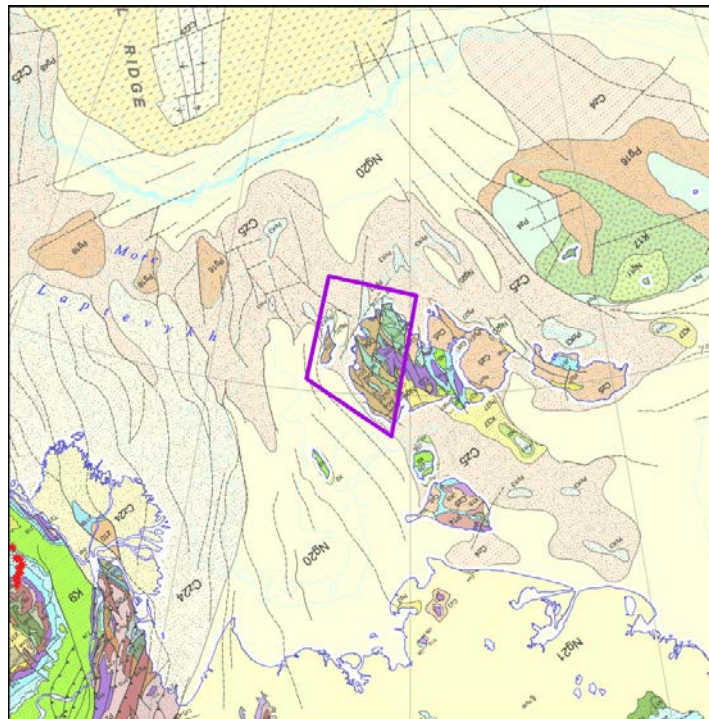


GEOLOGY OF KOTEL'NYI ISLAND (NEW SIBERIAN ISLANDS)

A REGIONAL STUDY REPORT



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GEOLOGY OF KOTEL'NYI ISLAND (NEW SIBERIAN ISLANDS)

Volume 1: 2014 Field Work Results

New Siberian Islands represent an exposed Paleozoic–Mesozoic crustal block in the East Siberian Arctic shelf between the Laptev and East Siberian seas. The islands were extensively studied 30-40 years ago during the State geologic mapping program. Since that time, there has been a prolonged gap in studying these islands with just a few new results being published. The present 2-volume report summarizes the most recent geological observations and results of rock samples analytical studies performed by Dr. Andrey Prokopiev (Diamond and Precious Metal Geology Institute RAS, Yakutsk), Dr. Victoria Ershova (St. Petersburg State University), and Dr. Vladimir Tumskoy (Moscow State University) in 2014 and 2015.

The Volume 1 provides a brief summary of the 9 weeks fieldwork campaign in July-September 2014 in the western part of Kotel'nyi Island. It contains photographs of studied outcrops and related explanatory notes, data spreadsheets containing information about location of the field stations, number and type of collected samples and performed structural and paleocurrent measurements and other related data.

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Volume 2. Analytical results and final data compilation

The Volume 2, Final Report, provides data on geology of Kotel'niy Island (New Siberia Islands). It consists of 115 pages including 68 illustrations. The main data sources were results of the 2014 field studies that are summarized in the Volume 1, and results of following analytical works. The new results include U-Pb dating of detrital zircons (18 samples), apatite fission-track analysis (11 samples), pollen and spores palynological studies (20 samples), clay mineralogy (38 samples) and Rock-Eval analyses (103 samples). The provided results help to improve understanding of regional geology and tectonic evolution of the Laptev and East Siberian Sea sedimentary basins and their hydrocarbon systems.

The report is accompanied by an ArGIS database that includes geological map of the studied region, paleogeographic maps, locations of the cross-sections, rock sampling sites and performed measurements.

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