

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL073019\
 Data File : VL034061.D
 Acq On : 30 Jul 2019 12:04
 Operator : SY/AP
 Sample : K4033-01DL 10X
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 JSG1DL

Manual Integrations
 APPROVED

MMDadoda
 8/7/2019 12:20:12 PM

Quant Time: Jul 31 19:54:43 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL073019AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Tue Jul 31 2019
 QLast Update : Tue Jul 30 06:55:18 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.72	49	1135122	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.25	114	4664012	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.18	117	3387696	10.00	ppbv	0.00

System Monitoring Compounds		R.T.	QIon	Response	Conc	Units	Dev(Min)
68) 1-Bromo-4-Fluorobenzene	14.52	95	2739176	10.23	ppbv	0.00	
Spiked Amount	10.000	Range	65 - 135	Recovery	=	102.30%	

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
3) Chlorodifluoromethane	2.99	51	24808	0.189	ppbv	96
9) Propene	3.01	41	116922	2.486	ppbv	95
10) Heptane	8.20	43	40501m	0.316	ppbv	
13) Ethanol	3.63	45	78351	4.185	ppbv	97
15) Acetone	3.88	43	204658m	1.186	ppbv	
26) Hexane	5.74	57	81093	0.699	ppbv #	39
27) Carbon Disulfide	4.59	76	66108	0.366	ppbv #	71
30) Cyclohexane	7.19	84	134557m	1.141	ppbv	
32) 1,1,1-Trichloroethane	6.57	97	14014m	0.063	ppbv	
34) 2-Butanone	5.29	43	46693m	0.243	ppbv	
36) Benzene	6.96	78	120581	0.388	ppbv	94
52) Tetrachloroethene	11.32	164	17026m	0.140	ppbv	
53) Toluene	9.89	91	2113170	6.523	ppbv	100
58) Ethyl Benzene	12.81	91	373474	0.932	ppbv	100
59) m/p-Xylene	13.07	91	1289095	3.537	ppbv	100
60) o-Xylene	13.79	91	456329	1.260	ppbv	96
61) Styrene	13.63	104	61043m	0.255	ppbv	
62) Isopropylbenzene	14.77	105	84061m	0.173	ppbv	
64) n-propylbenzene	15.67	120	44052m	0.351	ppbv	
72) 4-Ethyltoluene	15.95	105	253597	0.619	ppbv	97
73) 1,3,5-Trimethylbenzene	16.10	105	165806m	0.398	ppbv	
74) 1,2,4-Trimethylbenzene	16.87	105	763278	1.667	ppbv #	83

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

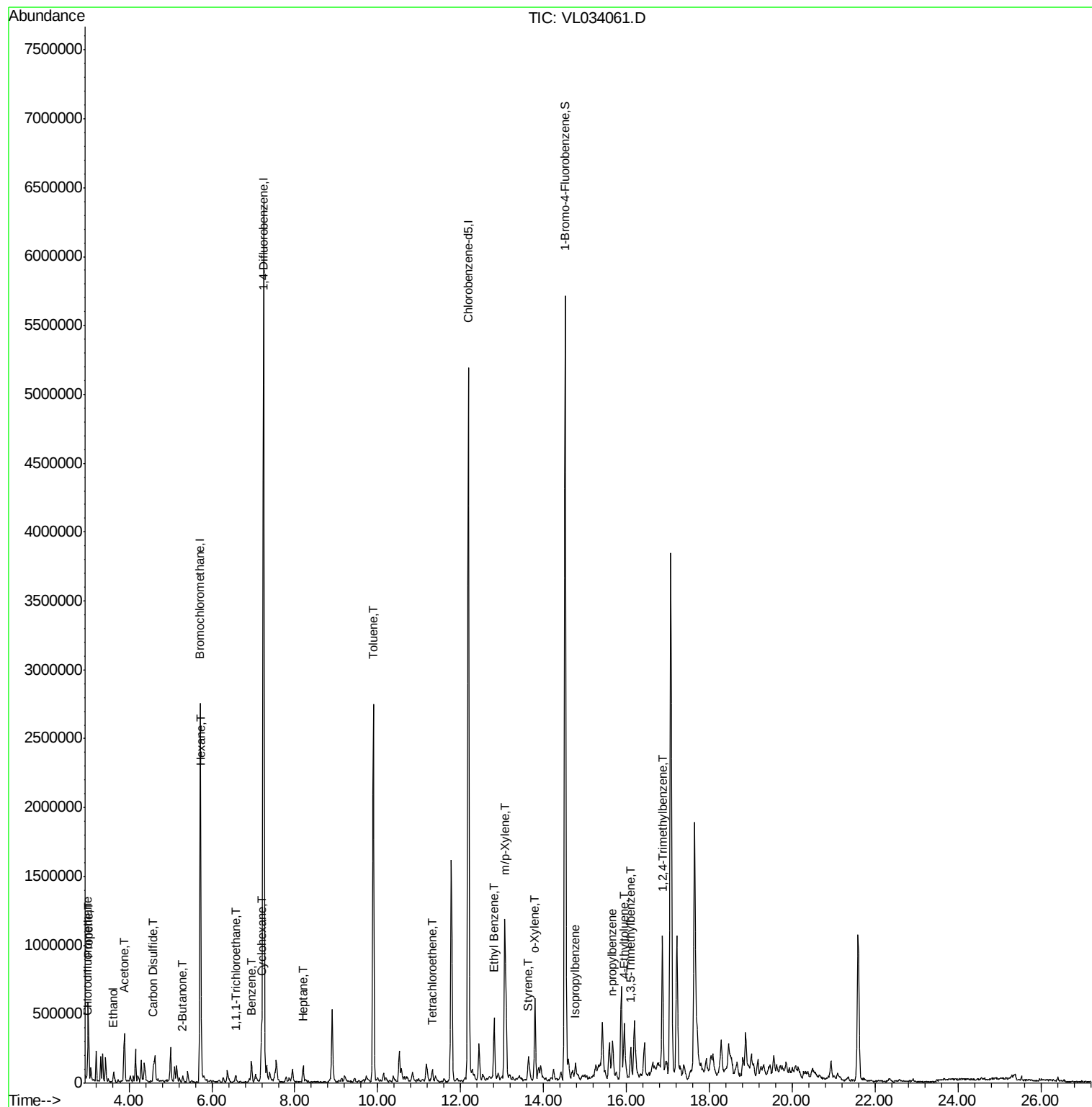
Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL073019\
Data File : VL034061.D
Acq On : 30 Jul 2019 12:04
Operator : SY/AP
Sample : K4033-01DL 10X
Misc : 400ml/MSVOA L
ALS Vial : 1 Sample Multiplier: 1

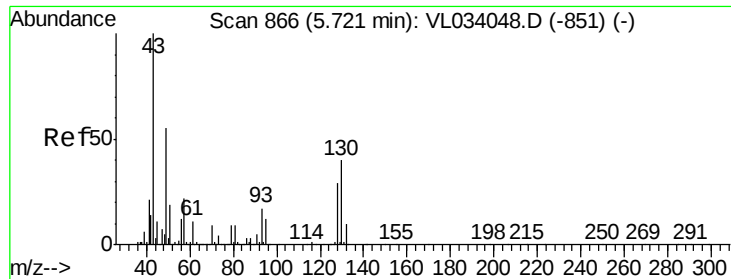
Instrument :
MSVOA_L
ClientSampleId :
JSG1DL

Manual Integrations
APPROVED

MMDadoda
8/7/2019 12:20:12 PM

Quant Time: Jul 31 19:54:43 2019
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL073019AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Tue Jul
QLast Update : Tue Jul 30 06:55:18 2019
Response via : Initial Calibration





#1

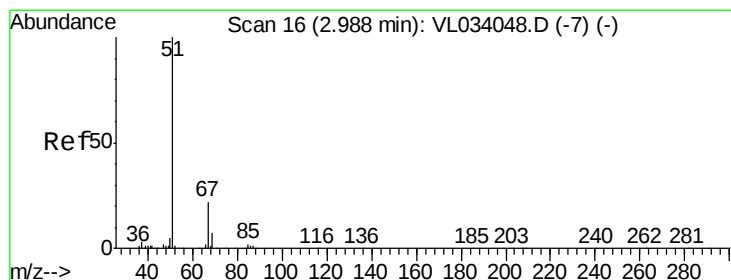
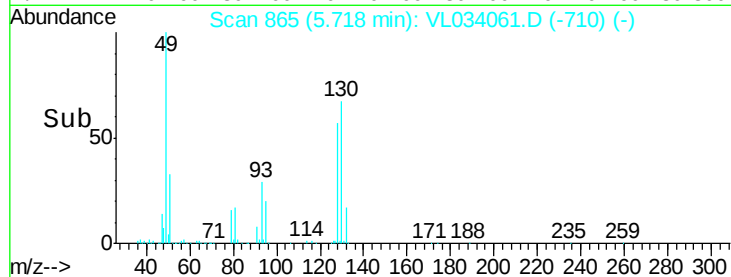
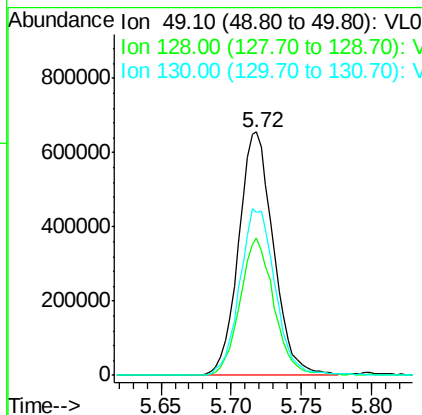
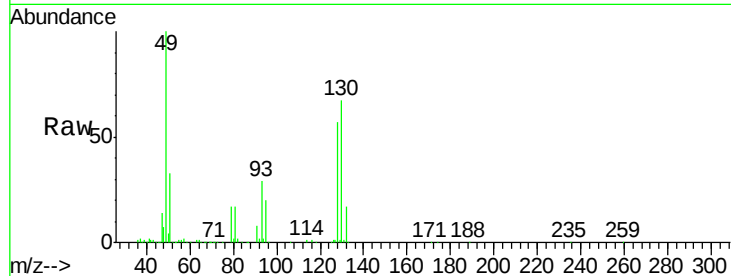
Bromochloromethane
Concen: 10.000 ppbv
RT: 5.72 min Scan# 865
Delta R.T. -0.00 min
Lab File: VL034061.D
Acq: 30 Jul 2019 12:04

Instrument :
MSVOA_L
ClientSampleId :
JSG1DL

Tot Ion: 49 Resp: 1135122
Ion Ratio Lower Upper
49 100
128 54.9 27.0 81.0
130 70.0 35.0 105.0

Manual Integrations
APPROVED

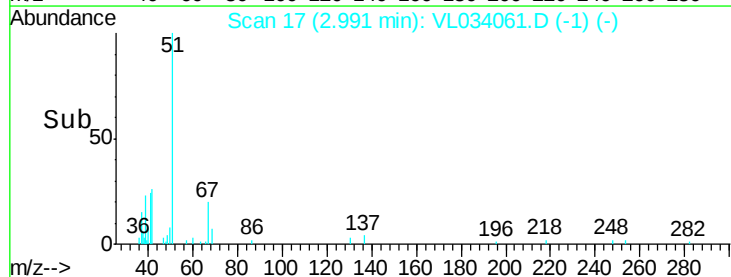
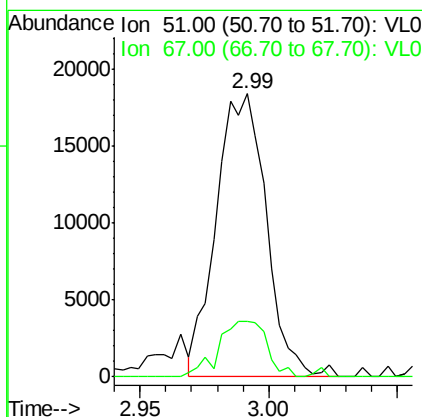
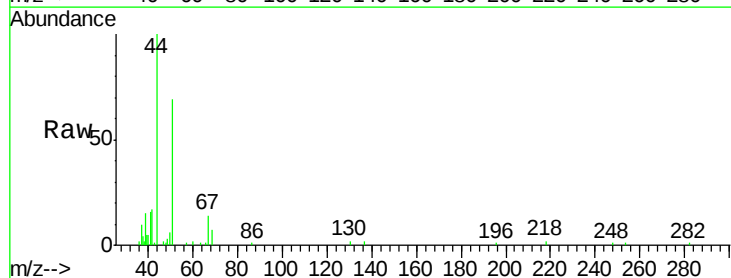
MMDadoda
8/7/2019 12:20:12 PM

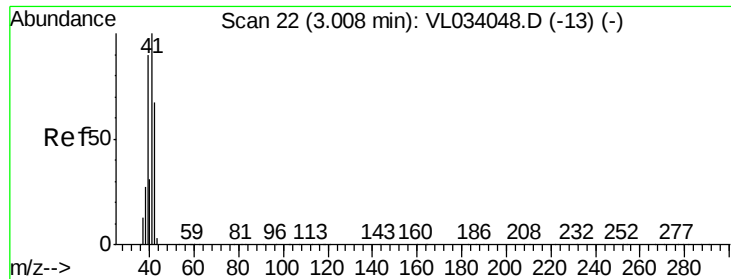


#3

Chlorodifluoromethane
Concen: 0.189 ppbv
RT: 2.99 min Scan# 17
Delta R.T. 0.00 min
Lab File: VL034061.D
Acq: 30 Jul 2019 12:04

Tgt Ion: 51 Resp: 24808
Ion Ratio Lower Upper
51 100
67 19.6 17.4 26.0





#9

Propene

Concen: 2.486 ppbv

RT: 3.01 min Scan# 24

Delta R.T. 0.01 min

Lab File: VL034061.D

Acq: 30 Jul 2019 12:04

Instrument :

MSVOA_L

ClientSampleId :

JSG1DL

Tot Ion: 41 Resp: 116922

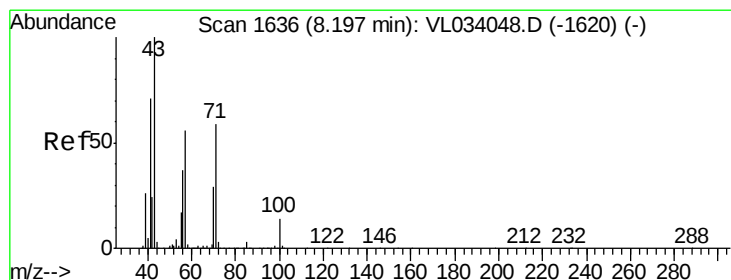
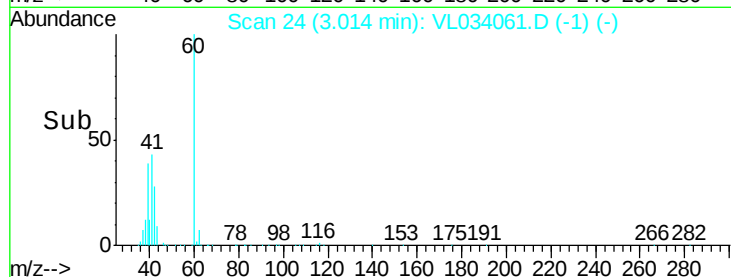
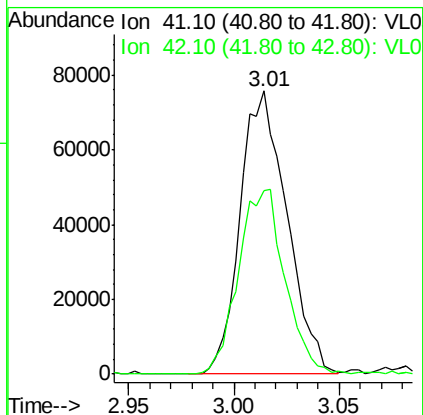
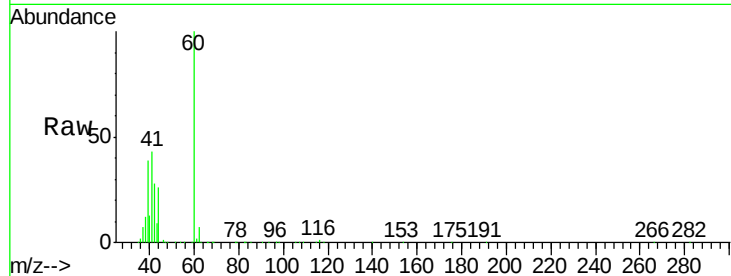
Ion Ratio Lower Upper

41 100

42 65.0 55.4 83.2

Manual Integrations
APPROVED

MMDadoda
8/7/2019 12:20:12 PM



#10

Heptane

Concen: 0.316 ppbv m

RT: 8.20 min Scan# 1637

Delta R.T. 0.00 min

Lab File: VL034061.D

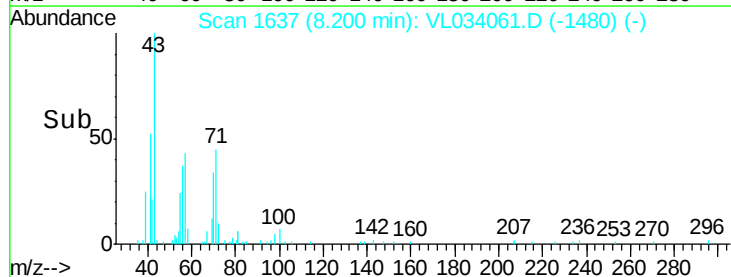
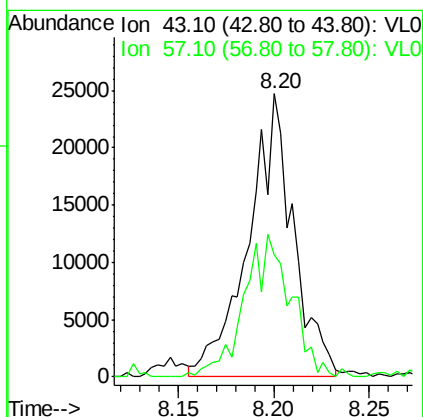
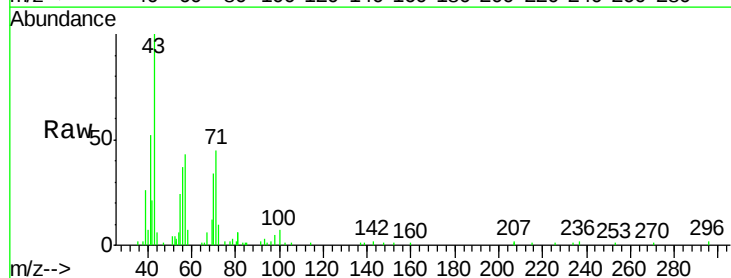
Acq: 30 Jul 2019 12:04

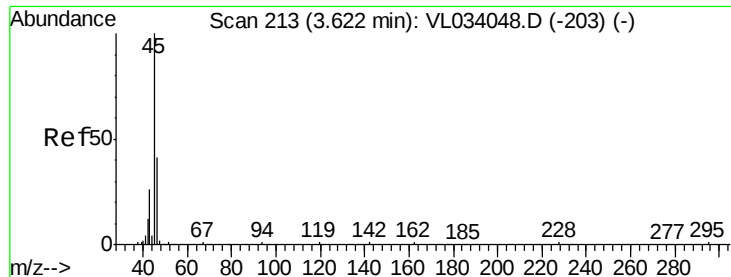
Tgt Ion: 43 Resp: 40501

Ion Ratio Lower Upper

43 100

57 0.0 44.8 67.2#





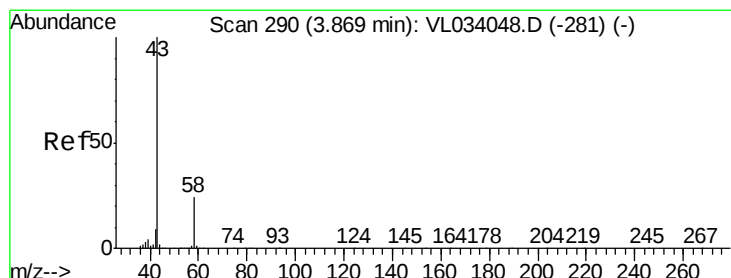
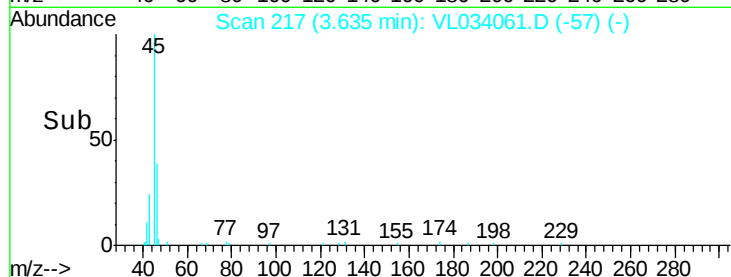
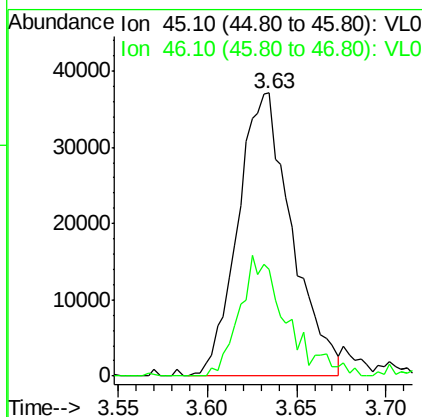
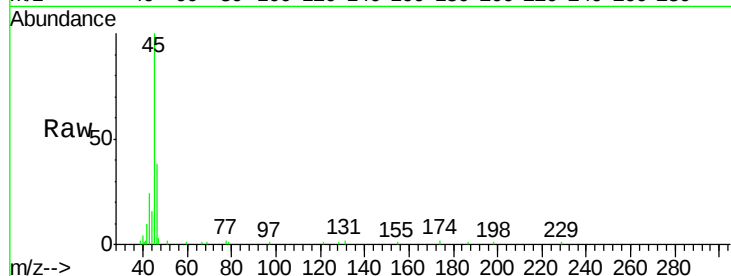
#13
Ethanol
Concen: 4.185 ppbv
RT: 3.63 min Scan# 217
Delta R.T. 0.01 min
Lab File: VL034061.D
Acq: 30 Jul 2019 12:04

Instrument :
MSVOA_L
ClientSampleId :
JSG1DL

Tot Ion: 45 Resp: 78351
Ion Ratio Lower Upper
45 100
46 37.0 15.6 62.2

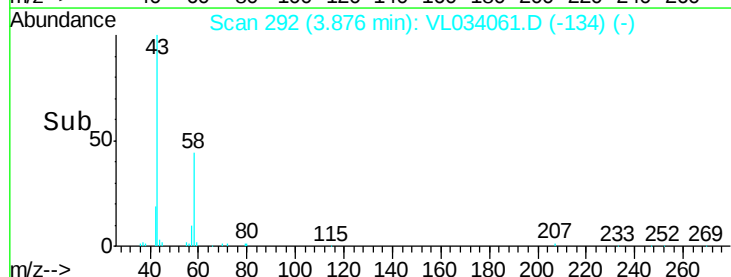
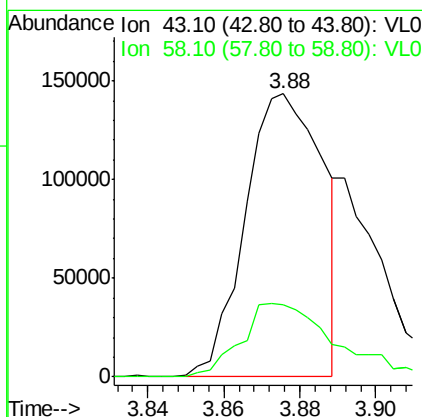
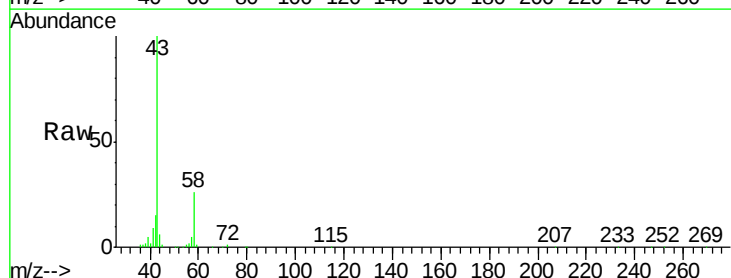
Manual Integrations
APPROVED

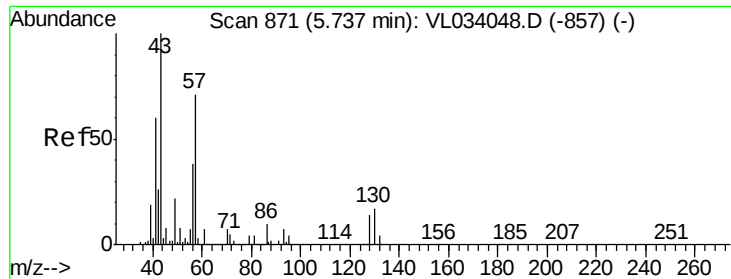
MMDadoda
8/7/2019 12:20:12 PM



#15
Acetone
Concen: 1.186 ppbv m
RT: 3.88 min Scan# 292
Delta R.T. 0.01 min
Lab File: VL034061.D
Acq: 30 Jul 2019 12:04

Tgt Ion: 43 Resp: 204658
Ion Ratio Lower Upper
43 100
58 31.8 21.6 32.4





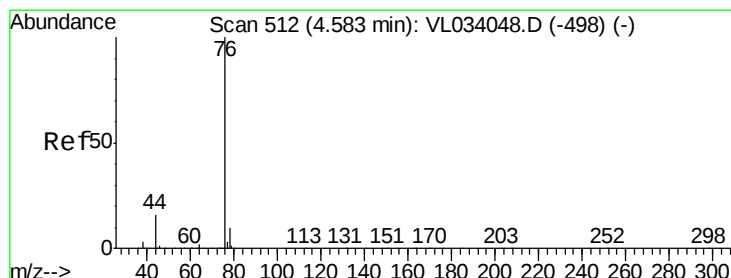
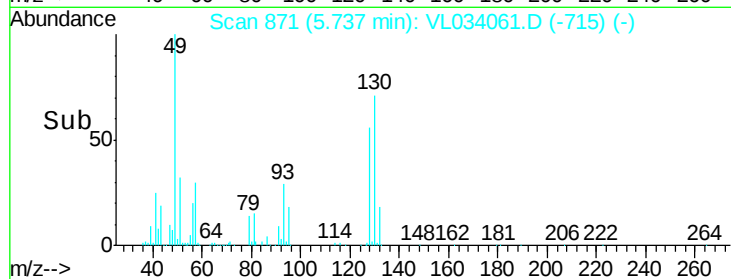
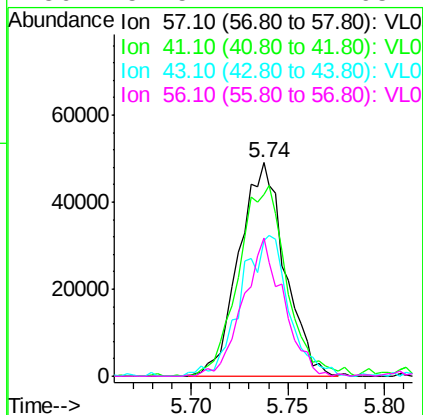
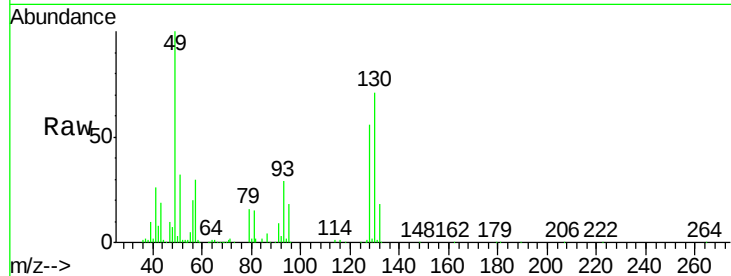
#26
Hexane
Concen: 0.699 ppbv
RT: 5.74 min Scan# 871
Delta R.T. 0.00 min
Lab File: VL034061.D
Acq: 30 Jul 2019 12:04

Instrument :
MSVOA_L
ClientSampleId :
JSG1DL

Tot Ion	Ratio	Lower	Upper
57	100		
41	93.9	69.0	103.6
43	69.0	176.6	264.8#
56	57.5	42.2	63.4

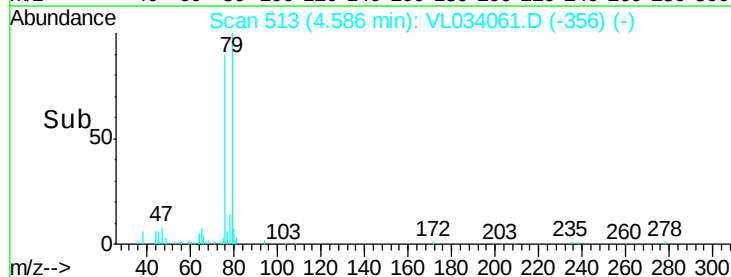
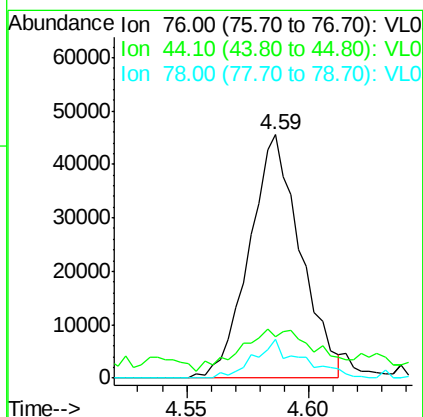
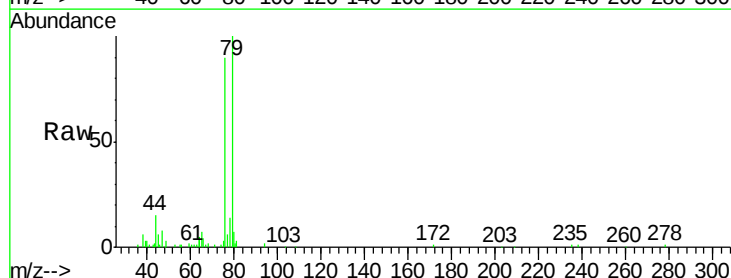
Manual Integrations
APPROVED

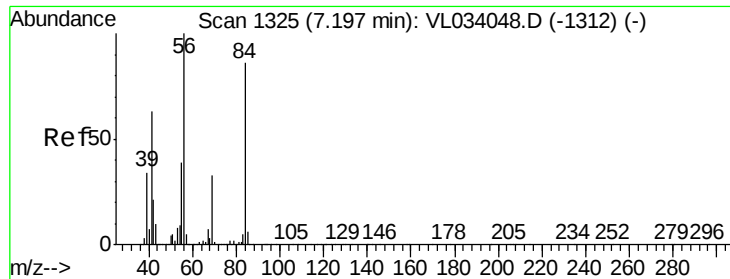
MMDadoda
8/7/2019 12:20:12 PM



#27
Carbon Disulfide
Concen: 0.366 ppbv
RT: 4.59 min Scan# 513
Delta R.T. 0.00 min
Lab File: VL034061.D
Acq: 30 Jul 2019 12:04

Tgt Ion	Ratio	Lower	Upper
76	100		
44	31.8	13.0	19.4#
78	15.8	7.7	11.5#





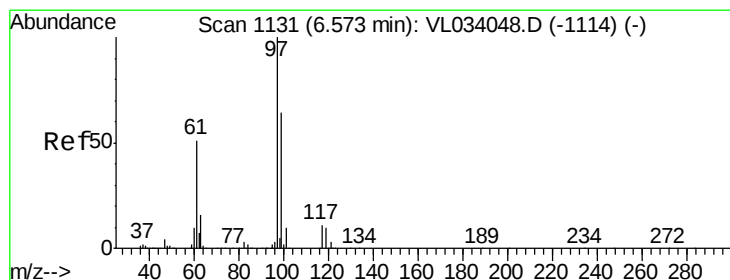
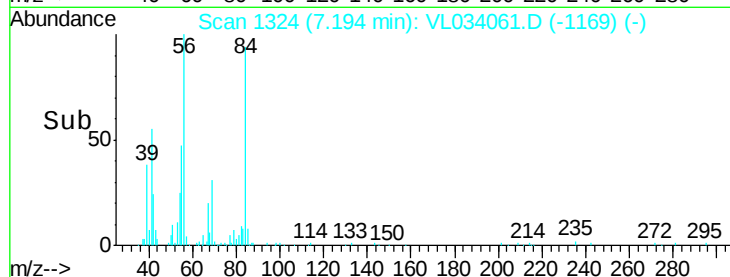
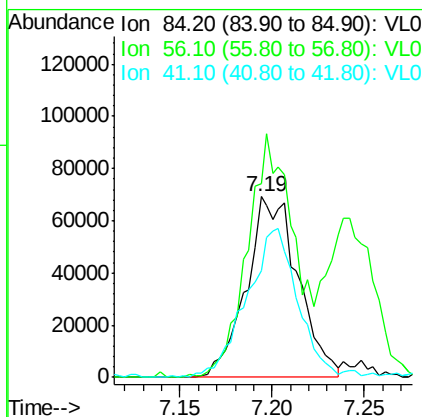
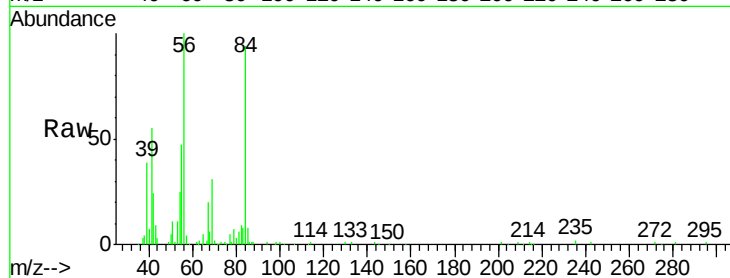
#30
Cvclohexane
Concen: 1.141 ppbv m
RT: 7.19 min Scan# 1324
Delta R.T. -0.00 min
Lab File: VL034061.D
Acq: 30 Jul 2019 12:04

Instrument :
MSVOA_L
ClientSampleId :
JSG1DL

Tot Ion	Ratio	Lower	Upper
84	100		
56	0.0	101.7	152.5#
41	83.6	59.4	89.0

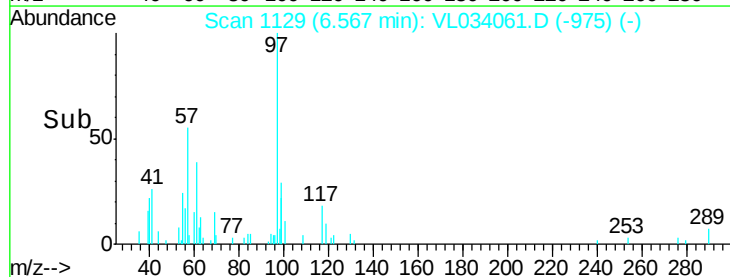
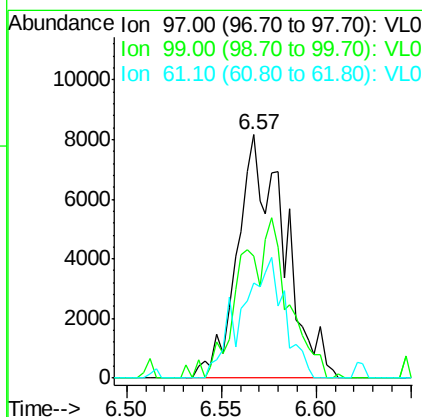
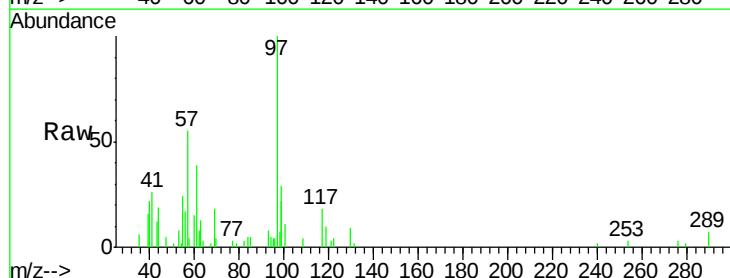
Manual Integrations
APPROVED

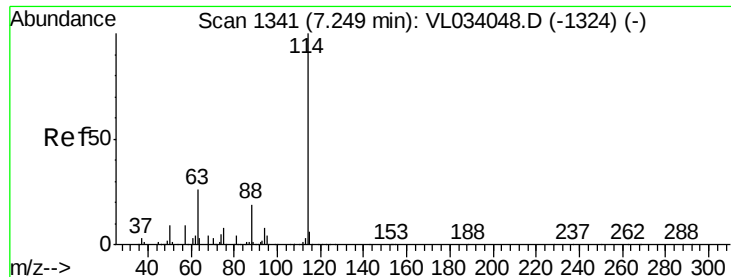
MMDadoda
8/7/2019 12:20:12 PM



#32
1,1,1-Trichloroethane
Concen: 0.063 ppbv m
RT: 6.57 min Scan# 1129
Delta R.T. -0.01 min
Lab File: VL034061.D
Acq: 30 Jul 2019 12:04

Tgt Ion	Ratio	Lower	Upper
97	100		
99	0.0	51.0	76.6#
61	0.0	39.5	59.3#





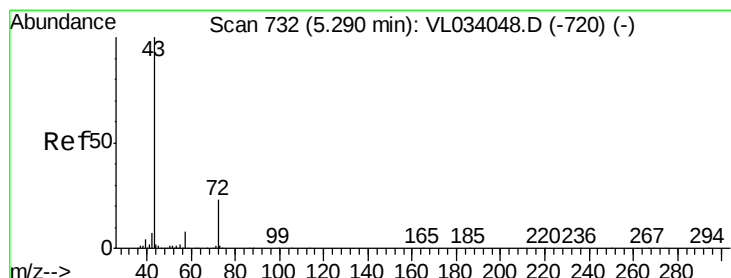
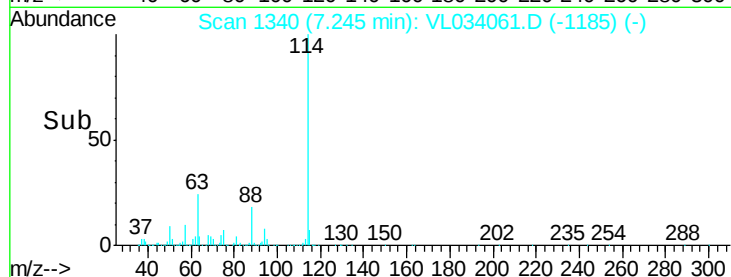
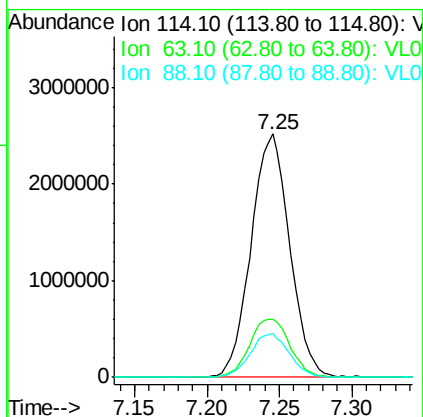
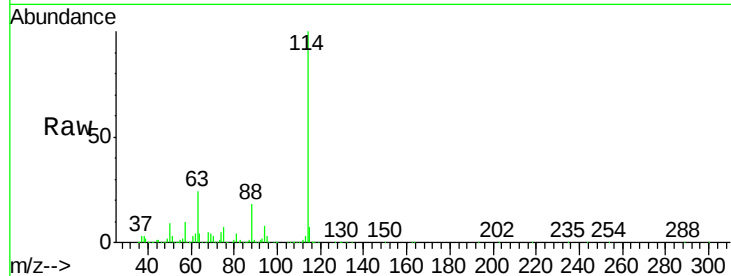
#33
 1,4-Difluorobenzene
 Concen: 10.000 ppbv
 RT: 7.25 min Scan# 1340
 Delta R.T. -0.00 min
 Lab File: VL034061.D
 Acq: 30 Jul 2019 12:04

Instrument :
 MSVOA_L
 ClientSampleId :
 JSG1DL

Tot Ion:114 Resp: 4664012
 Ion Ratio Lower Upper
 114 100
 63 25.2 21.0 31.6
 88 18.2 14.7 22.1

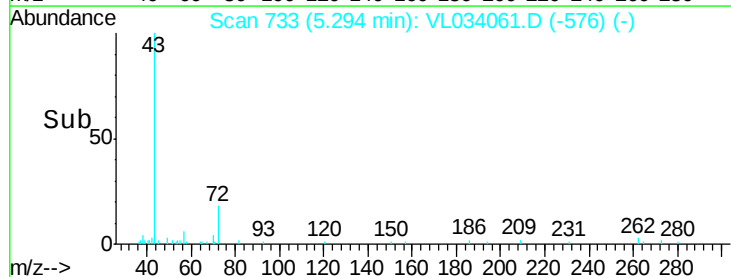
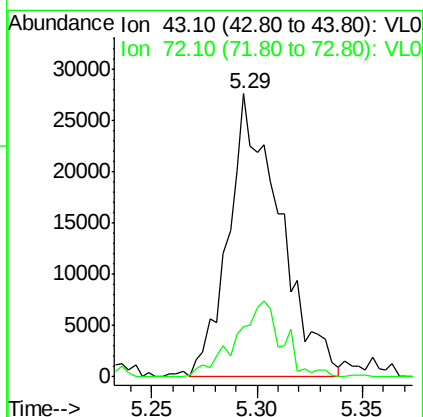
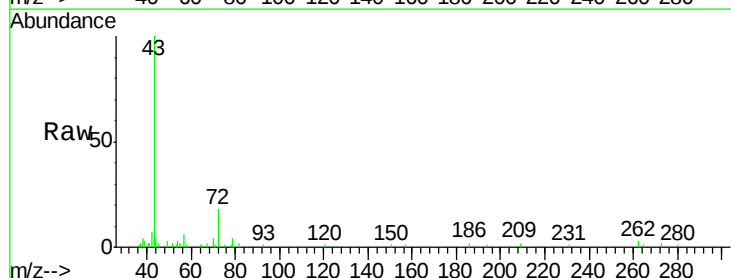
Manual Integrations
 APPROVED

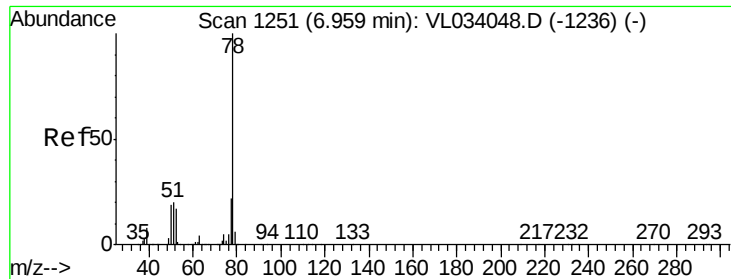
MMDadoda
 8/7/2019 12:20:12 PM



#34
 2-Butanone
 Concen: 0.243 ppbv m
 RT: 5.29 min Scan# 733
 Delta R.T. 0.00 min
 Lab File: VL034061.D
 Acq: 30 Jul 2019 12:04

Tgt Ion: 43 Resp: 46693
 Ion Ratio Lower Upper
 43 100
 72 0.0 20.2 30.4#





#36

Benzene

Concen: 0.388 ppbv

RT: 6.96 min Scan# 1251

Delta R.T. 0.00 min

Lab File: VL034061.D

Acq: 30 Jul 2019 12:04

Instrument :

MSVOA_L

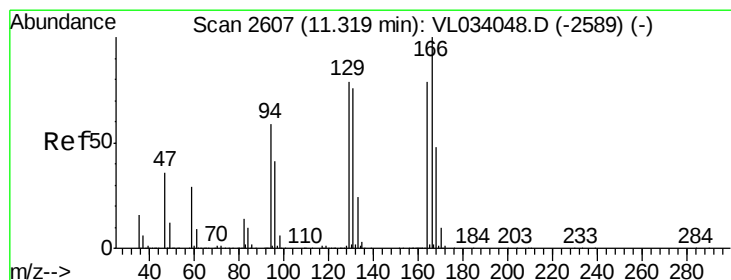
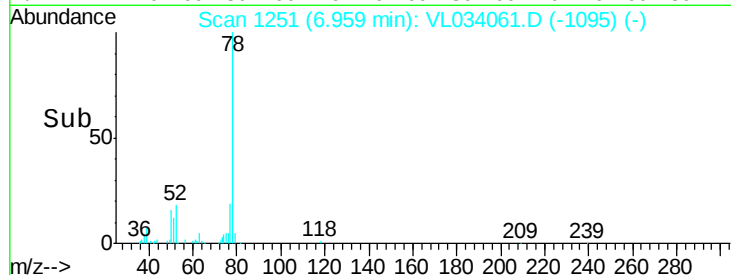
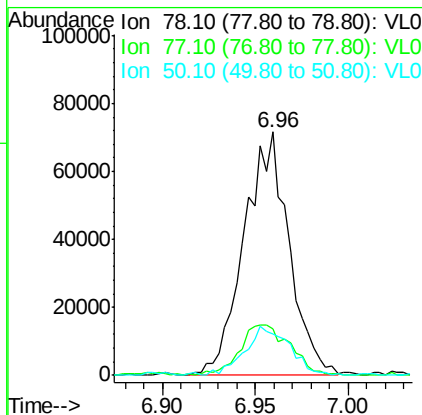
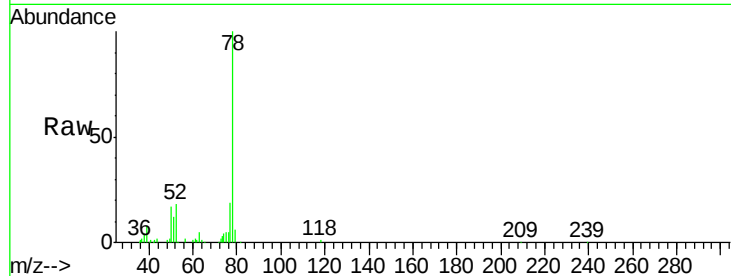
ClientSampleId :

JSG1DL

Tot Ion:	78	Resp:	120581
Ion	Ratio	Lower	Upper
78	100		
77	18.8	17.9	26.9
50	16.4	14.9	22.3

Manual Integrations
APPROVED

MMDadoda
8/7/2019 12:20:12 PM



#52

Tetrachloroethene

Concen: 0.140 ppbv m

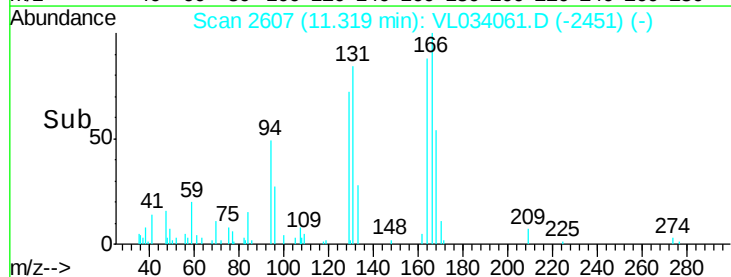
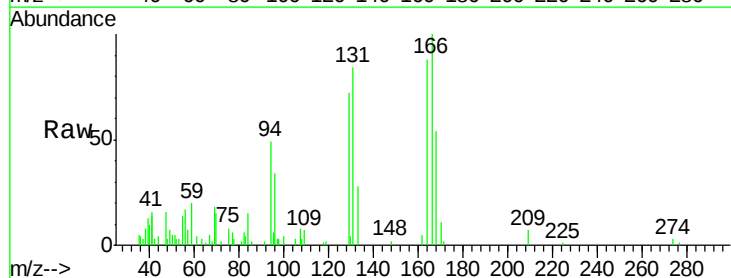
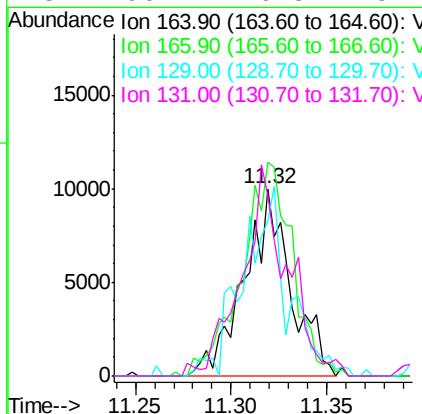
RT: 11.32 min Scan# 2607

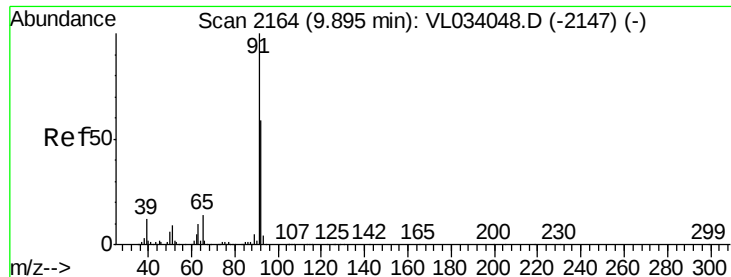
Delta R.T. 0.00 min

Lab File: VL034061.D

Acq: 30 Jul 2019 12:04

Tgt Ion:	164	Resp:	17026
Ion	Ratio	Lower	Upper
164	100		
166	114.0	101.6	152.4
129	82.4	80.7	121.1
131	96.1	76.8	115.2





#53

Toluene

Concen: 6.523 ppbv

RT: 9.89 min Scan# 2163

Delta R.T. -0.00 min

Lab File: VL034061.D

Acq: 30 Jul 2019 12:04

Instrument :

MSVOA_L

ClientSampleId :

JSG1DL

Tot Ion: 91 Resp: 2113170

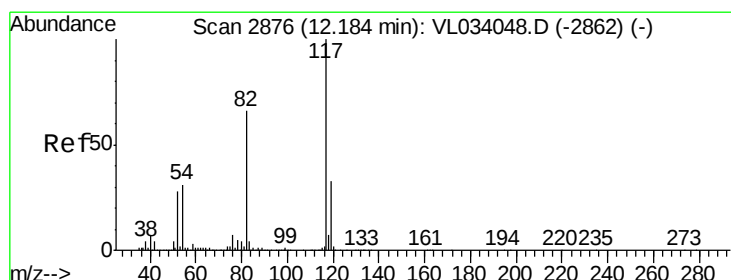
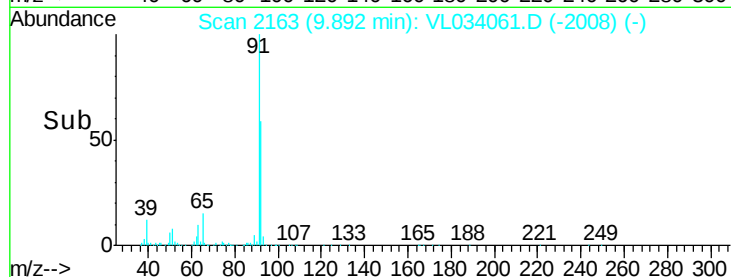
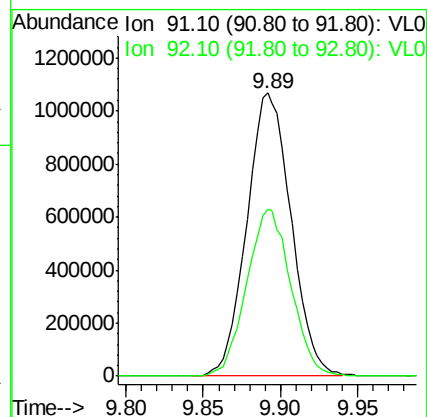
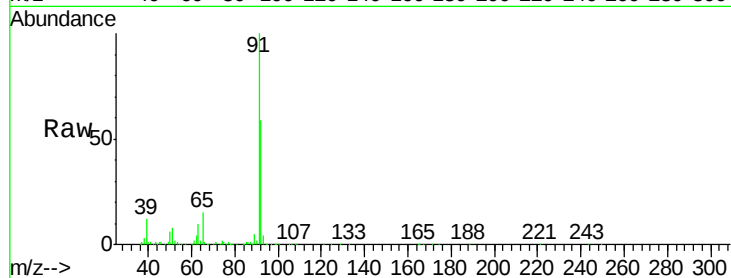
Ion Ratio Lower Upper

91 100

92 59.1 47.4 71.2

Manual Integrations
APPROVED

MMDadoda
8/7/2019 12:20:12 PM



#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.18 min Scan# 2876

Delta R.T. 0.00 min

Lab File: VL034061.D

Acq: 30 Jul 2019 12:04

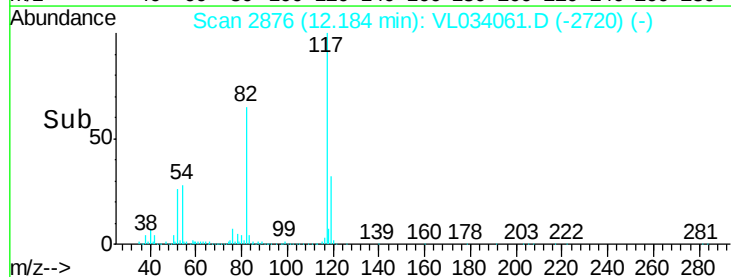
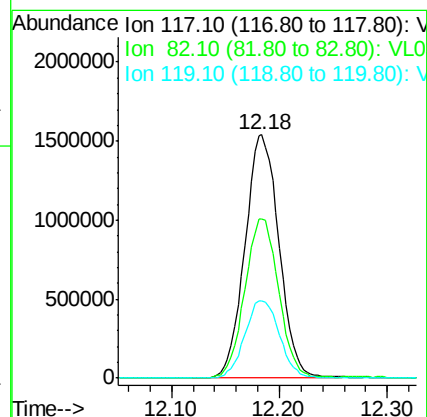
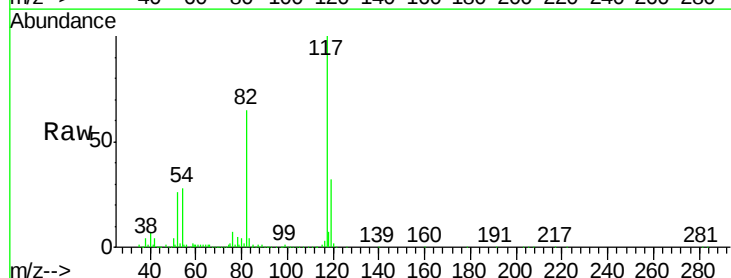
Tgt Ion: 117 Resp: 3387696

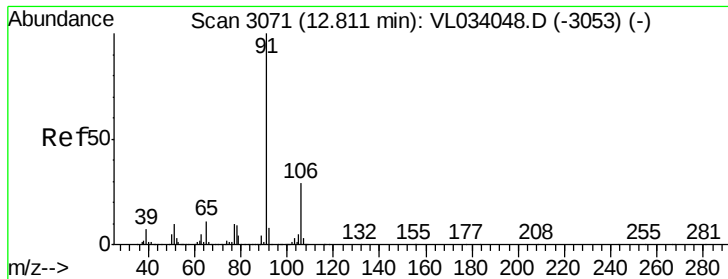
Ion Ratio Lower Upper

117 100

82 65.2 49.8 74.8

119 32.6 43.0 64.6#





#58

Ethyl Benzene

Concen: 0.932 ppbv

RT: 12.81 min Scan# 3071

Delta R.T. 0.00 min

Lab File: VL034061.D

Acq: 30 Jul 2019 12:04

Instrument :

MSVOA_L

ClientSampleId :

JSG1DL

Tot Ion: 91 Resp: 373474

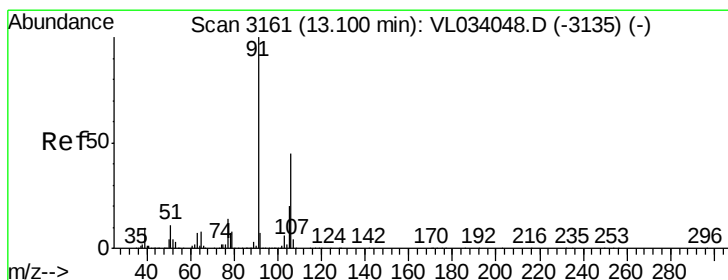
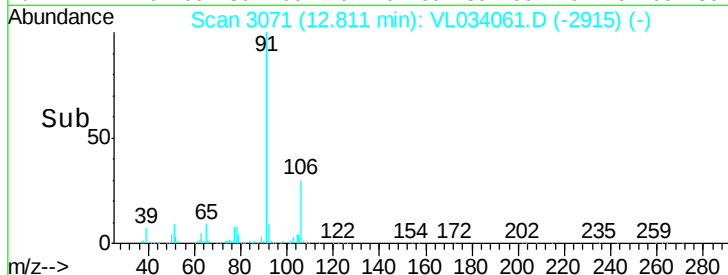
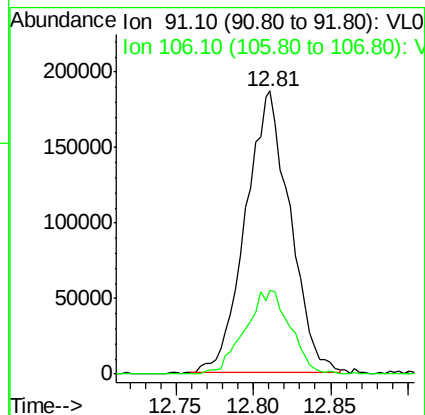
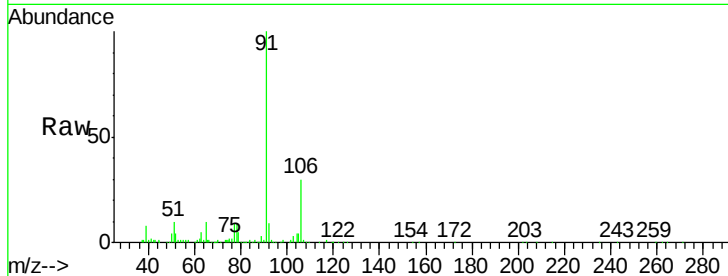
Ion Ratio Lower Upper

91 100

106 29.6 23.5 35.3

Manual Integrations
APPROVED

MMDadoda
8/7/2019 12:20:12 PM



#59

m/p-Xylene

Concen: 3.537 ppbv

RT: 13.07 min Scan# 3150

Delta R.T. -0.04 min

Lab File: VL034061.D

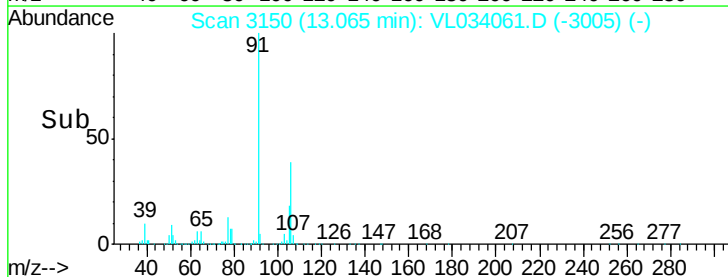
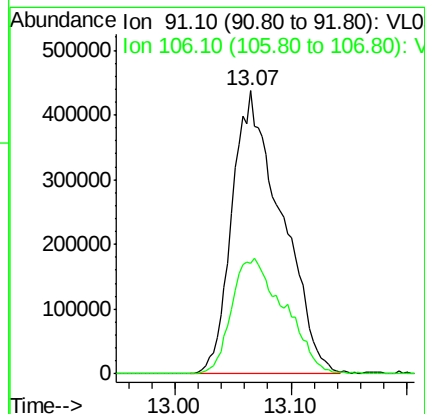
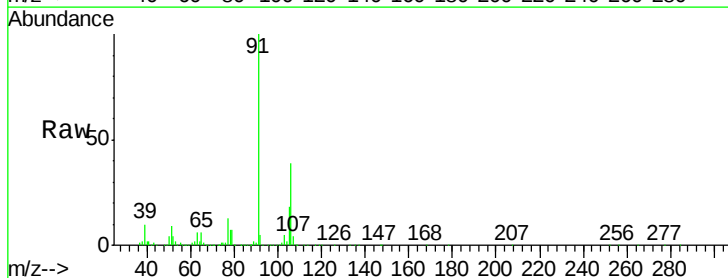
Acq: 30 Jul 2019 12:04

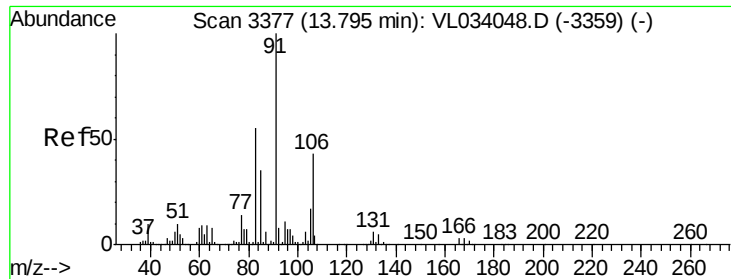
Tgt Ion: 91 Resp: 1289095

Ion Ratio Lower Upper

91 100

106 43.7 35.1 52.7





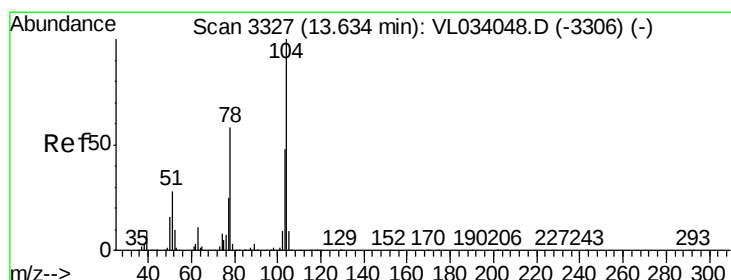
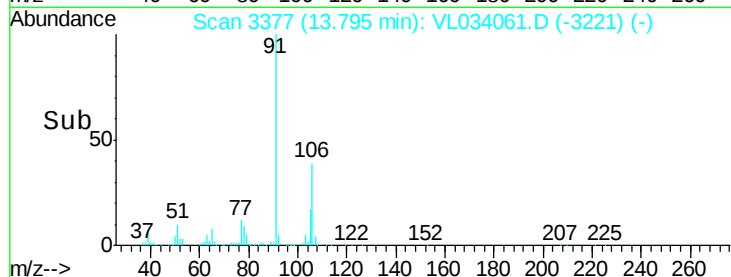
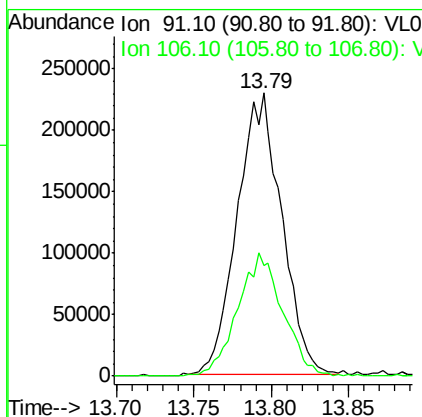
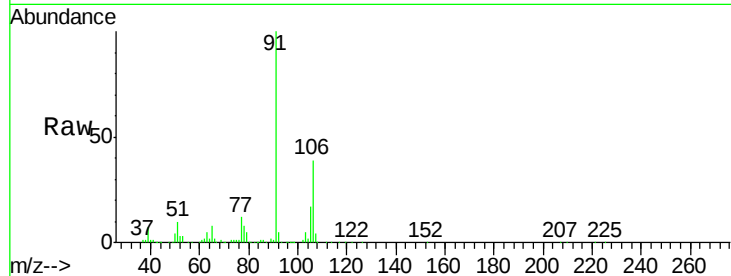
#60
o-Xylene
Concen: 1.260 ppbv
RT: 13.79 min Scan# 3377
Delta R.T. 0.00 min
Lab File: VL034061.D
Acq: 30 Jul 2019 12:04

Instrument :
MSVOA_L
ClientSampled :
JSG1DL

Tot Ion: 91 Resp: 456329
Ion Ratio Lower Upper
91 100
106 44.7 21.2 63.6

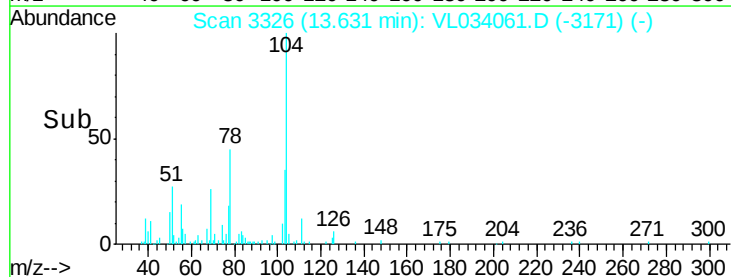
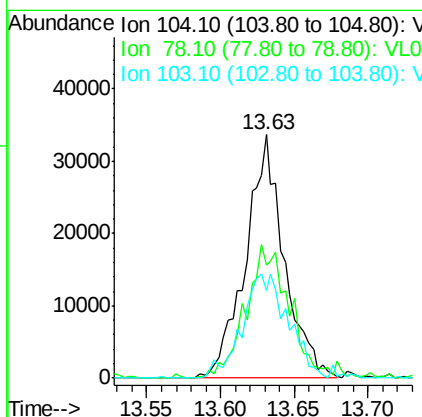
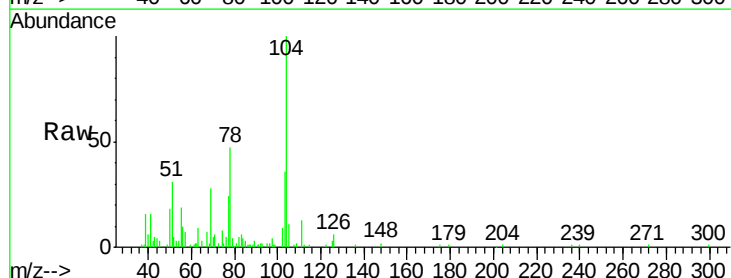
Manual Integrations
APPROVED

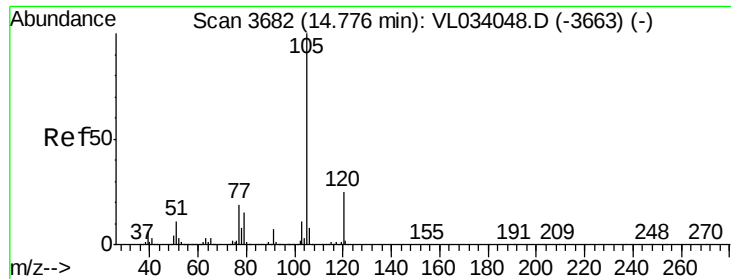
MMDadoda
8/7/2019 12:20:12 PM



#61
Styrene
Concen: 0.255 ppbv m
RT: 13.63 min Scan# 3326
Delta R.T. -0.00 min
Lab File: VL034061.D
Acq: 30 Jul 2019 12:04

Tgt Ion: 104 Resp: 61043
Ion Ratio Lower Upper
104 100
78 63.7 44.3 66.5
103 52.2 38.8 58.2





#62

Isopropylbenzene

Concen: 0.173 ppbv m

RT: 14.77 min Scan# 3681

Delta R.T. -0.00 min

Lab File: VL034061.D

Acq: 30 Jul 2019 12:04

Instrument :

MSVOA_L

ClientSampleId :

JSG1DL

Tot Ion:105 Resp: 84061

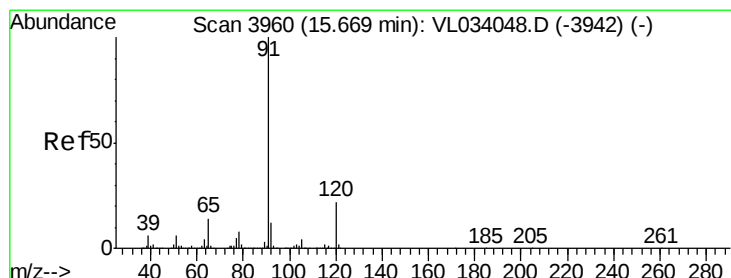
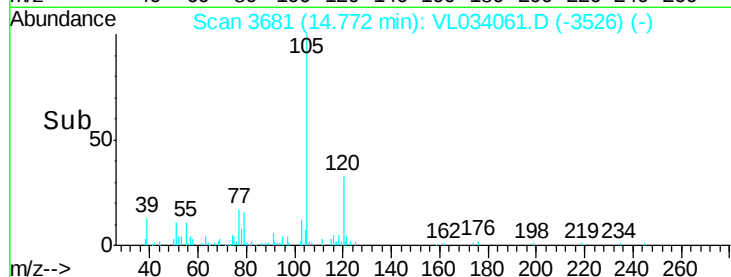
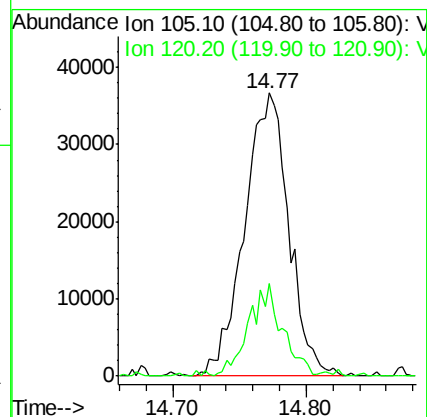
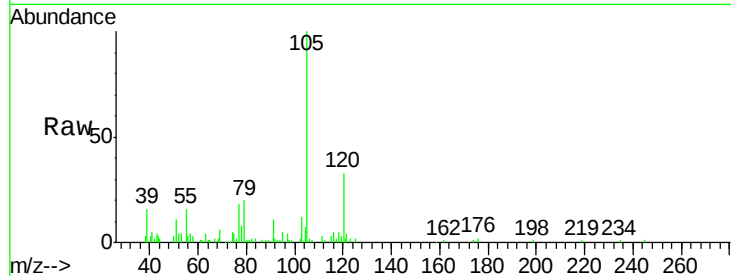
Ion Ratio Lower Upper

105 100

120 25.7 20.2 30.2

Manual Integrations
APPROVED

MMDadoda
8/7/2019 12:20:12 PM



#64

n-propylbenzene

Concen: 0.351 ppbv m

RT: 15.67 min Scan# 3959

Delta R.T. -0.00 min

Lab File: VL034061.D

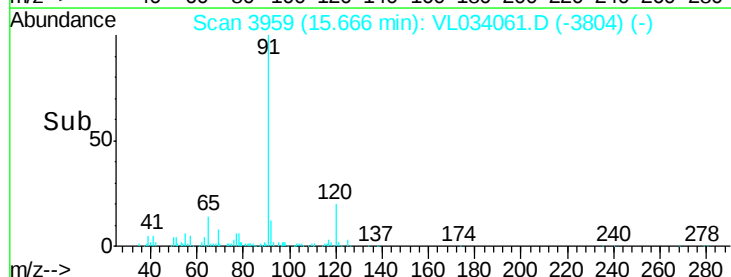
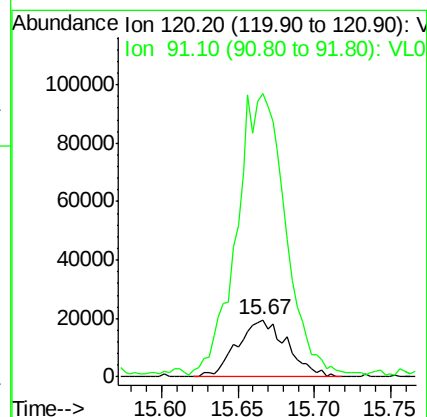
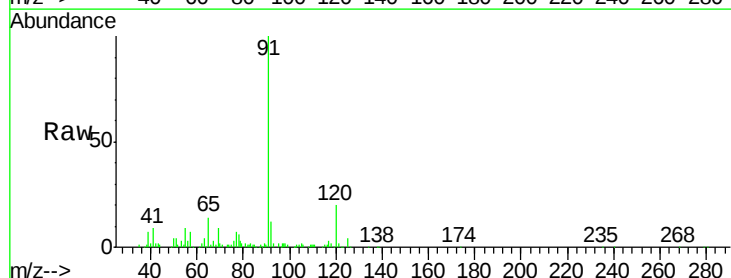
Acq: 30 Jul 2019 12:04

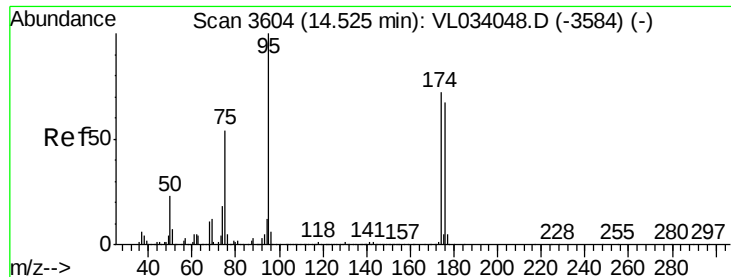
Tgt Ion:120 Resp: 44052

Ion Ratio Lower Upper

120 100

91 492.6 386.2 579.2





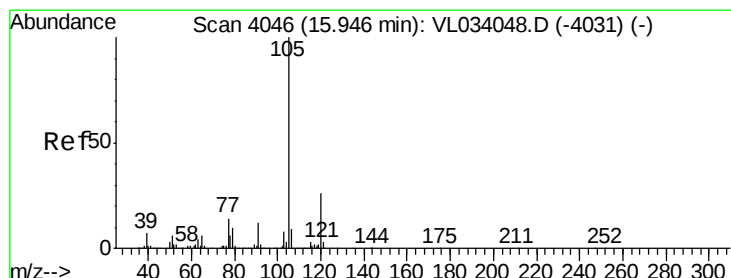
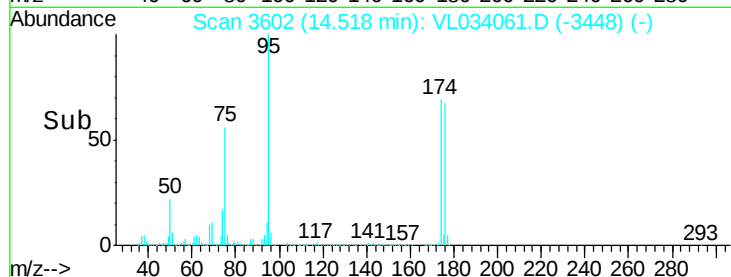
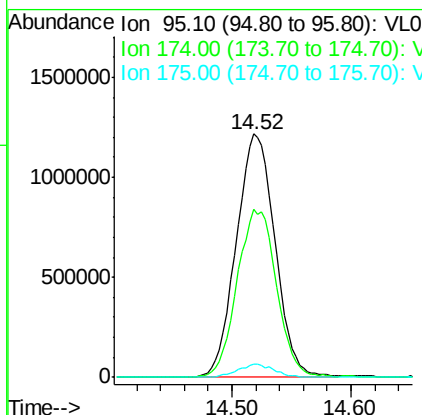
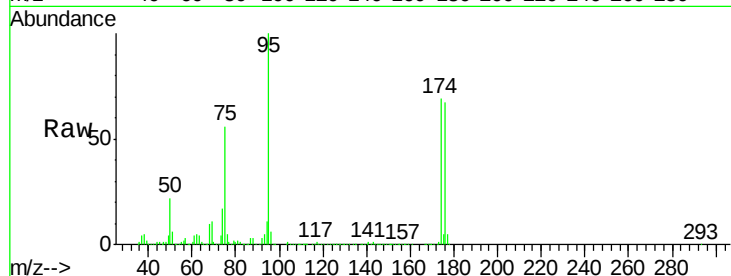
#68
 1-Bromo-4-Fluorobenzene
 Concen: 10.229 ppbv
 RT: 14.52 min Scan# 3602
 Delta R.T. -0.01 min
 Lab File: VL034061.D
 Acq: 30 Jul 2019 12:04

Instrument :
 MSVOA_L
 ClientSampleId :
 JSG1DL

Tot Ion: 95 Resp: 2739176
 Ion Ratio Lower Upper
 95 100
 174 70.7 57.6 86.4
 175 5.2 4.1 6.1

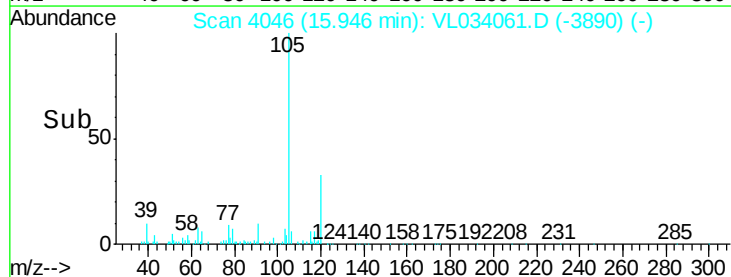
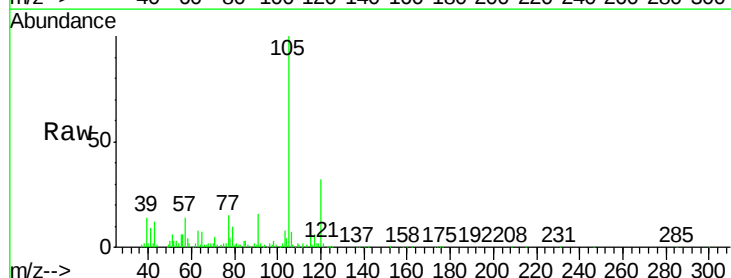
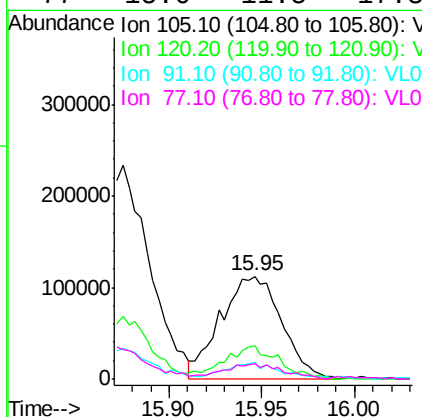
Manual Integrations
 APPROVED

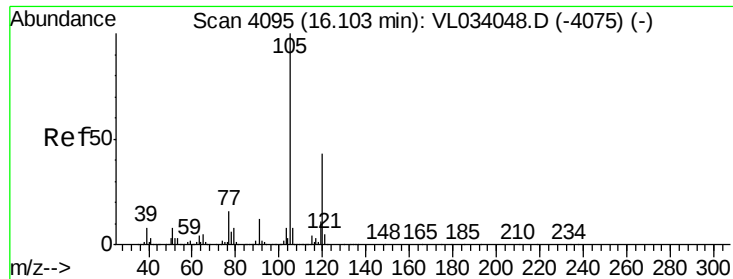
MMDadoda
 8/7/2019 12:20:12 PM



#72
 4-Ethyltoluene
 Concen: 0.619 ppbv
 RT: 15.95 min Scan# 4046
 Delta R.T. 0.00 min
 Lab File: VL034061.D
 Acq: 30 Jul 2019 12:04

Tgt Ion: 105 Resp: 253597
 Ion Ratio Lower Upper
 105 100
 120 30.1 23.0 34.4
 91 14.4 10.6 16.0
 77 15.6 11.5 17.3





#73

1,3,5-Trimethylbenzene

Concen: 0.398 ppbv m

RT: 16.10 min Scan# 4094

Delta R.T. -0.00 min

Lab File: VL034061.D

Acq: 30 Jul 2019 12:04

Instrument :

MSVOA_L

ClientSampleId :

JSG1DL

Tot Ion:105 Resp: 165806

Ion Ratio Lower Upper

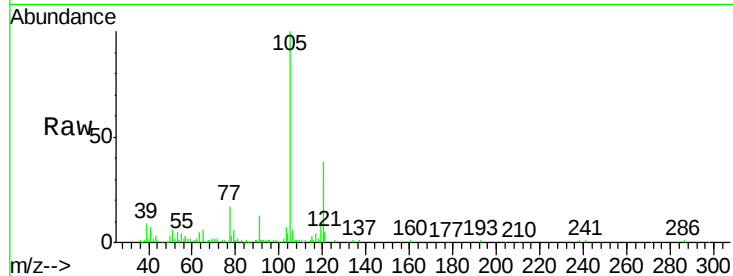
105 100

120 38.3 34.7 52.1

Manual Integrations
APPROVED

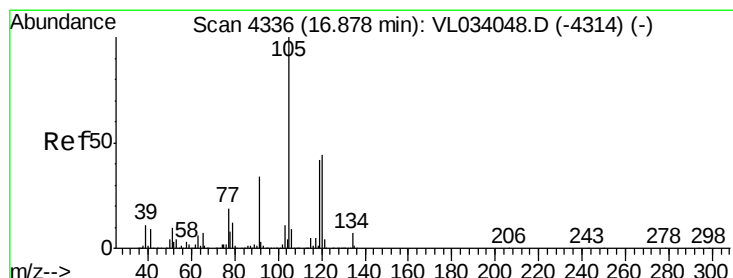
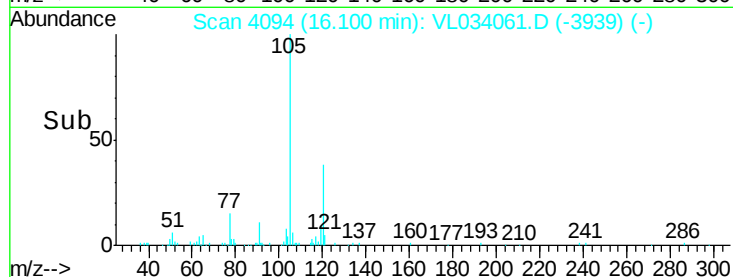
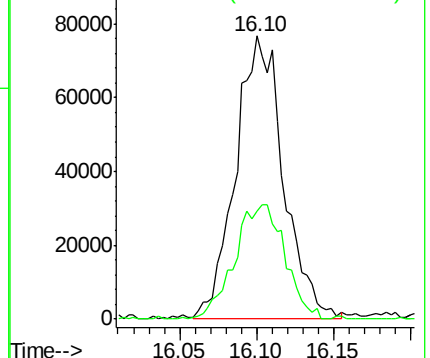
MMDadoda

8/7/2019 12:20:12 PM



Abundance Ion 105.10 (104.80 to 105.80): V

Ion 120.20 (119.90 to 120.90): V



#74

1,2,4-Trimethylbenzene

Concen: 1.667 ppbv

RT: 16.87 min Scan# 4333

Delta R.T. -0.01 min

Lab File: VL034061.D

Acq: 30 Jul 2019 12:04

Tgt Ion:105 Resp: 763278

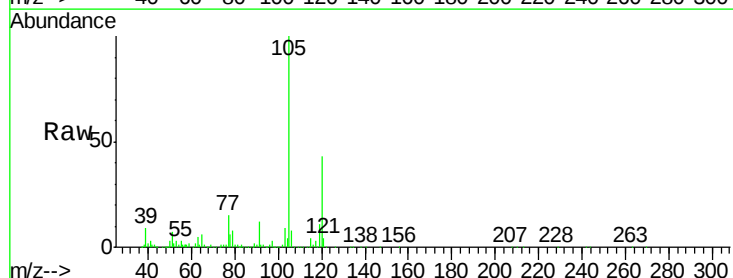
Ion Ratio Lower Upper

105 100

120 43.0 35.6 53.4

91 11.8 28.0 42.0#

77 14.7 15.2 22.8#



Abundance Ion 105.10 (104.80 to 105.80): V

Ion 120.20 (119.90 to 120.90): V

Ion 91.10 (90.80 to 91.80): VL0

Ion 77.10 (76.80 to 77.80): VL0

