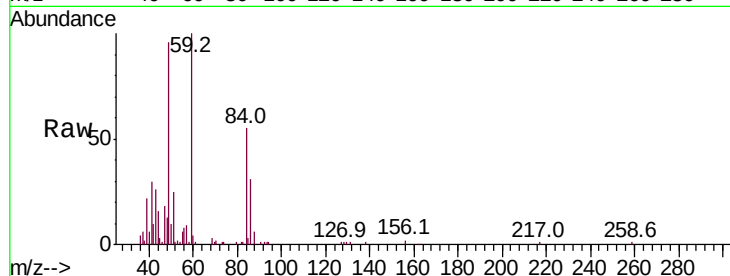
tert-Butyl alcohol
Concen: 0.711 ppbv
RT: 4.32 min Scan# 476
Delta R.T. 0.02 min
Lab File: VL036709.D
Acq: 6 Apr 2021 22:27

Instrument :
MSVOA_L
ClientSampleId :
UP-SG-6(2021)

Tot Ion	Ratio	Lower	Upper
59	100		
57	12.5	8.6	12.8

Manual Integrations
APPROVED

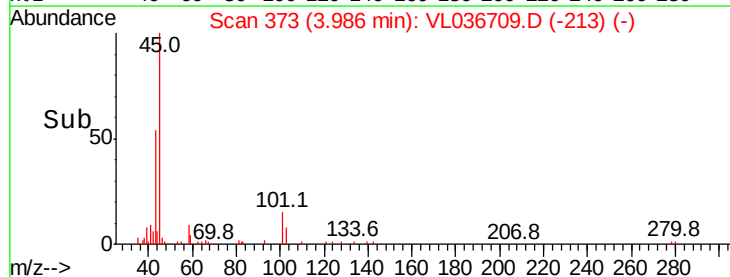
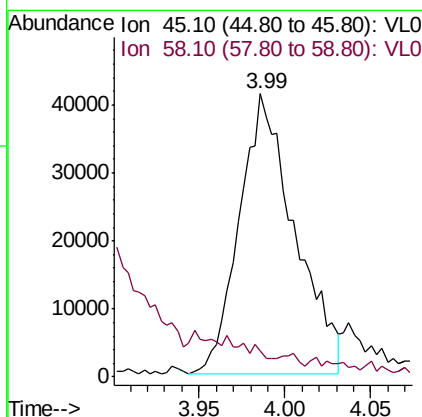
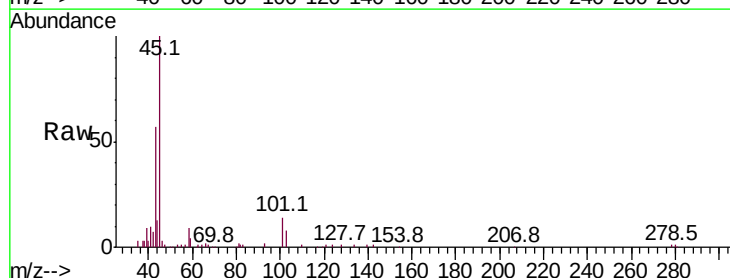
MMDadoda
4/12/2021 11:11:18 AM

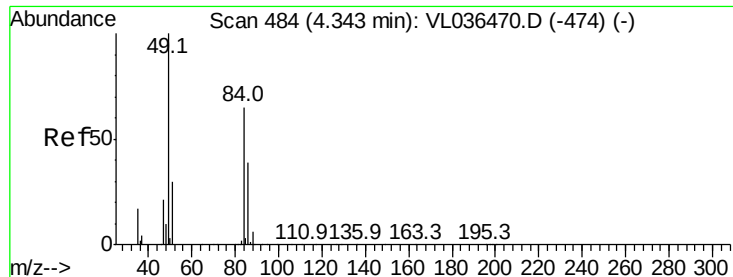


#19

Isopropyl Alcohol
Concen: 1.344 ppbv
RT: 3.99 min Scan# 373
Delta R.T. 0.02 min
Lab File: VL036709.D
Acq: 6 Apr 2021 22:27

Tgt Ion	Ratio	Lower	Upper
45	100		
58	545.6	2.9	4.3#





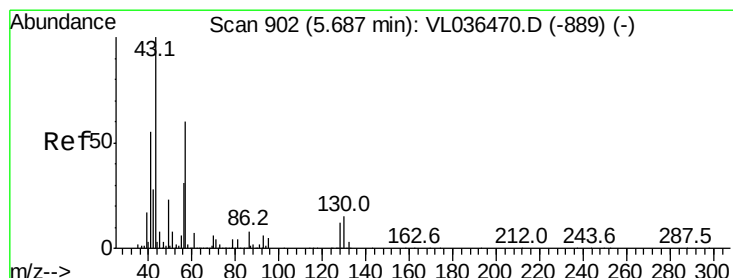
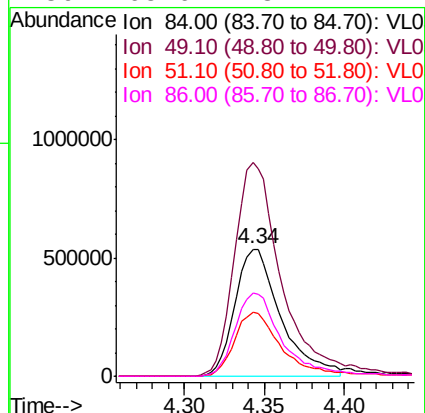
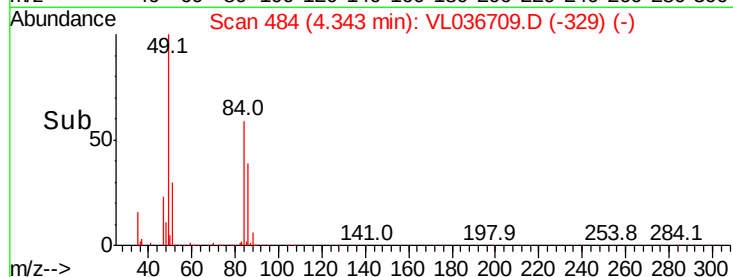
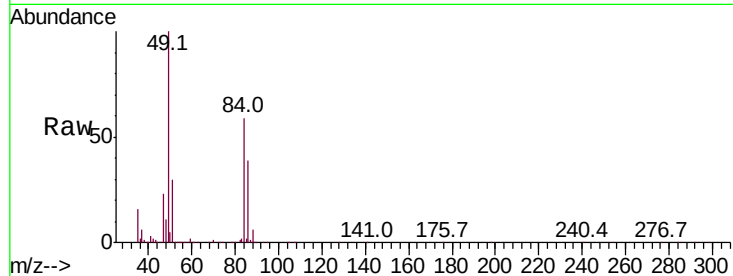
#20
Methvlene Chloride
Concen: 18.066 ppbv
RT: 4.34 min Scan# 484
Delta R.T. -0.00 min
Lab File: VL036709.D
Acq: 6 Apr 2021 22:27

Instrument :
MSVOA_L
ClientSampleId :
UP-SG-6(2021)

Tot Ion:	84	Resp:	1055490
Ion	Ratio	Lower	Upper
84	100		
49	168.3	122.9	184.3
51	50.9	36.9	55.3
86	65.6	48.2	72.4

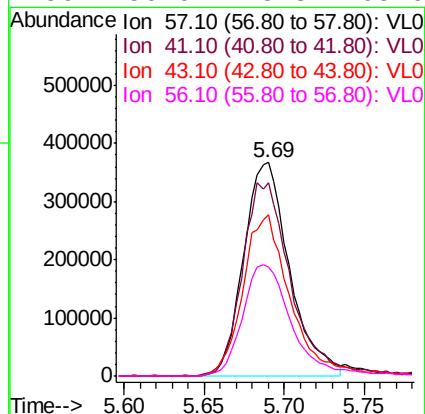
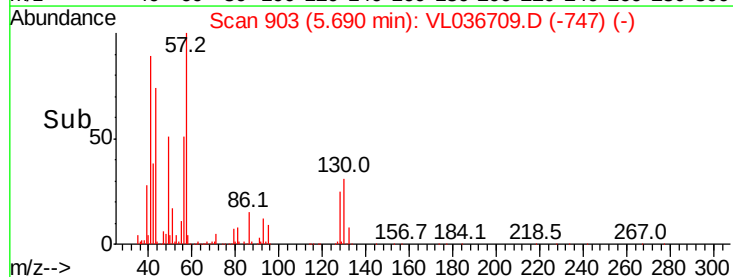
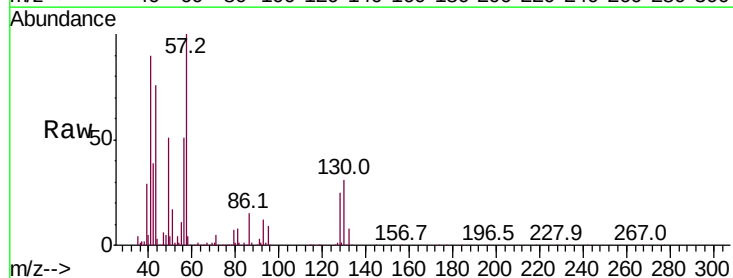
Manual Integrations
APPROVED

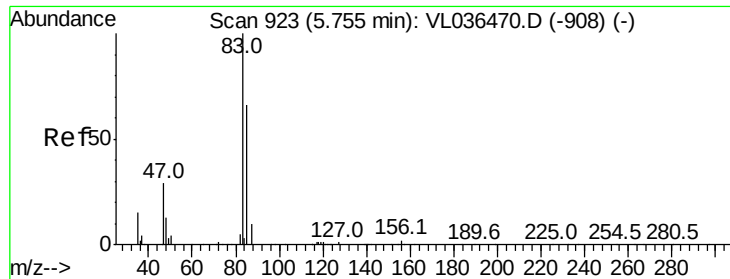
MMDadoda
4/12/2021 11:11:18 AM



#26
Hexane
Concen: 5.232 ppbv
RT: 5.69 min Scan# 903
Delta R.T. 0.00 min
Lab File: VL036709.D
Acq: 6 Apr 2021 22:27

Tgt Ion:	57	Resp:	720288
Ion	Ratio	Lower	Upper
57	100		
41	97.5	77.2	115.8
43	77.9	173.8	260.6#
56	56.0	43.8	65.6





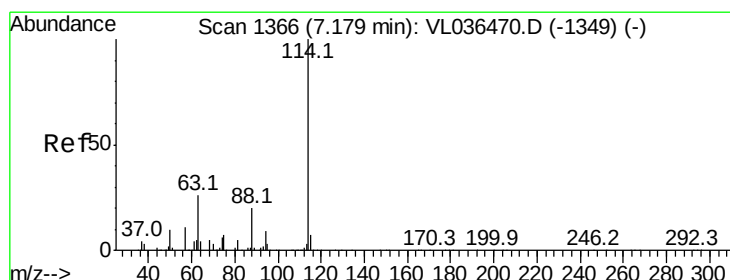
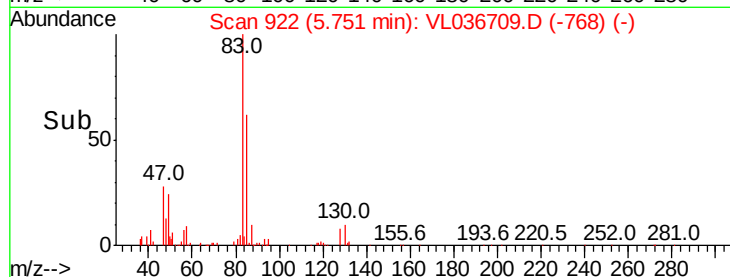
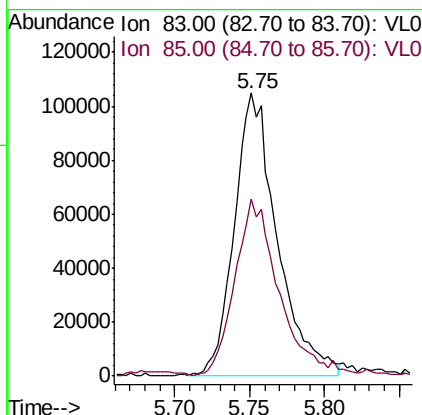
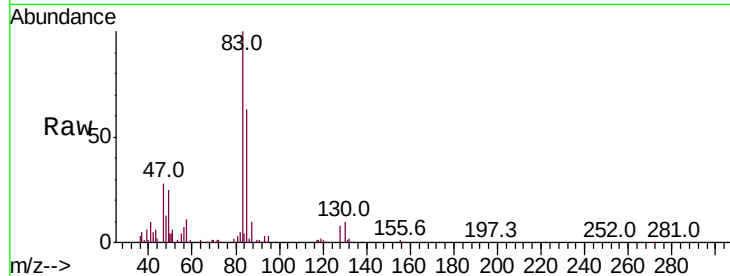
#29
Chloroform
Concen: 0.951 ppbv
RT: 5.75 min Scan# 922
Delta R.T. -0.00 min
Lab File: VL036709.D
Acq: 6 Apr 2021 22:27

Instrument :
MSVOA_L
ClientSampleId :
UP-SG-6(2021)

Tot Ion	83	Resp	209332
Ion Ratio	100	Lower	Upper
83	100		
85	61.9	52.6	78.8

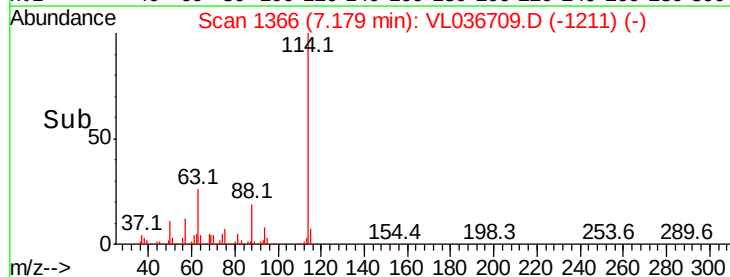
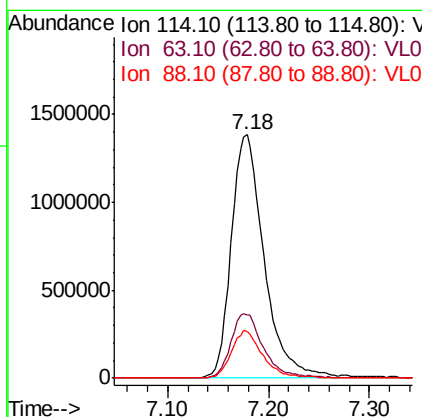
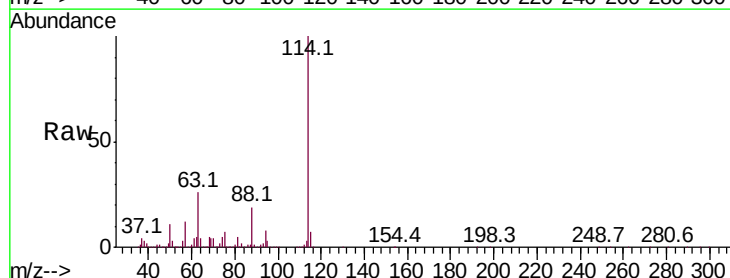
Manual Integrations
APPROVED

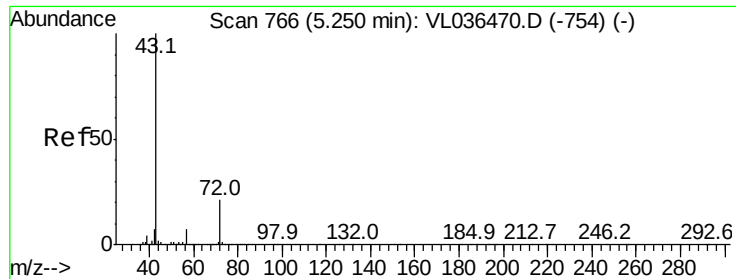
MMDadoda
4/12/2021 11:11:18 AM



#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 7.18 min Scan# 1366
Delta R.T. -0.00 min
Lab File: VL036709.D
Acq: 6 Apr 2021 22:27

Tgt Ion	114	Resp	3137356
Ion Ratio	100	Lower	Upper
114	100		
63	26.6	22.4	33.6
88	18.8	15.4	23.0





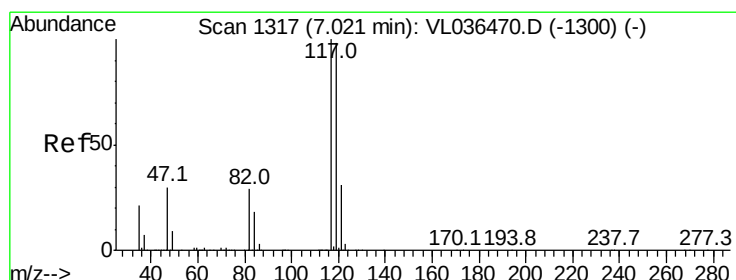
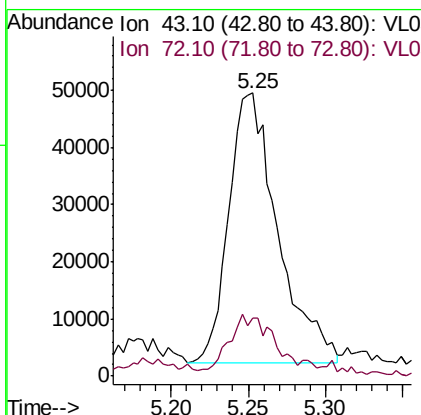
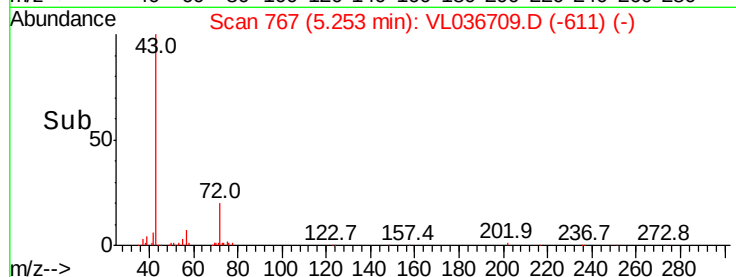
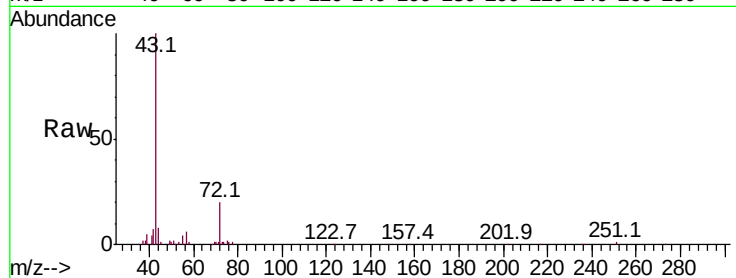
#34
2-Butanone
Concen: 0.680 ppbv
RT: 5.25 min Scan# 767
Delta R.T. 0.00 min
Lab File: VL036709.D
Acq: 6 Apr 2021 22:27

Instrument :
MSVOA_L
ClientSampleId :
UP-SG-6(2021)

Tot Ion: 43 Resp: 104081
Ion Ratio Lower Upper
43 100
72 26.6 17.0 25.6#

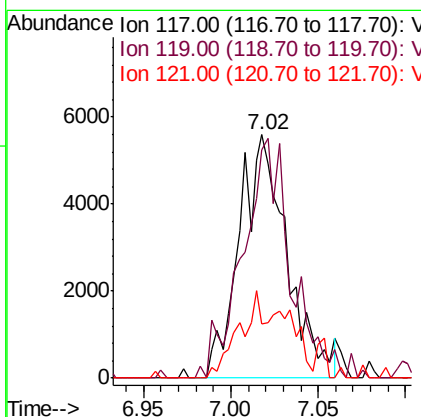
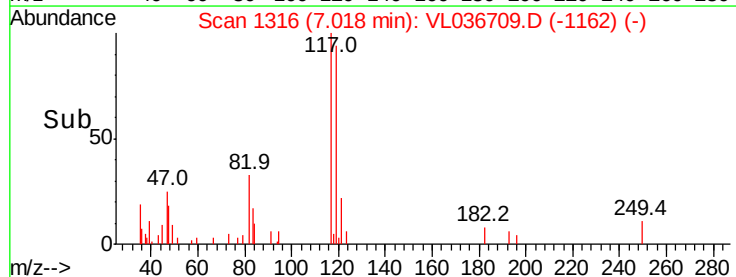
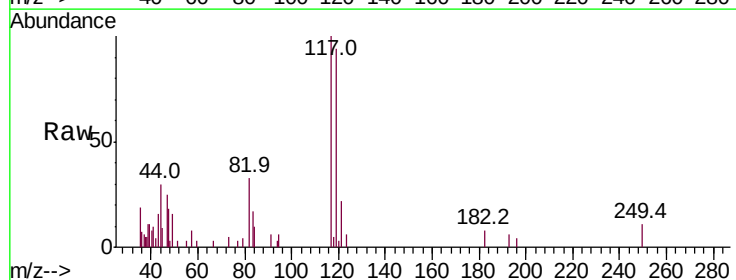
Manual Integrations
APPROVED

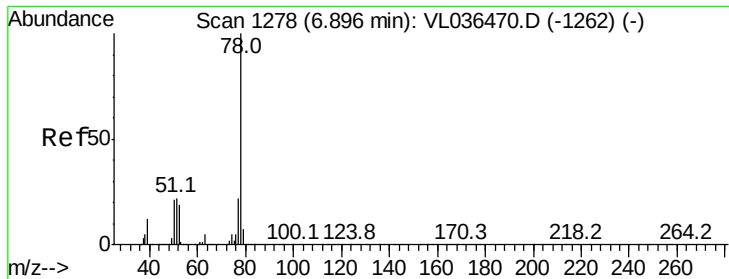
MMDadoda
4/12/2021 11:11:18 AM



#35
Carbon Tetrachloride
Concen: 0.044 ppbv m
RT: 7.02 min Scan# 1316
Delta R.T. -0.00 min
Lab File: VL036709.D
Acq: 6 Apr 2021 22:27

Tgt Ion: 117 Resp: 10622
Ion Ratio Lower Upper
117 100
119 94.0 78.2 117.2
121 22.4 24.5 36.7#





#36

Benzene

Concen: 0.104 ppbv m

RT: 6.89 min Scan# 1275

Delta R.T. -0.01 min

Lab File: VL036709.D

Acq: 6 Apr 2021 22:27

Instrument :

MSVOA_L

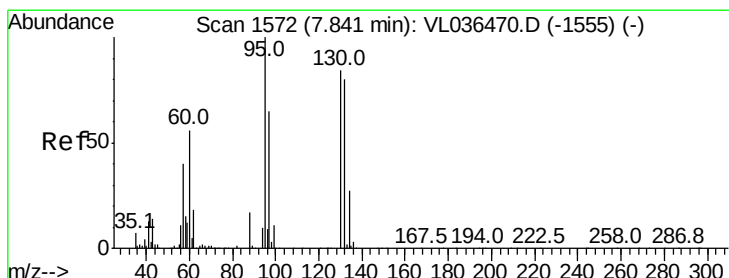
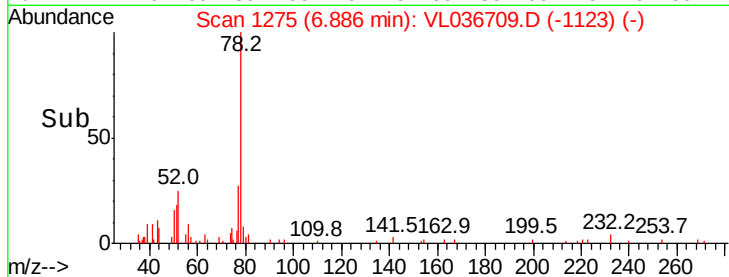
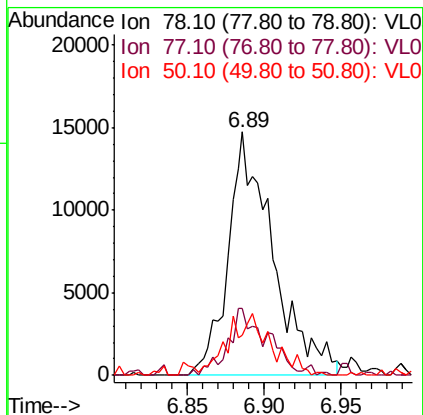
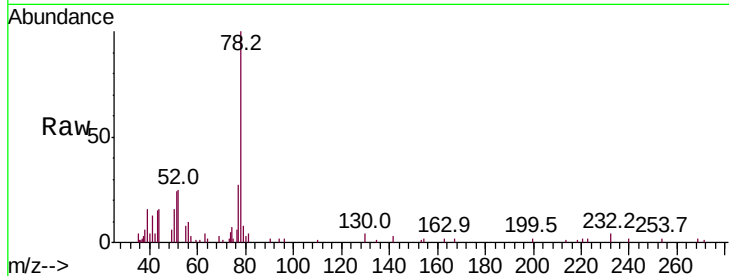
ClientSampleId :

UP-SG-6(2021)

Tot Ion:	78	Resp:	29979
Ion	Ratio	Lower	Upper
78	100		
77	27.3	18.0	27.0#
50	16.3	16.5	24.7#

Manual Integrations
APPROVED

MMDadoda
4/12/2021 11:11:18 AM



#38

Trichloroethene

Concen: 0.037 ppbv m

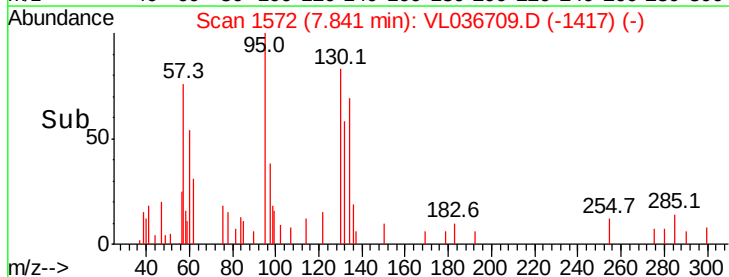
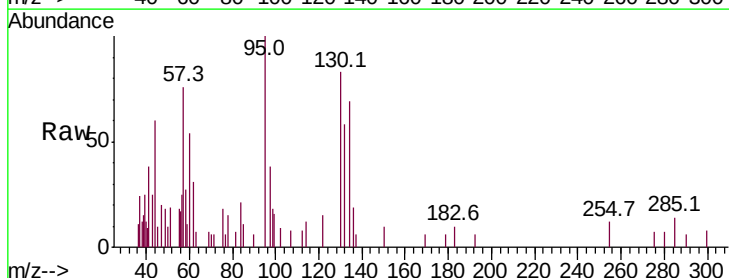
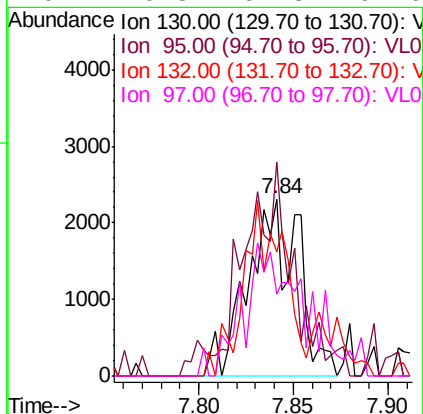
RT: 7.84 min Scan# 1572

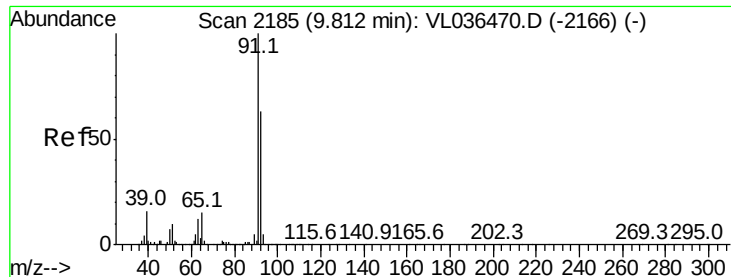
Delta R.T. -0.00 min

Lab File: VL036709.D

Acq: 6 Apr 2021 22:27

Tgt Ion:	130	Resp:	4218
Ion	Ratio	Lower	Upper
130	100		
95	120.5	95.7	143.5
132	69.7	76.2	114.4#
97	46.3	61.8	92.6#





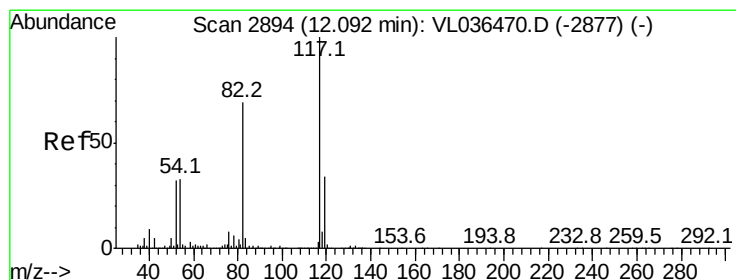
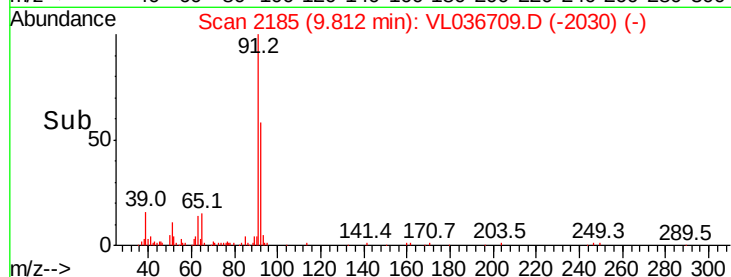
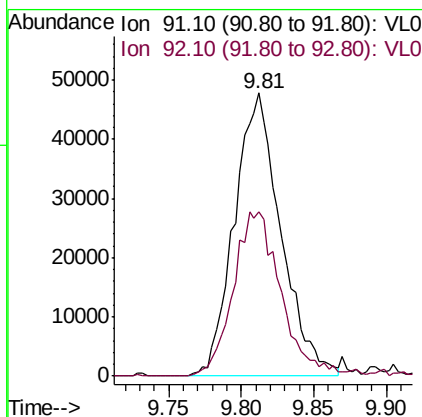
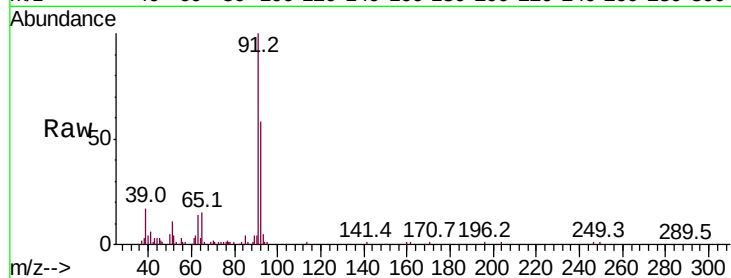
#53
Toluene
Concen: 0.346 ppbv
RT: 9.81 min Scan# 2185
Delta R.T. -0.00 min
Lab File: VL036709.D
Acq: 6 Apr 2021 22:27

Instrument :
MSVOA_L
ClientSampled :
UP-SG-6(2021)

Tot Ion	Ratio	Lower	Upper
91	100		
92	59.4	48.8	73.2

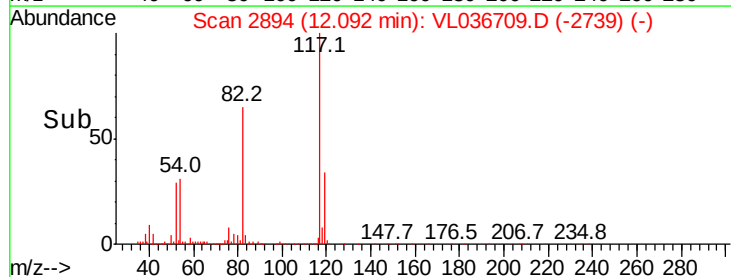
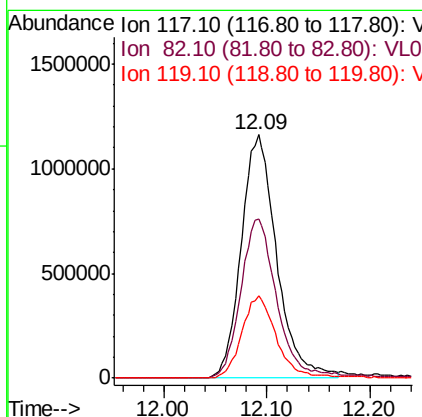
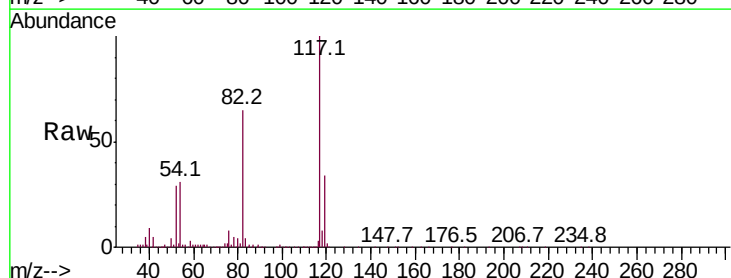
Manual Integrations
APPROVED

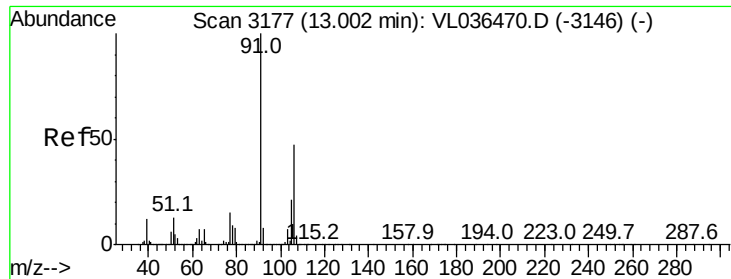
MMDadoda
4/12/2021 11:11:18 AM



#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 12.09 min Scan# 2894
Delta R.T. -0.00 min
Lab File: VL036709.D
Acq: 6 Apr 2021 22:27

Tgt Ion	Ratio	Lower	Upper
117	100		
82	68.5	57.4	86.0
119	34.0	47.4	71.0#





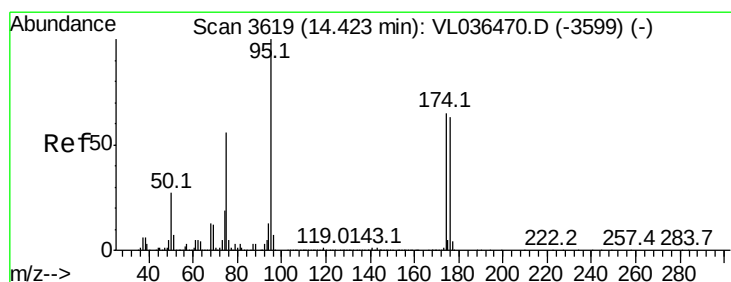
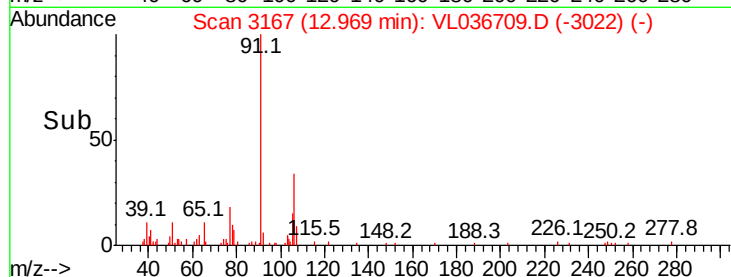
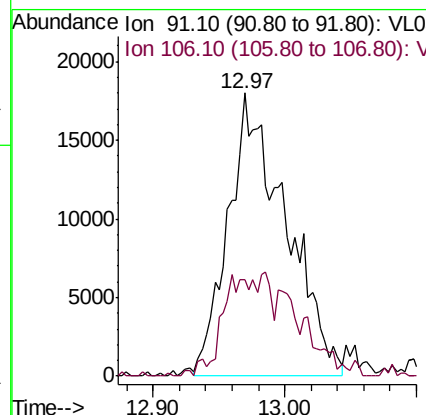
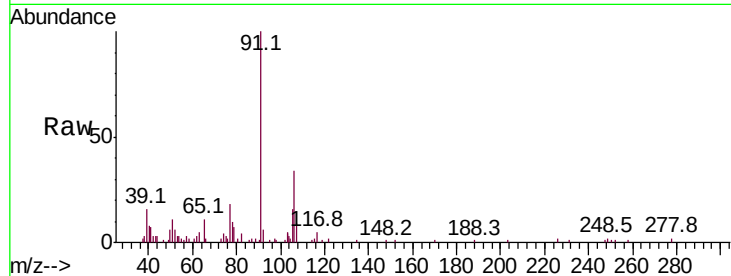
#59
m/p-Xylene
Concen: 0.154 ppbv m
RT: 12.97 min Scan# 3167
Delta R.T. -0.03 min
Lab File: VL036709.D
Acq: 6 Apr 2021 22:27

Instrument :
MSVOA_L
ClientSampleId :
UP-SG-6(2021)

Tot Ion: 91 Resp: 54413
Ion Ratio Lower Upper
91 100
106 0.0 35.3 52.9#

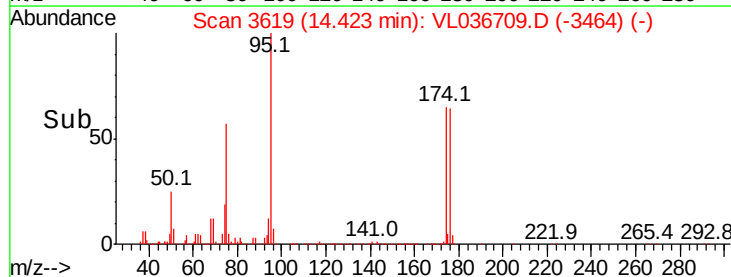
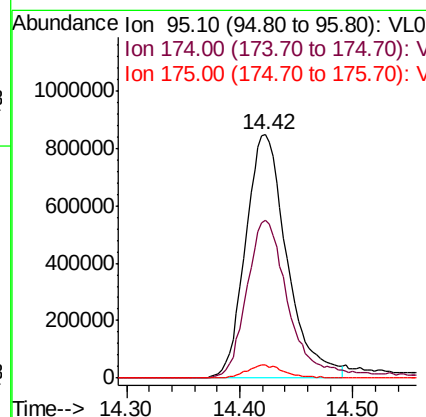
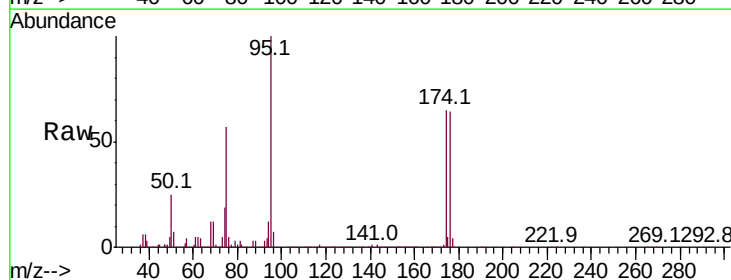
Manual Integrations
APPROVED

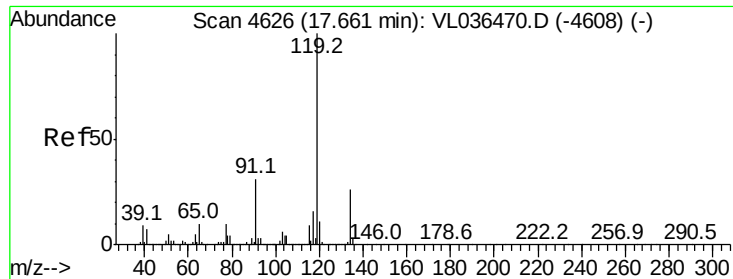
MMDadoda
4/12/2021 11:11:18 AM



#68
1-Bromo-4-Fluorobenzene
Concen: 9.766 ppbv
RT: 14.42 min Scan# 3619
Delta R.T. -0.00 min
Lab File: VL036709.D
Acq: 6 Apr 2021 22:27

Tgt Ion: 95 Resp: 2161916
Ion Ratio Lower Upper
95 100
174 68.5 51.0 76.6
175 5.1 3.9 5.9





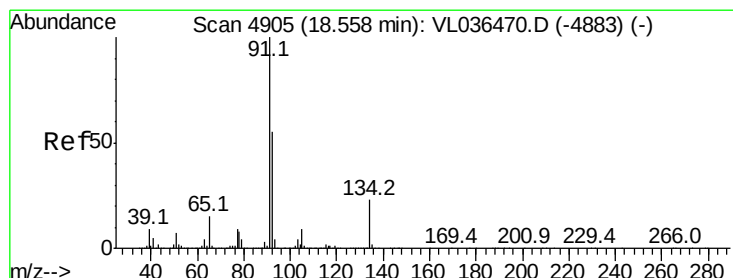
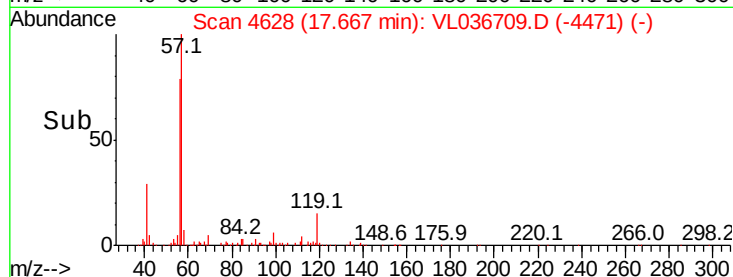
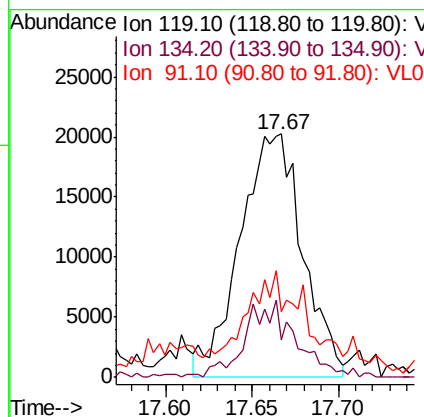
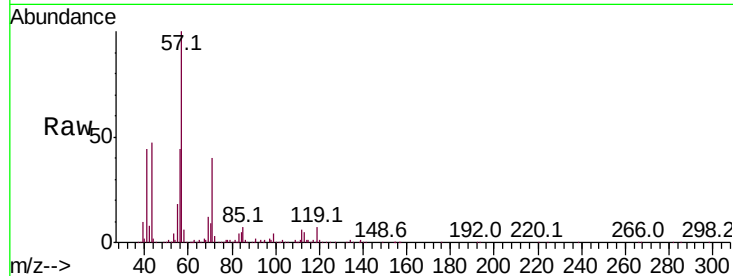
#69
 p-Isopropyltoluene
 Concen: 0.116 ppbv m
 RT: 17.67 min Scan# 4628
 Delta R.T. 0.01 min
 Lab File: VL036709.D
 Acq: 6 Apr 2021 22:27

Instrument :
 MSVOA_L
 ClientSampleId :
 UP-SG-6(2021)

Tot Ion	Ratio	Lower	Upper
119	100		
134	0.0	20.6	30.8#
91	0.0	25.0	37.6#

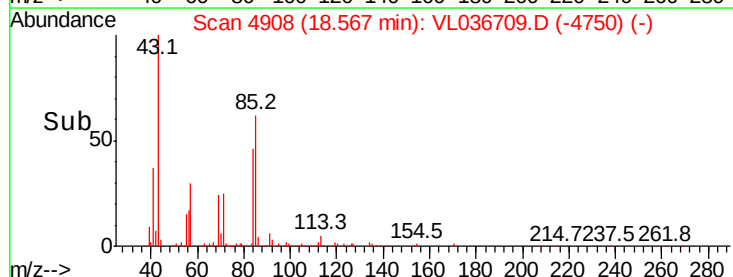
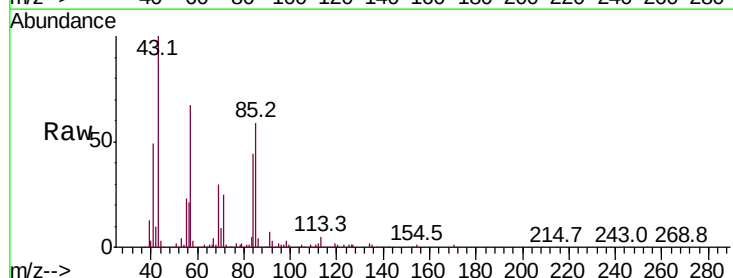
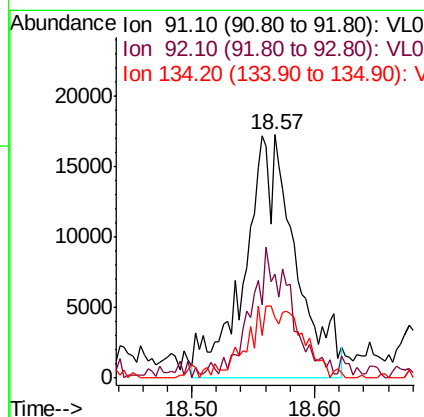
Manual Integrations
 APPROVED

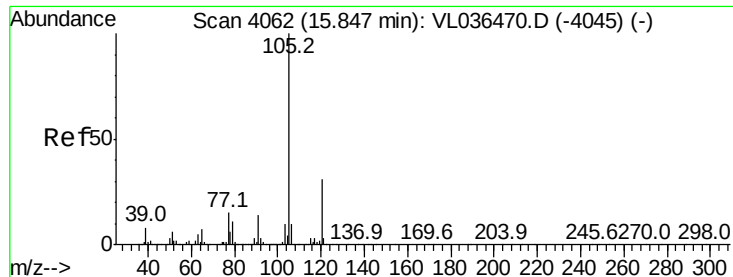
MMDadoda
 4/12/2021 11:11:18 AM



#70
 n-Butylbenzene
 Concen: 0.111 ppbv m
 RT: 18.57 min Scan# 4908
 Delta R.T. 0.01 min
 Lab File: VL036709.D
 Acq: 6 Apr 2021 22:27

Tgt Ion	Ratio	Lower	Upper
91	100		
92	42.8	43.8	65.8#
134	32.2	18.0	27.0#





#72

4-Ethyltoluene

Concen: 0.103 ppbv m

RT: 15.85 min Scan# 4063

Delta R.T. 0.00 min

Lab File: VL036709.D

Acq: 6 Apr 2021 22:27

Instrument :

MSVOA_L

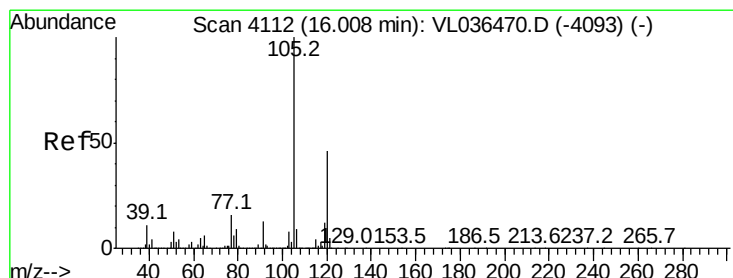
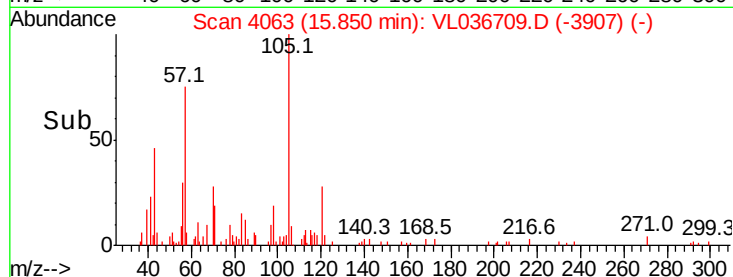
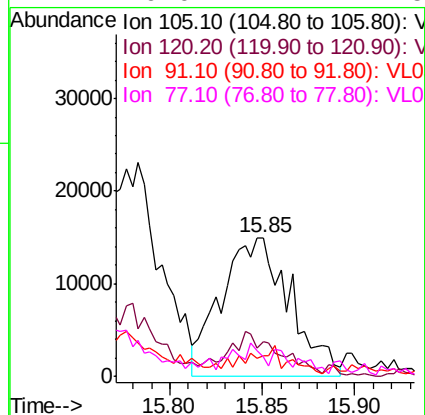
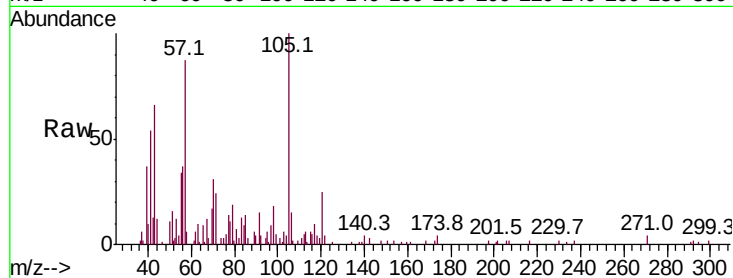
ClientSampleId :

UP-SG-6(2021)

Tot Ion	Ratio	Resp	Lower	Upper
105	100			
120	0.0	24.0	36.0#	
91	0.0	11.0	16.4#	
77	0.0	11.7	17.5#	

Manual Integrations
APPROVED

MMDadoda
4/12/2021 11:11:18 AM



#73

1,3,5-Trimethylbenzene

Concen: 0.098 ppbv m

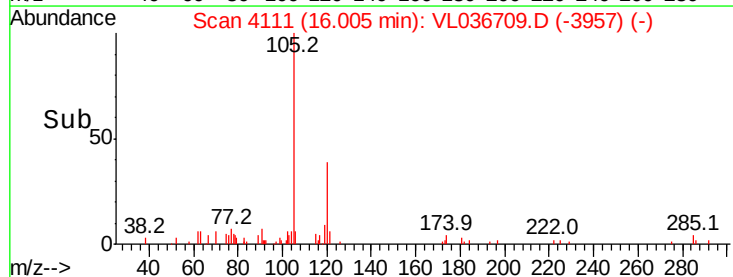
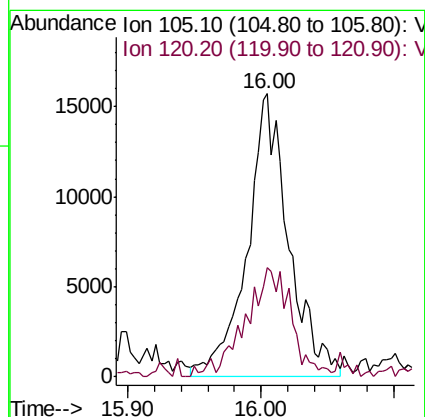
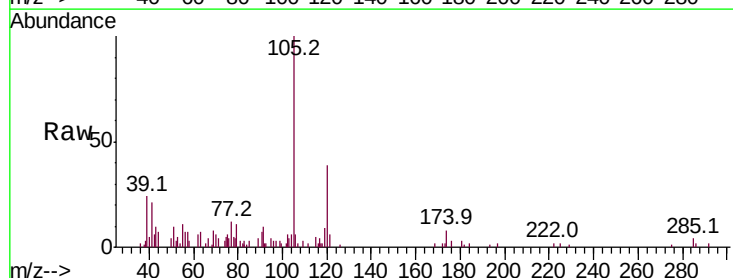
RT: 16.00 min Scan# 4111

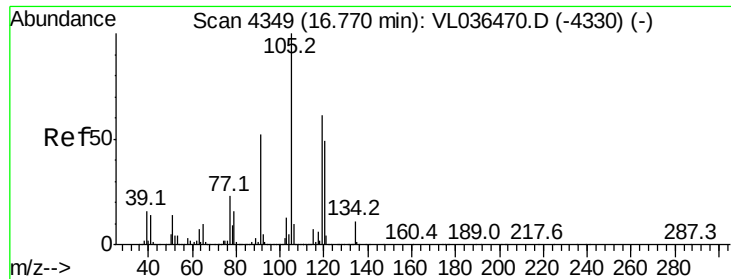
Delta R.T. -0.00 min

Lab File: VL036709.D

Acq: 6 Apr 2021 22:27

Tgt Ion	Ratio	Resp	Lower	Upper
105	100			
120	38.6	36.6	54.8	





#74

1,2,4-Trimethylbenzene

Concen: 0.280 ppbv m

RT: 16.76 min Scan# 4347

Delta R.T. -0.01 min

Lab File: VL036709.D

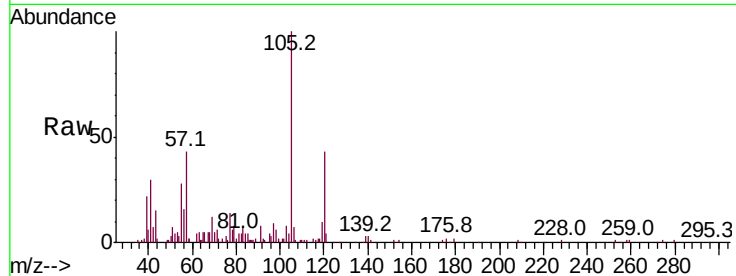
Acq: 6 Apr 2021 22:27

Instrument :

MSVOA_L

ClientSampleId :

UP-SG-6(2021)



Tot Ion	Ratio	Resp Lower	Upper
105	100		
120	42.9	39.2	58.8
91	8.4	42.6	64.0#
77	14.5	18.6	28.0#

Manual Integrations
APPROVED

MMDadoda
4/12/2021 11:11:18 AM

