

Data Path : Z:\VOASRV\HPCHEM1\MSVOA W\DATA\VW100319\
 Data File : VW013418.D
 Acq On : 03 Oct 2019 14:53
 Operator : SY/VA
 Sample : K5176-15
 Misc : 5.10G/5ML/MSVOA W/SOIL
 ALS Vial : 8 Sample Multiplier: 1

Instrument :
 MSVOA_W
 ClientSampleId :
 30459-61

Manual Integrations
 APPROVED

MMDadoda
 10/4/2019 12:10:23 PM

Quant Time: Oct 04 08:58:17 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_W\METHOD\82W100119S.M
 Quant Title : SW846 8260
 QLast Update : Wed Oct 02 11:49:57 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	7.95	168	181459	50.00	ug/l	0.00
34) 1,4-Difluorobenzene	8.84	114	251148	50.00	ug/l	0.00
63) Chlorobenzene-d5	11.63	117	183221	50.00	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.56	152	57723	50.00	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.30	65	69083	50.99	ug/l	0.00
Spiked Amount	50.000		Recovery	=	101.98%	
35) Dibromofluoromethane	7.88	113	69662	52.86	ug/l	0.00
Spiked Amount	50.000		Recovery	=	105.72%	
50) Toluene-d8	10.32	98	269935	49.36	ug/l	0.00
Spiked Amount	50.000		Recovery	=	98.72%	
62) 4-Bromofluorobenzene	12.61	95	72996	39.97	ug/l	0.00
Spiked Amount	50.000		Recovery	=	79.94%	
Target Compounds						
					Qvalue	
11) Tert butyl alcohol	5.21	59	16682m	139.806	ug/l	
16) Acetone	4.12	43	62409	150.273	ug/l	97
17) Carbon Disulfide	4.37	76	8828	1.894	ug/l	98
20) Methylene Chloride	4.91	84	104029	60.373	ug/l	98
25) 2-Butanone	7.18	43	26465m	49.801	ug/l	
30) Chloroform	7.68	83	693661	243.379	ug/l	97
31) Cyclohexane	7.92	56	307992	99.360	ug/l #	44
39) Methylcyclohexane	9.33	83	39814	12.960	ug/l	98
40) Benzene	8.32	78	15848	2.400	ug/l	97
51) 4-Methyl-2-Pentanone	10.21	43	35071	34.450	ug/l	99
52) Toluene	10.38	92	1530746	359.402	ug/l	99
65) Chlorobenzene	11.66	112	4984	1.328	ug/l	95
67) Ethyl Benzene	11.73	91	103881	15.441	ug/l	100
68) m/p-Xylenes	11.83	106	203697	78.444	ug/l	98
69) o-Xylene	12.16	106	87954	36.634	ug/l	98
70) Styrene	12.18	104	20442	4.981	ug/l #	35
73) Isopropylbenzene	12.46	105	22644	5.363	ug/l	86
78) n-propylbenzene	12.80	91	33515	6.901	ug/l	97
80) 1,3,5-Trimethylbenzene	12.94	105	51040	14.552	ug/l	100
84) 1,2,4-Trimethylbenzene	13.25	105	173315	49.706	ug/l	100
85) sec-Butylbenzene	13.38	105	27635	6.543	ug/l	85
86) p-Isopropyltoluene	13.50	119	133127m	34.008	ug/l	
89) n-Butylbenzene	13.82	91	24372m	6.906	ug/l	
95) Naphthalene	15.36	128	23515	11.520	ug/l #	88

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

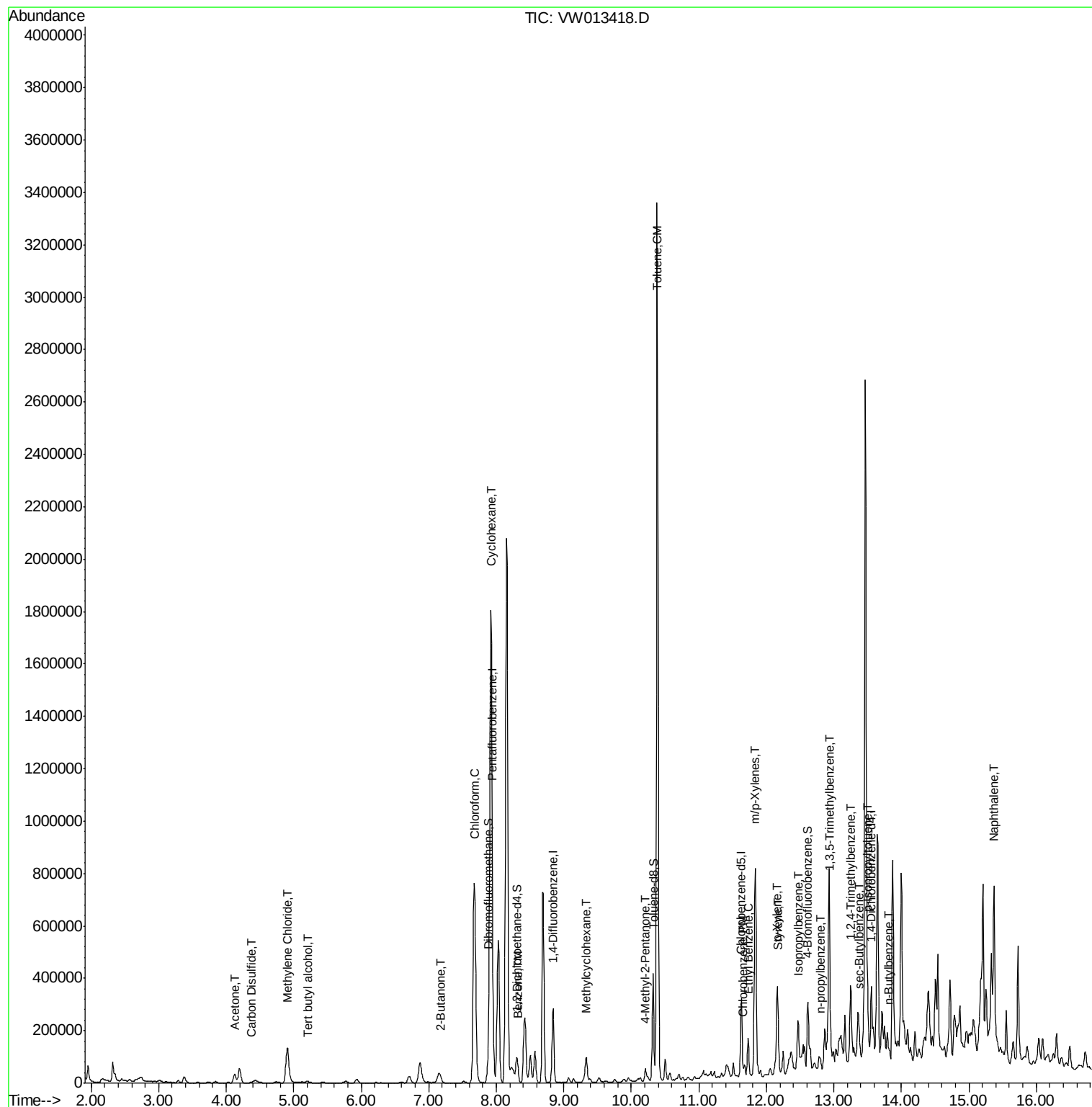
Data Path : Z:\V0ASRV\HPCHEM1\MSVOA W\DATA\VW100319\
Data File : VW013418.D
Acq On : 03 Oct 2019 14:53
Operator : SY/VA
Sample : K5176-15
Misc : 5.10G/5ML/MSVOA W/SOIL
ALS Vial : 8 Sample Multiplier: 1

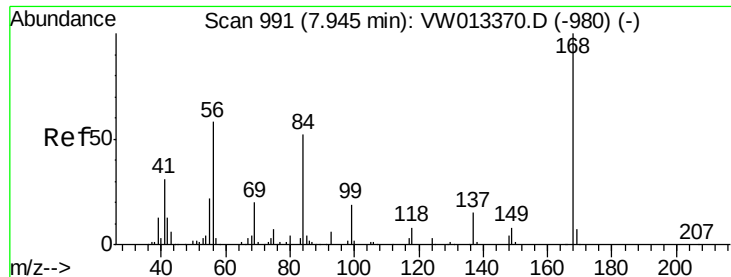
Instrument :
MSVOA_W
ClientSampleId :
30459-61

Manual Integrations
APPROVED

MMDadoda
10/4/2019 12:10:23 PM

Quant Time: Oct 04 08:58:17 2019
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA_W\METHOD\82W100119S.M
Quant Title : SW846 8260
QLast Update : Wed Oct 02 11:49:57 2019
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 7.95 min Scan# 991

Delta R.T. -0.00 min

Lab File: VW013418.D

Acq: 03 Oct 2019 14:53

Instrument :

MSVOA_W

ClientSampleId :

30459-61

Tot Ion:168 Resp: 181459

Ion Ratio Lower Upper

168 100

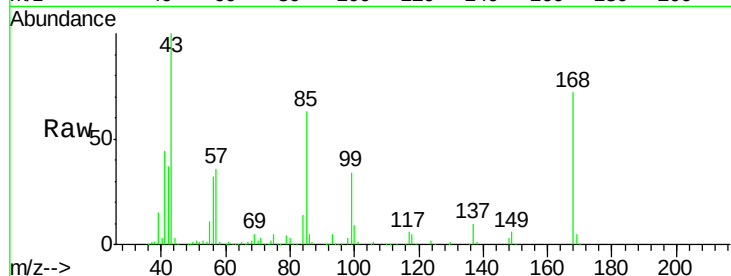
99 46.6 40.2 60.4

Manual Integrations

APPROVED

MMDadoda

10/4/2019 12:10:23 PM



Abundance Ion 167.90 (167.60 to 168.60): VW

Ion 98.90 (98.60 to 99.60): VW

7.95

80000

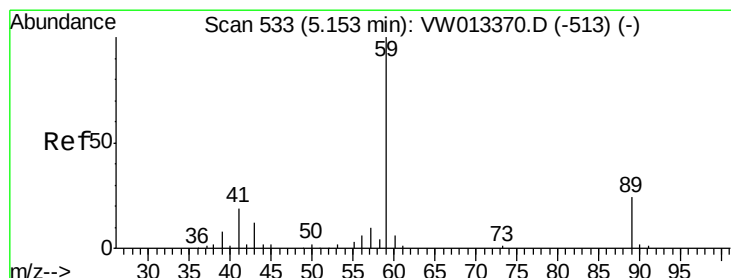
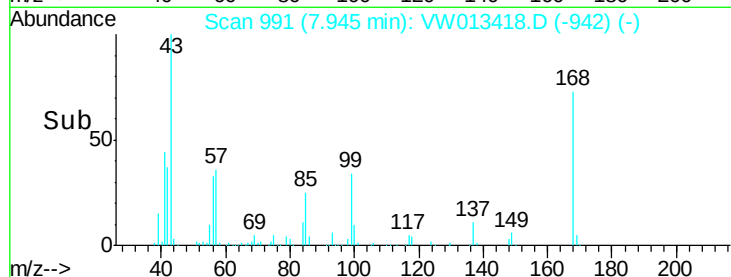
60000

40000

20000

0

Time--> 7.80 7.90 8.00



#11

Tert butyl alcohol

Concen: 139.806 ug/l m

RT: 5.21 min Scan# 542

Delta R.T. 0.05 min

Lab File: VW013418.D

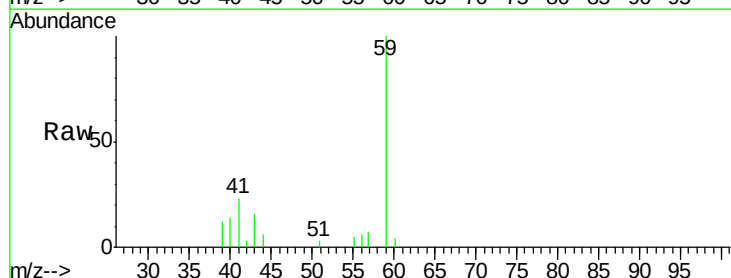
Acq: 03 Oct 2019 14:53

Tgt Ion: 59 Resp: 16682

Ion Ratio Lower Upper

59 100

57 0.0 8.2 12.2#



Abundance Ion 59.00 (58.70 to 59.70): VW

Ion 57.00 (56.70 to 57.70): VW

5.21

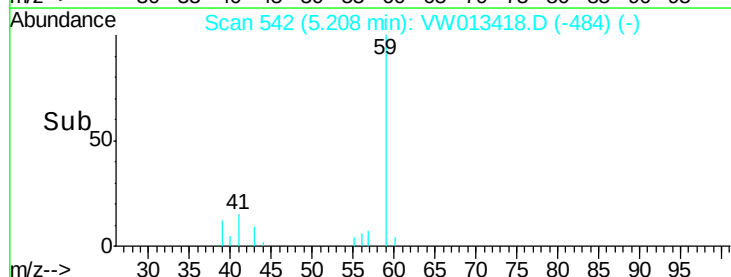
3000

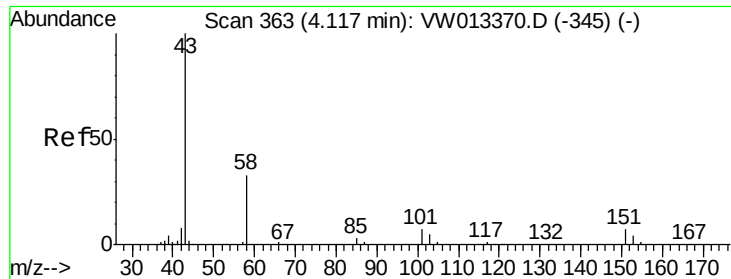
2000

1000

0

Time--> 5.10 5.20 5.30





#16

Acetone

Concen: 150.273 ug/l

RT: 4.12 min Scan# 364

Delta R.T. 0.01 min

Lab File: VW013418.D

Acq: 03 Oct 2019 14:53

Instrument :

MSVOA_W

ClientSampled :

30459-61

Tot Ion: 43 Resp: 62409

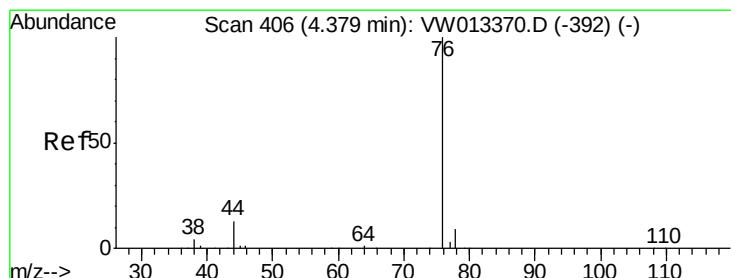
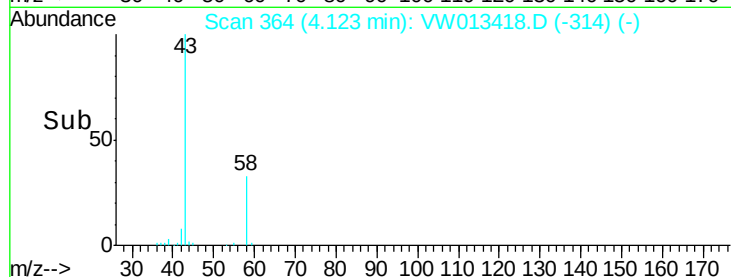
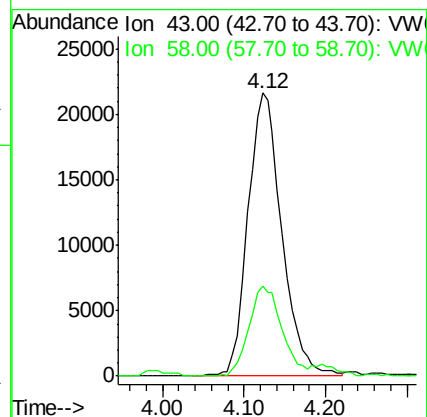
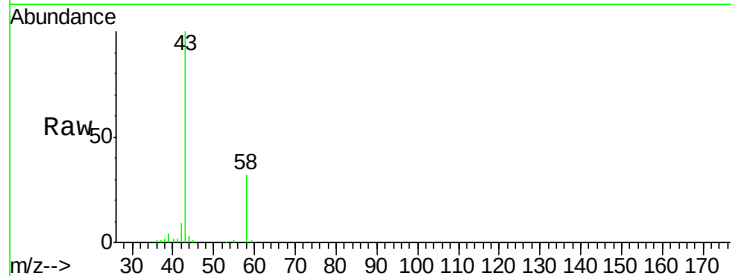
Ion Ratio Lower Upper

43 100

58 31.7 24.1 36.1

Manual Integrations
APPROVED

MMDadoda
10/4/2019 12:10:23 PM



#17

Carbon Disulfide

Concen: 1.894 ug/l

RT: 4.37 min Scan# 405

Delta R.T. -0.01 min

Lab File: VW013418.D

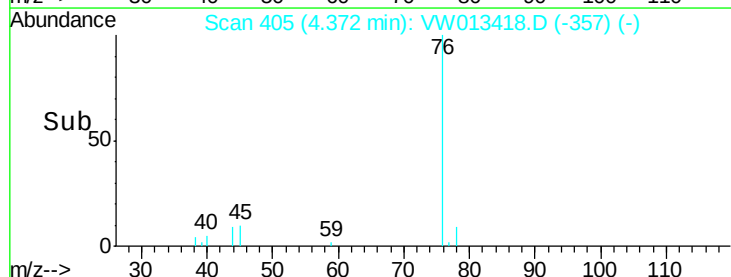
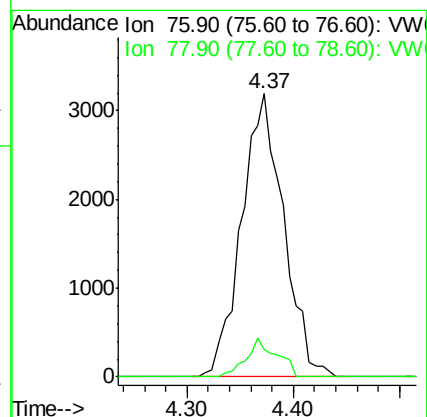
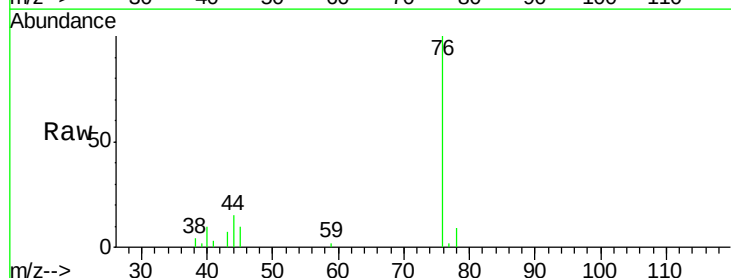
Acq: 03 Oct 2019 14:53

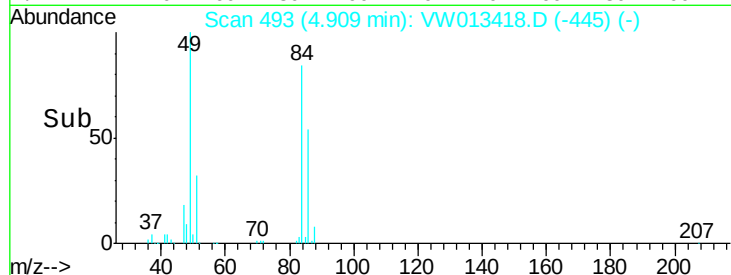
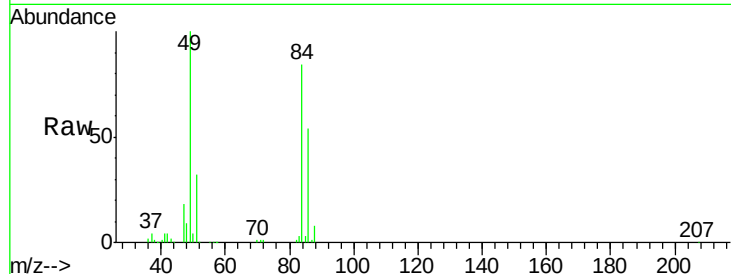
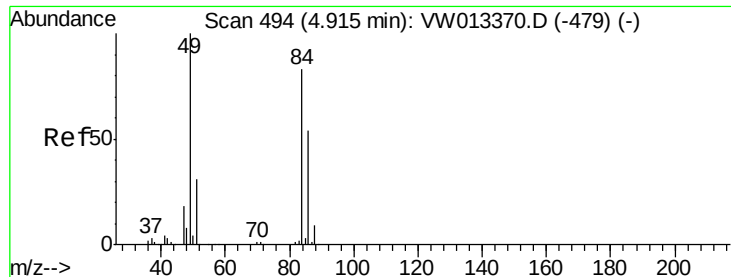
Tgt Ion: 76 Resp: 8828

Ion Ratio Lower Upper

76 100

78 9.5 7.0 10.4





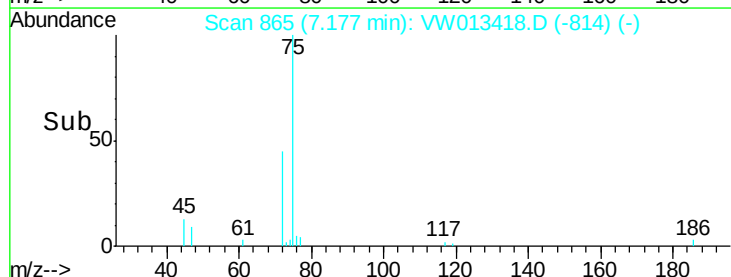
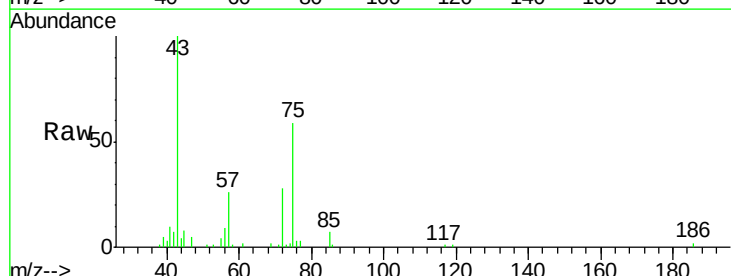
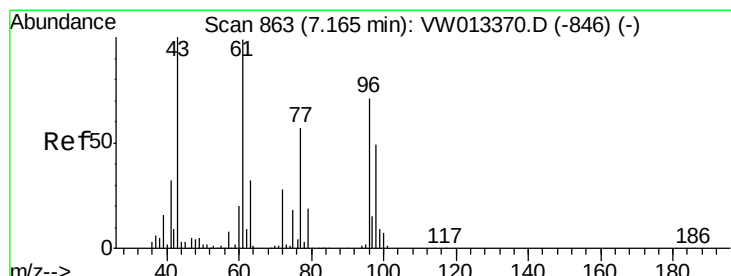
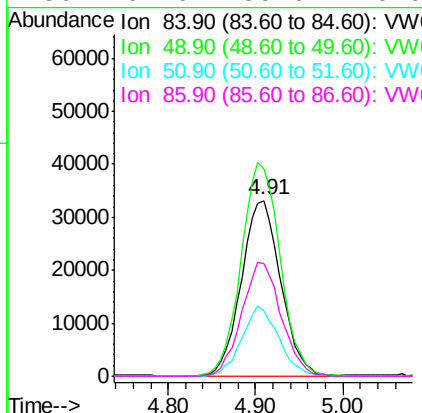
#20
Methylene Chloride
Concen: 60.373 ug/l
RT: 4.91 min Scan# 493
Delta R.T. -0.01 min
Lab File: VW013418.D
Acq: 03 Oct 2019 14:53

Tot Ion	84	Resp	104029
Ion Ratio	Lower	Upper	
84	100		
49	118.6	97.6	146.4
51	37.6	30.2	45.2
86	64.6	50.6	76.0

Instrument :
MSVOA_W
ClientSampleId :
30459-61

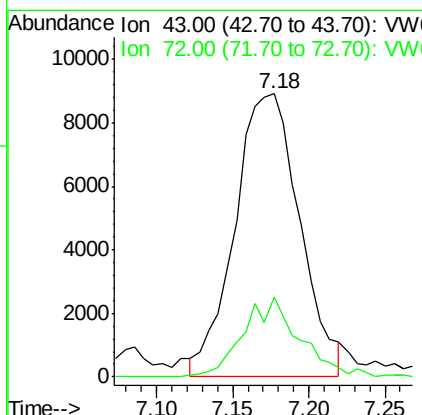
Manual Integrations
APPROVED

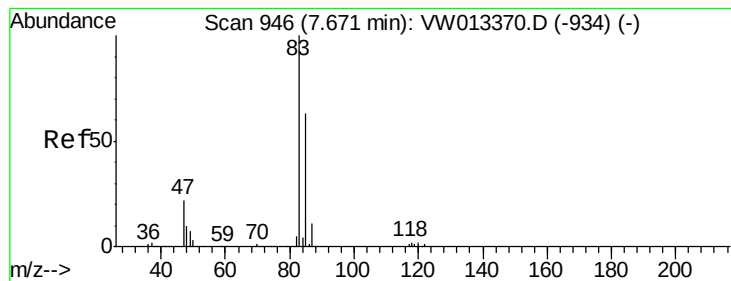
MMDadoda
10/4/2019 12:10:23 PM



#25
2-Butanone
Concen: 49.801 ug/l m
RT: 7.18 min Scan# 865
Delta R.T. 0.01 min
Lab File: VW013418.D
Acq: 03 Oct 2019 14:53

Tgt Ion	43	Resp	26465
Ion Ratio	Lower	Upper	
43	100		
72	28.0	19.4	29.0





#30

Chloroform

Concen: 243.379 ug/l

RT: 7.68 min Scan# 947

Delta R.T. 0.01 min

Lab File: VW013418.D

Acq: 03 Oct 2019 14:53

Instrument :

MSVOA_W

ClientSampleId :

30459-61

Tot Ion: 83 Resp: 693661

Ion Ratio Lower Upper

83 100

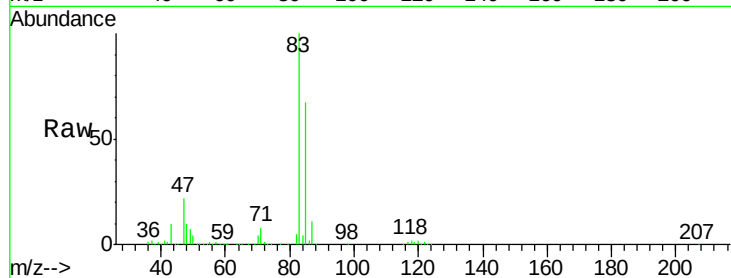
85 67.5 52.3 78.5

Manual Integrations

APPROVED

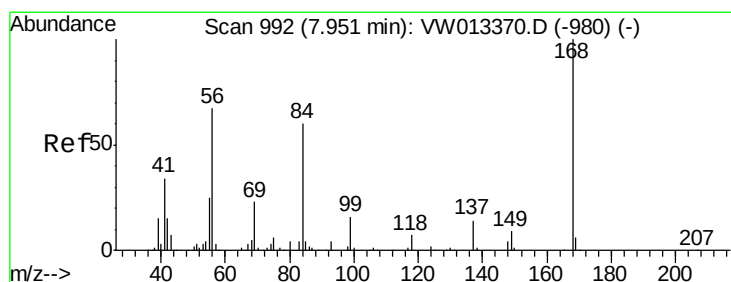
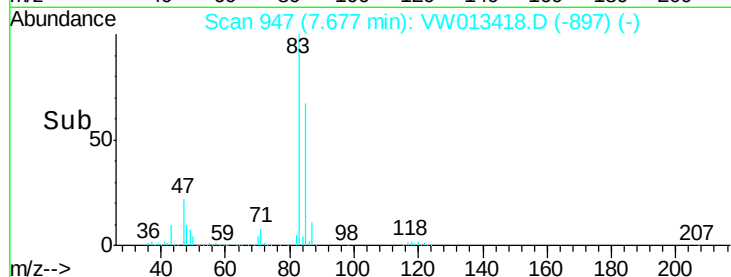
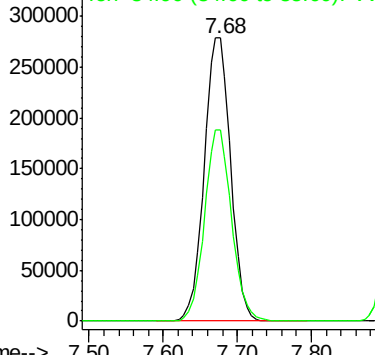
MMDadoda

10/4/2019 12:10:23 PM



Abundance Ion 82.90 (82.60 to 83.60): VW

Ion 84.90 (84.60 to 85.60): VW



#31

Cyclohexane

Concen: 99.360 ug/l

RT: 7.92 min Scan# 987

Delta R.T. -0.03 min

Lab File: VW013418.D

Acq: 03 Oct 2019 14:53

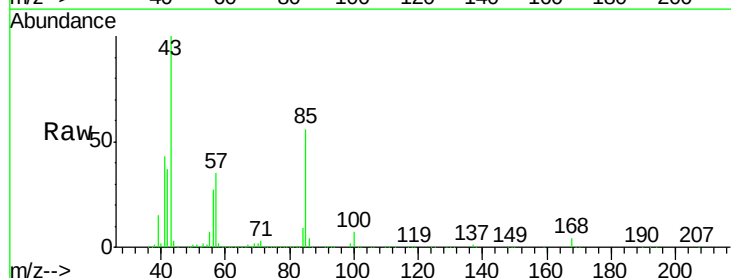
Tgt Ion: 56 Resp: 307992

Ion Ratio Lower Upper

56 100

69 6.2 27.2 40.8#

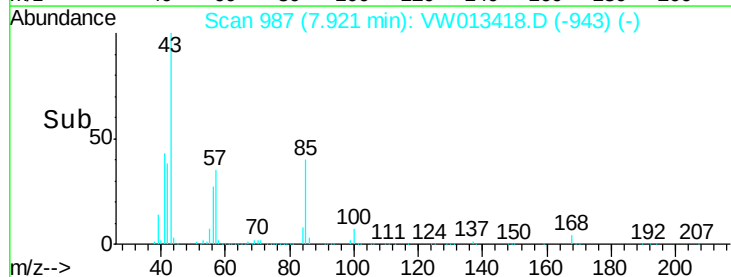
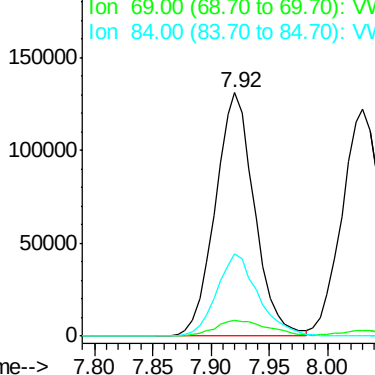
84 33.8 70.8 106.2#

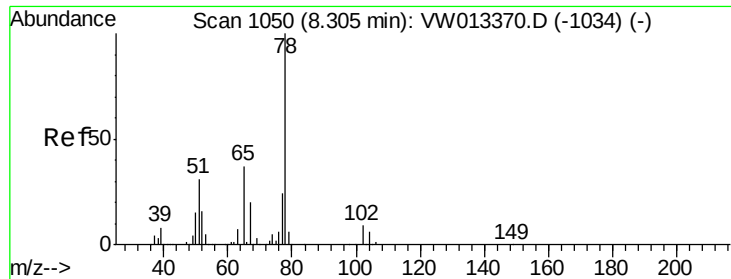


Abundance Ion 56.00 (55.70 to 56.70): VW

Ion 69.00 (68.70 to 69.70): VW

Ion 84.00 (83.70 to 84.70): VW





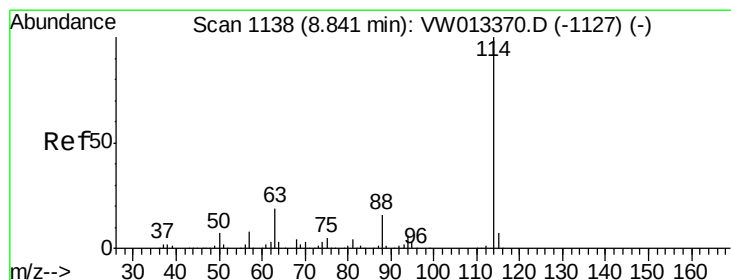
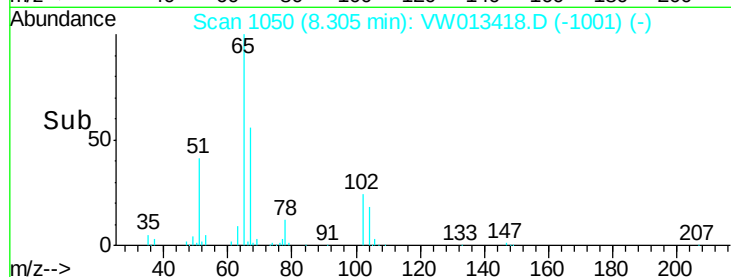
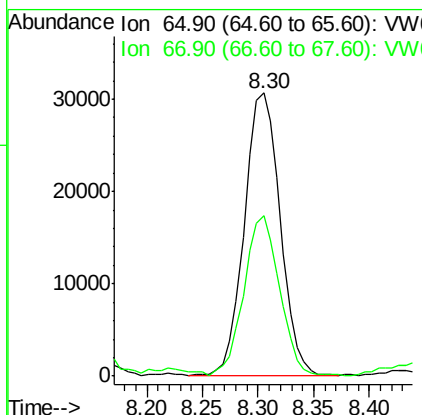
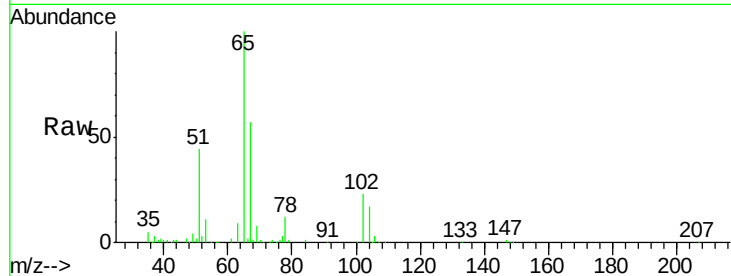
#33
 1,2-Dichloroethane-d4
 Concen: 50.987 ug/l
 RT: 8.30 min Scan# 1050
 Delta R.T. -0.00 min
 Lab File: VW013418.D
 Acq: 03 Oct 2019 14:53

Instrument :
 MSVOA_W
 ClientSampleId :
 30459-61

Tot Ion	Ratio	Resp	Lower	Upper
65	100	69083		
67	56.1	0.0	106.2	

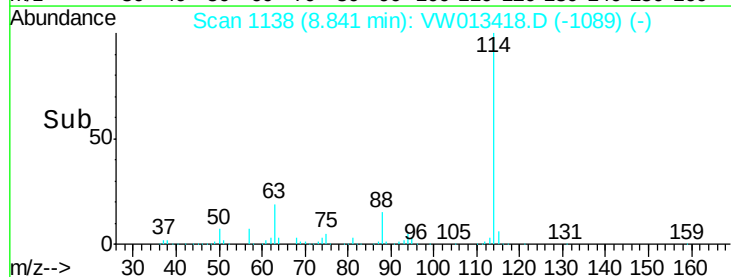
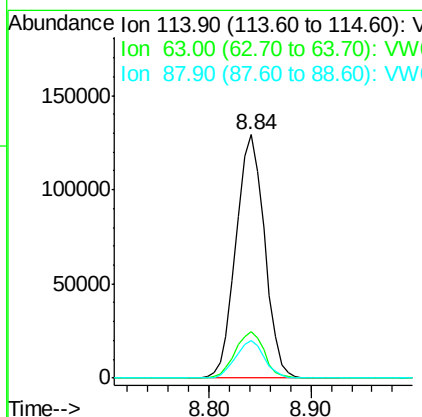
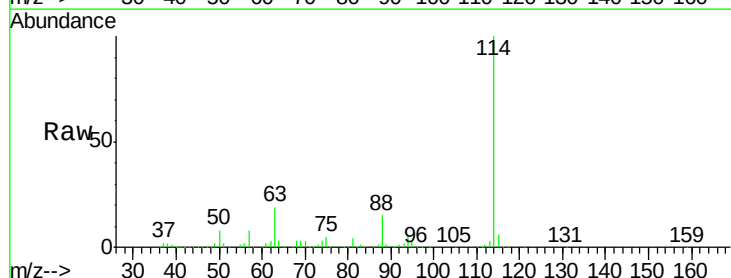
Manual Integrations
 APPROVED

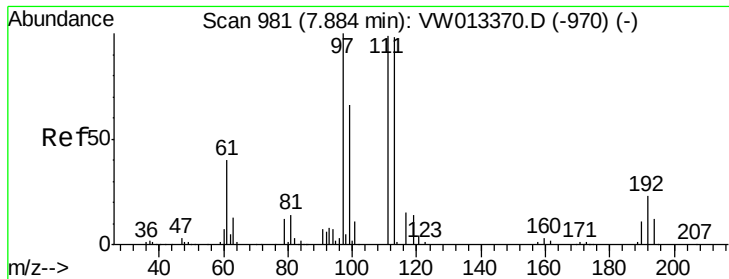
MMDadoda
 10/4/2019 12:10:23 PM



#34
 1,4-Difluorobenzene
 Concen: 50.000 ug/l
 RT: 8.84 min Scan# 1138
 Delta R.T. -0.00 min
 Lab File: VW013418.D
 Acq: 03 Oct 2019 14:53

Tgt Ion	Ratio	Resp	Lower	Upper
114	100	251148		
63	18.9	0.0	41.4	
88	15.3	0.0	32.0	





#35

Dibromofluoromethane

Concen: 52.861 ug/l

RT: 7.88 min Scan# 981

Delta R.T. -0.00 min

Lab File: VW013418.D

Acq: 03 Oct 2019 14:53

Instrument :

MSVOA_W

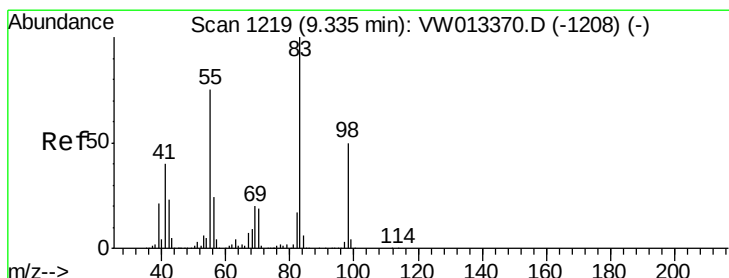
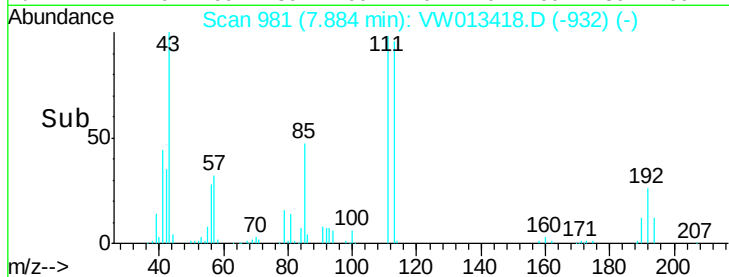
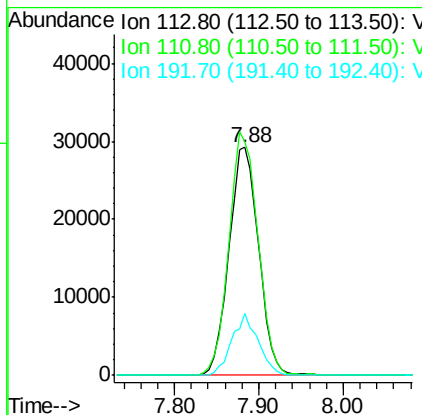
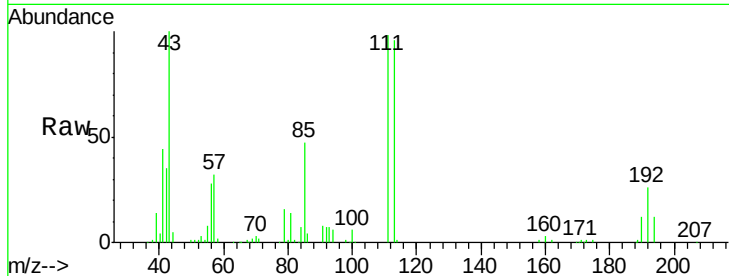
ClientSampled :

30459-61

Tot Ion:	113	Resp:	69662
Ion	Ratio	Lower	Upper
113	100		
111	105.2	81.9	122.9
192	24.0	19.1	28.7

Manual Integrations
APPROVED

MMDadoda
10/4/2019 12:10:23 PM



#39

Methylcyclohexane

Concen: 12.960 ug/l

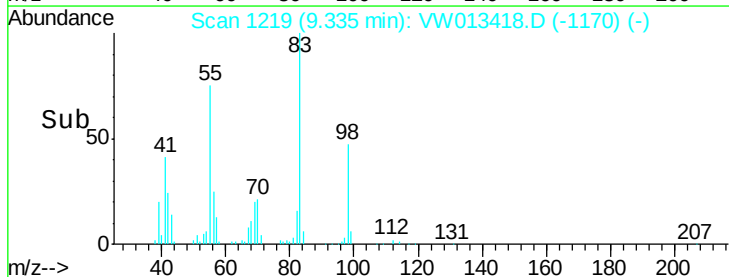
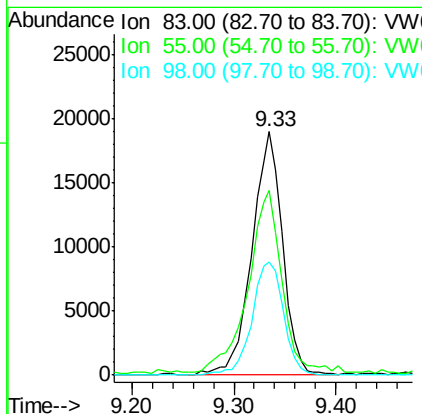
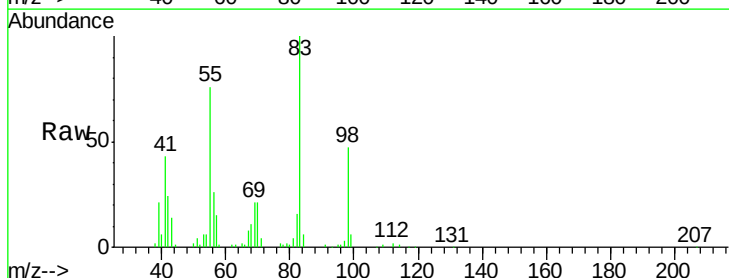
RT: 9.33 min Scan# 1219

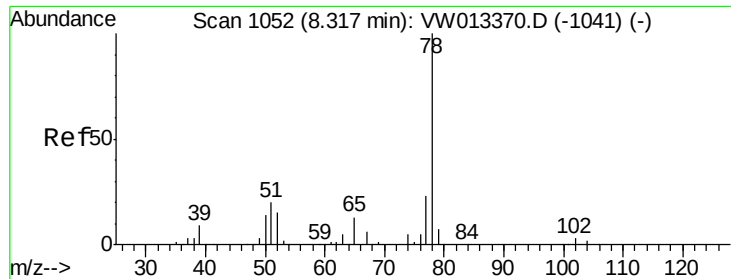
Delta R.T. -0.00 min

Lab File: VW013418.D

Acq: 03 Oct 2019 14:53

Tgt Ion:	83	Resp:	39814
Ion	Ratio	Lower	Upper
83	100		
55	75.0	60.4	90.6
98	46.7	40.0	60.0





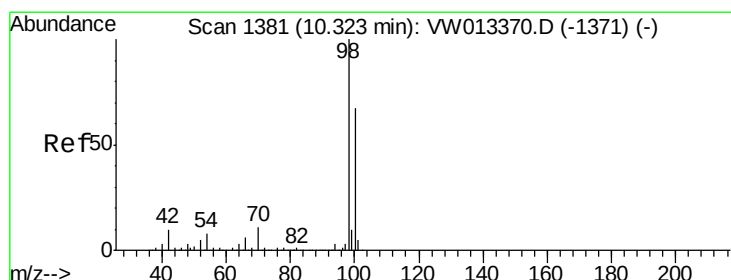
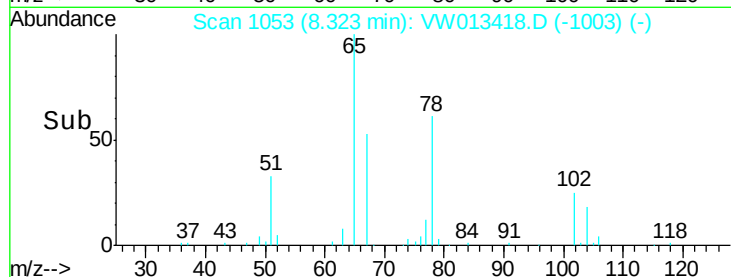
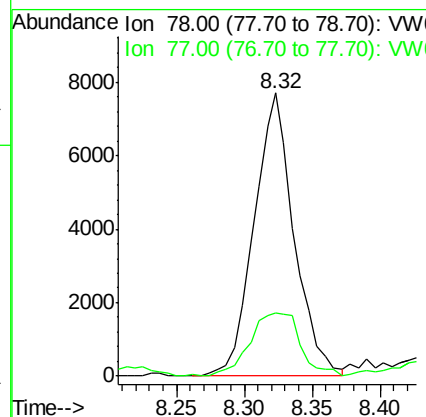
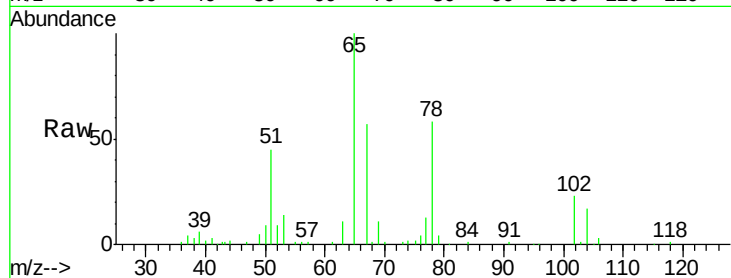
#40
Benzene
Concen: 2.400 ug/l
RT: 8.32 min Scan# 1053
Delta R.T. 0.01 min
Lab File: VW013418.D
Acq: 03 Oct 2019 14:53

Instrument :
MSVOA_W
ClientSampled :
30459-61

Tot Ion: 78 Resp: 15848
Ion Ratio Lower Upper
78 100
77 22.2 19.1 28.7

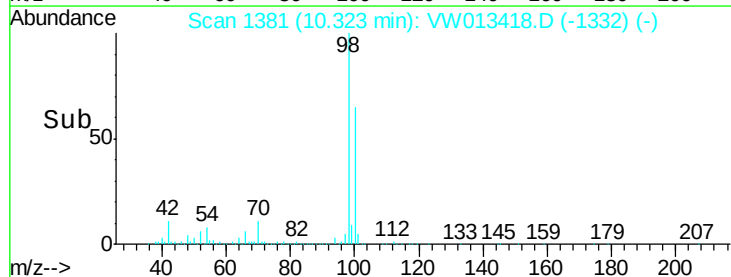
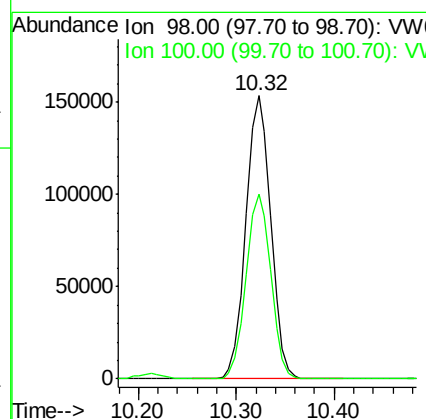
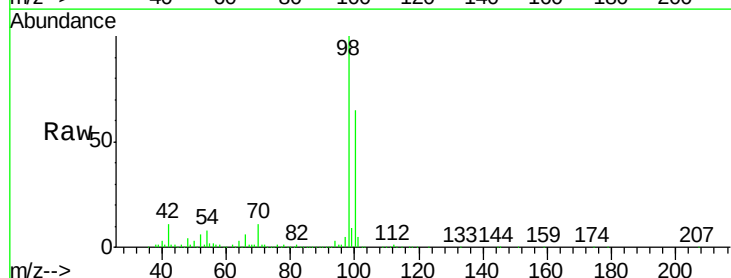
Manual Integrations
APPROVED

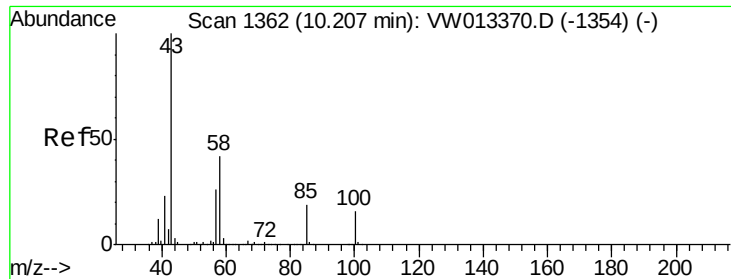
MMDadoda
10/4/2019 12:10:23 PM



#50
Toluene-d8
Concen: 49.359 ug/l
RT: 10.32 min Scan# 1381
Delta R.T. -0.00 min
Lab File: VW013418.D
Acq: 03 Oct 2019 14:53

Tgt Ion: 98 Resp: 269935
Ion Ratio Lower Upper
98 100
100 65.2 52.9 79.3





#51

4-Methyl-2-Pentanone

Concen: 34.450 ug/l

RT: 10.21 min Scan# 1363

Delta R.T. 0.01 min

Lab File: VW013418.D

Acq: 03 Oct 2019 14:53

Instrument :

MSVOA_W

ClientSampleId :

30459-61

Tot Ion: 43 Resp: 35071

Ion Ratio Lower Upper

43 100

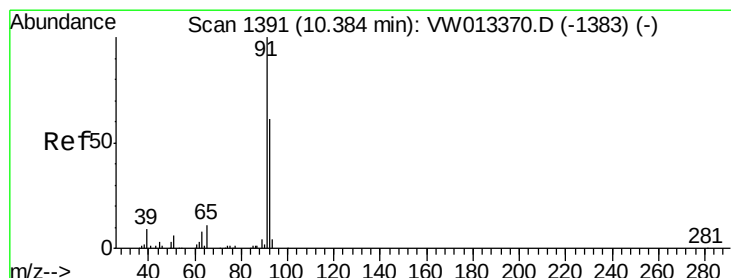
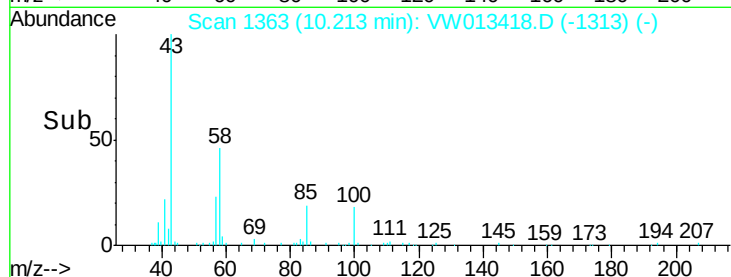
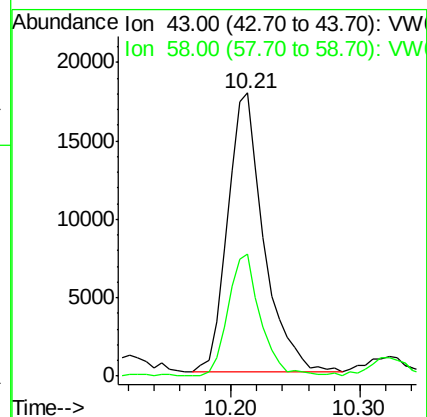
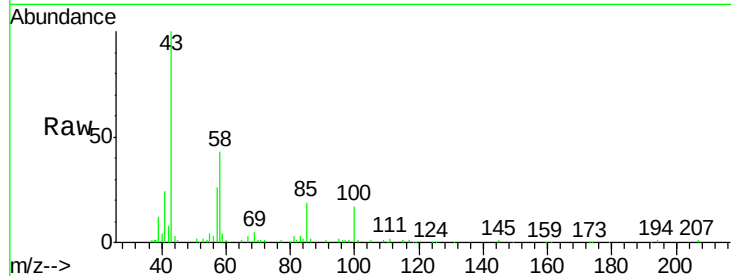
58 39.1 31.7 47.5

Manual Integrations

APPROVED

MMDadoda

10/4/2019 12:10:23 PM



#52

Toluene

Concen: 359.402 ug/l

RT: 10.38 min Scan# 1391

Delta R.T. -0.00 min

Lab File: VW013418.D

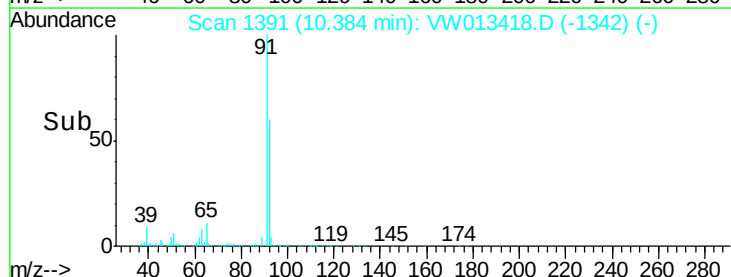
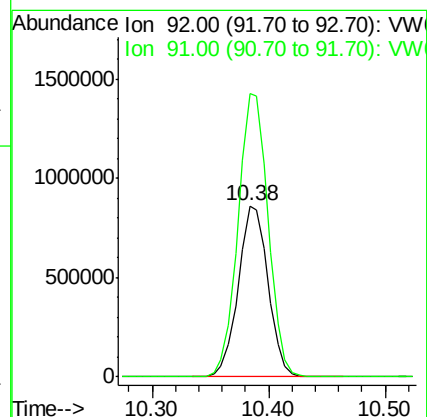
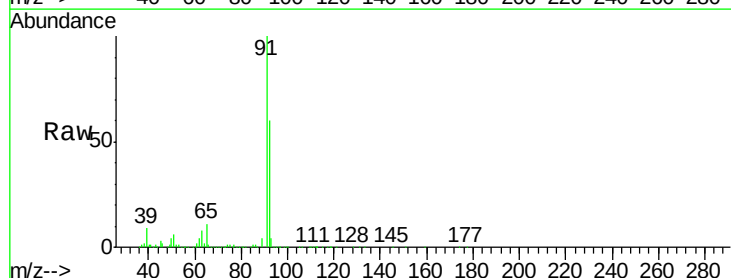
Acq: 03 Oct 2019 14:53

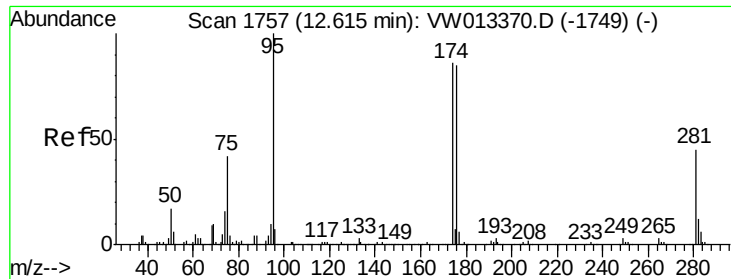
Tgt Ion: 92 Resp: 1530746

Ion Ratio Lower Upper

92 100

91 167.9 135.7 203.5





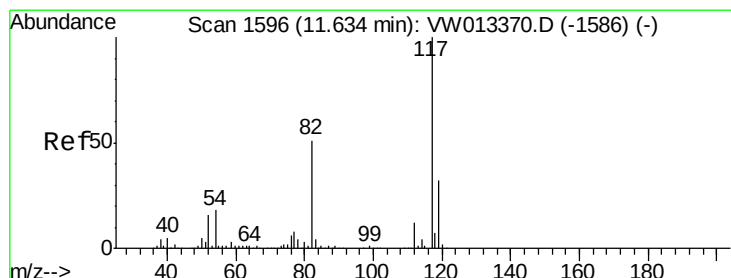
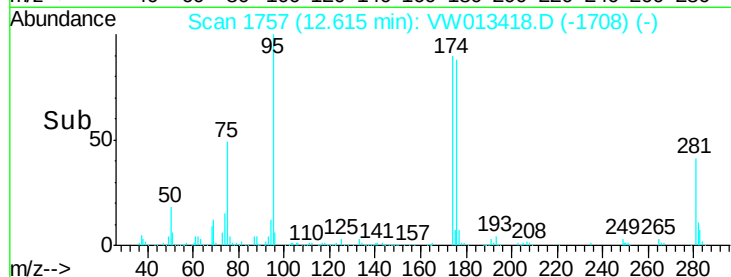
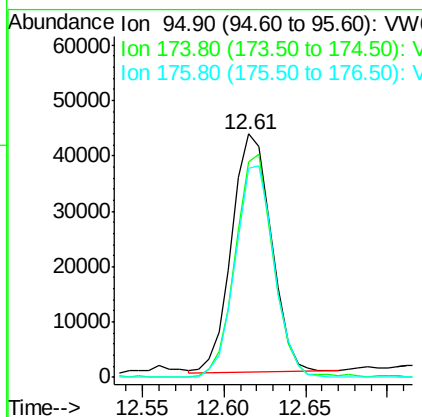
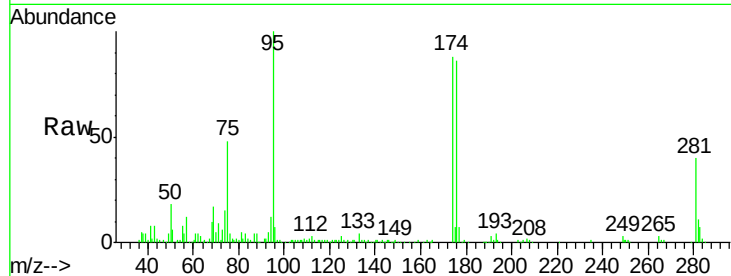
#62
4-Bromofluorobenzene
Concen: 39.971 ug/l
RT: 12.61 min Scan# 1757
Delta R.T. -0.00 min
Lab File: VW013418.D
Acq: 03 Oct 2019 14:53

Instrument :
MSVOA_W
ClientSampled :
30459-61

Tot Ion	Ratio	Resp	Lower	Upper
95	100	72996		
174	89.1	0.0	178.4	
176	86.8	0.0	172.2	

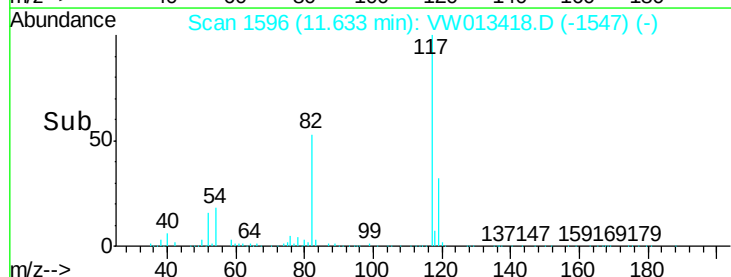
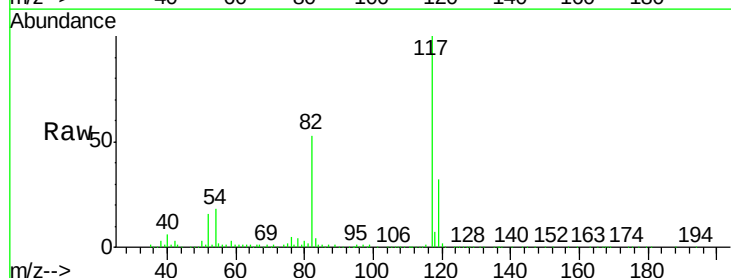
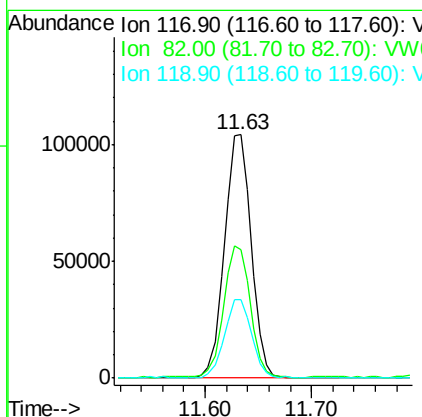
Manual Integrations
APPROVED

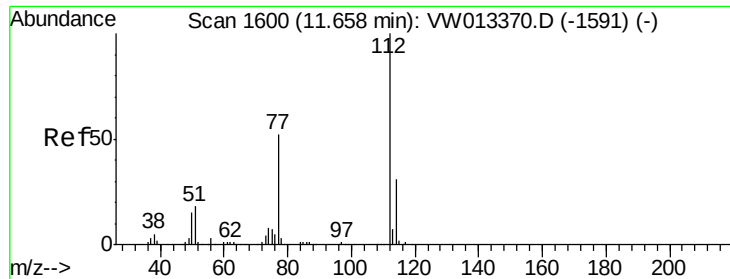
MMDadoda
10/4/2019 12:10:23 PM



#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.63 min Scan# 1596
Delta R.T. -0.00 min
Lab File: VW013418.D
Acq: 03 Oct 2019 14:53

Tgt Ion	Ratio	Resp	Lower	Upper
117	100	183221		
82	52.4	45.9	68.9	
119	32.1	26.2	39.2	





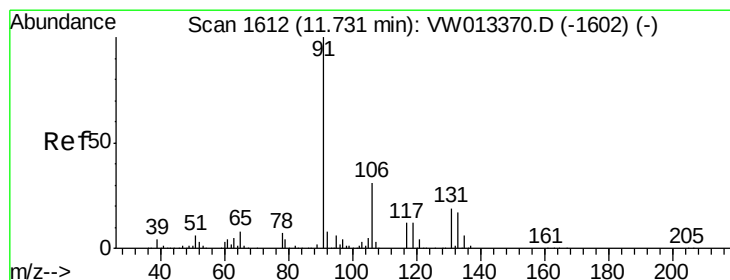
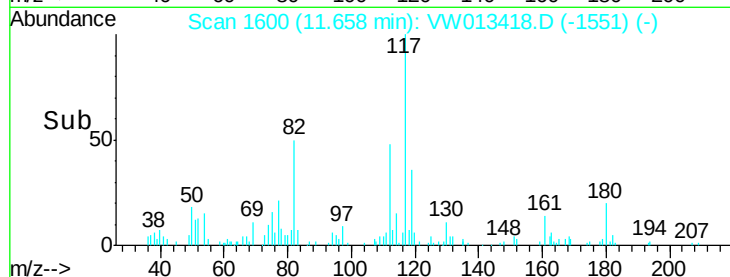
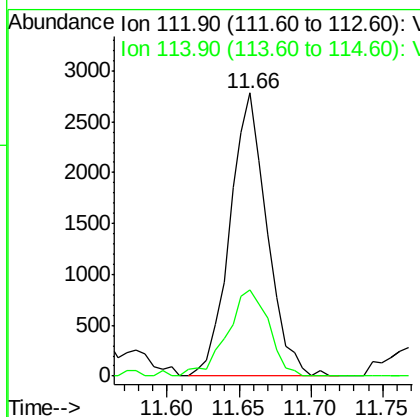
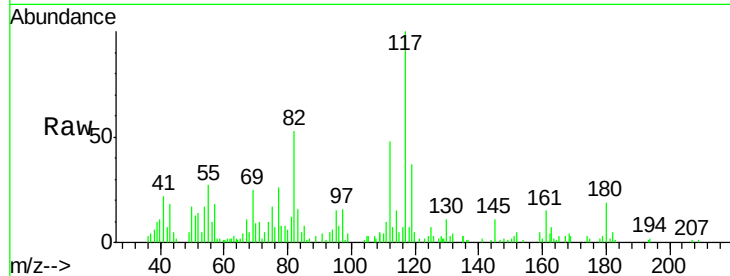
#65
Chlorobenzene
Concen: 1.328 ug/l
RT: 11.66 min Scan# 1600
Delta R.T. -0.00 min
Lab File: VW013418.D
Acq: 03 Oct 2019 14:53

Instrument :
MSVOA_W
ClientSampleId :
30459-61

Tot Ion: 112 Resp: 4984
Ion Ratio Lower Upper
112 100
114 30.3 26.5 39.7

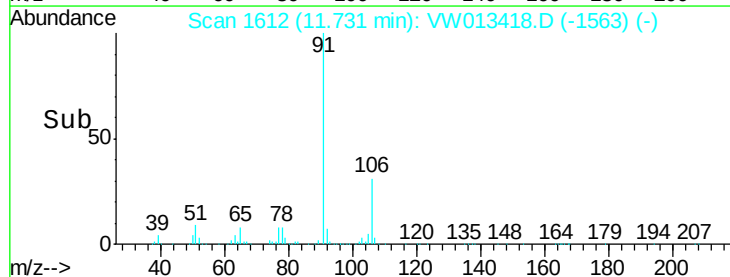
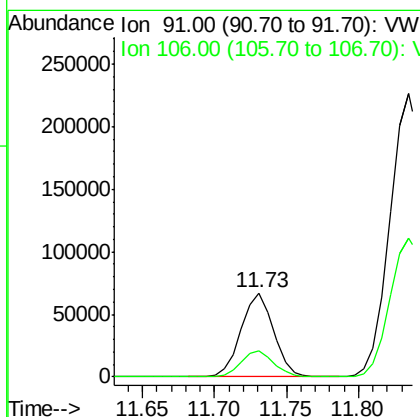
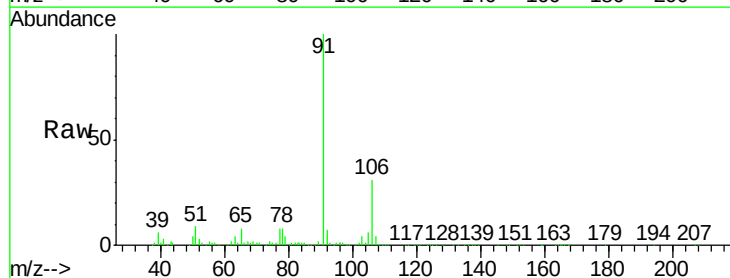
Manual Integrations
APPROVED

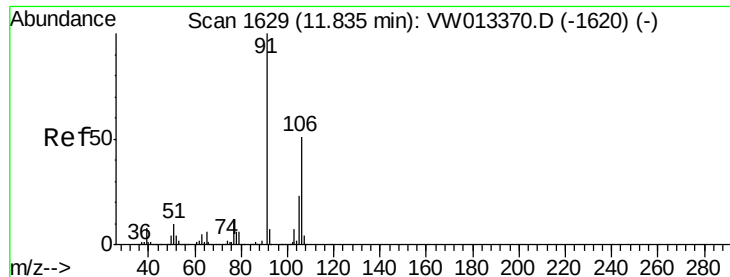
MMDadoda
10/4/2019 12:10:23 PM



#67
Ethyl Benzene
Concen: 15.441 ug/l
RT: 11.73 min Scan# 1612
Delta R.T. -0.00 min
Lab File: VW013418.D
Acq: 03 Oct 2019 14:53

Tgt Ion: 91 Resp: 103881
Ion Ratio Lower Upper
91 100
106 31.2 24.9 37.3





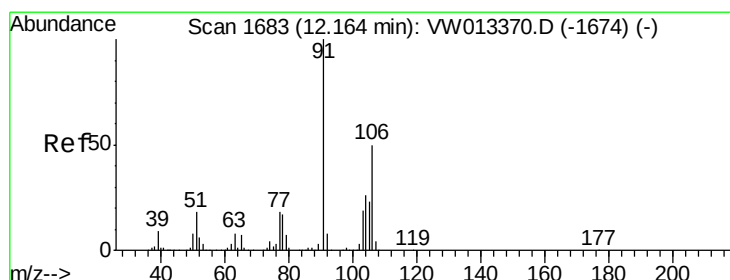
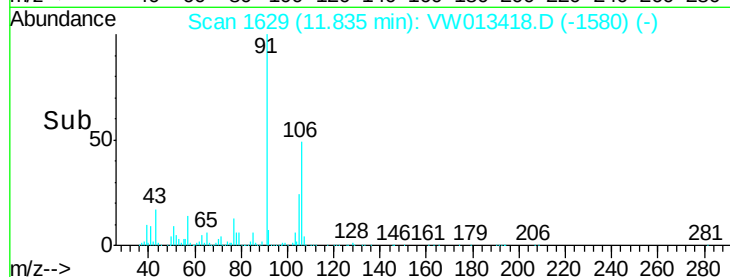
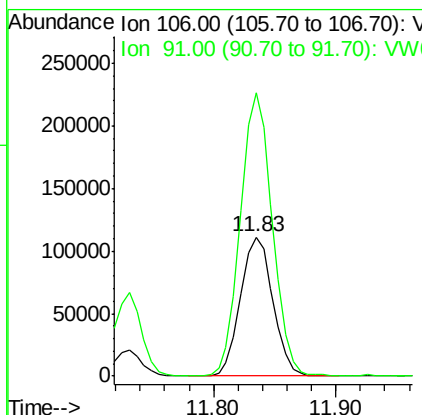
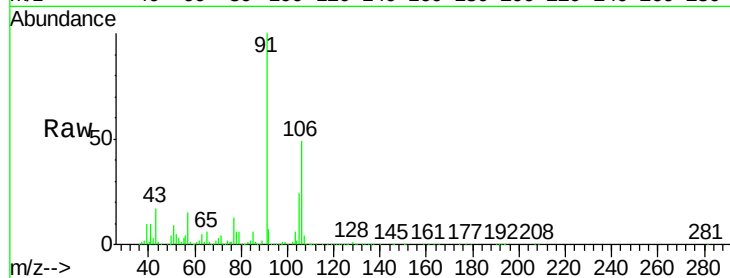
#68
m/p-Xylenes
Concen: 78.444 ug/l
RT: 11.83 min Scan# 1629
Delta R.T. -0.00 min
Lab File: VW013418.D
Acq: 03 Oct 2019 14:53

Instrument :
MSVOA_W
ClientSampled :
30459-61

Tot Ion	Ion	Ratio	Resp	Lower	Upper
106	100		203697		
91	200.2	157.9	236.9		

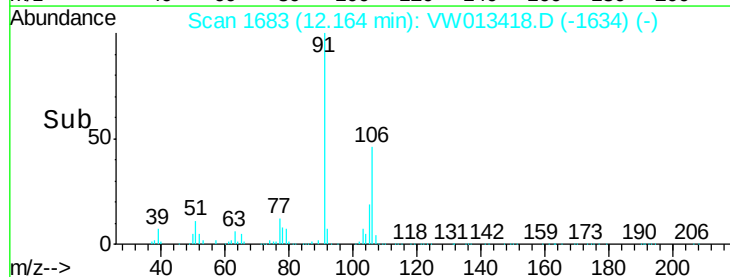
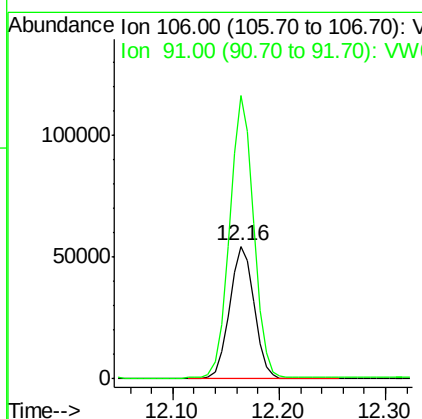
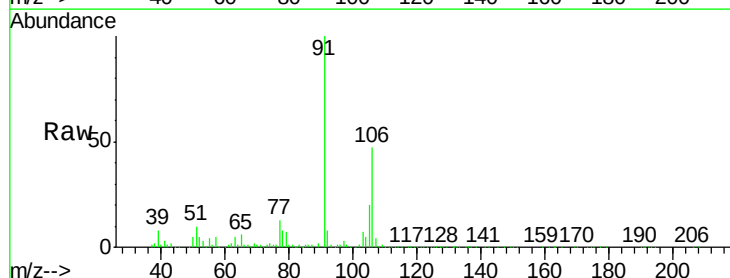
Manual Integrations
APPROVED

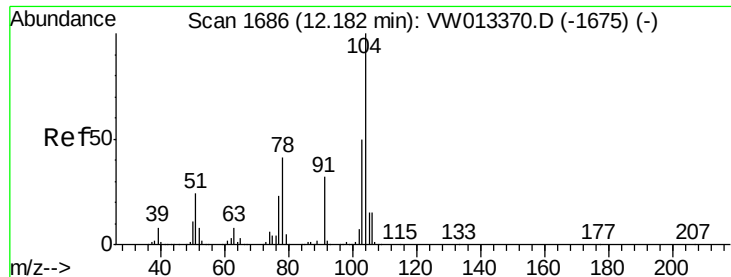
MMDadoda
10/4/2019 12:10:23 PM



#69
o-Xylene
Concen: 36.634 ug/l
RT: 12.16 min Scan# 1683
Delta R.T. -0.00 min
Lab File: VW013418.D
Acq: 03 Oct 2019 14:53

Tgt Ion	Ion	Ratio	Resp	Lower	Upper
106	100		87954		
91	210.3	106.5	319.5		





#70

Stvrene

Concen: 4.981 ug/l

RT: 12.18 min Scan# 1685

Delta R.T. -0.01 min

Lab File: VW013418.D

Acq: 03 Oct 2019 14:53

Instrument :

MSVOA_W

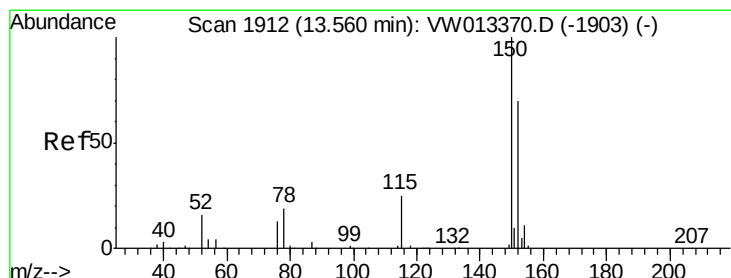
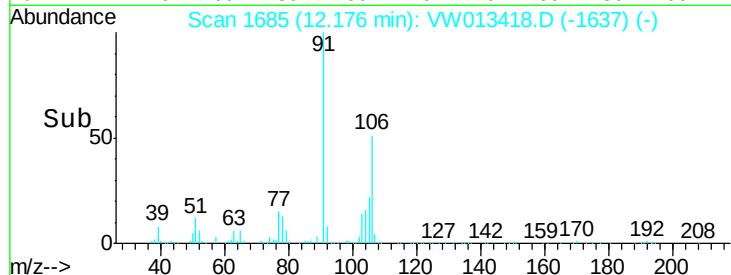
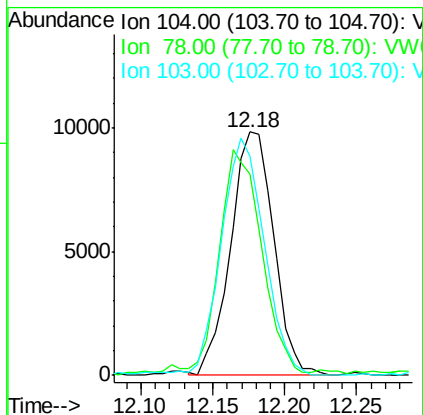
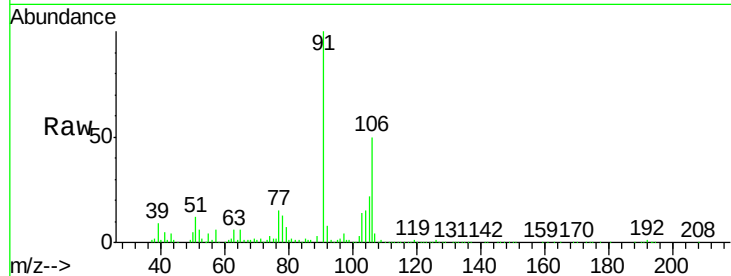
ClientSampled :

30459-61

Tot Ion:	104	Resp:	20442
Ion Ratio		Lower	Upper
104	100		
78	94.7	38.4	57.6#
103	98.5	43.3	64.9#

Manual Integrations
APPROVED

MMDadoda
10/4/2019 12:10:23 PM



#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

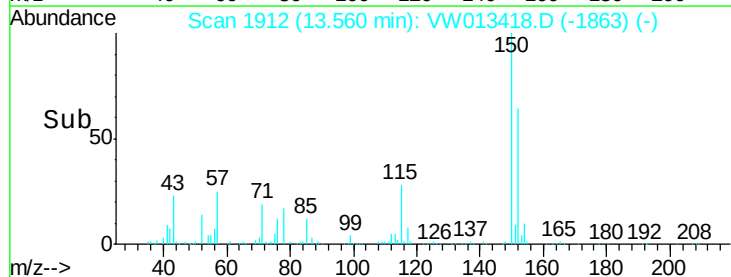
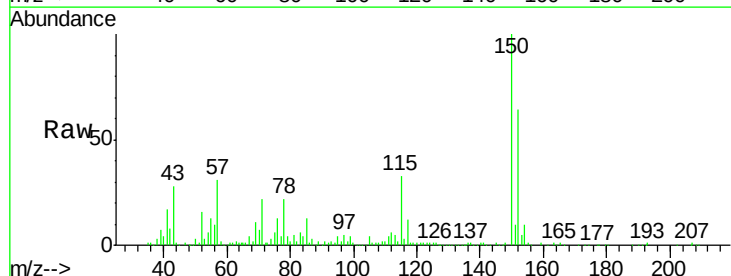
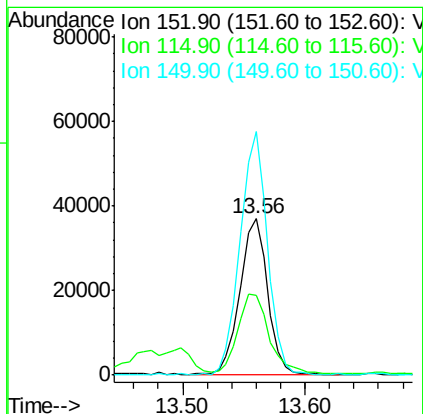
RT: 13.56 min Scan# 1912

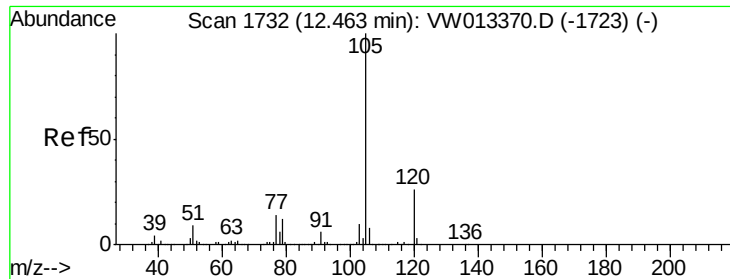
Delta R.T. -0.00 min

Lab File: VW013418.D

Acq: 03 Oct 2019 14:53

Tgt Ion:	152	Resp:	57723
Ion Ratio		Lower	Upper
152	100		
115	57.6	27.3	81.9
150	153.7	0.0	349.0





#73

Isopropylbenzene

Concen: 5.363 ug/l

RT: 12.46 min Scan# 1732

Delta R.T. -0.00 min

Lab File: VW013418.D

Acq: 03 Oct 2019 14:53

Instrument :

MSVOA_W

ClientSampled :

30459-61

Tot Ion:105 Resp: 22644

Ion Ratio Lower Upper

105 100

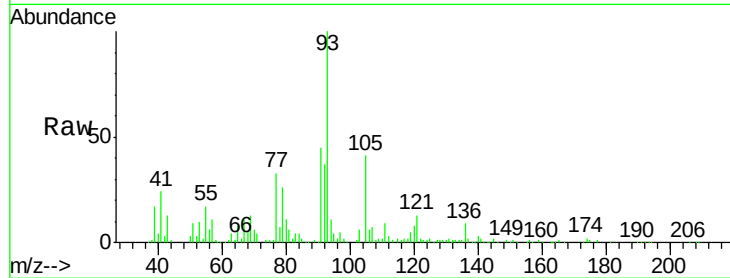
120 19.4 13.4 40.1

Manual Integrations

APPROVED

MMDadoda

10/4/2019 12:10:23 PM



Abundance Ion 105.00 (104.70 to 105.70): V

Ion 120.00 (119.70 to 120.70): V

12.46

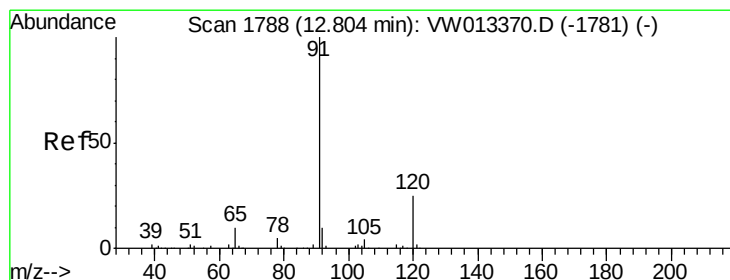
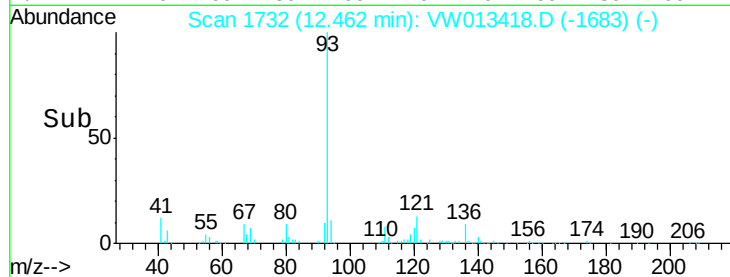
15000

10000

5000

0

Time-->



#78

n-propylbenzene

Concen: 6.901 ug/l

RT: 12.80 min Scan# 1788

Delta R.T. -0.00 min

Lab File: VW013418.D

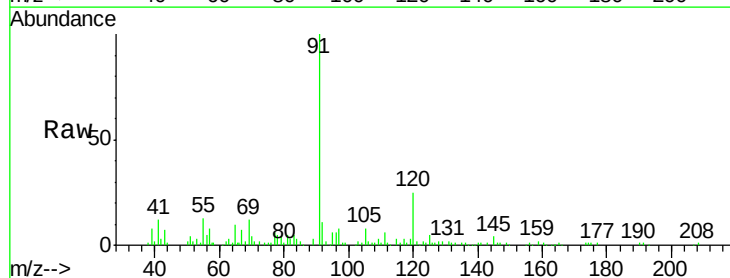
Acq: 03 Oct 2019 14:53

Tgt Ion: 91 Resp: 33515

Ion Ratio Lower Upper

91 100

120 25.0 11.7 35.1



Abundance Ion 91.00 (90.70 to 91.70): VW

Ion 120.00 (119.70 to 120.70): V

12.80

25000

20000

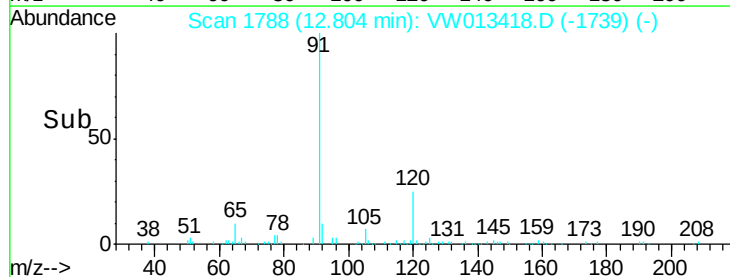
15000

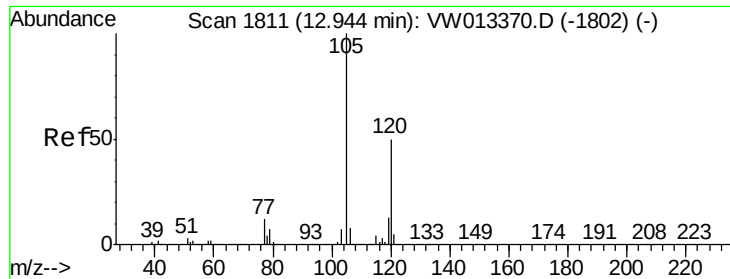
10000

5000

0

Time-->





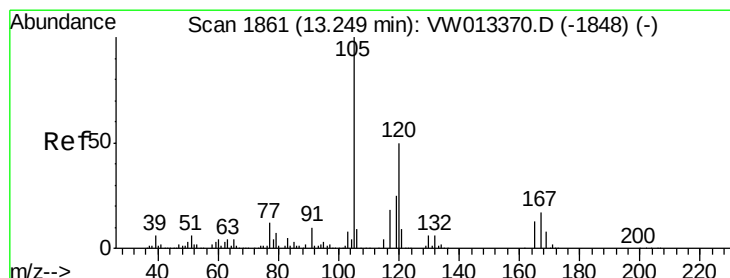
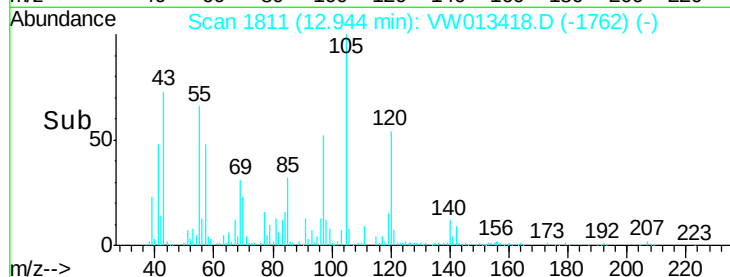
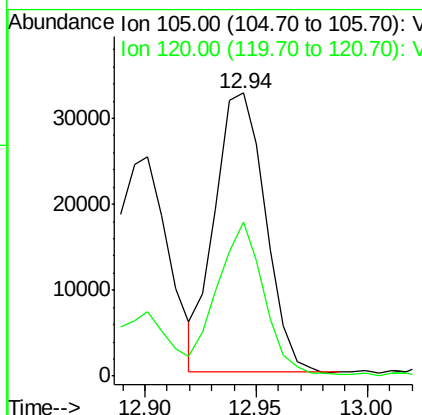
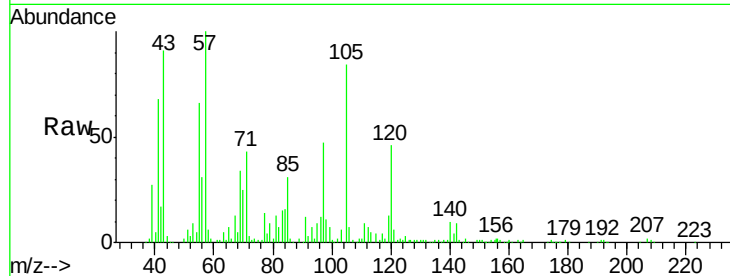
#80
 1,3,5-Trimethylbenzene
 Concen: 14.552 ug/l
 RT: 12.94 min Scan# 1811
 Delta R.T. -0.00 min
 Lab File: VW013418.D
 Acq: 03 Oct 2019 14:53

Instrument :
 MSVOA_W
 ClientSampled :
 30459-61

Tot Ion:105 Resp: 51040
 Ion Ratio Lower Upper
 105 100
 120 50.1 24.9 74.8

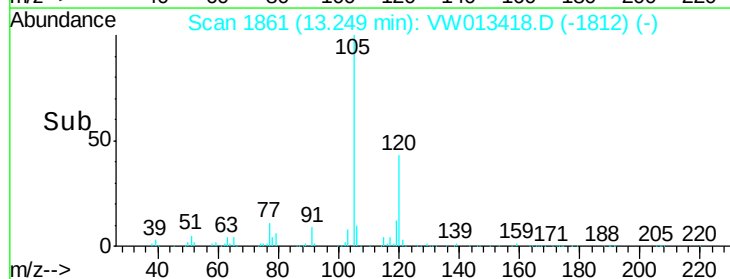
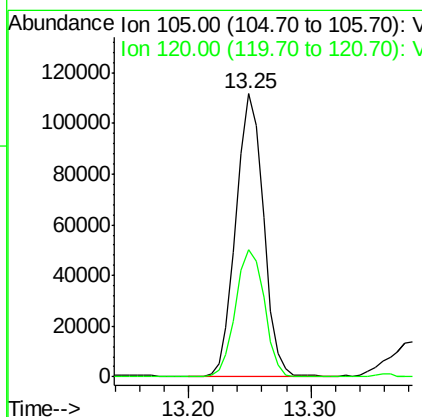
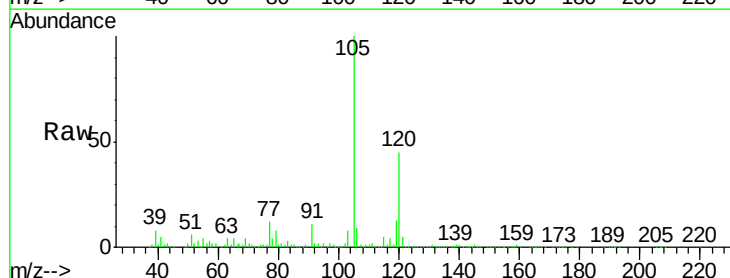
Manual Integrations
 APPROVED

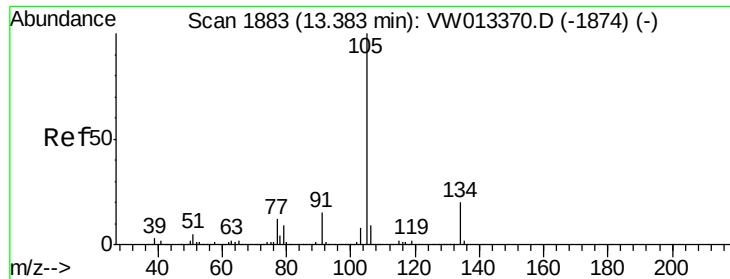
MMDadoda
 10/4/2019 12:10:23 PM



#84
 1,2,4-Trimethylbenzene
 Concen: 49.706 ug/l
 RT: 13.25 min Scan# 1861
 Delta R.T. -0.00 min
 Lab File: VW013418.D
 Acq: 03 Oct 2019 14:53

Tgt Ion:105 Resp: 173315
 Ion Ratio Lower Upper
 105 100
 120 46.8 23.4 70.3





#85

sec-Butylbenzene

Concen: 6.543 ug/l

RT: 13.38 min Scan# 1883

Delta R.T. -0.00 min

Lab File: VW013418.D

Acq: 03 Oct 2019 14:53

Instrument :

MSVOA_W

ClientSampled :

30459-61

Tot Ion:105 Resp: 27635

Ion Ratio Lower Upper

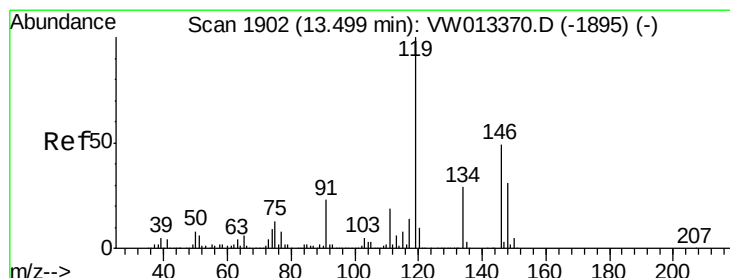
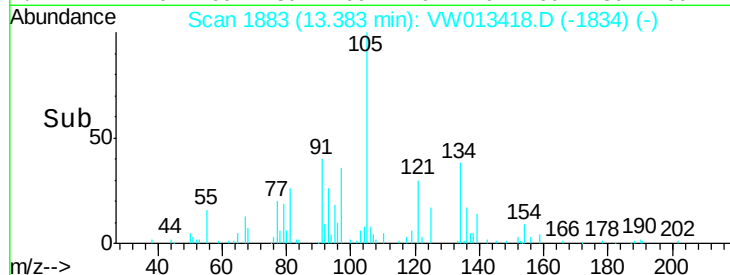
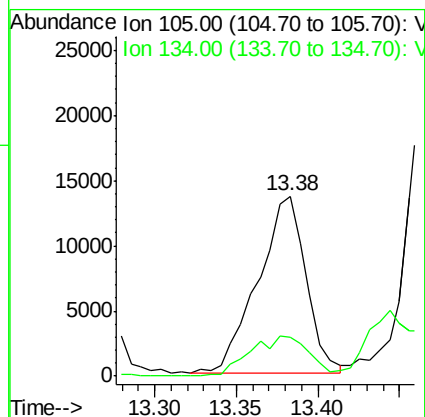
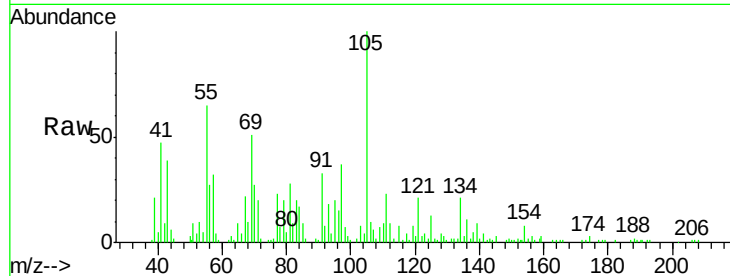
105 100

134 27.5 10.3 30.8

Manual Integrations
APPROVED

MMDadoda

10/4/2019 12:10:23 PM



#86

p-Isopropyltoluene

Concen: 34.008 ug/l m

RT: 13.50 min Scan# 1902

Delta R.T. -0.00 min

Lab File: VW013418.D

Acq: 03 Oct 2019 14:53

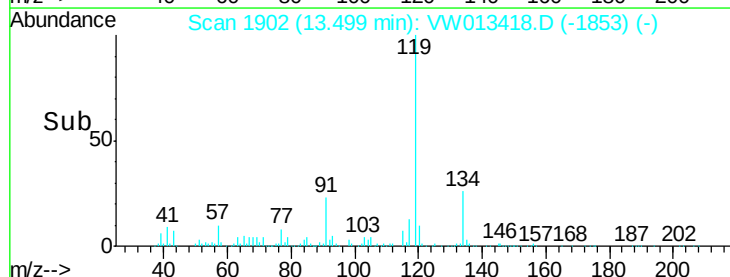
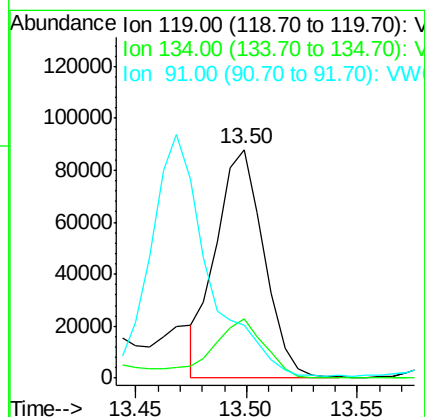
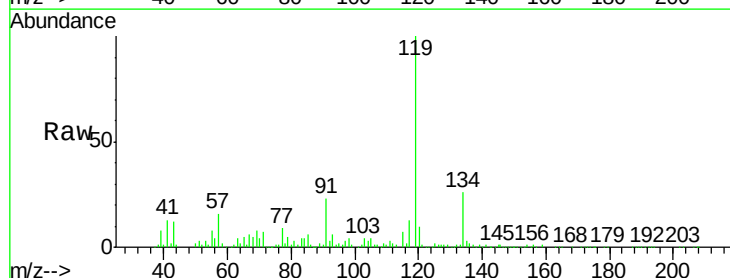
Tgt Ion:119 Resp: 133127

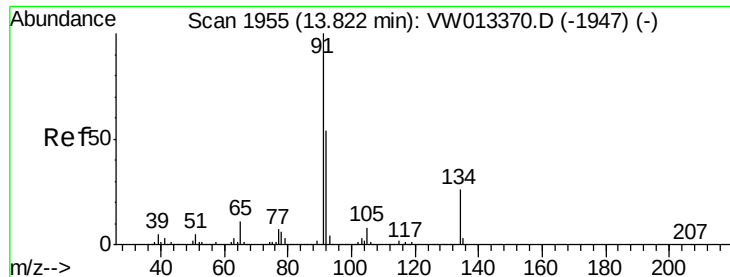
Ion Ratio Lower Upper

119 100

134 28.2 13.3 39.8

91 0.0 10.8 32.4#





#89

n-Butylbenzene

Concen: 6.906 ug/l m

RT: 13.82 min Scan# 1955

Delta R.T. -0.00 min

Lab File: VW013418.D

Acq: 03 Oct 2019 14:53

Instrument :

MSVOA_W

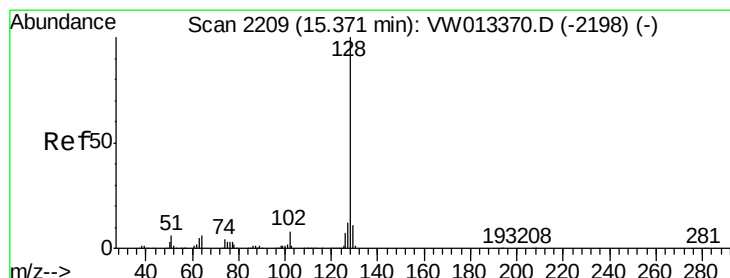
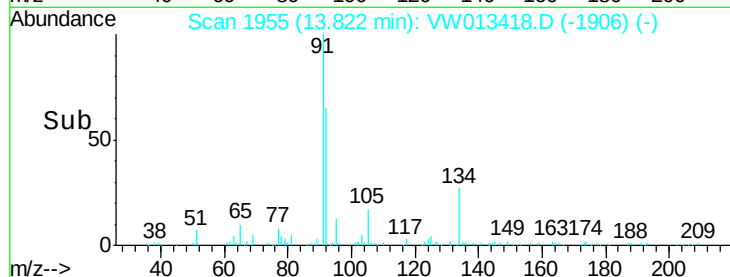
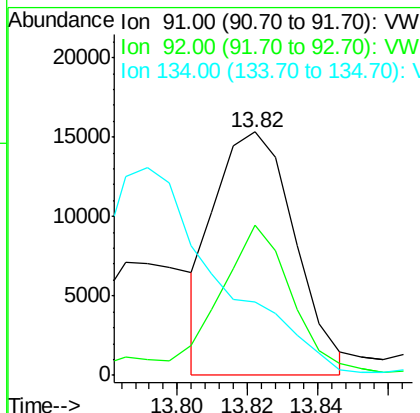
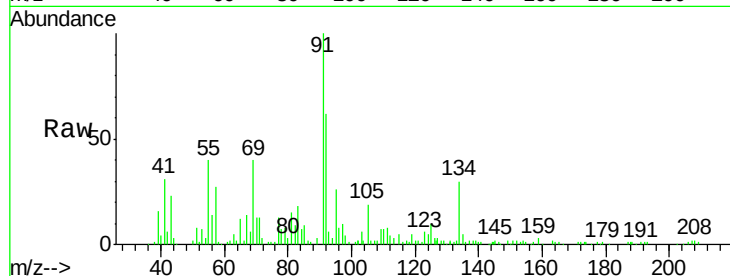
ClientSampled :

30459-61

Tot Ion	Ion	Ratio	Resp	Lower	Upper
91	100		24372		
92	48.0		27.6	82.8	
134	35.8		13.7	41.1	

Manual Integrations
APPROVED

MMDadoda
10/4/2019 12:10:23 PM



#95

Naphthalene

Concen: 11.520 ug/l

RT: 15.36 min Scan# 2208

Delta R.T. -0.01 min

Lab File: VW013418.D

Acq: 03 Oct 2019 14:53

Tgt Ion	Ion	Ratio	Resp	Lower	Upper
128	100		23515		
127	21.5		10.6	15.8#	
129	11.4		8.7	13.1	

