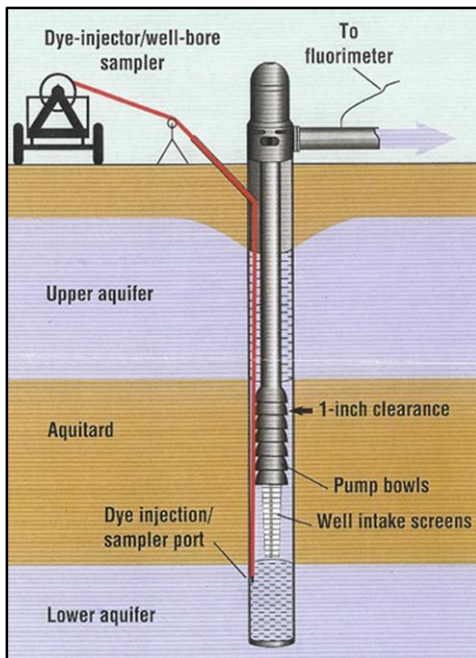


# Dynamic Groundwater Well Profiling

## High Resolution Data on Water Quality and Water Production

Stringent drinking water standards for constituents like chromium, arsenic, TCP, VOCs and nitrates, combined with continually higher demand for groundwater resources have left water suppliers with a need for more effective diagnostic tools. Under exclusive license to BESST Inc. and Field Data Solutions from the U.S. Geological Survey, dynamic well profiling is an innovative, high resolution, diagnostic service for characterizing flow dynamics and chemistry within operational groundwater production wells and the surrounding aquifers. The procedure is economical and minimally invasive.



Source: USGS

### Benefits of BESST Well Profiling:

- Keep wells in operation.
- Locate high and low production zones.
- Locate high and low concentrations of constituents of concern.
- Collect high resolution data along the length of the well screen.
- Miniaturized diagnostic tools allow access into almost any well.
- Feasible in shallow and deep wells in all lithologies.

### Cost Savings from BESST Well Profiling:

- Avoid the use of expensive test pumps by using the primary pump.
- Avoid removing the primary pump and column.
- Modify the well to reduce or even avoid water treatment costs.
- Recover stranded assets by bringing idled wells back online.
- Test requires less time than spinner logs or packer tests.

### Applications for BESST Well Profiling:

Dynamic well profiling can be used to characterize many different types of groundwater wells for a variety of applications and industries. Some examples include:

- *Municipal Wells:* Adjust groundwater withdrawals to reduce treatment costs.
- *Agricultural Wells:* Avoid pumping low quality groundwater to keep wells operational and avoid drilling new wells.
- *Industrial Wells:* Improve pump performance and working life by reducing TDS and other impurities.
- *Pump and treat Wells:* Optimize pump location to pull from targeted zones and minimize treatment volumes.

