

Data Path : Z:\VOASRV\HPCHEM1\MSVOA X\DATA\VX062018\
 Data File : VX002774.D
 Acq On : 21 Jun 2018 06:31
 Operator : JC/MD
 Sample : PB110408ZHE#13
 Misc : 5.0mL/MSVOA X/WATER
 ALS Vial : 45 Sample Multiplier: 1

Instrument :
 MSVOA_X
 ClientSampleId :

Quant Time: Jun 21 07:42:46 2018
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_X\METHOD\82X061518W.M
 Quant Title : SW846 8260
 QLast Update : Sat Jun 16 01:37:33 2018
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	5.67	168	232759	50.00	ug/l	0.00
34) 1,4-Difluorobenzene	6.87	114	330681	50.00	ug/l	0.00
63) Chlorobenzene-d5	10.12	117	311126	50.00	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	12.09	152	177627	50.00	ug/l	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
33) 1,2-Dichloroethane-d4	6.07	65	161703	45.72	ug/l	0.00
Spiked Amount			Recovery	=	91.44%	
35) Dibromofluoromethane	5.51	113	129273	48.98	ug/l	0.00
Spiked Amount			Recovery	=	97.96%	
50) Toluene-d8	8.72	98	473448	47.25	ug/l	0.00
Spiked Amount			Recovery	=	94.50%	
62) 4-Bromofluorobenzene	11.14	95	165909	43.69	ug/l	0.00
Spiked Amount			Recovery	=	87.38%	

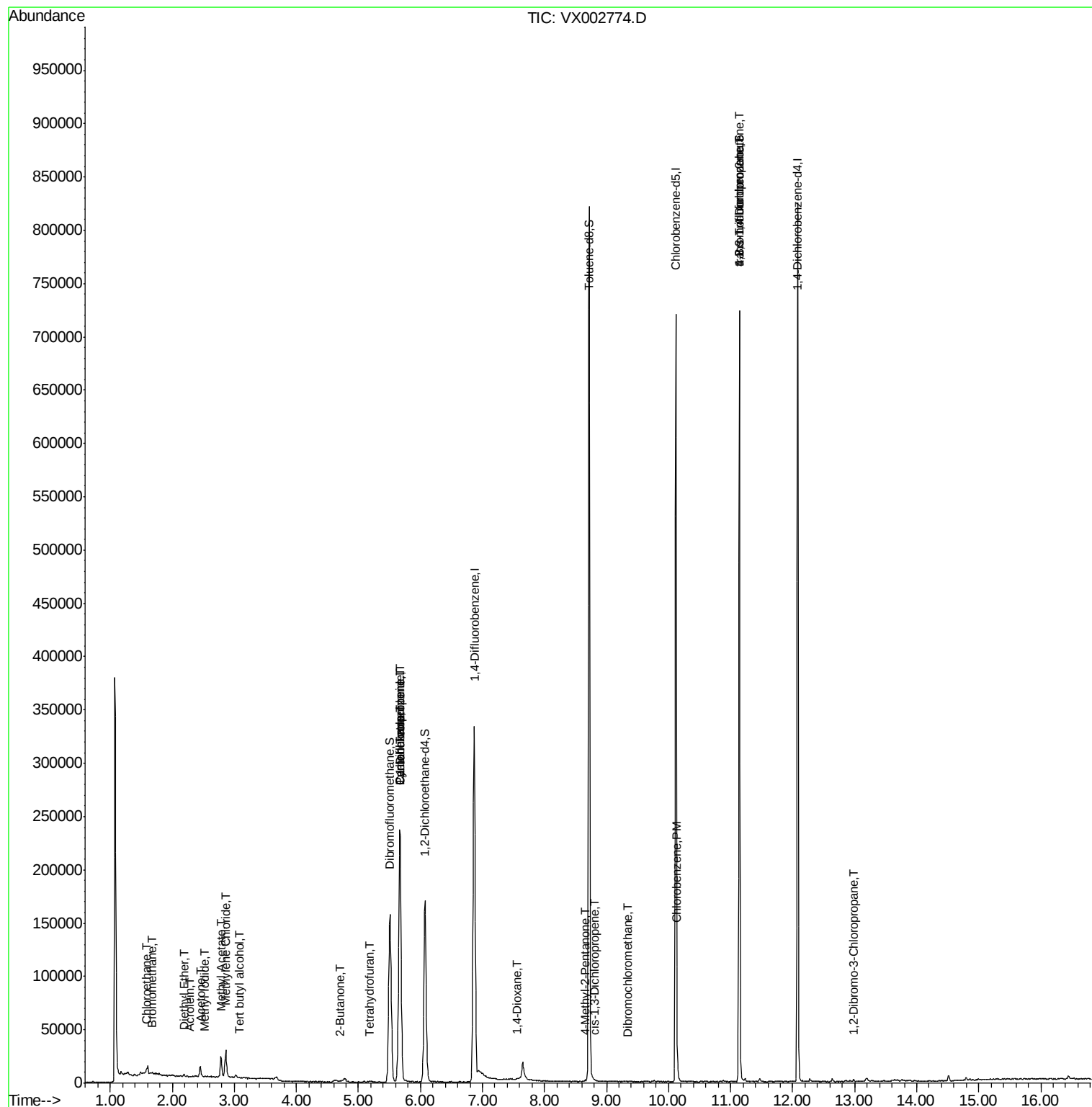
Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
5) Bromomethane	1.67	94	823	0.45	ug/l #	71
6) Chloroethane	1.58	64	8862	4.41	ug/l #	64
8) Diethyl Ether	2.19	74	654	0.35	ug/l	95
10) Methyl Iodide	2.53	142	601	5.33	ug/l #	79
11) Tert butyl alcohol	3.08	59	233	0.32	ug/l #	46
13) Acrolein	2.28	56	65	7.05	ug/l #	14
16) Acetone	2.45	43	11092	7.11	ug/l	99
18) Methyl Acetate	2.78	43	23106	5.56	ug/l	98
20) Methylene Chloride	2.86	84	11584	3.62	ug/l	98
25) 2-Butanone	4.71	43	1697	0.83	ug/l	96
29) Tetrahydrofuran	5.17	42	660	0.49	ug/l #	87
31) Cyclohexane	5.67	56	4908	1.18	ug/l #	18
36) 1,1-Dichloropropene	5.67	75	16157	4.60	ug/l #	51
38) Carbon Tetrachloride	5.67	117	22068	6.31	ug/l #	15
49) 1,4-Dioxane	7.56	88	20	0.31	ug/l #	1
51) 4-Methyl-2-Pentanone	8.66	43	956	0.23	ug/l #	82
54) cis-1,3-Dichloropropene	8.82	75	23	3.22	ug/l #	32
60) Dibromochloromethane	9.34	129	21	3.77	ug/l #	11
65) Chlorobenzene	10.14	112	3625	0.47	ug/l	97
76) 1,2,3-Trichloropropane	11.14	75	88191	26.31	ug/l #	33
81) trans-1,4-Dichloro-2-buten	11.14	75	88191	81.33	ug/l #	7
92) 1,2-Dibromo-3-Chloropropan	12.98	75	240	0.33	ug/l #	1

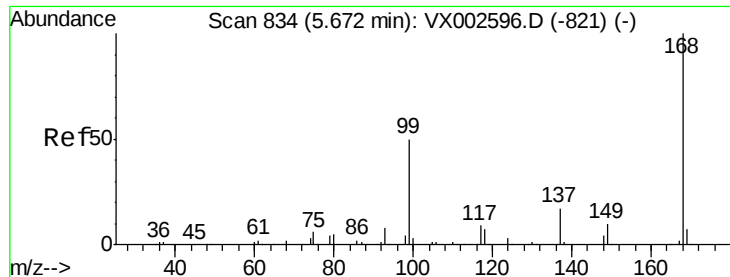
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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Quant Time: Jun 21 07:42:46 2018
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA_X\METHOD\82X061518W.M
Quant Title : SW846 8260
QLast Update : Sat Jun 16 01:37:33 2018
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.00 ug/l

RT: 5.67 min Scan# 833

Delta R.T. -0.01 min

Lab File: VX002774.D

Acq: 21 Jun 2018 06:31

Instrument :

MSVOA_X

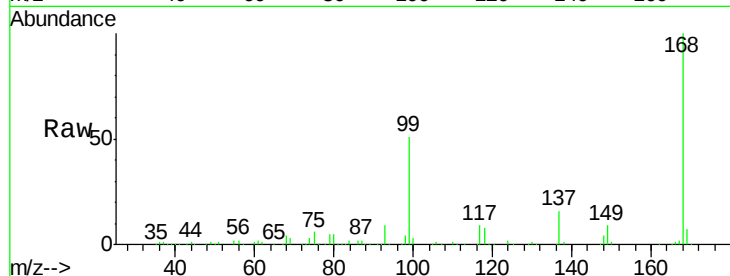
ClientSampleId :

Tot Ion:168 Resp: 232759

Ion Ratio Lower Upper

168 100

99 50.5 39.3 58.9



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VX0

5.67

80000

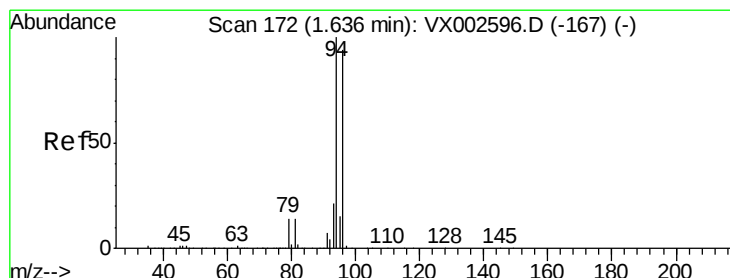
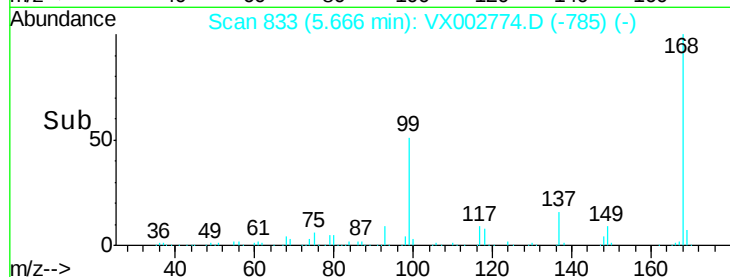
60000

40000

20000

0

Time--> 5.50 5.60 5.70 5.80



#5

Bromomethane

Concen: 0.45 ug/l

RT: 1.67 min Scan# 177

Delta R.T. 0.03 min

Lab File: VX002774.D

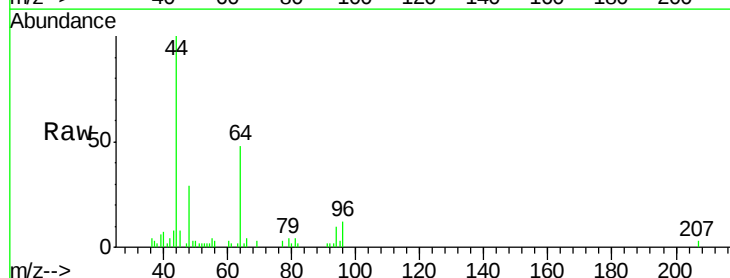
Acq: 21 Jun 2018 06:31

Tgt Ion: 94 Resp: 823

Ion Ratio Lower Upper

94 100

96 121.4 74.9 112.3#



Abundance Ion 93.90 (93.60 to 94.60): VX0

Ion 95.90 (95.60 to 96.60): VX0

1.67

400

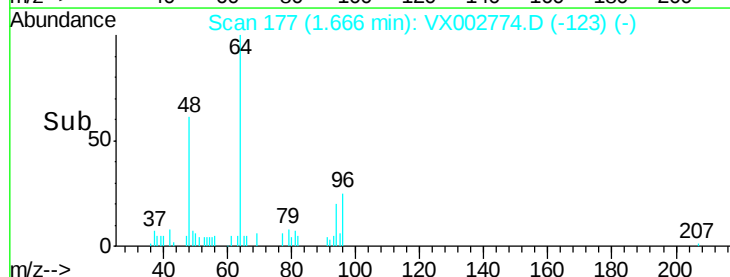
300

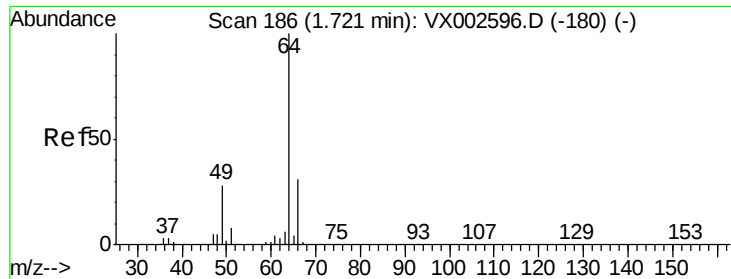
200

100

0

Time--> 1.60 1.65 1.70





#6

Chloroethane

Concen: 4.41 ug/l

RT: 1.58 min Scan# 163

Delta R.T. -0.14 min

Lab File: VX002774.D

Acq: 21 Jun 2018 06:31

Instrument :

MSVOA_X

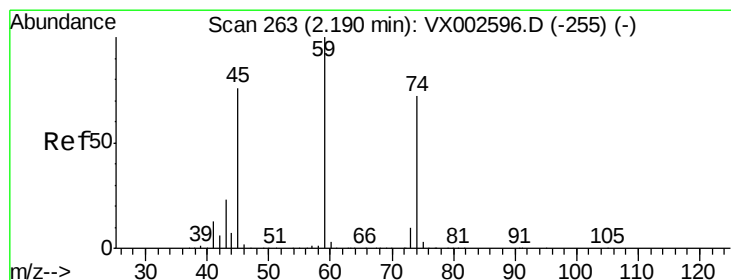
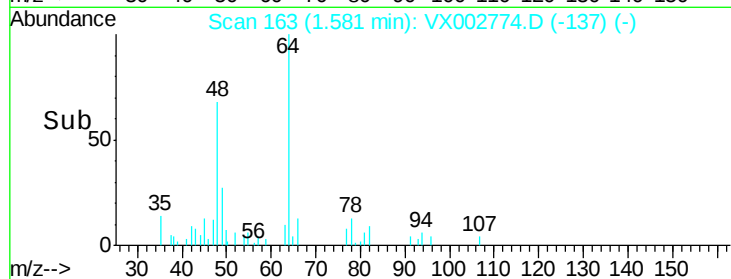
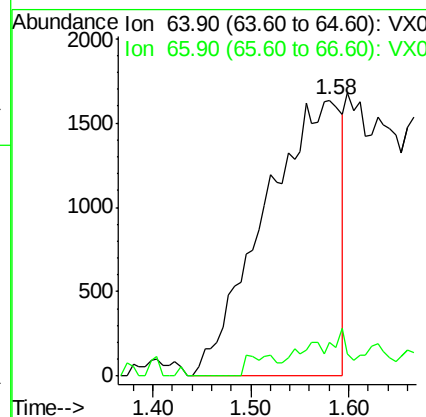
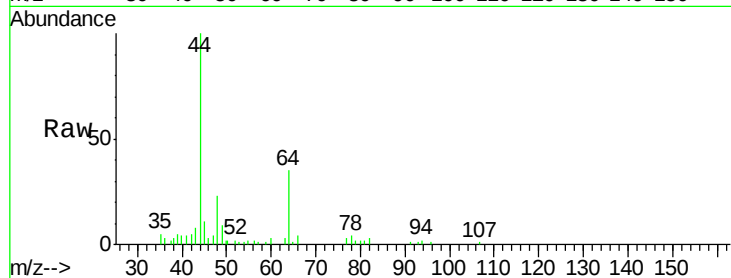
ClientSampleId :

Tot Ion: 64 Resp: 8862

Ion Ratio Lower Upper

64 100

66 12.0 25.5 38.3#



#8

Diethyl Ether

Concen: 0.35 ug/l

RT: 2.19 min Scan# 263

Delta R.T. 0.00 min

Lab File: VX002774.D

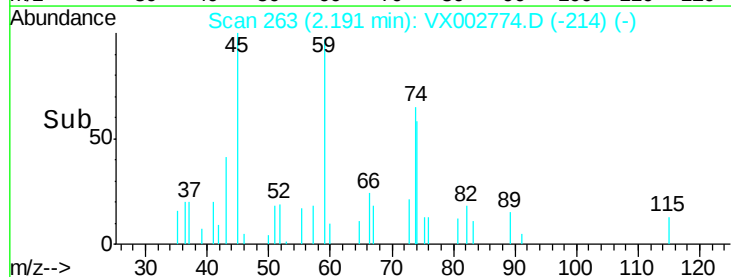
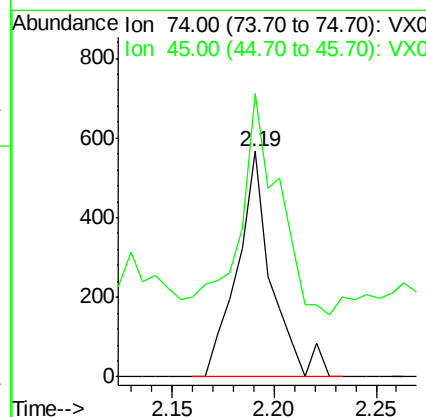
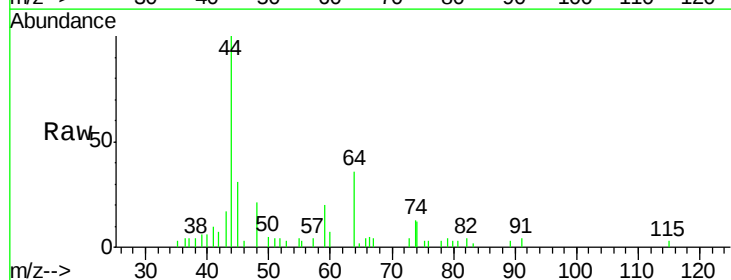
Acq: 21 Jun 2018 06:31

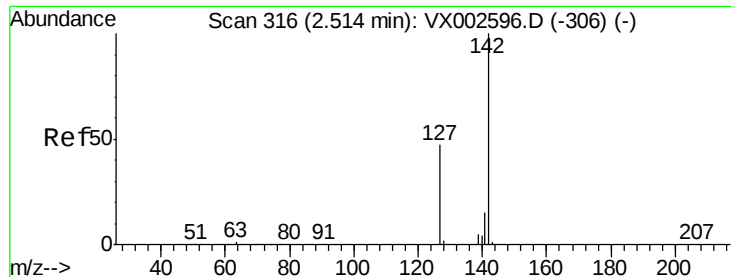
Tgt Ion: 74 Resp: 654

Ion Ratio Lower Upper

74 100

45 111.9 53.1 159.4





#10

Methyl Iodide

Concen: 5.33 ug/l

RT: 2.53 min Scan# 318

Delta R.T. 0.01 min

Lab File: VX002774.D

Acq: 21 Jun 2018 06:31

Instrument :

MSVOA_X

ClientSampled :

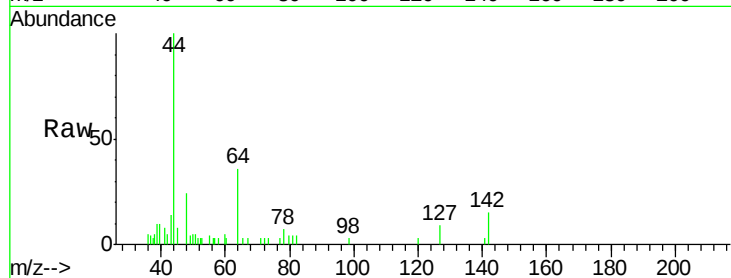
Tot Ion:142 Resp: 601

Ion Ratio Lower Upper

142 100

127 62.6 36.6 55.0#

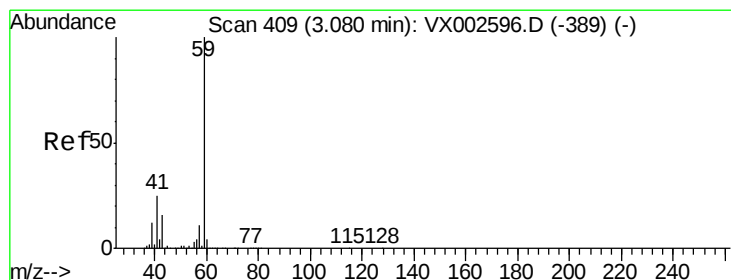
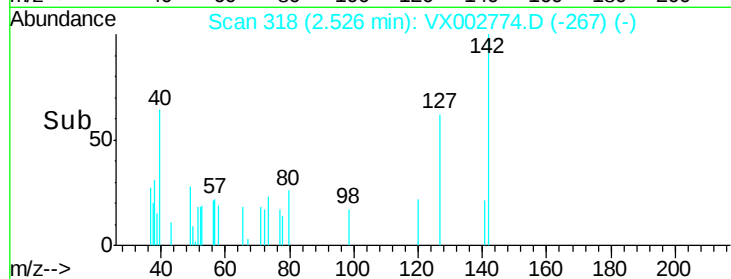
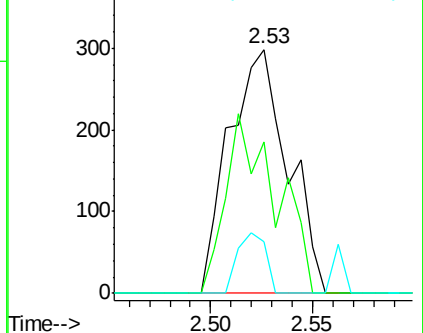
141 11.6 11.3 16.9



Abundance Ion 141.80 (141.50 to 142.50): V

Ion 126.80 (126.50 to 127.50): V

Ion 140.80 (140.50 to 141.50): V



#11

Tert butyl alcohol

Concen: 0.32 ug/l

RT: 3.08 min Scan# 409

Delta R.T. 0.00 min

Lab File: VX002774.D

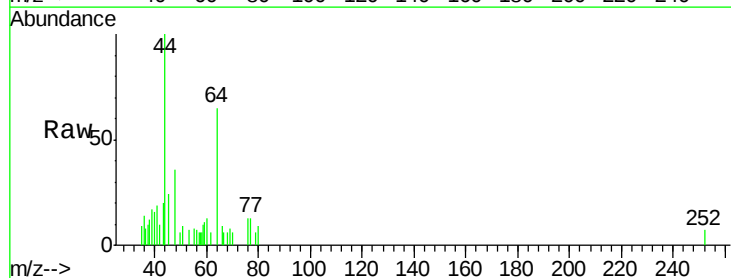
Acq: 21 Jun 2018 06:31

Tgt Ion: 59 Resp: 233

Ion Ratio Lower Upper

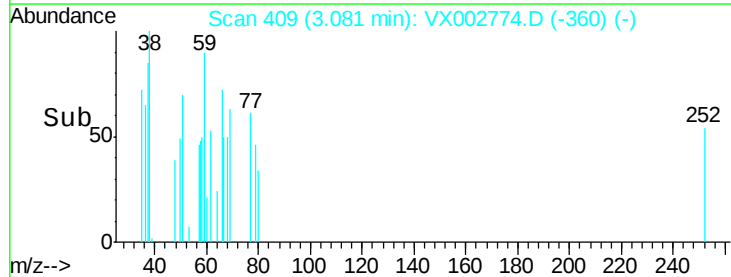
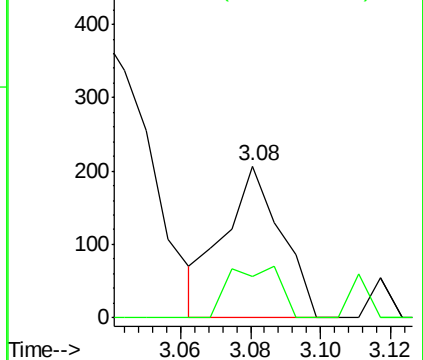
59 100

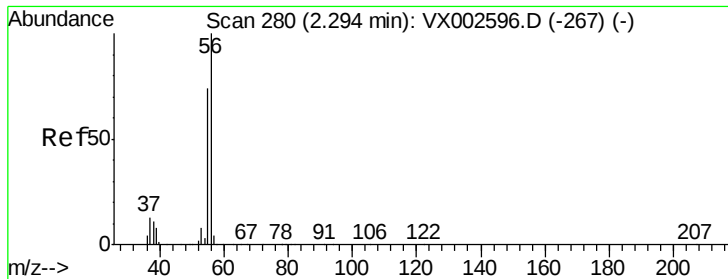
57 30.5 8.2 12.2#



Abundance Ion 59.00 (58.70 to 59.70): VX0

Ion 57.00 (56.70 to 57.70): VX0





#13

Acrolein

Concen: 7.05 ug/l

RT: 2.28 min Scan# 278

Delta R.T. -0.01 min

Lab File: VX002774.D

Acq: 21 Jun 2018 06:31

Instrument :

MSVOA_X

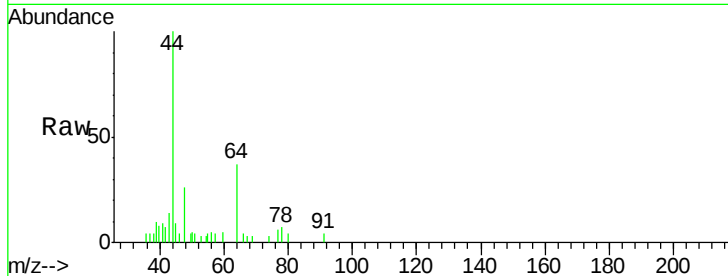
ClientSampled :

Tot Ion: 56 Resp: 65

Ion Ratio Lower Upper

56 100

55 0.0 57.0 85.4#



Abundance Ion 56.00 (55.70 to 56.70): VX0

Ion 55.00 (54.70 to 55.70): VX0

150

100

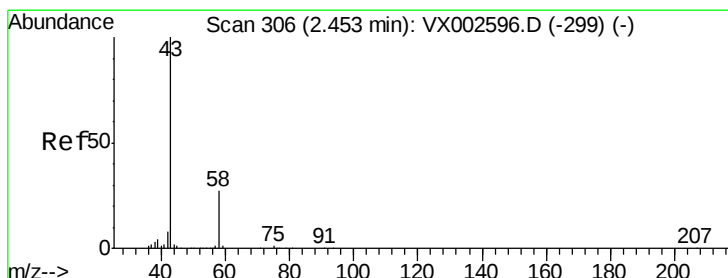
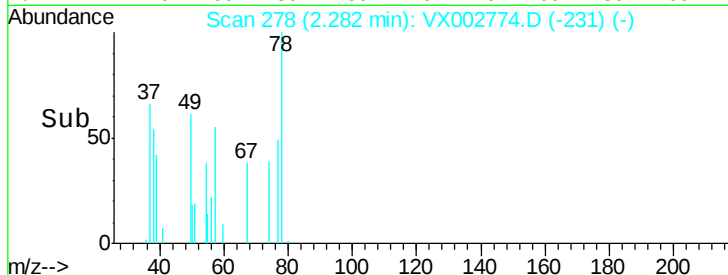
50

0

2.26 2.27 2.28 2.29

2.28

Time-->



#16

Acetone

Concen: 7.11 ug/l

RT: 2.45 min Scan# 306

Delta R.T. 0.00 min

Lab File: VX002774.D

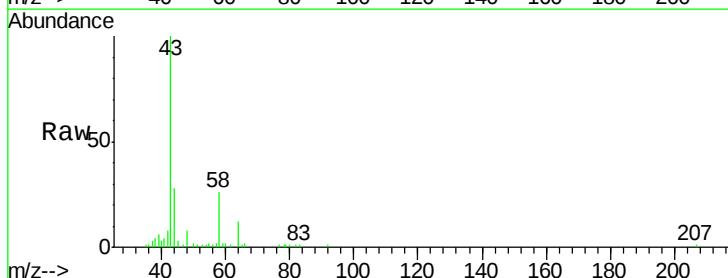
Acq: 21 Jun 2018 06:31

Tgt Ion: 43 Resp: 11092

Ion Ratio Lower Upper

43 100

58 27.0 22.1 33.1



Abundance Ion 43.00 (42.70 to 43.70): VX0

Ion 58.00 (57.70 to 58.70): VX0

8000

6000

4000

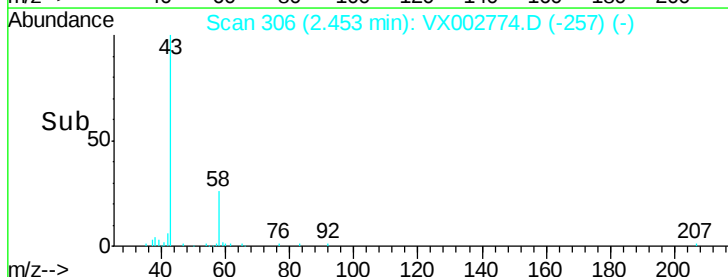
2000

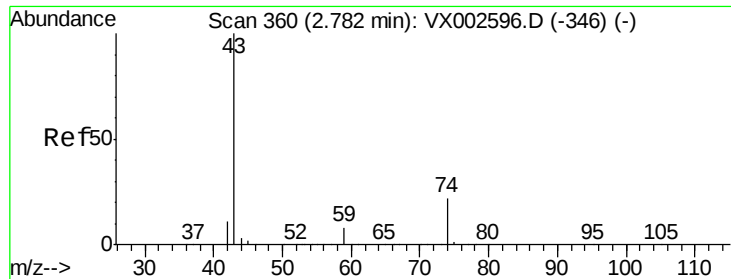
0

2.35 2.40 2.45 2.50 2.55

2.45

Time-->

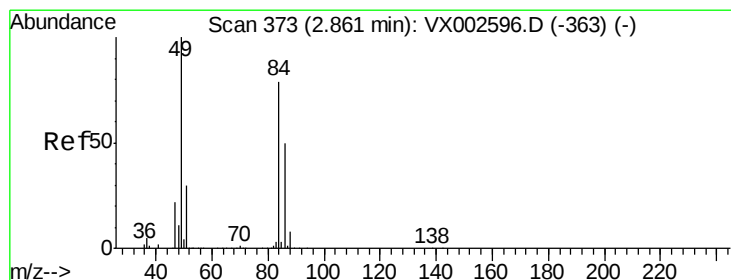
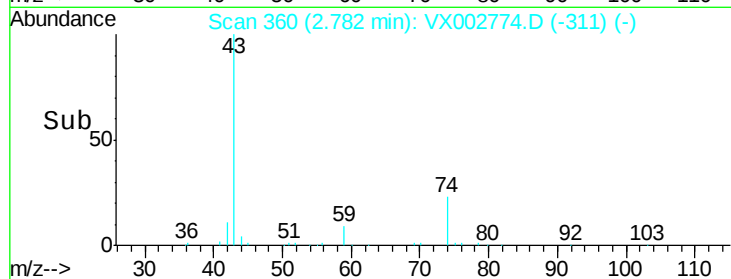
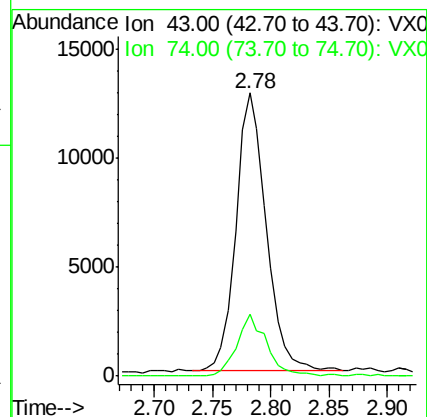
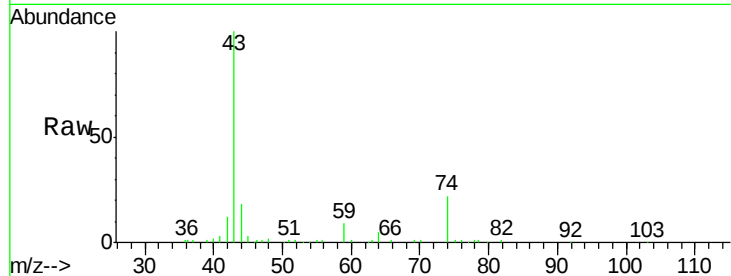




#18
Methvl Acetate
Concen: 5.56 ug/l
RT: 2.78 min Scan# 360
Delta R.T. 0.00 min
Lab File: VX002774.D
Acq: 21 Jun 2018 06:31

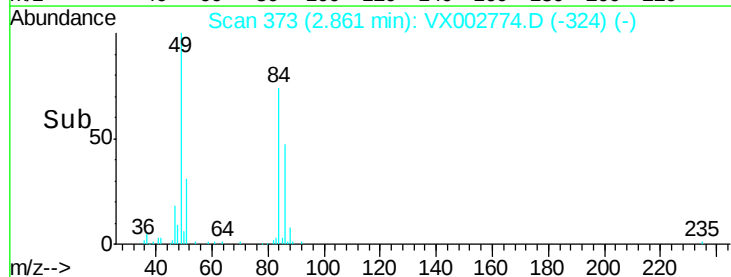
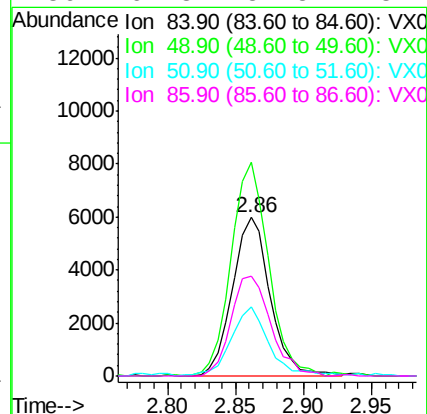
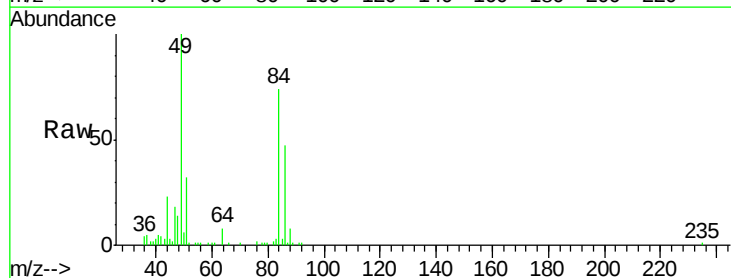
Instrument :
MSVOA_X
ClientSampleId :

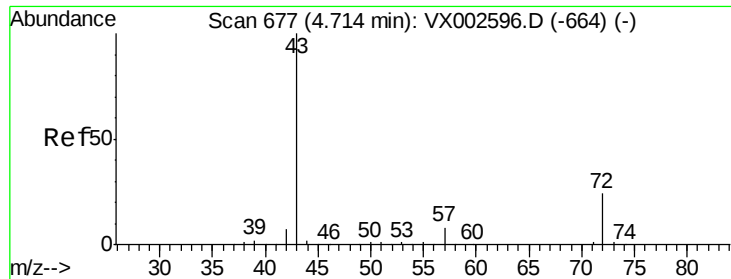
Tot Ion: 43 Resp: 23106
Ion Ratio Lower Upper
43 100
74 21.9 16.7 25.1



#20
Methylene Chloride
Concen: 3.62 ug/l
RT: 2.86 min Scan# 373
Delta R.T. 0.00 min
Lab File: VX002774.D
Acq: 21 Jun 2018 06:31

Tgt Ion: 84 Resp: 11584
Ion Ratio Lower Upper
84 100
49 133.8 107.8 161.6
51 42.4 32.8 49.2
86 62.8 52.5 78.7





#25

2-Butanone

Concen: 0.83 ug/l

RT: 4.71 min Scan# 677

Delta R.T. 0.00 min

Lab File: VX002774.D

Acq: 21 Jun 2018 06:31

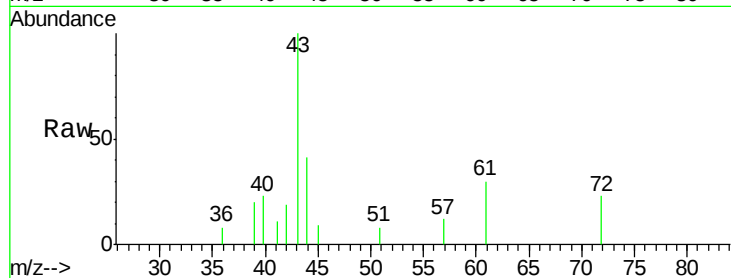
Instrument :
MSVOA_X
ClientSampled :

Tot Ion: 43 Resp: 1697

Ion Ratio Lower Upper

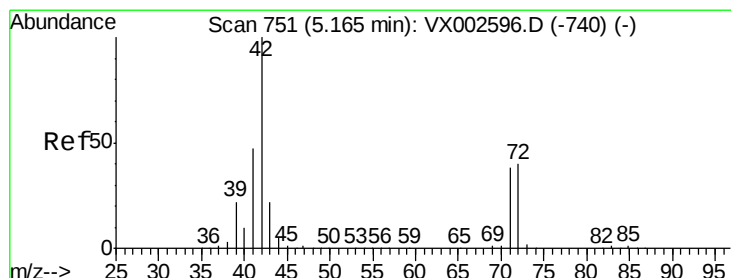
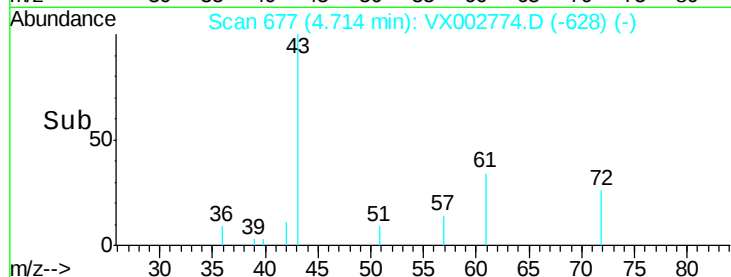
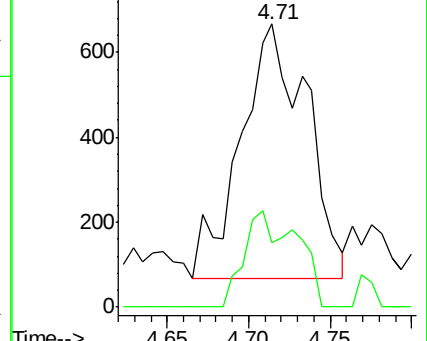
43 100

72 25.3 18.5 27.7



Abundance Ion 43.00 (42.70 to 43.70): VX0

Ion 72.00 (71.70 to 72.70): VX0



#29

Tetrahydrofuran

Concen: 0.49 ug/l

RT: 5.17 min Scan# 752

Delta R.T. 0.01 min

Lab File: VX002774.D

Acq: 21 Jun 2018 06:31

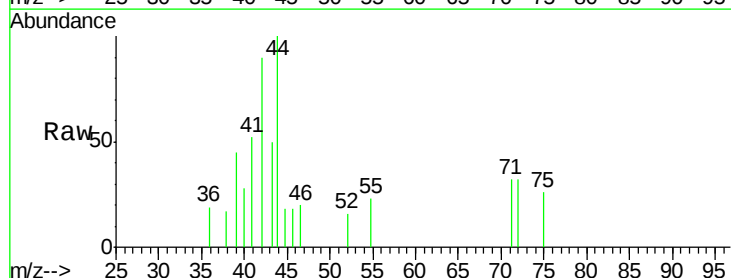
Tgt Ion: 42 Resp: 660

Ion Ratio Lower Upper

42 100

72 32.4 32.0 48.0

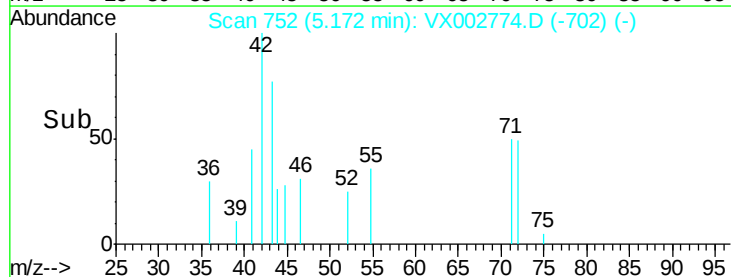
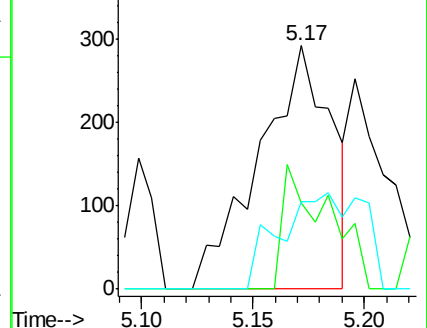
71 45.6 30.1 45.1#

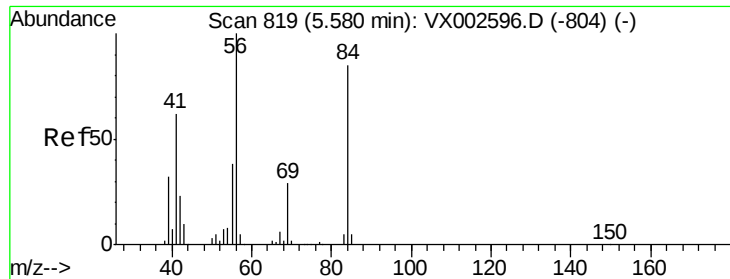


Abundance Ion 42.00 (41.70 to 42.70): VX0

Ion 72.00 (71.70 to 72.70): VX0

Ion 71.00 (70.70 to 71.70): VX0

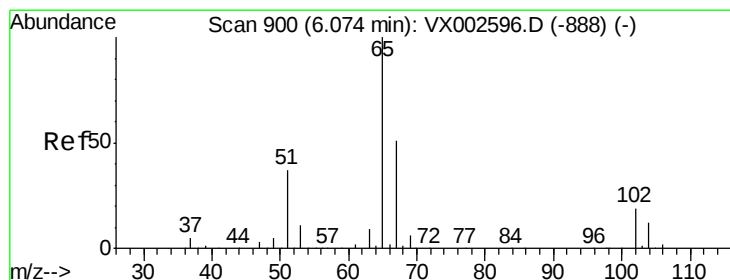
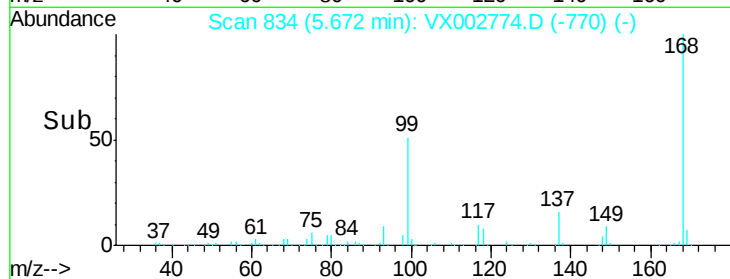
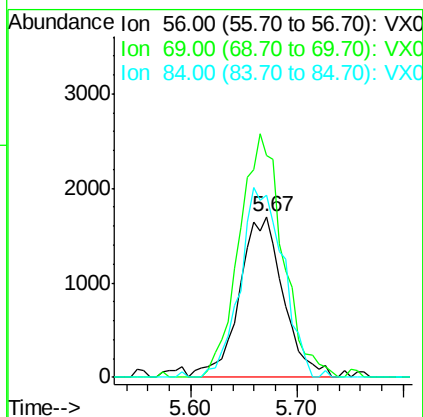
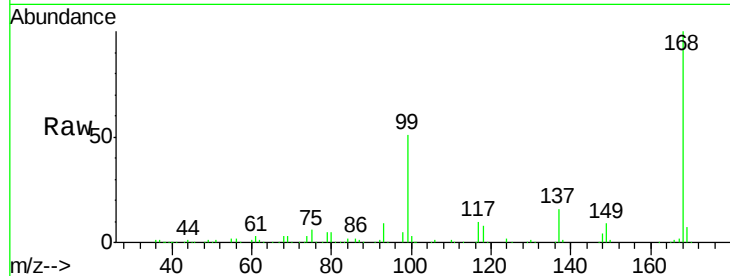




#31
Cyclohexane
Concen: 1.18 ug/l
RT: 5.67 min Scan# 834
Delta R.T. 0.09 min
Lab File: VX002774.D
Acq: 21 Jun 2018 06:31

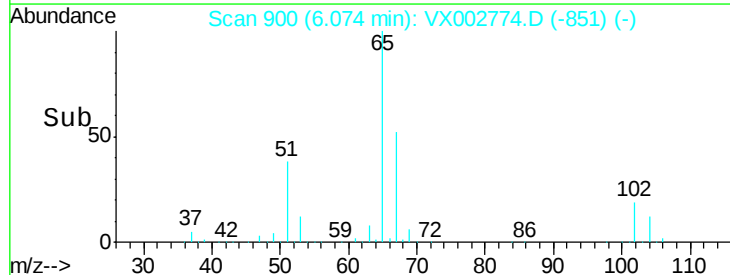
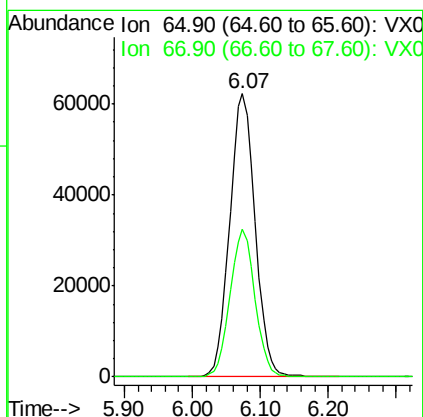
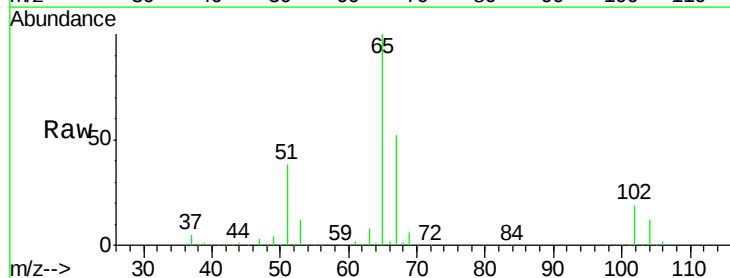
Instrument :
MSVOA_X
ClientSampleId :

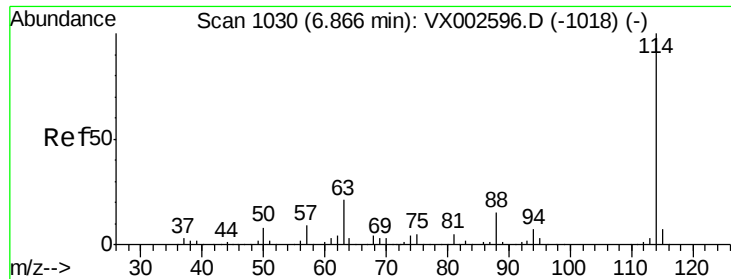
Tot Ion: 56 Resp: 4908
Ion Ratio Lower Upper
56 100
69 137.6 23.7 35.5#
84 113.5 64.1 96.1#



#33
1,2-Dichloroethane-d4
Concen: 45.72 ug/l
RT: 6.07 min Scan# 900
Delta R.T. 0.00 min
Lab File: VX002774.D
Acq: 21 Jun 2018 06:31

Tgt Ion: 65 Resp: 161703
Ion Ratio Lower Upper
65 100
67 51.0 0.0 102.6

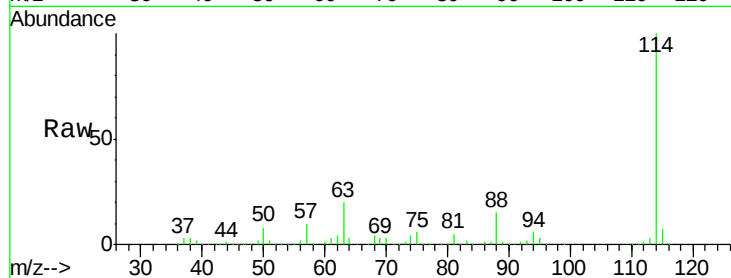




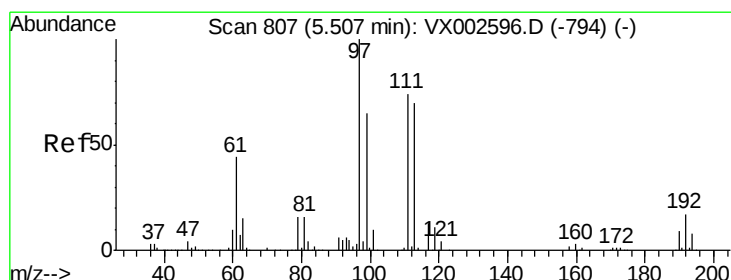
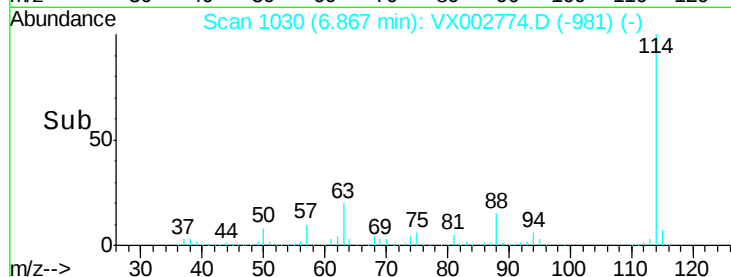
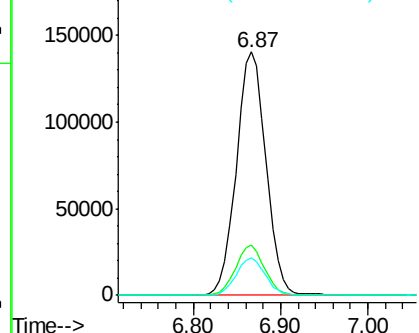
#34
 1,4-Difluorobenzene
 Concen: 50.00 ug/l
 RT: 6.87 min Scan# 1030
 Delta R.T. 0.00 min
 Lab File: VX002774.D
 Acq: 21 Jun 2018 06:31

Instrument :
 MSVOA_X
 ClientSampleId :

Tot Ion:114 Resp: 330681
 Ion Ratio Lower Upper
 114 100
 63 20.4 0.0 41.4
 88 15.5 0.0 30.0

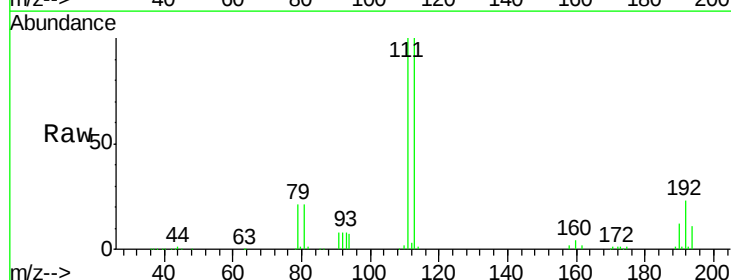


Abundance Ion 113.90 (113.60 to 114.60): V
 Ion 63.00 (62.70 to 63.70): VX0
 Ion 87.90 (87.60 to 88.60): VX0

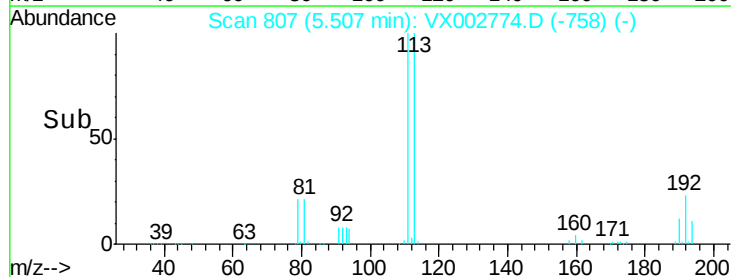
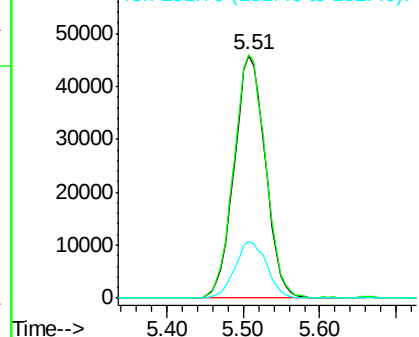


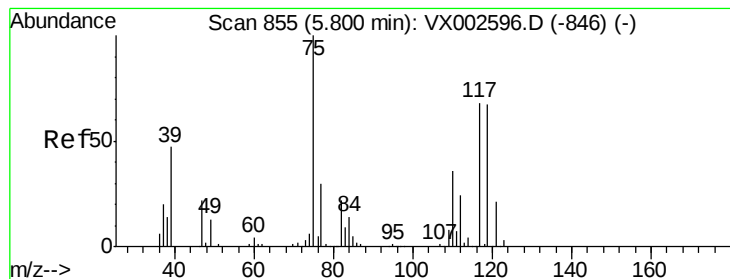
#35
 Dibromofluoromethane
 Concen: 48.98 ug/l
 RT: 5.51 min Scan# 807
 Delta R.T. 0.00 min
 Lab File: VX002774.D
 Acq: 21 Jun 2018 06:31

Tgt Ion:113 Resp: 129273
 Ion Ratio Lower Upper
 113 100
 111 102.1 81.4 122.0
 192 23.9 19.1 28.7



Abundance Ion 112.80 (112.50 to 113.50): V
 Ion 110.80 (110.50 to 111.50): V
 Ion 191.70 (191.40 to 192.40): V





#36

1,1-Dichloropropene

Concen: 4.60 ug/l

RT: 5.67 min Scan# 833

Delta R.T. -0.13 min

Lab File: VX002774.D

Acq: 21 Jun 2018 06:31

Instrument :

MSVOA_X

ClientSampleId :

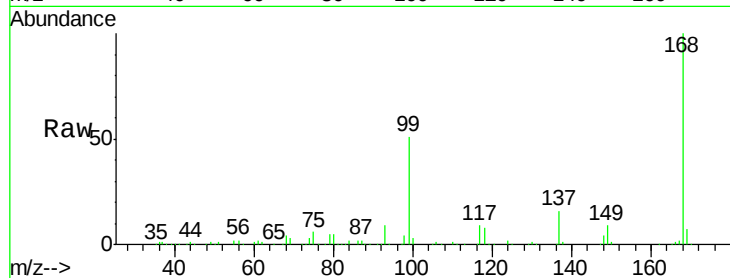
Tot Ion: 75 Resp: 16157

Ion Ratio Lower Upper

75 100

110 11.0 18.1 54.4#

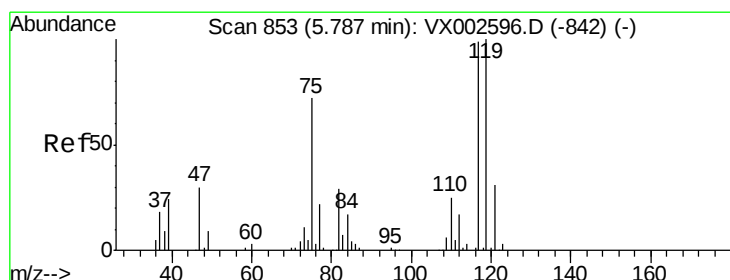
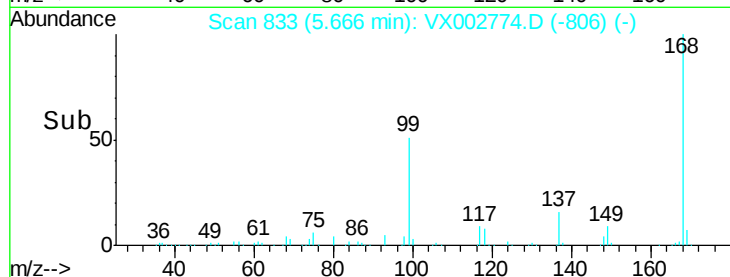
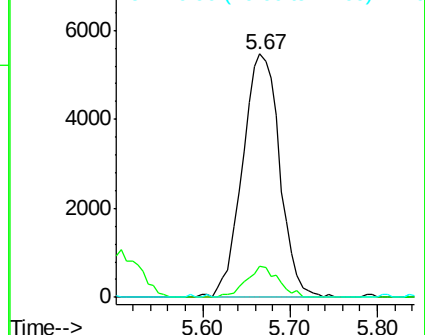
77 0.0 24.3 36.5#



Abundance Ion 74.90 (74.60 to 75.60): VX002774.D (-806) (-)

Ion 109.90 (109.60 to 110.60): VX002774.D (-806) (-)

Ion 76.90 (76.60 to 77.60): VX002774.D (-806) (-)



#38

Carbon Tetrachloride

Concen: 6.31 ug/l

RT: 5.67 min Scan# 834

Delta R.T. -0.12 min

Lab File: VX002774.D

Acq: 21 Jun 2018 06:31

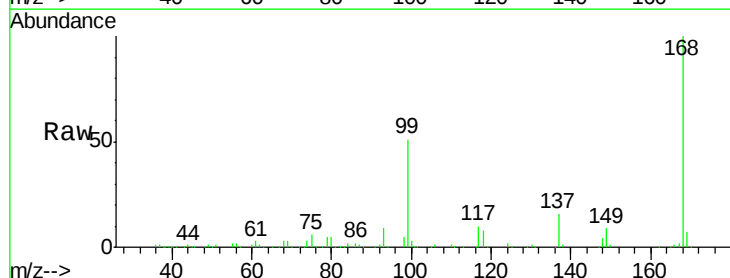
Tgt Ion: 117 Resp: 22068

Ion Ratio Lower Upper

117 100

119 4.9 77.4 116.0#

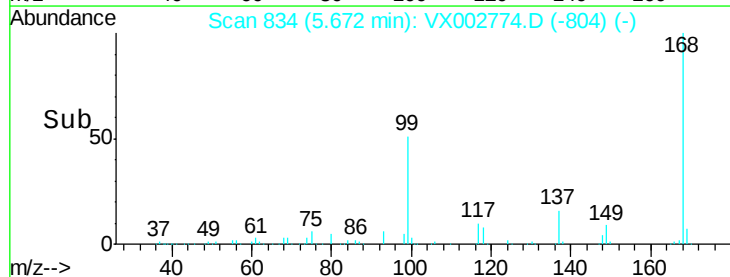
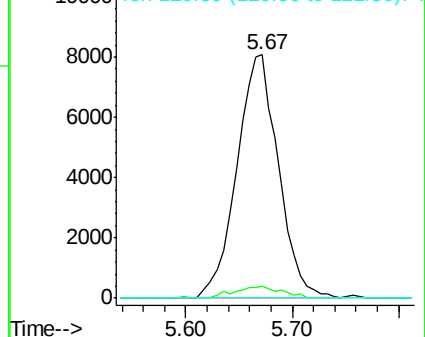
121 0.0 24.4 36.6#

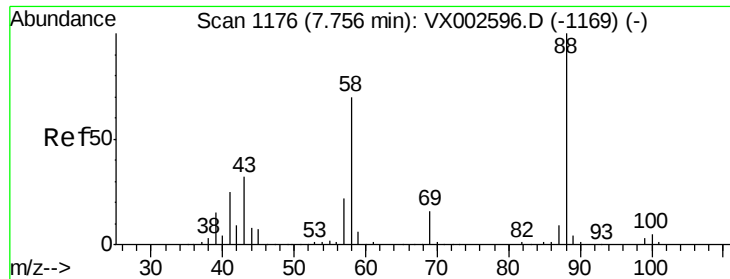


Abundance Ion 116.80 (116.50 to 117.50): VX002774.D (-804) (-)

Ion 118.80 (118.50 to 119.50): VX002774.D (-804) (-)

Ion 120.80 (120.50 to 121.50): VX002774.D (-804) (-)





#49

1,4-Dioxane

Concen: 0.31 ug/l

RT: 7.56 min Scan# 1144

Delta R.T. -0.19 min

Lab File: VX002774.D

Acq: 21 Jun 2018 06:31

Instrument :
MSVOA_X
ClientSampleId :

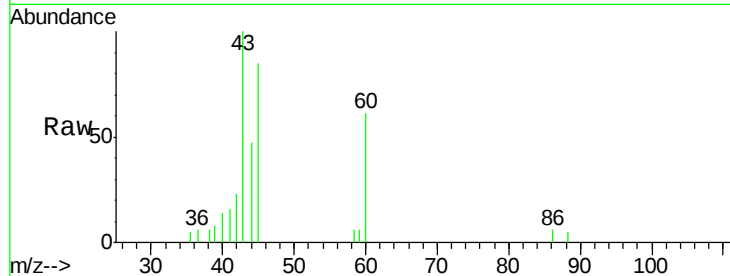
Tot Ion: 88 Resp: 20

Ion Ratio Lower Upper

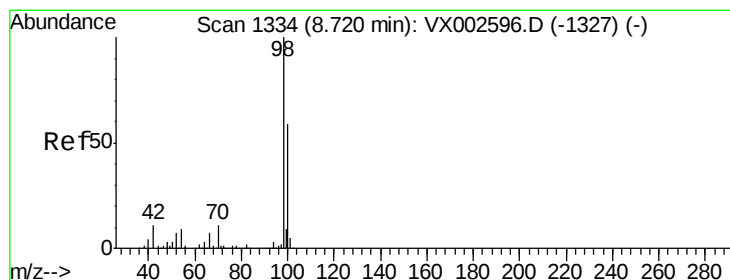
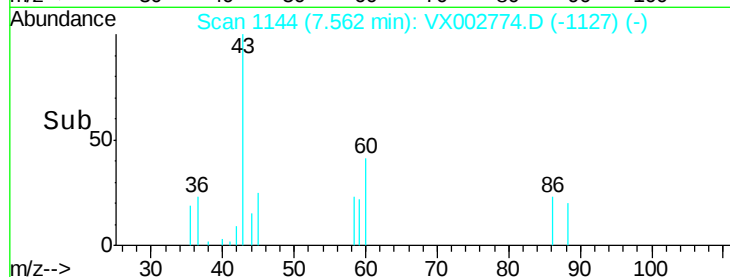
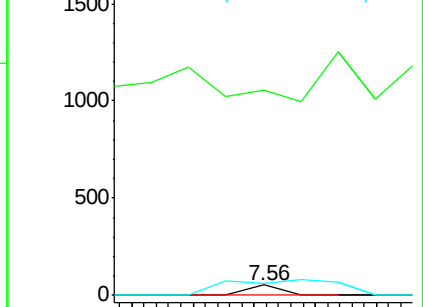
88 100

43 6195.0 29.8 44.6#

58 510.0 57.1 85.7#



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



#50

Toluene-d8

Concen: 47.25 ug/l

RT: 8.72 min Scan# 1334

Delta R.T. 0.00 min

Lab File: VX002774.D

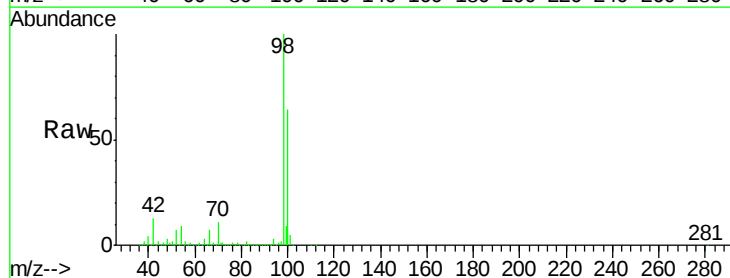
Acq: 21 Jun 2018 06:31

Tgt Ion: 98 Resp: 473448

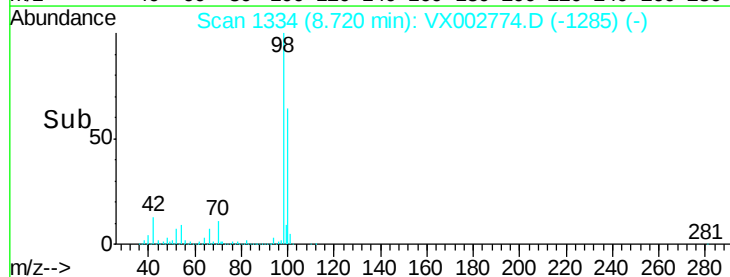
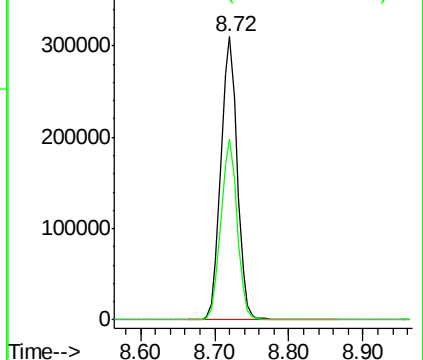
Ion Ratio Lower Upper

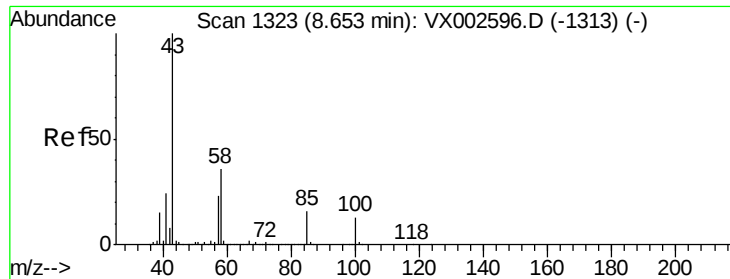
98 100

100 63.6 50.9 76.3



Abundance Ion 98.00 (97.70 to 98.70): VX0
Ion 100.00 (99.70 to 100.70): VX0





#51

4-Methyl-2-Pentanone

Concen: 0.23 ug/l

RT: 8.66 min Scan# 1324

Delta R.T. 0.01 min

Lab File: VX002774.D

Acq: 21 Jun 2018 06:31

Instrument :

MSVOA_X

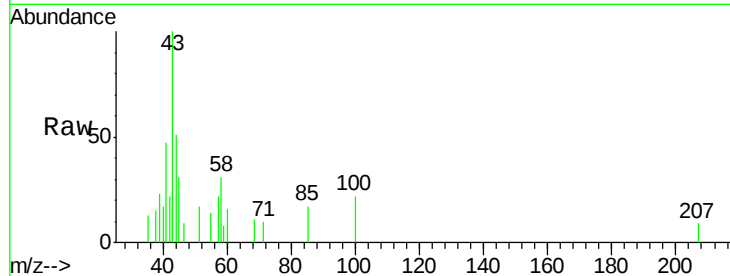
ClientSampled :

Tot Ion: 43 Resp: 956

Ion Ratio Lower Upper

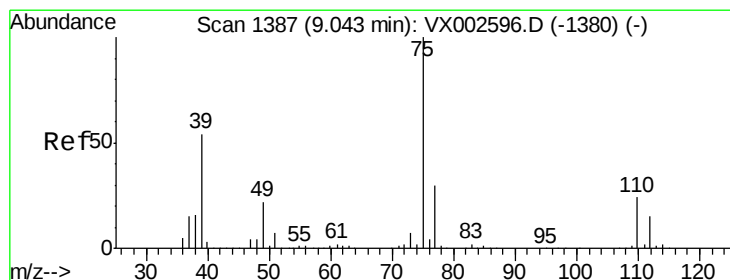
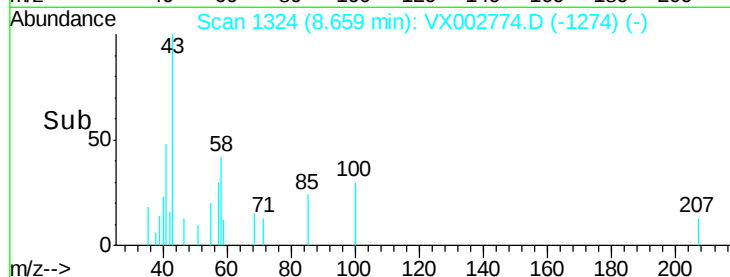
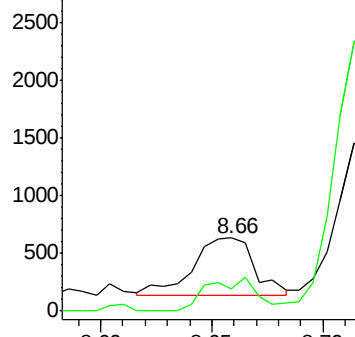
43 100

58 46.0 28.6 42.8#



Abundance Ion 43.00 (42.70 to 43.70): VX0

Ion 58.00 (57.70 to 58.70): VX0



#54

cis-1,3-Dichloropropene

Concen: 3.22 ug/l

RT: 8.82 min Scan# 1350

Delta R.T. -0.22 min

Lab File: VX002774.D

Acq: 21 Jun 2018 06:31

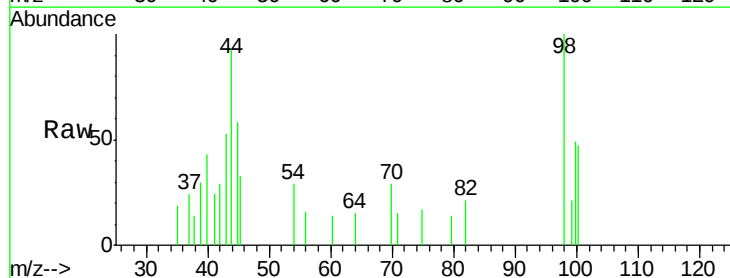
Tgt Ion: 75 Resp: 23

Ion Ratio Lower Upper

75 100

77 0.0 24.8 37.2#

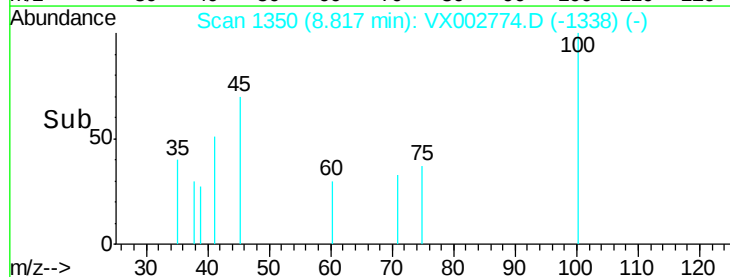
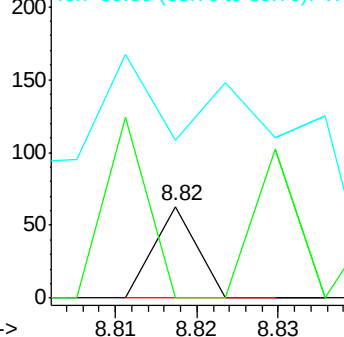
39 0.0 42.4 63.6#

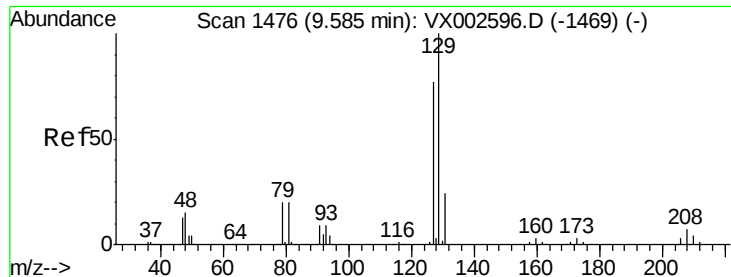


Abundance Ion 74.90 (74.60 to 75.60): VX0

Ion 76.90 (76.60 to 77.60): VX0

Ion 39.00 (38.70 to 39.70): VX0





#60

Dibromochloromethane

Concen: 3.77 ug/l

RT: 9.34 min Scan# 1435

Delta R.T. -0.25 min

Lab File: VX002774.D

Acq: 21 Jun 2018 06:31

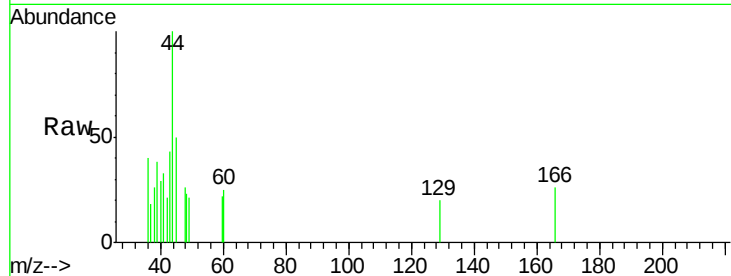
Instrument :
MSVOA_X
ClientSampleId :

Tot Ion:129 Resp: 21

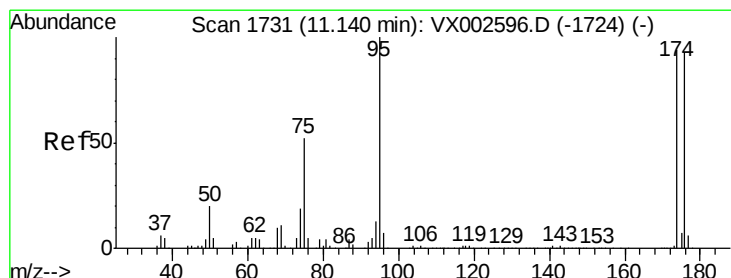
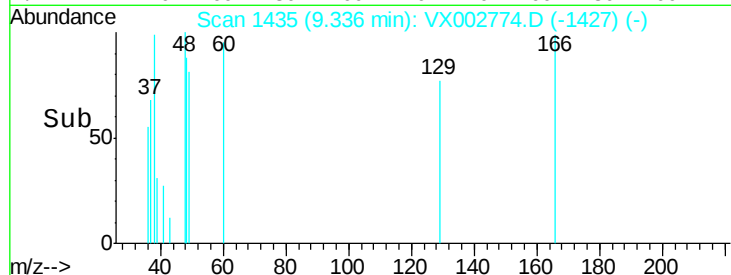
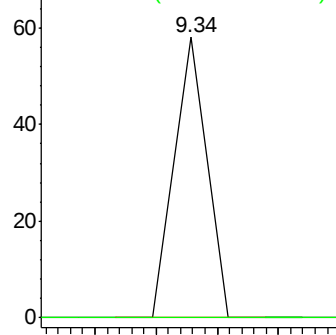
Ion Ratio Lower Upper

129 100

127 0.0 38.5 115.3#



Abundance Ion 128.80 (128.50 to 129.50): V
Ion 126.80 (126.50 to 127.50): V



#62

4-Bromofluorobenzene

Concen: 43.69 ug/l

RT: 11.14 min Scan# 1731

Delta R.T. 0.00 min

Lab File: VX002774.D

Acq: 21 Jun 2018 06:31

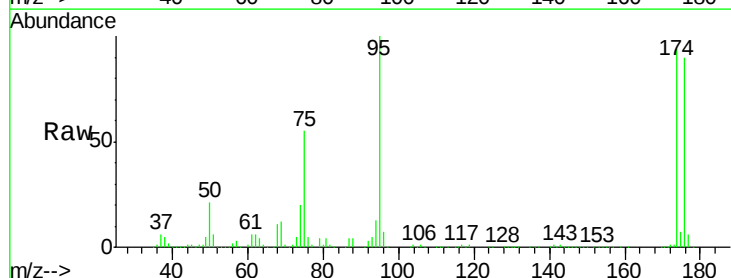
Tgt Ion: 95 Resp: 165909

Ion Ratio Lower Upper

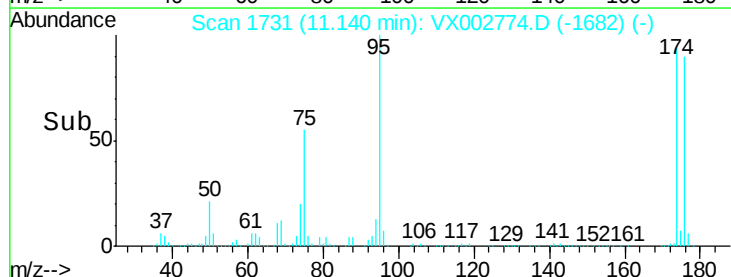
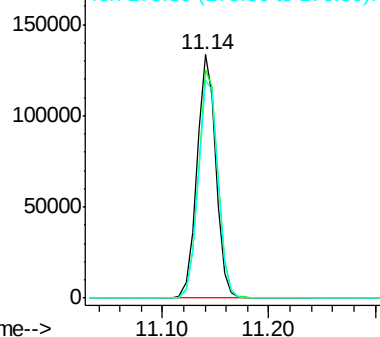
95 100

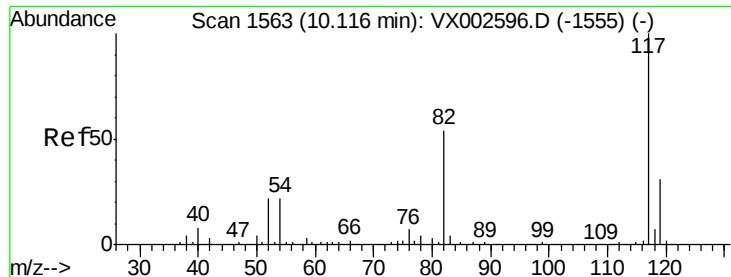
174 97.1 0.0 187.4

176 93.6 0.0 181.0



Abundance Ion 94.90 (94.60 to 95.60): VX0
Ion 173.80 (173.50 to 174.50): V
Ion 175.80 (175.50 to 176.50): V

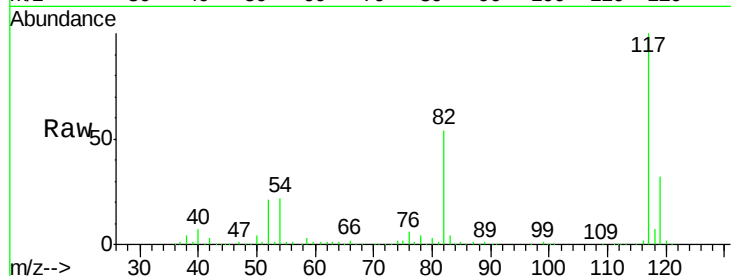




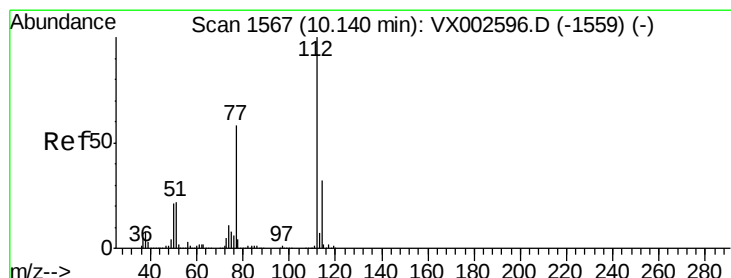
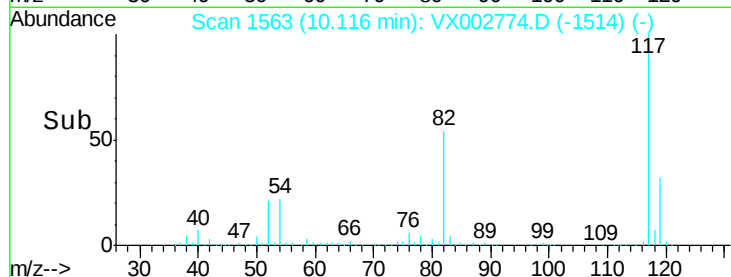
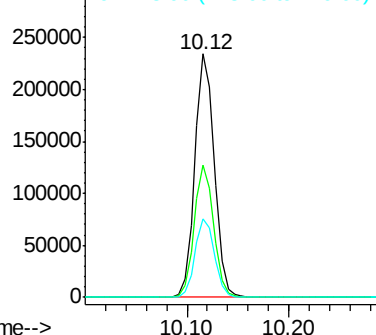
#63
Chlorobenzene-d5
Concen: 50.00 ug/l
RT: 10.12 min Scan# 1563
Delta R.T. 0.00 min
Lab File: VX002774.D
Acq: 21 Jun 2018 06:31

Instrument :
MSVOA_X
ClientSampleId :

Tot Ion:117 Resp: 311126
Ion Ratio Lower Upper
117 100
82 54.3 45.0 67.4
119 32.3 25.8 38.6

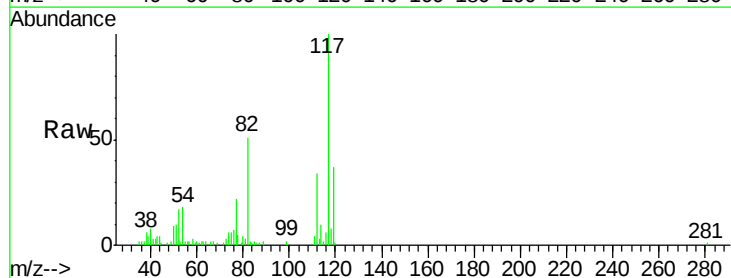


Abundance Ion 116.90 (116.60 to 117.60): V
Ion 82.00 (81.70 to 82.70): VX0
Ion 118.90 (118.60 to 119.60): V

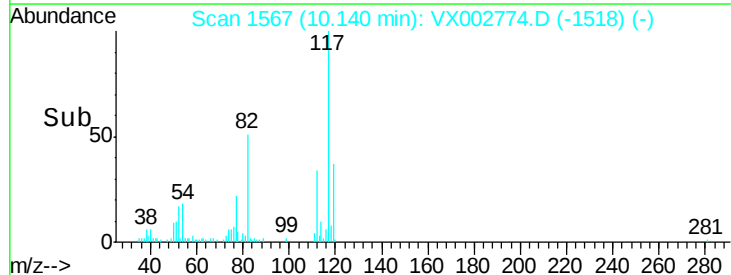
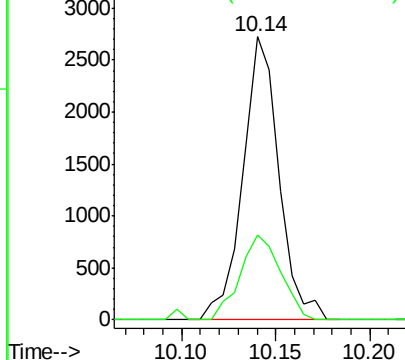


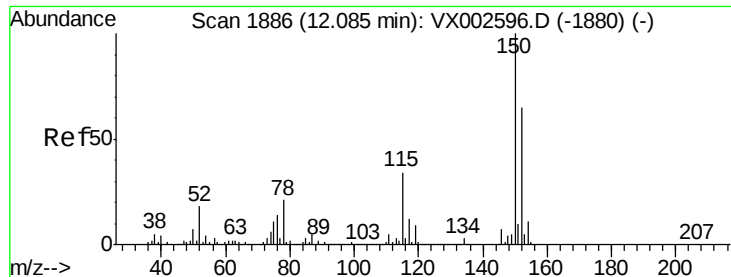
#65
Chlorobenzene
Concen: 0.47 ug/l
RT: 10.14 min Scan# 1567
Delta R.T. 0.00 min
Lab File: VX002774.D
Acq: 21 Jun 2018 06:31

Tgt Ion:112 Resp: 3625
Ion Ratio Lower Upper
112 100
114 30.1 25.3 37.9



Abundance Ion 111.90 (111.60 to 112.60): V
Ion 113.90 (113.60 to 114.60): V





#72

1,4-Dichlorobenzene-d4

Concen: 50.00 ug/l

RT: 12.09 min Scan# 1886

Delta R.T. 0.00 min

Lab File: VX002774.D

Acq: 21 Jun 2018 06:31

Instrument :

MSVOA_X

ClientSampleId :

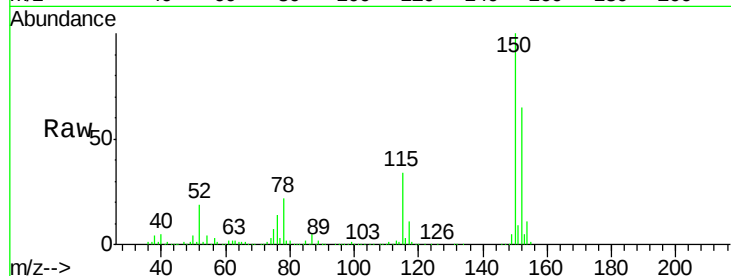
Tot Ion:152 Resp: 177627

Ion Ratio Lower Upper

152 100

115 54.6 40.1 120.2

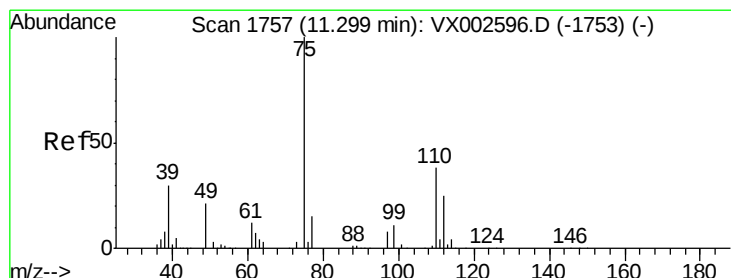
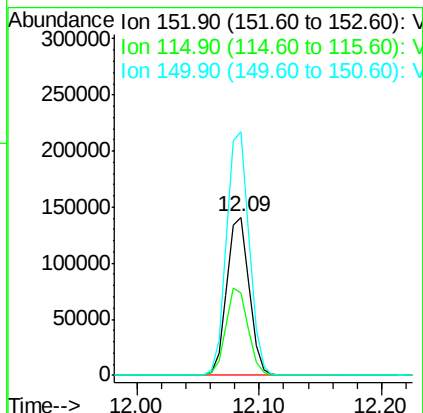
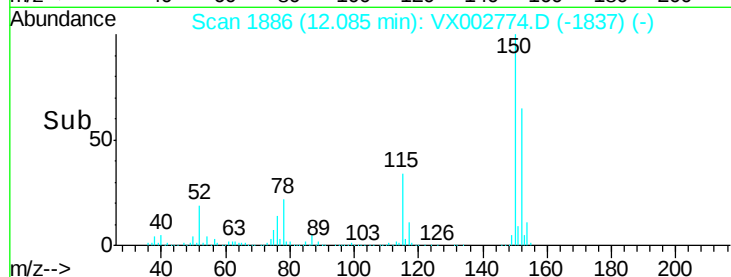
150 155.4 0.0 347.2



Abundance Ion 151.90 (151.60 to 152.60): V

Ion 114.90 (114.60 to 115.60): V

Ion 149.90 (149.60 to 150.60): V



#76

1,2,3-Trichloropropane

Concen: 26.31 ug/l

RT: 11.14 min Scan# 1731

Delta R.T. -0.16 min

Lab File: VX002774.D

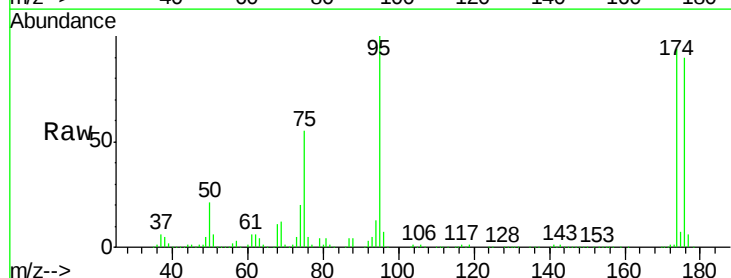
Acq: 21 Jun 2018 06:31

Tgt Ion: 75 Resp: 88191

Ion Ratio Lower Upper

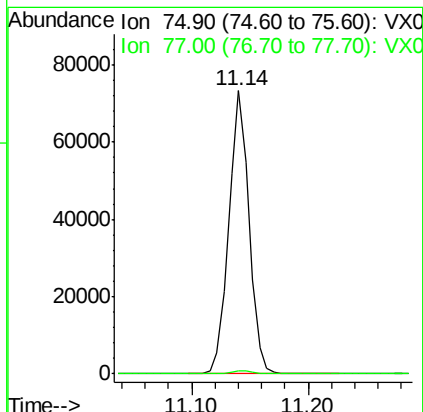
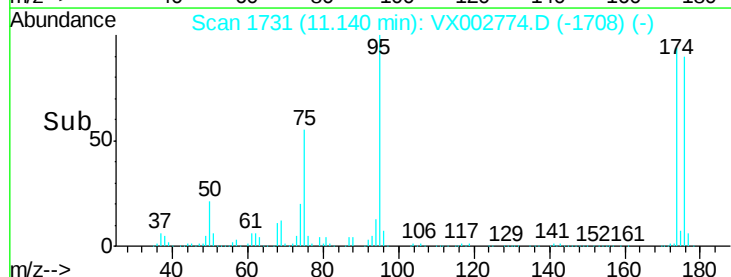
75 100

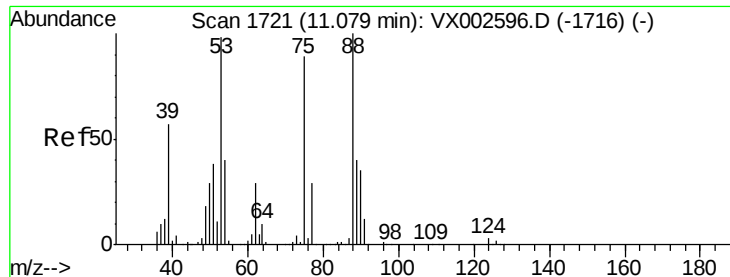
77 1.2 22.8 68.3#



Abundance Ion 74.90 (74.60 to 75.60): VX0

Ion 77.00 (76.70 to 77.70): VX0





#81

trans-1,4-Dichloro-2-butene

Concen: 81.33 ug/l

RT: 11.14 min Scan# 1731

Delta R.T. 0.06 min

Lab File: VX002774.D

Acq: 21 Jun 2018 06:31

Instrument :

MSVOA_X

ClientSampled :

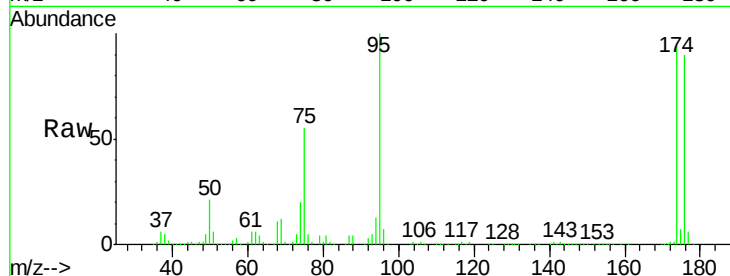
Tot Ion: 75 Resp: 88191

Ion Ratio Lower Upper

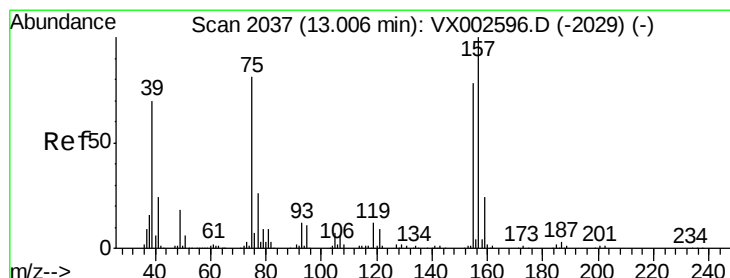
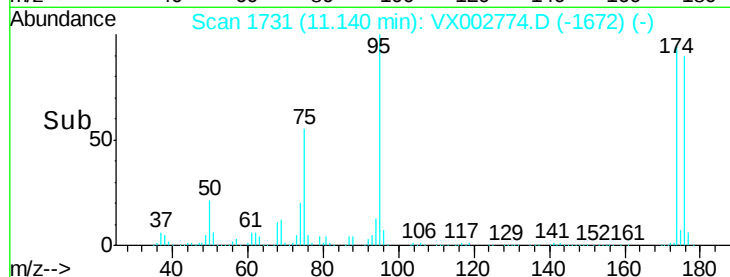
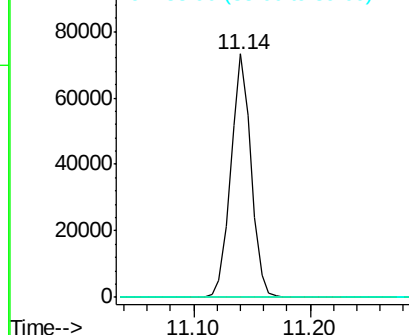
75 100

53 0.2 86.8 130.2#

89 0.0 38.2 57.2#



Abundance Ion 74.90 (74.60 to 75.60): VX0
Ion 53.00 (52.70 to 53.70): VX0
Ion 88.90 (88.60 to 89.60): VX0



#92

1,2-Dibromo-3-Chloropropane

Concen: 0.33 ug/l

RT: 12.98 min Scan# 2032

Delta R.T. -0.03 min

Lab File: VX002774.D

Acq: 21 Jun 2018 06:31

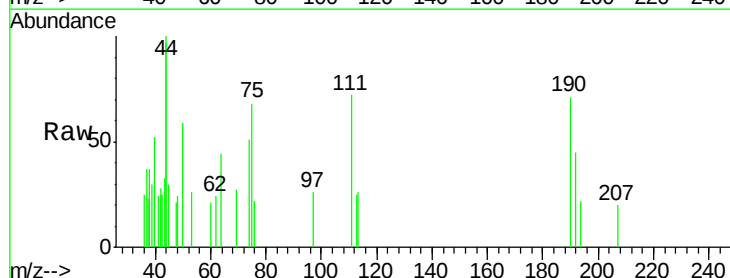
Tgt Ion: 75 Resp: 240

Ion Ratio Lower Upper

75 100

155 0.0 45.8 137.4#

157 0.0 60.1 180.3#



Abundance Ion 74.90 (74.60 to 75.60): VX0
Ion 154.80 (154.50 to 155.50): V
Ion 156.80 (156.50 to 157.50): V

