

Data Path : Z:\VOASRV\HPCHEM1\MSVOA X\DATA\VX020419\
 Data File : VX007359.D
 Acq On : 04 Feb 2019 15:10
 Operator : JC/SP
 Sample : K1312-02
 Misc : 5.0mL/MSVOA X/WATER
 ALS Vial : 11 Sample Multiplier: 1

Instrument :
 MSVOA_X
 ClientSampleId :
 SOIL-PILE

Quant Time: Feb 04 23:58:44 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_X\METHOD\82X020119W.M
 Quant Title : SW846 8260
 QLast Update : Sat Feb 02 01:32:36 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	5.66	168	501379	50.00	ug/l	0.00
34) 1,4-Difluorobenzene	6.86	114	780936	50.00	ug/l	0.00
63) Chlorobenzene-d5	10.12	117	767090	50.00	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	12.08	152	370551	50.00	ug/l	0.00

System Monitoring Compounds

33) 1,2-Dichloroethane-d4	6.07	65	270934	50.91	ug/l	0.00
Spiked Amount	50.000		Recovery	=	101.82%	
35) Dibromofluoromethane	5.50	113	245388	48.29	ug/l	0.00
Spiked Amount	50.000		Recovery	=	96.58%	
50) Toluene-d8	8.71	98	976051	51.77	ug/l	0.00
Spiked Amount	50.000		Recovery	=	103.54%	
62) 4-Bromofluorobenzene	11.13	95	345955	50.26	ug/l	0.00
Spiked Amount	50.000		Recovery	=	100.52%	

Target Compounds

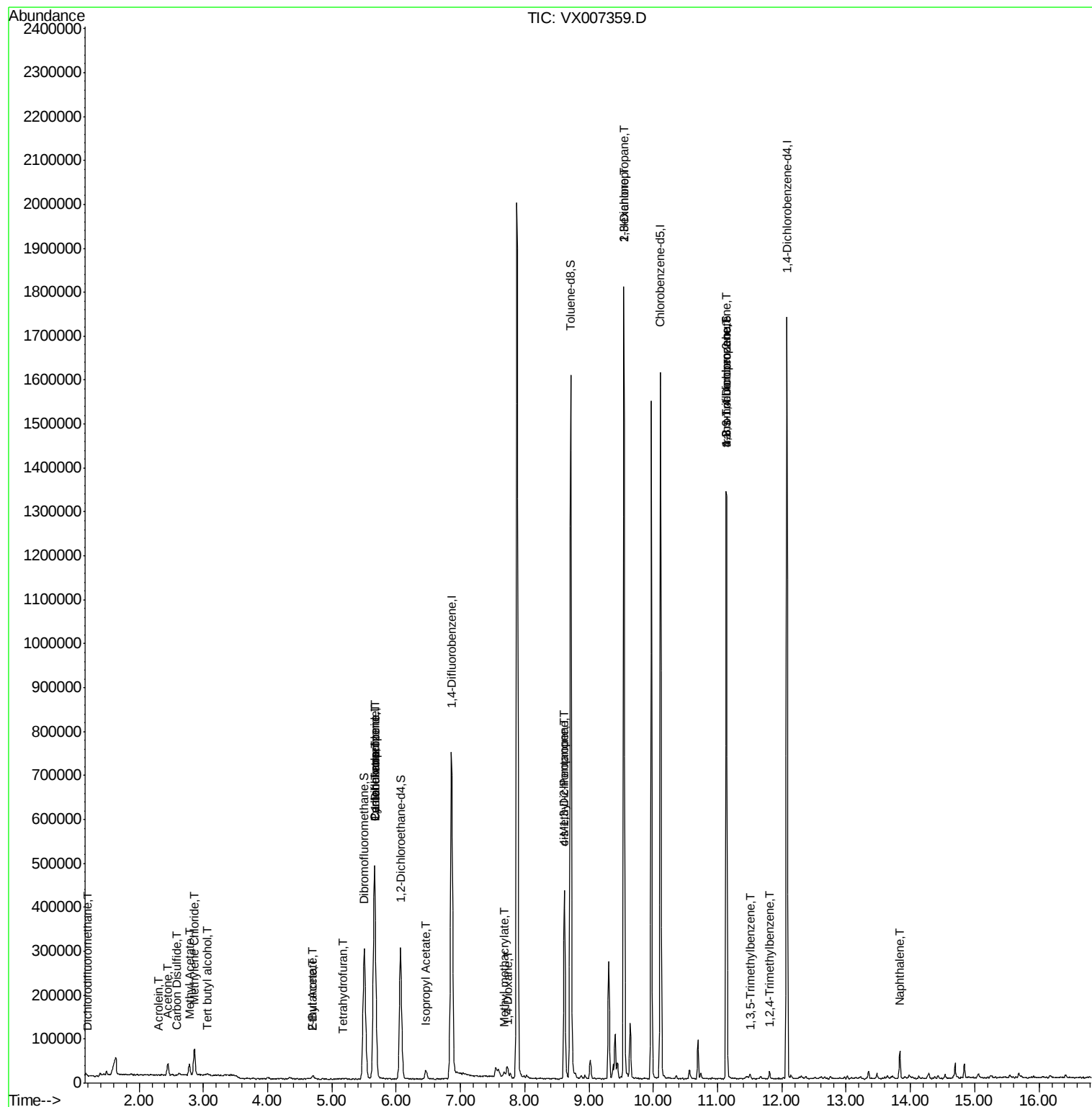
					Qvalue	
2) Dichlorodifluoromethane	1.20	85	204	0.210	ug/l #	1
5) Bromomethane	1.64	94	669	Below Cal		86
11) Tert butyl alcohol	3.07	59	4558	4.139	ug/l #	59
13) Acrolein	2.30	56	354	0.685	ug/l #	64
16) Acetone	2.45	43	30923	12.685	ug/l	99
17) Carbon Disulfide	2.58	76	1167	2.210	ug/l #	67
18) Methyl Acetate	2.78	43	31071	5.427	ug/l	96
20) Methylene Chloride	2.86	84	27666	5.204	ug/l	97
25) 2-Butanone	4.70	43	13715	3.953	ug/l	93
29) Tetrahydrofuran	5.17	42	1871	0.858	ug/l #	61
31) Cyclohexane	5.66	56	8292	1.121	ug/l #	2
36) 1,1-Dichloropropene	5.66	75	32534	4.643	ug/l #	49
37) Ethyl Acetate	4.70	43	13715	1.936	ug/l #	72
38) Carbon Tetrachloride	5.66	117	45173	6.645	ug/l #	16
43) Isopropyl Acetate	6.46	43	28014	2.562	ug/l	95
48) Methyl methacrylate	7.68	41	16786	3.070	ug/l #	13
49) 1,4-Dioxane	7.74	88	75	7.478	ug/l #	25
51) 4-Methyl-2-Pentanone	8.62	43	140146	19.472	ug/l #	46
54) cis-1,3-Dichloropropene	8.62	75	68570	9.113	ug/l #	63
57) 1,3-Dichloropropane	9.54	76	16044	1.817	ug/l #	44
59) 2-Hexanone	9.54	43	198711	35.481	ug/l #	52
76) 1,2,3-Trichloropropane	11.13	75	164317	22.798	ug/l #	33
80) 1,3,5-Trimethylbenzene	11.51	105	4256	0.207	ug/l	93
81) trans-1,4-Dichloro-2-buten	11.13	75	164317	68.734	ug/l #	9
84) 1,2,4-Trimethylbenzene	11.80	105	6310	0.302	ug/l	98
95) Naphthalene	13.83	128	40269	1.611	ug/l	99

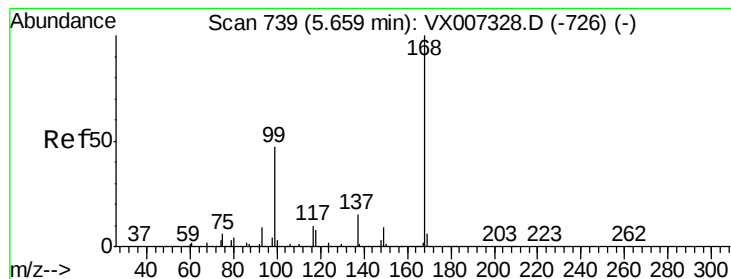
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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Quant Title : SW846 8260
QLast Update : Sat Feb 02 01:32:36 2019
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 5.66 min Scan# 740

Delta R.T. 0.01 min

Lab File: VX007359.D

Acq: 04 Feb 2019 15:10

Instrument :

MSVOA_X

ClientSampleId :

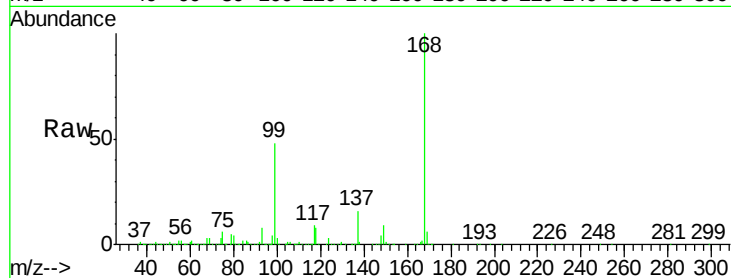
SOIL-PILE

Tot Ion:168 Resp: 501379

Ion Ratio Lower Upper

168 100

99 48.3 37.9 56.9



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VX0

5.66

200000

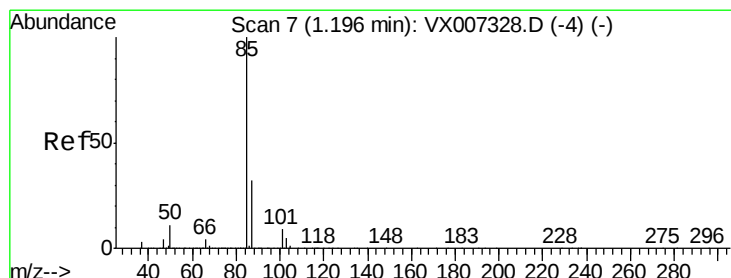
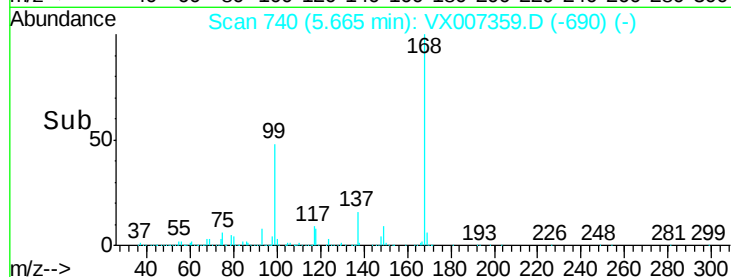
150000

100000

50000

0

Time-->



#2

Dichlorodifluoromethane

Concen: 0.210 ug/l

RT: 1.20 min Scan# 7

Delta R.T. 0.00 min

Lab File: VX007359.D

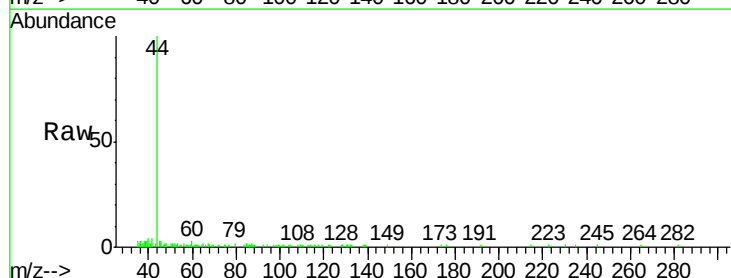
Acq: 04 Feb 2019 15:10

Tgt Ion: 85 Resp: 204

Ion Ratio Lower Upper

85 100

87 141.2 15.8 47.4#



Abundance Ion 84.90 (84.60 to 85.60): VX0

Ion 86.90 (86.60 to 87.60): VX0

1.20

250

200

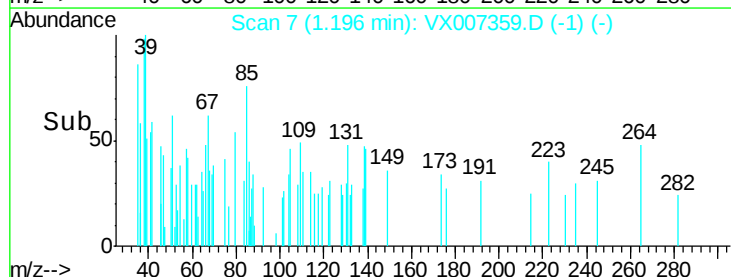
150

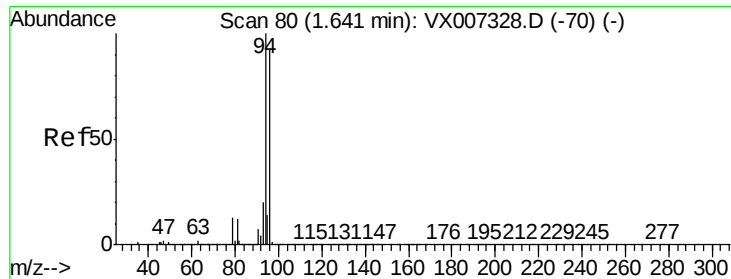
100

50

0

Time-->





#5

Bromomethane

Concen: Below Cal

RT: 1.64 min Scan# 80

Delta R.T. 0.00 min

Lab File: VX007359.D

Acq: 04 Feb 2019 15:10

Instrument :

MSVOA_X

ClientSampleId :

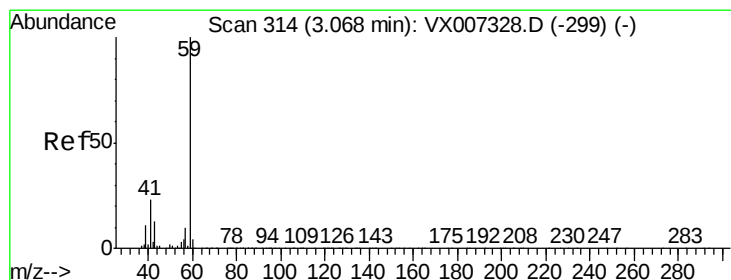
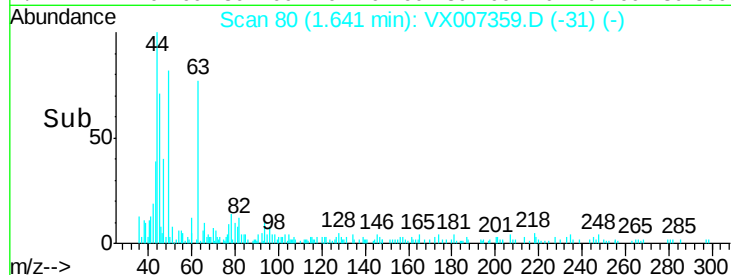
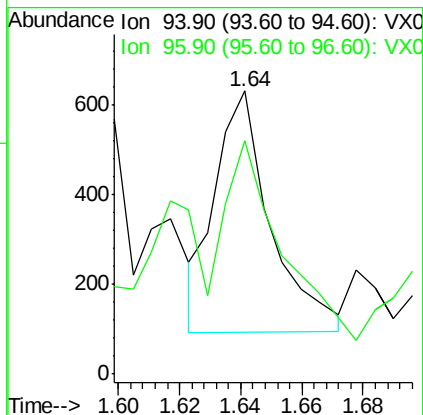
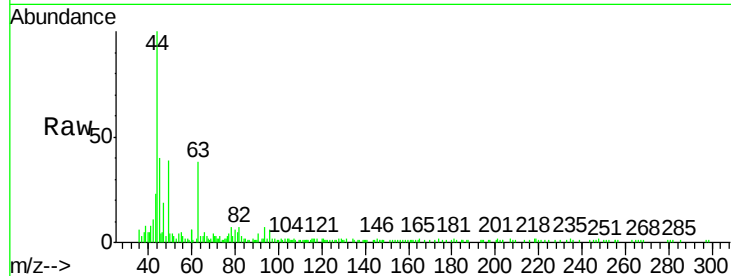
SOIL-PILE

Tot Ion: 94 Resp: 669

Ion Ratio Lower Upper

94 100

96 78.6 73.9 110.9



#11

Tert butyl alcohol

Concen: 4.139 ug/l

RT: 3.07 min Scan# 314

Delta R.T. -0.00 min

Lab File: VX007359.D

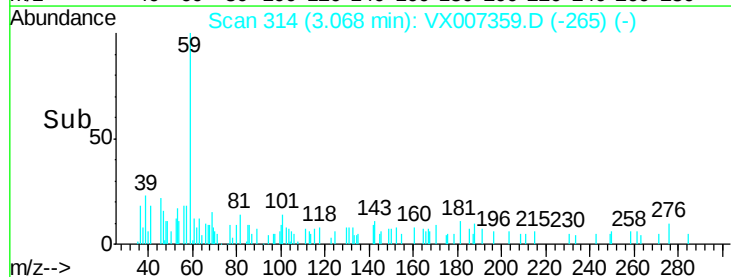
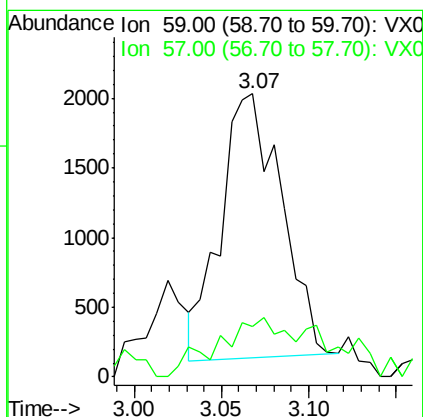
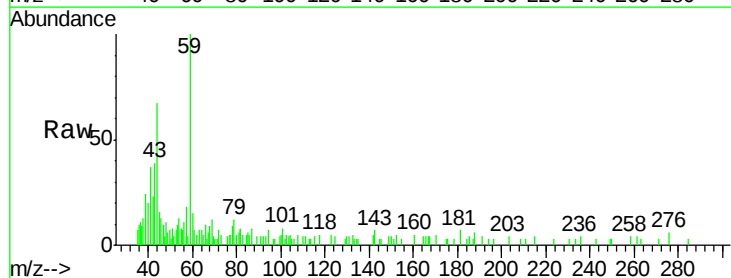
Acq: 04 Feb 2019 15:10

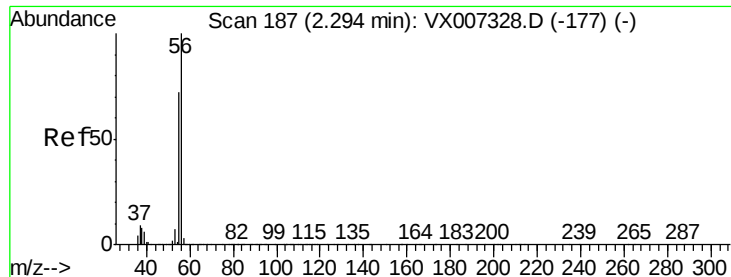
Tgt Ion: 59 Resp: 4558

Ion Ratio Lower Upper

59 100

57 25.4 8.1 12.1#





#13

Acrolein

Concen: 0.685 ug/l

RT: 2.30 min Scan# 188

Delta R.T. 0.01 min

Lab File: VX007359.D

Acq: 04 Feb 2019 15:10

Instrument :

MSVOA_X

ClientSampleId :

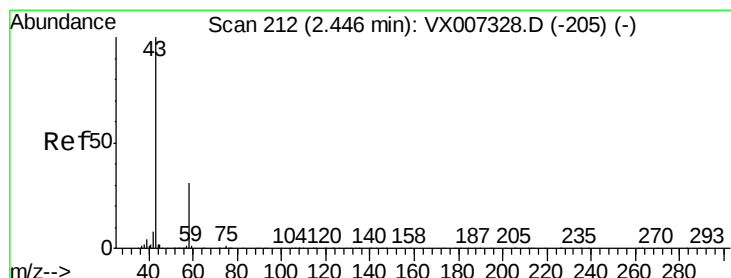
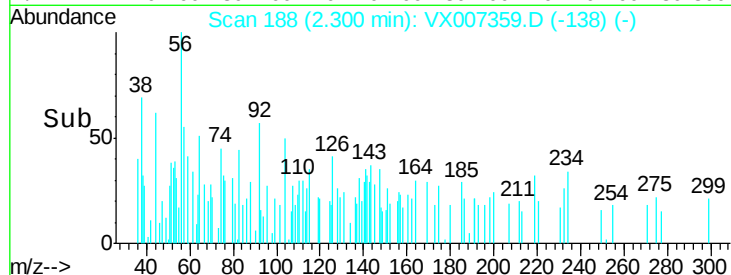
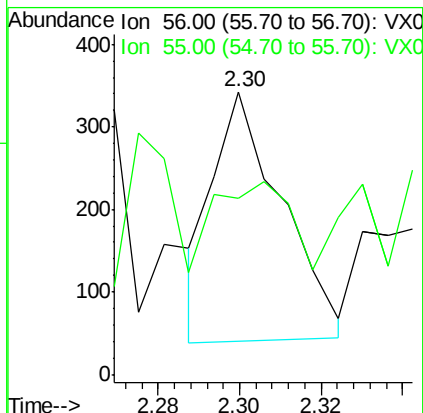
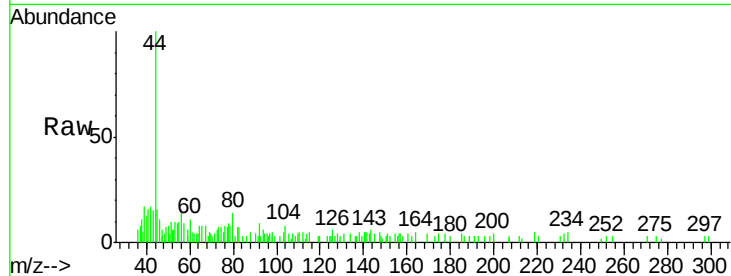
SOIL-PILE

Tot Ion: 56 Resp: 354

Ion Ratio Lower Upper

56 100

55 41.0 56.9 85.3#



#16

Acetone

Concen: 12.685 ug/l

RT: 2.45 min Scan# 212

Delta R.T. -0.00 min

Lab File: VX007359.D

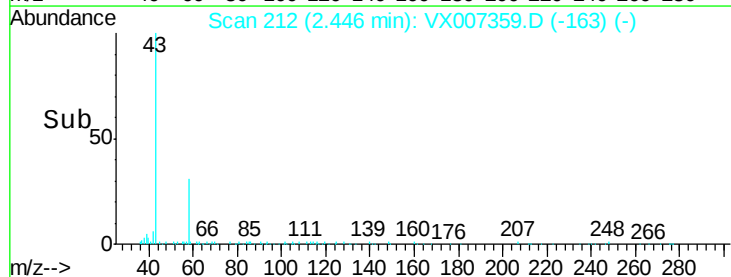
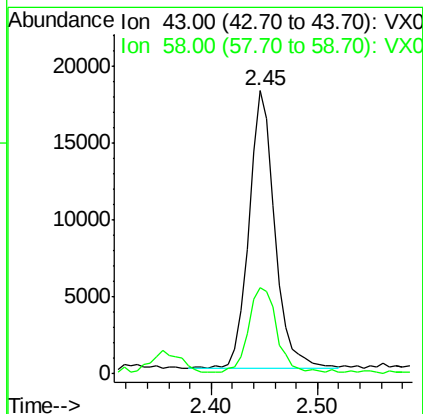
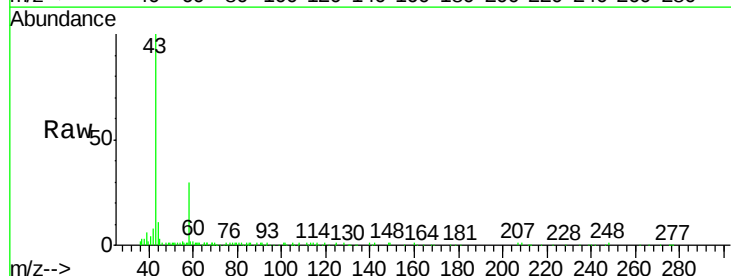
Acq: 04 Feb 2019 15:10

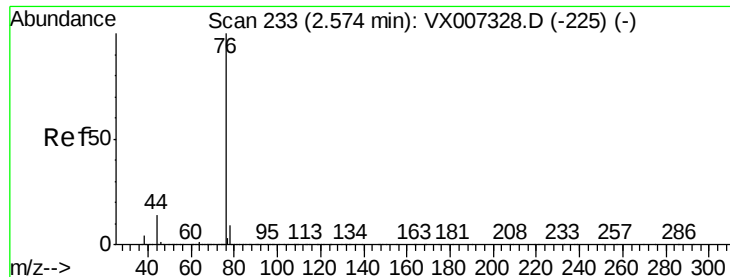
Tgt Ion: 43 Resp: 30923

Ion Ratio Lower Upper

43 100

58 30.5 24.9 37.3





#17

Carbon Disulfide

Concen: 2.210 ug/l

RT: 2.58 min Scan# 234

Delta R.T. 0.01 min

Lab File: VX007359.D

Acq: 04 Feb 2019 15:10

Instrument :

MSVOA_X

ClientSampled :

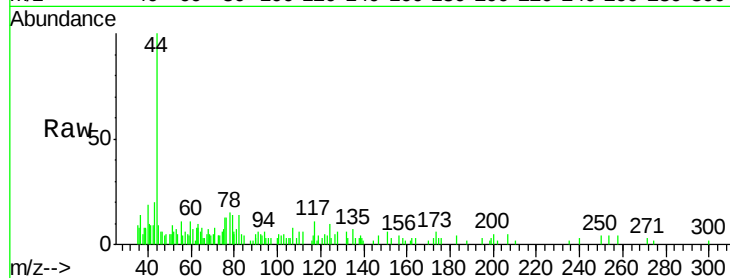
SOIL-PILE

Tot Ion: 76 Resp: 1167

Ion Ratio Lower Upper

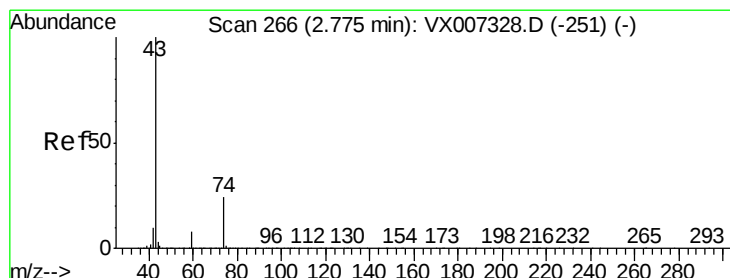
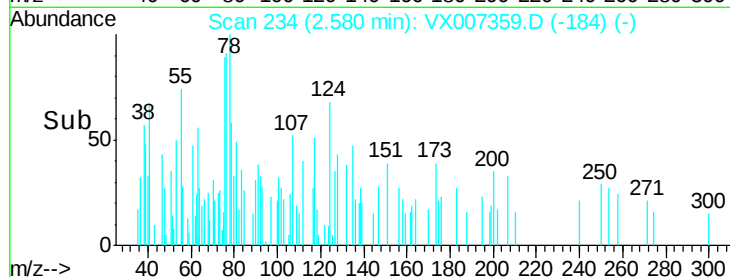
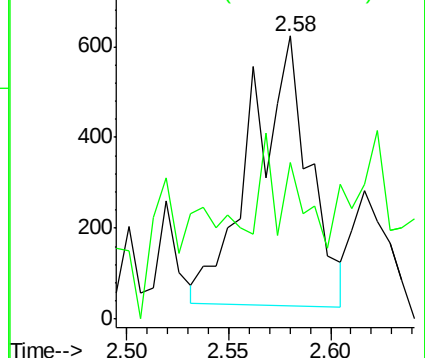
76 100

78 20.9 7.1 10.7#



Abundance Ion 75.90 (75.60 to 76.60): VX0

Ion 77.90 (77.60 to 78.60): VX0



#18

Methyl Acetate

Concen: 5.427 ug/l

RT: 2.78 min Scan# 267

Delta R.T. 0.01 min

Lab File: VX007359.D

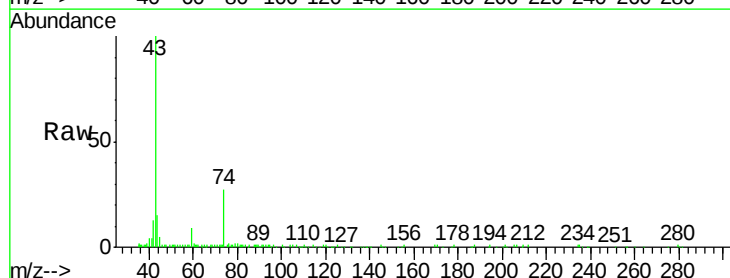
Acq: 04 Feb 2019 15:10

Tgt Ion: 43 Resp: 31071

Ion Ratio Lower Upper

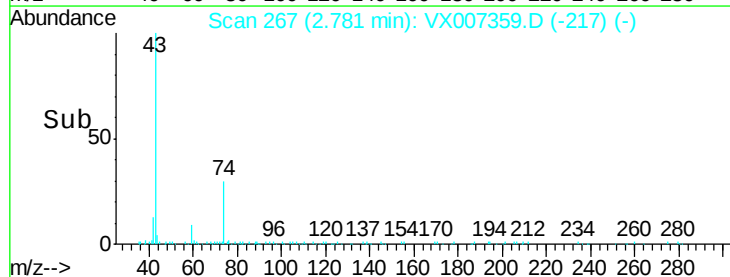
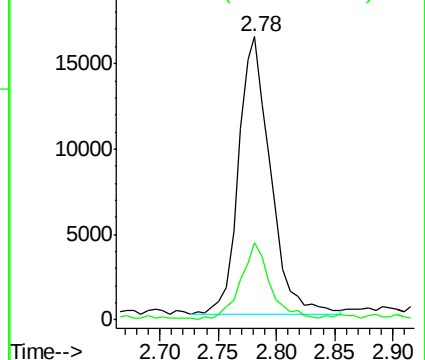
43 100

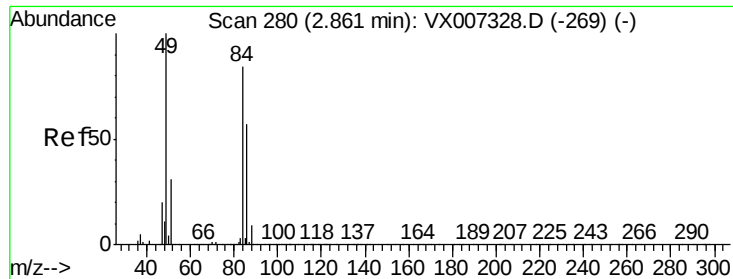
74 26.2 19.4 29.2



Abundance Ion 43.00 (42.70 to 43.70): VX0

Ion 74.00 (73.70 to 74.70): VX0

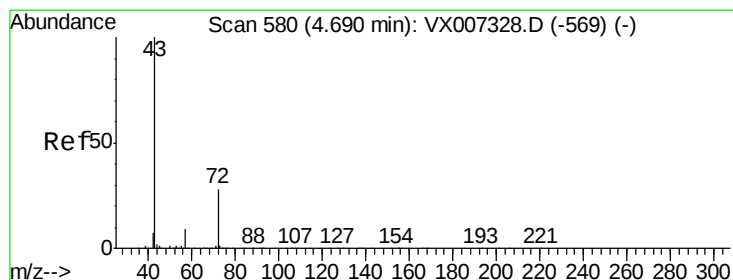
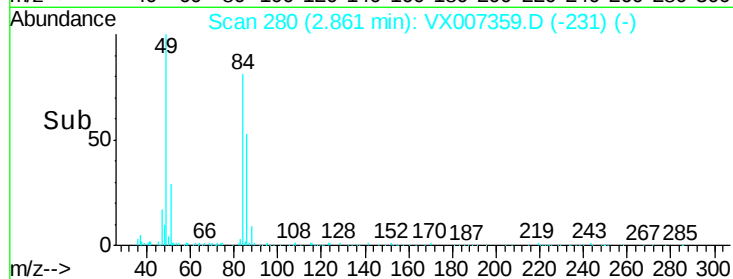
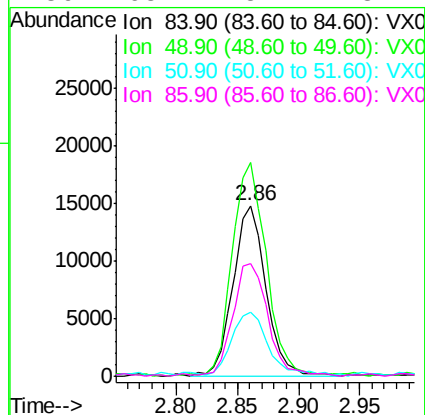
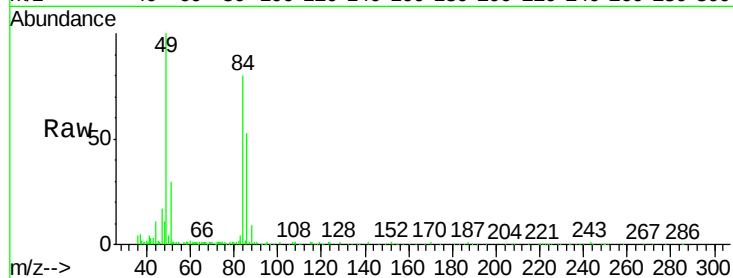




#20
Methvlene Chloride
Concen: 5.204 ug/l
RT: 2.86 min Scan# 280
Delta R.T. 0.00 min
Lab File: VX007359.D
Acq: 04 Feb 2019 15:10

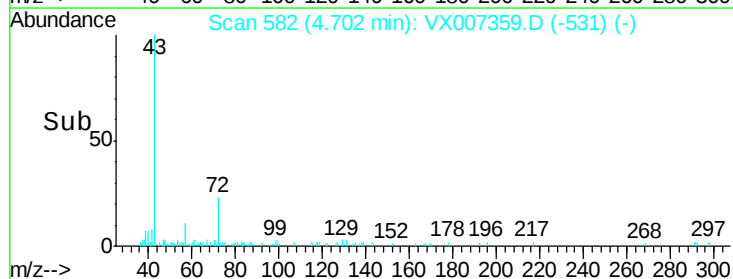
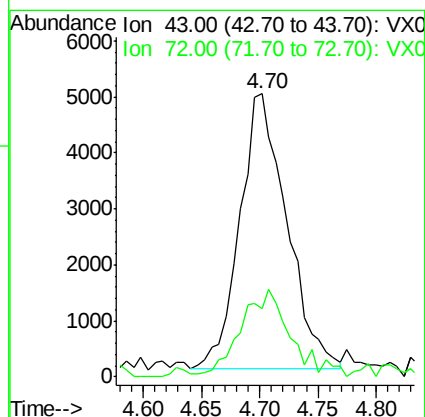
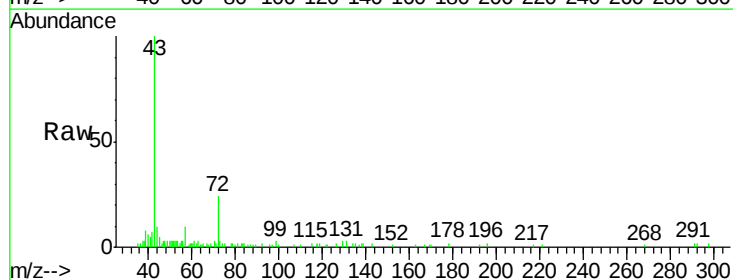
Instrument :
MSVOA_X
ClientSampled :
SOIL-PILE

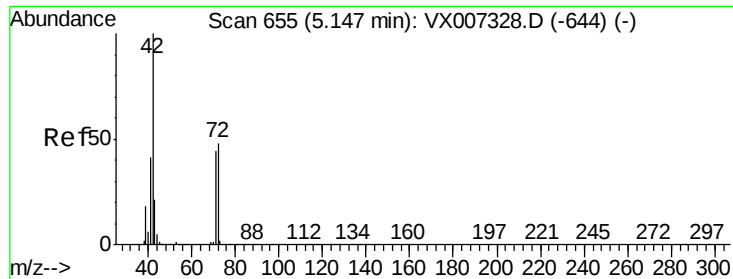
Tot Ion: 84 Resp: 27666
Ion Ratio Lower Upper
84 100
49 123.2 94.8 142.2
51 36.0 29.8 44.8
86 65.4 54.1 81.1



#25
2-Butanone
Concen: 3.953 ug/l
RT: 4.70 min Scan# 582
Delta R.T. 0.01 min
Lab File: VX007359.D
Acq: 04 Feb 2019 15:10

Tgt Ion: 43 Resp: 13715
Ion Ratio Lower Upper
43 100
72 23.8 22.2 33.2

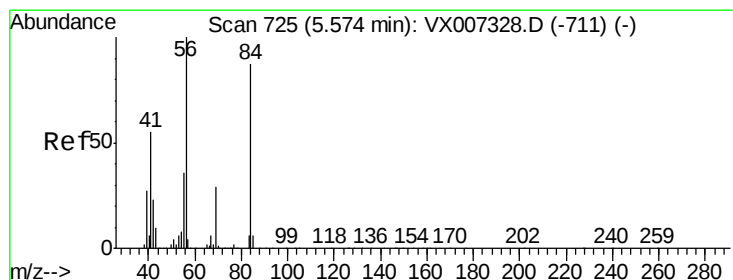
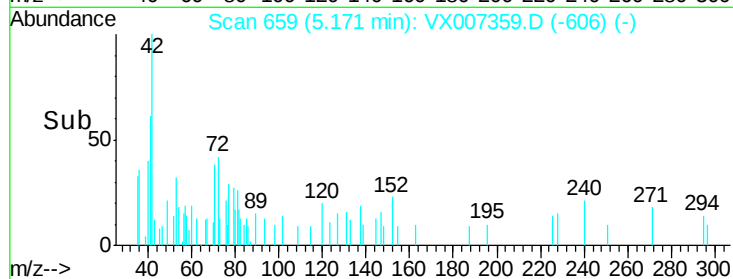
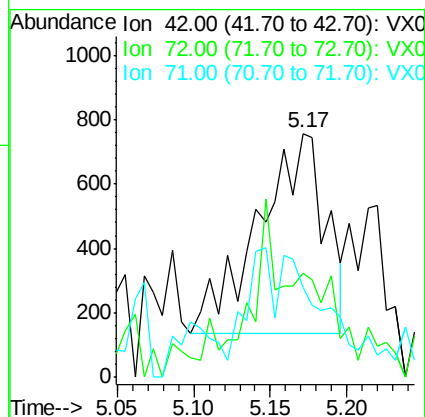
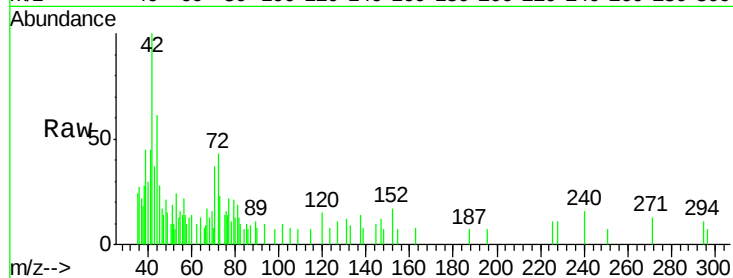




#29
Tetrahydrofuran
Concen: 0.858 ug/l
RT: 5.17 min Scan# 659
Delta R.T. 0.02 min
Lab File: VX007359.D
Acq: 04 Feb 2019 15:10

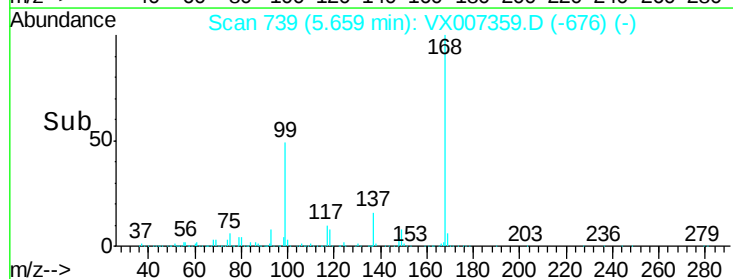
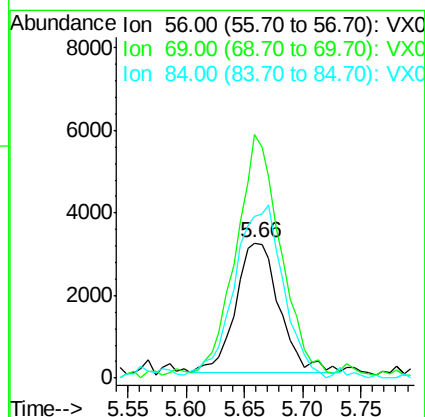
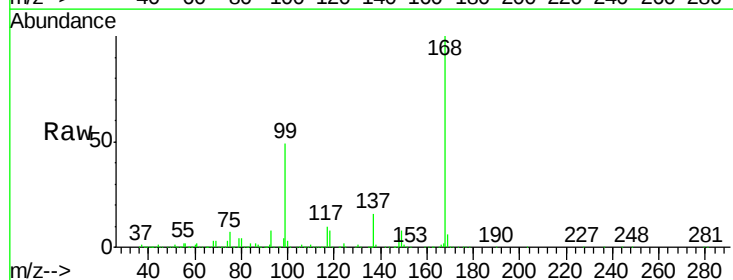
Instrument :
MSVOA_X
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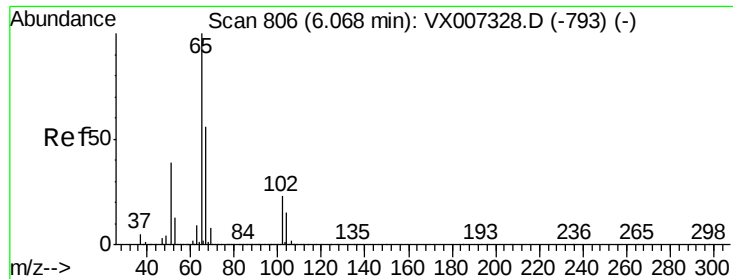
Tot Ion: 42 Resp: 1871
Ion Ratio Lower Upper
42 100
72 0.0 37.6 56.4#
71 40.0 34.6 51.8



#31
Cyclohexane
Concen: 1.121 ug/l
RT: 5.66 min Scan# 739
Delta R.T. 0.09 min
Lab File: VX007359.D
Acq: 04 Feb 2019 15:10

Tgt Ion: 56 Resp: 8292
Ion Ratio Lower Upper
56 100
69 183.9 23.0 34.6#
84 119.2 69.8 104.6#

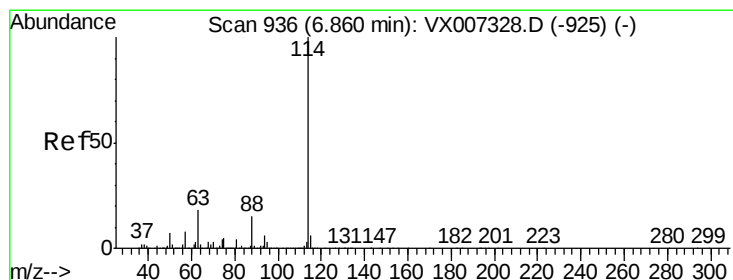
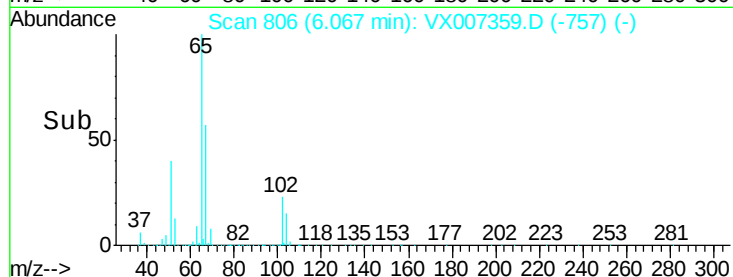
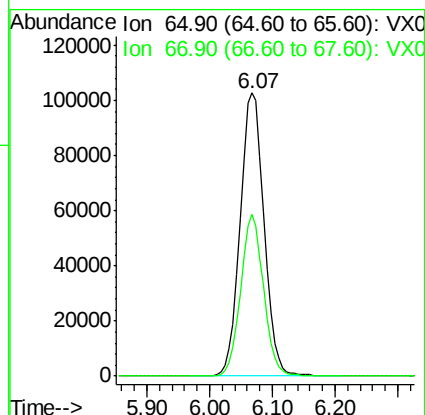
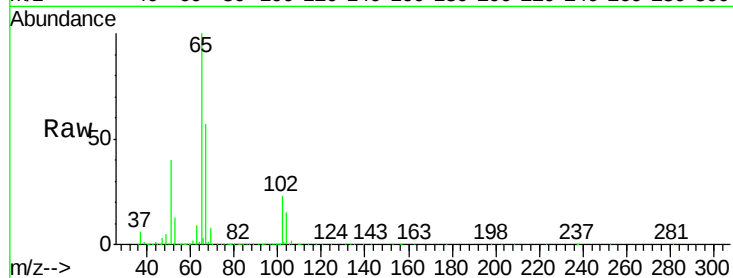




#33
 1,2-Dichloroethane-d4
 Concen: 50.911 ug/l
 RT: 6.07 min Scan# 806
 Delta R.T. -0.00 min
 Lab File: VX007359.D
 Acq: 04 Feb 2019 15:10

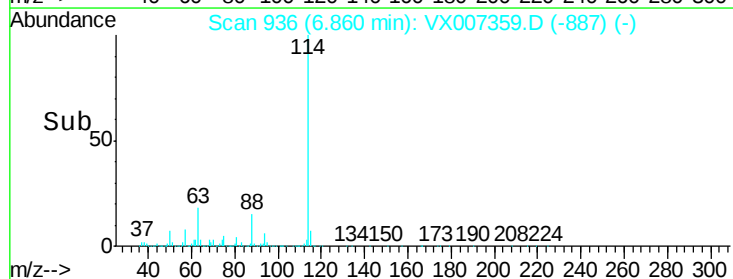
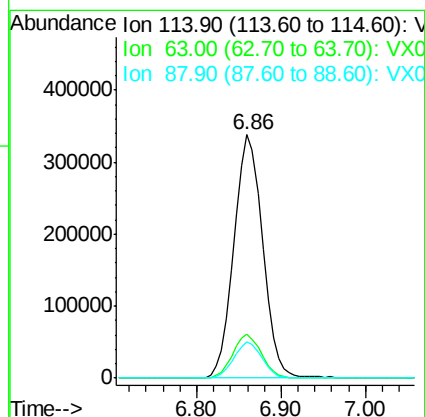
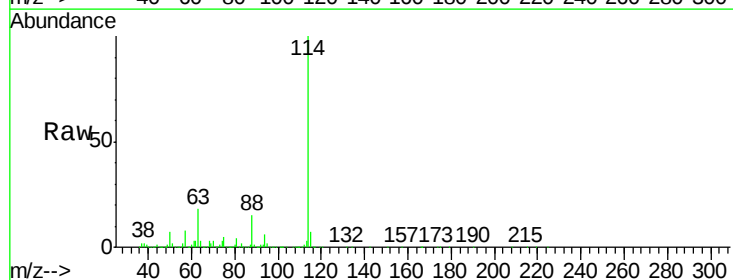
Instrument :
 MSVOA_X
 ClientSampleId :
 SOIL-PILE

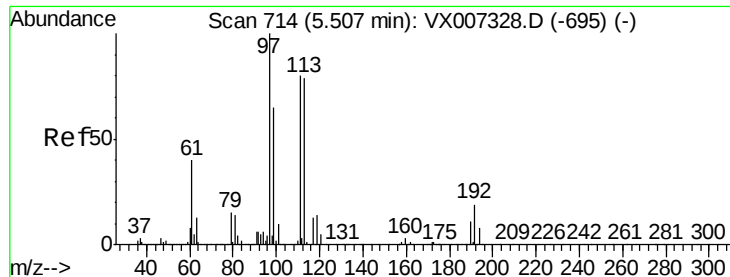
Tot Ion: 65 Resp: 270934
 Ion Ratio Lower Upper
 65 100
 67 54.6 0.0 108.8



#34
 1,4-Difluorobenzene
 Concen: 50.000 ug/l
 RT: 6.86 min Scan# 936
 Delta R.T. -0.00 min
 Lab File: VX007359.D
 Acq: 04 Feb 2019 15:10

Tgt Ion: 114 Resp: 780936
 Ion Ratio Lower Upper
 114 100
 63 17.9 0.0 35.6
 88 15.1 0.0 29.6





#35

Dibromofluoromethane

Concen: 48.293 ug/l

RT: 5.50 min Scan# 713

Delta R.T. -0.01 min

Lab File: VX007359.D

Acq: 04 Feb 2019 15:10

Instrument :

MSVOA_X

ClientSampleId :

SOIL-PILE

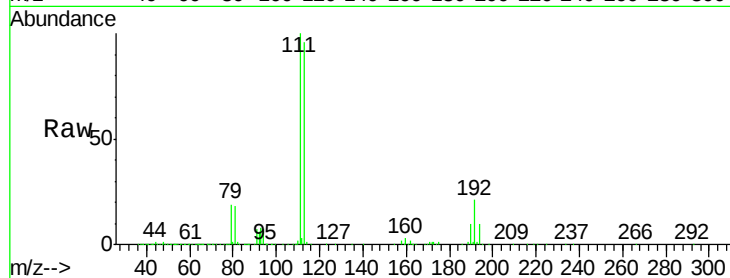
Tot Ion:113 Resp: 245388

Ion Ratio Lower Upper

113 100

111 103.9 81.8 122.8

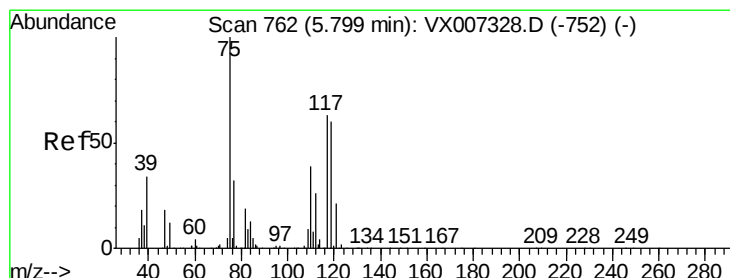
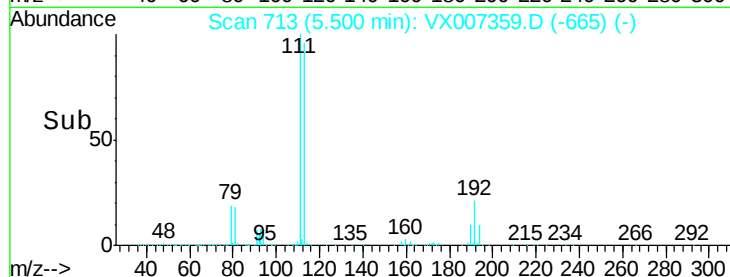
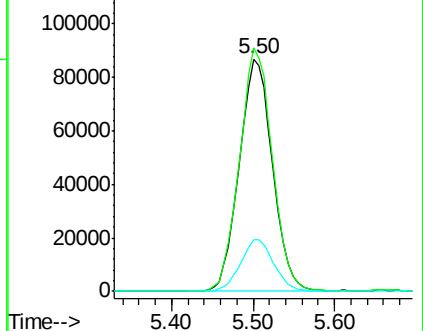
192 22.5 18.5 27.7



Abundance Ion 112.80 (112.50 to 113.50): V

Ion 110.80 (110.50 to 111.50): V

Ion 191.70 (191.40 to 192.40): V



#36

1,1-Dichloropropene

Concen: 4.643 ug/l

RT: 5.66 min Scan# 739

Delta R.T. -0.14 min

Lab File: VX007359.D

Acq: 04 Feb 2019 15:10

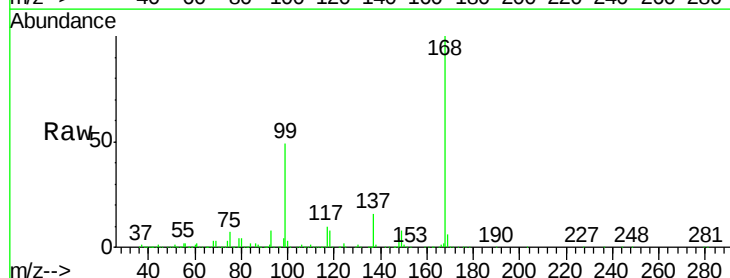
Tgt Ion: 75 Resp: 32534

Ion Ratio Lower Upper

75 100

110 10.4 20.0 59.9#

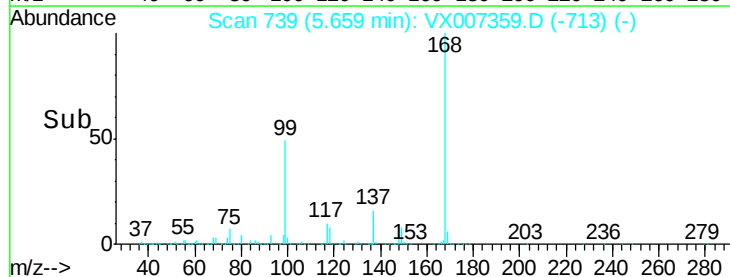
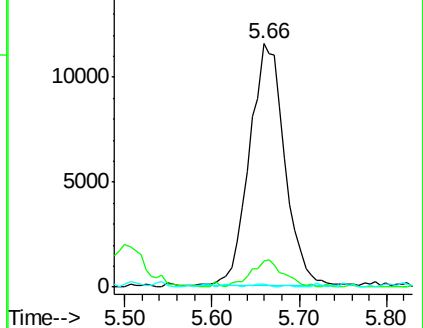
77 0.6 24.7 37.1#

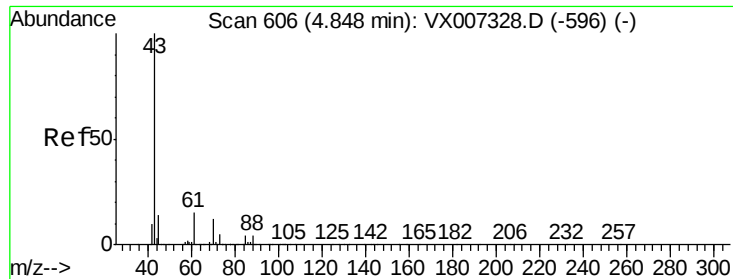


Abundance Ion 74.90 (74.60 to 75.60): VX0

Ion 109.90 (109.60 to 110.60): V

Ion 76.90 (76.60 to 77.60): VX0

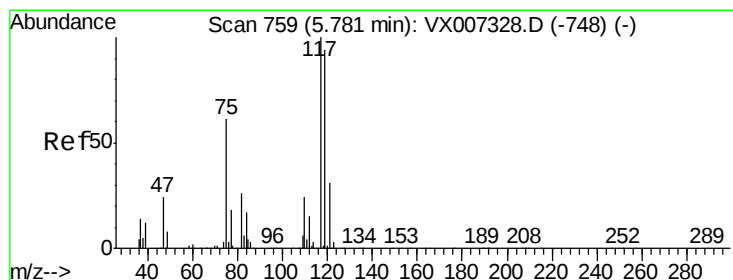
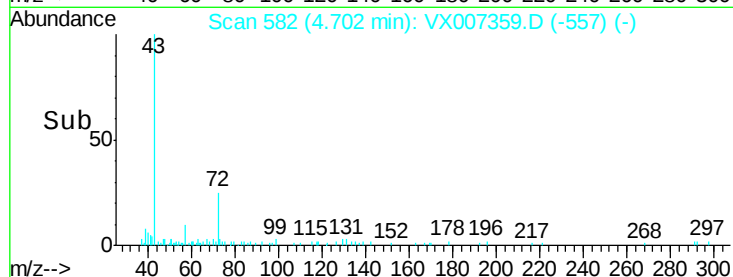
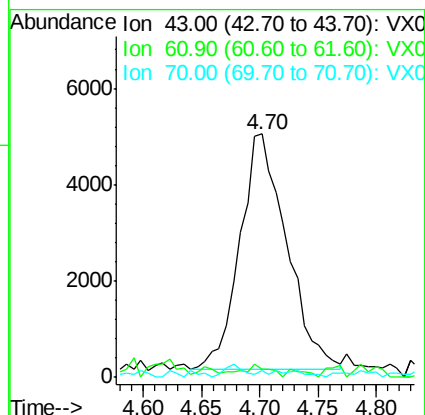
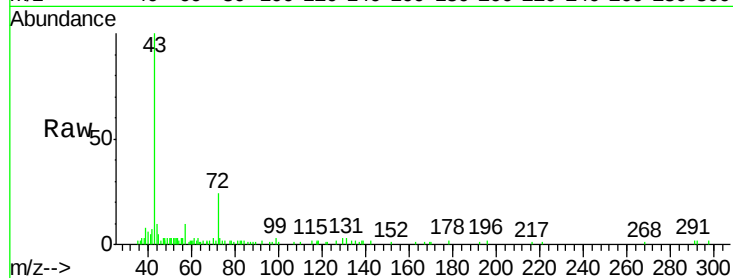




#37
Ethyl Acetate
Concen: 1.936 ug/l
RT: 4.70 min Scan# 582
Delta R.T. -0.15 min
Lab File: VX007359.D
Acq: 04 Feb 2019 15:10

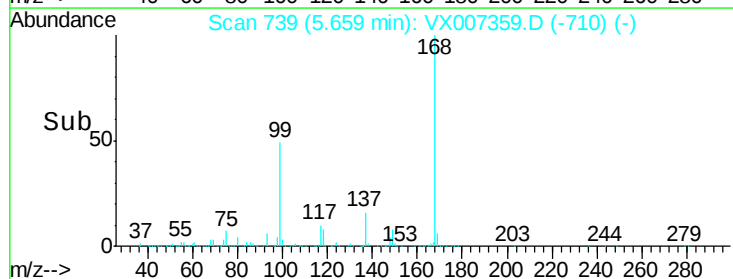
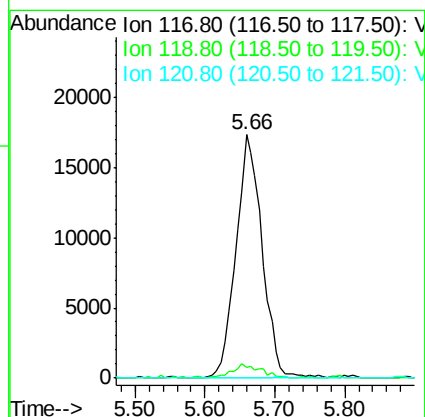
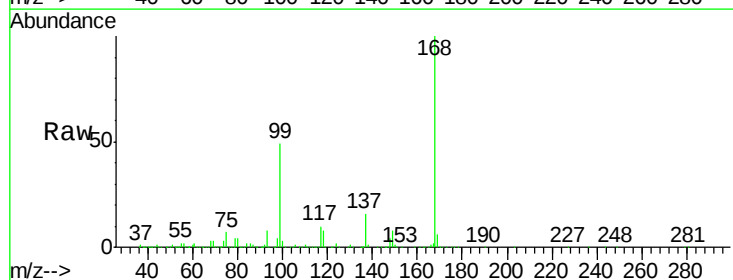
Instrument :
MSVOA_X
ClientSampleId :
SOIL-PILE

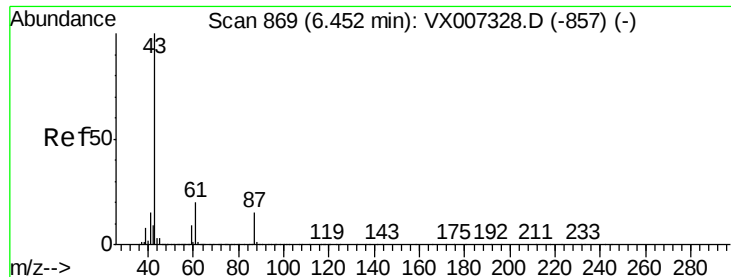
Tot Ion: 43 Resp: 13715
Ion Ratio Lower Upper
43 100
61 2.9 11.3 16.9#
70 0.2 8.6 13.0#



#38
Carbon Tetrachloride
Concen: 6.645 ug/l
RT: 5.66 min Scan# 739
Delta R.T. -0.12 min
Lab File: VX007359.D
Acq: 04 Feb 2019 15:10

Tgt Ion: 117 Resp: 45173
Ion Ratio Lower Upper
117 100
119 3.6 75.3 112.9#
121 0.0 25.0 37.4#





#43

Isopropyl Acetate

Concen: 2.562 ug/l

RT: 6.46 min Scan# 870

Delta R.T. 0.01 min

Lab File: VX007359.D

Acq: 04 Feb 2019 15:10

Instrument :

MSVOA_X

ClientSampleId :

SOIL-PILE

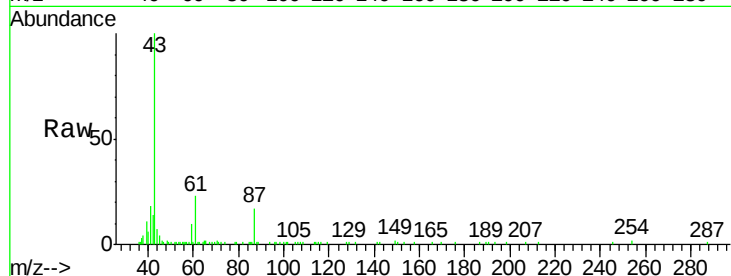
Tot Ion: 43 Resp: 28014

Ion Ratio Lower Upper

43 100

61 21.7 16.1 24.1

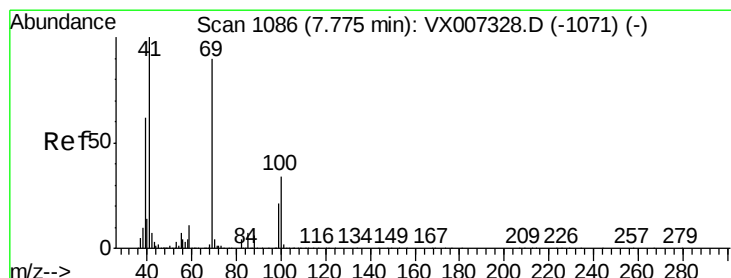
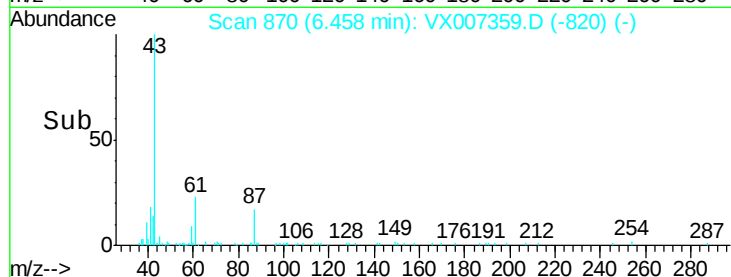
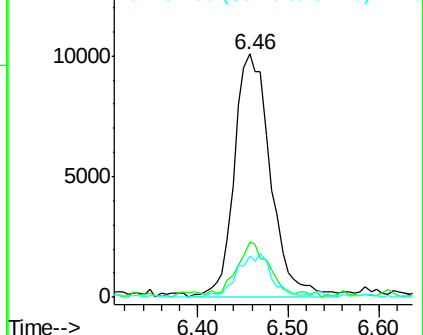
87 16.8 11.5 17.3



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: 3.070 ug/l

RT: 7.68 min Scan# 1071

Delta R.T. -0.09 min

Lab File: VX007359.D

Acq: 04 Feb 2019 15:10

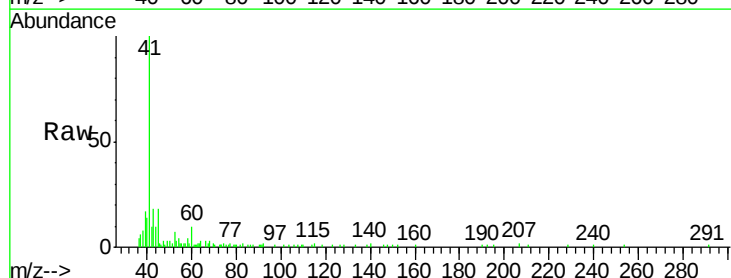
Tgt Ion: 41 Resp: 16786

Ion Ratio Lower Upper

41 100

69 1.5 70.2 105.4#

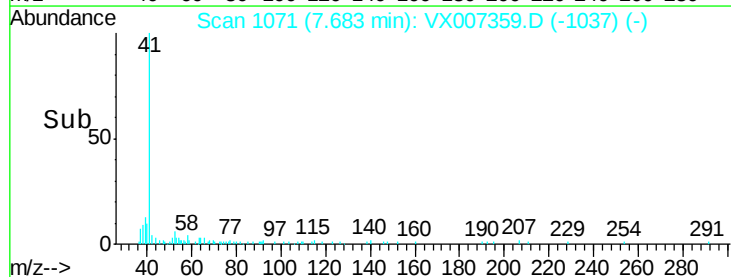
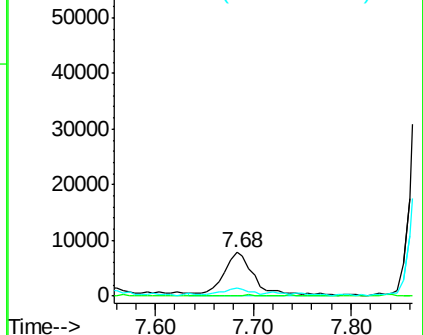
39 0.0 47.4 71.0#

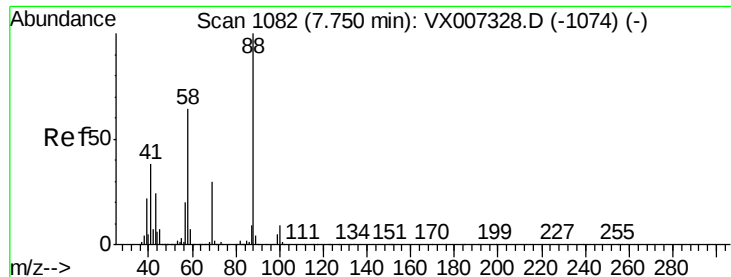


Abundance Ion 41.00 (40.70 to 41.70): VX0

Ion 69.00 (68.70 to 69.70): VX0

Ion 39.00 (38.70 to 39.70): VX0





#49

1,4-Dioxane

Concen: 7.478 ug/l

RT: 7.74 min Scan# 1081

Delta R.T. -0.01 min

Lab File: VX007359.D

Acq: 04 Feb 2019 15:10

Instrument :

MSVOA_X

ClientSampleId :

SOIL-PILE

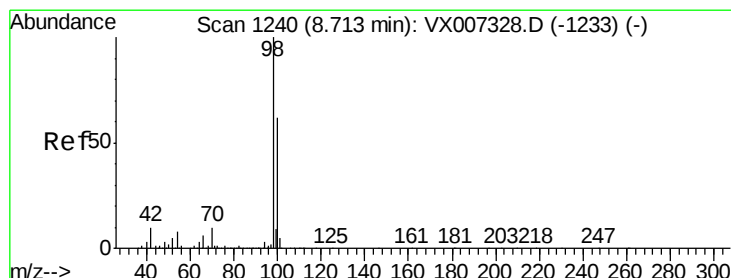
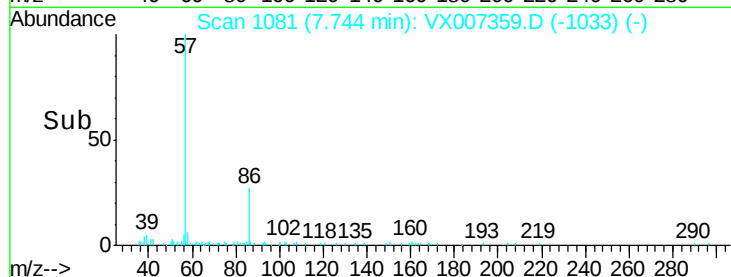
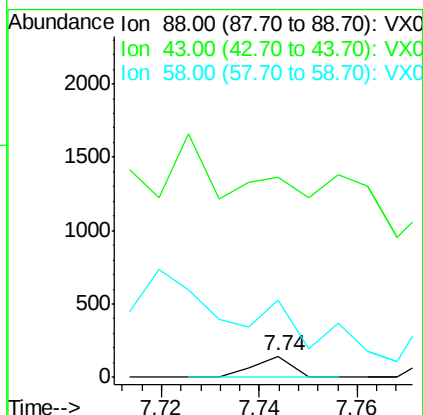
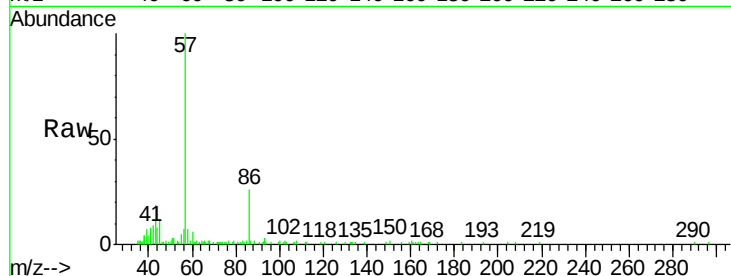
Tot Ion: 88 Resp: 75

Ion Ratio Lower Upper

88 100

43 0.0 24.2 36.4#

58 0.0 53.0 79.4#



#50

Toluene-d8

Concen: 51.773 ug/l

RT: 8.71 min Scan# 1240

Delta R.T. -0.00 min

Lab File: VX007359.D

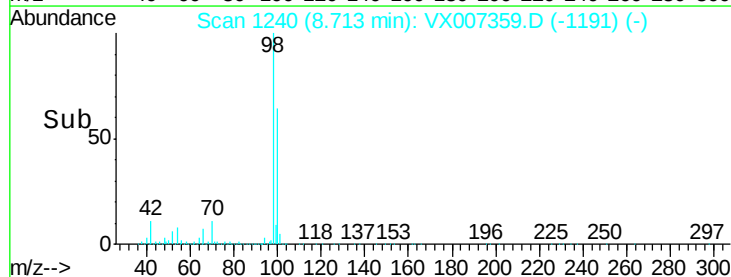
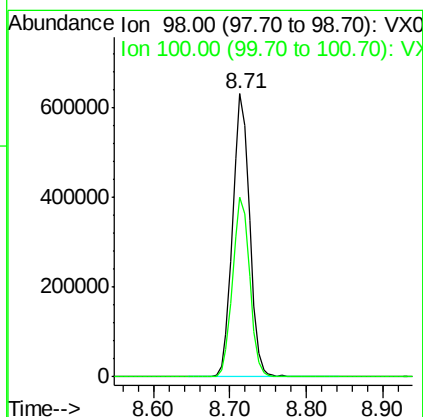
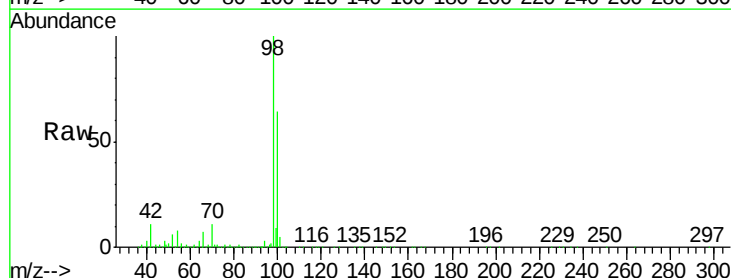
Acq: 04 Feb 2019 15:10

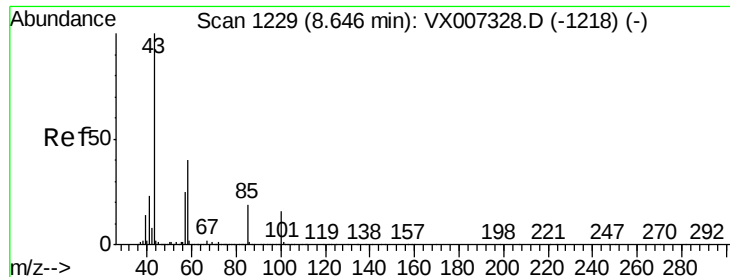
Tgt Ion: 98 Resp: 976051

Ion Ratio Lower Upper

98 100

100 63.6 51.6 77.4





#51

4-Methyl-2-Pentanone

Concen: 19.472 ug/l

RT: 8.62 min Scan# 1224

Delta R.T. -0.03 min

Lab File: VX007359.D

Acq: 04 Feb 2019 15:10

Instrument :

MSVOA_X

ClientSampled :

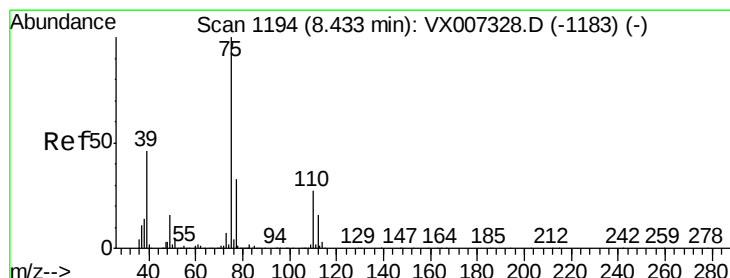
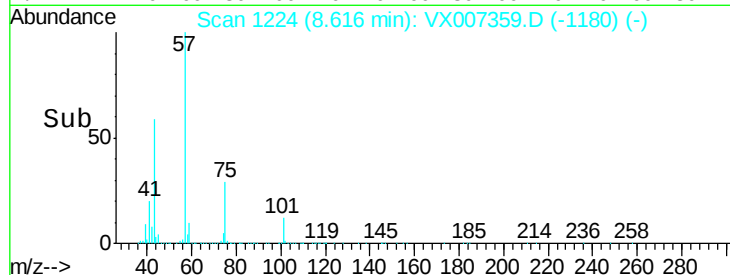
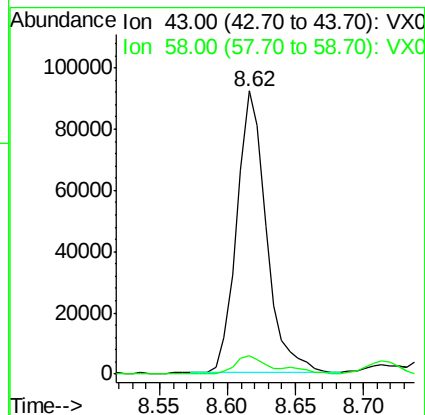
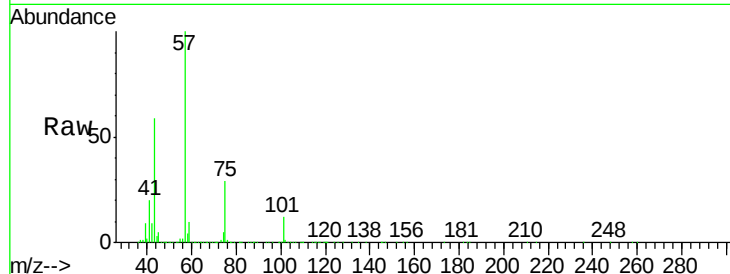
SOIL-PILE

Tot Ion: 43 Resp: 140146

Ion Ratio Lower Upper

43 100

58 6.3 31.2 46.8#



#54

cis-1,3-Dichloropropene

Concen: 9.113 ug/l

RT: 8.62 min Scan# 1224

Delta R.T. 0.18 min

Lab File: VX007359.D

Acq: 04 Feb 2019 15:10

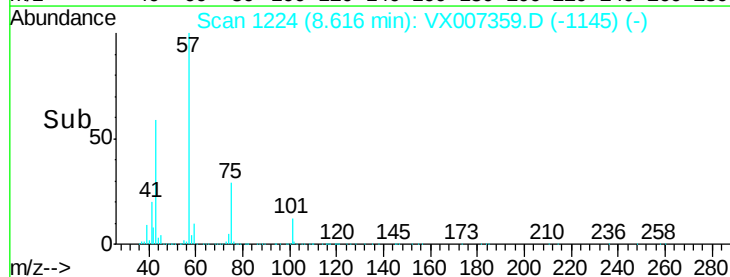
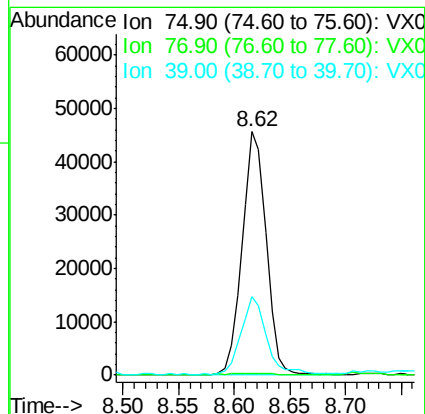
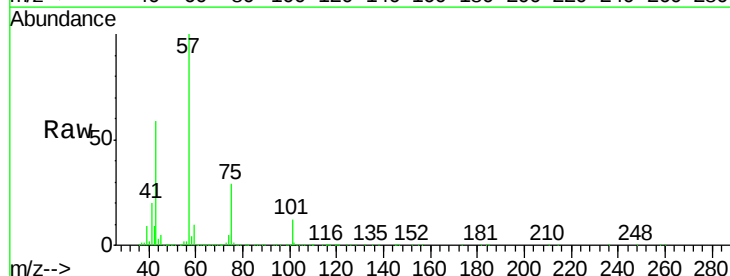
Tgt Ion: 75 Resp: 68570

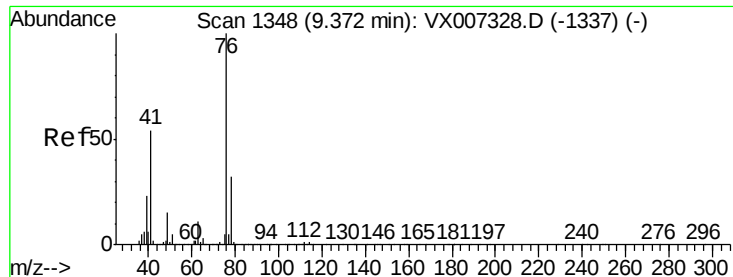
Ion Ratio Lower Upper

75 100

77 0.5 26.2 39.4#

39 31.7 37.1 55.7#





#57

1,3-Dichloropropane

Concen: 1.817 ug/l

RT: 9.54 min Scan# 1376

Delta R.T. 0.17 min

Lab File: VX007359.D

Acq: 04 Feb 2019 15:10

Instrument :

MSVOA_X

ClientSampleId :

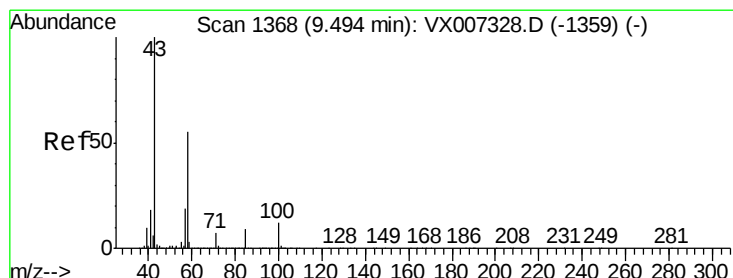
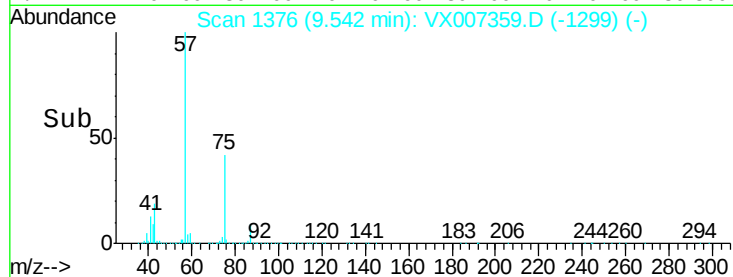
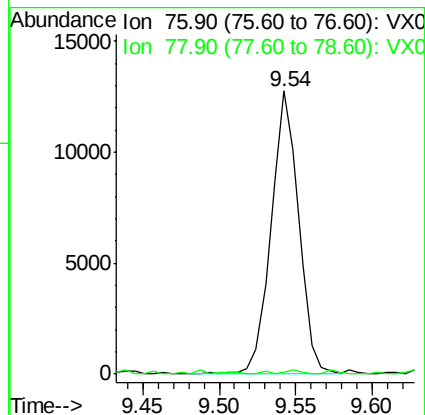
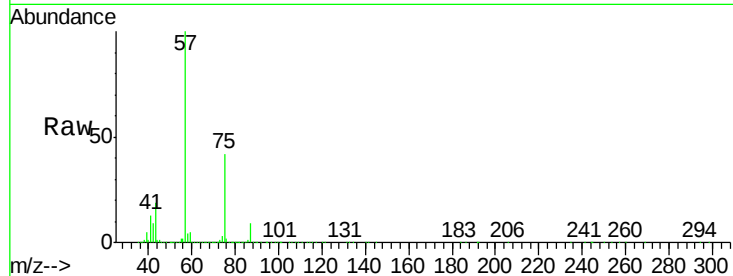
SOIL-PILE

Tot Ion: 76 Resp: 16044

Ion Ratio Lower Upper

76 100

78 0.7 25.8 38.8#



#59

2-Hexanone

Concen: 35.481 ug/l

RT: 9.54 min Scan# 1376

Delta R.T. 0.05 min

Lab File: VX007359.D

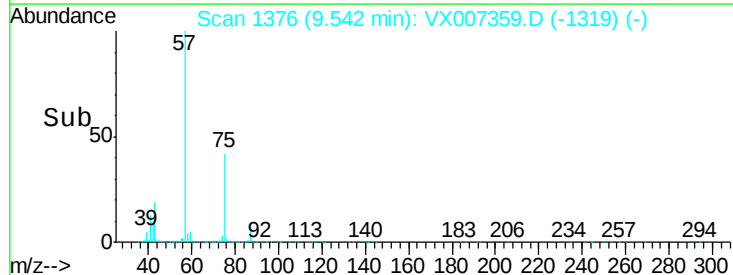
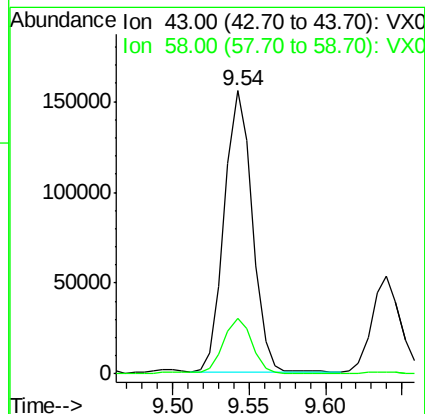
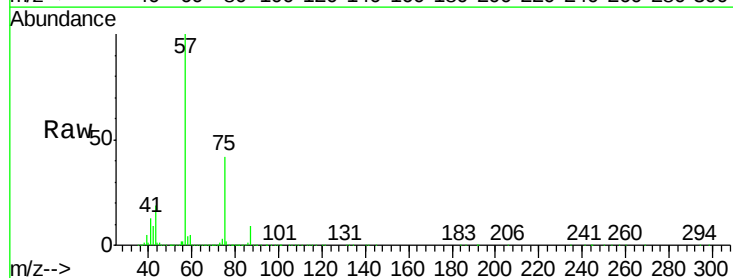
Acq: 04 Feb 2019 15:10

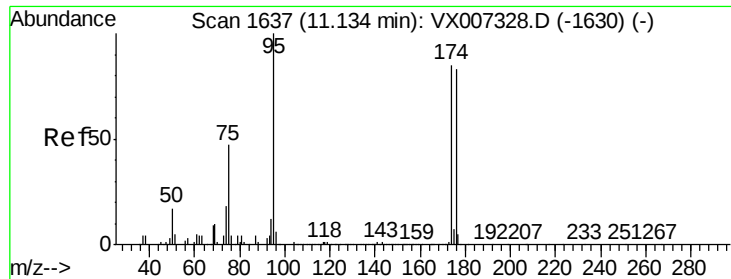
Tgt Ion: 43 Resp: 198711

Ion Ratio Lower Upper

43 100

58 20.1 27.1 81.3#

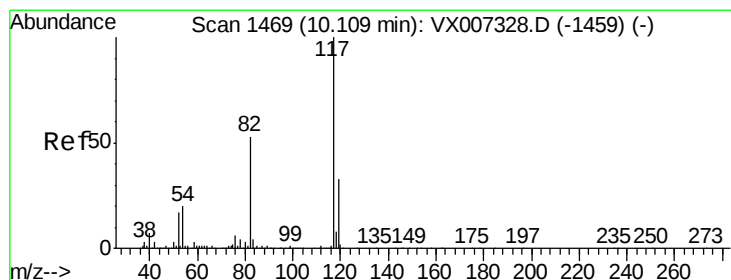
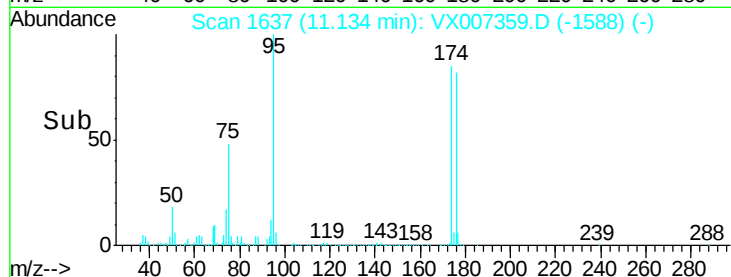
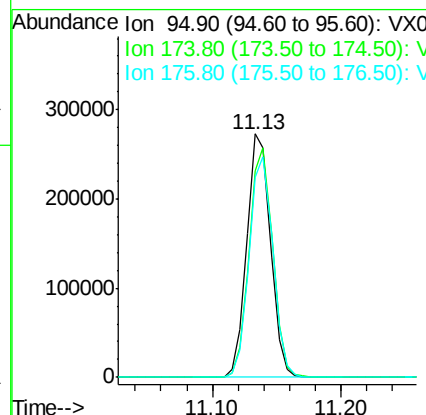
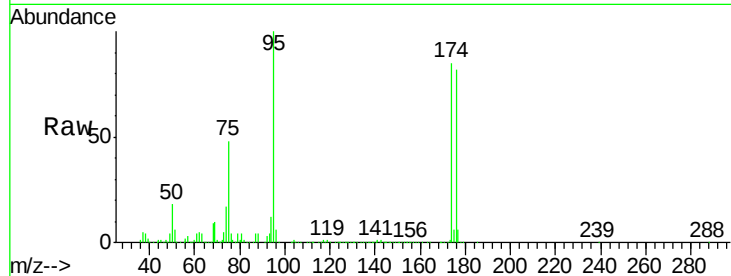




#62
4-Bromofluorobenzene
Concen: 50.262 ug/l
RT: 11.13 min Scan# 1637
Delta R.T. -0.00 min
Lab File: VX007359.D
Acq: 04 Feb 2019 15:10

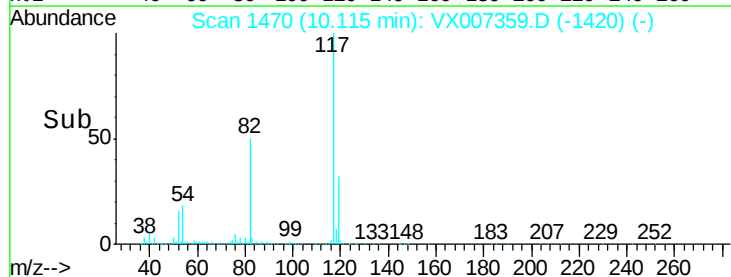
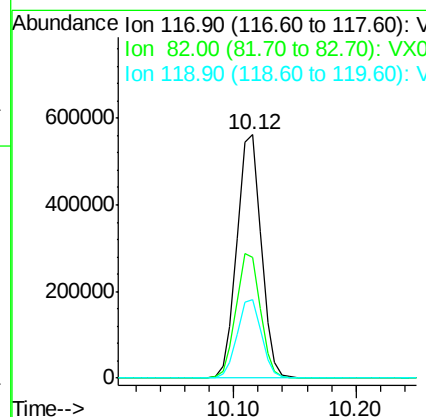
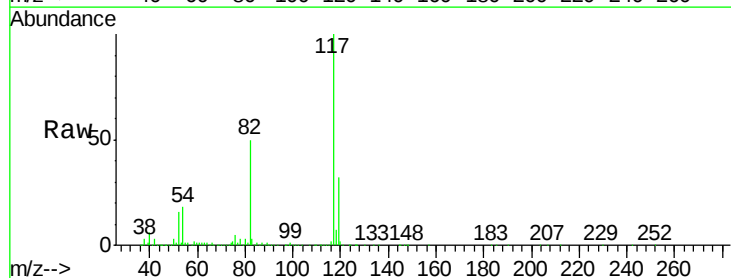
Instrument :
MSVOA_X
ClientSampleId :
SOIL-PILE

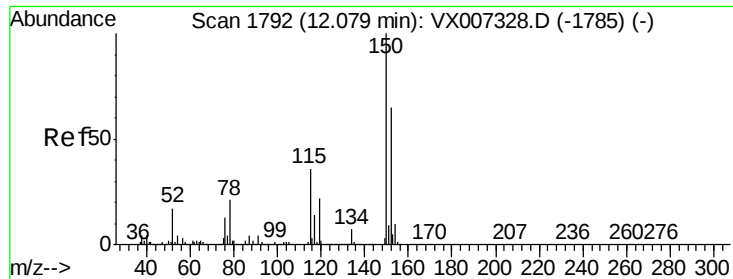
Tot Ion	Ratio	Lower	Upper
95	100		
174	93.3	0.0	189.2
176	90.5	0.0	186.2



#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 10.12 min Scan# 1470
Delta R.T. 0.01 min
Lab File: VX007359.D
Acq: 04 Feb 2019 15:10

Tgt Ion	Ratio	Lower	Upper
117	100		
82	49.7	42.1	63.1
119	32.1	26.5	39.7





#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 12.08 min Scan# 1792

Delta R.T. -0.00 min

Lab File: VX007359.D

Acq: 04 Feb 2019 15:10

Instrument :

MSVOA_X

ClientSampleId :

SOIL-PILE

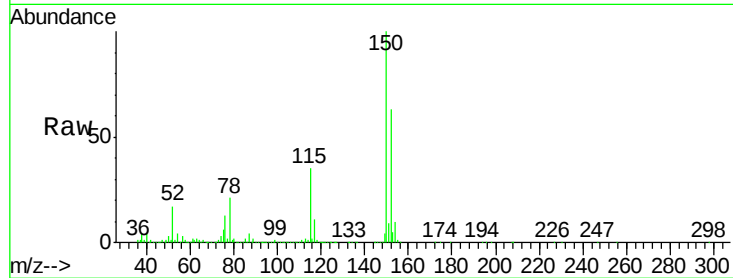
Tot Ion:152 Resp: 370551

Ion Ratio Lower Upper

152 100

115 55.1 38.0 114.0

150 158.2 0.0 346.4



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

600000

500000

400000

300000

200000

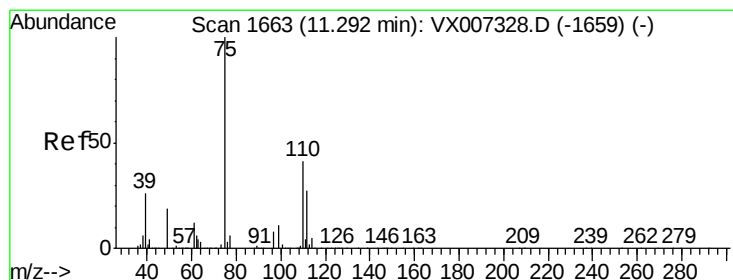
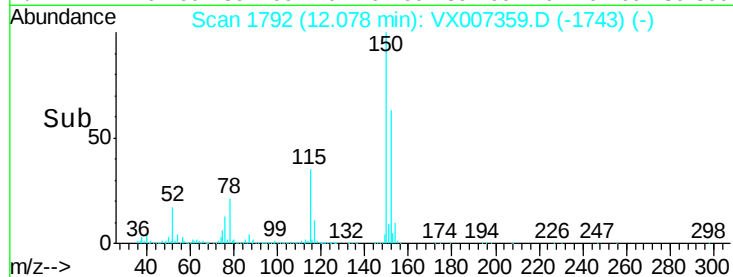
100000

0

12.00

12.10

Time-->



#76

1,2,3-Trichloropropane

Concen: 22.798 ug/l

RT: 11.13 min Scan# 1637

Delta R.T. -0.16 min

Lab File: VX007359.D

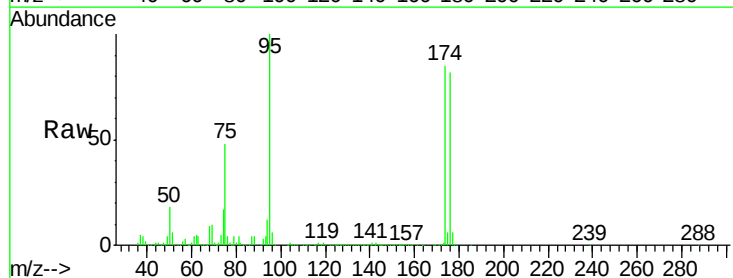
Acq: 04 Feb 2019 15:10

Tgt Ion: 75 Resp: 164317

Ion Ratio Lower Upper

75 100

77 1.5 23.0 69.0#



Abundance Ion 74.90 (74.60 to 75.60): VX0

Ion 77.00 (76.70 to 77.70): VX0

150000

100000

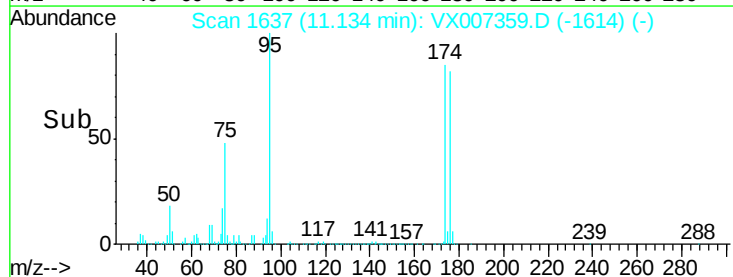
50000

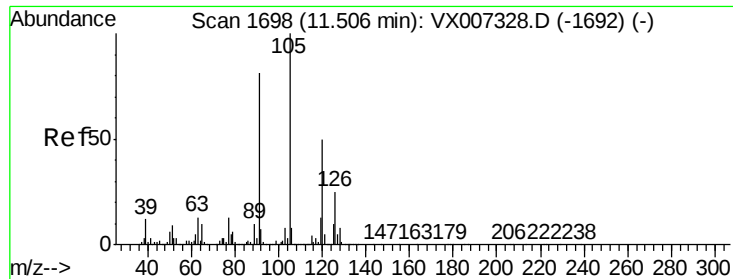
0

11.10

11.20

Time-->





#80

1,3,5-Trimethylbenzene

Concen: 0.207 ug/l

RT: 11.51 min Scan# 1698

Delta R.T. -0.00 min

Lab File: VX007359.D

Acq: 04 Feb 2019 15:10

Instrument :

MSVOA_X

ClientSampleId :

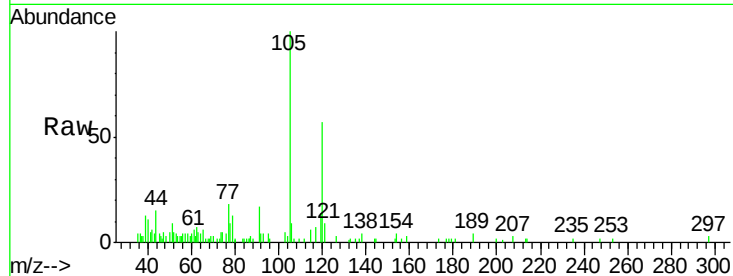
SOIL-PILE

Tot Ion:105 Resp: 4256

Ion Ratio Lower Upper

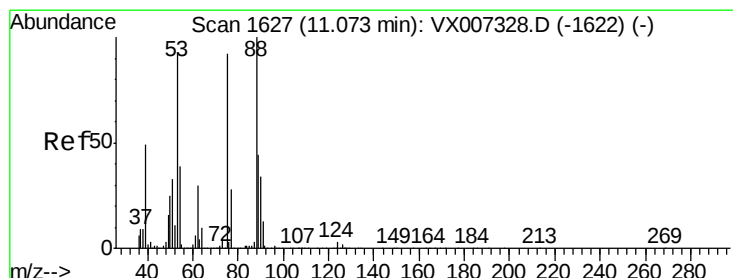
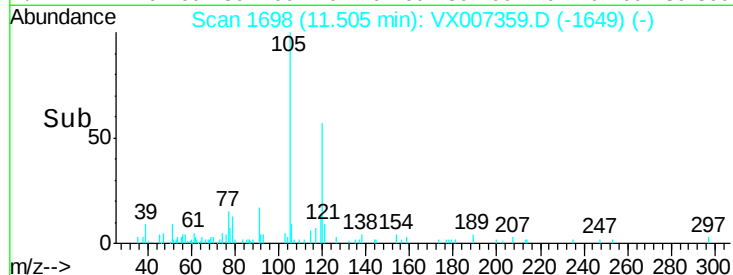
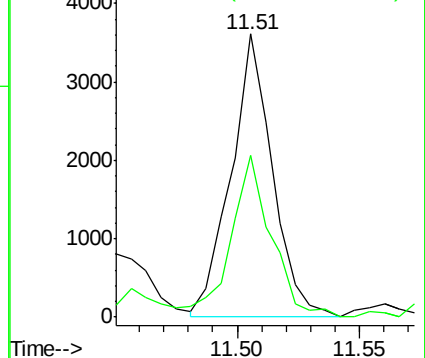
105 100

120 55.6 25.3 75.8



Abundance Ion 105.00 (104.70 to 105.70): V

Ion 120.00 (119.70 to 120.70): V



#81

trans-1,4-Dichloro-2-butene

Concen: 68.734 ug/l

RT: 11.13 min Scan# 1637

Delta R.T. 0.06 min

Lab File: VX007359.D

Acq: 04 Feb 2019 15:10

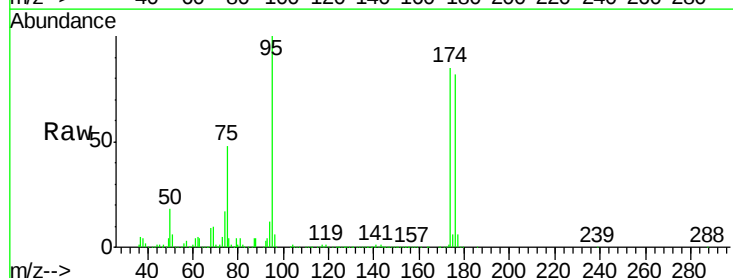
Tgt Ion: 75 Resp: 164317

Ion Ratio Lower Upper

75 100

53 0.0 81.0 121.6#

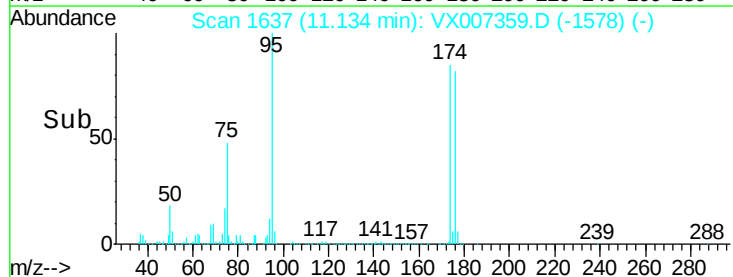
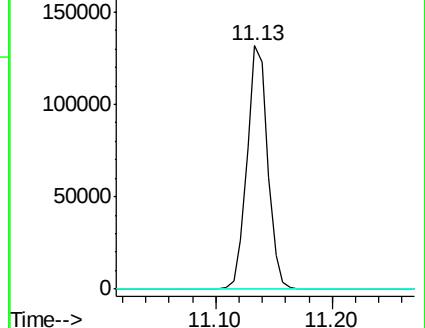
89 0.0 41.4 62.0#

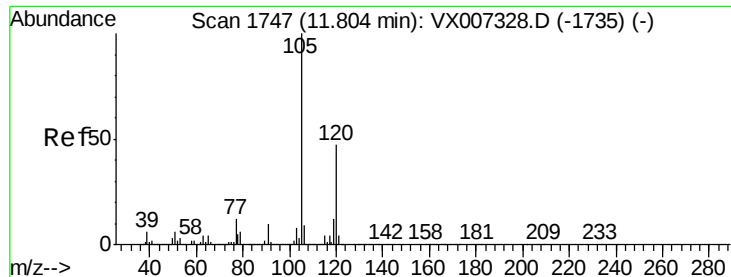


Abundance Ion 74.90 (74.60 to 75.60): VX0

Ion 53.00 (52.70 to 53.70): VX0

Ion 88.90 (88.60 to 89.60): VX0

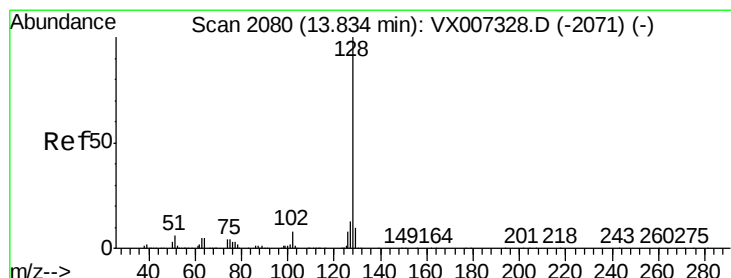
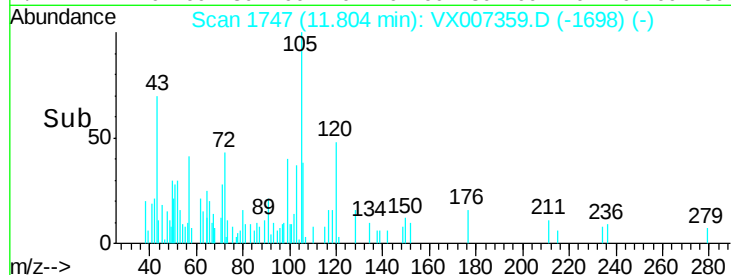
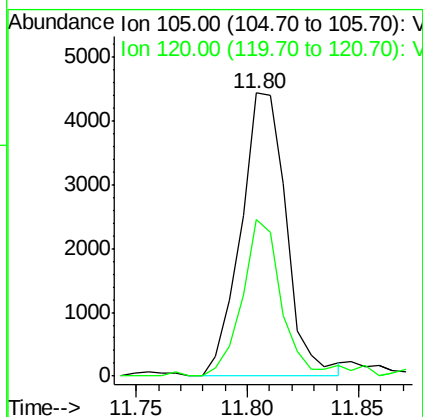
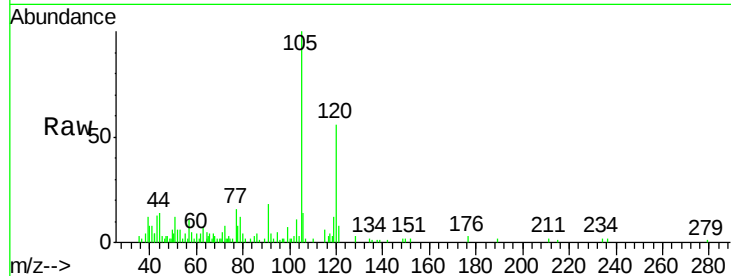




#84
 1,2,4-Trimethylbenzene
 Concen: 0.302 ug/l
 RT: 11.80 min Scan# 1747
 Delta R.T. -0.00 min
 Lab File: VX007359.D
 Acq: 04 Feb 2019 15:10

Instrument :
 MSVOA_X
 ClientSampleId :
 SOIL-PILE

Tot Ion:105 Resp: 6310
 Ion Ratio Lower Upper
 105 100
 120 47.3 23.1 69.3



#95
 Naphthalene
 Concen: 1.611 ug/l
 RT: 13.83 min Scan# 2080
 Delta R.T. -0.00 min
 Lab File: VX007359.D
 Acq: 04 Feb 2019 15:10

Tgt Ion:128 Resp: 40269
 Ion Ratio Lower Upper
 128 100
 127 13.3 10.5 15.7
 129 11.9 8.7 13.1

