

Water Sources

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All of the water these families use is carried in cans, sometimes for miles. All sources of water are in high demand, independent of quality. In some instances, people wait hours or days to fill their cans.

Well Costs :
\$8,000-\$15,000 (USD)

A F R I C A Water Quality



COLILERT TEST
KITS



A simple product, ColiLert, makes sampling these sources possible. Many of the water sources are contaminated with fecal coli form. Clean water is a basic necessity for all humans and determining which sources are safe is the first step to improving water quality.

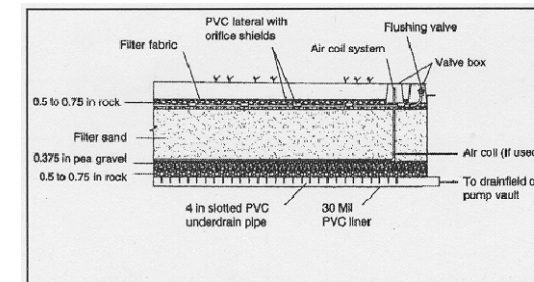
Costs:
About \$6 per test



Treatment



Material Profile of Bio-Sand Filter



PERFORMANCE

Sand filters produce a high quality effluent with typical concentrations of 5 mg/L or less of biochemical oxygen demand (BOD) and suspended solids (SS), as well as nitrification of 80% or more of the applied ammonia. Phosphorus removals are limited, but significant fecal coli form bacteria reductions can be achieved. Up to 99% FC removed (EPA).

Costs:
Life Straw—\$7-10
Sand Filter Manufacturing Kit—\$800
Cost to Complete One Unit—\$130