

### Hardship Gas Well Classification

Box Canyon Unit #2  
F 13-21S-21E  
Little Box Canyon Morrow

Yates Petroleum is not seeking emergency hardship classification for this well because El Paso Natural Gas has told Yates that El Paso will take gas from the Box Canyon Unit #2 while this hardship application is processed. Yates feels there is any emergency in the sense that recent behavior of the well makes it doubtful the well can be restarted many more times.

1. Provide a statement of the problem that leads the applicant to believe that "undergrowing waste" will occur if the subject well is shut-in or is curtailed below its ability to produce.

The Morrow reservoir at Box Canyon is a water drive reservoir. The Box Canyon Unit #2 has produced water since 1980. Yates installed a compressor in July of 1980 to keep the gas flowing in the presence of water. From 1980 to the end of 1985, the well has produced about 100 to 125 BWPD but peak gas production has declined from 1500 Mcf/D to about 400 to 500 Mcf/D. Sales during 1985 were about 110 MMcf and current reserves are estimated as 250 MMcf of gas. In 1986, the pipeline asked that the well be produced only one day a month. In March, Yates had to blow the well to the atmosphere for 2 days in order to produce for one day into the pipeline. In June, Yates had to blow the well to the atmosphere for 14 days to get the compressor started. Gas blown to the atmosphere is wasted. The total reserves will be wasted if the well cannot be unloaded. The problem is now to a critical stage. The waste can be prevented by letting the well produce continuously at 200 Mcf/D and 100 BWPD.

2. Document that you as applicant have done all you reasonably and economically can do to eliminate or prevent the problems leading to this application.

a. Well History

The Box Canyon Unit #2 was spudded on January 13, 1977, at a location 2080' FNL and 1980' FWL of Section 13-21S-21E in Eddy County. The well was drilled to TD of 8595' and completed on February 18, 1977 for 9970 Mcf/D from Morrow perforations at 8110-8126 and 8229-8238. Cumulative production is 2.2 Bcf of gas. Production during 1985 was 109182 Mcf and 18991 BW and 151 BC.

The well began to produce large quantities of water in 1980 after cumulative production of 1.3 Bcf. Due to high line pressures and quantity of water the well was producing, Yates Petroleum bought and installed a compressor on said well on July 21, 1980. At this time the well was capable of producing 1.5 MMcf of gas and 120 BWPD. From 7-21-80 until February of 1986 production has gradually fallen off to .4 MMcf and 125 BW due to loss of bottom hole pressure and water invasion; however, up until this point, our compressor has been able to handle the problem.