

## Capability Statement

## Water Quality Assessment

Aquifer and water quality assessment to ensure the best delivery to our clients

Performance of groundwater sampling and the development of periodic reports of such evaluation should be standard practice for all well systems. Water quality samples should be analysed by KAN — certified laboratory.

The sampling period should be determined by the stability of the water quality results in the well; how often, if ever, the parameters change and the amount of the change; and in accordance with government regulations.

SUPRA offers an integrated approach to water quality assessment and investigation to help clients ensure the quality of source water for their operation.



Figure: Groundwater water quality assessment executed by SUPRA's professional expert to assess the water quality

Analysis of the water within an aquifer starts with specific information gathered on existing production wells. From previous records and from water samples taken from test well, a detailed study may be made. These analyses include the routine testing of the raw water quality of the proposed production zones. Water quality is determined by assessing three classes of attributes: physical, chemical, and biological

- Physical: temperature, colour, light, sediment suspended in the water
- Chemical: dissolved oxygen, acidity (pH), salinity, nutrients and other contaminants
- · Biological: bacteria and algae.

There are standards of water quality set for each of these three classes of attributes. The parameters for clean water and drinking water must be measured to ensure the quality of water exploited. Water quality can be measured by collecting water samples for laboratory analysis or by using probes which can record data at a single point in time, or logged at regular intervals over an extended period.

