GAS STORAGE IN SASKATCHEWAN BEDDED SALT BY

N. GRAEME CROSSLEY, P.Eng.* MANAGER, PROCESS AND STORAGE

October 20, 1992

ABSTRACT

Large volume underground storage of hydrocarbons has been developed and practiced in Saskatchewan, Canada for many years. Use of these facilities has gained importance in recent years, due mainly to economical and environmental reasons.

Much of southern Saskatchewan is underlain by the Prairie Evaporite formation, whose major constituents are potassium and chlorides. This formation occurs in thicknesses of up to 700 feet and at depths varying from 3000 to 7000 feet.

TransGas Limited has developed natural gas storage in bedded salt caverns, washed from the Prairie Evaporite formation using a solution mining process. Twelve caverns are presently in operation and three more are in the process of being mined. Two former Liquified Petroleum Gas (LPG) caverns have recently been converted to natural gas storage.

This paper presents a general overview of TransGas Limited's experiences with development, operations and maintenance of salt caverns from the 1960's through the 1990's.

©2023 – Solution Mining Institute Full Paper is Available in the SMRI Library(www.solutionmining.org)

*TransGas Limited P.O. Box 67 Regina, Saskatchewan Canada S4P 2Z5