

Data Path : Z:\VOASRV\HPCHEM1\MSVOA_X\DATA\WX011320\
 Data File : VX014585.D
 Acq On : 13 Jan 2020 14:35
 Operator : JC/SP
 Sample : L1091-02
 Misc : 5.0mL/MSVOA_X/WATER
 ALS Vial : 11 Sample Multiplier: 1

Instrument :
 MSVOA_X
 ClientSampleId :
 GRAVEL-SOIL

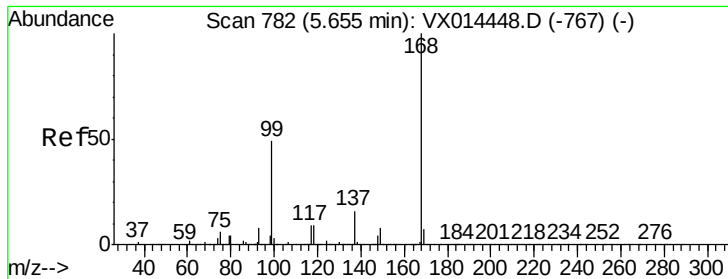
Quant Time: Jan 14 13:06:09 2020
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_X\METHOD\82X010720W.M
 Quant Title : SW846 8260
 QLast Update : Tue Jan 07 15:54:41 2020
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	5.65	168	485608	50.00	ug/l	0.00
34) 1,4-Difluorobenzene	6.85	114	757652	50.00	ug/l	0.00
63) Chlorobenzene-d5	10.11	117	696751	50.00	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	12.07	152	321618	50.00	ug/l	0.00

System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	6.06	65	270049	49.82	ug/l	0.00
Spiked Amount	50.000		Recovery	=	99.64%	
35) Dibromofluoromethane	5.49	113	228189	49.75	ug/l	0.00
Spiked Amount	50.000		Recovery	=	99.50%	
50) Toluene-d8	8.71	98	913987	51.35	ug/l	0.00
Spiked Amount	50.000		Recovery	=	102.70%	
62) 4-Bromofluorobenzene	11.14	95	309957	47.44	ug/l	0.00
Spiked Amount	50.000		Recovery	=	94.88%	

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	1.19	85	219	0.289	ug/l #	62
5) Bromomethane	1.65	94	955	0.209	ug/l	81
6) Chloroethane	1.71	64	345	Below Cal	#	43
8) Diethyl Ether	2.16	74	928	0.260	ug/l #	1
11) Tert butyl alcohol	3.01	59	2473	2.185	ug/l #	79
13) Acrolein	2.27	56	196	0.216	ug/l #	15
16) Acetone	2.43	43	121344	41.152	ug/l	98
18) Methyl Acetate	2.76	43	5513	0.708	ug/l #	82
20) Methylene Chloride	2.85	84	35999	6.601	ug/l	98
25) 2-Butanone	4.67	43	17695	4.370	ug/l	99
29) Tetrahydrofuran	5.12	42	8696	3.632	ug/l	93
36) 1,1-Dichloropropene	5.65	75	33566	4.711	ug/l #	52
37) Ethyl Acetate	4.83	43	23206	2.998	ug/l	98
38) Carbon Tetrachloride	5.65	117	42955	6.551	ug/l #	18
43) Isopropyl Acetate	6.43	43	72320	5.785	ug/l	98
48) Methyl methacrylate	7.87	41	49501	8.267	ug/l #	43
49) 1,4-Dioxane	7.73	88	296	2.333	ug/l #	1
51) 4-Methyl-2-Pentanone	8.61	43	84502	11.092	ug/l #	47
52) Toluene	8.78	92	21688	1.602	ug/l	98
54) cis-1,3-Dichloropropene	8.61	75	38608	4.483	ug/l #	58
59) 2-Hexanone	9.54	43	24443	4.055	ug/l #	52
76) 1,2,3-Trichloropropane	11.13	75	151007	22.693	ug/l #	34
81) trans-1,4-Dichloro-2-buten	11.13	75	151007	59.996	ug/l #	12
88) 1,4-Dichlorobenzene	12.02	146	628	Below Cal		75
93) 1,2,4-Trichlorobenzene	13.64	180	419	Below Cal		67
96) 1,2,3-Trichlorobenzene	14.02	180	571	Below Cal		80

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

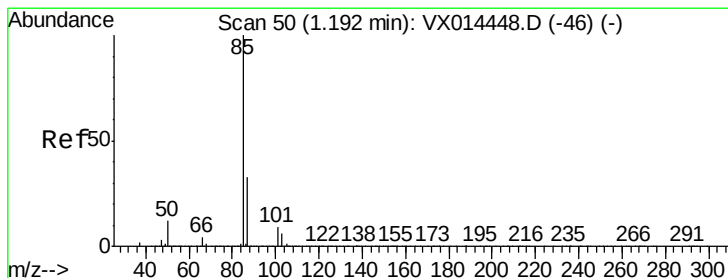
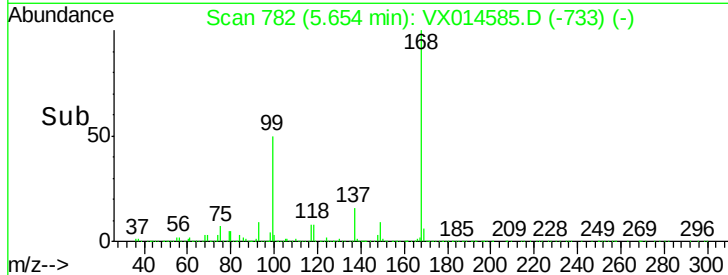
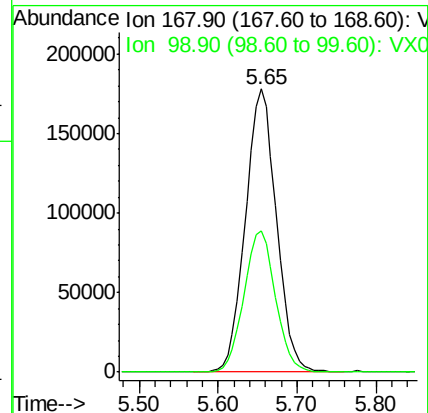
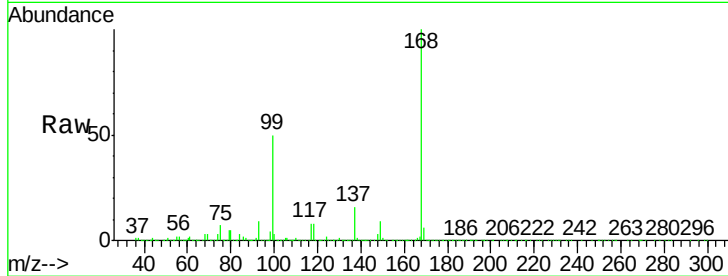


#1

Pentafluorobenzene
 Concen: 50.000 ug/l
 RT: 5.65 min Scan# 782
 Delta R.T. -0.00 min
 Lab File: VX014585.D
 Acq: 13 Jan 2020 14:35

Instrument :
 MSVOA_X
 ClientSampleId :
 GRAVEL-SOIL

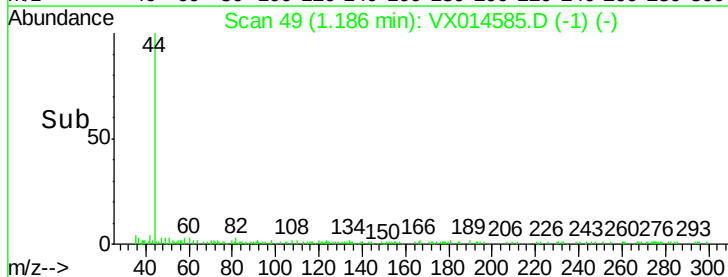
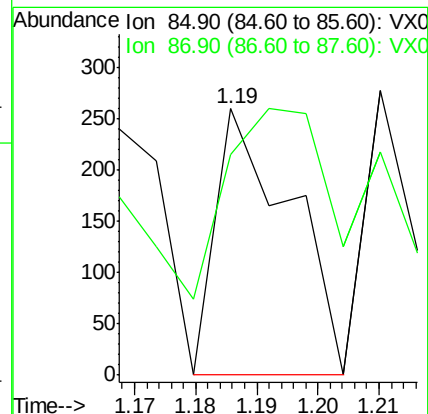
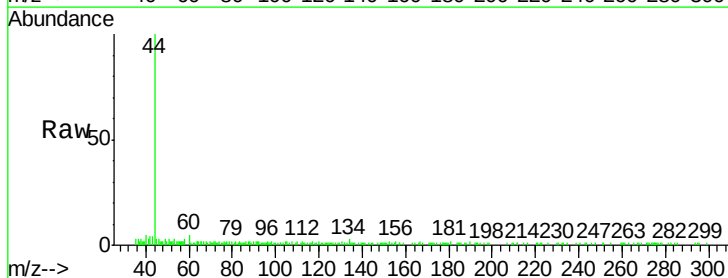
Tgt Ion: 168 Resp: 485608
 Ion Ratio Lower Upper
 168 100
 99 49.6 39.2 58.8

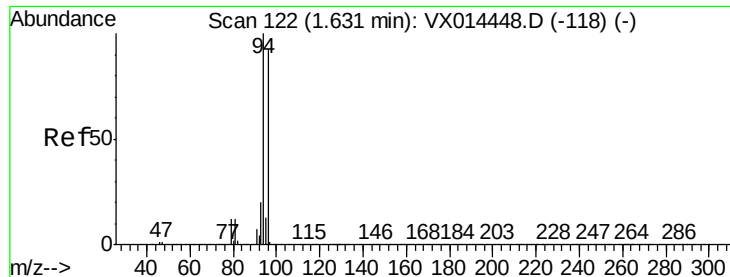


#2

Dichlorodifluoromethane
 Concen: 0.289 ug/l
 RT: 1.19 min Scan# 49
 Delta R.T. -0.01 min
 Lab File: VX014585.D
 Acq: 13 Jan 2020 14:35

Tgt Ion: 85 Resp: 219
 Ion Ratio Lower Upper
 85 100
 87 54.4 16.5 49.5#





#5

Bromomethane

Concen: 0.209 ug/l

RT: 1.65 min Scan# 125

Delta R.T. 0.02 min

Lab File: VX014585.D

Acq: 13 Jan 2020 14:35

Instrument :

MSVOA_X

ClientSampled :

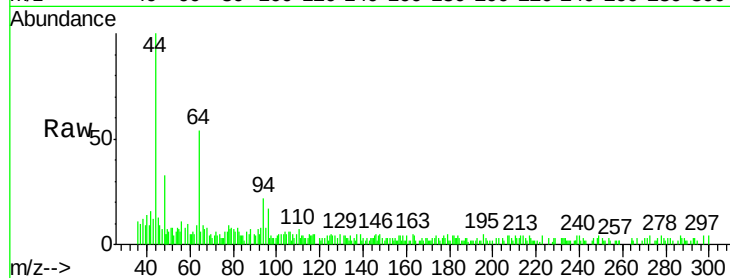
GRAVEL-SOIL

Tgt Ion: 94 Resp: 955

Ion Ratio Lower Upper

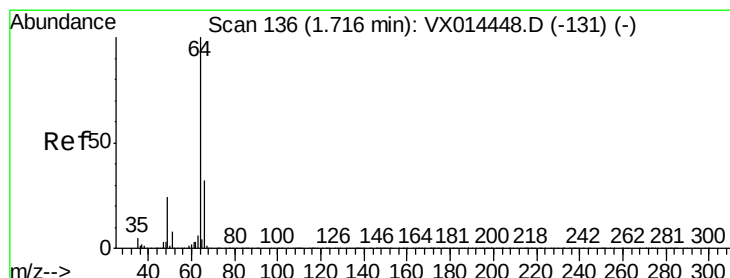
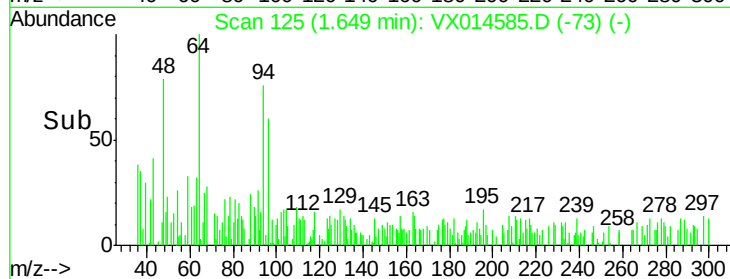
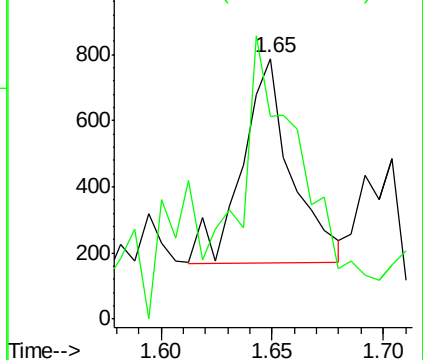
94 100

96 74.7 74.2 111.2



Abundance Ion 93.90 (93.60 to 94.60): VX0

Ion 95.90 (95.60 to 96.60): VX0



#6

Chloroethane

Concen: Below Cal

RT: 1.71 min Scan# 135

Delta R.T. -0.01 min

Lab File: VX014585.D

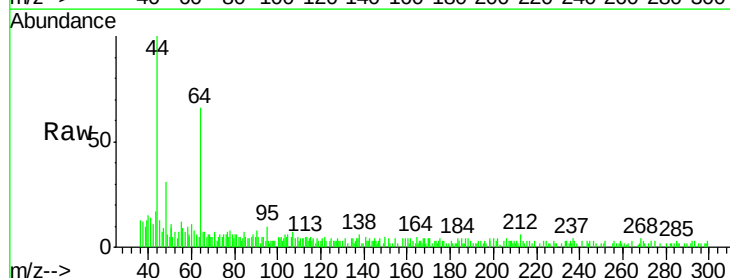
Acq: 13 Jan 2020 14:35

Tgt Ion: 64 Resp: 345

Ion Ratio Lower Upper

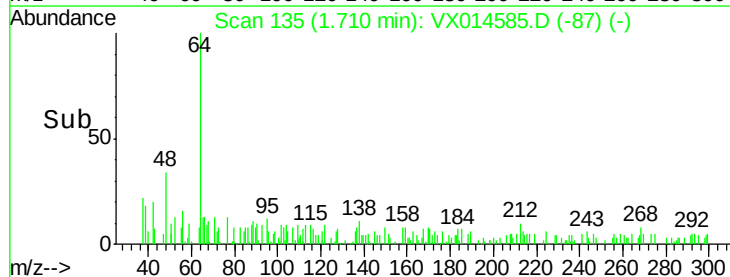
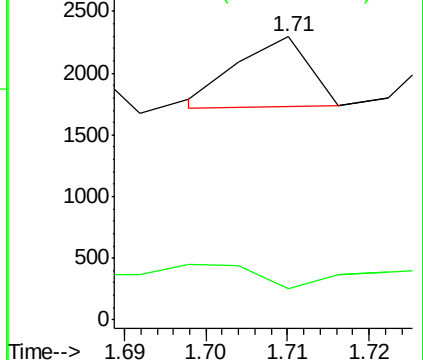
64 100

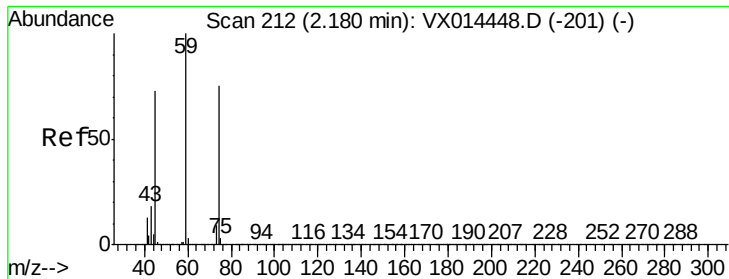
66 0.0 25.3 37.9#



Abundance Ion 63.90 (63.60 to 64.60): VX0

Ion 65.90 (65.60 to 66.60): VX0





#8

Diethyl Ether

Concen: 0.260 ug/l

RT: 2.16 min Scan# 209

Delta R.T. -0.02 min

Lab File: VX014585.D

Acq: 13 Jan 2020 14:35

Instrument :

MSVOA_X

ClientSampled :

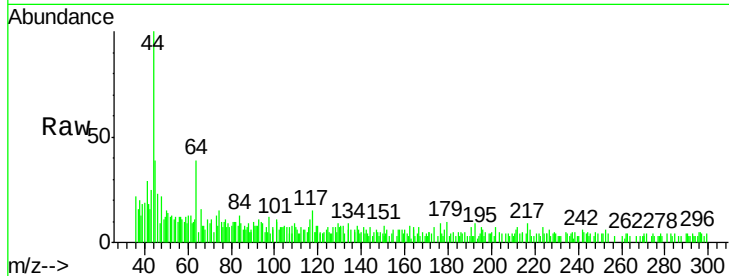
GRAVEL-SOIL

Tgt Ion: 74 Resp: 928

Ion Ratio Lower Upper

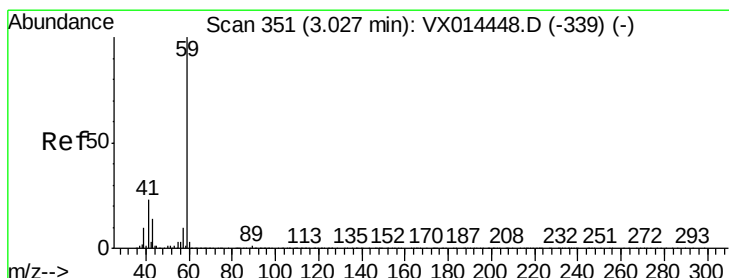
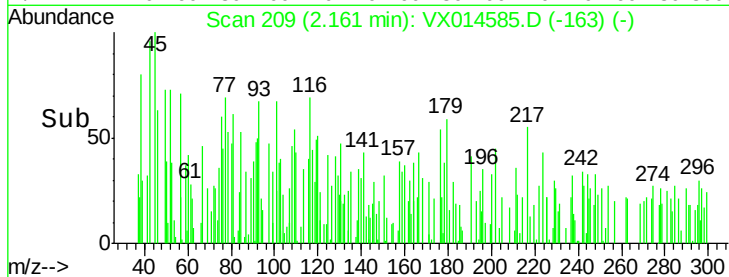
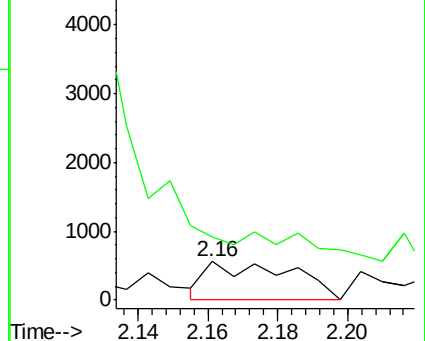
74 100

45 0.0 48.7 146.1#



Abundance Ion 74.00 (73.70 to 74.70): VX0

Ion 45.00 (44.70 to 45.70): VX0



#11

Tert butyl alcohol

Concen: 2.185 ug/l

RT: 3.01 min Scan# 349

Delta R.T. -0.01 min

Lab File: VX014585.D

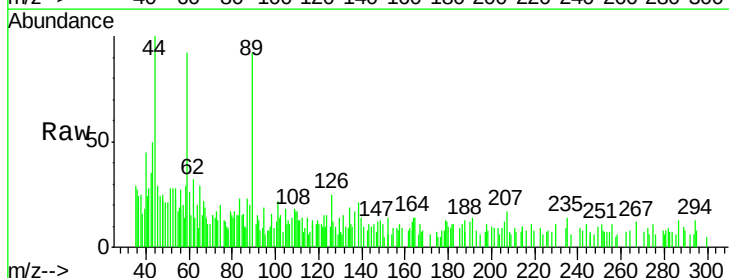
Acq: 13 Jan 2020 14:35

Tgt Ion: 59 Resp: 2473

Ion Ratio Lower Upper

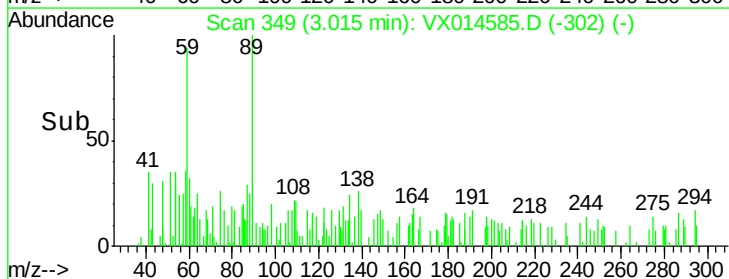
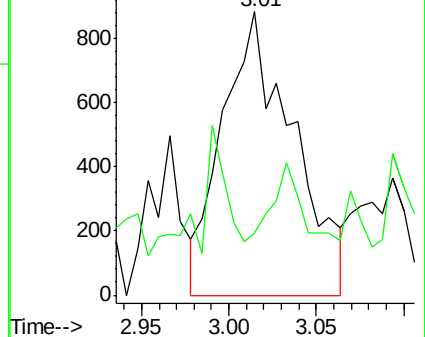
59 100

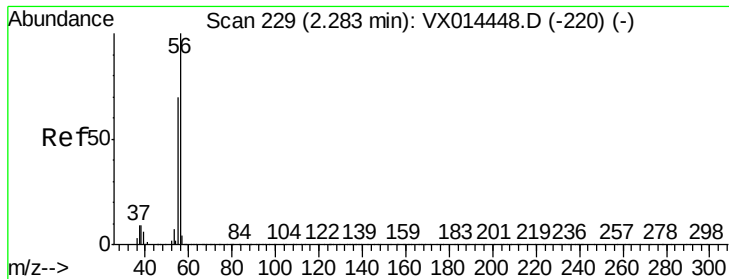
57 18.6 8.5 12.7#



Abundance Ion 59.00 (58.70 to 59.70): VX0

Ion 57.00 (56.70 to 57.70): VX0

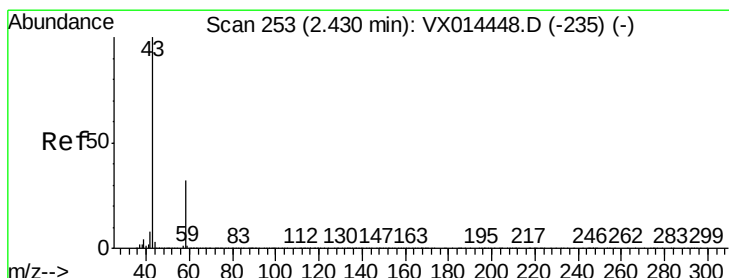
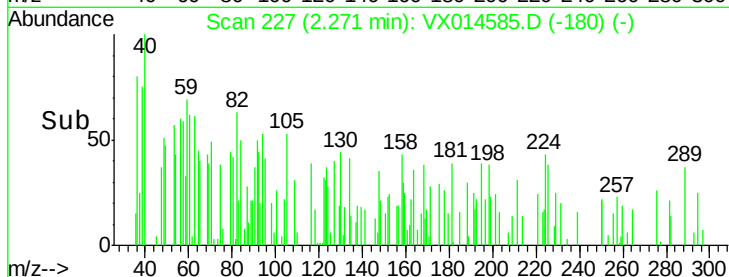
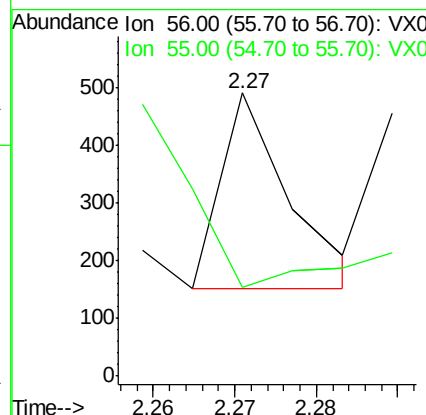
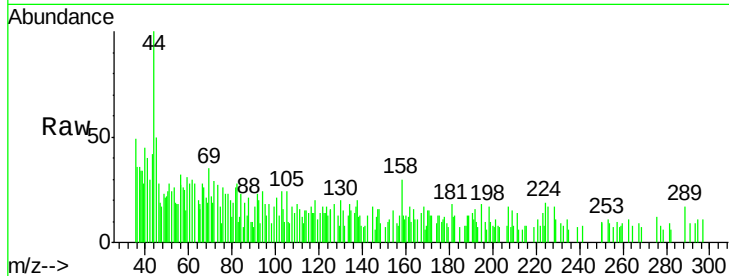




#13
Acrolein
Concen: 0.216 ug/l
RT: 2.27 min Scan# 227
Delta R.T. -0.01 min
Lab File: VX014585.D
Acq: 13 Jan 2020 14:35

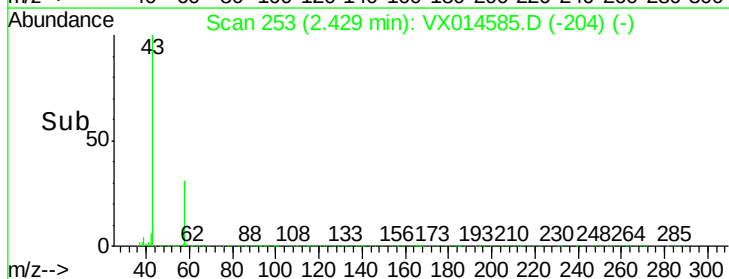
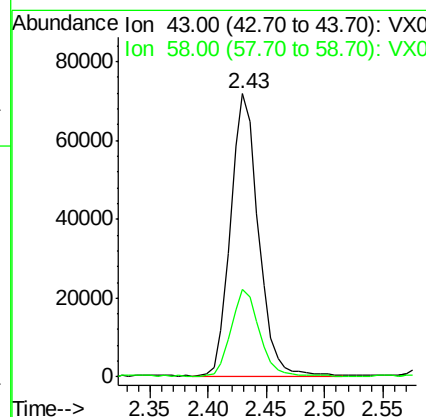
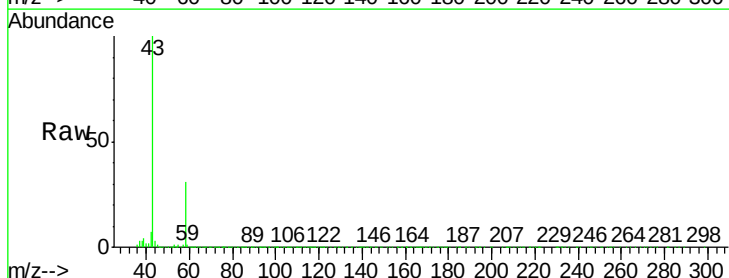
Instrument :
MSVOA_X
ClientSampled :
GRAVEL-SOIL

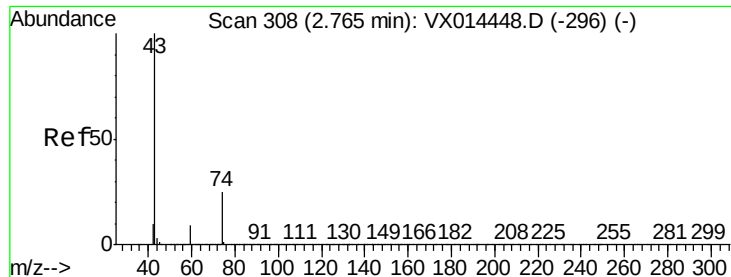
Tgt Ion: 56 Resp: 196
Ion Ratio Lower Upper
56 100
55 0.0 55.0 82.6#



#16
Acetone
Concen: 41.152 ug/l
RT: 2.43 min Scan# 253
Delta R.T. 0.00 min
Lab File: VX014585.D
Acq: 13 Jan 2020 14:35

Tgt Ion: 43 Resp: 121344
Ion Ratio Lower Upper
43 100
58 30.6 25.4 38.0

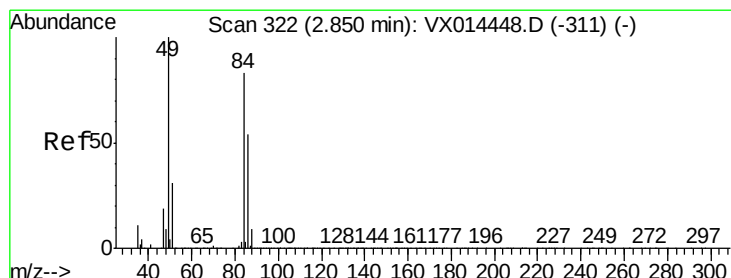
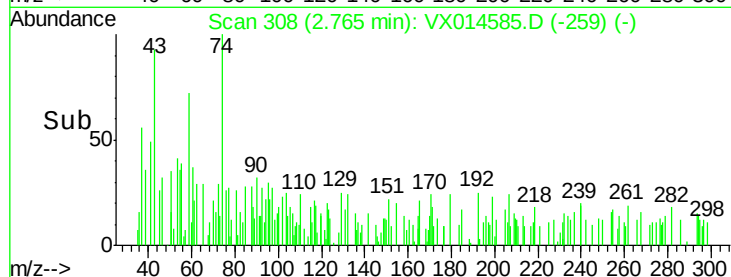
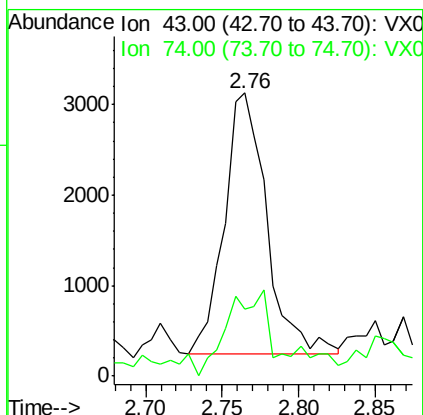
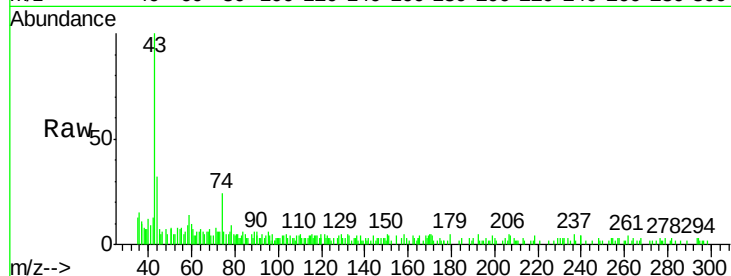




#18
Methyl Acetate
Concen: 0.708 ug/l
RT: 2.76 min Scan# 308
Delta R.T. -0.00 min
Lab File: VX014585.D
Acq: 13 Jan 2020 14:35

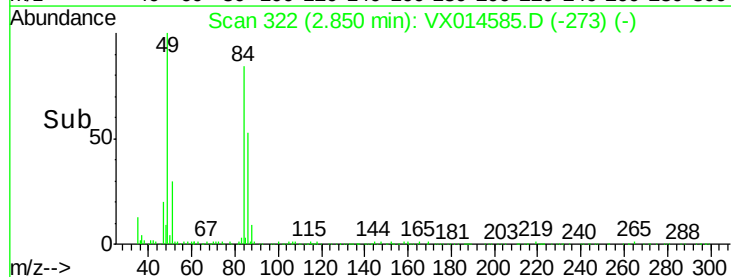
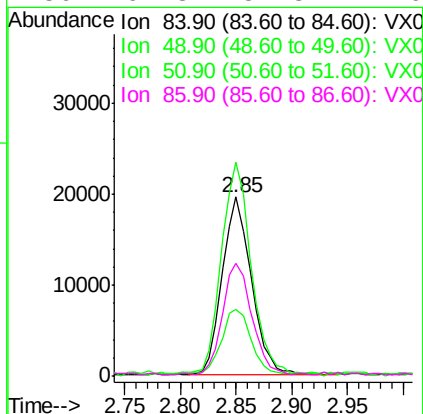
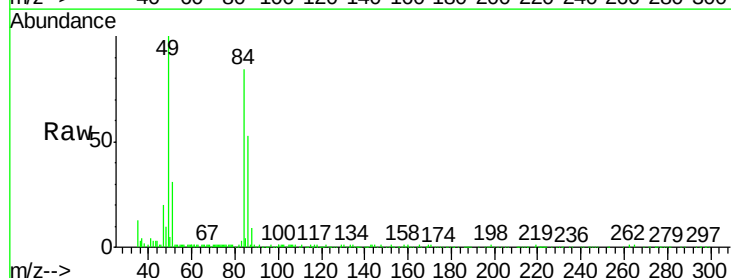
Instrument :
MSVOA_X
ClientSampled :
GRAVEL-SOIL

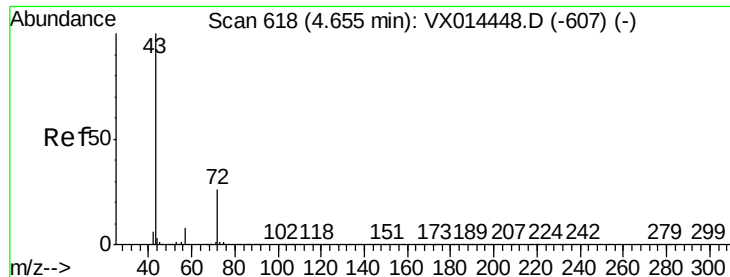
Tgt Ion: 43 Resp: 5513
Ion Ratio Lower Upper
43 100
74 33.5 19.4 29.2#



#20
Methylene Chloride
Concen: 6.601 ug/l
RT: 2.85 min Scan# 322
Delta R.T. -0.00 min
Lab File: VX014585.D
Acq: 13 Jan 2020 14:35

Tgt Ion: 84 Resp: 35999
Ion Ratio Lower Upper
84 100
49 118.7 95.8 143.8
51 35.4 30.2 45.4
86 61.8 51.8 77.6





#25

2-Butanone

Concen: 4.370 ug/l

RT: 4.67 min Scan# 620

Delta R.T. 0.01 min

Lab File: VX014585.D

Acq: 13 Jan 2020 14:35

Instrument :

MSVOA_X

ClientSampleId :

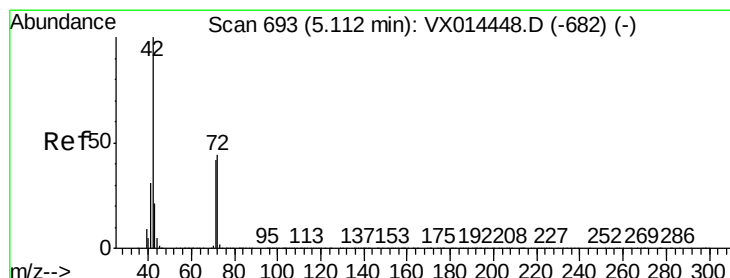
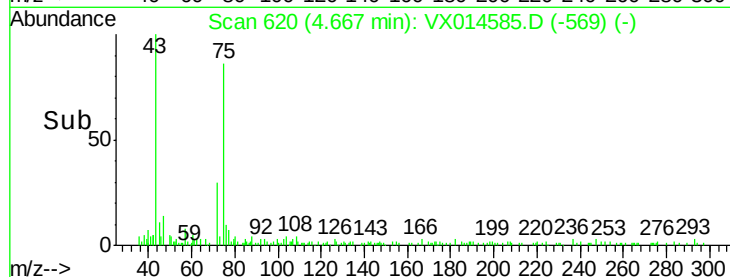
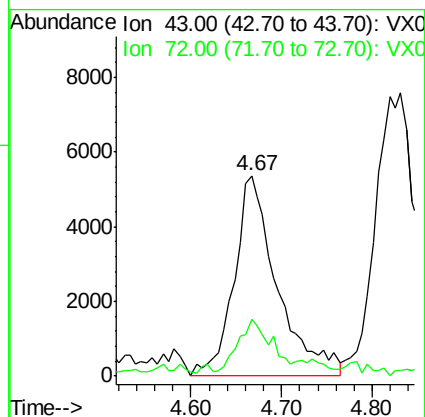
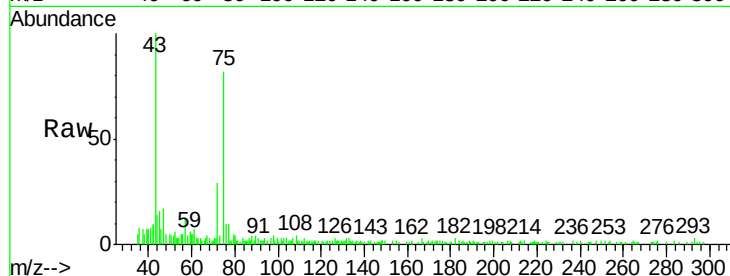
GRAVEL-SOIL

Tgt Ion: 43 Resp: 17695

Ion Ratio Lower Upper

43 100

72 25.2 20.6 31.0



#29

Tetrahydrofuran

Concen: 3.632 ug/l

RT: 5.12 min Scan# 694

Delta R.T. 0.01 min

Lab File: VX014585.D

Acq: 13 Jan 2020 14:35

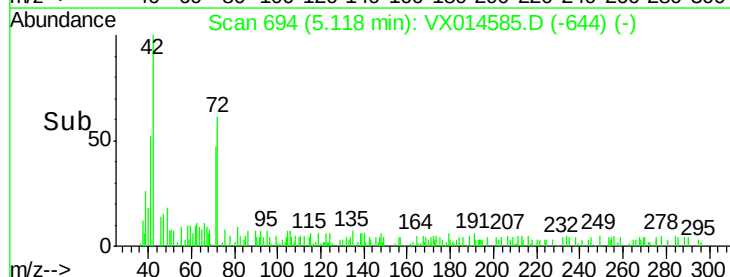
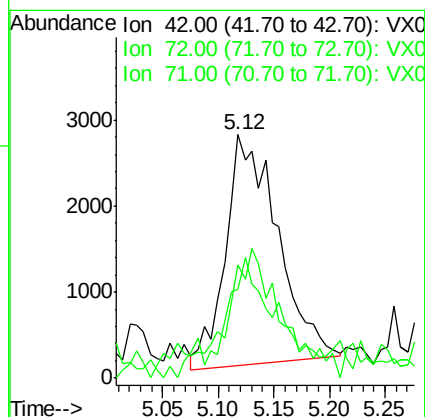
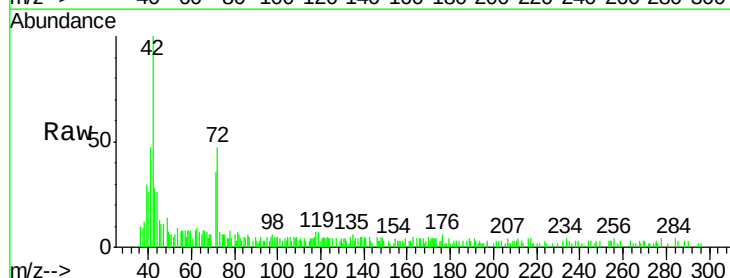
Tgt Ion: 42 Resp: 8696

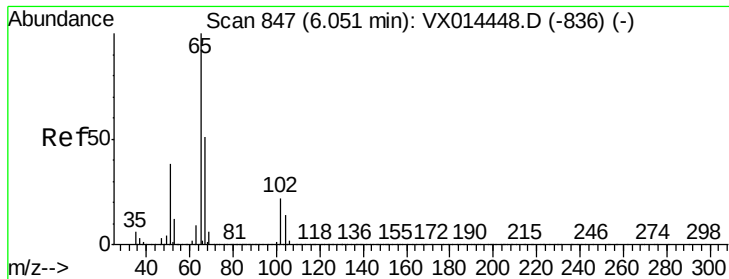
Ion Ratio Lower Upper

42 100

72 43.8 36.2 54.4

71 50.9 34.1 51.1





#33

1,2-Dichloroethane-d4

Concen: 49.815 ug/l

RT: 6.06 min Scan# 848

Delta R.T. 0.01 min

Lab File: VX014585.D

Acq: 13 Jan 2020 14:35

Instrument :

MSVOA_X

ClientSampled :

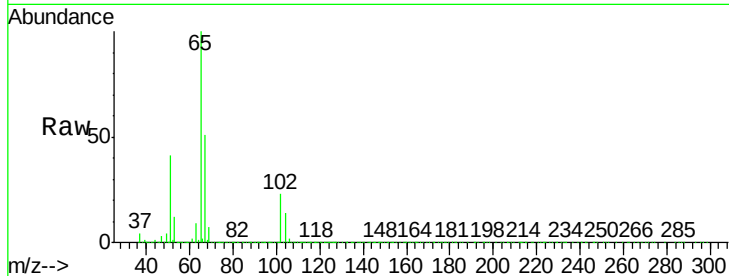
GRAVEL-SOIL

Tgt Ion: 65 Resp: 270049

Ion Ratio Lower Upper

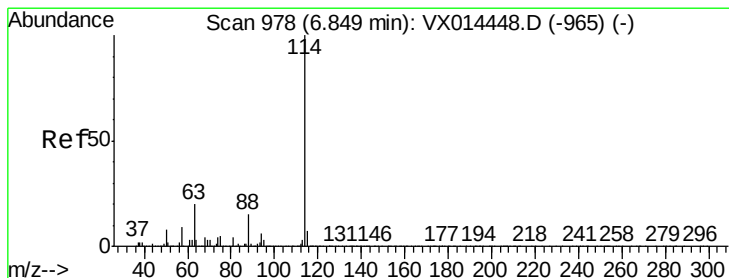
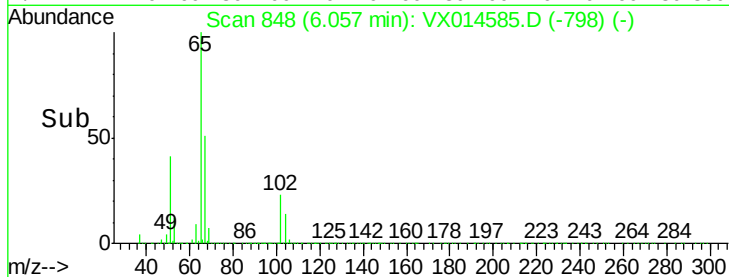
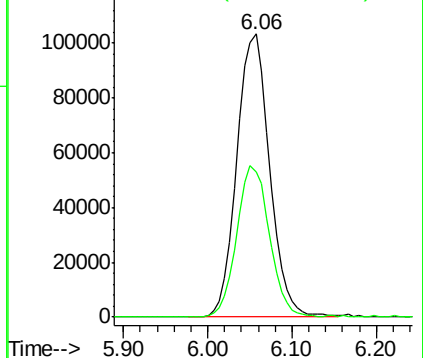
65 100

67 53.8 0.0 106.2



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: 6.85 min Scan# 978

Delta R.T. -0.00 min

Lab File: VX014585.D

Acq: 13 Jan 2020 14:35

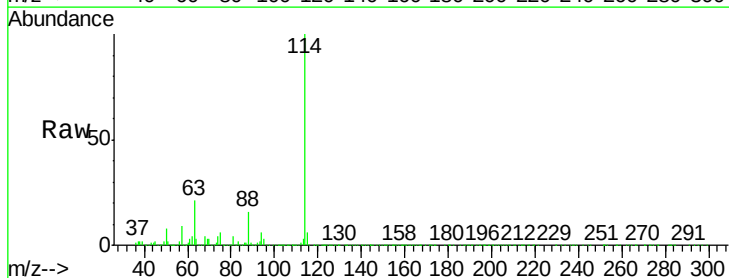
Tgt Ion: 114 Resp: 757652

Ion Ratio Lower Upper

114 100

63 21.1 0.0 39.6

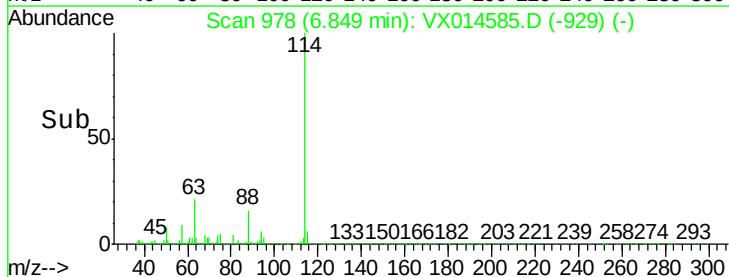
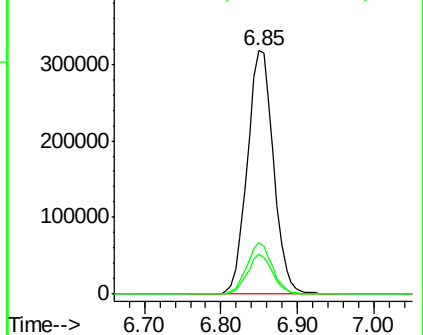
88 16.4 0.0 30.8

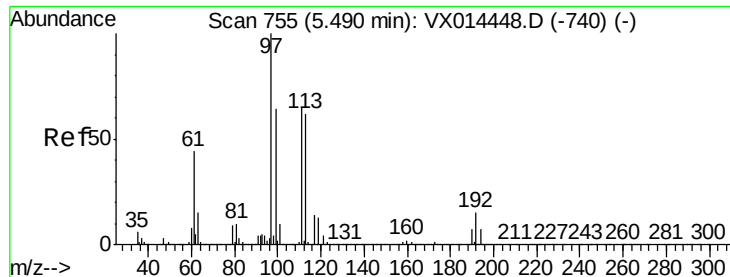


Abundance Ion 113.90 (113.60 to 114.60): V

Ion 63.00 (62.70 to 63.70): VX0

Ion 87.90 (87.60 to 88.60): VX0





#35

Dibromofluoromethane

Concen: 49.753 ug/l

RT: 5.49 min Scan# 755

Delta R.T. -0.00 min

Lab File: VX014585.D

Acq: 13 Jan 2020 14:35

Instrument :

MSVOA_X

ClientSampled :

GRAVEL-SOIL

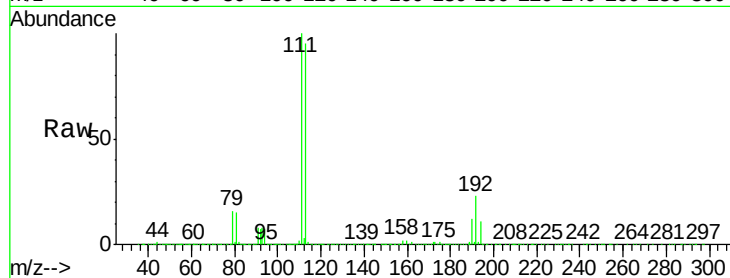
Tgt Ion:113 Resp: 228189

Ion Ratio Lower Upper

113 100

111 102.7 81.5 122.3

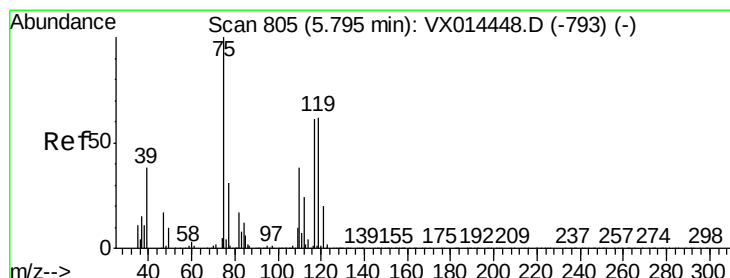
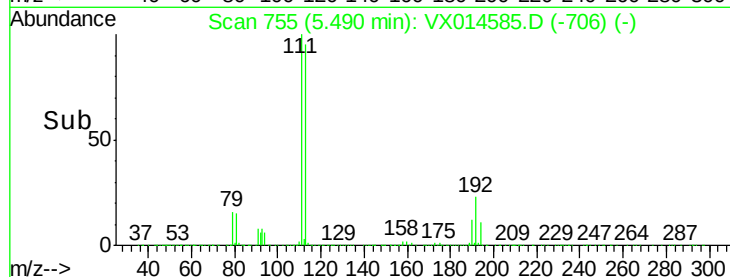
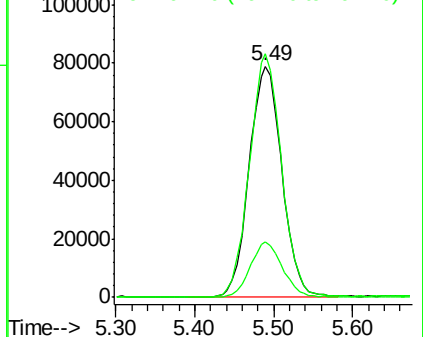
192 23.6 19.2 28.8



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: 5.65 min Scan# 782

Delta R.T. -0.14 min

Lab File: VX014585.D

Acq: 13 Jan 2020 14:35

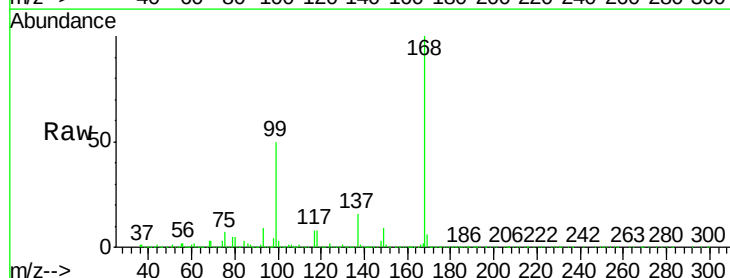
Tgt Ion: 75 Resp: 33566

Ion Ratio Lower Upper

75 100

110 11.4 18.6 55.8#

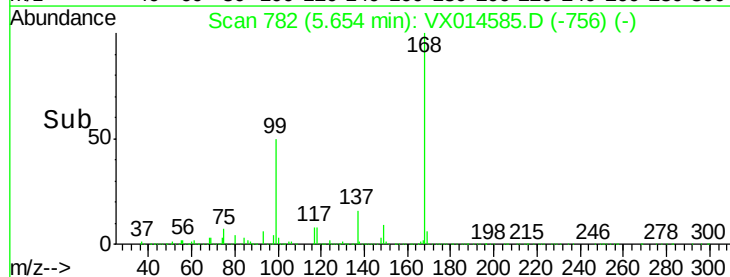
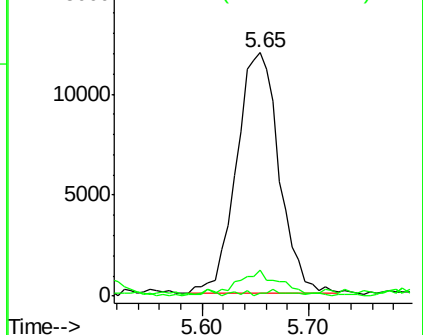
77 1.5 24.5 36.7#

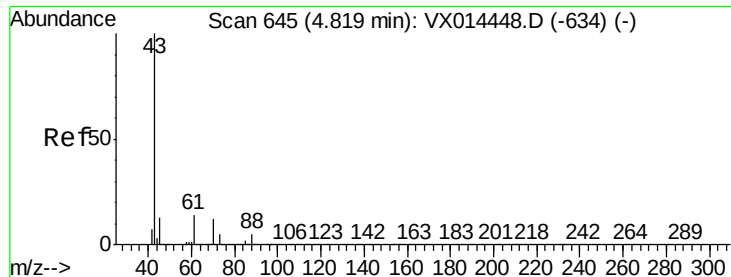


Abundance Ion 74.90 (74.60 to 75.60): VX0

Ion 109.90 (109.60 to 110.60): V

Ion 76.90 (76.60 to 77.60): VX0





#37

Ethyl Acetate

Concen: 2.998 ug/l

RT: 4.83 min Scan# 647

Delta R.T. 0.01 min

Lab File: VX014585.D

Acq: 13 Jan 2020 14:35

Instrument :

MSVOA_X

ClientSampled :

GRAVEL-SOIL

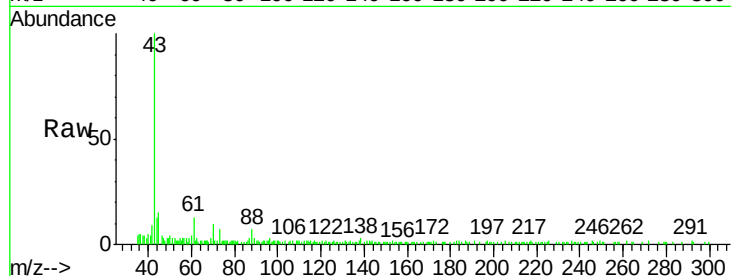
Tgt Ion: 43 Resp: 23206

Ion Ratio Lower Upper

43 100

61 13.6 11.1 16.7

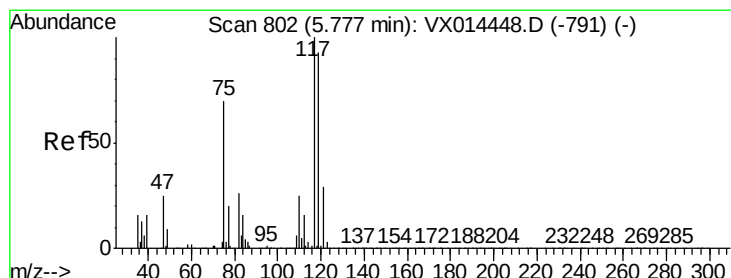
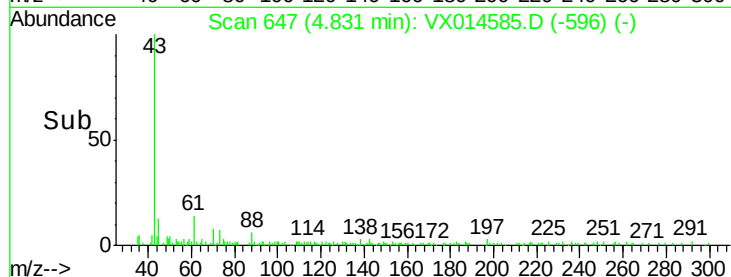
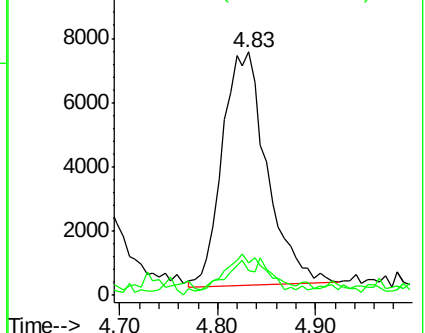
70 10.0 8.9 13.3



Abundance Ion 43.00 (42.70 to 43.70): VX0

Ion 60.90 (60.60 to 61.60): VX0

Ion 70.00 (69.70 to 70.70): VX0



#38

Carbon Tetrachloride

Concen: 6.551 ug/l

RT: 5.65 min Scan# 782

Delta R.T. -0.12 min

Lab File: VX014585.D

Acq: 13 Jan 2020 14:35

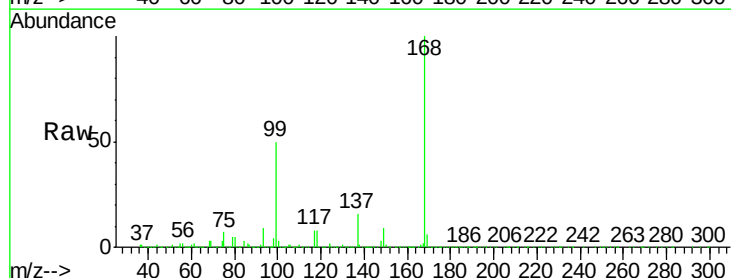
Tgt Ion: 117 Resp: 42955

Ion Ratio Lower Upper

117 100

119 5.4 73.8 110.8#

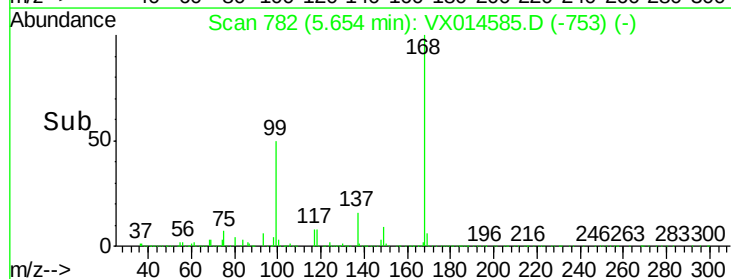
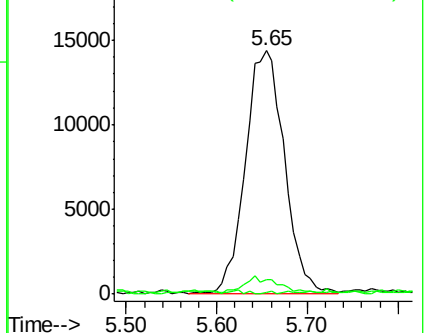
121 0.2 23.4 35.0#

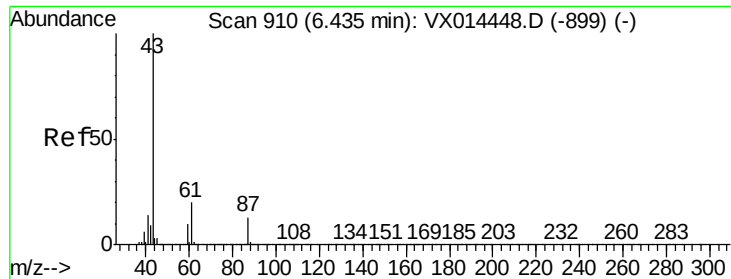


Abundance Ion 116.80 (116.50 to 117.50): V

Ion 118.80 (118.50 to 119.50): V

Ion 120.80 (120.50 to 121.50): V





#43

Isopropyl Acetate

Concen: 5.785 ug/l

RT: 6.43 min Scan# 910

Delta R.T. -0.00 min

Lab File: VX014585.D

Acq: 13 Jan 2020 14:35

Instrument :

MSVOA_X

ClientSampleId :

GRAVEL-SOIL

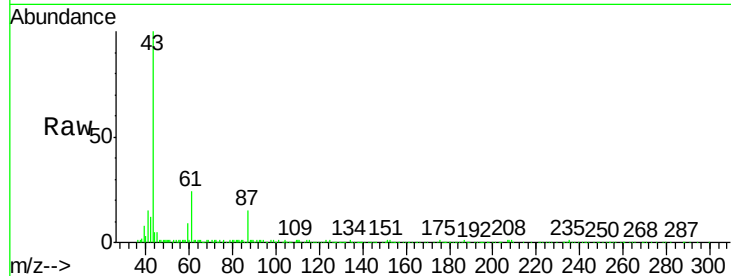
Tgt Ion: 43 Resp: 72320

Ion Ratio Lower Upper

43 100

61 22.1 16.6 24.8

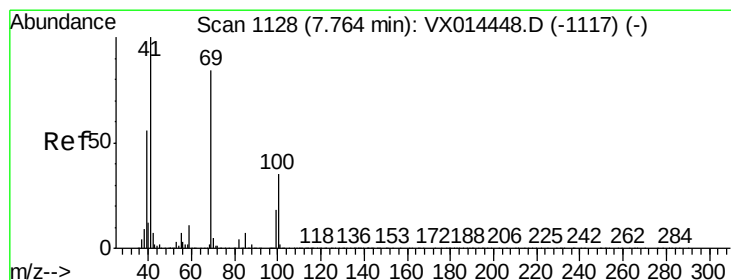
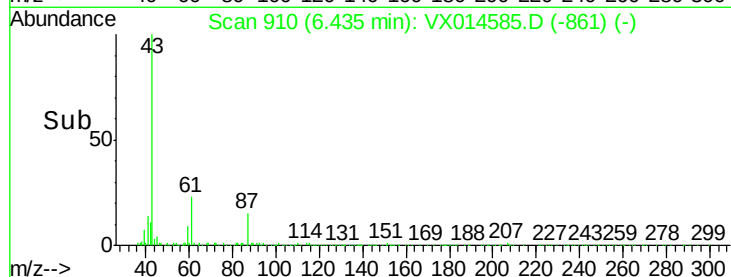
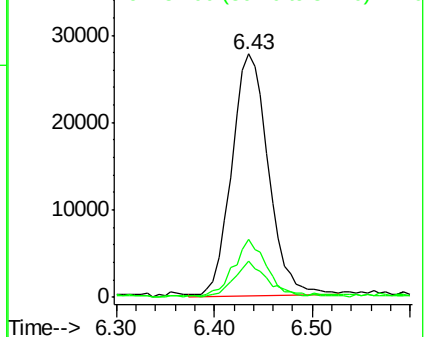
87 13.1 10.8 16.2



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: 8.267 ug/l

RT: 7.87 min Scan# 1145

Delta R.T. 0.10 min

Lab File: VX014585.D

Acq: 13 Jan 2020 14:35

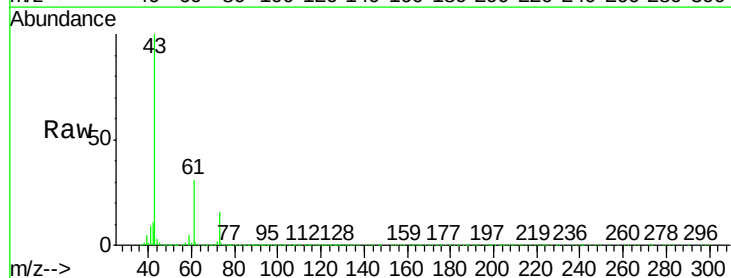
Tgt Ion: 41 Resp: 49501

Ion Ratio Lower Upper

41 100

69 0.5 65.5 98.3#

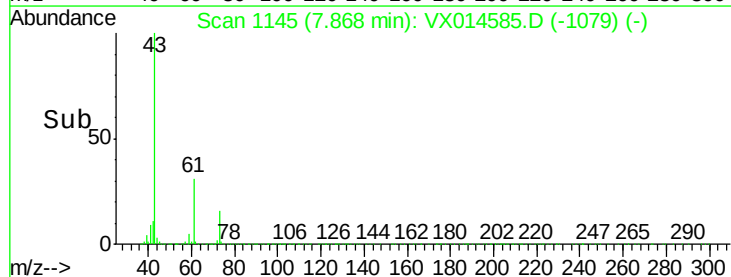
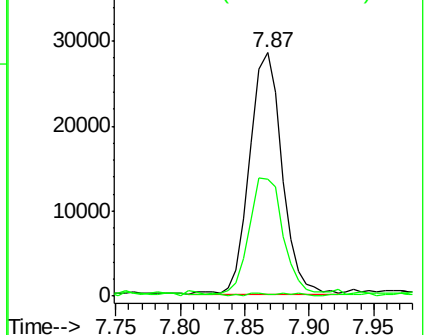
39 50.0 43.9 65.9

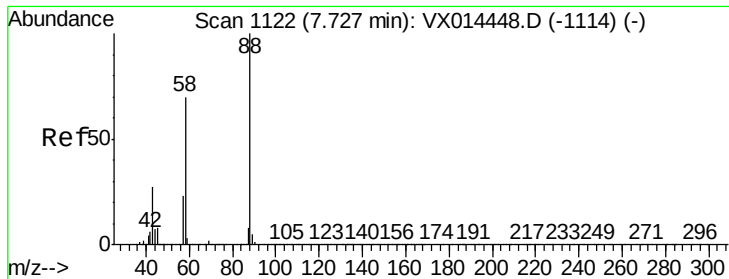


Abundance Ion 41.00 (40.70 to 41.70): VX0

Ion 69.00 (68.70 to 69.70): VX0

Ion 39.00 (38.70 to 39.70): VX0





#49

1,4-Dioxane

Concen: 2.333 ug/l

RT: 7.73 min Scan# 1122

Delta R.T. -0.00 min

Lab File: VX014585.D

Acq: 13 Jan 2020 14:35

Instrument :

MSVOA_X

ClientSampleId :

GRAVEL-SOIL

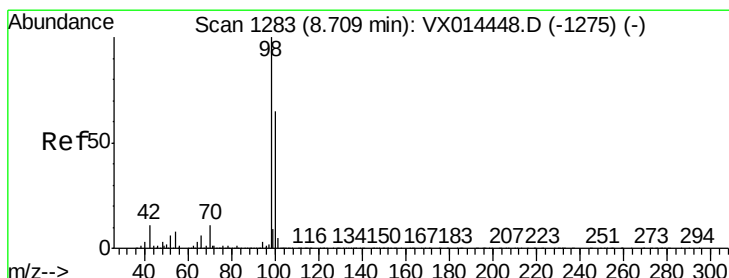
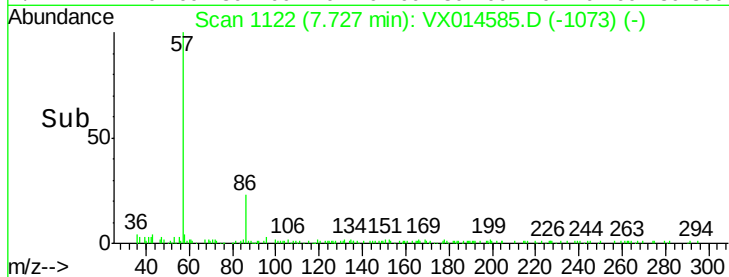
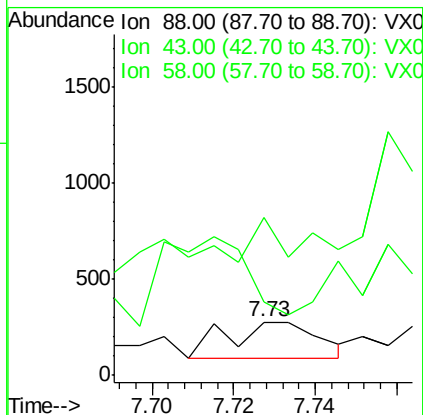
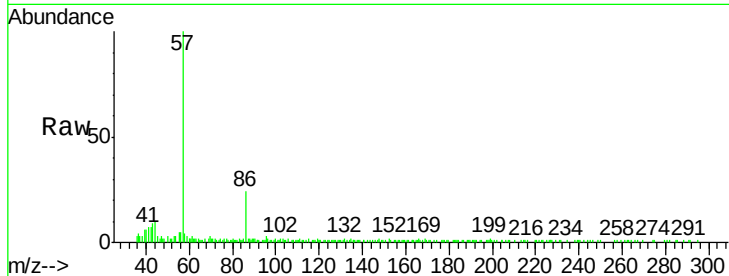
Tgt Ion: 88 Resp: 296

Ion Ratio Lower Upper

88 100

43 0.0 27.4 41.0#

58 366.9 57.1 85.7#



#50

Toluene-d8

Concen: 51.353 ug/l

RT: 8.71 min Scan# 1283

Delta R.T. -0.00 min

Lab File: VX014585.D

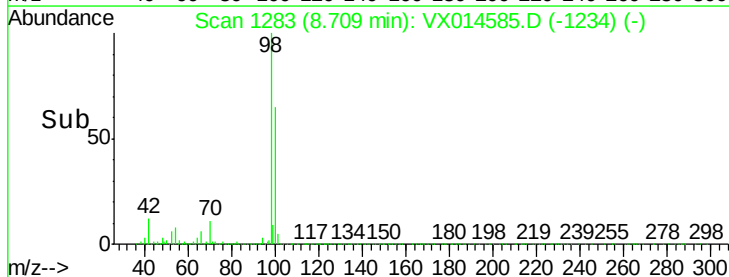
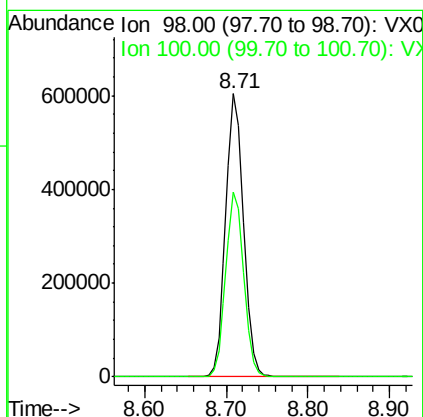
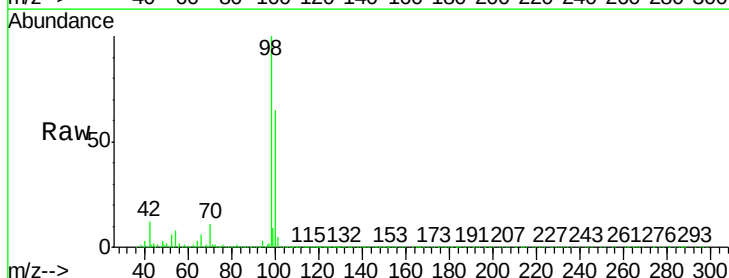
Acq: 13 Jan 2020 14:35

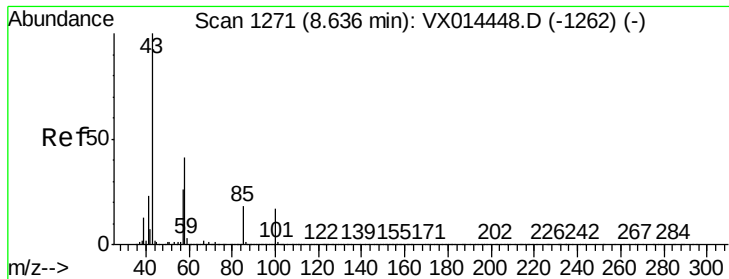
Tgt Ion: 98 Resp: 913987

Ion Ratio Lower Upper

98 100

100 65.6 53.2 79.8

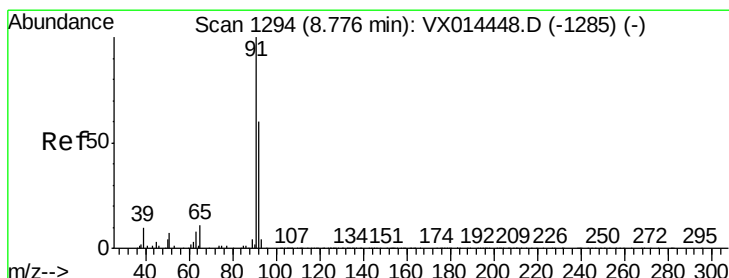
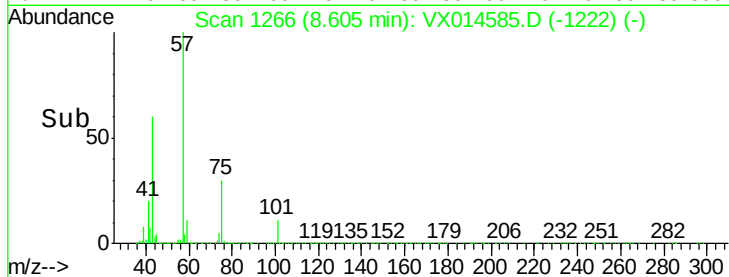
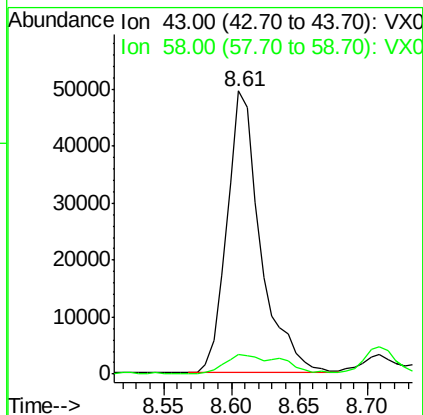
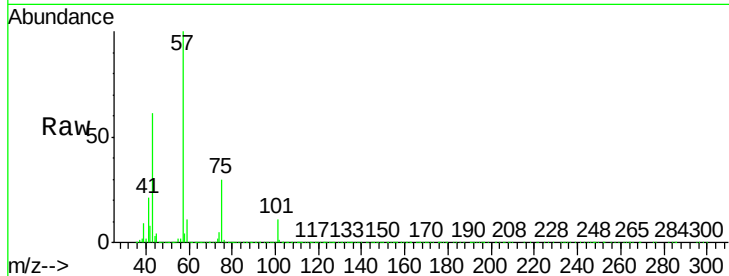




#51
 4-Methyl-2-Pentanone
 Concen: 11.092 ug/l
 RT: 8.61 min Scan# 1266
 Delta R.T. -0.03 min
 Lab File: VX014585.D
 Acq: 13 Jan 2020 14:35

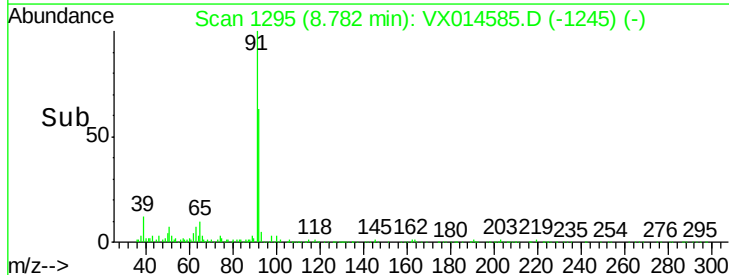
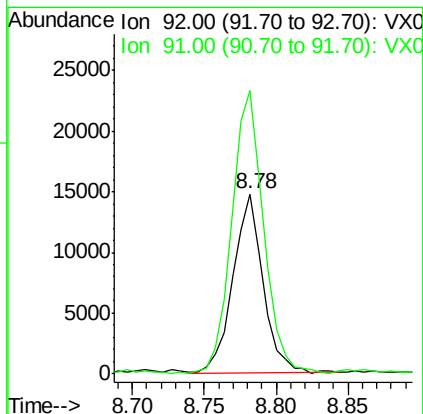
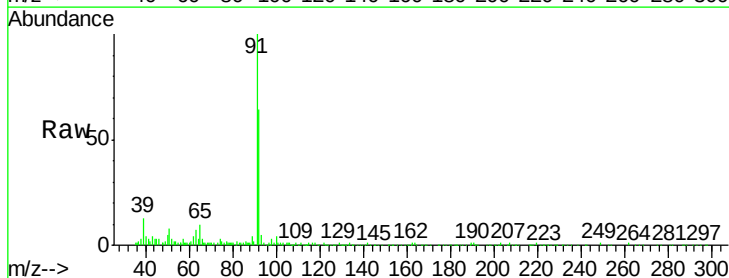
Instrument :
 MSVOA_X
 ClientSampleId :
 GRAVEL-SOIL

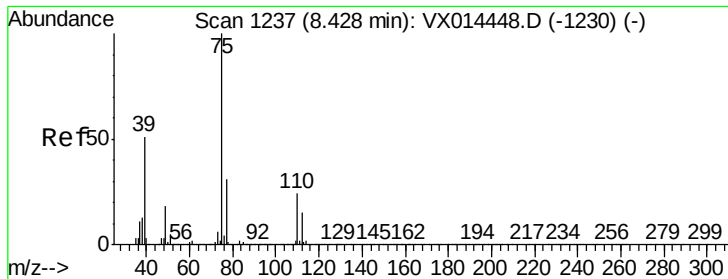
Tgt Ion: 43 Resp: 84502
 Ion Ratio Lower Upper
 43 100
 58 7.6 32.4 48.6#



#52
 Toluene
 Concen: 1.602 ug/l
 RT: 8.78 min Scan# 1295
 Delta R.T. 0.01 min
 Lab File: VX014585.D
 Acq: 13 Jan 2020 14:35

Tgt Ion: 92 Resp: 21688
 Ion Ratio Lower Upper
 92 100
 91 166.6 135.7 203.5





#54

cis-1,3-Dichloropropene

Concen: 4.483 ug/l

RT: 8.61 min Scan# 1266

Delta R.T. 0.18 min

Lab File: VX014585.D

Acq: 13 Jan 2020 14:35

Instrument :

MSVOA_X

ClientSampleId :

GRAVEL-SOIL

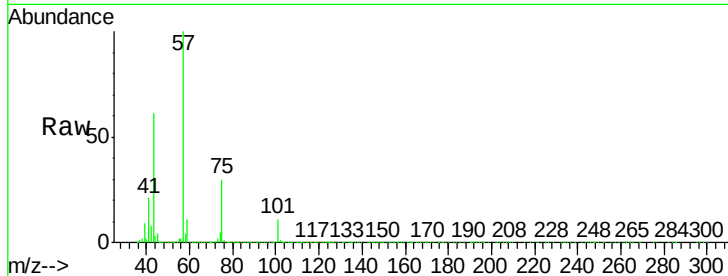
Tgt Ion: 75 Resp: 38608

Ion Ratio Lower Upper

75 100

77 0.9 25.0 37.4#

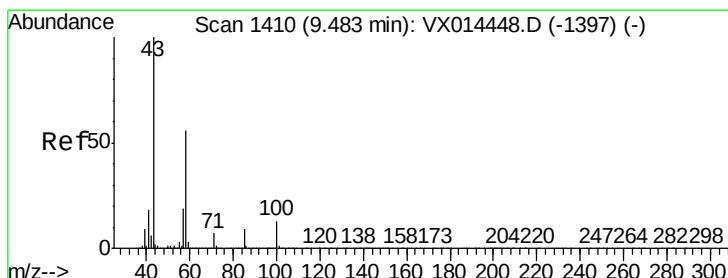
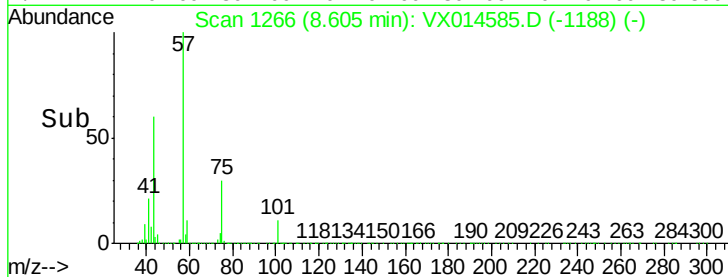
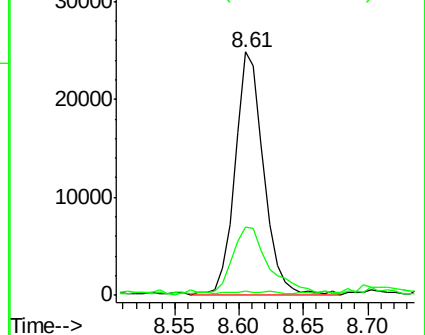
39 26.8 40.7 61.1#



Abundance Ion 74.90 (74.60 to 75.60): VX0

Ion 76.90 (76.60 to 77.60): VX0

Ion 39.00 (38.70 to 39.70): VX0



#59

2-Hexanone

Concen: 4.055 ug/l

RT: 9.54 min Scan# 1419

Delta R.T. 0.05 min

Lab File: VX014585.D

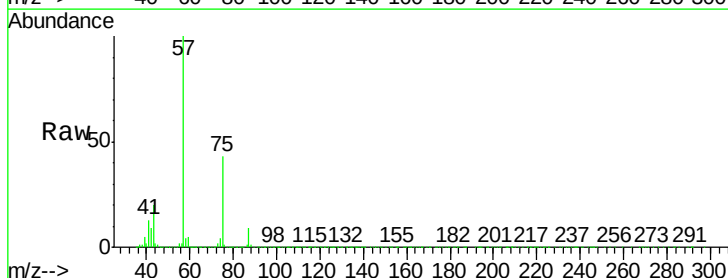
Acq: 13 Jan 2020 14:35

Tgt Ion: 43 Resp: 24443

Ion Ratio Lower Upper

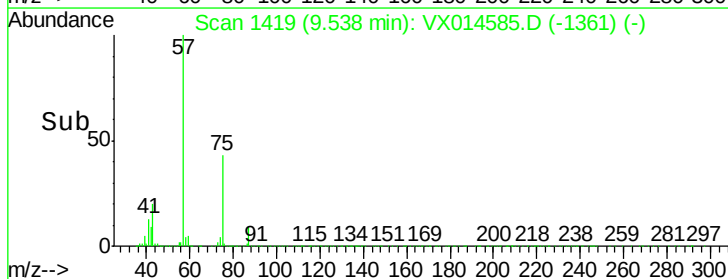
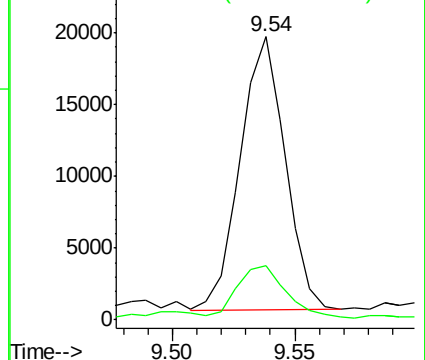
43 100

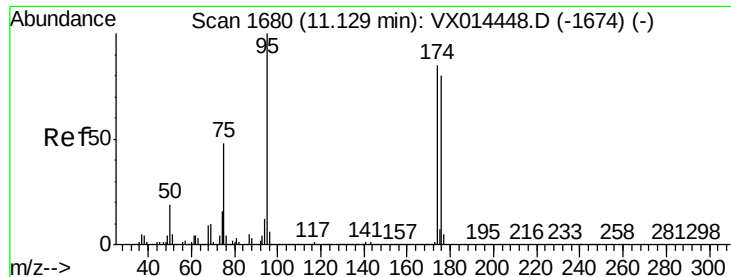
58 21.1 27.9 83.7#



Abundance Ion 43.00 (42.70 to 43.70): VX0

Ion 58.00 (57.70 to 58.70): VX0





#62

4-Bromofluorobenzene

Concen: 47.438 ug/l

RT: 11.14 min Scan# 1681

Delta R.T. 0.01 min

Lab File: VX014585.D

Acq: 13 Jan 2020 14:35

Instrument :

MSVOA_X

ClientSampleId :

GRAVEL-SOIL

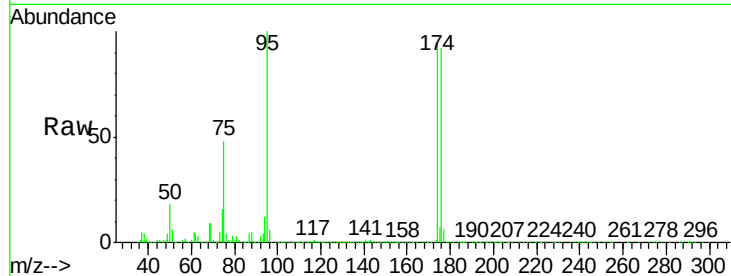
Tgt Ion: 95 Resp: 309957

Ion Ratio Lower Upper

95 100

174 89.4 0.0 180.8

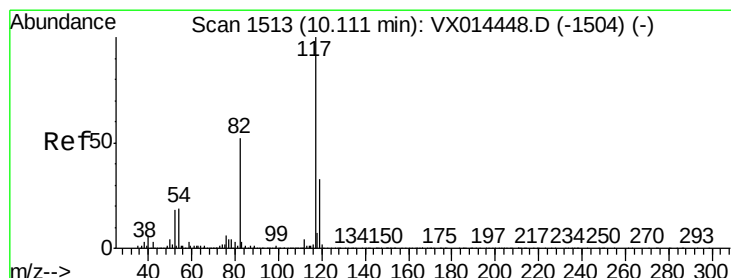
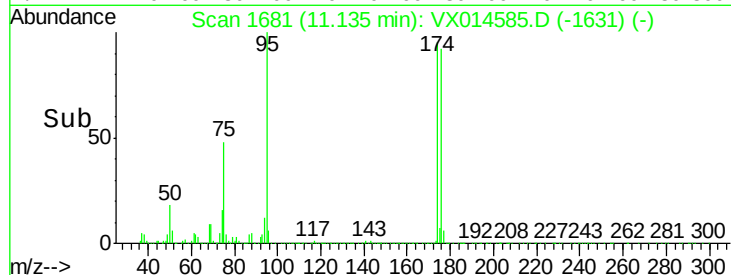
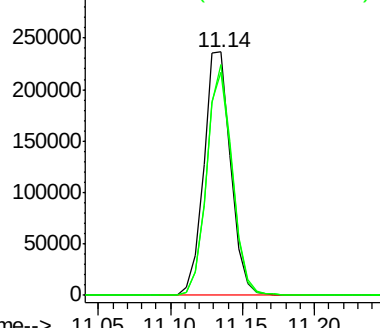
176 87.2 0.0 172.8



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



#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 10.11 min Scan# 1513

Delta R.T. -0.00 min

Lab File: VX014585.D

Acq: 13 Jan 2020 14:35

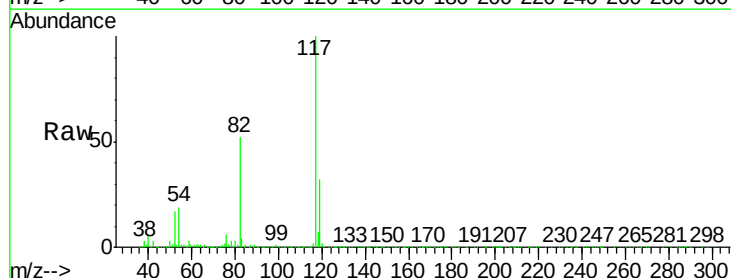
Tgt Ion: 117 Resp: 696751

Ion Ratio Lower Upper

117 100

82 52.3 41.8 62.6

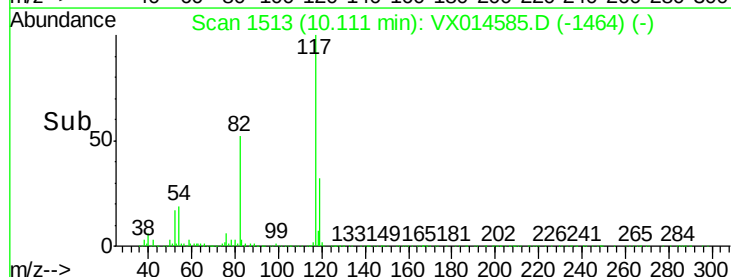
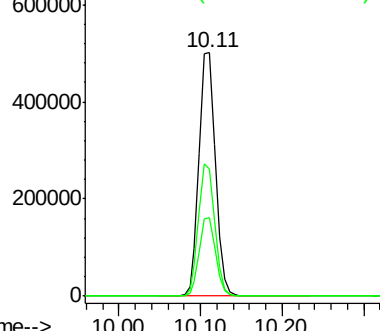
119 32.2 26.2 39.4

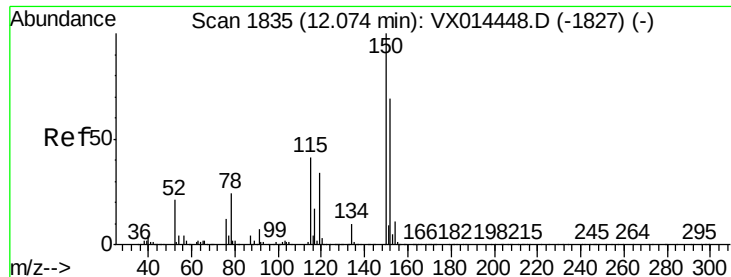


Abundance Ion 116.90 (116.60 to 117.60): V

Ion 82.00 (81.70 to 82.70): VX0

Ion 118.90 (118.60 to 119.60): V



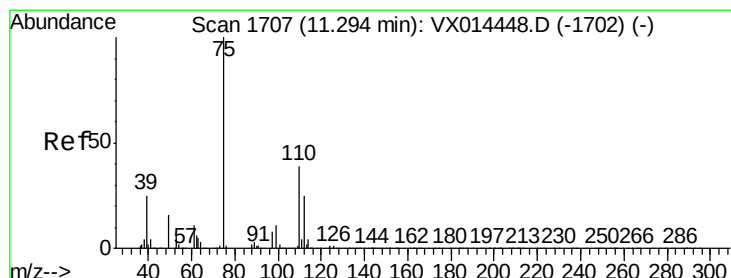
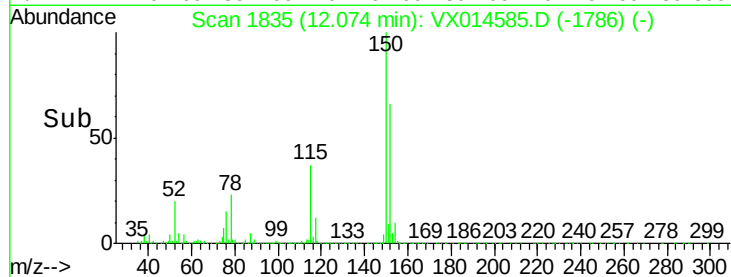
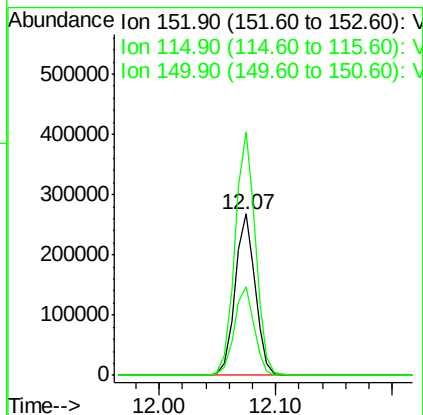
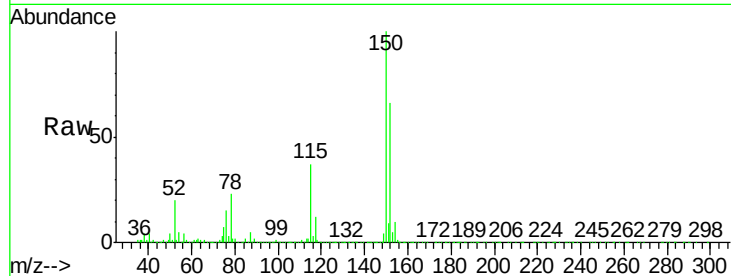


#72

1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 12.07 min Scan# 1835
Delta R.T. -0.00 min
Lab File: VX014585.D
Acq: 13 Jan 2020 14:35

Instrument :
MSVOA_X
ClientSampled :
GRAVEL-SOIL

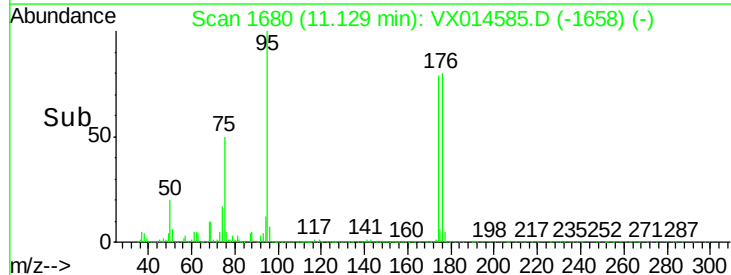
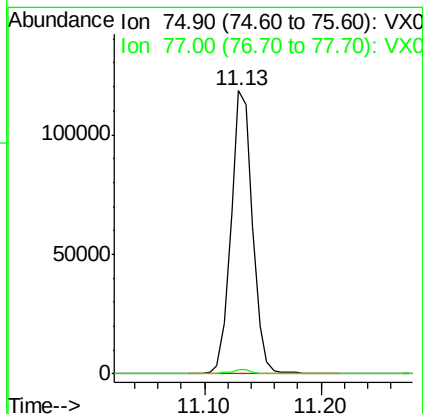
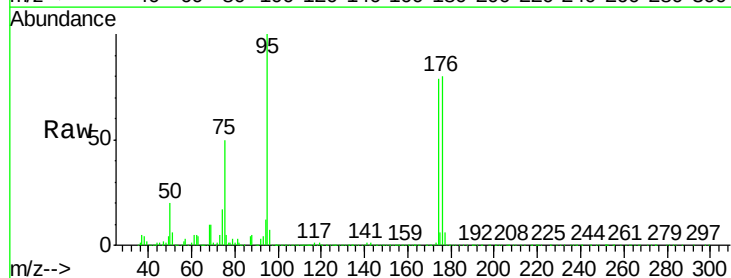
Tgt Ion: 152 Resp: 321618
Ion Ratio Lower Upper
152 100
115 55.1 39.5 118.3
150 153.9 0.0 350.2

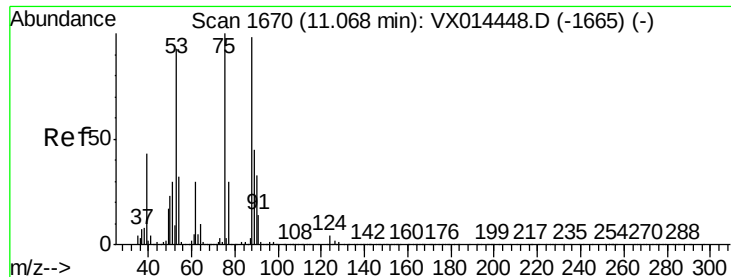


#76

1,2,3-Trichloropropane
Concen: 22.693 ug/l
RT: 11.13 min Scan# 1680
Delta R.T. -0.16 min
Lab File: VX014585.D
Acq: 13 Jan 2020 14:35

Tgt Ion: 75 Resp: 151007
Ion Ratio Lower Upper
75 100
77 1.5 21.9 65.7#





#81

trans-1,4-Dichloro-2-butene

Concen: 59.996 ug/l

RT: 11.13 min Scan# 1680

Delta R.T. 0.06 min

Lab File: VX014585.D

Acq: 13 Jan 2020 14:35

Instrument :

MSVOA_X

ClientSampleId :

GRAVEL-SOIL

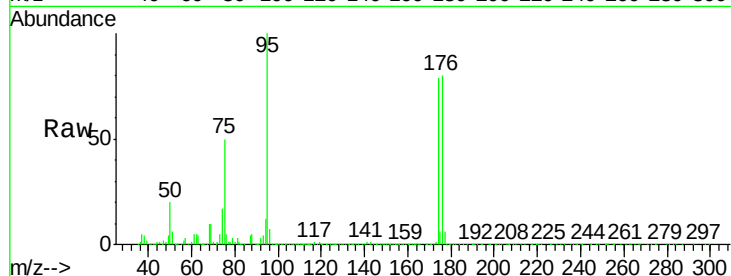
Tgt Ion: 75 Resp: 151007

Ion Ratio Lower Upper

75 100

53 0.5 74.8 112.2#

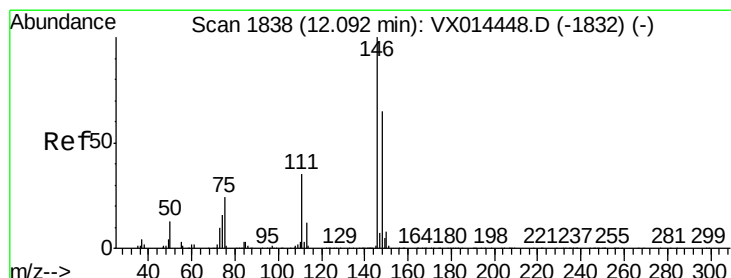
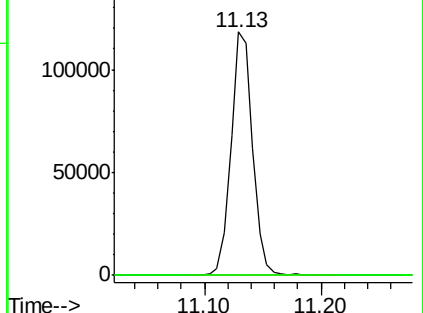
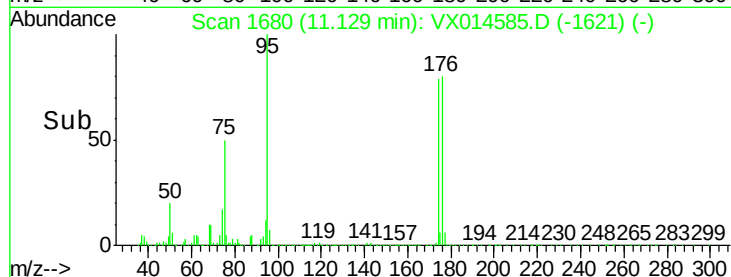
89 0.2 36.3 54.5#



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



#88

1,4-Dichlorobenzene

Concen: Below Cal

RT: 12.02 min Scan# 1826

Delta R.T. -0.07 min

Lab File: VX014585.D

Acq: 13 Jan 2020 14:35

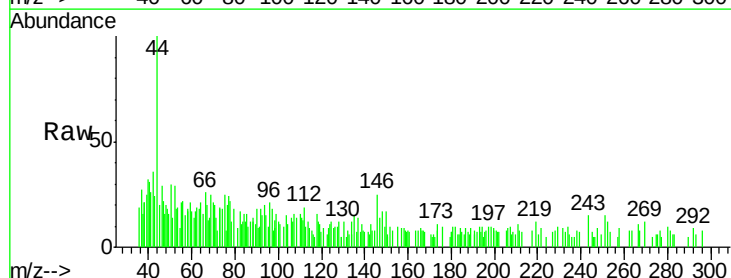
Tgt Ion: 146 Resp: 628

Ion Ratio Lower Upper

146 100

111 45.4 18.1 54.1

148 40.6 32.1 96.3



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

