

Data Path : Z:\VOASRV\HPCHEM1\MSVOA X\DATA\VX012119\
 Data File : VX007169.D
 Acq On : 21 Jan 2019 19:47
 Operator : JC/SP
 Sample : K1198-01DL 4X
 Misc : 5.0mL/MSVOA X/WATER
 ALS Vial : 22 Sample Multiplier: 1

Instrument :
 MSVOA_X
 ClientSampleId :
 SA-TW522-3337DL

Quant Time: Jan 22 00:09:33 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_X\METHOD\82X010819W.M
 Quant Title : SW846 8260
 QLast Update : Tue Jan 08 14:06:59 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	5.67	168	532425	50.00	ug/l	0.00
34) 1,4-Difluorobenzene	6.86	114	827037	50.00	ug/l	0.00
63) Chlorobenzene-d5	10.11	117	788616	50.00	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	12.08	152	403632	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	290966	52.29	ug/l	0.00
Spiked Amount			Recovery	=	104.58%	
35) Dibromofluoromethane	5.50	113	261462	49.37	ug/l	0.00
Spiked Amount			Recovery	=	98.74%	
50) Toluene-d8	8.71	98	996207	51.39	ug/l	0.00
Spiked Amount			Recovery	=	102.78%	
62) 4-Bromofluorobenzene	11.13	95	365620	54.10	ug/l	0.00
Spiked Amount			Recovery	=	108.20%	

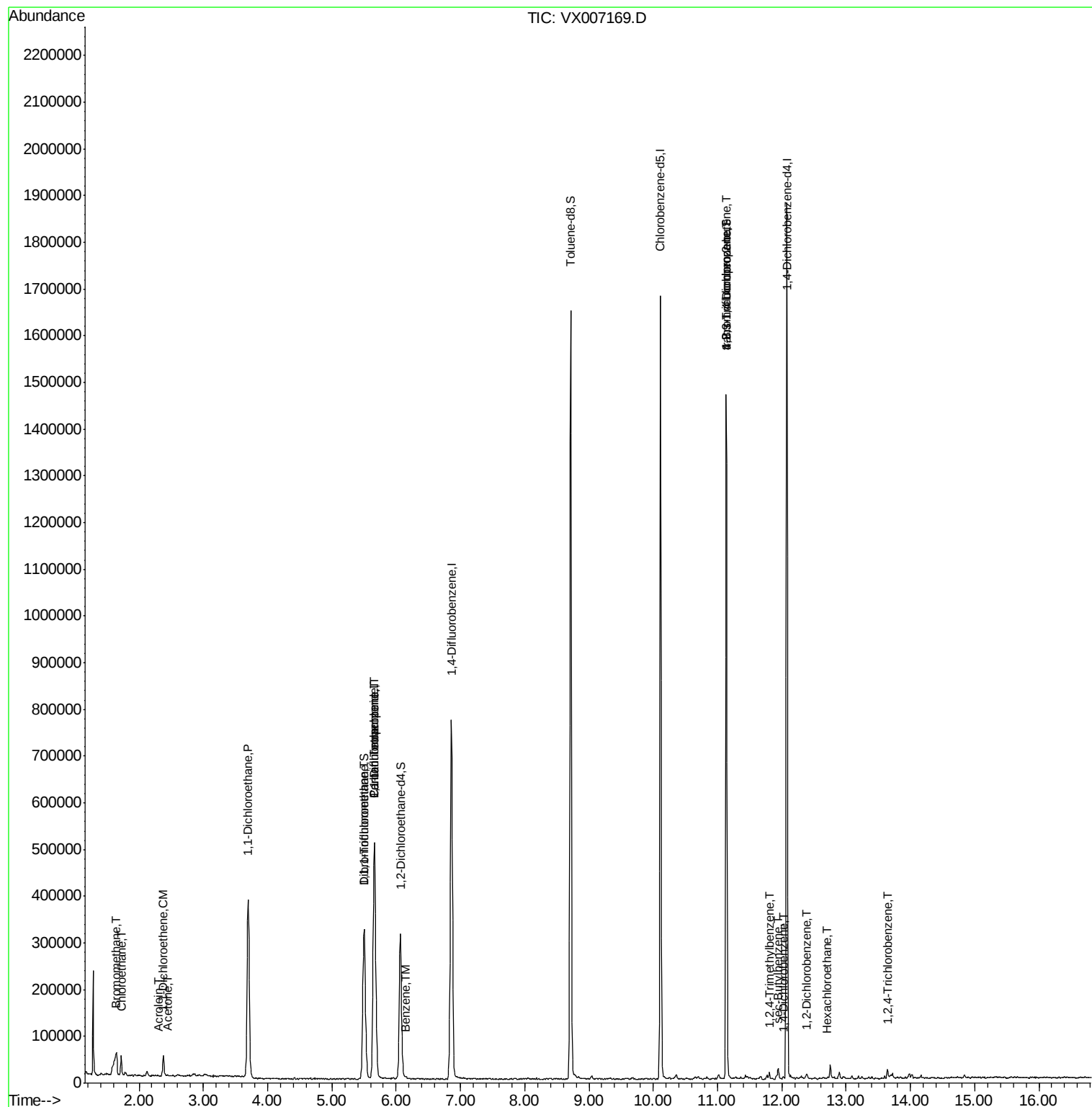
Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
5) Bromomethane	1.64	94	1767	0.302	ug/l #	66
6) Chloroethane	1.72	64	27707	7.247	ug/l	96
12) 1,1-Dichloroethene	2.37	96	15875	3.244	ug/l	96
13) Acrolein	2.30	56	582	4.100	ug/l #	52
16) Acetone	2.44	43	1969	0.716	ug/l	96
20) Methylene Chloride	2.85	84	2198	Below Cal	#	71
24) 1,1-Dichloroethane	3.70	63	432382	49.046	ug/l	99
32) 1,1,1-Trichloroethane	5.49	97	17458	2.231	ug/l	95
36) 1,1-Dichloropropene	5.66	75	34105	4.743	ug/l #	50
38) Carbon Tetrachloride	5.66	117	48078	6.646	ug/l #	15
40) Benzene	6.15	78	5760	0.263	ug/l	99
49) 1,4-Dioxane	7.73	88	106	Below Cal	#	1
76) 1,2,3-Trichloropropane	11.13	75	175121	21.410	ug/l #	40
81) trans-1,4-Dichloro-2-buten	11.13	75	175121	63.507	ug/l #	10
84) 1,2,4-Trimethylbenzene	11.80	105	5984	0.250	ug/l	95
85) sec-Butylbenzene	11.94	105	12534	0.442	ug/l #	76
88) 1,4-Dichlorobenzene	12.02	146	1608	0.264	ug/l	89
90) Hexachloroethane	12.69	117	679	3.066	ug/l #	6
91) 1,2-Dichlorobenzene	12.39	146	3254	0.233	ug/l	100
93) 1,2,4-Trichlorobenzene	13.65	180	4149	0.432	ug/l #	88

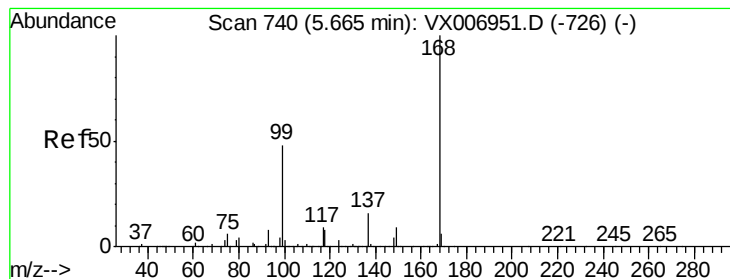
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 5.67 min Scan# 740

Delta R.T. 0.00 min

Lab File: VX007169.D

Acq: 21 Jan 2019 19:47

Instrument :

MSVOA_X

ClientSampleId :

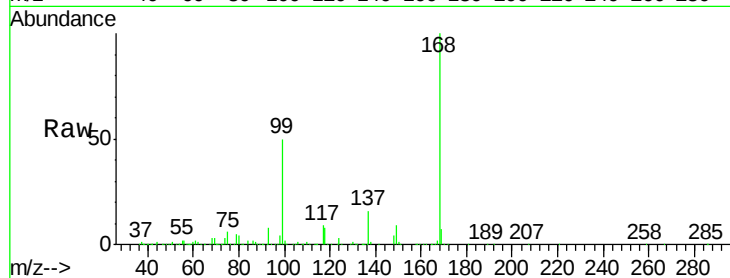
SA-TW522-3337DL

Tot Ion:168 Resp: 532425

Ion Ratio Lower Upper

168 100

99 50.2 41.8 62.8



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VX0

5.67

200000

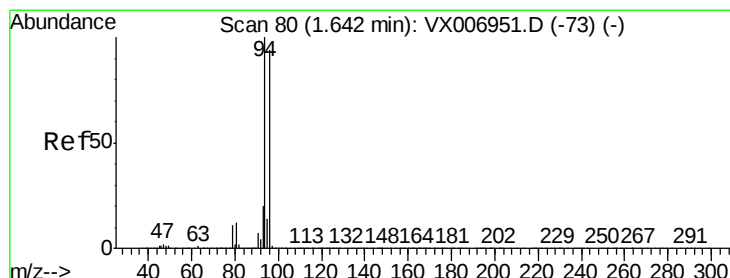
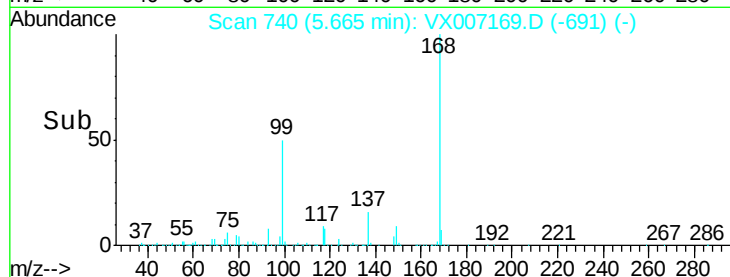
150000

100000

50000

0

Time--> 5.50 5.60 5.70 5.80



#5

Bromomethane

Concen: 0.302 ug/l

RT: 1.64 min Scan# 80

Delta R.T. 0.00 min

Lab File: VX007169.D

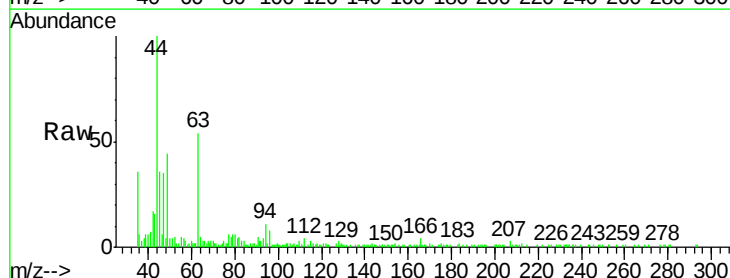
Acq: 21 Jan 2019 19:47

Tgt Ion: 94 Resp: 1767

Ion Ratio Lower Upper

94 100

96 59.2 73.4 110.2#



Abundance Ion 93.90 (93.60 to 94.60): VX0

Ion 95.90 (95.60 to 96.60): VX0

1.64

1200

1000

800

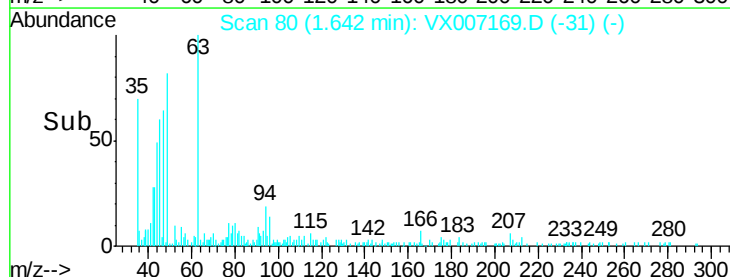
600

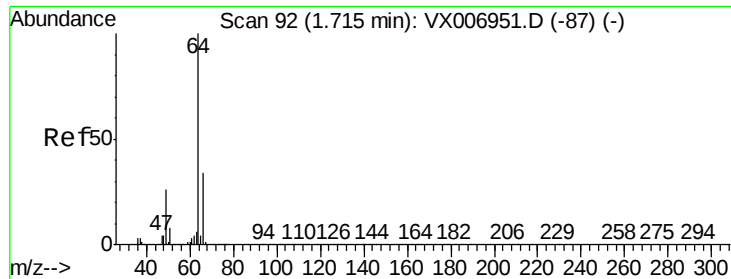
400

200

0

Time--> 1.60 1.65 1.70





#6

Chloroethane

Concen: 7.247 ug/l

RT: 1.72 min Scan# 93

Delta R.T. 0.01 min

Lab File: VX007169.D

Acq: 21 Jan 2019 19:47

Instrument :

MSVOA_X

ClientSampleId :

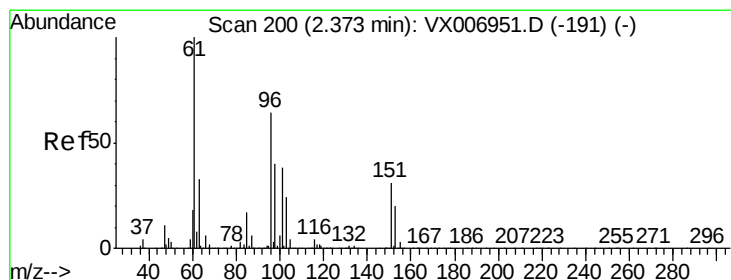
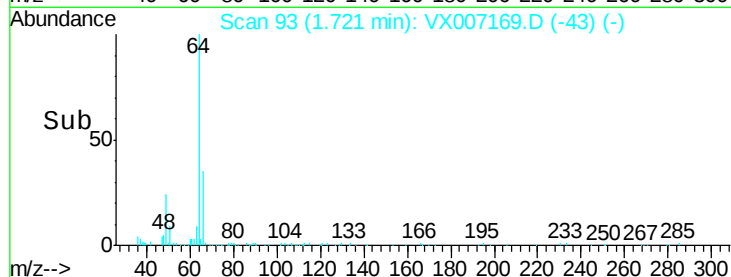
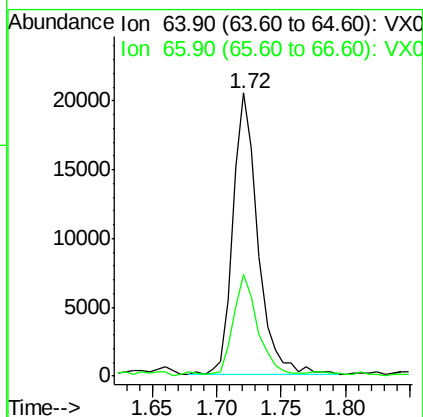
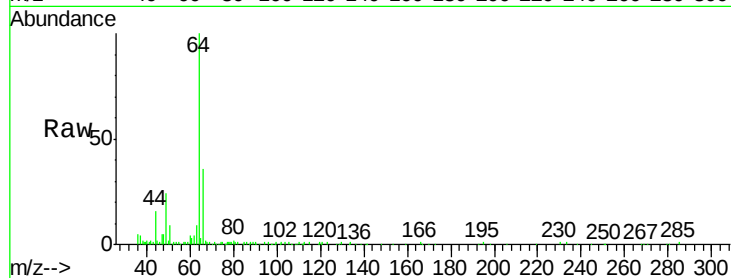
SA-TW522-3337DL

Tot Ion: 64 Resp: 27707

Ion Ratio Lower Upper

64 100

66 35.3 26.4 39.6



#12

1,1-Dichloroethene

Concen: 3.244 ug/l

RT: 2.37 min Scan# 200

Delta R.T. 0.00 min

Lab File: VX007169.D

Acq: 21 Jan 2019 19:47

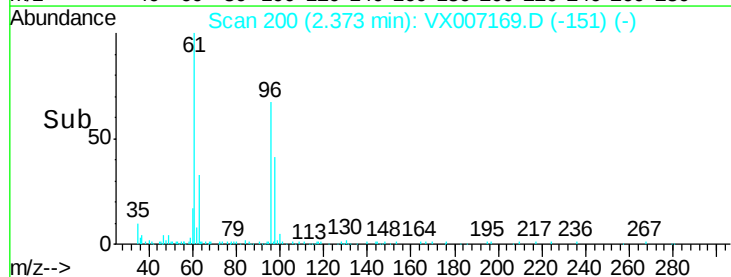
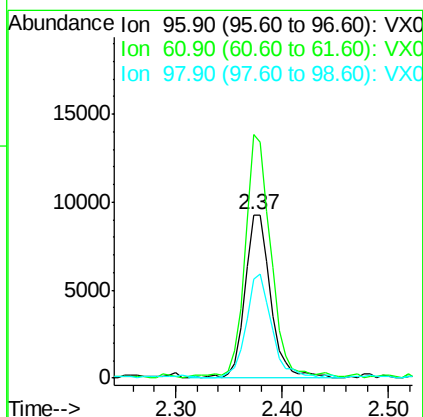
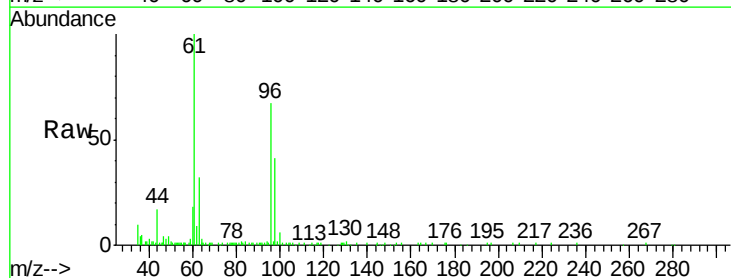
Tgt Ion: 96 Resp: 15875

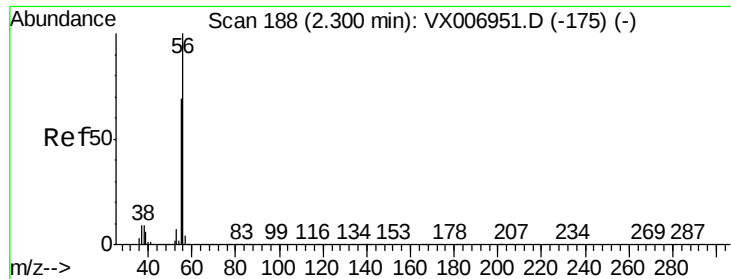
Ion Ratio Lower Upper

96 100

61 148.0 121.4 182.2

98 59.9 51.9 77.9





#13

Acrolein

Concen: 4.100 ug/l

RT: 2.30 min Scan# 188

Delta R.T. 0.00 min

Lab File: VX007169.D

Acq: 21 Jan 2019 19:47

Instrument :

MSVOA_X

ClientSampleId :

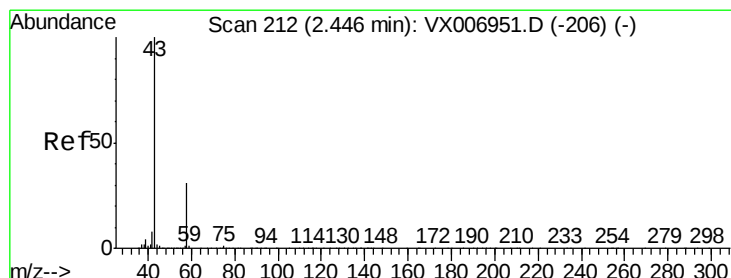
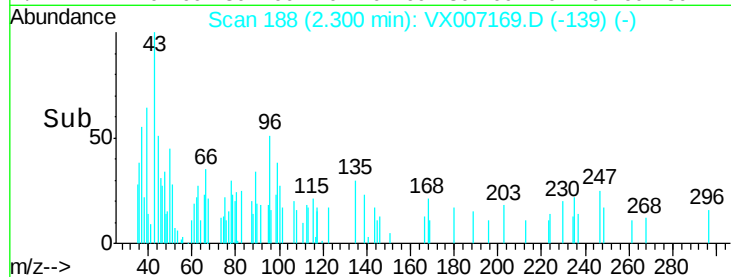
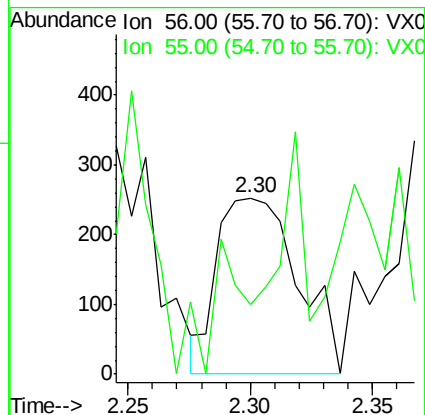
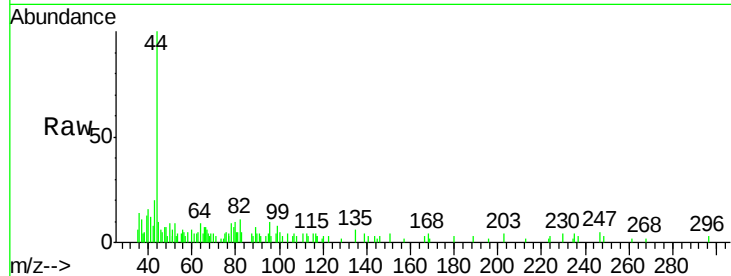
SA-TW522-3337DL

Tot Ion: 56 Resp: 582

Ion Ratio Lower Upper

56 100

55 33.0 58.2 87.4#



#16

Acetone

Concen: 0.716 ug/l

RT: 2.44 min Scan# 211

Delta R.T. -0.01 min

Lab File: VX007169.D

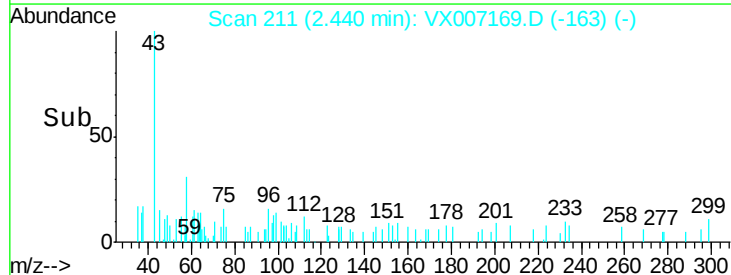
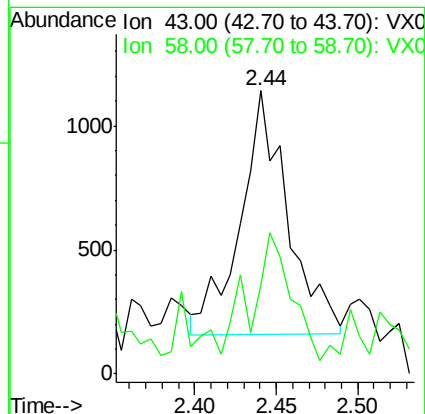
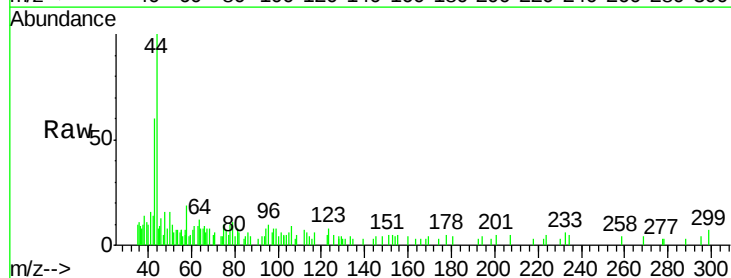
Acq: 21 Jan 2019 19:47

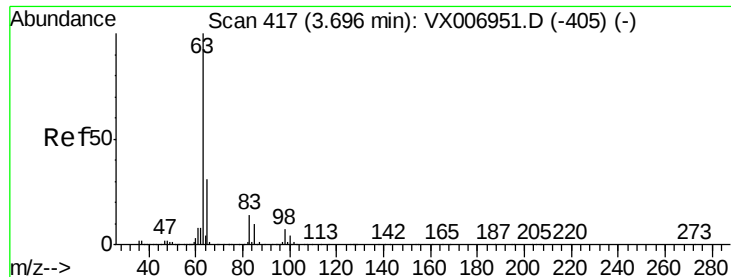
Tgt Ion: 43 Resp: 1969

Ion Ratio Lower Upper

43 100

58 29.2 25.0 37.6





#24

1,1-Dichloroethane

Concen: 49.046 ug/l

RT: 3.70 min Scan# 417

Delta R.T. 0.00 min

Lab File: VX007169.D

Acq: 21 Jan 2019 19:47

Instrument :

MSVOA_X

ClientSampleId :

SA-TW522-3337DL

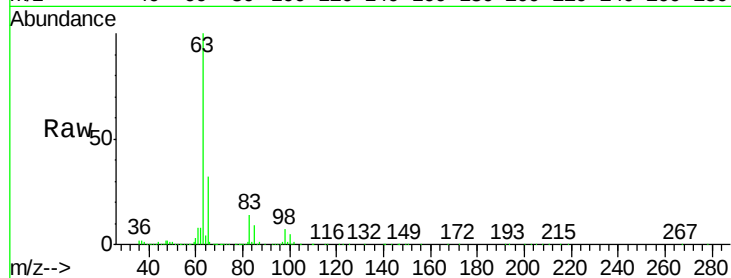
Tot Ion: 63 Resp: 432382

Ion Ratio Lower Upper

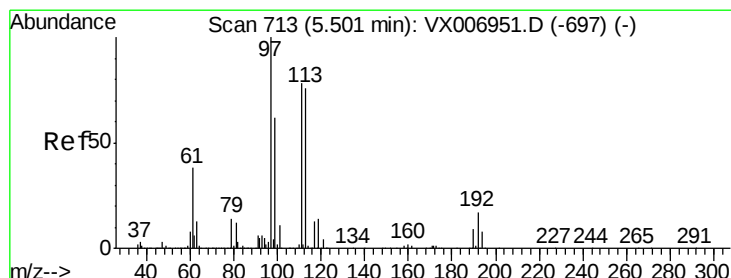
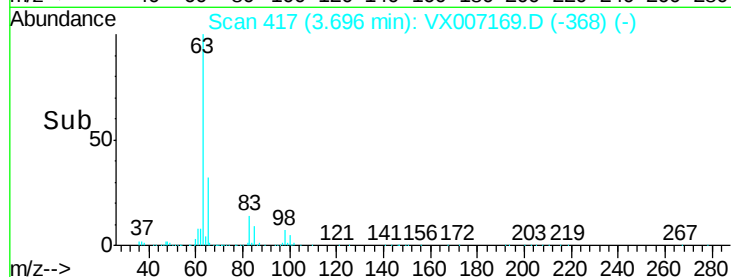
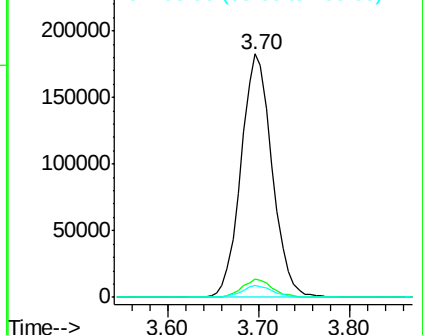
63 100

98 7.4 3.9 11.5

100 4.7 2.4 7.2



Abundance Ion 62.90 (62.60 to 63.60): VX0
Ion 97.90 (97.60 to 98.60): VX0
Ion 99.90 (99.60 to 100.60): VX0



#32

1,1,1-Trichloroethane

Concen: 2.231 ug/l

RT: 5.49 min Scan# 712

Delta R.T. -0.01 min

Lab File: VX007169.D

Acq: 21 Jan 2019 19:47

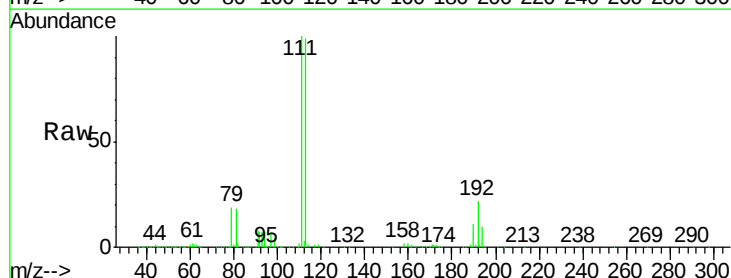
Tgt Ion: 97 Resp: 17458

Ion Ratio Lower Upper

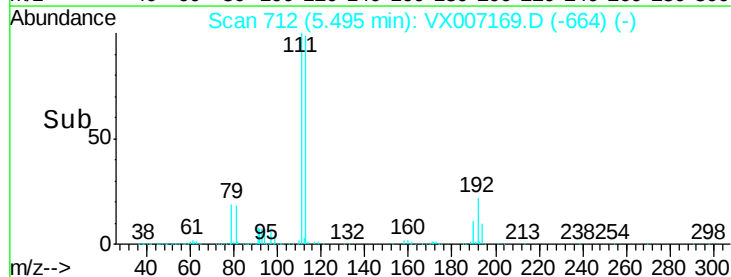
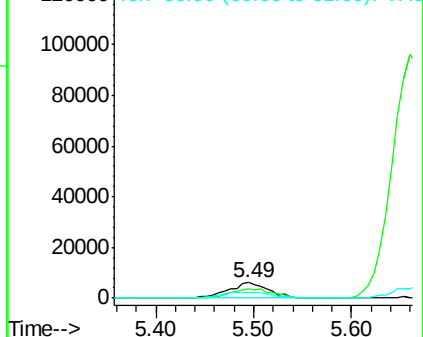
97 100

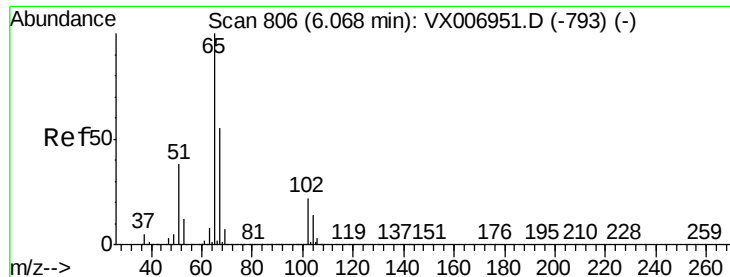
99 62.9 51.7 77.5

61 44.6 31.3 46.9



Abundance Ion 96.90 (96.60 to 97.60): VX0
Ion 98.90 (98.60 to 99.60): VX0
Ion 60.90 (60.60 to 61.60): VX0





#33

1,2-Dichloroethane-d4

Concen: 52.292 ug/l

RT: 6.07 min Scan# 806

Delta R.T. 0.00 min

Lab File: VX007169.D

Acq: 21 Jan 2019 19:47

Instrument :

MSVOA_X

ClientSampleId :

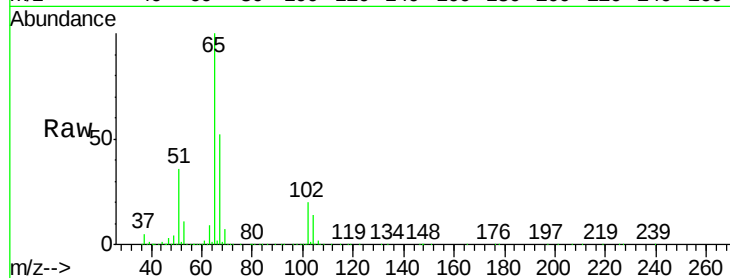
SA-TW522-3337DL

Tot Ion: 65 Resp: 290966

Ion Ratio Lower Upper

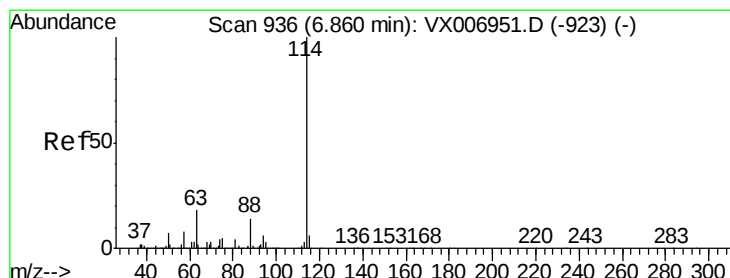
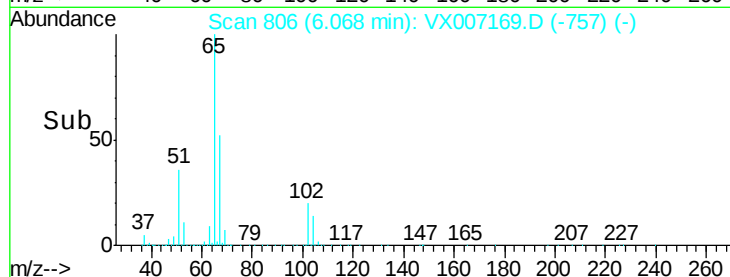
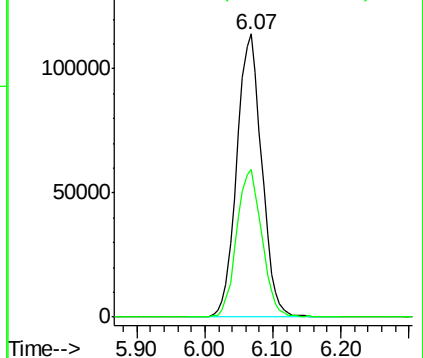
65 100

67 52.8 0.0 105.0



Abundance Ion 64.90 (64.60 to 65.60): VX0

Ion 66.90 (66.60 to 67.60): VX0



#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 6.86 min Scan# 936

Delta R.T. 0.00 min

Lab File: VX007169.D

Acq: 21 Jan 2019 19:47

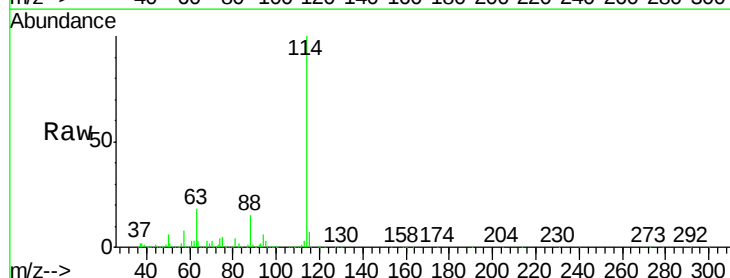
Tgt Ion: 114 Resp: 827037

Ion Ratio Lower Upper

114 100

63 18.1 0.0 34.8

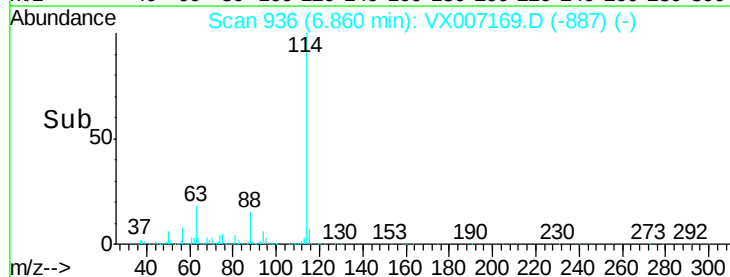
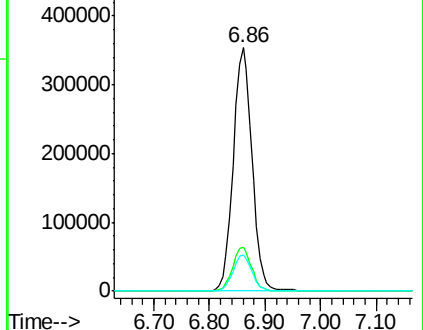
88 15.0 0.0 28.8

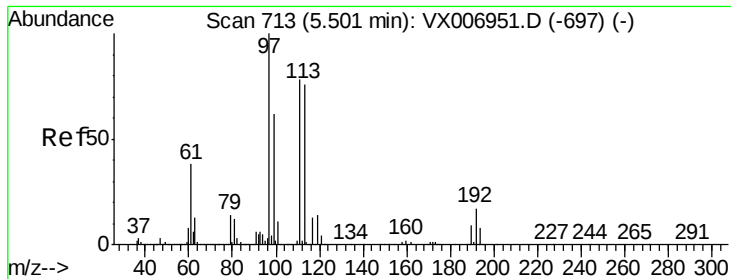


Abundance Ion 113.90 (113.60 to 114.60): V

Ion 63.00 (62.70 to 63.70): VX0

Ion 87.90 (87.60 to 88.60): VX0





#35

Dibromofluoromethane

Concen: 49.367 ug/l

RT: 5.50 min Scan# 713

Delta R.T. 0.00 min

Lab File: VX007169.D

Acq: 21 Jan 2019 19:47

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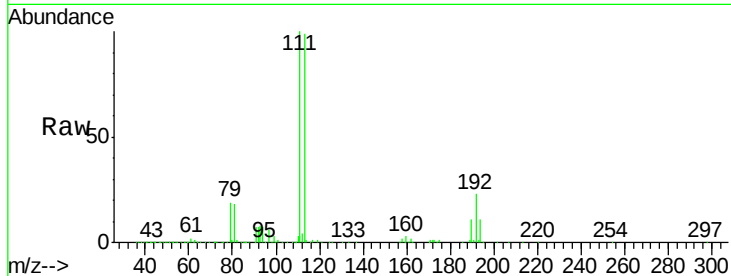
Tot Ion:113 Resp: 261462

Ion Ratio Lower Upper

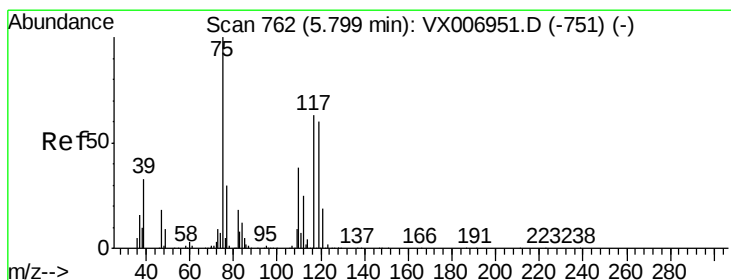
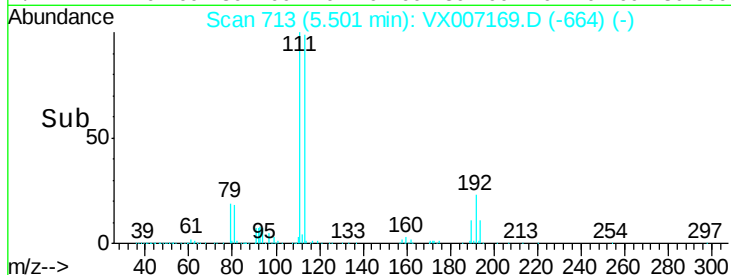
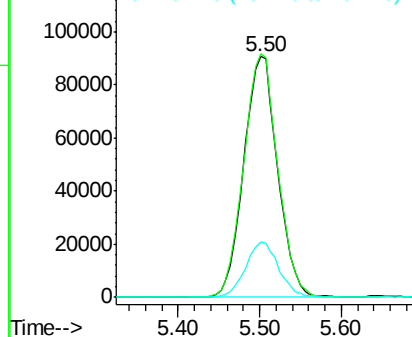
113 100

111 101.9 81.6 122.4

192 22.7 16.7 25.1



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: 4.743 ug/l

RT: 5.66 min Scan# 739

Delta R.T. -0.14 min

Lab File: VX007169.D

Acq: 21 Jan 2019 19:47

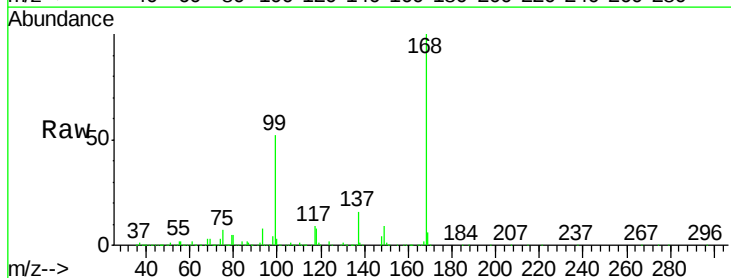
Tgt Ion: 75 Resp: 34105

Ion Ratio Lower Upper

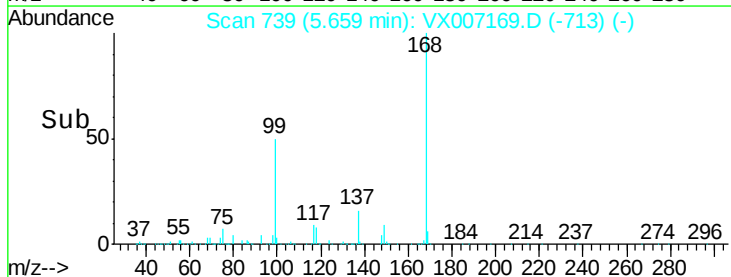
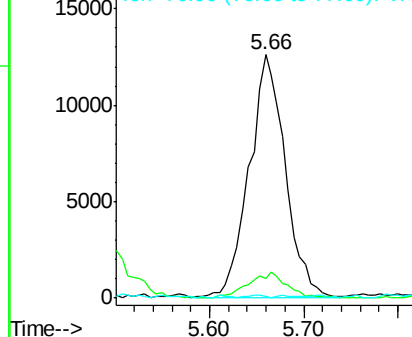
75 100

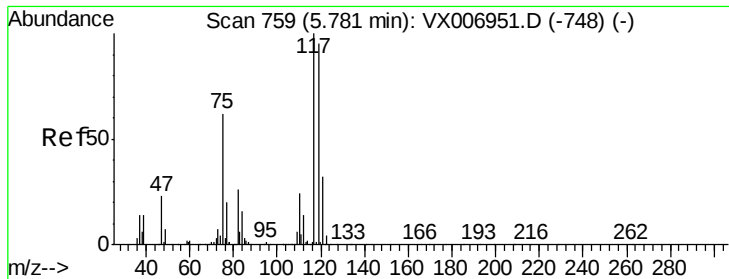
110 11.5 20.2 60.5#

77 0.6 24.8 37.2#



Abundance Ion 74.90 (74.60 to 75.60): VX0
Ion 109.90 (109.60 to 110.60): V
Ion 76.90 (76.60 to 77.60): VX0





#38

Carbon Tetrachloride

Concen: 6.646 ug/l

RT: 5.66 min Scan# 739

Delta R.T. -0.12 min

Lab File: VX007169.D

Acq: 21 Jan 2019 19:47

Instrument :

MSVOA_X

ClientSampleId :

SA-TW522-3337DL

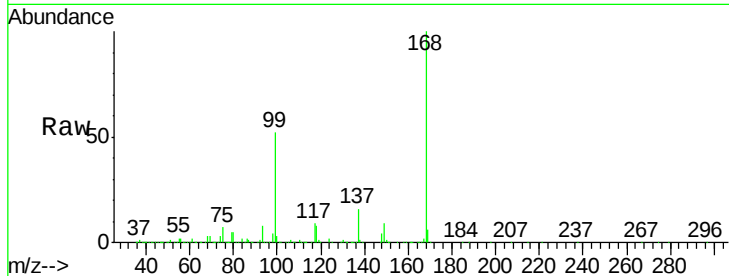
Tot Ion:117 Resp: 48078

Ion Ratio Lower Upper

117 100

119 5.5 79.4 119.2#

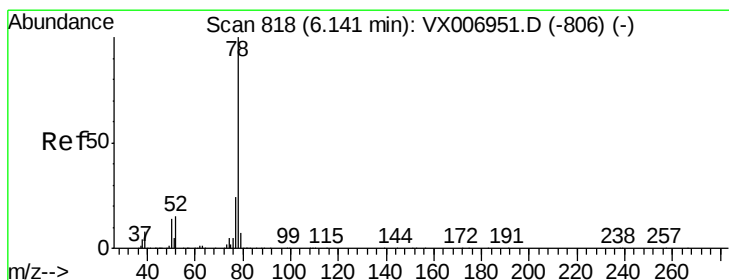
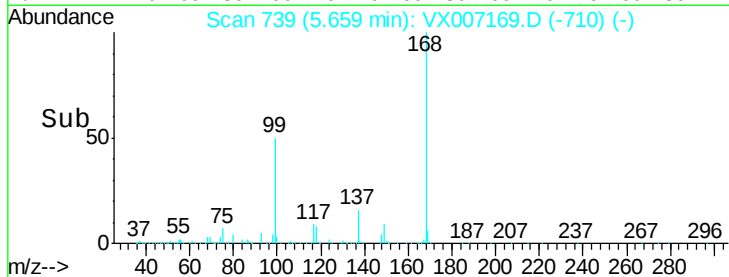
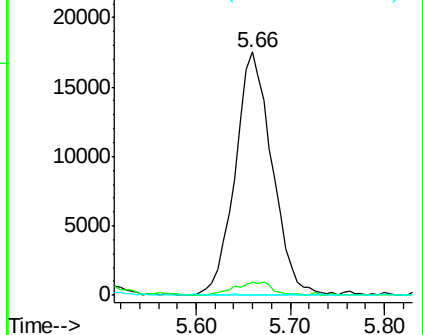
121 0.0 24.0 36.0#



Abundance Ion 116.80 (116.50 to 117.50): V

Ion 118.80 (118.50 to 119.50): V

Ion 120.80 (120.50 to 121.50): V



#40

Benzene

Concen: 0.263 ug/l

RT: 6.15 min Scan# 819

Delta R.T. 0.01 min

Lab File: VX007169.D

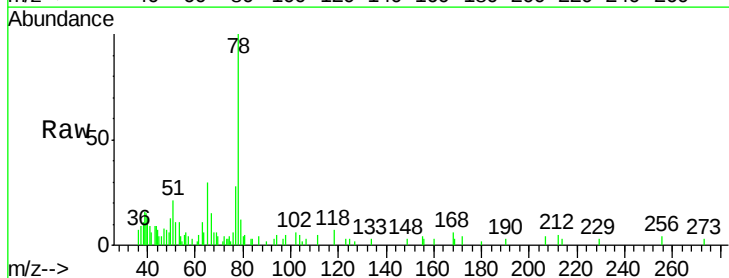
Acq: 21 Jan 2019 19:47

Tgt Ion: 78 Resp: 5760

Ion Ratio Lower Upper

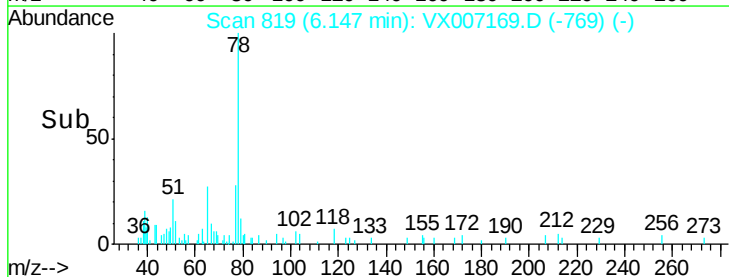
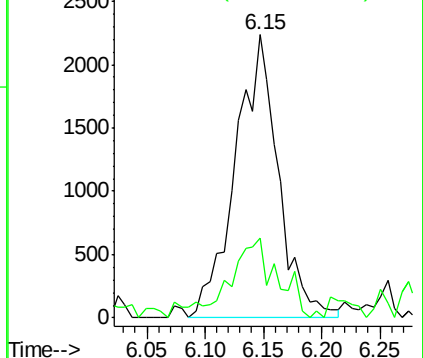
78 100

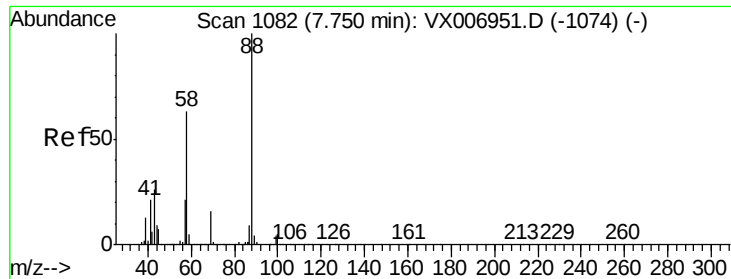
77 24.5 19.2 28.8



Abundance Ion 78.00 (77.70 to 78.70): VX0

Ion 77.00 (76.70 to 77.70): VX0





#49

1,4-Dioxane

Concen: Below Cal

RT: 7.73 min Scan# 1079

Delta R.T. -0.02 min

Lab File: VX007169.D

Acq: 21 Jan 2019 19:47

Instrument :

MSVOA_X

ClientSampleId :

SA-TW522-3337DL

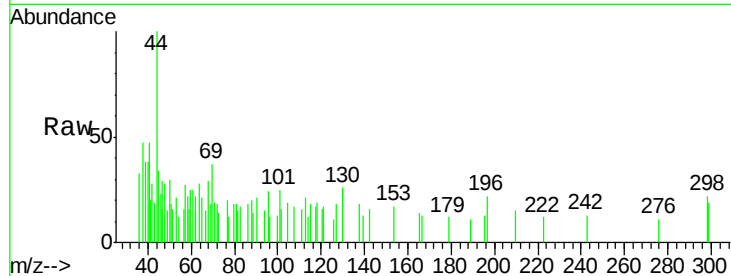
Tot Ion: 88 Resp: 106

Ion Ratio Lower Upper

88 100

43 282.1 22.2 33.4#

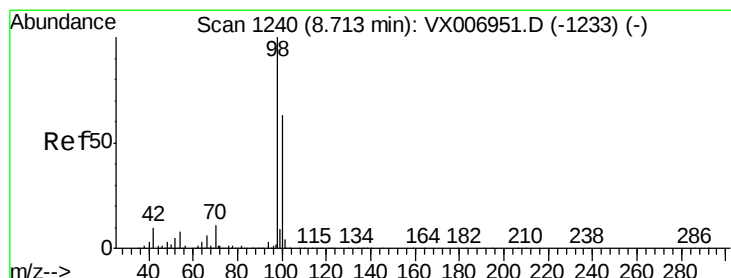
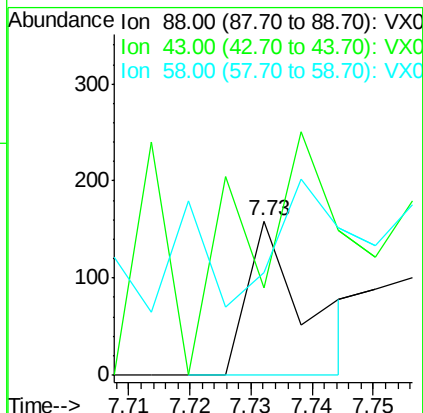
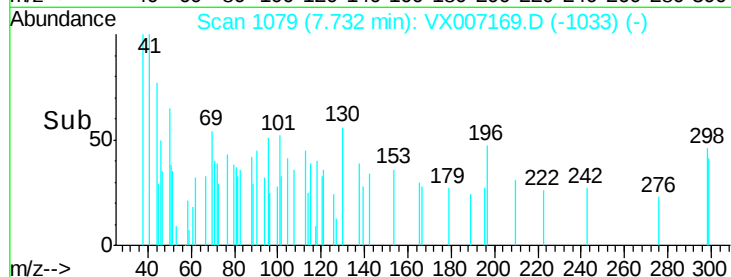
58 145.3 51.0 76.4#



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: 51.388 ug/l

RT: 8.71 min Scan# 1240

Delta R.T. 0.00 min

Lab File: VX007169.D

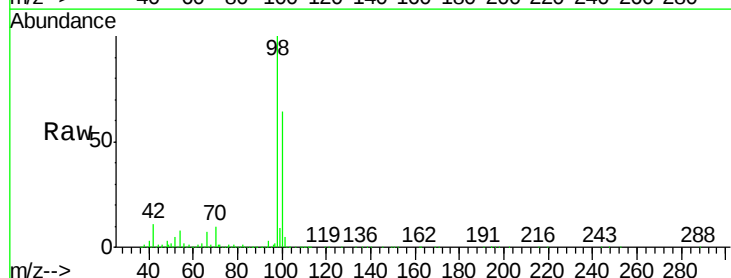
Acq: 21 Jan 2019 19:47

Tgt Ion: 98 Resp: 996207

Ion Ratio Lower Upper

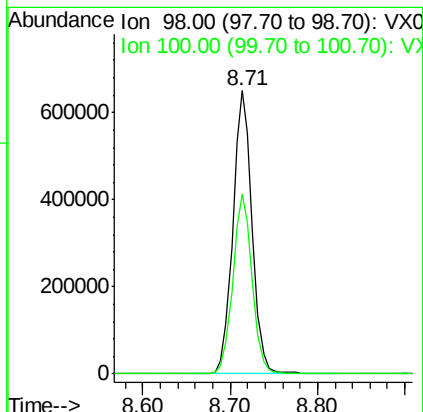
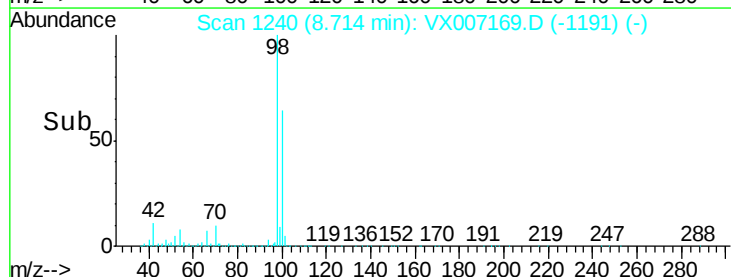
98 100

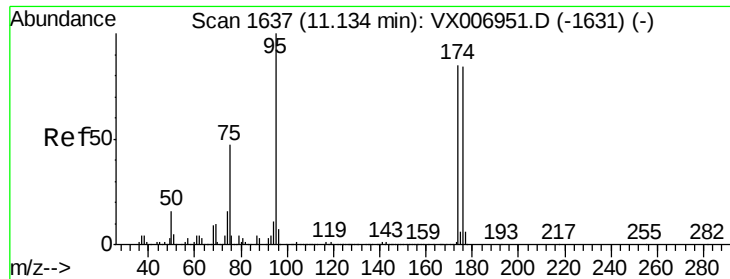
100 63.8 52.0 78.0



Abundance Ion 98.00 (97.70 to 98.70): VX0

Ion 100.00 (99.70 to 100.70): VX0





#62

4-Bromofluorobenzene

Concen: 54.098 ug/l

RT: 11.13 min Scan# 1637

Delta R.T. 0.00 min

Lab File: VX007169.D

Acq: 21 Jan 2019 19:47

Instrument :

MSVOA_X

ClientSampleId :

SA-TW522-3337DL

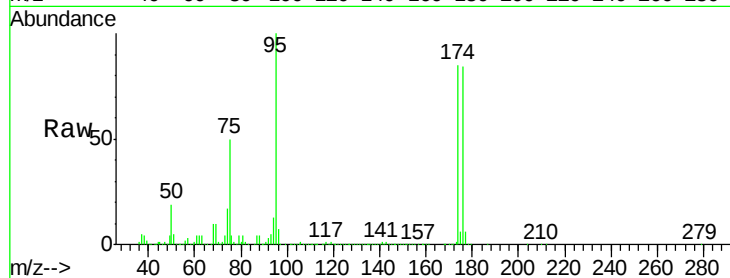
Tot Ion: 95 Resp: 365620

Ion Ratio Lower Upper

95 100

174 91.9 0.0 182.2

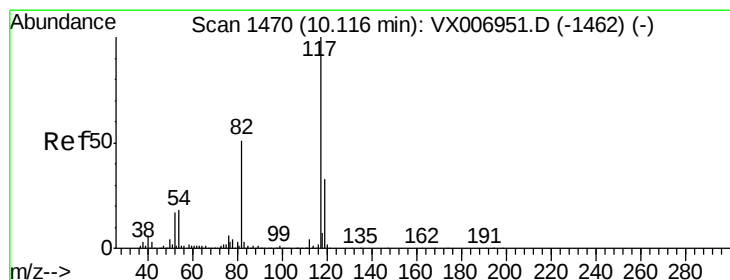
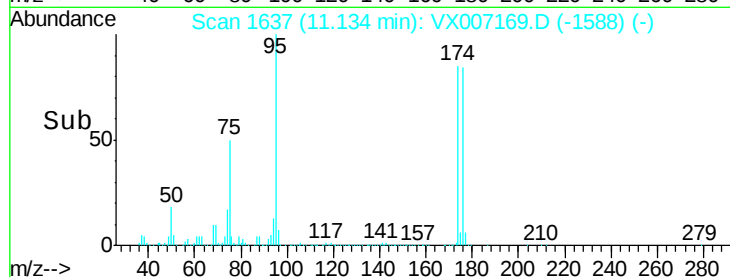
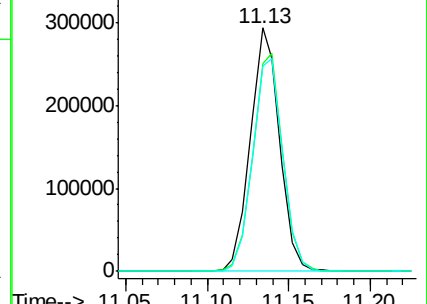
176 90.9 0.0 178.8



Abundance Ion 94.90 (94.60 to 95.60): VX006951.D (-1631) (-)

Ion 173.80 (173.50 to 174.50): VX006951.D (-1631) (-)

Ion 175.80 (175.50 to 176.50): VX006951.D (-1631) (-)



#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 10.11 min Scan# 1469

Delta R.T. -0.01 min

Lab File: VX007169.D

Acq: 21 Jan 2019 19:47

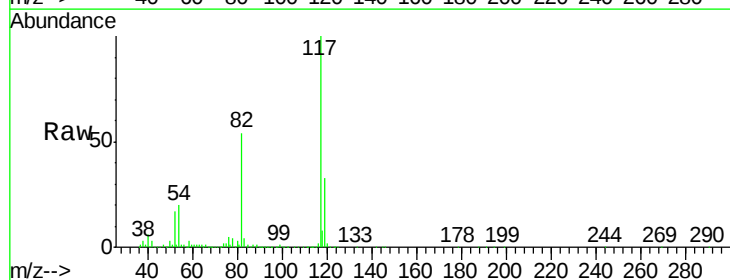
Tgt Ion: 117 Resp: 788616

Ion Ratio Lower Upper

117 100

82 53.9 41.0 61.6

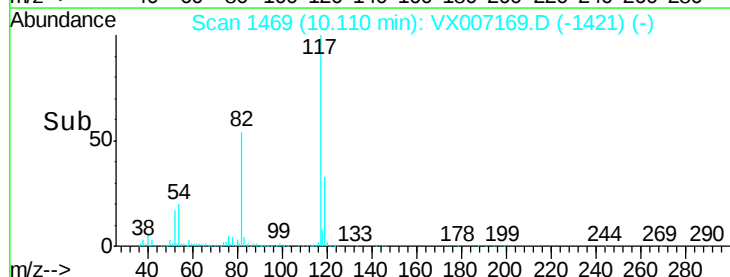
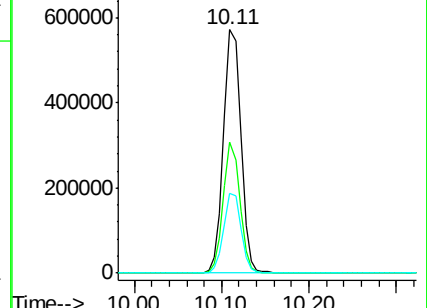
119 32.5 25.4 38.0

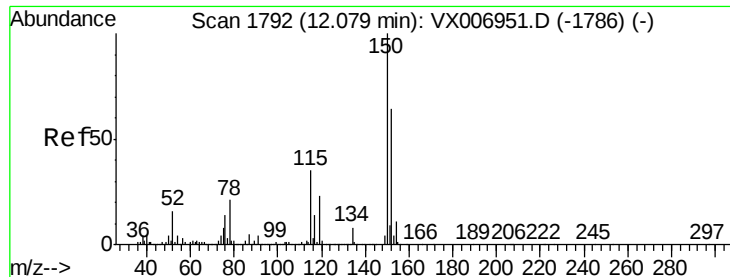


Abundance Ion 116.90 (116.60 to 117.60): VX006951.D (-1462) (-)

Ion 82.00 (81.70 to 82.70): VX006951.D (-1462) (-)

Ion 118.90 (118.60 to 119.60): VX006951.D (-1462) (-)





#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 12.08 min Scan# 1792

Delta R.T. 0.00 min

Lab File: VX007169.D

Acq: 21 Jan 2019 19:47

Instrument :

MSVOA_X

ClientSampleId :

SA-TW522-3337DL

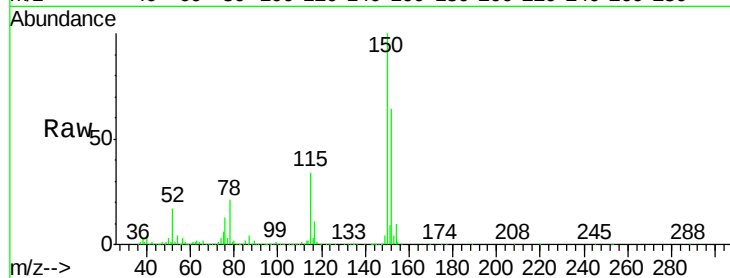
Tot Ion:152 Resp: 403632

Ion Ratio Lower Upper

152 100

115 53.8 39.1 117.2

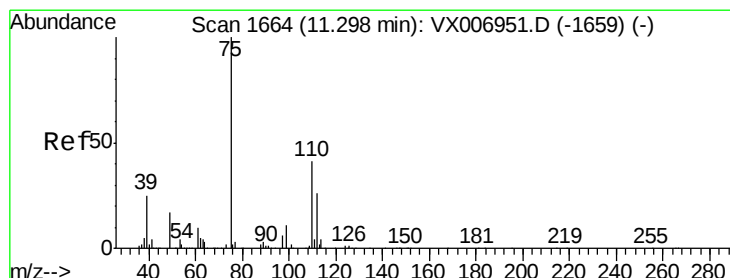
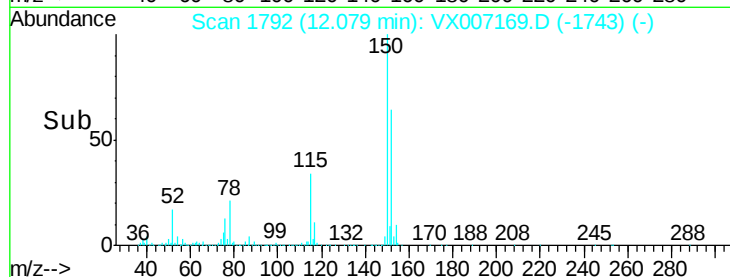
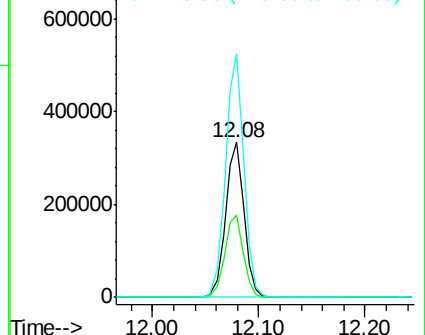
150 156.0 0.0 344.8



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: 21.410 ug/l

RT: 11.13 min Scan# 1637

Delta R.T. -0.16 min

Lab File: VX007169.D

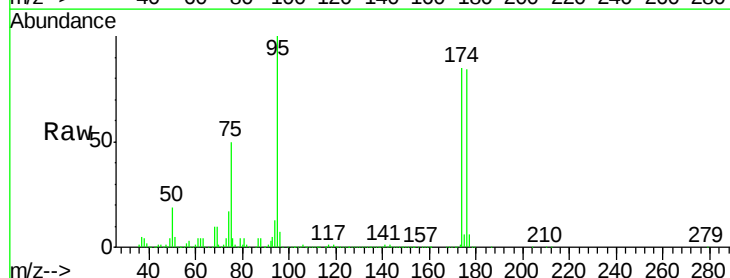
Acq: 21 Jan 2019 19:47

Tgt Ion: 75 Resp: 175121

Ion Ratio Lower Upper

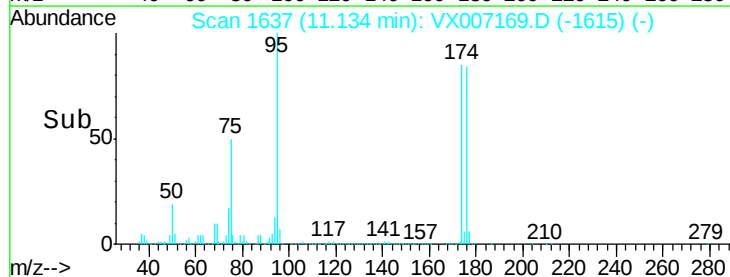
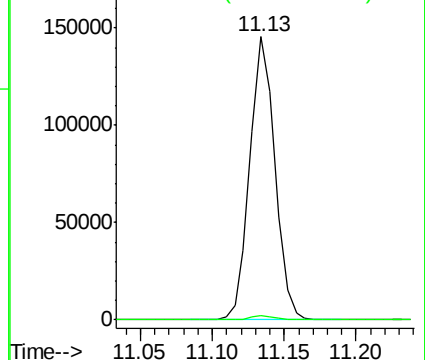
75 100

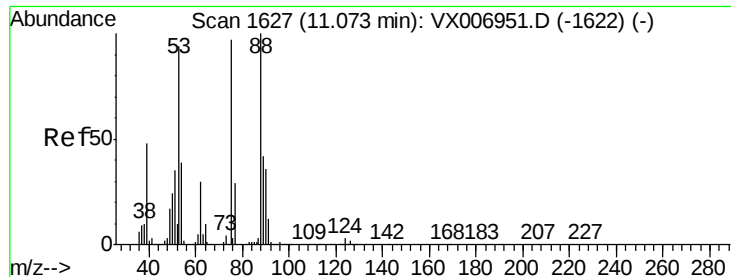
77 1.4 18.5 55.5#



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: 63.507 ug/l

RT: 11.13 min Scan# 1637

Delta R.T. 0.06 min

Lab File: VX007169.D

Acq: 21 Jan 2019 19:47

Instrument :

MSVOA_X

ClientSampleId :

SA-TW522-3337DL

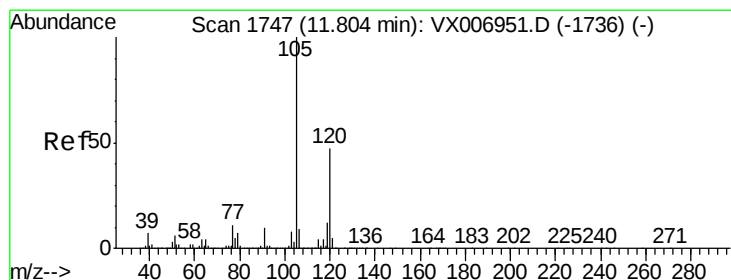
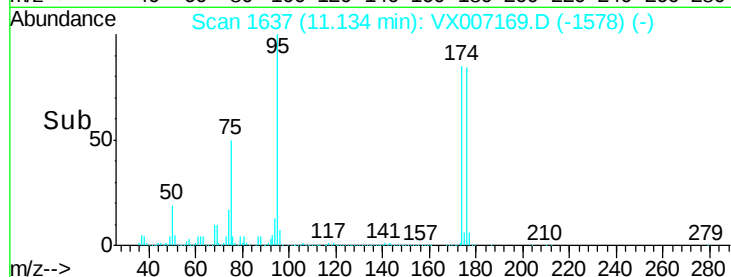
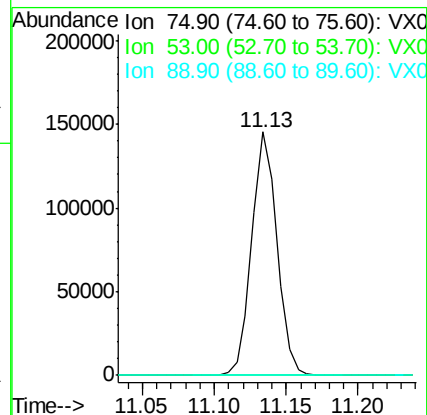
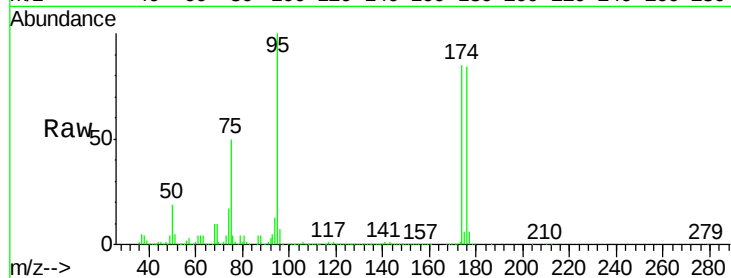
Tot Ion: 75 Resp: 175121

Ion Ratio Lower Upper

75 100

53 0.1 79.7 119.5#

89 0.4 38.0 57.0#



#84

1,2,4-Trimethylbenzene

Concen: 0.250 ug/l

RT: 11.80 min Scan# 1747

Delta R.T. 0.00 min

Lab File: VX007169.D

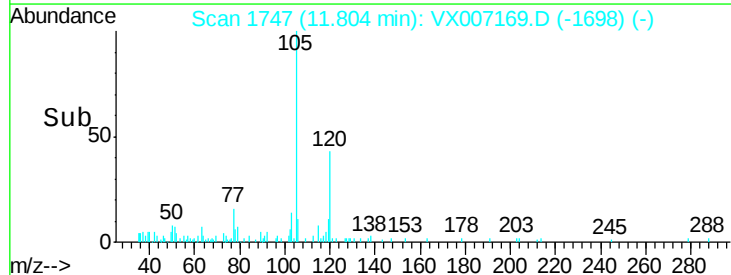
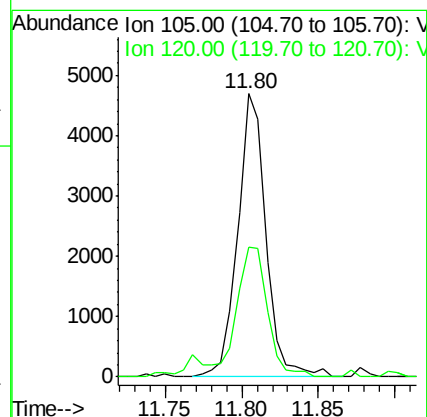
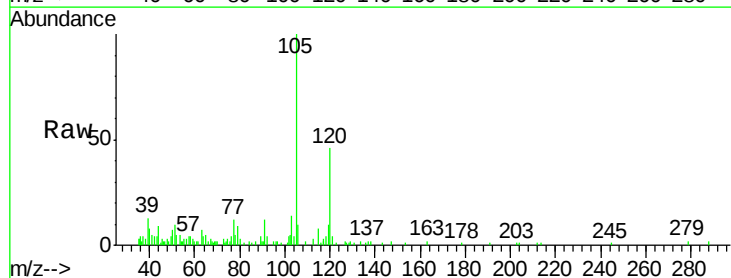
Acq: 21 Jan 2019 19:47

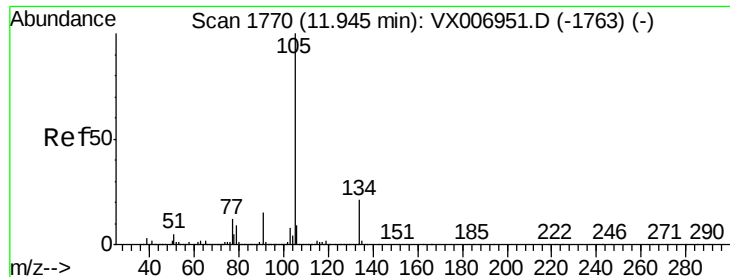
Tgt Ion: 105 Resp: 5984

Ion Ratio Lower Upper

105 100

120 49.8 23.2 69.6





#85

sec-Butylbenzene

Concen: 0.442 ug/l

RT: 11.94 min Scan# 1770

Delta R.T. 0.00 min

Lab File: VX007169.D

Acq: 21 Jan 2019 19:47

Instrument :

MSVOA_X

ClientSampleId :

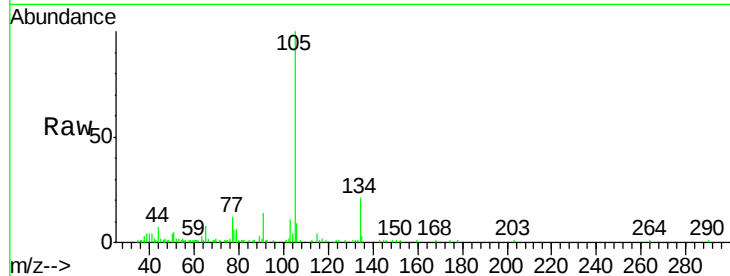
SA-TW522-3337DL

Tot Ion:105 Resp: 12534

Ion Ratio Lower Upper

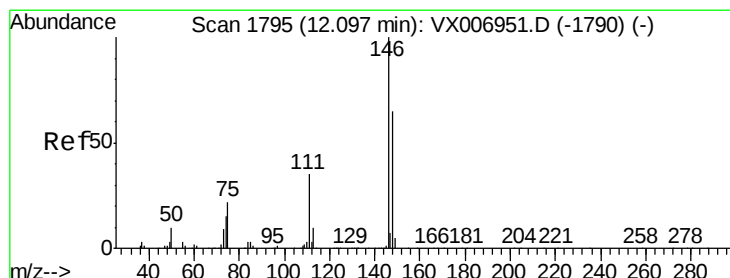
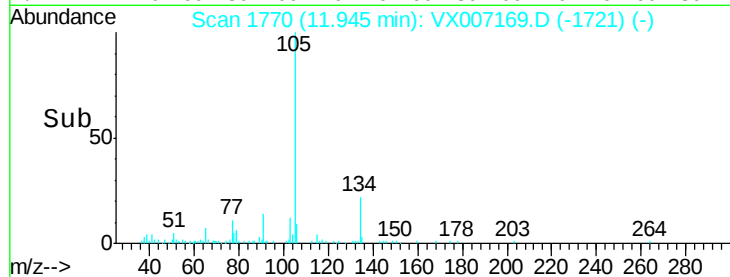
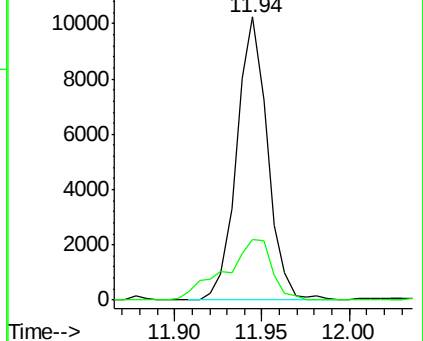
105 100

134 32.6 10.7 31.9#



Abundance Ion 105.00 (104.70 to 105.70): V

Ion 134.00 (133.70 to 134.70): V



#88

1,4-Dichlorobenzene

Concen: 0.264 ug/l

RT: 12.02 min Scan# 1783

Delta R.T. -0.07 min

Lab File: VX007169.D

Acq: 21 Jan 2019 19:47

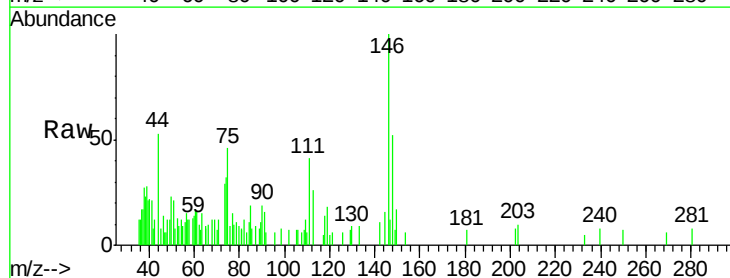
Tgt Ion:146 Resp: 1608

Ion Ratio Lower Upper

146 100

111 45.4 18.1 54.1

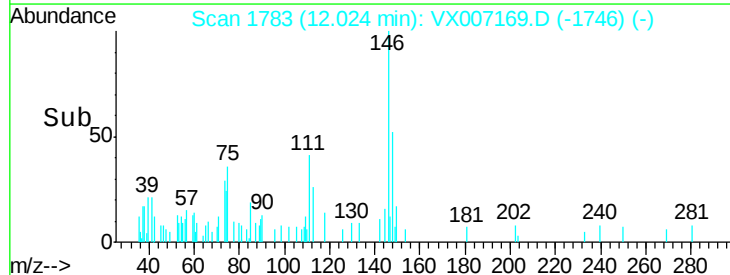
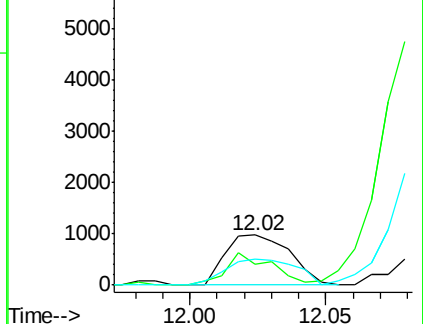
148 57.8 31.9 95.9

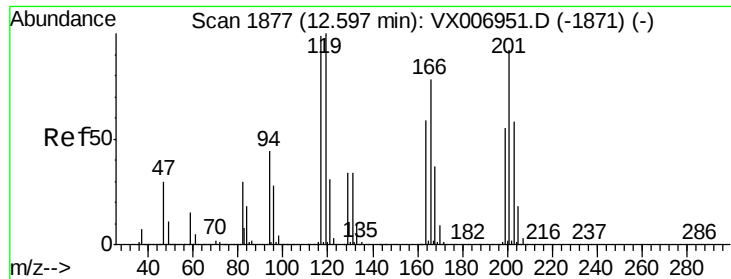


Abundance Ion 145.90 (145.60 to 146.60): V

Ion 110.90 (110.60 to 111.60): V

Ion 147.90 (147.60 to 148.60): V





#90

Hexachloroethane

Concen: 3.066 ug/l

RT: 12.69 min Scan# 1893

Delta R.T. 0.10 min

Lab File: VX007169.D

Acq: 21 Jan 2019 19:47

Instrument :

MSVOA_X

ClientSampleId :

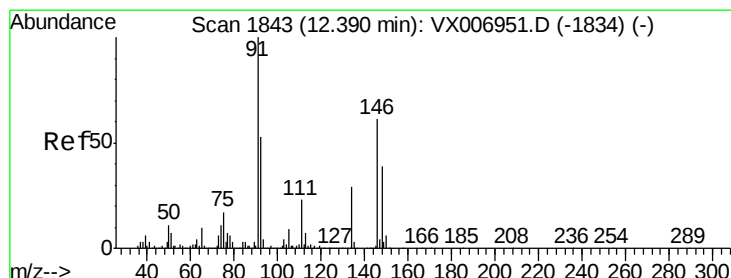
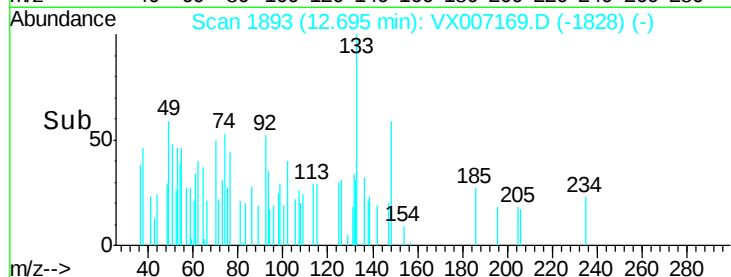
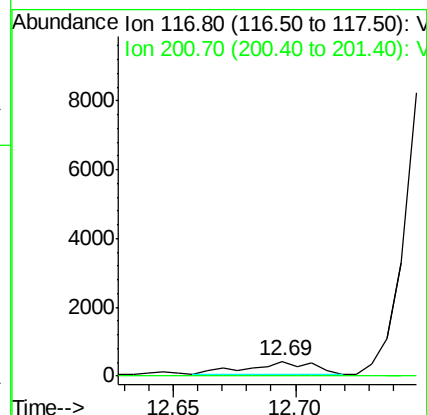
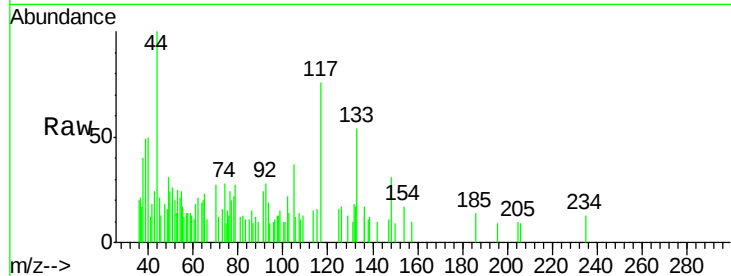
SA-TW522-3337DL

Tot Ion:117 Resp: 679

Ion Ratio Lower Upper

117 100

201 0.0 42.9 128.7#



#91

1,2-Dichlorobenzene

Concen: 0.233 ug/l

RT: 12.39 min Scan# 1843

Delta R.T. 0.00 min

Lab File: VX007169.D

Acq: 21 Jan 2019 19:47

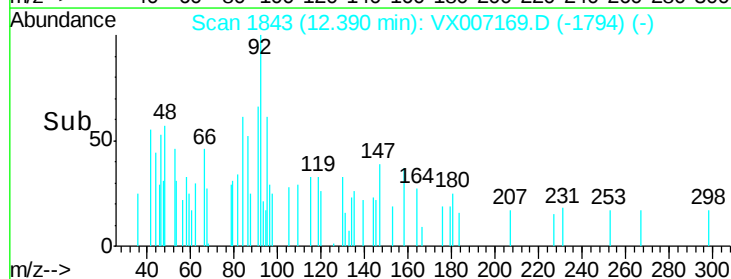
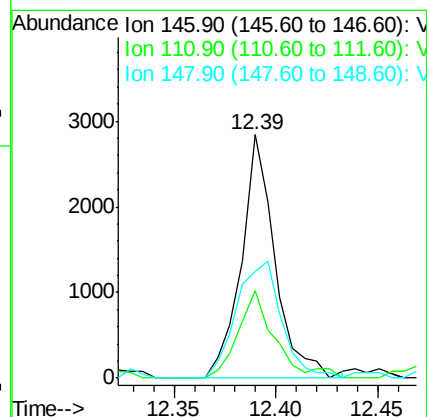
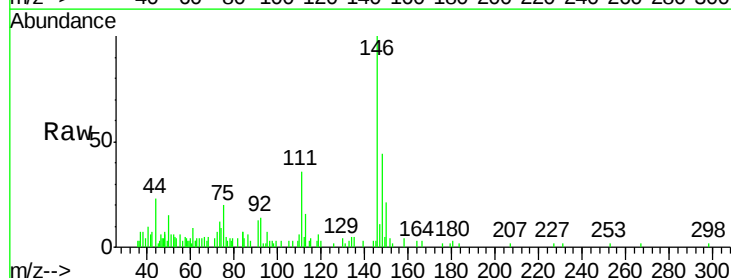
Tgt Ion:146 Resp: 3254

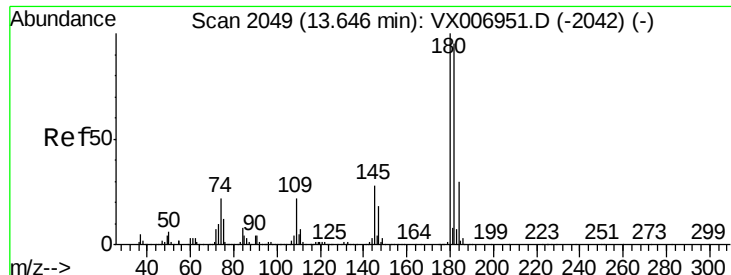
Ion Ratio Lower Upper

146 100

111 39.2 19.4 58.2

148 64.5 32.3 96.9





#93

1,2,4-Trichlorobenzene

Concen: 0.432 ug/l

RT: 13.65 min Scan# 2049

Delta R.T. 0.00 min

Lab File: VX007169.D

Acq: 21 Jan 2019 19:47

Instrument :

MSVOA_X

ClientSampleId :

SA-TW522-3337DL

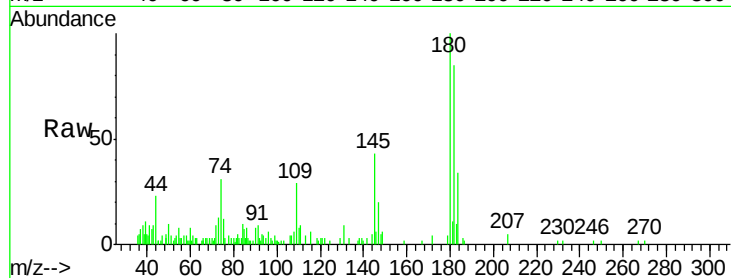
Tot Ion:180 Resp: 4149

Ion Ratio Lower Upper

180 100

182 98.8 47.3 142.0

145 49.7 14.8 44.3#



Abundance Ion 179.80 (179.50 to 180.50): V

Ion 181.80 (181.50 to 182.50): V

Ion 144.80 (144.50 to 145.50): V

