

APPLICATION FOR CLASSIFICATION TO HARDSHIP WELL

Douglass Com. No. 1
H-Sec. 7, T-22-S, R-27-E
South Carlsbad (Morrow) Field
Eddy Co., New Mexico

1. On November 19, 1981 Case No. 7427 was presented before the Oil Conservation Division requesting special allowable for this well due to its extreme sensitivity to flow rate changes. This allowable was granted by Order No. 6905. Attached daily gauge reports show how the productivity of well is affected if flow rate is reduced. Data obtained on this well indicates that formation damage occurs if flow rate is restricted for several days; thus, indicating that a prolonged restriction of flow would result in waste.
2. Well history and data supporting sensitivity to flow change are attached. This well produces a very limited volume of fluid; thus its loss of productivity can not be attributed to "loading up". The affect of the small volume of fluid produced by this well becomes more critical as bottom hole pressure declines. Well schmatic is attached.
3. Historical data which demonstrates conditions that could result in waste are attached and discussed in original letter. These data are shown on attached monthly gauge sheets. Until the recent reduction in monthly allowable, this well was the only non-marginal well in the South Carlsbad (Morrow) pool.
3 d. Average monthly operations expenses for the period May through October 1983 was \$2040.
4. Estimated remaining gas and condensate reserves that would be lost if subject well was abandoned prematurely are 1573 MMcf and 2400 barrels respectively.
5. Data shown on monthly gauge sheets. To help determine current producing rate and fluid volumes, monthly gauge sheets for August, September and October 1983 are attached. Currently daily production ranges from 1400 - 520 Mcf/D with fluid being intermittently produced. Average water production for October 1983 was only 2 BPD. It is requested that this well be granted a "Hardship" allowable of 1000 Mcf/D
6. Decline curve and monthly gauge sheets are attached. The 1981 gauge sheets show results of restricting flow and the later gauge sheets show the variance in rate with only a very limited amount of fluids being produced each day. Compression would help eliminate this variance provided adequate rate could be maintained, but this can not be accomplished by restricting well to recent monthly allowables.
7. This well is located in the South Carlsbad (Morrow) field which is a prorated gas pool. As of October 1983 underproduction shown on proration schedule was 26,119 Mcf.