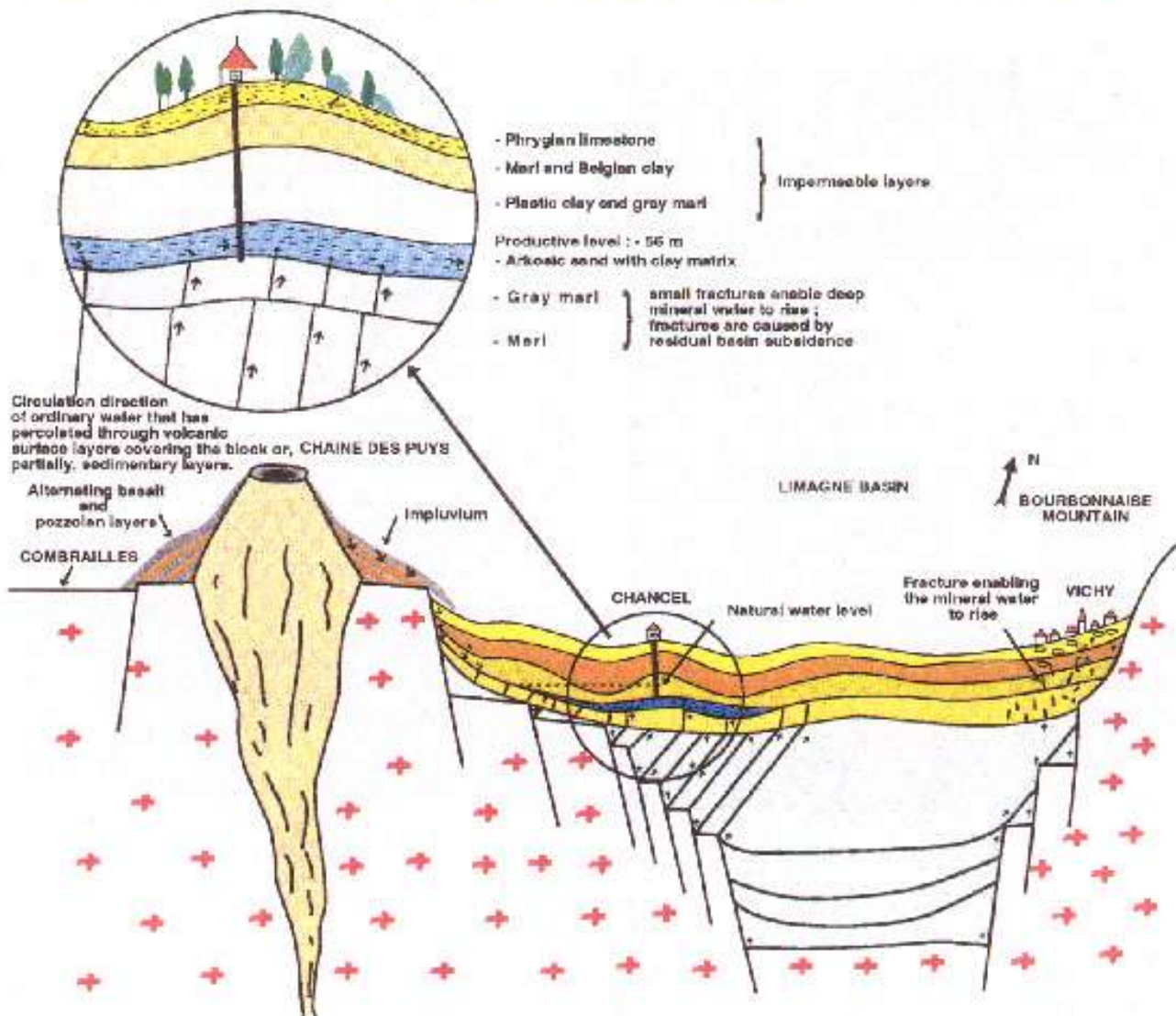




A RESOURCE PROTECTED BY ITS GEOLOGICAL ENVIRONMENT



CHANCEL SPRING GEOLOGICAL ENVIRONMENT

The Chancel spring borders the Limagne collapse basin on its western slope. The upper section of the bore runs through sedimentary layers of limestone and alternating impermeable marl and clay that protect the production horizon over a depth of several tens of meters (exactly 48 m at the level of the well), which helps keep the water nitrate-free. The productive horizon is a captive layer whose reservoir is arkosic sand with a clay matrix; the bore runs through it for 12.5 meters.

The Chancel mineral water captured by this structure is a mixture of water with a high mineral content from great depths and meteoric water that has collected in the Chaîne des Dômes eastern slope basin and percolated through the permeable surface volcanic and sedimentary layers (alluvium-sand). The latter make excellent natural filters on the edge of the basin. Since the water cannot penetrate the impermeable surface clay and marl layers, it travels the length of the block until it reaches permeable sandy horizons such as that of the Chancel.

This slope basin is located at average altitude in a wo-

ded area where there is no major human activity or intensive farming, which is why Chancel water contains no nitrates. The highly mineralized water rises through faults and thermal ascension channels in the block forming the Limagne collapse basin. It is mineralized through physical and chemical interaction with the various geological layers through which it passes at depths of several thousands of meters. When the water reaches the bottom of the north sloping basin, it reaches the sandy horizon through clay and marl sediment containing cracks of varying size caused by residual subsidence of the hard materials on the basin floor. It then mixes naturally with the ordinary water trapped in the arkosic sand.

The resultant mixture has a low mineral content, no carbon dioxide and a low sodium content, because of extensive dilution of deep water by meteoric water. Nonetheless, it contains potable concentrations of some elements, proof of its partial deep origins.