

Petrographic descriptions of drill hole cuttings from the Great Northern Plains

by G. B. Everard

Samples of cuttings from boreholes on the Great Northern Plains have been examined. Several representative pieces were selected from the cuttings and broken in a steel mortar. Fragments without weathered faces were taken from the broken pieces and crushed in the mortar and the crushed fragments examined under the microscope.

Line 15: Bore No. 1, 45–55'

Fine-grained rock consisting of laths of plagioclase, with serpentinous chloritic material, some fresh pyroxene showing herringbone texture. The rock is a fine-grained dolerite.

Line 15: Bore No. 2, 30–35'

Medium-grained crystals of pyroxene and twinned plagioclase, green chloritic and serpentinous material and ilmenite. The rock is dolerite.

Line 15: Bore No. 3

Very fine grained weathered dolerite with much serpentinous and chloritic material.

Line 15: Bore No. 4, 25–30'

Rounded pebbles of fine-grained dolerite in greenish clay.

Line 15: Bore No. 4, 30–35'

Small laths of plagioclase in serpentinous and chloritic material. The rock is a very fine grained weathered dolerite.

Line 16: Bore No. 1, 39'

Medium-grained crystals of pyroxene and plagioclase with ilmenite in fine-grained chlorite and serpentine. The rock is a dolerite.

Not numbered

Dark greenish fine-grained rock consisting of serpentinous and chloritic material with small laths of plagioclase. The rock is altered dolerite.

[28 April 1967]