

Data Path : Z:\VOASRV\HPCHEM1\MSVOA F\DATA\VF032319\
 Data File : VF062123.D
 Acq On : 23 Mar 2019 18:02
 Operator : VA/AP
 Sample : K2045-13
 Misc : 6.52g/5mL/MSVOA-F/SOIL
 ALS Vial : 13 Sample Multiplier: 1

Instrument :
 MSVOA_F
 ClientSampleId :
 WP022SB436-190320-(20-22)

Manual Integrations
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 3/25/2019 12:40:49 PM

Quant Time: Mar 25 04:22:02 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_F\METHODS\82F032219S.M
 Quant Title : SW846 8260
 QLast Update : Sat Mar 23 01:16:37 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	4.87	168	245890	50.00	ug/l	-0.03
34) 1,4-Difluorobenzene	5.59	114	400386	50.00	ug/l	-0.03
63) Chlorobenzene-d5	9.77	117	305551	50.00	ug/l	-0.03
72) 1,4-Dichlorobenzene-d4	12.55	152	145665	50.00	ug/l	-0.01

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
33) 1,2-Dichloroethane-d4	4.84	65	74365	40.66	ug/l	-0.03
Spiked Amount 50.000			Recovery =	81.32%		
35) Dibromofluoromethane	4.11	113	112293	41.46	ug/l	-0.03
Spiked Amount 50.000			Recovery =	82.92%		
50) Toluene-d8	7.56	98	291903	36.11	ug/l	-0.03
Spiked Amount 50.000			Recovery =	72.22%		
62) 4-Bromofluorobenzene	11.41	95	127773	40.94	ug/l	-0.02
Spiked Amount 50.000			Recovery =	81.88%		

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
4) Vinyl Chloride	1.14	62	383693	125.851	ug/l	98
16) Acetone	2.24	43	19571	50.843	ug/l	93
21) trans-1,2-Dichloroethene	2.31	96	21556	9.452	ug/l	89
24) 1,1-Dichloroethane	2.87	63	62820	15.789	ug/l	97
27) cis-1,2-Dichloroethene	3.47	96	415041	137.342	ug/l	95
31) Cyclohexane	3.69	56	19082m	4.592	ug/l	
39) Methylcyclohexane	5.46	83	53878	12.173	ug/l	92
40) Benzene	4.64	78	109708	10.731	ug/l	99
42) 1,2-Dichloroethane	4.94	62	14599	6.038	ug/l	96
52) Toluene	7.62	92	30928	5.223	ug/l	99
65) Chlorobenzene	9.80	112	2953723	516.650	ug/l #	88
67) Ethyl Benzene	9.90	91	34286	3.448	ug/l	98
69) o-Xylene	10.71	106	18891	4.854	ug/l	88
73) Isopropylbenzene	11.13	105	17433	1.701	ug/l	98
78) n-propylbenzene	11.59	91	43234	3.632	ug/l	95
79) 2-Chlorotoluene	11.72	91	13008	1.966	ug/l	84
83) tert-Butylbenzene	12.13	119	12094	1.370	ug/l	79
85) sec-Butylbenzene	12.31	105	31710	2.777	ug/l #	71
86) p-Isopropyltoluene	12.43	119	26470	2.676	ug/l	95
87) 1,3-Dichlorobenzene	12.48	146	709730	152.547	ug/l	94
88) 1,4-Dichlorobenzene	12.56	146	1707551	376.119	ug/l	89
89) n-Butylbenzene	12.84	91	35125	3.722	ug/l	92
91) 1,2-Dichlorobenzene	12.95	146	3119256	714.004	ug/l	83
93) 1,2,4-Trichlorobenzene	14.20	180	154049	50.595	ug/l	95
96) 1,2,3-Trichlorobenzene	14.60	180	26605	9.335	ug/l	88

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

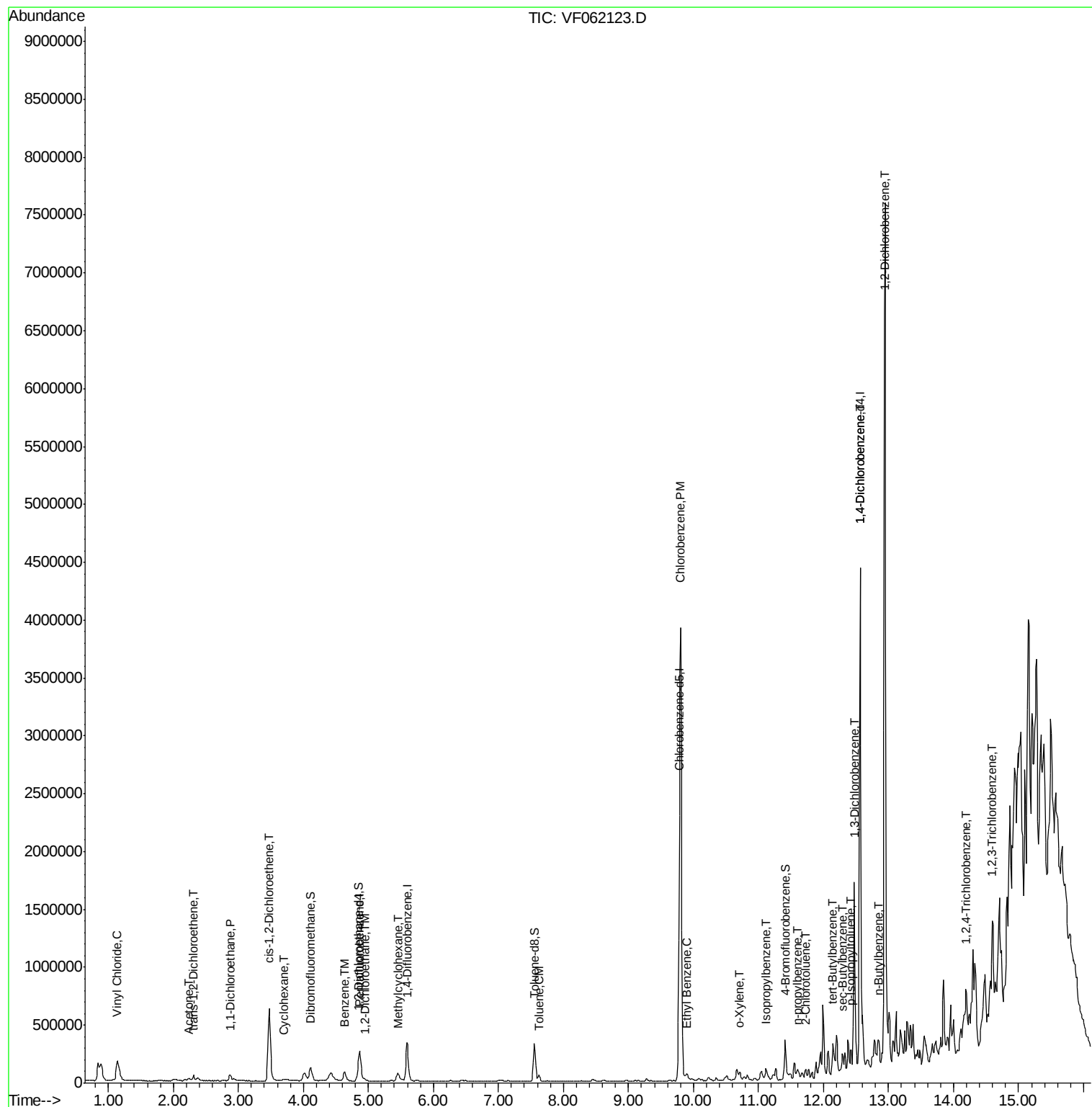
Data Path : Z:\V0ASRV\HPCHEM1\MSVOA F\DATA\VF032319\
Data File : VF062123.D
Acq On : 23 Mar 2019 18:02
Operator : VA/AP
Sample : K2045-13
Misc : 6.52g/5mL/MSVOA-F/SOIL
ALS Vial : 13 Sample Multiplier: 1

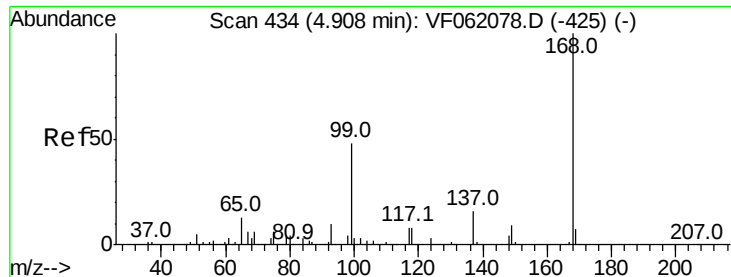
Instrument :
MSVOA_F
ClientSampleId :
WP022SB436-190320-(20-22)

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Quant Time: Mar 25 04:22:02 2019
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA_F\METHODS\82F032219S.M
Quant Title : SW846 8260
QLast Update : Sat Mar 23 01:16:37 2019
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 4.87 min Scan# 430

Delta R.T. -0.03 min

Lab File: VF062123.D

Acq: 23 Mar 2019 18:02

Instrument :

MSVOA_F

ClientSampleId :

WP022SB436-190320-(20-22)

Tot Ion:168 Resp: 245890

Ion Ratio Lower Upper

168 100

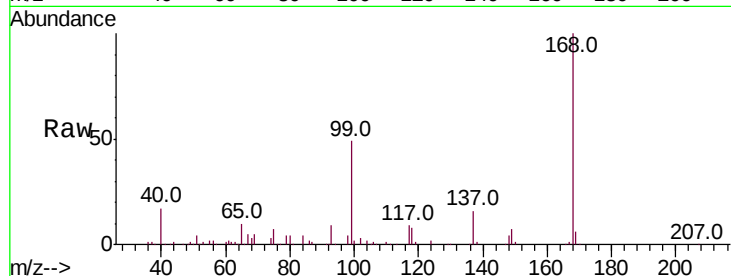
99 49.0 38.2 57.4

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Abundance Ion 168.00 (167.70 to 168.70): VF0

Ion 99.00 (98.70 to 99.70): VF0

4.87

80000

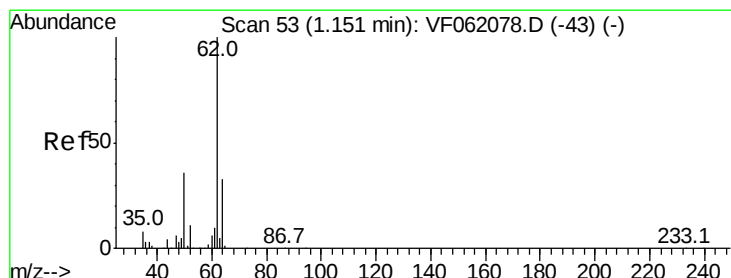
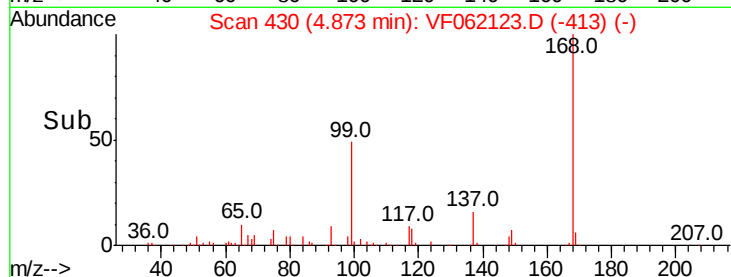
60000

40000

20000

0

Time-->



#4

Vinyl Chloride

Concen: 125.851 ug/l

RT: 1.14 min Scan# 51

Delta R.T. -0.01 min

Lab File: VF062123.D

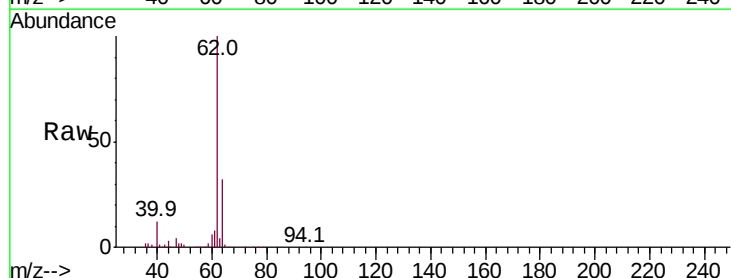
Acq: 23 Mar 2019 18:02

Tgt Ion: 62 Resp: 383693

Ion Ratio Lower Upper

62 100

64 31.5 26.2 39.2



Abundance Ion 62.00 (61.70 to 62.70): VF0

Ion 64.00 (63.70 to 64.70): VF0

1.14

120000

100000

80000

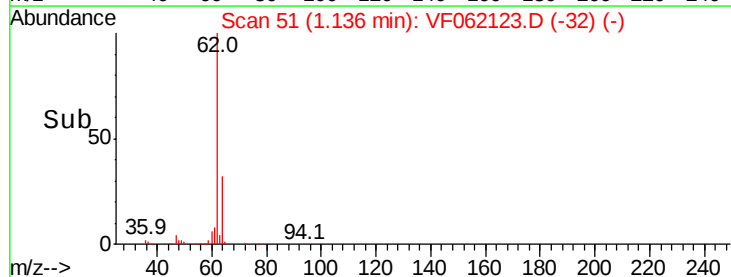
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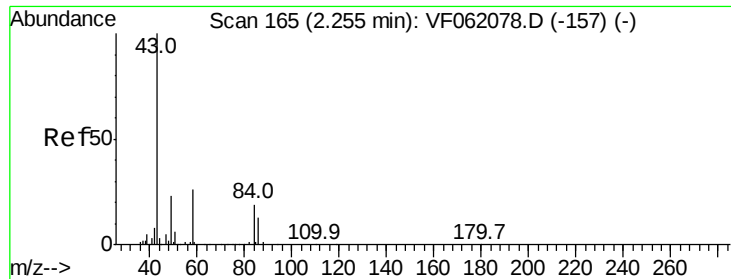
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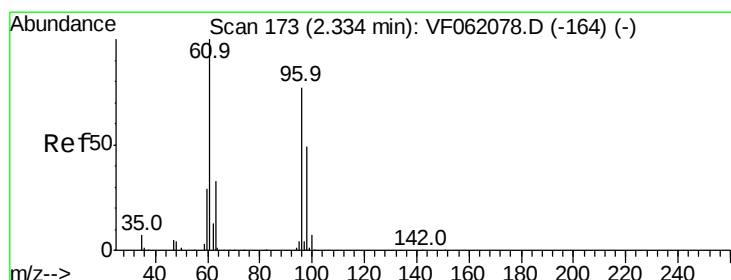
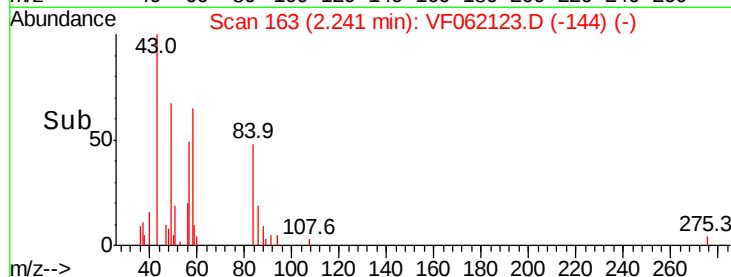
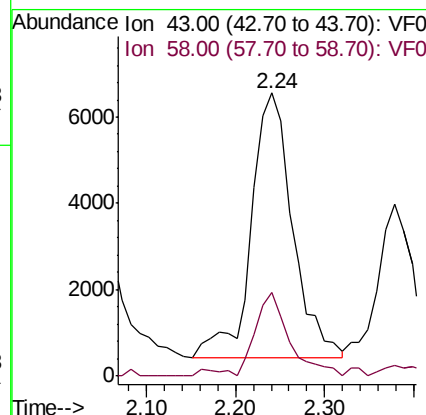
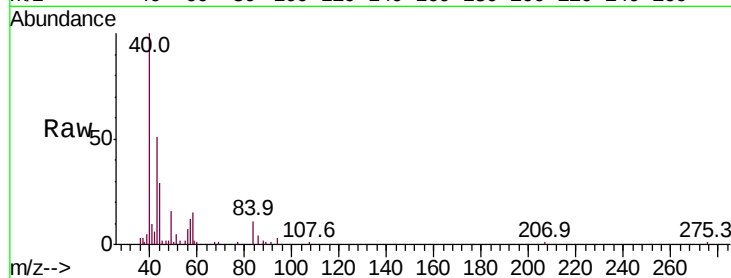
#16
Acetone
Concen: 50.843 ug/l
RT: 2.24 min Scan# 163
Delta R.T. -0.01 min
Lab File: VF062123.D
Acq: 23 Mar 2019 18:02

Instrument :
MSVOA_F
ClientSampleId :
WP022SB436-190320-(20-22)

Tot Ion: 43 Resp: 19571
Ion Ratio Lower Upper
43 100
58 29.6 20.8 31.2

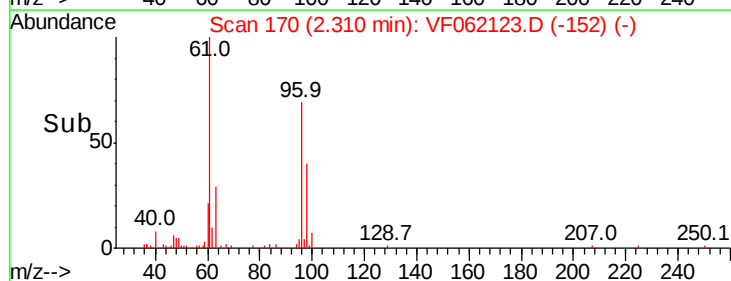
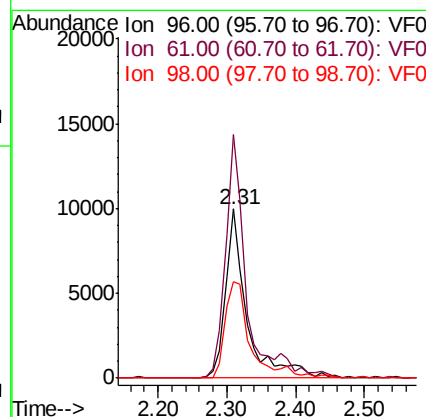
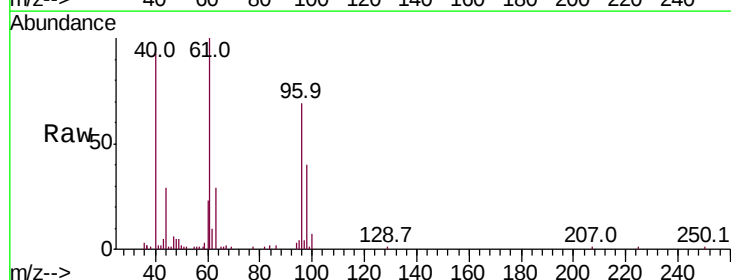
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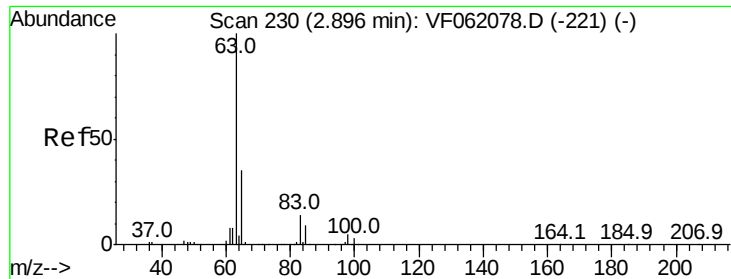
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#21
trans-1,2-Dichloroethene
Concen: 9.452 ug/l
RT: 2.31 min Scan# 170
Delta R.T. -0.02 min
Lab File: VF062123.D
Acq: 23 Mar 2019 18:02

Tgt Ion: 96 Resp: 21556
Ion Ratio Lower Upper
96 100
61 144.2 104.5 156.7
98 57.3 51.2 76.8





#24

1,1-Dichloroethane

Concen: 15.789 ug/l

RT: 2.87 min Scan# 227

Delta R.T. -0.02 min

Lab File: VF062123.D

Acq: 23 Mar 2019 18:02

Instrument :

MSVOA_F

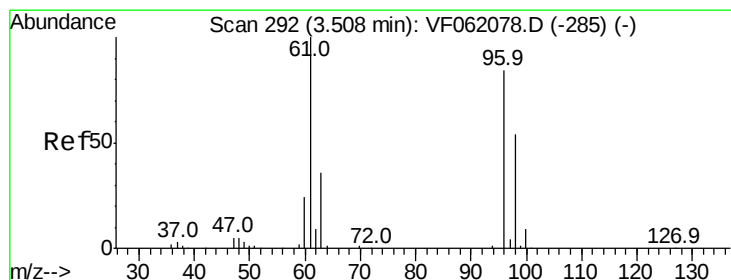
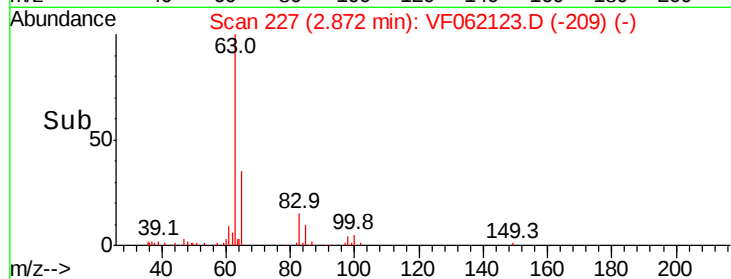
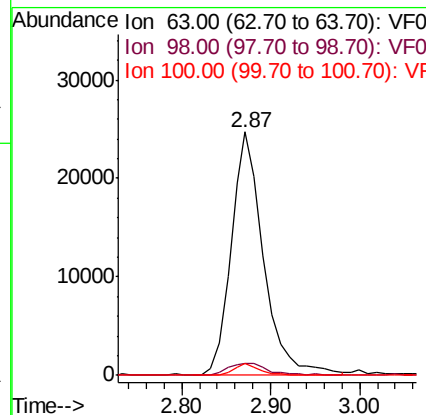
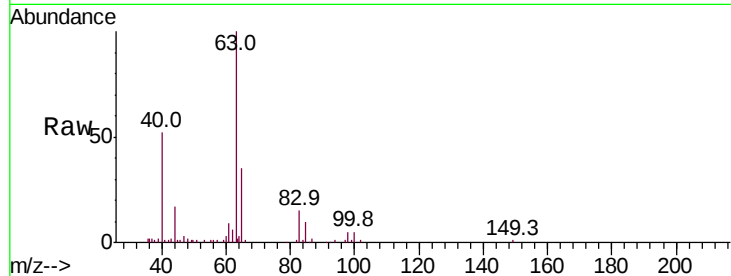
ClientSampleId :

WP022SB436-190320-(20-22)

Tot Ion:	63	Resp:	62820
Ion Ratio	Lower	Upper	
63	100		
98	4.7	2.7	8.1
100	4.6	1.7	5.1

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#27

cis-1,2-Dichloroethene

Concen: 137.342 ug/l

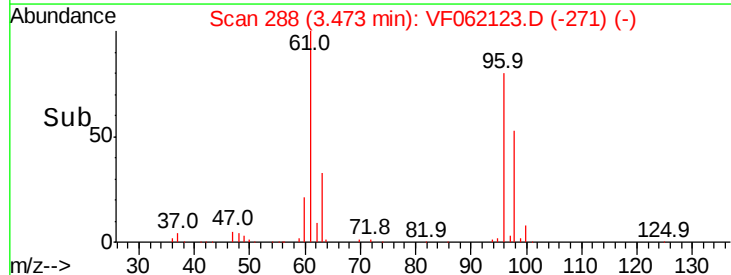
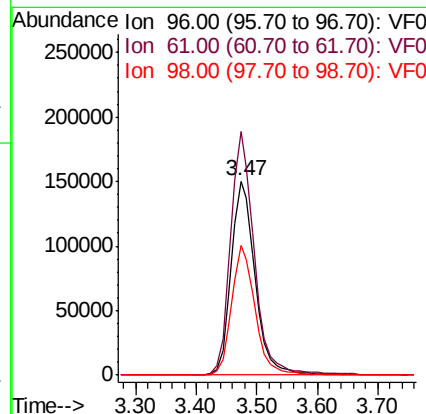
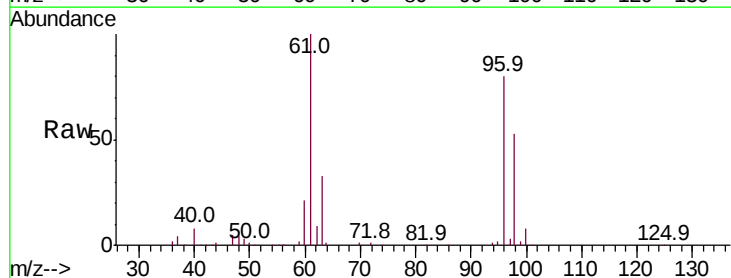
RT: 3.47 min Scan# 288

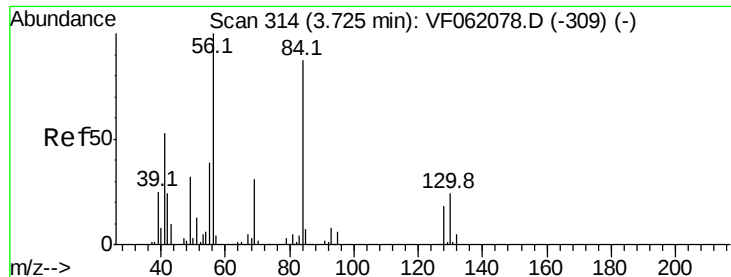
Delta R.T. -0.03 min

Lab File: VF062123.D

Acq: 23 Mar 2019 18:02

Tgt Ion:	96	Resp:	415041
Ion Ratio	Lower	Upper	
96	100		
61	125.5	0.0	239.0
98	67.1	0.0	128.2





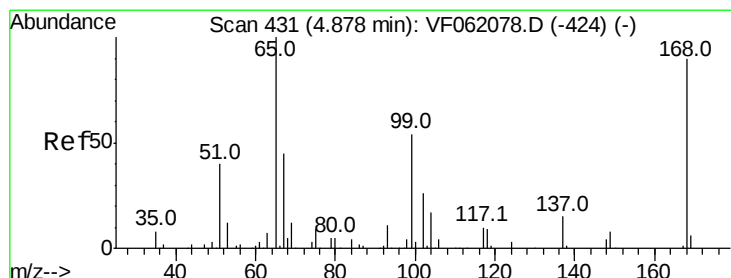
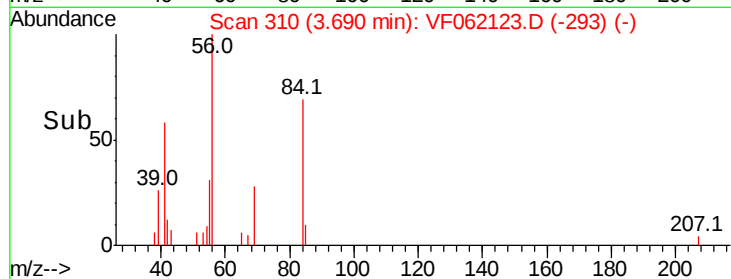
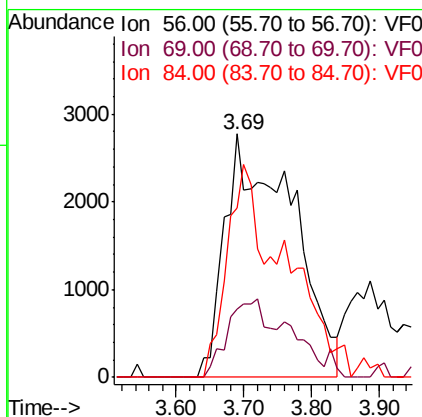
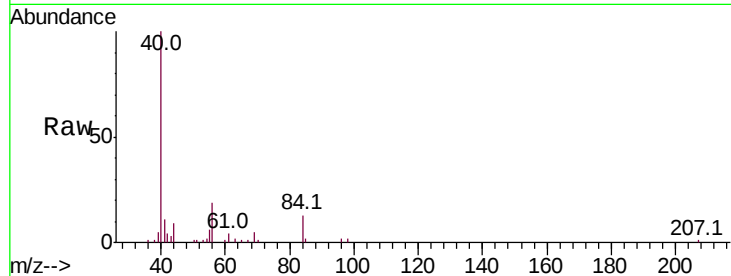
#31
Cyclohexane
Concen: 4.592 ug/l m
RT: 3.69 min Scan# 310
Delta R.T. -0.03 min
Lab File: VF062123.D
Acq: 23 Mar 2019 18:02

Instrument :
MSVOA_F
ClientSampleId :
WP022SB436-190320-(20-22)

Tot Ion	Ratio	Lower	Upper
56	100		
69	28.3	25.9	38.9
84	69.3	71.1	106.7#

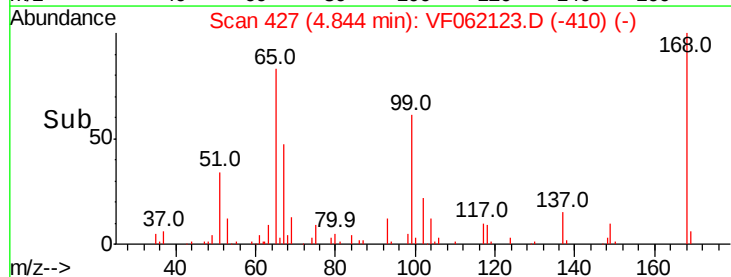
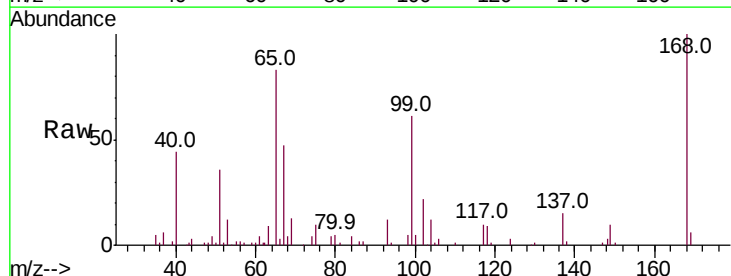
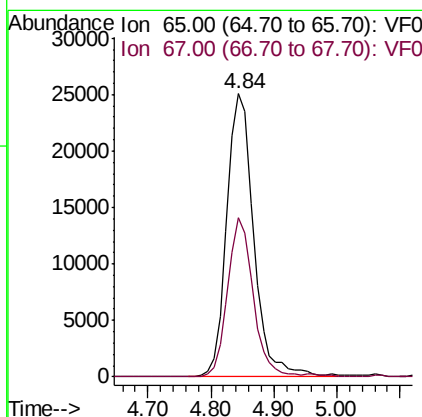
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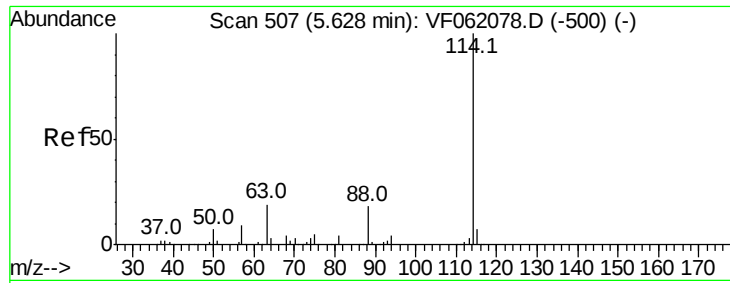
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#33
1,2-Dichloroethane-d4
Concen: 40.660 ug/l
RT: 4.84 min Scan# 427
Delta R.T. -0.03 min
Lab File: VF062123.D
Acq: 23 Mar 2019 18:02

Tgt Ion	Ratio	Lower	Upper
65	100		
67	56.2	0.0	106.2





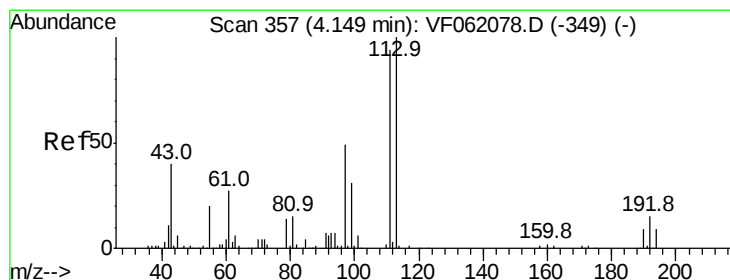
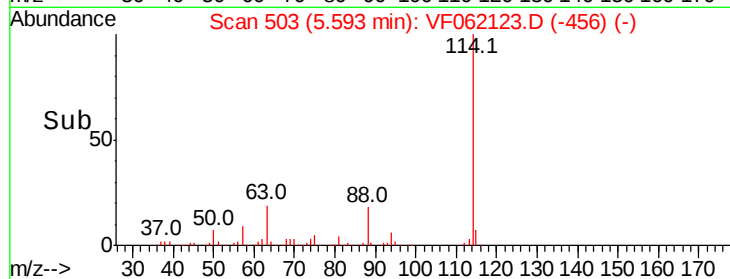
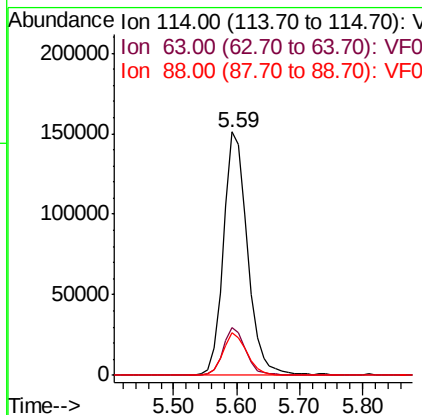
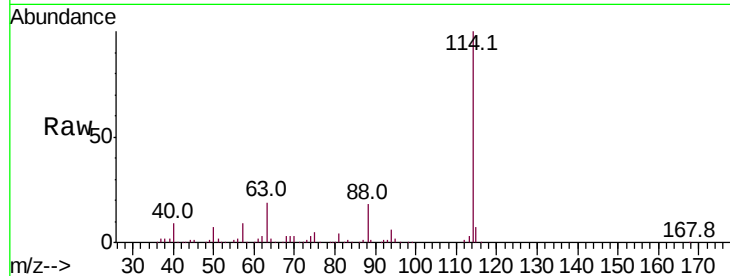
#34
 1,4-Difluorobenzene
 Concen: 50.000 ug/l
 RT: 5.59 min Scan# 503
 Delta R.T. -0.03 min
 Lab File: VF062123.D
 Acq: 23 Mar 2019 18:02

Instrument :
 MSVOA_F
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 WP022SB436-190320-(20-22)

Tot Ion	Ratio	Resp	Lower	Upper
114	100			
63	19.4	0.0	37.8	
88	17.8	0.0	36.4	

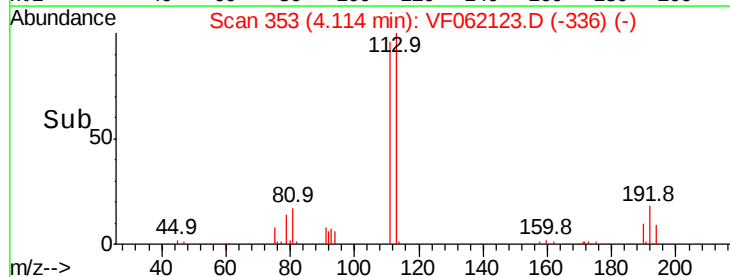
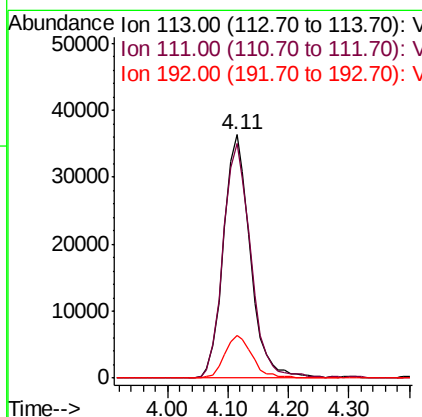
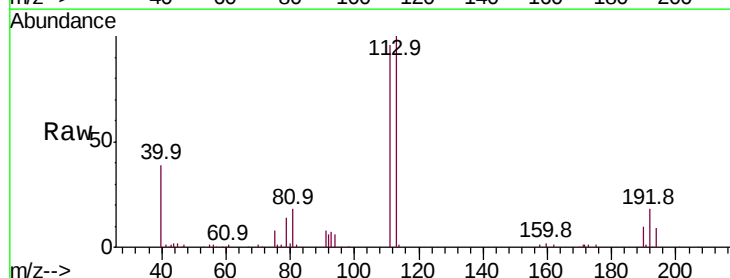
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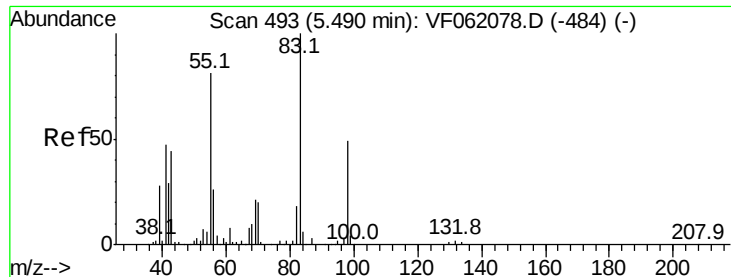
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#35
 Dibromofluoromethane
 Concen: 41.460 ug/l
 RT: 4.11 min Scan# 353
 Delta R.T. -0.03 min
 Lab File: VF062123.D
 Acq: 23 Mar 2019 18:02

Tgt Ion	Ratio	Resp	Lower	Upper
113	100			
111	96.3	75.4	113.0	
192	17.8	12.3	18.5	





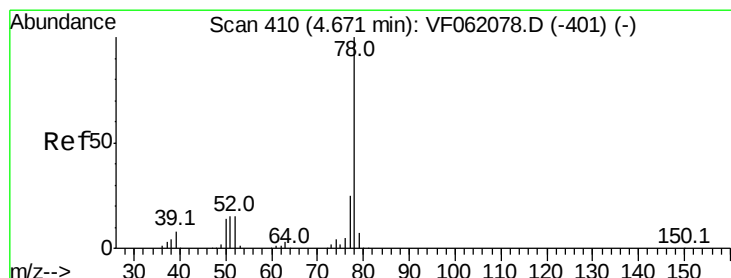
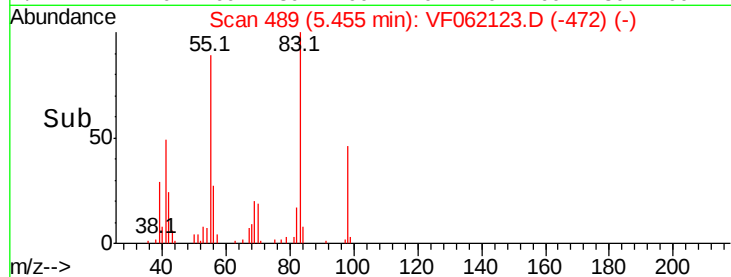
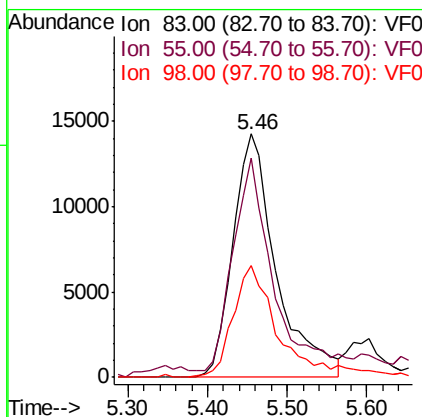
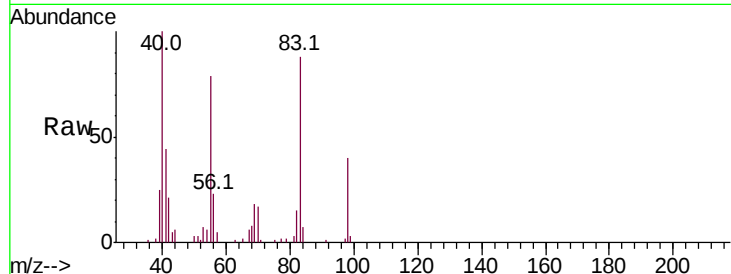
#39
Methvlcvclohexane
Concen: 12.173 ug/l
RT: 5.46 min Scan# 489
Delta R.T. -0.03 min
Lab File: VF062123.D
Acq: 23 Mar 2019 18:02

Instrument :
MSVOA_F
ClientSampleId :
WP022SB436-190320-(20-22)

Tot Ion	Ratio	Lower	Upper
83	100		
55	89.8	64.5	96.7
98	46.1	39.1	58.7

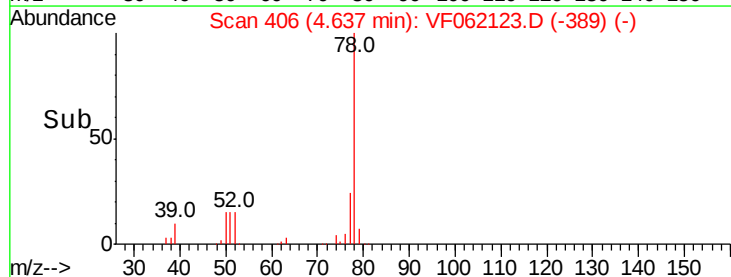
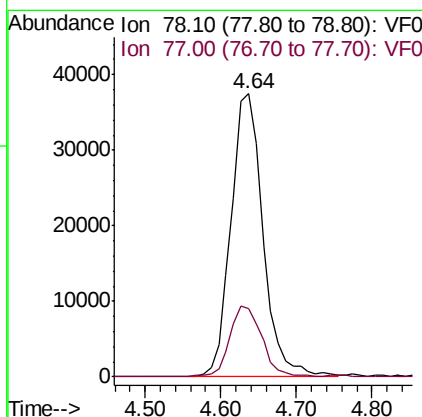
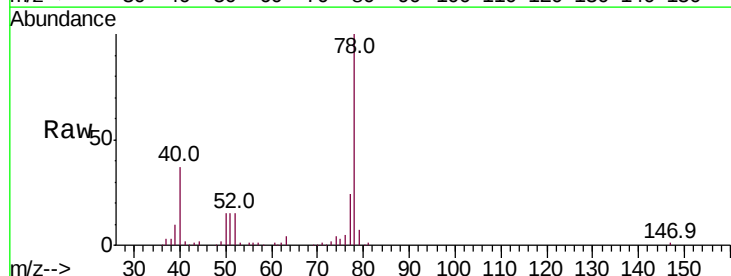
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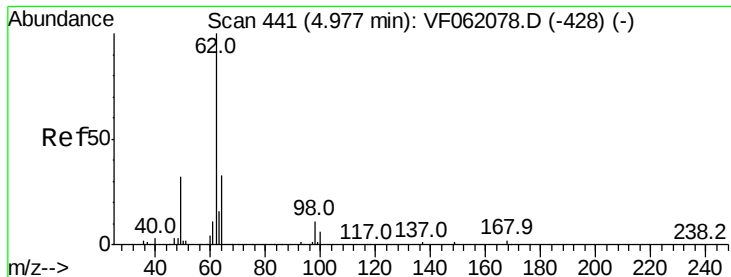
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#40
Benzene
Concen: 10.731 ug/l
RT: 4.64 min Scan# 406
Delta R.T. -0.03 min
Lab File: VF062123.D
Acq: 23 Mar 2019 18:02

Tgt Ion	Ratio	Lower	Upper
78	100		
77	24.1	19.8	29.6





#42

1,2-Dichloroethane

Concen: 6.038 ug/l

RT: 4.94 min Scan# 437

Delta R.T. -0.03 min

Lab File: VF062123.D

Acq: 23 Mar 2019 18:02

Instrument :

MSVOA_F

ClientSampleId :

WP022SB436-190320-(20-22)

Tot Ion: 62 Resp: 14599

Ion Ratio Lower Upper

62 100

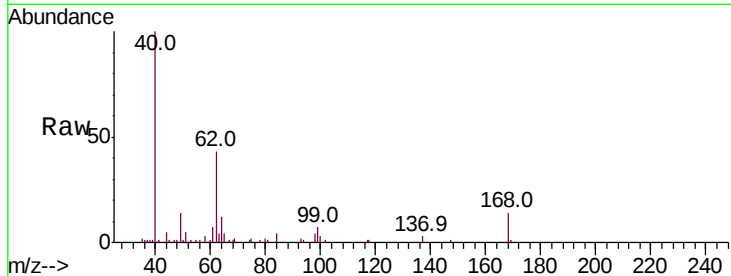
98 10.2 0.0 23.2

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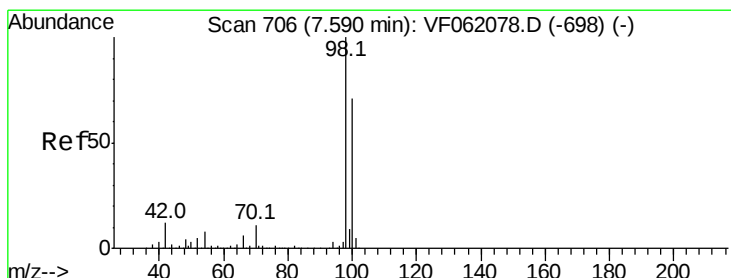
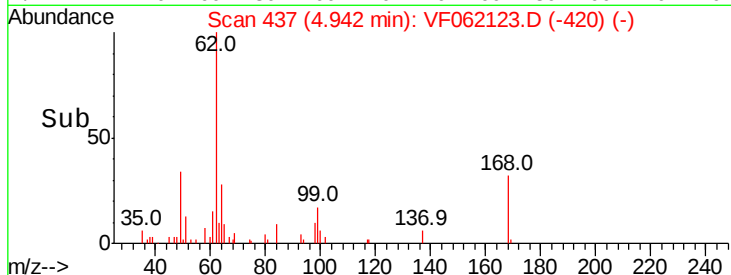
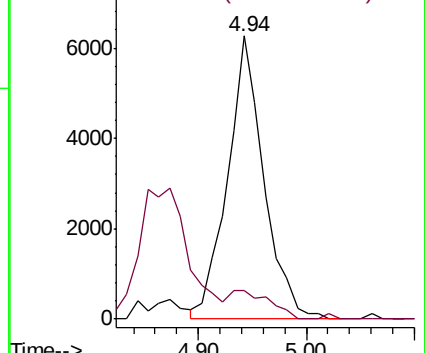
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Abundance Ion 62.00 (61.70 to 62.70): VF0

Ion 98.00 (97.70 to 98.70): VF0



#50

Toluene-d8

Concen: 36.105 ug/l

RT: 7.56 min Scan# 702

Delta R.T. -0.03 min

Lab File: VF062123.D

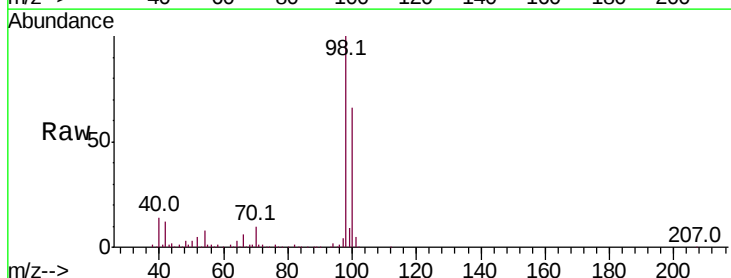
Acq: 23 Mar 2019 18:02

Tgt Ion: 98 Resp: 291903

Ion Ratio Lower Upper

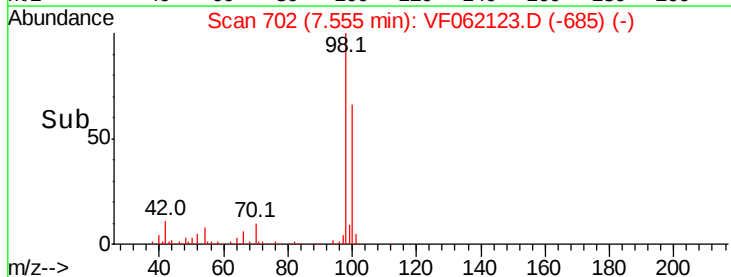
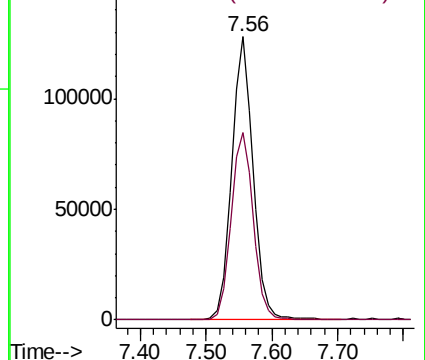
98 100

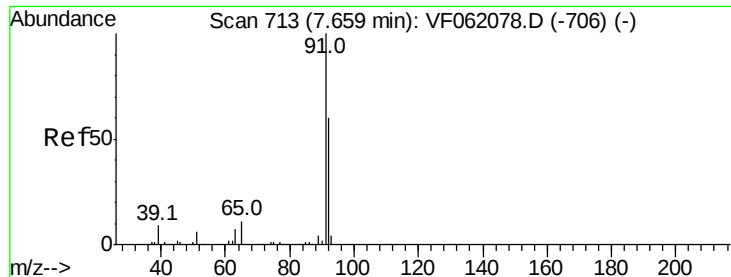
100 66.4 57.0 85.6



Abundance Ion 98.00 (97.70 to 98.70): VF0

Ion 100.00 (99.70 to 100.70): VF0





#52

Toluene

Concen: 5.223 ug/l

RT: 7.62 min Scan# 709

Delta R.T. -0.03 min

Lab File: VF062123.D

Acq: 23 Mar 2019 18:02

Instrument :

MSVOA_F

ClientSampleId :

WP022SB436-190320-(20-22)

Tot Ion: 92 Resp: 30928

Ion Ratio Lower Upper

92 100

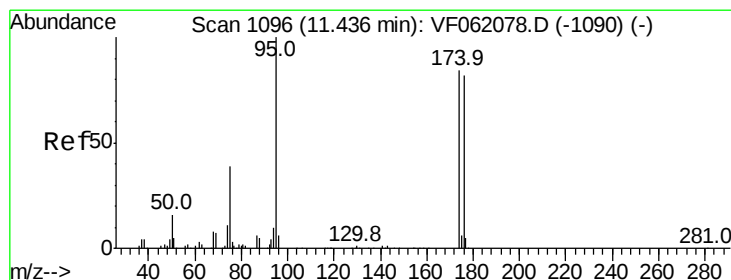
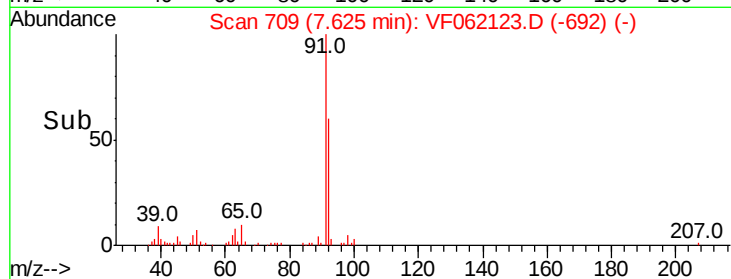
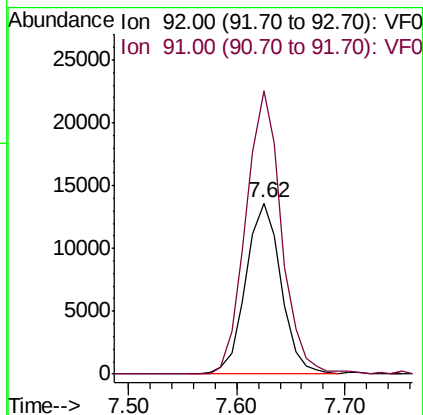
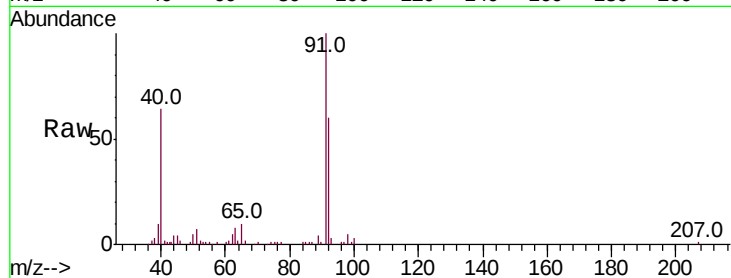
91 165.7 134.1 201.1

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#62

4-Bromofluorobenzene

Concen: 40.937 ug/l

RT: 11.41 min Scan# 1093

Delta R.T. -0.02 min

Lab File: VF062123.D

Acq: 23 Mar 2019 18:02

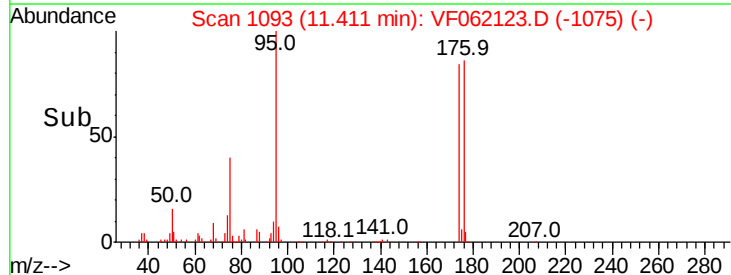
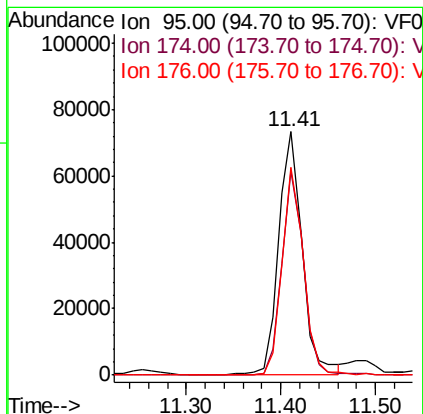
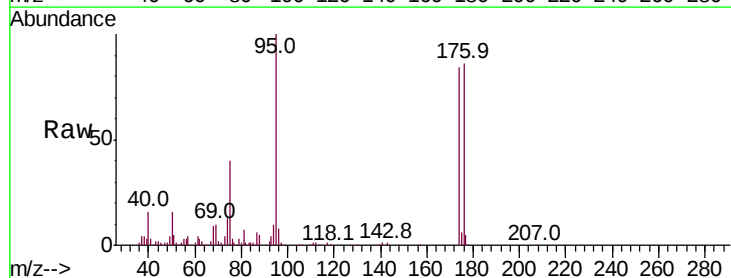
Tgt Ion: 95 Resp: 127773

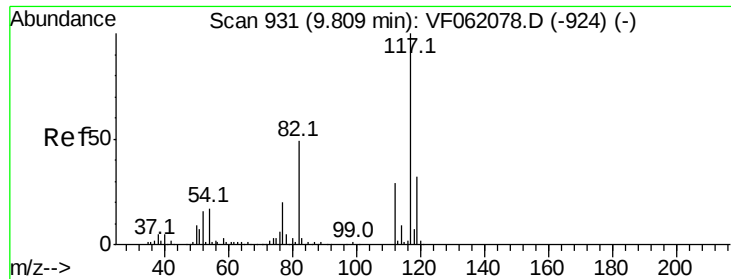
Ion Ratio Lower Upper

95 100

174 83.5 0.0 168.2

176 85.6 0.0 164.2





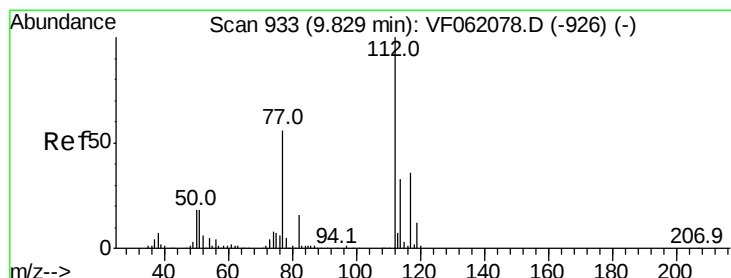
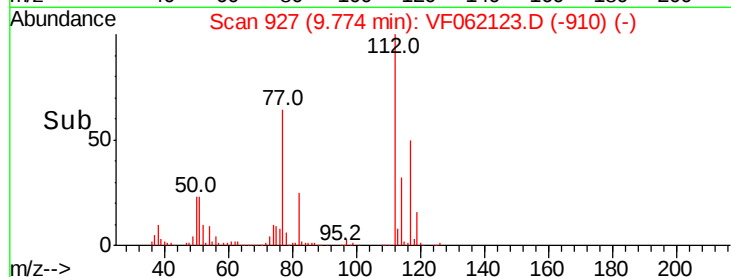
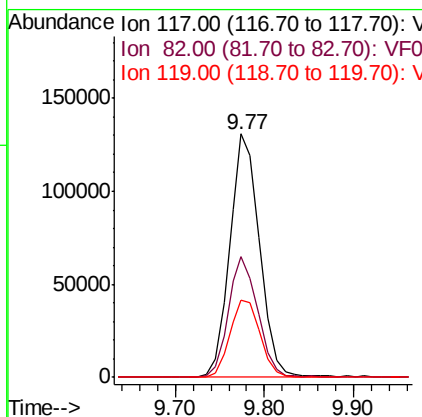
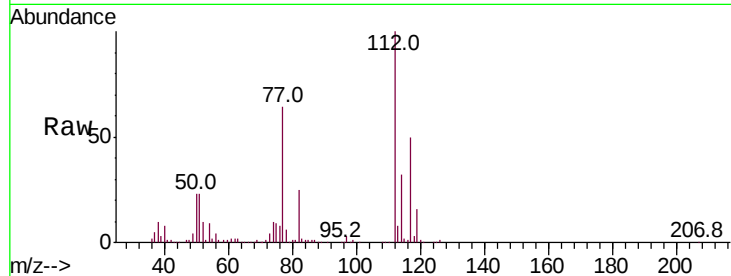
#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 9.77 min Scan# 927
Delta R.T. -0.03 min
Lab File: VF062123.D
Acq: 23 Mar 2019 18:02

Instrument :
MSVOA_F
ClientSampleId :
WP022SB436-190320-(20-22)

Tot Ion	Ratio	Resp	Lower	Upper
117	100	305551		
82	49.7		39.2	58.8
119	31.9		25.4	38.2

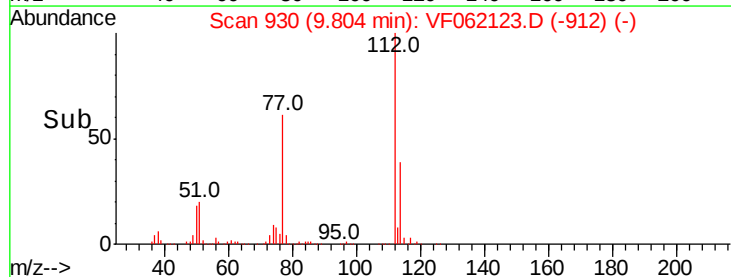
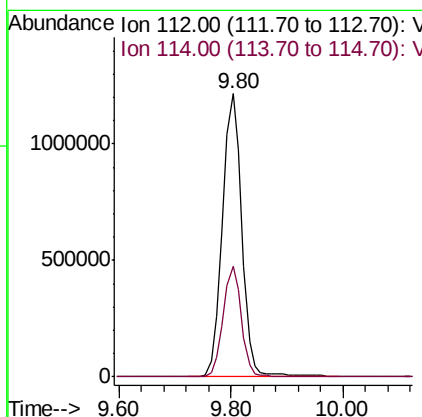
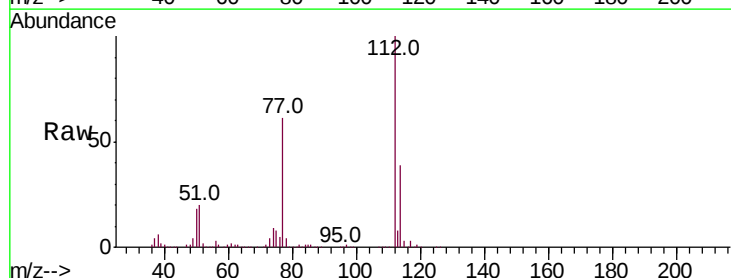
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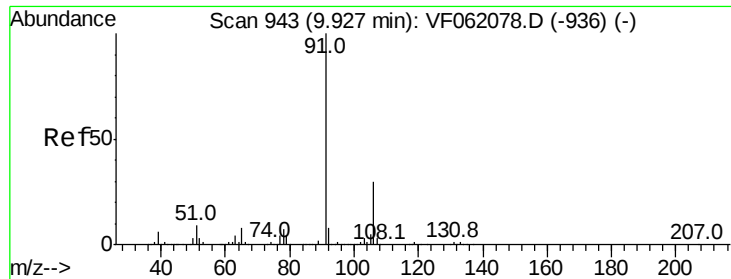
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#65
Chlorobenzene
Concen: 516.650 ug/l
RT: 9.80 min Scan# 930
Delta R.T. -0.02 min
Lab File: VF062123.D
Acq: 23 Mar 2019 18:02

Tgt Ion	Ratio	Resp	Lower	Upper
112	100	2953723		
114	39.1		26.0	39.0#





#67

Ethyl Benzene

Concen: 3.448 ug/l

RT: 9.90 min Scan# 940

Delta R.T. -0.02 min

Lab File: VF062123.D

Acq: 23 Mar 2019 18:02

Instrument :

MSVOA_F

ClientSampleId :

WP022SB436-190320-(20-22)

Tot Ion: 91 Resp: 34286

Ion Ratio Lower Upper

91 100

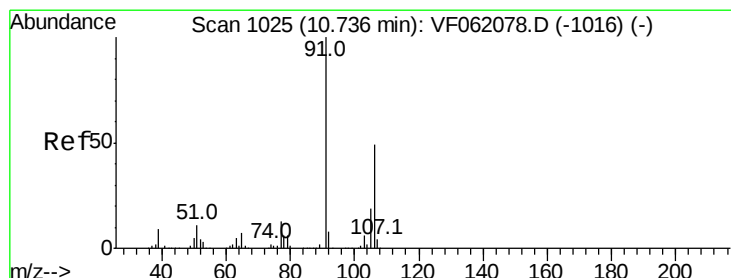
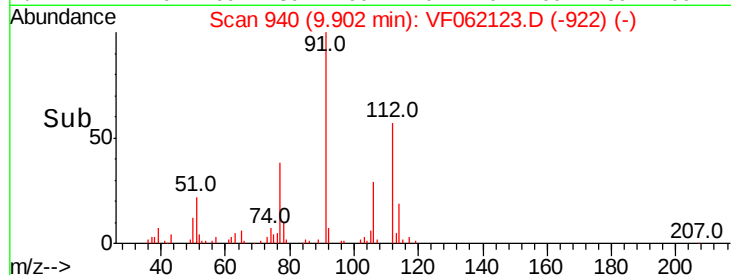
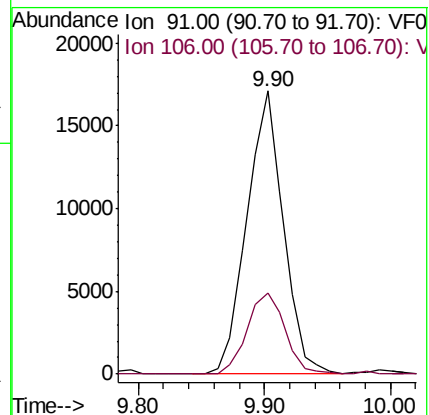
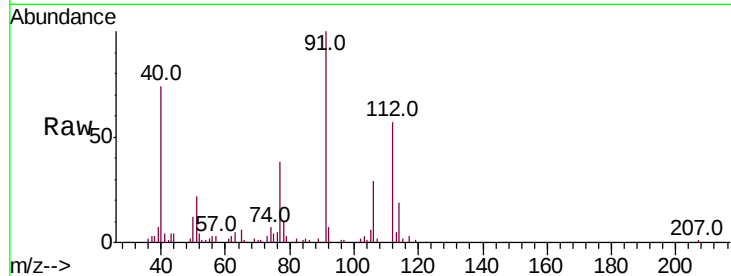
106 28.7 24.0 36.0

Manual Integrations

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#69

o-Xylene

Concen: 4.854 ug/l

RT: 10.71 min Scan# 1022

Delta R.T. -0.02 min

Lab File: VF062123.D

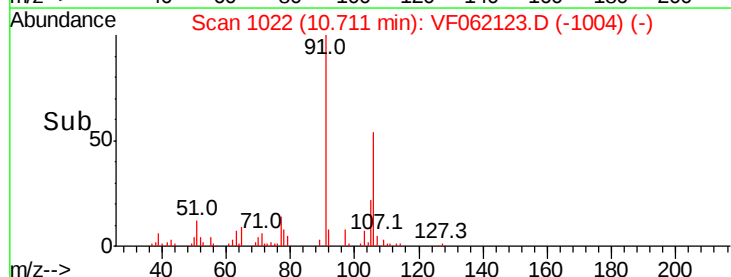
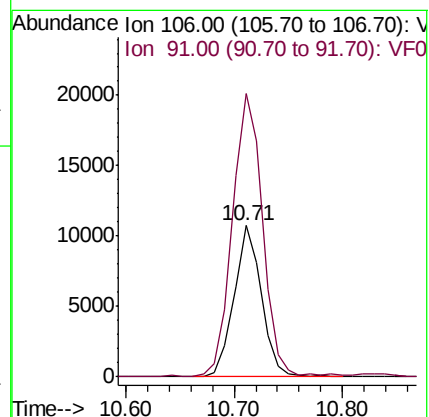
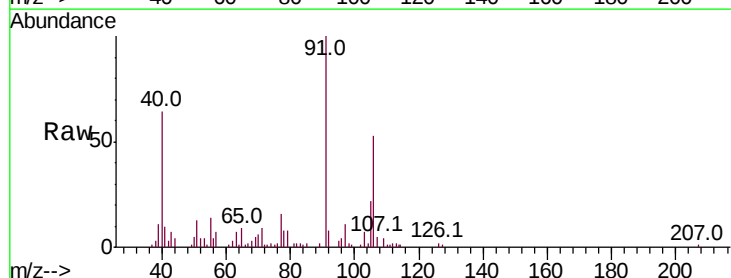
Acq: 23 Mar 2019 18:02

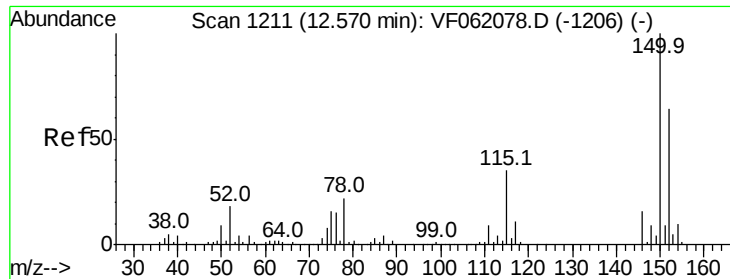
Tgt Ion: 106 Resp: 18891

Ion Ratio Lower Upper

106 100

91 187.3 102.6 307.8





#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 12.55 min Scan# 1209

Delta R.T. -0.01 min

Lab File: VF062123.D

Acq: 23 Mar 2019 18:02

Instrument :

MSVOA_F

ClientSampleId :

WP022SB436-190320-(20-22)

Tot Ion:152 Resp: 145665

Ion Ratio Lower Upper

152 100

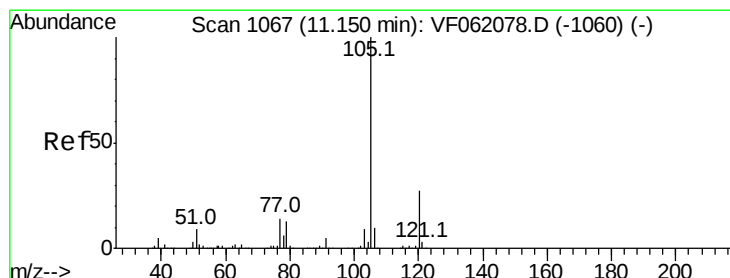
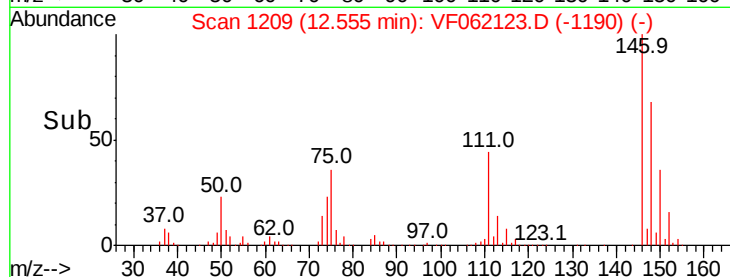
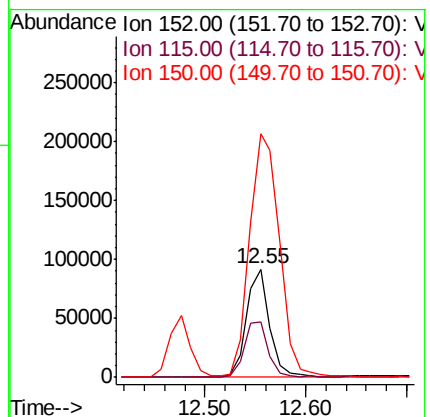
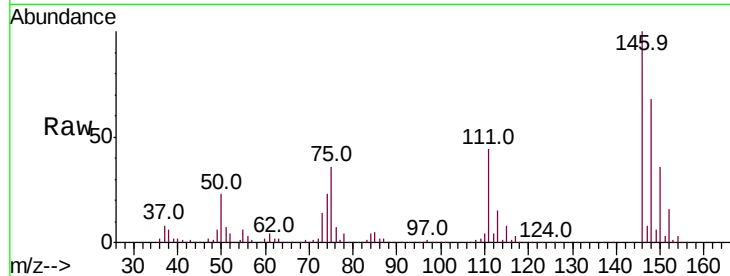
115 50.6 27.7 83.1

150 224.6 0.0 313.2

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#73

Isopropylbenzene

Concen: 1.701 ug/l

RT: 11.13 min Scan# 1064

Delta R.T. -0.02 min

Lab File: VF062123.D

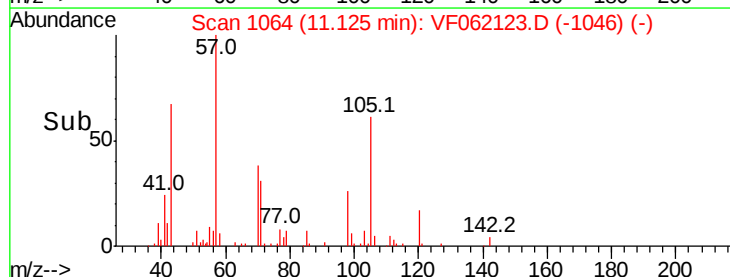
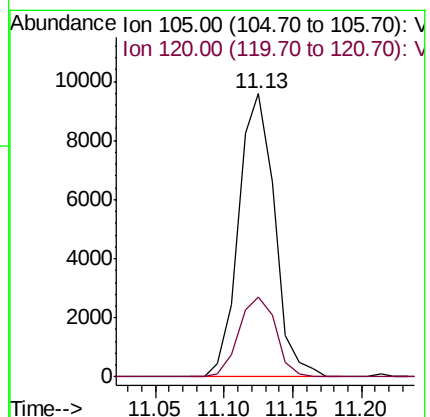
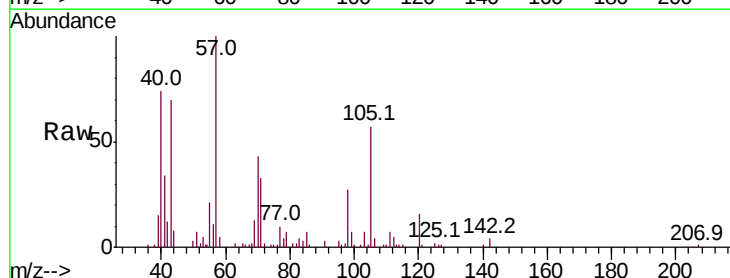
Acq: 23 Mar 2019 18:02

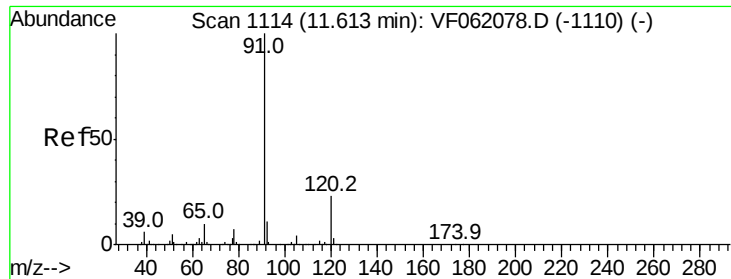
Tgt Ion:105 Resp: 17433

Ion Ratio Lower Upper

105 100

120 28.4 13.8 41.3





#78

n-propylbenzene

Concen: 3.632 ug/l

RT: 11.59 min Scan# 1111

Delta R.T. -0.02 min

Lab File: VF062123.D

Acq: 23 Mar 2019 18:02

Instrument :

MSVOA_F

ClientSampleId :

WP022SB436-190320-(20-22)

Tot Ion: 91 Resp: 43234

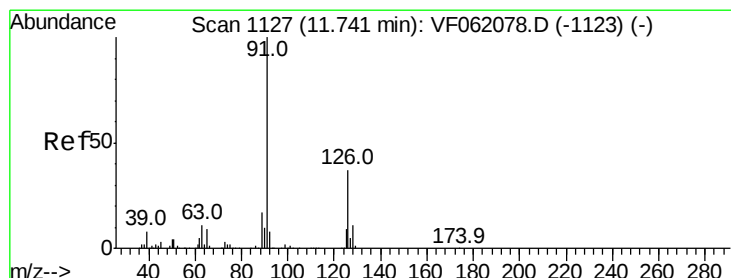
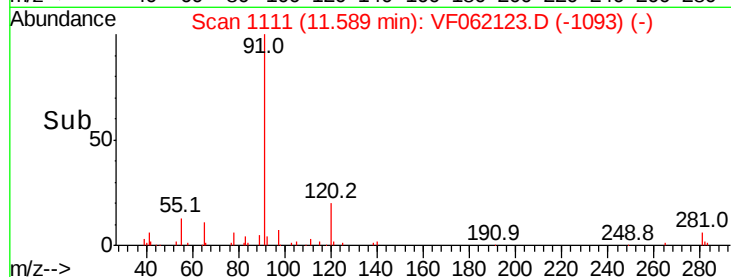
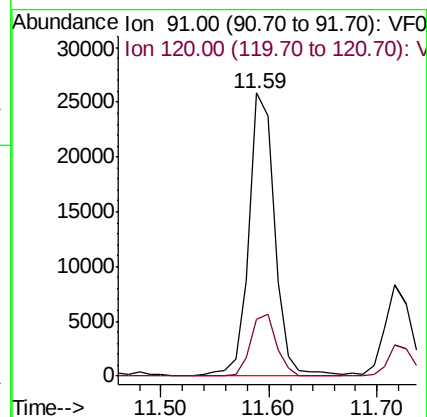
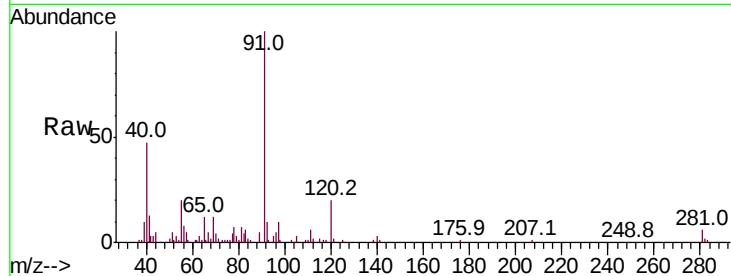
Ion Ratio Lower Upper

91 100

120 19.9 11.3 33.8

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#79

2-Chlorotoluene

Concen: 1.966 ug/l

RT: 11.72 min Scan# 1124

Delta R.T. -0.02 min

Lab File: VF062123.D

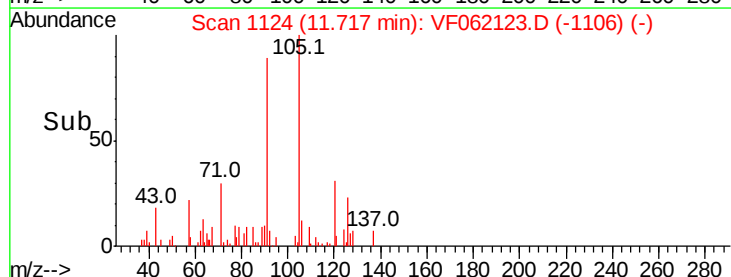
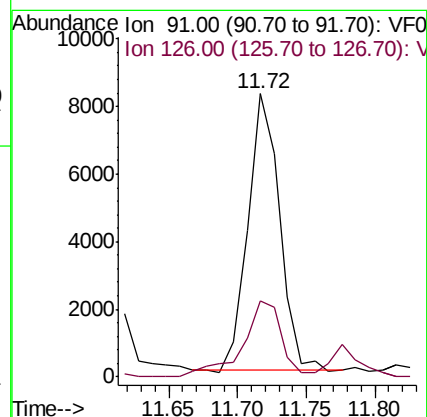
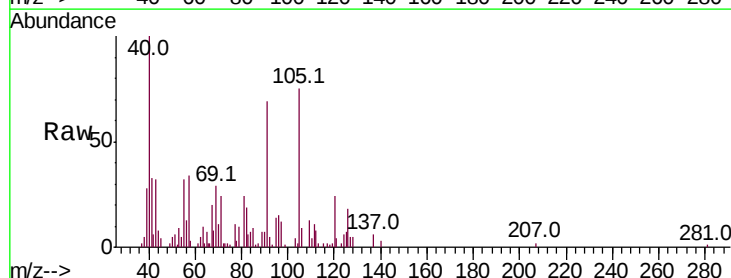
Acq: 23 Mar 2019 18:02

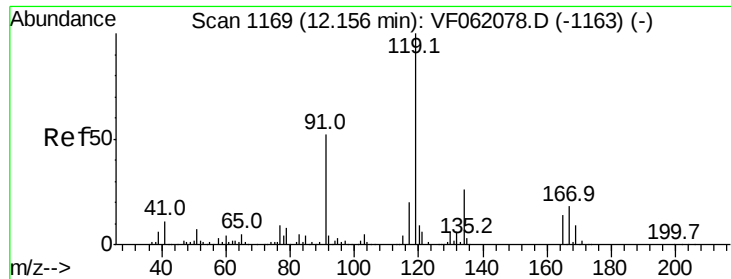
Tgt Ion: 91 Resp: 13008

Ion Ratio Lower Upper

91 100

126 26.8 18.3 54.8





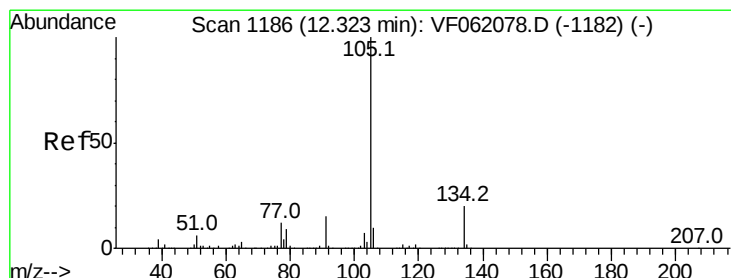
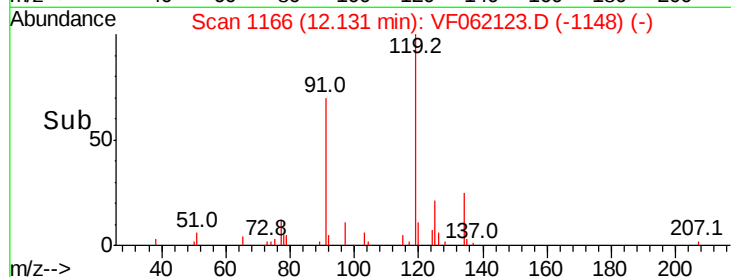
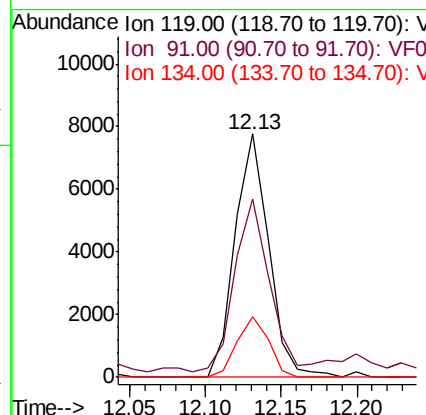
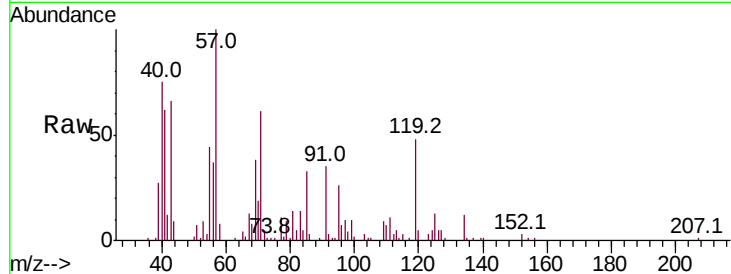
#83
tert-Butylbenzene
Concen: 1.370 ug/l
RT: 12.13 min Scan# 1166
Delta R.T. -0.02 min
Lab File: VF062123.D
Acq: 23 Mar 2019 18:02

Instrument :
MSVOA_F
ClientSampleId :
WP022SB436-190320-(20-22)

Tot Ion	Ratio	Lower	Upper
119	100		
91	73.3	26.1	78.2
134	25.0	12.8	38.4

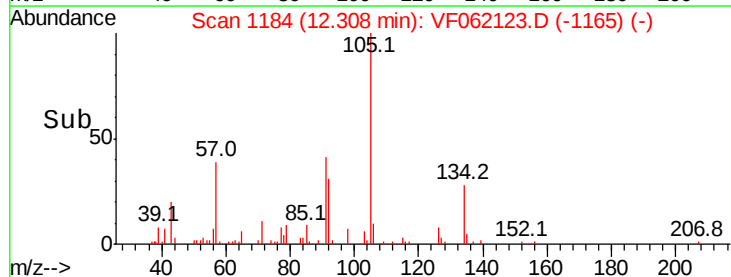
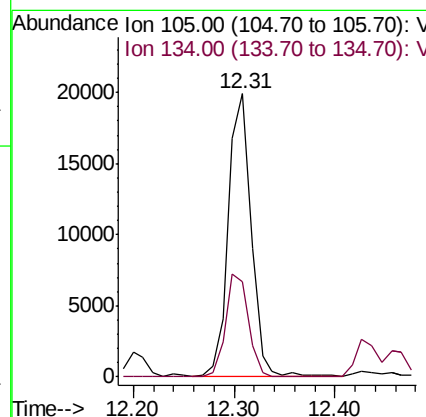
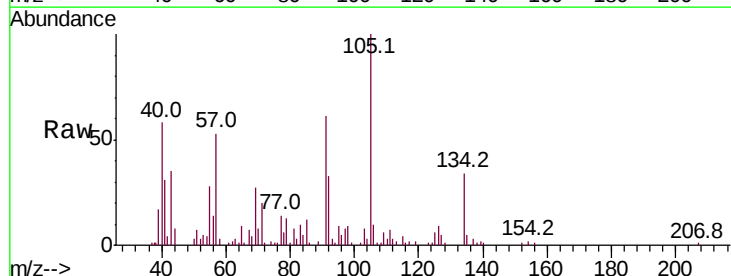
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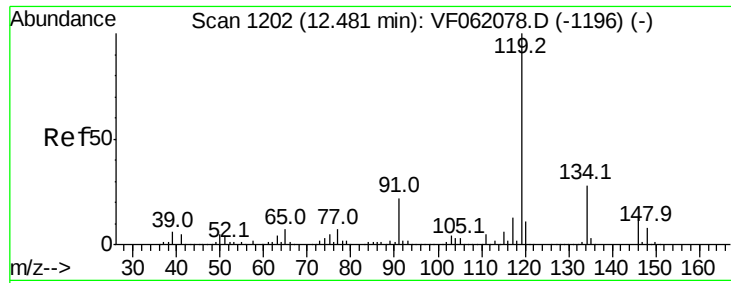
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#85
sec-Butylbenzene
Concen: 2.777 ug/l
RT: 12.31 min Scan# 1184
Delta R.T. -0.01 min
Lab File: VF062123.D
Acq: 23 Mar 2019 18:02

Tgt Ion	Ratio	Lower	Upper
105	100		
134	33.5	10.2	30.4





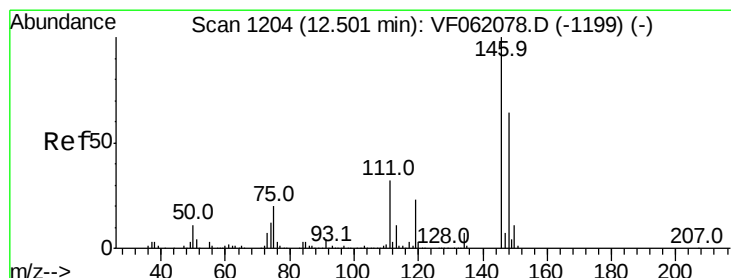
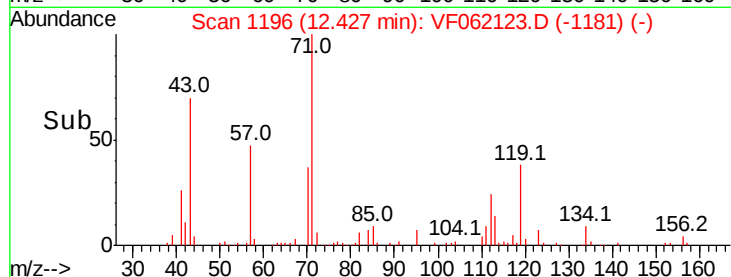
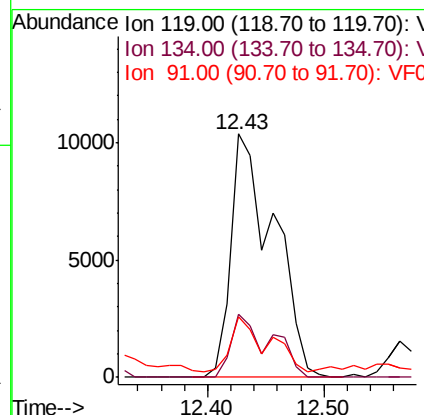
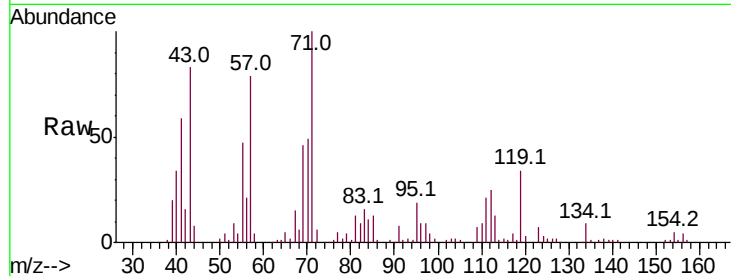
#86
p-Isopropyltoluene
Concen: 2.676 ug/l
RT: 12.43 min Scan# 1196
Delta R.T. -0.05 min
Lab File: VF062123.D
Acq: 23 Mar 2019 18:02

Instrument :
MSVOA_F
ClientSampleId :
WP022SB436-190320-(20-22)

Tot Ion	Ratio	Lower	Upper
119	100		
134	25.7	14.0	42.0
91	24.7	10.8	32.4

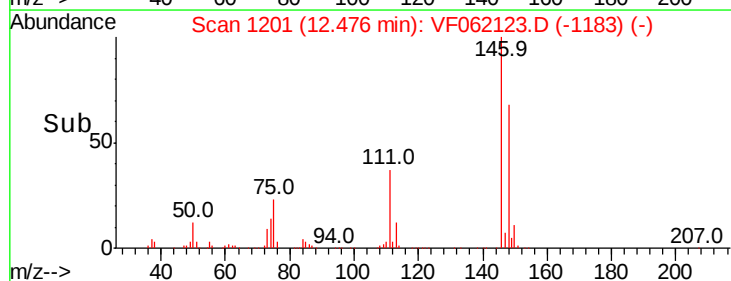
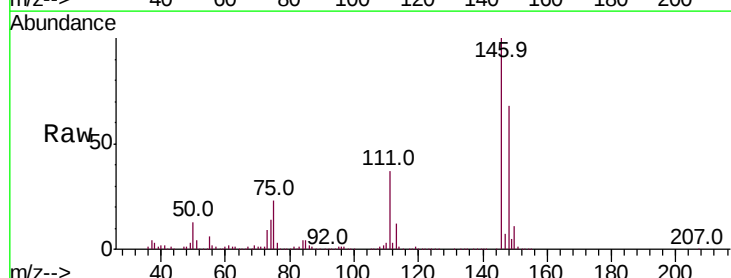
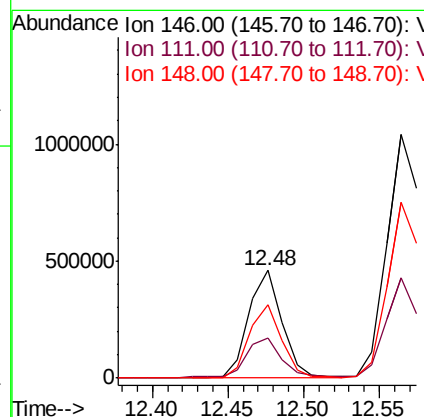
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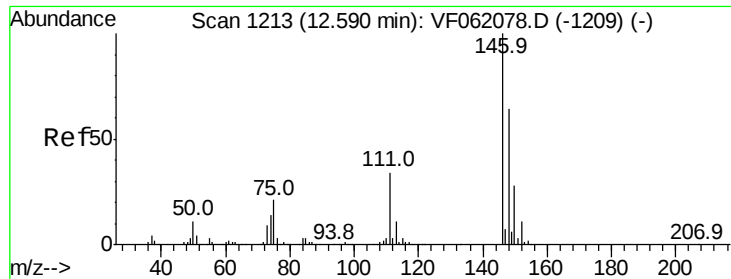
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#87
1,3-Dichlorobenzene
Concen: 152.547 ug/l
RT: 12.48 min Scan# 1201
Delta R.T. -0.02 min
Lab File: VF062123.D
Acq: 23 Mar 2019 18:02

Tgt Ion	Ratio	Lower	Upper
146	100		
111	37.0	16.1	48.3
148	67.7	31.9	95.7





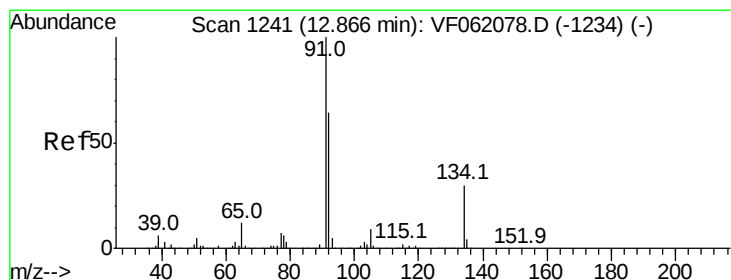
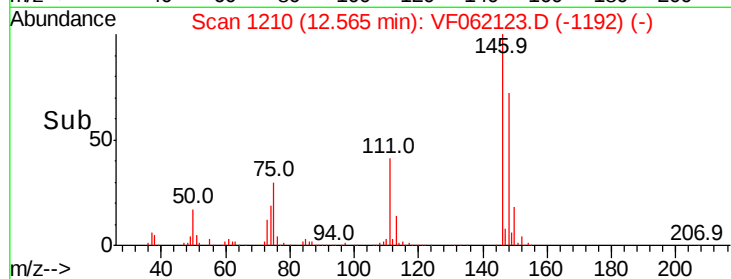
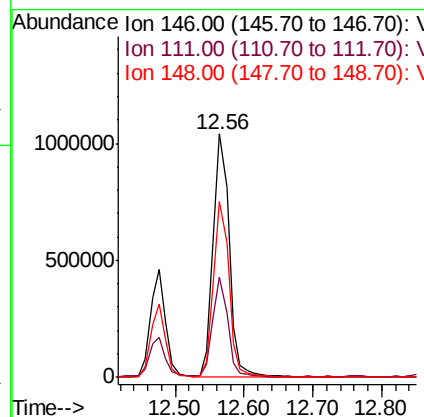
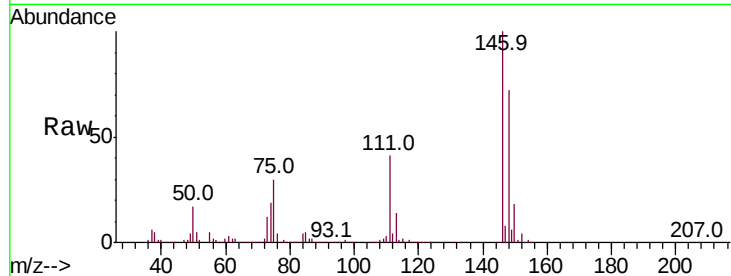
#88
 1,4-Dichlorobenzene
 Concen: 376.119 ug/l
 RT: 12.56 min Scan# 1210
 Delta R.T. -0.02 min
 Lab File: VF062123.D
 Acq: 23 Mar 2019 18:02

Instrument :
 MSVOA_F
 ClientSampleId :
 WP022SB436-190320-(20-22)

Tot Ion:146 Resp: 1707551
 Ion Ratio Lower Upper
 146 100
 111 41.2 16.9 50.6
 148 72.0 31.9 95.7

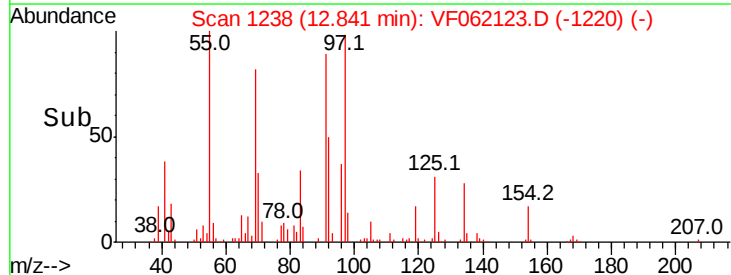
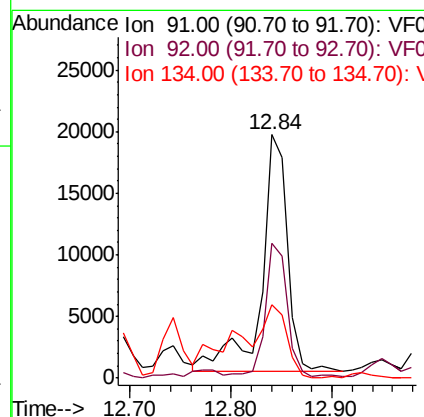
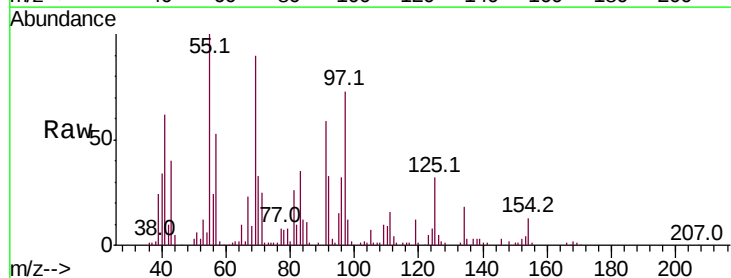
Manual Integrations
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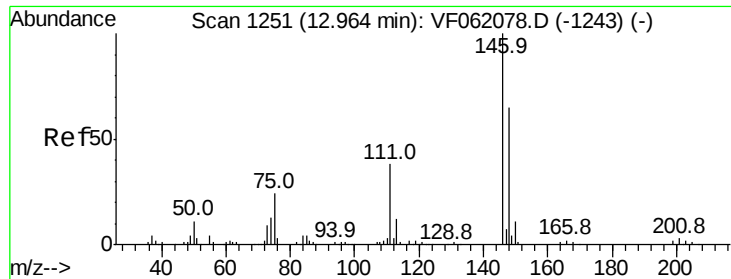
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 3/25/2019 12:40:49 PM



#89
 n-Butylbenzene
 Concen: 3.722 ug/l
 RT: 12.84 min Scan# 1238
 Delta R.T. -0.02 min
 Lab File: VF062123.D
 Acq: 23 Mar 2019 18:02

Tgt Ion: 91 Resp: 35125
 Ion Ratio Lower Upper
 91 100
 92 55.1 31.9 95.5
 134 30.4 14.9 44.9





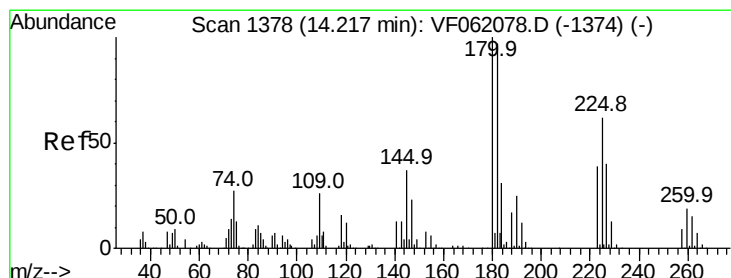
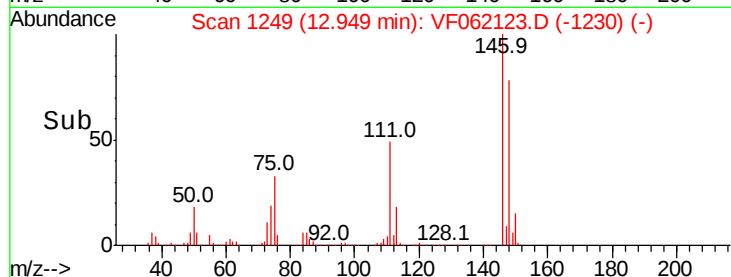
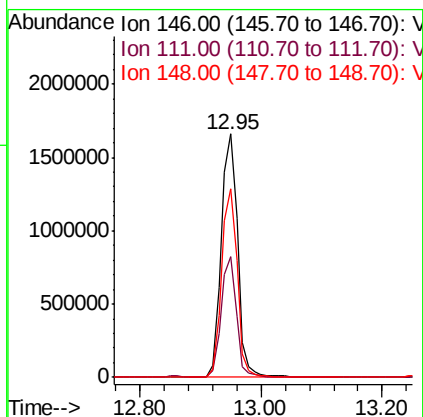
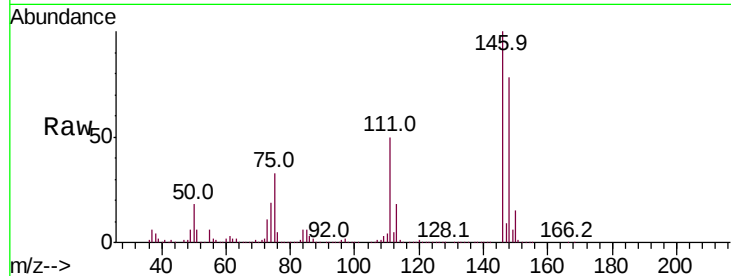
#91
 1,2-Dichlorobenzene
 Concen: 714.004 ug/l
 RT: 12.95 min Scan# 1249
 Delta R.T. -0.01 min
 Lab File: VF062123.D
 Acq: 23 Mar 2019 18:02

Instrument :
 MSVOA_F
 ClientSampleId :
 WP022SB436-190320-(20-22)

Tot Ion	Ratio	Lower	Upper
146	100		
111	49.7	19.1	57.3
148	77.6	32.8	98.3

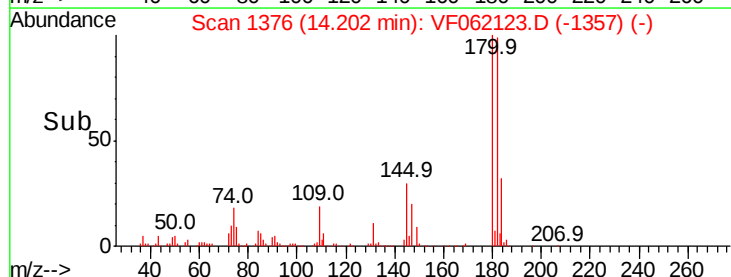
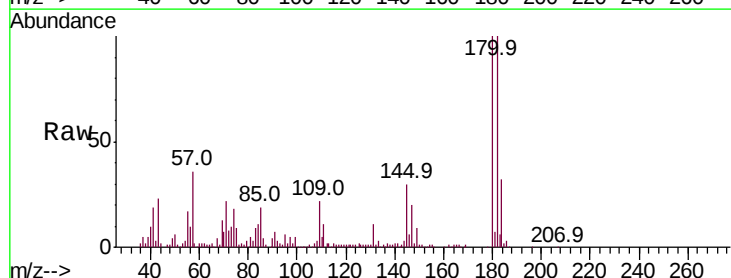
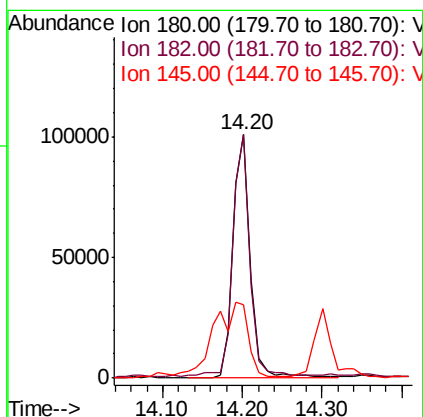
Manual Integrations
 APPROVED

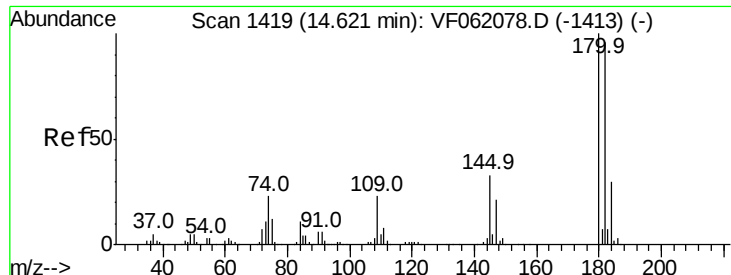
MMDadoda
 3/25/2019 12:40:49 PM



#93
 1,2,4-Trichlorobenzene
 Concen: 50.595 ug/l
 RT: 14.20 min Scan# 1376
 Delta R.T. -0.01 min
 Lab File: VF062123.D
 Acq: 23 Mar 2019 18:02

Tgt Ion	Ratio	Lower	Upper
180	100		
182	99.9	48.7	146.1
145	29.9	18.3	54.8





#96
 1,2,3-Trichlorobenzene
 Concen: 9.335 ug/l
 RT: 14.60 min Scan# 1416
 Delta R.T. -0.02 min
 Lab File: VF062123.D
 Acq: 23 Mar 2019 18:02

Instrument :
 MSVOA_F
 ClientSampleId :
 WP022SB436-190320-(20-22)

Tot Ion	Ratio	Lower	Upper
180	100		
182	85.8	47.9	143.7
145	43.7	16.6	49.7

Manual Integrations
 APPROVED

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 3/25/2019 12:40:49 PM

