

#414996

Sandia National Laboratories

Albuquerque, New Mexico 87185-1341

date: February 1, 1996
to: SWCF-A Records Center, SWCF-A: 1.2.07.1:PDD:QA:SALADO:PKG
7:Salado Halite Permeability:PERMX_LOG :PERMY_LOG: PERMZ_LOG

from: Tracy L. Christian-Frear, MS-1324 (6115)
subject: SALADO PARAMETER PRINCIPAL INVESTIGATOR
DOCUMENTATION PACKAGE FOR: SALADO HALITE
PERMEABILITY FROM ROOM Q ANALYSIS

The attached record package contains the intrinsic permeability of the halite as determined from an analysis of Room Q brine inflow data. Simulation of brine inflow to Room Q reproduced measured brine accumulation data with a value for log permeability of -21.3 m² and a rock compressibility of 5.4 E-12 /Pa for the halite. The rock compressibility and the permeability of the halite are correlated with each other. Changing either rock compressibility or permeability by more than a factor of two would require a commensurate change in the other parameter to maintain proper slopes in comparison to cumulative brine inflow data (i.e., if the rock compressibility was determined to be about 5.4 E -10 /Pa, then the log of the permeability would be approximately -23.3). If the permeability value is used without correlation to rock compressibility, then the use of this sole permeability value as a data point in the decision of the parameter estimate is not valid.

The parameter information provided in this record package was collected by Principal Investigators for input to the WIPP Data Entry Form and for use by Performance Assessment personnel making parameter estimates. The record package was prepared in accordance with WIPP Quality Assurance Procedure (QAP) 17-1, Rev. 1, WIPP QA Records Source Requirements.

Please call me at 848-0704 if you have any questions.

Information Only

RECORD PACKAGE:

**SALADO PARAMETER PRINCIPAL INVESTIGATOR
DOCUMENTATION PACKAGE FOR:**

**SALADO HALITE PERMEABILITY FROM ROOM Q
ANALYSIS**

Purpose: The parameter information in this package was collected by Principal Investigators for input to the WIPP Data Entry Form and for use by Performance Assessment personnel making parameter estimates.

Date of Record: January 31, 1996

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Recipient: SWCF-A Records Center

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