

2×10^{-2} . Test results indicate that the Felix No. 1 behaves as a very leaky aquifer.

The 7.6-m-thick Felix No. 2 was found to be hydraulically anisotropic. Its maximum horizontal hydraulic conductivity is estimated to be approximately 0.3 m/day along a direction of N 59° E, while its minimum horizontal hydraulic conductivity of about 0.15 m/day is developed in a direction of N 31° W. The principal conductivity axes of the Felix No. 2 correspond to the orientation of two sets of near vertical fractures found in oriented cores taken from the seam. The maximum horizontal conductivity is developed along the more prominent fracture set. The vertical hydraulic conductivity of the Felix No. 2 is apparently greater than its minimum horizontal conductivity and may be as great as the sum of its maximum and minimum horizontal conductivity. The average vertical hydraulic conductivity of the strata between the two coal seams is estimated to be from 0.015 to nearly 0.3 m/day. The first 2m of strata below the Felix No. 2 coal has a vertical hydraulic conductivity of less than 1×10^{-3} m/day. The Felix No. 2 behaves as a leaky-to-very-leaky aquifer. Coefficients of storage estimated for the Felix No. 2 range in value from about 1×10^{-3} to 1.6×10^{-2} , with the larger values associated with greater vertical leakage. The saturated strata from the base of the Felix No. 2 up to the water table make up a multiple-leaky-aquifer system. The hydraulic character of the Felix coal shows less variability than that of adjacent strata.

STOUT, N. C., The effects of time-temperature history on oil yield for Colorado oil shale, talk at Westco Conf., Livermore, Calif., October 29, 1975.

TAYLOR, R. W., Gas pressure from a nuclear explosion in oil shale, Lawrence Livermore Laboratory, Rept. UCRL-51795 (1975).

In this report we estimate the quantity of gas and the gas pressure resulting from a nuclear explosion in oil shale. These estimates are based on the thermal history of the rock during and after the explosion and the amount of gas that oil shale releases when heated. We estimate that for oil shale containing less than a few percent of kerogen the gas pressure will be lower than the hydrostatic pressure. A field program to determine the effects of nuclear explosions in rocks that simulate the unique features of oil shale is recommended.

TAYLOR, R. W., Bowen, D. W., and Rossler, P. E., Heating effects in Rio Blanco rock, Nucl. Tech. 27, 653-59 (1975).