

A RECONNAISSANCE SURVEY OF STRUCTURES AT THE  
EAST BULL LAKE PLUTON, ONTARIO

by

Anton Brown and D.C. Kamineni

ABSTRACT

The results and contemporary (1981) analysis of a 1980 reconnaissance survey of the East Bull Lake mafic pluton are presented for comparison with more detailed surveys. Analysis of the primary foliation indicates that the maximum depth of the base of the pluton is under 1000 m, and that the basal profile is interrupted by faults. Areal distribution, orientation, infillings and movement data on mesoscopic fractures indicate a protracted, probably six-stage, history of brittle deformation on the pluton. The important fracture orientations correspond to the orientations of aerial-photograph lineaments. The fracture density varies slightly with the rock type, but is commonly three to four fractures per square metre.

Terrain Sciences Division  
Geological Survey of Canada  
Energy, Mines and Resources Canada

Work done for

Atomic Energy of Canada Limited  
Whiteshell Nuclear Research Establishment  
Pinawa, Manitoba ROE 1L0

1989