

Data Path : Z:\VOASRV\HPCHEM1\MSVOA X\DATA\VX041020\
 Data File : VX015620.D
 Acq On : 10 Apr 2020 14:48
 Operator : JC/SP
 Sample : L2210-01
 Misc : 5.0mL/MSVOA X/WATER
 ALS Vial : 11 Sample Multiplier: 1

Instrument :
 MSVOA_X
 ClientSampleId :
 400408742.3-VOA

Quant Time: Apr 11 00:21:27 2020
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA X\METHOD\624X032520W.M
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
 QLast Update : Thu Mar 26 02:31:53 2020
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	4.98	128	185159	30.00	ug/l	0.00
28) 1,4-Difluorobenzene	6.84	114	1031301	30.00	ug/l	0.00
57) Chlorobenzene-d5	10.10	117	943165	30.00	ug/l	0.00

System Monitoring Compounds

27) 1,2-Dichloroethane-d4	6.03	65	451139	31.18	ug/l	0.00
Spiked Amount	30.000	Range	50 - 169	Recovery	=	103.93%
60) 4-Bromofluorobenzene	11.12	95	488002	30.23	ug/l	0.00
Spiked Amount	30.000	Range	56 - 143	Recovery	=	100.77%
63) Toluene-d8	8.70	98	1201078	29.97	ug/l	0.00
Spiked Amount	30.000	Range	66 - 137	Recovery	=	99.90%

Target Compounds

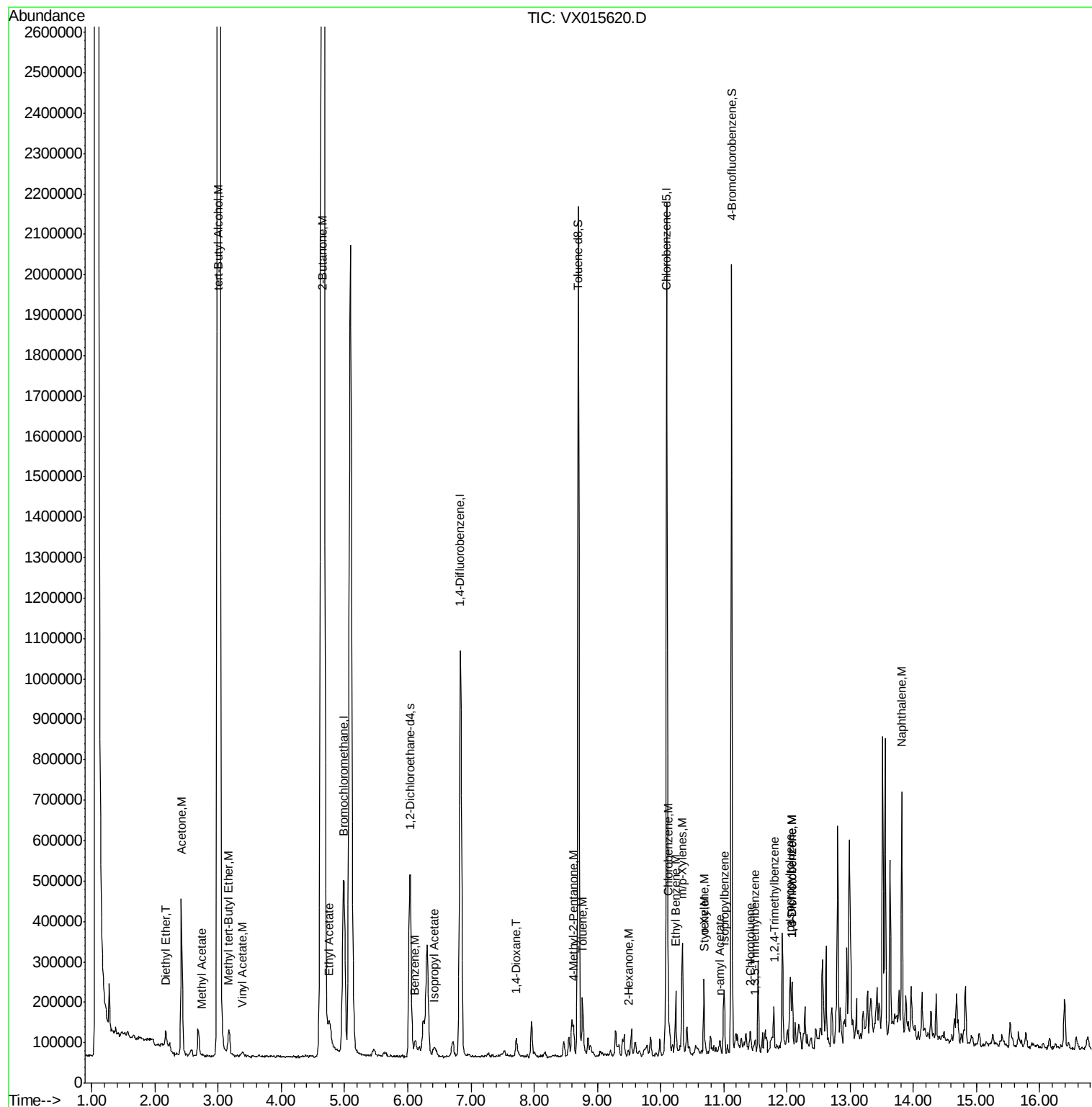
					Ovalue
8) Diethyl Ether	2.17	74	12262	2.124	ug/l 98
12) Methyl Acetate	2.75	43	4053	0.275	ug/l # 79
15) Acetone	2.42	58	106274	66.173	ug/l 87
23) tert-Butyl Alcohol	3.01	59	16773467	5399.207	ug/l 100
24) Methyl tert-Butyl Ether	3.17	73	69328	1.852	ug/l 100
30) 2-Butanone	4.65	43	763318	82.181	ug/l # 88
34) Benzene	6.12	78	49730	1.114	ug/l # 93
42) Vinyl Acetate	3.38	43	8185	0.233	ug/l 96
43) Ethyl Acetate	4.75	43	14480	0.717	ug/l 99
44) Isopropyl Acetate	6.42	43	6664	0.205	ug/l 93
45) 1,4-Dioxane	7.71	88	33623	112.249	ug/l 96
47) n-amyl Acetate	10.93	43	15795	0.563	ug/l 92
58) 4-Methyl-2-Pentanone	8.62	43	38733	2.146	ug/l # 87
59) 2-Hexanone	9.48	43	3919	0.285	ug/l # 33
62) Toluene	8.77	91	82347	1.724	ug/l 98
64) Chlorobenzene	10.12	112	20087	0.654	ug/l 92
66) Ethyl Benzene	10.24	91	93199	1.708	ug/l 99
67) m/p-Xylenes	10.34	106	53802	2.605	ug/l 97
68) o-Xylene	10.68	106	36702	1.818	ug/l 96
69) Styrene	10.70	104	8843	0.251	ug/l # 42
70) Isopropylbenzene	11.01	105	81497	1.523	ug/l 98
75) 2-Chlorotoluene	11.42	91	8956	0.240	ug/l 86
76) 1,3,5-Trimethylbenzene	11.49	105	13697	0.298	ug/l 94
80) 1,2,4-Trimethylbenzene	11.79	105	43397	0.932	ug/l 99
82) p-Isopropyltoluene	12.05	119	27454	0.553	ug/l 94
83) 1,3-Dichlorobenzene	12.08	146	51205	1.982	ug/l 99
84) 1,4-Dichlorobenzene	12.08	146	50980	1.977	ug/l 99
91) Naphthalene	13.82	128	264522	4.499	ug/l 100

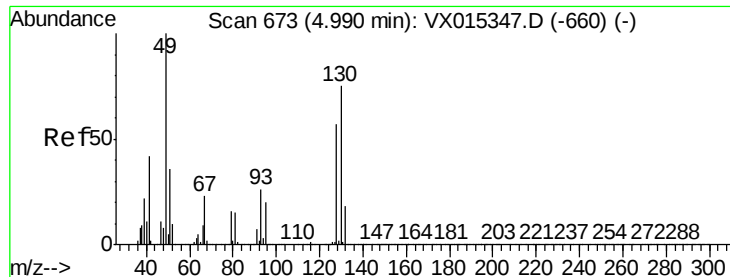
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\VOASRV\HPCHEM1\MSVOA X\DATA\VX041020\
Data File : VX015620.D
Acq On : 10 Apr 2020 14:48
Operator : JC/SP
Sample : L2210-01
Misc : 5.0mL/MSVOA X/WATER
ALS Vial : 11 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
400408742.3-VOA

Quant Time: Apr 11 00:21:27 2020
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA X\METHOD\624X032520W.M
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
QLast Update : Thu Mar 26 02:31:53 2020
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 30.000 ug/l

RT: 4.98 min Scan# 672

Delta R.T. -0.01 min

Lab File: VX015620.D

Acq: 10 Apr 2020 14:48

Instrument :

MSVOA_X

ClientSampleId :

400408742.3-VOA

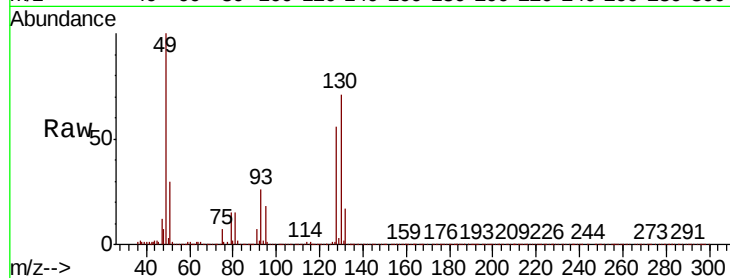
Tot Ion:128 Resp: 185159

Ion Ratio Lower Upper

128 100

49 172.1 0.0 428.0

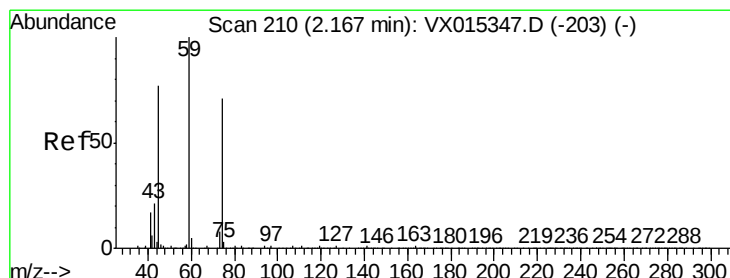
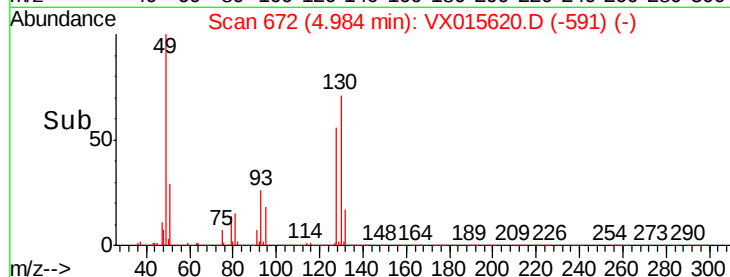
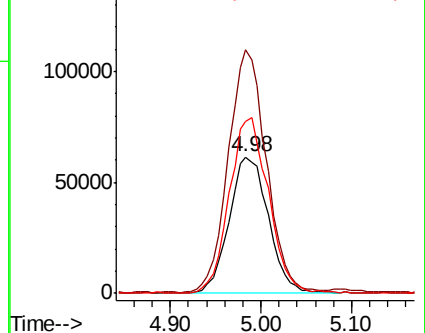
130 127.3 0.0 324.5



Abundance Ion 128.00 (127.70 to 128.70): V

Ion 49.00 (48.70 to 49.70): VX0

Ion 130.00 (129.70 to 130.70): V



#8

Diethyl Ether

Concen: 2.124 ug/l

RT: 2.17 min Scan# 210

Delta R.T. -0.00 min

Lab File: VX015620.D

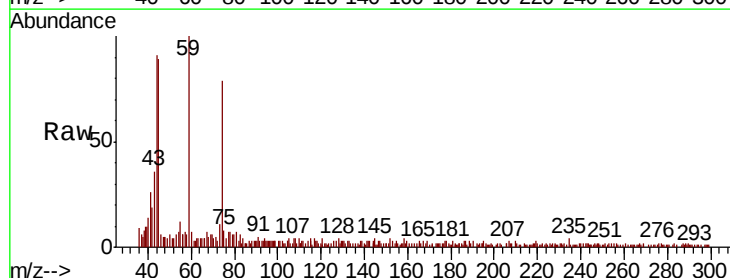
Acq: 10 Apr 2020 14:48

Tgt Ion: 74 Resp: 12262

Ion Ratio Lower Upper

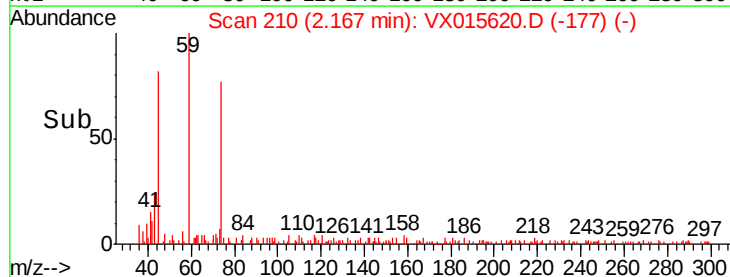
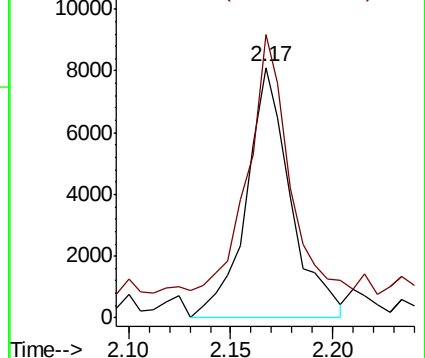
74 100

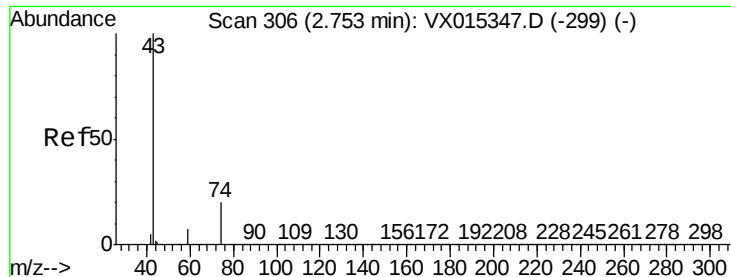
45 107.4 21.8 196.4



Abundance Ion 74.00 (73.70 to 74.70): VX0

Ion 45.00 (44.70 to 45.70): VX0





#12

Methvl Acetate

Concen: 0.275 ug/l

RT: 2.75 min Scan# 306

Delta R.T. -0.00 min

Lab File: VX015620.D

Acq: 10 Apr 2020 14:48

Instrument :

MSVOA_X

ClientSampleId :

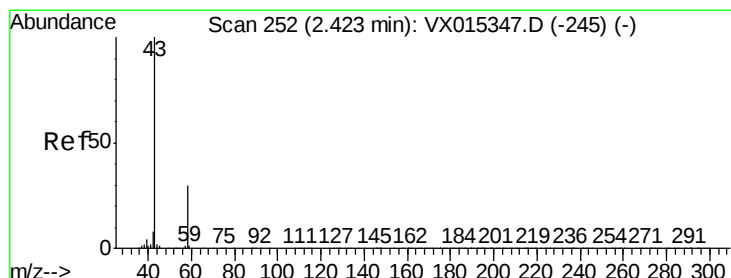
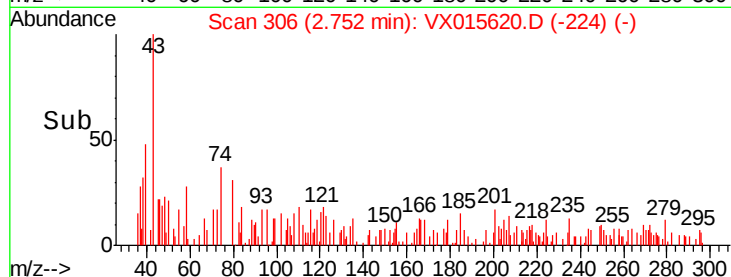
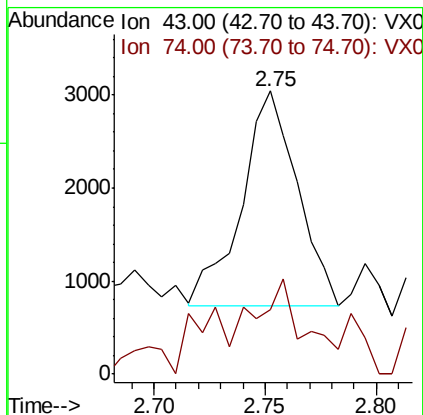
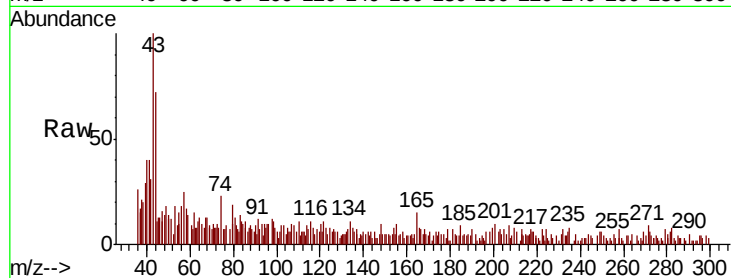
400408742.3-VOA

Tot Ion: 43 Resp: 4053

Ion Ratio Lower Upper

43 100

74 10.0 15.8 23.6#



#15

Acetone

Concen: 66.173 ug/l

RT: 2.42 min Scan# 251

Delta R.T. -0.01 min

Lab File: VX015620.D

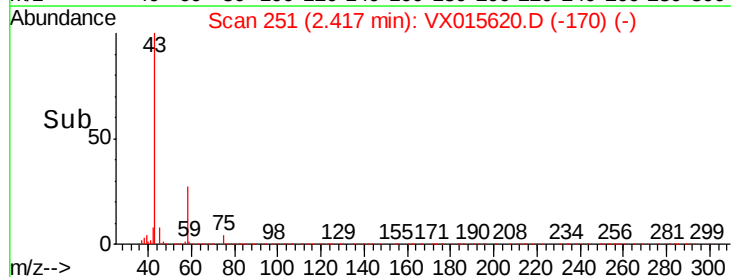
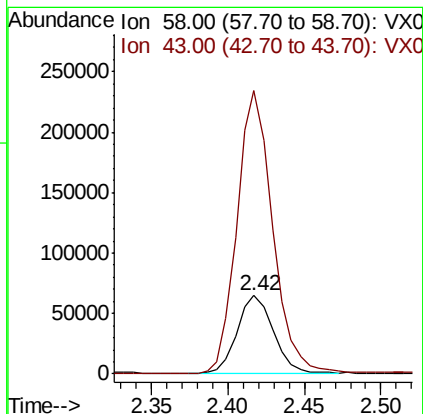
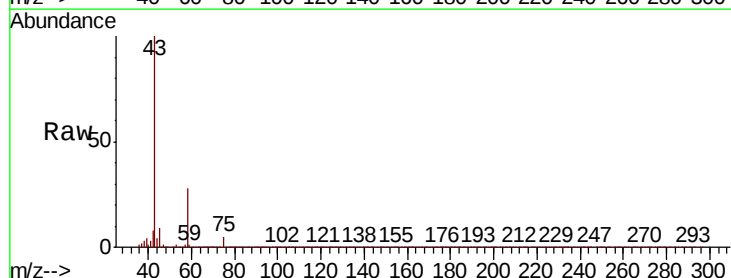
Acq: 10 Apr 2020 14:48

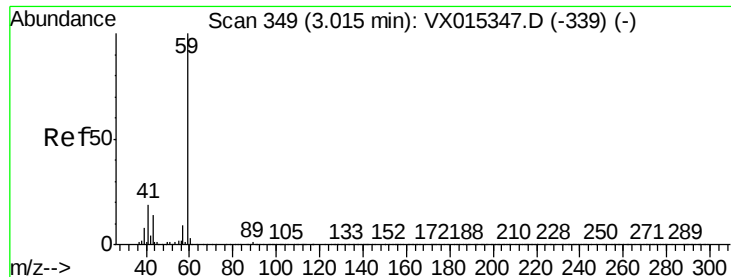
Tgt Ion: 58 Resp: 106274

Ion Ratio Lower Upper

58 100

43 362.7 267.8 401.8





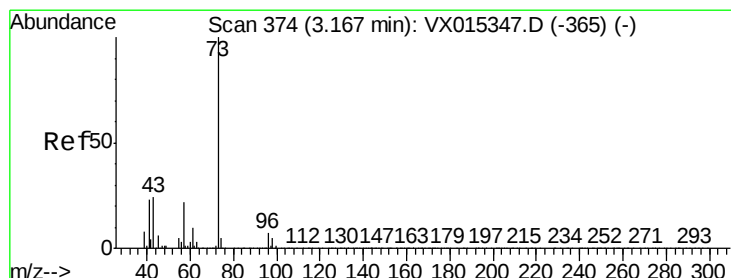
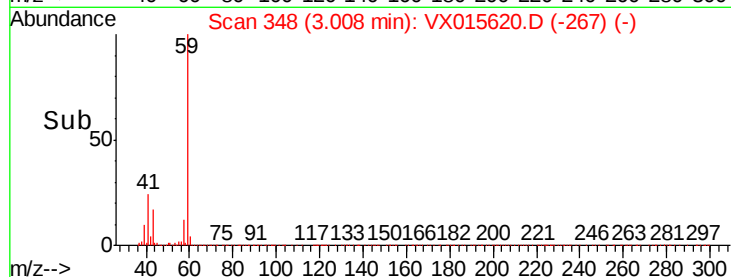
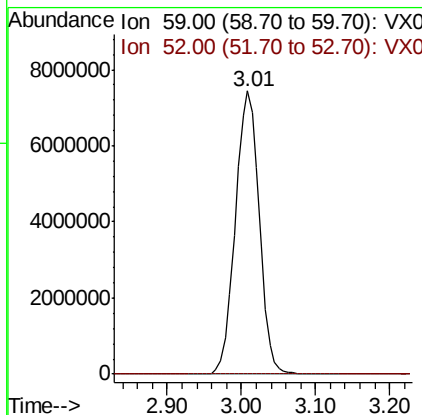
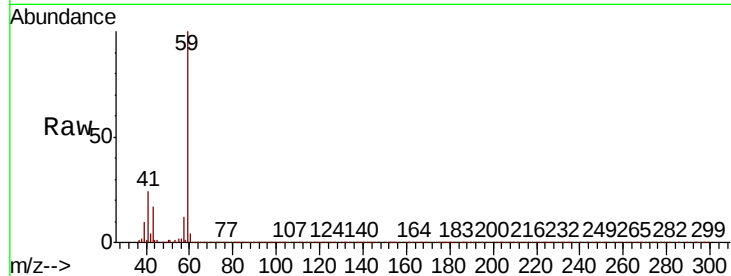
#23

tert-Butyl Alcohol
 Concen: 5399.207 ug/l
 RT: 3.01 min Scan# 348
 Delta R.T. -0.01 min
 Lab File: VX015620.D
 Acq: 10 Apr 2020 14:48

Instrument :
 MSVOA_X
 ClientSampleId :
 400408742.3-VOA

Tot Ion: 59 Resp:16773467

Ion	Ratio	Lower	Upper
59	100		
52	0.2	0.2	0.2

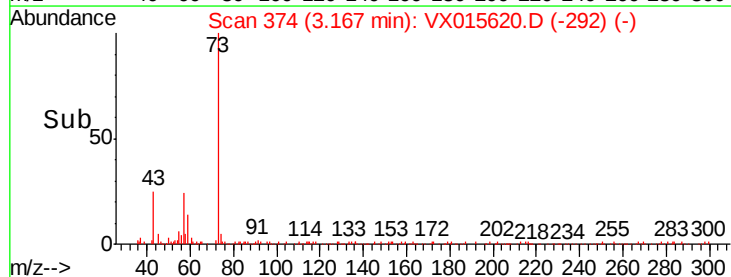
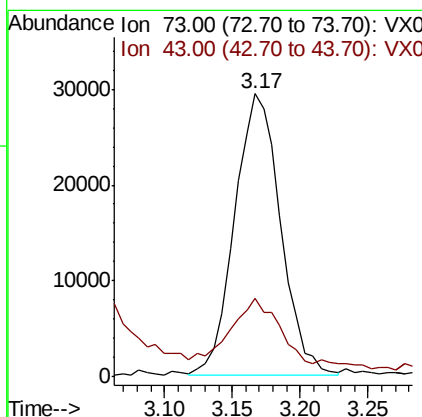
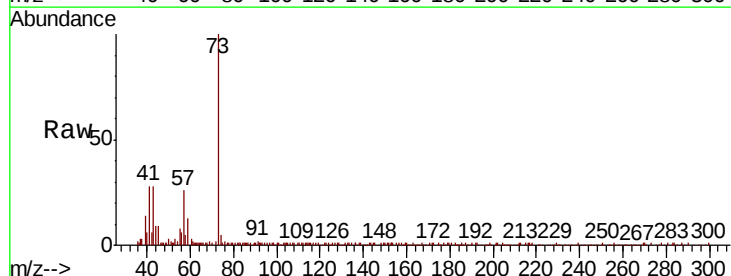


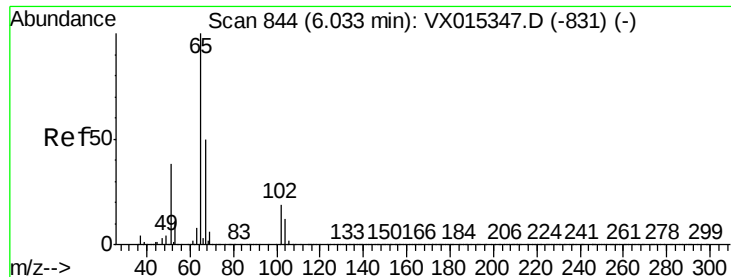
#24

Methyl tert-Butyl Ether
 Concen: 1.852 ug/l
 RT: 3.17 min Scan# 374
 Delta R.T. -0.00 min
 Lab File: VX015620.D
 Acq: 10 Apr 2020 14:48

Tgt Ion: 73 Resp: 69328

Ion	Ratio	Lower	Upper
73	100		
43	24.2	19.2	28.8





#27

1,2-Dichloroethane-d4

Concen: 31.180 ug/l

RT: 6.03 min Scan# 844

Delta R.T. -0.00 min

Lab File: VX015620.D

Acq: 10 Apr 2020 14:48

Instrument :

MSVOA_X

ClientSampleId :

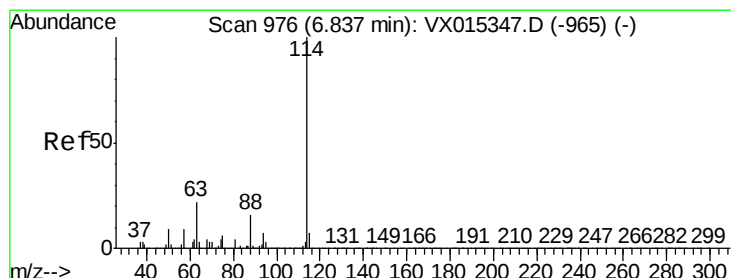
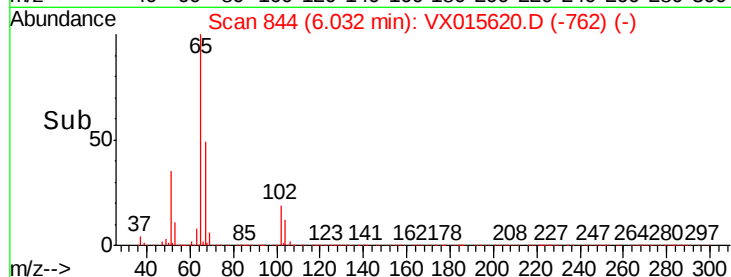
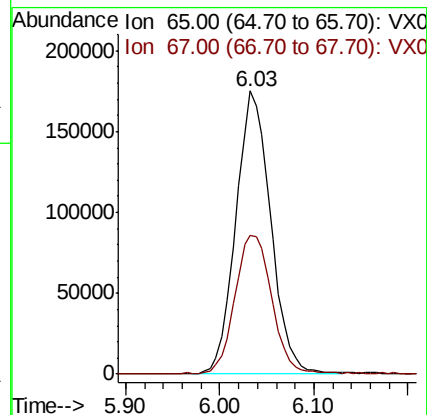
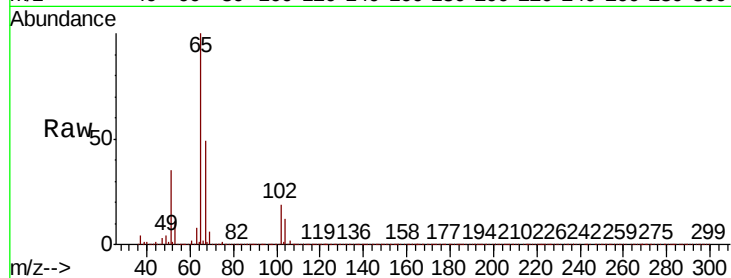
400408742.3-VOA

Tot Ion: 65 Resp: 451139

Ion Ratio Lower Upper

65 100

67 51.8 40.9 61.3



#28

1,4-Difluorobenzene

Concen: 30.000 ug/l

RT: 6.84 min Scan# 976

Delta R.T. -0.00 min

Lab File: VX015620.D

Acq: 10 Apr 2020 14:48

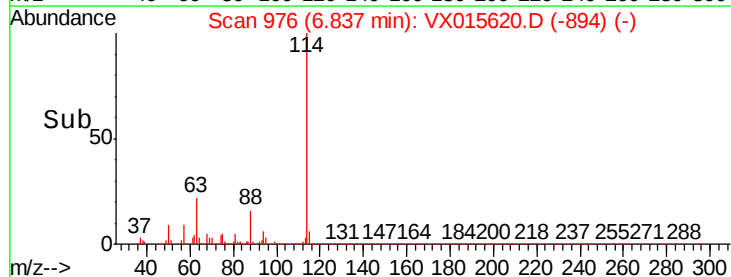
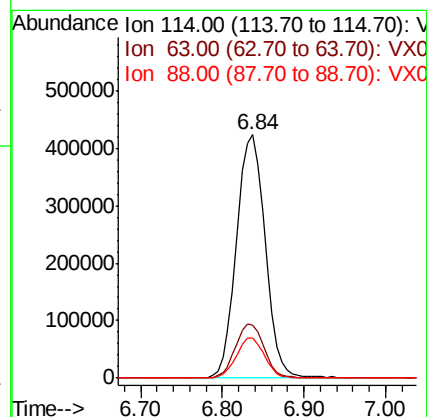
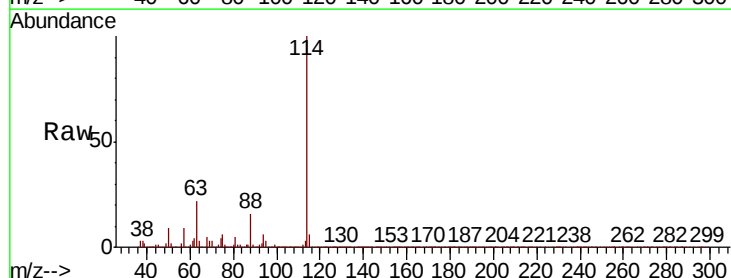
Tgt Ion: 114 Resp: 1031301

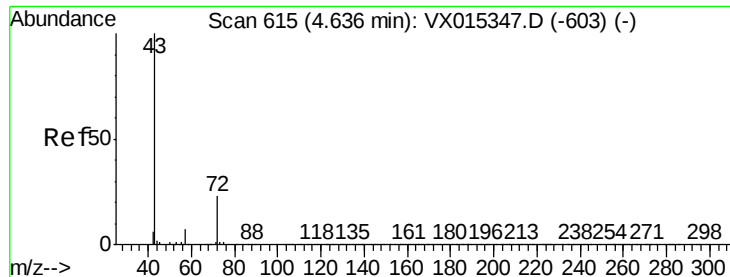
Ion Ratio Lower Upper

114 100

63 21.8 17.4 26.2

88 15.9 12.9 19.3

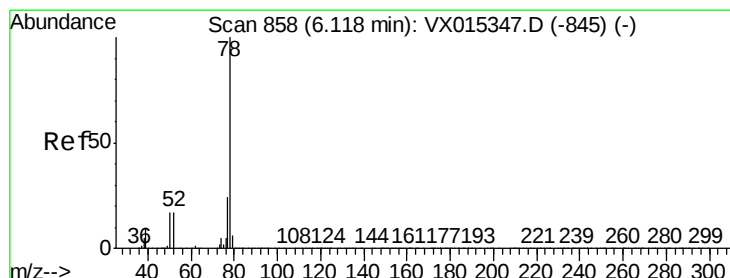
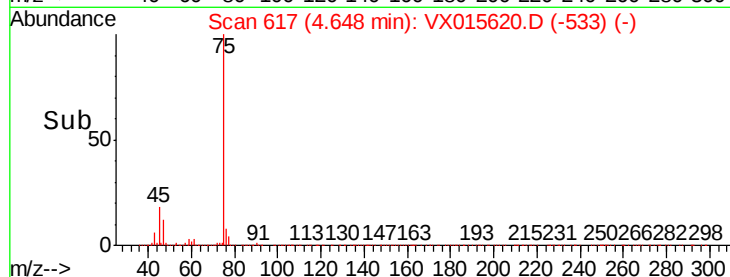
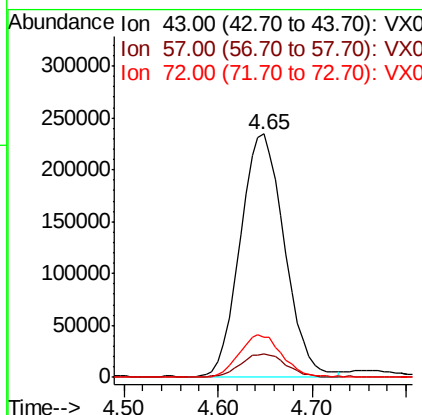
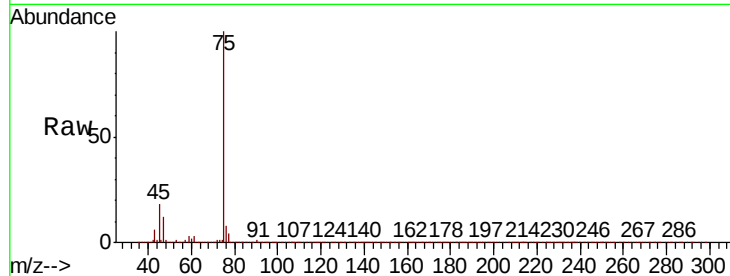




#30
2-Butanone
Concen: 82.181 ug/l
RT: 4.65 min Scan# 617
Delta R.T. 0.01 min
Lab File: VX015620.D
Acq: 10 Apr 2020 14:48

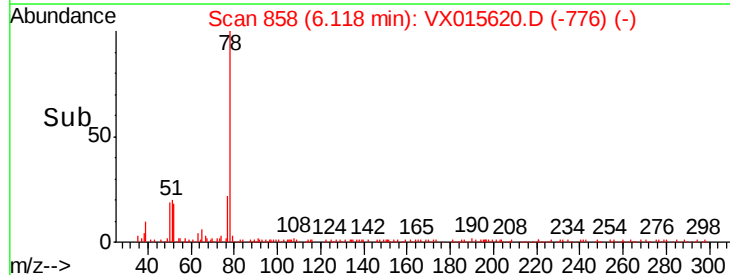
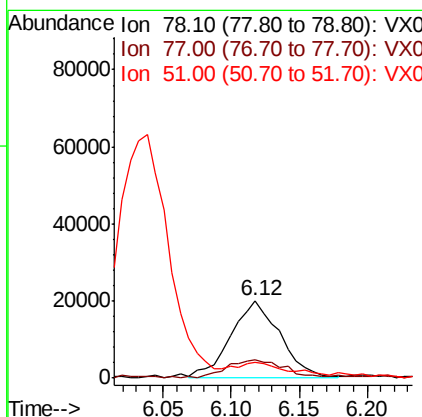
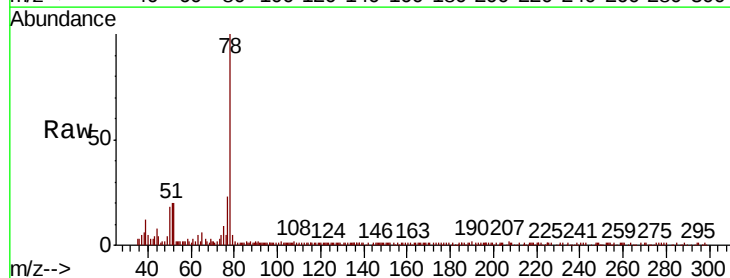
Instrument :
MSVOA_X
ClientSampleId :
400408742.3-VOA

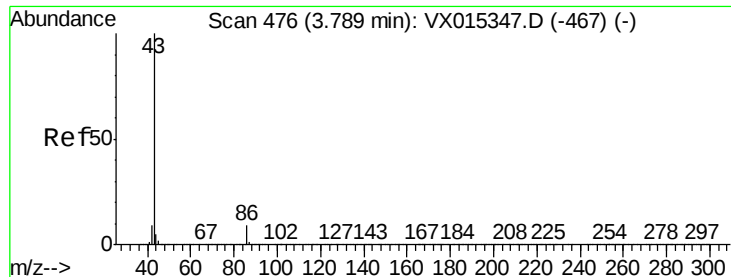
Tot Ion: 43 Resp: 763318
Ion Ratio Lower Upper
43 100
57 9.7 5.9 8.9#
72 16.3 18.6 27.8#



#34
Benzene
Concen: 1.114 ug/l
RT: 6.12 min Scan# 858
Delta R.T. -0.00 min
Lab File: VX015620.D
Acq: 10 Apr 2020 14:48

Tgt Ion: 78 Resp: 49730
Ion Ratio Lower Upper
78 100
77 22.1 19.4 29.2
51 13.4 14.6 21.8#

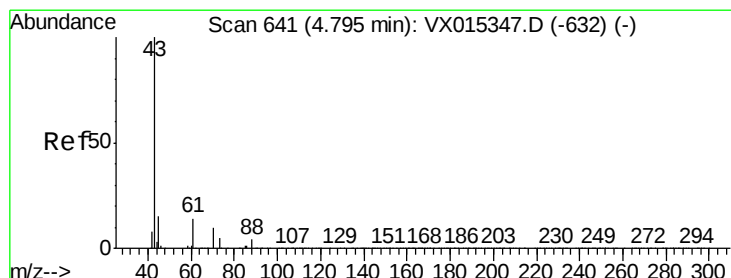
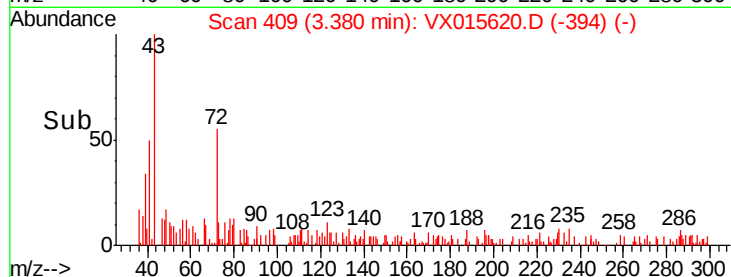
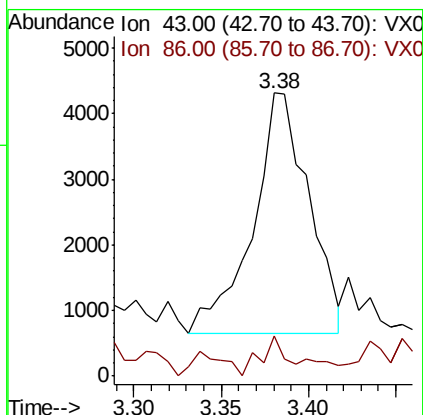
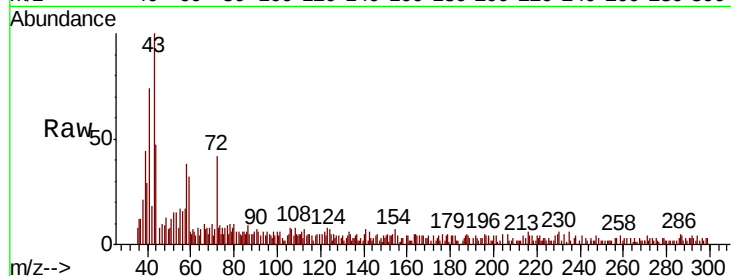




#42
 Vinyl Acetate
 Concen: 0.233 ug/l
 RT: 3.38 min Scan# 409
 Delta R.T. -0.41 min
 Lab File: VX015620.D
 Acq: 10 Apr 2020 14:48

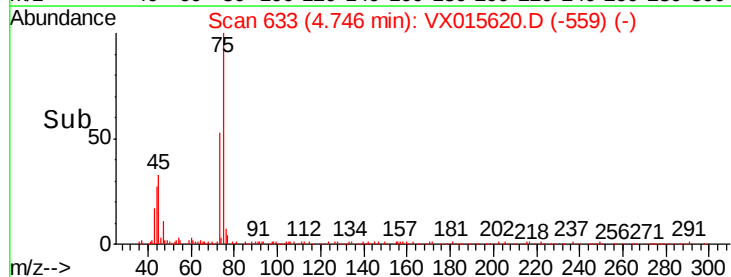
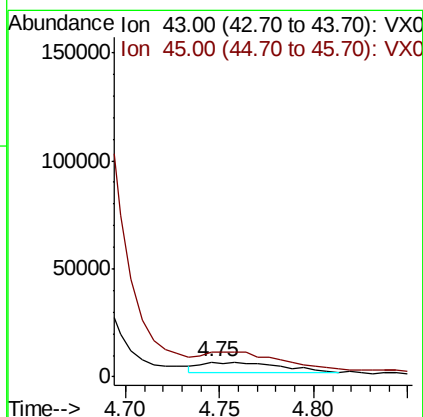
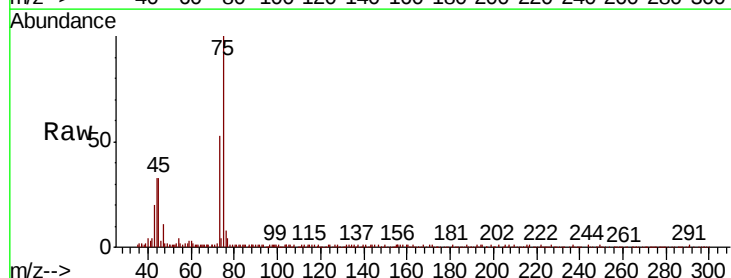
Instrument :
 MSVOA_X
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 400408742.3-VOA

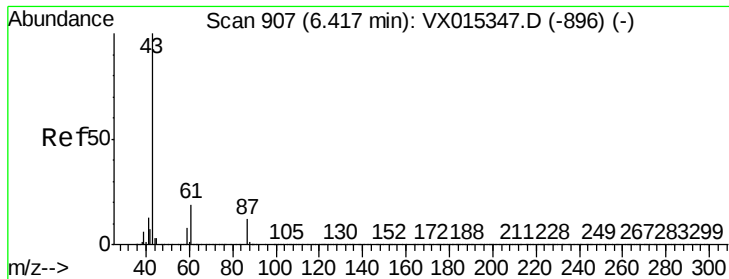
Tot Ion: 43 Resp: 8185
 Ion Ratio Lower Upper
 43 100
 86 7.1 6.9 10.3



#43
 Ethyl Acetate
 Concen: 0.717 ug/l
 RT: 4.75 min Scan# 633
 Delta R.T. -0.05 min
 Lab File: VX015620.D
 Acq: 10 Apr 2020 14:48

Tgt Ion: 43 Resp: 14480
 Ion Ratio Lower Upper
 43 100
 45 15.0 12.2 18.4





#44

Isopropyl Acetate

Concen: 0.205 ug/l

RT: 6.42 min Scan# 907

Delta R.T. -0.00 min

Lab File: VX015620.D

Acq: 10 Apr 2020 14:48

Instrument :

MSVOA_X

ClientSampleId :

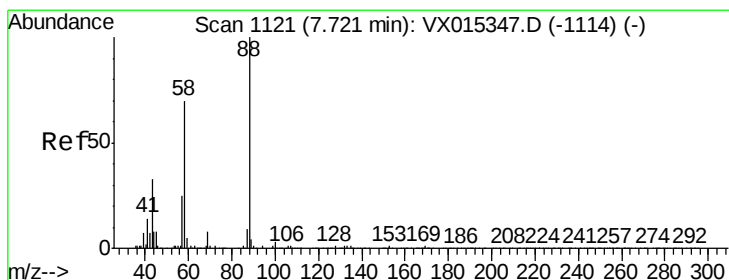
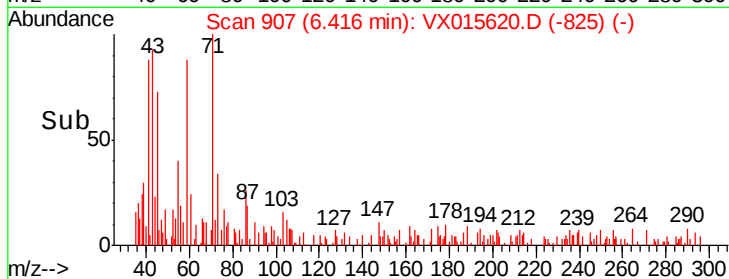
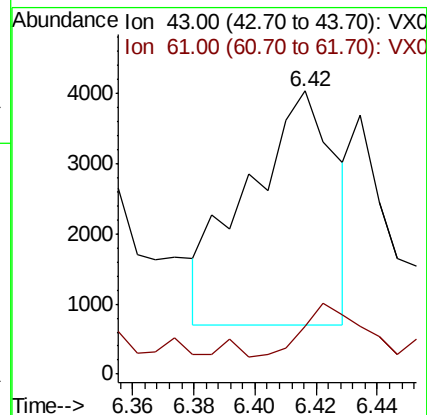
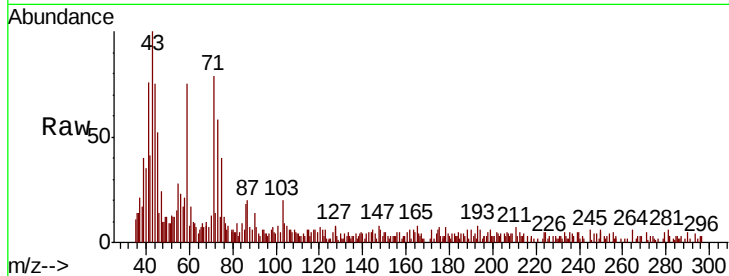
400408742.3-VOA

Tot Ion: 43 Resp: 6664

Ion Ratio Lower Upper

43 100

61 15.3 14.6 22.0



#45

1,4-Dioxane

Concen: 112.249 ug/l

RT: 7.71 min Scan# 1120

Delta R.T. -0.01 min

Lab File: VX015620.D

Acq: 10 Apr 2020 14:48

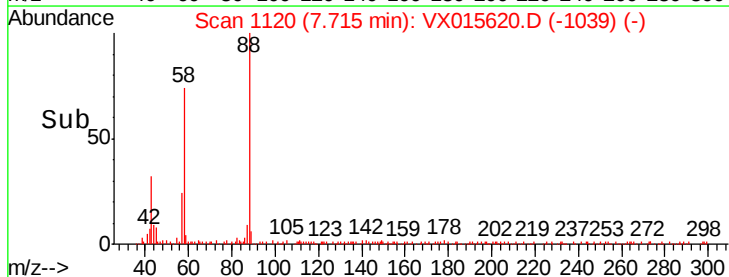
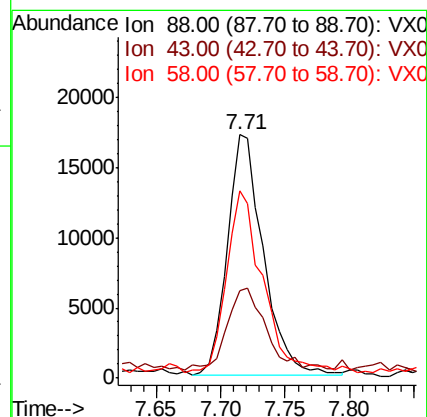
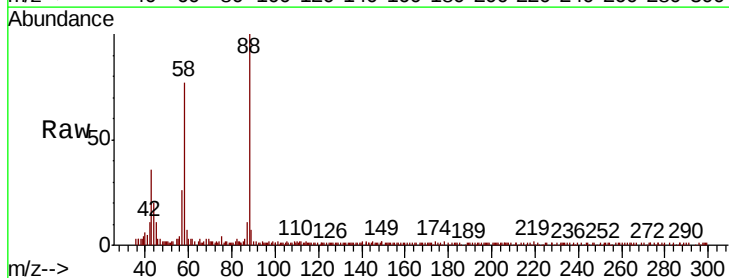
Tgt Ion: 88 Resp: 33623

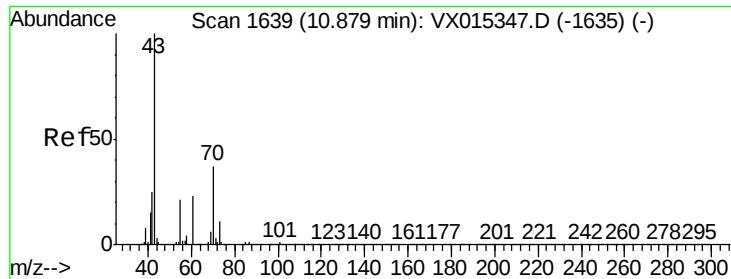
Ion Ratio Lower Upper

88 100

43 33.0 32.1 48.1

58 74.7 59.4 89.0





#47

n-amvl Acetate

Concen: 0.563 ug/l

RT: 10.93 min Scan# 1648

Delta R.T. 0.05 min

Lab File: VX015620.D

Acq: 10 Apr 2020 14:48

Instrument :

MSVOA_X

ClientSampleId :

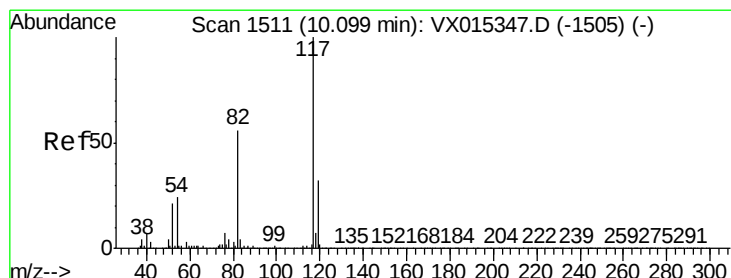
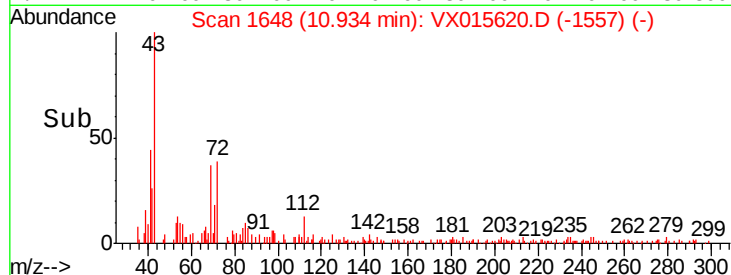
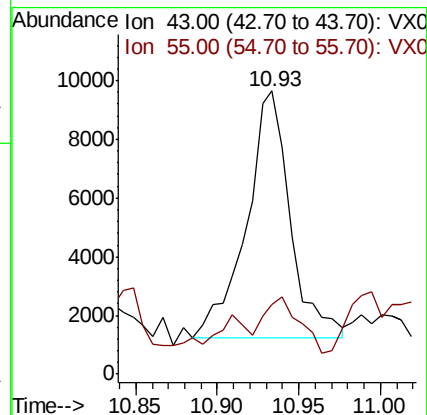
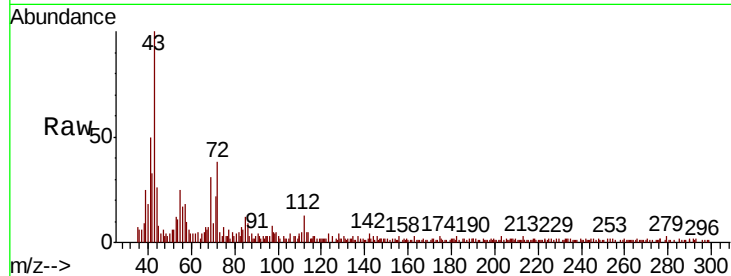
400408742.3-VOA

Tot Ion: 43 Resp: 15795

Ion Ratio Lower Upper

43 100

55 17.7 17.0 25.6



#57

Chlorobenzene-d5

Concen: 30.000 ug/l

RT: 10.10 min Scan# 1511

Delta R.T. -0.00 min

Lab File: VX015620.D

Acq: 10 Apr 2020 14:48

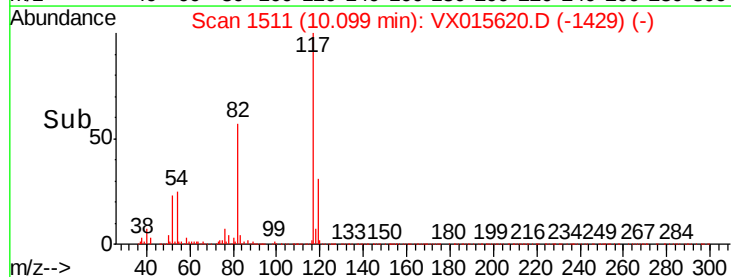
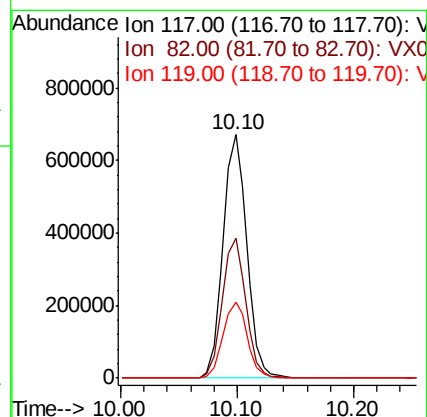
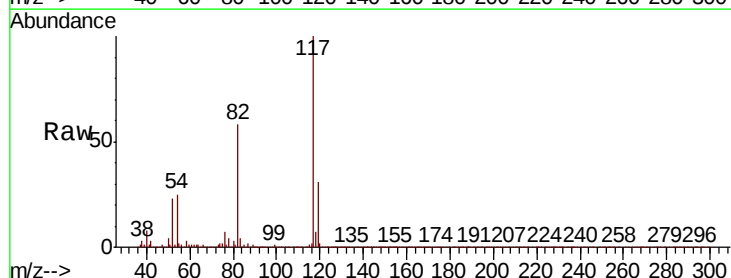
Tgt Ion: 117 Resp: 943165

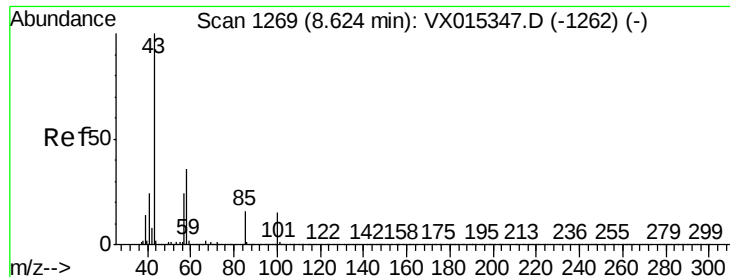
Ion Ratio Lower Upper

117 100

82 56.8 45.0 67.6

119 31.7 25.5 38.3

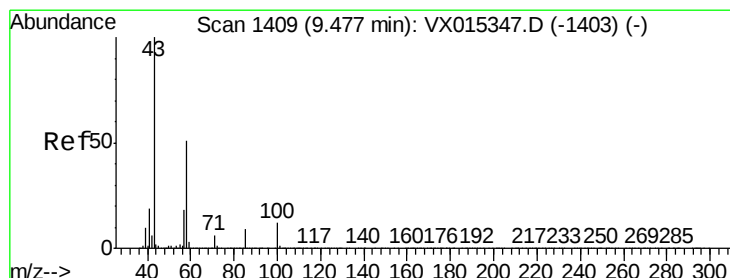
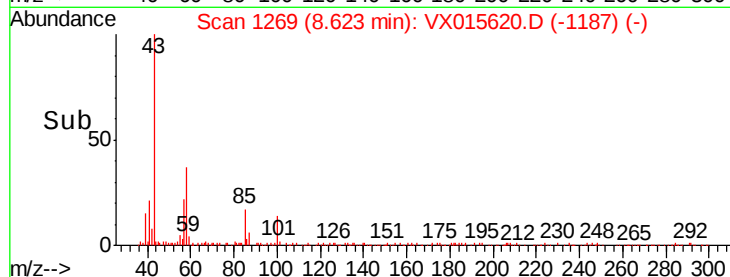
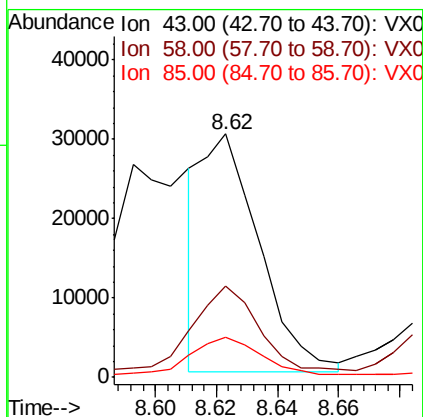
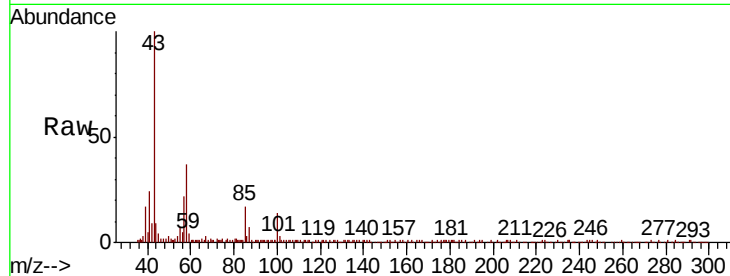




#58
4-Methyl-2-Pentanone
Concen: 2.146 ug/l
RT: 8.62 min Scan# 1269
Delta R.T. -0.00 min
Lab File: VX015620.D
Acq: 10 Apr 2020 14:48

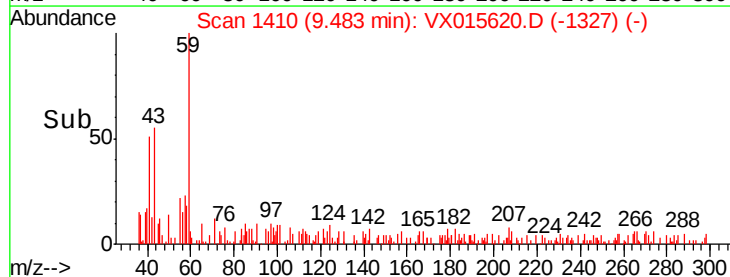
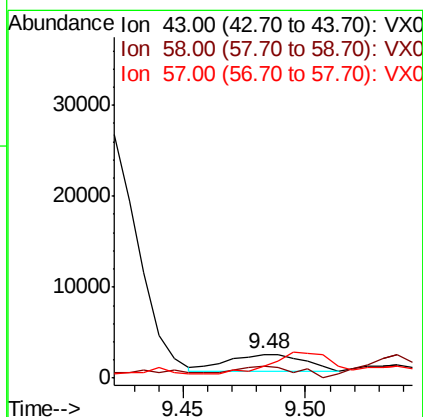
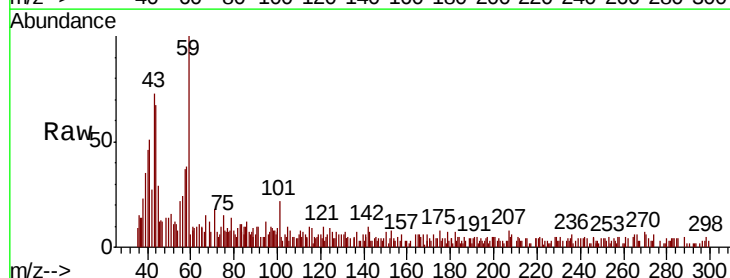
Instrument :
MSVOA_X
ClientSampleId :
400408742.3-VOA

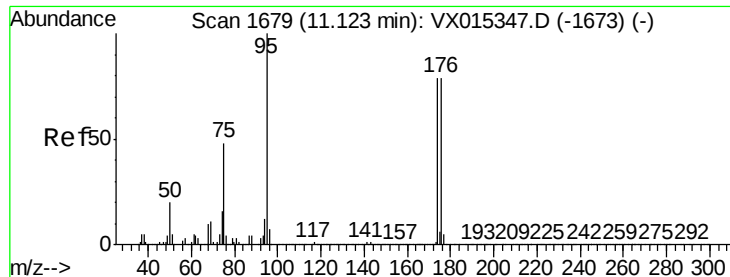
Tot Ion	Ratio	Lower	Upper
43	100		
58	43.6	29.4	44.0
85	22.4	13.0	19.4



#59
2-Hexanone
Concen: 0.285 ug/l
RT: 9.48 min Scan# 1410
Delta R.T. 0.01 min
Lab File: VX015620.D
Acq: 10 Apr 2020 14:48

Tgt Ion	Ratio	Lower	Upper
43	100		
58	62.8	40.2	60.4
57	108.2	14.6	22.0

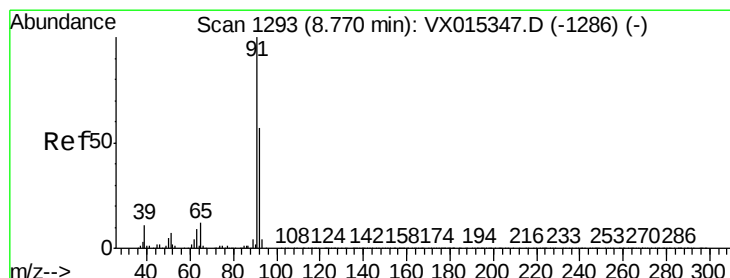
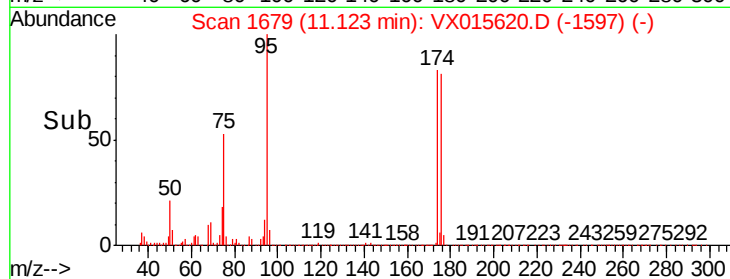
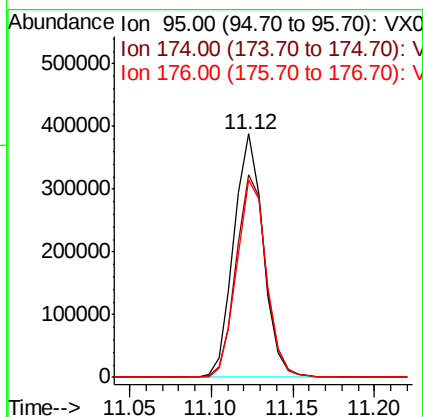
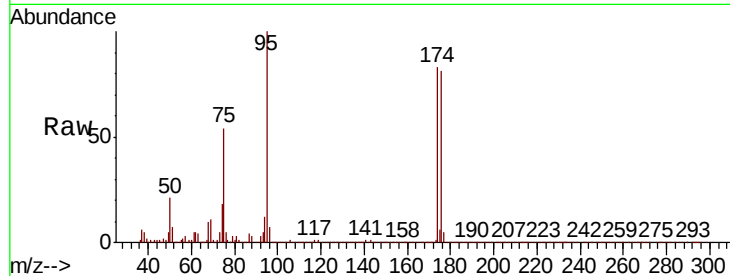




#60
4-Bromofluorobenzene
Concen: 30.233 ug/l
RT: 11.12 min Scan# 1679
Delta R.T. -0.00 min
Lab File: VX015620.D
Acq: 10 Apr 2020 14:48

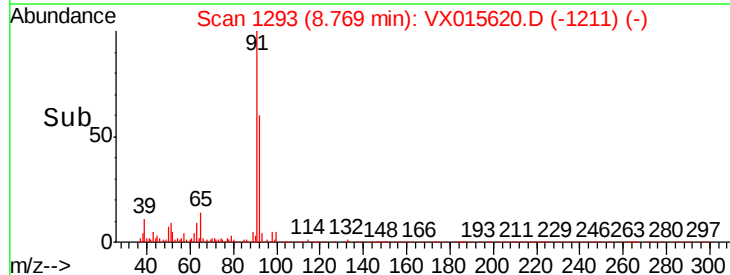
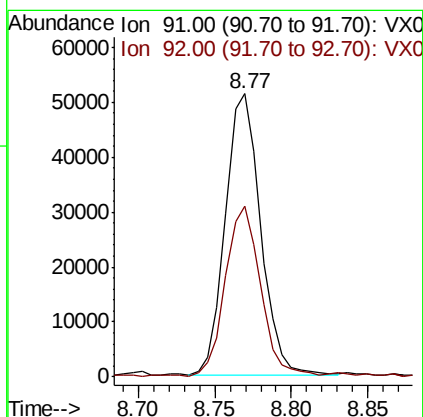
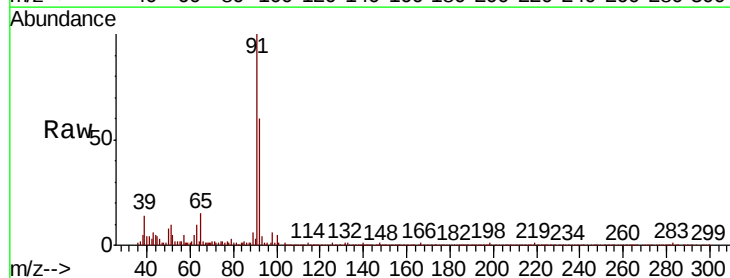
Instrument :
MSVOA_X
ClientSampleId :
400408742.3-VOA

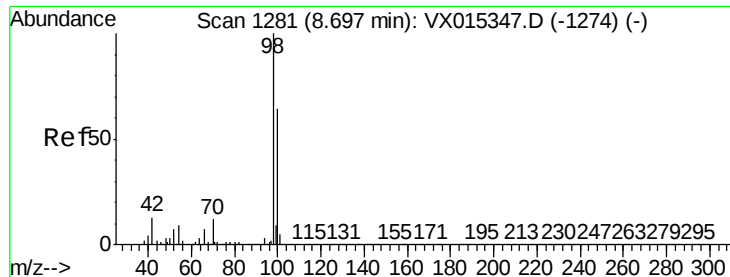
Tot Ion	95	Resp	488002
Ion Ratio	Lower	Upper	
95	100		
174	84.5	66.4	99.6
176	82.4	64.1	96.1



#62
Toluene
Concen: 1.724 ug/l
RT: 8.77 min Scan# 1293
Delta R.T. -0.00 min
Lab File: VX015620.D
Acq: 10 Apr 2020 14:48

Tgt Ion	91	Resp	82347
Ion Ratio	Lower	Upper	
91	100		
92	59.6	46.7	70.1





#63

Toluene-d8

Concen: 29.973 ug/l

RT: 8.70 min Scan# 1281

Delta R.T. -0.00 min

Lab File: VX015620.D

Acq: 10 Apr 2020 14:48

Instrument :

MSVOA_X

ClientSampleId :

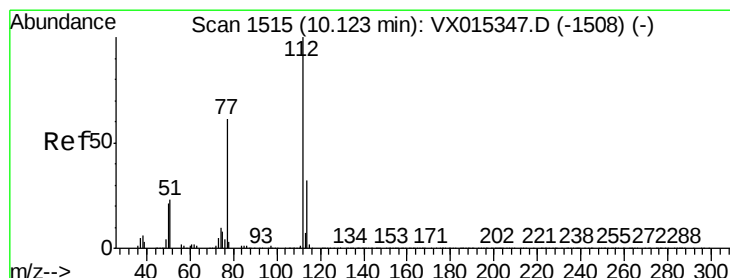
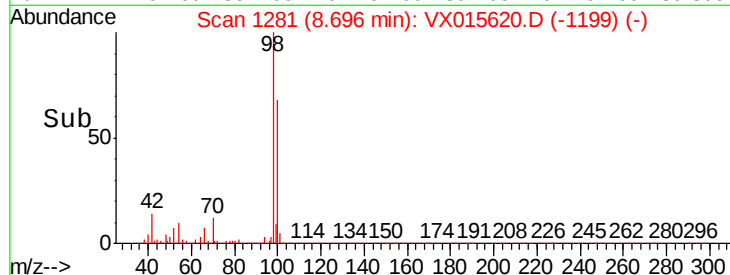
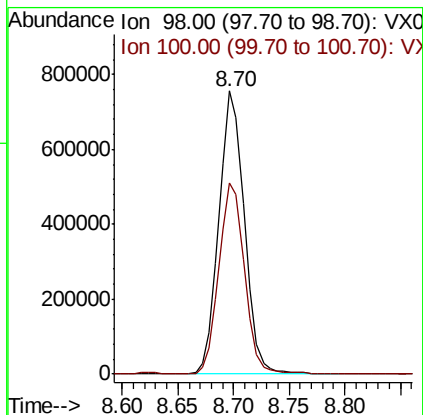
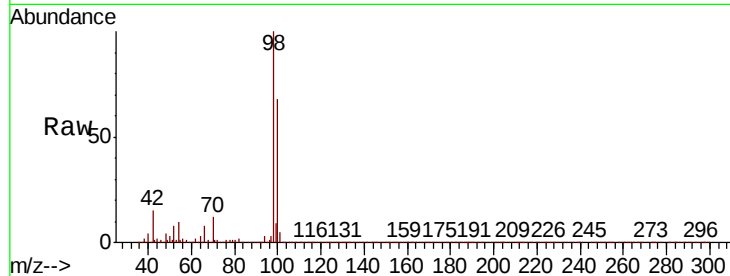
400408742.3-VOA

Tot Ion: 98 Resp: 1201078

Ion Ratio Lower Upper

98 100

100 67.3 52.2 78.2



#64

Chlorobenzene

Concen: 0.654 ug/l

RT: 10.12 min Scan# 1515

Delta R.T. -0.00 min

Lab File: VX015620.D

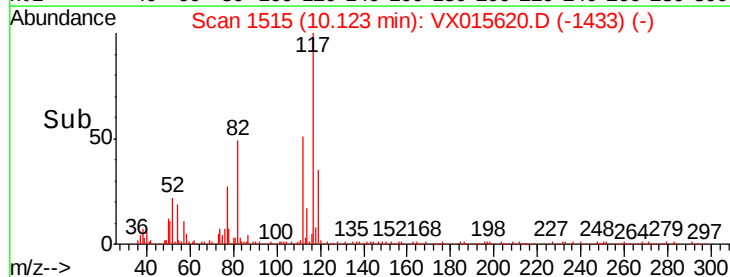
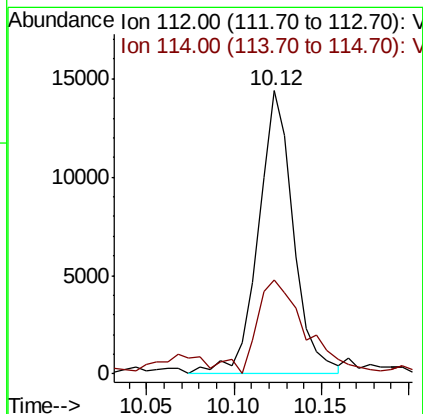
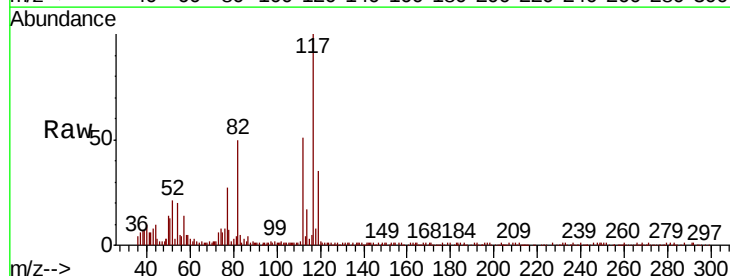
Acq: 10 Apr 2020 14:48

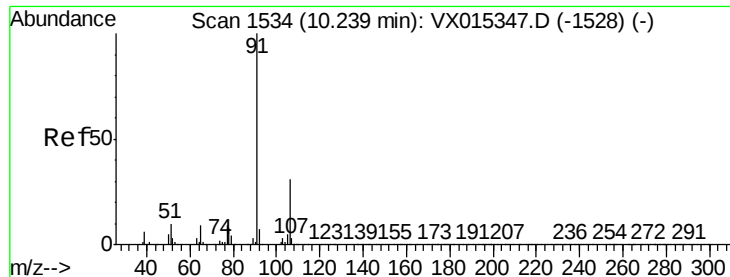
Tgt Ion: 112 Resp: 20087

Ion Ratio Lower Upper

112 100

114 27.8 25.8 38.8





#66

Ethyl Benzene

Concen: 1.708 ug/l

RT: 10.24 min Scan# 1534

Delta R.T. -0.00 min

Lab File: VX015620.D

Acq: 10 Apr 2020 14:48

Instrument :

MSVOA_X

ClientSampleId :

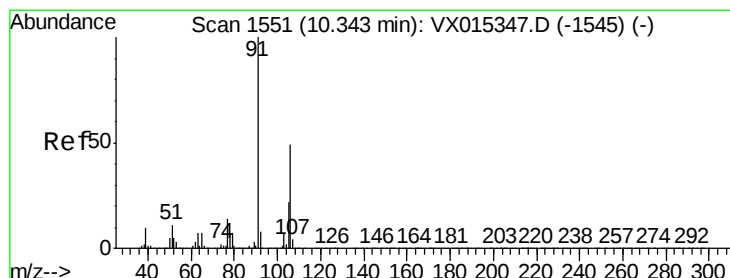
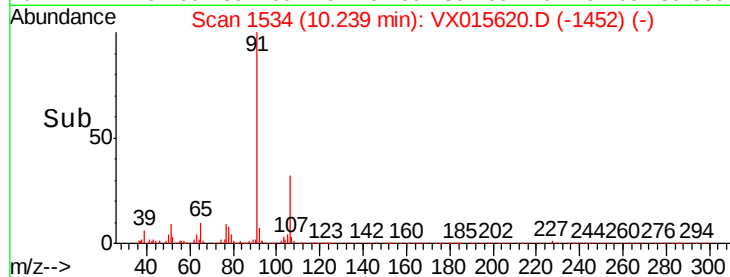
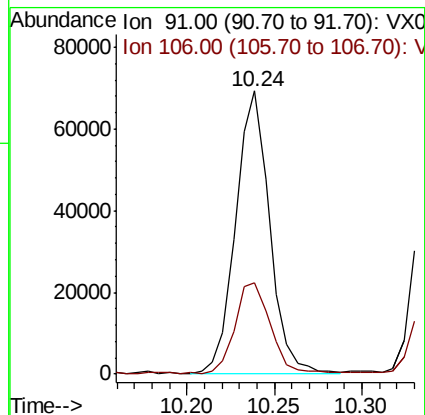
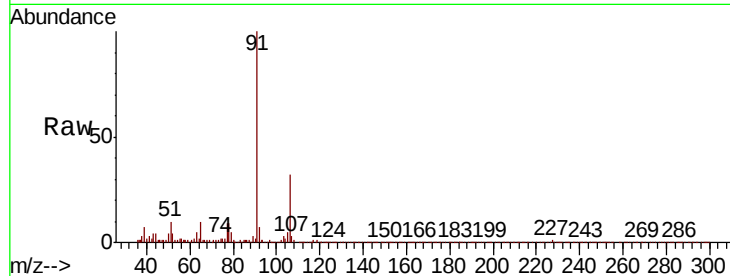
400408742.3-VOA

Tot Ion: 91 Resp: 93199

Ion Ratio Lower Upper

91 100

106 31.9 25.0 37.6



#67

m/p-Xylenes

Concen: 2.605 ug/l

RT: 10.34 min Scan# 1551

Delta R.T. -0.00 min

Lab File: VX015620.D

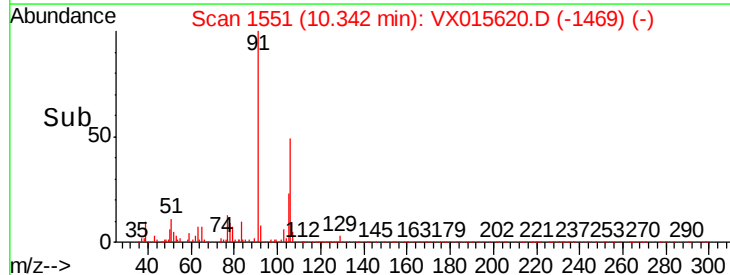
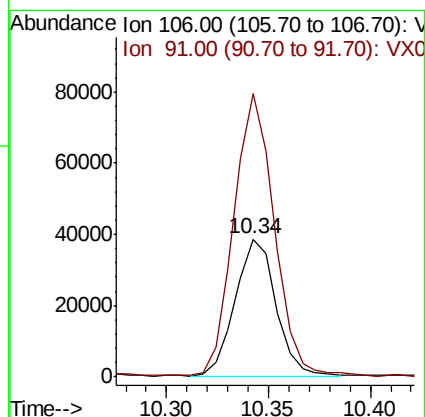
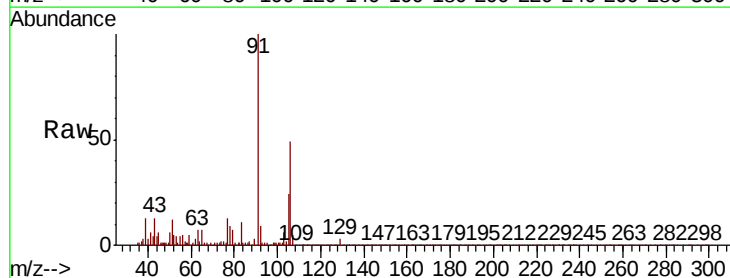
Acq: 10 Apr 2020 14:48

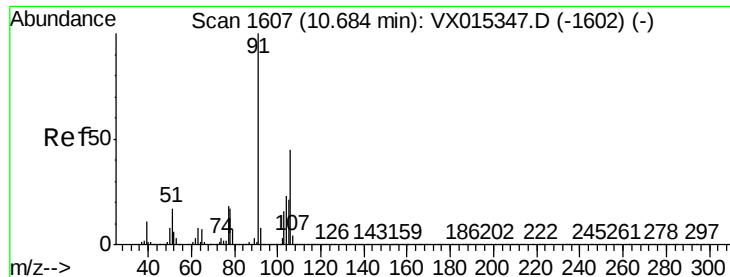
Tgt Ion: 106 Resp: 53802

Ion Ratio Lower Upper

106 100

91 201.7 165.0 247.4

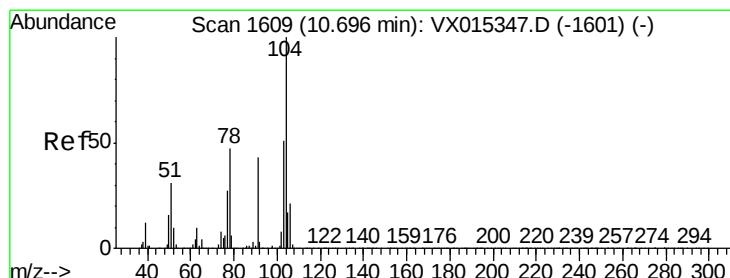
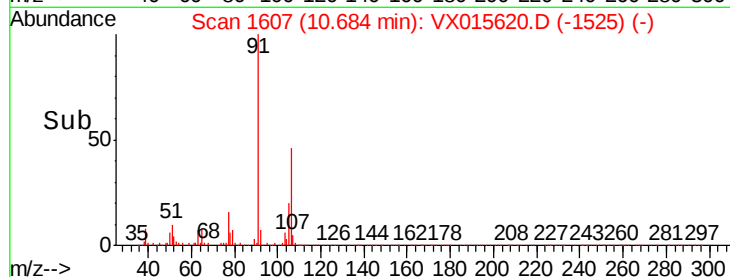
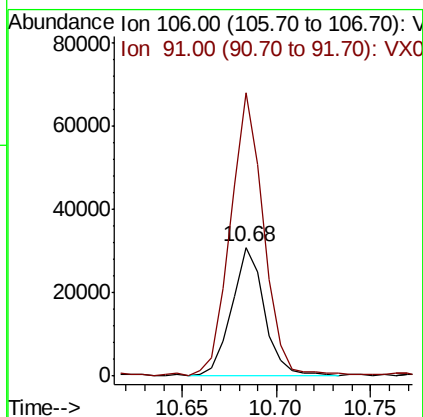
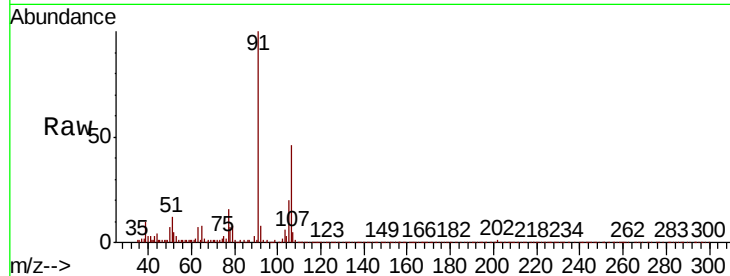




#68
o-Xylene
Concen: 1.818 ug/l
RT: 10.68 min Scan# 1607
Delta R.T. -0.00 min
Lab File: VX015620.D
Acq: 10 Apr 2020 14:48

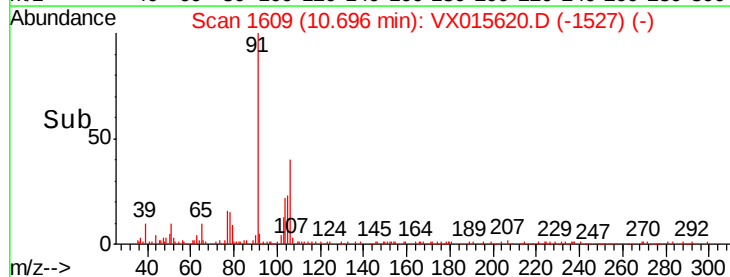
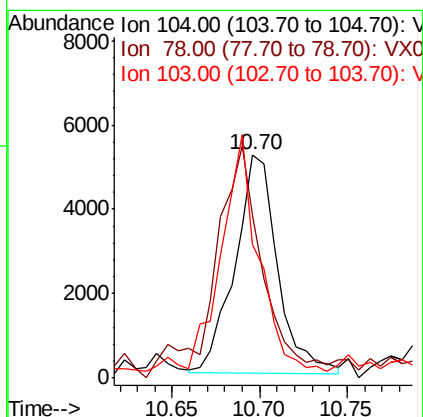
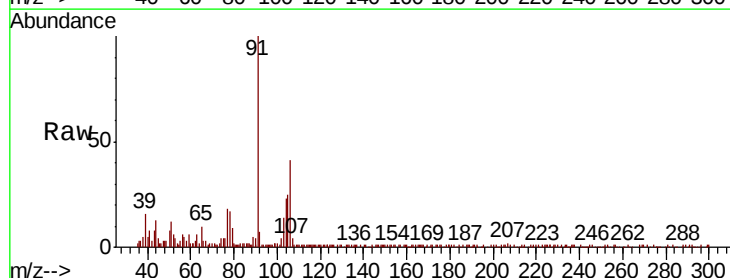
Instrument :
MSVOA_X
ClientSampleId :
400408742.3-VOA

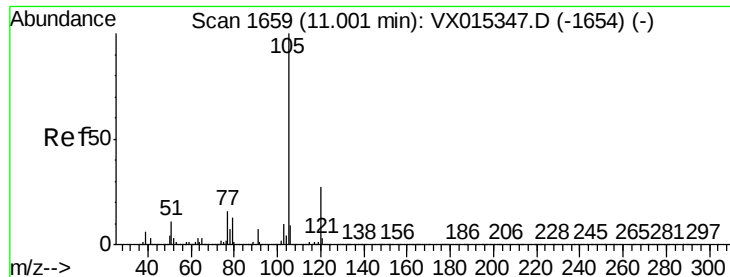
Tot Ion:106 Resp: 36702
Ion Ratio Lower Upper
106 100
91 224.2 109.1 327.2



#69
Styrene
Concen: 0.251 ug/l
RT: 10.70 min Scan# 1609
Delta R.T. -0.00 min
Lab File: VX015620.D
Acq: 10 Apr 2020 14:48

Tgt Ion:104 Resp: 8843
Ion Ratio Lower Upper
104 100
78 93.2 41.5 62.3#
103 95.2 43.4 65.2#





#70

Isopropylbenzene

Concen: 1.523 ug/l

RT: 11.01 min Scan# 1660

Delta R.T. 0.01 min

Lab File: VX015620.D

Acq: 10 Apr 2020 14:48

Instrument :

MSVOA_X

ClientSampleId :

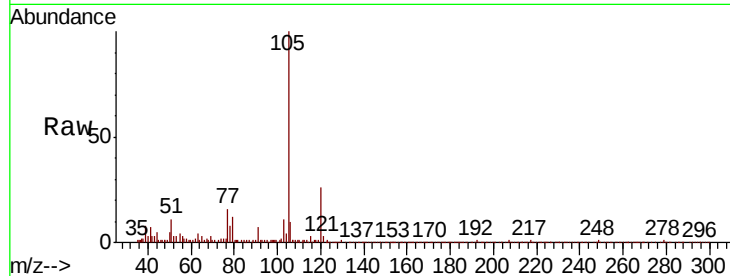
400408742.3-VOA

Tot Ion:105 Resp: 81497

Ion Ratio Lower Upper

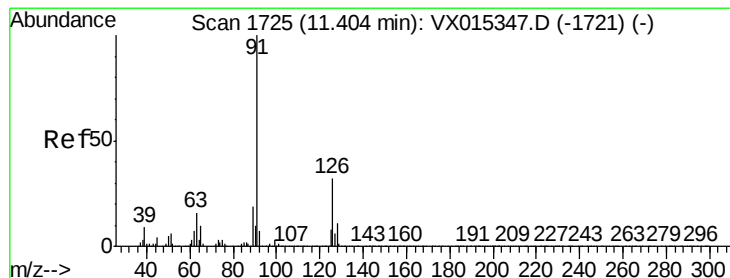
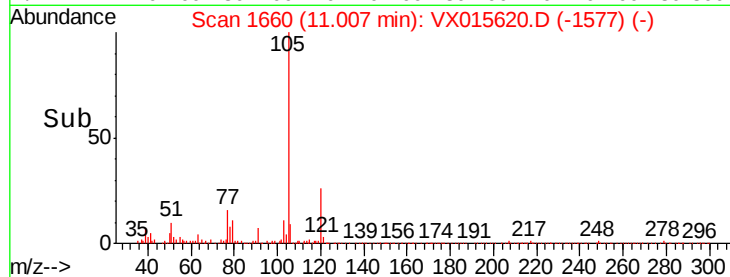
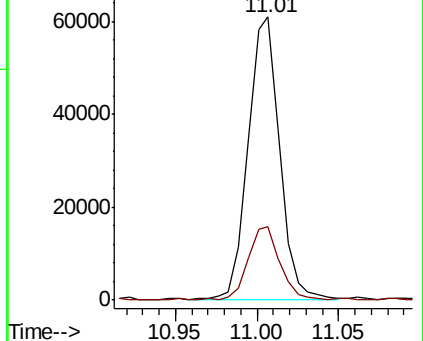
105 100

120 25.9 18.8 34.8



Abundance Ion 105.00 (104.70 to 105.70): V

Ion 120.00 (119.70 to 120.70): V



#75

2-Chlorotoluene

Concen: 0.240 ug/l

RT: 11.42 min Scan# 1727

Delta R.T. 0.01 min

Lab File: VX015620.D

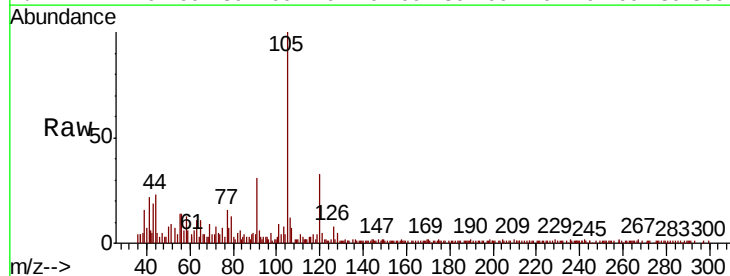
Acq: 10 Apr 2020 14:48

Tgt Ion: 91 Resp: 8956

Ion Ratio Lower Upper

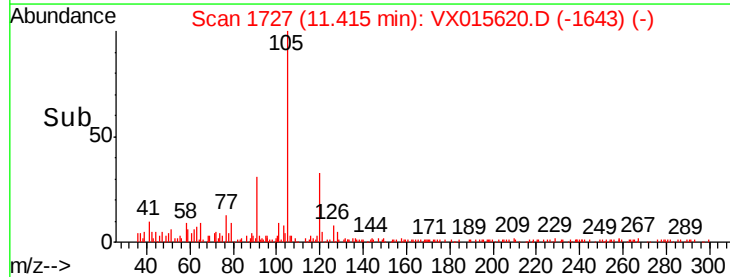
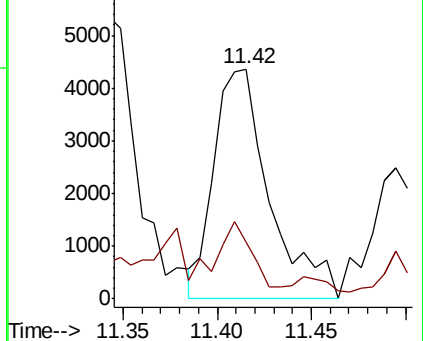
91 100

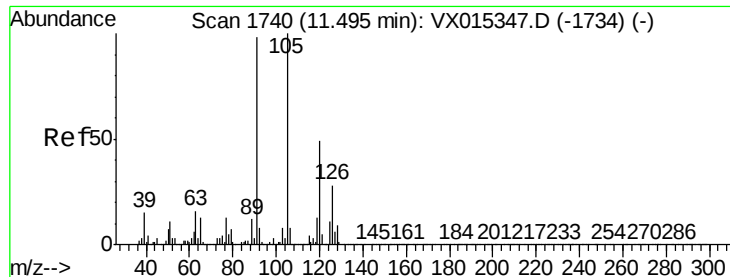
126 24.5 0.0 65.2



Abundance Ion 91.00 (90.70 to 91.70): VX0

Ion 126.00 (125.70 to 126.70): V





#76

1,3,5-Trimethylbenzene

Concen: 0.298 ug/l

RT: 11.49 min Scan# 1740

Delta R.T. -0.00 min

Lab File: VX015620.D

Acq: 10 Apr 2020 14:48

Instrument :

MSVOA_X

ClientSampleId :

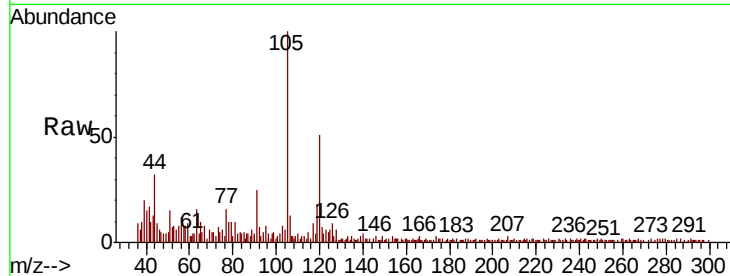
400408742.3-VOA

Tot Ion:105 Resp: 13697

Ion Ratio Lower Upper

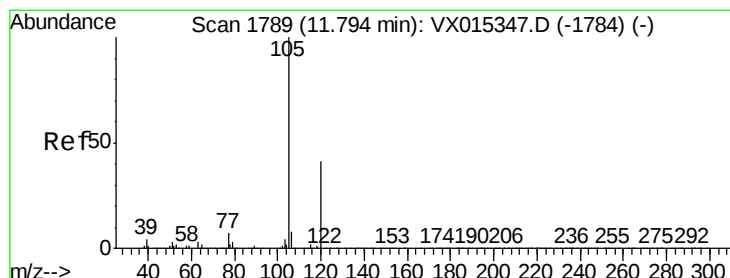
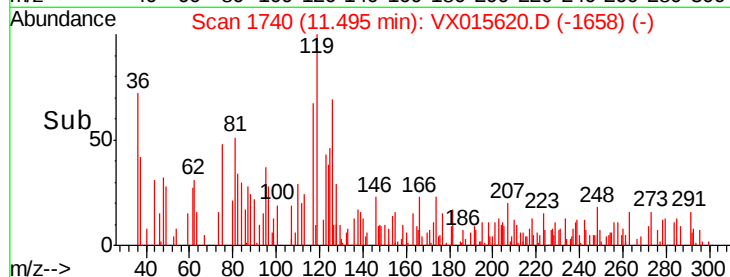
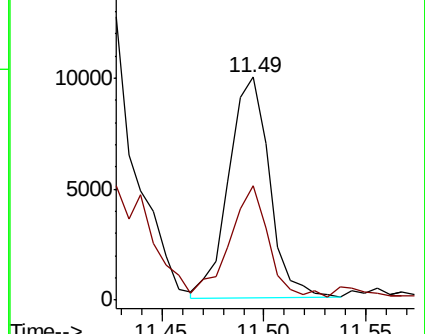
105 100

120 44.6 0.0 98.0



Abundance Ion 105.00 (104.70 to 105.70): V

Ion 120.00 (119.70 to 120.70): V



#80

1,2,4-Trimethylbenzene

Concen: 0.932 ug/l

RT: 11.79 min Scan# 1789

Delta R.T. -0.00 min

Lab File: VX015620.D

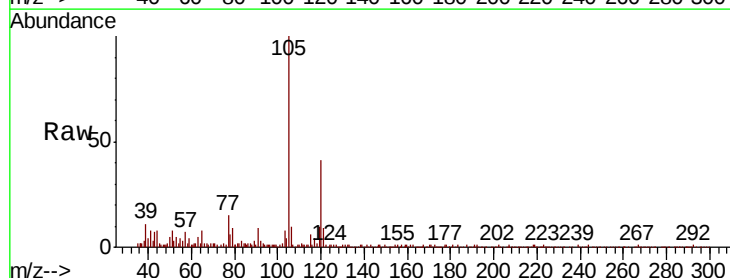
Acq: 10 Apr 2020 14:48

Tgt Ion:105 Resp: 43397

Ion Ratio Lower Upper

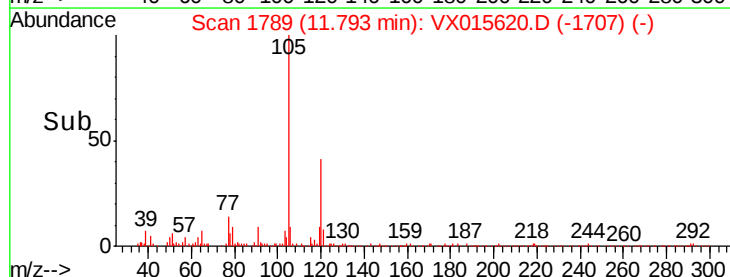
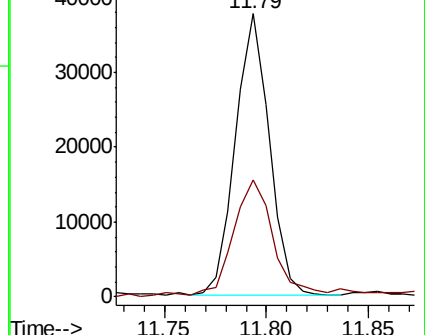
105 100

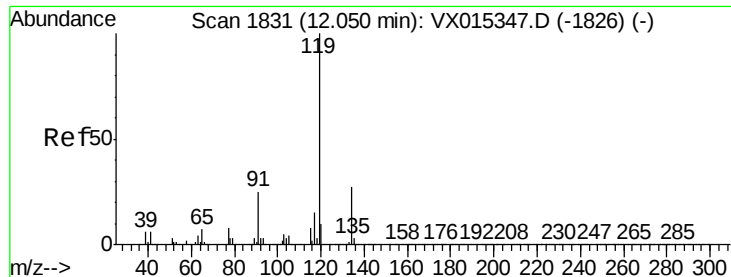
120 46.1 0.0 91.0



Abundance Ion 105.00 (104.70 to 105.70): V

Ion 120.00 (119.70 to 120.70): V

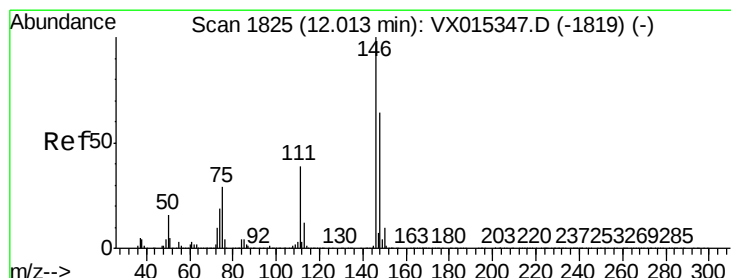
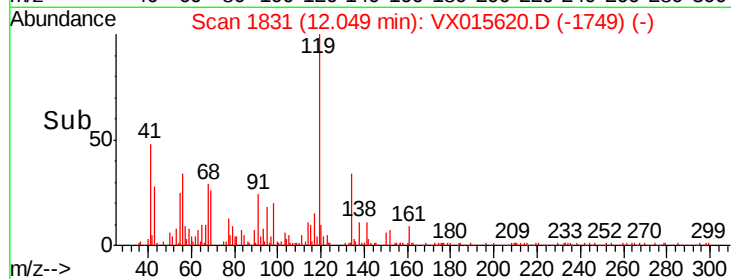
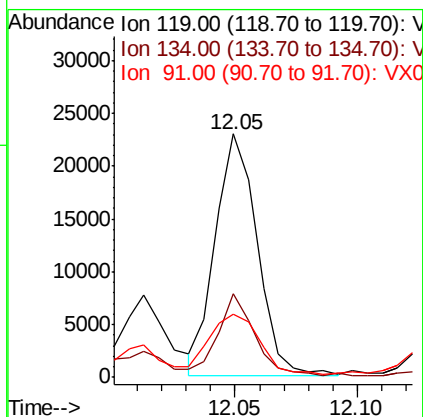
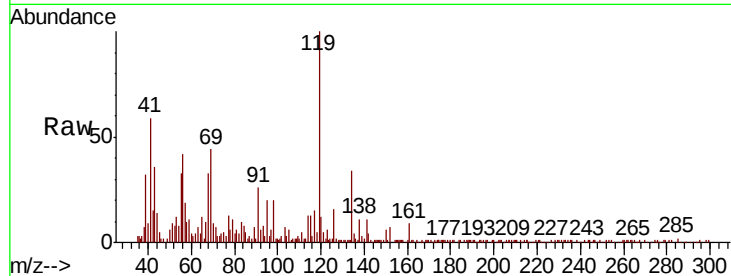




#82
 p-Isopropyltoluene
 Concen: 0.553 ug/l
 RT: 12.05 min Scan# 1831
 Delta R.T. -0.00 min
 Lab File: VX015620.D
 Acq: 10 Apr 2020 14:48

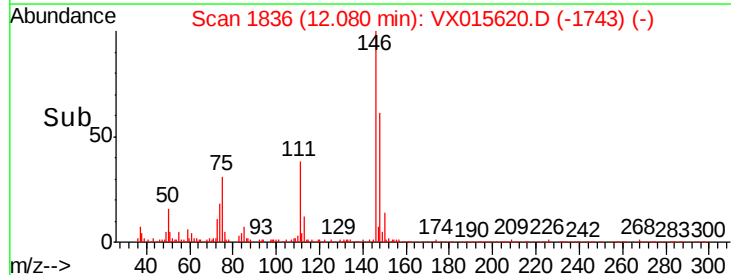
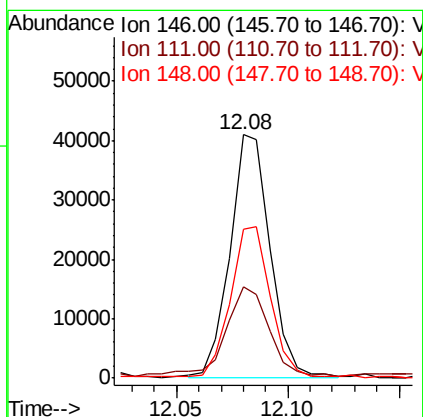
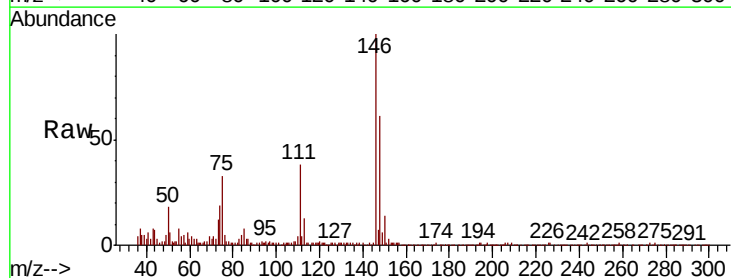
Instrument :
 MSVOA_X
 ClientSampleId :
 400408742.3-VOA

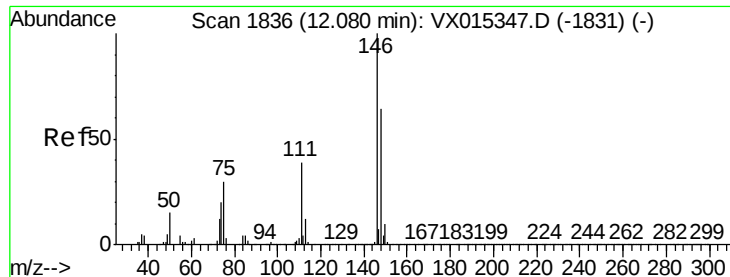
Tot Ion	Ratio	Lower	Upper
119	100		
134	28.3	0.0	53.2
91	28.5	0.0	48.2



#83
 1,3-Dichlorobenzene
 Concen: 1.982 ug/l
 RT: 12.08 min Scan# 1836
 Delta R.T. 0.07 min
 Lab File: VX015620.D
 Acq: 10 Apr 2020 14:48

Tgt Ion	Ratio	Lower	Upper
146	100		
111	39.3	20.1	60.2
148	61.6	31.4	94.2





#84

1,4-Dichlorobenzene

Concen: 1.977 ug/l

RT: 12.08 min Scan# 1836

Delta R.T. -0.00 min

Lab File: VX015620.D

Acq: 10 Apr 2020 14:48

Instrument :

MSVOA_X

ClientSampleId :

400408742.3-VOA

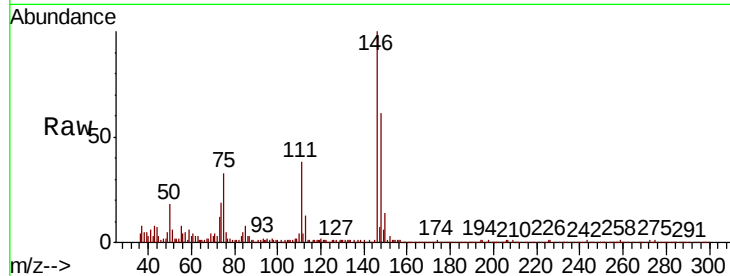
Tot Ion:146 Resp: 50980

Ion Ratio Lower Upper

146 100

111 39.5 18.9 56.9

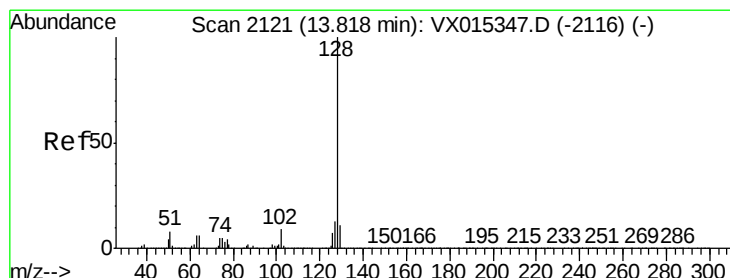
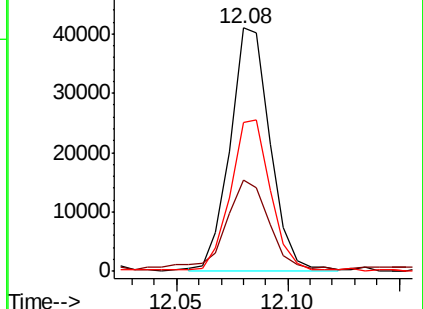
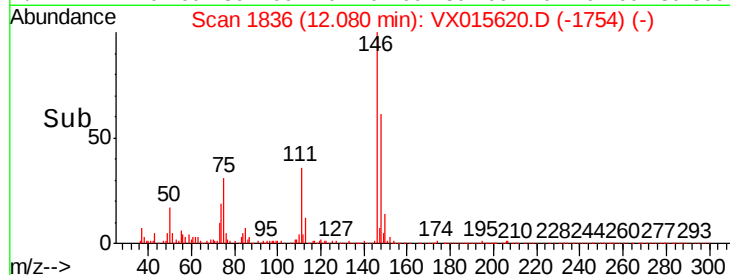
148 62.4 31.4 94.3



Abundance Ion 146.00 (145.70 to 146.70): V

Ion 111.00 (110.70 to 111.70): V

Ion 148.00 (147.70 to 148.70): V



#91

Naphthalene

Concen: 4.499 ug/l

RT: 13.82 min Scan# 2121

Delta R.T. -0.00 min

Lab File: VX015620.D

Acq: 10 Apr 2020 14:48

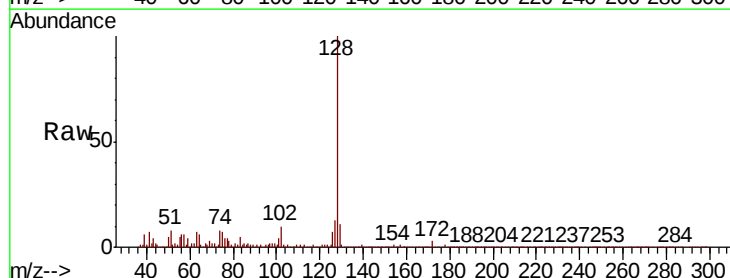
Tgt Ion:128 Resp: 264522

Ion Ratio Lower Upper

128 100

127 13.0 10.3 15.5

129 11.3 8.9 13.3



Abundance Ion 128.00 (127.70 to 128.70): V

Ion 127.00 (126.70 to 127.70): V

Ion 129.00 (128.70 to 129.70): V

