

Data Path : Z:\VOASRV\HPCHEM1\MSVOA F\DATA\VF081418\
 Data File : VF059964.D
 Acq On : 15 Aug 2018 1:09
 Operator : VA/AP
 Sample : J3762-02
 Misc : 5.00µ/5mL/MSVOA F/SOIL
 ALS Vial : 45 Sample Multiplier: 1

Instrument :
 MSVOA_F
 ClientSampleId :
 LOQ-SOIL-02-QT3-2018

Quant Time: Aug 15 11:03:24 2018
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_F\METHODS\82F081418S.M
 Quant Title : SW846 8260
 QLast Update : Wed Aug 15 09:20:23 2018
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	5.07	168	128612	50.00	ug/l	0.01
34) 1,4-Difluorobenzene	5.79	114	177908	50.00	ug/l	0.00
63) Chlorobenzene-d5	9.94	117	180161	50.00	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	12.65	152	116940	50.00	ug/l	0.00

System Monitoring Compounds

33) 1,2-Dichloroethane-d4	5.04	65	115486	51.36	ug/l	0.00
Spiked Amount 50.000			Recovery	=	102.72%	
35) Dibromofluoromethane	4.32	113	91779	51.48	ug/l	0.01
Spiked Amount 50.000			Recovery	=	102.96%	
50) Toluene-d8	7.73	98	193977	49.34	ug/l	0.00
Spiked Amount 50.000			Recovery	=	98.68%	
62) 4-Bromofluorobenzene	11.53	95	110540	51.19	ug/l	0.00
Spiked Amount 50.000			Recovery	=	102.38%	

Target Compounds

						Qvalue
2) Dichlorodifluoromethane	0.99	85	18107	9.50	ug/l	95
3) Chloromethane	1.09	50	8647	10.65	ug/l	97
4) Vinyl Chloride	1.17	62	8292	8.89	ug/l	95
5) Bromomethane	1.35	94	7298	8.69	ug/l	86
6) Chloroethane	1.44	64	5513	9.10	ug/l	96
7) Trichlorofluoromethane	1.54	101	22947	8.42	ug/l	91
8) Diethyl Ether	1.71	74	3972	10.60	ug/l	70
9) 1,1,2-Trichlorotrifluoroet	1.92	101	13212	9.61	ug/l	94
10) Methyl Iodide	1.97	142	21686	10.10	ug/l	91
11) Tert butyl alcohol	2.70	59	4451	49.83	ug/l	96
12) 1,1-Dichloroethene	1.87	96	9538	9.36	ug/l #	82
13) Acrolein	2.09	56	1708	46.63	ug/l #	63
14) Allyl chloride	2.20	41	14258	9.83	ug/l	96
15) Acrylonitrile	3.09	53	6537	48.27	ug/l #	85
16) Acetone	2.35	43	19898	44.58	ug/l	99
17) Carbon Disulfide	1.89	76	25169	9.64	ug/l	97
18) Methyl Acetate	2.47	43	6115	9.85	ug/l	95
19) Methyl tert-butyl Ether	2.55	73	27570	9.42	ug/l	96
20) Methylene Chloride	2.34	84	5913	1.27	ug/l	89
21) trans-1,2-Dichloroethene	2.43	96	10020	10.11	ug/l	95
22) Diisopropyl ether	2.94	45	32642	9.79	ug/l	98
23) Vinyl Acetate	3.34	43	80958	48.90	ug/l #	95
24) 1,1-Dichloroethane	3.02	63	23953	10.16	ug/l	99
25) 2-Butanone	4.53	43	21608	47.87	ug/l	92
26) 1,2-Dichloropropane	3.79	77	14988	9.77	ug/l	96
27) cis-1,2-Dichloroethene	3.66	96	10645	9.72	ug/l	86
28) Bromochloromethane	3.91	49	8951	10.20	ug/l	98
29) Tetrahydrofuran	4.27	42	8022	51.74	ug/l	95
30) Chloroform	4.05	83	31404	9.70	ug/l	87
31) Cyclohexane	3.89	56	11748	9.97	ug/l	93
32) 1,1,1-Trichloroethane	4.29	97	24787	9.31	ug/l	96
36) 1,1-Dichloropropene	4.48	75	18489	9.35	ug/l	92
37) Ethyl Acetate	4.30	43	9383	11.10	ug/l #	82
38) Carbon Tetrachloride	4.19	117	31289	9.51	ug/l	95

Data Path : Z:\VOASRV\HPCHEM1\MSVOA F\DATA\VF081418\
 Data File : VF059964.D
 Acq On : 15 Aug 2018 1:09
 Operator : VA/AP
 Sample : J3762-02
 Misc : 5.00µ/5mL/MSVOA F/SOIL
 ALS Vial : 45 Sample Multiplier: 1

Instrument :
 MSVOA_F
 ClientSampleId :
 LOQ-SOIL-02-QT3-2018

Quant Time: Aug 15 11:03:24 2018
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_F\METHODS\82F081418S.M
 Quant Title : SW846 8260
 QLast Update : Wed Aug 15 09:20:23 2018
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
39) Methylcyclohexane	5.65	83	13938	9.70	ug/l	89
40) Benzene	4.83	78	32244	9.64	ug/l	99
41) Methacrylonitrile	4.93	41	4214	10.10	ug/l	95
42) 1,2-Dichloroethane	5.14	62	26422	9.94	ug/l #	86
43) Isopropyl Acetate	7.13	43	8154	8.84	ug/l #	89
44) Trichloroethene	5.69	130	13729	10.66	ug/l	100
45) 1,2-Dichloropropane	6.42	63	8783	9.93	ug/l	94
46) Dibromomethane	6.27	93	7878	9.02	ug/l #	85
47) Bromodichloromethane	6.57	83	24941	9.90	ug/l	97
48) Methyl methacrylate	6.89	41	6169	8.98	ug/l #	88
49) 1,4-Dioxane	6.88	88	1085	208.95	ug/l	92
51) 4-Methyl-2-Pentanone	8.43	43	44540	49.87	ug/l	100
52) Toluene	7.80	92	24884	10.04	ug/l	85
53) t-1,3-Dichloropropene	8.44	75	18663	9.06	ug/l	92
54) cis-1,3-Dichloropropene	7.47	75	18492	9.33	ug/l	96
55) 1,1,2-Trichloroethane	8.66	97	8576	10.13	ug/l	93
56) Ethyl methacrylate	8.78	69	7416	8.15	ug/l	96
57) 1,3-Dichloropropane	9.02	76	14371	9.21	ug/l	100
58) 2-Chloroethyl Vinyl ether	7.80	63	5446	44.50	ug/l	100
59) 2-Hexanone	9.65	43	31356	48.13	ug/l	94
60) Dibromochloromethane	8.87	129	15034	8.97	ug/l	99
61) 1,2-Dibromoethane	9.15	107	10570	10.01	ug/l	81
64) Tetrachloroethene	8.32	164	13965	9.96	ug/l	97
65) Chlorobenzene	9.96	112	34173	9.82	ug/l	100
66) 1,1,1,2-Tetrachloroethane	10.09	131	16736	9.95	ug/l	98
67) Ethyl Benzene	10.06	91	58837	9.57	ug/l	94
68) m/p-Xylenes	10.28	106	42233	20.43	ug/l	94
69) o-Xylene	10.85	106	21215	9.45	ug/l	94
70) Styrene	10.91	104	30999	9.33	ug/l	93
71) Bromoform	10.90	173	9469	9.06	ug/l	96
73) Isopropylbenzene	11.24	105	70352	9.57	ug/l	96
74) N-amyl acetate	11.48	43	15697	9.68	ug/l	96
75) 1,1,2,2-Tetrachloroethane	11.80	83	12319	9.96	ug/l	86
76) 1,2,3-Trichloropropane	11.90	75	10316	9.68	ug/l	94
77) Bromobenzene	11.60	156	18549	9.61	ug/l	92
78) n-propylbenzene	11.70	91	84218	9.76	ug/l	97
79) 2-Chlorotoluene	11.82	91	54712	10.12	ug/l	95
80) 1,3,5-Trimethylbenzene	11.92	105	65875	9.62	ug/l	98
81) trans-1,4-Dichloro-2-buten	11.97	75	2944	6.76	ug/l	94
82) 4-Chlorotoluene	12.00	91	53691	9.00	ug/l	99
83) tert-Butylbenzene	12.23	119	63740	9.45	ug/l	92
84) 1,2,4-Trimethylbenzene	12.30	105	68322	9.90	ug/l	99
85) sec-Butylbenzene	12.40	105	82760	9.63	ug/l	96
86) p-Isopropyltoluene	12.55	119	70562	9.32	ug/l	100
87) 1,3-Dichlorobenzene	12.57	146	36090	9.86	ug/l	94
88) 1,4-Dichlorobenzene	12.66	146	35645	9.89	ug/l	100
89) n-Butylbenzene	12.94	91	65851	9.03	ug/l	98
90) Hexachloroethane	13.00	117	18540	9.89	ug/l	69
91) 1,2-Dichlorobenzene	13.03	146	35114	9.89	ug/l	95
92) 1,2-Dibromo-3-Chloropropan	13.72	75	2963	8.85	ug/l	78

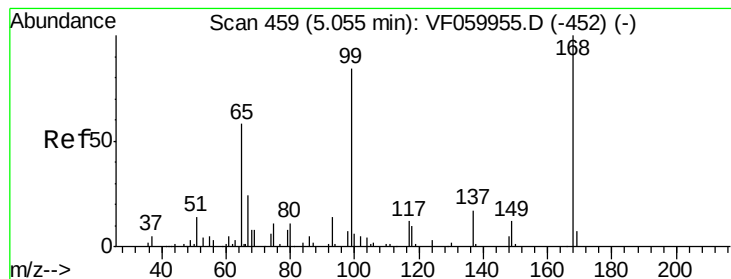
Data Path : Z:\V0ASRV\HPCHEM1\MSVOA F\DATA\VF081418\
Data File : VF059964.D
Acq On : 15 Aug 2018 1:09
Operator : VA/AP
Sample : J3762-02
Misc : 5.00µ/5mL/MSVOA F/SOIL
ALS Vial : 45 Sample Multiplier: 1

Instrument :
MSVOA_F
ClientSampleId :
LOQ-SOIL-02-QT3-2018

Quant Time: Aug 15 11:03:24 2018
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA_F\METHODS\82F081418S.M
Quant Title : SW846 8260
QLast Update : Wed Aug 15 09:20:23 2018
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
93) 1,2,4-Trichlorobenzene	14.28	180	27761	9.76	µg/l	89
94) Hexachlorobutadiene	14.27	225	18004	8.85	µg/l	94
95) Naphthalene	14.53	128	40481	8.71	µg/l	98
96) 1,2,3-Trichlorobenzene	14.68	180	25280	9.31	µg/l	95

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



#1

Pentafluorobenzene

Concen: 50.00 ug/l

RT: 5.07 min Scan# 460

Delta R.T. 0.01 min

Lab File: VF059964.D

Acq: 15 Aug 2018 1:09

Instrument :

MSVOA_F

ClientSampleId :

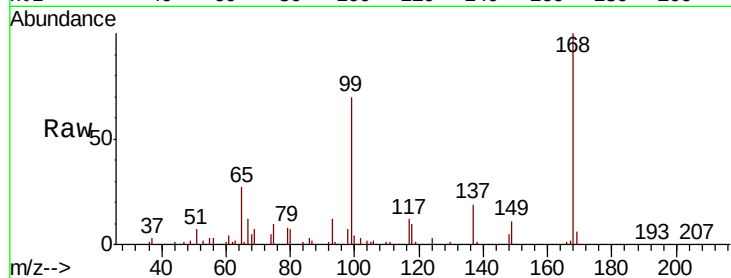
LOQ-SOIL-02-QT3-2018

Tot Ion:168 Resp: 128612

Ion Ratio Lower Upper

168 100

99 70.1 67.4 101.0



Abundance Ion 168.00 (167.70 to 168.70): VF0

Ion 99.00 (98.70 to 99.70): VF0

5.07

40000

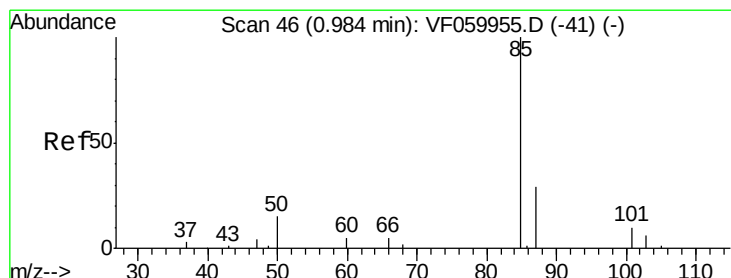
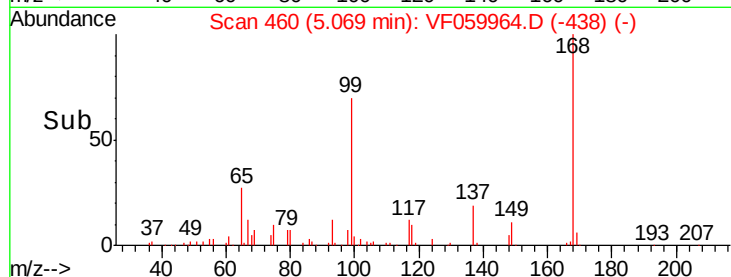
30000

20000

10000

0

Time--> 4.90 5.00 5.10 5.20



#2

Dichlorodifluoromethane

Concen: 9.50 ug/l

RT: 0.99 min Scan# 46

Delta R.T. 0.00 min

Lab File: VF059964.D

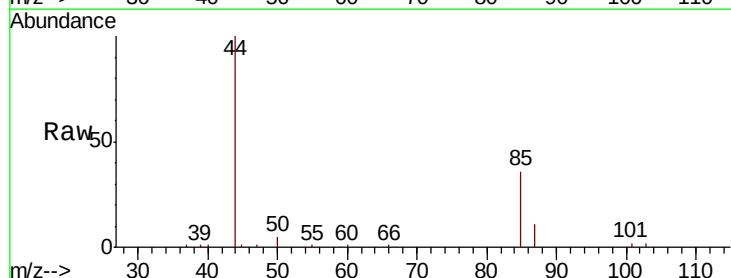
Acq: 15 Aug 2018 1:09

Tgt Ion: 85 Resp: 18107

Ion Ratio Lower Upper

85 100

87 31.3 14.4 43.4



Abundance Ion 85.00 (84.70 to 85.70): VF0

Ion 87.00 (86.70 to 87.70): VF0

0.99

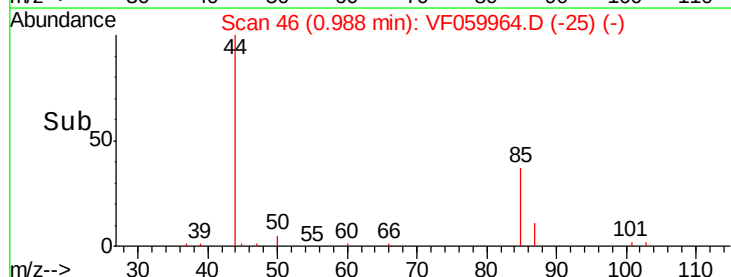
6000

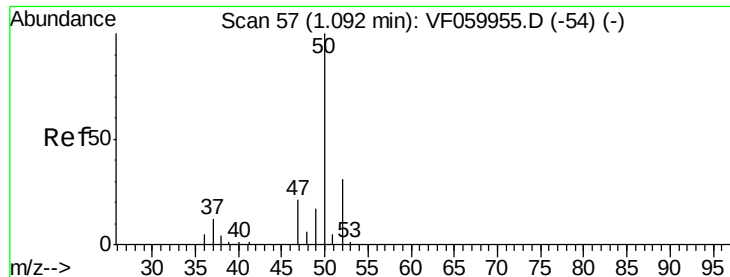
4000

2000

0

Time--> 0.90 1.00 1.10





#3

Chloromethane

Concen: 10.65 ug/l

RT: 1.09 min Scan# 56

Delta R.T. -0.01 min

Lab File: VF059964.D

Acq: 15 Aug 2018 1:09

Instrument :

MSVOA_F

ClientSampleId :

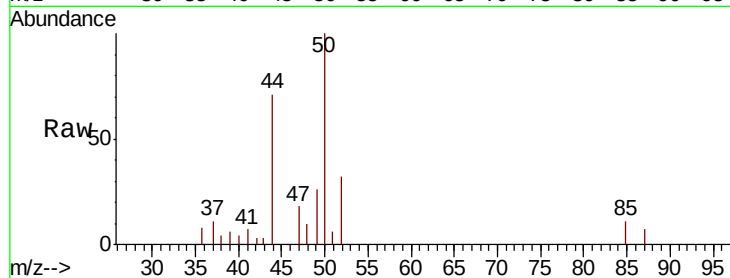
LOQ-SOIL-02-QT3-2018

Tot Ion: 50 Resp: 8647

Ion Ratio Lower Upper

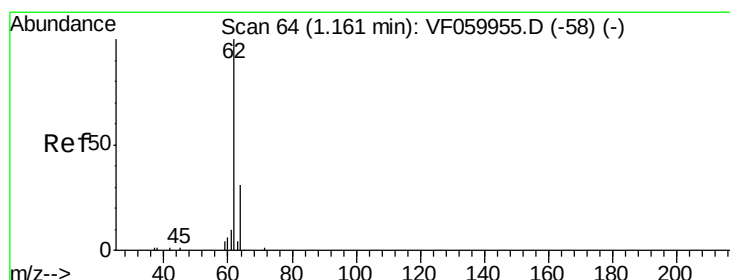
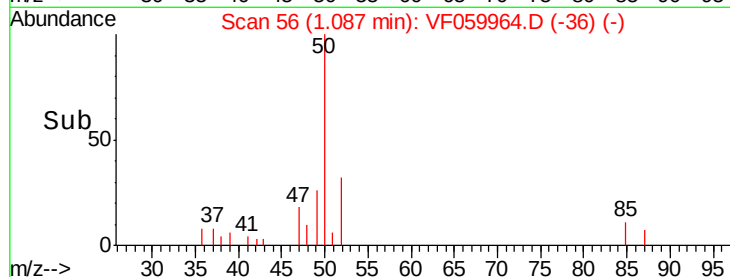
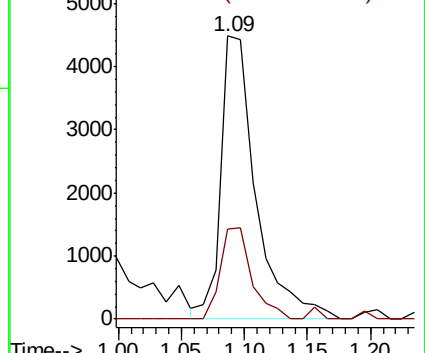
50 100

52 31.7 24.2 36.2



Abundance Ion 50.00 (49.70 to 50.70): VF0

Ion 52.00 (51.70 to 52.70): VF0



#4

Vinyl Chloride

Concen: 8.89 ug/l

RT: 1.17 min Scan# 64

Delta R.T. 0.00 min

Lab File: VF059964.D

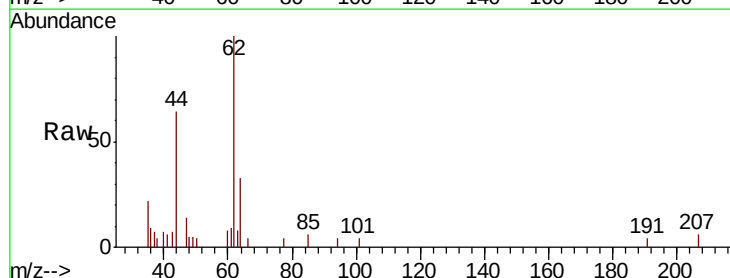
Acq: 15 Aug 2018 1:09

Tgt Ion: 62 Resp: 8292

Ion Ratio Lower Upper

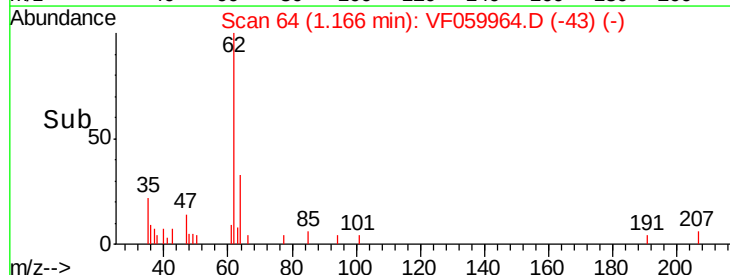
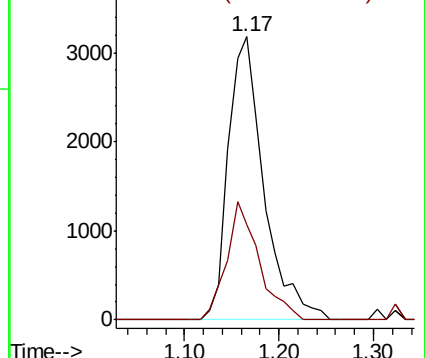
62 100

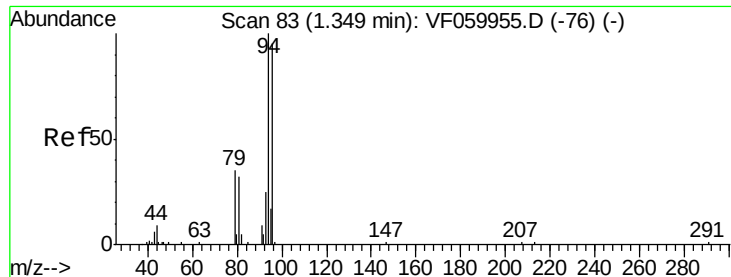
64 33.5 24.7 37.1



Abundance Ion 62.00 (61.70 to 62.70): VF0

Ion 64.00 (63.70 to 64.70): VF0





#5

Bromomethane

Concen: 8.69 ug/l

RT: 1.35 min Scan# 83

Delta R.T. 0.00 min

Lab File: VF059964.D

Acq: 15 Aug 2018 1:09

Instrument :

MSVOA_F

ClientSampleId :

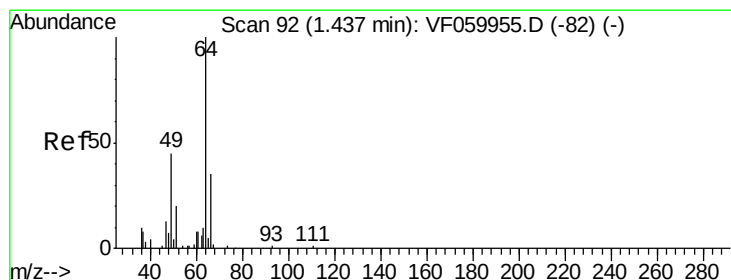
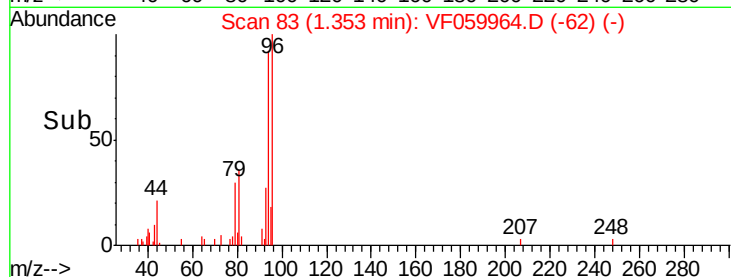
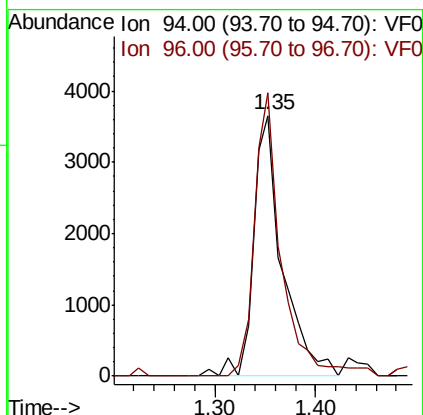
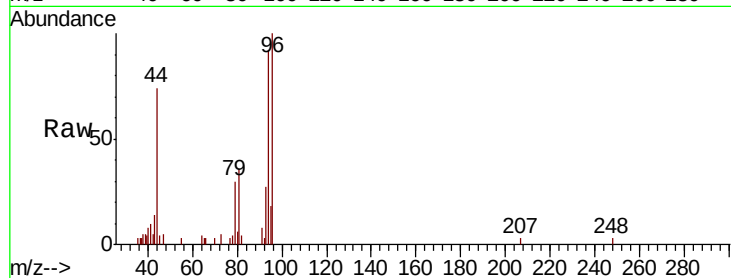
LOQ-SOIL-02-QT3-2018

Tot Ion: 94 Resp: 7298

Ion Ratio Lower Upper

94 100

96 108.6 76.3 114.5



#6

Chloroethane

Concen: 9.10 ug/l

RT: 1.44 min Scan# 92

Delta R.T. 0.00 min

Lab File: VF059964.D

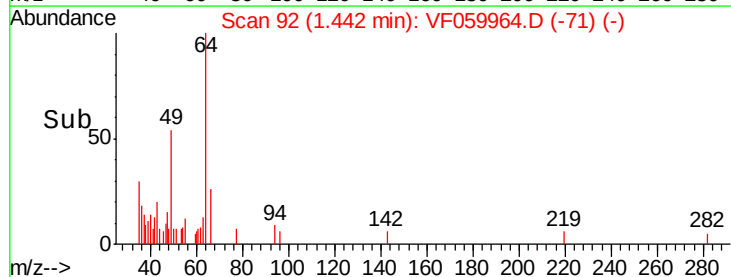
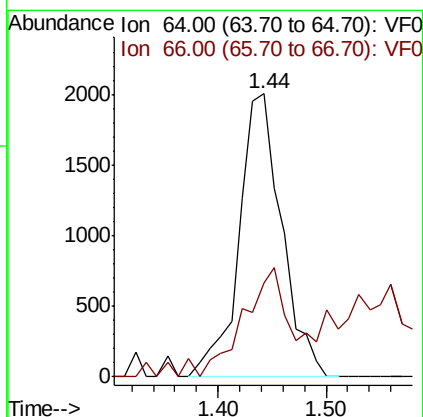
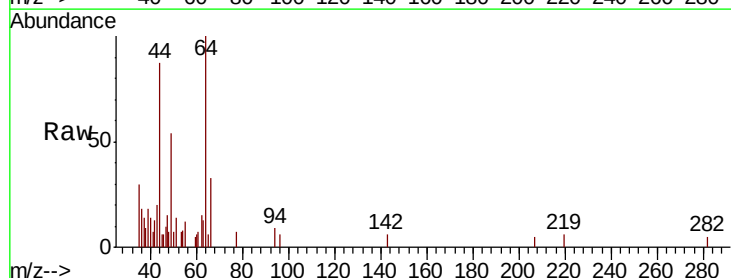
Acq: 15 Aug 2018 1:09

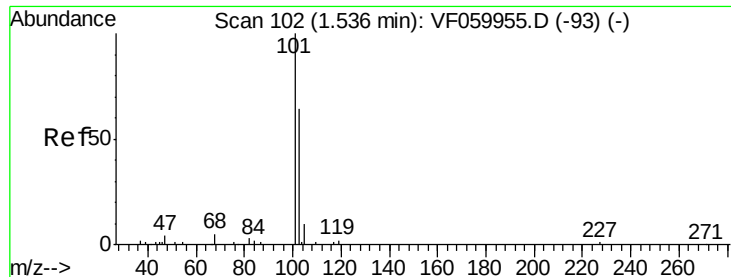
Tgt Ion: 64 Resp: 5513

Ion Ratio Lower Upper

64 100

66 33.1 28.2 42.2





#7

Trichlorofluoromethane

Concen: 8.42 ug/l

RT: 1.54 min Scan# 102

Delta R.T. 0.00 min

Lab File: VF059964.D

Acq: 15 Aug 2018 1:09

Instrument :

MSVOA_F

ClientSampleId :

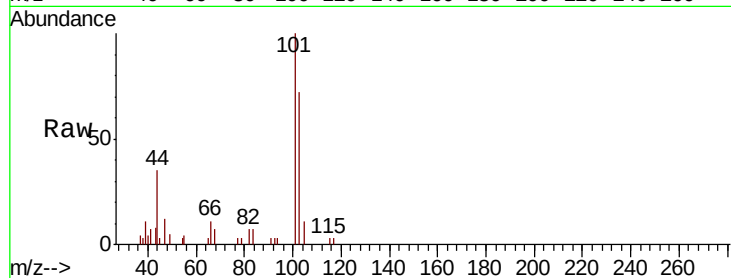
LOQ-SOIL-02-QT3-2018

Tot Ion:101 Resp: 22947

Ion Ratio Lower Upper

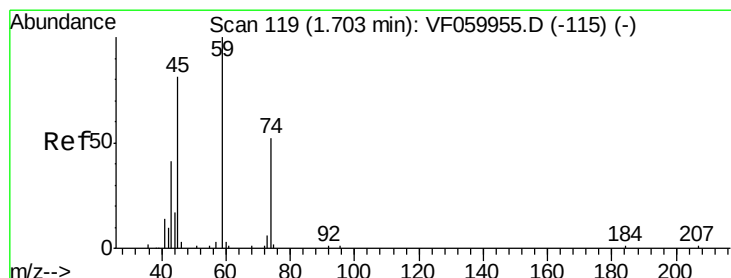
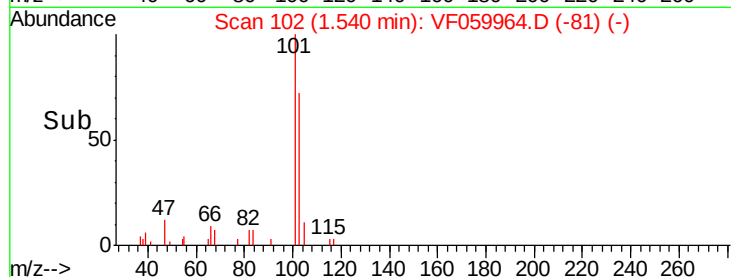
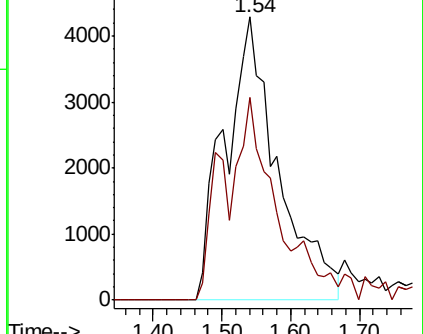
101 100

103 71.8 51.6 77.4



Abundance Ion 101.00 (100.70 to 101.70): V

Ion 103.00 (102.70 to 103.70): V



#8

Diethyl Ether

Concen: 10.60 ug/l

RT: 1.71 min Scan# 119

Delta R.T. 0.00 min

Lab File: VF059964.D

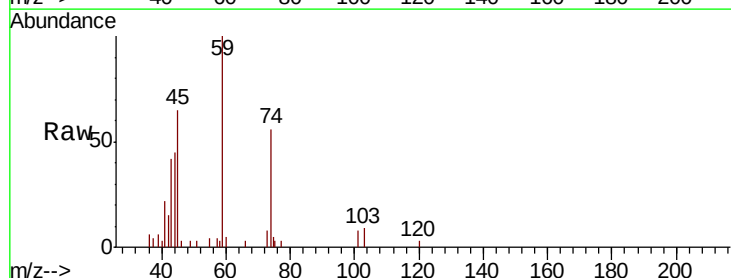
Acq: 15 Aug 2018 1:09

Tgt Ion: 74 Resp: 3972

Ion Ratio Lower Upper

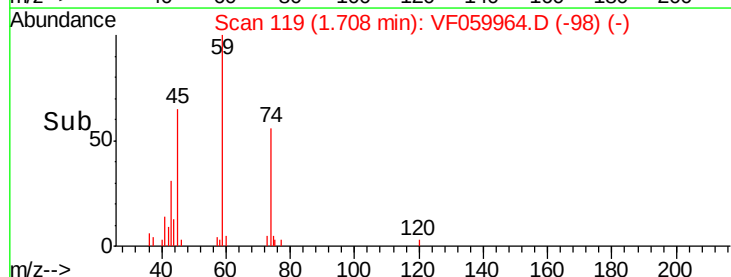
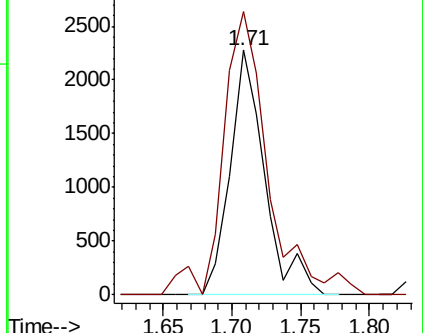
74 100

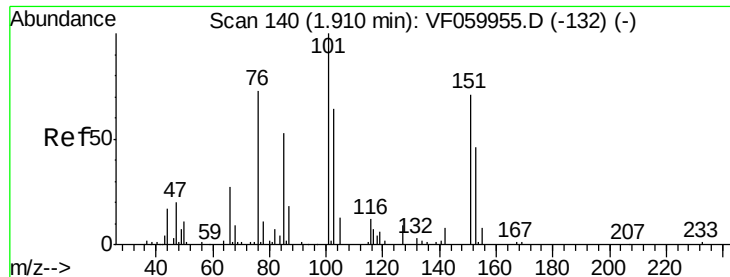
45 115.8 77.5 232.6



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: 9.61 ug/l

RT: 1.92 min Scan# 140

Delta R.T. 0.00 min

Lab File: VF059964.D

Acq: 15 Aug 2018 1:09

Instrument :

MSVOA_F

ClientSampleId :

LOQ-SOIL-02-QT3-2018

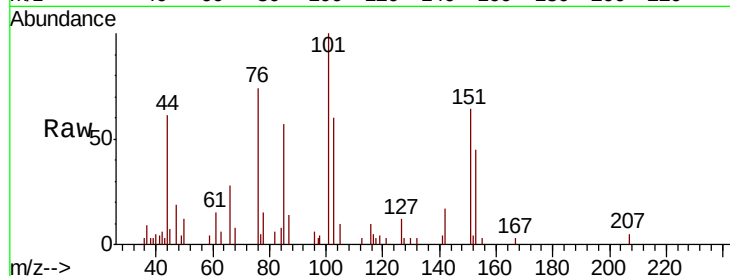
Tot Ion:101 Resp: 13212

Ion Ratio Lower Upper

101 100

85 56.7 42.1 63.1

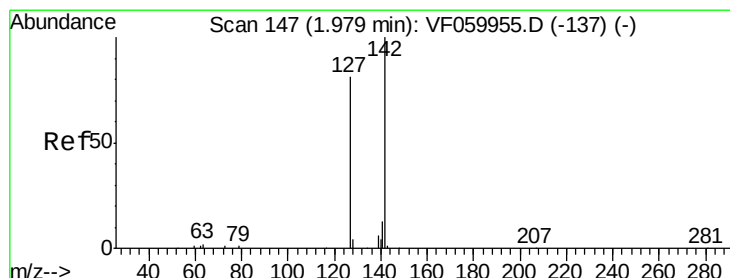
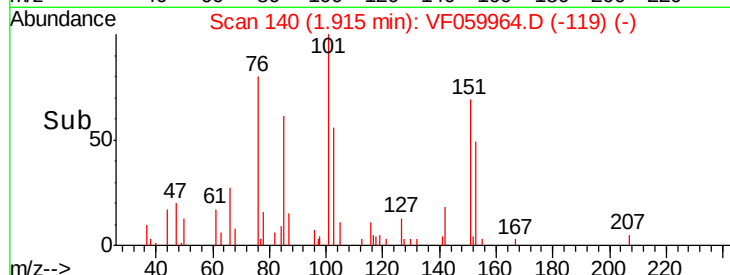
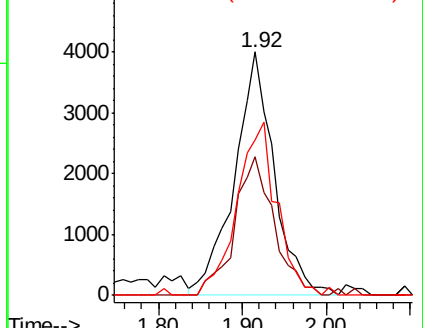
151 64.0 55.4 83.0



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



#10

Methyl Iodide

Concen: 10.10 ug/l

RT: 1.97 min Scan# 146

Delta R.T. -0.01 min

Lab File: VF059964.D

Acq: 15 Aug 2018 1:09

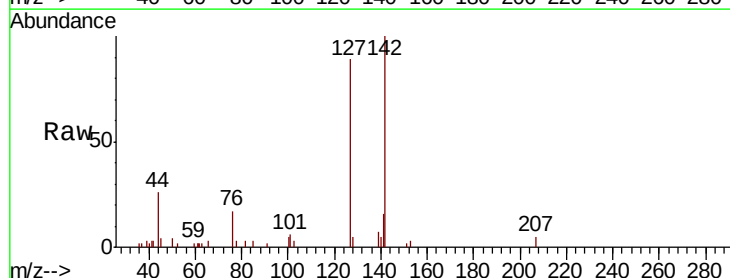
Tgt Ion:142 Resp: 21686

Ion Ratio Lower Upper

142 100

127 88.8 64.5 96.7

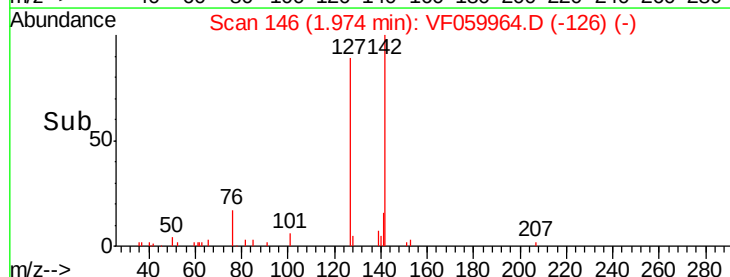
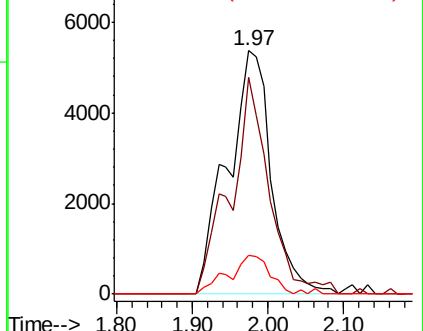
141 16.1 10.8 16.2

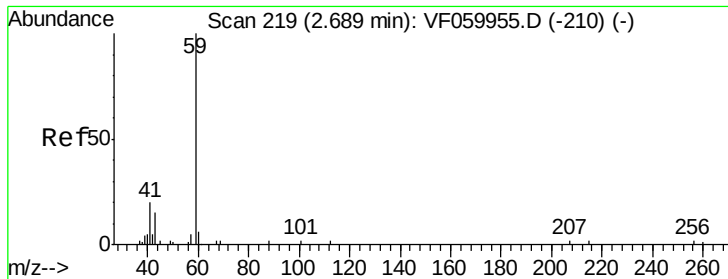


Abundance Ion 142.00 (141.70 to 142.70): V

Ion 127.00 (126.70 to 127.70): V

Ion 141.00 (140.70 to 141.70): V

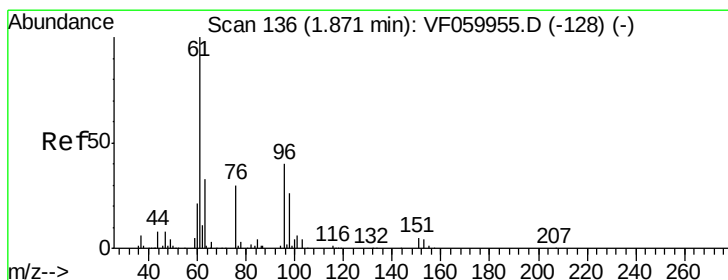
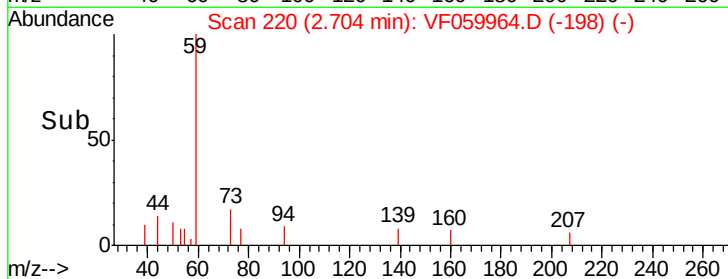
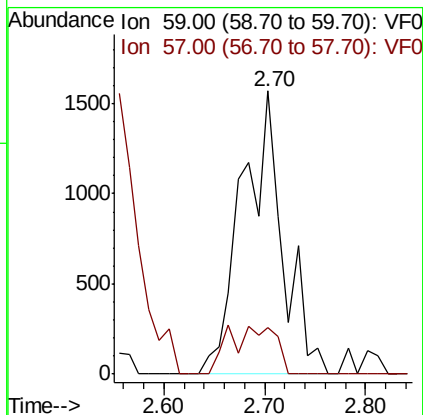
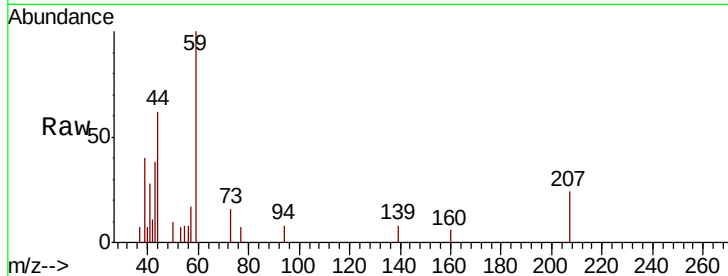




#11
Tert butyl alcohol
Concen: 49.83 ug/l
RT: 2.70 min Scan# 220
Delta R.T. 0.01 min
Lab File: VF059964.D
Acq: 15 Aug 2018 1:09

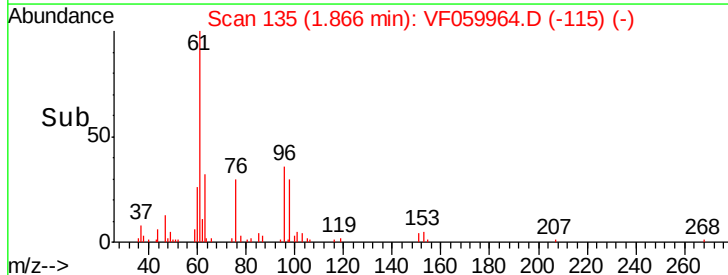
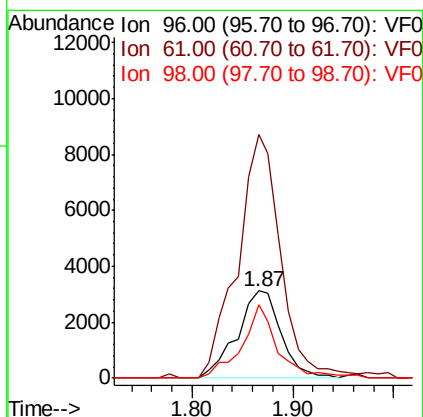
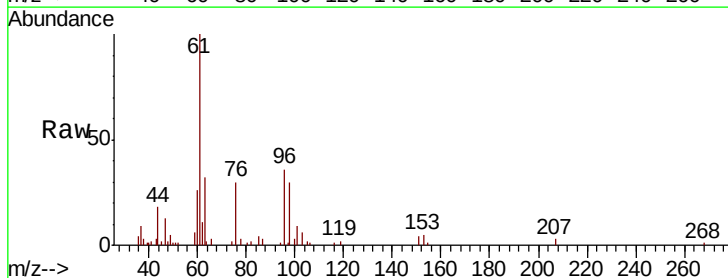
Instrument :
MSVOA_F
ClientSampleId :
LOQ-SOIL-02-QT3-2018

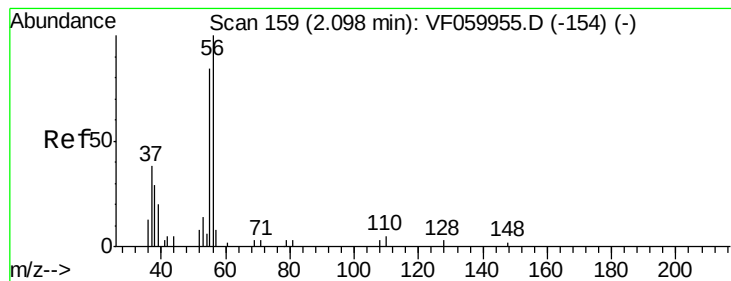
Tot Ion: 59 Resp: 4451
Ion Ratio Lower Upper
59 100
57 16.5 12.0 18.0



#12
1,1-Dichloroethene
Concen: 9.36 ug/l
RT: 1.87 min Scan# 135
Delta R.T. -0.01 min
Lab File: VF059964.D
Acq: 15 Aug 2018 1:09

Tgt Ion: 96 Resp: 9538
Ion Ratio Lower Upper
96 100
61 279.1 201.0 301.4
98 83.8 51.9 77.9#





#13

Acrolein

Concen: 46.63 ug/l

RT: 2.09 min Scan# 158

Delta R.T. -0.00 min

Lab File: VF059964.D

Acq: 15 Aug 2018 1:09

Instrument :

MSVOA_F

ClientSampleId :

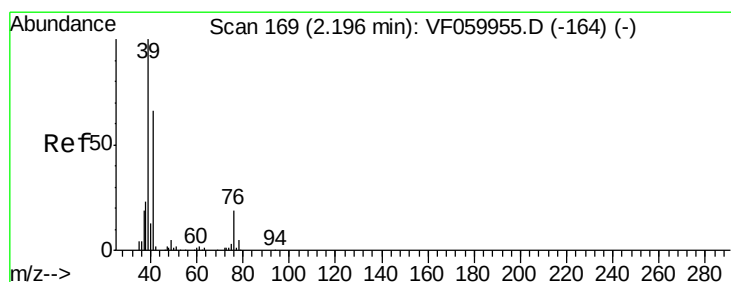
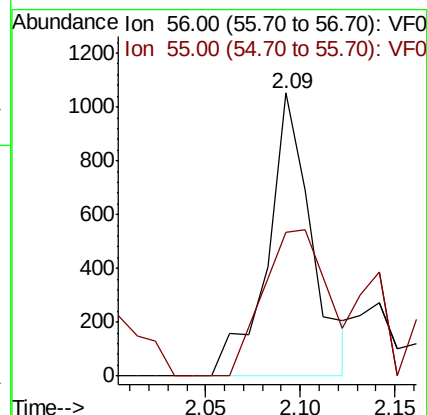
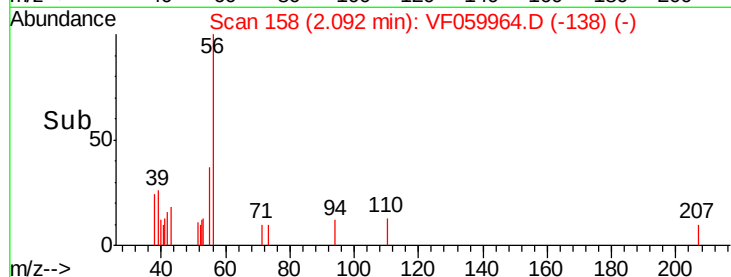
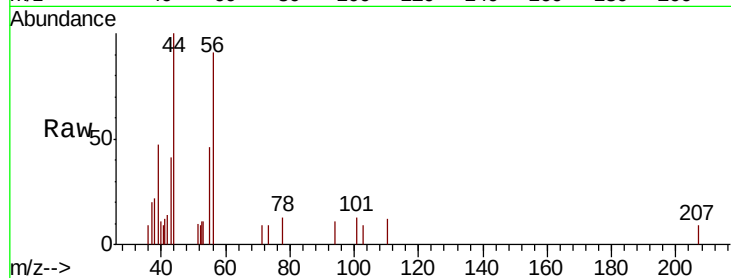
LOQ-SOIL-02-QT3-2018

Tot Ion: 56 Resp: 1708

Ion Ratio Lower Upper

56 100

55 50.6 67.4 101.2#



#14

Allyl chloride

Concen: 9.83 ug/l

RT: 2.20 min Scan# 169

Delta R.T. 0.00 min

Lab File: VF059964.D

Acq: 15 Aug 2018 1:09

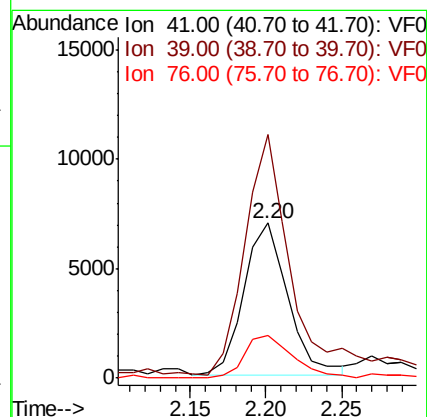
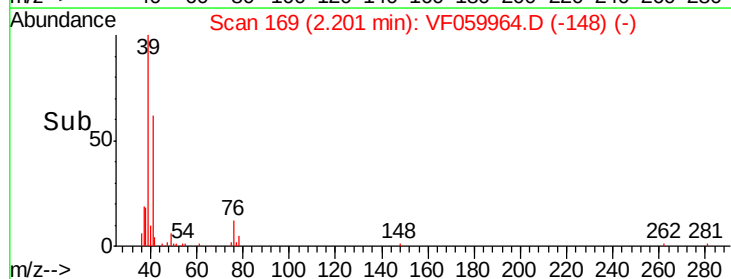
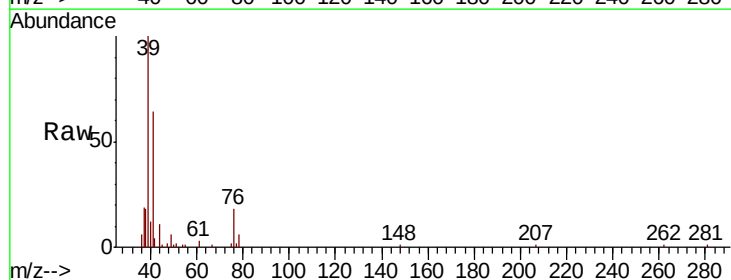
Tgt Ion: 41 Resp: 14258

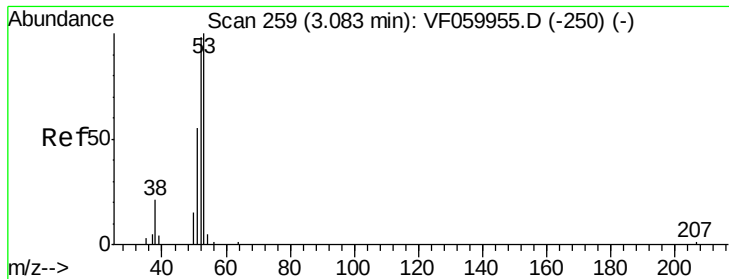
Ion Ratio Lower Upper

41 100

39 157.0 121.0 181.4

76 27.9 23.6 35.4





#15

Acrylonitrile

Concen: 48.27 ug/l

RT: 3.09 min Scan# 259

Delta R.T. 0.00 min

Lab File: VF059964.D

Acq: 15 Aug 2018 1:09

Instrument :

MSVOA_F

ClientSampleId :

LOQ-SOIL-02-QT3-2018

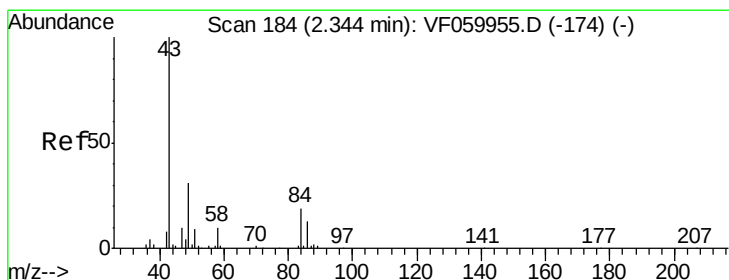
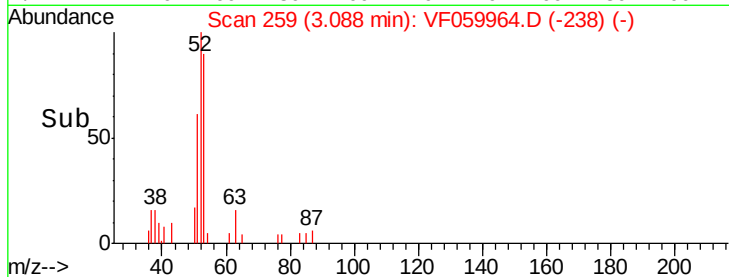
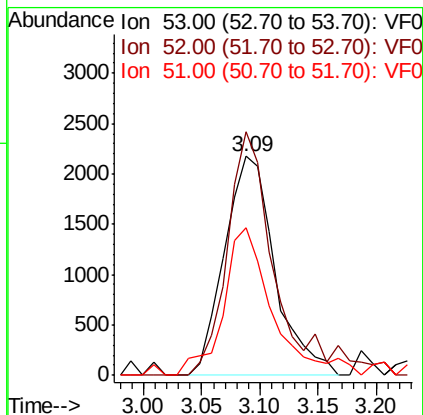
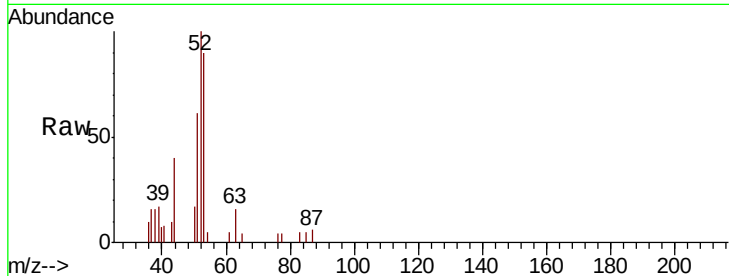
Tot Ion: 53 Resp: 6537

Ion Ratio Lower Upper

53 100

52 111.2 78.1 117.1

51 67.3 44.2 66.4#



#16

Acetone

Concen: 44.58 ug/l

RT: 2.35 min Scan# 184

Delta R.T. 0.00 min

Lab File: VF059964.D

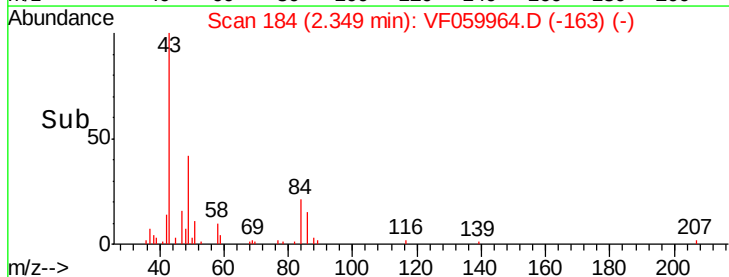
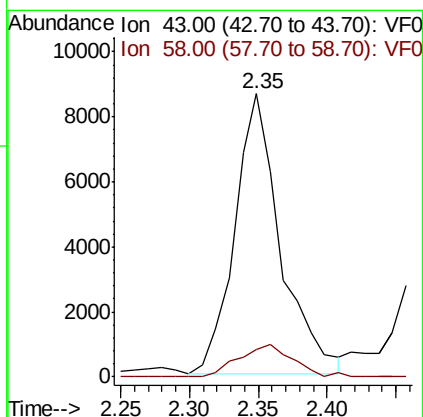
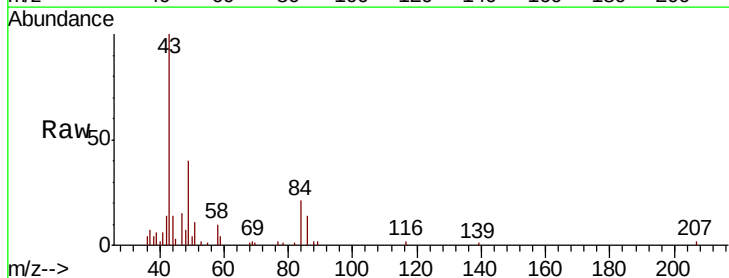
Acq: 15 Aug 2018 1:09

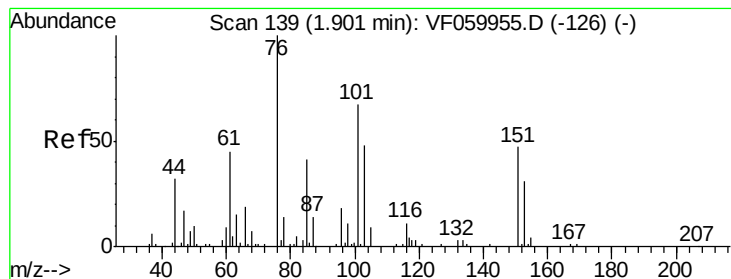
Tgt Ion: 43 Resp: 19898

Ion Ratio Lower Upper

43 100

58 9.9 8.1 12.1





#17

Carbon Disulfide

Concen: 9.64 ug/l

RT: 1.89 min Scan# 137

Delta R.T. -0.02 min

Lab File: VF059964.D

Acq: 15 Aug 2018 1:09

Instrument :

MSVOA_F

ClientSampleId :

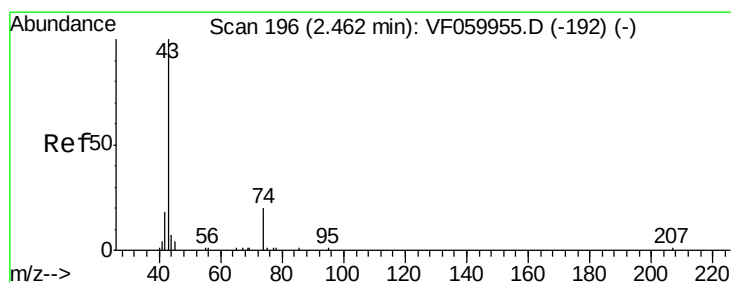
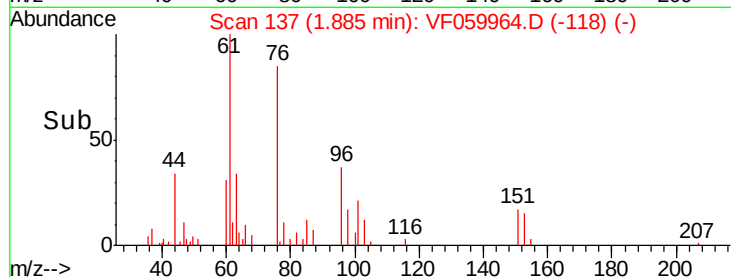
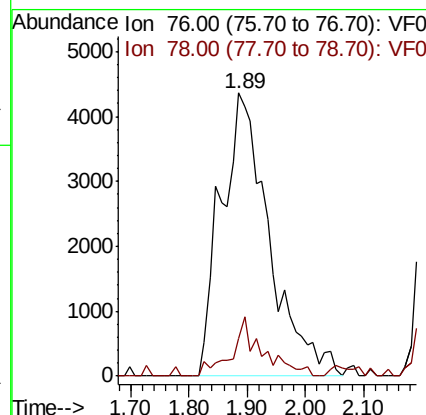
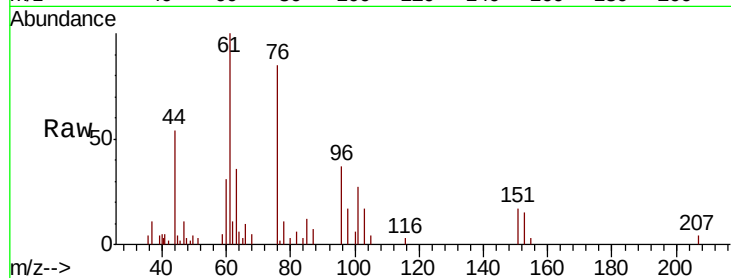
LOQ-SOIL-02-QT3-2018

Tot Ion: 76 Resp: 25169

Ion Ratio Lower Upper

76 100

78 13.1 11.4 17.0



#18

Methyl Acetate

Concen: 9.85 ug/l

RT: 2.47 min Scan# 196

Delta R.T. 0.00 min

Lab File: VF059964.D

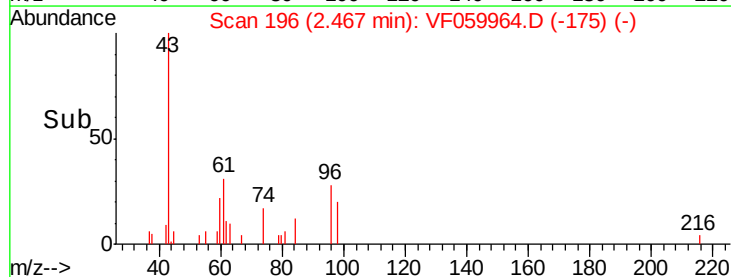
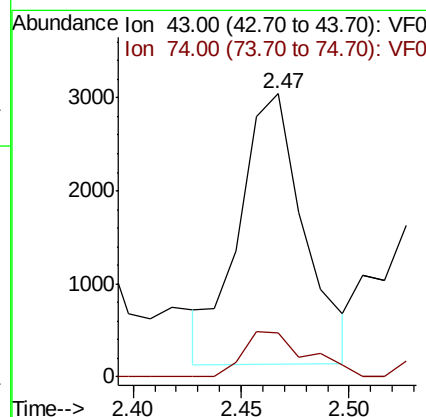
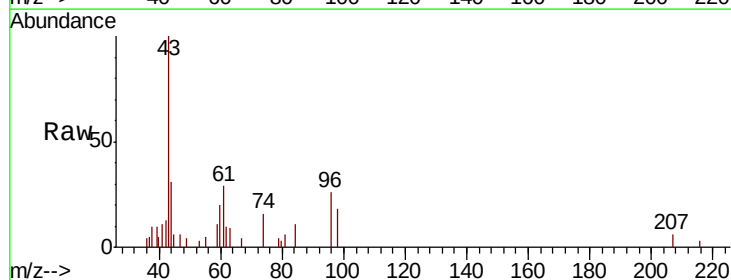
Acq: 15 Aug 2018 1:09

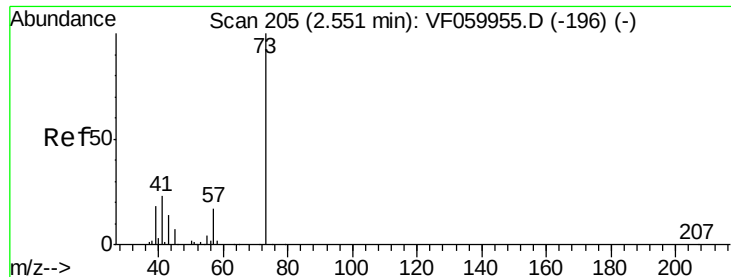
Tgt Ion: 43 Resp: 6115

Ion Ratio Lower Upper

43 100

74 15.6 14.3 21.5

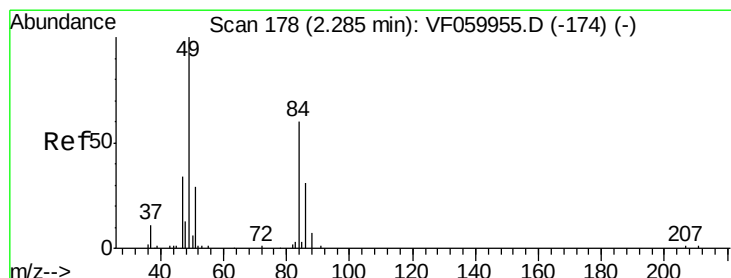
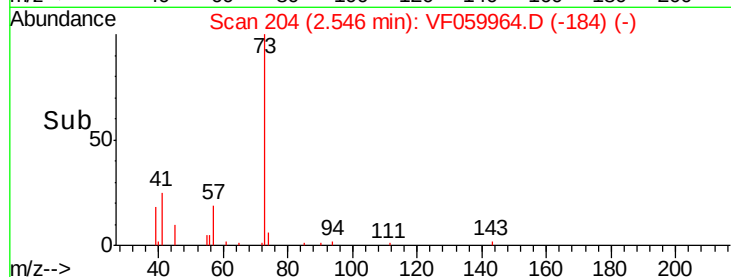
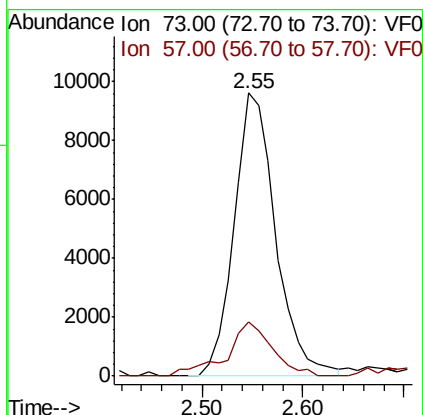
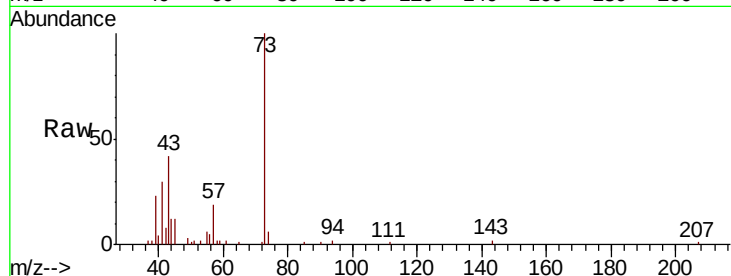




#19
Methyl tert-butyl Ether
Concen: 9.42 ug/l
RT: 2.55 min Scan# 204
Delta R.T. -0.01 min
Lab File: VF059964.D
Acq: 15 Aug 2018 1:09

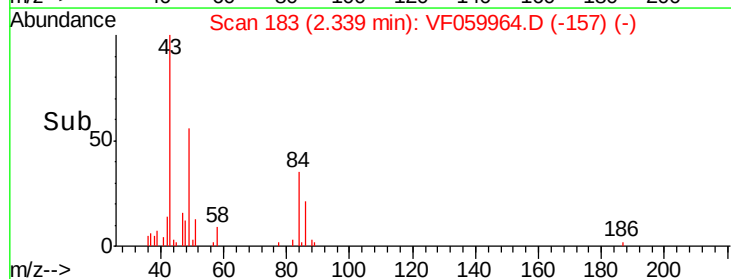
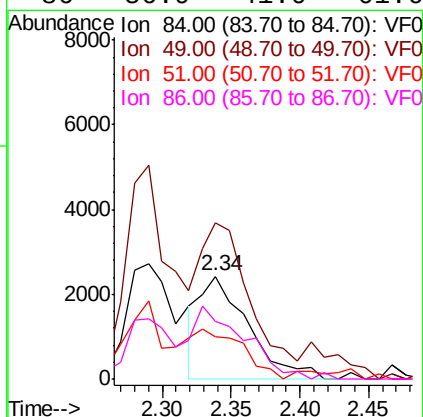
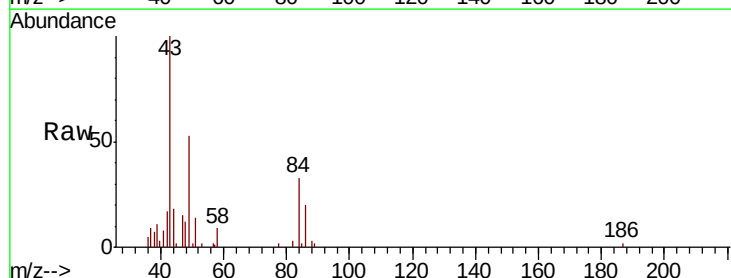
Instrument :
MSVOA_F
ClientSampleId :
LOQ-SOIL-02-QT3-2018

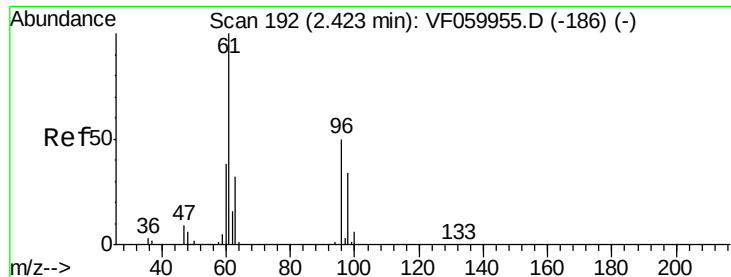
Tot Ion: 73 Resp: 27570
Ion Ratio Lower Upper
73 100
57 19.1 14.0 21.0



#20
Methylene Chloride
Concen: 1.27 ug/l
RT: 2.34 min Scan# 183
Delta R.T. 0.05 min
Lab File: VF059964.D
Acq: 15 Aug 2018 1:09

Tgt Ion: 84 Resp: 5913
Ion Ratio Lower Upper
84 100
49 152.5 134.8 202.2
51 40.9 39.8 59.6
86 56.9 41.0 61.6





#21

trans-1,2-Dichloroethene

Concen: 10.11 ug/l

RT: 2.43 min Scan# 192

Delta R.T. 0.00 min

Lab File: VF059964.D

Acq: 15 Aug 2018 1:09

Instrument :

MSVOA_F

ClientSampleId :

LOQ-SOIL-02-QT3-2018

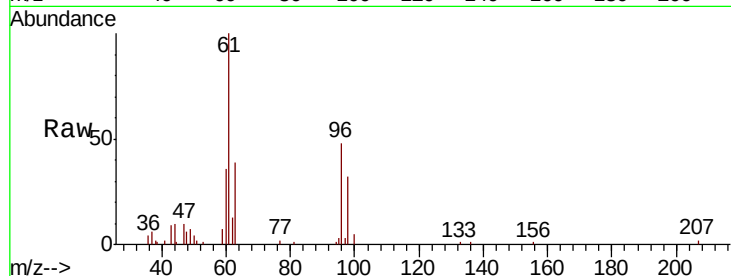
Tot Ion: 96 Resp: 10020

Ion Ratio Lower Upper

96 100

61 208.7 159.5 239.3

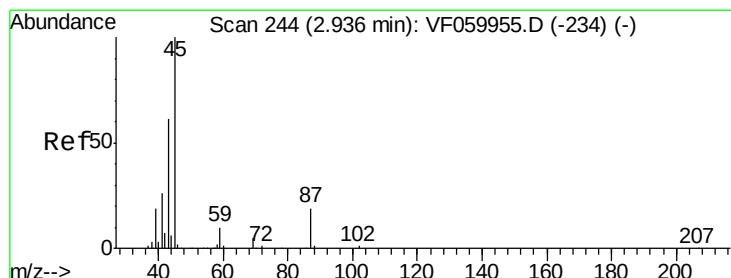
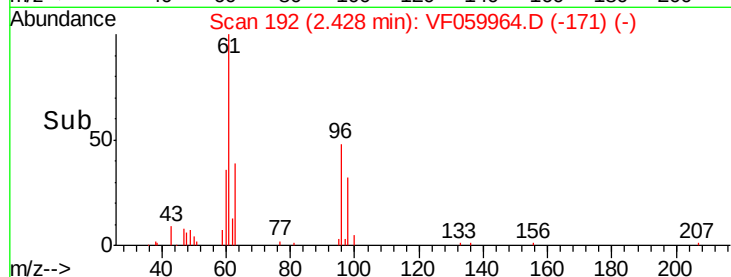
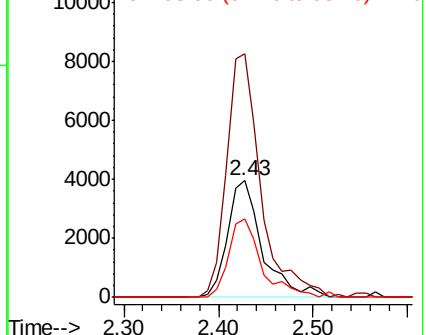
98 67.7 53.8 80.6



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



#22

Diisopropyl ether

Concen: 9.79 ug/l

RT: 2.94 min Scan# 244

Delta R.T. 0.00 min

Lab File: VF059964.D

Acq: 15 Aug 2018 1:09

Tgt Ion: 45 Resp: 32642

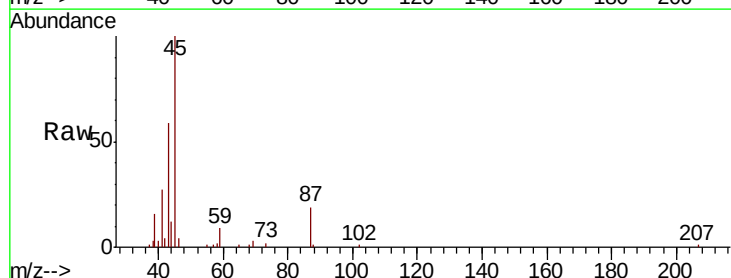
Ion Ratio Lower Upper

45 100

43 59.0 48.7 73.1

87 19.1 15.3 22.9

59 9.0 8.5 12.7

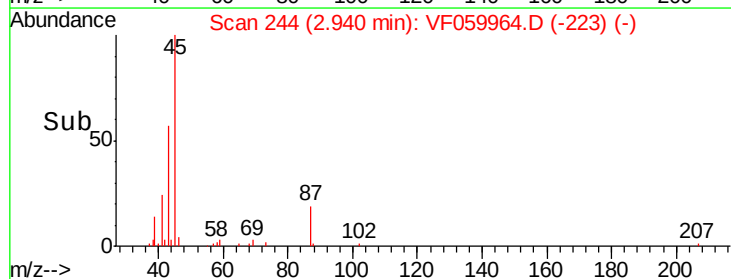
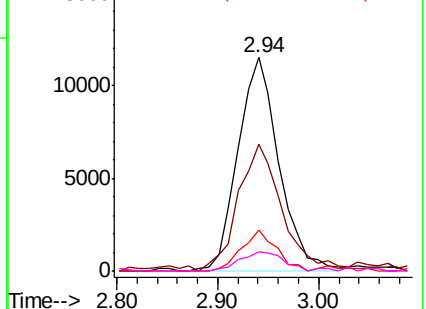


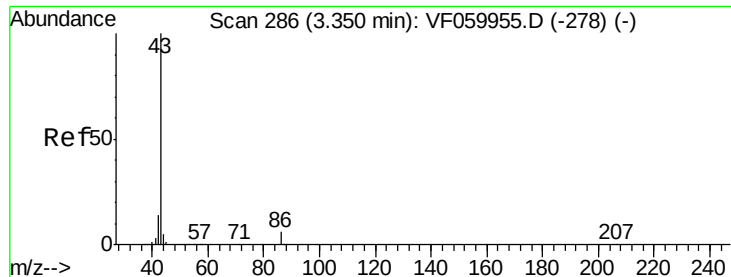
Abundance Ion 45.00 (44.70 to 45.70): VF0

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: 48.90 ug/l

RT: 3.34 min Scan# 285

Delta R.T. -0.01 min

Lab File: VF059964.D

Acq: 15 Aug 2018 1:09

Instrument :

MSVOA_F

ClientSampleId :

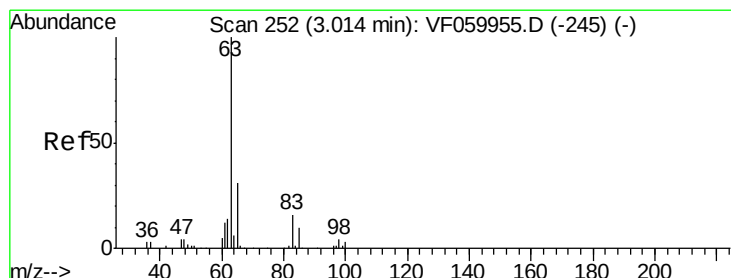
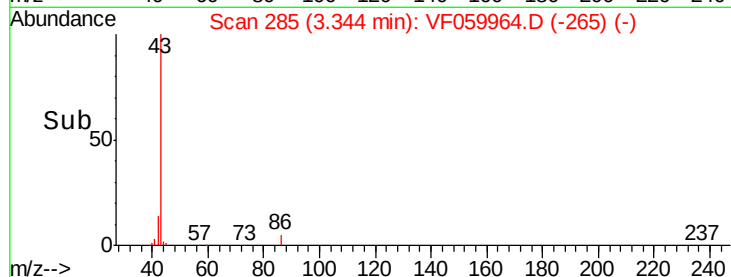
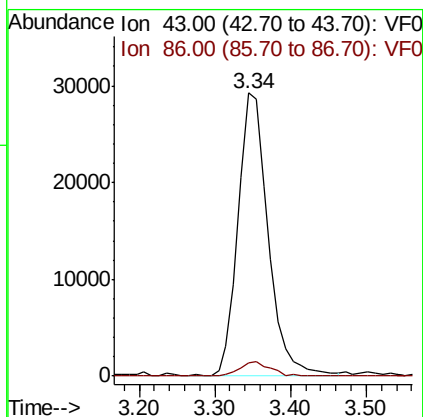
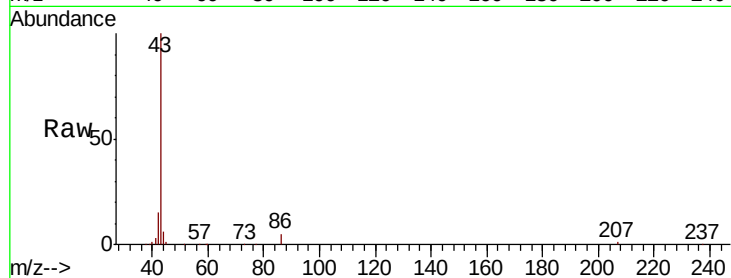
LOQ-SOIL-02-QT3-2018

Tot Ion: 43 Resp: 80958

Ion Ratio Lower Upper

43 100

86 4.6 4.9 7.3#



#24

1,1-Dichloroethane

Concen: 10.16 ug/l

RT: 3.02 min Scan# 252

Delta R.T. 0.00 min

Lab File: VF059964.D

Acq: 15 Aug 2018 1:09

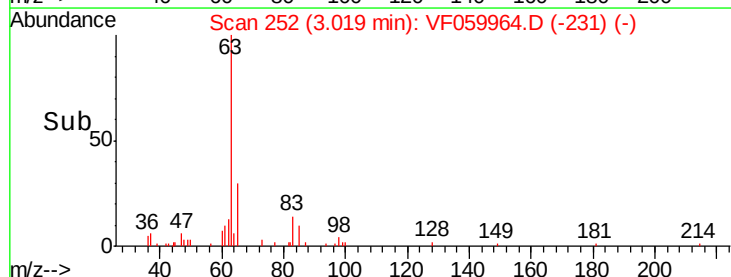
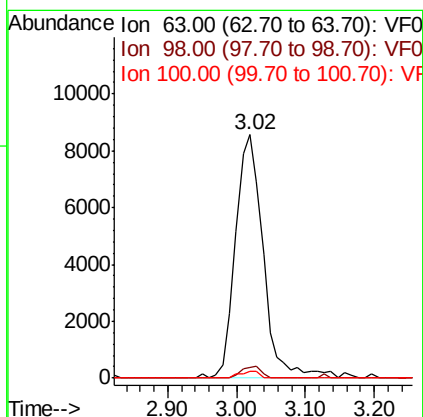
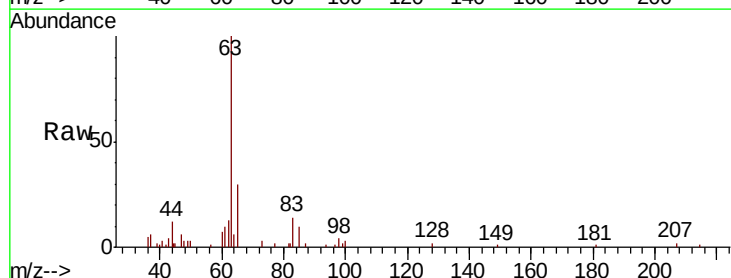
Tgt Ion: 63 Resp: 23953

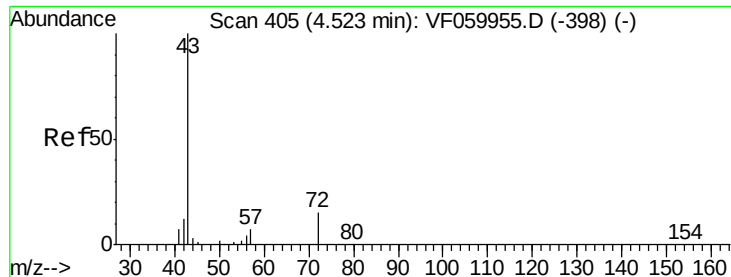
Ion Ratio Lower Upper

63 100

98 4.4 2.1 6.2

100 3.0 1.7 5.1





#25

2-Butanone

Concen: 47.87 ug/l

RT: 4.53 min Scan# 405

Delta R.T. 0.00 min

Lab File: VF059964.D

Acq: 15 Aug 2018 1:09

Instrument :

MSVOA_F

ClientSampleId :

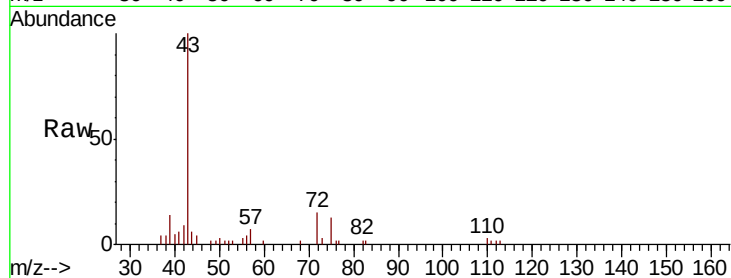
LOQ-SOIL-02-QT3-2018

Tot Ion: 43 Resp: 21608

Ion Ratio Lower Upper

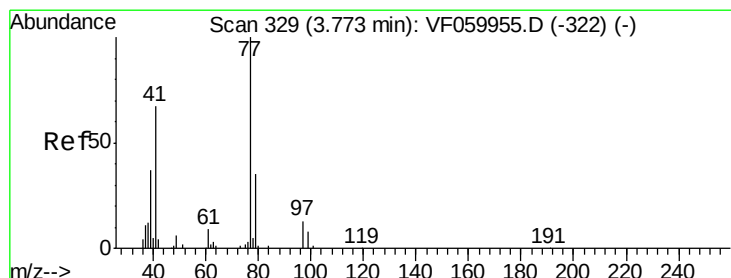
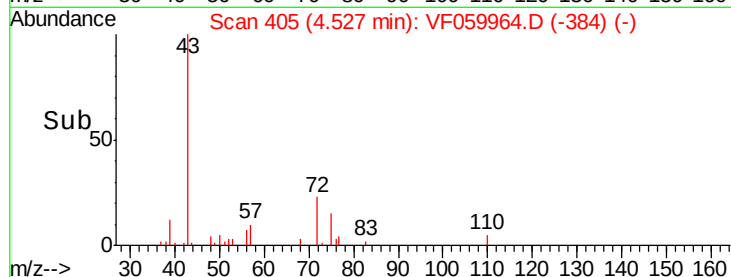
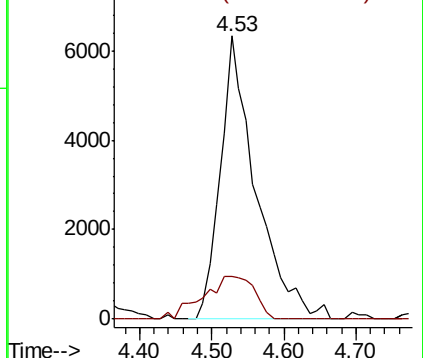
43 100

72 14.9 14.6 22.0



Abundance Ion 43.00 (42.70 to 43.70): VF0

Ion 72.00 (71.70 to 72.70): VF0



#26

2,2-Dichloropropane

Concen: 9.77 ug/l

RT: 3.79 min Scan# 330

Delta R.T. 0.01 min

Lab File: VF059964.D

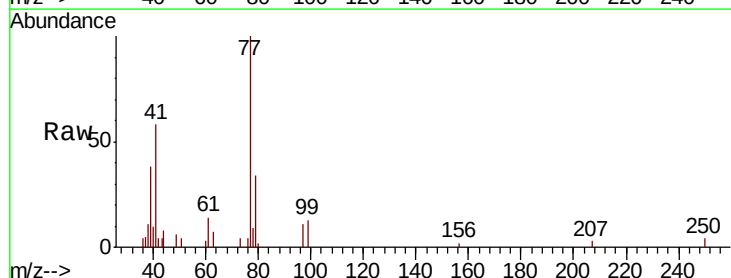
Acq: 15 Aug 2018 1:09

Tgt Ion: 77 Resp: 14988

Ion Ratio Lower Upper

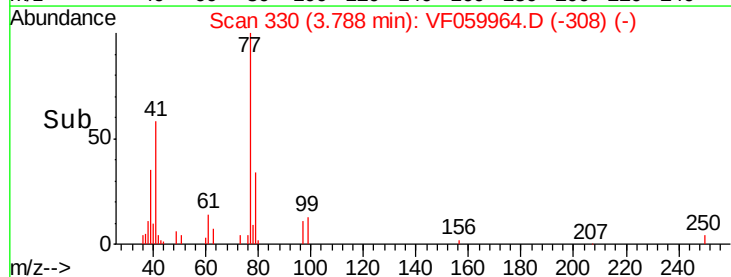
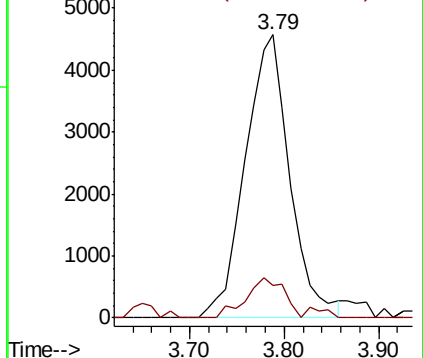
77 100

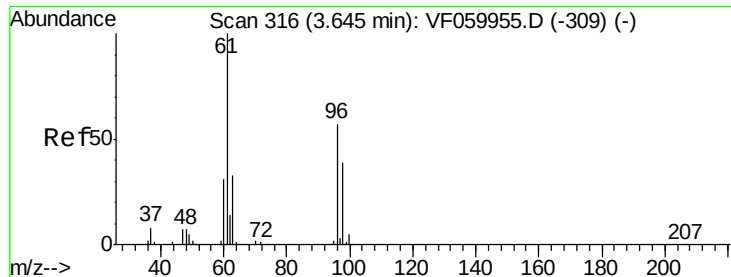
97 11.4 6.6 19.7



Abundance Ion 77.00 (76.70 to 77.70): VF0

Ion 97.00 (96.70 to 97.70): VF0





#27

cis-1,2-Dichloroethene

Concen: 9.72 ug/l

RT: 3.66 min Scan# 317

Delta R.T. 0.01 min

Lab File: VF059964.D

Acq: 15 Aug 2018 1:09

Instrument :

MSVOA_F

ClientSampleId :

LOQ-SOIL-02-QT3-2018

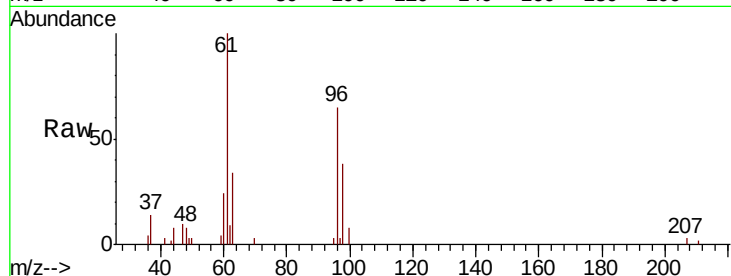
Tot Ion: 96 Resp: 10645

Ion Ratio Lower Upper

96 100

61 153.5 0.0 349.4

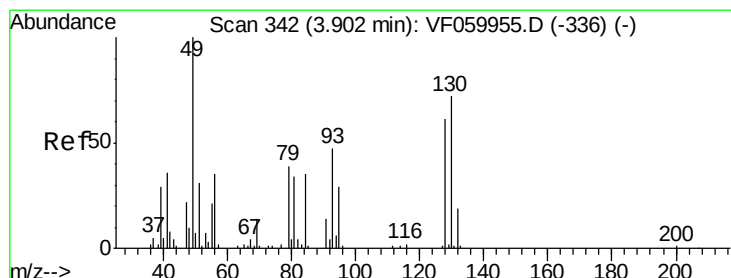
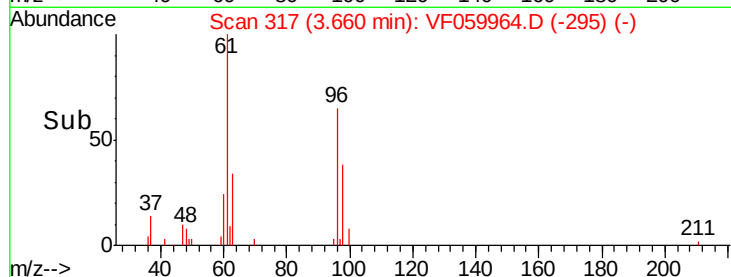
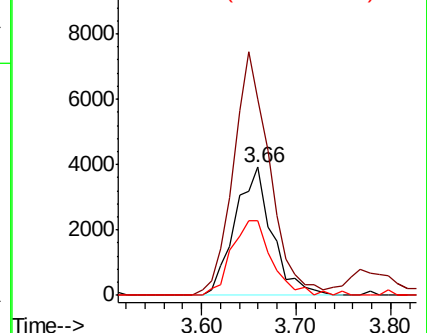
98 58.6 0.0 134.6



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



#28

Bromochloromethane

Concen: 10.20 ug/l

RT: 3.91 min Scan# 342

Delta R.T. 0.00 min

Lab File: VF059964.D

Acq: 15 Aug 2018 1:09

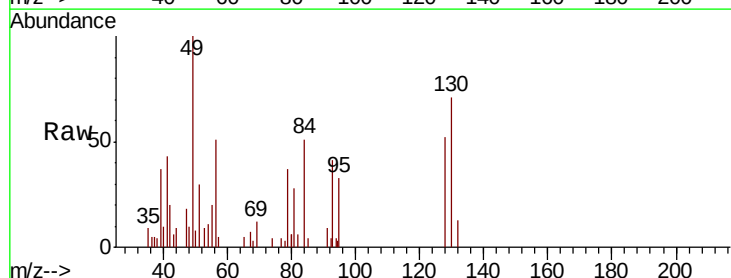
Tgt Ion: 49 Resp: 8951

Ion Ratio Lower Upper

49 100

129 0.0 0.0 4.2

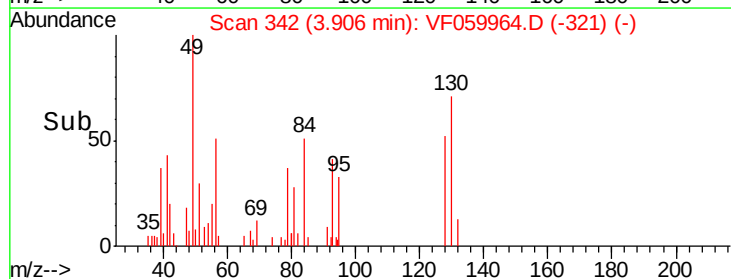
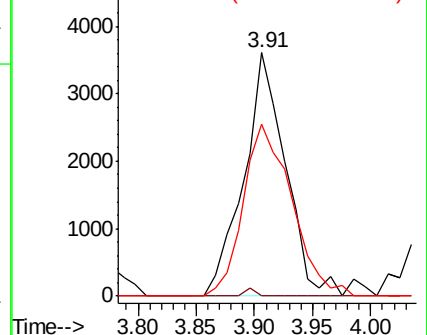
130 70.7 58.1 87.1

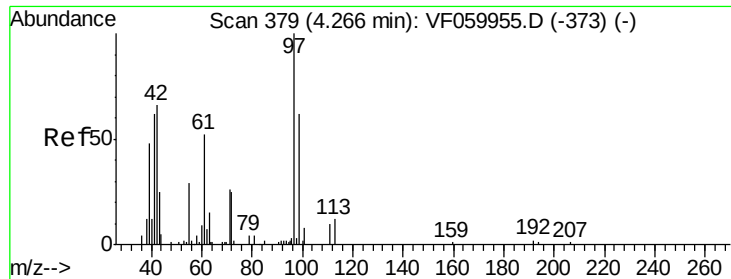


Abundance Ion 49.00 (48.70 to 49.70): VF0

Ion 129.00 (128.70 to 129.70): V

Ion 130.00 (129.70 to 130.70): V





#29

Tetrahydrofuran

Concen: 51.74 ug/l

RT: 4.27 min Scan# 379

Delta R.T. 0.00 min

Lab File: VF059964.D

Acq: 15 Aug 2018 1:09

Instrument :

MSVOA_F

ClientSampleId :

LOQ-SOIL-02-QT3-2018

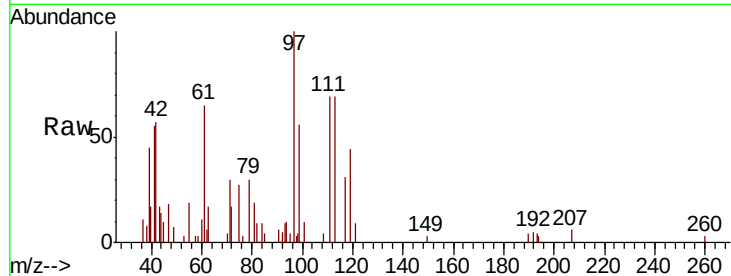
Tot Ion: 42 Resp: 8022

Ion Ratio Lower Upper

42 100

72 32.3 27.7 41.5

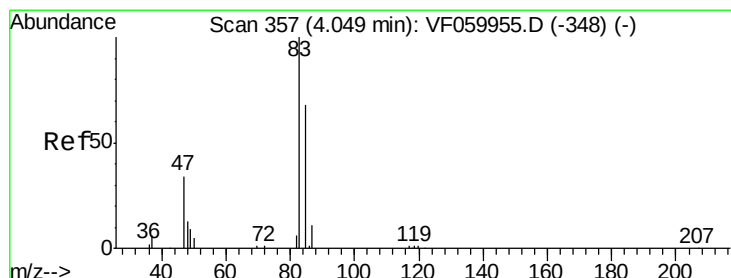
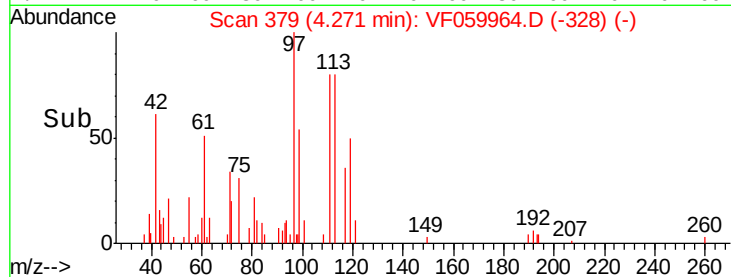
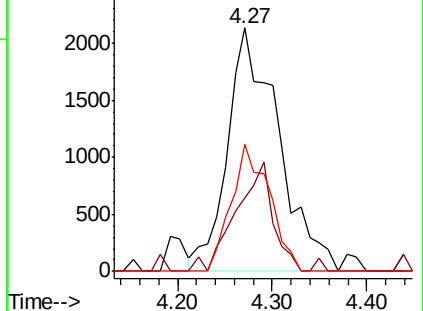
71 38.8 28.2 42.4



Abundance Ion 42.00 (41.70 to 42.70): VF0

Ion 72.00 (71.70 to 72.70): VF0

Ion 71.00 (70.70 to 71.70): VF0



#30

Chloroform

Concen: 9.70 ug/l

RT: 4.05 min Scan# 357

Delta R.T. 0.00 min

Lab File: VF059964.D

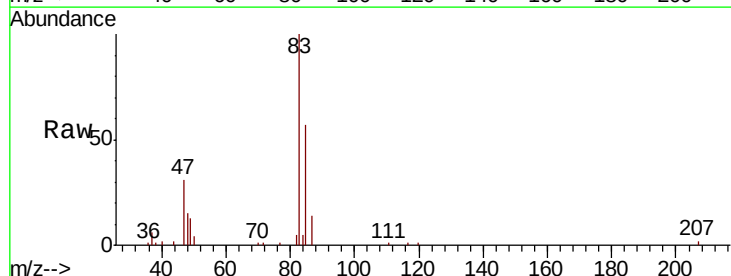
Acq: 15 Aug 2018 1:09

Tgt Ion: 83 Resp: 31404

Ion Ratio Lower Upper

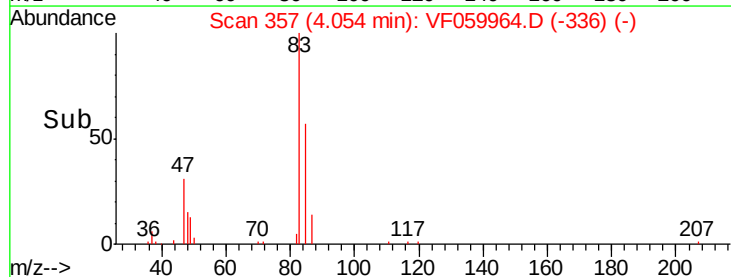
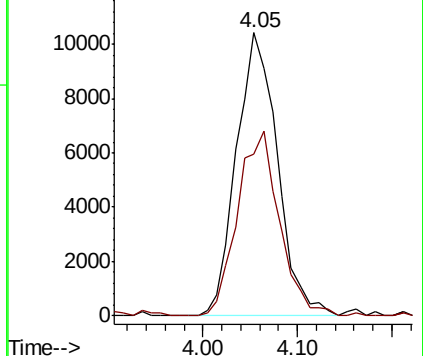
83 100

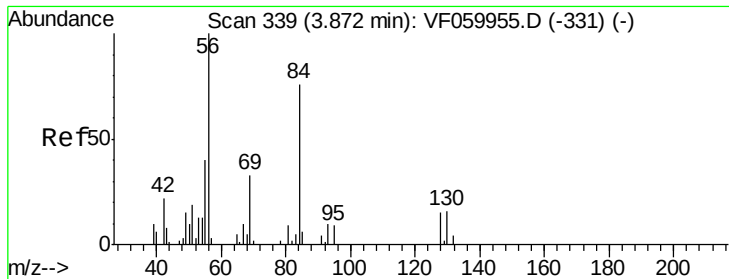
85 57.2 54.4 81.6



Abundance Ion 83.00 (82.70 to 83.70): VF0

Ion 85.00 (84.70 to 85.70): VF0

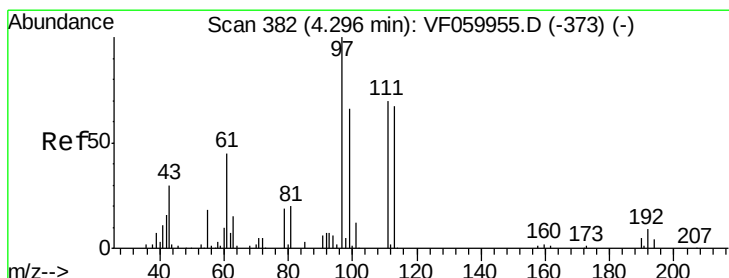
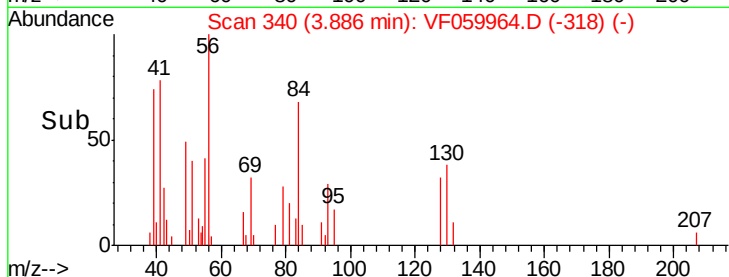
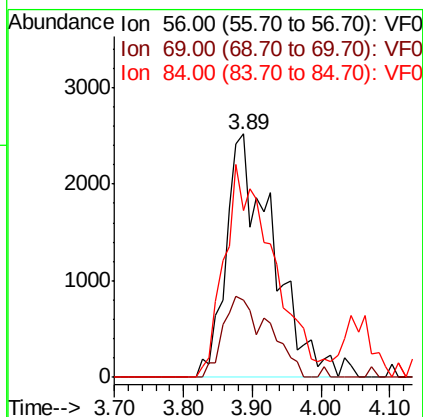
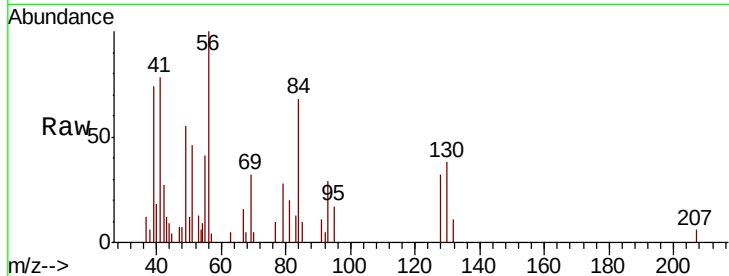




#31
Cyclohexane
Concen: 9.97 ug/l
RT: 3.89 min Scan# 340
Delta R.T. 0.01 min
Lab File: VF059964.D
Acq: 15 Aug 2018 1:09

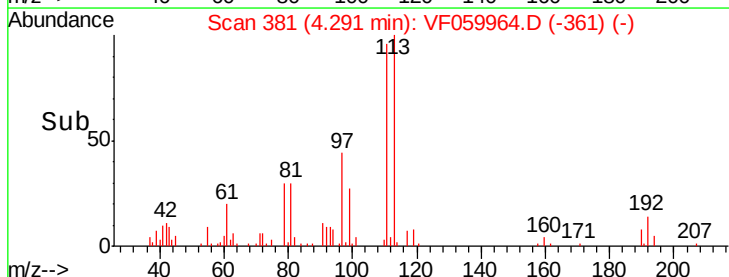
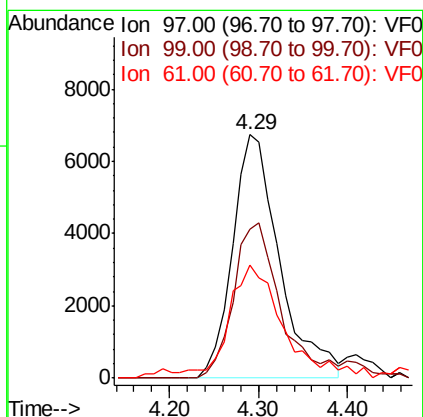
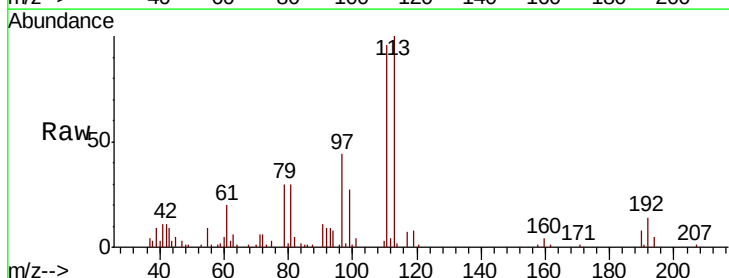
Instrument :
MSVOA_F
ClientSampleId :
LOQ-SOIL-02-QT3-2018

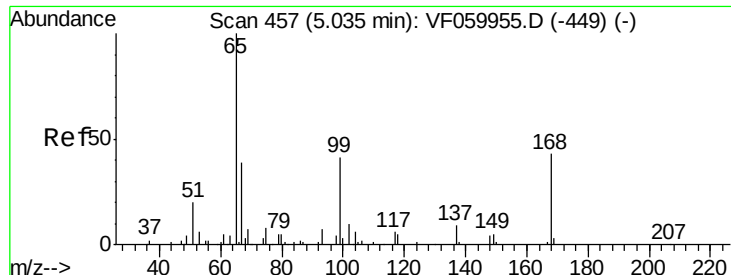
Tot Ion: 56 Resp: 11748
Ion Ratio Lower Upper
56 100
69 31.9 26.2 39.2
84 68.3 61.0 91.4



#32
1,1,1-Trichloroethane
Concen: 9.31 ug/l
RT: 4.29 min Scan# 381
Delta R.T. -0.01 min
Lab File: VF059964.D
Acq: 15 Aug 2018 1:09

Tgt Ion: 97 Resp: 24787
Ion Ratio Lower Upper
97 100
99 61.2 53.0 79.4
61 46.3 36.6 55.0

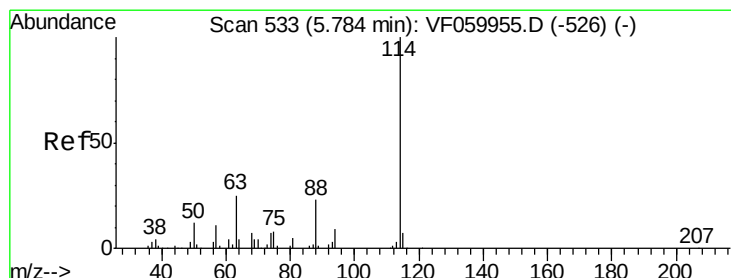
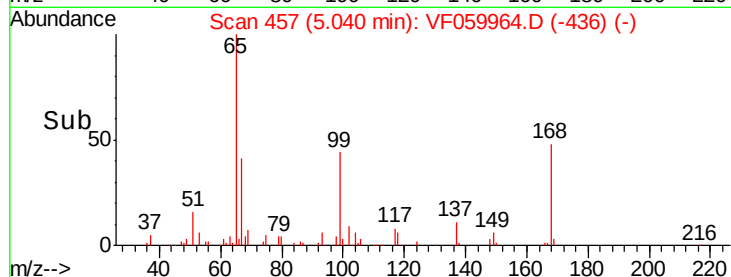
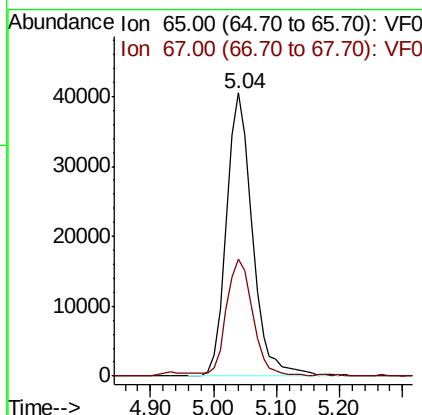
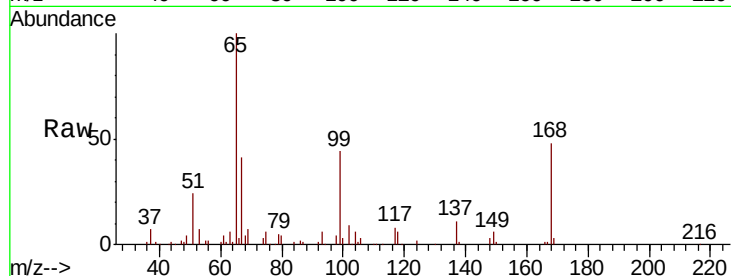




#33
 1,2-Dichloroethane-d4
 Concen: 51.36 ug/l
 RT: 5.04 min Scan# 457
 Delta R.T. 0.00 min
 Lab File: VF059964.D
 Acq: 15 Aug 2018 1:09

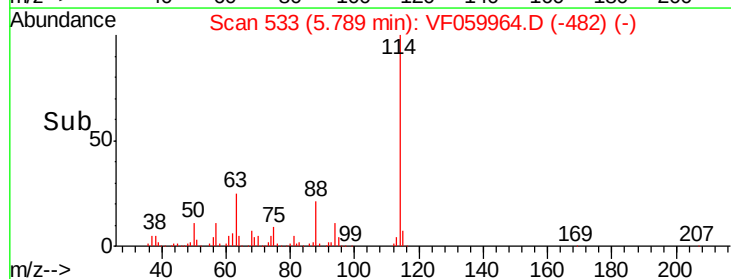
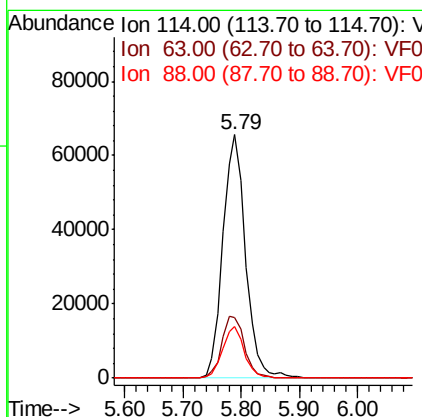
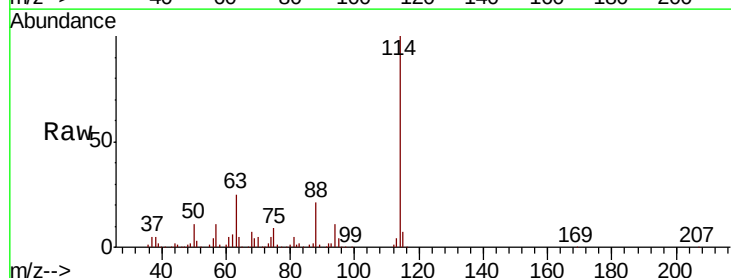
Instrument :
 MSVOA_F
 ClientSampleId :
 LOQ-SOIL-02-QT3-2018

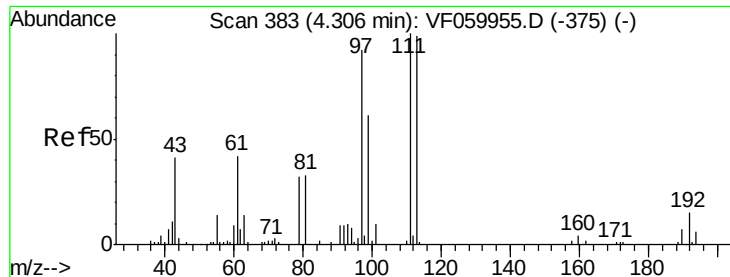
Tot Ion: 65 Resp: 115486
 Ion Ratio Lower Upper
 65 100
 67 41.4 0.0 87.4



#34
 1,4-Difluorobenzene
 Concen: 50.00 ug/l
 RT: 5.79 min Scan# 533
 Delta R.T. 0.00 min
 Lab File: VF059964.D
 Acq: 15 Aug 2018 1:09

Tgt Ion: 114 Resp: 177908
 Ion Ratio Lower Upper
 114 100
 63 24.7 0.0 50.2
 88 21.3 0.0 46.8

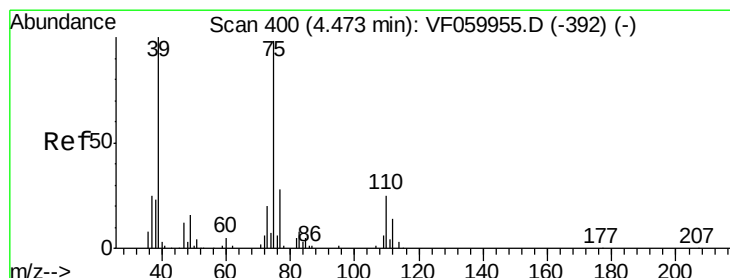
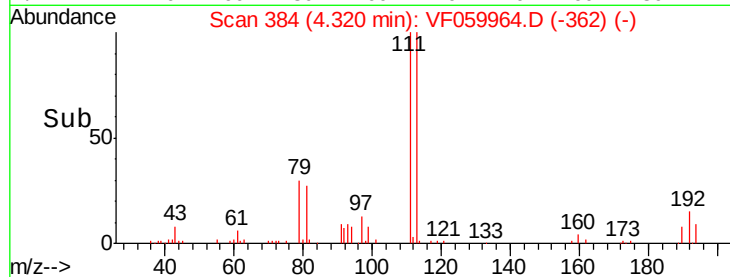
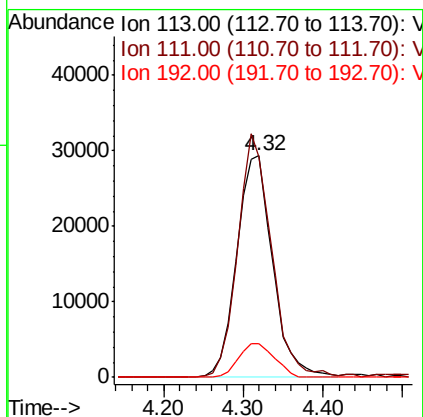
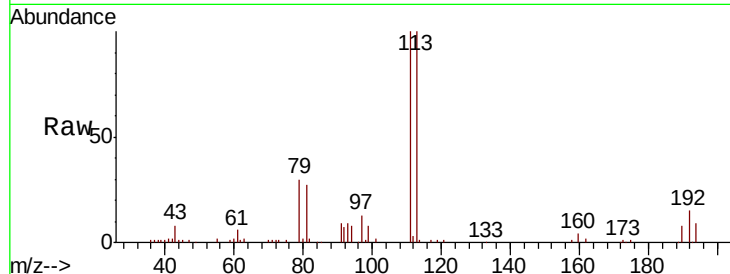




#35
 Dibromofluoromethane
 Concen: 51.48 ug/l
 RT: 4.32 min Scan# 384
 Delta R.T. 0.01 min
 Lab File: VF059964.D
 Acq: 15 Aug 2018 1:09

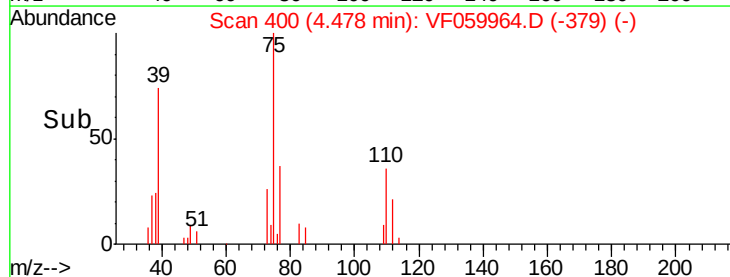
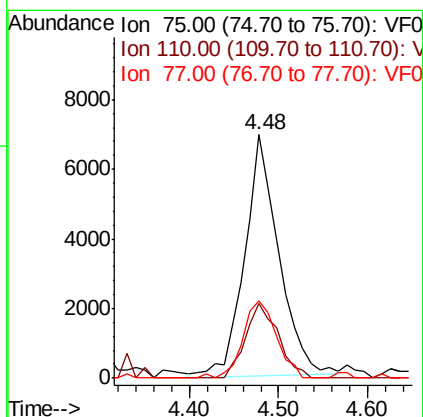
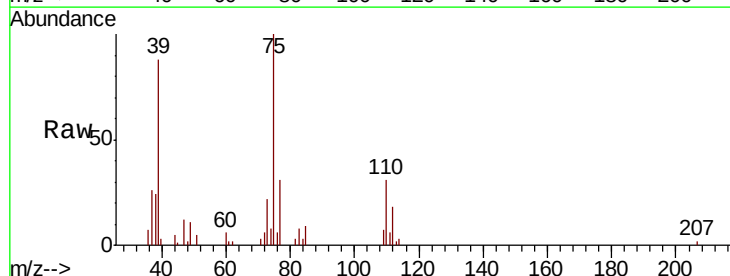
Instrument :
 MSVOA_F
 ClientSampleId :
 LOQ-SOIL-02-QT3-2018

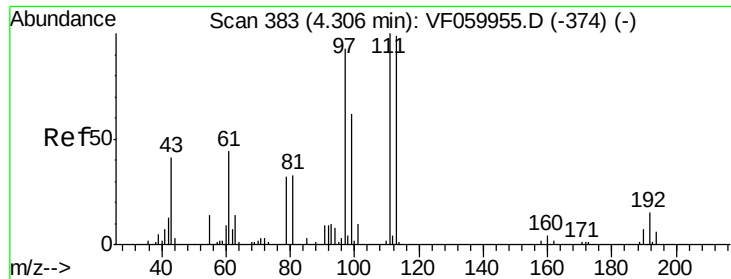
Tot Ion:113 Resp: 91779
 Ion Ratio Lower Upper
 113 100
 111 99.6 80.6 121.0
 192 15.0 11.7 17.5



#36
 1,1-Dichloropropene
 Concen: 9.35 ug/l
 RT: 4.48 min Scan# 400
 Delta R.T. 0.00 min
 Lab File: VF059964.D
 Acq: 15 Aug 2018 1:09

Tgt Ion: 75 Resp: 18489
 Ion Ratio Lower Upper
 75 100
 110 30.9 12.6 37.8
 77 31.5 22.7 34.1

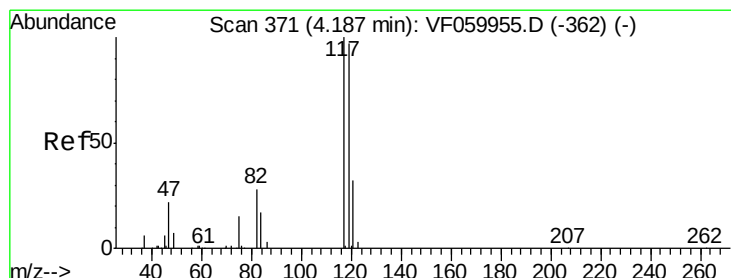
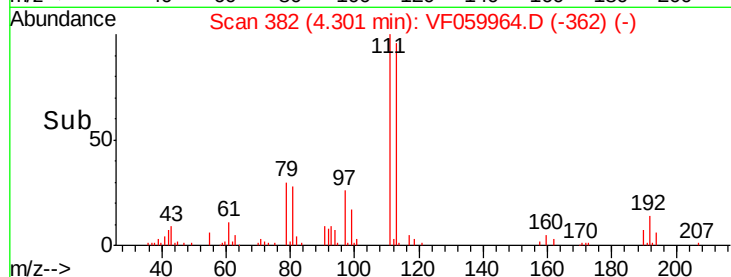
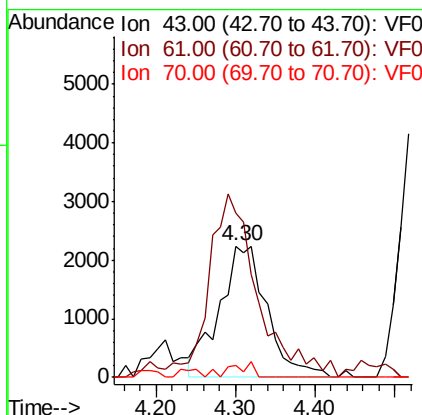
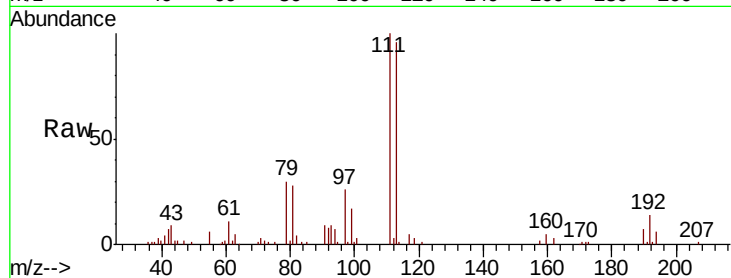




#37
Ethyl Acetate
Concen: 11.10 ug/l
RT: 4.30 min Scan# 382
Delta R.T. -0.01 min
Lab File: VF059964.D
Acq: 15 Aug 2018 1:09

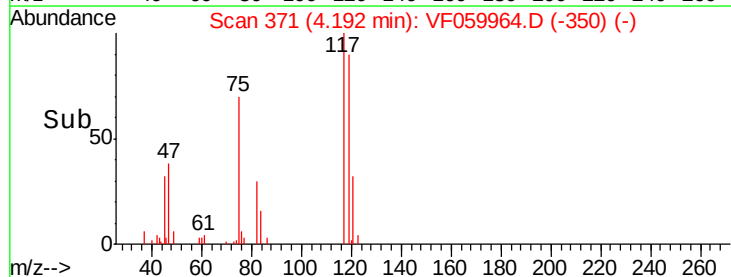
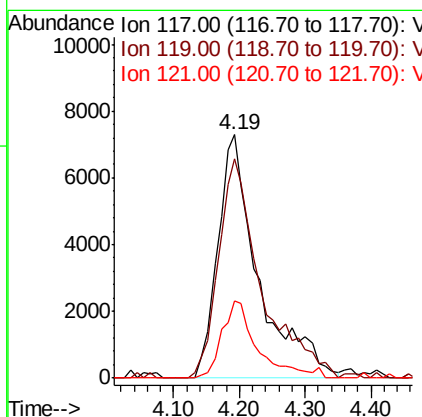
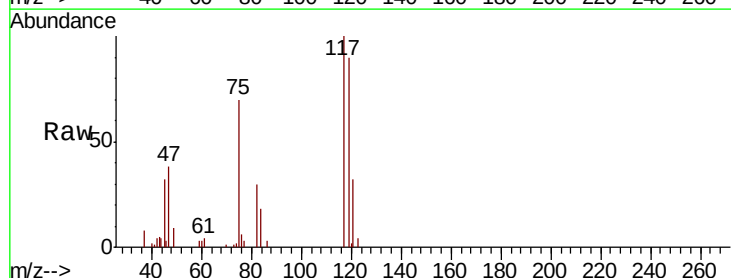
Instrument :
MSVOA_F
ClientSampleId :
LOQ-SOIL-02-QT3-2018

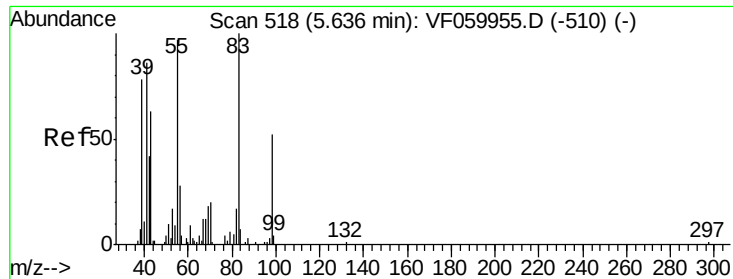
Tot Ion: 43 Resp: 9383
Ion Ratio Lower Upper
43 100
61 124.5 84.3 126.5
70 8.7 5.5 8.3#



#38
Carbon Tetrachloride
Concen: 9.51 ug/l
RT: 4.19 min Scan# 371
Delta R.T. 0.00 min
Lab File: VF059964.D
Acq: 15 Aug 2018 1:09

Tgt Ion: 117 Resp: 31289
Ion Ratio Lower Upper
117 100
119 89.8 76.9 115.3
121 31.7 24.9 37.3

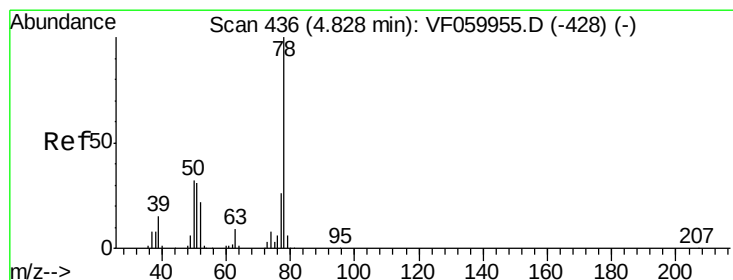
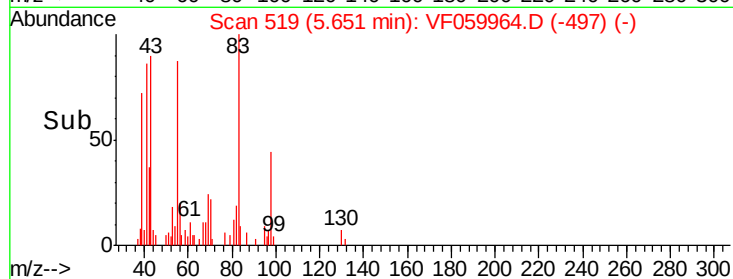
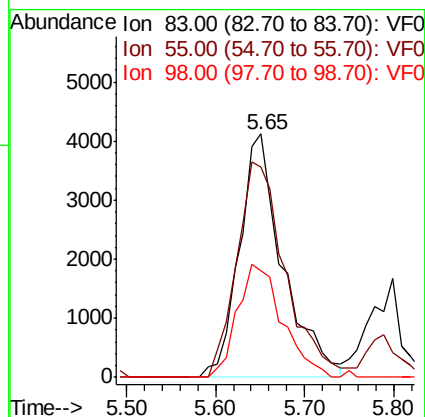
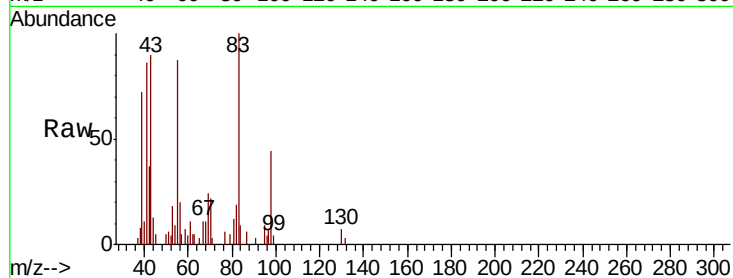




#39
Methylvlcyclohexane
Concen: 9.70 ug/l
RT: 5.65 min Scan# 519
Delta R.T. 0.01 min
Lab File: VF059964.D
Acq: 15 Aug 2018 1:09

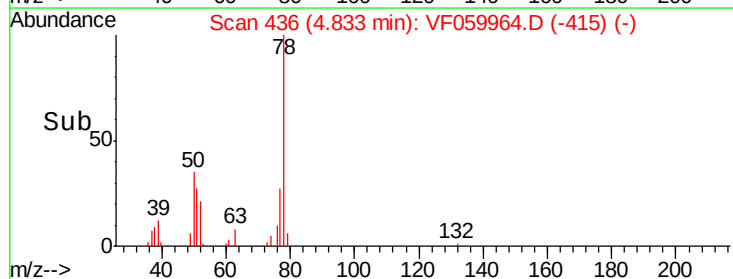
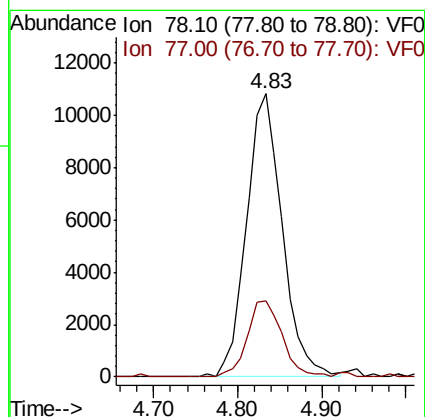
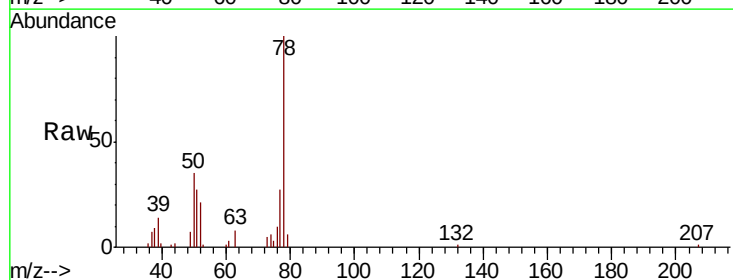
Instrument :
MSVOA_F
ClientSampleId :
LOQ-SOIL-02-QT3-2018

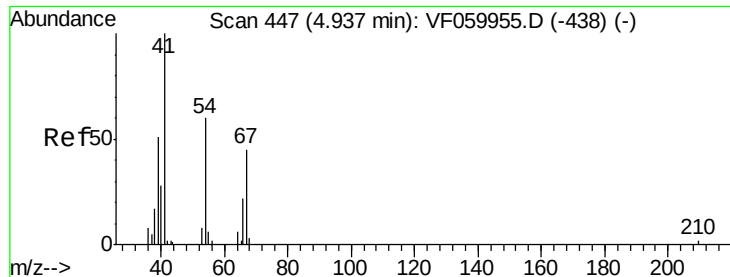
Tot Ion: 83 Resp: 13938
Ion Ratio Lower Upper
83 100
55 86.6 77.4 116.2
98 44.0 41.5 62.3



#40
Benzene
Concen: 9.64 ug/l
RT: 4.83 min Scan# 436
Delta R.T. 0.00 min
Lab File: VF059964.D
Acq: 15 Aug 2018 1:09

Tgt Ion: 78 Resp: 32244
Ion Ratio Lower Upper
78 100
77 26.7 21.1 31.7

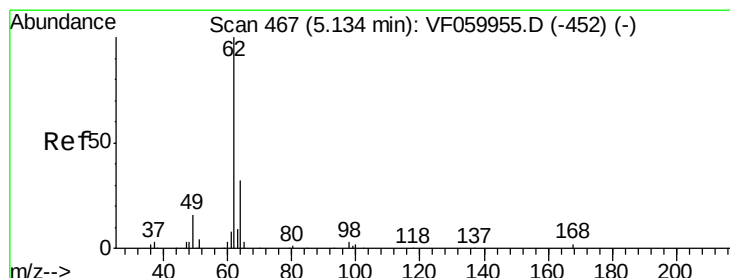
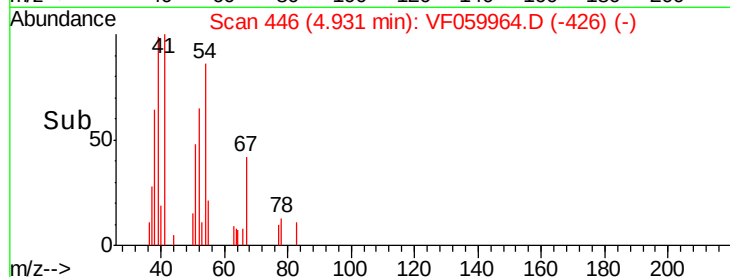
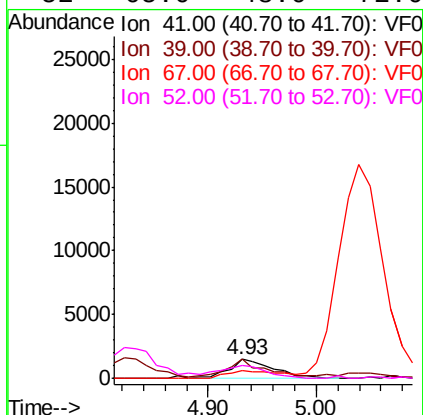
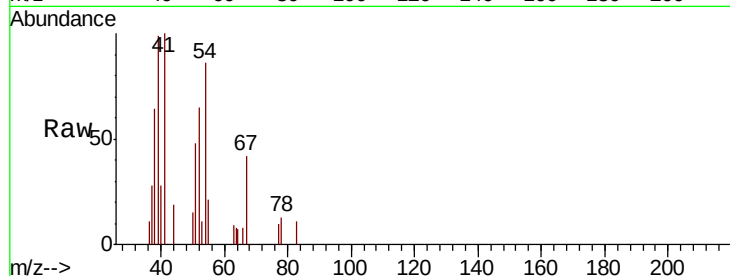




#41
Methacrylonitrile
Concen: 10.10 ug/l
RT: 4.93 min Scan# 446
Delta R.T. -0.01 min
Lab File: VF059964.D
Acq: 15 Aug 2018 1:09

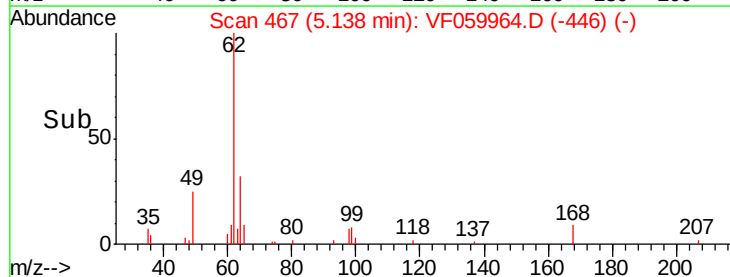
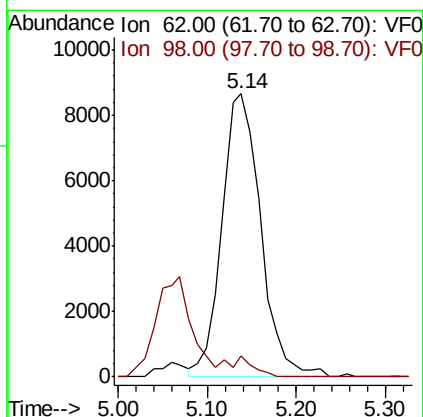
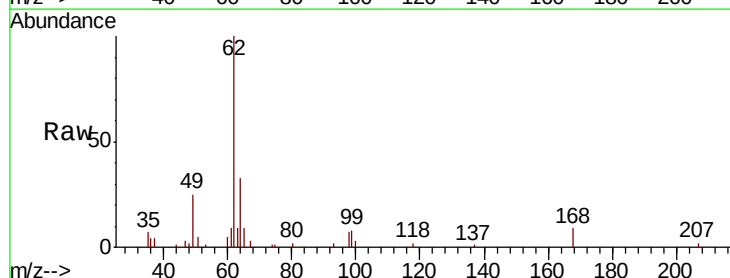
Instrument :
MSVOA_F
ClientSampleId :
LOQ-SOIL-02-QT3-2018

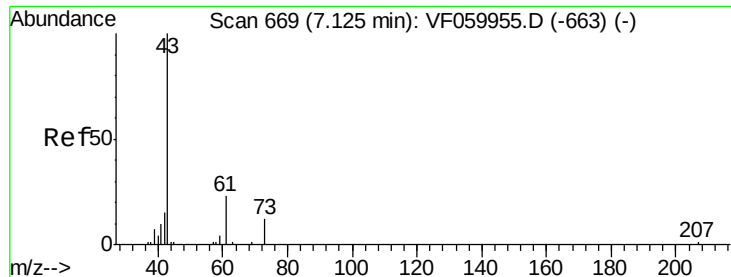
Tot Ion:	41	Resp:	4214
Ion	Ratio	Lower	Upper
41	100		
39	98.9	75.7	113.5
67	41.6	36.1	54.1
52	65.0	48.0	72.0



#42
1,2-Dichloroethane
Concen: 9.94 ug/l
RT: 5.14 min Scan# 467
Delta R.T. 0.00 min
Lab File: VF059964.D
Acq: 15 Aug 2018 1:09

Tgt Ion:	62	Resp:	26422
Ion	Ratio	Lower	Upper
62	100		
98	7.3	0.0	5.0#





#43

Isopropyl Acetate

Concen: 8.84 ug/l

RT: 7.13 min Scan# 669

Delta R.T. 0.00 min

Lab File: VF059964.D

Acq: 15 Aug 2018 1:09

Instrument :

MSVOA_F

ClientSampleId :

LOQ-SOIL-02-QT3-2018

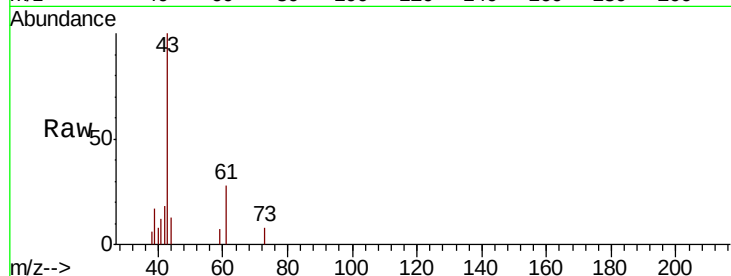
Tot Ion: 43 Resp: 8154

Ion Ratio Lower Upper

43 100

61 28.4 18.6 27.8#

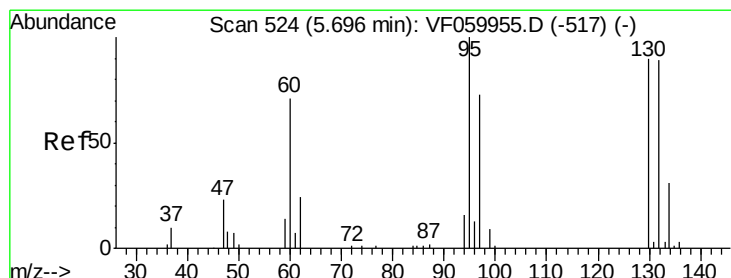
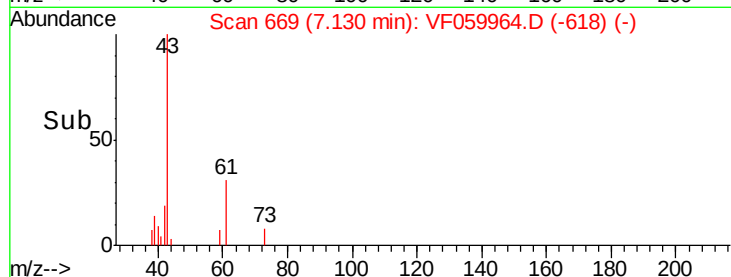
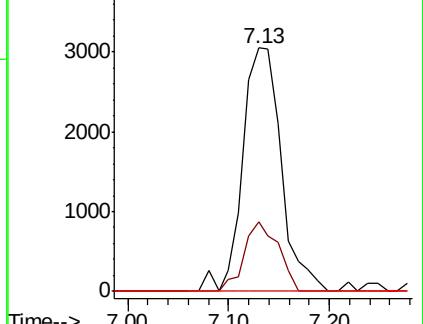
87 0.0 0.0 0.0



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



#44

Trichloroethene

Concen: 10.66 ug/l

RT: 5.69 min Scan# 523

Delta R.T. -0.01 min

Lab File: VF059964.D

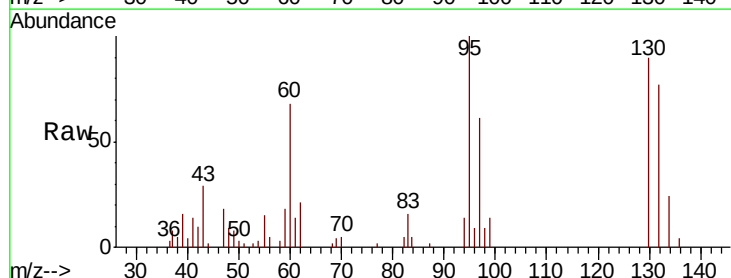
Acq: 15 Aug 2018 1:09

Tgt Ion:130 Resp: 13729

Ion Ratio Lower Upper

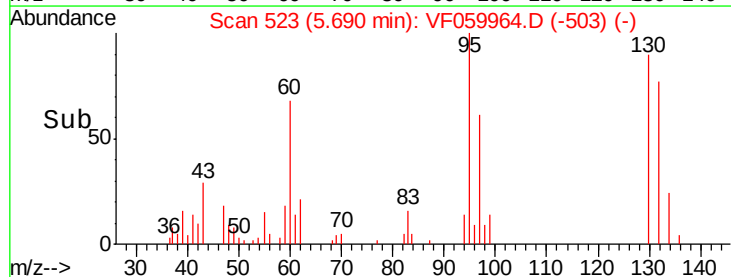
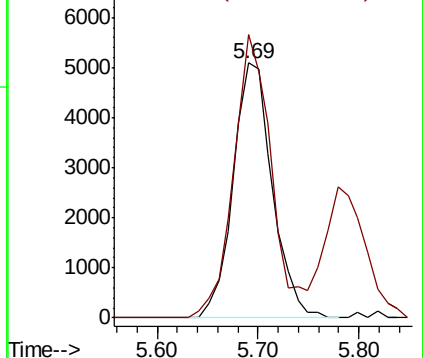
130 100

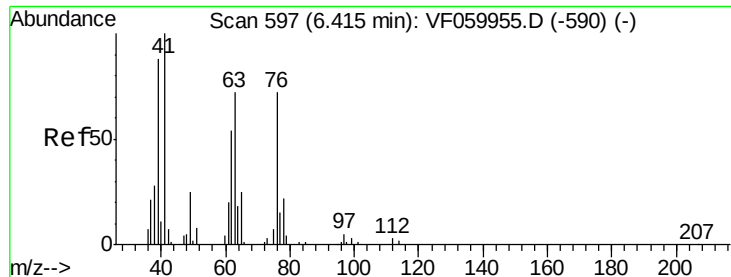
95 111.1 0.0 222.0



Abundance Ion 129.90 (129.60 to 130.60): V

Ion 94.90 (94.60 to 95.60): VF0





#45

1,2-Dichloropropane

Concen: 9.93 ug/l

RT: 6.42 min Scan# 597

Delta R.T. 0.00 min

Lab File: VF059964.D

Acq: 15 Aug 2018 1:09

Instrument :

MSVOA_F

ClientSampleId :

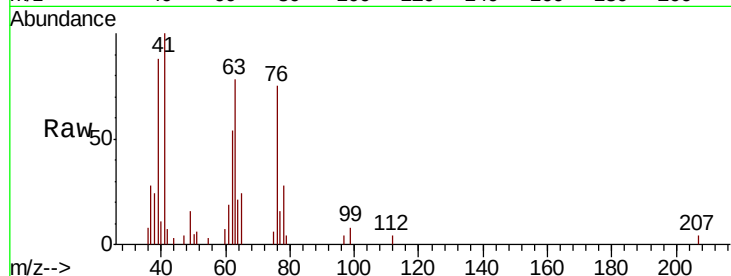
LOQ-SOIL-02-QT3-2018

Tot Ion: 63 Resp: 8783

Ion Ratio Lower Upper

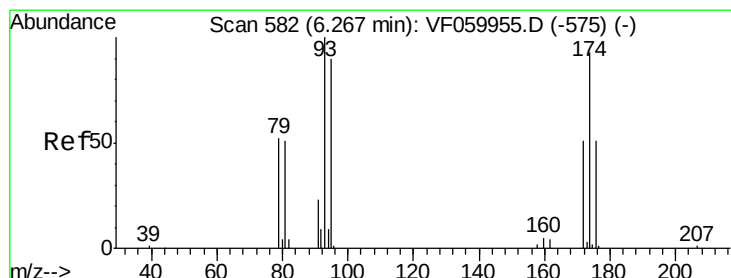
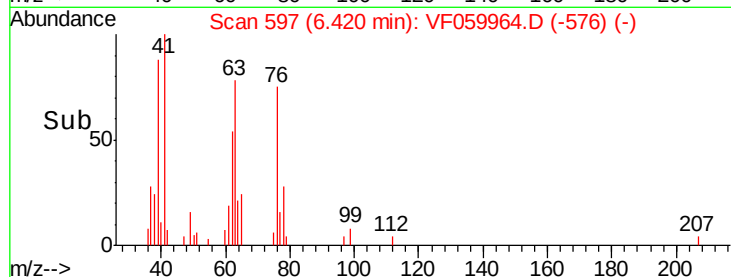
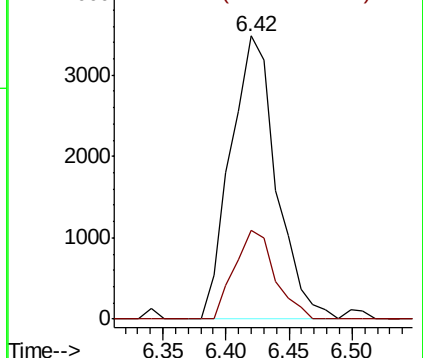
63 100

65 31.3 27.8 41.6



Abundance Ion 63.00 (62.70 to 63.70): VF0

Ion 65.00 (64.70 to 65.70): VF0



#46

Dibromomethane

Concen: 9.02 ug/l

RT: 6.27 min Scan# 582

Delta R.T. 0.00 min

Lab File: VF059964.D

Acq: 15 Aug 2018 1:09

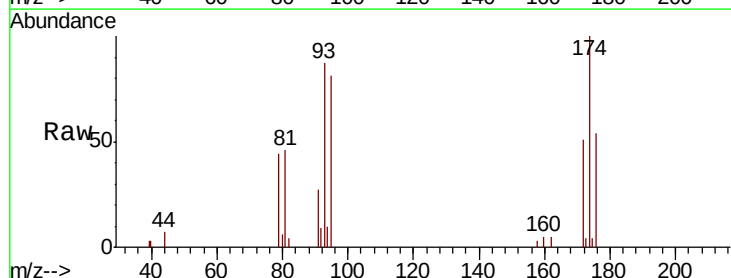
Tgt Ion: 93 Resp: 7878

Ion Ratio Lower Upper

93 100

95 93.1 72.4 108.6

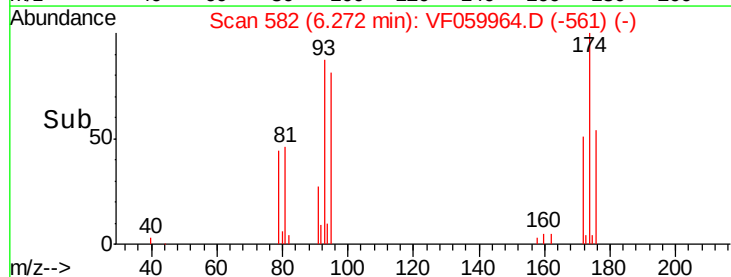
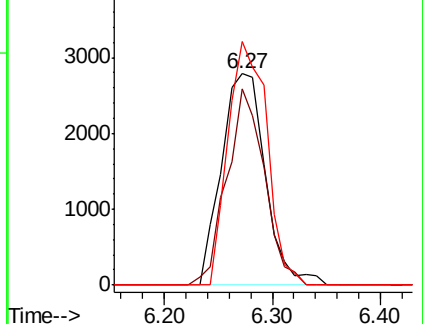
174 120.0 75.9 113.9#

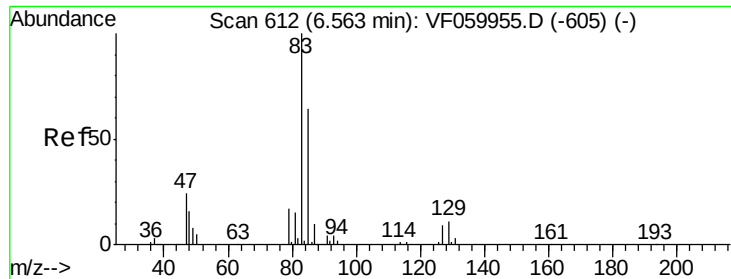


Abundance Ion 93.00 (92.70 to 93.70): VF0

Ion 95.00 (94.70 to 95.70): VF0

Ion 174.00 (173.70 to 174.70): V





#47

Bromodichloromethane

Concen: 9.90 ug/l

RT: 6.57 min Scan# 612

Delta R.T. 0.00 min

Lab File: VF059964.D

Acq: 15 Aug 2018 1:09

Instrument :

MSVOA_F

ClientSampleId :

LOQ-SOIL-02-QT3-2018

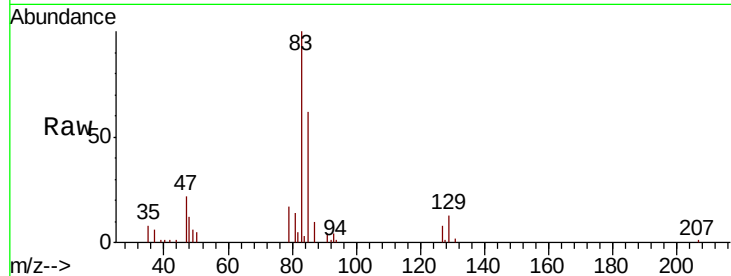
Tot Ion: 83 Resp: 24941

Ion Ratio Lower Upper

83 100

85 61.8 51.5 77.3

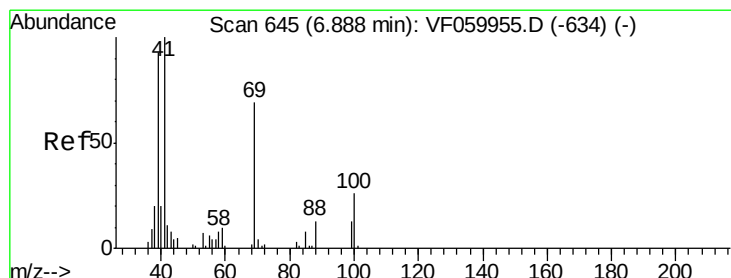
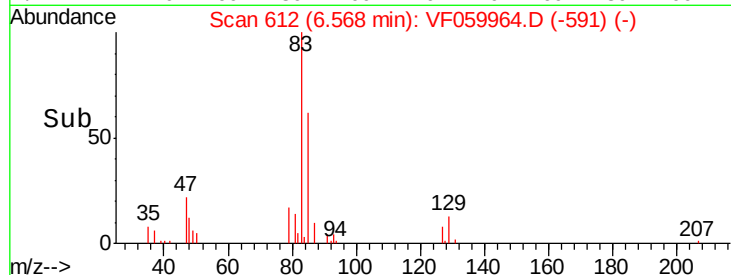
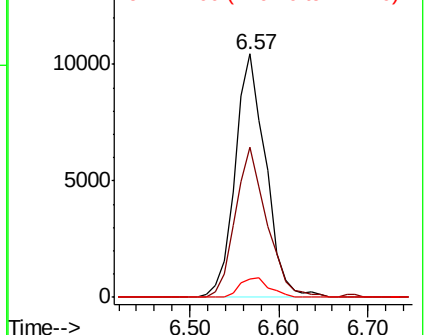
127 7.5 7.5 11.3



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: 8.98 ug/l

RT: 6.89 min Scan# 645

Delta R.T. 0.00 min

Lab File: VF059964.D

Acq: 15 Aug 2018 1:09

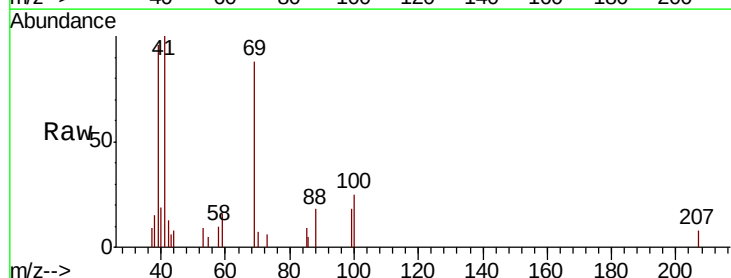
Tgt Ion: 41 Resp: 6169

Ion Ratio Lower Upper

41 100

69 88.1 54.8 82.2#

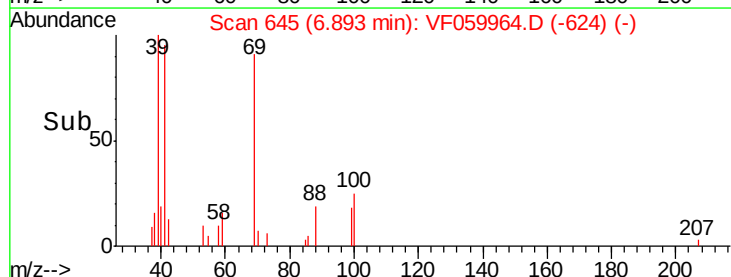
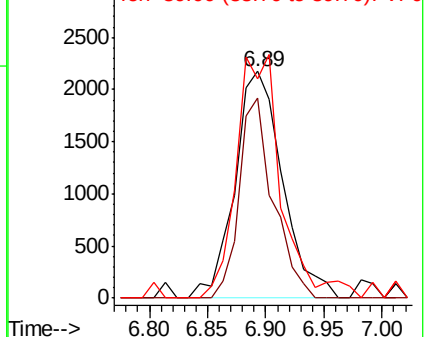
39 96.5 75.1 112.7

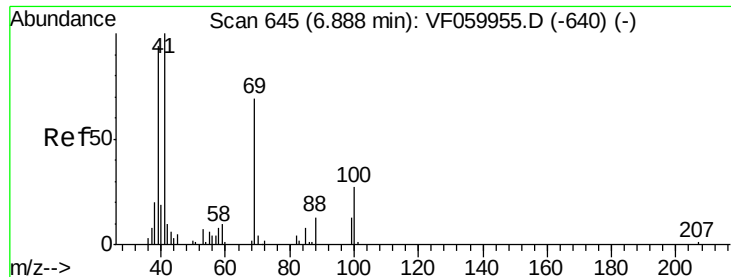


Abundance Ion 41.00 (40.70 to 41.70): VF0

Ion 69.00 (68.70 to 69.70): VF0

Ion 39.00 (38.70 to 39.70): VF0





#49

1,4-Dioxane

Concen: 208.95 ug/l

RT: 6.88 min Scan# 644

Delta R.T. -0.01 min

Lab File: VF059964.D

Acq: 15 Aug 2018 1:09

Instrument :

MSVOA_F

ClientSampleId :

LOQ-SOIL-02-QT3-2018

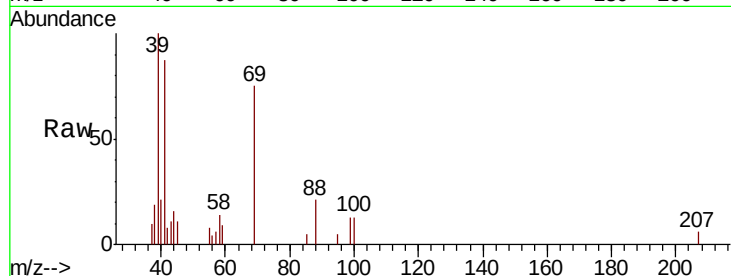
Tot Ion: 88 Resp: 1085

Ion Ratio Lower Upper

88 100

43 53.0 47.9 71.9

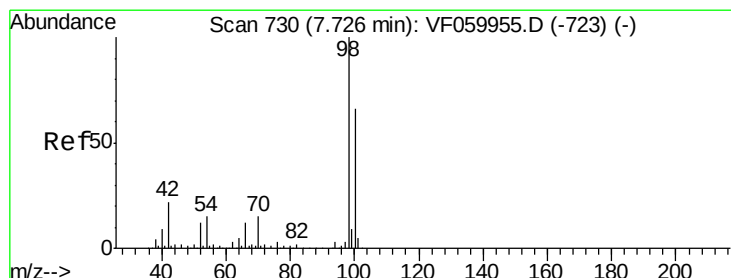
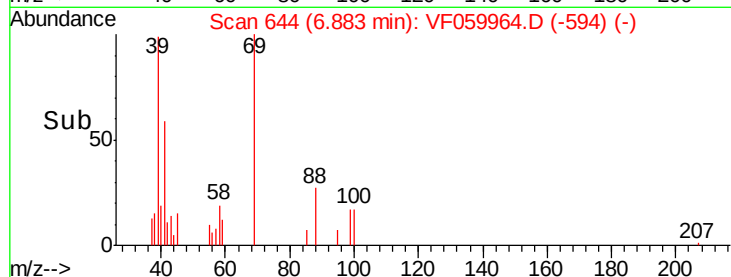
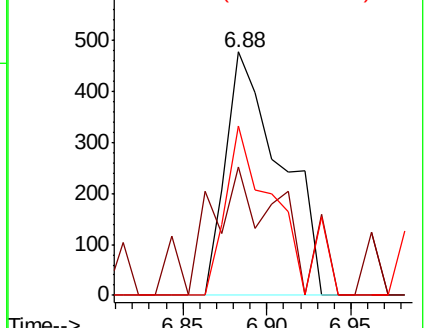
58 69.8 52.0 78.0



Abundance Ion 88.00 (87.70 to 88.70): VF0

Ion 43.00 (42.70 to 43.70): VF0

Ion 58.00 (57.70 to 58.70): VF0



#50

Toluene-d8

Concen: 49.34 ug/l

RT: 7.73 min Scan# 730

Delta R.T. 0.00 min

Lab File: VF059964.D

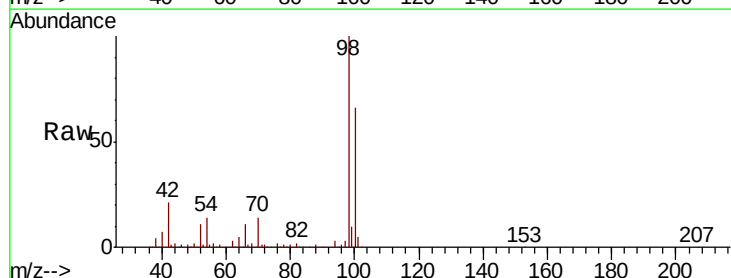
Acq: 15 Aug 2018 1:09

Tgt Ion: 98 Resp: 193977

Ion Ratio Lower Upper

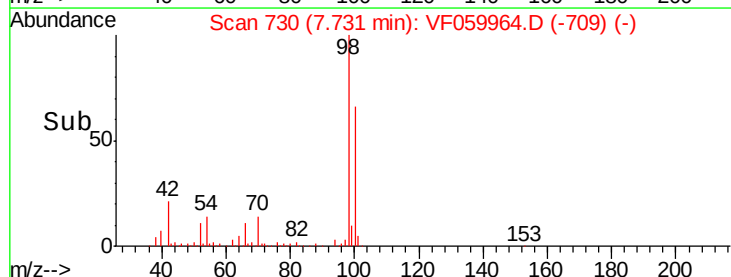
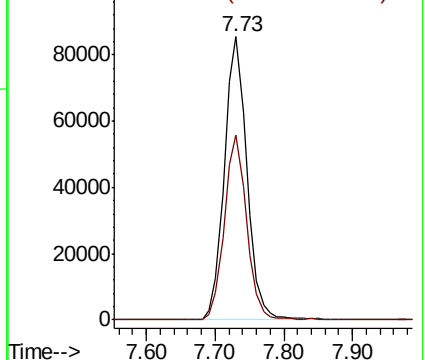
98 100

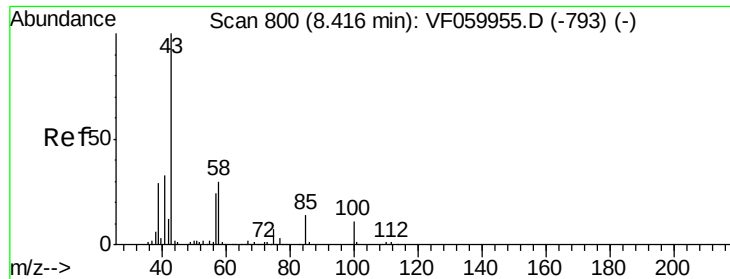
100 65.5 52.9 79.3



Abundance Ion 98.00 (97.70 to 98.70): VF0

Ion 100.00 (99.70 to 100.70): VF0





#51

4-Methyl-2-Pentanone

Concen: 49.87 ug/l

RT: 8.43 min Scan# 801

Delta R.T. 0.01 min

Lab File: VF059964.D

Acq: 15 Aug 2018 1:09

Instrument :

MSVOA_F

ClientSampleId :

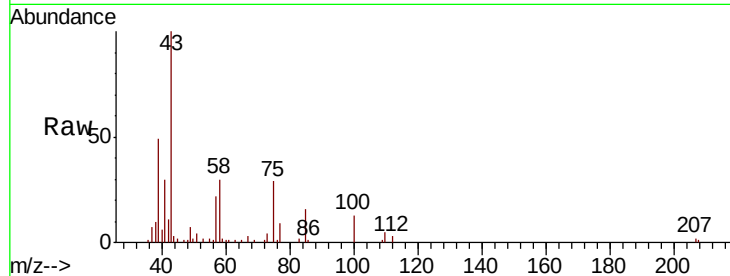
LOQ-SOIL-02-QT3-2018

Tot Ion: 43 Resp: 44540

Ion Ratio Lower Upper

43 100

58 30.4 24.2 36.4



Abundance Ion 43.00 (42.70 to 43.70): VF0

Ion 58.00 (57.70 to 58.70): VF0

8.43

20000

15000

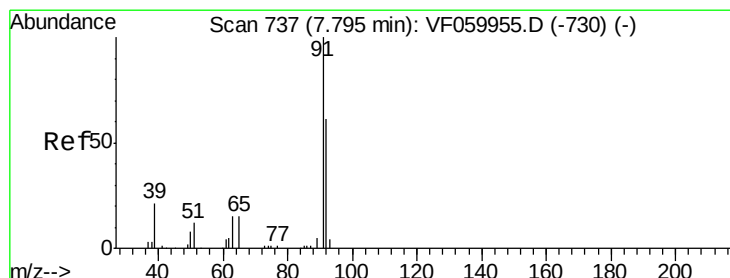
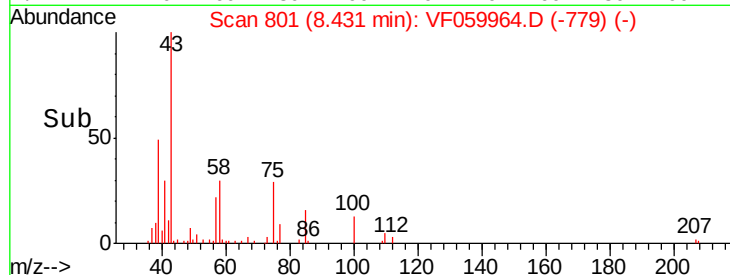
10000

5000

0

8.30 8.40 8.50 8.60

Time-->



#52

Toluene

Concen: 10.04 ug/l

RT: 7.80 min Scan# 737

Delta R.T. 0.00 min

Lab File: VF059964.D

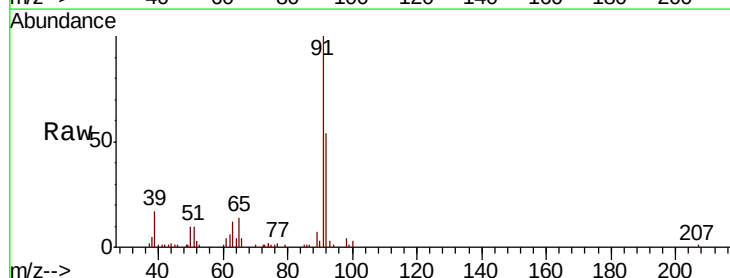
Acq: 15 Aug 2018 1:09

Tgt Ion: 92 Resp: 24884

Ion Ratio Lower Upper

92 100

91 184.2 131.2 196.8



Abundance Ion 92.00 (91.70 to 92.70): VF0

Ion 91.00 (90.70 to 91.70): VF0

7.80

20000

15000

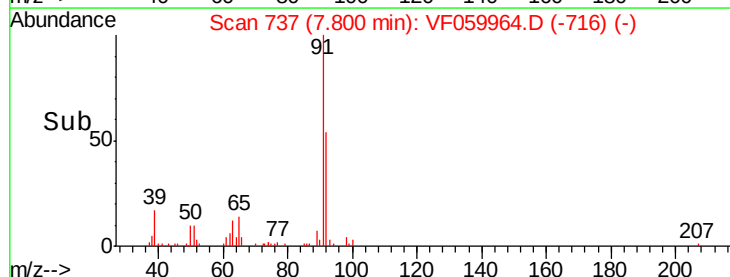
10000

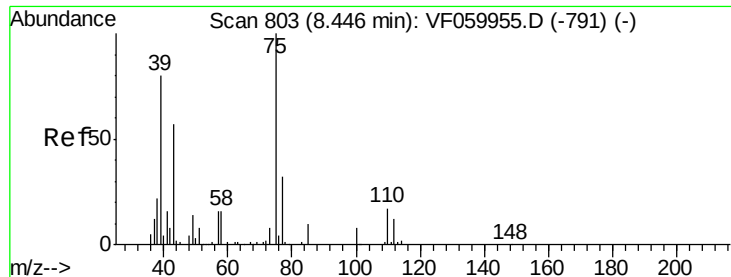
5000

0

7.70 7.80 7.90

Time-->





#53

t-1,3-Dichloropropene

Concen: 9.06 ug/l

RT: 8.44 min Scan# 802

Delta R.T. -0.01 min

Lab File: VF059964.D

Acq: 15 Aug 2018 1:09

Instrument :

MSVOA_F

ClientSampleId :

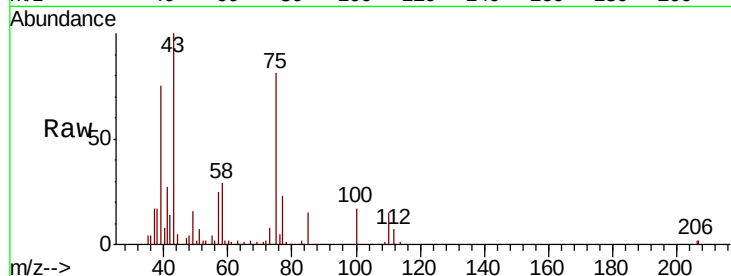
LOQ-SOIL-02-QT3-2018

Tot Ion: 75 Resp: 18663

Ion Ratio Lower Upper

75 100

77 27.9 25.8 38.6



Abundance Ion 75.00 (74.70 to 75.70): VF0

Ion 77.00 (76.70 to 77.70): VF0

8.44

10000

8000

6000

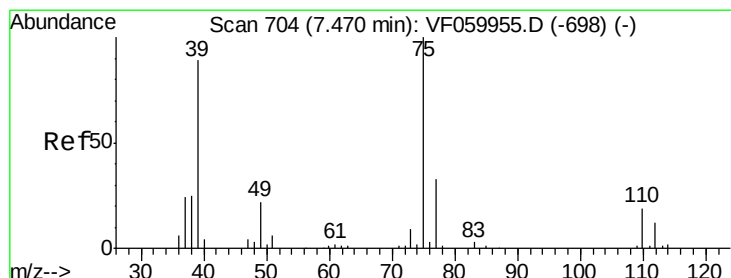
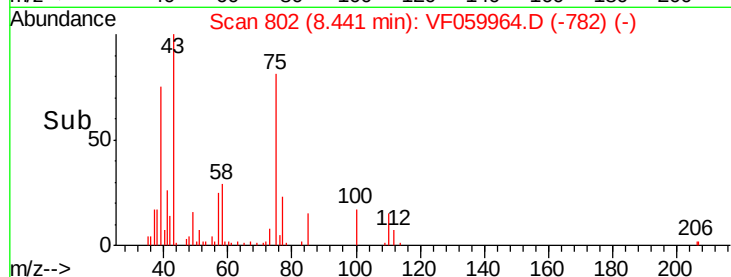
4000

2000

0

8.35 8.40 8.45 8.50 8.55

Time-->



#54

cis-1,3-Dichloropropene

Concen: 9.33 ug/l

RT: 7.47 min Scan# 704

Delta R.T. 0.00 min

Lab File: VF059964.D

Acq: 15 Aug 2018 1:09

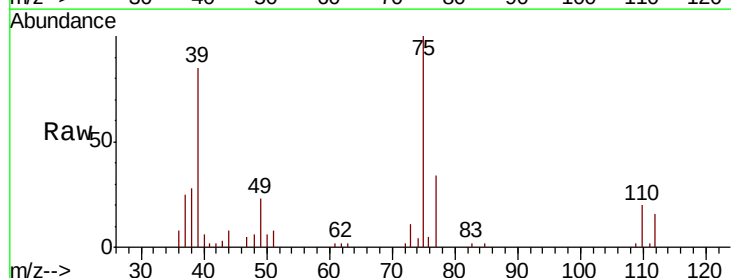
Tgt Ion: 75 Resp: 18492

Ion Ratio Lower Upper

75 100

77 33.6 26.1 39.1

39 85.3 71.6 107.4



Abundance Ion 75.00 (74.70 to 75.70): VF0

Ion 77.00 (76.70 to 77.70): VF0

Ion 39.00 (38.70 to 39.70): VF0

7.47

10000

8000

6000

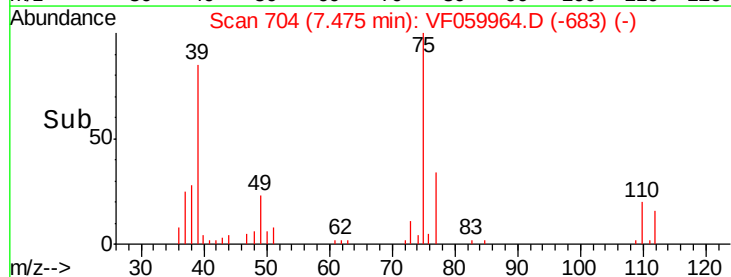
4000

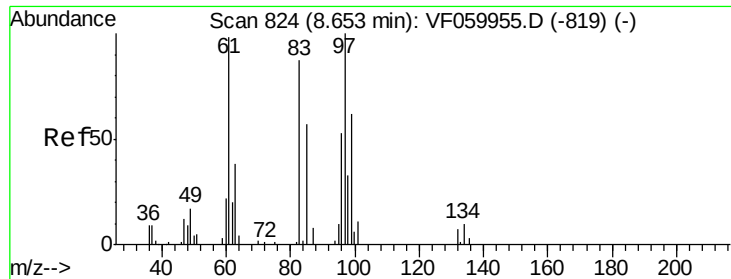
2000

0

7.40 7.50 7.60

Time-->





#55

1,1,2-Trichloroethane

Concen: 10.13 ug/l

RT: 8.66 min Scan# 824

Delta R.T. 0.00 min

Lab File: VF059964.D

Acq: 15 Aug 2018 1:09

Instrument :

MSVOA_F

ClientSampleId :

LOQ-SOIL-02-QT3-2018

Tot Ion: 97 Resp: 8576

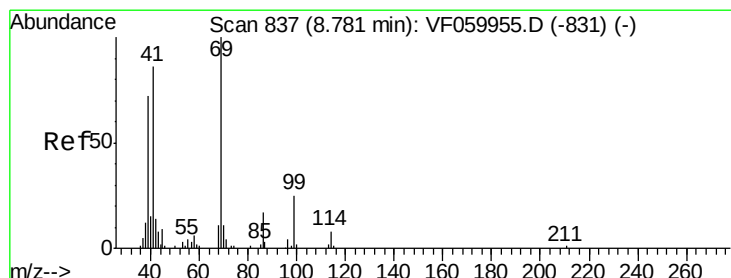
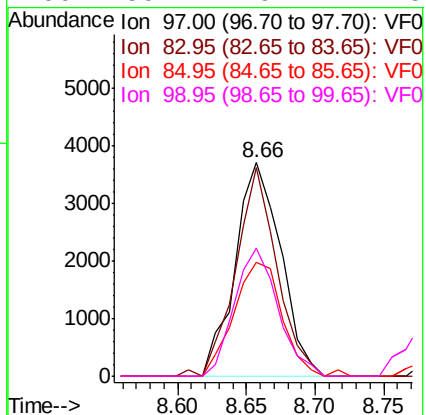
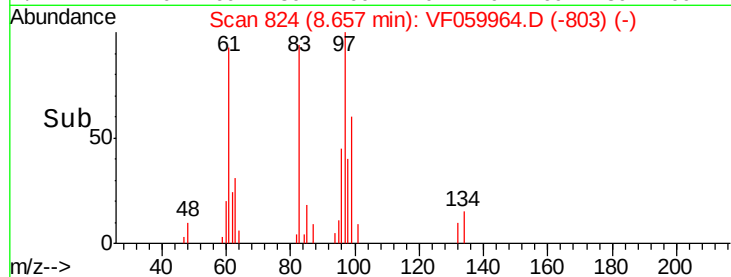
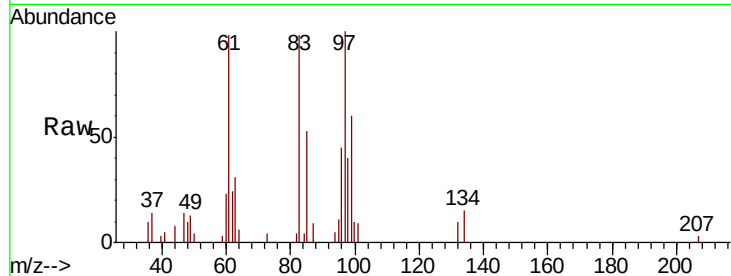
Ion Ratio Lower Upper

97 100

83 97.5 70.0 105.0

85 53.3 45.2 67.8

99 59.7 49.7 74.5



#56

Ethyl methacrylate

Concen: 8.15 ug/l

RT: 8.78 min Scan# 836

Delta R.T. -0.01 min

Lab File: VF059964.D

Acq: 15 Aug 2018 1:09

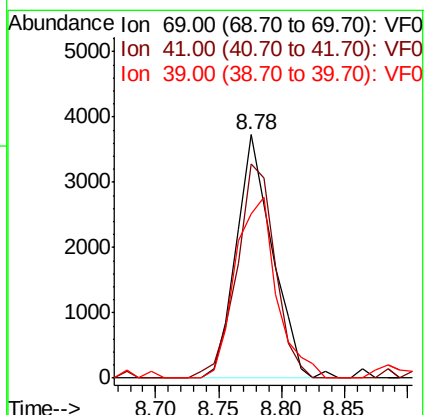
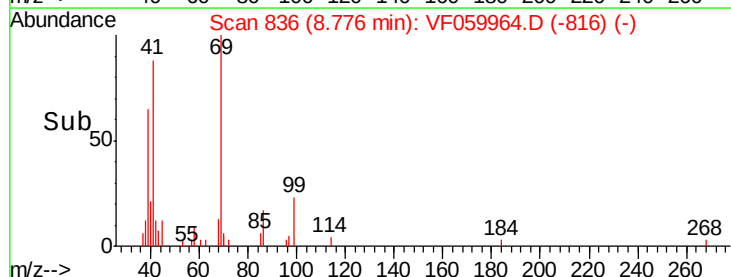
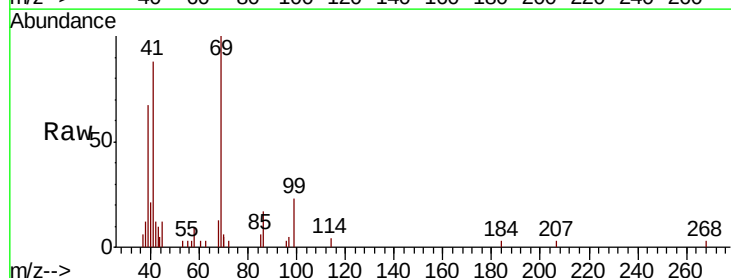
Tgt Ion: 69 Resp: 7416

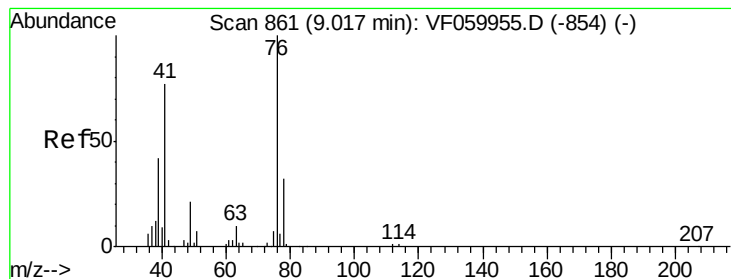
Ion Ratio Lower Upper

69 100

41 88.2 68.7 103.1

39 67.4 58.5 87.7





#57

1,3-Dichloropropane

Concen: 9.21 ug/l

RT: 9.02 min Scan# 861

Delta R.T. 0.00 min

Lab File: VF059964.D

Acq: 15 Aug 2018 1:09

Instrument :

MSVOA_F

ClientSampleId :

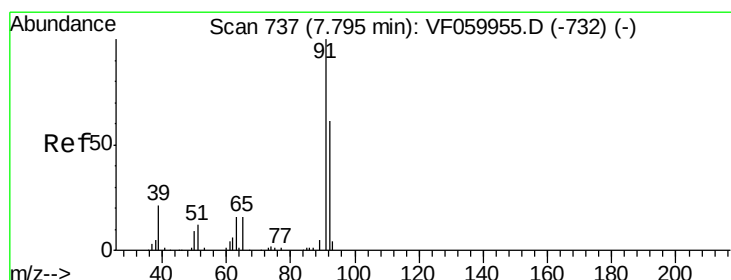
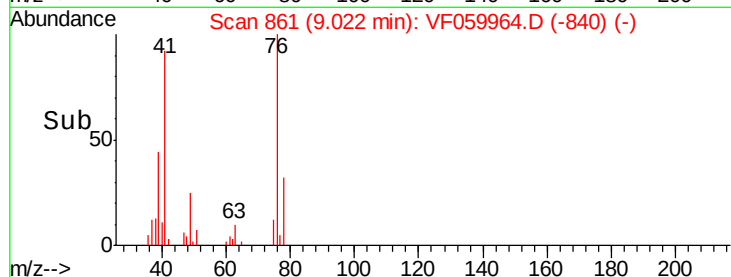
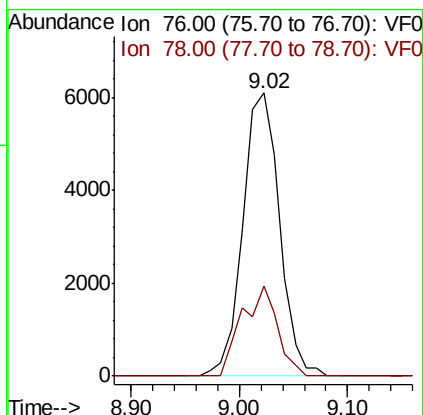
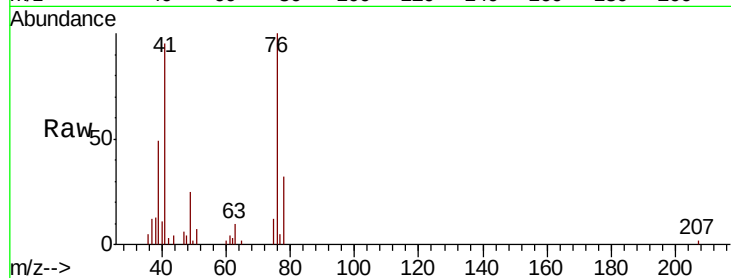
LOQ-SOIL-02-QT3-2018

Tot Ion: 76 Resp: 14371

Ion Ratio Lower Upper

76 100

78 31.7 25.5 38.3



#58

2-Chloroethyl Vinyl ether

Concen: 44.50 ug/l

RT: 7.80 min Scan# 737

Delta R.T. 0.00 min

Lab File: VF059964.D

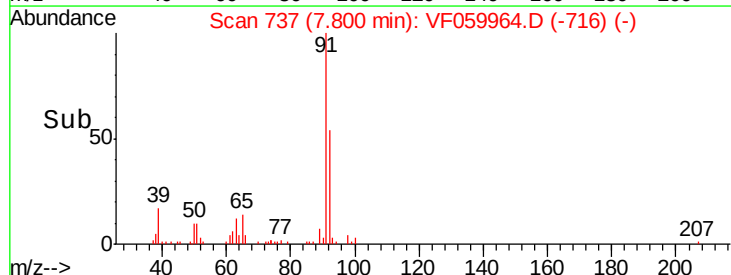
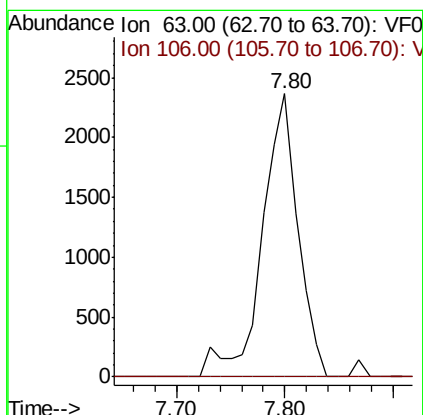
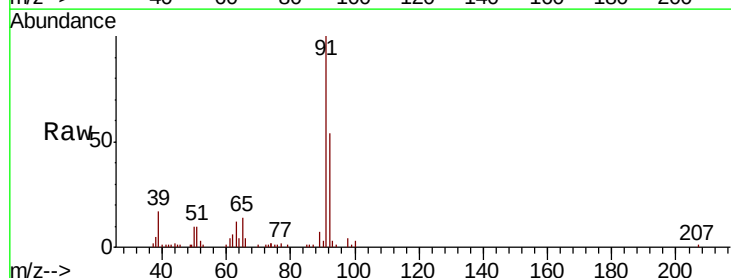
Acq: 15 Aug 2018 1:09

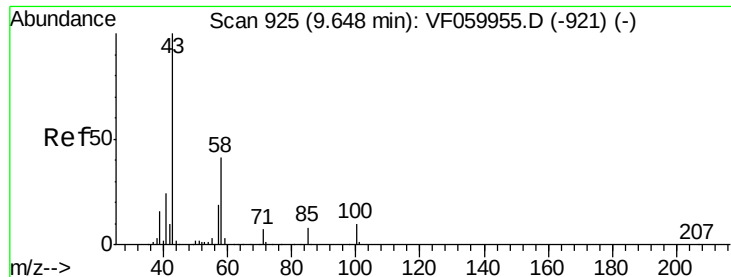
Tgt Ion: 63 Resp: 5446

Ion Ratio Lower Upper

63 100

106 0.0 0.0 0.0

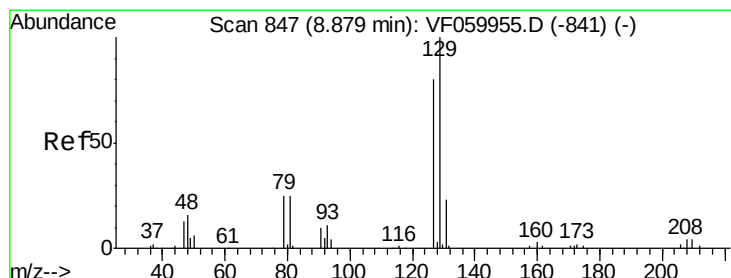
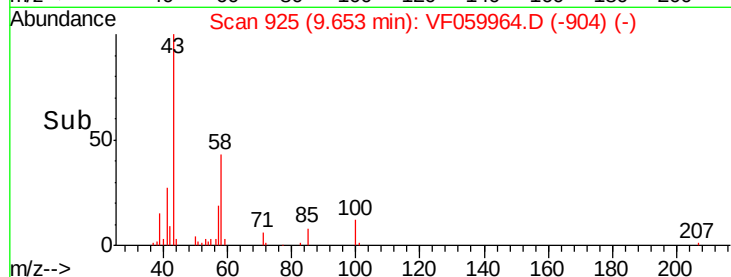
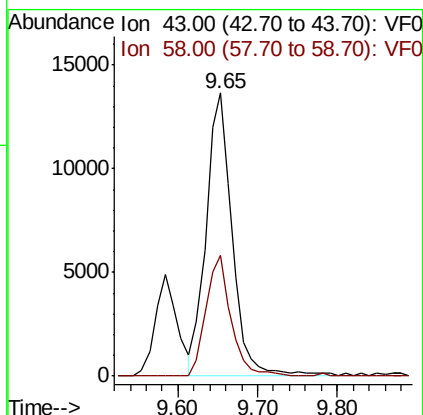
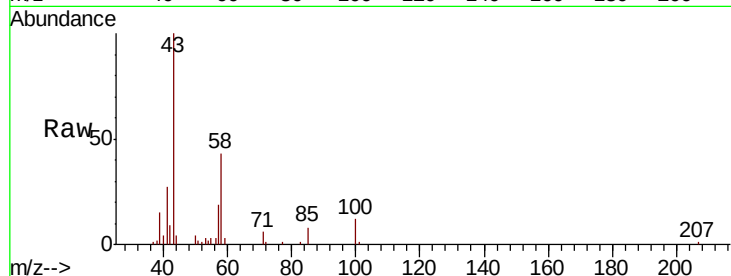




#59
2-Hexanone
Concen: 48.13 ug/l
RT: 9.65 min Scan# 925
Delta R.T. 0.00 min
Lab File: VF059964.D
Acq: 15 Aug 2018 1:09

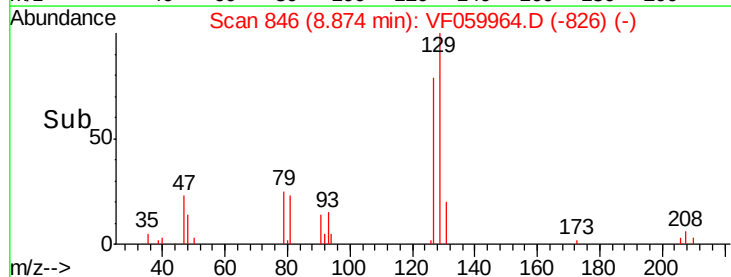
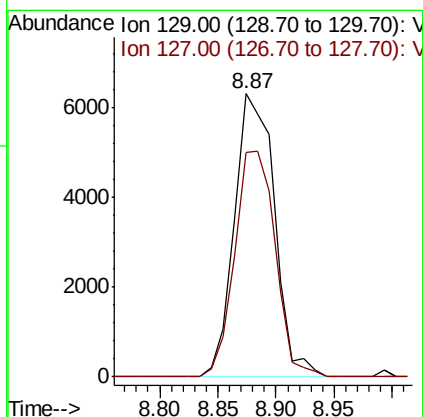
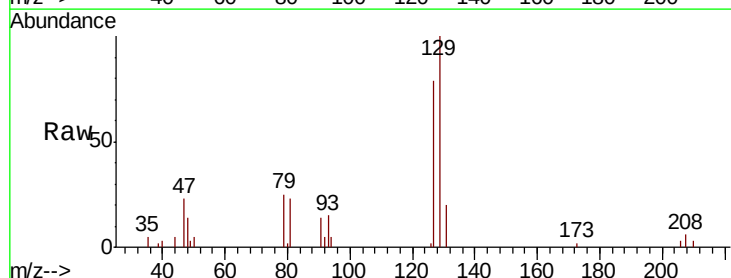
Instrument :
MSVOA_F
ClientSampleId :
LOQ-SOIL-02-QT3-2018

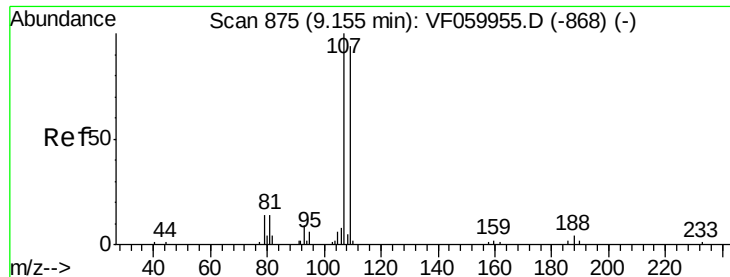
Tot Ion: 43 Resp: 31356
Ion Ratio Lower Upper
43 100
58 42.7 19.4 58.2



#60
Dibromochloromethane
Concen: 8.97 ug/l
RT: 8.87 min Scan# 846
Delta R.T. -0.01 min
Lab File: VF059964.D
Acq: 15 Aug 2018 1:09

Tgt Ion: 129 Resp: 15034
Ion Ratio Lower Upper
129 100
127 79.4 40.0 119.9





#61

1,2-Dibromoethane

Concen: 10.01 ug/l

RT: 9.15 min Scan# 874

Delta R.T. -0.01 min

Lab File: VF059964.D

Acq: 15 Aug 2018 1:09

Instrument :

MSVOA_F

ClientSampleId :

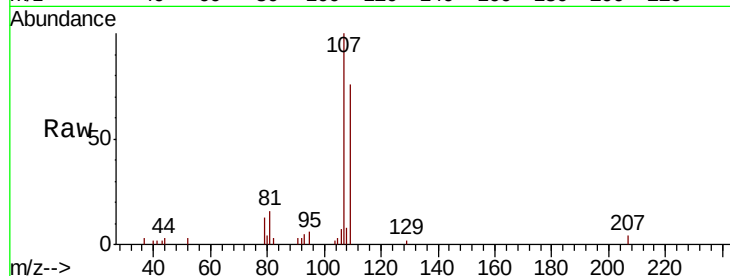
LOQ-SOIL-02-QT3-2018

Tot Ion:107 Resp: 10570

Ion Ratio Lower Upper

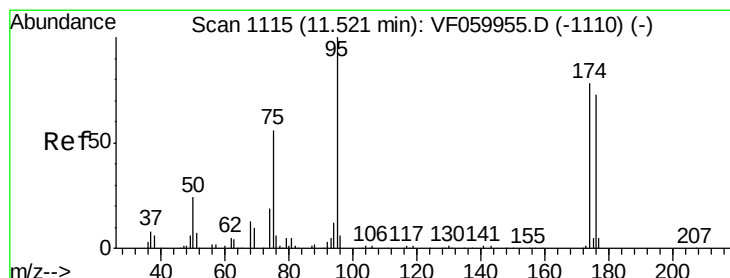
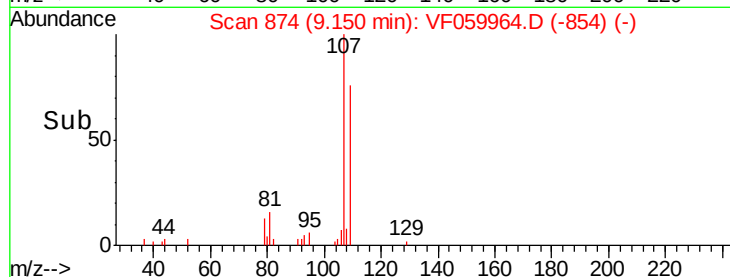
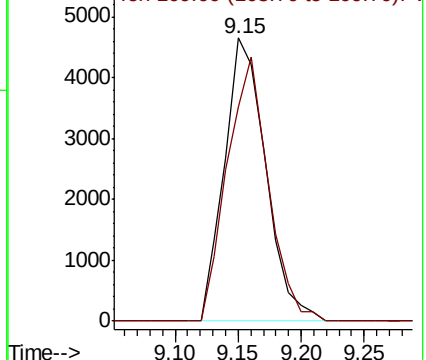
107 100

109 75.8 75.0 112.6



Abundance Ion 107.00 (106.70 to 107.70): V

Ion 109.00 (108.70 to 109.70): V



#62

4-Bromofluorobenzene

Concen: 51.19 ug/l

RT: 11.53 min Scan# 1115

Delta R.T. 0.00 min

Lab File: VF059964.D

Acq: 15 Aug 2018 1:09

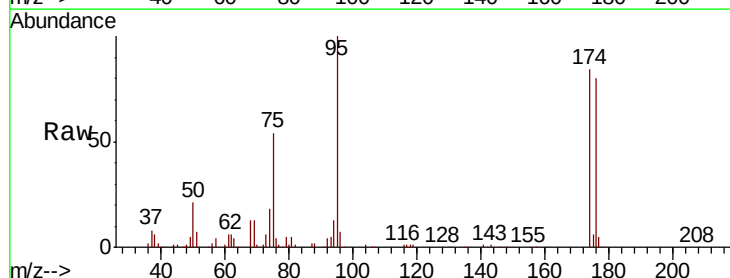
Tgt Ion: 95 Resp: 110540

Ion Ratio Lower Upper

95 100

174 83.9 0.0 156.4

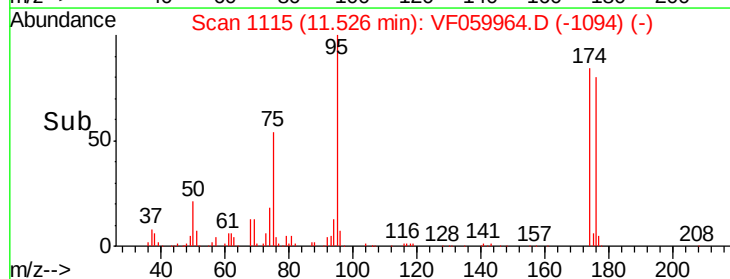
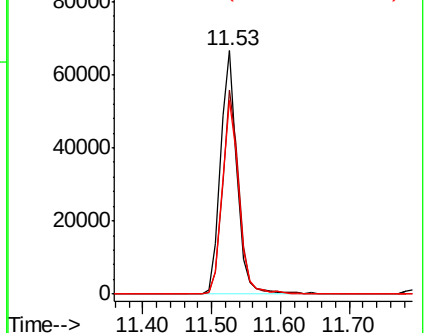
176 79.8 0.0 146.8

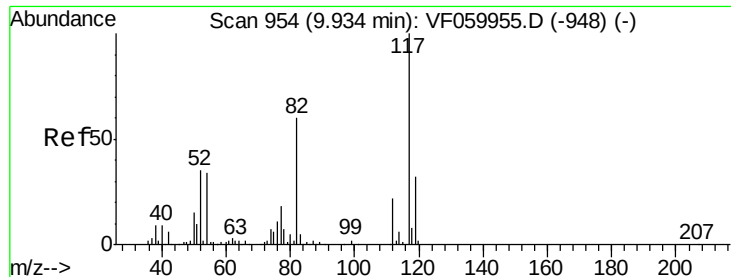


Abundance Ion 95.00 (94.70 to 95.70): VF0

Ion 174.00 (173.70 to 174.70): V

Ion 176.00 (175.70 to 176.70): V

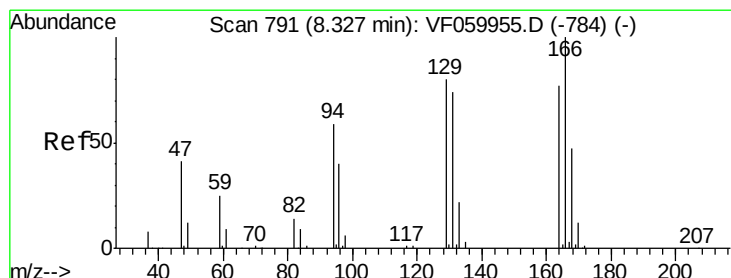
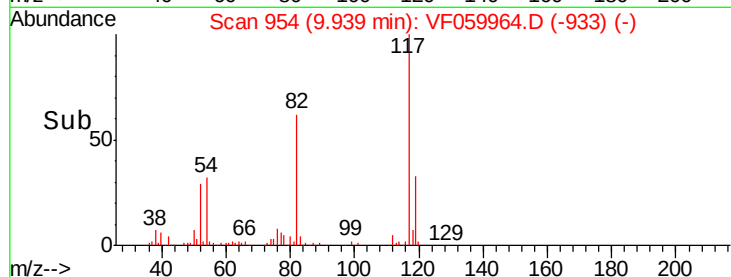
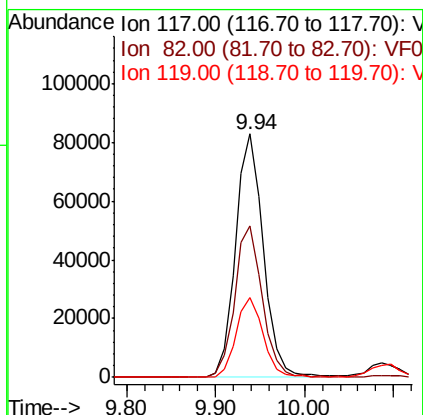
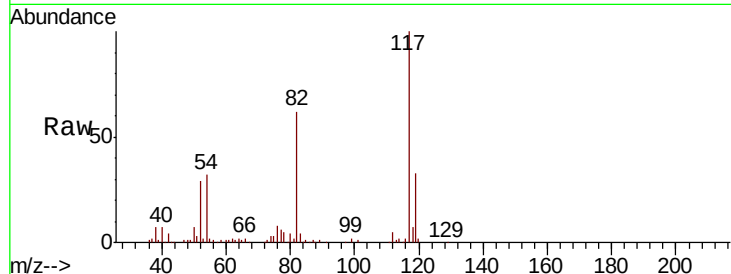




#63
Chlorobenzene-d5
Concen: 50.00 ug/l
RT: 9.94 min Scan# 954
Delta R.T. 0.00 min
Lab File: VF059964.D
Acq: 15 Aug 2018 1:09

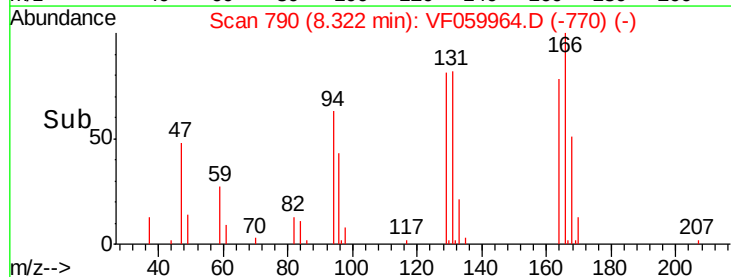
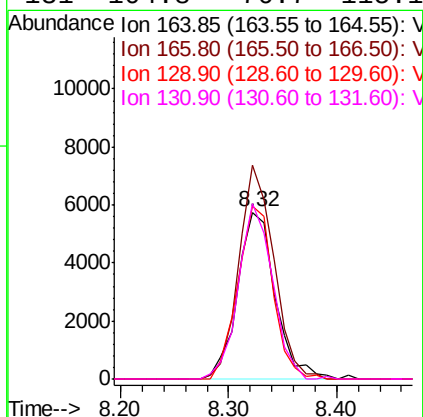
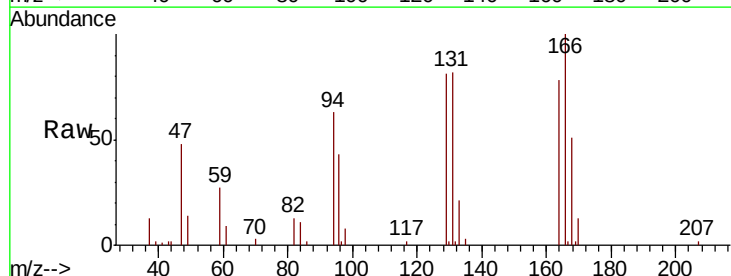
Instrument :
MSVOA_F
ClientSampleId :
LOQ-SOIL-02-QT3-2018

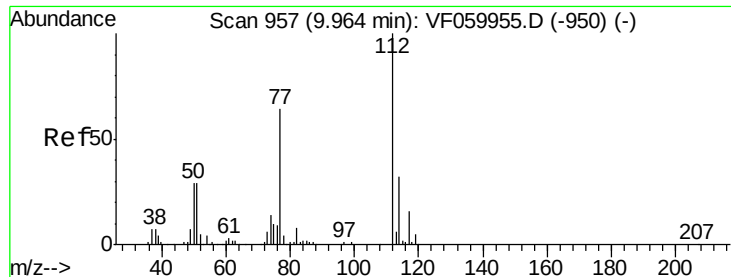
Tot Ion	Ratio	Lower	Upper
117	100		
82	62.3	48.3	72.5
119	32.8	25.7	38.5



#64
Tetrachloroethene
Concen: 9.96 ug/l
RT: 8.32 min Scan# 790
Delta R.T. -0.01 min
Lab File: VF059964.D
Acq: 15 Aug 2018 1:09

Tgt Ion	Ratio	Lower	Upper
164	100		
166	128.0	103.4	155.2
129	103.3	82.2	123.4
131	104.8	76.7	115.1

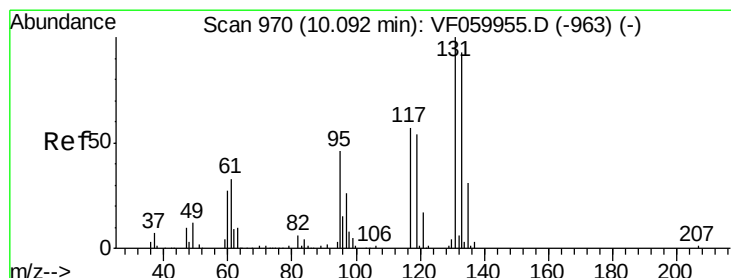
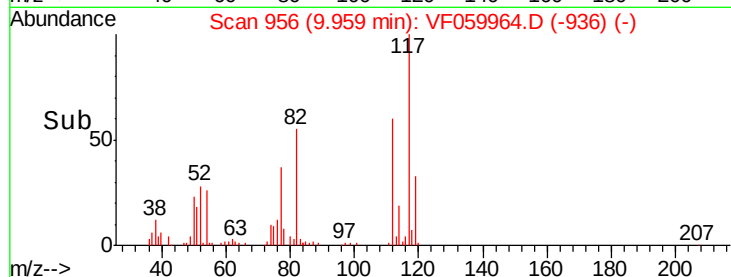
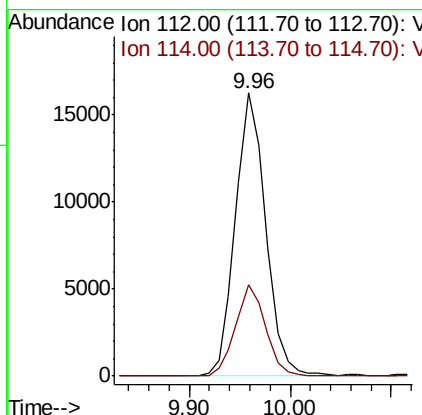
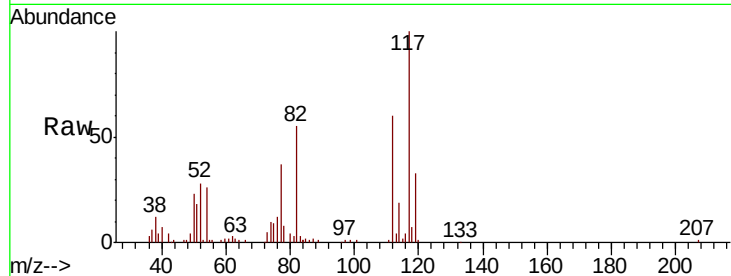




#65
Chlorobenzene
Concen: 9.82 ug/l
RT: 9.96 min Scan# 956
Delta R.T. -0.01 min
Lab File: VF059964.D
Acq: 15 Aug 2018 1:09

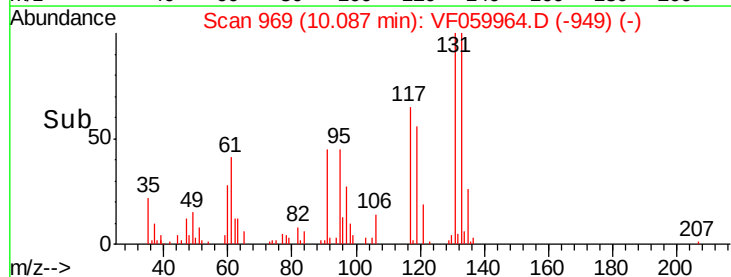
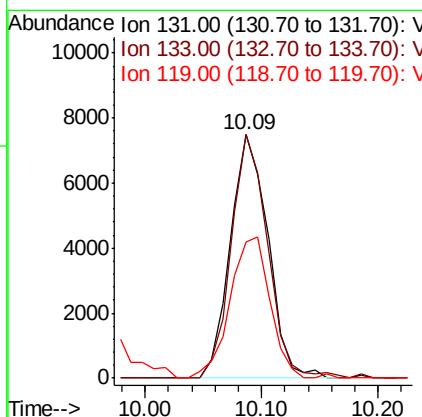
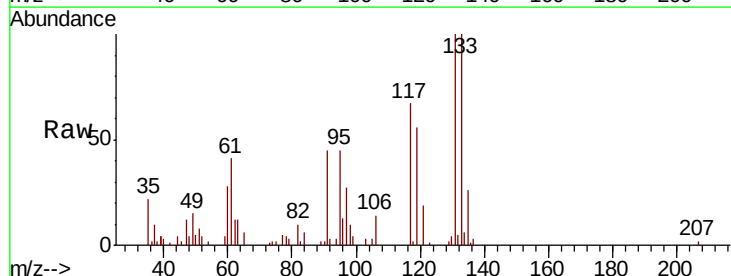
Instrument :
MSVOA_F
ClientSampleId :
LOQ-SOIL-02-QT3-2018

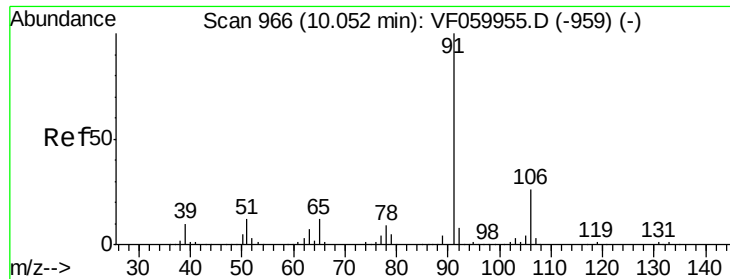
Tot Ion:112 Resp: 34173
Ion Ratio Lower Upper
112 100
114 32.3 25.8 38.6



#66
1,1,1,2-Tetrachloroethane
Concen: 9.95 ug/l
RT: 10.09 min Scan# 969
Delta R.T. -0.01 min
Lab File: VF059964.D
Acq: 15 Aug 2018 1:09

Tgt Ion:131 Resp: 16736
Ion Ratio Lower Upper
131 100
133 95.1 46.4 139.1
119 53.1 27.2 81.5





#67

Ethyl Benzene

Concen: 9.57 ug/l

RT: 10.06 min Scan# 966

Delta R.T. 0.00 min

Lab File: VF059964.D

Acq: 15 Aug 2018 1:09

Instrument :

MSVOA_F

ClientSampleId :

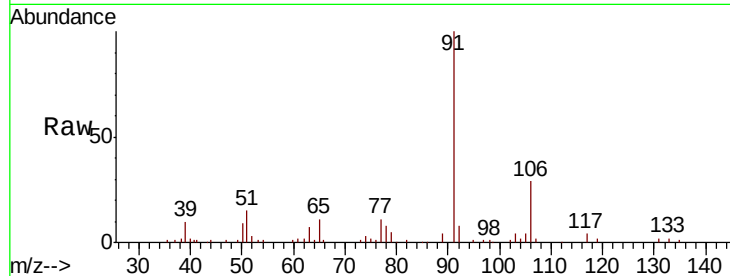
LOQ-SOIL-02-QT3-2018

Tot Ion: 91 Resp: 58837

Ion Ratio Lower Upper

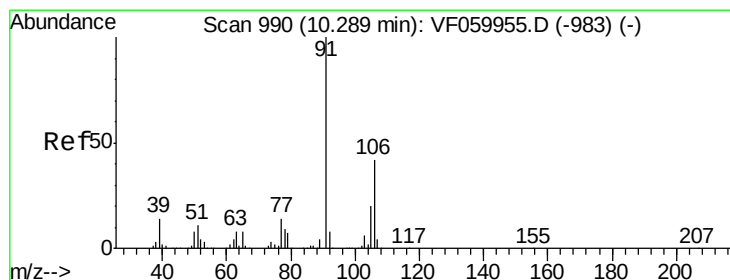
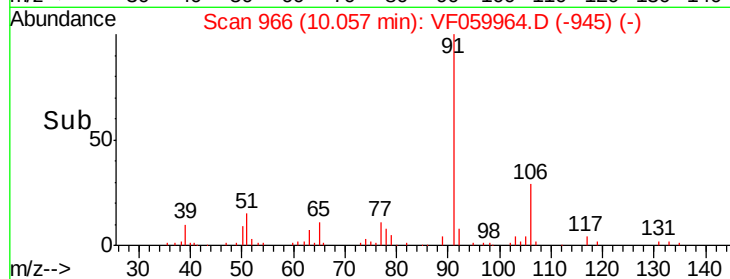
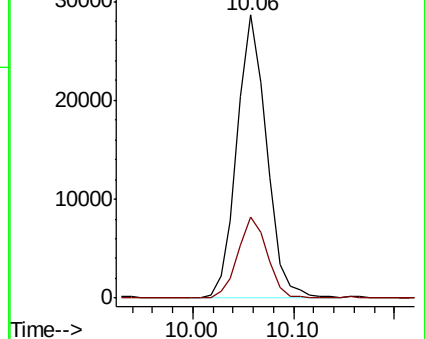
91 100

106 28.9 20.7 31.1



Abundance Ion 91.00 (90.70 to 91.70): VF0

Ion 106.00 (105.70 to 106.70): V



#68

m/p-Xylenes

Concen: 20.43 ug/l

RT: 10.28 min Scan# 989

Delta R.T. -0.01 min

Lab File: VF059964.D

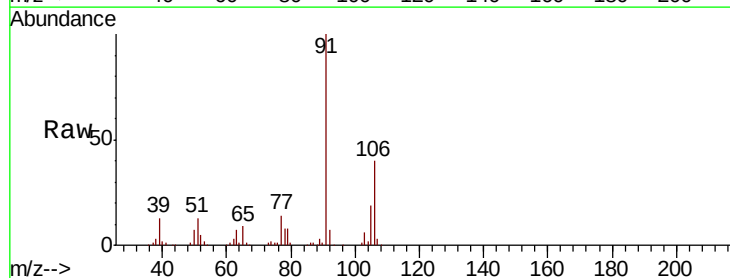
Acq: 15 Aug 2018 1:09

Tgt Ion: 106 Resp: 42233

Ion Ratio Lower Upper

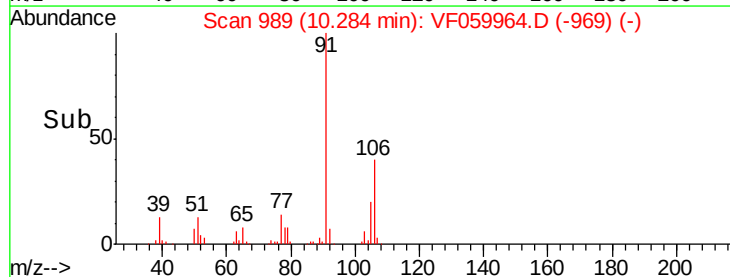
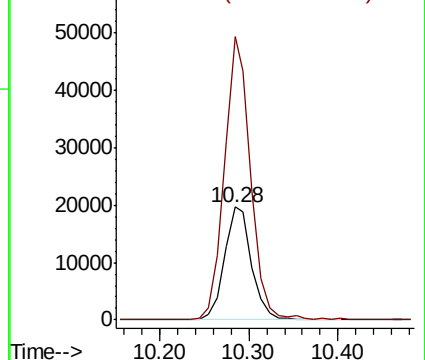
106 100

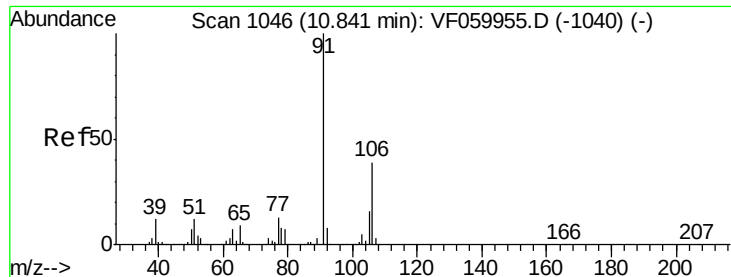
91 250.7 191.8 287.8



Abundance Ion 106.00 (105.70 to 106.70): V

Ion 91.00 (90.70 to 91.70): VF0





#69

o-Xylene

Concen: 9.45 ug/l

RT: 10.85 min Scan# 1046

Delta R.T. 0.00 min

Lab File: VF059964.D

Acq: 15 Aug 2018 1:09

Instrument :

MSVOA_F

ClientSampleId :

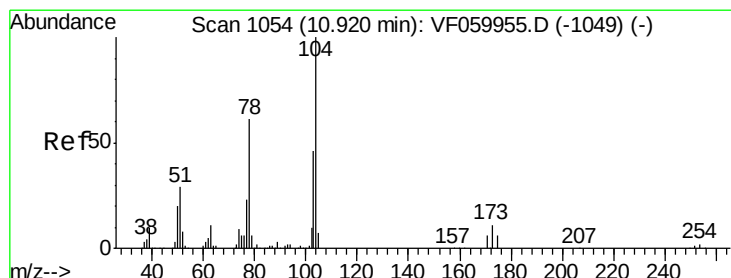
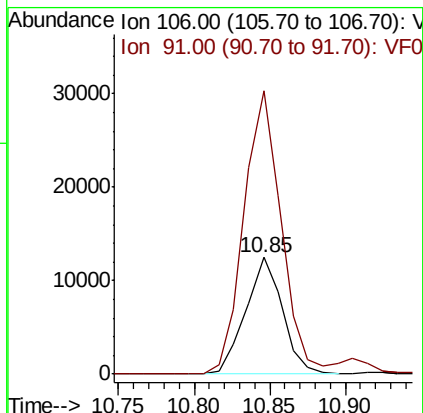
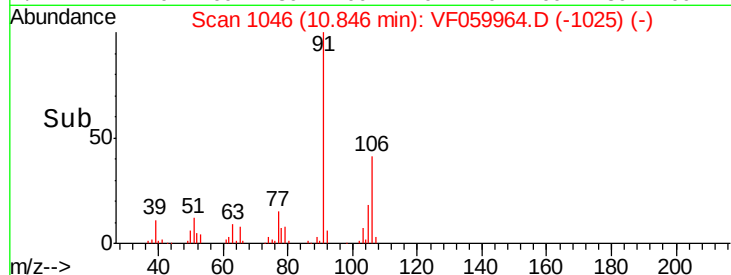
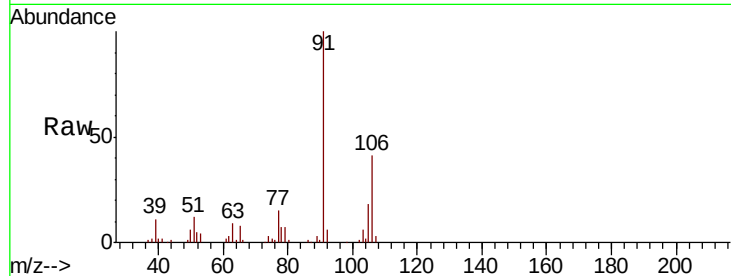
LOQ-SOIL-02-QT3-2018

Tot Ion:106 Resp: 21215

Ion Ratio Lower Upper

106 100

91 243.2 126.8 380.6



#70

Styrene

Concen: 9.33 ug/l

RT: 10.91 min Scan# 1053

Delta R.T. -0.01 min

Lab File: VF059964.D

Acq: 15 Aug 2018 1:09

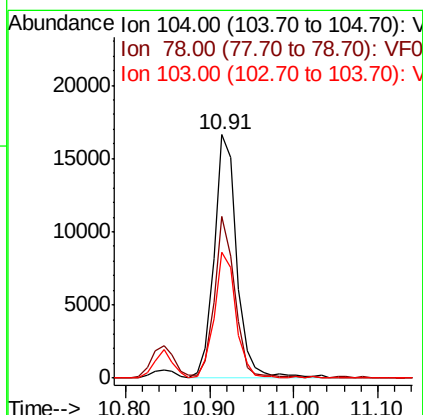
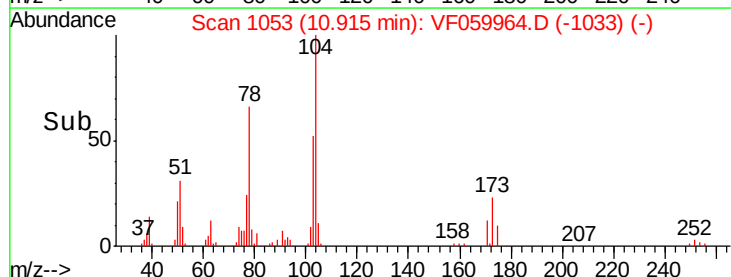
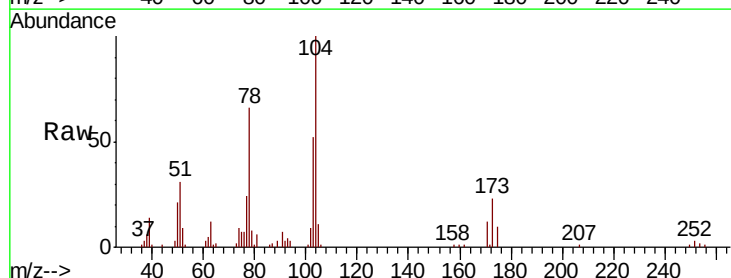
Tgt Ion:104 Resp: 30999

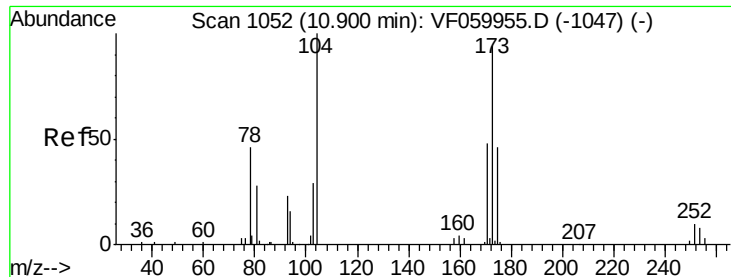
Ion Ratio Lower Upper

104 100

78 66.4 49.2 73.8

103 51.8 37.4 56.0





#71

Bromoform

Concen: 9.06 ug/l

RT: 10.90 min Scan# 1052

Delta R.T. 0.00 min

Lab File: VF059964.D

Acq: 15 Aug 2018 1:09

Instrument :

MSVOA_F

ClientSampleId :

LOQ-SOIL-02-QT3-2018

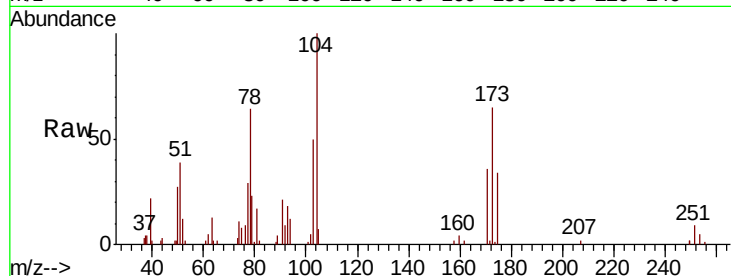
Tot Ion:173 Resp: 9469

Ion Ratio Lower Upper

173 100

175 51.6 24.6 73.6

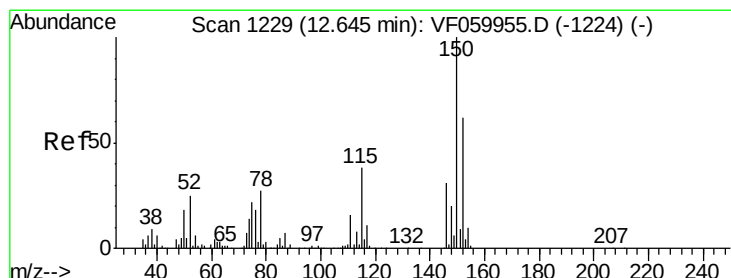
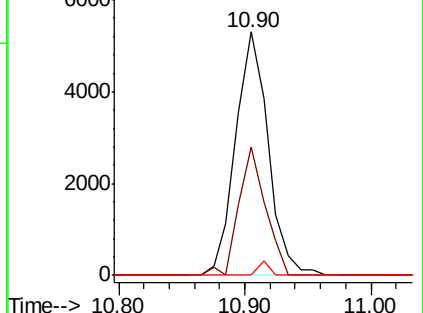
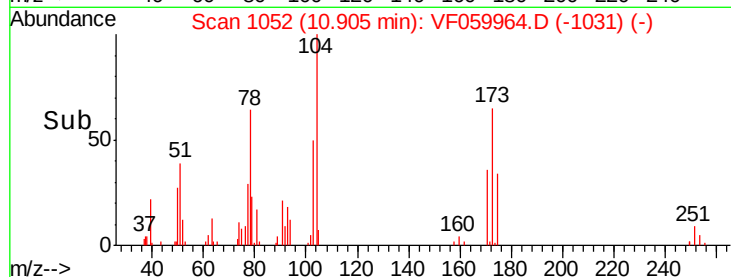
254 0.0 0.0 0.0



Abundance Ion 173.00 (172.70 to 173.70): V

Ion 175.00 (174.70 to 175.70): V

Ion 254.00 (253.70 to 254.70): V



#72

1,4-Dichlorobenzene-d4

Concen: 50.00 ug/l

RT: 12.65 min Scan# 1229

Delta R.T. 0.00 min

Lab File: VF059964.D

Acq: 15 Aug 2018 1:09

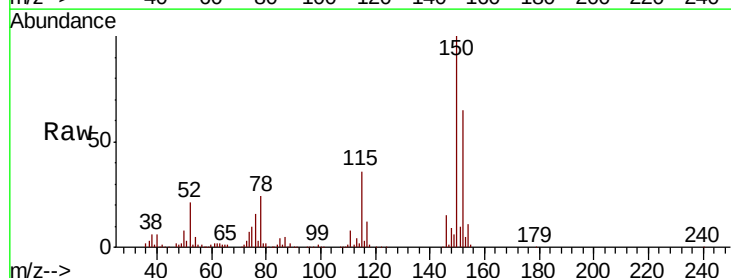
Tgt Ion:152 Resp: 116940

Ion Ratio Lower Upper

152 100

115 55.4 31.4 94.0

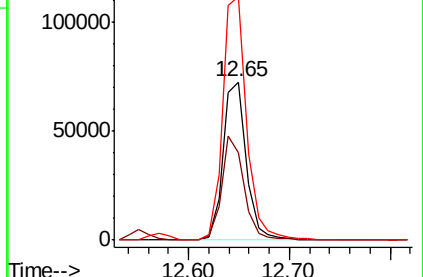
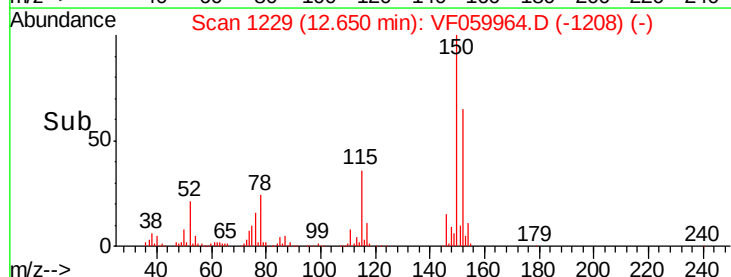
150 154.1 0.0 326.2

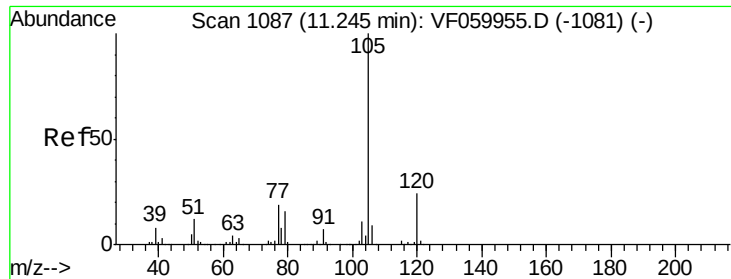


Abundance Ion 152.00 (151.70 to 152.70): V

Ion 115.00 (114.70 to 115.70): V

Ion 150.00 (149.70 to 150.70): V





#73

Isopropylbenzene

Concen: 9.57 ug/l

RT: 11.24 min Scan# 1086

Delta R.T. -0.01 min

Lab File: VF059964.D

Acq: 15 Aug 2018 1:09

Instrument :

MSVOA_F

ClientSampleId :

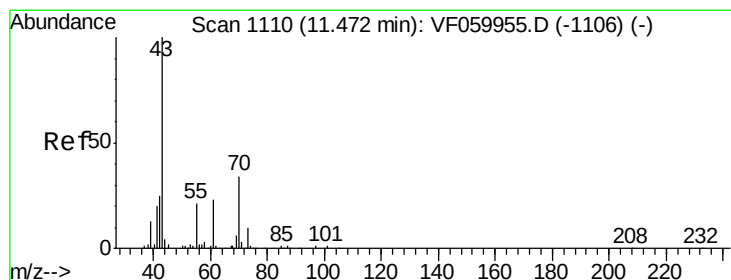
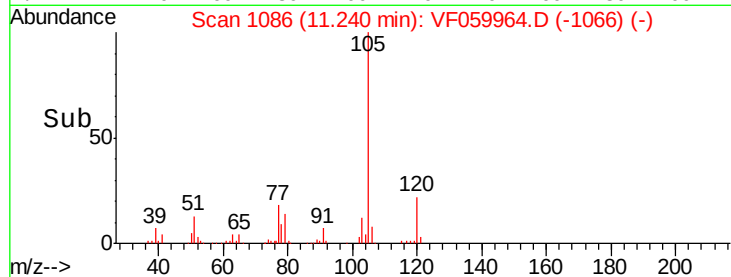
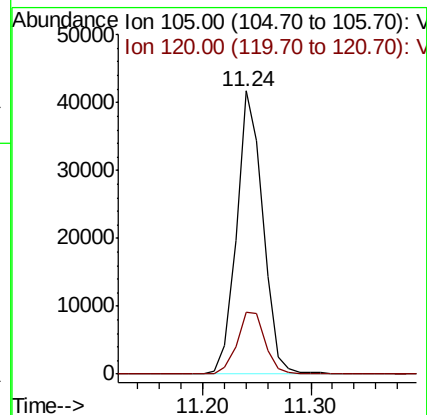
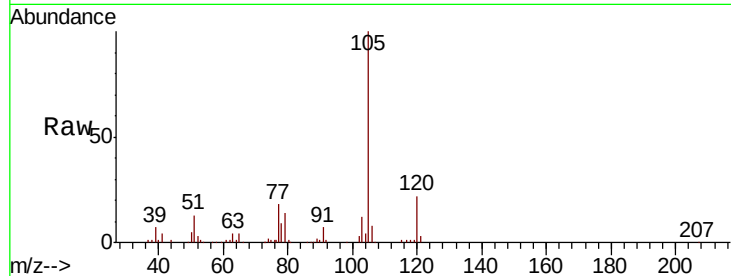
LOQ-SOIL-02-QT3-2018

Tot Ion:105 Resp: 70352

Ion Ratio Lower Upper

105 100

120 21.9 11.9 35.9



#74

N-ethyl acetate

Concen: 9.68 ug/l

RT: 11.48 min Scan# 1110

Delta R.T. 0.00 min

Lab File: VF059964.D

Acq: 15 Aug 2018 1:09

Tgt Ion: 43 Resp: 15697

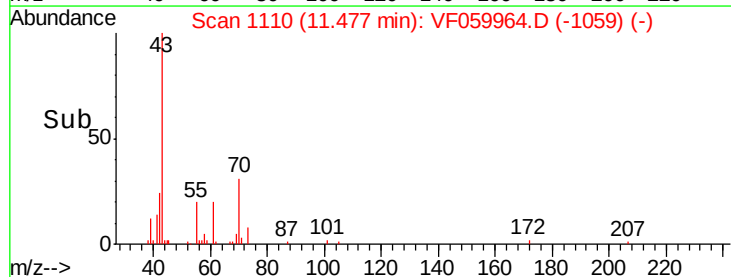
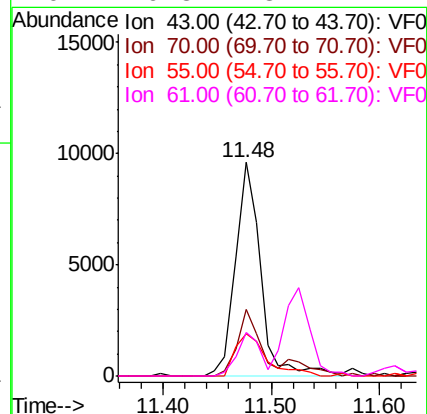
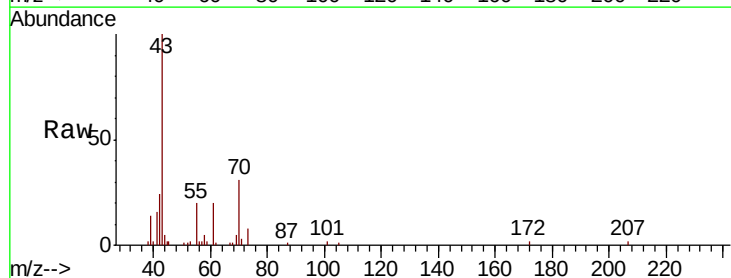
Ion Ratio Lower Upper

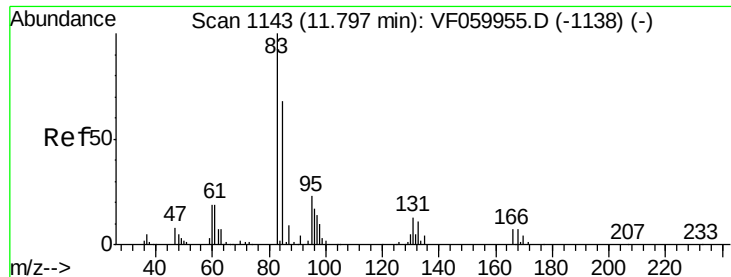
43 100

70 31.1 26.9 40.3

55 19.9 16.9 25.3

61 20.3 18.1 27.1





#75

1,1,2,2-Tetrachloroethane

Concen: 9.96 ug/l

RT: 11.80 min Scan# 1143

Delta R.T. 0.00 min

Lab File: VF059964.D

Acq: 15 Aug 2018 1:09

Instrument :

MSVOA_F

ClientSampleId :

LOQ-SOIL-02-QT3-2018

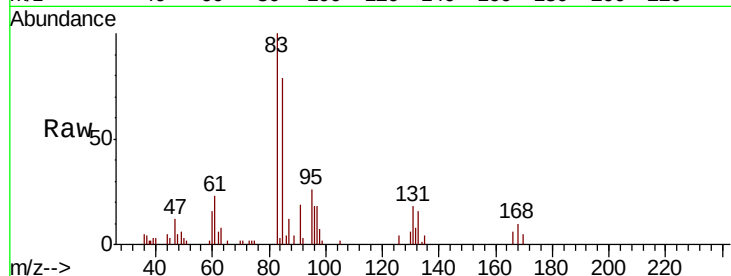
Tot Ion: 83 Resp: 12319

Ion Ratio Lower Upper

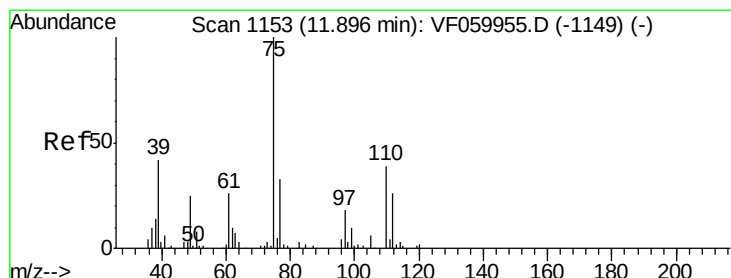
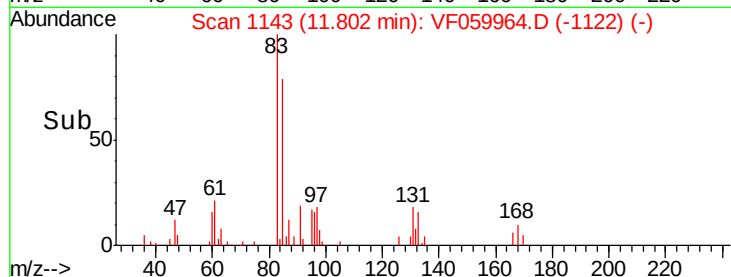
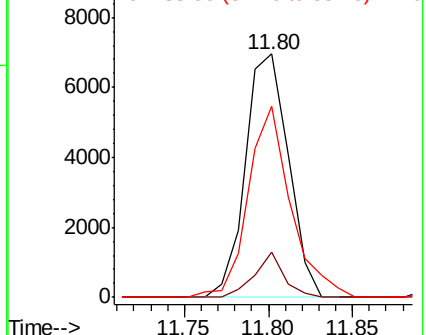
83 100

131 18.4 6.3 19.1

85 78.7 33.9 101.7



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: 9.68 ug/l

RT: 11.90 min Scan# 1153

Delta R.T. 0.00 min

Lab File: VF059964.D

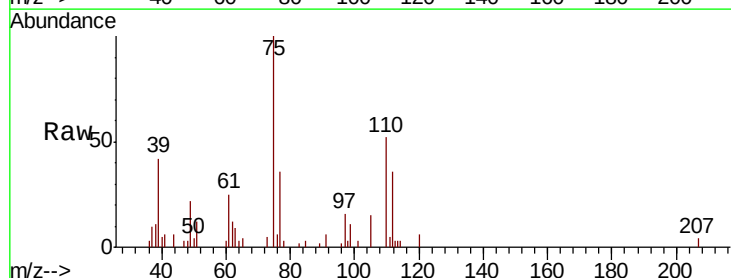
Acq: 15 Aug 2018 1:09

Tgt Ion: 75 Resp: 10316

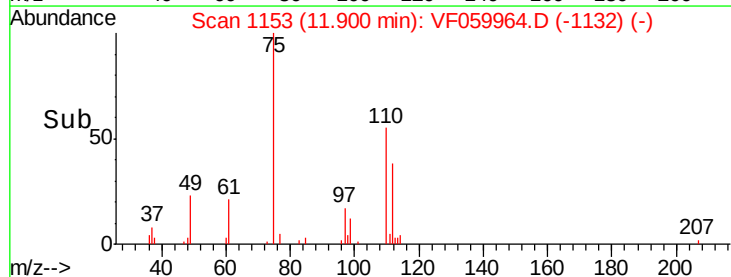
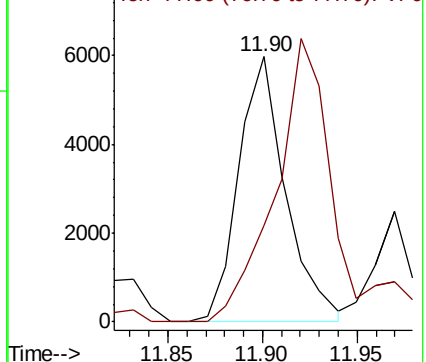
Ion Ratio Lower Upper

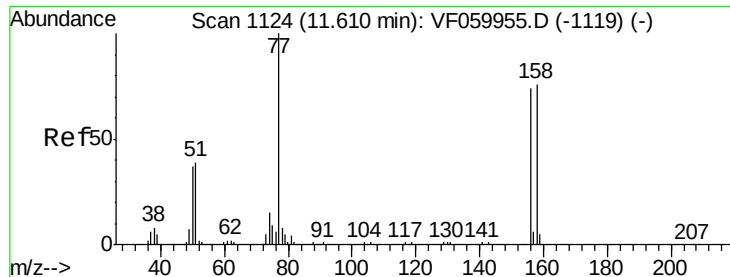
75 100

77 36.4 16.6 49.7



Abundance Ion 75.00 (74.70 to 75.70): VF0
Ion 77.00 (76.70 to 77.70): VF0





#77

Bromobenzene

Concen: 9.61 ug/l

RT: 11.60 min Scan# 1123

Delta R.T. -0.01 min

Lab File: VF059964.D

Acq: 15 Aug 2018 1:09

Instrument :

MSVOA_F

ClientSampleId :

LOQ-SOIL-02-QT3-2018

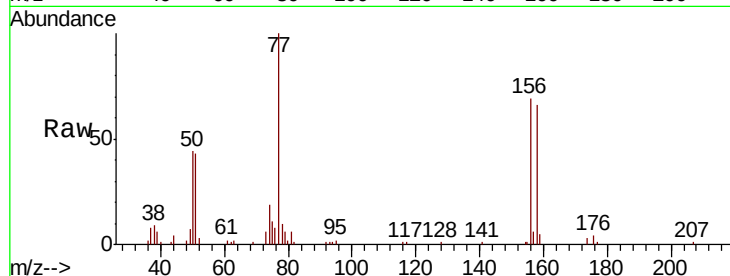
Tot Ion:156 Resp: 18549

Ion Ratio Lower Upper

156 100

77 144.3 67.8 203.2

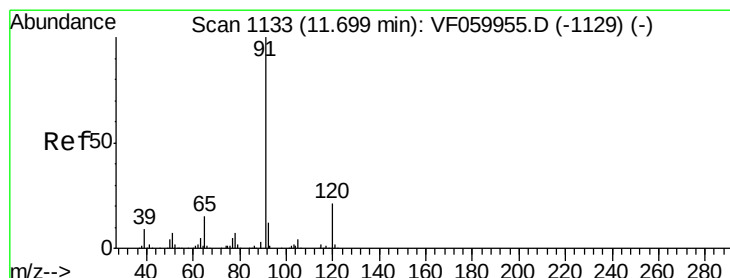
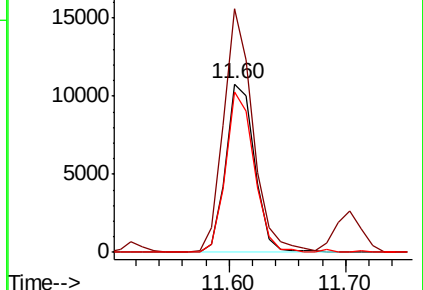
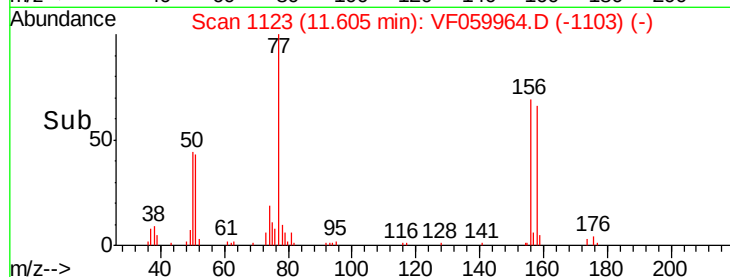
158 95.4 51.7 155.2



Abundance Ion 156.00 (155.70 to 156.70): V

Ion 77.00 (76.70 to 77.70): VF0

Ion 158.00 (157.70 to 158.70): V



#78

n-propylbenzene

Concen: 9.76 ug/l

RT: 11.70 min Scan# 1133

Delta R.T. 0.00 min

Lab File: VF059964.D

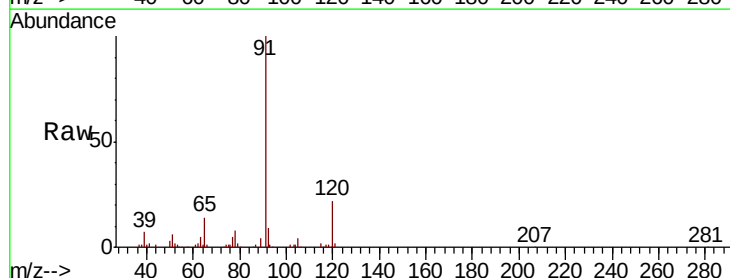
Acq: 15 Aug 2018 1:09

Tgt Ion: 91 Resp: 84218

Ion Ratio Lower Upper

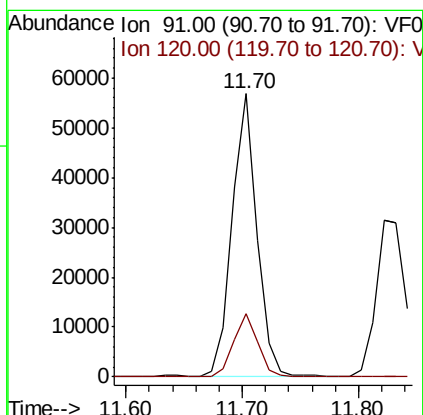
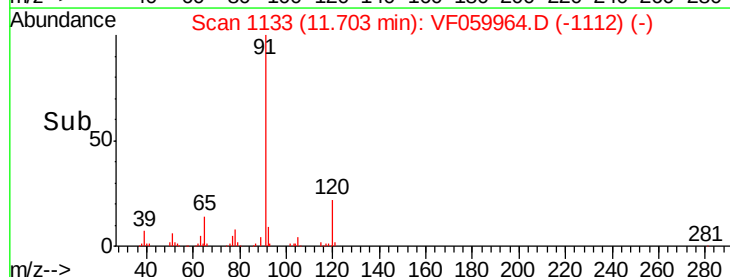
91 100

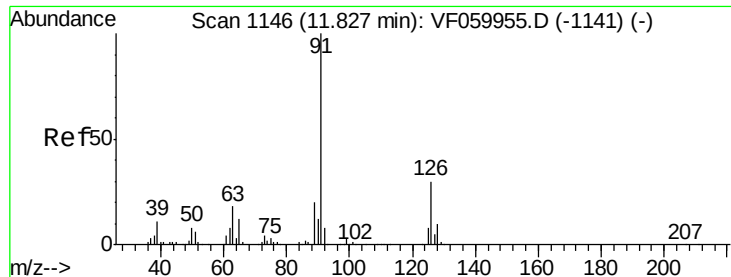
120 22.2 10.4 31.1



Abundance Ion 91.00 (90.70 to 91.70): VF0

Ion 120.00 (119.70 to 120.70): V





#79

2-Chlorotoluene

Concen: 10.12 ug/l

RT: 11.82 min Scan# 1145

Delta R.T. -0.01 min

Lab File: VF059964.D

Acq: 15 Aug 2018 1:09

Instrument :

MSVOA_F

ClientSampleId :

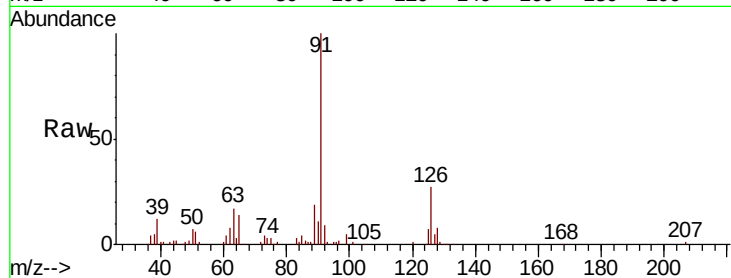
LOQ-SOIL-02-QT3-2018

Tot Ion: 91 Resp: 54712

Ion Ratio Lower Upper

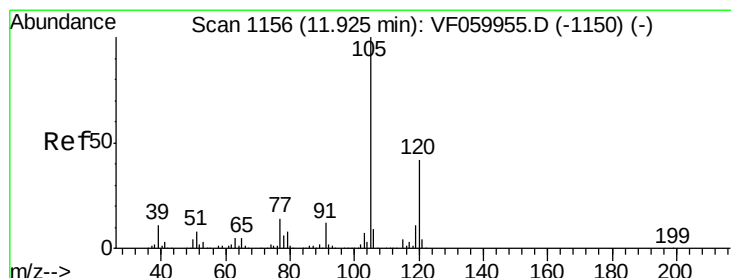
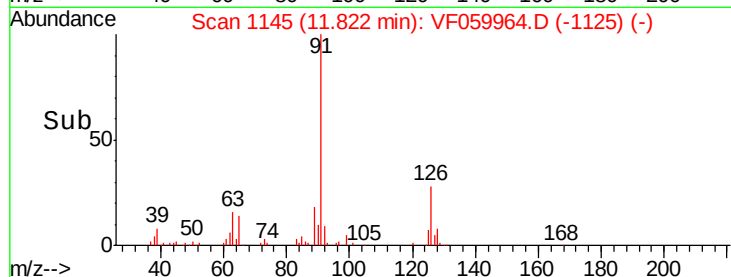
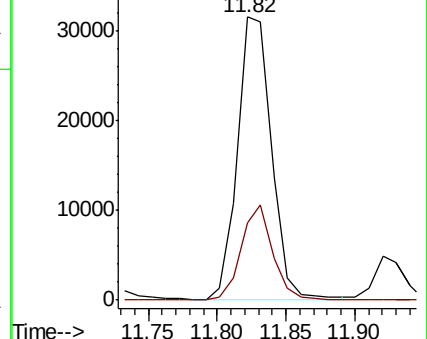
91 100

126 27.5 15.2 45.5



Abundance Ion 91.00 (90.70 to 91.70): VF0

Ion 126.00 (125.70 to 126.70): V



#80

1,3,5-Trimethylbenzene

Concen: 9.62 ug/l

RT: 11.92 min Scan# 1155

Delta R.T. -0.01 min

Lab File: VF059964.D

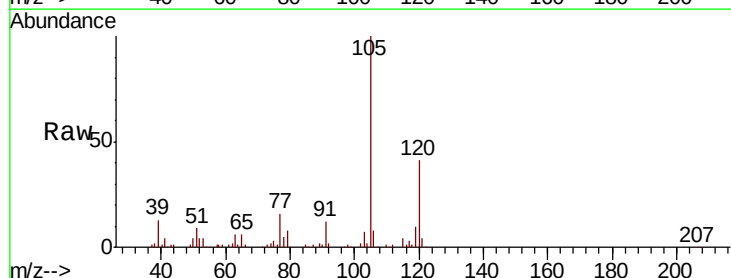
Acq: 15 Aug 2018 1:09

Tgt Ion:105 Resp: 65875

Ion Ratio Lower Upper

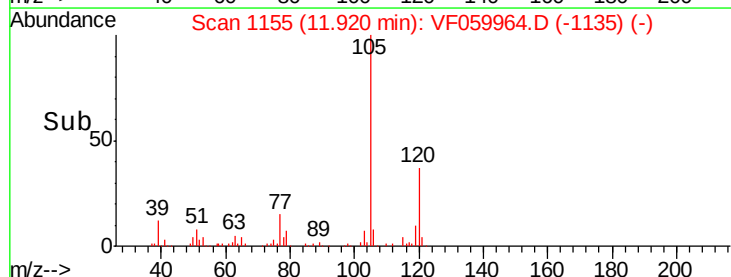
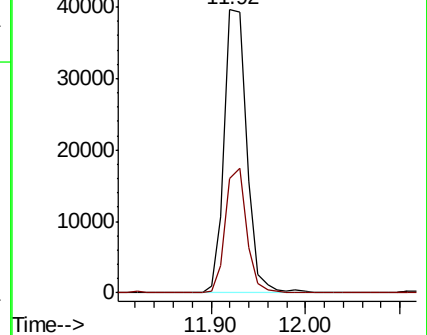
105 100

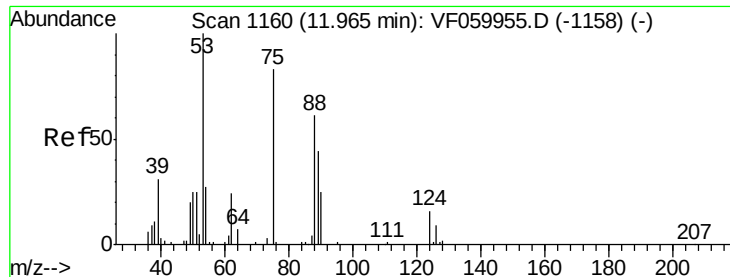
120 40.6 21.1 63.3



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: 6.76 ug/l

RT: 11.97 min Scan# 1160

Delta R.T. 0.00 min

Lab File: VF059964.D

Acq: 15 Aug 2018 1:09

Instrument :

MSVOA_F

ClientSampleId :

LOQ-SOIL-02-QT3-2018

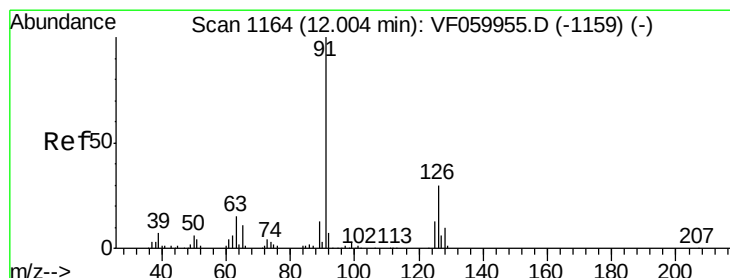
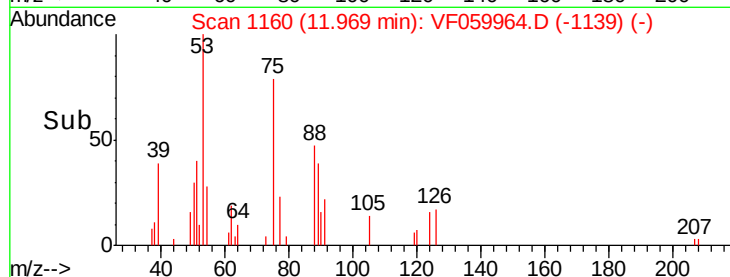
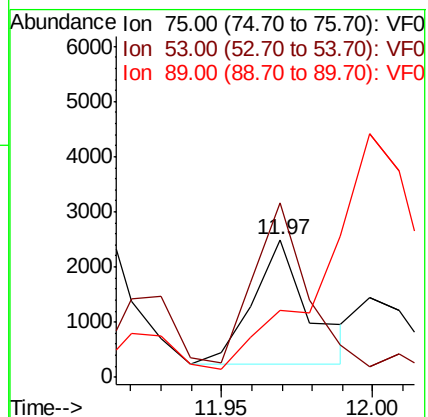
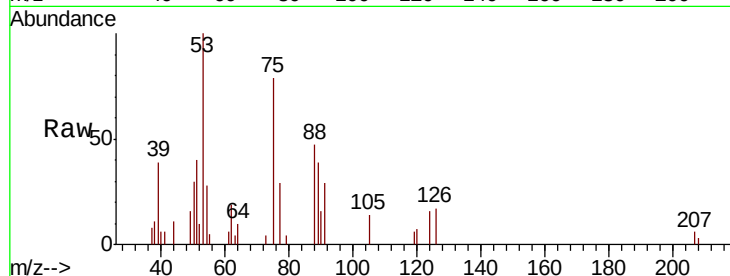
Tot Ion: 75 Resp: 2944

Ion Ratio Lower Upper

75 100

53 126.4 97.1 145.7

89 48.7 43.6 65.4



#82

4-Chlorotoluene

Concen: 9.00 ug/l

RT: 12.00 min Scan# 1163

Delta R.T. -0.01 min

Lab File: VF059964.D

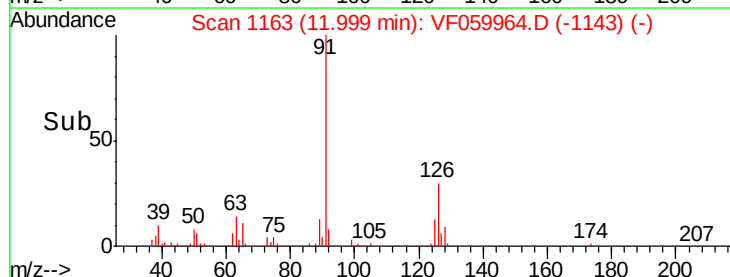
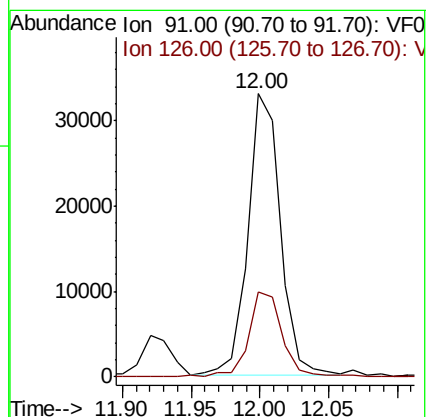
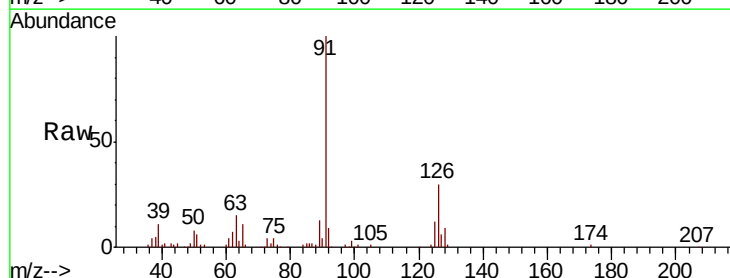
Acq: 15 Aug 2018 1:09

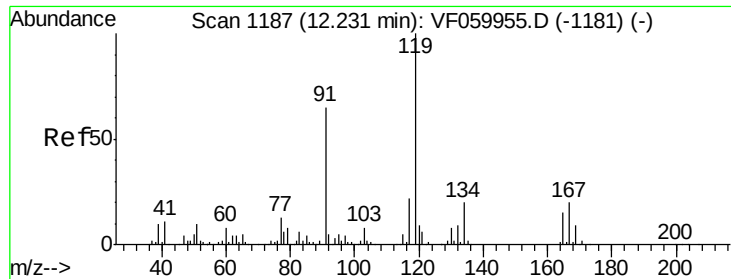
Tgt Ion: 91 Resp: 53691

Ion Ratio Lower Upper

91 100

126 30.1 15.3 45.8

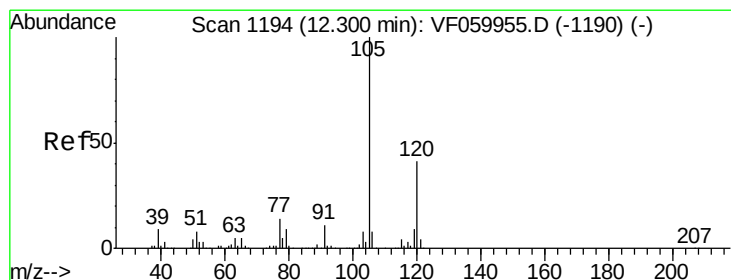
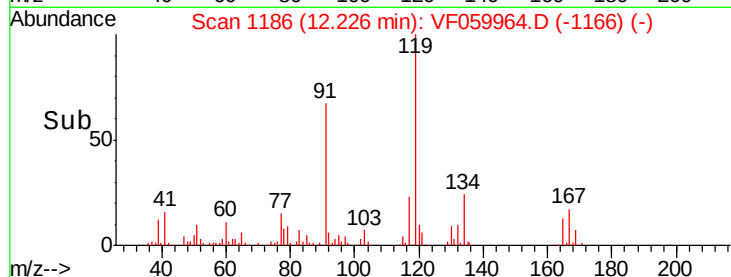
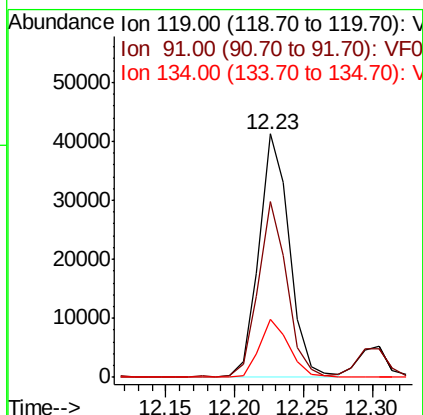
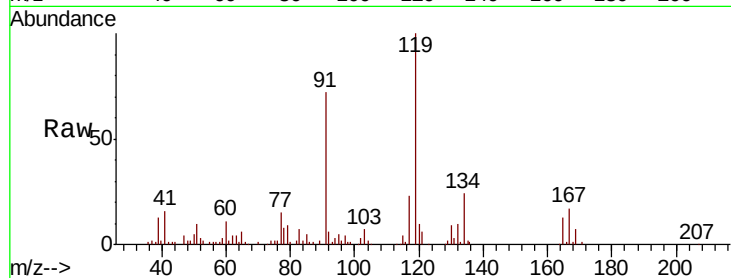




#83
 tert-Butylbenzene
 Concen: 9.45 ug/l
 RT: 12.23 min Scan# 1186
 Delta R.T. -0.01 min
 Lab File: VF059964.D
 Acq: 15 Aug 2018 1:09

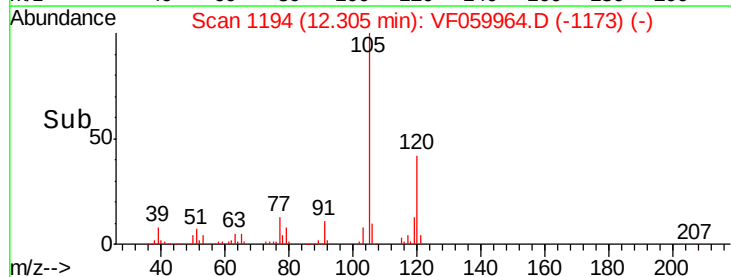
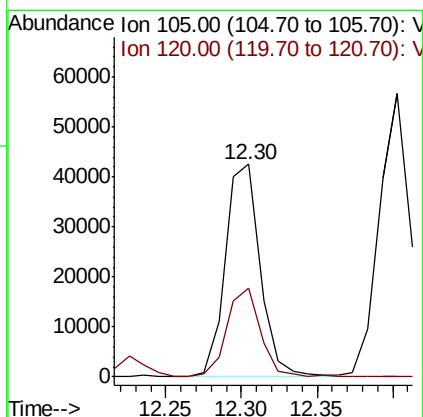
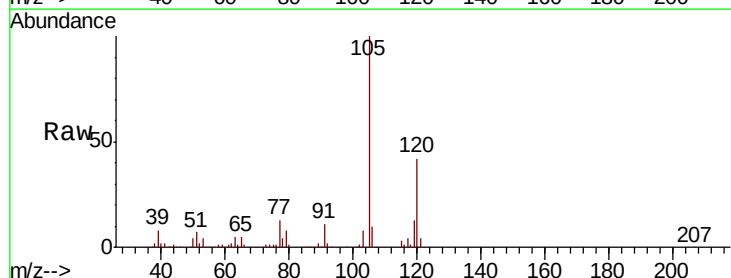
Instrument :
 MSVOA_F
 ClientSampleId :
 LOQ-SOIL-02-QT3-2018

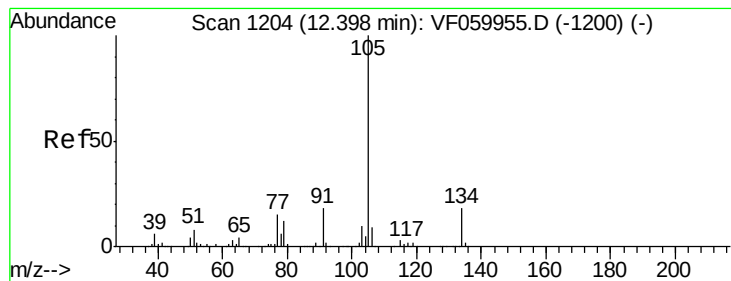
Tot Ion:119 Resp: 63740
 Ion Ratio Lower Upper
 119 100
 91 72.0 32.6 98.0
 134 23.8 10.1 30.3



#84
 1,2,4-Trimethylbenzene
 Concen: 9.90 ug/l
 RT: 12.30 min Scan# 1194
 Delta R.T. 0.00 min
 Lab File: VF059964.D
 Acq: 15 Aug 2018 1:09

Tgt Ion:105 Resp: 68322
 Ion Ratio Lower Upper
 105 100
 120 41.8 20.6 61.9





#85

sec-Butylbenzene

Concen: 9.63 ug/l

RT: 12.40 min Scan# 1204

Delta R.T. 0.00 min

Lab File: VF059964.D

Acq: 15 Aug 2018 1:09

Instrument :

MSVOA_F

ClientSampleId :

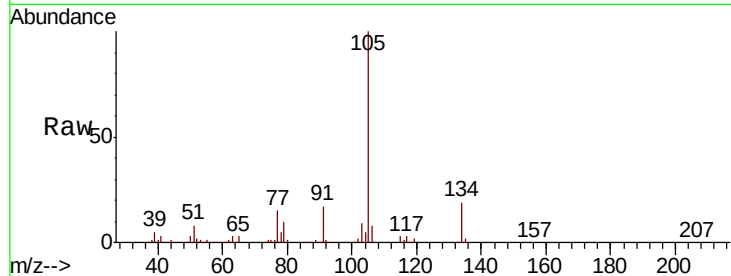
LOQ-SOIL-02-QT3-2018

Tot Ion:105 Resp: 82760

Ion Ratio Lower Upper

105 100

134 19.3 8.9 26.7



Abundance Ion 105.00 (104.70 to 105.70): V

Ion 134.00 (133.70 to 134.70): V

60000

50000

40000

30000

20000

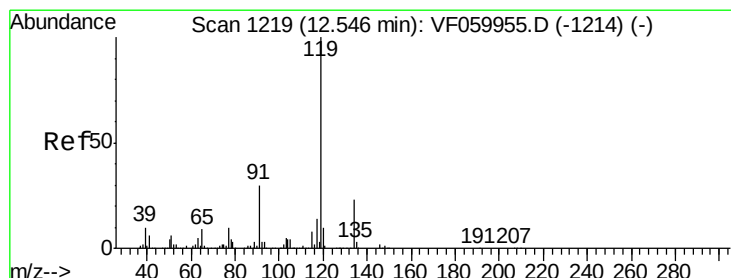
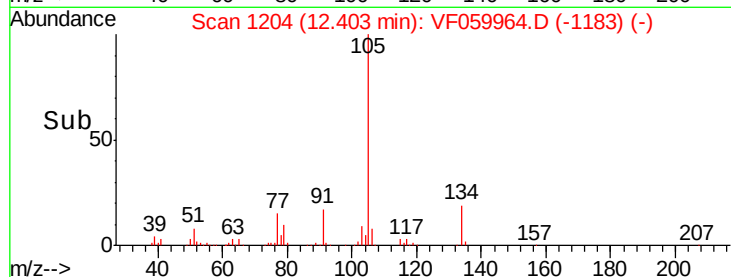
10000

0

12.40

12.50

Time-->



#86

p-Isopropyltoluene

Concen: 9.32 ug/l

RT: 12.55 min Scan# 1219

Delta R.T. 0.00 min

Lab File: VF059964.D

Acq: 15 Aug 2018 1:09

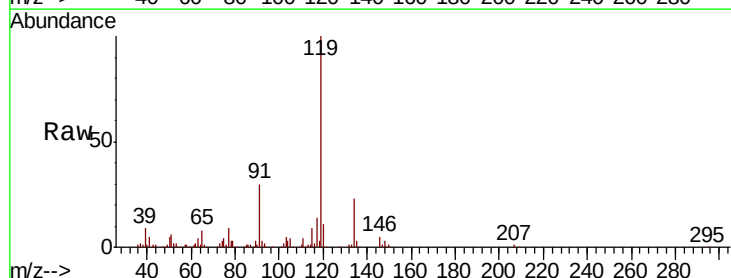
Tgt Ion:119 Resp: 70562

Ion Ratio Lower Upper

119 100

134 22.6 11.4 34.2

91 29.7 14.8 44.4



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

60000

40000

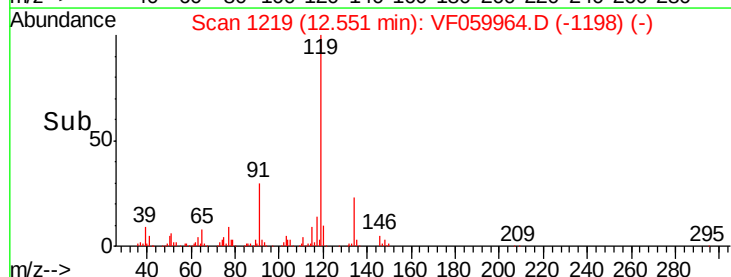
20000

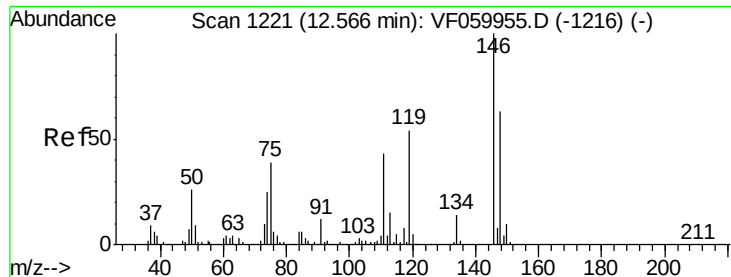
0

12.55

12.60

Time-->

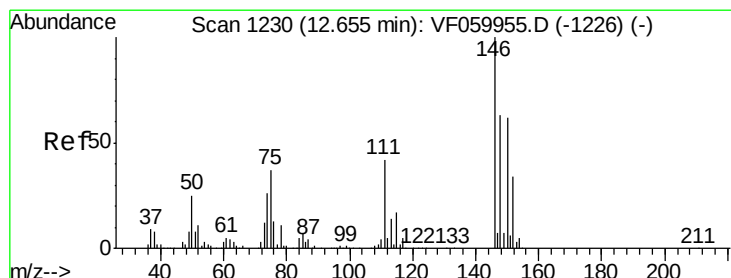
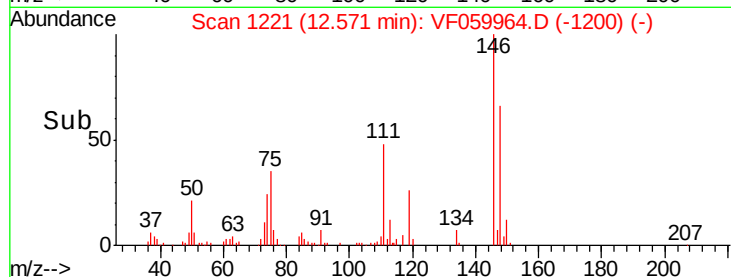
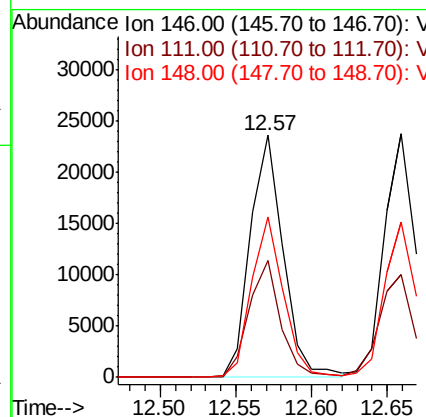
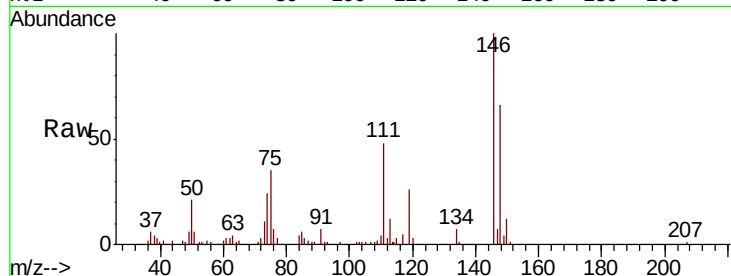




#87
 1,3-Dichlorobenzene
 Concen: 9.86 ug/l
 RT: 12.57 min Scan# 1221
 Delta R.T. 0.00 min
 Lab File: VF059964.D
 Acq: 15 Aug 2018 1:09

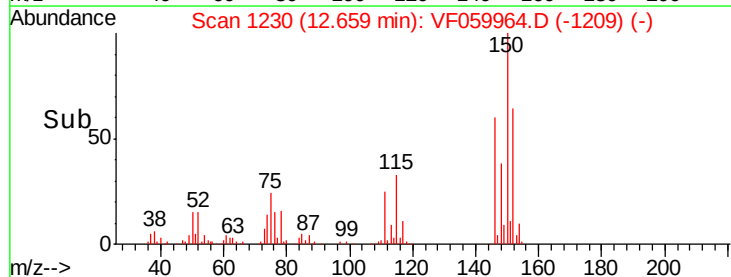
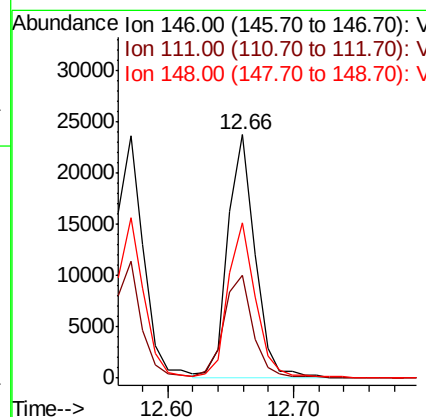
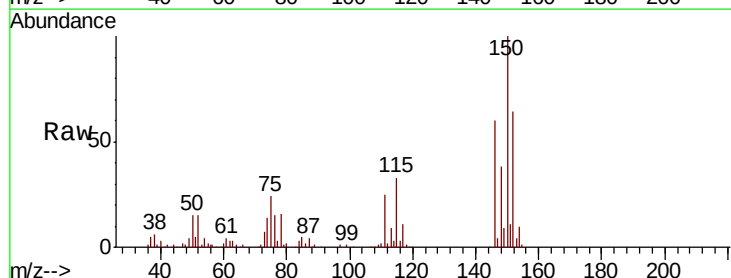
Instrument :
 MSVOA_F
 ClientSampleId :
 LOQ-SOIL-02-QT3-2018

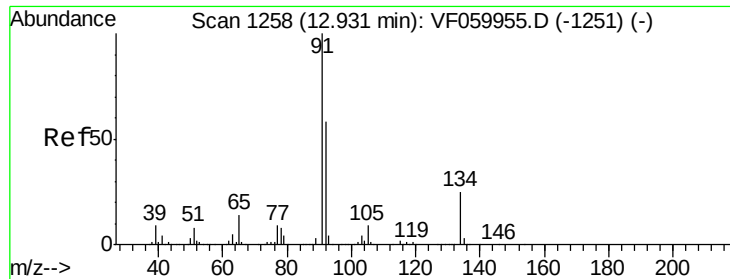
Tot Ion:146 Resp: 36090
 Ion Ratio Lower Upper
 146 100
 111 48.4 21.3 63.9
 148 66.1 31.4 94.3



#88
 1,4-Dichlorobenzene
 Concen: 9.89 ug/l
 RT: 12.66 min Scan# 1230
 Delta R.T. 0.00 min
 Lab File: VF059964.D
 Acq: 15 Aug 2018 1:09

Tgt Ion:146 Resp: 35645
 Ion Ratio Lower Upper
 146 100
 111 42.2 21.1 63.1
 148 63.8 31.7 95.1





#89

n-Butylbenzene

Concen: 9.03 ug/l

RT: 12.94 min Scan# 1258

Delta R.T. 0.00 min

Lab File: VF059964.D

Acq: 15 Aug 2018 1:09

Instrument:

MSVOA_F

ClientSampleId:

LOQ-SOIL-02-QT3-2018

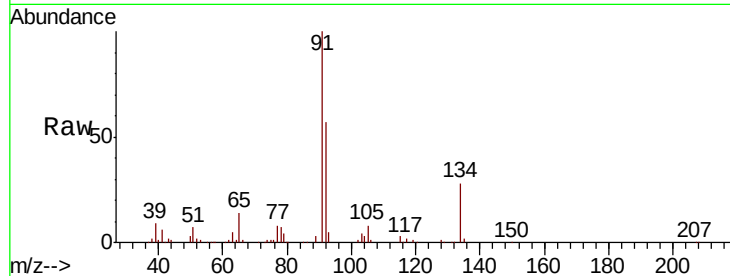
Tot Ion: 91 Resp: 65851

Ion Ratio Lower Upper

91 100

92 57.5 29.2 87.6

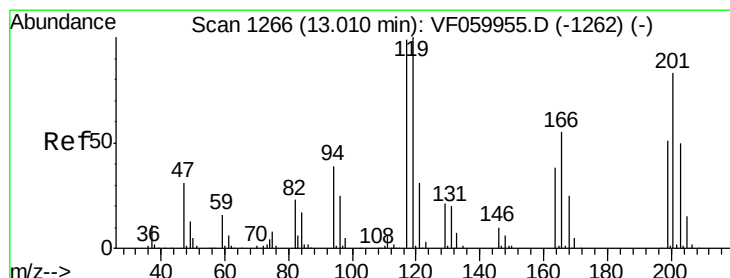
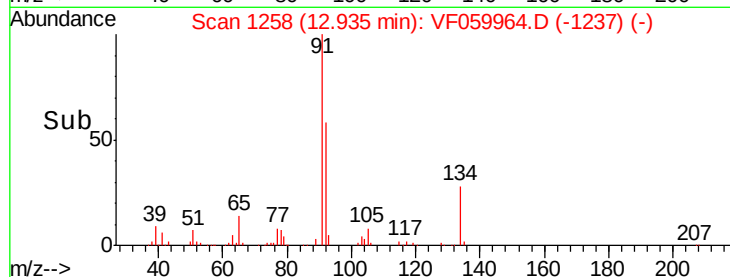
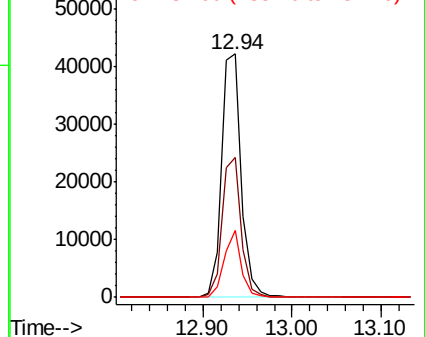
134 27.6 12.8 38.3



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: 9.89 ug/l

RT: 13.00 min Scan# 1265

Delta R.T. -0.01 min

Lab File: VF059964.D

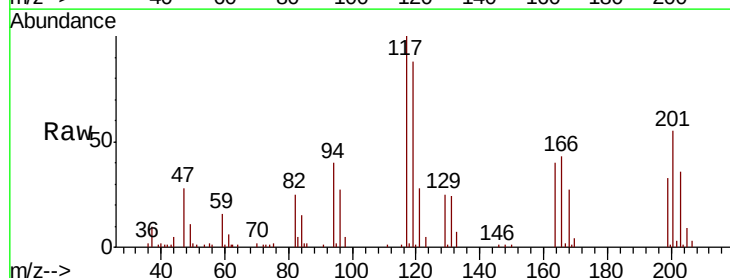
Acq: 15 Aug 2018 1:09

Tgt Ion: 117 Resp: 18540

Ion Ratio Lower Upper

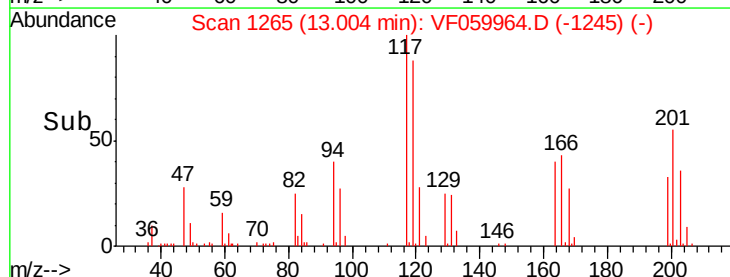
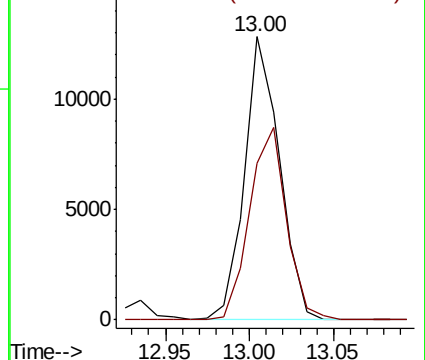
117 100

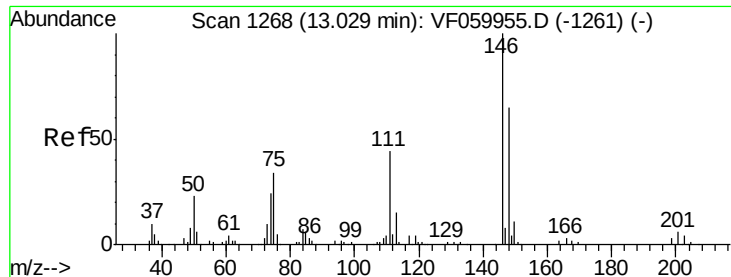
201 55.4 41.8 125.3



Abundance Ion 117.00 (116.70 to 117.70): V

Ion 201.00 (200.70 to 201.70): V

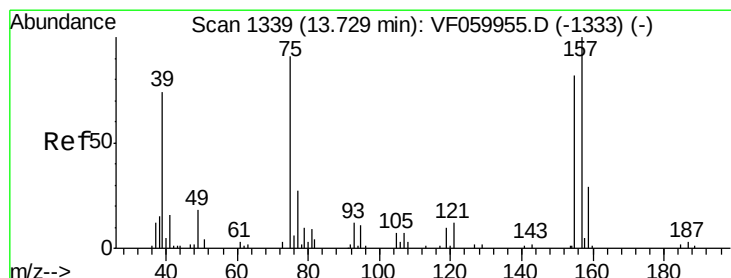
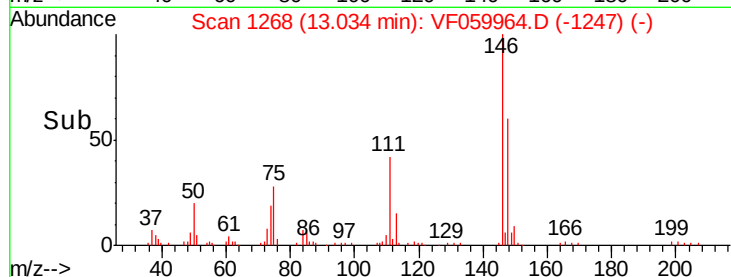
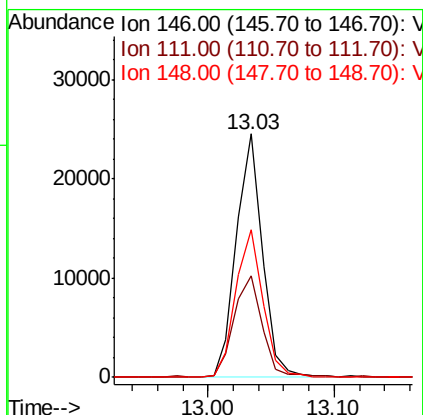
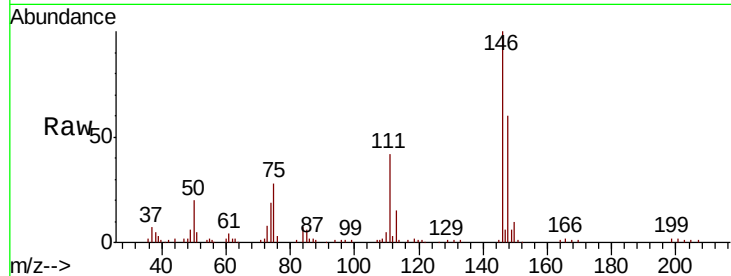




#91
 1,2-Dichlorobenzene
 Concen: 9.89 ug/l
 RT: 13.03 min Scan# 1268
 Delta R.T. 0.00 min
 Lab File: VF059964.D
 Acq: 15 Aug 2018 1:09

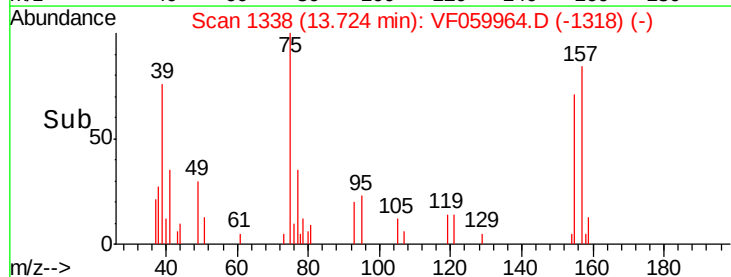
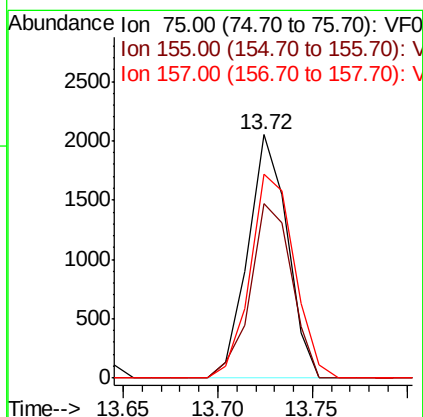
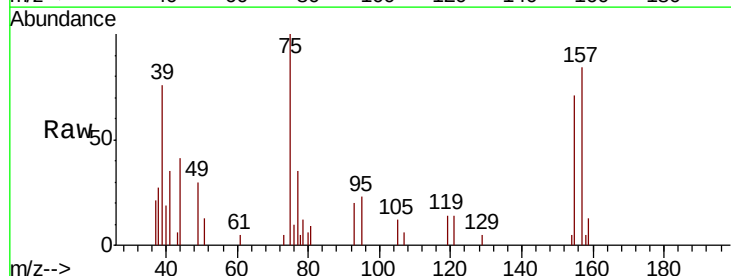
Instrument :
 MSVOA_F
 ClientSampleId :
 LOQ-SOIL-02-QT3-2018

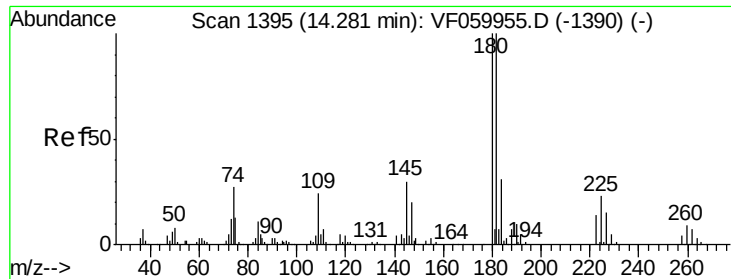
Tot Ion	Ratio	Lower	Upper
146	100		
111	41.9	22.0	66.0
148	60.5	32.4	97.0



#92
 1,2-Dibromo-3-Chloropropane
 Concen: 8.85 ug/l
 RT: 13.72 min Scan# 1338
 Delta R.T. -0.01 min
 Lab File: VF059964.D
 Acq: 15 Aug 2018 1:09

Tgt Ion	Ratio	Lower	Upper
75	100		
155	71.5	44.6	134.0
157	83.9	54.8	164.3

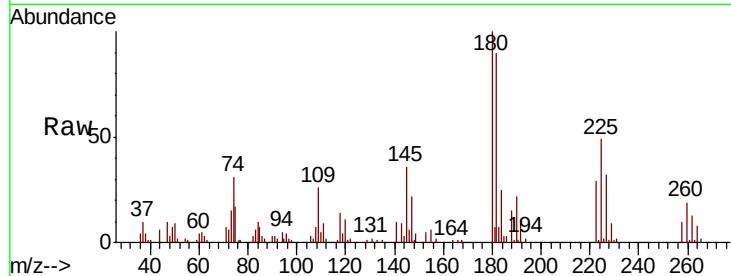




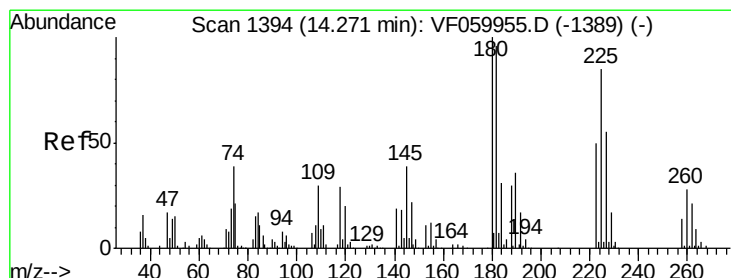
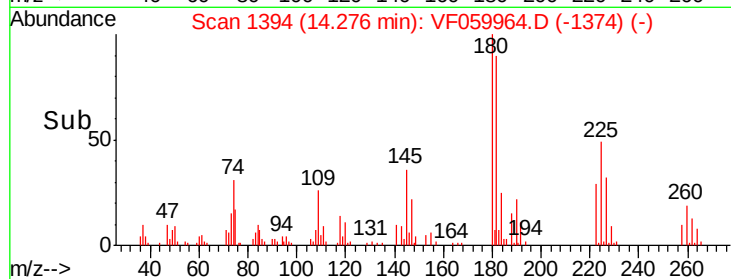
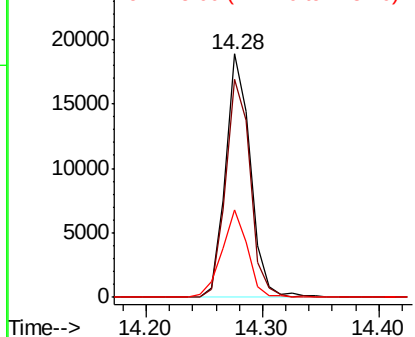
#93
 1,2,4-Trichlorobenzene
 Concen: 9.76 ug/l
 RT: 14.28 min Scan# 1394
 Delta R.T. -0.01 min
 Lab File: VF059964.D
 Acq: 15 Aug 2018 1:09

Instrument :
 MSVOA_F
 ClientSampleId :
 LOQ-SOIL-02-QT3-2018

Tot Ion:180 Resp: 27761
 Ion Ratio Lower Upper
 180 100
 182 89.8 50.2 150.7
 145 35.8 14.9 44.9

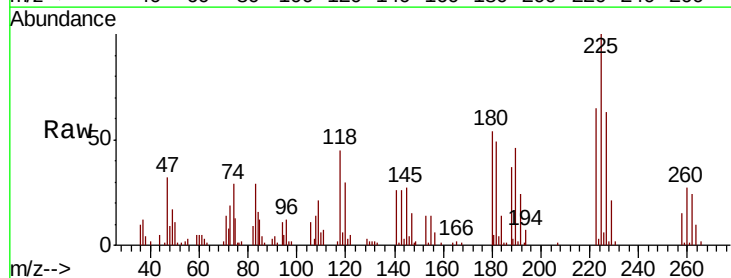


Abundance Ion 180.00 (179.70 to 180.70): V
 Ion 182.00 (181.70 to 182.70): V
 Ion 145.00 (144.70 to 145.70): V

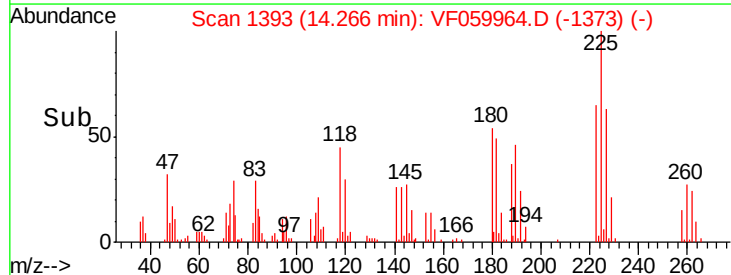
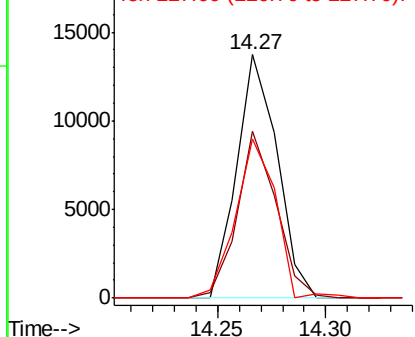


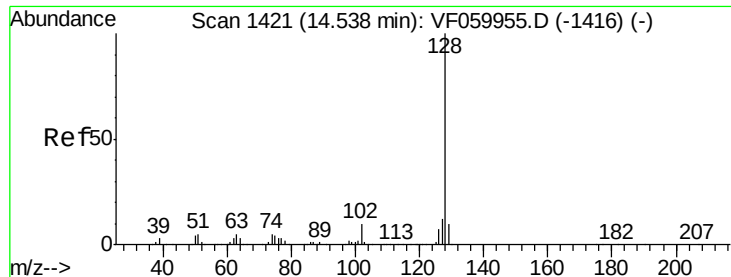
#94
 Hexachlorobutadiene
 Concen: 8.85 ug/l
 RT: 14.27 min Scan# 1393
 Delta R.T. -0.01 min
 Lab File: VF059964.D
 Acq: 15 Aug 2018 1:09

Tgt Ion:225 Resp: 18004
 Ion Ratio Lower Upper
 225 100
 223 68.4 29.6 88.8
 227 65.4 32.5 97.5



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

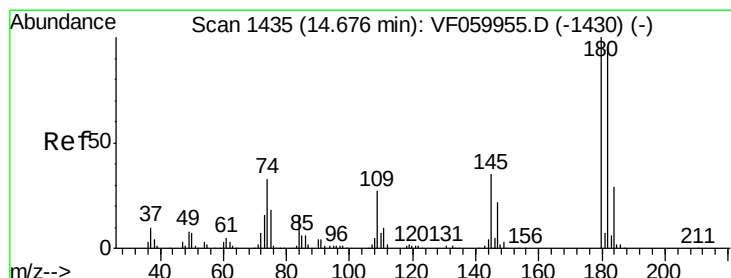
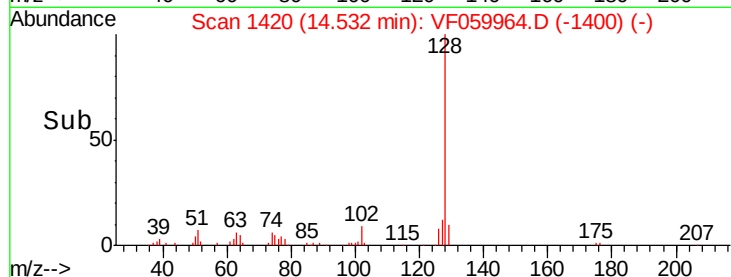
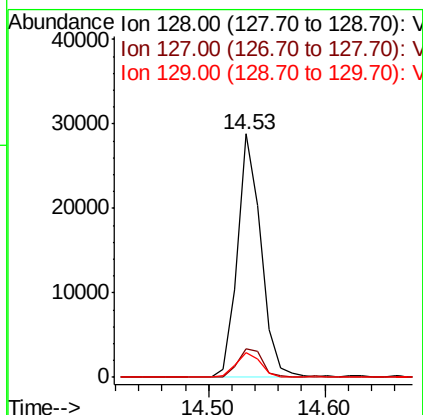
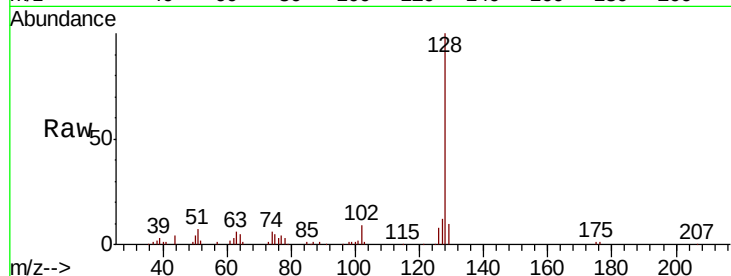




#95
Naphthalene
Concen: 8.71 ug/l
RT: 14.53 min Scan# 1420
Delta R.T. -0.01 min
Lab File: VF059964.D
Acq: 15 Aug 2018 1:09

Instrument :
MSVOA_F
ClientSampleId :
LOQ-SOIL-02-QT3-2018

Tot Ion:128 Resp: 40481
Ion Ratio Lower Upper
128 100
127 11.5 9.9 14.9
129 9.9 8.4 12.6



#96
1,2,3-Trichlorobenzene
Concen: 9.31 ug/l
RT: 14.68 min Scan# 1435
Delta R.T. 0.00 min
Lab File: VF059964.D
Acq: 15 Aug 2018 1:09

Tgt Ion:180 Resp: 25280
Ion Ratio Lower Upper
180 100
182 100.3 47.5 142.6
145 31.8 17.6 52.8

