

GEOLOGY, GEOPHYSICS AND ROCK PROPERTIES RESEARCH FOR THE
CANADIAN NUCLEAR FUEL WASTE MANAGEMENT PROGRAM

by

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ABSTRACT

This document describes the geological, geophysical and rock properties investigations which form part of the Canadian Nuclear Fuel Waste Management Program. The research is directed mainly at developing or refining techniques for identifying suitable igneous rock bodies, mapping their boundaries and fracture populations, determining physical and thermal properties of the rock types, as well as determining long-term solubility. The geology activity is principally concerned with field data acquisition, i.e., mapping, drilling and logging; testing and storage of data and interpretation. Airborne, ground and downhole geophysical surveys have aided in the investigations of igneous plutons. Several new geophysical methods are being developed for applications that are unique to this program. Matrix physical, thermal and magnetic rock properties are being investigated to assist activities in a wider Rock Mechanics Program, and also to provide data for geophysical and geological interpretations.

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