

PERMAFROST DISTRIBUTION OFFSHORE OF WEST YAMAL**P. Rokant, G. Cherkashev, B. Vanstein, P. Krynitsky****Institute for Geology and Mineral Resources of the Ocean (VNIIOkeangeologia), St. Petersburg, Russia**

The results of seismic studies in the near-shore, shallow waters of the south-western Kara Sea – at the Shpindler, Kharsavey and Mare-Sale sites - showed the presence of a seismic interface which can be interpreted as a submarine permafrost table. The proposed permafrost exhibits a continuous distribution and a strongly dissected top surface overlain by unfrozen sediments. The permafrost table is located at a depth of 4-6 m and 5-10 m below the sea floor at the Shpindler and Mare-Sale sites, respectively. Three dimensional modeling of the permafrost table suggests the presence of relict buried thermoenudational depressions (up to 2 km across) at a minimum sea depth of 40-45 m at the Shpindler and Mare-Sale sites. The depressions may be considered as paragenetic to thermocirques found in cliffs at the Shpindler site. At the Kharsavey site, the permafrost table has an elongated depression parallel to the modern shoreline. The maximum depression depth is 20 m below the seafloor. At present, the relict thermocirques (Shpindler and Mare-Sale) and the elongated depression (Kharsavey) are completely filled in with sediment and are not evident in modern bottom topography.