

GEOLOGY AND SUMMARY OF RESULTS FROM BOREHOLE EBL-1
IN THE EAST BULL LAKE RESEARCH AREA (RA-7)
ALGOMA DISTRICT, NORTHEASTERN ONTARIO

by

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ABSTRACT

Borehole EBL-1, a vertical NQ-3 hole, was drilled to a depth of 850.73 m in the East Bull Lake Pluton in the Algoma District of Ontario. It was drilled at the thickest part of the pluton and penetrated its bottom at 770-790 m. The borehole intersected several altered lithological units. Starting at the top, they were massive gabbro, layered gabbro, dendritic gabbro, troctolite, rhythmic layered gabbro, gabbroic anorthosite, basal anorthosite, and the basal granite.

The borehole also intersected several mafic dykes, the most prominent being an approximately 80-m-thick diabase dyke. This dyke may also be related to the regional Nipissing diabase that has been dated to be 2100 Ma.

The most common orientation of 23 345 fractures intersected in the borehole ranged from north through northeast to easterly and southeast, with variable dips, predominantly between 16 to 75°.

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