

Data Path : Z:\VOASRV\HPCHEM1\MSVOA X\DATA\VX120920\
 Data File : VX019788.D
 Acq On : 09 Dec 2020 18:54
 Operator : JC/MD
 Sample : L4971-17
 Misc : 5.0mL/MSVOA X/WATER
 ALS Vial : 21 Sample Multiplier: 1

Instrument :
 MSVOA_X
 ClientSampleId :
 5S2-B-TOP

Quant Time: Dec 10 05:42:07 2020
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_X\METHOD\82X120420W.M
 Quant Title : SW846 8260
 QLast Update : Fri Dec 04 15:32:53 2020
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	5.62	168	318466	50.00	ug/l	0.00
34) 1,4-Difluorobenzene	6.83	114	542391	50.00	ug/l	0.00
63) Chlorobenzene-d5	10.09	117	500586	50.00	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	12.06	152	217929	50.00	ug/l	0.00

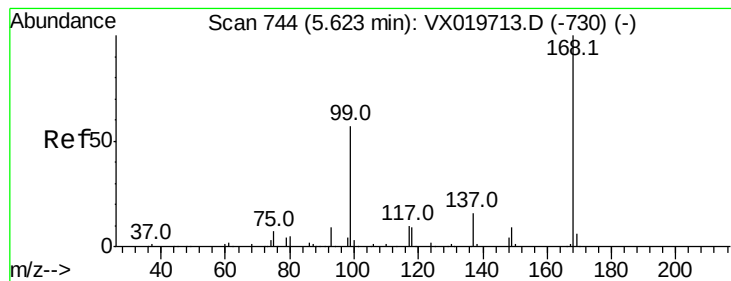
System Monitoring Compounds

33) 1,2-Dichloroethane-d4	6.03	65	204224	48.79	ug/l	0.00
Spiked Amount	50.000	Range	61 - 141	Recovery	=	97.58%
35) Dibromofluoromethane	5.46	113	167212	47.70	ug/l	0.00
Spiked Amount	50.000	Range	69 - 133	Recovery	=	95.40%
50) Toluene-d8	8.70	98	663686	49.59	ug/l	0.00
Spiked Amount	50.000	Range	65 - 126	Recovery	=	99.18%
62) 4-Bromofluorobenzene	11.12	95	232698	45.68	ug/l	0.00
Spiked Amount	50.000	Range	58 - 135	Recovery	=	91.36%

Target Compounds

					Qvalue	
5) Bromomethane	1.62	94	489	0.407	ug/l #	77
11) Tert butyl alcohol	2.99	59	5926	4.319	ug/l #	79
13) Acrolein	2.28	56	165	0.357	ug/l	91
16) Acetone	2.42	43	34836	22.143	ug/l	97
18) Methyl Acetate	2.75	43	2447	0.636	ug/l	99
20) Methylene Chloride	2.83	84	8646	1.014	ug/l	99
25) 2-Butanone	4.64	43	6348	2.626	ug/l	91
29) Tetrahydrofuran	5.10	42	2619	1.681	ug/l	92
31) Cyclohexane	5.63	56	6230	1.197	ug/l #	1
36) 1,1-Dichloropropene	5.62	75	24607	5.021	ug/l #	48
38) Carbon Tetrachloride	5.63	117	31966	6.660	ug/l #	16
41) Methacrylonitrile	5.10	41	1561	0.575	ug/l #	42
43) Isopropyl Acetate	6.41	43	18850	2.343	ug/l	99
48) Methyl methacrylate	7.65	41	6763	1.709	ug/l #	17
49) 1,4-Dioxane	7.85	88	45	0.469	ug/l #	1
51) 4-Methyl-2-Pentanone	8.59	43	50596	10.301	ug/l #	43
54) cis-1,3-Dichloropropene	8.59	75	25229	4.174	ug/l #	61
57) 1,3-Dichloropropane	9.52	76	4424	0.687	ug/l #	42
59) 2-Hexanone	9.52	43	52328	13.744	ug/l #	47
76) 1,2,3-Trichloropropane	11.12	75	112557	23.028	ug/l #	39
81) trans-1,4-Dichloro-2-buten	11.12	75	112557	66.571	ug/l #	12

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



#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 5.62 min Scan# 744

Delta R.T. 0.00 min

Lab File: VX019788.D

Acq: 09 Dec 2020 18:54

Instrument :

MSVOA_X

ClientSampleId :

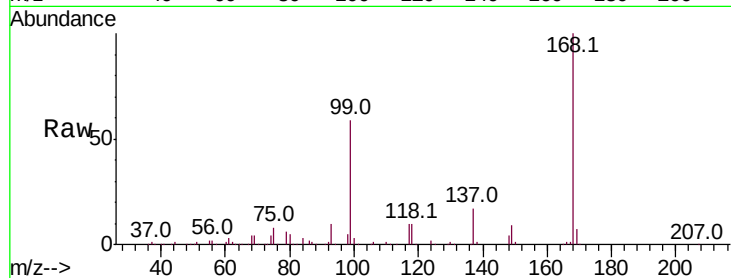
5S2-B-TOP

Tot Ion:168 Resp: 318466

Ion Ratio Lower Upper

168 100

99 59.3 45.8 68.6



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VX0

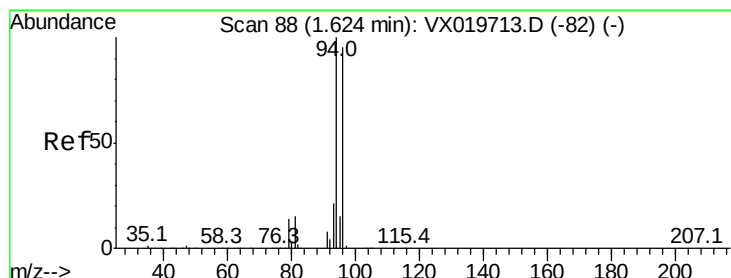
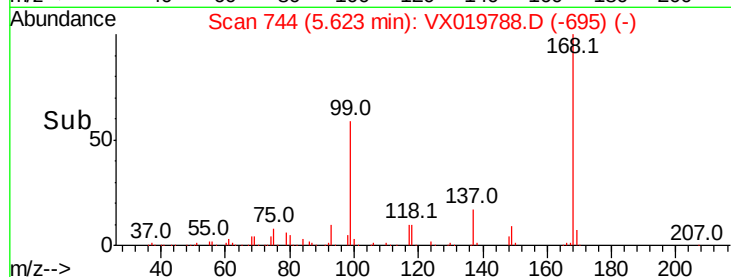
5.62

100000

50000

0

Time-->



#5

Bromomethane

Concen: 0.407 ug/l

RT: 1.62 min Scan# 88

Delta R.T. 0.00 min

Lab File: VX019788.D

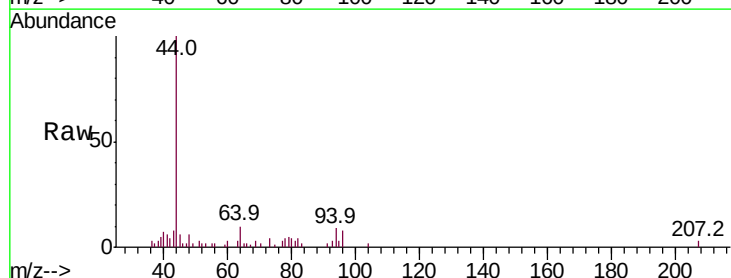
Acq: 09 Dec 2020 18:54

Tgt Ion: 94 Resp: 489

Ion Ratio Lower Upper

94 100

96 118.3 76.4 114.6#



Abundance Ion 93.90 (93.60 to 94.60): VX0

Ion 95.90 (95.60 to 96.60): VX0

1.62

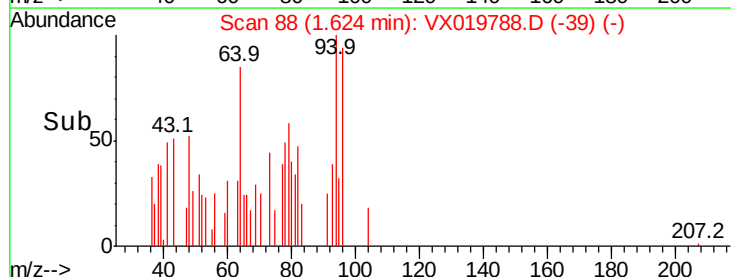
300

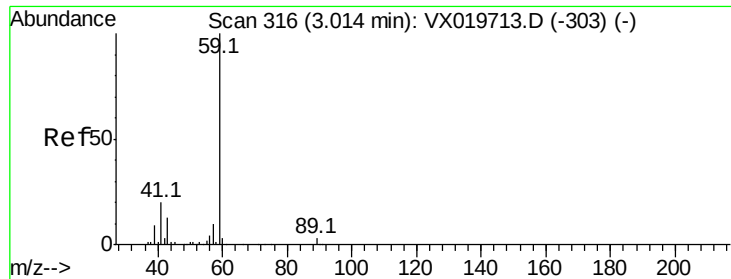
200

100

0

Time-->

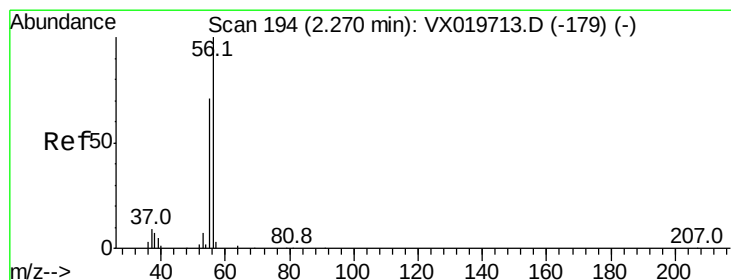
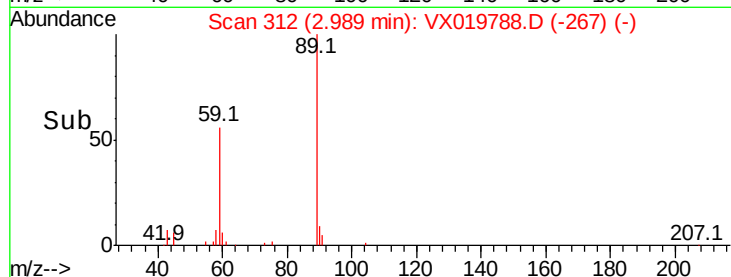
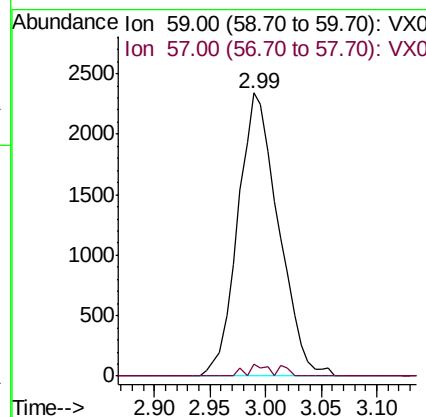
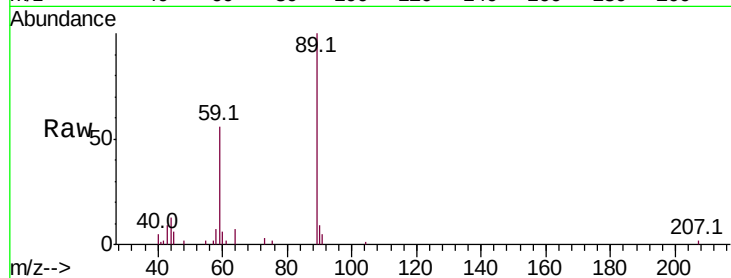




#11
Tert butyl alcohol
Concen: 4.319 ug/l
RT: 2.99 min Scan# 312
Delta R.T. -0.02 min
Lab File: VX019788.D
Acq: 09 Dec 2020 18:54

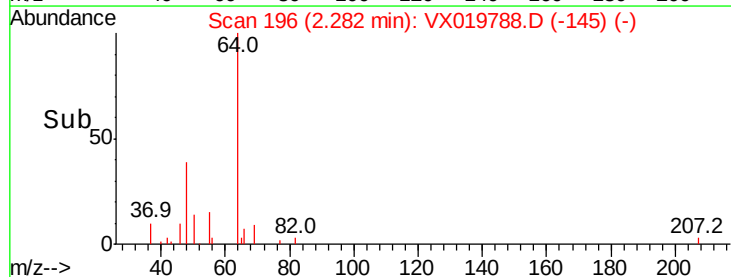
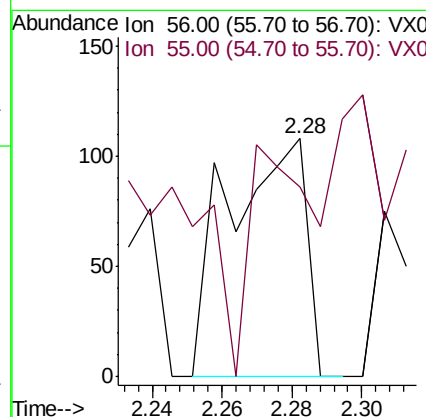
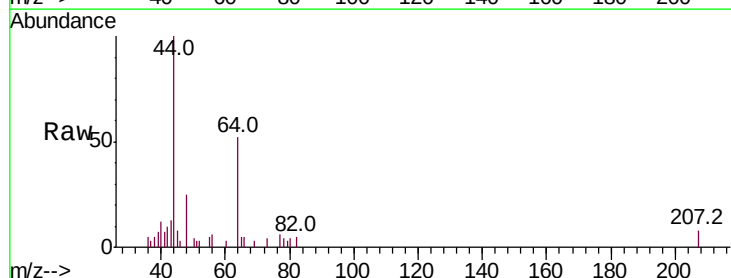
Instrument :
MSVOA_X
ClientSampleId :
5S2-B-TOP

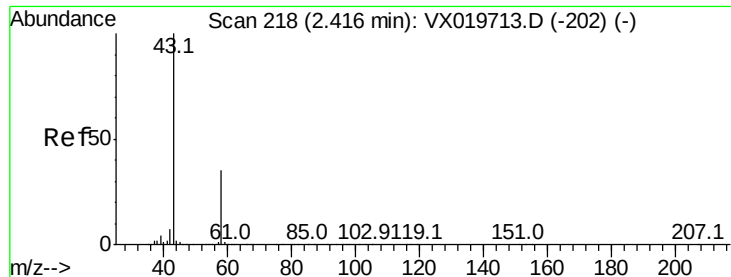
Tot Ion: 59 Resp: 5926
Ion Ratio Lower Upper
59 100
57 1.9 7.8 11.8#



#13
Acrolein
Concen: 0.357 ug/l
RT: 2.28 min Scan# 196
Delta R.T. 0.01 min
Lab File: VX019788.D
Acq: 09 Dec 2020 18:54

Tgt Ion: 56 Resp: 165
Ion Ratio Lower Upper
56 100
55 78.2 56.4 84.6





#16

Acetone

Concen: 22.143 ug/l

RT: 2.42 min Scan# 218

Delta R.T. 0.00 min

Lab File: VX019788.D

Acq: 09 Dec 2020 18:54

Instrument :

MSVOA_X

ClientSampleId :

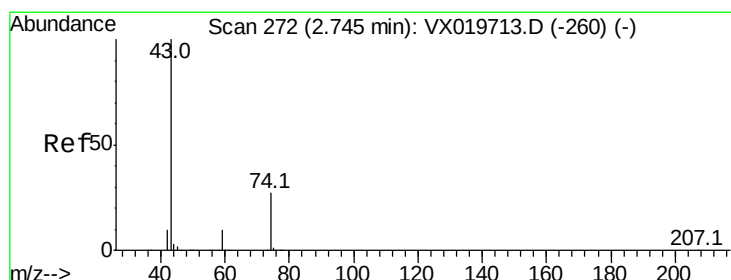
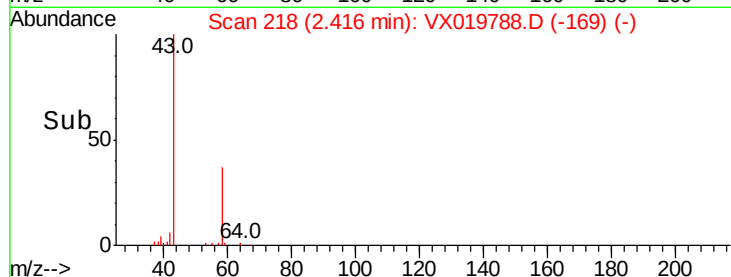
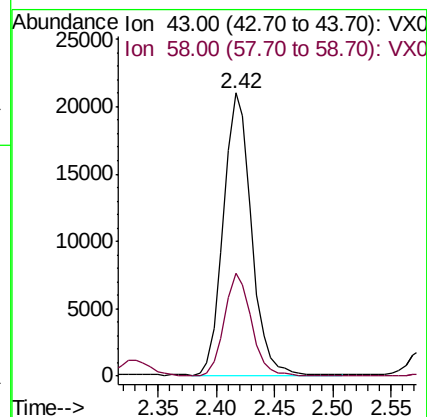
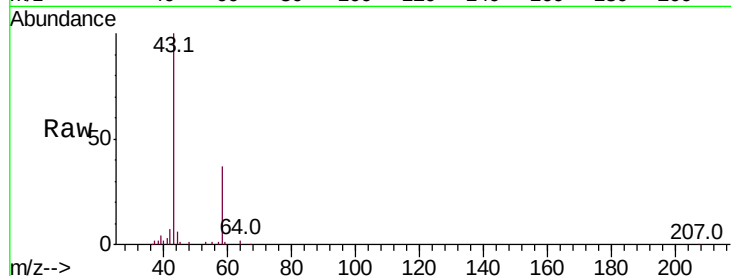
5S2-B-TOP

Tot Ion: 43 Resp: 34836

Ion Ratio Lower Upper

43 100

58 36.7 27.8 41.8



#18

Methyl Acetate

Concen: 0.636 ug/l

RT: 2.75 min Scan# 272

Delta R.T. 0.00 min

Lab File: VX019788.D

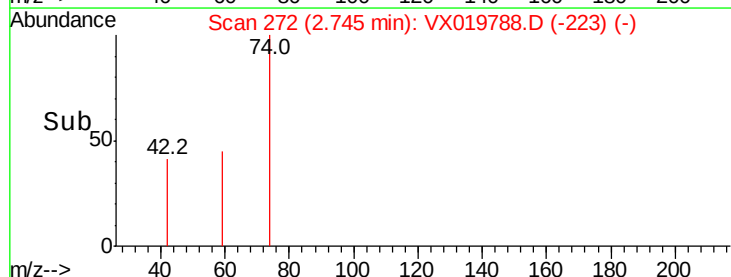
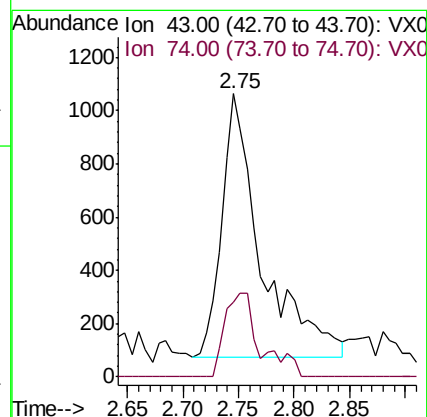
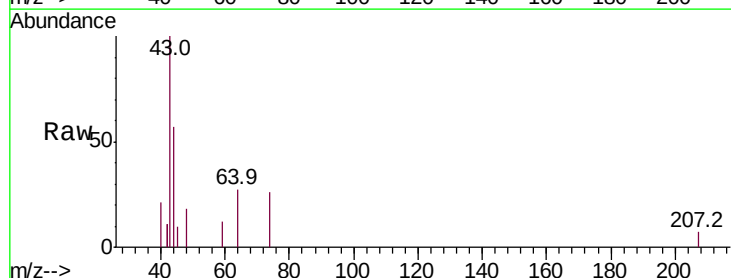
Acq: 09 Dec 2020 18:54

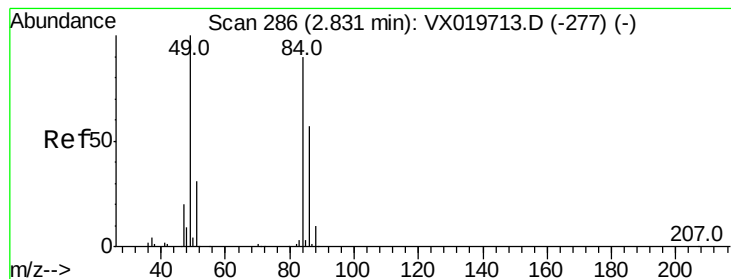
Tgt Ion: 43 Resp: 2447

Ion Ratio Lower Upper

43 100

74 28.0 21.9 32.9





#20

Methvlene Chloride

Concen: 1.014 ug/l

RT: 2.83 min Scan# 286

Delta R.T. 0.00 min

Lab File: VX019788.D

Acq: 09 Dec 2020 18:54

Instrument :

MSVOA_X

ClientSampled :

5S2-B-TOP

Tot Ion: 84 Resp: 8646

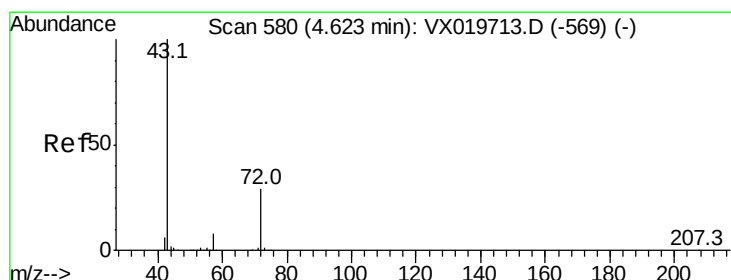
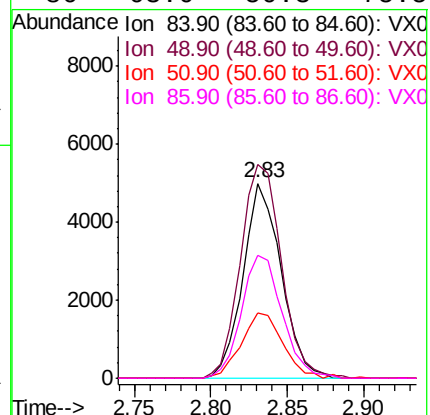
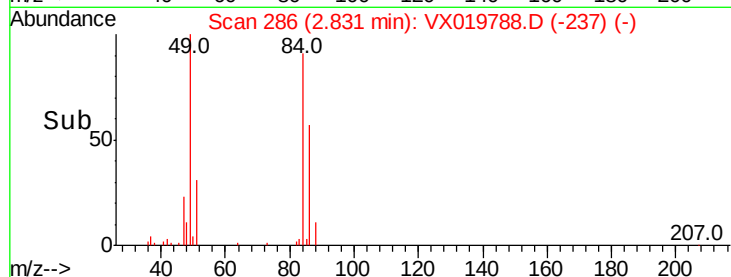
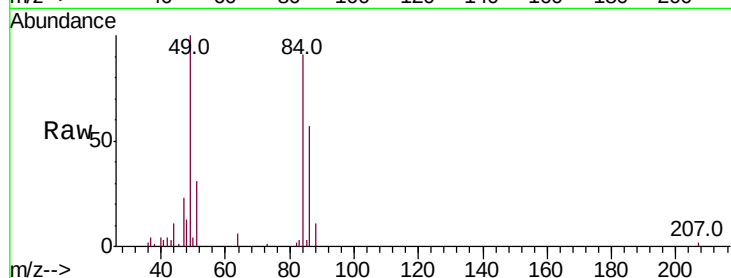
Ion Ratio Lower Upper

84 100

49 109.7 88.6 132.8

51 33.8 27.0 40.6

86 63.0 50.3 75.5



#25

2-Butanone

Concen: 2.626 ug/l

RT: 4.64 min Scan# 583

Delta R.T. 0.02 min

Lab File: VX019788.D

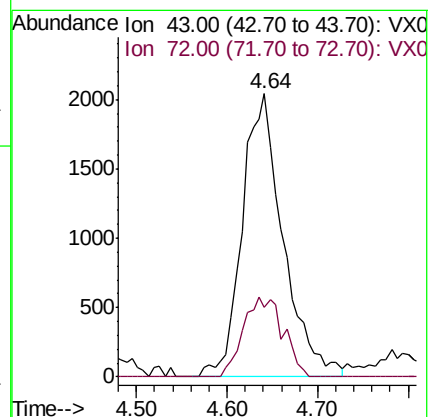
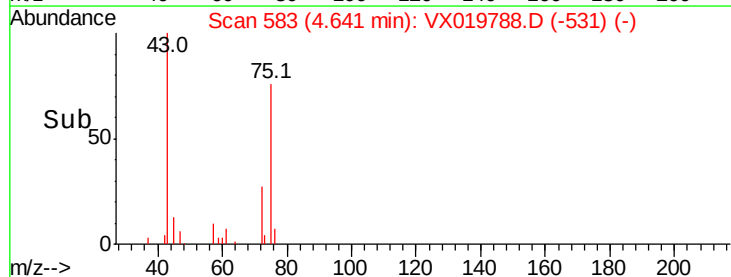
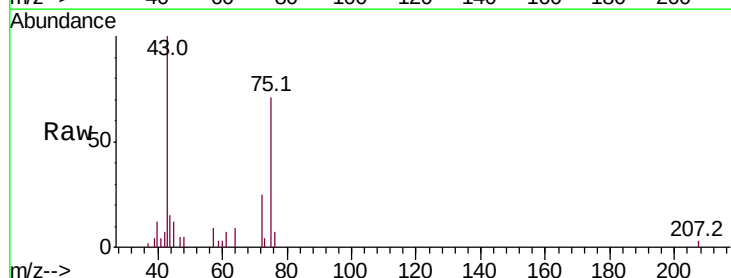
Acq: 09 Dec 2020 18:54

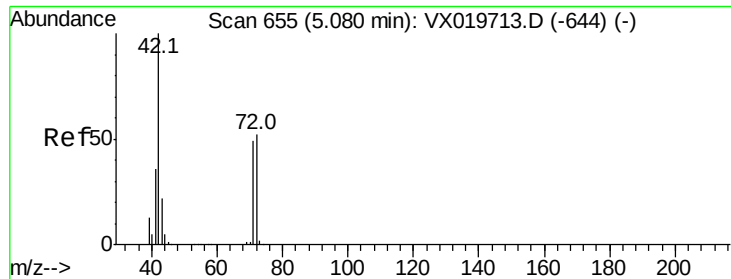
Tgt Ion: 43 Resp: 6348

Ion Ratio Lower Upper

43 100

72 24.7 23.7 35.5





#29

Tetrahydrofuran

Concen: 1.681 ug/l

RT: 5.10 min Scan# 658

Delta R.T. 0.02 min

Lab File: VX019788.D

Acq: 09 Dec 2020 18:54

Instrument :

MSVOA_X

ClientSampled :

5S2-B-TOP

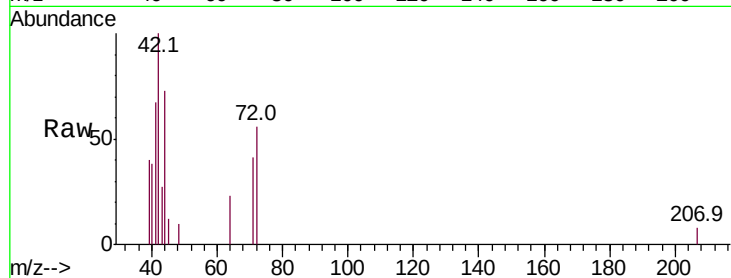
Tot Ion: 42 Resp: 2619

Ion Ratio Lower Upper

42 100

72 47.6 41.7 62.5

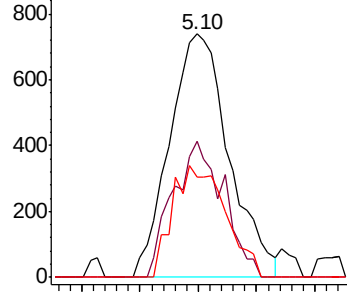
71 40.8 38.4 57.6



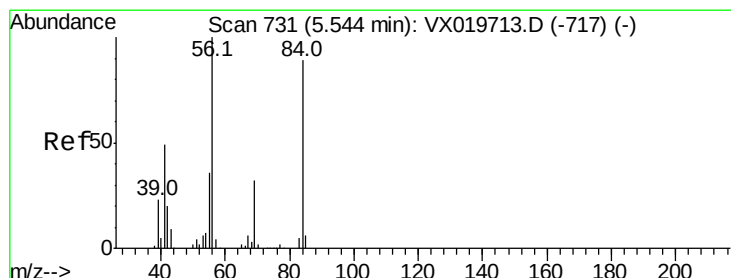
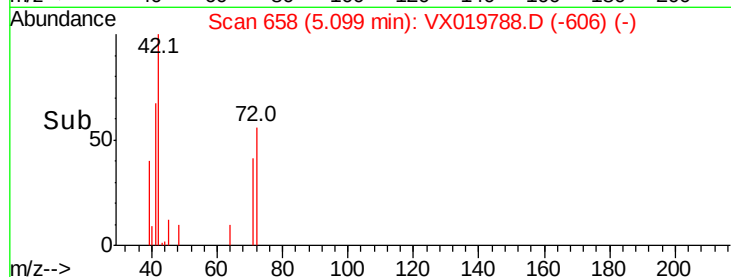
Abundance Ion 42.00 (41.70 to 42.70): VX0

Ion 72.00 (71.70 to 72.70): VX0

Ion 71.00 (70.70 to 71.70): VX0



Time-->



#31

Cyclohexane

Concen: 1.197 ug/l

RT: 5.63 min Scan# 745

Delta R.T. 0.09 min

Lab File: VX019788.D

Acq: 09 Dec 2020 18:54

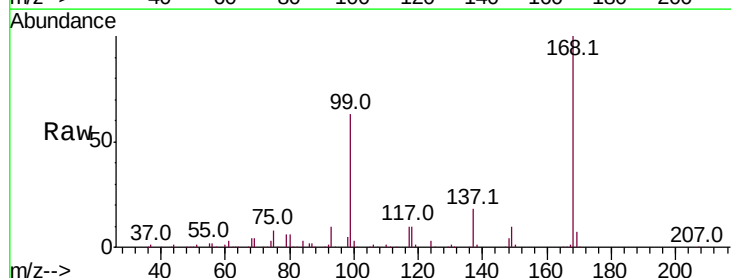
Tgt Ion: 56 Resp: 6230

Ion Ratio Lower Upper

56 100

69 188.3 25.3 37.9#

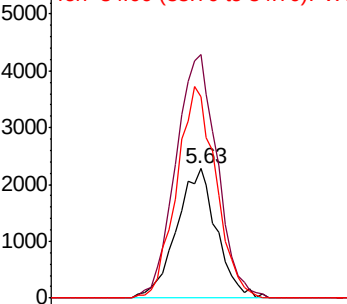
84 156.1 71.4 107.0#



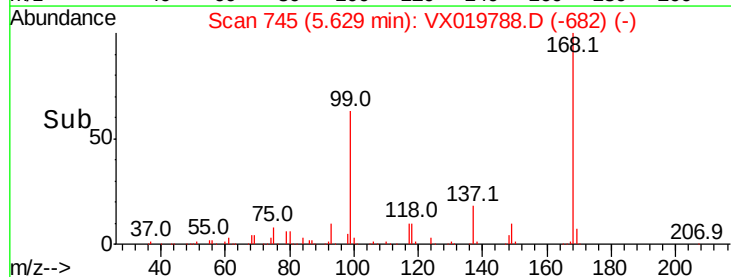
Abundance Ion 56.00 (55.70 to 56.70): VX0

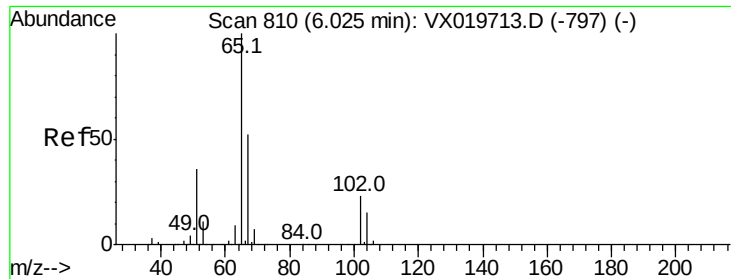
Ion 69.00 (68.70 to 69.70): VX0

Ion 84.00 (83.70 to 84.70): VX0



Time-->

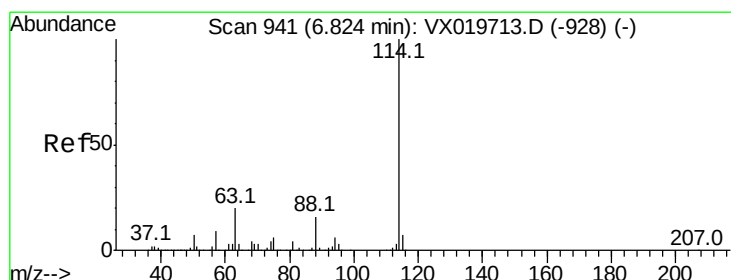
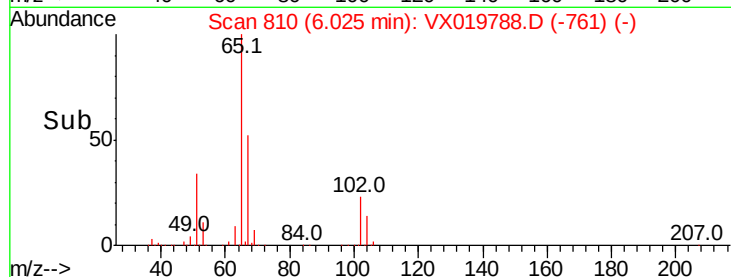
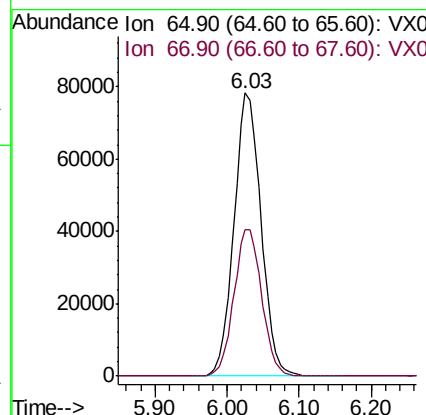
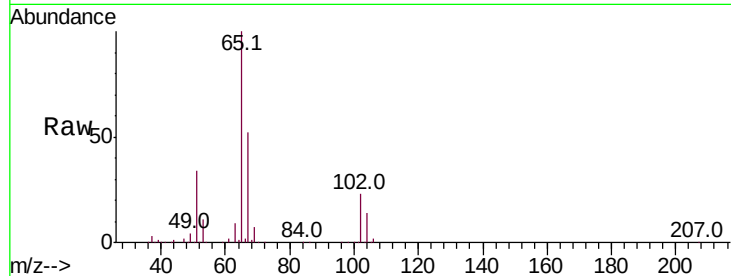




#33
 1,2-Dichloroethane-d4
 Concen: 48.792 ug/l
 RT: 6.03 min Scan# 810
 Delta R.T. 0.00 min
 Lab File: VX019788.D
 Acq: 09 Dec 2020 18:54

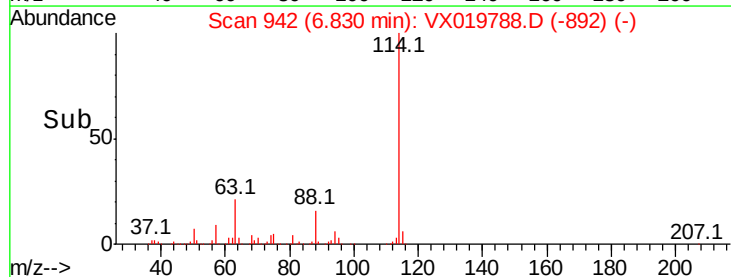
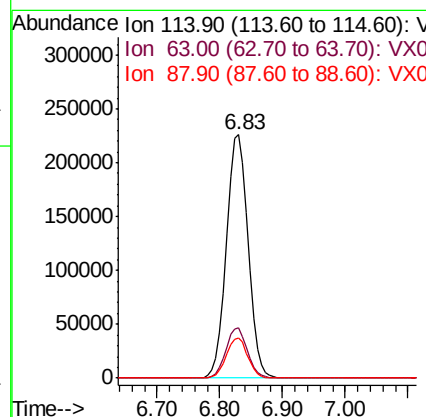
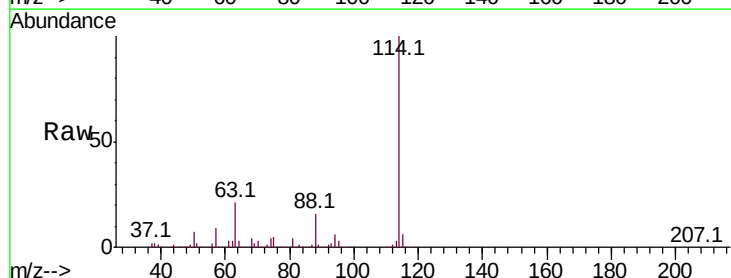
Instrument :
 MSVOA_X
 ClientSampleId :
 5S2-B-TOP

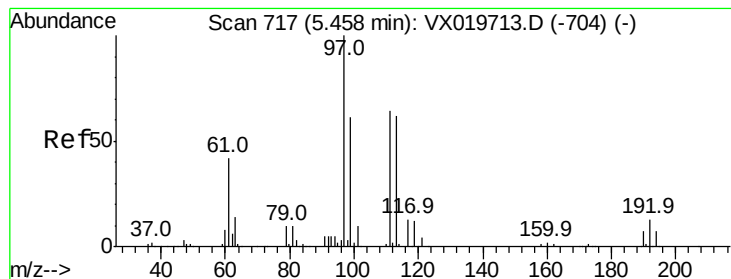
Tot Ion: 65 Resp: 204224
 Ion Ratio Lower Upper
 65 100
 67 53.3 0.0 105.4



#34
 1,4-Difluorobenzene
 Concen: 50.000 ug/l
 RT: 6.83 min Scan# 942
 Delta R.T. 0.01 min
 Lab File: VX019788.D
 Acq: 09 Dec 2020 18:54

Tgt Ion: 114 Resp: 542391
 Ion Ratio Lower Upper
 114 100
 63 20.5 0.0 40.8
 88 16.4 0.0 32.8





#35

Dibromofluoromethane

Concen: 47.701 ug/l

RT: 5.46 min Scan# 718

Delta R.T. 0.01 min

Lab File: VX019788.D

Acq: 09 Dec 2020 18:54

Instrument :

MSVOA_X

ClientSampleId :

5S2-B-TOP

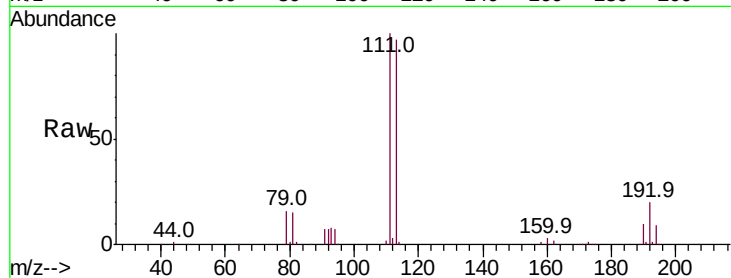
Tot Ion:113 Resp: 167212

Ion Ratio Lower Upper

113 100

111 102.6 81.9 122.9

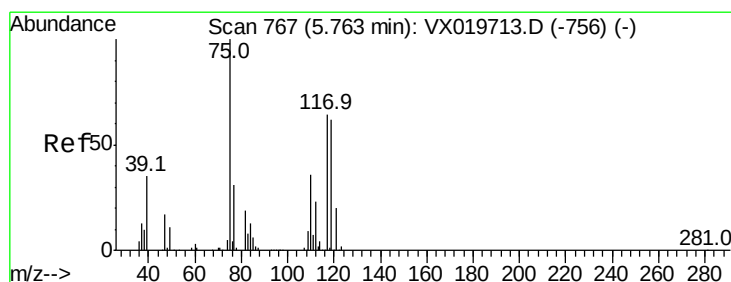
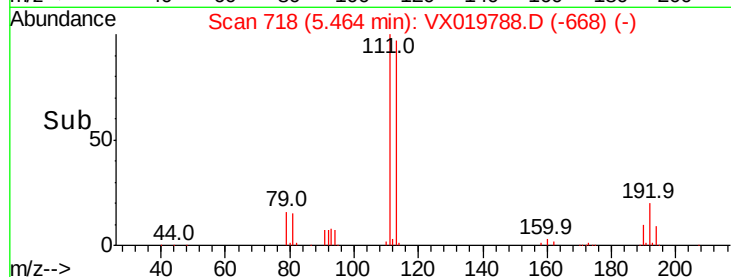
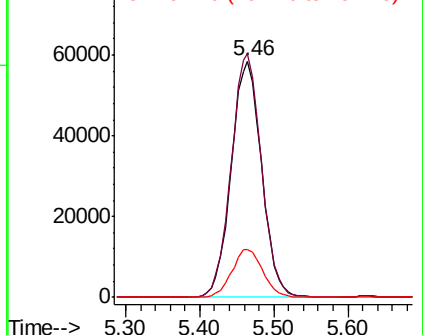
192 20.6 16.7 25.1



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: 5.021 ug/l

RT: 5.62 min Scan# 744

Delta R.T. -0.14 min

Lab File: VX019788.D

Acq: 09 Dec 2020 18:54

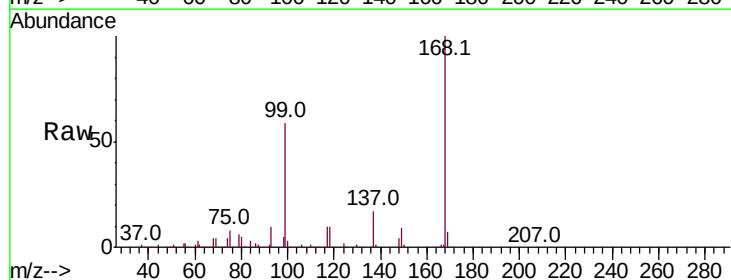
Tgt Ion: 75 Resp: 24607

Ion Ratio Lower Upper

75 100

110 8.6 18.1 54.4#

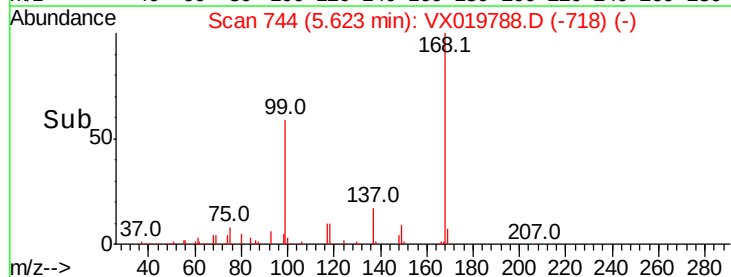
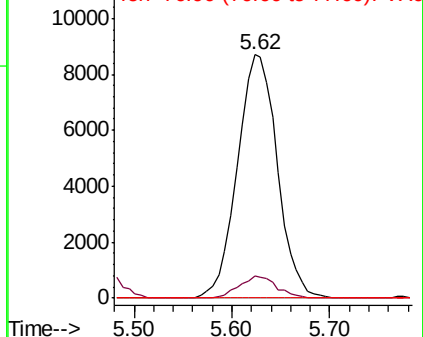
77 0.0 25.3 37.9#

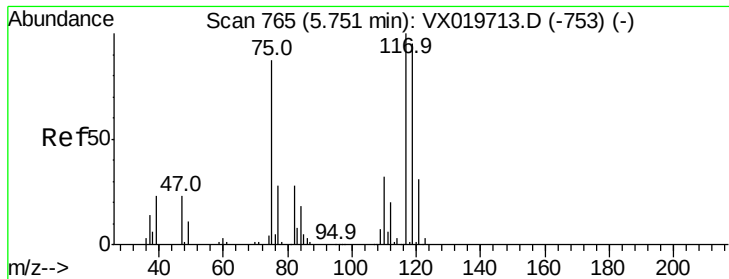


Abundance Ion 74.90 (74.60 to 75.60): VX0

Ion 109.90 (109.60 to 110.60): V

Ion 76.90 (76.60 to 77.60): VX0

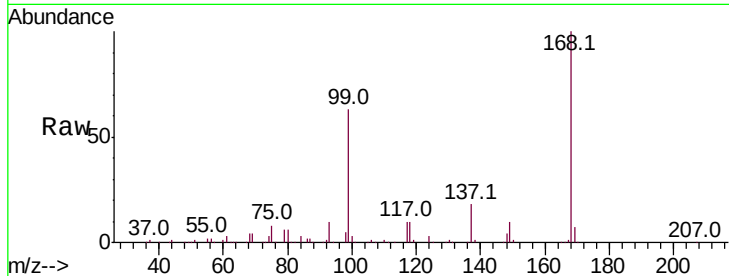




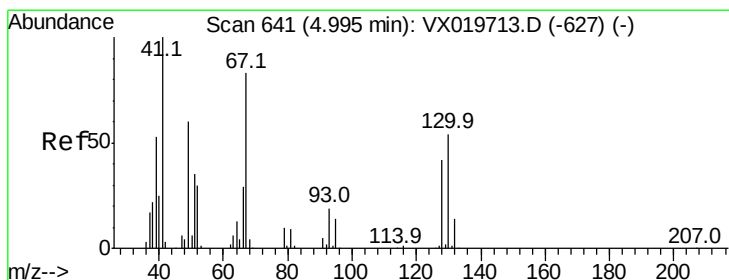
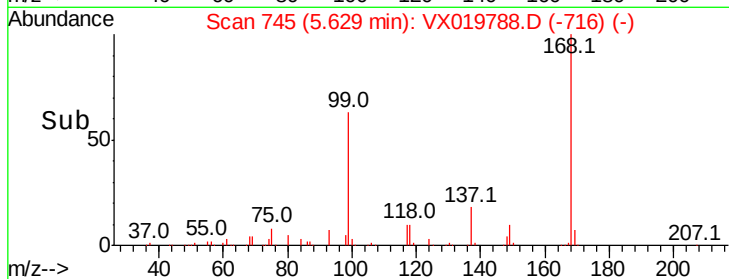
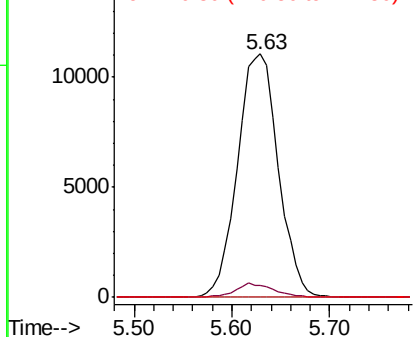
#38
Carbon Tetrachloride
Concen: 6.660 ug/l
RT: 5.63 min Scan# 745
Delta R.T. -0.12 min
Lab File: VX019788.D
Acq: 09 Dec 2020 18:54

Instrument :
MSVOA_X
ClientSampleId :
5S2-B-TOP

Tot Ion:117 Resp: 31966
Ion Ratio Lower Upper
117 100
119 5.0 76.2 114.2#
121 0.0 24.8 37.2#

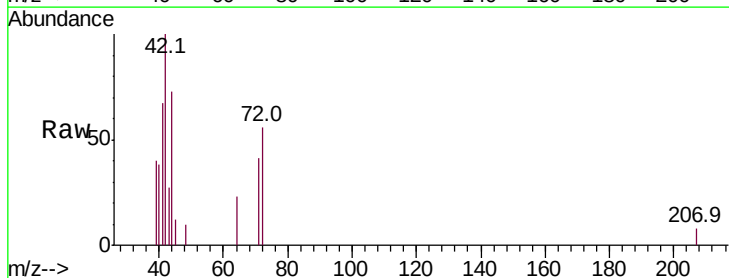


Abundance Ion 116.80 (116.50 to 117.50): V
Ion 118.80 (118.50 to 119.50): V
Ion 120.80 (120.50 to 121.50): V

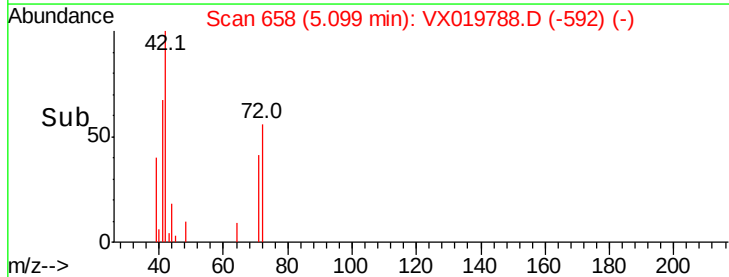
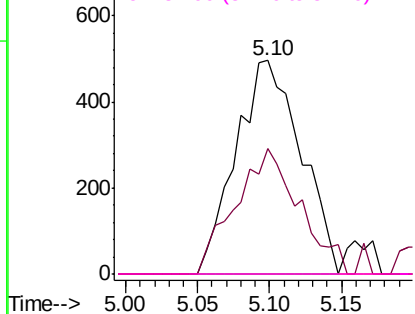


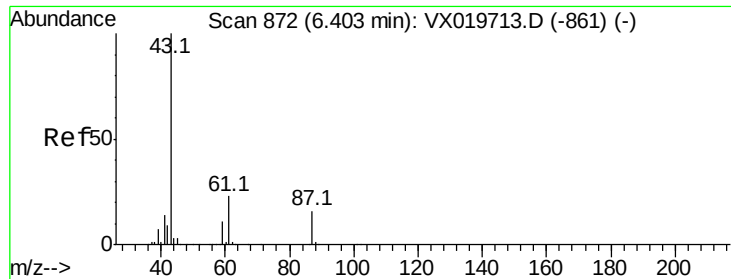
#41
Methacrylonitrile
Concen: 0.575 ug/l
RT: 5.10 min Scan# 658
Delta R.T. 0.10 min
Lab File: VX019788.D
Acq: 09 Dec 2020 18:54

Tgt Ion: 41 Resp: 1561
Ion Ratio Lower Upper
41 100
39 57.5 42.5 63.7
67 0.0 65.0 97.6#
52 0.0 25.3 37.9#



Abundance Ion 41.00 (40.70 to 41.70): VX0
Ion 39.00 (38.70 to 39.70): VX0
Ion 67.00 (66.70 to 67.70): VX0
Ion 52.00 (51.70 to 52.70): VX0





#43

Isopropyl Acetate

Concen: 2.343 ug/l

RT: 6.41 min Scan# 873

Delta R.T. 0.01 min

Lab File: VX019788.D

Acq: 09 Dec 2020 18:54

Instrument :

MSVOA_X

ClientSampleId :

5S2-B-TOP

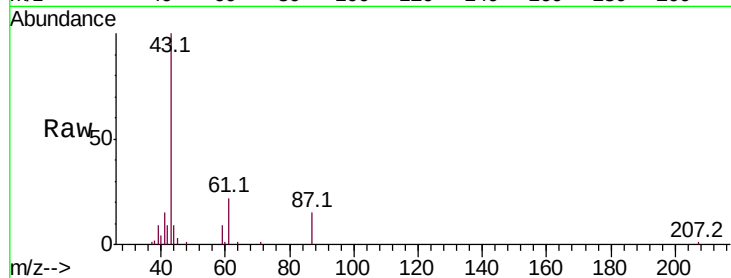
Tot Ion: 43 Resp: 18850

Ion Ratio Lower Upper

43 100

61 22.5 18.2 27.4

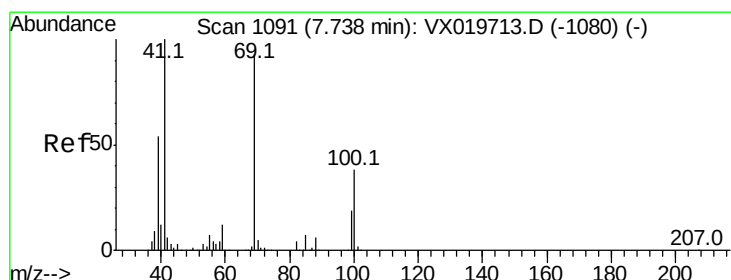
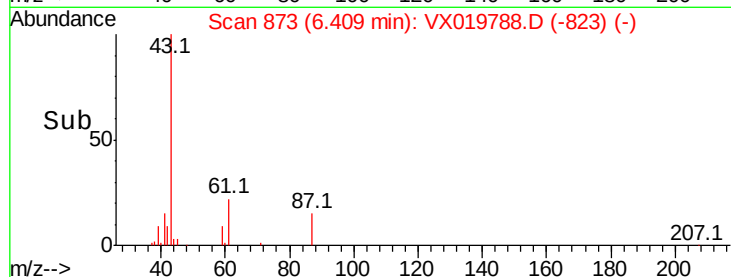
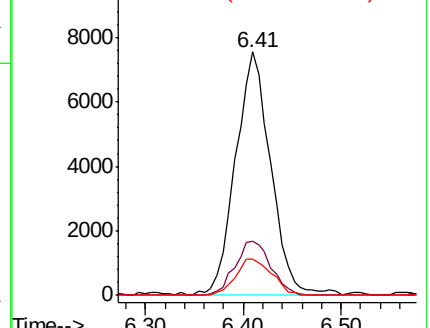
87 15.4 12.5 18.7



Abundance Ion 43.00 (42.70 to 43.70): VX0

Ion 61.00 (60.70 to 61.70): VX0

Ion 87.00 (86.70 to 87.70): VX0



#48

Methyl methacrylate

Concen: 1.709 ug/l

RT: 7.65 min Scan# 1076

Delta R.T. -0.09 min

Lab File: VX019788.D

Acq: 09 Dec 2020 18:54

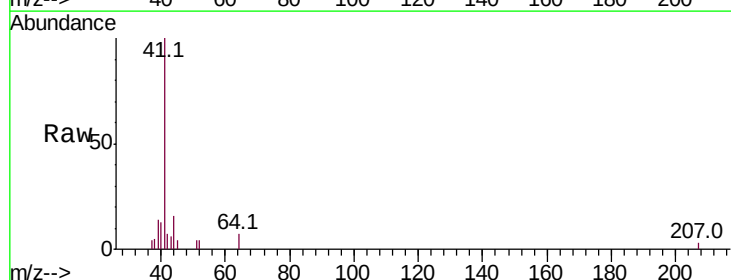
Tgt Ion: 41 Resp: 6763

Ion Ratio Lower Upper

41 100

69 0.0 76.0 114.0#

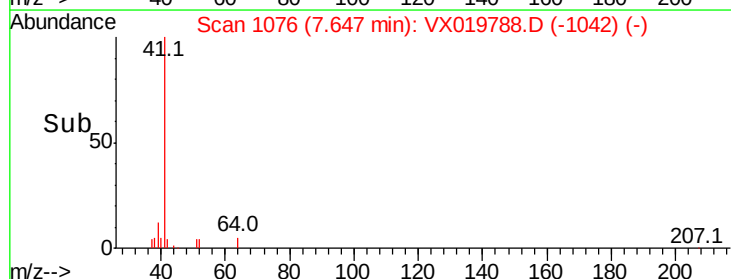
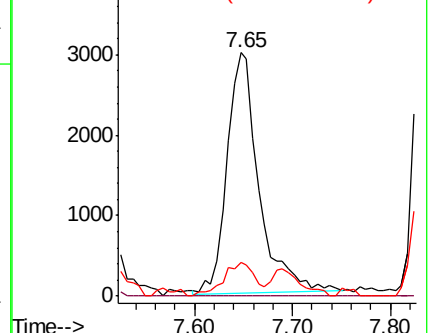
39 13.7 44.6 67.0#

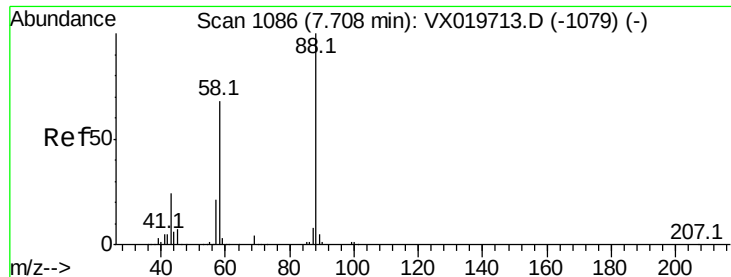


Abundance Ion 41.00 (40.70 to 41.70): VX0

Ion 69.00 (68.70 to 69.70): VX0

Ion 39.00 (38.70 to 39.70): VX0





#49

1,4-Dioxane

Concen: 0.469 ug/l

RT: 7.85 min Scan# 1109

Delta R.T. 0.14 min

Lab File: VX019788.D

Acq: 09 Dec 2020 18:54

Instrument :

MSVOA_X

ClientSampled :

5S2-B-TOP

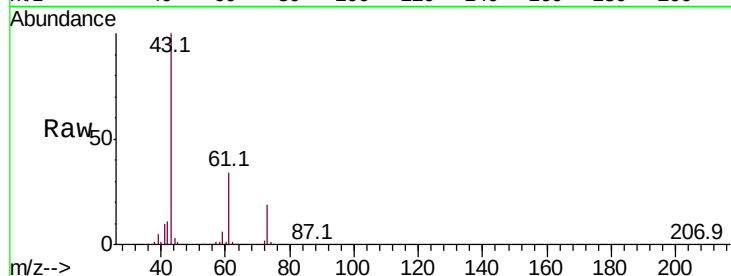
Tot Ion: 88 Resp: 45

Ion Ratio Lower Upper

88 100

43 941688.9 23.2 34.8#

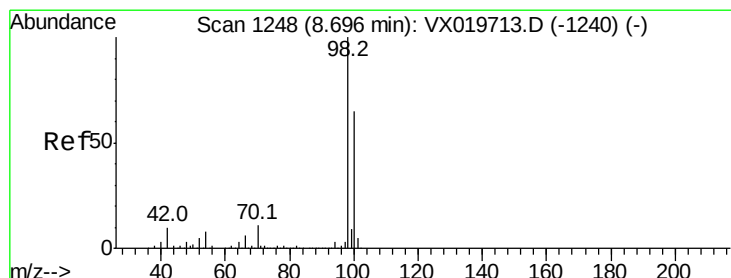
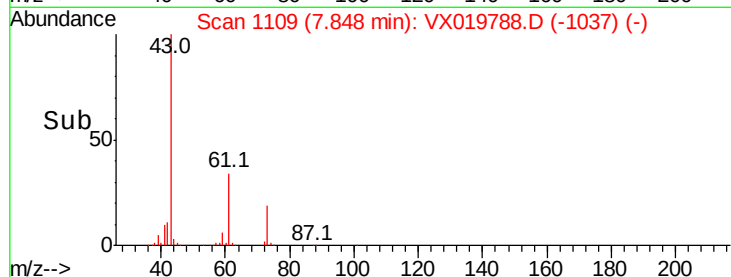
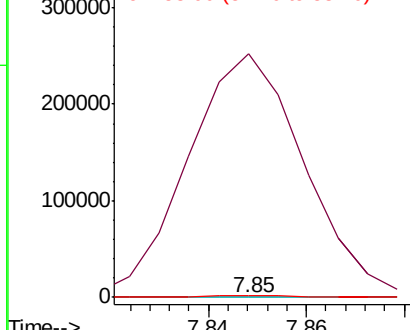
58 5524.4 55.0 82.4#



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: 49.593 ug/l

RT: 8.70 min Scan# 1248

Delta R.T. 0.00 min

Lab File: VX019788.D

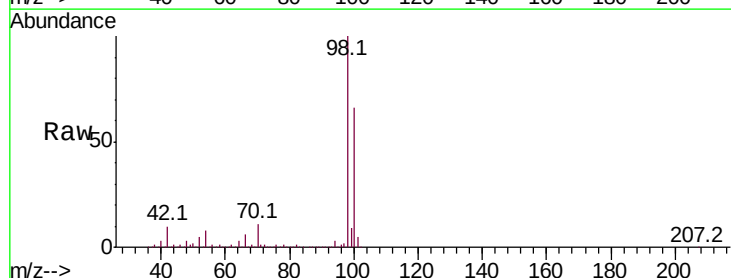
Acq: 09 Dec 2020 18:54

Tgt Ion: 98 Resp: 663686

Ion Ratio Lower Upper

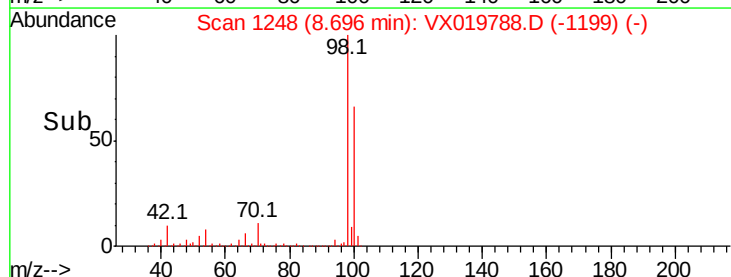
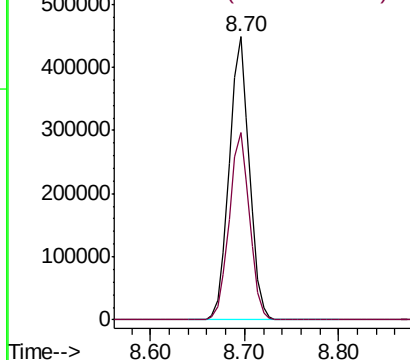
98 100

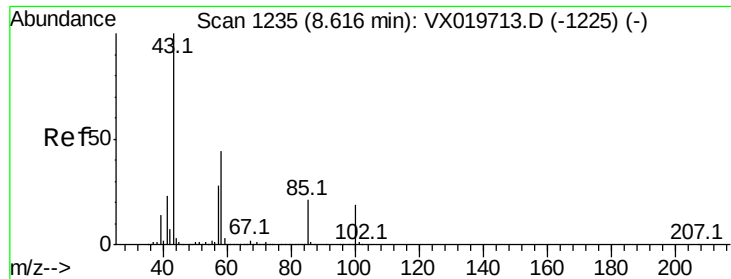
100 66.6 51.9 77.9



Abundance Ion 98.00 (97.70 to 98.70): VX0

Ion 100.00 (99.70 to 100.70): V





#51

4-Methyl-2-Pentanone

Concen: 10.301 ug/l

RT: 8.59 min Scan# 1231

Delta R.T. -0.02 min

Lab File: VX019788.D

Acq: 09 Dec 2020 18:54

Instrument :

MSVOA_X

ClientSampleId :

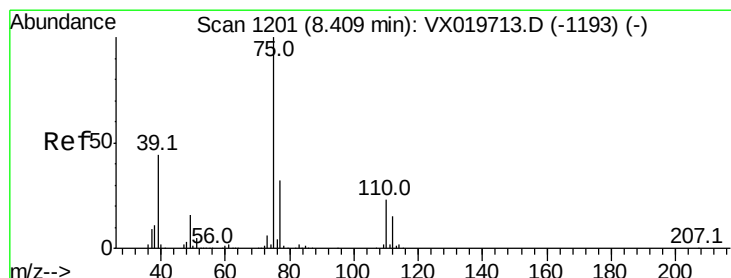
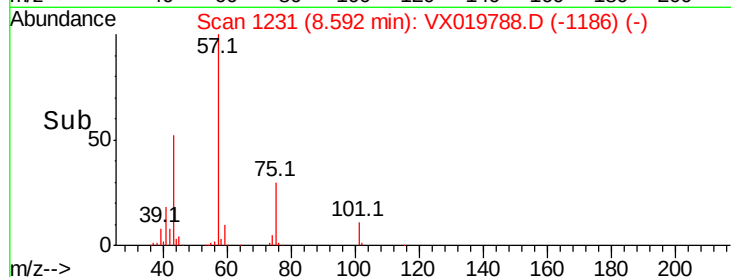
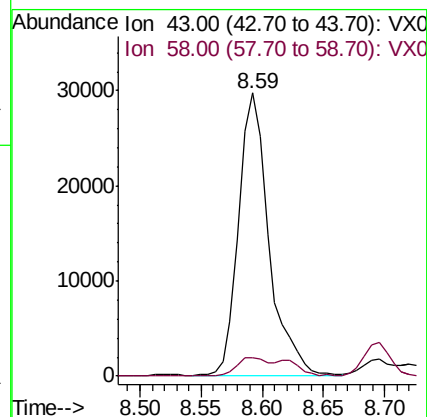
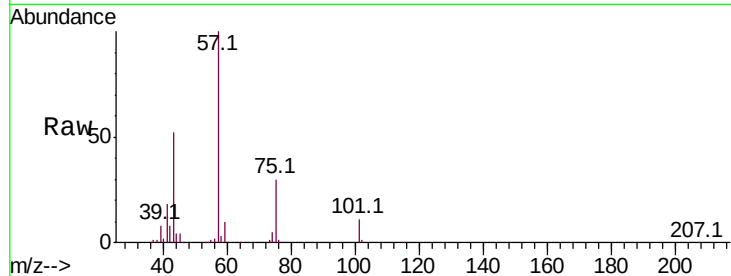
5S2-B-TOP

Tot Ion: 43 Resp: 50596

Ion Ratio Lower Upper

43 100

58 7.4 35.4 53.0#



#54

cis-1,3-Dichloropropene

Concen: 4.174 ug/l

RT: 8.59 min Scan# 1231

Delta R.T. 0.18 min

Lab File: VX019788.D

Acq: 09 Dec 2020 18:54

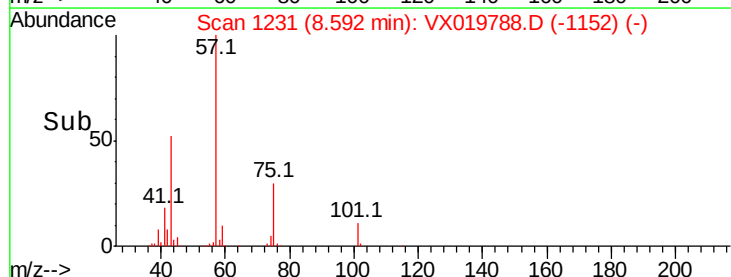
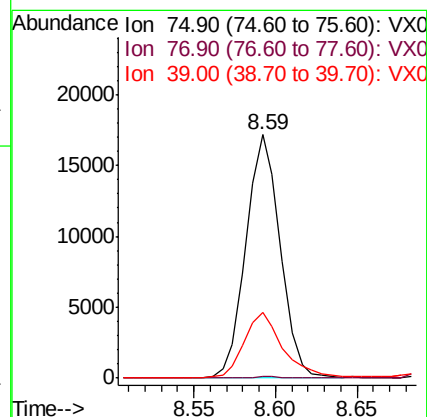
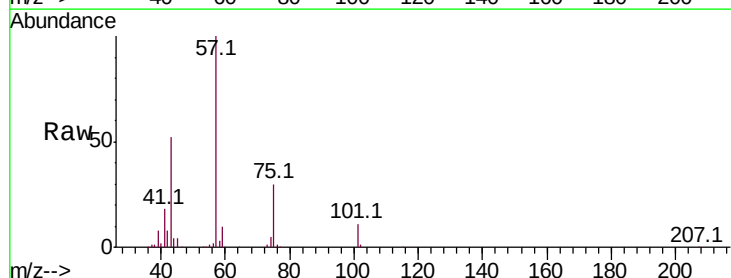
Tgt Ion: 75 Resp: 25229

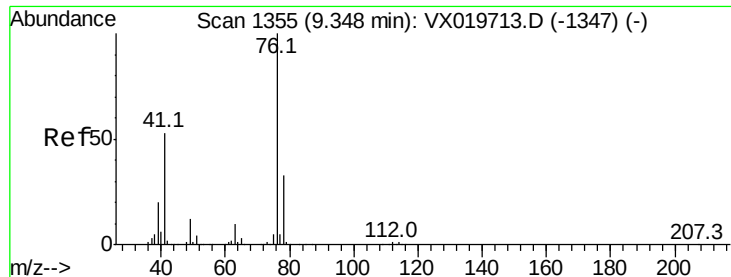
Ion Ratio Lower Upper

75 100

77 0.6 25.7 38.5#

39 27.1 35.1 52.7#





#57

1,3-Dichloropropane

Concen: 0.687 ug/l

RT: 9.52 min Scan# 1384

Delta R.T. 0.18 min

Lab File: VX019788.D

Acq: 09 Dec 2020 18:54

Instrument :

MSVOA_X

ClientSampleId :

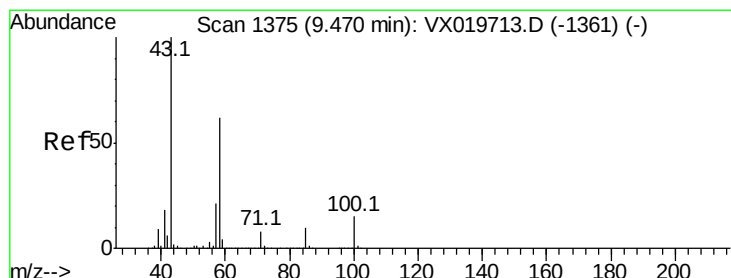
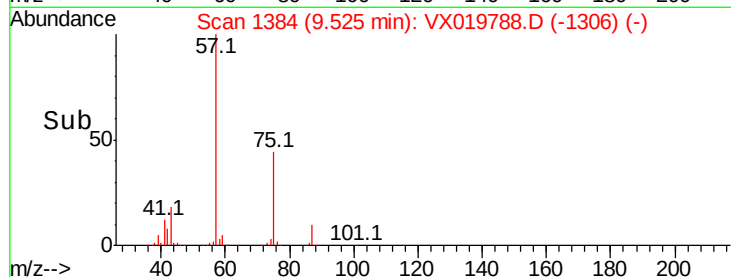
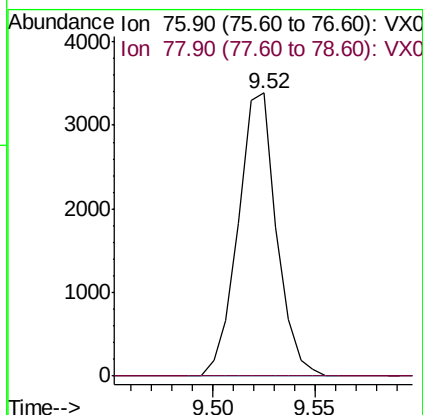
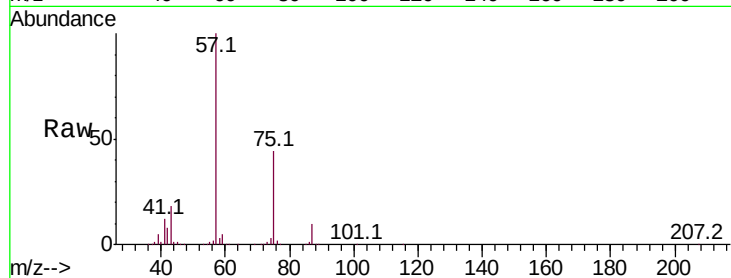
5S2-B-TOP

Tot Ion: 76 Resp: 4424

Ion Ratio Lower Upper

76 100

78 0.0 26.2 39.2#



#59

2-Hexanone

Concen: 13.744 ug/l

RT: 9.52 min Scan# 1384

Delta R.T. 0.05 min

Lab File: VX019788.D

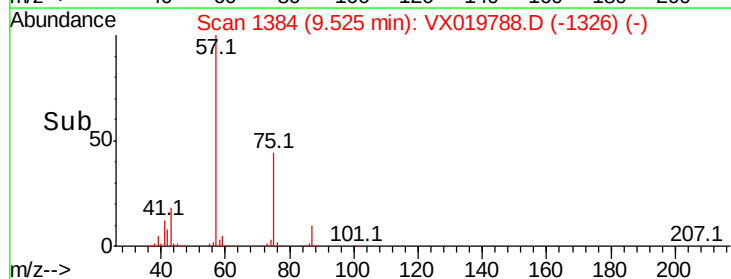
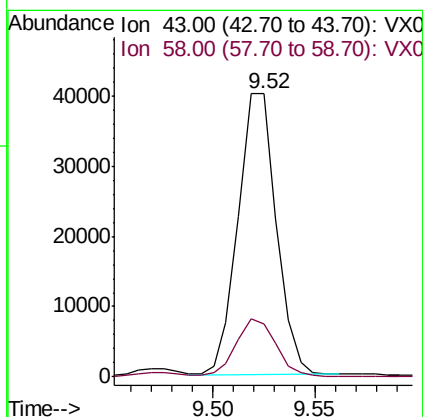
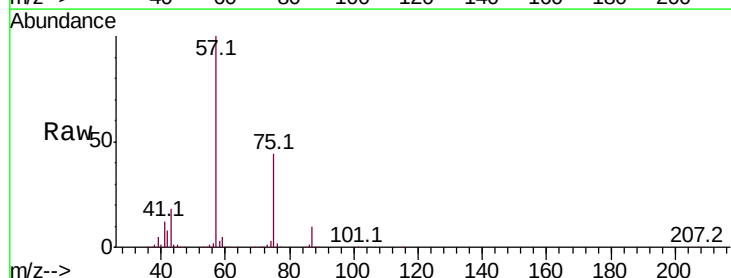
Acq: 09 Dec 2020 18:54

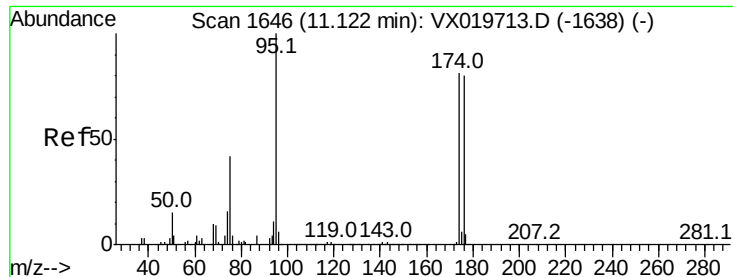
Tgt Ion: 43 Resp: 52328

Ion Ratio Lower Upper

43 100

58 21.2 30.9 92.8#

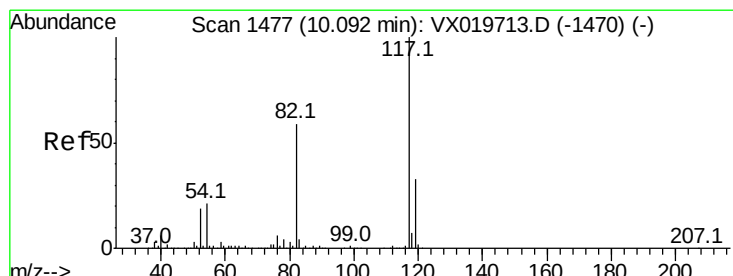
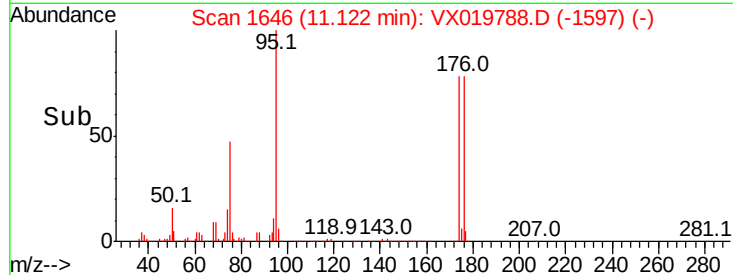
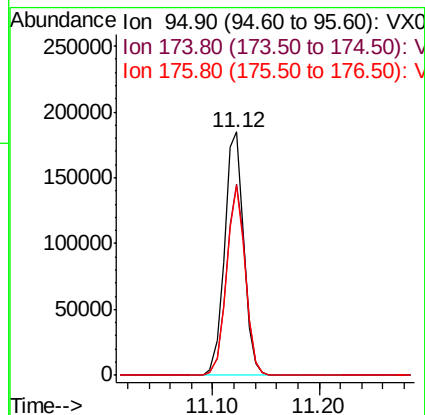
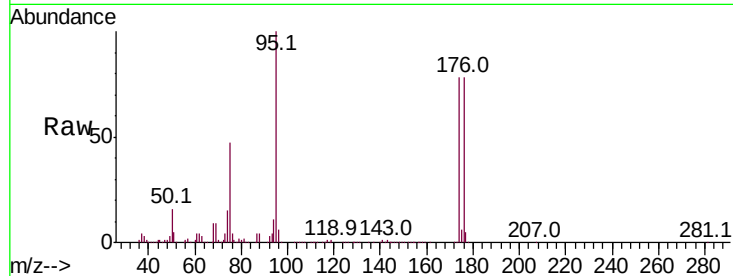




#62
4-Bromofluorobenzene
Concen: 45.684 ug/l
RT: 11.12 min Scan# 1646
Delta R.T. 0.00 min
Lab File: VX019788.D
Acq: 09 Dec 2020 18:54

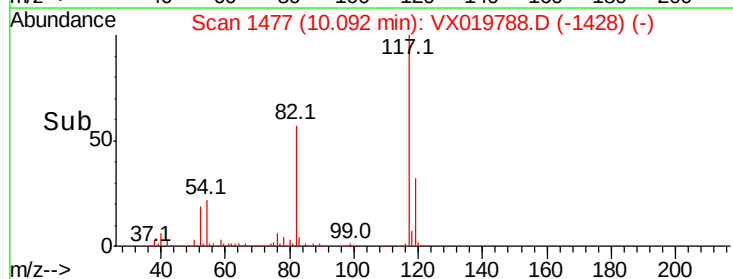
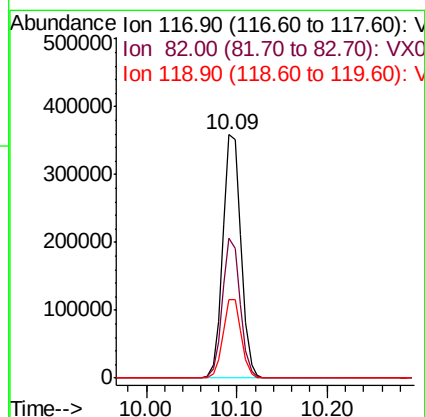
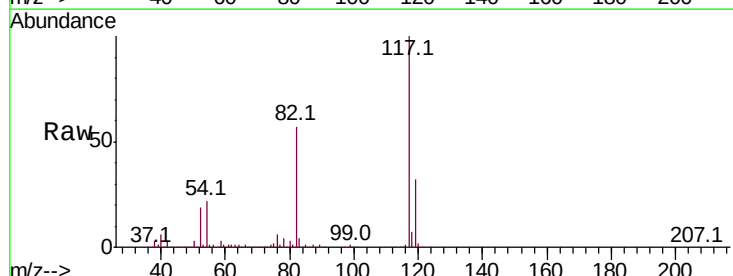
Instrument :
MSVOA_X
ClientSampleId :
5S2-B-TOP

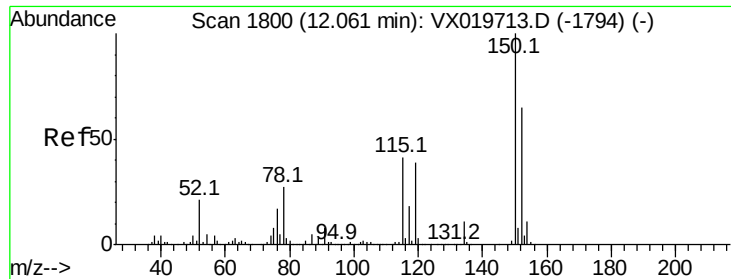
Tot Ion: 95 Resp: 232698
Ion Ratio Lower Upper
95 100
174 77.5 0.0 154.6
176 75.7 0.0 155.8



#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 10.09 min Scan# 1477
Delta R.T. 0.00 min
Lab File: VX019788.D
Acq: 09 Dec 2020 18:54

Tgt Ion: 117 Resp: 500586
Ion Ratio Lower Upper
117 100
82 57.3 47.4 71.2
119 32.5 26.6 39.8





#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 12.06 min Scan# 1800

Delta R.T. 0.00 min

Lab File: VX019788.D

Acq: 09 Dec 2020 18:54

Instrument :

MSVOA_X

ClientSampled :

5S2-B-TOP

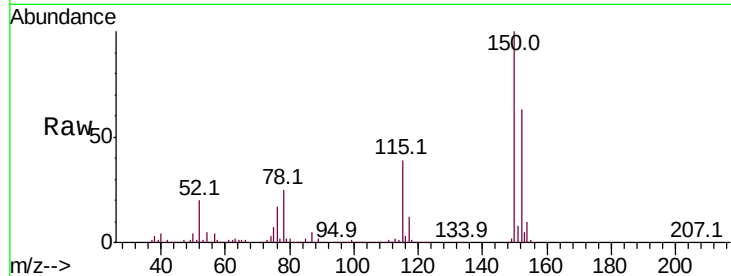
Tot Ion:152 Resp: 217929

Ion Ratio Lower Upper

152 100

115 59.9 41.1 123.3

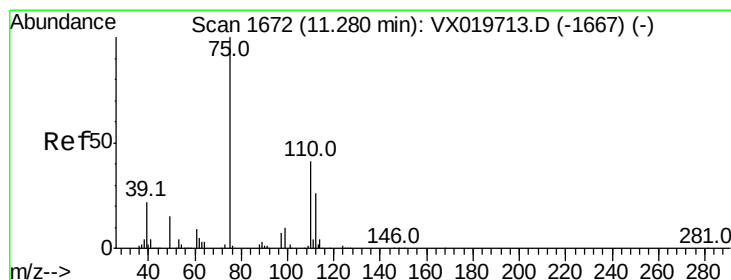
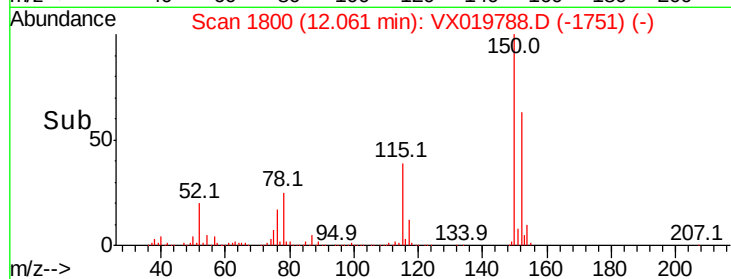
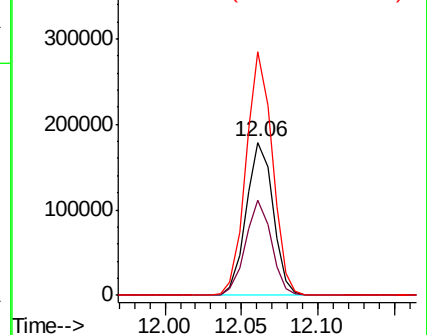
150 156.5 0.0 349.0



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: 23.028 ug/l

RT: 11.12 min Scan# 1646

Delta R.T. -0.16 min

Lab File: VX019788.D

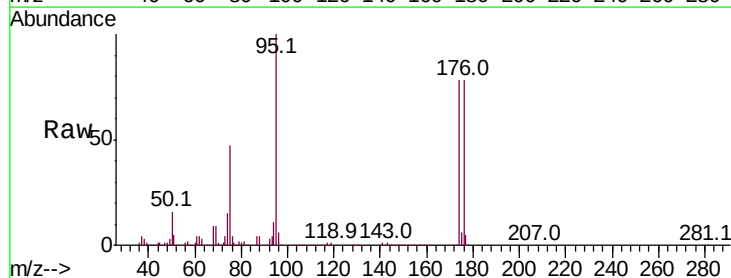
Acq: 09 Dec 2020 18:54

Tgt Ion: 75 Resp: 112557

Ion Ratio Lower Upper

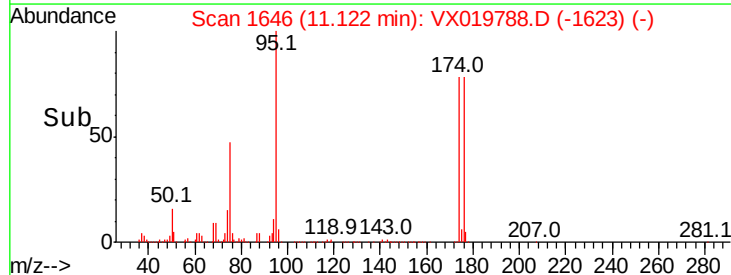
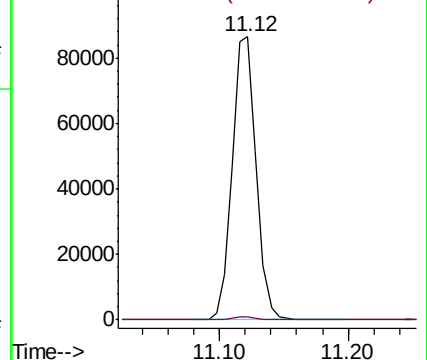
75 100

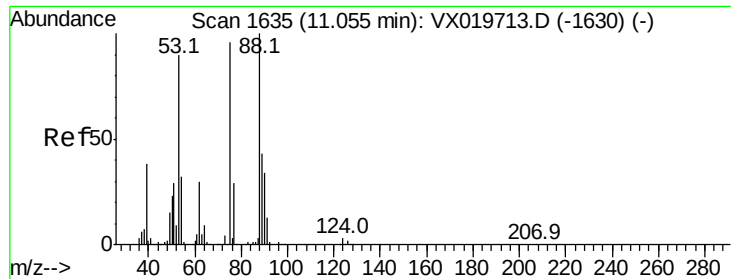
77 1.1 19.1 57.5#



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: 66.571 ug/l

RT: 11.12 min Scan# 1646

Delta R.T. 0.07 min

Lab File: VX019788.D

Acq: 09 Dec 2020 18:54

Instrument :

MSVOA_X

ClientSampleId :

5S2-B-TOP

Tot Ion: 75 Resp: 112557

Ion Ratio Lower Upper

75 100

53 0.0 74.5 111.7#

89 0.0 37.9 56.9#

