

Data Path : Z:\VOASRV\HPCHEM1\MSVOA F\DATA\VF022519\
 Data File : VF061733.D
 Acq On : 25 Feb 2019 16:35
 Operator : VA/AP
 Sample : K1560-02L00
 Misc : 5.00µ/5mL/MSVOA-F/SOIL
 ALS Vial : 12 Sample Multiplier: 1

Instrument :
 MSVOA_F
 ClientSampleId :
 LOQ-SOIL-02-QT1-2019

Quant Time: Feb 26 04:57:17 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_F\METHODS\82F021319S.M
 Quant Title : SW846 8260
 QLast Update : Thu Feb 14 03:27:56 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	4.87	168	334379	50.00	ug/l	-0.01
34) 1,4-Difluorobenzene	5.59	114	478422	50.00	ug/l	-0.01
63) Chlorobenzene-d5	9.77	117	415022	50.00	ug/l	-0.01
72) 1,4-Dichlorobenzene-d4	12.54	152	251639	50.00	ug/l	-0.01

System Monitoring Compounds

33) 1,2-Dichloroethane-d4	4.84	65	131348	53.57	ug/l	-0.01
Spiked Amount	50.000		Recovery	=	107.14%	
35) Dibromofluoromethane	4.11	113	189627	53.37	ug/l	0.00
Spiked Amount	50.000		Recovery	=	106.74%	
50) Toluene-d8	7.56	98	522928	51.20	ug/l	0.00
Spiked Amount	50.000		Recovery	=	102.40%	
62) 4-Bromofluorobenzene	11.41	95	220833	53.44	ug/l	0.00
Spiked Amount	50.000		Recovery	=	106.88%	

Target Compounds

						Qvalue
2) Dichlorodifluoromethane	0.96	85	43812	11.409	ug/l	94
3) Chloromethane	1.10	50	40241	9.988	ug/l	99
4) Vinyl Chloride	1.14	62	38757	10.348	ug/l	94
5) Bromomethane	1.32	94	27662	10.731	ug/l	98
6) Chloroethane	1.39	64	18426	9.983	ug/l	99
7) Trichlorofluoromethane	1.48	101	44454	9.840	ug/l	97
8) Diethyl Ether	1.63	74	10215	8.973	ug/l	84
9) 1,1,2-Trichlorotrifluoroet	1.83	101	33409	10.251	ug/l	91
11) Tert butyl alcohol	2.58	59	6765	47.671	ug/l	96
12) 1,1-Dichloroethene	1.80	96	28963	10.108	ug/l	86
13) Acrolein	2.00	56	8345	46.789	ug/l	92
14) Allvl chloride	2.09	41	34949	9.940	ug/l	95
15) Acrylonitrile	2.94	53	21712	43.134	ug/l	89
16) Acetone	2.24	43	24339	46.263	ug/l	94
17) Carbon Disulfide	1.83	76	88136m	9.786	ug/l	
18) Methyl Acetate	2.35	43	19582m	16.522	ug/l	
19) Methyl tert-butyl Ether	2.43	73	48465	9.897	ug/l	98
20) Methylene Chloride	2.18	84	32448m	9.467	ug/l	
21) trans-1,2-Dichloroethene	2.31	96	32299	10.370	ug/l	93
22) Diisopropyl ether	2.80	45	90259	10.694	ug/l	98
23) Vinyl Acetate	3.19	43	183452	44.502	ug/l	99
24) 1,1-Dichloroethane	2.87	63	53049	10.386	ug/l	95
25) 2-Butanone	4.33	43	53810	46.825	ug/l	92
26) 2,2-Dichloropropane	3.59	77	23356	10.796	ug/l	94
27) cis-1,2-Dichloroethene	3.47	96	40790	9.977	ug/l	99
28) Bromochloromethane	3.73	49	23017	9.392	ug/l	85
29) Tetrahydrofuran	4.07	42	24422	46.758	ug/l	92
30) Chloroform	3.86	83	58592	10.087	ug/l	89
31) Cyclohexane	3.69	56	53159m	9.614	ug/l	
32) 1,1,1-Trichloroethane	4.09	97	41866	11.003	ug/l	90
36) 1,1-Dichloropropene	4.27	75	48861	10.310	ug/l	92
37) Ethyl Acetate	4.11	43	19460	8.840	ug/l #	75
38) Carbon Tetrachloride	3.99	117	38032	11.621	ug/l	94
39) Methylcyclohexane	5.45	83	54632	9.747	ug/l	94

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 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
40) Benzene	4.63	78	122262	9.863	ug/l	97
41) Methacrylonitrile	4.75	41	11526	10.238	ug/l #	89
42) 1,2-Dichloroethane	4.94	62	31101	10.488	ug/l	93
43) Isopropyl Acetate	6.96	43	23592	9.054	ug/l #	86
44) Trichloroethene	5.49	130	43442	10.837	ug/l	100
45) 1,2-Dichloropropane	6.23	63	30783	10.273	ug/l	96
46) Dibromomethane	6.08	93	17900	9.702	ug/l	89
47) Bromodichloromethane	6.38	83	42124	10.426	ug/l #	95
48) Methyl methacrylate	6.72	41	15680	10.000	ug/l	94
49) 1,4-Dioxane	6.71	88	2878	195.243	ug/l #	77
51) 4-Methyl-2-Pentanone	8.26	43	91247	49.009	ug/l	95
52) Toluene	7.62	92	79479	10.571	ug/l	97
53) t-1,3-Dichloropropene	8.28	75	39025	11.606	ug/l	97
54) cis-1,3-Dichloropropene	7.30	75	47514	10.609	ug/l	98
55) 1,1,2-Trichloroethane	8.49	97	22615	10.238	ug/l	94
56) Ethyl methacrylate	8.62	69	22178	9.018	ug/l #	85
57) 1,3-Dichloropropane	8.85	76	36587	9.923	ug/l	96
58) 2-Chloroethyl Vinyl ether	7.29	63	15421	36.342	ug/l #	87
59) 2-Hexanone	9.49	43	66455	50.920	ug/l	96
60) Dibromochloromethane	8.72	129	30244	9.837	ug/l	87
61) 1,2-Dibromoethane	8.99	107	26004	10.854	ug/l	91
64) Tetrachloroethene	8.15	164	37428	11.033	ug/l	92
65) Chlorobenzene	9.79	112	88683	10.530	ug/l	98
66) 1,1,1,2-Tetrachloroethane	9.93	131	37224	11.280	ug/l	99
67) Ethyl Benzene	9.90	91	161468	11.529	ug/l	96
68) m/p-Xylenes	10.13	106	117448	21.912	ug/l	95
69) o-Xylene	10.71	106	61998	10.840	ug/l	99
70) Stvrene	10.79	104	90811	11.224	ug/l	96
71) Bromoform	10.77	173	18745	10.460	ug/l	95
73) Isopropylbenzene	11.12	105	184024	10.271	ug/l	98
74) N-amyl acetate	11.37	43	40803	9.488	ug/l	98
75) 1,1,2,2-Tetrachloroethane	11.70	83	31254	9.737	ug/l	99
76) 1,2,3-Trichloropropane	11.80	75	20118	9.219	ug/l	89
77) Bromobenzene	11.49	156	42572	9.618	ug/l	93
78) n-propylbenzene	11.59	91	223783	10.885	ug/l	94
79) 2-Chlorotoluene	11.72	91	126533	10.989	ug/l	93
80) 1,3,5-Trimethylbenzene	11.82	105	153883	10.747	ug/l	99
81) trans-1,4-Dichloro-2-buten	11.86	75	9102m	8.700	ug/l	
82) 4-Chlorotoluene	11.89	91	121916	10.201	ug/l	93
83) tert-Butylbenzene	12.13	119	170036	10.721	ug/l	99
84) 1,2,4-Trimethylbenzene	12.20	105	153898	10.818	ug/l	96
85) sec-Butylbenzene	12.31	105	220038	10.728	ug/l	100
86) p-Isopropyltoluene	12.46	119	182931	10.628	ug/l	99
87) 1,3-Dichlorobenzene	12.48	146	91849	10.645	ug/l	98
88) 1,4-Dichlorobenzene	12.56	146	87849	10.586	ug/l	97
89) n-Butylbenzene	12.84	91	176808	10.878	ug/l	97
90) Hexachloroethane	12.92	117	42871	10.709	ug/l	100
91) 1,2-Dichlorobenzene	12.94	146	85285	10.391	ug/l	97
92) 1,2-Dibromo-3-Chloropropan	13.64	75	4393	8.632	ug/l	77
93) 1,2,4-Trichlorobenzene	14.20	180	57564	9.785	ug/l	98

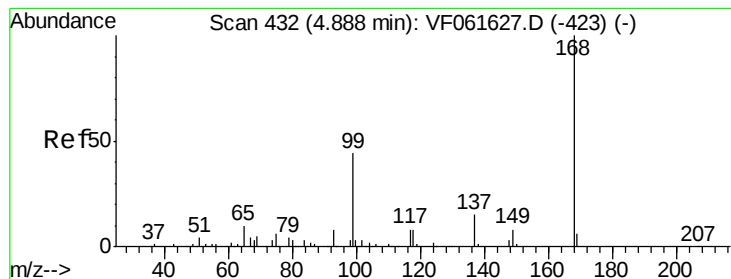
Data Path : Z:\V0ASRV\HPCHEM1\MSVOA F\DATA\VF022519\
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Quant Title : SW846 8260
QLast Update : Thu Feb 14 03:27:56 2019
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
94) Hexachlorobutadiene	14.19	225	36859	10.145	µg/l	97
95) Naphthalene	14.46	128	92337	8.971	µg/l	98
96) 1,2,3-Trichlorobenzene	14.61	180	52579	9.738	µg/l	96

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



#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 4.87 min Scan# 430

Delta R.T. -0.01 min

Lab File: VF061733.D

Acq: 25 Feb 2019 16:35

Instrument :

MSVOA_F

ClientSampleId :

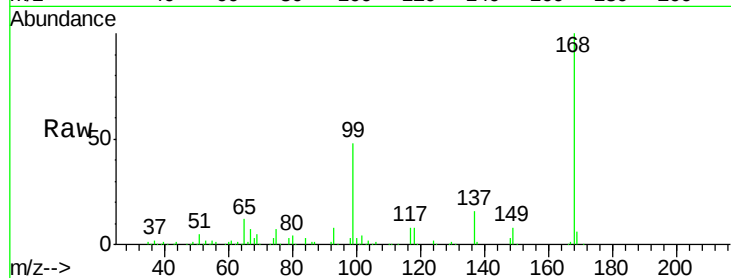
LOQ-SOIL-02-QT1-2019

Tot Ion:168 Resp: 334379

Ion Ratio Lower Upper

168 100

99 47.6 34.9 52.3



Abundance Ion 168.00 (167.70 to 168.70): VF0

Ion 99.00 (98.70 to 99.70): VF0

4.87

120000

100000

80000

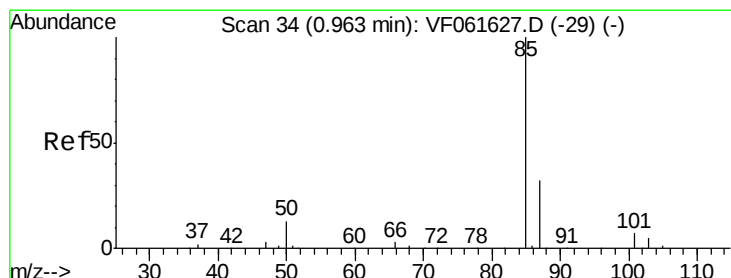
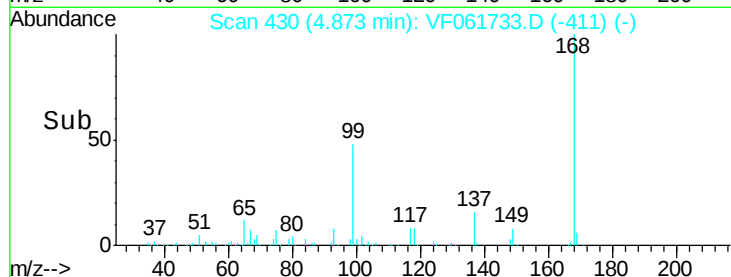
60000

40000

20000

0

Time--> 4.70 4.80 4.90 5.00 5.10



#2

Dichlorodifluoromethane

Concen: 11.409 ug/l

RT: 0.96 min Scan# 33

Delta R.T. -0.01 min

Lab File: VF061733.D

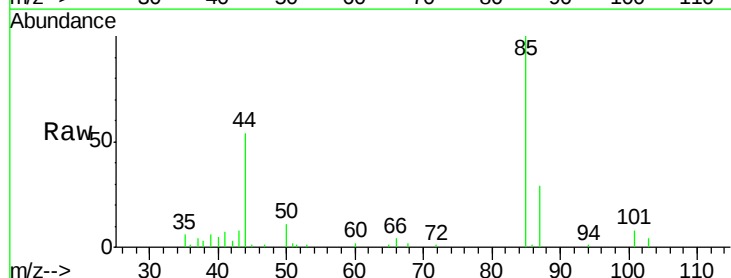
Acq: 25 Feb 2019 16:35

Tgt Ion: 85 Resp: 43812

Ion Ratio Lower Upper

85 100

87 28.6 16.1 48.2



Abundance Ion 85.00 (84.70 to 85.70): VF0

Ion 87.00 (86.70 to 87.70): VF0

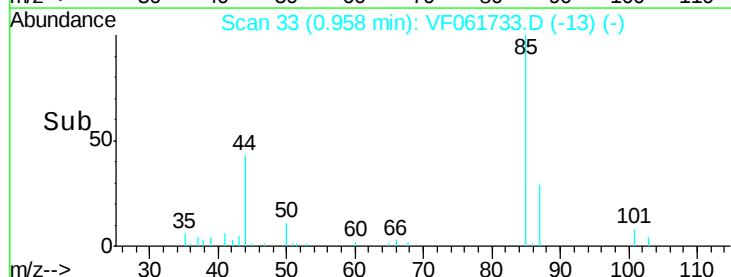
0.96

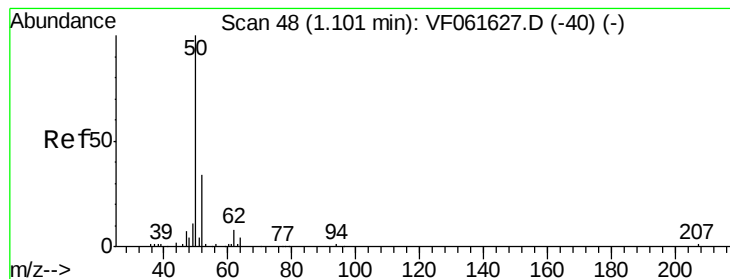
10000

5000

0

Time--> 0.90 1.00 1.10





#3

Chloromethane

Concen: 9.988 ug/l

RT: 1.10 min Scan# 47

Delta R.T. -0.00 min

Lab File: VF061733.D

Acq: 25 Feb 2019 16:35

Instrument :

MSVOA_F

ClientSampleId :

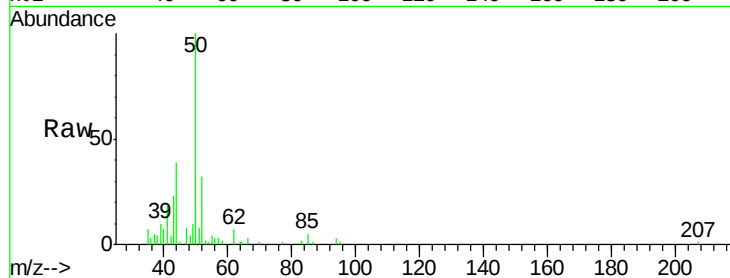
LOQ-SOIL-02-QT1-2019

Tot Ion: 50 Resp: 40241

Ion Ratio Lower Upper

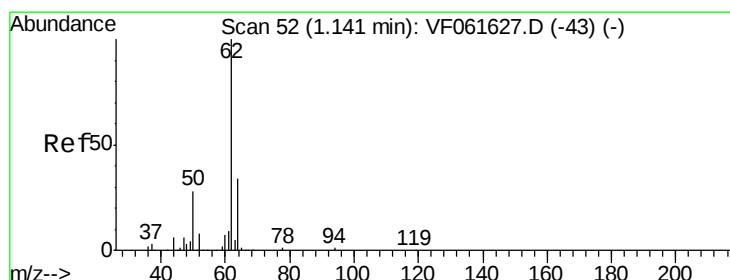
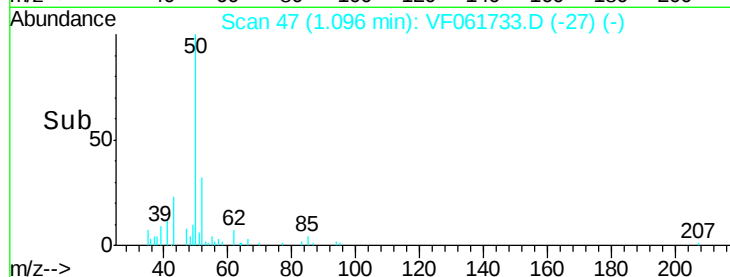
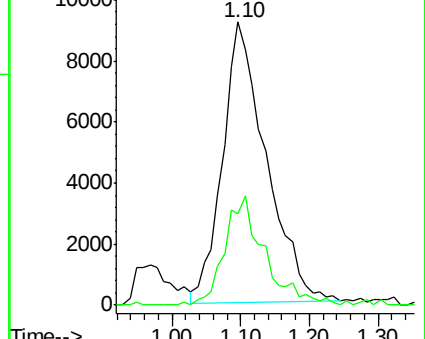
50 100

52 32.3 26.2 39.4



Abundance Ion 50.00 (49.70 to 50.70): VF0

Ion 52.00 (51.70 to 52.70): VF0



#4

Vinyl Chloride

Concen: 10.348 ug/l

RT: 1.14 min Scan# 51

Delta R.T. -0.00 min

Lab File: VF061733.D

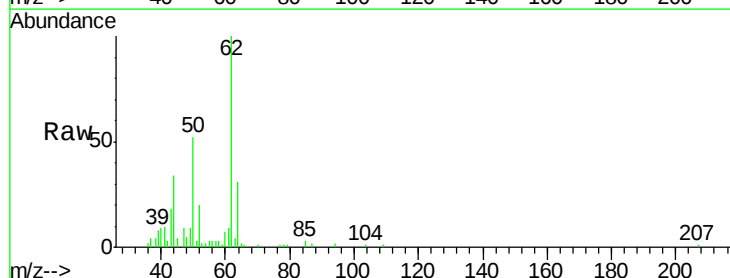
Acq: 25 Feb 2019 16:35

Tgt Ion: 62 Resp: 38757

Ion Ratio Lower Upper

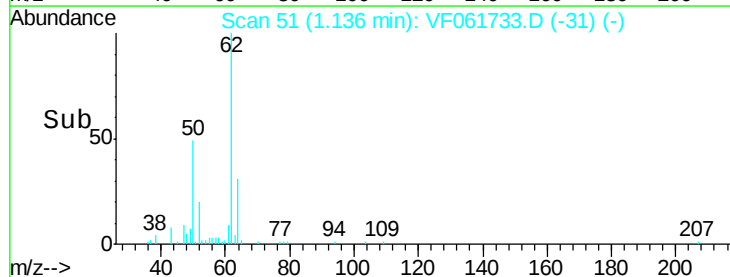
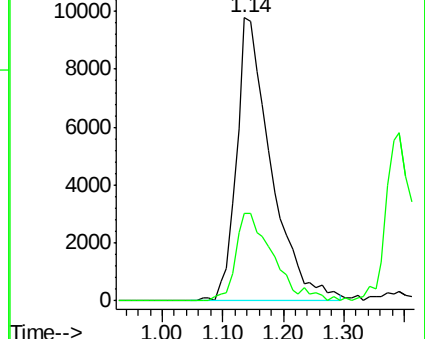
62 100

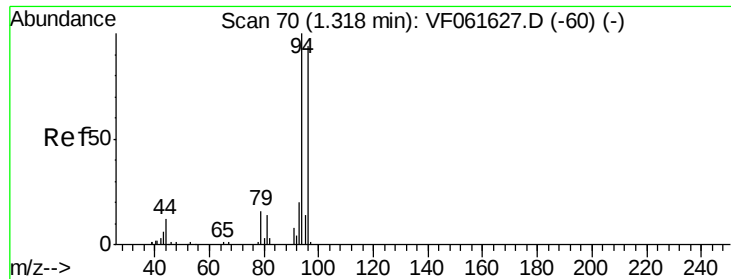
64 30.7 27.5 41.3



Abundance Ion 62.00 (61.70 to 62.70): VF0

Ion 64.00 (63.70 to 64.70): VF0





#5

Bromomethane

Concen: 10.731 ug/l

RT: 1.32 min Scan# 70

Delta R.T. 0.00 min

Lab File: VF061733.D

Acq: 25 Feb 2019 16:35

Instrument :

MSVOA_F

ClientSampleId :

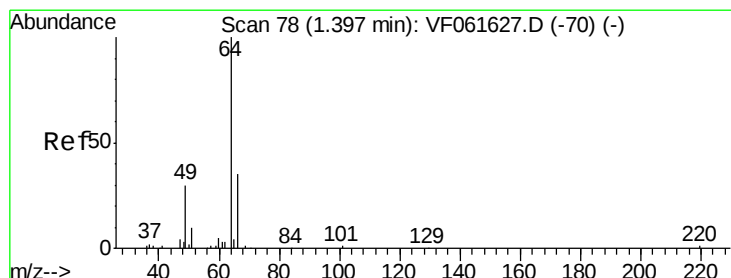
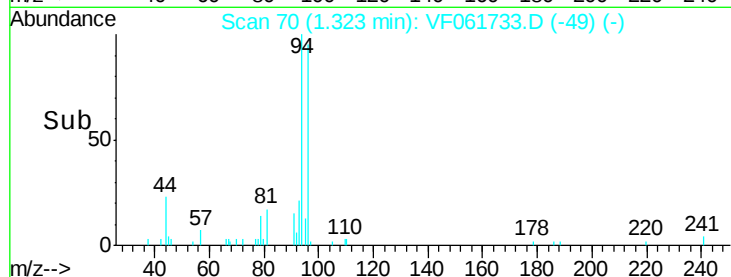
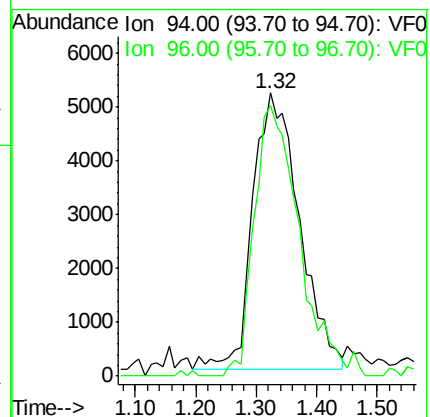
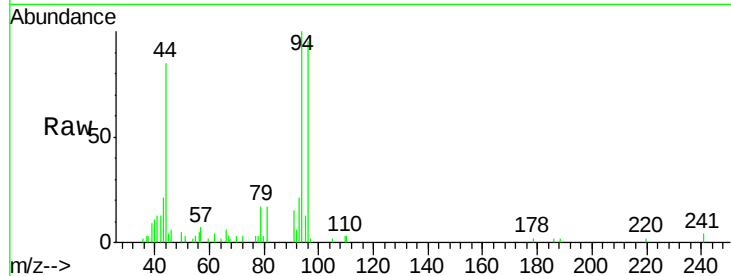
LOQ-SOIL-02-QT1-2019

Tot Ion: 94 Resp: 27662

Ion Ratio Lower Upper

94 100

96 95.5 74.6 112.0



#6

Chloroethane

Concen: 9.983 ug/l

RT: 1.39 min Scan# 77

Delta R.T. -0.01 min

Lab File: VF061733.D

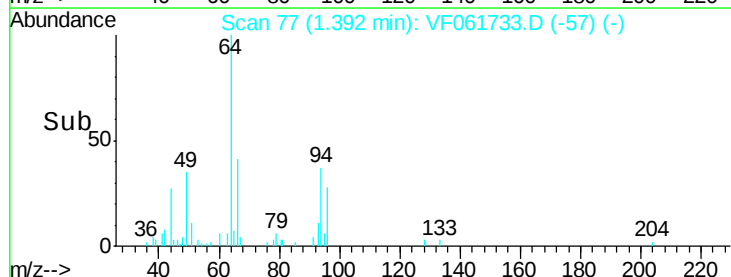
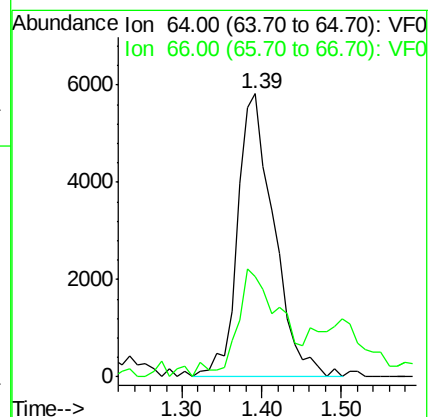
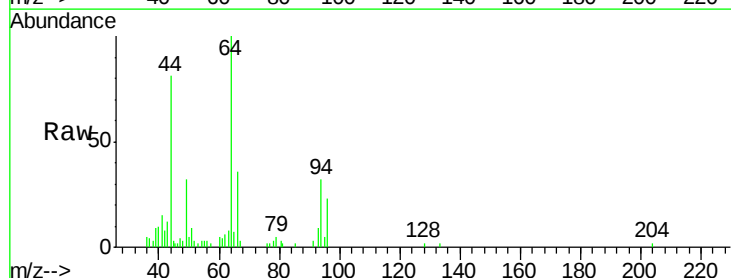
Acq: 25 Feb 2019 16:35

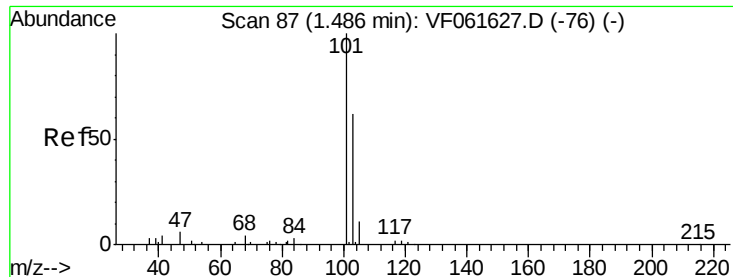
Tgt Ion: 64 Resp: 18426

Ion Ratio Lower Upper

64 100

66 35.6 27.9 41.9





#7

Trichlorofluoromethane

Concen: 9.840 ug/l

RT: 1.48 min Scan# 86

Delta R.T. -0.00 min

Lab File: VF061733.D

Acq: 25 Feb 2019 16:35

Instrument :

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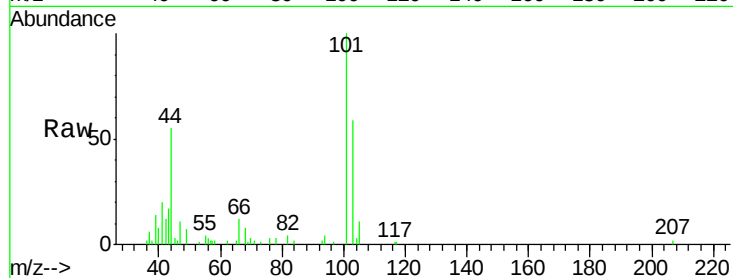
LOQ-SOIL-02-QT1-2019

Tot Ion:101 Resp: 44454

Ion Ratio Lower Upper

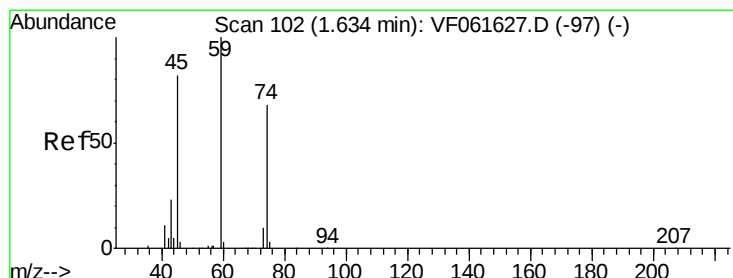
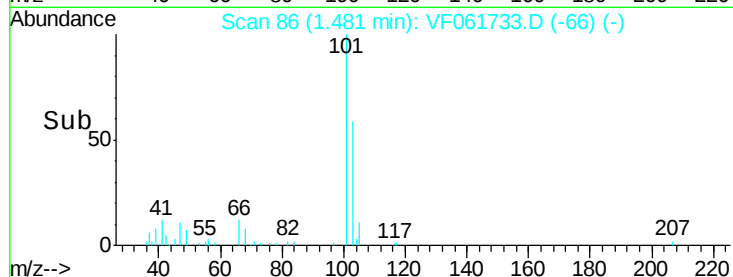
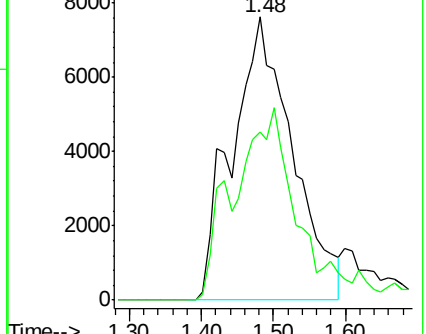
101 100

103 59.5 49.3 73.9



Abundance Ion 101.00 (100.70 to 101.70): V

Ion 103.00 (102.70 to 103.70): V



#8

Diethyl Ether

Concen: 8.973 ug/l

RT: 1.63 min Scan# 101

Delta R.T. -0.01 min

Lab File: VF061733.D

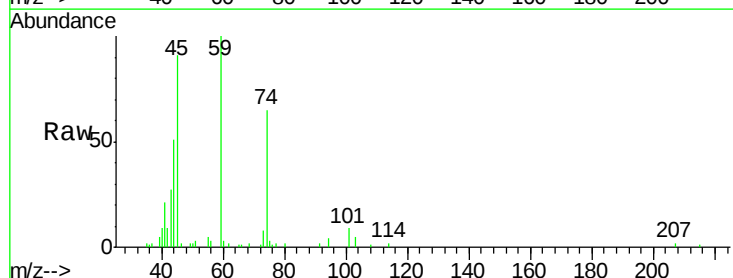
Acq: 25 Feb 2019 16:35

Tgt Ion: 74 Resp: 10215

Ion Ratio Lower Upper

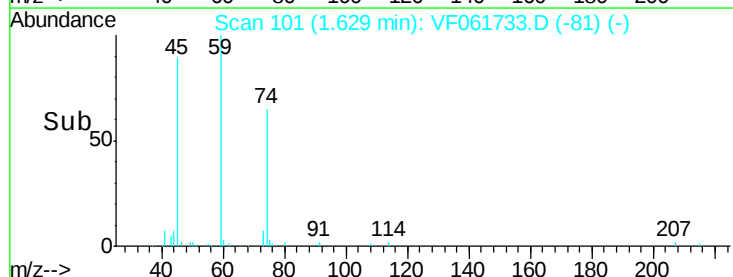
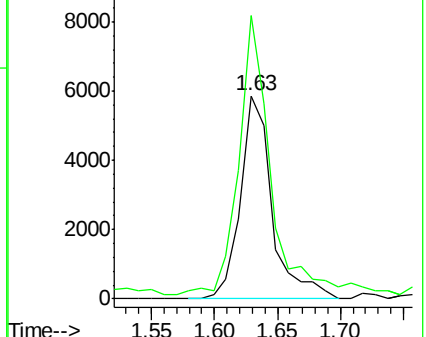
74 100

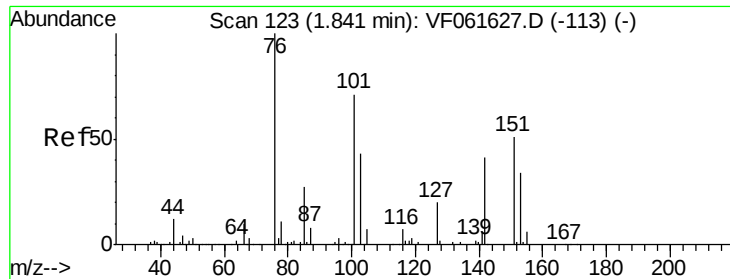
45 139.2 60.8 182.3



Abundance Ion 74.00 (73.70 to 74.70): VF0

Ion 45.00 (44.70 to 45.70): VF0





#9

1,1,2-Trichlorotrifluoroethane

Concen: 10.251 ug/l

RT: 1.83 min Scan# 121

Delta R.T. -0.01 min

Lab File: VF061733.D

Acq: 25 Feb 2019 16:35

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MSVOA_F

ClientSampleId :

LOQ-SOIL-02-QT1-2019

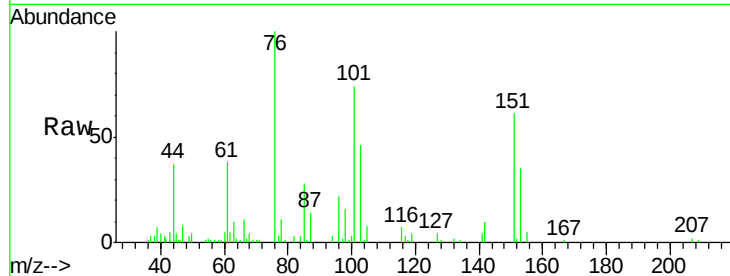
Tot Ion:101 Resp: 33409

Ion Ratio Lower Upper

101 100

85 37.4 29.8 44.6

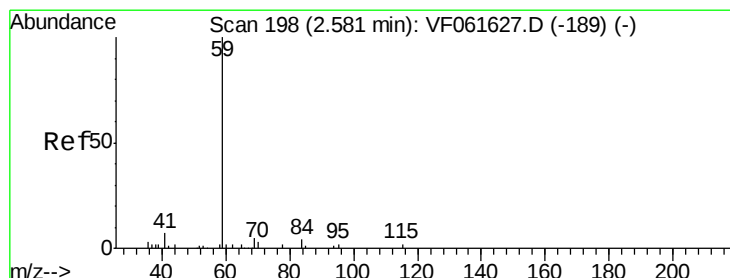
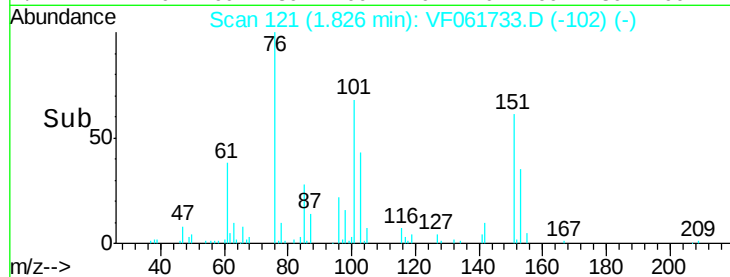
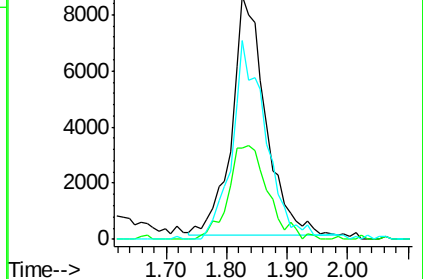
151 81.8 56.3 84.5



Abundance Ion 101.00 (100.70 to 101.70): V

Ion 85.00 (84.70 to 85.70): VF0

Ion 151.00 (150.70 to 151.70): V



#11

Tert butyl alcohol

Concen: 47.671 ug/l

RT: 2.58 min Scan# 197

Delta R.T. -0.00 min

Lab File: VF061733.D

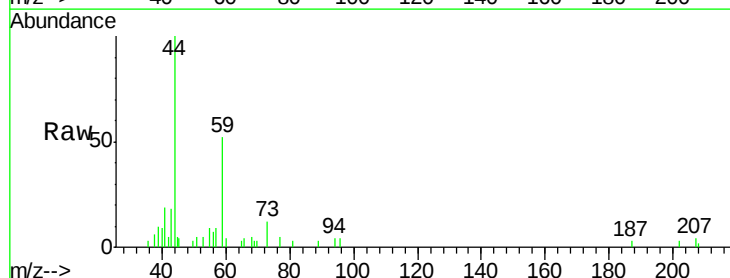
Acq: 25 Feb 2019 16:35

Tgt Ion: 59 Resp: 6765

Ion Ratio Lower Upper

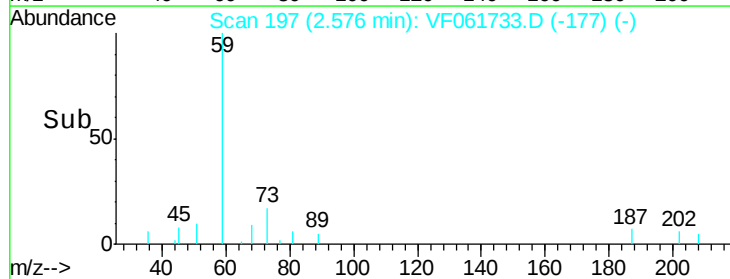
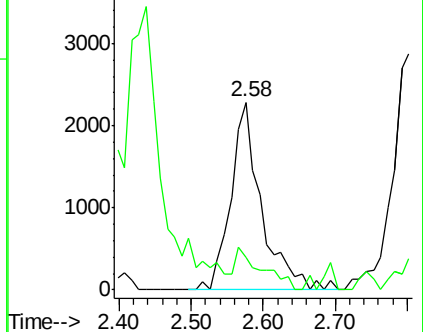
59 100

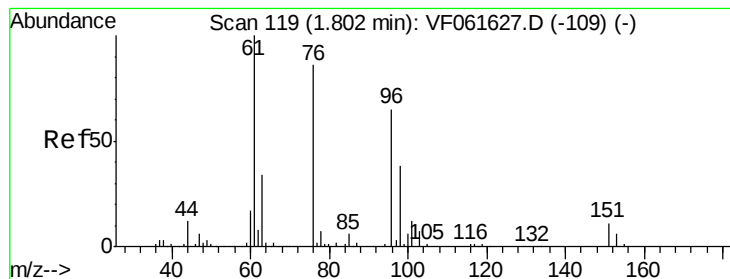
57 17.5 12.5 18.7



Abundance Ion 59.00 (58.70 to 59.70): VF0

Ion 57.00 (56.70 to 57.70): VF0





#12

1,1-Dichloroethene

Concen: 10.108 ug/l

RT: 1.80 min Scan# 118

Delta R.T. -0.00 min

Lab File: VF061733.D

Acq: 25 Feb 2019 16:35

Instrument :

MSVOA_F

ClientSampleId :

LOQ-SOIL-02-QT1-2019

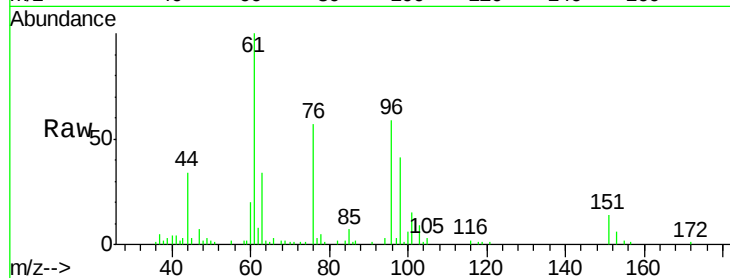
Tot Ion: 96 Resp: 28963

Ion Ratio Lower Upper

96 100

61 170.3 122.6 184.0

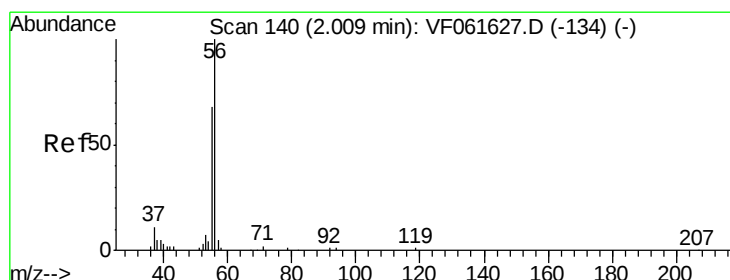
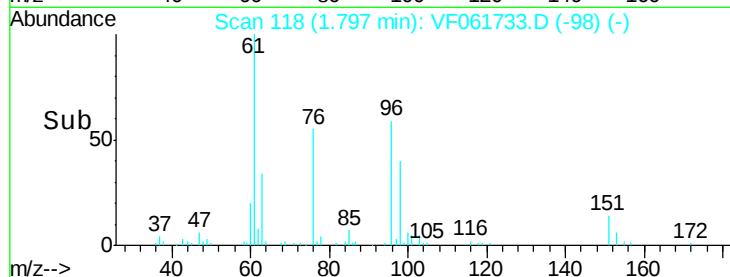
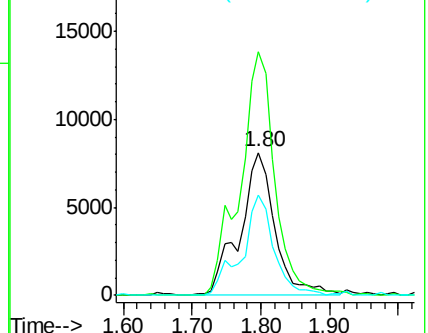
98 69.9 47.2 70.8



Abundance Ion 96.00 (95.70 to 96.70): VF0

Ion 61.00 (60.70 to 61.70): VF0

Ion 98.00 (97.70 to 98.70): VF0



#13

Acrolein

Concen: 46.789 ug/l

RT: 2.00 min Scan# 139

Delta R.T. -0.00 min

Lab File: VF061733.D

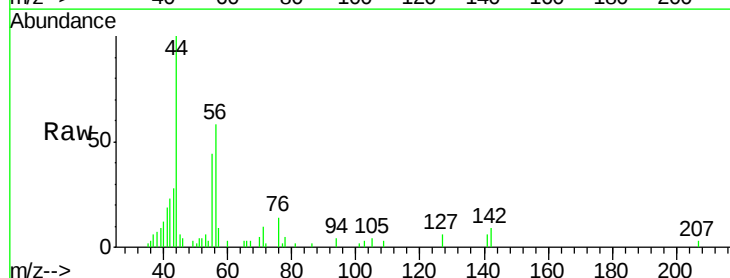
Acq: 25 Feb 2019 16:35

Tgt Ion: 56 Resp: 8345

Ion Ratio Lower Upper

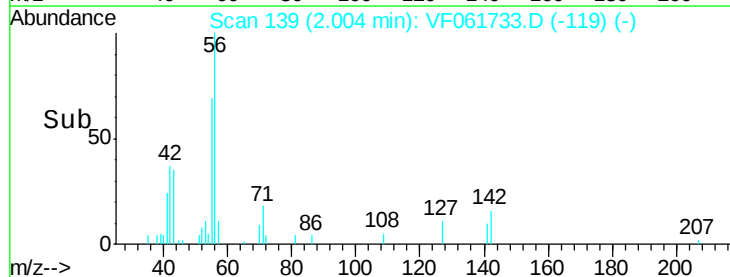
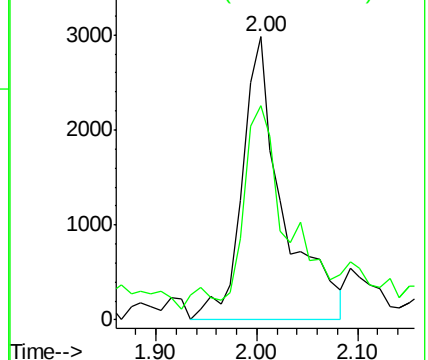
56 100

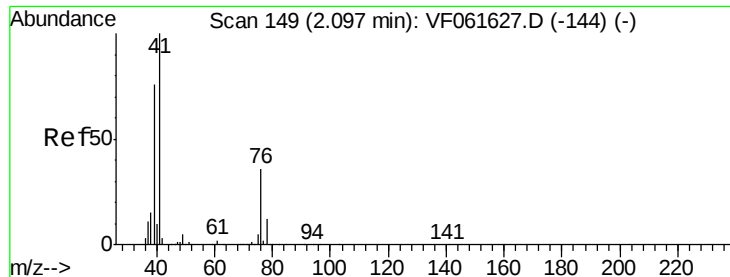
55 75.7 55.0 82.6



Abundance Ion 56.00 (55.70 to 56.70): VF0

Ion 55.00 (54.70 to 55.70): VF0





#14

Allvl chloride

Concen: 9.940 ug/l

RT: 2.09 min Scan# 148

Delta R.T. -0.00 min

Lab File: VF061733.D

Acq: 25 Feb 2019 16:35

Instrument :

MSVOA_F

ClientSampleId :

LOQ-SOIL-02-QT1-2019

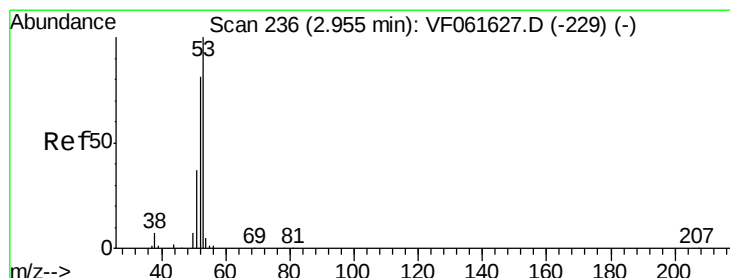
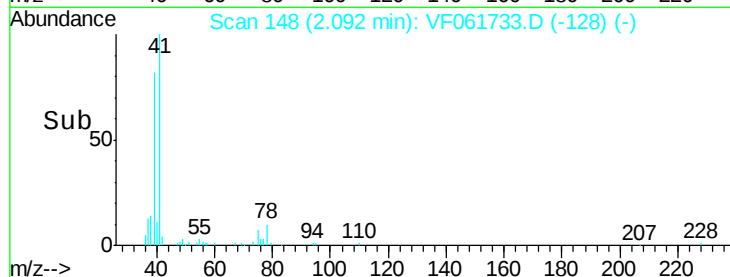
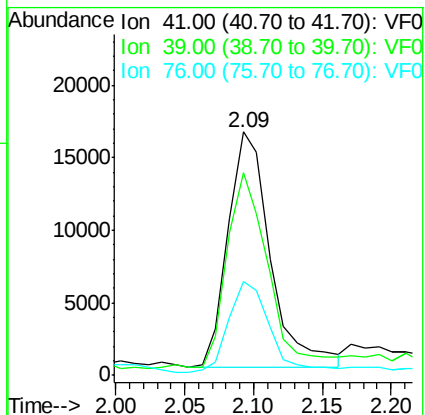
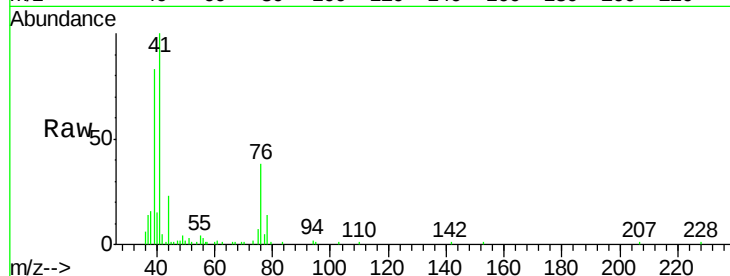
Tot Ion: 41 Resp: 34949

Ion Ratio Lower Upper

41 100

39 83.5 61.6 92.4

76 38.3 30.3 45.5



#15

Acrylonitrile

Concen: 43.134 ug/l

RT: 2.94 min Scan# 234

Delta R.T. -0.01 min

Lab File: VF061733.D

Acq: 25 Feb 2019 16:35

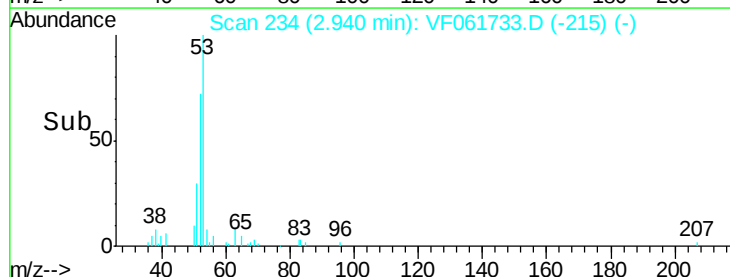
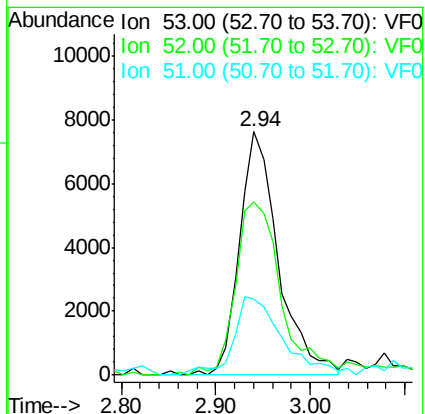
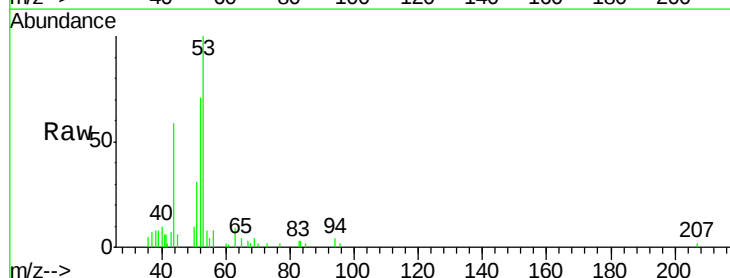
Tgt Ion: 53 Resp: 21712

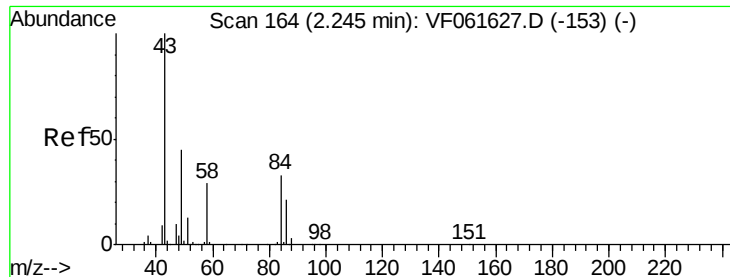
Ion Ratio Lower Upper

53 100

52 71.2 64.6 97.0

51 31.1 29.8 44.8





#16

Acetone

Concen: 46.263 ug/l

RT: 2.24 min Scan# 163

Delta R.T. -0.00 min

Lab File: VF061733.D

Acq: 25 Feb 2019 16:35

Instrument :

MSVOA_F

ClientSampleId :

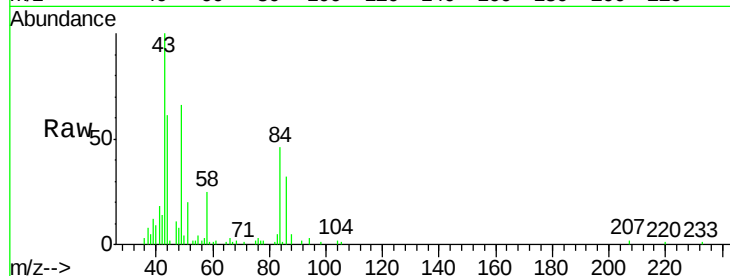
LOQ-SOIL-02-QT1-2019

Tot Ion: 43 Resp: 24339

Ion Ratio Lower Upper

43 100

58 25.2 22.9 34.3



Abundance Ion 43.00 (42.70 to 43.70): VF0

Ion 58.00 (57.70 to 58.70): VF0

10000

8000

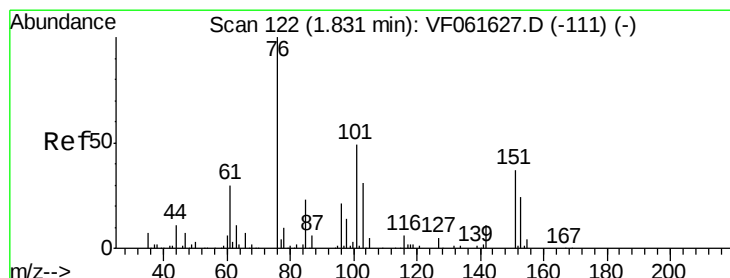
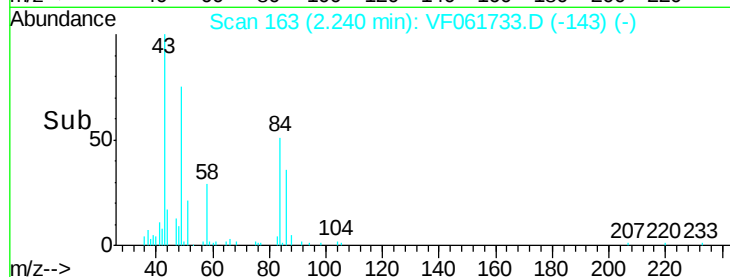
6000

4000

2000

0

Time--> 2.15 2.20 2.25 2.30



#17

Carbon Disulfide

Concen: 9.786 ug/l m

RT: 1.83 min Scan# 121

Delta R.T. -0.00 min

Lab File: VF061733.D

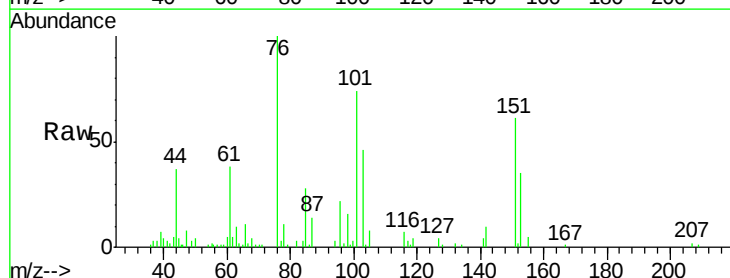
Acq: 25 Feb 2019 16:35

Tgt Ion: 76 Resp: 88136

Ion Ratio Lower Upper

76 100

78 10.9 7.9 11.9



Abundance Ion 76.00 (75.70 to 76.70): VF0

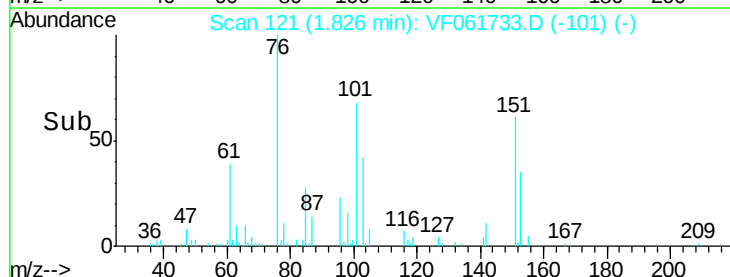
Ion 78.00 (77.70 to 78.70): VF0

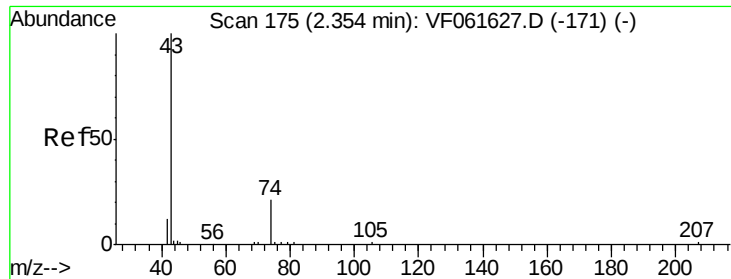
10000

5000

0

Time--> 1.60 1.80 2.00

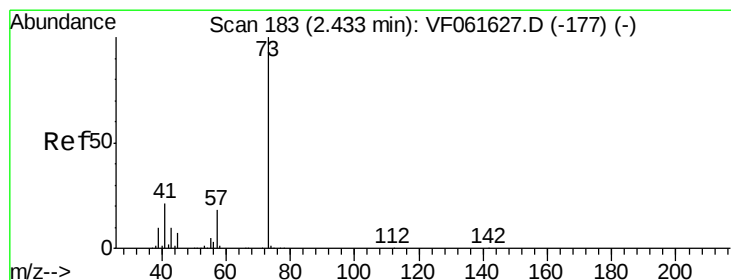
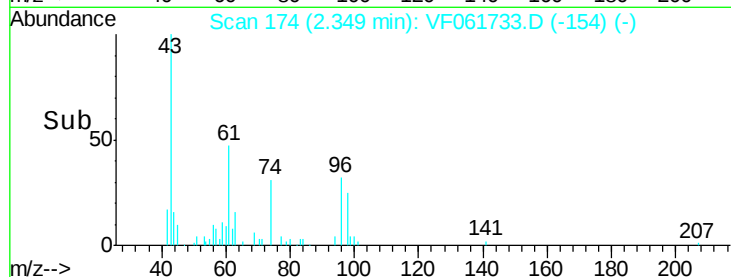
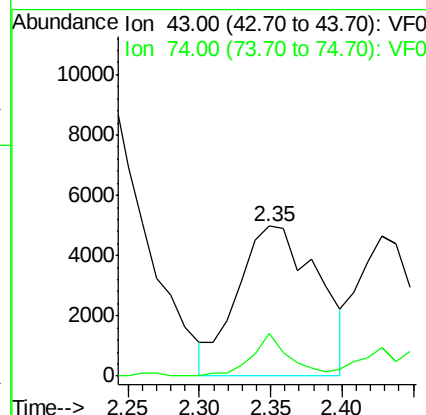
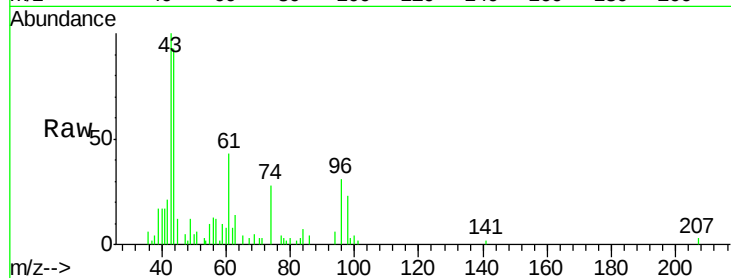




#18
Methvl Acetate
Concen: 16.522 ug/l m
RT: 2.35 min Scan# 174
Delta R.T. -0.00 min
Lab File: VF061733.D
Acq: 25 Feb 2019 16:35

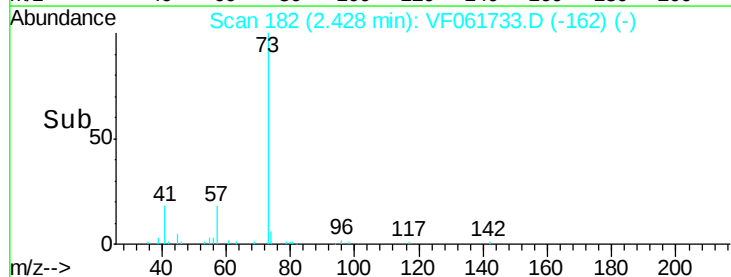
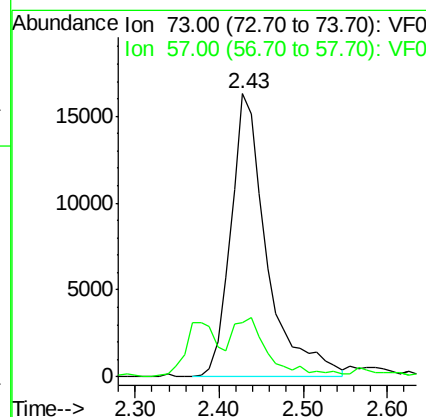
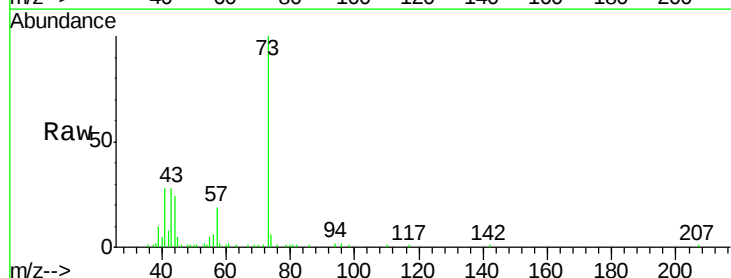
Instrument :
MSVOA_F
ClientSampleId :
LOQ-SOIL-02-QT1-2019

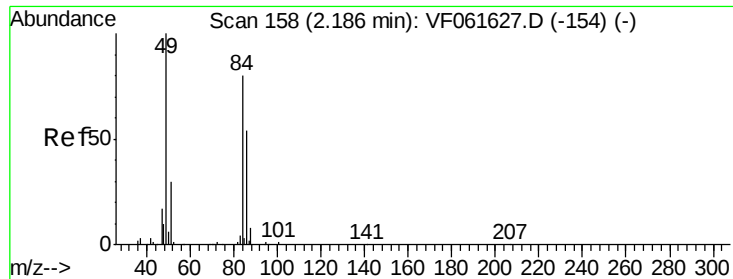
Tot Ion: 43 Resp: 19582
Ion Ratio Lower Upper
43 100
74 28.4 14.6 21.8#



#19
Methyl tert-butyl Ether
Concen: 9.897 ug/l
RT: 2.43 min Scan# 182
Delta R.T. -0.00 min
Lab File: VF061733.D
Acq: 25 Feb 2019 16:35

Tgt Ion: 73 Resp: 48465
Ion Ratio Lower Upper
73 100
57 19.1 15.8 23.8

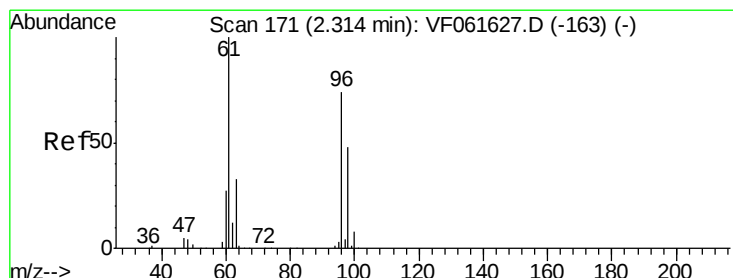
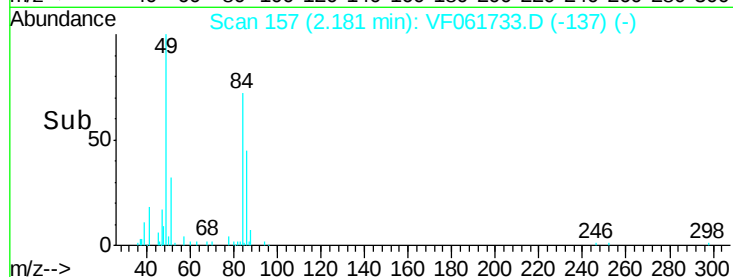
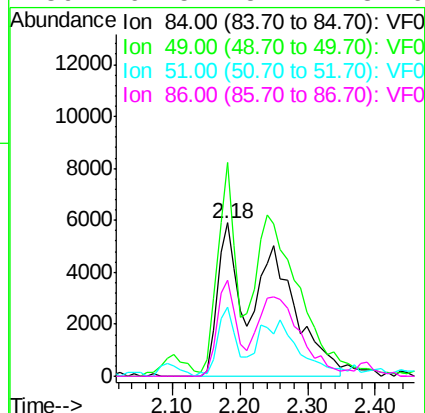
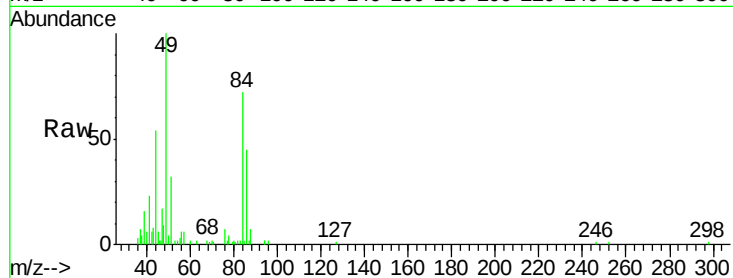




#20
Methylene Chloride
Concen: 9.467 ug/l m
RT: 2.18 min Scan# 157
Delta R.T. -0.00 min
Lab File: VF061733.D
Acq: 25 Feb 2019 16:35

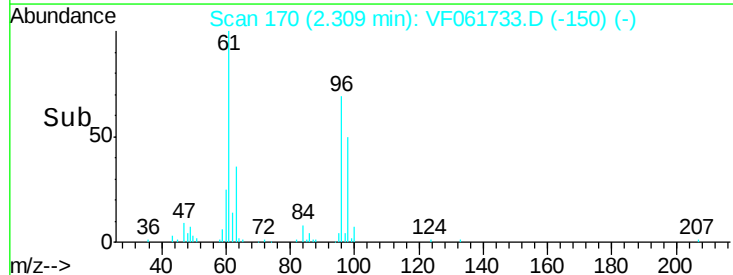
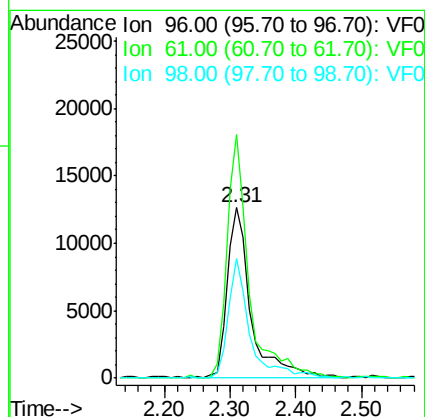
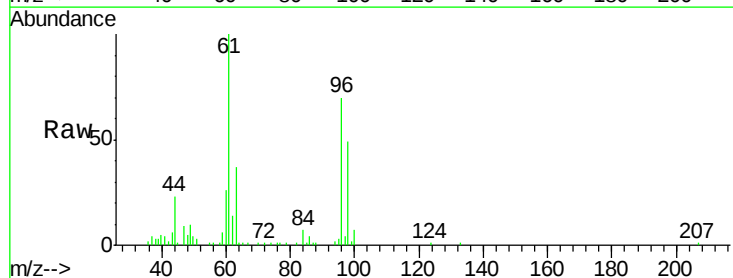
Instrument :
MSVOA_F
ClientSampleId :
LOQ-SOIL-02-QT1-2019

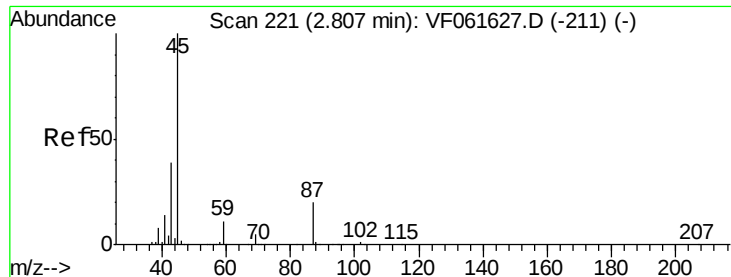
Tot Ion: 84 Resp: 32448
Ion Ratio Lower Upper
84 100
49 139.2 101.8 152.8
51 45.2 31.1 46.7
86 62.5 54.4 81.6



#21
trans-1,2-Dichloroethene
Concen: 10.370 ug/l
RT: 2.31 min Scan# 170
Delta R.T. -0.01 min
Lab File: VF061733.D
Acq: 25 Feb 2019 16:35

Tgt Ion: 96 Resp: 32299
Ion Ratio Lower Upper
96 100
61 143.1 108.2 162.4
98 70.5 52.2 78.2





#22

Diisopropyl ether

Concen: 10.694 ug/l

RT: 2.80 min Scan# 220

Delta R.T. -0.00 min

Lab File: VF061733.D

Acq: 25 Feb 2019 16:35

Instrument :

MSVOA_F

ClientSampleId :

LOQ-SOIL-02-QT1-2019

Tot Ion: 45 Resp: 90259

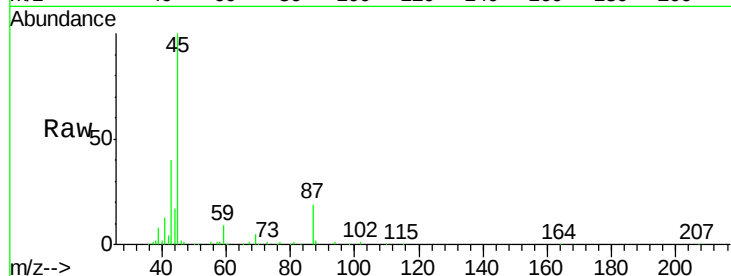
Ion Ratio Lower Upper

45 100

43 40.1 31.4 47.2

87 19.3 16.3 24.5

59 9.2 8.7 13.1

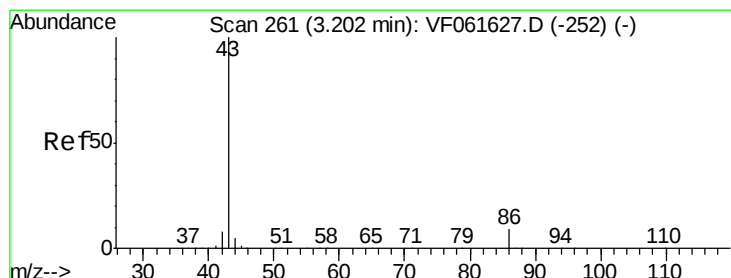
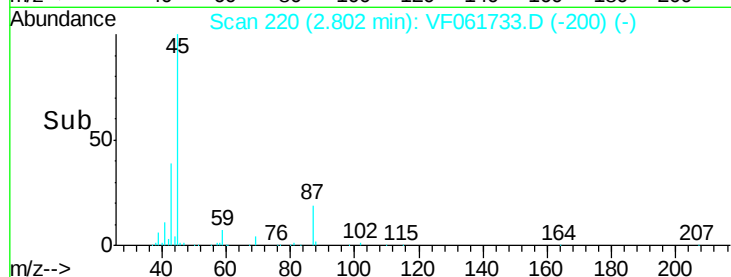
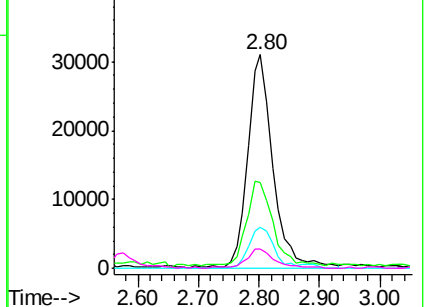


Abundance Ion 45.00 (44.70 to 45.70): VF0

Ion 43.00 (42.70 to 43.70): VF0

Ion 87.00 (86.70 to 87.70): VF0

Ion 59.00 (58.70 to 59.70): VF0



#23

Vinyl Acetate

Concen: 44.502 ug/l

RT: 3.19 min Scan# 259

Delta R.T. -0.01 min

Lab File: VF061733.D

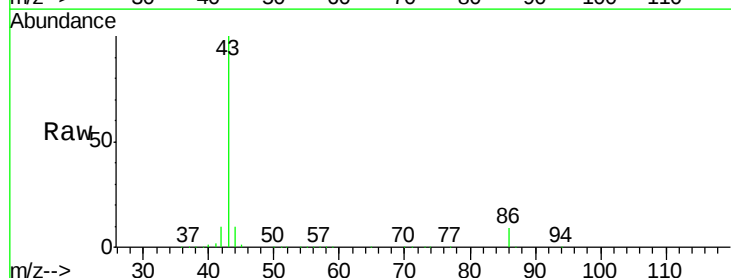
Acq: 25 Feb 2019 16:35

Tgt Ion: 43 Resp: 183452

Ion Ratio Lower Upper

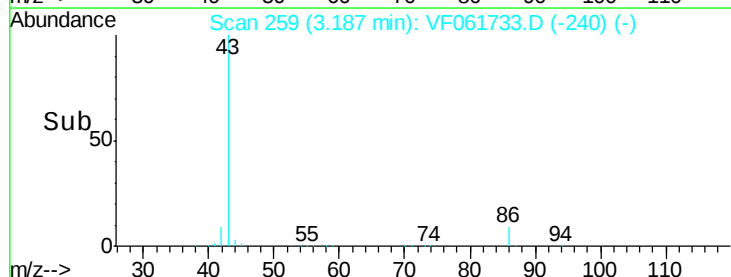
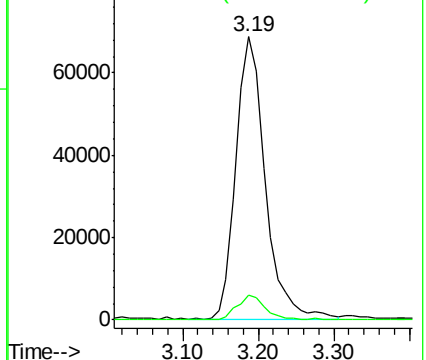
43 100

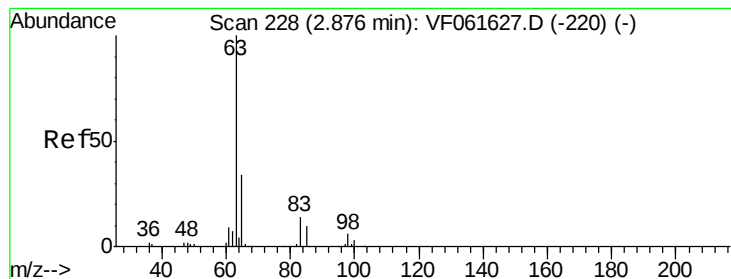
86 9.0 7.5 11.3



Abundance Ion 43.00 (42.70 to 43.70): VF0

Ion 86.00 (85.70 to 86.70): VF0





#24

1,1-Dichloroethane

Concen: 10.386 ug/l

RT: 2.87 min Scan# 227

Delta R.T. -0.00 min

Lab File: VF061733.D

Acq: 25 Feb 2019 16:35

Instrument :

MSVOA_F

ClientSampleId :

LOQ-SOIL-02-QT1-2019

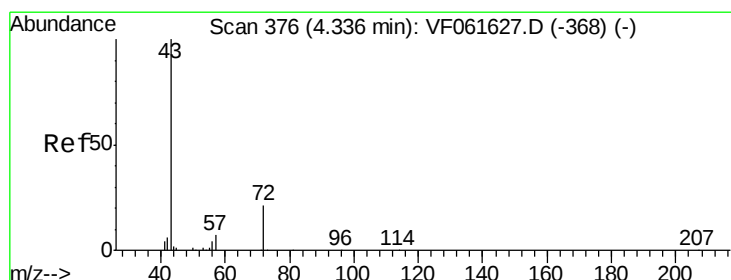
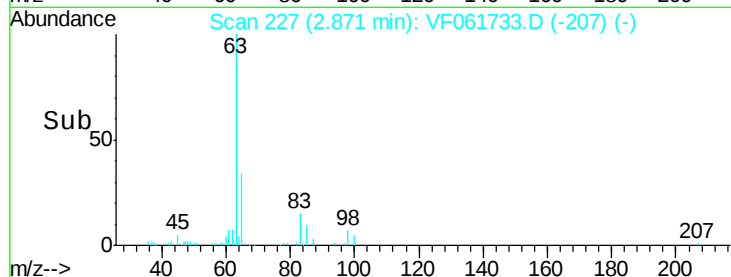
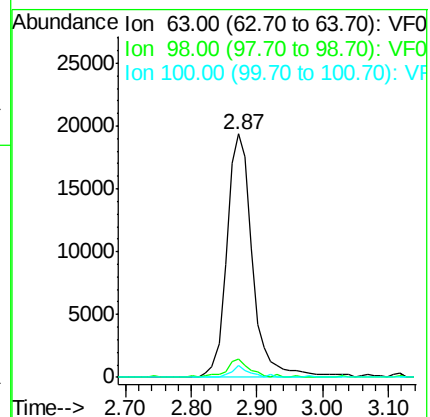
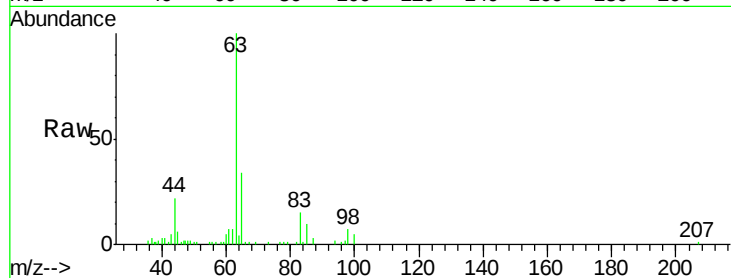
Tot Ion: 63 Resp: 53049

Ion Ratio Lower Upper

63 100

98 7.5 2.8 8.3

100 4.7 1.8 5.4



#25

2-Butanone

Concen: 46.825 ug/l

RT: 4.33 min Scan# 375

Delta R.T. -0.00 min

Lab File: VF061733.D

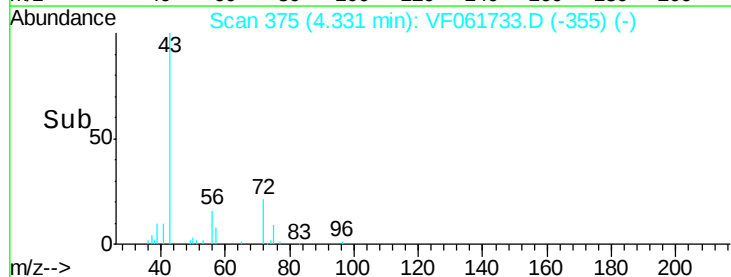
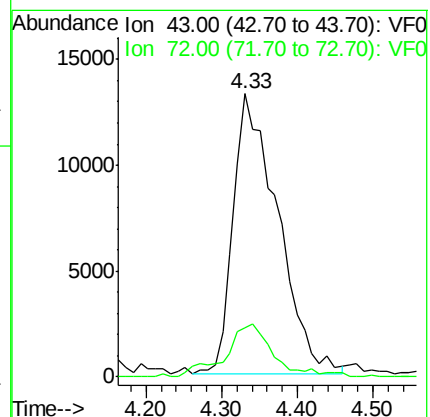
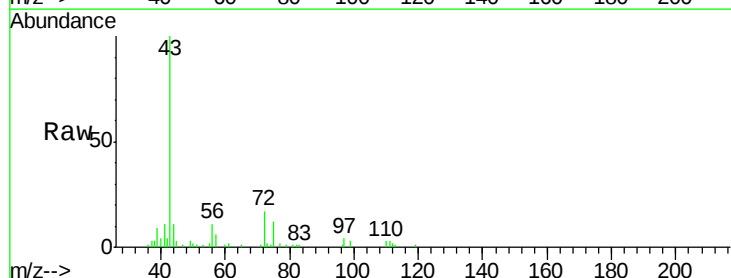
Acq: 25 Feb 2019 16:35

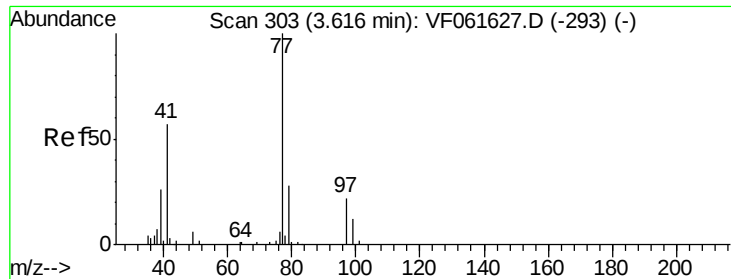
Tgt Ion: 43 Resp: 53810

Ion Ratio Lower Upper

43 100

72 17.5 17.1 25.7





#26

2,2-Dichloropropane

Concen: 10.796 ug/l

RT: 3.59 min Scan# 300

Delta R.T. -0.02 min

Lab File: VF061733.D

Acq: 25 Feb 2019 16:35

Instrument :

MSVOA_F

ClientSampleId :

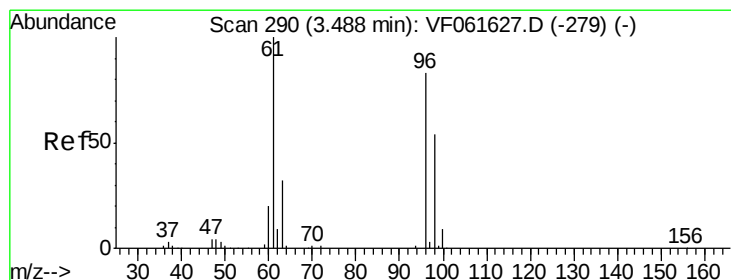
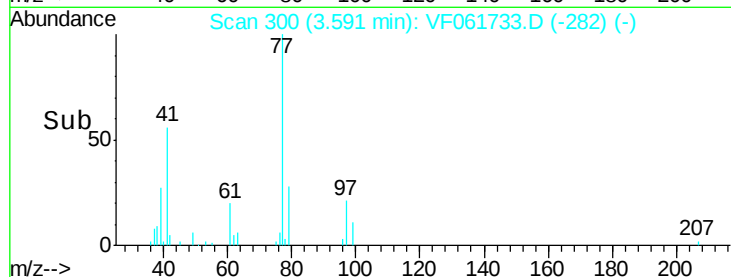
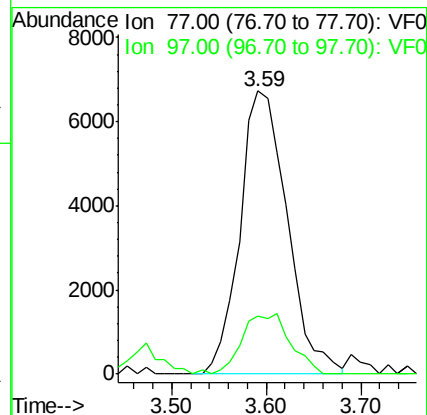
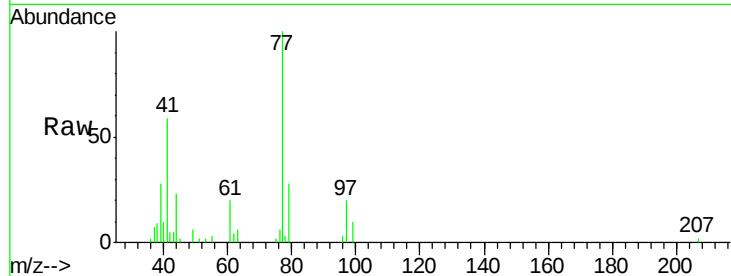
LOQ-SOIL-02-QT1-2019

Tot Ion: 77 Resp: 23356

Ion Ratio Lower Upper

77 100

97 20.5 11.7 35.0



#27

cis-1,2-Dichloroethene

Concen: 9.977 ug/l

RT: 3.47 min Scan# 288

Delta R.T. -0.01 min

Lab File: VF061733.D

Acq: 25 Feb 2019 16:35

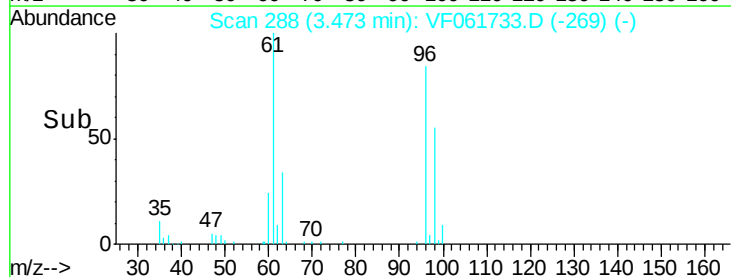
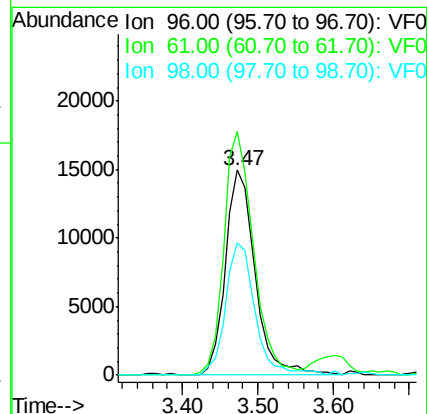
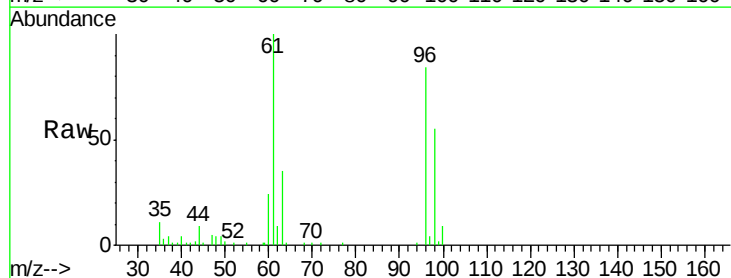
Tgt Ion: 96 Resp: 40790

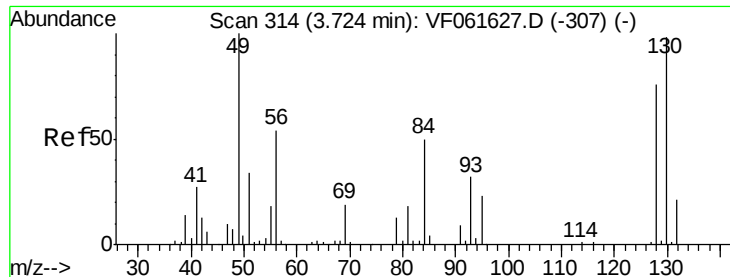
Ion Ratio Lower Upper

96 100

61 118.7 0.0 241.6

98 64.7 0.0 130.2

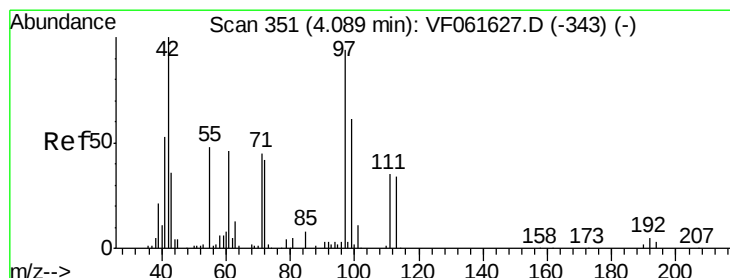
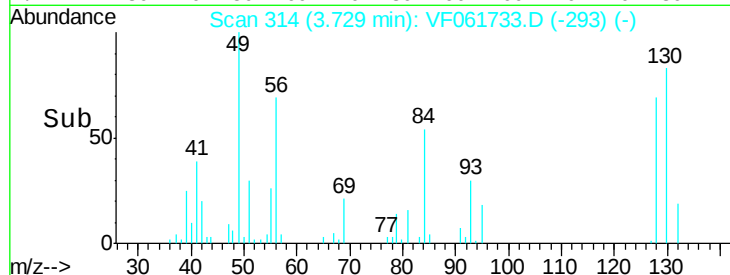
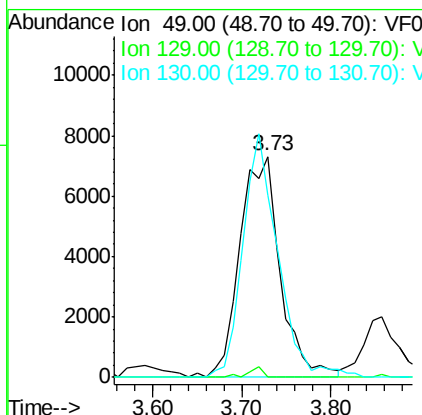
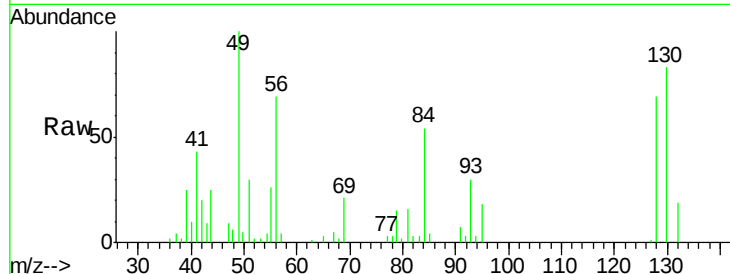




#28
 Bromochloromethane
 Concen: 9.392 ug/l
 RT: 3.73 min Scan# 314
 Delta R.T. 0.00 min
 Lab File: VF061733.D
 Acq: 25 Feb 2019 16:35

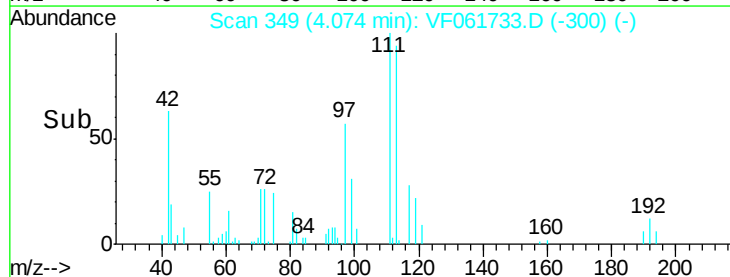
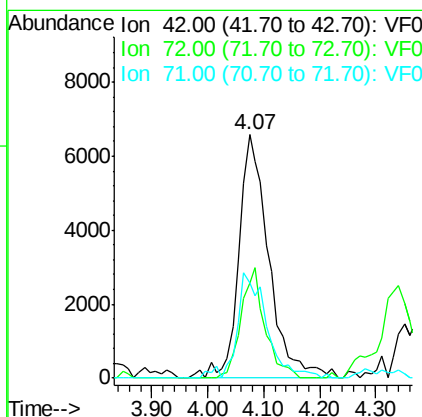
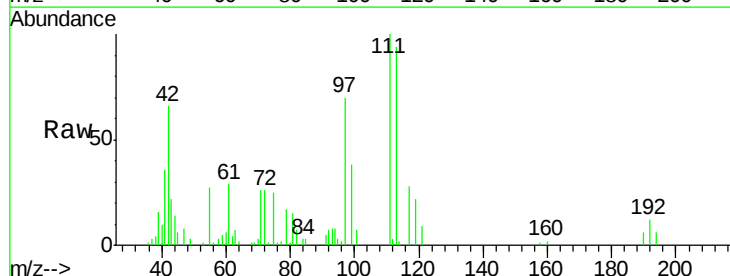
Instrument :
 MSVOA_F
 ClientSampleId :
 LOQ-SOIL-02-QT1-2019

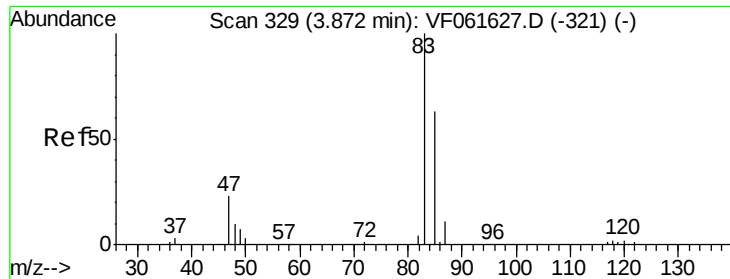
Tot Ion: 49 Resp: 23017
 Ion Ratio Lower Upper
 49 100
 129 0.0 0.0 3.4
 130 82.6 77.7 116.5



#29
 Tetrahydrofuran
 Concen: 46.758 ug/l
 RT: 4.07 min Scan# 349
 Delta R.T. -0.01 min
 Lab File: VF061733.D
 Acq: 25 Feb 2019 16:35

Tgt Ion: 42 Resp: 24422
 Ion Ratio Lower Upper
 42 100
 72 36.3 35.2 52.8
 71 43.2 32.9 49.3

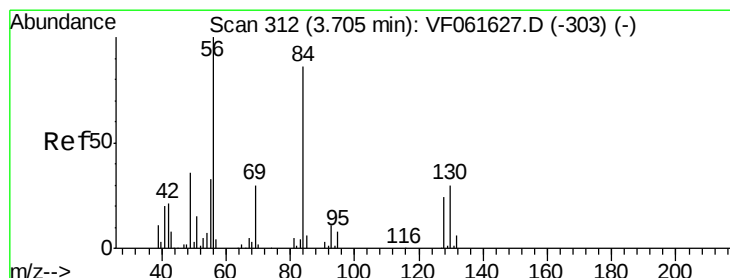
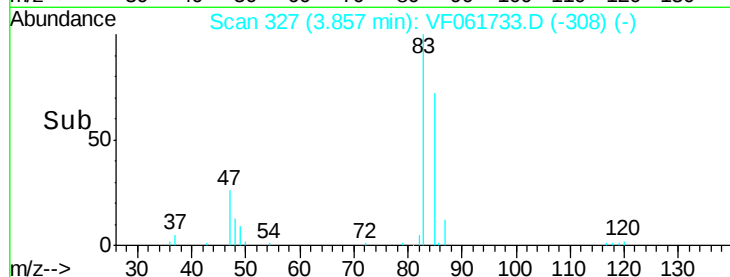
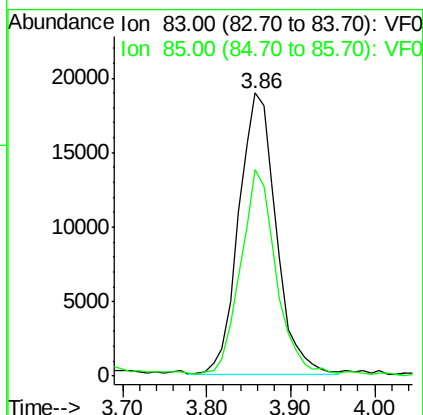
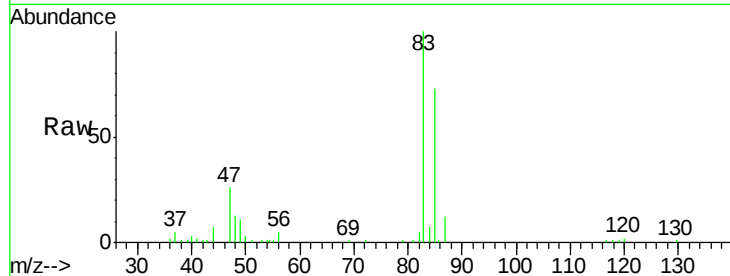




#30
Chloroform
Concen: 10.087 ug/l
RT: 3.86 min Scan# 327
Delta R.T. -0.01 min
Lab File: VF061733.D
Acq: 25 Feb 2019 16:35

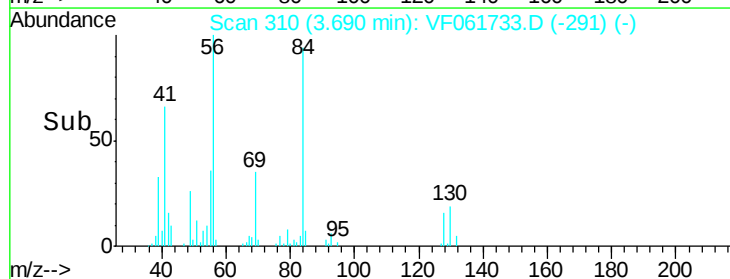
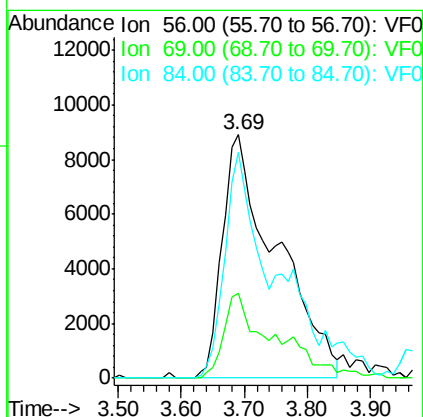
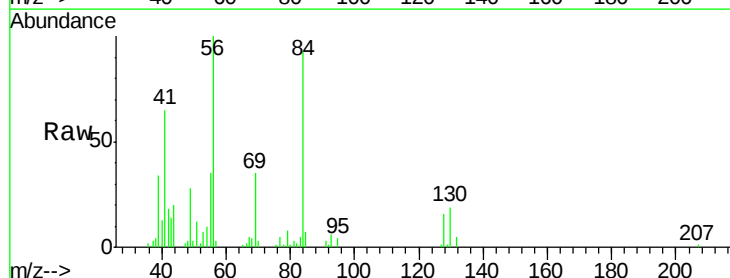
Instrument :
MSVOA_F
ClientSampleId :
LOQ-SOIL-02-QT1-2019

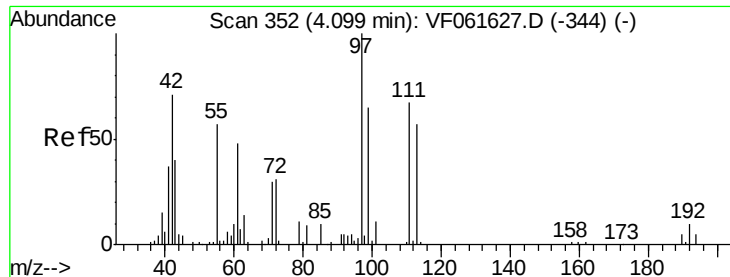
Tot Ion: 83 Resp: 58592
Ion Ratio Lower Upper
83 100
85 72.9 51.1 76.7



#31
Cyclohexane
Concen: 9.614 ug/l m
RT: 3.69 min Scan# 310
Delta R.T. -0.01 min
Lab File: VF061733.D
Acq: 25 Feb 2019 16:35

Tgt Ion: 56 Resp: 53159
Ion Ratio Lower Upper
56 100
69 35.1 23.8 35.8
84 92.8 68.6 103.0





#32

1,1,1-Trichloroethane

Concen: 11.003 ug/l

RT: 4.09 min Scan# 351

Delta R.T. -0.00 min

Lab File: VF061733.D

Acq: 25 Feb 2019 16:35

Instrument :

MSVOA_F

ClientSampleId :

LOQ-SOIL-02-QT1-2019

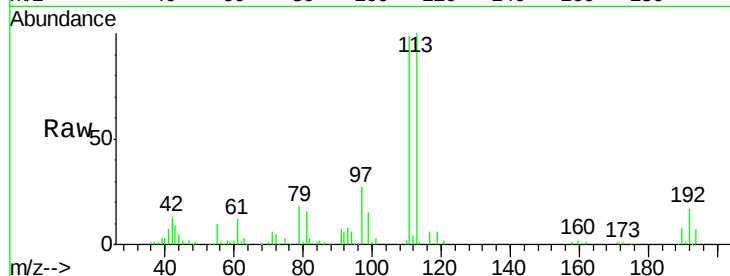
Tot Ion: 97 Resp: 41866

Ion Ratio Lower Upper

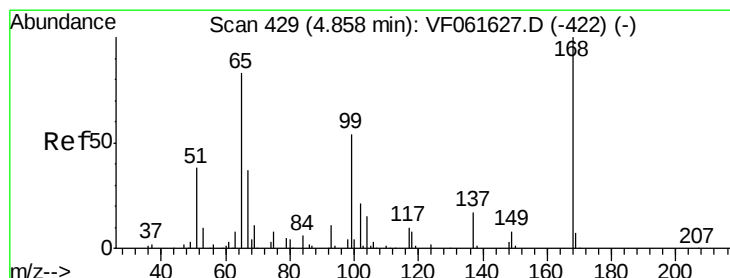
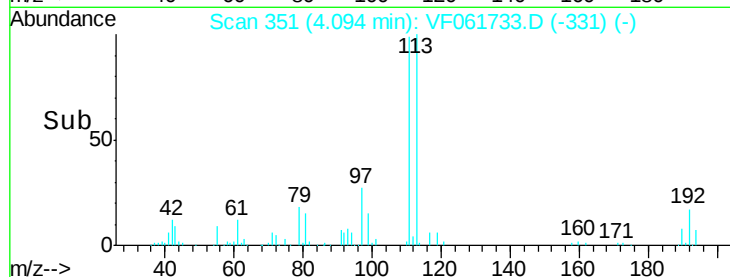
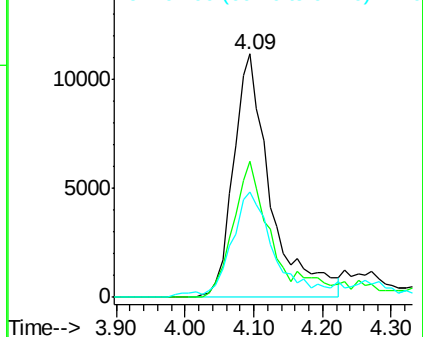
97 100

99 55.9 52.2 78.2

61 43.4 39.2 58.8



Abundance Ion 97.00 (96.70 to 97.70): VF0
Ion 99.00 (98.70 to 99.70): VF0
Ion 61.00 (60.70 to 61.70): VF0



#33

1,2-Dichloroethane-d4

Concen: 53.567 ug/l

RT: 4.84 min Scan# 427

Delta R.T. -0.01 min

Lab File: VF061733.D

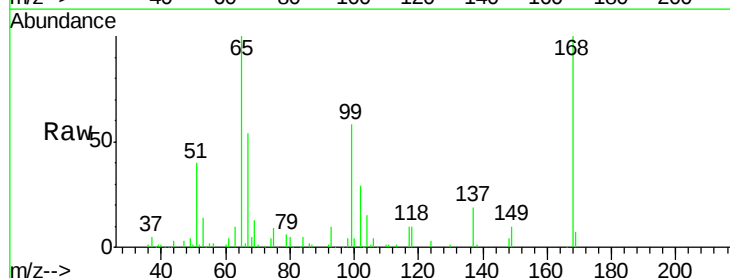
Acq: 25 Feb 2019 16:35

Tgt Ion: 65 Resp: 131348

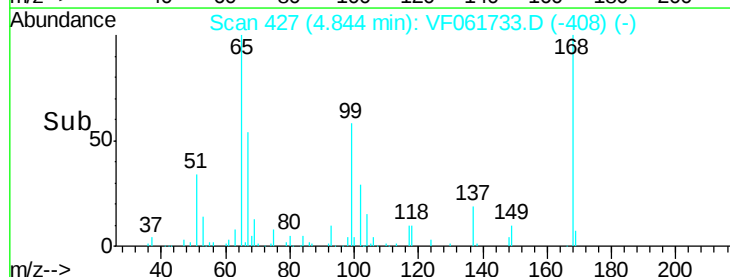
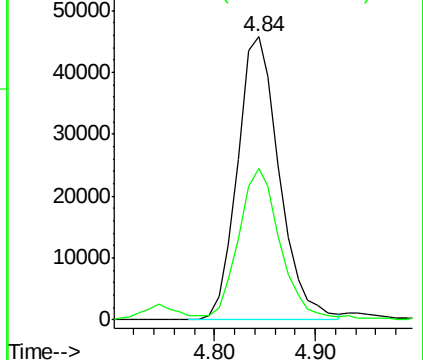
Ion Ratio Lower Upper

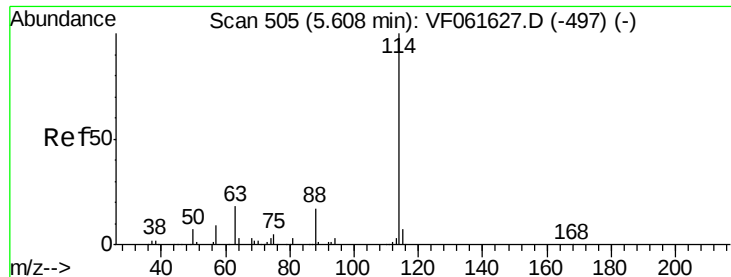
65 100

67 53.6 0.0 104.0



Abundance Ion 65.00 (64.70 to 65.70): VF0
Ion 67.00 (66.70 to 67.70): VF0





#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 5.59 min Scan# 503

Delta R.T. -0.01 min

Lab File: VF061733.D

Acq: 25 Feb 2019 16:35

Instrument :

MSVOA_F

ClientSampleId :

LOQ-SOIL-02-QT1-2019

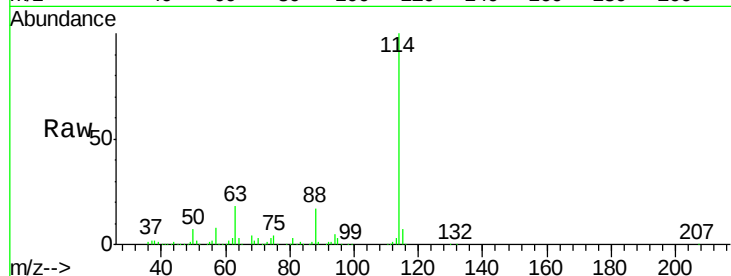
Tot Ion:114 Resp: 478422

Ion Ratio Lower Upper

114 100

63 18.2 0.0 36.6

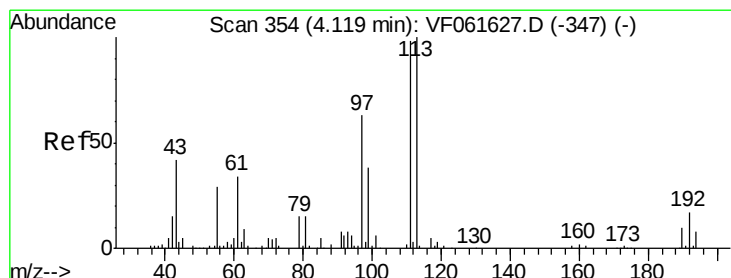
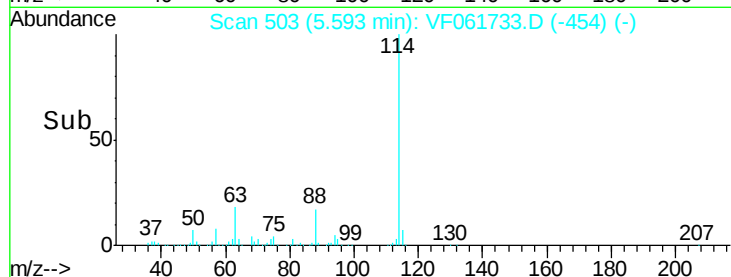
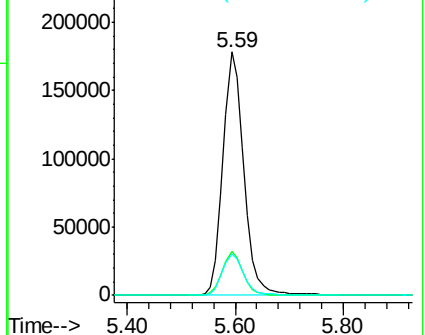
88 17.1 0.0 34.4



Abundance Ion 114.00 (113.70 to 114.70): V

Ion 63.00 (62.70 to 63.70): VF0

Ion 88.00 (87.70 to 88.70): VF0



#35

Dibromofluoromethane

Concen: 53.374 ug/l

RT: 4.11 min Scan# 353

Delta R.T. -0.00 min

Lab File: VF061733.D

Acq: 25 Feb 2019 16:35

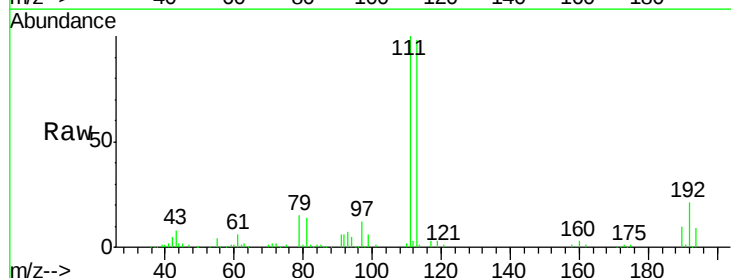
Tgt Ion:113 Resp: 189627

Ion Ratio Lower Upper

113 100

111 102.3 78.8 118.2

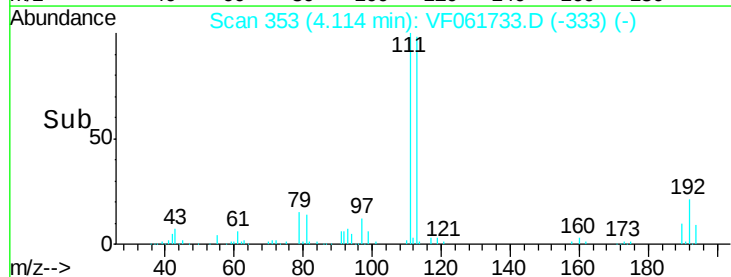
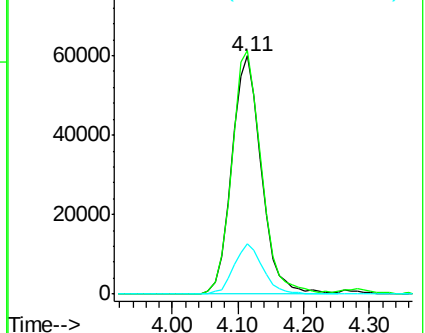
192 21.2 13.4 20.0#

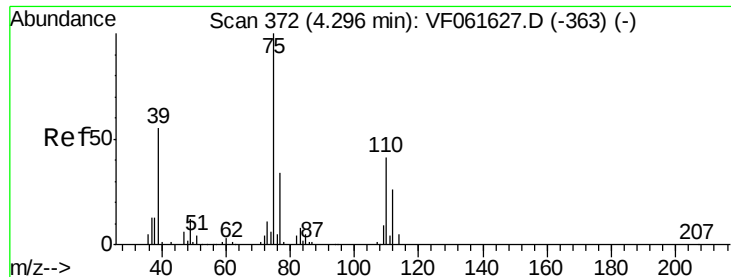


Abundance Ion 113.00 (112.70 to 113.70): V

Ion 111.00 (110.70 to 111.70): V

Ion 192.00 (191.70 to 192.70): V





#36

1,1-Dichloropropene

Concen: 10.310 ug/l

RT: 4.27 min Scan# 369

Delta R.T. -0.02 min

Lab File: VF061733.D

Acq: 25 Feb 2019 16:35

Instrument :

MSVOA_F

ClientSampleId :

LOQ-SOIL-02-QT1-2019

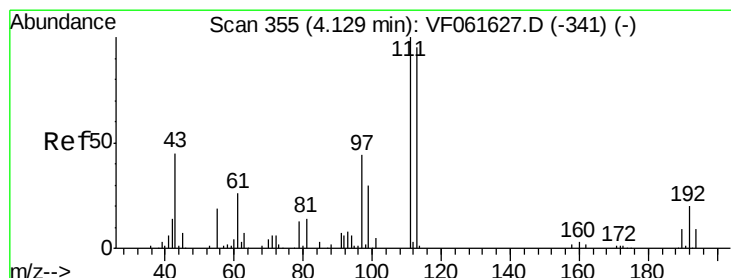
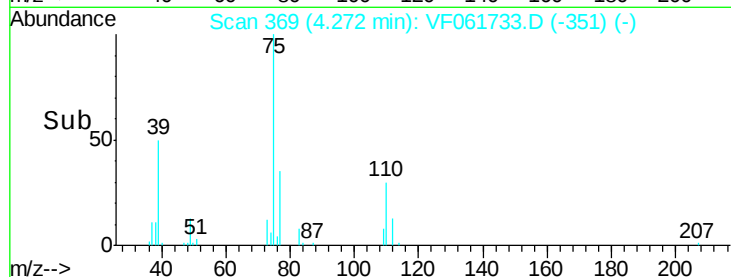
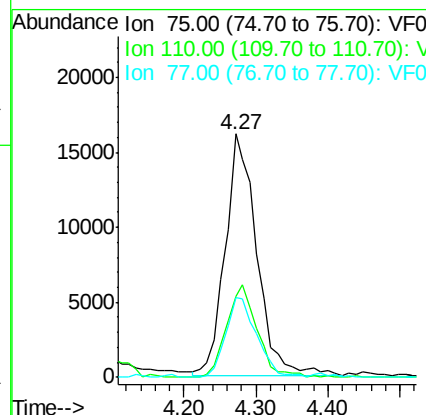
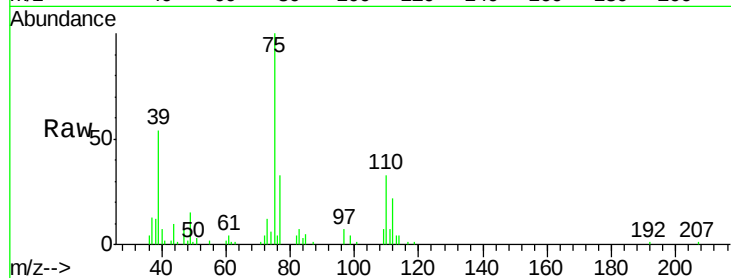
Tot Ion: 75 Resp: 48861

Ion Ratio Lower Upper

75 100

110 33.3 20.5 61.6

77 32.5 27.0 40.4



#37

Ethyl Acetate

Concen: 8.840 ug/l

RT: 4.11 min Scan# 353

Delta R.T. -0.01 min

Lab File: VF061733.D

Acq: 25 Feb 2019 16:35

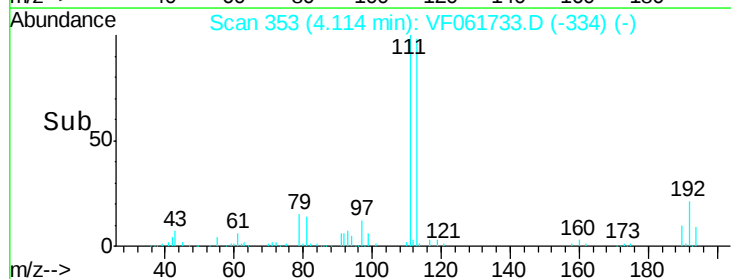
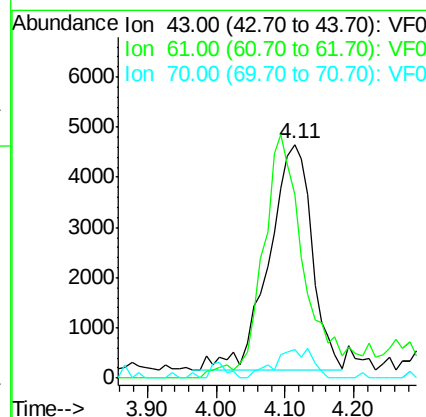
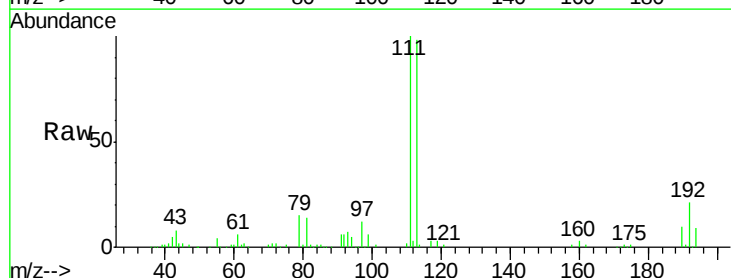
Tgt Ion: 43 Resp: 19460

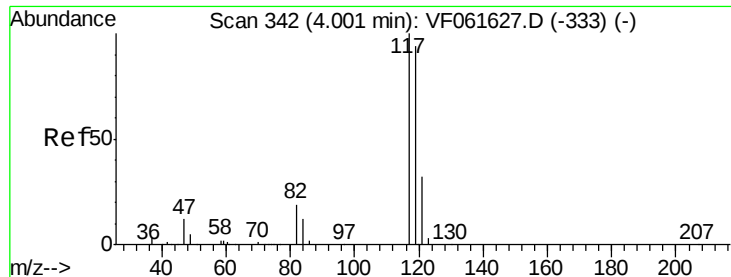
Ion Ratio Lower Upper

43 100

61 78.4 45.7 68.5#

70 12.3 8.5 12.7





#38

Carbon Tetrachloride

Concen: 11.621 ug/l

RT: 3.99 min Scan# 340

Delta R.T. -0.01 min

Lab File: VF061733.D

Acq: 25 Feb 2019 16:35

Instrument :

MSVOA_F

ClientSampleId :

LOQ-SOIL-02-QT1-2019

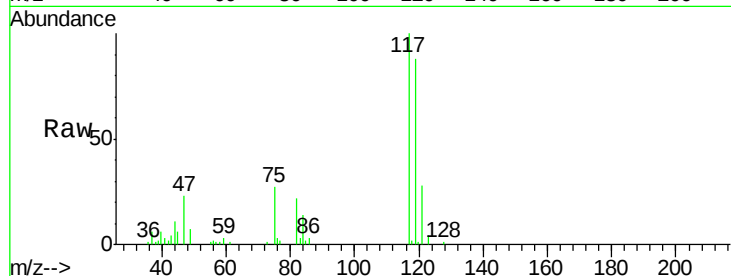
Tot Ion:117 Resp: 38032

Ion Ratio Lower Upper

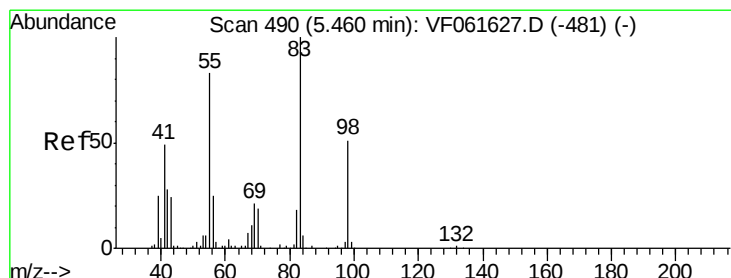
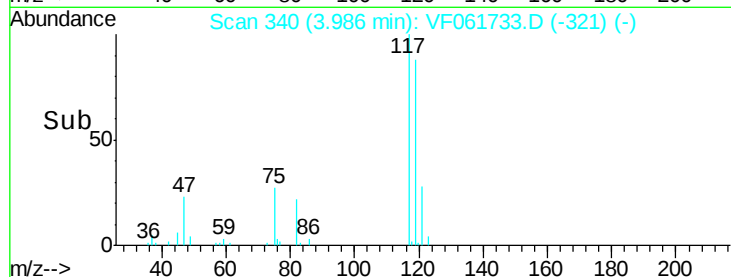
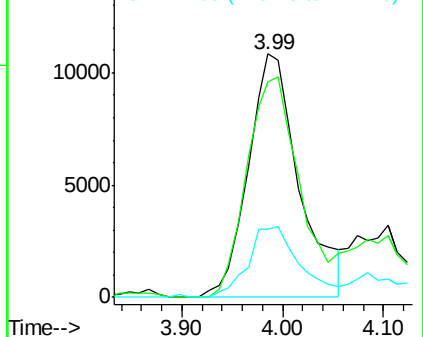
117 100

119 88.4 75.6 113.4

121 28.1 25.2 37.8



Abundance Ion 117.00 (116.70 to 117.70): V
Ion 119.00 (118.70 to 119.70): V
Ion 121.00 (120.70 to 121.70): V



#39

Methylcyclohexane

Concen: 9.747 ug/l

RT: 5.45 min Scan# 489

Delta R.T. -0.01 min

Lab File: VF061733.D

Acq: 25 Feb 2019 16:35

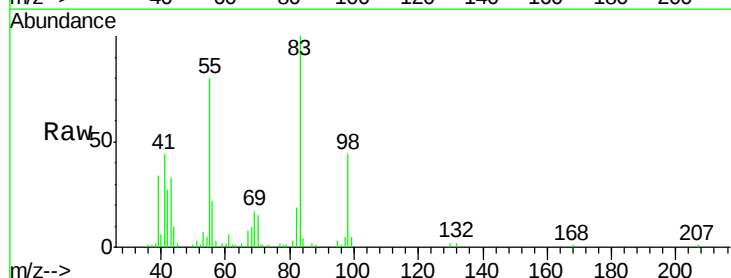
Tgt Ion: 83 Resp: 54632

Ion Ratio Lower Upper

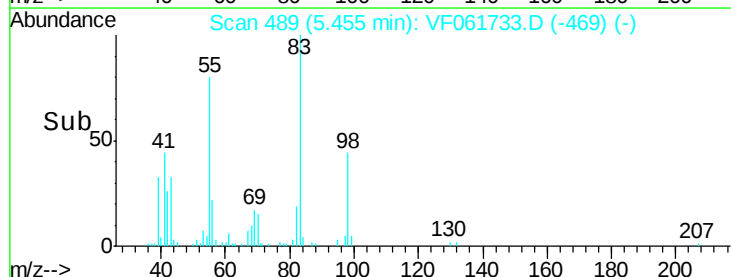
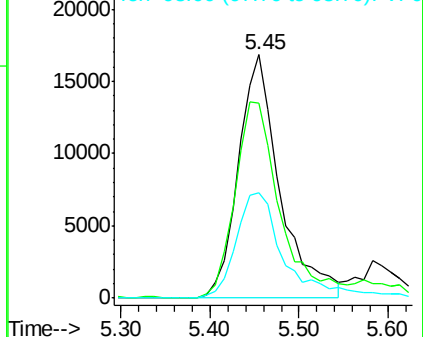
83 100

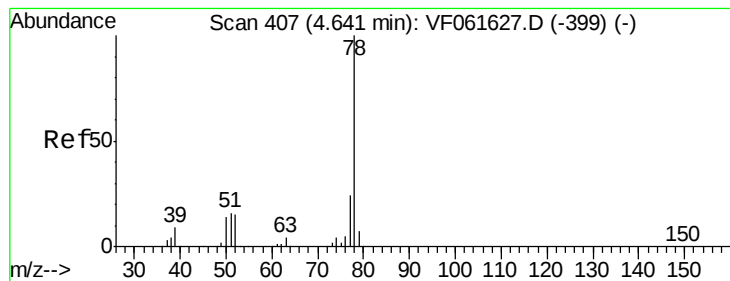
55 80.1 66.6 99.8

98 43.5 40.4 60.6



Abundance Ion 83.00 (82.70 to 83.70): VF0
Ion 55.00 (54.70 to 55.70): VF0
Ion 98.00 (97.70 to 98.70): VF0





#40

Benzene

Concen: 9.863 ug/l

RT: 4.63 min Scan# 405

Delta R.T. -0.01 min

Lab File: VF061733.D

Acq: 25 Feb 2019 16:35

Instrument :

MSVOA_F

ClientSampleId :

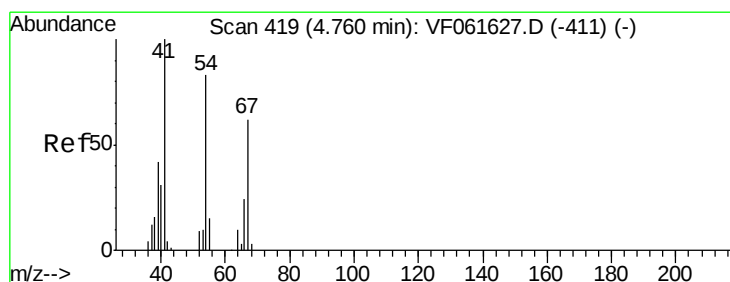
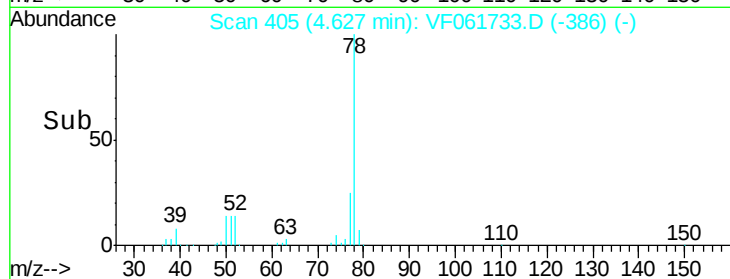
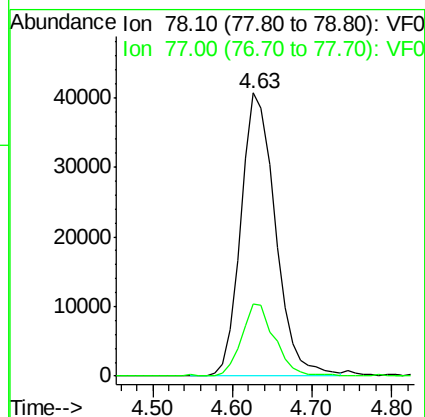
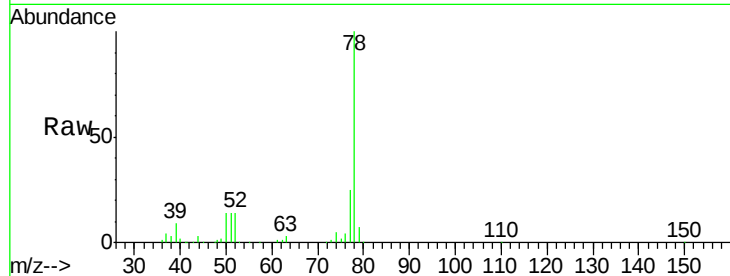
LOQ-SOIL-02-QT1-2019

Tot Ion: 78 Resp: 122262

Ion Ratio Lower Upper

78 100

77 25.4 19.0 28.6



#41

Methacrylonitrile

Concen: 10.238 ug/l

RT: 4.75 min Scan# 418

Delta R.T. -0.01 min

Lab File: VF061733.D

Acq: 25 Feb 2019 16:35

Tgt Ion: 41 Resp: 11526

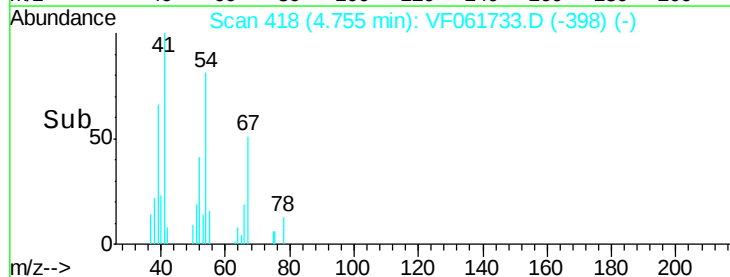
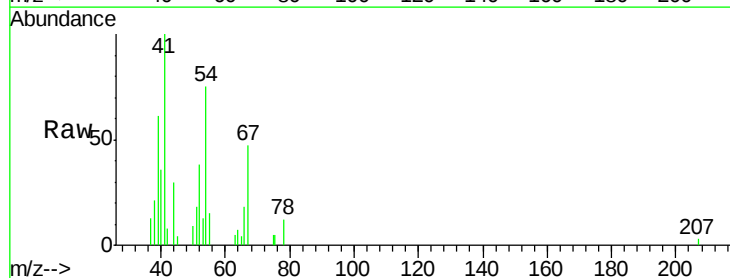
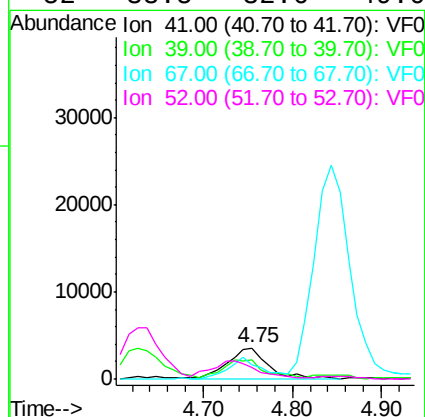
Ion Ratio Lower Upper

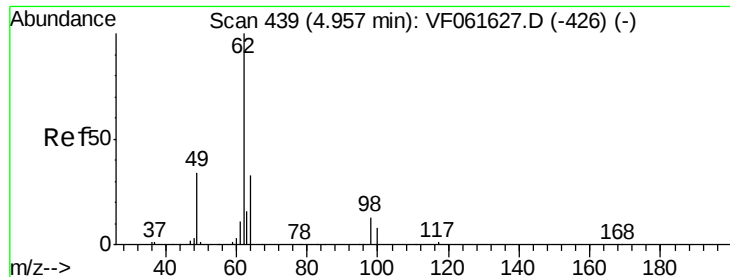
41 100

39 61.1 45.3 67.9

67 47.0 49.3 73.9#

52 38.5 32.6 49.0





#42

1,2-Dichloroethane

Concen: 10.488 ug/l

RT: 4.94 min Scan# 437

Delta R.T. -0.01 min

Lab File: VF061733.D

Acq: 25 Feb 2019 16:35

Instrument :

MSVOA_F

ClientSampleId :

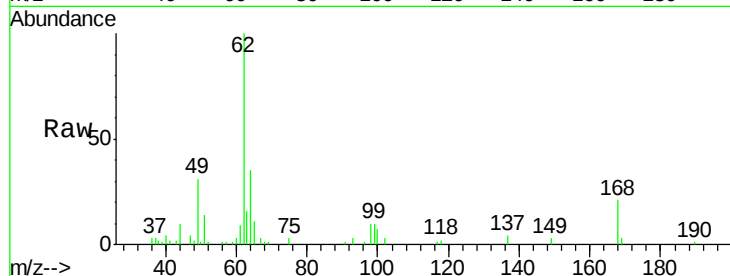
LOQ-SOIL-02-QT1-2019

Tot Ion: 62 Resp: 31101

Ion Ratio Lower Upper

62 100

98 10.2 0.0 26.0



Abundance Ion 62.00 (61.70 to 62.70): VF0

Ion 98.00 (97.70 to 98.70): VF0

12000

10000

8000

6000

4000

2000

0

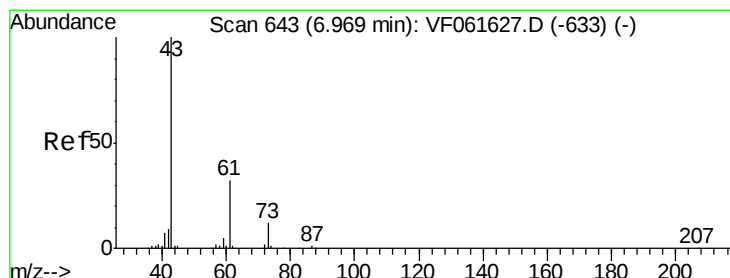
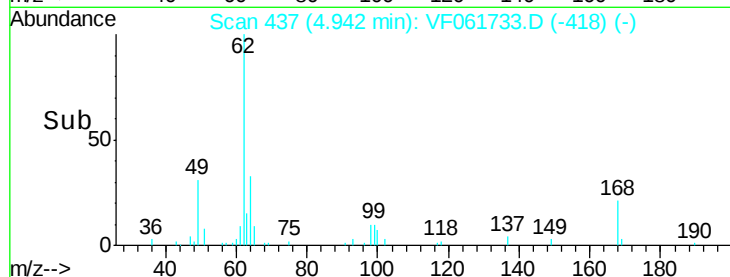
4.80

4.90

5.00

5.10

Time-->



#43

Isopropyl Acetate

Concen: 9.054 ug/l

RT: 6.96 min Scan# 642

Delta R.T. -0.00 min

Lab File: VF061733.D

Acq: 25 Feb 2019 16:35

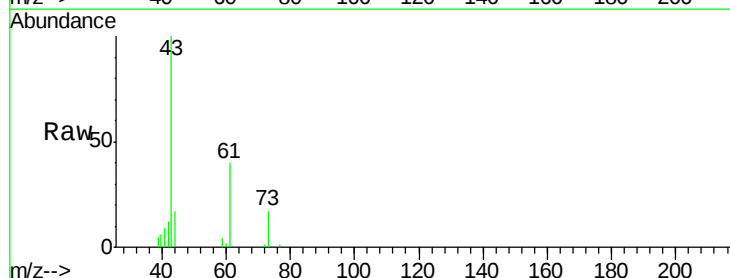
Tgt Ion: 43 Resp: 23592

Ion Ratio Lower Upper

43 100

61 40.3 25.8 38.6#

87 0.0 0.4 0.6#



Abundance Ion 43.00 (42.70 to 43.70): VF0

Ion 61.00 (60.70 to 61.70): VF0

Ion 87.00 (86.70 to 87.70): VF0

12000

10000

8000

6000

4000

2000

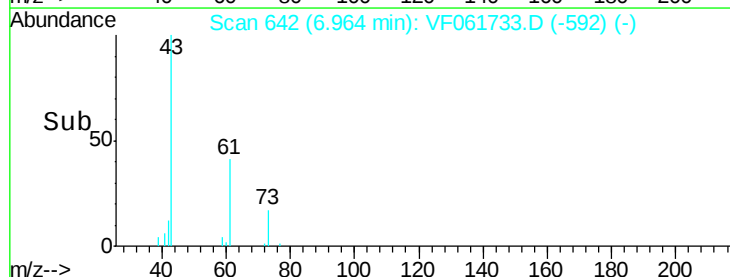
0

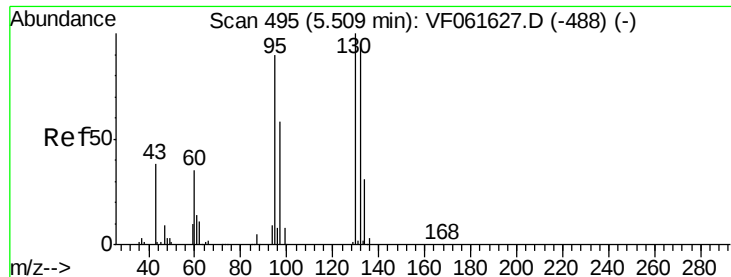
6.90

7.00

7.10

Time-->

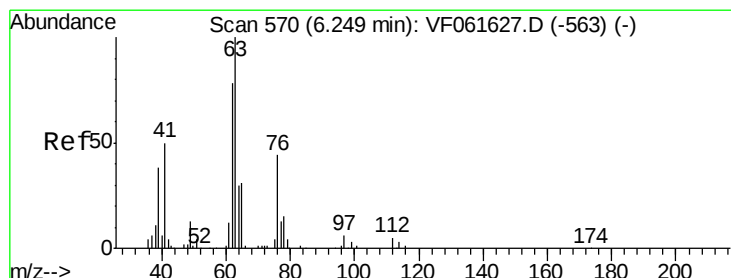
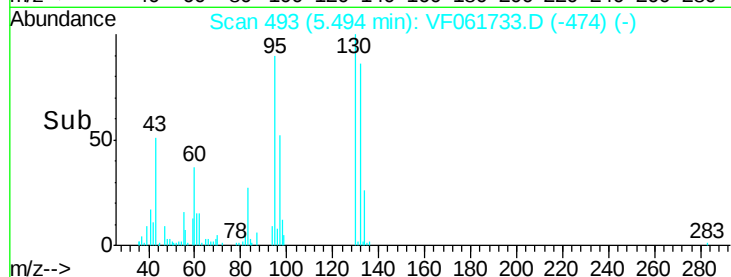
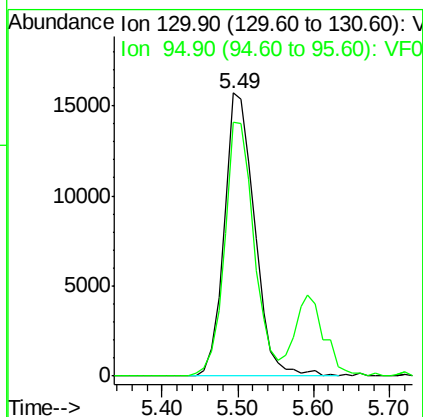
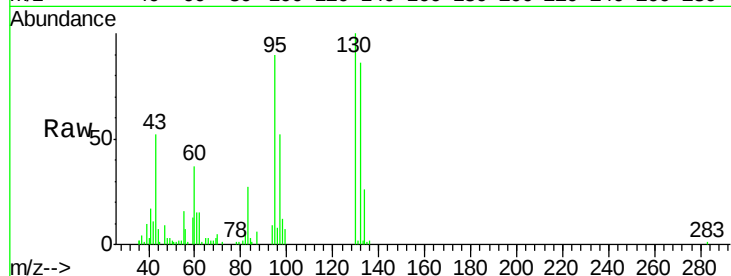




#44
 Trichloroethene
 Concen: 10.837 ug/l
 RT: 5.49 min Scan# 493
 Delta R.T. -0.01 min
 Lab File: VF061733.D
 Acq: 25 Feb 2019 16:35

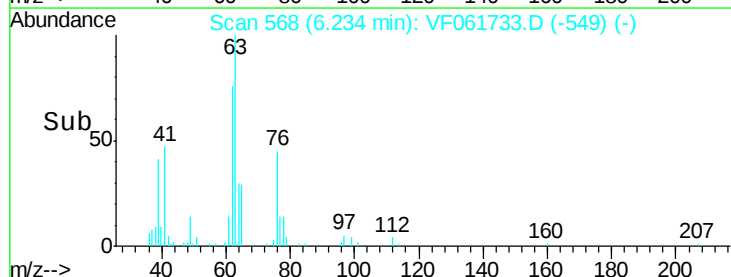
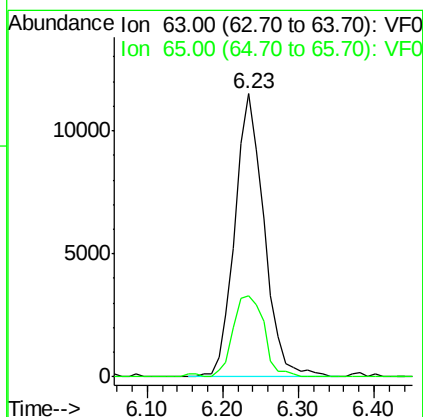
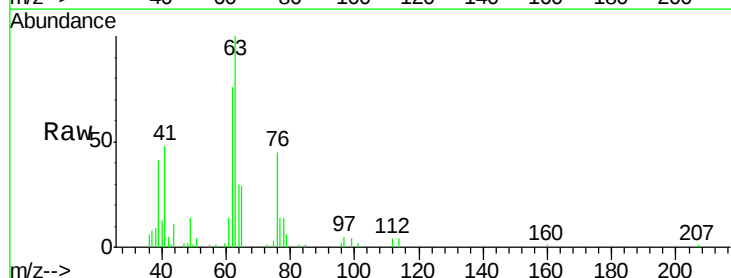
Instrument :
 MSVOA_F
 ClientSampleId :
 LOQ-SOIL-02-QT1-2019

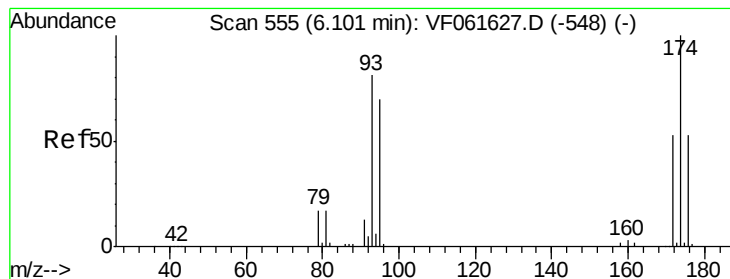
Tot Ion:130 Resp: 43442
 Ion Ratio Lower Upper
 130 100
 95 89.9 0.0 179.4



#45
 1,2-Dichloropropane
 Concen: 10.273 ug/l
 RT: 6.23 min Scan# 568
 Delta R.T. -0.01 min
 Lab File: VF061733.D
 Acq: 25 Feb 2019 16:35

Tgt Ion: 63 Resp: 30783
 Ion Ratio Lower Upper
 63 100
 65 28.8 24.9 37.3





#46

Dibromomethane

Concen: 9.702 ug/l

RT: 6.08 min Scan# 552

Delta R.T. -0.02 min

Lab File: VF061733.D

Acq: 25 Feb 2019 16:35

Instrument :

MSVOA_F

ClientSampleId :

LOQ-SOIL-02-QT1-2019

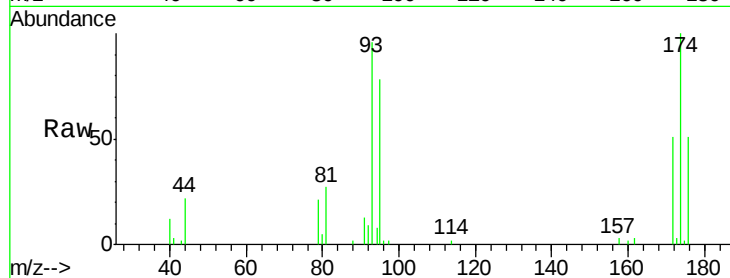
Tot Ion: 93 Resp: 17900

Ion Ratio Lower Upper

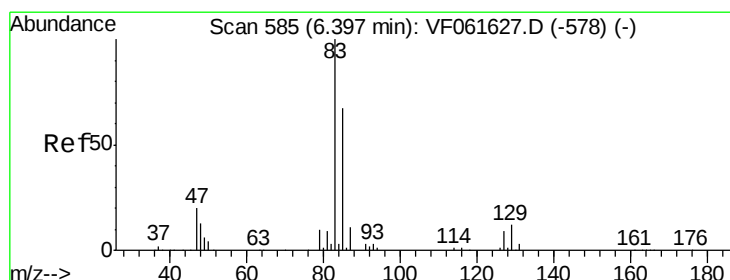
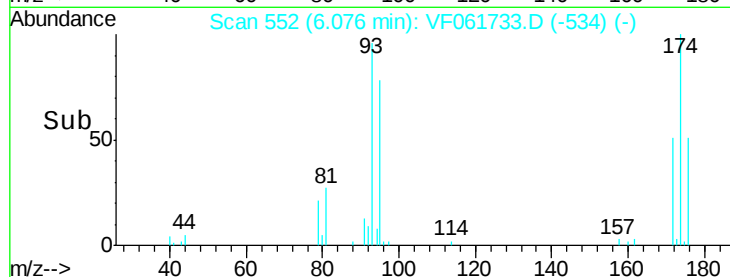
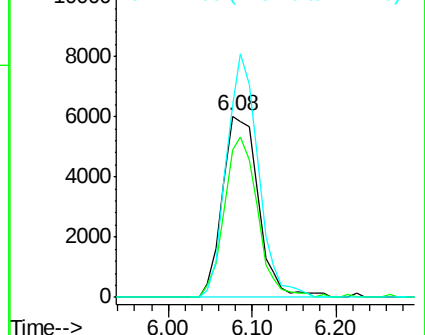
93 100

95 81.8 69.0 103.6

174 106.6 99.3 148.9



Abundance Ion 93.00 (92.70 to 93.70): VF0
Ion 95.00 (94.70 to 95.70): VF0
Ion 174.00 (173.70 to 174.70): V



#47

Bromodichloromethane

Concen: 10.426 ug/l

RT: 6.38 min Scan# 583

Delta R.T. -0.01 min

Lab File: VF061733.D

Acq: 25 Feb 2019 16:35

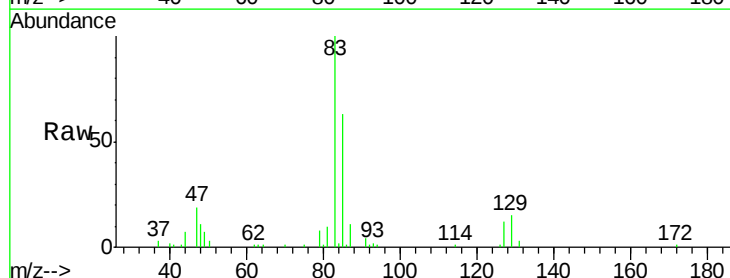
Tgt Ion: 83 Resp: 42124

Ion Ratio Lower Upper

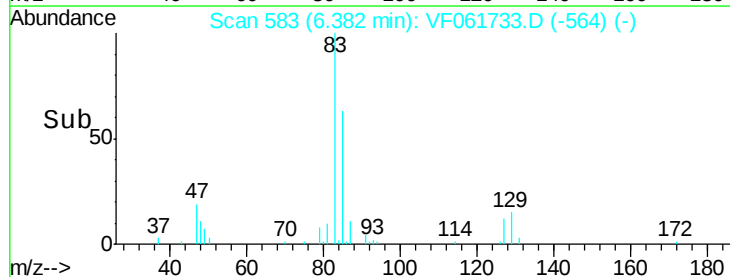
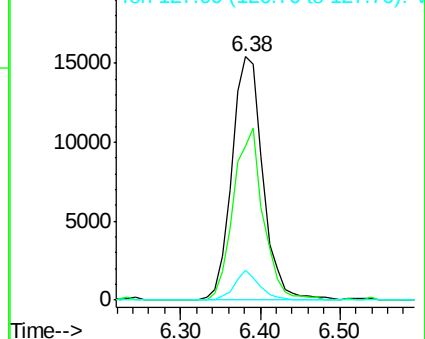
83 100

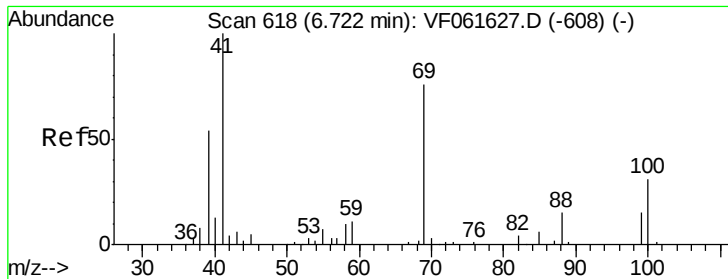
85 63.4 53.4 80.2

127 12.4 7.5 11.3#



Abundance Ion 83.00 (82.70 to 83.70): VF0
Ion 85.00 (84.70 to 85.70): VF0
Ion 127.00 (126.70 to 127.70): V





#48

Methyl methacrylate

Concen: 10.000 ug/l

RT: 6.72 min Scan# 617

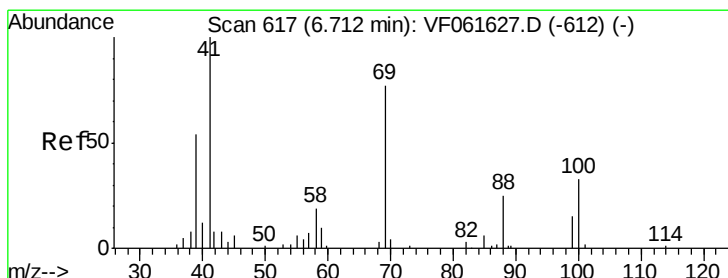
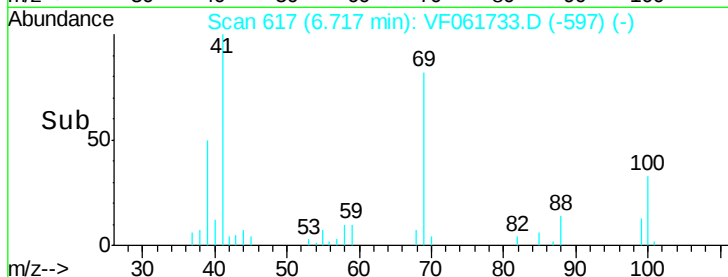
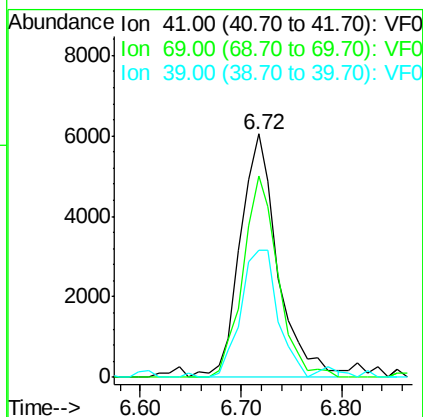
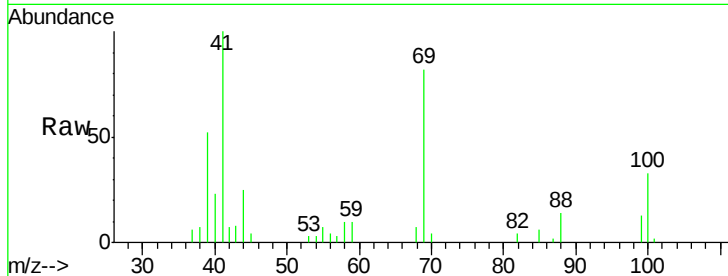
Delta R.T. -0.00 min

Lab File: VF061733.D

Acq: 25 Feb 2019 16:35

Instrument :
MSVOA_F
ClientSampleId :
LOQ-SOIL-02-QT1-2019

Tot Ion:	41	Resp:	15680
Ion	Ratio	Lower	Upper
41	100		
69	82.5	60.4	90.6
39	52.0	43.7	65.5



#49

1,4-Dioxane

Concen: 195.243 ug/l

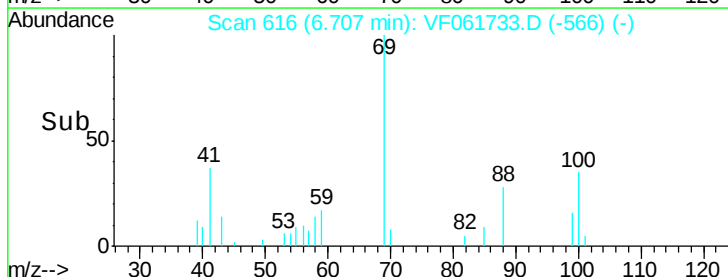
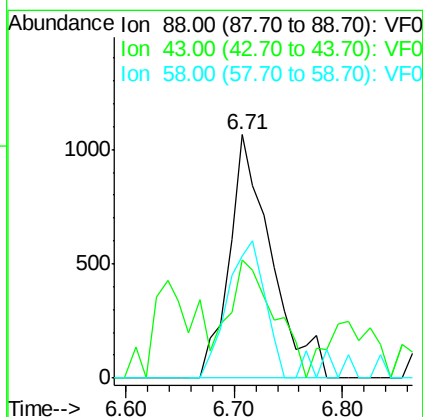
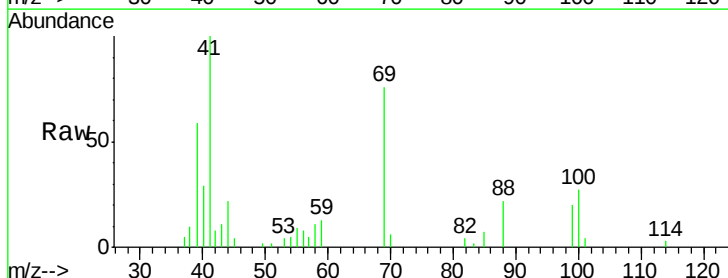
RT: 6.71 min Scan# 616

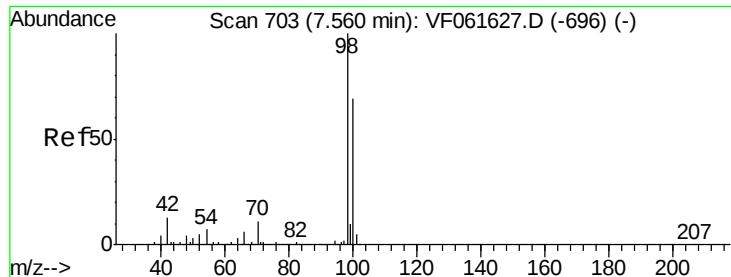
Delta R.T. -0.00 min

Lab File: VF061733.D

Acq: 25 Feb 2019 16:35

Tgt Ion:	88	Resp:	2878
Ion	Ratio	Lower	Upper
88	100		
43	48.6	32.3	48.5#
58	50.0	59.4	89.2#





#50

Toluene-d8

Concen: 51.201 ug/l

RT: 7.56 min Scan# 702

Delta R.T. -0.00 min

Lab File: VF061733.D

Acq: 25 Feb 2019 16:35

Instrument :

MSVOA_F

ClientSampleId :

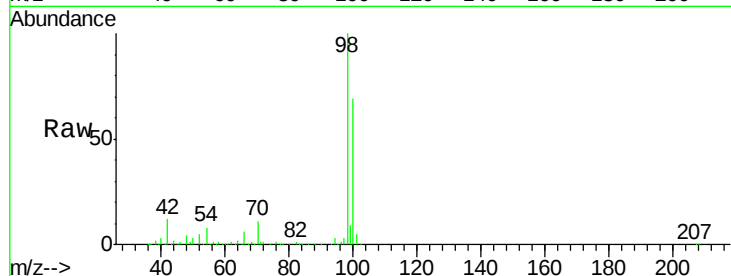
LOQ-SOIL-02-QT1-2019

Tot Ion: 98 Resp: 522928

Ion Ratio Lower Upper

98 100

100 68.8 55.4 83.2



Abundance Ion 98.00 (97.70 to 98.70): VF0

Ion 100.00 (99.70 to 100.70): VF0

250000

200000

150000

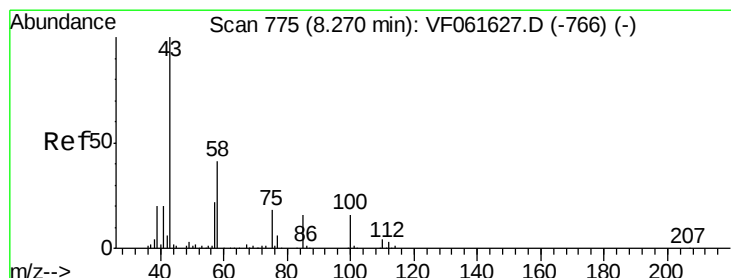
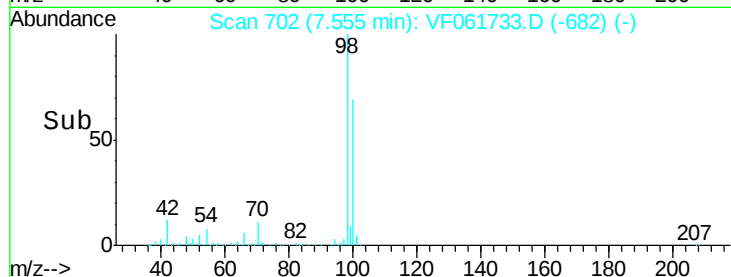
100000

50000

0

7.40 7.50 7.60 7.70

Time-->



#51

4-Methyl-2-Pentanone

Concen: 49.009 ug/l

RT: 8.26 min Scan# 773

Delta R.T. -0.01 min

Lab File: VF061733.D

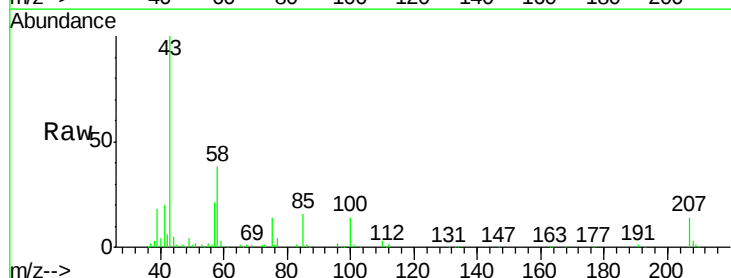
Acq: 25 Feb 2019 16:35

Tgt Ion: 43 Resp: 91247

Ion Ratio Lower Upper

43 100

58 38.2 33.1 49.7



Abundance Ion 43.00 (42.70 to 43.70): VF0

Ion 58.00 (57.70 to 58.70): VF0

40000

30000

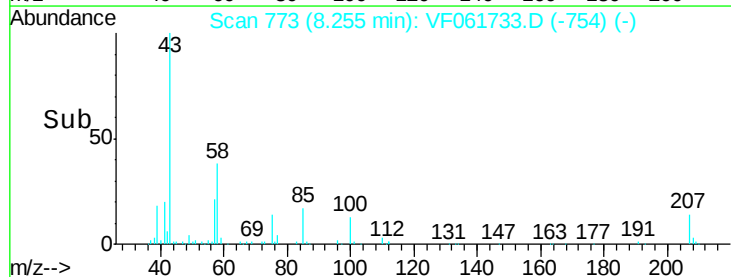
20000

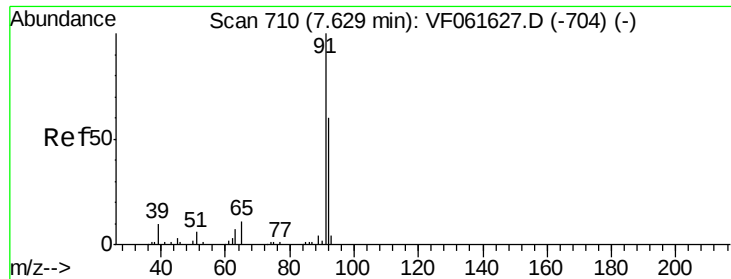
10000

0

8.10 8.20 8.30 8.40

Time-->





#52

Toluene

Concen: 10.571 ug/l

RT: 7.62 min Scan# 709

Delta R.T. -0.00 min

Lab File: VF061733.D

Acq: 25 Feb 2019 16:35

Instrument :

MSVOA_F

ClientSampleId :

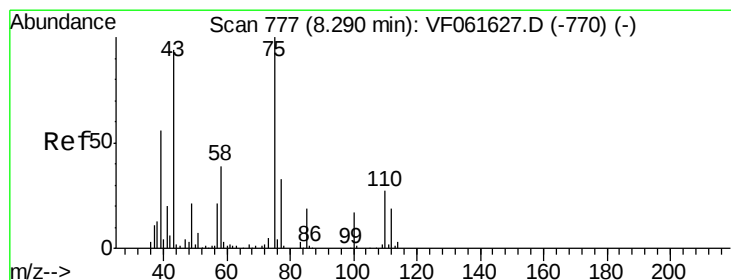
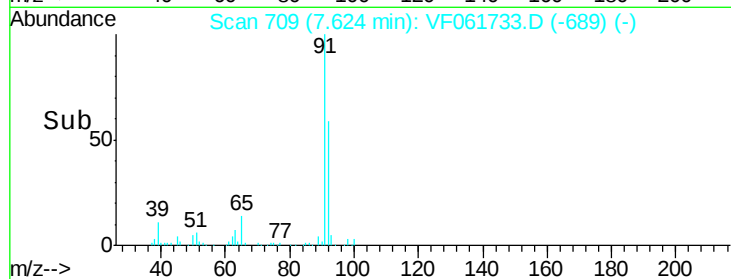
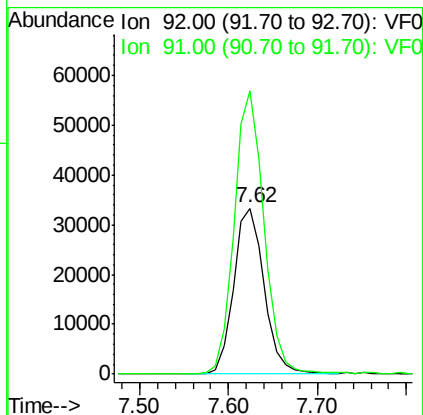
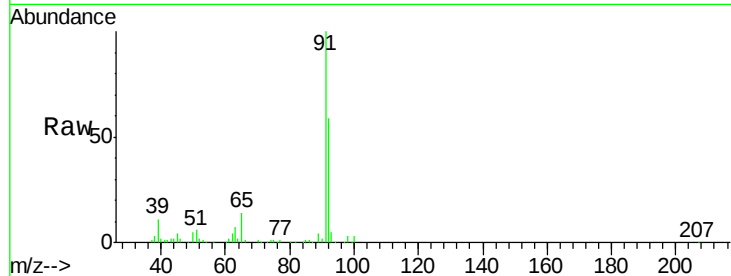
LOQ-SOIL-02-QT1-2019

Tot Ion: 92 Resp: 79479

Ion Ratio Lower Upper

92 100

91 170.9 133.9 200.9



#53

t-1,3-Dichloropropene

Concen: 11.606 ug/l

RT: 8.28 min Scan# 775

Delta R.T. -0.01 min

Lab File: VF061733.D

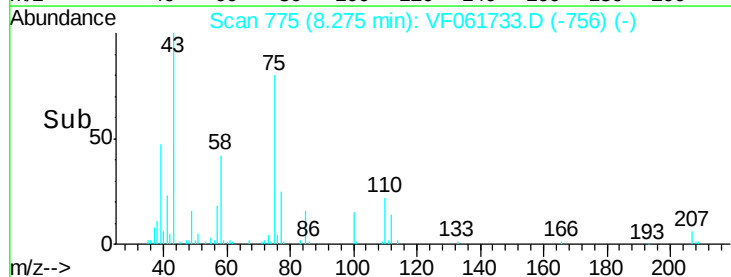
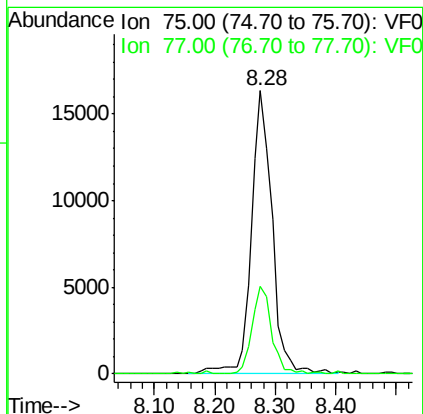
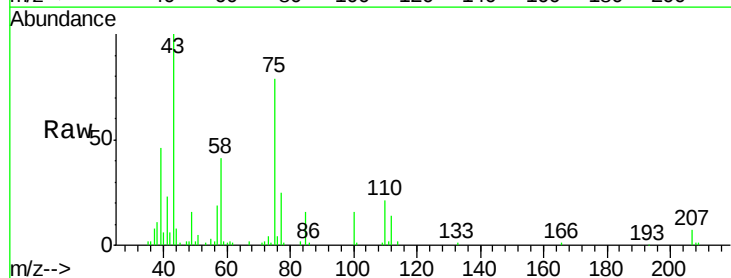
Acq: 25 Feb 2019 16:35

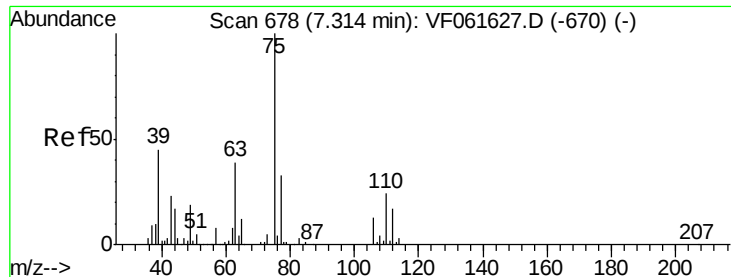
Tgt Ion: 75 Resp: 39025

Ion Ratio Lower Upper

75 100

77 30.9 26.2 39.2



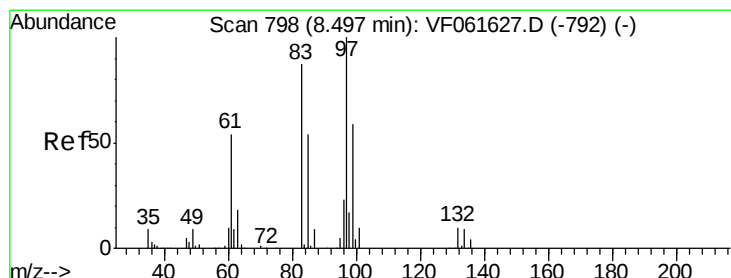
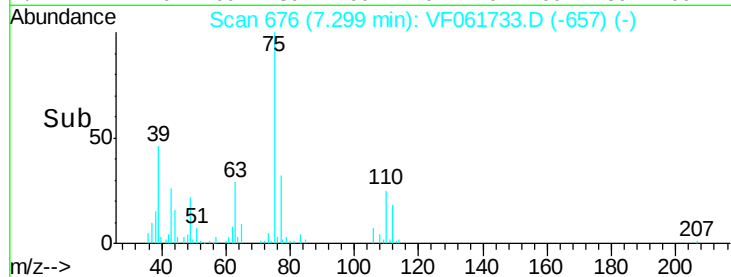
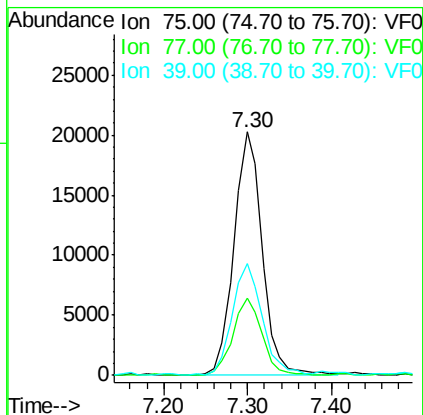
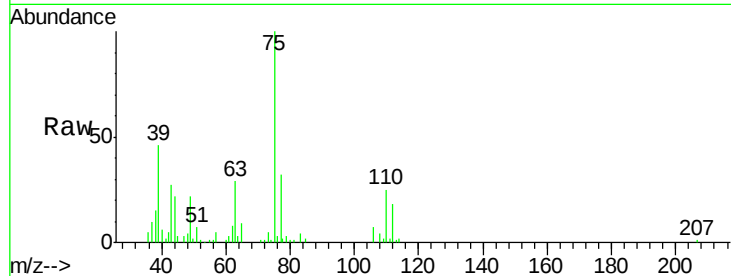


#54

cis-1,3-Dichloropropene
 Concen: 10.609 ug/l
 RT: 7.30 min Scan# 676
 Delta R.T. -0.01 min
 Lab File: VF061733.D
 Acq: 25 Feb 2019 16:35

Instrument :
 MSVOA_F
 ClientSampleId :
 LOQ-SOIL-02-QT1-2019

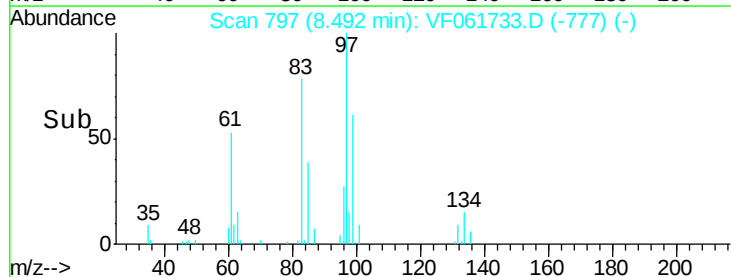
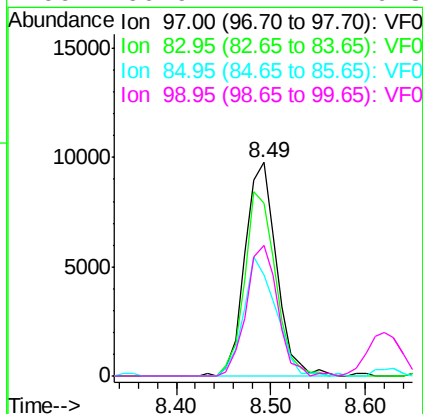
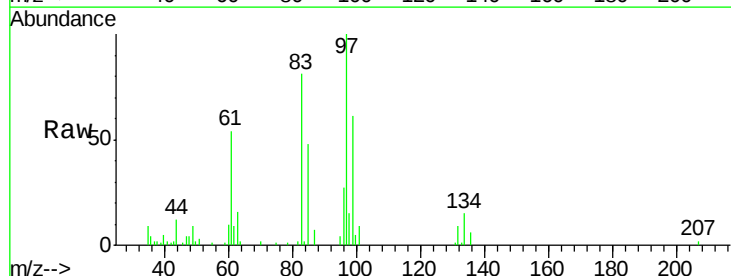
Tot Ion	Ratio	Lower	Upper
75	100		
77	31.6	26.4	39.6
39	45.9	36.0	54.0

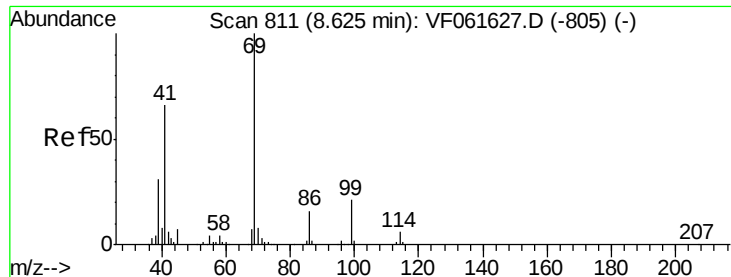


#55

1,1,2-Trichloroethane
 Concen: 10.238 ug/l
 RT: 8.49 min Scan# 797
 Delta R.T. -0.00 min
 Lab File: VF061733.D
 Acq: 25 Feb 2019 16:35

Tgt Ion	Ratio	Lower	Upper
97	100		
83	80.7	69.2	103.8
85	47.6	43.0	64.4
99	60.9	47.2	70.8





#56

Ethyl methacrylate

Concen: 9.018 ug/l

RT: 8.62 min Scan# 810

Delta R.T. -0.01 min

Lab File: VF061733.D

Acq: 25 Feb 2019 16:35

Instrument :

MSVOA_F

ClientSampleId :

LOQ-SOIL-02-QT1-2019

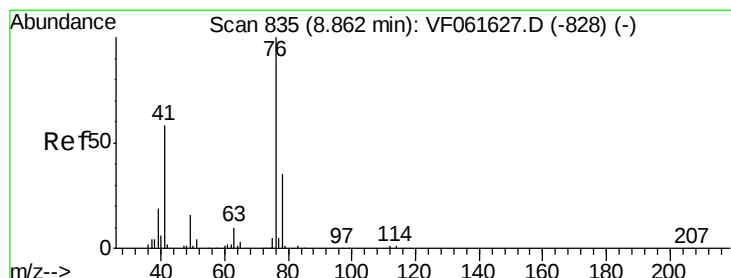
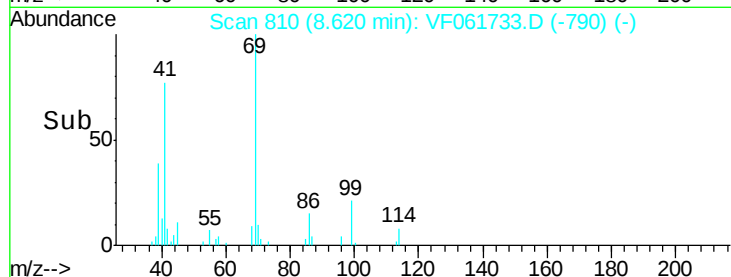
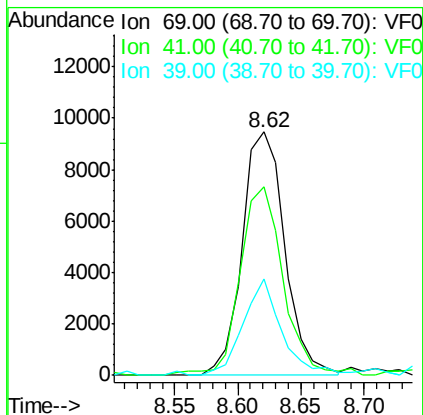
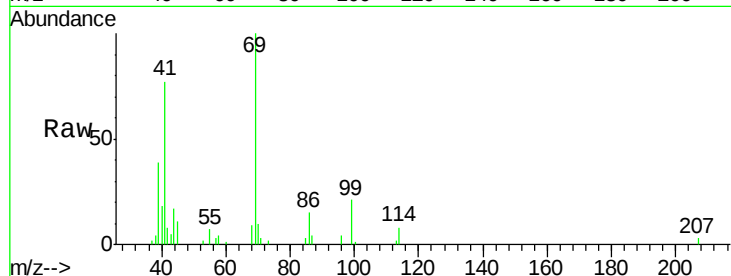
Tot Ion: 69 Resp: 22178

Ion Ratio Lower Upper

69 100

41 77.5 52.9 79.3

39 39.5 24.5 36.7#



#57

1,3-Dichloropropane

Concen: 9.923 ug/l

RT: 8.85 min Scan# 833

Delta R.T. -0.01 min

Lab File: VF061733.D

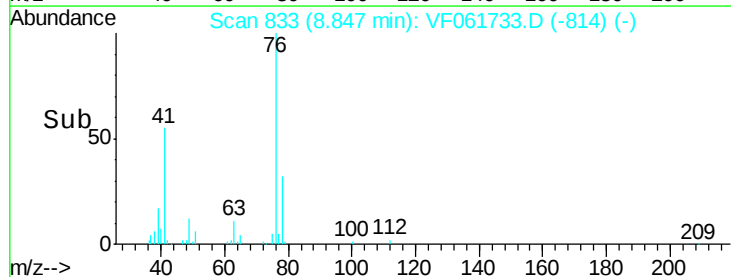
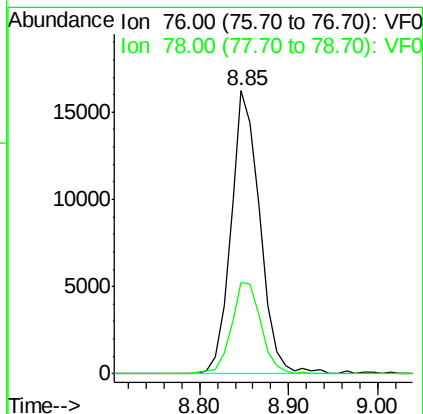
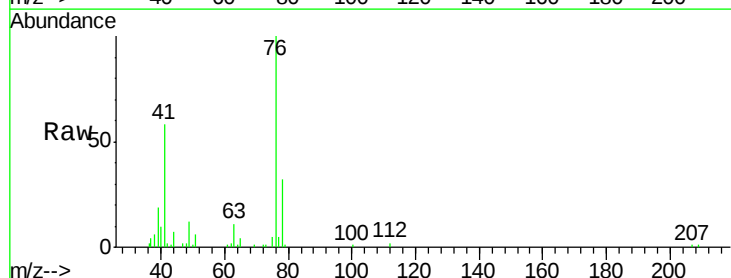
Acq: 25 Feb 2019 16:35

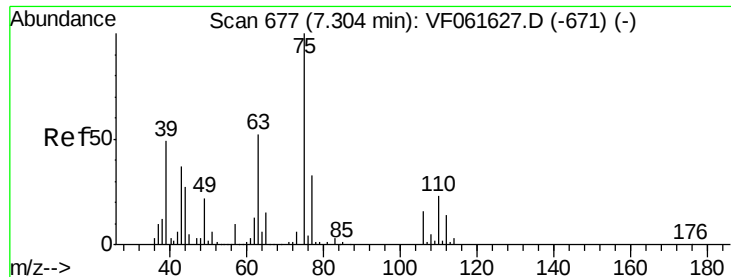
Tgt Ion: 76 Resp: 36587

Ion Ratio Lower Upper

76 100

78 32.3 27.8 41.6

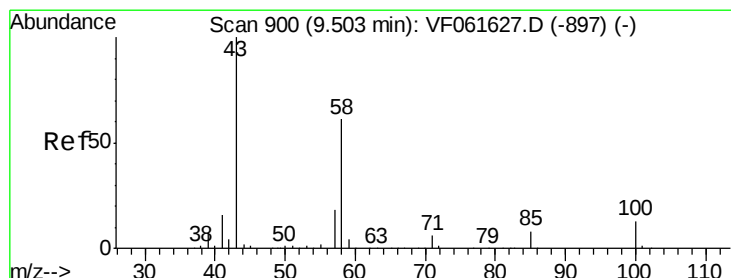
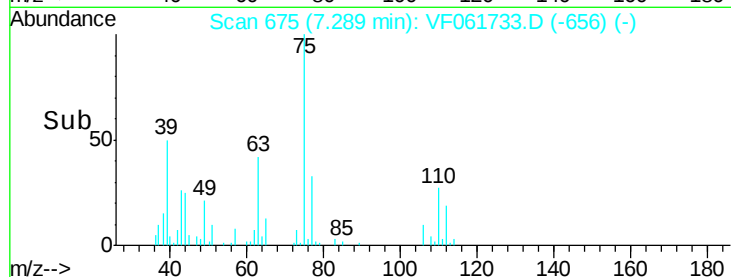
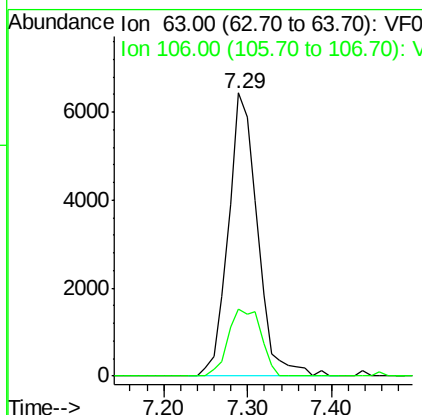
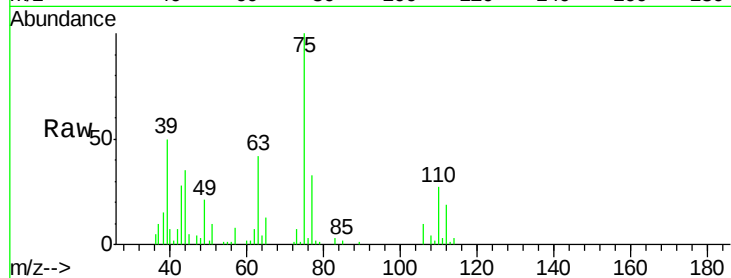




#58
 2-Chloroethyl Vinyl ether
 Concen: 36.342 ug/l
 RT: 7.29 min Scan# 675
 Delta R.T. -0.01 min
 Lab File: VF061733.D
 Acq: 25 Feb 2019 16:35

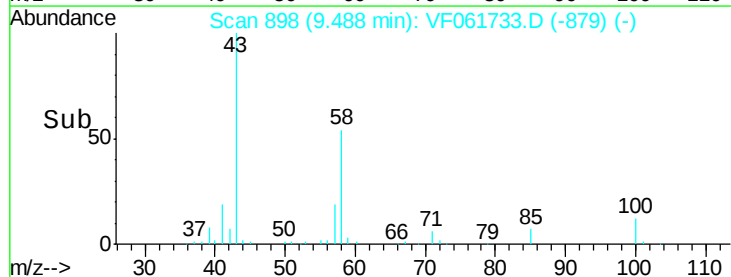
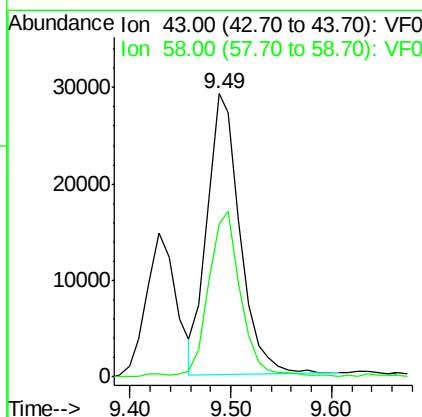
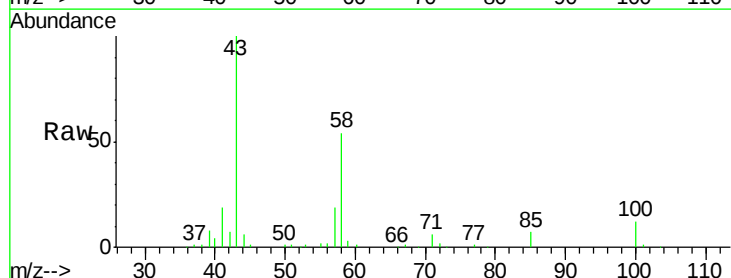
Instrument :
 MSVOA_F
 ClientSampleId :
 LOQ-SOIL-02-QT1-2019

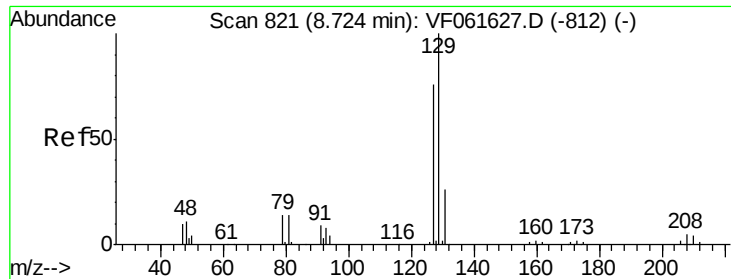
Tot Ion: 63 Resp: 15421
 Ion Ratio Lower Upper
 63 100
 106 23.8 24.6 36.8#



#59
 2-Hexanone
 Concen: 50.920 ug/l
 RT: 9.49 min Scan# 898
 Delta R.T. -0.01 min
 Lab File: VF061733.D
 Acq: 25 Feb 2019 16:35

Tgt Ion: 43 Resp: 66455
 Ion Ratio Lower Upper
 43 100
 58 53.8 28.5 85.5





#60

Dibromochloromethane

Concen: 9.837 ug/l

RT: 8.72 min Scan# 820

Delta R.T. -0.01 min

Lab File: VF061733.D

Acq: 25 Feb 2019 16:35

Instrument :

MSVOA_F

ClientSampleId :

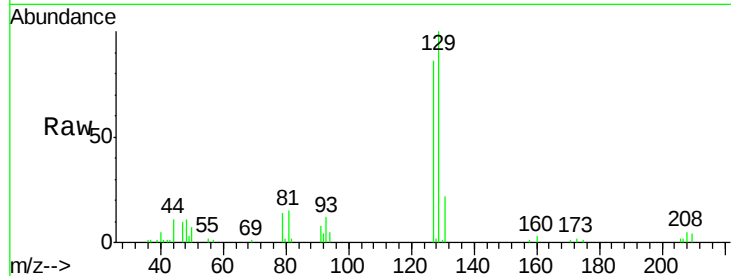
LOQ-SOIL-02-QT1-2019

Tot Ion:129 Resp: 30244

Ion Ratio Lower Upper

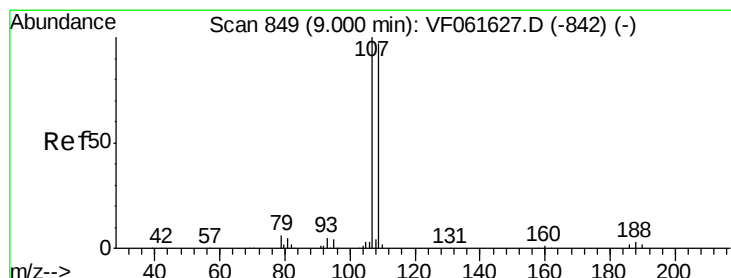
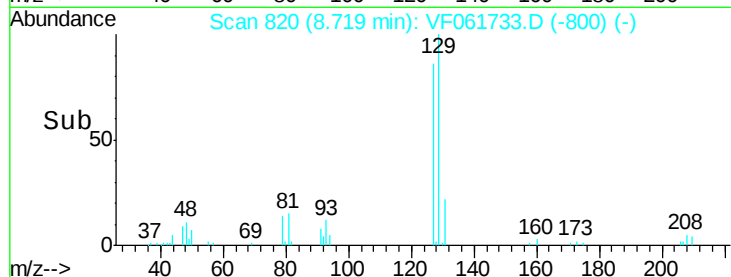
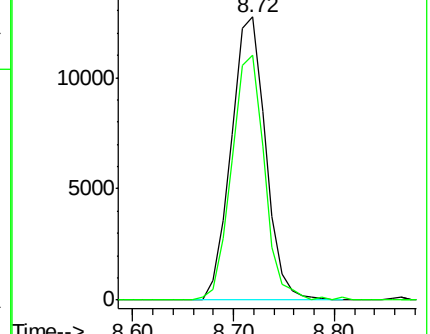
129 100

127 86.5 37.8 113.4



Abundance Ion 129.00 (128.70 to 129.70): V

Ion 127.00 (126.70 to 127.70): V



#61

1,2-Dibromoethane

Concen: 10.854 ug/l

RT: 8.99 min Scan# 847

Delta R.T. -0.01 min

Lab File: VF061733.D

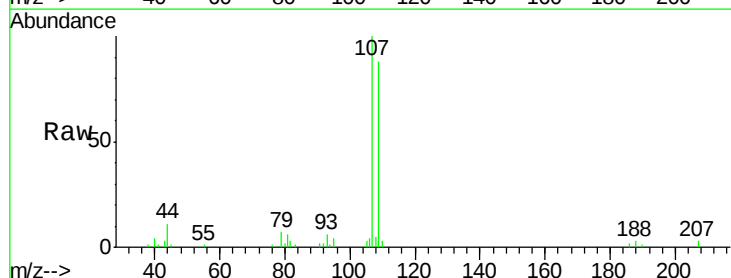
Acq: 25 Feb 2019 16:35

Tgt Ion:107 Resp: 26004

Ion Ratio Lower Upper

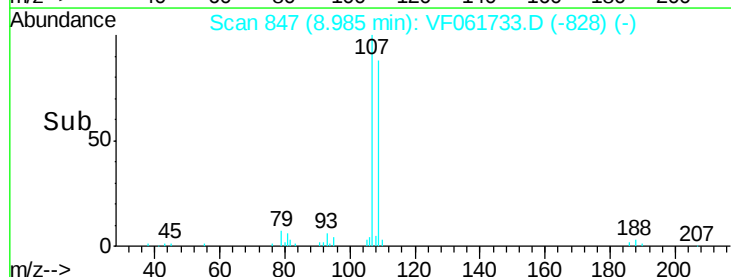
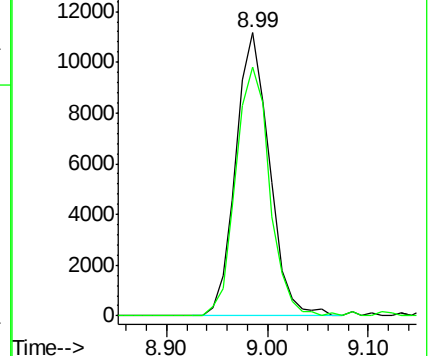
107 100

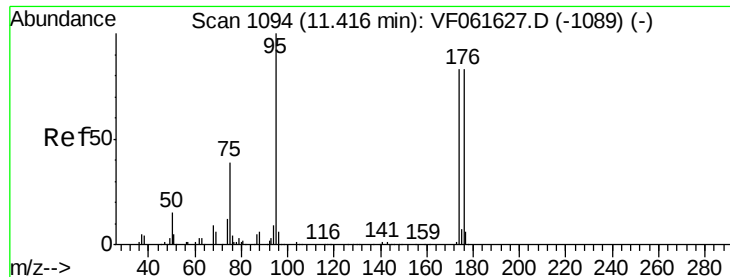
109 87.9 77.4 116.0



Abundance Ion 107.00 (106.70 to 107.70): V

Ion 109.00 (108.70 to 109.70): V





#62

4-Bromofluorobenzene

Concen: 53.438 ug/l

RT: 11.41 min Scan# 1093

Delta R.T. -0.00 min

Lab File: VF061733.D

Acq: 25 Feb 2019 16:35

Instrument :

MSVOA_F

ClientSampleId :

LOQ-SOIL-02-QT1-2019

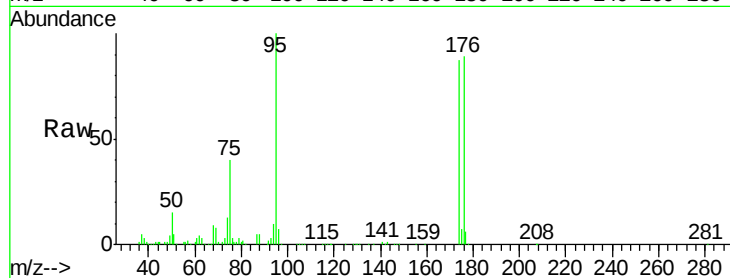
Tot Ion: 95 Resp: 220833

Ion Ratio Lower Upper

95 100

174 87.3 0.0 165.8

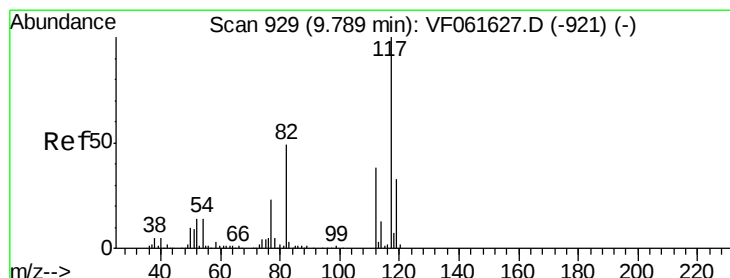
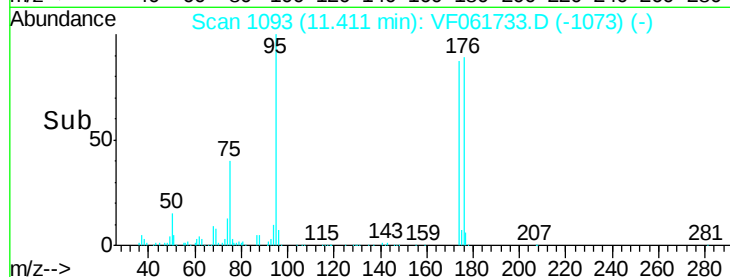
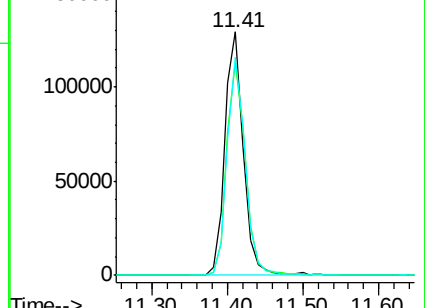
176 89.4 0.0 167.0



Abundance Ion 95.00 (94.70 to 95.70): VF0

Ion 174.00 (173.70 to 174.70): VF0

Ion 176.00 (175.70 to 176.70): VF0



#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 9.77 min Scan# 927

Delta R.T. -0.01 min

Lab File: VF061733.D

Acq: 25 Feb 2019 16:35

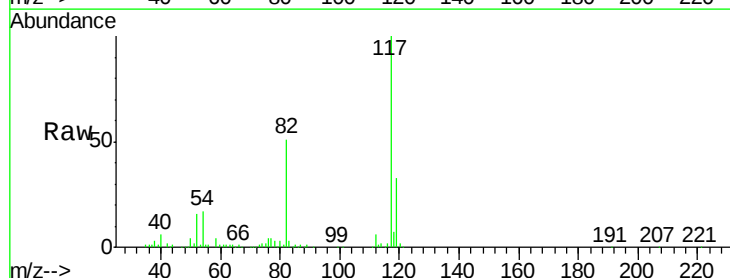
Tgt Ion: 117 Resp: 415022

Ion Ratio Lower Upper

117 100

82 50.6 39.3 58.9

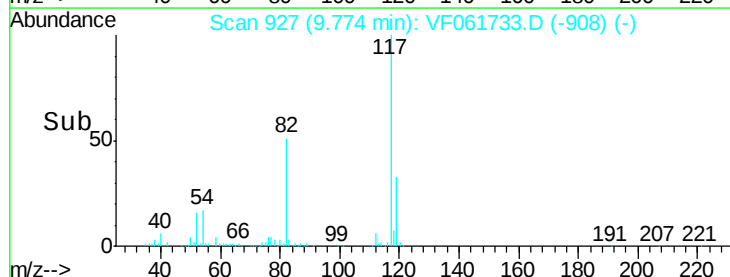
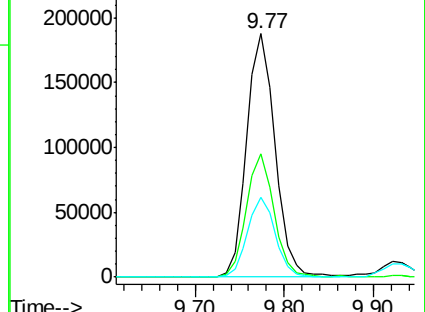
119 32.6 26.6 40.0

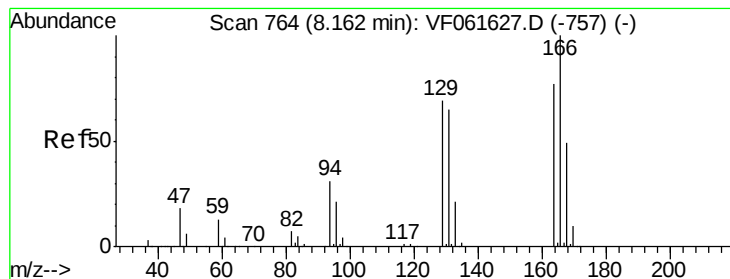


Abundance Ion 117.00 (116.70 to 117.70): VF0

Ion 82.00 (81.70 to 82.70): VF0

Ion 119.00 (118.70 to 119.70): VF0





#64

Tetrachloroethene

Concen: 11.033 ug/l

RT: 8.15 min Scan# 762

Delta R.T. -0.01 min

Lab File: VF061733.D

Acq: 25 Feb 2019 16:35

Instrument :

MSVOA_F

ClientSampleId :

LOQ-SOIL-02-QT1-2019

Tot Ion:164 Resp: 37428

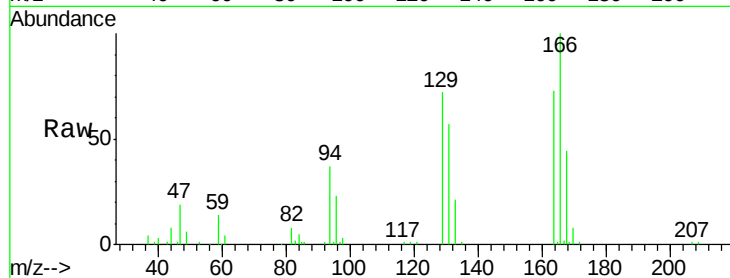
Ion Ratio Lower Upper

164 100

166 137.9 103.9 155.9

129 98.7 71.3 106.9

131 78.5 67.1 100.7

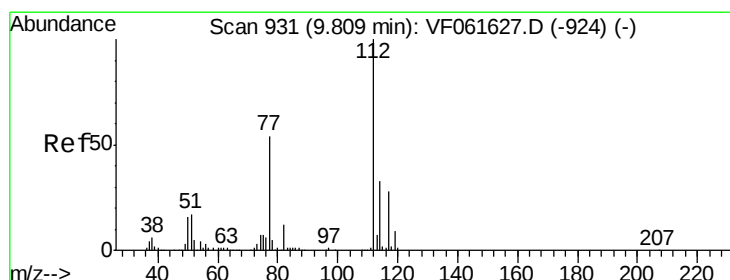
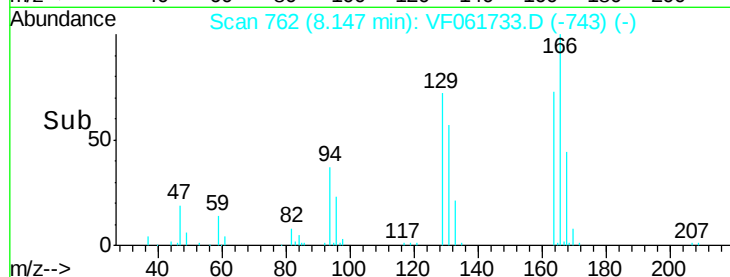
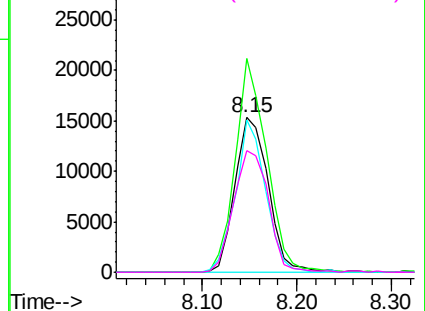


Abundance Ion 163.85 (163.55 to 164.55): V

Ion 165.80 (165.50 to 166.50): V

Ion 128.90 (128.60 to 129.60): V

Ion 130.90 (130.60 to 131.60): V



#65

Chlorobenzene

Concen: 10.530 ug/l

RT: 9.79 min Scan# 929

Delta R.T. -0.01 min

Lab File: VF061733.D

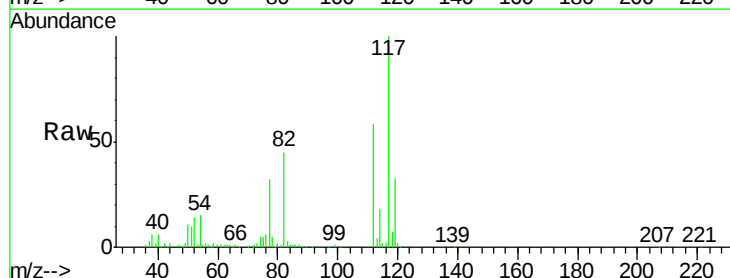
Acq: 25 Feb 2019 16:35

Tgt Ion:112 Resp: 88683

Ion Ratio Lower Upper

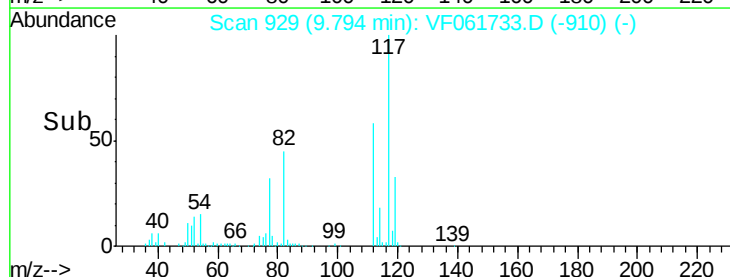
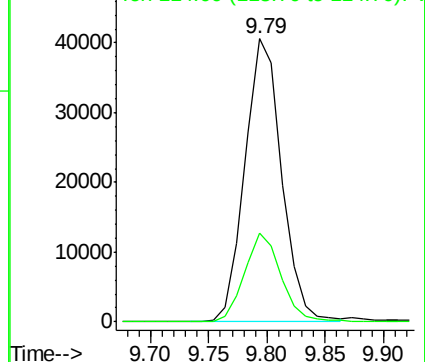
112 100

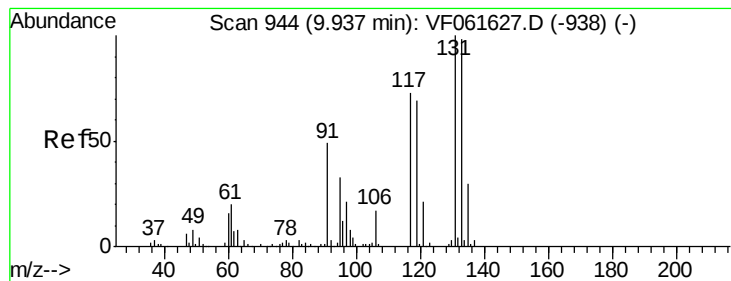
114 31.4 26.2 39.2



Abundance Ion 112.00 (111.70 to 112.70): V

Ion 114.00 (113.70 to 114.70): V





#66

1,1,1,2-Tetrachloroethane

Concen: 11.280 ug/l

RT: 9.93 min Scan# 943

Delta R.T. -0.01 min

Lab File: VF061733.D

Acq: 25 Feb 2019 16:35

Instrument :

MSVOA_F

ClientSampleId :

LOQ-SOIL-02-QT1-2019

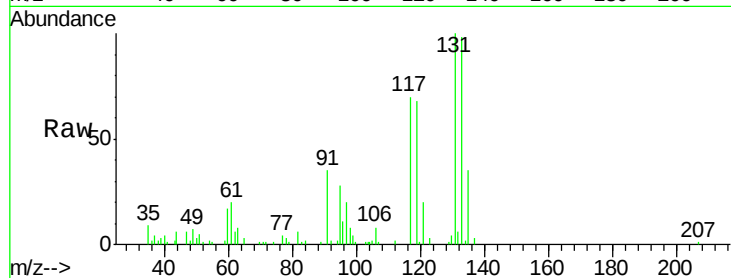
Tot Ion:131 Resp: 37224

Ion Ratio Lower Upper

131 100

133 98.5 48.9 146.6

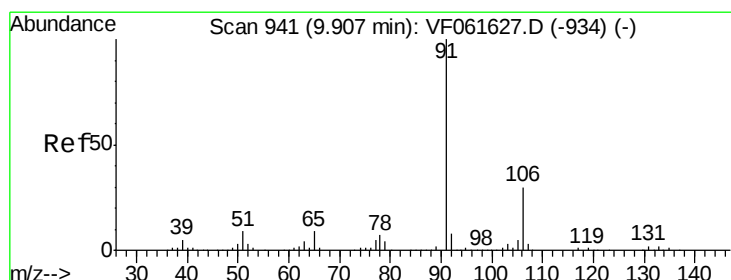
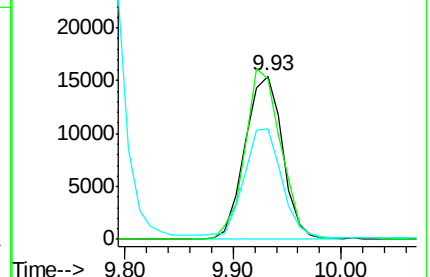
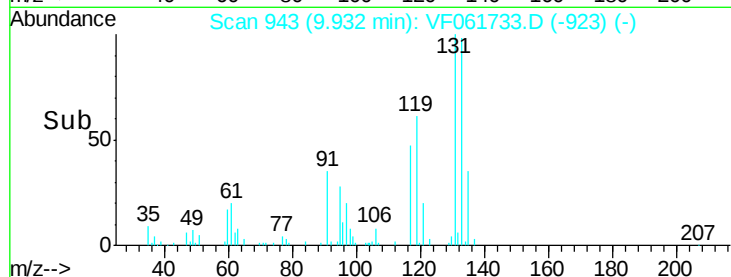
119 67.7 34.8 104.3



Abundance Ion 131.00 (130.70 to 131.70): V

Ion 133.00 (132.70 to 133.70): V

Ion 119.00 (118.70 to 119.70): V



#67

Ethyl Benzene

Concen: 11.529 ug/l

RT: 9.90 min Scan# 940

Delta R.T. -0.01 min

Lab File: VF061733.D

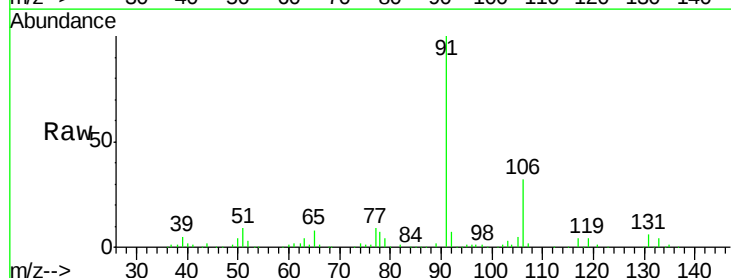
Acq: 25 Feb 2019 16:35

Tgt Ion: 91 Resp: 161468

Ion Ratio Lower Upper

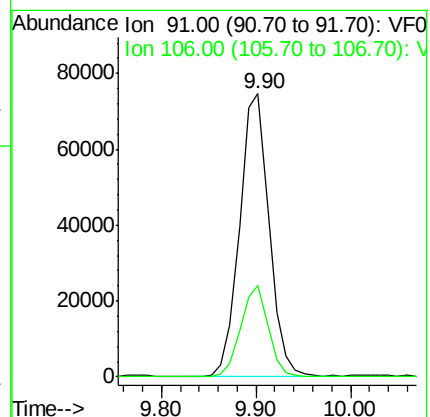
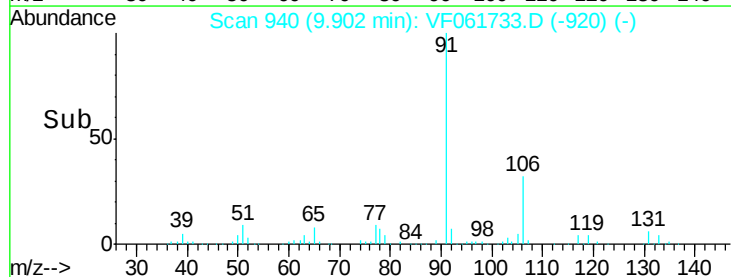
91 100

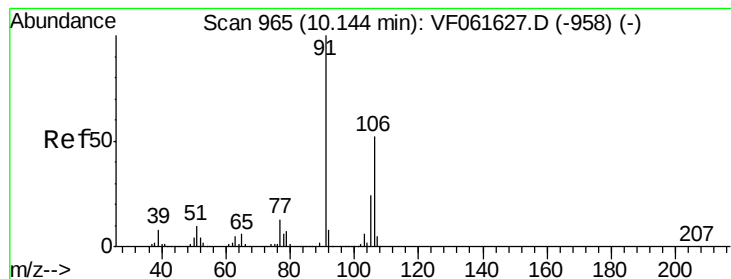
106 32.3 24.1 36.1



Abundance Ion 91.00 (90.70 to 91.70): VF0

Ion 106.00 (105.70 to 106.70): V





#68

m/p-Xvlenes

Concen: 21.912 ug/l

RT: 10.13 min Scan# 963

Delta R.T. -0.01 min

Lab File: VF061733.D

Acq: 25 Feb 2019 16:35

Instrument :

MSVOA_F

ClientSampleId :

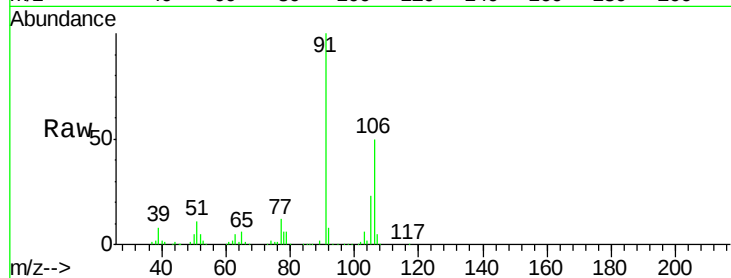
LOQ-SOIL-02-QT1-2019

Tot Ion:106 Resp: 117448

Ion Ratio Lower Upper

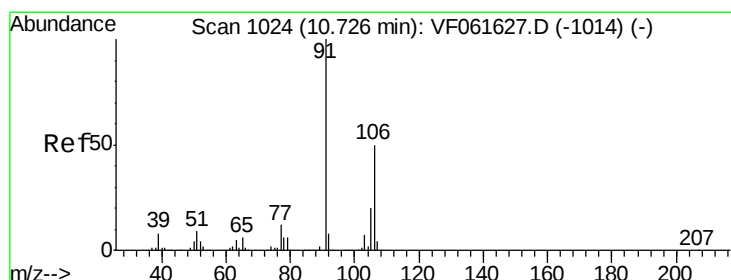
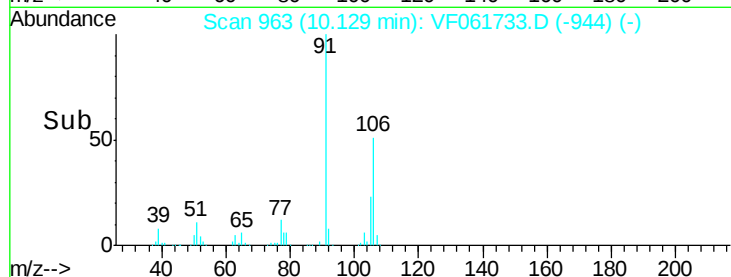
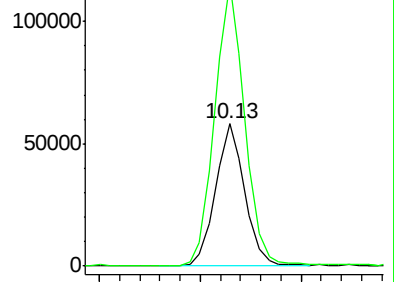
106 100

91 199.2 153.0 229.6



Abundance Ion 106.00 (105.70 to 106.70): V

Ion 91.00 (90.70 to 91.70): VF0



#69

o-Xylene

Concen: 10.840 ug/l

RT: 10.71 min Scan# 1022

Delta R.T. -0.01 min

Lab File: VF061733.D

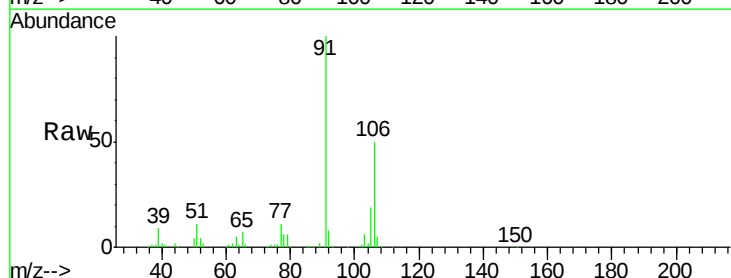
Acq: 25 Feb 2019 16:35

Tgt Ion:106 Resp: 61998

Ion Ratio Lower Upper

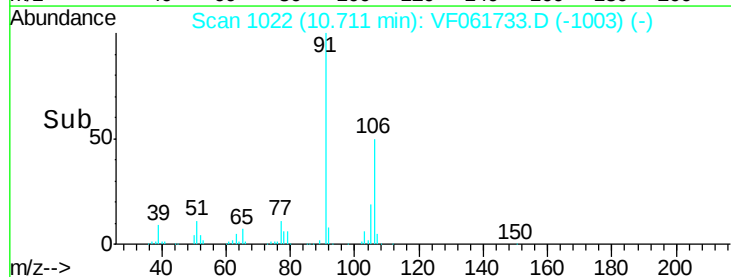
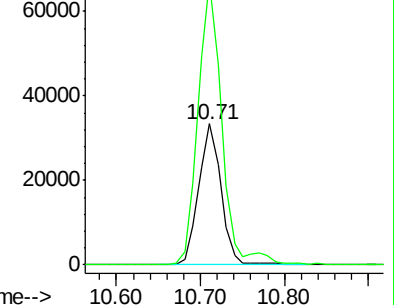
106 100

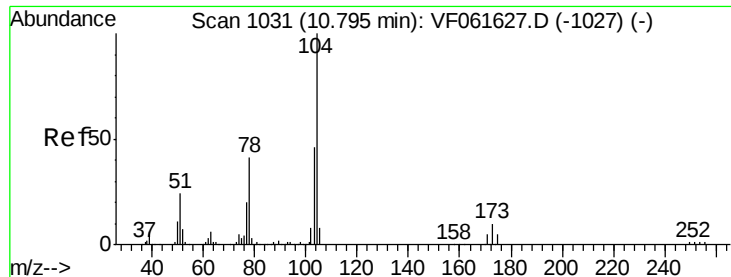
91 201.0 100.1 300.1



Abundance Ion 106.00 (105.70 to 106.70): V

Ion 91.00 (90.70 to 91.70): VF0

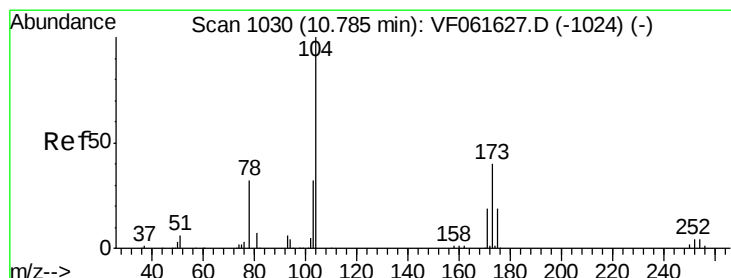
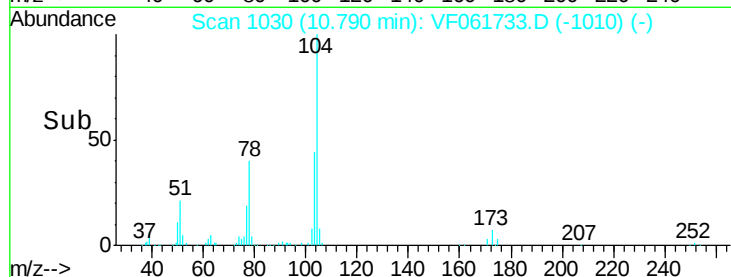
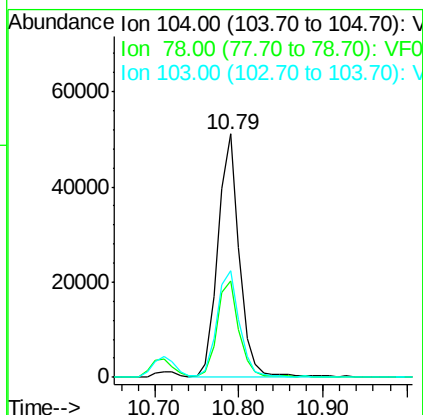
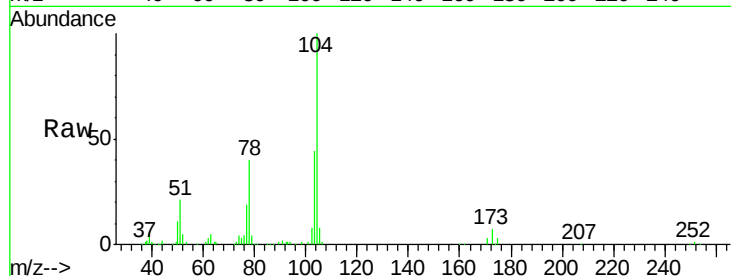




#70
Stvrene
Concen: 11.224 ug/l
RT: 10.79 min Scan# 1030
Delta R.T. -0.00 min
Lab File: VF061733.D
Acq: 25 Feb 2019 16:35

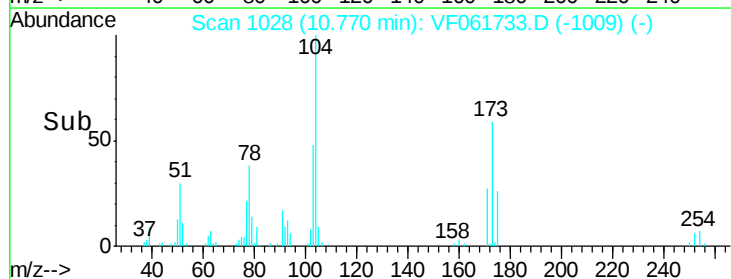
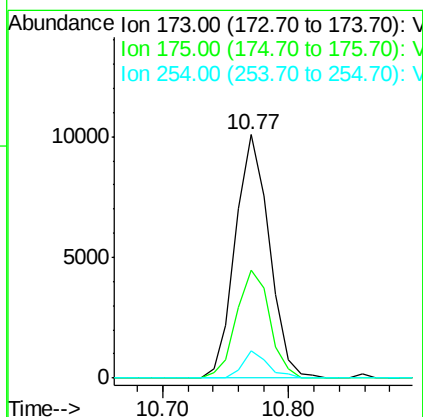
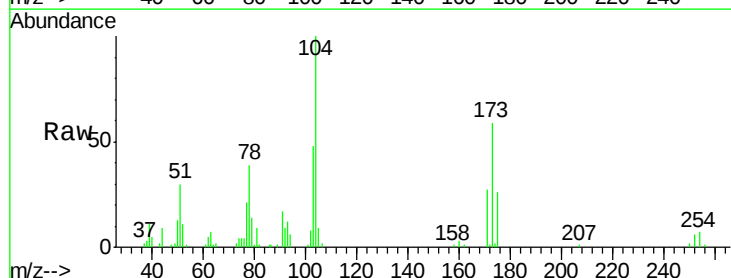
Instrument :
MSVOA_F
ClientSampleId :
LOQ-SOIL-02-QT1-2019

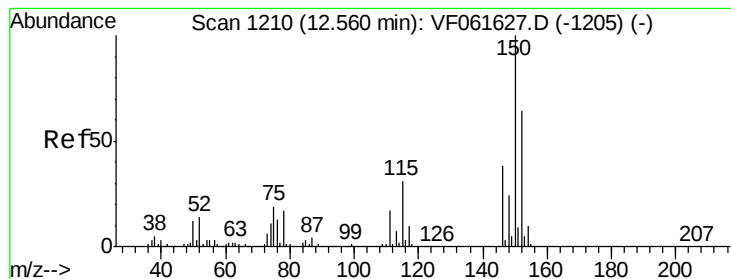
Tot Ion:104 Resp: 90811
Ion Ratio Lower Upper
104 100
78 39.6 33.2 49.8
103 43.7 37.2 55.8



#71
Bromoform
Concen: 10.460 ug/l
RT: 10.77 min Scan# 1028
Delta R.T. -0.01 min
Lab File: VF061733.D
Acq: 25 Feb 2019 16:35

Tgt Ion:173 Resp: 18745
Ion Ratio Lower Upper
173 100
175 44.5 24.0 72.0
254 11.1 8.2 12.2





#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 12.54 min Scan# 1208

Delta R.T. -0.01 min

Lab File: VF061733.D

Acq: 25 Feb 2019 16:35

Instrument :

MSVOA_F

ClientSampleId :

LOQ-SOIL-02-QT1-2019

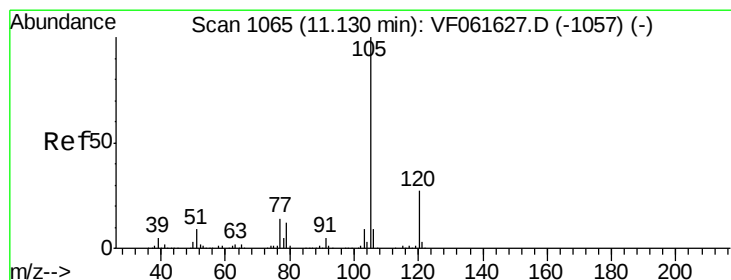
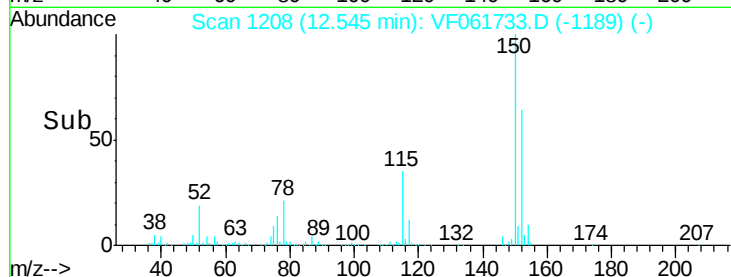
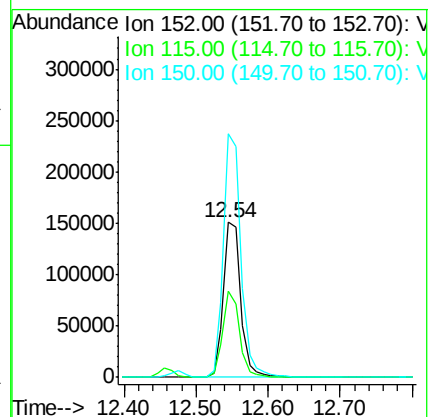
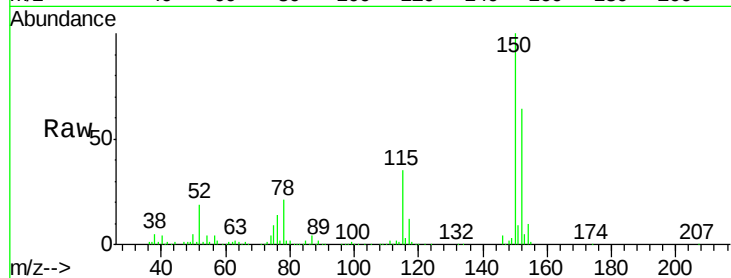
Tot Ion:152 Resp: 251639

Ion Ratio Lower Upper

152 100

115 55.3 24.3 72.8

150 157.0 0.0 312.0



#73

Isopropylbenzene

Concen: 10.271 ug/l

RT: 11.12 min Scan# 1064

Delta R.T. -0.00 min

Lab File: VF061733.D

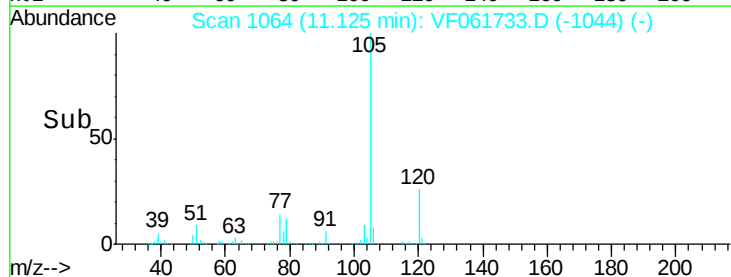
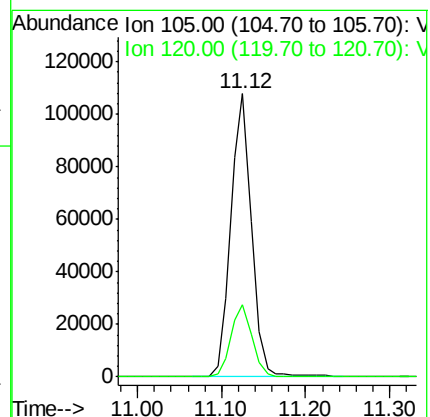
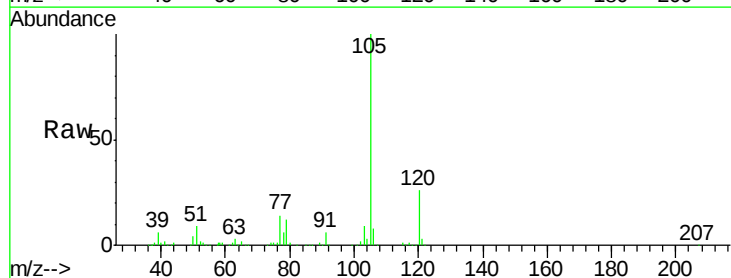
Acq: 25 Feb 2019 16:35

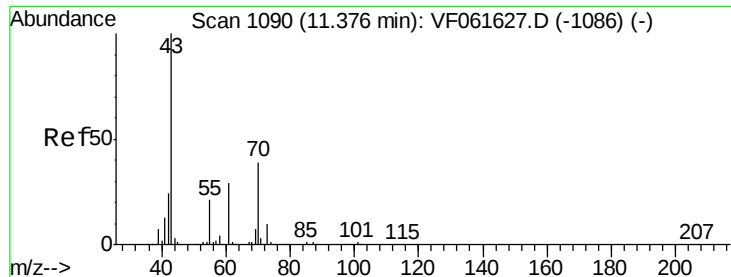
Tgt Ion:105 Resp: 184024

Ion Ratio Lower Upper

105 100

120 25.6 13.4 40.1





#74

N-amvl acetate

Concen: 9.488 ug/l

RT: 11.37 min Scan# 1089

Delta R.T. -0.00 min

Lab File: VF061733.D

Acq: 25 Feb 2019 16:35

Instrument :

MSVOA_F

ClientSampleId :

LOQ-SOIL-02-QT1-2019

Tot Ion: 43 Resp: 40803

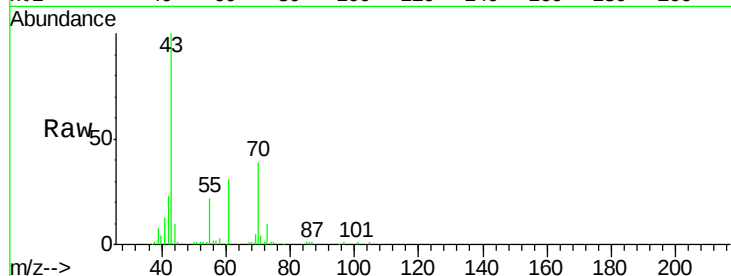
Ion Ratio Lower Upper

43 100

70 39.3 31.5 47.3

55 22.2 16.7 25.1

61 31.2 23.0 34.6

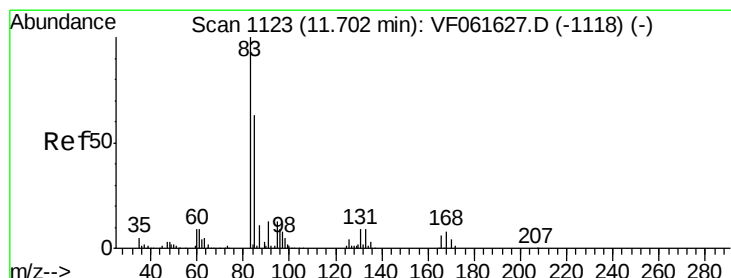
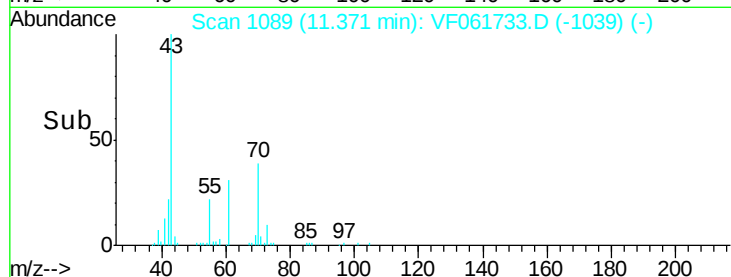
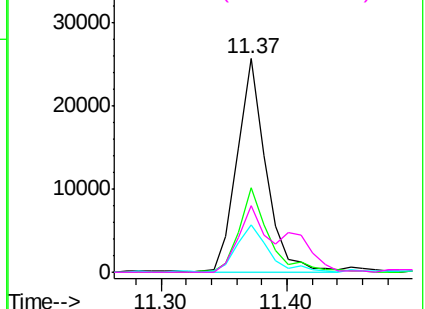


Abundance Ion 43.00 (42.70 to 43.70): VF0

Ion 70.00 (69.70 to 70.70): VF0

Ion 55.00 (54.70 to 55.70): VF0

Ion 61.00 (60.70 to 61.70): VF0



#75

1,1,2,2-Tetrachloroethane

Concen: 9.737 ug/l

RT: 11.70 min Scan# 1122

Delta R.T. -0.00 min

Lab File: VF061733.D

Acq: 25 Feb 2019 16:35

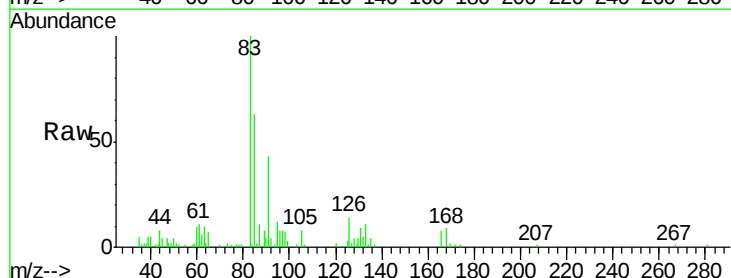
Tgt Ion: 83 Resp: 31254

Ion Ratio Lower Upper

83 100

131 9.2 4.4 13.2

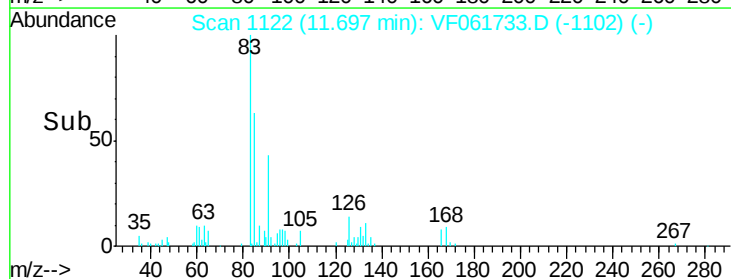
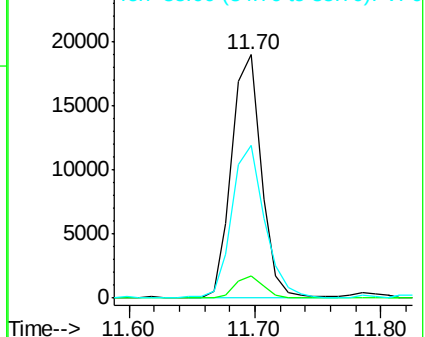
85 62.6 31.5 94.5

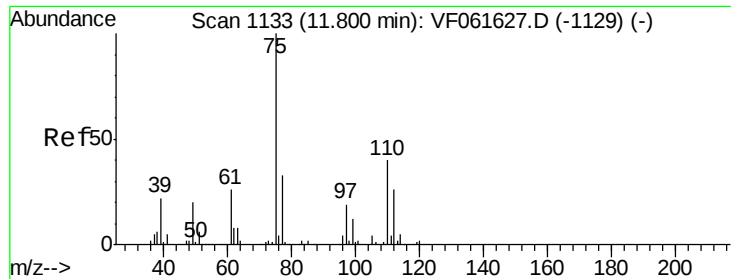


Abundance Ion 83.00 (82.70 to 83.70): VF0

Ion 131.00 (130.70 to 131.70): V

Ion 85.00 (84.70 to 85.70): VF0





#76

1,2,3-Trichloropropane

Concen: 9.219 ug/l

RT: 11.80 min Scan# 1132

Delta R.T. -0.00 min

Lab File: VF061733.D

Acq: 25 Feb 2019 16:35

Instrument :

MSVOA_F

ClientSampleId :

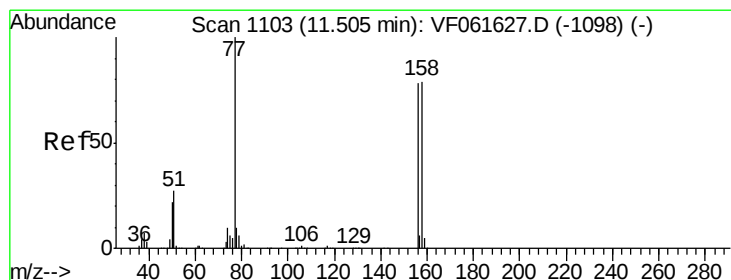
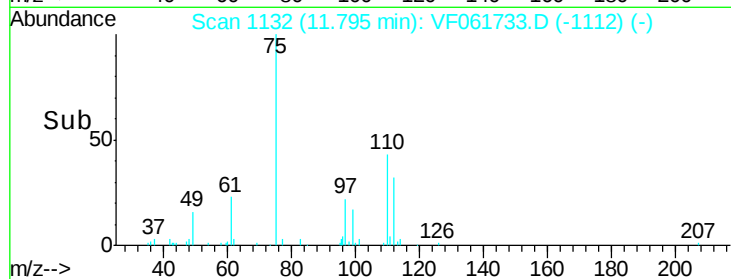
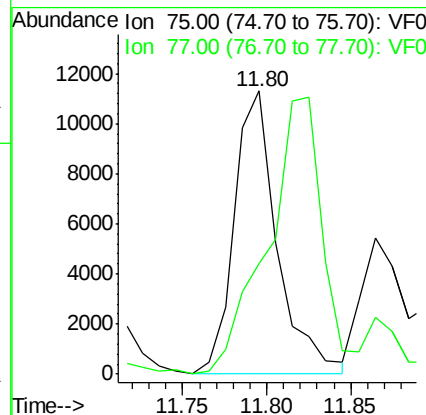
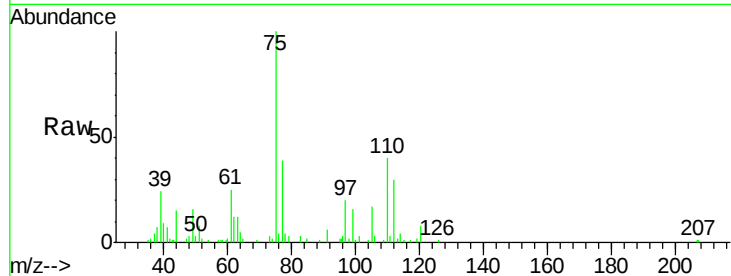
LOQ-SOIL-02-QT1-2019

Tot Ion: 75 Resp: 20118

Ion Ratio Lower Upper

75 100

77 39.1 16.6 49.7



#77

Bromobenzene

Concen: 9.618 ug/l

RT: 11.49 min Scan# 1101

Delta R.T. -0.01 min

Lab File: VF061733.D

Acq: 25 Feb 2019 16:35

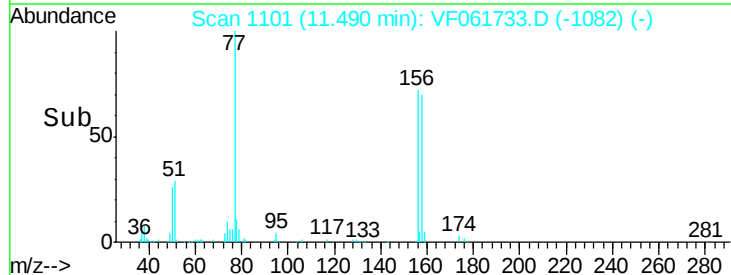
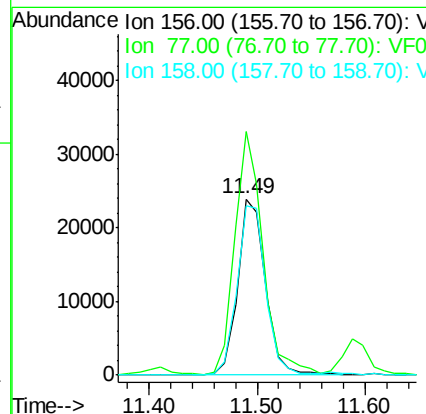
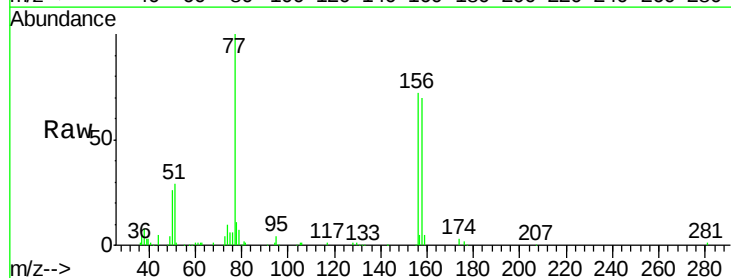
Tgt Ion: 156 Resp: 42572

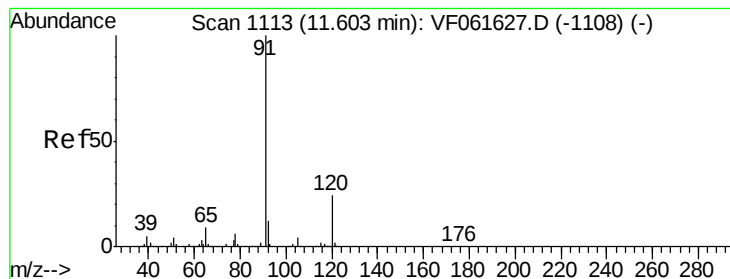
Ion Ratio Lower Upper

156 100

77 138.0 64.3 192.7

158 96.2 50.9 152.7





#78

n-propylbenzene

Concen: 10.885 ug/l

RT: 11.59 min Scan# 1111

Delta R.T. -0.01 min

Lab File: VF061733.D

Acq: 25 Feb 2019 16:35

Instrument :

MSVOA_F

ClientSampleId :

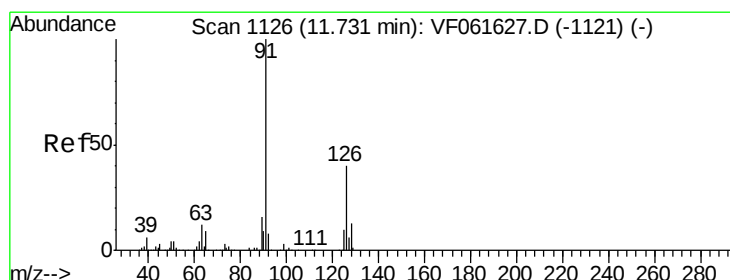
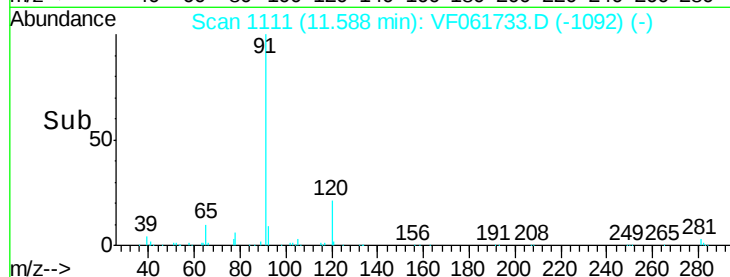
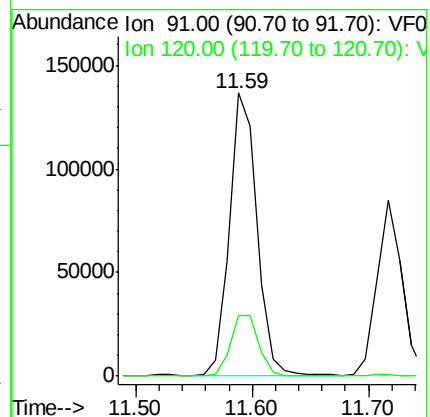
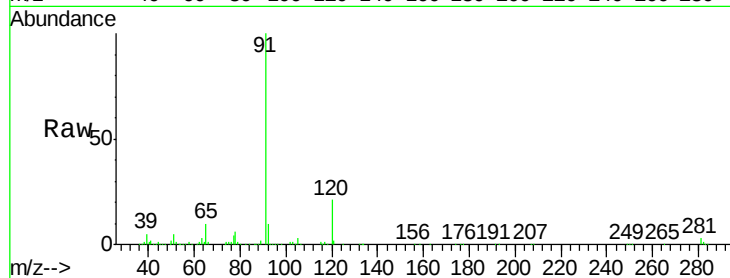
LOQ-SOIL-02-QT1-2019

Tot Ion: 91 Resp: 223783

Ion Ratio Lower Upper

91 100

120 21.4 12.1 36.3



#79

2-Chlorotoluene

Concen: 10.989 ug/l

RT: 11.72 min Scan# 1124

Delta R.T. -0.01 min

Lab File: VF061733.D

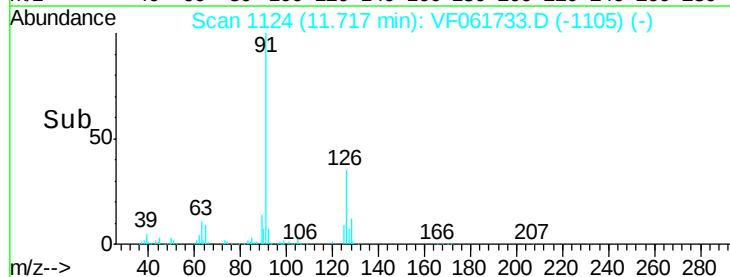
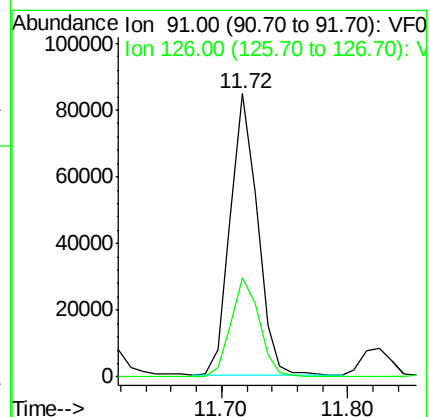
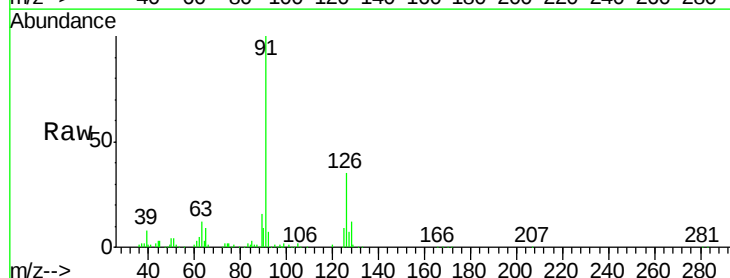
Acq: 25 Feb 2019 16:35

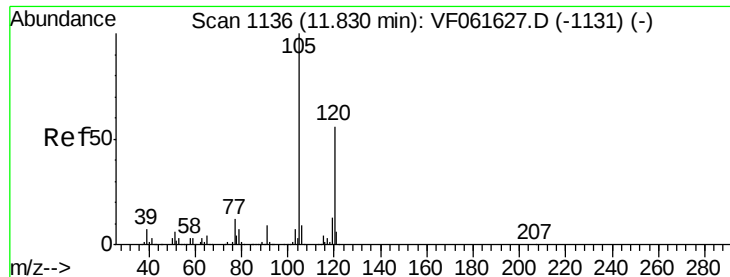
Tgt Ion: 91 Resp: 126533

Ion Ratio Lower Upper

91 100

126 35.0 19.8 59.4





#80

1,3,5-Trimethylbenzene

Concen: 10.747 ug/l

RT: 11.82 min Scan# 1135

Delta R.T. -0.01 min

Lab File: VF061733.D

Acq: 25 Feb 2019 16:35

Instrument :

MSVOA_F

ClientSampleId :

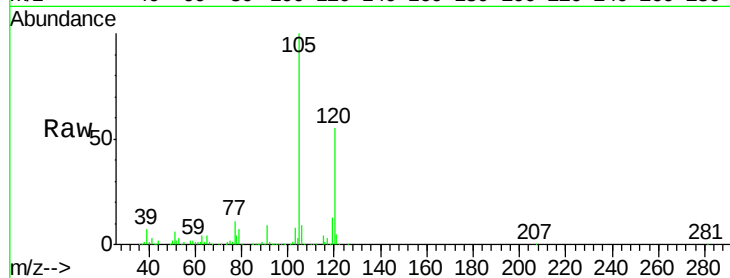
LOQ-SOIL-02-QT1-2019

Tot Ion:105 Resp: 153883

Ion Ratio Lower Upper

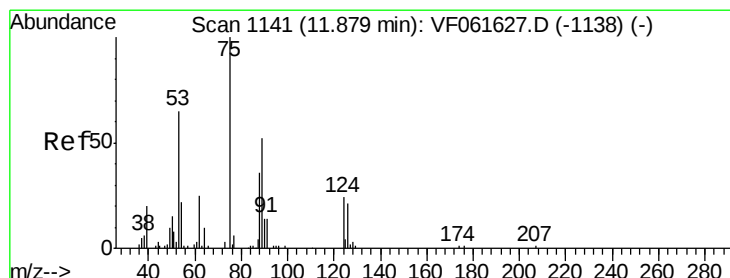
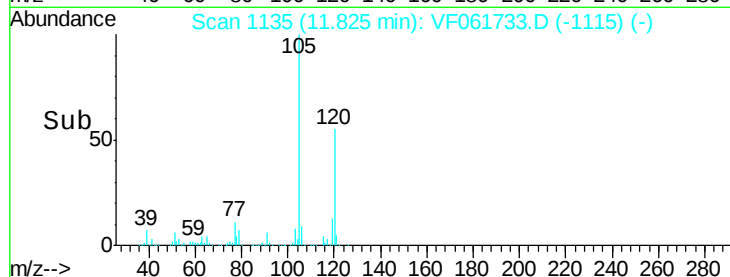
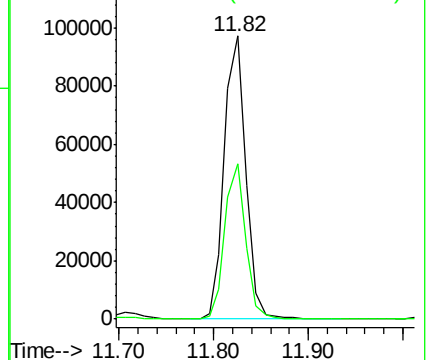
105 100

120 55.0 27.9 83.6



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: 8.700 ug/l m

RT: 11.86 min Scan# 1139

Delta R.T. -0.01 min

Lab File: VF061733.D

Acq: 25 Feb 2019 16:35

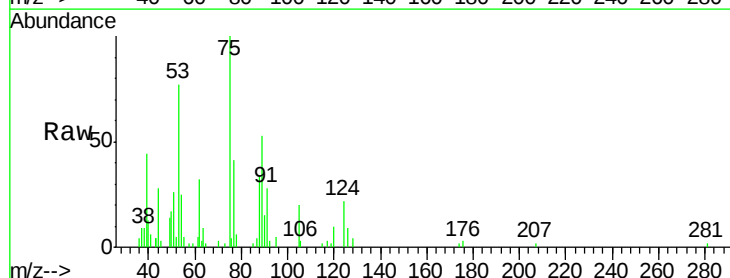
Tgt Ion: 75 Resp: 9102

Ion Ratio Lower Upper

75 100

53 76.7 53.7 80.5

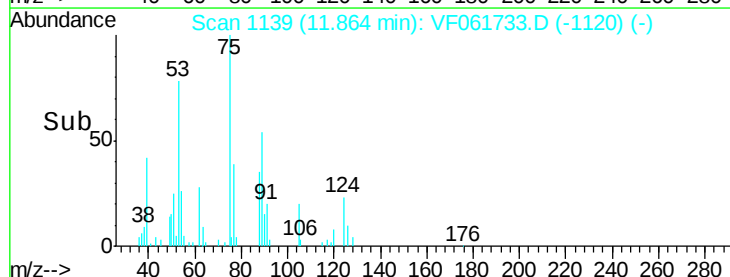
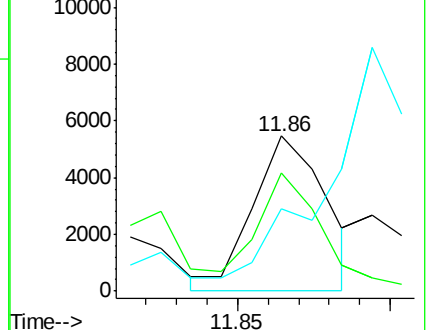
89 52.8 41.6 62.4

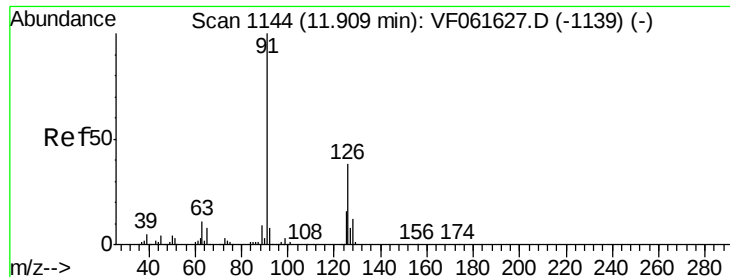


Abundance Ion 75.00 (74.70 to 75.70): VF0

Ion 53.00 (52.70 to 53.70): VF0

Ion 89.00 (88.70 to 89.70): VF0

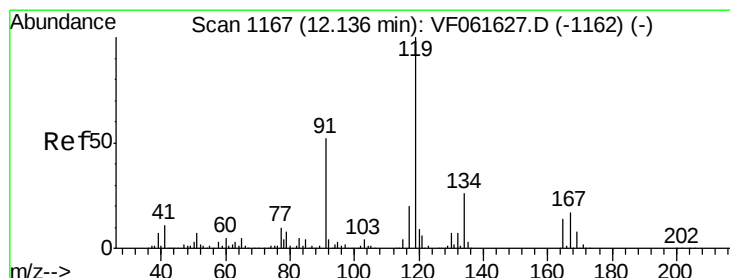
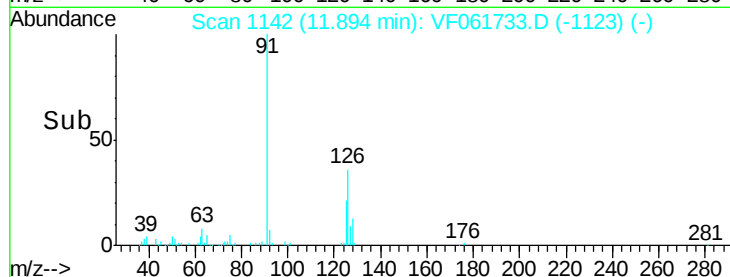
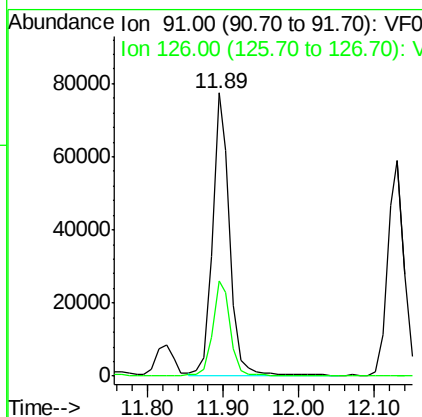
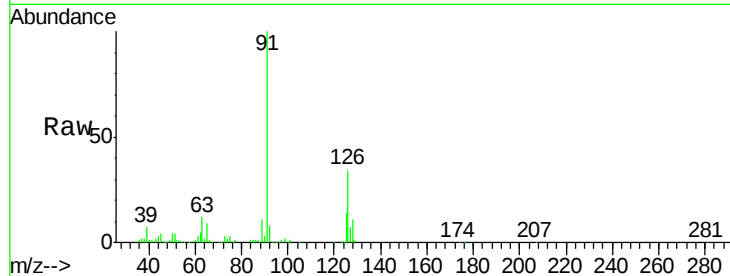




#82
4-Chlorotoluene
Concen: 10.201 ug/l
RT: 11.89 min Scan# 1142
Delta R.T. -0.01 min
Lab File: VF061733.D
Acq: 25 Feb 2019 16:35

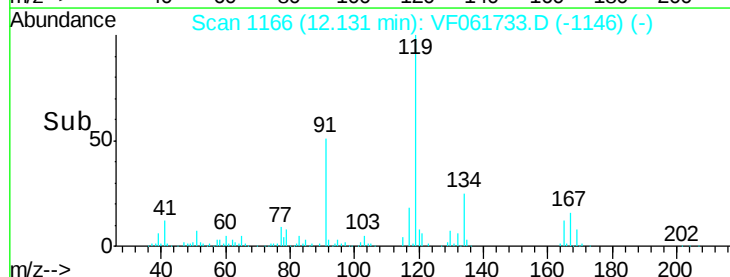
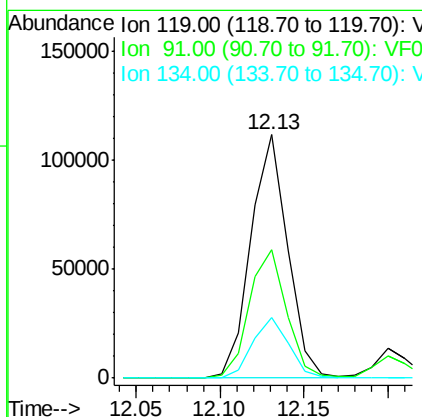
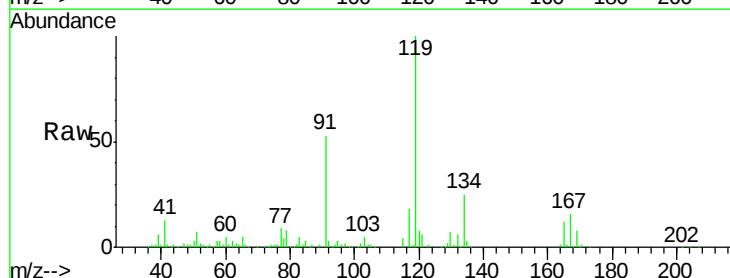
Instrument :
MSVOA_F
ClientSampleId :
LOQ-SOIL-02-QT1-2019

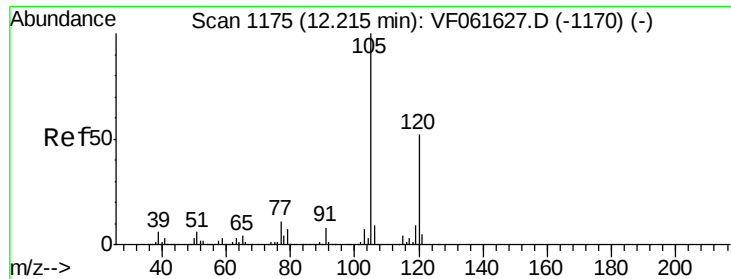
Tot Ion: 91 Resp: 121916
Ion Ratio Lower Upper
91 100
126 33.6 19.1 57.1



#83
tert-Butylbenzene
Concen: 10.721 ug/l
RT: 12.13 min Scan# 1166
Delta R.T. -0.00 min
Lab File: VF061733.D
Acq: 25 Feb 2019 16:35

Tgt Ion: 119 Resp: 170036
Ion Ratio Lower Upper
119 100
91 52.9 26.3 78.8
134 24.9 12.9 38.7





#84

1,2,4-Trimethylbenzene

Concen: 10.818 ug/l

RT: 12.20 min Scan# 1173

Delta R.T. -0.01 min

Lab File: VF061733.D

Acq: 25 Feb 2019 16:35

Instrument :

MSVOA_F

ClientSampleId :

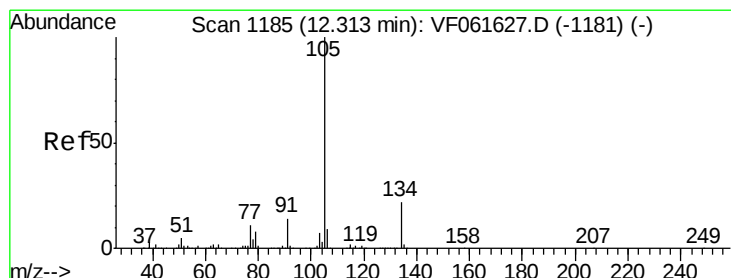
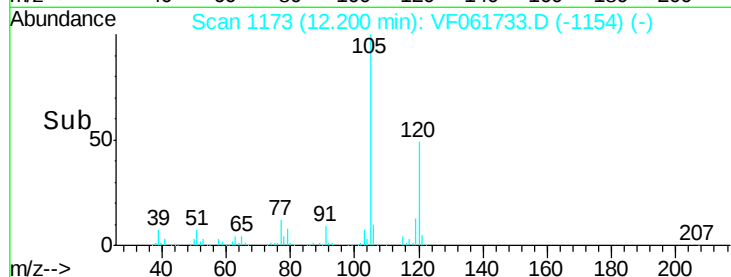
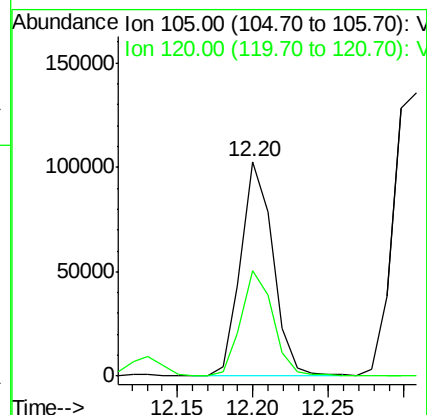
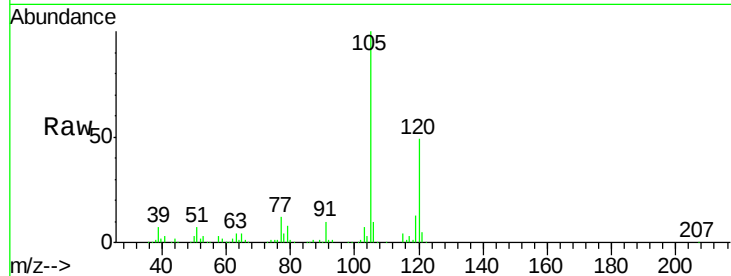
LOQ-SOIL-02-QT1-2019

Tot Ion:105 Resp: 153898

Ion Ratio Lower Upper

105 100

120 49.2 26.1 78.3



#85

sec-Butylbenzene

Concen: 10.728 ug/l

RT: 12.31 min Scan# 1184

Delta R.T. -0.01 min

Lab File: VF061733.D

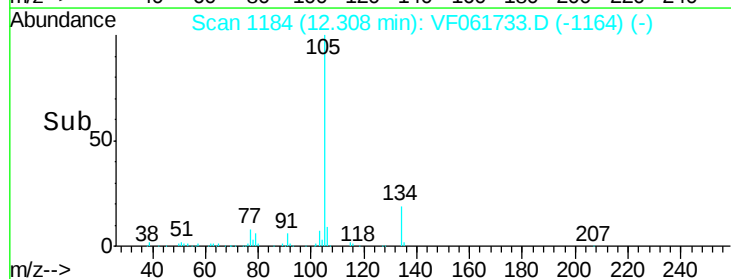
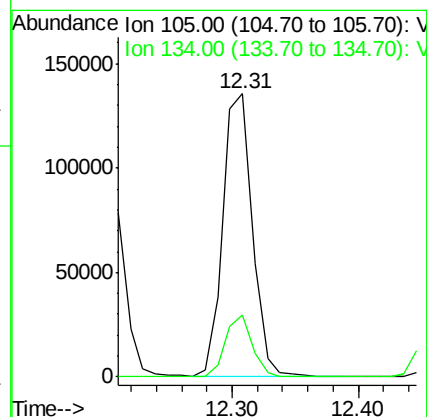
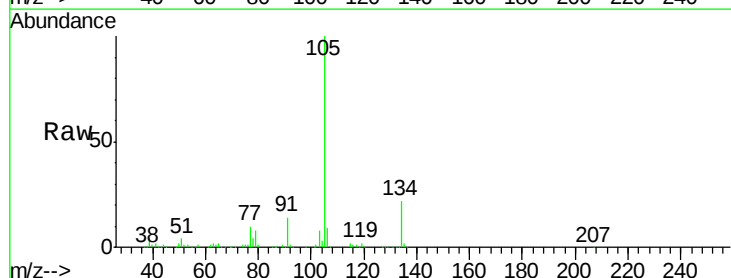
Acq: 25 Feb 2019 16:35

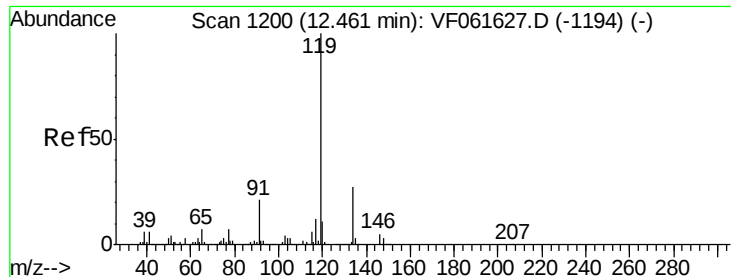
Tgt Ion:105 Resp: 220038

Ion Ratio Lower Upper

105 100

134 21.8 10.8 32.4





#86

p-Isopropyltoluene

Concen: 10.628 ug/l

RT: 12.46 min Scan# 1199

Delta R.T. -0.01 min

Lab File: VF061733.D

Acq: 25 Feb 2019 16:35

Instrument :

MSVOA_F

ClientSampleId :

LOQ-SOIL-02-QT1-2019

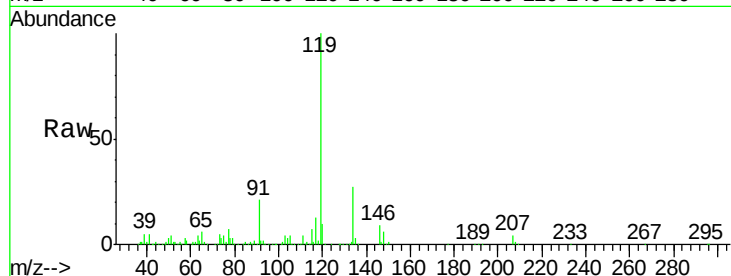
Tot Ion:119 Resp: 182931

Ion Ratio Lower Upper

119 100

134 26.7 13.7 41.1

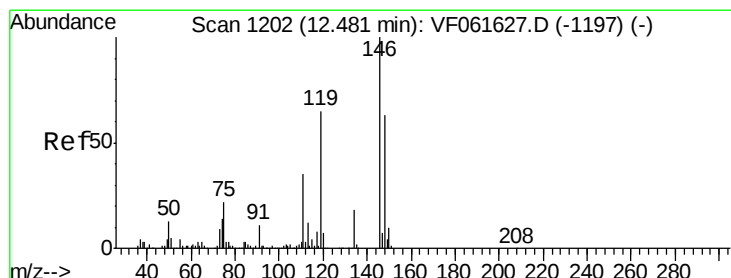
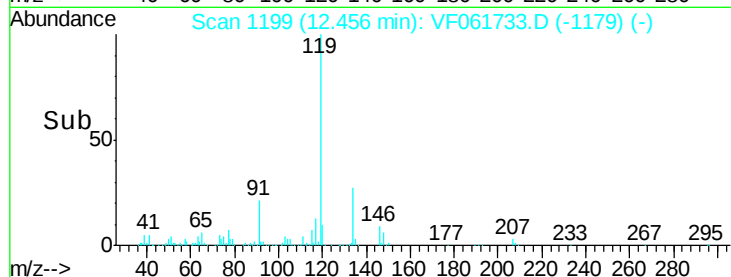
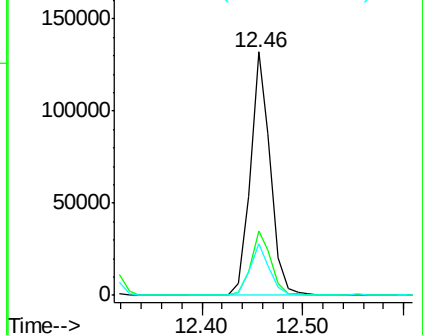
91 21.2 10.8 32.4



Abundance Ion 119.00 (118.70 to 119.70): V

Ion 134.00 (133.70 to 134.70): V

Ion 91.00 (90.70 to 91.70): V



#87

1,3-Dichlorobenzene

Concen: 10.645 ug/l

RT: 12.48 min Scan# 1201

Delta R.T. -0.00 min

Lab File: VF061733.D

Acq: 25 Feb 2019 16:35

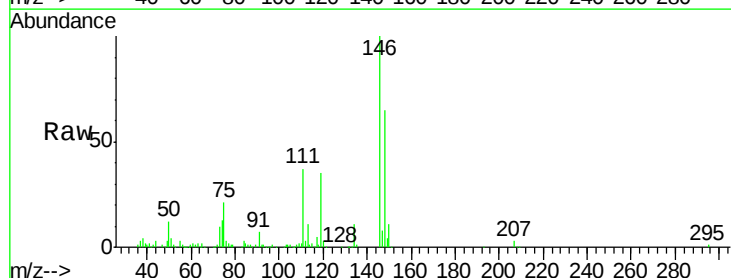
Tgt Ion:146 Resp: 91849

Ion Ratio Lower Upper

146 100

111 36.6 17.5 52.6

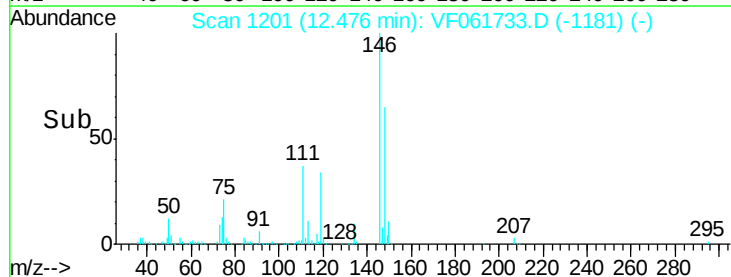
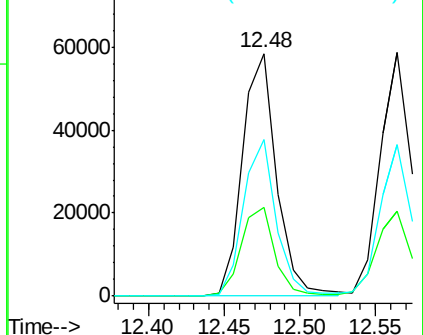
148 64.7 31.4 94.3

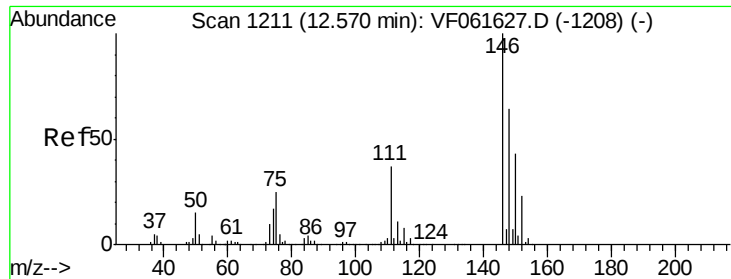


Abundance Ion 146.00 (145.70 to 146.70): V

Ion 111.00 (110.70 to 111.70): V

Ion 148.00 (147.70 to 148.70): V

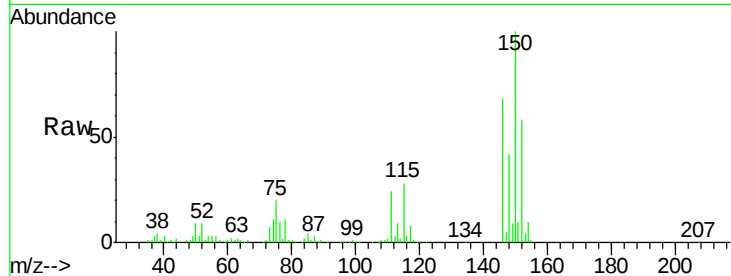




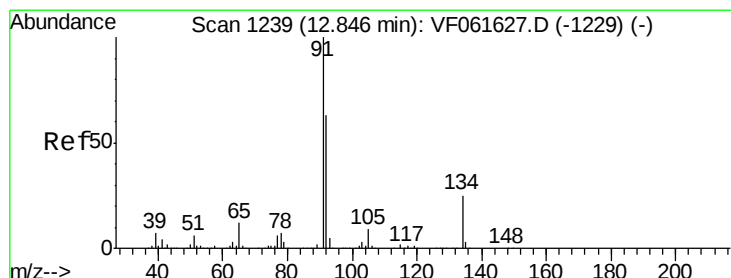
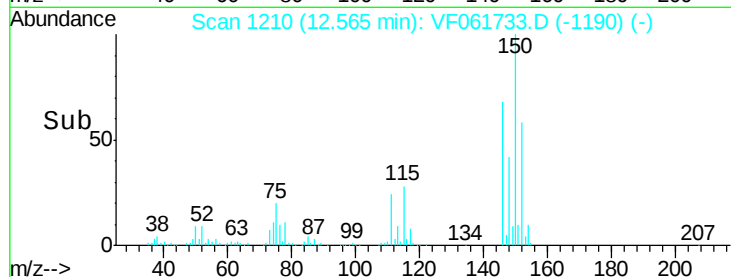
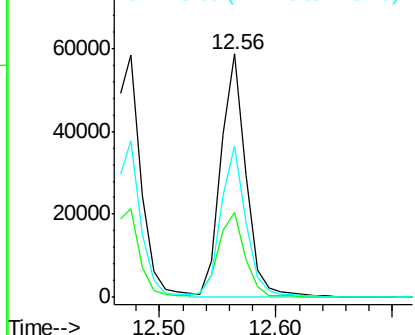
#88
 1,4-Dichlorobenzene
 Concen: 10.586 ug/l
 RT: 12.56 min Scan# 1210
 Delta R.T. -0.01 min
 Lab File: VF061733.D
 Acq: 25 Feb 2019 16:35

Instrument :
 MSVOA_F
 ClientSampleId :
 LOQ-SOIL-02-QT1-2019

Tot Ion:146 Resp: 87849
 Ion Ratio Lower Upper
 146 100
 111 34.7 18.4 55.4
 148 62.0 32.2 96.6

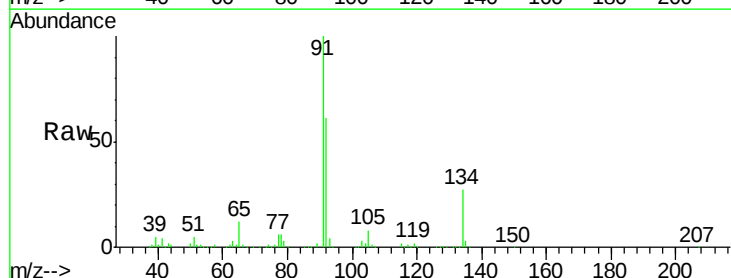


Abundance Ion 146.00 (145.70 to 146.70): V
 Ion 111.00 (110.70 to 111.70): V
 Ion 148.00 (147.70 to 148.70): V

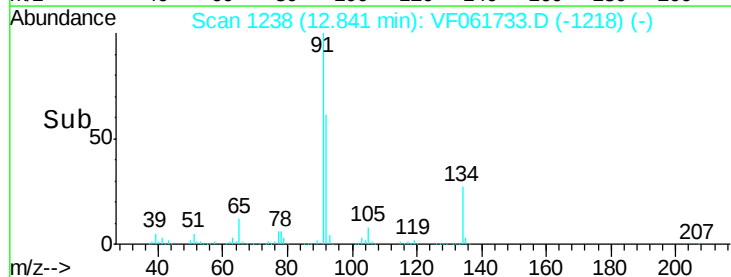
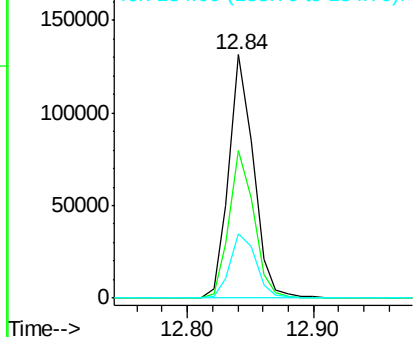


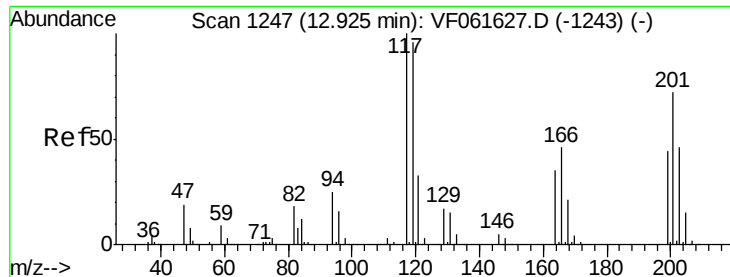
#89
 n-Butylbenzene
 Concen: 10.878 ug/l
 RT: 12.84 min Scan# 1238
 Delta R.T. -0.01 min
 Lab File: VF061733.D
 Acq: 25 Feb 2019 16:35

Tgt Ion: 91 Resp: 176808
 Ion Ratio Lower Upper
 91 100
 92 60.6 31.4 94.3
 134 26.6 12.3 36.9



Abundance Ion 91.00 (90.70 to 91.70): VF0
 Ion 92.00 (91.70 to 92.70): VF0
 Ion 134.00 (133.70 to 134.70): V

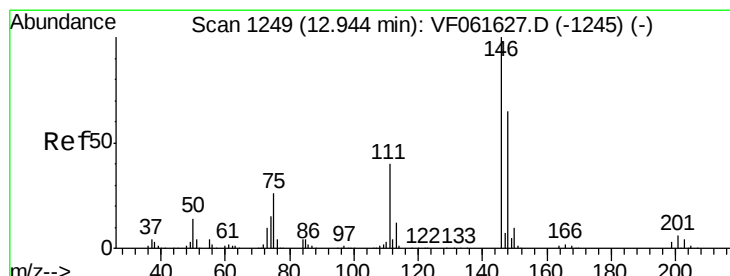
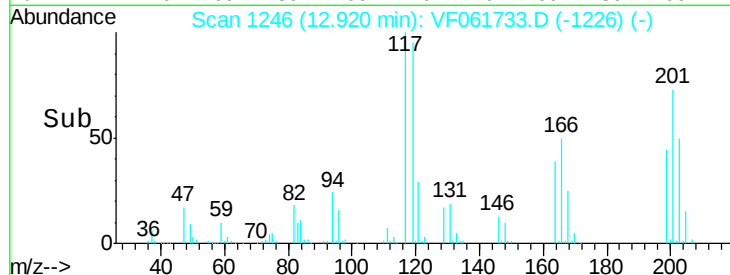
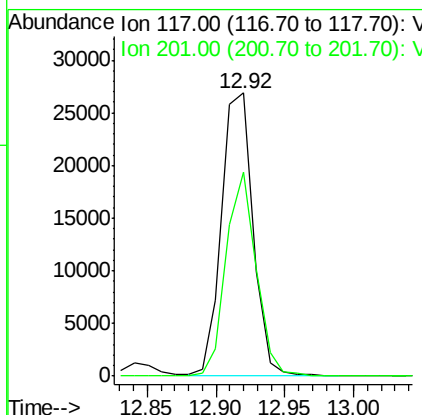
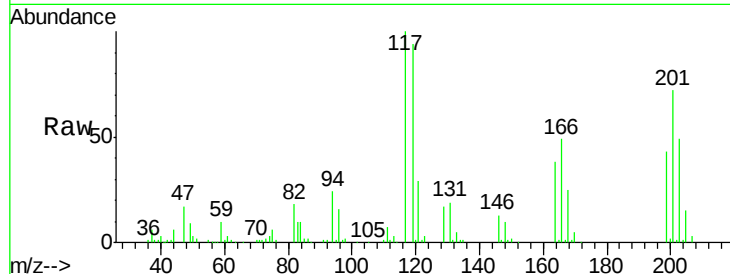




#90
Hexachloroethane
Concen: 10.709 ug/l
RT: 12.92 min Scan# 1246
Delta R.T. -0.01 min
Lab File: VF061733.D
Acq: 25 Feb 2019 16:35

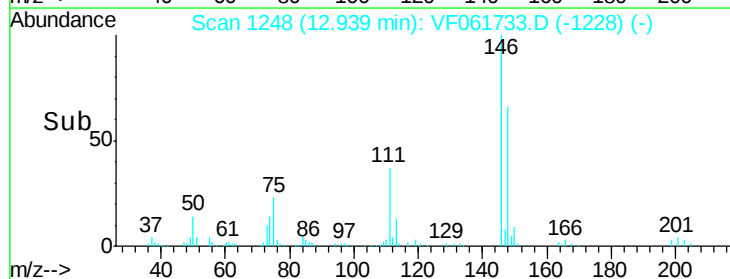
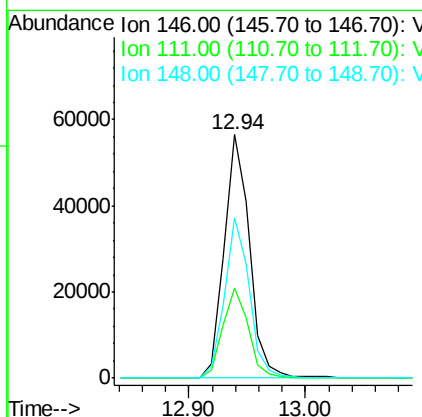
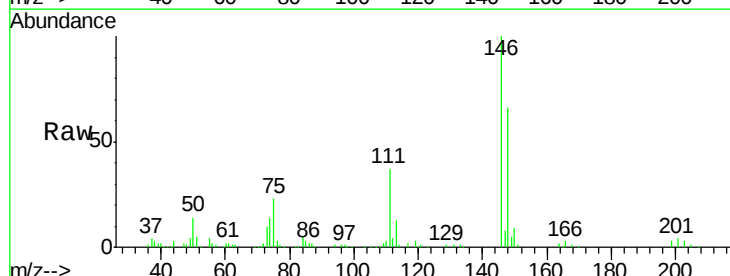
Instrument :
MSVOA_F
ClientSampleId :
LOQ-SOIL-02-QT1-2019

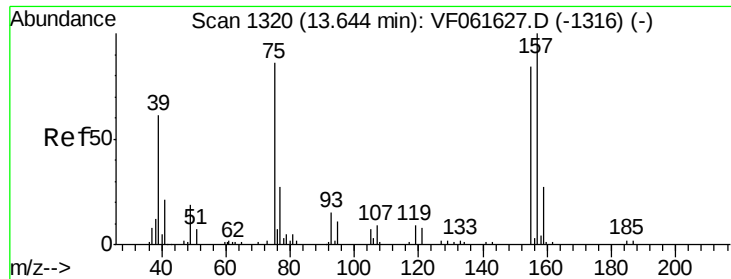
Tot Ion:117 Resp: 42871
Ion Ratio Lower Upper
117 100
201 72.1 36.2 108.6



#91
1,2-Dichlorobenzene
Concen: 10.391 ug/l
RT: 12.94 min Scan# 1248
Delta R.T. -0.00 min
Lab File: VF061733.D
Acq: 25 Feb 2019 16:35

Tgt Ion:146 Resp: 85285
Ion Ratio Lower Upper
146 100
111 36.9 20.2 60.5
148 66.0 32.3 96.9





#92

1,2-Dibromo-3-Chloropropane

Concen: 8.632 ug/l

RT: 13.64 min Scan# 1319

Delta R.T. -0.00 min

Lab File: VF061733.D

Acq: 25 Feb 2019 16:35

Instrument :

MSVOA_F

ClientSampleId :

LOQ-SOIL-02-QT1-2019

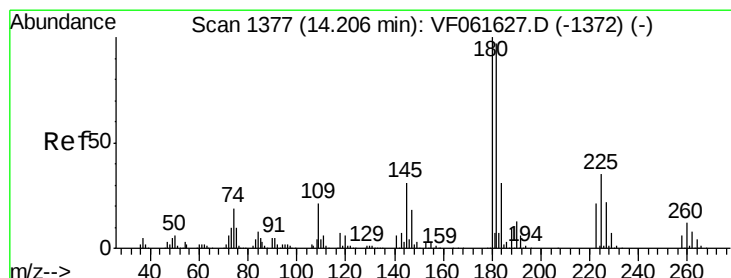
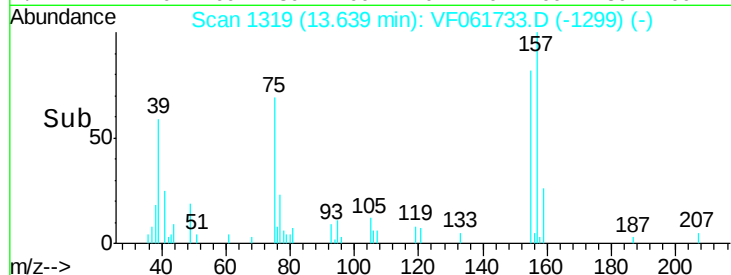
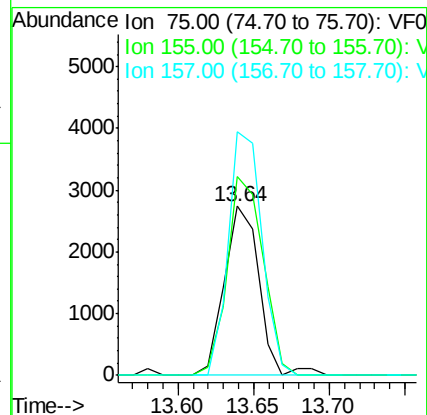
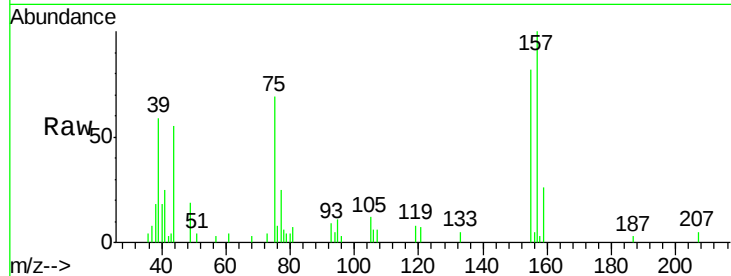
Tot Ion: 75 Resp: 4393

Ion Ratio Lower Upper

75 100

155 117.9 48.9 146.8

157 143.9 58.3 174.8



#93

1,2,4-Trichlorobenzene

Concen: 9.785 ug/l

RT: 14.20 min Scan# 1376

Delta R.T. -0.00 min

Lab File: VF061733.D

Acq: 25 Feb 2019 16:35

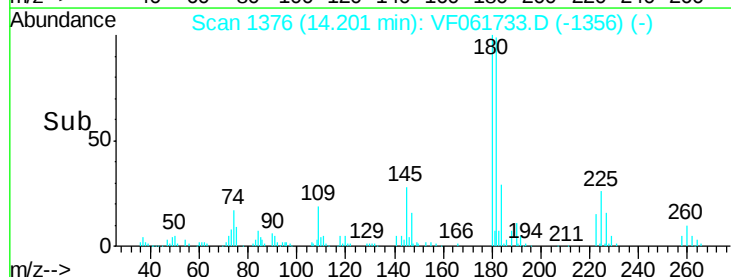
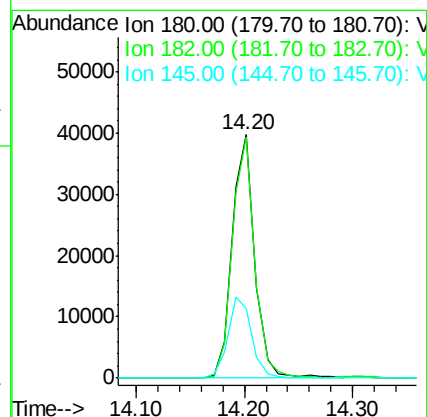
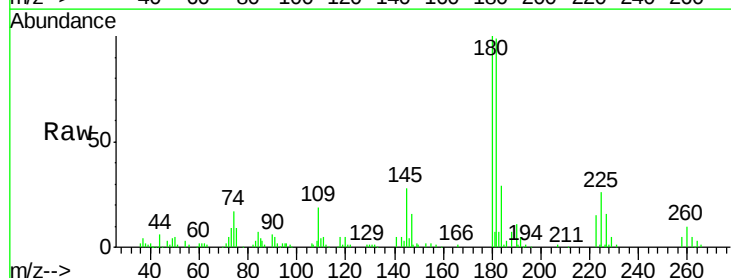
Tgt Ion: 180 Resp: 57564

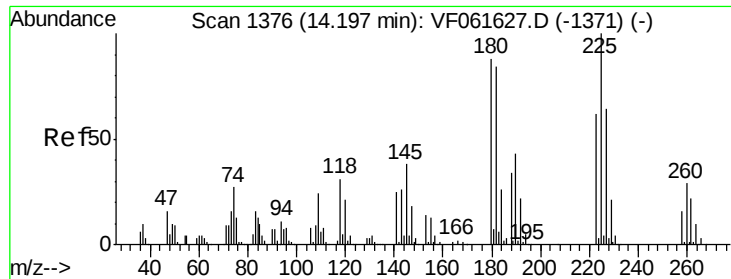
Ion Ratio Lower Upper

180 100

182 98.8 48.6 145.9

145 28.4 15.3 45.9





#94

Hexachlorobutadiene

Concen: 10.145 ug/l

RT: 14.19 min Scan# 1375

Delta R.T. -0.01 min

Lab File: VF061733.D

Acq: 25 Feb 2019 16:35

Instrument :

MSVOA_F

ClientSampleId :

LOQ-SOIL-02-QT1-2019

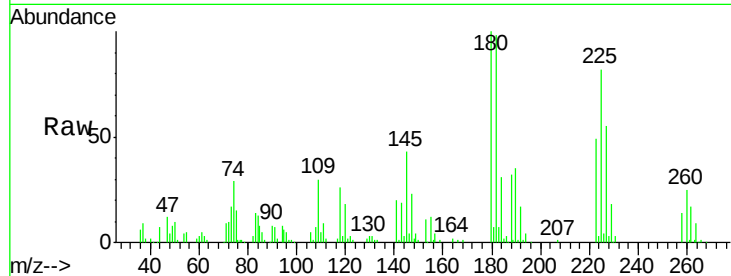
Tot Ion:225 Resp: 36859

Ion Ratio Lower Upper

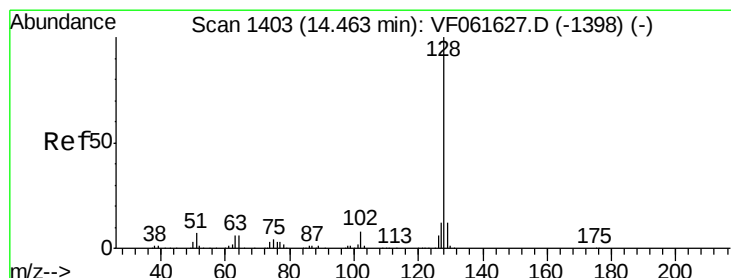
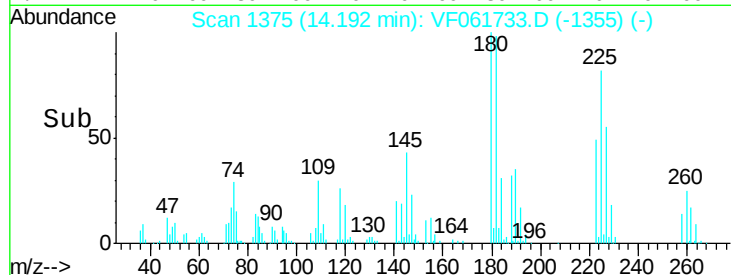
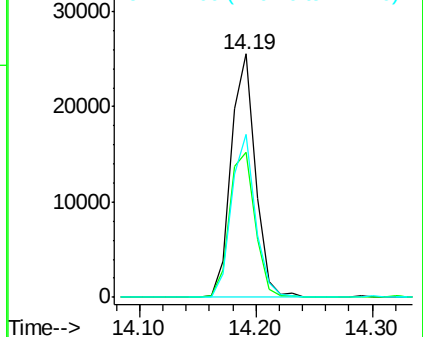
225 100

223 59.4 30.9 92.7

227 66.8 32.1 96.3



Abundance Ion 225.00 (224.70 to 225.70): V
Ion 223.00 (222.70 to 223.70): V
Ion 227.00 (226.70 to 227.70): V



#95

Naphthalene

Concen: 8.971 ug/l

RT: 14.46 min Scan# 1402

Delta R.T. -0.00 min

Lab File: VF061733.D

Acq: 25 Feb 2019 16:35

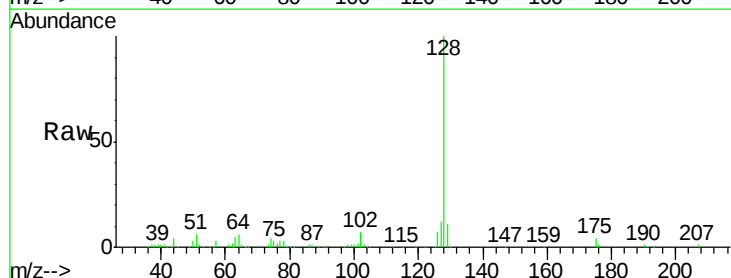
Tgt Ion:128 Resp: 92337

Ion Ratio Lower Upper

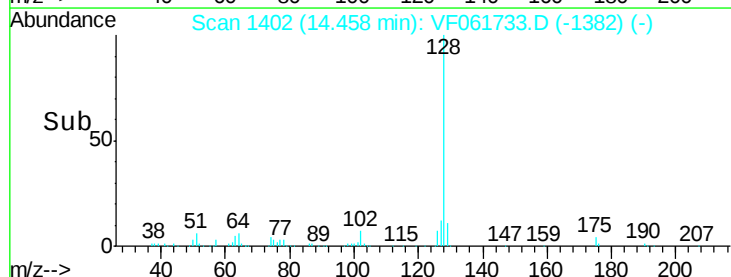
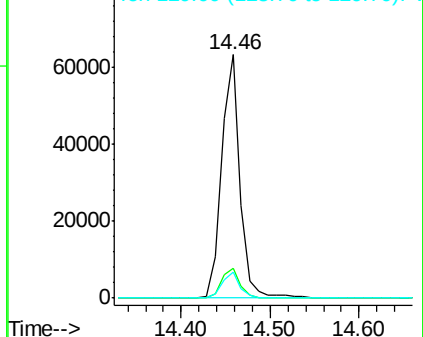
128 100

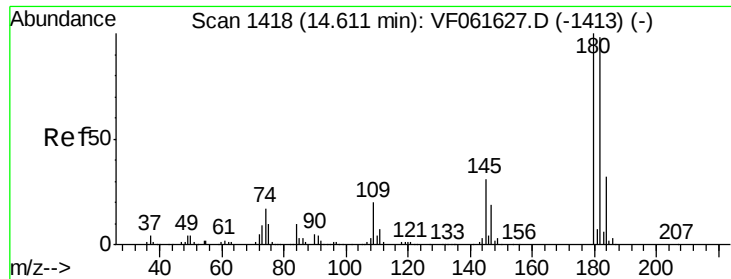
127 12.4 9.8 14.6

129 10.6 9.4 14.2



Abundance Ion 128.00 (127.70 to 128.70): V
Ion 127.00 (126.70 to 127.70): V
Ion 129.00 (128.70 to 129.70): V





#96
 1,2,3-Trichlorobenzene
 Concen: 9.738 ug/l
 RT: 14.61 min Scan# 1417
 Delta R.T. -0.00 min
 Lab File: VF061733.D
 Acq: 25 Feb 2019 16:35

Instrument :
 MSVOA_F
 ClientSampleId :
 LOQ-SOIL-02-QT1-2019

Tot Ion	Ratio	Lower	Upper
180	100		
182	94.4	49.0	147.2
145	27.2	15.4	46.1

