

Data Path : Z:\VOASRV\HPCHEM1\MSVOA F\DATA\VF111318\
 Data File : VF060709.D
 Acq On : 13 Nov 2018 12:35
 Operator : VA/AP
 Sample : VSTDIC020
 Misc : 5.00g/5mL/MSVOA-F/SOIL
 ALS Vial : 4 Sample Multiplier: 1

Instrument :
 MSVOA_F
 ClientSampleId :
 VSTDIC020

Manual Integrations
 APPROVED

sam
 11/14/2018 11:53:36 AM

Quant Time: Nov 14 02:57:34 2018
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_F\METHODS\82F111318S.M
 Quant Title : SW846 8260
 QLast Update : Wed Nov 14 02:40:41 2018
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	4.88	168	234572	50.00	ug/l	-0.01
34) 1,4-Difluorobenzene	5.61	114	385527	50.00	ug/l	-0.01
63) Chlorobenzene-d5	9.79	117	359251	50.00	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	12.56	152	201995	50.00	ug/l	0.00

System Monitoring Compounds

33) 1,2-Dichloroethane-d4	4.86	65	55028	20.57	ug/l	0.00
Spiked Amount	50.000		Recovery	=	41.14%	
35) Dibromofluoromethane	4.13	113	62009	21.40	ug/l	0.00
Spiked Amount	50.000		Recovery	=	42.80%	
50) Toluene-d8	7.57	98	198431	23.71	ug/l	0.00
Spiked Amount	50.000		Recovery	=	47.42%	
62) 4-Bromofluorobenzene	11.43	95	83653	21.37	ug/l	0.00
Spiked Amount	50.000		Recovery	=	42.74%	

Target Compounds

						Qvalue
2) Dichlorodifluoromethane	0.96	85	92951	22.142	ug/l	96
3) Chloromethane	1.09	50	53717	20.633	ug/l	91
4) Vinyl Chloride	1.14	62	46014	19.757	ug/l	98
5) Bromomethane	1.33	94	30262	20.455	ug/l	96
6) Chloroethane	1.38	64	16691	18.317	ug/l	98
7) Trichlorofluoromethane	1.49	101	100731	19.546	ug/l	99
8) Diethyl Ether	1.63	74	12384	18.767	ug/l	90
9) 1,1,2-Trichlorotrifluoroet	1.82	101	48685	20.060	ug/l #	90
10) Methyl Iodide	1.89	142	76725	20.553	ug/l #	84
11) Tert butyl alcohol	2.58	59	12425	102.039	ug/l	95
12) 1,1-Dichloroethene	1.79	96	37871	19.789	ug/l	91
13) Acrolein	2.01	56	12165	109.262	ug/l #	68
14) Allyl chloride	2.10	41	65480	19.531	ug/l	98
15) Acrylonitrile	2.94	53	26072	100.482	ug/l	92
16) Acetone	2.24	43	51941	90.824	ug/l	100
17) Carbon Disulfide	1.83	76	115015m	19.898	ug/l	
18) Methyl Acetate	2.35	43	18084	17.725	ug/l	94
19) Methyl tert-butyl Ether	2.44	73	92996	20.256	ug/l	99
20) Methylene Chloride	2.22	84	41426m	19.153	ug/l	
21) trans-1,2-Dichloroethene	2.31	96	38767	19.389	ug/l	95
22) Diisopropyl ether	2.81	45	131926	20.382	ug/l	100
23) Vinyl Acetate	3.20	43	309258	101.463	ug/l	100
24) 1,1-Dichloroethane	2.89	63	77215	19.704	ug/l	99
25) 2-Butanone	4.35	43	92533	98.371	ug/l	96
26) 2,2-Dichloropropane	3.61	77	62833	20.376	ug/l	95
27) cis-1,2-Dichloroethene	3.49	96	67182	19.752	ug/l	98
28) Bromochloromethane	3.73	49	40174	19.727	ug/l	98
29) Tetrahydrofuran	4.08	42	37980	97.886	ug/l	99
30) Chloroform	3.87	83	124234	19.759	ug/l	96
31) Cyclohexane	3.70	56	98235	20.655	ug/l	98
32) 1,1,1-Trichloroethane	4.11	97	105079	21.223	ug/l	98
36) 1,1-Dichloropropene	4.30	75	93862	20.993	ug/l	98
37) Ethyl Acetate	4.12	43	35439	21.319	ug/l #	93
38) Carbon Tetrachloride	4.01	117	94105	21.691	ug/l	94

Data Path : Z:\VOASRV\HPCHEM1\MSVOA F\DATA\VF111318\
 Data File : VF060709.D
 Acq On : 13 Nov 2018 12:35
 Operator : VA/AP
 Sample : VSTDIC020
 Misc : 5.00g/5mL/MSVOA-F/SOIL
 ALS Vial : 4 Sample Multiplier: 1

Instrument :
 MSVOA_F
 ClientSampleID :
 VSTDIC020

Manual Integrations
 APPROVED

sam
 11/14/2018 11:53:36 AM

Quant Time: Nov 14 02:57:34 2018
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_F\METHODS\82F111318S.M
 Quant Title : SW846 8260
 QLast Update : Wed Nov 14 02:40:41 2018
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
39) Methylcyclohexane	5.47	83	107592	20.742	ug/l	99
40) Benzene	4.64	78	205629	20.631	ug/l	98
41) Methacrylonitrile	4.76	41	19141	19.008	ug/l #	91
42) 1,2-Dichloroethane	4.96	62	70706	20.529	ug/l	99
43) Isopropyl Acetate	6.97	43	46295	21.005	ug/l #	98
44) Trichloroethene	5.52	130	67289	21.398	ug/l	95
45) 1,2-Dichloropropane	6.25	63	52701	20.320	ug/l	98
46) Dibromomethane	6.10	93	36226	21.160	ug/l	90
47) Bromodichloromethane	6.40	83	90982	20.811	ug/l	95
48) Methyl methacrylate	6.73	41	31145	21.352	ug/l	96
49) 1,4-Dioxane	6.72	88	6112	448.035	ug/l	92
51) 4-Methyl-2-Pentanone	8.27	43	170056	106.683	ug/l	100
52) Toluene	7.64	92	138653	20.759	ug/l	92
53) t-1,3-Dichloropropene	8.29	75	76702	21.905	ug/l	93
54) cis-1,3-Dichloropropene	7.31	75	95208	20.932	ug/l	95
55) 1,1,2-Trichloroethane	8.51	97	40672	21.313	ug/l	94
56) Ethyl methacrylate	8.64	69	49794	22.975	ug/l	99
57) 1,3-Dichloropropane	8.87	76	72835	22.023	ug/l	97
58) 2-Chloroethyl Vinyl ether	7.63	63	19202	96.989	ug/l	100
59) 2-Hexanone	9.50	43	123279	110.047	ug/l	100
60) Dibromochloromethane	8.72	129	58155	21.383	ug/l	87
61) 1,2-Dibromoethane	9.00	107	41444	20.650	ug/l	99
64) Tetrachloroethene	8.17	164	60006	21.093	ug/l	92
65) Chlorobenzene	9.81	112	153587	21.186	ug/l	94
66) 1,1,1,2-Tetrachloroethane	9.95	131	65275	20.644	ug/l	97
67) Ethyl Benzene	9.92	91	291390	21.324	ug/l	96
68) m/p-Xylenes	10.15	106	208779	42.753	ug/l	93
69) o-Xylene	10.73	106	115671	21.068	ug/l	95
70) Styrene	10.81	104	154234	20.699	ug/l	97
71) Bromoform	10.79	173	29214	20.546	ug/l	99
73) Isopropylbenzene	11.14	105	347112	21.349	ug/l	98
74) N-amyl acetate	11.38	43	80200	21.667	ug/l	98
75) 1,1,2,2-Tetrachloroethane	11.70	83	55627	20.694	ug/l	98
76) 1,2,3-Trichloropropane	11.80	75	43756	21.917	ug/l	94
77) Bromobenzene	11.51	156	70893	20.947	ug/l	96
78) n-propylbenzene	11.61	91	418635	22.077	ug/l	97
79) 2-Chlorotoluene	11.73	91	236638	21.471	ug/l	99
80) 1,3,5-Trimethylbenzene	11.84	105	252397	19.553	ug/l	97
81) trans-1,4-Dichloro-2-buten	11.88	75	21091m	22.019	ug/l	
82) 4-Chlorotoluene	11.91	91	244912	21.691	ug/l	97
83) tert-Butylbenzene	12.14	119	294984	21.523	ug/l	97
84) 1,2,4-Trimethylbenzene	12.22	105	273977	20.522	ug/l	94
85) sec-Butylbenzene	12.32	105	398493	21.433	ug/l	96
86) p-Isopropyltoluene	12.47	119	326294	21.013	ug/l	98
87) 1,3-Dichlorobenzene	12.48	146	144440	21.446	ug/l	96
88) 1,4-Dichlorobenzene	12.58	146	134662	20.803	ug/l	92
89) n-Butylbenzene	12.86	91	352083	22.218	ug/l	95
90) Hexachloroethane	12.93	117	83231	21.915	ug/l	89
91) 1,2-Dichlorobenzene	12.96	146	132164	20.841	ug/l	99
92) 1,2-Dibromo-3-Chloropropan	13.66	75	9768	19.333	ug/l #	54

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA F\DATA\VF111318\
Data File : VF060709.D
Acq On : 13 Nov 2018 12:35
Operator : VA/AP
Sample : VSTDICC020
Misc : 5.00g/5mL/MSVOA-F/SOIL
ALS Vial : 4 Sample Multiplier: 1

Instrument :
MSVOA_F
ClientSampleId :
VSTDICC020

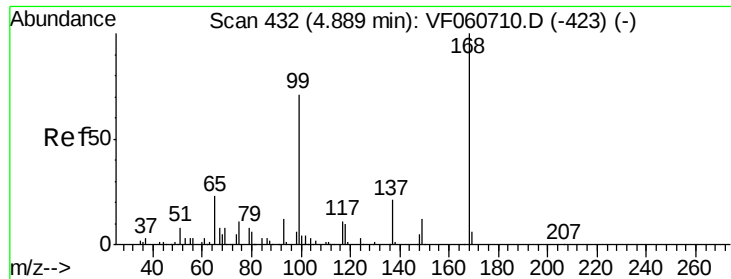
Manual Integrations
APPROVED

sam
11/14/2018 11:53:36 AM

Quant Time: Nov 14 02:57:34 2018
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA_F\METHODS\82F111318S.M
Quant Title : SW846 8260
QLast Update : Wed Nov 14 02:40:41 2018
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
93) 1,2,4-Trichlorobenzene	14.21	180	98128	21.528	ug/l	97
94) Hexachlorobutadiene	14.20	225	63926	21.462	ug/l	98
95) Naphthalene	14.47	128	163696	19.682	ug/l	99
96) 1,2,3-Trichlorobenzene	14.61	180	86960	20.646	ug/l	99

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



#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 4.88 min Scan# 431

Delta R.T. -0.01 min

Lab File: VF060709.D

Acq: 13 Nov 2018 12:35

Instrument :

MSVOA_F

ClientSampleId :

VSTDIC020

Tot Ion:168 Resp: 234572

Ion Ratio Lower Upper

168 100

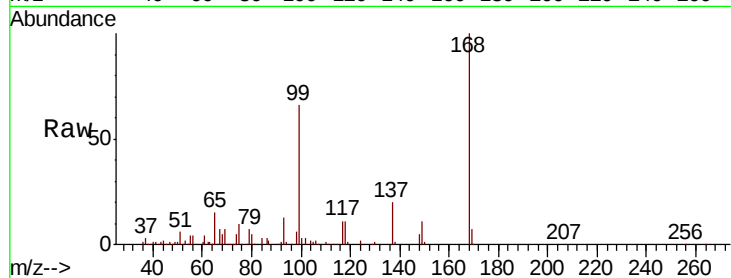
99 65.6 57.2 85.8

Manual Integrations

APPROVED

sam

11/14/2018 11:53:36 AM



Abundance Ion 168.00 (167.70 to 168.70): VF0

Ion 99.00 (98.70 to 99.70): VF0

4.88

80000

60000

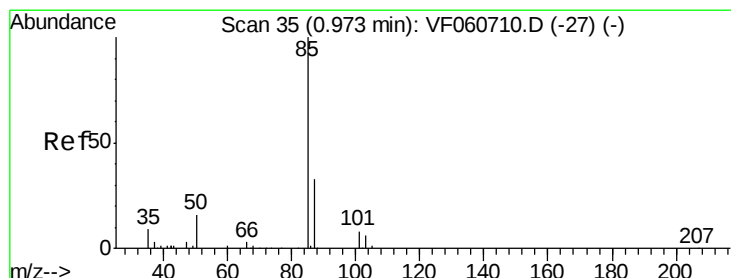
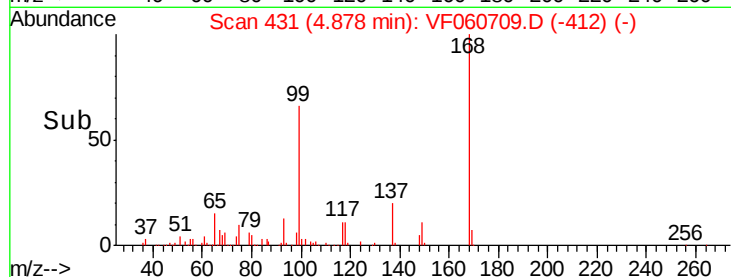
40000

20000

0

4.70 4.80 4.90 5.00 5.10

Time-->



#2

Dichlorodifluoromethane

Concen: 22.142 ug/l

RT: 0.96 min Scan# 34

Delta R.T. -0.01 min

Lab File: VF060709.D

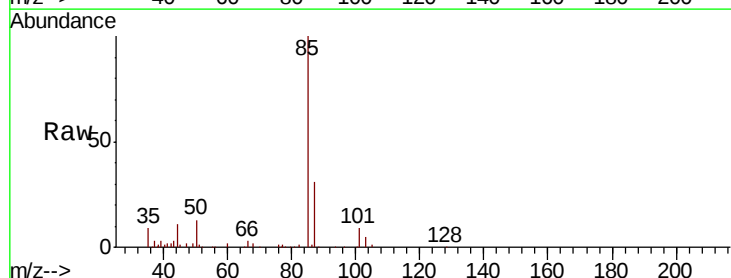
Acq: 13 Nov 2018 12:35

Tgt Ion: 85 Resp: 92951

Ion Ratio Lower Upper

85 100

87 30.6 16.3 48.9



Abundance Ion 85.00 (84.70 to 85.70): VF0

Ion 87.00 (86.70 to 87.70): VF0

0.96

30000

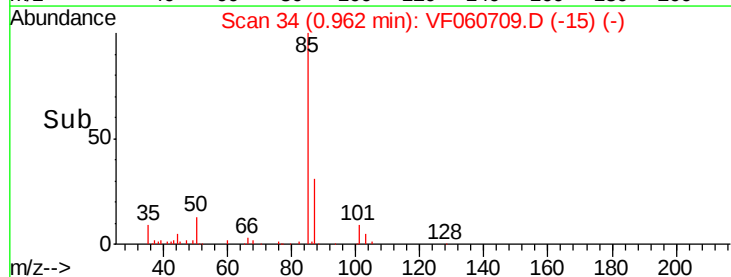
20000

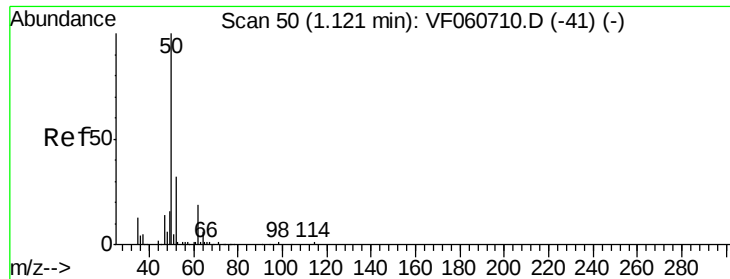
10000

0

0.80 0.90 1.00 1.10 1.20

Time-->





#3

Chloromethane

Concen: 20.633 ug/l

RT: 1.09 min Scan# 47

Delta R.T. -0.03 min

Lab File: VF060709.D

Acq: 13 Nov 2018 12:35

Instrument :

MSVOA_F

ClientSampleId :

VSTDIC020

Tot Ion: 50 Resp: 53717

Ion Ratio Lower Upper

50 100

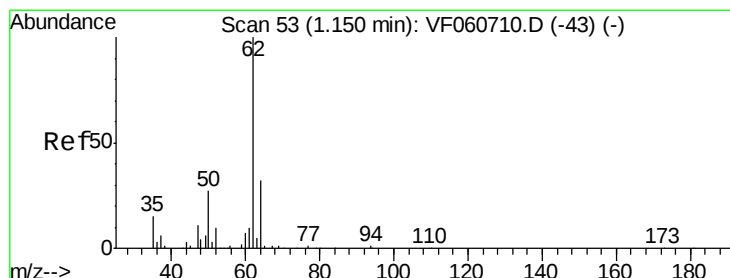
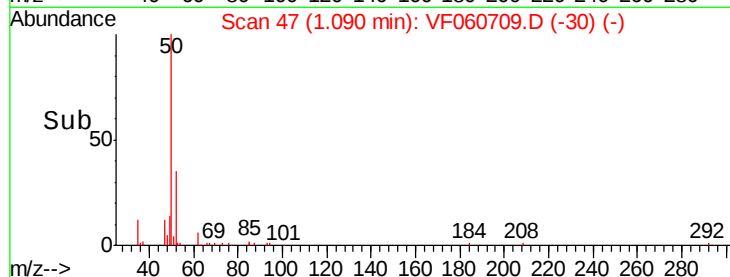
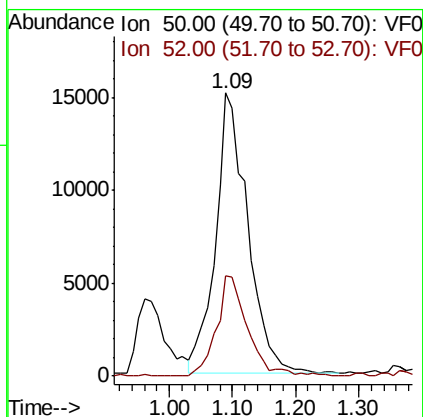
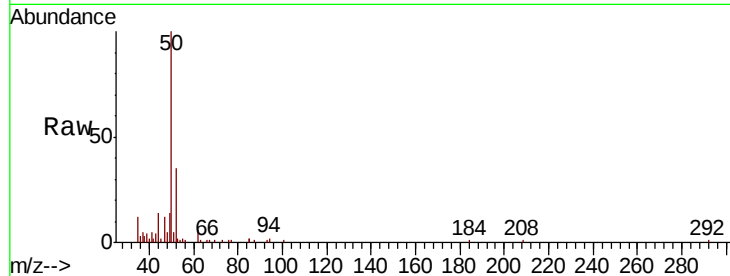
52 35.3 24.2 36.2

Manual Integrations

APPROVED

sam

11/14/2018 11:53:36 AM



#4

Vinyl Chloride

Concen: 19.757 ug/l

RT: 1.14 min Scan# 52

Delta R.T. -0.01 min

Lab File: VF060709.D

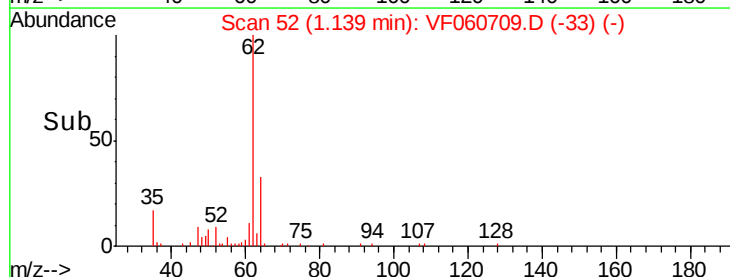
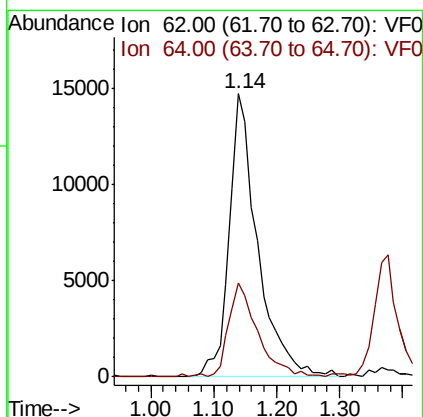
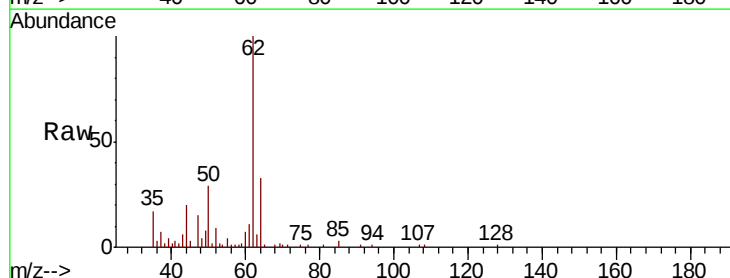
Acq: 13 Nov 2018 12:35

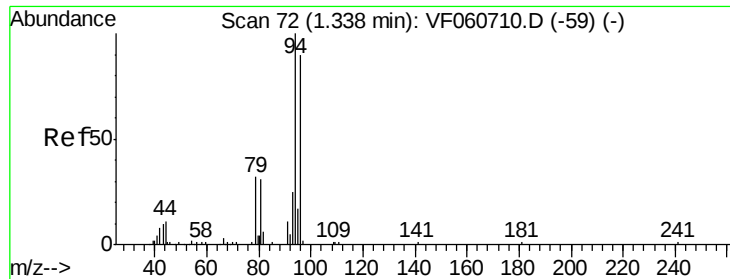
Tgt Ion: 62 Resp: 46014

Ion Ratio Lower Upper

62 100

64 33.3 25.8 38.8





#5

Bromomethane

Concen: 20.455 ug/l

RT: 1.33 min Scan# 71

Delta R.T. -0.01 min

Lab File: VF060709.D

Acq: 13 Nov 2018 12:35

Instrument :

MSVOA_F

ClientSampleId :

VSTDIC020

Tot Ion: 94 Resp: 30262

Ion Ratio Lower Upper

94 100

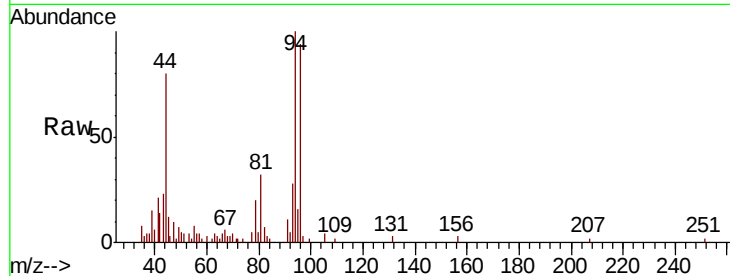
96 93.9 71.9 107.9

Manual Integrations

APPROVED

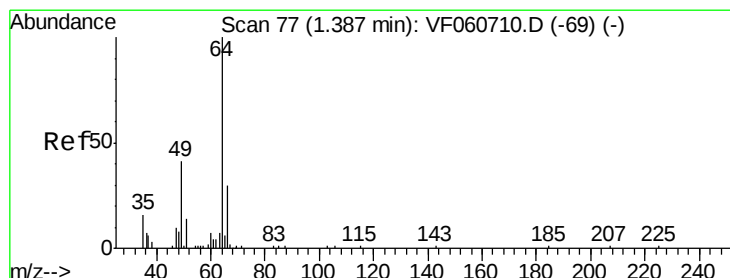
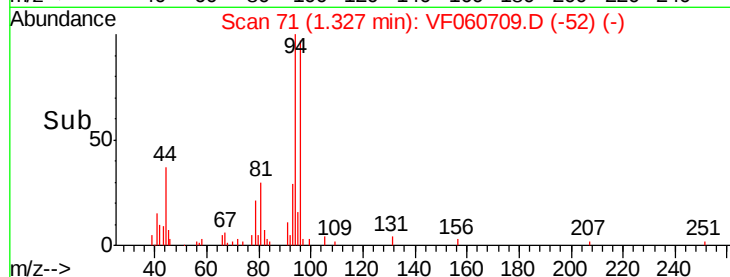
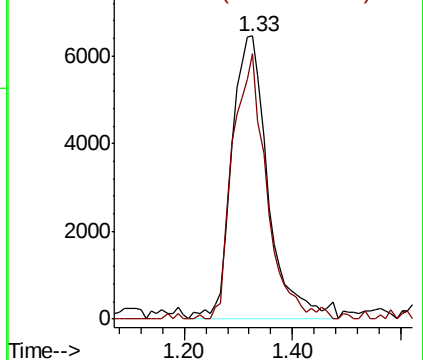
sam

11/14/2018 11:53:36 AM



Abundance Ion 94.00 (93.70 to 94.70): VF0

Ion 96.00 (95.70 to 96.70): VF0



#6

Chloroethane

Concen: 18.317 ug/l

RT: 1.38 min Scan# 76

Delta R.T. -0.01 min

Lab File: VF060709.D

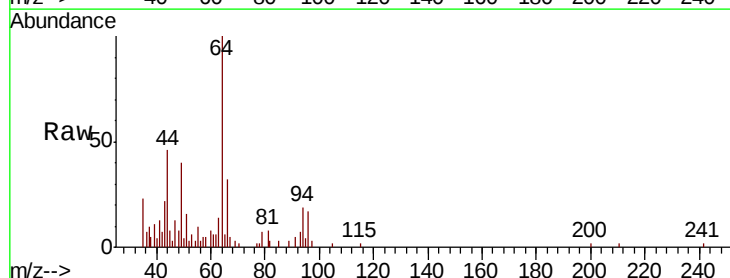
Acq: 13 Nov 2018 12:35

Tgt Ion: 64 Resp: 16691

Ion Ratio Lower Upper

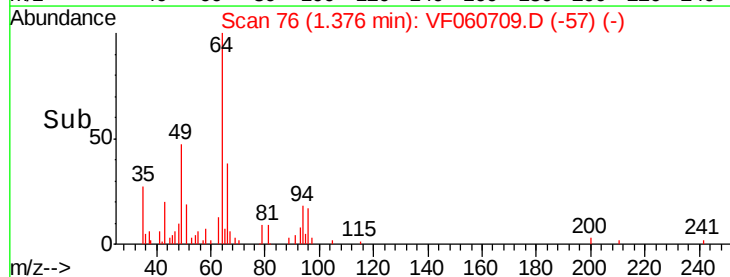
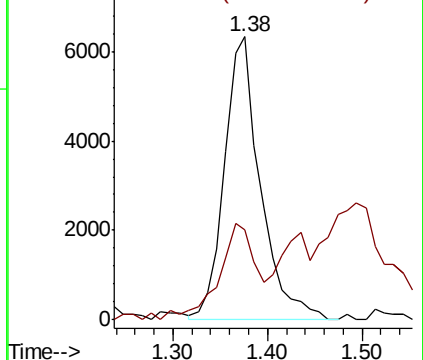
64 100

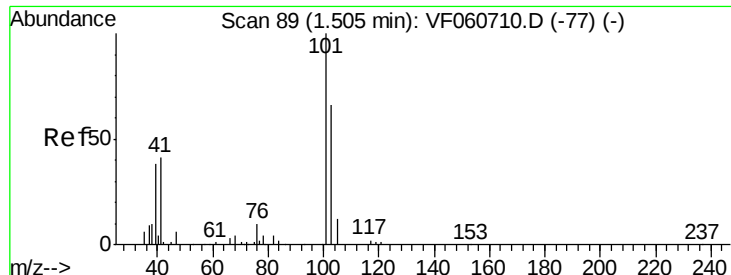
66 32.0 24.8 37.2



Abundance Ion 64.00 (63.70 to 64.70): VF0

Ion 66.00 (65.70 to 66.70): VF0





#7

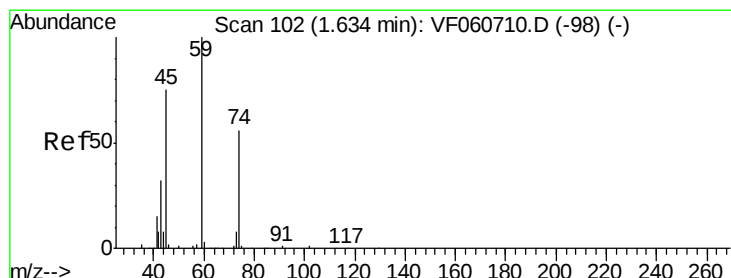
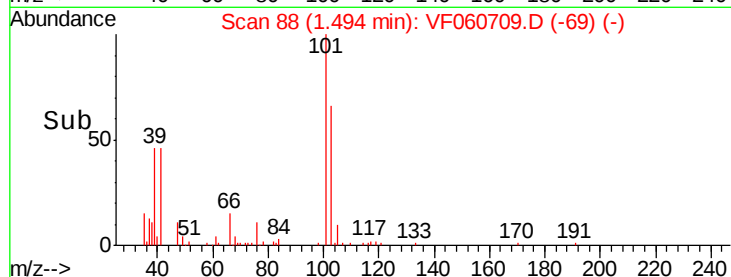
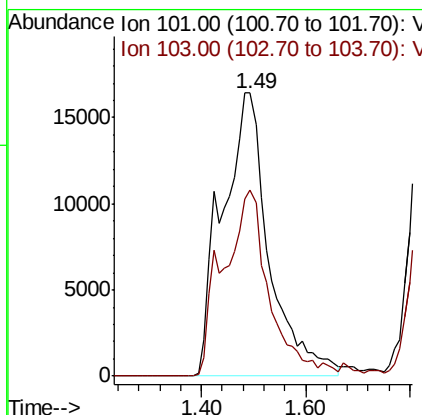
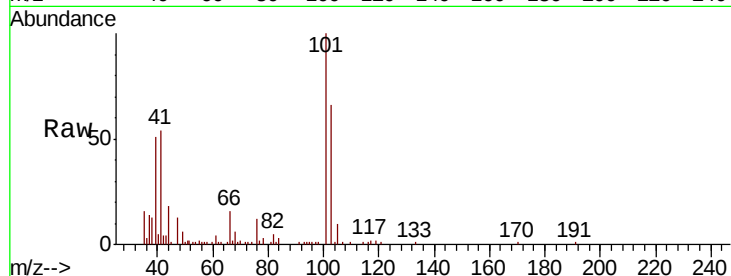
Trichlorofluoromethane
Concen: 19.546 ug/l
RT: 1.49 min Scan# 88
Delta R.T. -0.01 min
Lab File: VF060709.D
Acq: 13 Nov 2018 12:35

Instrument :
MSVOA_F
ClientSampleId :
VSTDIC020

Tot Ion:101 Resp: 100731
Ion Ratio Lower Upper
101 100
103 65.9 53.1 79.7

Manual Integrations
APPROVED

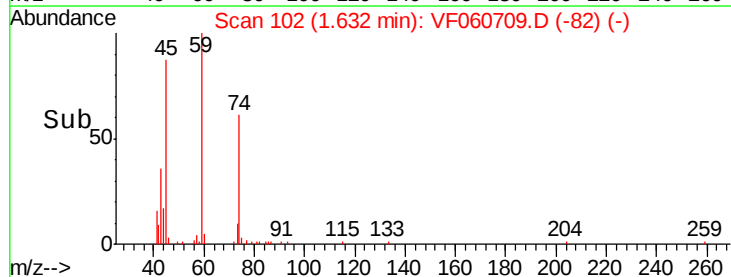
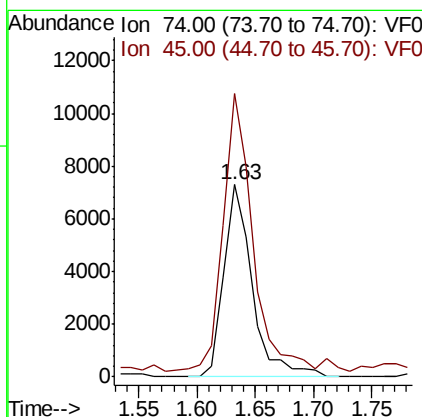
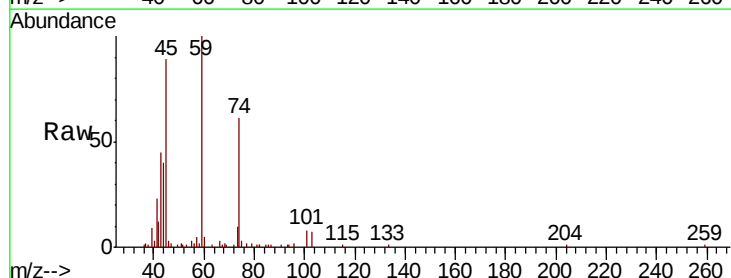
sam
11/14/2018 11:53:36 AM

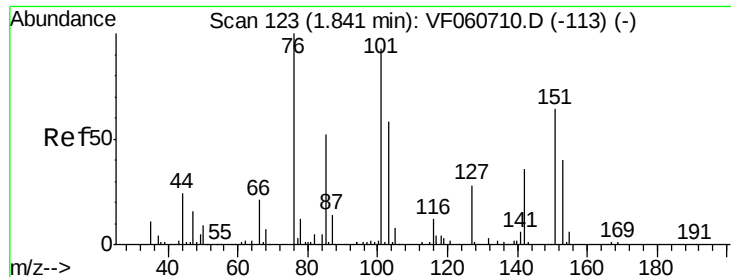


#8

Diethyl Ether
Concen: 18.767 ug/l
RT: 1.63 min Scan# 102
Delta R.T. -0.00 min
Lab File: VF060709.D
Acq: 13 Nov 2018 12:35

Tgt Ion: 74 Resp: 12384
Ion Ratio Lower Upper
74 100
45 147.3 67.7 203.1





#9

1,1,2-Trichlorotrifluoroethane

Concen: 20.060 ug/l

RT: 1.82 min Scan# 121

Delta R.T. -0.02 min

Lab File: VF060709.D

Acq: 13 Nov 2018 12:35

Instrument :

MSVOA_F

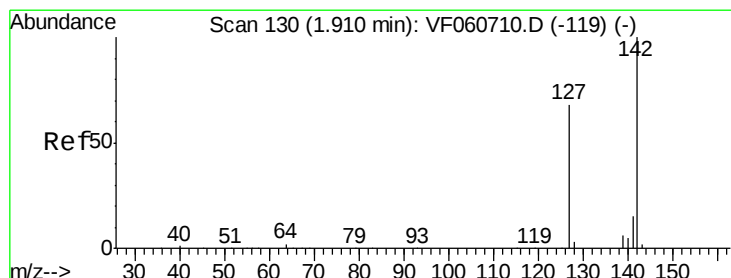
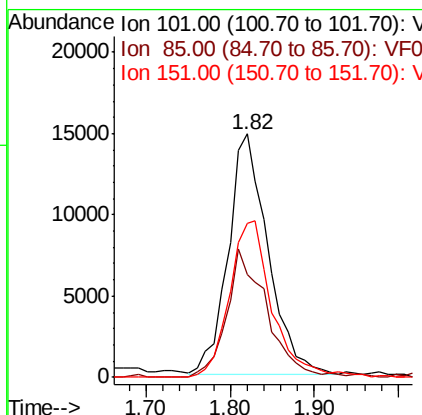
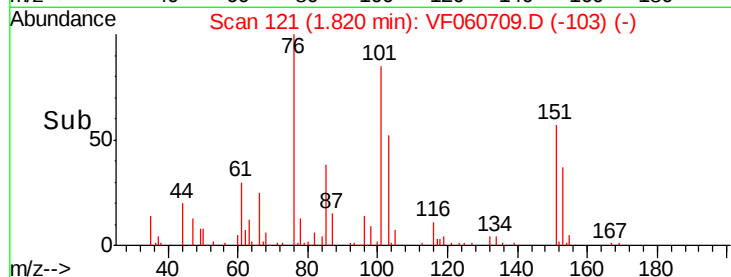
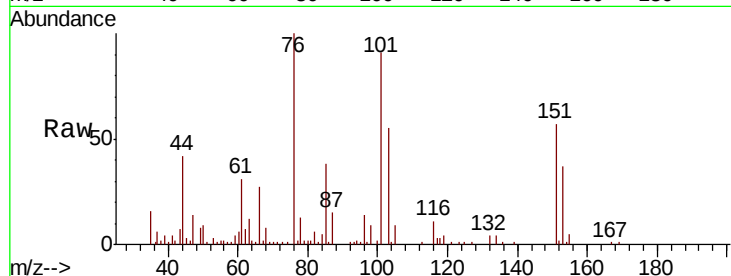
ClientSampleId :

VSTDIC020

Tot Ion:	101	Resp:	48685
Ion Ratio	Lower	Upper	
101	100		
85	42.4	43.6	65.4#
151	63.4	53.1	79.7

Manual Integrations
APPROVED

sam
11/14/2018 11:53:36 AM



#10

Methyl Iodide

Concen: 20.553 ug/l

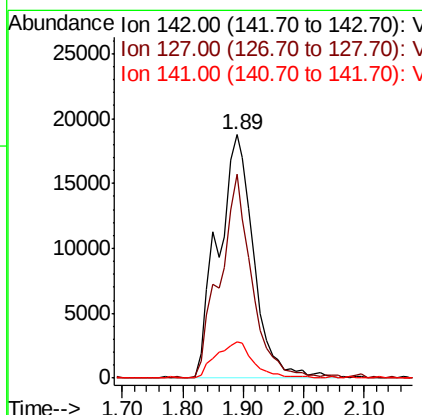
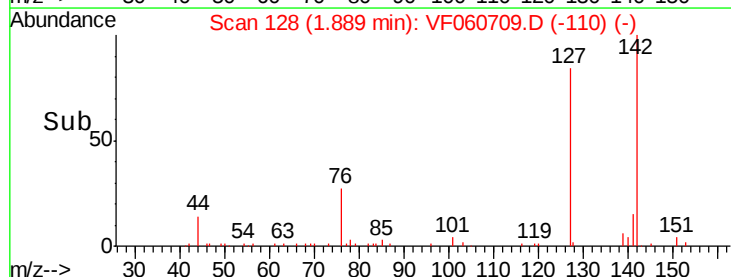
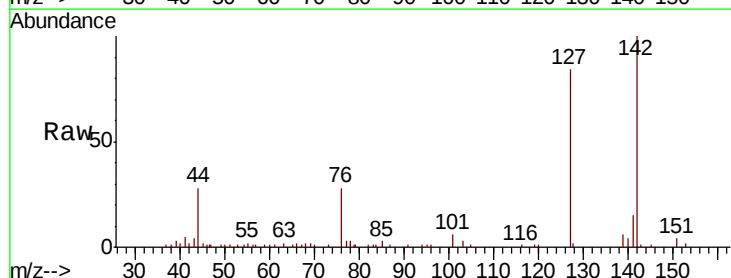
RT: 1.89 min Scan# 128

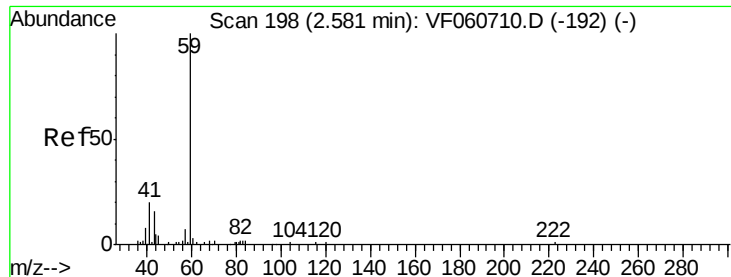
Delta R.T. -0.02 min

Lab File: VF060709.D

Acq: 13 Nov 2018 12:35

Tgt Ion:	142	Resp:	76725
Ion Ratio	Lower	Upper	
142	100		
127	83.6	54.0	81.0#
141	15.1	12.3	18.5





#11

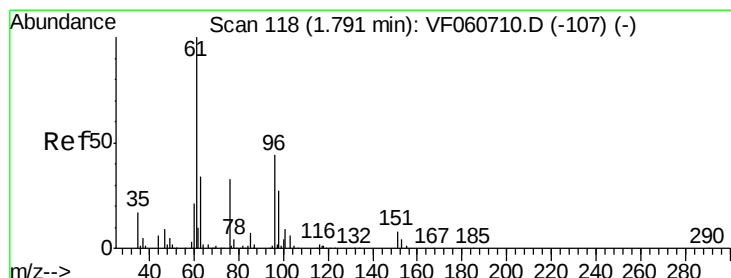
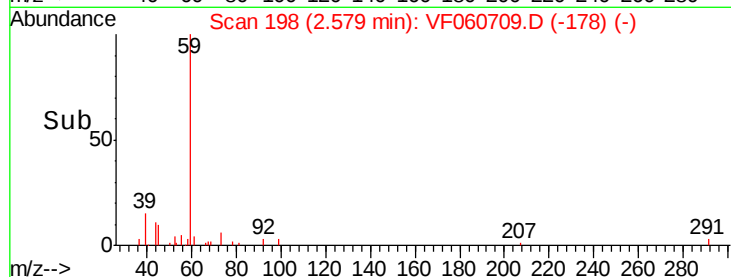
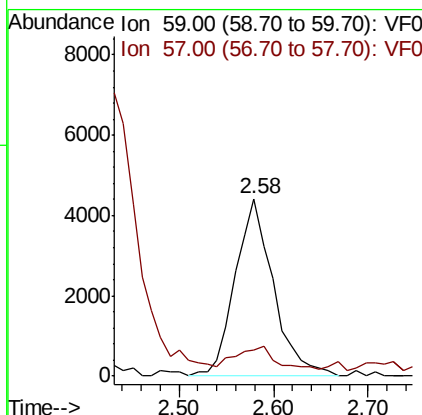
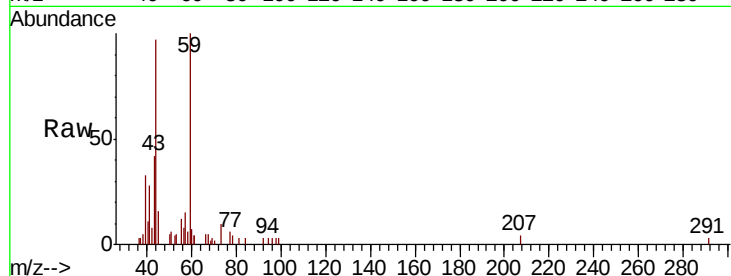
Tert butyl alcohol
 Concen: 102.039 ug/l
 RT: 2.58 min Scan# 198
 Delta R.T. -0.00 min
 Lab File: VF060709.D
 Acq: 13 Nov 2018 12:35

Instrument :
 MSVOA_F
 ClientSampleId :
 VSTDIC020

Tot Ion	59	Resp	12425
Ion Ratio	100	Lower	Upper
57	15.1	10.5	15.7

Manual Integrations
 APPROVED

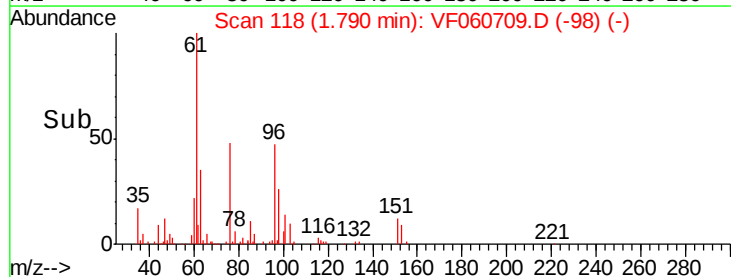
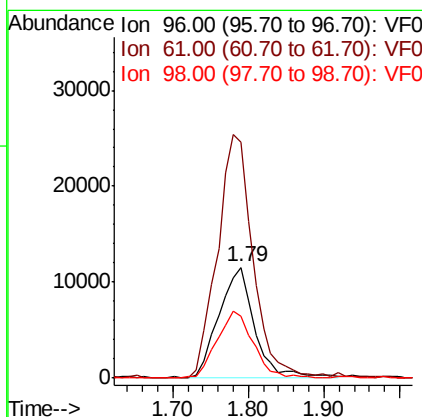
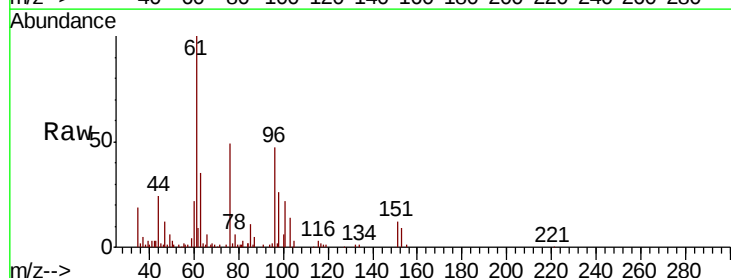
sam
 11/14/2018 11:53:36 AM

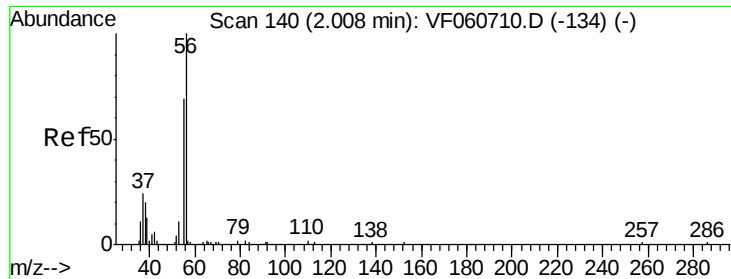


#12

1,1-Dichloroethene
 Concen: 19.789 ug/l
 RT: 1.79 min Scan# 118
 Delta R.T. -0.00 min
 Lab File: VF060709.D
 Acq: 13 Nov 2018 12:35

Tgt Ion	96	Resp	37871
Ion Ratio	100	Lower	Upper
61	212.9	182.2	273.2
98	55.9	49.2	73.8





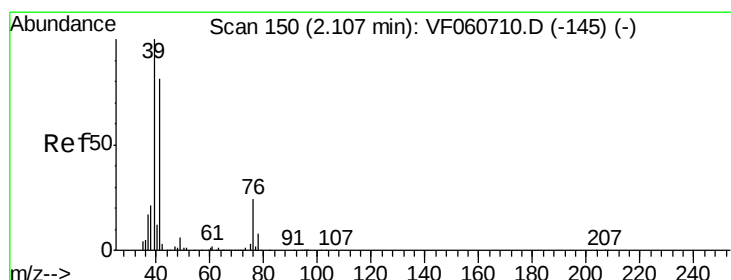
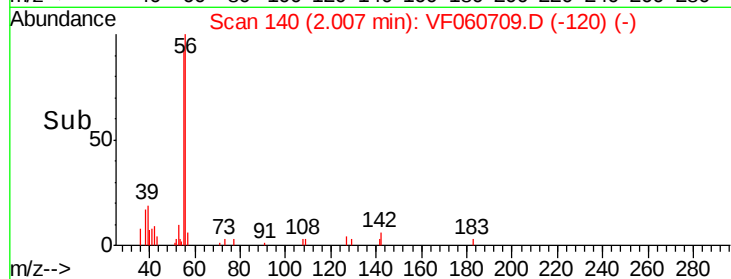
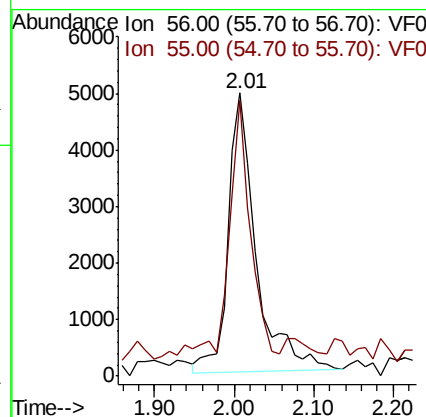
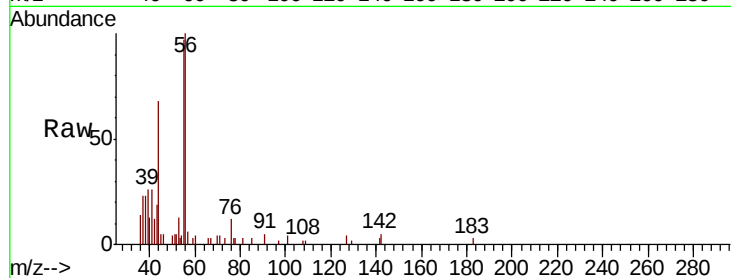
#13
Acrolein
Concen: 109.262 ug/l
RT: 2.01 min Scan# 140
Delta R.T. -0.00 min
Lab File: VF060709.D
Acq: 13 Nov 2018 12:35

Instrument :
MSVOA_F
ClientSampleId :
VSTDIC020

Tot Ion	Ratio	Lower	Upper
56	100		
55	97.3	56.6	85.0#

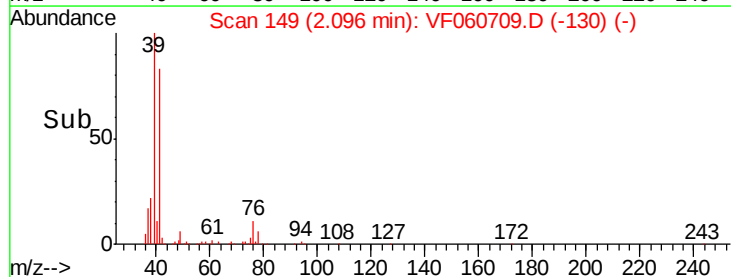
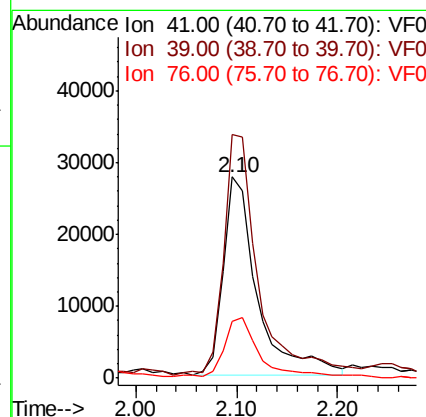
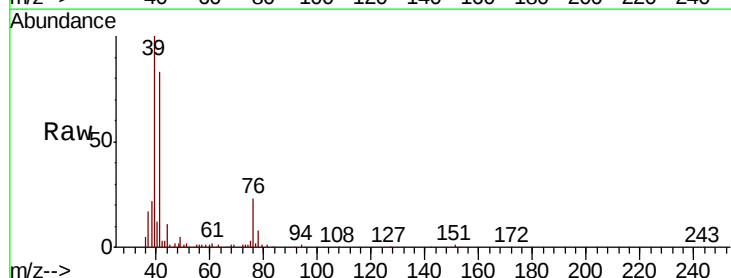
Manual Integrations
APPROVED

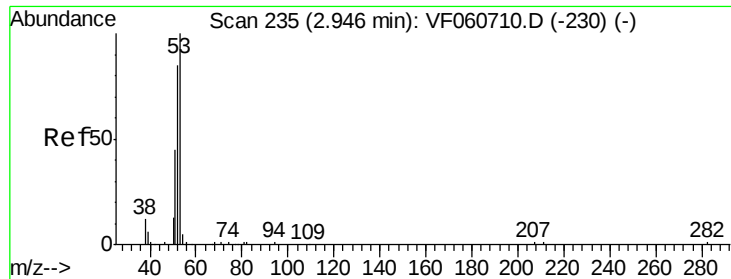
sam
11/14/2018 11:53:36 AM



#14
Allyl chloride
Concen: 19.531 ug/l
RT: 2.10 min Scan# 149
Delta R.T. -0.01 min
Lab File: VF060709.D
Acq: 13 Nov 2018 12:35

Tgt Ion	Ratio	Lower	Upper
41	100		
39	121.1	98.5	147.7
76	28.0	24.5	36.7





#15

Acrylonitrile

Concen: 100.482 ug/l

RT: 2.94 min Scan# 235

Delta R.T. -0.00 min

Lab File: VF060709.D

Acq: 13 Nov 2018 12:35

Instrument :

MSVOA_F

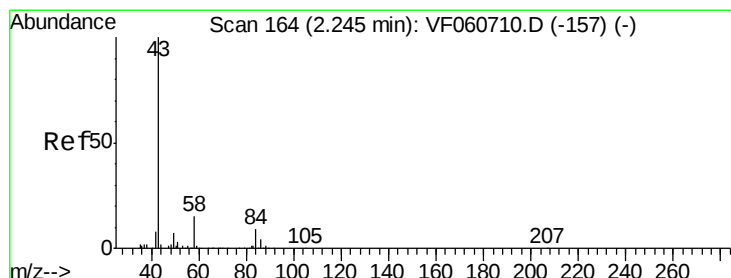
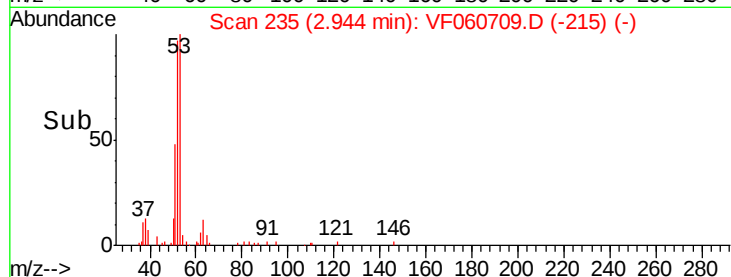
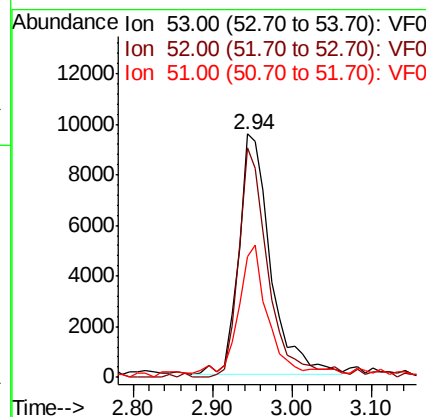
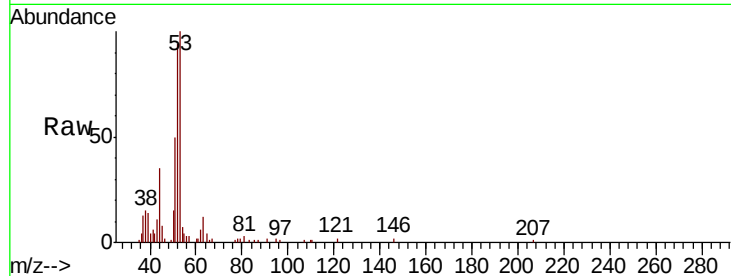
ClientSampleId :

VSTDIC020

Tot Ion:	53	Resp:	26072
Ion	Ratio	Lower	Upper
53	100		
52	94.5	68.8	103.2
51	49.6	36.7	55.1

Manual Integrations
APPROVED

sam
11/14/2018 11:53:36 AM



#16

Acetone

Concen: 90.824 ug/l

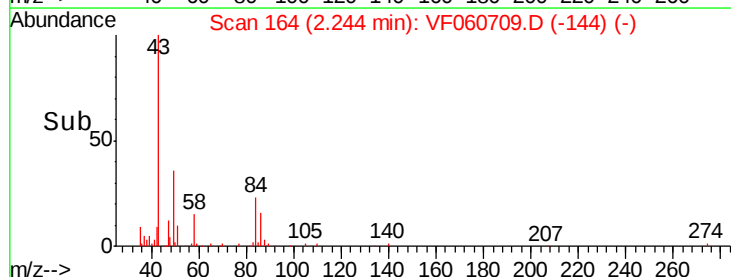
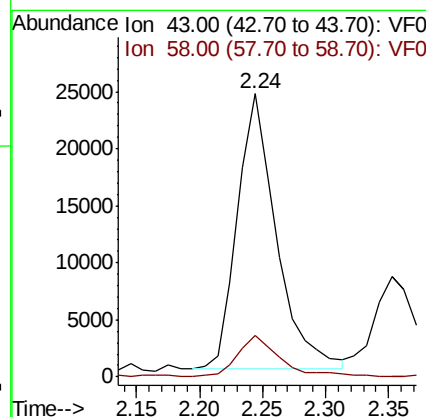
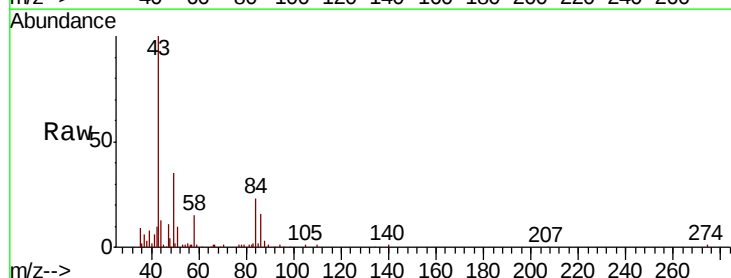
RT: 2.24 min Scan# 164

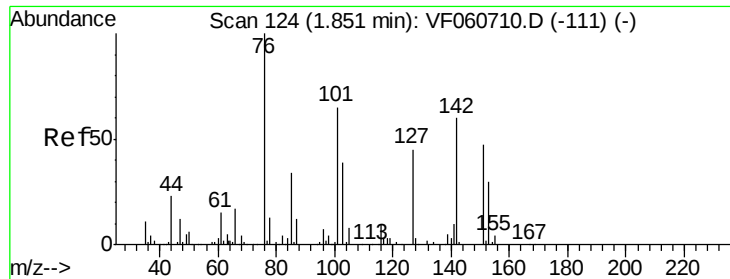
Delta R.T. -0.00 min

Lab File: VF060709.D

Acq: 13 Nov 2018 12:35

Tgt Ion:	43	Resp:	51941
Ion	Ratio	Lower	Upper
43	100		
58	14.6	11.6	17.4





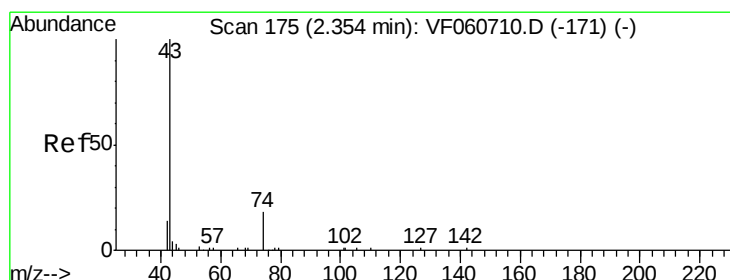
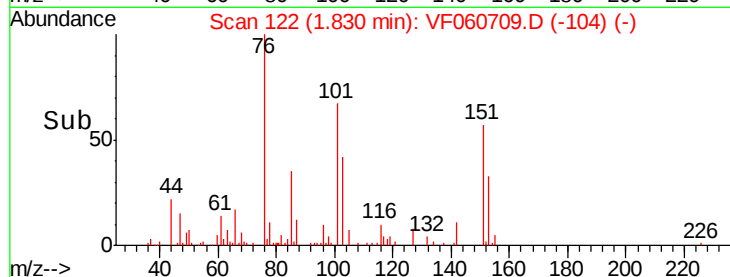
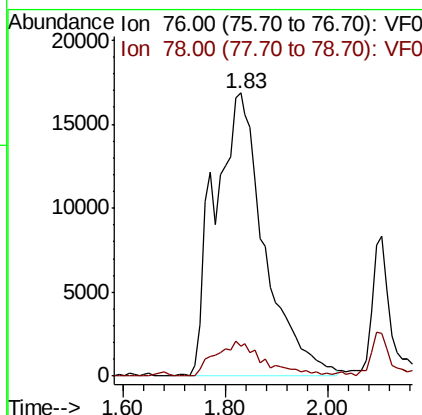
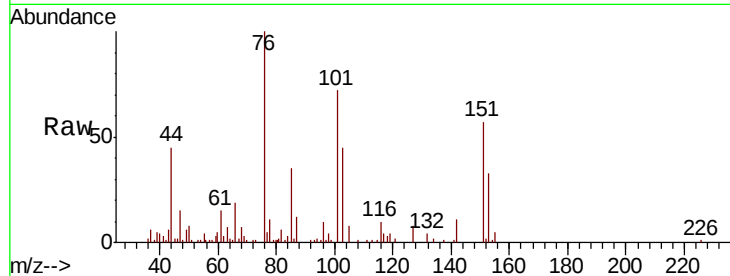
#17
Carbon Disulfide
Concen: 19.898 ug/l m
RT: 1.83 min Scan# 122
Delta R.T. -0.02 min
Lab File: VF060709.D
Acq: 13 Nov 2018 12:35

Instrument :
MSVOA_F
ClientSampleId :
VSTDIC020

Tot Ion: 76 Resp: 115015
Ion Ratio Lower Upper
76 100
78 10.7 10.5 15.7

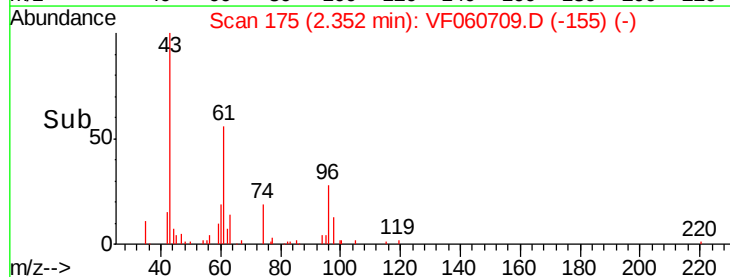
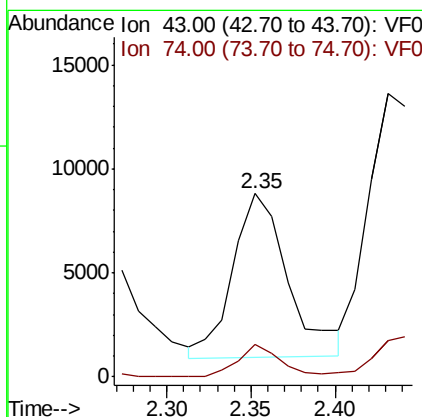
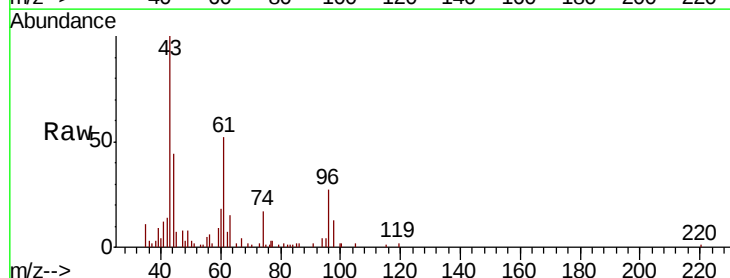
Manual Integrations
APPROVED

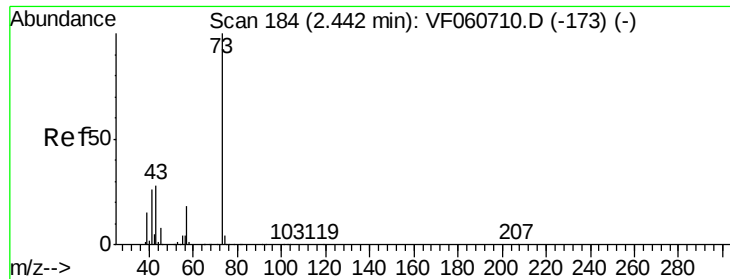
sam
11/14/2018 11:53:36 AM



#18
Methyl Acetate
Concen: 17.725 ug/l
RT: 2.35 min Scan# 175
Delta R.T. -0.00 min
Lab File: VF060709.D
Acq: 13 Nov 2018 12:35

Tgt Ion: 43 Resp: 18084
Ion Ratio Lower Upper
43 100
74 17.5 11.8 17.8





#19

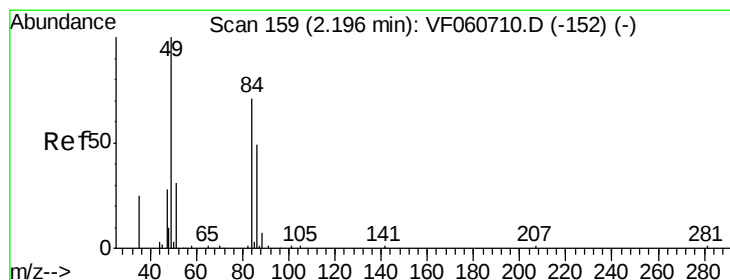
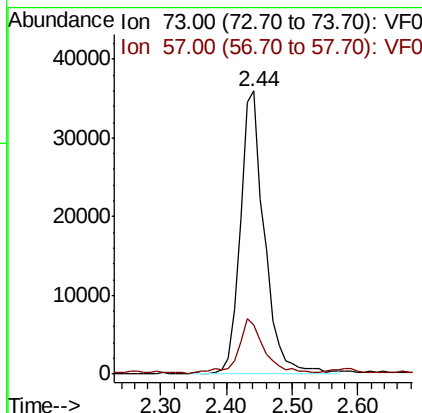
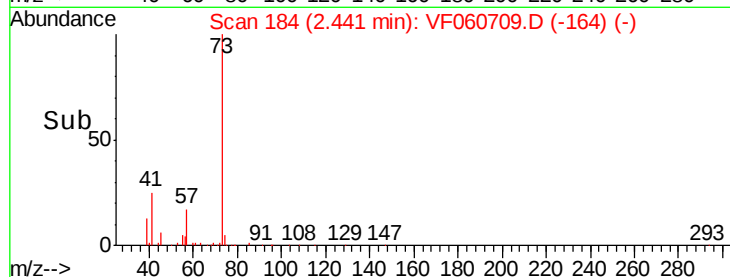
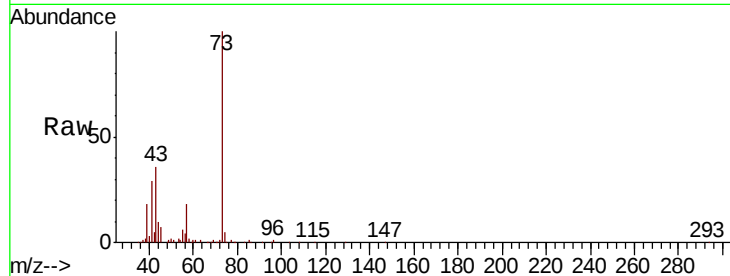
Methyl tert-butyl Ether
 Concen: 20.256 ug/l
 RT: 2.44 min Scan# 184
 Delta R.T. -0.00 min
 Lab File: VF060709.D
 Acq: 13 Nov 2018 12:35

Instrument :
 MSVOA_F
 ClientSampleId :
 VSTDIC020

Tot Ion	73	Resp	92996
Ion Ratio	Lower	Upper	
73	100		
57	17.5	14.3	21.5

Manual Integrations
 APPROVED

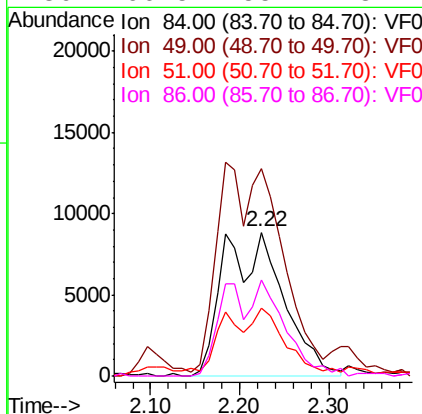
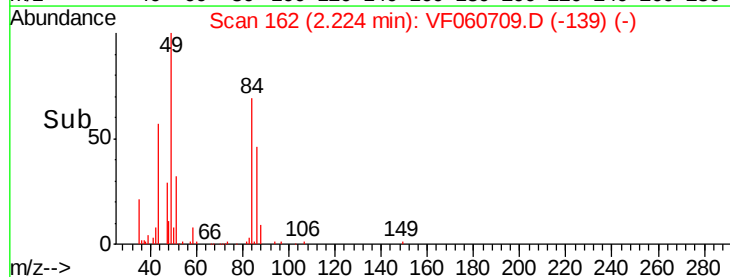
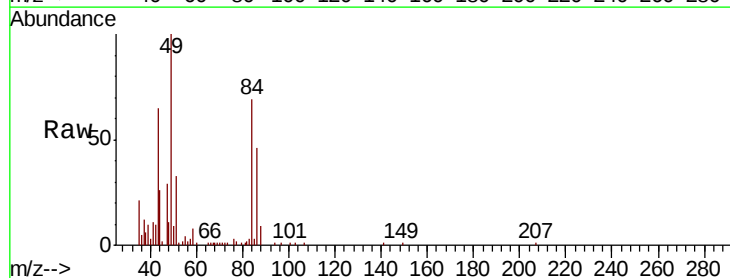
sam
 11/14/2018 11:53:36 AM

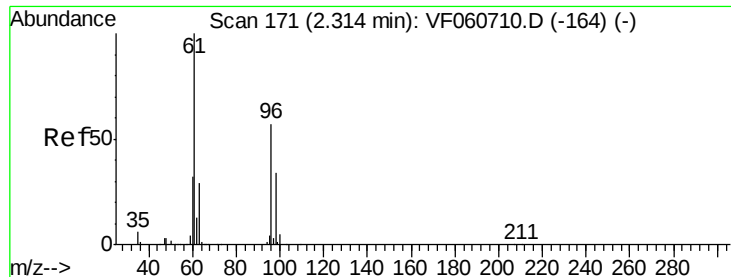


#20

Methylene Chloride
 Concen: 19.153 ug/l m
 RT: 2.22 min Scan# 162
 Delta R.T. 0.03 min
 Lab File: VF060709.D
 Acq: 13 Nov 2018 12:35

Tgt Ion	84	Resp	41426
Ion Ratio	Lower	Upper	
84	100		
49	143.9	120.2	180.4
51	47.4	37.2	55.8
86	66.5	55.1	82.7





#21

trans-1,2-Dichloroethene

Concen: 19.389 ug/l

RT: 2.31 min Scan# 171

Delta R.T. -0.00 min

Lab File: VF060709.D

Acq: 13 Nov 2018 12:35

Instrument :

MSVOA_F

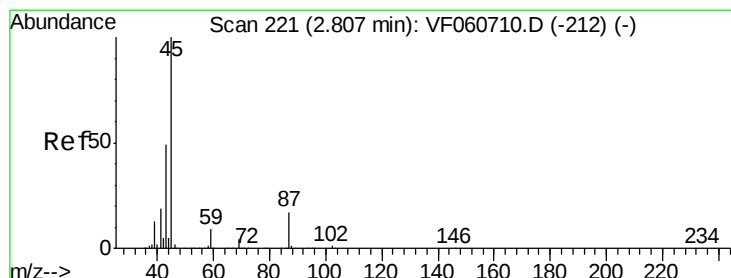
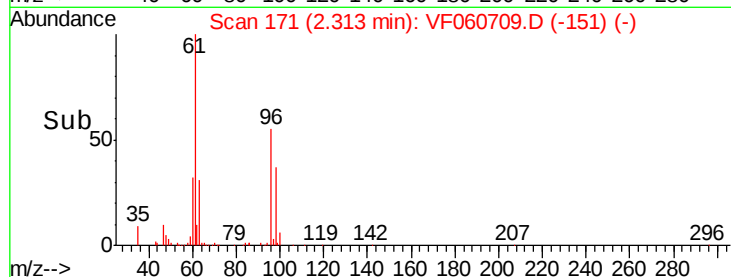
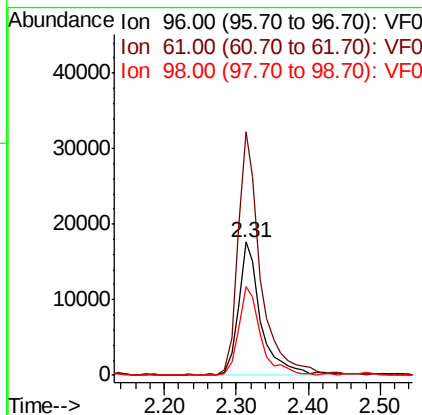
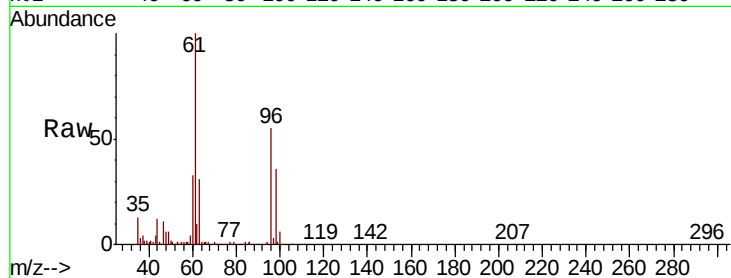
ClientSampleId :

VSTDIC020

Tot Ion:	96	Resp:	38767
Ion	Ratio	Lower	Upper
96	100		
61	182.6	141.6	212.4
98	66.2	47.4	71.0

Manual Integrations
APPROVED

sam
11/14/2018 11:53:36 AM



#22

Diisopropyl ether

Concen: 20.382 ug/l

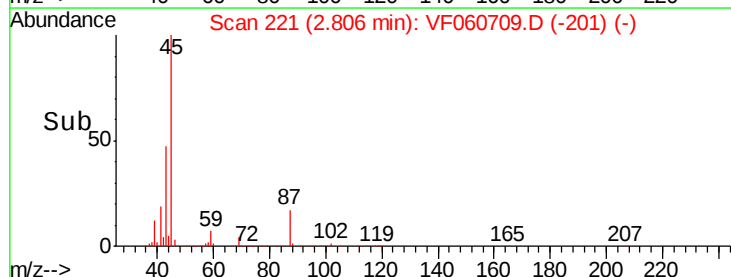
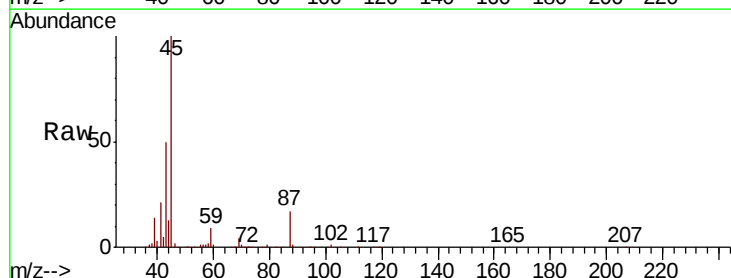
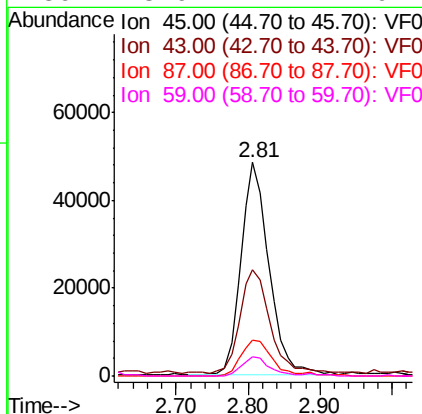
RT: 2.81 min Scan# 221

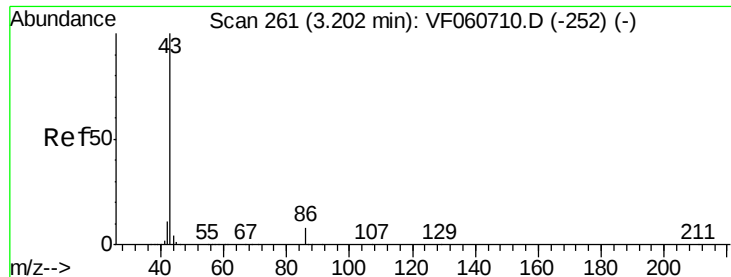
Delta R.T. -0.00 min

Lab File: VF060709.D

Acq: 13 Nov 2018 12:35

Tgt Ion:	45	Resp:	131926
Ion	Ratio	Lower	Upper
45	100		
43	49.6	39.9	59.9
87	16.9	13.9	20.9
59	8.9	7.1	10.7





#23

Vinyl Acetate

Concen: 101.463 ug/l

RT: 3.20 min Scan# 261

Delta R.T. -0.00 min

Lab File: VF060709.D

Acq: 13 Nov 2018 12:35

Instrument :

MSVOA_F

ClientSampleId :

VSTDIC020

Tot Ion: 43 Resp: 309258

Ion Ratio Lower Upper

43 100

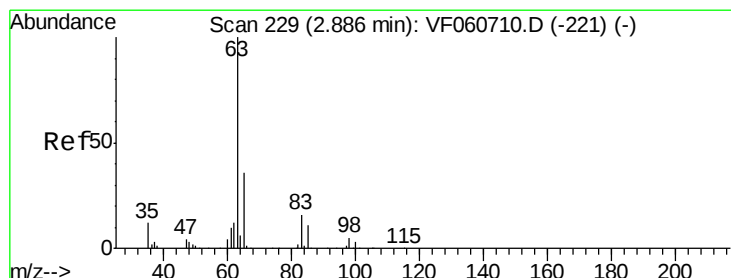
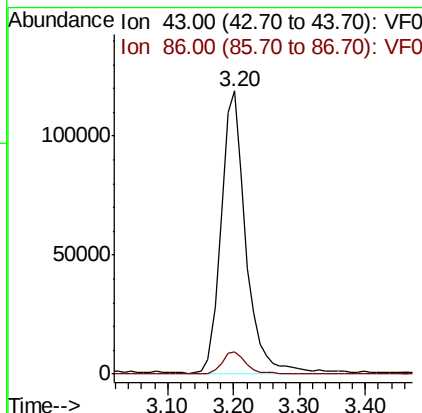
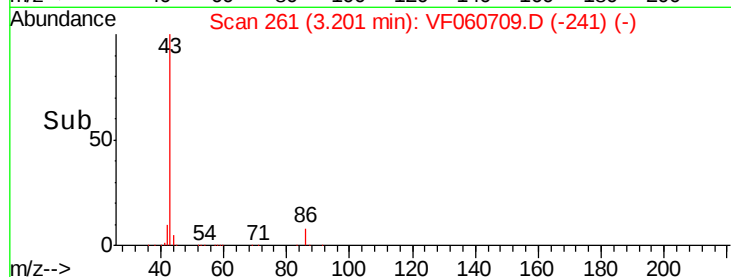
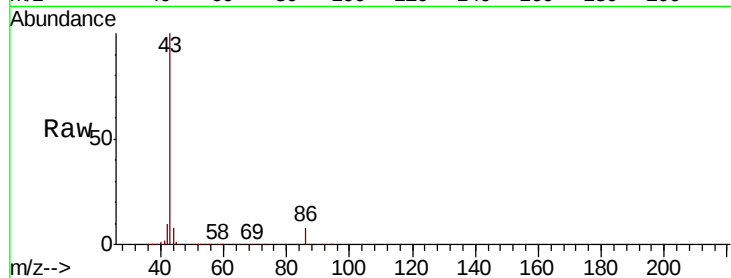
86 7.9 6.4 9.6

Manual Integrations

APPROVED

sam

11/14/2018 11:53:36 AM



#24

1,1-Dichloroethane

Concen: 19.704 ug/l

RT: 2.89 min Scan# 229

Delta R.T. -0.00 min

Lab File: VF060709.D

Acq: 13 Nov 2018 12:35

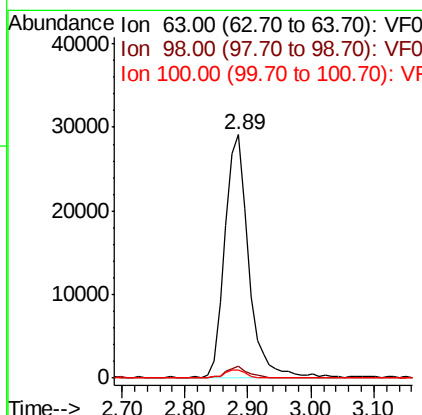
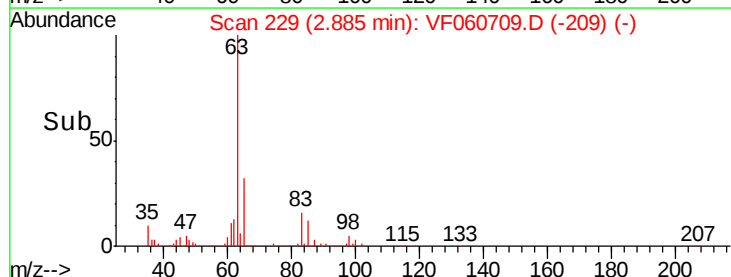
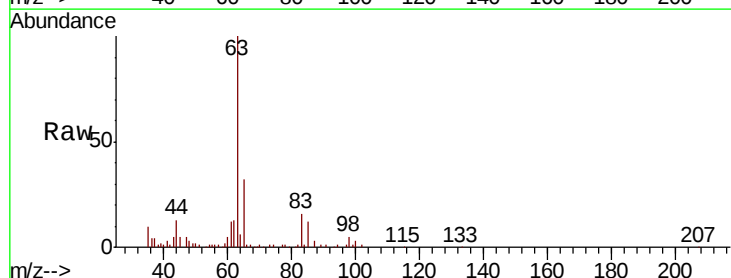
Tgt Ion: 63 Resp: 77215

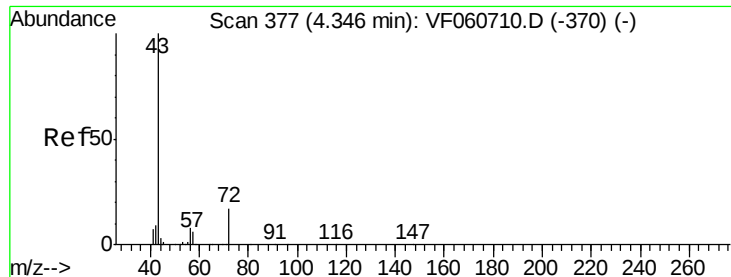
Ion Ratio Lower Upper

63 100

98 4.7 2.4 7.1

100 3.2 1.4 4.2





#25

2-Butanone

Concen: 98.371 ug/l

RT: 4.35 min Scan# 377

Delta R.T. -0.00 min

Lab File: VF060709.D

Acq: 13 Nov 2018 12:35

Instrument :

MSVOA_F

ClientSampleId :

VSTDIC020

Tot Ion: 43 Resp: 92533

Ion Ratio Lower Upper

43 100

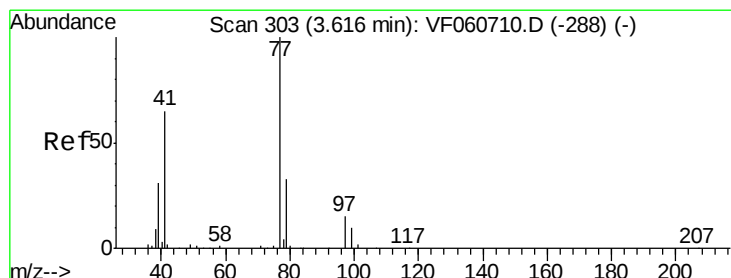
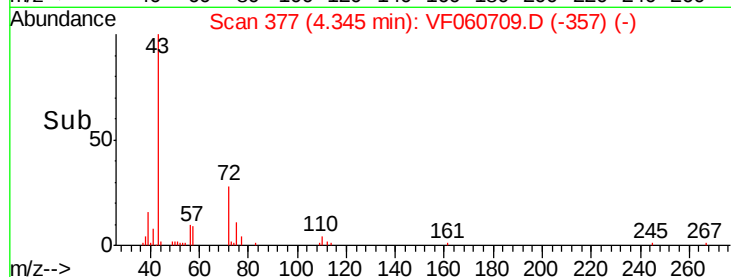
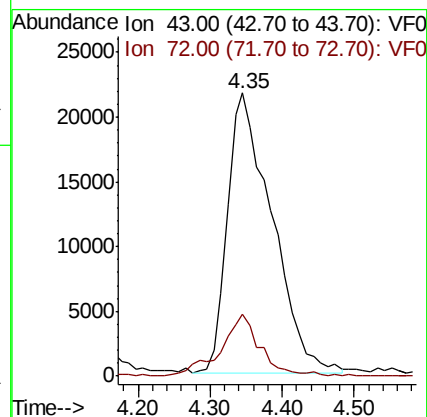
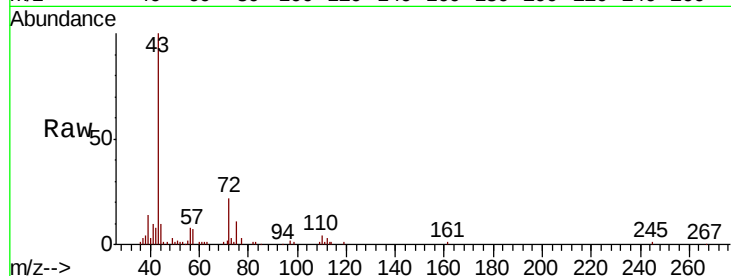
72 21.7 16.1 24.1

Manual Integrations

APPROVED

sam

11/14/2018 11:53:36 AM



#26

2,2-Dichloropropane

Concen: 20.376 ug/l

RT: 3.61 min Scan# 302

Delta R.T. -0.01 min

Lab File: VF060709.D

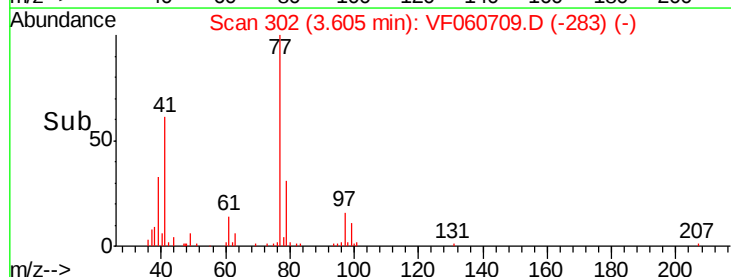
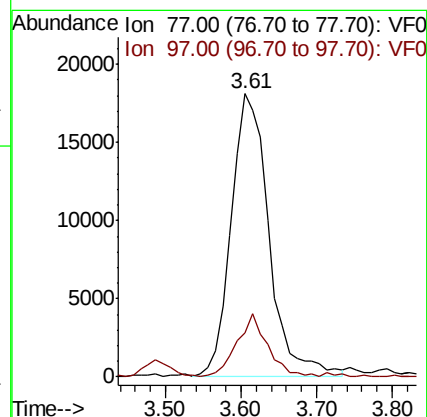
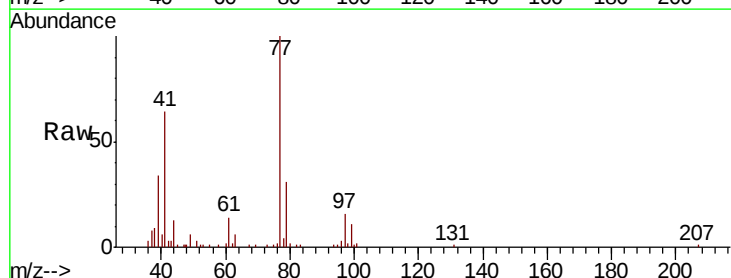
Acq: 13 Nov 2018 12:35

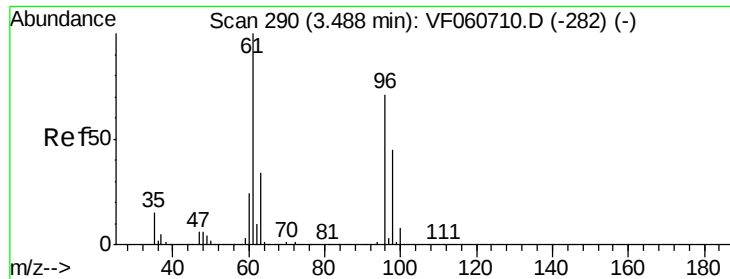
Tgt Ion: 77 Resp: 62833

Ion Ratio Lower Upper

77 100

97 15.7 8.8 26.5





#27

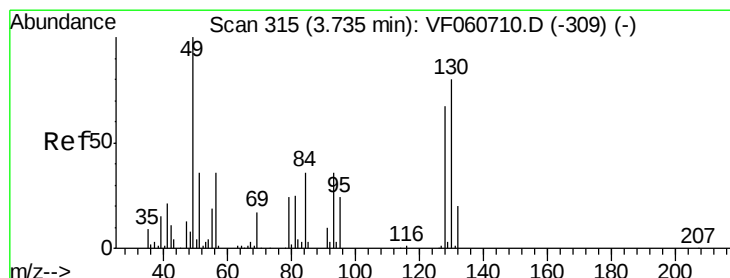
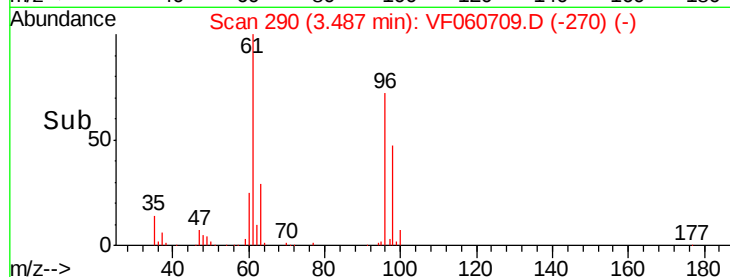
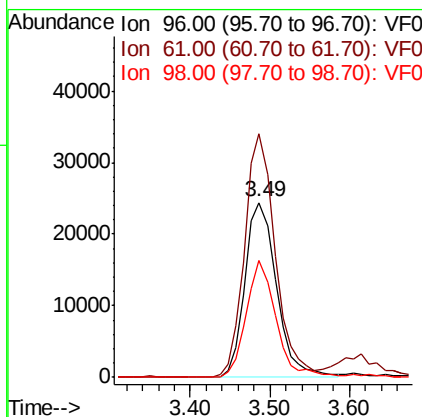
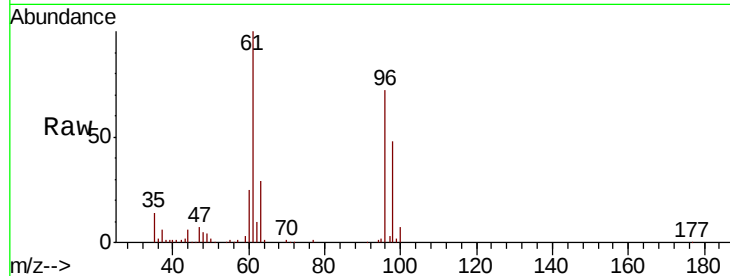
cis-1,2-Dichloroethene
 Concen: 19.752 ug/l
 RT: 3.49 min Scan# 290
 Delta R.T. -0.00 min
 Lab File: VF060709.D
 Acq: 13 Nov 2018 12:35

Instrument :
 MSVOA_F
 ClientSampleId :
 VSTDIC020

Tot Ion	Ratio	Lower	Upper
96	100		
61	139.1	0.0	280.6
98	66.5	0.0	127.6

Manual Integrations
 APPROVED

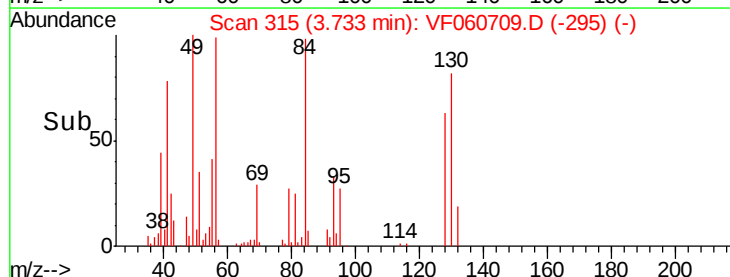
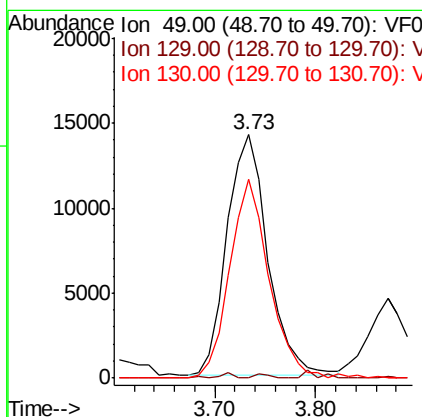
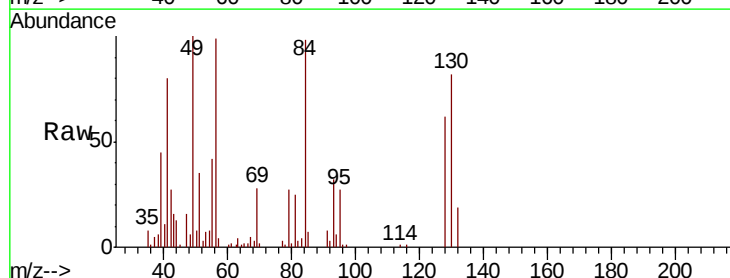
sam
 11/14/2018 11:53:36 AM

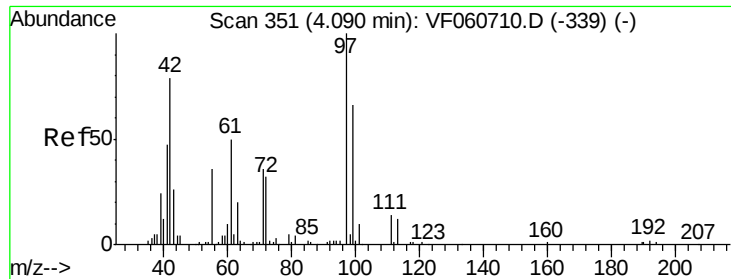


#28

Bromochloromethane
 Concen: 19.727 ug/l
 RT: 3.73 min Scan# 315
 Delta R.T. -0.00 min
 Lab File: VF060709.D
 Acq: 13 Nov 2018 12:35

Tgt Ion	Ratio	Lower	Upper
49	100		
129	0.0	0.0	5.2
130	81.6	63.9	95.9





#29

Tetrahydrofuran

Concen: 97.886 ug/l

RT: 4.08 min Scan# 350

Delta R.T. -0.01 min

Lab File: VF060709.D

Acq: 13 Nov 2018 12:35

Instrument :

MSVOA_F

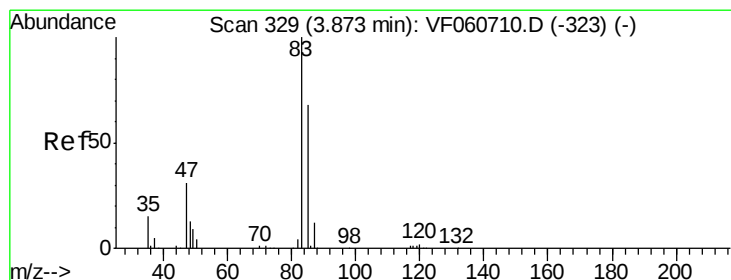
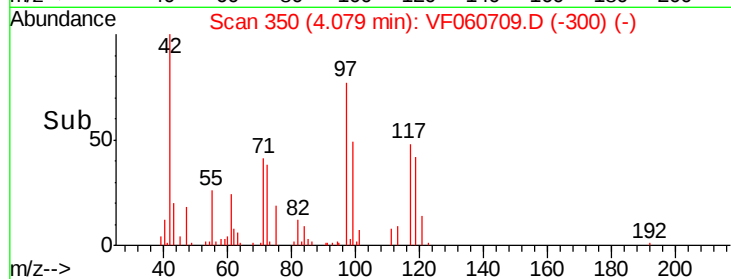
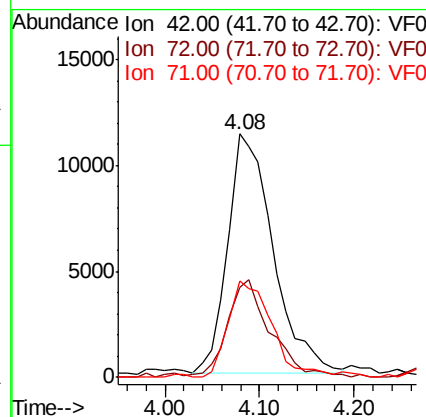
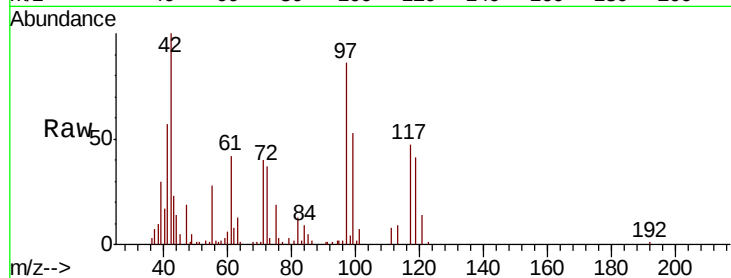
ClientSampleId :

VSTDIC020

Tot Ion:	42	Resp:	37980
Ion	Ratio	Lower	Upper
42	100		
72	38.4	30.3	45.5
71	39.2	32.2	48.2

Manual Integrations
APPROVED

sam
11/14/2018 11:53:36 AM



#30

Chloroform

Concen: 19.759 ug/l

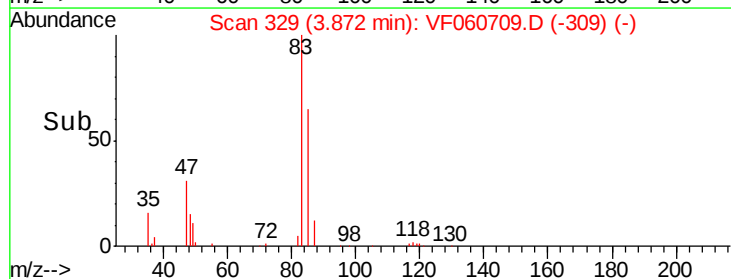
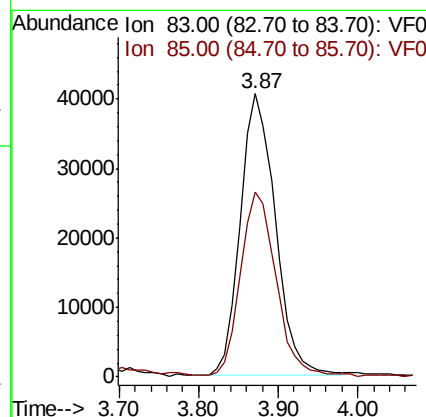
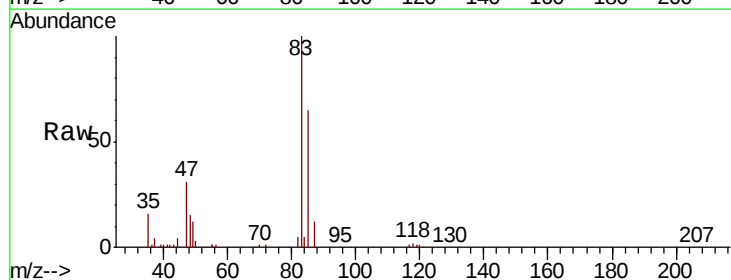
RT: 3.87 min Scan# 329

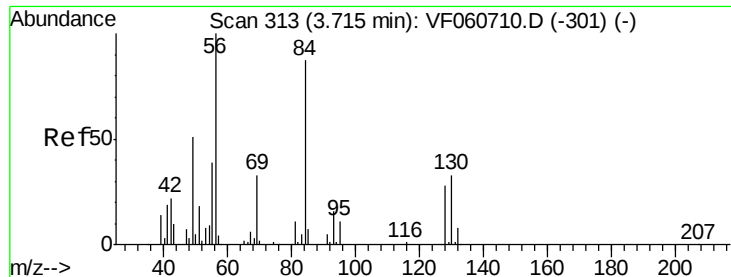
Delta R.T. -0.00 min

Lab File: VF060709.D

Acq: 13 Nov 2018 12:35

Tgt Ion:	83	Resp:	124234
Ion	Ratio	Lower	Upper
83	100		
85	65.4	54.6	82.0





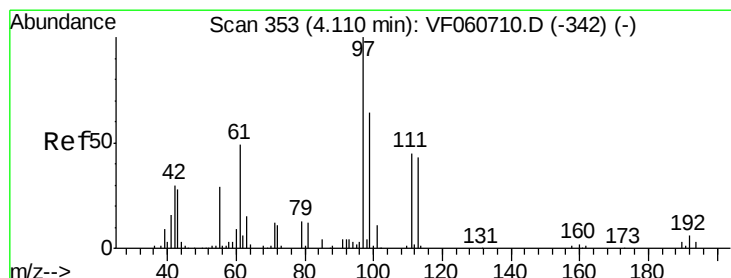
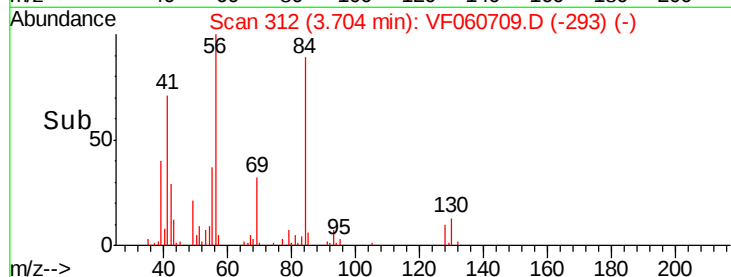
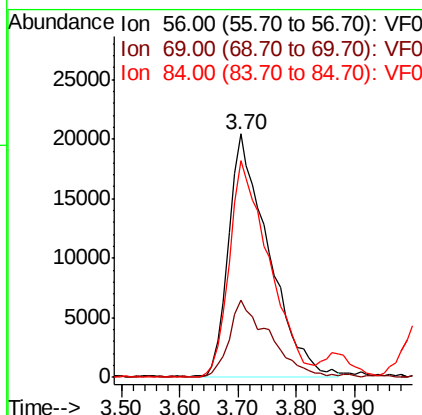
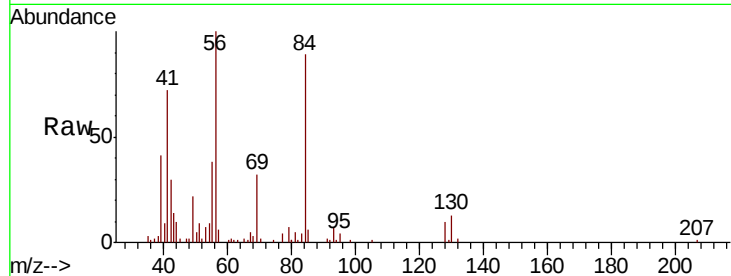
#31
Cyclohexane
Concen: 20.655 ug/l
RT: 3.70 min Scan# 312
Delta R.T. -0.01 min
Lab File: VF060709.D
Acq: 13 Nov 2018 12:35

Instrument :
MSVOA_F
ClientSampleId :
VSTDIC020

Tot Ion	Ion	Ratio	Lower	Upper
56	100			
69	32.0	26.0	39.0	
84	89.0	69.4	104.2	

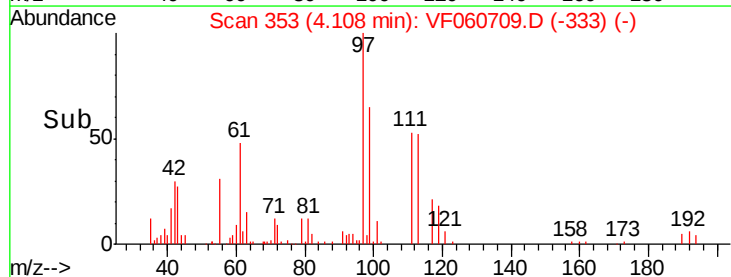
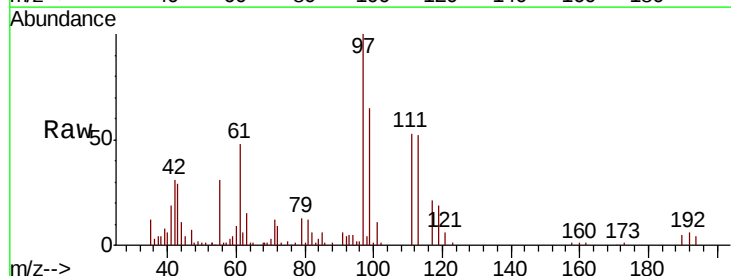
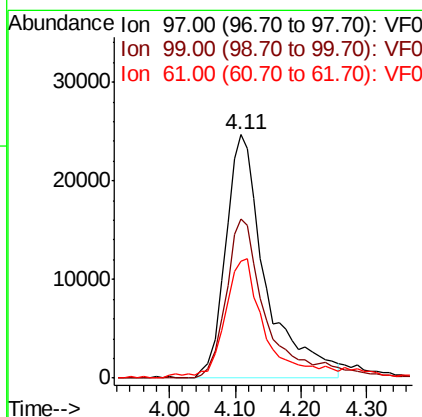
Manual Integrations
APPROVED

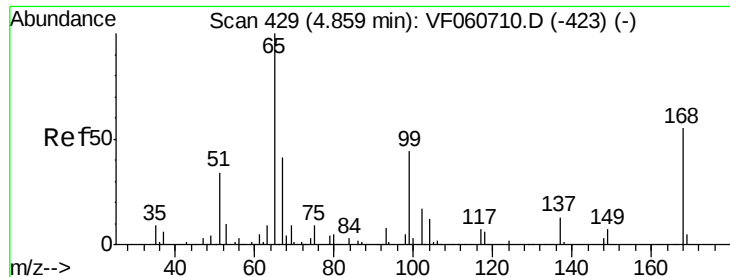
sam
11/14/2018 11:53:36 AM



#32
1,1,1-Trichloroethane
Concen: 21.223 ug/l
RT: 4.11 min Scan# 353
Delta R.T. -0.00 min
Lab File: VF060709.D
Acq: 13 Nov 2018 12:35

Tgt Ion	Ion	Ratio	Lower	Upper
97	100			
99	65.2	51.1	76.7	
61	48.2	40.1	60.1	





#33

1,2-Dichloroethane-d4

Concen: 20.567 ug/l

RT: 4.86 min Scan# 429

Delta R.T. -0.00 min

Lab File: VF060709.D

Acq: 13 Nov 2018 12:35

Tot Ion: 65 Resp: 55028

Ion Ratio Lower Upper

65 100

67 46.0 0.0 90.2

Instrument :

MSVOA_F

ClientSampleId :

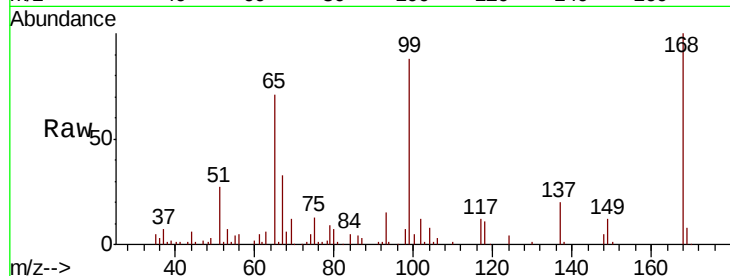
VSTDIC020

Manual Integrations

APPROVED

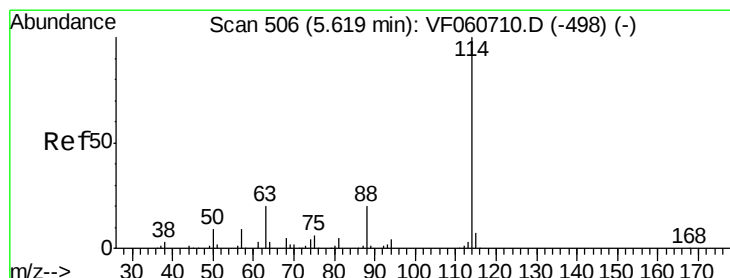
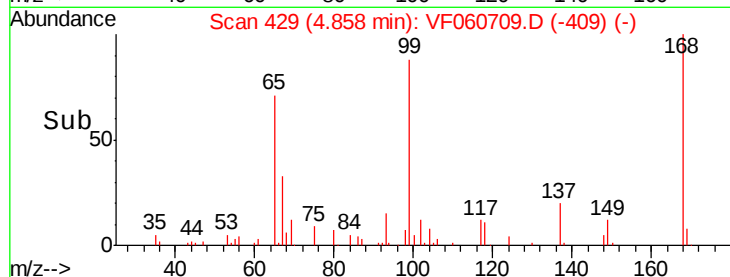
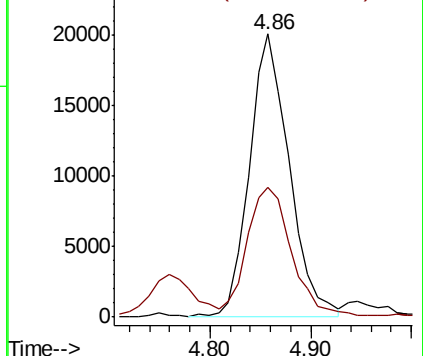
sam

11/14/2018 11:53:36 AM



Abundance Ion 65.00 (64.70 to 65.70): VF0

Ion 67.00 (66.70 to 67.70): VF0



#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 5.61 min Scan# 505

Delta R.T. -0.01 min

Lab File: VF060709.D

Acq: 13 Nov 2018 12:35

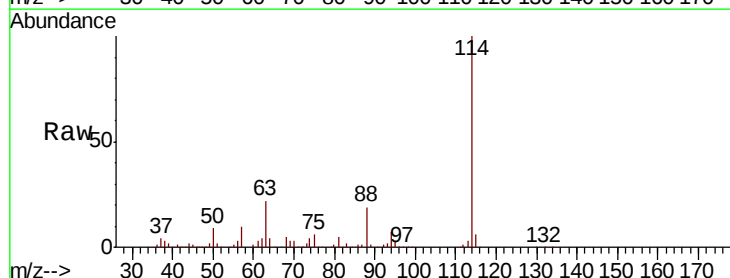
Tgt Ion: 114 Resp: 385527

Ion Ratio Lower Upper

114 100

63 22.0 0.0 40.8

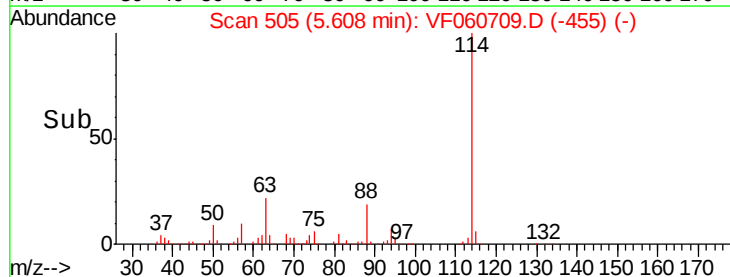
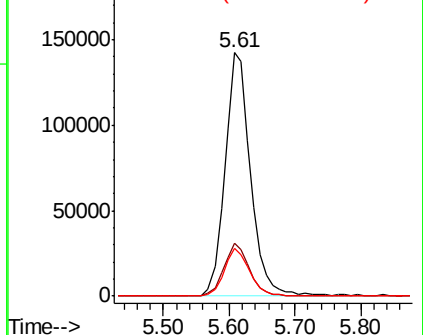
88 19.4 0.0 39.6

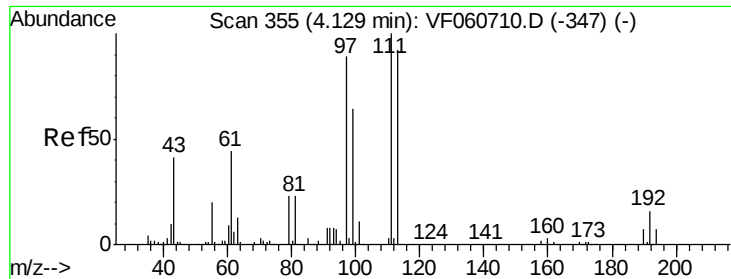


Abundance Ion 114.00 (113.70 to 114.70): V

Ion 63.00 (62.70 to 63.70): VF0

Ion 88.00 (87.70 to 88.70): VF0





#35

Dibromofluoromethane

Concen: 21.397 ug/l

RT: 4.13 min Scan# 355

Delta R.T. -0.00 min

Lab File: VF060709.D

Acq: 13 Nov 2018 12:35

Instrument :

MSVOA_F

ClientSampleId :

VSTDIC020

Tot Ion: 113 Resp: 62009

Ion Ratio Lower Upper

113 100

111 94.0 87.1 130.7

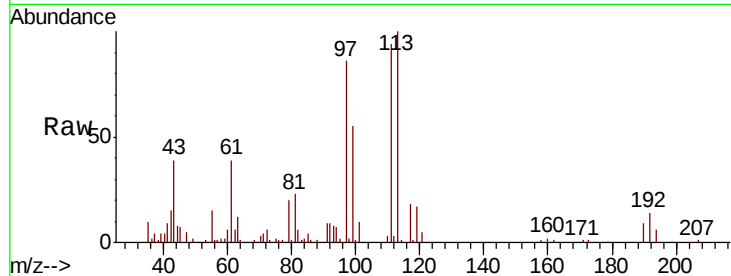
192 14.5 13.8 20.6

Manual Integrations

APPROVED

sam

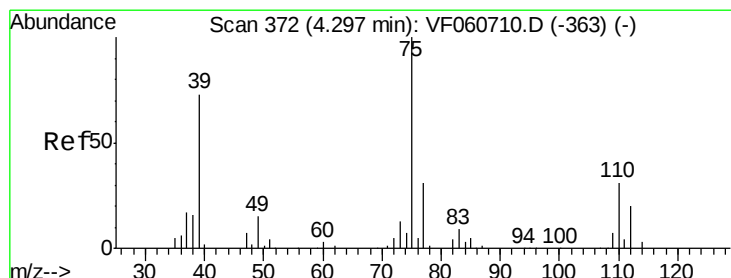
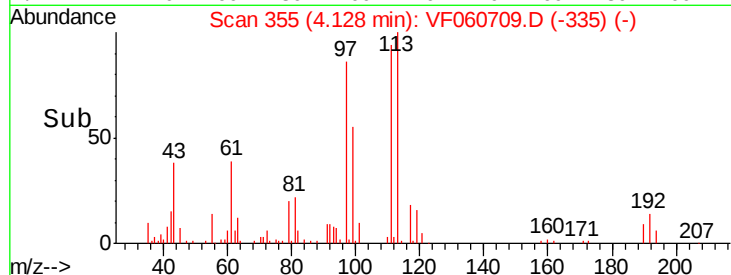
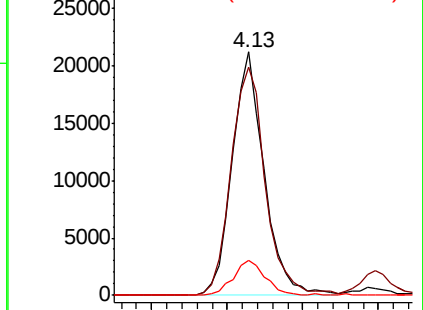
11/14/2018 11:53:36 AM



Abundance Ion 113.00 (112.70 to 113.70): V

Ion 111.00 (110.70 to 111.70): V

Ion 192.00 (191.70 to 192.70): V



#36

1,1-Dichloropropene

Concen: 20.993 ug/l

RT: 4.30 min Scan# 372

Delta R.T. -0.00 min

Lab File: VF060709.D

Acq: 13 Nov 2018 12:35

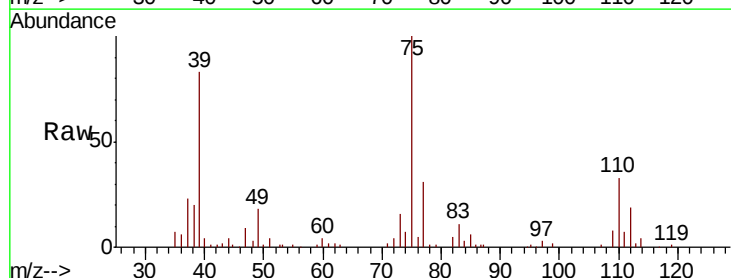
Tgt Ion: 75 Resp: 93862

Ion Ratio Lower Upper

75 100

110 32.9 15.6 46.8

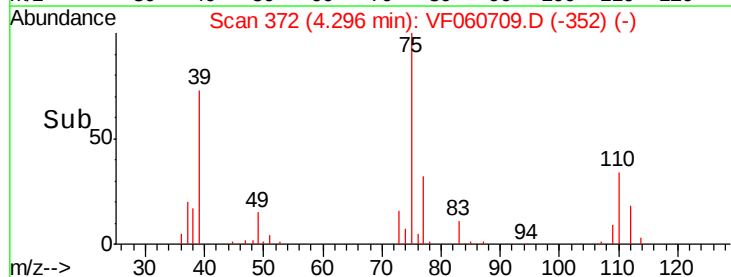
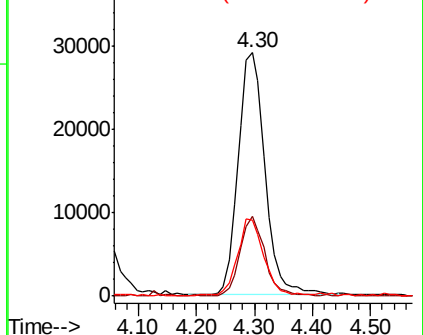
77 31.0 25.0 37.6

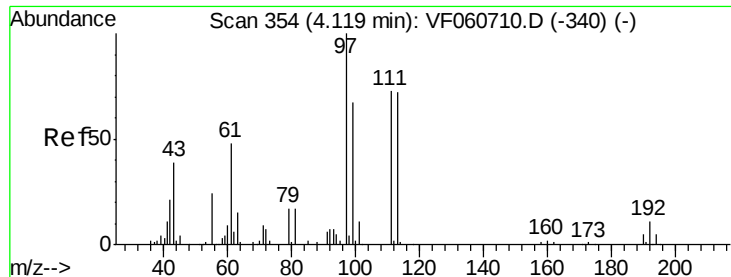


Abundance Ion 75.00 (74.70 to 75.70): VF0

Ion 110.00 (109.70 to 110.70): V

Ion 77.00 (76.70 to 77.70): VF0





#37

Ethyl Acetate

Concen: 21.319 ug/l

RT: 4.12 min Scan# 354

Delta R.T. -0.00 min

Lab File: VF060709.D

Acq: 13 Nov 2018 12:35

Instrument :

MSVOA_F

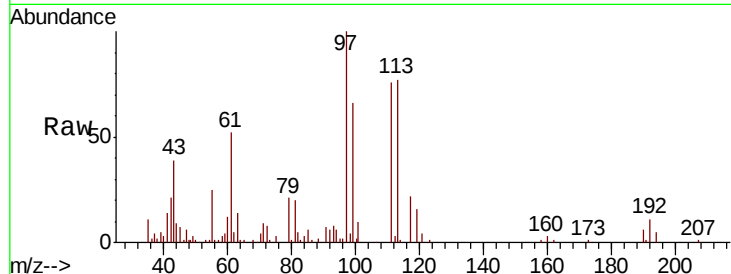
ClientSampleId :

VSTDIC020

Tot Ion:	43	Resp:	35439
Ion	Ratio	Lower	Upper
43	100		
61	131.7	98.5	147.7
70	11.1	7.4	11.0#

Manual Integrations
APPROVED

sam
11/14/2018 11:53:36 AM

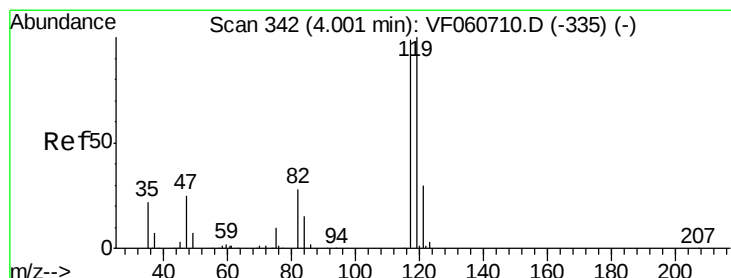
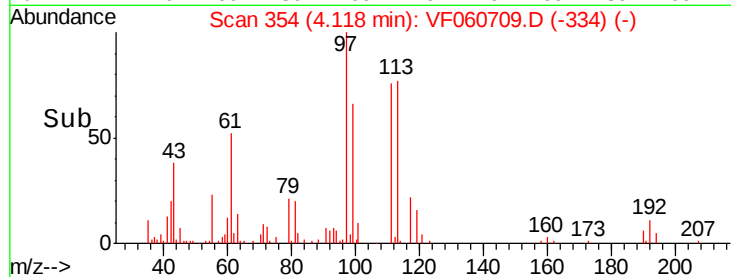
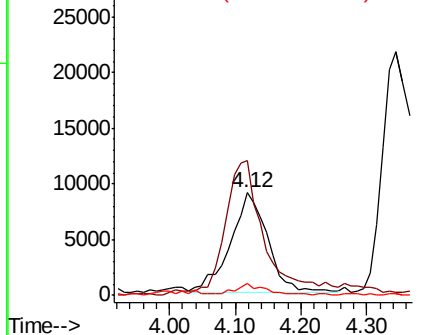


Abundance

Ion 43.00 (42.70 to 43.70): VF0

Ion 61.00 (60.70 to 61.70): VF0

Ion 70.00 (69.70 to 70.70): VF0



#38

Carbon Tetrachloride

Concen: 21.691 ug/l

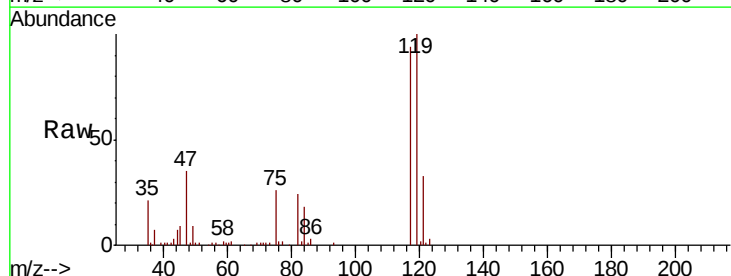
RT: 4.01 min Scan# 343

Delta R.T. 0.01 min

Lab File: VF060709.D

Acq: 13 Nov 2018 12:35

Tgt Ion:	117	Resp:	94105
Ion	Ratio	Lower	Upper
117	100		
119	105.8	80.7	121.1
121	34.8	24.3	36.5

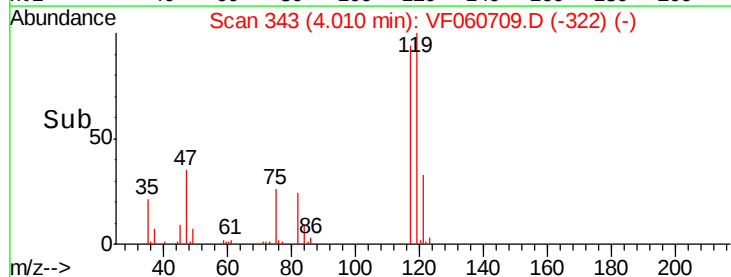
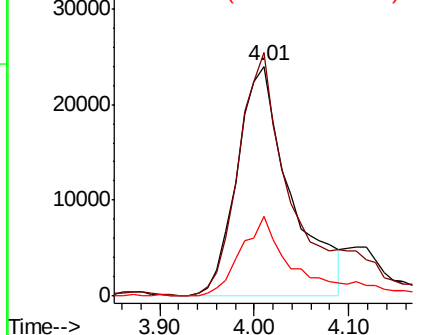


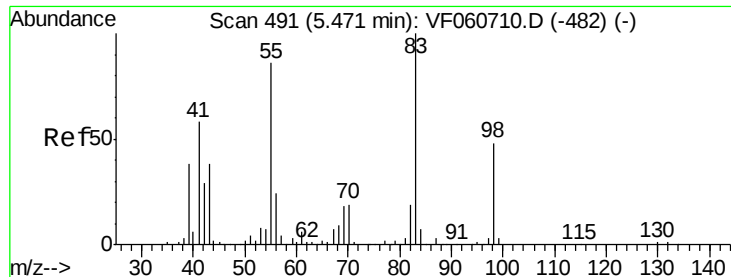
Abundance

Ion 117.00 (116.70 to 117.70): V

Ion 119.00 (118.70 to 119.70): V

Ion 121.00 (120.70 to 121.70): V





#39

Methvlcvclohexane

Concen: 20.742 ug/l

RT: 5.47 min Scan# 491

Delta R.T. -0.00 min

Lab File: VF060709.D

Acq: 13 Nov 2018 12:35

Instrument :

MSVOA_F

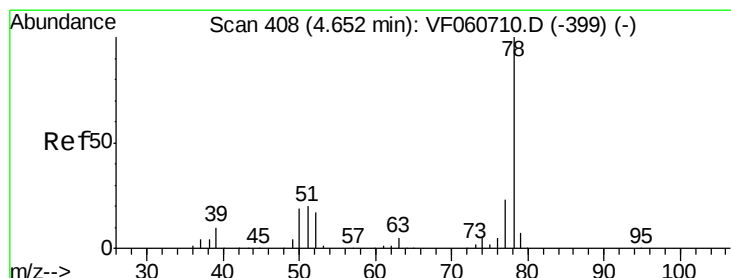
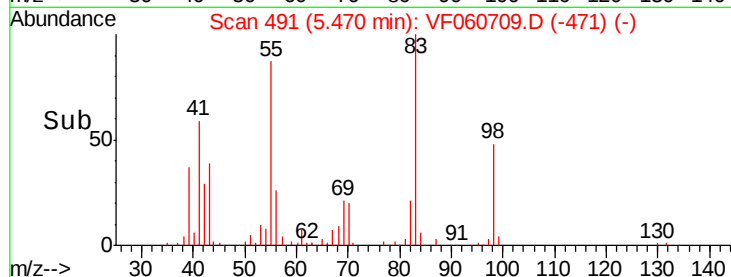
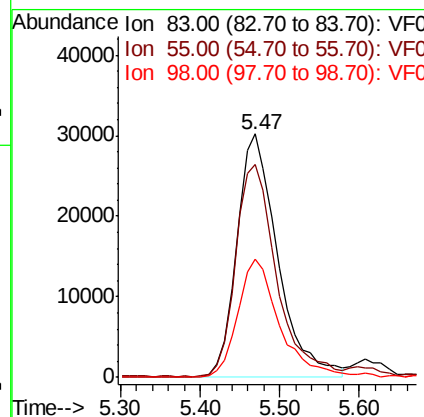
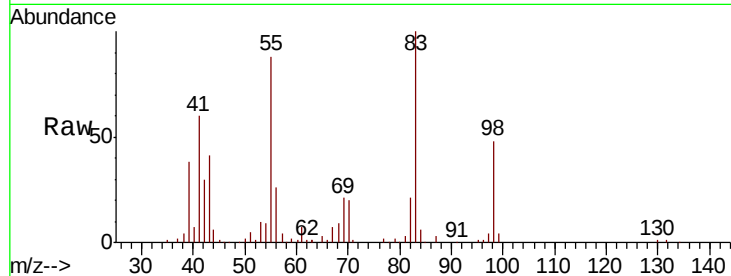
ClientSampleId :

VSTDIC020

Tot Ion:	83	Resp:	107592
Ion	Ratio	Lower	Upper
83	100		
55	87.6	69.0	103.4
98	48.3	38.5	57.7

Manual Integrations
APPROVED

Sam
11/14/2018 11:53:36 AM



#40

Benzene

Concen: 20.631 ug/l

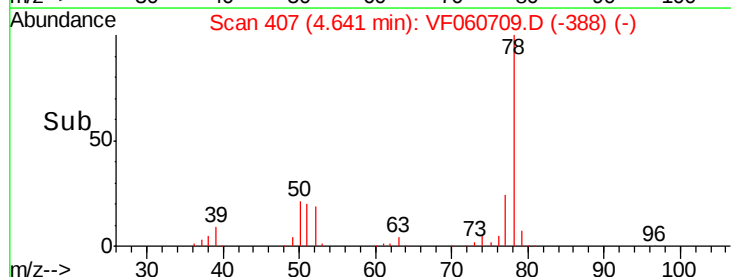
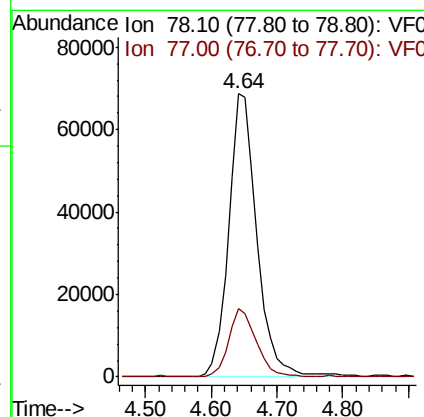
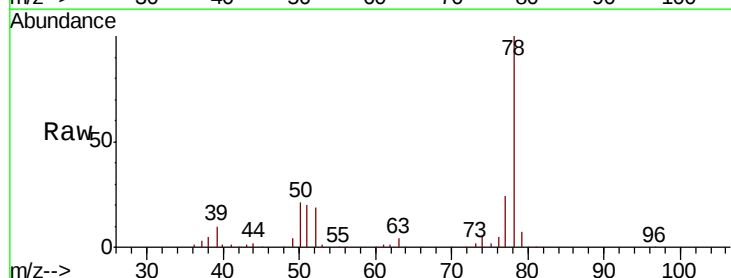
RT: 4.64 min Scan# 407

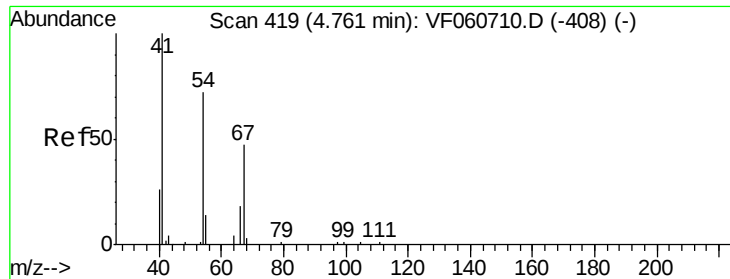
Delta R.T. -0.01 min

Lab File: VF060709.D

Acq: 13 Nov 2018 12:35

Tgt Ion:	78	Resp:	205629
Ion	Ratio	Lower	Upper
78	100		
77	24.1	18.6	28.0





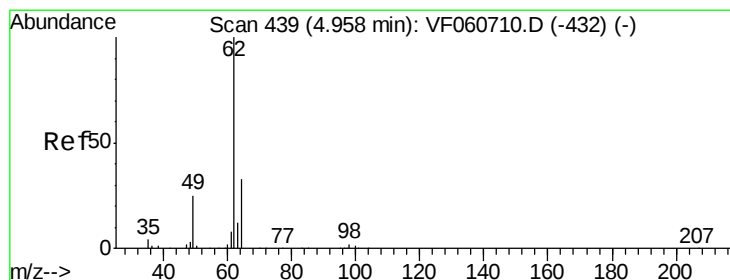
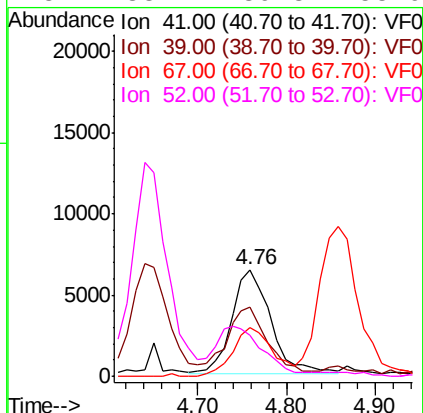
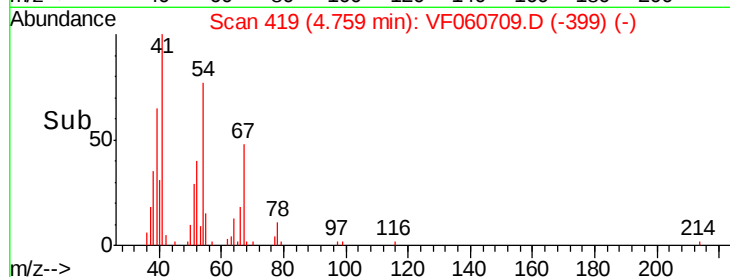
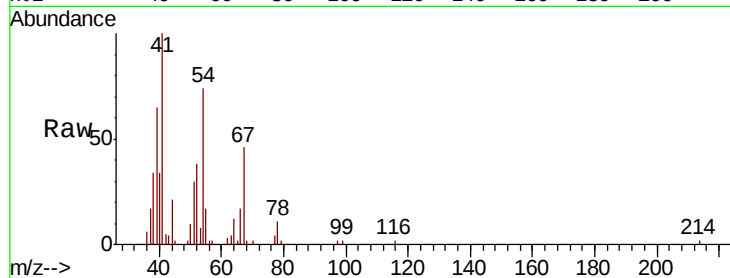
#41
Methacrylonitrile
Concen: 19.008 ug/l
RT: 4.76 min Scan# 419
Delta R.T. -0.00 min
Lab File: VF060709.D
Acq: 13 Nov 2018 12:35

Instrument :
MSVOA_F
ClientSampleId :
VSTDIC020

Tot Ion	Ratio	Lower	Upper
41	100		
39	65.1	47.1	70.7
67	45.8	37.1	55.7
52	38.1	39.3	58.9

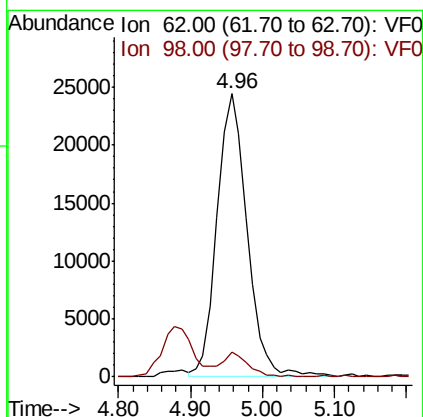
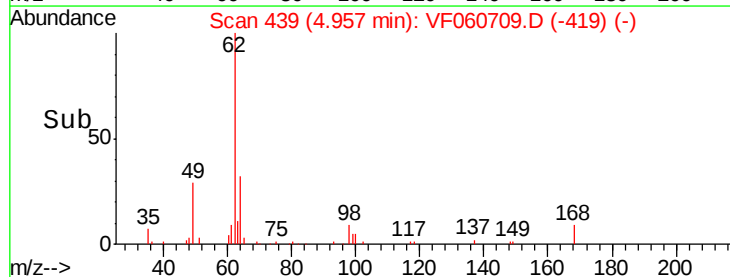
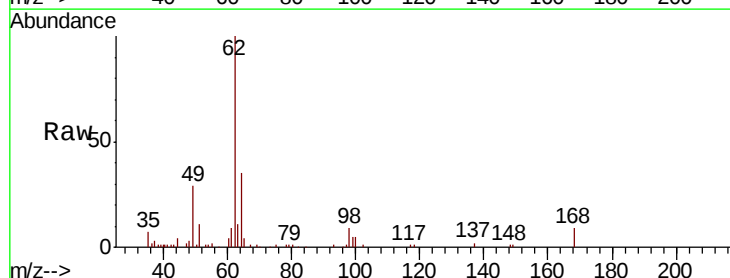
Manual Integrations
APPROVED

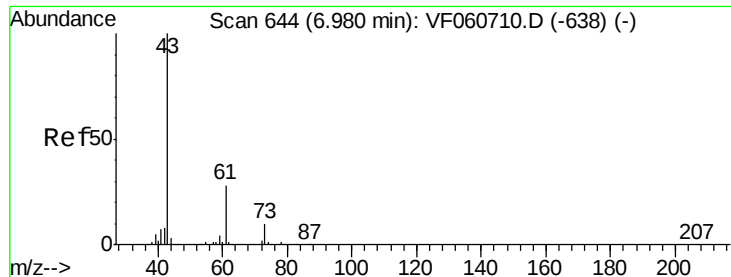
sam
11/14/2018 11:53:36 AM



#42
1,2-Dichloroethane
Concen: 20.529 ug/l
RT: 4.96 min Scan# 439
Delta R.T. -0.00 min
Lab File: VF060709.D
Acq: 13 Nov 2018 12:35

Tgt Ion	Ratio	Lower	Upper
62	100		
98	8.8	0.0	16.6





#43

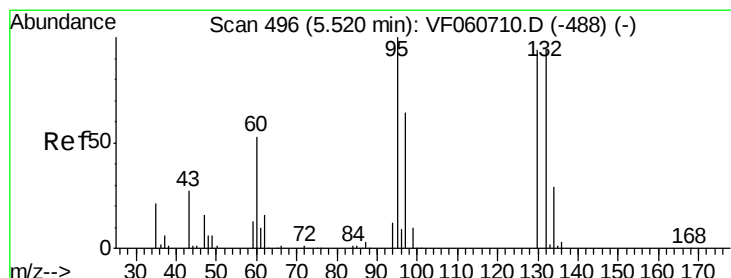
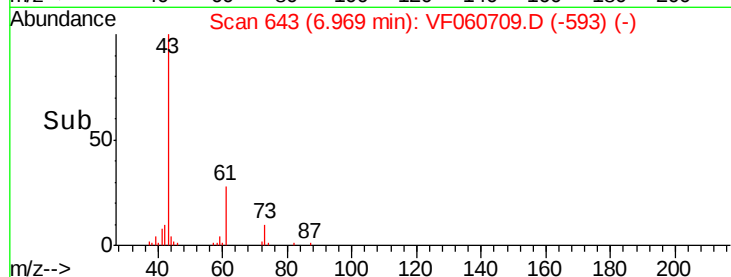
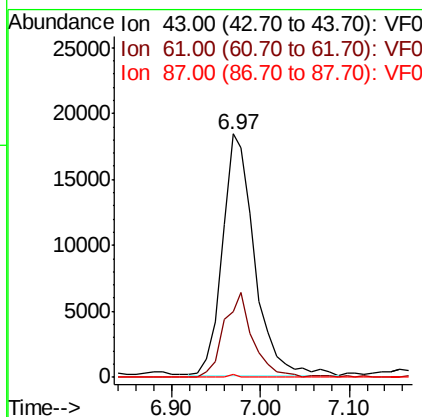
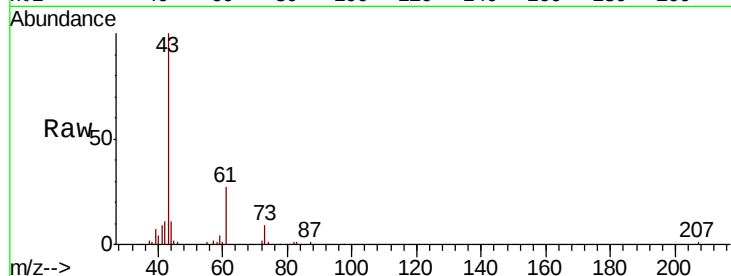
Isopropyl Acetate
 Concen: 21.005 ug/l
 RT: 6.97 min Scan# 643
 Delta R.T. -0.01 min
 Lab File: VF060709.D
 Acq: 13 Nov 2018 12:35

Instrument :
 MSVOA_F
 ClientSampleId :
 VSTDIC020

Tot Ion	Ratio	Lower	Upper
43	100		
61	26.9	22.2	33.4
87	1.2	0.4	0.6

Manual Integrations
 APPROVED

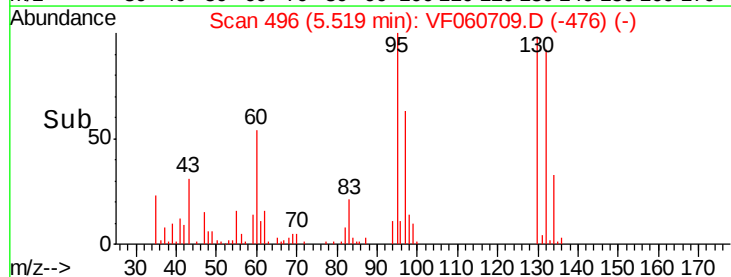
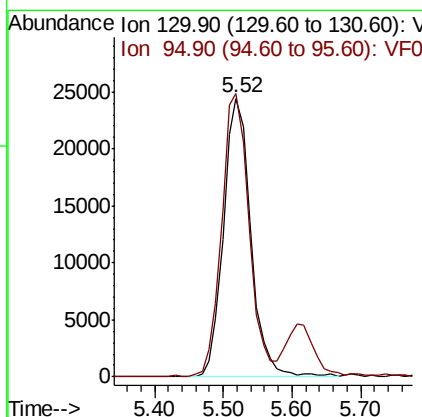
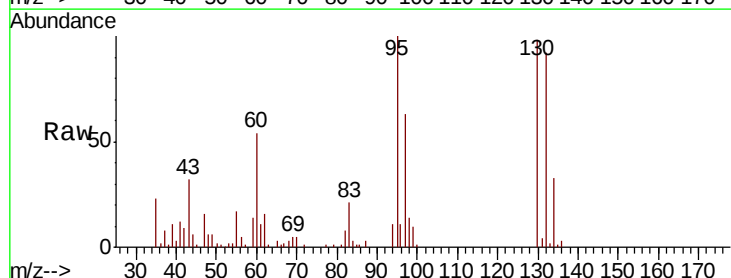
sam
 11/14/2018 11:53:36 AM

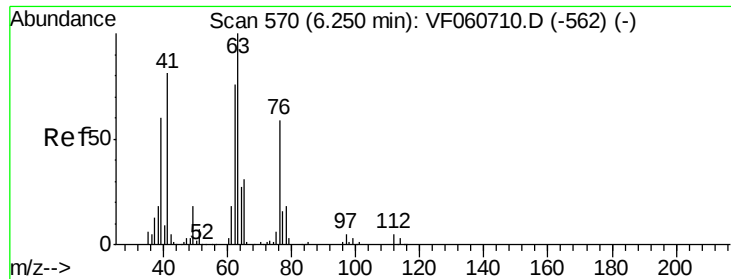


#44

Trichloroethene
 Concen: 21.398 ug/l
 RT: 5.52 min Scan# 496
 Delta R.T. -0.00 min
 Lab File: VF060709.D
 Acq: 13 Nov 2018 12:35

Tgt Ion	Ratio	Lower	Upper
130	100		
95	101.6	0.0	212.6





#45

1,2-Dichloropropane

Concen: 20.320 ug/l

RT: 6.25 min Scan# 570

Delta R.T. -0.00 min

Lab File: VF060709.D

Acq: 13 Nov 2018 12:35

Instrument :

MSVOA_F

ClientSampleId :

VSTDIC020

Tot Ion: 63 Resp: 52701

Ion Ratio Lower Upper

63 100

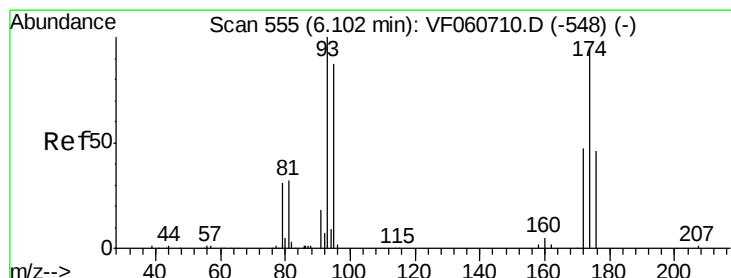
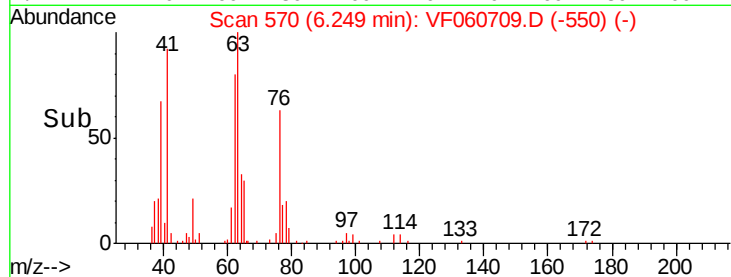
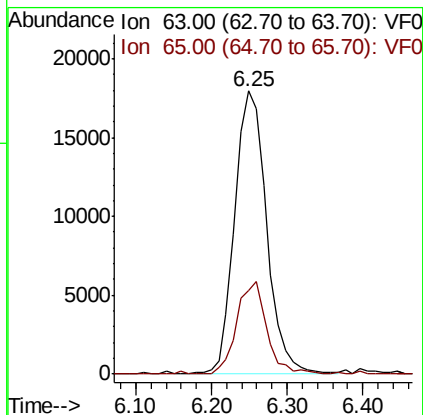
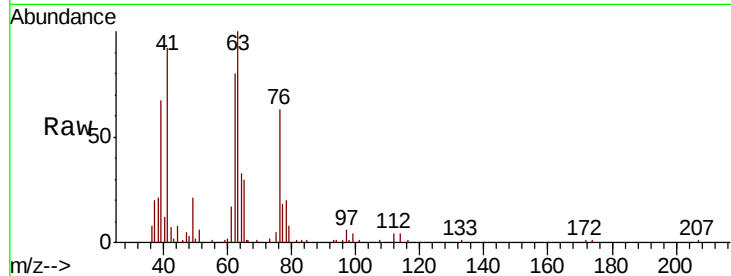
65 29.7 24.6 36.8

Manual Integrations

APPROVED

sam

11/14/2018 11:53:36 AM



#46

Dibromomethane

Concen: 21.160 ug/l

RT: 6.10 min Scan# 555

Delta R.T. -0.00 min

Lab File: VF060709.D

Acq: 13 Nov 2018 12:35

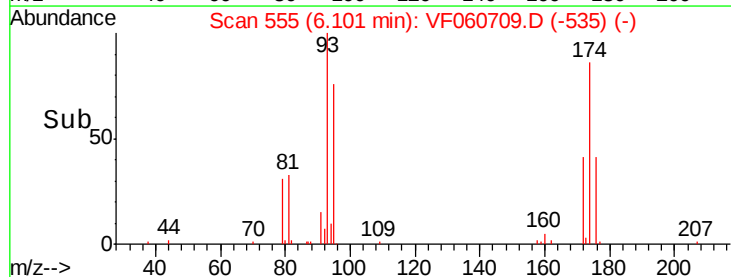
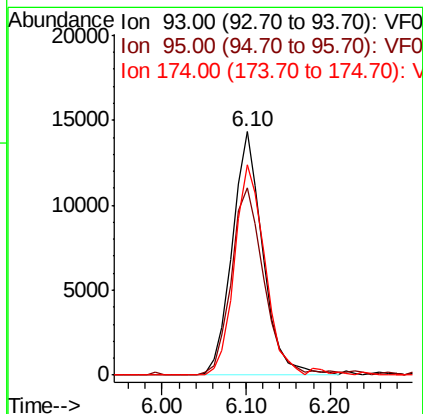
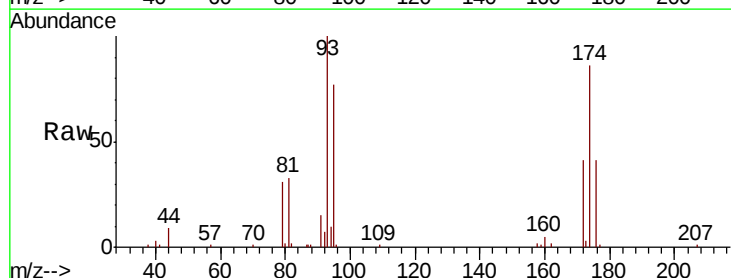
Tgt Ion: 93 Resp: 36226

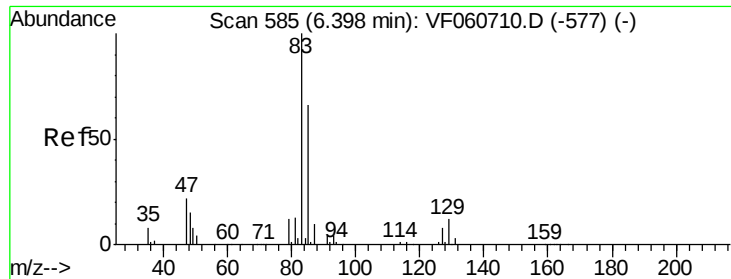
Ion Ratio Lower Upper

93 100

95 77.1 69.5 104.3

174 86.4 76.2 114.2





#47

Bromodichloromethane

Concen: 20.811 ug/l

RT: 6.40 min Scan# 585

Delta R.T. -0.00 min

Lab File: VF060709.D

Acq: 13 Nov 2018 12:35

Instrument :

MSVOA_F

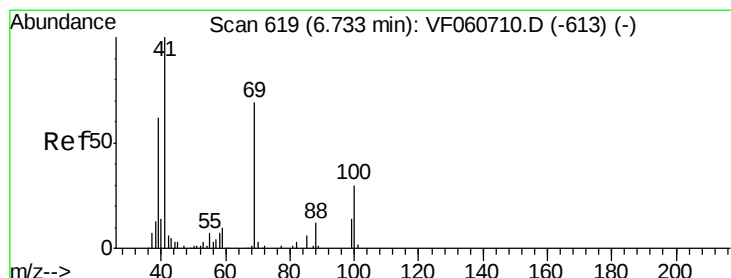
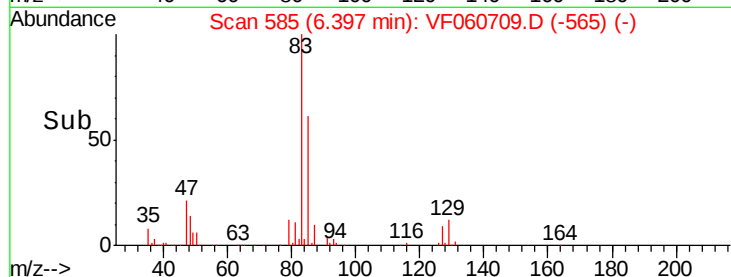
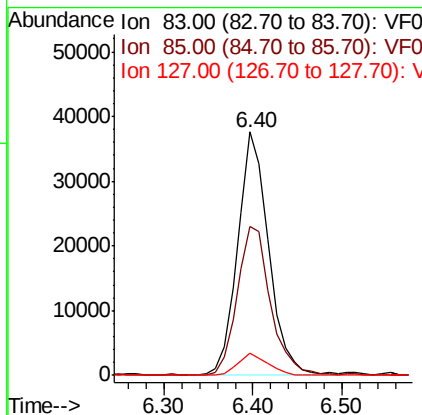
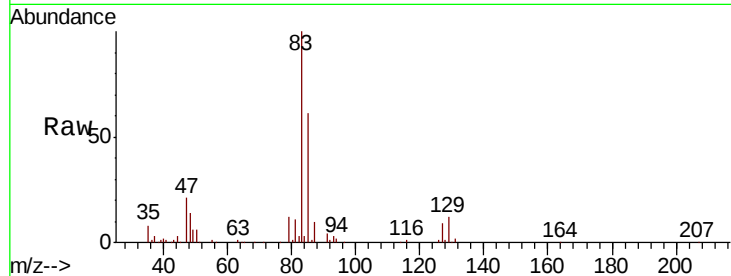
ClientSampleId :

VSTDIC020

Tot Ion:	83	Resp:	90982
Ion	Ratio	Lower	Upper
83	100		
85	61.4	52.4	78.6
127	8.8	6.8	10.2

Manual Integrations
APPROVED

sam
11/14/2018 11:53:36 AM



#48

Methyl methacrylate

Concen: 21.352 ug/l

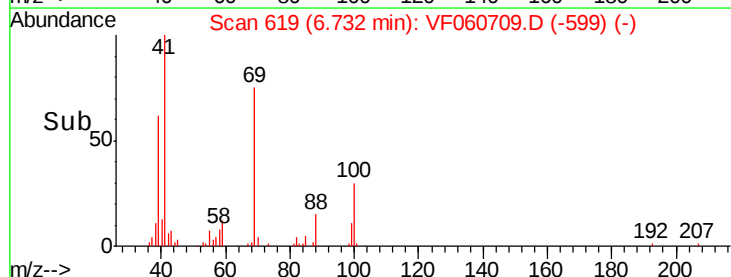
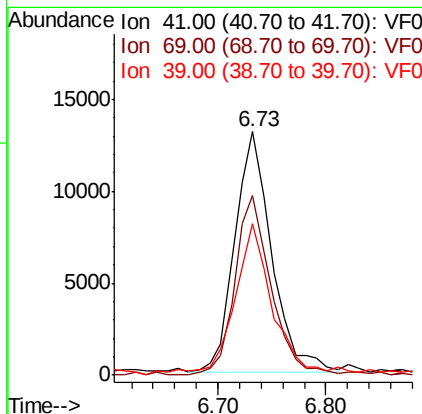
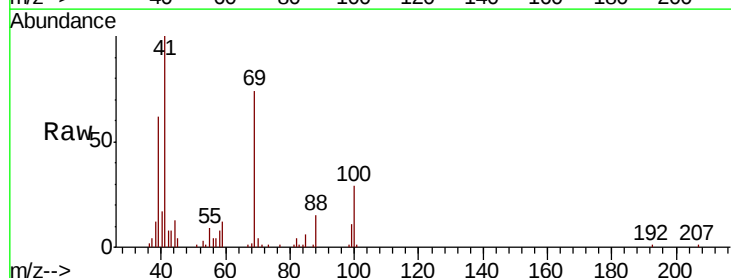
RT: 6.73 min Scan# 619

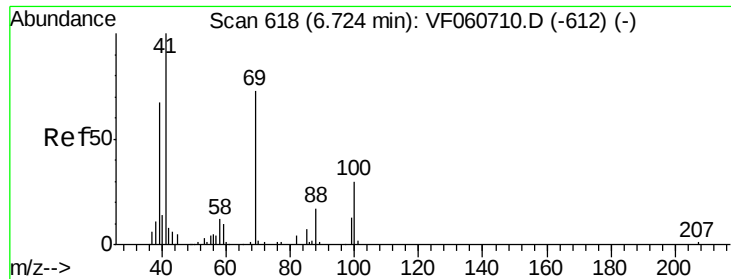
Delta R.T. -0.00 min

Lab File: VF060709.D

Acq: 13 Nov 2018 12:35

Tgt Ion:	41	Resp:	31145
Ion	Ratio	Lower	Upper
41	100		
69	73.9	54.9	82.3
39	62.2	49.6	74.4





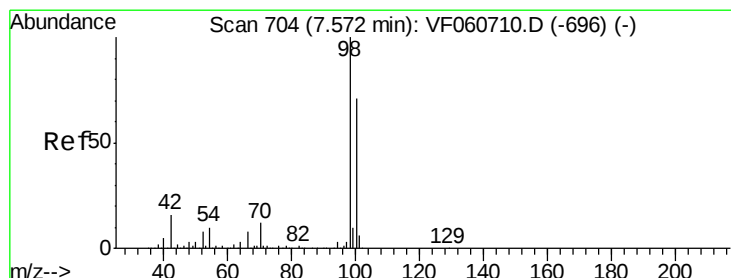
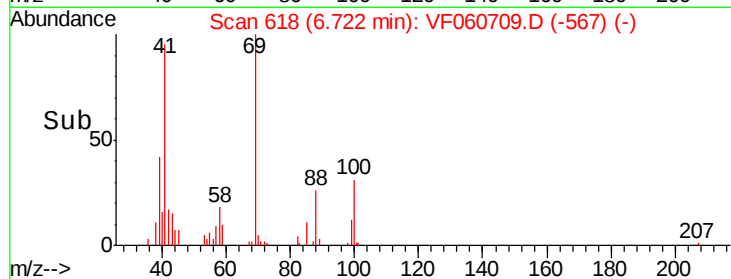
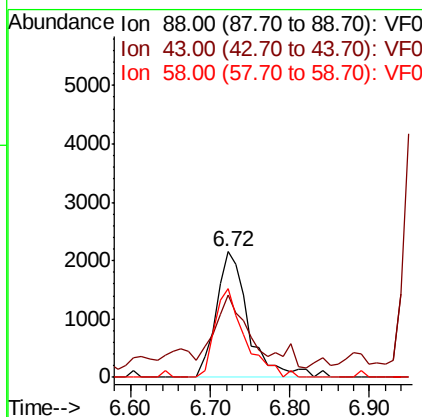
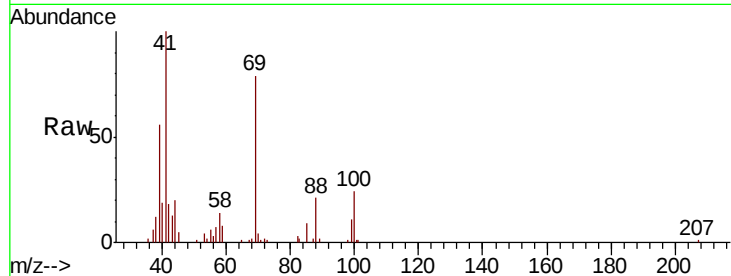
#49
1,4-Dioxane
Concen: 448.035 ug/l
RT: 6.72 min Scan# 618
Delta R.T. -0.00 min
Lab File: VF060709.D
Acq: 13 Nov 2018 12:35

Instrument :
MSVOA_F
ClientSampleId :
VSTDIC020

Tot Ion	Ratio	Lower	Upper
88	100		
43	65.3	44.6	66.8
58	70.5	54.5	81.7

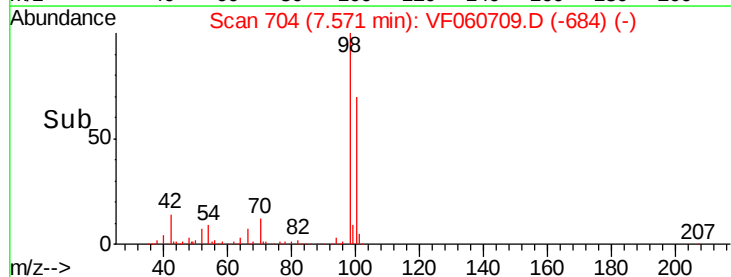
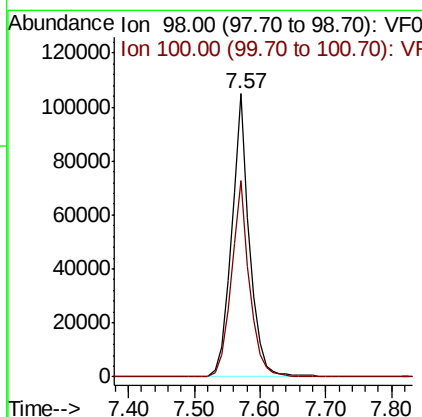
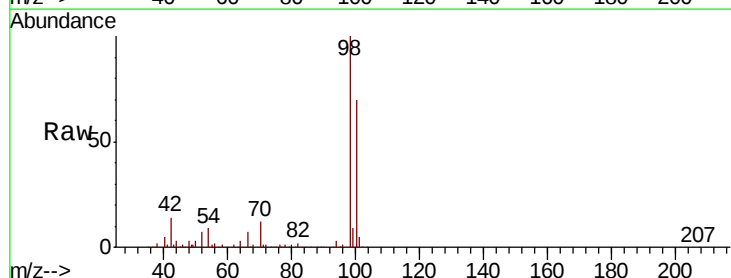
Manual Integrations
APPROVED

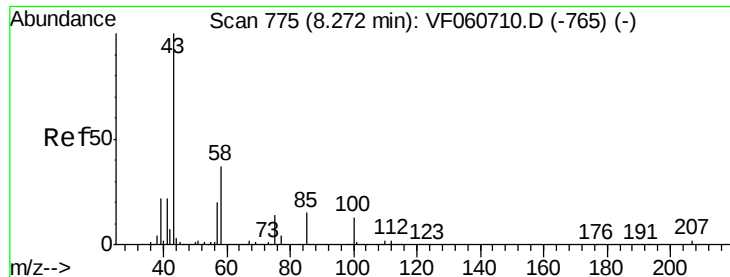
sam
11/14/2018 11:53:36 AM



#50
Toluene-d8
Concen: 23.714 ug/l
RT: 7.57 min Scan# 704
Delta R.T. -0.00 min
Lab File: VF060709.D
Acq: 13 Nov 2018 12:35

Tgt Ion	Ratio	Lower	Upper
98	100		
100	69.5	56.5	84.7





#51

4-Methyl-2-Pentanone

Concen: 106.683 ug/l

RT: 8.27 min Scan# 775

Delta R.T. -0.00 min

Lab File: VF060709.D

Acq: 13 Nov 2018 12:35

Instrument :

MSVOA_F

ClientSampleId :

VSTDIC020

Tot Ion: 43 Resp: 170056

Ion Ratio Lower Upper

43 100

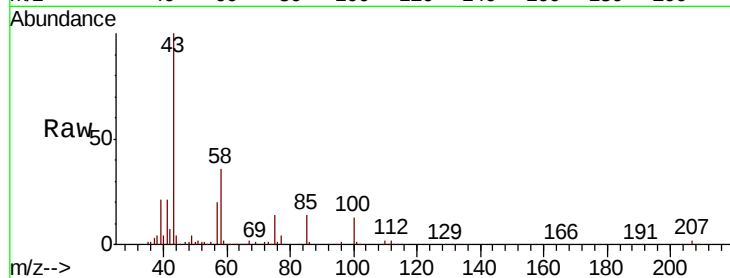
58 36.4 29.2 43.8

Manual Integrations

APPROVED

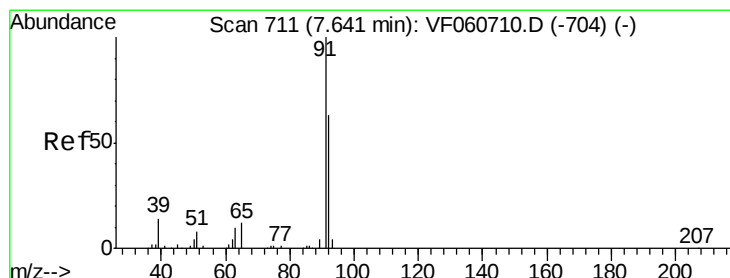
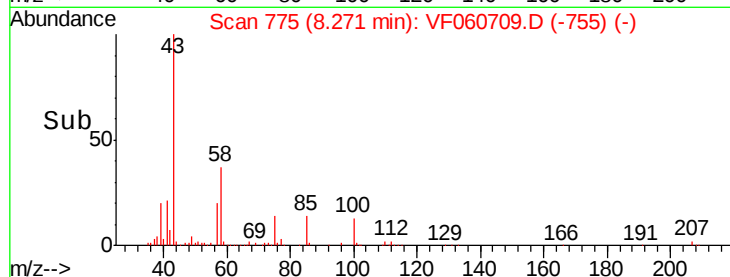
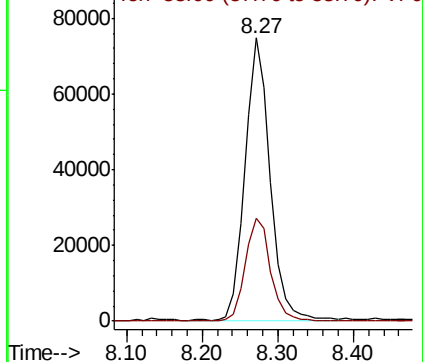
sam

11/14/2018 11:53:36 AM



Abundance Ion 43.00 (42.70 to 43.70): VF0

Ion 58.00 (57.70 to 58.70): VF0



#52

Toluene

Concen: 20.759 ug/l

RT: 7.64 min Scan# 711

Delta R.T. -0.00 min

Lab File: VF060709.D

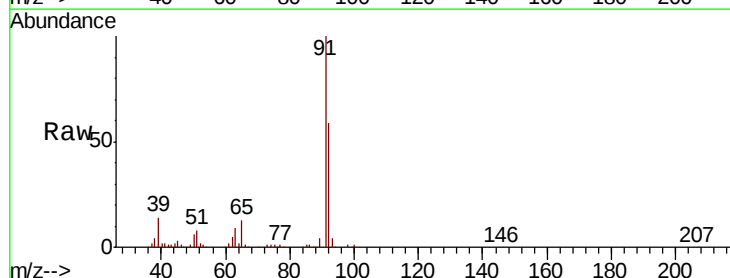
Acq: 13 Nov 2018 12:35

Tgt Ion: 92 Resp: 138653

Ion Ratio Lower Upper

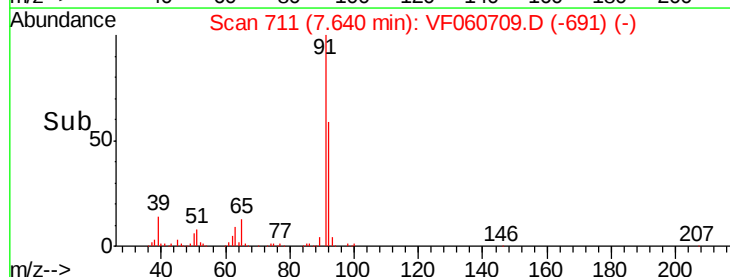
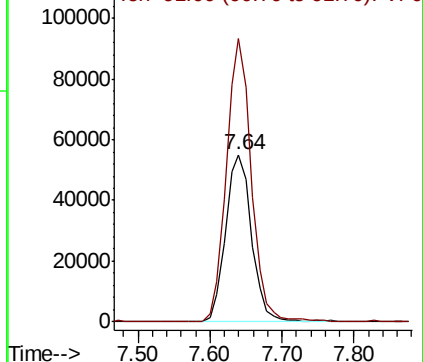
92 100

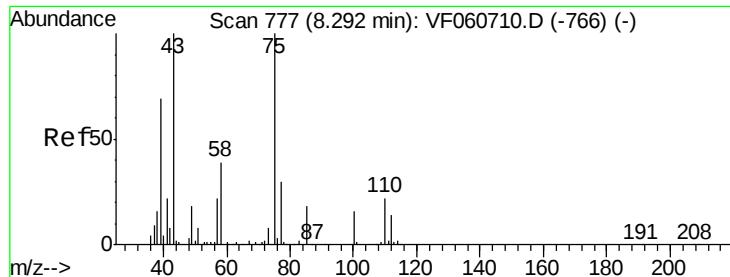
91 169.0 126.7 190.1



Abundance Ion 92.00 (91.70 to 92.70): VF0

Ion 91.00 (90.70 to 91.70): VF0





#53

t-1,3-Dichloropropene

Concen: 21.905 ug/l

RT: 8.29 min Scan# 777

Delta R.T. -0.00 min

Lab File: VF060709.D

Acq: 13 Nov 2018 12:35

Instrument :

MSVOA_F

ClientSampleId :

VSTDIC020

Tot Ion: 75 Resp: 76702

Ion Ratio Lower Upper

75 100

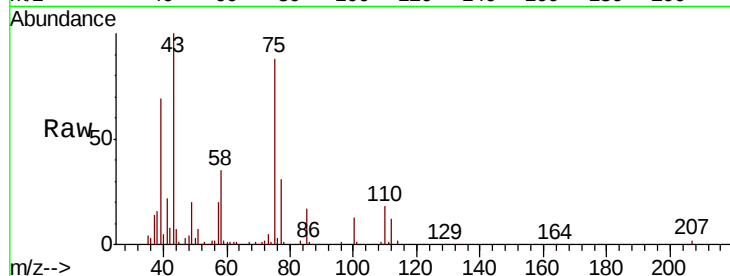
77 34.5 24.6 36.8

Manual Integrations

APPROVED

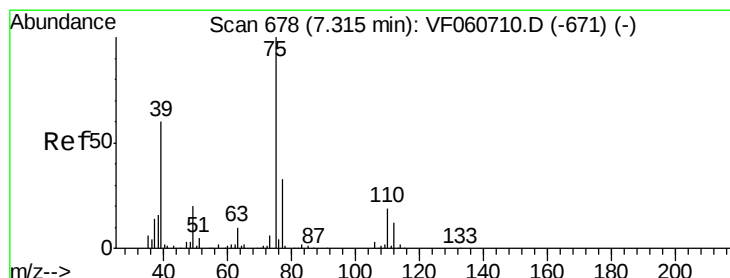
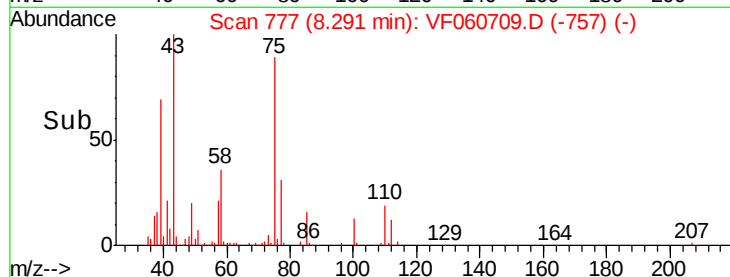
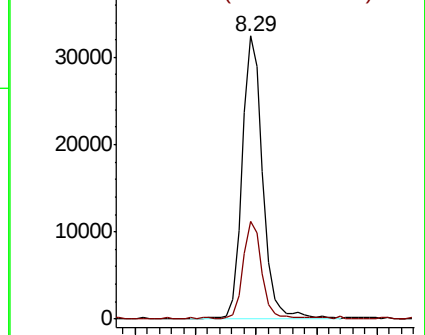
sam

11/14/2018 11:53:36 AM



Abundance Ion 75.00 (74.70 to 75.70): VF0

Ion 77.00 (76.70 to 77.70): VF0



#54

cis-1,3-Dichloropropene

Concen: 20.932 ug/l

RT: 7.31 min Scan# 678

Delta R.T. -0.00 min

Lab File: VF060709.D

Acq: 13 Nov 2018 12:35

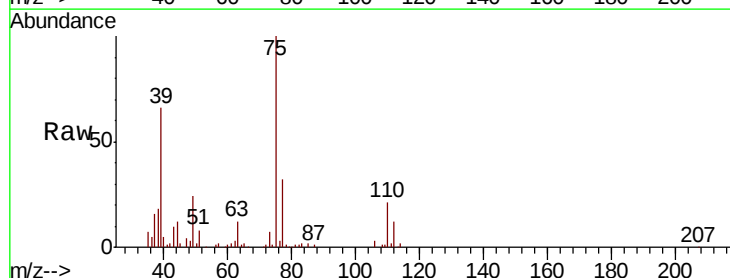
Tgt Ion: 75 Resp: 95208

Ion Ratio Lower Upper

75 100

77 32.3 26.5 39.7

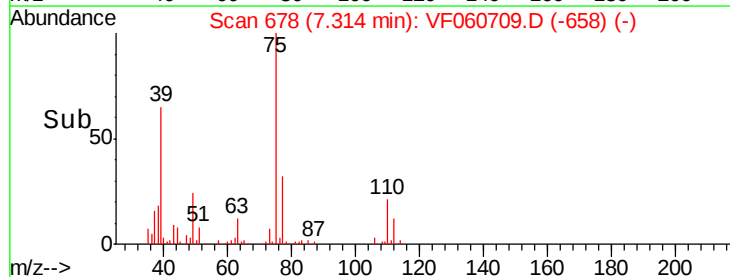
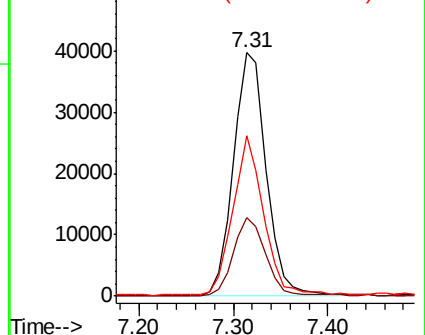
39 65.9 48.5 72.7

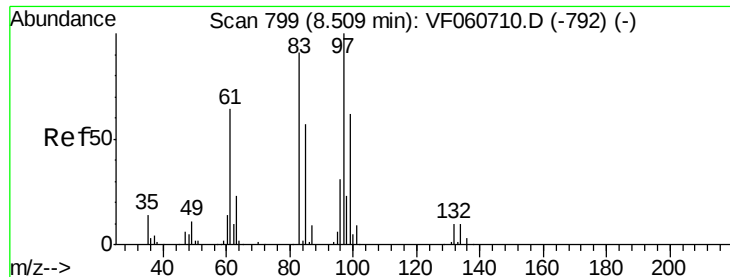


Abundance Ion 75.00 (74.70 to 75.70): VF0

Ion 77.00 (76.70 to 77.70): VF0

Ion 39.00 (38.70 to 39.70): VF0





#55

1,1,2-Trichloroethane

Concen: 21.313 ug/l

RT: 8.51 min Scan# 799

Delta R.T. -0.00 min

Lab File: VF060709.D

Acq: 13 Nov 2018 12:35

Instrument :

MSVOA_F

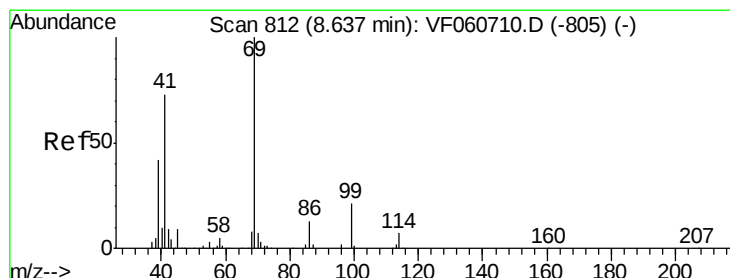
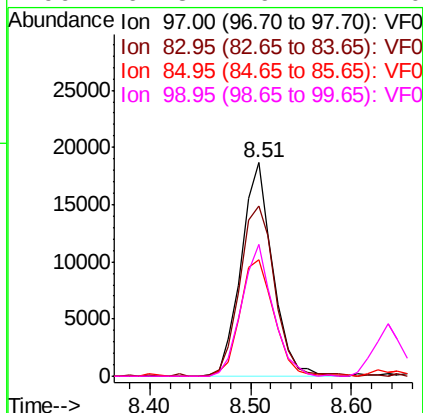
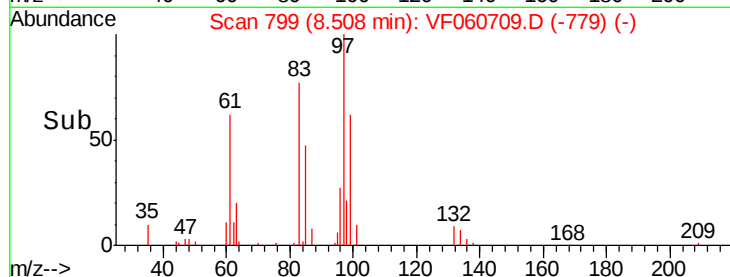
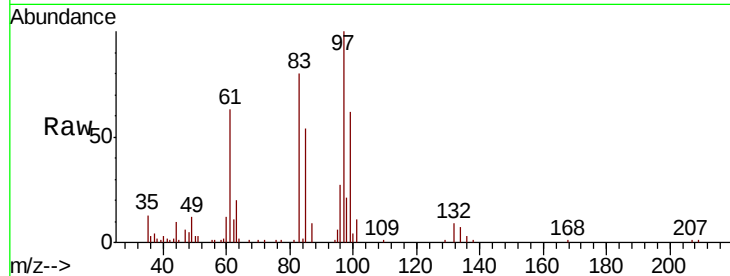
ClientSampleId :

VSTDIC020

Tot Ion:	97	Resp:	40672
Ion	Ratio	Lower	Upper
97	100		
83	79.8	72.8	109.2
85	54.3	45.8	68.6
99	61.8	49.4	74.0

Manual Integrations
APPROVED

sam
11/14/2018 11:53:36 AM



#56

Ethyl methacrylate

Concen: 22.975 ug/l

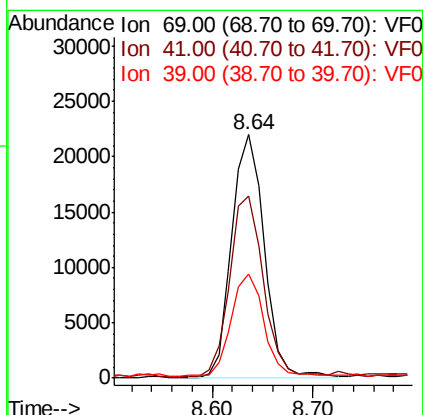
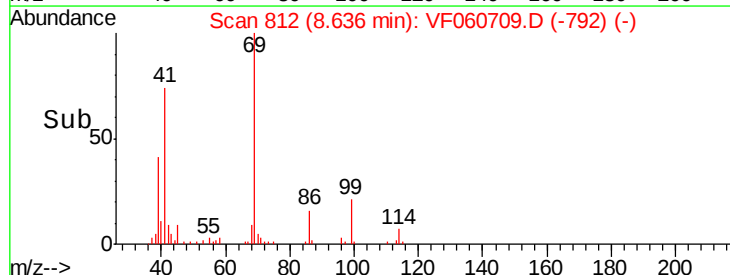
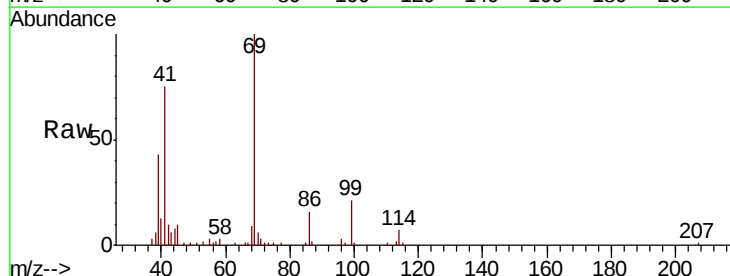
RT: 8.64 min Scan# 812

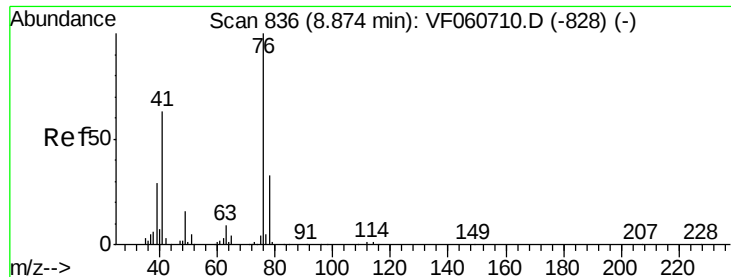
Delta R.T. -0.00 min

Lab File: VF060709.D

Acq: 13 Nov 2018 12:35

Tgt Ion:	69	Resp:	49794
Ion	Ratio	Lower	Upper
69	100		
41	75.1	59.0	88.6
39	42.5	34.0	51.0





#57

1,3-Dichloropropane

Concen: 22.023 ug/l

RT: 8.87 min Scan# 836

Delta R.T. -0.00 min

Lab File: VF060709.D

Acq: 13 Nov 2018 12:35

Instrument :

MSVOA_F

ClientSampleId :

VSTDIC020

Tot Ion: 76 Resp: 72835

Ion Ratio Lower Upper

76 100

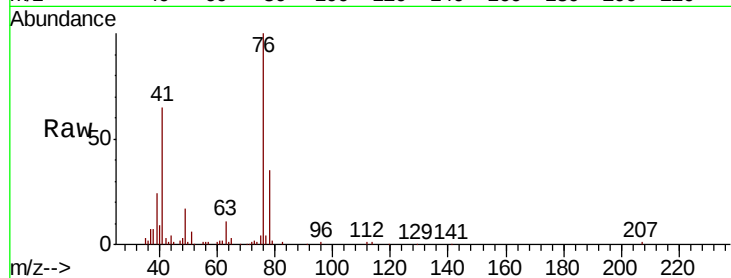
78 35.0 26.6 39.8

Manual Integrations

APPROVED

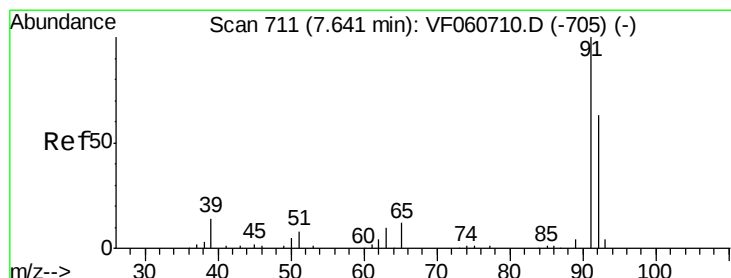
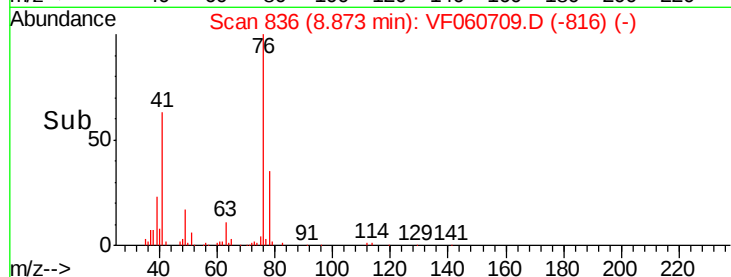
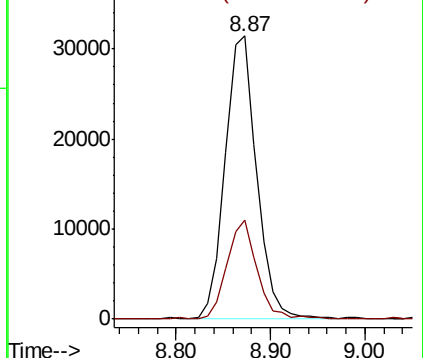
sam

11/14/2018 11:53:36 AM



Abundance Ion 76.00 (75.70 to 76.70): VF0

Ion 78.00 (77.70 to 78.70): VF0



#58

2-Chloroethyl Vinyl ether

Concen: 96.989 ug/l

RT: 7.63 min Scan# 710

Delta R.T. -0.01 min

Lab File: VF060709.D

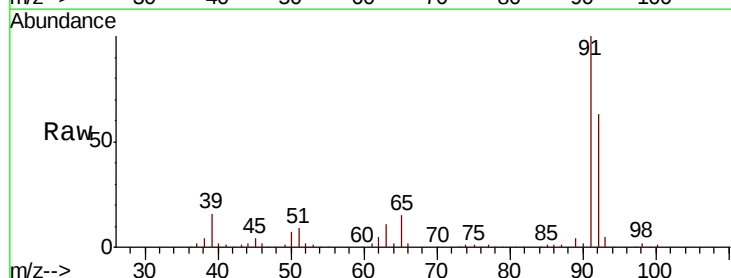
Acq: 13 Nov 2018 12:35

Tgt Ion: 63 Resp: 19202

Ion Ratio Lower Upper

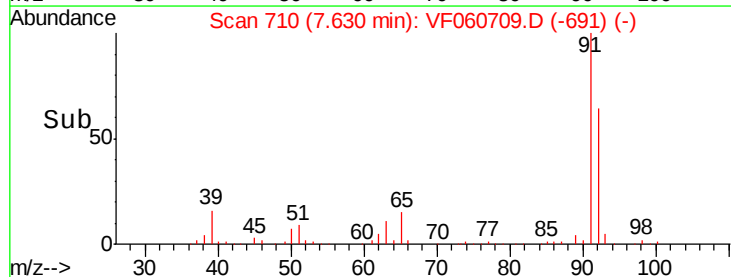
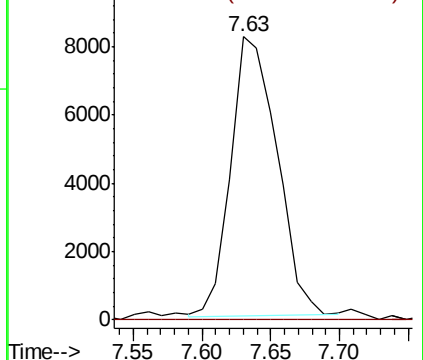
63 100

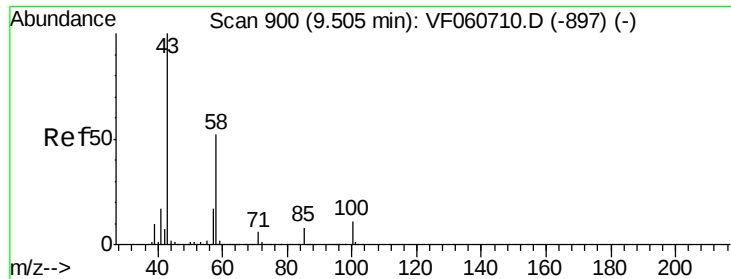
106 0.0 0.0 0.0



Abundance Ion 63.00 (62.70 to 63.70): VF0

Ion 106.00 (105.70 to 106.70): V





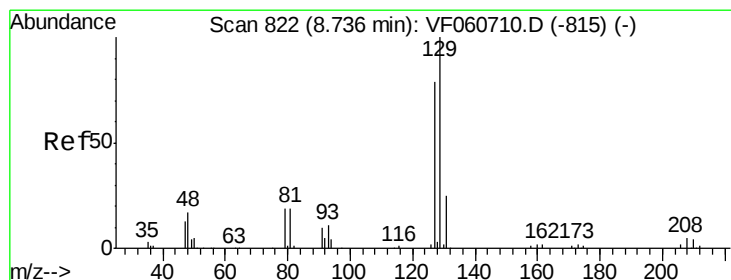
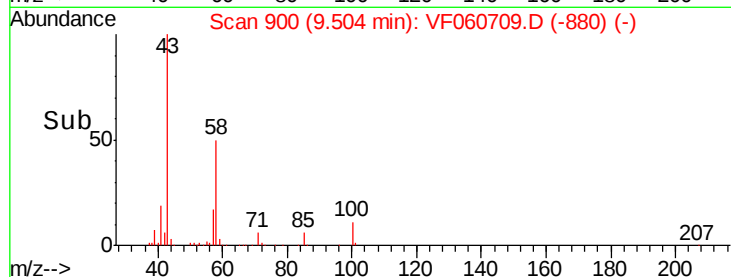
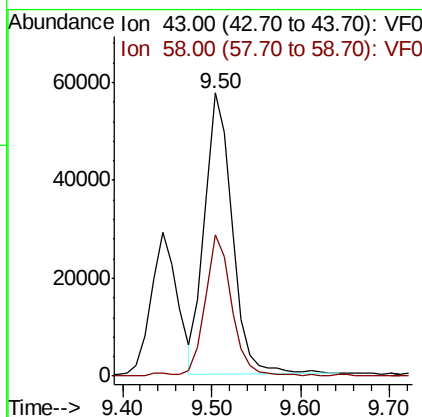
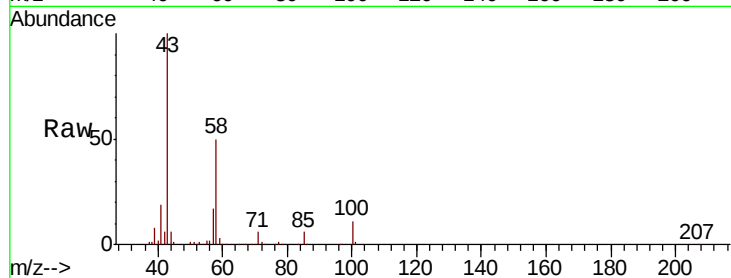
#59
2-Hexanone
Concen: 110.047 ug/l
RT: 9.50 min Scan# 900
Delta R.T. -0.00 min
Lab File: VF060709.D
Acq: 13 Nov 2018 12:35

Instrument :
MSVOA_F
ClientSampleId :
VSTDIC020

Tot Ion: 43 Resp: 123279
Ion Ratio Lower Upper
43 100
58 49.7 24.9 74.7

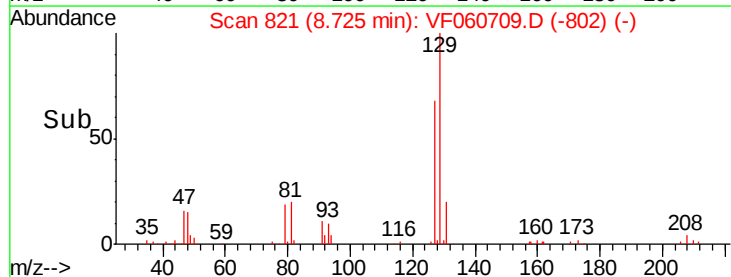
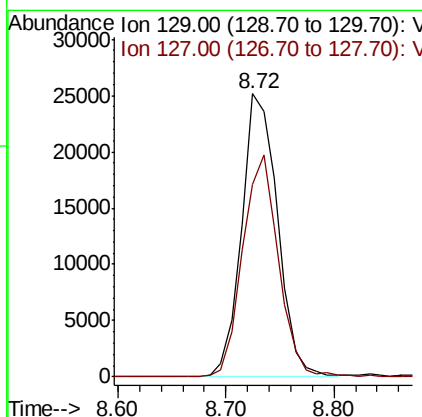
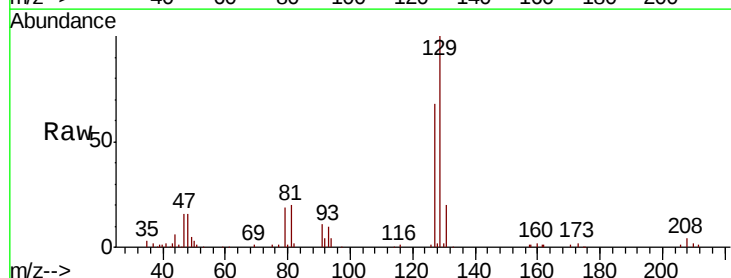
Manual Integrations
APPROVED

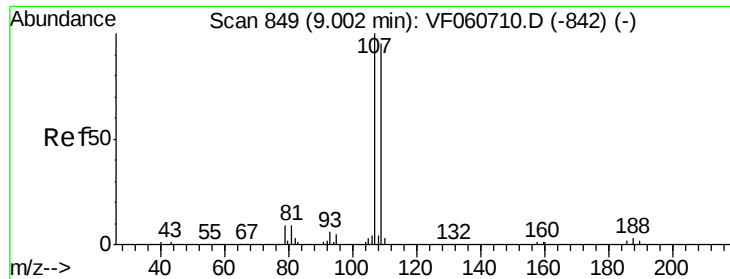
sam
11/14/2018 11:53:36 AM



#60
Dibromochloromethane
Concen: 21.383 ug/l
RT: 8.72 min Scan# 821
Delta R.T. -0.01 min
Lab File: VF060709.D
Acq: 13 Nov 2018 12:35

Tgt Ion: 129 Resp: 58155
Ion Ratio Lower Upper
129 100
127 68.2 39.7 119.1





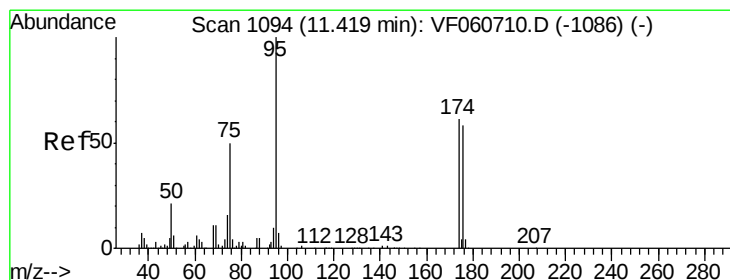
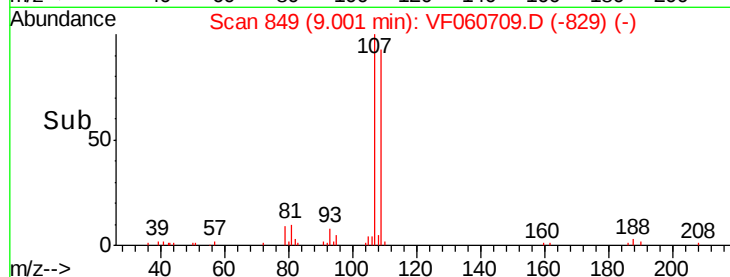
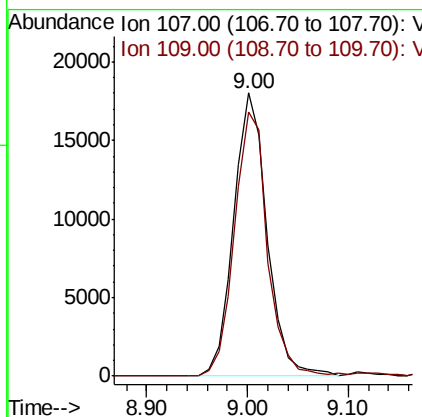
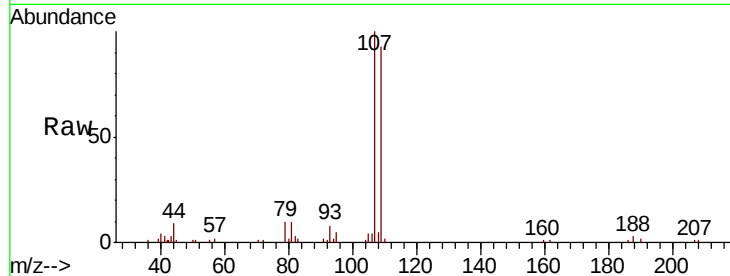
#61
 1,2-Dibromoethane
 Concen: 20.650 ug/l
 RT: 9.00 min Scan# 849
 Delta R.T. -0.00 min
 Lab File: VF060709.D
 Acq: 13 Nov 2018 12:35

Instrument :
 MSVOA_F
 ClientSampleId :
 VSTDIC020

Tot Ion:107 Resp: 41444
 Ion Ratio Lower Upper
 107 100
 109 93.5 75.9 113.9

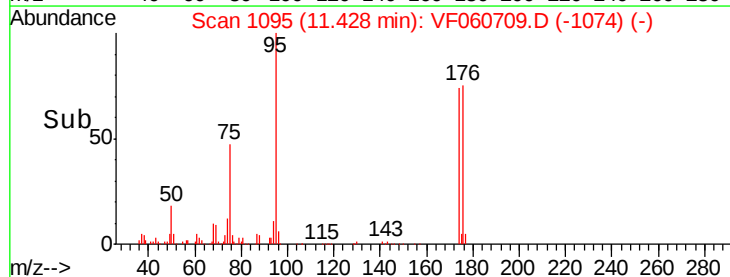
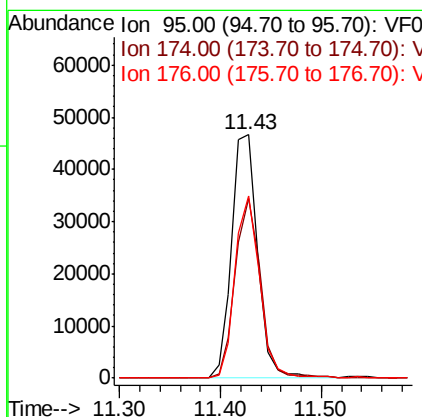
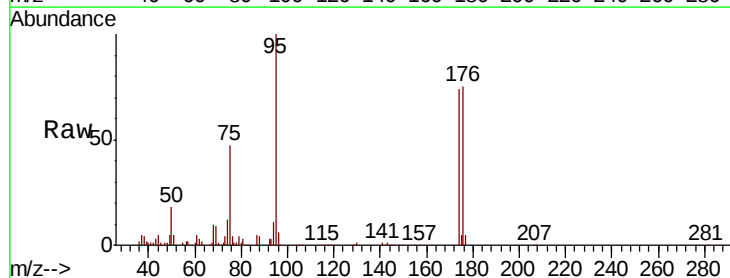
Manual Integrations
 APPROVED

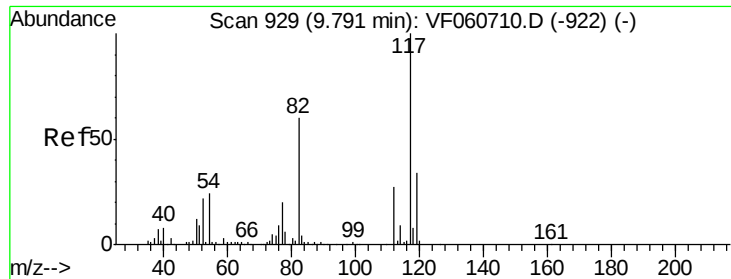
sam
 11/14/2018 11:53:36 AM



#62
 4-Bromofluorobenzene
 Concen: 21.366 ug/l
 RT: 11.43 min Scan# 1095
 Delta R.T. 0.01 min
 Lab File: VF060709.D
 Acq: 13 Nov 2018 12:35

Tgt Ion: 95 Resp: 83653
 Ion Ratio Lower Upper
 95 100
 174 74.0 0.0 121.6
 176 74.9 0.0 115.2





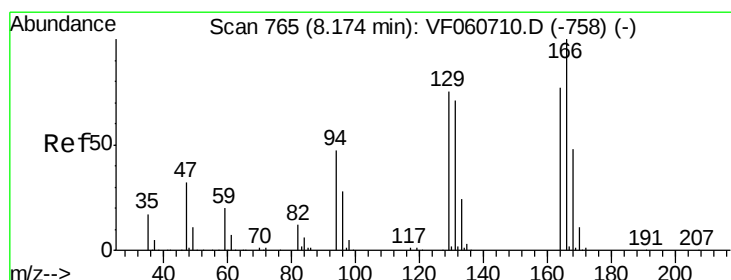
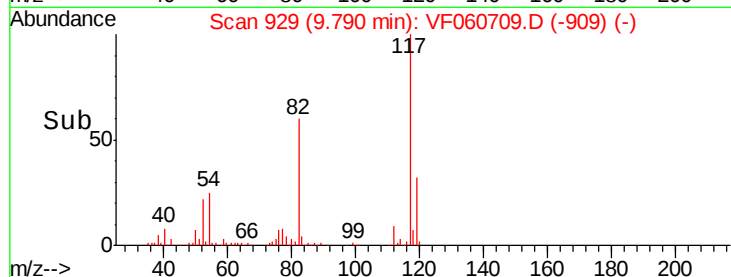
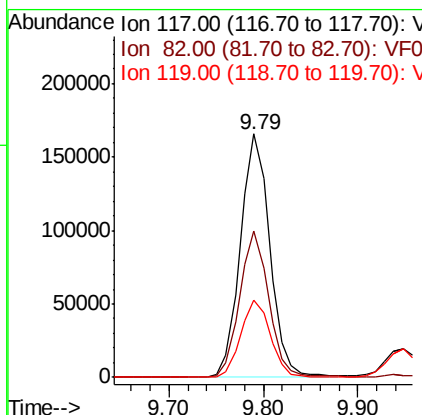
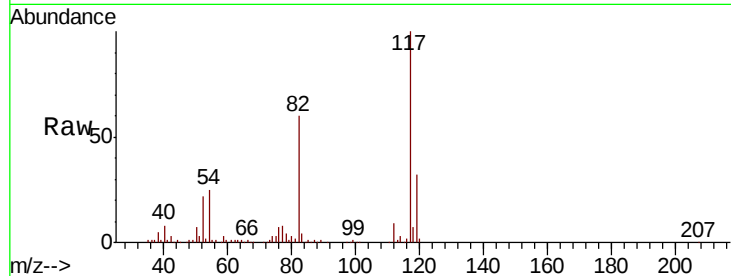
#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 9.79 min Scan# 929
Delta R.T. -0.00 min
Lab File: VF060709.D
Acq: 13 Nov 2018 12:35

Instrument :
MSVOA_F
ClientSampleId :
VSTDIC020

Tot Ion	Ratio	Resp	Lower	Upper
117	100	359251		
82	60.1		47.9	71.9
119	31.8		26.8	40.2

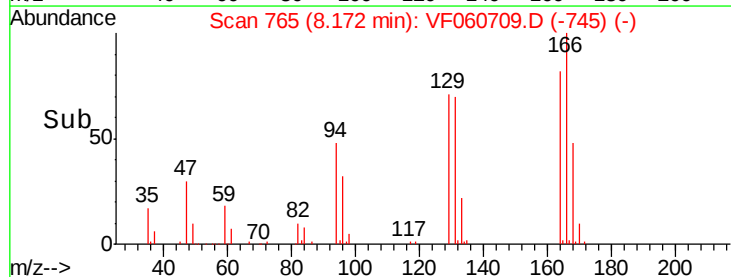
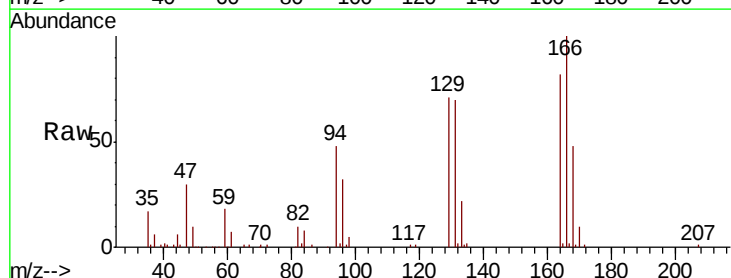
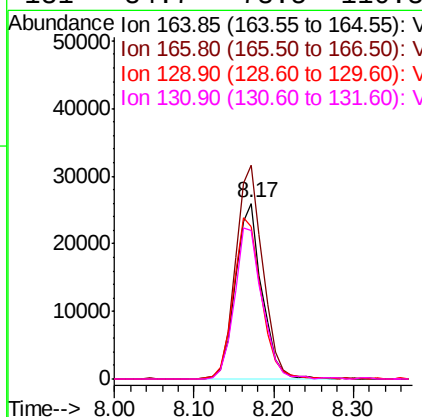
Manual Integrations
APPROVED

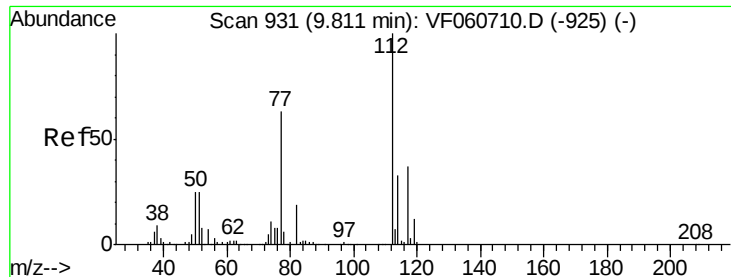
sam
11/14/2018 11:53:36 AM



#64
Tetrachloroethene
Concen: 21.093 ug/l
RT: 8.17 min Scan# 765
Delta R.T. -0.00 min
Lab File: VF060709.D
Acq: 13 Nov 2018 12:35

Tgt Ion	Ratio	Resp	Lower	Upper
164	100	60006		
166	121.7		103.5	155.3
129	87.0		77.4	116.2
131	84.7		73.5	110.3





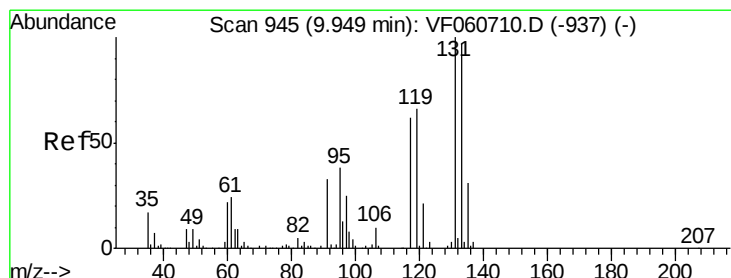
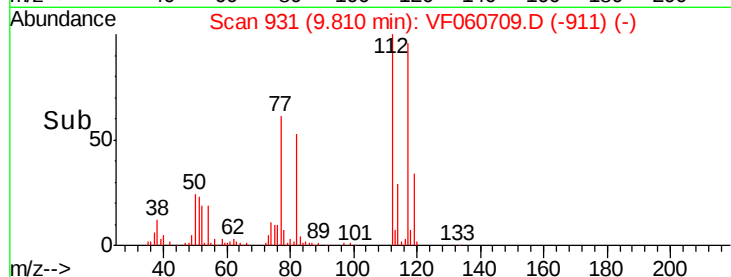
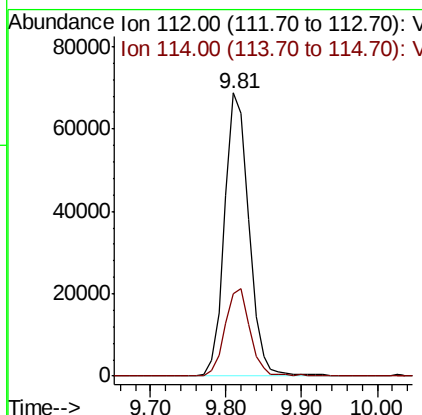
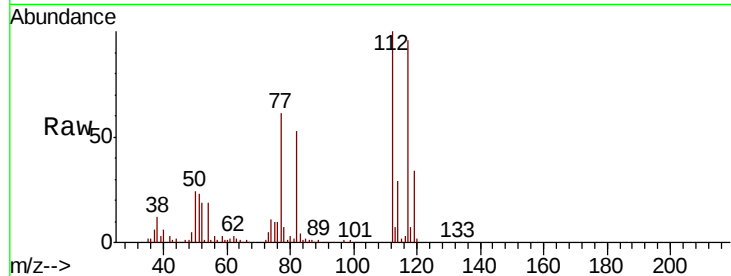
#65
Chlorobenzene
Concen: 21.186 ug/l
RT: 9.81 min Scan# 931
Delta R.T. -0.00 min
Lab File: VF060709.D
Acq: 13 Nov 2018 12:35

Instrument :
MSVOA_F
ClientSampleId :
VSTDIC020

Tot Ion	Ratio	Lower	Upper
112	100		
114	29.0	26.1	39.1

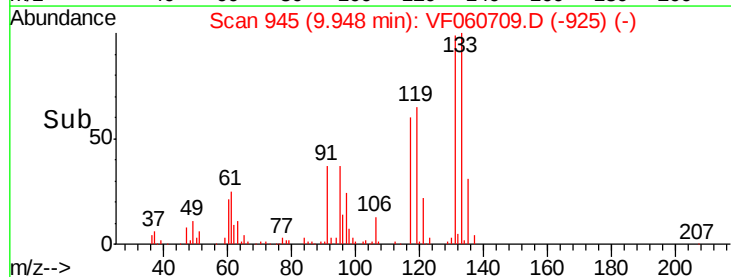
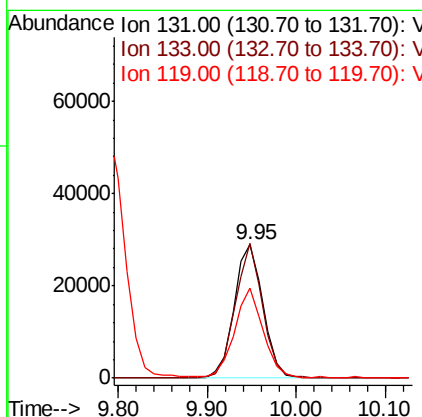
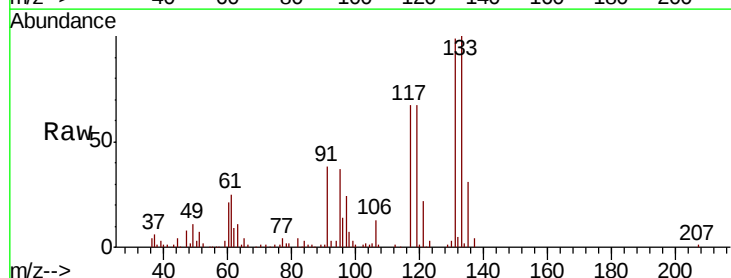
Manual Integrations
APPROVED

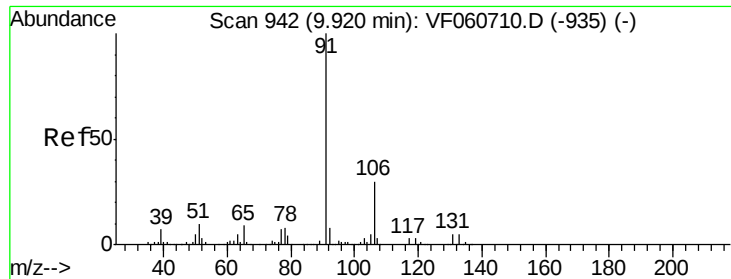
sam
11/14/2018 11:53:36 AM



#66
1,1,1,2-Tetrachloroethane
Concen: 20.644 ug/l
RT: 9.95 min Scan# 945
Delta R.T. -0.00 min
Lab File: VF060709.D
Acq: 13 Nov 2018 12:35

Tgt Ion	Ratio	Lower	Upper
131	100		
133	101.1	48.3	144.8
119	67.4	33.2	99.6





#67

Ethyl Benzene

Concen: 21.324 ug/l

RT: 9.92 min Scan# 942

Delta R.T. -0.00 min

Lab File: VF060709.D

Acq: 13 Nov 2018 12:35

Instrument :

MSVOA_F

ClientSampleId :

VSTDIC020

Tot Ion: 91 Resp: 291390

Ion Ratio Lower Upper

91 100

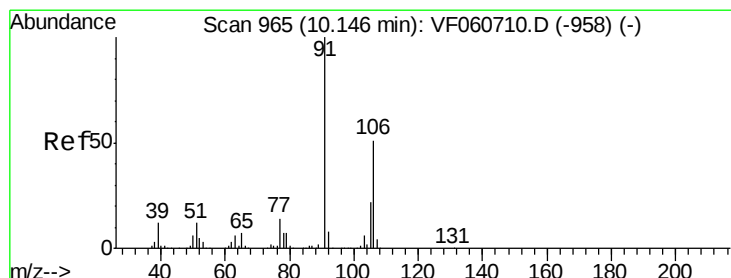
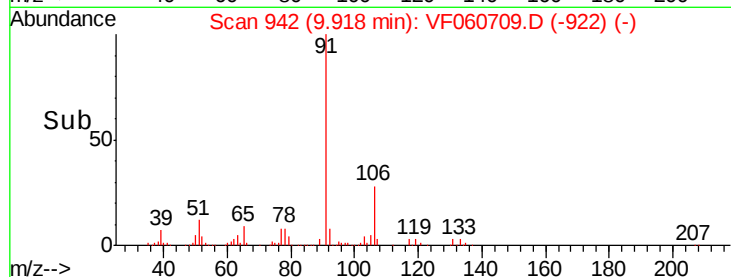
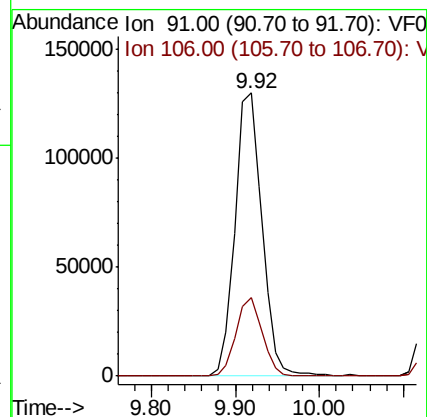
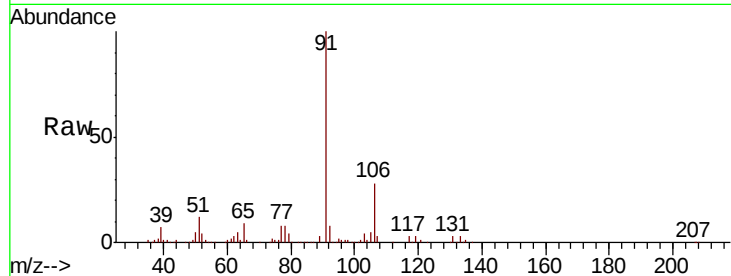
106 27.9 23.9 35.9

Manual Integrations

APPROVED

sam

11/14/2018 11:53:36 AM



#68

m/p-Xylenes

Concen: 42.753 ug/l

RT: 10.15 min Scan# 965

Delta R.T. -0.00 min

Lab File: VF060709.D

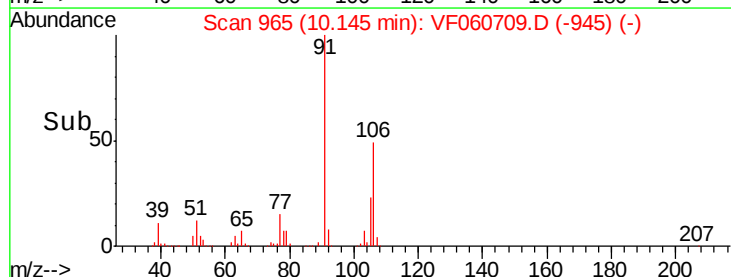
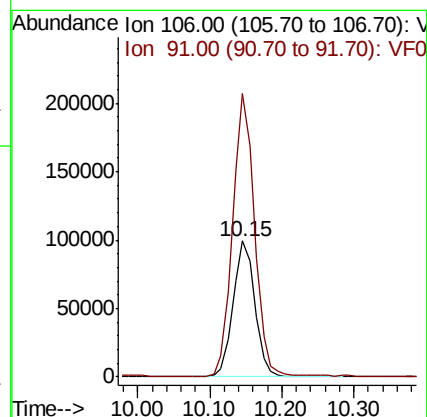
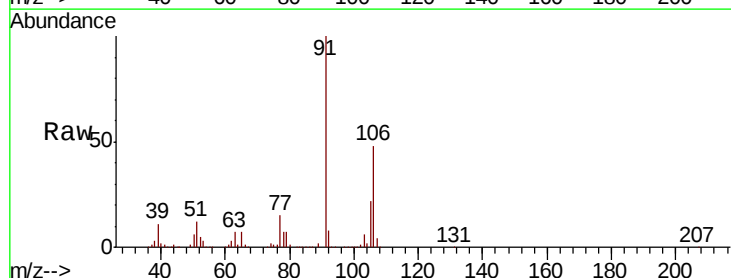
Acq: 13 Nov 2018 12:35

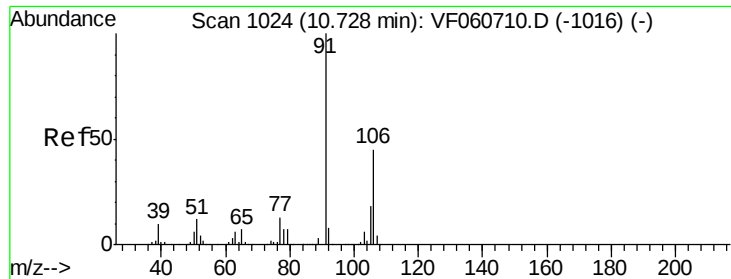
Tgt Ion: 106 Resp: 208779

Ion Ratio Lower Upper

106 100

91 208.4 158.2 237.2





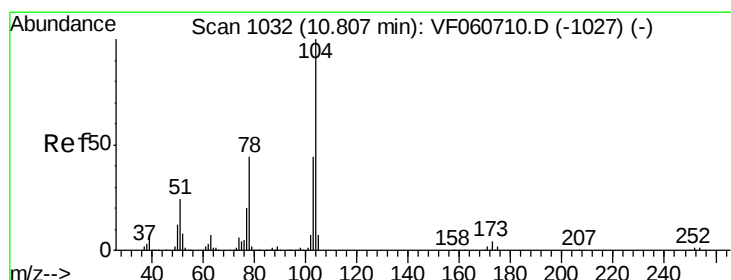
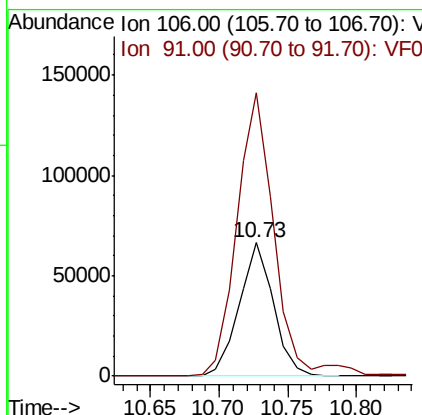
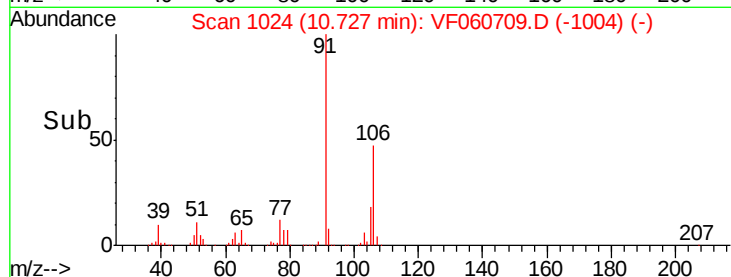
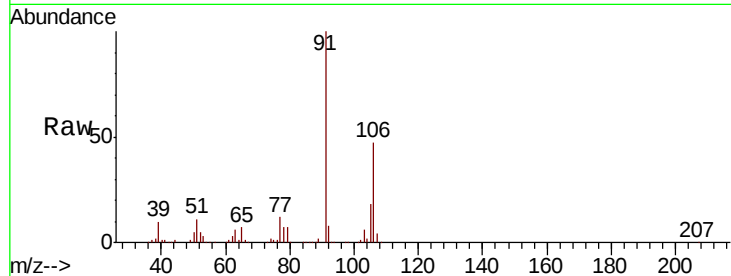
#69
o-Xylene
Concen: 21.068 ug/l
RT: 10.73 min Scan# 1024
Delta R.T. -0.00 min
Lab File: VF060709.D
Acq: 13 Nov 2018 12:35

Instrument :
MSVOA_F
ClientSampleId :
VSTDIC020

Tot Ion	Ion	Ratio	Resp	Lower	Upper
106	100				
91	212.1	110.3	330.9		

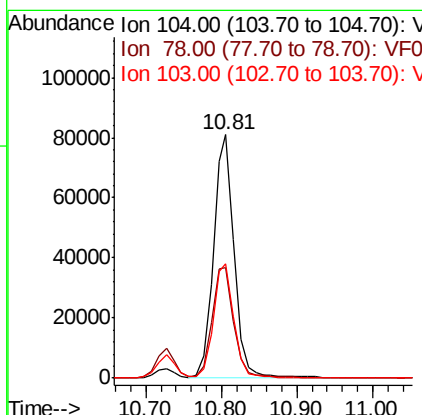
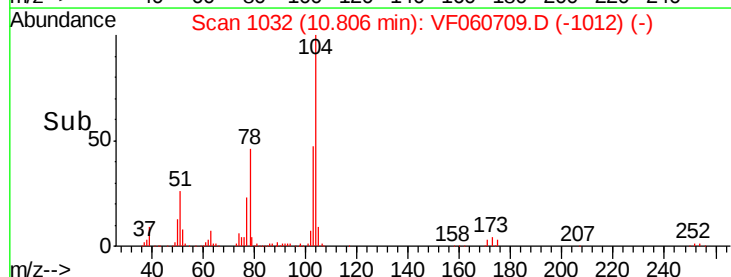
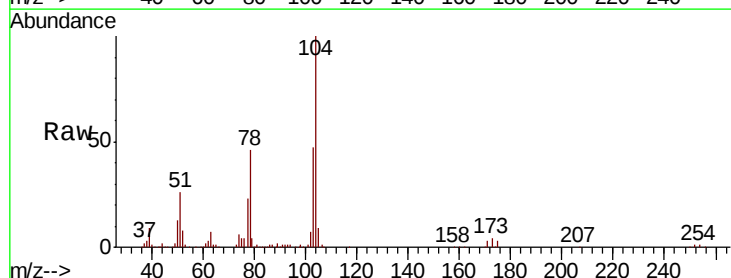
Manual Integrations
APPROVED

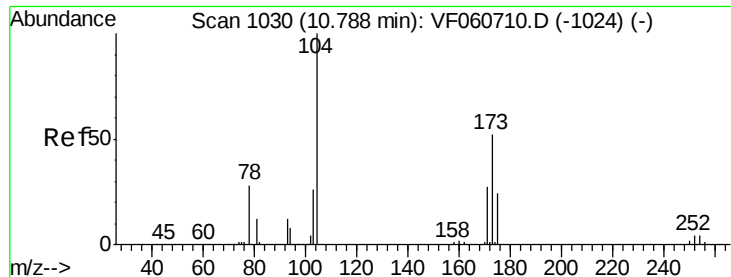
sam
11/14/2018 11:53:36 AM



#70
Styrene
Concen: 20.699 ug/l
RT: 10.81 min Scan# 1032
Delta R.T. -0.00 min
Lab File: VF060709.D
Acq: 13 Nov 2018 12:35

Tgt Ion	Ion	Ratio	Resp	Lower	Upper
104	100				
78	45.6	35.4	53.2		
103	47.0	35.8	53.6		





#71

Bromoform

Concen: 20.546 ug/l

RT: 10.79 min Scan# 1030

Delta R.T. -0.00 min

Lab File: VF060709.D

Acq: 13 Nov 2018 12:35

Instrument :

MSVOA_F

ClientSampleId :

VSTDIC020

Tot Ion:173 Resp: 29214

Ion Ratio Lower Upper

173 100

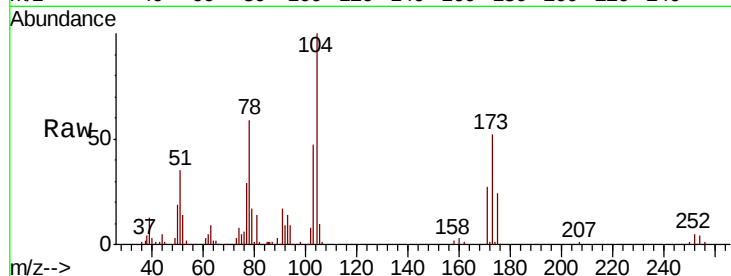
175 47.7 23.4 70.0

254 6.9 5.8 8.8

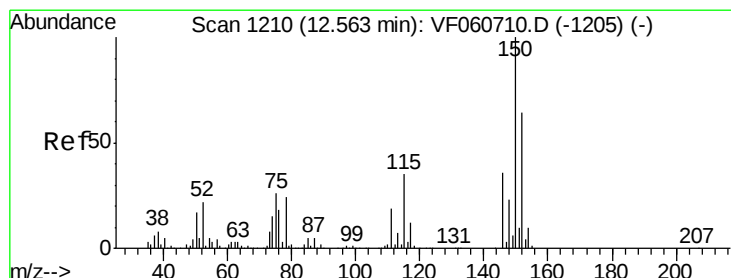
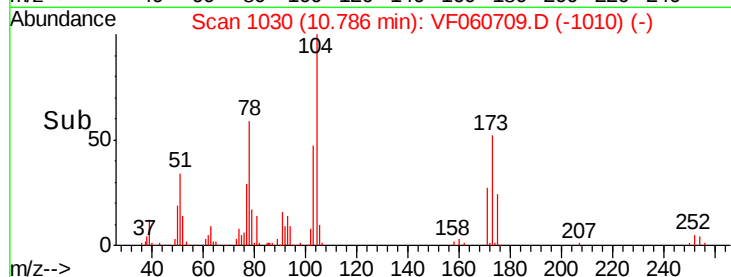
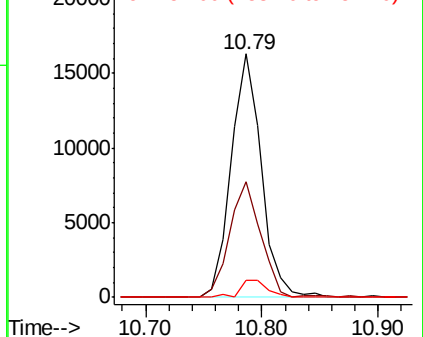
Manual Integrations
APPROVED

sam

11/14/2018 11:53:36 AM



Abundance Ion 173.00 (172.70 to 173.70): V
Ion 175.00 (174.70 to 175.70): V
Ion 254.00 (253.70 to 254.70): V



#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 12.56 min Scan# 1210

Delta R.T. -0.00 min

Lab File: VF060709.D

Acq: 13 Nov 2018 12:35

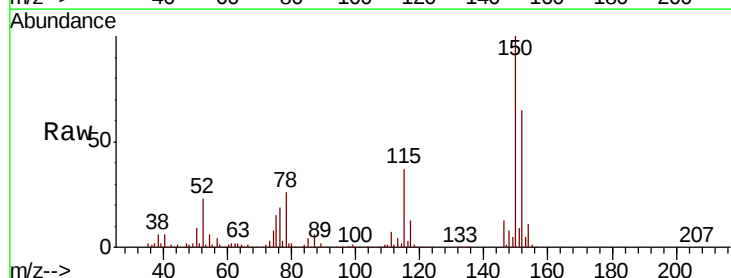
Tgt Ion:152 Resp: 201995

Ion Ratio Lower Upper

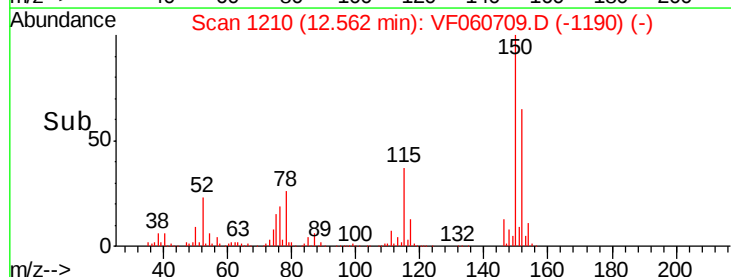
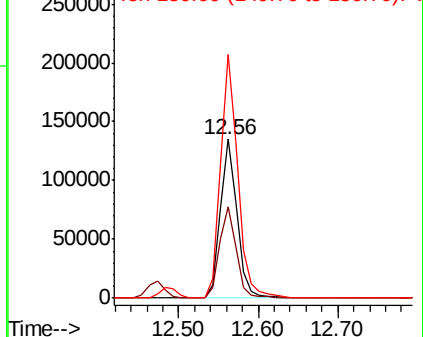
152 100

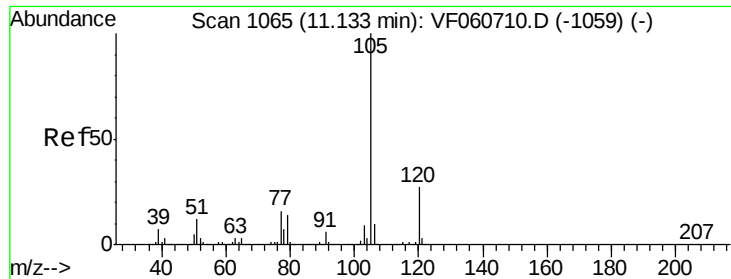
115 57.3 27.9 83.7

150 153.3 0.0 316.4



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





#73

Isopropylbenzene

Concen: 21.349 ug/l

RT: 11.14 min Scan# 1066

Delta R.T. 0.01 min

Lab File: VF060709.D

Acq: 13 Nov 2018 12:35

Instrument :

MSVOA_F

ClientSampleId :

VSTDIC020

Tot Ion:105 Resp: 347112

Ion Ratio Lower Upper

105 100

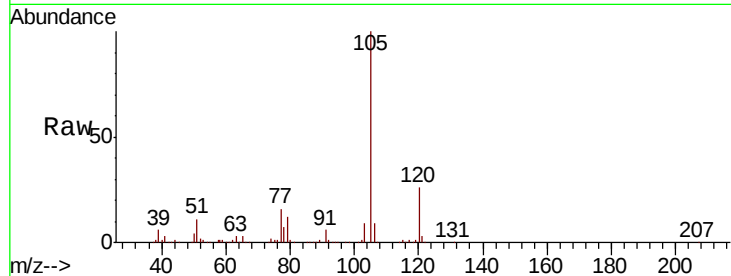
120 25.6 13.4 40.1

Manual Integrations

APPROVED

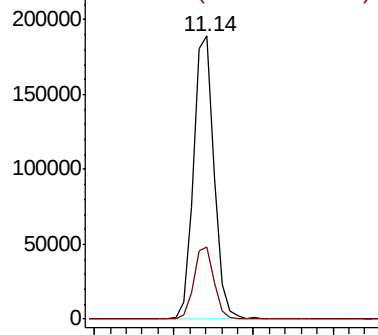
sam

11/14/2018 11:53:36 AM

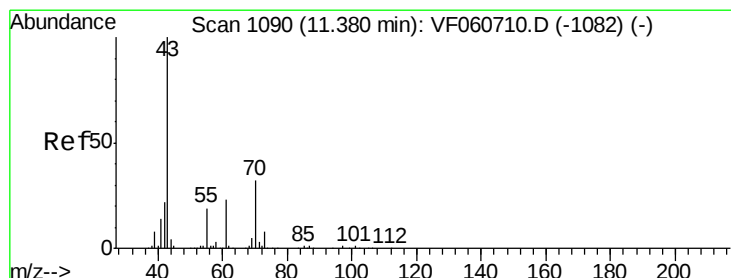
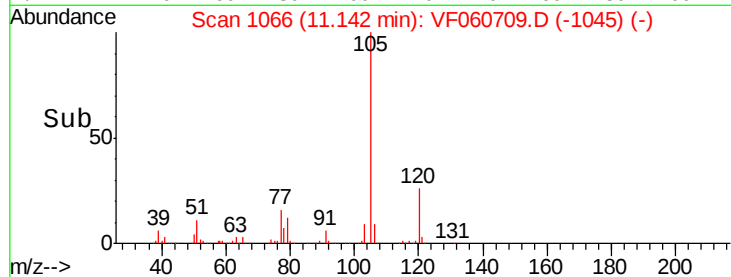


Abundance Ion 105.00 (104.70 to 105.70): V

Ion 120.00 (119.70 to 120.70): V



Time-->



#74

N-ethyl acetate

Concen: 21.667 ug/l

RT: 11.38 min Scan# 1090

Delta R.T. -0.00 min

Lab File: VF060709.D

Acq: 13 Nov 2018 12:35

Tgt Ion: 43 Resp: 80200

Ion Ratio Lower Upper

43 100

70 31.5 25.5 38.3

55 20.4 14.9 22.3

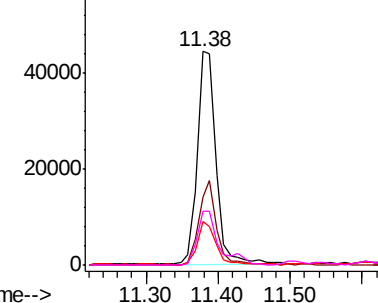
61 25.1 18.6 27.8

Abundance Ion 43.00 (42.70 to 43.70): VF0

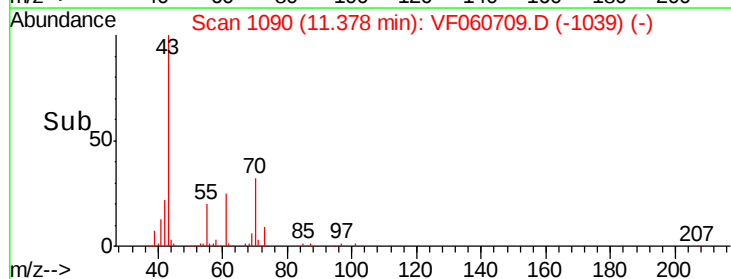
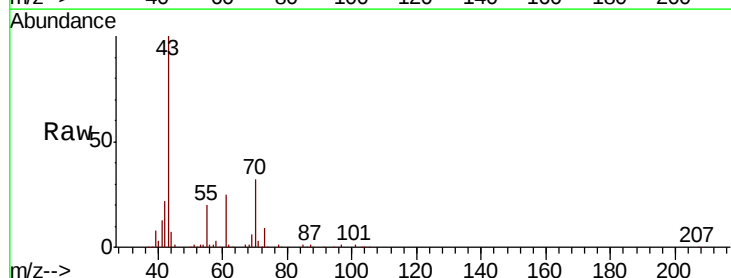
Ion 70.00 (69.70 to 70.70): VF0

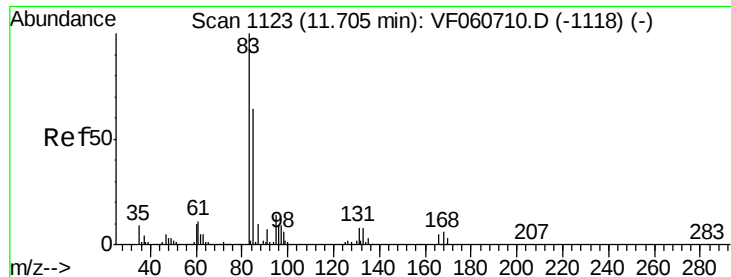
Ion 55.00 (54.70 to 55.70): VF0

Ion 61.00 (60.70 to 61.70): VF0



Time-->





#75

1,1,2,2-Tetrachloroethane

Concen: 20.694 ug/l

RT: 11.70 min Scan# 1123

Delta R.T. -0.00 min

Lab File: VF060709.D

Acq: 13 Nov 2018 12:35

Instrument :

MSVOA_F

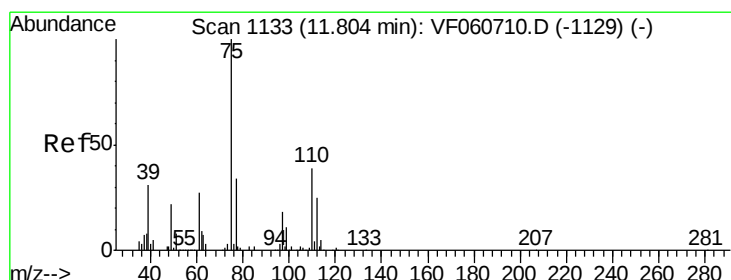
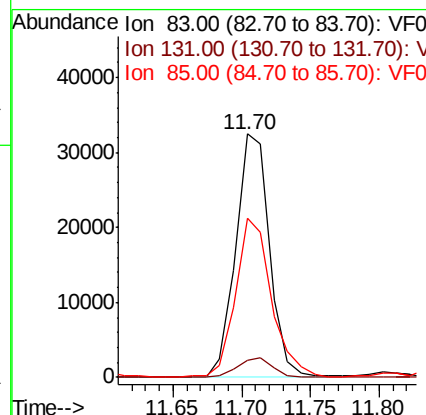
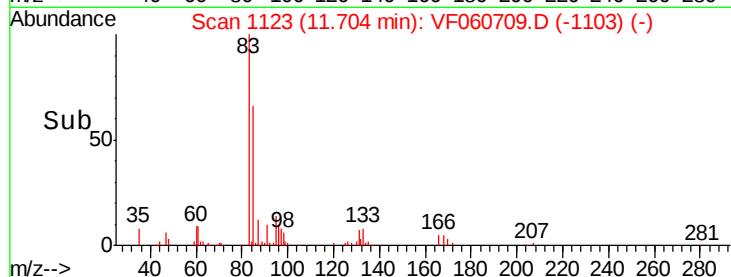
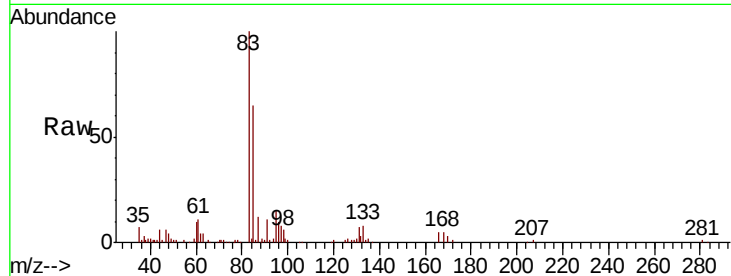
ClientSampleId :

VSTDIC020

Tot Ion:	83	Resp:	55627
Ion Ratio	Lower	Upper	
83	100		
131	7.2	4.2	12.4
85	65.1	32.0	96.2

Manual Integrations
APPROVED

sam
11/14/2018 11:53:36 AM



#76

1,2,3-Trichloropropane

Concen: 21.917 ug/l

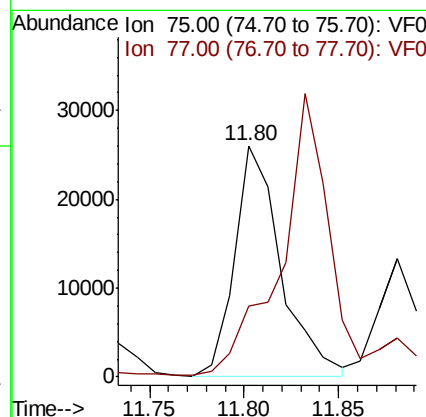
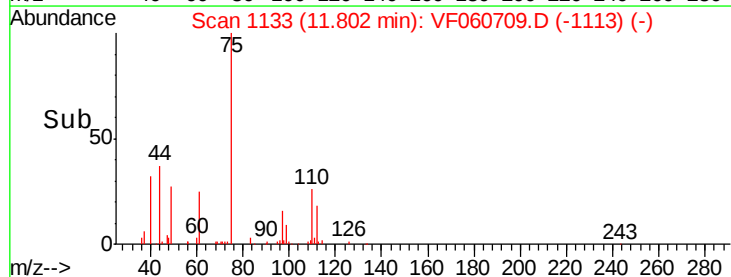
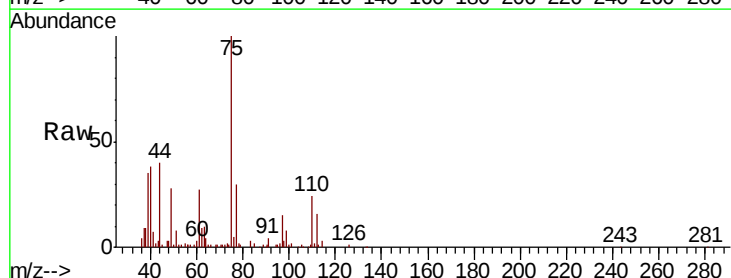
RT: 11.80 min Scan# 1133

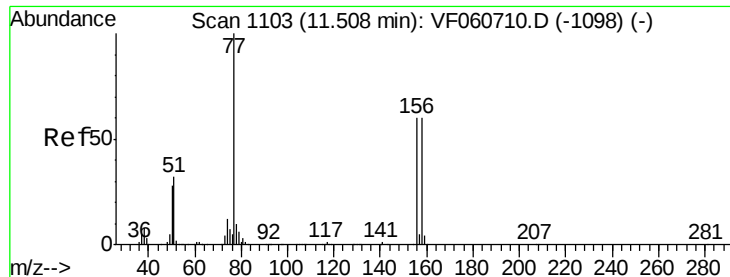
Delta R.T. -0.00 min

Lab File: VF060709.D

Acq: 13 Nov 2018 12:35

Tgt Ion:	75	Resp:	43756
Ion Ratio	Lower	Upper	
75	100		
77	30.5	17.0	51.0





#77

Bromobenzene

Concen: 20.947 ug/l

RT: 11.51 min Scan# 1103

Delta R.T. -0.00 min

Lab File: VF060709.D

Acq: 13 Nov 2018 12:35

Instrument :

MSVOA_F

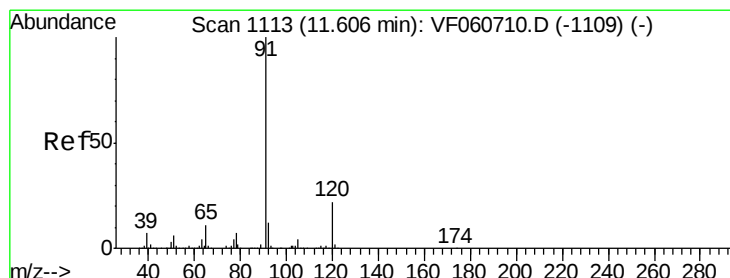
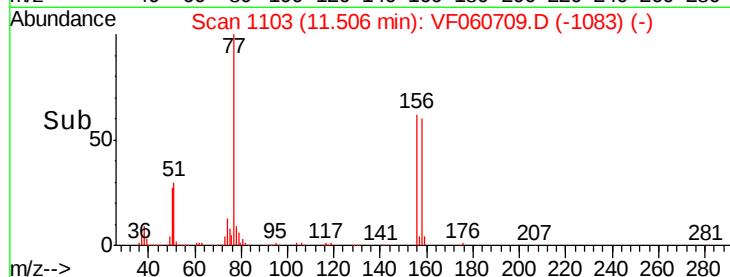
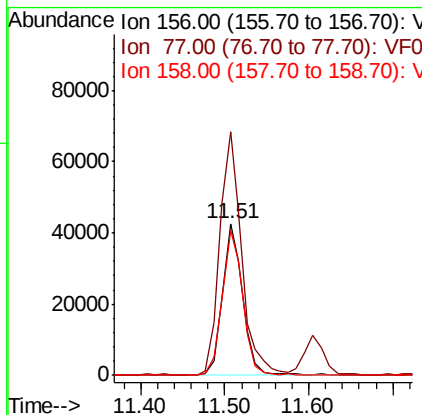
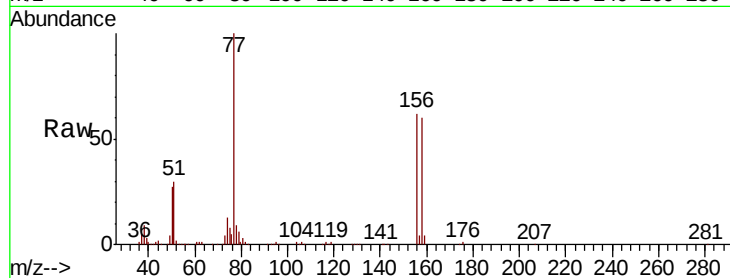
ClientSampleId :

VSTDIC020

Tot Ion	Ratio	Lower	Upper
156	100		
77	160.6	83.0	248.9
158	95.8	49.6	149.0

Manual Integrations
APPROVED

sam
11/14/2018 11:53:36 AM



#78

n-propylbenzene

Concen: 22.077 ug/l

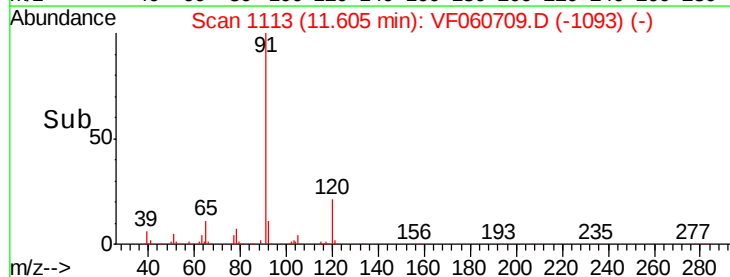
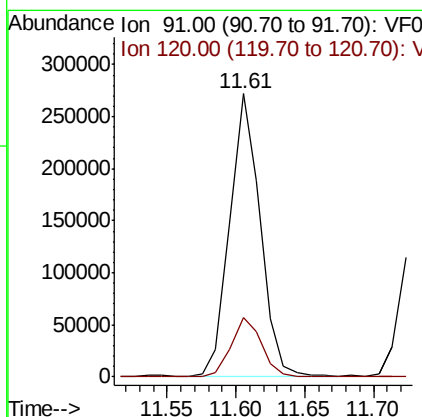
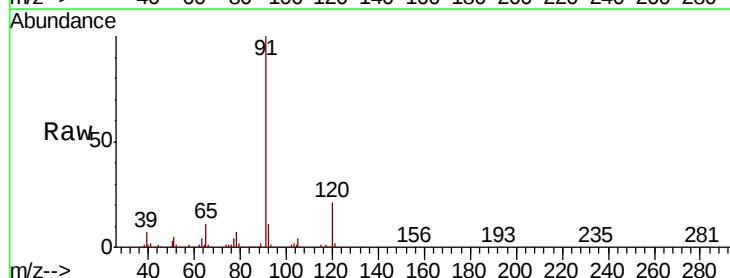
RT: 11.61 min Scan# 1113

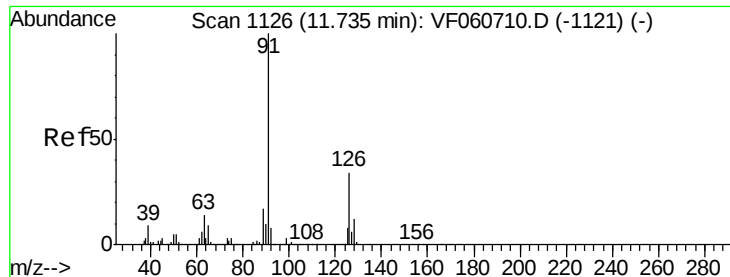
Delta R.T. -0.00 min

Lab File: VF060709.D

Acq: 13 Nov 2018 12:35

Tgt Ion	Ratio	Lower	Upper
91	100		
120	21.1	11.2	33.5





#79

2-Chlorotoluene

Concen: 21.471 ug/l

RT: 11.73 min Scan# 1126

Delta R.T. -0.00 min

Lab File: VF060709.D

Acq: 13 Nov 2018 12:35

Instrument :

MSVOA_F

ClientSampleId :

VSTDIC020

Tot Ion: 91 Resp: 236638

Ion Ratio Lower Upper

91 100

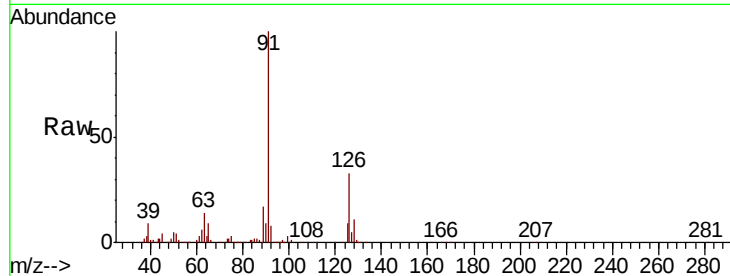
126 32.8 16.8 50.4

Manual Integrations

APPROVED

sam

11/14/2018 11:53:36 AM



Abundance Ion 91.00 (90.70 to 91.70): VF060709.D (-1121) (-)

Ion 126.00 (125.70 to 126.70): VF060709.D (-1121) (-)

300000

250000

200000

150000

100000

50000

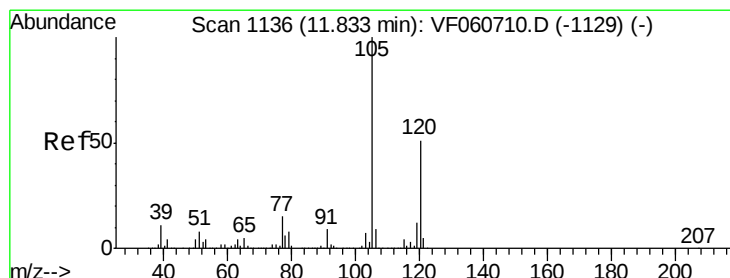
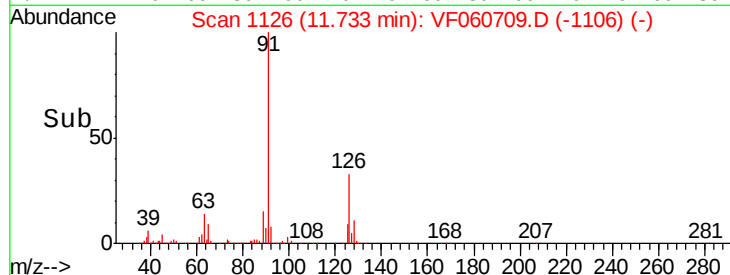
0

11.73

11.70

11.80

Time-->



#80

1,3,5-Trimethylbenzene

Concen: 19.553 ug/l

RT: 11.84 min Scan# 1137

Delta R.T. 0.01 min

Lab File: VF060709.D

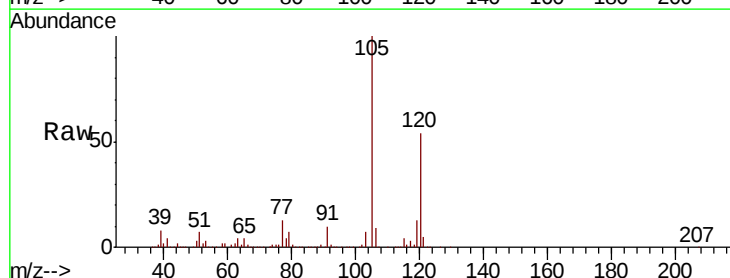
Acq: 13 Nov 2018 12:35

Tgt Ion: 105 Resp: 252397

Ion Ratio Lower Upper

105 100

120 53.6 25.6 76.8



Abundance Ion 105.00 (104.70 to 105.70): VF060709.D (-1116) (-)

Ion 120.00 (119.70 to 120.70): VF060709.D (-1116) (-)

150000

100000

50000

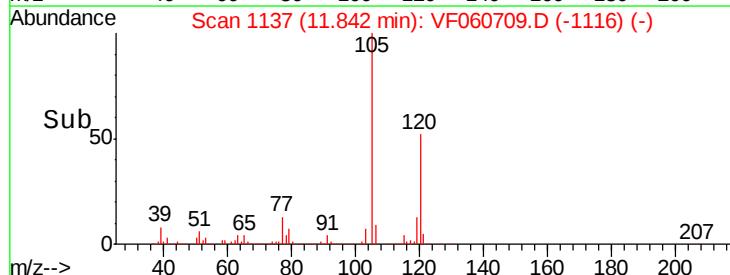
0

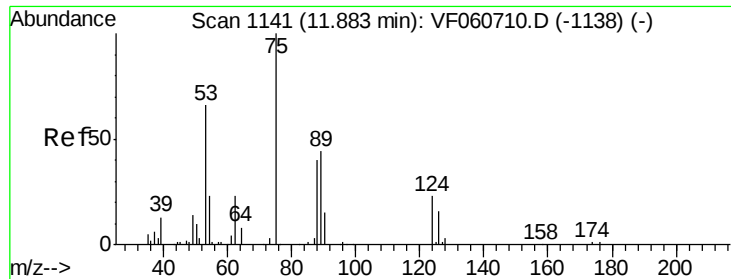
11.84

11.80

11.90

Time-->





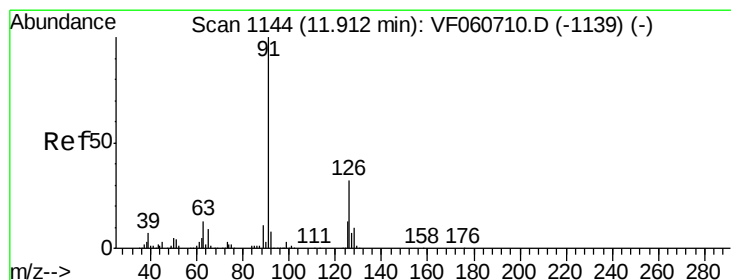
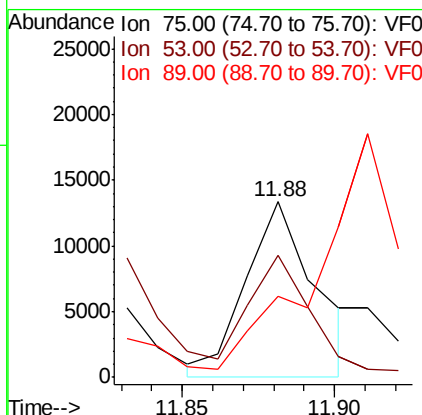
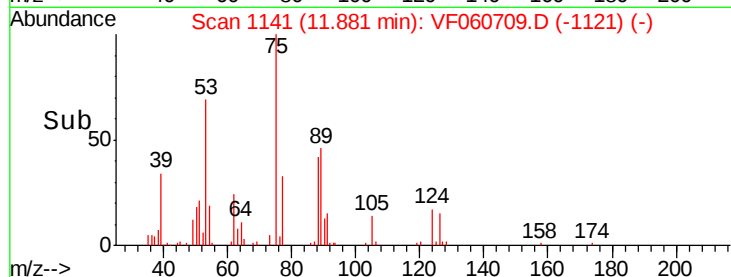
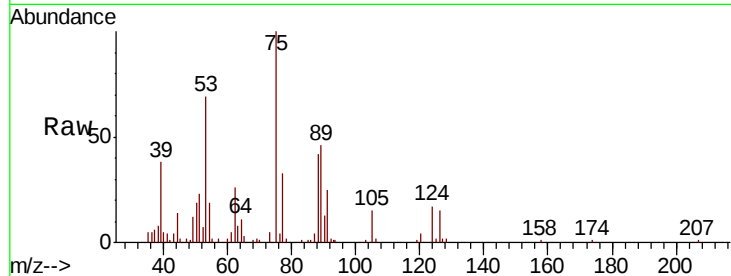
#81
trans-1,4-Dichloro-2-butene
Concen: 22.019 ug/l m
RT: 11.88 min Scan# 1141
Delta R.T. -0.00 min
Lab File: VF060709.D
Acq: 13 Nov 2018 12:35

Instrument :
MSVOA_F
ClientSampleId :
VSTDIC020

Tot Ion	Ratio	Lower	Upper
75	100		
53	69.2	57.0	85.4
89	46.2	37.8	56.8

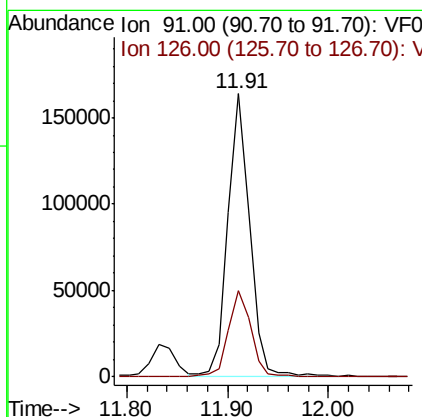
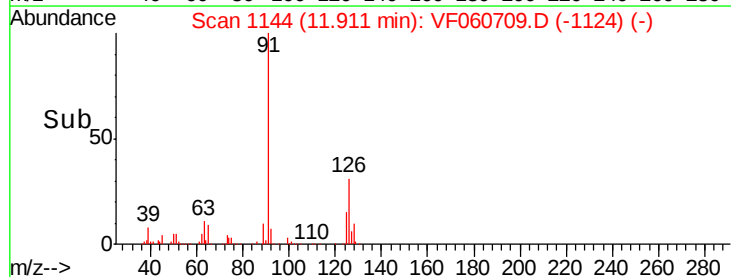
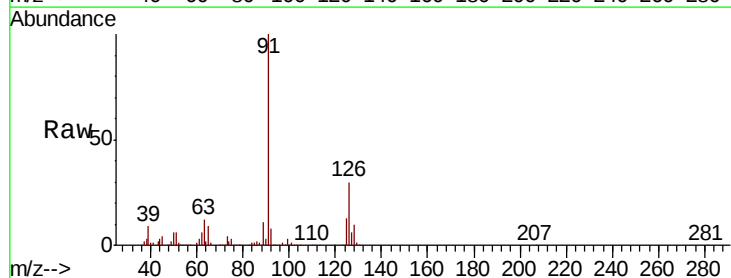
Manual Integrations
APPROVED

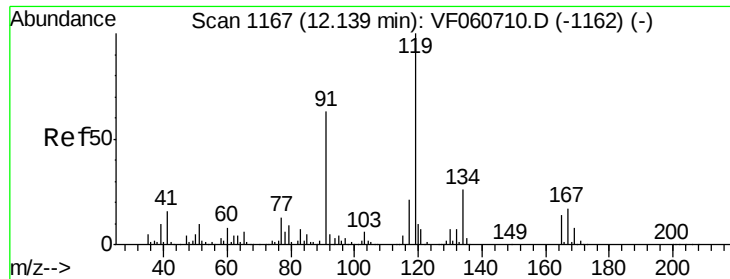
sam
11/14/2018 11:53:36 AM



#82
4-Chlorotoluene
Concen: 21.691 ug/l
RT: 11.91 min Scan# 1144
Delta R.T. -0.00 min
Lab File: VF060709.D
Acq: 13 Nov 2018 12:35

Tgt Ion	Ratio	Lower	Upper
91	100		
126	30.3	16.0	47.9





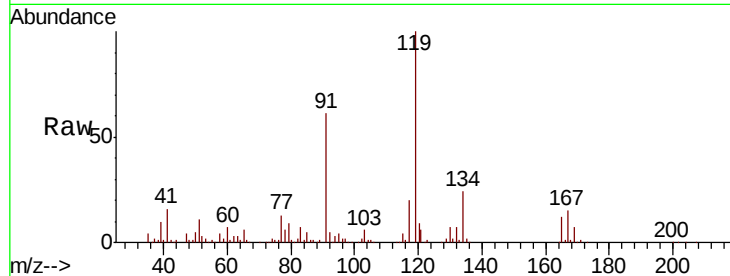
#83
tert-Butylbenzene
Concen: 21.523 ug/l
RT: 12.14 min Scan# 1167
Delta R.T. -0.00 min
Lab File: VF060709.D
Acq: 13 Nov 2018 12:35

Instrument :
MSVOA_F
ClientSampleId :
VSTDIC020

Tot Ion	Ratio	Resp	Lower	Upper
119	100	294984		
91	60.5		31.4	94.3
134	24.1		12.8	38.4

Manual Integrations
APPROVED

sam
11/14/2018 11:53:36 AM

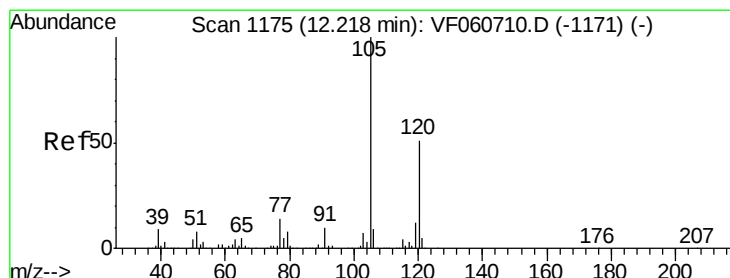
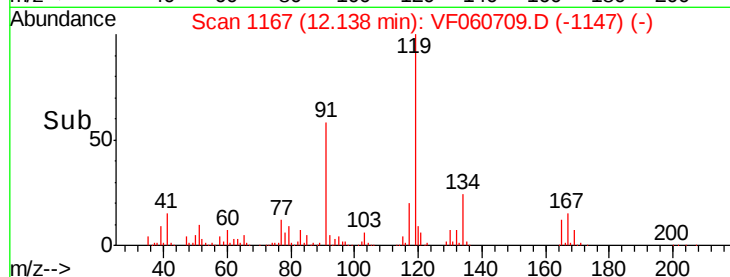
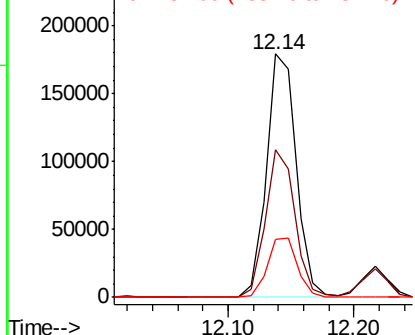


Abundance

Ion 119.00 (118.70 to 119.70): V

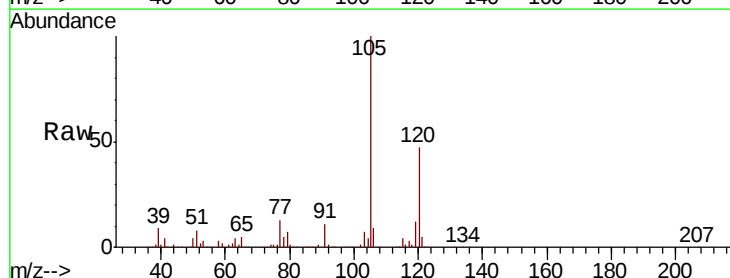
Ion 91.00 (90.70 to 91.70): VF0

Ion 134.00 (133.70 to 134.70): V



#84
1,2,4-Trimethylbenzene
Concen: 20.522 ug/l
RT: 12.22 min Scan# 1175
Delta R.T. -0.00 min
Lab File: VF060709.D
Acq: 13 Nov 2018 12:35

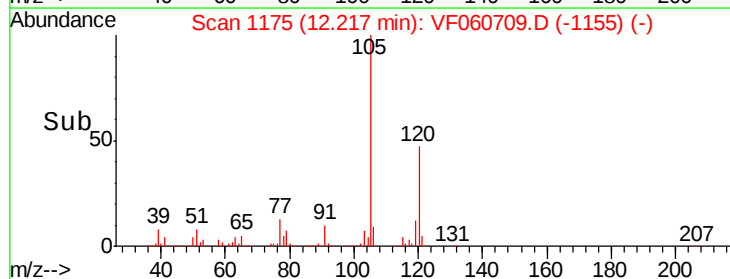
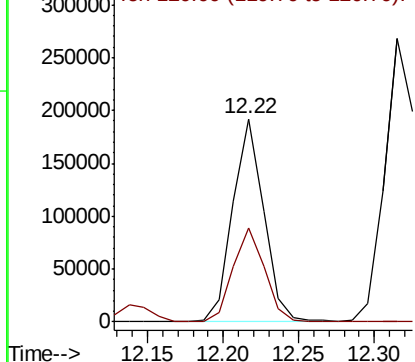
Tgt Ion	Ratio	Resp	Lower	Upper
105	100	273977		
120	46.6		25.5	76.5

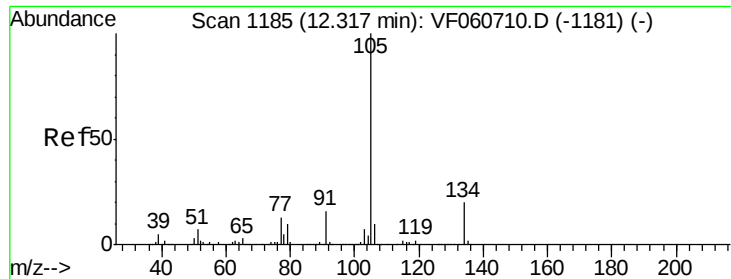


Abundance

Ion 105.00 (104.70 to 105.70): V

Ion 120.00 (119.70 to 120.70): V





#85

sec-Butylbenzene

Concen: 21.433 ug/l

RT: 12.32 min Scan# 1185

Delta R.T. -0.00 min

Lab File: VF060709.D

Acq: 13 Nov 2018 12:35

Instrument :

MSVOA_F

ClientSampleId :

VSTDIC020

Tot Ion:105 Resp: 398493

Ion Ratio Lower Upper

105 100

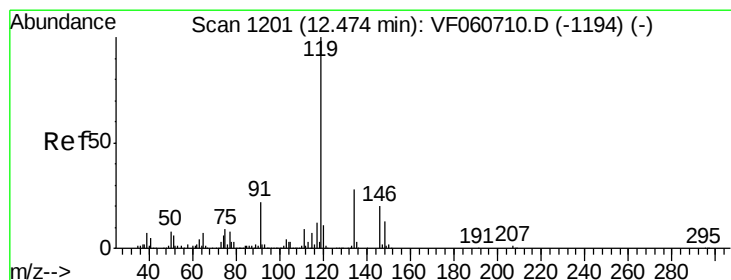
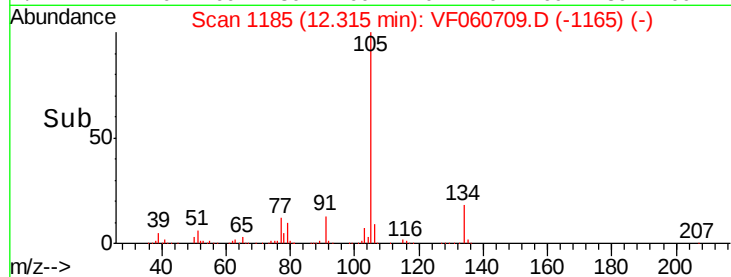
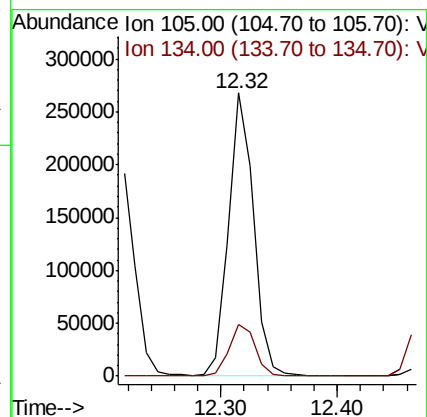
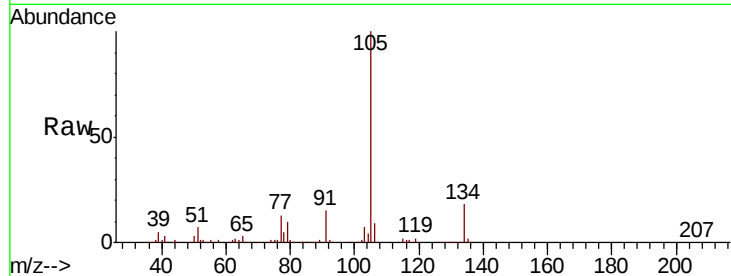
134 18.5 10.1 30.3

Manual Integrations

APPROVED

sam

11/14/2018 11:53:36 AM



#86

p-Isopropyltoluene

Concen: 21.013 ug/l

RT: 12.47 min Scan# 1201

Delta R.T. -0.00 min

Lab File: VF060709.D

Acq: 13 Nov 2018 12:35

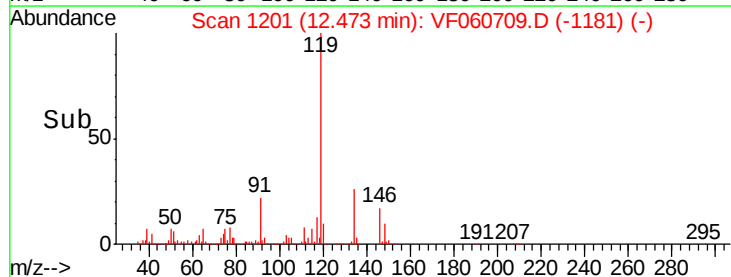
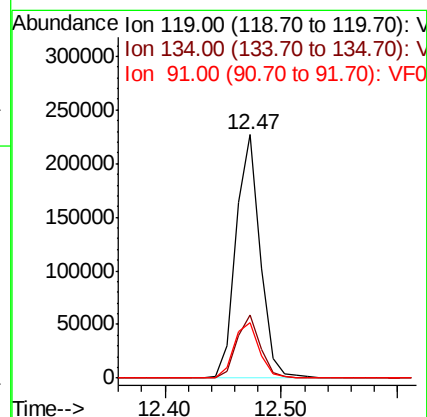
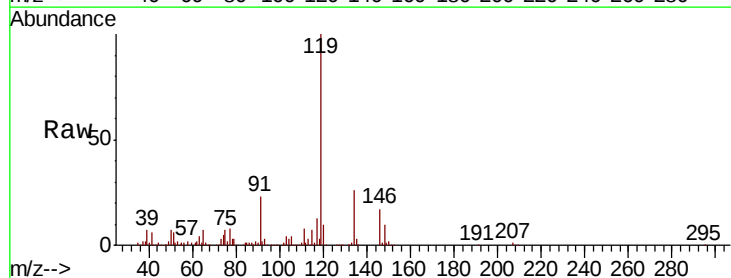
Tgt Ion:119 Resp: 326294

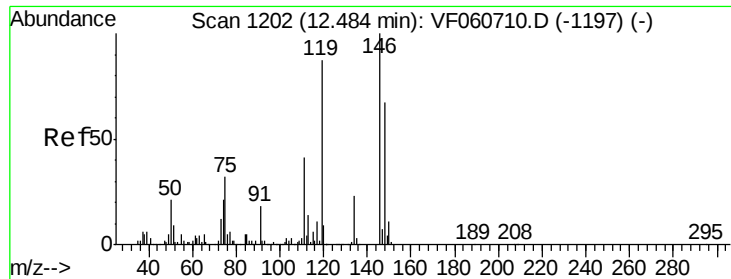
Ion Ratio Lower Upper

119 100

134 26.0 13.9 41.7

91 22.6 11.3 33.9





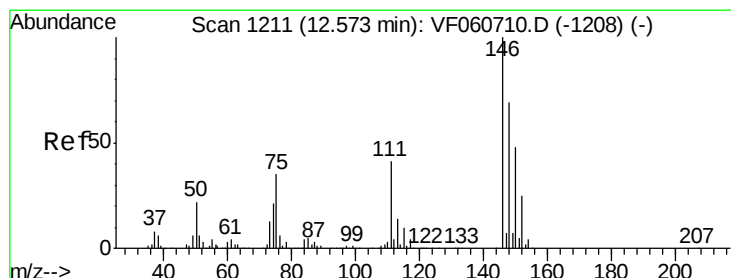
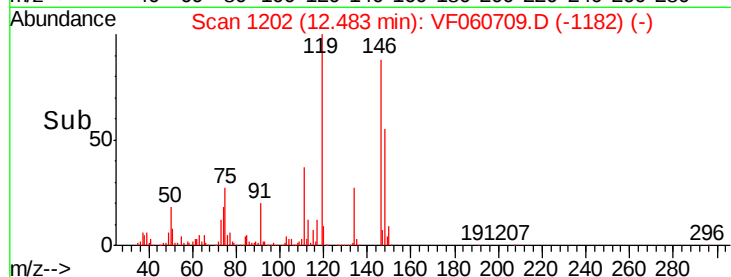
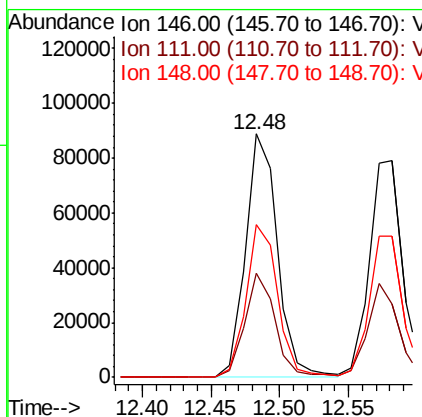
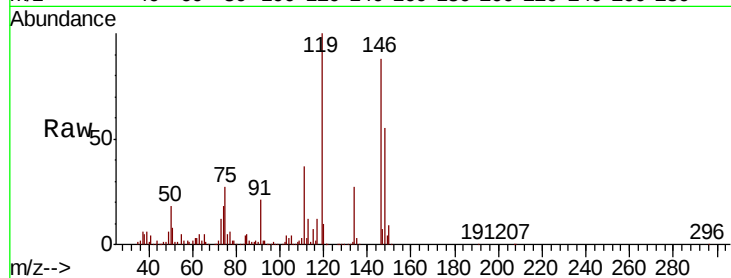
#87
 1,3-Dichlorobenzene
 Concen: 21.446 ug/l
 RT: 12.48 min Scan# 1202
 Delta R.T. -0.00 min
 Lab File: VF060709.D
 Acq: 13 Nov 2018 12:35

Instrument :
 MSVOA_F
 ClientSampleId :
 VSTDIC020

Tot Ion	Ratio	Lower	Upper
146	100		
111	42.5	20.3	60.8
148	62.5	33.3	99.9

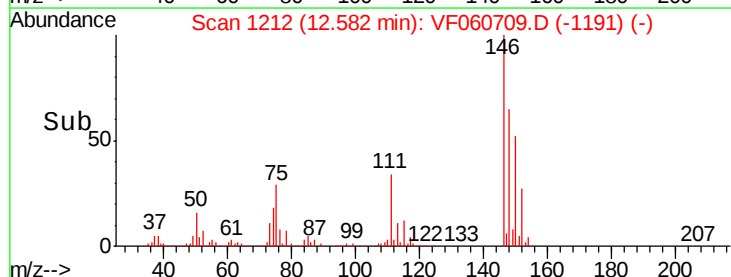
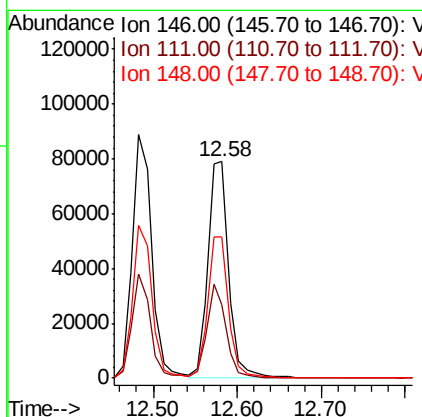
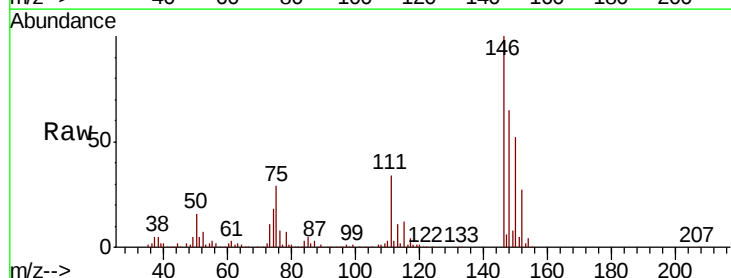
Manual Integrations
 APPROVED

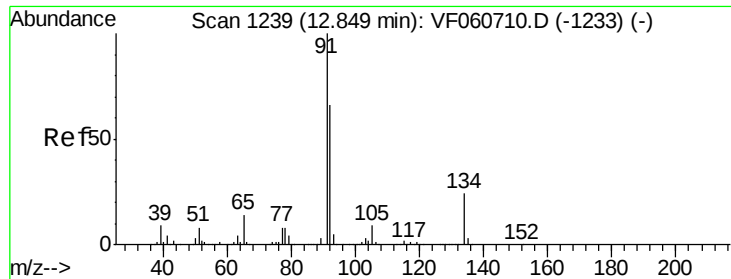
sam
 11/14/2018 11:53:36 AM



#88
 1,4-Dichlorobenzene
 Concen: 20.803 ug/l
 RT: 12.58 min Scan# 1212
 Delta R.T. 0.01 min
 Lab File: VF060709.D
 Acq: 13 Nov 2018 12:35

Tgt Ion	Ratio	Lower	Upper
146	100		
111	34.0	20.6	61.9
148	65.2	34.7	104.1





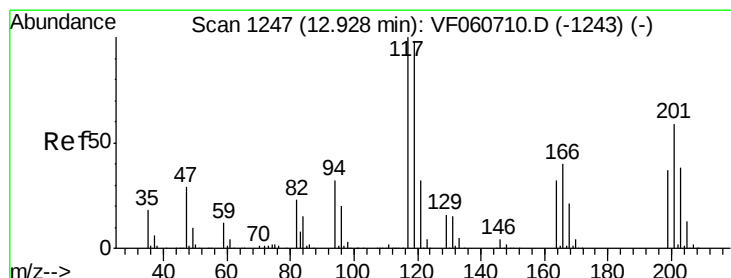
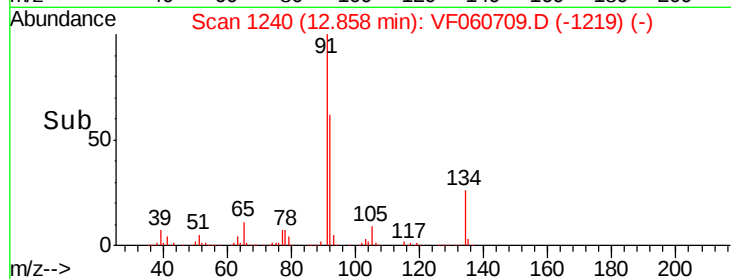
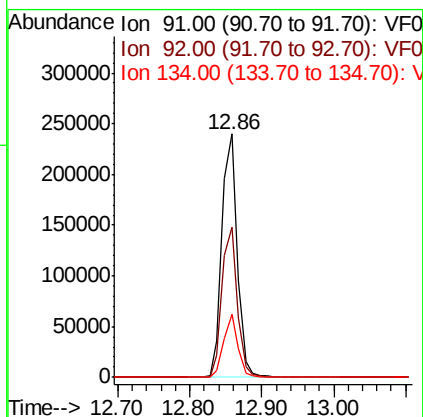
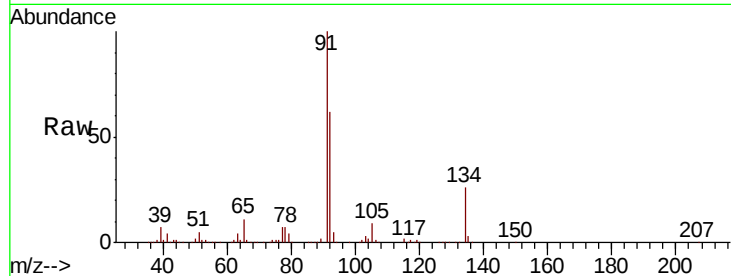
#89
n-Butylbenzene
Concen: 22.218 ug/l
RT: 12.86 min Scan# 1240
Delta R.T. 0.01 min
Lab File: VF060709.D
Acq: 13 Nov 2018 12:35

Instrument :
MSVOA_F
ClientSampleId :
VSTDIC020

Tot Ion	Ratio	Lower	Upper
91	100		
92	61.6	33.1	99.2
134	26.0	11.9	35.9

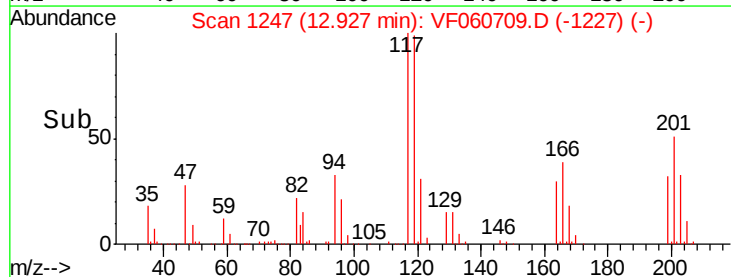
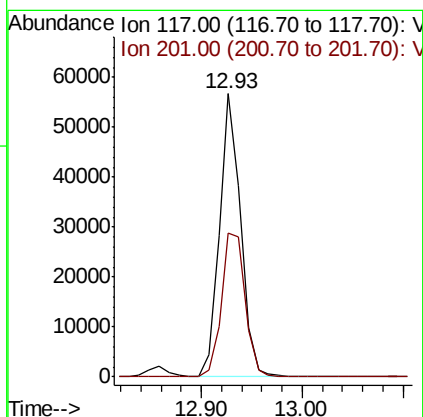
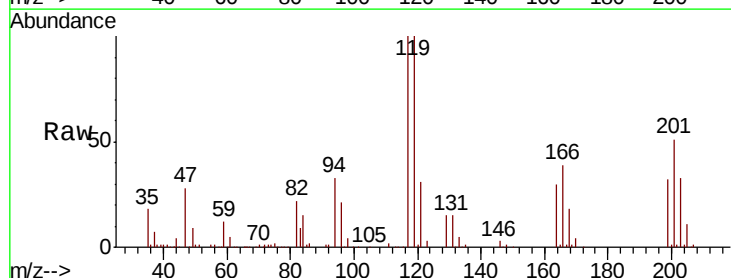
Manual Integrations
APPROVED

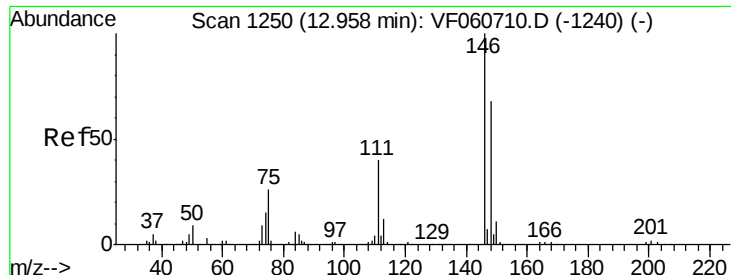
sam
11/14/2018 11:53:36 AM



#90
Hexachloroethane
Concen: 21.915 ug/l
RT: 12.93 min Scan# 1247
Delta R.T. -0.00 min
Lab File: VF060709.D
Acq: 13 Nov 2018 12:35

Tgt Ion	Ratio	Lower	Upper
117	100		
201	50.6	29.4	88.3





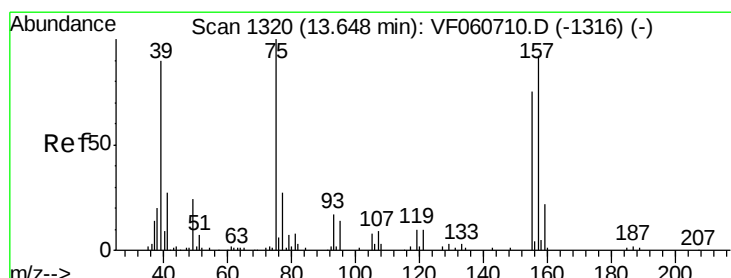
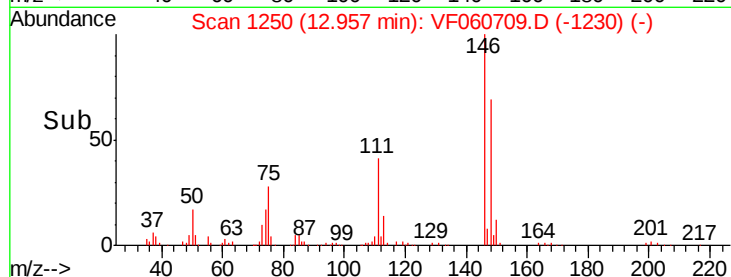
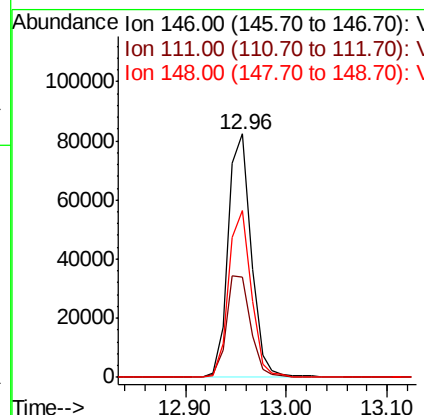
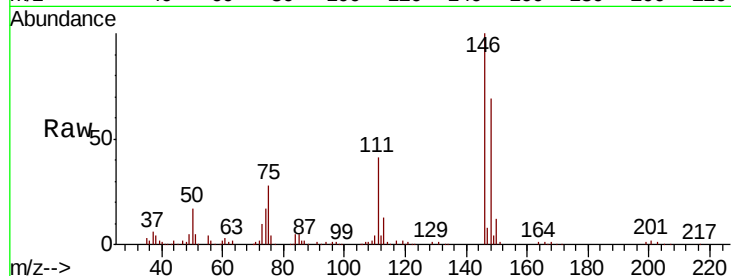
#91
 1,2-Dichlorobenzene
 Concen: 20.841 ug/l
 RT: 12.96 min Scan# 1250
 Delta R.T. -0.00 min
 Lab File: VF060709.D
 Acq: 13 Nov 2018 12:35

Instrument :
 MSVOA_F
 ClientSampleId :
 VSTDIC020

Tot Ion	Ratio	Lower	Upper
146	100		
111	41.3	20.3	60.8
148	68.8	34.1	102.3

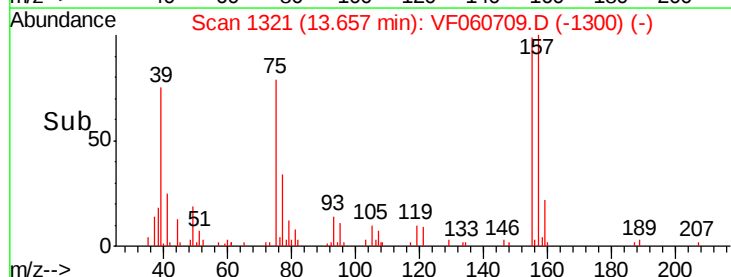
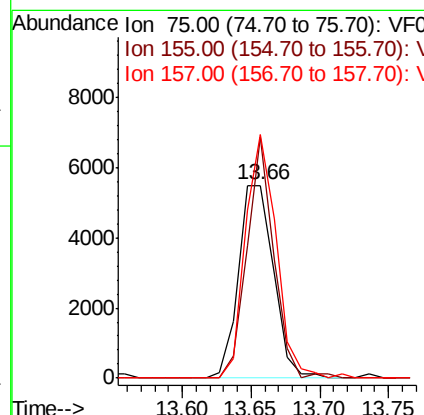
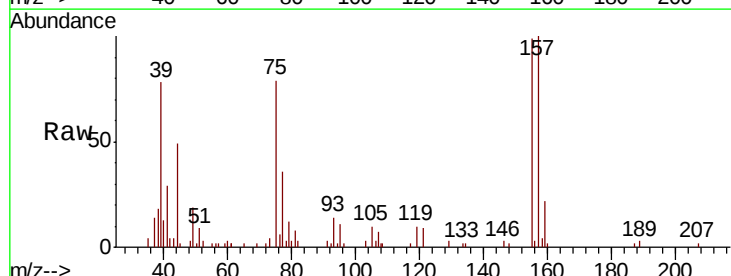
Manual Integrations
 APPROVED

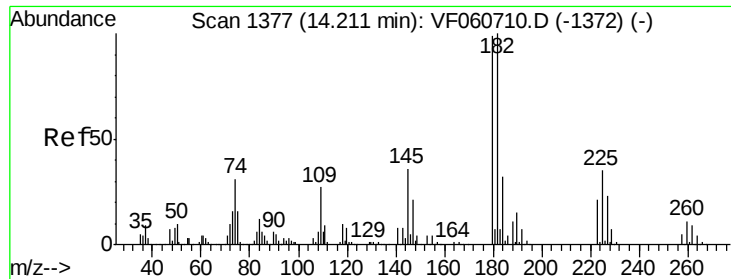
sam
 11/14/2018 11:53:36 AM



#92
 1,2-Dibromo-3-Chloropropane
 Concen: 19.333 ug/l
 RT: 13.66 min Scan# 1321
 Delta R.T. 0.01 min
 Lab File: VF060709.D
 Acq: 13 Nov 2018 12:35

Tgt Ion	Ratio	Lower	Upper
75	100		
155	125.1	37.4	112.2#
157	126.3	46.0	138.0





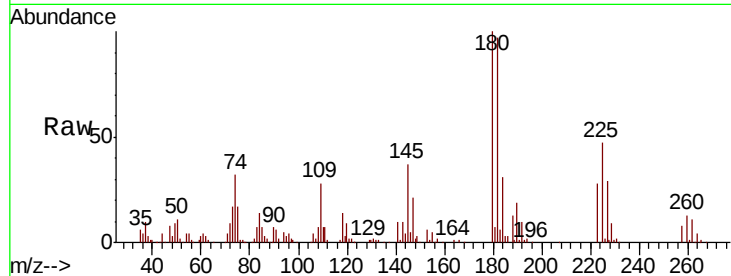
#93
 1,2,4-Trichlorobenzene
 Concen: 21.528 ug/l
 RT: 14.21 min Scan# 1377
 Delta R.T. -0.00 min
 Lab File: VF060709.D
 Acq: 13 Nov 2018 12:35

Instrument :
 MSVOA_F
 ClientSampleId :
 VSTDIC020

Tot Ion	Ratio	Resp	Lower	Upper
180	100			
182	96.7	50.3	151.0	
145	36.7	18.3	54.9	

Manual Integrations
 APPROVED

sam
 11/14/2018 11:53:36 AM

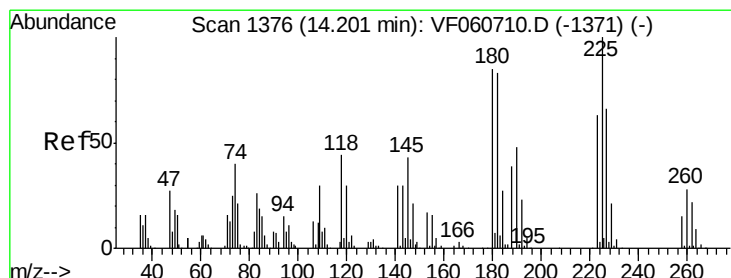
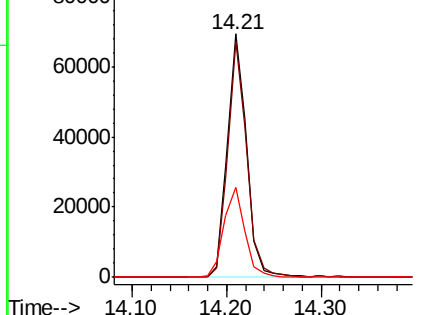
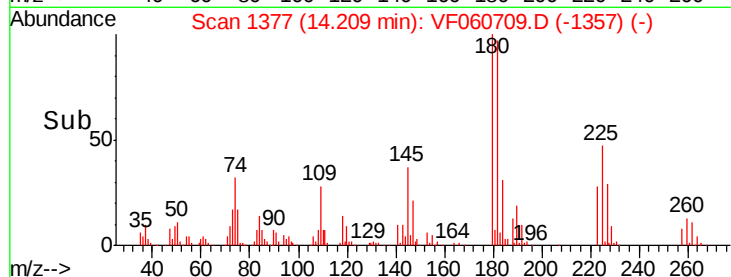


Abundance

Ion 180.00 (179.70 to 180.70): V

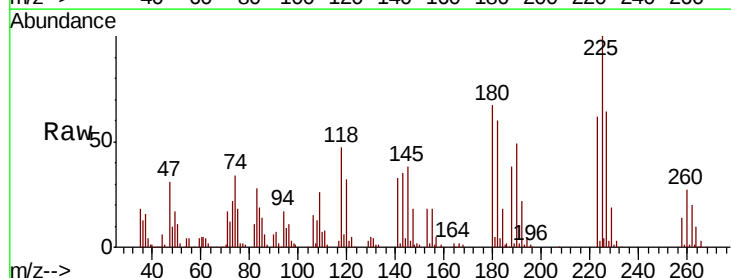
Ion 182.00 (181.70 to 182.70): V

Ion 145.00 (144.70 to 145.70): V



#94
 Hexachlorobutadiene
 Concen: 21.462 ug/l
 RT: 14.20 min Scan# 1376
 Delta R.T. -0.00 min
 Lab File: VF060709.D
 Acq: 13 Nov 2018 12:35

Tgt Ion	Ratio	Resp	Lower	Upper
225	100			
223	61.5	31.5	94.5	
227	64.1	33.0	99.0	

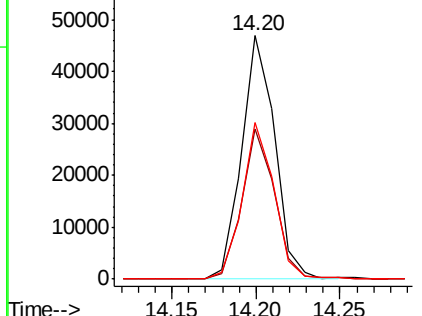
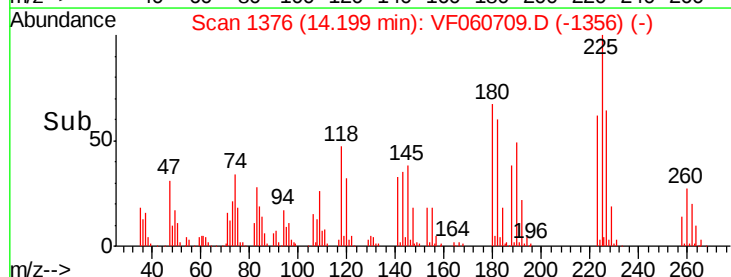


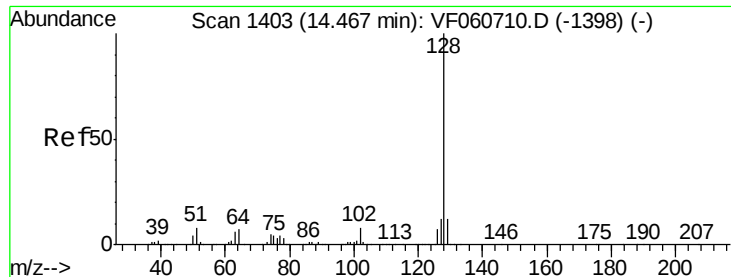
Abundance

Ion 225.00 (224.70 to 225.70): V

Ion 223.00 (222.70 to 223.70): V

Ion 227.00 (226.70 to 227.70): V





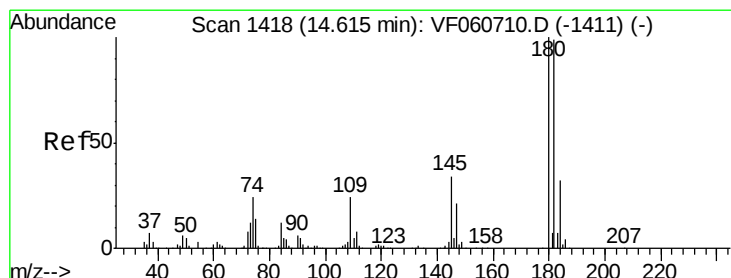
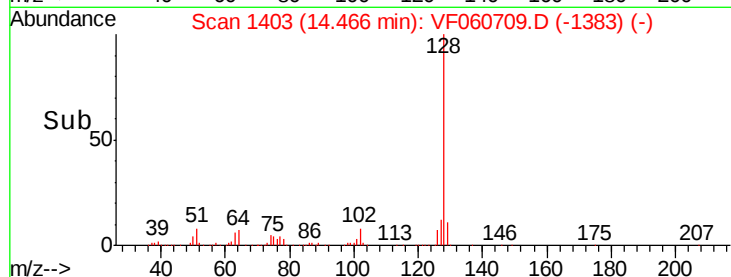
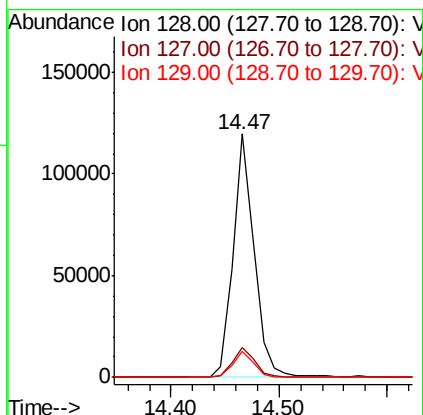
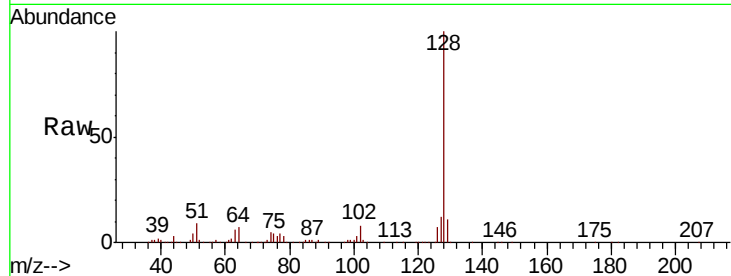
#95
Naphthalene
Concen: 19.682 ug/l
RT: 14.47 min Scan# 1403
Delta R.T. -0.00 min
Lab File: VF060709.D
Acq: 13 Nov 2018 12:35

Instrument :
MSVOA_F
ClientSampleId :
VSTDIC020

Tot Ion	Ratio	Lower	Upper
128	100		
127	12.0	9.8	14.6
129	10.9	9.3	13.9

Manual Integrations
APPROVED

sam
11/14/2018 11:53:36 AM



#96
1,2,3-Trichlorobenzene
Concen: 20.646 ug/l
RT: 14.61 min Scan# 1418
Delta R.T. -0.00 min
Lab File: VF060709.D
Acq: 13 Nov 2018 12:35

Tgt Ion	Ratio	Lower	Upper
180	100		
182	97.4	49.6	149.0
145	33.7	16.9	50.7

