

MENSANO: GEOTHERMAL EARLY STAGE ASSETS

- ✔ Western Tuscany, NE of Larderello geothermal area
- ✔ 21,265 hectares
- ✔ Heat flow anomaly > 150 mW/mq and temperatures over 150 °C at 2000 m depth,
- ✔ Thermal springs, hydrothermal alteration areas and recent travertine deposits.
- ✔ significant recent (post-neogenic) uplift on a regional scale, exceeding 400 m (asl)
- ✔ Overlies a large inferred heat source
- ✔ High enthalpy sources expected within 3000 m depth

The Mensano exploration lease is located in the central part of Tuscany, in the districts of Siena and Pisa. The area is centered 30 km west from Siena, the closest city (70.000 inhabitants), and about 20 km north - east of Larderello town. Access to the area is by Firenze-Siena highway and other regional roads.

Several geological, geophysical and geochemical studies have been carried out in the '70s. The Mensano lease area is characterized by the presence of a large heat flow anomaly (> 150 mW/m²), numerous thermal springs and hydrothermal alteration areas, recent travertine deposits and significant post-neogenic uplifting on a regional scale, exceeding 400 m above sea level.

An exploration well was drilled in 1979 in the southern part of Mensano lease area, that is adjacent to active geothermal exploitation concessions and temperature exceeding 170°C was measured at about 2300 m.

Based on this prior work a large geothermal system is inferred and two potential reservoir targets are foreseen :

- the first one in the rocks of Tuscany Series, at depths estimated between 1000 and 2000 m, with temperatures expected to about 150 °C
- the second one in fractured zones within the metamorphic complex, at depths between 2800 and 3000 m, corresponding to extensional faults and/or near igneous intrusions, with temperatures expected to 200 °C.

A detailed exploration program has been proposed to confirm the presence of high enthalpy resources in the Mensano area and will include geological, geophysical and geochemical prospecting suitable to define the best location and targets of the exploration wells that will be drilled in the following phase.

