

Data Path : Z:\VOASRV\HPCHEM1\MSVOA X\DATA\VX112618\
 Data File : VX006187.D
 Acq On : 26 Nov 2018 20:31
 Operator : JC/MD
 Sample : PB115023ZHE#06
 Misc : 5.0mL/MSVOA X/WATER
 ALS Vial : 24 Sample Multiplier: 1

Instrument :
 MSVOA_X
 ClientSampleId :

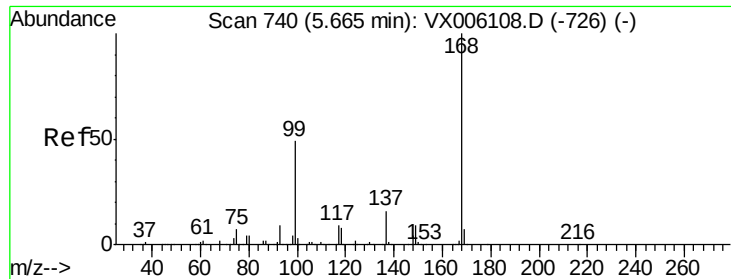
Quant Time: Nov 27 02:32:11 2018
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_X\METHOD\82X112018W.M
 Quant Title : SW846 8260
 QLast Update : Wed Nov 21 08:15:54 2018
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	5.67	168	302402	50.00	ug/l	0.00
34) 1,4-Difluorobenzene	6.86	114	456127	50.00	ug/l	0.00
63) Chlorobenzene-d5	10.12	117	452878	50.00	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	12.08	152	209021	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	193507	55.22	ug/l	0.00
Spiked Amount			Recovery	=	110.44%	
35) Dibromofluoromethane	5.51	113	156540	53.46	ug/l	0.00
Spiked Amount			Recovery	=	106.92%	
50) Toluene-d8	8.71	98	596379	53.40	ug/l	0.00
Spiked Amount			Recovery	=	106.80%	
62) 4-Bromofluorobenzene	11.14	95	196891	46.99	ug/l	0.00
Spiked Amount			Recovery	=	93.98%	

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
5) Bromomethane	1.65	94	431	3.895	ug/l #	17
6) Chloroethane	1.73	64	327	Below Cal	#	43
8) Diethyl Ether	2.18	74	463	0.290	ug/l	81
11) Tert butyl alcohol	3.03	59	6664	8.940	ug/l #	80
13) Acrolein	2.31	56	118	0.265	ug/l #	1
16) Acetone	2.45	43	12797	8.230	ug/l	98
17) Carbon Disulfide	2.57	76	1574	0.267	ug/l #	51
18) Methyl Acetate	2.78	43	7141	1.791	ug/l	95
20) Methylene Chloride	2.86	84	10799	4.270	ug/l	94
25) 2-Butanone	4.71	43	2533	0.878	ug/l	97
29) Tetrahydrofuran	5.16	42	1000	0.555	ug/l #	67
36) 1,1-Dichloropropene	5.66	75	21977	5.296	ug/l #	50
38) Carbon Tetrachloride	5.67	117	28115	7.208	ug/l #	17
43) Isopropyl Acetate	6.46	43	19158	2.485	ug/l	98
48) Methyl methacrylate	7.68	41	10808	2.764	ug/l #	17
49) 1,4-Dioxane	7.75	88	181	1.951	ug/l #	22
51) 4-Methyl-2-Pentanone	8.62	43	92345	16.707	ug/l #	51
54) cis-1,3-Dichloropropene	8.62	75	39823	8.424	ug/l #	67
56) Ethyl methacrylate	9.19	69	241	2.910	ug/l #	23
57) 1,3-Dichloropropane	9.54	76	11247	2.084	ug/l #	45
58) 2-Chloroethyl Vinyl ether	8.46	63	92	6.753	ug/l	100
59) 2-Hexanone	9.54	43	161411	36.797	ug/l #	52
74) N-ethyl acetate	10.69	43	12973	4.117	ug/l #	59
76) 1,2,3-Trichloropropane	11.14	75	100240	23.294	ug/l #	38
80) 1,3,5-Trimethylbenzene	11.51	105	6592	0.618	ug/l	94
81) trans-1,4-Dichloro-2-buten	11.14	75	100240	78.785	ug/l #	7

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



#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 5.67 min Scan# 740

Delta R.T. 0.00 min

Lab File: VX006187.D

Acq: 26 Nov 2018 20:31

Instrument :

MSVOA_X

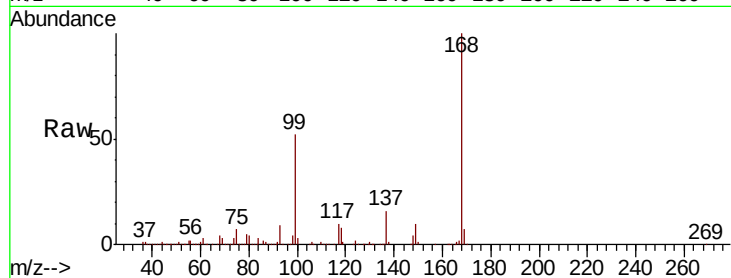
ClientSampleId :

Tot Ion:168 Resp: 302402

Ion Ratio Lower Upper

168 100

99 52.4 39.2 58.8



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VX0

5.67

120000

100000

80000

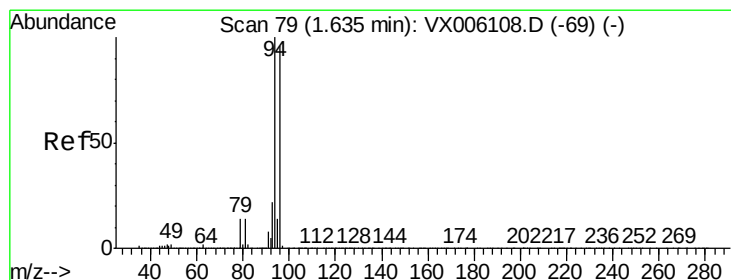
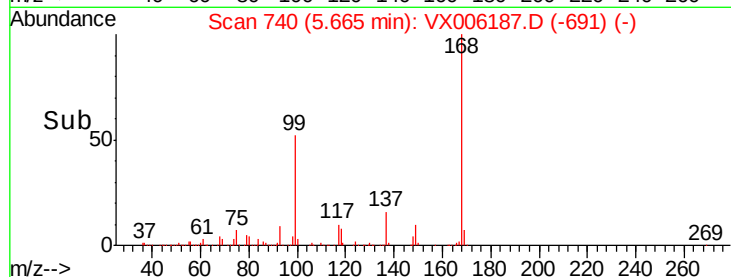
60000

40000

20000

0

Time--> 5.50 5.60 5.70 5.80



#5

Bromomethane

Concen: 3.895 ug/l

RT: 1.65 min Scan# 82

Delta R.T. 0.02 min

Lab File: VX006187.D

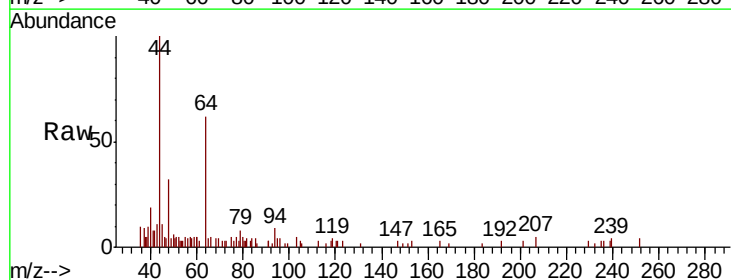
Acq: 26 Nov 2018 20:31

Tgt Ion: 94 Resp: 431

Ion Ratio Lower Upper

94 100

96 14.7 76.7 115.1#



Abundance Ion 93.90 (93.60 to 94.60): VX0

Ion 95.90 (95.60 to 96.60): VX0

1.65

250

200

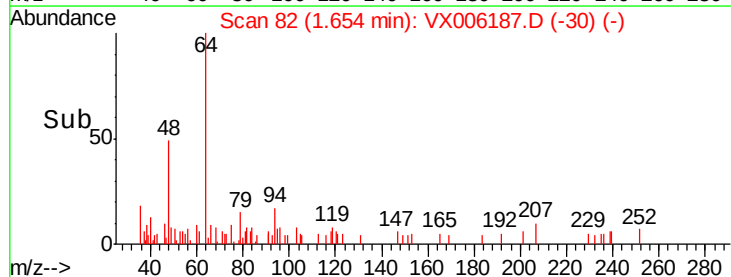
150

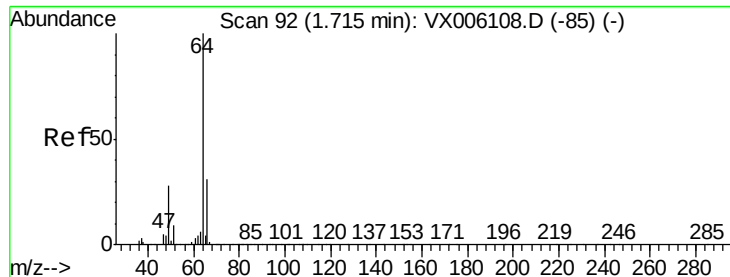
100

50

0

Time--> 1.65 1.70





#6

Chloroethane

Concen: Below Cal

RT: 1.73 min Scan# 94

Delta R.T. 0.01 min

Lab File: VX006187.D

Acq: 26 Nov 2018 20:31

Instrument :

MSVOA_X

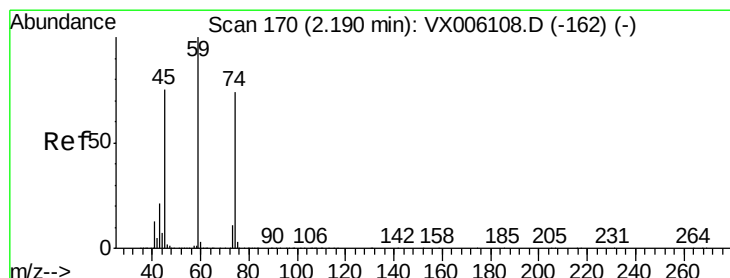
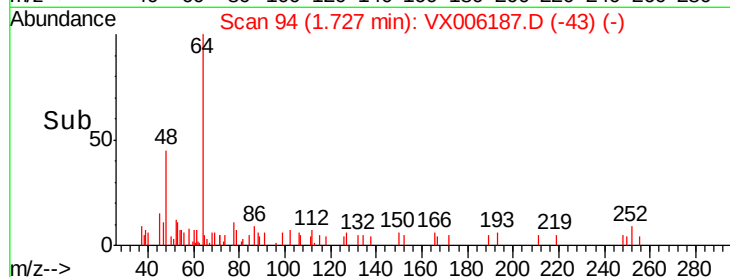
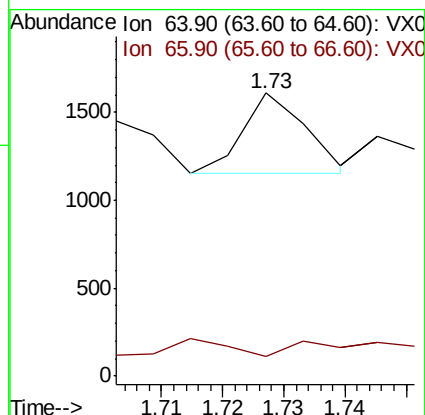
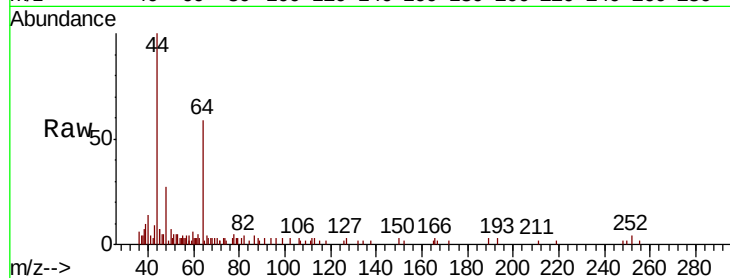
ClientSampleId :

Tot Ion: 64 Resp: 327

Ion Ratio Lower Upper

64 100

66 0.0 25.1 37.7#



#8

Diethyl Ether

Concen: 0.290 ug/l

RT: 2.18 min Scan# 169

Delta R.T. -0.01 min

Lab File: VX006187.D

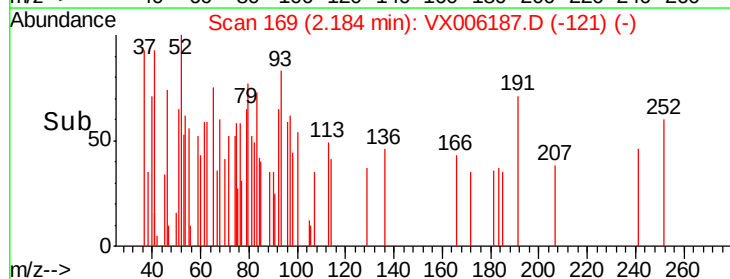
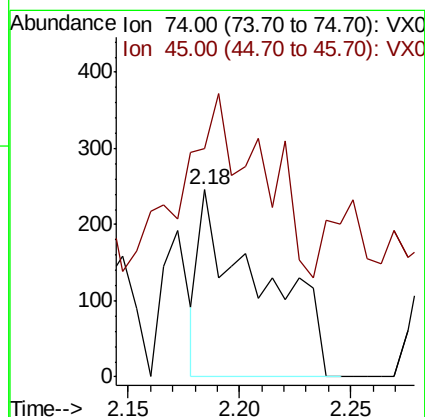
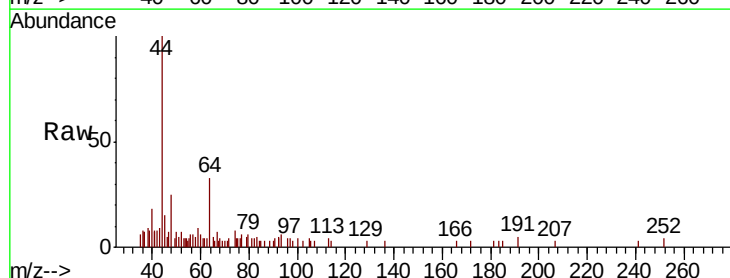
Acq: 26 Nov 2018 20:31

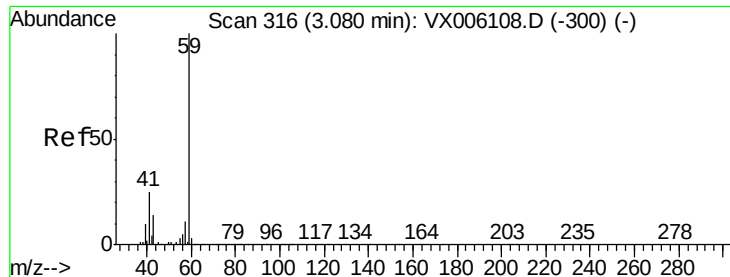
Tgt Ion: 74 Resp: 463

Ion Ratio Lower Upper

74 100

45 85.3 52.2 156.6



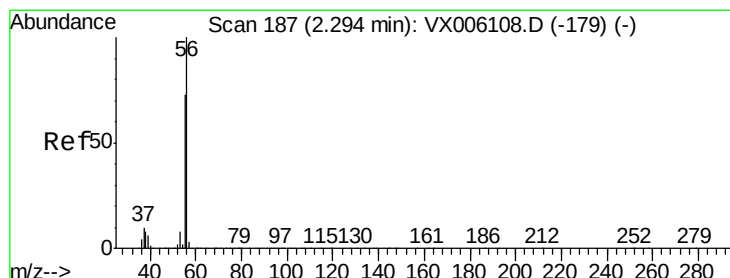
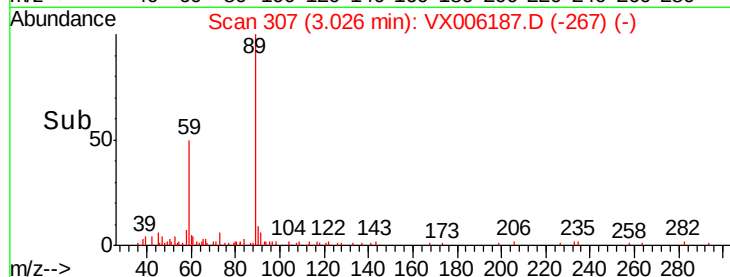
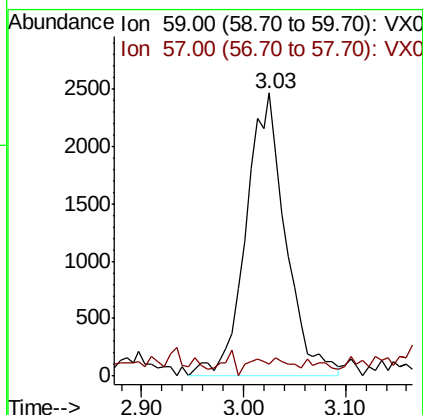
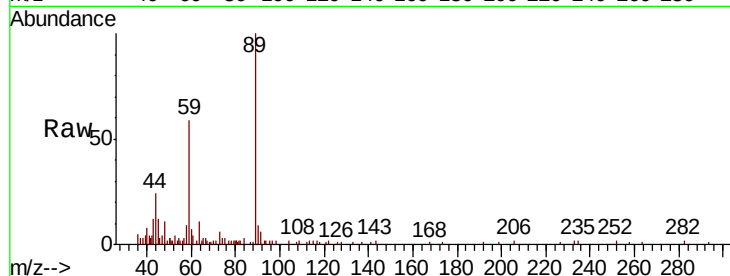


#11

Tert butyl alcohol
 Concen: 8.940 ug/l
 RT: 3.03 min Scan# 307
 Delta R.T. -0.05 min
 Lab File: VX006187.D
 Acq: 26 Nov 2018 20:31

Instrument :
 MSVOA_X
 ClientSampleId :

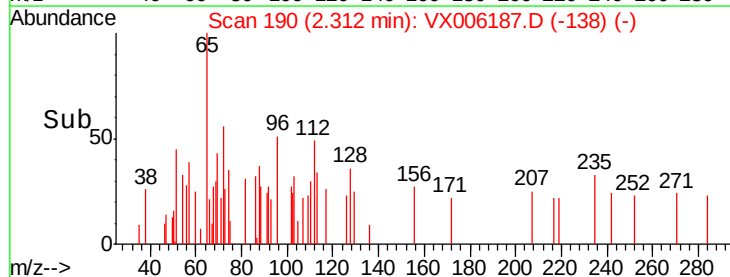
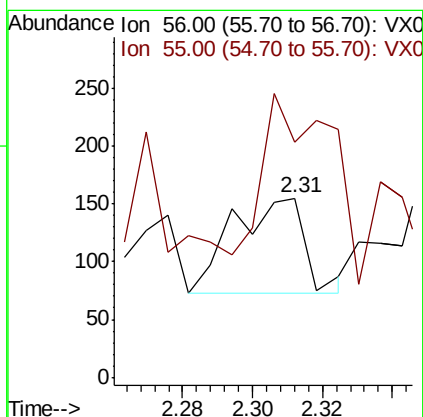
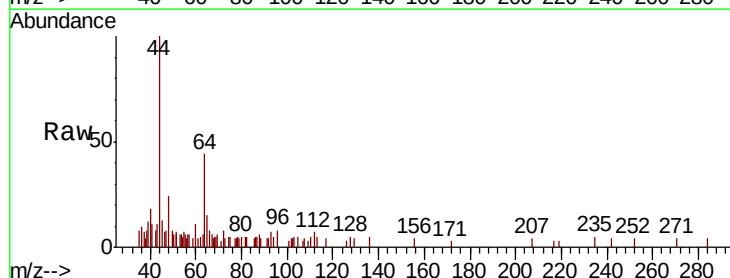
Tot Ion: 59 Resp: 6664
 Ion Ratio Lower Upper
 59 100
 57 3.3 8.7 13.1#

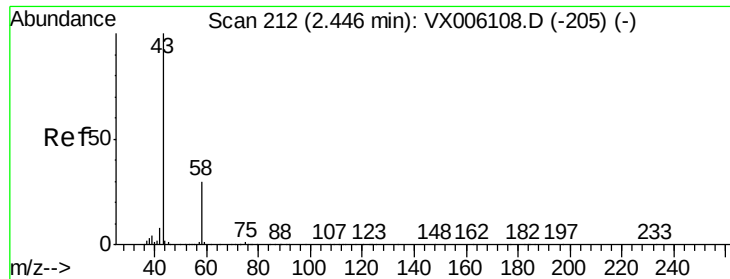


#13

Acrolein
 Concen: 0.265 ug/l
 RT: 2.31 min Scan# 190
 Delta R.T. 0.02 min
 Lab File: VX006187.D
 Acq: 26 Nov 2018 20:31

Tgt Ion: 56 Resp: 118
 Ion Ratio Lower Upper
 56 100
 55 189.8 57.8 86.6#





#16

Acetone

Concen: 8.230 ug/l

RT: 2.45 min Scan# 212

Delta R.T. 0.00 min

Lab File: VX006187.D

Acq: 26 Nov 2018 20:31

Instrument :

MSVOA_X

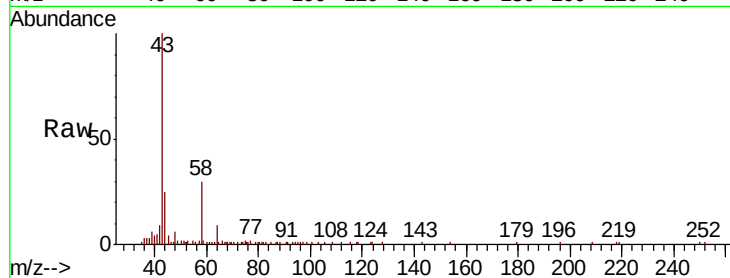
ClientSampleId :

Tot Ion: 43 Resp: 12797

Ion Ratio Lower Upper

43 100

58 30.7 23.8 35.8



Abundance Ion 43.00 (42.70 to 43.70): VX0

Ion 58.00 (57.70 to 58.70): VX0

8000

6000

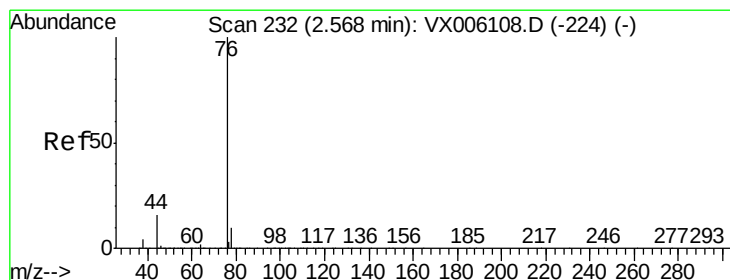
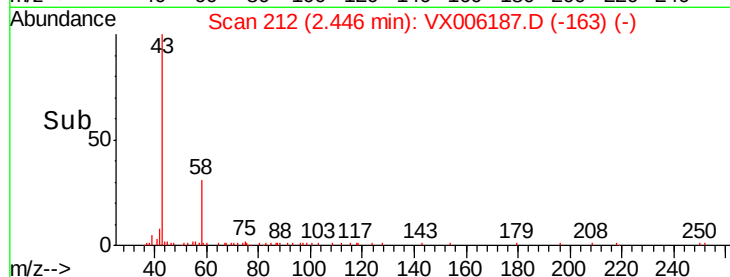
4000

2000

0

2.40 2.45 2.50

Time-->



#17

Carbon Disulfide

Concen: 0.267 ug/l

RT: 2.57 min Scan# 233

Delta R.T. 0.01 min

Lab File: VX006187.D

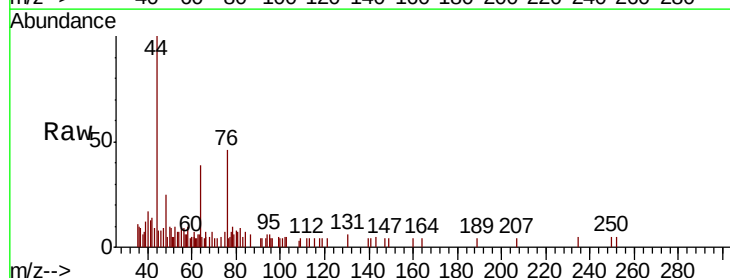
Acq: 26 Nov 2018 20:31

Tgt Ion: 76 Resp: 1574

Ion Ratio Lower Upper

76 100

78 27.7 7.7 11.5#



Abundance Ion 75.90 (75.60 to 76.60): VX0

Ion 77.90 (77.60 to 78.60): VX0

800

600

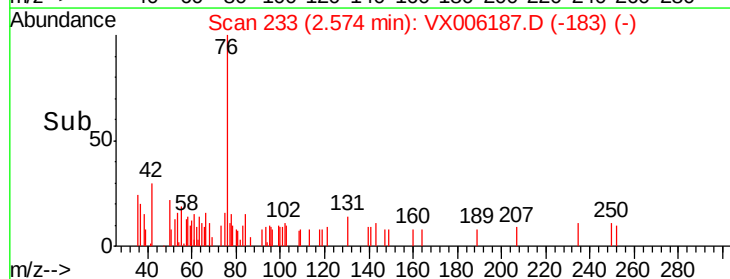
400

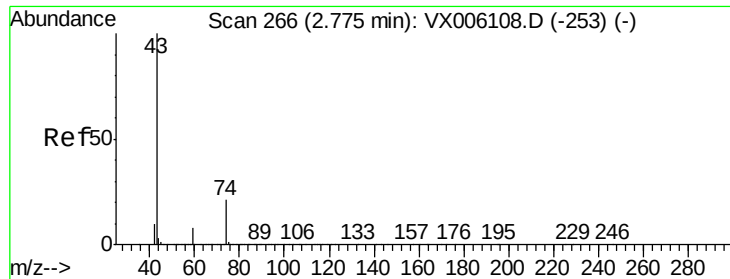
200

0

2.50 2.55 2.60 2.65

Time-->

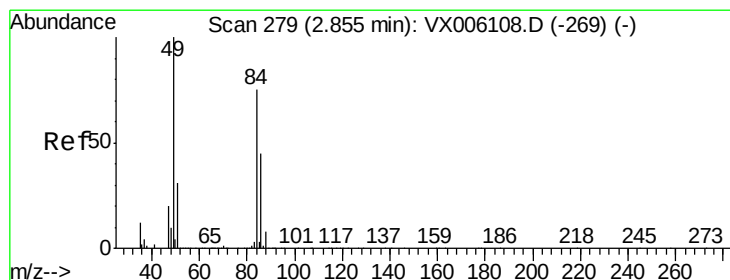
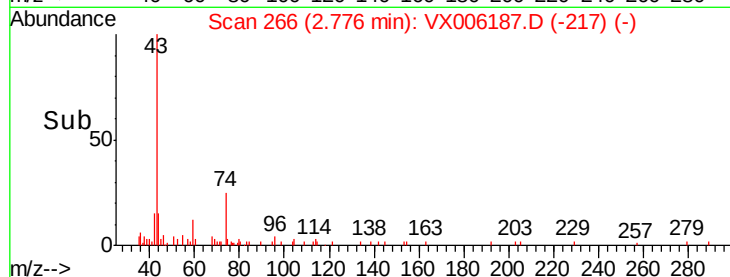
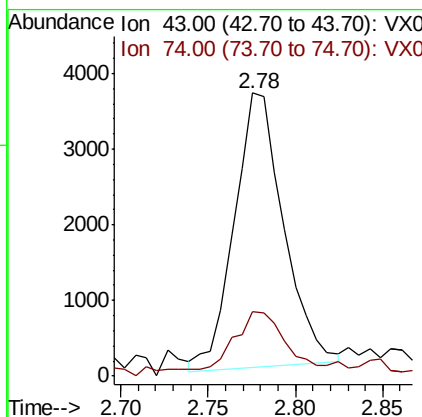
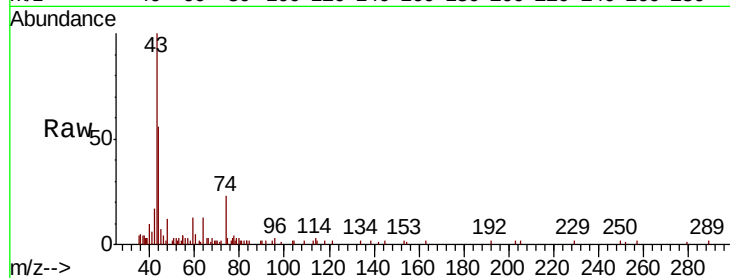




#18
Methvl Acetate
Concen: 1.791 ug/l
RT: 2.78 min Scan# 266
Delta R.T. 0.00 min
Lab File: VX006187.D
Acq: 26 Nov 2018 20:31

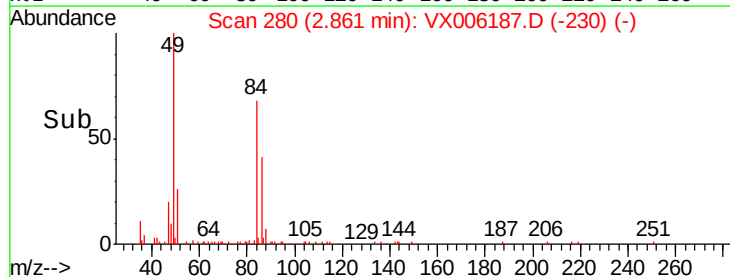
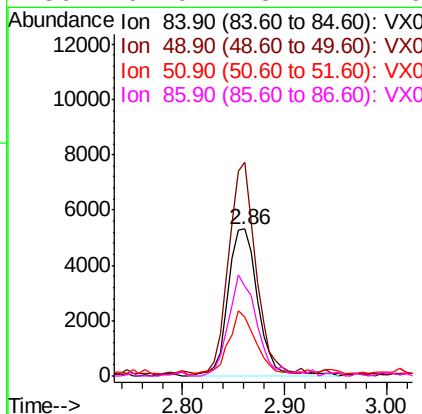
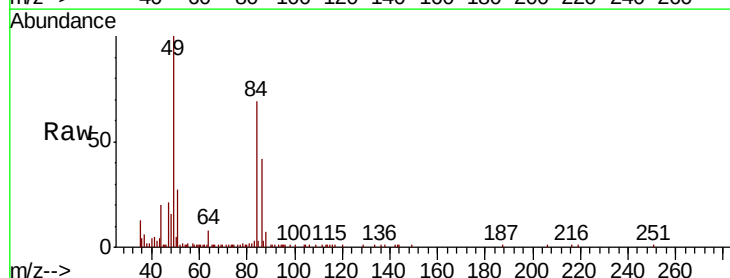
Instrument :
MSVOA_X
ClientSampleId :

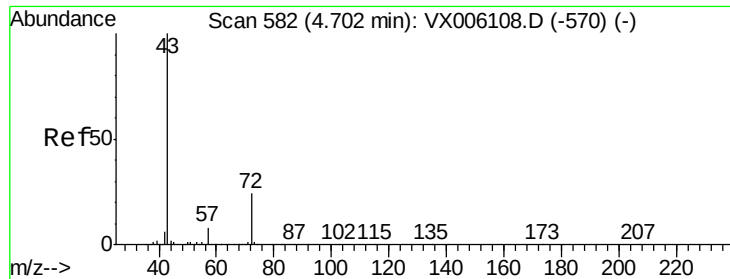
Tot Ion: 43 Resp: 7141
Ion Ratio Lower Upper
43 100
74 24.1 17.3 25.9



#20
Methylene Chloride
Concen: 4.270 ug/l
RT: 2.86 min Scan# 280
Delta R.T. 0.01 min
Lab File: VX006187.D
Acq: 26 Nov 2018 20:31

Tgt Ion: 84 Resp: 10799
Ion Ratio Lower Upper
84 100
49 144.1 106.6 159.8
51 38.9 32.6 49.0
86 61.0 48.4 72.6





#25

2-Butanone

Concen: 0.878 ug/l

RT: 4.71 min Scan# 583

Delta R.T. 0.01 min

Lab File: VX006187.D

Acq: 26 Nov 2018 20:31

Instrument :

MSVOA_X

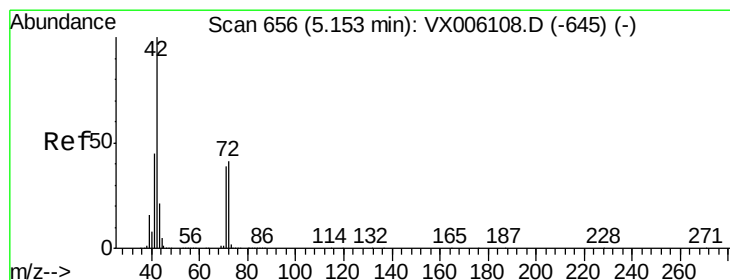
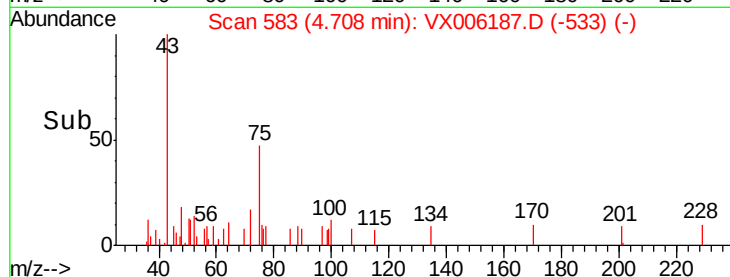
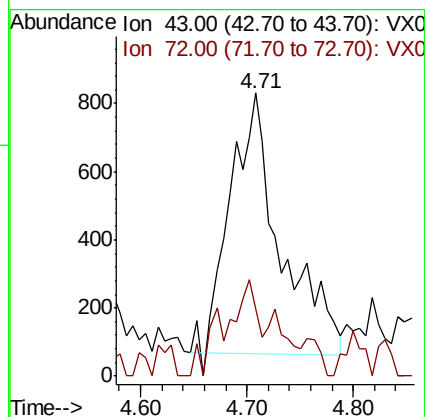
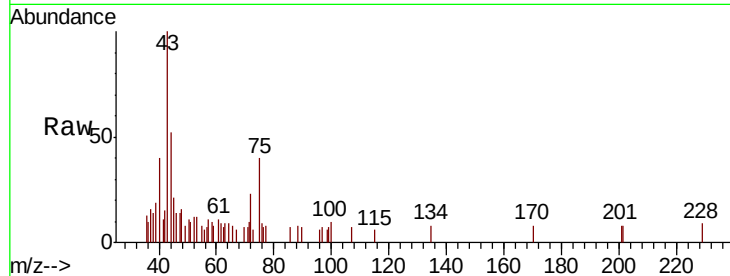
ClientSampleId :

Tot Ion: 43 Resp: 2533

Ion Ratio Lower Upper

43 100

72 25.6 19.2 28.8



#29

Tetrahydrofuran

Concen: 0.555 ug/l

RT: 5.16 min Scan# 657

Delta R.T. 0.01 min

Lab File: VX006187.D

Acq: 26 Nov 2018 20:31

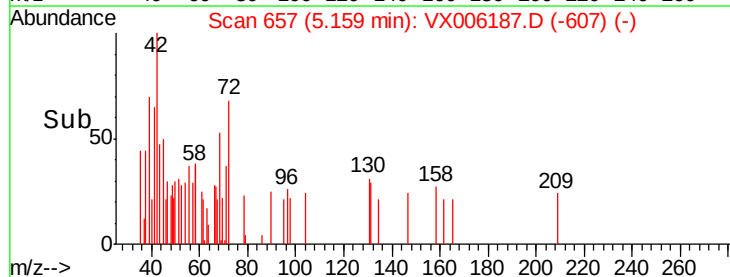
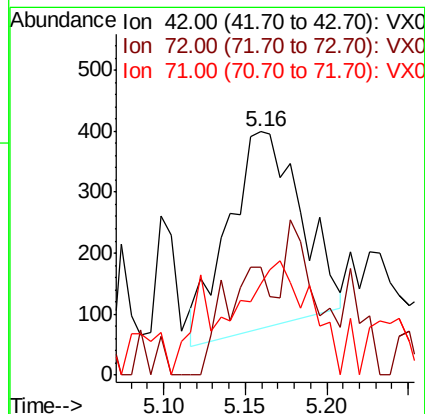
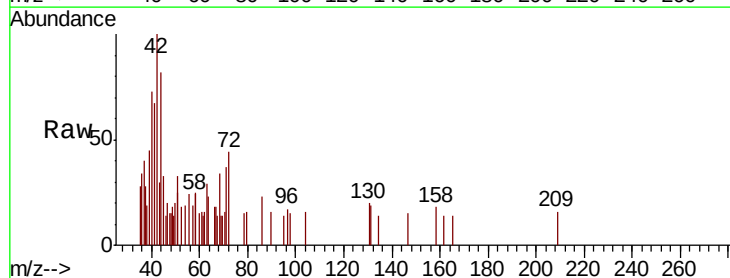
Tgt Ion: 42 Resp: 1000

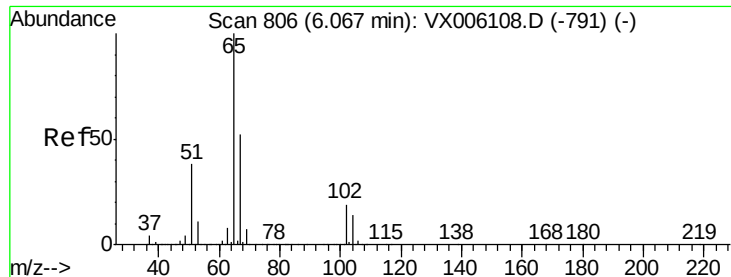
Ion Ratio Lower Upper

42 100

72 38.7 33.0 49.6

71 0.0 31.0 46.4#

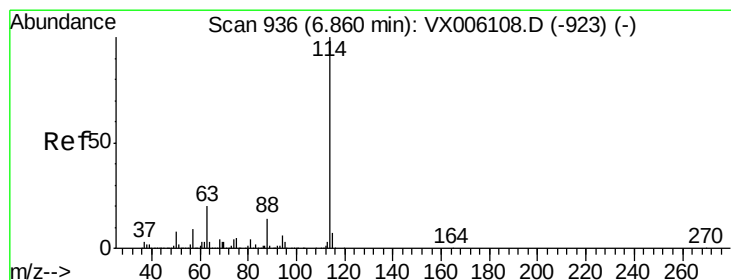
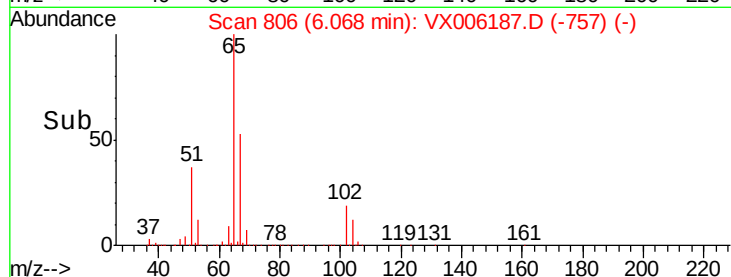
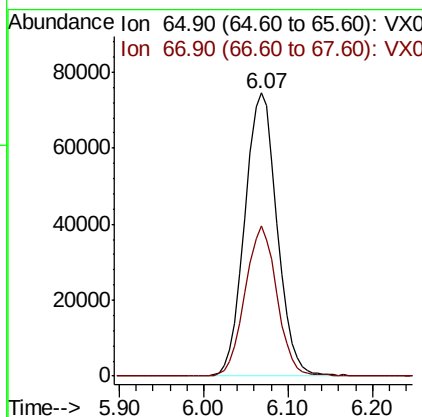
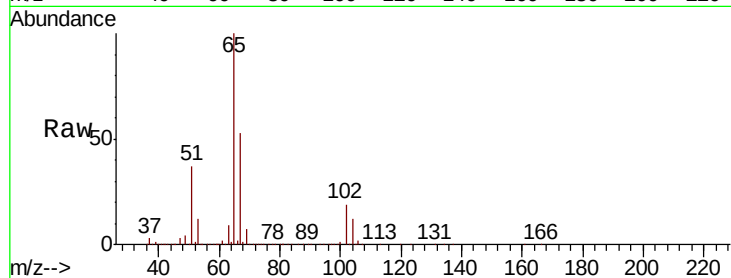




#33
 1,2-Dichloroethane-d4
 Concen: 55.223 ug/l
 RT: 6.07 min Scan# 806
 Delta R.T. 0.00 min
 Lab File: VX006187.D
 Acq: 26 Nov 2018 20:31

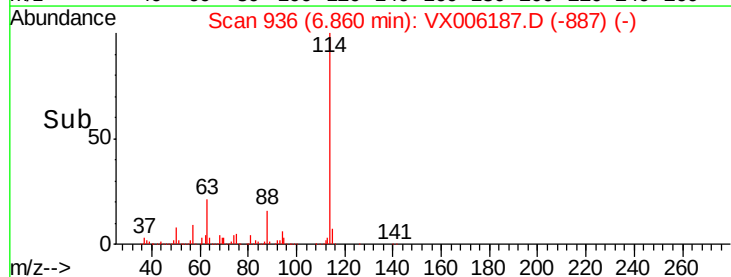
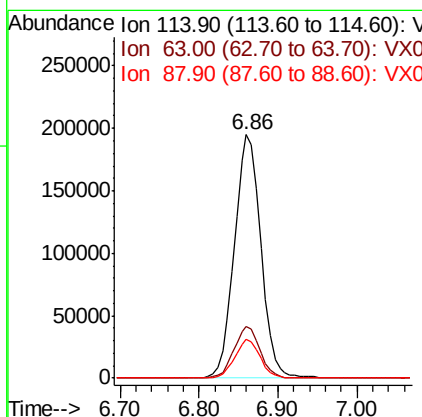
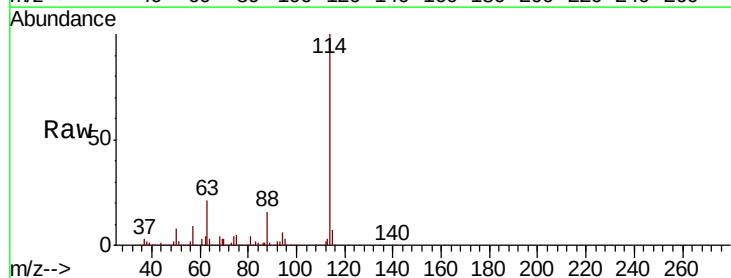
Instrument :
 MSVOA_X
 ClientSampleId :

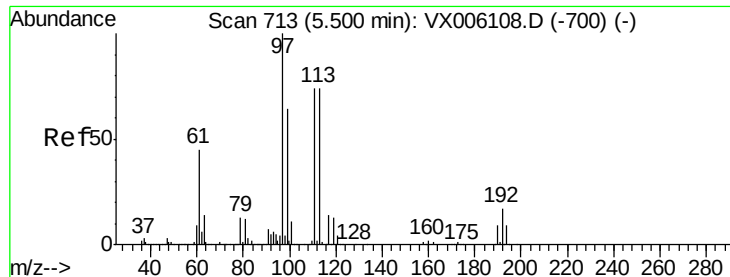
Tot Ion: 65 Resp: 193507
 Ion Ratio Lower Upper
 65 100
 67 52.5 0.0 105.8



#34
 1,4-Difluorobenzene
 Concen: 50.000 ug/l
 RT: 6.86 min Scan# 936
 Delta R.T. 0.00 min
 Lab File: VX006187.D
 Acq: 26 Nov 2018 20:31

Tgt Ion: 114 Resp: 456127
 Ion Ratio Lower Upper
 114 100
 63 21.3 0.0 39.2
 88 15.7 0.0 28.6





#35

Dibromofluoromethane

Concen: 53.464 ug/l

RT: 5.51 min Scan# 714

Delta R.T. 0.01 min

Lab File: VX006187.D

Acq: 26 Nov 2018 20:31

Instrument :
MSVOA_X
ClientSampleId :

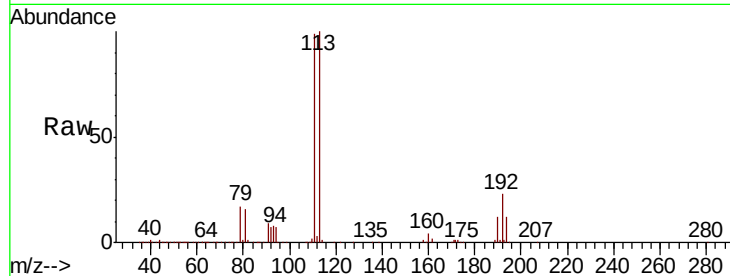
Tot Ion:113 Resp: 156540

Ion Ratio Lower Upper

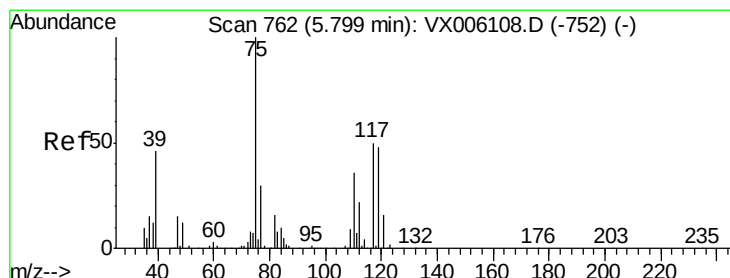
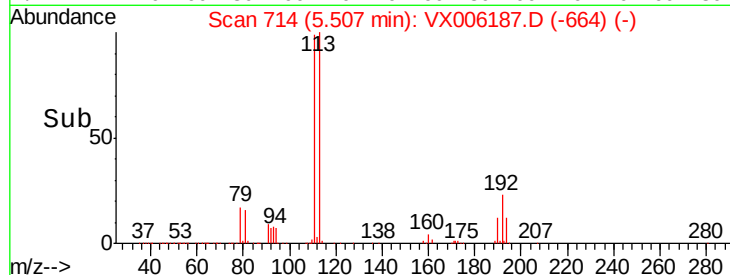
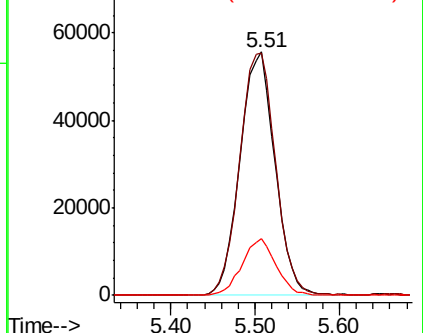
113 100

111 101.9 81.5 122.3

192 22.7 18.6 28.0



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: 5.296 ug/l

RT: 5.66 min Scan# 739

Delta R.T. -0.14 min

Lab File: VX006187.D

Acq: 26 Nov 2018 20:31

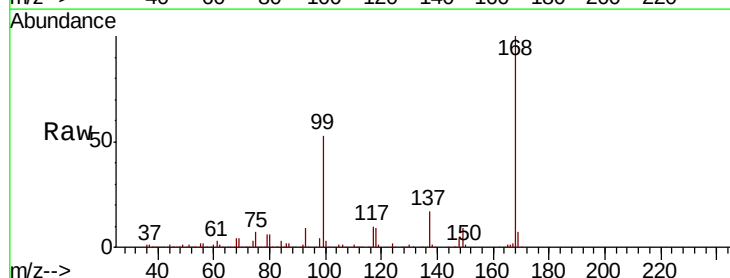
Tgt Ion: 75 Resp: 21977

Ion Ratio Lower Upper

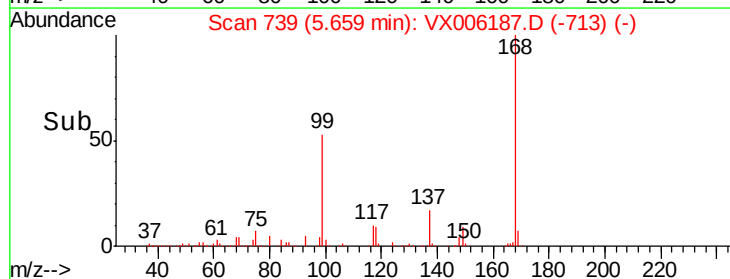
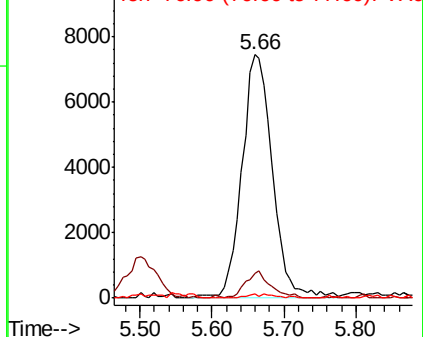
75 100

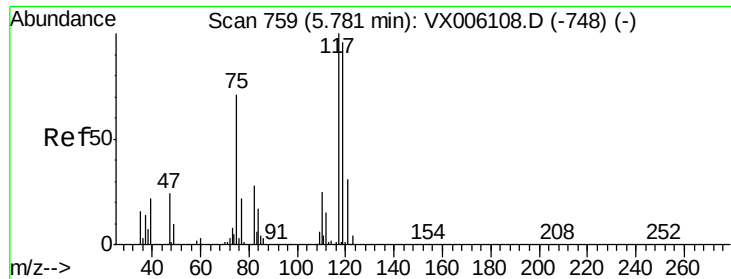
110 9.2 17.8 53.3#

77 0.6 24.5 36.7#



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: 7.208 ug/l

RT: 5.67 min Scan# 740

Delta R.T. -0.12 min

Lab File: VX006187.D

Acq: 26 Nov 2018 20:31

Instrument :

MSVOA_X

ClientSampleId :

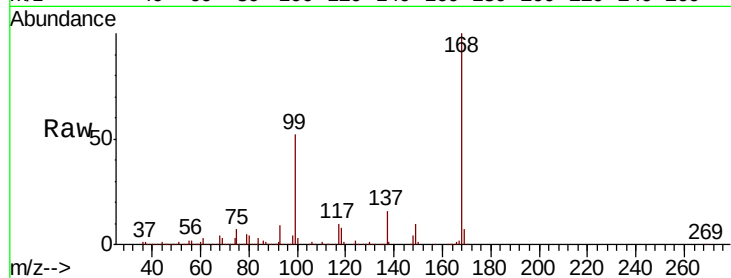
Tot Ion:117 Resp: 28115

Ion Ratio Lower Upper

117 100

119 5.7 76.3 114.5#

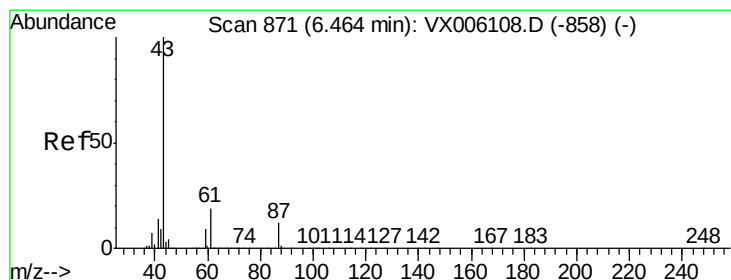
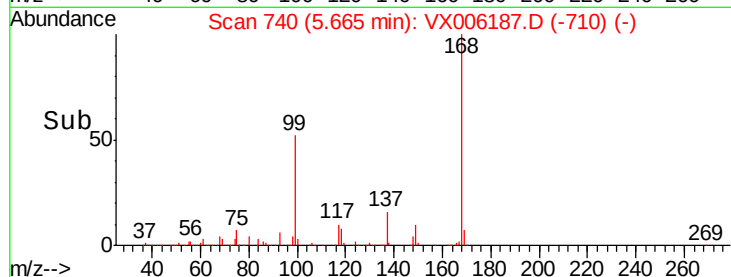
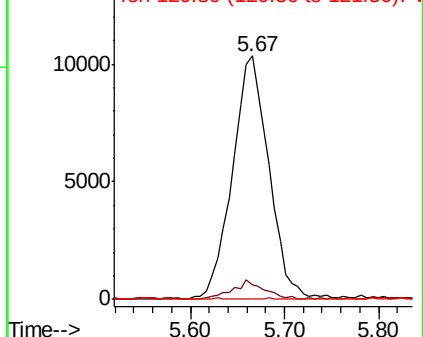
121 0.0 24.7 37.1#



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



#43

Isopropyl Acetate

Concen: 2.485 ug/l

RT: 6.46 min Scan# 871

Delta R.T. 0.00 min

Lab File: VX006187.D

Acq: 26 Nov 2018 20:31

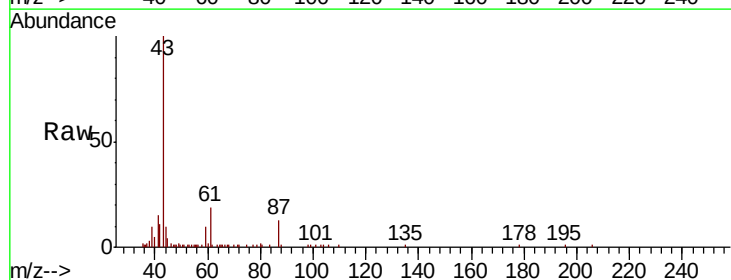
Tgt Ion: 43 Resp: 19158

Ion Ratio Lower Upper

43 100

61 20.3 15.2 22.8

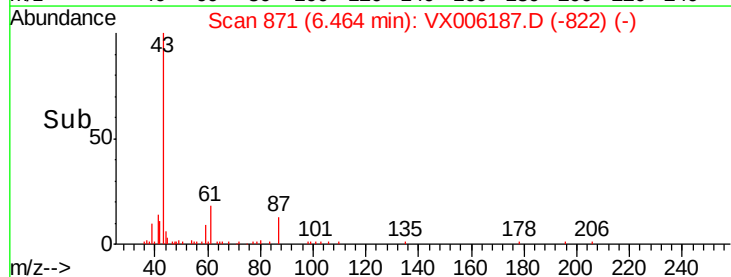
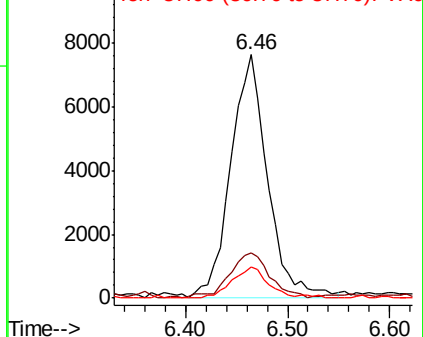
87 12.3 9.6 14.4

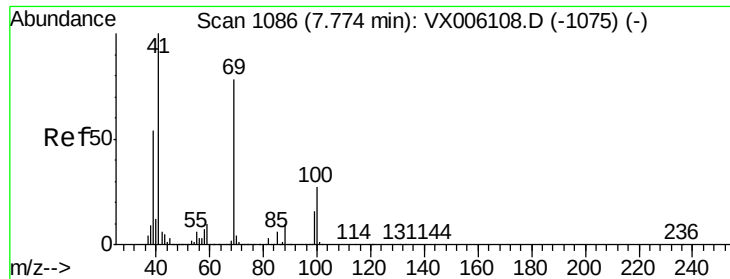


Abundance Ion 43.00 (42.70 to 43.70): VX0

Ion 61.00 (60.70 to 61.70): VX0

Ion 87.00 (86.70 to 87.70): VX0

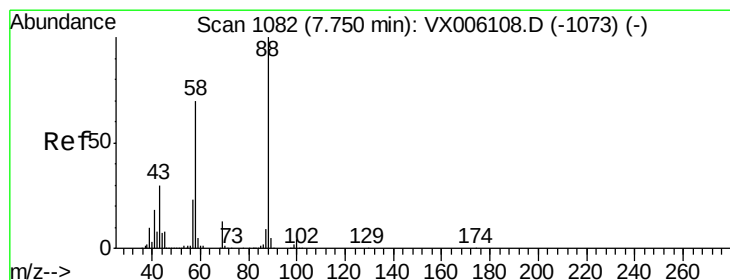
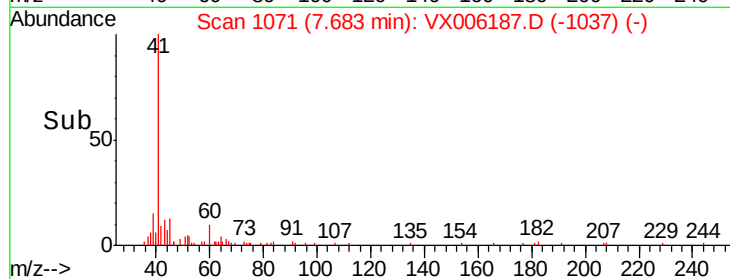
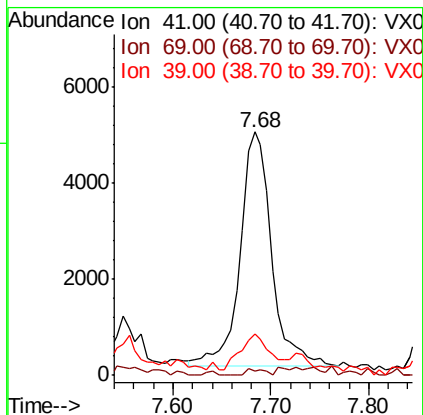
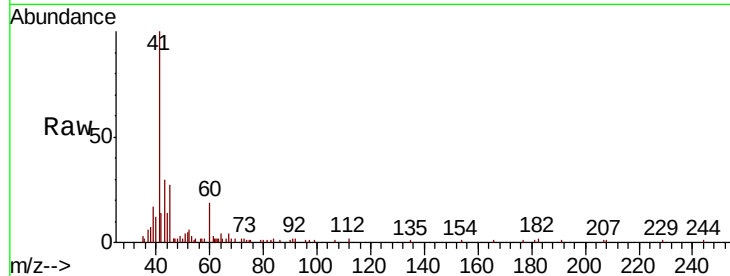




#48
Methyl methacrylate
Concen: 2.764 ug/l
RT: 7.68 min Scan# 1071
Delta R.T. -0.09 min
Lab File: VX006187.D
Acq: 26 Nov 2018 20:31

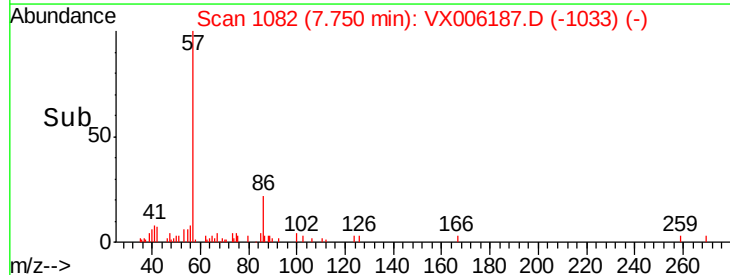
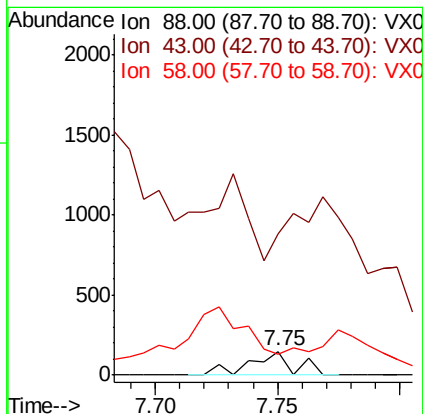
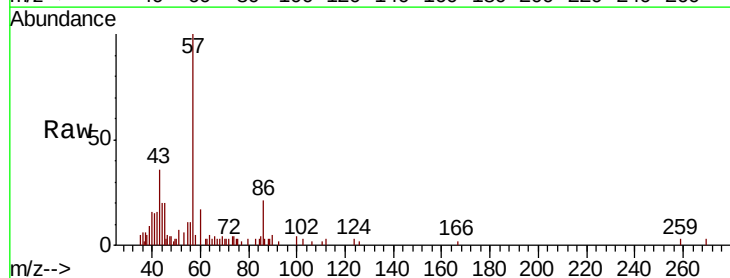
Instrument :
MSVOA_X
ClientSampleId :

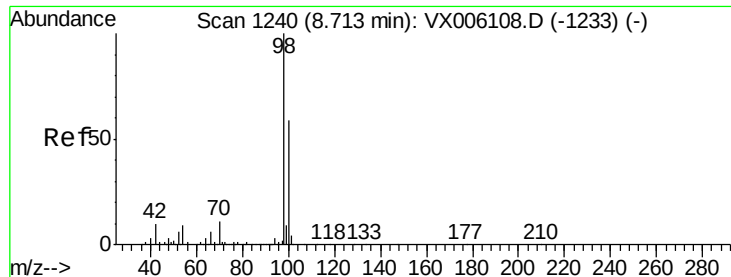
Tot Ion: 41 Resp: 10808
Ion Ratio Lower Upper
41 100
69 1.5 62.8 94.2#
39 0.0 43.8 65.6#



#49
1,4-Dioxane
Concen: 1.951 ug/l
RT: 7.75 min Scan# 1082
Delta R.T. 0.00 min
Lab File: VX006187.D
Acq: 26 Nov 2018 20:31

Tgt Ion: 88 Resp: 181
Ion Ratio Lower Upper
88 100
43 0.0 26.7 40.1#
58 0.0 58.5 87.7#

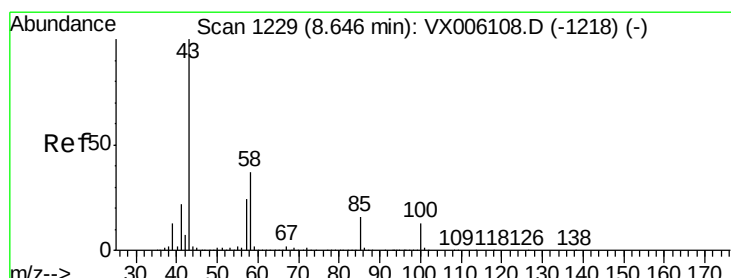
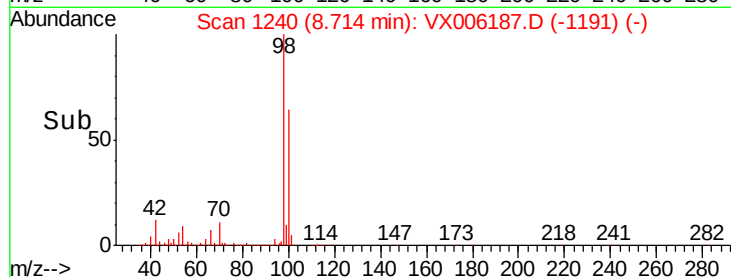
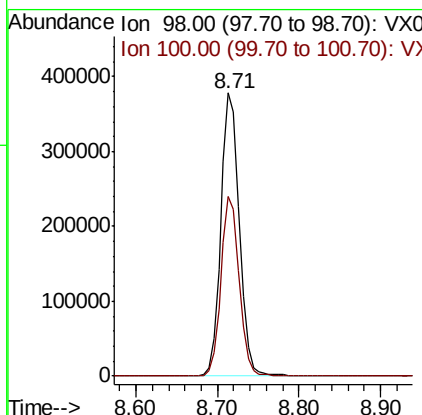
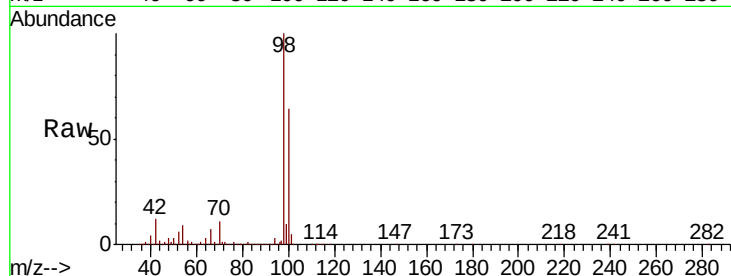




#50
Toluene-d8
Concen: 53.402 ug/l
RT: 8.71 min Scan# 1240
Delta R.T. 0.00 min
Lab File: VX006187.D
Acq: 26 Nov 2018 20:31

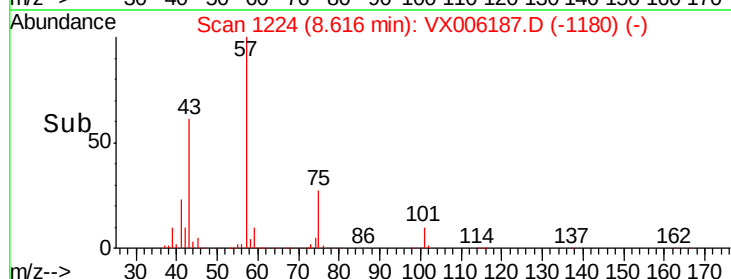
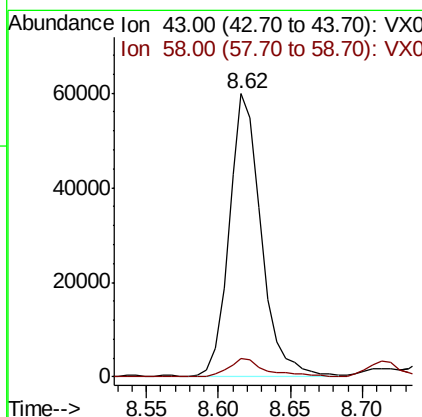
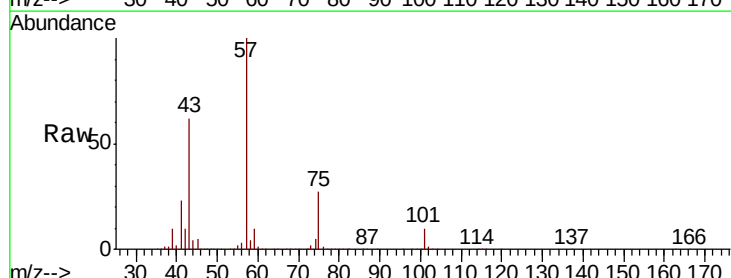
Instrument :
MSVOA_X
ClientSampleId :

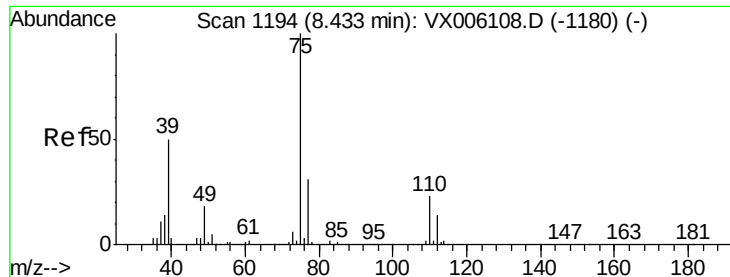
Tot Ion: 98 Resp: 596379
Ion Ratio Lower Upper
98 100
100 62.4 51.0 76.4



#51
4-Methyl-2-Pentanone
Concen: 16.707 ug/l
RT: 8.62 min Scan# 1224
Delta R.T. -0.03 min
Lab File: VX006187.D
Acq: 26 Nov 2018 20:31

Tgt Ion: 43 Resp: 92345
Ion Ratio Lower Upper
43 100
58 7.8 29.9 44.9#



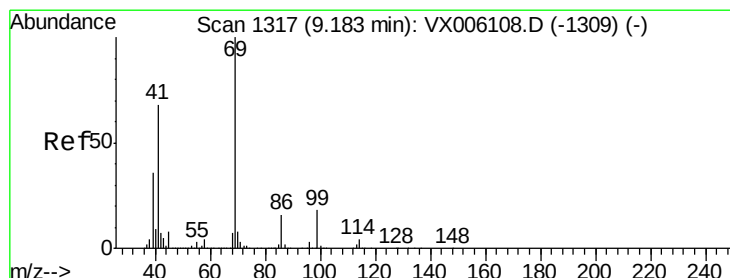
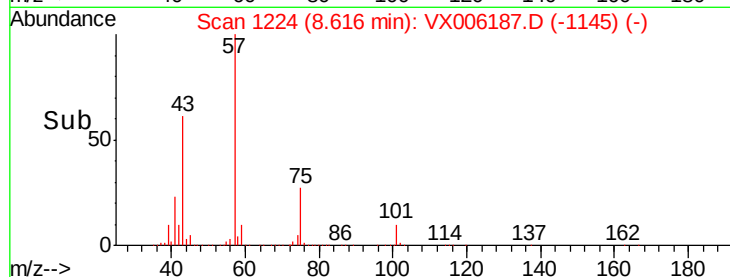
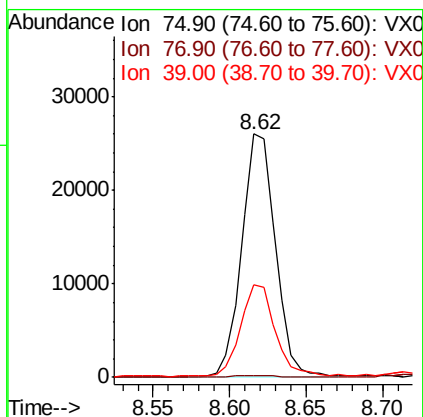
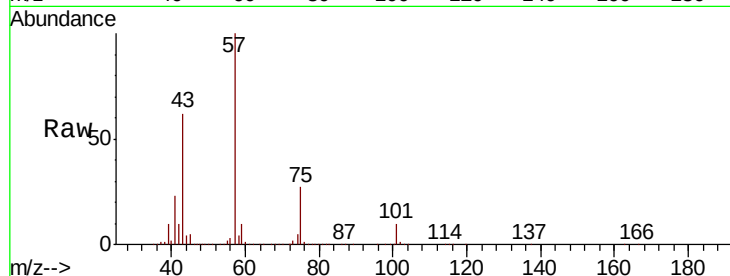


#54

cis-1,3-Dichloropropene
Concen: 8.424 ug/l
RT: 8.62 min Scan# 1224
Delta R.T. 0.18 min
Lab File: VX006187.D
Acq: 26 Nov 2018 20:31

Instrument :
MSVOA_X
ClientSampleId :

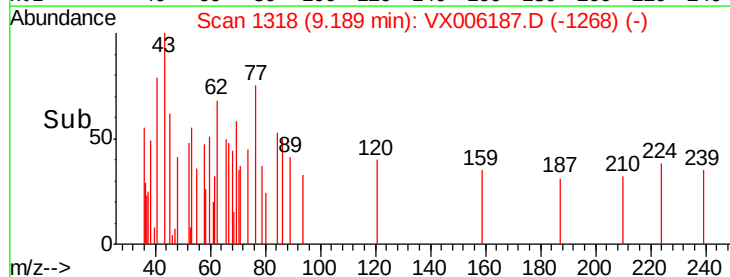
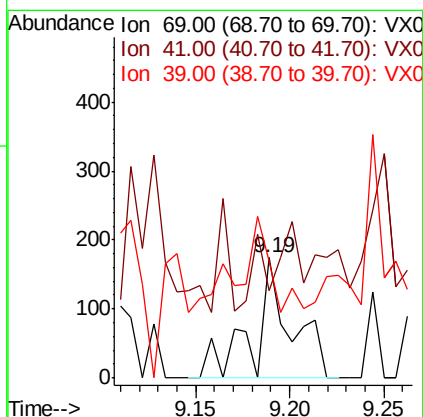
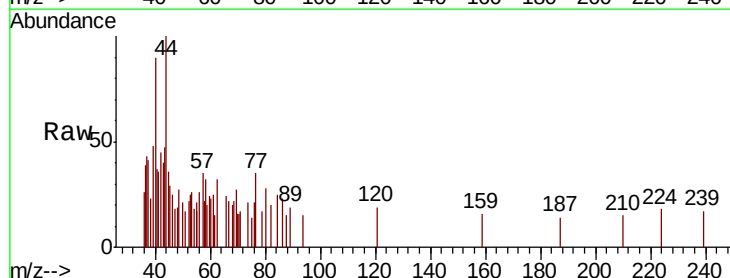
Tot Ion: 75 Resp: 39823
Ion Ratio Lower Upper
75 100
77 0.7 24.7 37.1#
39 37.2 40.3 60.5#

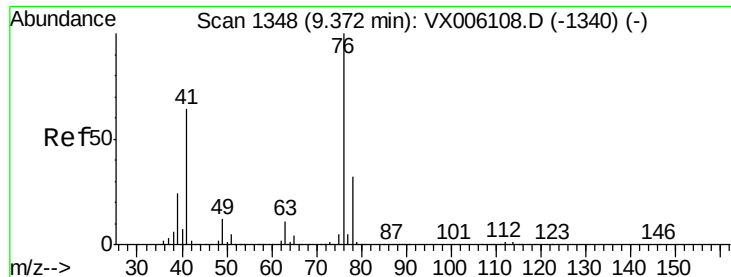


#56

Ethyl methacrylate
Concen: 2.910 ug/l
RT: 9.19 min Scan# 1318
Delta R.T. 0.01 min
Lab File: VX006187.D
Acq: 26 Nov 2018 20:31

Tgt Ion: 69 Resp: 241
Ion Ratio Lower Upper
69 100
41 0.0 56.2 84.4#
39 0.0 29.4 44.0#





#57

1,3-Dichloropropane

Concen: 2.084 ug/l

RT: 9.54 min Scan# 1376

Delta R.T. 0.17 min

Lab File: VX006187.D

Acq: 26 Nov 2018 20:31

Instrument :

MSVOA_X

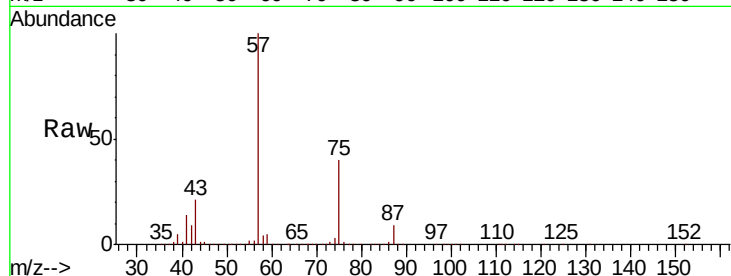
ClientSampled :

Tot Ion: 76 Resp: 11247

Ion Ratio Lower Upper

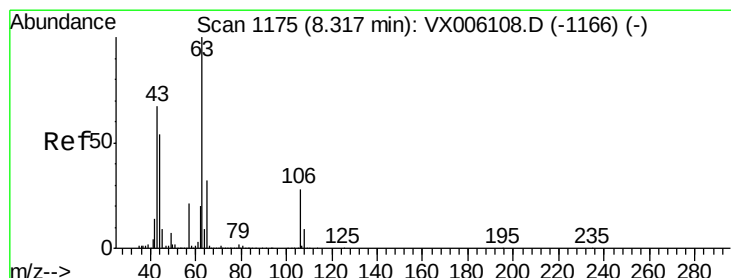
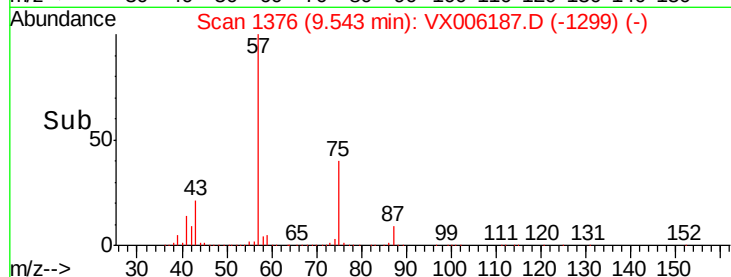
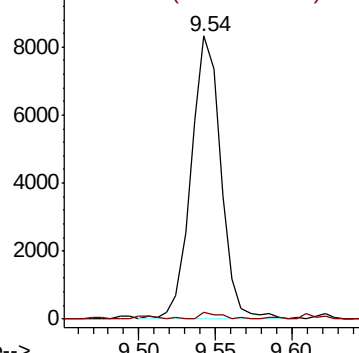
76 100

78 1.7 25.7 38.5#



Abundance Ion 75.90 (75.60 to 76.60): VX0

Ion 77.90 (77.60 to 78.60): VX0



#58

2-Chloroethyl Vinyl ether

Concen: 6.753 ug/l

RT: 8.46 min Scan# 1199

Delta R.T. 0.15 min

Lab File: VX006187.D

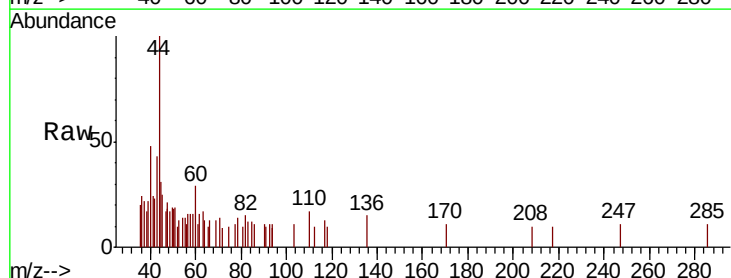
Acq: 26 Nov 2018 20:31

Tgt Ion: 63 Resp: 92

Ion Ratio Lower Upper

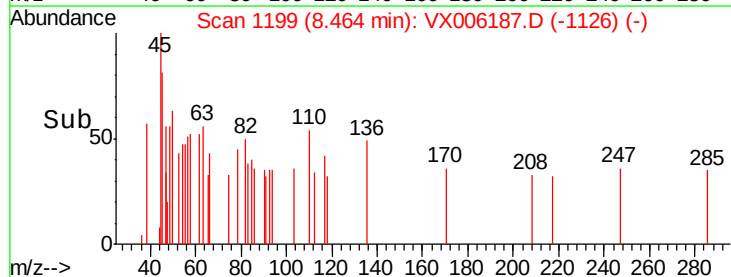
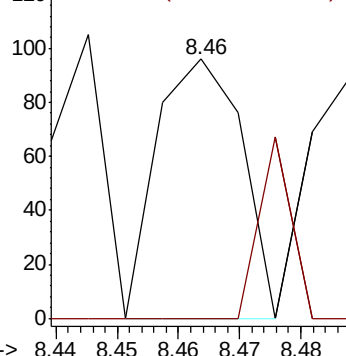
63 100

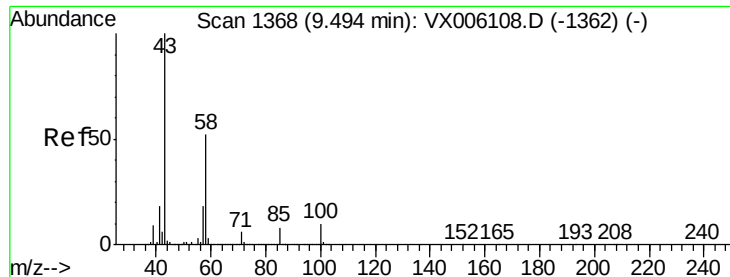
106 27.2 21.7 32.5



Abundance Ion 62.90 (62.60 to 63.60): VX0

Ion 105.90 (105.60 to 106.60): V

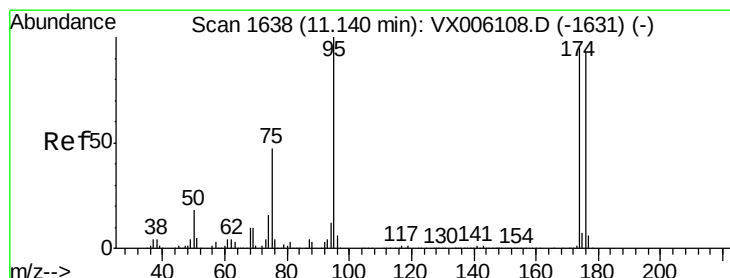
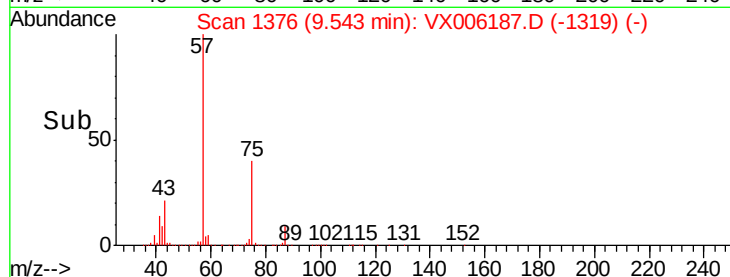
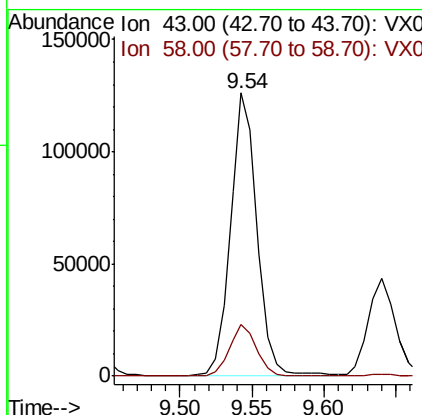
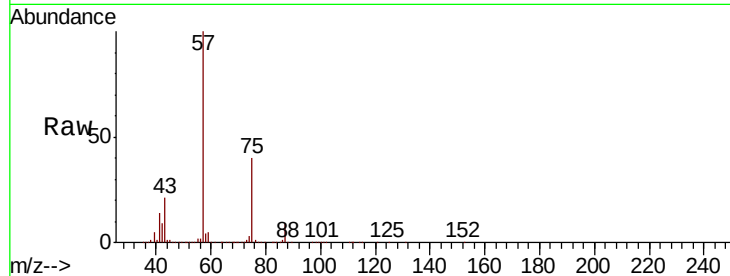




#59
2-Hexanone
Concen: 36.797 ug/l
RT: 9.54 min Scan# 1376
Delta R.T. 0.05 min
Lab File: VX006187.D
Acq: 26 Nov 2018 20:31

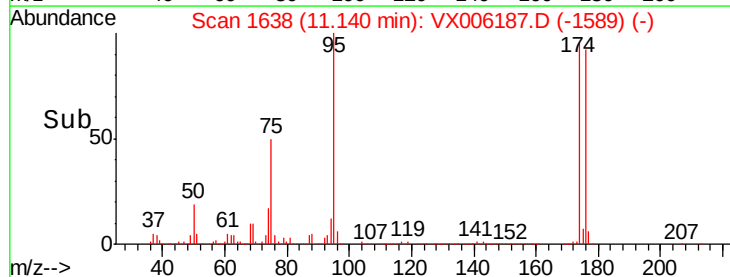
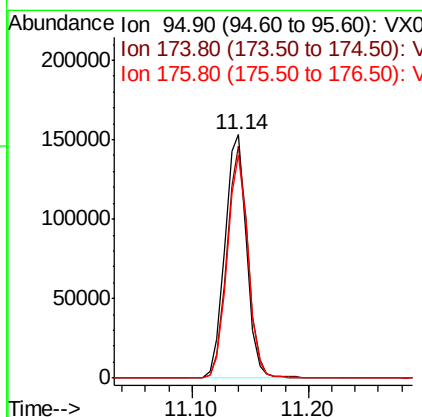
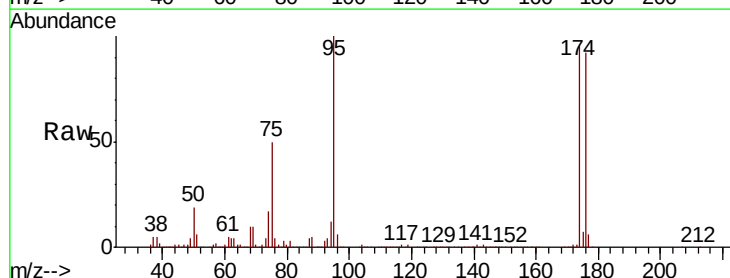
Instrument :
MSVOA_X
ClientSampleId :

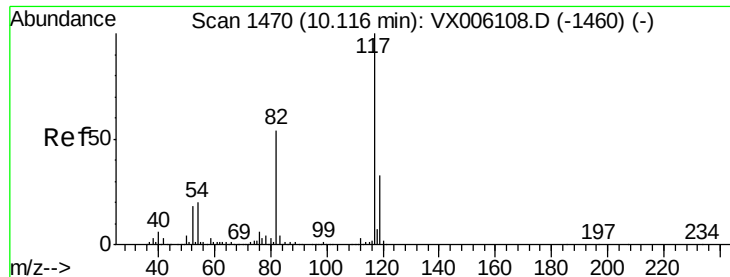
Tot Ion: 43 Resp: 161411
Ion Ratio Lower Upper
43 100
58 18.6 26.3 78.9#



#62
4-Bromofluorobenzene
Concen: 46.989 ug/l
RT: 11.14 min Scan# 1638
Delta R.T. 0.00 min
Lab File: VX006187.D
Acq: 26 Nov 2018 20:31

Tgt Ion: 95 Resp: 196891
Ion Ratio Lower Upper
95 100
174 93.0 0.0 184.4
176 89.2 0.0 179.0

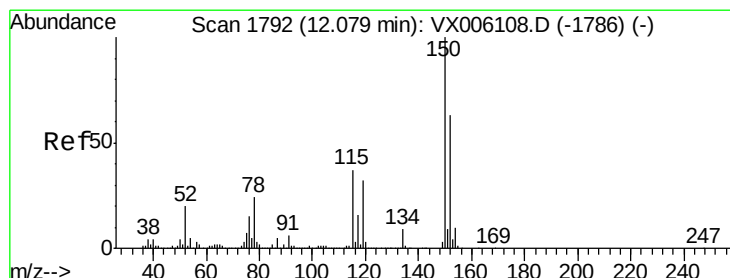
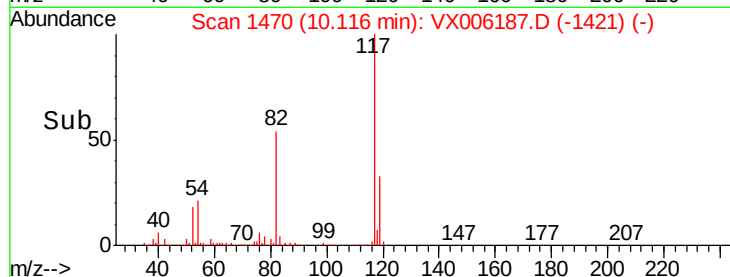
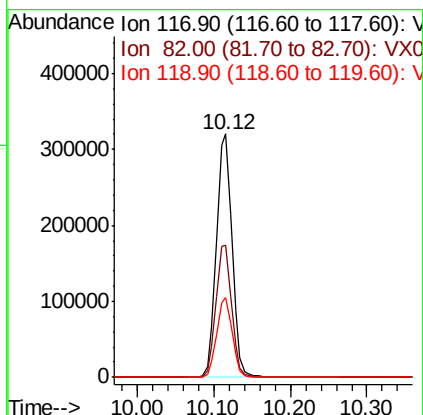
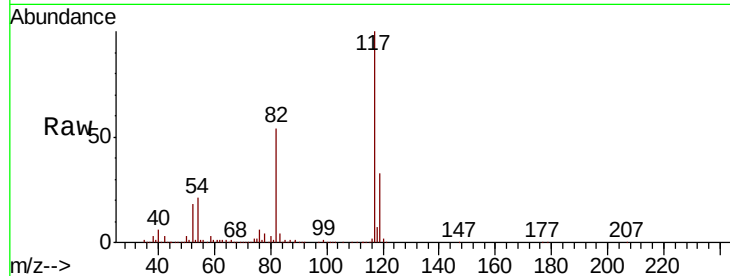




#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 10.12 min Scan# 1470
Delta R.T. 0.00 min
Lab File: VX006187.D
Acq: 26 Nov 2018 20:31

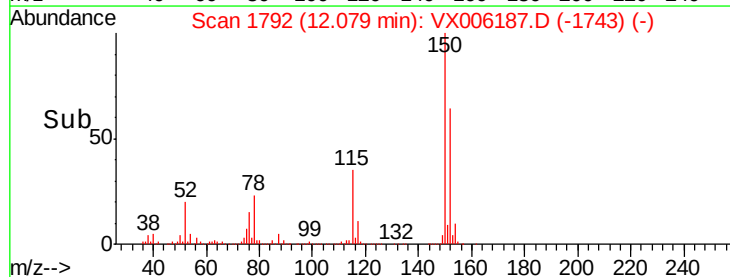
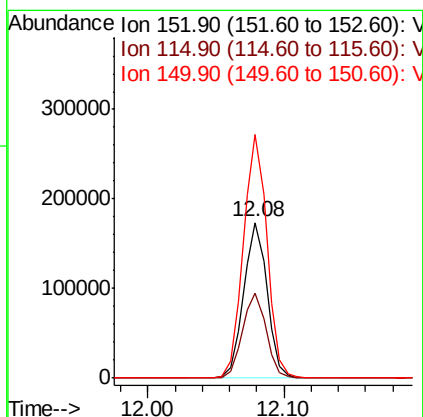
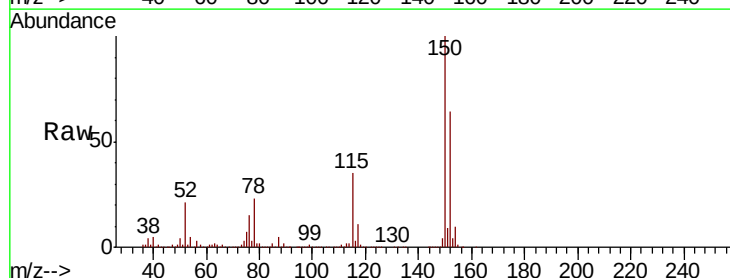
Instrument :
MSVOA_X
ClientSampleId :

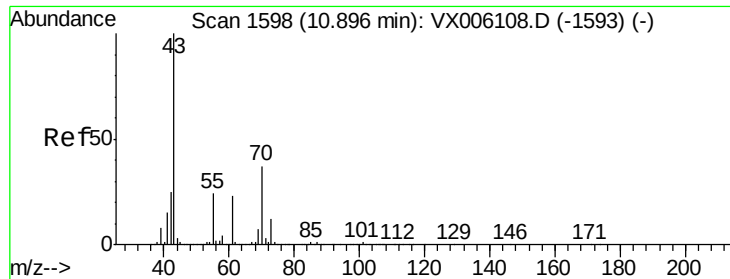
Tot Ion:117 Resp: 452878
Ion Ratio Lower Upper
117 100
82 54.5 43.0 64.4
119 32.6 26.1 39.1



#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 12.08 min Scan# 1792
Delta R.T. 0.00 min
Lab File: VX006187.D
Acq: 26 Nov 2018 20:31

Tgt Ion:152 Resp: 209021
Ion Ratio Lower Upper
152 100
115 55.4 39.0 116.9
150 157.6 0.0 346.6





#74

N-amvl acetate

Concen: 4.117 ug/l

RT: 10.69 min Scan# 1565

Delta R.T. -0.20 min

Lab File: VX006187.D

Acq: 26 Nov 2018 20:31

Instrument :

MSVOA_X

ClientSampleId :

Tot Ion: 43 Resp: 12973

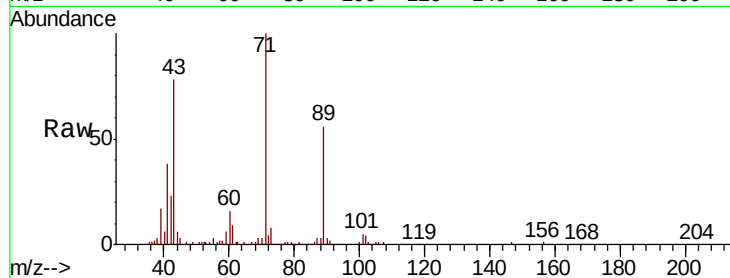
Ion Ratio Lower Upper

43 100

70 4.7 31.8 47.6#

55 7.9 19.5 29.3#

61 11.7 18.6 27.8#

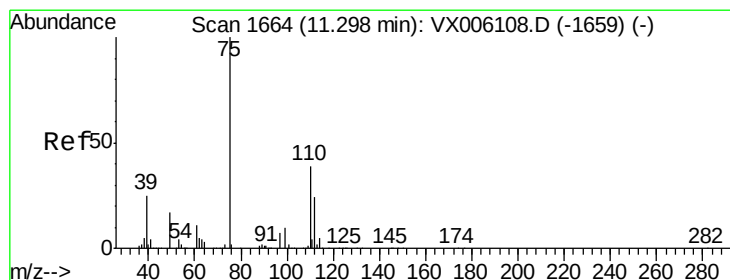
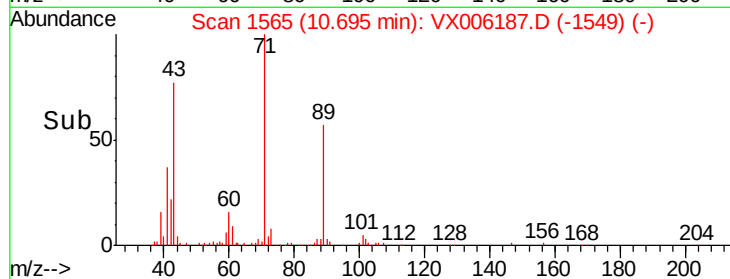
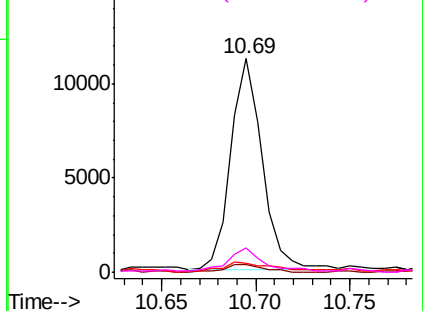


Abundance Ion 43.00 (42.70 to 43.70): VX0

Ion 70.00 (69.70 to 70.70): VX0

Ion 55.00 (54.70 to 55.70): VX0

Ion 61.00 (60.70 to 61.70): VX0



#76

1,2,3-Trichloropropane

Concen: 23.294 ug/l

RT: 11.14 min Scan# 1638

Delta R.T. -0.16 min

Lab File: VX006187.D

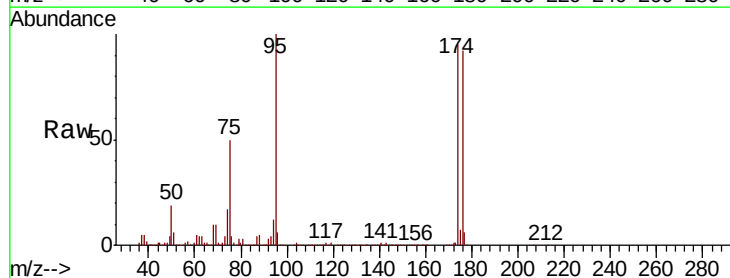
Acq: 26 Nov 2018 20:31

Tgt Ion: 75 Resp: 100240

Ion Ratio Lower Upper

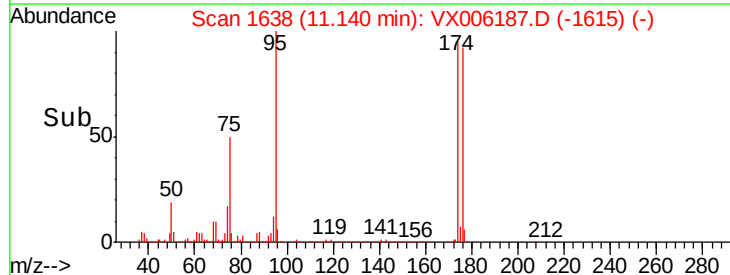
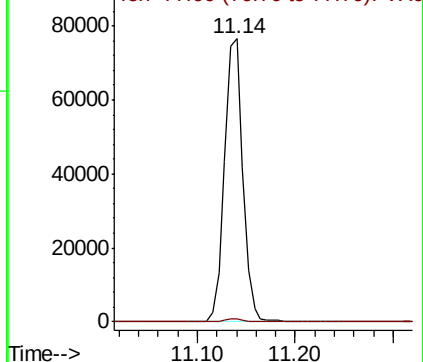
75 100

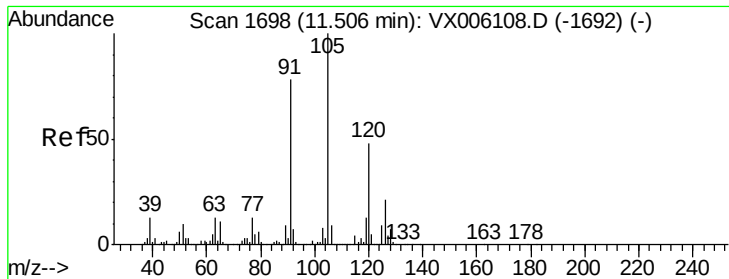
77 1.5 19.6 58.7#



Abundance Ion 74.90 (74.60 to 75.60): VX0

Ion 77.00 (76.70 to 77.70): VX0





#80

1,3,5-Trimethylbenzene

Concen: 0.618 ug/l

RT: 11.51 min Scan# 1698

Delta R.T. 0.00 min

Lab File: VX006187.D

Acq: 26 Nov 2018 20:31

Instrument :

MSVOA_X

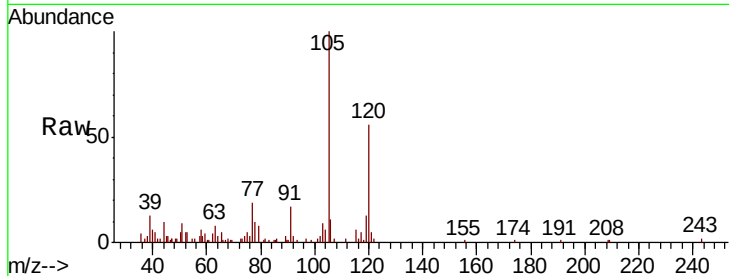
ClientSampleId :

Tot Ion:105 Resp: 6592

Ion Ratio Lower Upper

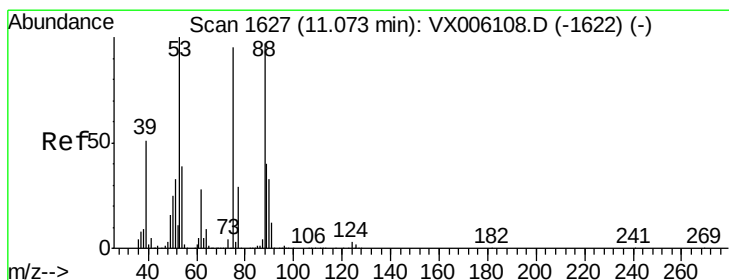
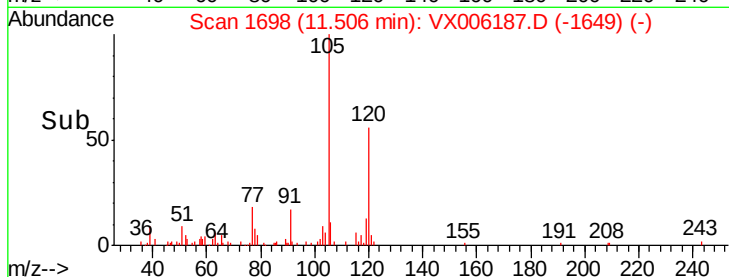
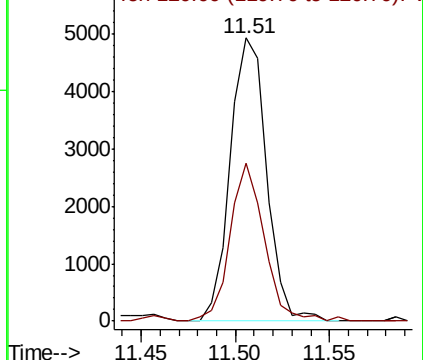
105 100

120 52.8 24.3 73.0



Abundance Ion 105.00 (104.70 to 105.70): V

Ion 120.00 (119.70 to 120.70): V



#81

trans-1,4-Dichloro-2-butene

Concen: 78.785 ug/l

RT: 11.14 min Scan# 1638

Delta R.T. 0.07 min

Lab File: VX006187.D

Acq: 26 Nov 2018 20:31

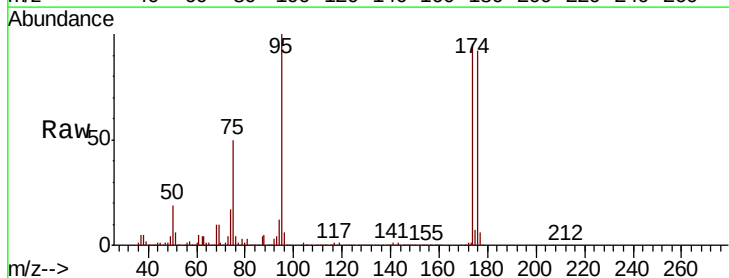
Tgt Ion: 75 Resp: 100240

Ion Ratio Lower Upper

75 100

53 0.4 85.3 127.9#

89 0.0 37.2 55.8#



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

