



**Amoco Production Company**

P.O. Drawer A  
Levelland, Texas 79336

V. E. Staley  
Area Superintendent

April 18, 1978

File: SWS-538-101

Re: Proposed Workover Operations for  
Amoco Operated South Hobbs Unit  
Well No. 59, Hobbs Pool, Lea  
County, New Mexico

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Mr. J. T. Sexton, District Supervisor  
Oil Conservation Commission  
Hobbs, NM

Dear Mr. Sexton:

As reflected on the attached form C-103, we plan to perform a stimulation workover on South Hobbs Unit Well No. 59 to increase injection. In addition to the stimulation, we plan to take steps to determine the possible source of the 700 psi pressure on the 9-5/8" intermediate casing.

In previous discussions we had talked about the possibility of drilling a replacement well and permanently abandoning Well No. 59. Since that time, extensive testing has taken place to find out if communication does exist between the injection pressure and the pressure on the intermediate casing. After several months of monitoring pressures with surface recording pressure gauges we have determined that no connection exists between the injection pressure and the pressure on the intermediate casing. Therefore, we have no plans to attempt any remedial work to alleviate the intermediate casing pressure.

Several times during the past three months, the pressure was bled down on the intermediate casing. Afterwards, it would build back up but had no effect on the injection tubing pressure of zero. On December 12, 1977, the intermediate casing had 680 psi which bled to zero in 1 minute and 15 seconds. Approximately 1-1/2 gallons of fluid were recovered. The casing was then shut-in and after 1 hour and 40 minutes, the pressure had built back up to 105 psi. Five days later, on December 17, 1977, the pressure had built up to 700 psi. All during this time, the injection tubing had 0 psi pressure. This particular test and others like it have convinced us that the pressure on the intermediate casing is not the result of or related to the injection of water into the pay section.

Part of the procedure on the planned workover is to run a radioactive tracer survey. This will indicate which zones have been stimulated and