

Data Path : Z:\VOASRV\HPCHEM1\MSVOA X\DATA\VX062818\
 Data File : VX003003.D
 Acq On : 28 Jun 2018 23:12
 Operator : JC/MD
 Sample : J3736-01
 Misc : 5.0mL/MSVOA X/WATER
 ALS Vial : 27 Sample Multiplier: 1

Instrument :
 MSVOA_X
 ClientSampleId :
 2-AVE-15

Quant Time: Jun 29 05:34:24 2018
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA X\METHOD\624X061818W.M
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
 QLast Update : Mon Jun 18 15:18:02 2018
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.03	128	47914	30.00	ug/l	0.00
28) 1,4-Difluorobenzene	6.87	114	261207	30.00	ug/l	0.00
57) Chlorobenzene-d5	10.12	117	235618	30.00	ug/l	0.00

System Monitoring Compounds

27) 1,2-Dichloroethane-d4	6.07	65	110777	30.28	ug/l	0.00
Spiked Amount	30.000	Range	50 - 169	Recovery	=	100.93%
60) 4-Bromofluorobenzene	11.14	95	107544	27.64	ug/l	0.00
Spiked Amount	30.000	Range	56 - 143	Recovery	=	92.13%
63) Toluene-d8	8.72	98	301021	29.25	ug/l	0.00
Spiked Amount	30.000	Range	66 - 137	Recovery	=	97.50%

Target Compounds

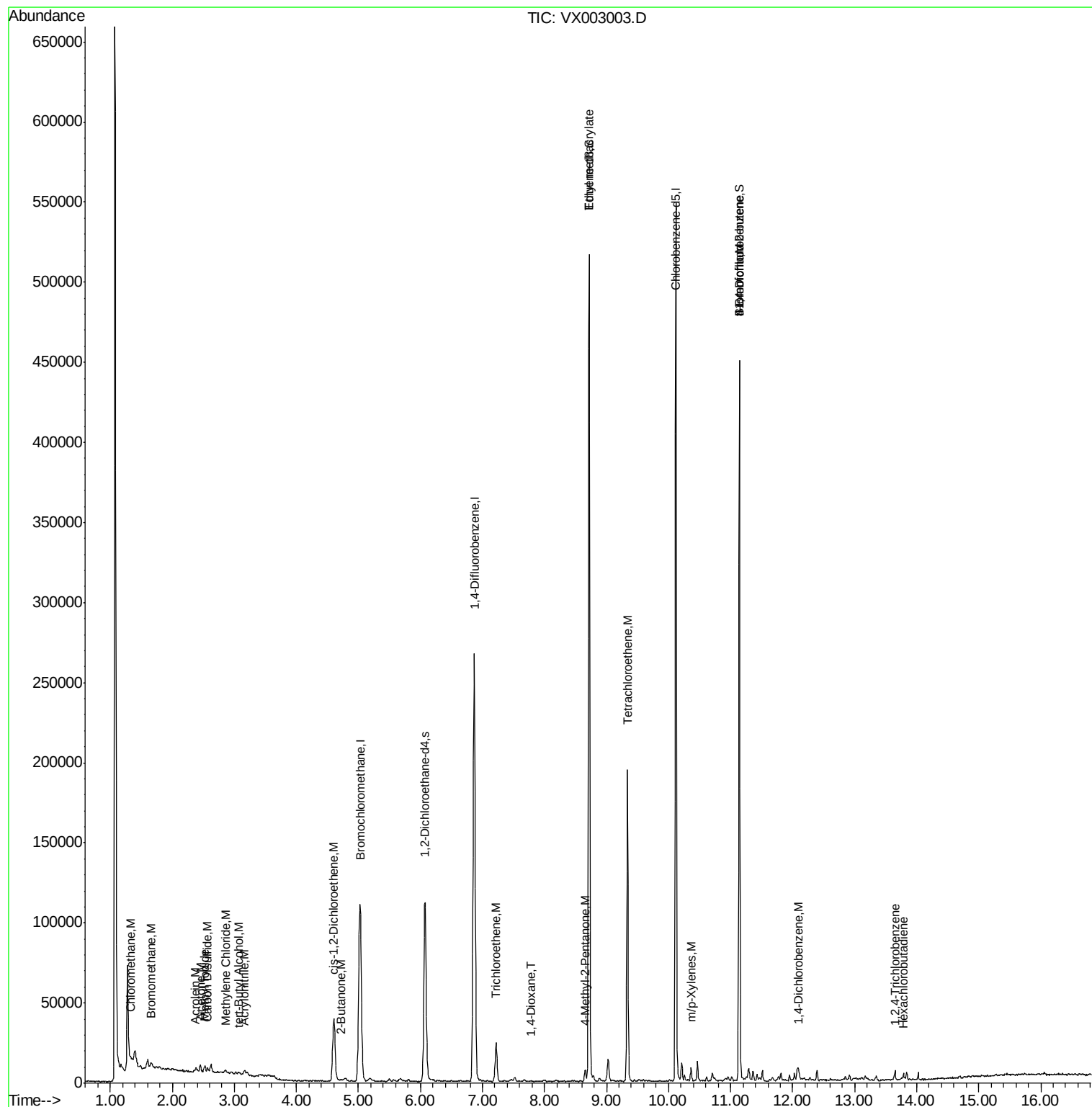
						Ovalue
3) Chloromethane	1.33	50	965	0.39	ug/l	# 85
5) Bromomethane	1.65	94	2268	1.40	ug/l	94
11) Methyl Iodide	2.53	142	3751	1.31	ug/l	95
13) Acrolein	2.37	56	224	0.78	ug/l	90
14) Acrylonitrile	3.15	53	461	0.30	ug/l	93
15) Acetone	2.45	58	1627	3.87	ug/l	90
16) Carbon Disulfide	2.57	76	3112	0.50	ug/l	98
18) Methylene Chloride	2.86	84	824	0.29	ug/l	# 90
22) cis-1,2-Dichloroethene	4.60	96	23785	8.33	ug/l	# 76
23) tert-Butyl Alcohol	3.07	59	1441	2.10	ug/l	# 99
30) 2-Butanone	4.71	43	1217	0.60	ug/l	97
37) Trichloroethene	7.22	130	9189	3.00	ug/l	95
45) 1,4-Dioxane	7.79	88	44	0.69	ug/l	# 1
51) Ethyl methacrylate	8.73	69	939	0.22	ug/l	79
56) Bromoform	11.14	173	1403	0.59	ug/l	# 1
58) 4-Methyl-2-Pentanone	8.66	43	4110	1.03	ug/l	94
61) Tetrachloroethene	9.34	164	39169	12.11	ug/l	98
67) m/p-Xylenes	10.37	106	1941	0.39	ug/l	98
77) t-1,4-Dichloro-2-butene	11.14	75	55824	50.16	ug/l	# 11
84) 1,4-Dichlorobenzene	12.10	146	1476	0.21	ug/l	95
89) 1,2,4-Trichlorobenzene	13.65	180	1212	0.23	ug/l	95
90) Hexachlorobutadiene	13.79	225	583	0.21	ug/l	84

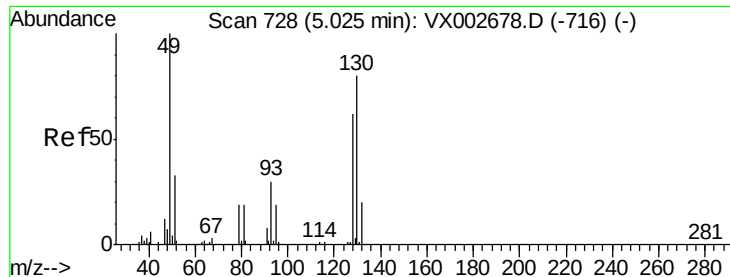
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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Quant Time: Jun 29 05:34:24 2018
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA X\METHOD\624X061818W.M
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
QLast Update : Mon Jun 18 15:18:02 2018
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 30.00 ug/l

RT: 5.03 min Scan# 728

Delta R.T. -0.00 min

Lab File: VX003003.D

Acq: 28 Jun 2018 23:12

Instrument :

MSVOA_X

ClientSampleId :

2-AVE-15

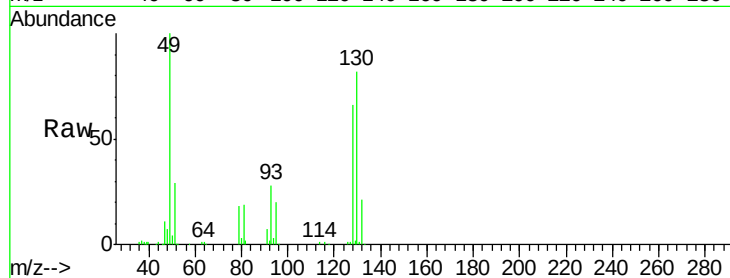
Tot Ion:128 Resp: 47914

Ion Ratio Lower Upper

128 100

49 155.4 0.0 423.0

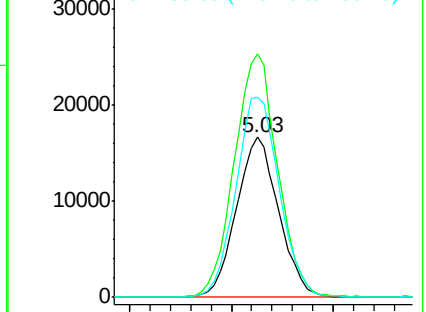
130 129.2 0.0 324.3



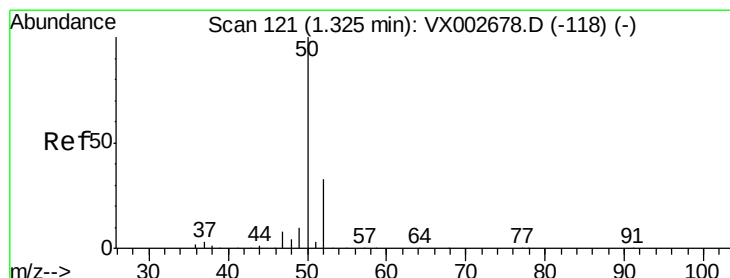
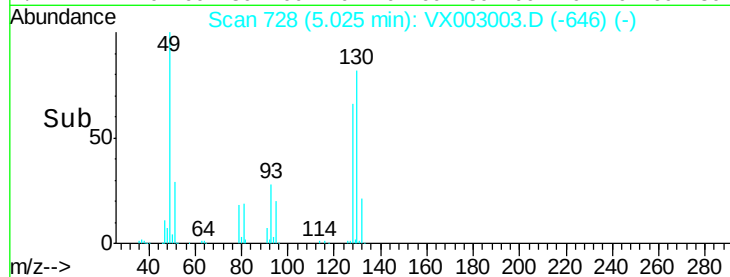
Abundance Ion 128.00 (127.70 to 128.70): V

Ion 49.00 (48.70 to 49.70): VX0

Ion 130.00 (129.70 to 130.70): V



Time-->



#3

Chloromethane

Concen: 0.39 ug/l

RT: 1.33 min Scan# 122

Delta R.T. 0.01 min

Lab File: VX003003.D

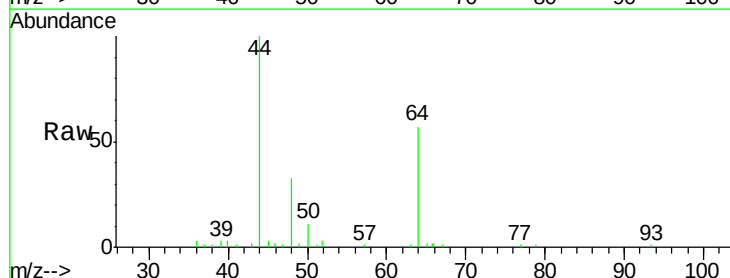
Acq: 28 Jun 2018 23:12

Tgt Ion: 50 Resp: 965

Ion Ratio Lower Upper

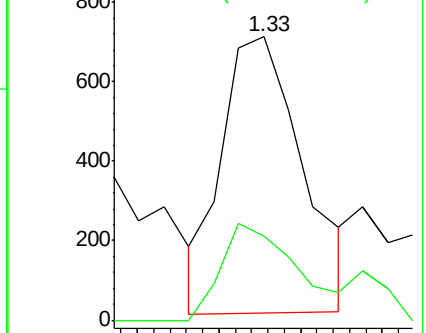
50 100

52 40.1 25.6 38.4#

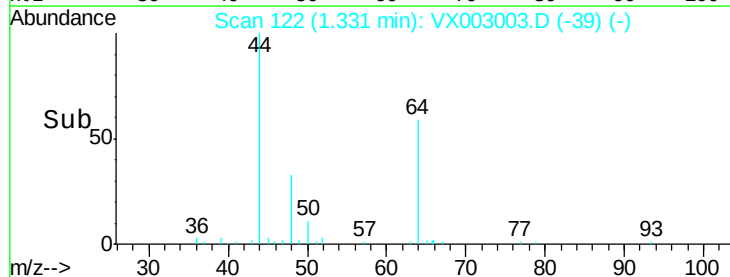


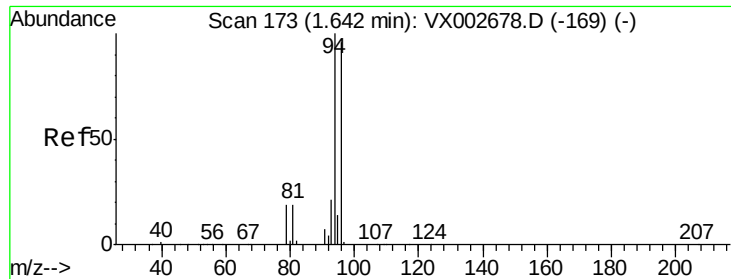
Abundance Ion 50.00 (49.70 to 50.70): VX0

Ion 52.00 (51.70 to 52.70): VX0



Time-->





#5

Bromomethane

Concen: 1.40 ug/l

RT: 1.65 min Scan# 175

Delta R.T. 0.02 min

Lab File: VX003003.D

Acq: 28 Jun 2018 23:12

Instrument :

MSVOA_X

ClientSampleId :

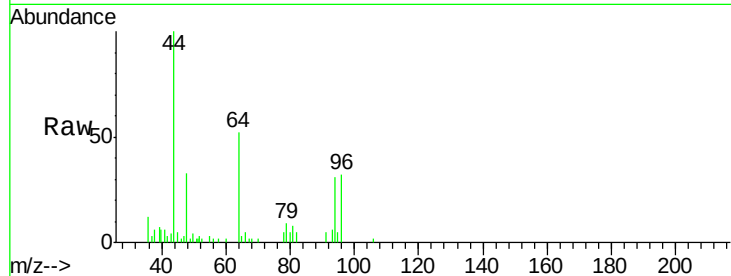
2-AVE-15

Tot Ion: 94 Resp: 2268

Ion Ratio Lower Upper

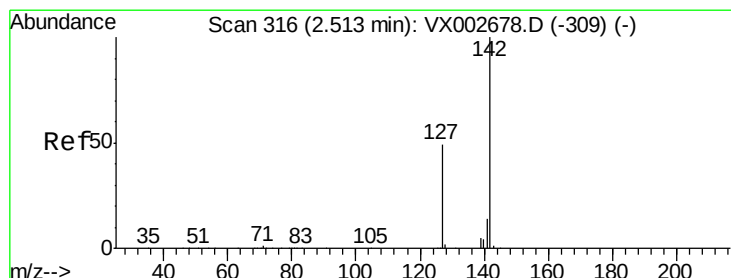
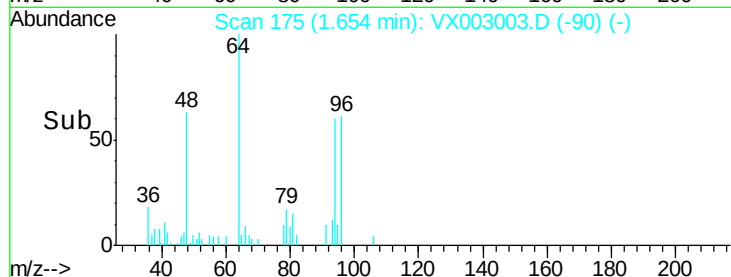
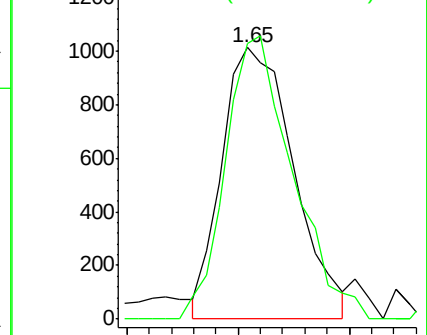
94 100

96 100.4 75.7 113.5



Abundance Ion 94.00 (93.70 to 94.70): VX0

Ion 96.00 (95.70 to 96.70): VX0



#11

Methyl Iodide

Concen: 1.31 ug/l

RT: 2.53 min Scan# 318

Delta R.T. 0.02 min

Lab File: VX003003.D

Acq: 28 Jun 2018 23:12

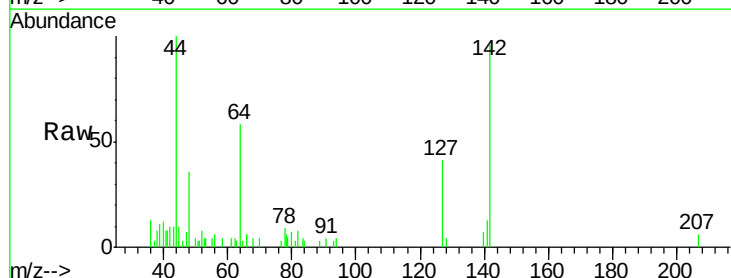
Tgt Ion:142 Resp: 3751

Ion Ratio Lower Upper

142 100

127 42.2 23.2 69.6

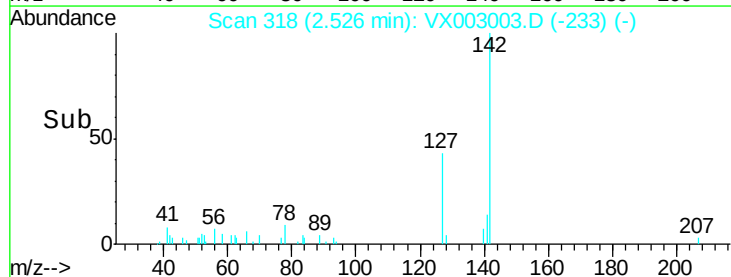
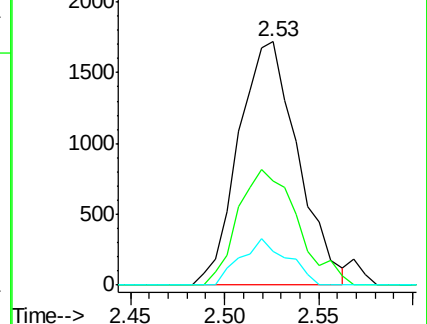
141 14.5 7.4 22.2

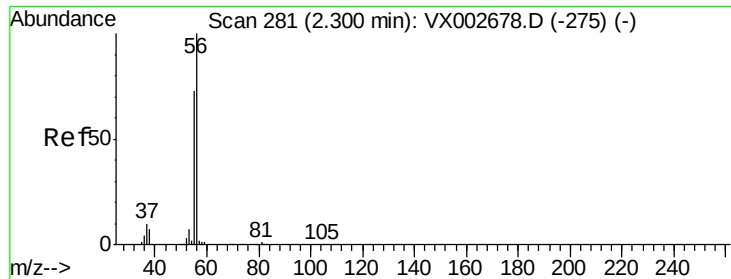


Abundance Ion 142.00 (141.70 to 142.70): V

Ion 127.00 (126.70 to 127.70): V

Ion 141.00 (140.70 to 141.70): V





#13

Acrolein

Concen: 0.78 ug/l

RT: 2.37 min Scan# 292

Delta R.T. 0.07 min

Lab File: VX003003.D

Acq: 28 Jun 2018 23:12

Instrument :

MSVOA_X

ClientSampled :

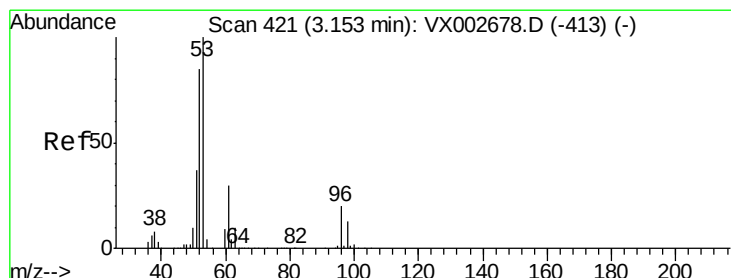
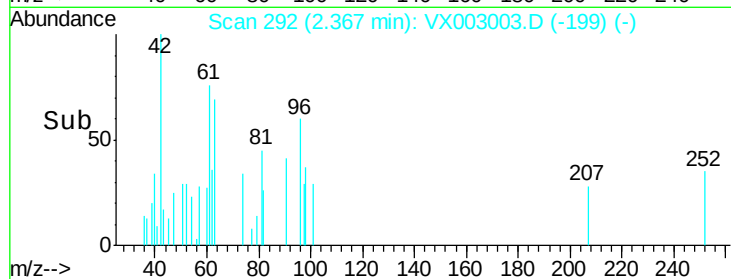
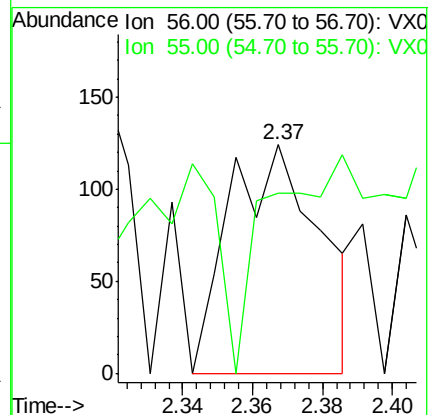
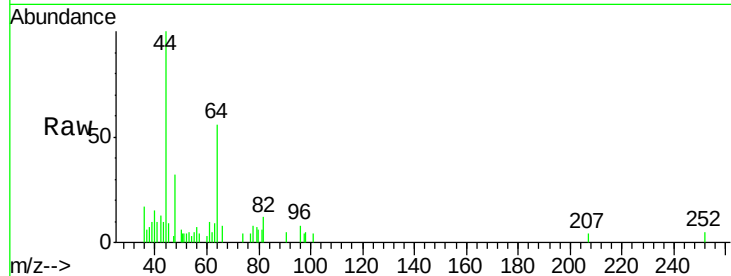
2-AVE-15

Tot Ion: 56 Resp: 224

Ion Ratio Lower Upper

56 100

55 62.9 57.3 85.9



#14

Acrylonitrile

Concen: 0.30 ug/l

RT: 3.15 min Scan# 420

Delta R.T. -0.01 min

Lab File: VX003003.D

Acq: 28 Jun 2018 23:12

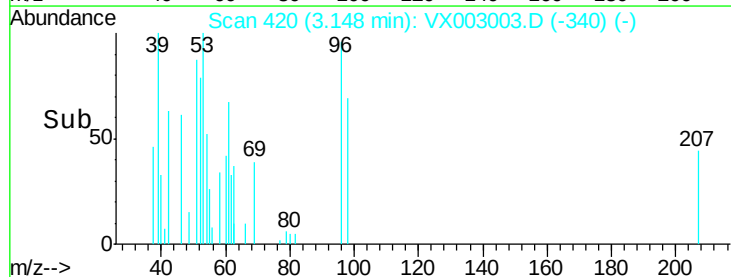
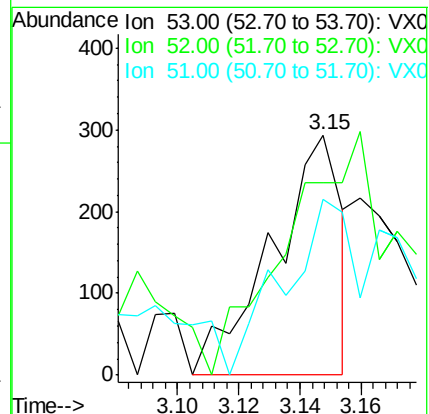
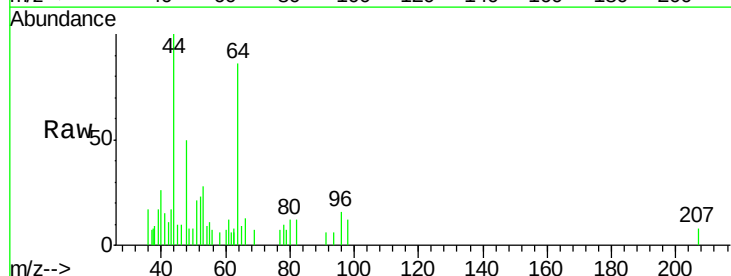
Tgt Ion: 53 Resp: 461

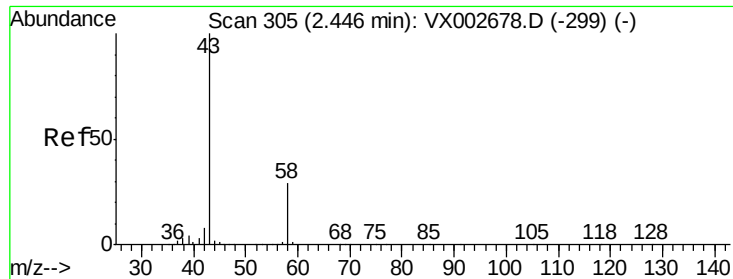
Ion Ratio Lower Upper

53 100

52 90.5 41.5 124.6

51 32.5 17.9 53.8





#15

Acetone

Concen: 3.87 ug/l

RT: 2.45 min Scan# 306

Delta R.T. -0.01 min

Lab File: VX003003.D

Acq: 28 Jun 2018 23:12

Instrument :

MSVOA_X

ClientSampleId :

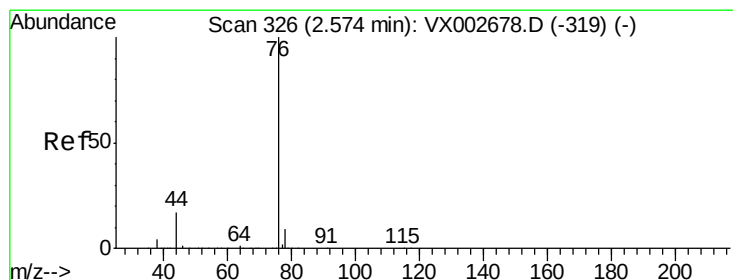
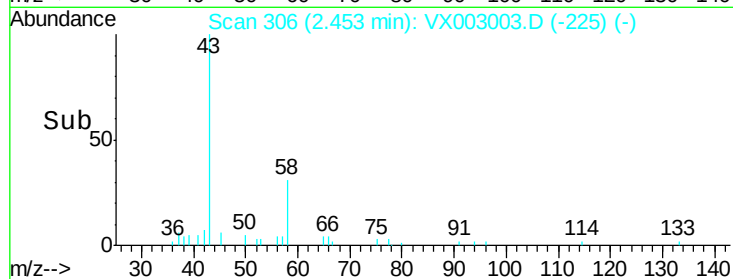
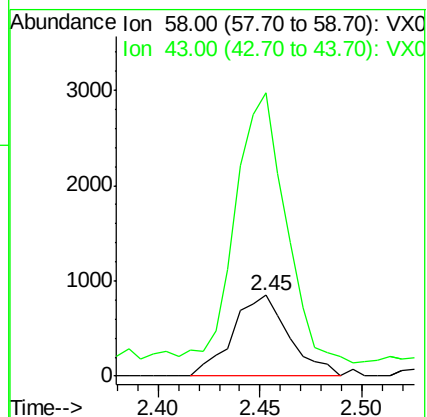
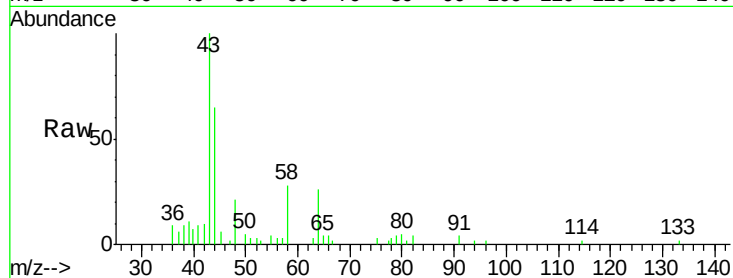
2-AVE-15

Tot Ion: 58 Resp: 1627

Ion Ratio Lower Upper

58 100

43 327.2 278.8 418.2



#16

Carbon Disulfide

Concen: 0.50 ug/l

RT: 2.57 min Scan# 325

Delta R.T. 0.01 min

Lab File: VX003003.D

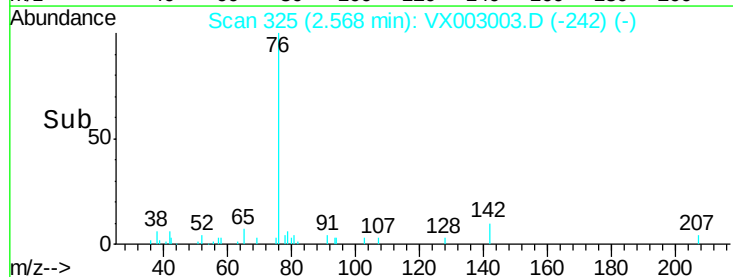
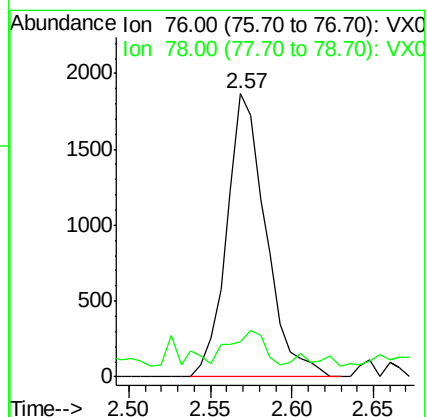
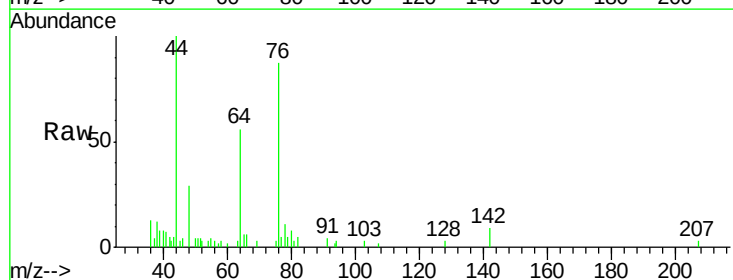
Acq: 28 Jun 2018 23:12

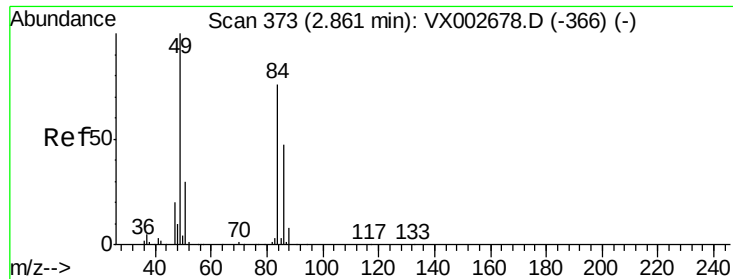
Tgt Ion: 76 Resp: 3112

Ion Ratio Lower Upper

76 100

78 8.3 7.4 11.0

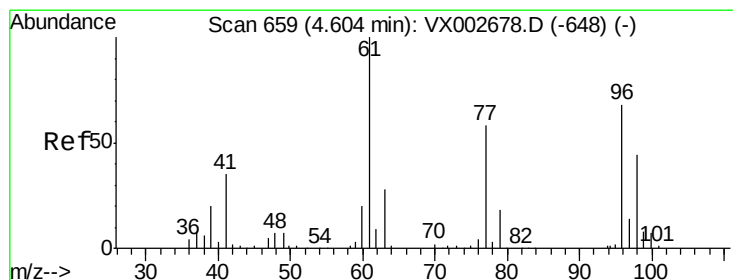
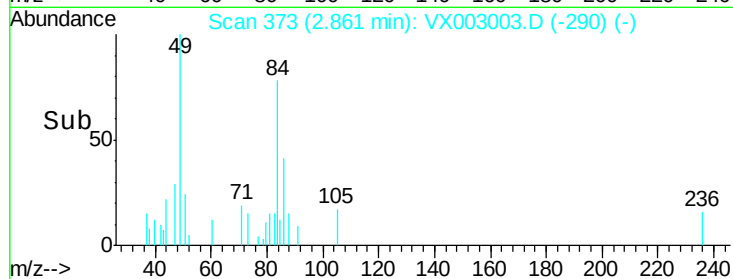
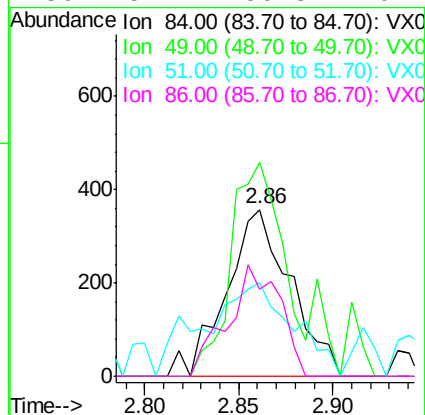
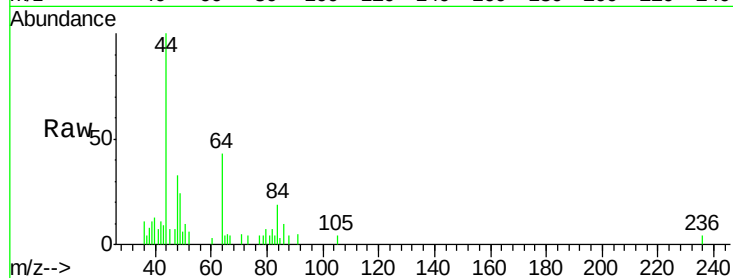




#18
Methylene Chloride
Concen: 0.29 ug/l
RT: 2.86 min Scan# 373
Delta R.T. 0.01 min
Lab File: VX003003.D
Acq: 28 Jun 2018 23:12

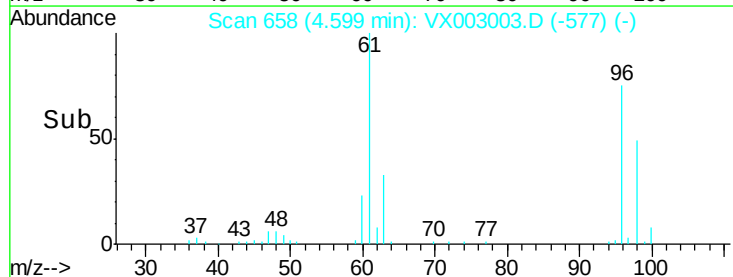
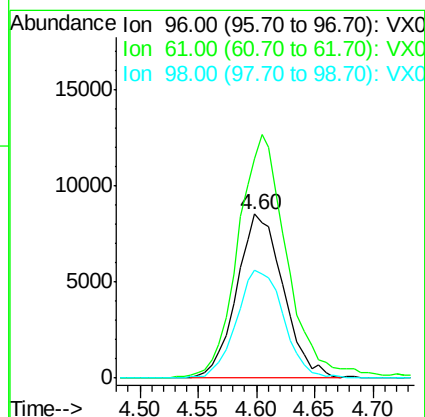
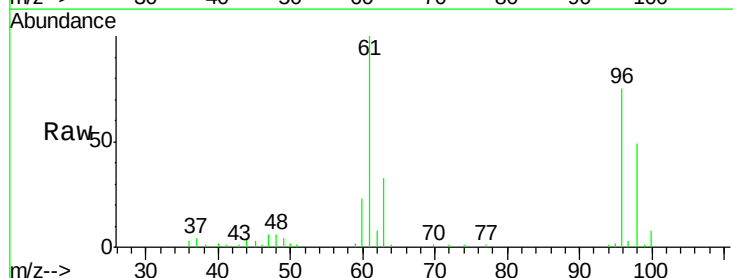
Instrument :
MSVOA_X
ClientSampleId :
2-AVE-15

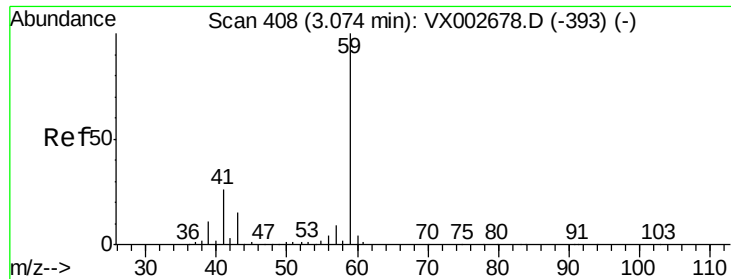
Tot Ion: 84 Resp: 824
Ion Ratio Lower Upper
84 100
49 127.9 104.7 157.1
51 55.6 31.0 46.4#
86 52.2 50.8 76.2



#22
cis-1,2-Dichloroethene
Concen: 8.33 ug/l
RT: 4.60 min Scan# 658
Delta R.T. -0.01 min
Lab File: VX003003.D
Acq: 28 Jun 2018 23:12

Tgt Ion: 96 Resp: 23785
Ion Ratio Lower Upper
96 100
61 153.2 160.2 240.2#
98 66.4 54.1 81.1





#23

tert-Butyl Alcohol

Concen: 2.10 ug/l

RT: 3.07 min Scan# 408

Delta R.T. -0.02 min

Lab File: VX003003.D

Acq: 28 Jun 2018 23:12

Instrument :

MSVOA_X

ClientSampled :

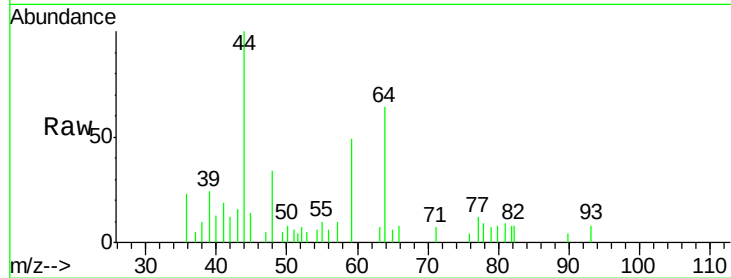
2-AVE-15

Tot Ion: 59 Resp: 1441

Ion Ratio Lower Upper

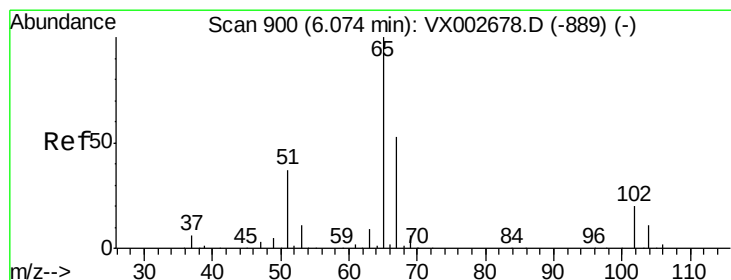
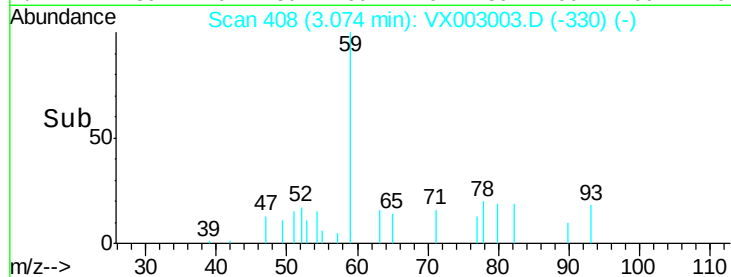
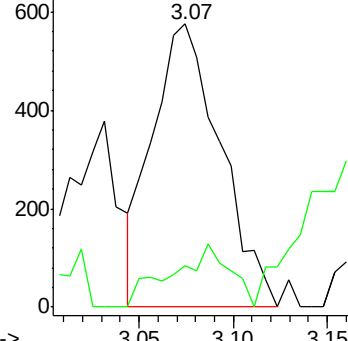
59 100

52 1.5 0.2 0.2#



Abundance Ion 59.00 (58.70 to 59.70): VX0

Ion 52.00 (51.70 to 52.70): VX0



#27

1,2-Dichloroethane-d4

Concen: 30.28 ug/l

RT: 6.07 min Scan# 900

Delta R.T. -0.00 min

Lab File: VX003003.D

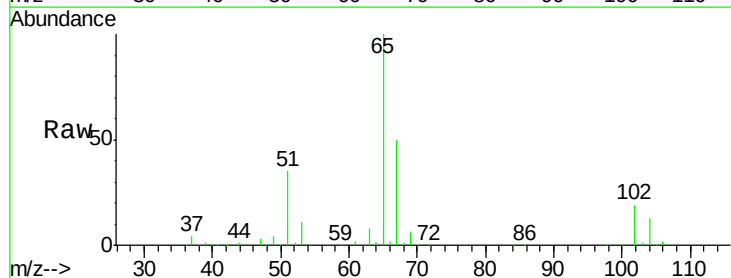
Acq: 28 Jun 2018 23:12

Tgt Ion: 65 Resp: 110777

Ion Ratio Lower Upper

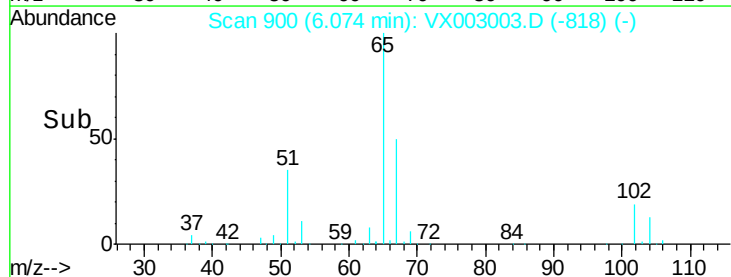
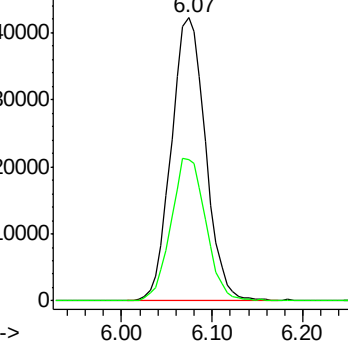
65 100

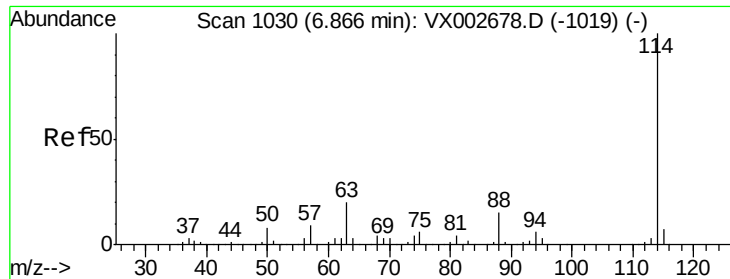
67 51.2 40.9 61.3



Abundance Ion 65.00 (64.70 to 65.70): VX0

Ion 67.00 (66.70 to 67.70): VX0

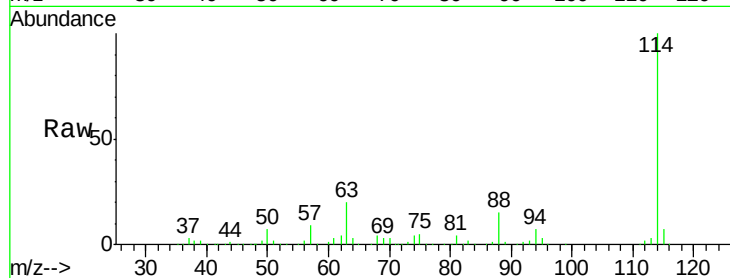




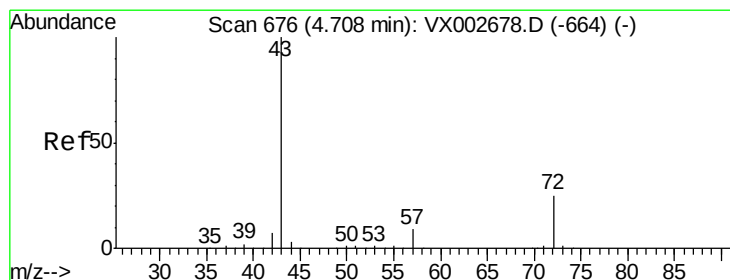
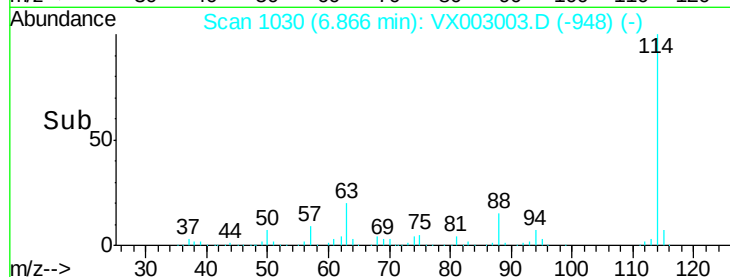
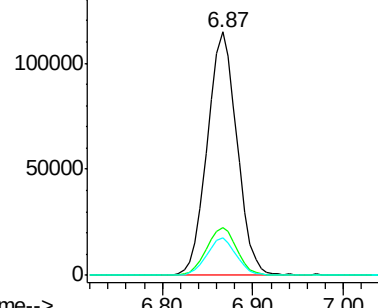
#28
 1,4-Difluorobenzene
 Concen: 30.00 ug/l
 RT: 6.87 min Scan# 1030
 Delta R.T. -0.00 min
 Lab File: VX003003.D
 Acq: 28 Jun 2018 23:12

Instrument :
 MSVOA_X
 ClientSampled :
 2-AVE-15

Tot Ion:114 Resp: 261207
 Ion Ratio Lower Upper
 114 100
 63 20.2 17.1 25.7
 88 15.1 12.6 19.0

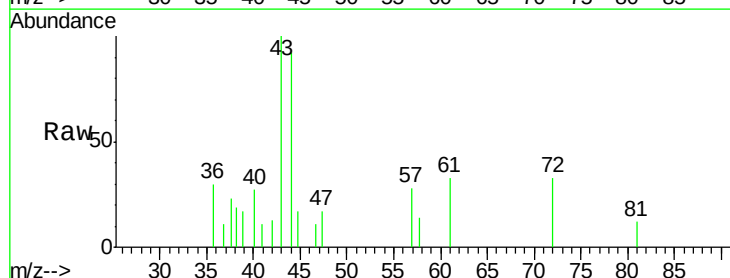


Abundance Ion 114.00 (113.70 to 114.70): V
 Ion 63.00 (62.70 to 63.70): VX0
 Ion 88.00 (87.70 to 88.70): VX0

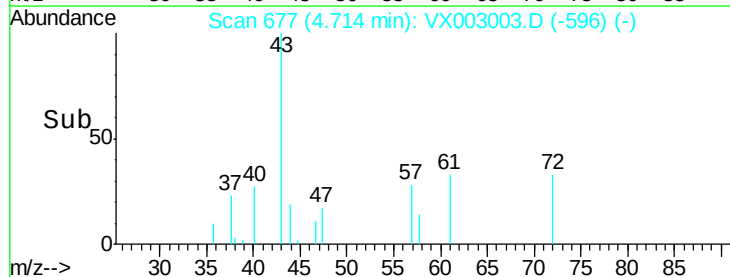
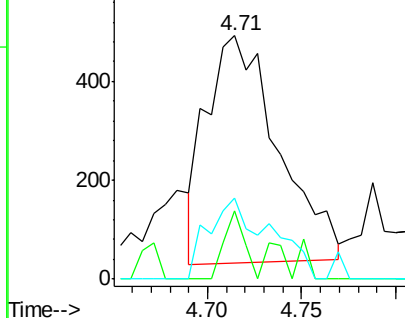


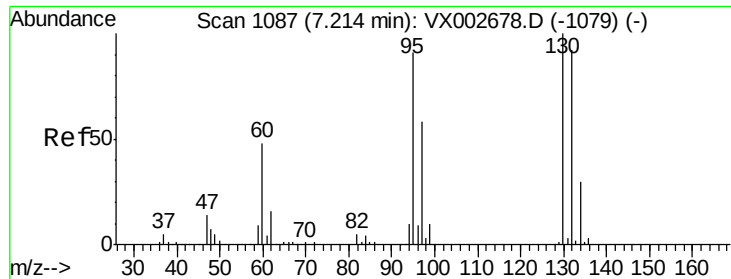
#30
 2-Butanone
 Concen: 0.60 ug/l
 RT: 4.71 min Scan# 677
 Delta R.T. -0.01 min
 Lab File: VX003003.D
 Acq: 28 Jun 2018 23:12

Tgt Ion: 43 Resp: 1217
 Ion Ratio Lower Upper
 43 100
 57 8.5 6.1 9.1
 72 20.9 18.1 27.1



Abundance Ion 43.00 (42.70 to 43.70): VX0
 Ion 57.00 (56.70 to 57.70): VX0
 Ion 72.00 (71.70 to 72.70): VX0





#37

Trichloroethene

Concen: 3.00 ug/l

RT: 7.22 min Scan# 1088

Delta R.T. -0.00 min

Lab File: VX003003.D

Acq: 28 Jun 2018 23:12

Instrument :

MSVOA_X

ClientSampled :

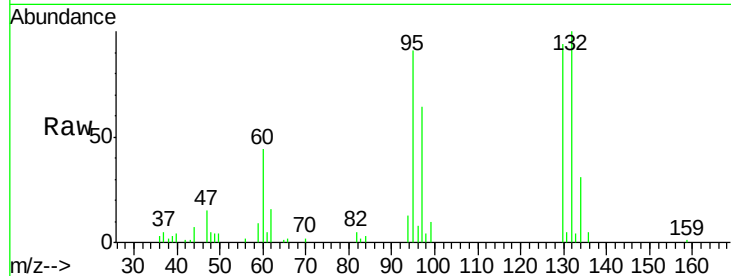
2-AVE-15

Tot Ion:130 Resp: 9189

Ion Ratio Lower Upper

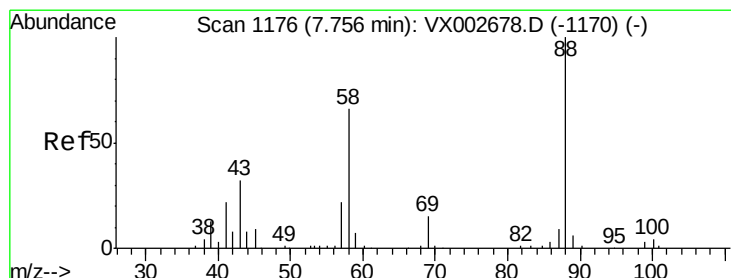
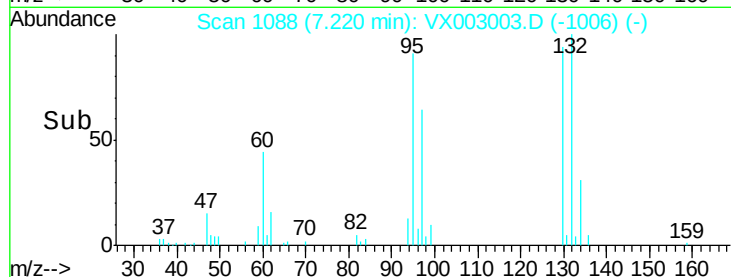
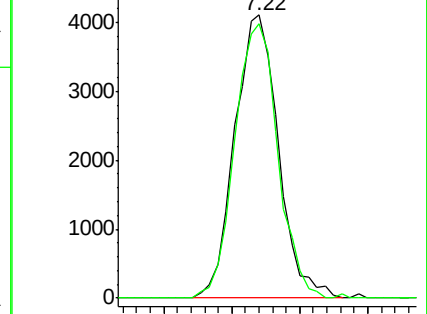
130 100

95 97.1 81.5 122.3



Abundance Ion 129.90 (129.60 to 130.60): V

Ion 94.90 (94.60 to 95.60): VX0



#45

1,4-Dioxane

Concen: 0.69 ug/l

RT: 7.79 min Scan# 1181

Delta R.T. 0.02 min

Lab File: VX003003.D

Acq: 28 Jun 2018 23:12

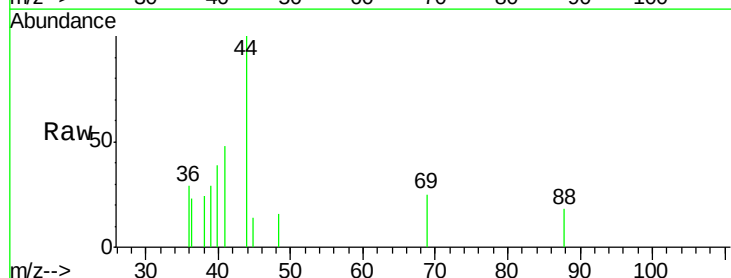
Tgt Ion: 88 Resp: 44

Ion Ratio Lower Upper

88 100

43 231.8 43.2 64.8#

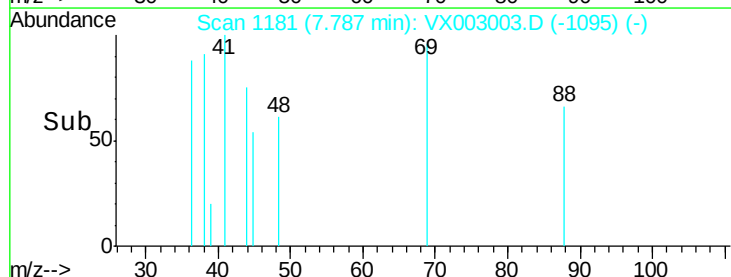
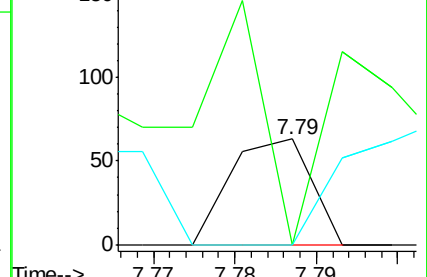
58 0.0 60.2 90.2#

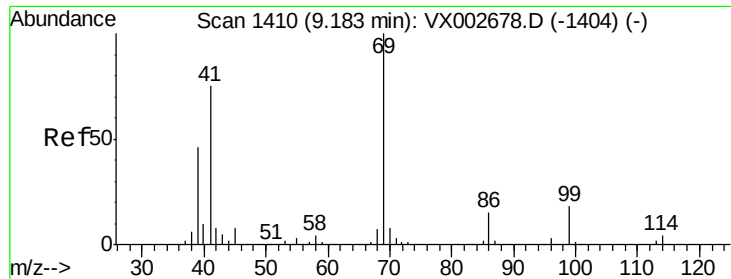


Abundance Ion 88.00 (87.70 to 88.70): VX0

Ion 43.00 (42.70 to 43.70): VX0

Ion 58.00 (57.70 to 58.70): VX0





#51

Ethyl methacrylate

Concen: 0.22 ug/l

RT: 8.73 min Scan# 1335

Delta R.T. -0.46 min

Lab File: VX003003.D

Acq: 28 Jun 2018 23:12

Instrument :

MSVOA_X

ClientSampleId :

2-AVE-15

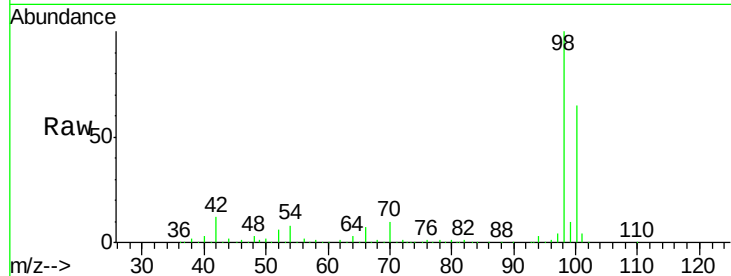
Tot Ion: 69 Resp: 939

Ion Ratio Lower Upper

69 100

41 94.3 39.1 117.3

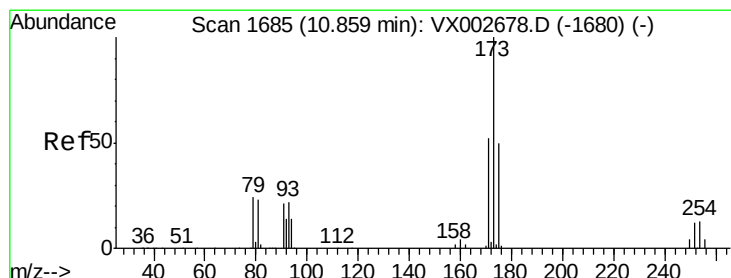
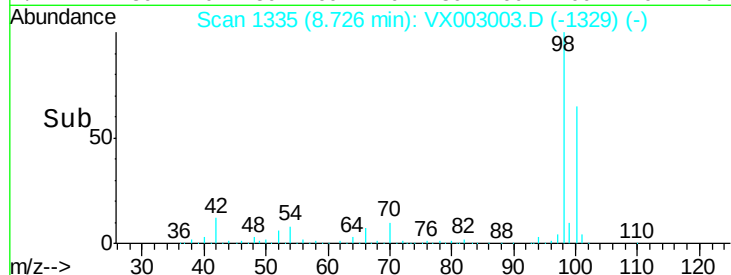
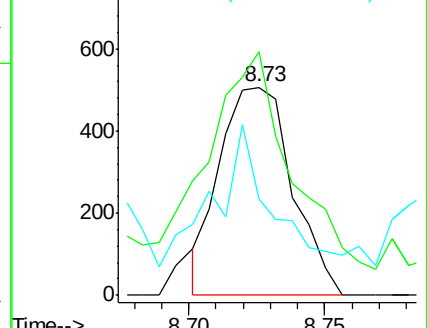
39 26.8 21.7 65.1



Abundance Ion 69.00 (68.70 to 69.70): VX0

Ion 41.00 (40.70 to 41.70): VX0

Ion 39.00 (38.70 to 39.70): VX0



#56

Bromoform

Concen: 0.59 ug/l

RT: 11.14 min Scan# 1731

Delta R.T. 0.28 min

Lab File: VX003003.D

Acq: 28 Jun 2018 23:12

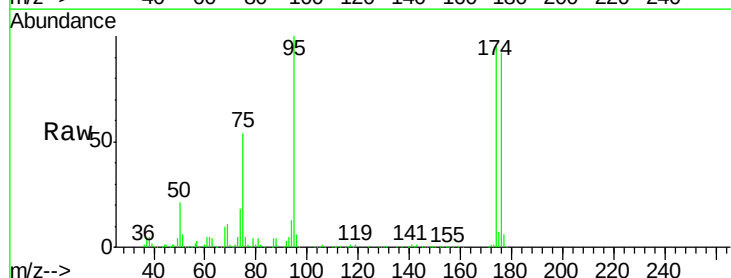
Tgt Ion: 173 Resp: 1403

Ion Ratio Lower Upper

173 100

175 554.2 39.0 58.4#

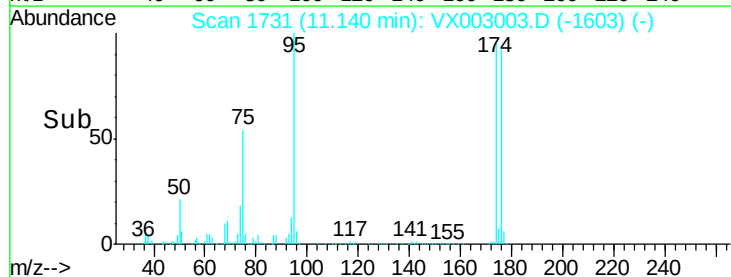
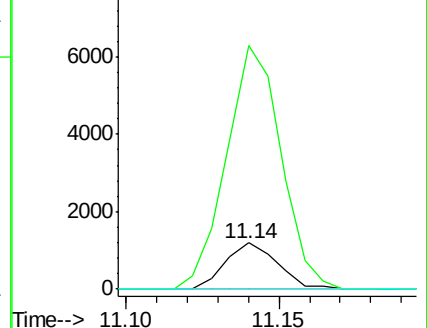
254 0.0 9.6 14.4#

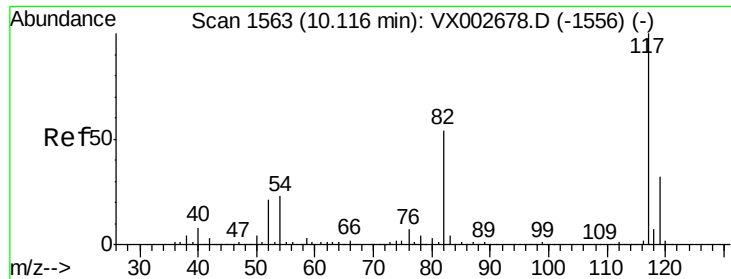


Abundance Ion 173.00 (172.70 to 173.70): V

Ion 175.00 (174.70 to 175.70): V

Ion 254.00 (253.70 to 254.70): V

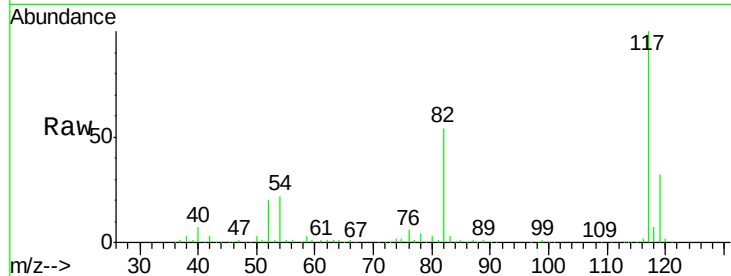




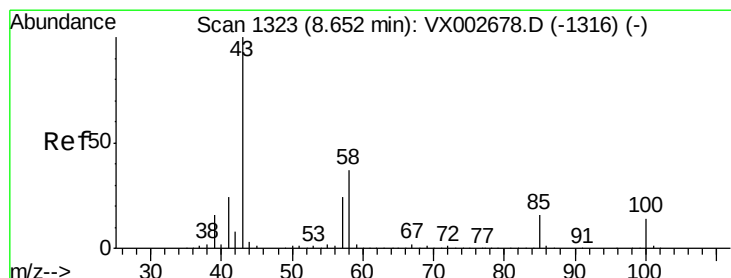
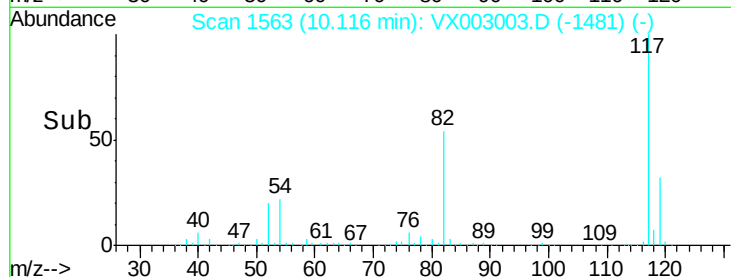
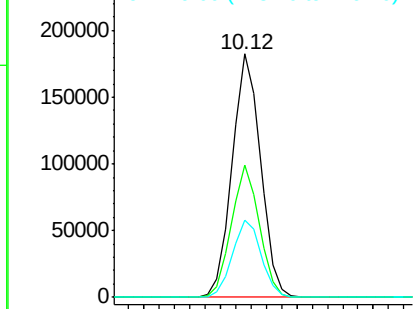
#57
Chlorobenzene-d5
Concen: 30.00 ug/l
RT: 10.12 min Scan# 1563
Delta R.T. -0.00 min
Lab File: VX003003.D
Acq: 28 Jun 2018 23:12

Instrument :
MSVOA_X
ClientSampled :
2-AVE-15

Tot Ion:117 Resp: 235618
Ion Ratio Lower Upper
117 100
82 53.3 44.3 66.5
119 32.2 25.7 38.5

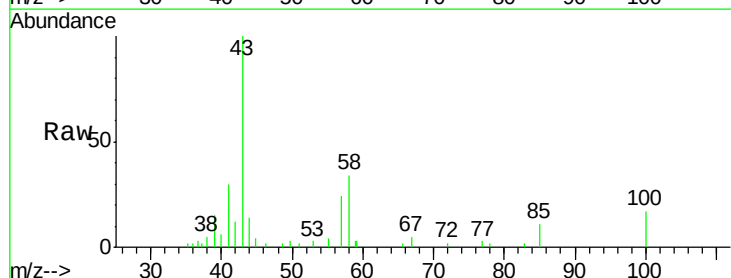


Abundance Ion 117.00 (116.70 to 117.70): V
Ion 82.00 (81.70 to 82.70): VX0
Ion 119.00 (118.70 to 119.70): V

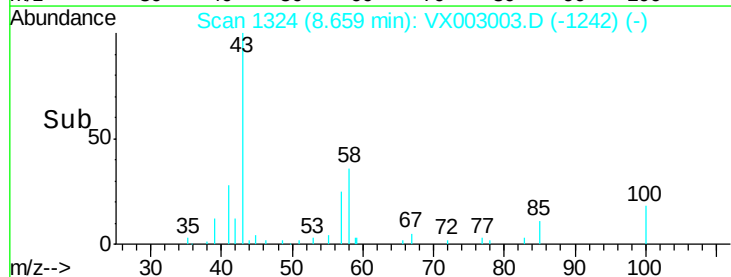
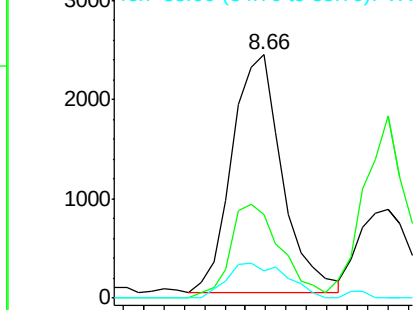


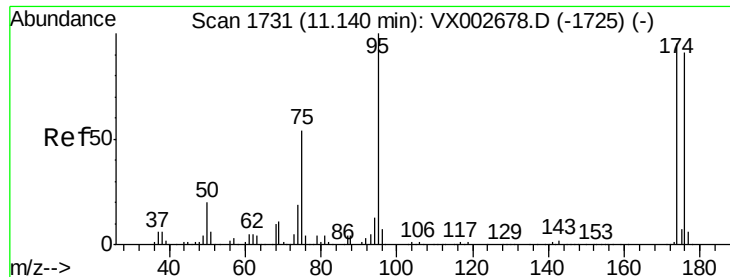
#58
4-Methyl-2-Pentanone
Concen: 1.03 ug/l
RT: 8.66 min Scan# 1324
Delta R.T. -0.00 min
Lab File: VX003003.D
Acq: 28 Jun 2018 23:12

Tgt Ion: 43 Resp: 4110
Ion Ratio Lower Upper
43 100
58 39.7 28.2 42.4
85 17.0 12.4 18.6



Abundance Ion 43.00 (42.70 to 43.70): VX0
Ion 58.00 (57.70 to 58.70): VX0
Ion 85.00 (84.70 to 85.70): VX0

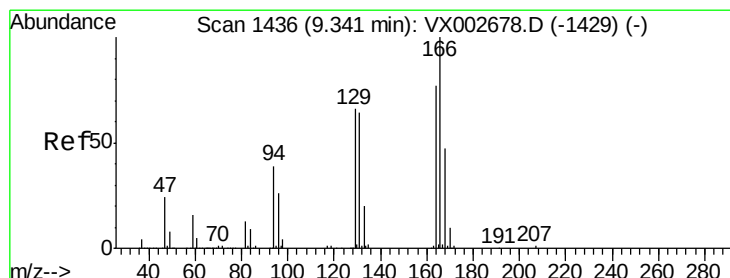
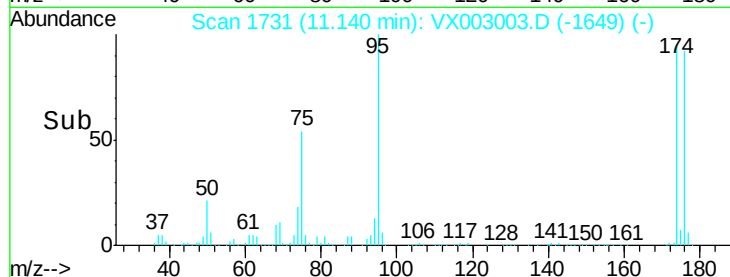
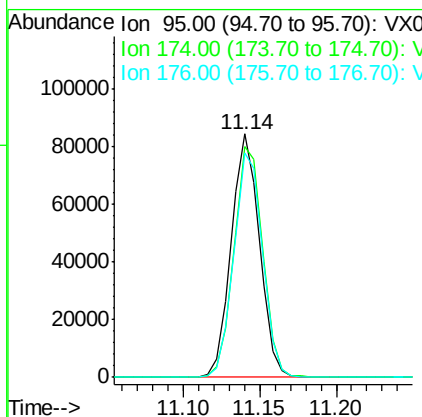
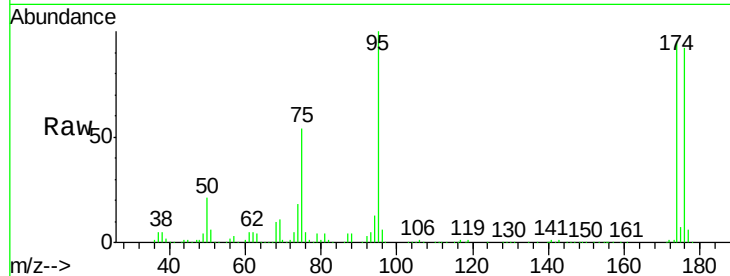




#60
4-Bromofluorobenzene
Concen: 27.64 ug/l
RT: 11.14 min Scan# 1731
Delta R.T. -0.00 min
Lab File: VX003003.D
Acq: 28 Jun 2018 23:12

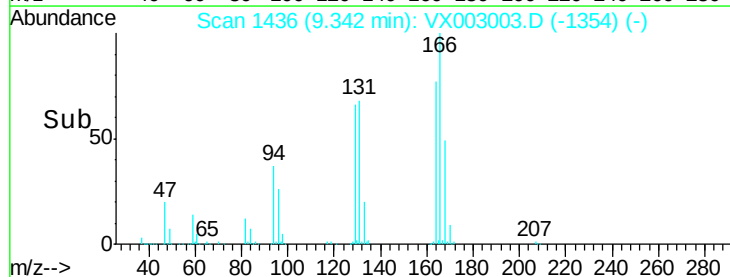
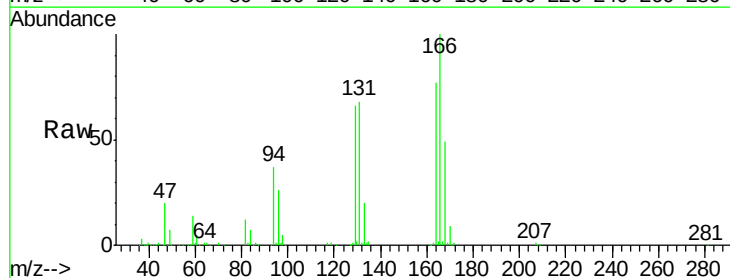
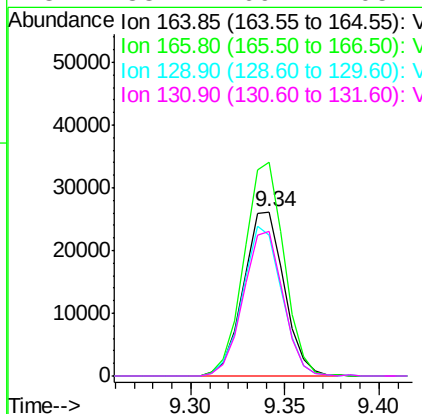
Instrument :
MSVOA_X
ClientSampled :
2-AVE-15

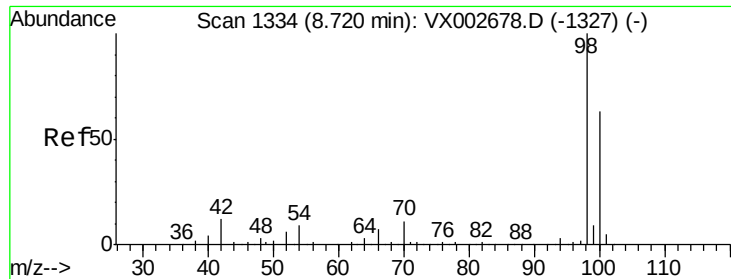
Tot Ion: 95 Resp: 107544
Ion Ratio Lower Upper
95 100
174 96.6 71.8 107.6
176 93.5 70.1 105.1



#61
Tetrachloroethene
Concen: 12.11 ug/l
RT: 9.34 min Scan# 1436
Delta R.T. -0.00 min
Lab File: VX003003.D
Acq: 28 Jun 2018 23:12

Tgt Ion: 164 Resp: 39169
Ion Ratio Lower Upper
164 100
166 130.3 102.4 153.6
129 85.9 70.1 105.1
131 88.4 69.1 103.7

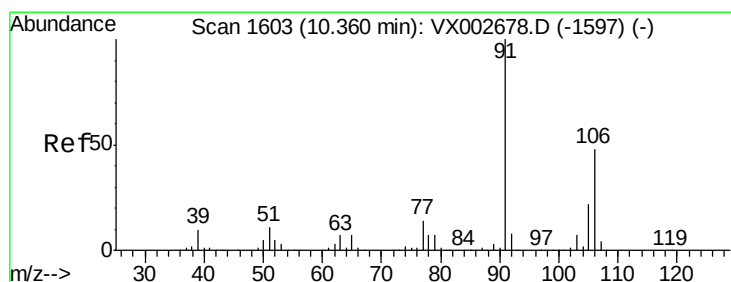
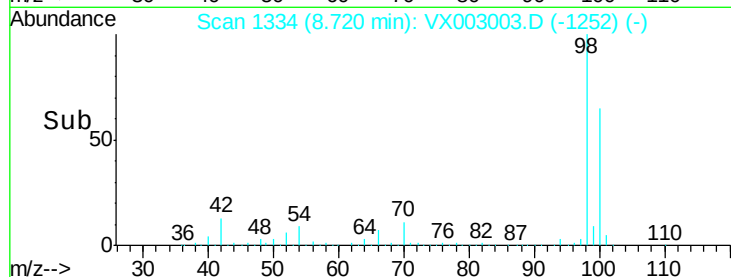
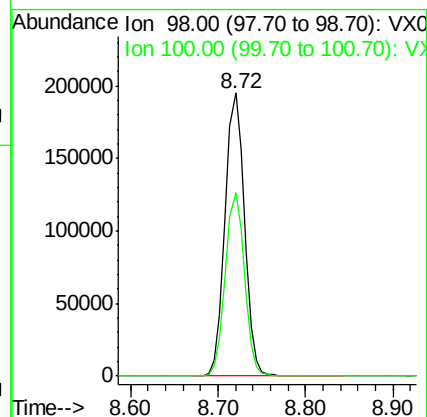
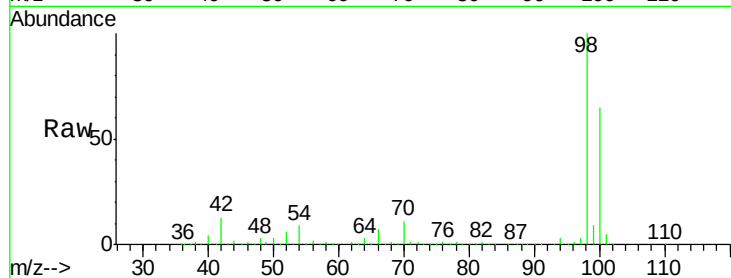




#63
Toluene-d8
Concen: 29.25 ug/l
RT: 8.72 min Scan# 1334
Delta R.T. -0.00 min
Lab File: VX003003.D
Acq: 28 Jun 2018 23:12

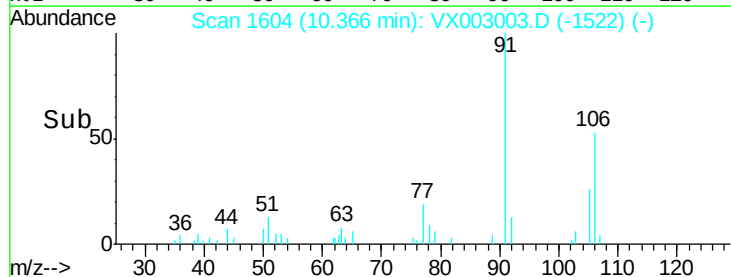
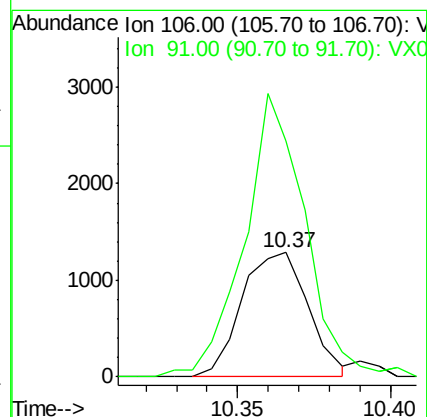
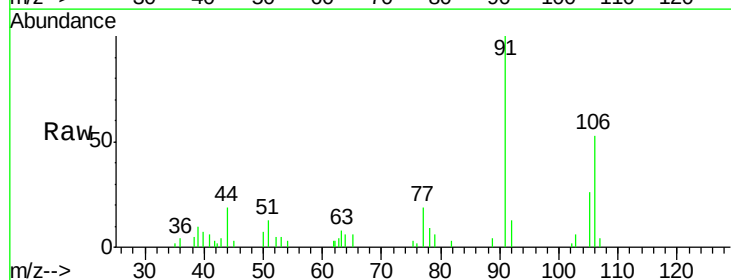
Instrument :
MSVOA_X
ClientSampleId :
2-AVE-15

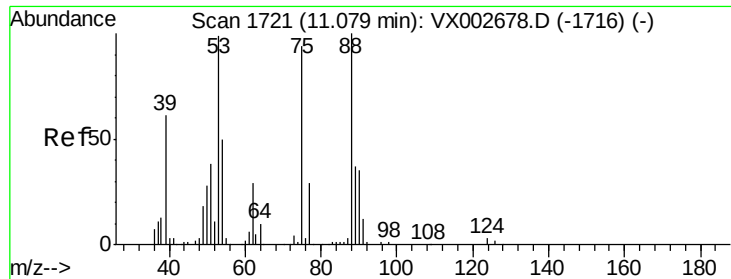
Tot Ion: 98 Resp: 301021
Ion Ratio Lower Upper
98 100
100 63.5 50.8 76.2



#67
m/p-Xylenes
Concen: 0.39 ug/l
RT: 10.37 min Scan# 1604
Delta R.T. -0.00 min
Lab File: VX003003.D
Acq: 28 Jun 2018 23:12

Tgt Ion: 106 Resp: 1941
Ion Ratio Lower Upper
106 100
91 207.7 164.1 246.1





#77

t-1,4-Dichloro-2-butene

Concen: 50.16 ug/l

RT: 11.14 min Scan# 1731

Delta R.T. 0.06 min

Lab File: VX003003.D

Acq: 28 Jun 2018 23:12

Instrument :

MSVOA_X

ClientSampled :

2-AVE-15

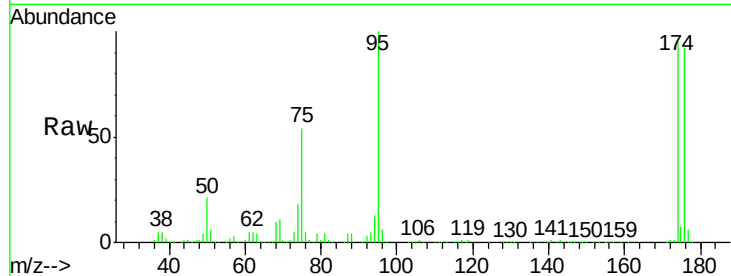
Tot Ion: 75 Resp: 55824

Ion Ratio Lower Upper

75 100

53 0.1 48.3 144.9#

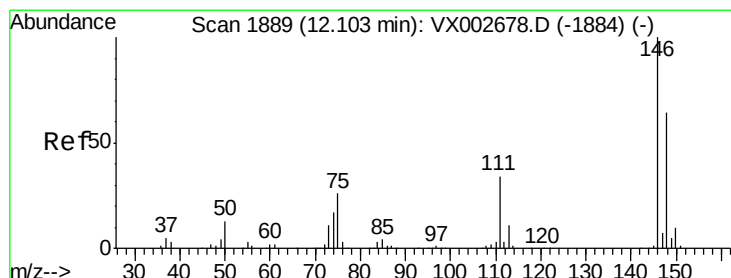
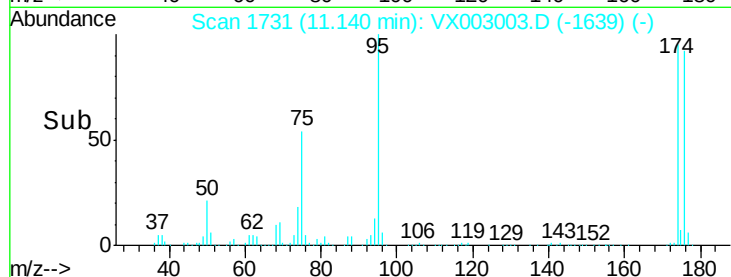
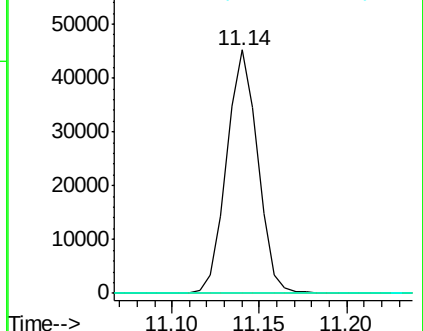
89 0.0 21.8 65.4#



Abundance Ion 75.00 (74.70 to 75.70): VX0

Ion 53.00 (52.70 to 53.70): VX0

Ion 89.00 (88.70 to 89.70): VX0



#84

1,4-Dichlorobenzene

Concen: 0.21 ug/l

RT: 12.10 min Scan# 1889

Delta R.T. -0.00 min

Lab File: VX003003.D

Acq: 28 Jun 2018 23:12

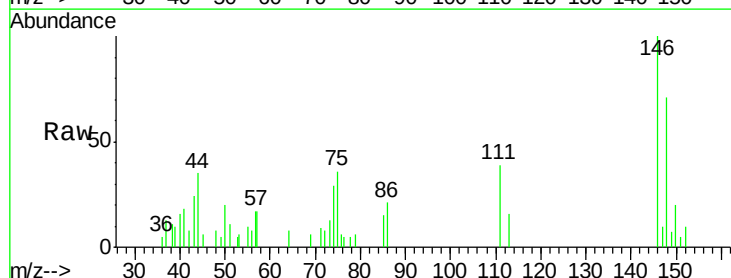
Tgt Ion: 146 Resp: 1476

Ion Ratio Lower Upper

146 100

111 44.6 18.5 55.5

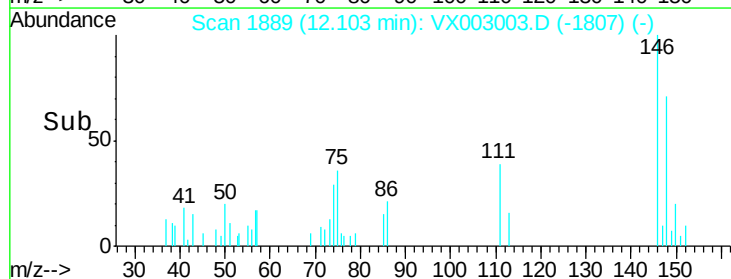
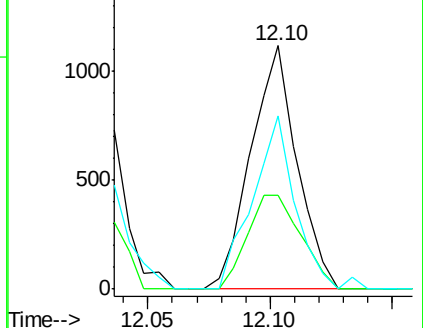
148 64.9 32.0 96.0

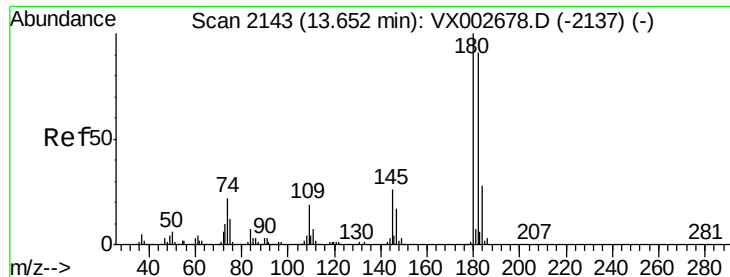


Abundance Ion 146.00 (145.70 to 146.70): V

Ion 111.00 (110.70 to 111.70): V

Ion 148.00 (147.70 to 148.70): V

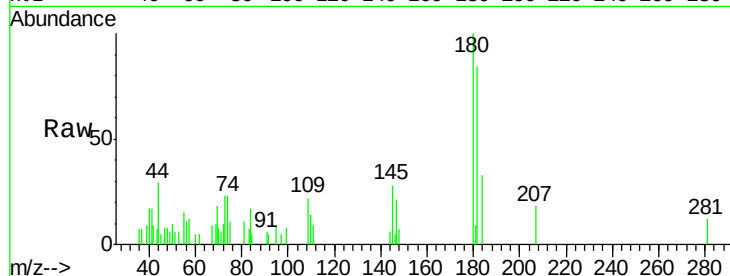




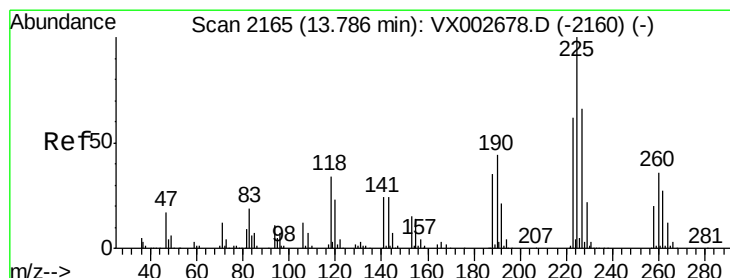
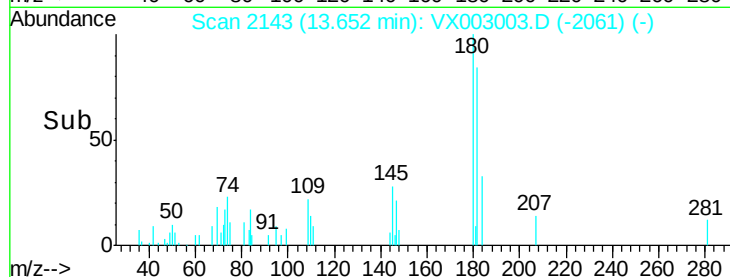
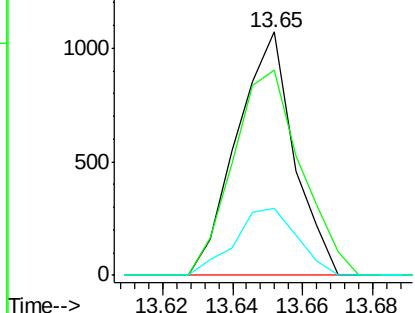
#89
 1,2,4-Trichlorobenzene
 Concen: 0.23 ug/l
 RT: 13.65 min Scan# 2143
 Delta R.T. -0.00 min
 Lab File: VX003003.D
 Acq: 28 Jun 2018 23:12

Instrument :
 MSVOA_X
 ClientSampled :
 2-AVE-15

Tot Ion:180 Resp: 1212
 Ion Ratio Lower Upper
 180 100
 182 100.7 76.4 114.6
 145 30.4 22.9 34.3

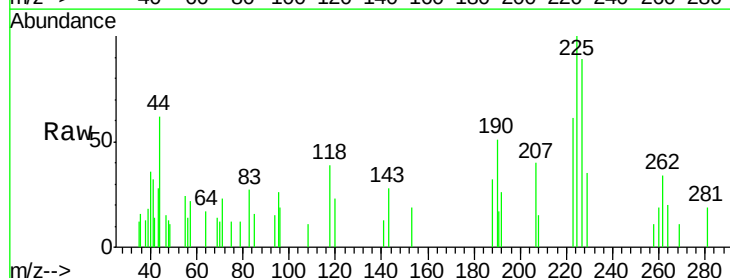


Abundance Ion 180.00 (179.70 to 180.70): V
 Ion 182.00 (181.70 to 182.70): V
 Ion 145.00 (144.70 to 145.70): V



#90
 Hexachlorobutadiene
 Concen: 0.21 ug/l
 RT: 13.79 min Scan# 2165
 Delta R.T. -0.00 min
 Lab File: VX003003.D
 Acq: 28 Jun 2018 23:12

Tgt Ion:225 Resp: 583
 Ion Ratio Lower Upper
 225 100
 223 70.7 0.0 122.4
 227 79.9 0.0 128.0



Abundance Ion 225.00 (224.70 to 225.70): V
 Ion 223.00 (222.70 to 223.70): V
 Ion 227.00 (226.70 to 227.70): V

