

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL111220\
 Data File : VL035930.D
 Acq On : 13 Nov 2020 1:56
 Operator : SY/AP
 Sample : L4721-04
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 LA-4

Manual Integrations
 APPROVED

MMDadoda
 11/16/2020 2:31:25 PM

Quant Time: Nov 14 21:45:44 2020
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL110320AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LWed Nov 04
 QLast Update : Wed Nov 04 02:40:06 2020
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.66	49	1090055	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.17	114	3902804	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.09	117	3538120	10.00	ppbv	0.00

System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	14.42	95	2646222	10.53	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	105.30%

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.04	85	45330	0.221	ppbv	99
3) Chlorodifluoromethane	2.98	51	80284m	0.615	ppbv	
4) Chloromethane	3.13	50	33936	0.535	ppbv	94
9) Propene	3.01	41	60818	1.273	ppbv	86
11) Trichlorofluoromethane	3.94	101	65815	0.255	ppbv	96
13) Ethanol	3.59	45	595907	57.491	ppbv	94
15) Acetone	3.84	43	797754	6.846	ppbv	91
19) Isopropyl Alcohol	3.97	45	385206	5.379	ppbv #	91
20) Methylene Chloride	4.34	84	418695	5.104	ppbv	97
26) Hexane	5.68	57	498182	3.935	ppbv #	47
34) 2-Butanone	5.24	43	50110	0.396	ppbv	97
35) Carbon Tetrachloride	7.02	117	14338m	0.069	ppbv	
36) Benzene	6.88	78	115275	0.397	ppbv	97
44) 2,2,4-Trimethylpentane	7.87	57	90339m	0.235	ppbv	
52) Tetrachloroethene	11.22	164	6521m	0.047	ppbv	
53) Toluene	9.80	91	635139	1.814	ppbv	97
59) m/p-Xylene	12.97	91	114065	0.313	ppbv	98
60) o-Xylene	13.69	91	47524	0.134	ppbv	93
74) 1,2,4-Trimethylbenzene	16.77	105	50941	0.121	ppbv #	67

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

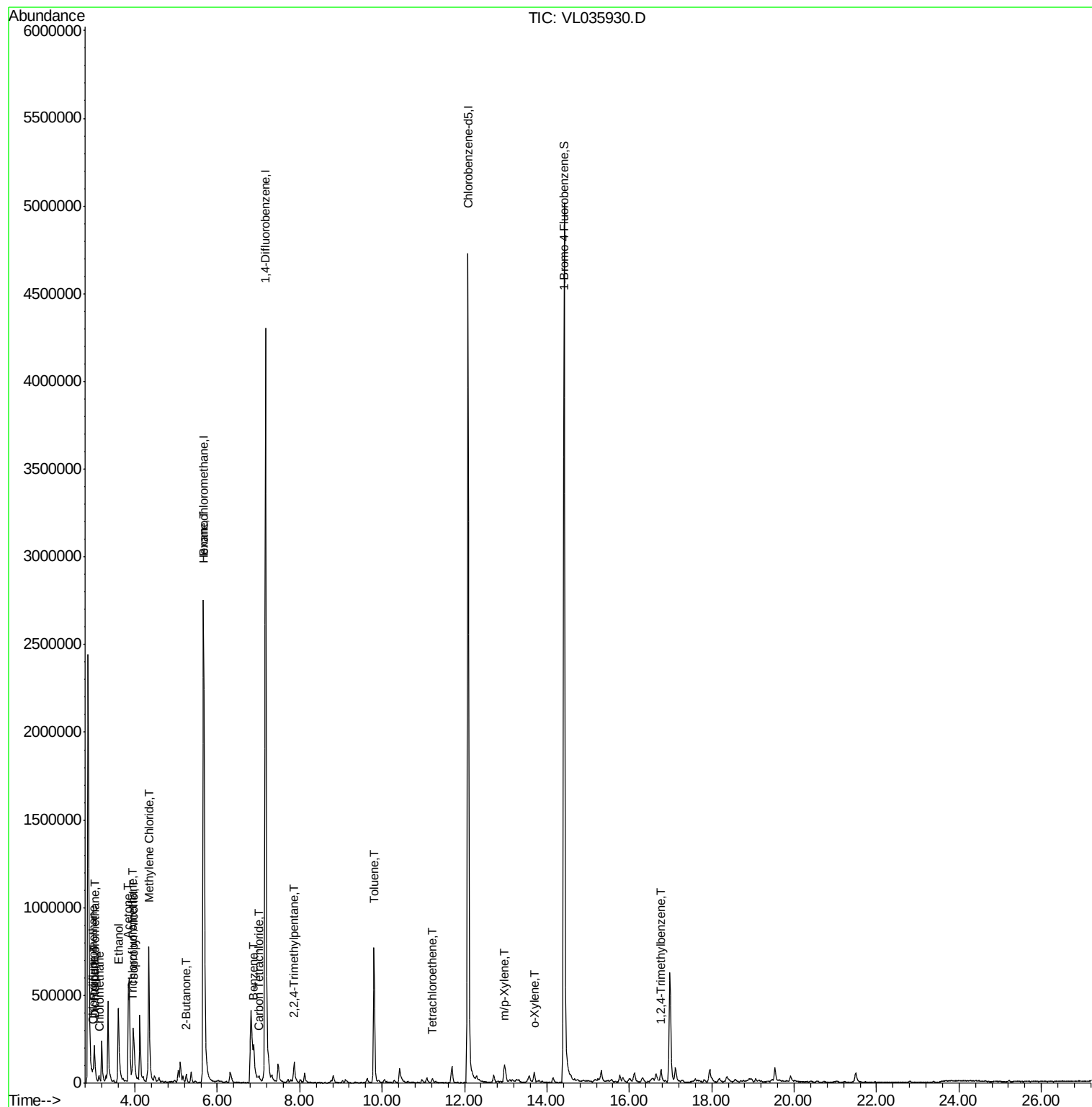
Data Path : Z:\V0ASRV\HPCHEM1\MSVOA L\DATA\VL111220\
Data File : VL035930.D
Acq On : 13 Nov 2020 1:56
Operator : SY/AP
Sample : L4721-04
Misc : 400ml/MSVOA L
ALS Vial : 1 Sample Multiplier: 1

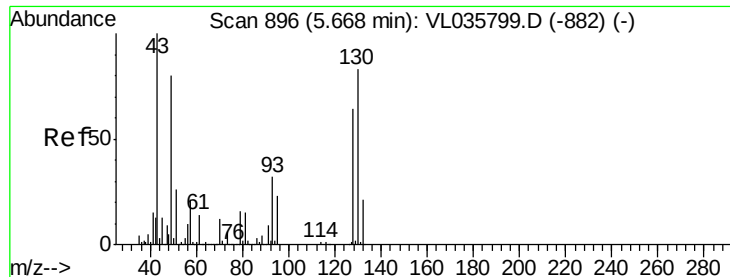
Instrument :
MSVOA_L
ClientSampleId :
LA-4

Manual Integrations
APPROVED

MMDadoda
11/16/2020 2:31:25 PM

Quant Time: Nov 14 21:45:44 2020
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA L\METHODS\VL110320AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Wed Nov
QLast Update : Wed Nov 04 02:40:06 2020
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.66 min Scan# 894

Delta R.T. -0.01 min

Lab File: VL035930.D

Acq: 13 Nov 2020 1:56

Instrument :

MSVOA_L

ClientSampled :

LA-4

Tot Ion: 49 Resp: 1090055

Ion Ratio Lower Upper

49 100

128 76.3 41.5 124.6

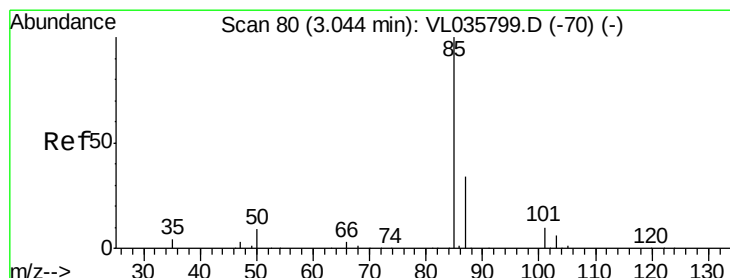
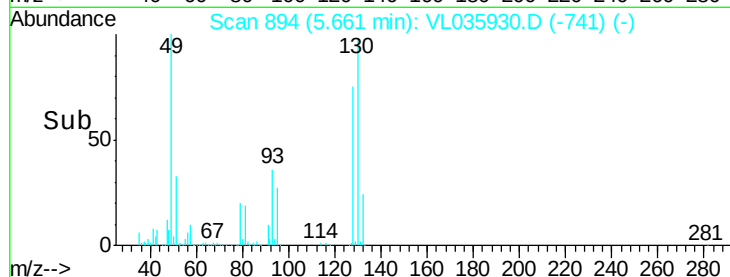
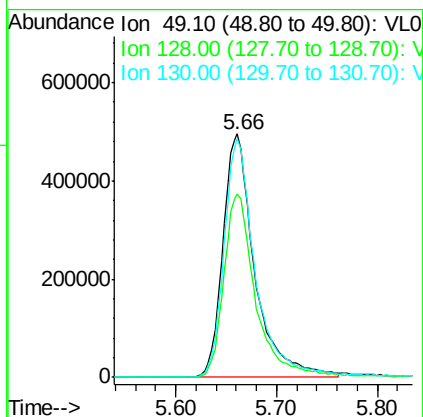
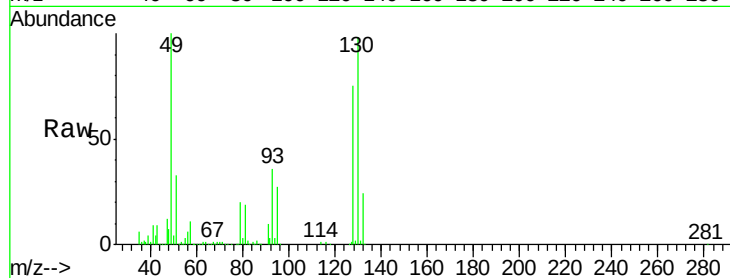
130 99.3 53.7 161.1

Manual Integrations

APPROVED

MMDadoda

11/16/2020 2:31:25 PM



#2

Dichlorodifluoromethane

Concen: 0.221 ppbv

RT: 3.04 min Scan# 78

Delta R.T. -0.01 min

Lab File: VL035930.D

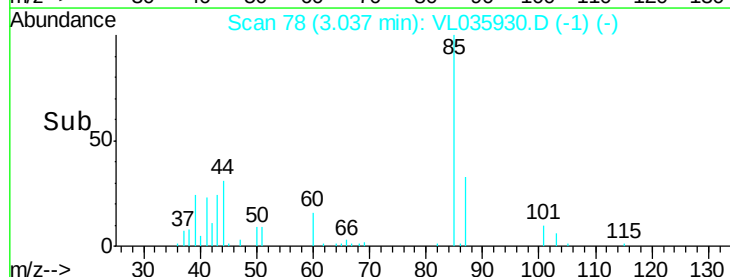
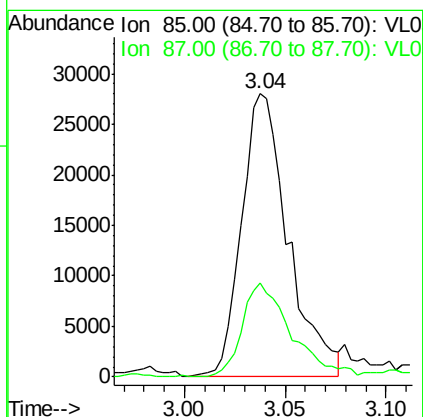
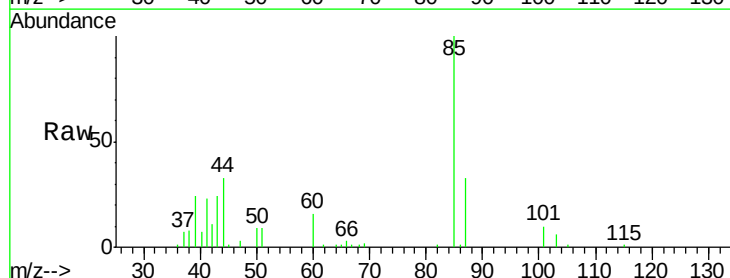
Acq: 13 Nov 2020 1:56

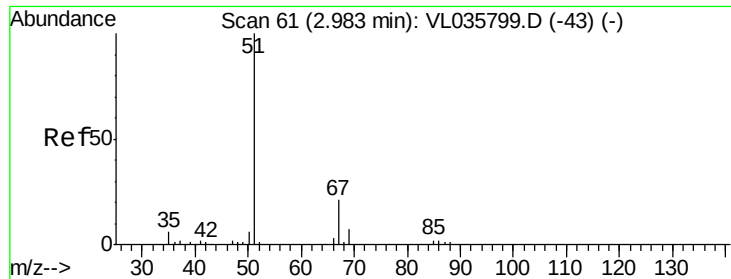
Tgt Ion: 85 Resp: 45330

Ion Ratio Lower Upper

85 100

87 33.2 27.1 40.7





#3

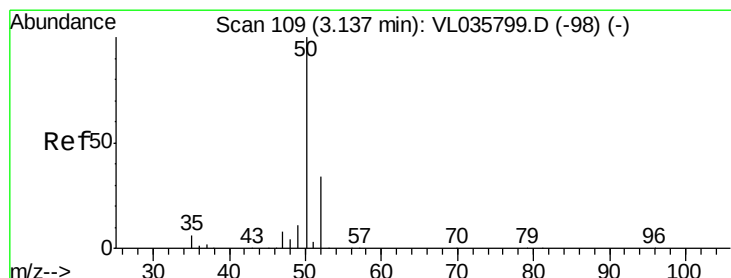
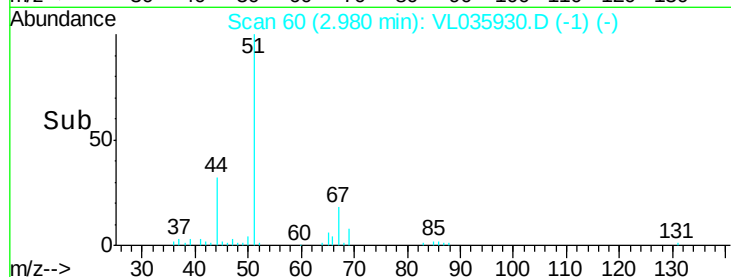
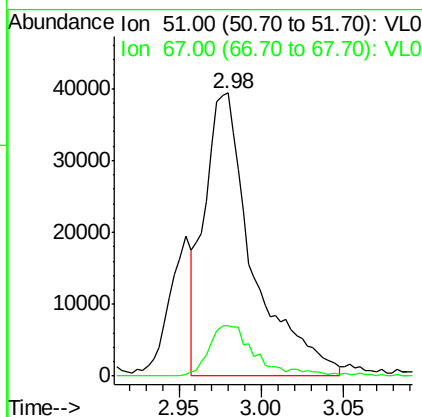
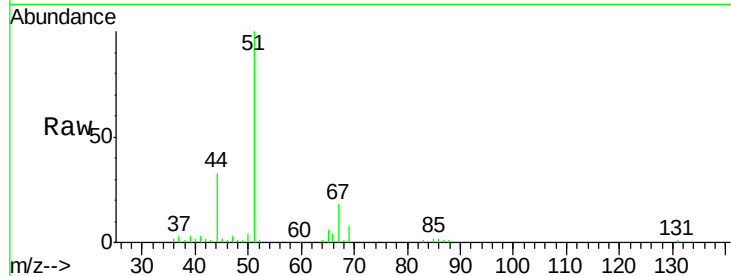
Chlorodifluoromethane
Concen: 0.615 ppbv
RT: 2.98 min Scan# 60
Delta R.T. -0.00 min
Lab File: VL035930.D
Acq: 13 Nov 2020 1:56

Instrument :
MSVOA_L
ClientSampled :
LA-4

Tot Ion	51	Resp	80284
Ion Ratio	Lower	Upper	
51	100		
67	17.7	17.0	25.4

Manual Integrations
APPROVED

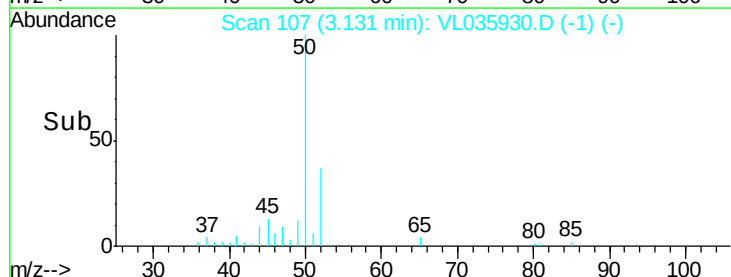
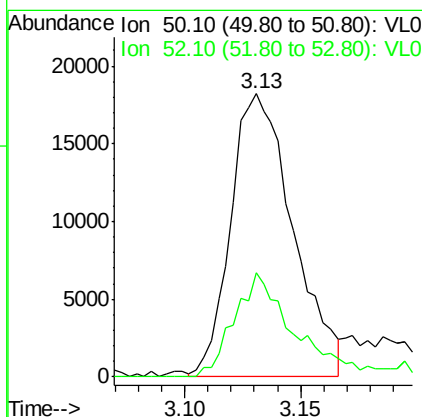
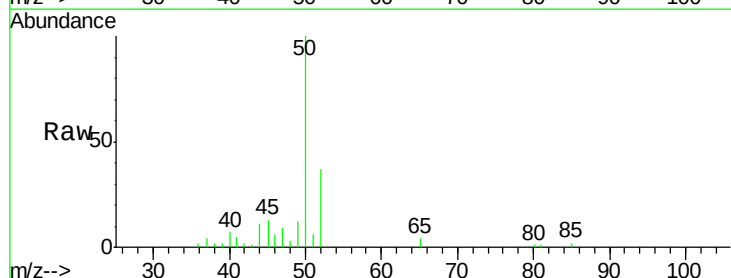
MMDadoda
11/16/2020 2:31:25 PM

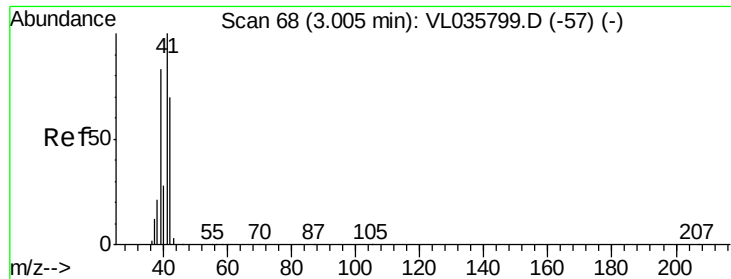


#4

Chloromethane
Concen: 0.535 ppbv
RT: 3.13 min Scan# 107
Delta R.T. -0.01 min
Lab File: VL035930.D
Acq: 13 Nov 2020 1:56

Tgt Ion	50	Resp	33936
Ion Ratio	Lower	Upper	
50	100		
52	37.3	27.1	40.7





#9

Propene

Concen: 1.273 ppbv

RT: 3.01 min Scan# 69

Delta R.T. 0.00 min

Lab File: VL035930.D

Acq: 13 Nov 2020 1:56

Instrument :

MSVOA_L

ClientSampled :

LA-4

Tot Ion: 41 Resp: 60818

Ion Ratio Lower Upper

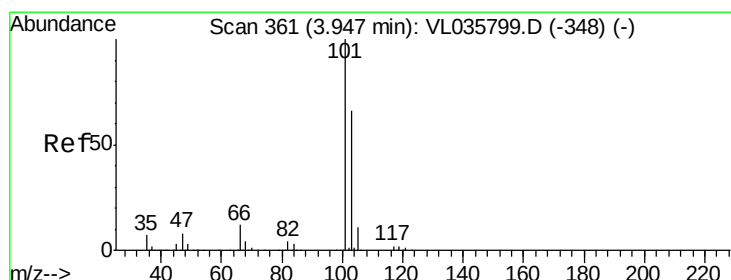
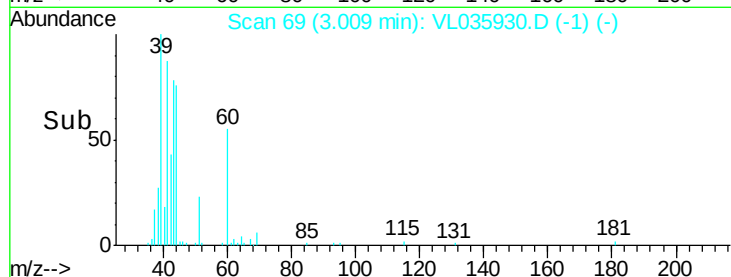
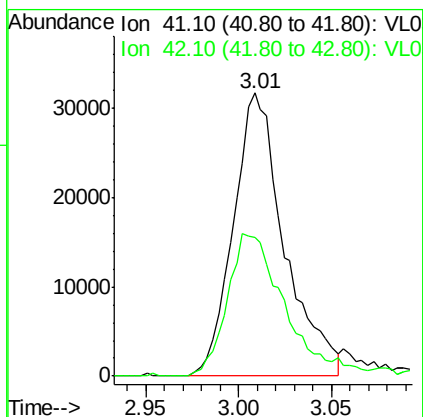
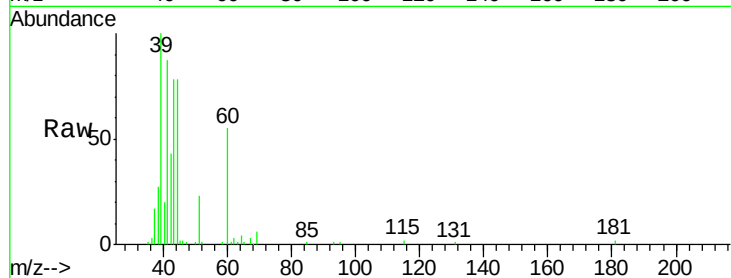
41 100

42 59.0 56.2 84.4

Manual Integrations
APPROVED

MMDadoda

11/16/2020 2:31:25 PM



#11

Trichlorofluoromethane

Concen: 0.255 ppbv

RT: 3.94 min Scan# 359

Delta R.T. -0.01 min

Lab File: VL035930.D

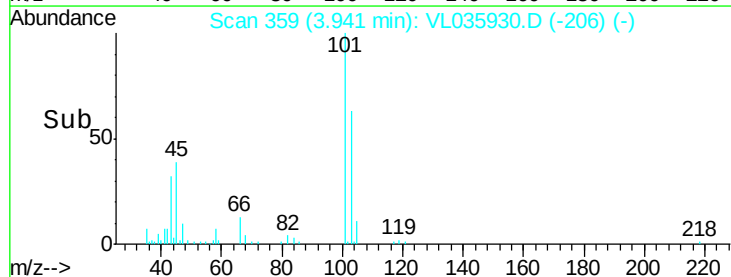
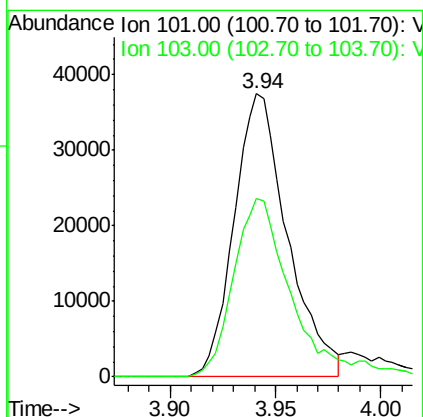
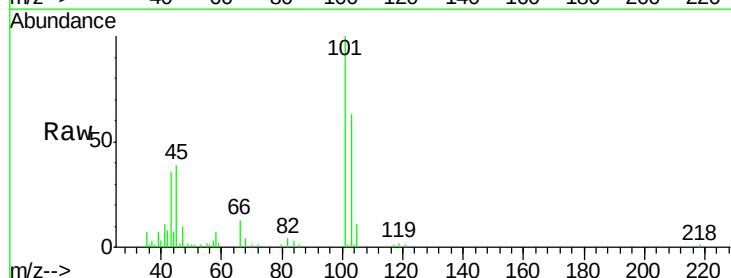
Acq: 13 Nov 2020 1:56

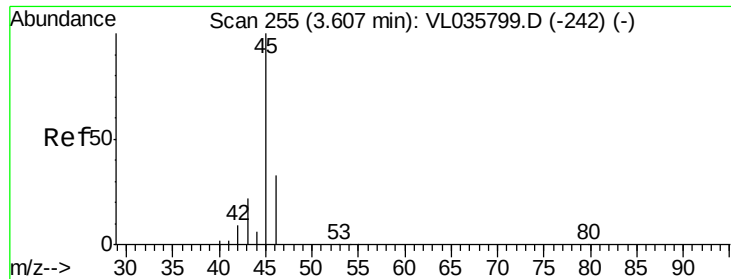
Tgt Ion: 101 Resp: 65815

Ion Ratio Lower Upper

101 100

103 63.3 53.0 79.4





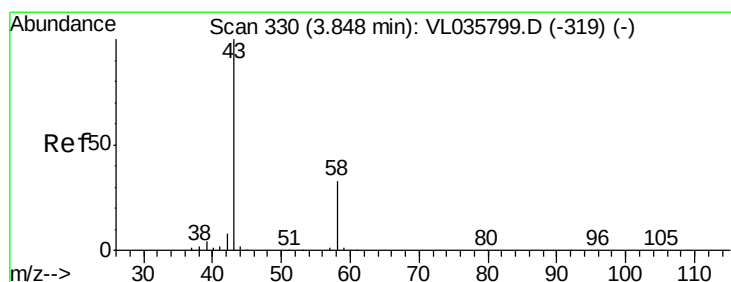
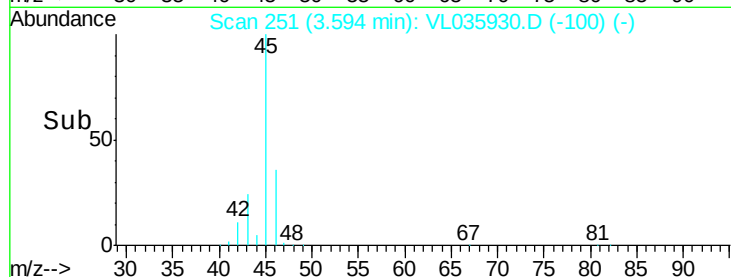
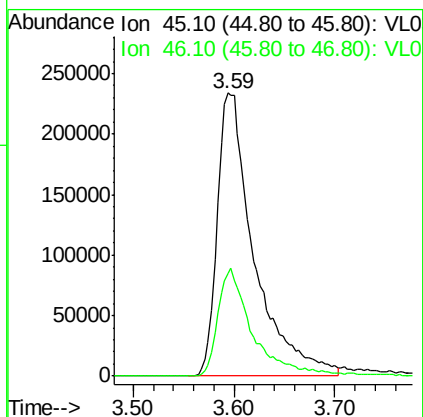
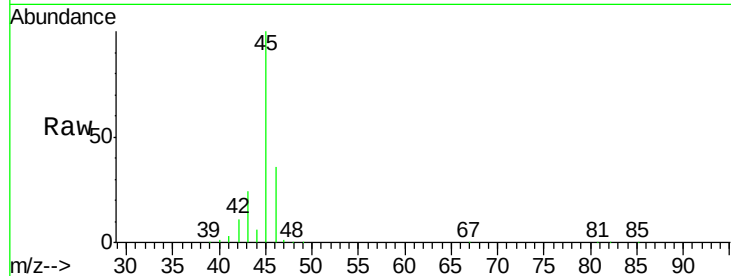
#13
Ethanol
Concen: 57.491 ppbv
RT: 3.59 min Scan# 251
Delta R.T. -0.01 min
Lab File: VL035930.D
Acq: 13 Nov 2020 1:56

Instrument :
MSVOA_L
ClientSampled :
LA-4

Tot Ion	Ratio	Lower	Upper
45	100		
46	36.7	16.1	64.5

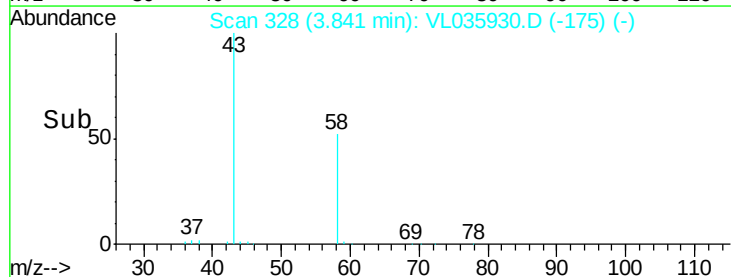
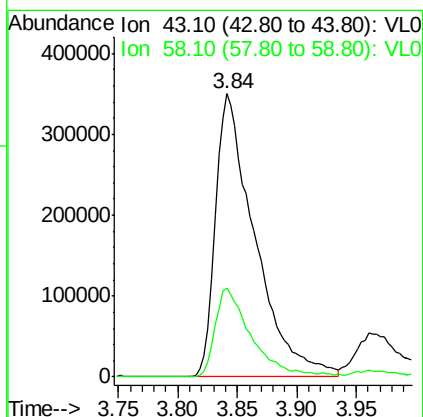
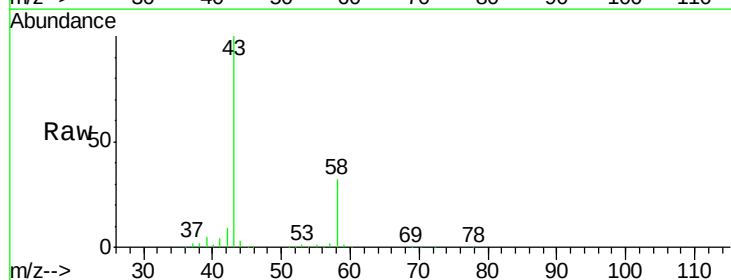
Manual Integrations
APPROVED

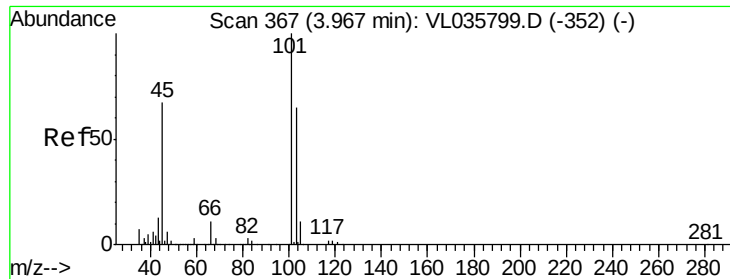
MMDadoda
11/16/2020 2:31:25 PM



#15
Acetone
Concen: 6.846 ppbv
RT: 3.84 min Scan# 328
Delta R.T. -0.01 min
Lab File: VL035930.D
Acq: 13 Nov 2020 1:56

Tgt Ion	Ratio	Lower	Upper
43	100		
58	29.4	27.5	41.3





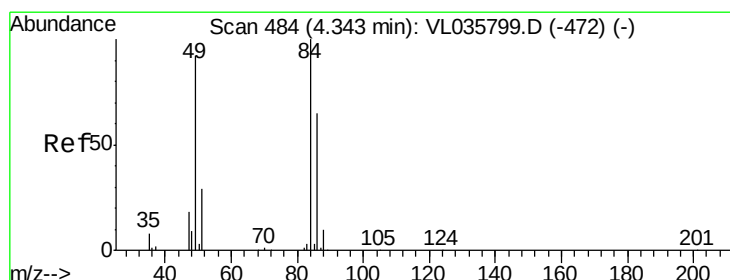
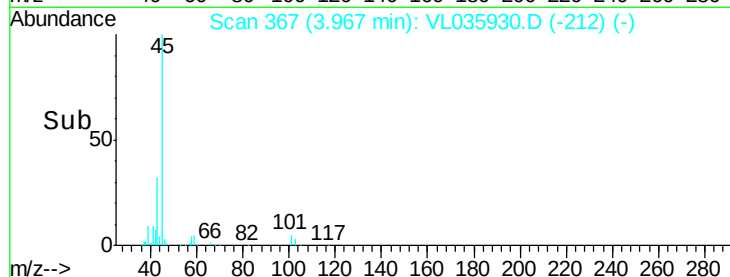
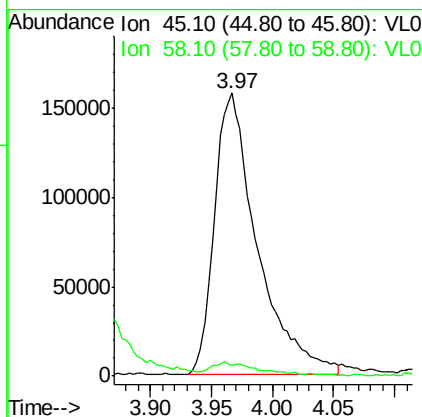
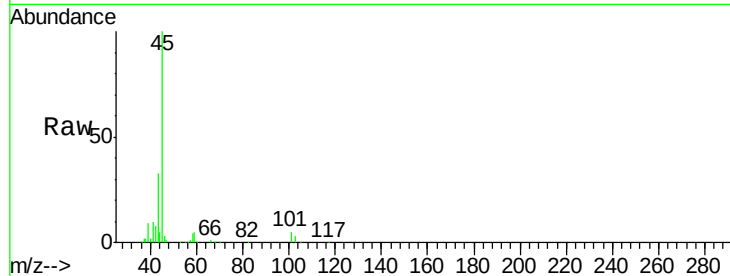
#19
Isopropyl Alcohol
Concen: 5.379 ppbv
RT: 3.97 min Scan# 367
Delta R.T. -0.00 min
Lab File: VL035930.D
Acq: 13 Nov 2020 1:56

Instrument :
MSVOA_L
ClientSampled :
LA-4

Tot Ion: 45 Resp: 385206
Ion Ratio Lower Upper
45 100
58 6.1 2.6 3.8#

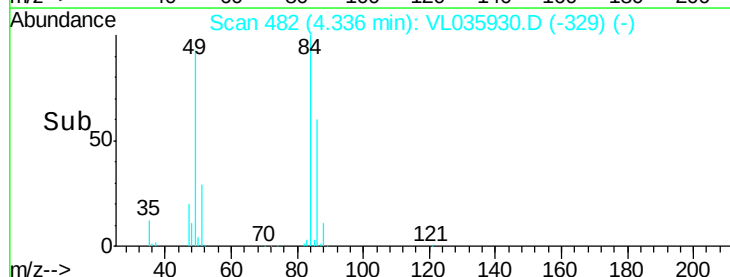
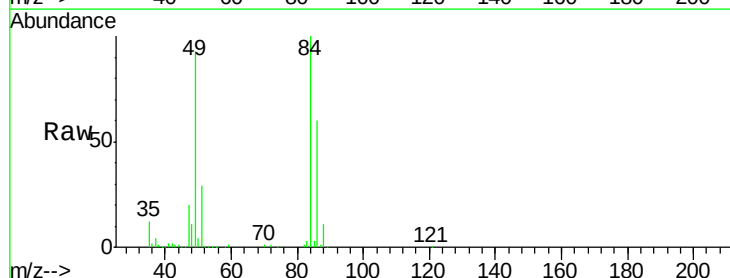
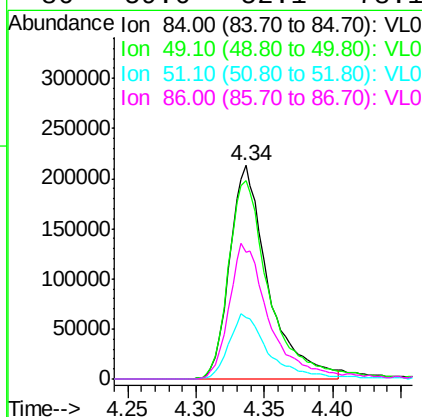
Manual Integrations
APPROVED

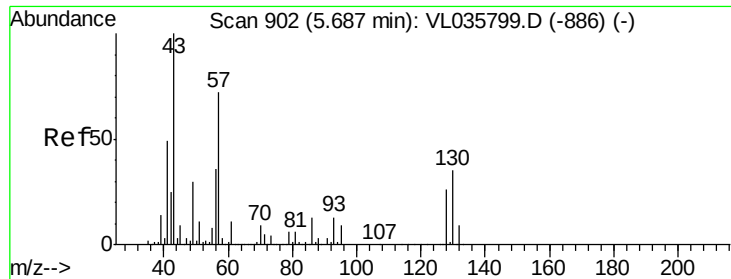
MMDadoda
11/16/2020 2:31:25 PM



#20
Methylene Chloride
Concen: 5.104 ppbv
RT: 4.34 min Scan# 482
Delta R.T. -0.01 min
Lab File: VL035930.D
Acq: 13 Nov 2020 1:56

Tgt Ion: 84 Resp: 418695
Ion Ratio Lower Upper
84 100
49 92.5 73.8 110.8
51 28.9 23.0 34.4
86 59.6 52.1 78.1





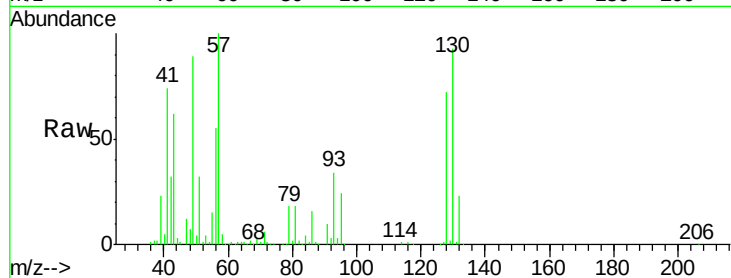
#26
Hexane
Concen: 3.935 ppbv
RT: 5.68 min Scan# 899
Delta R.T. -0.01 min
Lab File: VL035930.D
Acq: 13 Nov 2020 1:56

Instrument :
MSVOA_L
ClientSampled :
LA-4

Tot Ion	Ratio	Resp	Lower	Upper
57	100	498182		
41	79.3		58.9	88.3
43	64.4		150.2	225.2#
56	56.6		42.4	63.6

Manual Integrations
APPROVED

MMDadoda
11/16/2020 2:31:25 PM



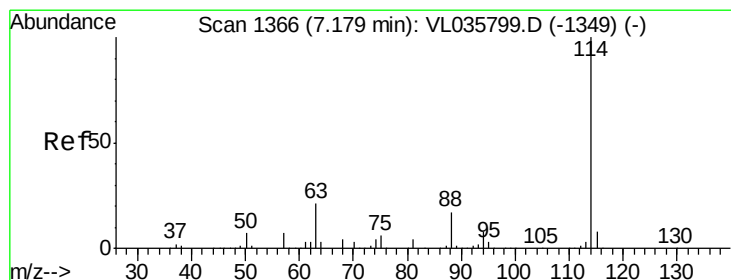
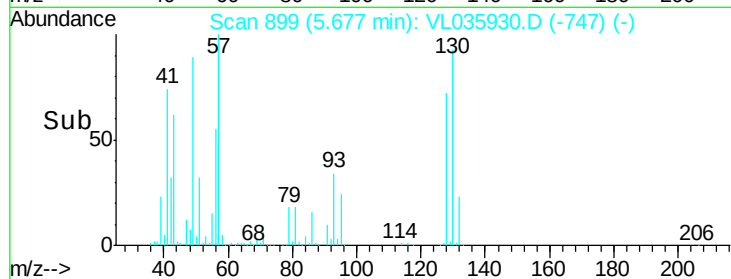
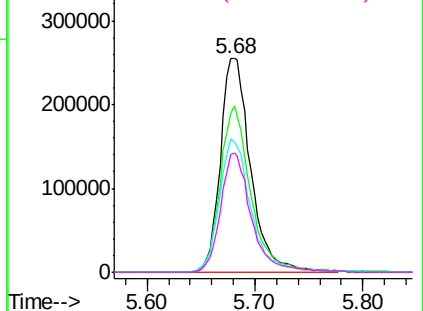
Abundance

Ion 57.10 (56.80 to 57.80): VL0

Ion 41.10 (40.80 to 41.80): VL0

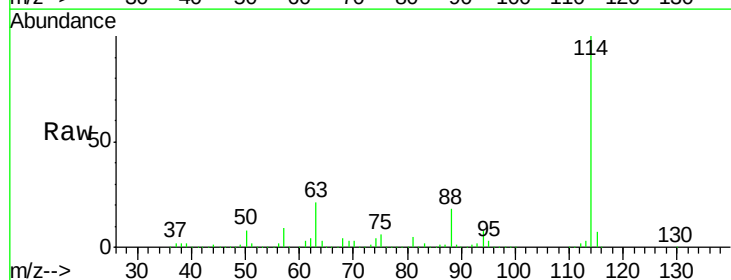
Ion 43.10 (42.80 to 43.80): VL0

Ion 56.10 (55.80 to 56.80): VL0



#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 7.17 min Scan# 1363
Delta R.T. -0.01 min
Lab File: VL035930.D
Acq: 13 Nov 2020 1:56

Tgt Ion	Ratio	Resp	Lower	Upper
114	100	3902804		
63	20.9		16.1	24.1
88	17.5		13.7	20.5

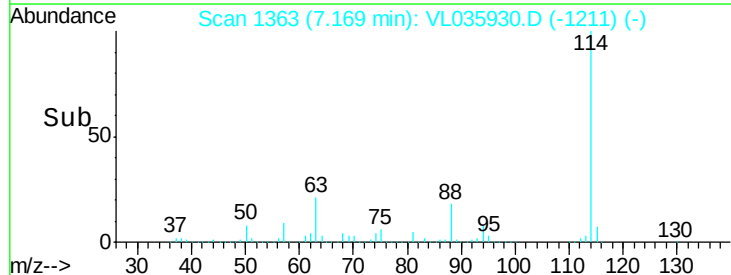
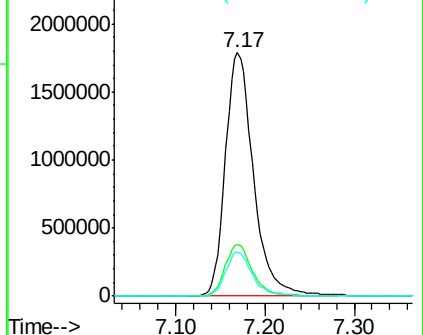


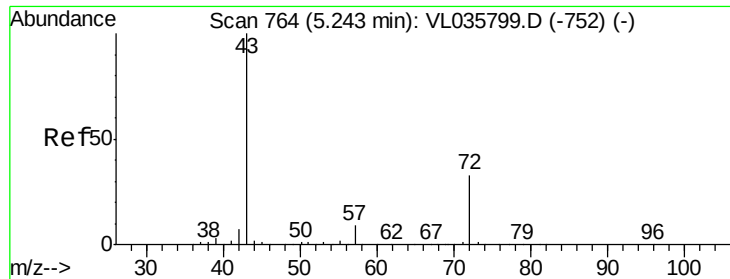
Abundance

Ion 114.10 (113.80 to 114.80): V

Ion 63.10 (62.80 to 63.80): VL0

Ion 88.10 (87.80 to 88.80): VL0





#34

2-Butanone

Concen: 0.396 ppbv

RT: 5.24 min Scan# 764

Delta R.T. -0.00 min

Lab File: VL035930.D

Acq: 13 Nov 2020 1:56

Instrument :

MSVOA_L

ClientSampled :

LA-4

Tot Ion: 43 Resp: 50110

Ion Ratio Lower Upper

43 100

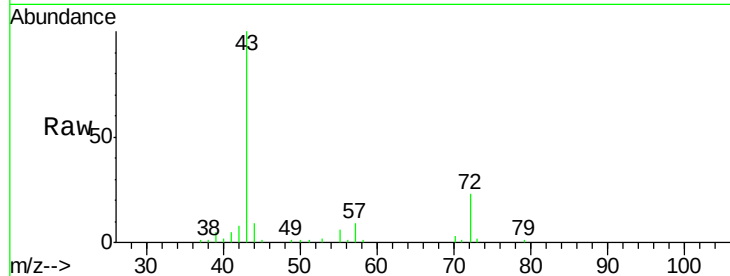
72 34.8 26.5 39.7

Manual Integrations

APPROVED

MMDadoda

11/16/2020 2:31:25 PM



Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 72.10 (71.80 to 72.80): VL0

5.24

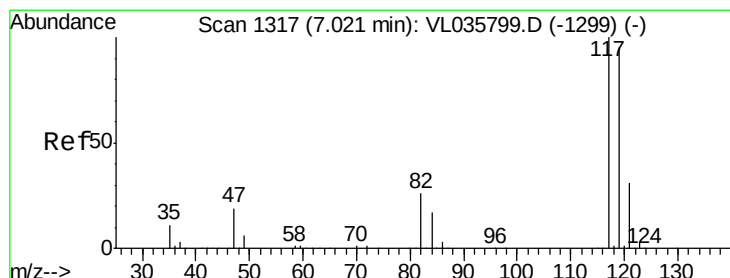
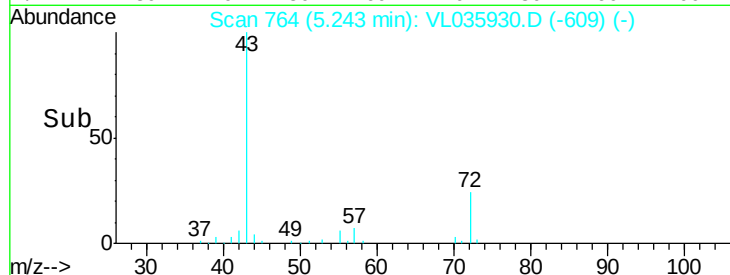
30000

20000

10000

0

Time-->



#35

Carbon Tetrachloride

Concen: 0.069 ppbv m

RT: 7.02 min Scan# 1316

Delta R.T. -0.00 min

Lab File: VL035930.D

Acq: 13 Nov 2020 1:56

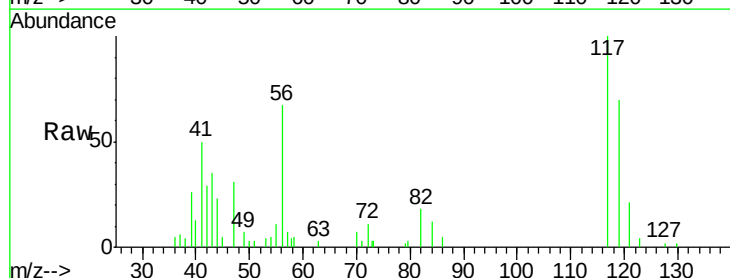
Tgt Ion: 117 Resp: 14338

Ion Ratio Lower Upper

117 100

119 70.4 75.6 113.4#

121 21.3 25.1 37.7#



Abundance Ion 117.00 (116.70 to 117.70): V

Ion 119.00 (118.70 to 119.70): V

Ion 121.00 (120.70 to 121.70): V

7.02

8000

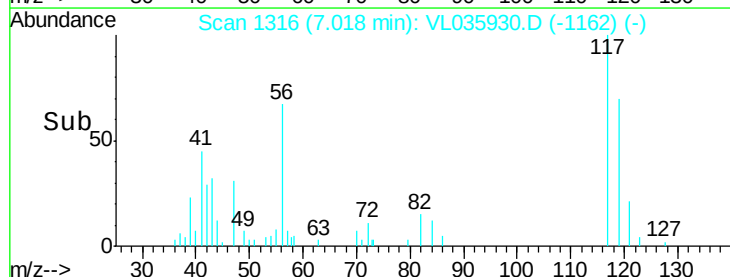
6000

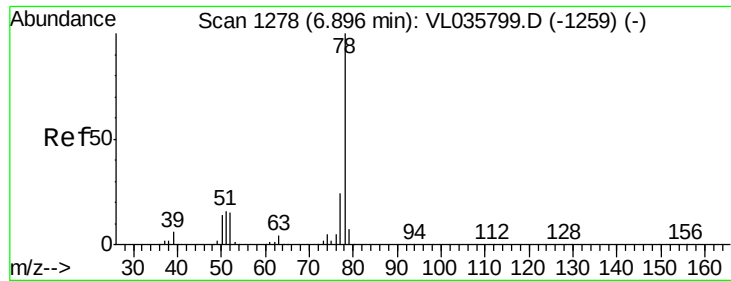
4000

2000

0

Time-->





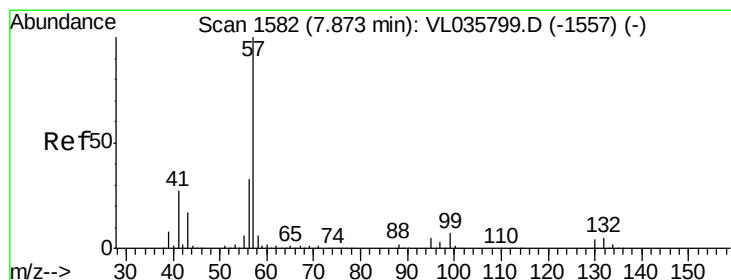
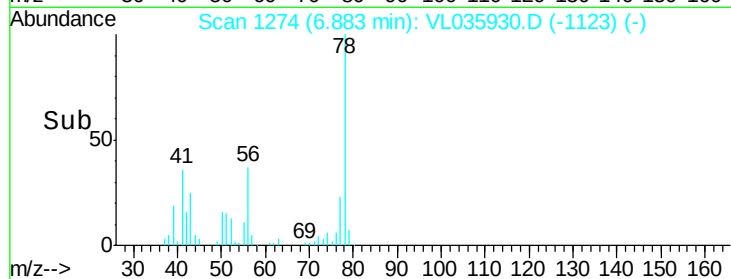
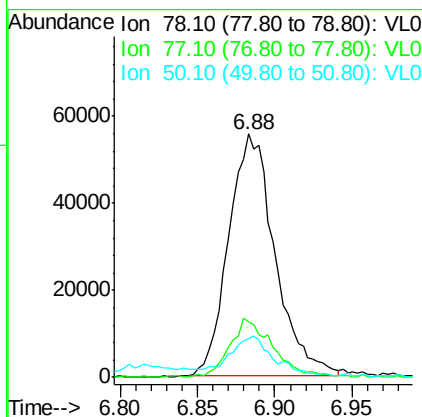
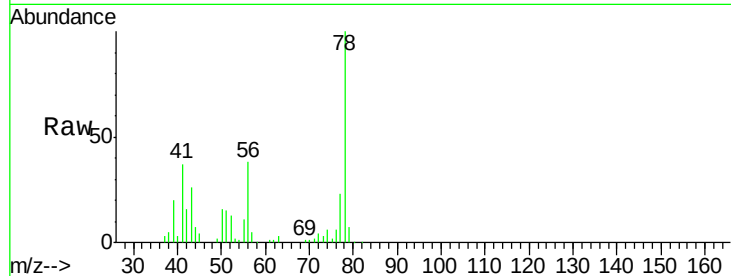
#36
Benzene
Concen: 0.397 ppbv
RT: 6.88 min Scan# 1274
Delta R.T. -0.01 min
Lab File: VL035930.D
Acq: 13 Nov 2020 1:56

Instrument :
MSVOA_L
ClientSampled :
LA-4

Tot Ion	Ratio	Lower	Upper
78	100		
77	22.8	19.3	28.9
50	15.5	11.4	17.2

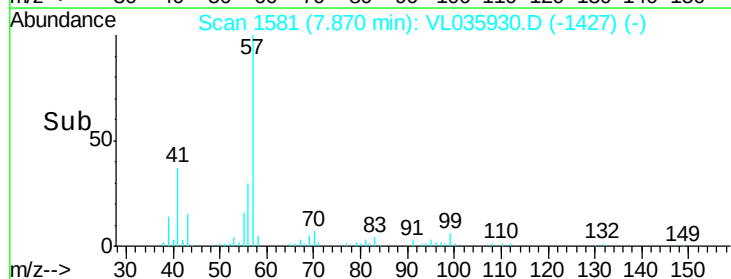
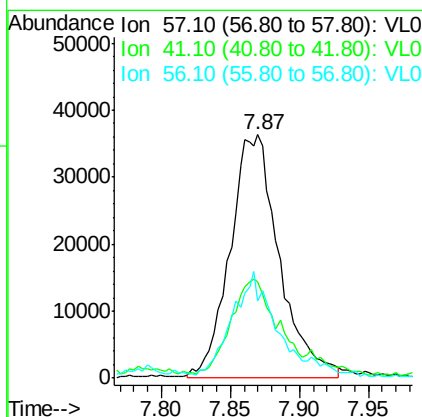
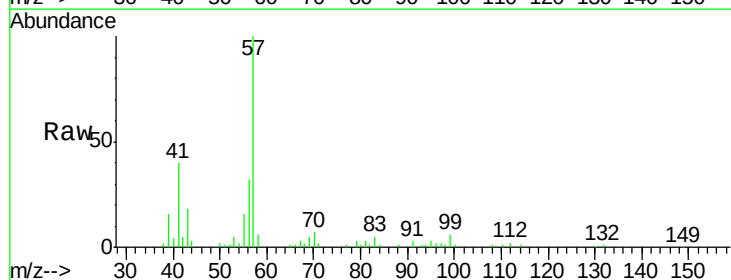
Manual Integrations
APPROVED

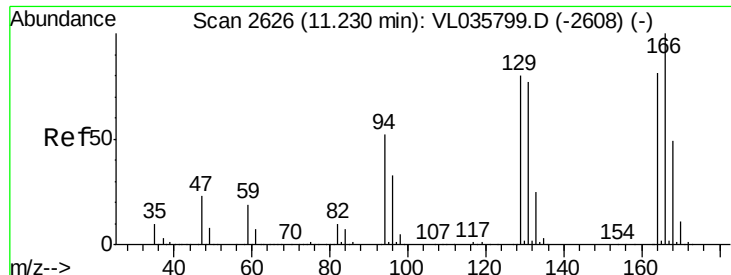
MMDadoda
11/16/2020 2:31:25 PM



#44
2,2,4-Trimethylpentane
Concen: 0.235 ppbv m
RT: 7.87 min Scan# 1581
Delta R.T. -0.00 min
Lab File: VL035930.D
Acq: 13 Nov 2020 1:56

Tgt Ion	Ratio	Lower	Upper
57	100		
41	42.6	21.0	31.4#
56	43.9	25.4	38.0#





#52

Tetrachloroethene

Concen: 0.047 ppbv m

RT: 11.22 min Scan# 2623

Delta R.T. -0.01 min

Lab File: VL035930.D

Acq: 13 Nov 2020 1:56

Instrument :

MSVOA_L

ClientSampled :

LA-4

Tot Ion:164 Resp: 6521

Ion Ratio Lower Upper

164 100

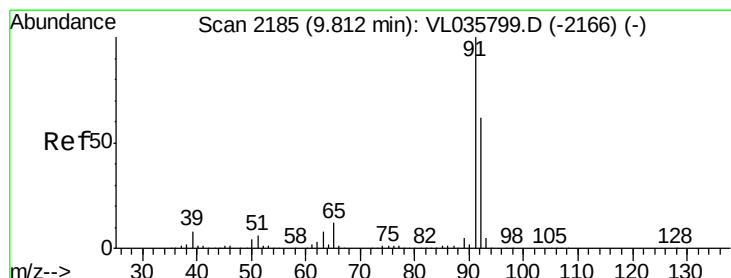
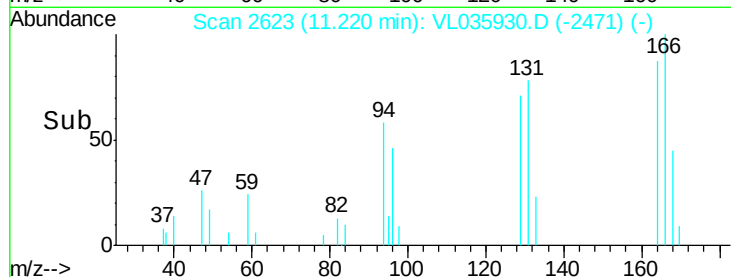
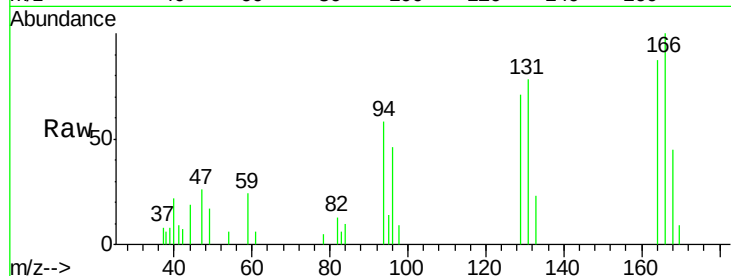
166 114.7 99.3 148.9

129 82.0 79.3 118.9

131 89.4 76.5 114.7

Manual Integrations
APPROVED

MMDadoda
11/16/2020 2:31:25 PM



#53

Toluene

Concen: 1.814 ppbv

RT: 9.80 min Scan# 2182

Delta R.T. -0.01 min

Lab File: VL035930.D

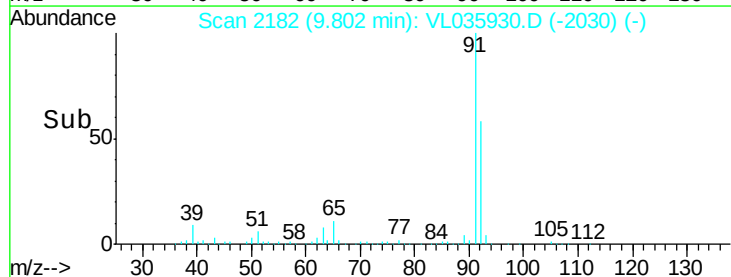
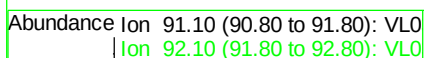
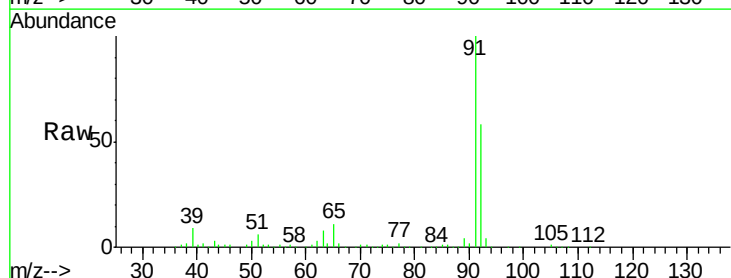
Acq: 13 Nov 2020 1:56

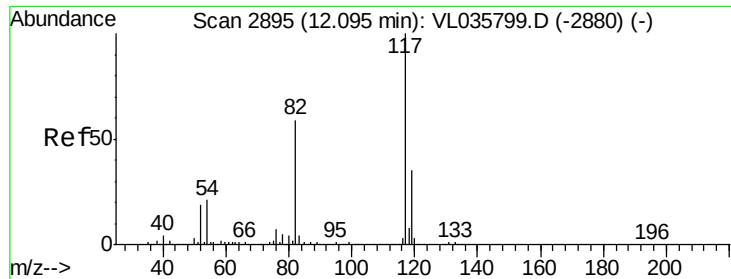
Tgt Ion: 91 Resp: 635139

Ion Ratio Lower Upper

91 100

92 59.5 49.8 74.6





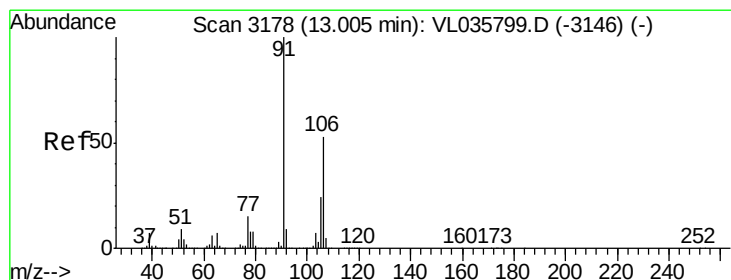
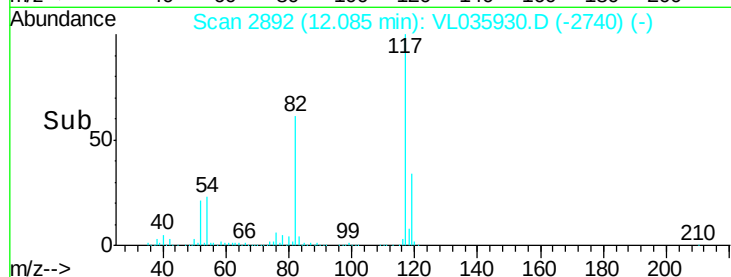
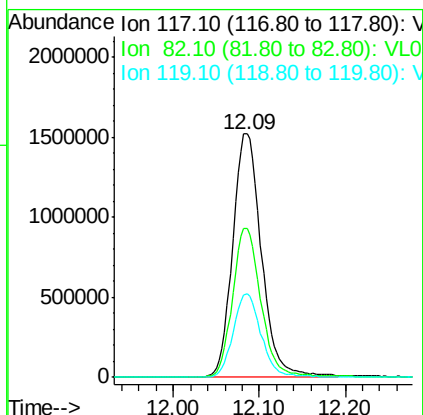
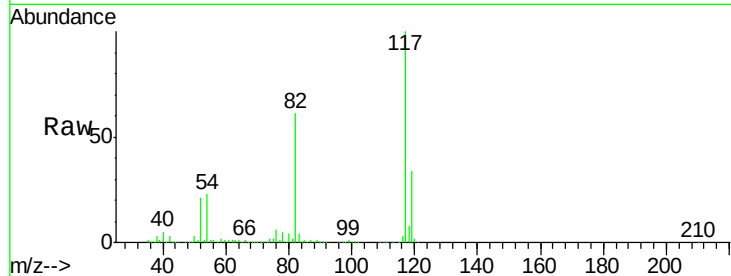
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 12.09 min Scan# 2892
Delta R.T. -0.01 min
Lab File: VL035930.D
Acq: 13 Nov 2020 1:56

Instrument :
MSVOA_L
ClientSampled :
LA-4

Tot Ion	Ratio	Lower	Upper
117	100		
82	61.5	50.6	76.0
119	33.6	52.6	78.8#

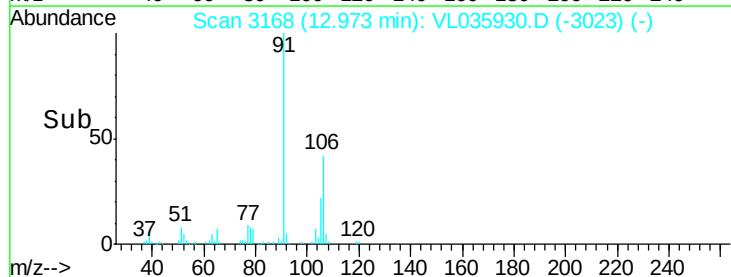
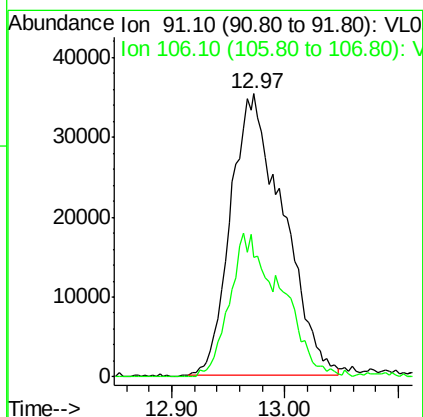
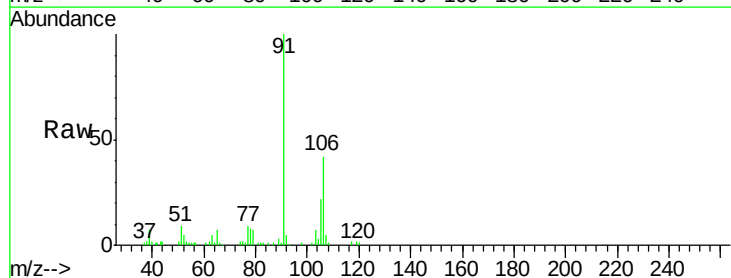
Manual Integrations
APPROVED

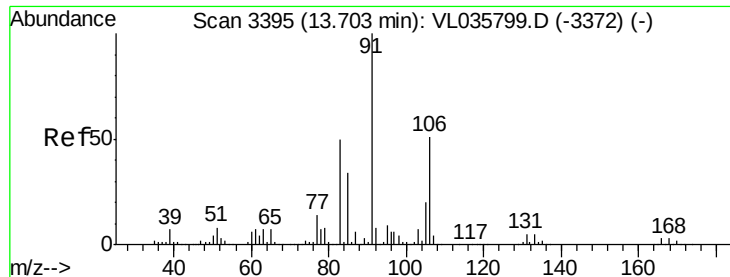
MMDadoda
11/16/2020 2:31:25 PM



#59
m/p-Xylene
Concen: 0.313 ppbv
RT: 12.97 min Scan# 3168
Delta R.T. -0.03 min
Lab File: VL035930.D
Acq: 13 Nov 2020 1:56

Tgt Ion	Ratio	Lower	Upper
91	100		
106	50.6	39.5	59.3





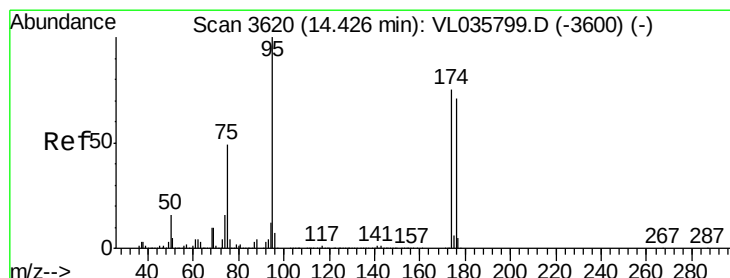
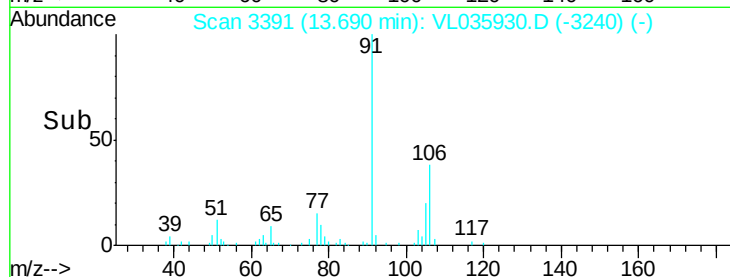
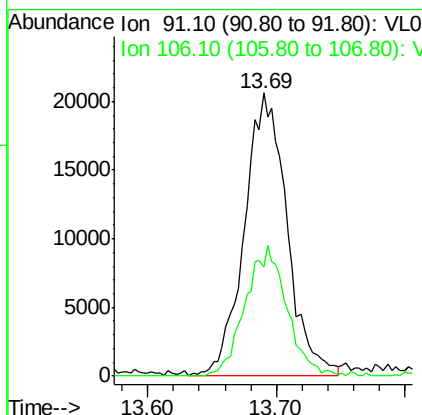
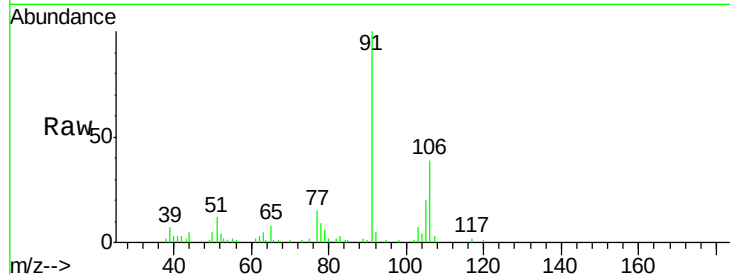
#60
o-Xylene
Concen: 0.134 ppbv
RT: 13.69 min Scan# 3391
Delta R.T. -0.01 min
Lab File: VL035930.D
Acq: 13 Nov 2020 1:56

Instrument :
MSVOA_L
ClientSampled :
LA-4

Tot Ion: 91 Resp: 47524
Ion Ratio Lower Upper
91 100
106 45.0 24.8 74.4

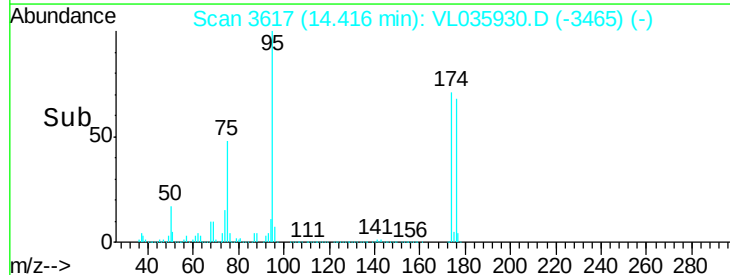
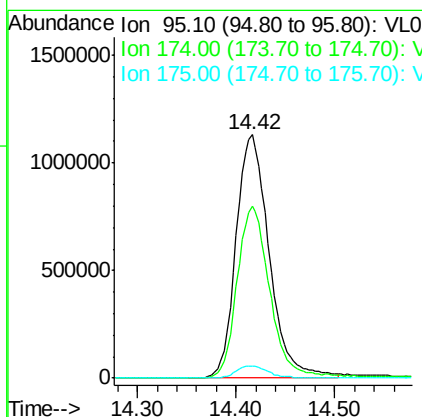
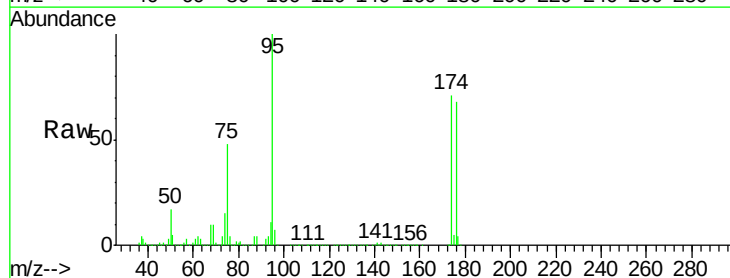
Manual Integrations
APPROVED

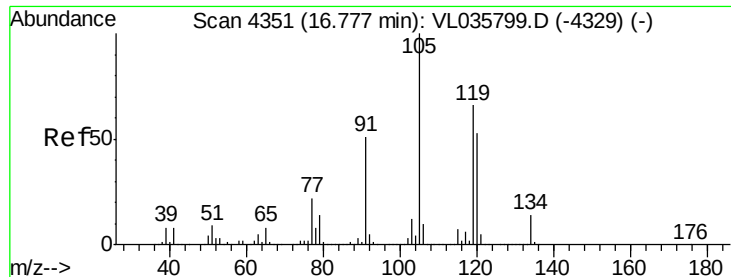
MMDadoda
11/16/2020 2:31:25 PM



#68
1-Bromo-4-Fluorobenzene
Concen: 10.527 ppbv
RT: 14.42 min Scan# 3617
Delta R.T. -0.01 min
Lab File: VL035930.D
Acq: 13 Nov 2020 1:56

Tgt Ion: 95 Resp: 2646222
Ion Ratio Lower Upper
95 100
174 71.3 59.8 89.6
175 5.0 4.3 6.5





#74

1,2,4-Trimethylbenzene

Concen: 0.121 ppbv

RT: 16.77 min Scan# 4348

Delta R.T. -0.01 min

Lab File: VL035930.D

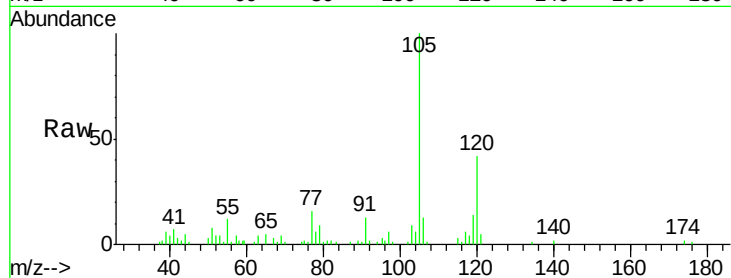
Acq: 13 Nov 2020 1:56

Instrument :

MSVOA_L

ClientSampleId :

LA-4



Tot Ion	Ratio	Resp Lower	Upper
105	100		
120	42.6	42.0	63.0
91	10.3	41.0	61.6#
77	14.1	17.3	25.9#

Manual Integrations
APPROVED

MMDadoda
11/16/2020 2:31:25 PM

