

Data Path : Z:\VOASRV\HPCHEM1\MSVOA F\DATA\VF030419\
 Data File : VF061833.D
 Acq On : 4 Mar 2019 22:16
 Operator : VA/AP
 Sample : K1560-0210PPBL00
 Misc : 5.00µ/5mL/MSVOA-F/SOIL
 ALS Vial : 16 Sample Multiplier: 1

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

Manual Integrations
 APPROVED

MMDadoda
 3/5/2019 10:48:26 AM

Quant Time: Mar 05 06:10:31 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_F\METHODS\82F030419S.M
 Quant Title : SW846 8260
 QLast Update : Tue Mar 05 04:50:44 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	4.86	168	309439	50.00	ug/l	-0.02
34) 1,4-Difluorobenzene	5.59	114	461572	50.00	ug/l	-0.02
63) Chlorobenzene-d5	9.77	117	401507	50.00	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	12.55	152	224553	50.00	ug/l	0.00

System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	4.84	65	128475	57.01	ug/l	0.00
Spiked Amount	50.000		Recovery	=	114.02%	
35) Dibromofluoromethane	4.10	113	181063	56.21	ug/l	-0.02
Spiked Amount	50.000		Recovery	=	112.42%	
50) Toluene-d8	7.55	98	523018	54.63	ug/l	0.00
Spiked Amount	50.000		Recovery	=	109.26%	
62) 4-Bromofluorobenzene	11.41	95	205075	54.68	ug/l	0.00
Spiked Amount	50.000		Recovery	=	109.36%	

Target Compounds				Qvalue		
2) Dichlorodifluoromethane	0.96	85	40852	10.753	ug/l	96
3) Chloromethane	1.09	50	38527	10.464	ug/l	90
4) Vinyl Chloride	1.13	62	35855	10.259	ug/l	94
5) Bromomethane	1.33	94	26784	11.245	ug/l	94
6) Chloroethane	1.39	64	18204	10.957	ug/l	98
7) Trichlorofluoromethane	1.48	101	45839m	10.738	ug/l	
8) Diethyl Ether	1.63	74	9136	9.412	ug/l	71
9) 1,1,2-Trichlorotrifluoroet	1.83	101	28837	9.948	ug/l	96
10) Methyl Iodide	1.90	142	59314m	10.752	ug/l	
11) Tert butyl alcohol	2.57	59	6483	50.686	ug/l #	75
12) 1,1-Dichloroethene	1.79	96	27431	10.365	ug/l	88
13) Acrolein	1.99	56	7028	43.364	ug/l #	59
14) Allyl chloride	2.09	41	30071	10.314	ug/l	97
15) Acrylonitrile	2.94	53	18835	46.245	ug/l	96
16) Acetone	2.24	43	23877	50.583	ug/l	99
17) Carbon Disulfide	1.82	76	84741m	10.287	ug/l	
18) Methyl Acetate	2.35	43	12906	9.374	ug/l	99
19) Methyl tert-butyl Ether	2.43	73	45569	10.179	ug/l	97
20) Methylene Chloride	2.17	84	37562m	10.126	ug/l	
21) trans-1,2-Dichloroethene	2.31	96	29635	11.898	ug/l	99
22) Diisopropyl ether	2.79	45	81171	10.703	ug/l	97
23) Vinyl Acetate	3.18	43	166079	49.019	ug/l	99
24) 1,1-Dichloroethane	2.87	63	46495	10.257	ug/l	99
25) 2-Butanone	4.34	43	47410	49.377	ug/l	97
26) 2,2-Dichloropropane	3.59	77	18291	9.039	ug/l	91
27) cis-1,2-Dichloroethene	3.47	96	34080	9.876	ug/l	96
28) Bromochloromethane	3.72	49	22402	11.337	ug/l	92
29) Tetrahydrofuran	4.07	42	21280	51.390	ug/l	95
30) Chloroform	3.86	83	52587	10.156	ug/l	90
31) Cyclohexane	3.68	56	48632m	10.243	ug/l	
32) 1,1,1-Trichloroethane	4.09	97	32523	10.191	ug/l	87
36) 1,1-Dichloropropene	4.27	75	42829	9.823	ug/l	94
37) Ethyl Acetate	4.10	43	18524	10.122	ug/l	96
38) Carbon Tetrachloride	3.98	117	30197	9.784	ug/l	91

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Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)

39) Methylcyclohexane	5.45	83	49194	9.552	µg/l	95
40) Benzene	4.62	78	115568	10.140	µg/l	99
41) Methacrylonitrile	4.75	41	9031	9.007	µg/l #	82
42) 1,2-Dichloroethane	4.94	62	27548	9.699	µg/l	98
43) Isopropyl Acetate	6.96	43	21792	9.660	µg/l #	88
44) Trichloroethene	5.49	130	36083	10.188	µg/l	100
45) 1,2-Dichloropropane	6.23	63	26119	9.638	µg/l #	85
46) Dibromomethane	6.07	93	15811	9.270	µg/l #	86
47) Bromodichloromethane	6.38	83	36531	9.695	µg/l #	97
48) Methyl methacrylate	6.71	41	13159	9.217	µg/l #	84
49) 1,4-Dioxane	6.71	88	2539	194.543	µg/l	90
51) 4-Methyl-2-Pentanone	8.26	43	81122	52.031	µg/l	96
52) Toluene	7.62	92	66618	9.881	µg/l	90
53) t-1,3-Dichloropropene	8.27	75	30262	9.729	µg/l	97
54) cis-1,3-Dichloropropene	7.30	75	38927	9.073	µg/l	96
55) 1,1,2-Trichloroethane	8.49	97	19704	10.143	µg/l	96
56) Ethyl methacrylate	8.62	69	21592	9.863	µg/l	90
57) 1,3-Dichloropropane	8.85	76	32255	10.153	µg/l	97
58) 2-Chloroethyl Vinyl ether	7.29	63	18923	54.641	µg/l	96
59) 2-Hexanone	9.49	43	57172	50.830	µg/l	95
60) Dibromochloromethane	8.72	129	26011	9.395	µg/l	92
61) 1,2-Dibromoethane	8.98	107	19512	9.134	µg/l	92
64) Tetrachloroethene	8.15	164	30024	9.732	µg/l	96
65) Chlorobenzene	9.79	112	75815	9.828	µg/l	99
66) 1,1,1,2-Tetrachloroethane	9.93	131	29826	9.980	µg/l	98
67) Ethyl Benzene	9.90	91	129374	10.119	µg/l	95
68) m/p-Xylenes	10.13	106	100624	20.544	µg/l	96
69) o-Xylene	10.71	106	51541	9.772	µg/l	94
70) Styrene	10.79	104	73604	9.916	µg/l	96
71) Bromoform	10.77	173	14825	9.385	µg/l #	94
73) Isopropylbenzene	11.12	105	151764	9.817	µg/l	98
74) N-amyl acetate	11.37	43	34806	9.780	µg/l	95
75) 1,1,2,2-Tetrachloroethane	11.69	83	24202	9.419	µg/l	96
76) 1,2,3-Trichloropropane	11.79	75	17573	10.021	µg/l	96
77) Bromobenzene	11.50	156	34828	9.361	µg/l	84
78) n-propylbenzene	11.60	91	177509	10.168	µg/l	98
79) 2-Chlorotoluene	11.71	91	98606	9.879	µg/l	99
80) 1,3,5-Trimethylbenzene	11.82	105	122485	9.868	µg/l	95
81) trans-1,4-Dichloro-2-buten	11.87	75	6078m	7.580	µg/l	
82) 4-Chlorotoluene	11.90	91	105522	10.336	µg/l	95
83) tert-Butylbenzene	12.13	119	129148	9.799	µg/l	90
84) 1,2,4-Trimethylbenzene	12.21	105	123390	10.141	µg/l	96
85) sec-Butylbenzene	12.31	105	174623	10.182	µg/l	98
86) p-Isopropyltoluene	12.45	119	151070	10.362	µg/l	96
87) 1,3-Dichlorobenzene	12.47	146	70987	10.048	µg/l	97
88) 1,4-Dichlorobenzene	12.56	146	69202	10.155	µg/l	94
89) n-Butylbenzene	12.84	91	143703	10.314	µg/l	94
90) Hexachloroethane	12.92	117	33090	9.430	µg/l	77
91) 1,2-Dichlorobenzene	12.94	146	68613	10.251	µg/l	96
92) 1,2-Dibromo-3-Chloropropan	13.65	75	3861	11.769	µg/l	85

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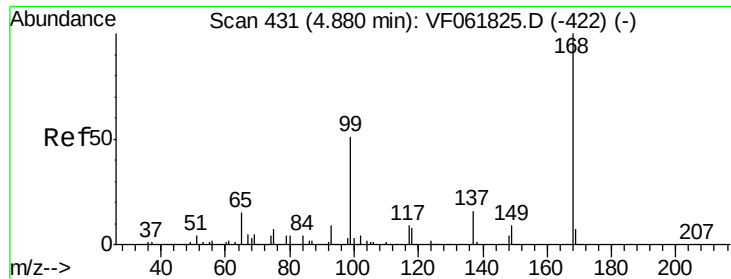
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Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
93) 1,2,4-Trichlorobenzene	14.20	180	46871	9.989	ug/l	96
94) Hexachlorobutadiene	14.19	225	30252	9.313	ug/l	94
95) Naphthalene	14.46	128	79134	9.468	ug/l	98
96) 1,2,3-Trichlorobenzene	14.60	180	41818	9.652	ug/l	94

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



#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 4.86 min Scan# 429

Delta R.T. -0.02 min

Lab File: VF061833.D

Acq: 4 Mar 2019 22:16

Instrument :

MSVOA_F

ClientSampleId :

LOQ-SOIL-02-QT1-2019

Tot Ion:168 Resp: 309439

Ion Ratio Lower Upper

168 100

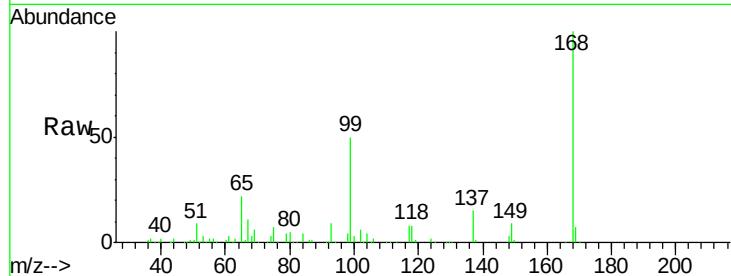
99 49.8 40.8 61.2

Manual Integrations

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3/5/2019 10:48:26 AM



Abundance Ion 168.00 (167.70 to 168.70): VF0

Ion 99.00 (98.70 to 99.70): VF0

4.86

100000

80000

60000

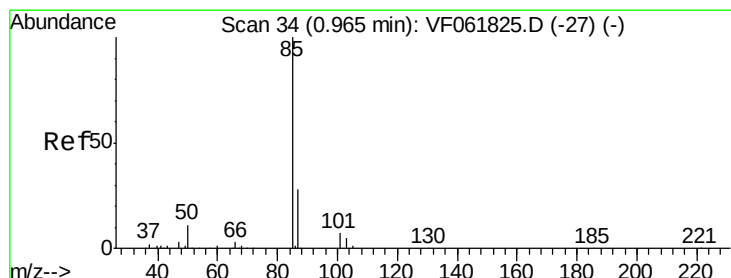
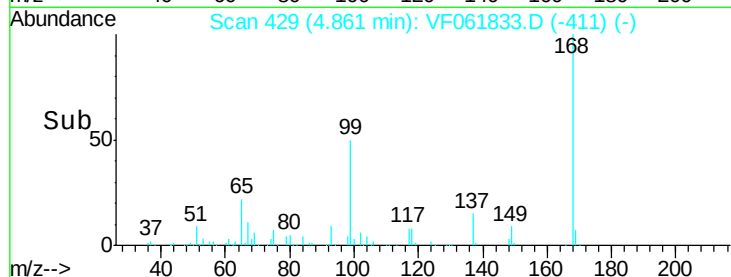
40000

20000

0

4.70 4.80 4.90 5.00 5.10

Time-->



#2

Dichlorodifluoromethane

Concen: 10.753 ug/l

RT: 0.96 min Scan# 33

Delta R.T. -0.01 min

Lab File: VF061833.D

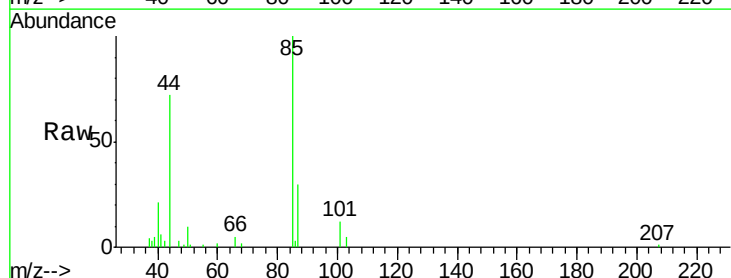
Acq: 4 Mar 2019 22:16

Tgt Ion: 85 Resp: 40852

Ion Ratio Lower Upper

85 100

87 30.1 14.1 42.2



Abundance Ion 85.00 (84.70 to 85.70): VF0

Ion 87.00 (86.70 to 87.70): VF0

0.96

12000

10000

8000

6000

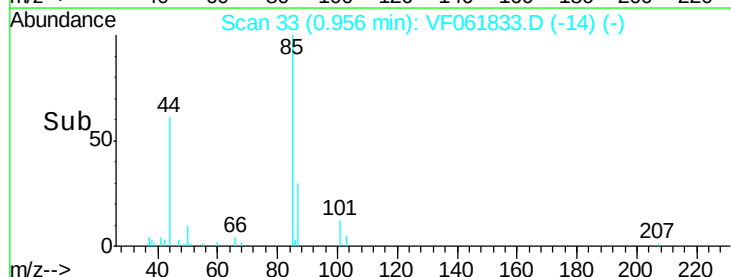
4000

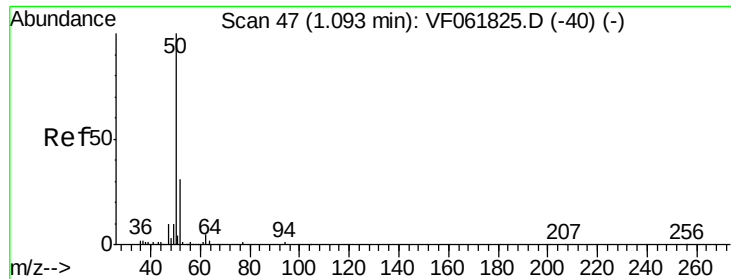
2000

0

0.80 0.90 1.00 1.10

Time-->





#3

Chloromethane

Concen: 10.464 ug/l

RT: 1.09 min Scan# 47

Delta R.T. 0.00 min

Lab File: VF061833.D

Acq: 4 Mar 2019 22:16

Instrument :

MSVOA_F

ClientSampleId :

LOQ-SOIL-02-QT1-2019

Tot Ion: 50 Resp: 38527

Ion Ratio Lower Upper

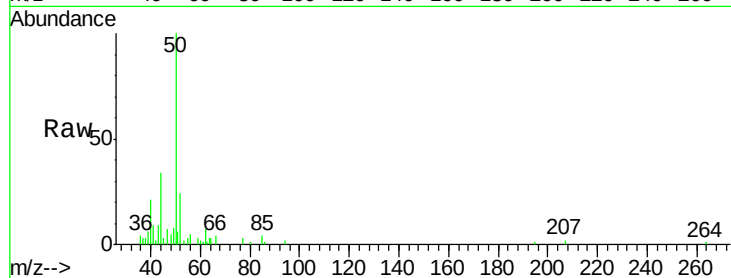
50 100

52 24.2 23.8 35.8

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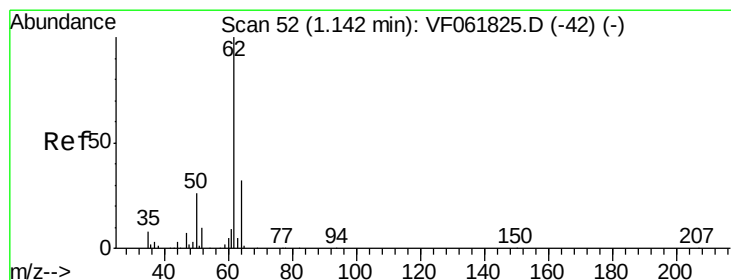
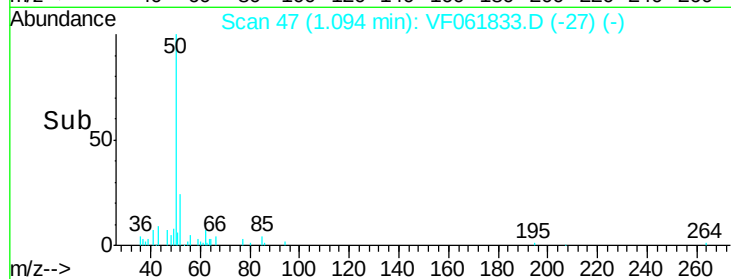
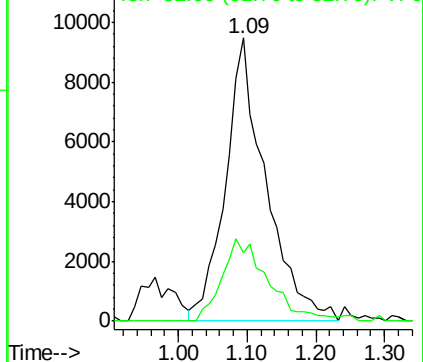
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Abundance Ion 50.00 (49.70 to 50.70): VF0

Ion 52.00 (51.70 to 52.70): VF0



#4

Vinyl Chloride

Concen: 10.259 ug/l

RT: 1.13 min Scan# 51

Delta R.T. -0.01 min

Lab File: VF061833.D

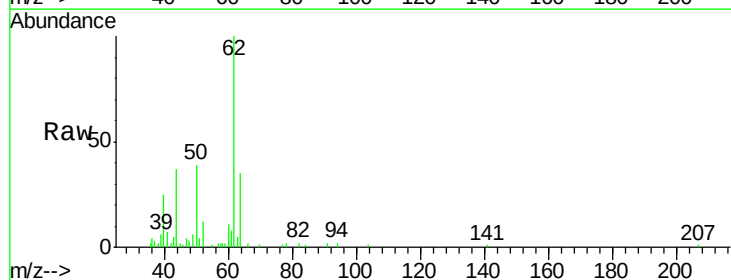
Acq: 4 Mar 2019 22:16

Tgt Ion: 62 Resp: 35855

Ion Ratio Lower Upper

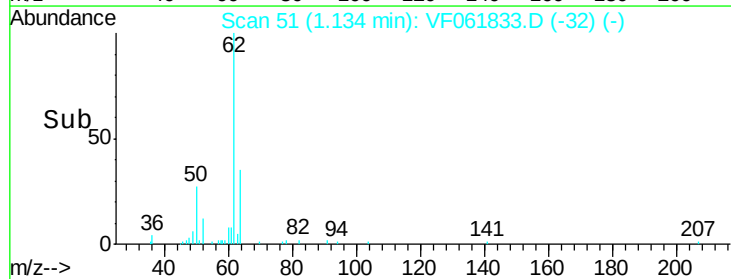
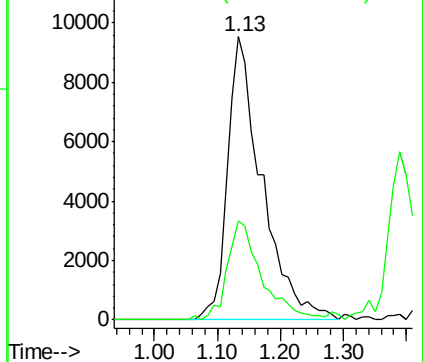
62 100

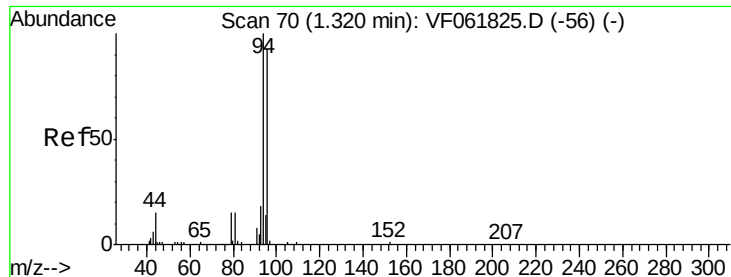
64 35.0 25.2 37.8



Abundance Ion 62.00 (61.70 to 62.70): VF0

Ion 64.00 (63.70 to 64.70): VF0





#5

Bromomethane

Concen: 11.245 ug/l

RT: 1.33 min Scan# 71

Delta R.T. 0.01 min

Lab File: VF061833.D

Acq: 4 Mar 2019 22:16

Instrument :

MSVOA_F

ClientSampleId :

LOQ-SOIL-02-QT1-2019

Tot Ion: 94 Resp: 26784

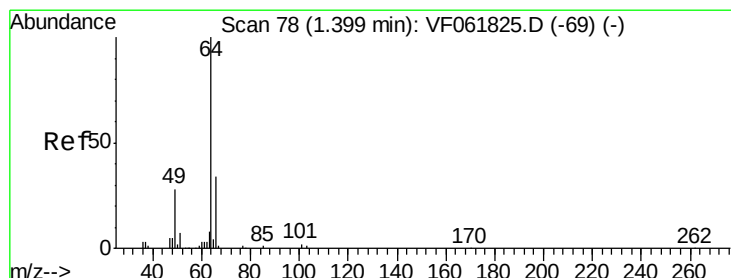
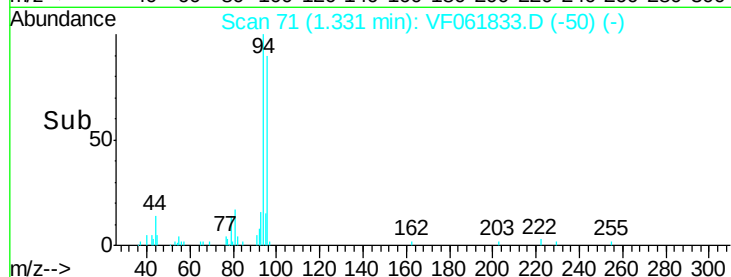
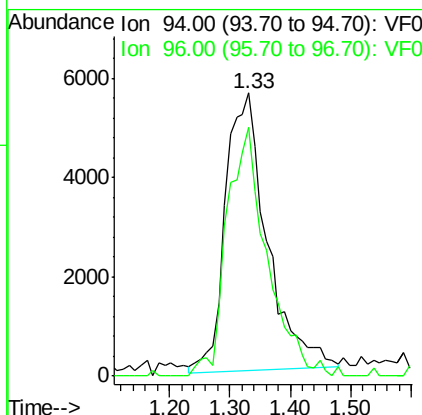
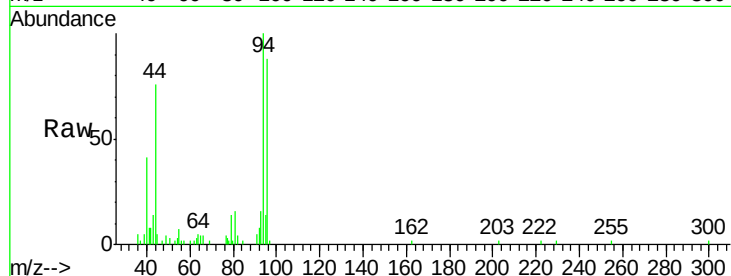
Ion Ratio Lower Upper

94 100

96 88.1 75.2 112.8

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#6

Chloroethane

Concen: 10.957 ug/l

RT: 1.39 min Scan# 77

Delta R.T. -0.01 min

Lab File: VF061833.D

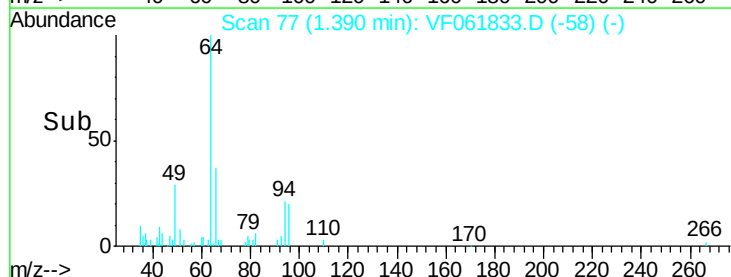
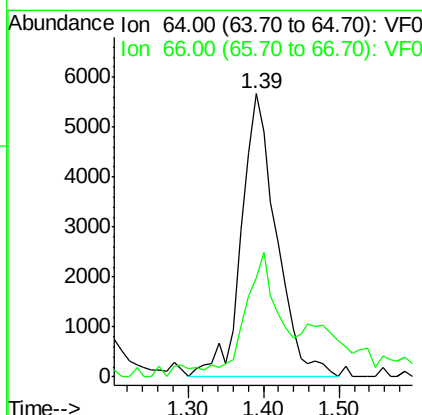
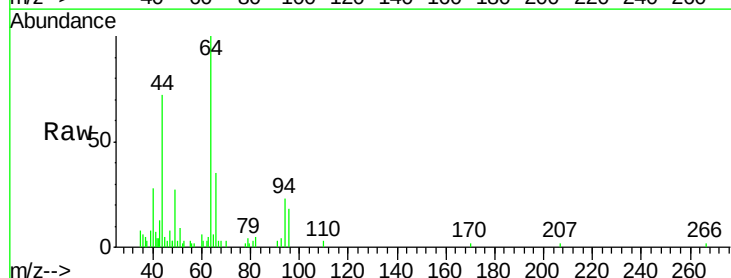
Acq: 4 Mar 2019 22:16

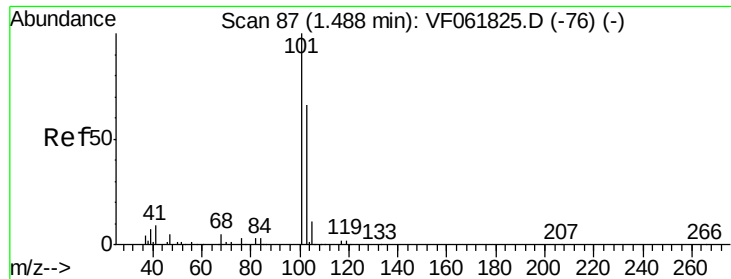
Tgt Ion: 64 Resp: 18204

Ion Ratio Lower Upper

64 100

66 34.8 27.0 40.4





#7

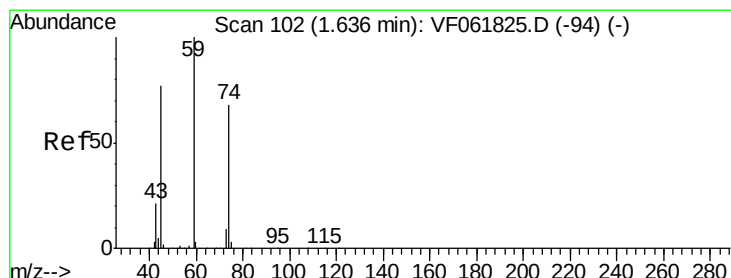
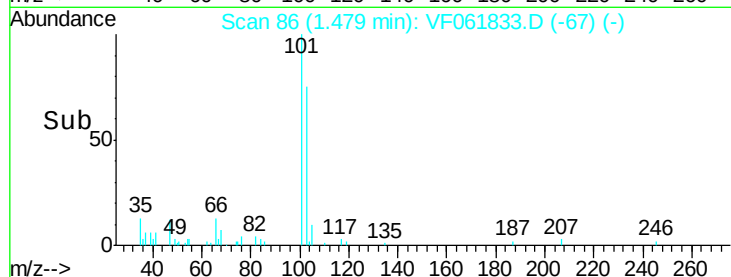
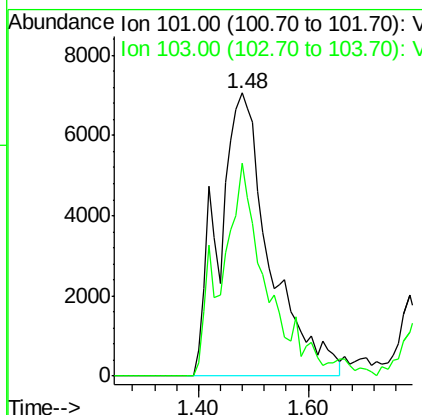
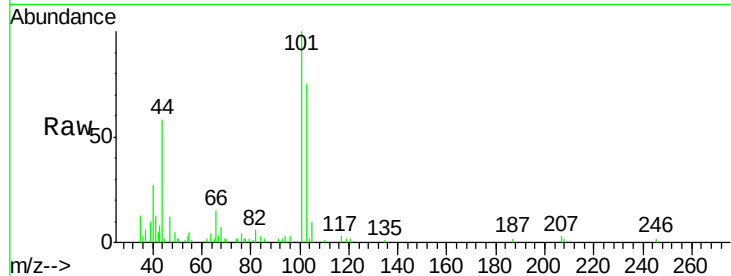
Trichlorofluoromethane
Concen: 10.738 ug/l m
RT: 1.48 min Scan# 86
Delta R.T. -0.01 min
Lab File: VF061833.D
Acq: 4 Mar 2019 22:16

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Tot Ion	Ion	Ratio	Lower	Upper
101	100			
103	75.3	52.8	79.2	

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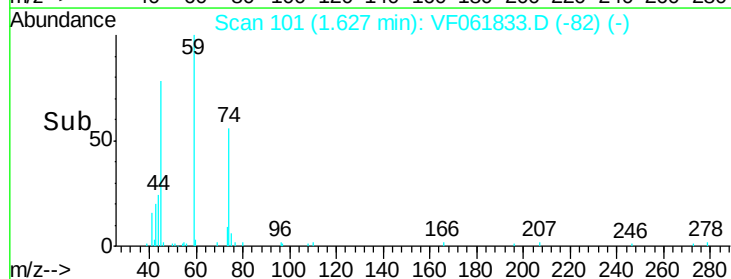
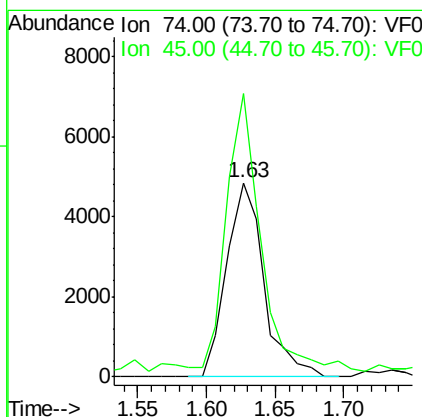
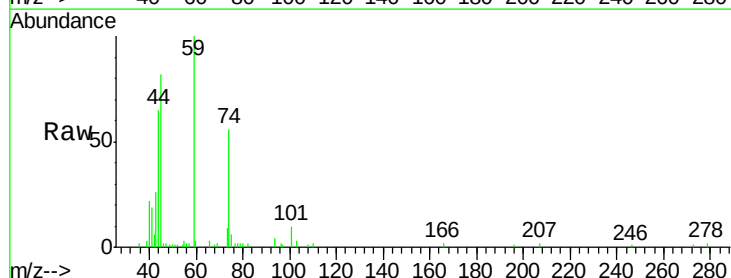
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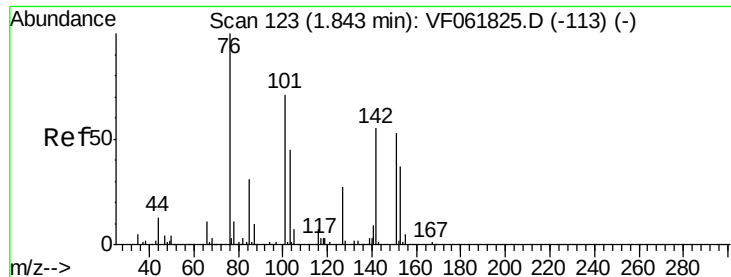


#8

Diethyl Ether
Concen: 9.412 ug/l
RT: 1.63 min Scan# 101
Delta R.T. -0.01 min
Lab File: VF061833.D
Acq: 4 Mar 2019 22:16

Tgt Ion	Ion	Ratio	Lower	Upper
74	100			
45	145.7	57.2	171.6	





#9

1,1,2-Trichlorotrifluoroethane

Concen: 9.948 ug/l

RT: 1.83 min Scan# 122

Delta R.T. -0.01 min

Lab File: VF061833.D

Acq: 4 Mar 2019 22:16

Instrument :

MSVOA_F

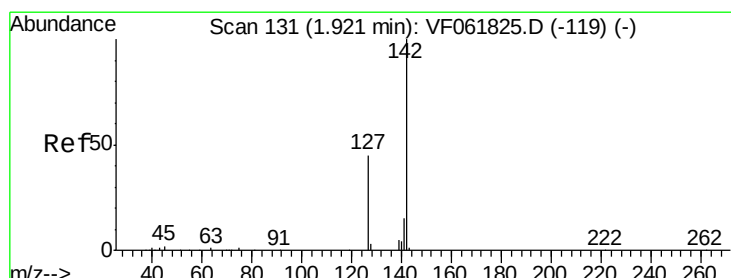
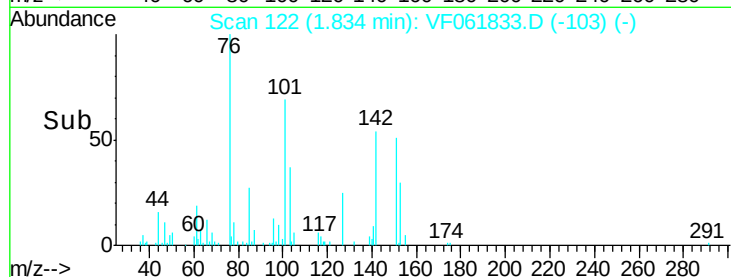
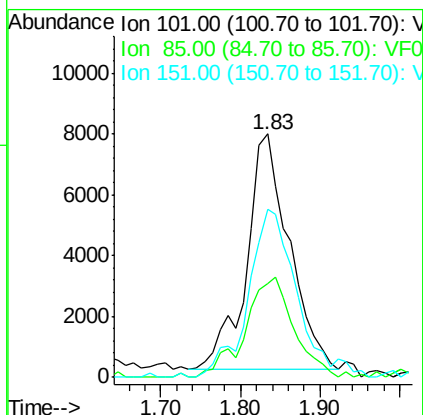
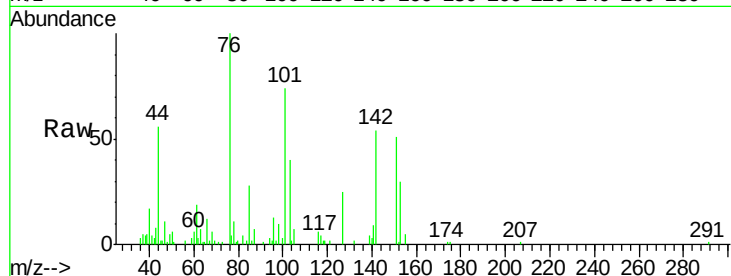
ClientSampleId :

LOQ-SOIL-02-QT1-2019

Tot Ion:	101	Resp:	28837
Ion Ratio	Lower	Upper	
101	100		
85	38.7	34.0	51.0
151	68.9	57.3	85.9

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#10

Methyl Iodide

Concen: 10.752 ug/l m

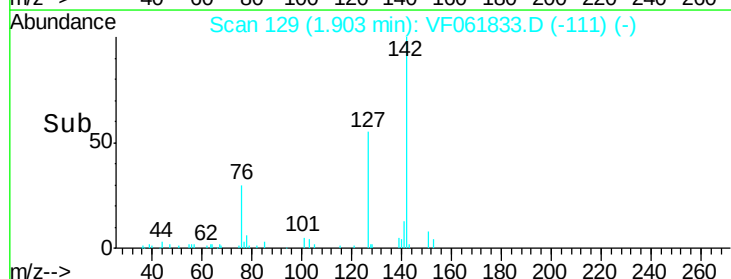
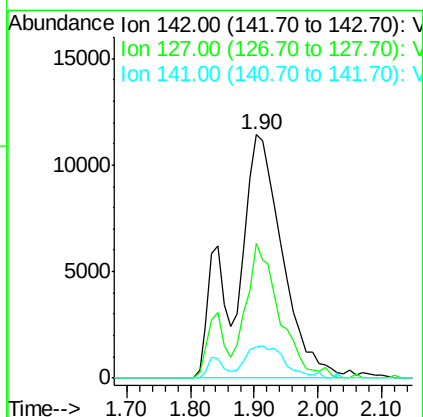
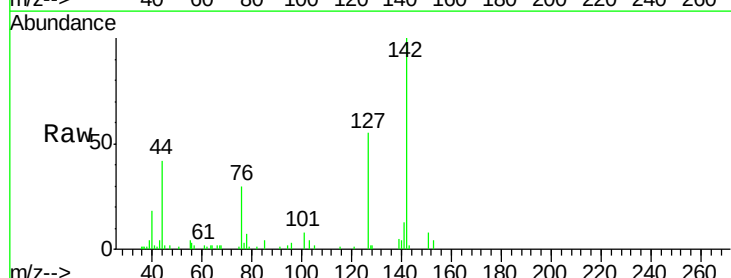
RT: 1.90 min Scan# 129

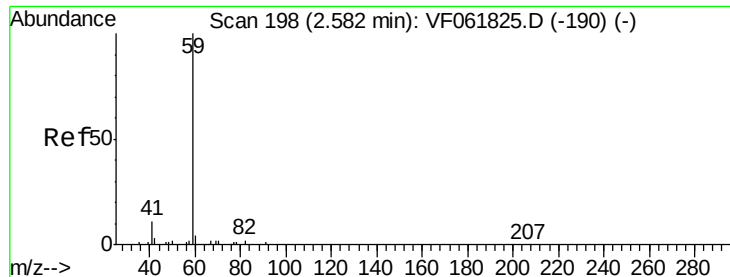
Delta R.T. -0.02 min

Lab File: VF061833.D

Acq: 4 Mar 2019 22:16

Tgt Ion:	142	Resp:	59314
Ion Ratio	Lower	Upper	
142	100		
127	55.4	35.8	53.6#
141	13.0	11.7	17.5





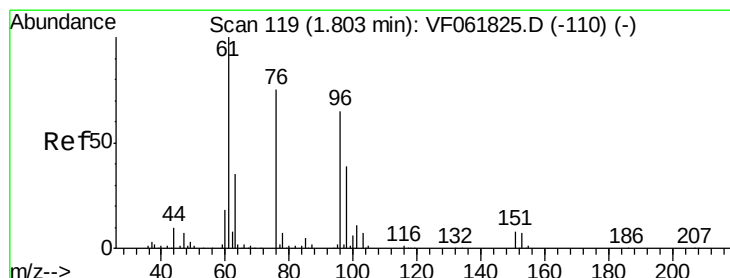
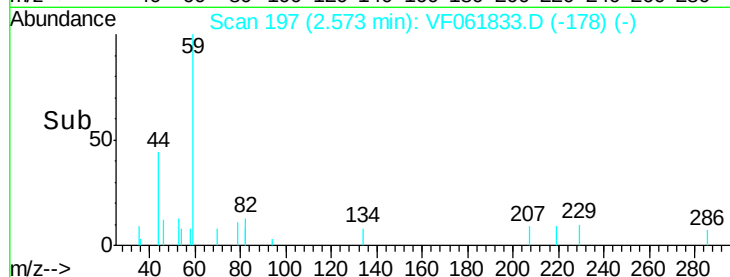
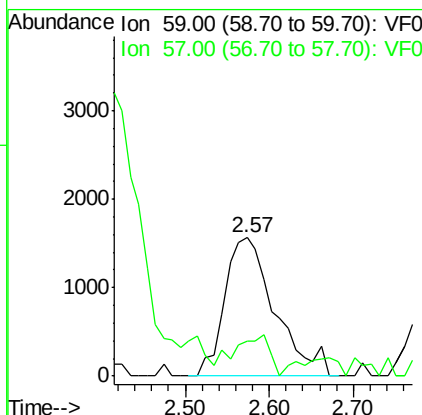
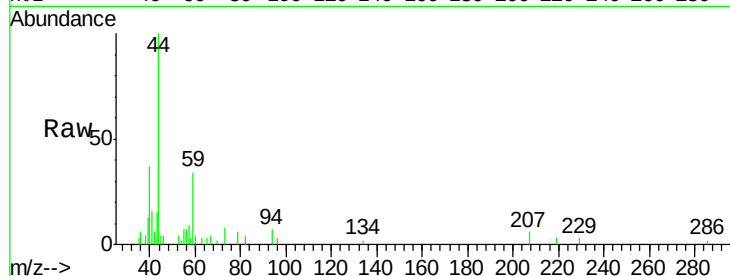
#11
Tert butyl alcohol
Concen: 50.686 ug/l
RT: 2.57 min Scan# 197
Delta R.T. -0.01 min
Lab File: VF061833.D
Acq: 4 Mar 2019 22:16

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

Tot Ion: 59 Resp: 6483
Ion Ratio Lower Upper
59 100
57 25.2 11.8 17.6#

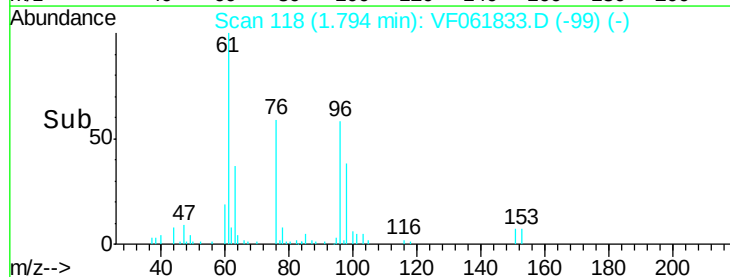
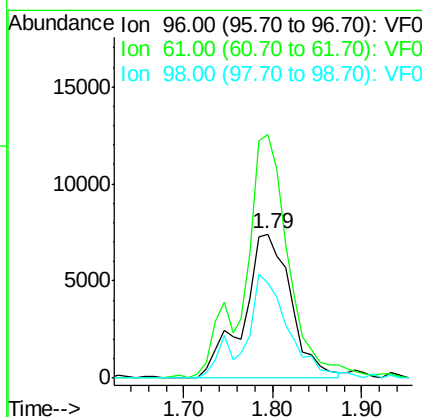
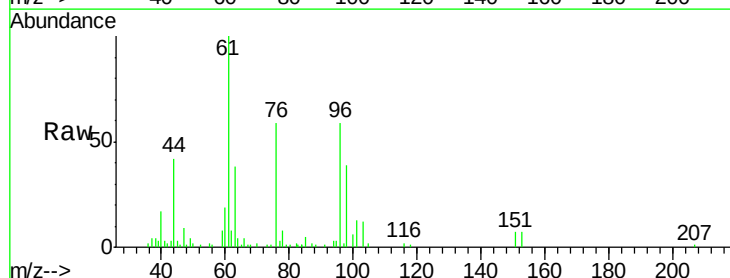
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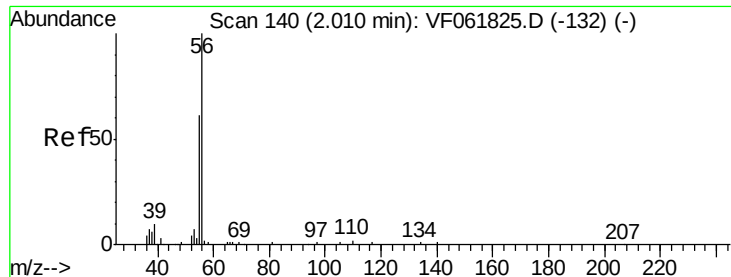
MMDadoda
3/5/2019 10:48:26 AM



#12
1,1-Dichloroethene
Concen: 10.365 ug/l
RT: 1.79 min Scan# 118
Delta R.T. -0.01 min
Lab File: VF061833.D
Acq: 4 Mar 2019 22:16

Tgt Ion: 96 Resp: 27431
Ion Ratio Lower Upper
96 100
61 168.8 122.5 183.7
98 66.4 47.1 70.7





#13

Acrolein

Concen: 43.364 ug/l

RT: 1.99 min Scan# 138

Delta R.T. -0.02 min

Lab File: VF061833.D

Acq: 4 Mar 2019 22:16

Instrument :

MSVOA_F

ClientSampleId :

LOQ-SOIL-02-QT1-2019

Tot Ion: 56 Resp: 7028

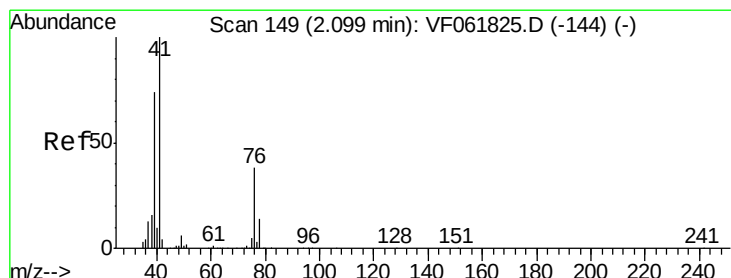
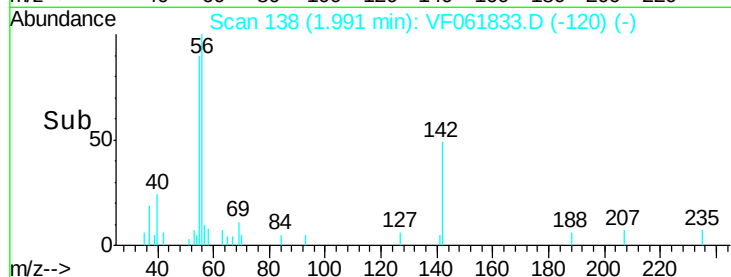
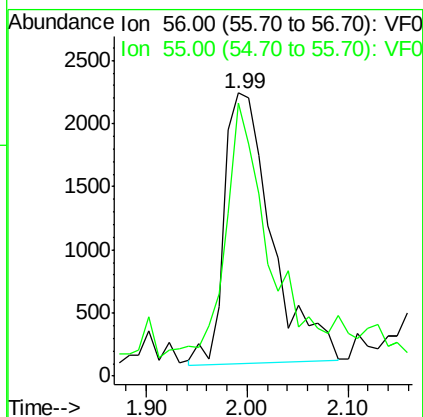
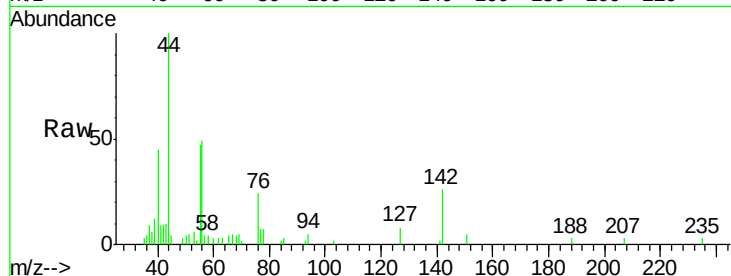
Ion Ratio Lower Upper

56 100

55 96.3 51.3 76.9#

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3/5/2019 10:48:26 AM



#14

Allyl chloride

Concen: 10.314 ug/l

RT: 2.09 min Scan# 148

Delta R.T. -0.01 min

Lab File: VF061833.D

Acq: 4 Mar 2019 22:16

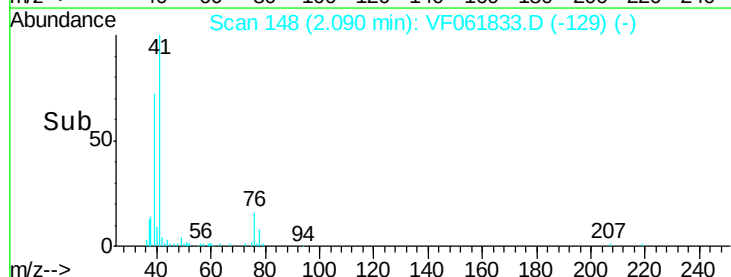
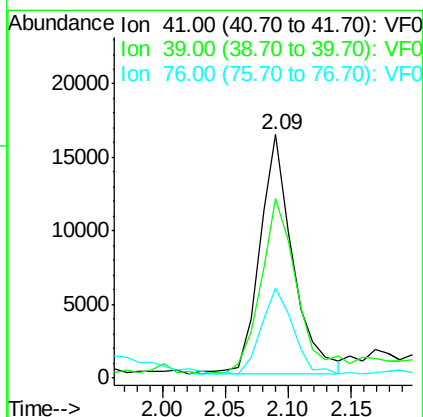
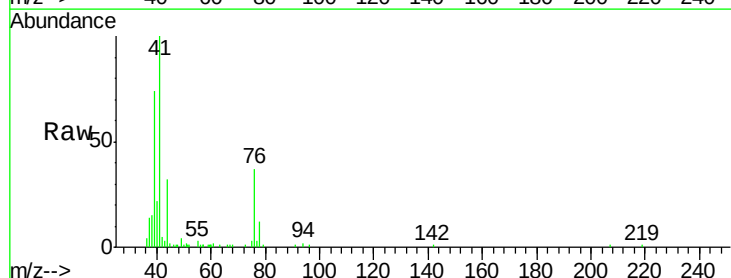
Tgt Ion: 41 Resp: 30071

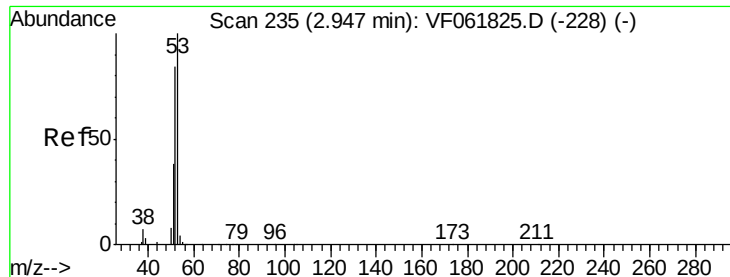
Ion Ratio Lower Upper

41 100

39 73.7 59.6 89.4

76 36.8 32.3 48.5





#15

Acrylonitrile

Concen: 46.245 ug/l

RT: 2.94 min Scan# 234

Delta R.T. -0.01 min

Lab File: VF061833.D

Acq: 4 Mar 2019 22:16

Instrument :

MSVOA_F

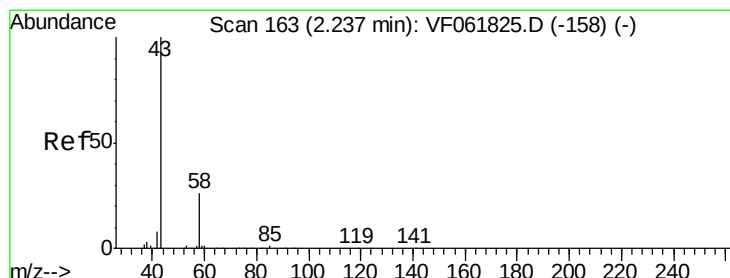
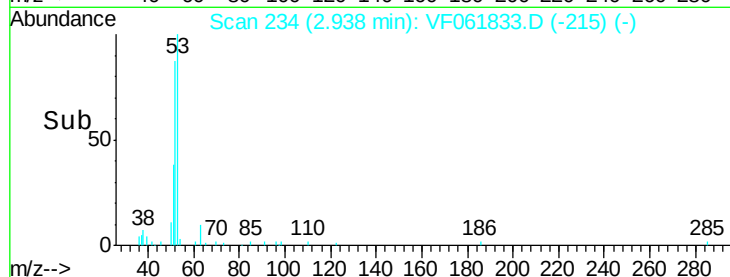
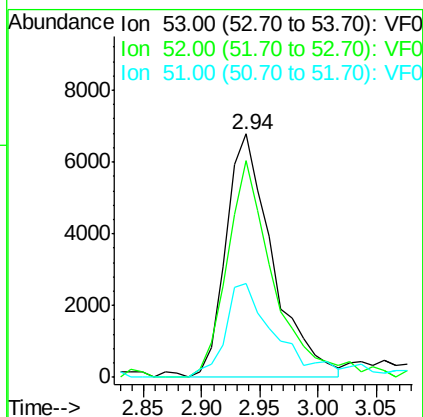
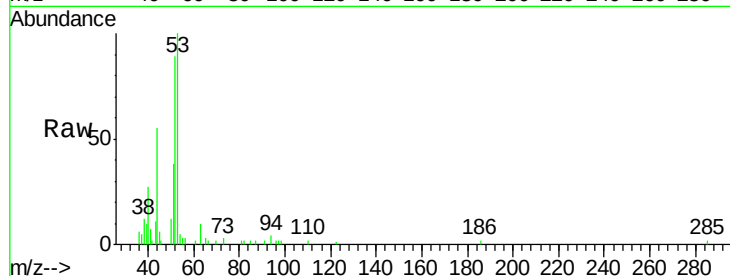
ClientSampleId :

LOQ-SOIL-02-QT1-2019

Tot Ion:	53	Resp:	18835
Ion	Ratio	Lower	Upper
53	100		
52	89.1	67.4	101.0
51	38.4	30.7	46.1

Manual Integrations
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#16

Acetone

Concen: 50.583 ug/l

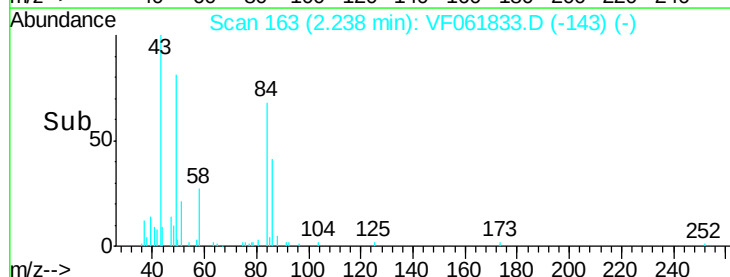
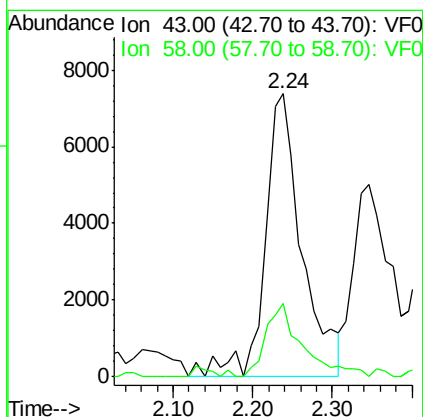
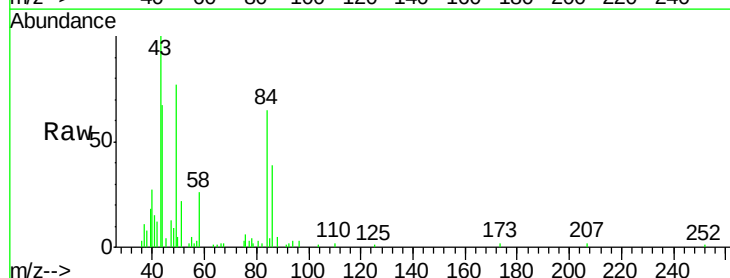
RT: 2.24 min Scan# 163

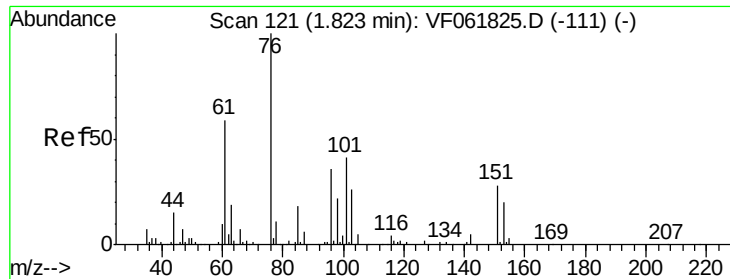
Delta R.T. 0.00 min

Lab File: VF061833.D

Acq: 4 Mar 2019 22:16

Tgt Ion:	43	Resp:	23877
Ion	Ratio	Lower	Upper
43	100		
58	26.0	20.3	30.5





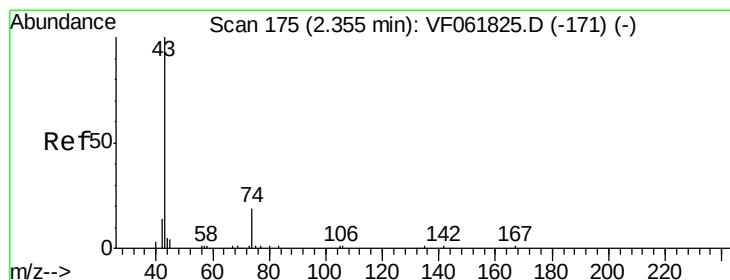
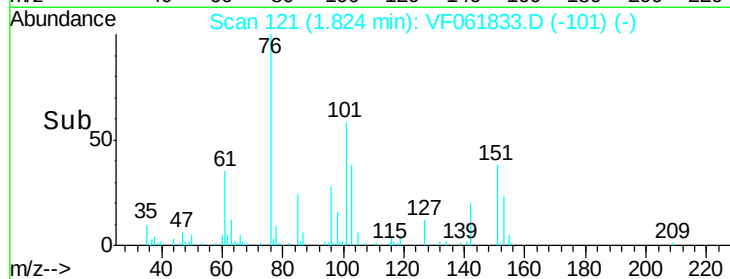
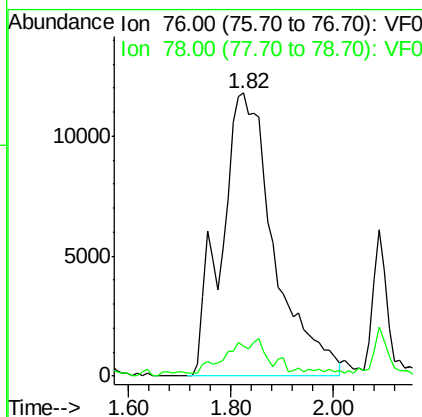
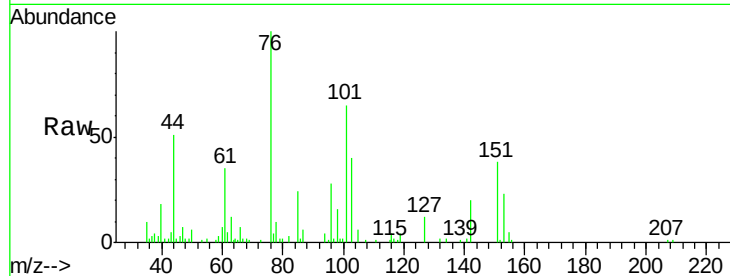
#17
Carbon Disulfide
Concen: 10.287 ug/l m
RT: 1.82 min Scan# 121
Delta R.T. 0.00 min
Lab File: VF061833.D
Acq: 4 Mar 2019 22:16

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

Tot Ion: 76 Resp: 84741
Ion Ratio Lower Upper
76 100
78 10.4 9.1 13.7

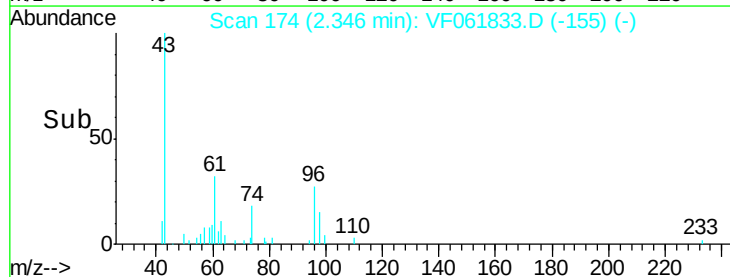
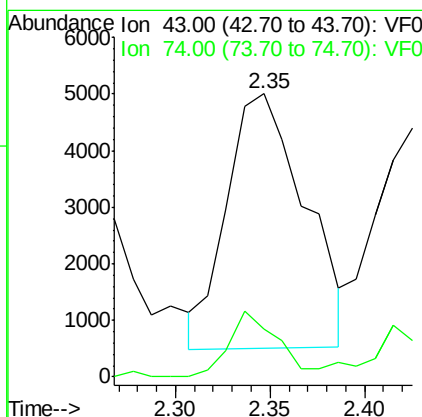
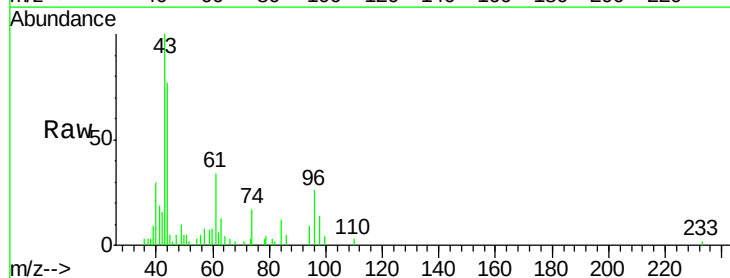
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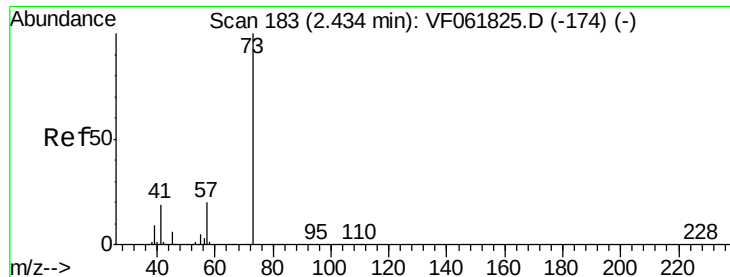
MMDadoda
3/5/2019 10:48:26 AM



#18
Methyl Acetate
Concen: 9.374 ug/l
RT: 2.35 min Scan# 174
Delta R.T. -0.01 min
Lab File: VF061833.D
Acq: 4 Mar 2019 22:16

Tgt Ion: 43 Resp: 12906
Ion Ratio Lower Upper
43 100
74 16.8 13.2 19.8





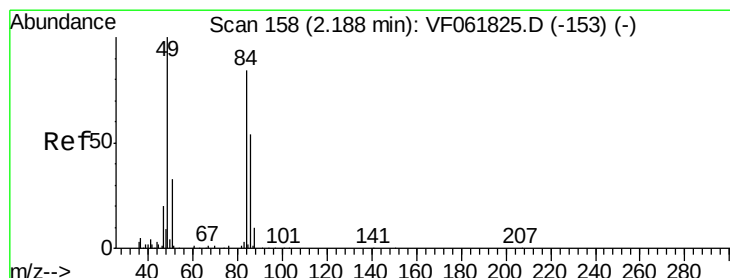
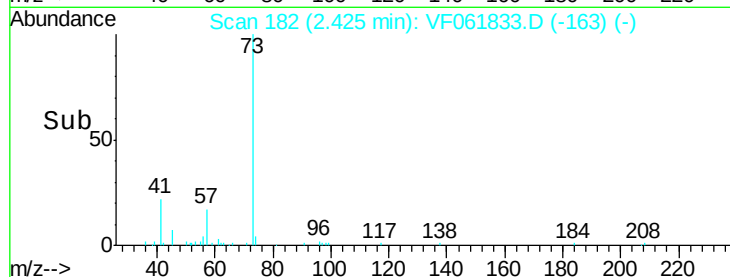
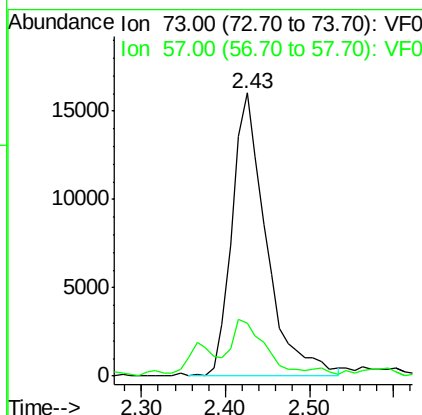
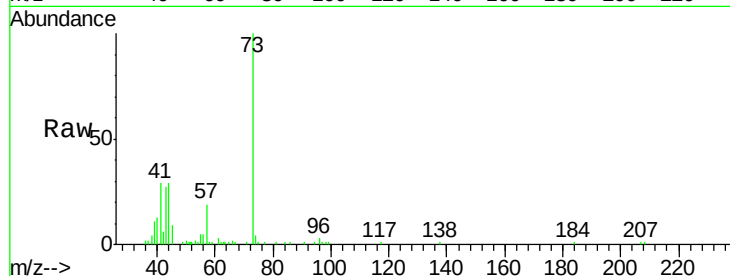
#19
Methyl tert-butyl Ether
Concen: 10.179 ug/l
RT: 2.43 min Scan# 182
Delta R.T. -0.01 min
Lab File: VF061833.D
Acq: 4 Mar 2019 22:16

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

Tot Ion	73	Resp	45569
Ion Ratio	Lower	Upper	
73	100		
57	18.7	16.1	24.1

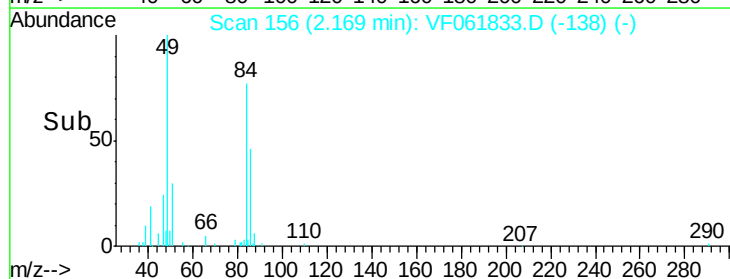
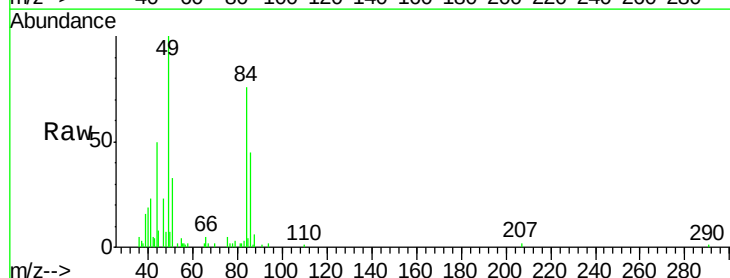
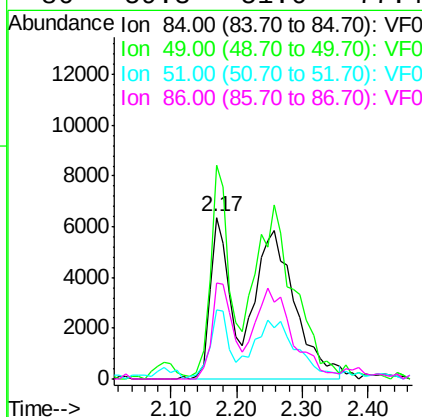
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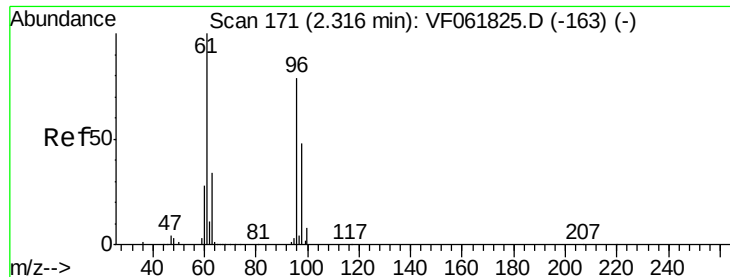
MMDadoda
3/5/2019 10:48:26 AM



#20
Methylene Chloride
Concen: 10.126 ug/l m
RT: 2.17 min Scan# 156
Delta R.T. -0.02 min
Lab File: VF061833.D
Acq: 4 Mar 2019 22:16

Tgt Ion	84	Resp	37562
Ion Ratio	Lower	Upper	
84	100		
49	132.4	96.8	145.2
51	43.1	31.8	47.6
86	59.3	51.6	77.4





#21

trans-1,2-Dichloroethene

Concen: 11.898 ug/l

RT: 2.31 min Scan# 170

Delta R.T. -0.01 min

Lab File: VF061833.D

Acq: 4 Mar 2019 22:16

Instrument :

MSVOA_F

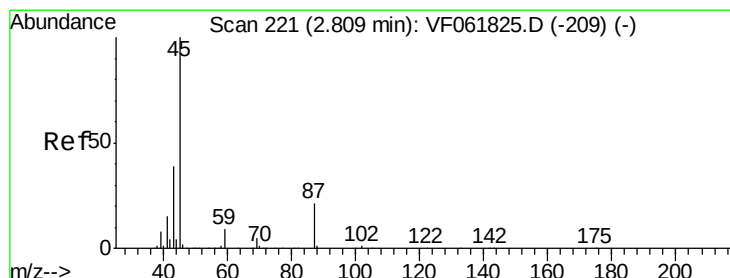
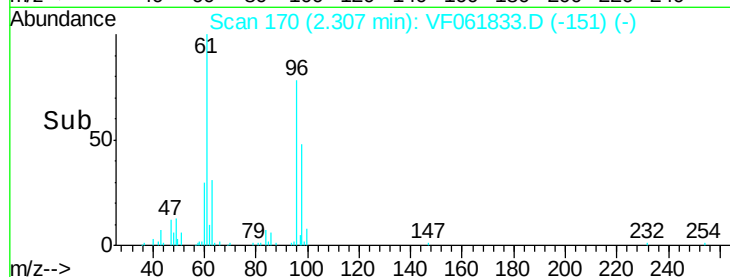
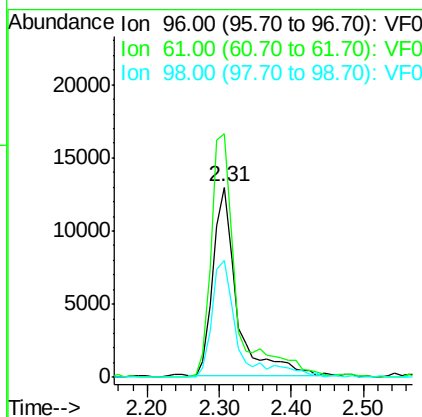
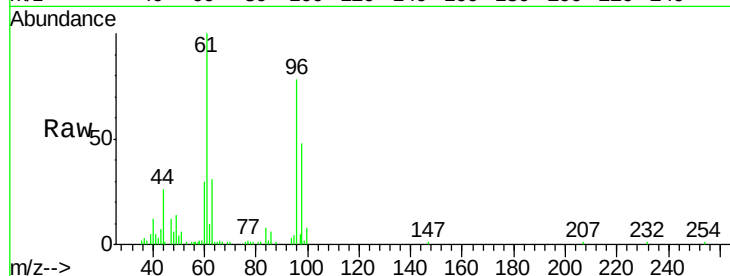
ClientSampleId :

LOQ-SOIL-02-QT1-2019

Tot Ion:	96	Resp:	29635
Ion	Ratio	Lower	Upper
96	100		
61	128.2	101.0	151.6
98	61.4	48.8	73.2

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#22

Diisopropyl ether

Concen: 10.703 ug/l

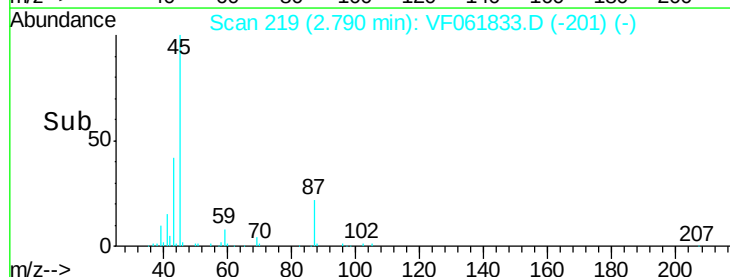
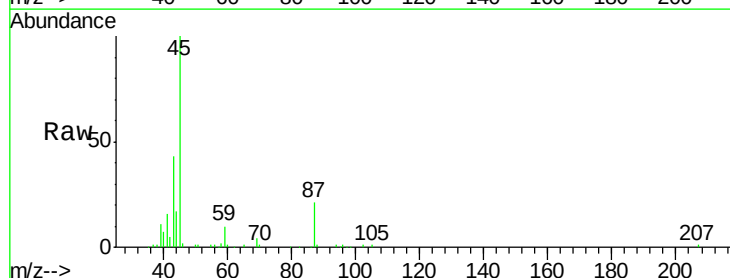
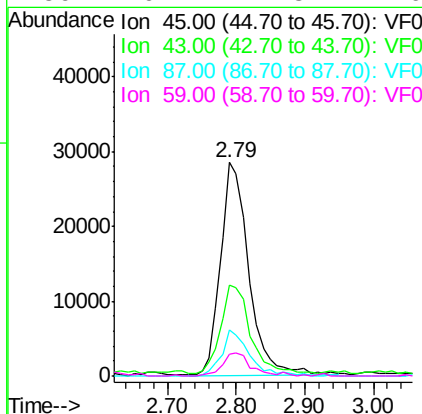
RT: 2.79 min Scan# 219

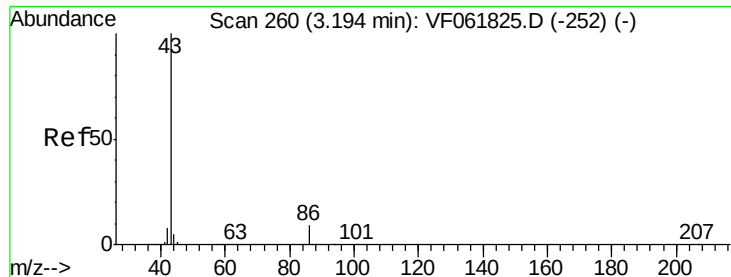
Delta R.T. -0.02 min

Lab File: VF061833.D

Acq: 4 Mar 2019 22:16

Tgt Ion:	45	Resp:	81171
Ion	Ratio	Lower	Upper
45	100		
43	42.8	31.8	47.8
87	21.4	17.1	25.7
59	10.4	7.8	11.6





#23

Vinyl Acetate

Concen: 49.019 ug/l

RT: 3.18 min Scan# 259

Delta R.T. -0.01 min

Lab File: VF061833.D

Acq: 4 Mar 2019 22:16

Instrument :

MSVOA_F

ClientSampleId :

LOQ-SOIL-02-QT1-2019

Tot Ion: 43 Resp: 166079

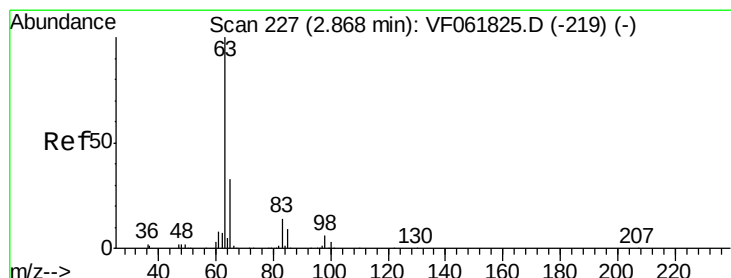
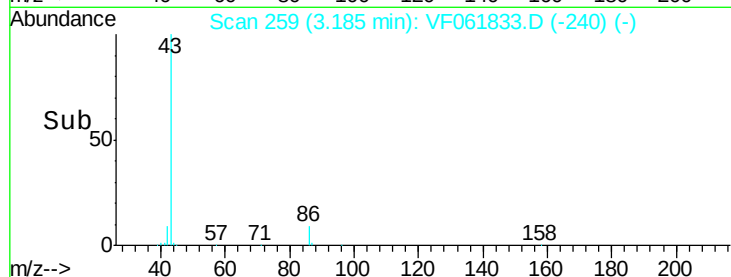
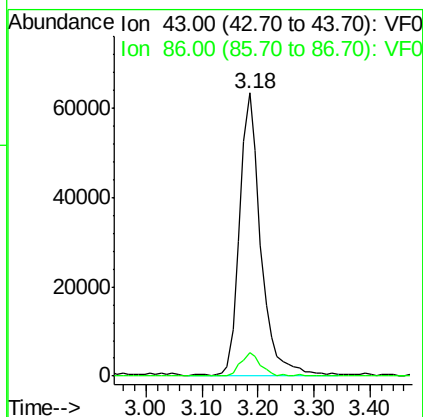
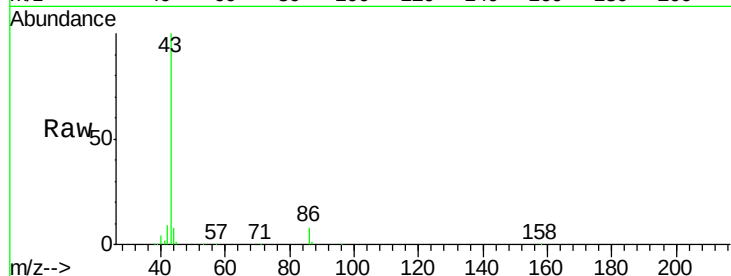
Ion Ratio Lower Upper

43 100

86 8.5 7.0 10.4

Manual Integrations
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MMDadoda
3/5/2019 10:48:26 AM



#24

1,1-Dichloroethane

Concen: 10.257 ug/l

RT: 2.87 min Scan# 227

Delta R.T. 0.00 min

Lab File: VF061833.D

Acq: 4 Mar 2019 22:16

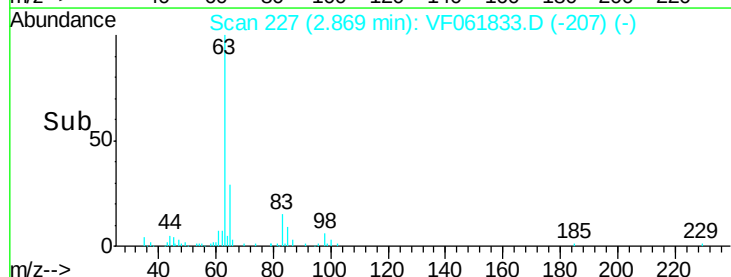
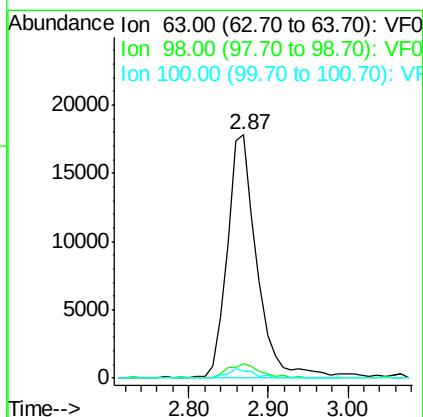
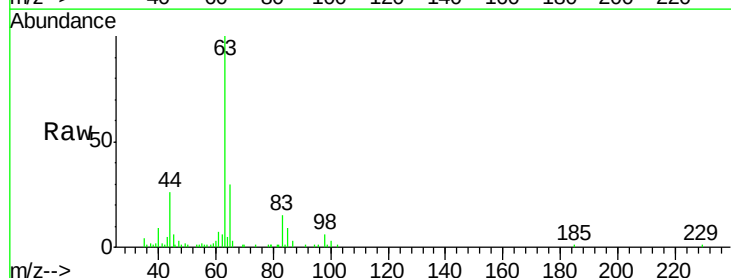
Tgt Ion: 63 Resp: 46495

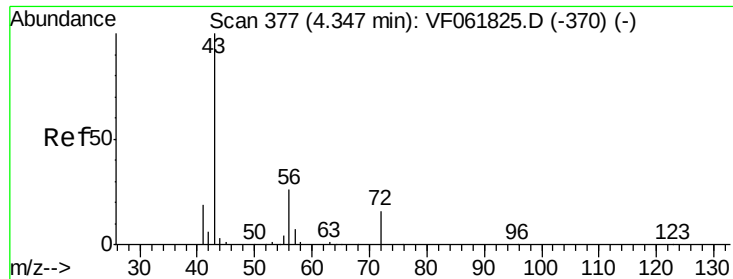
Ion Ratio Lower Upper

63 100

98 5.9 2.9 8.6

100 2.9 1.8 5.3





#25

2-Butanone

Concen: 49.377 ug/l

RT: 4.34 min Scan# 376

Delta R.T. -0.01 min

Lab File: VF061833.D

Acq: 4 Mar 2019 22:16

Instrument :

MSVOA_F

ClientSampleId :

LOQ-SOIL-02-QT1-2019

Tot Ion: 43 Resp: 47410

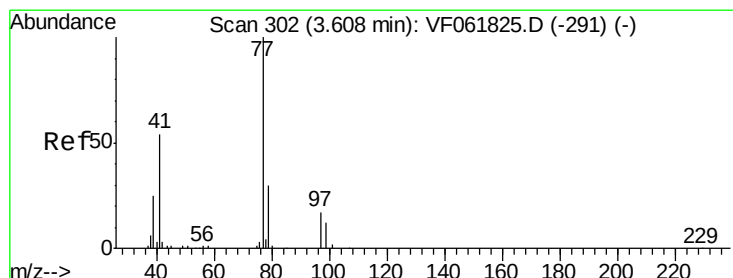
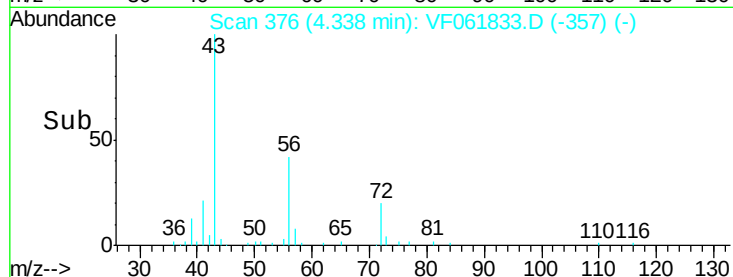
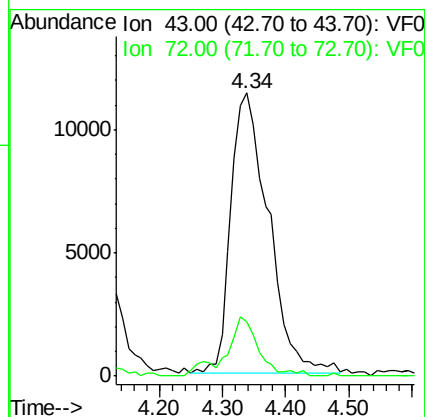
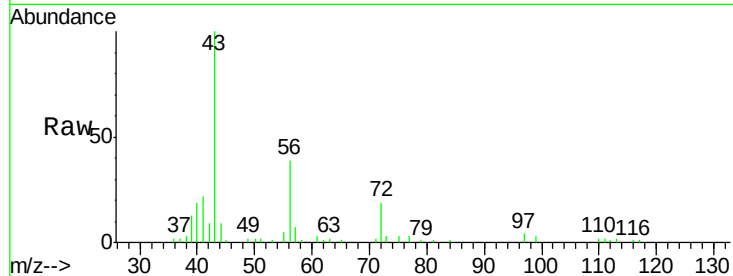
Ion Ratio Lower Upper

43 100

72 19.0 16.2 24.4

Manual Integrations
APPROVED

MMDadoda
3/5/2019 10:48:26 AM



#26

2,2-Dichloropropane

Concen: 9.039 ug/l

RT: 3.59 min Scan# 300

Delta R.T. -0.02 min

Lab File: VF061833.D

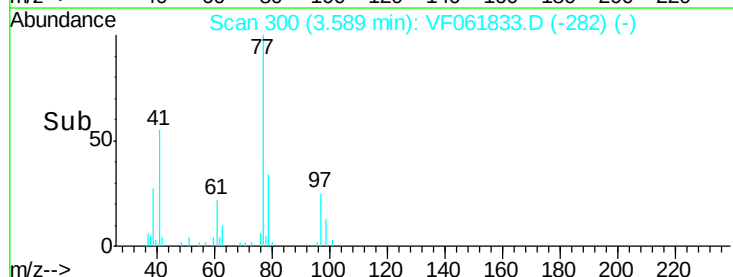
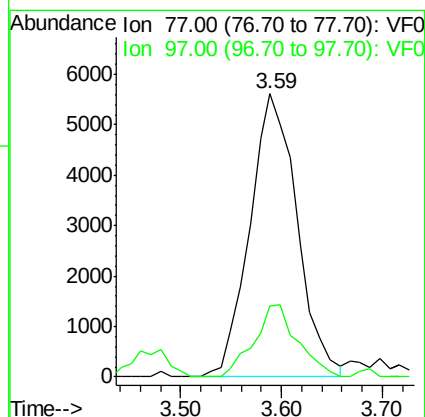
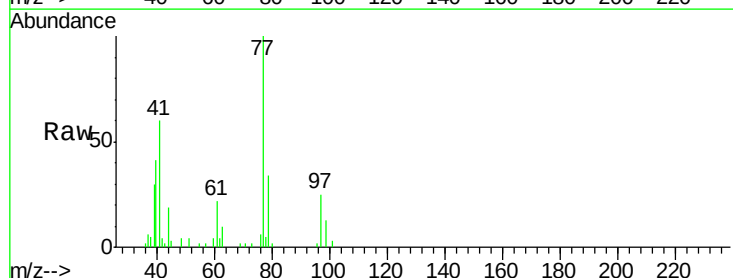
Acq: 4 Mar 2019 22:16

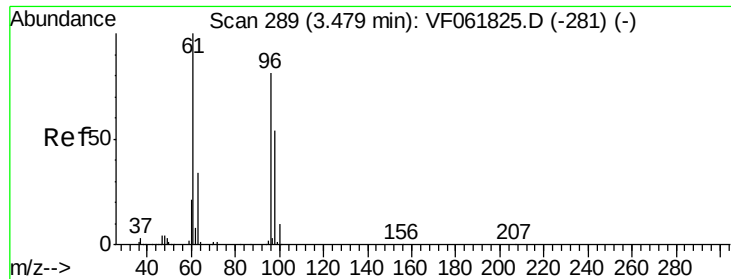
Tgt Ion: 77 Resp: 18291

Ion Ratio Lower Upper

77 100

97 25.2 10.4 31.4





#27

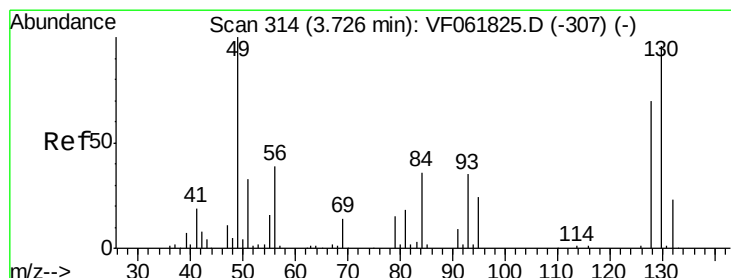
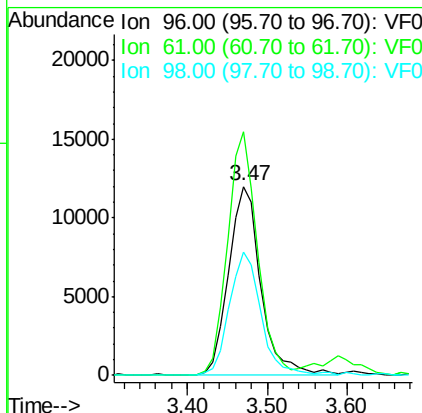
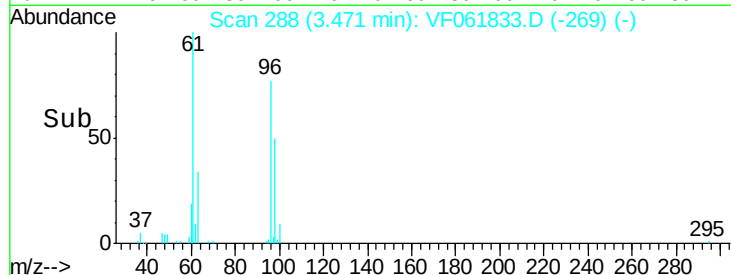
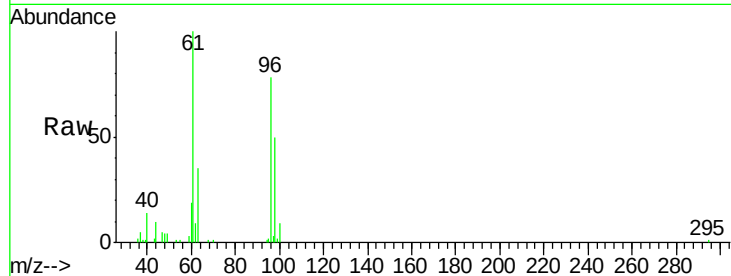
cis-1,2-Dichloroethene
Concen: 9.876 ug/l
RT: 3.47 min Scan# 288
Delta R.T. -0.01 min
Lab File: VF061833.D
Acq: 4 Mar 2019 22:16

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

Tot Ion	Ratio	Lower	Upper
96	100		
61	128.8	0.0	245.8
98	64.9	0.0	132.6

Manual Integrations
APPROVED

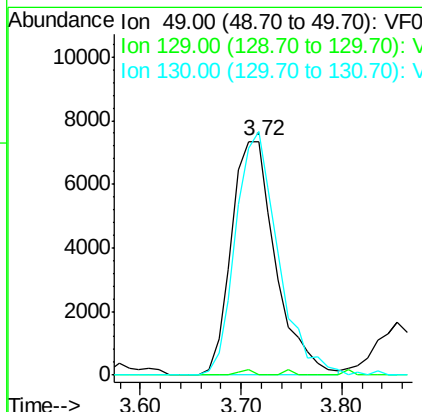
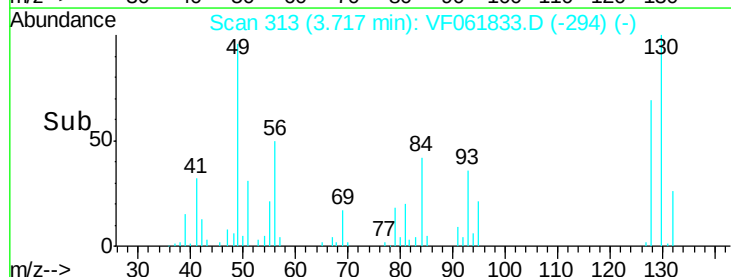
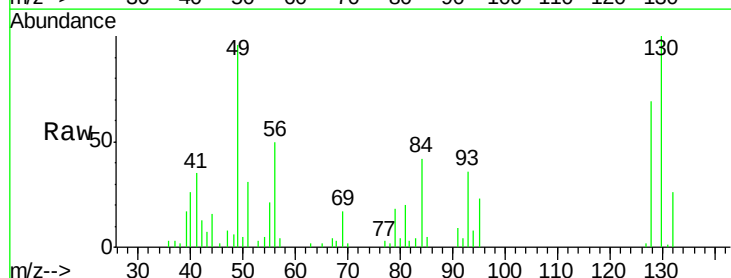
MMDadoda
3/5/2019 10:48:26 AM

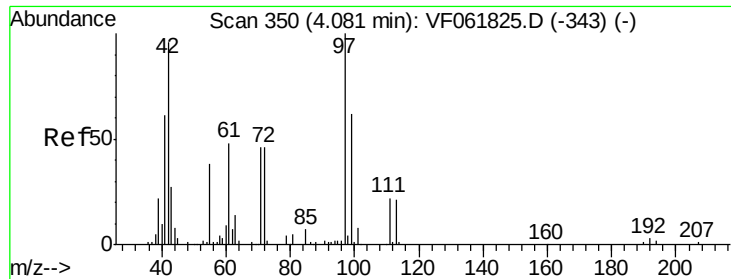


#28

Bromochloromethane
Concen: 11.337 ug/l
RT: 3.72 min Scan# 313
Delta R.T. -0.01 min
Lab File: VF061833.D
Acq: 4 Mar 2019 22:16

Tgt Ion	Ratio	Lower	Upper
49	100		
129	0.0	0.0	0.0
130	104.3	76.9	115.3





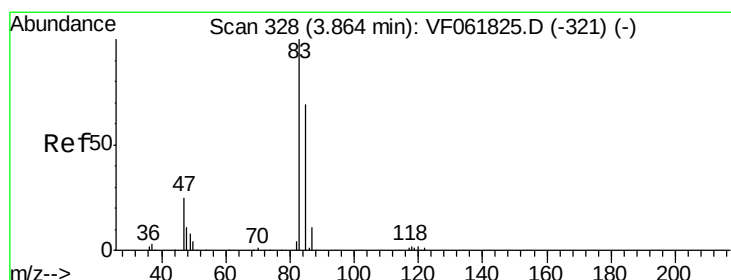
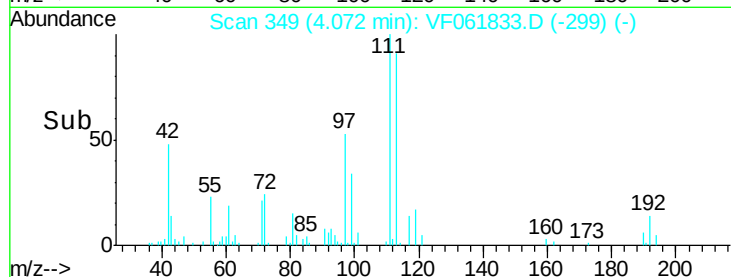
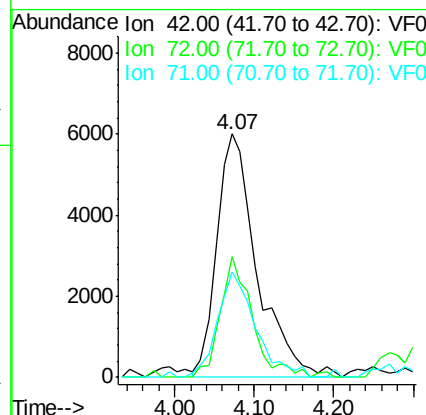
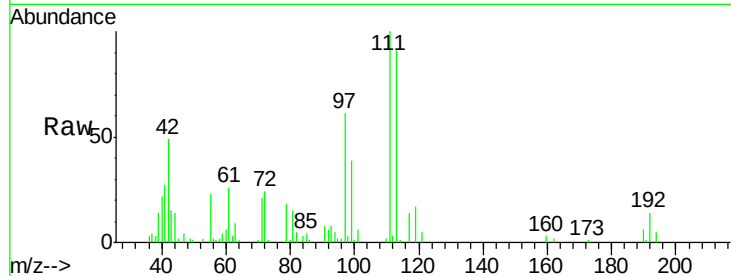
#29
Tetrahydrofuran
Concen: 51.390 ug/l
RT: 4.07 min Scan# 349
Delta R.T. -0.01 min
Lab File: VF061833.D
Acq: 4 Mar 2019 22:16

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

Tot Ion	Ratio	Lower	Upper
42	100		
72	39.5	34.4	51.6
71	40.6	34.6	52.0

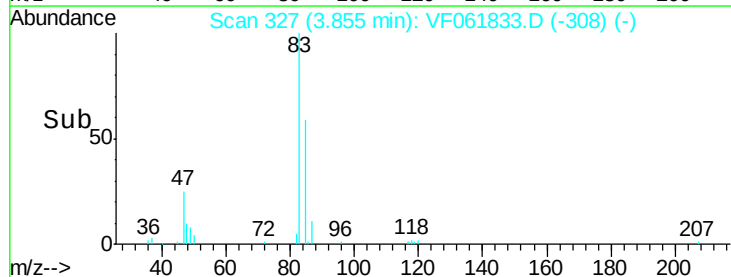
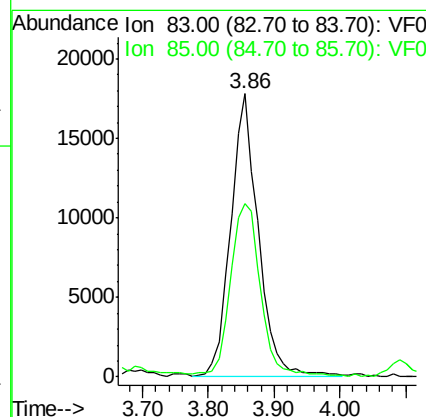
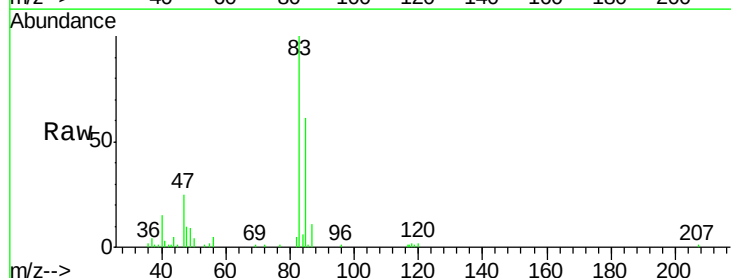
Manual Integrations
APPROVED

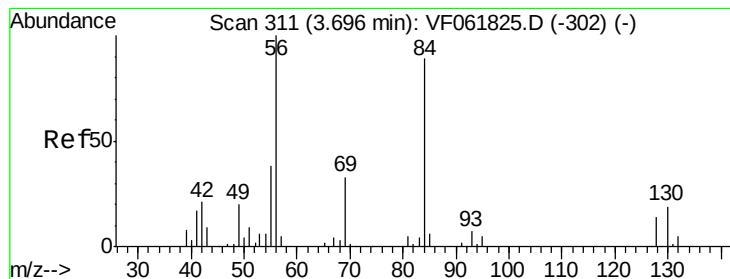
MMDadoda
3/5/2019 10:48:26 AM



#30
Chloroform
Concen: 10.156 ug/l
RT: 3.86 min Scan# 327
Delta R.T. -0.01 min
Lab File: VF061833.D
Acq: 4 Mar 2019 22:16

Tgt Ion	Ratio	Lower	Upper
83	100		
85	61.3	55.3	82.9





#31

Cyclohexane

Concen: 10.243 ug/l m

RT: 3.68 min Scan# 309

Delta R.T. -0.02 min

Lab File: VF061833.D

Acq: 4 Mar 2019 22:16

Instrument :

MSVOA_F

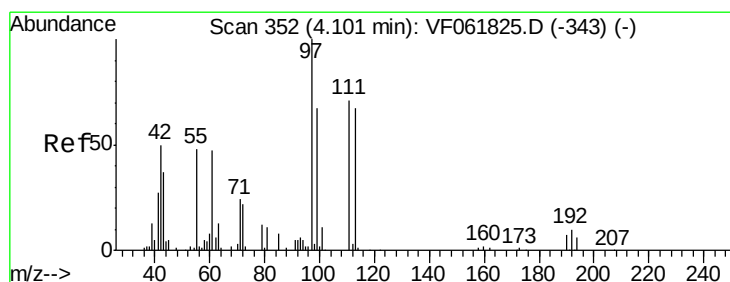
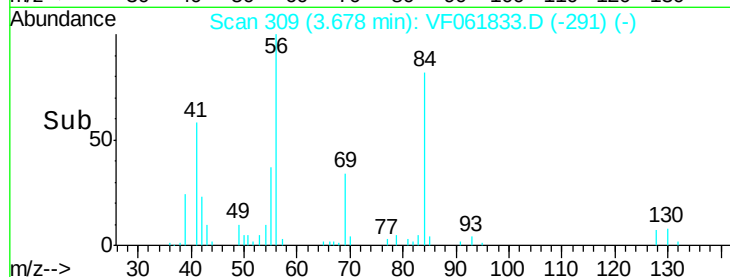
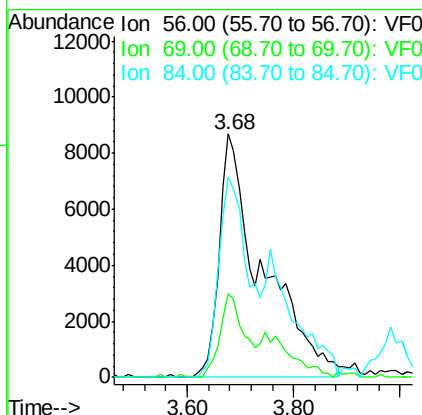
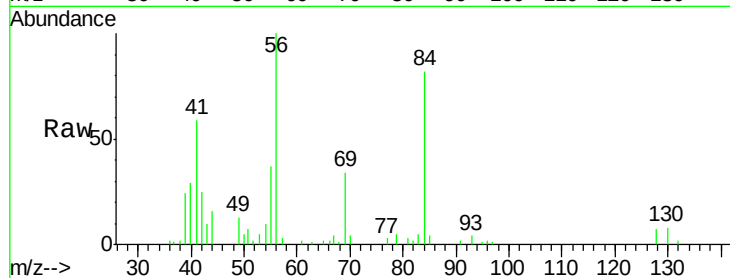
ClientSampleId :

LOQ-SOIL-02-QT1-2019

Tot Ion:	56	Resp:	48632
Ion	Ratio	Lower	Upper
56	100		
69	34.3	26.0	39.0
84	82.0	71.0	106.6

Manual Integrations
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#32

1,1,1-Trichloroethane

Concen: 10.191 ug/l

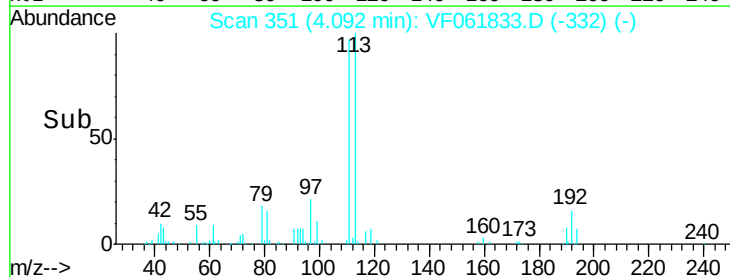
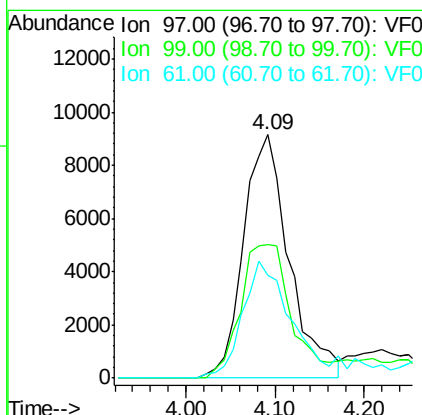
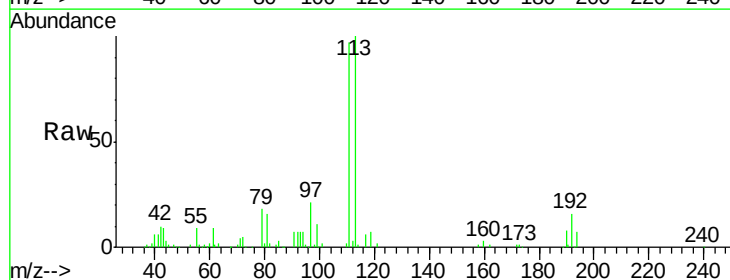
RT: 4.09 min Scan# 351

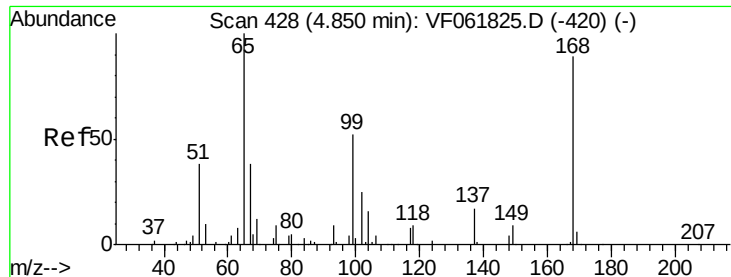
Delta R.T. -0.01 min

Lab File: VF061833.D

Acq: 4 Mar 2019 22:16

Tgt Ion:	97	Resp:	32523
Ion	Ratio	Lower	Upper
97	100		
99	54.7	53.8	80.8
61	42.0	37.9	56.9





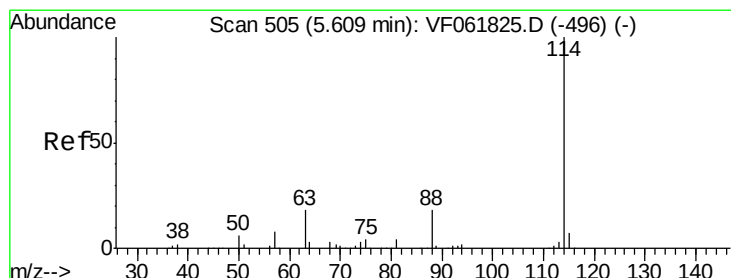
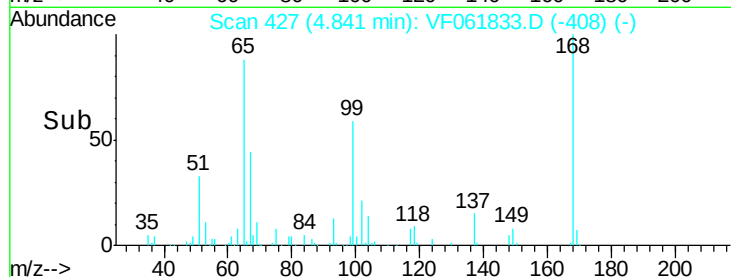
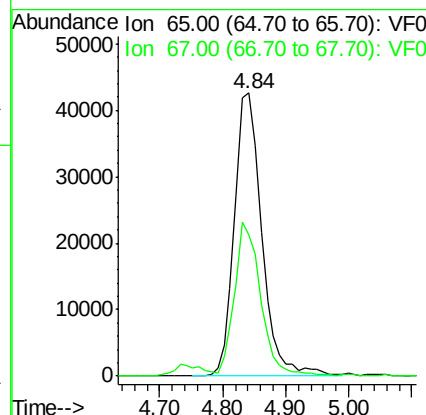
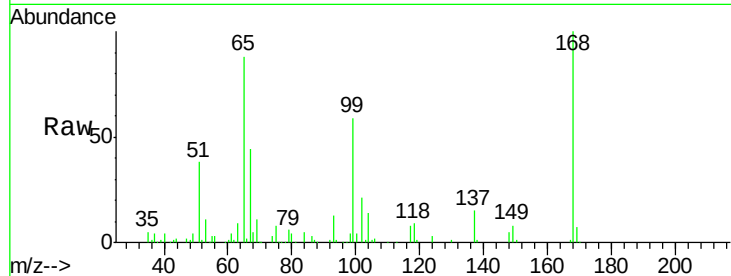
#33
 1,2-Dichloroethane-d4
 Concen: 57.012 ug/l
 RT: 4.84 min Scan# 427
 Delta R.T. -0.01 min
 Lab File: VF061833.D
 Acq: 4 Mar 2019 22:16

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

Tot Ion: 65 Resp: 128475
 Ion Ratio Lower Upper
 65 100
 67 49.9 0.0 108.6

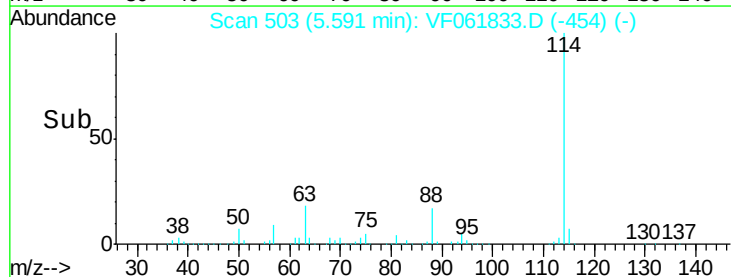
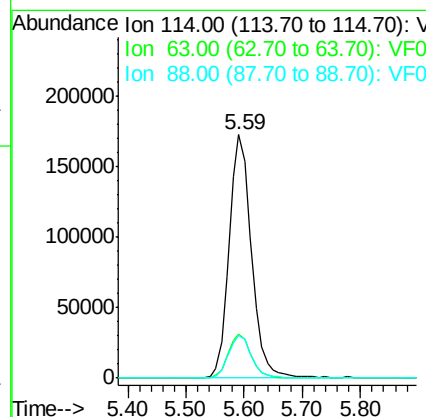
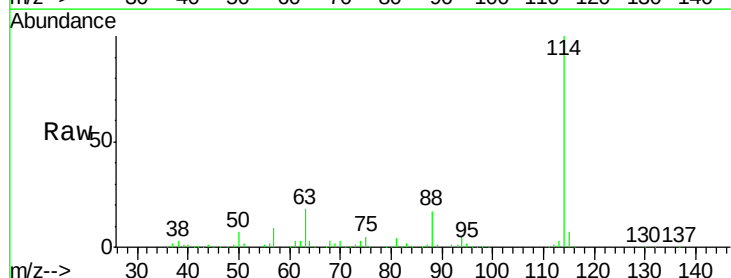
Manual Integrations
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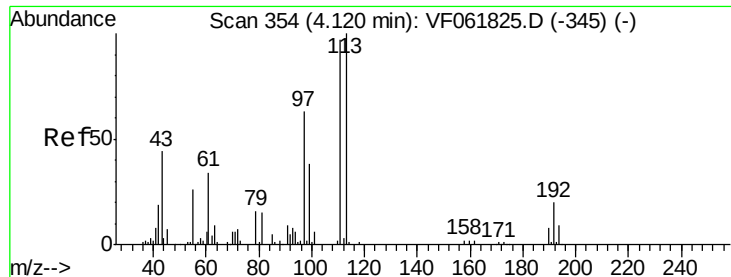
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 3/5/2019 10:48:26 AM



#34
 1,4-Difluorobenzene
 Concen: 50.000 ug/l
 RT: 5.59 min Scan# 503
 Delta R.T. -0.02 min
 Lab File: VF061833.D
 Acq: 4 Mar 2019 22:16

Tgt Ion: 114 Resp: 461572
 Ion Ratio Lower Upper
 114 100
 63 18.3 0.0 35.6
 88 17.4 0.0 35.6





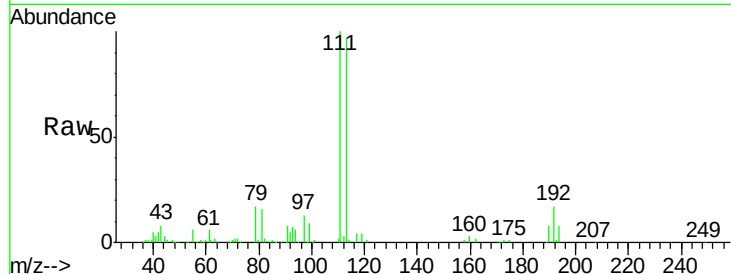
#35
Dibromofluoromethane
Concen: 56.210 ug/l
RT: 4.10 min Scan# 352
Delta R.T. -0.02 min
Lab File: VF061833.D
Acq: 4 Mar 2019 22:16

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

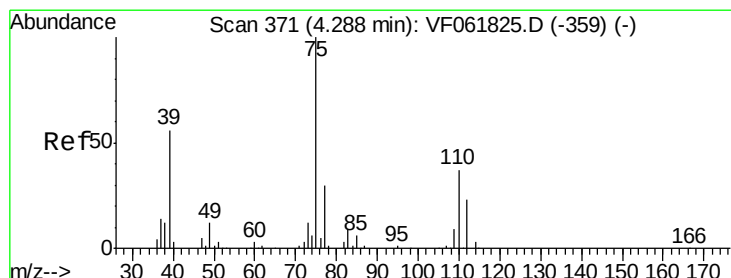
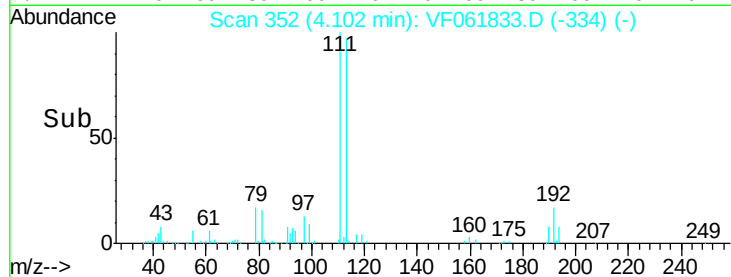
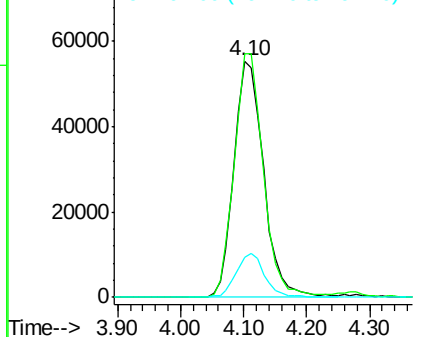
Tot Ion	Ratio	Resp	Lower	Upper
113	100	181063		
111	103.1	77.6	116.4	
192	17.7	15.9	23.9	

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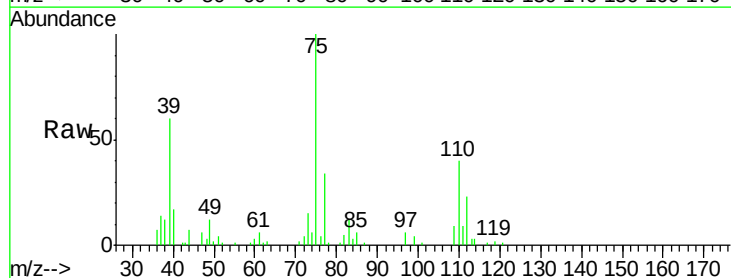


Abundance Ion 113.00 (112.70 to 113.70): V
Ion 111.00 (110.70 to 111.70): V
Ion 192.00 (191.70 to 192.70): V

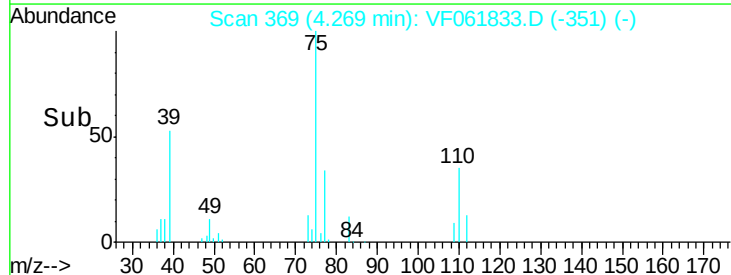
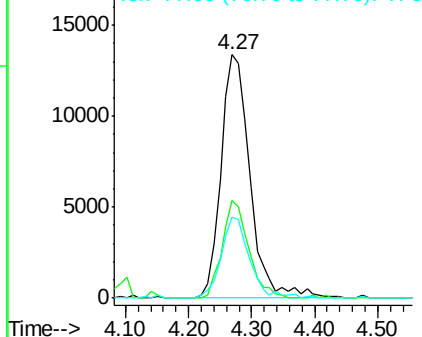


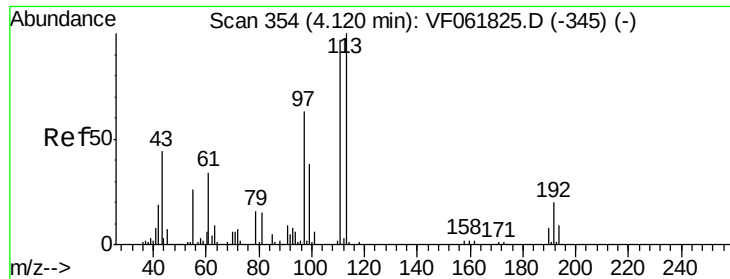
#36
1,1-Dichloropropene
Concen: 9.823 ug/l
RT: 4.27 min Scan# 369
Delta R.T. -0.02 min
Lab File: VF061833.D
Acq: 4 Mar 2019 22:16

Tgt Ion	Ratio	Resp	Lower	Upper
75	100	42829		
110	40.3	18.6	55.6	
77	33.5	24.2	36.2	



Abundance Ion 75.00 (74.70 to 75.70): VF0
Ion 110.00 (109.70 to 110.70): V
Ion 77.00 (76.70 to 77.70): VF0





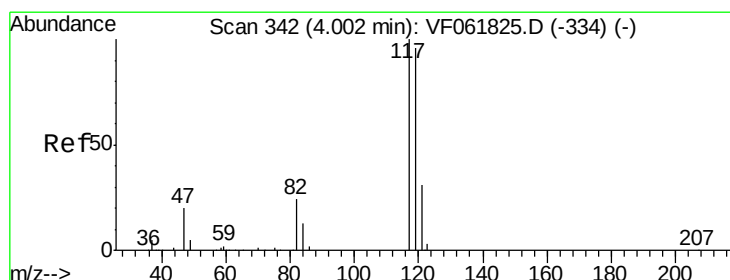
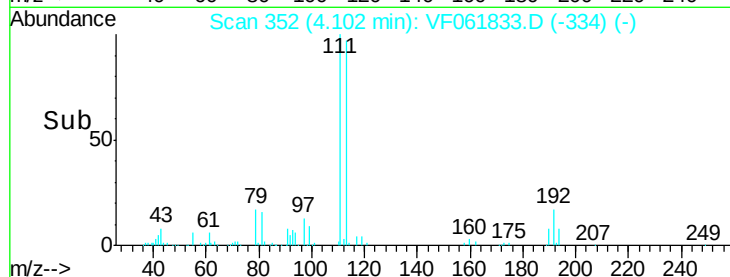
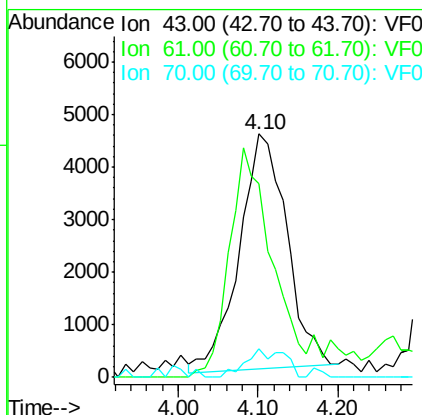
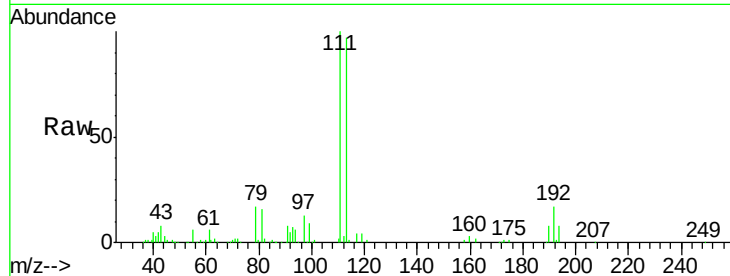
#37
Ethyl Acetate
Concen: 10.122 ug/l
RT: 4.10 min Scan# 352
Delta R.T. -0.02 min
Lab File: VF061833.D
Acq: 4 Mar 2019 22:16

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

Tot Ion	43	61	70	Ratio	100	79.5	11.6	Resp	18524	Lower	Upper
43	100										
61		79.5				60.7				91.1	
70			11.6			10.6				15.8	

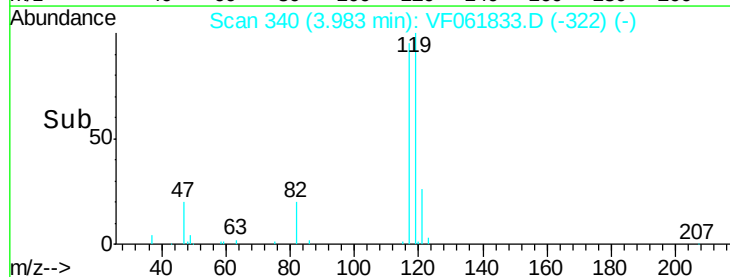
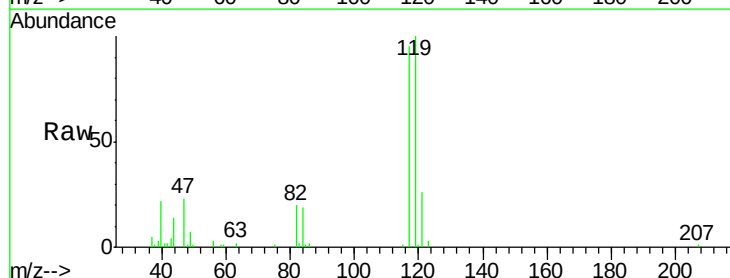
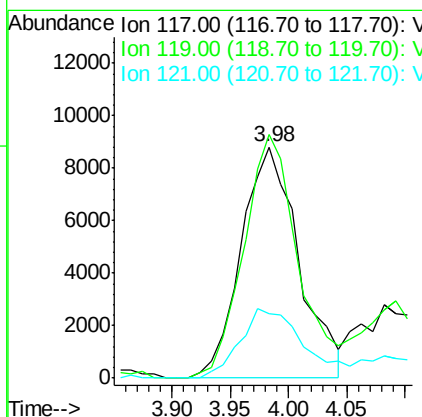
Manual Integrations
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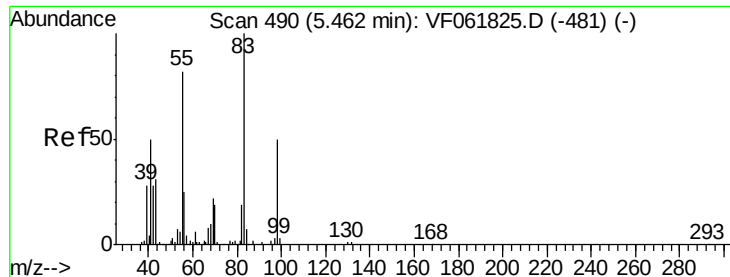
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#38
Carbon Tetrachloride
Concen: 9.784 ug/l
RT: 3.98 min Scan# 340
Delta R.T. -0.02 min
Lab File: VF061833.D
Acq: 4 Mar 2019 22:16

Tgt Ion	117	119	121	Ratio	100	105.4	27.8	Resp	30197	Lower	Upper
117	100										
119		105.4				76.6				114.8	
121			27.8			24.4				36.6	





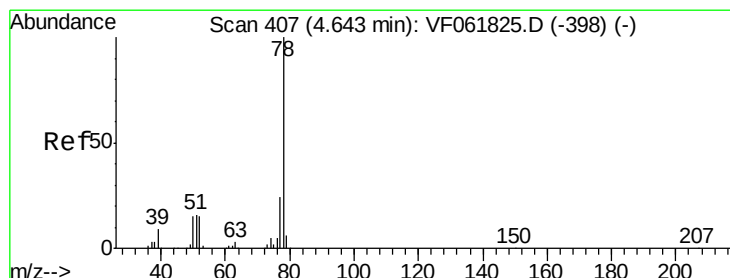
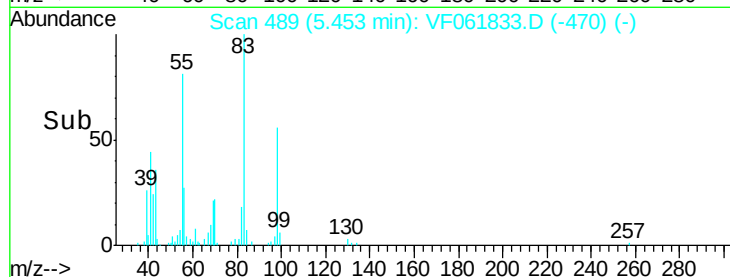
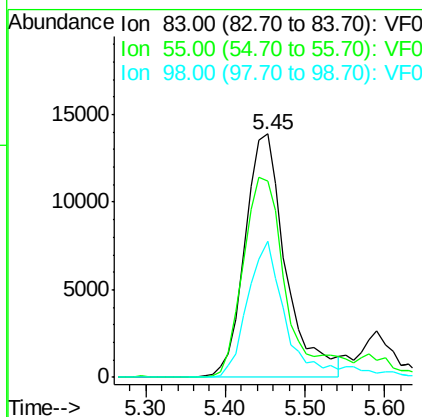
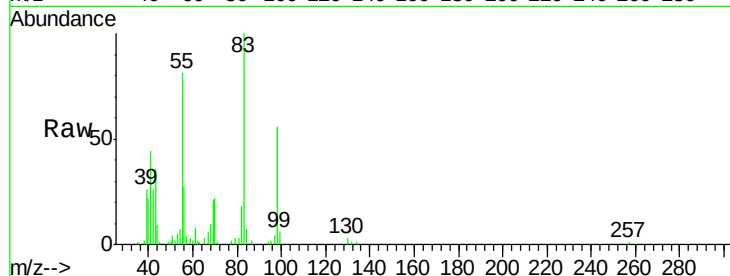
#39
Methylvlcyclohexane
Concen: 9.552 ug/l
RT: 5.45 min Scan# 489
Delta R.T. -0.01 min
Lab File: VF061833.D
Acq: 4 Mar 2019 22:16

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

Tot Ion	Ratio	Lower	Upper
83	100		
55	80.7	66.0	99.0
98	55.9	39.8	59.6

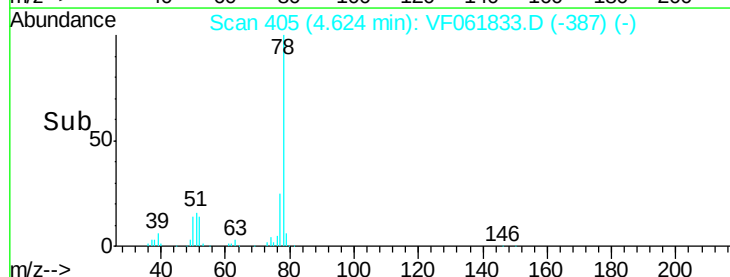
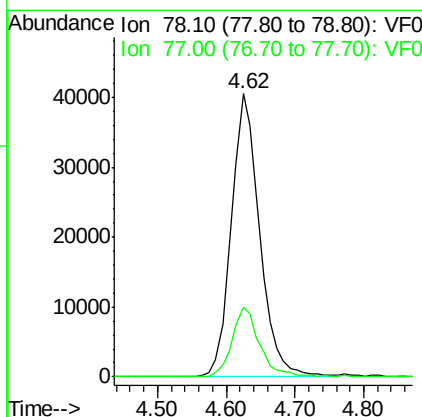
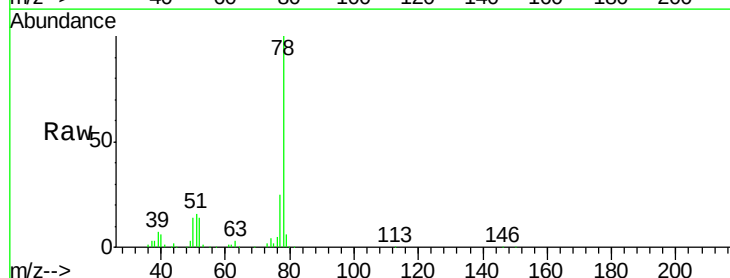
Manual Integrations
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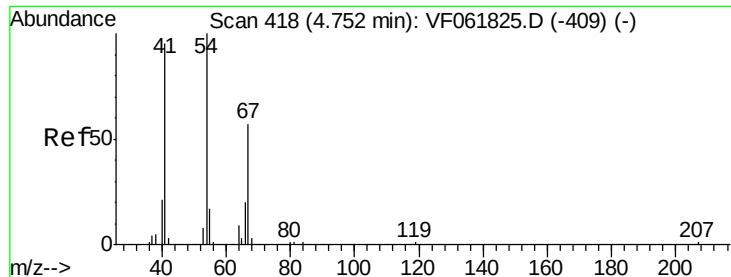
MMDadoda
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#40
Benzene
Concen: 10.140 ug/l
RT: 4.62 min Scan# 405
Delta R.T. -0.02 min
Lab File: VF061833.D
Acq: 4 Mar 2019 22:16

Tgt Ion	Ratio	Lower	Upper
78	100		
77	24.8	19.5	29.3





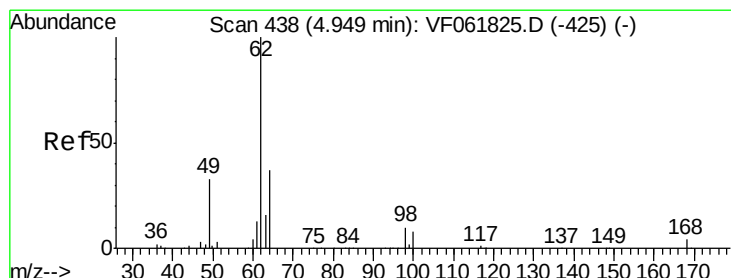
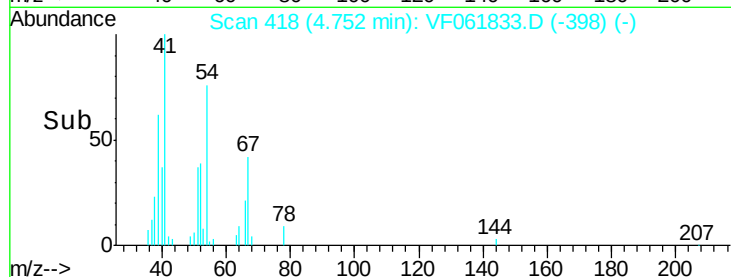
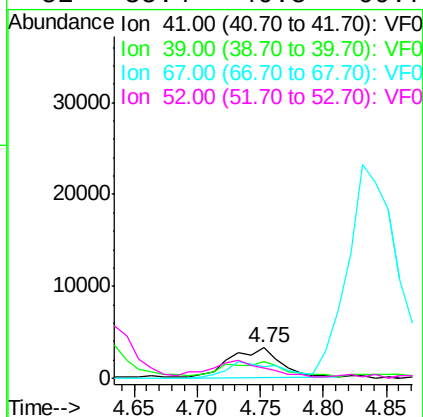
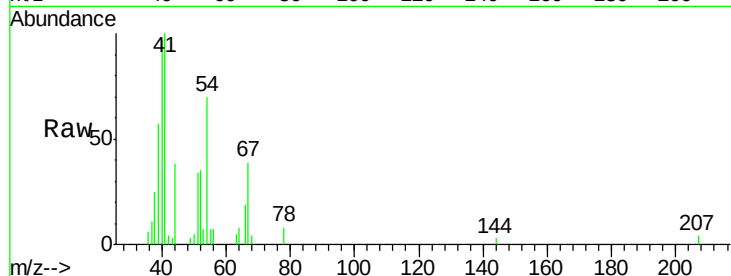
#41
Methacrylonitrile
Concen: 9.007 ug/l
RT: 4.75 min Scan# 418
Delta R.T. 0.00 min
Lab File: VF061833.D
Acq: 4 Mar 2019 22:16

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

Tot Ion	Ratio	Lower	Upper
41	100		
39	57.0	43.0	64.6
67	38.6	47.8	71.8#
52	35.4	40.5	60.7#

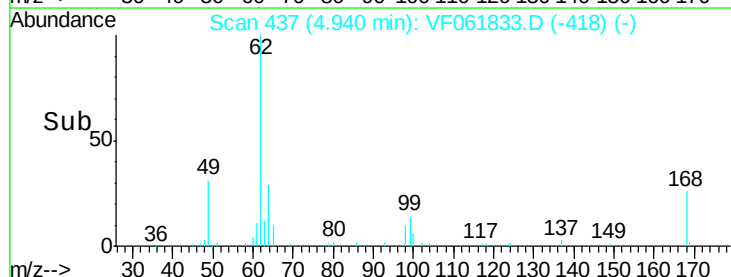
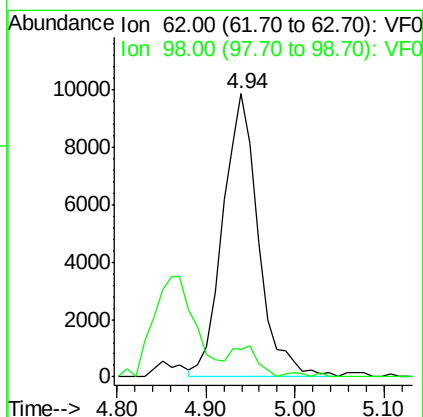
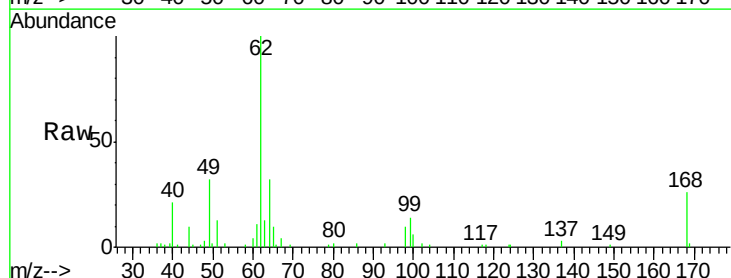
Manual Integrations
APPROVED

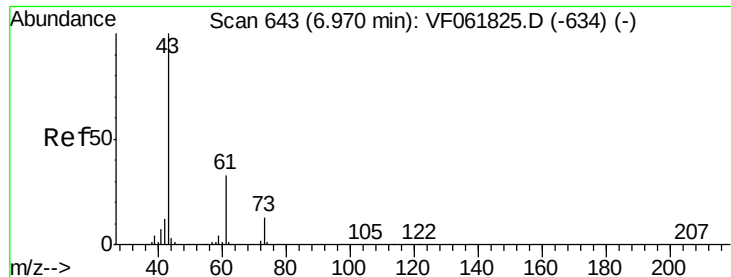
MMDadoda
3/5/2019 10:48:26 AM



#42
1,2-Dichloroethane
Concen: 9.699 ug/l
RT: 4.94 min Scan# 437
Delta R.T. -0.01 min
Lab File: VF061833.D
Acq: 4 Mar 2019 22:16

Tgt Ion	Ratio	Lower	Upper
62	100		
98	9.7	0.0	21.0





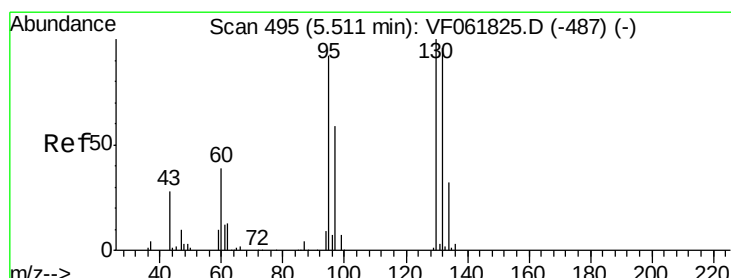
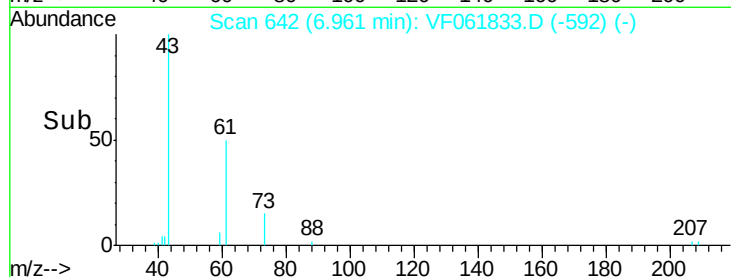
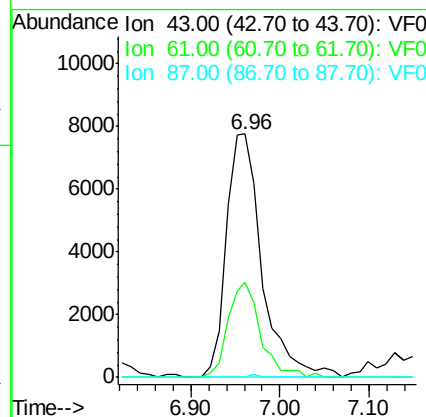
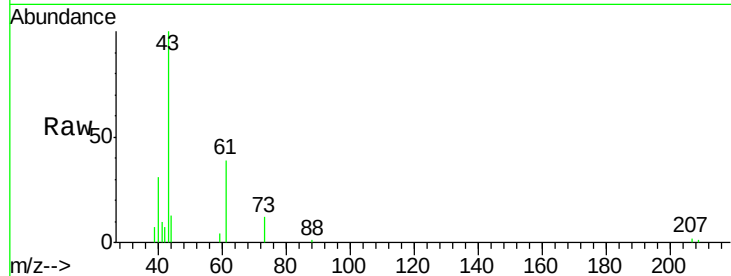
#43
Isopropyl Acetate
Concen: 9.660 ug/l
RT: 6.96 min Scan# 642
Delta R.T. -0.01 min
Lab File: VF061833.D
Acq: 4 Mar 2019 22:16

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

Tot Ion	Ratio	Lower	Upper
43	100		
61	39.1	26.1	39.1#
87	0.0	0.0	0.0

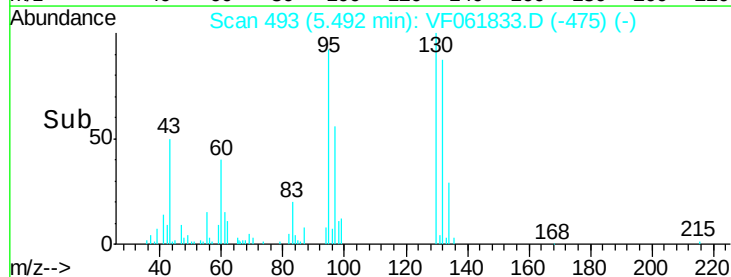
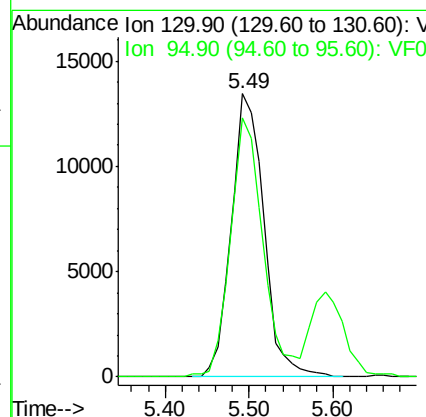
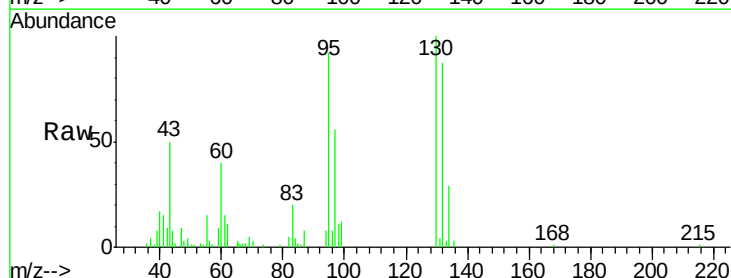
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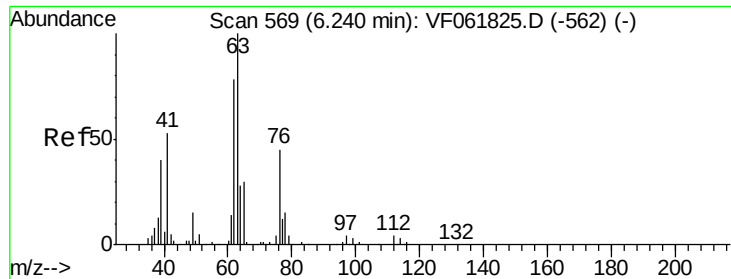
MMDadoda
3/5/2019 10:48:26 AM



#44
Trichloroethene
Concen: 10.188 ug/l
RT: 5.49 min Scan# 493
Delta R.T. -0.02 min
Lab File: VF061833.D
Acq: 4 Mar 2019 22:16

Tgt Ion	Ratio	Lower	Upper
130	100		
95	91.7	0.0	184.0





#45

1,2-Dichloropropane

Concen: 9.638 ug/l

RT: 6.23 min Scan# 568

Delta R.T. -0.01 min

Lab File: VF061833.D

Acq: 4 Mar 2019 22:16

Instrument :

MSVOA_F

ClientSampleId :

LOQ-SOIL-02-QT1-2019

Tot Ion: 63 Resp: 26119

Ion Ratio Lower Upper

63 100

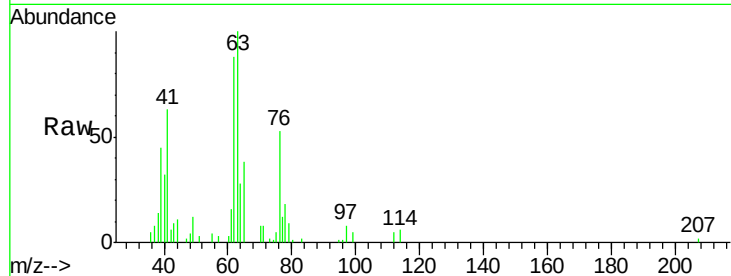
65 38.4 24.0 36.0#

Manual Integrations

APPROVED

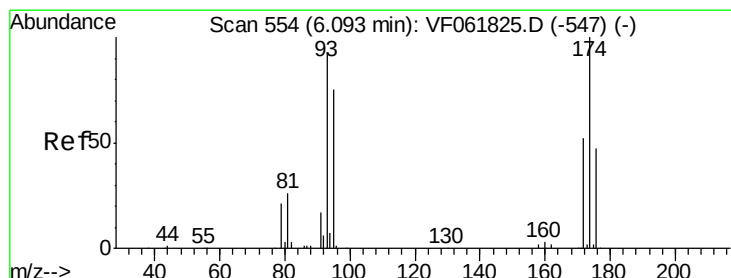
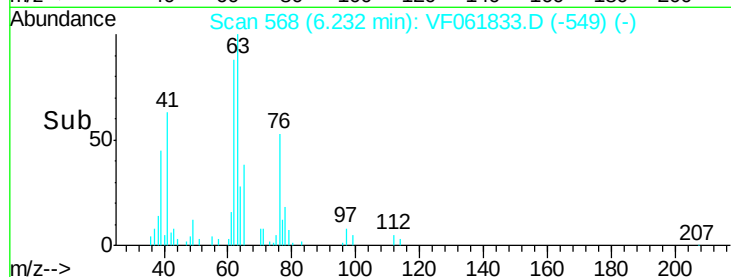
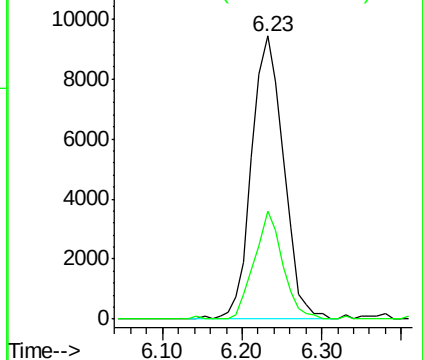
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Abundance Ion 63.00 (62.70 to 63.70): VF0

Ion 65.00 (64.70 to 65.70): VF0



#46

Dibromomethane

Concen: 9.270 ug/l

RT: 6.07 min Scan# 552

Delta R.T. -0.02 min

Lab File: VF061833.D

Acq: 4 Mar 2019 22:16

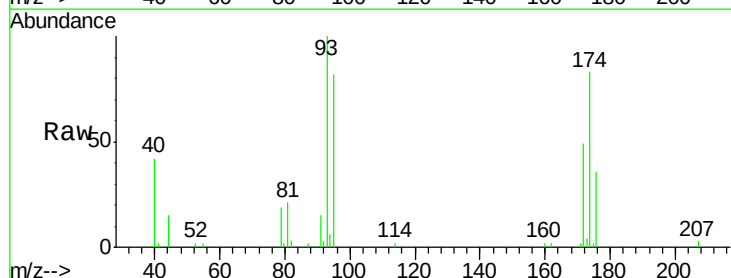
Tgt Ion: 93 Resp: 15811

Ion Ratio Lower Upper

93 100

95 82.0 64.4 96.6

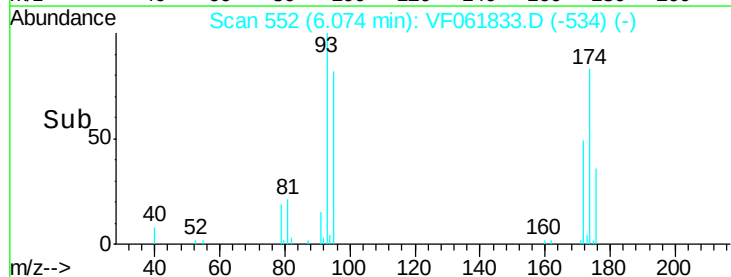
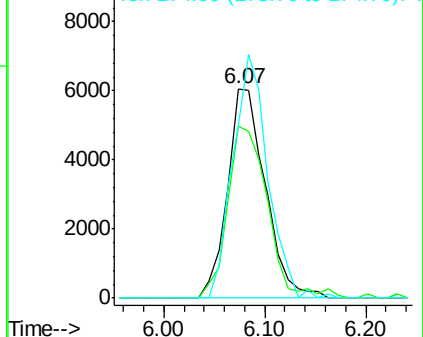
174 82.7 85.8 128.6#

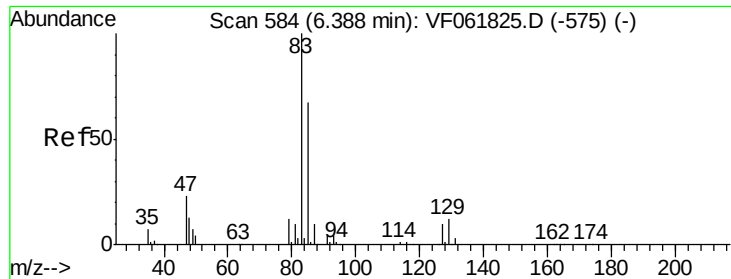


Abundance Ion 93.00 (92.70 to 93.70): VF0

Ion 95.00 (94.70 to 95.70): VF0

Ion 174.00 (173.70 to 174.70): V





#47

Bromodichloromethane

Concen: 9.695 ug/l

RT: 6.38 min Scan# 583

Delta R.T. -0.01 min

Lab File: VF061833.D

Acq: 4 Mar 2019 22:16

Instrument :

MSVOA_F

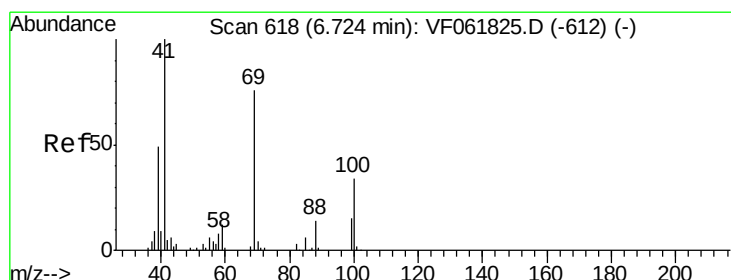
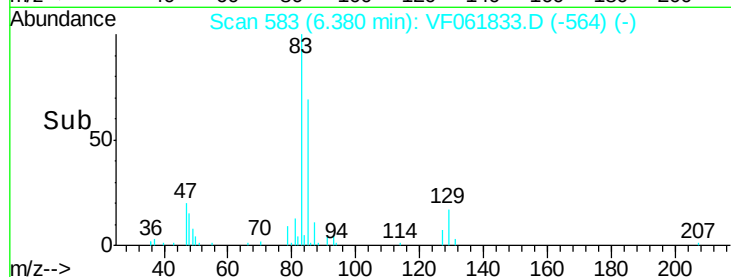
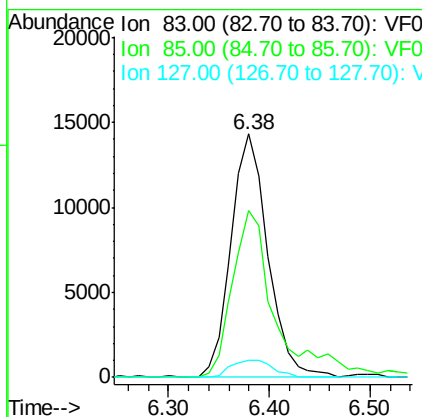
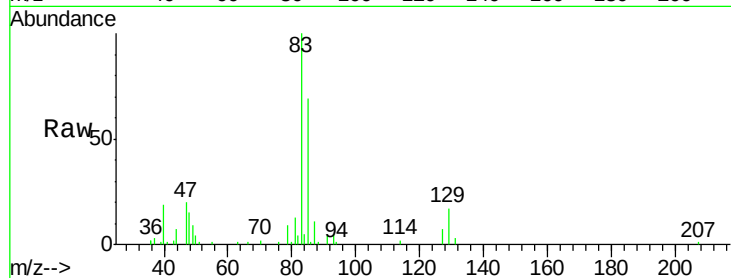
ClientSampleId :

LOQ-SOIL-02-QT1-2019

Tot Ion:	83	Resp:	36531
Ion Ratio	Lower	Upper	
83	100		
85	68.6	53.6	80.4
127	7.2	8.1	12.1#

Manual Integrations
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#48

Methyl methacrylate

Concen: 9.217 ug/l

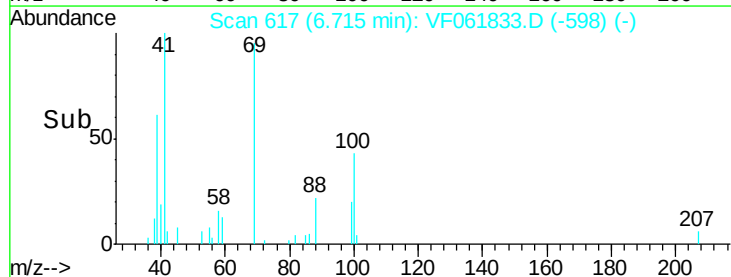
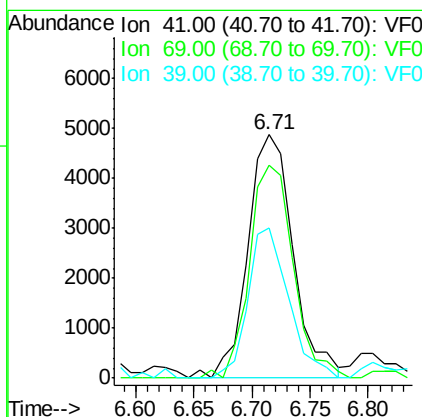
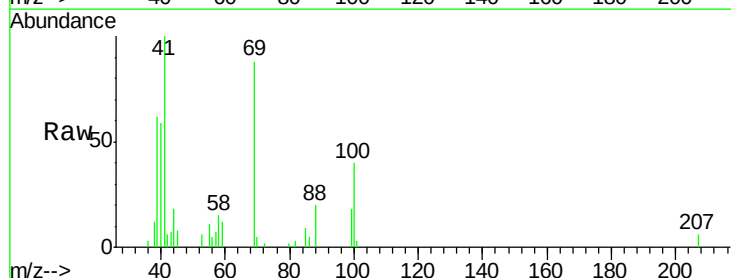
RT: 6.71 min Scan# 617

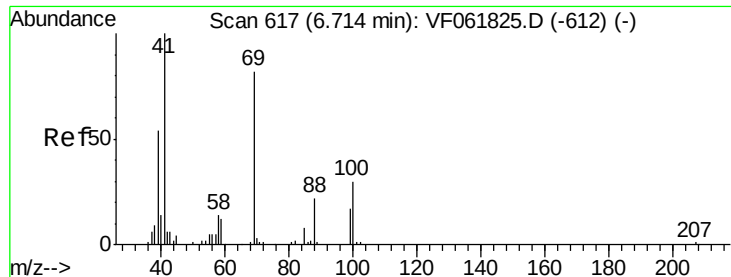
Delta R.T. -0.01 min

Lab File: VF061833.D

Acq: 4 Mar 2019 22:16

Tgt Ion:	41	Resp:	13159
Ion Ratio	Lower	Upper	
41	100		
69	87.6	60.4	90.6
39	61.7	39.7	59.5#





#49

1,4-Dioxane

Concen: 194.543 ug/l

RT: 6.71 min Scan# 617

Delta R.T. 0.00 min

Lab File: VF061833.D

Acq: 4 Mar 2019 22:16

Instrument :

MSVOA_F

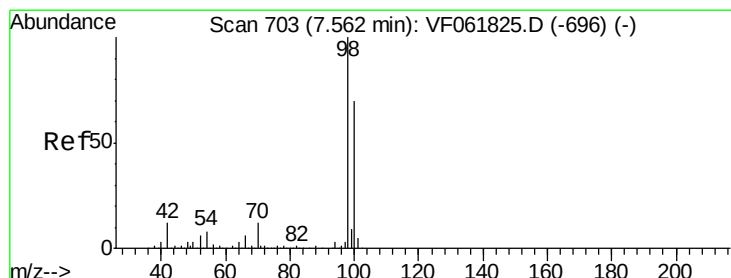
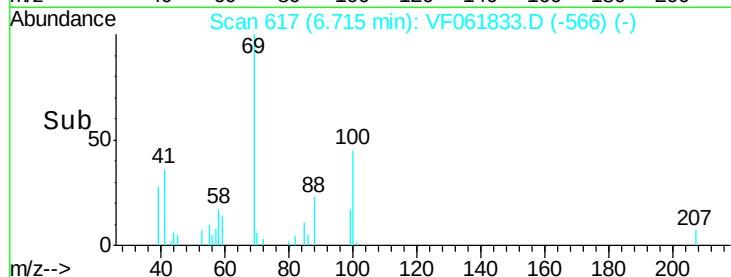
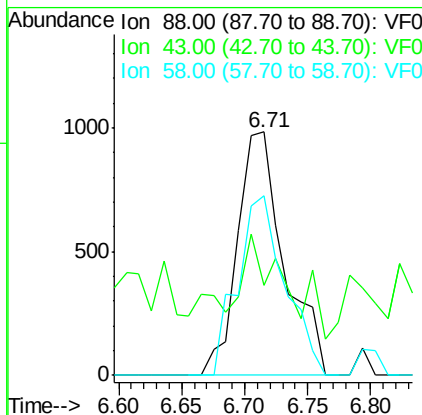
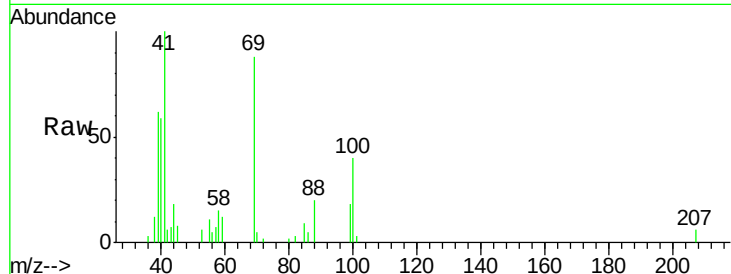
ClientSampleId :

LOQ-SOIL-02-QT1-2019

Tot Ion:	88	Resp:	2539
Ion	Ratio	Lower	Upper
88	100		
43	37.1	28.4	42.6
58	73.8	50.7	76.1

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#50

Toluene-d8

Concen: 54.627 ug/l

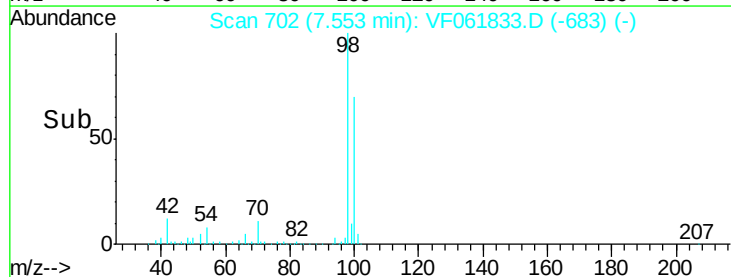
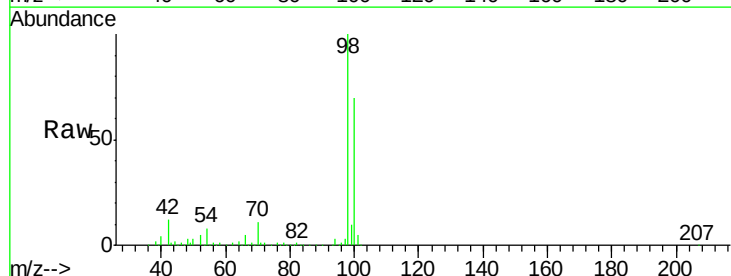
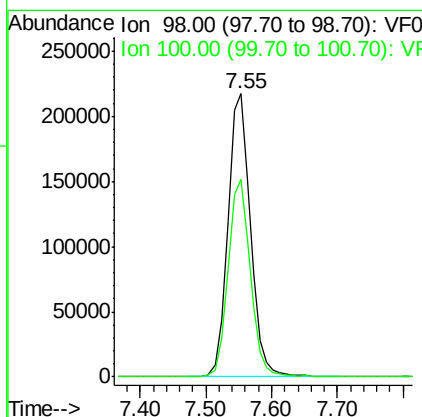
RT: 7.55 min Scan# 702

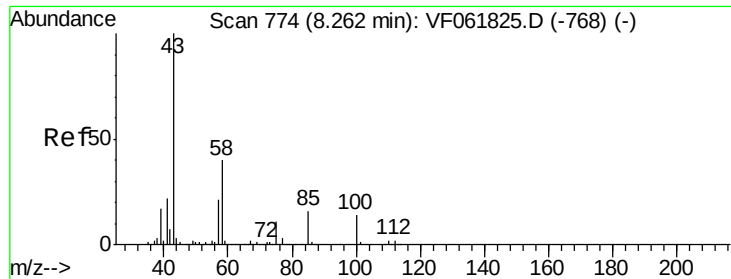
Delta R.T. -0.01 min

Lab File: VF061833.D

Acq: 4 Mar 2019 22:16

Tgt Ion:	98	Resp:	523018
Ion	Ratio	Lower	Upper
98	100		
100	69.7	56.0	84.0





#51

4-Methyl-2-Pentanone

Concen: 52.031 ug/l

RT: 8.26 min Scan# 774

Delta R.T. 0.00 min

Lab File: VF061833.D

Acq: 4 Mar 2019 22:16

Instrument :

MSVOA_F

ClientSampleId :

LOQ-SOIL-02-QT1-2019

Tot Ion: 43 Resp: 81122

Ion Ratio Lower Upper

43 100

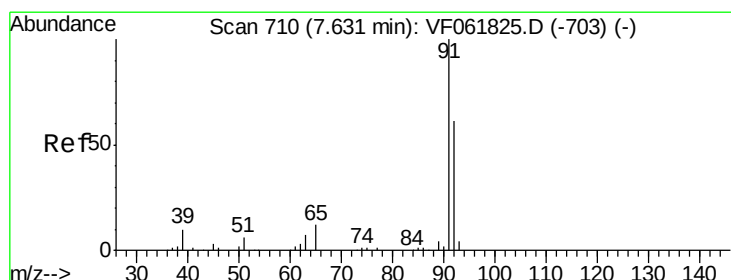
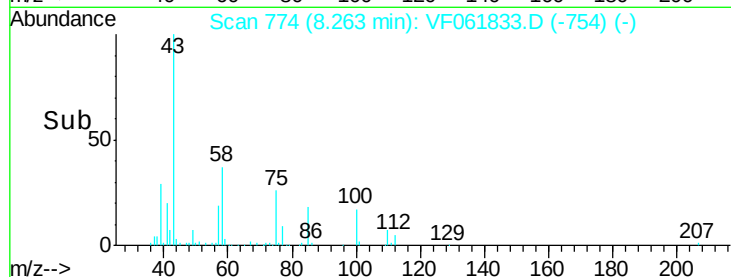
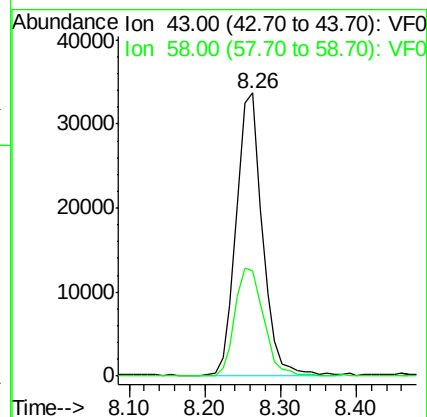
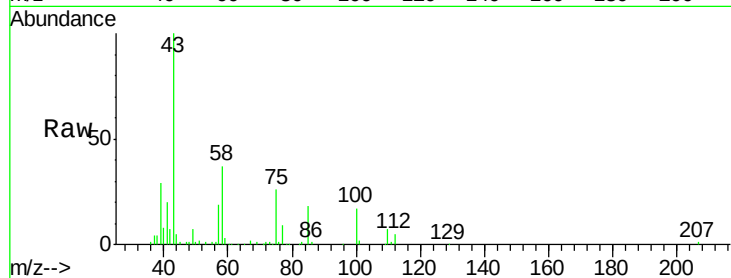
58 37.2 31.8 47.8

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#52

Toluene

Concen: 9.881 ug/l

RT: 7.62 min Scan# 709

Delta R.T. -0.01 min

Lab File: VF061833.D

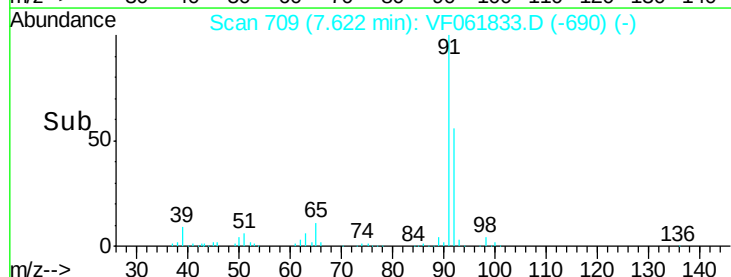
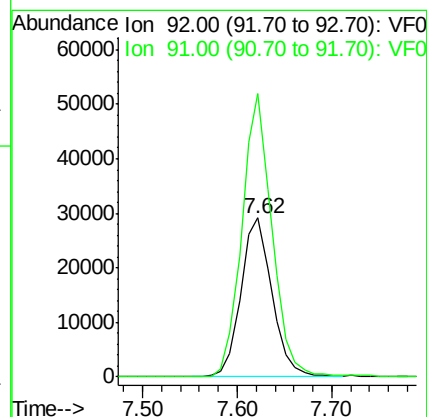
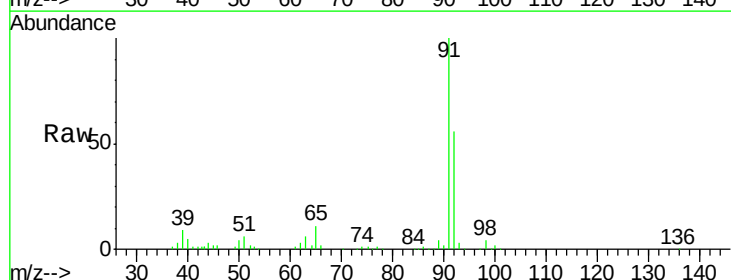
Acq: 4 Mar 2019 22:16

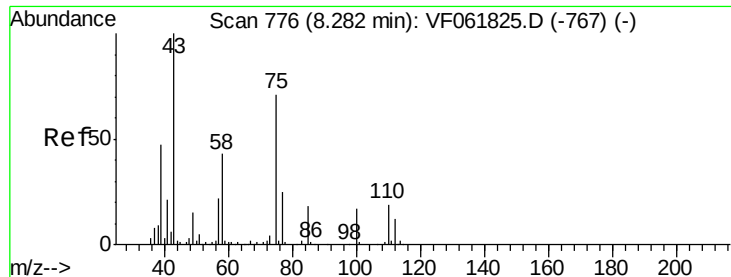
Tgt Ion: 92 Resp: 66618

Ion Ratio Lower Upper

92 100

91 178.2 132.0 198.0





#53

t-1,3-Dichloropropene

Concen: 9.729 ug/l

RT: 8.27 min Scan# 775

Delta R.T. -0.01 min

Lab File: VF061833.D

Acq: 4 Mar 2019 22:16

Instrument :

MSVOA_F

ClientSampleId :

LOQ-SOIL-02-QT1-2019

Tot Ion: 75 Resp: 30262

Ion Ratio Lower Upper

75 100

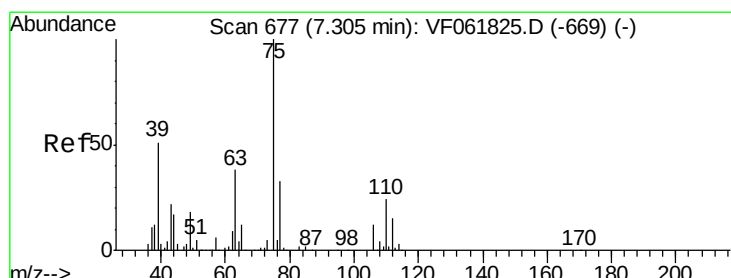
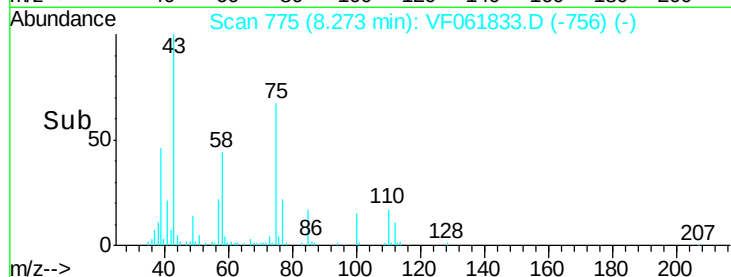
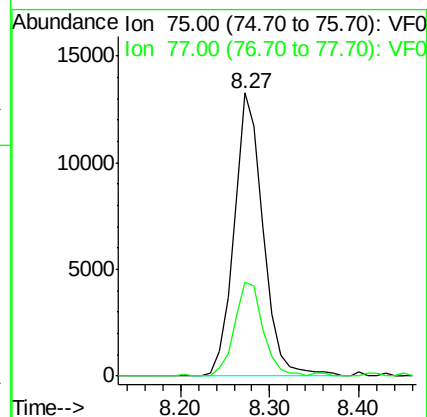
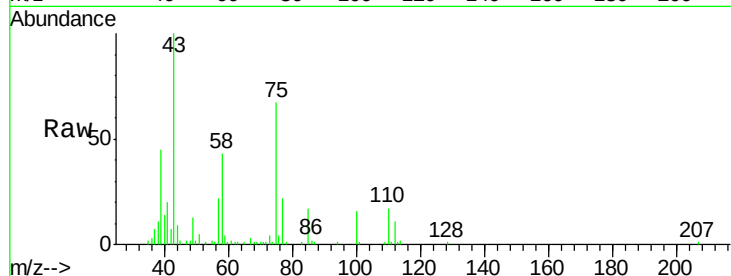
77 33.4 28.0 42.0

Manual Integrations

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#54

cis-1,3-Dichloropropene

Concen: 9.073 ug/l

RT: 7.30 min Scan# 676

Delta R.T. -0.01 min

Lab File: VF061833.D

Acq: 4 Mar 2019 22:16

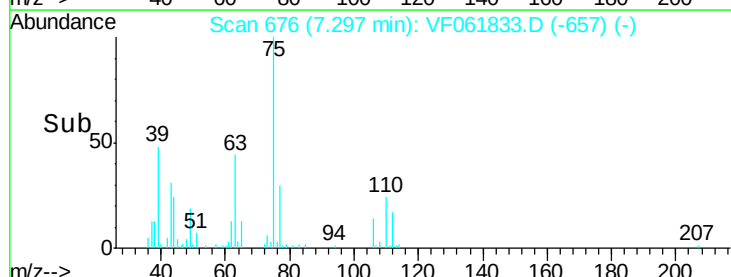
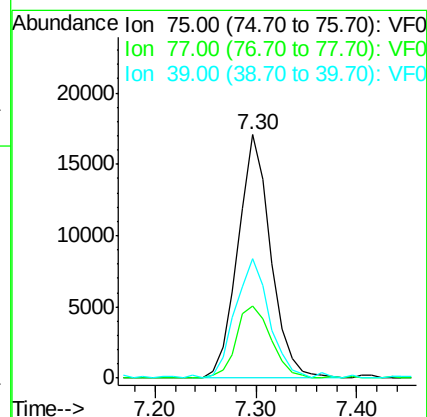
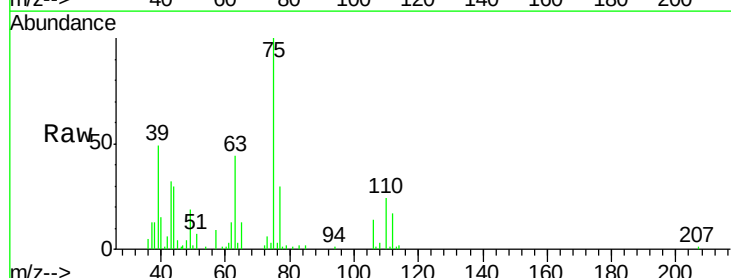
Tgt Ion: 75 Resp: 38927

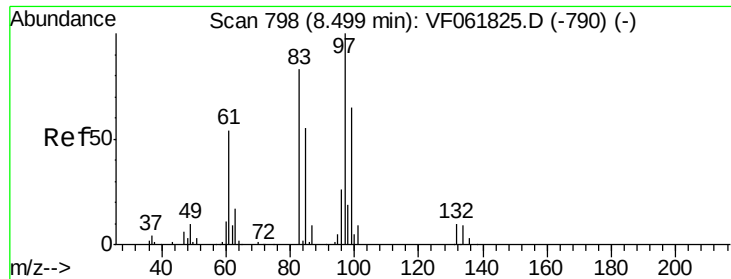
Ion Ratio Lower Upper

75 100

77 29.6 26.3 39.5

39 49.2 40.8 61.2





#55

1,1,2-Trichloroethane

Concen: 10.143 ug/l

RT: 8.49 min Scan# 797

Delta R.T. -0.01 min

Lab File: VF061833.D

Acq: 4 Mar 2019 22:16

Instrument :

MSVOA_F

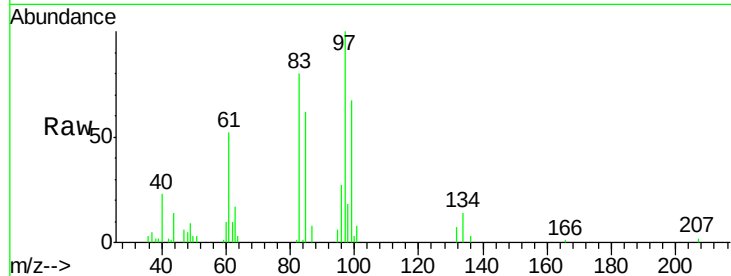
ClientSampleId :

LOQ-SOIL-02-QT1-2019

Tot Ion:	97	Resp:	19704
Ion	Ratio	Lower	Upper
97	100		
83	80.5	66.5	99.7
85	61.7	44.2	66.2
99	66.5	51.8	77.6

Manual Integrations
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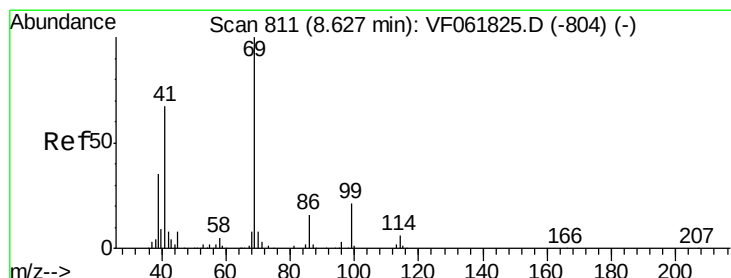
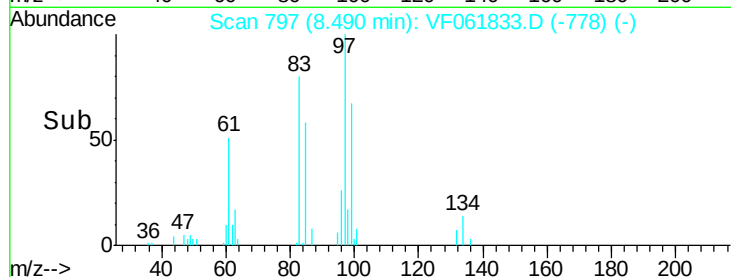
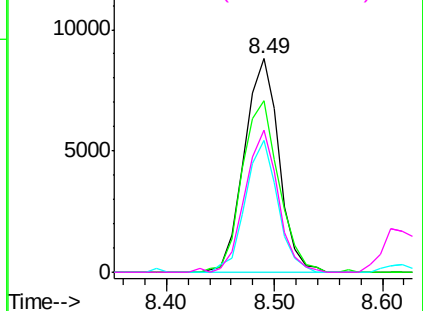


Abundance Ion 97.00 (96.70 to 97.70): VF0

Ion 82.95 (82.65 to 83.65): VF0

Ion 84.95 (84.65 to 85.65): VF0

Ion 98.95 (98.65 to 99.65): VF0



#56

Ethyl methacrylate

Concen: 9.863 ug/l

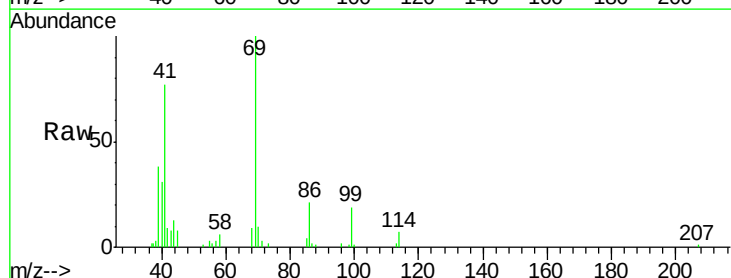
RT: 8.62 min Scan# 810

Delta R.T. -0.01 min

Lab File: VF061833.D

Acq: 4 Mar 2019 22:16

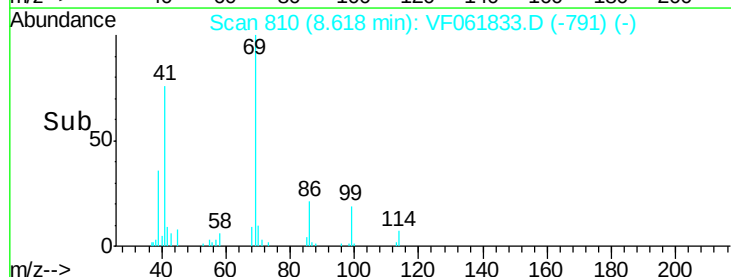
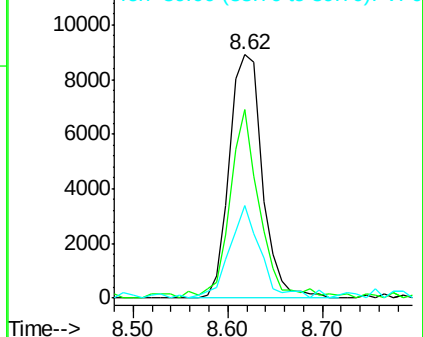
Tgt Ion:	69	Resp:	21592
Ion	Ratio	Lower	Upper
69	100		
41	77.4	53.9	80.9
39	38.0	28.3	42.5

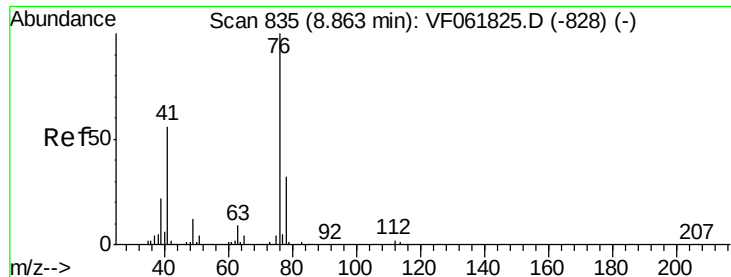


Abundance Ion 69.00 (68.70 to 69.70): VF0

Ion 41.00 (40.70 to 41.70): VF0

Ion 39.00 (38.70 to 39.70): VF0





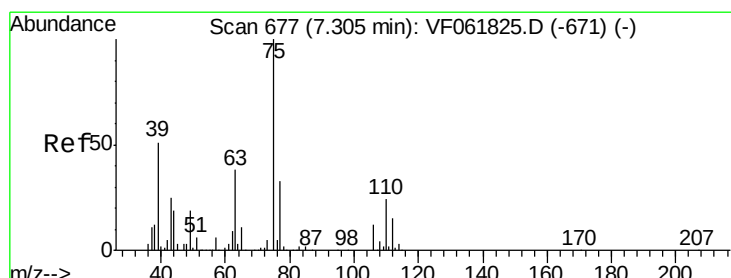
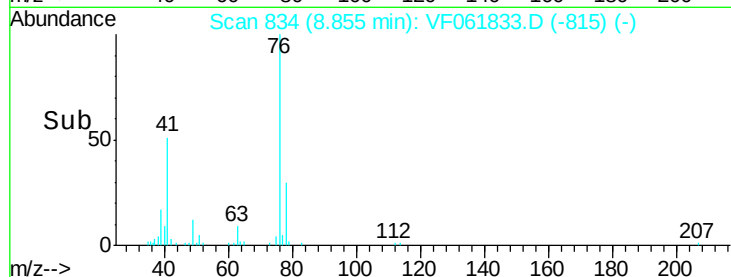
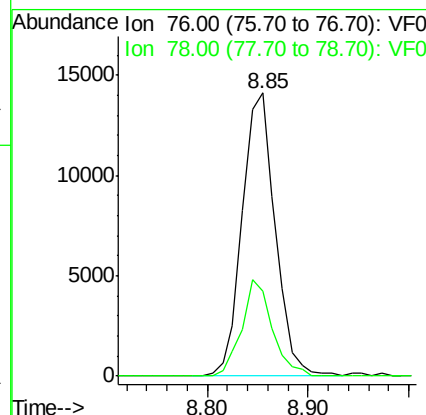
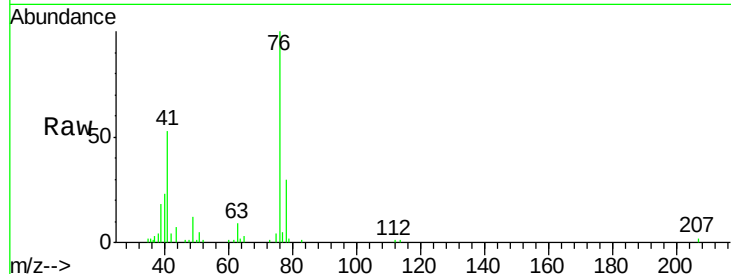
#57
 1,3-Dichloropropane
 Concen: 10.153 ug/l
 RT: 8.85 min Scan# 834
 Delta R.T. -0.01 min
 Lab File: VF061833.D
 Acq: 4 Mar 2019 22:16

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

Tot Ion: 76 Resp: 32255
 Ion Ratio Lower Upper
 76 100
 78 30.2 25.4 38.2

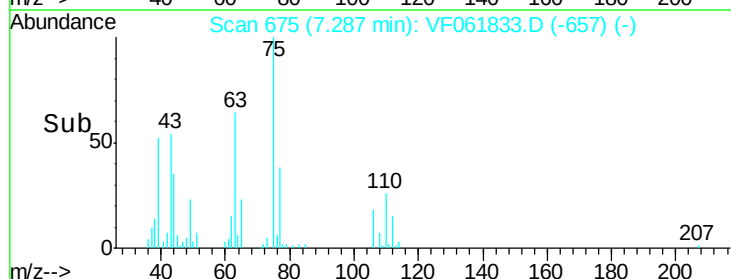
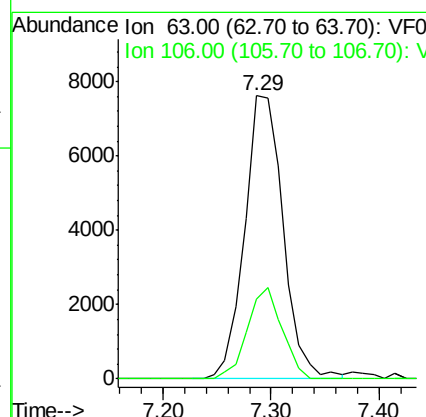
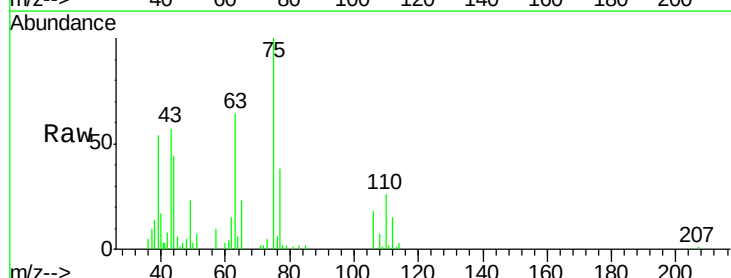
Manual Integrations
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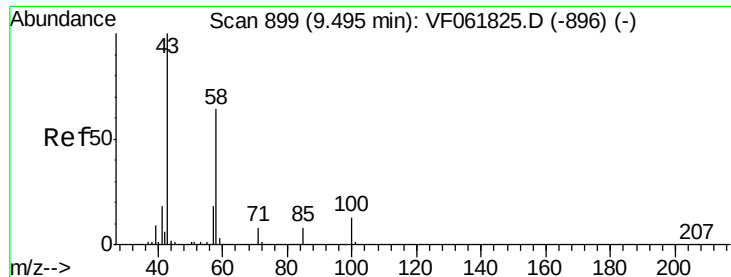
MMDadoda
 3/5/2019 10:48:26 AM



#58
 2-Chloroethyl Vinyl ether
 Concen: 54.641 ug/l
 RT: 7.29 min Scan# 675
 Delta R.T. -0.02 min
 Lab File: VF061833.D
 Acq: 4 Mar 2019 22:16

Tgt Ion: 63 Resp: 18923
 Ion Ratio Lower Upper
 63 100
 106 28.3 24.3 36.5





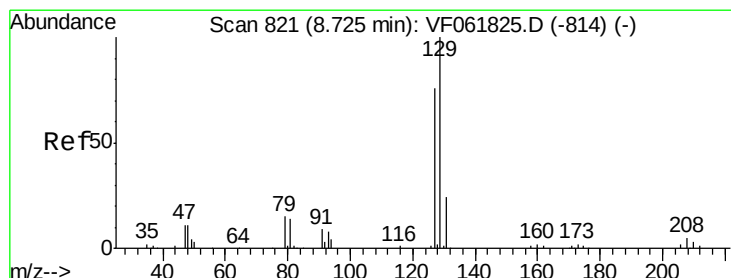
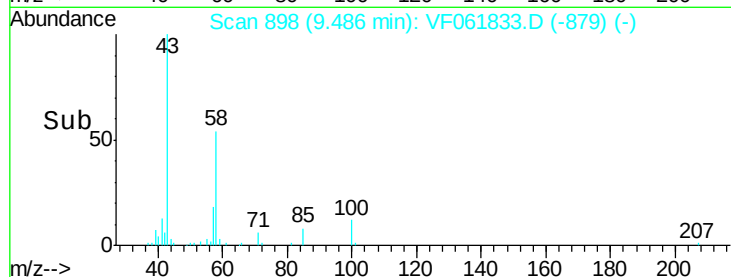
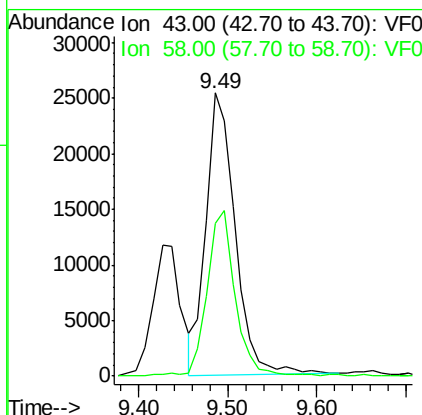
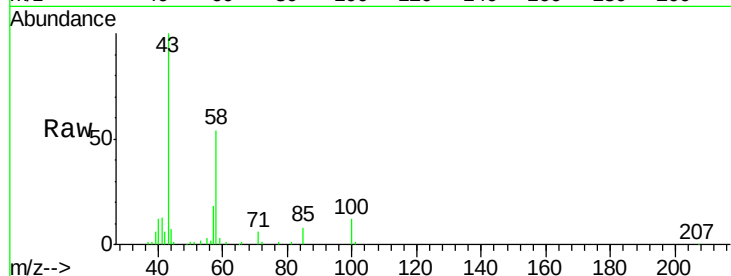
#59
2-Hexanone
Concen: 50.830 ug/l
RT: 9.49 min Scan# 898
Delta R.T. -0.01 min
Lab File: VF061833.D
Acq: 4 Mar 2019 22:16

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

Tot Ion: 43 Resp: 57172
Ion Ratio Lower Upper
43 100
58 54.1 28.8 86.4

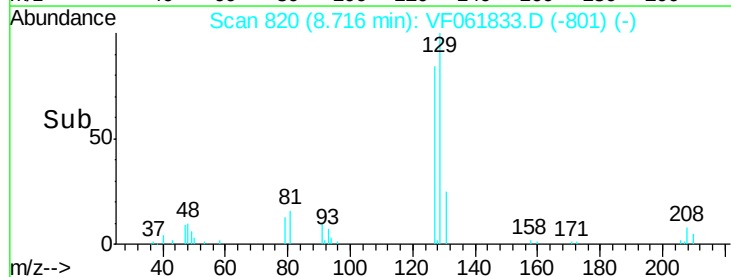
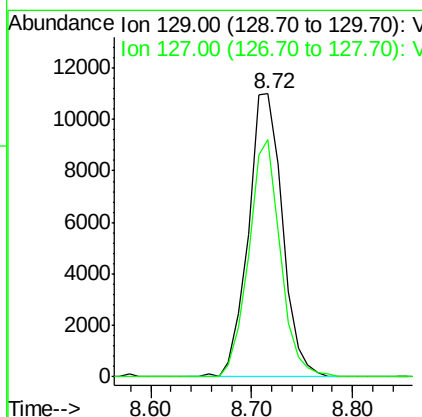
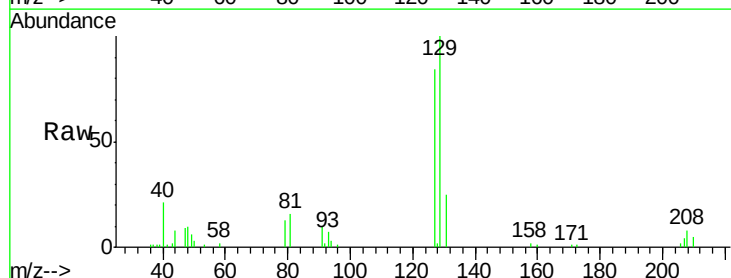
Manual Integrations
APPROVED

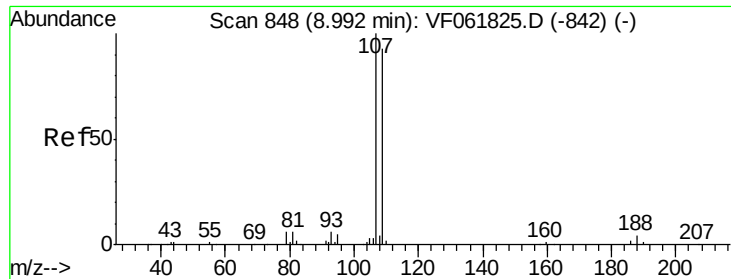
MMDadoda
3/5/2019 10:48:26 AM



#60
Dibromochloromethane
Concen: 9.395 ug/l
RT: 8.72 min Scan# 820
Delta R.T. -0.01 min
Lab File: VF061833.D
Acq: 4 Mar 2019 22:16

Tgt Ion: 129 Resp: 26011
Ion Ratio Lower Upper
129 100
127 83.7 38.2 114.6





#61

1,2-Dibromoethane

Concen: 9.134 ug/l

RT: 8.98 min Scan# 847

Delta R.T. -0.01 min

Lab File: VF061833.D

Acq: 4 Mar 2019 22:16

Instrument :

MSVOA_F

ClientSampleId :

LOQ-SOIL-02-QT1-2019

Tot Ion:107 Resp: 19512

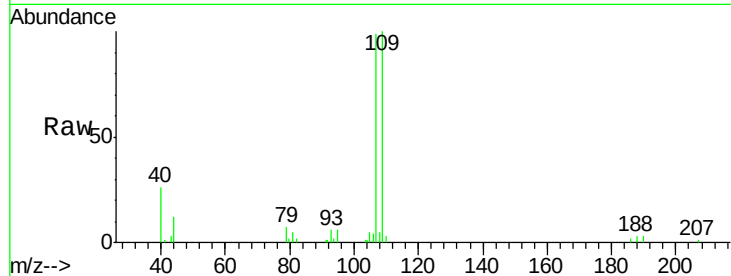
Ion Ratio Lower Upper

107 100

109 101.2 74.6 112.0

Manual Integrations
APPROVED

MMDadoda
3/5/2019 10:48:26 AM

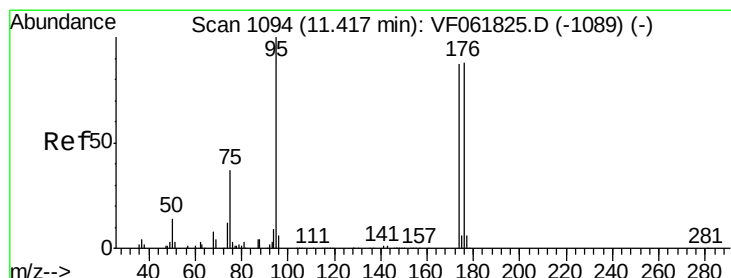
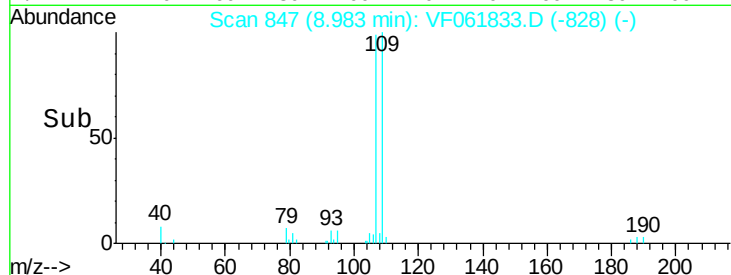


Abundance Ion 107.00 (106.70 to 107.70): V

Ion 109.00 (108.70 to 109.70): V

8.98

Time-->



#62

4-Bromofluorobenzene

Concen: 54.680 ug/l

RT: 11.41 min Scan# 1093

Delta R.T. -0.01 min

Lab File: VF061833.D

Acq: 4 Mar 2019 22:16

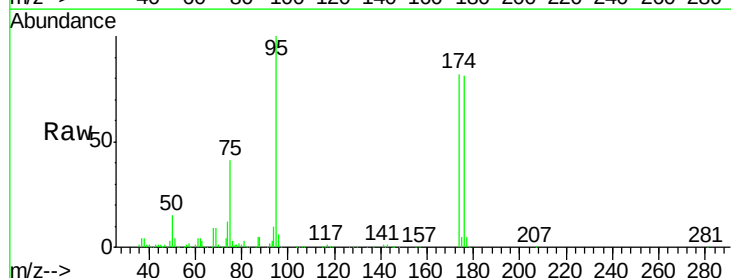
Tgt Ion: 95 Resp: 205075

Ion Ratio Lower Upper

95 100

174 82.1 0.0 174.0

176 80.9 0.0 175.2



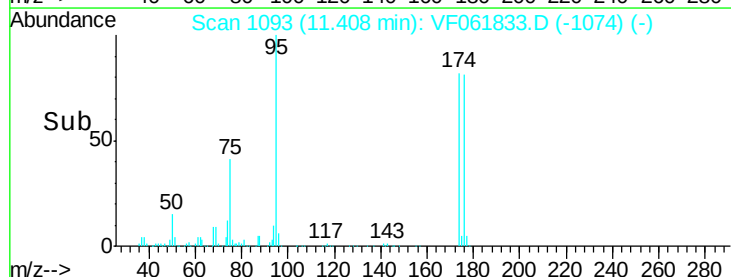
Abundance Ion 95.00 (94.70 to 95.70): VF0

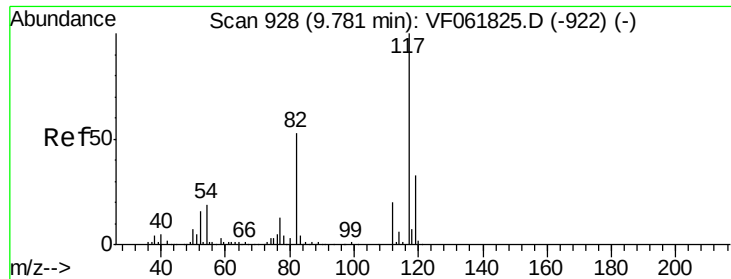
Ion 174.00 (173.70 to 174.70): V

Ion 176.00 (175.70 to 176.70): V

11.41

Time-->





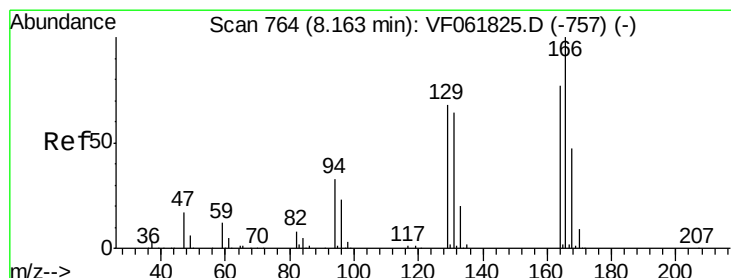
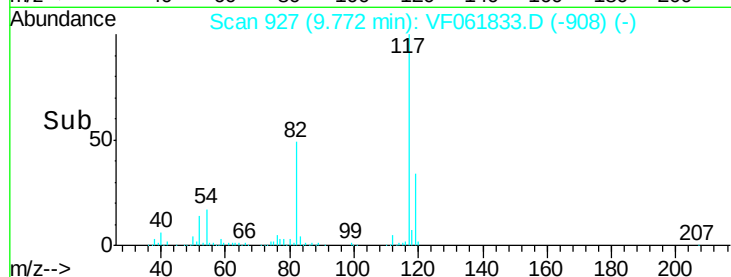
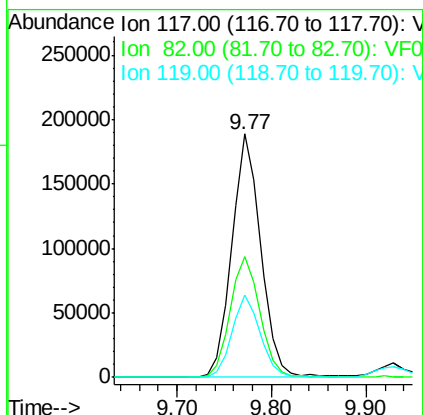
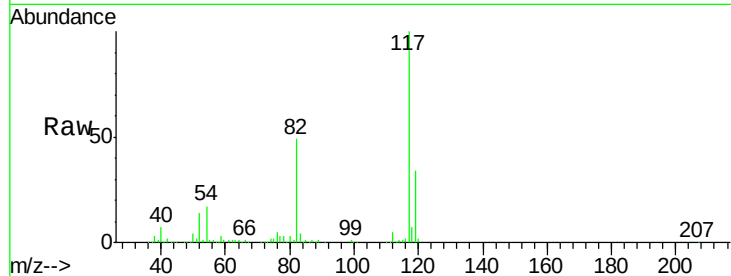
#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 9.77 min Scan# 927
Delta R.T. -0.01 min
Lab File: VF061833.D
Acq: 4 Mar 2019 22:16

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

Tot Ion	Ratio	Resp	Lower	Upper
117	100	401507		
82	49.4		42.6	63.8
119	33.7		26.0	39.0

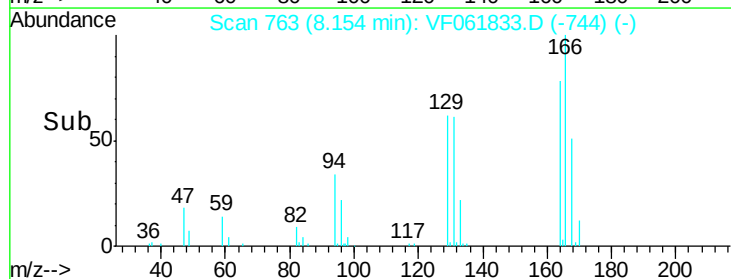
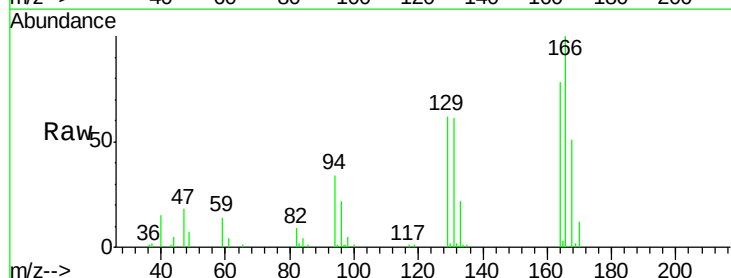
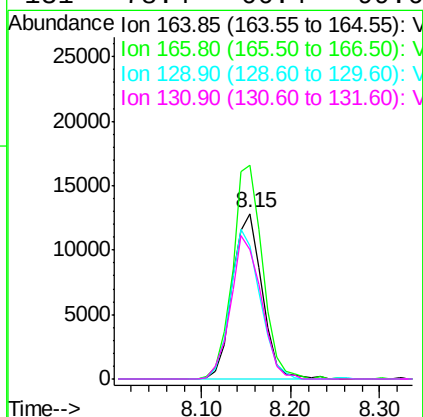
Manual Integrations
APPROVED

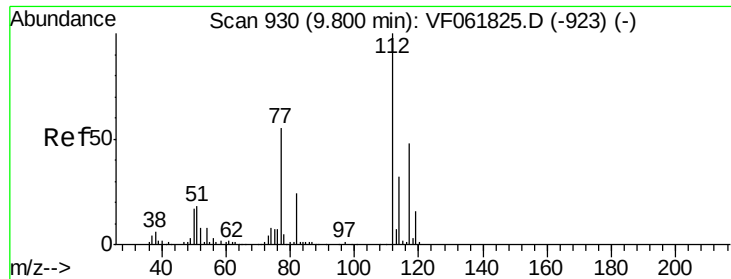
MMDadoda
3/5/2019 10:48:26 AM



#64
Tetrachloroethene
Concen: 9.732 ug/l
RT: 8.15 min Scan# 763
Delta R.T. -0.01 min
Lab File: VF061833.D
Acq: 4 Mar 2019 22:16

Tgt Ion	Ratio	Resp	Lower	Upper
164	100	30024		
166	129.0		103.4	155.0
129	80.2		69.9	104.9
131	78.4		66.4	99.6





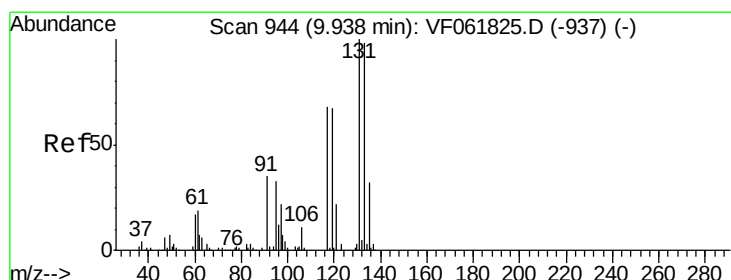
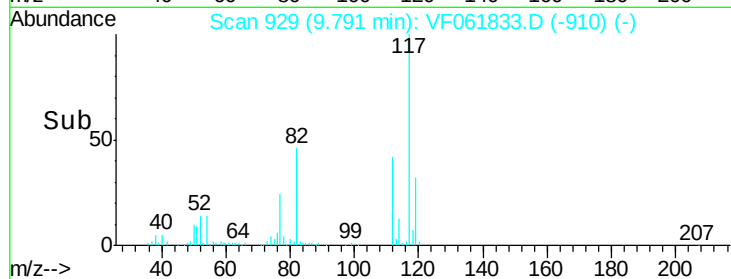
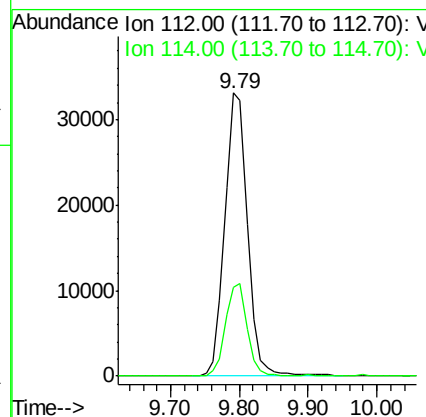
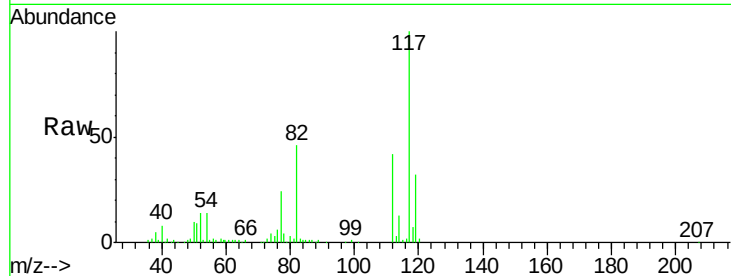
#65
Chlorobenzene
Concen: 9.828 ug/l
RT: 9.79 min Scan# 929
Delta R.T. -0.01 min
Lab File: VF061833.D
Acq: 4 Mar 2019 22:16

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

Tot Ion	Ratio	Lower	Upper
112	100		
114	31.3	25.5	38.3

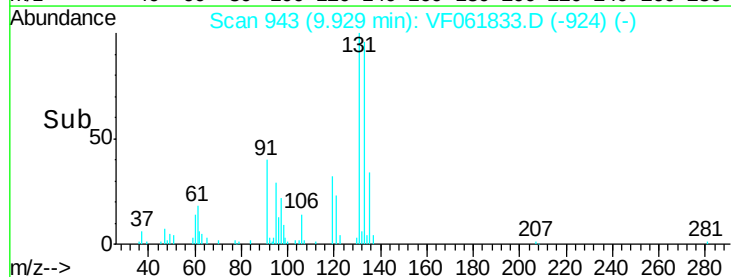
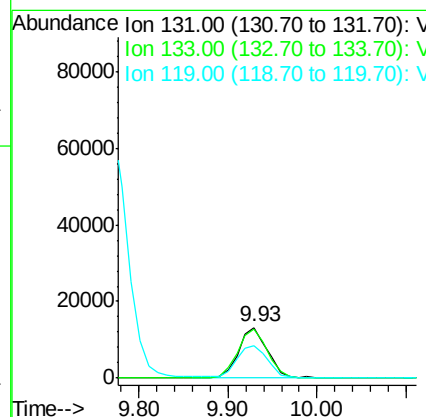
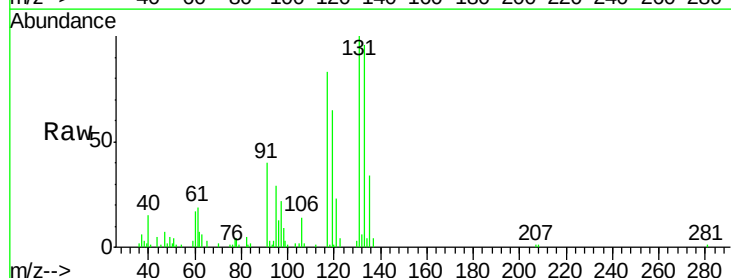
Manual Integrations
APPROVED

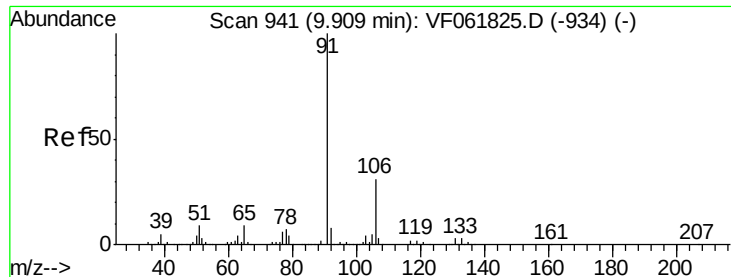
MMDadoda
3/5/2019 10:48:26 AM



#66
1,1,1,2-Tetrachloroethane
Concen: 9.980 ug/l
RT: 9.93 min Scan# 943
Delta R.T. -0.01 min
Lab File: VF061833.D
Acq: 4 Mar 2019 22:16

Tgt Ion	Ratio	Lower	Upper
131	100		
133	96.2	48.9	146.7
119	65.1	33.6	100.8





#67

Ethyl Benzene

Concen: 10.119 ug/l

RT: 9.90 min Scan# 940

Delta R.T. -0.01 min

Lab File: VF061833.D

Acq: 4 Mar 2019 22:16

Instrument :

MSVOA_F

ClientSampleId :

LOQ-SOIL-02-QT1-2019

Tot Ion: 91 Resp: 129374

Ion Ratio Lower Upper

91 100

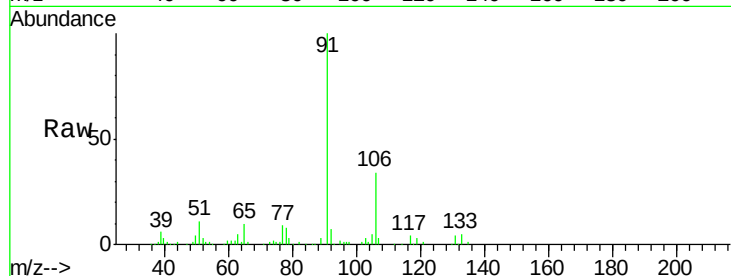
106 33.7 25.0 37.4

Manual Integrations

APPROVED

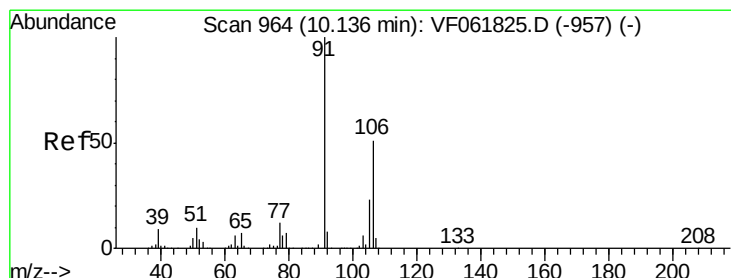
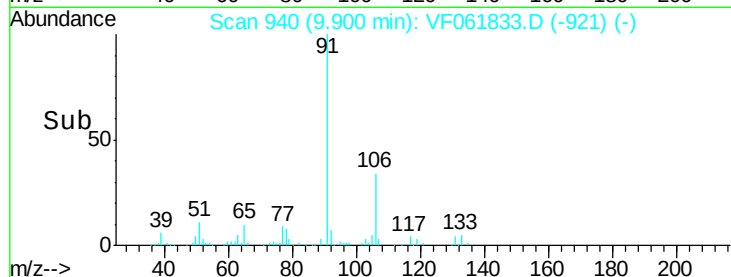
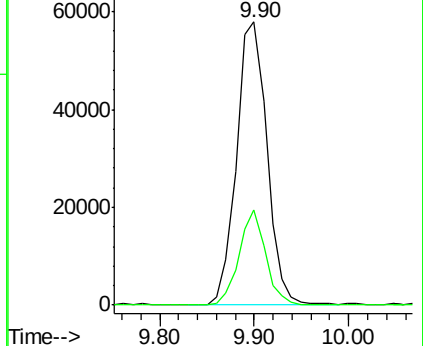
MMDadoda

3/5/2019 10:48:26 AM



Abundance Ion 91.00 (90.70 to 91.70): VF0

Ion 106.00 (105.70 to 106.70): V



#68

m/p-Xylenes

Concen: 20.544 ug/l

RT: 10.13 min Scan# 963

Delta R.T. -0.01 min

Lab File: VF061833.D

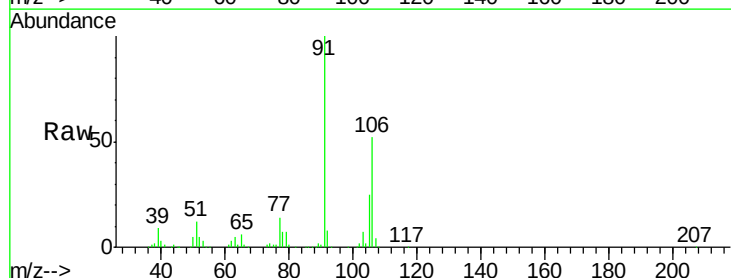
Acq: 4 Mar 2019 22:16

Tgt Ion:106 Resp: 100624

Ion Ratio Lower Upper

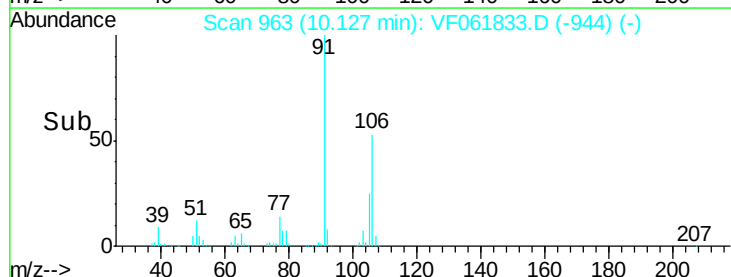
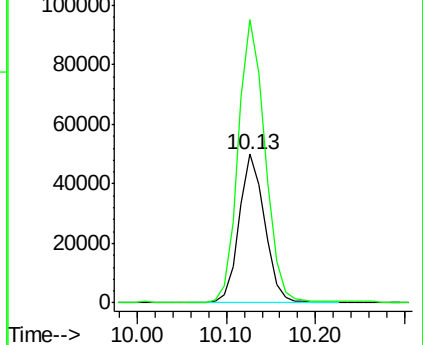
106 100

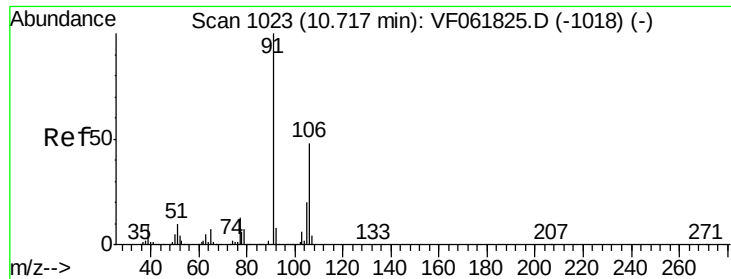
91 190.8 157.5 236.3



Abundance Ion 106.00 (105.70 to 106.70): V

Ion 91.00 (90.70 to 91.70): VF0





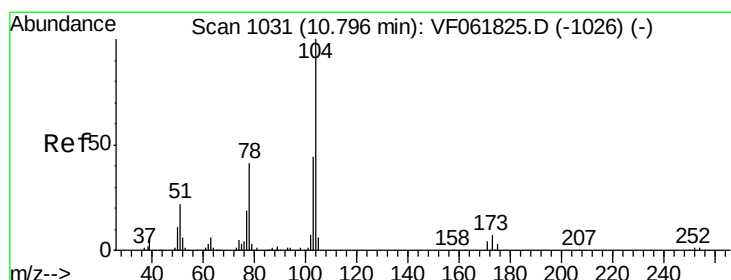
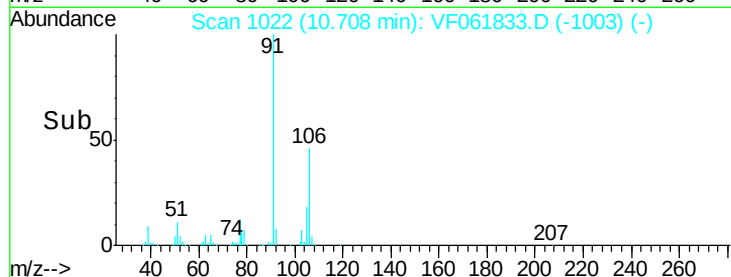
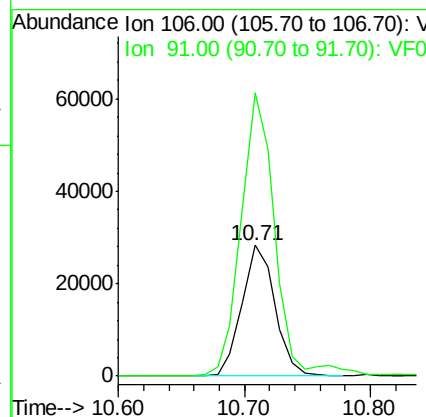
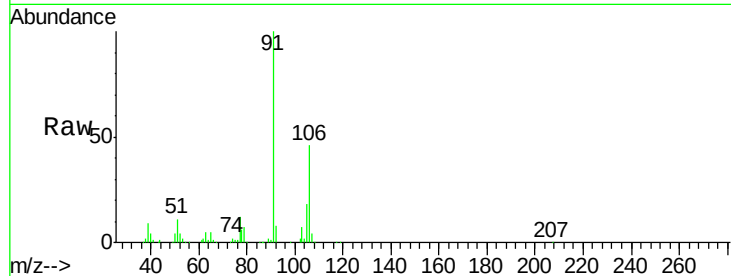
#69
o-Xylene
Concen: 9.772 ug/l
RT: 10.71 min Scan# 1022
Delta R.T. -0.01 min
Lab File: VF061833.D
Acq: 4 Mar 2019 22:16

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

Tot Ion:106 Resp: 51541
Ion Ratio Lower Upper
106 100
91 216.2 103.5 310.3

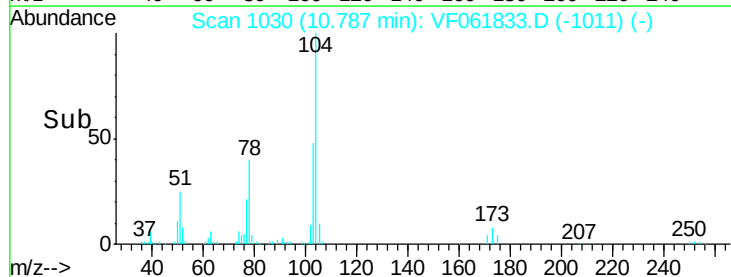
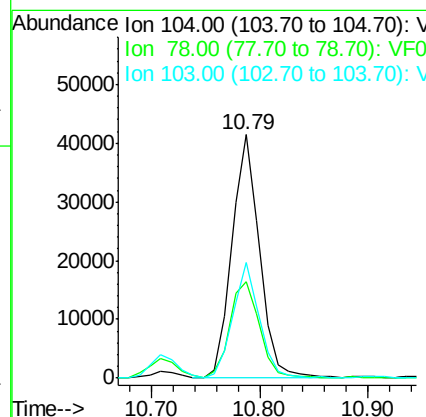
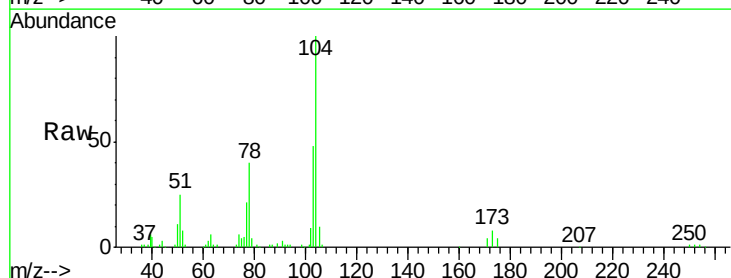
Manual Integrations
APPROVED

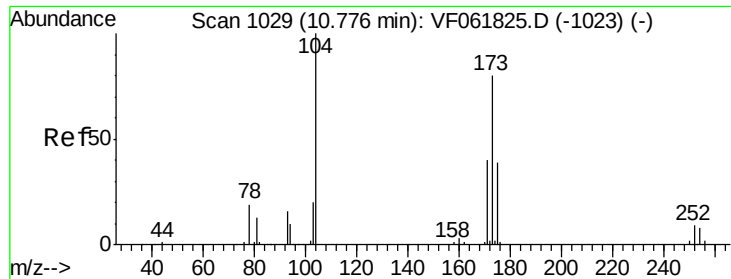
MMDadoda
3/5/2019 10:48:26 AM



#70
Styrene
Concen: 9.916 ug/l
RT: 10.79 min Scan# 1030
Delta R.T. -0.01 min
Lab File: VF061833.D
Acq: 4 Mar 2019 22:16

Tgt Ion:104 Resp: 73604
Ion Ratio Lower Upper
104 100
78 39.6 33.3 49.9
103 47.6 35.4 53.0





#71

Bromoform

Concen: 9.385 ug/l

RT: 10.77 min Scan# 1028

Delta R.T. -0.01 min

Lab File: VF061833.D

Acq: 4 Mar 2019 22:16

Instrument :

MSVOA_F

ClientSampleId :

LOQ-SOIL-02-QT1-2019

Tot Ion:173 Resp: 14825

Ion Ratio Lower Upper

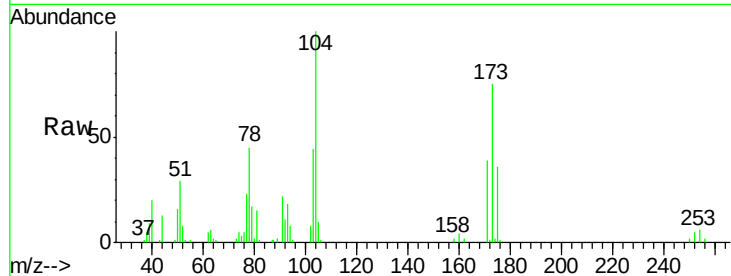
173 100

175 47.8 24.5 73.5

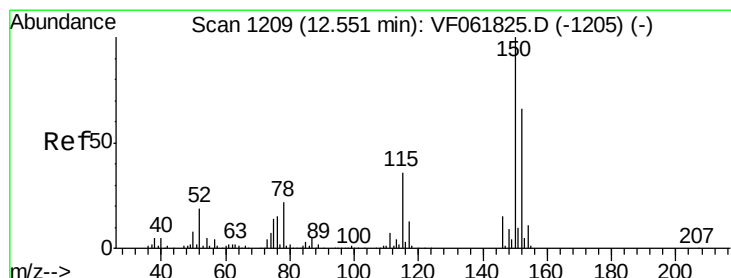
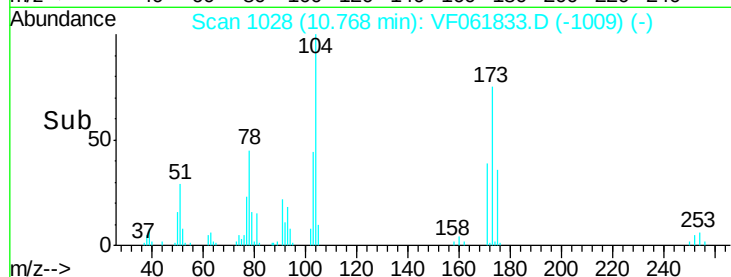
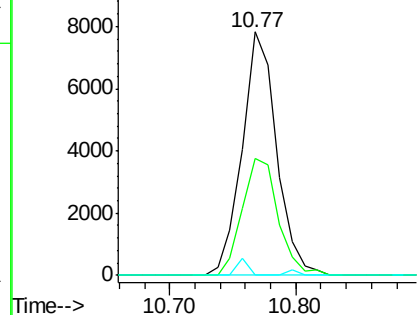
254 0.0 8.0 12.0#

Manual Integrations
APPROVED

MMDadoda
3/5/2019 10:48:26 AM



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: 50.000 ug/l

RT: 12.55 min Scan# 1209

Delta R.T. 0.00 min

Lab File: VF061833.D

Acq: 4 Mar 2019 22:16

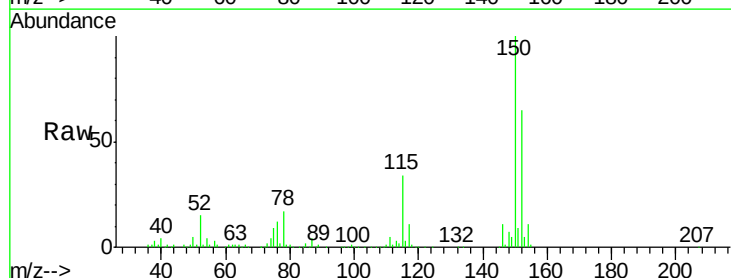
Tgt Ion:152 Resp: 224553

Ion Ratio Lower Upper

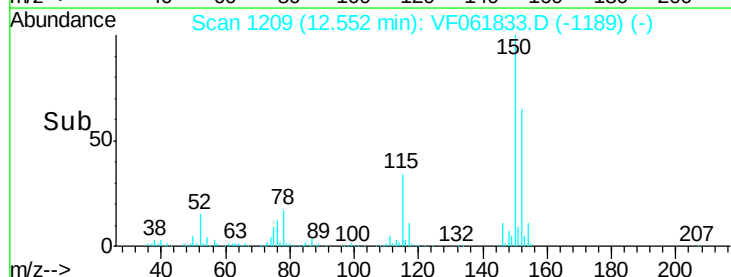
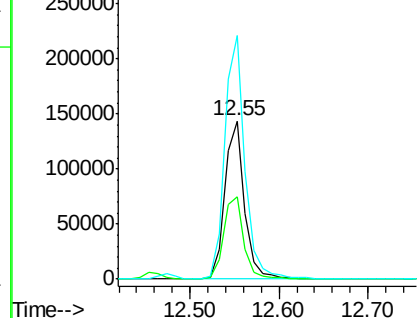
152 100

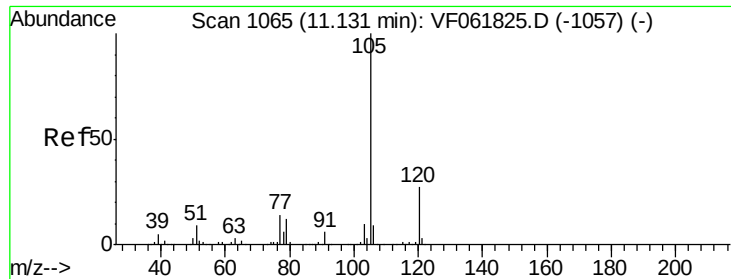
115 51.9 27.7 83.1

150 153.8 0.0 304.2



Abundance Ion 152.00 (151.70 to 152.70): V
Ion 115.00 (114.70 to 115.70): V
Ion 150.00 (149.70 to 150.70): V





#73

Isopropylbenzene

Concen: 9.817 ug/l

RT: 11.12 min Scan# 1064

Delta R.T. -0.01 min

Lab File: VF061833.D

Acq: 4 Mar 2019 22:16

Instrument :

MSVOA_F

ClientSampleId :

LOQ-SOIL-02-QT1-2019

Tot Ion:105 Resp: 151764

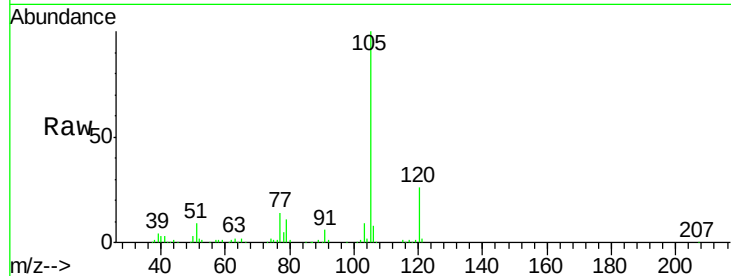
Ion Ratio Lower Upper

105 100

120 26.0 13.7 41.0

Manual Integrations
APPROVED

MMDadoda
3/5/2019 10:48:26 AM



Abundance Ion 105.00 (104.70 to 105.70): V

Ion 120.00 (119.70 to 120.70): V

11.12

100000

80000

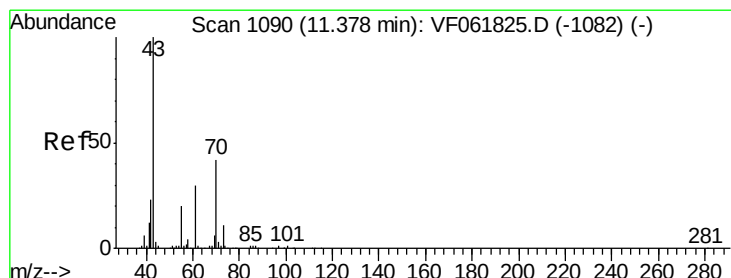
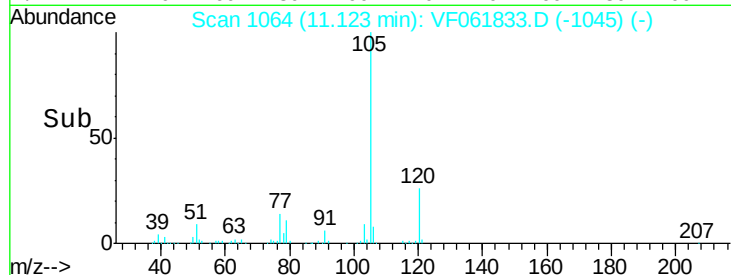
60000

40000

20000

0

Time--> 11.00 11.10 11.20 11.30



#74

N-ethyl acetate

Concen: 9.780 ug/l

RT: 11.37 min Scan# 1089

Delta R.T. -0.01 min

Lab File: VF061833.D

Acq: 4 Mar 2019 22:16

Tgt Ion: 43 Resp: 34806

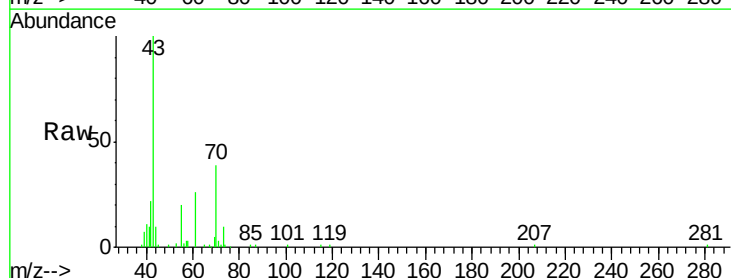
Ion Ratio Lower Upper

43 100

70 38.5 33.4 50.0

55 19.9 16.3 24.5

61 26.5 24.0 36.0



Abundance Ion 43.00 (42.70 to 43.70): VF0

Ion 70.00 (69.70 to 70.70): VF0

Ion 55.00 (54.70 to 55.70): VF0

Ion 61.00 (60.70 to 61.70): VF0

30000

25000

20000

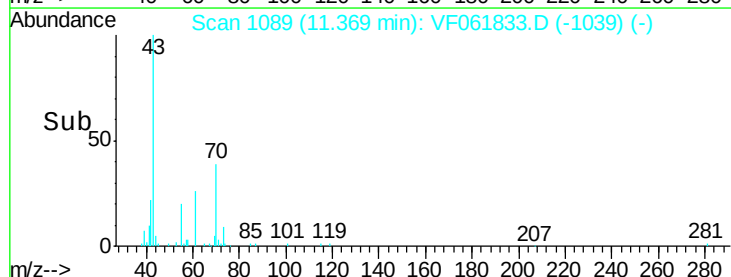
15000

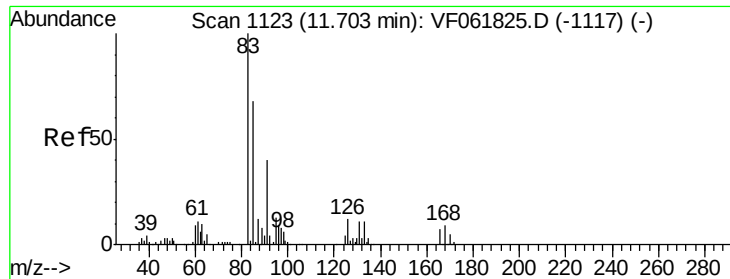
10000

5000

0

Time--> 11.30 11.40 11.50





#75

1,1,2,2-Tetrachloroethane

Concen: 9.419 ug/l

RT: 11.69 min Scan# 1122

Delta R.T. -0.01 min

Lab File: VF061833.D

Acq: 4 Mar 2019 22:16

Instrument :

MSVOA_F

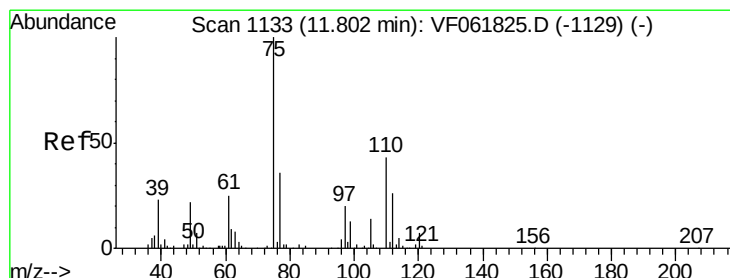
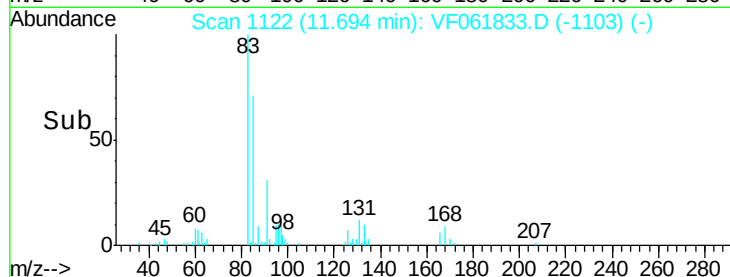
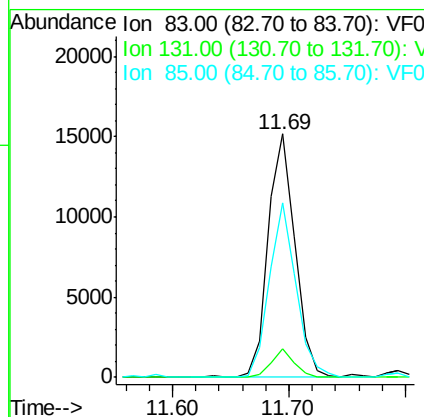
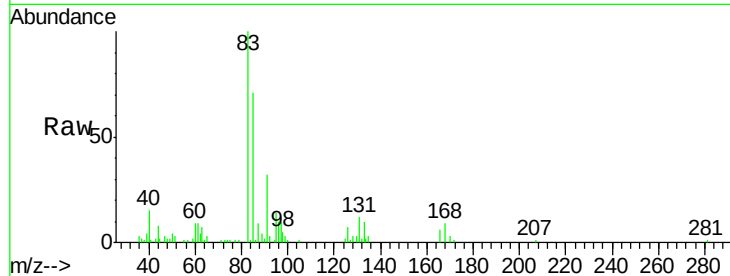
ClientSampleId :

LOQ-SOIL-02-QT1-2019

Tot Ion	83	Resp	24202
Ion	Ratio	Lower	Upper
83	100		
131	12.0	5.5	16.7
85	71.4	34.2	102.6

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#76

1,2,3-Trichloropropane

Concen: 10.021 ug/l

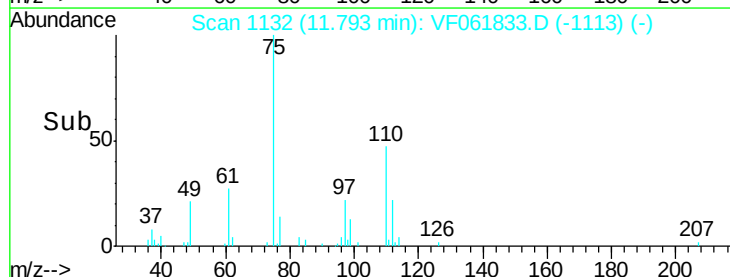
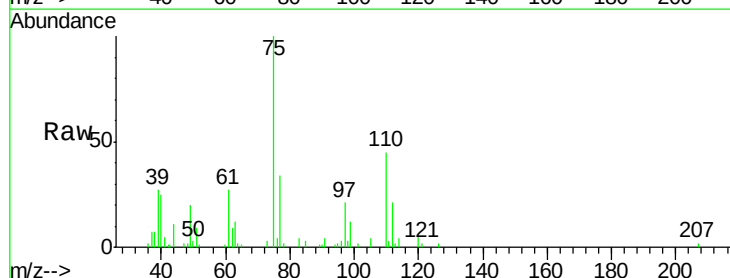
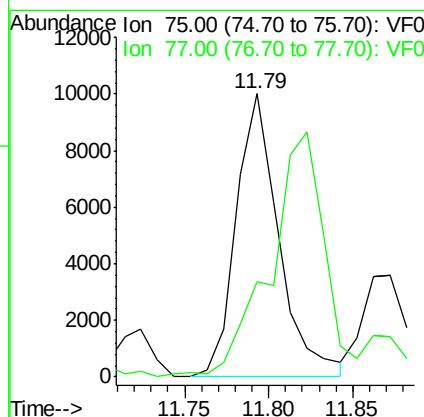
RT: 11.79 min Scan# 1132

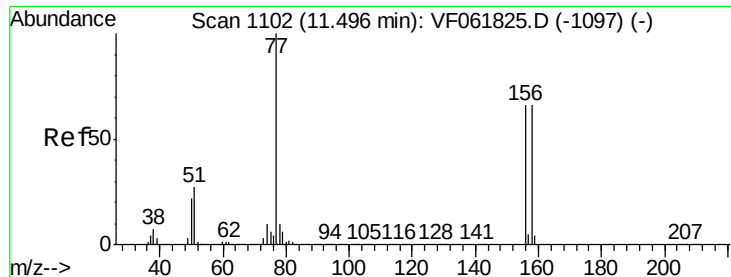
Delta R.T. -0.01 min

Lab File: VF061833.D

Acq: 4 Mar 2019 22:16

Tgt Ion	75	Resp	17573
Ion	Ratio	Lower	Upper
75	100		
77	33.8	18.1	54.4





#77

Bromobenzene

Concen: 9.361 ug/l

RT: 11.50 min Scan# 1102

Delta R.T. 0.00 min

Lab File: VF061833.D

Acq: 4 Mar 2019 22:16

Instrument :

MSVOA_F

ClientSampleId :

LOQ-SOIL-02-QT1-2019

Tot Ion:156 Resp: 34828

Ion Ratio Lower Upper

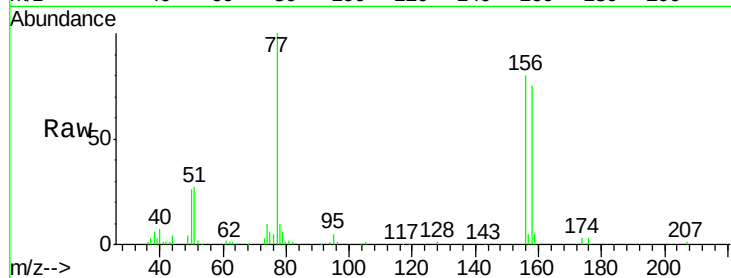
156 100

77 124.5 75.7 227.1

158 92.9 50.0 150.1

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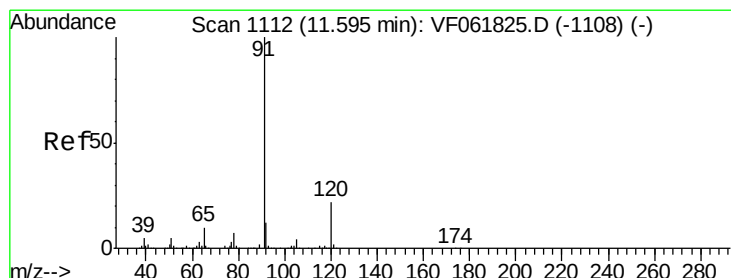
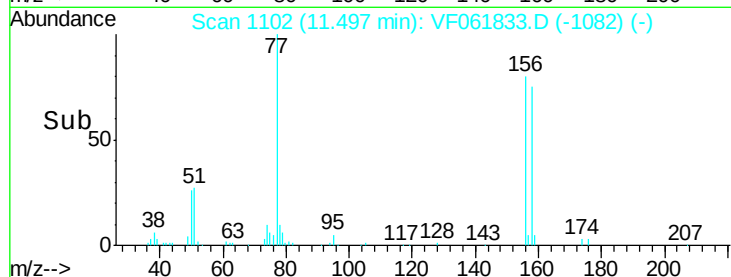
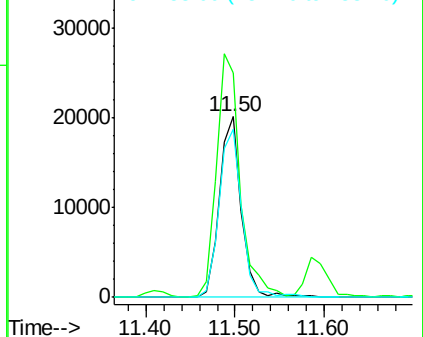
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Abundance Ion 156.00 (155.70 to 156.70): V

Ion 77.00 (76.70 to 77.70): VF0

Ion 158.00 (157.70 to 158.70): V



#78

n-propylbenzene

Concen: 10.168 ug/l

RT: 11.60 min Scan# 1112

Delta R.T. 0.00 min

Lab File: VF061833.D

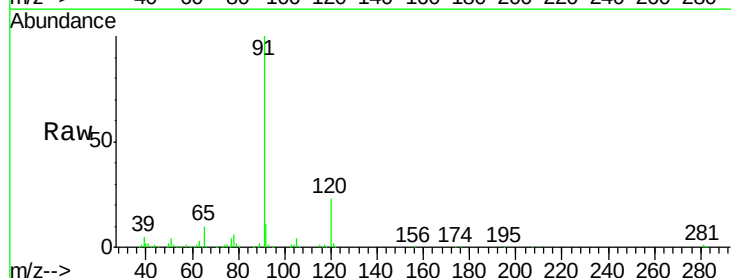
Acq: 4 Mar 2019 22:16

Tgt Ion: 91 Resp: 177509

Ion Ratio Lower Upper

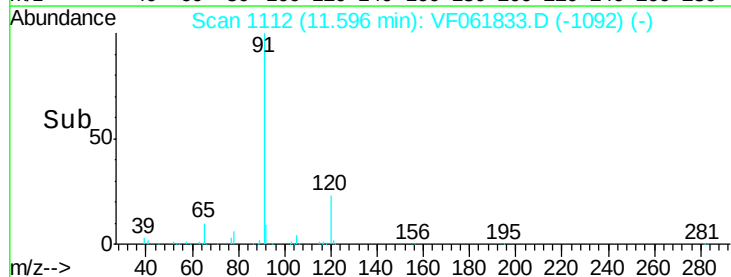
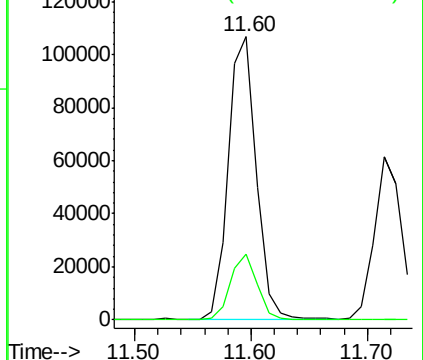
91 100

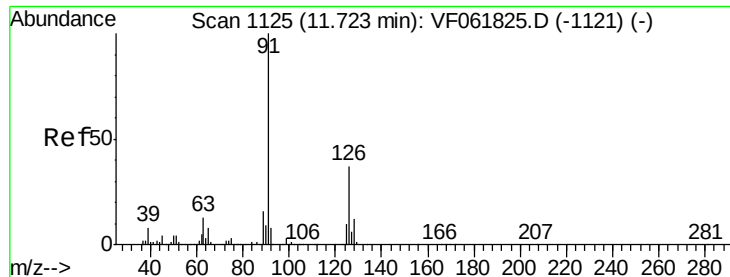
120 23.0 11.1 33.1



Abundance Ion 91.00 (90.70 to 91.70): VF0

Ion 120.00 (119.70 to 120.70): V





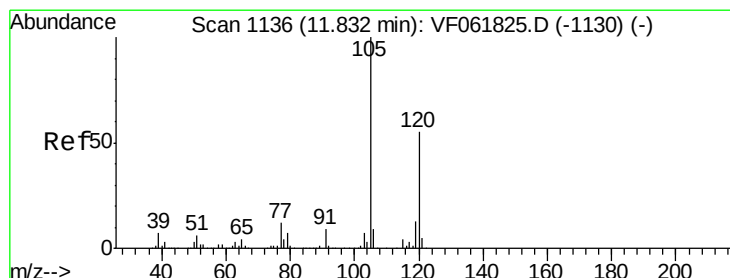
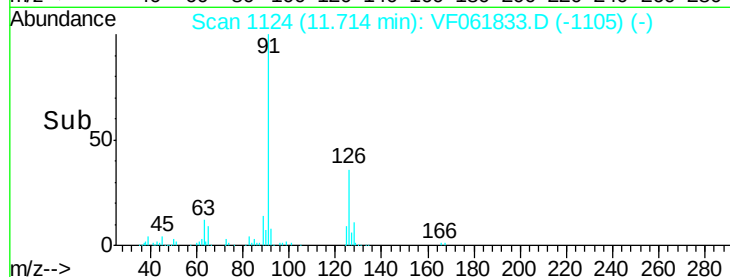
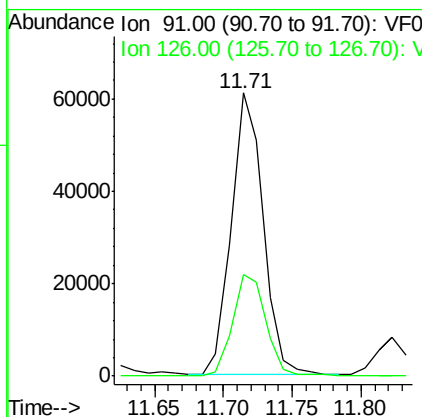
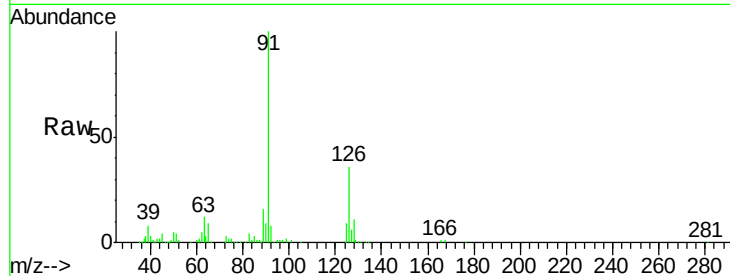
#79
2-Chlorotoluene
Concen: 9.879 ug/l
RT: 11.71 min Scan# 1124
Delta R.T. -0.01 min
Lab File: VF061833.D
Acq: 4 Mar 2019 22:16

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

Tot Ion	Ratio	Lower	Upper
91	100		
126	35.8	18.1	54.4

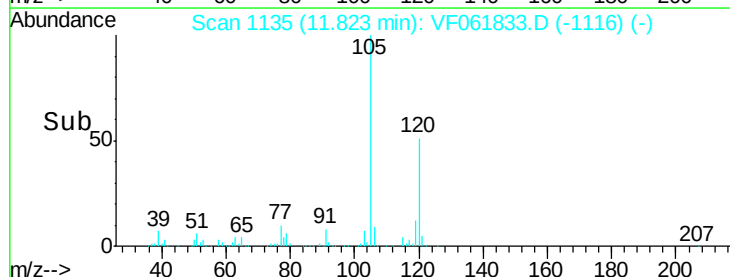
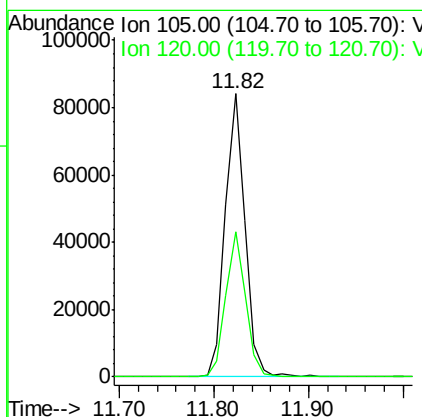
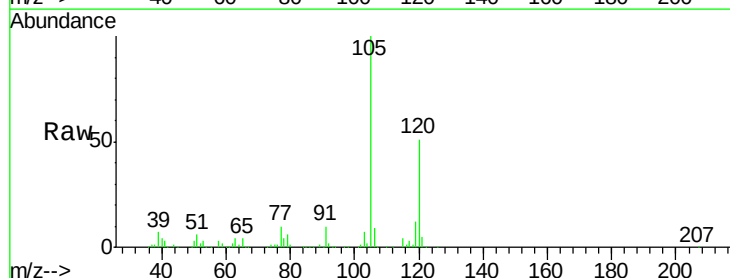
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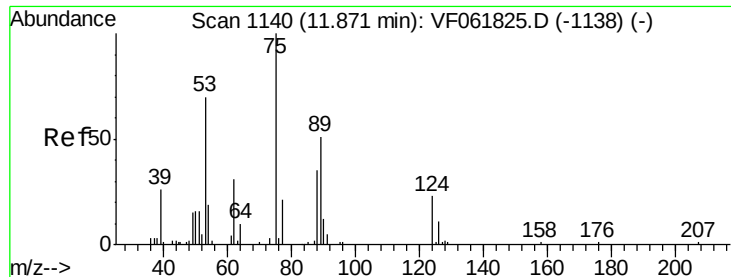
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#80
1,3,5-Trimethylbenzene
Concen: 9.868 ug/l
RT: 11.82 min Scan# 1135
Delta R.T. -0.01 min
Lab File: VF061833.D
Acq: 4 Mar 2019 22:16

Tgt Ion	Ratio	Lower	Upper
105	100		
120	51.4	27.4	82.2





#81

trans-1,4-Dichloro-2-butene

Concen: 7.580 ug/l m

RT: 11.87 min Scan# 1140

Delta R.T. 0.00 min

Lab File: VF061833.D

Acq: 4 Mar 2019 22:16

Instrument :

MSVOA_F

ClientSampleId :

LOQ-SOIL-02-QT1-2019

Tot Ion: 75 Resp: 6078

Ion Ratio Lower Upper

75 100

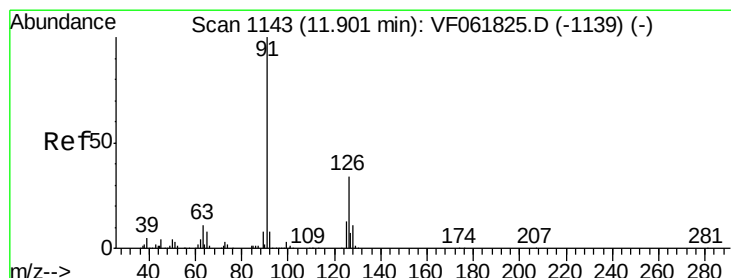
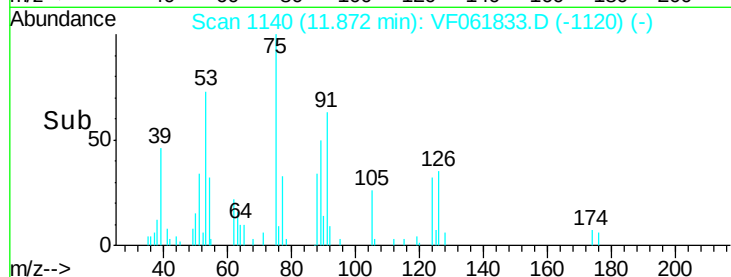
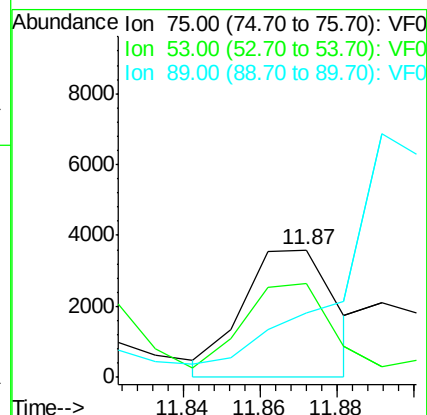
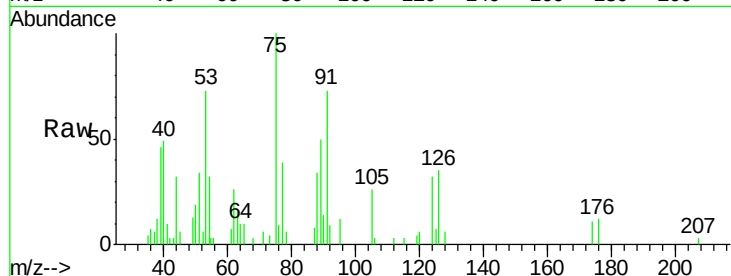
53 73.2 58.6 88.0

89 50.3 41.4 62.0

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#82

4-Chlorotoluene

Concen: 10.336 ug/l

RT: 11.90 min Scan# 1143

Delta R.T. 0.00 min

Lab File: VF061833.D

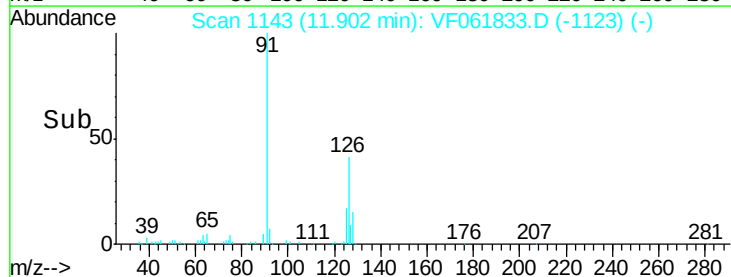
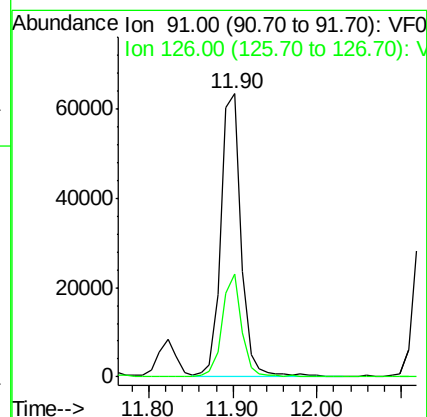
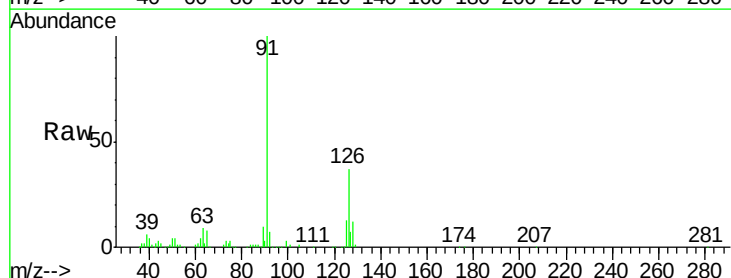
Acq: 4 Mar 2019 22:16

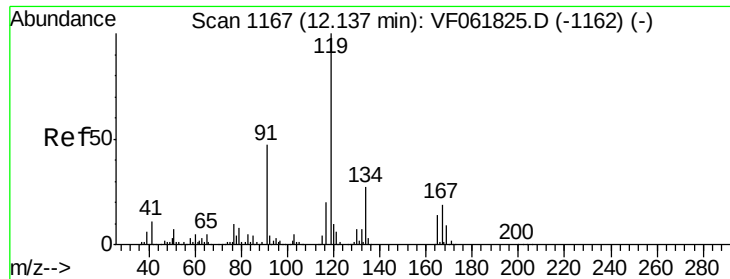
Tgt Ion: 91 Resp: 105522

Ion Ratio Lower Upper

91 100

126 36.5 17.0 50.9





#83

tert-Butylbenzene

Concen: 9.799 ug/l

RT: 12.13 min Scan# 1166

Delta R.T. -0.01 min

Lab File: VF061833.D

Acq: 4 Mar 2019 22:16

Instrument :

MSVOA_F

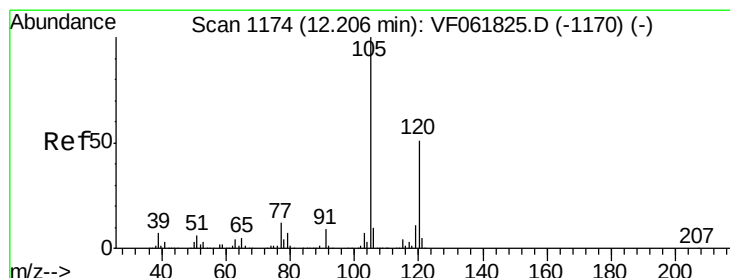
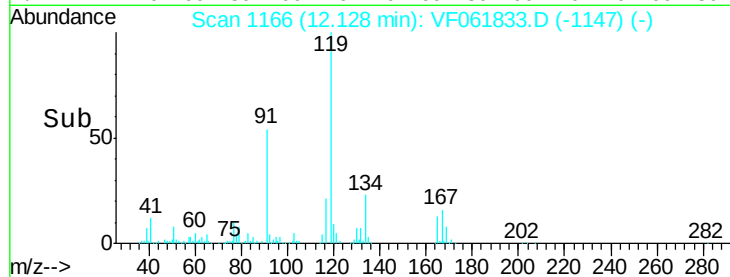
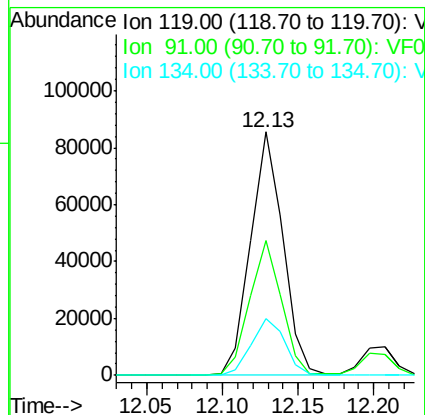
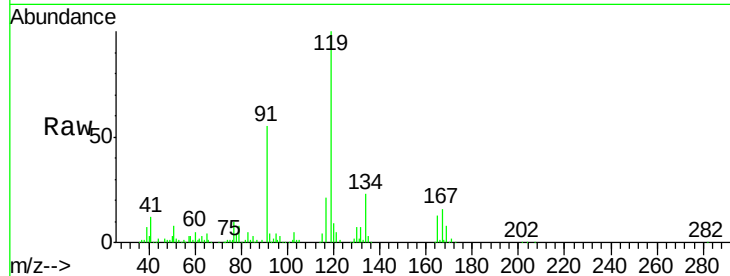
ClientSampleId :

LOQ-SOIL-02-QT1-2019

Tot Ion:	119	Resp:	129148
Ion Ratio	Lower	Upper	
119	100		
91	55.3	23.5	70.5
134	23.3	13.3	39.8

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#84

1,2,4-Trimethylbenzene

Concen: 10.141 ug/l

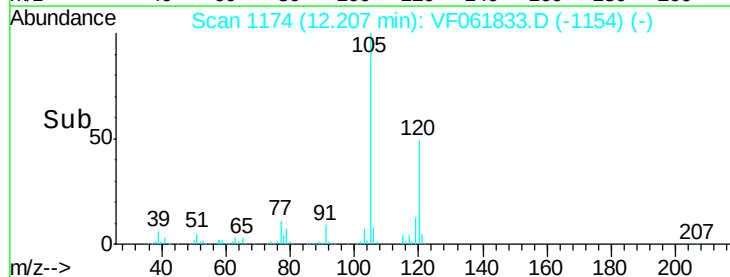
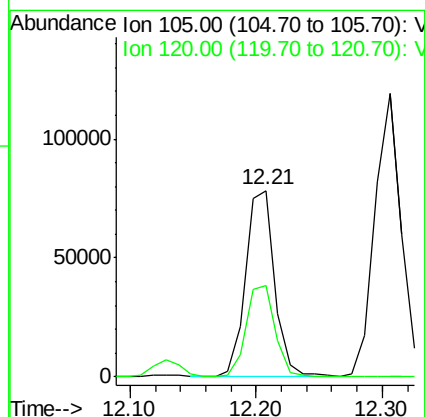
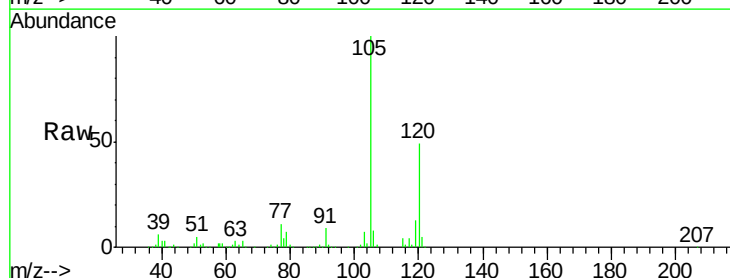
RT: 12.21 min Scan# 1174

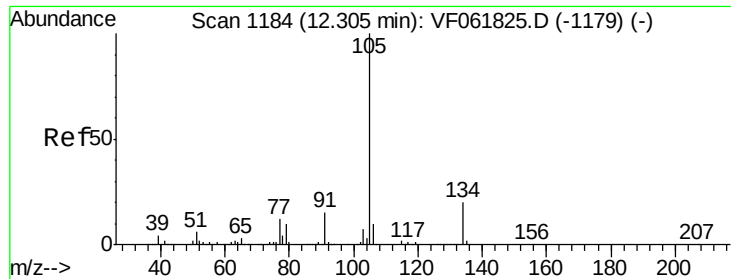
Delta R.T. 0.00 min

Lab File: VF061833.D

Acq: 4 Mar 2019 22:16

Tgt Ion:	105	Resp:	123390
Ion Ratio	Lower	Upper	
105	100		
120	48.8	25.8	77.4





#85

sec-Butylbenzene

Concen: 10.182 ug/l

RT: 12.31 min Scan# 1184

Delta R.T. 0.00 min

Lab File: VF061833.D

Acq: 4 Mar 2019 22:16

Instrument :

MSVOA_F

ClientSampleId :

LOQ-SOIL-02-QT1-2019

Tot Ion:105 Resp: 174623

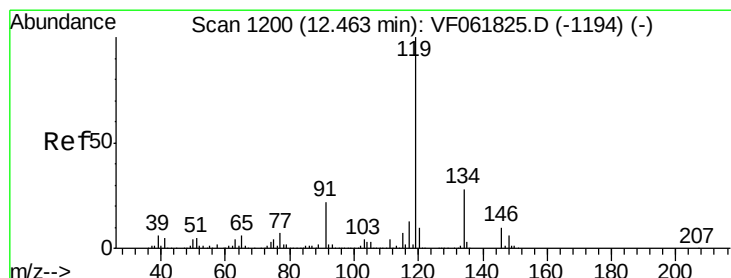
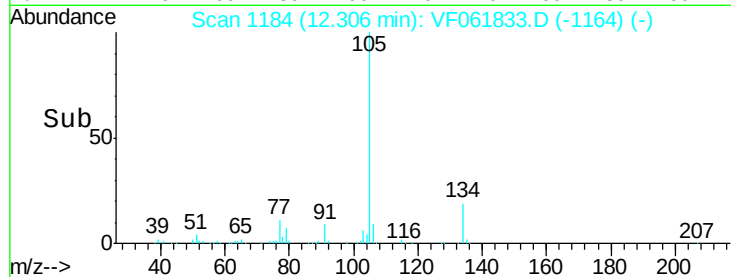
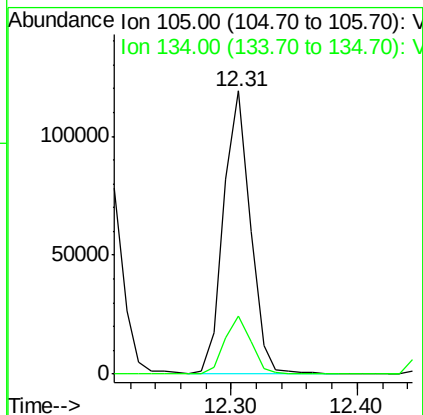
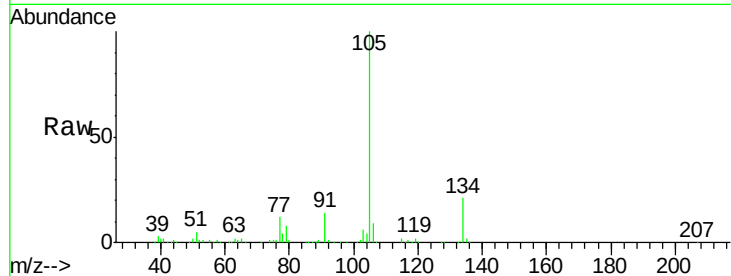
Ion Ratio Lower Upper

105 100

134 20.6 9.8 29.5

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#86

p-Isopropyltoluene

Concen: 10.362 ug/l

RT: 12.45 min Scan# 1199

Delta R.T. -0.01 min

Lab File: VF061833.D

Acq: 4 Mar 2019 22:16

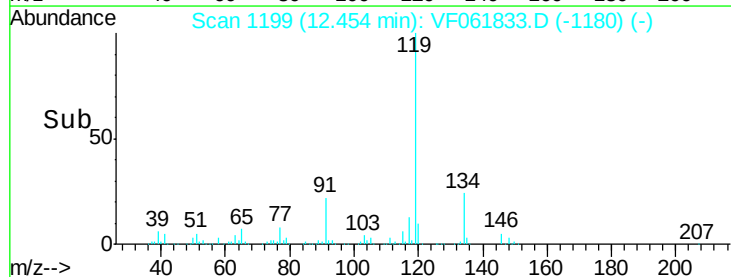
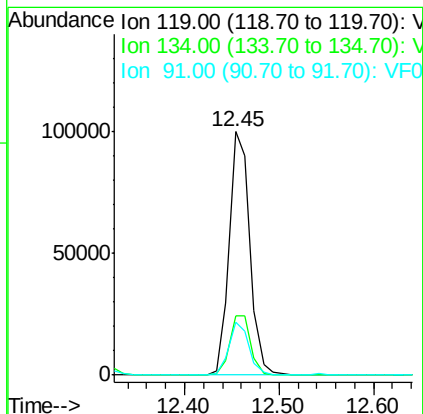
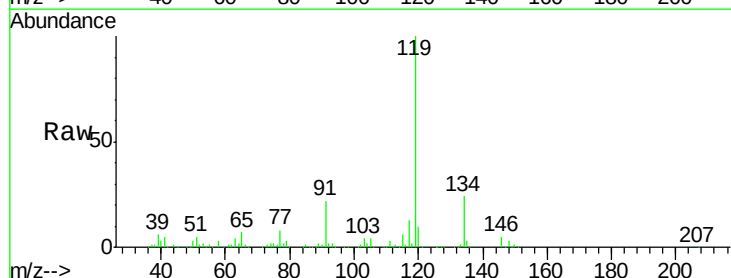
Tgt Ion:119 Resp: 151070

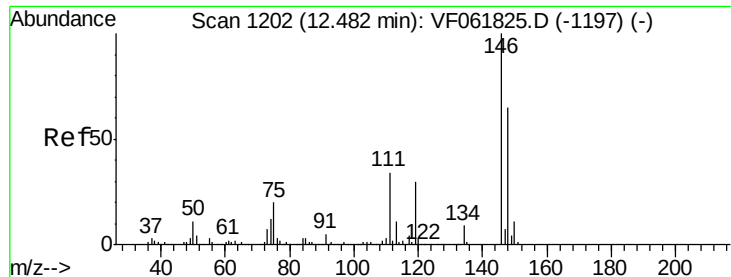
Ion Ratio Lower Upper

119 100

134 24.3 14.0 42.0

91 21.9 11.1 33.3





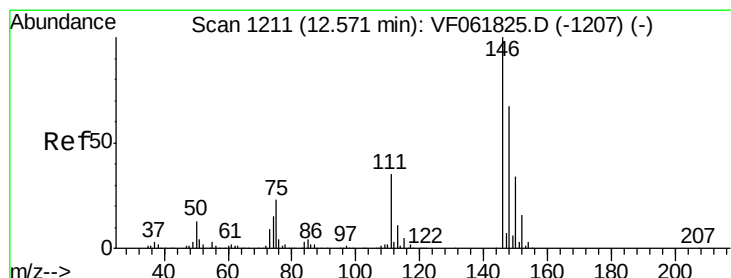
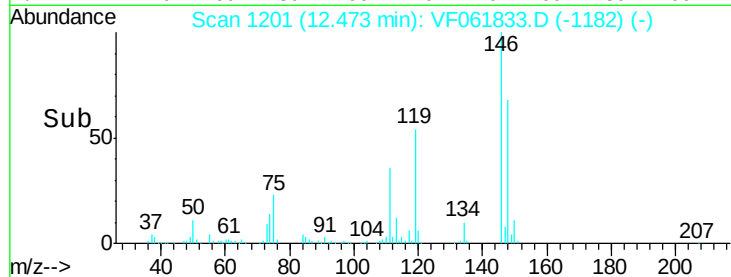
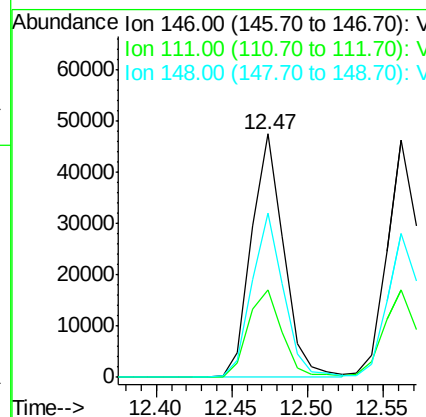
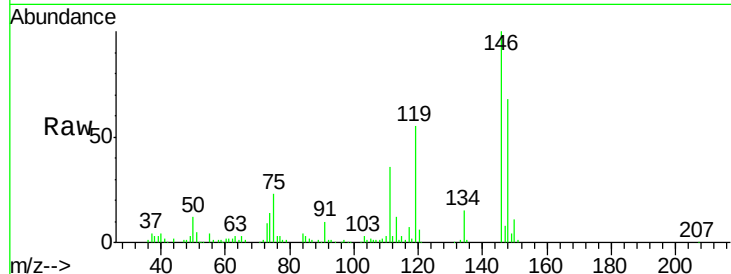
#87
 1,3-Dichlorobenzene
 Concen: 10.048 ug/l
 RT: 12.47 min Scan# 1201
 Delta R.T. -0.01 min
 Lab File: VF061833.D
 Acq: 4 Mar 2019 22:16

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

Tot Ion	Ratio	Lower	Upper
146	100		
111	36.0	17.0	51.0
148	67.6	32.5	97.5

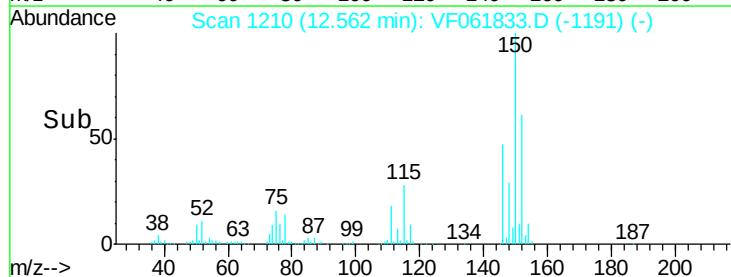
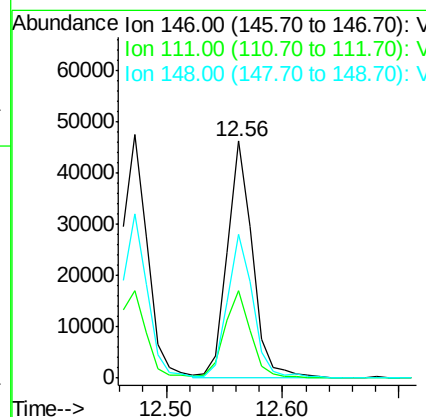
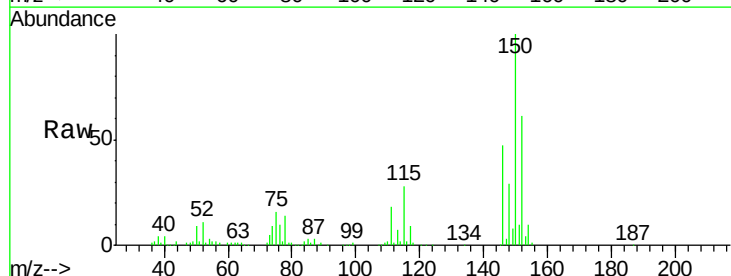
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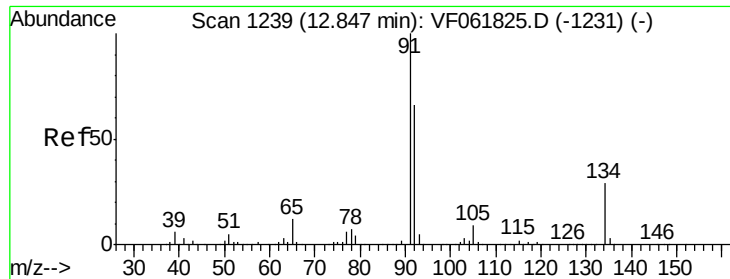
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#88
 1,4-Dichlorobenzene
 Concen: 10.155 ug/l
 RT: 12.56 min Scan# 1210
 Delta R.T. -0.01 min
 Lab File: VF061833.D
 Acq: 4 Mar 2019 22:16

Tgt Ion	Ratio	Lower	Upper
146	100		
111	37.1	17.6	52.9
148	60.9	33.5	100.4





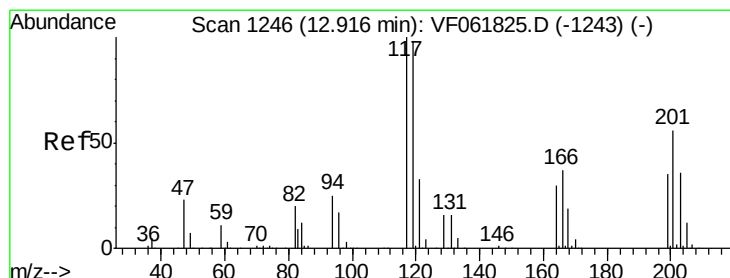
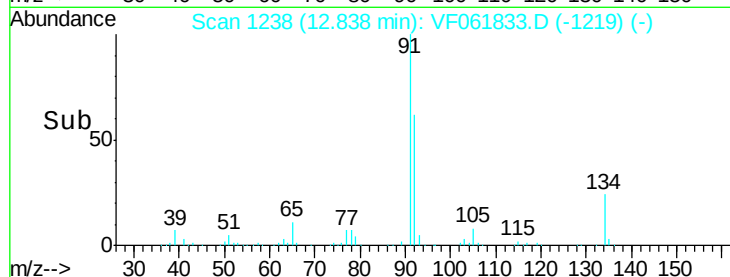
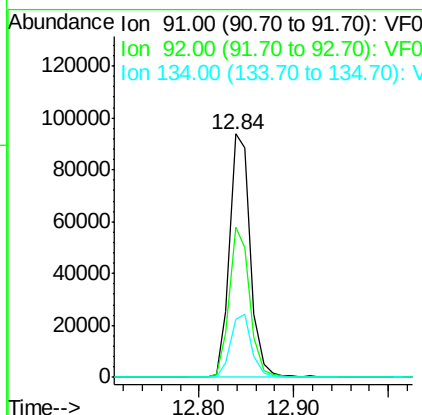
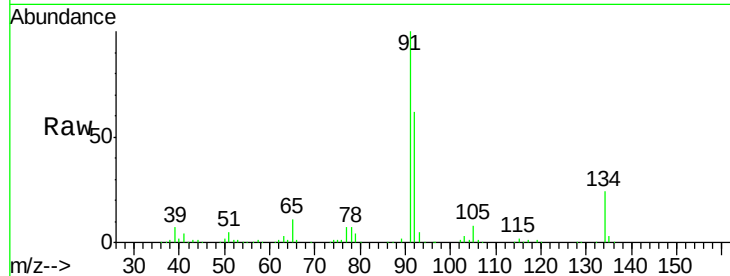
#89
n-Butylbenzene
Concen: 10.314 ug/l
RT: 12.84 min Scan# 1238
Delta R.T. -0.01 min
Lab File: VF061833.D
Acq: 4 Mar 2019 22:16

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

Tot Ion	Ratio	Lower	Upper
91	100		
92	61.8	32.9	98.6
134	23.8	14.5	43.6

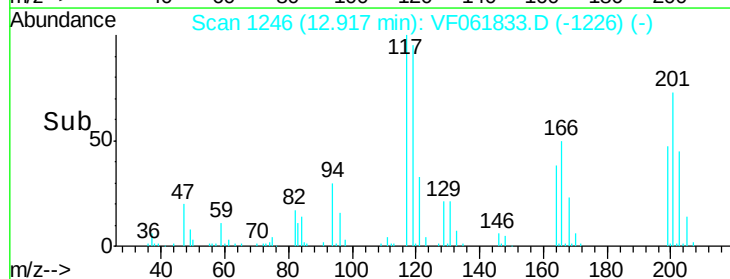
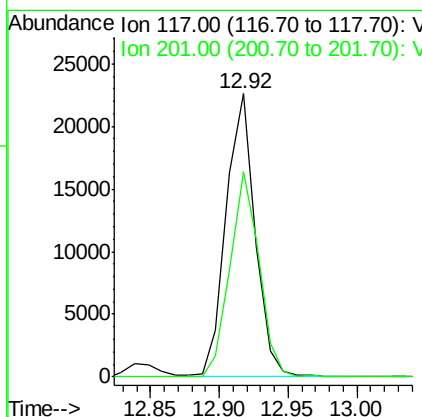
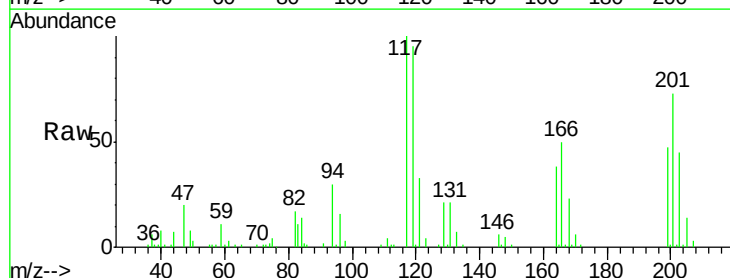
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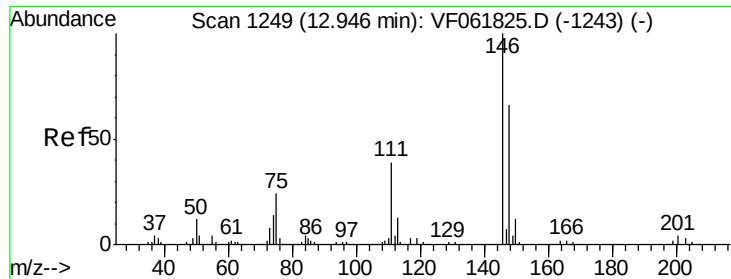
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#90
Hexachloroethane
Concen: 9.430 ug/l
RT: 12.92 min Scan# 1246
Delta R.T. 0.00 min
Lab File: VF061833.D
Acq: 4 Mar 2019 22:16

Tgt Ion	Ratio	Lower	Upper
117	100		
201	72.7	27.8	83.4





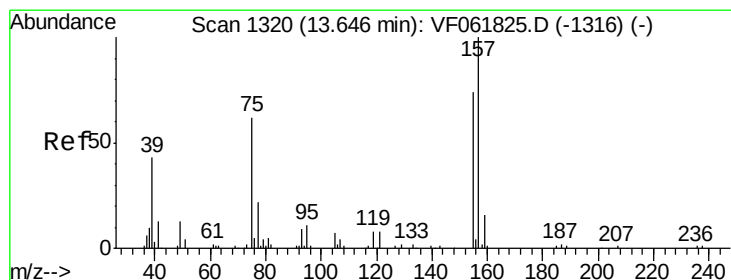
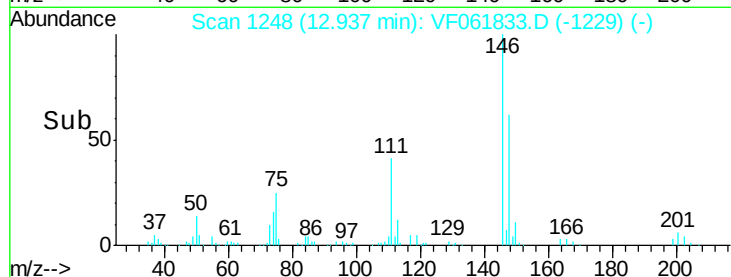
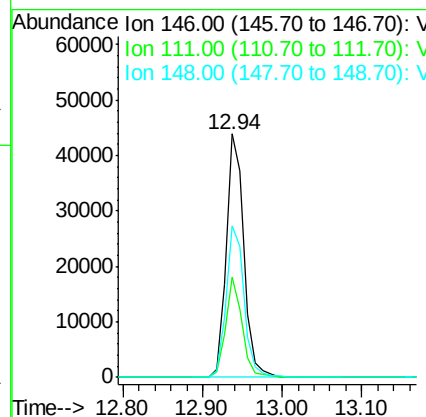
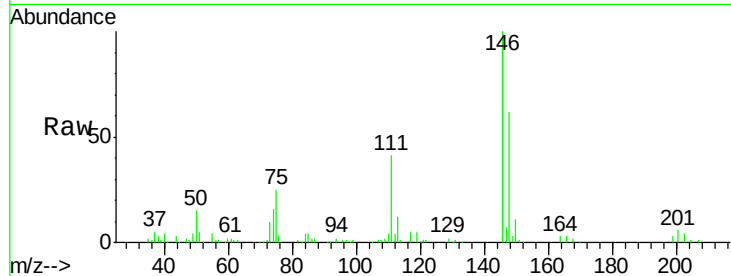
#91
 1,2-Dichlorobenzene
 Concen: 10.251 ug/l
 RT: 12.94 min Scan# 1248
 Delta R.T. -0.01 min
 Lab File: VF061833.D
 Acq: 4 Mar 2019 22:16

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

Tot Ion	Ratio	Lower	Upper
146	100		
111	41.0	19.4	58.4
148	62.1	33.0	98.9

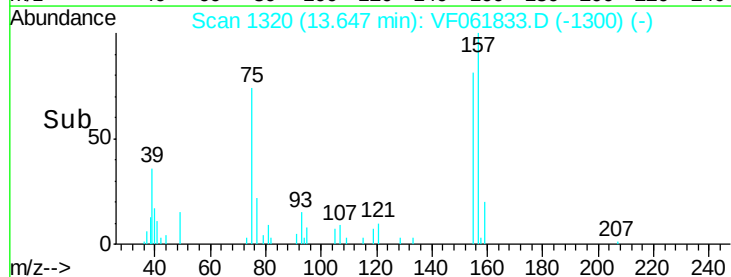
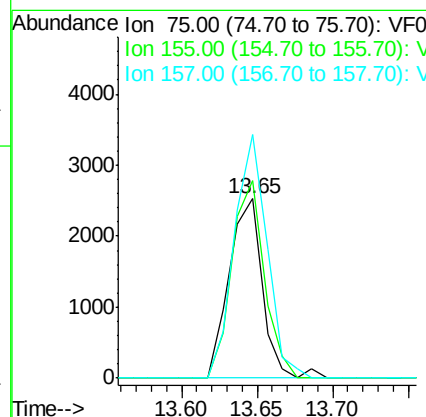
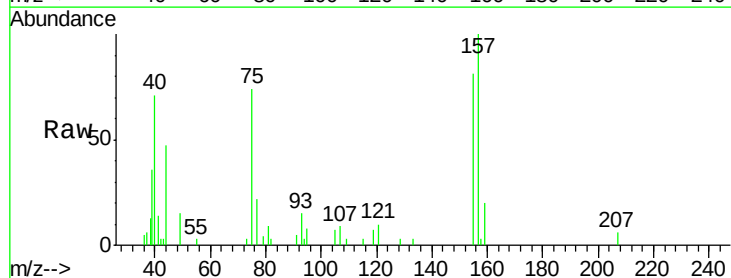
Manual Integrations
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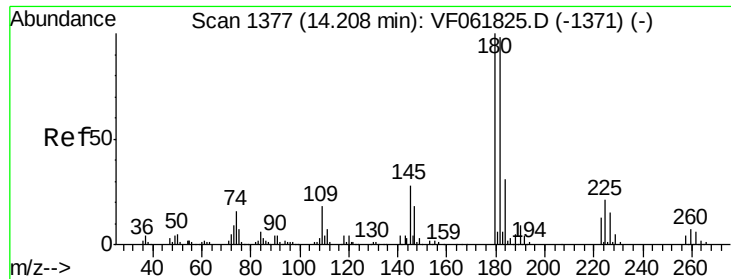
MMDadoda
 3/5/2019 10:48:26 AM



#92
 1,2-Dibromo-3-Chloropropane
 Concen: 11.769 ug/l
 RT: 13.65 min Scan# 1320
 Delta R.T. 0.00 min
 Lab File: VF061833.D
 Acq: 4 Mar 2019 22:16

Tgt Ion	Ratio	Lower	Upper
75	100		
155	110.5	59.8	179.4
157	135.9	81.2	243.4





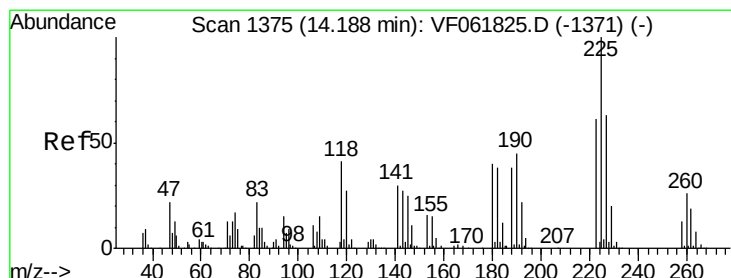
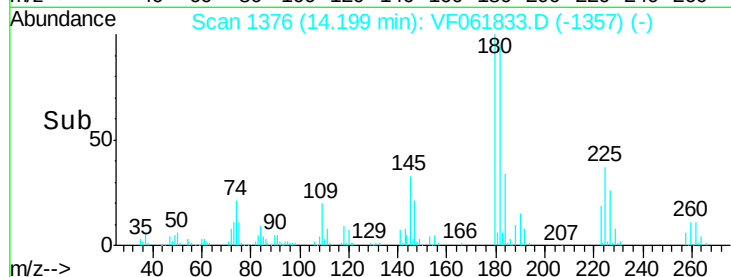
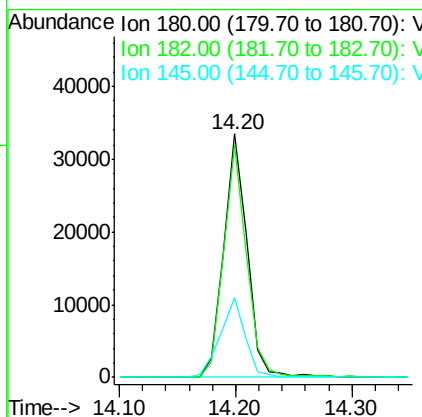
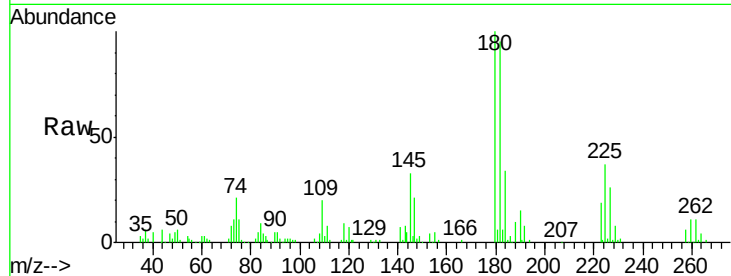
#93
 1,2,4-Trichlorobenzene
 Concen: 9.989 ug/l
 RT: 14.20 min Scan# 1376
 Delta R.T. -0.01 min
 Lab File: VF061833.D
 Acq: 4 Mar 2019 22:16

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

Tot Ion	Ratio	Lower	Upper
180	100		
182	95.3	49.0	147.2
145	32.9	14.1	42.4

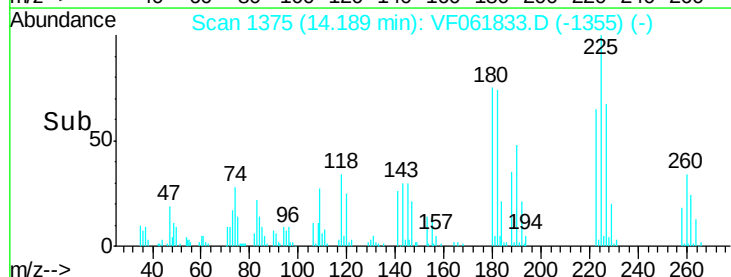
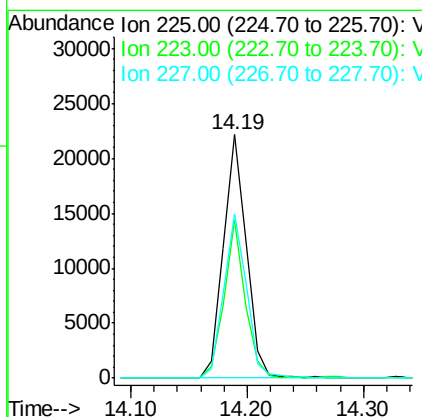
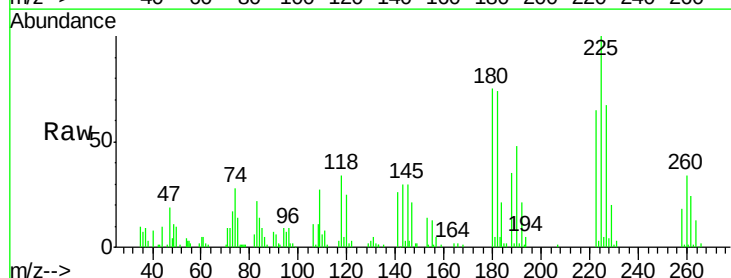
Manual Integrations
 APPROVED

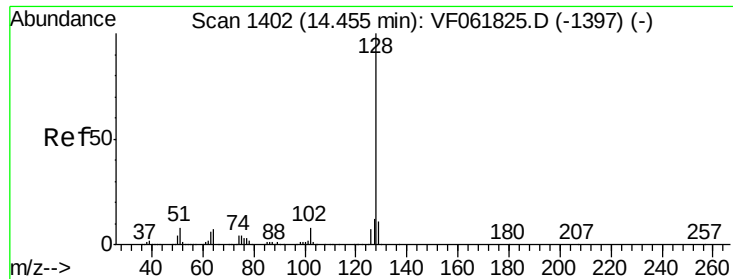
MMDadoda
 3/5/2019 10:48:26 AM



#94
 Hexachlorobutadiene
 Concen: 9.313 ug/l
 RT: 14.19 min Scan# 1375
 Delta R.T. 0.00 min
 Lab File: VF061833.D
 Acq: 4 Mar 2019 22:16

Tgt Ion	Ratio	Lower	Upper
225	100		
223	64.8	30.3	90.9
227	67.4	31.3	93.8





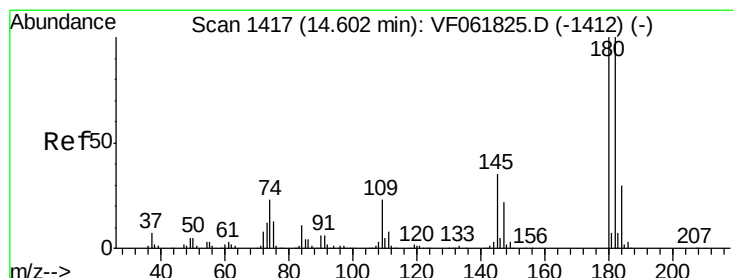
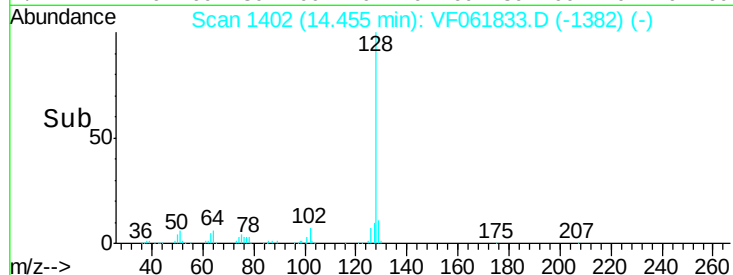
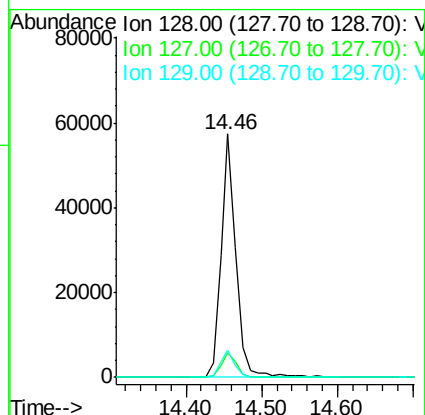
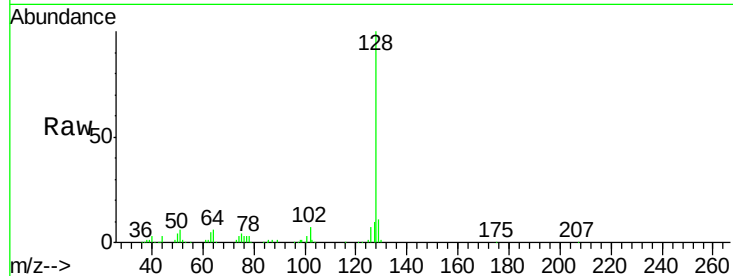
#95
Naphthalene
Concen: 9.468 ug/l
RT: 14.46 min Scan# 1402
Delta R.T. 0.00 min
Lab File: VF061833.D
Acq: 4 Mar 2019 22:16

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

Tot Ion	Ratio	Resp	Lower	Upper
128	100	79134		
127	10.4		9.3	13.9
129	11.0		8.8	13.2

Manual Integrations
APPROVED

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3/5/2019 10:48:26 AM



#96
1,2,3-Trichlorobenzene
Concen: 9.652 ug/l
RT: 14.60 min Scan# 1417
Delta R.T. 0.00 min
Lab File: VF061833.D
Acq: 4 Mar 2019 22:16

Tgt Ion	Ratio	Resp	Lower	Upper
180	100	41818		
182	95.1		50.2	150.7
145	30.0		17.5	52.5

