



## DRILLING UNDER THE DURANCE RIVER TO PROTECT ENVIRONMENT | 2007

As part of a project to construct a 60-kilometer pipeline between Fos-sur-Mer and Rognac in the south of France, HDI performed an impressive drilling operation to cross the Durance river.

To avoid disturbing the ecosystem of a Natura 2000 protected area, the solution chosen was to dig under the river. However, a tough geological profile had already caused similar attempts to fail in the past.

The 980-meter directional drilling project consisted in first boring a pilot hole using a remote-controlled machine directed according to previously calculated coordinates. The hole was then widened before the pipe was drawn. Oil will now flow directly to the storage depot in Manosque through the 600 mm-diameter steel pipeline, allowing an additional three million cubic meters to be stored by the end of 2007.

Directional drilling makes it possible to drill hard-to-access areas and minimizes impact on the environment or cultural heritage sites (monuments, buildings, etc.). HDI is one of very few companies worldwide capable of mastering this technique over long distances, as it showed in India, when it crossed the Vasishta Godavari, one of the country's seven holy rivers, achieving a double record: a tunnel of 1.20 meters in diameter and 1,760 meters long, with total weight of pipe drawn of 1,700 metric tons.

