

ELDVÖRP: GEOTHERMAL DEVELOPMENT ASSET

- ✓ Exploration and Exploitation permit for 1,007 hectares
- ✓ 50 MW planned expansion
- ✓ 1 production well
- ✓ Transient Electro-Magnetic (TEM) exploration survey conducted in 1996 and 2008
- ✓ Sub-field to the Svartsengi geothermal system
- ✓ 50 MW Indicated Resource

Eldvörp is a 1,007 hectare high-temperature geothermal field, located in the western part of the Reykjanes peninsula, approximately 6 km from Svartsengi. Alterra Power's subsidiary, HS Orka, has had an exclusive exploration and exploitation license in the Eldvörp geothermal field for 70 years since 1987. The field is accessed by a gravel road from the Svartsengi field.

The Eldvörp field has been studied since the 1980's and has been included in several surveys as part of investigations of the Svartsengi geothermal field. The research and exploration in the field includes detailed geological mapping, several resistivity exploration campaigns, geochemical analysis of the reservoir fluid and drilling of one full size exploration well to a depth of 1,265 m in 1983.

The temperature and pressure in the well has been measured systematically since 1983 as part of the monitoring program of the Svartsengi field. Monitoring data, exploration results and reservoir simulation show that the Eldvörp and Svartsengi geothermal fields are part of the same geothermal resource. The geothermal reservoir is a liquid dominated high-temperature geothermal system with a steam zone from the surface down to approximately 800 m depth. The reservoir temperature in Eldvörp is approximately 270°C and 30°C higher than the current Svartsengi production zone. The chemistry of the reservoir fluid in Eldvörp is approximately 2/3 seawater and 1/3 freshwater, similar to Svartsengi.

