

Data Path : Z:\VOASRV\HPCHEM1\MSVOA X\DATA\VX101718\
 Data File : VX005409.D
 Acq On : 18 Oct 2018 00:14
 Operator : JC/MD
 Sample : J5569-02
 Misc : 5.0mL/MSVOA X/WATER
 ALS Vial : 35 Sample Multiplier: 1

Instrument :
 MSVOA_X
 ClientSampleId :
 RLF-GW-9S

Quant Time: Oct 18 11:04:09 2018
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_X\METHOD\82X101218W.M
 Quant Title : SW846 8260
 QLast Update : Fri Oct 12 11:28:43 2018
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	5.67	168	275056	50.00	ug/l	0.00
34) 1,4-Difluorobenzene	6.86	114	394563	50.00	ug/l	0.00
63) Chlorobenzene-d5	10.12	117	354589	50.00	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	12.08	152	174392	50.00	ug/l	0.00

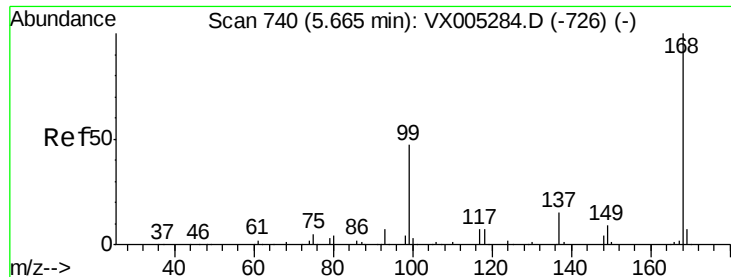
System Monitoring Compounds

33) 1,2-Dichloroethane-d4	6.07	65	154354	50.56	ug/l	0.00
Spiked Amount	50.000		Recovery	=	101.12%	
35) Dibromofluoromethane	5.50	113	125657	48.08	ug/l	0.00
Spiked Amount	50.000		Recovery	=	96.16%	
50) Toluene-d8	8.71	98	471554	52.56	ug/l	0.00
Spiked Amount	50.000		Recovery	=	105.12%	
62) 4-Bromofluorobenzene	11.14	95	155705	46.20	ug/l	0.00
Spiked Amount	50.000		Recovery	=	92.40%	

Target Compounds

					Qvalue	
2) Dichlorodifluoromethane	1.20	85	1071	0.498	ug/l	98
3) Chloromethane	1.32	50	633	0.203	ug/l	97
5) Bromomethane	1.64	94	590	0.911	ug/l	83
6) Chloroethane	1.86	64	666	0.657	ug/l #	84
8) Diethyl Ether	2.19	74	11091	6.165	ug/l	93
10) Methyl Iodide	2.51	142	214	2.565	ug/l #	52
11) Tert butyl alcohol	3.03	59	2568	2.982	ug/l #	72
13) Acrolein	2.30	56	124	Below Cal		93
16) Acetone	2.44	43	3450	1.955	ug/l	97
20) Methylene Chloride	2.86	84	630	Below Cal	#	87
29) Tetrahydrofuran	5.17	42	1639	0.995	ug/l #	60
31) Cyclohexane	5.67	56	4757	1.134	ug/l #	1
36) 1,1-Dichloropropene	5.67	75	18004	4.711	ug/l #	49
38) Carbon Tetrachloride	5.67	117	24118	6.281	ug/l #	15
44) Trichloroethene	7.23	130	179	Below Cal		4
65) Chlorobenzene	10.14	112	6147	0.815	ug/l	92
76) 1,2,3-Trichloropropane	11.13	75	76337	22.567	ug/l #	37
81) trans-1,4-Dichloro-2-buten	11.13	75	76337	68.569	ug/l #	10
88) 1,4-Dichlorobenzene	12.10	146	2924	0.516	ug/l #	44

(#) = 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: VX005409.D

Acq: 18 Oct 2018 00:14

Instrument :

MSVOA_X

ClientSampled :

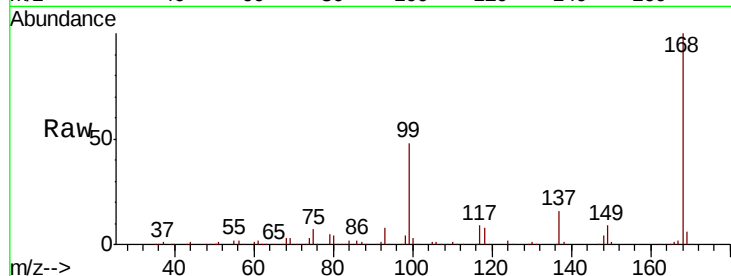
RLF-GW-9S

Tot Ion:168 Resp: 275056

Ion Ratio Lower Upper

168 100

99 48.5 39.9 59.9



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VX0

5.67

100000

80000

60000

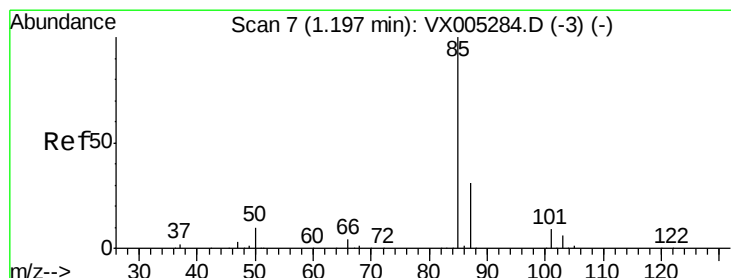
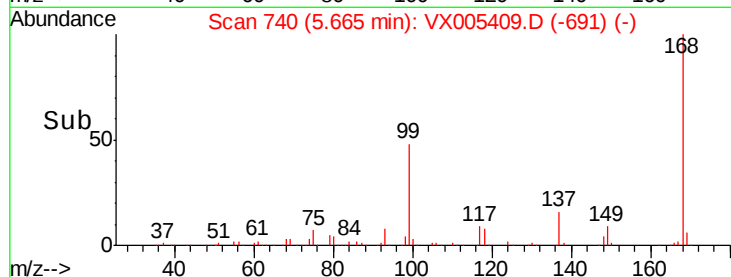
40000

20000

0

Time-->

5.50 5.60 5.70 5.80 5.90



#2

Dichlorodifluoromethane

Concen: 0.498 ug/l

RT: 1.20 min Scan# 8

Delta R.T. 0.01 min

Lab File: VX005409.D

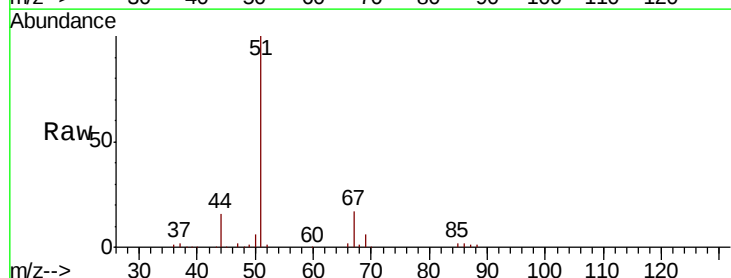
Acq: 18 Oct 2018 00:14

Tgt Ion: 85 Resp: 1071

Ion Ratio Lower Upper

85 100

87 32.7 17.0 50.9



Abundance Ion 84.90 (84.60 to 85.60): VX0

Ion 86.90 (86.60 to 87.60): VX0

1.20

1200

1000

800

600

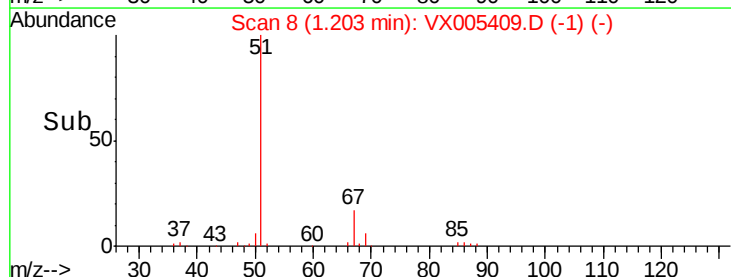
400

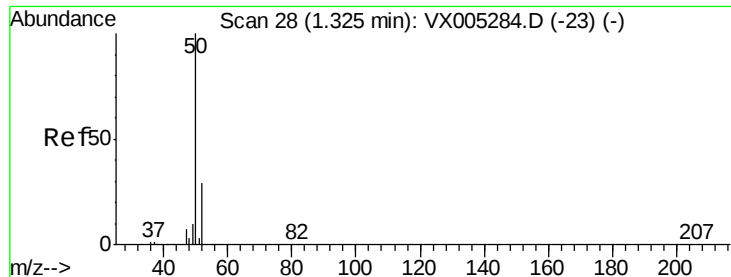
200

0

Time-->

1.15 1.20 1.25





#3

Chloromethane

Concen: 0.203 ug/l

RT: 1.32 min Scan# 28

Delta R.T. 0.00 min

Lab File: VX005409.D

Acq: 18 Oct 2018 00:14

Instrument :

MSVOA_X

ClientSampleId :

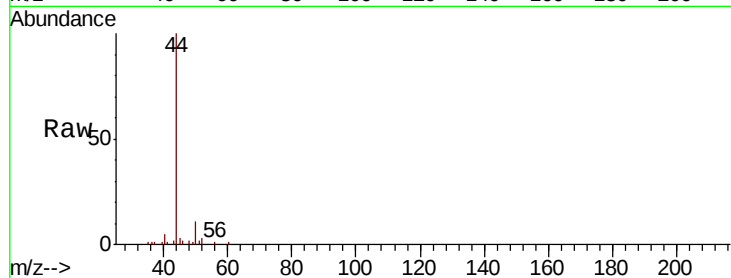
RLF-GW-9S

Tot Ion: 50 Resp: 633

Ion Ratio Lower Upper

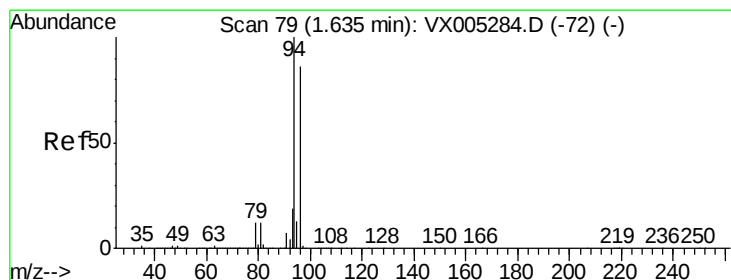
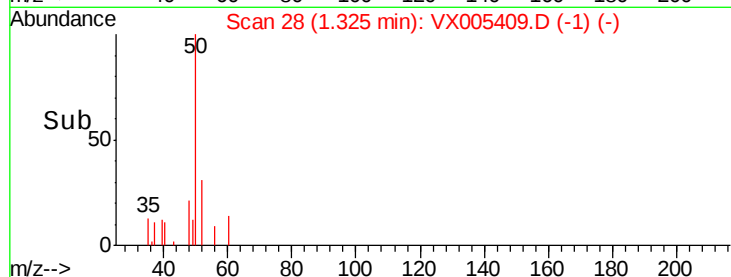
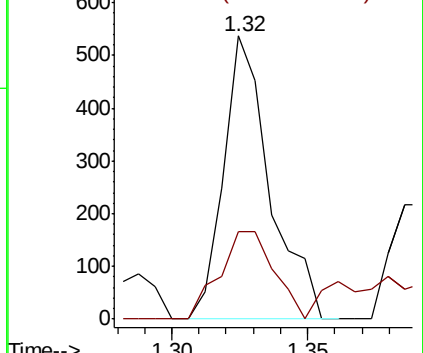
50 100

52 30.9 26.2 39.2



Abundance Ion 49.90 (49.60 to 50.60): VX0

Ion 51.90 (51.60 to 52.60): VX0



#5

Bromomethane

Concen: 0.911 ug/l

RT: 1.64 min Scan# 80

Delta R.T. 0.01 min

Lab File: VX005409.D

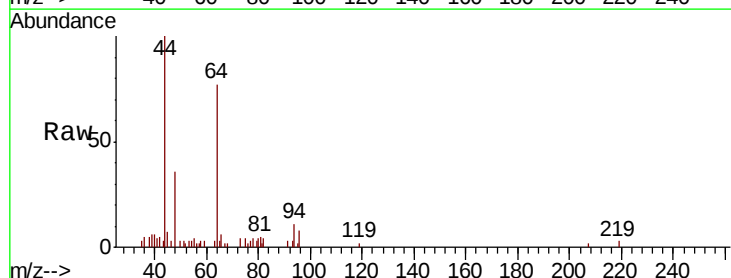
Acq: 18 Oct 2018 00:14

Tgt Ion: 94 Resp: 590

Ion Ratio Lower Upper

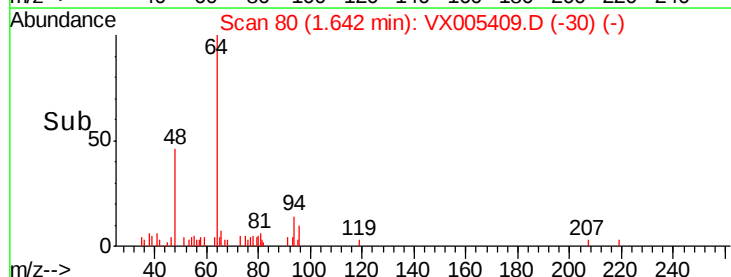
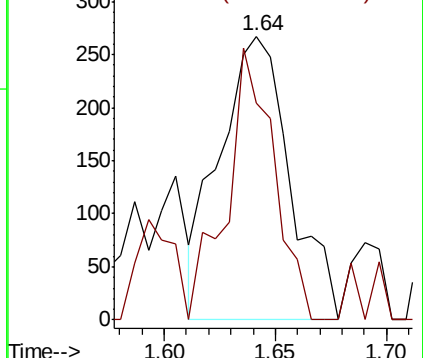
94 100

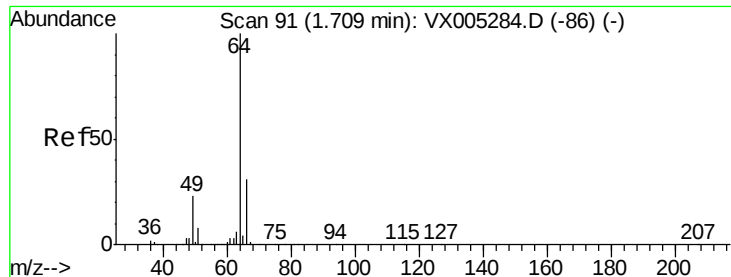
96 76.4 74.5 111.7



Abundance Ion 93.90 (93.60 to 94.60): VX0

Ion 95.90 (95.60 to 96.60): VX0





#6

Chloroethane

Concen: 0.657 ug/l

RT: 1.86 min Scan# 116

Delta R.T. 0.15 min

Lab File: VX005409.D

Acq: 18 Oct 2018 00:14

Instrument :

MSVOA_X

ClientSampleId :

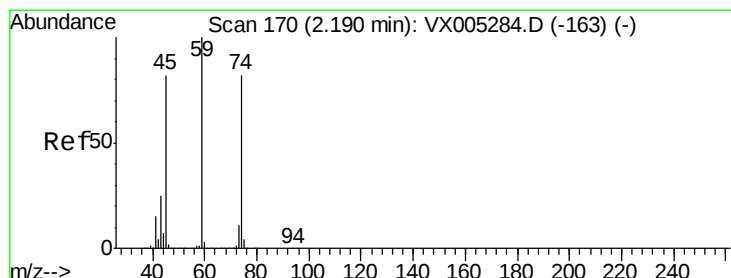
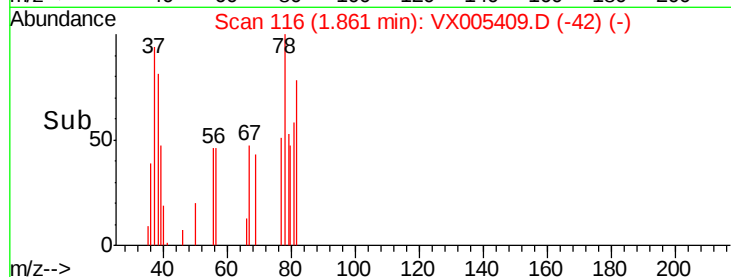
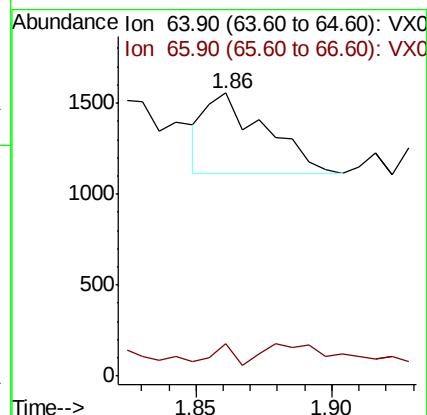
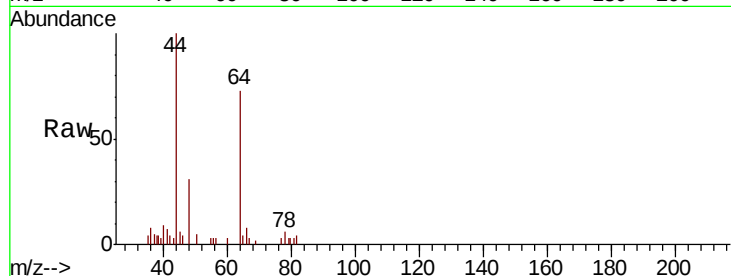
RLF-GW-9S

Tot Ion: 64 Resp: 666

Ion Ratio Lower Upper

64 100

66 21.8 24.6 36.8#



#8

Diethyl Ether

Concen: 6.165 ug/l

RT: 2.19 min Scan# 170

Delta R.T. 0.00 min

Lab File: VX005409.D

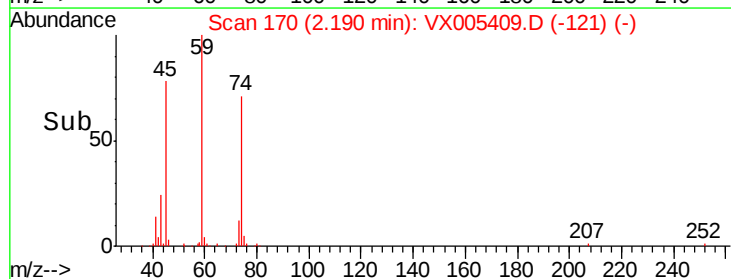
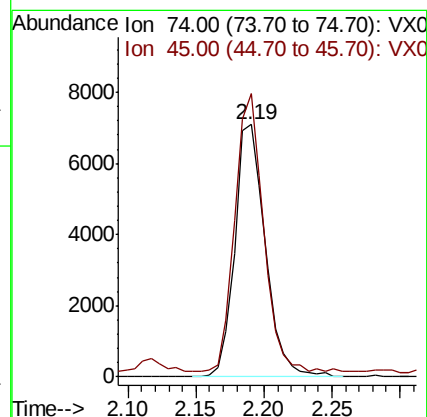
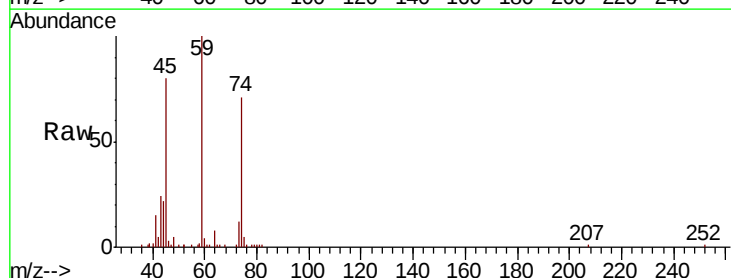
Acq: 18 Oct 2018 00:14

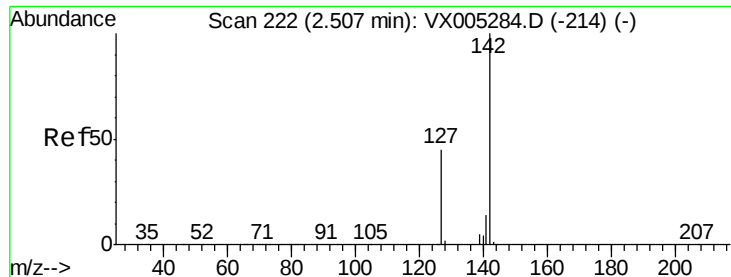
Tgt Ion: 74 Resp: 11091

Ion Ratio Lower Upper

74 100

45 103.2 48.3 144.8

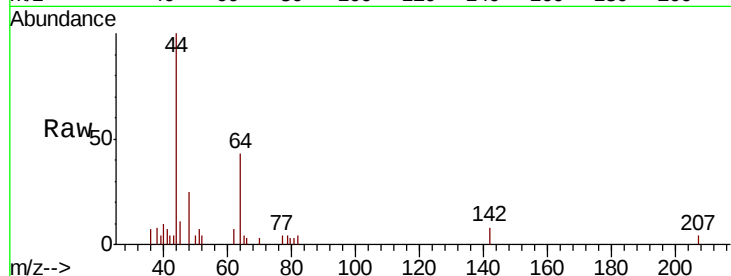




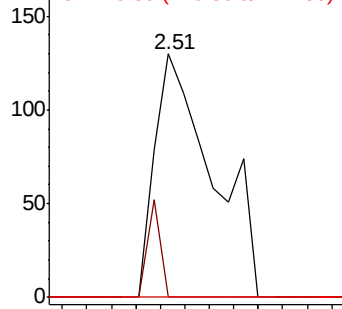
#10
Methvl Iodide
Concen: 2.565 ug/l
RT: 2.51 min Scan# 223
Delta R.T. 0.01 min
Lab File: VX005409.D
Acq: 18 Oct 2018 00:14

Instrument :
MSVOA_X
ClientSampleId :
RLF-GW-9S

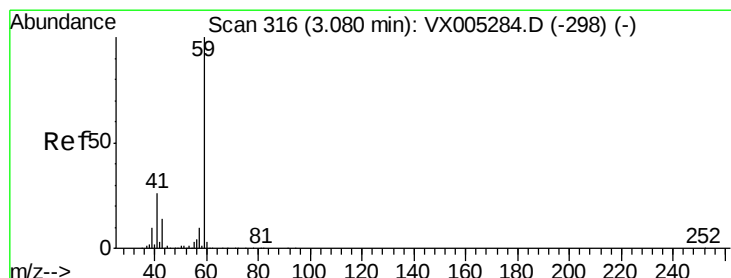
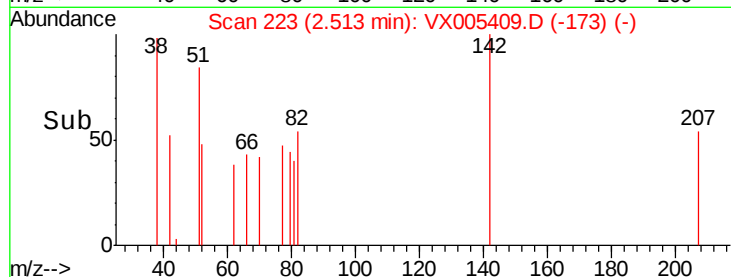
Tot Ion:142 Resp: 214
Ion Ratio Lower Upper
142 100
127 8.9 33.8 50.6#
141 0.0 11.4 17.0#



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

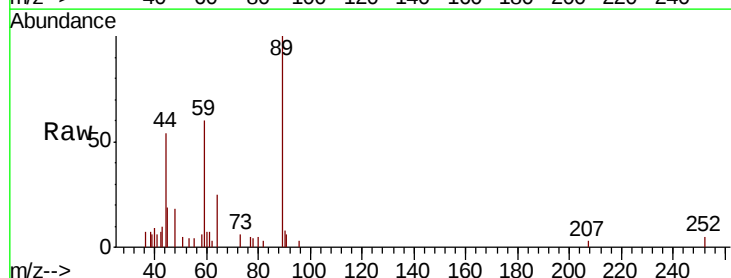


Time-->

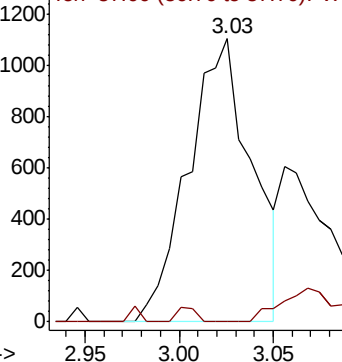


#11
Tert butyl alcohol
Concen: 2.982 ug/l
RT: 3.03 min Scan# 307
Delta R.T. -0.05 min
Lab File: VX005409.D
Acq: 18 Oct 2018 00:14

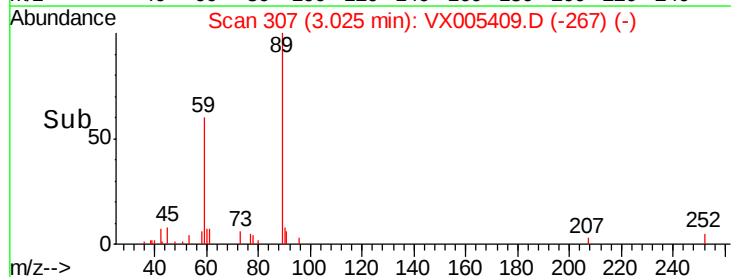
Tgt Ion: 59 Resp: 2568
Ion Ratio Lower Upper
59 100
57 0.0 8.2 12.4#

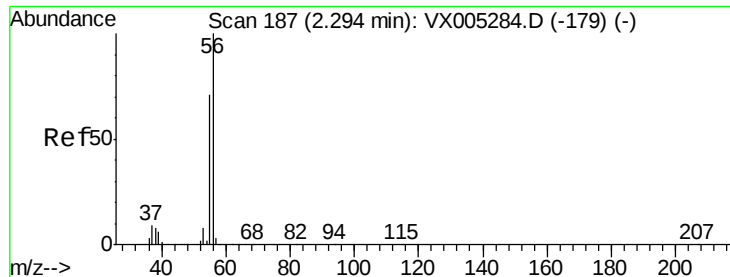


Abundance Ion 59.00 (58.70 to 59.70): VX0
Ion 57.00 (56.70 to 57.70): VX0



Time-->





#13

Acrolein

Concen: Below Cal

RT: 2.30 min Scan# 188

Delta R.T. 0.01 min

Lab File: VX005409.D

Acq: 18 Oct 2018 00:14

Instrument :

MSVOA_X

ClientSampled :

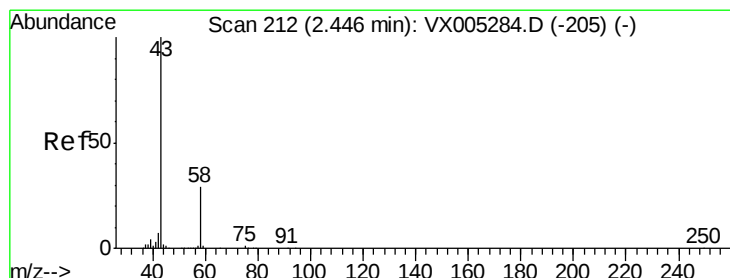
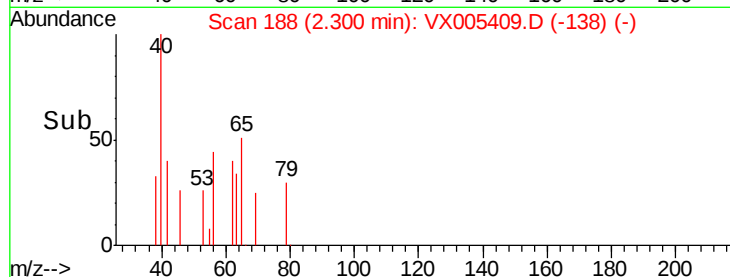
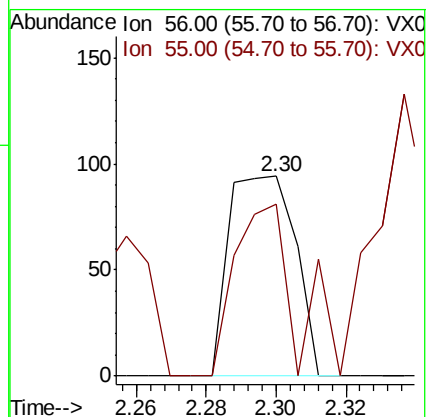
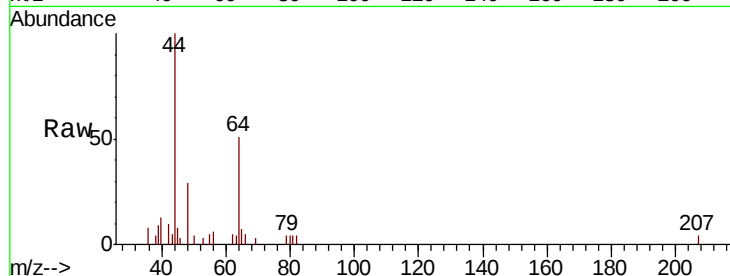
RLF-GW-9S

Tot Ion: 56 Resp: 124

Ion Ratio Lower Upper

56 100

55 62.9 54.7 82.1



#16

Acetone

Concen: 1.955 ug/l

RT: 2.44 min Scan# 211

Delta R.T. -0.01 min

Lab File: VX005409.D

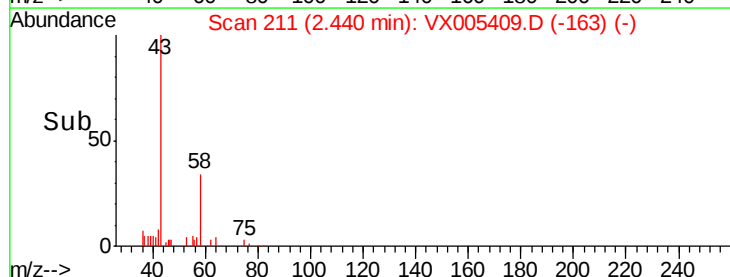
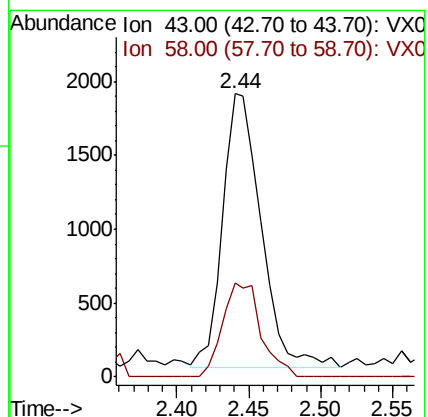
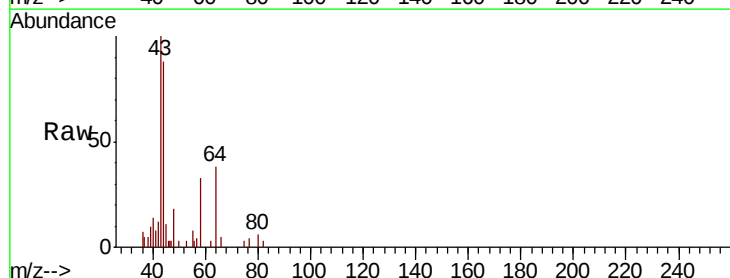
Acq: 18 Oct 2018 00:14

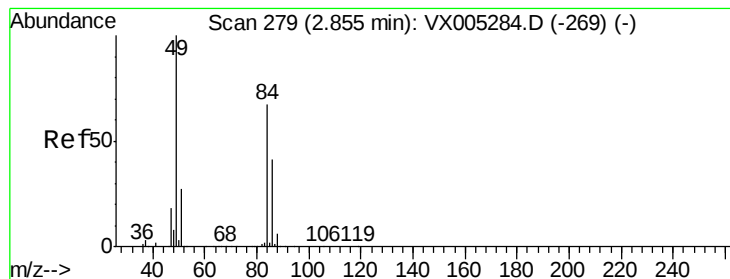
Tgt Ion: 43 Resp: 3450

Ion Ratio Lower Upper

43 100

58 34.4 26.2 39.4





#20

Methylene Chloride

Concen: Below Cal

RT: 2.86 min Scan# 280

Delta R.T. 0.01 min

Lab File: VX005409.D

Acq: 18 Oct 2018 00:14

Instrument :

MSVOA_X

ClientSampleId :

RLF-GW-9S

Tot Ion: 84 Resp: 630

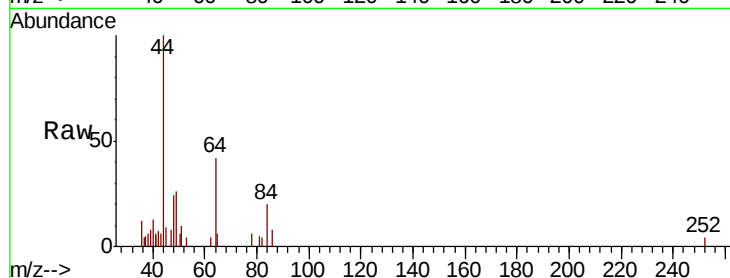
Ion Ratio Lower Upper

84 100

49 130.7 101.2 151.8

51 26.4 29.5 44.3#

86 41.9 52.3 78.5#

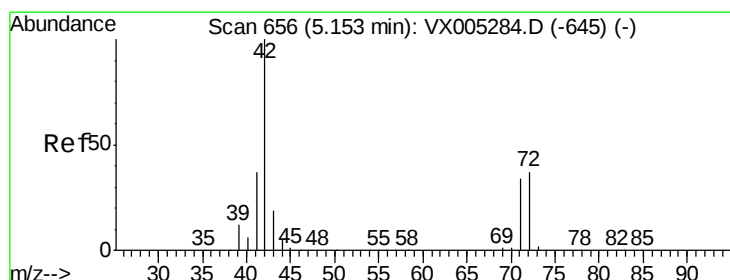
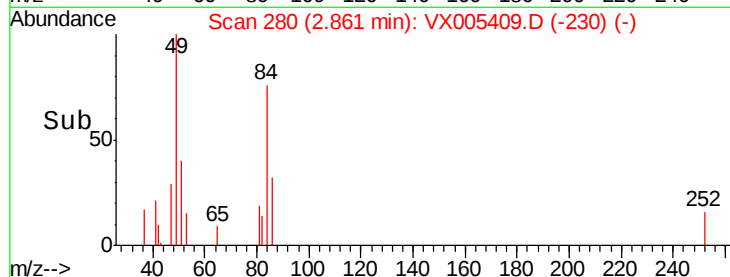
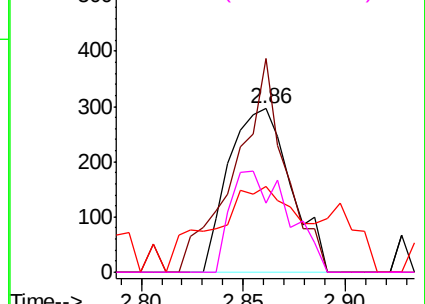


Abundance Ion 83.90 (83.60 to 84.60): VX0

Ion 48.90 (48.60 to 49.60): VX0

Ion 50.90 (50.60 to 51.60): VX0

Ion 85.90 (85.60 to 86.60): VX0



#29

Tetrahydrofuran

Concen: 0.995 ug/l

RT: 5.17 min Scan# 658

Delta R.T. 0.01 min

Lab File: VX005409.D

Acq: 18 Oct 2018 00:14

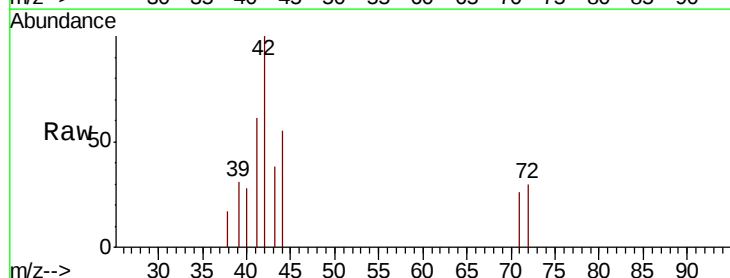
Tgt Ion: 42 Resp: 1639

Ion Ratio Lower Upper

42 100

72 18.1 37.4 56.0#

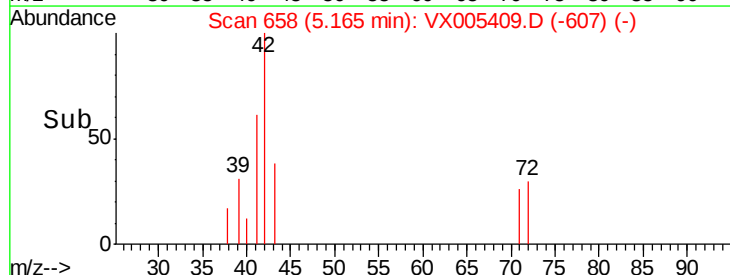
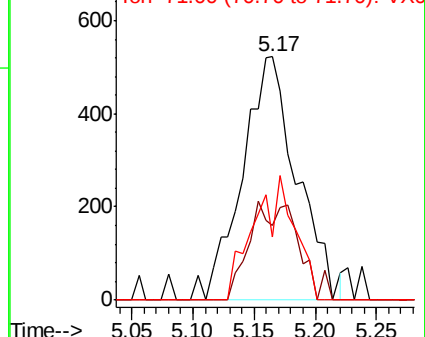
71 20.0 34.5 51.7#

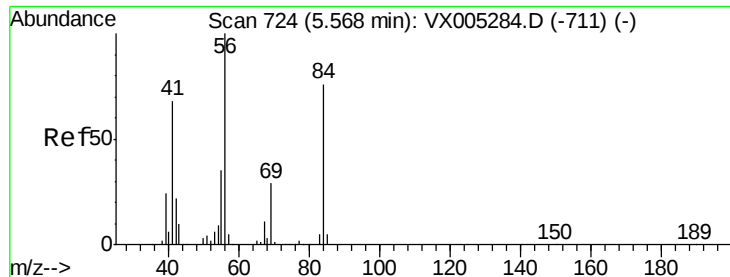


Abundance Ion 42.00 (41.70 to 42.70): VX0

Ion 72.00 (71.70 to 72.70): VX0

Ion 71.00 (70.70 to 71.70): VX0

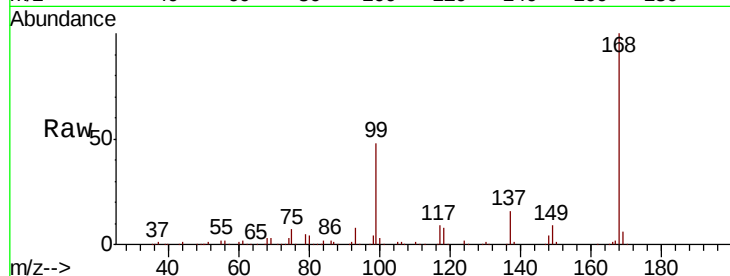




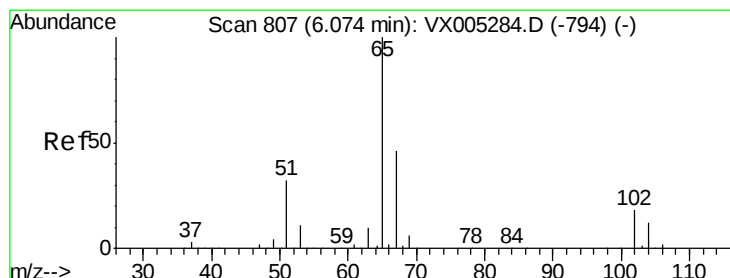
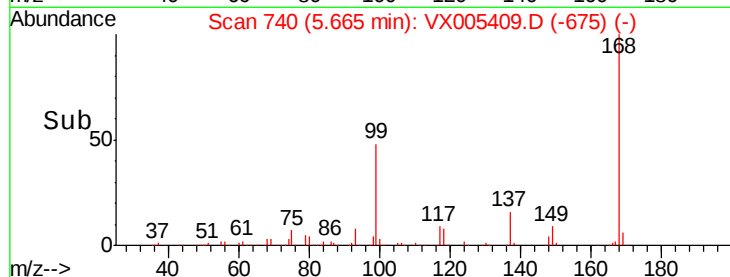
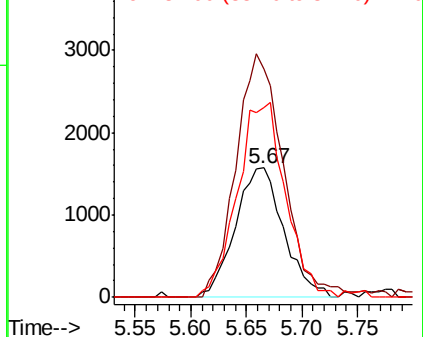
#31
Cyclohexane
Concen: 1.134 ug/l
RT: 5.67 min Scan# 740
Delta R.T. 0.10 min
Lab File: VX005409.D
Acq: 18 Oct 2018 00:14

Instrument :
MSVOA_X
ClientSampleId :
RLF-GW-9S

Tot Ion: 56 Resp: 4757
Ion Ratio Lower Upper
56 100
69 177.2 25.4 38.2#
84 147.5 71.4 107.2#

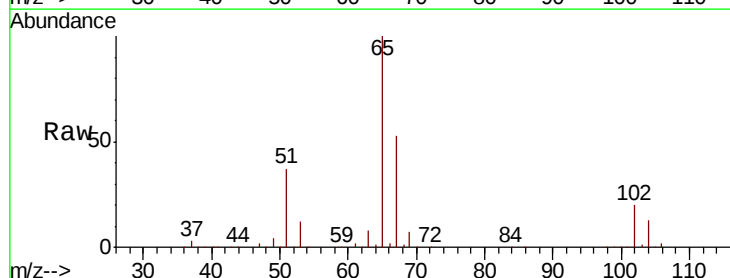


Abundance Ion 56.00 (55.70 to 56.70): VX0
Ion 69.00 (68.70 to 69.70): VX0
Ion 84.00 (83.70 to 84.70): VX0

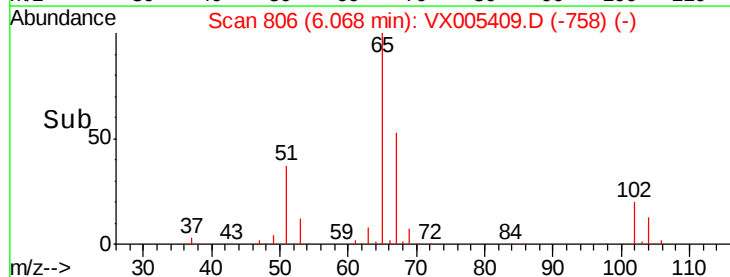
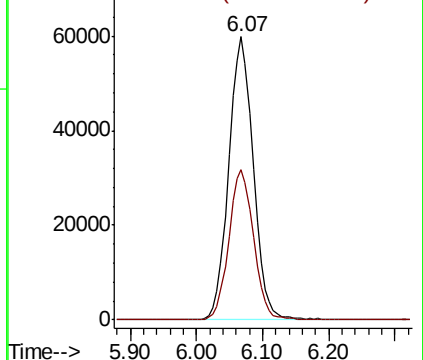


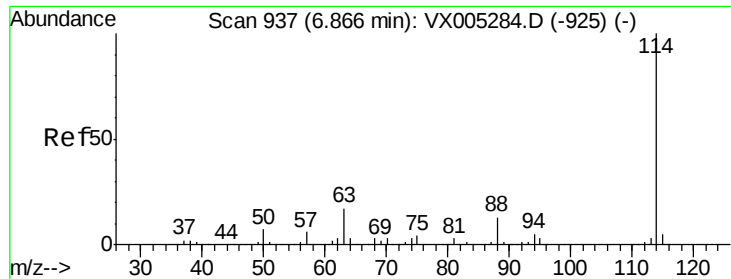
#33
1,2-Dichloroethane-d4
Concen: 50.563 ug/l
RT: 6.07 min Scan# 806
Delta R.T. -0.01 min
Lab File: VX005409.D
Acq: 18 Oct 2018 00:14

Tgt Ion: 65 Resp: 154354
Ion Ratio Lower Upper
65 100
67 53.5 0.0 106.8



Abundance Ion 64.90 (64.60 to 65.60): VX0
Ion 66.90 (66.60 to 67.60): VX0

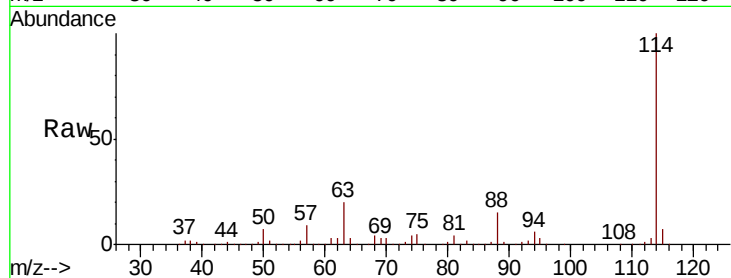




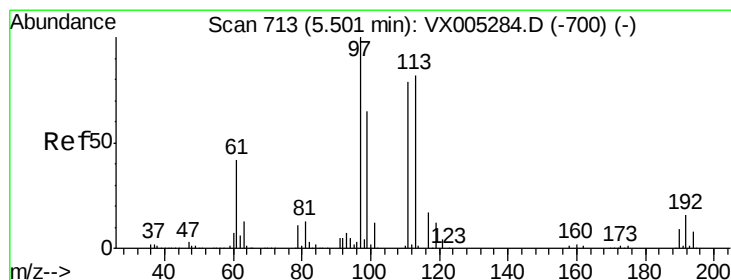
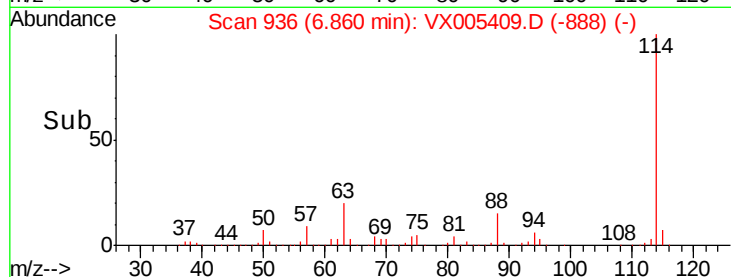
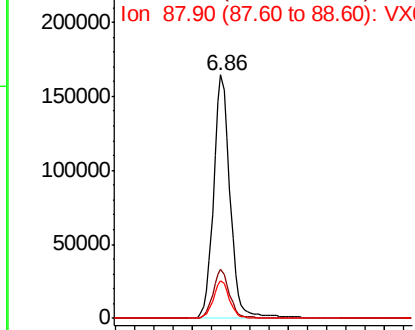
#34
 1,4-Difluorobenzene
 Concen: 50.000 ug/l
 RT: 6.86 min Scan# 936
 Delta R.T. -0.01 min
 Lab File: VX005409.D
 Acq: 18 Oct 2018 00:14

Instrument :
 MSVOA_X
 ClientSampleId :
 RLF-GW-9S

Tot Ion:114 Resp: 394563
 Ion Ratio Lower Upper
 114 100
 63 20.1 0.0 39.0
 88 15.4 0.0 30.4

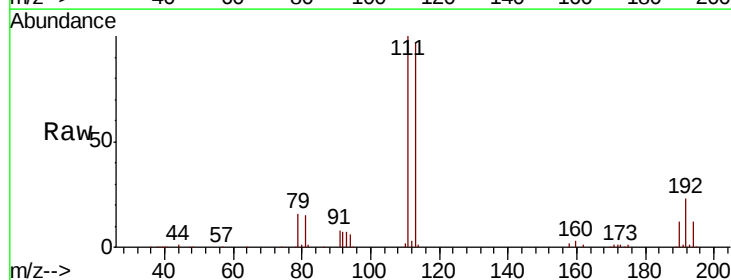


Abundance Ion 113.90 (113.60 to 114.60): V
 Ion 63.00 (62.70 to 63.70): VX0
 Ion 87.90 (87.60 to 88.60): VX0

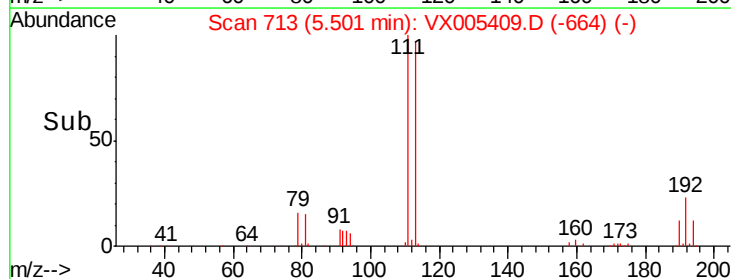
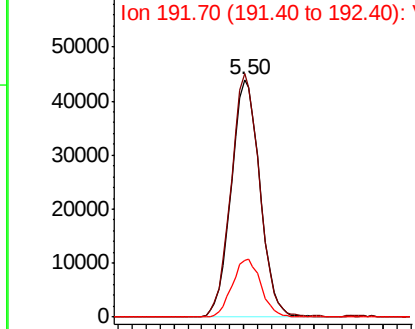


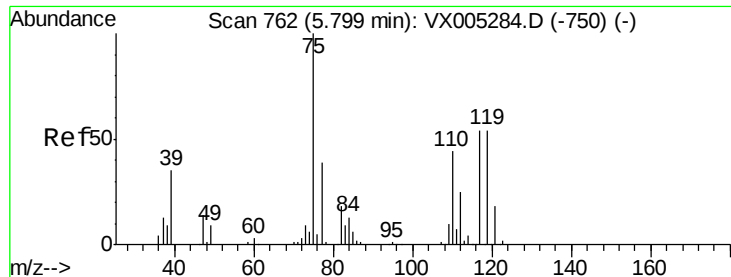
#35
 Dibromofluoromethane
 Concen: 48.084 ug/l
 RT: 5.50 min Scan# 713
 Delta R.T. 0.00 min
 Lab File: VX005409.D
 Acq: 18 Oct 2018 00:14

Tgt Ion:113 Resp: 125657
 Ion Ratio Lower Upper
 113 100
 111 101.2 82.4 123.6
 192 24.3 19.4 29.2



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





#36

1,1-Dichloropropene

Concen: 4.711 ug/l

RT: 5.67 min Scan# 740

Delta R.T. -0.13 min

Lab File: VX005409.D

Acq: 18 Oct 2018 00:14

Instrument :

MSVOA_X

ClientSampleId :

RLF-GW-9S

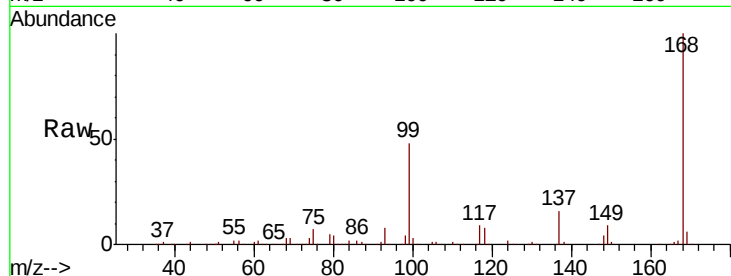
Tot Ion: 75 Resp: 18004

Ion Ratio Lower Upper

75 100

110 8.8 18.0 54.0#

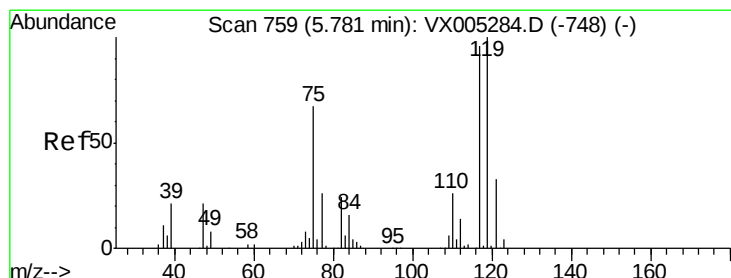
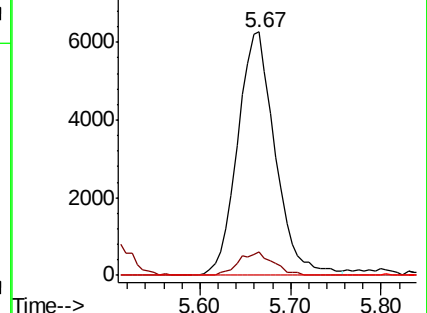
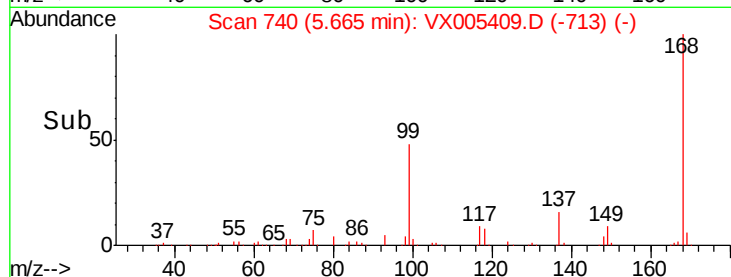
77 0.0 24.6 36.8#



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: 6.281 ug/l

RT: 5.67 min Scan# 740

Delta R.T. -0.12 min

Lab File: VX005409.D

Acq: 18 Oct 2018 00:14

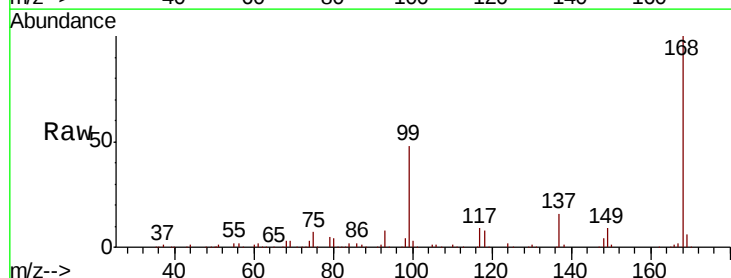
Tgt Ion: 117 Resp: 24118

Ion Ratio Lower Upper

117 100

119 5.3 78.8 118.2#

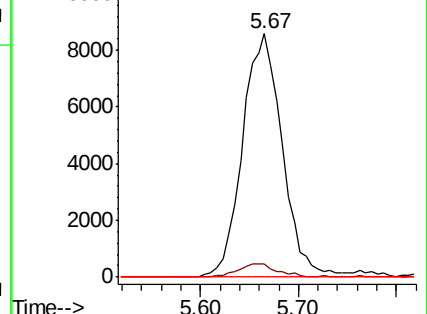
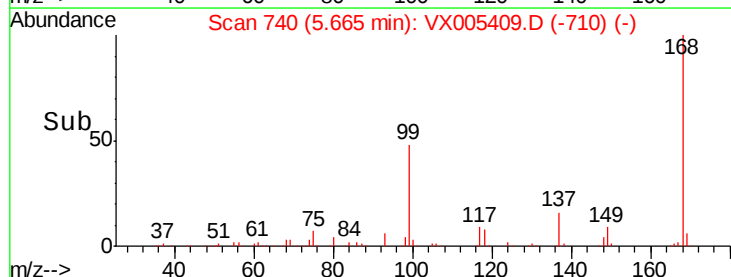
121 0.0 24.9 37.3#

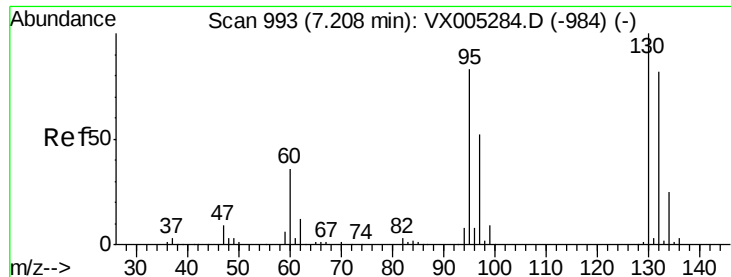


Abundance Ion 116.80 (116.50 to 117.50): V

Ion 118.80 (118.50 to 119.50): V

Ion 120.80 (120.50 to 121.50): V





#44

Trichloroethene

Concen: Below Cal

RT: 7.23 min Scan# 996

Delta R.T. 0.02 min

Lab File: VX005409.D

Acq: 18 Oct 2018 00:14

Instrument :

MSVOA_X

ClientSampleId :

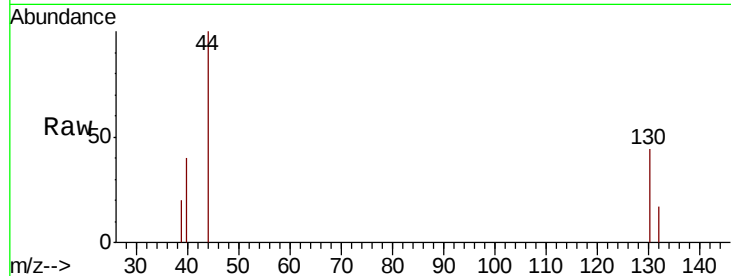
RLF-GW-9S

Tot Ion:130 Resp: 179

Ion Ratio Lower Upper

130 100

95 0.0 0.0 181.6



Abundance Ion 129.80 (129.50 to 130.50): VX005284.D (-984) (-)

Ion 94.90 (94.60 to 95.60): VX005284.D (-984) (-)

7.23

150

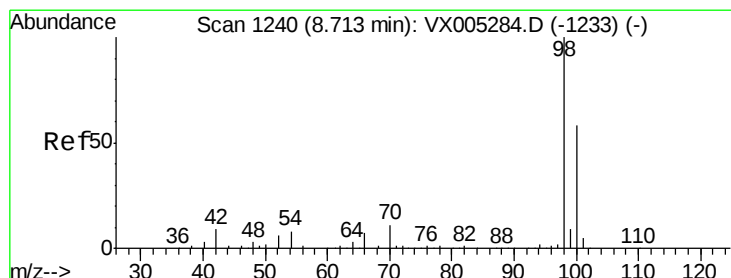
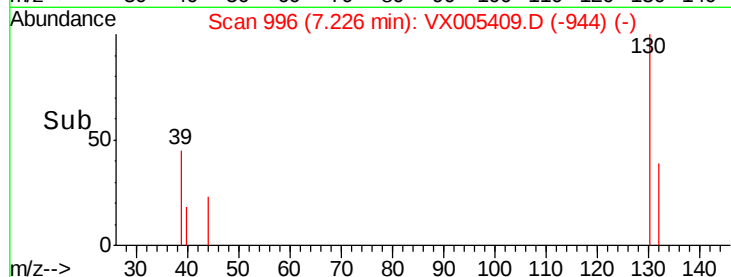
100

50

0

7.18 7.20 7.22 7.24

Time-->



#50

Toluene-d8

Concen: 52.561 ug/l

RT: 8.71 min Scan# 1240

Delta R.T. 0.00 min

Lab File: VX005409.D

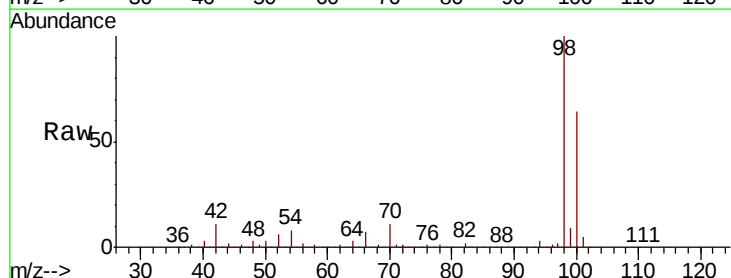
Acq: 18 Oct 2018 00:14

Tgt Ion: 98 Resp: 471554

Ion Ratio Lower Upper

98 100

100 63.6 52.9 79.3



Abundance Ion 98.00 (97.70 to 98.70): VX005284.D (-1233) (-)

Ion 100.00 (99.70 to 100.70): VX005284.D (-1233) (-)

8.71

300000

250000

200000

150000

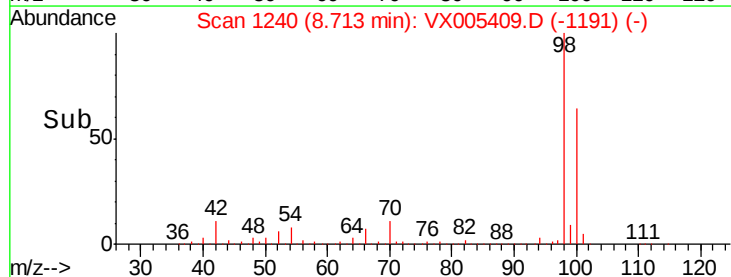
100000

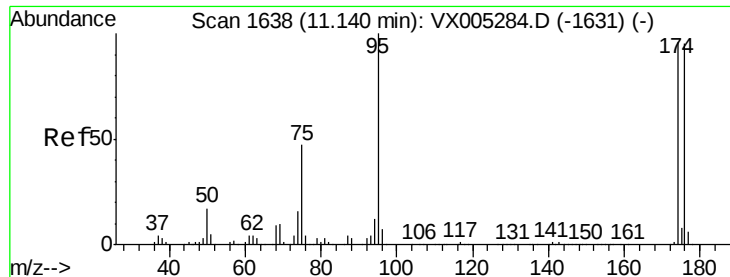
50000

0

8.60 8.80 9.00

Time-->





#62

4-Bromofluorobenzene

Concen: 46.199 ug/l

RT: 11.14 min Scan# 1638

Delta R.T. 0.00 min

Lab File: VX005409.D

Acq: 18 Oct 2018 00:14

Instrument :

MSVOA_X

ClientSampleId :

RLF-GW-9S

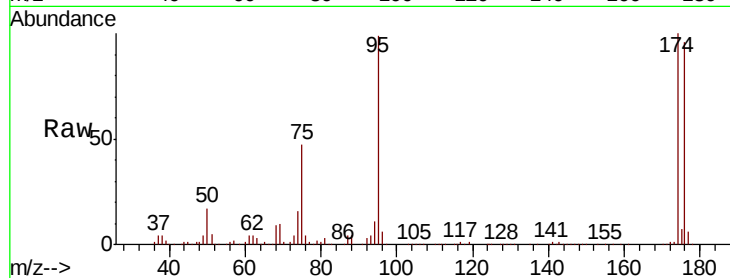
Tot Ion: 95 Resp: 155705

Ion Ratio Lower Upper

95 100

174 96.3 0.0 185.2

176 92.5 0.0 178.6



Abundance Ion 94.90 (94.60 to 95.60): VX0

Ion 173.80 (173.50 to 174.50): V

Ion 175.80 (175.50 to 176.50): V

11.14

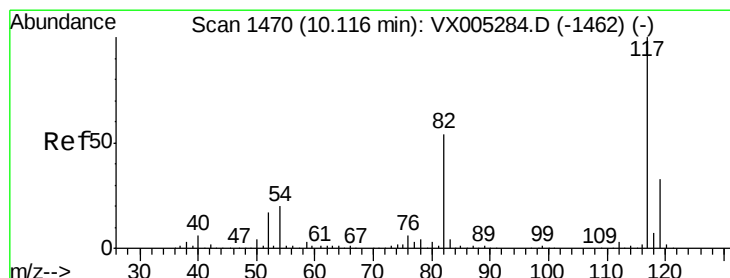
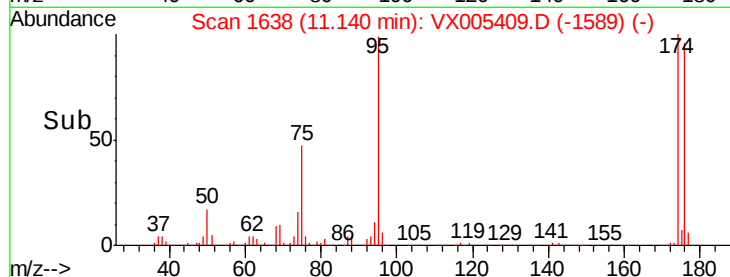
150000

100000

50000

0

Time-->



#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 10.12 min Scan# 1470

Delta R.T. 0.00 min

Lab File: VX005409.D

Acq: 18 Oct 2018 00:14

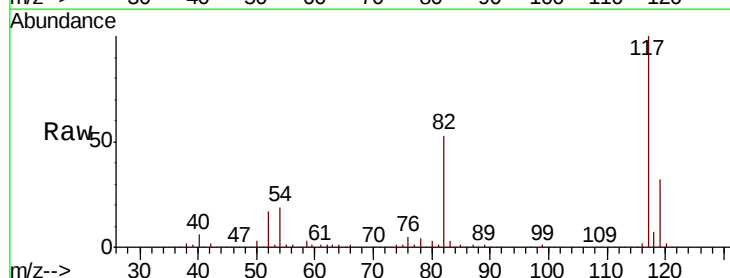
Tgt Ion: 117 Resp: 354589

Ion Ratio Lower Upper

117 100

82 53.5 47.8 71.6

119 32.4 29.3 43.9



Abundance Ion 116.90 (116.60 to 117.60): V

Ion 82.00 (81.70 to 82.70): VX0

Ion 118.90 (118.60 to 119.60): V

10.12

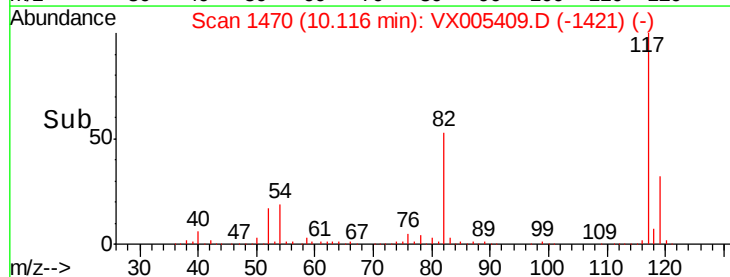
300000

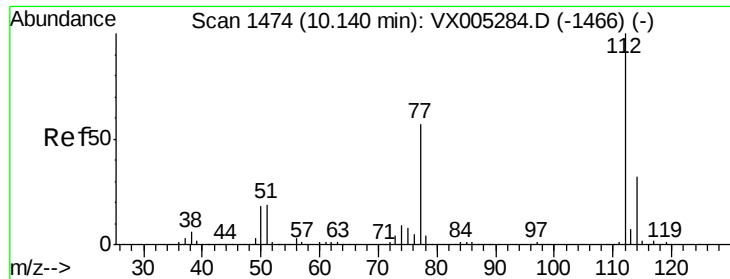
200000

100000

0

Time-->





#65

Chlorobenzene

Concen: 0.815 ug/l

RT: 10.14 min Scan# 1474

Delta R.T. 0.00 min

Lab File: VX005409.D

Acq: 18 Oct 2018 00:14

Instrument :

MSVOA_X

ClientSampleId :

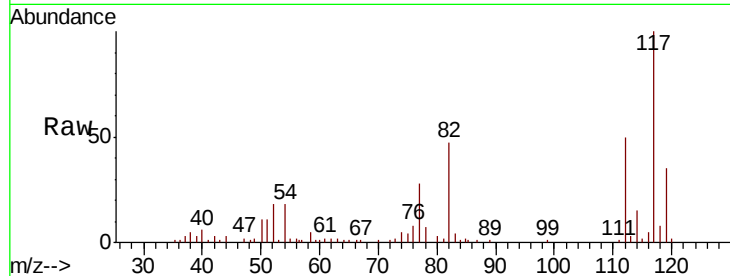
RLF-GW-9S

Tot Ion:112 Resp: 6147

Ion Ratio Lower Upper

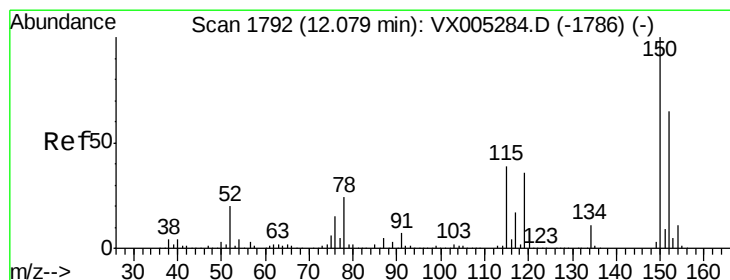
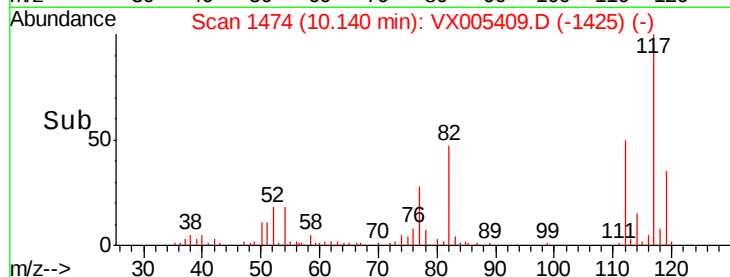
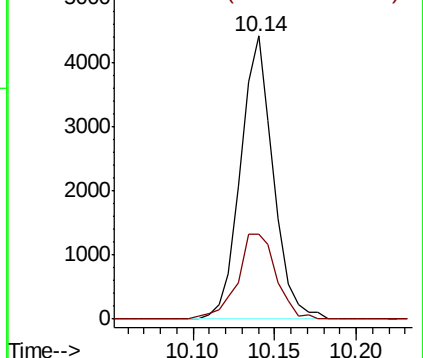
112 100

114 30.0 27.8 41.8



Abundance Ion 111.90 (111.60 to 112.60): V

Ion 113.90 (113.60 to 114.60): V



#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 12.08 min Scan# 1792

Delta R.T. 0.00 min

Lab File: VX005409.D

Acq: 18 Oct 2018 00:14

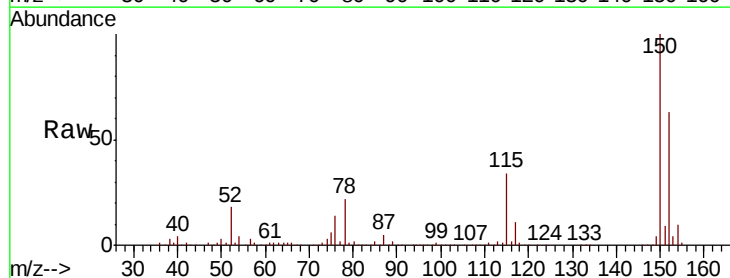
Tgt Ion:152 Resp: 174392

Ion Ratio Lower Upper

152 100

115 54.4 39.0 117.0

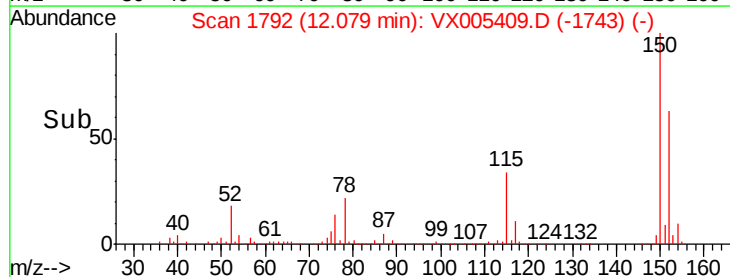
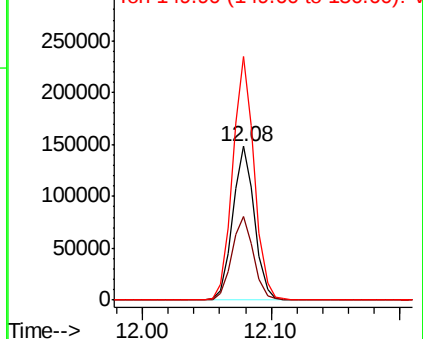
150 156.9 0.0 351.0

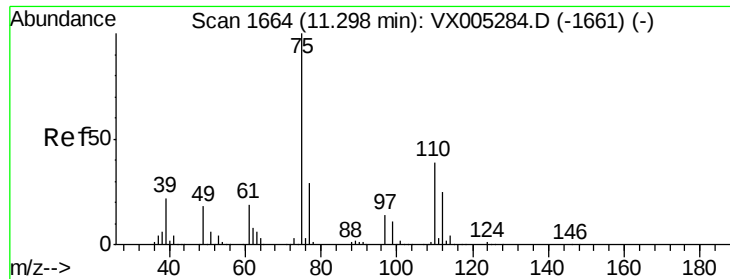


Abundance Ion 151.90 (151.60 to 152.60): V

Ion 114.90 (114.60 to 115.60): V

Ion 149.90 (149.60 to 150.60): V

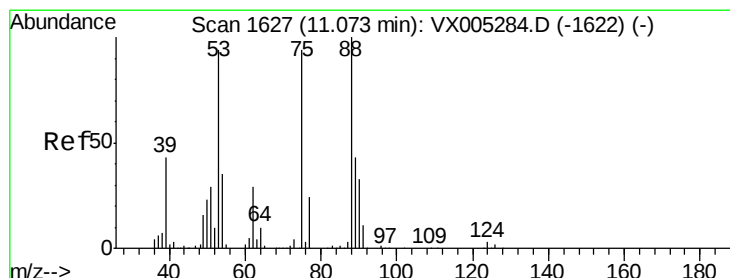
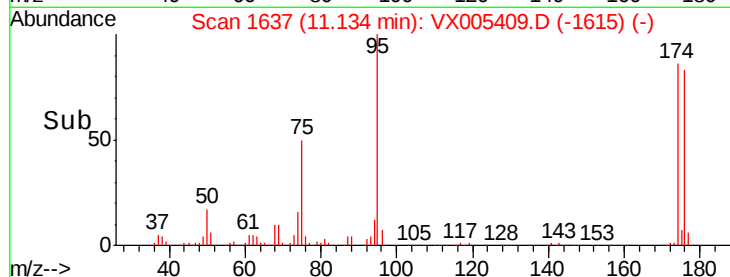
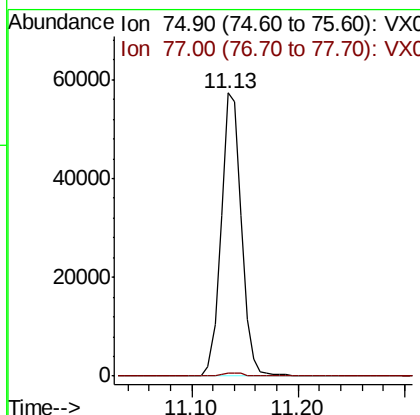
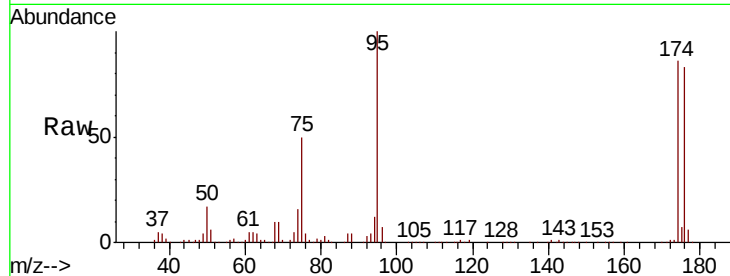




#76
 1,2,3-Trichloropropane
 Concen: 22.567 ug/l
 RT: 11.13 min Scan# 1637
 Delta R.T. -0.16 min
 Lab File: VX005409.D
 Acq: 18 Oct 2018 00:14

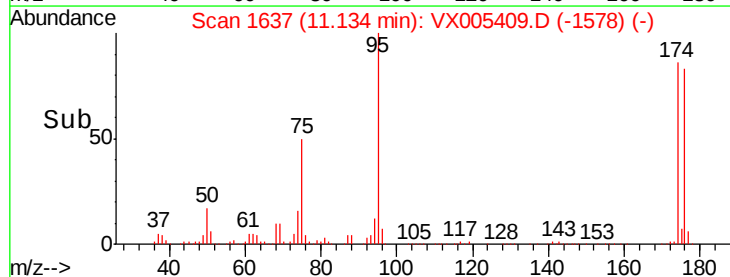
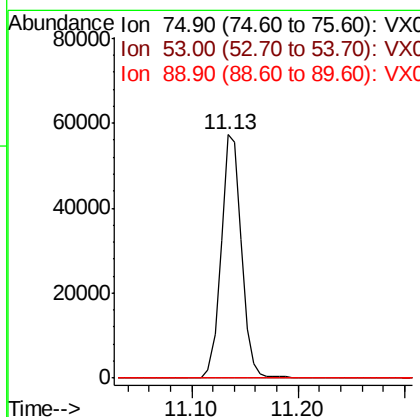
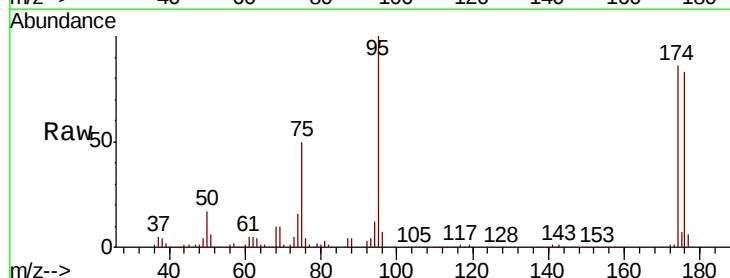
Instrument :
 MSVOA_X
 ClientSampleId :
 RLF-GW-9S

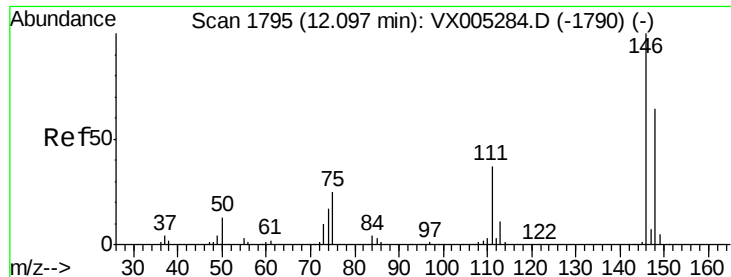
Tot Ion: 75 Resp: 76337
 Ion Ratio Lower Upper
 75 100
 77 1.4 20.2 60.6#



#81
 trans-1,4-Dichloro-2-butene
 Concen: 68.569 ug/l
 RT: 11.13 min Scan# 1637
 Delta R.T. 0.06 min
 Lab File: VX005409.D
 Acq: 18 Oct 2018 00:14

Tgt Ion: 75 Resp: 76337
 Ion Ratio Lower Upper
 75 100
 53 0.2 80.1 120.1#
 89 0.0 37.2 55.8#





#88

1,4-Dichlorobenzene

Concen: 0.516 ug/l

RT: 12.10 min Scan# 1795

Delta R.T. 0.00 min

Lab File: VX005409.D

Acq: 18 Oct 2018 00:14

Instrument :

MSVOA_X

ClientSampleId :

RLF-GW-9S

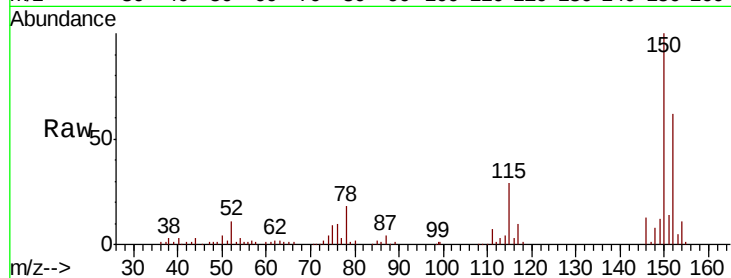
Tot Ion:146 Resp: 2924

Ion Ratio Lower Upper

146 100

111 101.2 18.1 54.1#

148 83.6 32.0 96.0



Abundance

Ion 145.90 (145.60 to 146.60): V

Ion 110.90 (110.60 to 111.60): V

Ion 147.90 (147.60 to 148.60): V

