

Data Path : Z:\VOASRV\HPCHEM1\MSVOA F\DATA\VF041919\
 Data File : VF062235.D
 Acq On : 19 Apr 2019 20:04
 Operator : FY/SY
 Sample : K2241-03
 Misc : 5.00µ/5mL/MSVOA F/SOIL
 ALS Vial : 19 Sample Multiplier: 1

Instrument :
 MSVOA_F
 ClientSampleId :
 MDL-MDL-SOIL-03-QT2-2019

Manual Integrations
 APPROVED

MMDadoda
 4/23/2019 6:56:00 AM

Quant Time: Apr 19 23:53:22 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_X\METHOD\82F041719S.M
 Quant Title : SW846 8260
 QLast Update : Fri Apr 19 23:45:30 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	5.06	168	407666	50.00	ug/l	0.03
34) 1,4-Difluorobenzene	5.78	114	578743	50.00	ug/l	0.02
63) Chlorobenzene-d5	9.92	117	434560	50.00	ug/l	0.03
72) 1,4-Dichlorobenzene-d4	12.62	152	298562	50.00	ug/l	0.02
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	5.04	65	217609	58.21	ug/l	0.03
Spiked Amount 50.000			Recovery	=	116.42%	
35) Dibromofluoromethane	4.32	113	291151	57.51	ug/l	0.03
Spiked Amount 50.000			Recovery	=	115.02%	
50) Toluene-d8	7.72	98	679222	53.00	ug/l	0.03
Spiked Amount 50.000			Recovery	=	106.00%	
62) 4-Bromofluorobenzene	11.50	95	279019	56.60	ug/l	0.02
Spiked Amount 50.000			Recovery	=	113.20%	
Target Compounds						
					Qvalue	
2) Dichlorodifluoromethane	1.01	85	16284	2.628	ug/l	99
3) Chloromethane	1.16	50	15133	2.363	ug/l	99
4) Vinyl Chloride	1.21	62	12490	2.270	ug/l #	82
5) Bromomethane	1.40	94	11098	3.473	ug/l	86
6) Chloroethane	1.46	64	7469	3.248	ug/l #	83
7) Trichlorofluoromethane	1.57	101	14880m	2.129	ug/l	
8) Diethyl Ether	1.72	74	4147	2.851	ug/l	79
9) 1,1,2-Trichlorotrifluoroet	1.93	101	12761	2.673	ug/l	94
10) Methyl Iodide	2.00	142	20043m	2.363	ug/l	
11) Tert butyl alcohol	2.71	59	3145	12.104	ug/l	99
12) 1,1-Dichloroethene	1.89	96	13173	2.901	ug/l #	79
13) Acrolein	2.11	56	2129	13.522	ug/l #	14
14) Allyl chloride	2.20	41	11135	2.137	ug/l #	72
15) Acrylonitrile	3.09	53	12017	15.184	ug/l	96
16) Acetone	2.36	43	13481	15.088	ug/l	99
17) Carbon Disulfide	1.93	76	27553m	2.183	ug/l	
18) Methyl Acetate	2.48	43	15902	6.468	ug/l #	83
19) Methyl tert-butyl Ether	2.56	73	20425	2.547	ug/l #	81
20) Methylene Chloride	2.36	84	50394m	8.843	ug/l	
21) trans-1,2-Dichloroethene	2.43	96	12517	2.787	ug/l	91
22) Diisopropyl ether	2.94	45	33336	2.501	ug/l	95
23) Vinyl Acetate	3.36	43	69803	10.990	ug/l #	95
24) 1,1-Dichloroethane	3.02	63	18372	2.519	ug/l #	94
25) 2-Butanone	4.54	43	21134	11.829	ug/l #	91
26) 2,2-Dichloropropane	3.77	77	8401	2.282	ug/l	83
27) cis-1,2-Dichloroethene	3.65	96	14272	2.454	ug/l	91
28) Bromochloromethane	3.92	49	8174	2.340	ug/l #	94
29) Tetrahydrofuran	4.29	42	9970	12.329	ug/l #	87
30) Chloroform	4.07	83	24836	2.771	ug/l	86
31) Cyclohexane	3.88	56	23981m	2.744	ug/l	
32) 1,1,1-Trichloroethane	4.29	97	14223	2.168	ug/l #	91
36) 1,1-Dichloropropene	4.48	75	17592	2.535	ug/l	94
37) Ethyl Acetate	4.32	43	8108	2.476	ug/l #	83
38) Carbon Tetrachloride	4.19	117	16181	2.635	ug/l	92

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Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
39) Methylcyclohexane	5.65	83	19852	2.390	ug/l #	84
40) Benzene	4.83	78	46117	2.534	ug/l	94
41) Methacrylonitrile	4.95	41	6375	3.375	ug/l	93
42) 1,2-Dichloroethane	5.14	62	12028	2.500	ug/l #	74
43) Isopropyl Acetate	7.13	43	9019	2.619	ug/l #	98
44) Trichloroethene	5.69	130	14142	2.876	ug/l	87
45) 1,2-Dichloropropane	6.43	63	9612	2.398	ug/l	96
46) Dibromomethane	6.27	93	7499	2.811	ug/l	97
47) Bromodichloromethane	6.56	83	16219	2.695	ug/l	92
48) Methyl methacrylate	6.89	41	5802	2.564	ug/l #	56
49) 1,4-Dioxane	6.89	88	1123	43.267	ug/l #	1
51) 4-Methyl-2-Pentanone	8.41	43	33146	12.941	ug/l	95
52) Toluene	7.79	92	24172	2.520	ug/l	96
53) t-1,3-Dichloropropene	8.43	75	12624	2.792	ug/l #	88
54) cis-1,3-Dichloropropene	7.47	75	15885	2.598	ug/l	96
55) 1,1,2-Trichloroethane	8.64	97	8181	3.044	ug/l #	85
56) Ethyl methacrylate	8.77	69	7958	2.604	ug/l #	84
57) 1,3-Dichloropropane	9.00	76	11638	2.682	ug/l	97
58) 2-Chloroethyl Vinyl ether	7.46	63	11471	12.930	ug/l	97
59) 2-Hexanone	9.63	43	23236	13.768	ug/l	100
60) Dibromochloromethane	8.87	129	11134	2.786	ug/l	90
61) 1,2-Dibromoethane	9.14	107	8328	2.750	ug/l	95
64) Tetrachloroethene	8.31	164	11801	3.008	ug/l	98
65) Chlorobenzene	9.94	112	25334	2.734	ug/l	91
66) 1,1,1,2-Tetrachloroethane	10.07	131	12476	2.875	ug/l	98
67) Ethyl Benzene	10.04	91	44322	2.631	ug/l	99
68) m/p-Xylenes	10.27	106	34237	5.520	ug/l	95
69) o-Xylene	10.83	106	19102	2.774	ug/l	100
70) Styrene	10.90	104	27465	2.826	ug/l	97
71) Bromoform	10.89	173	7350	3.208	ug/l #	95
73) Isopropylbenzene	11.22	105	52056	2.030	ug/l	100
74) N-amyl acetate	11.46	43	15165	2.237	ug/l #	91
75) 1,1,2,2-Tetrachloroethane	11.77	83	9579	2.172	ug/l	90
76) 1,2,3-Trichloropropane	11.87	75	7981m	2.630	ug/l	
77) Bromobenzene	11.59	156	13563	2.469	ug/l	92
78) n-propylbenzene	11.68	91	59781	2.210	ug/l	97
79) 2-Chlorotoluene	11.80	91	35241	2.147	ug/l	98
80) 1,3,5-Trimethylbenzene	11.90	105	50753	2.376	ug/l	94
81) trans-1,4-Dichloro-2-buten	11.95	75	4982m	3.219	ug/l	
82) 4-Chlorotoluene	11.98	91	36261	2.286	ug/l	98
83) tert-Butylbenzene	12.21	119	49954	2.261	ug/l	98
84) 1,2,4-Trimethylbenzene	12.28	105	48537	2.348	ug/l	96
85) sec-Butylbenzene	12.37	105	62011	2.162	ug/l	100
86) p-Isopropyltoluene	12.52	119	58224	2.393	ug/l	97
87) 1,3-Dichlorobenzene	12.54	146	26411	2.591	ug/l	97
88) 1,4-Dichlorobenzene	12.63	146	24595	2.501	ug/l	94
89) n-Butylbenzene	12.91	91	54907	2.354	ug/l	97
90) Hexachloroethane	12.98	117	14622	2.341	ug/l	97
91) 1,2-Dichlorobenzene	13.01	146	23947	2.433	ug/l	96
92) 1,2-Dibromo-3-Chloropropan	13.70	75	2199	2.538	ug/l	93

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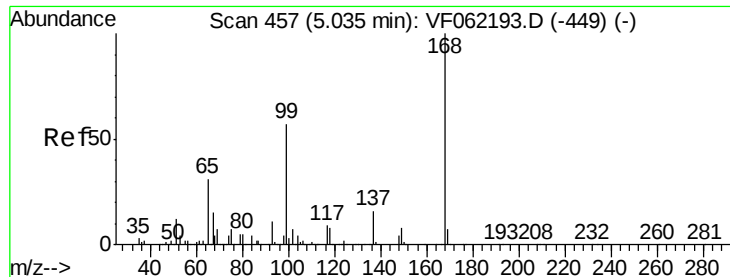
Manual Integrations
 APPROVED

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Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
93) 1,2,4-Trichlorobenzene	14.25	180	20791	2.524	ug/l	96
94) Hexachlorobutadiene	14.24	225	13687	2.423	ug/l	98
95) Naphthalene	14.50	128	31688	2.200	ug/l	98
96) 1,2,3-Trichlorobenzene	14.64	180	19140	2.420	ug/l	97

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



#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 5.06 min Scan# 459

Delta R.T. 0.03 min

Lab File: VF062235.D

Acq: 19 Apr 2019 20:04

Instrument :

MSVOA_F

ClientSampleId :

MDL-MDL-SOIL-03-QT2-2019

Tot Ion:168 Resp: 407666

Ion Ratio Lower Upper

168 100

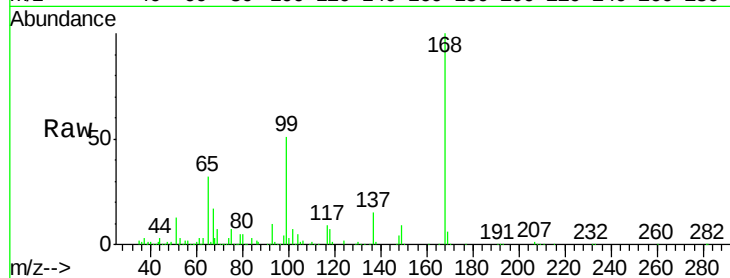
99 50.7 45.5 68.3

Manual Integrations

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Abundance Ion 167.90 (167.60 to 168.60): VF0

Ion 98.90 (98.60 to 99.60): VF0

5.06

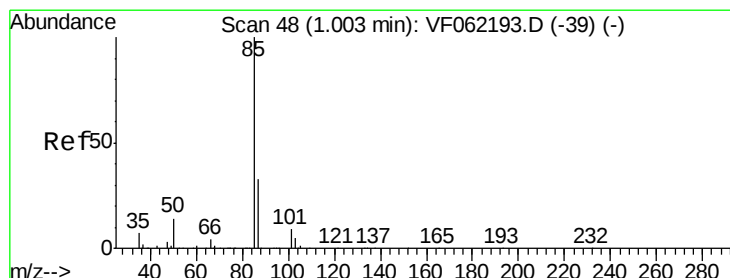
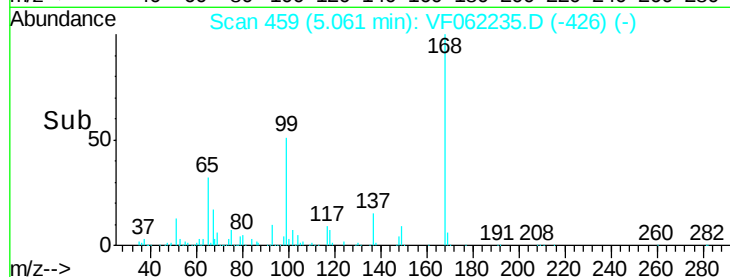
150000

100000

50000

0

Time-->



#2

Dichlorodifluoromethane

Concen: 2.628 ug/l

RT: 1.01 min Scan# 48

Delta R.T. 0.01 min

Lab File: VF062235.D

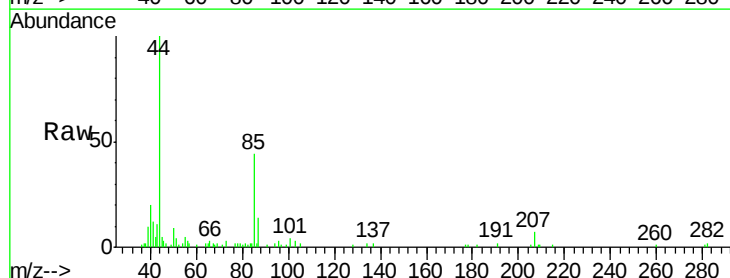
Acq: 19 Apr 2019 20:04

Tgt Ion: 85 Resp: 16284

Ion Ratio Lower Upper

85 100

87 32.4 16.4 49.1



Abundance Ion 84.90 (84.60 to 85.60): VF0

Ion 86.90 (86.60 to 87.60): VF0

1.01

4000

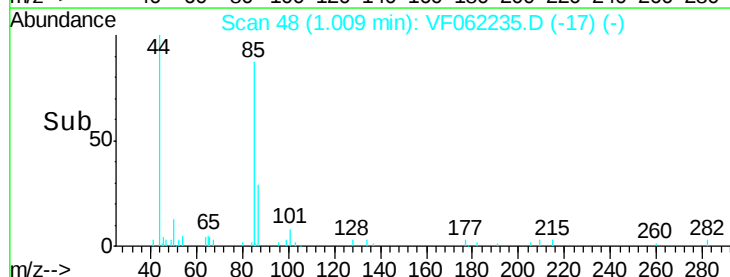
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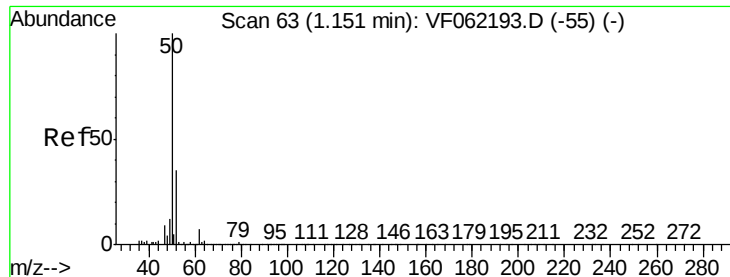
2000

1000

0

Time-->





#3

Chloromethane

Concen: 2.363 ug/l

RT: 1.16 min Scan# 63

Delta R.T. 0.01 min

Lab File: VF062235.D

Acq: 19 Apr 2019 20:04

Instrument :

MSVOA_F

ClientSampleId :

MDL-MDL-SOIL-03-QT2-2019

Tot Ion: 50 Resp: 15133

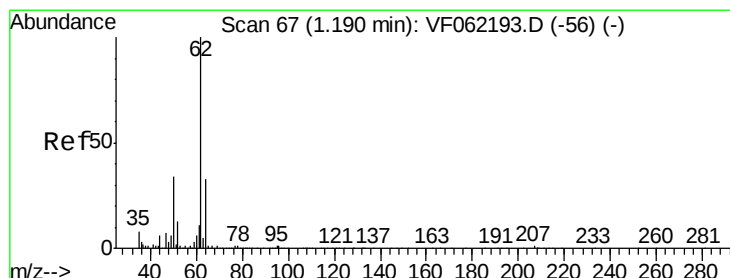
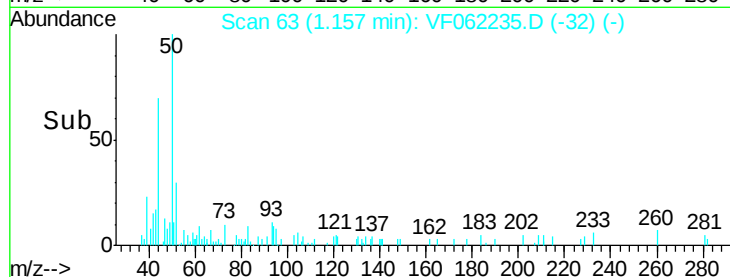
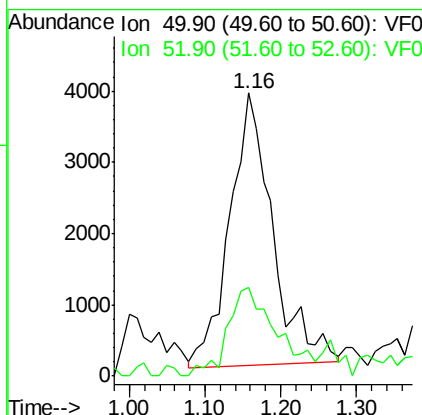
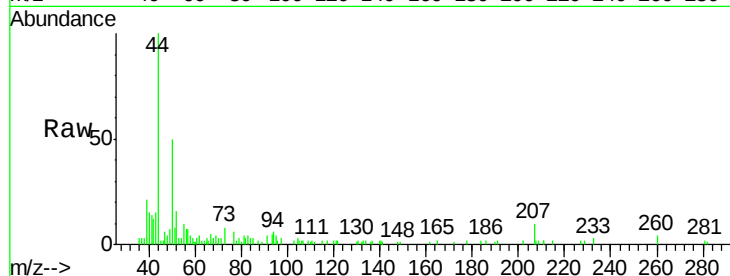
Ion Ratio Lower Upper

50 100

52 33.2 27.0 40.4

Manual Integrations
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#4

Vinyl Chloride

Concen: 2.270 ug/l

RT: 1.21 min Scan# 68

Delta R.T. 0.02 min

Lab File: VF062235.D

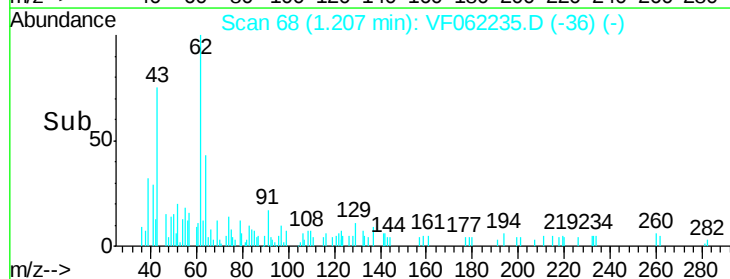
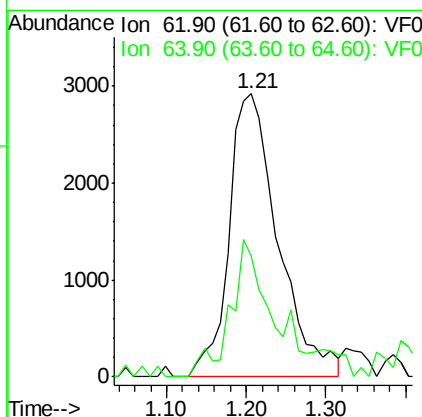
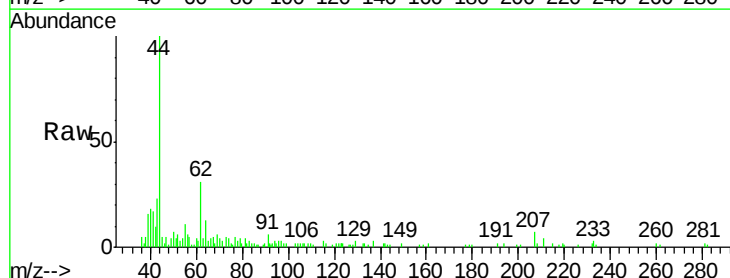
Acq: 19 Apr 2019 20:04

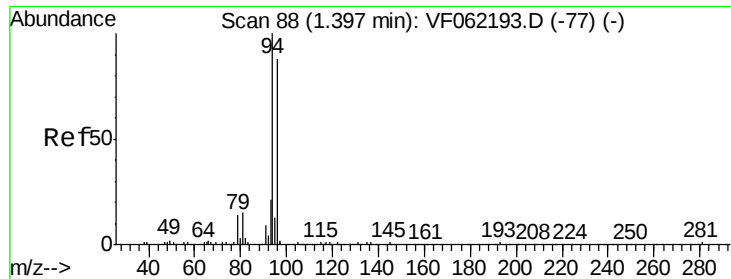
Tgt Ion: 62 Resp: 12490

Ion Ratio Lower Upper

62 100

64 42.7 26.2 39.4#





#5

Bromomethane

Concen: 3.473 ug/l

RT: 1.40 min Scan# 88

Delta R.T. 0.01 min

Lab File: VF062235.D

Acq: 19 Apr 2019 20:04

Instrument :

MSVOA_F

ClientSampleId :

MDL-MDL-SOIL-03-QT2-2019

Tot Ion: 94 Resp: 11098

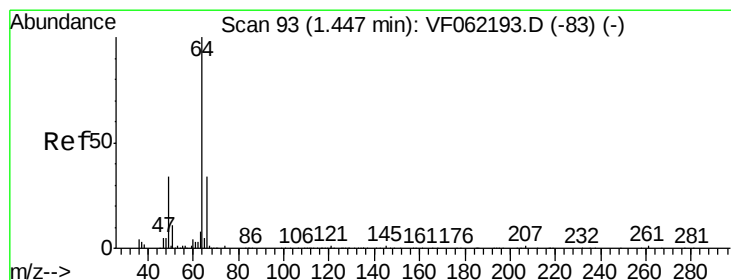
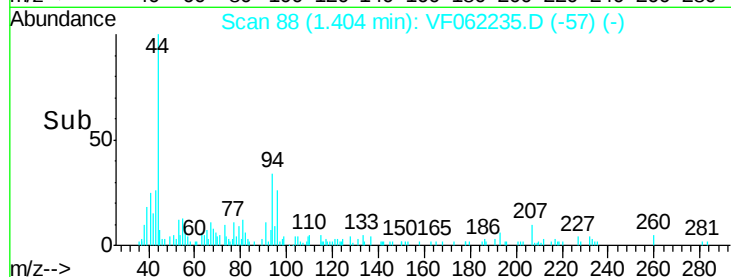
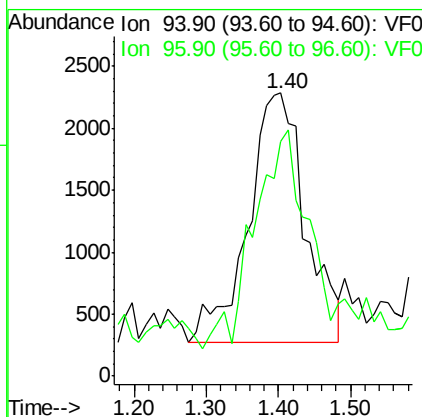
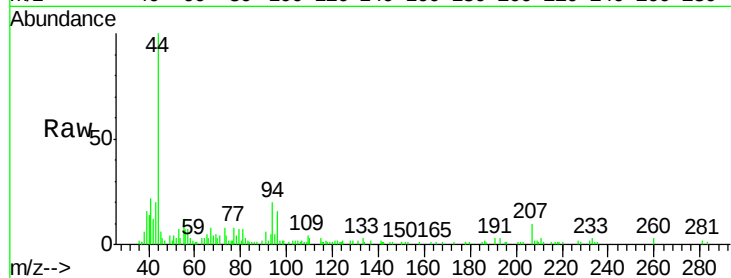
Ion Ratio Lower Upper

94 100

96 74.7 70.2 105.4

Manual Integrations
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#6

Chloroethane

Concen: 3.248 ug/l

RT: 1.46 min Scan# 94

Delta R.T. 0.02 min

Lab File: VF062235.D

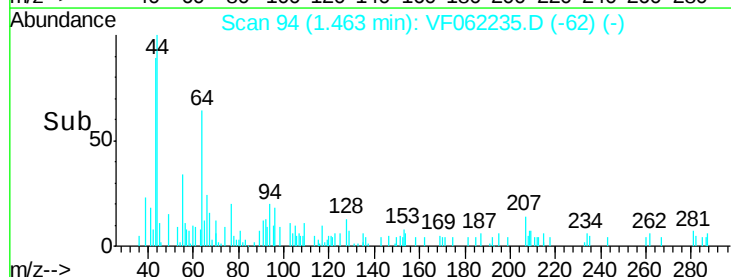
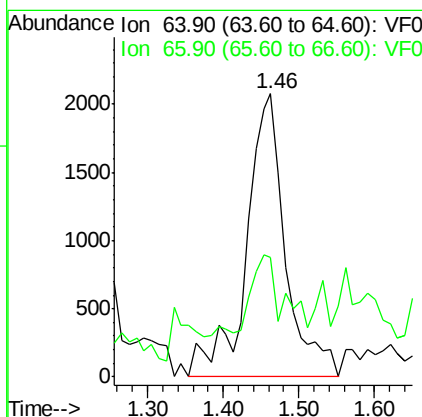
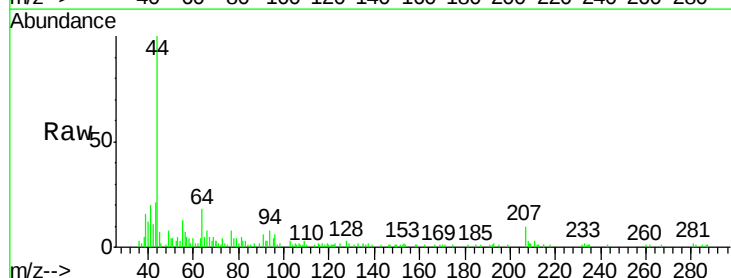
Acq: 19 Apr 2019 20:04

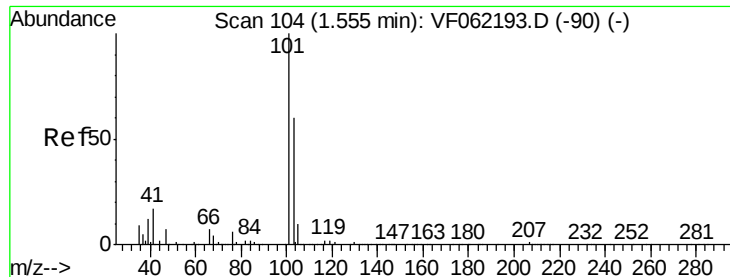
Tgt Ion: 64 Resp: 7469

Ion Ratio Lower Upper

64 100

66 23.9 27.0 40.4#





#7

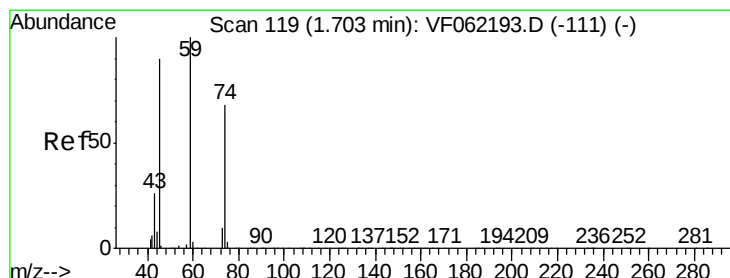
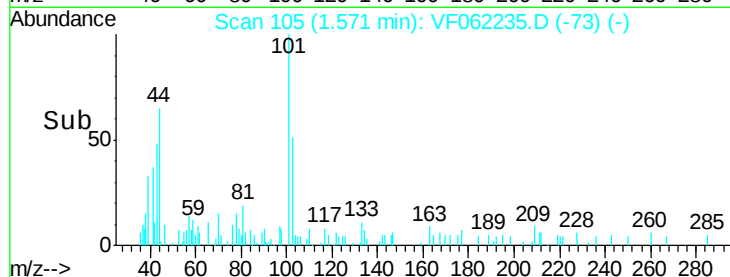
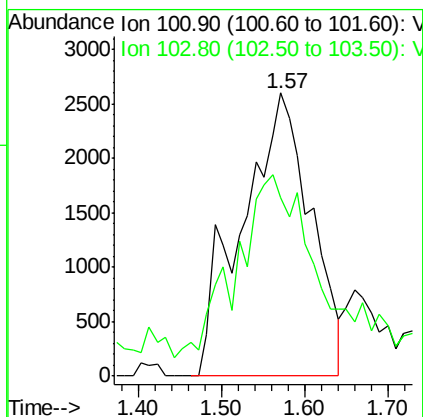
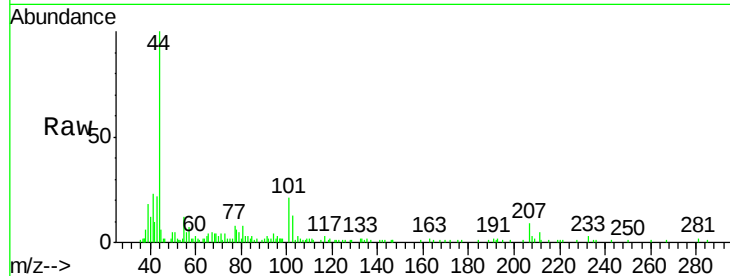
Trichlorofluoromethane
Concen: 2.129 ug/l m
RT: 1.57 min Scan# 105
Delta R.T. 0.02 min
Lab File: VF062235.D
Acq: 19 Apr 2019 20:04

Instrument :
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ClientSampleId :
MDL-MDL-SOIL-03-QT2-2019

Tot Ion:101 Resp: 14880
Ion Ratio Lower Upper
101 100
103 62.9 48.2 72.4

Manual Integrations
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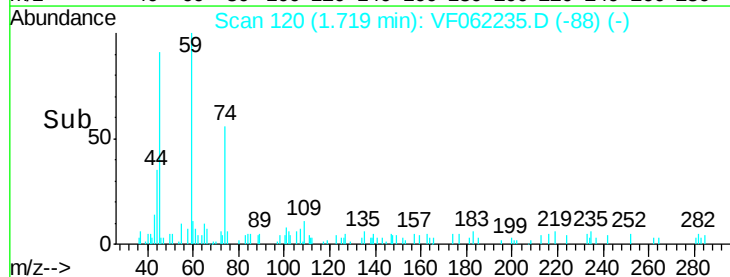
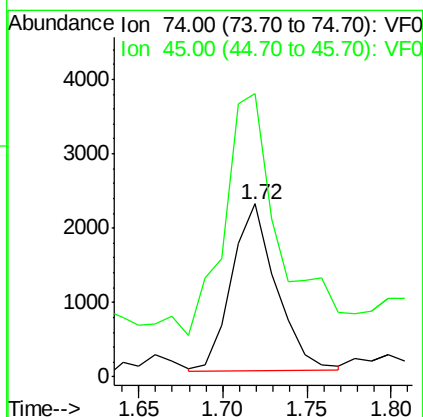
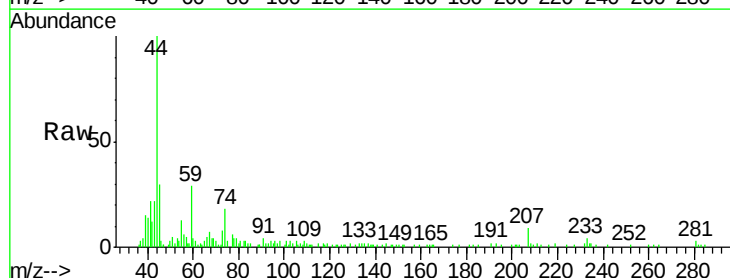
MMDadoda
4/23/2019 6:56:00 AM

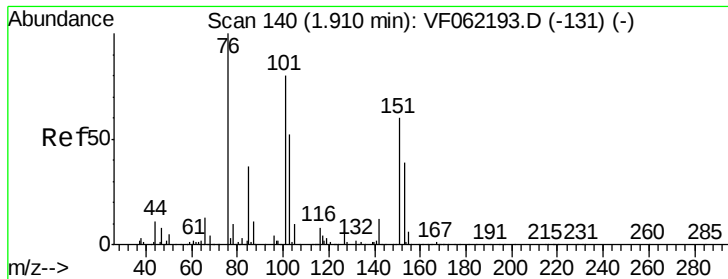


#8

Diethyl Ether
Concen: 2.851 ug/l
RT: 1.72 min Scan# 120
Delta R.T. 0.02 min
Lab File: VF062235.D
Acq: 19 Apr 2019 20:04

Tgt Ion: 74 Resp: 4147
Ion Ratio Lower Upper
74 100
45 165.6 70.0 210.2





#9

1,1,2-Trichlorotrifluoroethane

Concen: 2.673 ug/l

RT: 1.93 min Scan# 141

Delta R.T. 0.02 min

Lab File: VF062235.D

Acq: 19 Apr 2019 20:04

Instrument :

MSVOA_F

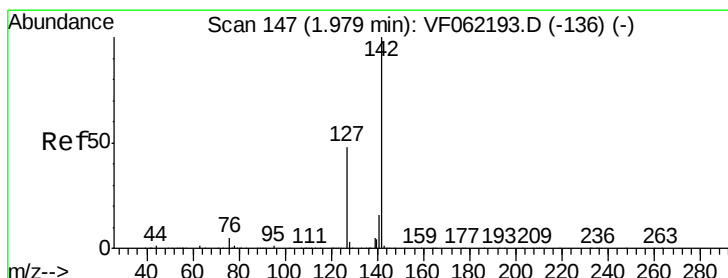
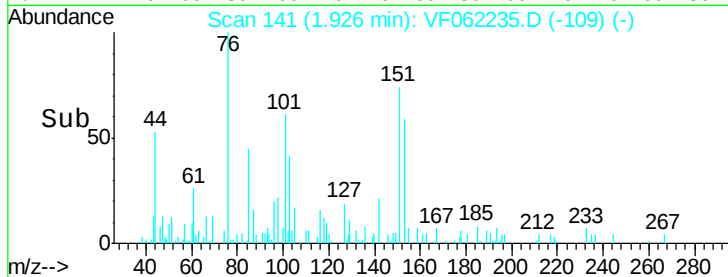
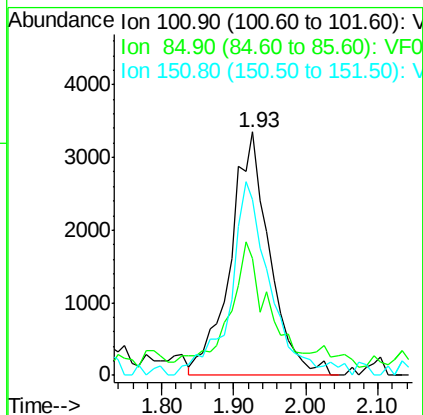
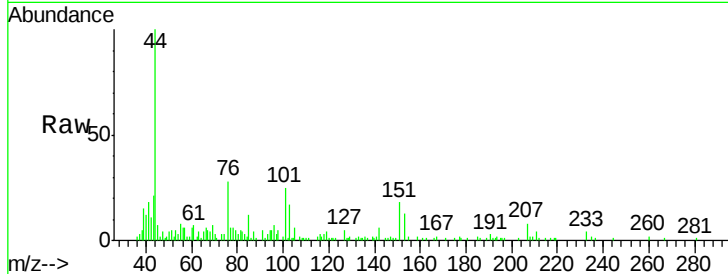
ClientSampleId :

MDL-MDL-SOIL-03-QT2-2019

Tot Ion:	101	Resp:	12761
Ion Ratio	Lower	Upper	
101	100		
85	45.1	35.3	52.9
151	78.7	57.5	86.3

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#10

Methyl Iodide

Concen: 2.363 ug/l m

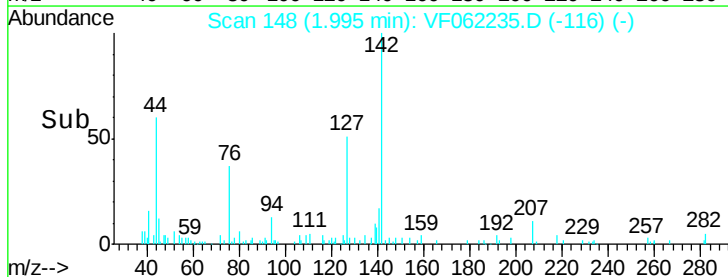
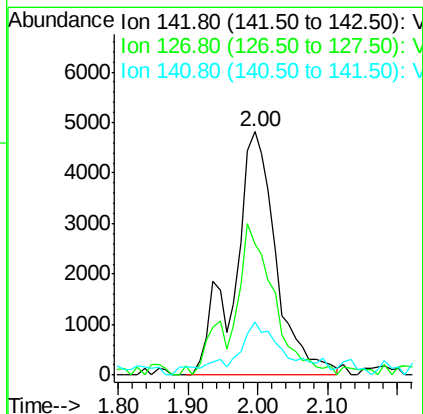
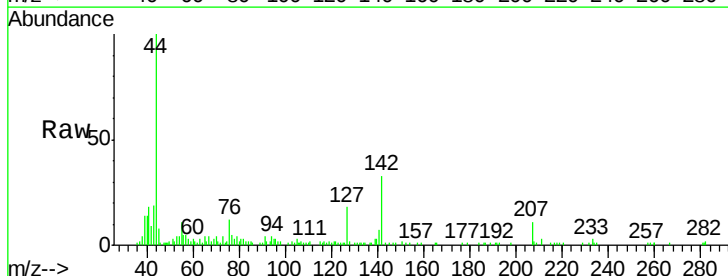
RT: 2.00 min Scan# 148

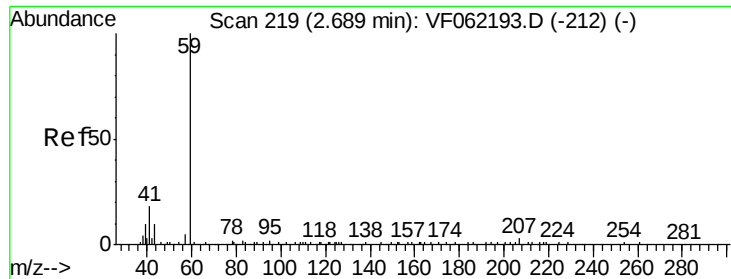
Delta R.T. 0.02 min

Lab File: VF062235.D

Acq: 19 Apr 2019 20:04

Tgt Ion:	142	Resp:	20043
Ion Ratio	Lower	Upper	
142	100		
127	50.6	33.0	49.4#
141	26.4	12.7	19.1#





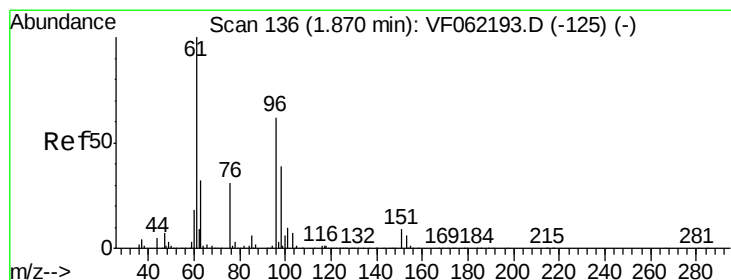
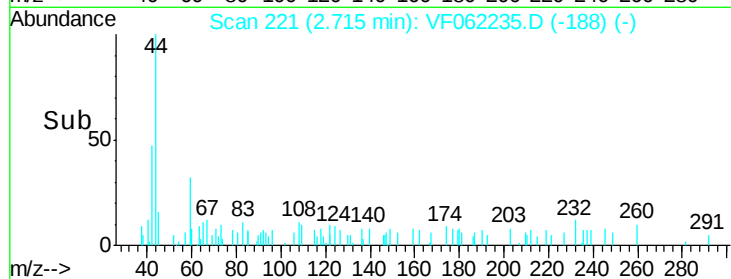
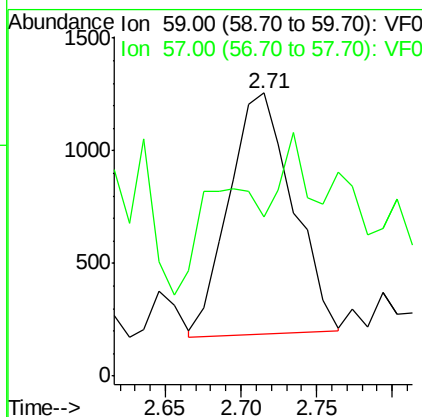
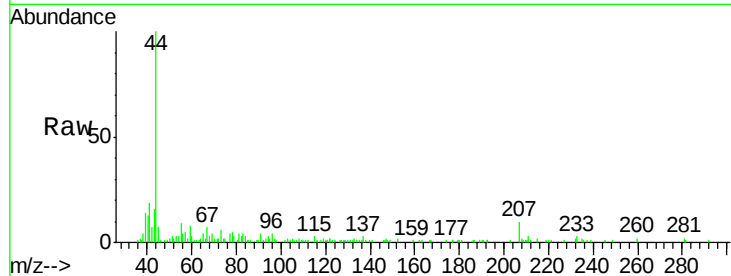
#11
Tert butyl alcohol
Concen: 12.104 ug/l
RT: 2.71 min Scan# 221
Delta R.T. 0.03 min
Lab File: VF062235.D
Acq: 19 Apr 2019 20:04

Instrument :
MSVOA_F
ClientSampleId :
MDL-MDL-SOIL-03-QT2-2019

Tot Ion	Ratio	Lower	Upper
59	100		
57	11.9	9.3	13.9

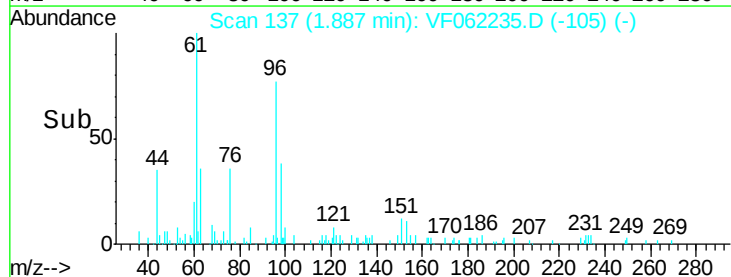
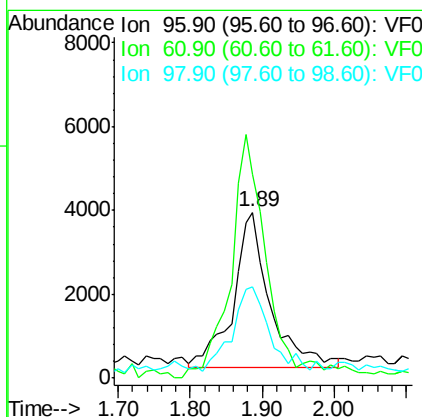
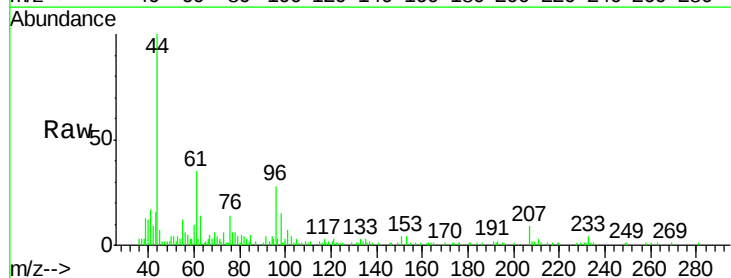
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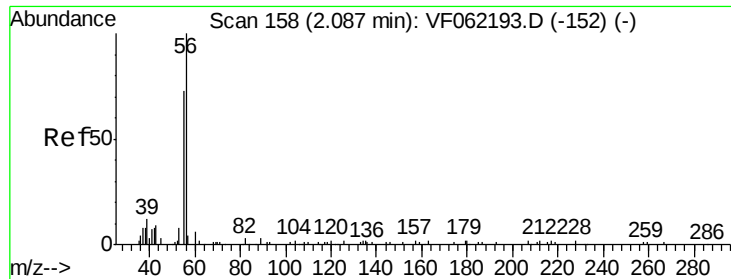
MMDadoda
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#12
1,1-Dichloroethene
Concen: 2.901 ug/l
RT: 1.89 min Scan# 137
Delta R.T. 0.02 min
Lab File: VF062235.D
Acq: 19 Apr 2019 20:04

Tgt Ion	Ratio	Lower	Upper
96	100		
61	128.5	129.1	193.7#
98	54.1	50.0	75.0





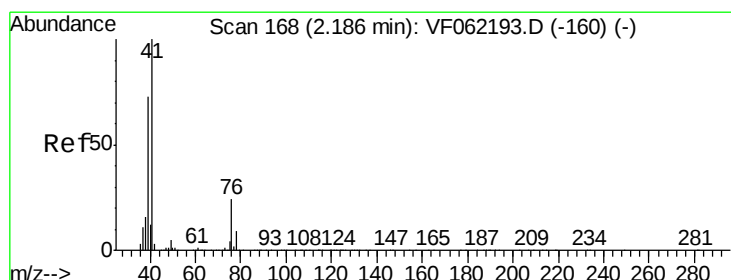
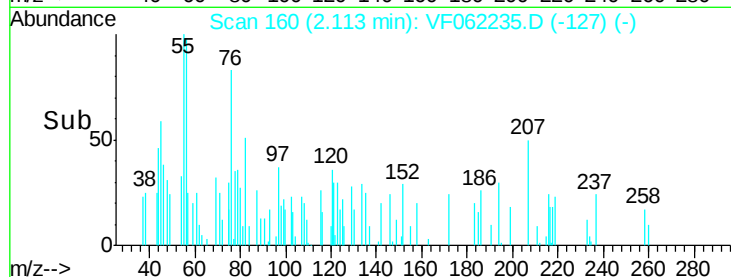
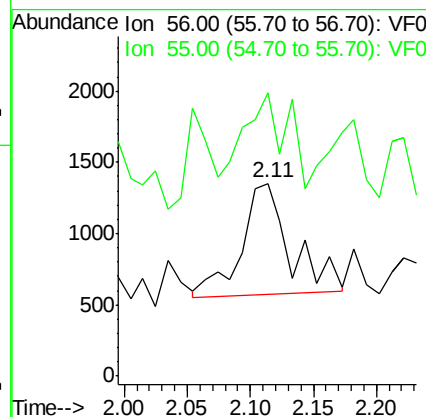
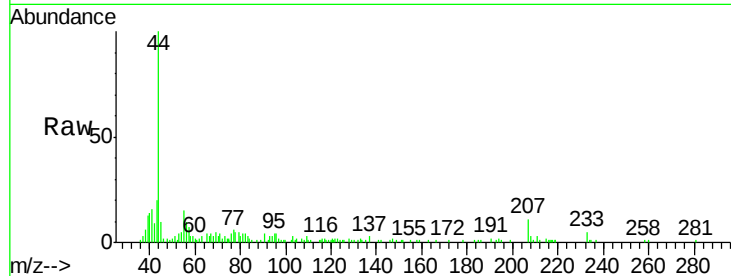
#13
Acrolein
Concen: 13.522 ug/l
RT: 2.11 min Scan# 160
Delta R.T. 0.03 min
Lab File: VF062235.D
Acq: 19 Apr 2019 20:04

Instrument :
MSVOA_F
ClientSampleId :
MDL-MDL-SOIL-03-QT2-2019

Tot Ion: 56 Resp: 2129
Ion Ratio Lower Upper
56 100
55 142.9 57.4 86.0#

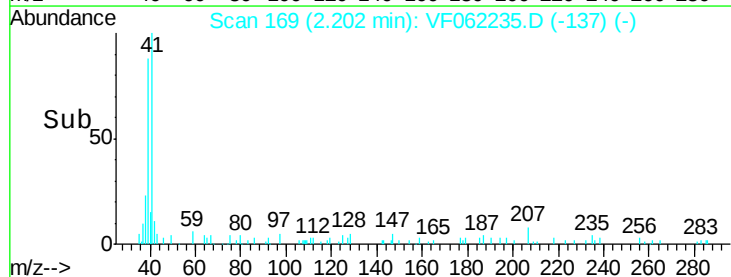
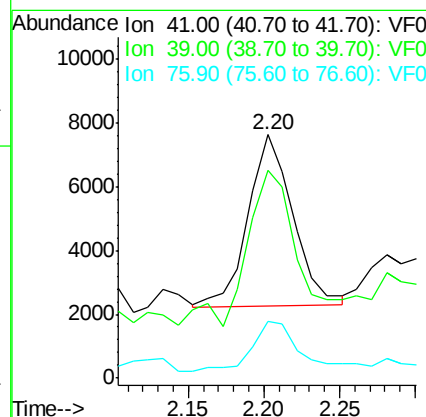
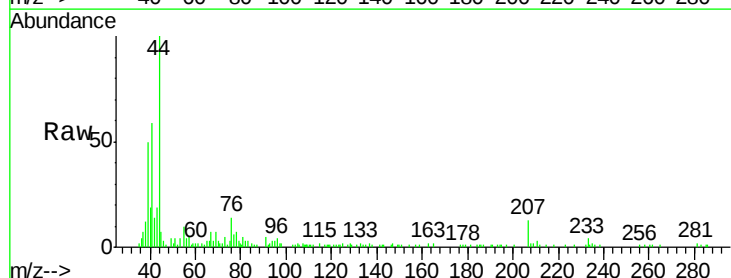
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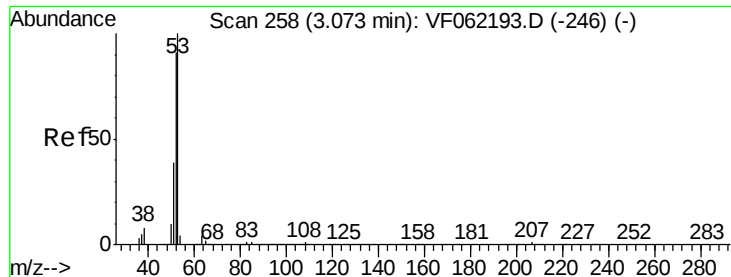
MMDadoda
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#14
Allyl chloride
Concen: 2.137 ug/l
RT: 2.20 min Scan# 169
Delta R.T. 0.02 min
Lab File: VF062235.D
Acq: 19 Apr 2019 20:04

Tgt Ion: 41 Resp: 11135
Ion Ratio Lower Upper
41 100
39 104.6 60.0 90.0#
76 30.0 20.6 30.8





#15

Acrylonitrile

Concen: 15.184 ug/l

RT: 3.09 min Scan# 259

Delta R.T. 0.02 min

Lab File: VF062235.D

Acq: 19 Apr 2019 20:04

Instrument :

MSVOA_F

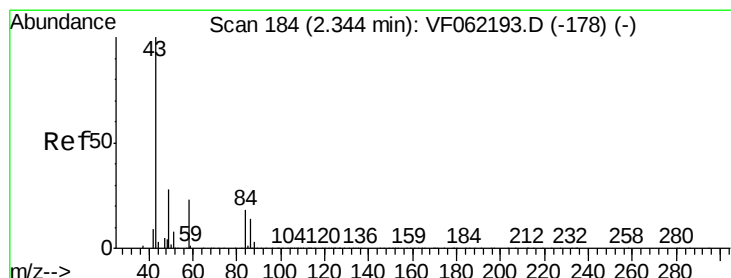
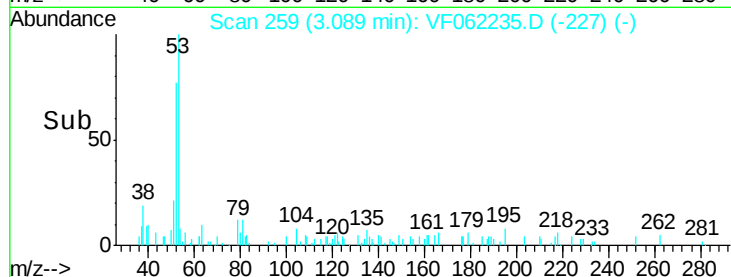
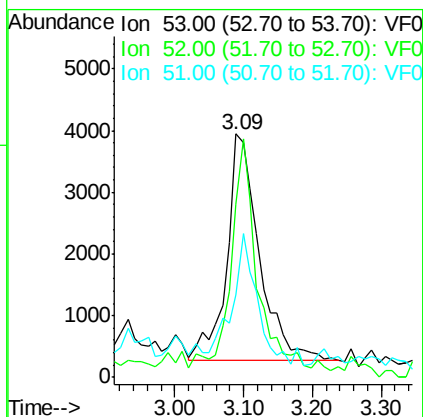
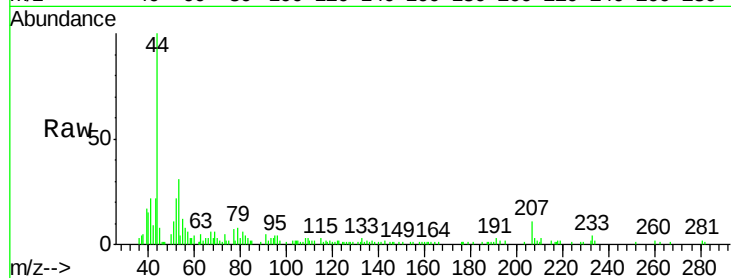
ClientSampleId :

MDL-MDL-SOIL-03-QT2-2019

Tot Ion:	53	Resp:	12017
Ion Ratio	Lower	Upper	
53	100		
52	84.0	69.5	104.3
51	43.6	31.8	47.8

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#16

Acetone

Concen: 15.088 ug/l

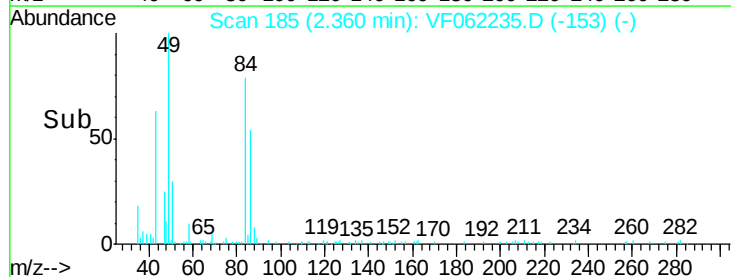
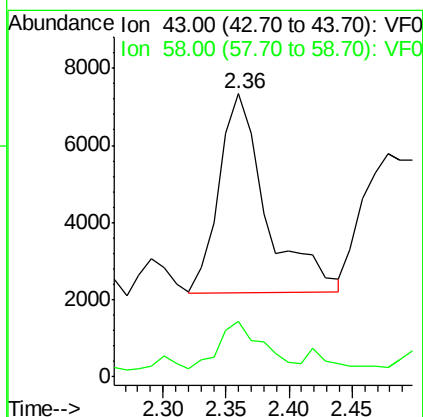
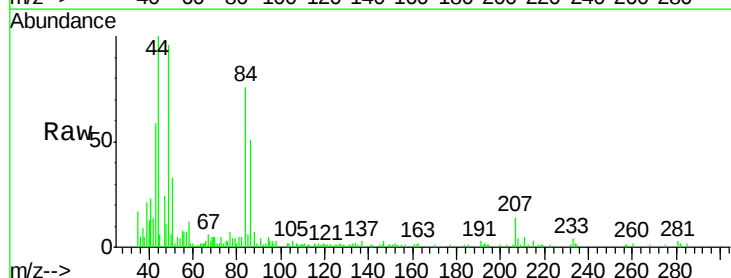
RT: 2.36 min Scan# 185

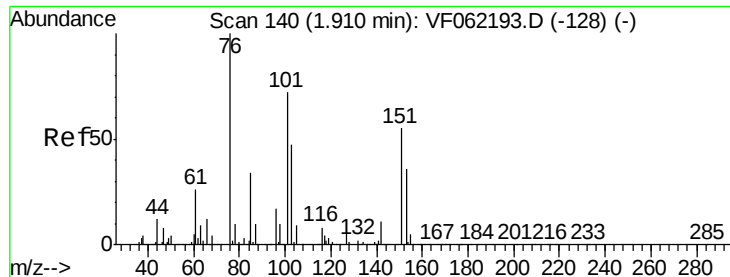
Delta R.T. 0.02 min

Lab File: VF062235.D

Acq: 19 Apr 2019 20:04

Tgt Ion:	43	Resp:	13481
Ion Ratio	Lower	Upper	
43	100		
58	24.1	18.8	28.2





#17

Carbon Disulfide

Concen: 2.183 ug/l m

RT: 1.93 min Scan# 141

Delta R.T. 0.02 min

Lab File: VF062235.D

Acq: 19 Apr 2019 20:04

Instrument :

MSVOA_F

ClientSampleId :

MDL-MDL-SOIL-03-QT2-2019

Tot Ion: 76 Resp: 27553

Ion Ratio Lower Upper

76 100

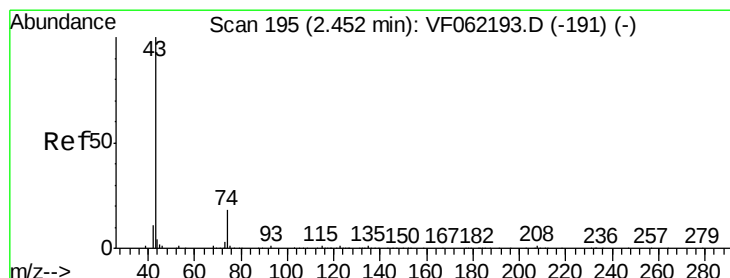
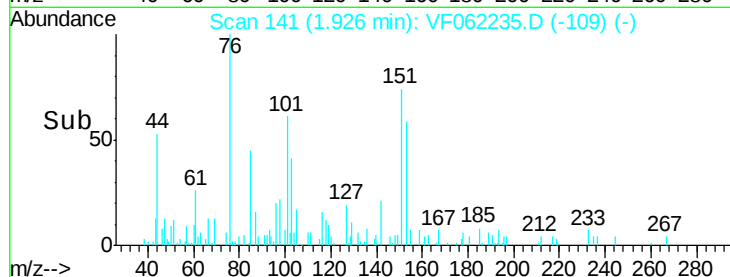
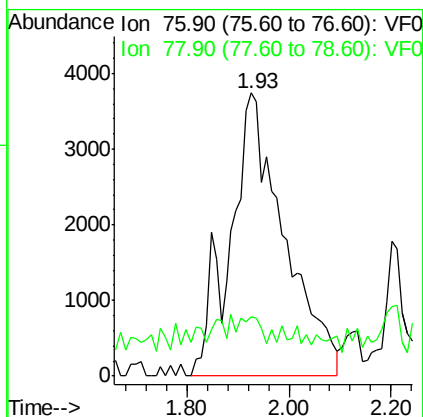
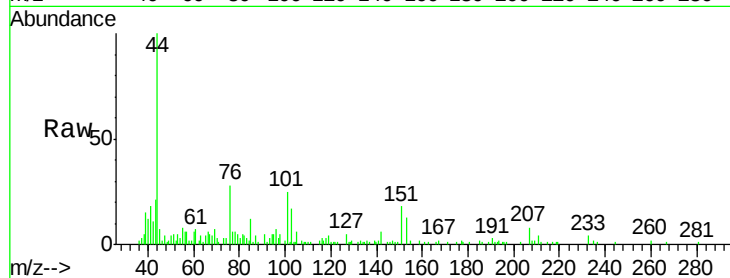
78 21.0 8.7 13.1#

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#18

Methyl Acetate

Concen: 6.468 ug/l

RT: 2.48 min Scan# 197

Delta R.T. 0.03 min

Lab File: VF062235.D

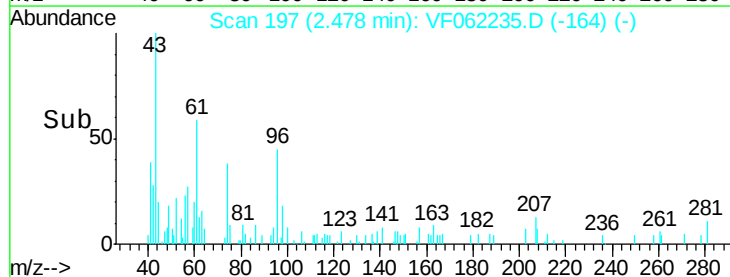
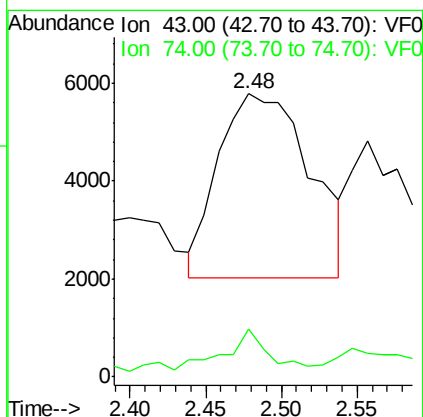
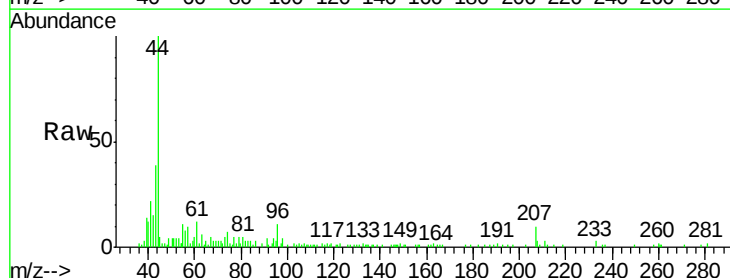
Acq: 19 Apr 2019 20:04

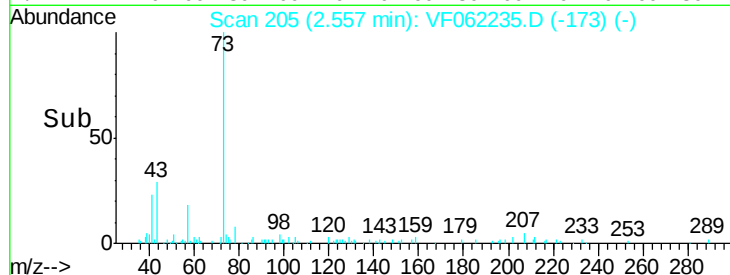
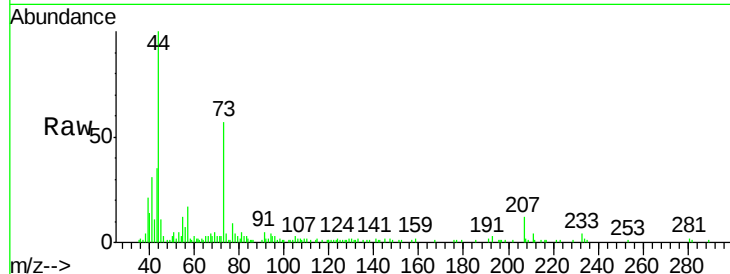
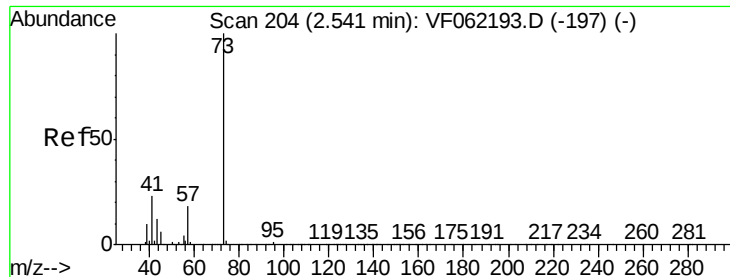
Tgt Ion: 43 Resp: 15902

Ion Ratio Lower Upper

43 100

74 10.4 14.5 21.7#





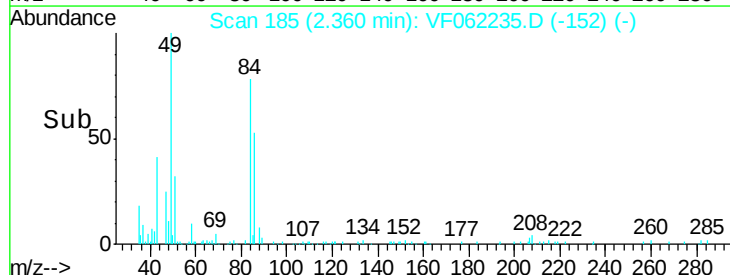
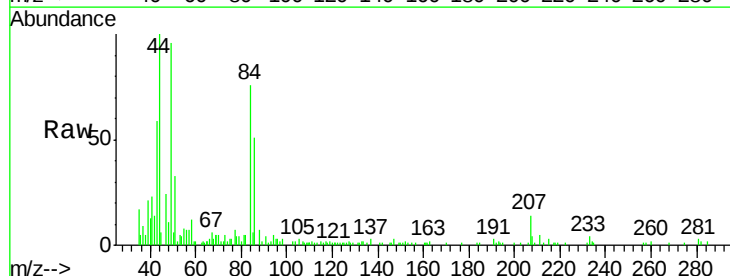
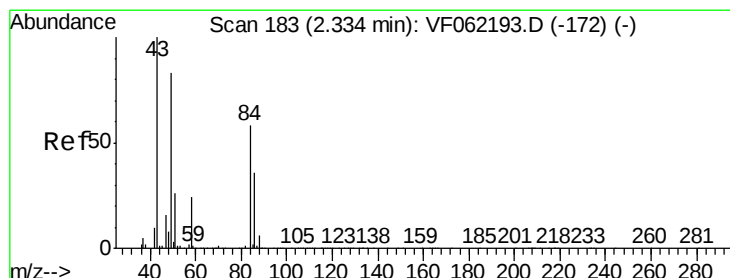
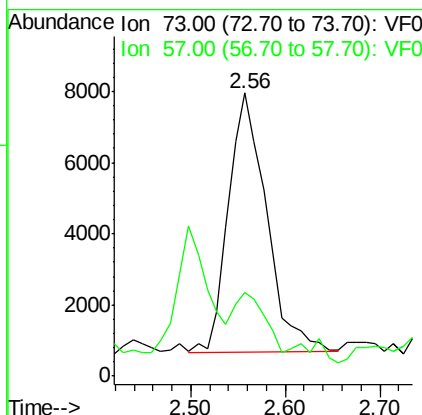
#19
Methvl tert-butvl Ether
Concen: 2.547 ug/l
RT: 2.56 min Scan# 205
Delta R.T. 0.02 min
Lab File: VF062235.D
Acq: 19 Apr 2019 20:04

Tot Ion	Ratio	Lower	Upper
73	100		
57	27.4	15.1	22.7#

Instrument :
MSVOA_F
ClientSampleId :
MDL-MDL-SOIL-03-QT2-2019

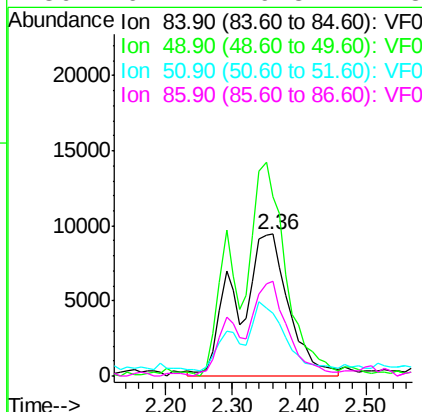
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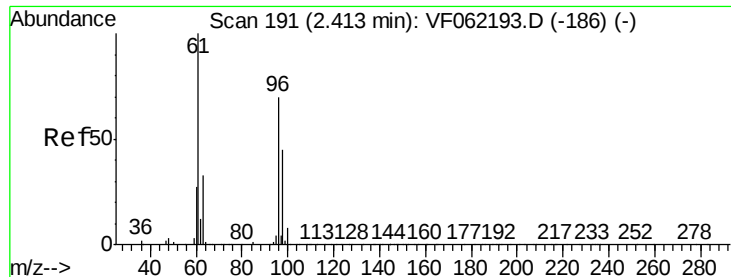
MMDadoda
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#20
Methylene Chloride
Concen: 8.843 ug/l m
RT: 2.36 min Scan# 185
Delta R.T. 0.03 min
Lab File: VF062235.D
Acq: 19 Apr 2019 20:04

Tgt Ion	Ratio	Lower	Upper
84	100		
49	126.2	114.0	171.0
51	43.9	37.0	55.4
86	67.2	49.8	74.8





#21

trans-1,2-Dichloroethene

Concen: 2.787 ug/l

RT: 2.43 min Scan# 192

Delta R.T. 0.02 min

Lab File: VF062235.D

Acq: 19 Apr 2019 20:04

Instrument :

MSVOA_F

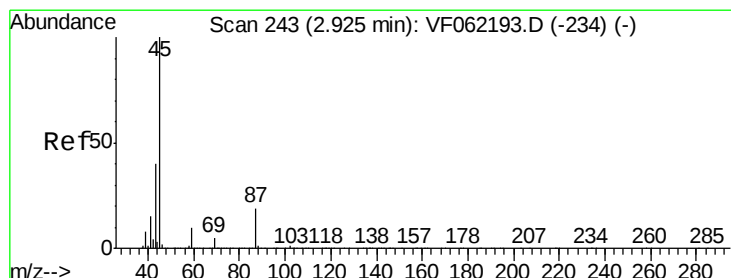
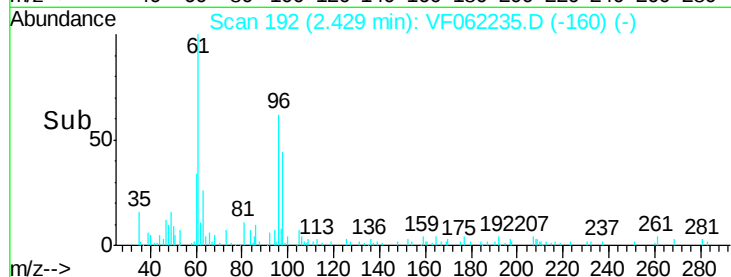
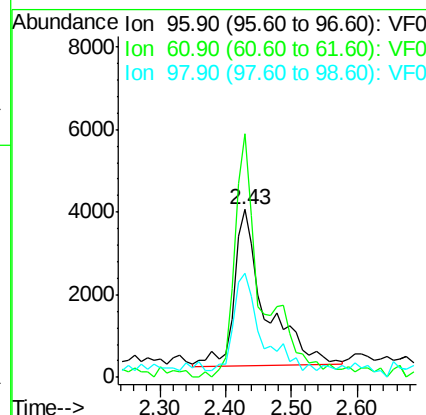
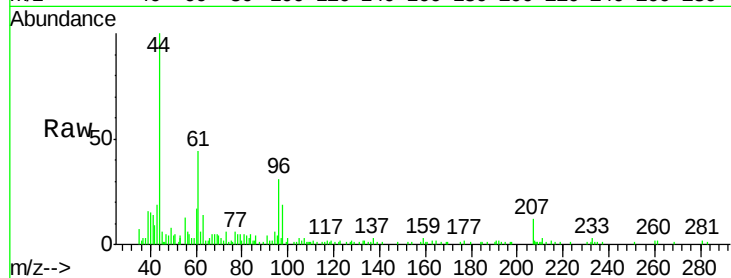
ClientSampleId :

MDL-MDL-SOIL-03-QT2-2019

Tot Ion:	96	Resp:	12517
Ion Ratio	Lower	Upper	
96	100		
61	157.8	114.6	172.0
98	61.6	51.2	76.8

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#22

Diisopropyl ether

Concen: 2.501 ug/l

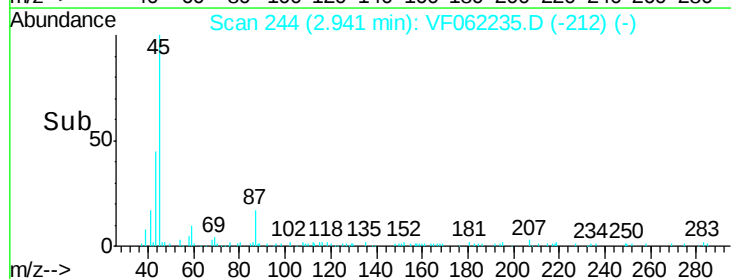
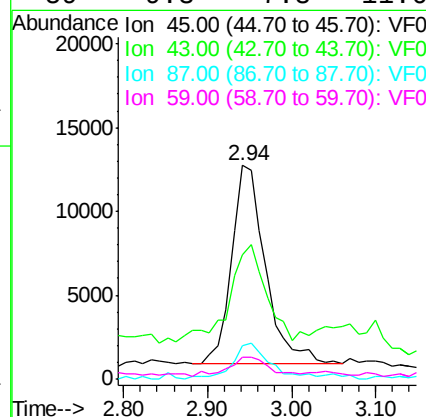
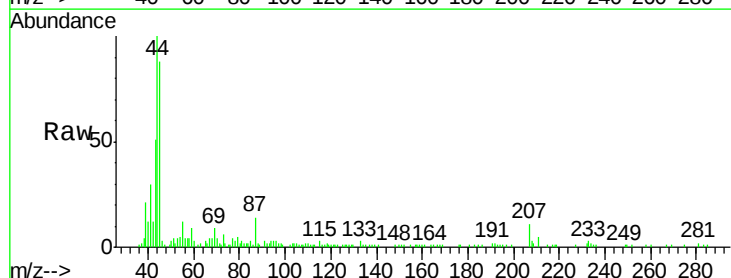
RT: 2.94 min Scan# 244

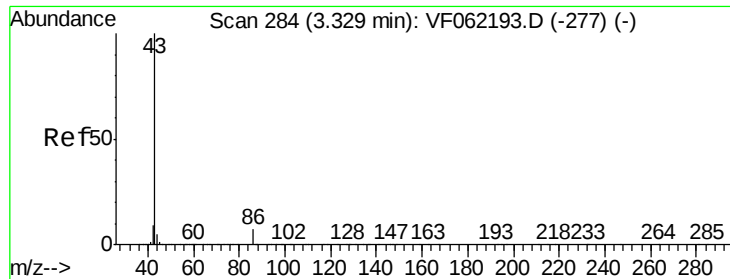
Delta R.T. 0.02 min

Lab File: VF062235.D

Acq: 19 Apr 2019 20:04

Tgt Ion:	45	Resp:	33336
Ion Ratio	Lower	Upper	
45	100		
43	38.3	32.8	49.2
87	15.5	15.2	22.8
59	9.3	7.8	11.6





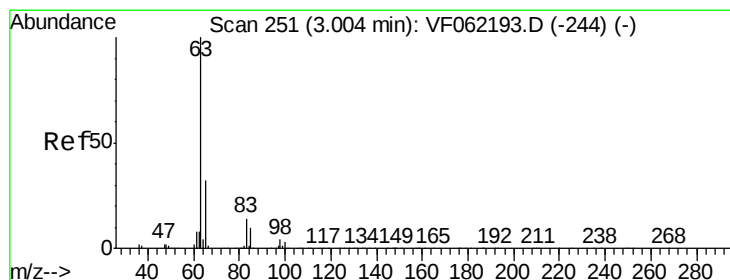
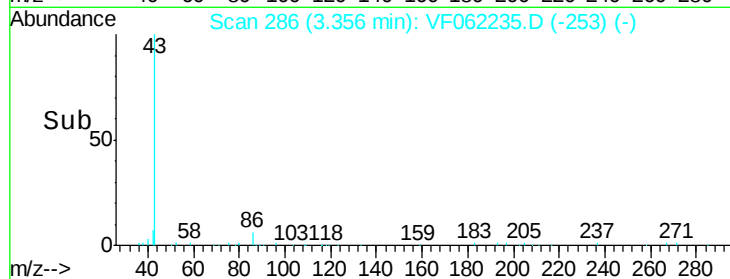
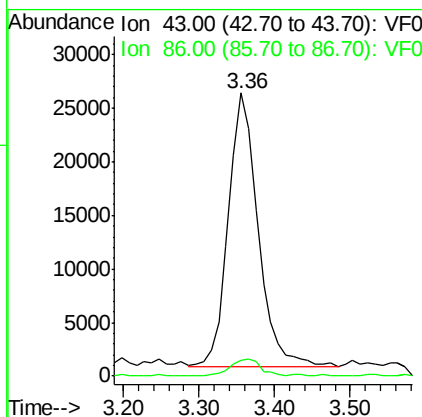
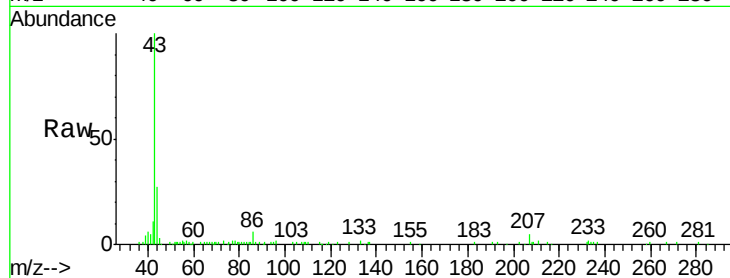
#23
 Vinyl Acetate
 Concen: 10.990 ug/l
 RT: 3.36 min Scan# 286
 Delta R.T. 0.03 min
 Lab File: VF062235.D
 Acq: 19 Apr 2019 20:04

Instrument :
 MSVOA_F
 ClientSampleId :
 MDL-MDL-SOIL-03-QT2-2019

Tot Ion	43	Resp	69803
Ion Ratio	Lower	Upper	
43	100		
86	5.8	5.9	8.9#

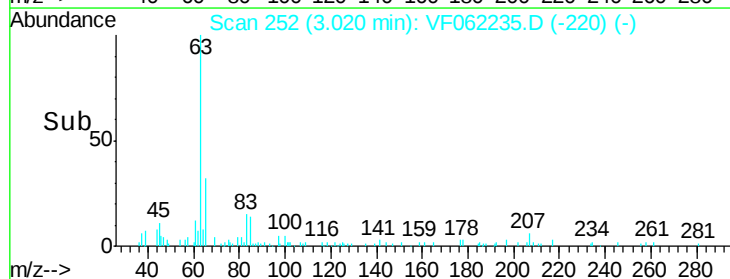
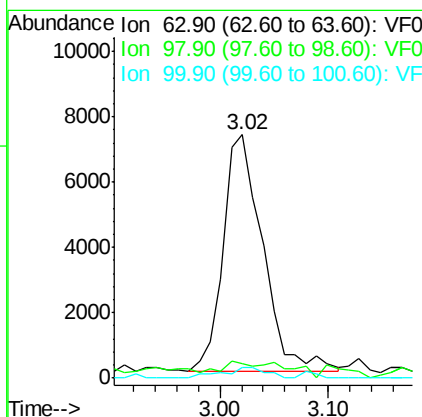
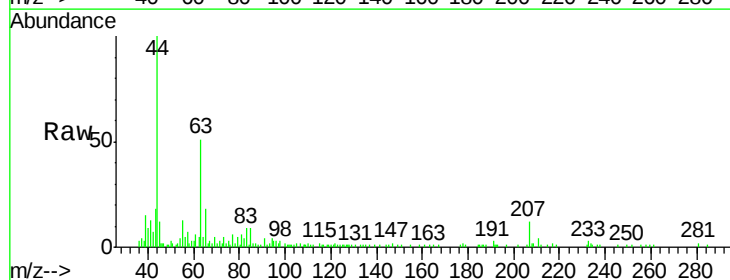
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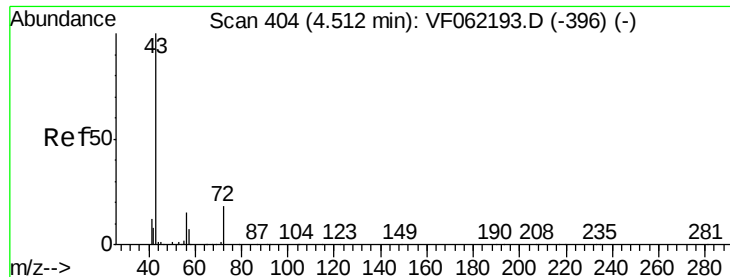
MMDadoda
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#24
 1,1-Dichloroethane
 Concen: 2.519 ug/l
 RT: 3.02 min Scan# 252
 Delta R.T. 0.02 min
 Lab File: VF062235.D
 Acq: 19 Apr 2019 20:04

Tgt Ion	63	Resp	18372
Ion Ratio	Lower	Upper	
63	100		
98	2.2	2.3	6.8#
100	4.7	1.7	5.0





#25

2-Butanone

Concen: 11.829 ug/l

RT: 4.54 min Scan# 406

Delta R.T. 0.03 min

Lab File: VF062235.D

Acq: 19 Apr 2019 20:04

Instrument :

MSVOA_F

ClientSampleId :

MDL-MDL-SOIL-03-QT2-2019

Tot Ion: 43 Resp: 21134

Ion Ratio Lower Upper

43 100

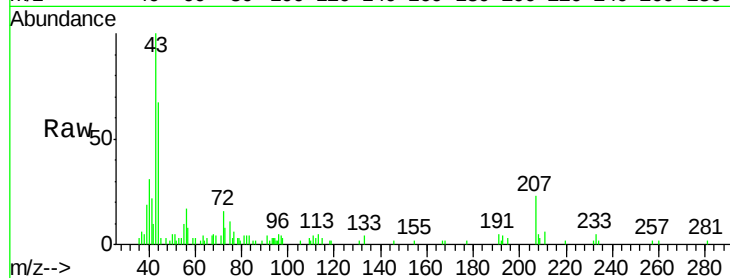
72 15.8 16.1 24.1#

Manual Integrations

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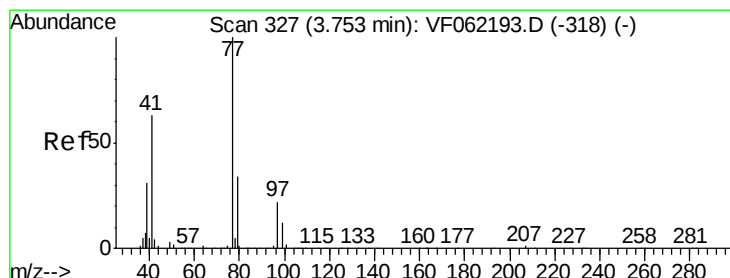
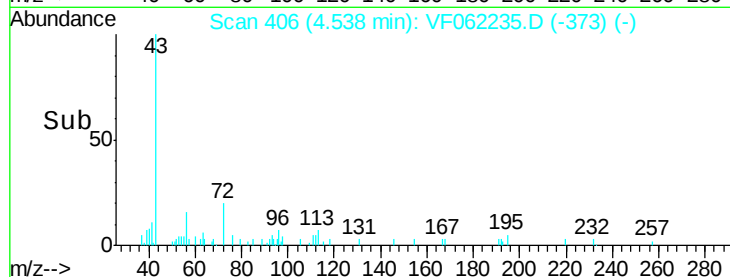
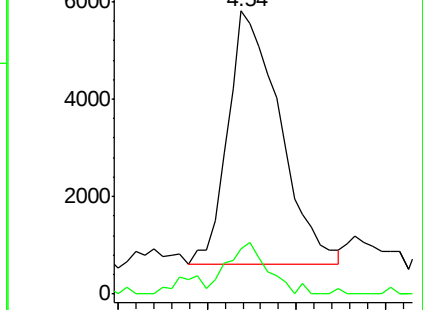
MMDadoda

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Abundance Ion 43.00 (42.70 to 43.70): VF0

Ion 72.00 (71.70 to 72.70): VF0



#26

2,2-Dichloropropane

Concen: 2.282 ug/l

RT: 3.77 min Scan# 328

Delta R.T. 0.02 min

Lab File: VF062235.D

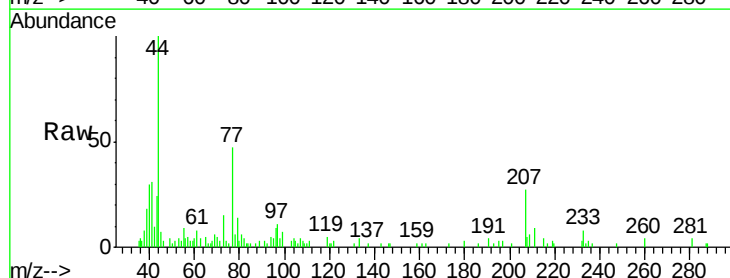
Acq: 19 Apr 2019 20:04

Tgt Ion: 77 Resp: 8401

Ion Ratio Lower Upper

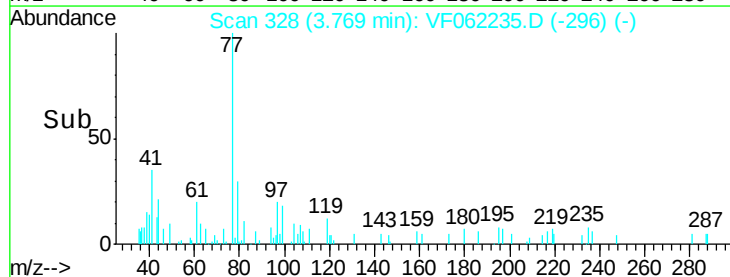
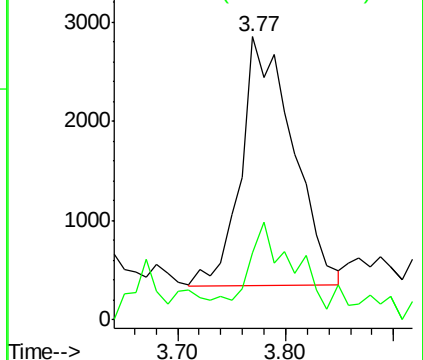
77 100

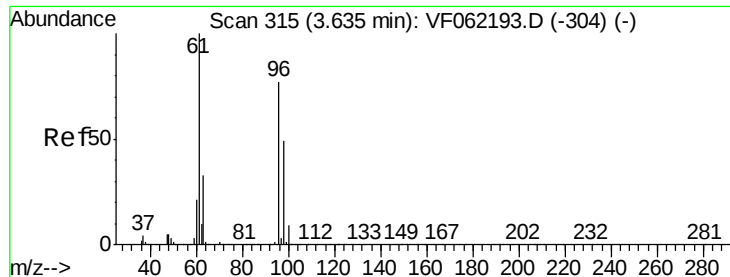
97 30.2 11.1 33.3



Abundance Ion 76.90 (76.60 to 77.60): VF0

Ion 96.90 (96.60 to 97.60): VF0





#27

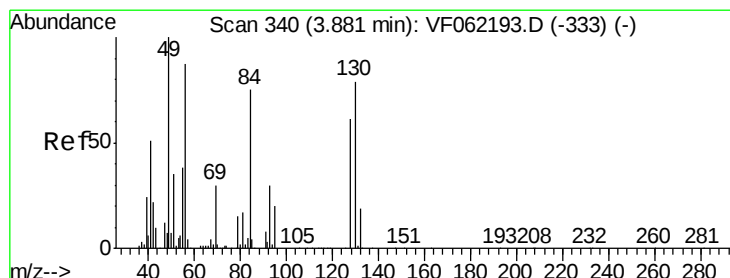
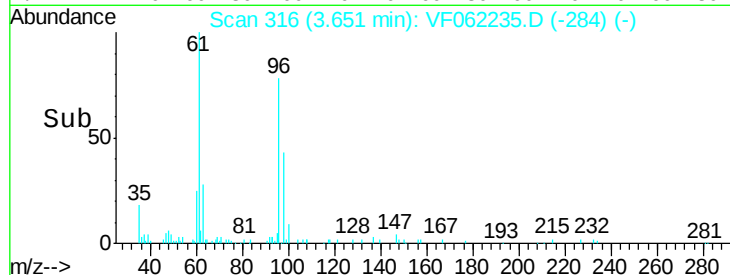
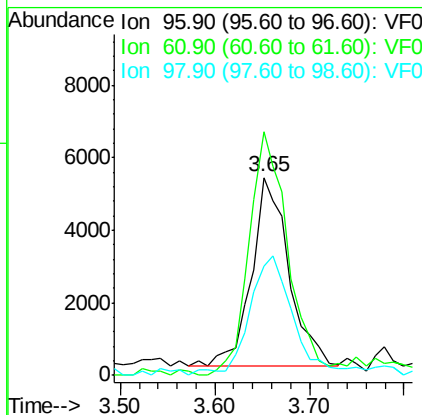
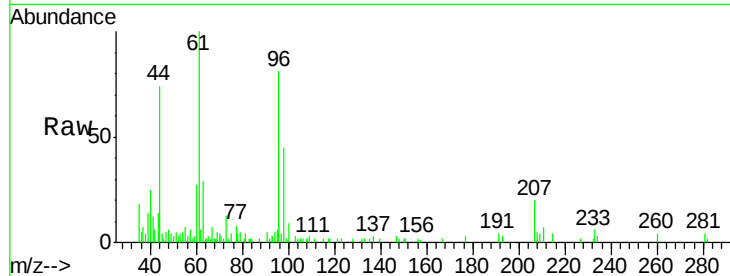
cis-1,2-Dichloroethene
Concen: 2.454 ug/l
RT: 3.65 min Scan# 316
Delta R.T. 0.02 min
Lab File: VF062235.D
Acq: 19 Apr 2019 20:04

Instrument :
MSVOA_F
ClientSampleId :
MDL-MDL-SOIL-03-QT2-2019

Tot Ion	Ratio	Resp	Lower	Upper
96	100	14272		
61	133.9	0.0	253.6	
98	73.3	0.0	124.8	

Manual Integrations
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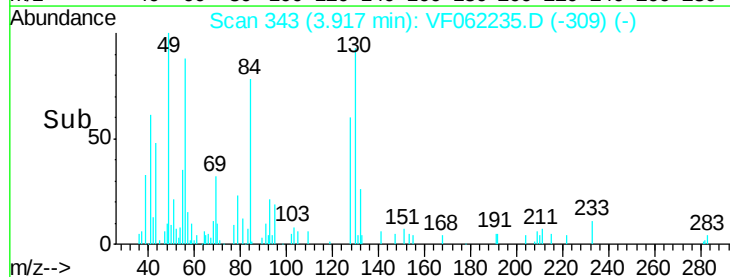
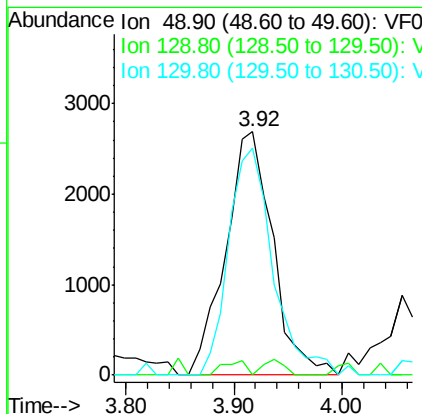
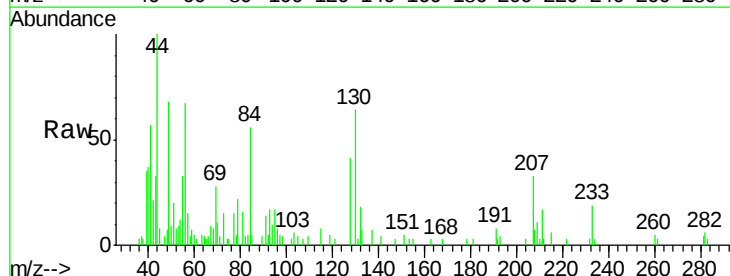
MMDadoda
4/23/2019 6:56:00 AM



#28

Bromochloromethane
Concen: 2.340 ug/l
RT: 3.92 min Scan# 343
Delta R.T. 0.04 min
Lab File: VF062235.D
Acq: 19 Apr 2019 20:04

Tgt Ion	Ratio	Resp	Lower	Upper
49	100	8174		
129	2.9	0.0	0.0#	
130	88.5	66.6	100.0	





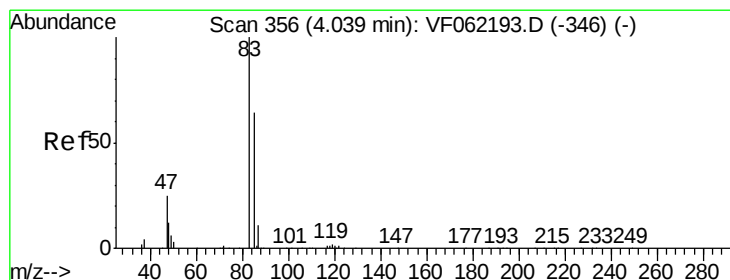
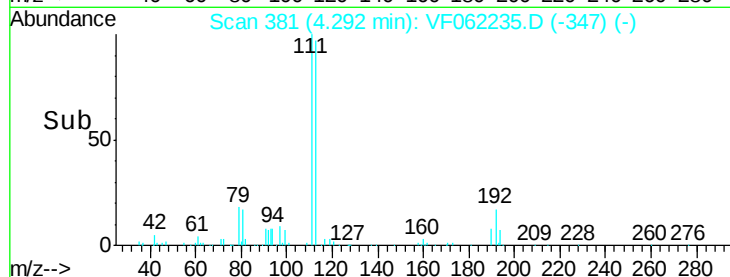
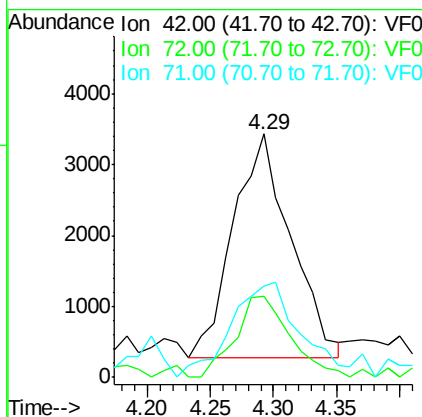
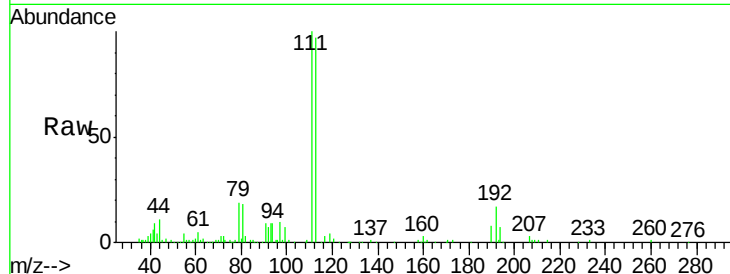
#29
Tetrahydrofuran
Concen: 12.329 ug/l
RT: 4.29 min Scan# 381
Delta R.T. 0.04 min
Lab File: VF062235.D
Acq: 19 Apr 2019 20:04

Instrument :
MSVOA_F
ClientSampleId :
MDL-MDL-SOIL-03-QT2-2019

Tot Ion	Ratio	Lower	Upper
42	100		
72	34.7	28.6	43.0
71	50.9	29.2	43.8

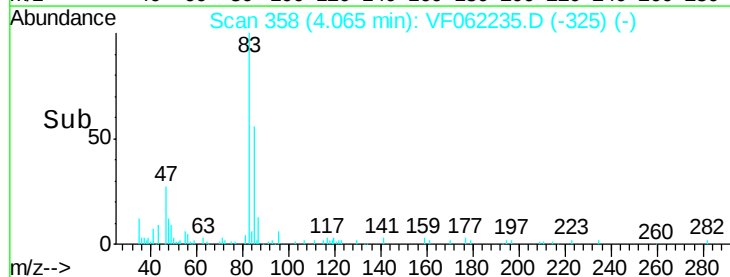
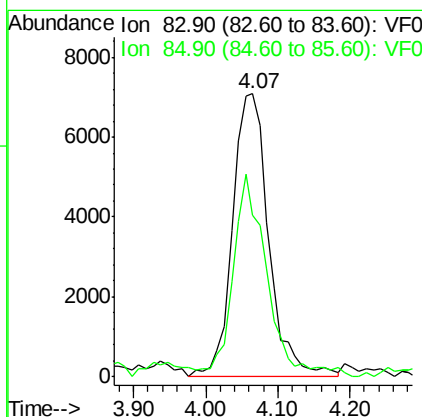
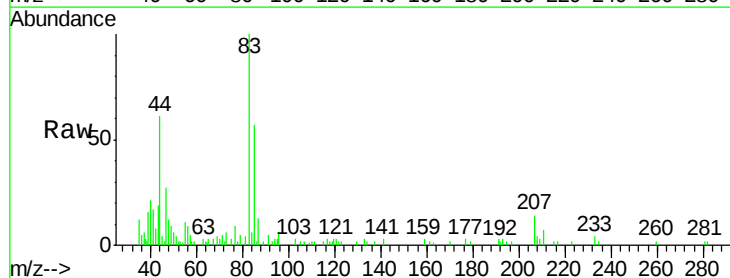
Manual Integrations
APPROVED

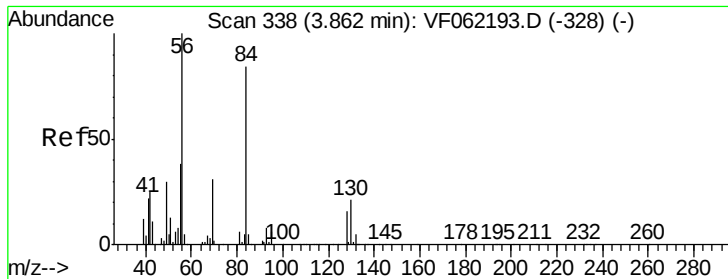
MMDadoda
4/23/2019 6:56:00 AM



#30
Chloroform
Concen: 2.771 ug/l
RT: 4.07 min Scan# 358
Delta R.T. 0.03 min
Lab File: VF062235.D
Acq: 19 Apr 2019 20:04

Tgt Ion	Ratio	Lower	Upper
83	100		
85	53.8	51.8	77.8





#31

Cyclohexane

Concen: 2.744 ug/l m

RT: 3.88 min Scan# 339

Delta R.T. 0.02 min

Lab File: VF062235.D

Acq: 19 Apr 2019 20:04

Tot Ion:	56	Resp:	23981
Ion	Ratio	Lower	Upper
56	100		
69	43.5	25.1	37.7#
84	88.3	67.8	101.6

Instrument :

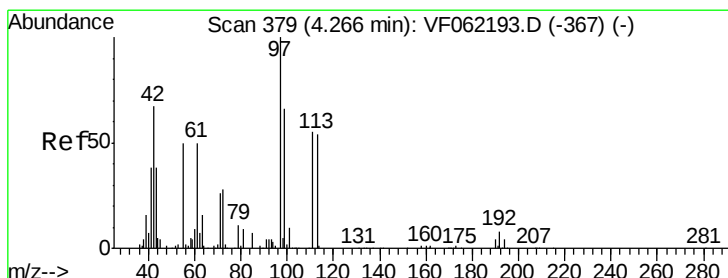
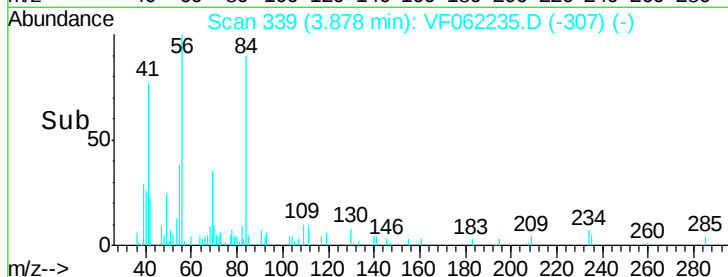
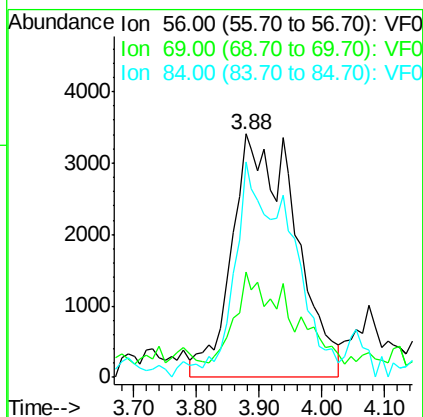
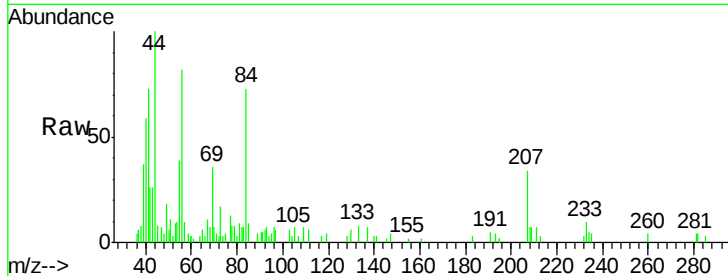
MSVOA_F

ClientSampleId :

MDL-MDL-SOIL-03-QT2-2019

Manual Integrations
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4/23/2019 6:56:00 AM



#32

1,1,1-Trichloroethane

Concen: 2.168 ug/l

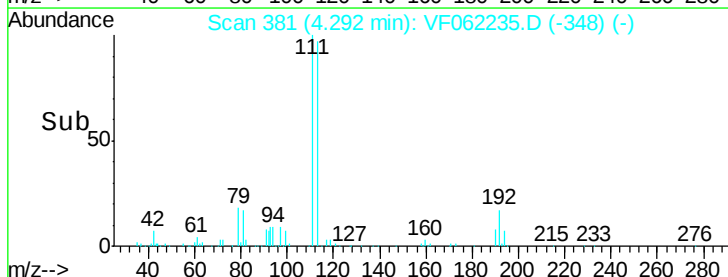
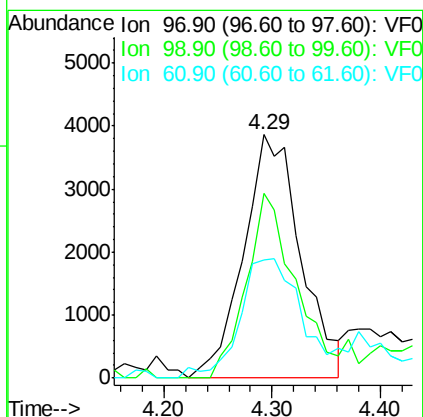
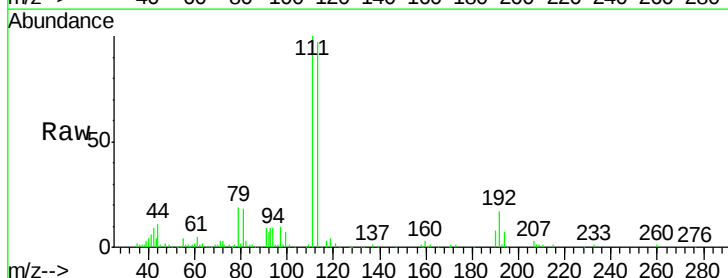
RT: 4.29 min Scan# 381

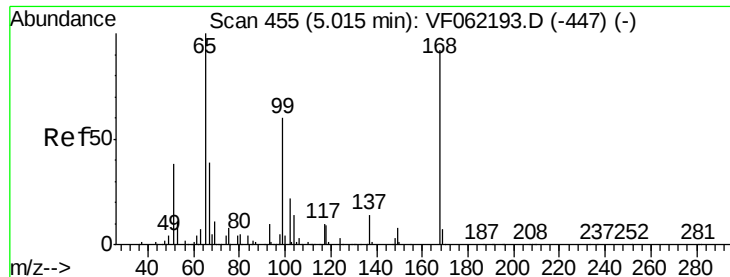
Delta R.T. 0.03 min

Lab File: VF062235.D

Acq: 19 Apr 2019 20:04

Tgt Ion:	97	Resp:	14223
Ion	Ratio	Lower	Upper
97	100		
99	65.3	52.7	79.1
61	51.7	53.0	79.4#





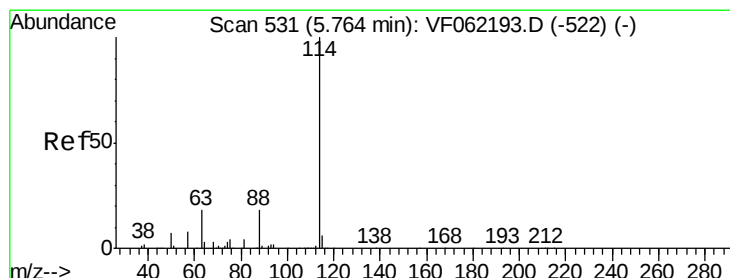
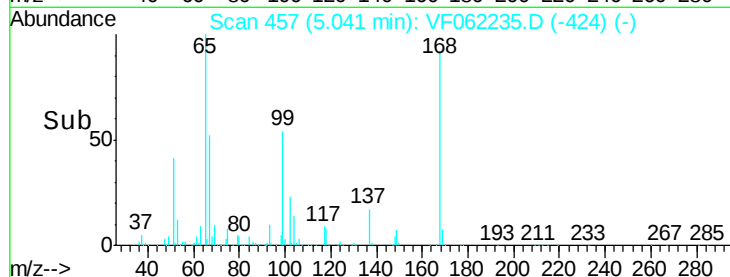
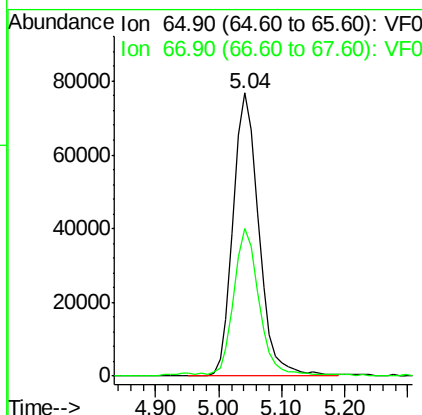
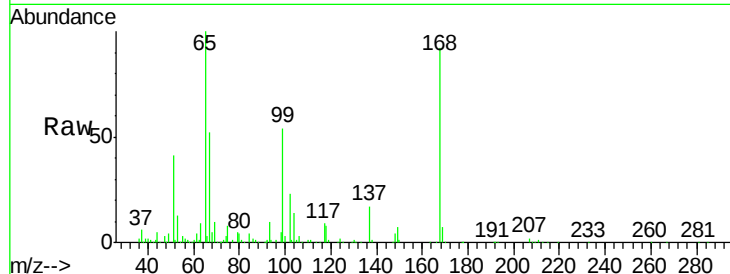
#33
 1,2-Dichloroethane-d4
 Concen: 58.214 ug/l
 RT: 5.04 min Scan# 457
 Delta R.T. 0.03 min
 Lab File: VF062235.D
 Acq: 19 Apr 2019 20:04

Instrument :
 MSVOA_F
 ClientSampleId :
 MDL-MDL-SOIL-03-QT2-2019

Tot Ion	Ratio	Resp	Lower	Upper
65	100	217609		
67	50.2	0.0	109.4	

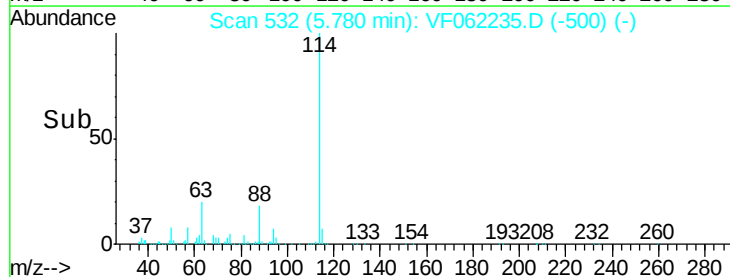
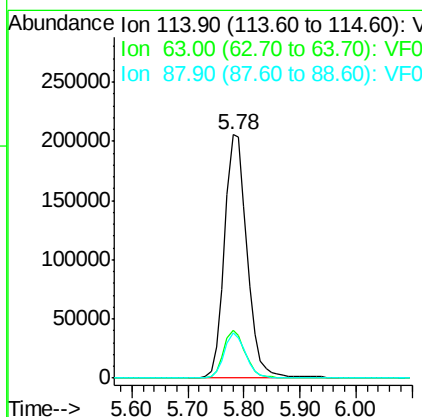
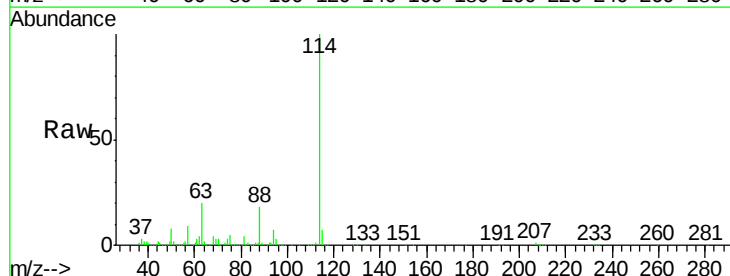
Manual Integrations
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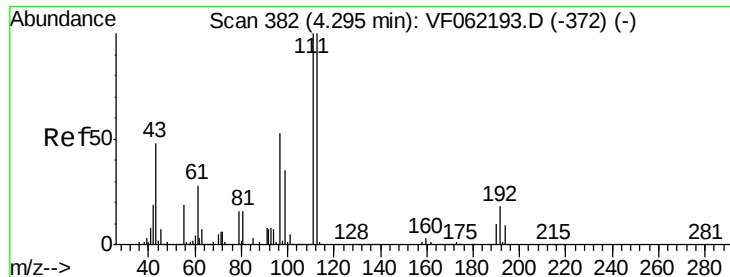
MMDadoda
 4/23/2019 6:56:00 AM



#34
 1,4-Difluorobenzene
 Concen: 50.000 ug/l
 RT: 5.78 min Scan# 532
 Delta R.T. 0.02 min
 Lab File: VF062235.D
 Acq: 19 Apr 2019 20:04

Tgt Ion	Ratio	Resp	Lower	Upper
114	100	578743		
63	19.7	0.0	36.6	
88	18.4	0.0	35.8	





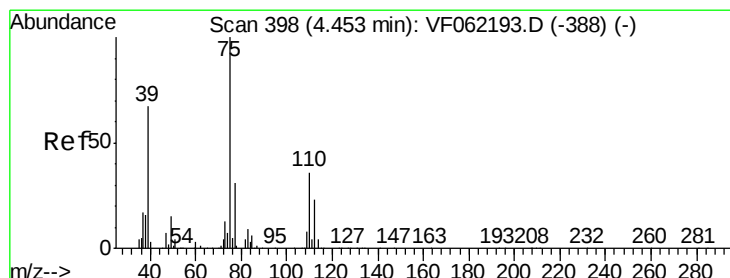
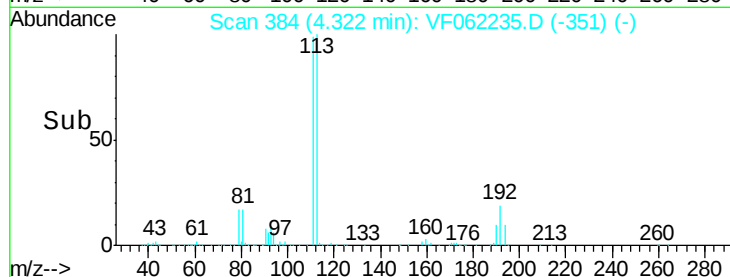
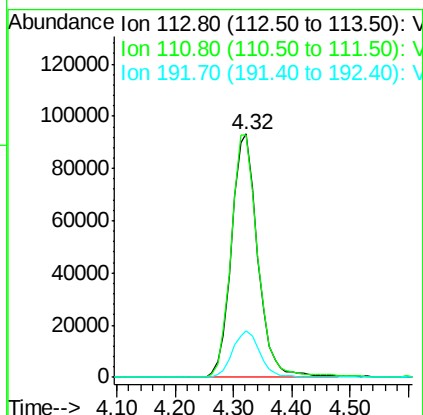
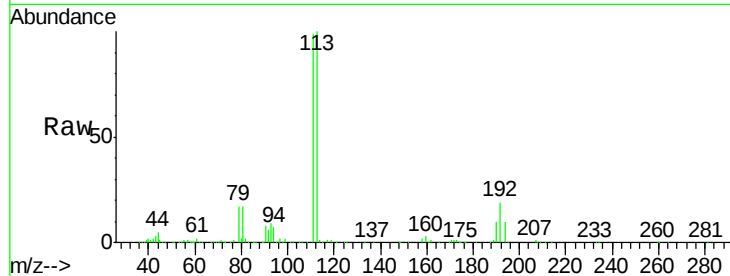
#35
 Dibromofluoromethane
 Concen: 57.512 ug/l
 RT: 4.32 min Scan# 384
 Delta R.T. 0.03 min
 Lab File: VF062235.D
 Acq: 19 Apr 2019 20:04

Instrument :
 MSVOA_F
 ClientSampleId :
 MDL-MDL-SOIL-03-QT2-2019

Tot Ion	Ratio	Resp	Lower	Upper
113	100	291151		
111	101.8	81.1	121.7	
192	20.0	14.7	22.1	

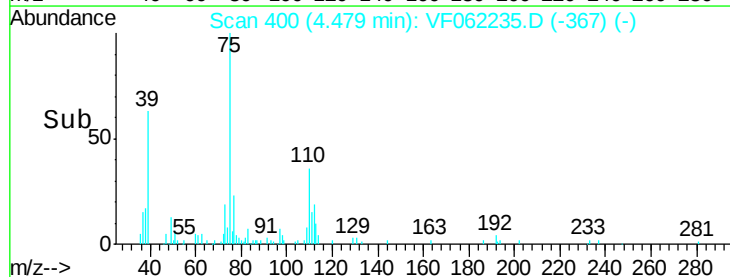
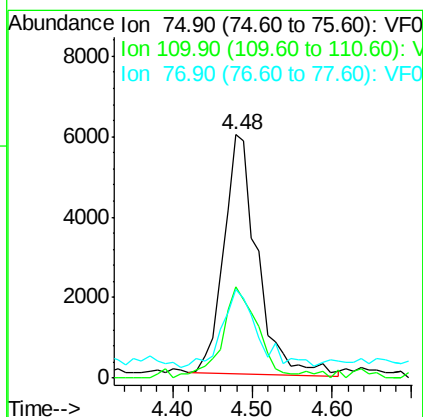
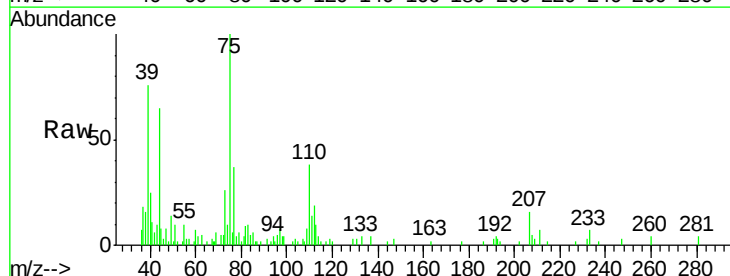
Manual Integrations
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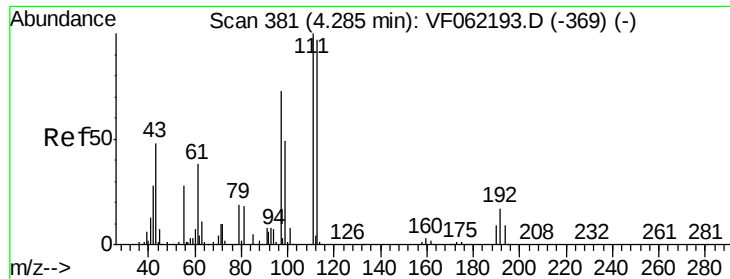
MMDadoda
 4/23/2019 6:56:00 AM



#36
 1,1-Dichloropropene
 Concen: 2.535 ug/l
 RT: 4.48 min Scan# 400
 Delta R.T. 0.03 min
 Lab File: VF062235.D
 Acq: 19 Apr 2019 20:04

Tgt Ion	Ratio	Resp	Lower	Upper
75	100	17592		
110	40.1	18.4	55.2	
77	35.1	25.4	38.2	





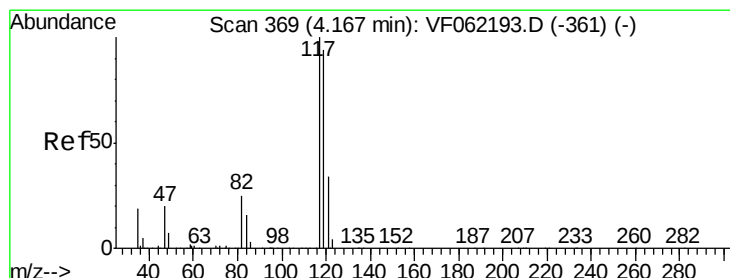
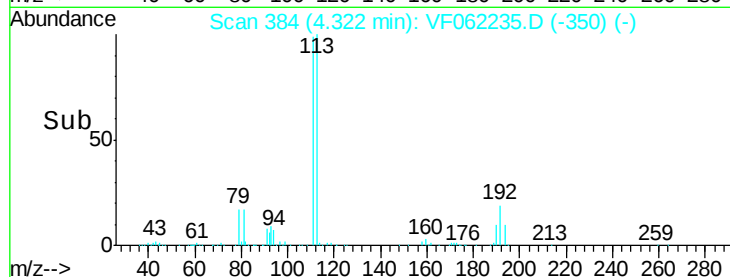
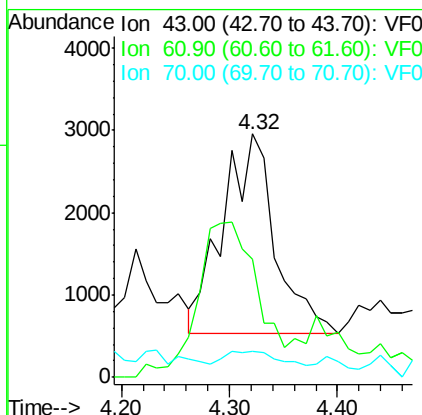
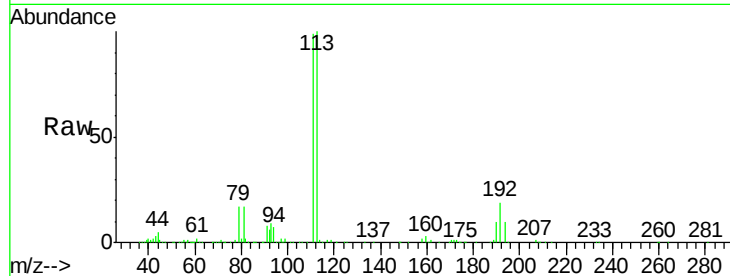
#37
Ethyl Acetate
Concen: 2.476 ug/l
RT: 4.32 min Scan# 384
Delta R.T. 0.04 min
Lab File: VF062235.D
Acq: 19 Apr 2019 20:04

Instrument :
MSVOA_F
ClientSampleId :
MDL-MDL-SOIL-03-QT2-2019

Tot Ion	Ratio	Lower	Upper
43	100		
61	90.8	0.0	0.0#
70	16.0	7.8	11.6#

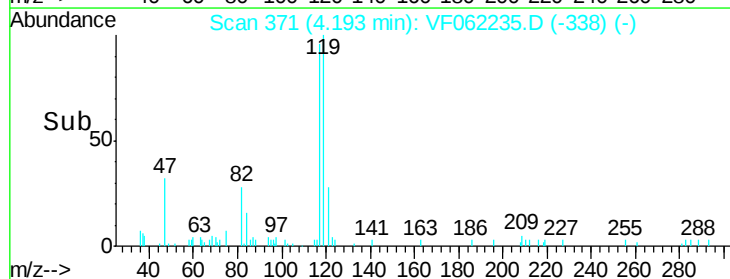
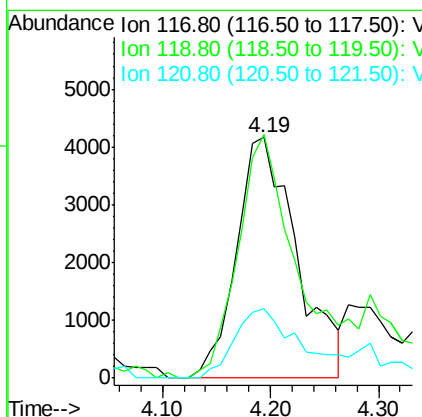
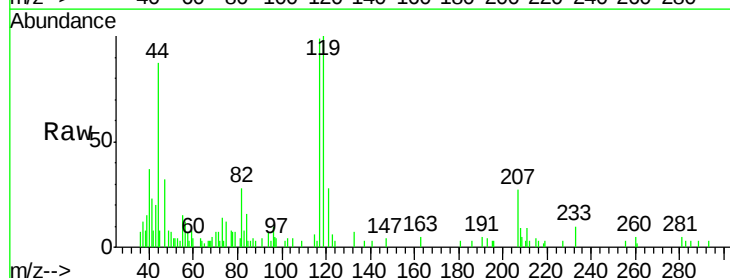
Manual Integrations
APPROVED

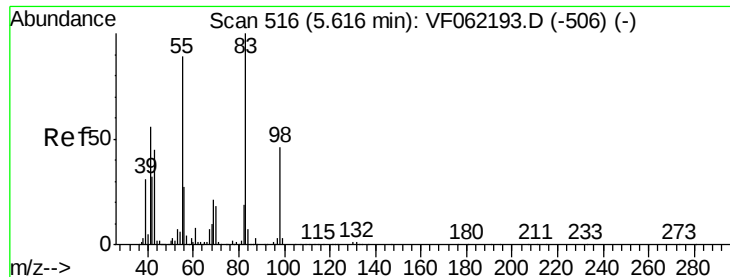
MMDadoda
4/23/2019 6:56:00 AM



#38
Carbon Tetrachloride
Concen: 2.635 ug/l
RT: 4.19 min Scan# 371
Delta R.T. 0.03 min
Lab File: VF062235.D
Acq: 19 Apr 2019 20:04

Tgt Ion	Ratio	Lower	Upper
117	100		
119	101.2	75.0	112.4
121	28.7	26.9	40.3





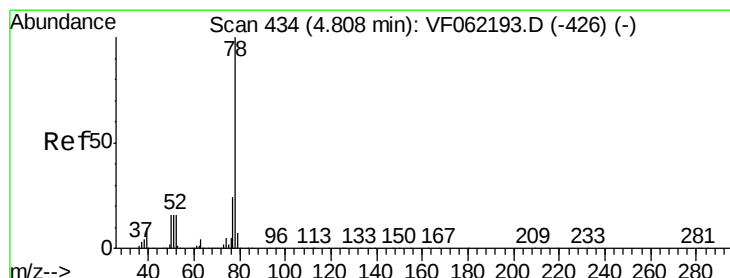
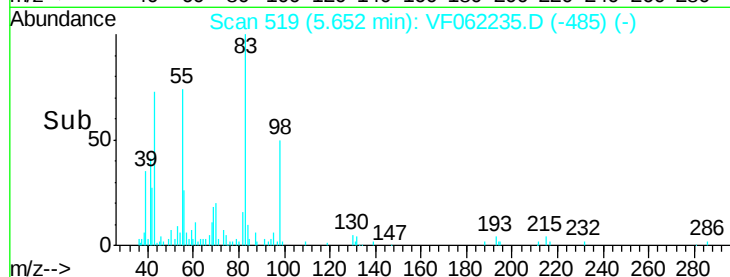
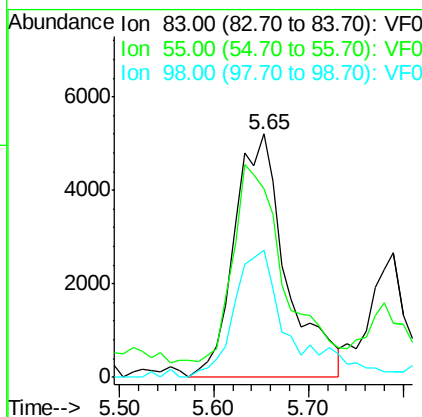
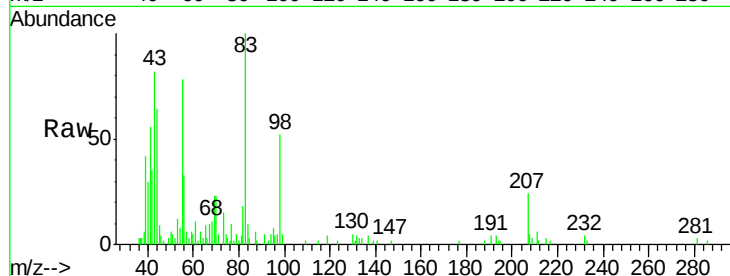
#39
Methvlcvclohexane
Concen: 2.390 ug/l
RT: 5.65 min Scan# 519
Delta R.T. 0.04 min
Lab File: VF062235.D
Acq: 19 Apr 2019 20:04

Instrument :
MSVOA_F
ClientSampleId :
MDL-MDL-SOIL-03-QT2-2019

Tot Ion	Ratio	Lower	Upper
83	100		
55	70.4	71.0	106.6#
98	52.2	36.7	55.1

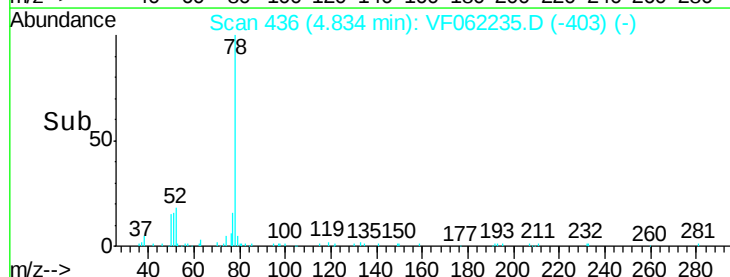
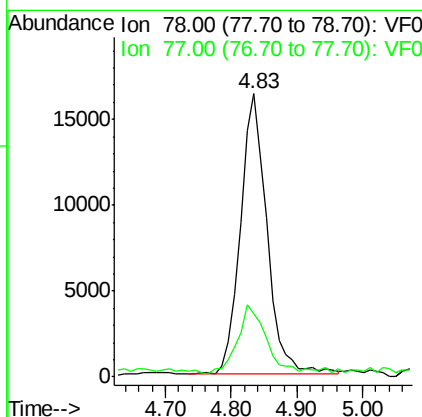
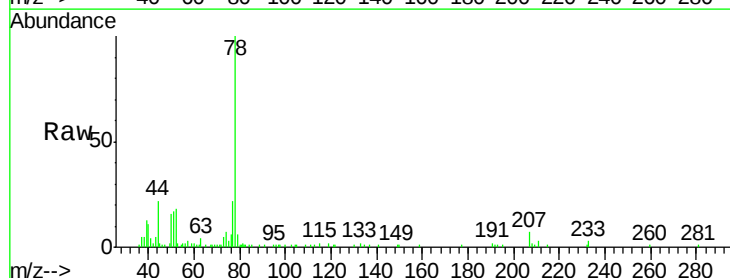
Manual Integrations
APPROVED

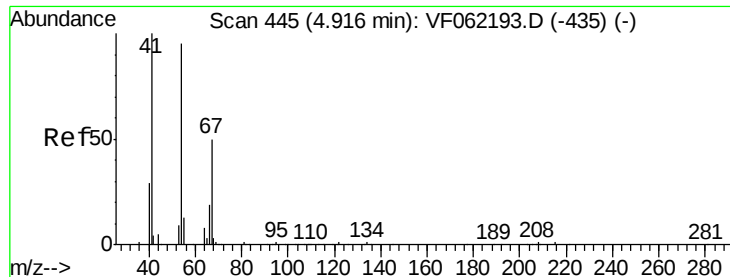
MMDadoda
4/23/2019 6:56:00 AM



#40
Benzene
Concen: 2.534 ug/l
RT: 4.83 min Scan# 436
Delta R.T. 0.03 min
Lab File: VF062235.D
Acq: 19 Apr 2019 20:04

Tgt Ion	Ratio	Lower	Upper
78	100		
77	20.6	18.9	28.3





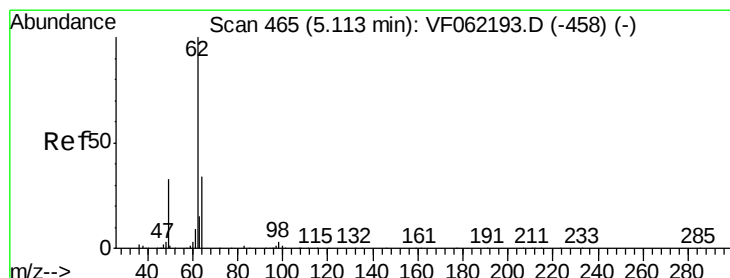
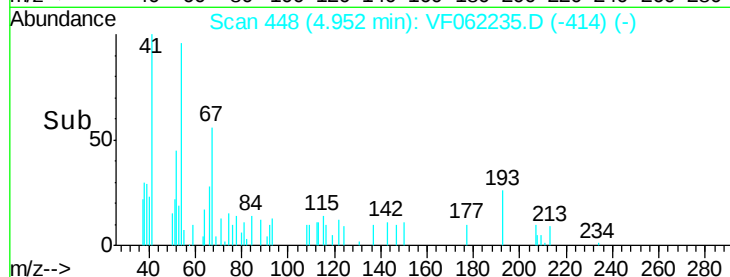
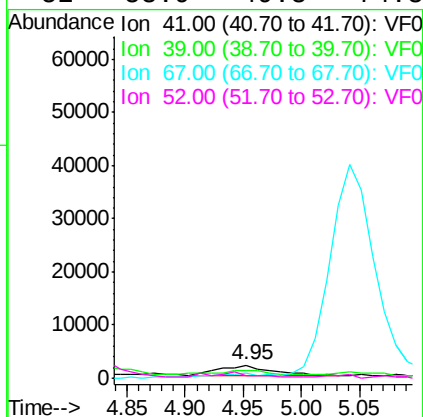
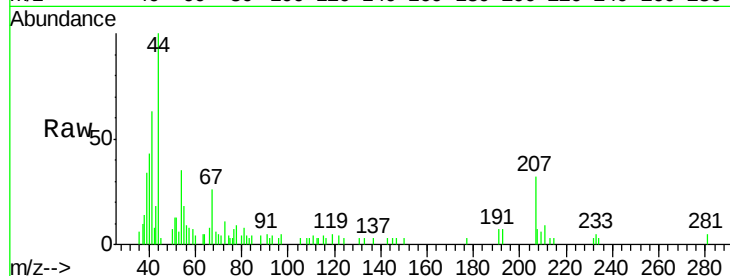
#41
Methacrylonitrile
Concen: 3.375 ug/l
RT: 4.95 min Scan# 448
Delta R.T. 0.04 min
Lab File: VF062235.D
Acq: 19 Apr 2019 20:04

Instrument :
MSVOA_F
ClientSampleId :
MDL-MDL-SOIL-03-QT2-2019

Tot Ion	Ion	Ratio	Lower	Upper
41	100			
39	52.0	44.7	67.1	
67	56.7	39.1	58.7	
52	58.9	49.8	74.8	

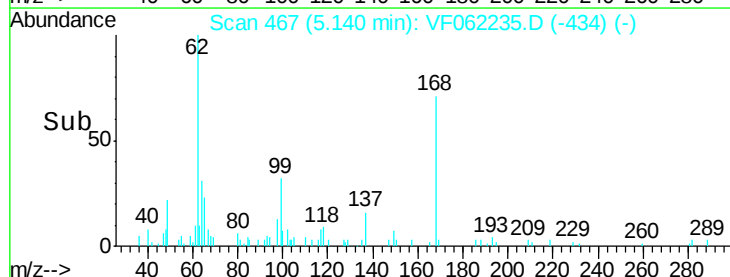
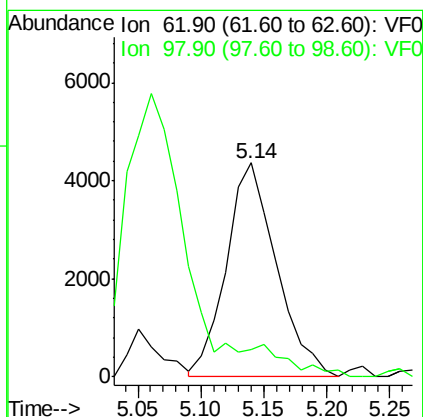
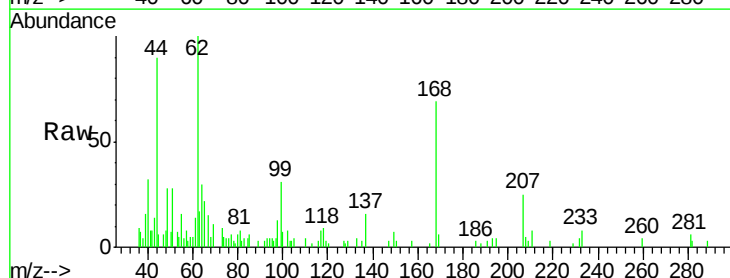
Manual Integrations
APPROVED

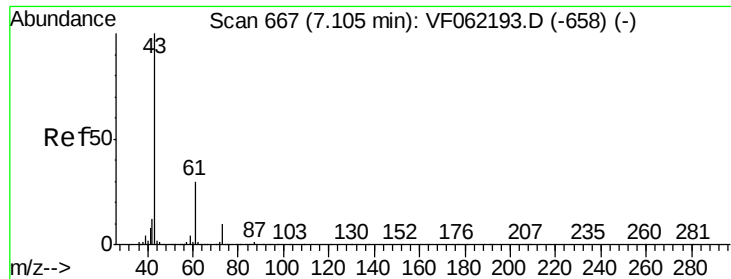
MMDadoda
4/23/2019 6:56:00 AM



#42
1,2-Dichloroethane
Concen: 2.500 ug/l
RT: 5.14 min Scan# 467
Delta R.T. 0.03 min
Lab File: VF062235.D
Acq: 19 Apr 2019 20:04

Tgt Ion	Ion	Ratio	Lower	Upper
62	100			
98	0.0	0.0	19.0	





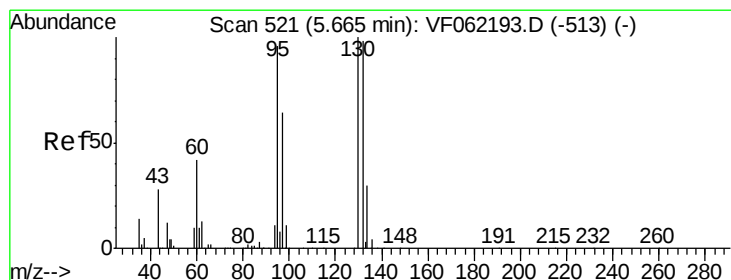
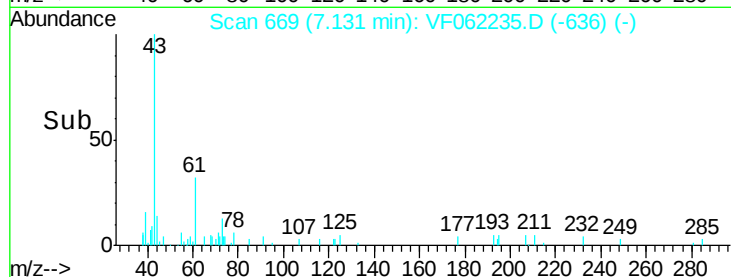
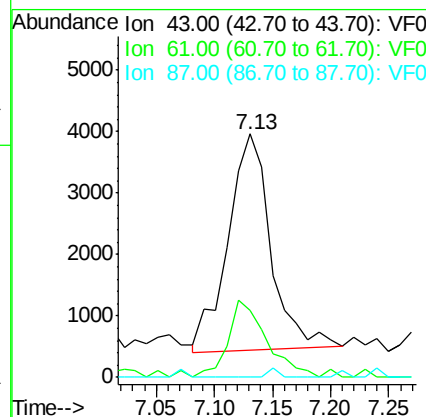
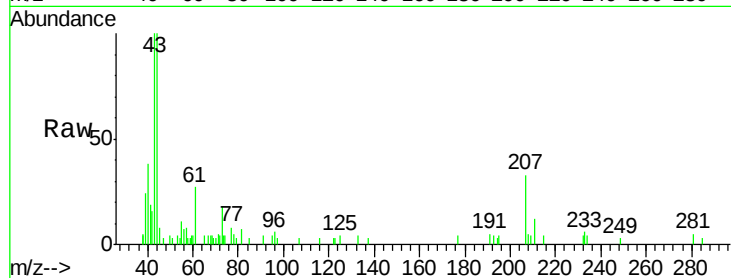
#43
Isopropyl Acetate
Concen: 2.619 ug/l
RT: 7.13 min Scan# 669
Delta R.T. 0.03 min
Lab File: VF062235.D
Acq: 19 Apr 2019 20:04

Instrument :
MSVOA_F
ClientSampleId :
MDL-MDL-SOIL-03-QT2-2019

Tot Ion	43	Resp:	9019
Ion	Ratio	Lower	Upper
43	100		
61	31.8	24.4	36.6
87	0.0	0.4	0.6

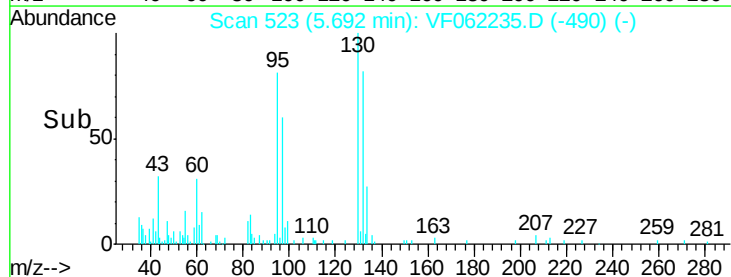
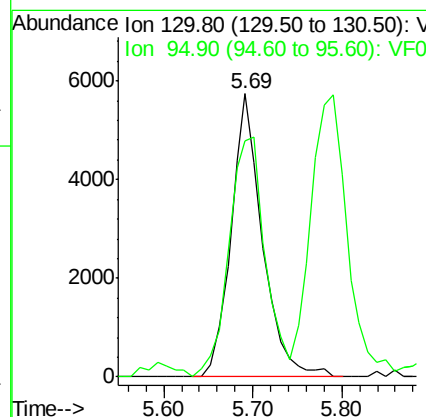
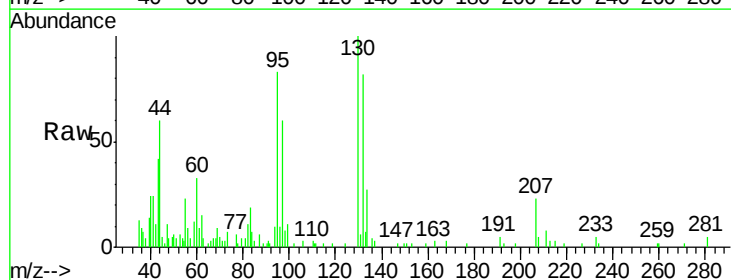
Manual Integrations
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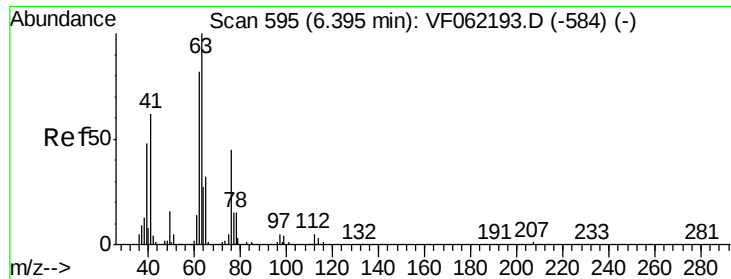
MMDadoda
4/23/2019 6:56:00 AM



#44
Trichloroethene
Concen: 2.876 ug/l
RT: 5.69 min Scan# 523
Delta R.T. 0.03 min
Lab File: VF062235.D
Acq: 19 Apr 2019 20:04

Tgt Ion	130	Resp:	14142
Ion	Ratio	Lower	Upper
130	100		
95	83.5	0.0	191.4





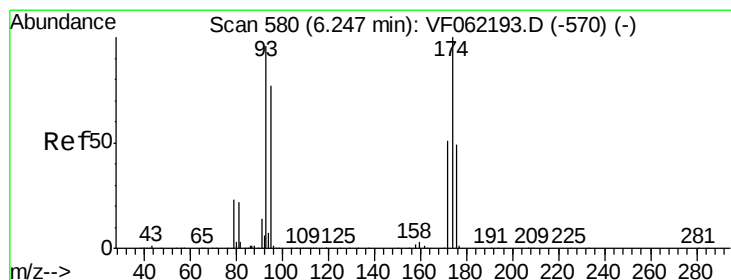
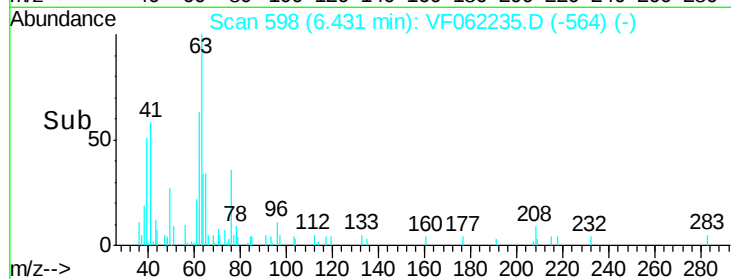
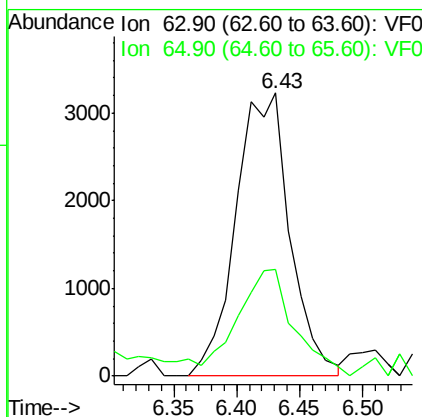
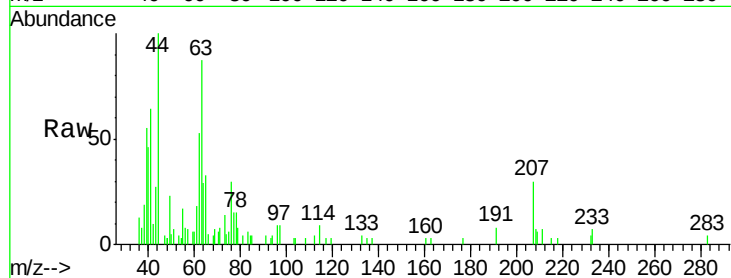
#45
1,2-Dichloropropane
Concen: 2.398 ug/l
RT: 6.43 min Scan# 598
Delta R.T. 0.04 min
Lab File: VF062235.D
Acq: 19 Apr 2019 20:04

Instrument :
MSVOA_F
ClientSampleId :
MDL-MDL-SOIL-03-QT2-2019

Tot Ion	Ratio	Lower	Upper
63	100		
65	34.7	25.9	38.9

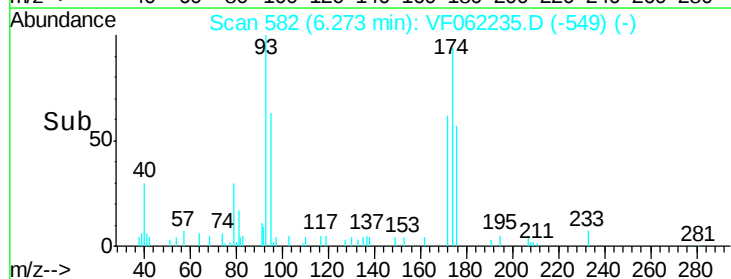
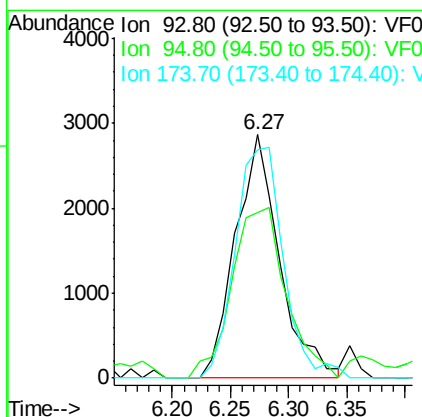
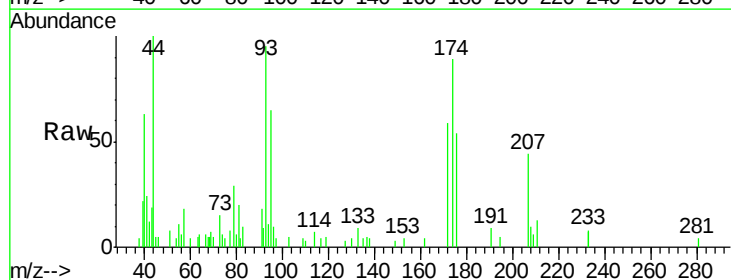
Manual Integrations
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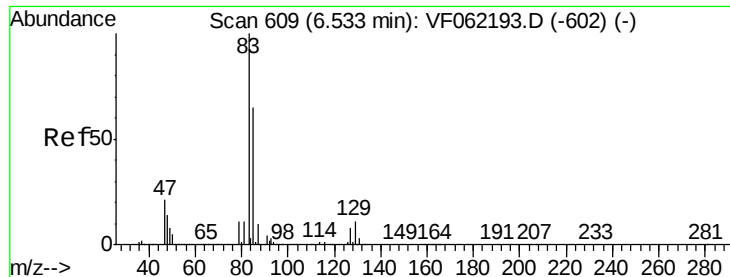
MMDadoda
4/23/2019 6:56:00 AM



#46
Dibromomethane
Concen: 2.811 ug/l
RT: 6.27 min Scan# 582
Delta R.T. 0.03 min
Lab File: VF062235.D
Acq: 19 Apr 2019 20:04

Tgt Ion	Ratio	Lower	Upper
93	100		
95	86.4	65.1	97.7
174	103.8	81.8	122.6





#47

Bromodichloromethane

Concen: 2.695 ug/l

RT: 6.56 min Scan# 611

Delta R.T. 0.03 min

Lab File: VF062235.D

Acq: 19 Apr 2019 20:04

Instrument :

MSVOA_F

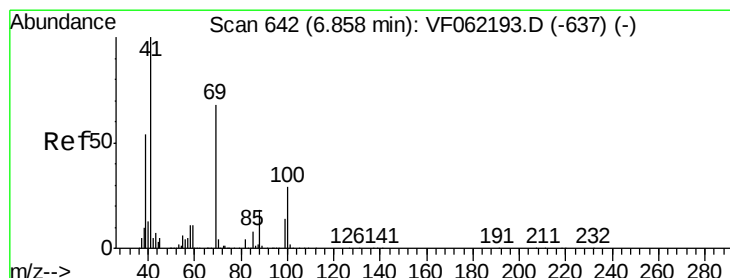
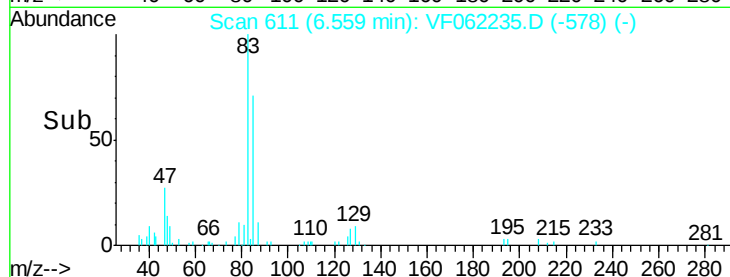
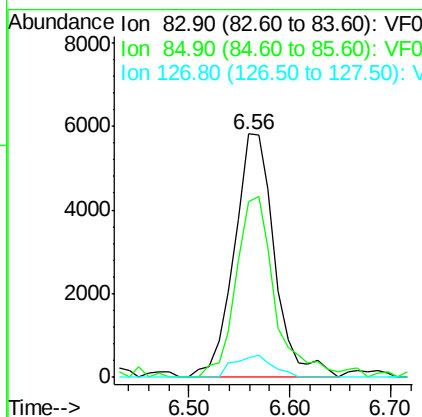
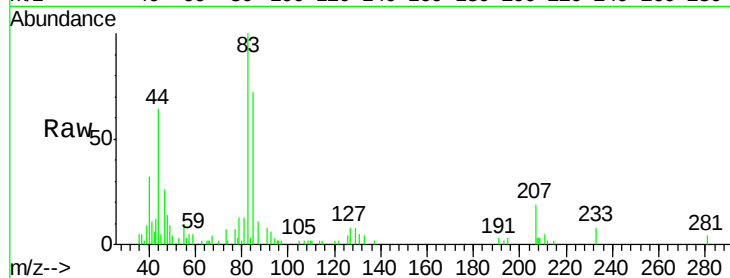
ClientSampleId :

MDL-MDL-SOIL-03-QT2-2019

Tot Ion:	83	Resp:	16219
Ion	Ratio	Lower	Upper
83	100		
85	72.5	52.2	78.4
127	8.1	6.7	10.1

Manual Integrations
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MMDadoda
4/23/2019 6:56:00 AM



#48

Methyl methacrylate

Concen: 2.564 ug/l

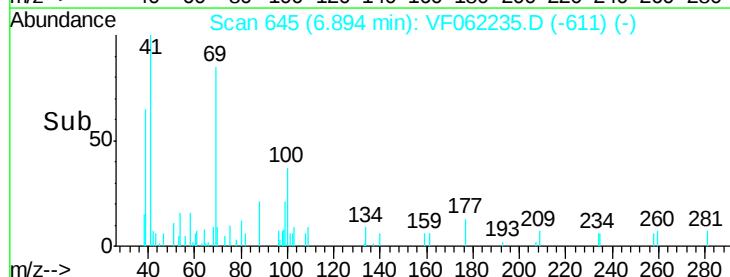
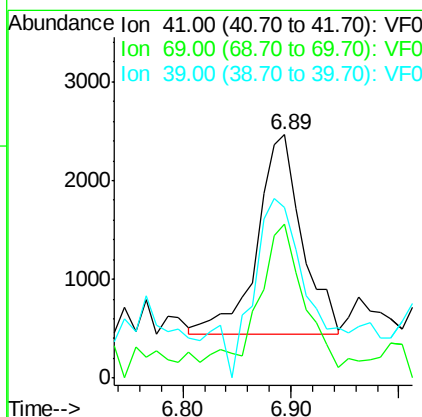
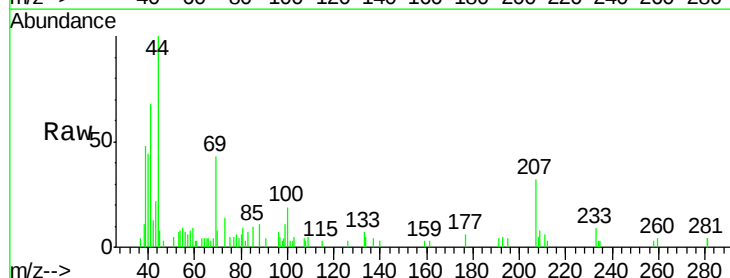
RT: 6.89 min Scan# 645

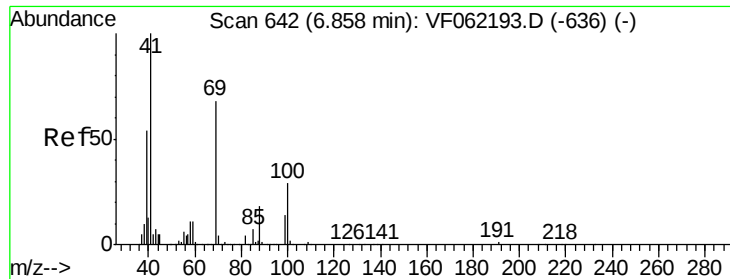
Delta R.T. 0.04 min

Lab File: VF062235.D

Acq: 19 Apr 2019 20:04

Tgt Ion:	41	Resp:	5802
Ion	Ratio	Lower	Upper
41	100		
69	82.2	54.9	82.3
39	110.3	43.6	65.4#





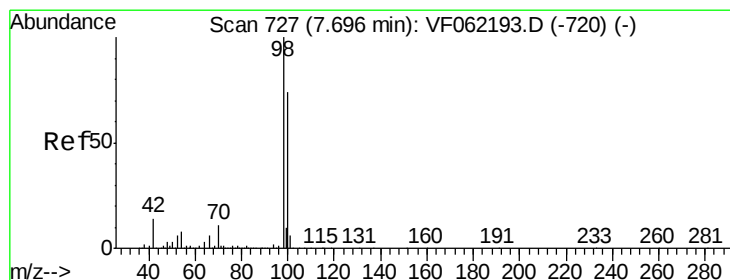
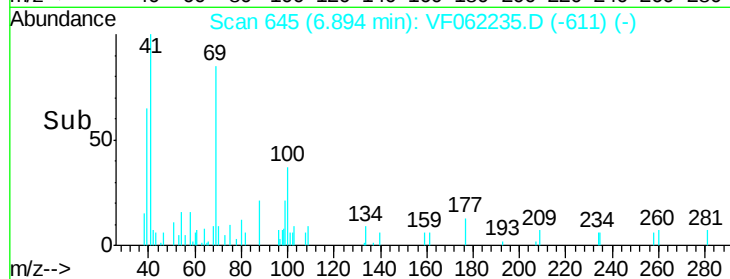
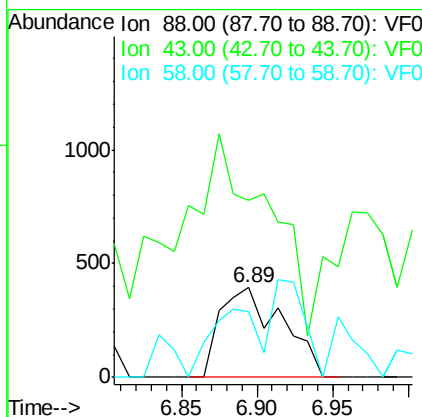
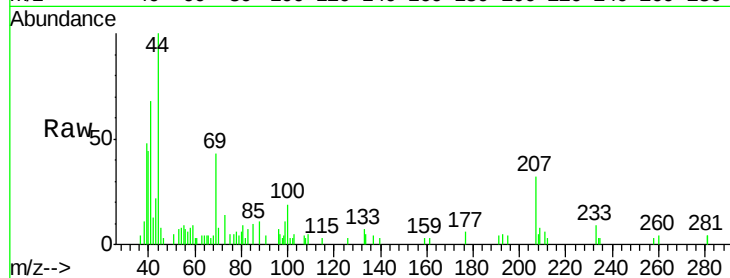
#49
 1,4-Dioxane
 Concen: 43.267 ug/l
 RT: 6.89 min Scan# 645
 Delta R.T. 0.04 min
 Lab File: VF062235.D
 Acq: 19 Apr 2019 20:04

Instrument :
 MSVOA_F
 ClientSampleId :
 MDL-MDL-SOIL-03-QT2-2019

Tot Ion	Ratio	Lower	Upper
88	100		
43	318.9	36.9	55.3#
58	58.1	56.8	85.2

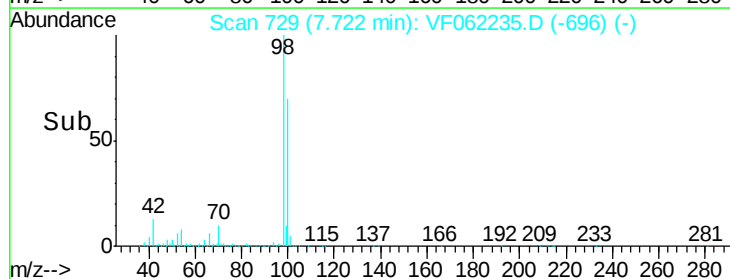
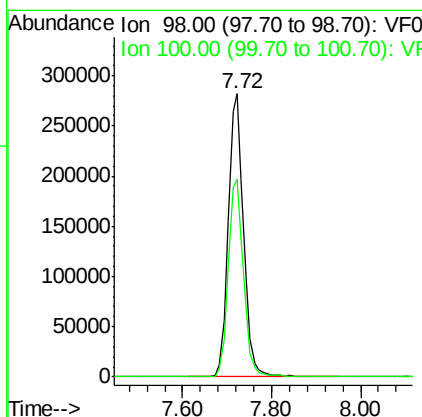
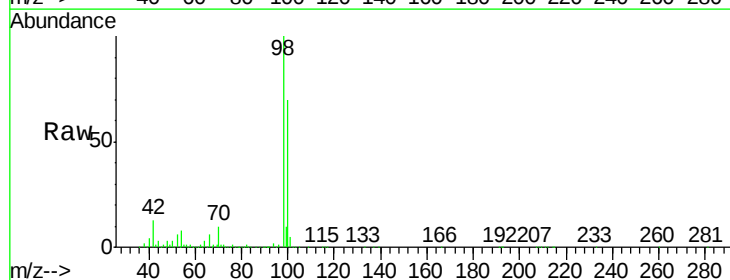
Manual Integrations
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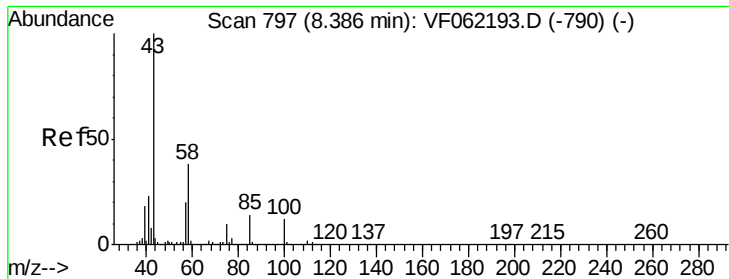
MMDadoda
 4/23/2019 6:56:00 AM



#50
 Toluene-d8
 Concen: 53.002 ug/l
 RT: 7.72 min Scan# 729
 Delta R.T. 0.03 min
 Lab File: VF062235.D
 Acq: 19 Apr 2019 20:04

Tgt Ion	Ratio	Lower	Upper
98	100		
100	69.7	56.2	84.2





#51

4-Methyl-2-Pentanone

Concen: 12.941 ug/l

RT: 8.41 min Scan# 799

Delta R.T. 0.03 min

Lab File: VF062235.D

Acq: 19 Apr 2019 20:04

Instrument :

MSVOA_F

ClientSampleId :

MDL-MDL-SOIL-03-QT2-2019

Tot Ion: 43 Resp: 33146

Ion Ratio Lower Upper

43 100

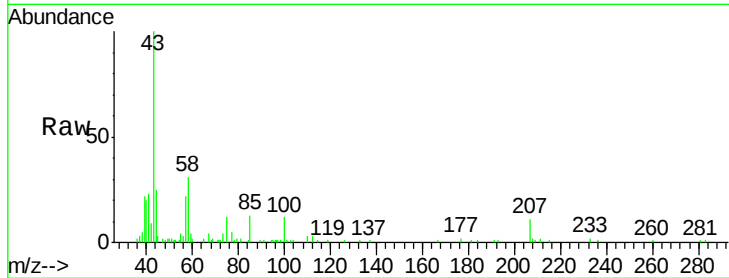
58 33.5 29.3 43.9

Manual Integrations

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MMDadoda

4/23/2019 6:56:00 AM



Abundance Ion 43.00 (42.70 to 43.70): VF0

Ion 58.00 (57.70 to 58.70): VF0

15000

10000

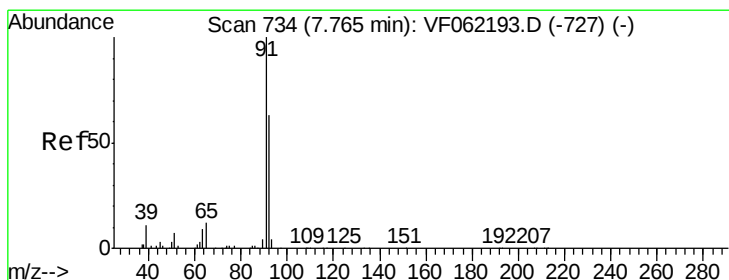
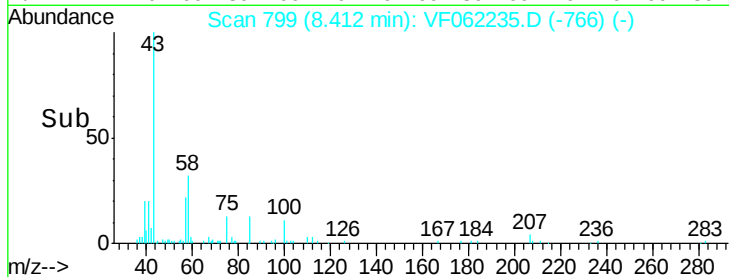
5000

0

8.41

8.30 8.40 8.50

Time-->



#52

Toluene

Concen: 2.520 ug/l

RT: 7.79 min Scan# 736

Delta R.T. 0.03 min

Lab File: VF062235.D

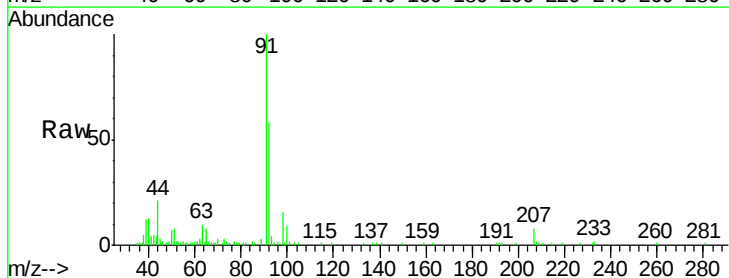
Acq: 19 Apr 2019 20:04

Tgt Ion: 92 Resp: 24172

Ion Ratio Lower Upper

92 100

91 167.8 130.1 195.1



Abundance Ion 92.00 (91.70 to 92.70): VF0

Ion 91.00 (90.70 to 91.70): VF0

20000

15000

10000

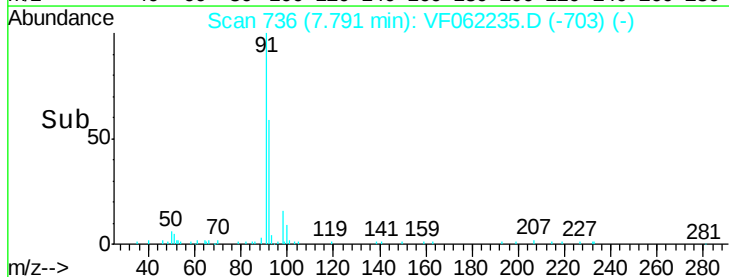
5000

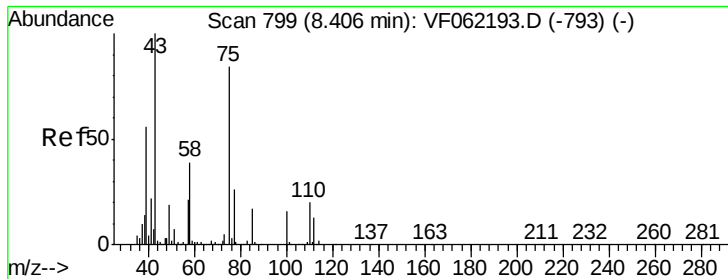
0

7.79

7.70 7.75 7.80 7.85 7.90

Time-->





#53

t-1,3-Dichloropropene

Concen: 2.792 ug/l

RT: 8.43 min Scan# 801

Delta R.T. 0.03 min

Lab File: VF062235.D

Acq: 19 Apr 2019 20:04

Instrument :

MSVOA_F

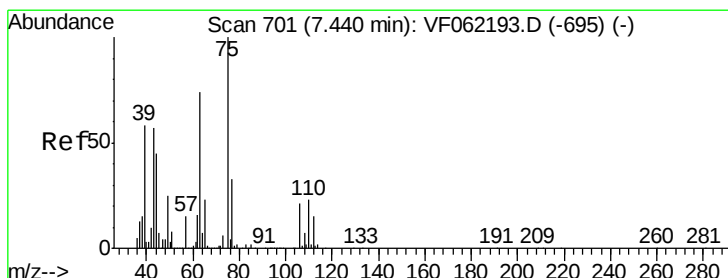
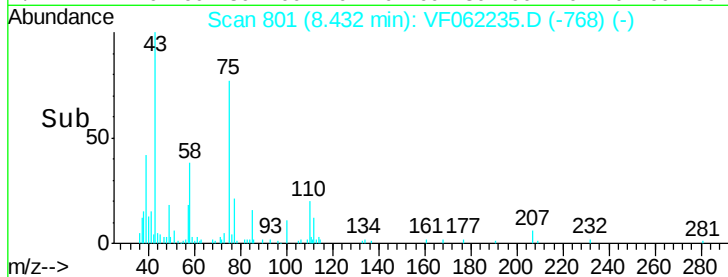
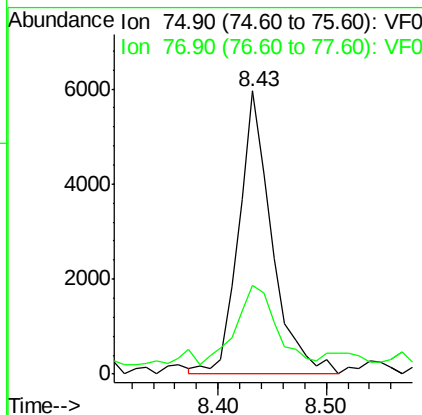
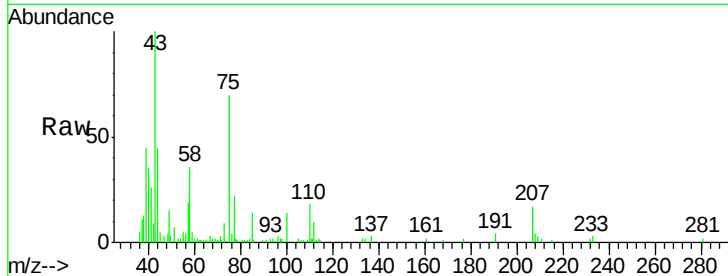
ClientSampleId :

MDL-MDL-SOIL-03-QT2-2019

Tot Ion: 75 Resp: 12624
 Ion Ratio Lower Upper
 75 100
 77 24.1 24.6 36.8#

Manual Integrations
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MMDadoda
 4/23/2019 6:56:00 AM



#54

cis-1,3-Dichloropropene

Concen: 2.598 ug/l

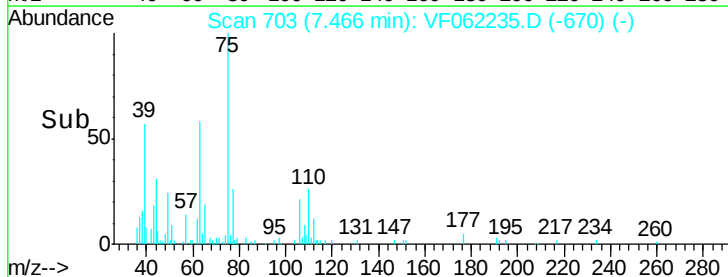
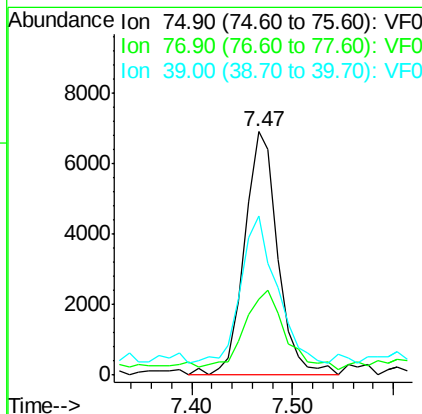
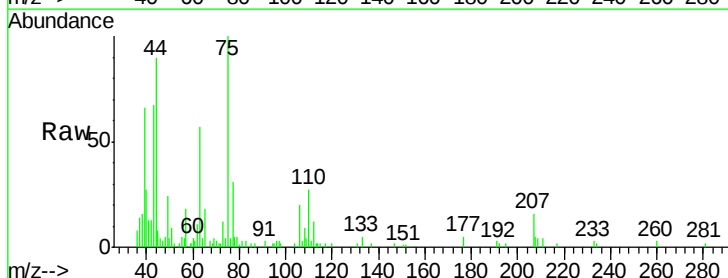
RT: 7.47 min Scan# 703

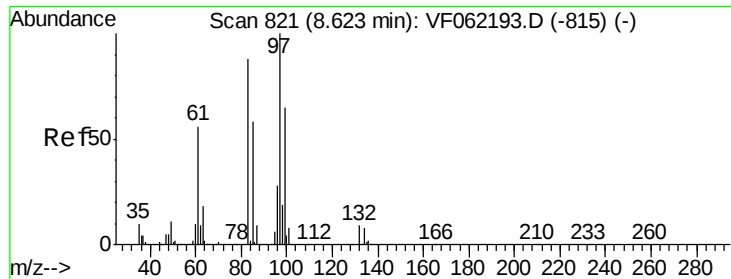
Delta R.T. 0.03 min

Lab File: VF062235.D

Acq: 19 Apr 2019 20:04

Tgt Ion: 75 Resp: 15885
 Ion Ratio Lower Upper
 75 100
 77 29.2 26.4 39.6
 39 60.5 46.7 70.1





#55

1,1,2-Trichloroethane

Concen: 3.044 ug/l

RT: 8.64 min Scan# 822

Delta R.T. 0.02 min

Lab File: VF062235.D

Acq: 19 Apr 2019 20:04

Instrument :

MSVOA_F

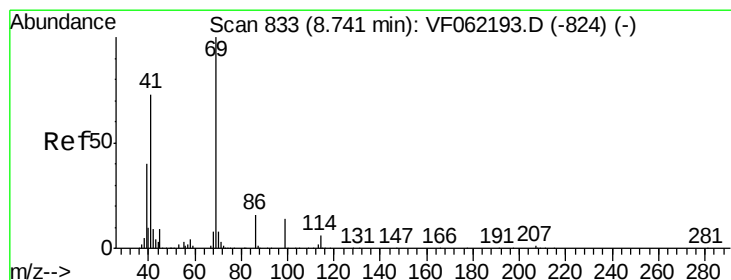
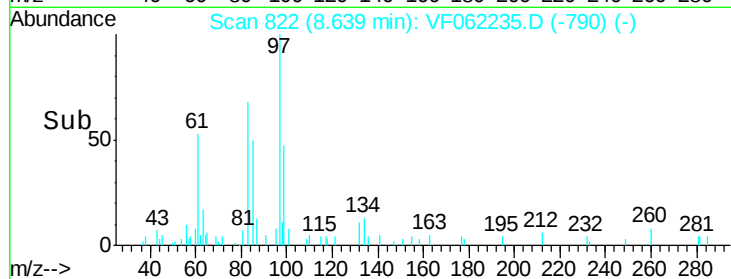
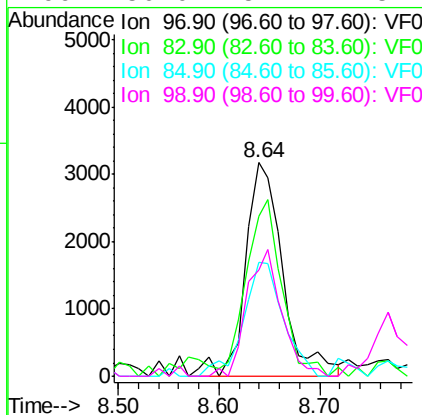
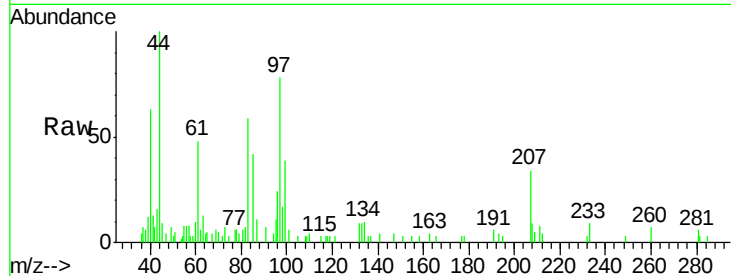
ClientSampleId :

MDL-MDL-SOIL-03-QT2-2019

Tot Ion:	97	Resp:	8181
Ion	Ratio	Lower	Upper
97	100		
83	70.4	70.2	105.2
85	53.1	46.2	69.4
99	50.0	52.2	78.4#

Manual Integrations
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4/23/2019 6:56:00 AM



#56

Ethyl methacrylate

Concen: 2.604 ug/l

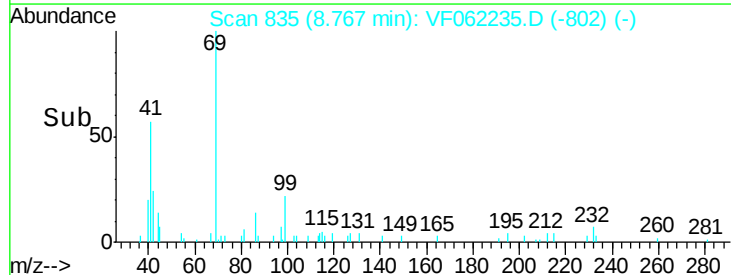
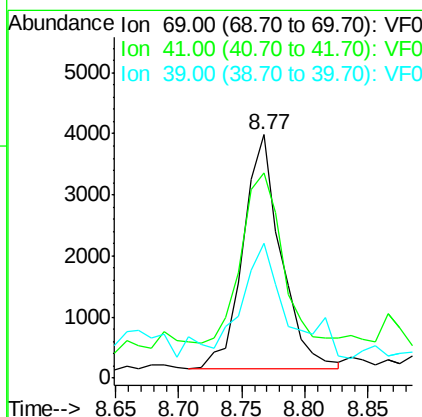
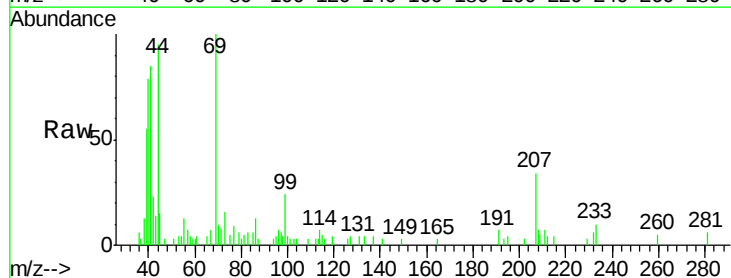
RT: 8.77 min Scan# 835

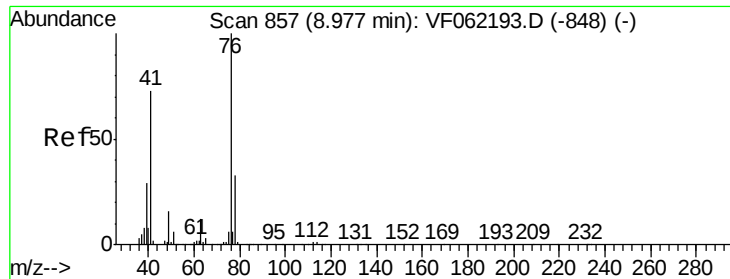
Delta R.T. 0.03 min

Lab File: VF062235.D

Acq: 19 Apr 2019 20:04

Tgt Ion:	69	Resp:	7958
Ion	Ratio	Lower	Upper
69	100		
41	80.8	61.5	92.3
39	64.1	33.3	49.9#





#57

1,3-Dichloropropane

Concen: 2.682 ug/l

RT: 9.00 min Scan# 859

Delta R.T. 0.03 min

Lab File: VF062235.D

Acq: 19 Apr 2019 20:04

Tot Ion: 76 Resp: 11638

Ion Ratio Lower Upper

76 100

78 34.6 26.5 39.7

Instrument :

MSVOA_F

ClientSampleId :

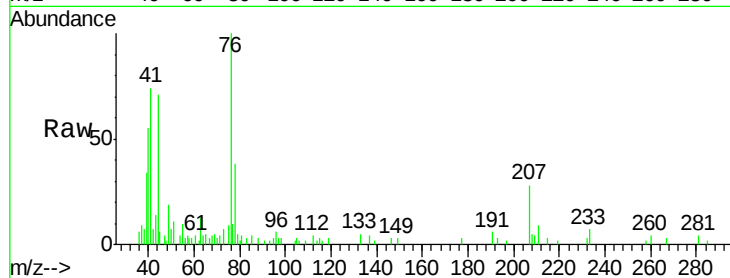
MDL-MDL-SOIL-03-QT2-2019

Manual Integrations

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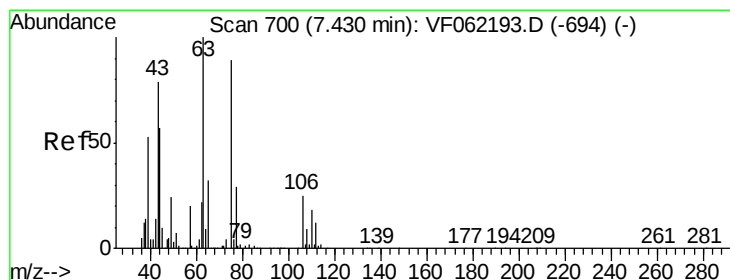
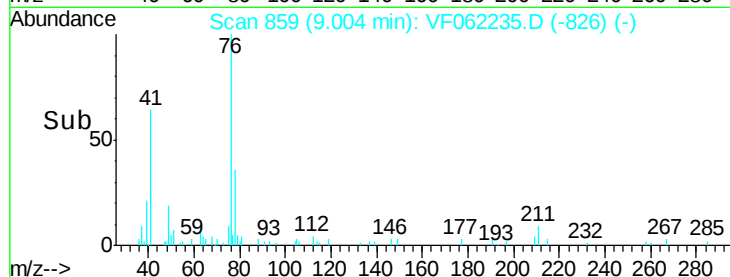
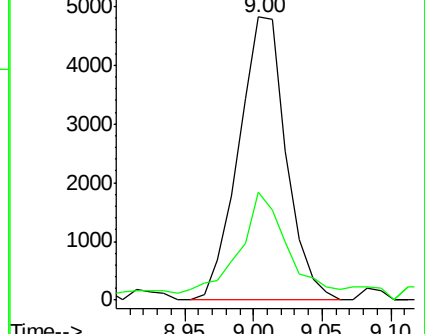
MMDadoda

4/23/2019 6:56:00 AM



Abundance Ion 75.90 (75.60 to 76.60): VF0

Ion 77.90 (77.60 to 78.60): VF0



#58

2-Chloroethyl Vinyl ether

Concen: 12.930 ug/l

RT: 7.46 min Scan# 702

Delta R.T. 0.03 min

Lab File: VF062235.D

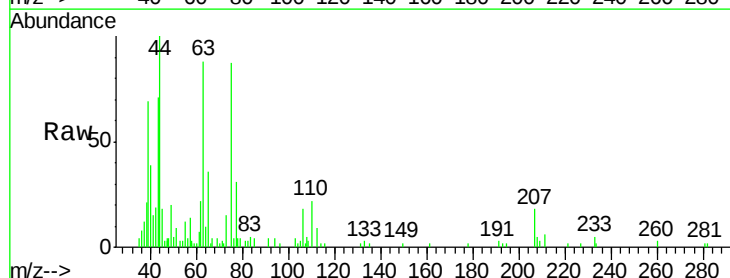
Acq: 19 Apr 2019 20:04

Tgt Ion: 63 Resp: 11471

Ion Ratio Lower Upper

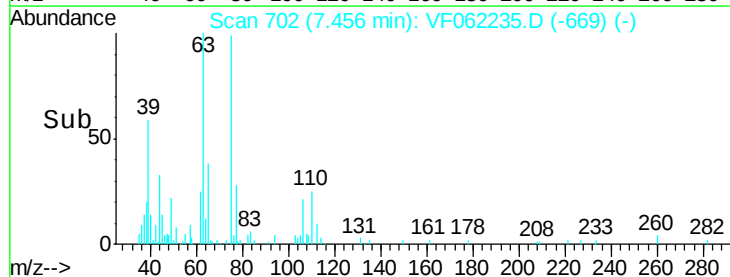
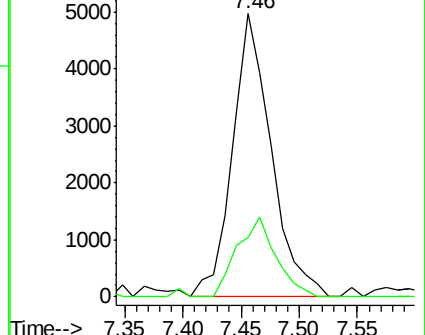
63 100

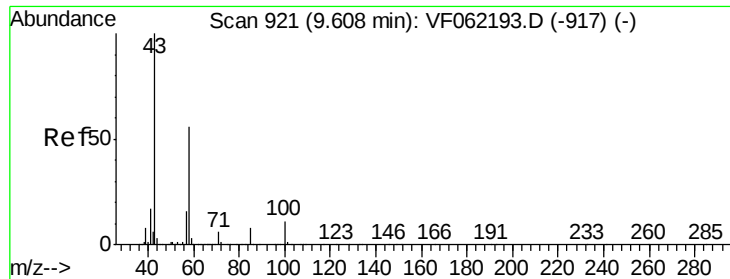
106 28.3 21.4 32.0



Abundance Ion 62.90 (62.60 to 63.60): VF0

Ion 105.90 (105.60 to 106.60): V





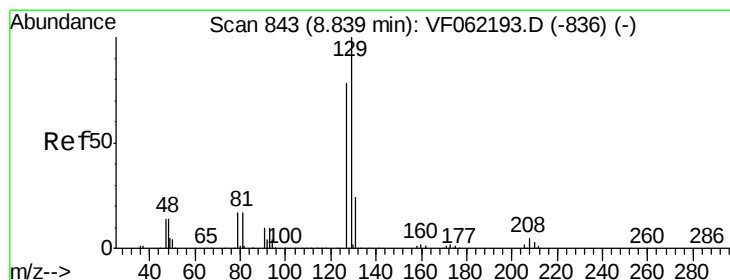
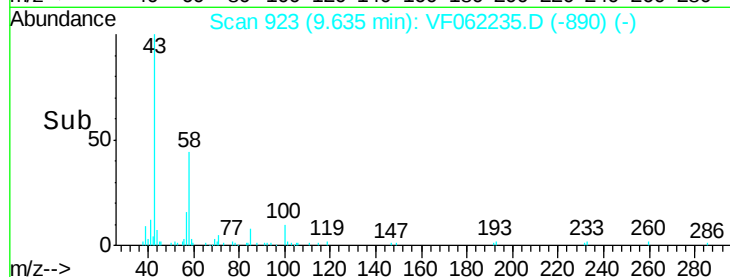
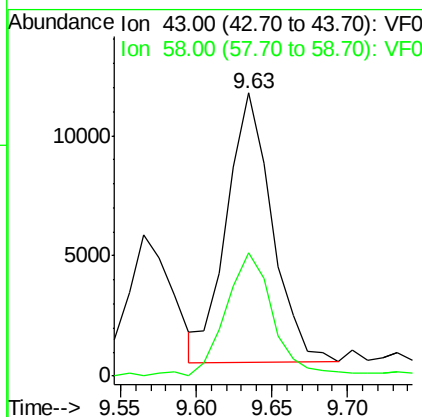
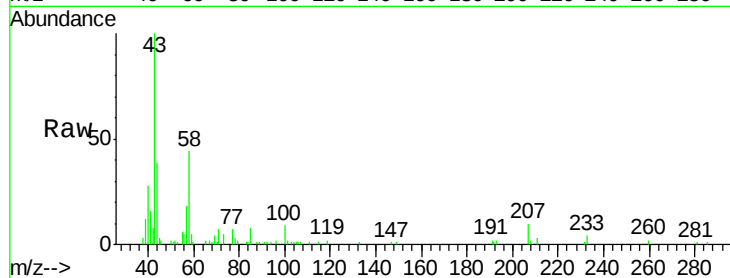
#59
2-Hexanone
Concen: 13.768 ug/l
RT: 9.63 min Scan# 923
Delta R.T. 0.03 min
Lab File: VF062235.D
Acq: 19 Apr 2019 20:04

Instrument :
MSVOA_F
ClientSampleId :
MDL-MDL-SOIL-03-QT2-2019

Tot Ion: 43 Resp: 23236
Ion Ratio Lower Upper
43 100
58 49.1 24.6 74.0

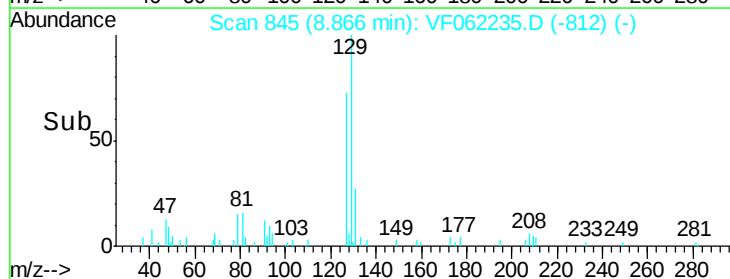
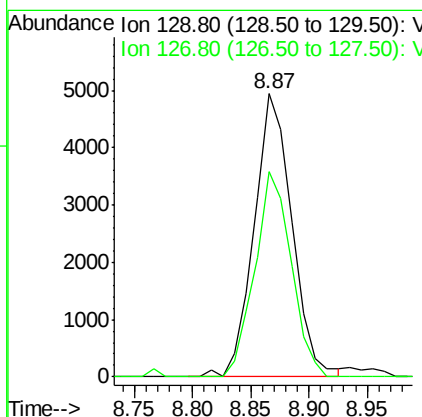
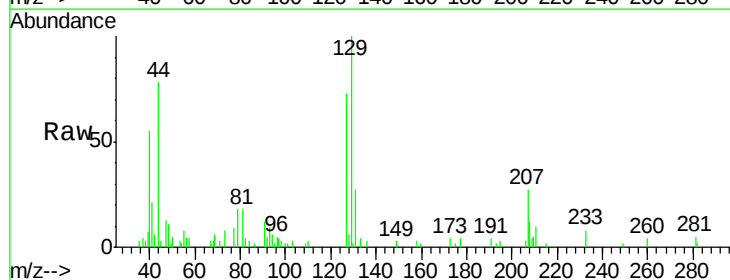
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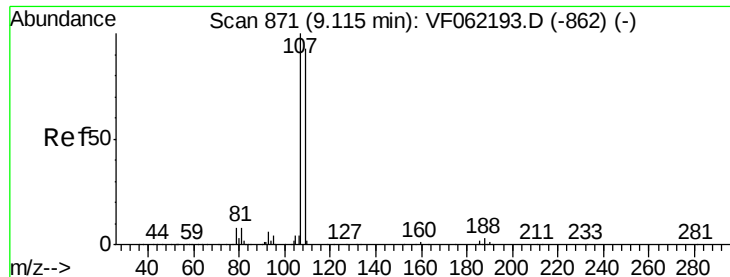
MMDadoda
4/23/2019 6:56:00 AM



#60
Dibromochloromethane
Concen: 2.786 ug/l
RT: 8.87 min Scan# 845
Delta R.T. 0.03 min
Lab File: VF062235.D
Acq: 19 Apr 2019 20:04

Tgt Ion:129 Resp: 11134
Ion Ratio Lower Upper
129 100
127 69.5 39.0 117.0





#61

1,2-Dibromoethane

Concen: 2.750 ug/l

RT: 9.14 min Scan# 873

Delta R.T. 0.03 min

Lab File: VF062235.D

Acq: 19 Apr 2019 20:04

Instrument :

MSVOA_F

ClientSampleId :

MDL-MDL-SOIL-03-QT2-2019

Tot Ion: 107 Resp: 8328

Ion Ratio Lower Upper

107 100

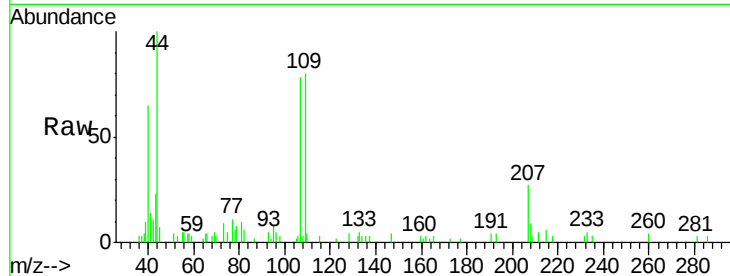
109 97.5 74.3 111.5

Manual Integrations

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Abundance Ion 106.90 (106.60 to 107.60): V

Ion 108.80 (108.50 to 109.50): V

9.14

4000

3000

2000

1000

0

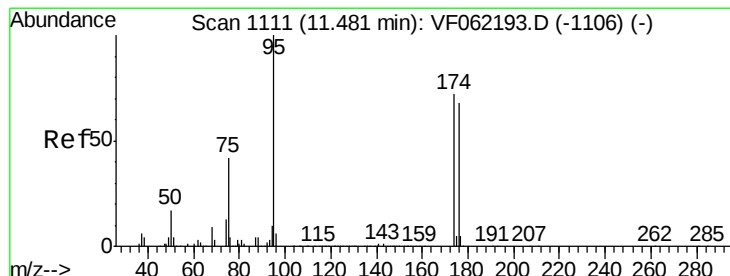
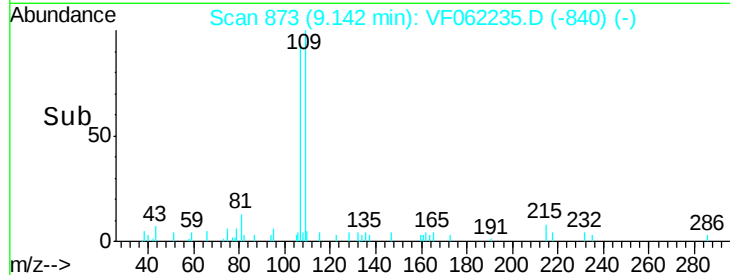
Time-->

9.00

9.10

9.20

9.30



#62

4-Bromofluorobenzene

Concen: 56.598 ug/l

RT: 11.50 min Scan# 1112

Delta R.T. 0.02 min

Lab File: VF062235.D

Acq: 19 Apr 2019 20:04

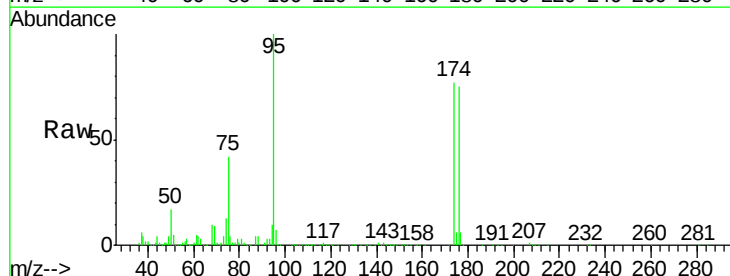
Tgt Ion: 95 Resp: 279019

Ion Ratio Lower Upper

95 100

174 89.8 0.0 159.4

176 89.9 0.0 155.4



Abundance Ion 94.90 (94.60 to 95.60): VF0

Ion 173.80 (173.50 to 174.50): V

Ion 175.80 (175.50 to 176.50): V

200000

150000

100000

50000

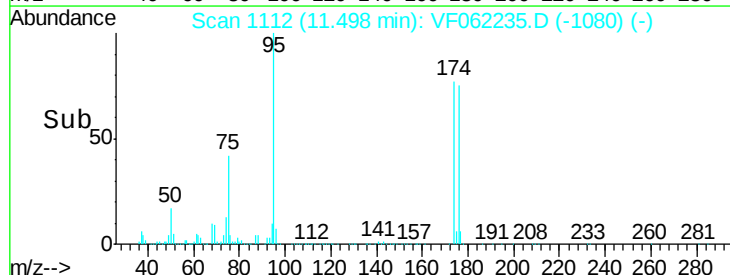
0

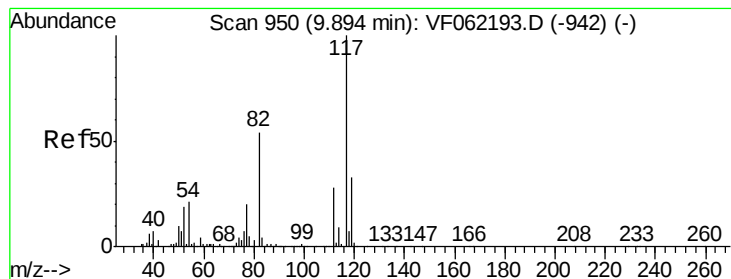
Time-->

11.40

11.50

11.60





#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 9.92 min Scan# 952

Delta R.T. 0.03 min

Lab File: VF062235.D

Acq: 19 Apr 2019 20:04

Instrument :

MSVOA_F

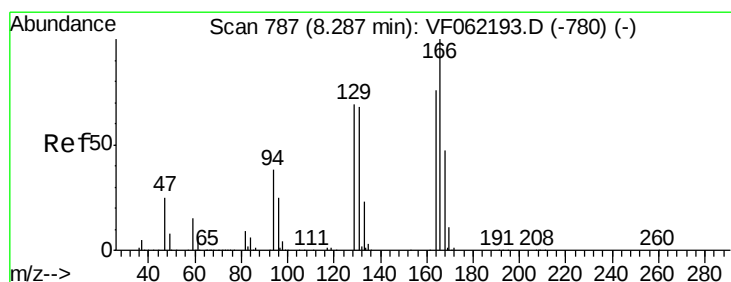
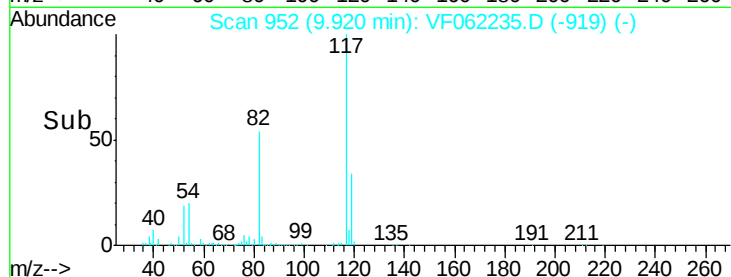
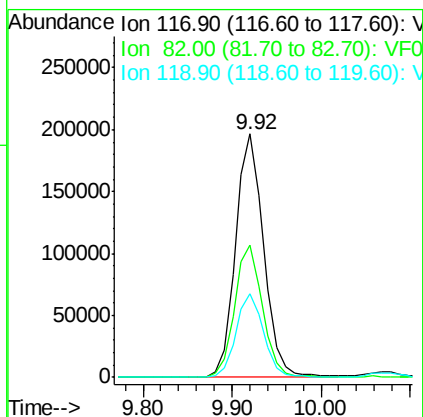
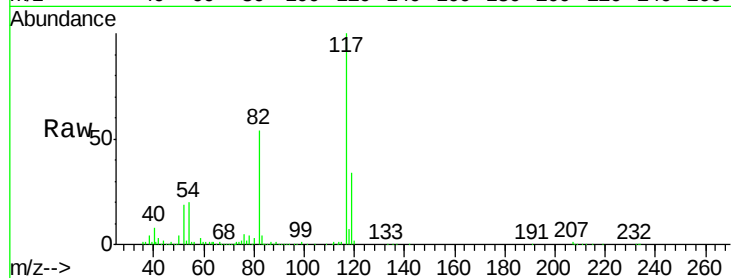
ClientSampleId :

MDL-MDL-SOIL-03-QT2-2019

Tot Ion:	117	Resp:	434560
Ion Ratio	Lower	Upper	
117	100		
82	54.4	43.2	64.8
119	34.4	26.2	39.4

Manual Integrations
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#64

Tetrachloroethene

Concen: 3.008 ug/l

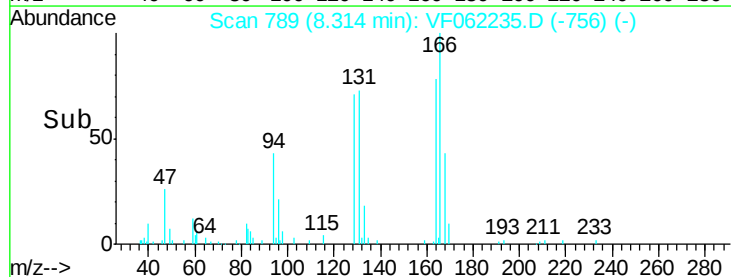
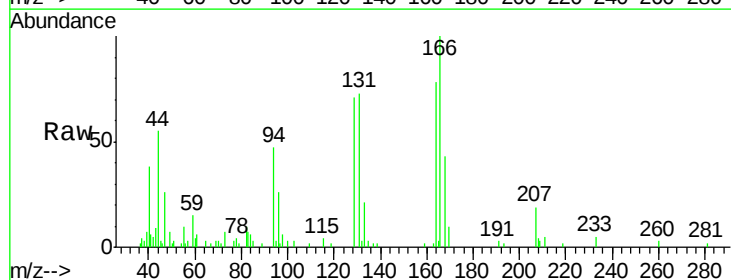
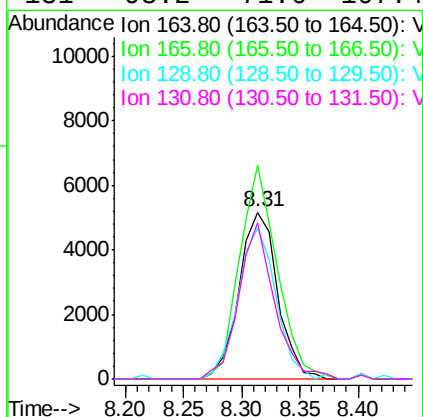
RT: 8.31 min Scan# 789

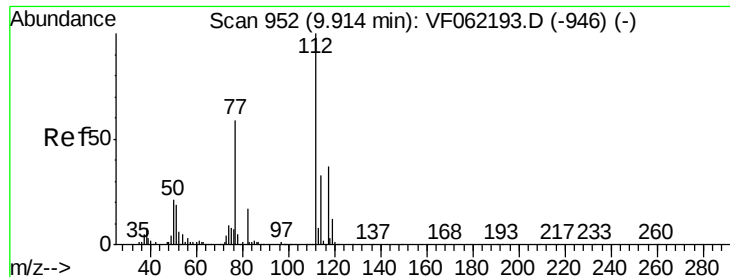
Delta R.T. 0.03 min

Lab File: VF062235.D

Acq: 19 Apr 2019 20:04

Tgt Ion:	164	Resp:	11801
Ion Ratio	Lower	Upper	
164	100		
166	127.9	104.7	157.1
129	90.3	72.6	109.0
131	93.2	71.6	107.4





#65

Chlorobenzene

Concen: 2.734 ug/l

RT: 9.94 min Scan# 954

Delta R.T. 0.03 min

Lab File: VF062235.D

Acq: 19 Apr 2019 20:04

Instrument :

MSVOA_F

ClientSampleId :

MDL-MDL-SOIL-03-QT2-2019

Tot Ion:112 Resp: 25334

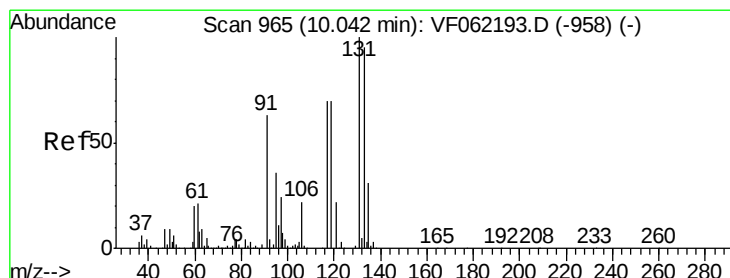
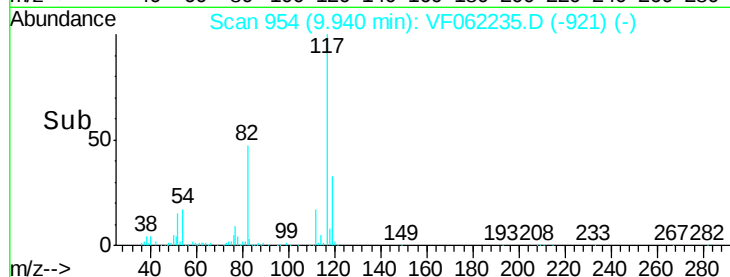
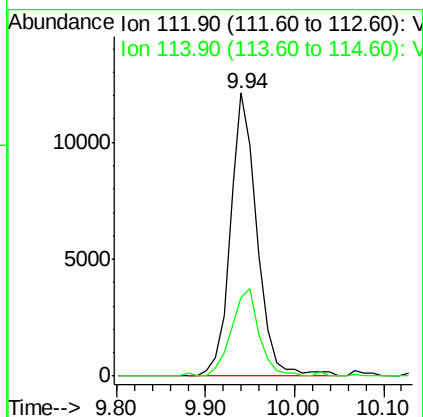
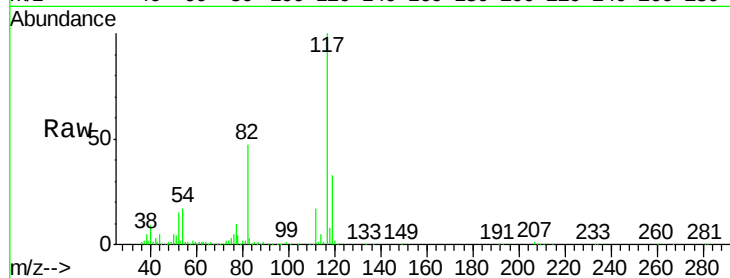
Ion Ratio Lower Upper

112 100

114 27.8 26.1 39.1

Manual Integrations
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#66

1,1,1,2-Tetrachloroethane

Concen: 2.875 ug/l

RT: 10.07 min Scan# 967

Delta R.T. 0.03 min

Lab File: VF062235.D

Acq: 19 Apr 2019 20:04

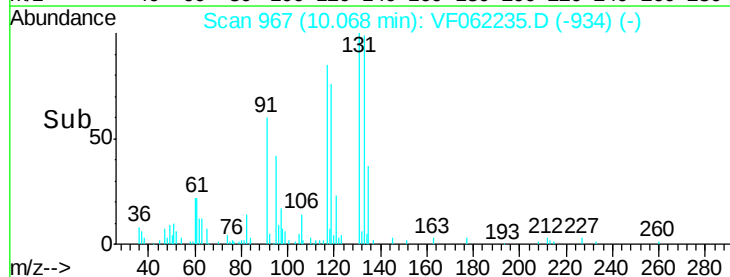
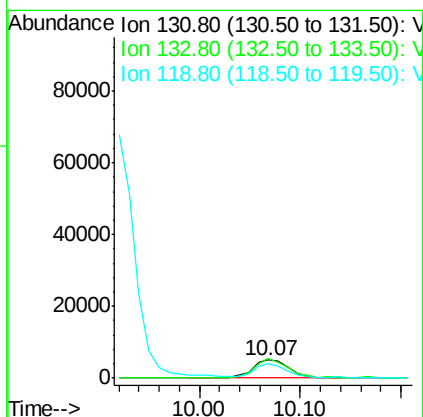
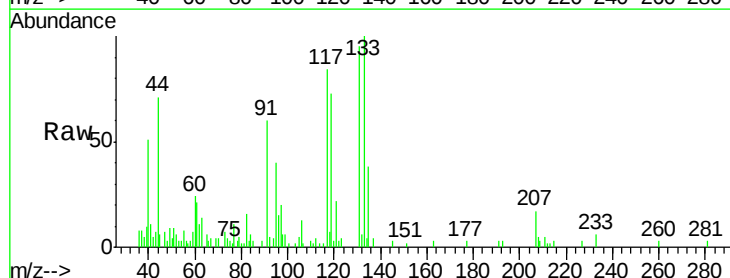
Tgt Ion:131 Resp: 12476

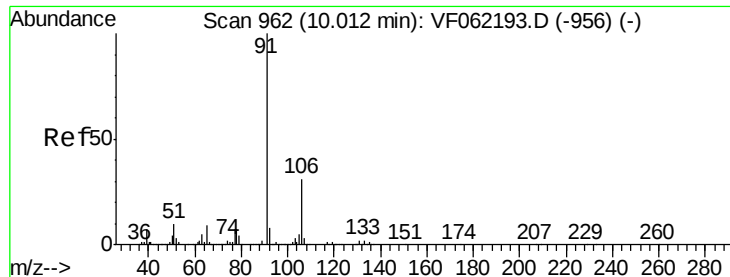
Ion Ratio Lower Upper

131 100

133 96.7 47.7 143.1

119 70.7 34.6 103.9





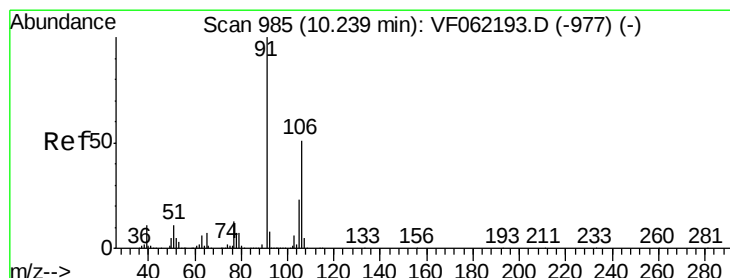
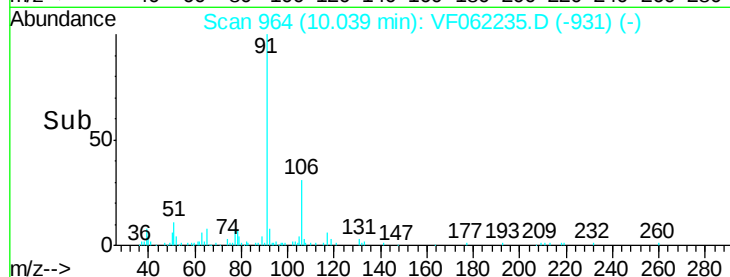
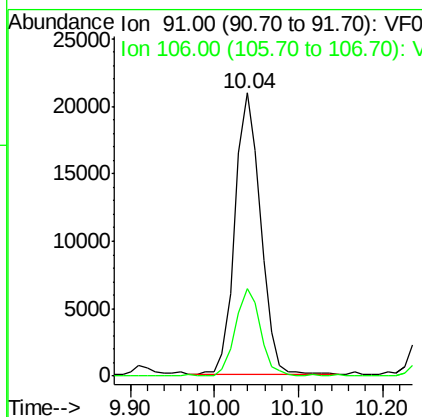
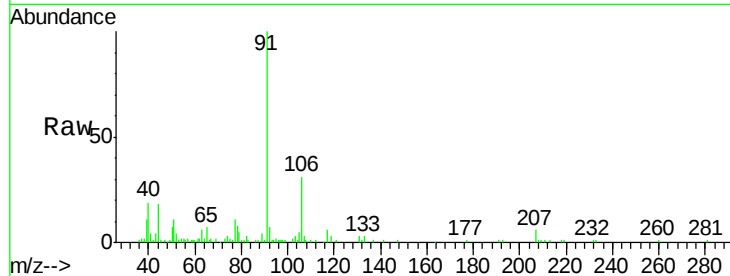
#67
Ethyl Benzene
Concen: 2.631 ug/l
RT: 10.04 min Scan# 964
Delta R.T. 0.03 min
Lab File: VF062235.D
Acq: 19 Apr 2019 20:04

Instrument :
MSVOA_F
ClientSampleId :
MDL-MDL-SOIL-03-QT2-2019

Tot Ion: 91 Resp: 44322
Ion Ratio Lower Upper
91 100
106 30.7 24.9 37.3

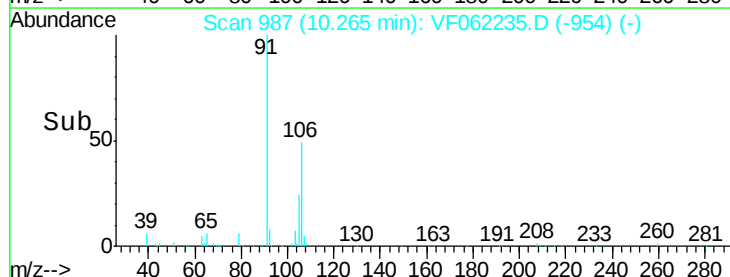
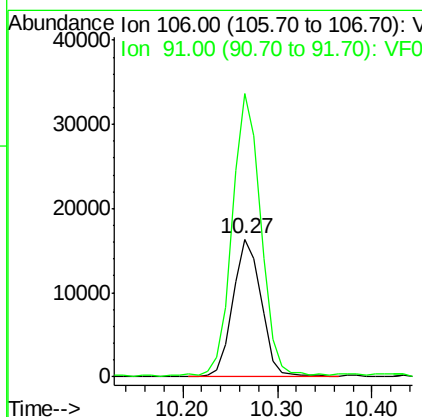
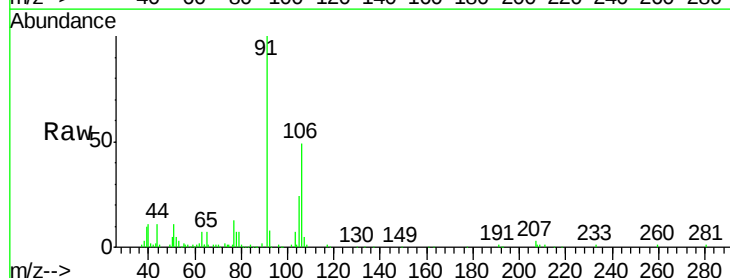
Manual Integrations
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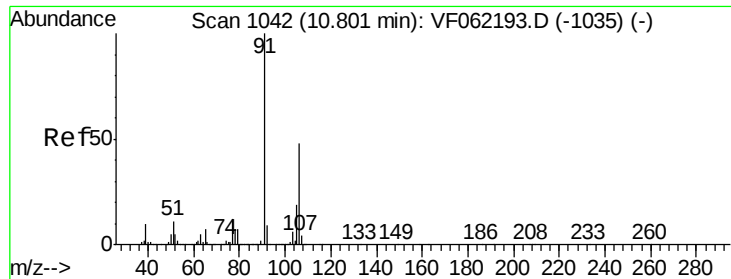
MMDadoda
4/23/2019 6:56:00 AM



#68
m/p-Xylenes
Concen: 5.520 ug/l
RT: 10.27 min Scan# 987
Delta R.T. 0.03 min
Lab File: VF062235.D
Acq: 19 Apr 2019 20:04

Tgt Ion: 106 Resp: 34237
Ion Ratio Lower Upper
106 100
91 206.8 159.1 238.7





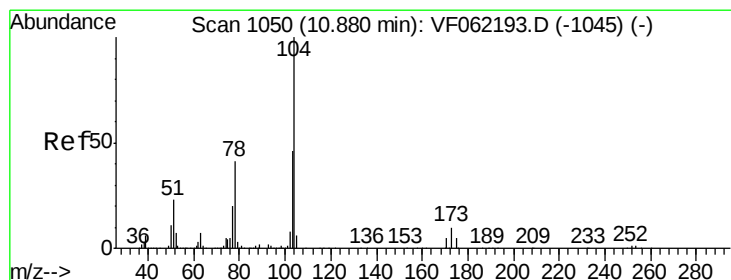
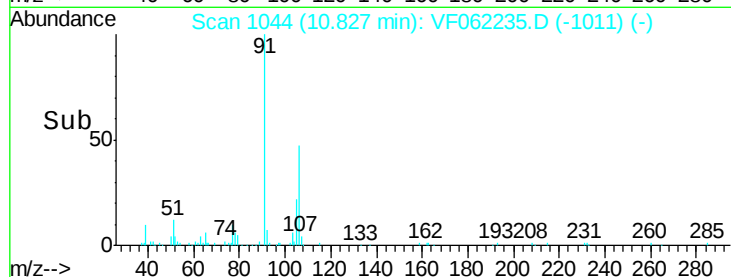
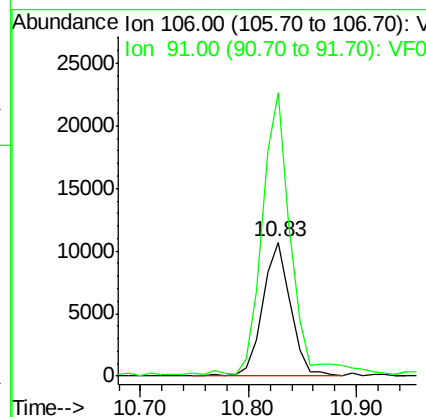
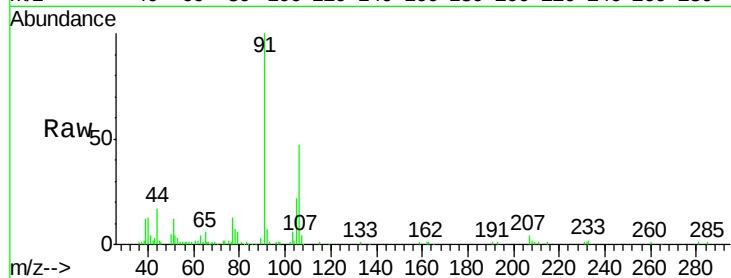
#69
o-Xylene
Concen: 2.774 ug/l
RT: 10.83 min Scan# 1044
Delta R.T. 0.03 min
Lab File: VF062235.D
Acq: 19 Apr 2019 20:04

Instrument :
MSVOA_F
ClientSampleId :
MDL-MDL-SOIL-03-QT2-2019

Tot Ion:106 Resp: 19102
Ion Ratio Lower Upper
106 100
91 214.3 107.5 322.4

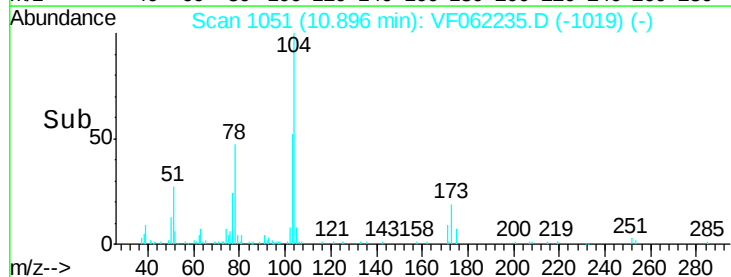
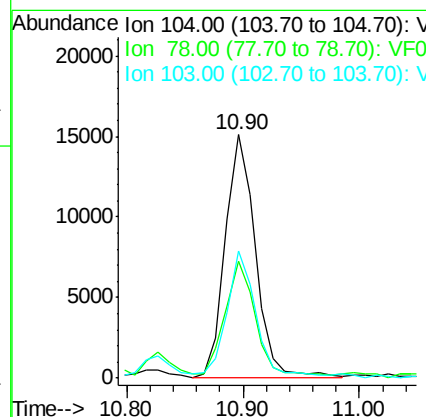
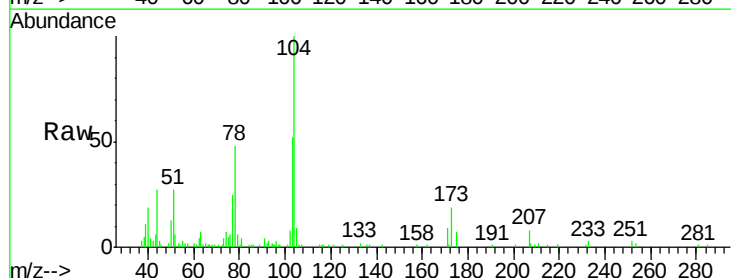
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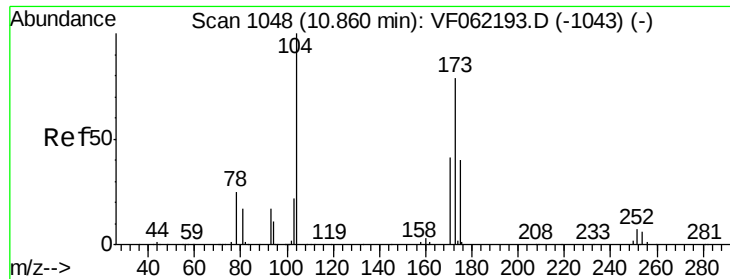
MMDadoda
4/23/2019 6:56:00 AM



#70
Styrene
Concen: 2.826 ug/l
RT: 10.90 min Scan# 1051
Delta R.T. 0.02 min
Lab File: VF062235.D
Acq: 19 Apr 2019 20:04

Tgt Ion:104 Resp: 27465
Ion Ratio Lower Upper
104 100
78 46.6 34.5 51.7
103 47.4 37.2 55.8





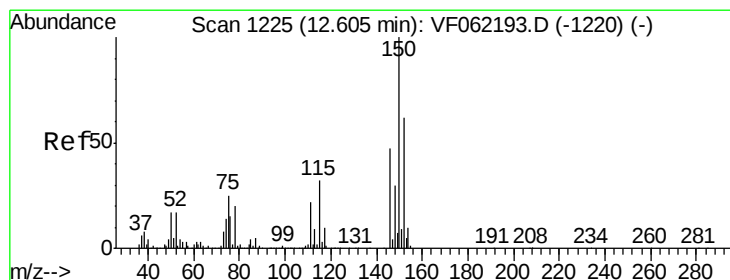
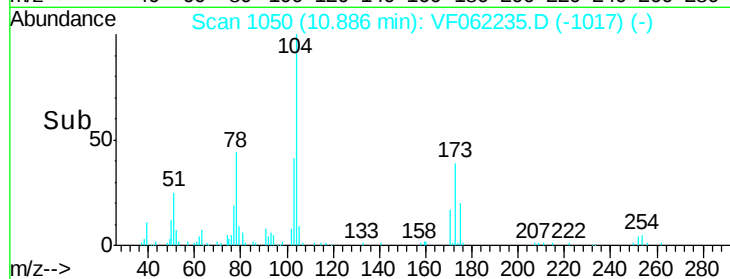
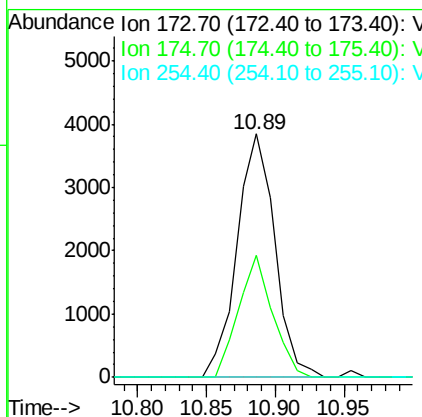
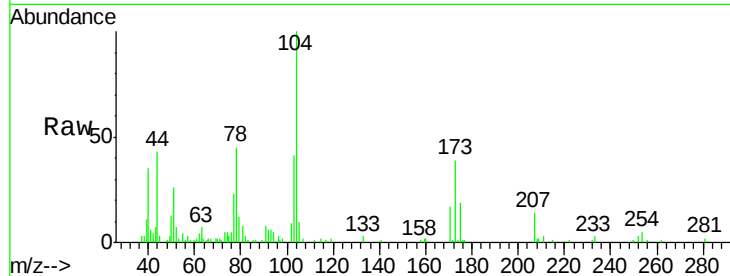
#71
Bromoform
Concen: 3.208 ug/l
RT: 10.89 min Scan# 1050
Delta R.T. 0.03 min
Lab File: VF062235.D
Acq: 19 Apr 2019 20:04

Instrument :
MSVOA_F
ClientSampleId :
MDL-MDL-SOIL-03-QT2-2019

Tot Ion	Ratio	Lower	Upper
173	100		
175	45.4	24.5	73.5
254	0.0	0.1	0.1#

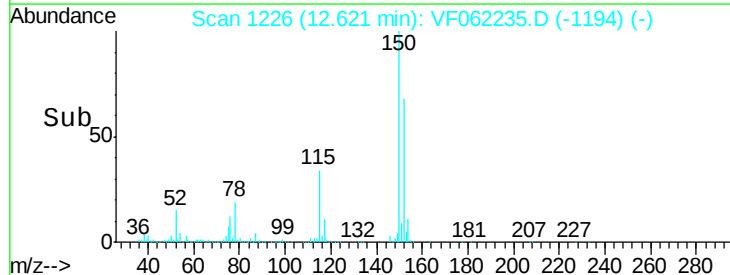
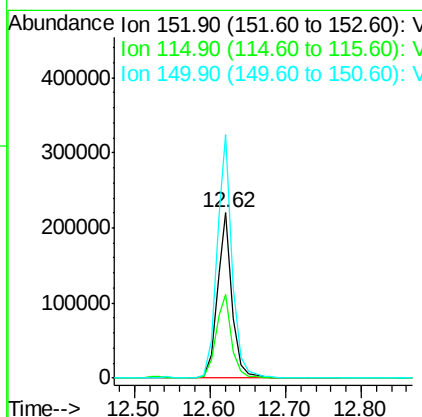
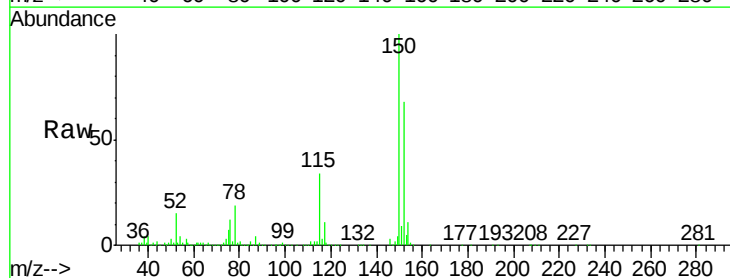
Manual Integrations
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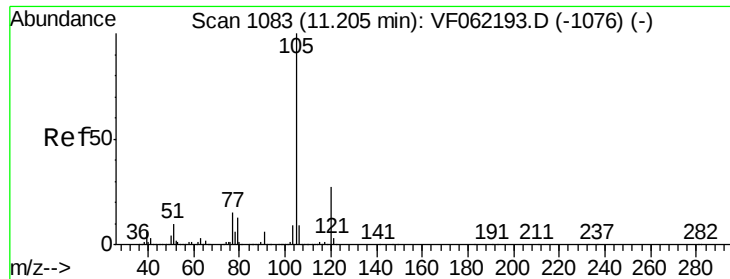
MMDadoda
4/23/2019 6:56:00 AM



#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 12.62 min Scan# 1226
Delta R.T. 0.02 min
Lab File: VF062235.D
Acq: 19 Apr 2019 20:04

Tgt Ion	Ratio	Lower	Upper
152	100		
115	53.7	27.8	83.3
150	151.8	0.0	341.8





#73

Isopropylbenzene

Concen: 2.030 ug/l

RT: 11.22 min Scan# 1084

Delta R.T. 0.02 min

Lab File: VF062235.D

Acq: 19 Apr 2019 20:04

Instrument :

MSVOA_F

ClientSampleId :

MDL-MDL-SOIL-03-QT2-2019

Tot Ion:105 Resp: 52056

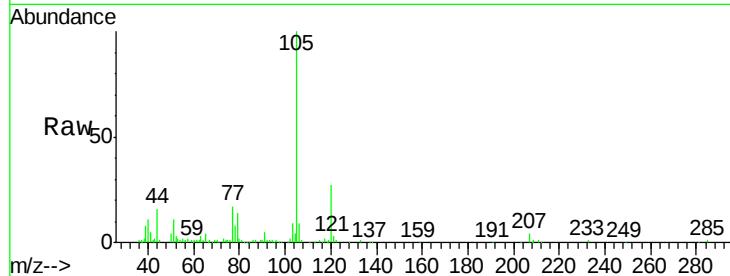
Ion Ratio Lower Upper

105 100

120 25.9 13.0 38.9

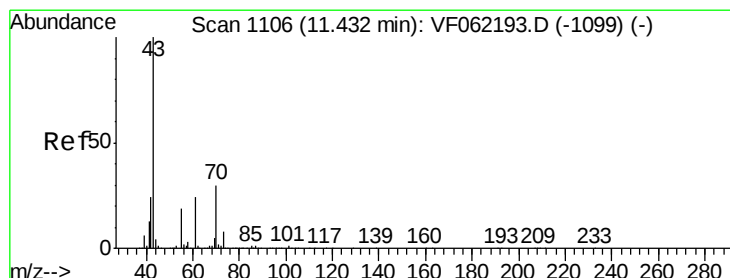
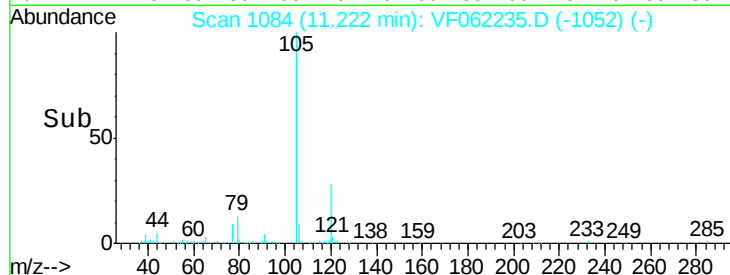
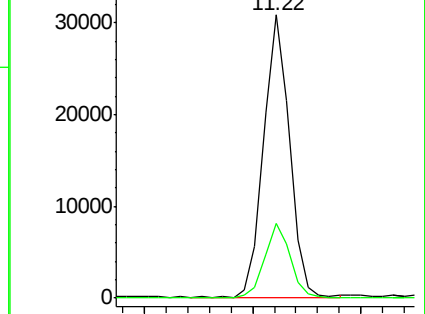
Manual Integrations
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Abundance Ion 105.00 (104.70 to 105.70): V

Ion 120.00 (119.70 to 120.70): V



#74

N-ethyl acetate

Concen: 2.237 ug/l

RT: 11.46 min Scan# 1108

Delta R.T. 0.03 min

Lab File: VF062235.D

Acq: 19 Apr 2019 20:04

Tgt Ion: 43 Resp: 15165

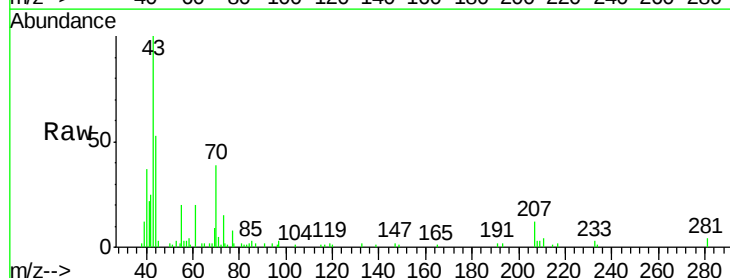
Ion Ratio Lower Upper

43 100

70 42.1 27.0 40.4#

55 22.1 15.7 23.5

61 24.0 20.8 31.2

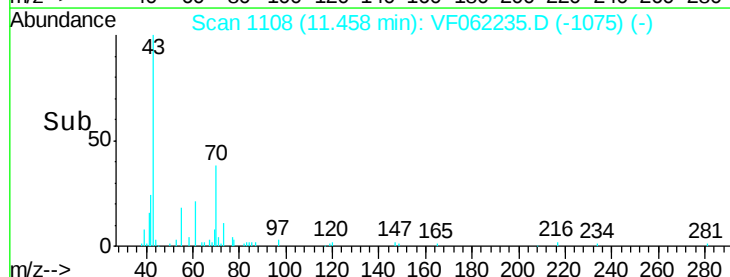
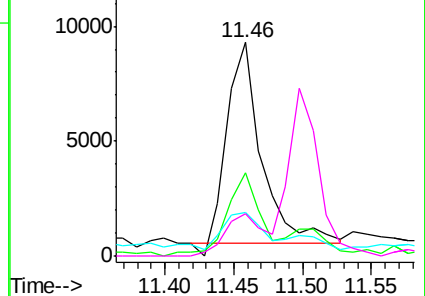


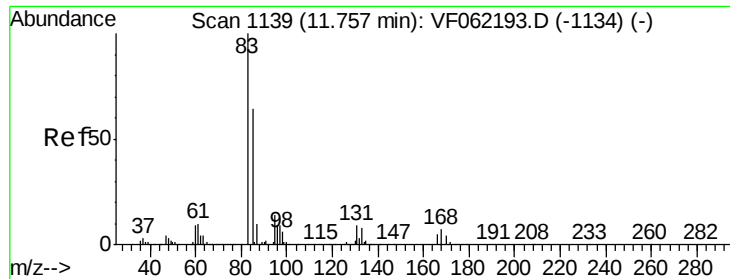
Abundance Ion 43.00 (42.70 to 43.70): VF0

Ion 70.00 (69.70 to 70.70): VF0

Ion 55.00 (54.70 to 55.70): VF0

Ion 61.00 (60.70 to 61.70): VF0





#75

1,1,2,2-Tetrachloroethane

Concen: 2.172 ug/l

RT: 11.77 min Scan# 1140

Delta R.T. 0.02 min

Lab File: VF062235.D

Acq: 19 Apr 2019 20:04

Instrument :

MSVOA_F

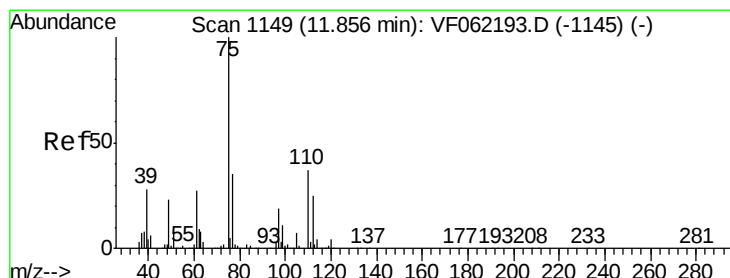
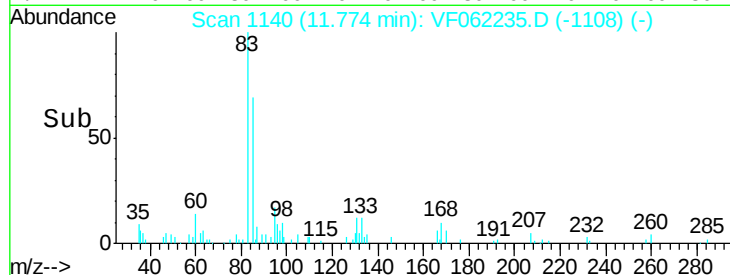
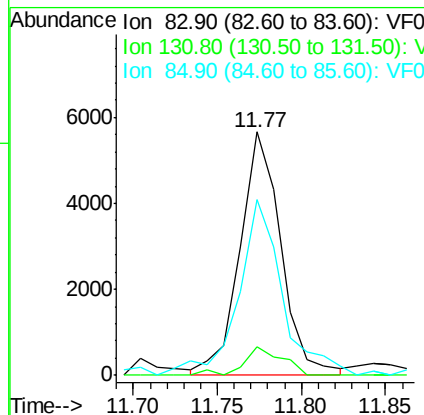
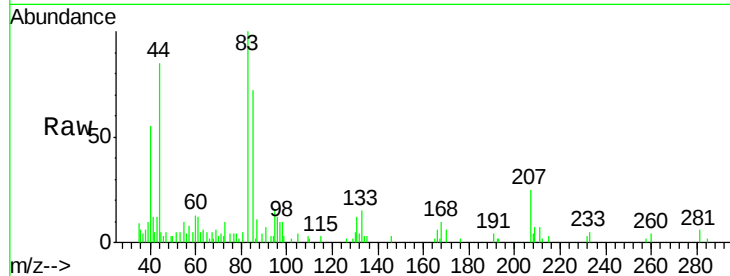
ClientSampleId :

MDL-MDL-SOIL-03-QT2-2019

Tot Ion	Ratio	Lower	Upper
83	100		
131	11.0	4.5	13.5
85	78.1	34.7	104.1

Manual Integrations
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MMDadoda
4/23/2019 6:56:00 AM



#76

1,2,3-Trichloropropane

Concen: 2.630 ug/l m

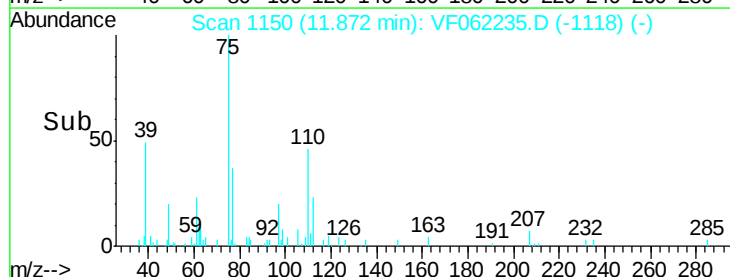
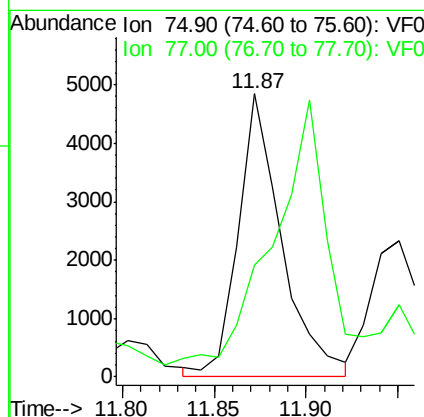
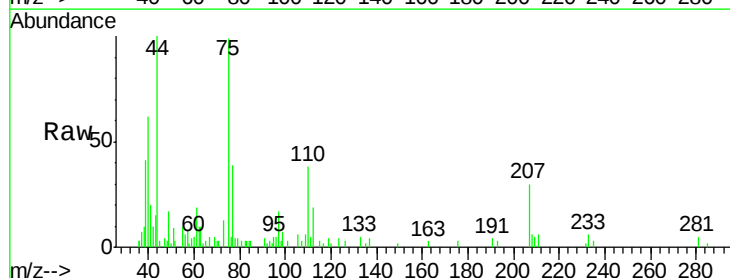
RT: 11.87 min Scan# 1150

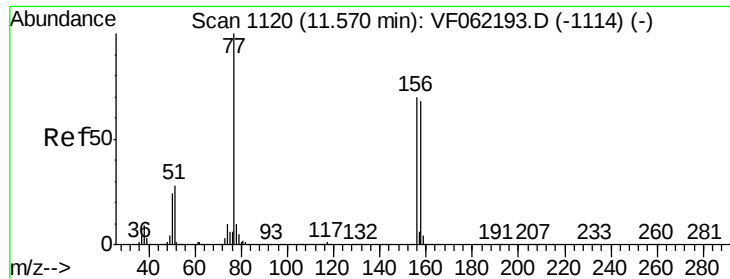
Delta R.T. 0.02 min

Lab File: VF062235.D

Acq: 19 Apr 2019 20:04

Tgt Ion	Ratio	Lower	Upper
75	100		
77	14.2	7.4	22.2





#77

Bromobenzene

Concen: 2.469 ug/l

RT: 11.59 min Scan# 1121

Delta R.T. 0.02 min

Lab File: VF062235.D

Acq: 19 Apr 2019 20:04

Instrument :

MSVOA_F

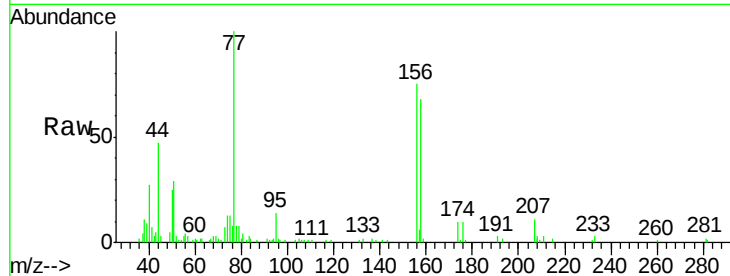
ClientSampleId :

MDL-MDL-SOIL-03-QT2-2019

Tot Ion:	156	Resp:	13563
Ion Ratio	Lower	Upper	
156	100		
77	151.0	80.9	242.7
158	90.9	49.8	149.4

Manual Integrations
APPROVED

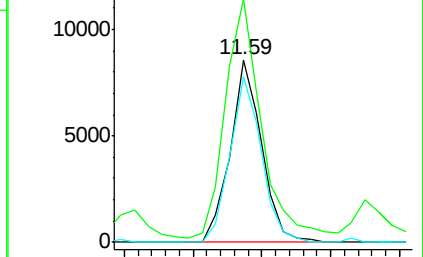
MMDadoda
4/23/2019 6:56:00 AM



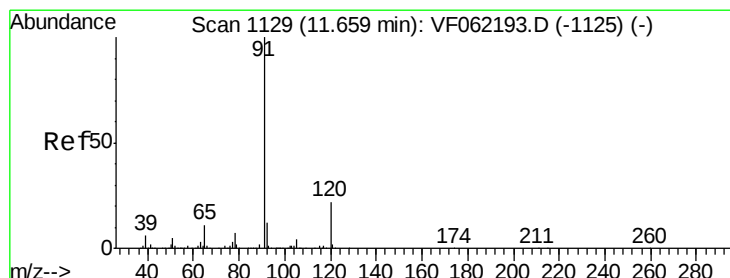
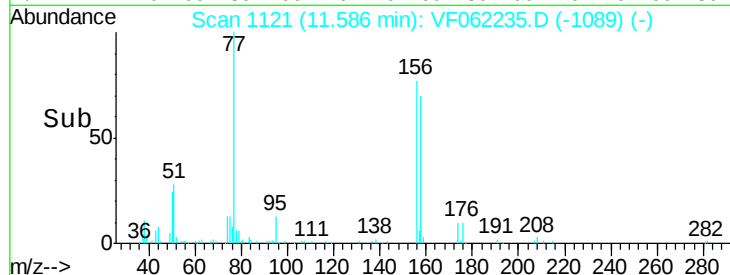
Abundance Ion 155.80 (155.50 to 156.50): V

Ion 77.00 (76.70 to 77.70): VF0

Ion 157.80 (157.50 to 158.50): V



Time-->



#78

n-propylbenzene

Concen: 2.210 ug/l

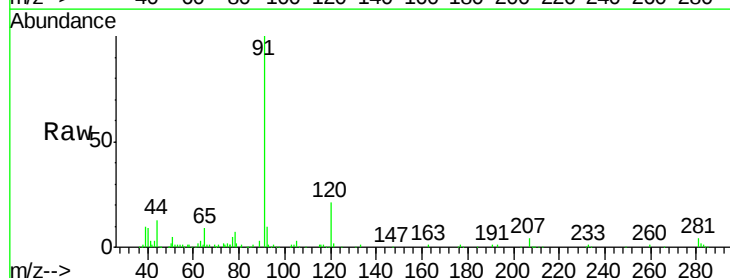
RT: 11.68 min Scan# 1130

Delta R.T. 0.02 min

Lab File: VF062235.D

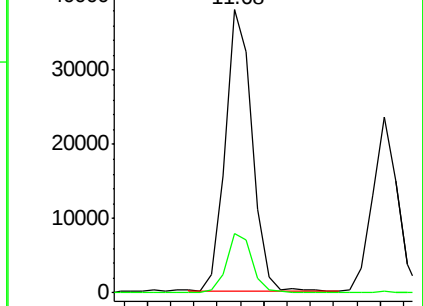
Acq: 19 Apr 2019 20:04

Tgt Ion:	91	Resp:	59781
Ion Ratio	Lower	Upper	
91	100		
120	20.7	11.2	33.6

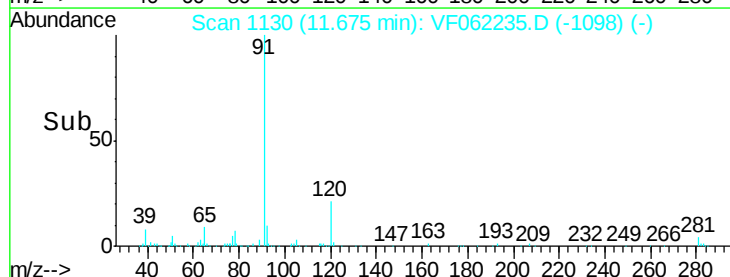


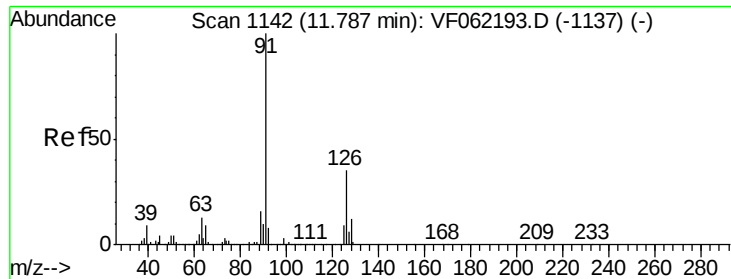
Abundance Ion 91.00 (90.70 to 91.70): VF0

Ion 120.00 (119.70 to 120.70): V



Time-->





#79

2-Chlorotoluene

Concen: 2.147 ug/l

RT: 11.80 min Scan# 1143

Delta R.T. 0.02 min

Lab File: VF062235.D

Acq: 19 Apr 2019 20:04

Instrument :

MSVOA_F

ClientSampleId :

MDL-MDL-SOIL-03-QT2-2019

Tot Ion: 91 Resp: 35241

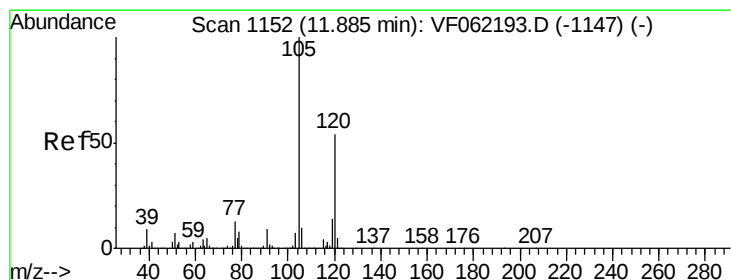
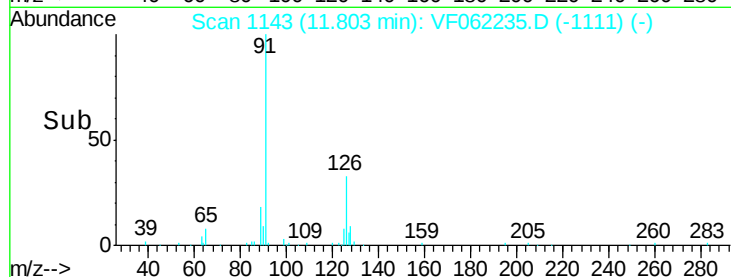
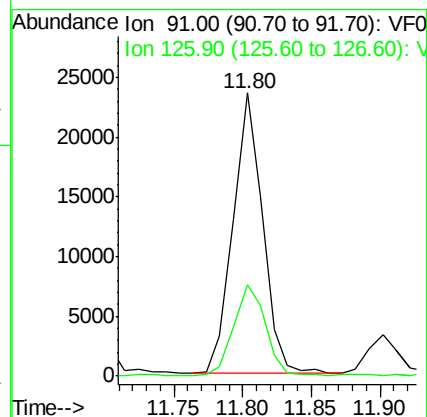
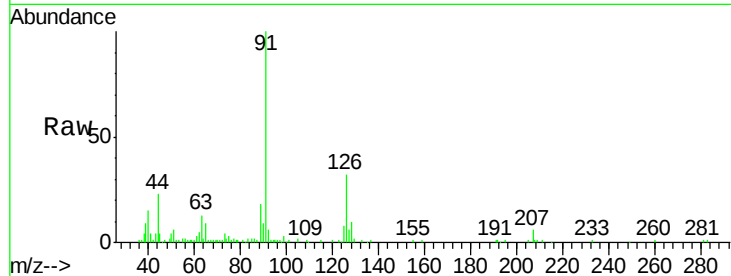
Ion Ratio Lower Upper

91 100

126 35.1 16.9 50.6

Manual Integrations
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#80

1,3,5-Trimethylbenzene

Concen: 2.376 ug/l

RT: 11.90 min Scan# 1153

Delta R.T. 0.02 min

Lab File: VF062235.D

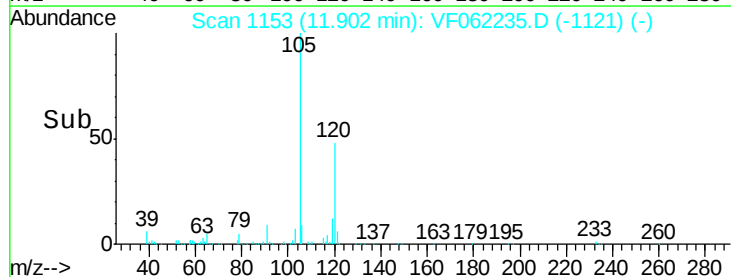
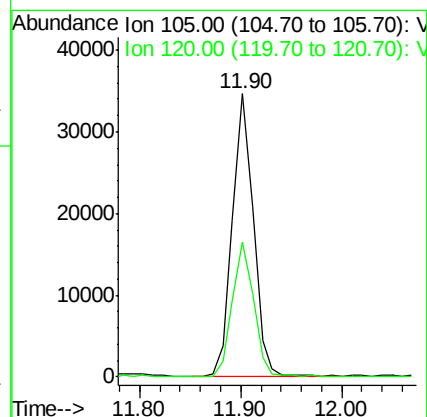
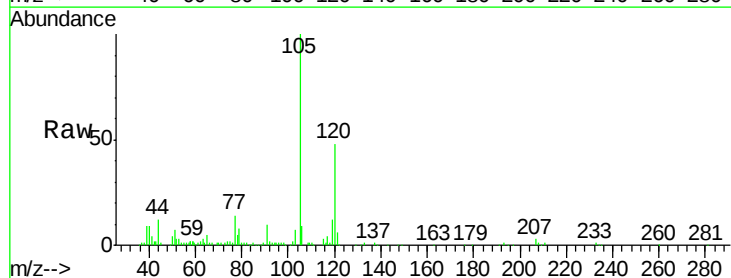
Acq: 19 Apr 2019 20:04

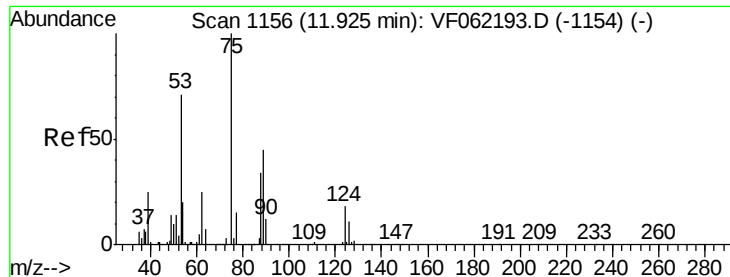
Tgt Ion: 105 Resp: 50753

Ion Ratio Lower Upper

105 100

120 48.3 26.2 78.5





#81

trans-1,4-Dichloro-2-butene

Concen: 3.219 ug/l m

RT: 11.95 min Scan# 1158

Delta R.T. 0.03 min

Lab File: VF062235.D

Acq: 19 Apr 2019 20:04

Instrument :

MSVOA_F

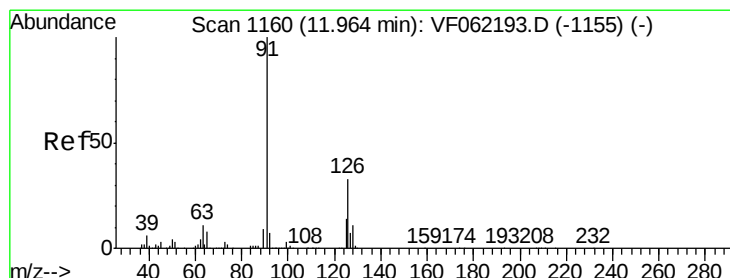
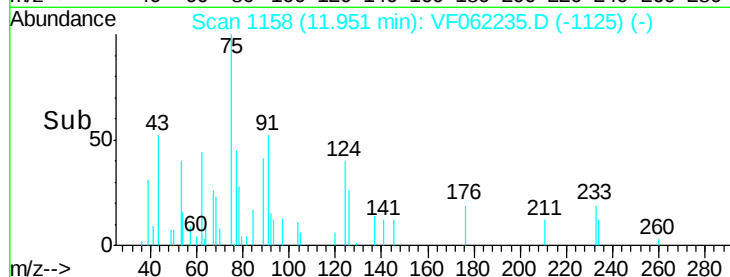
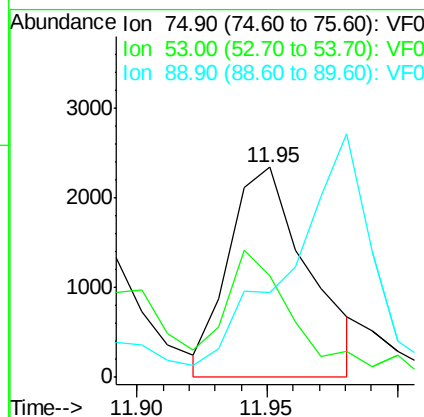
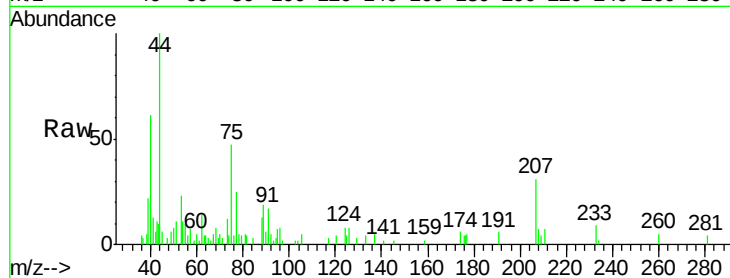
ClientSampleId :

MDL-MDL-SOIL-03-QT2-2019

Tot Ion:	75	Resp:	4982
Ion	Ratio	Lower	Upper
75	100		
53	56.3	50.2	75.4
89	0.0	0.0	0.0

Manual Integrations
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#82

4-Chlorotoluene

Concen: 2.286 ug/l

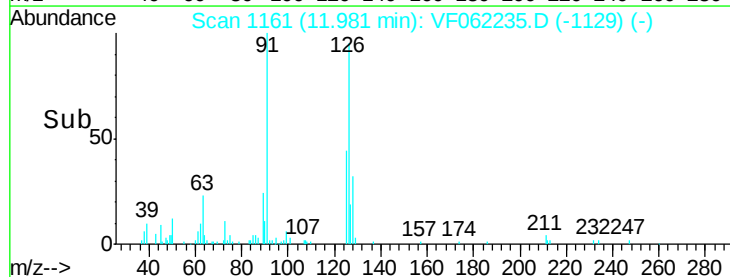
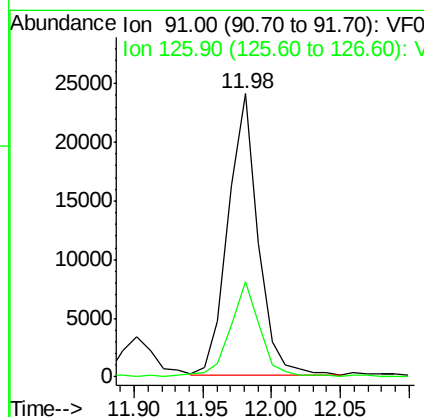
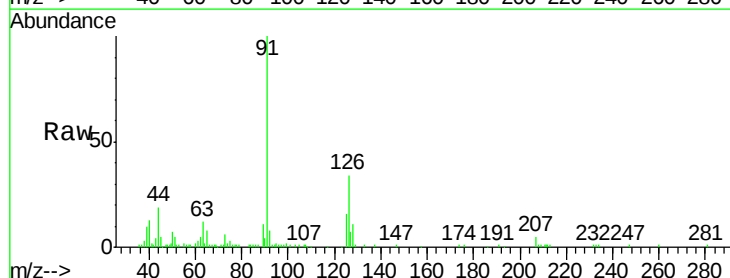
RT: 11.98 min Scan# 1161

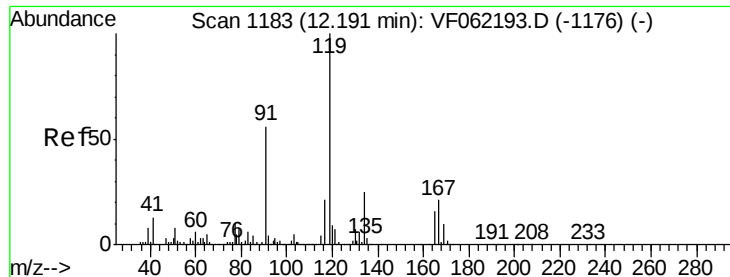
Delta R.T. 0.02 min

Lab File: VF062235.D

Acq: 19 Apr 2019 20:04

Tgt Ion:	91	Resp:	36261
Ion	Ratio	Lower	Upper
91	100		
126	34.7	16.9	50.6





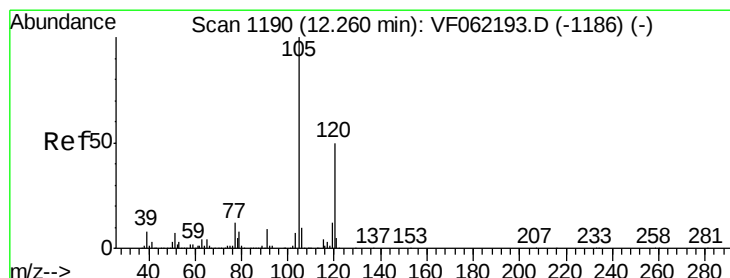
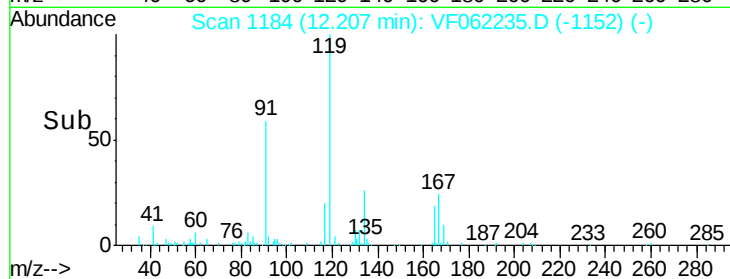
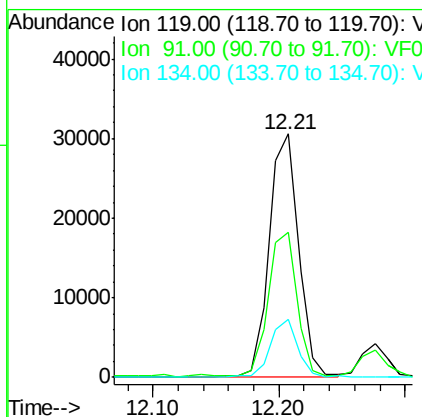
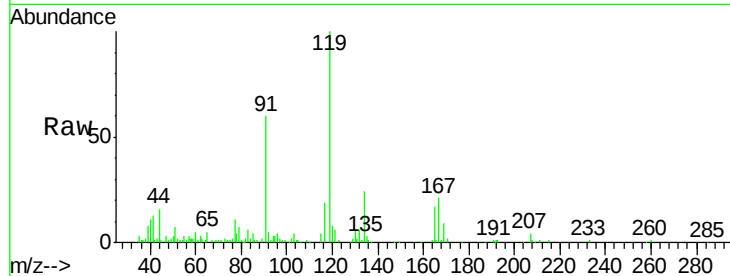
#83
tert-Butylbenzene
Concen: 2.261 ug/l
RT: 12.21 min Scan# 1184
Delta R.T. 0.02 min
Lab File: VF062235.D
Acq: 19 Apr 2019 20:04

Instrument :
MSVOA_F
ClientSampleId :
MDL-MDL-SOIL-03-QT2-2019

Tot Ion	Ratio	Lower	Upper
119	100		
91	57.1	29.4	88.2
134	22.3	11.8	35.3

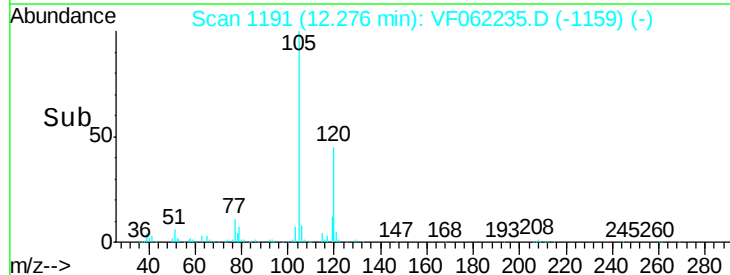
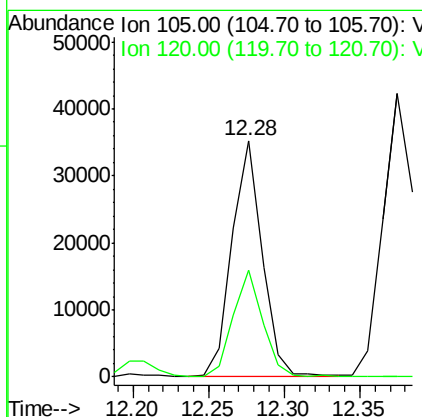
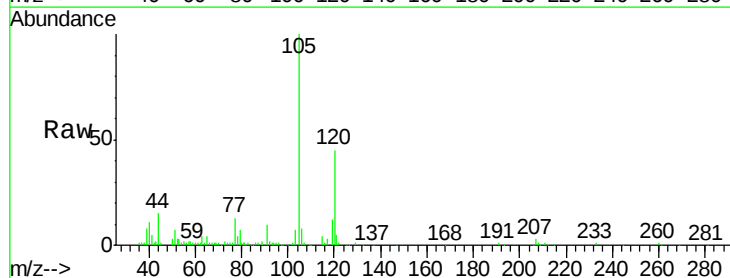
Manual Integrations
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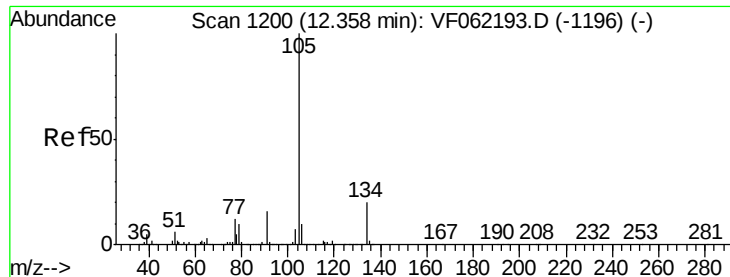
MMDadoda
4/23/2019 6:56:00 AM



#84
1,2,4-Trimethylbenzene
Concen: 2.348 ug/l
RT: 12.28 min Scan# 1191
Delta R.T. 0.02 min
Lab File: VF062235.D
Acq: 19 Apr 2019 20:04

Tgt Ion	Ratio	Lower	Upper
105	100		
120	45.2	24.0	72.0





#85

sec-Butylbenzene

Concen: 2.162 ug/l

RT: 12.37 min Scan# 1201

Delta R.T. 0.02 min

Lab File: VF062235.D

Acq: 19 Apr 2019 20:04

Instrument :

MSVOA_F

ClientSampleId :

MDL-MDL-SOIL-03-QT2-2019

Tot Ion:105 Resp: 62011

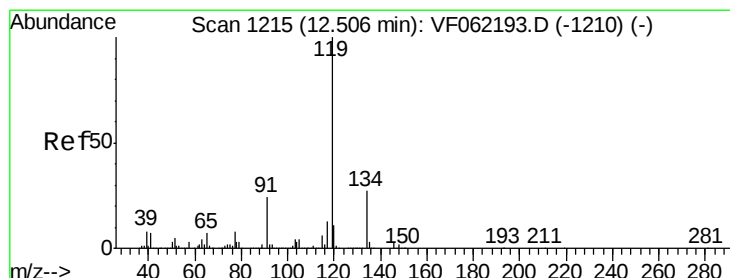
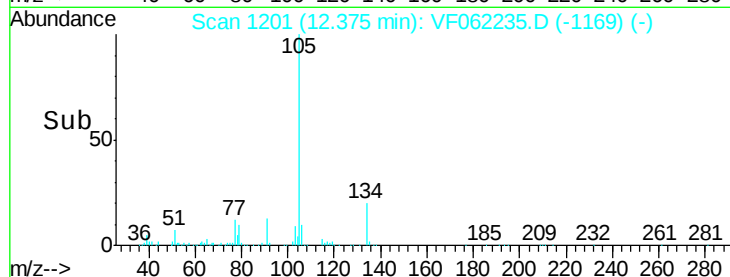
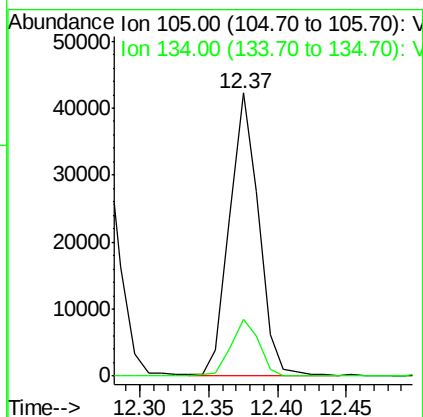
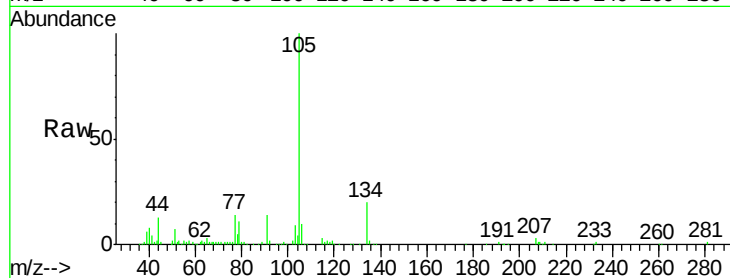
Ion Ratio Lower Upper

105 100

134 19.6 9.7 29.1

Manual Integrations
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#86

p-Isopropyltoluene

Concen: 2.393 ug/l

RT: 12.52 min Scan# 1216

Delta R.T. 0.02 min

Lab File: VF062235.D

Acq: 19 Apr 2019 20:04

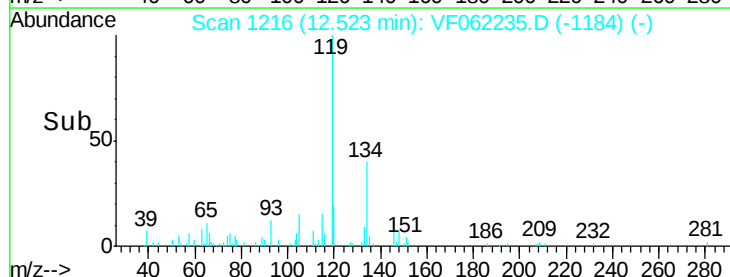
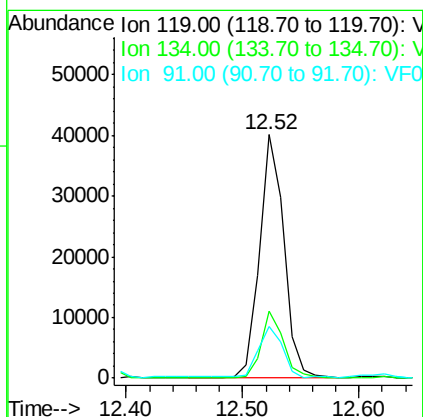
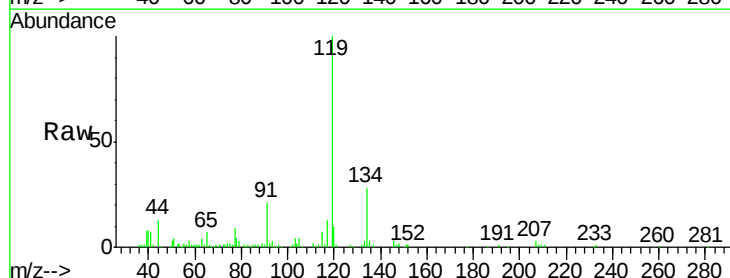
Tgt Ion:119 Resp: 58224

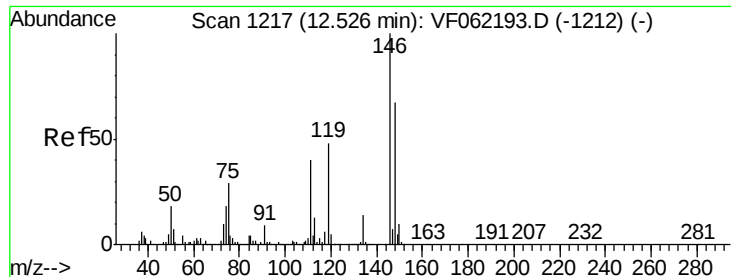
Ion Ratio Lower Upper

119 100

134 25.6 13.2 39.5

91 20.7 11.7 35.1





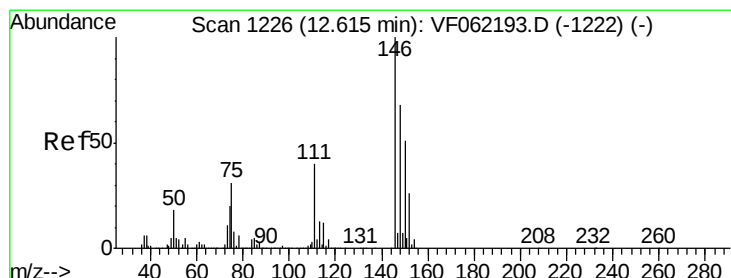
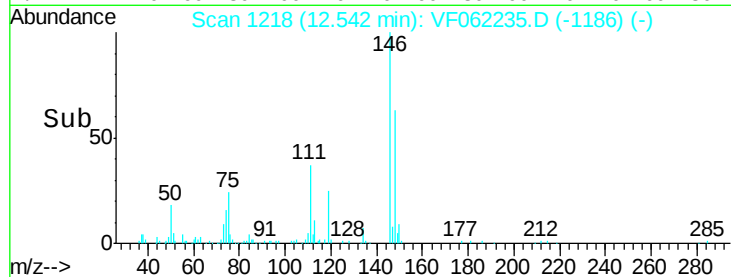
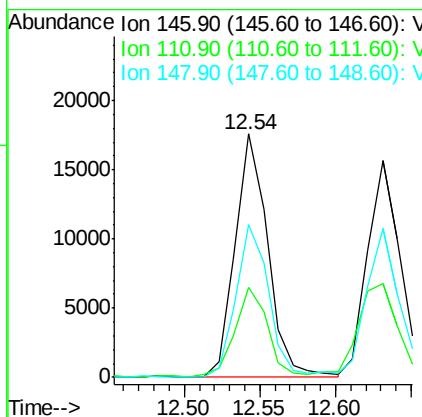
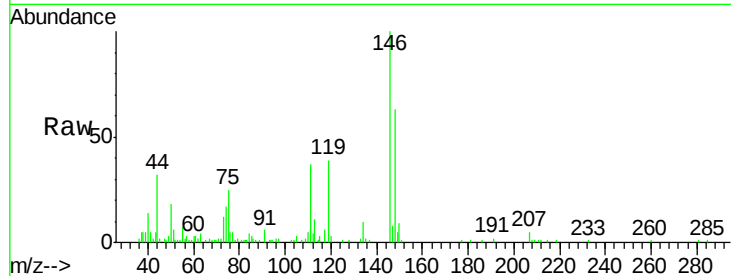
#87
 1,3-Dichlorobenzene
 Concen: 2.591 ug/l
 RT: 12.54 min Scan# 1218
 Delta R.T. 0.02 min
 Lab File: VF062235.D
 Acq: 19 Apr 2019 20:04

Instrument :
 MSVOA_F
 ClientSampleId :
 MDL-MDL-SOIL-03-QT2-2019

Tot Ion	Ratio	Lower	Upper
146	100		
111	38.0	19.7	59.0
148	62.7	32.9	98.6

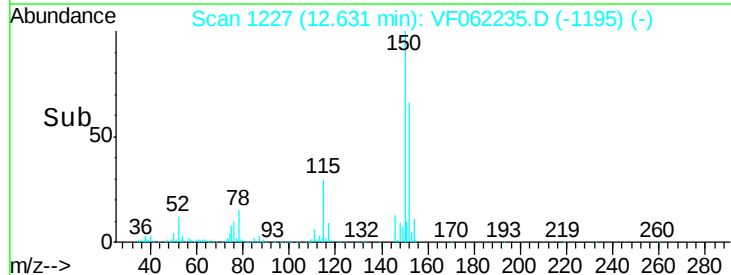
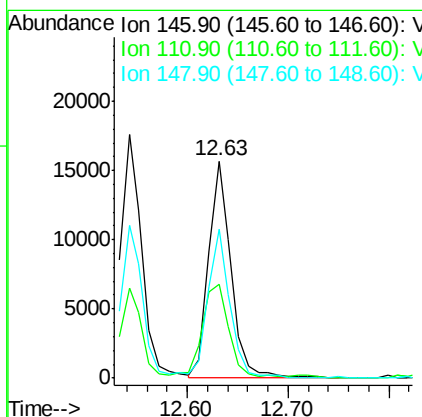
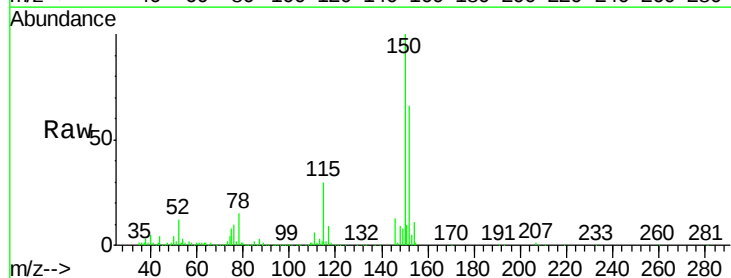
Manual Integrations
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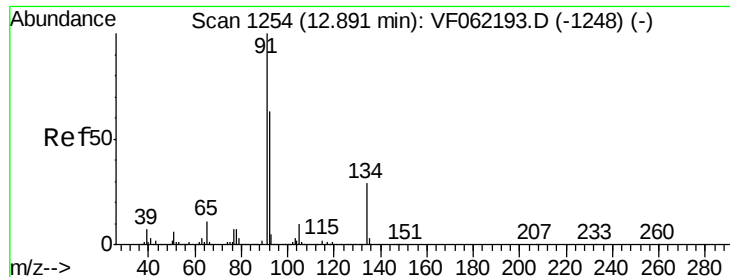
MMDadoda
 4/23/2019 6:56:00 AM



#88
 1,4-Dichlorobenzene
 Concen: 2.501 ug/l
 RT: 12.63 min Scan# 1227
 Delta R.T. 0.02 min
 Lab File: VF062235.D
 Acq: 19 Apr 2019 20:04

Tgt Ion	Ratio	Lower	Upper
146	100		
111	49.2	20.0	60.0
148	68.3	33.6	100.8





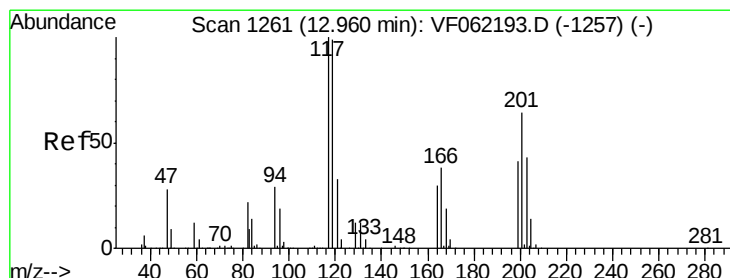
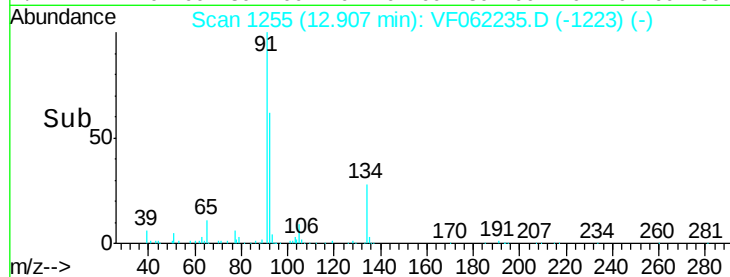
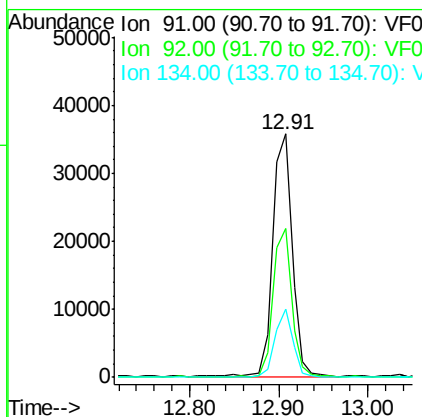
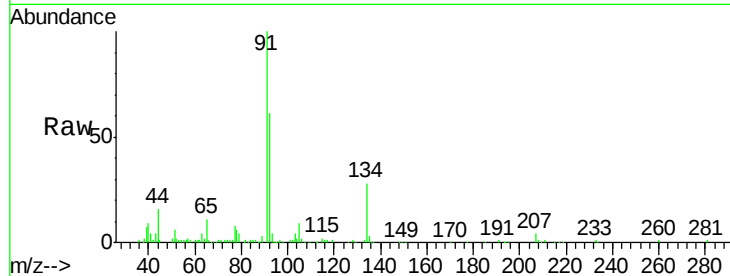
#89
n-Butylbenzene
Concen: 2.354 ug/l
RT: 12.91 min Scan# 1255
Delta R.T. 0.02 min
Lab File: VF062235.D
Acq: 19 Apr 2019 20:04

Instrument :
MSVOA_F
ClientSampleId :
MDL-MDL-SOIL-03-QT2-2019

Tot Ion	Ratio	Lower	Upper
91	100		
92	59.2	31.2	93.6
134	25.8	13.1	39.1

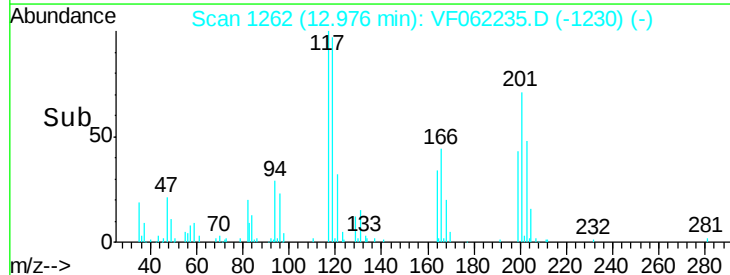
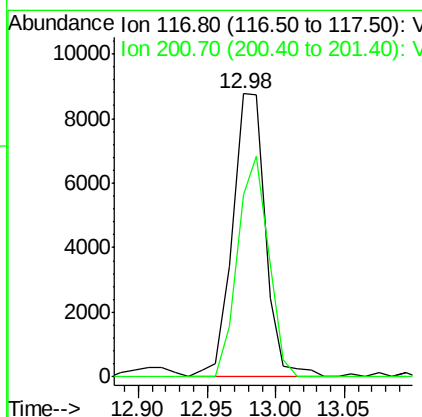
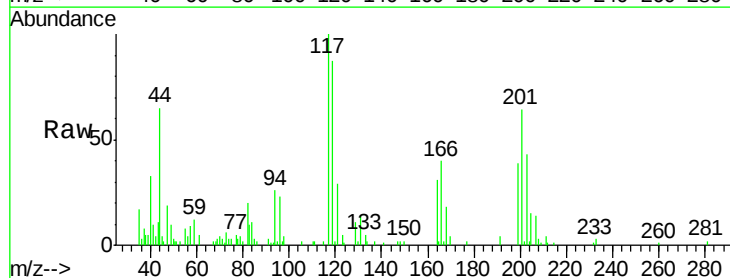
Manual Integrations
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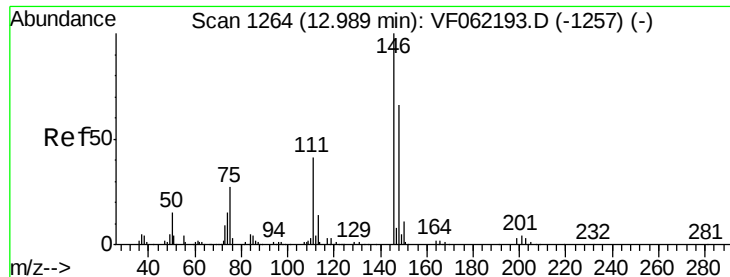
MMDadoda
4/23/2019 6:56:00 AM



#90
Hexachloroethane
Concen: 2.341 ug/l
RT: 12.98 min Scan# 1262
Delta R.T. 0.02 min
Lab File: VF062235.D
Acq: 19 Apr 2019 20:04

Tgt Ion	Ratio	Lower	Upper
117	100		
201	73.1	37.7	113.1





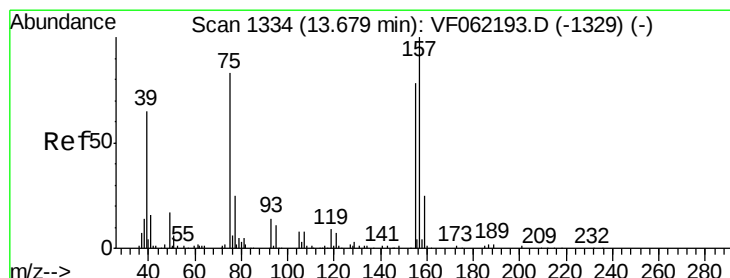
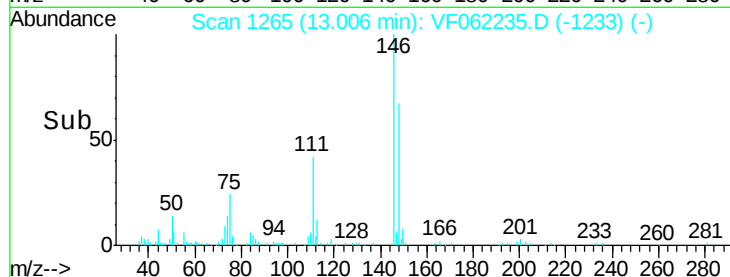
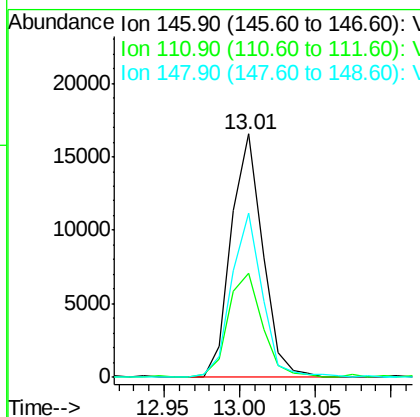
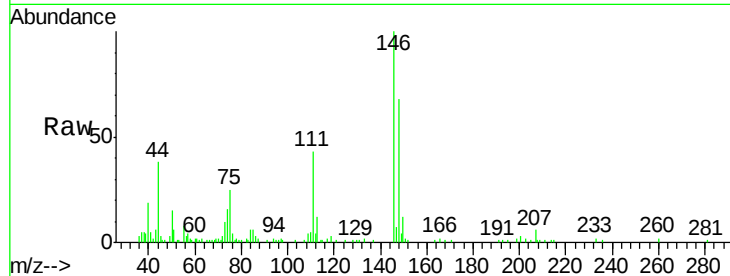
#91
 1,2-Dichlorobenzene
 Concen: 2.433 ug/l
 RT: 13.01 min Scan# 1265
 Delta R.T. 0.02 min
 Lab File: VF062235.D
 Acq: 19 Apr 2019 20:04

Instrument :
 MSVOA_F
 ClientSampleId :
 MDL-MDL-SOIL-03-QT2-2019

Tot Ion	Ratio	Lower	Upper
146	100		
111	46.7	20.8	62.5
148	66.8	33.0	99.0

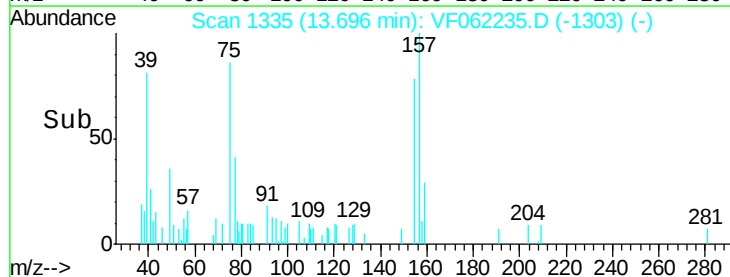
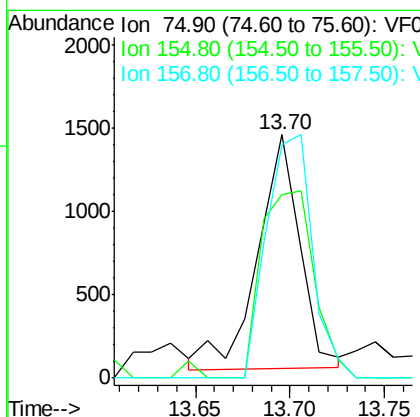
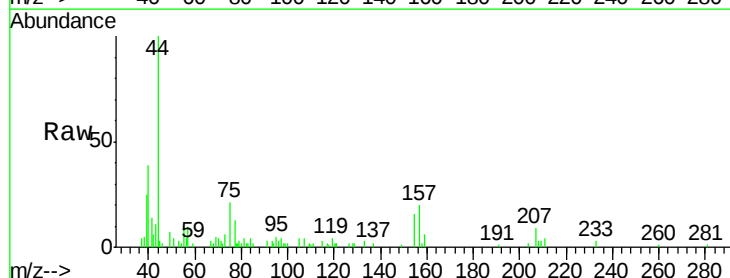
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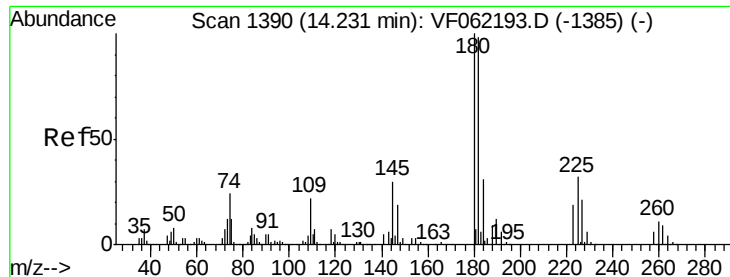
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#92
 1,2-Dibromo-3-Chloropropane
 Concen: 2.538 ug/l
 RT: 13.70 min Scan# 1335
 Delta R.T. 0.02 min
 Lab File: VF062235.D
 Acq: 19 Apr 2019 20:04

Tgt Ion	Ratio	Lower	Upper
75	100		
155	100.0	47.6	142.8
157	112.3	61.3	183.9





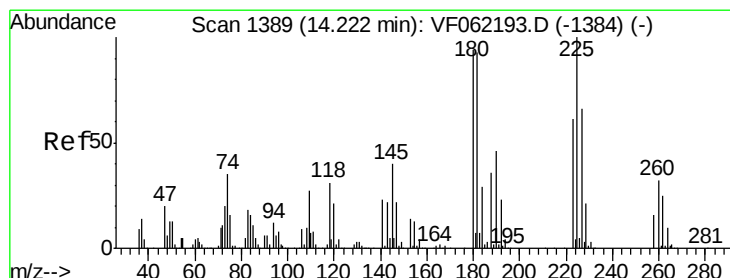
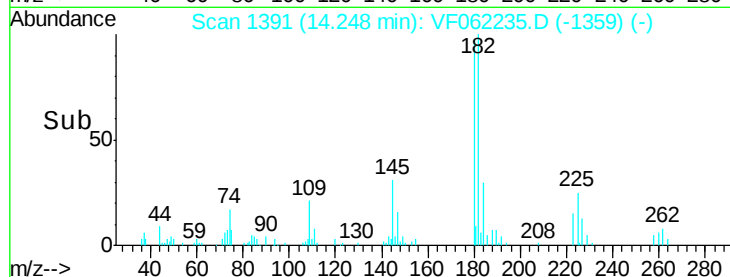
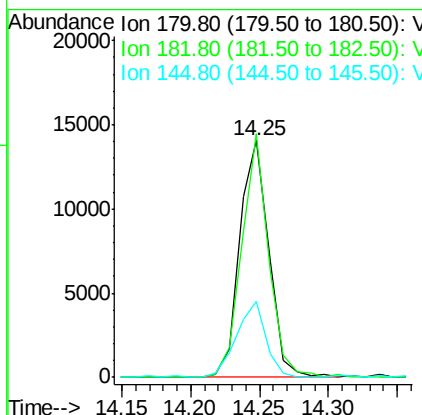
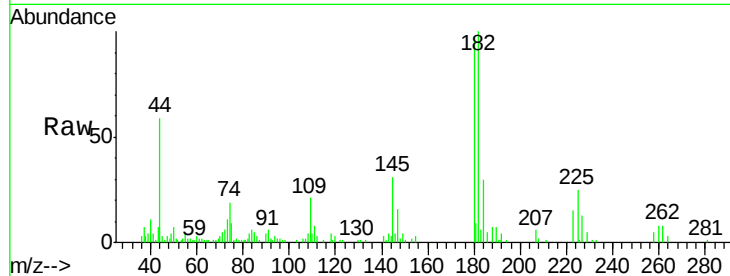
#93
 1,2,4-Trichlorobenzene
 Concen: 2.524 ug/l
 RT: 14.25 min Scan# 1391
 Delta R.T. 0.02 min
 Lab File: VF062235.D
 Acq: 19 Apr 2019 20:04

Instrument :
 MSVOA_F
 ClientSampleId :
 MDL-MDL-SOIL-03-QT2-2019

Tot Ion	Ratio	Resp	Lower	Upper
180	100	20791		
182	95.0	49.3	147.9	
145	32.4	18.1	54.4	

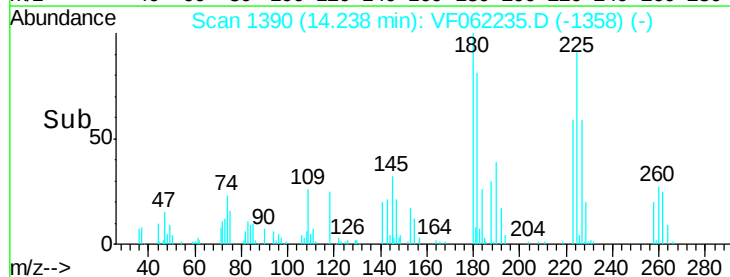
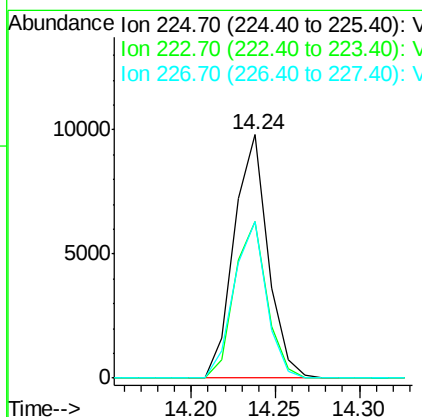
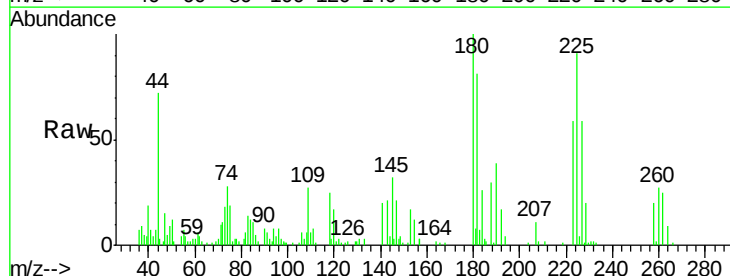
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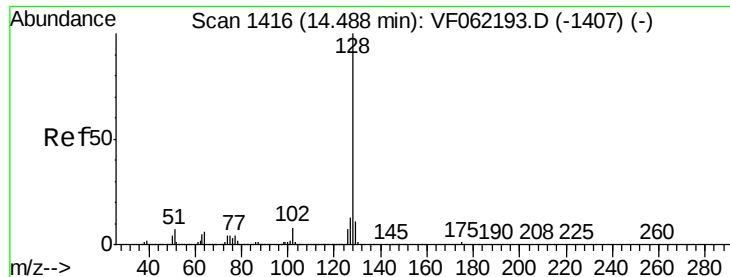
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 4/23/2019 6:56:00 AM



#94
 Hexachlorobutadiene
 Concen: 2.423 ug/l
 RT: 14.24 min Scan# 1390
 Delta R.T. 0.02 min
 Lab File: VF062235.D
 Acq: 19 Apr 2019 20:04

Tgt Ion	Ratio	Resp	Lower	Upper
225	100	13687		
223	61.8	31.0	93.0	
227	61.5	32.4	97.0	





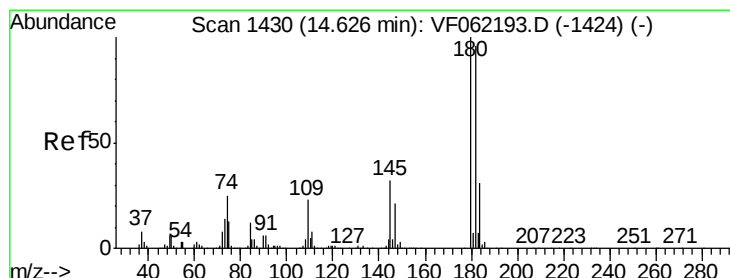
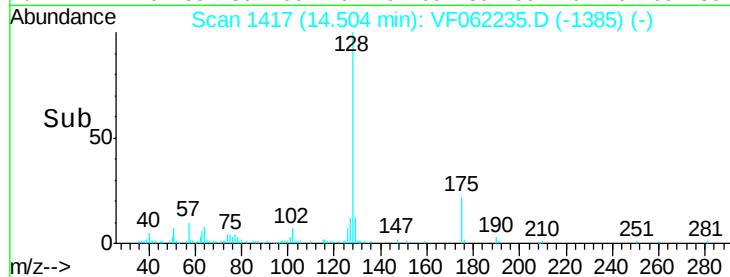
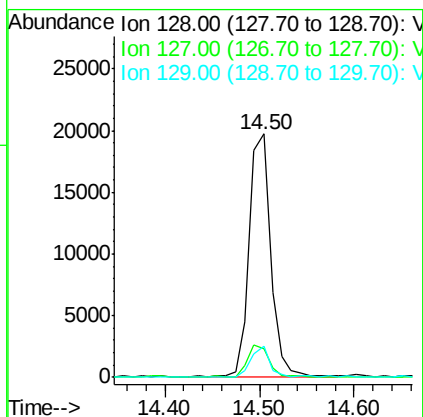
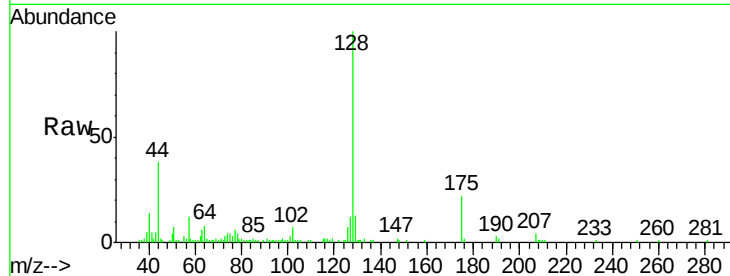
#95
Naphthalene
Concen: 2.200 ug/l
RT: 14.50 min Scan# 1417
Delta R.T. 0.02 min
Lab File: VF062235.D
Acq: 19 Apr 2019 20:04

Instrument :
MSVOA_F
ClientSampleId :
MDL-MDL-SOIL-03-QT2-2019

Tot Ion	Ratio	Lower	Upper
128	100		
127	13.5	10.4	15.6
129	10.8	9.2	13.8

Manual Integrations
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#96
1,2,3-Trichlorobenzene
Concen: 2.420 ug/l
RT: 14.64 min Scan# 1431
Delta R.T. 0.02 min
Lab File: VF062235.D
Acq: 19 Apr 2019 20:04

Tgt Ion	Ratio	Lower	Upper
180	100		
182	93.1	48.4	145.3
145	30.2	15.6	46.8

