

Capability Statement

Groundwater Exploration Drilling

SUPRA is striving to achieve the best result possible for each and every drilling project

Commercial water well typically includes industrial, irrigation, and major water supply well. The major objective when drilling a commercial well is to ensure that the formation remains stable and capable of being pumped at the maximum efficient water yield. It is important in constructing a commercial water well that the long-term stability and the efficiency of the operation are not compromised by imprudent cost savings.

A drilled well consists of a hole bored into the ground, with the upper part being lined with casing. The casing prevents the collapse of the borehole walls and (grout seal) prevents surface or subsurface contaminants from entering the water supply. The casing also provides a housing for a pumping mechanism and for the pipe that moves water from the pump to the surface. Drilled wells are constructed by rotary-drilling rig. Drilled wells that penetrate unconsolidated material require installation of casing and a screen to prevent inflow of sediment and collapse. They can be drilled more than 300 meters deep. The space around the casing must be sealed with grouting material of either neat cement or bentonite clay to prevent contamination by water draining from the surface downward around the outside of the casing.



Depending on the lithology, SUPRA carries out all methods of drilling: the use of direct rotary flush, air-lift, coring, or down the hole hammer drilling makes it possible to adjust to the prevailing conditions. This is possible only by using modern, well-maintained drilling rigs and associated equipment and by having responsible, safety-conscious employees for the company's operations, even when being confronted with the most difficult conditions. Our strong commitment to innovation is reflected in the technologies we brought to the market throughout the year. By adopting technologies that address specific challenges, we enable our clients to achieve their objectives more efficiently and profitably.

Other important factors that must be considered include: selecting a casing size based on the desired or potential yield and the required pump size; selecting a screen length appropriate to the aquifer thickness being screened; choosing the screen slots size and gravel pack size based on analysis of the gradation of the aquifer materials; selecting a screen diameter and length that will transmit the bore yield at low entrance velocities; selecting a large hole diameter; and selecting gravel pack material that is well rounded and clean.

