



APPLICATION FOR CLASSIFICATION AS HARDSHIP GAS WELL

The following information is offered in response to items required by the preceding form:

- 1) Underground waste of hydrocarbons will occur if the well is shut in or restricted in flow to less than present rates of approximately 313 Mcf per day. Waste will result from migration of the gas through the leaking liner hanger (which connects the 7-3/4" liner to the 9-5/8" casing at 10,879 ft) into various formations over 8,085 feet of hole exposed behind the 9-5/8" casing from 11,226 feet up to the 3,141-foot setting depth of the 13-3/8" casing.

The 2-7/8" production tubing, 9-5/8" casing (set at 11,226 ft) and 13-3/8" surface casing (set at 3,141 ft) are in pressure communication - probably through a packer leak and liner hanger leak.

(Note the gauge tickets of March, 1985) When the well is shut in, pressure at the surface builds to more than 5,000 psi on the 2-7/8" tubing and 9-5/8" casing. (Note gauge ticket of January, 1984).

This amount of pressure would exceed the burst limit of the 13-3/8" surface casing and probably exceeds the entry pressure threshold of various formations behind the 9-5/8" casing. (Communication with the 13-3/8" casing was not discovered until March, 1985, as noted above).

- 2) The problem has been controlled by allowing gas to flow from the 9-5/8" casing into the sales line, thus reducing back pressure sufficiently to eliminate the danger of a blowout and minimize the probability of waste into the unprotected hole.