

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN062419\
 Data File : VN056466.D
 Acq On : 24 Jun 2019 19:17
 Operator : JC/SP
 Sample : K3475-04
 Misc : 5.00mL/MSVOA N/WATER
 ALS Vial : 27 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 SOILS-4

Quant Time: Jun 25 01:24:23 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_N\METHODS\82N061919W.M
 Quant Title : SW846 8260
 QLast Update : Fri Jun 21 03:45:40 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	7.67	168	376694	50.00	ug/l	0.00
34) 1,4-Difluorobenzene	8.59	114	652795	50.00	ug/l	0.00
63) Chlorobenzene-d5	11.41	117	637781	50.00	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.34	152	185667	50.00	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.03	65	212876	50.99	ug/l	0.00
Spiked Amount	50.000		Recovery	=	101.98%	
35) Dibromofluoromethane	7.59	113	189387	46.51	ug/l	0.00
Spiked Amount	50.000		Recovery	=	93.02%	
50) Toluene-d8	10.09	98	805662	50.84	ug/l	0.00
Spiked Amount	50.000		Recovery	=	101.68%	
62) 4-Bromofluorobenzene	12.40	95	258875	49.01	ug/l	0.00
Spiked Amount	50.000		Recovery	=	98.02%	
Target Compounds						
					Qvalue	
16) Acetone	3.82	43	10888	5.205	ug/l	97
18) Methyl Acetate	4.33	43	4536	0.244	ug/l	94
20) Methylene Chloride	4.55	84	7778	1.102	ug/l	89
25) 2-Butanone	6.85	43	1278	0.462	ug/l	96
29) Tetrahydrofuran	7.22	42	1093	0.646	ug/l #	61
31) Cyclohexane	7.66	56	5880	0.912	ug/l #	1
36) 1,1-Dichloropropene	7.67	75	24314	4.232	ug/l #	49
38) Carbon Tetrachloride	7.66	117	32063	6.381	ug/l #	15
43) Isopropyl Acetate	8.17	43	12318	1.415	ug/l #	77
45) 1,2-Dichloropropane	9.27	63	1247	0.264	ug/l #	43
48) Methyl methacrylate	9.18	41	8990	2.060	ug/l #	21
51) 4-Methyl-2-Pentanone	9.99	43	5480	0.975	ug/l #	86
54) cis-1,3-Dichloropropene	9.90	75	63530	10.059	ug/l #	62
57) 1,3-Dichloropropane	10.76	76	11331	1.553	ug/l #	42
59) 2-Hexanone	10.76	43	158731	38.431	ug/l #	50
71) Bromoform	12.40	173	1846	3.638	ug/l #	1
73) Isopropylbenzene	12.40	105	223	Below Cal	#	48
74) N-amyl acetate	11.88	43	11603	1.964	ug/l #	50
76) 1,2,3-Trichloropropane	12.40	75	118547	30.793	ug/l #	100
79) 2-Chlorotoluene	12.60	91	171	Below Cal	#	40
80) 1,3,5-Trimethylbenzene	12.73	105	735	Below Cal		92
81) trans-1,4-Dichloro-2-buten	12.40	75	118547	109.442	ug/l #	8
95) Naphthalene	15.14	128	330	5.279	ug/l #	70

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



#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 7.67 min Scan# 1833

Delta R.T. 0.00 min

Lab File: VN056466.D

Acq: 24 Jun 2019 19:17

Instrument :

MSVOA_N

ClientSampled :

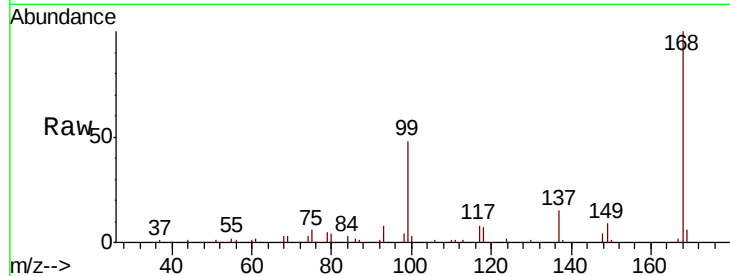
SOILS-4

Tot Ion:168 Resp: 376694

Ion Ratio Lower Upper

168 100

99 48.0 40.6 61.0



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VN

7.67

150000

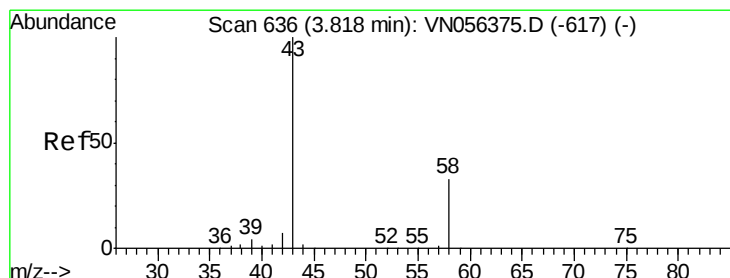
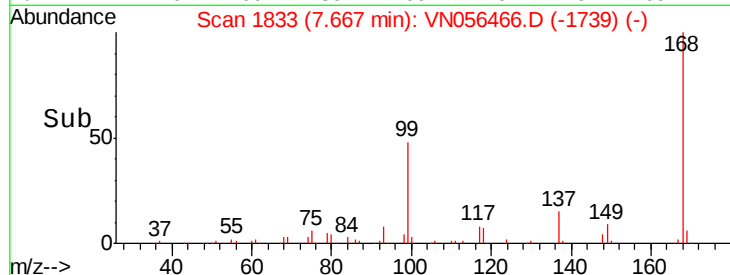
100000

50000

0

Time-->

7.60 7.70 7.80



#16

Acetone

Concen: 5.205 ug/l

RT: 3.82 min Scan# 638

Delta R.T. 0.01 min

Lab File: VN056466.D

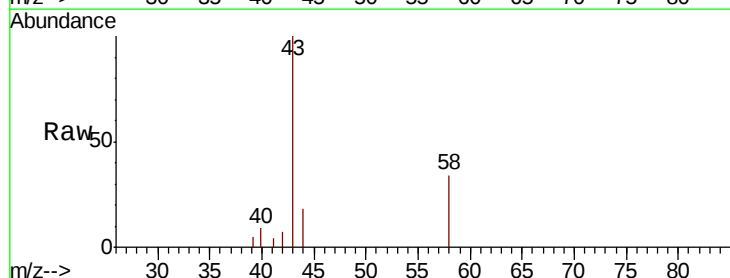
Acq: 24 Jun 2019 19:17

Tgt Ion: 43 Resp: 10888

Ion Ratio Lower Upper

43 100

58 34.9 26.4 39.6



Abundance Ion 43.00 (42.70 to 43.70): VN

Ion 58.00 (57.70 to 58.70): VN

3.82

4000

3000

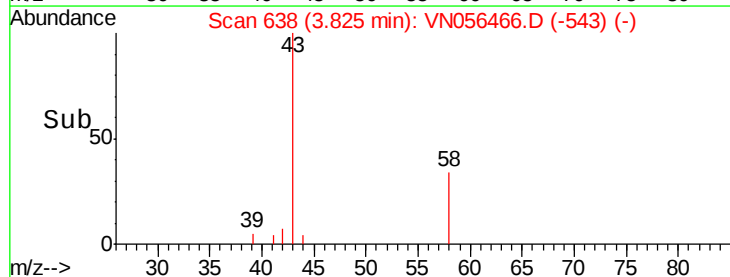
2000

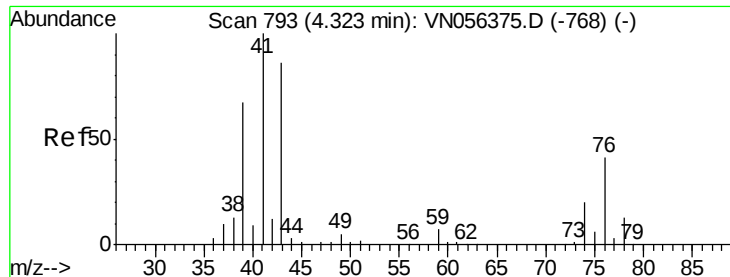
1000

0

Time-->

3.75 3.80 3.85 3.90

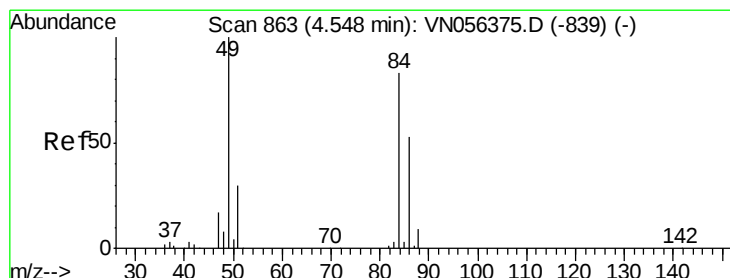
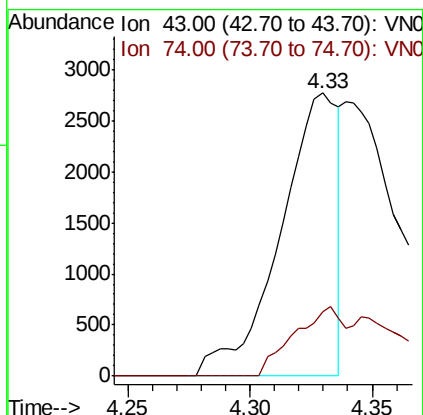
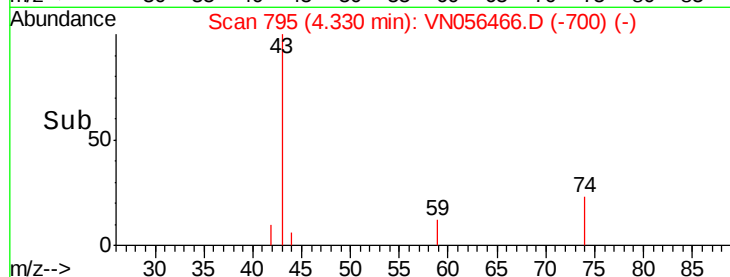
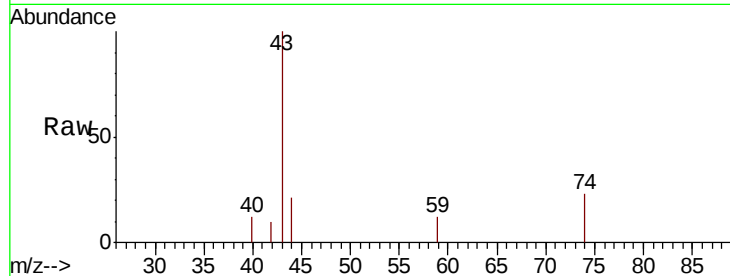




#18
Methyl Acetate
Concen: 0.244 ug/l
RT: 4.33 min Scan# 795
Delta R.T. 0.01 min
Lab File: VN056466.D
Acq: 24 Jun 2019 19:17

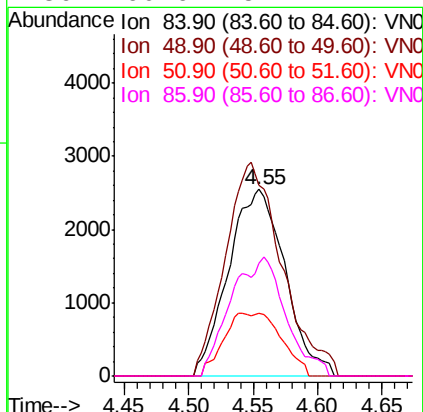
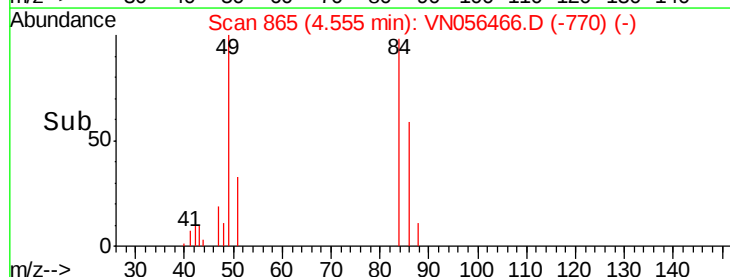
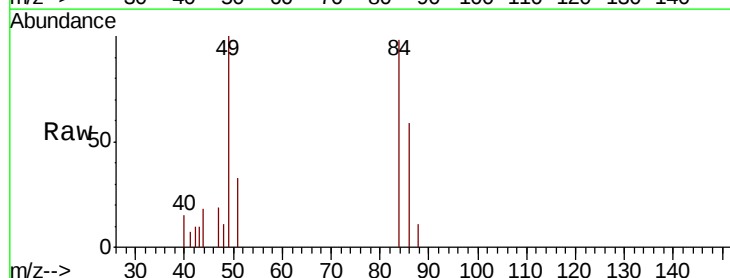
Instrument :
MSVOA_N
ClientSampled :
SOILS-4

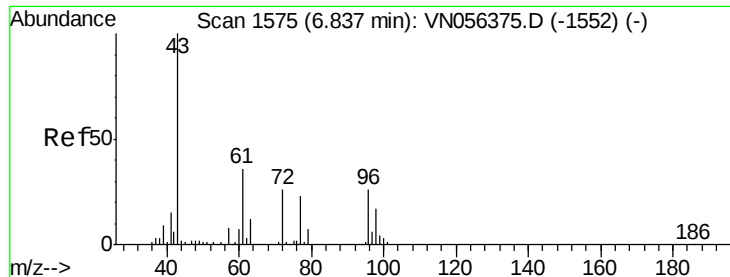
Tot Ion: 43 Resp: 4536
Ion Ratio Lower Upper
43 100
74 20.9 19.2 28.8



#20
Methylene Chloride
Concen: 1.102 ug/l
RT: 4.55 min Scan# 865
Delta R.T. 0.01 min
Lab File: VN056466.D
Acq: 24 Jun 2019 19:17

Tgt Ion: 84 Resp: 7778
Ion Ratio Lower Upper
84 100
49 102.0 96.4 144.6
51 33.6 28.6 43.0
86 60.6 51.4 77.2





#25

2-Butanone

Concen: 0.462 ug/l

RT: 6.85 min Scan# 1579

Delta R.T. 0.01 min

Lab File: VN056466.D

Acq: 24 Jun 2019 19:17

Instrument :

MSVOA_N

ClientSampleId :

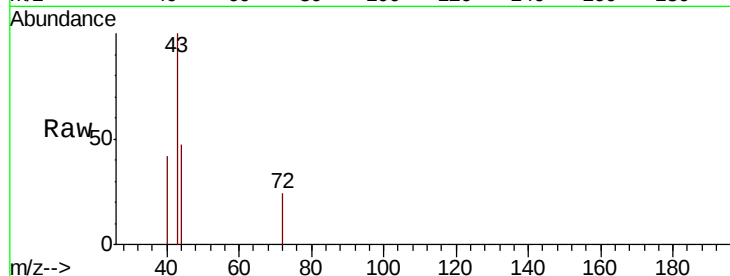
SOILS-4

Tot Ion: 43 Resp: 1278

Ion Ratio Lower Upper

43 100

72 23.9 20.6 31.0



Abundance Ion 43.00 (42.70 to 43.70): VN0

Ion 72.00 (71.70 to 72.70): VN0

6.85

800

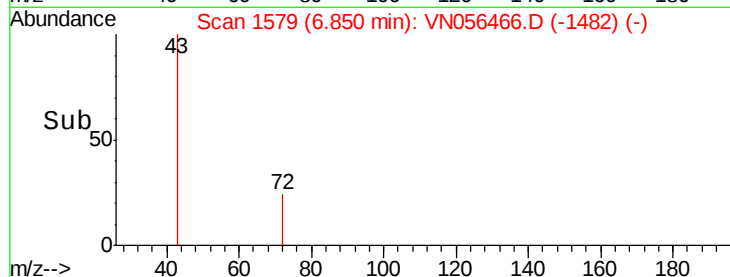
600

400

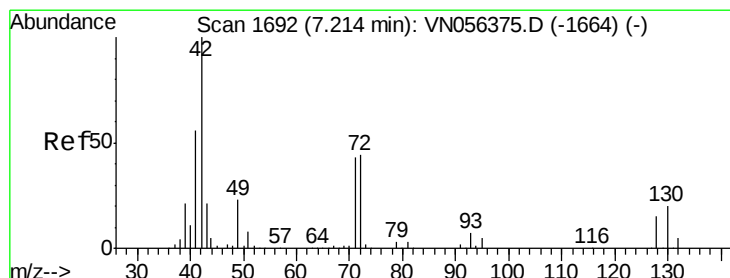
200

0

Time-->



Time-->



#29

Tetrahydrofuran

Concen: 0.646 ug/l

RT: 7.22 min Scan# 1695

Delta R.T. 0.01 min

Lab File: VN056466.D

Acq: 24 Jun 2019 19:17

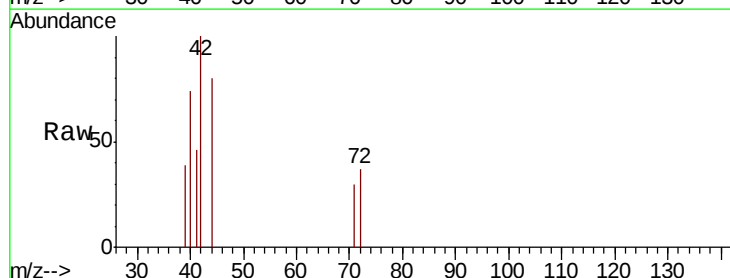
Tgt Ion: 42 Resp: 1093

Ion Ratio Lower Upper

42 100

72 19.0 34.7 52.1#

71 16.7 33.0 49.6#



Abundance Ion 42.00 (41.70 to 42.70): VN0

Ion 72.00 (71.70 to 72.70): VN0

Ion 71.00 (70.70 to 71.70): VN0

7.22

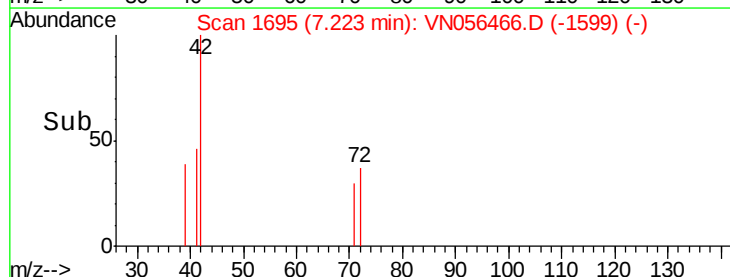
600

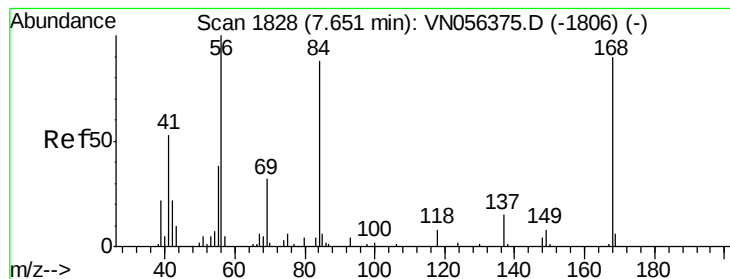
400

200

0

Time-->





#31

Cyclohexane

Concen: 0.912 ug/l

RT: 7.66 min Scan# 1832

Delta R.T. 0.01 min

Lab File: VN056466.D

Acq: 24 Jun 2019 19:17

Instrument :

MSVOA_N

ClientSampleId :

SOILS-4

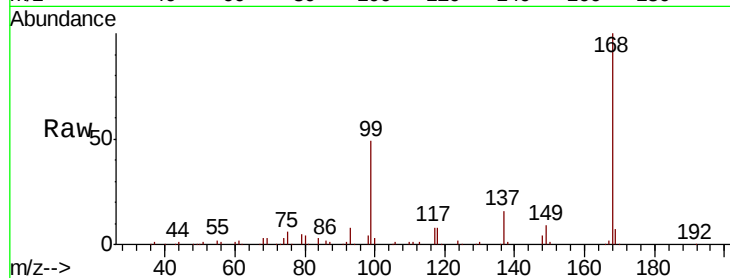
Tot Ion: 56 Resp: 5880

Ion Ratio Lower Upper

56 100

69 188.1 25.8 38.6#

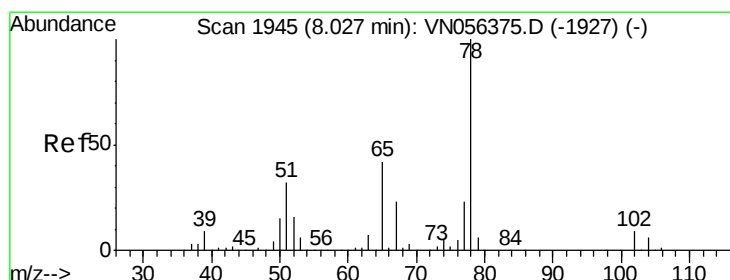
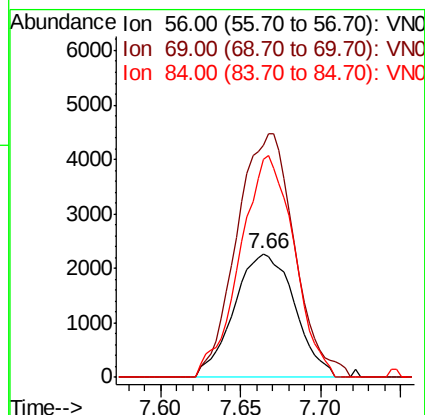
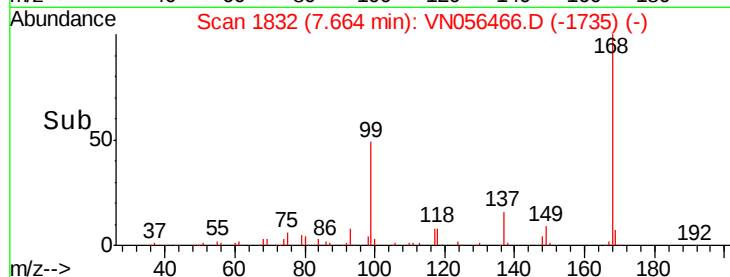
84 176.3 69.4 104.0#



Abundance Ion 56.00 (55.70 to 56.70): VN0

Ion 69.00 (68.70 to 69.70): VN0

Ion 84.00 (83.70 to 84.70): VN0



#33

1,2-Dichloroethane-d4

Concen: 50.989 ug/l

RT: 8.03 min Scan# 1945

Delta R.T. 0.00 min

Lab File: VN056466.D

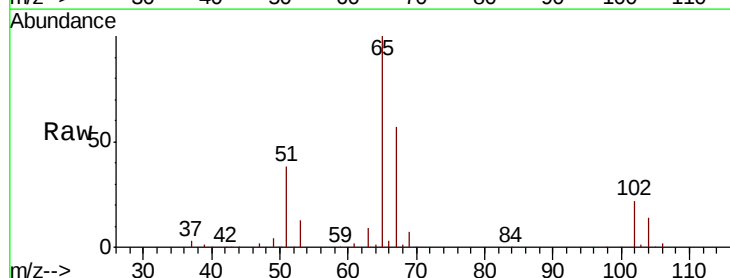
Acq: 24 Jun 2019 19:17

Tgt Ion: 65 Resp: 212876

Ion Ratio Lower Upper

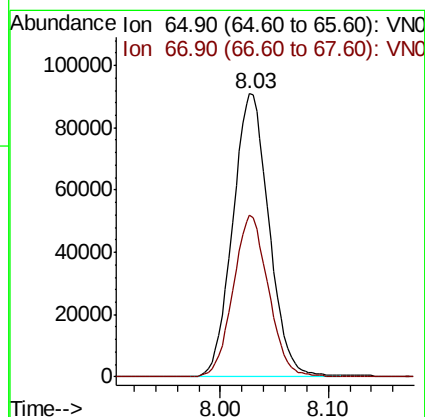
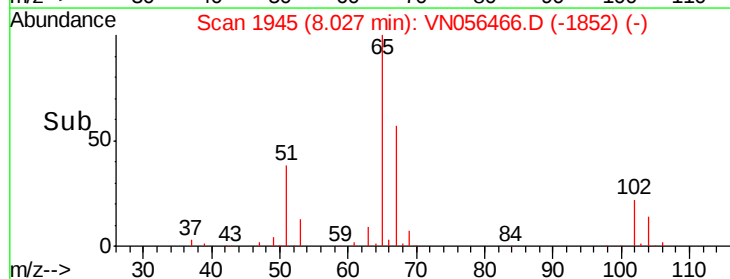
65 100

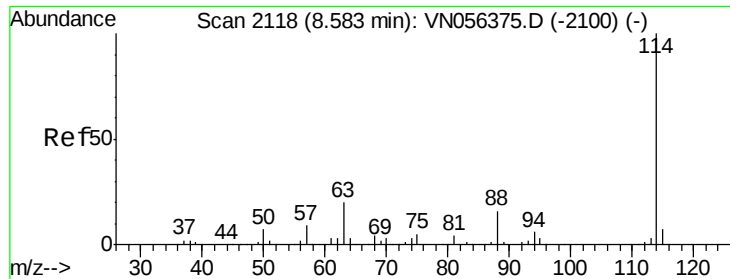
67 55.7 0.0 109.0



Abundance Ion 64.90 (64.60 to 65.60): VN0

Ion 66.90 (66.60 to 67.60): VN0

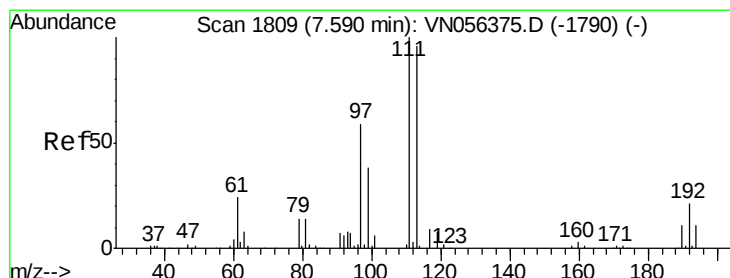
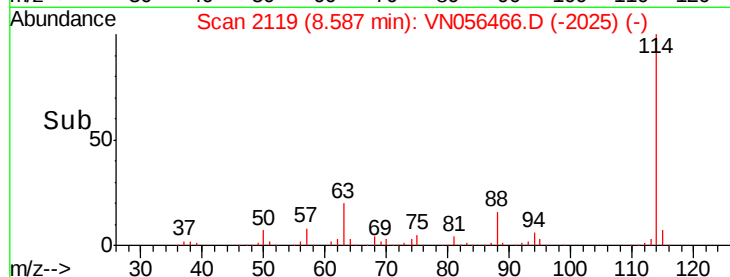
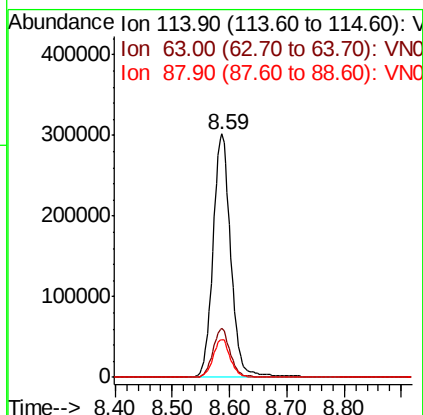
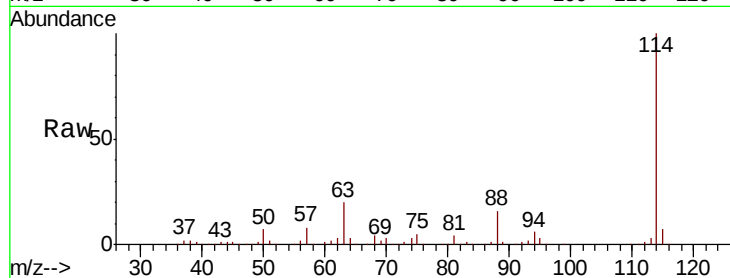




#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 8.59 min Scan# 2119
Delta R.T. 0.00 min
Lab File: VN056466.D
Acq: 24 Jun 2019 19:17

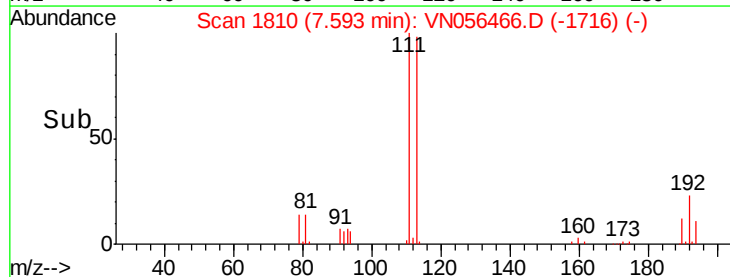
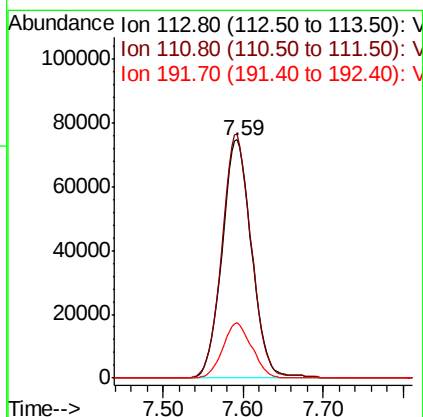
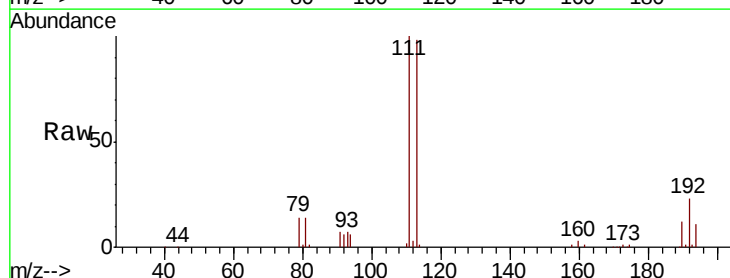
Instrument :
MSVOA_N
ClientSampleId :
SOILS-4

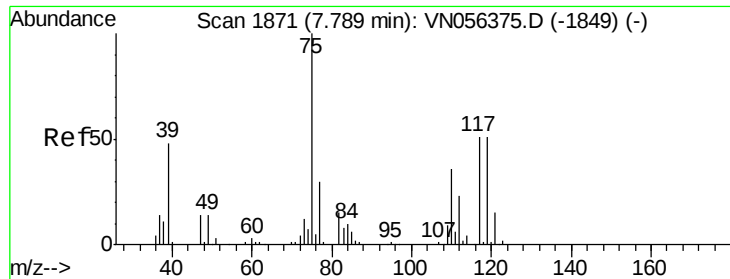
Tot Ion	Ratio	Lower	Upper
114	100		
63	19.9	0.0	39.2
88	15.6	0.0	31.4



#35
Dibromofluoromethane
Concen: 46.505 ug/l
RT: 7.59 min Scan# 1810
Delta R.T. 0.00 min
Lab File: VN056466.D
Acq: 24 Jun 2019 19:17

Tgt Ion	Ratio	Lower	Upper
113	100		
111	101.4	82.9	124.3
192	22.7	17.7	26.5





#36

1,1-Dichloropropene

Concen: 4.232 ug/l

RT: 7.67 min Scan# 1833

Delta R.T. -0.12 min

Lab File: VN056466.D

Acq: 24 Jun 2019 19:17

Instrument :

MSVOA_N

ClientSampled :

SOILS-4

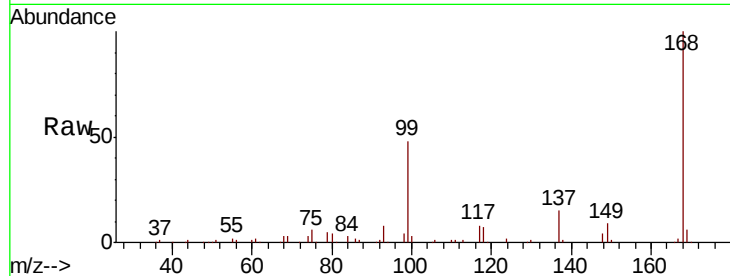
Tot Ion: 75 Resp: 24314

Ion Ratio Lower Upper

75 100

110 8.2 18.1 54.3#

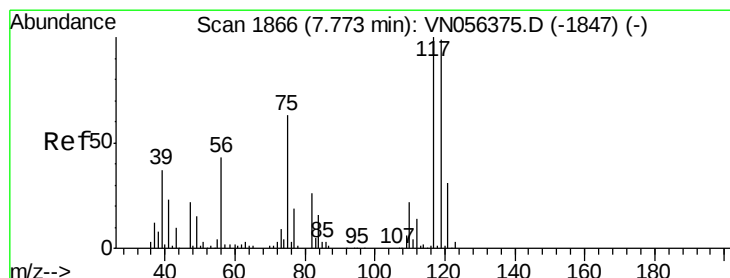
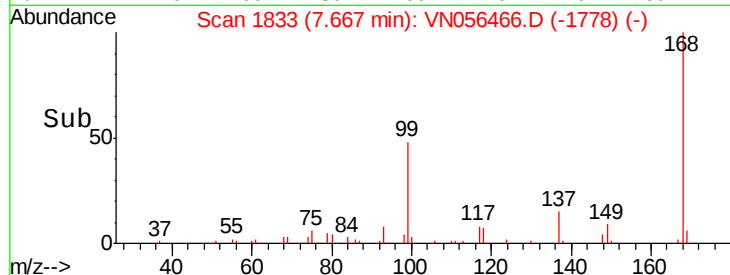
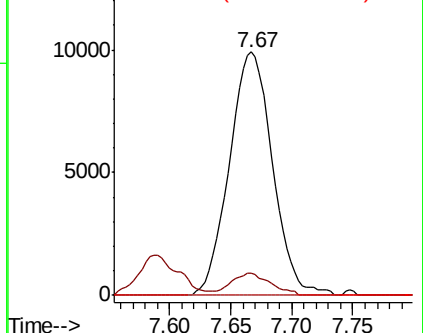
77 0.0 24.6 36.8#



Abundance Ion 74.90 (74.60 to 75.60): VN056375.D (-1849) (-)

Ion 109.90 (109.60 to 110.60): VN056375.D (-1849) (-)

Ion 76.90 (76.60 to 77.60): VN056375.D (-1849) (-)



#38

Carbon Tetrachloride

Concen: 6.381 ug/l

RT: 7.66 min Scan# 1832

Delta R.T. -0.11 min

Lab File: VN056466.D

Acq: 24 Jun 2019 19:17

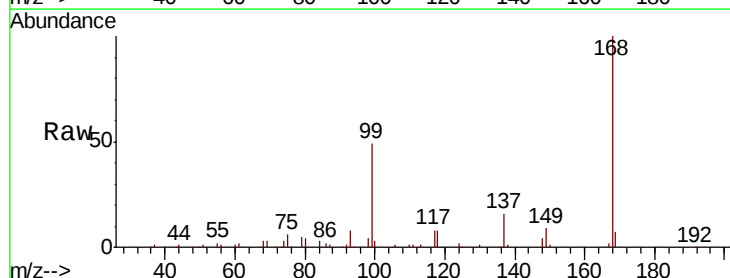
Tgt Ion: 117 Resp: 32063

Ion Ratio Lower Upper

117 100

119 5.1 79.1 118.7#

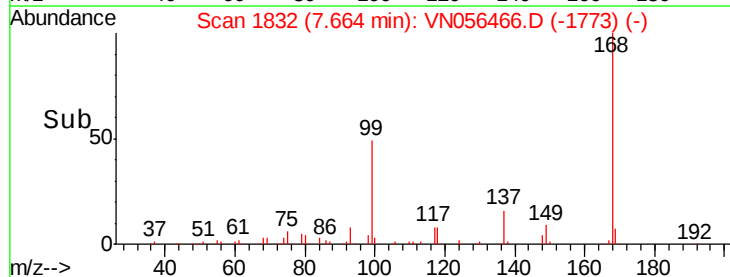
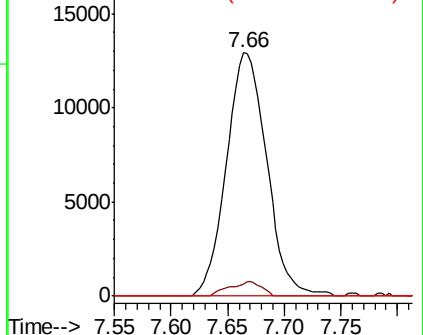
121 0.0 24.8 37.2#

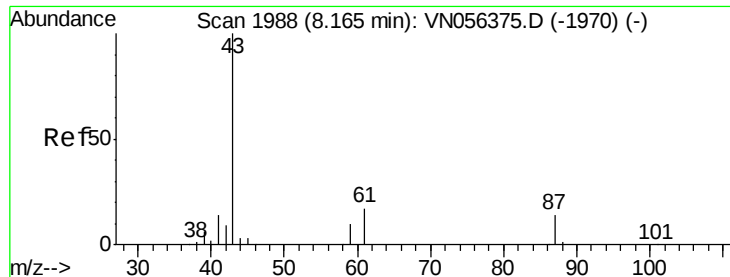


Abundance Ion 116.80 (116.50 to 117.50): VN056375.D (-1847) (-)

Ion 118.80 (118.50 to 119.50): VN056375.D (-1847) (-)

Ion 120.80 (120.50 to 121.50): VN056375.D (-1847) (-)





#43

Isopropyl Acetate

Concen: 1.415 ug/l

RT: 8.17 min Scan# 1989

Delta R.T. 0.00 min

Lab File: VN056466.D

Acq: 24 Jun 2019 19:17

Instrument :

MSVOA_N

ClientSampled :

SOILS-4

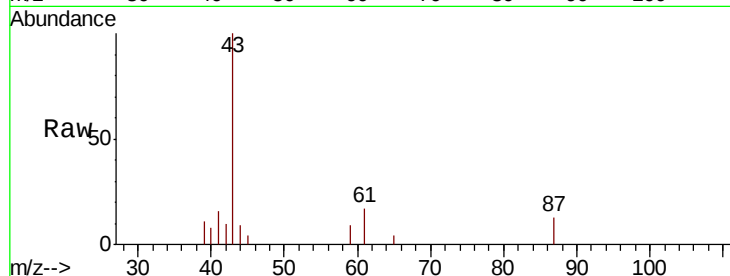
Tot Ion: 43 Resp: 12318

Ion Ratio Lower Upper

43 100

61 10.2 22.0 33.0#

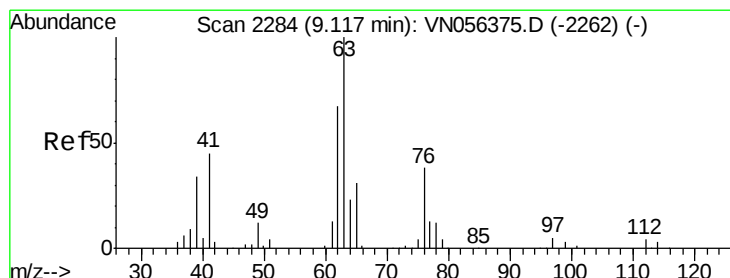
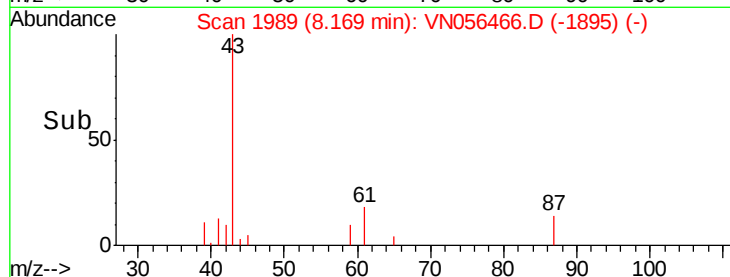
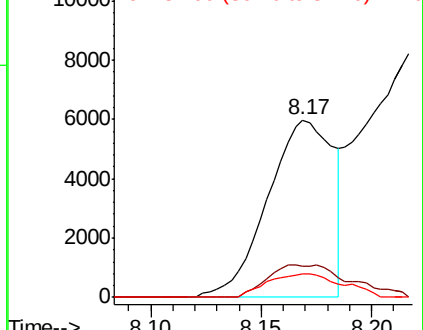
87 15.1 11.0 16.4



Abundance Ion 43.00 (42.70 to 43.70): VN0

Ion 61.00 (60.70 to 61.70): VN0

Ion 87.00 (86.70 to 87.70): VN0



#45

1,2-Dichloropropane

Concen: 0.264 ug/l

RT: 9.27 min Scan# 2330

Delta R.T. 0.15 min

Lab File: VN056466.D

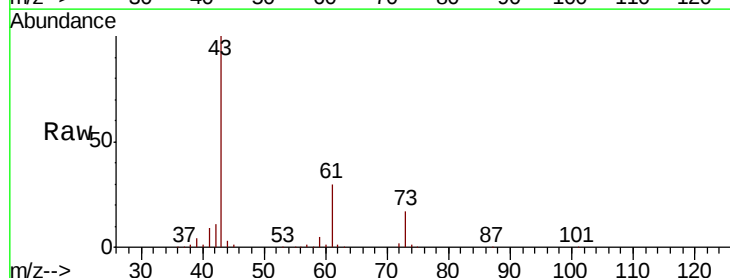
Acq: 24 Jun 2019 19:17

Tgt Ion: 63 Resp: 1247

Ion Ratio Lower Upper

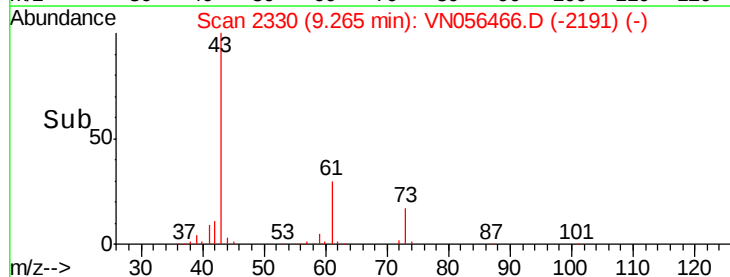
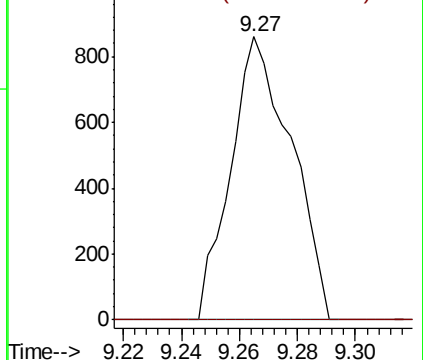
63 100

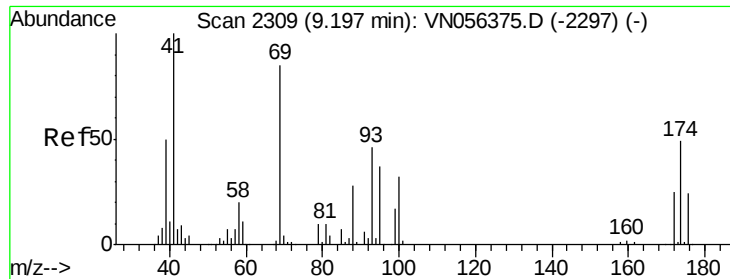
65 0.0 25.0 37.6#



Abundance Ion 62.90 (62.60 to 63.60): VN0

Ion 64.90 (64.60 to 65.60): VN0

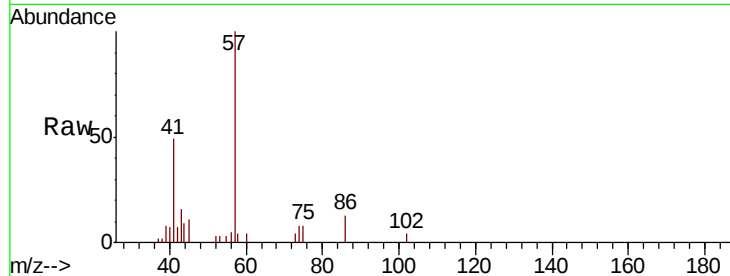




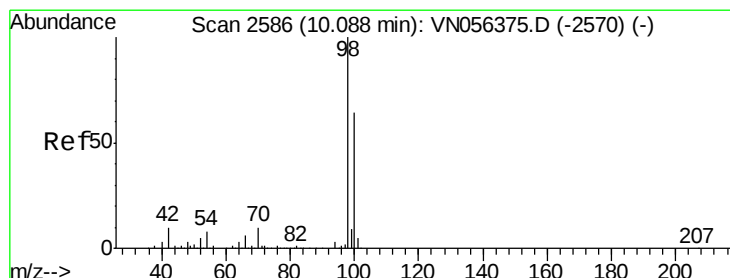
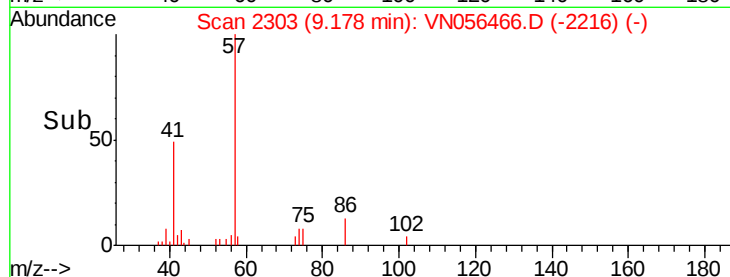
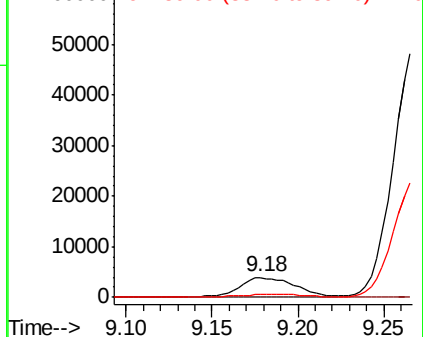
#48
Methyl methacrylate
Concen: 2.060 ug/l
RT: 9.18 min Scan# 2303
Delta R.T. -0.02 min
Lab File: VN056466.D
Acq: 24 Jun 2019 19:17

Instrument :
MSVOA_N
ClientSampled :
SOILS-4

Tot Ion: 41 Resp: 8990
Ion Ratio Lower Upper
41 100
69 0.0 72.6 109.0#
39 17.5 42.6 63.8#

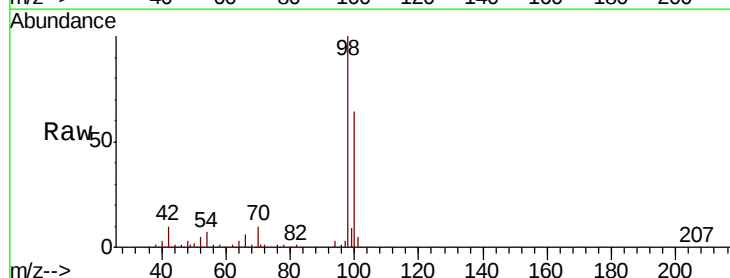


Abundance Ion 41.00 (40.70 to 41.70): VN0
Ion 69.00 (68.70 to 69.70): VN0
Ion 39.00 (38.70 to 39.70): VN0

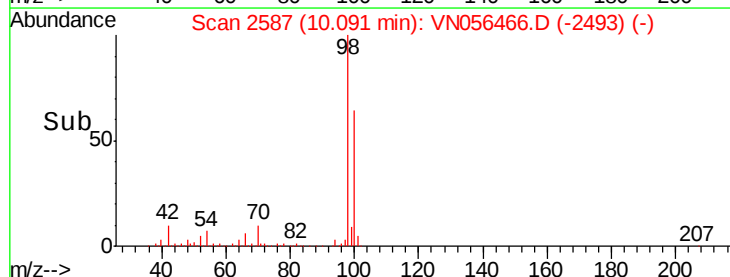
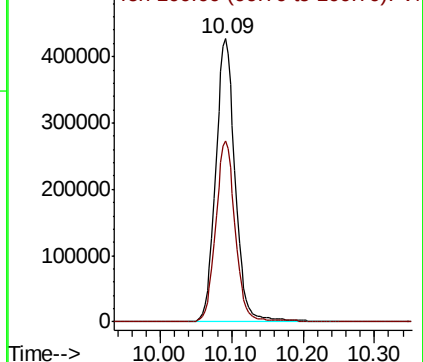


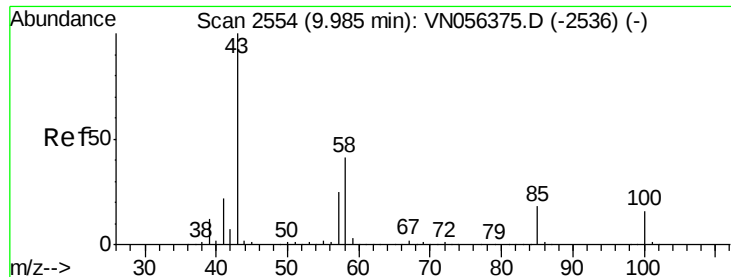
#50
Toluene-d8
Concen: 50.844 ug/l
RT: 10.09 min Scan# 2587
Delta R.T. 0.00 min
Lab File: VN056466.D
Acq: 24 Jun 2019 19:17

Tgt Ion: 98 Resp: 805662
Ion Ratio Lower Upper
98 100
100 63.9 52.2 78.2



Abundance Ion 98.00 (97.70 to 98.70): VN0
Ion 100.00 (99.70 to 100.70): VN0





#51

4-Methyl-2-Pentanone

Concen: 0.975 ug/l

RT: 9.99 min Scan# 2554

Delta R.T. 0.00 min

Lab File: VN056466.D

Acq: 24 Jun 2019 19:17

Instrument :

MSVOA_N

ClientSampled :

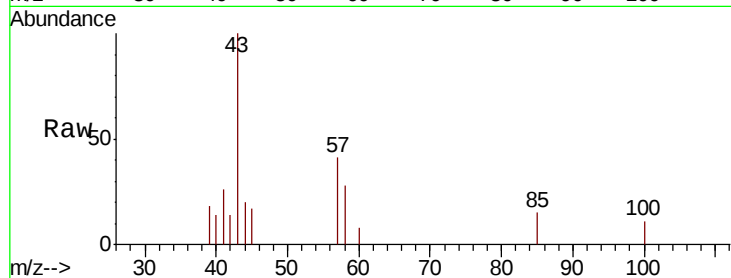
SOILS-4

Tot Ion: 43 Resp: 5480

Ion Ratio Lower Upper

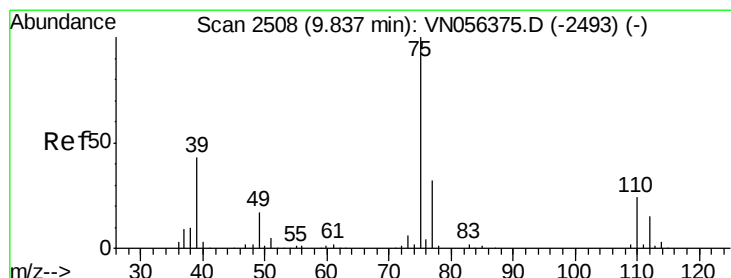
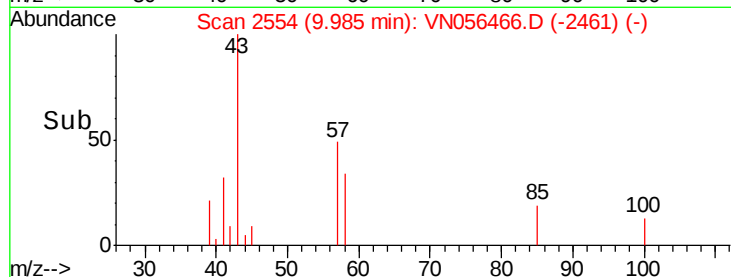
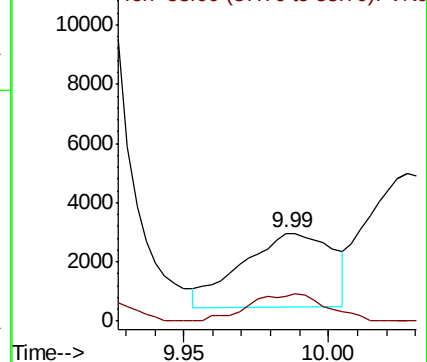
43 100

58 30.9 31.8 47.8#



Abundance Ion 43.00 (42.70 to 43.70): VN0

Ion 58.00 (57.70 to 58.70): VN0



#54

cis-1,3-Dichloropropene

Concen: 10.059 ug/l

RT: 9.90 min Scan# 2529

Delta R.T. 0.07 min

Lab File: VN056466.D

Acq: 24 Jun 2019 19:17

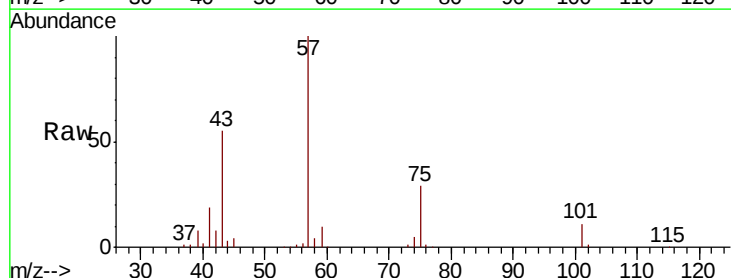
Tgt Ion: 75 Resp: 63530

Ion Ratio Lower Upper

75 100

77 0.6 25.2 37.8#

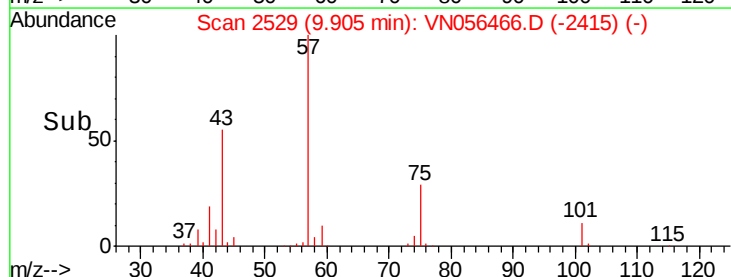
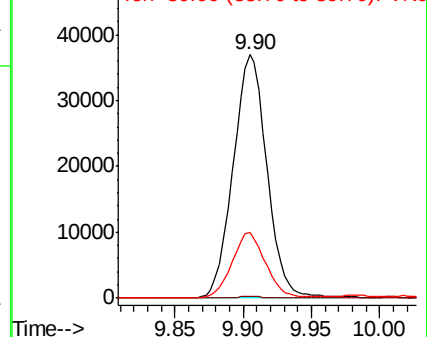
39 26.8 34.2 51.4#

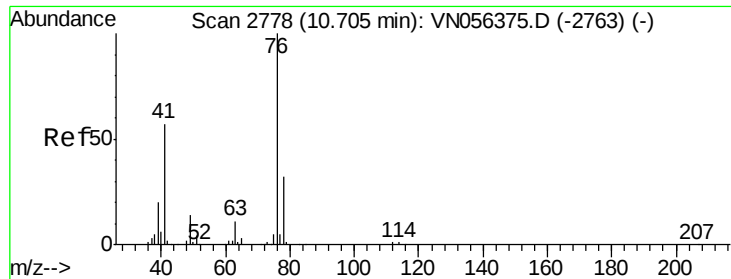


Abundance Ion 74.90 (74.60 to 75.60): VN0

Ion 76.90 (76.60 to 77.60): VN0

Ion 39.00 (38.70 to 39.70): VN0





#57

1,3-Dichloropropane

Concen: 1.553 ug/l

RT: 10.76 min Scan# 2796

Delta R.T. 0.06 min

Lab File: VN056466.D

Acq: 24 Jun 2019 19:17

Instrument :

MSVOA_N

ClientSampleId :

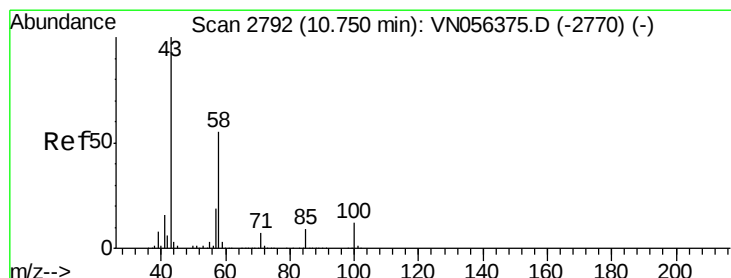
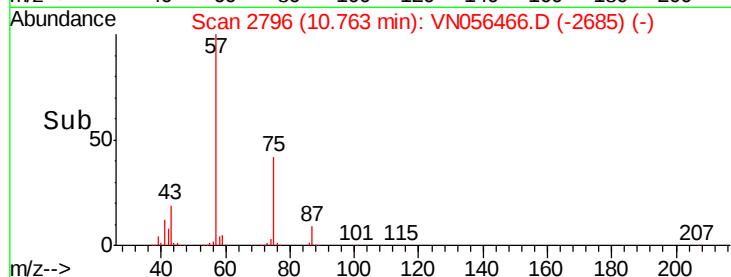
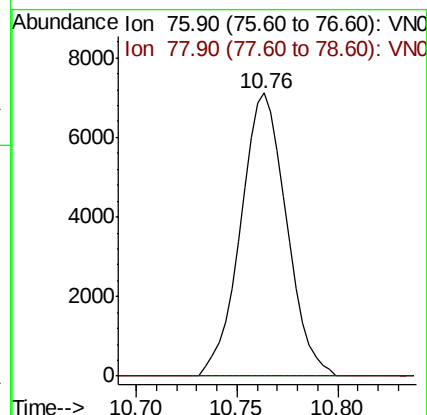
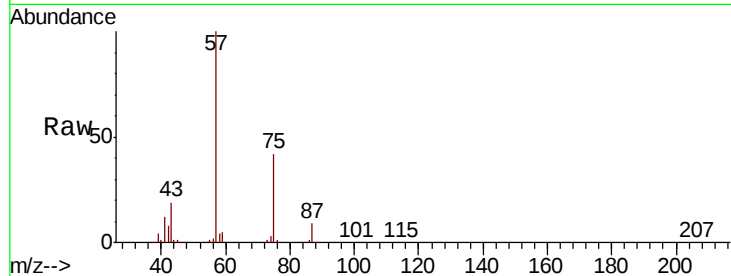
SOILS-4

Tot Ion: 76 Resp: 11331

Ion Ratio Lower Upper

76 100

78 0.0 25.9 38.9#



#59

2-Hexanone

Concen: 38.431 ug/l

RT: 10.76 min Scan# 2796

Delta R.T. 0.01 min

Lab File: VN056466.D

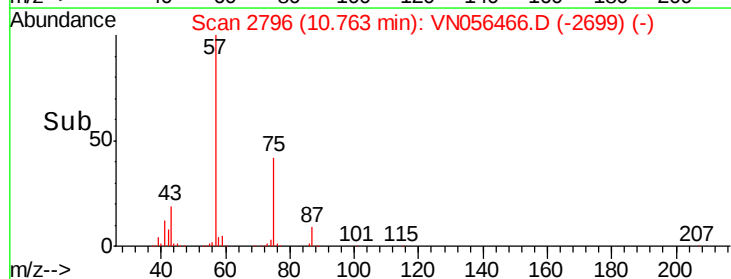
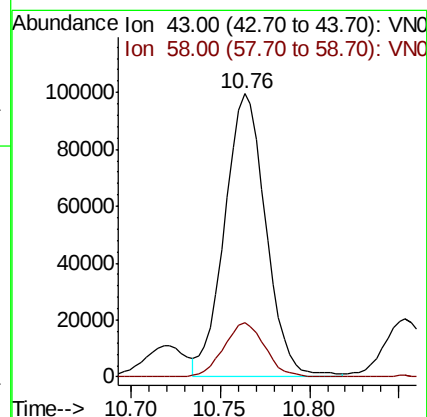
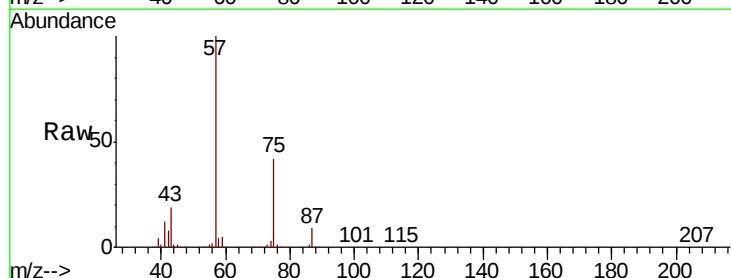
Acq: 24 Jun 2019 19:17

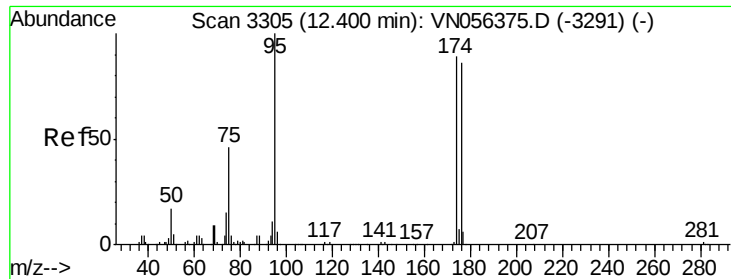
Tgt Ion: 43 Resp: 158731

Ion Ratio Lower Upper

43 100

58 19.4 27.8 83.4#





#62

4-Bromofluorobenzene

Concen: 49.007 ug/l

RT: 12.40 min Scan# 3305

Delta R.T. 0.00 min

Lab File: VN056466.D

Acq: 24 Jun 2019 19:17

Instrument :

MSVOA_N

ClientSampleId :

SOILS-4

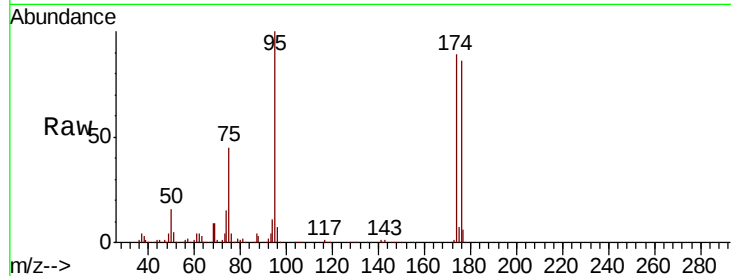
Tot Ion: 95 Resp: 258875

Ion Ratio Lower Upper

95 100

174 90.3 0.0 179.4

176 87.3 0.0 173.4



Abundance Ion 94.90 (94.60 to 95.60): VN056375.D (-3291) (-)

Ion 173.80 (173.50 to 174.50): VN056375.D (-3291) (-)

Ion 175.80 (175.50 to 176.50): VN056375.D (-3291) (-)

12.40

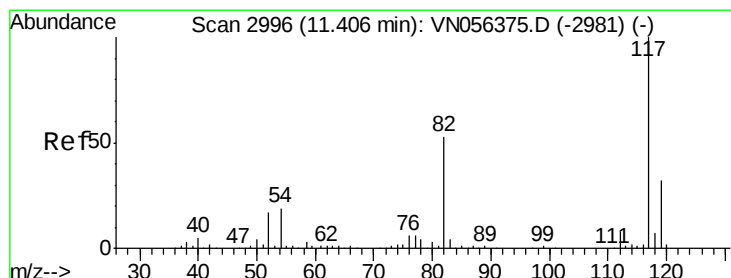
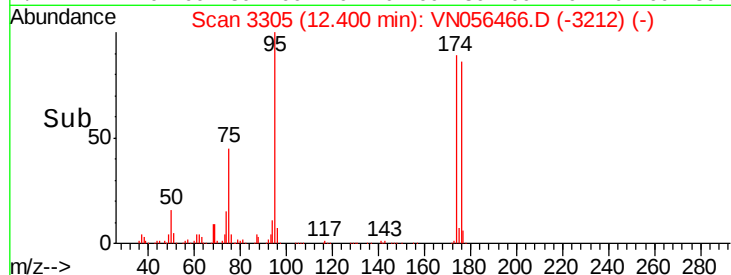
150000

100000

50000

0

Time--> 12.30 12.40 12.50



#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 11.41 min Scan# 2996

Delta R.T. 0.00 min

Lab File: VN056466.D

Acq: 24 Jun 2019 19:17

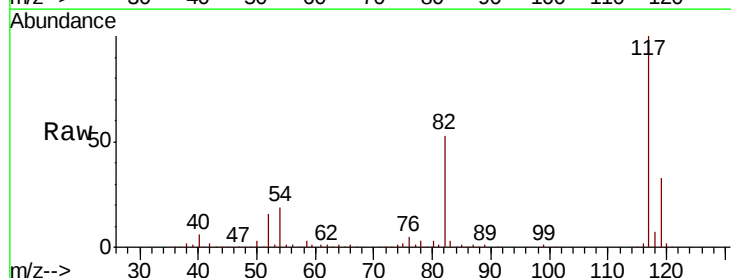
Tgt Ion: 117 Resp: 637781

Ion Ratio Lower Upper

117 100

82 52.6 42.0 63.0

119 32.6 25.3 37.9



Abundance Ion 116.90 (116.60 to 117.60): VN056375.D (-2981) (-)

Ion 82.00 (81.70 to 82.70): VN056375.D (-2981) (-)

Ion 118.90 (118.60 to 119.60): VN056375.D (-2981) (-)

11.41

500000

400000

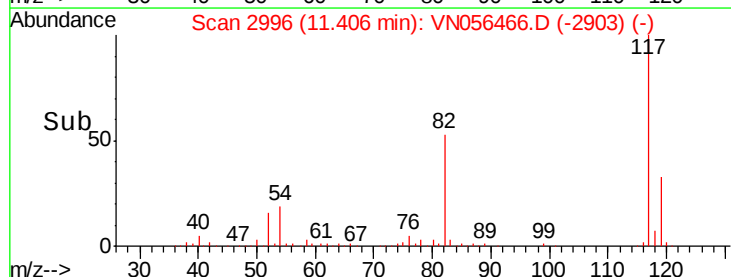
300000

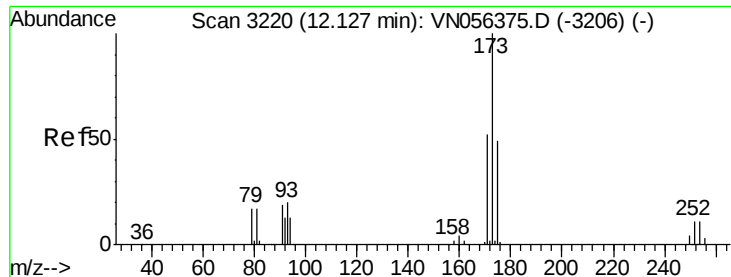
200000

100000

0

Time--> 11.30 11.40 11.50





#71

Bromoform

Concen: 3.638 ug/l

RT: 12.40 min Scan# 3305

Delta R.T. 0.27 min

Lab File: VN056466.D

Acq: 24 Jun 2019 19:17

Instrument :

MSVOA_N

ClientSampled :

SOILS-4

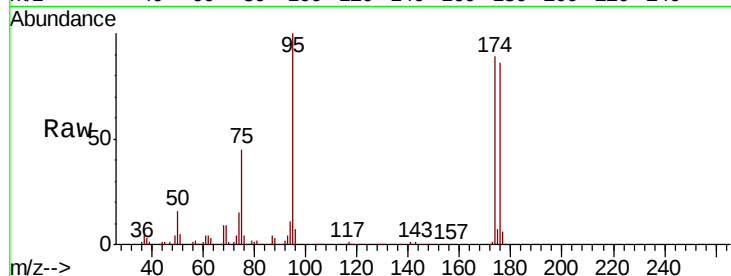
Tot Ion:173 Resp: 1846

Ion Ratio Lower Upper

173 100

175 826.4 24.4 73.4#

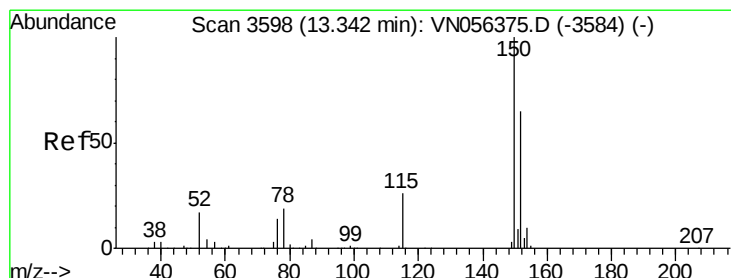
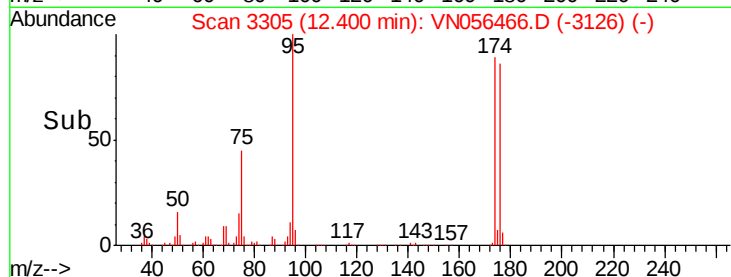
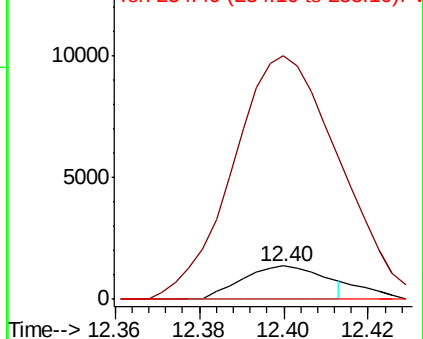
254 0.0 0.0 0.0



Abundance Ion 172.70 (172.40 to 173.40): V

Ion 174.70 (174.40 to 175.40): V

Ion 254.40 (254.10 to 255.10): V



#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 13.34 min Scan# 3598

Delta R.T. 0.00 min

Lab File: VN056466.D

Acq: 24 Jun 2019 19:17

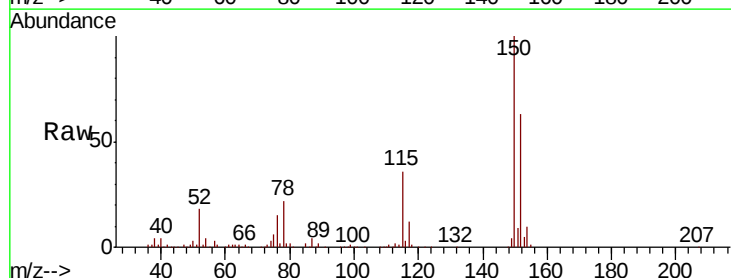
Tgt Ion:152 Resp: 185667

Ion Ratio Lower Upper

152 100

115 55.9 28.1 84.4

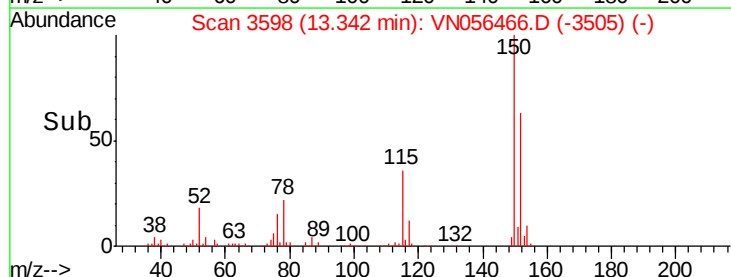
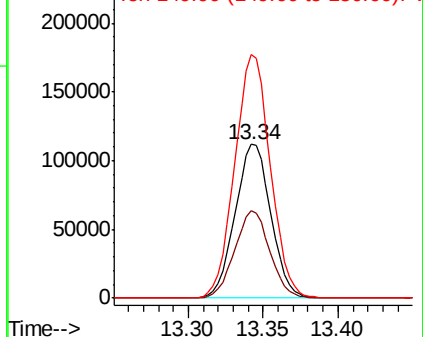
150 158.1 0.0 348.4

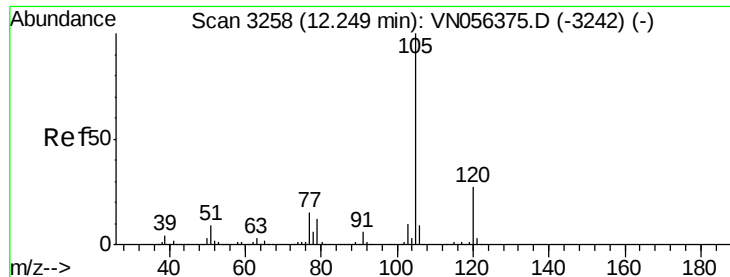


Abundance Ion 151.90 (151.60 to 152.60): V

Ion 114.90 (114.60 to 115.60): V

Ion 149.90 (149.60 to 150.60): V

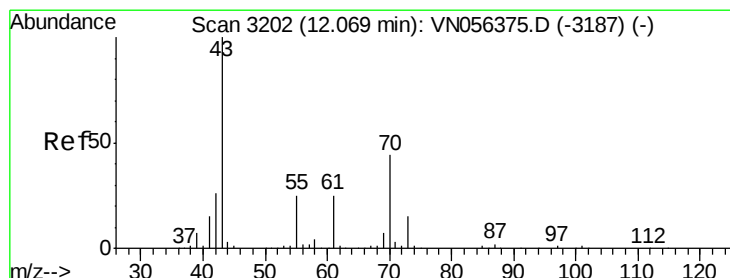
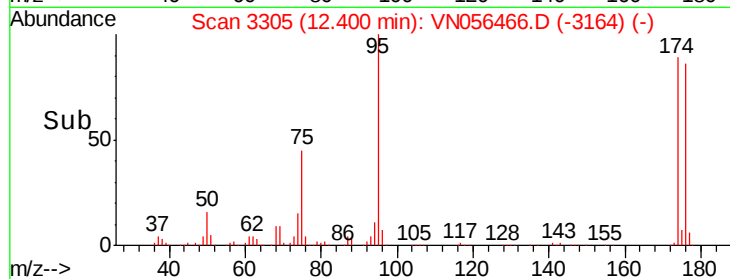
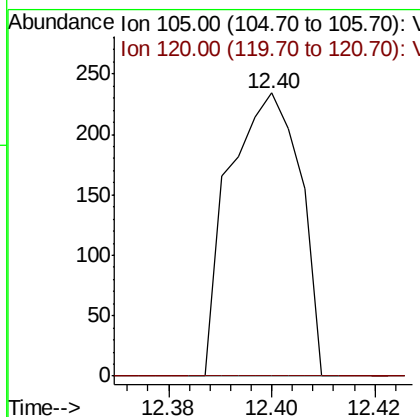
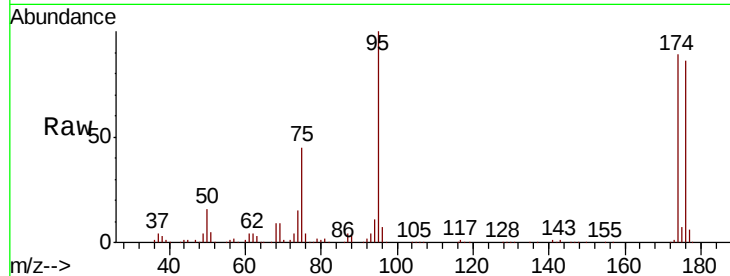




#73
Isopropylbenzene
Concen: Below Cal
RT: 12.40 min Scan# 3305
Delta R.T. 0.15 min
Lab File: VN056466.D
Acq: 24 Jun 2019 19:17

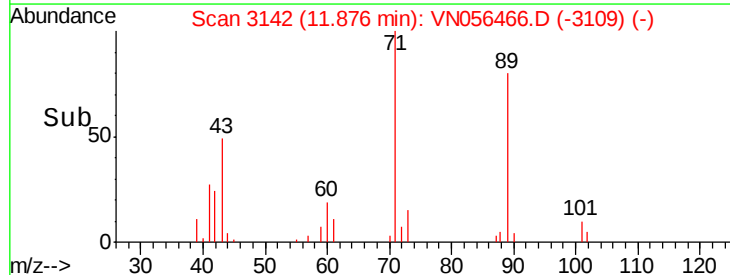
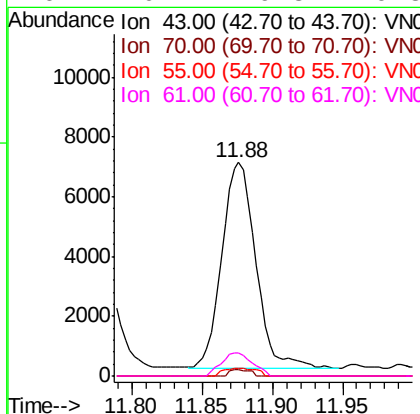
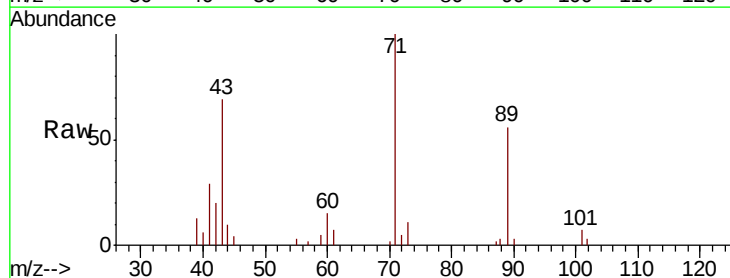
Instrument :
MSVOA_N
ClientSampled :
SOILS-4

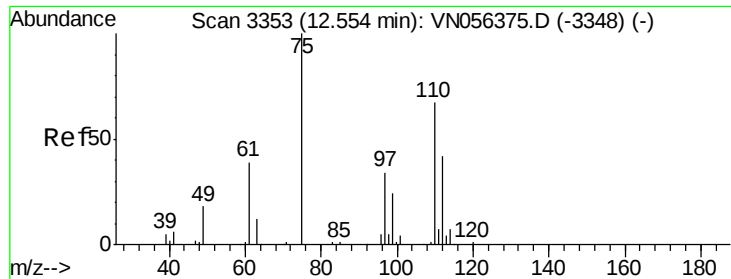
Tot Ion: 105 Resp: 223
Ion Ratio Lower Upper
105 100
120 0.0 13.4 40.2#



#74
N-ethyl acetate
Concen: 1.964 ug/l
RT: 11.88 min Scan# 3142
Delta R.T. -0.19 min
Lab File: VN056466.D
Acq: 24 Jun 2019 19:17

Tgt Ion: 43 Resp: 11603
Ion Ratio Lower Upper
43 100
70 1.8 34.9 52.3#
55 3.7 20.4 30.6#
61 10.2 19.8 29.8#

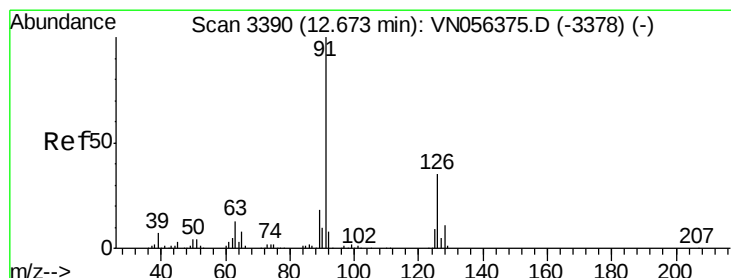
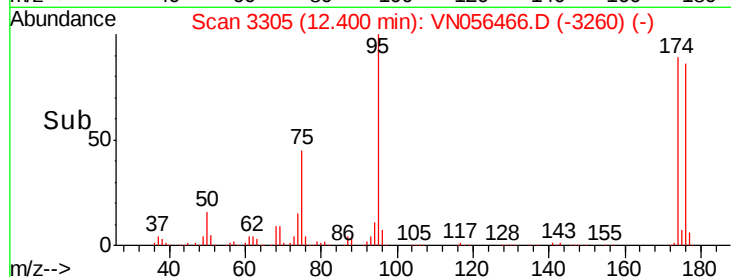
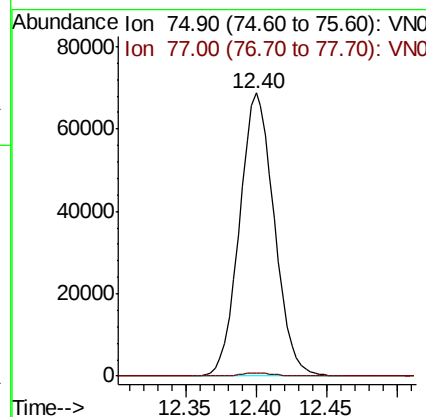
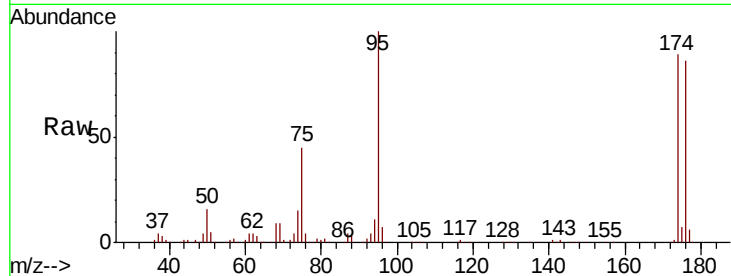




#76
 1,2,3-Trichloropropane
 Concen: 30.793 ug/l
 RT: 12.40 min Scan# 3305
 Delta R.T. -0.15 min
 Lab File: VN056466.D
 Acq: 24 Jun 2019 19:17

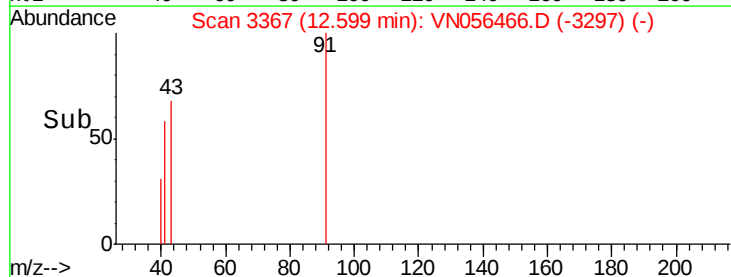
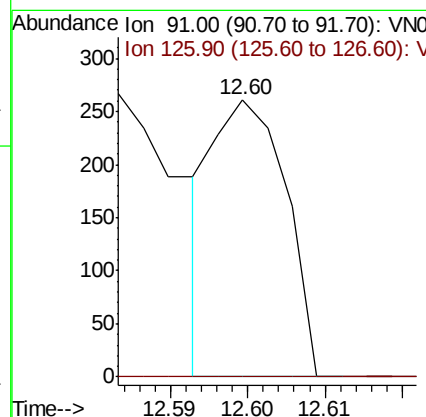
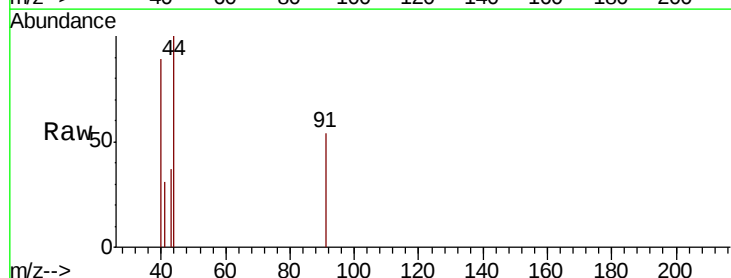
Instrument :
 MSVOA_N
 ClientSampled :
 SOILS-4

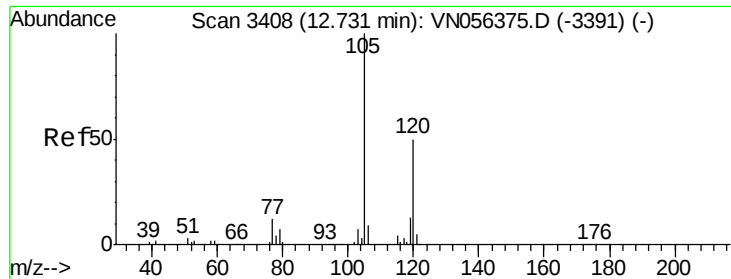
Tot Ion: 75 Resp: 118547
 Ion Ratio Lower Upper
 75 100
 77 1.0 0.0 0.0#



#79
 2-Chlorotoluene
 Concen: Below Cal
 RT: 12.60 min Scan# 3367
 Delta R.T. -0.07 min
 Lab File: VN056466.D
 Acq: 24 Jun 2019 19:17

Tgt Ion: 91 Resp: 171
 Ion Ratio Lower Upper
 91 100
 126 0.0 17.6 52.8#

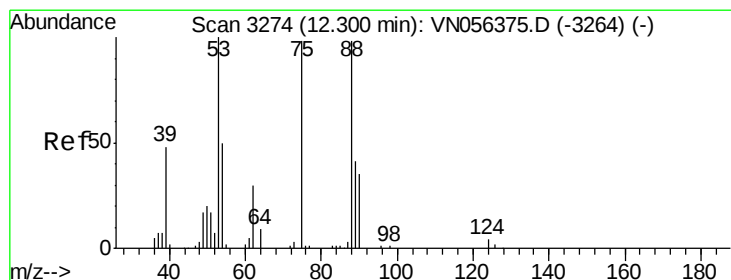
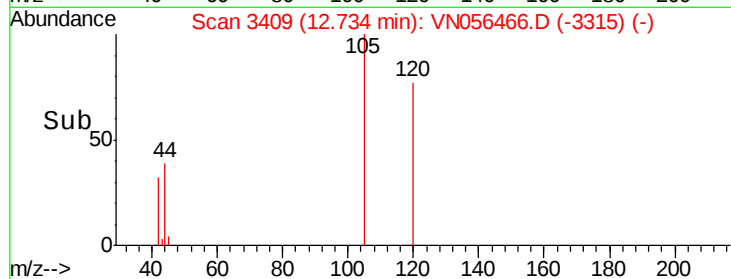
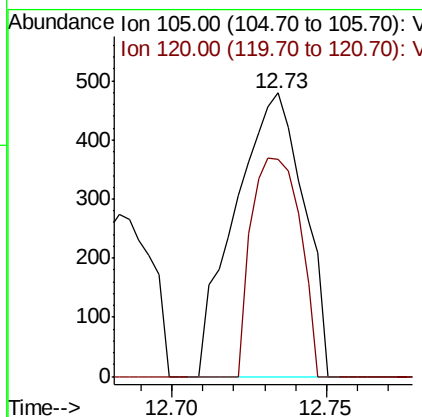
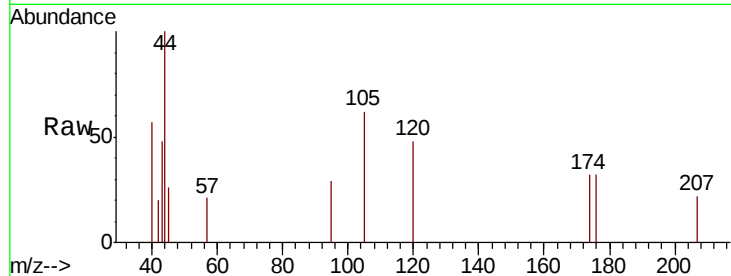




#80
 1,3,5-Trimethylbenzene
 Concen: Below Cal
 RT: 12.73 min Scan# 3409
 Delta R.T. 0.00 min
 Lab File: VN056466.D
 Acq: 24 Jun 2019 19:17

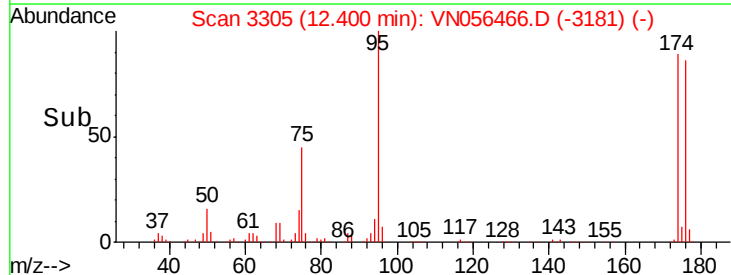
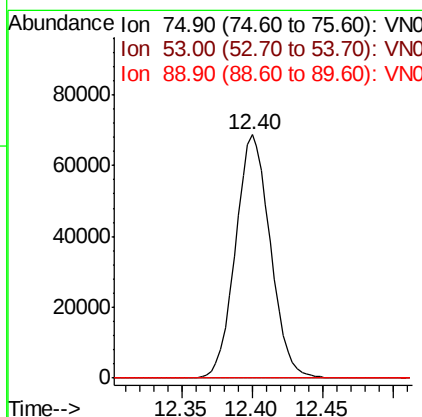
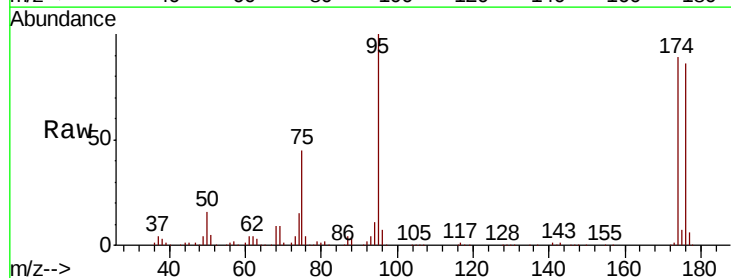
Instrument :
 MSVOA_N
 ClientSampled :
 SOILS-4

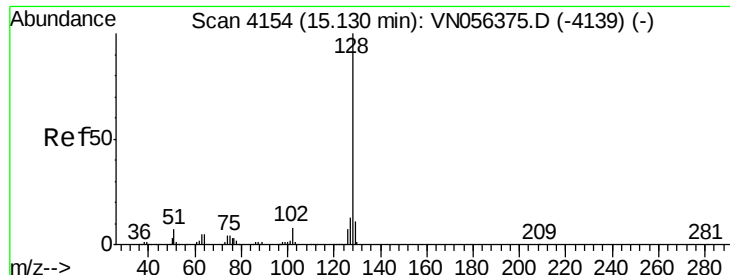
Tot Ion: 105 Resp: 735
 Ion Ratio Lower Upper
 105 100
 120 55.0 24.8 74.4



#81
 trans-1,4-Dichloro-2-butene
 Concen: 109.442 ug/l
 RT: 12.40 min Scan# 3305
 Delta R.T. 0.10 min
 Lab File: VN056466.D
 Acq: 24 Jun 2019 19:17

Tgt Ion: 75 Resp: 118547
 Ion Ratio Lower Upper
 75 100
 53 0.0 83.9 125.9#
 89 0.0 35.0 52.6#





#95

Naphthalene

Concen: 5.279 ug/l

RT: 15.14 min Scan# 4156

Delta R.T. 0.01 min

Lab File: VN056466.D

Acq: 24 Jun 2019 19:17

Instrument :

MSVOA_N

ClientSampleId :

SOILS-4

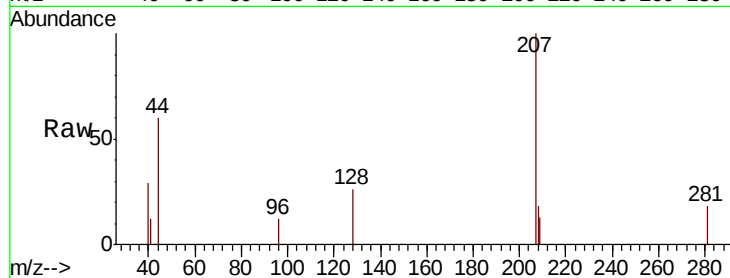
Tot Ion:128 Resp: 330

Ion Ratio Lower Upper

128 100

127 0.0 10.2 15.2#

129 0.0 8.6 12.8#



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

