El Paso NATURAL GAS COMPANY

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PHONE: 505-325-2841

December 2, 1977

Mr. A. R. Kendrick
New Mexico Oil Conservation Commission
1000 Rio Brazos Road
Aztec, New Mexico 87410

Re: Huerfanito Unit #88 Dual Well
Mesa Verde - Dakota
NE/4 Section 23, T-27-N, R-9-W
San Juan County, New Mexico

Dear Mr. Kendrick:

The Huerfanito Unit #88 Dual Mesa Verde Dakota was found to have communication between zones earlier this year. This well has two strings of 2 7/8" casing, one through the Dakota zone which was cemented back to a depth of 5775' (temperature survey) and one through the Mesa Verde which was cemented back to a depth of 3920' (temperature survey). In addition the Pictured Cliffs formation was covered by cementing through a string of 1" tubing. Cement from this job filled back to a depth of 1300' (temperature survey), the base of the Ojo Alamo is at 1318'. Based on cement fill calculations and Temperature Survey data all hydrocarbon productive zones are isolated from fresh water producing zones by cement on the outside of the production casing strings.

It was believed that the communication was caused by casing leaks in each production string. Authorization was obtained to cement squeeze the suspected leaks. Casing corrosion, electronic caliper and noise logs were run in the Dakota casing string on October 20 and 21, 1977 without a workover rig on the location. The logs indicate a hole or holes in the Dakota string near the 4445' depth. The lowest set of perfs in the Mesa Verde production string is at 4430-46'. It therefore appears the communication (and leak in the Dakota string) is at a point across or very near the perforations in the Mesa Verde string. This precludes cement squeezing to repair the leak in the Dakota string due to probability of cementing off part or all of the Mesa Verde production.

With the Dakota string leak being across the Mesa Verde productive area, there should not be a water intrusion problem, and according to the Production Engineer for the area, there is not.

The well is not highly productive. During 1976 the production was: Mesa Verde - 76 MCF/D and 64 bbls. of oil for 353.1 producing days; Dakota - 103 MCF/D and 319 bbls. of oil for 354.8 producing days.

Consideration was given to seeking authorization to commingle production from the zones because of the nature of the communication, however, our Land Department states that this is impractical due to the large number of interest holders in the well.

Based on your authorization over the telephone this date, we will set a packer in the Dakota string on 1 1/4" tubing above the Dakota perfs and below the leak point. The Dakota tubing-casing annulus will not be tied into the pipeline. A packer leakage test will be conducted after seting the packer.

Yours truly,

W. D. Dawson
Chief Division Drilling Engineer

LAA:jf