Subject well is producing from the Wolfcamp formation, as is all wells in this field, and is perforated at 10,335-10,369'. Production is flowing through 2" tubing with the packer set at 10,100'. The annulus between the tubing and 5-1/2" production casing is filled with lease oil. The open hole section at 4620-7350' is not productive in any well drilled in this field.

Injection of produced water in the casing annulus will present no danger of collapse or burst to the casing strings. The 5-1/2" production casing was designed for collapse resistance using 10 pounds per gallon mud, which would give a hydrostatic pressure at 7350' (top of cement)of 3820 psig. By comparison, the hydrostatic pressure at 7350' with subject produced water (8.45#/gallon) would be only 3220 psig. Also, the casing-tubing annulus is filled with oil and internal pressure would partially balance external hydrostatic pressure. Internal burst pressure of the 8-5/8" J-55 casing is over 2900 psig, compared to hydrostatic pressure of the water column at 2500' (top of cement) of only 1100 psig.

By copy of this application, Mr. Irby of the State Engineer office is being advised of the proposed annulus disposal. A copy of the transmittal letter to Mr. Irby is attached. Please contact this office if any additional data is required in support of this application.

Very truly yours, W. Coombes District Operations Superintendent

Attachments

GWC: JRH/bMc

cc: Mr. Frank Irby State Engineer Office State Capitol Building Santa Fe, New Mexico

> Mr. Joe Ramey V New Mexico Oil Conservation Commission P. O. Box 1980 Hobbs, New Mexico 88240