

Directional logging survey of well 1 in Husavik, N-Iceland

Grímur Björnsson, Steinar Þór Guðlaugsson, Kjartan Birgisson

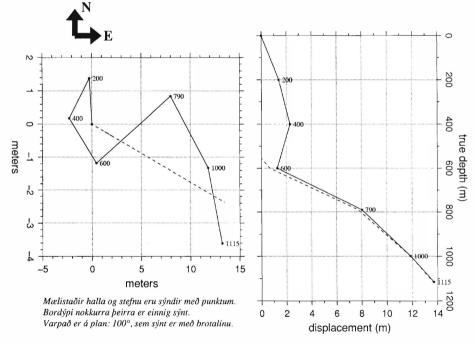
Greinargerð GrB-STG-KB-2000-03

Directional logging survey of well 1 in Husavik, N-Iceland

This reports describes the results of a directional survey of well 1 in Husavik, N-Iceland. The measurements were carried out on October 18, 2000. Inclination from the vertical and direction of the well, relative to the magnetic north, were measured by a single-shot tool from Todco. Measurement depths were selected at positions where the well diameter is near constant, determined by caliper logs. As the magnetic north is approximately 25° west of the true north, that same number is added to the tool readings to show the correct well direction. The table below presents the results:

Well depth (m)	Inclination from vertical (°)	Direction (°)
200	0.8	350
400	1.8	215
600	2.7	75
790	2.0	75
1000	1.7	175
1115	1.4	115

The projected well track is shown on the figure below, both in horizontal view as well as in a cross section striking 100°. The conclusion from these measurements is that the well is almost truly vertical. A maximum displacement from the wellhead is no more than 15 m at 1000 m depth.



It should be noted that the well directions in the table above can be interpreted as random. This is to be blamed on the almost vertical direction of magnetic field lines here in Iceland and, therefore, very low momentum on the tool magnetic compass in near vertical wells. This irregularity is of minor concern, as the inclination data is very accurate and shows alone that the wellbottom is practically straight underneath the wellhead.

Orkustofnun, Reykjavik on December 5, 2000

Grimur Bjornsson, Steinar Thor Gudlaugsson and Kjartan Birgisson