

Data Path : Z:\VOASRV\HPCHEM1\MSVOA F\DATA\VF072318\
 Data File : VF059631.D
 Acq On : 23 Jul 2018 23:12
 Operator : VA/AP
 Sample : J4099-11MSD
 Misc : 5.57g/5mL/MSVOA F/SOIL
 ALS Vial : 100 Sample Multiplier: 1

Instrument :
 MSVOA_F
 ClientSampleId :
 GL-TOPSOIL-09MSD

Manual Integrations
 APPROVED

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 7/24/2018 1:14:52 PM

Quant Time: Jul 24 08:54:29 2018
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_F\METHODS\82F072318S.M
 Quant Title : SW846 8260
 QLast Update : Tue Jul 24 04:17:55 2018
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	5.03	168	209195	50.00	ug/l	0.00
34) 1,4-Difluorobenzene	5.76	114	291095	50.00	ug/l	0.00
63) Chlorobenzene-d5	9.91	117	207396	50.00	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	12.63	152	66716	50.00	ug/l	0.00

System Monitoring Compounds

33) 1,2-Dichloroethane-d4	5.01	65	160174	48.66	ug/l	0.00
Spiked Amount	50.000		Recovery	=	97.32%	
35) Dibromofluoromethane	4.28	113	142825	53.18	ug/l	0.00
Spiked Amount	50.000		Recovery	=	106.36%	
50) Toluene-d8	7.70	98	313694	46.65	ug/l	0.00
Spiked Amount	50.000		Recovery	=	93.30%	
62) 4-Bromofluorobenzene	11.51	95	101866	26.24	ug/l	0.00
Spiked Amount	50.000		Recovery	=	52.48%	

Target Compounds

						Qvalue
2) Dichlorodifluoromethane	0.98	85	125350	47.75	ug/l	93
3) Chloromethane	1.09	50	48348	40.39	ug/l #	81
4) Vinyl Chloride	1.16	62	65800	48.66	ug/l #	80
5) Bromomethane	1.33	94	41316	35.31	ug/l	92
6) Chloroethane	1.41	64	40285	48.82	ug/l #	86
7) Trichlorofluoromethane	1.48	101	175560m	47.75	ug/l	
8) Diethyl Ether	1.69	74	26146	49.54	ug/l	91
9) 1,1,2-Trichlorotrifluoroet	1.91	101	82932	44.83	ug/l	93
10) Methyl Iodide	1.96	142	88137	28.33	ug/l #	94
11) Tert butyl alcohol	2.68	59	27293	203.69	ug/l #	87
12) 1,1-Dichloroethene	1.85	96	68574	46.76	ug/l	98
13) Acrolein	2.01	56	303	4.51	ug/l	84
14) Allyl chloride	2.18	41	88396	33.30	ug/l	96
15) Acrylonitrile	3.06	53	37269	180.31	ug/l	97
16) Acetone	2.33	43	88280	156.41	ug/l	96
17) Carbon Disulfide	1.84	76	72438	19.08	ug/l #	83
18) Methyl Acetate	2.44	43	79034	111.02	ug/l	96
19) Methyl tert-butyl Ether	2.53	73	196826	46.06	ug/l	99
20) Methylene Chloride	2.27	84	64534	50.15	ug/l	88
21) trans-1,2-Dichloroethene	2.41	96	65560	43.50	ug/l	89
22) Diisopropyl ether	2.91	45	245000	50.36	ug/l	98
24) 1,1-Dichloroethane	2.99	63	169000	48.46	ug/l	99
25) 2-Butanone	4.50	43	103415	177.71	ug/l #	89
26) 2,2-Dichloropropane	3.76	77	134592	45.80	ug/l	93
27) cis-1,2-Dichloroethene	3.62	96	87660	50.74	ug/l	87
28) Bromochloromethane	3.88	49	50980	39.77	ug/l	95
29) Tetrahydrofuran	4.24	42	42919	182.04	ug/l	90
30) Chloroform	4.03	83	228074	47.58	ug/l	93
31) Cyclohexane	3.86	56	63848	32.91	ug/l #	91
32) 1,1,1-Trichloroethane	4.27	97	203465	46.87	ug/l	91
36) 1,1-Dichloropropene	4.45	75	135429	45.94	ug/l #	92
37) Ethyl Acetate	4.24	43	15786	13.32	ug/l #	1
38) Carbon Tetrachloride	4.16	117	171662	37.74	ug/l	98
39) Methylcyclohexane	5.62	83	54608	22.83	ug/l	97

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Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
40) Benzene	4.79	78	253640	47.08	ug/l	99
41) Methacrylonitrile	4.91	41	18471	30.40	ug/l #	75
42) 1,2-Dichloroethane	5.11	62	156265	42.96	ug/l	100
44) Trichloroethene	5.66	130	93619	45.08	ug/l	97
45) 1,2-Dichloropropane	6.39	63	68245	46.79	ug/l	98
46) Dibromomethane	6.24	93	51694	42.79	ug/l	98
47) Bromodichloromethane	6.54	83	138118	37.67	ug/l #	91
48) Methyl methacrylate	6.86	41	56773	50.12	ug/l	92
49) 1,4-Dioxane	6.85	88	6839m	969.61	ug/l	
51) 4-Methyl-2-Pentanone	8.39	43	217106	196.77	ug/l	98
52) Toluene	7.77	92	167120	40.75	ug/l	99
53) t-1,3-Dichloropropene	8.42	75	103199	33.29	ug/l	93
54) cis-1,3-Dichloropropene	7.45	75	100999	32.87	ug/l	99
55) 1,1,2-Trichloroethane	8.63	97	54205	38.62	ug/l	93
56) Ethyl methacrylate	8.75	69	4347	2.78	ug/l #	67
57) 1,3-Dichloropropane	8.99	76	101090	41.40	ug/l	97
58) 2-Chloroethyl Vinyl ether	7.77	63	35554	196.68	ug/l	100
59) 2-Hexanone	9.62	43	116713	130.34	ug/l	100
60) Dibromochloromethane	8.86	129	80553	32.23	ug/l	100
61) 1,2-Dibromoethane	9.13	107	63545	39.50	ug/l	87
64) Tetrachloroethene	8.29	164	74313	48.25	ug/l	92
65) Chlorobenzene	9.93	112	181625	47.49	ug/l	98
66) 1,1,1,2-Tetrachloroethane	10.06	131	82584	47.66	ug/l	96
67) Ethyl Benzene	10.03	91	321425	46.22	ug/l	97
68) m/p-Xylenes	10.27	106	203982	86.32	ug/l	99
69) o-Xylene	10.82	106	110309	42.98	ug/l	96
70) Styrene	10.90	104	145882	37.89	ug/l	92
71) Bromoform	10.88	173	37219	34.66	ug/l	83
73) Isopropylbenzene	11.22	105	291086	68.70	ug/l	100
75) 1,1,2,2-Tetrachloroethane	11.78	83	58463	82.19	ug/l	98
76) 1,2,3-Trichloropropane	11.88	75	53821	86.61	ug/l	80
77) Bromobenzene	11.59	156	73192	66.67	ug/l	97
78) n-propylbenzene	11.68	91	298452	58.77	ug/l	98
79) 2-Chlorotoluene	11.80	91	184617	60.66	ug/l	98
80) 1,3,5-Trimethylbenzene	11.90	105	199888	52.70	ug/l	93
81) trans-1,4-Dichloro-2-buten	11.95	75	12543m	50.89	ug/l	
82) 4-Chlorotoluene	11.98	91	186473	55.09	ug/l	99
83) tert-Butylbenzene	12.21	119	185228	49.38	ug/l	98
84) 1,2,4-Trimethylbenzene	12.29	105	196188	50.84	ug/l	95
85) sec-Butylbenzene	12.38	105	203719	42.02	ug/l	100
86) p-Isopropyltoluene	12.53	119	130200	30.51	ug/l	99
87) 1,3-Dichlorobenzene	12.55	146	97461	46.30	ug/l	97
88) 1,4-Dichlorobenzene	12.64	146	91737	46.45	ug/l	99
89) n-Butylbenzene	12.92	91	89471	21.95	ug/l	97
90) Hexachloroethane	12.99	117	33202	31.41	ug/l	97
91) 1,2-Dichlorobenzene	13.02	146	78057	39.78	ug/l	94
92) 1,2-Dibromo-3-Chloropropan	13.71	75	9331	54.50	ug/l	91
93) 1,2,4-Trichlorobenzene	14.27	180	21211	14.46	ug/l	93
94) Hexachlorobutadiene	14.25	225	13638	13.36	ug/l	83
95) Naphthalene	14.52	128	42379	17.79	ug/l #	96

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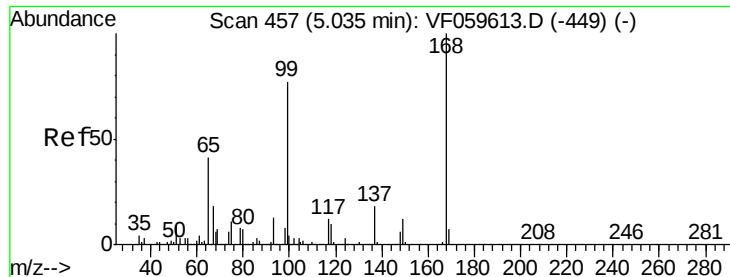
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Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
96) 1,2,3-Trichlorobenzene	14.66	180	15522	11.64	ug/l	93

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



#1

Pentafluorobenzene

Concen: 50.00 ug/l

RT: 5.03 min Scan# 456

Delta R.T. -0.00 min

Lab File: VF059631.D

Acq: 23 Jul 2018 23:12

Instrument :

MSVOA_F

ClientSampleId :

GL-TOPSOIL-09MSD

Tot Ion:168 Resp: 209195

Ion Ratio Lower Upper

168 100

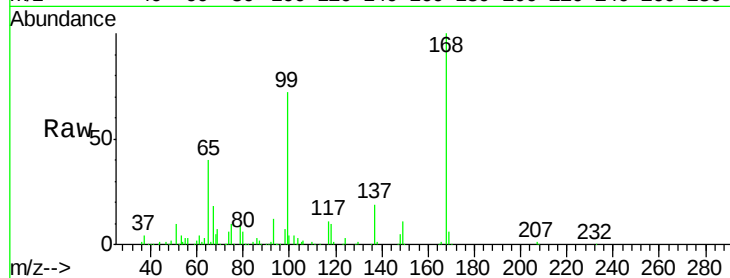
99 71.8 61.5 92.3

Manual Integrations

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Abundance Ion 168.00 (167.70 to 168.70): VF0

Ion 99.00 (98.70 to 99.70): VF0

5.03

80000

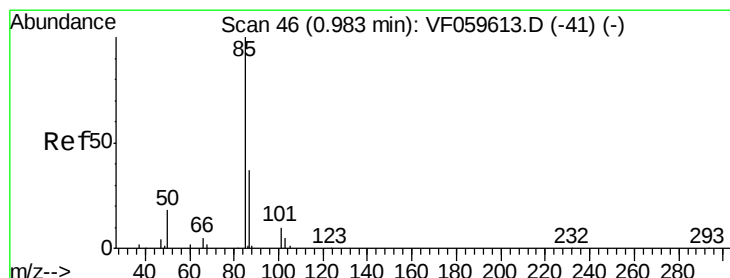
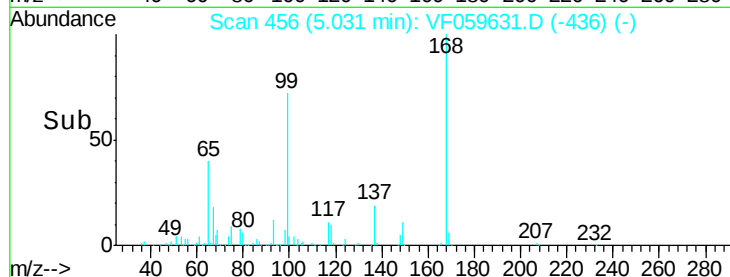
60000

40000

20000

0

Time-->



#2

Dichlorodifluoromethane

Concen: 47.75 ug/l

RT: 0.98 min Scan# 45

Delta R.T. -0.00 min

Lab File: VF059631.D

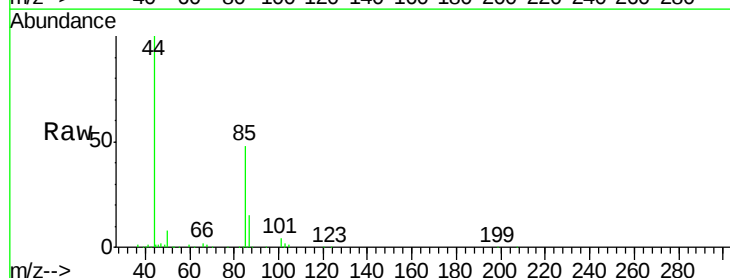
Acq: 23 Jul 2018 23:12

Tgt Ion: 85 Resp: 125350

Ion Ratio Lower Upper

85 100

87 32.2 18.3 54.9



Abundance Ion 85.00 (84.70 to 85.70): VF0

Ion 87.00 (86.70 to 87.70): VF0

0.98

40000

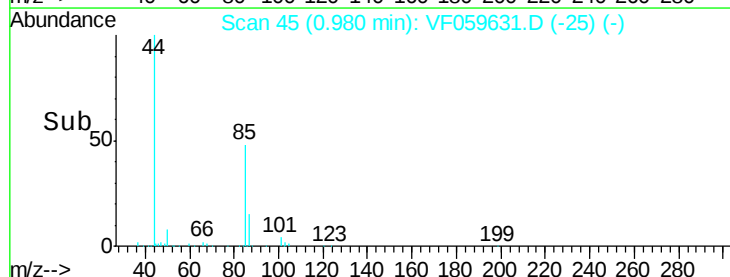
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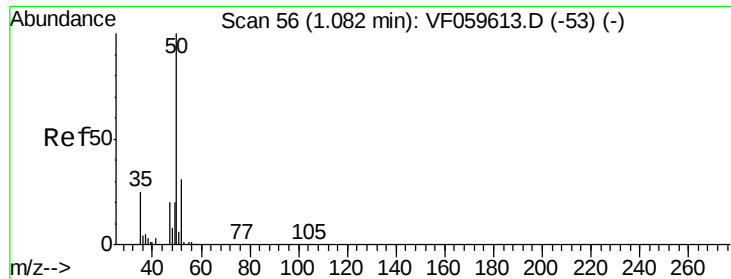
20000

10000

0

Time-->





#3

Chloromethane

Concen: 40.39 ug/l

RT: 1.09 min Scan# 56

Delta R.T. 0.01 min

Lab File: VF059631.D

Acq: 23 Jul 2018 23:12

Instrument :

MSVOA_F

ClientSampleId :

GL-TOPSOIL-09MSD

Tot Ion: 50 Resp: 48348

Ion Ratio Lower Upper

50 100

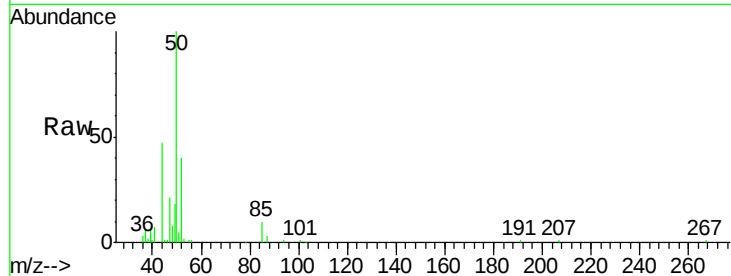
52 39.8 23.7 35.5#

Manual Integrations

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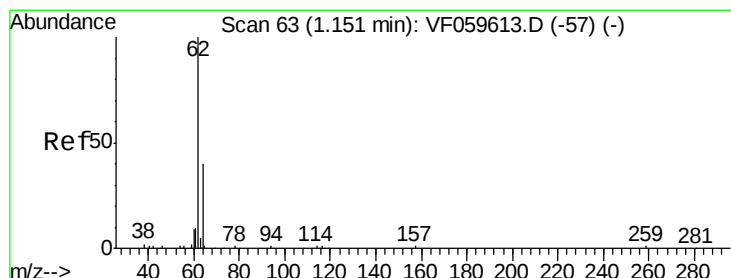
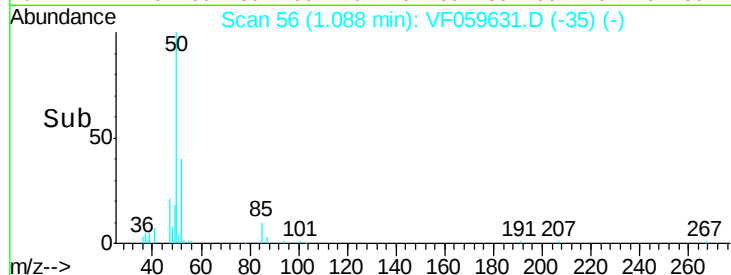
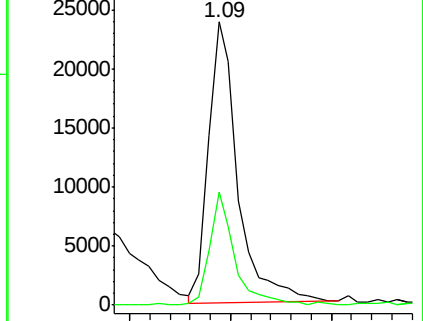
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Abundance Ion 50.00 (49.70 to 50.70): VF0

Ion 52.00 (51.70 to 52.70): VF0



#4

Vinyl Chloride

Concen: 48.66 ug/l

RT: 1.16 min Scan# 63

Delta R.T. 0.01 min

Lab File: VF059631.D

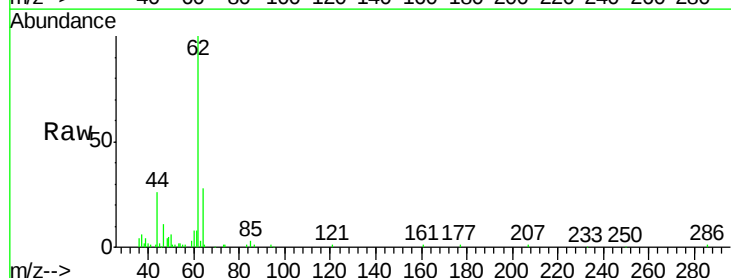
Acq: 23 Jul 2018 23:12

Tgt Ion: 62 Resp: 65800

Ion Ratio Lower Upper

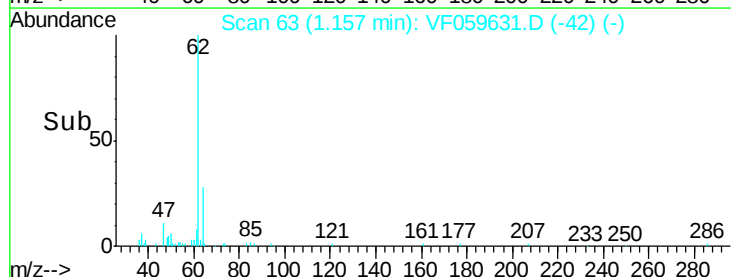
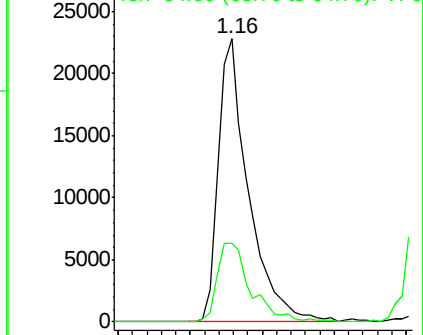
62 100

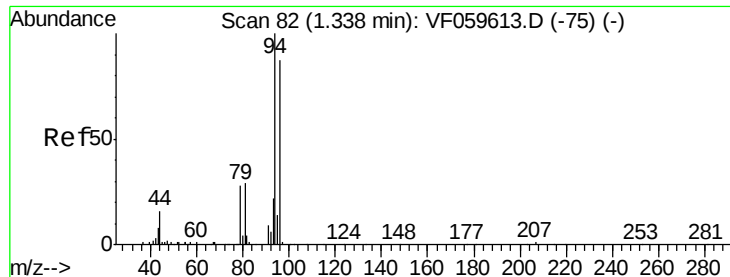
64 27.8 32.2 48.4#



Abundance Ion 62.00 (61.70 to 62.70): VF0

Ion 64.00 (63.70 to 64.70): VF0





#5

Bromomethane

Concen: 35.31 ug/l

RT: 1.33 min Scan# 81

Delta R.T. -0.00 min

Lab File: VF059631.D

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Tot Ion: 94 Resp: 41316

Ion Ratio Lower Upper

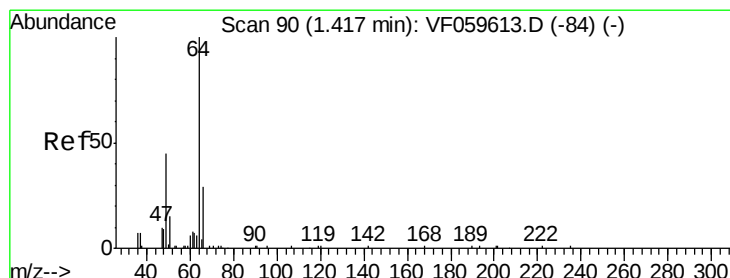
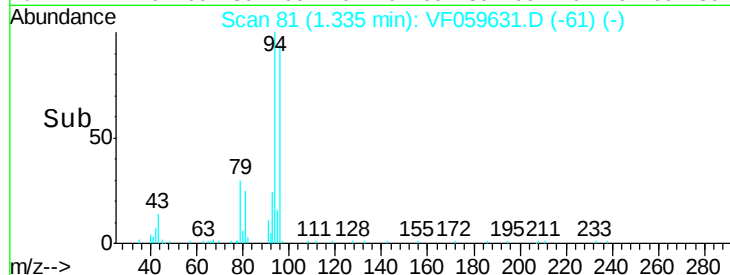
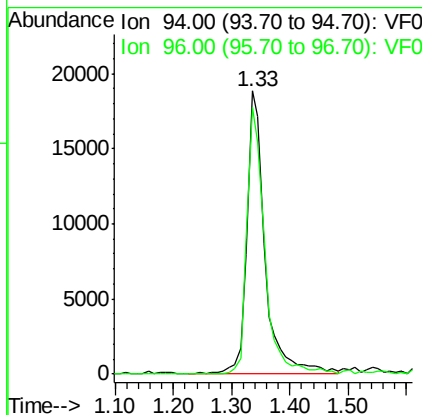
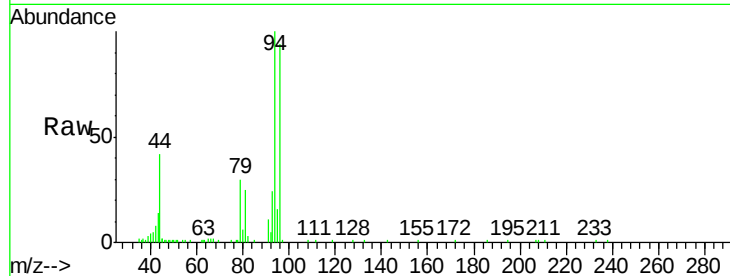
94 100

96 94.3 69.8 104.8

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#6

Chloroethane

Concen: 48.82 ug/l

RT: 1.41 min Scan# 89

Delta R.T. -0.00 min

Lab File: VF059631.D

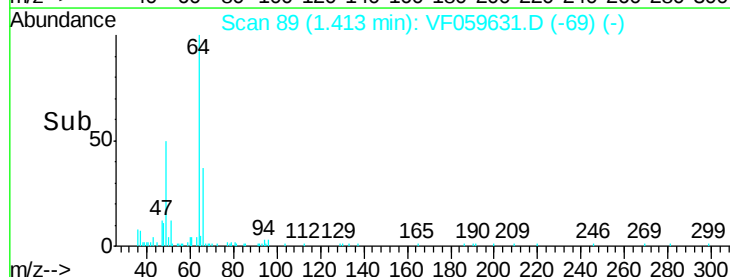
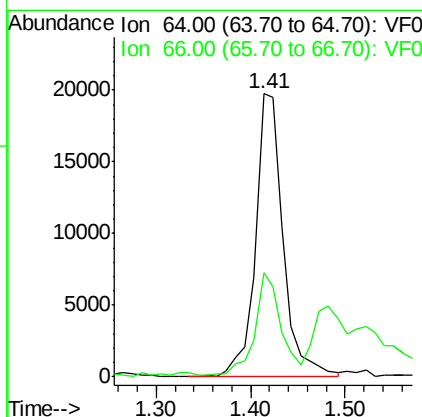
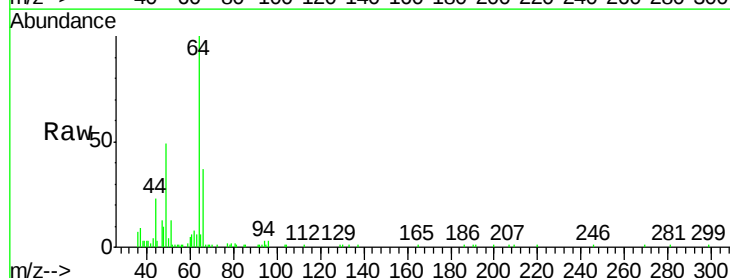
Acq: 23 Jul 2018 23:12

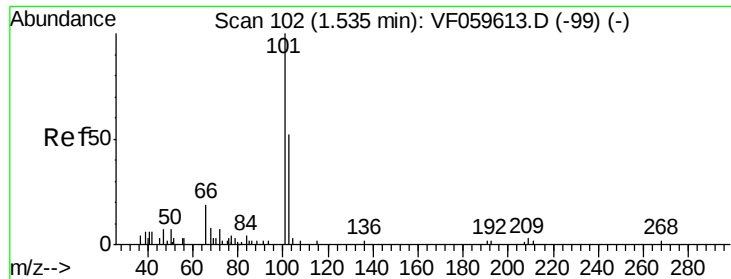
Tgt Ion: 64 Resp: 40285

Ion Ratio Lower Upper

64 100

66 37.0 23.7 35.5#





#7

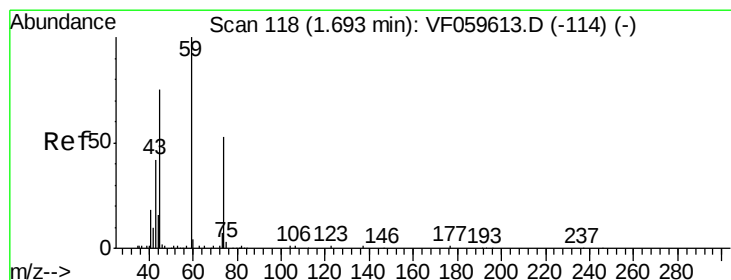
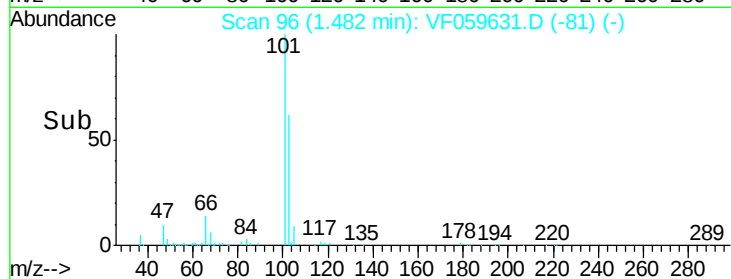
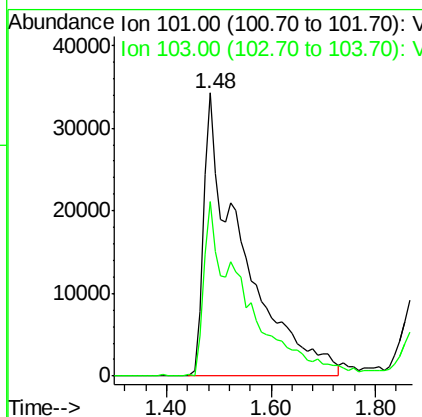
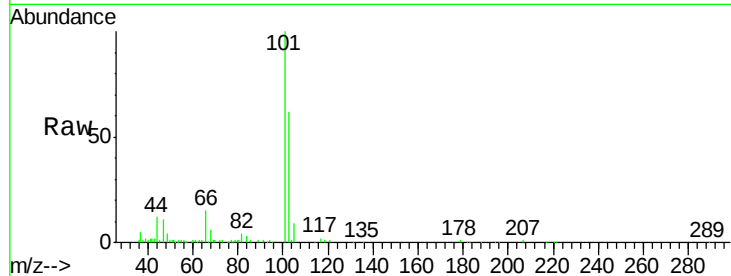
Trichlorofluoromethane
 Concen: 47.75 ug/l m
 RT: 1.48 min Scan# 96
 Delta R.T. -0.05 min
 Lab File: VF059631.D
 Acq: 23 Jul 2018 23:12

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Tot Ion	Ratio	Lower	Upper
101	100		
103	61.7	48.2	72.4

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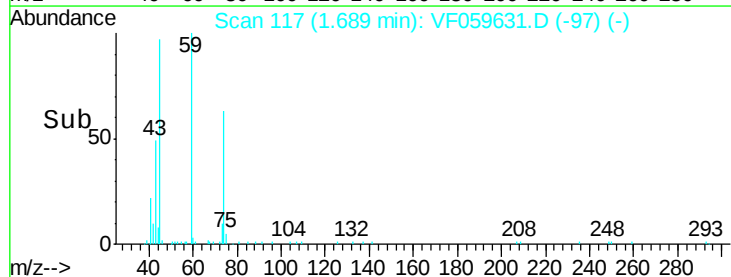
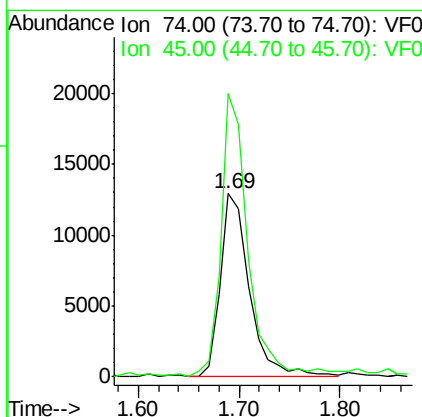
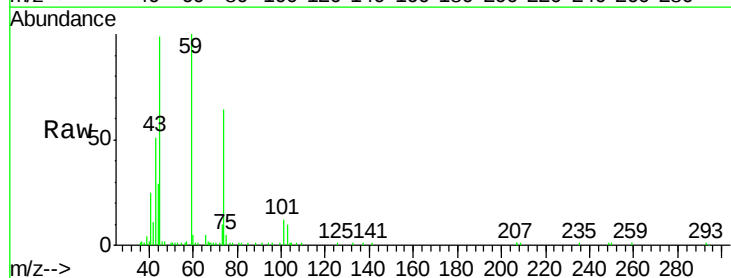
apatel
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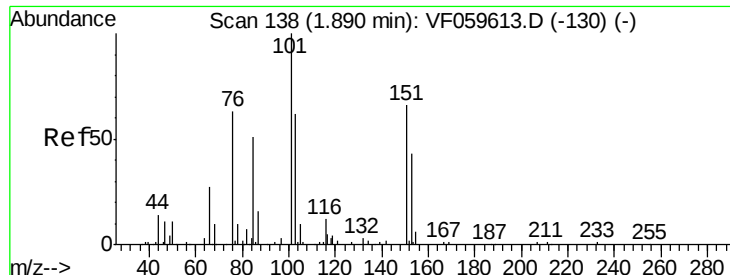


#8

Diethyl Ether
 Concen: 49.54 ug/l
 RT: 1.69 min Scan# 117
 Delta R.T. -0.00 min
 Lab File: VF059631.D
 Acq: 23 Jul 2018 23:12

Tgt Ion	Ratio	Lower	Upper
74	100		
45	154.7	72.0	215.9





#9

1,1,2-Trichlorotrifluoroethane

Concen: 44.83 ug/l

RT: 1.91 min Scan# 139

Delta R.T. 0.02 min

Lab File: VF059631.D

Acq: 23 Jul 2018 23:12

Instrument :

MSVOA_F

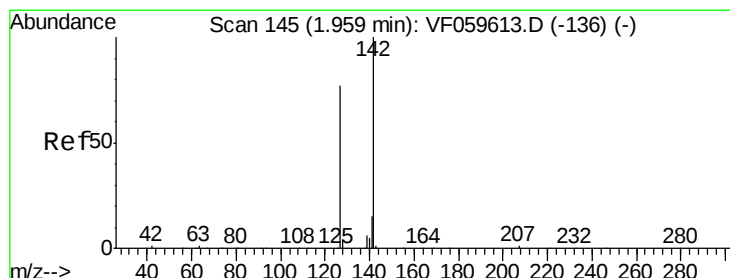
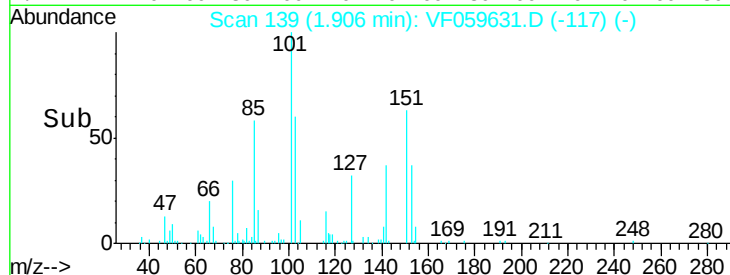
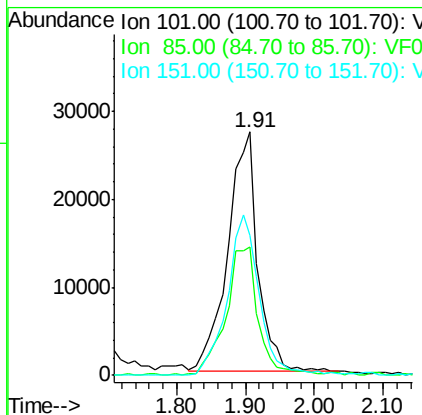
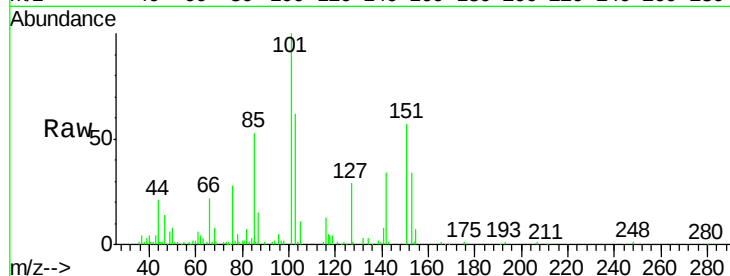
ClientSampleId :

GL-TOPSOIL-09MSD

Tot Ion:	101	Resp:	82932
Ion Ratio	Lower	Upper	
101	100		
85	52.9	40.2	60.2
151	57.2	51.4	77.2

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#10

Methyl Iodide

Concen: 28.33 ug/l

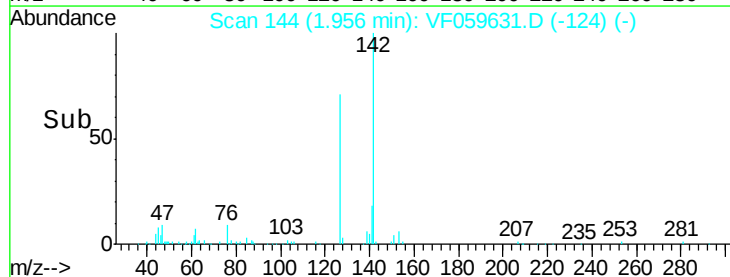
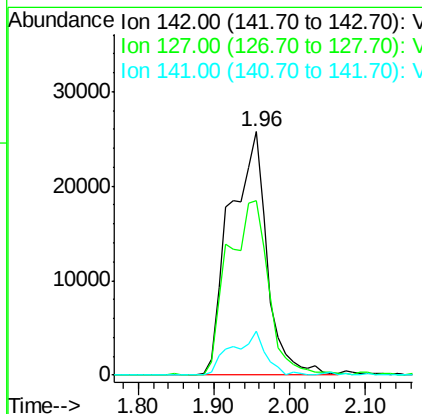
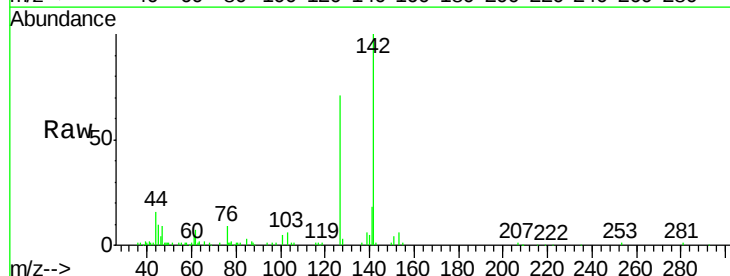
RT: 1.96 min Scan# 144

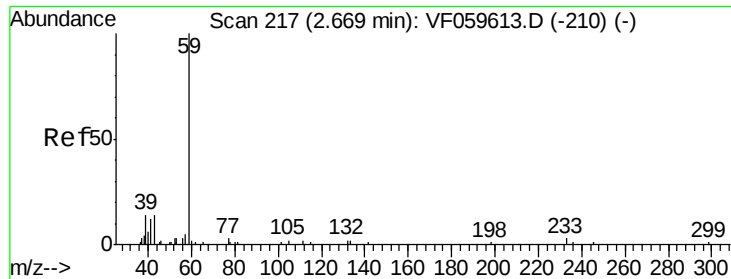
Delta R.T. -0.00 min

Lab File: VF059631.D

Acq: 23 Jul 2018 23:12

Tgt Ion:	142	Resp:	88137
Ion Ratio	Lower	Upper	
142	100		
127	71.5	61.2	91.8
141	18.1	12.0	18.0#





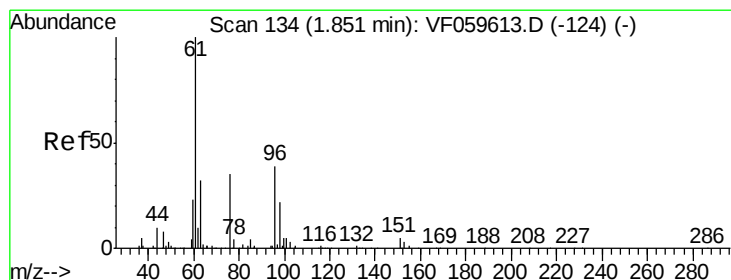
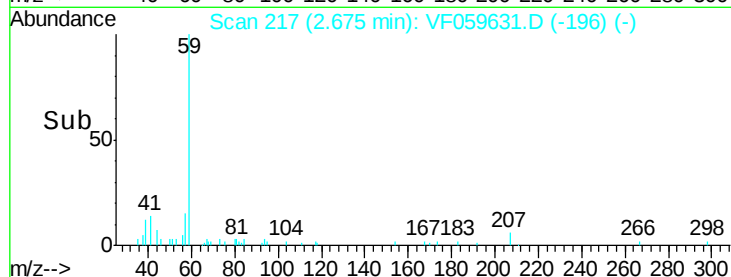
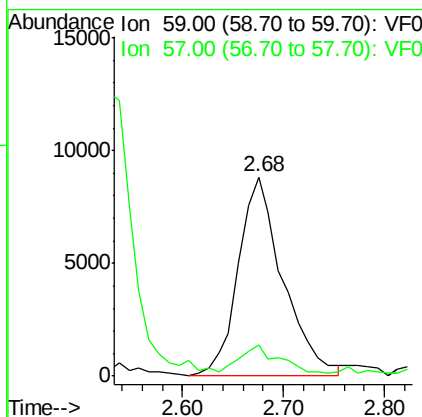
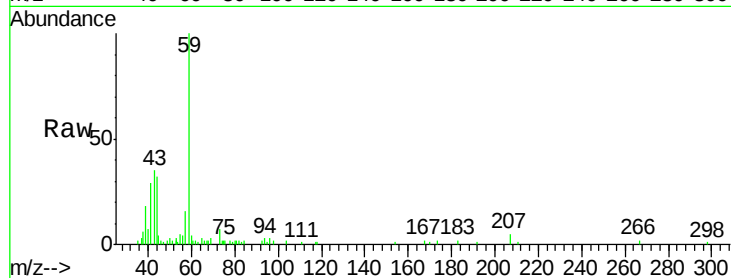
#11
Tert butyl alcohol
Concen: 203.69 ug/l
RT: 2.68 min Scan# 217
Delta R.T. 0.01 min
Lab File: VF059631.D
Acq: 23 Jul 2018 23:12

Instrument :
MSVOA_F
ClientSampleId :
GL-TOPSOIL-09MSD

Tot Ion	59	Resp	27293
Ion Ratio	100	Lower	Upper
57	15.7	8.6	12.8#

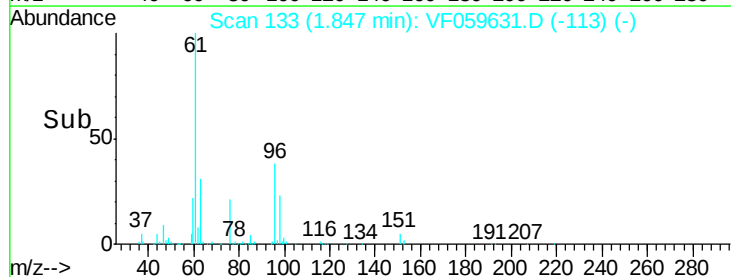
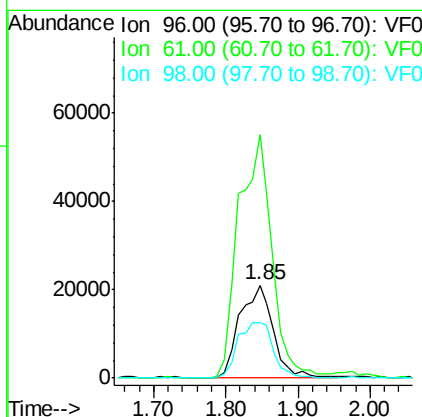
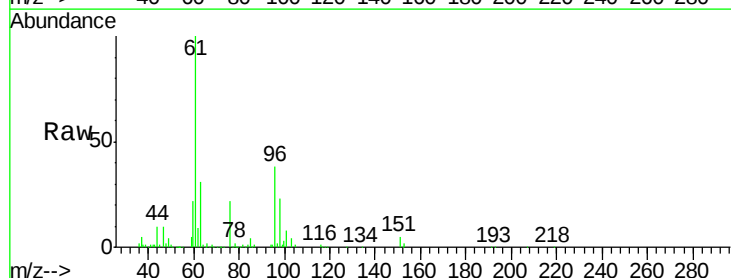
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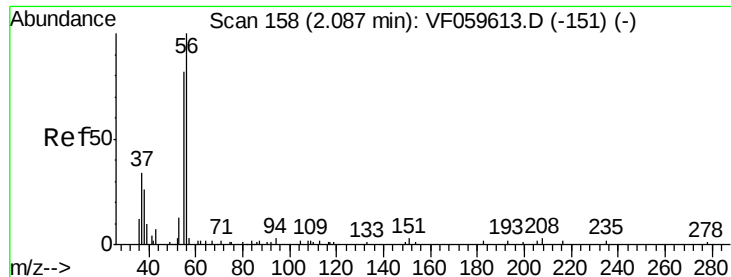
apatel
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#12
1,1-Dichloroethene
Concen: 46.76 ug/l
RT: 1.85 min Scan# 133
Delta R.T. -0.00 min
Lab File: VF059631.D
Acq: 23 Jul 2018 23:12

Tgt Ion	96	Resp	68574
Ion Ratio	100	Lower	Upper
61	261.6	207.2	310.8
98	60.1	45.5	68.3





#13

Acrolein

Concen: 4.51 ug/l

RT: 2.01 min Scan# 150

Delta R.T. -0.07 min

Lab File: VF059631.D

Acq: 23 Jul 2018 23:12

Tot Ion: 56 Resp: 303

Ion Ratio Lower Upper

56 100

55 67.4 65.6 98.4

Instrument :

MSVOA_F

ClientSampleId :

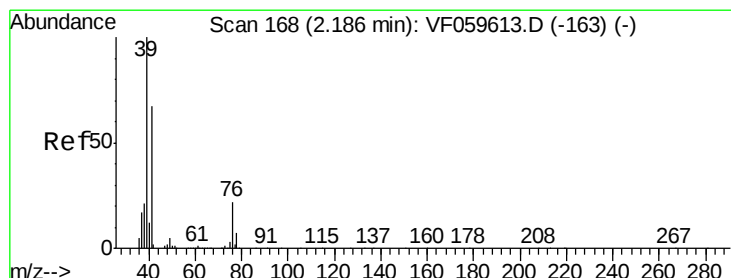
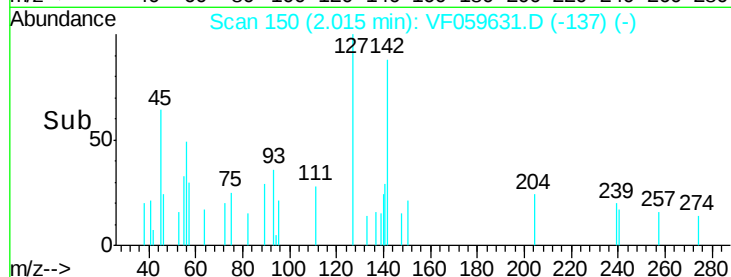
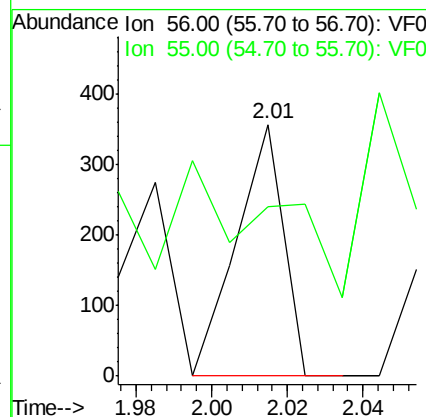
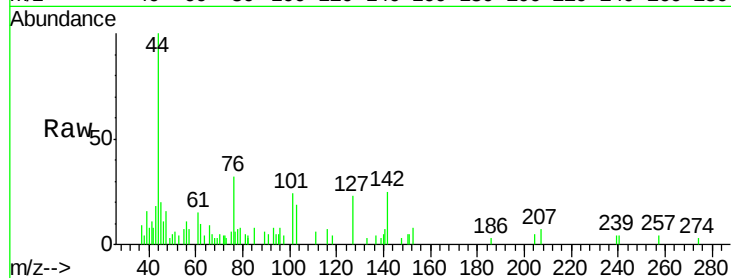
GL-TOPSOIL-09MSD

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#14

Allyl chloride

Concen: 33.30 ug/l

RT: 2.18 min Scan# 167

Delta R.T. -0.00 min

Lab File: VF059631.D

Acq: 23 Jul 2018 23:12

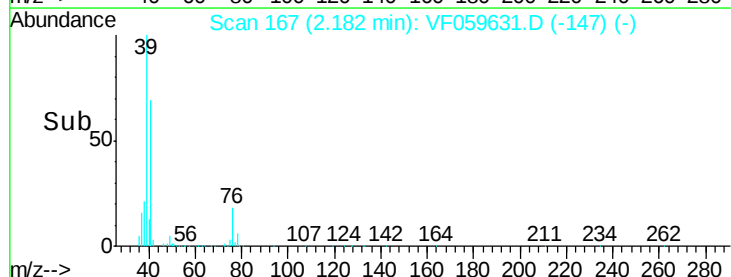
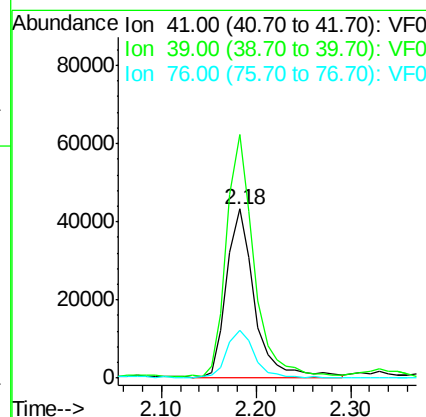
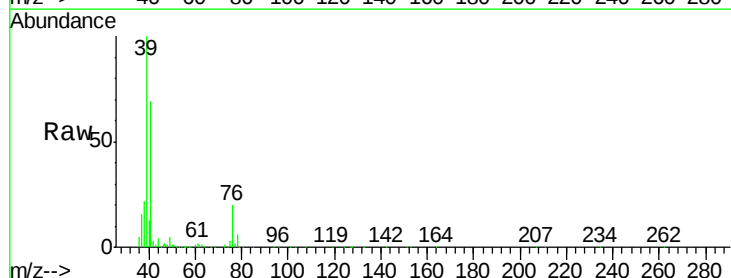
Tgt Ion: 41 Resp: 88396

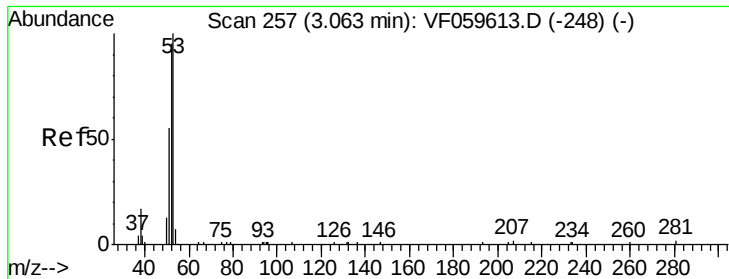
Ion Ratio Lower Upper

41 100

39 144.2 119.0 178.4

76 28.4 26.3 39.5





#15

Acrylonitrile

Concen: 180.31 ug/l

RT: 3.06 min Scan# 256

Delta R.T. -0.00 min

Lab File: VF059631.D

Acq: 23 Jul 2018 23:12

Instrument :

MSVOA_F

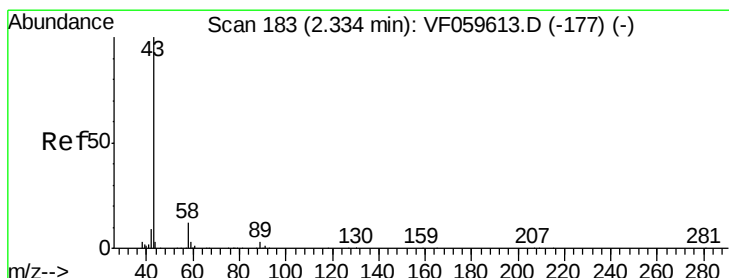
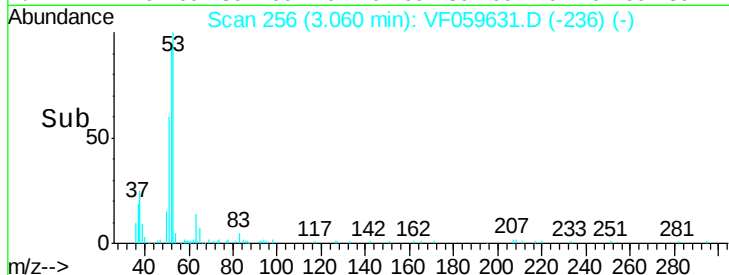
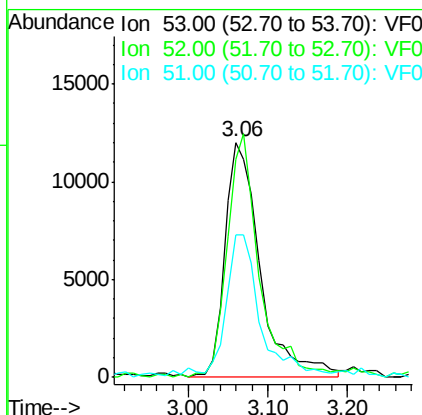
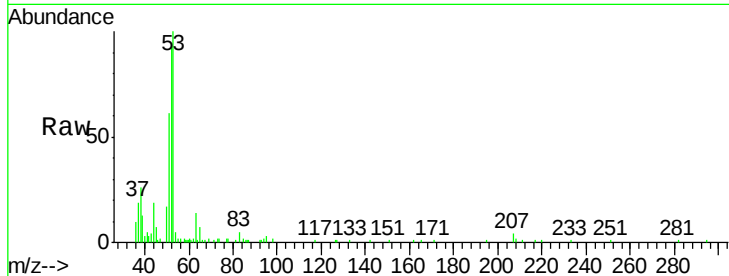
ClientSampleId :

GL-TOPSOIL-09MSD

Tot Ion:	53	Resp:	37269
Ion	Ratio	Lower	Upper
53	100		
52	92.9	76.2	114.2
51	60.6	45.8	68.8

Manual Integrations
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#16

Acetone

Concen: 156.41 ug/l

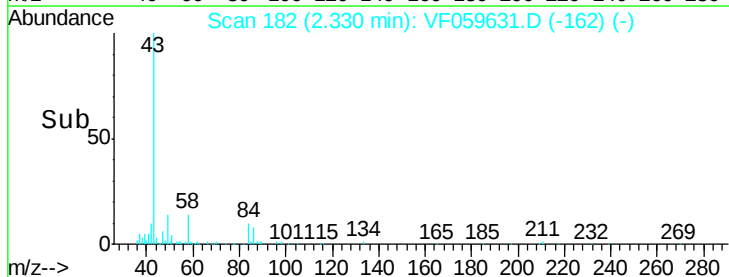
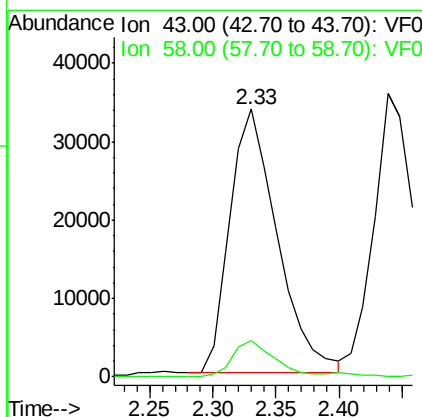
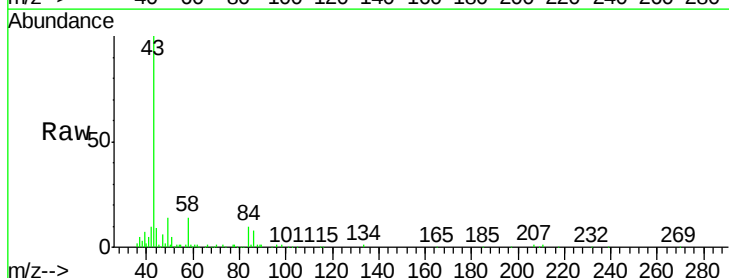
RT: 2.33 min Scan# 182

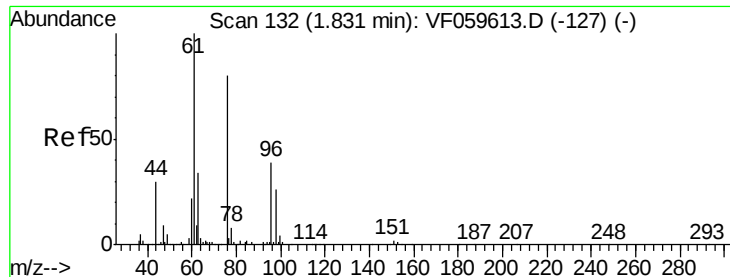
Delta R.T. -0.00 min

Lab File: VF059631.D

Acq: 23 Jul 2018 23:12

Tgt Ion:	43	Resp:	88280
Ion	Ratio	Lower	Upper
43	100		
58	13.8	9.8	14.8





#17

Carbon Disulfide

Concen: 19.08 ug/l

RT: 1.84 min Scan# 132

Delta R.T. 0.01 min

Lab File: VF059631.D

Acq: 23 Jul 2018 23:12

Instrument :

MSVOA_F

ClientSampleId :

GL-TOPSOIL-09MSD

Tot Ion: 76 Resp: 72438

Ion Ratio Lower Upper

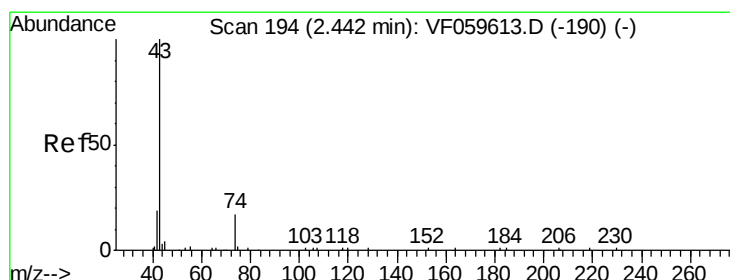
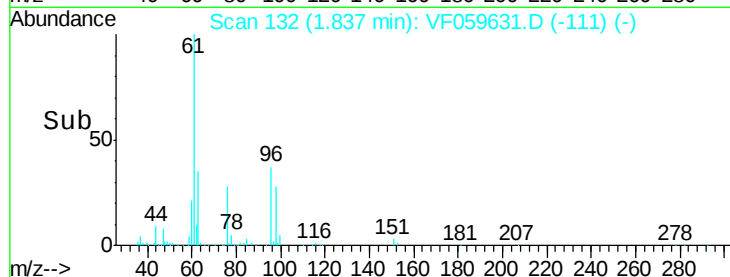
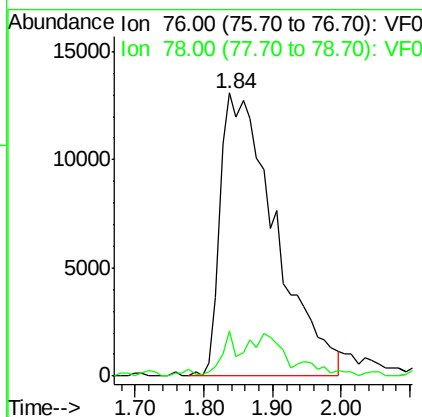
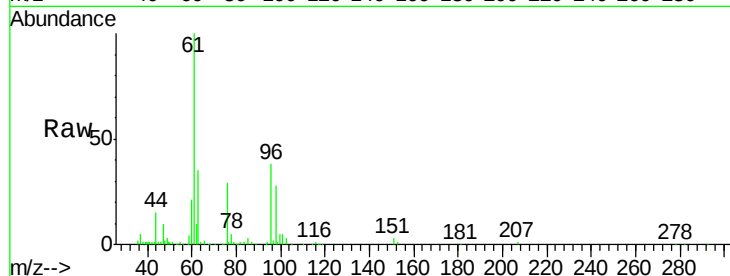
76 100

78 16.0 7.7 11.5#

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#18

Methyl Acetate

Concen: 111.02 ug/l

RT: 2.44 min Scan# 193

Delta R.T. -0.00 min

Lab File: VF059631.D

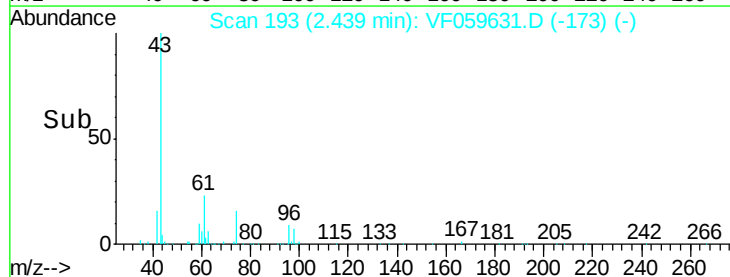
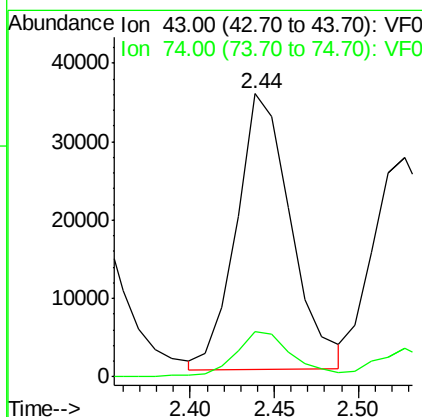
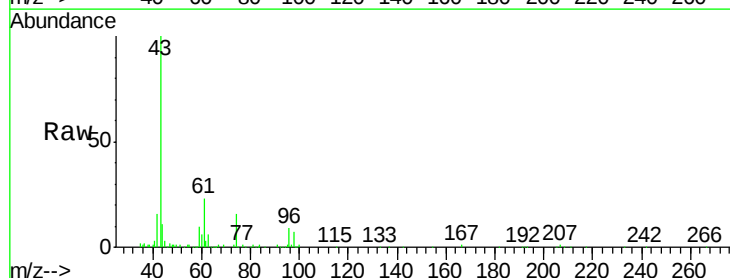
Acq: 23 Jul 2018 23:12

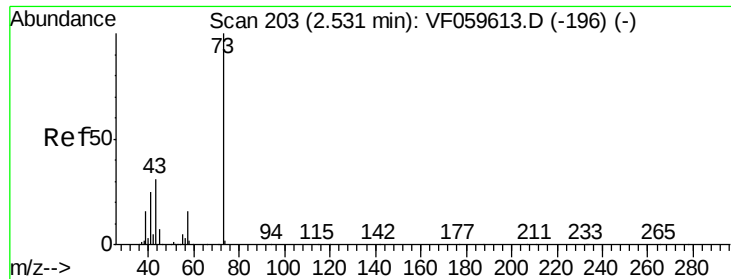
Tgt Ion: 43 Resp: 79034

Ion Ratio Lower Upper

43 100

74 15.9 11.4 17.0





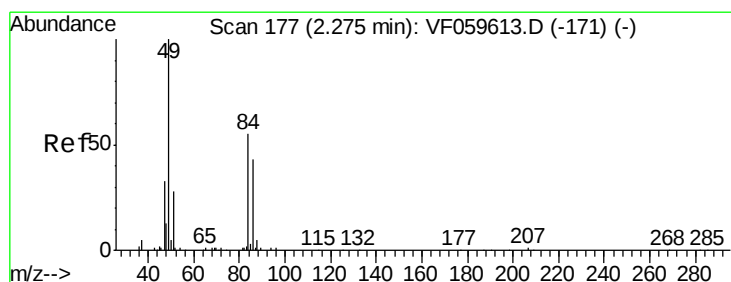
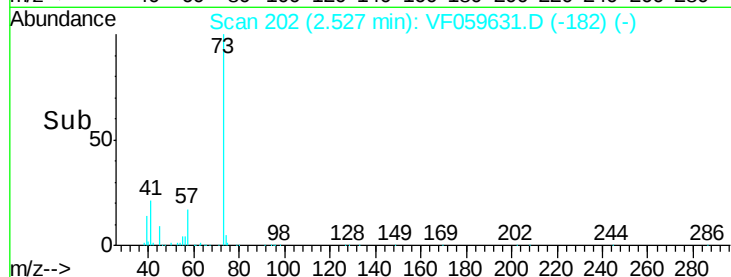
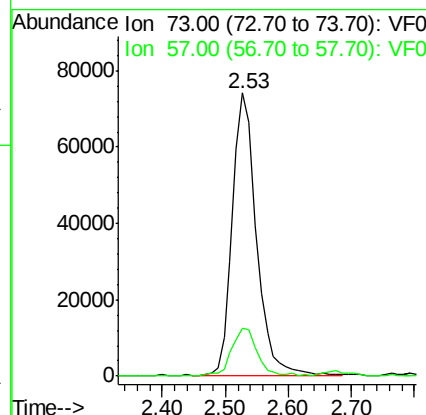
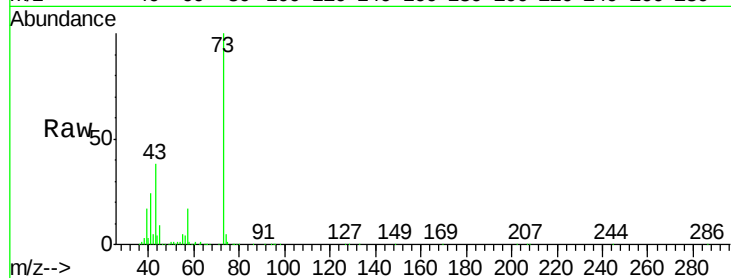
#19
Methyl tert-butyl Ether
Concen: 46.06 ug/l
RT: 2.53 min Scan# 202
Delta R.T. -0.00 min
Lab File: VF059631.D
Acq: 23 Jul 2018 23:12

Instrument :
MSVOA_F
ClientSampleId :
GL-TOPSOIL-09MSD

Tot Ion: 73 Resp: 196826
Ion Ratio Lower Upper
73 100
57 16.9 13.2 19.8

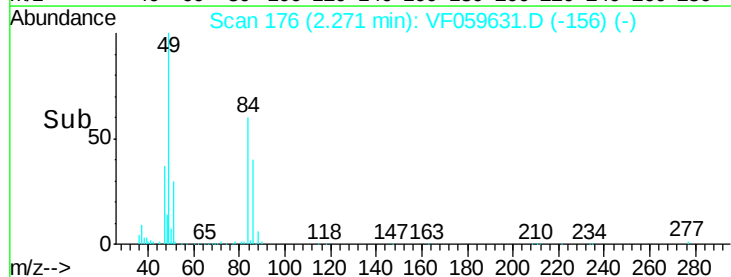
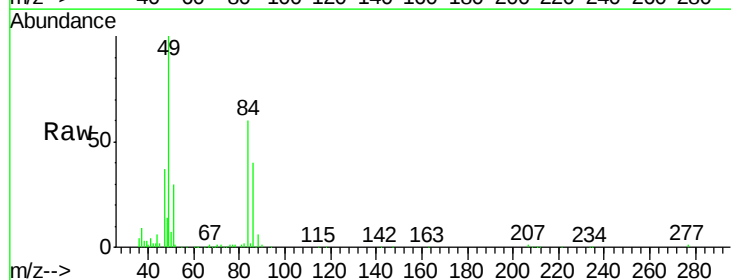
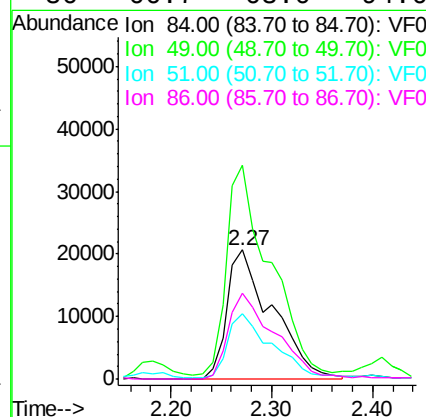
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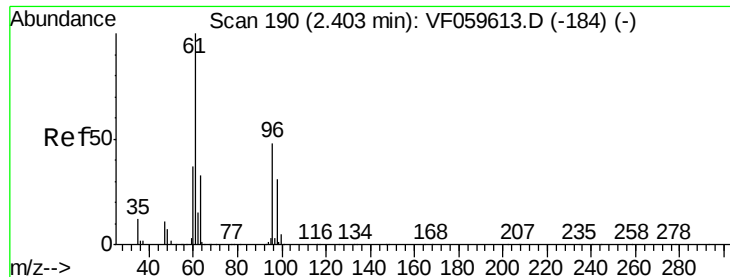
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#20
Methylene Chloride
Concen: 50.15 ug/l
RT: 2.27 min Scan# 176
Delta R.T. -0.00 min
Lab File: VF059631.D
Acq: 23 Jul 2018 23:12

Tgt Ion: 84 Resp: 64534
Ion Ratio Lower Upper
84 100
49 165.7 148.6 222.8
51 50.4 42.7 64.1
86 66.7 63.0 94.6





#21

trans-1,2-Dichloroethene

Concen: 43.50 ug/l

RT: 2.41 min Scan# 190

Delta R.T. 0.01 min

Lab File: VF059631.D

Acq: 23 Jul 2018 23:12

Instrument :

MSVOA_F

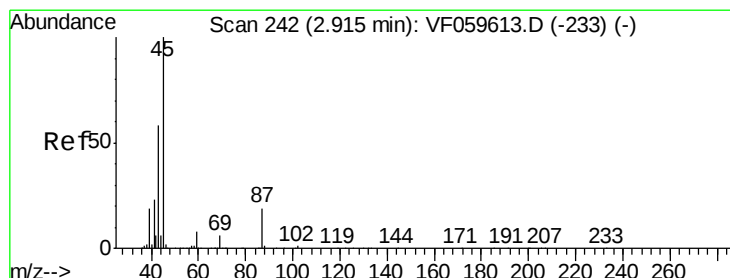
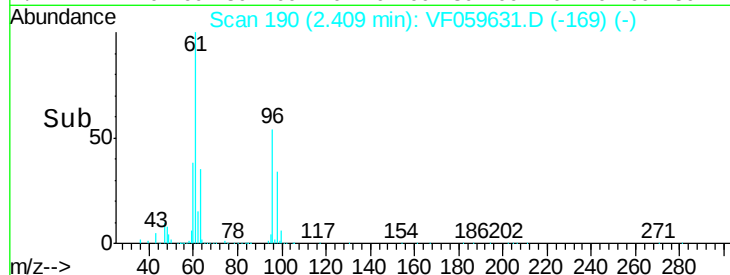
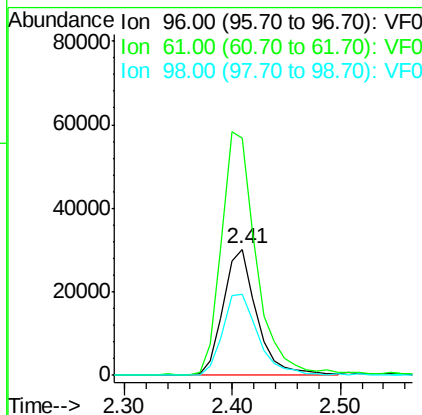
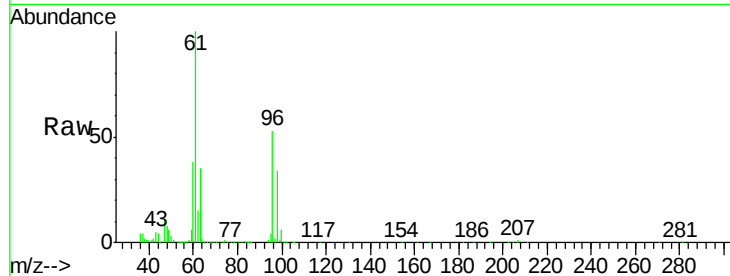
ClientSampleId :

GL-TOPSOIL-09MSD

Tot Ion:	96	Resp:	65560
Ion	Ratio	Lower	Upper
96	100		
61	187.4	167.0	250.6
98	63.7	51.8	77.8

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#22

Diisopropyl ether

Concen: 50.36 ug/l

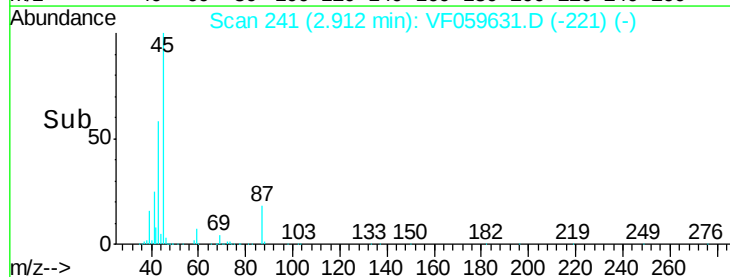
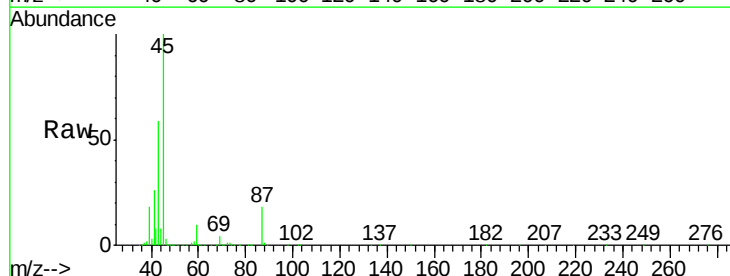
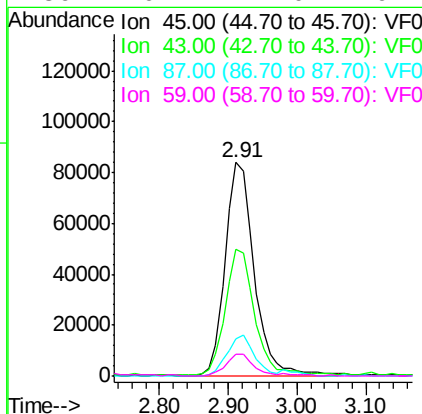
RT: 2.91 min Scan# 241

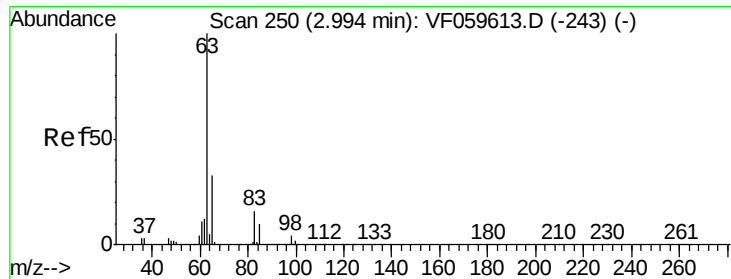
Delta R.T. -0.00 min

Lab File: VF059631.D

Acq: 23 Jul 2018 23:12

Tgt Ion:	45	Resp:	245000
Ion	Ratio	Lower	Upper
45	100		
43	59.3	46.7	70.1
87	17.7	15.0	22.6
59	10.1	7.0	10.4





#24

1,1-Dichloroethane

Concen: 48.46 ug/l

RT: 2.99 min Scan# 249

Delta R.T. -0.00 min

Lab File: VF059631.D

Acq: 23 Jul 2018 23:12

Instrument :

MSVOA_F

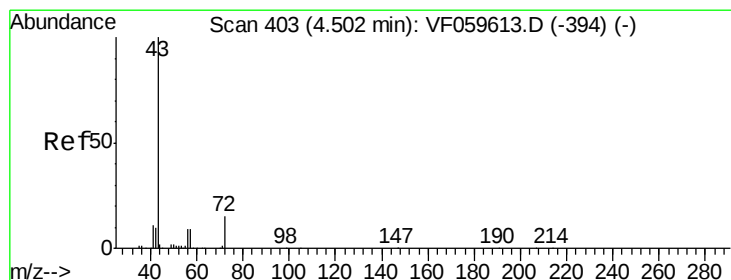
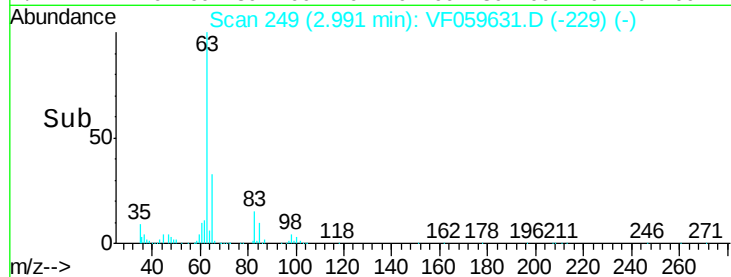
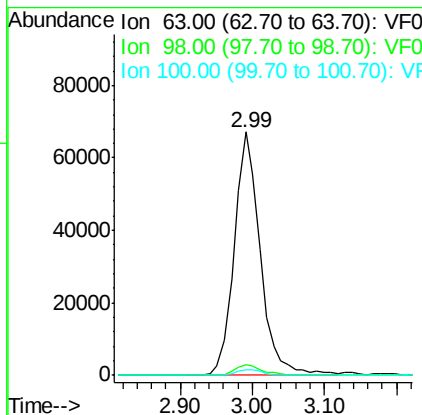
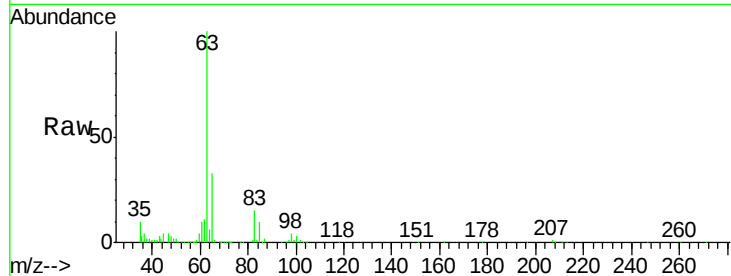
ClientSampleId :

GL-TOPSOIL-09MSD

Tot Ion:	63	Resp:	169000
Ion Ratio	Lower	Upper	
63	100		
98	4.2	1.9	5.7
100	2.5	1.2	3.6

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#25

2-Butanone

Concen: 177.71 ug/l

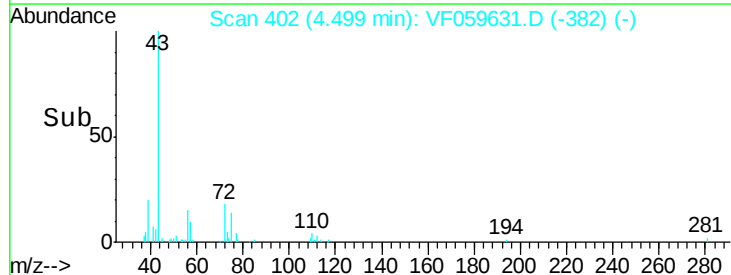
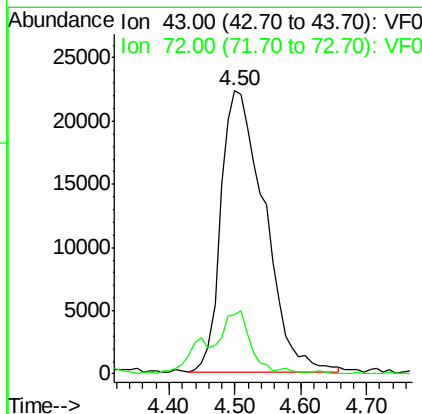
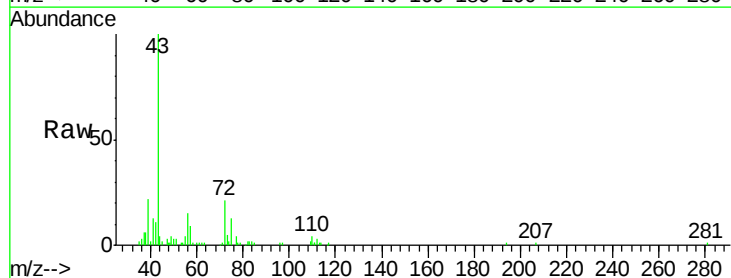
RT: 4.50 min Scan# 402

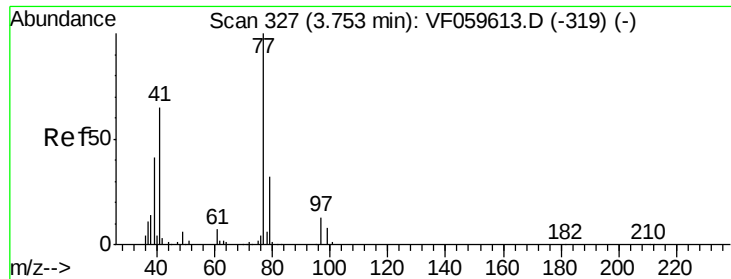
Delta R.T. -0.00 min

Lab File: VF059631.D

Acq: 23 Jul 2018 23:12

Tgt Ion:	43	Resp:	103415
Ion Ratio	Lower	Upper	
43	100		
72	20.9	12.9	19.3#





#26

2,2-Dichloropropane

Concen: 45.80 ug/l

RT: 3.76 min Scan# 327

Delta R.T. 0.01 min

Lab File: VF059631.D

Acq: 23 Jul 2018 23:12

Instrument :

MSVOA_F

ClientSampleId :

GL-TOPSOIL-09MSD

Tot Ion: 77 Resp: 134592

Ion Ratio Lower Upper

77 100

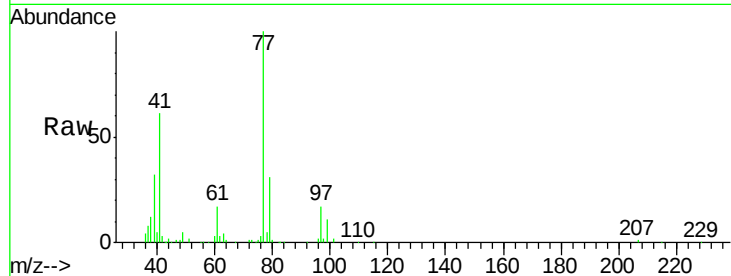
97 17.0 7.1 21.3

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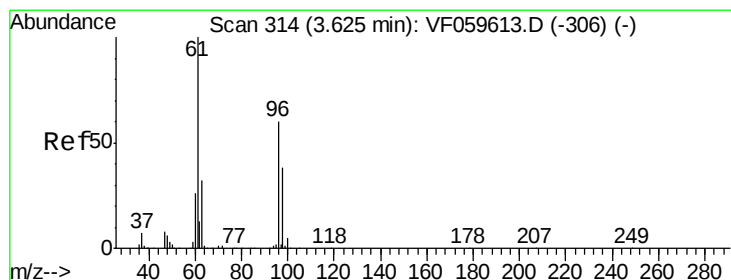
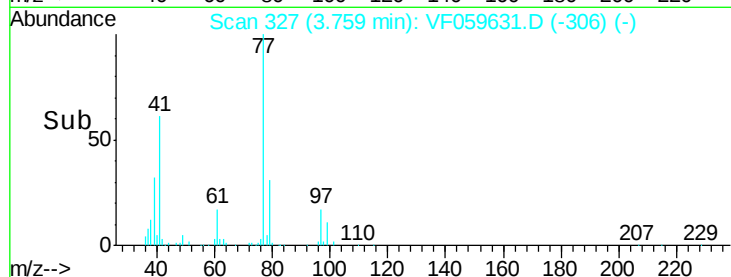
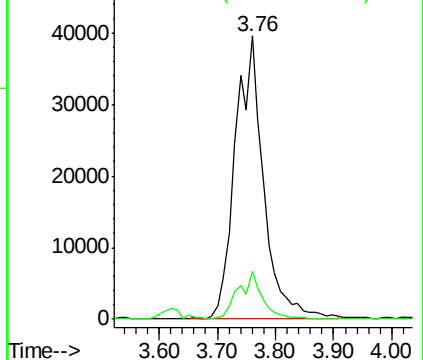
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Abundance Ion 77.00 (76.70 to 77.70): VF0

Ion 97.00 (96.70 to 97.70): VF0



#27

cis-1,2-Dichloroethene

Concen: 50.74 ug/l

RT: 3.62 min Scan# 313

Delta R.T. -0.00 min

Lab File: VF059631.D

Acq: 23 Jul 2018 23:12

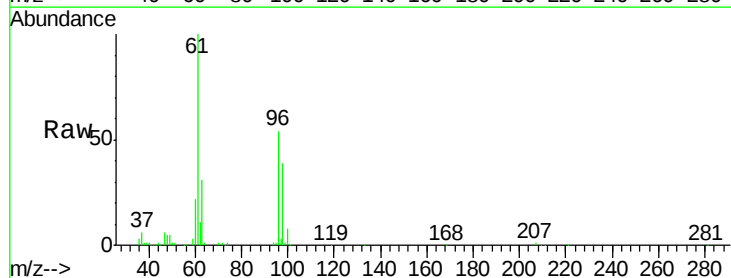
Tgt Ion: 96 Resp: 87660

Ion Ratio Lower Upper

96 100

61 184.9 0.0 335.2

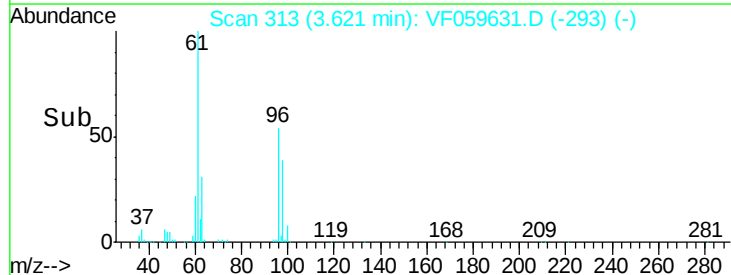
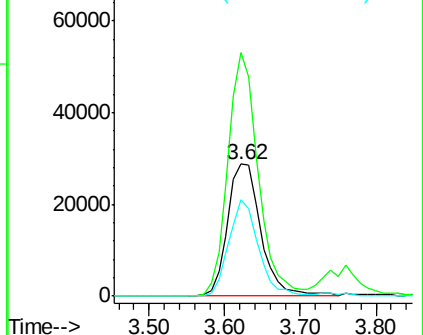
98 72.9 0.0 126.6

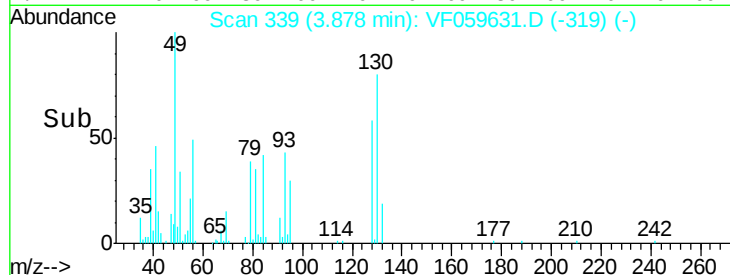
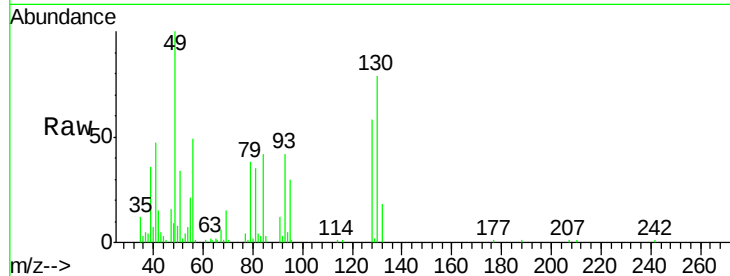
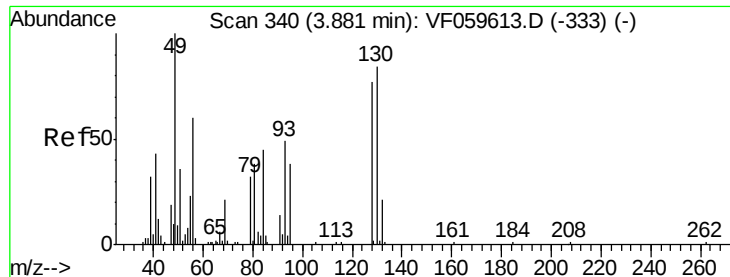


Abundance Ion 96.00 (95.70 to 96.70): VF0

Ion 61.00 (60.70 to 61.70): VF0

Ion 98.00 (97.70 to 98.70): VF0





#28

Bromochloromethane

Concen: 39.77 ug/l

RT: 3.88 min Scan# 339

Delta R.T. -0.00 min

Lab File: VF059631.D

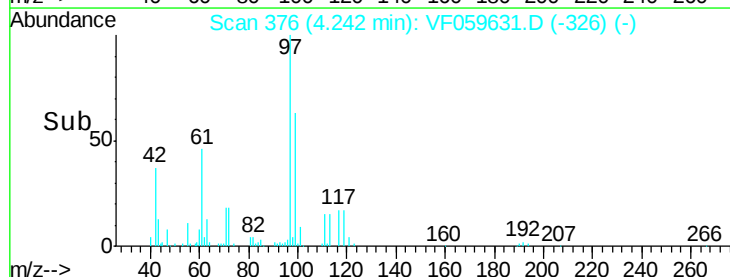
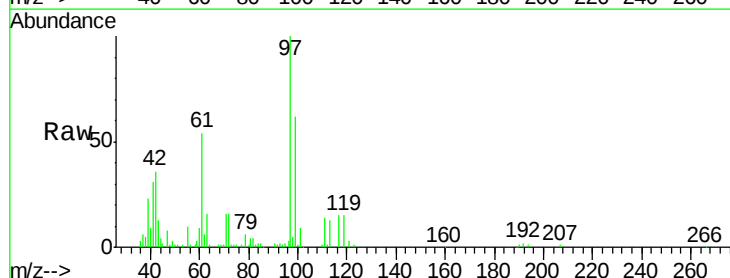
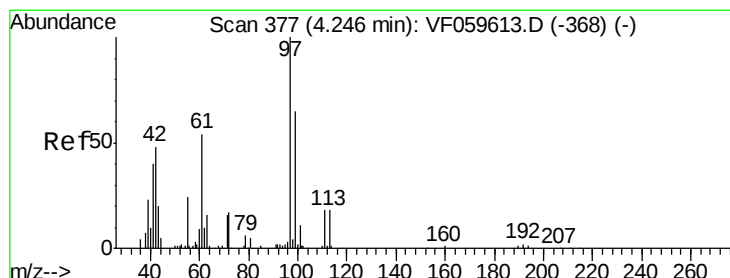
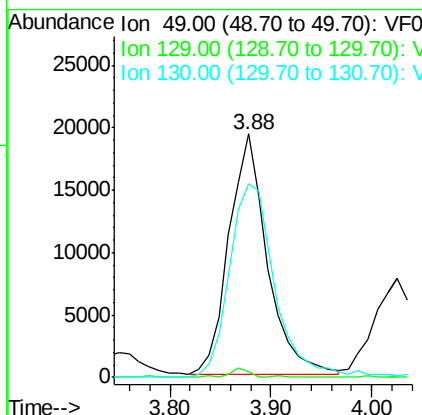
Acq: 23 Jul 2018 23:12

Tot Ion:	49	Resp:	50980
Ion	Ratio	Lower	Upper
49	100		
129	2.3	0.0	4.6
130	79.5	67.1	100.7

Instrument :
MSVOA_F
ClientSampleId :
GL-TOPSOIL-09MSD

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#29

Tetrahydrofuran

Concen: 182.04 ug/l

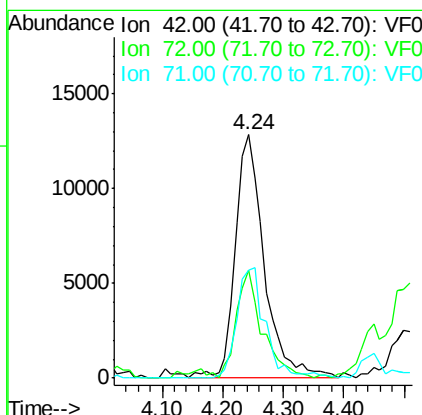
RT: 4.24 min Scan# 376

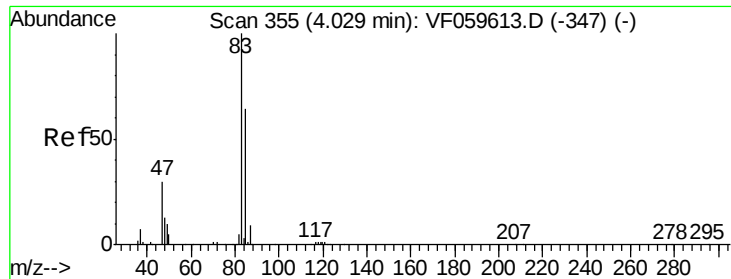
Delta R.T. -0.00 min

Lab File: VF059631.D

Acq: 23 Jul 2018 23:12

Tgt Ion:	42	Resp:	42919
Ion	Ratio	Lower	Upper
42	100		
72	39.8	27.9	41.9
71	43.2	29.3	43.9





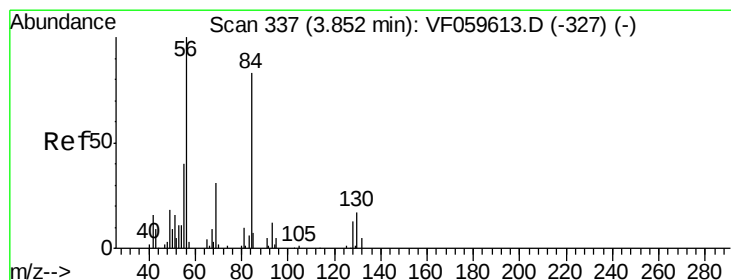
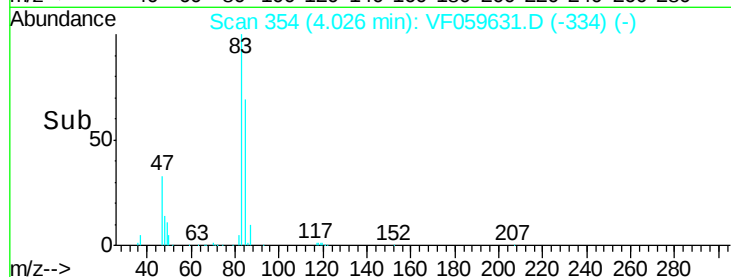
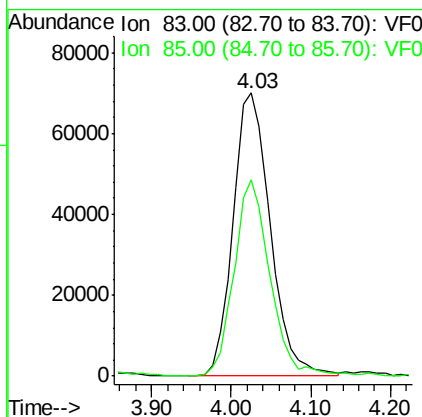
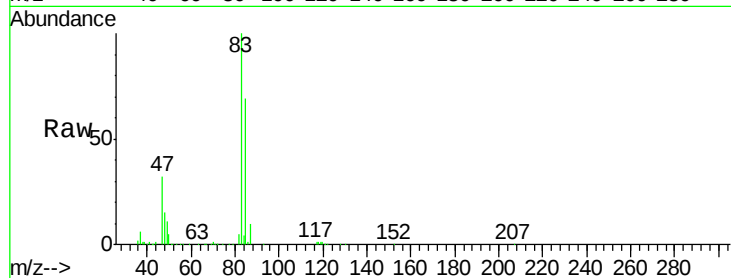
#30
Chloroform
Concen: 47.58 ug/l
RT: 4.03 min Scan# 354
Delta R.T. -0.00 min
Lab File: VF059631.D
Acq: 23 Jul 2018 23:12

Instrument :
MSVOA_F
ClientSampleId :
GL-TOPSOIL-09MSD

Tot Ion	83	Resp	228074
Ion Ratio	100	Lower	Upper
83	100		
85	69.3	51.1	76.7

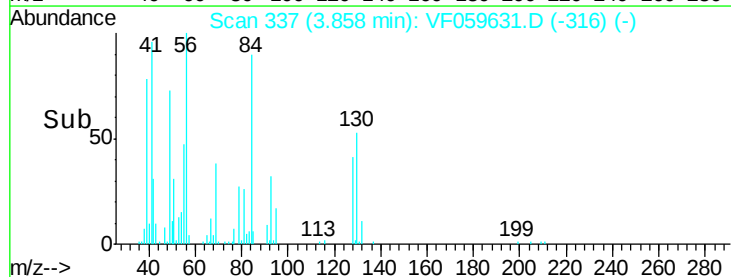
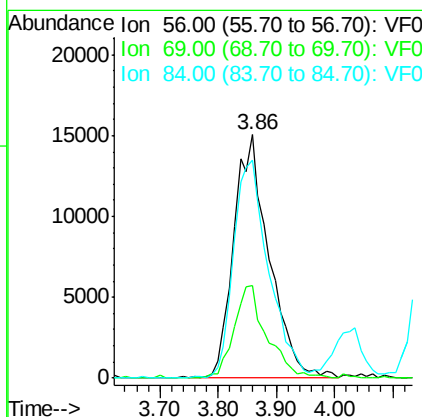
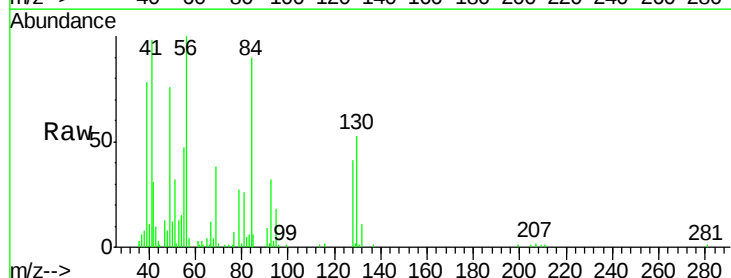
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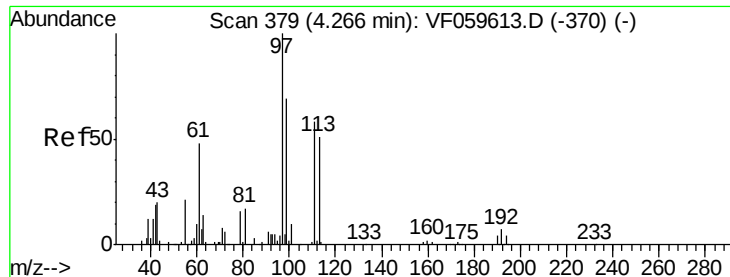
apatel
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#31
Cyclohexane
Concen: 32.91 ug/l
RT: 3.86 min Scan# 337
Delta R.T. 0.01 min
Lab File: VF059631.D
Acq: 23 Jul 2018 23:12

Tgt Ion	56	Resp	63848
Ion Ratio	100	Lower	Upper
56	100		
69	38.2	24.6	37.0#
84	89.6	66.6	99.8





#32

1,1,1-Trichloroethane

Concen: 46.87 ug/l

RT: 4.27 min Scan# 379

Delta R.T. 0.01 min

Lab File: VF059631.D

Acq: 23 Jul 2018 23:12

Instrument :

MSVOA_F

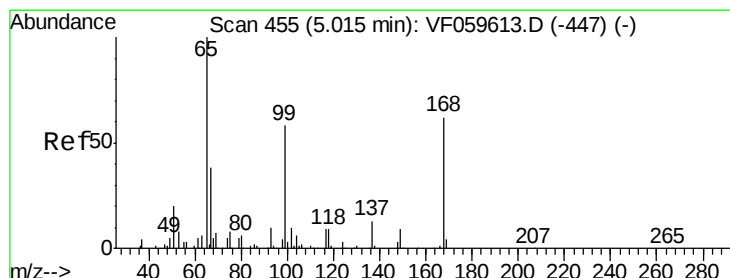
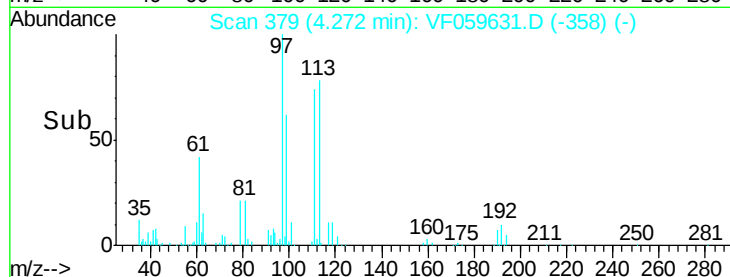
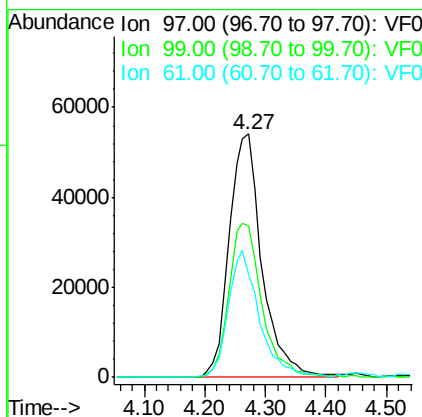
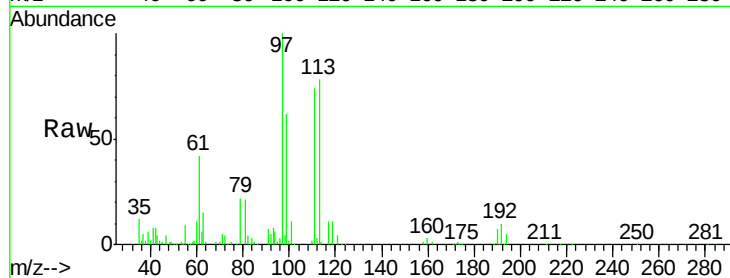
ClientSampleId :

GL-TOPSOIL-09MSD

Tot Ion:	97	Resp:	203465
Ion Ratio	Lower	Upper	
97	100		
99	62.1	55.4	83.2
61	42.1	39.3	58.9

Manual Integrations
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#33

1,2-Dichloroethane-d4

Concen: 48.66 ug/l

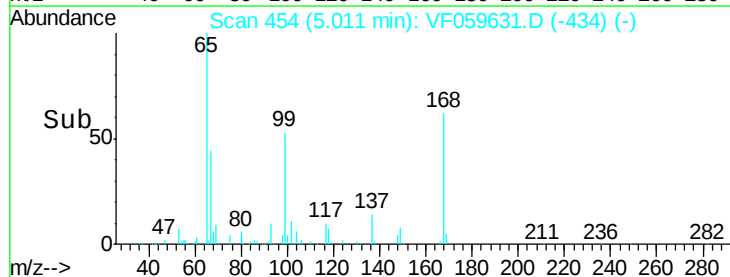
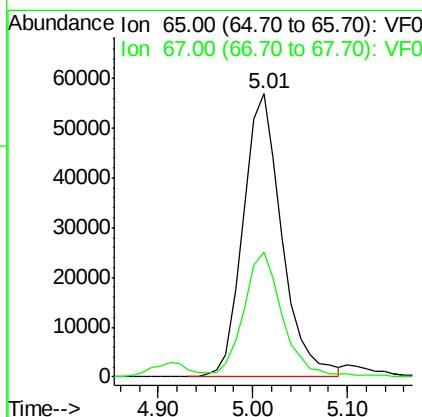
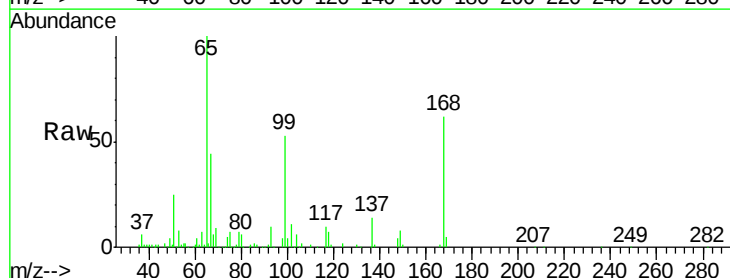
RT: 5.01 min Scan# 454

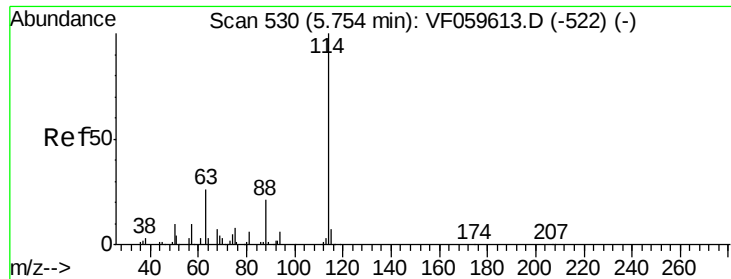
Delta R.T. -0.00 min

Lab File: VF059631.D

Acq: 23 Jul 2018 23:12

Tgt Ion:	65	Resp:	160174
Ion Ratio	Lower	Upper	
65	100		
67	44.2	0.0	83.8





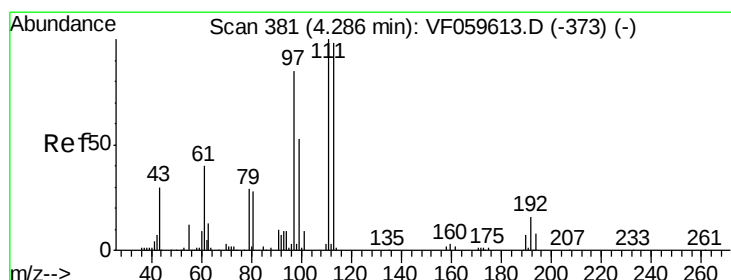
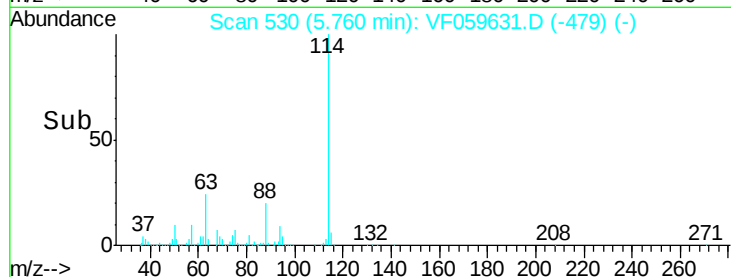
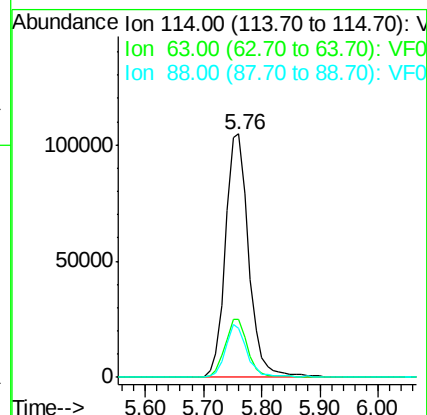
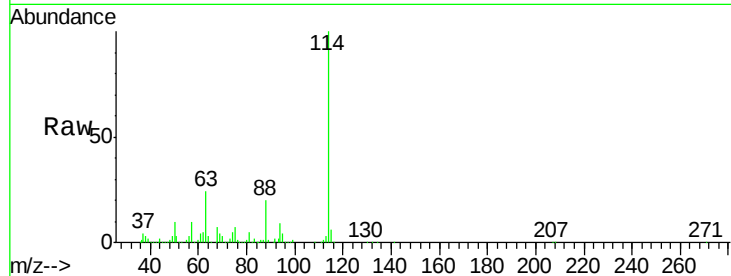
#34
 1,4-Difluorobenzene
 Concen: 50.00 ug/l
 RT: 5.76 min Scan# 530
 Delta R.T. 0.01 min
 Lab File: VF059631.D
 Acq: 23 Jul 2018 23:12

Instrument :
 MSVOA_F
 ClientSampleId :
 GL-TOPSOIL-09MSD

Tot Ion	Ratio	Resp Lower	Upper
114	100		
63	23.6	0.0	51.8
88	20.3	0.0	42.8

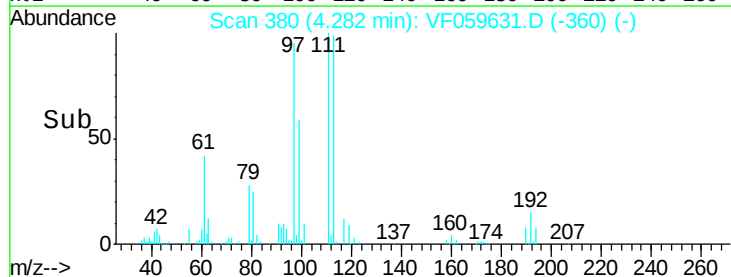
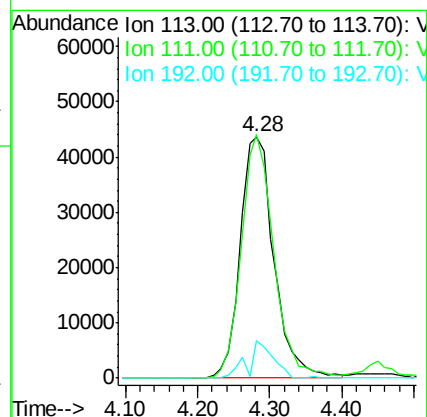
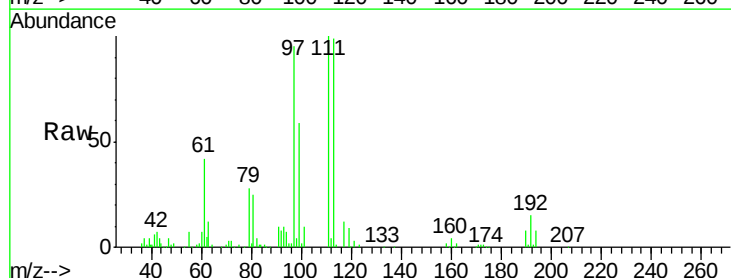
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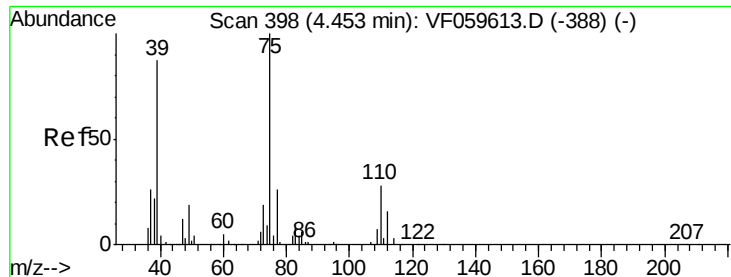
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#35
 Dibromofluoromethane
 Concen: 53.18 ug/l
 RT: 4.28 min Scan# 380
 Delta R.T. -0.00 min
 Lab File: VF059631.D
 Acq: 23 Jul 2018 23:12

Tgt Ion	Ratio	Resp Lower	Upper
113	100		
111	100.8	81.5	122.3
192	15.7	13.4	20.2





#36

1,1-Dichloropropene

Concen: 45.94 ug/l

RT: 4.45 min Scan# 397

Delta R.T. -0.00 min

Lab File: VF059631.D

Acq: 23 Jul 2018 23:12

Instrument :

MSVOA_F

ClientSampleId :

GL-TOPSOIL-09MSD

Tot Ion: 75 Resp: 135429

Ion Ratio Lower Upper

75 100

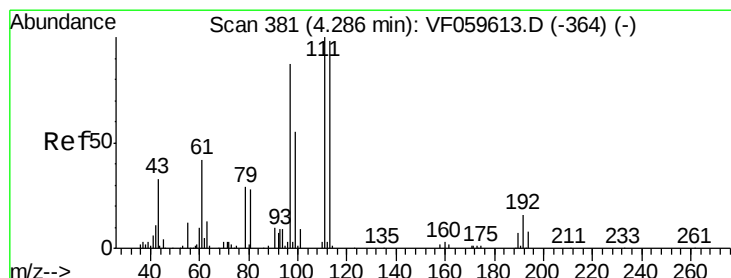
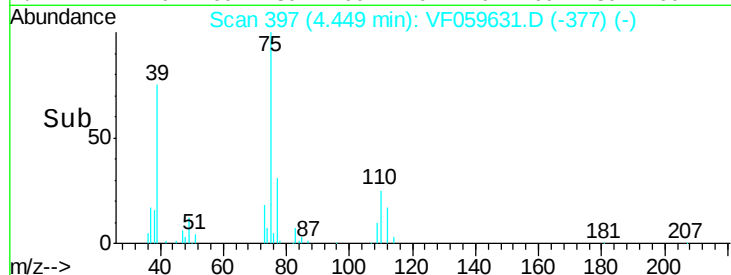
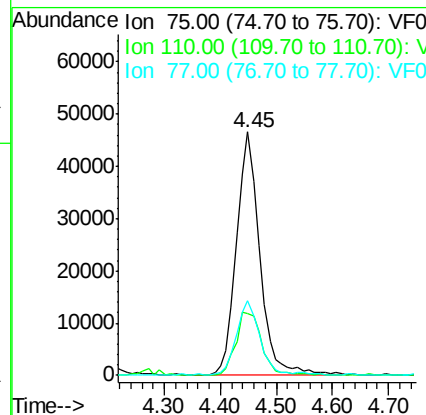
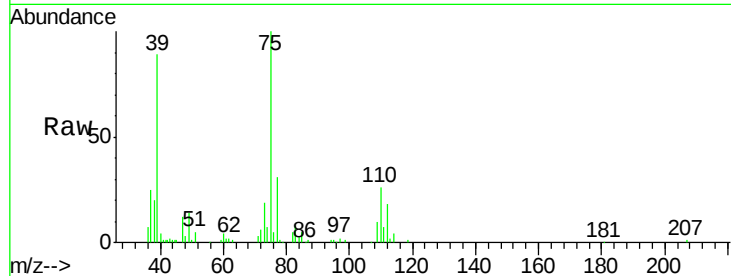
110 25.6 14.2 42.6

77 30.5 20.3 30.5#

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#37

Ethyl Acetate

Concen: 13.32 ug/l

RT: 4.24 min Scan# 376

Delta R.T. -0.04 min

Lab File: VF059631.D

Acq: 23 Jul 2018 23:12

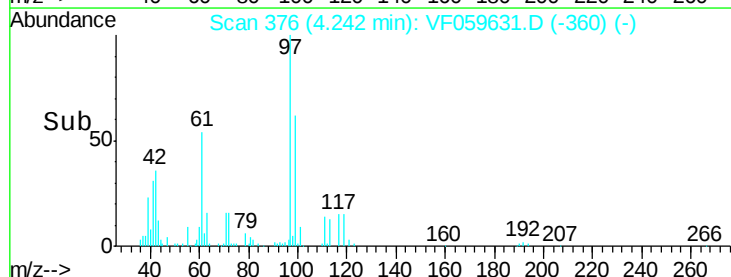
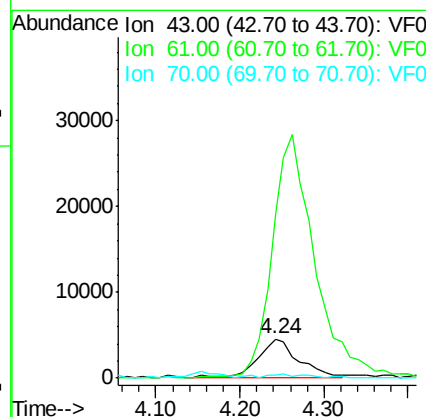
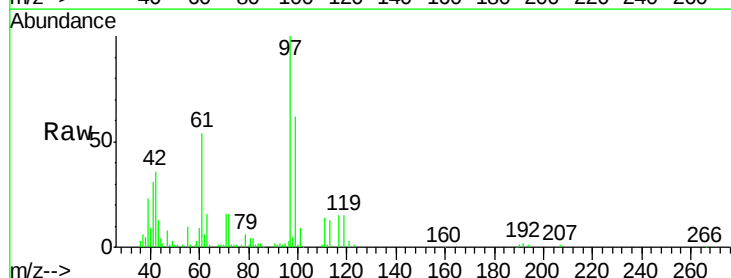
Tgt Ion: 43 Resp: 15786

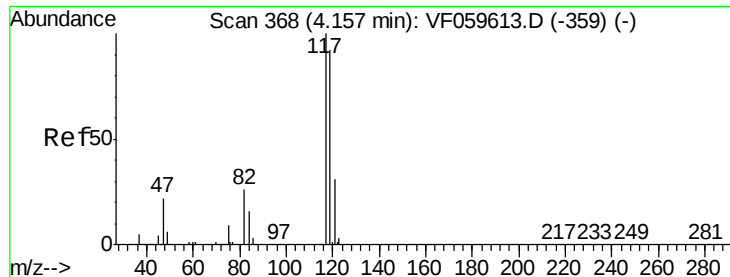
Ion Ratio Lower Upper

43 100

61 421.2 101.9 152.9#

70 8.7 7.9 11.9





#38

Carbon Tetrachloride

Concen: 37.74 ug/l

RT: 4.16 min Scan# 368

Delta R.T. 0.01 min

Lab File: VF059631.D

Acq: 23 Jul 2018 23:12

Instrument :

MSVOA_F

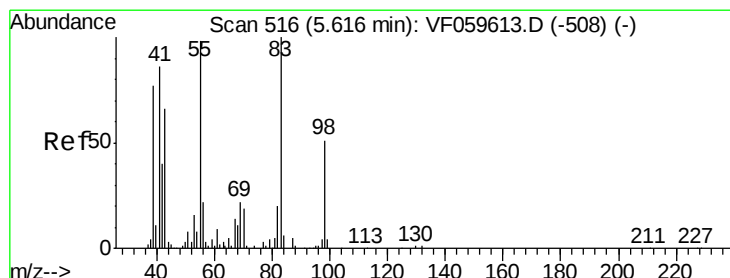
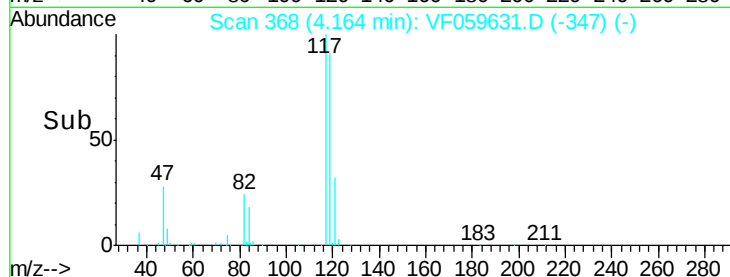
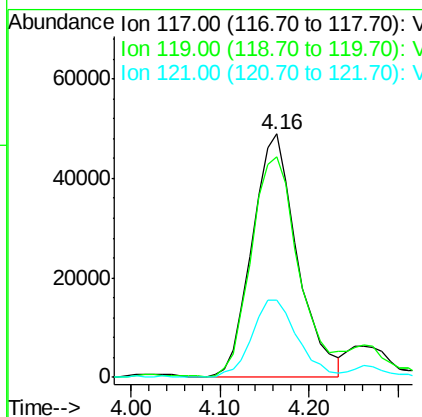
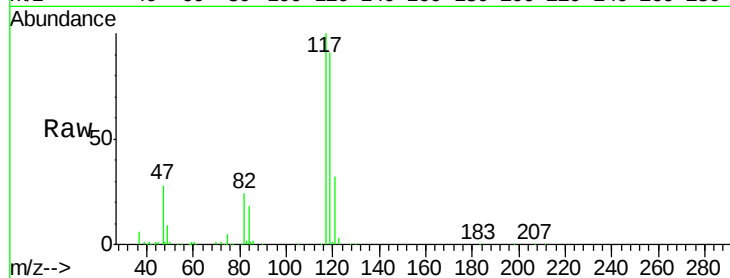
ClientSampleId :

GL-TOPSOIL-09MSD

Tot Ion:	117	Resp:	171662
Ion Ratio	Lower	Upper	
117	100		
119	90.5	74.2	111.4
121	31.6	24.7	37.1

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#39

Methylcyclohexane

Concen: 22.83 ug/l

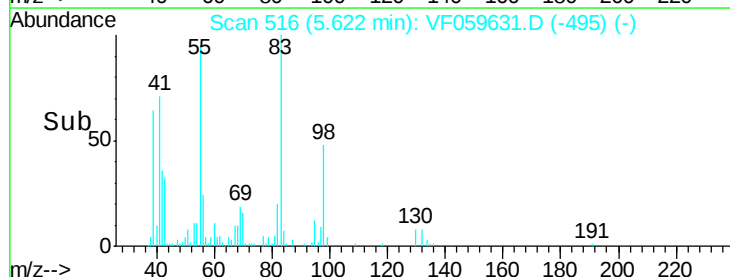
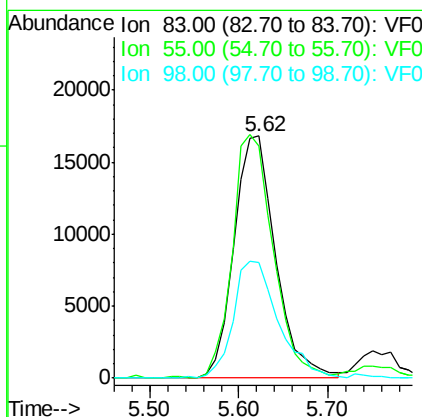
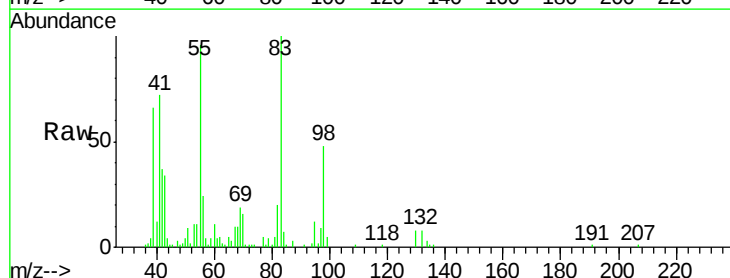
RT: 5.62 min Scan# 516

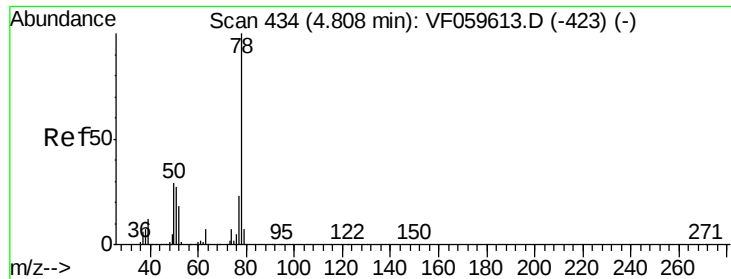
Delta R.T. 0.01 min

Lab File: VF059631.D

Acq: 23 Jul 2018 23:12

Tgt Ion:	83	Resp:	54608
Ion Ratio	Lower	Upper	
83	100		
55	96.0	78.5	117.7
98	47.8	41.1	61.7





#40

Benzene

Concen: 47.08 ug/l

RT: 4.79 min Scan# 432

Delta R.T. -0.01 min

Lab File: VF059631.D

Acq: 23 Jul 2018 23:12

Instrument :

MSVOA_F

ClientSampleId :

GL-TOPSOIL-09MSD

Tot Ion: 78 Resp: 253640

Ion Ratio Lower Upper

78 100

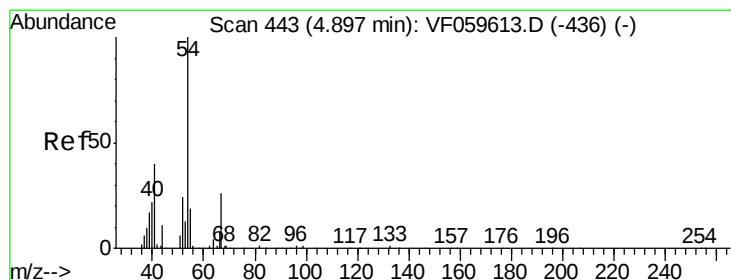
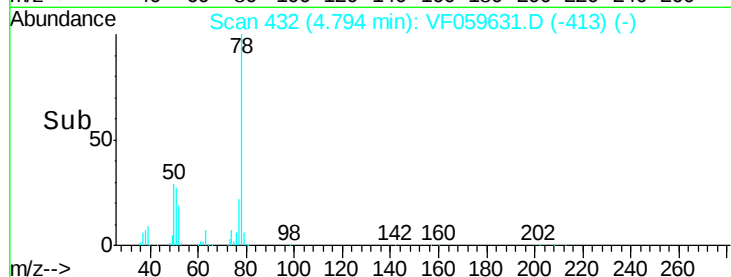
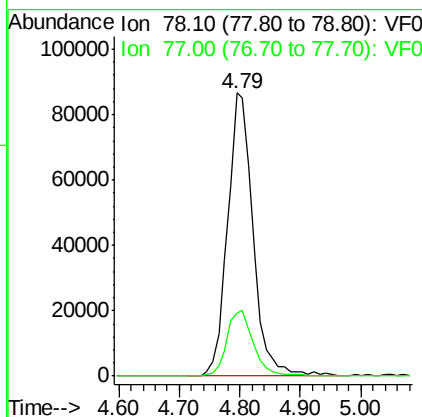
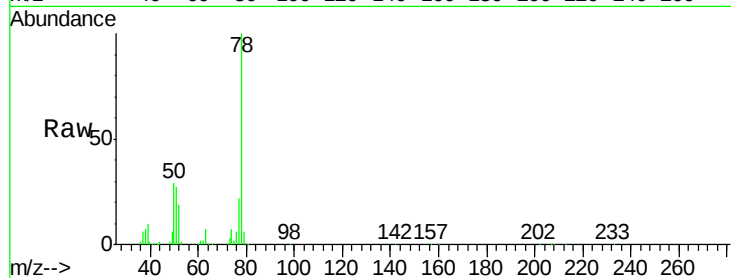
77 22.5 18.4 27.6

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#41

Methacrylonitrile

Concen: 30.40 ug/l

RT: 4.91 min Scan# 444

Delta R.T. 0.02 min

Lab File: VF059631.D

Acq: 23 Jul 2018 23:12

Tgt Ion: 41 Resp: 18471

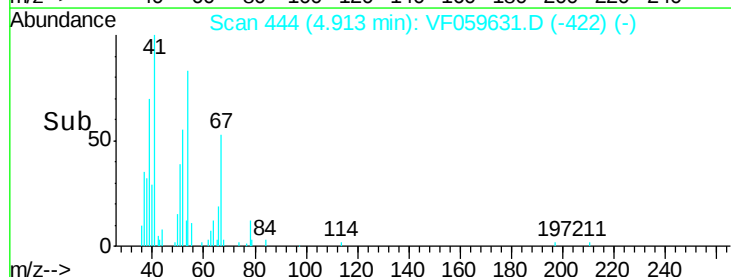
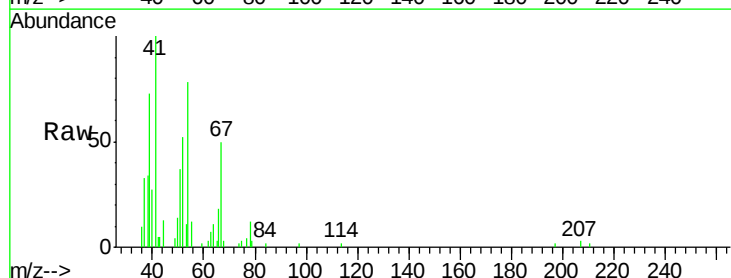
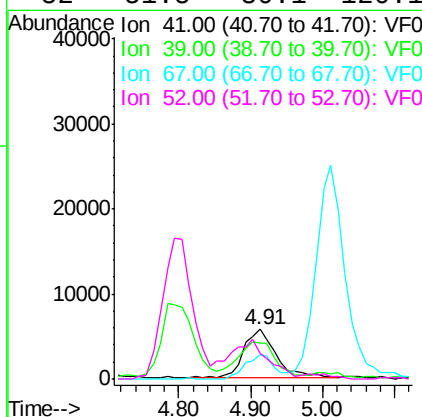
Ion Ratio Lower Upper

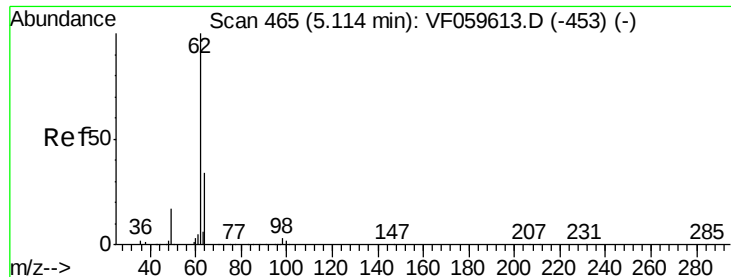
41 100

39 72.8 58.2 87.4

67 49.7 51.0 76.6#

52 51.5 80.1 120.1#





#42

1,2-Dichloroethane

Concen: 42.96 ug/l

RT: 5.11 min Scan# 464

Delta R.T. -0.00 min

Lab File: VF059631.D

Acq: 23 Jul 2018 23:12

Instrument :

MSVOA_F

ClientSampleId :

GL-TOPSOIL-09MSD

Tot Ion: 62 Resp: 156265

Ion Ratio Lower Upper

62 100

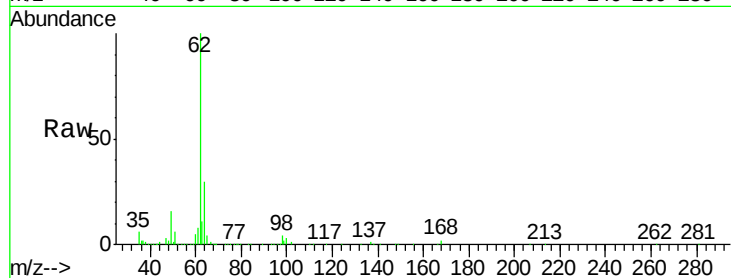
98 4.0 0.0 8.4

Manual Integrations

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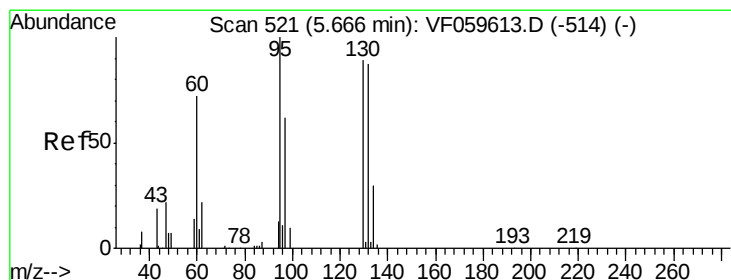
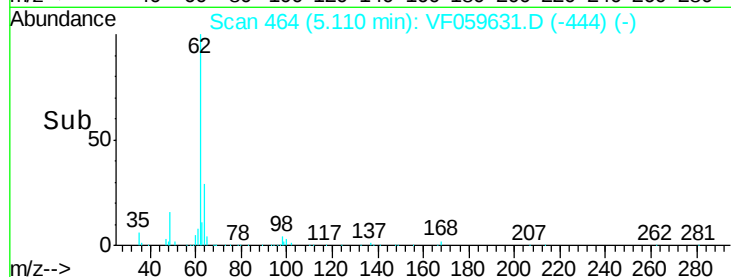
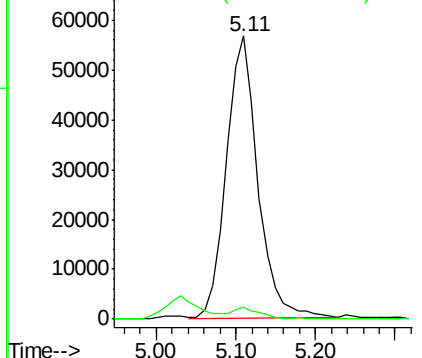
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Abundance Ion 62.00 (61.70 to 62.70): VF0

Ion 98.00 (97.70 to 98.70): VF0



#44

Trichloroethene

Concen: 45.08 ug/l

RT: 5.66 min Scan# 520

Delta R.T. -0.00 min

Lab File: VF059631.D

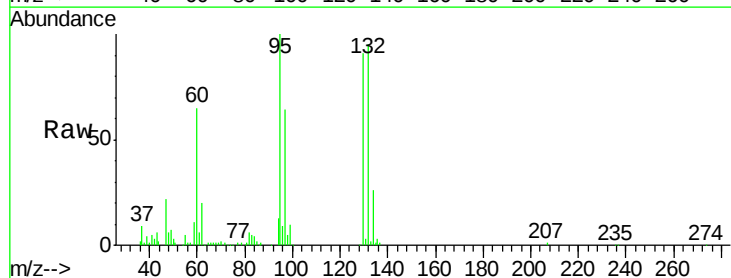
Acq: 23 Jul 2018 23:12

Tgt Ion:130 Resp: 93619

Ion Ratio Lower Upper

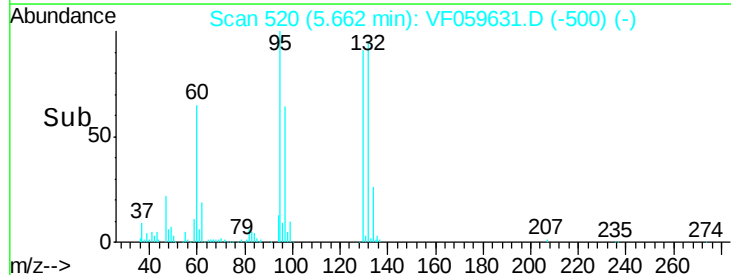
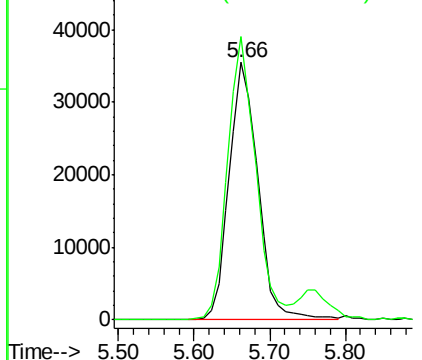
130 100

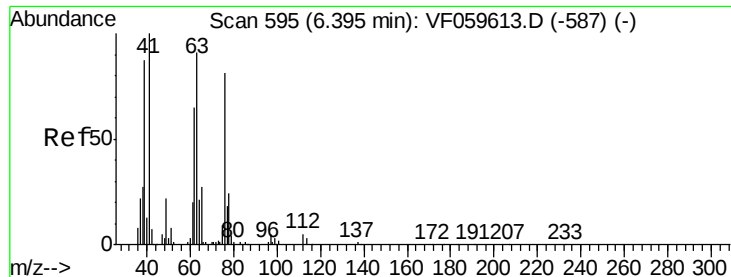
95 110.0 0.0 226.4



Abundance Ion 129.90 (129.60 to 130.60): V

Ion 94.90 (94.60 to 95.60): VF0





#45

1,2-Dichloropropane

Concen: 46.79 ug/l

RT: 6.39 min Scan# 594

Delta R.T. -0.00 min

Lab File: VF059631.D

Acq: 23 Jul 2018 23:12

Instrument :

MSVOA_F

ClientSampleId :

GL-TOPSOIL-09MSD

Tot Ion: 63 Resp: 68245

Ion Ratio Lower Upper

63 100

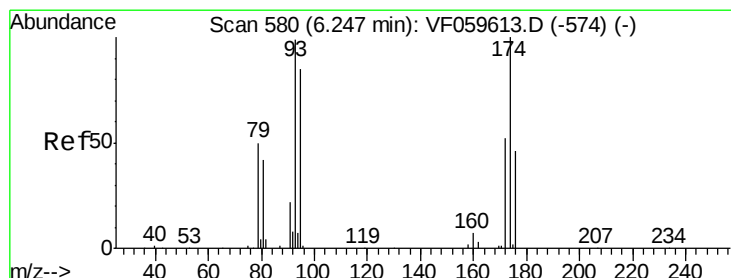
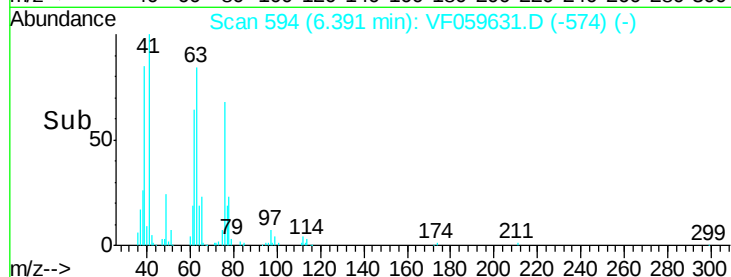
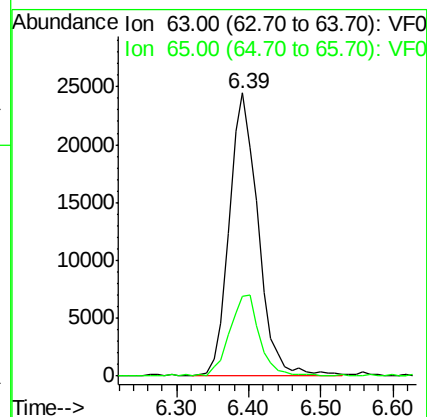
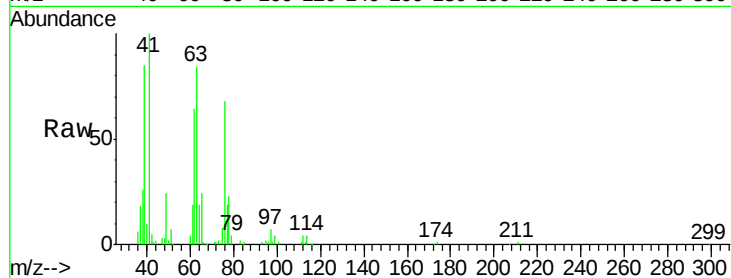
65 28.1 23.4 35.0

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#46

Dibromomethane

Concen: 42.79 ug/l

RT: 6.24 min Scan# 579

Delta R.T. -0.00 min

Lab File: VF059631.D

Acq: 23 Jul 2018 23:12

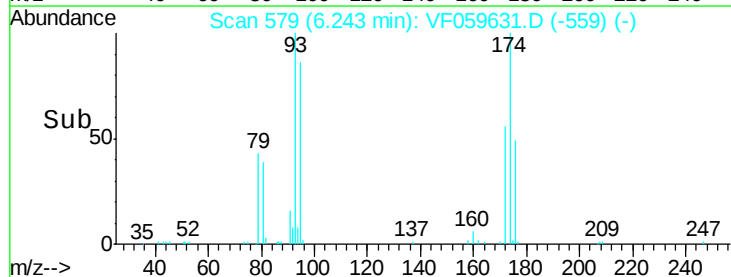
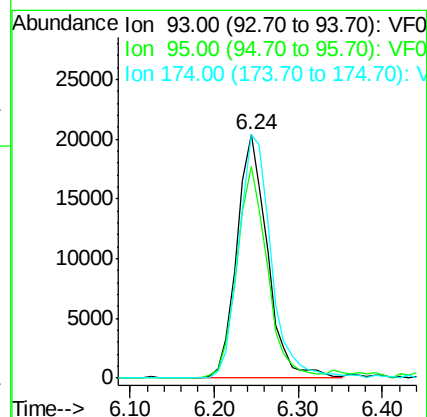
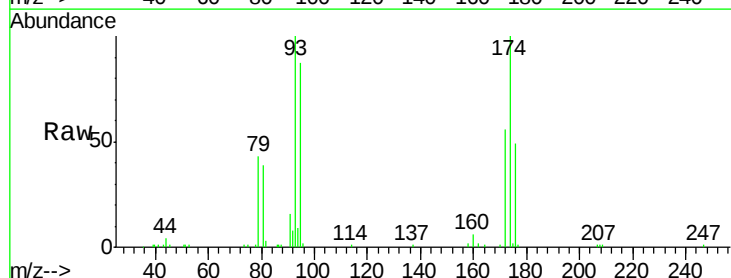
Tgt Ion: 93 Resp: 51694

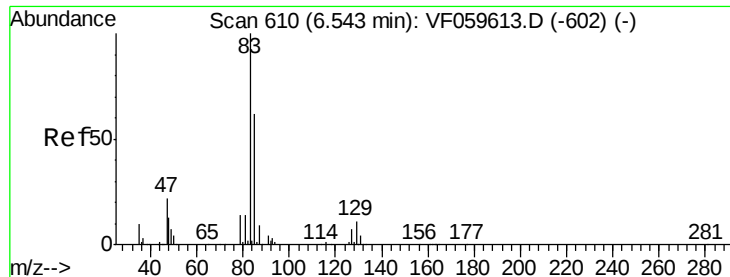
Ion Ratio Lower Upper

93 100

95 89.1 68.6 102.8

174 99.8 80.8 121.2





#47

Bromodichloromethane

Concen: 37.67 ug/l

RT: 6.54 min Scan# 609

Delta R.T. -0.00 min

Lab File: VF059631.D

Acq: 23 Jul 2018 23:12

Instrument :

MSVOA_F

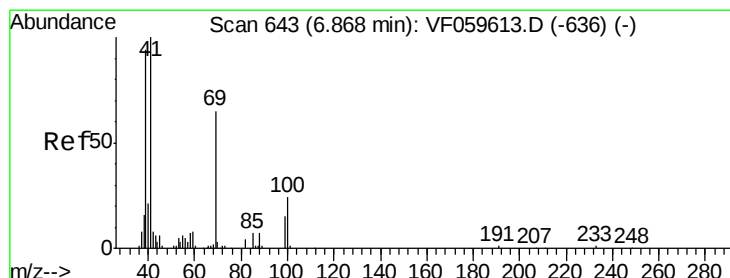
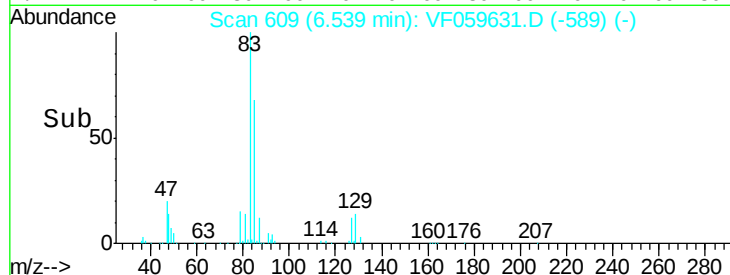
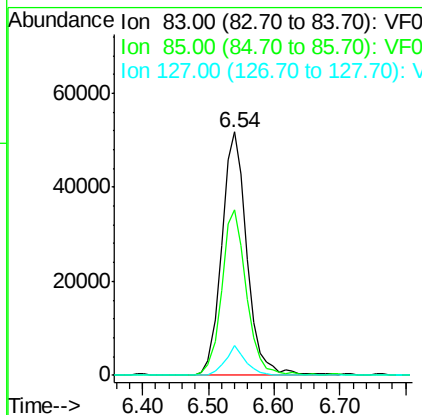
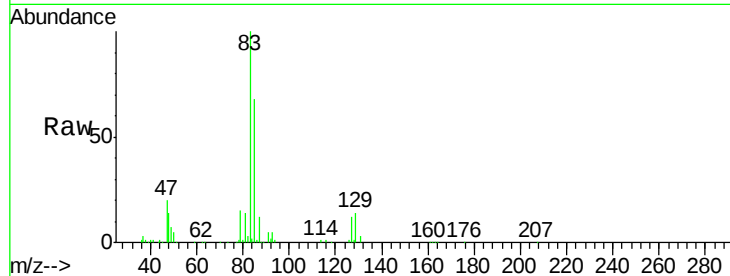
ClientSampleId :

GL-TOPSOIL-09MSD

Tot Ion:	83	Resp:	138118
Ion Ratio	Lower	Upper	
83	100		
85	68.3	49.4	74.0
127	12.0	5.9	8.9#

Manual Integrations
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#48

Methyl methacrylate

Concen: 50.12 ug/l

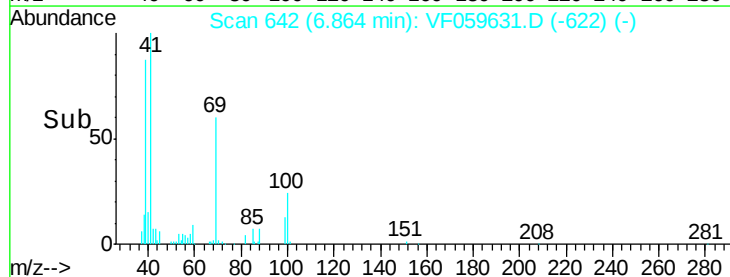
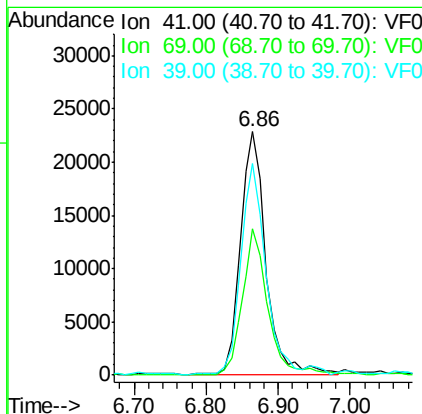
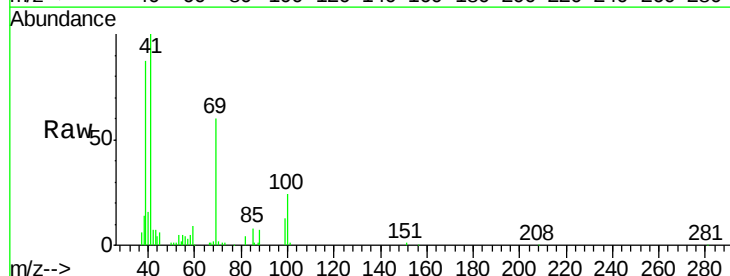
RT: 6.86 min Scan# 642

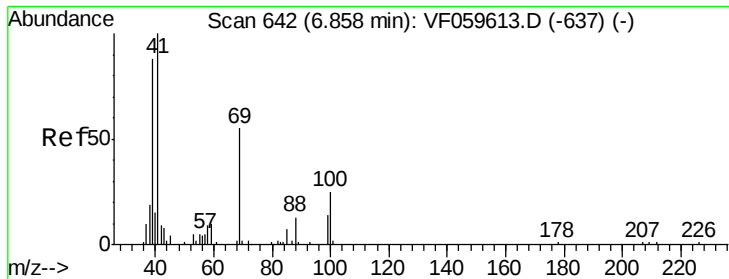
Delta R.T. -0.00 min

Lab File: VF059631.D

Acq: 23 Jul 2018 23:12

Tgt Ion:	41	Resp:	56773
Ion Ratio	Lower	Upper	
41	100		
69	59.9	51.6	77.4
39	86.7	76.3	114.5





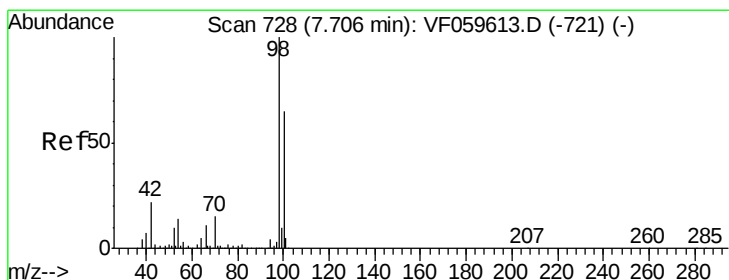
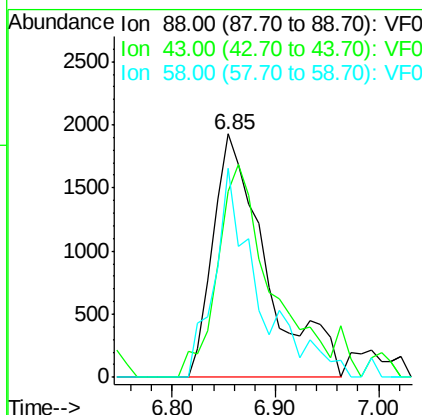
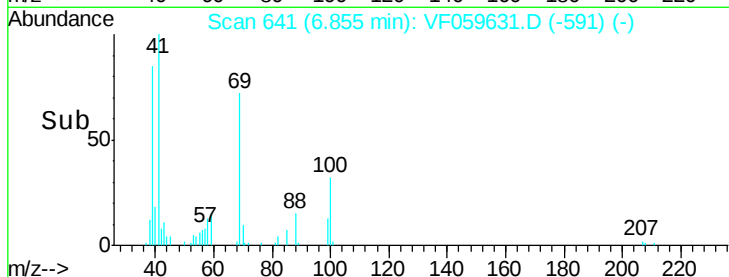
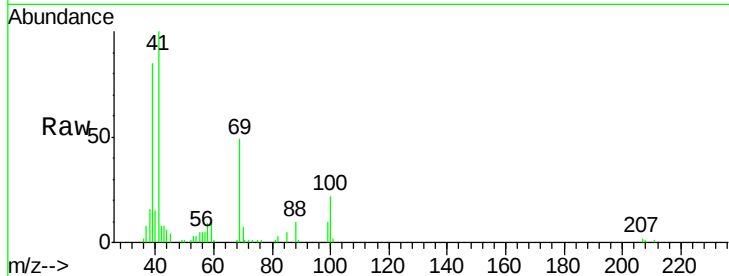
#49
1,4-Dioxane
Concen: 969.61 ug/l m
RT: 6.85 min Scan# 641
Delta R.T. -0.00 min
Lab File: VF059631.D
Acq: 23 Jul 2018 23:12

Instrument :
MSVOA_F
ClientSampleId :
GL-TOPSOIL-09MSD

Tot Ion	Ratio	Lower	Upper
88	100		
43	76.5	54.2	81.4
58	86.1	54.3	81.5#

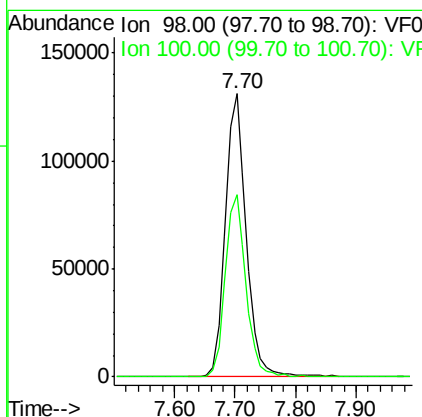
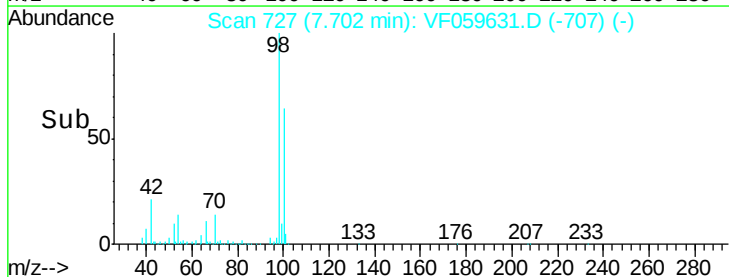
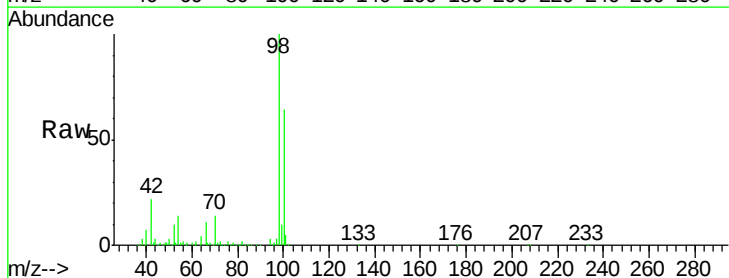
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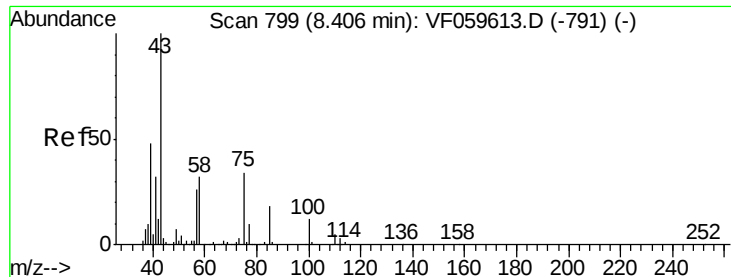
apatel
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#50
Toluene-d8
Concen: 46.65 ug/l
RT: 7.70 min Scan# 727
Delta R.T. -0.00 min
Lab File: VF059631.D
Acq: 23 Jul 2018 23:12

Tgt Ion	Ratio	Lower	Upper
98	100		
100	64.2	51.6	77.4





#51

4-Methyl-2-Pentanone

Concen: 196.77 ug/l

RT: 8.39 min Scan# 797

Delta R.T. -0.01 min

Lab File: VF059631.D

Acq: 23 Jul 2018 23:12

Instrument :

MSVOA_F

ClientSampleId :

GL-TOPSOIL-09MSD

Tot Ion: 43 Resp: 217106

Ion Ratio Lower Upper

43 100

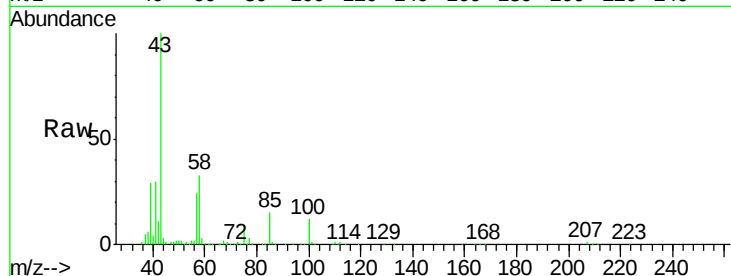
58 33.1 25.8 38.6

Manual Integrations

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Abundance Ion 43.00 (42.70 to 43.70): VF0

Ion 58.00 (57.70 to 58.70): VF0

8.39

100000

80000

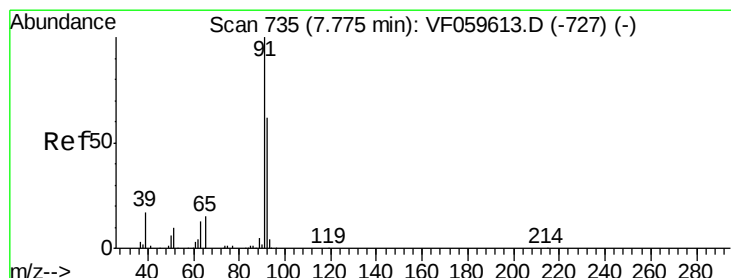
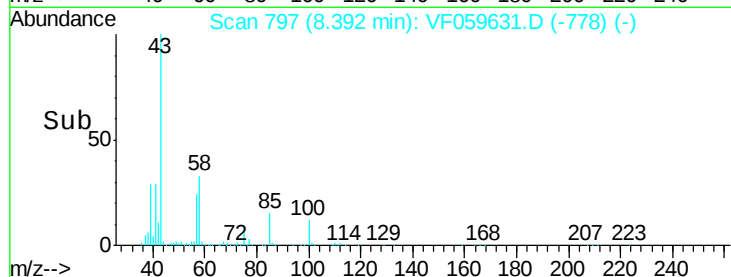
60000

40000

20000

0

Time-->



#52

Toluene

Concen: 40.75 ug/l

RT: 7.77 min Scan# 734

Delta R.T. -0.00 min

Lab File: VF059631.D

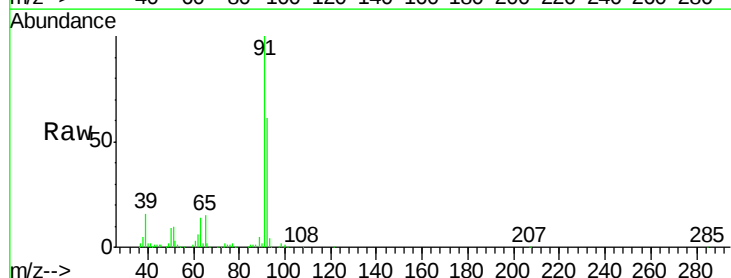
Acq: 23 Jul 2018 23:12

Tgt Ion: 92 Resp: 167120

Ion Ratio Lower Upper

92 100

91 164.1 129.8 194.8



Abundance Ion 92.00 (91.70 to 92.70): VF0

Ion 91.00 (90.70 to 91.70): VF0

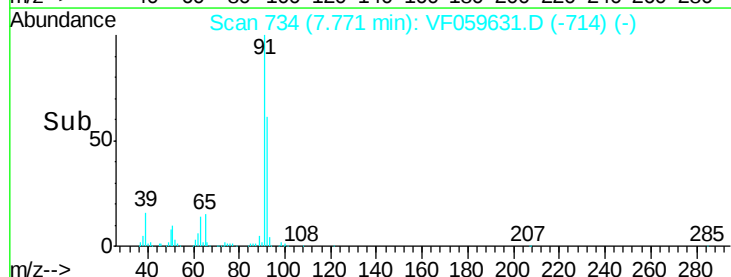
7.77

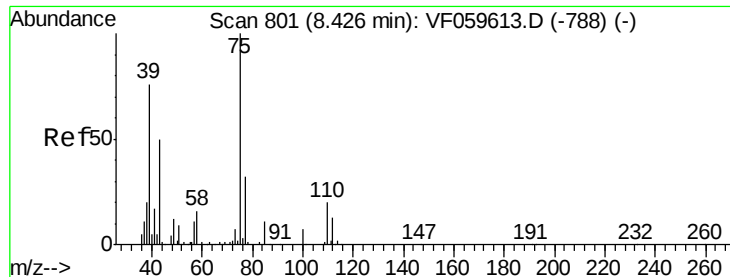
100000

50000

0

Time-->





#53

t-1,3-Dichloropropene

Concen: 33.29 ug/l

RT: 8.42 min Scan# 800

Delta R.T. -0.00 min

Lab File: VF059631.D

Acq: 23 Jul 2018 23:12

Instrument :

MSVOA_F

ClientSampleId :

GL-TOPSOIL-09MSD

Tot Ion: 75 Resp: 103199

Ion Ratio Lower Upper

75 100

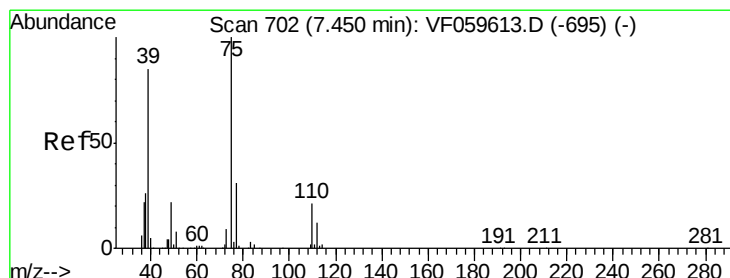
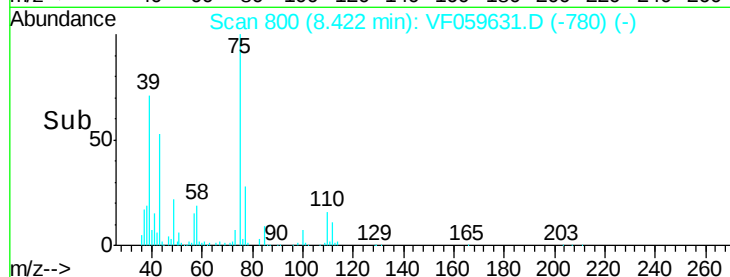
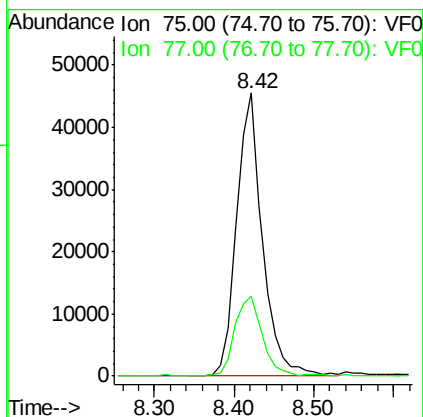
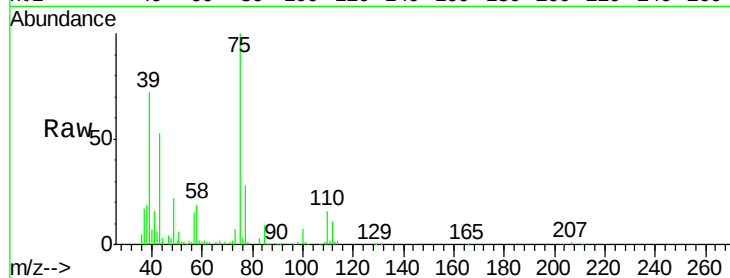
77 28.3 25.6 38.4

Manual Integrations

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#54

cis-1,3-Dichloropropene

Concen: 32.87 ug/l

RT: 7.45 min Scan# 701

Delta R.T. -0.00 min

Lab File: VF059631.D

Acq: 23 Jul 2018 23:12

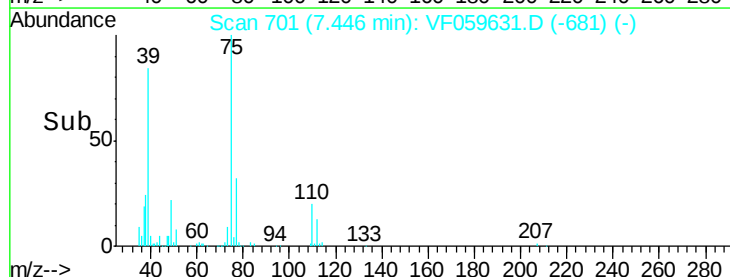
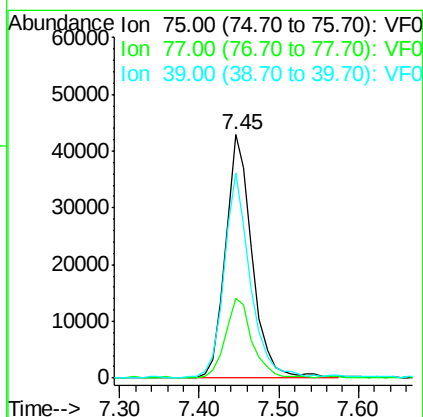
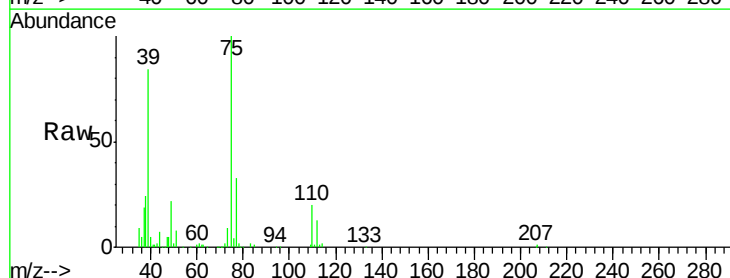
Tgt Ion: 75 Resp: 100999

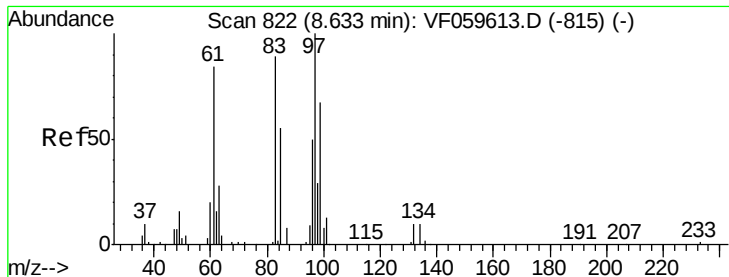
Ion Ratio Lower Upper

75 100

77 32.5 24.6 37.0

39 84.2 67.8 101.6





#55

1,1,2-Trichloroethane

Concen: 38.62 ug/l

RT: 8.63 min Scan# 821

Delta R.T. -0.00 min

Lab File: VF059631.D

Acq: 23 Jul 2018 23:12

Instrument :

MSVOA_F

ClientSampleId :

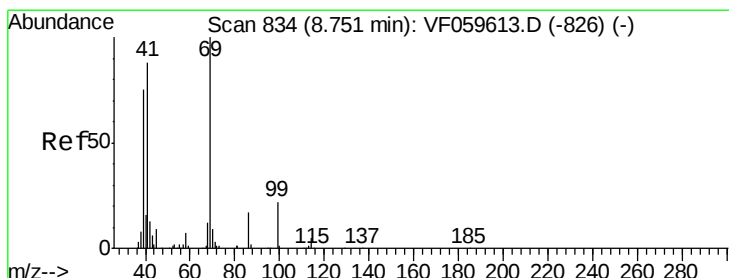
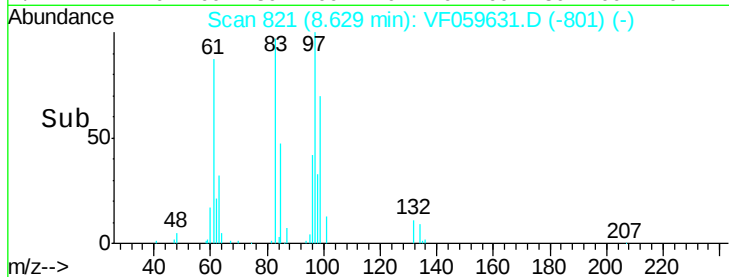
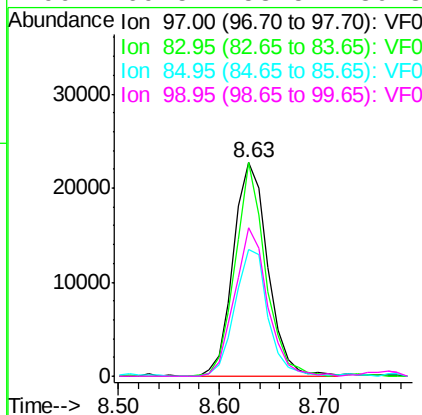
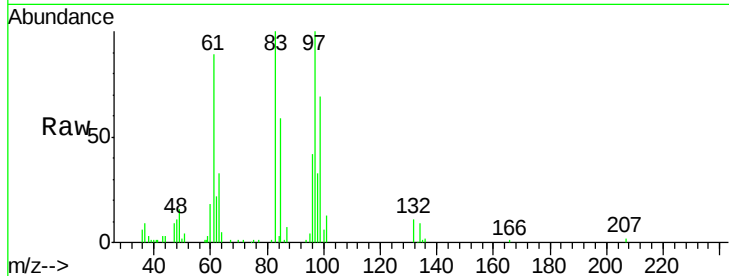
GL-TOPSOIL-09MSD

Tot Ion:	97	Resp:	54205
Ion	Ratio	Lower	Upper
97	100		
83	100.1	71.8	107.6
85	59.5	43.9	65.9
99	69.5	53.5	80.3

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#56

Ethyl methacrylate

Concen: 2.78 ug/l

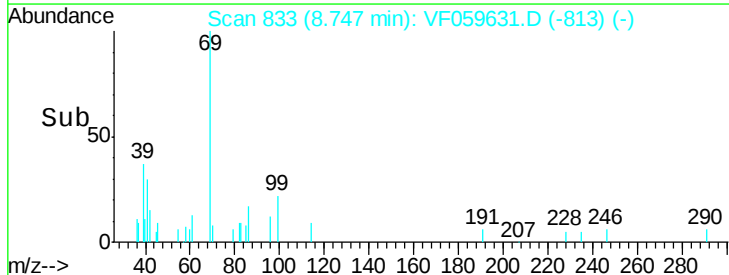
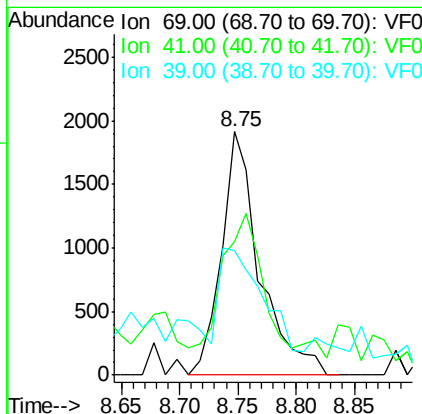
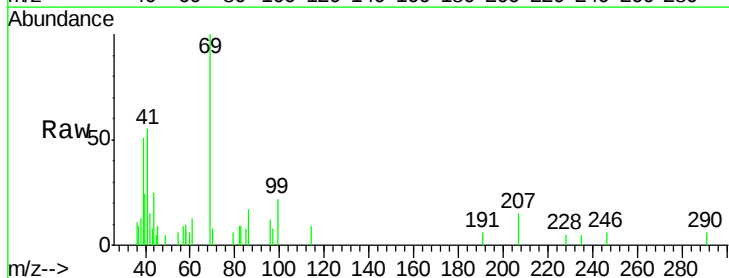
RT: 8.75 min Scan# 833

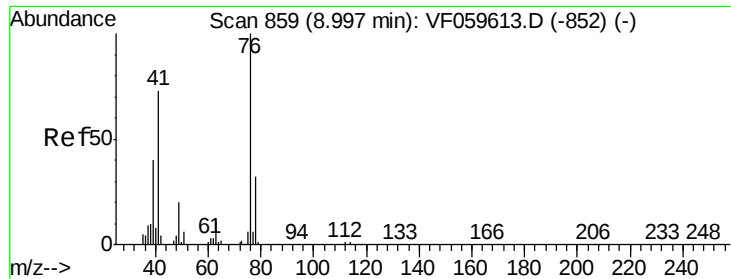
Delta R.T. -0.00 min

Lab File: VF059631.D

Acq: 23 Jul 2018 23:12

Tgt Ion:	69	Resp:	4347
Ion	Ratio	Lower	Upper
69	100		
41	54.7	70.8	106.2#
39	51.0	60.7	91.1#





#57

1,3-Dichloropropane

Concen: 41.40 ug/l

RT: 8.99 min Scan# 858

Delta R.T. -0.00 min

Lab File: VF059631.D

Acq: 23 Jul 2018 23:12

Instrument :

MSVOA_F

ClientSampleId :

GL-TOPSOIL-09MSD

Tot Ion: 76 Resp: 101090

Ion Ratio Lower Upper

76 100

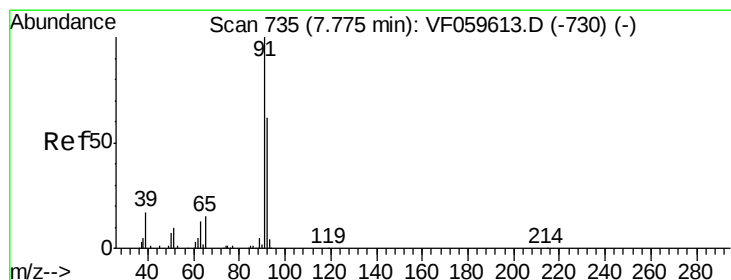
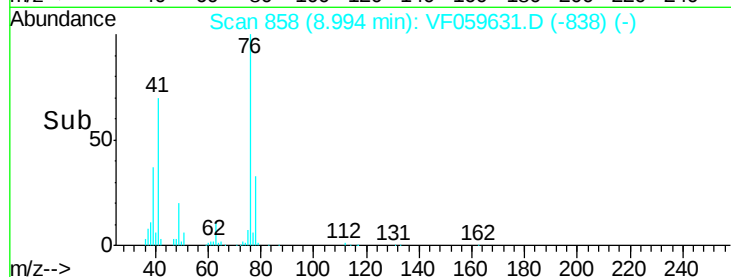
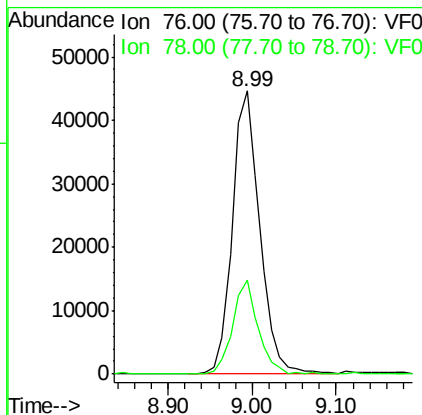
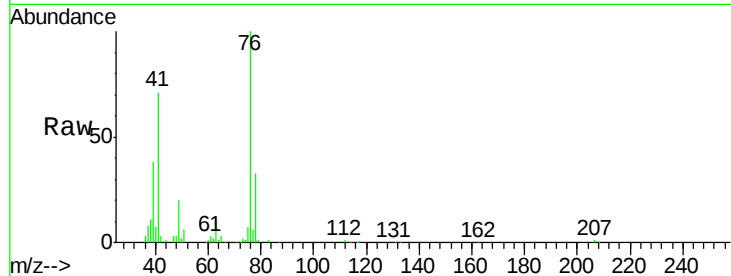
78 33.0 25.3 37.9

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#58

2-Chloroethyl Vinyl ether

Concen: 196.68 ug/l

RT: 7.77 min Scan# 734

Delta R.T. -0.00 min

Lab File: VF059631.D

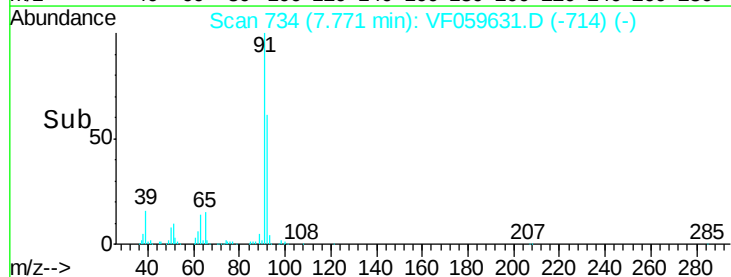
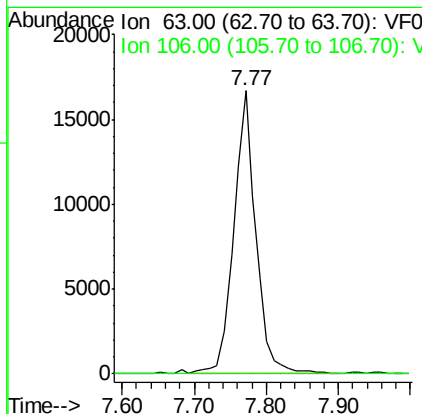
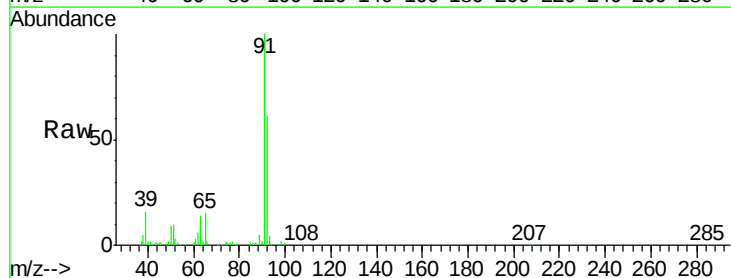
Acq: 23 Jul 2018 23:12

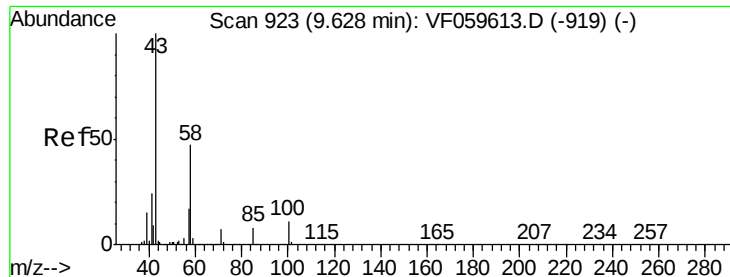
Tgt Ion: 63 Resp: 35554

Ion Ratio Lower Upper

63 100

106 0.0 0.0 0.0





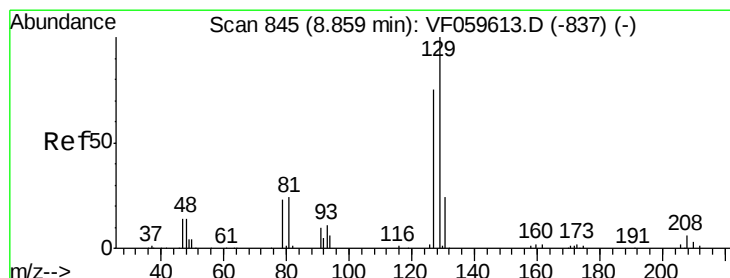
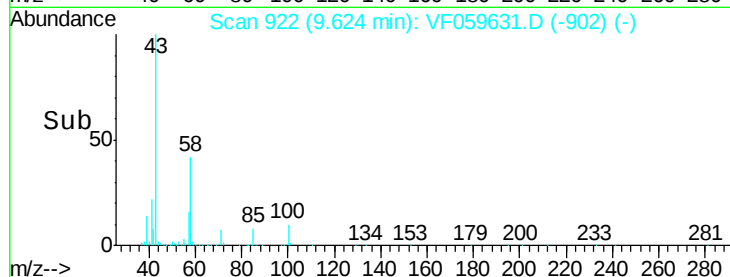
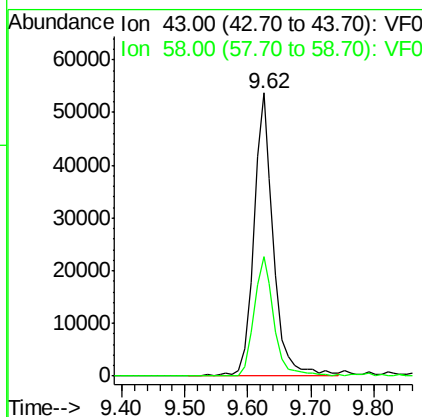
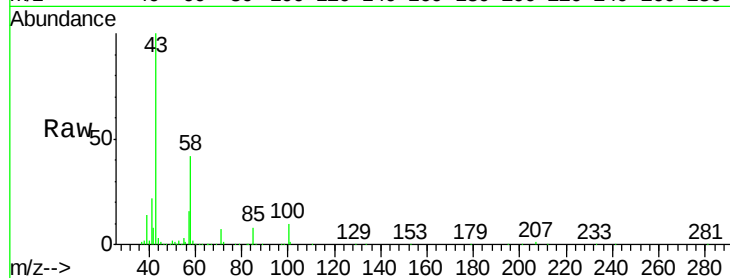
#59
2-Hexanone
Concen: 130.34 ug/l
RT: 9.62 min Scan# 922
Delta R.T. -0.00 min
Lab File: VF059631.D
Acq: 23 Jul 2018 23:12

Instrument :
MSVOA_F
ClientSampleId :
GL-TOPSOIL-09MSD

Tot Ion	Ratio	Lower	Upper
43	100		
58	42.4	21.1	63.4

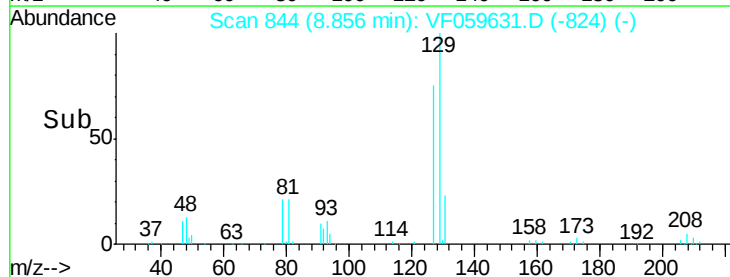
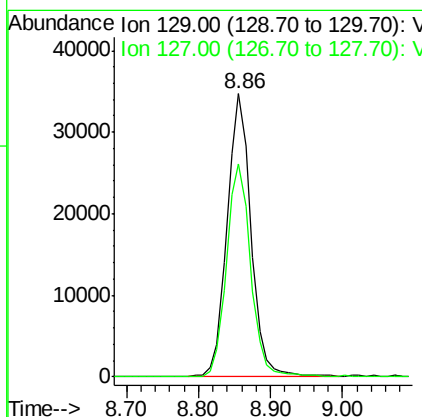
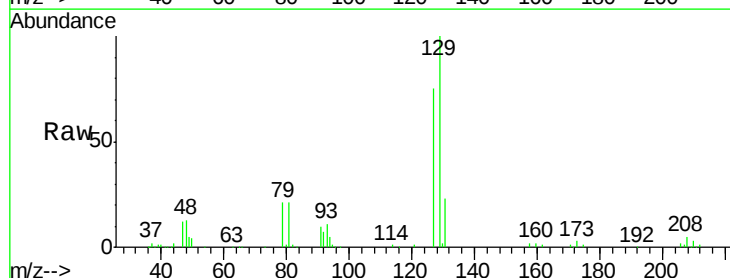
Manual Integrations
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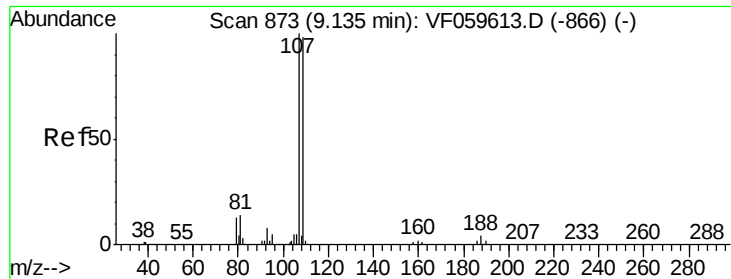
apatel
7/24/2018 1:14:52 PM



#60
Dibromochloromethane
Concen: 32.23 ug/l
RT: 8.86 min Scan# 844
Delta R.T. -0.00 min
Lab File: VF059631.D
Acq: 23 Jul 2018 23:12

Tgt Ion	Ratio	Lower	Upper
129	100		
127	75.0	37.5	112.7





#61

1,2-Dibromoethane

Concen: 39.50 ug/l

RT: 9.13 min Scan# 872

Delta R.T. -0.00 min

Lab File: VF059631.D

Acq: 23 Jul 2018 23:12

Instrument :

MSVOA_F

ClientSampleId :

GL-TOPSOIL-09MSD

Tot Ion: 107 Resp: 63545

Ion Ratio Lower Upper

107 100

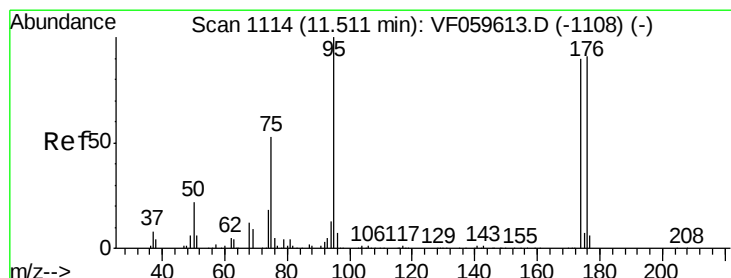
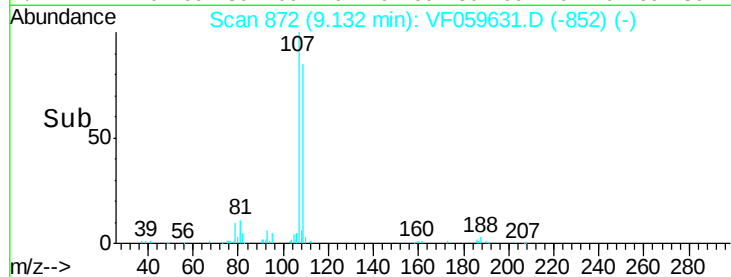
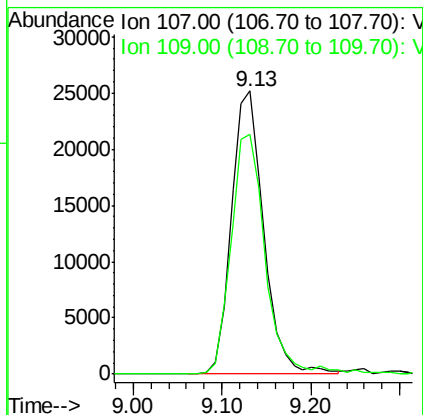
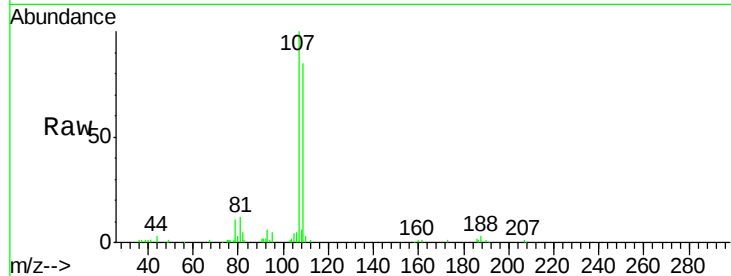
109 84.8 78.2 117.4

Manual Integrations

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#62

4-Bromofluorobenzene

Concen: 26.24 ug/l

RT: 11.51 min Scan# 1113

Delta R.T. -0.00 min

Lab File: VF059631.D

Acq: 23 Jul 2018 23:12

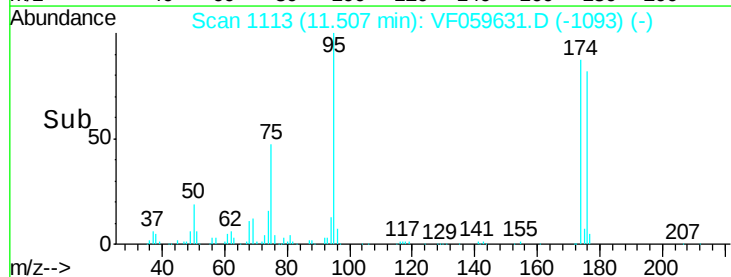
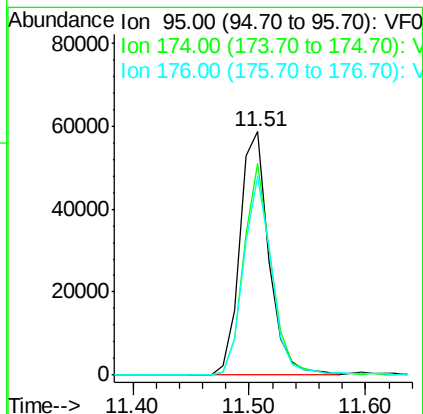
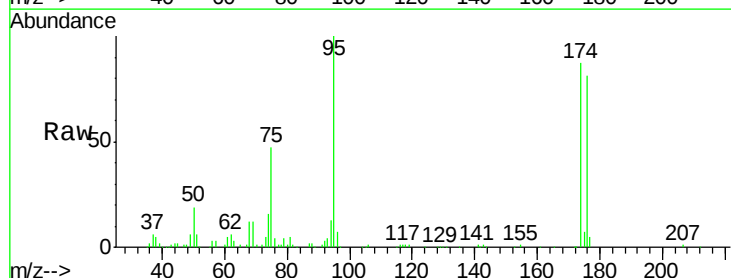
Tgt Ion: 95 Resp: 101866

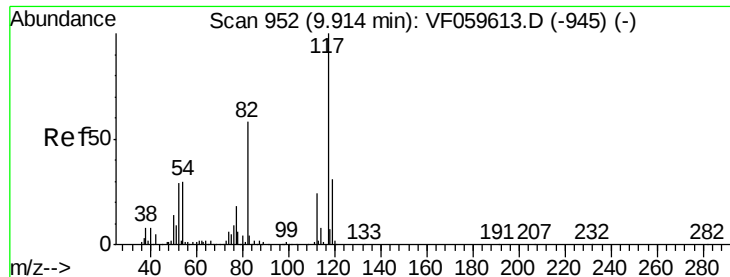
Ion Ratio Lower Upper

95 100

174 87.0 0.0 180.6

176 81.4 0.0 182.4





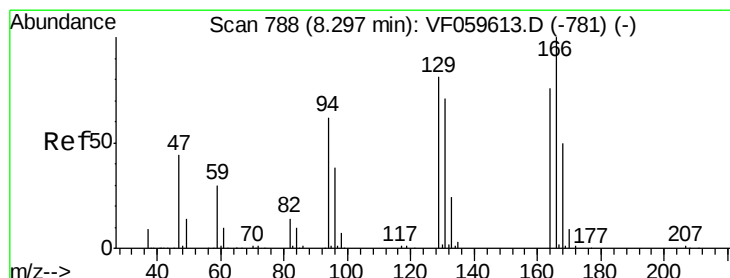
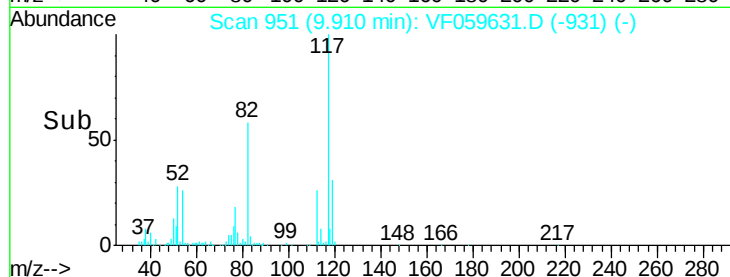
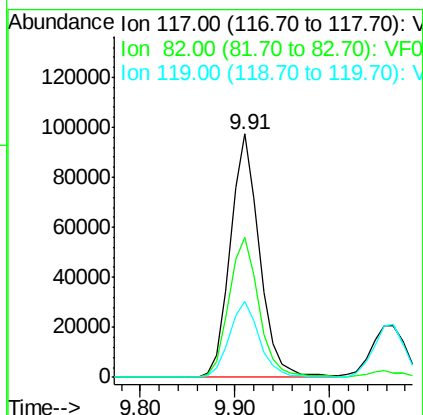
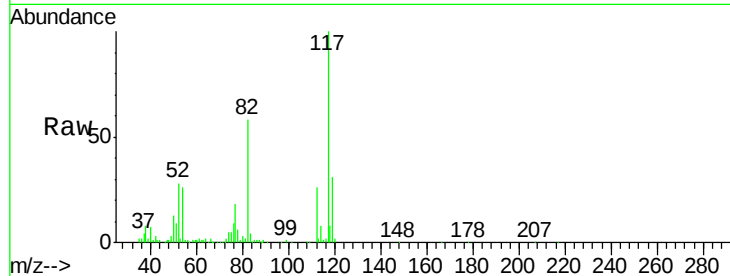
#63
Chlorobenzene-d5
Concen: 50.00 ug/l
RT: 9.91 min Scan# 951
Delta R.T. -0.00 min
Lab File: VF059631.D
Acq: 23 Jul 2018 23:12

Instrument :
MSVOA_F
ClientSampleId :
GL-TOPSOIL-09MSD

Tot Ion	Ratio	Lower	Upper
117	100		
82	57.5	46.5	69.7
119	31.3	24.4	36.6

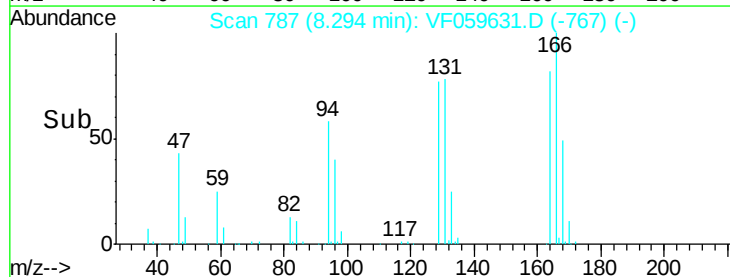
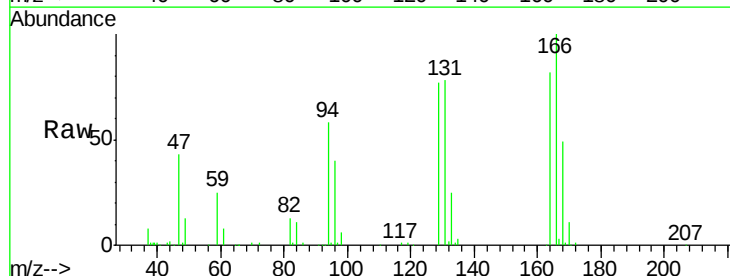
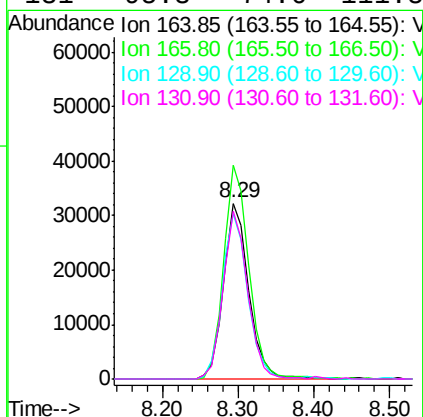
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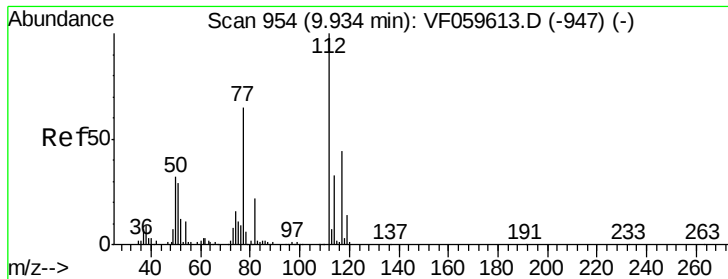
apatel
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#64
Tetrachloroethene
Concen: 48.25 ug/l
RT: 8.29 min Scan# 787
Delta R.T. -0.00 min
Lab File: VF059631.D
Acq: 23 Jul 2018 23:12

Tgt Ion	Ratio	Lower	Upper
164	100		
166	121.7	104.8	157.2
129	94.1	85.3	127.9
131	95.3	74.6	111.8





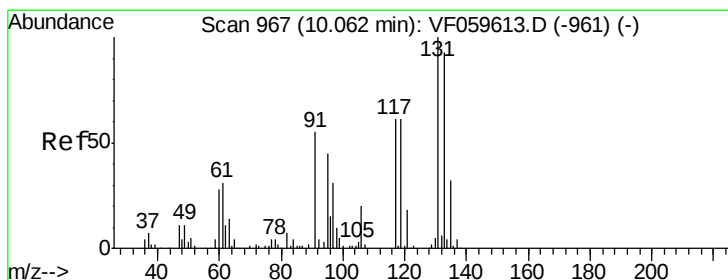
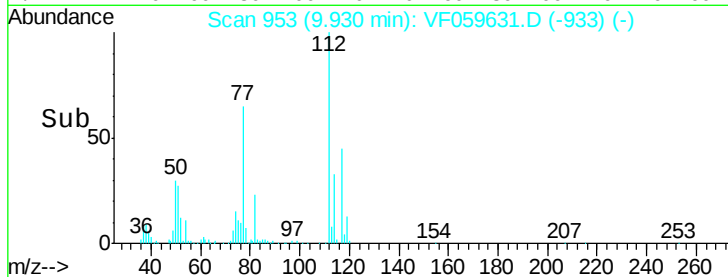
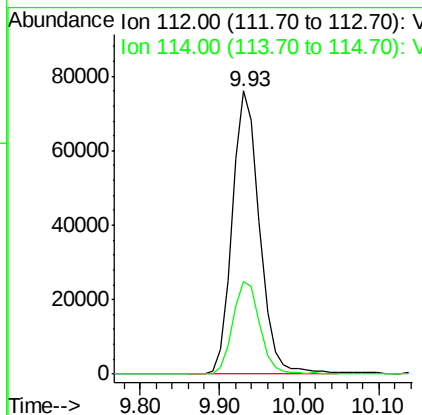
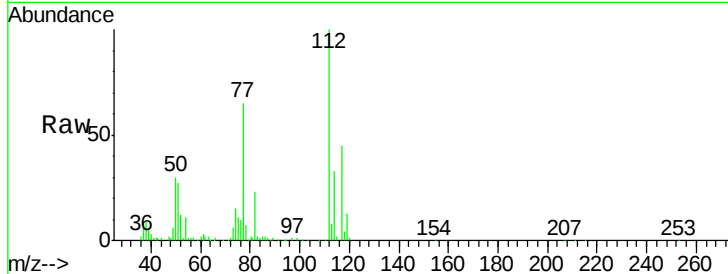
#65
Chlorobenzene
Concen: 47.49 ug/l
RT: 9.93 min Scan# 953
Delta R.T. -0.00 min
Lab File: VF059631.D
Acq: 23 Jul 2018 23:12

Instrument :
MSVOA_F
ClientSampleId :
GL-TOPSOIL-09MSD

Tot Ion	Ratio	Resp	Lower	Upper
112	100	181625		
114	32.5	26.8	40.2	

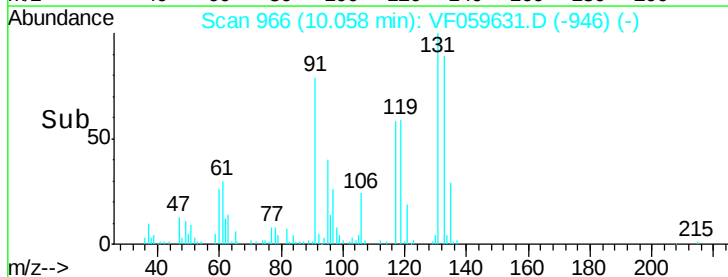
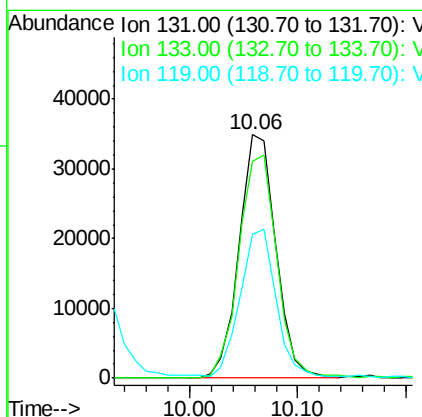
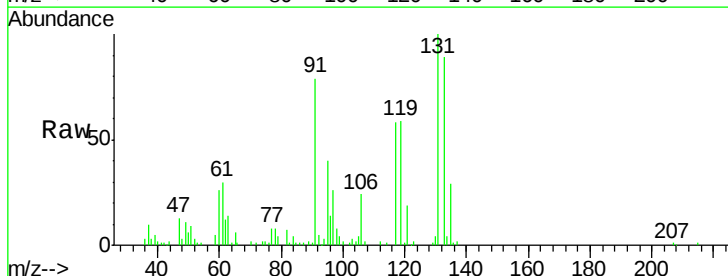
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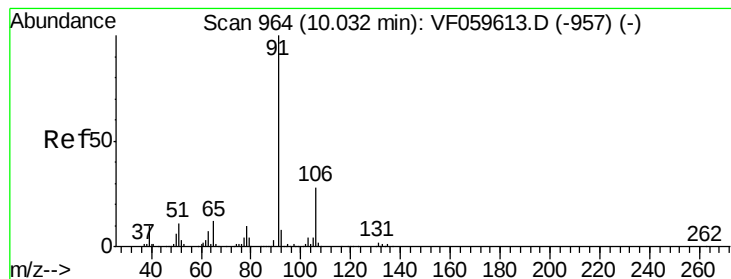
apatel
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#66
1,1,1,2-Tetrachloroethane
Concen: 47.66 ug/l
RT: 10.06 min Scan# 966
Delta R.T. -0.00 min
Lab File: VF059631.D
Acq: 23 Jul 2018 23:12

Tgt Ion	Ratio	Resp	Lower	Upper
131	100	82584		
133	88.9	46.4	139.2	
119	59.1	30.6	91.8	





#67

Ethyl Benzene

Concen: 46.22 ug/l

RT: 10.03 min Scan# 963

Delta R.T. -0.00 min

Lab File: VF059631.D

Acq: 23 Jul 2018 23:12

Instrument :

MSVOA_F

ClientSampleId :

GL-TOPSOIL-09MSD

Tot Ion: 91 Resp: 321425

Ion Ratio Lower Upper

91 100

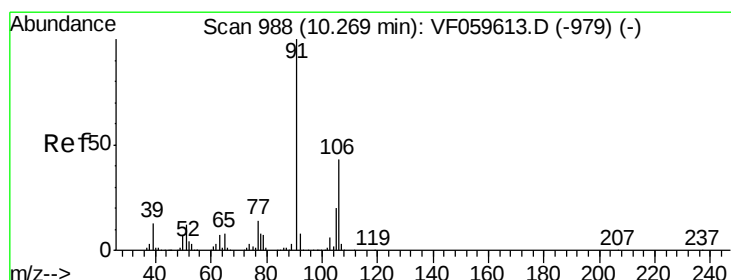
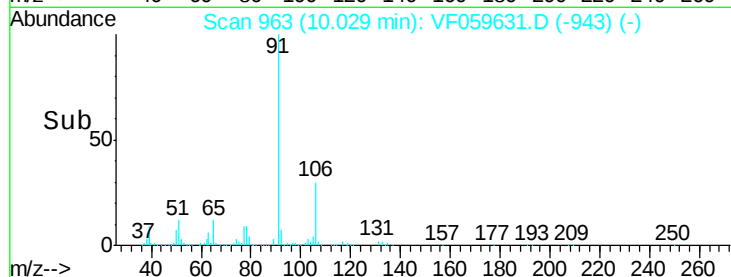
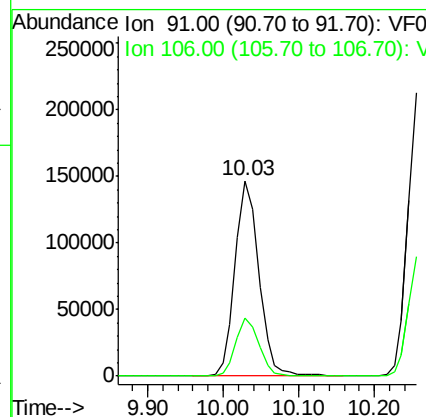
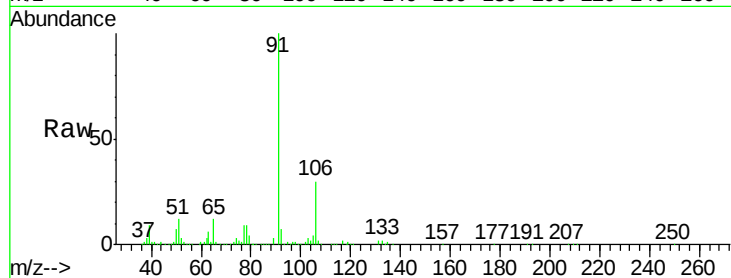
106 29.5 22.5 33.7

Manual Integrations

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#68

m/p-Xylenes

Concen: 86.32 ug/l

RT: 10.27 min Scan# 987

Delta R.T. -0.00 min

Lab File: VF059631.D

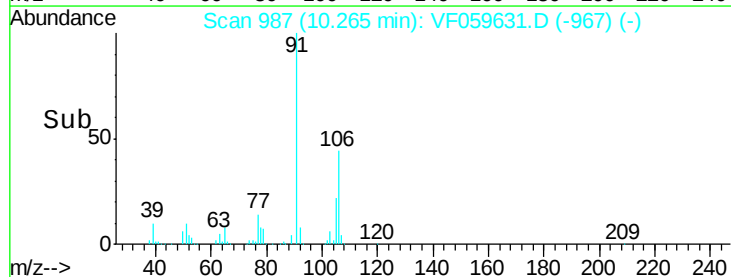
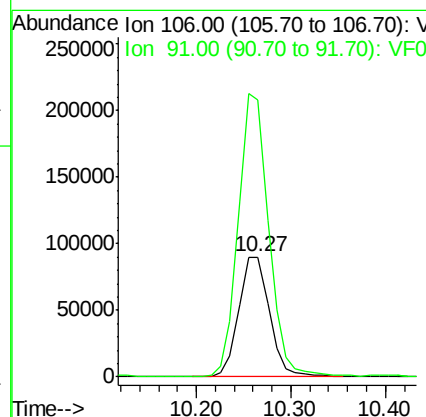
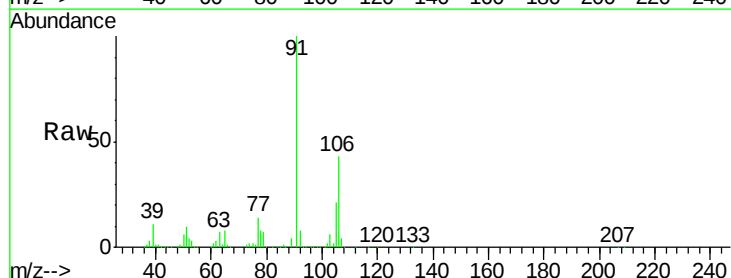
Acq: 23 Jul 2018 23:12

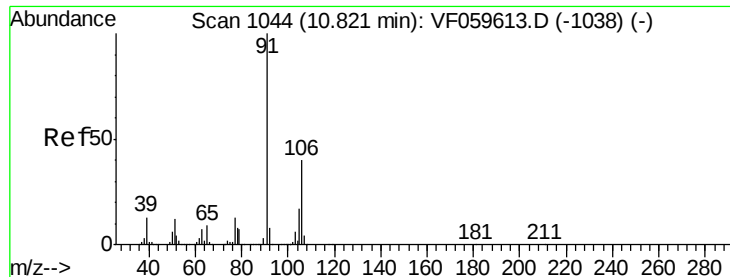
Tgt Ion: 106 Resp: 203982

Ion Ratio Lower Upper

106 100

91 231.8 187.0 280.4





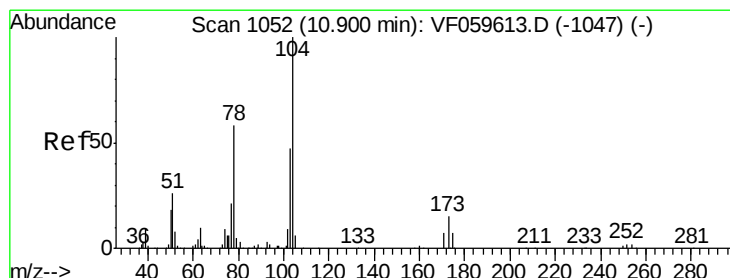
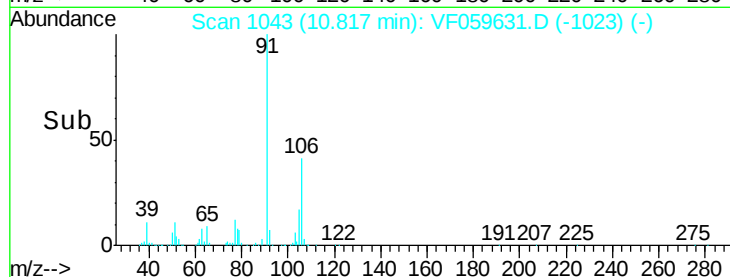
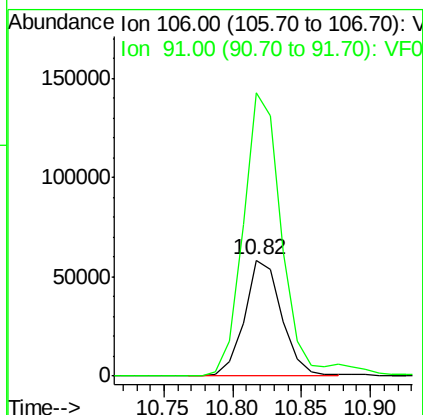
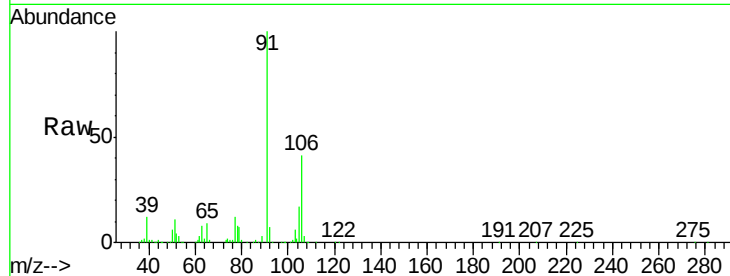
#69
o-Xylene
Concen: 42.98 ug/l
RT: 10.82 min Scan# 1043
Delta R.T. -0.00 min
Lab File: VF059631.D
Acq: 23 Jul 2018 23:12

Instrument :
MSVOA_F
ClientSampleId :
GL-TOPSOIL-09MSD

Tot Ion	Ion	Ratio	Lower	Upper
106	106	100		
91	91	244.5	125.8	377.3

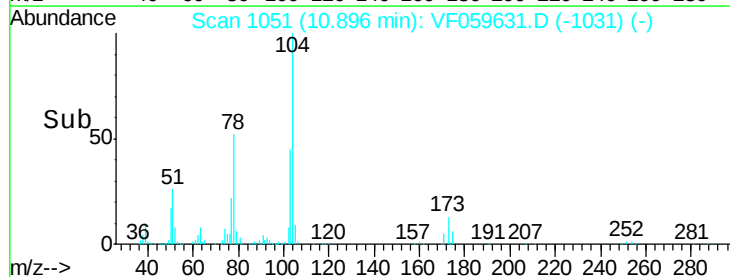
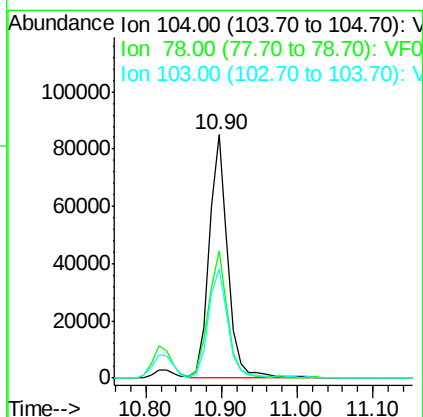
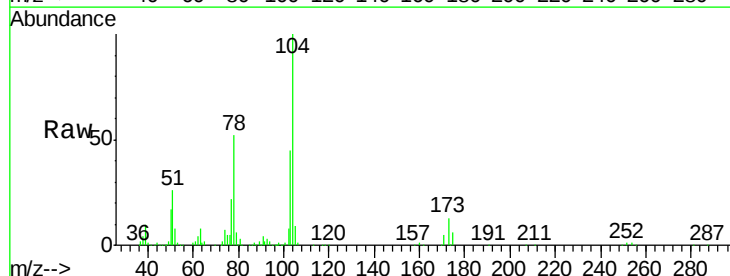
Manual Integrations
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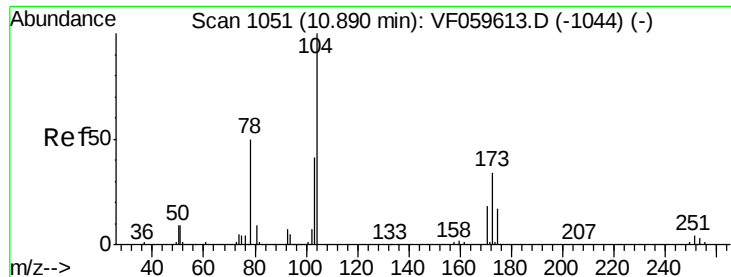
apatel
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#70
Styrene
Concen: 37.89 ug/l
RT: 10.90 min Scan# 1051
Delta R.T. -0.00 min
Lab File: VF059631.D
Acq: 23 Jul 2018 23:12

Tgt Ion	Ion	Ratio	Lower	Upper
104	104	100		
78	78	52.1	47.4	71.2
103	103	44.7	38.8	58.2





#71

Bromoform

Concen: 34.66 ug/l

RT: 10.88 min Scan# 1049

Delta R.T. -0.01 min

Lab File: VF059631.D

Acq: 23 Jul 2018 23:12

Instrument :

MSVOA_F

ClientSampleId :

GL-TOPSOIL-09MSD

Tot Ion:173 Resp: 37219

Ion Ratio Lower Upper

173 100

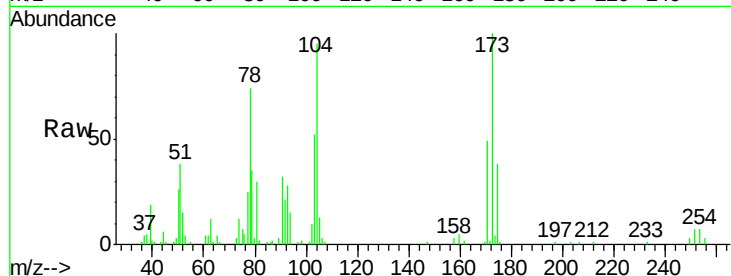
175 38.5 25.1 75.2

254 0.0 0.0 0.0

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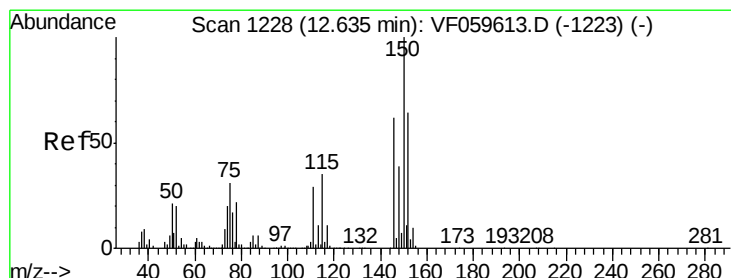
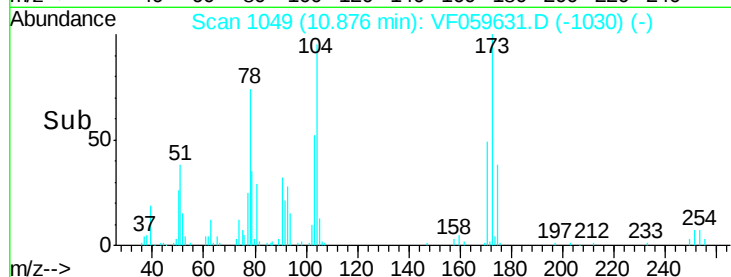
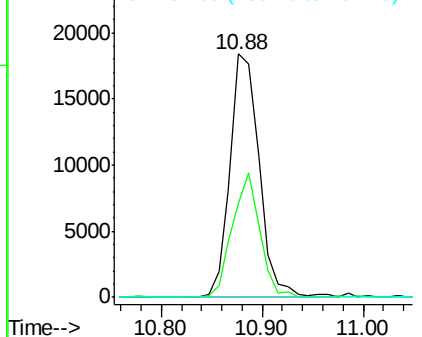
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Abundance Ion 173.00 (172.70 to 173.70): V

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: 12.63 min Scan# 1227

Delta R.T. -0.00 min

Lab File: VF059631.D

Acq: 23 Jul 2018 23:12

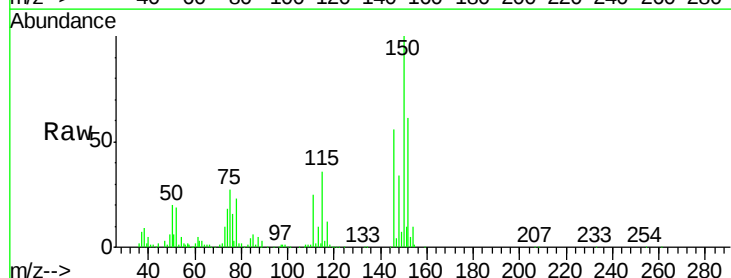
Tgt Ion:152 Resp: 66716

Ion Ratio Lower Upper

152 100

115 58.0 27.8 83.4

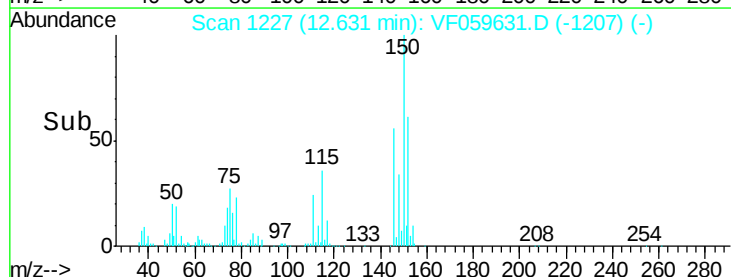
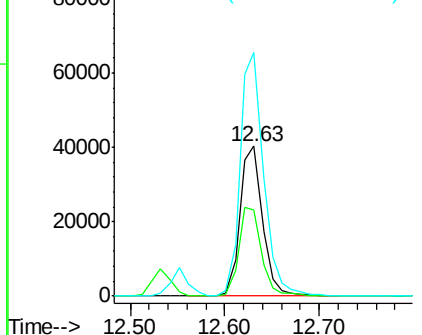
150 162.6 0.0 314.6

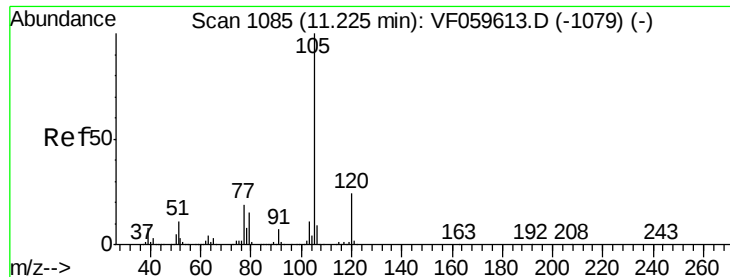


Abundance Ion 152.00 (151.70 to 152.70): V

Ion 115.00 (114.70 to 115.70): V

Ion 150.00 (149.70 to 150.70): V





#73

Isopropylbenzene

Concen: 68.70 ug/l

RT: 11.22 min Scan# 1084

Delta R.T. -0.00 min

Lab File: VF059631.D

Acq: 23 Jul 2018 23:12

Instrument :

MSVOA_F

ClientSampleId :

GL-TOPSOIL-09MSD

Tot Ion: 105 Resp: 291086

Ion Ratio Lower Upper

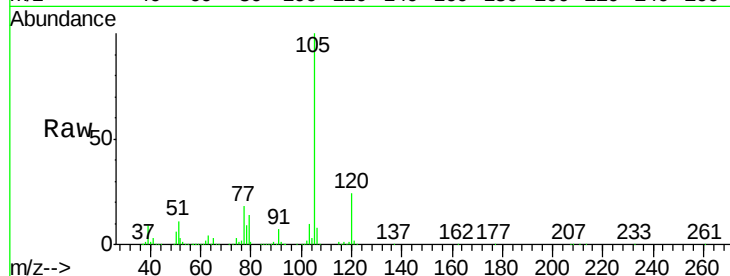
105 100

120 23.7 11.8 35.4

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Abundance Ion 105.00 (104.70 to 105.70): V

Ion 120.00 (119.70 to 120.70): V

200000

150000

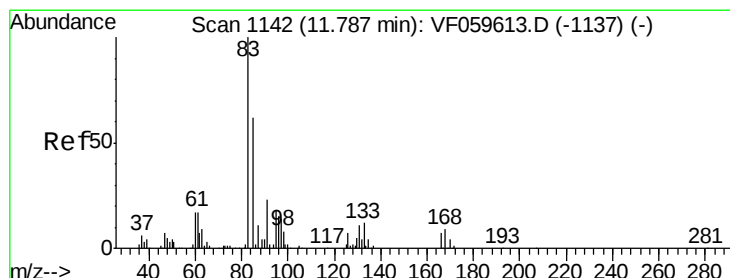
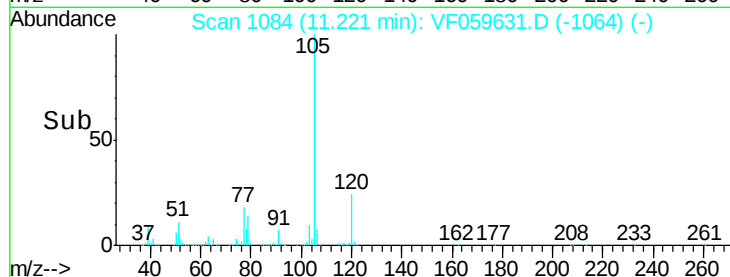
100000

50000

0

11.10 11.20 11.30 11.40

Time-->



#75

1,1,2,2-Tetrachloroethane

Concen: 82.19 ug/l

RT: 11.78 min Scan# 1141

Delta R.T. -0.00 min

Lab File: VF059631.D

Acq: 23 Jul 2018 23:12

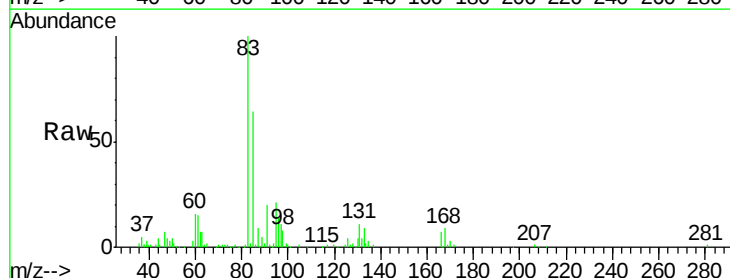
Tgt Ion: 83 Resp: 58463

Ion Ratio Lower Upper

83 100

131 10.5 5.7 17.0

85 63.6 31.1 93.3



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

50000

40000

30000

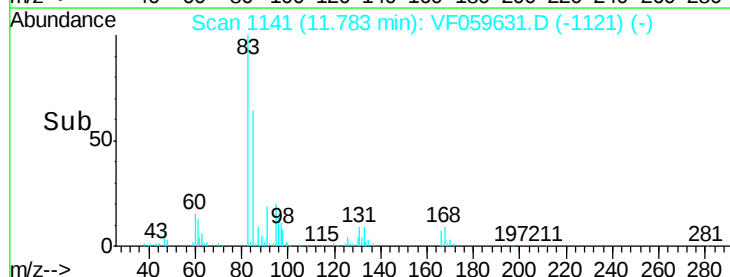
20000

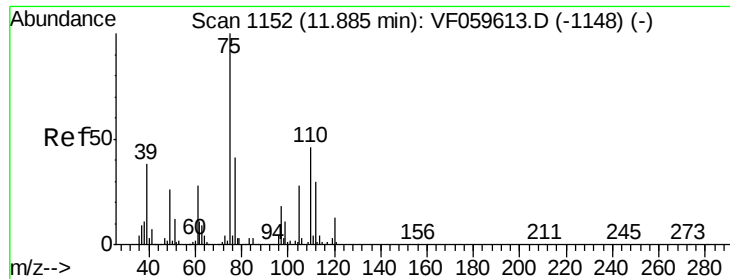
10000

0

11.70 11.80

Time-->





#76

1,2,3-Trichloropropane

Concen: 86.61 ug/l

RT: 11.88 min Scan# 1151

Delta R.T. -0.00 min

Lab File: VF059631.D

Acq: 23 Jul 2018 23:12

Instrument :

MSVOA_F

ClientSampleId :

GL-TOPSOIL-09MSD

Tot Ion: 75 Resp: 53821

Ion Ratio Lower Upper

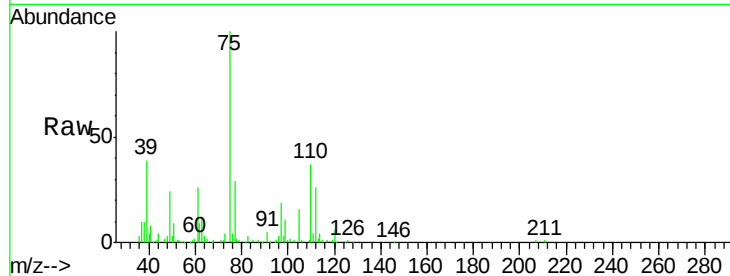
75 100

77 29.5 20.9 62.8

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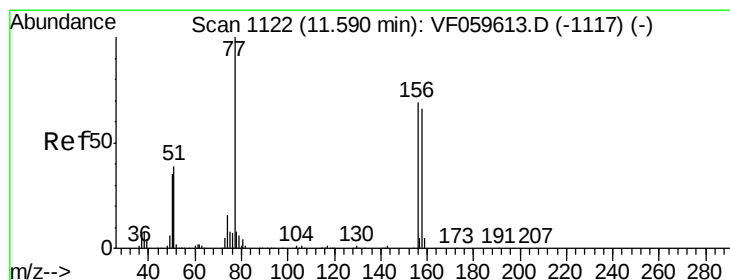
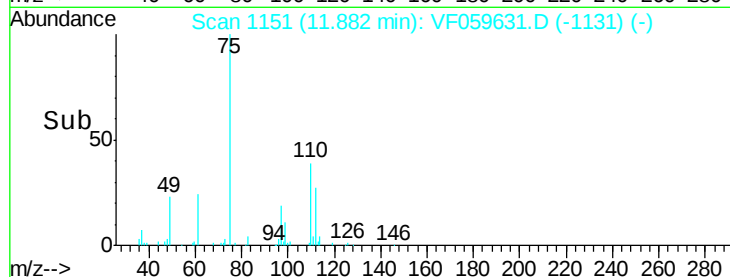
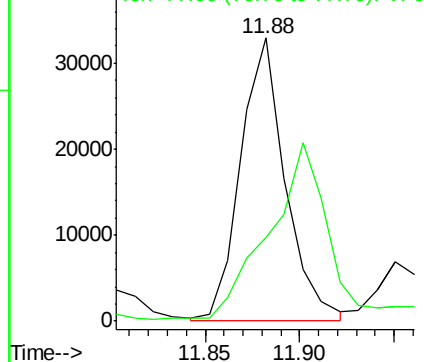
apatel

7/24/2018 1:14:52 PM



Abundance Ion 75.00 (74.70 to 75.70): VF0

Ion 77.00 (76.70 to 77.70): VF0



#77

Bromobenzene

Concen: 66.67 ug/l

RT: 11.59 min Scan# 1121

Delta R.T. -0.00 min

Lab File: VF059631.D

Acq: 23 Jul 2018 23:12

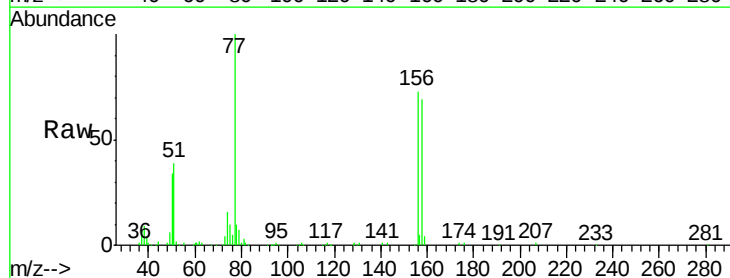
Tgt Ion: 156 Resp: 73192

Ion Ratio Lower Upper

156 100

77 137.6 72.1 216.3

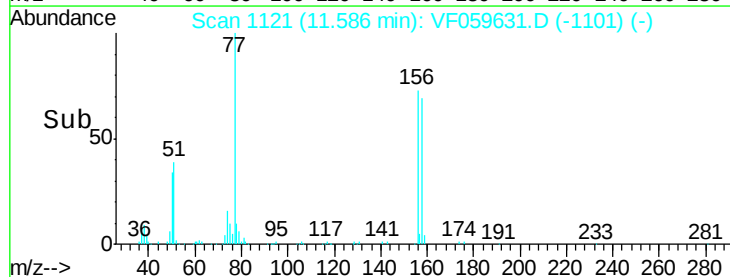
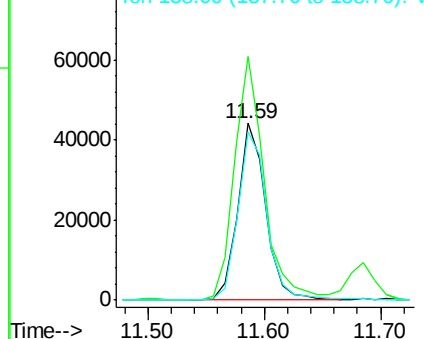
158 95.1 47.3 141.9

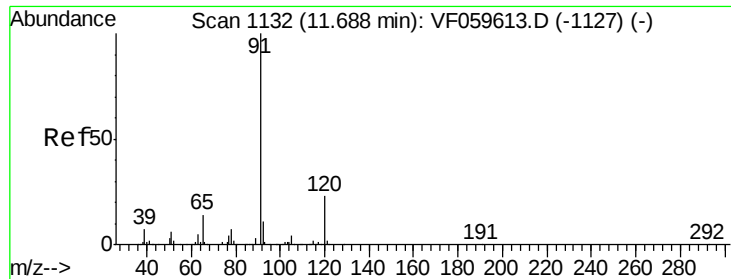


Abundance Ion 156.00 (155.70 to 156.70): V

Ion 77.00 (76.70 to 77.70): VF0

Ion 158.00 (157.70 to 158.70): V





#78

n-propylbenzene

Concen: 58.77 ug/l

RT: 11.68 min Scan# 1131

Delta R.T. -0.00 min

Lab File: VF059631.D

Acq: 23 Jul 2018 23:12

Instrument :

MSVOA_F

ClientSampleId :

GL-TOPSOIL-09MSD

Tot Ion: 91 Resp: 298452

Ion Ratio Lower Upper

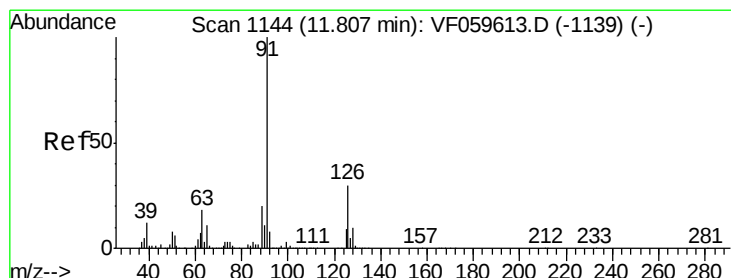
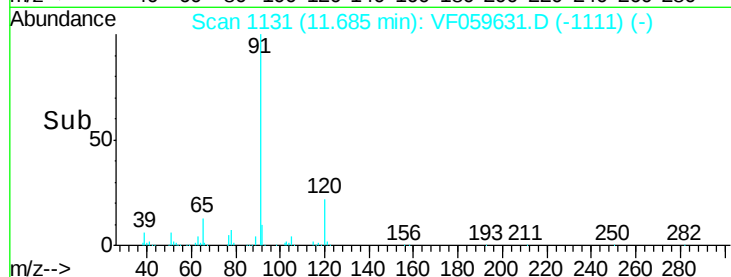
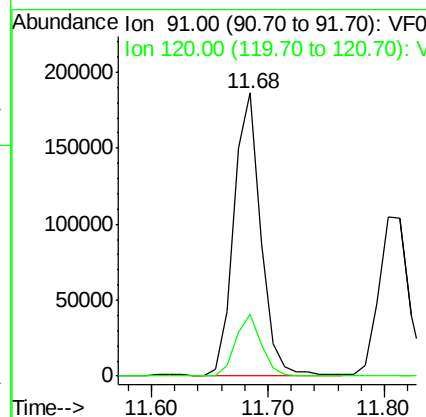
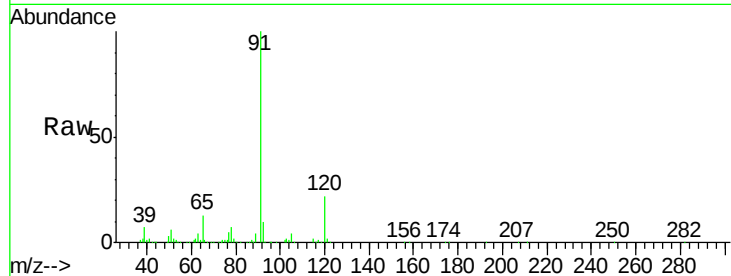
91 100

120 22.0 11.6 34.7

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#79

2-Chlorotoluene

Concen: 60.66 ug/l

RT: 11.80 min Scan# 1143

Delta R.T. -0.00 min

Lab File: VF059631.D

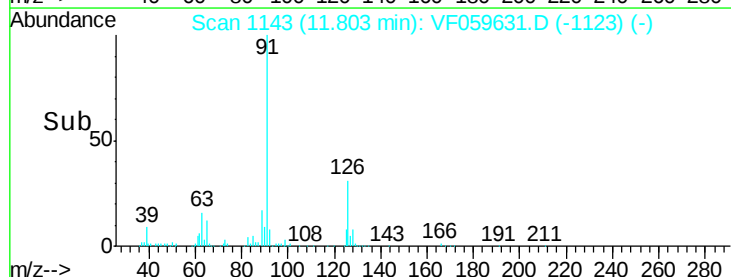
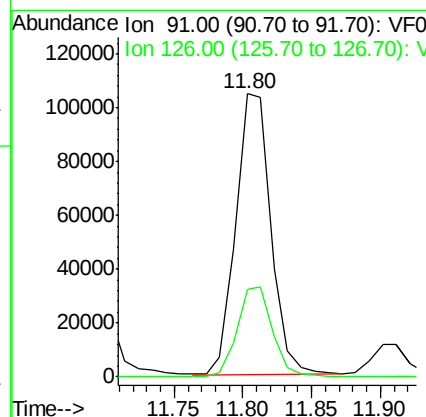
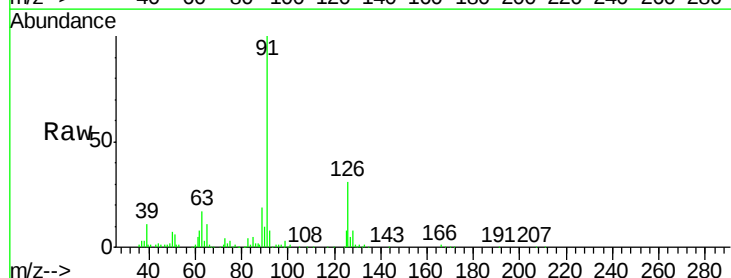
Acq: 23 Jul 2018 23:12

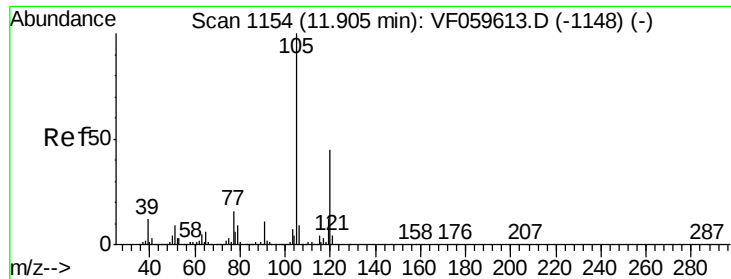
Tgt Ion: 91 Resp: 184617

Ion Ratio Lower Upper

91 100

126 31.1 15.1 45.3





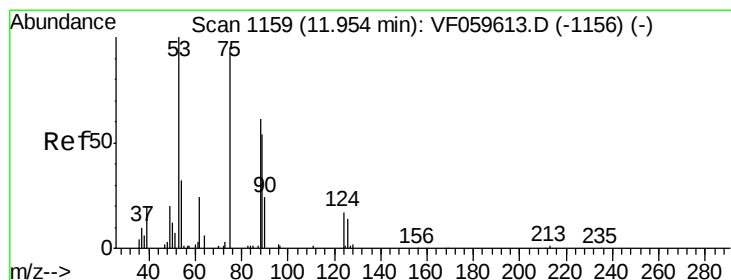
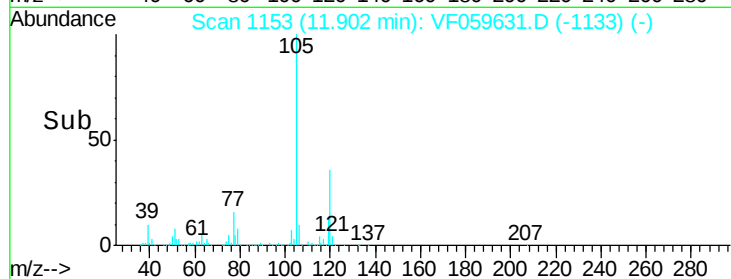
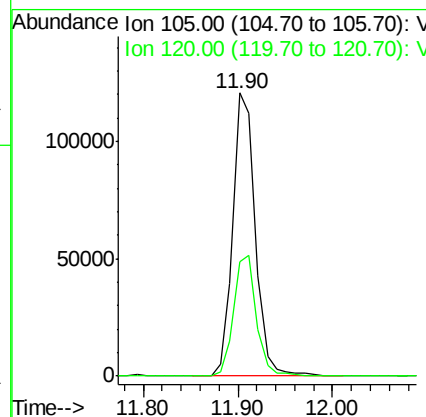
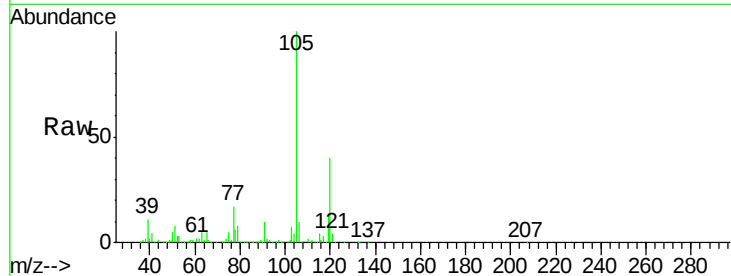
#80
 1,3,5-Trimethylbenzene
 Concen: 52.70 ug/l
 RT: 11.90 min Scan# 1153
 Delta R.T. -0.00 min
 Lab File: VF059631.D
 Acq: 23 Jul 2018 23:12

Instrument :
 MSVOA_F
 ClientSampleId :
 GL-TOPSOIL-09MSD

Tot Ion	Ratio	Lower	Upper
105	100		
120	40.3	22.4	67.0

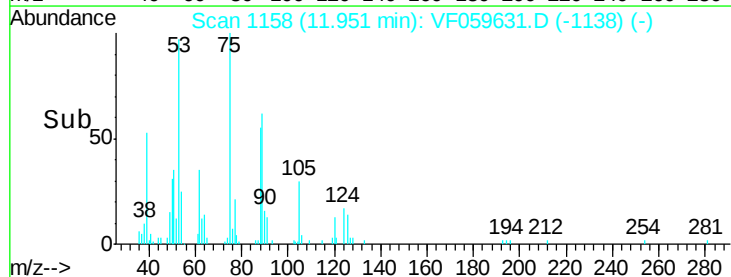
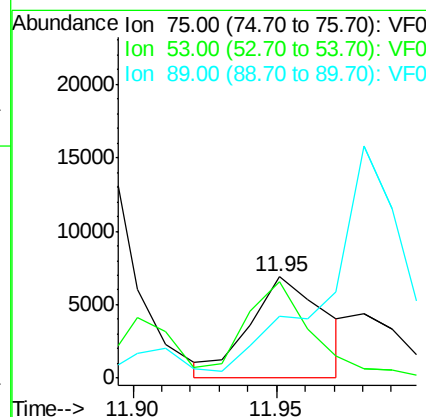
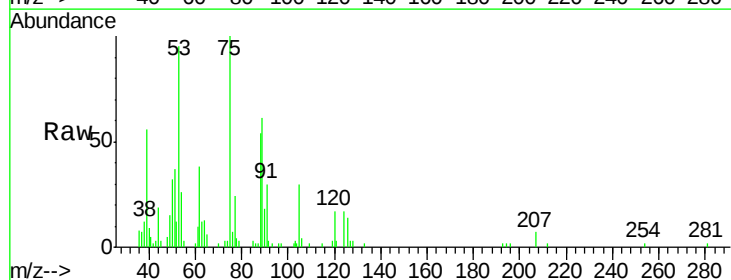
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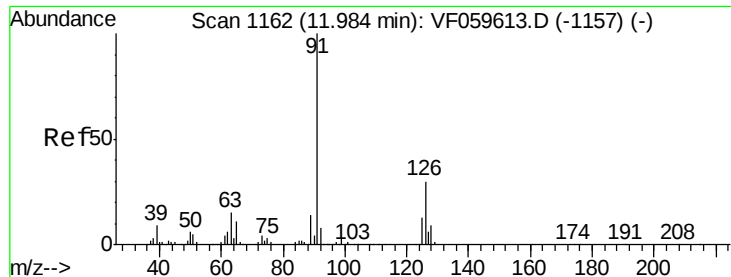
apatel
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#81
 trans-1,4-Dichloro-2-butene
 Concen: 50.89 ug/l m
 RT: 11.95 min Scan# 1158
 Delta R.T. -0.00 min
 Lab File: VF059631.D
 Acq: 23 Jul 2018 23:12

Tgt Ion	Ratio	Lower	Upper
75	100		
53	95.3	86.4	129.6
89	60.8	46.8	70.2





#82

4-Chlorotoluene

Concen: 55.09 ug/l

RT: 11.98 min Scan# 1161

Delta R.T. -0.00 min

Lab File: VF059631.D

Acq: 23 Jul 2018 23:12

Instrument :

MSVOA_F

ClientSampleId :

GL-TOPSOIL-09MSD

Tot Ion: 91 Resp: 186473

Ion Ratio Lower Upper

91 100

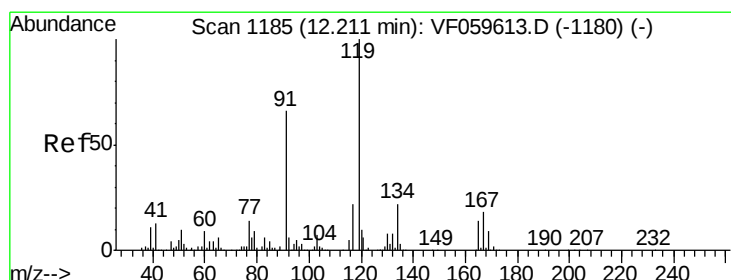
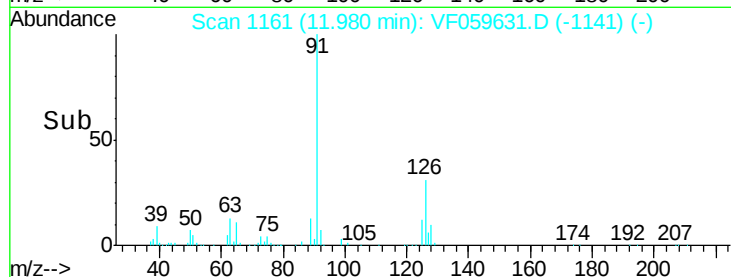
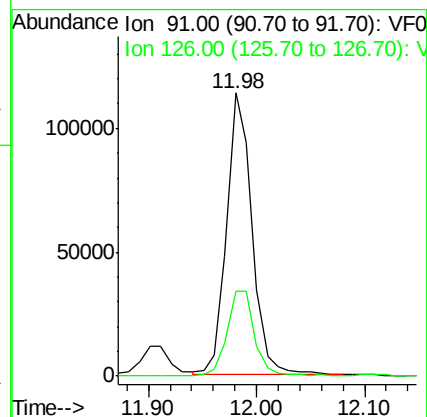
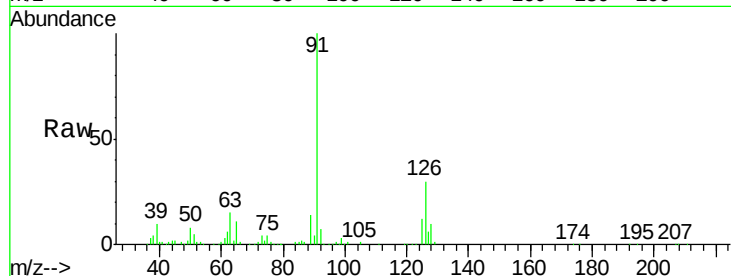
126 30.0 14.7 44.1

Manual Integrations

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#83

tert-Butylbenzene

Concen: 49.38 ug/l

RT: 12.21 min Scan# 1184

Delta R.T. -0.00 min

Lab File: VF059631.D

Acq: 23 Jul 2018 23:12

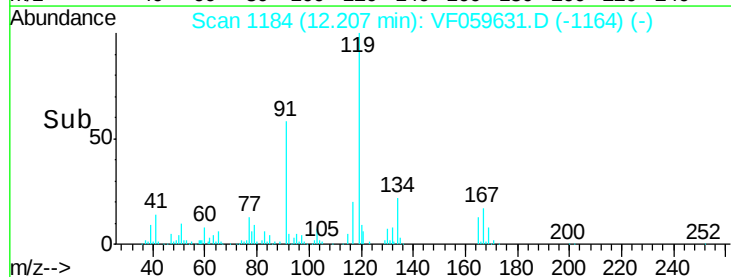
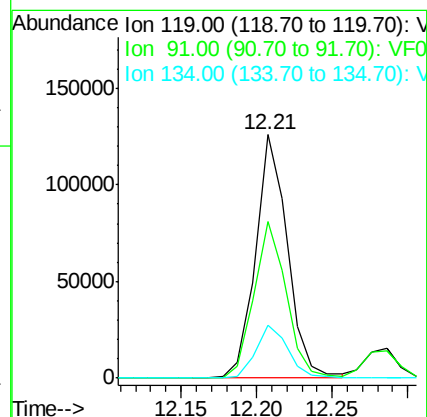
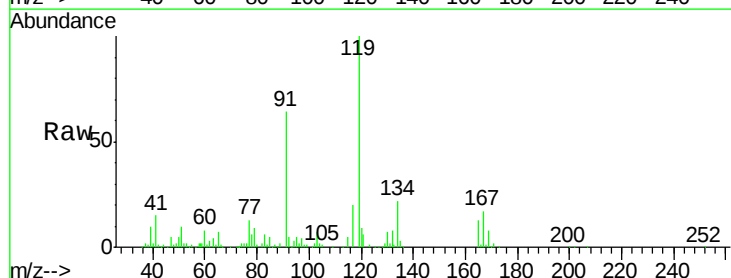
Tgt Ion: 119 Resp: 185228

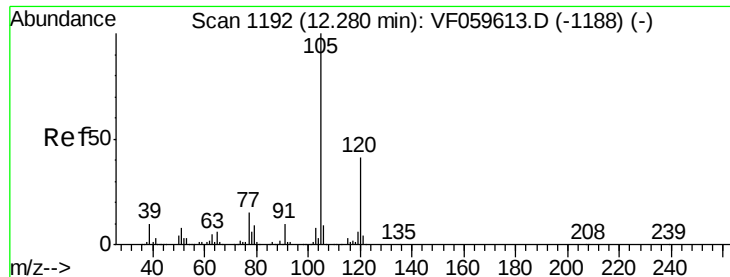
Ion Ratio Lower Upper

119 100

91 64.4 33.2 99.6

134 21.8 10.9 32.6





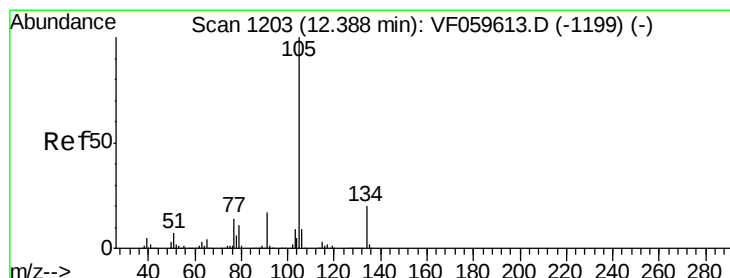
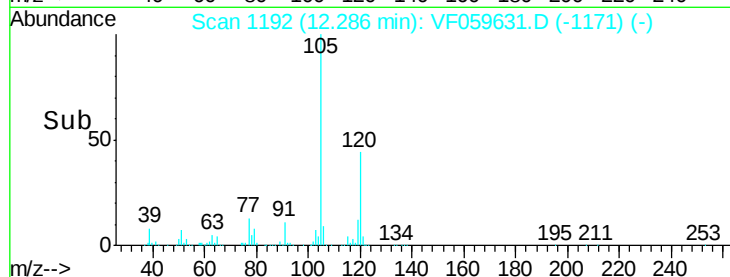
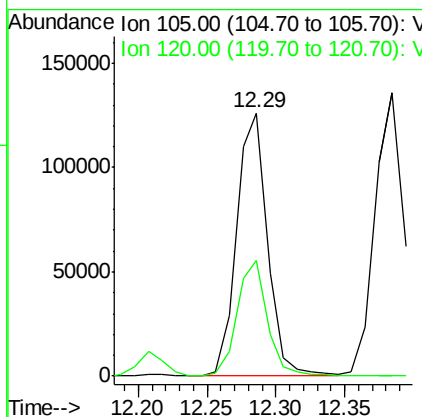
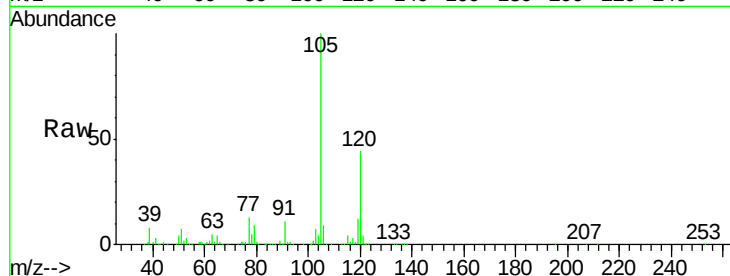
#84
 1,2,4-Trimethylbenzene
 Concen: 50.84 ug/l
 RT: 12.29 min Scan# 1192
 Delta R.T. 0.01 min
 Lab File: VF059631.D
 Acq: 23 Jul 2018 23:12

Instrument :
 MSVOA_F
 ClientSampleId :
 GL-TOPSOIL-09MSD

Tot Ion	Ratio	Resp	Lower	Upper
105	100	196188		
120	43.8	20.4	61.3	

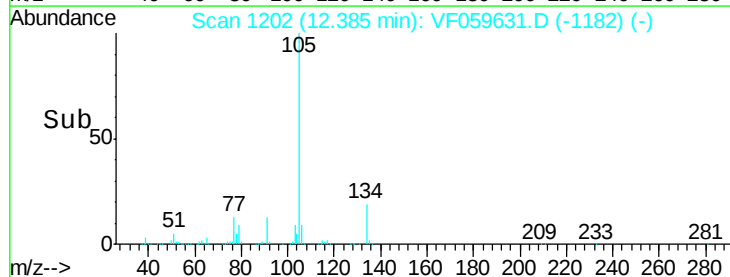
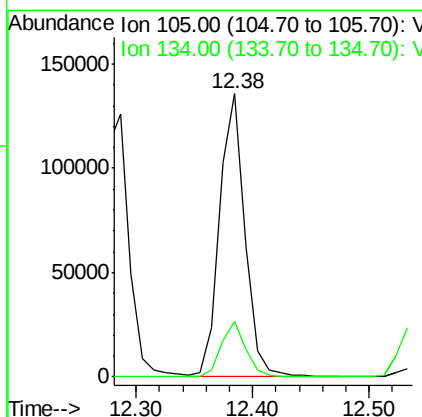
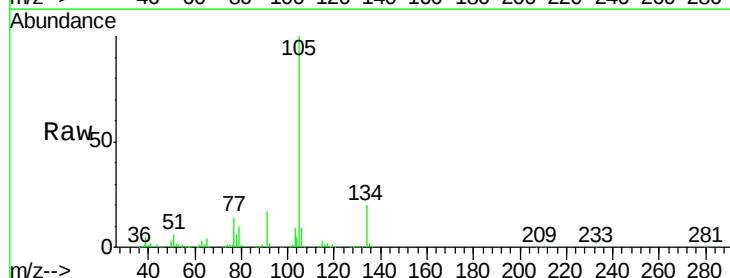
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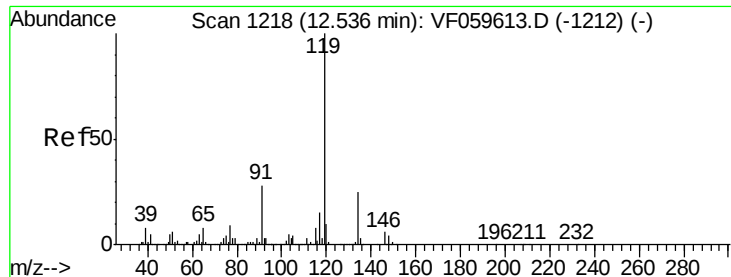
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#85
 sec-Butylbenzene
 Concen: 42.02 ug/l
 RT: 12.38 min Scan# 1202
 Delta R.T. -0.00 min
 Lab File: VF059631.D
 Acq: 23 Jul 2018 23:12

Tgt Ion	Ratio	Resp	Lower	Upper
105	100	203719		
134	19.7	9.9	29.7	





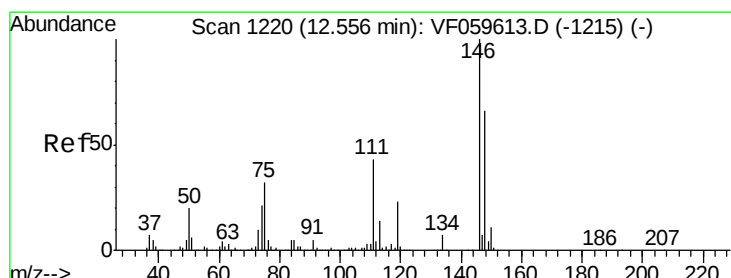
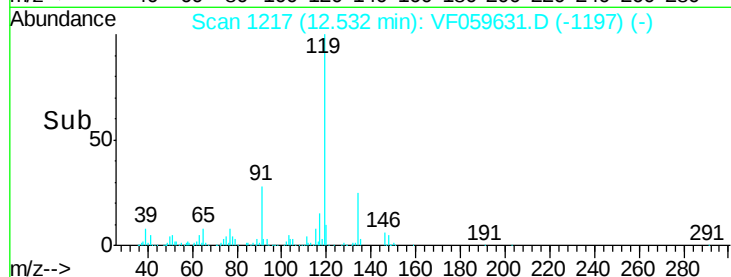
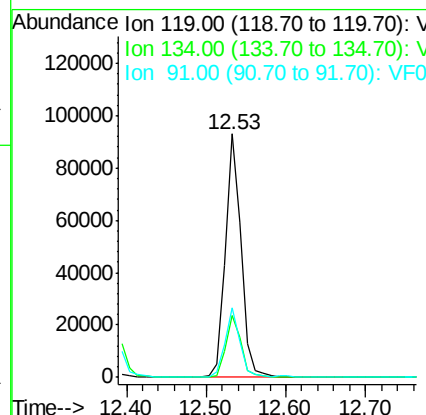
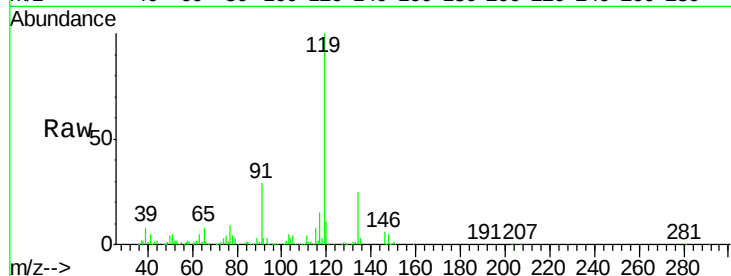
#86
 p-Isopropyltoluene
 Concen: 30.51 ug/l
 RT: 12.53 min Scan# 1217
 Delta R.T. -0.00 min
 Lab File: VF059631.D
 Acq: 23 Jul 2018 23:12

Instrument :
 MSVOA_F
 ClientSampleId :
 GL-TOPSOIL-09MSD

Tot Ion	Ratio	Lower	Upper
119	100		
134	25.3	12.4	37.2
91	28.6	13.9	41.7

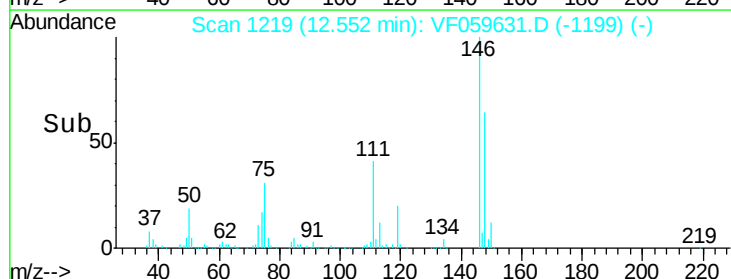
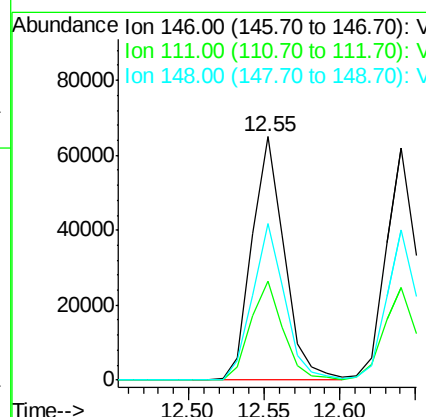
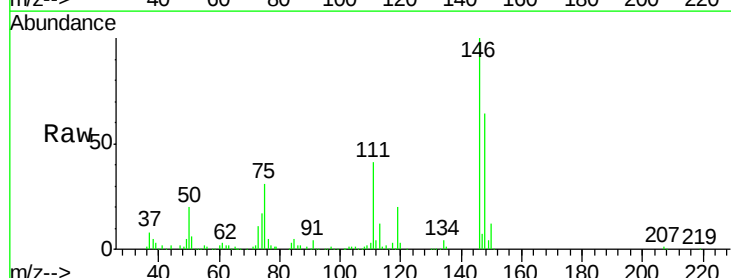
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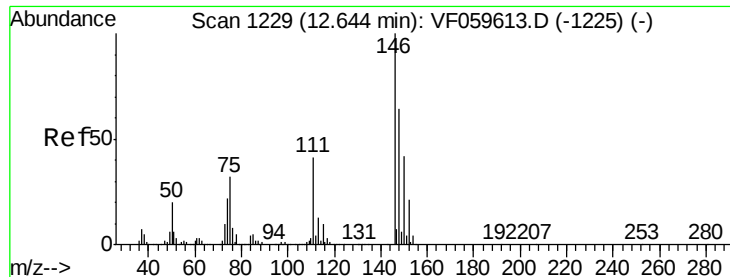
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#87
 1,3-Dichlorobenzene
 Concen: 46.30 ug/l
 RT: 12.55 min Scan# 1219
 Delta R.T. -0.00 min
 Lab File: VF059631.D
 Acq: 23 Jul 2018 23:12

Tgt Ion	Ratio	Lower	Upper
146	100		
111	40.8	21.6	64.8
148	64.1	33.1	99.3





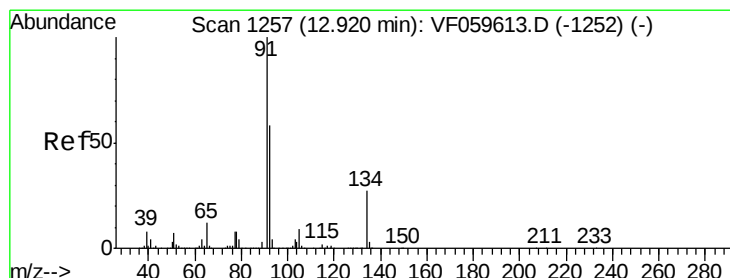
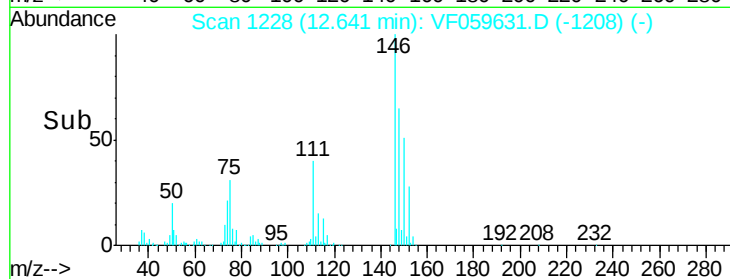
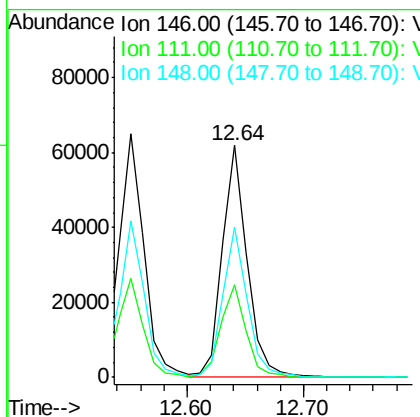
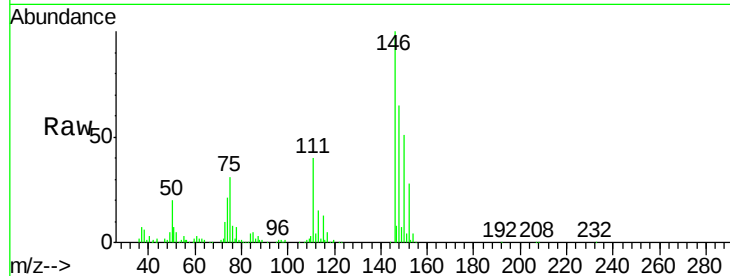
#88
 1,4-Dichlorobenzene
 Concen: 46.45 ug/l
 RT: 12.64 min Scan# 1228
 Delta R.T. -0.00 min
 Lab File: VF059631.D
 Acq: 23 Jul 2018 23:12

Instrument :
 MSVOA_F
 ClientSampleId :
 GL-TOPSOIL-09MSD

Tot Ion	Ratio	Lower	Upper
146	100		
111	39.9	20.5	61.5
148	65.0	32.3	96.8

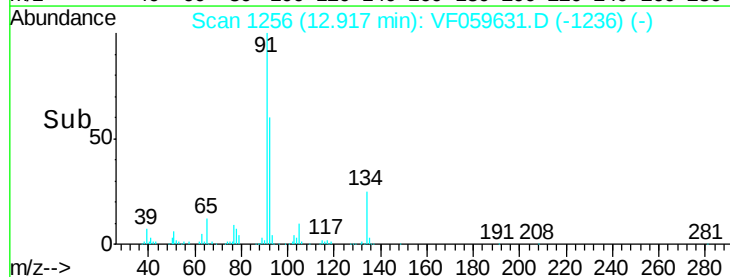
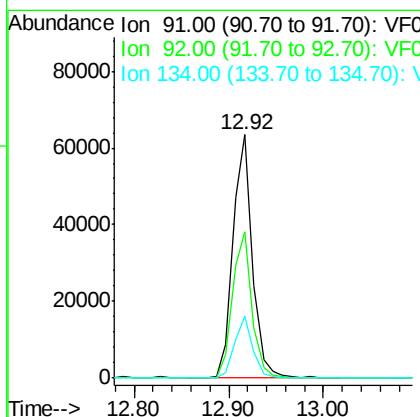
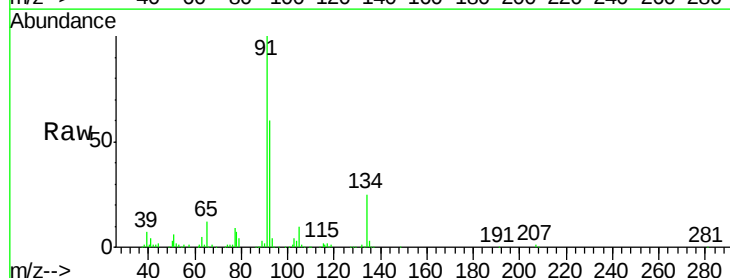
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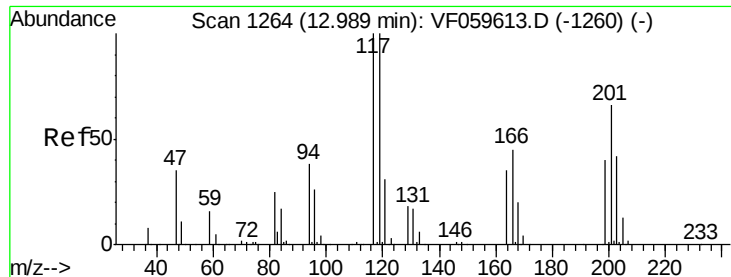
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#89
 n-Butylbenzene
 Concen: 21.95 ug/l
 RT: 12.92 min Scan# 1256
 Delta R.T. -0.00 min
 Lab File: VF059631.D
 Acq: 23 Jul 2018 23:12

Tgt Ion	Ratio	Lower	Upper
91	100		
92	60.0	28.8	86.4
134	25.4	13.5	40.4





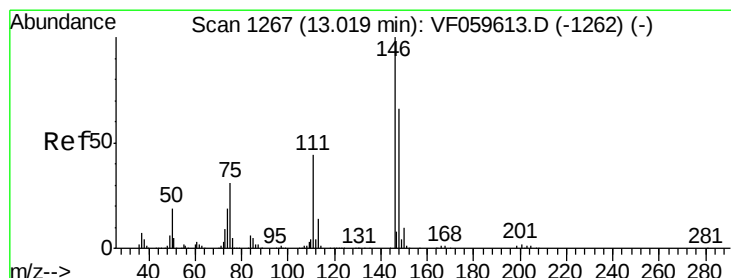
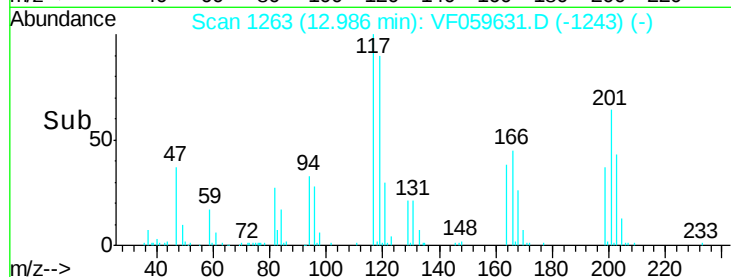
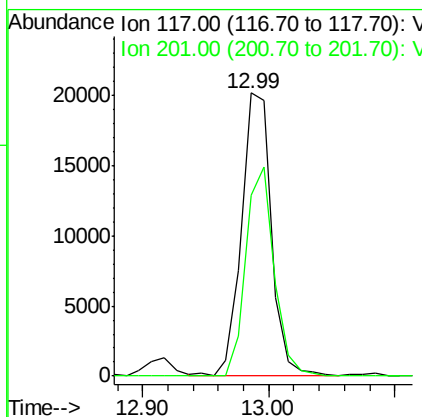
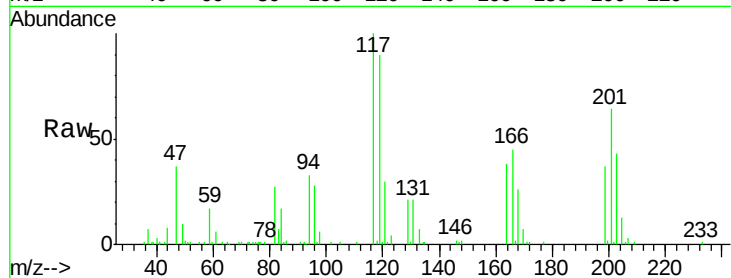
#90
Hexachloroethane
Concen: 31.41 ug/l
RT: 12.99 min Scan# 1263
Delta R.T. -0.00 min
Lab File: VF059631.D
Acq: 23 Jul 2018 23:12

Instrument :
MSVOA_F
ClientSampleId :
GL-TOPSOIL-09MSD

Tot Ion:117 Resp: 33202
Ion Ratio Lower Upper
117 100
201 64.9 33.6 100.6

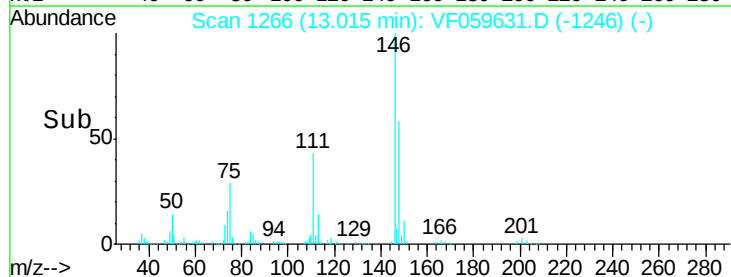
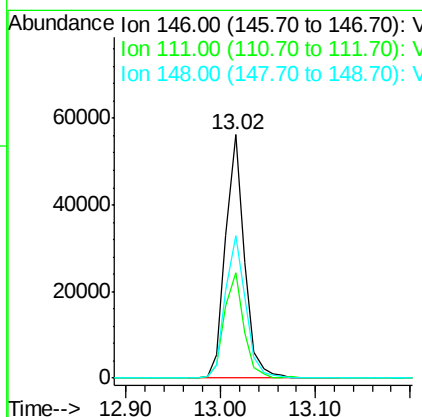
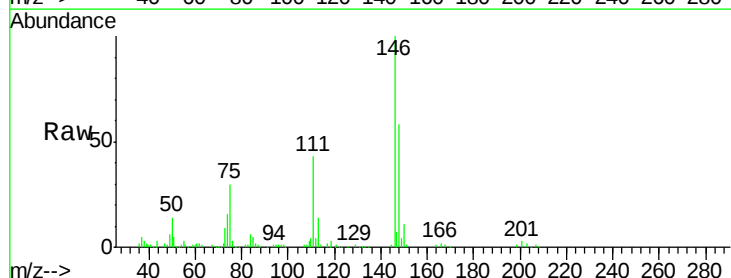
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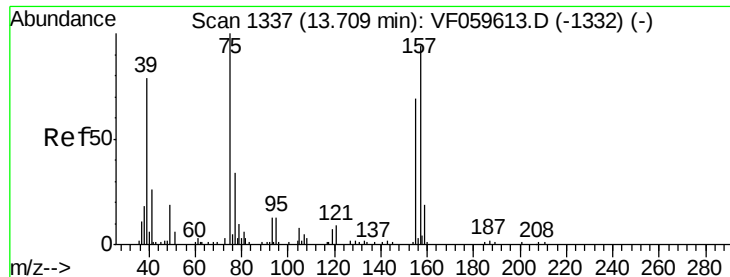
apatel
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#91
1,2-Dichlorobenzene
Concen: 39.78 ug/l
RT: 13.02 min Scan# 1266
Delta R.T. -0.00 min
Lab File: VF059631.D
Acq: 23 Jul 2018 23:12

Tgt Ion:146 Resp: 78057
Ion Ratio Lower Upper
146 100
111 43.4 21.8 65.3
148 58.5 32.9 98.7





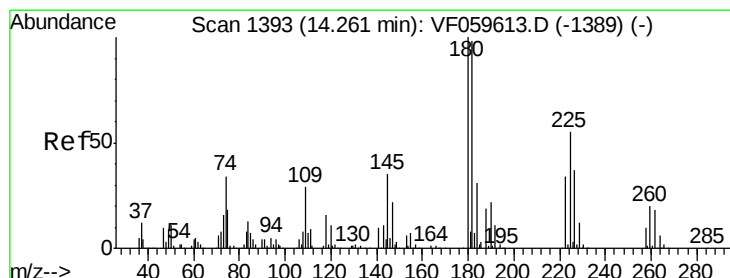
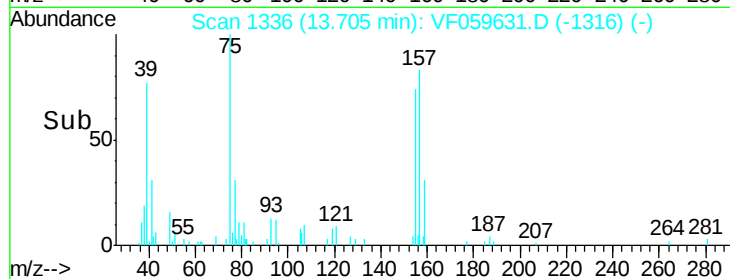
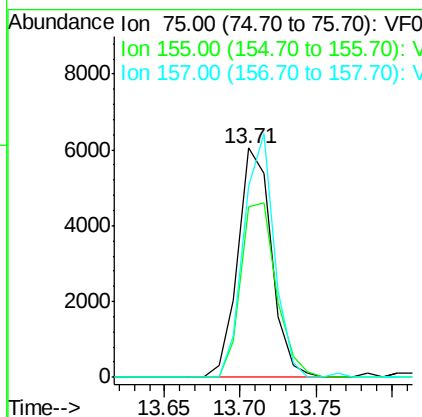
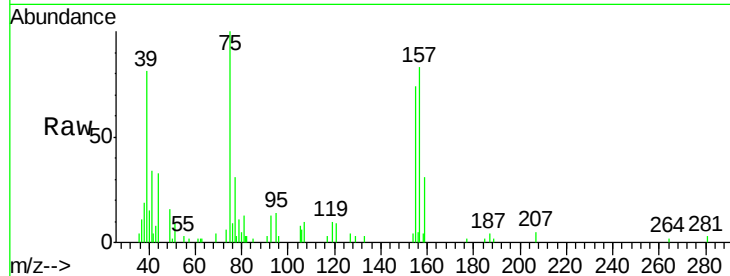
#92
 1,2-Dibromo-3-Chloropropane
 Concen: 54.50 ug/l
 RT: 13.71 min Scan# 1336
 Delta R.T. -0.00 min
 Lab File: VF059631.D
 Acq: 23 Jul 2018 23:12

Instrument :
 MSVOA_F
 ClientSampleId :
 GL-TOPSOIL-09MSD

Tot Ion	Ratio	Lower	Upper
75	100		
155	74.3	34.6	103.8
157	83.1	47.0	141.0

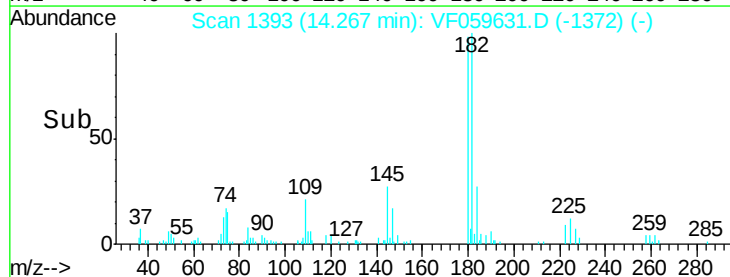
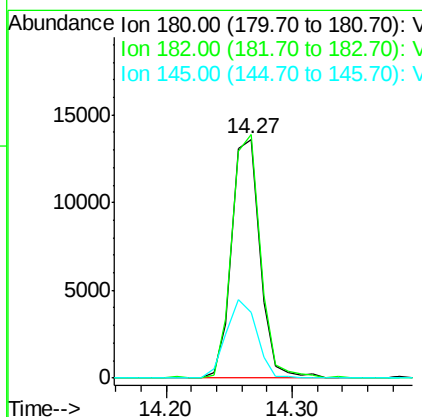
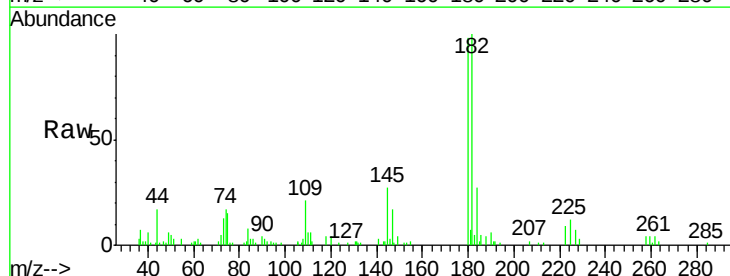
Manual Integrations
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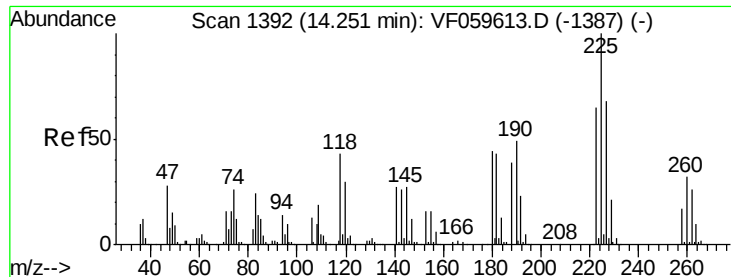
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#93
 1,2,4-Trichlorobenzene
 Concen: 14.46 ug/l
 RT: 14.27 min Scan# 1393
 Delta R.T. 0.01 min
 Lab File: VF059631.D
 Acq: 23 Jul 2018 23:12

Tgt Ion	Ratio	Lower	Upper
180	100		
182	101.9	48.8	146.3
145	27.4	17.5	52.6





#94

Hexachlorobutadiene

Concen: 13.36 ug/l

RT: 14.25 min Scan# 1391

Delta R.T. -0.00 min

Lab File: VF059631.D

Acq: 23 Jul 2018 23:12

Instrument :

MSVOA_F

ClientSampleId :

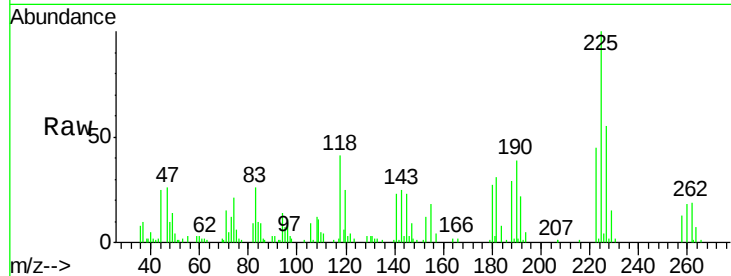
GL-TOPSOIL-09MSD

Tot Ion:	225	Resp:	13638
Ion Ratio	Lower	Upper	
225	100		
223	47.7	32.6	98.0
227	57.6	33.9	101.6

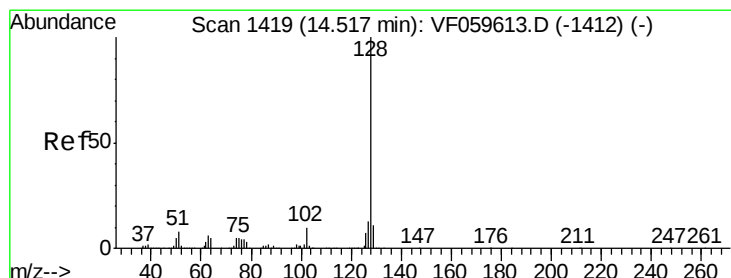
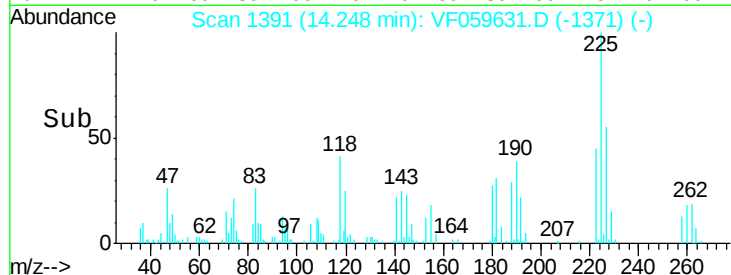
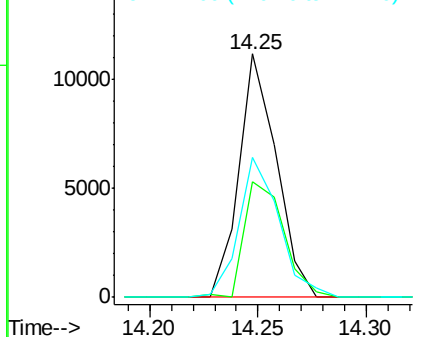
Manual Integrations
APPROVED

apatel

7/24/2018 1:14:52 PM



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: 17.79 ug/l

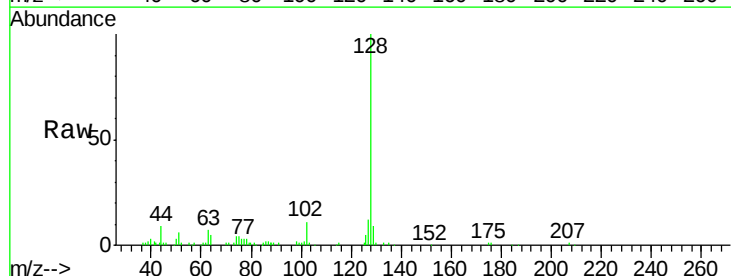
RT: 14.52 min Scan# 1419

Delta R.T. 0.01 min

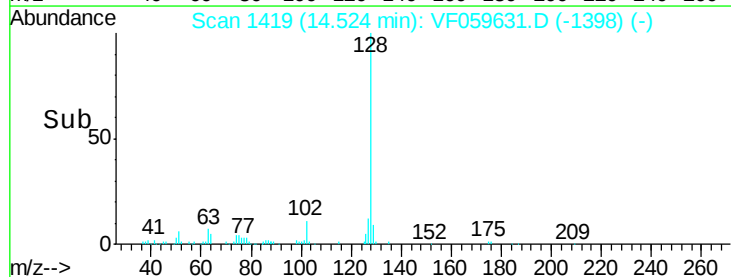
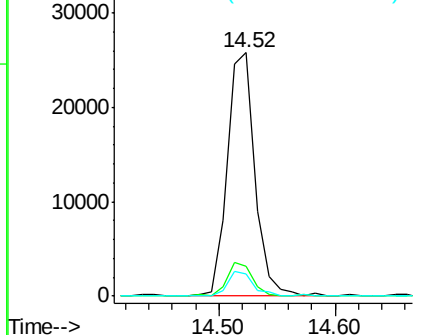
Lab File: VF059631.D

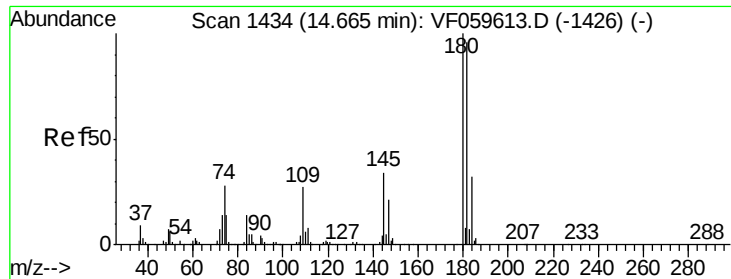
Acq: 23 Jul 2018 23:12

Tgt Ion:	128	Resp:	42379
Ion Ratio	Lower	Upper	
128	100		
127	12.0	10.2	15.2
129	9.0	9.1	13.7#



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





#96
 1,2,3-Trichlorobenzene
 Concen: 11.64 ug/l
 RT: 14.66 min Scan# 1433
 Delta R.T. -0.00 min
 Lab File: VF059631.D
 Acq: 23 Jul 2018 23:12

Instrument :
 MSVOA_F
 ClientSampleId :
 GL-TOPSOIL-09MSD

Tot Ion	Ratio	Resp	Lower	Upper
180	100	15522		
182	87.6		48.0	144.2
145	34.5		17.1	51.2

Manual Integrations
 APPROVED

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 7/24/2018 1:14:52 PM

