

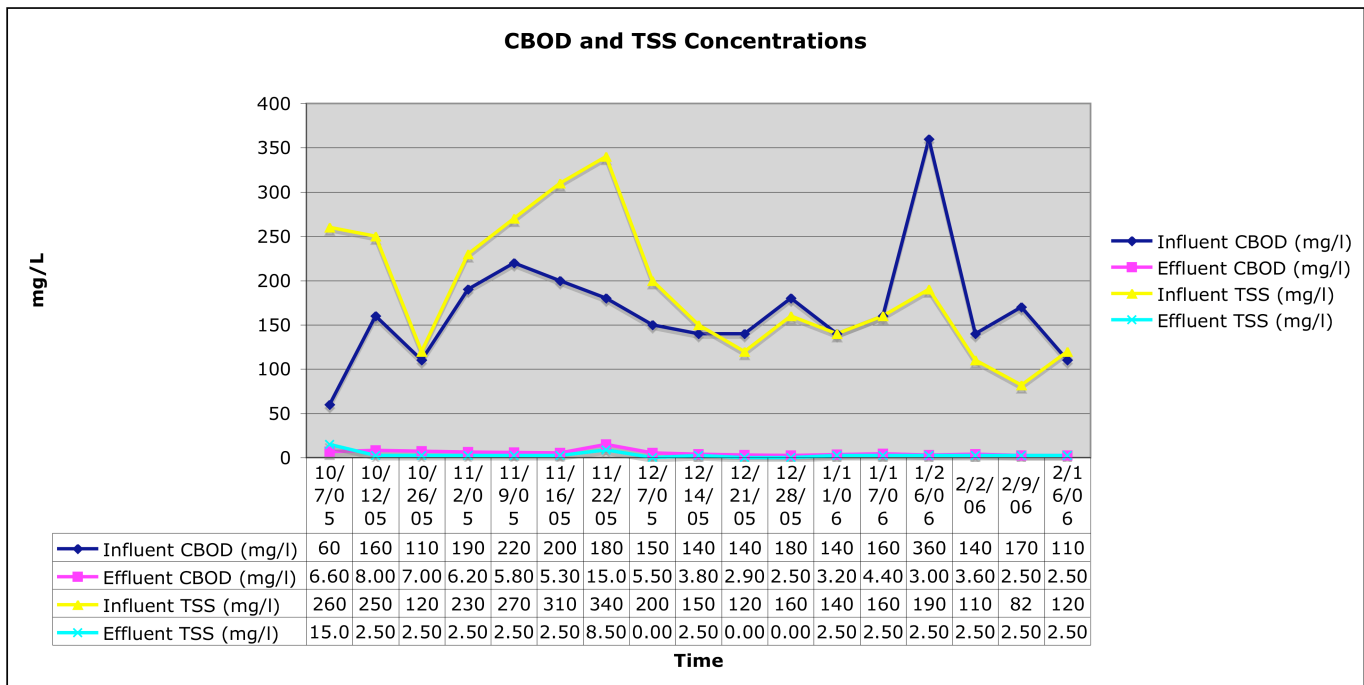


WASTEWATER ALTERNATIVES INC.

developing innovative solutions with sustainable results

INDEPENDENT TEST RESULTS

In addition to the creativity that *THE CLEAN SOLUTION* gives designers to fit systems into a natural setting while reducing impact to natural buffers, *THE CLEAN SOLUTION* reduces BOD and TSS below 30 mg/l, and in most residential project the results are in the single digits. *THE CLEAN SOLUTION* system is being tested at the Massachusetts Alternative Septic Testing Center located at Otis Air National Guard Base on Cape Cod. A measured 550 gal/day from the base facilities are metered into the system each day. Test results average 5.2 mg/l BOD, 3.1mg/l TSS, levels far superior to municipal plants, typically operating at 30mg/l for both BOD and TSS.



It is important to note the difference between the influent and effluent CBOD, which is a measure of the strength of the wastewater. The influent test BOD is very typical of that from the septic tank in a residential dwelling.

High strength wastewater from a restaurant typically has BOD and TSS levels four to ten times or more higher than residential wastewater. In wastewater sampling completed by WAI, we have seen wastewater strength as high as 4900 mg/l for BOD, 4000 mg/l for TSS and FOG (Fats-oil-grease) at 930 mg/l. Conventional leach field sizing is based on residential strength wastewater. The organic loading on a conventional soil or fabric based leach field from high strength wastewater increases the rate that the Biomat forms resulting in early failures. *THE CLEAN SOLUTION* system reduces high strength wastewater down to levels typical of treated residential wastewater.