

Data File : VF059305.D
Acq On : 25 Jun 2018 16:41
Operator : VA/AP
Sample : VSTDIC075
Misc : 5.00g/5mL/MSVOA-F/SOIL
ALS Vial : 8 Sample Multiplier: 1

Instrument :
MSVOA_F
ClientSampleId :
VSTDIC075

Quant Time: Jun 26 08:01:08 2018
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_F\METHODS\82F062518S.M
Quant Title : SW846 8260
QLast Update : Tue Jun 26 07:57:09 2018
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	5.03	168	276887	50.00	ug/l	0.00
34) 1,4-Difluorobenzene	5.75	114	424685	50.00	ug/l	-0.01
63) Chlorobenzene-d5	9.91	117	433448	50.00	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	12.63	152	249798	50.00	ug/l	0.00

System Monitoring Compounds

33) 1,2-Dichloroethane-d4	5.01	65	229016	58.67	ug/l	0.00
Spiked Amount	50.000		Recovery	=	117.34%	
35) Dibromofluoromethane	4.28	113	189437	54.29	ug/l	0.00
Spiked Amount	50.000		Recovery	=	108.58%	
50) Toluene-d8	7.70	98	527746	59.73	ug/l	0.00
Spiked Amount	50.000		Recovery	=	119.46%	
62) 4-Bromofluorobenzene	11.50	95	275413	56.26	ug/l	0.00
Spiked Amount	50.000		Recovery	=	112.52%	

Target Compounds

						Qvalue
2) Dichlorodifluoromethane	0.98	85	188235	60.184	ug/l	91
3) Chloromethane	1.08	50	119319	60.536	ug/l	99
4) Vinyl Chloride	1.14	62	120581	61.802	ug/l	99
5) Bromomethane	1.34	94	85260	64.056	ug/l	96
6) Chloroethane	1.42	64	65145	68.198	ug/l	91
7) Trichlorofluoromethane	1.49	101	82459	21.593	ug/l	98
8) Diethyl Ether	1.69	74	56866	64.283	ug/l	98
9) 1,1,2-Trichlorotrifluoroet	1.90	101	134165	62.134	ug/l	96
10) Methyl Iodide	1.95	142	248526	62.757	ug/l	96
11) Tert butyl alcohol	2.67	59	59440	250.665	ug/l #	91
12) 1,1-Dichloroethene	1.84	96	119760	61.951	ug/l	95
13) Acrolein	2.08	56	31740	167.891	ug/l	100
14) Allyl chloride	2.18	41	214272	59.912	ug/l	95
15) Acrylonitrile	3.06	53	123083	250.934	ug/l	95
16) Acetone	2.32	43	272066	285.599	ug/l	99
17) Carbon Disulfide	1.83	76	270521	58.143	ug/l	94
18) Methyl Acetate	2.44	43	100589	56.023	ug/l	97
19) Methyl tert-butyl Ether	2.52	73	378074	58.088	ug/l	94
20) Methylene Chloride	2.27	84	129598	62.389	ug/l	95
21) trans-1,2-Dichloroethene	2.40	96	119570	60.156	ug/l	98
22) Diisopropyl ether	2.92	45	453242	60.967	ug/l	97
23) Vinyl Acetate	3.32	43	1364780	286.557	ug/l	100
24) 1,1-Dichloroethane	2.99	63	276350	57.561	ug/l	100
25) 2-Butanone	4.49	43	346124	278.368	ug/l	98
26) 2,2-Dichloropropane	3.74	77	199016	59.805	ug/l	100
27) cis-1,2-Dichloroethene	3.62	96	176505	58.290	ug/l	92
28) Bromochloromethane	3.87	49	96094	47.903	ug/l	97
29) Tetrahydrofuran	4.24	42	143305	257.164	ug/l	97
30) Chloroform	4.02	83	411557	59.309	ug/l	100
31) Cyclohexane	3.85	56	176474	54.250	ug/l	90
32) 1,1,1-Trichloroethane	4.26	97	300590	57.755	ug/l	94
36) 1,1-Dichloropropene	4.44	75	257196	59.823	ug/l	98
37) Ethyl Acetate	4.28	43	142296	50.342	ug/l #	81
38) Carbon Tetrachloride	4.16	117	361999	68.254	ug/l	93

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Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
39) Methylcyclohexane	5.61	83	236429	61.159	ug/l	95
40) Benzene	4.80	78	536669	58.357	ug/l	99
41) Methacrylonitrile	4.91	41	75599	56.181	ug/l	95
42) 1,2-Dichloroethane	5.10	62	327728	62.047	ug/l	99
43) Isopropyl Acetate	7.10	43	191622	56.338	ug/l #	94
44) Trichloroethene	5.66	130	192846	60.979	ug/l	98
45) 1,2-Dichloropropane	6.39	63	165758	62.161	ug/l	97
46) Dibromomethane	6.24	93	137082	59.904	ug/l	97
47) Bromodichloromethane	6.53	83	333821	61.189	ug/l	98
48) Methyl methacrylate	6.86	41	133247	61.197	ug/l	97
49) 1,4-Dioxane	6.85	88	13543	1061.445	ug/l	95
51) 4-Methyl-2-Pentanone	8.40	43	670151	272.850	ug/l	99
52) Toluene	7.77	92	407330	57.260	ug/l	100
53) t-1,3-Dichloropropene	8.42	75	295690	58.025	ug/l	99
54) cis-1,3-Dichloropropene	7.44	75	343220	63.349	ug/l	99
55) 1,1,2-Trichloroethane	8.62	97	160728	58.468	ug/l	96
56) Ethyl methacrylate	8.75	69	189928	60.127	ug/l	99
57) 1,3-Dichloropropane	8.99	76	278631	61.283	ug/l	100
58) 2-Chloroethyl Vinyl ether	7.77	63	71757	285.831	ug/l	100
59) 2-Hexanone	9.62	43	560509	285.289	ug/l	99
60) Dibromochloromethane	8.85	129	259854	63.883	ug/l	97
61) 1,2-Dibromoethane	9.13	107	192753	60.418	ug/l	98
64) Tetrachloroethene	8.29	164	191779	59.324	ug/l	91
65) Chlorobenzene	9.92	112	538064	60.093	ug/l	98
66) 1,1,1,2-Tetrachloroethane	10.06	131	226787	60.073	ug/l	96
67) Ethyl Benzene	10.02	91	904653	59.570	ug/l	97
68) m/p-Xylenes	10.26	106	662464	122.121	ug/l	95
69) o-Xylene	10.82	106	366687	60.994	ug/l	91
70) Styrene	10.89	104	537690	58.885	ug/l	98
71) Bromoform	10.88	173	158371	59.090	ug/l	97
73) Isopropylbenzene	11.22	105	1067509	64.067	ug/l	98
74) N-amyl acetate	11.45	43	356934	64.235	ug/l	97
75) 1,1,2,2-Tetrachloroethane	11.78	83	237687	59.583	ug/l	99
76) 1,2,3-Trichloropropane	11.88	75	188644	64.686	ug/l	95
77) Bromobenzene	11.58	156	274433	60.795	ug/l	97
78) n-propylbenzene	11.68	91	1232140	62.810	ug/l	98
79) 2-Chlorotoluene	11.81	91	742244	62.871	ug/l	97
80) 1,3,5-Trimethylbenzene	11.91	105	913541	64.932	ug/l	99
81) trans-1,4-Dichloro-2-buten	11.95	75	110835	60.138	ug/l	95
82) 4-Chlorotoluene	11.98	91	806621	63.232	ug/l	100
83) tert-Butylbenzene	12.21	119	925509	65.138	ug/l	98
84) 1,2,4-Trimethylbenzene	12.28	105	934539	62.779	ug/l	97
85) sec-Butylbenzene	12.38	105	1199513	62.853	ug/l	97
86) p-Isopropyltoluene	12.53	119	1009294	64.474	ug/l	99
87) 1,3-Dichlorobenzene	12.55	146	495350	61.146	ug/l	99
88) 1,4-Dichlorobenzene	12.64	146	488923	61.297	ug/l	98
89) n-Butylbenzene	12.91	91	983640	61.823	ug/l	98
90) Hexachloroethane	12.99	117	261705	66.388	ug/l	96
91) 1,2-Dichlorobenzene	13.01	146	505505	62.222	ug/l	98
92) 1,2-Dibromo-3-Chloropropan	13.71	75	53714	62.349	ug/l	89

Data Path : Z:\VOASRV\HPCHEM1\MSVOA_F\DATA\VF062518\
Quantitation Report (Not Reviewed)

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Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
93) 1,2,4-Trichlorobenzene	14.26	180	351551	59.691	ug/l #	85
94) Hexachlorobutadiene	14.25	225	210248	60.995	ug/l #	75
95) Naphthalene	14.52	128	802026	66.063	ug/l	99
96) 1,2,3-Trichlorobenzene	14.66	180	366575	66.173	ug/l	99

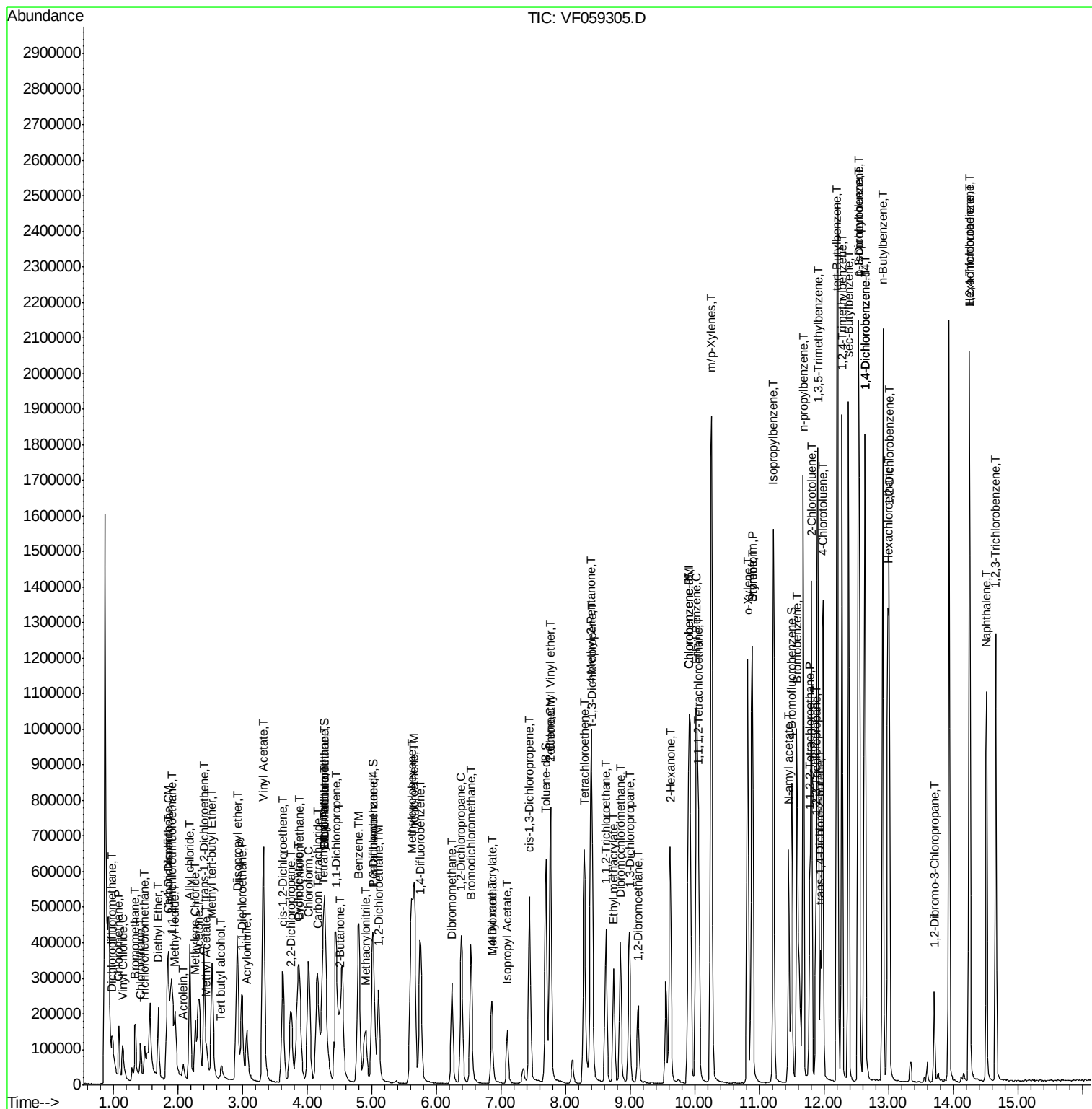
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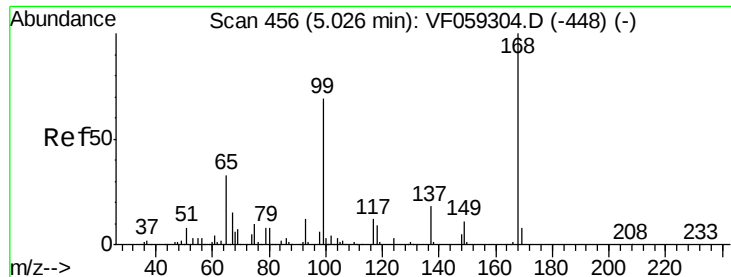
Data File : VF059305.D

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#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 5.03 min Scan# 456

Delta R.T. -0.00 min

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Instrument :

MSVOA_F

ClientSampleId :

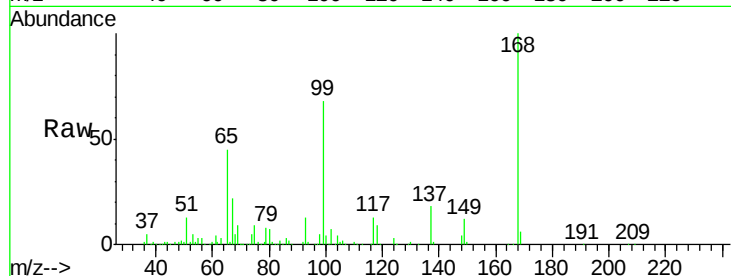
VSTDIC075

Tgt Ion: 168 Resp: 276887

Ion Ratio Lower Upper

168 100

99 68.1 54.9 82.3



Abundance Ion 168.00 (167.70 to 168.70): VF0

Ion 99.00 (98.70 to 99.70): VF0

5.03

100000

80000

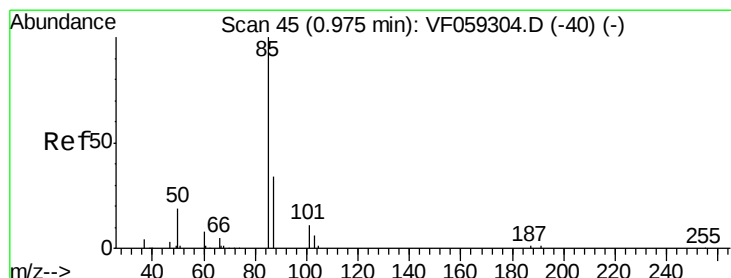
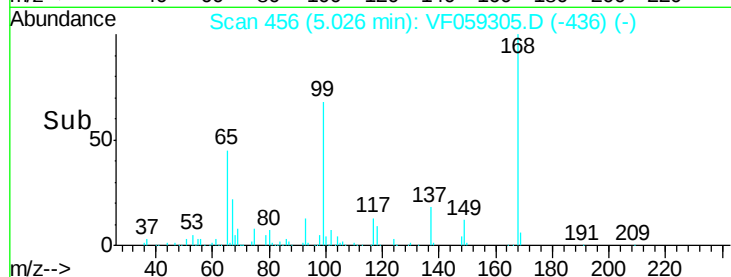
60000

40000

20000

0

Time-->



#2

Dichlorodifluoromethane

Concen: 60.184 ug/l

RT: 0.98 min Scan# 46

Delta R.T. 0.01 min

Lab File: VF059305.D

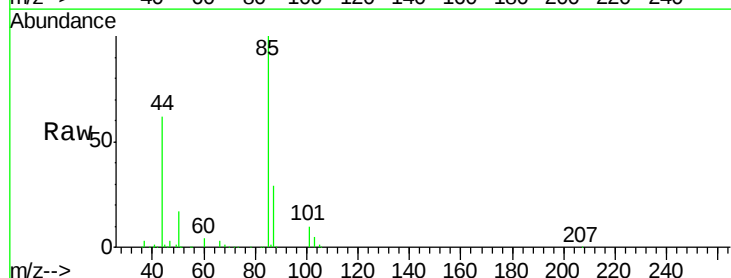
Acq: 25 Jun 2018 16:41

Tgt Ion: 85 Resp: 188235

Ion Ratio Lower Upper

85 100

87 28.9 17.1 51.3



Abundance Ion 85.00 (84.70 to 85.70): VF0

Ion 87.00 (86.70 to 87.70): VF0

0.98

60000

50000

40000

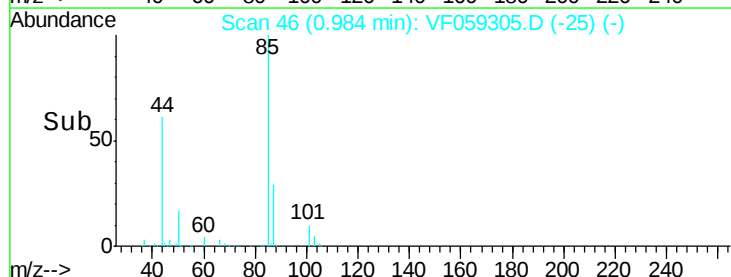
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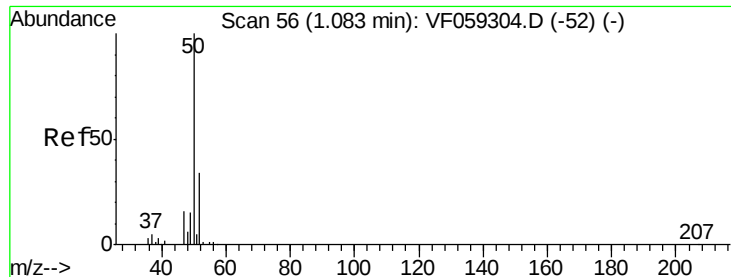
20000

10000

0

Time-->





#3

Chloromethane

Concen: 60.536 ug/l

RT: 1.08 min Scan# 56

Delta R.T. -0.00 min

Lab File: VF059305.D

Acq: 25 Jun 2018 16:41

Instrument :

MSVOA_F

ClientSampleId :

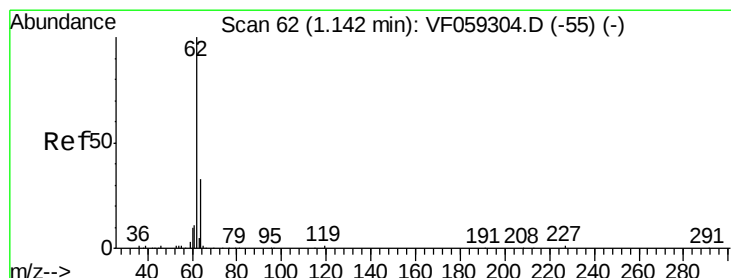
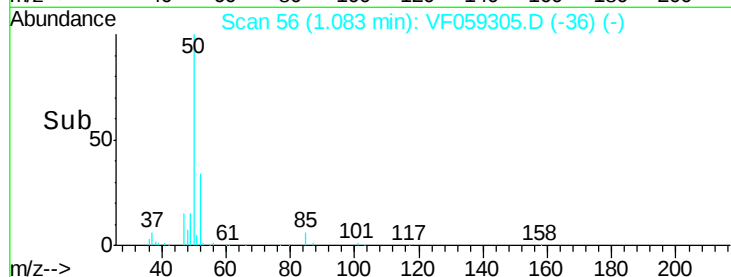
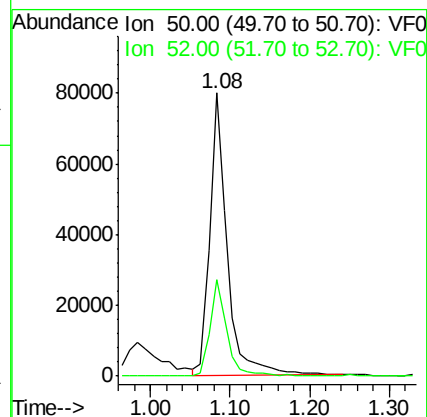
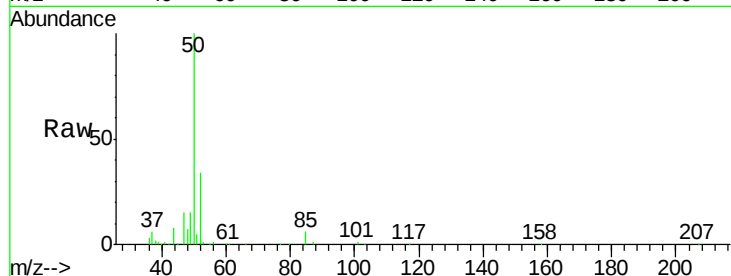
VSTDIC075

Tgt Ion: 50 Resp: 119319

Ion Ratio Lower Upper

50 100

52 34.0 26.7 40.1



#4

Vinyl Chloride

Concen: 61.802 ug/l

RT: 1.14 min Scan# 62

Delta R.T. -0.00 min

Lab File: VF059305.D

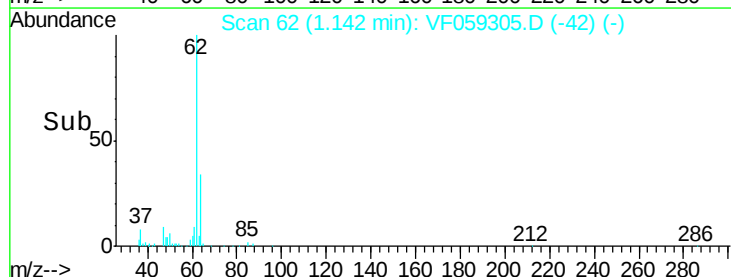
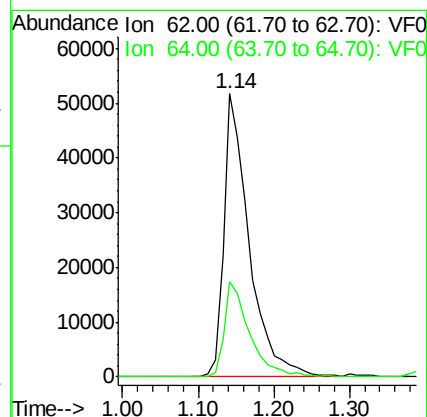
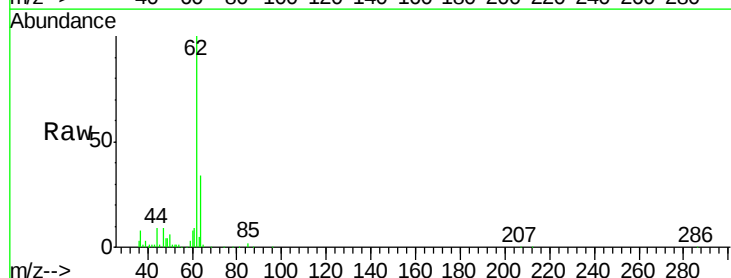
Acq: 25 Jun 2018 16:41

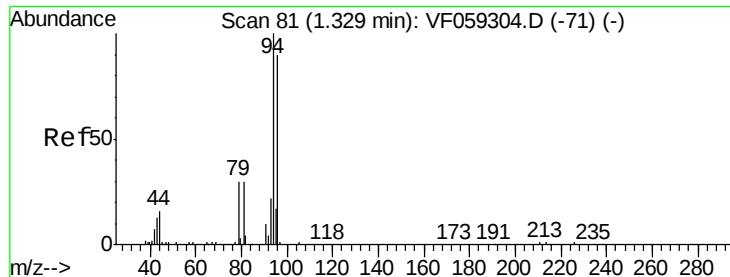
Tgt Ion: 62 Resp: 120581

Ion Ratio Lower Upper

62 100

64 33.7 26.3 39.5





#5

Bromomethane

Concen: 64.056 ug/l

RT: 1.34 min Scan# 82

Delta R.T. 0.01 min

Lab File: VF059305.D

Acq: 25 Jun 2018 16:41

Instrument :

MSVOA_F

ClientSampleId :

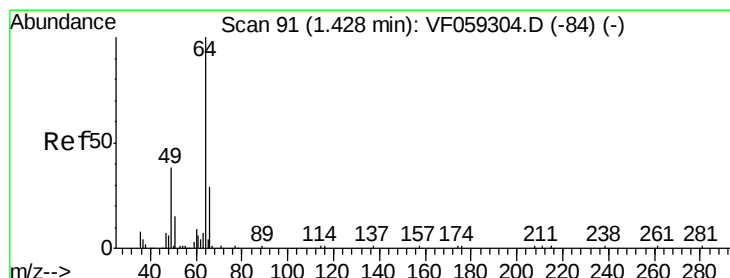
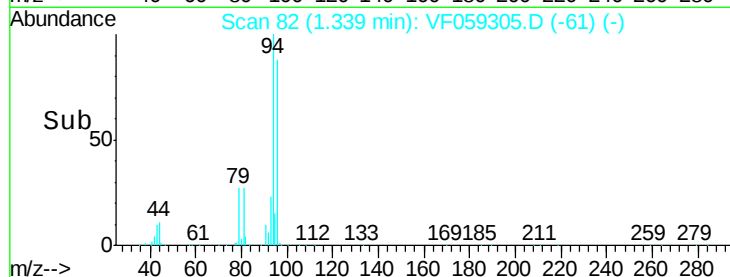
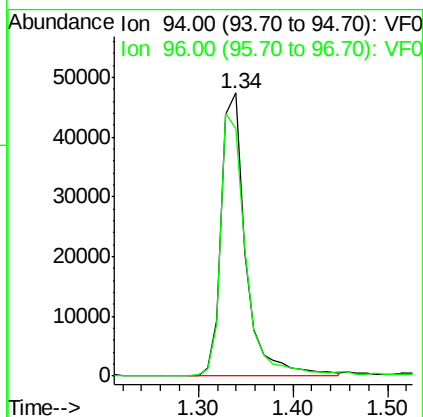
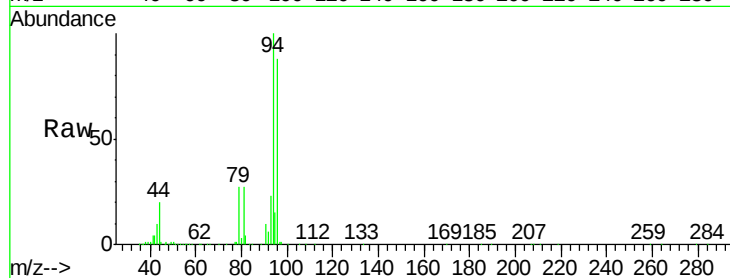
VSTDIC075

Tgt Ion: 94 Resp: 85260

Ion Ratio Lower Upper

94 100

96 87.7 73.4 110.0



#6

Chloroethane

Concen: 68.198 ug/l

RT: 1.42 min Scan# 90

Delta R.T. -0.01 min

Lab File: VF059305.D

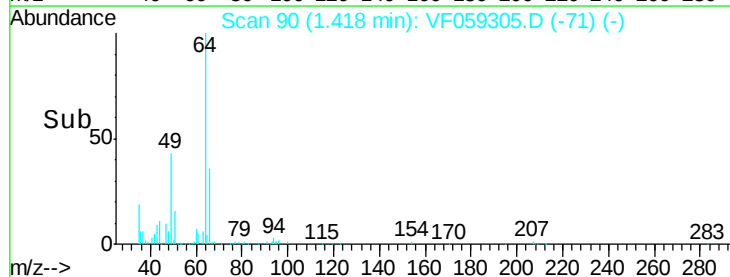
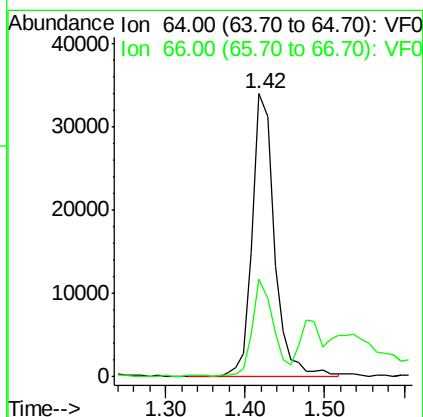
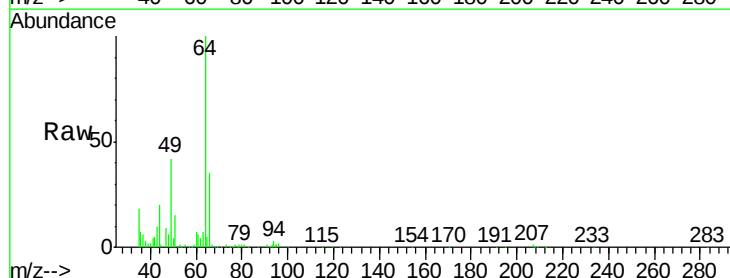
Acq: 25 Jun 2018 16:41

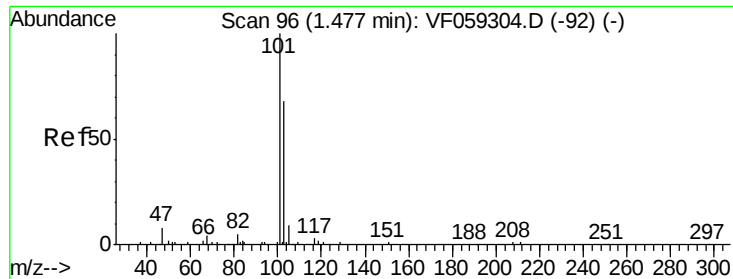
Tgt Ion: 64 Resp: 65145

Ion Ratio Lower Upper

64 100

66 34.8 23.9 35.9





#7

Trichlorofluoromethane

Concen: 21.593 ug/l

RT: 1.49 min Scan# 97

Delta R.T. 0.01 min

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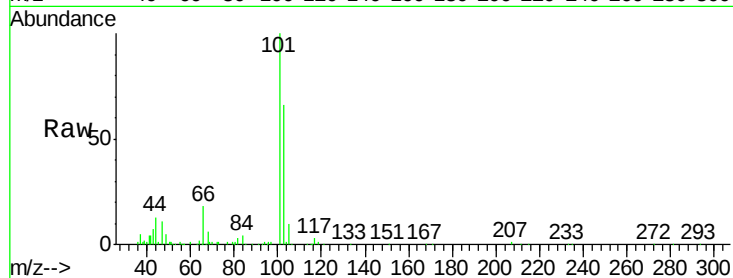
VSTDIC075

Tgt Ion:101 Resp: 82459

Ion Ratio Lower Upper

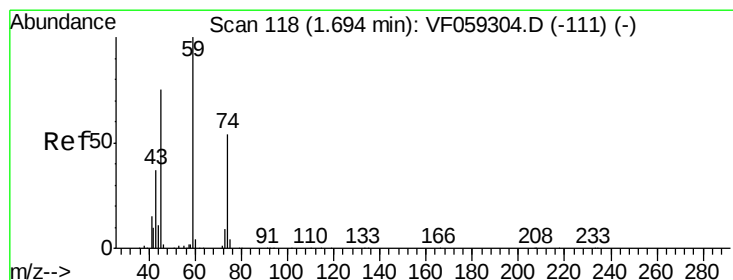
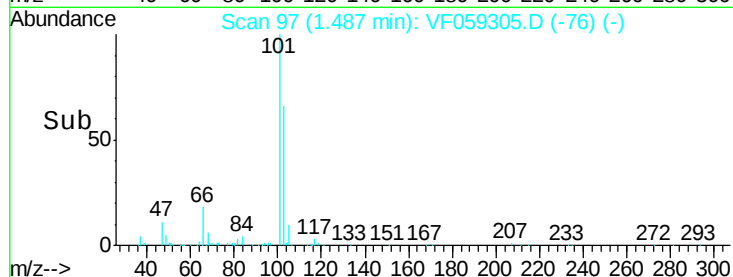
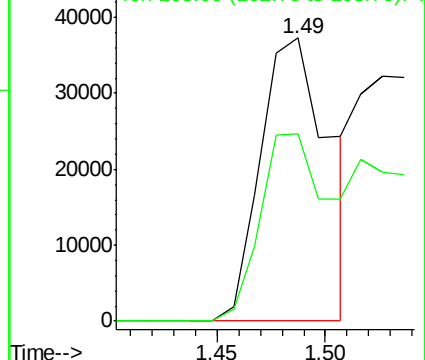
101 100

103 66.2 54.2 81.2



Abundance Ion 101.00 (100.70 to 101.70): V

Ion 103.00 (102.70 to 103.70): V



#8

Diethyl Ether

Concen: 64.283 ug/l

RT: 1.69 min Scan# 118

Delta R.T. -0.00 min

Lab File: VF059305.D

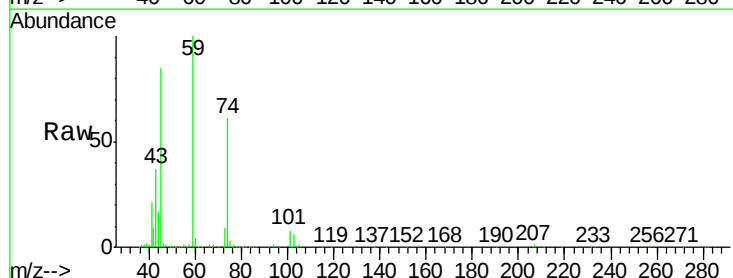
Acq: 25 Jun 2018 16:41

Tgt Ion: 74 Resp: 56866

Ion Ratio Lower Upper

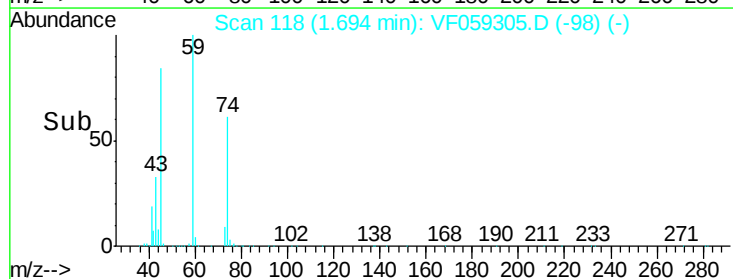
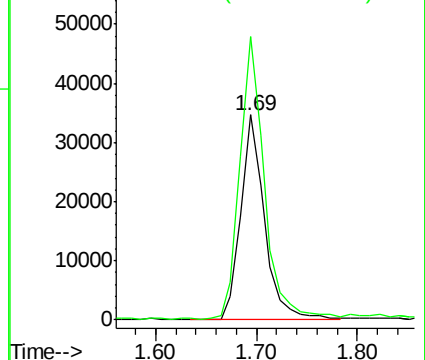
74 100

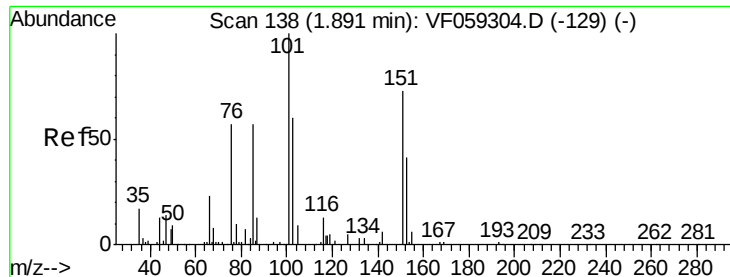
45 138.1 70.0 210.0



Abundance Ion 74.00 (73.70 to 74.70): VF0

Ion 45.00 (44.70 to 45.70): VF0





#9

1,1,2-Trichlorotrifluoroethane

Concen: 62.134 ug/l

RT: 1.90 min Scan# 139

Delta R.T. 0.01 min

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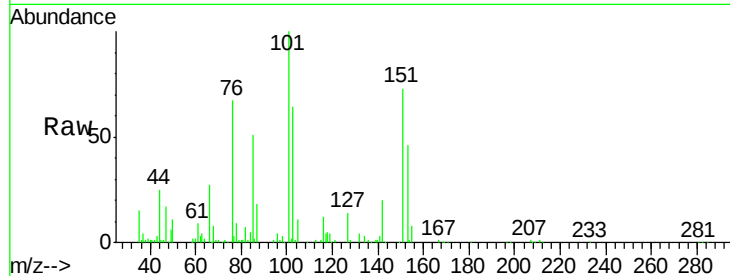
Tgt Ion:101 Resp: 134165

Ion Ratio Lower Upper

101 100

85 50.5 44.5 66.7

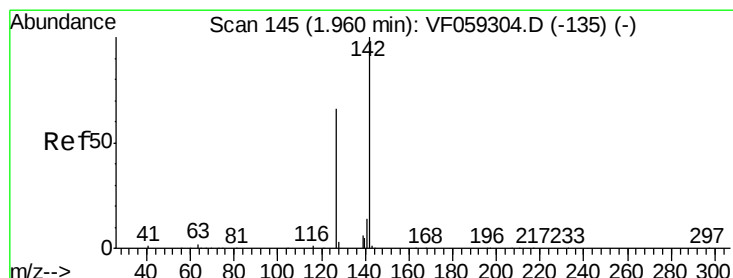
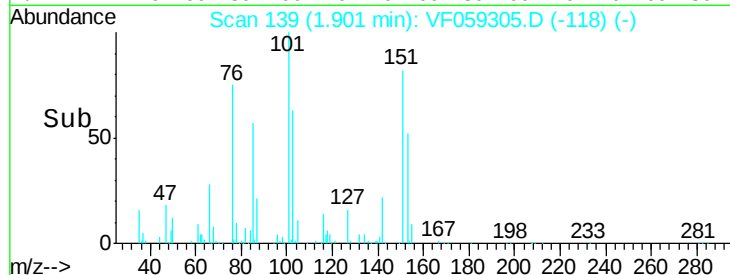
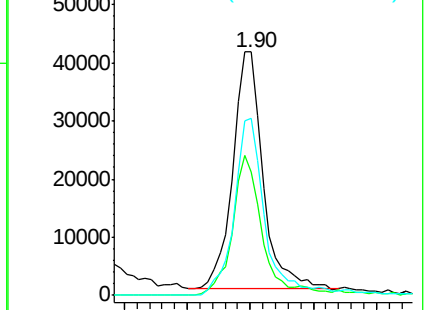
151 72.7 56.8 85.2



Abundance Ion 101.00 (100.70 to 101.70): V

Ion 85.00 (84.70 to 85.70): VF0

Ion 151.00 (150.70 to 151.70): V



#10

Methyl Iodide

Concen: 62.757 ug/l

RT: 1.95 min Scan# 144

Delta R.T. -0.01 min

Lab File: VF059305.D

Acq: 25 Jun 2018 16:41

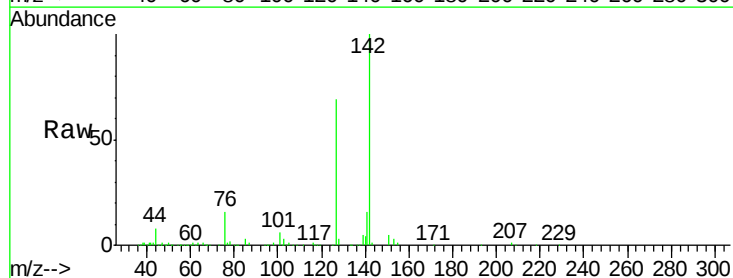
Tgt Ion:142 Resp: 248526

Ion Ratio Lower Upper

142 100

127 69.2 52.5 78.7

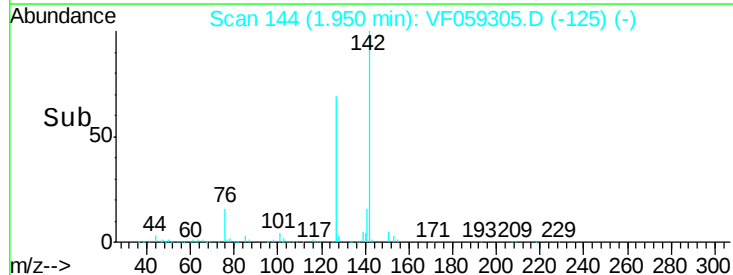
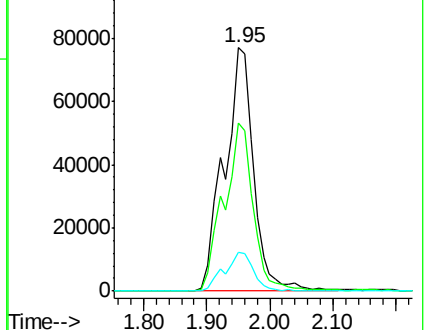
141 15.9 11.5 17.3

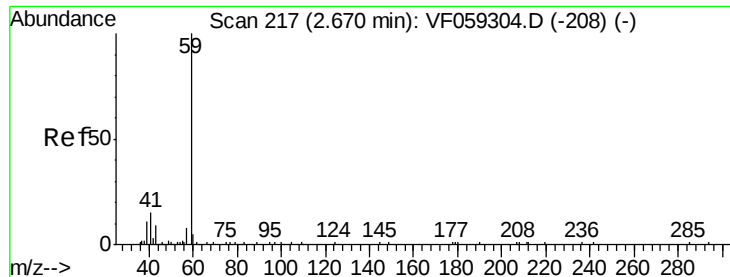


Abundance Ion 142.00 (141.70 to 142.70): V

Ion 127.00 (126.70 to 127.70): V

Ion 141.00 (140.70 to 141.70): V



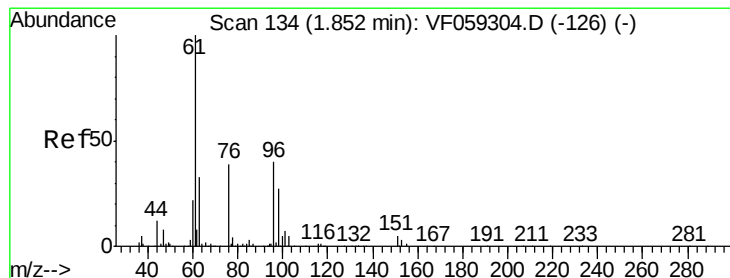
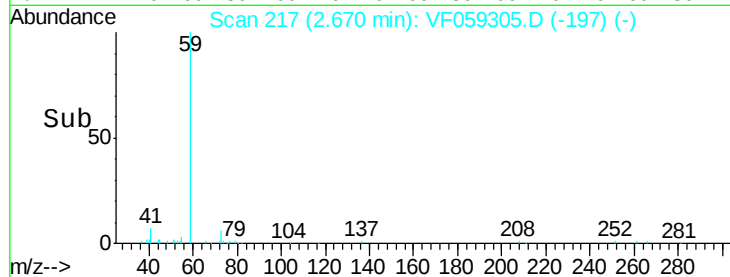
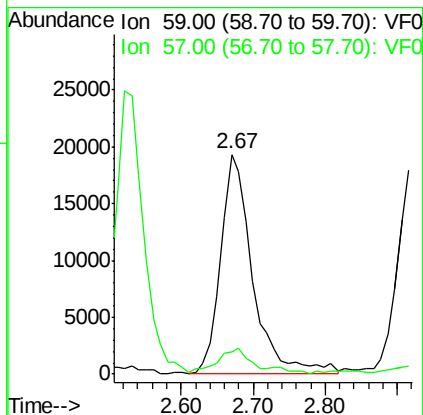
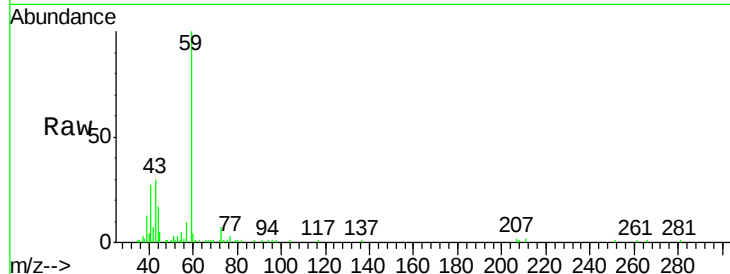


#11

Tert butyl alcohol
Concen: 250.665 ug/l
RT: 2.67 min Scan# 217
Delta R.T. -0.00 min
Lab File: VF059305.D
Acq: 25 Jun 2018 16:41

Instrument :
MSVOA_F
ClientSampleId :
VSTDIC075

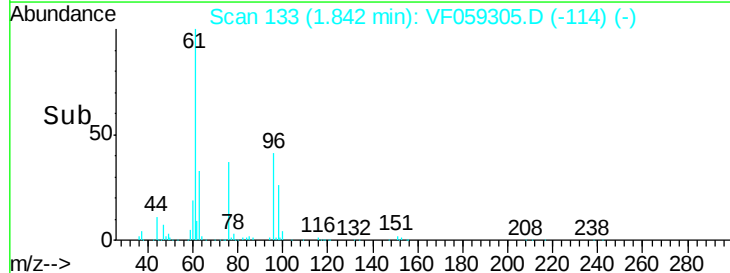
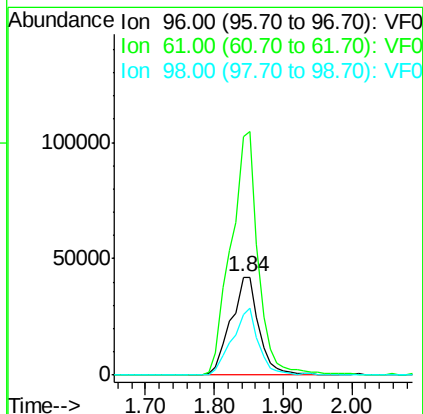
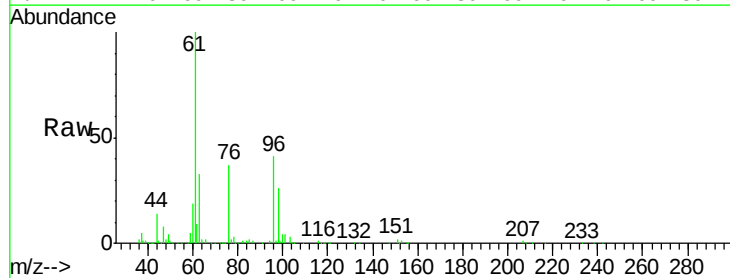
Tgt Ion: 59 Resp: 59440
Ion Ratio Lower Upper
59 100
57 10.1 11.0 16.4#

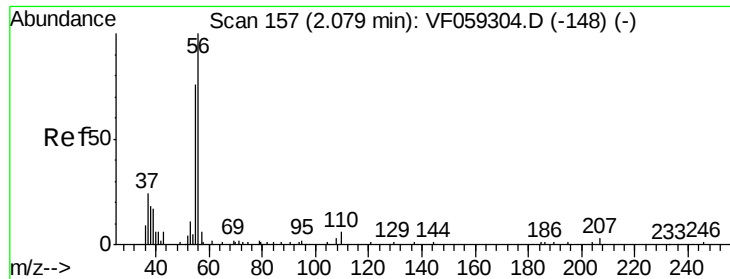


#12

1,1-Dichloroethene
Concen: 61.951 ug/l
RT: 1.84 min Scan# 133
Delta R.T. -0.01 min
Lab File: VF059305.D
Acq: 25 Jun 2018 16:41

Tgt Ion: 96 Resp: 119760
Ion Ratio Lower Upper
96 100
61 243.8 201.1 301.7
98 62.3 53.9 80.9

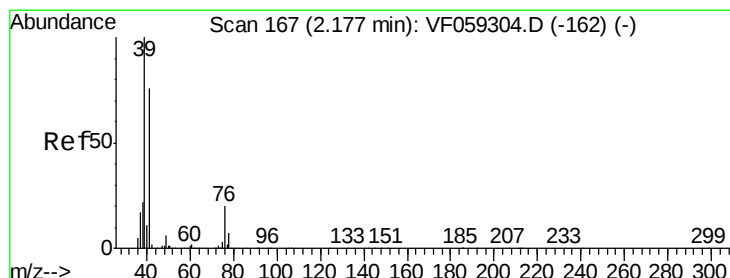
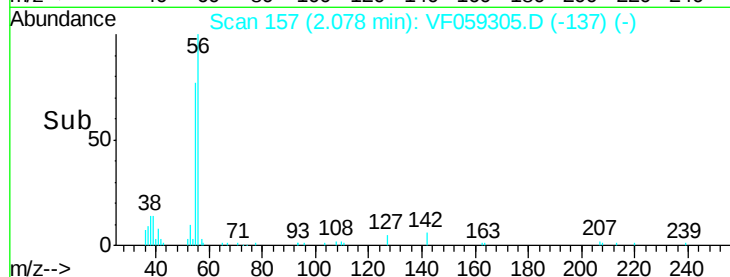
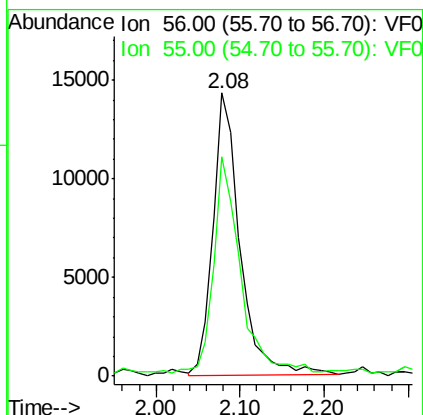
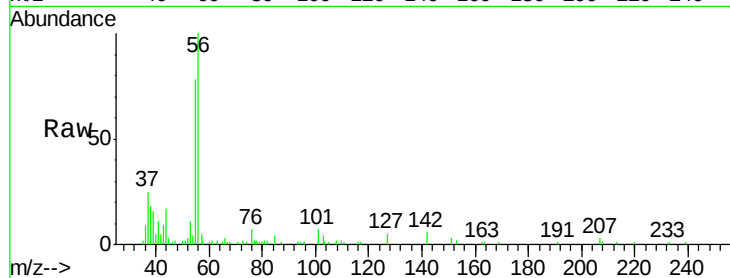




#13
 Acrolein
 Concen: 167.891 ug/l
 RT: 2.08 min Scan# 157
 Delta R.T. -0.00 min
 Lab File: VF059305.D
 Acq: 25 Jun 2018 16:41

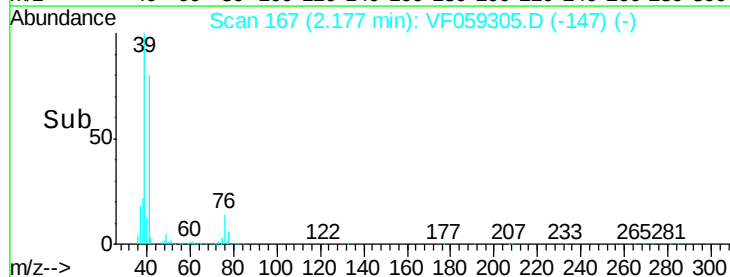
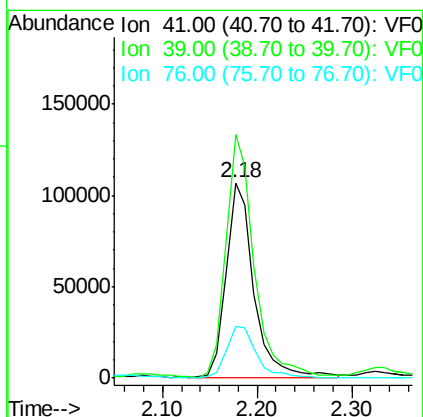
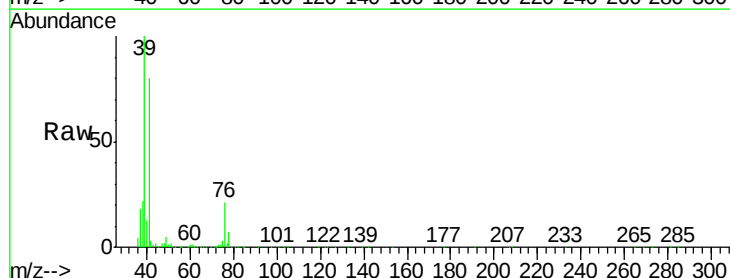
Instrument :
 MSVOA_F
 ClientSampleId :
 VSTDIC075

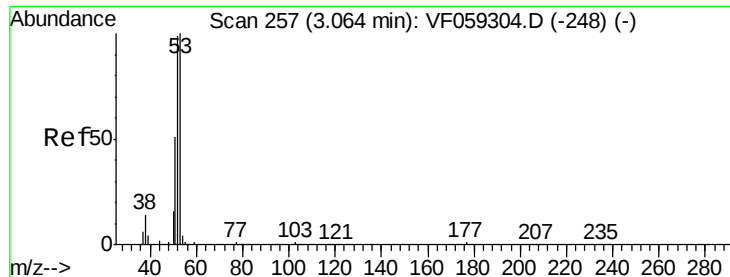
Tgt Ion: 56 Resp: 31740
 Ion Ratio Lower Upper
 56 100
 55 77.6 62.4 93.6



#14
 Allyl chloride
 Concen: 59.912 ug/l
 RT: 2.18 min Scan# 167
 Delta R.T. -0.00 min
 Lab File: VF059305.D
 Acq: 25 Jun 2018 16:41

Tgt Ion: 41 Resp: 214272
 Ion Ratio Lower Upper
 41 100
 39 124.7 105.6 158.4
 76 26.1 21.6 32.4





#15

Acrylonitrile

Concen: 250.934 ug/l

RT: 3.06 min Scan# 257

Delta R.T. -0.00 min

Lab File: VF059305.D

Acq: 25 Jun 2018 16:41

Instrument :

MSVOA_F

ClientSampleId :

VSTDIC075

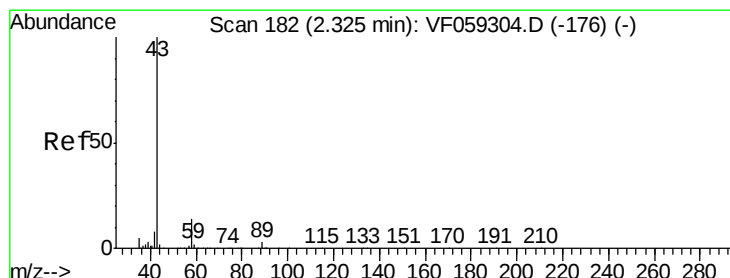
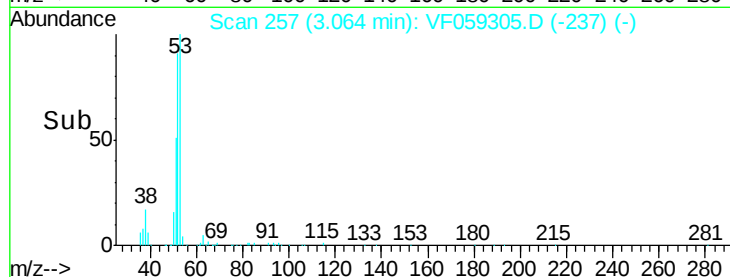
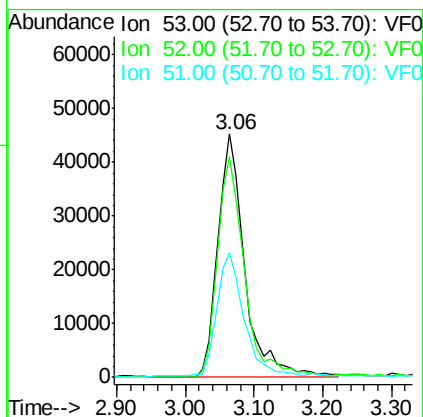
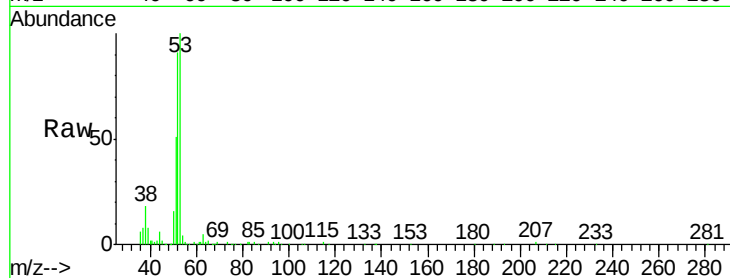
Tgt Ion: 53 Resp: 123083

Ion Ratio Lower Upper

53 100

52 90.8 79.2 118.8

51 51.2 40.9 61.3



#16

Acetone

Concen: 285.599 ug/l

RT: 2.32 min Scan# 182

Delta R.T. -0.00 min

Lab File: VF059305.D

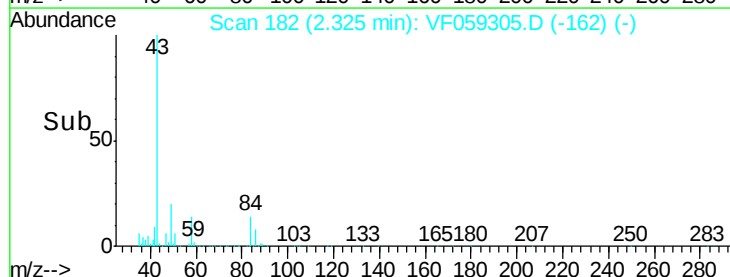
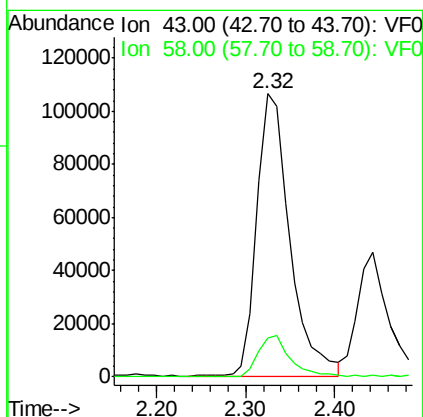
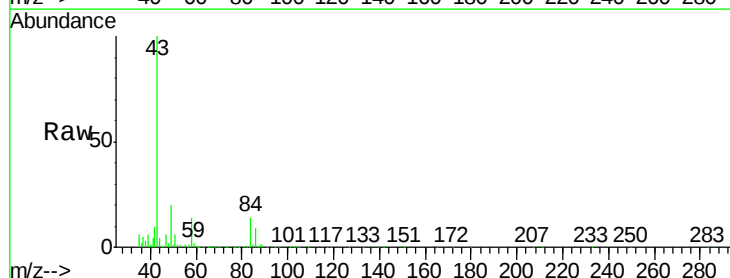
Acq: 25 Jun 2018 16:41

Tgt Ion: 43 Resp: 272066

Ion Ratio Lower Upper

43 100

58 13.6 11.4 17.0

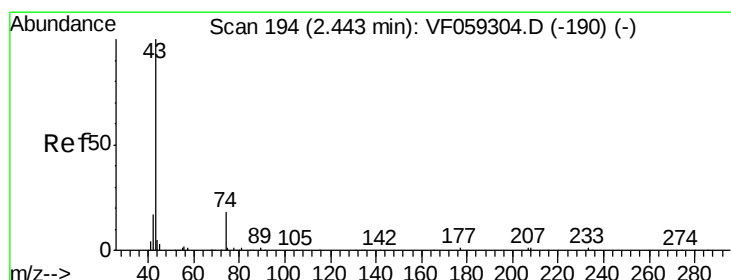
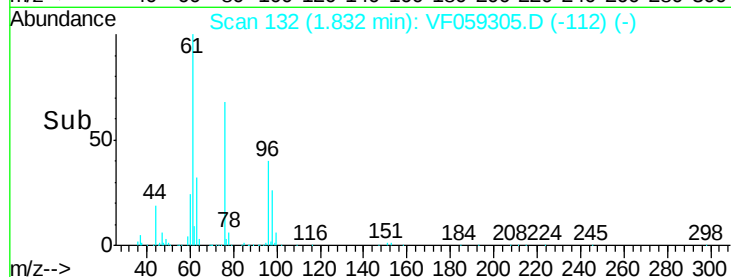
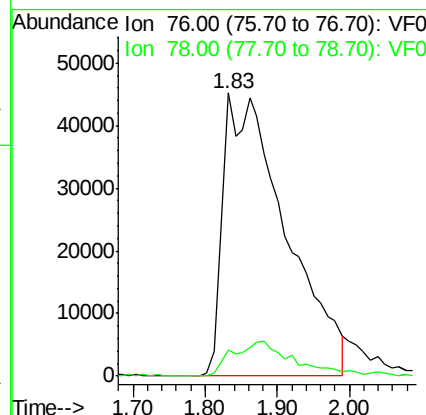
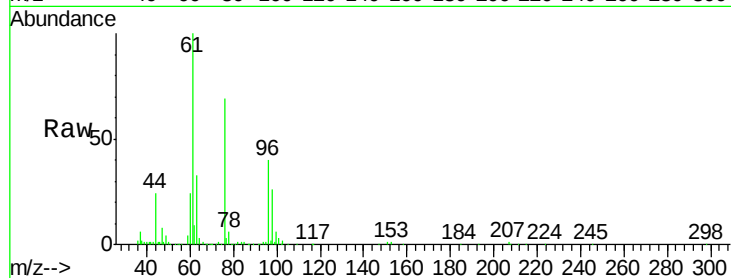




#17
Carbon Disulfide
Concen: 58.143 ug/l
RT: 1.83 min Scan# 132
Delta R.T. -0.00 min
Lab File: VF059305.D
Acq: 25 Jun 2018 16:41

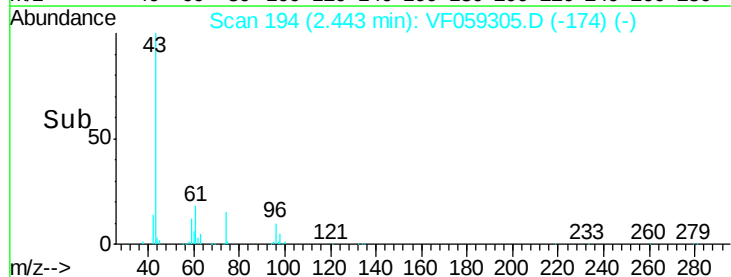
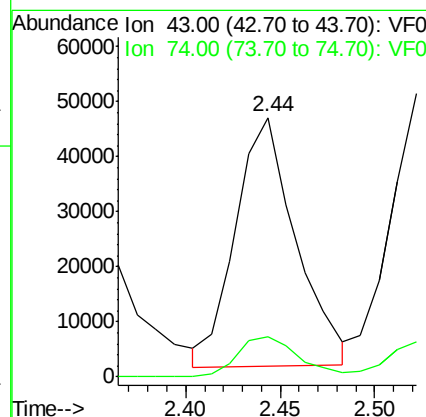
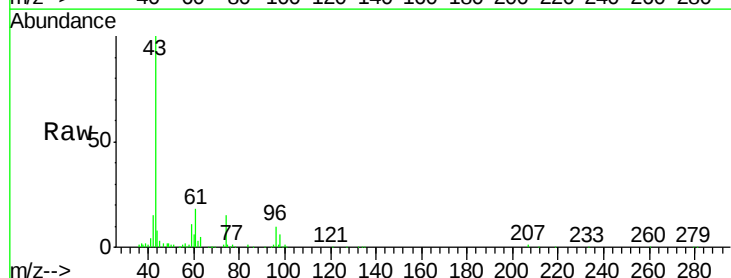
Instrument :
MSVOA_F
ClientSampleId :
VSTDIC075

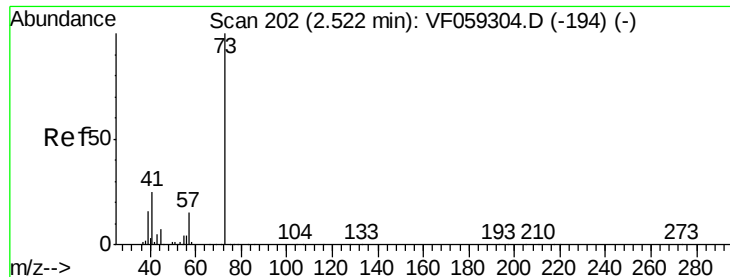
Tgt Ion: 76 Resp: 270521
Ion Ratio Lower Upper
76 100
78 9.0 8.9 13.3



#18
Methyl Acetate
Concen: 56.023 ug/l
RT: 2.44 min Scan# 194
Delta R.T. -0.00 min
Lab File: VF059305.D
Acq: 25 Jun 2018 16:41

Tgt Ion: 43 Resp: 100589
Ion Ratio Lower Upper
43 100
74 15.3 13.3 19.9



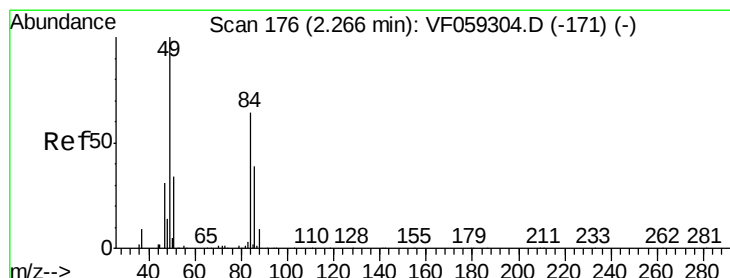
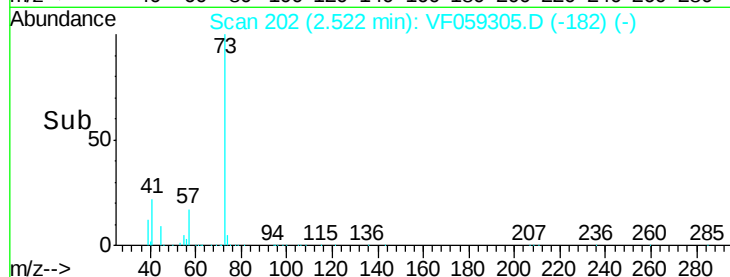
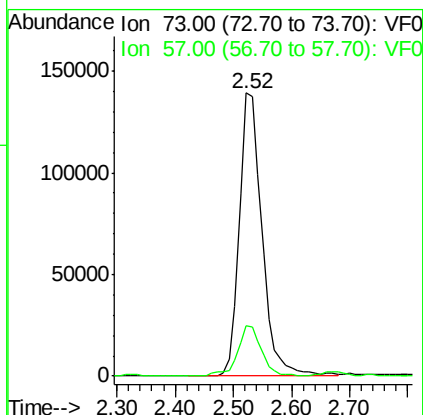
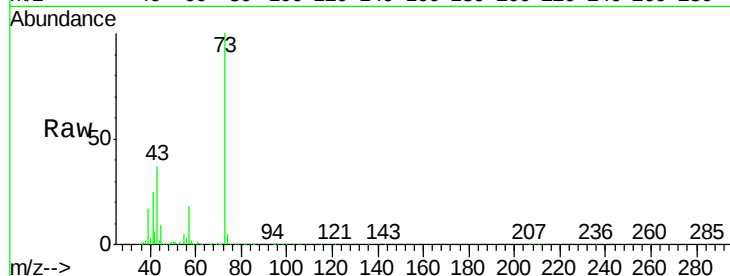


#19

Methyl tert-butyl Ether
Concen: 58.088 ug/l
RT: 2.52 min Scan# 202
Delta R.T. -0.00 min
Lab File: VF059305.D
Acq: 25 Jun 2018 16:41

Instrument :
MSVOA_F
ClientSampleId :
VSTDIC075

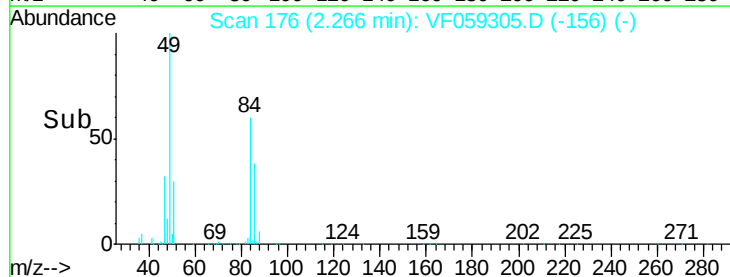
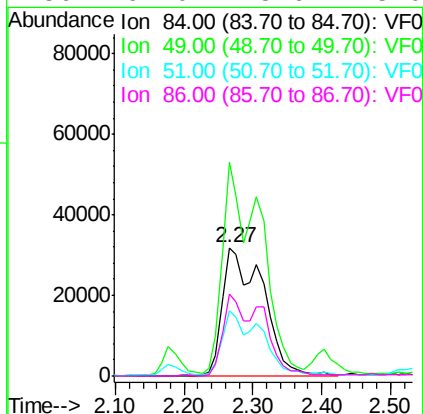
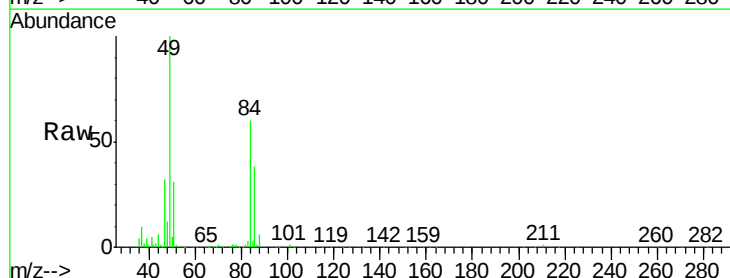
Tgt Ion: 73 Resp: 378074
Ion Ratio Lower Upper
73 100
57 17.9 12.3 18.5

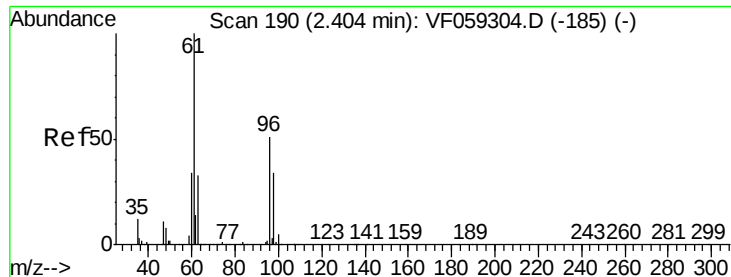


#20

Methylene Chloride
Concen: 62.389 ug/l
RT: 2.27 min Scan# 176
Delta R.T. -0.00 min
Lab File: VF059305.D
Acq: 25 Jun 2018 16:41

Tgt Ion: 84 Resp: 129598
Ion Ratio Lower Upper
84 100
49 166.1 126.5 189.7
51 50.9 42.9 64.3
86 64.0 48.6 73.0





#21

trans-1,2-Dichloroethene

Concen: 60.156 ug/l

RT: 2.40 min Scan# 190

Delta R.T. -0.00 min

Lab File: VF059305.D

Acq: 25 Jun 2018 16:41

Instrument :

MSVOA_F

ClientSampleId :

VSTDIC075

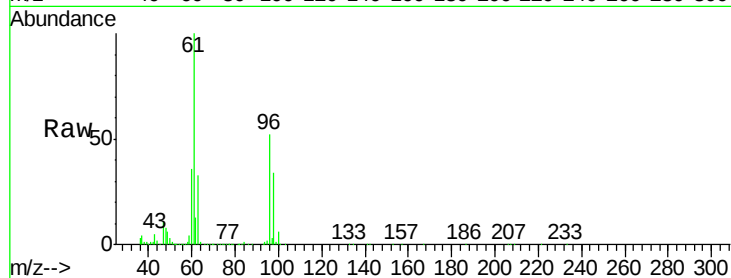
Tgt Ion: 96 Resp: 119570

Ion Ratio Lower Upper

96 100

61 193.1 157.4 236.2

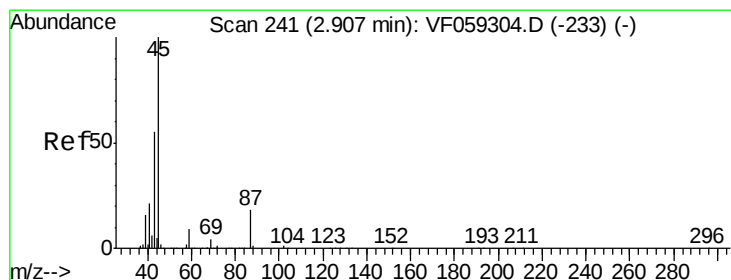
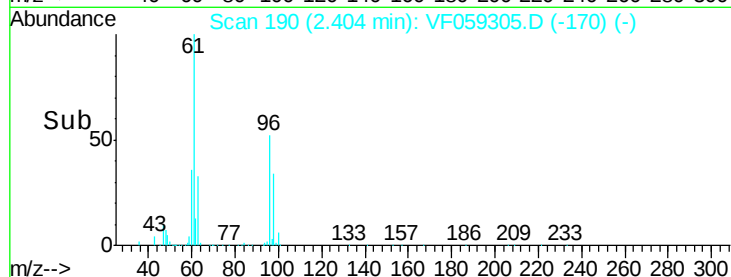
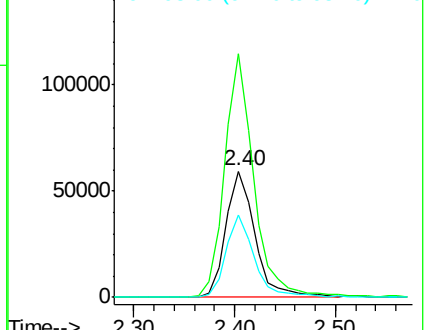
98 65.5 53.7 80.5



Abundance Ion 96.00 (95.70 to 96.70): VF0

Ion 61.00 (60.70 to 61.70): VF0

Ion 98.00 (97.70 to 98.70): VF0



#22

Diisopropyl ether

Concen: 60.967 ug/l

RT: 2.92 min Scan# 242

Delta R.T. 0.01 min

Lab File: VF059305.D

Acq: 25 Jun 2018 16:41

Tgt Ion: 45 Resp: 453242

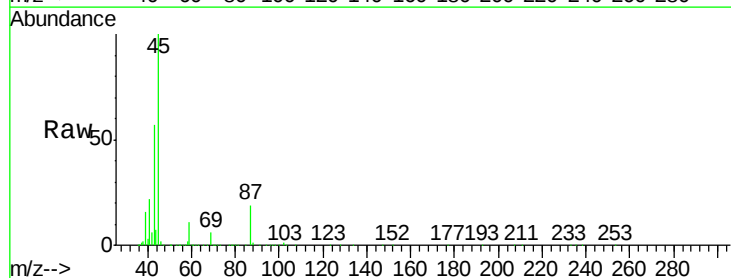
Ion Ratio Lower Upper

45 100

43 57.2 44.6 66.8

87 19.5 14.3 21.5

59 11.2 7.5 11.3



Abundance Ion 45.00 (44.70 to 45.70): VF0

Ion 43.00 (42.70 to 43.70): VF0

Ion 87.00 (86.70 to 87.70): VF0

Ion 59.00 (58.70 to 59.70): VF0

