

IN SITU MEASUREMENT OF STRESS STATES IN BEDDED SALT AND ASSOCIATED SEDIMENTARY ROCK IN RELATION TO DEPTH

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1.0 PROPOSAL SUMMARY

This is a proposal to the Solution Mining Research Institute (SMRI) to measure tectonic lateral stress and vertical stress from horizontal boreholes at two distinct salt layers in virgin ground at the edge of an existing salt mine operated by the Sifto Salt Division of Domtar, Inc. in Goderich, Ontario. The proposal was presented at the Fall 1984 meeting of SMRI in Kansas City.

As a member of SMRI, the Domtar Chemicals Group is willing to serve as the sponsor for the proposed research project, and the Goderich mine has agreed to participate.

Serata Geomechanics, Inc. (SGI) has recently developed and field-proven a new method of in situ stress measurement. The method overcomes the main difficulties which have beset the overcoring and hydrofracturing approaches to stress determination in non-elastic media such as rock salt. This new method is proposed for the stress measurements.