

Data Path : Z:\VOASRV\HPCHEM1\MSVOA X\DATA\VX072118\
 Data File : VX003554.D
 Acq On : 21 Jul 2018 14:54
 Operator : JC/SP
 Sample : J4014-01DL 10X
 Misc : 5.0mL/MSVOA X/WATER
 ALS Vial : 11 Sample Multiplier: 1

Instrument :
 MSVOA_X
 ClientSampleId :
 RE103D1-071218DL

Quant Time: Jul 23 01:38:09 2018
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_X\METHOD\82X071918W.M
 Quant Title : SW846 8260
 QLast Update : Thu Jul 19 17:09:44 2018
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	5.67	168	269818	50.00	ug/l	0.00
34) 1,4-Difluorobenzene	6.87	114	413231	50.00	ug/l	0.00
63) Chlorobenzene-d5	10.12	117	390638	50.00	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	12.09	152	211205	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	175055	54.81	ug/l	0.00
Spiked Amount			Recovery	=	109.62%	
35) Dibromofluoromethane	5.51	113	155679	49.46	ug/l	0.00
Spiked Amount			Recovery	=	98.92%	
50) Toluene-d8	8.72	98	586918	49.61	ug/l	0.00
Spiked Amount			Recovery	=	99.22%	
62) 4-Bromofluorobenzene	11.14	95	195107	45.19	ug/l	0.00
Spiked Amount			Recovery	=	90.38%	

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	1.20	85	250	Below Cal		85
3) Chloromethane	1.33	50	730	Below Cal		95
5) Bromomethane	1.65	94	1574	Below Cal		87
9) 1,1,2-Trichlorotrifluoroet	2.39	101	1600	0.53	ug/l	96
10) Methyl Iodide	2.52	142	2950	0.82	ug/l	99
12) 1,1-Dichloroethene	2.37	96	1391	0.50	ug/l #	72
13) Acrolein	2.30	56	138	0.48	ug/l #	1
15) Acrylonitrile	3.14	53	651	0.40	ug/l #	76
16) Acetone	2.45	43	835	0.69	ug/l #	89
17) Carbon Disulfide	2.57	76	2906	0.39	ug/l #	93
20) Methylene Chloride	2.86	84	780	Below Cal	#	88
25) 2-Butanone	4.72	43	405	0.20	ug/l #	52
27) cis-1,2-Dichloroethene	4.60	96	1010	0.30	ug/l #	1
29) Tetrahydrofuran	5.18	42	991	0.74	ug/l #	84
38) Carbon Tetrachloride	5.67	117	23419	5.35	ug/l #	16
44) Trichloroethene	7.21	130	171764	42.76	ug/l	98
49) 1,4-Dioxane	7.77	88	187	2.44	ug/l #	63
76) 1,2,3-Trichloropropane	11.14	75	89789	23.66	ug/l #	33
81) trans-1,4-Dichloro-2-buten	11.14	75	89789	66.40	ug/l #	6
93) 1,2,4-Trichlorobenzene	13.65	180	1478	0.26	ug/l	98
94) Hexachlorobutadiene	13.79	225	744	0.28	ug/l	90
95) Naphthalene	13.84	128	3197	0.22	ug/l	99
96) 1,2,3-Trichlorobenzene	14.02	180	1336	0.24	ug/l	97

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



#1

Pentafluorobenzene

Concen: 50.00 ug/l

RT: 5.67 min Scan# 833

Delta R.T. 0.00 min

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ClientSampleId :

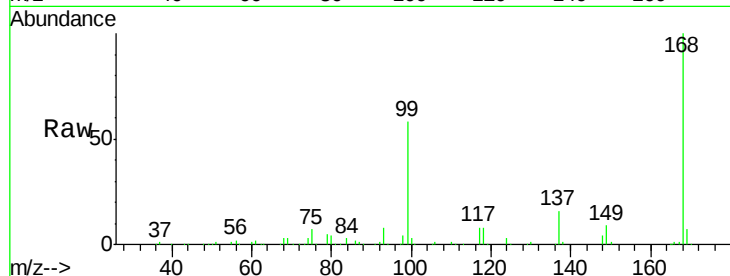
RE103D1-071218DL

Tot Ion:168 Resp: 269818

Ion Ratio Lower Upper

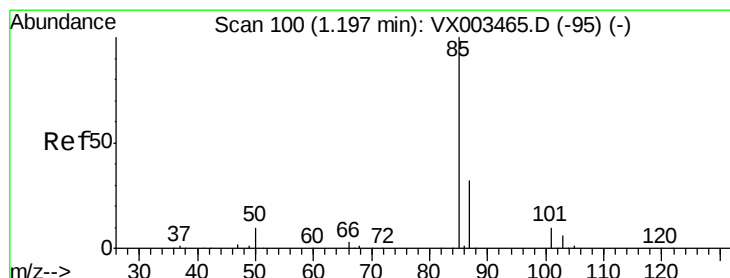
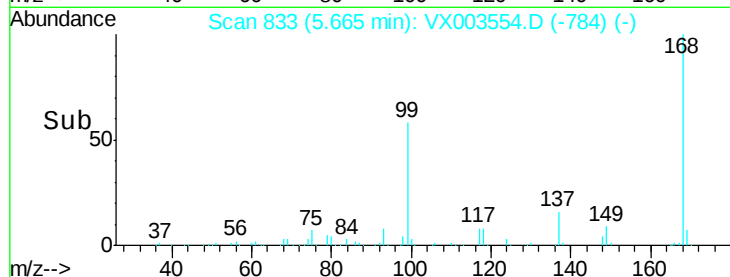
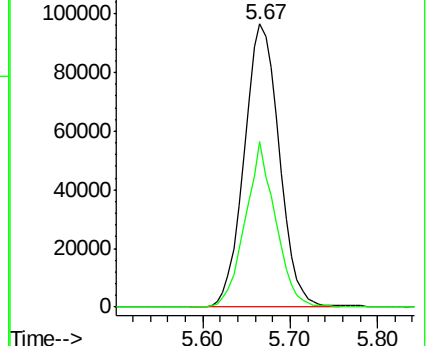
168 100

99 58.4 39.3 58.9



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VX0



#2

Dichlorodifluoromethane

Concen: Below Cal

RT: 1.20 min Scan# 100

Delta R.T. 0.00 min

Lab File: VX003554.D

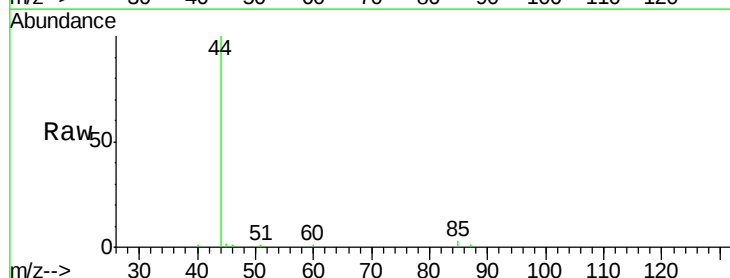
Acq: 21 Jul 2018 14:54

Tgt Ion: 85 Resp: 250

Ion Ratio Lower Upper

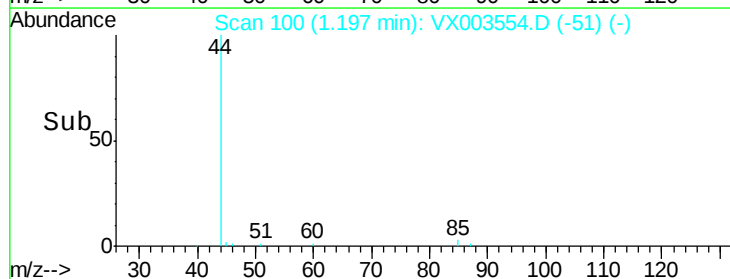
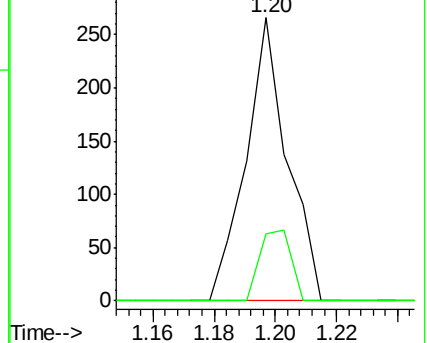
85 100

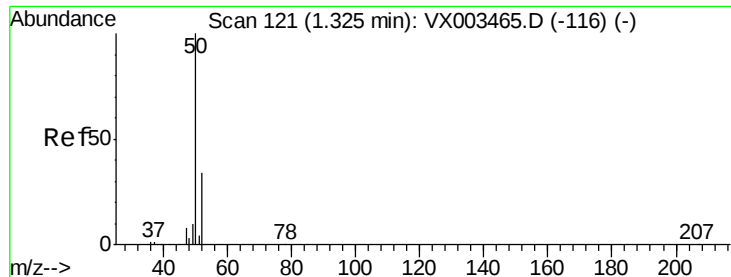
87 23.7 16.0 47.9



Abundance Ion 84.90 (84.60 to 85.60): VX0

Ion 86.90 (86.60 to 87.60): VX0





#3

Chloromethane

Concen: Below Cal

RT: 1.33 min Scan# 122

Delta R.T. 0.01 min

Lab File: VX003554.D

Acq: 21 Jul 2018 14:54

Instrument :

MSVOA_X

ClientSampleId :

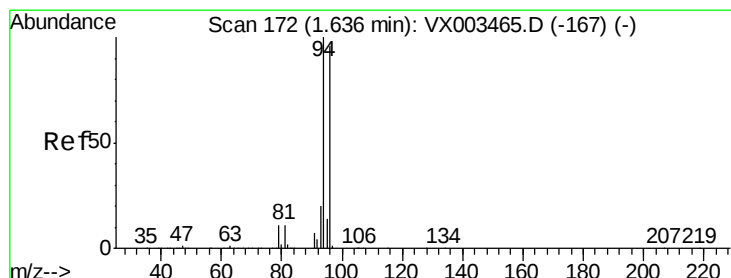
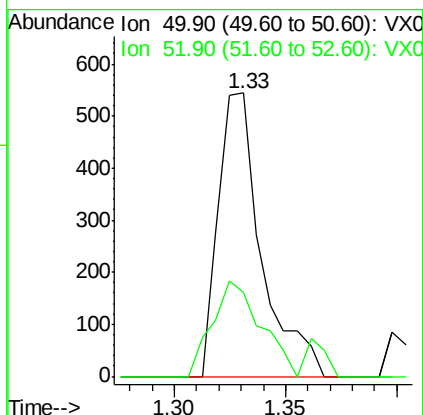
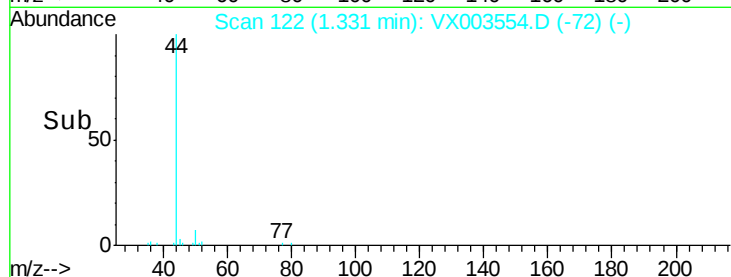
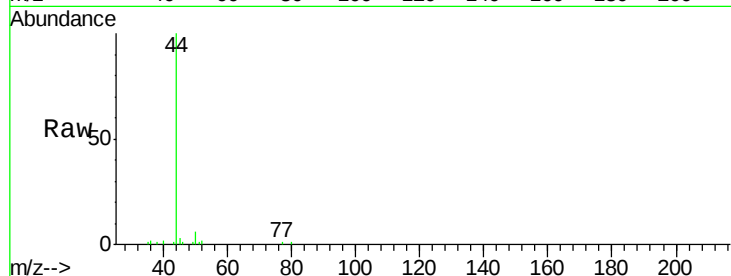
RE103D1-071218DL

Tot Ion: 50 Resp: 730

Ion Ratio Lower Upper

50 100

52 29.4 25.7 38.5



#5

Bromomethane

Concen: Below Cal

RT: 1.65 min Scan# 174

Delta R.T. 0.01 min

Lab File: VX003554.D

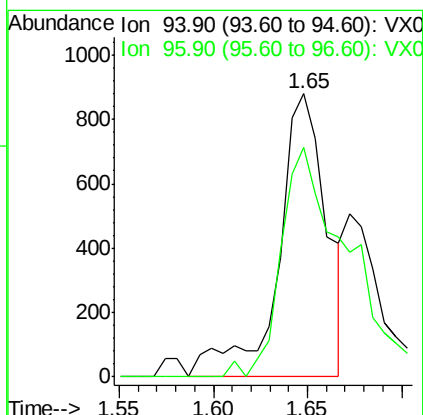
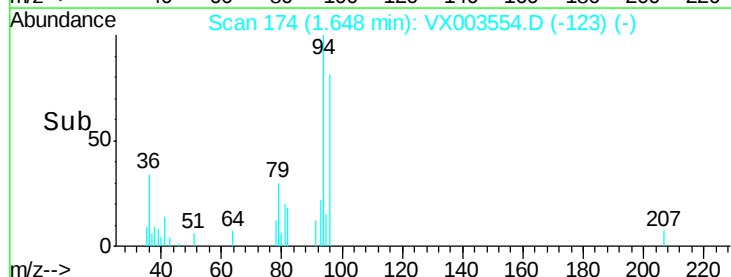
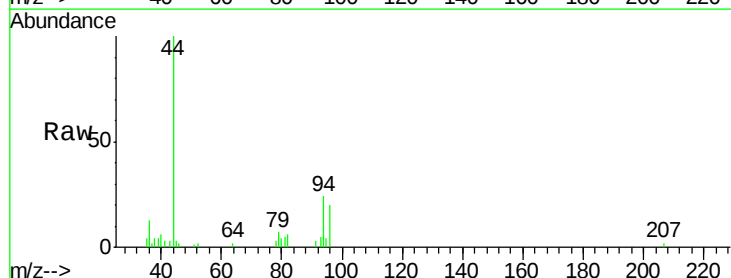
Acq: 21 Jul 2018 14:54

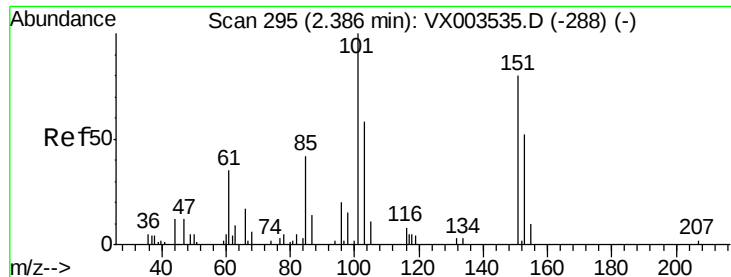
Tgt Ion: 94 Resp: 1574

Ion Ratio Lower Upper

94 100

96 81.1 74.9 112.3





#9

1,1,2-Trichlorotrifluoroethane

Concen: 0.53 ug/l

RT: 2.39 min Scan# 295

Delta R.T. 0.01 min

Lab File: VX003554.D

Acq: 21 Jul 2018 14:54

Instrument :

MSVOA_X

ClientSampleId :

RE103D1-071218DL

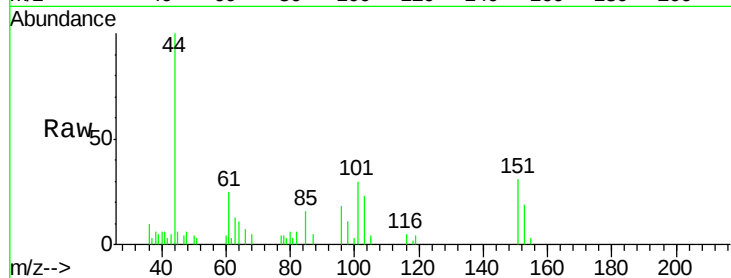
Tot Ion:101 Resp: 1600

Ion Ratio Lower Upper

101 100

85 40.5 36.0 54.0

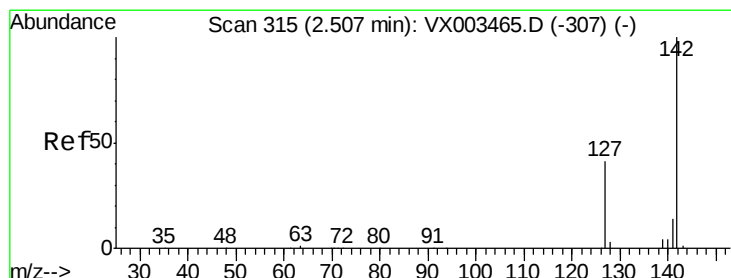
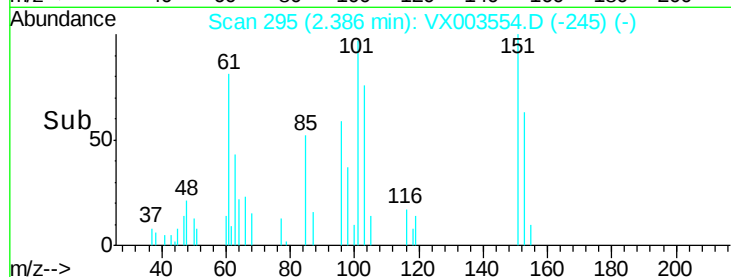
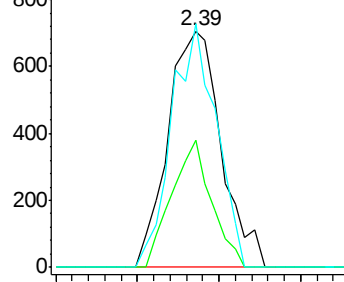
151 86.1 70.9 106.3



Abundance Ion 100.90 (100.60 to 101.60): V

Ion 84.90 (84.60 to 85.60): V

Ion 150.80 (150.50 to 151.50): V



#10

Methyl Iodide

Concen: 0.82 ug/l

RT: 2.52 min Scan# 317

Delta R.T. 0.01 min

Lab File: VX003554.D

Acq: 21 Jul 2018 14:54

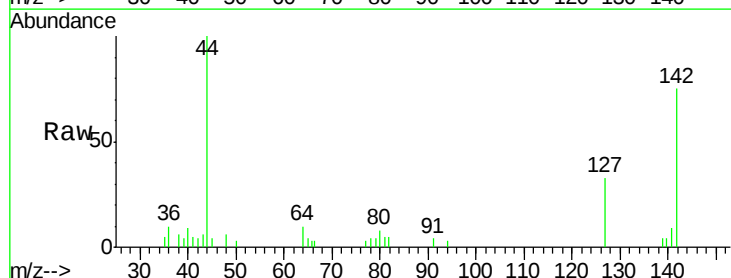
Tgt Ion:142 Resp: 2950

Ion Ratio Lower Upper

142 100

127 44.8 36.6 55.0

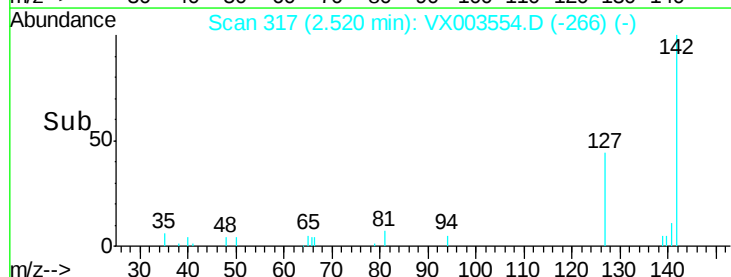
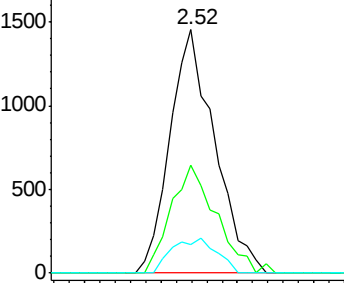
141 14.3 11.3 16.9

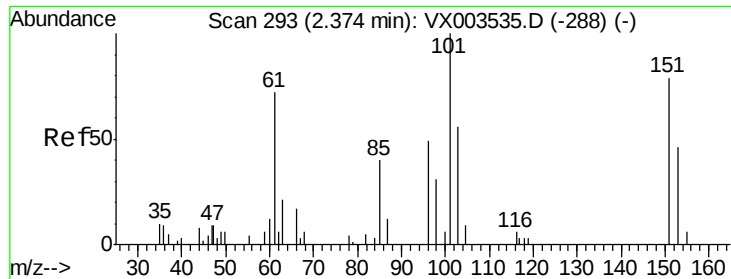


Abundance Ion 141.80 (141.50 to 142.50): V

Ion 126.80 (126.50 to 127.50): V

Ion 140.80 (140.50 to 141.50): V





#12

1,1-Dichloroethene

Concen: 0.50 ug/l

RT: 2.37 min Scan# 293

Delta R.T. 0.00 min

Lab File: VX003554.D

Acq: 21 Jul 2018 14:54

Instrument :

MSVOA_X

ClientSampleId :

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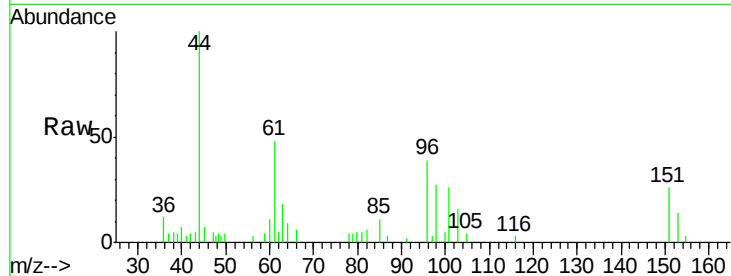
Tot Ion: 96 Resp: 1391

Ion Ratio Lower Upper

96 100

61 121.8 137.9 206.9#

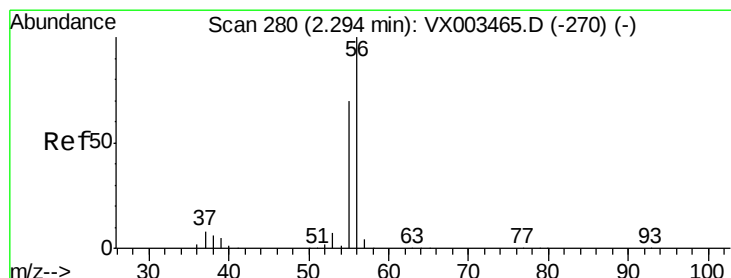
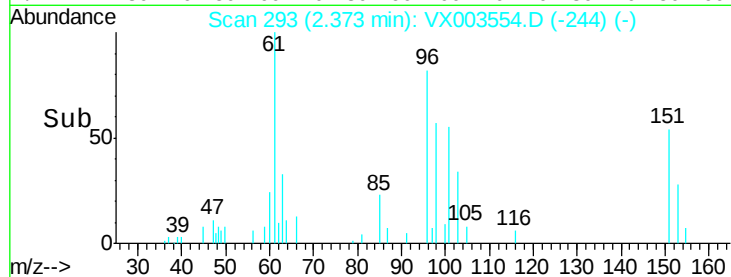
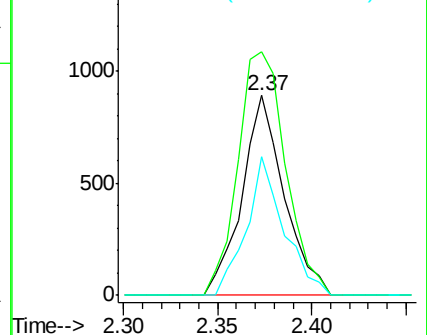
98 69.4 51.6 77.4



Abundance Ion 95.90 (95.60 to 96.60): VX0

Ion 60.90 (60.60 to 61.60): VX0

Ion 97.90 (97.60 to 98.60): VX0



#13

Acrolein

Concen: 0.48 ug/l

RT: 2.30 min Scan# 281

Delta R.T. 0.01 min

Lab File: VX003554.D

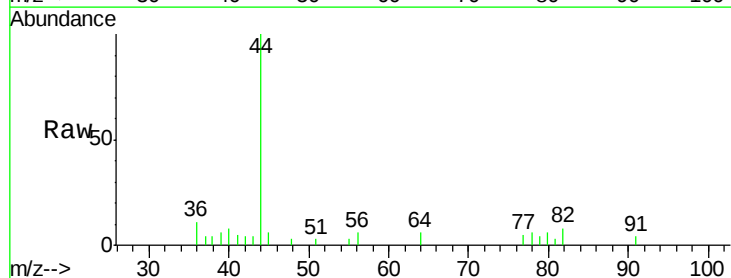
Acq: 21 Jul 2018 14:54

Tgt Ion: 56 Resp: 138

Ion Ratio Lower Upper

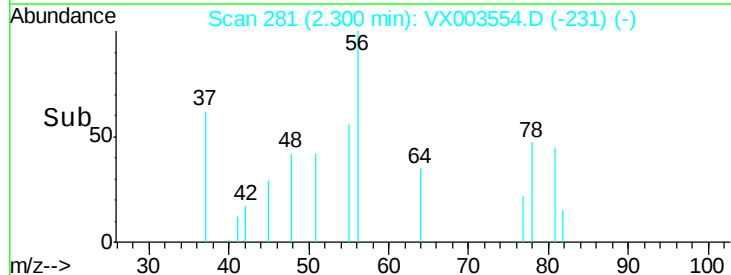
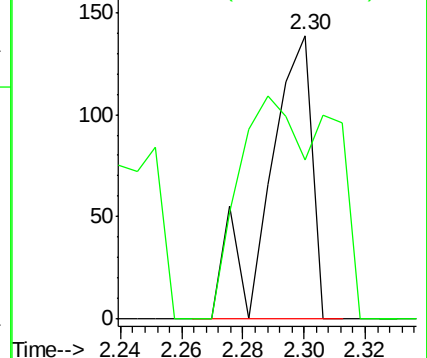
56 100

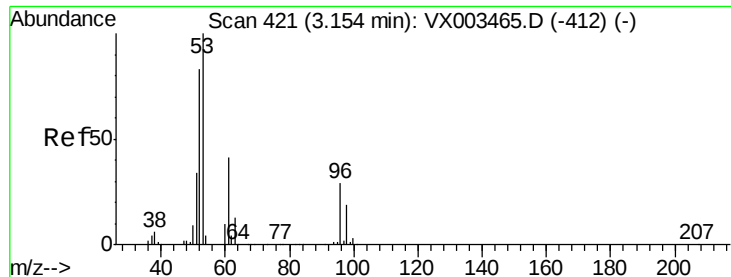
55 165.9 57.0 85.4#



Abundance Ion 56.00 (55.70 to 56.70): VX0

Ion 55.00 (54.70 to 55.70): VX0





#15

Acrylonitrile

Concen: 0.40 ug/l

RT: 3.14 min Scan# 419

Delta R.T. -0.01 min

Lab File: VX003554.D

Acq: 21 Jul 2018 14:54

Instrument :

MSVOA_X

ClientSampleId :

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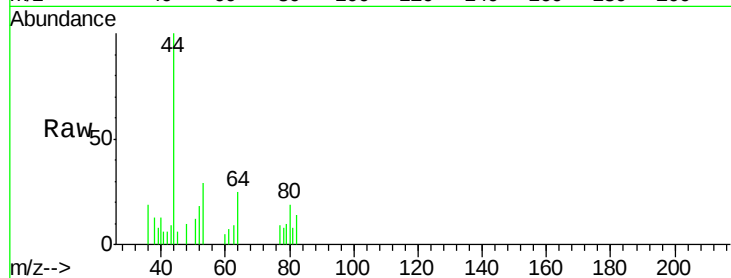
Tot Ion: 53 Resp: 651

Ion Ratio Lower Upper

53 100

52 99.5 66.7 100.1

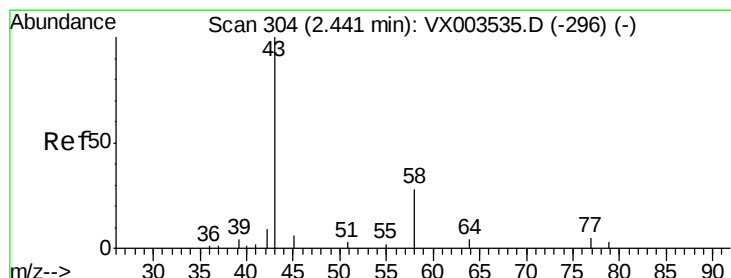
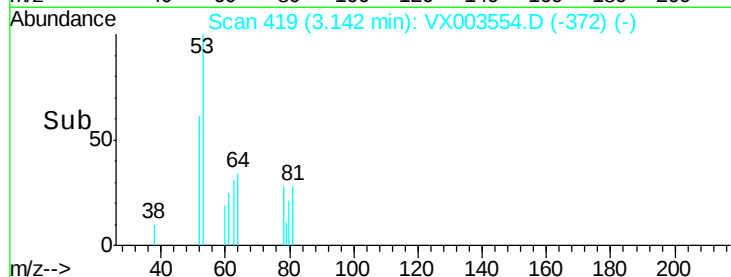
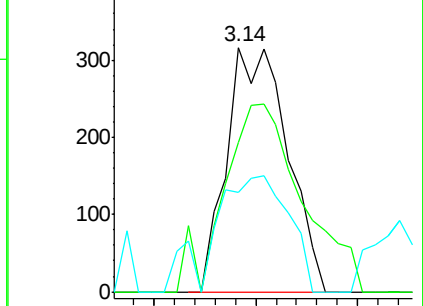
51 59.6 29.9 44.9#



Abundance Ion 53.00 (52.70 to 53.70): VX0

Ion 52.00 (51.70 to 52.70): VX0

Ion 51.00 (50.70 to 51.70): VX0



#16

Acetone

Concen: 0.69 ug/l

RT: 2.45 min Scan# 305

Delta R.T. 0.00 min

Lab File: VX003554.D

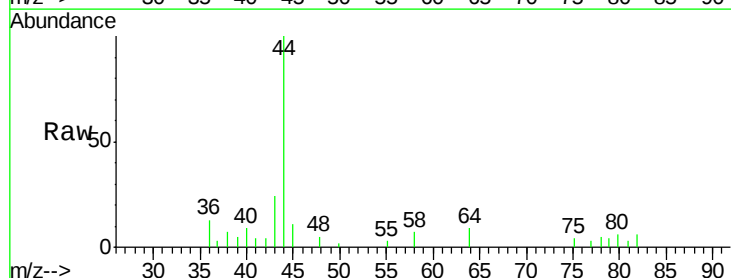
Acq: 21 Jul 2018 14:54

Tgt Ion: 43 Resp: 835

Ion Ratio Lower Upper

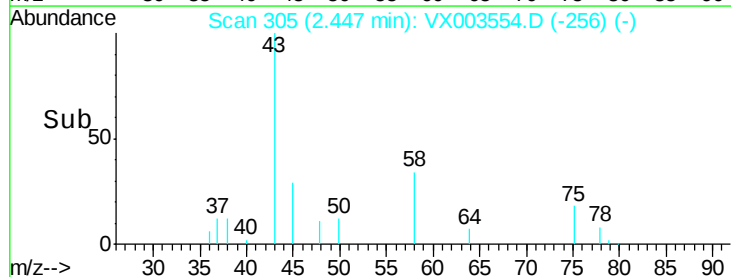
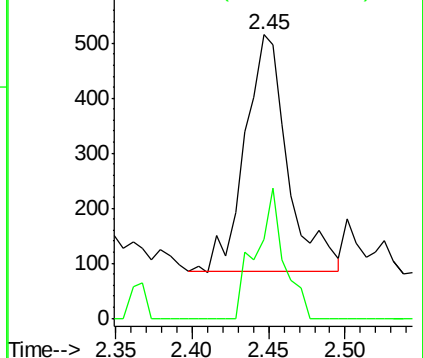
43 100

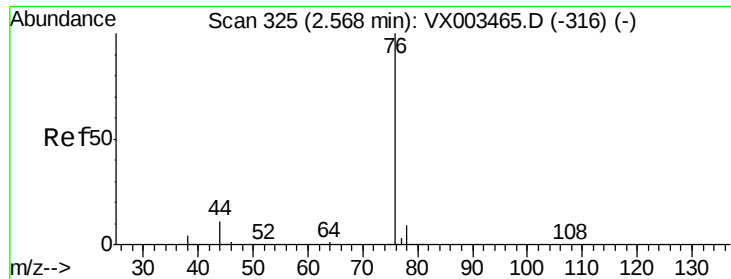
58 33.5 22.1 33.1#



Abundance Ion 43.00 (42.70 to 43.70): VX0

Ion 58.00 (57.70 to 58.70): VX0





#17

Carbon Disulfide

Concen: 0.39 ug/l

RT: 2.57 min Scan# 325

Delta R.T. 0.00 min

Lab File: VX003554.D

Acq: 21 Jul 2018 14:54

Instrument :

MSVOA_X

ClientSampleId :

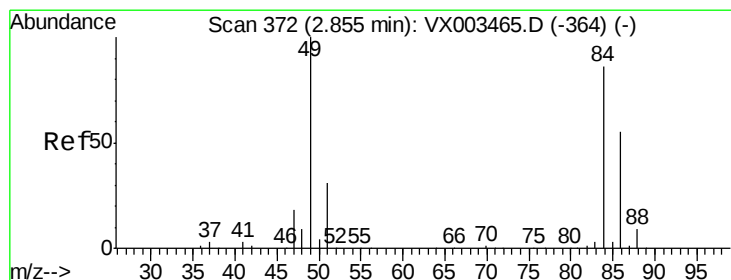
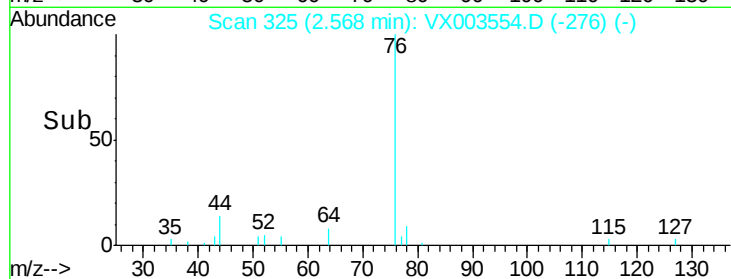
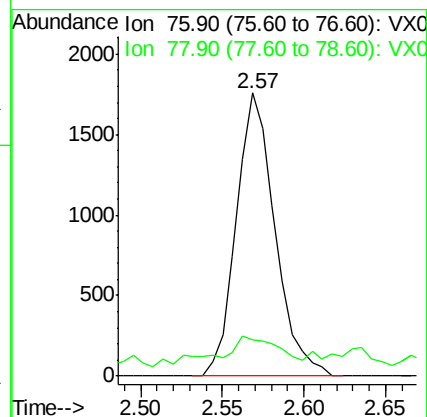
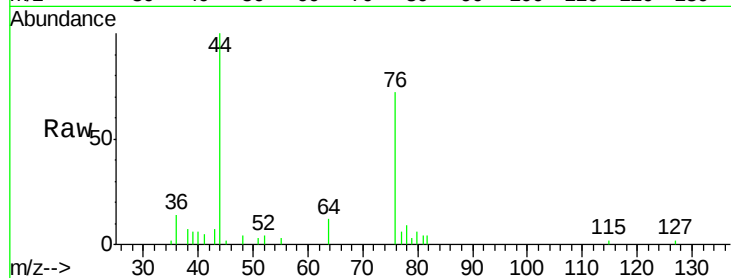
RE103D1-071218DL

Tot Ion: 76 Resp: 2906

Ion Ratio Lower Upper

76 100

78 6.0 6.9 10.3#



#20

Methylene Chloride

Concen: Below Cal

RT: 2.86 min Scan# 373

Delta R.T. 0.01 min

Lab File: VX003554.D

Acq: 21 Jul 2018 14:54

Tgt Ion: 84 Resp: 780

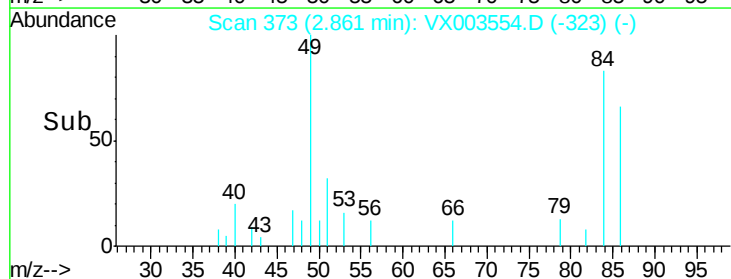
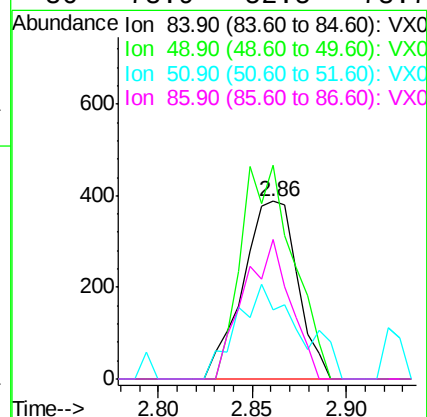
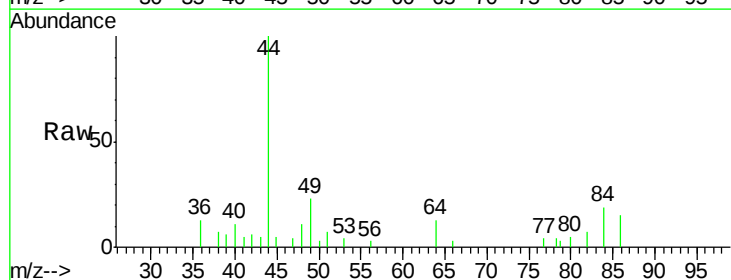
Ion Ratio Lower Upper

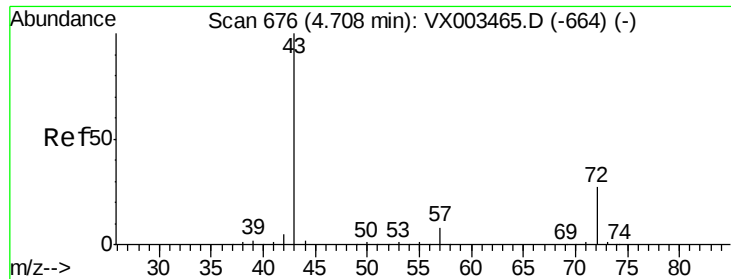
84 100

49 120.1 107.8 161.6

51 38.9 32.8 49.2

86 78.9 52.5 78.7#





#25

2-Butanone

Concen: 0.20 ug/l

RT: 4.72 min Scan# 678

Delta R.T. 0.01 min

Lab File: VX003554.D

Acq: 21 Jul 2018 14:54

Instrument :

MSVOA_X

ClientSampleId :

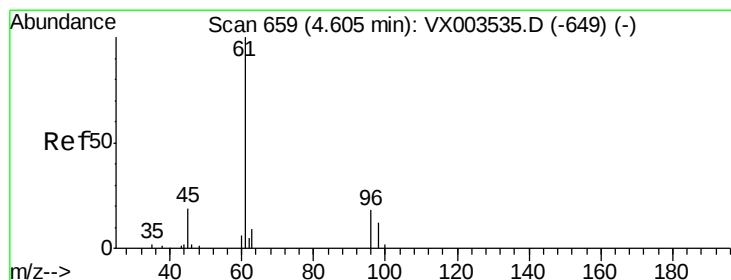
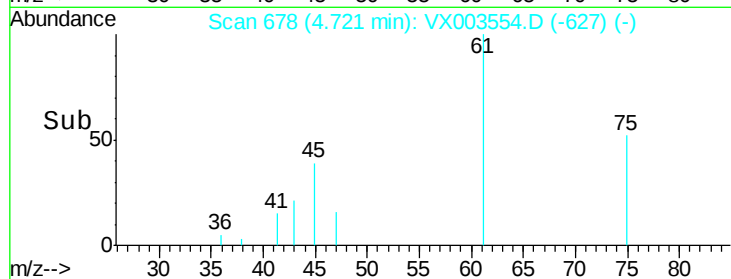
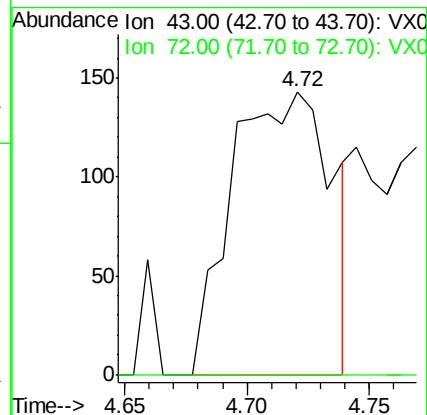
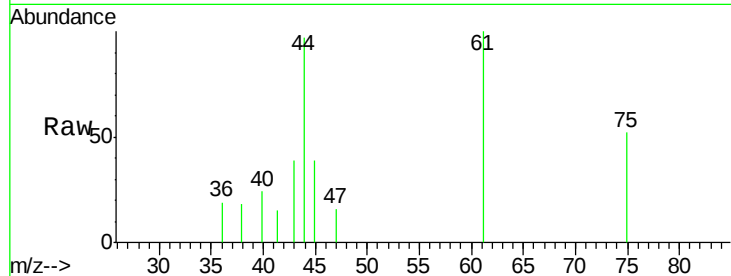
RE103D1-071218DL

Tot Ion: 43 Resp: 405

Ion Ratio Lower Upper

43 100

72 0.0 18.5 27.7#



#27

cis-1,2-Dichloroethene

Concen: 0.30 ug/l

RT: 4.60 min Scan# 659

Delta R.T. 0.01 min

Lab File: VX003554.D

Acq: 21 Jul 2018 14:54

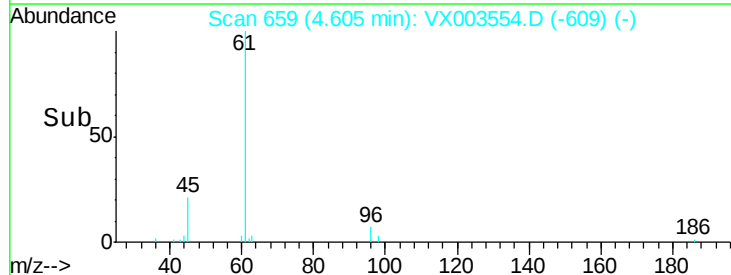
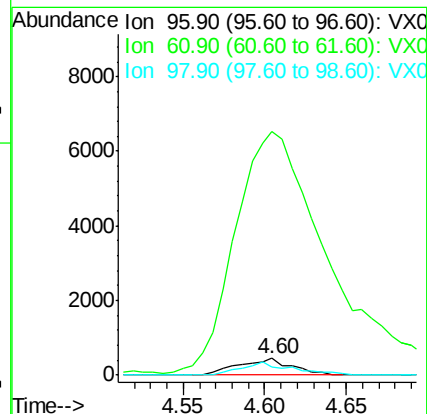
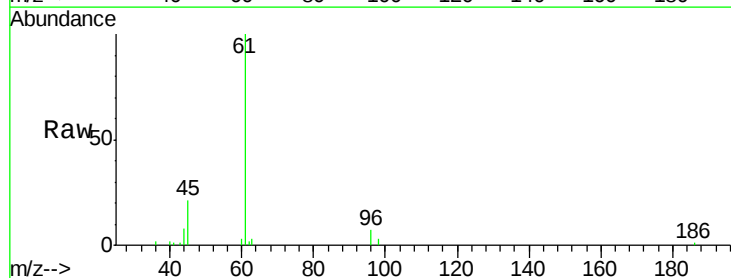
Tgt Ion: 96 Resp: 1010

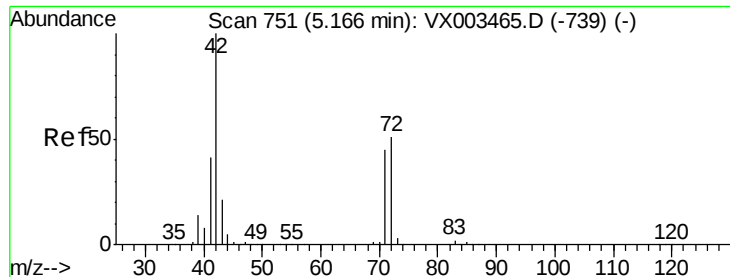
Ion Ratio Lower Upper

96 100

61 2594.1 0.0 330.2#

98 72.1 0.0 130.2





#29

Tetrahydrofuran

Concen: 0.74 ug/l

RT: 5.18 min Scan# 753

Delta R.T. 0.01 min

Lab File: VX003554.D

Acq: 21 Jul 2018 14:54

Instrument :

MSVOA_X

ClientSampleId :

RE103D1-071218DL

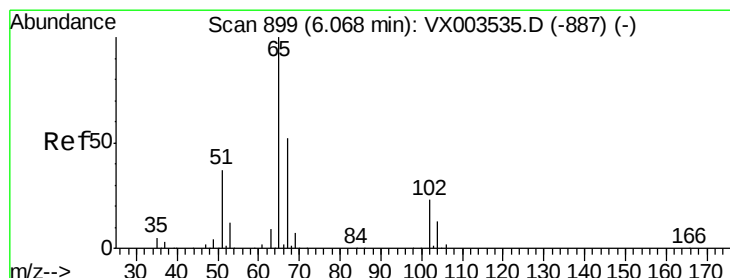
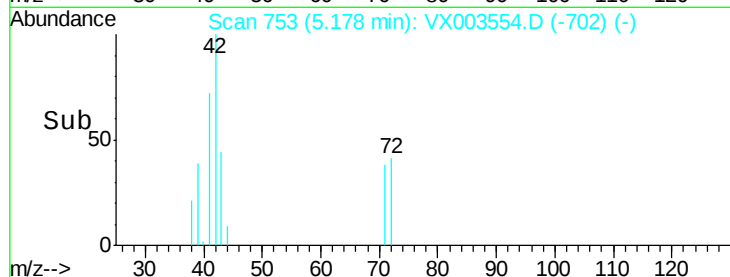
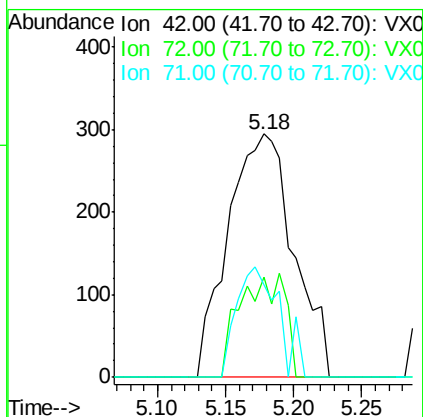
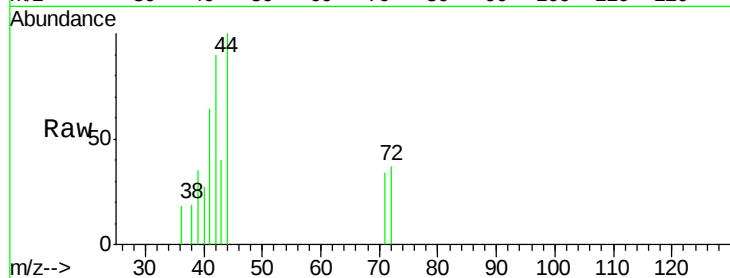
Tot Ion: 42 Resp: 991

Ion Ratio Lower Upper

42 100

72 29.2 32.0 48.0#

71 29.5 30.1 45.1#



#33

1,2-Dichloroethane-d4

Concen: 54.81 ug/l

RT: 6.07 min Scan# 899

Delta R.T. 0.00 min

Lab File: VX003554.D

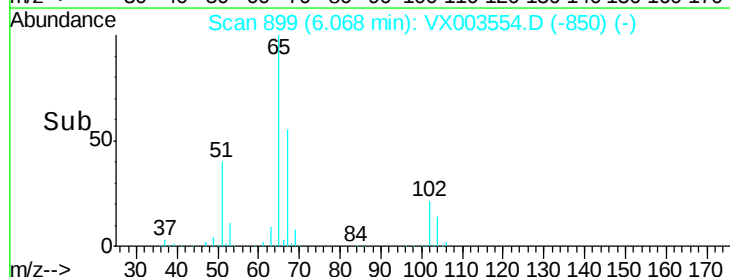
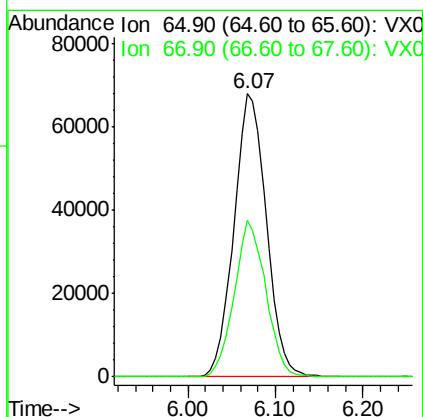
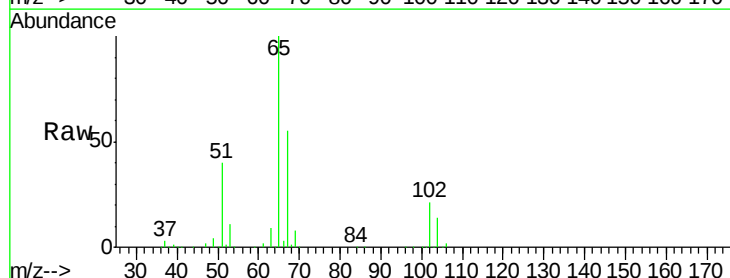
Acq: 21 Jul 2018 14:54

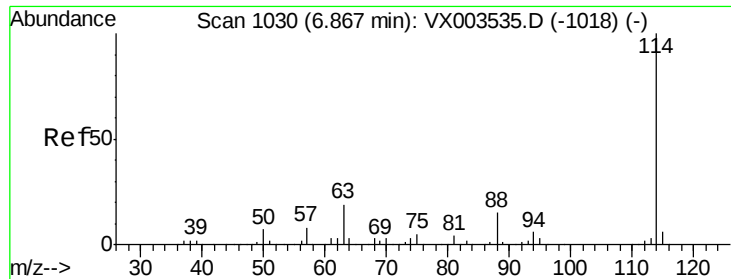
Tgt Ion: 65 Resp: 175055

Ion Ratio Lower Upper

65 100

67 53.9 0.0 102.6

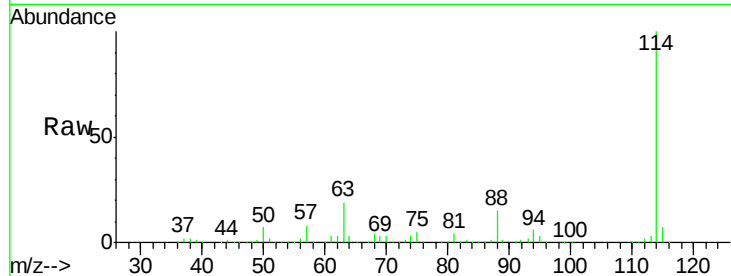




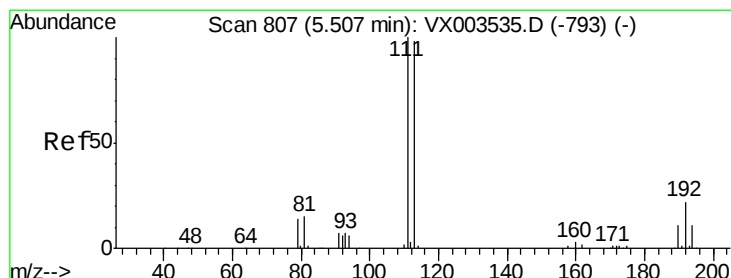
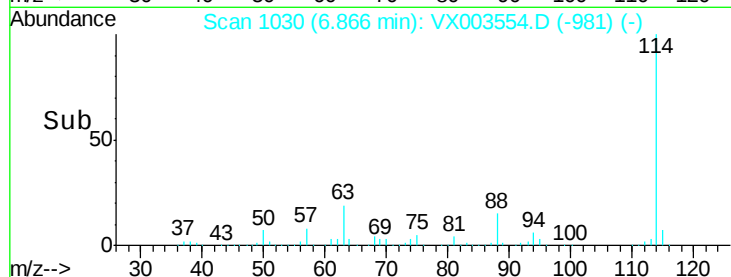
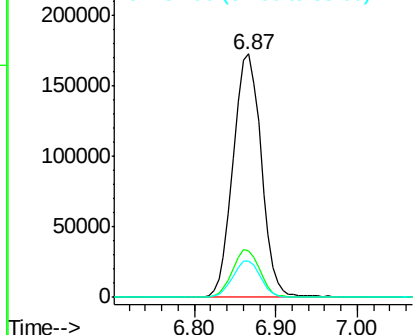
#34
 1,4-Difluorobenzene
 Concen: 50.00 ug/l
 RT: 6.87 min Scan# 1030
 Delta R.T. -0.00 min
 Lab File: VX003554.D
 Acq: 21 Jul 2018 14:54

Instrument :
 MSVOA_X
 ClientSampleId :
 RE103D1-071218DL

Tot Ion:114 Resp: 413231
 Ion Ratio Lower Upper
 114 100
 63 19.2 0.0 41.4
 88 14.7 0.0 30.0

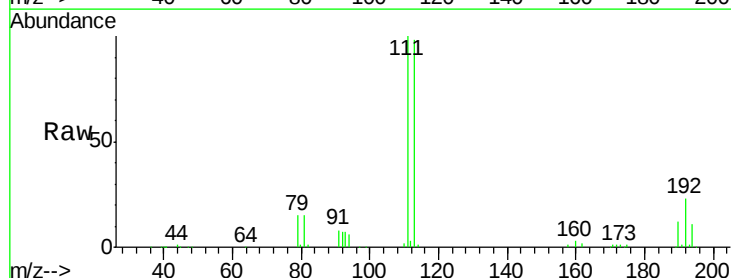


Abundance Ion 113.90 (113.60 to 114.60): V
 Ion 63.00 (62.70 to 63.70): VX0
 Ion 87.90 (87.60 to 88.60): VX0

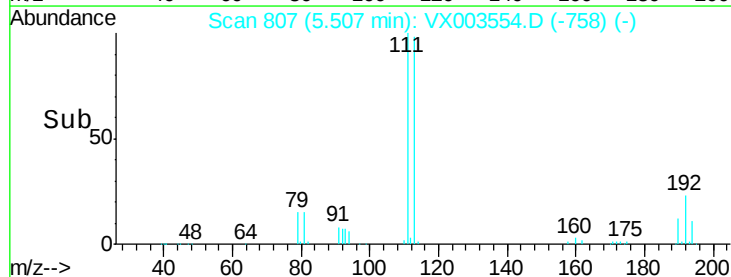
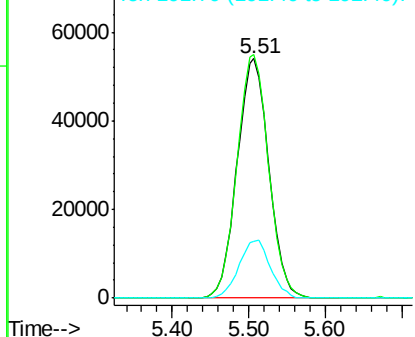


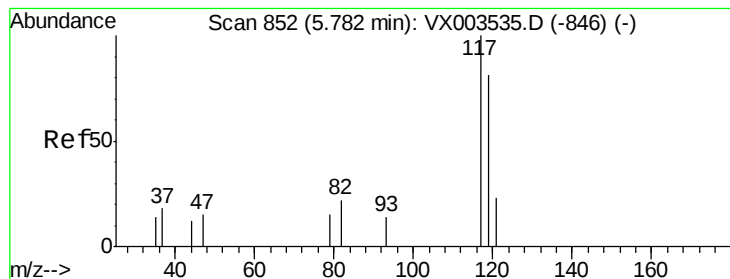
#35
 Dibromofluoromethane
 Concen: 49.46 ug/l
 RT: 5.51 min Scan# 807
 Delta R.T. 0.00 min
 Lab File: VX003554.D
 Acq: 21 Jul 2018 14:54

Tgt Ion:113 Resp: 155679
 Ion Ratio Lower Upper
 113 100
 111 101.1 81.4 122.0
 192 23.8 19.1 28.7



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





#38

Carbon Tetrachloride

Concen: 5.35 ug/l

RT: 5.67 min Scan# 834

Delta R.T. -0.11 min

Lab File: VX003554.D

Acq: 21 Jul 2018 14:54

Instrument :

MSVOA_X

ClientSampleId :

RE103D1-071218DL

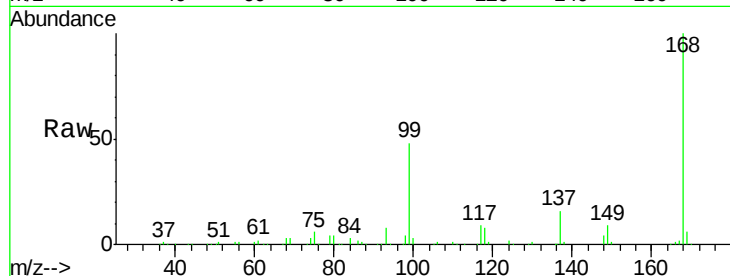
Tot Ion:117 Resp: 23419

Ion Ratio Lower Upper

117 100

119 5.7 77.4 116.0#

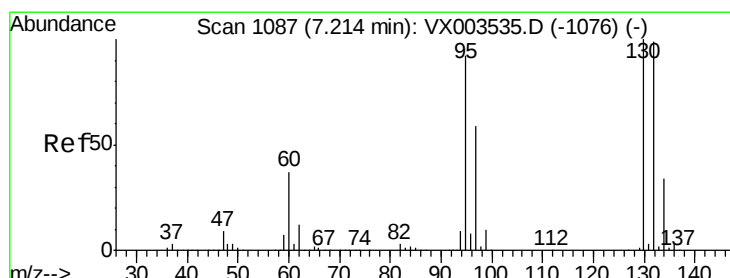
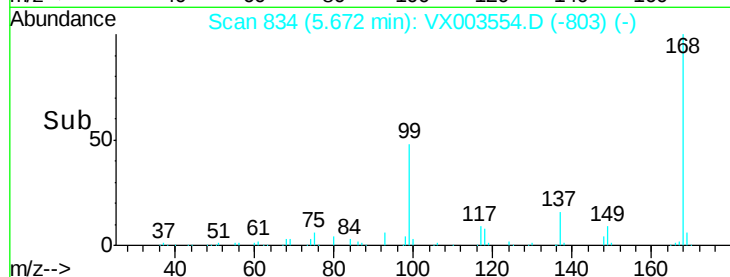
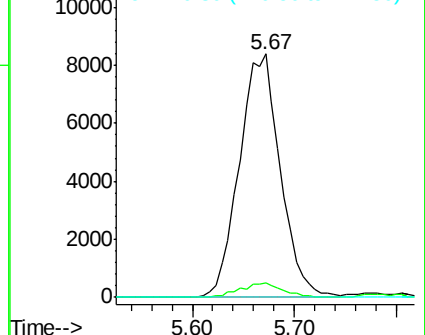
121 0.0 24.4 36.6#



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



#44

Trichloroethene

Concen: 42.76 ug/l

RT: 7.21 min Scan# 1087

Delta R.T. 0.00 min

Lab File: VX003554.D

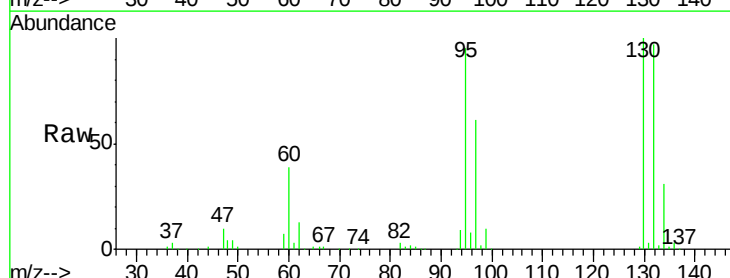
Acq: 21 Jul 2018 14:54

Tgt Ion:130 Resp: 171764

Ion Ratio Lower Upper

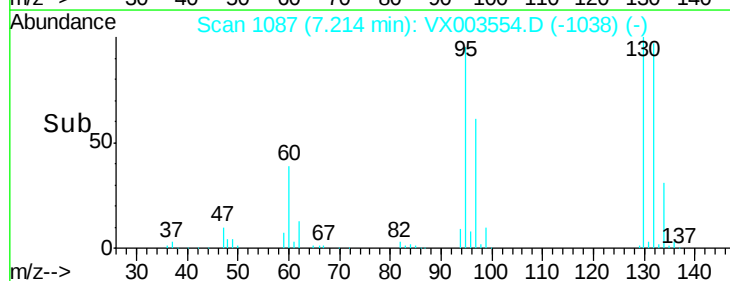
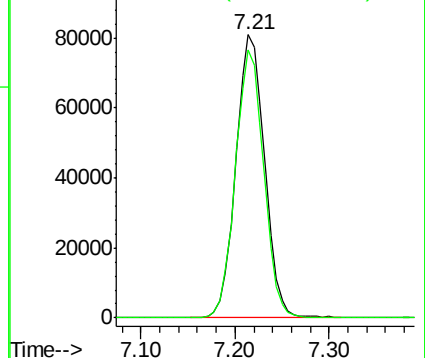
130 100

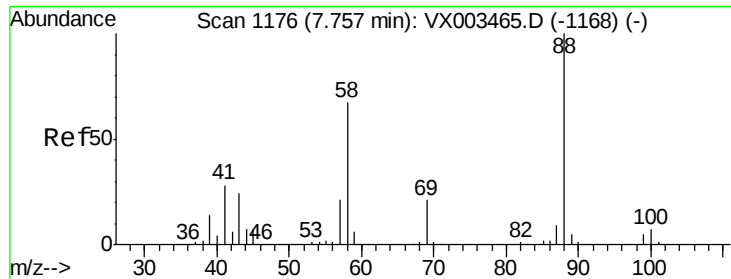
95 94.8 0.0 185.4



Abundance Ion 129.80 (129.50 to 130.50): V

Ion 94.90 (94.60 to 95.60): VX0

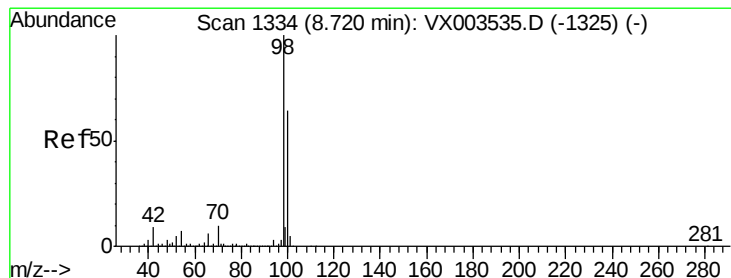
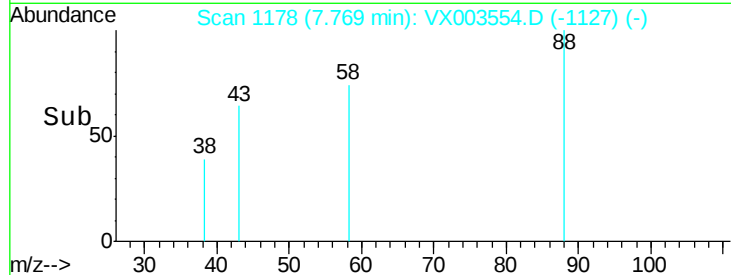
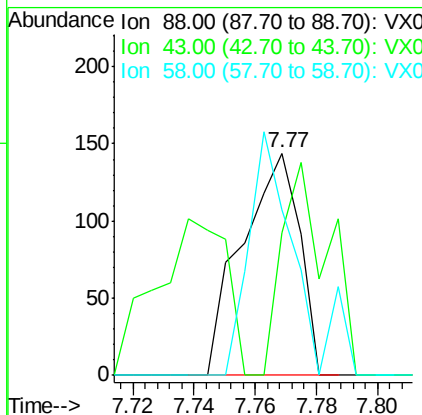
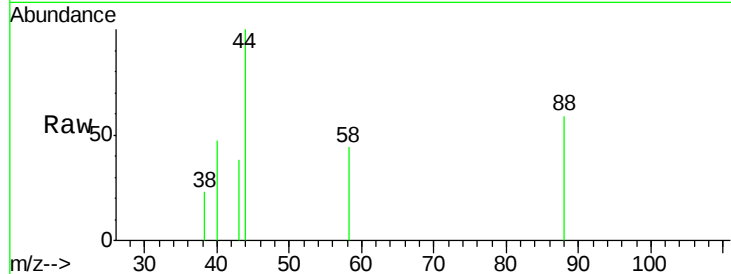




#49
 1,4-Dioxane
 Concen: 2.44 ug/l
 RT: 7.77 min Scan# 1178
 Delta R.T. 0.01 min
 Lab File: VX003554.D
 Acq: 21 Jul 2018 14:54

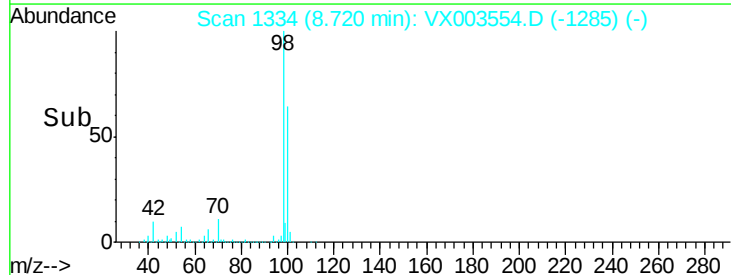
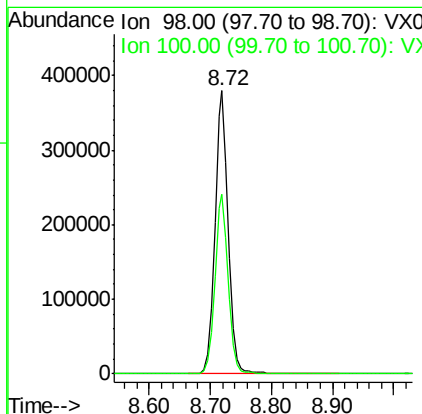
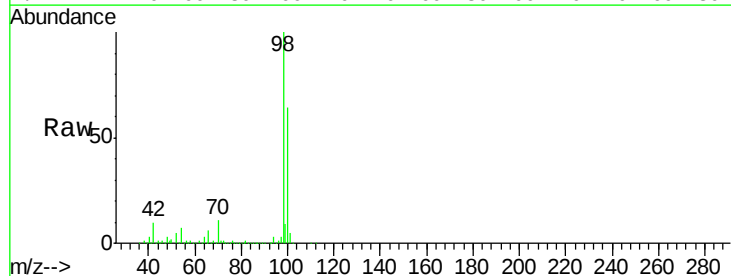
Instrument :
 MSVOA_X
 ClientSampleId :
 RE103D1-071218DL

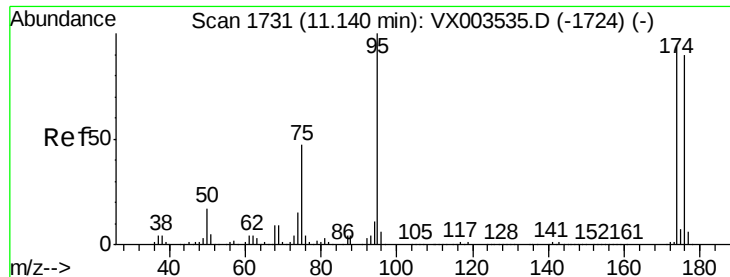
Tot Ion: 88 Resp: 187
 Ion Ratio Lower Upper
 88 100
 43 77.0 29.8 44.6#
 58 89.3 57.1 85.7#



#50
 Toluene-d8
 Concen: 49.61 ug/l
 RT: 8.72 min Scan# 1334
 Delta R.T. 0.00 min
 Lab File: VX003554.D
 Acq: 21 Jul 2018 14:54

Tgt Ion: 98 Resp: 586918
 Ion Ratio Lower Upper
 98 100
 100 64.0 50.9 76.3

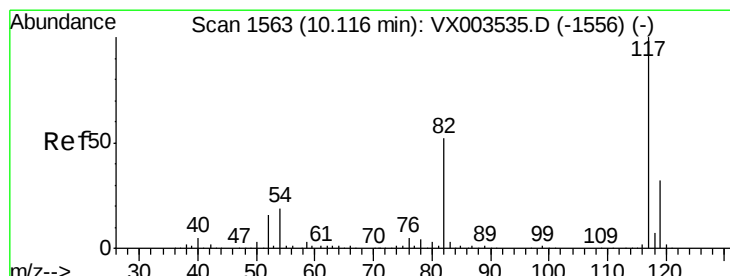
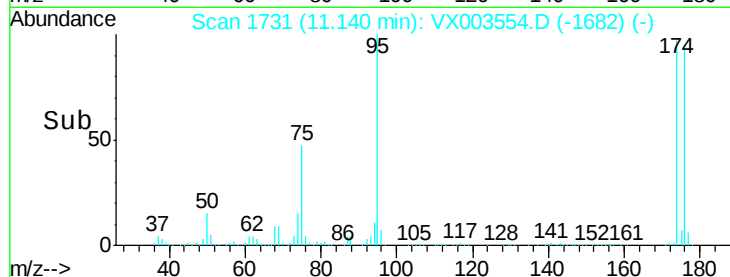
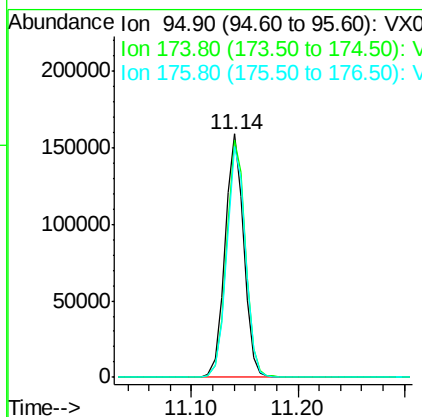
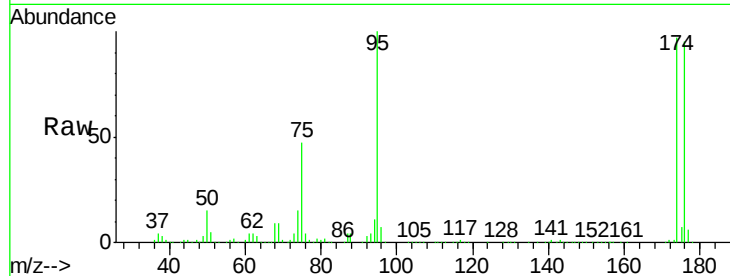




#62
4-Bromofluorobenzene
Concen: 45.19 ug/l
RT: 11.14 min Scan# 1731
Delta R.T. 0.00 min
Lab File: VX003554.D
Acq: 21 Jul 2018 14:54

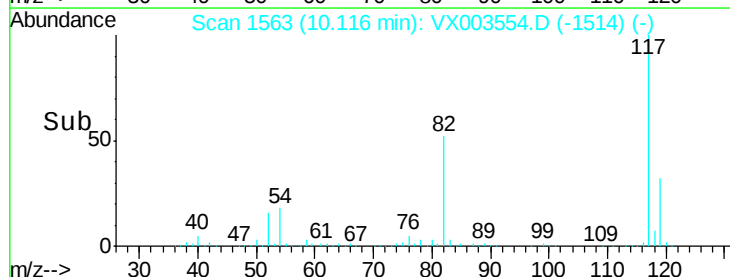
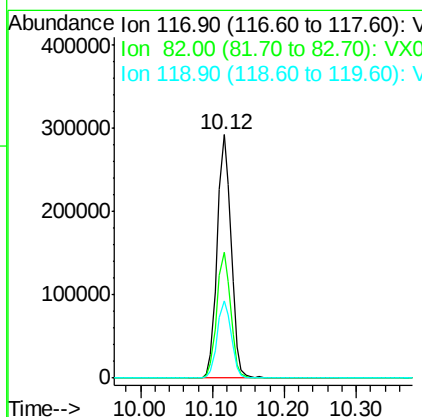
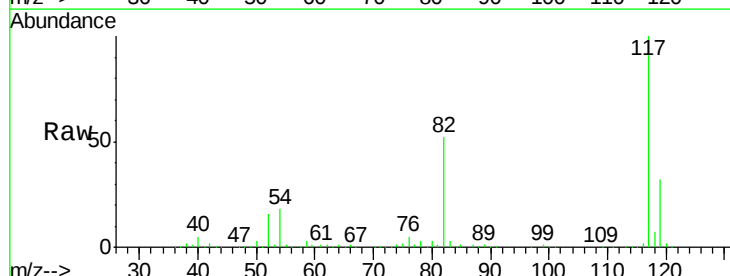
Instrument :
MSVOA_X
ClientSampleId :
RE103D1-071218DL

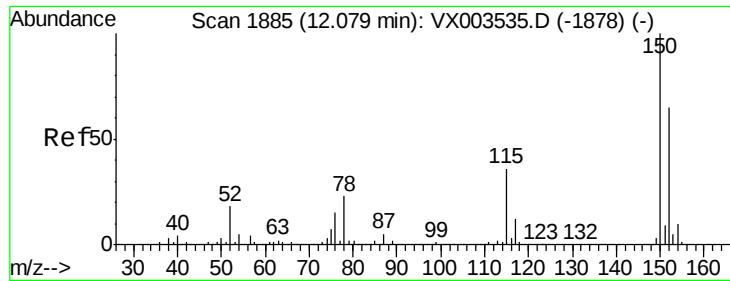
Tot Ion: 95 Resp: 195107
Ion Ratio Lower Upper
95 100
174 99.3 0.0 187.4
176 95.9 0.0 181.0



#63
Chlorobenzene-d5
Concen: 50.00 ug/l
RT: 10.12 min Scan# 1563
Delta R.T. 0.00 min
Lab File: VX003554.D
Acq: 21 Jul 2018 14:54

Tgt Ion: 117 Resp: 390638
Ion Ratio Lower Upper
117 100
82 51.6 45.0 67.4
119 31.6 25.8 38.6





#72

1,4-Dichlorobenzene-d4

Concen: 50.00 ug/l

RT: 12.09 min Scan# 1886

Delta R.T. 0.01 min

Lab File: VX003554.D

Acq: 21 Jul 2018 14:54

Instrument :

MSVOA_X

ClientSampleId :

RE103D1-071218DL

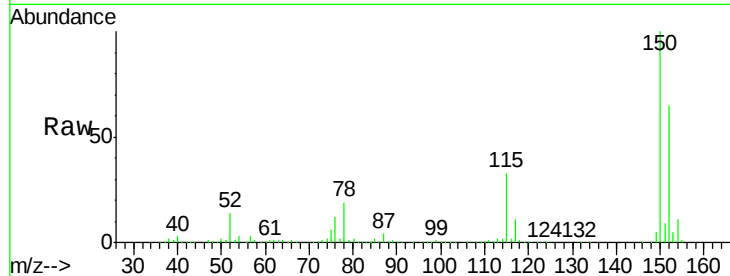
Tot Ion:152 Resp: 211205

Ion Ratio Lower Upper

152 100

115 53.7 40.1 120.2

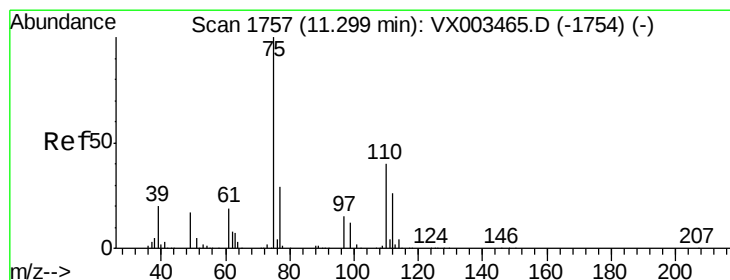
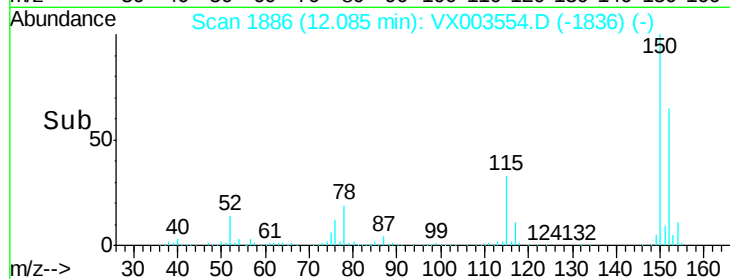
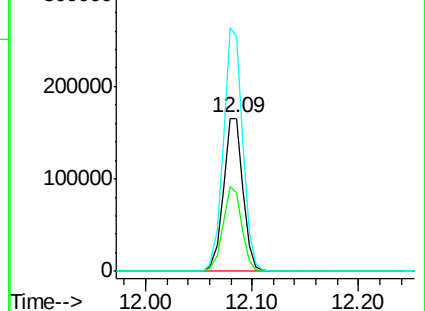
150 157.4 0.0 347.2



Abundance Ion 151.90 (151.60 to 152.60): V

Ion 114.90 (114.60 to 115.60): V

Ion 149.90 (149.60 to 150.60): V



#76

1,2,3-Trichloropropane

Concen: 23.66 ug/l

RT: 11.14 min Scan# 1731

Delta R.T. -0.16 min

Lab File: VX003554.D

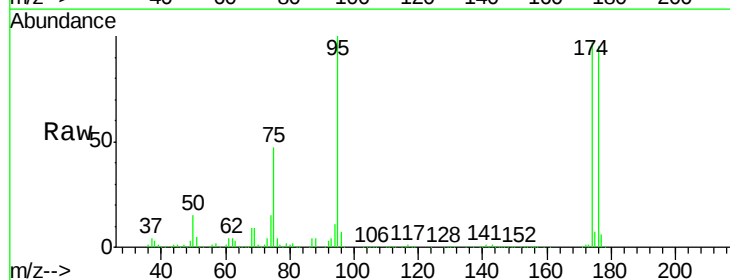
Acq: 21 Jul 2018 14:54

Tgt Ion: 75 Resp: 89789

Ion Ratio Lower Upper

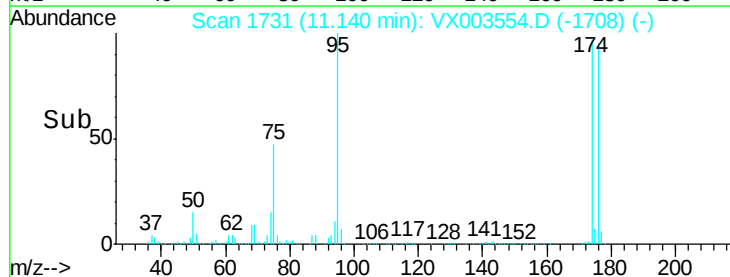
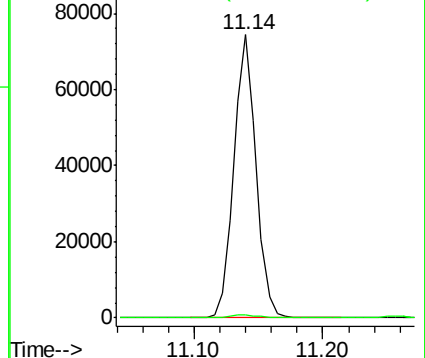
75 100

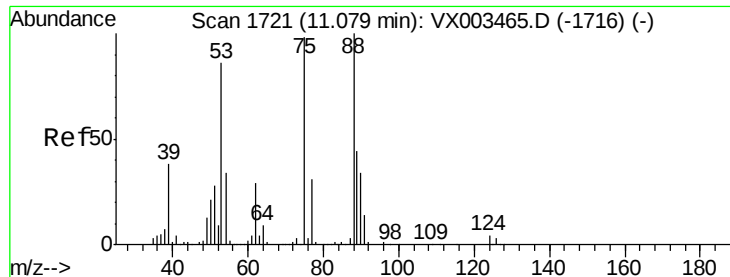
77 1.3 22.8 68.3#



Abundance Ion 74.90 (74.60 to 75.60): VX0

Ion 77.00 (76.70 to 77.70): VX0





#81

trans-1,4-Dichloro-2-butene

Concen: 66.40 ug/l

RT: 11.14 min Scan# 1731

Delta R.T. 0.06 min

Lab File: VX003554.D

Acq: 21 Jul 2018 14:54

Instrument :

MSVOA_X

ClientSampleId :

RE103D1-071218DL

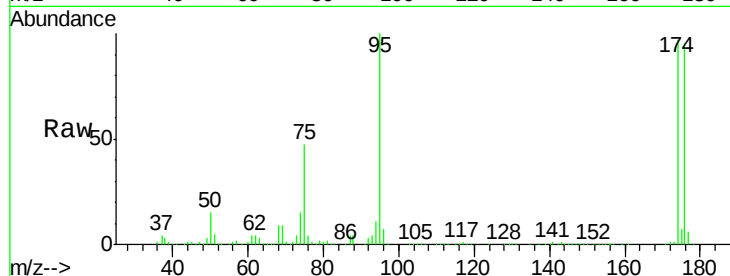
Tot Ion: 75 Resp: 89789

Ion Ratio Lower Upper

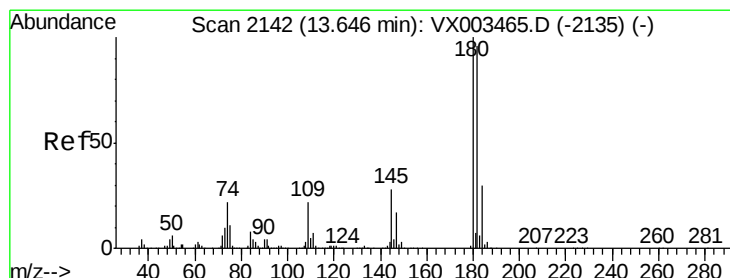
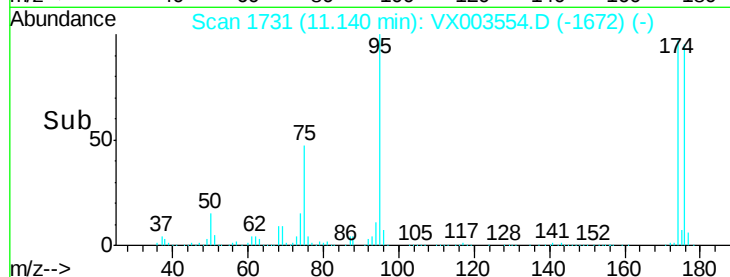
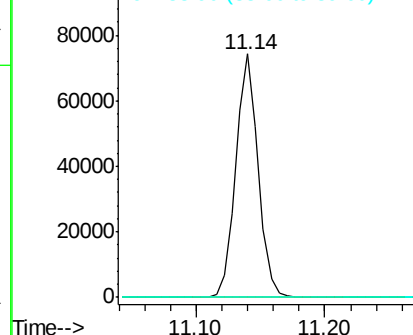
75 100

53 0.1 86.8 130.2#

89 0.0 38.2 57.2#



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



#93

1,2,4-Trichlorobenzene

Concen: 0.26 ug/l

RT: 13.65 min Scan# 2143

Delta R.T. 0.01 min

Lab File: VX003554.D

Acq: 21 Jul 2018 14:54

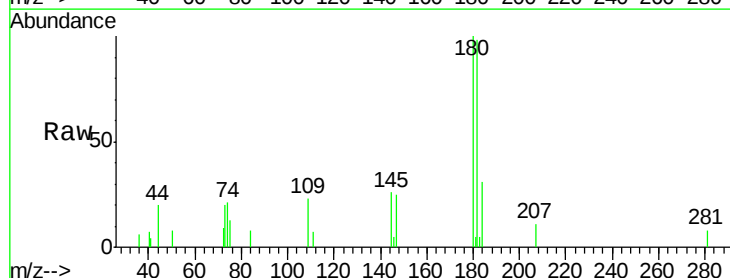
Tgt Ion: 180 Resp: 1478

Ion Ratio Lower Upper

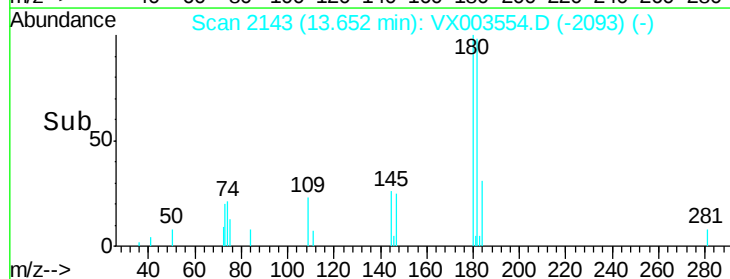
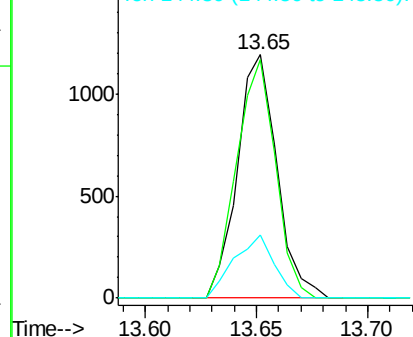
180 100

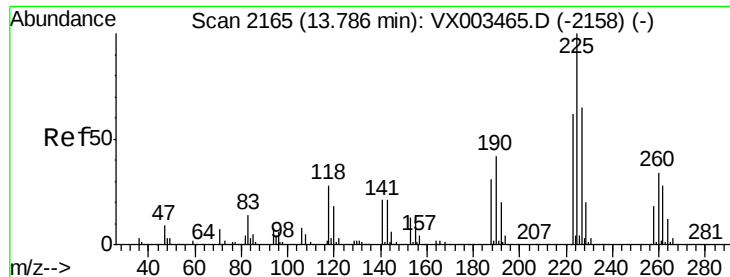
182 96.1 47.7 143.1

145 26.0 14.1 42.4



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





#94

Hexachlorobutadiene

Concen: 0.28 ug/l

RT: 13.79 min Scan# 2165

Delta R.T. 0.00 min

Lab File: VX003554.D

Acq: 21 Jul 2018 14:54

Instrument :

MSVOA_X

ClientSampleId :

RE103D1-071218DL

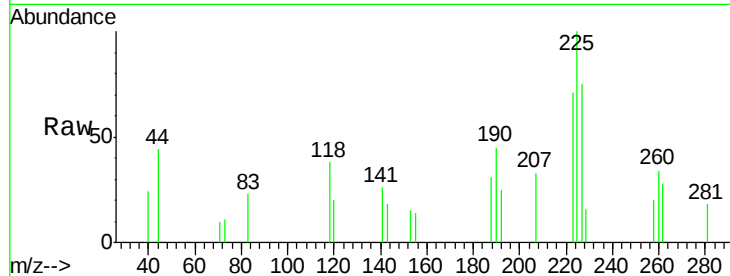
Tot Ion:225 Resp: 744

Ion Ratio Lower Upper

225 100

223 56.7 31.6 95.0

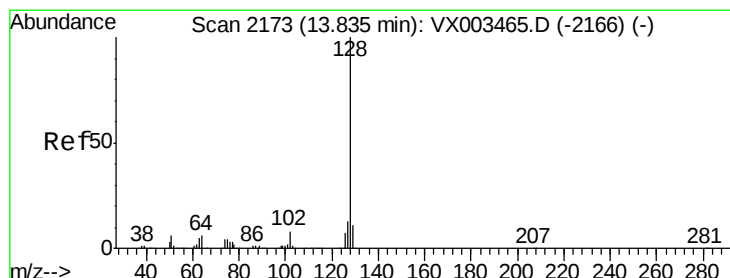
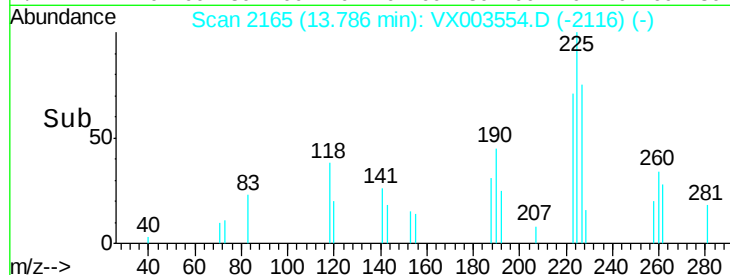
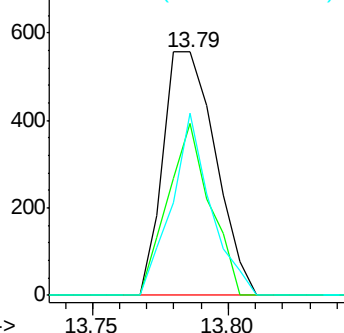
227 55.6 32.4 97.2



Abundance Ion 224.70 (224.40 to 225.40): V

Ion 222.70 (222.40 to 223.40): V

Ion 226.70 (226.40 to 227.40): V



#95

Naphthalene

Concen: 0.22 ug/l

RT: 13.84 min Scan# 2174

Delta R.T. 0.01 min

Lab File: VX003554.D

Acq: 21 Jul 2018 14:54

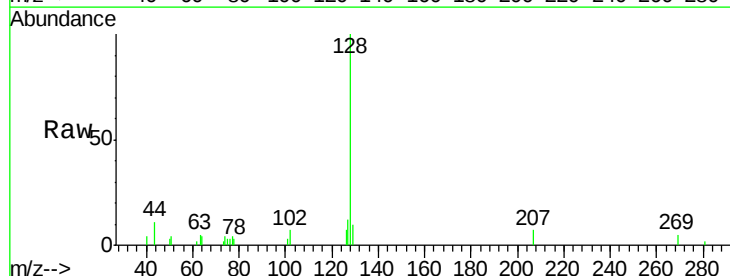
Tgt Ion:128 Resp: 3197

Ion Ratio Lower Upper

128 100

127 12.8 10.4 15.6

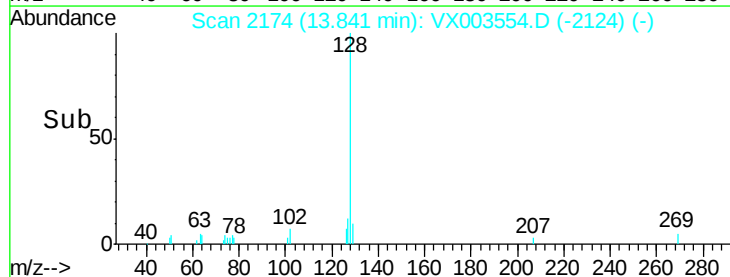
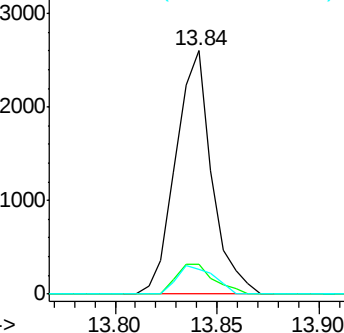
129 11.7 8.6 13.0

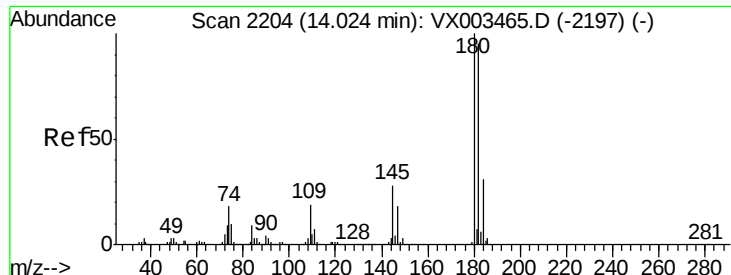


Abundance Ion 128.00 (127.70 to 128.70): V

Ion 127.00 (126.70 to 127.70): V

Ion 129.00 (128.70 to 129.70): V

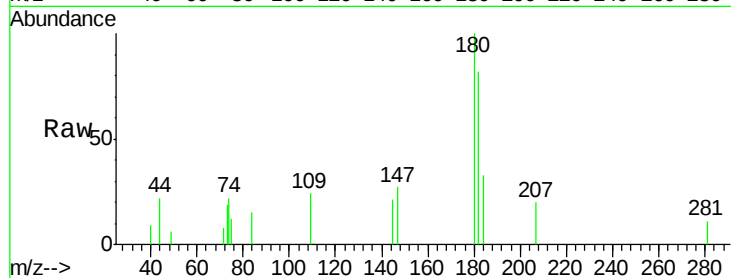




#96
 1,2,3-Trichlorobenzene
 Concen: 0.24 ug/l
 RT: 14.02 min Scan# 2204
 Delta R.T. -0.00 min
 Lab File: VX003554.D
 Acq: 21 Jul 2018 14:54

Instrument :
 MSVOA_X
 ClientSampleId :
 RE103D1-071218DL

Tot Ion	Ratio	Lower	Upper
180	100		
182	93.9	48.0	144.0
145	26.9	14.8	44.3



Abundance

Ion 179.80 (179.50 to 180.50): V

Ion 181.80 (181.50 to 182.50): V

Ion 144.90 (144.60 to 145.60): V

