

Data File : VV011129.D
Acq On : 30 May 2019 08:34
Operator : SY/MD
Sample : VSTDCCC025EC
Misc : 5.00G/10ML/MSVOA_V/SOIL
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_V
ClientSampleId :
BFB66

Quant Time: May 30 11:19:25 2019
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_V\METHOD\SOM2VLM052819S.M
Quant Title : VOC Analysis
QLast Update : Thu May 30 04:49:33 2019
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Difluorobenzene	5.66	114	401139	25.00	ug/L	0.00
28) Chlorobenzene-d5	8.89	117	376061	25.00	ug/L	0.00
60) 1,4-Dichlorobenzene-d4	11.29	152	164689	25.00	ug/L	0.00

System Monitoring Compounds

4) Vinyl Chloride-d3	1.31	65	126012	22.91	ug/L	0.00
Spiked Amount	25.000	Range	30 - 150	Recovery	=	91.64%
7) Chloroethane-d5	1.56	69	103263	26.31	ug/L	0.00
Spiked Amount	25.000	Range	30 - 150	Recovery	=	105.24%
10) 1,1-Dichloroethene-d2	2.12	63	262093	25.62	ug/L	0.00
Spiked Amount	25.000	Range	45 - 110	Recovery	=	102.48%
20) 2-Butanone-d5	3.93	46	96545	50.93	ug/L	0.00
Spiked Amount	50.000	Range	20 - 135	Recovery	=	101.86%
24) Chloroform-d	4.39	84	265791	27.32	ug/L	0.00
Spiked Amount	25.000	Range	40 - 150	Recovery	=	109.28%
26) 1,2-Dichloroethane-d4	5.07	65	170274	27.38	ug/L	0.00
Spiked Amount	25.000	Range	70 - 130	Recovery	=	109.52%
29) Benzene-d6	5.09	84	575236	26.12	ug/L	0.00
Spiked Amount	25.000	Range	20 - 135	Recovery	=	104.48%
33) 1,2-Dichloropropane-d6	6.11	67	184995	26.41	ug/L	0.00
Spiked Amount	25.000	Range	70 - 120	Recovery	=	105.64%
37) Toluene-d8	7.35	98	512933	25.27	ug/L	0.00
Spiked Amount	25.000	Range	30 - 130	Recovery	=	101.08%
38) trans-1,3-Dichloropropene-	7.66	79	75363	23.09	ug/L	0.00
Spiked Amount	25.000	Range	30 - 135	Recovery	=	92.36%
39) 2-Hexanone-d5	8.13	63	66450	43.54	ug/L	0.00
Spiked Amount	50.000	Range	20 - 135	Recovery	=	87.08%
48) 1,1,2,2-Tetrachloroethane-	10.26	84	143621	23.84	ug/L	0.00
Spiked Amount	25.000	Range	45 - 120	Recovery	=	95.36%
61) 1,2-Dichlorobenzene-d4	11.67	152	168084	25.81	ug/L	0.00
Spiked Amount	25.000	Range	75 - 120	Recovery	=	103.24%

Target Compounds

						Qvalue
2) Dichlorodifluoromethane	1.13	85	139435	21.317	ug/L	99
3) Chloromethane	1.24	50	167275	25.926	ug/L	100
5) Vinyl chloride	1.32	62	151671	25.471	ug/L	98
6) Bromomethane	1.51	94	80288	31.285	ug/L	99
8) Chloroethane	1.58	64	91241	28.246	ug/L	98
9) Trichlorofluoromethane	1.75	101	203462	25.509	ug/L	98
11) 1,1,2-Trichloro-1,2,2-trif	2.12	101	100008	23.366	ug/L	98
12) 1,1-Dichloroethene	2.13	96	105450	26.184	ug/L	87
13) Acetone	2.18	43	77694	36.181	ug/L	99
14) Carbon disulfide	2.30	76	355019	26.352	ug/L	99
15) Methyl Acetate	2.45	43	83499	26.940	ug/L #	100
16) Methylene chloride	2.52	84	148424	25.309	ug/L	97
17) Methyl tert-butyl Ether	2.80	73	384775	25.506	ug/L	99
18) trans-1,2-Dichloroethene	2.78	96	138177	25.082	ug/L	97
19) 1,1-Dichloroethane	3.22	63	273355	25.523	ug/L	99
21) 2-Butanone	4.01	43	103223	39.033	ug/L	99
22) cis-1,2-Dichloroethene	3.95	96	160632	25.887	ug/L	99

Data File : VV011129.D
Acq On : 30 May 2019 08:34
Operator : SY/MD
Sample : VSTDCCC025EC
Misc : 5.00G/10ML/MSVOA_V/SOIL
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_V
ClientSampleId :
BFB66

Quant Time: May 30 11:19:25 2019
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_V\METHOD\SOM2VLM052819S.M
Quant Title : VOC Analysis
QLast Update : Thu May 30 04:49:33 2019
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
23) Bromochloromethane	4.28	128	69404	26.405	ug/L	96
25) Chloroform	4.42	83	298996	26.436	ug/L	100
27) 1,2-Dichloroethane	5.17	62	200592	27.222	ug/L	99
30) Cyclohexane	4.71	56	213454	19.596	ug/L	95
31) 1,1,1-Trichloroethane	4.65	97	213911	24.983	ug/L	99
32) Carbon tetrachloride	4.87	117	175154	23.884	ug/L	99
34) Benzene	5.14	78	596561	26.233	ug/L	100
35) Trichloroethene	5.95	95	154192	25.962	ug/L	98
36) Methylcyclohexane	6.17	83	213359	20.819	ug/L	94
40) 1,2-Dichloropropane	6.21	63	160682	26.514	ug/L	99
41) Bromodichloromethane	6.55	83	210859	27.445	ug/L	99
42) cis-1,3-Dichloropropene	7.06	75	238940	24.677	ug/L	100
43) 4-Methyl-2-pentanone	7.27	43	233286	43.893	ug/L	99
44) Toluene	7.43	91	619037	25.037	ug/L	99
45) trans-1,3-Dichloropropene	7.69	75	193860	23.463	ug/L	99
46) 1,1,2-Trichloroethane	7.88	97	116835	26.012	ug/L	96
47) Tetrachloroethene	8.01	164	101596	23.719	ug/L	98
49) 2-Hexanone	8.18	43	151542	38.662	ug/L	97
50) Dibromochloromethane	8.29	129	136244	26.180	ug/L	100
51) 1,2-Dibromoethane	8.39	107	111166	25.863	ug/L	99
52) Chlorobenzene	8.92	112	391393	25.543	ug/L	98
53) Ethylbenzene	9.05	91	683243	24.240	ug/L	99
54) m,p-Xylene	9.18	106	243302	23.173	ug/L	98
55) o-xylene	9.59	106	250578	24.561	ug/L	97
56) Styrene	9.60	104	429673	24.838	ug/L	99
57) Isopropylbenzene	9.97	105	630488	23.155	ug/L	100
58) 1,1,2,2-Tetrachloroethane	10.28	83	136806	23.120	ug/L	100
59) 1,2,3-Trichloropropane	10.32	75	109610	24.239	ug/L	100
62) Bromoform	9.77	173	72528	26.179	ug/L	100
63) 1,3-Dichlorobenzene	11.23	146	277286	25.593	ug/L	99
64) 1,4-Dichlorobenzene	11.32	146	275182	25.522	ug/L	99
65) 1,2-Dichlorobenzene	11.69	146	261643	25.843	ug/L	99
66) 1,2-Dibromo-3-chloropropan	12.48	75	22376	21.651	ug/L	95
67) 1,3,5-Trichlorobenzene	12.69	180	189434	23.773	ug/L	99
68) 1,2,4-trichlorobenzene	13.31	180	148724	23.461	ug/L	100
69) Naphthalene	13.55	128	313487	23.972	ug/L	99
70) 1,2,3-Trichlorobenzene	13.79	180	142065	24.489	ug/L	100

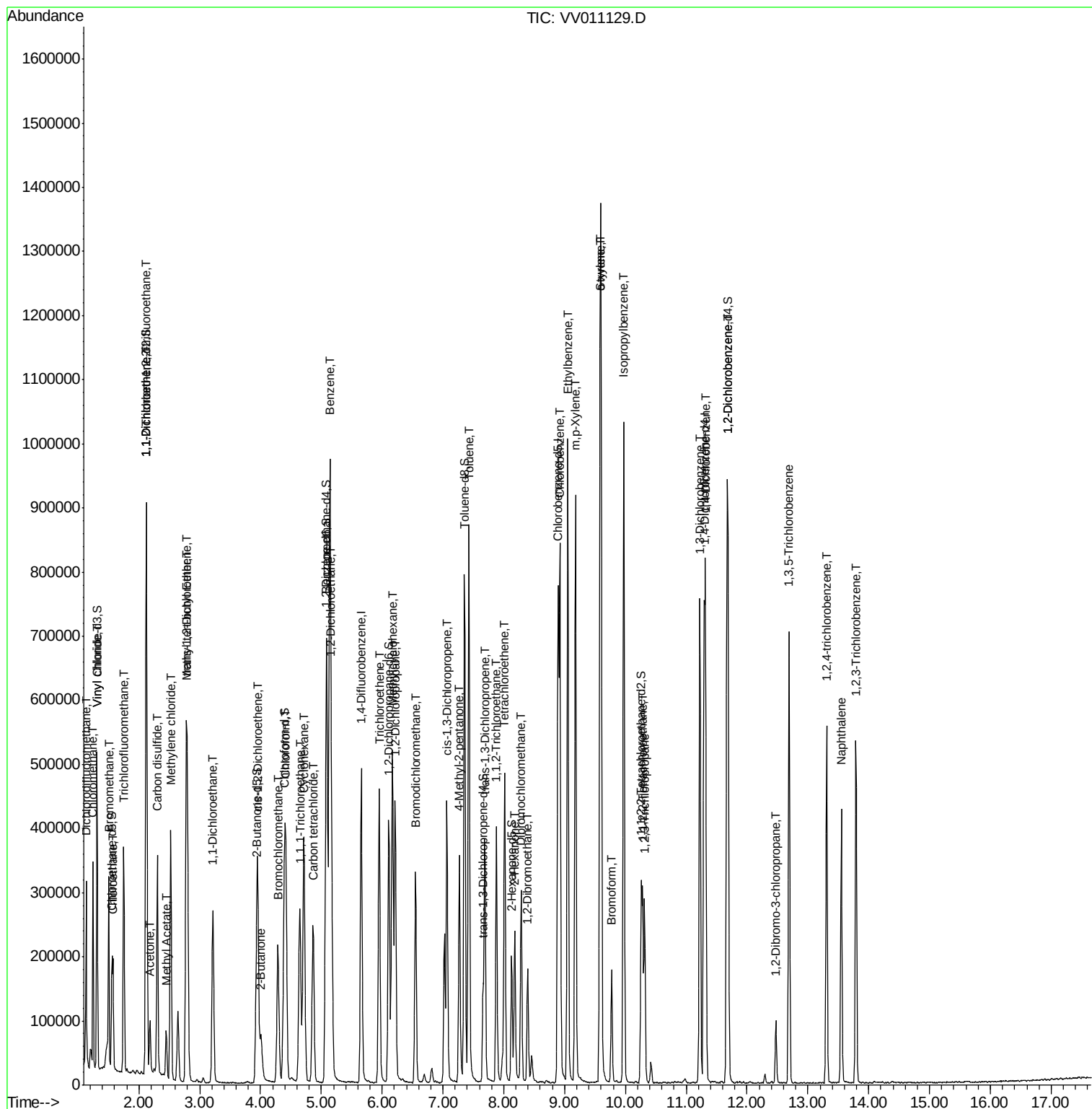
(#) = qualifier out of range (m) = manual integration (+) = signals summed

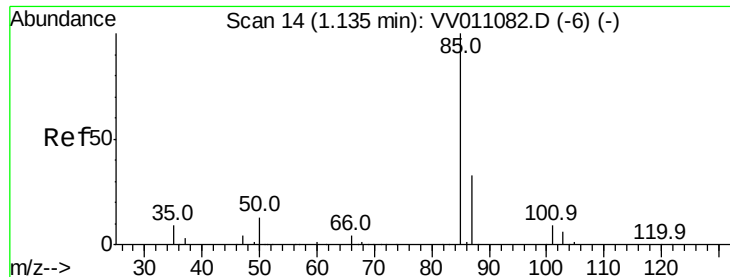
Data File : VV011129.D

```
Acq On       : 30 May 2019   08:34
Operator     : SY/MD
Sample       : VSTDCCC025EC
Misc         : 5.00G/10ML/MSV0A_V/SOIL
ALS Vial     : 1      Sample Multiplier: 1
```

Instrument :
MSVOA_V
ClientSampleId :
BFB66

Quant Time: May 30 11:19:25 2019
Quant Method : Z:\VOASRV\HPCHEM1\MSV0A_V\METHOD\SOM2VLM052819S.M
Quant Title : VOC Analysis
QLast Update : Thu May 30 04:49:33 2019
Response via : Initial Calibration





#2

Dichlorodifluoromethane

Concen: 21.317 ug/L

RT: 1.13 min Scan# 13

Delta R.T. -0.00 min

Lab File: VV011129.D

Acq: 30 May 2019 08:34

Instrument :

MSVOA_V

ClientSampleId :

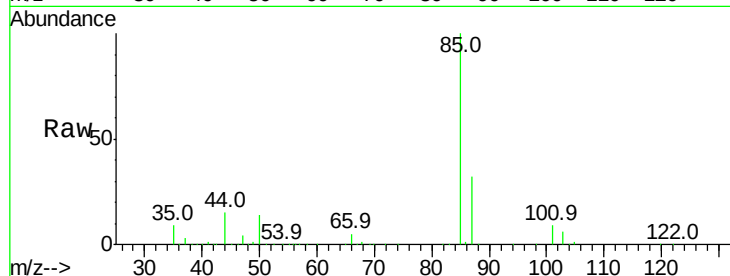
BFB66

Tgt Ion: 85 Resp: 139435

Ion Ratio Lower Upper

85 100

87 32.6 22.5 41.9



Abundance Ion 85.00 (84.70 to 85.70): VV0

Ion 87.00 (86.70 to 87.70): VV0

1.13

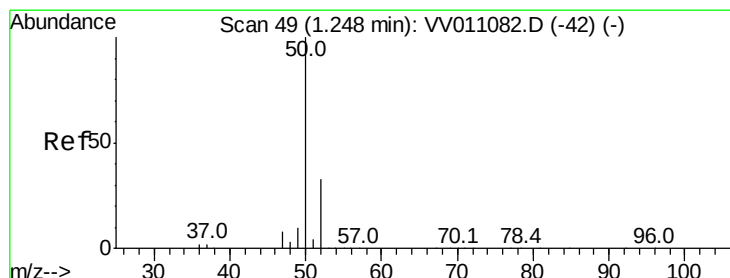
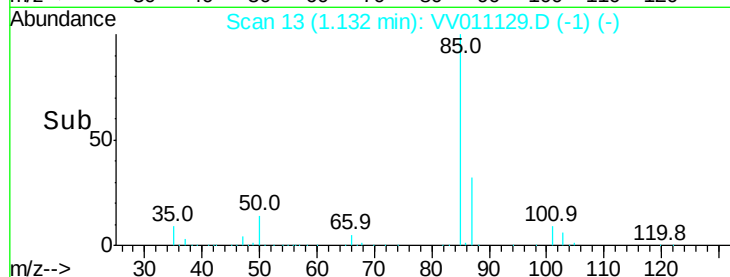
150000

100000

50000

0

Time-->



#3

Chloromethane

Concen: 25.926 ug/L

RT: 1.24 min Scan# 48

Delta R.T. -0.00 min

Lab File: VV011129.D

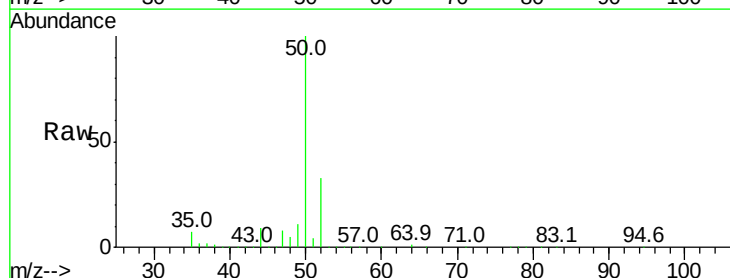
Acq: 30 May 2019 08:34

Tgt Ion: 50 Resp: 167275

Ion Ratio Lower Upper

50 100

52 32.9 22.9 42.5



Abundance Ion 50.00 (49.70 to 50.70): VV0

Ion 52.00 (51.70 to 52.70): VV0

1.24

200000

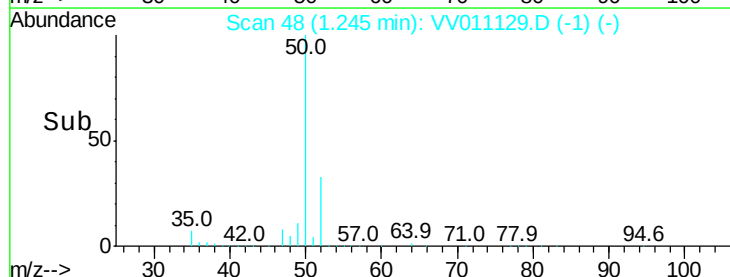
150000

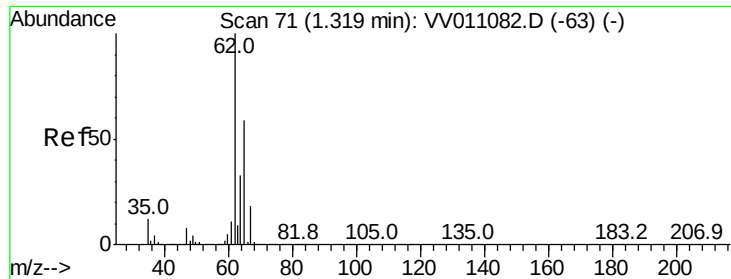
100000

50000

0

Time-->





#5

Vinyl chloride

Concen: 25.471 ug/L

RT: 1.32 min Scan# 70

Delta R.T. -0.00 min

Lab File: VV011129.D

Acq: 30 May 2019 08:34

Instrument :

MSVOA_V

ClientSampled :

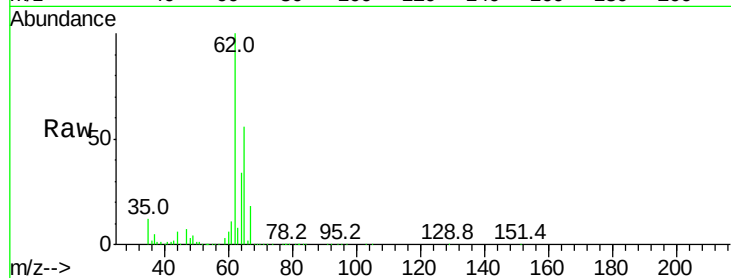
BFB66

Tgt Ion: 62 Resp: 151671

Ion Ratio Lower Upper

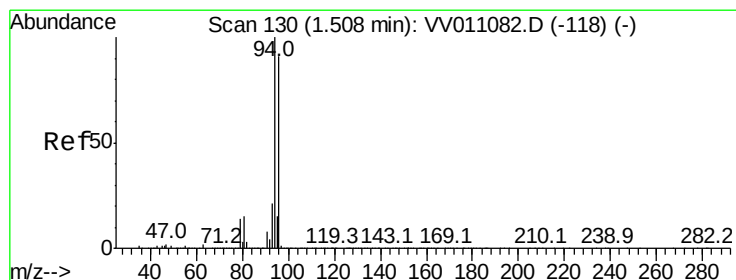
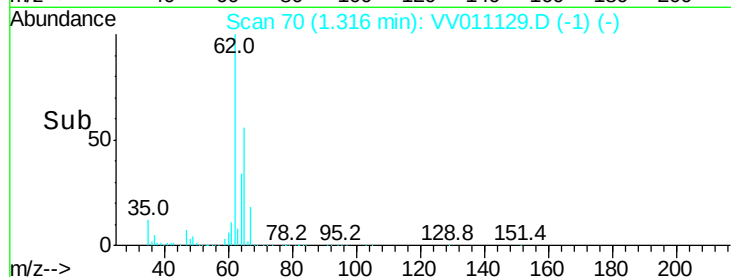
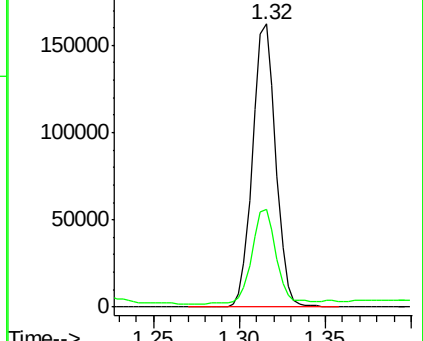
62 100

64 34.5 23.4 43.6



Abundance Ion 62.00 (61.70 to 62.70): VV0

Ion 64.00 (63.70 to 64.70): VV0



#6

Bromomethane

Concen: 31.285 ug/L

RT: 1.51 min Scan# 129

Delta R.T. -0.00 min

Lab File: VV011129.D

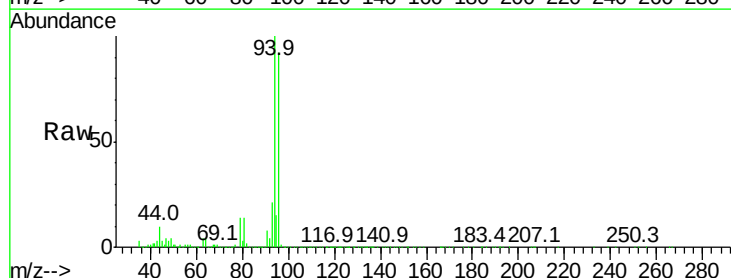
Acq: 30 May 2019 08:34

Tgt Ion: 94 Resp: 80288

Ion Ratio Lower Upper

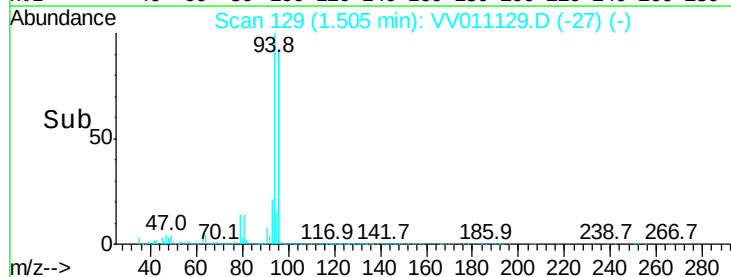
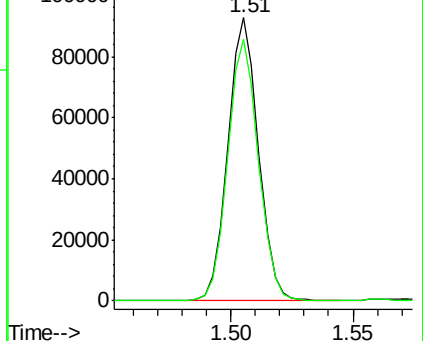
94 100

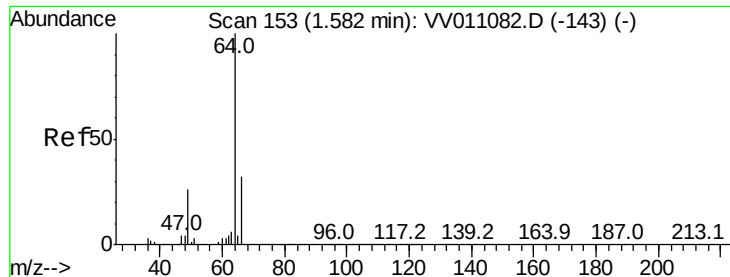
96 93.2 9.5 179.7



Abundance Ion 94.00 (93.70 to 94.70): VV0

Ion 96.00 (95.70 to 96.70): VV0

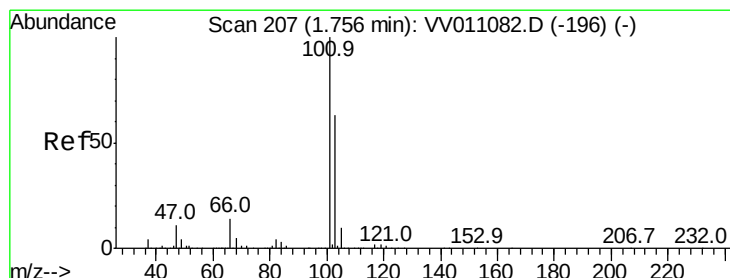
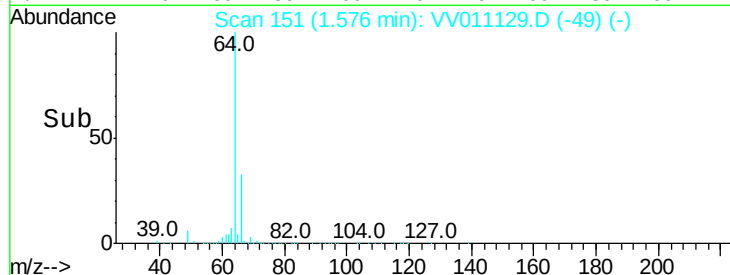
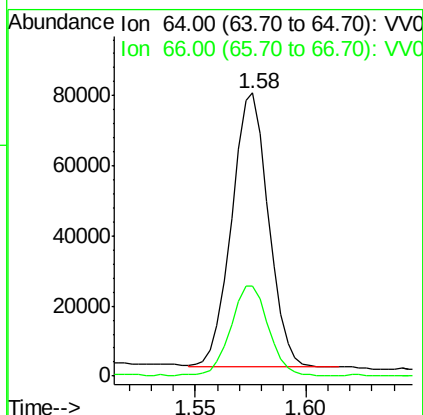
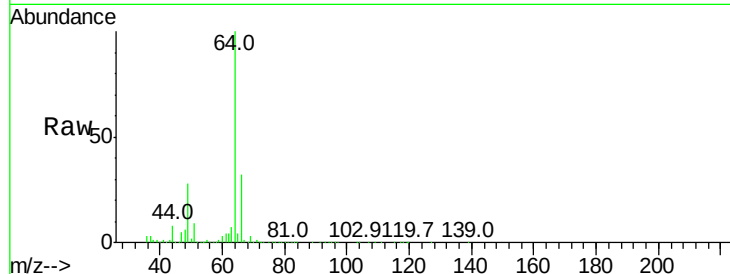




#8
Chloroethane
Concen: 28.246 ug/L
RT: 1.58 min Scan# 151
Delta R.T. -0.00 min
Lab File: VV011129.D
Acq: 30 May 2019 08:34

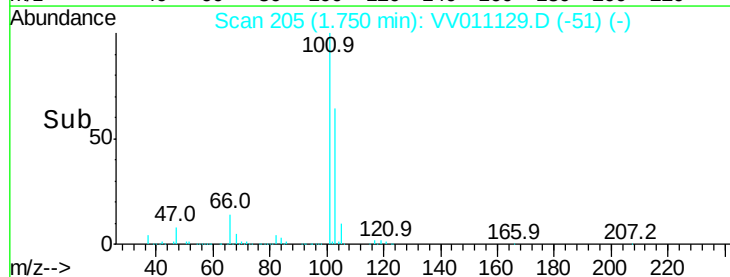
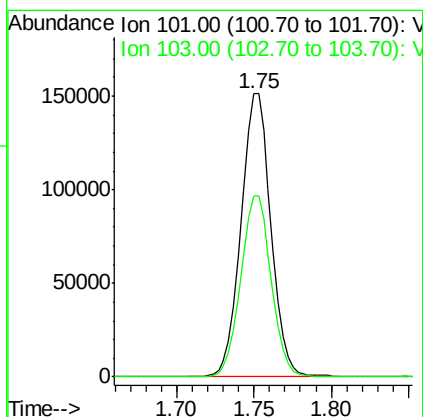
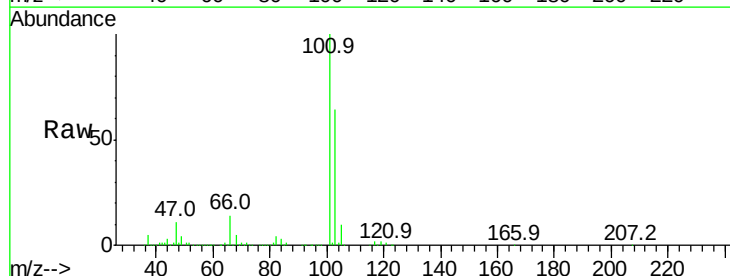
Instrument :
MSVOA_V
ClientSampleId :
BFB66

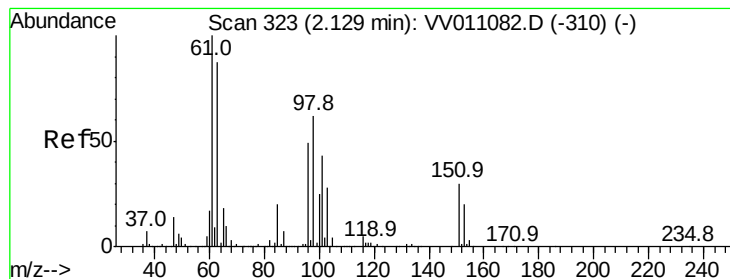
Tgt Ion: 64 Resp: 91241
Ion Ratio Lower Upper
64 100
66 32.0 21.7 40.3



#9
Trichlorofluoromethane
Concen: 25.509 ug/L
RT: 1.75 min Scan# 205
Delta R.T. -0.01 min
Lab File: VV011129.D
Acq: 30 May 2019 08:34

Tgt Ion: 101 Resp: 203462
Ion Ratio Lower Upper
101 100
103 65.0 44.4 82.4





#11

1,1,2-Trichloro-1,2,2-trifluoroethane

Concen: 23.366 ug/L

RT: 2.12 min Scan# 321

Delta R.T. -0.01 min

Lab File: VV011129.D

Acq: 30 May 2019 08:34

Instrument :

MSVOA_V

ClientSampled :

BFB66

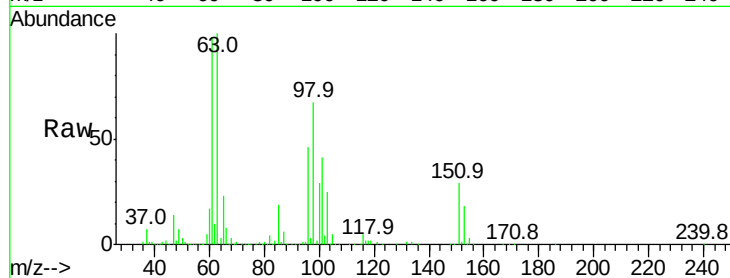
Tgt Ion: 101 Resp: 100008

Ion Ratio Lower Upper

101 100

85 47.4 36.1 54.1

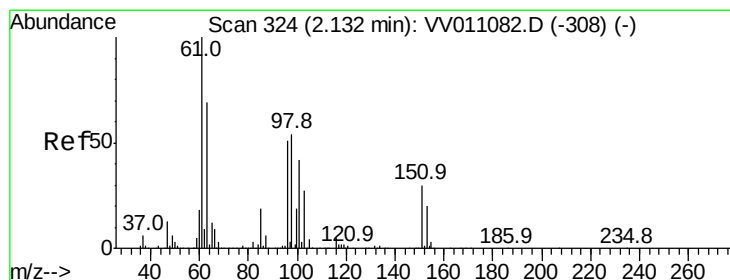
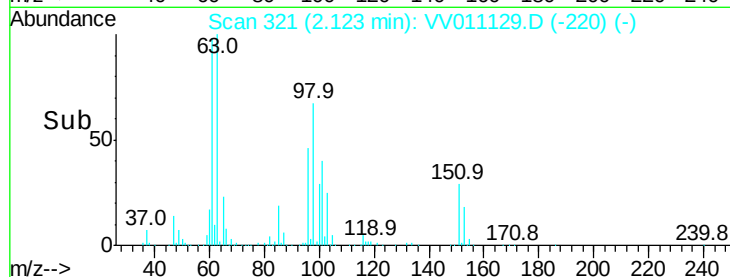
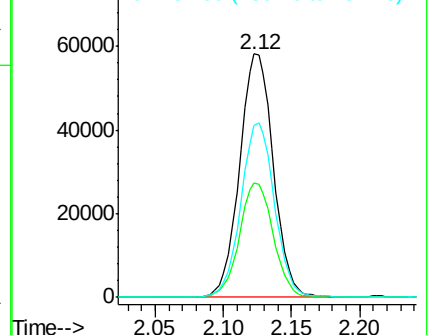
151 71.3 56.6 85.0



Abundance Ion 101.00 (100.70 to 101.70): V

Ion 85.00 (84.70 to 85.70): VV0

Ion 151.00 (150.70 to 151.70): V



#12

1,1-Dichloroethene

Concen: 26.184 ug/L

RT: 2.13 min Scan# 322

Delta R.T. -0.00 min

Lab File: VV011129.D

Acq: 30 May 2019 08:34

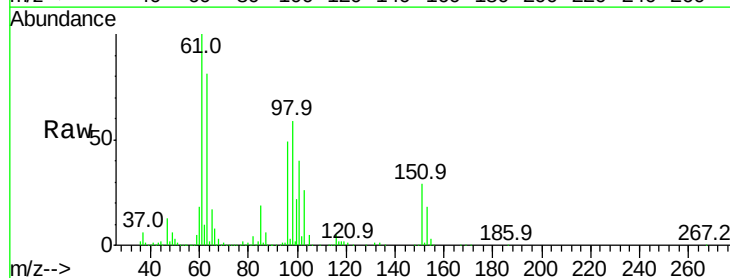
Tgt Ion: 96 Resp: 105450

Ion Ratio Lower Upper

96 100

61 203.5 134.1 249.1

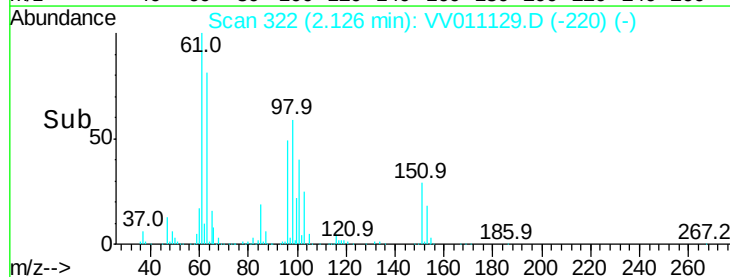
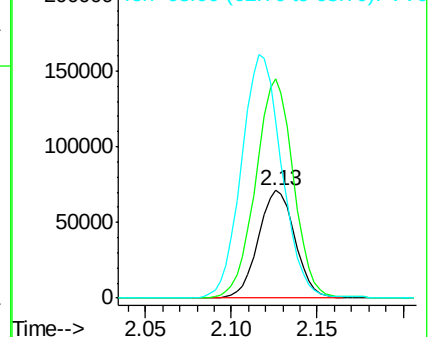
63 164.4 98.1 182.3

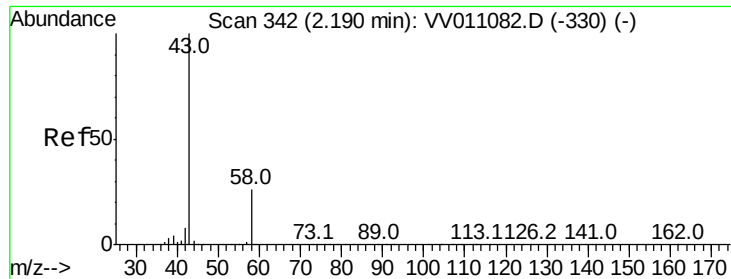


Abundance Ion 96.00 (95.70 to 96.70): VV0

Ion 61.00 (60.70 to 61.70): VV0

Ion 63.00 (62.70 to 63.70): VV0





#13

Acetone

Concen: 36.181 ug/L

RT: 2.18 min Scan# 340

Delta R.T. -0.00 min

Lab File: VV011129.D

Acq: 30 May 2019 08:34

Instrument :

MSVOA_V

ClientSampleId :

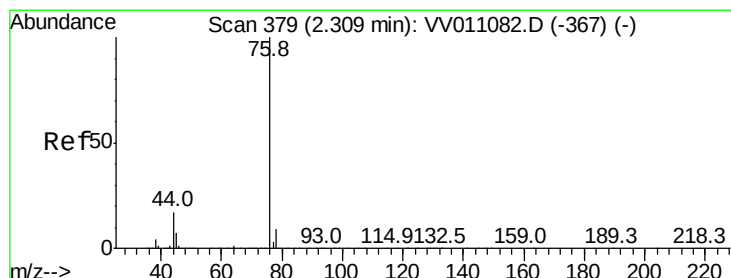
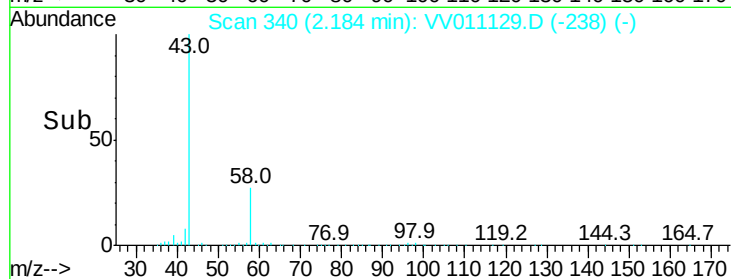
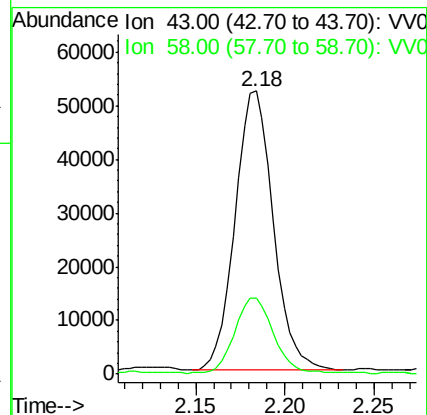
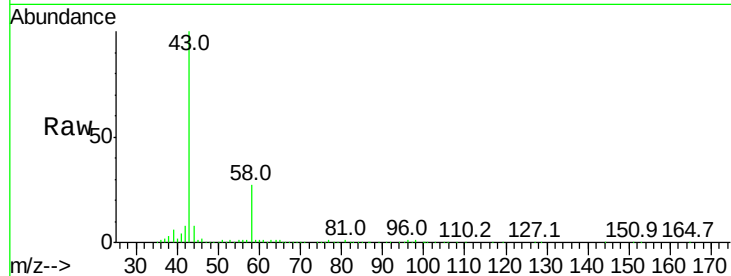
BFB66

Tgt Ion: 43 Resp: 77694

Ion Ratio Lower Upper

43 100

58 27.1 0.0 54.8



#14

Carbon disulfide

Concen: 26.352 ug/L

RT: 2.30 min Scan# 377

Delta R.T. -0.00 min

Lab File: VV011129.D

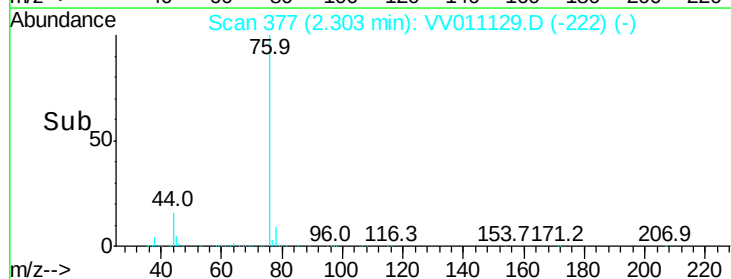
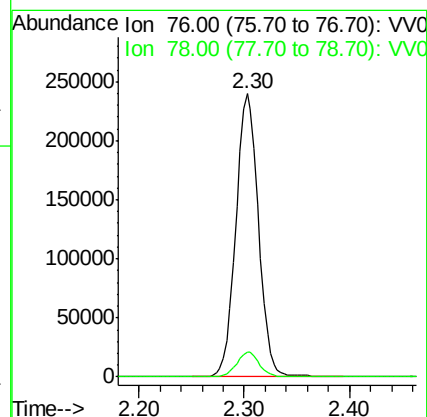
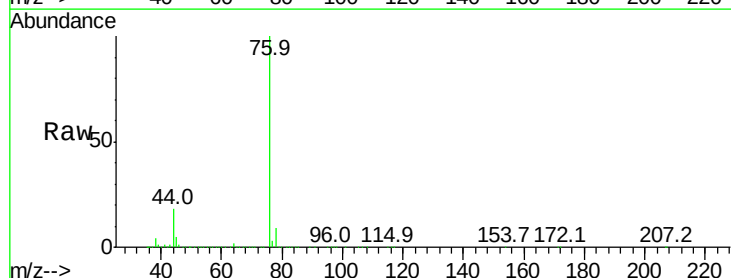
Acq: 30 May 2019 08:34

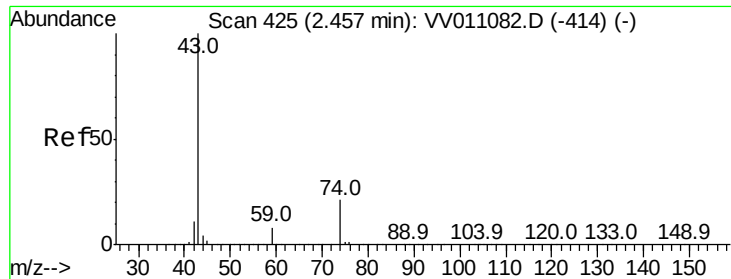
Tgt Ion: 76 Resp: 355019

Ion Ratio Lower Upper

76 100

78 8.8 7.3 10.9





#15

Methyl Acetate

Concen: 26.940 ug/L

RT: 2.45 min Scan# 423

Delta R.T. -0.00 min

Lab File: VV011129.D

Acq: 30 May 2019 08:34

Instrument :

MSVOA_V

ClientSampleId :

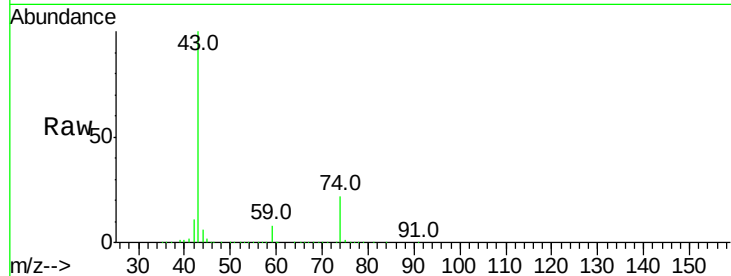
BFB66

Tgt Ion: 43 Resp: 83499

Ion Ratio Lower Upper

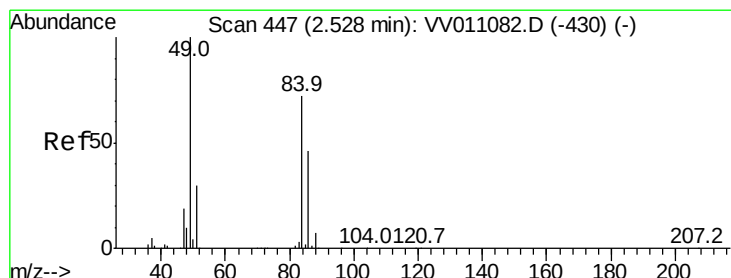
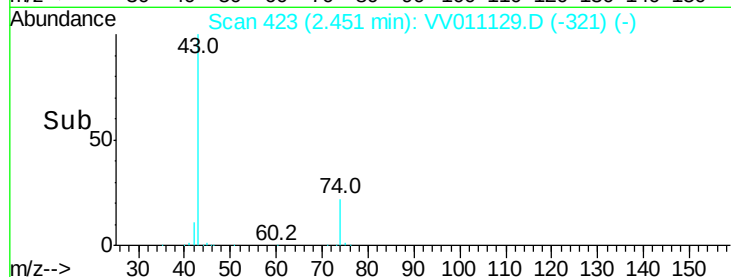
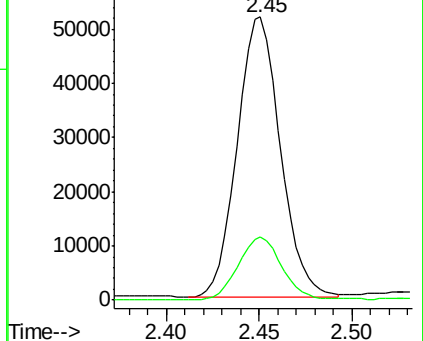
43 100

74 23.1 0.0 0.0#



Abundance Ion 43.00 (42.70 to 43.70): VV0

Ion 74.00 (73.70 to 74.70): VV0



#16

Methylene chloride

Concen: 25.309 ug/L

RT: 2.52 min Scan# 446

Delta R.T. -0.00 min

Lab File: VV011129.D

Acq: 30 May 2019 08:34

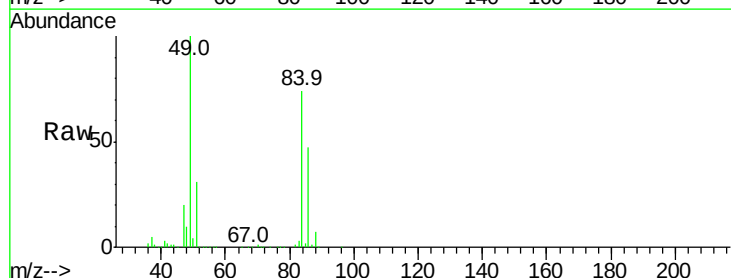
Tgt Ion: 84 Resp: 148424

Ion Ratio Lower Upper

84 100

49 136.0 98.0 182.0

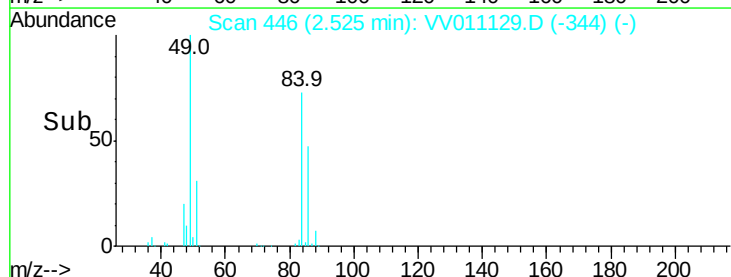
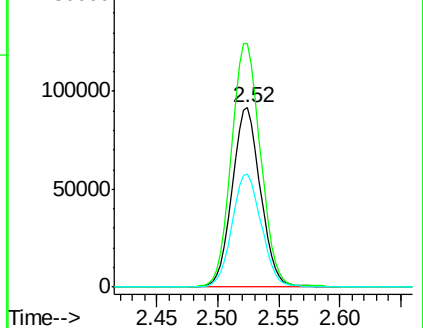
86 63.3 45.4 84.4

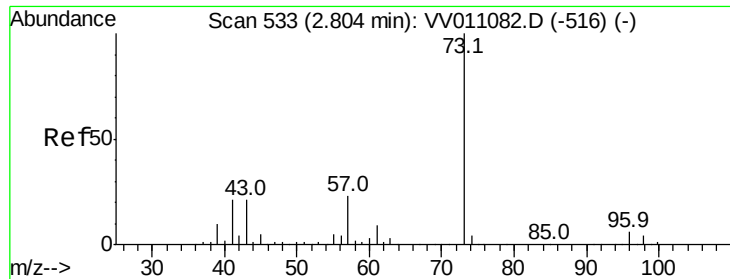


Abundance Ion 84.00 (83.70 to 84.70): VV0

Ion 49.00 (48.70 to 49.70): VV0

Ion 86.00 (85.70 to 86.70): VV0

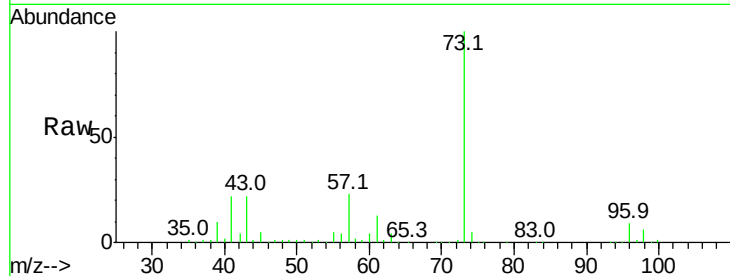




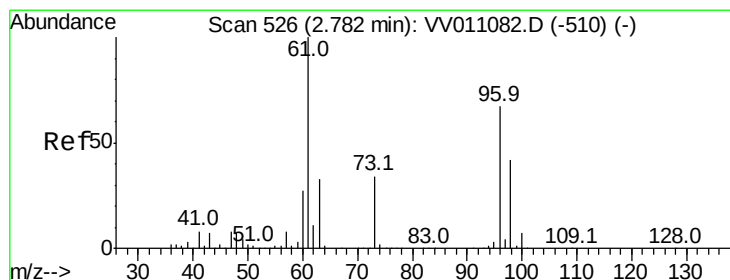
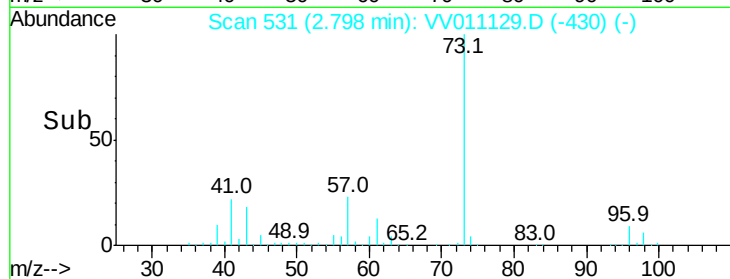
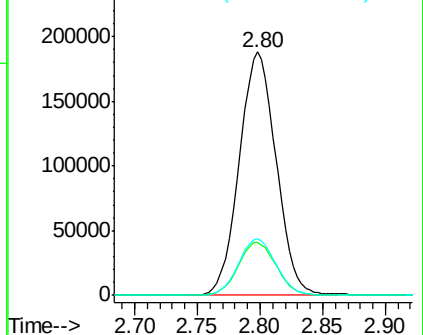
#17
Methyl tert-butyl Ether
Concen: 25.506 ug/L
RT: 2.80 min Scan# 531
Delta R.T. -0.01 min
Lab File: VV011129.D
Acq: 30 May 2019 08:34

Instrument :
MSVOA_V
ClientSampleId :
BFB66

Tgt Ion: 73 Resp: 384775
Ion Ratio Lower Upper
73 100
43 21.9 17.2 25.8
57 23.3 18.5 27.7

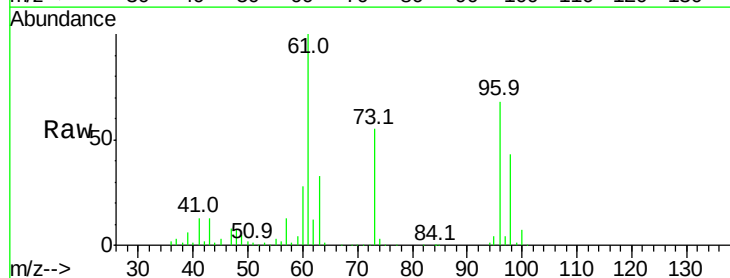


Abundance Ion 73.00 (72.70 to 73.70): VV0
Ion 43.00 (42.70 to 43.70): VV0
Ion 57.00 (56.70 to 57.70): VV0

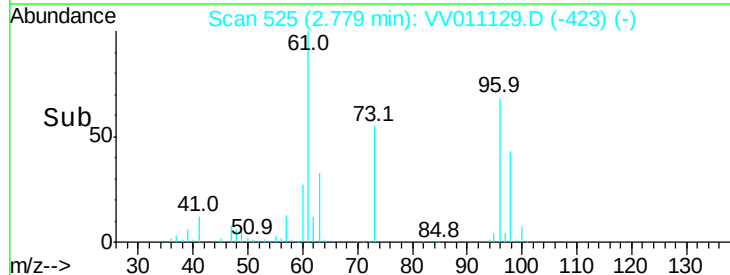
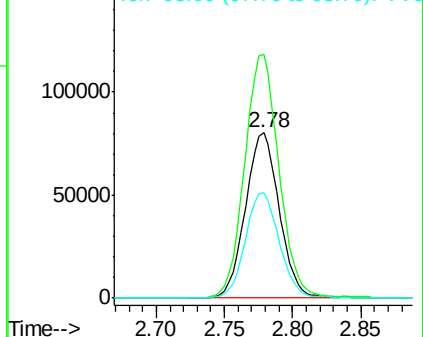


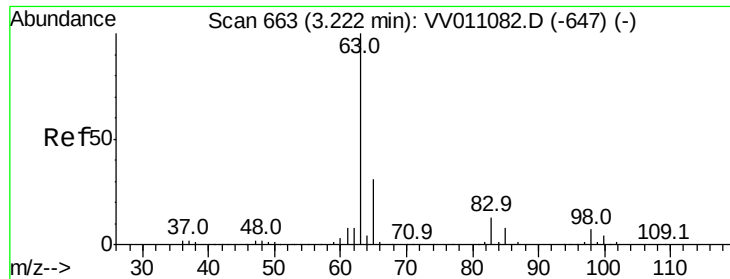
#18
trans-1,2-Dichloroethene
Concen: 25.082 ug/L
RT: 2.78 min Scan# 525
Delta R.T. -0.00 min
Lab File: VV011129.D
Acq: 30 May 2019 08:34

Tgt Ion: 96 Resp: 138177
Ion Ratio Lower Upper
96 100
61 147.6 106.5 197.9
98 63.6 44.0 81.8



Abundance Ion 96.00 (95.70 to 96.70): VV0
Ion 61.00 (60.70 to 61.70): VV0
Ion 98.00 (97.70 to 98.70): VV0

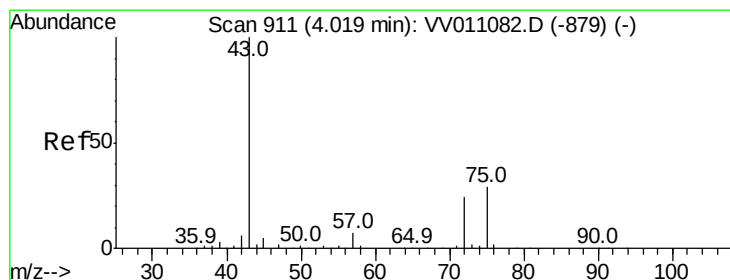
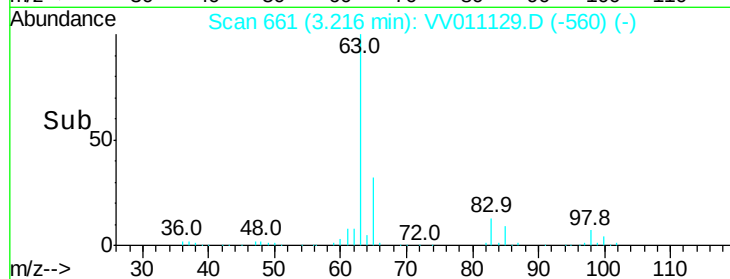
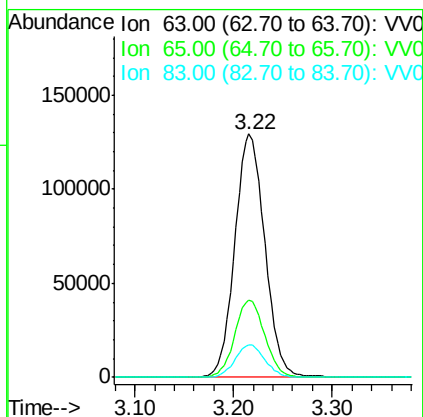
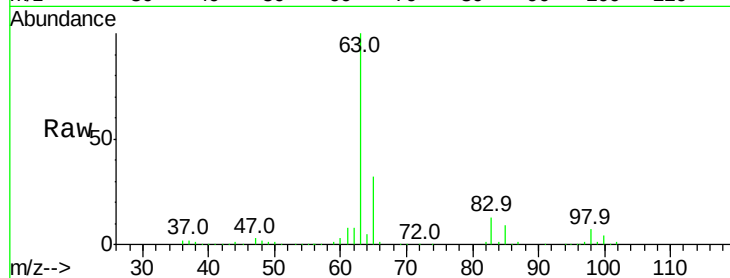




#19
 1,1-Dichloroethane
 Concen: 25.523 ug/L
 RT: 3.22 min Scan# 661
 Delta R.T. -0.01 min
 Lab File: VV011129.D
 Acq: 30 May 2019 08:34

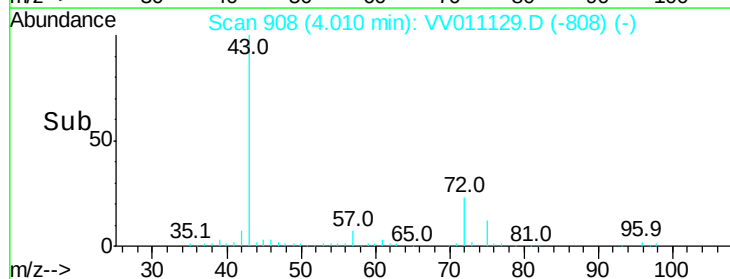
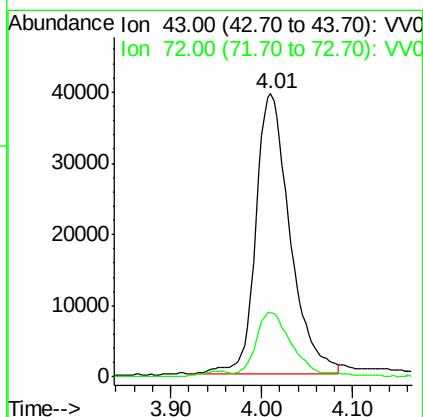
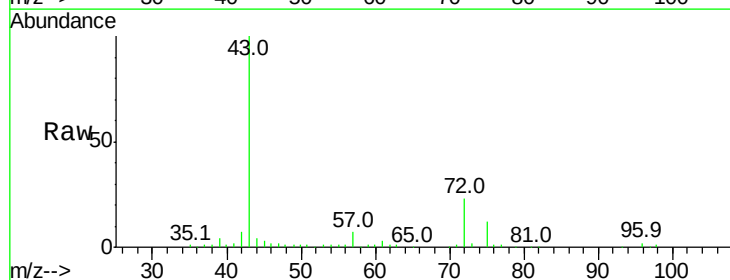
Instrument :
 MSVOA_V
 ClientSampleId :
 BFB66

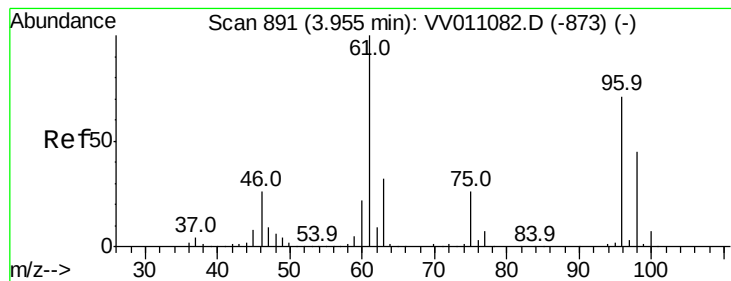
Tgt Ion: 63 Resp: 273355
 Ion Ratio Lower Upper
 63 100
 65 31.6 22.4 41.6
 83 13.4 9.2 17.2



#21
 2-Butanone
 Concen: 39.033 ug/L
 RT: 4.01 min Scan# 908
 Delta R.T. -0.01 min
 Lab File: VV011129.D
 Acq: 30 May 2019 08:34

Tgt Ion: 43 Resp: 103223
 Ion Ratio Lower Upper
 43 100
 72 21.8 10.7 31.9





#22

cis-1,2-Dichloroethene

Concen: 25.887 ug/L

RT: 3.95 min Scan# 889

Delta R.T. -0.01 min

Lab File: VV011129.D

Acq: 30 May 2019 08:34

Instrument :

MSVOA_V

ClientSampleId :

BFB66

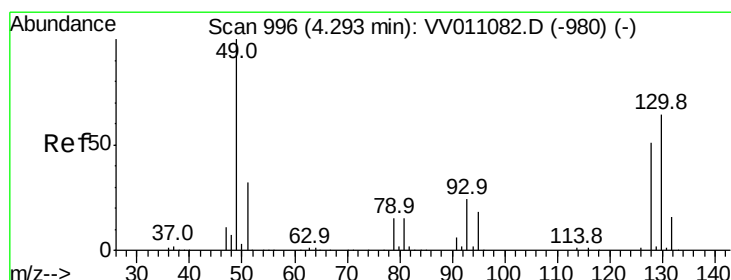
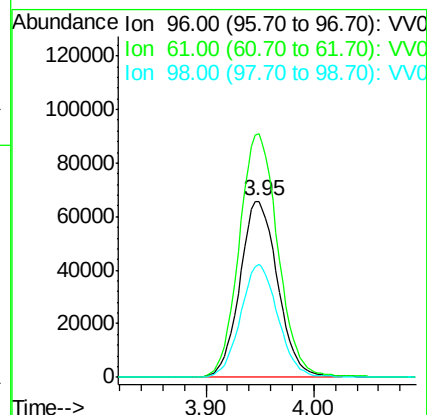
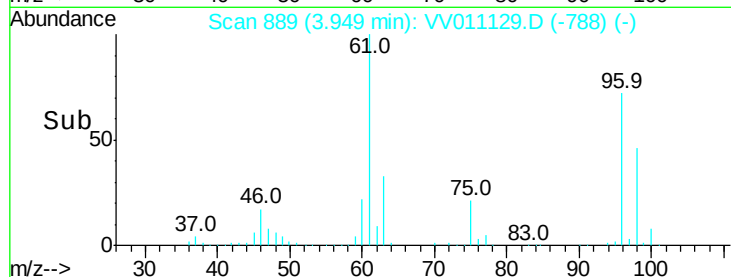
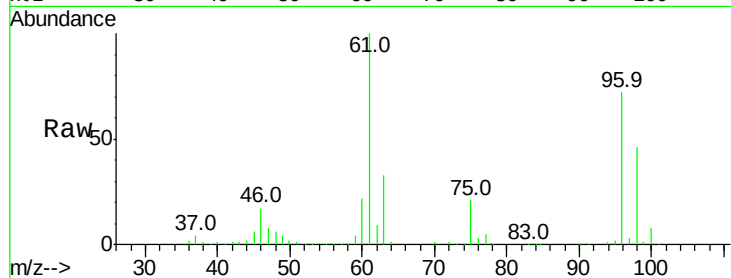
Tgt Ion: 96 Resp: 160632

Ion Ratio Lower Upper

96 100

61 138.4 97.4 180.8

98 64.3 44.4 82.5



#23

Bromochloromethane

Concen: 26.405 ug/L

RT: 4.28 min Scan# 993

Delta R.T. -0.01 min

Lab File: VV011129.D

Acq: 30 May 2019 08:34

Tgt Ion: 128 Resp: 69404

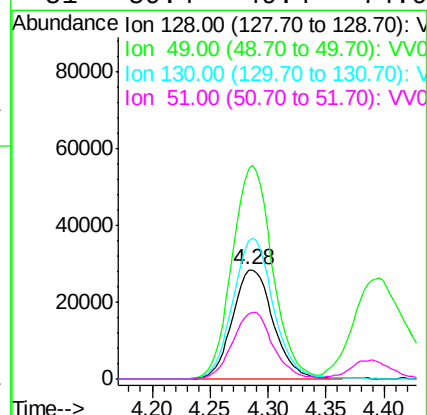
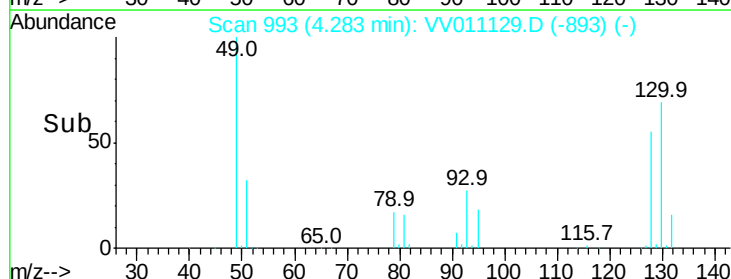
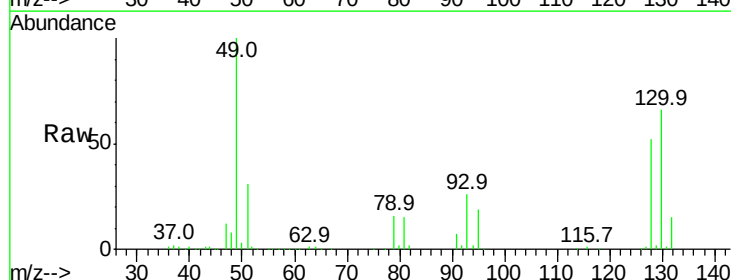
Ion Ratio Lower Upper

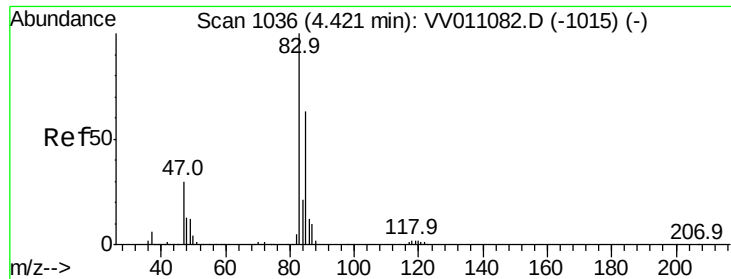
128 100

49 192.2 140.6 261.0

130 126.1 87.2 162.0

51 59.4 49.4 74.0





#25

Chloroform

Concen: 26.436 ug/L

RT: 4.42 min Scan# 1034

Delta R.T. -0.01 min

Lab File: VV011129.D

Acq: 30 May 2019 08:34

Instrument :

MSVOA_V

ClientSampled :

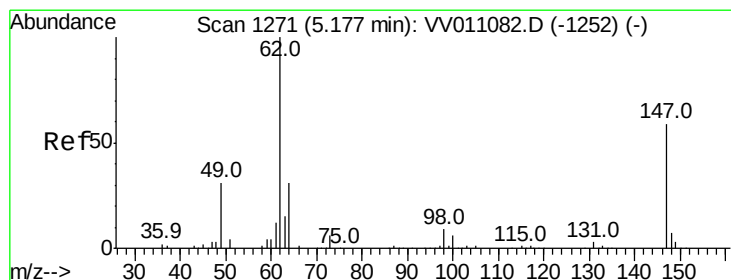
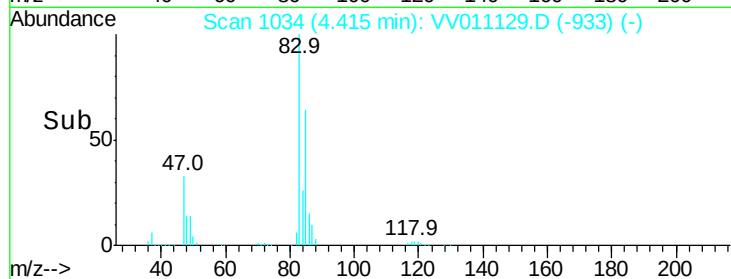
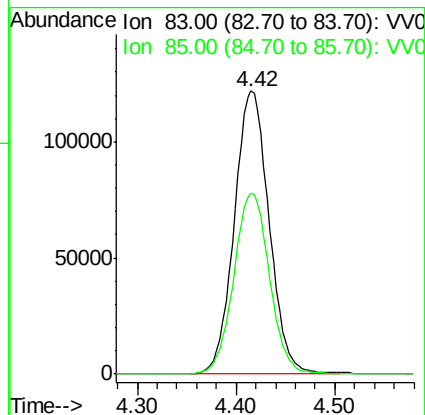
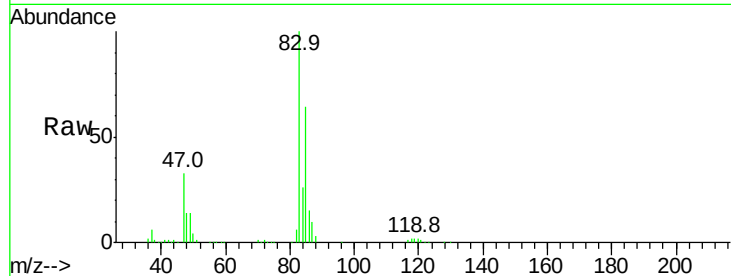
BFB66

Tgt Ion: 83 Resp: 298996

Ion Ratio Lower Upper

83 100

85 65.8 46.2 85.8



#27

1,2-Dichloroethane

Concen: 27.222 ug/L

RT: 5.17 min Scan# 1269

Delta R.T. -0.01 min

Lab File: VV011129.D

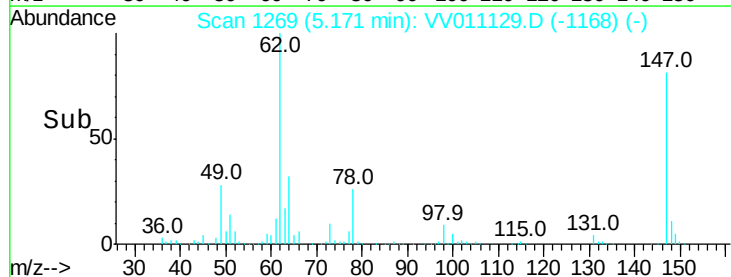
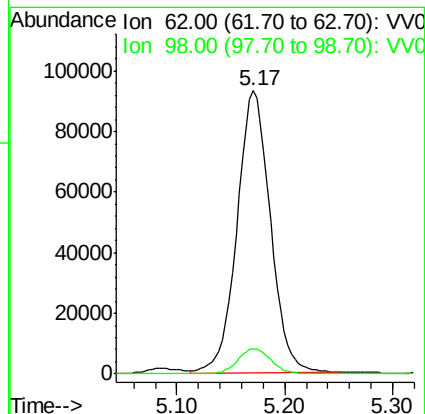
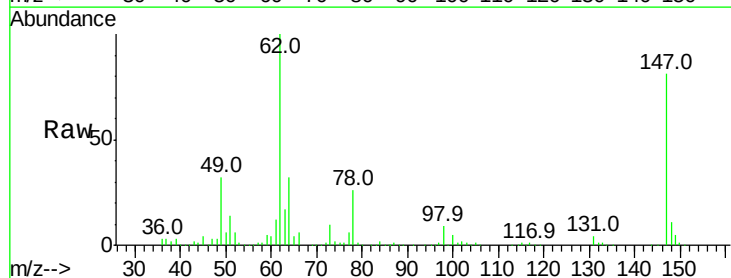
Acq: 30 May 2019 08:34

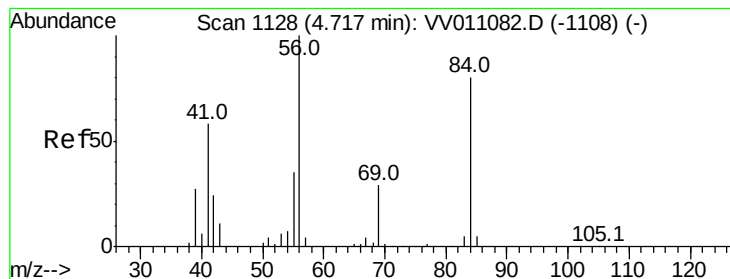
Tgt Ion: 62 Resp: 200592

Ion Ratio Lower Upper

62 100

98 8.9 7.4 11.0





#30

Cyclohexane

Concen: 19.596 ug/L

RT: 4.71 min Scan# 1126

Delta R.T. -0.01 min

Lab File: VV011129.D

Acq: 30 May 2019 08:34

Instrument :

MSVOA_V

ClientSampleId :

BFB66

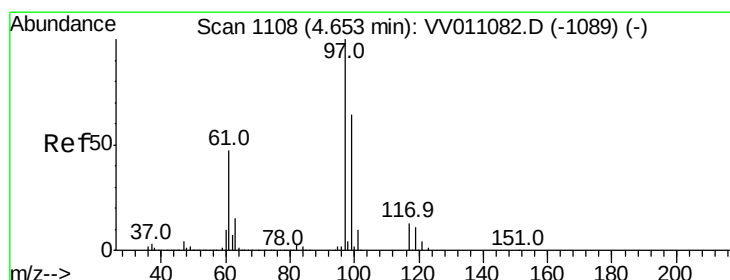
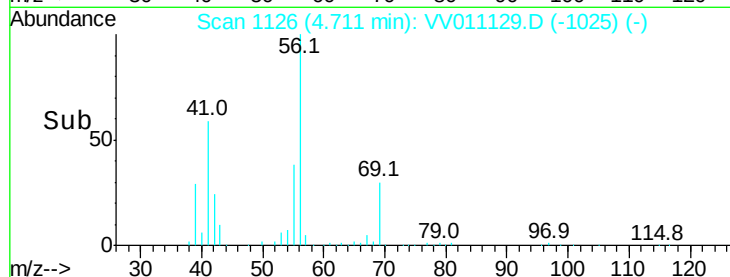
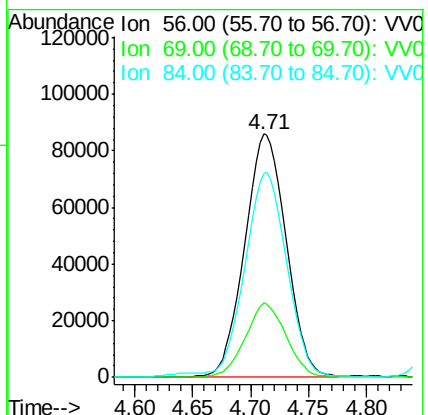
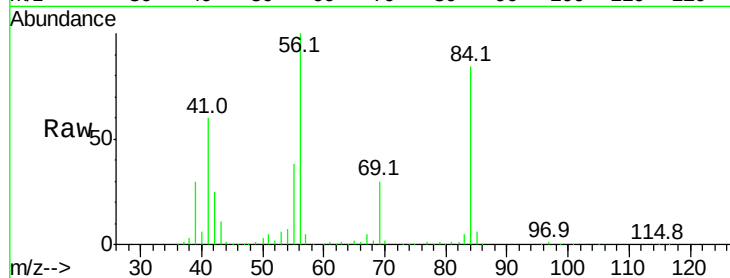
Tgt Ion: 56 Resp: 213454

Ion Ratio Lower Upper

56 100

69 30.0 23.2 34.8

84 84.7 63.2 94.8



#31

1,1,1-Trichloroethane

Concen: 24.983 ug/L

RT: 4.65 min Scan# 1106

Delta R.T. -0.01 min

Lab File: VV011129.D

Acq: 30 May 2019 08:34

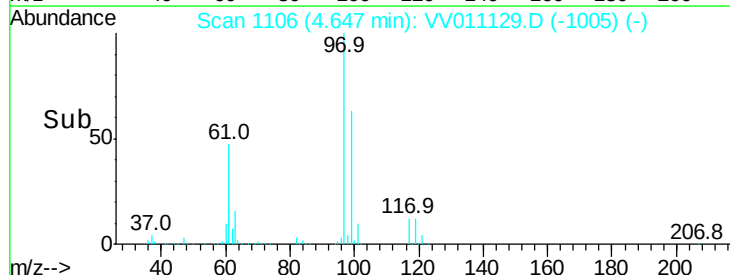
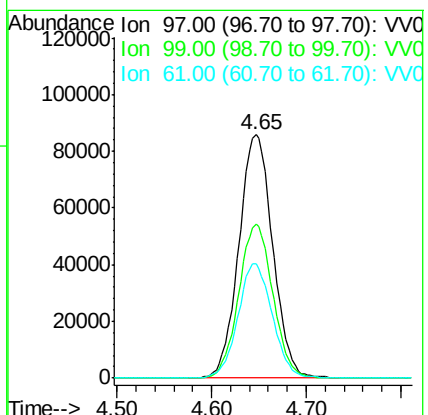
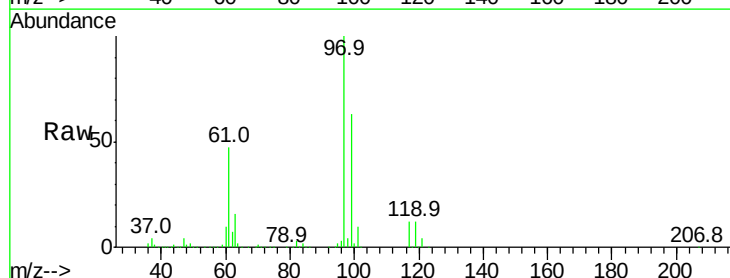
Tgt Ion: 97 Resp: 213911

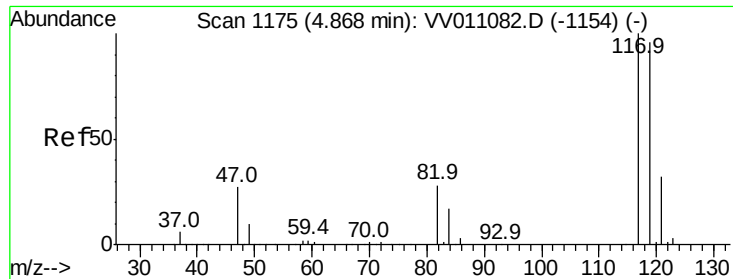
Ion Ratio Lower Upper

97 100

99 63.6 51.5 77.3

61 47.8 38.2 57.2





#32

Carbon tetrachloride

Concen: 23.884 ug/L

RT: 4.87 min Scan# 1174

Delta R.T. -0.01 min

Lab File: VV011129.D

Acq: 30 May 2019 08:34

Instrument :

MSVOA_V

ClientSampleId :

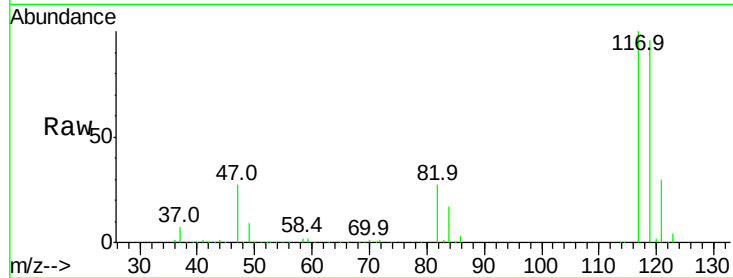
BFB66

Tgt Ion:117 Resp: 175154

Ion Ratio Lower Upper

117 100

119 96.6 76.6 115.0



Abundance Ion 117.00 (116.70 to 117.70): V

Ion 119.00 (118.70 to 119.70): V

4.87

80000

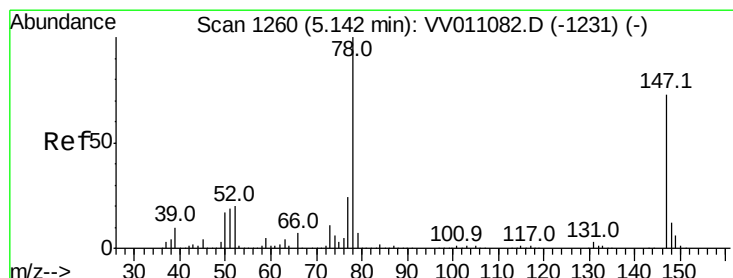
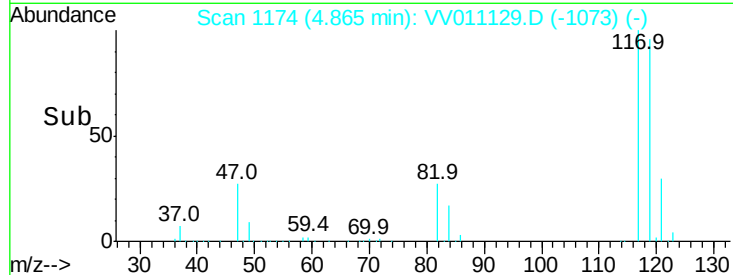
60000

40000

20000

0

Time-->



#34

Benzene

Concen: 26.233 ug/L

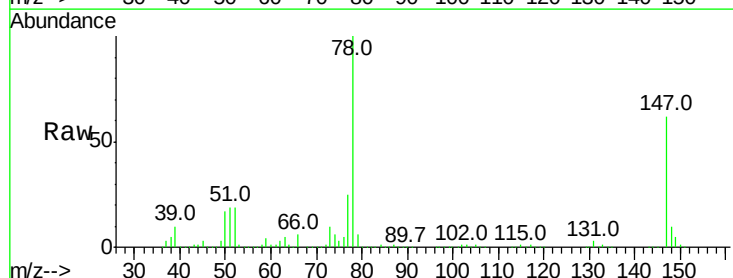
RT: 5.14 min Scan# 1259

Delta R.T. -0.00 min

Lab File: VV011129.D

Acq: 30 May 2019 08:34

Tgt Ion: 78 Resp: 596561



Abundance Ion 78.00 (77.70 to 78.70): VV0

5.14

300000

250000

200000

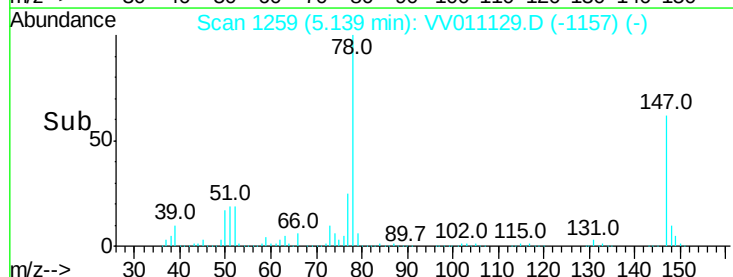
150000

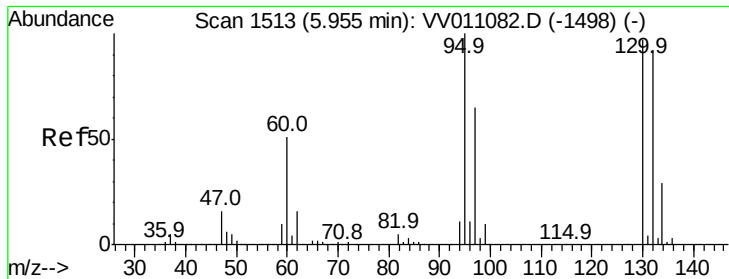
100000

50000

0

Time-->





#35

Trichloroethene

Concen: 25.962 ug/L

RT: 5.95 min Scan# 1512

Delta R.T. -0.00 min

Lab File: VV011129.D

Acq: 30 May 2019 08:34

Instrument :

MSVOA_V

ClientSampleId :

BFB66

Tgt Ion: 95 Resp: 154192

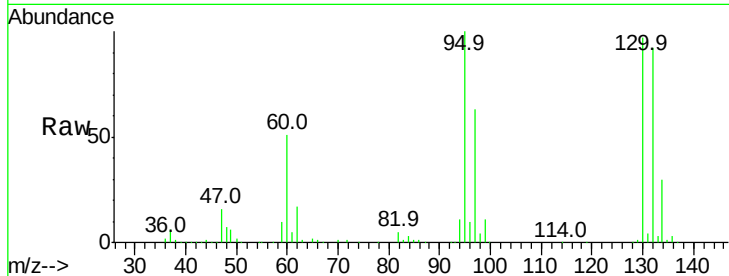
Ion Ratio Lower Upper

95 100

97 63.2 45.4 84.4

132 92.2 66.1 122.8

130 96.4 68.9 127.9



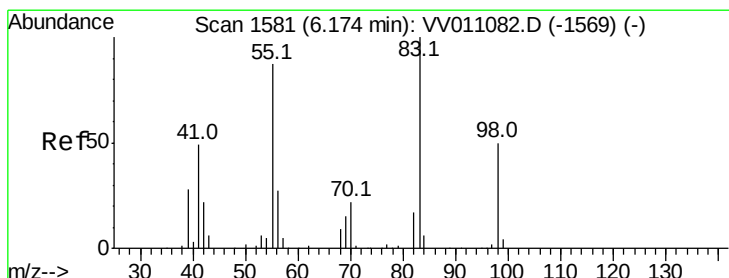
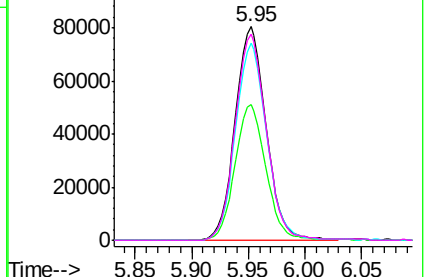
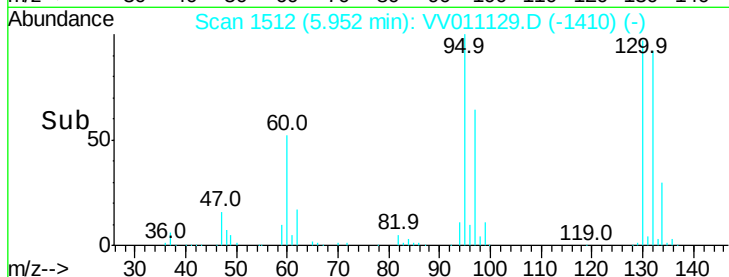
Abundance Ion 95.00 (94.70 to 95.70): VV0

Ion 97.00 (96.70 to 97.70): VV0

Ion 132.00 (131.70 to 132.70): V

Ion 130.00 (129.70 to 130.70): V

Time-->



#36

Methylcyclohexane

Concen: 20.819 ug/L

RT: 6.17 min Scan# 1579

Delta R.T. -0.01 min

Lab File: VV011129.D

Acq: 30 May 2019 08:34

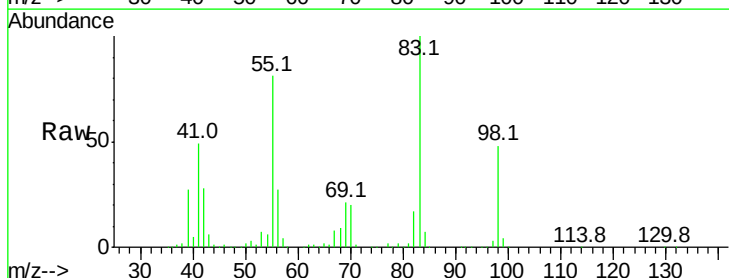
Tgt Ion: 83 Resp: 213359

Ion Ratio Lower Upper

83 100

55 80.4 69.9 104.9

98 47.8 40.0 60.0



Abundance Ion 83.00 (82.70 to 83.70): VV0

Ion 55.00 (54.70 to 55.70): VV0

Ion 98.00 (97.70 to 98.70): VV0

Time-->

