

MAIN OFFICE OCC

Before Examiner
Oil Conservation Commission

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Mr. John A. Anderson
Regional Oil & Gas Supervisor
U. S. Geological Survey
Box 6721
Roswell, New Mexico

Loco Hills, New Mexico
July 19, 1957

Dear Sir:

The General American Oil Company of Texas, Unit Operator for the Grayburg Cooperative and Unit Agreement, I - Sec. No. 370, Eddy County, New Mexico, hereby proposes to commence a water flood program with a pilot flood of the Grayburg Zone under the above Agreement. Set out below are data concerning this proposed pilot flood.

1. Zone to be Flooded: The Unit Operator proposes to inject water into the productive zones of the San Andres formation.
2. Input Wells: Wells to be converted from production to water input wells are as follows:

Burch A #8, 990 feet from North line and 2310 feet from West line of Section 19, Township 17 South, Range 30 East, N. M. P. M.

Burch A #9, 990 feet from North and West lines of Section 19, Township 17 South, Range 30 East, N. M. P. M.

Burch A #23, 2565 feet from North line and 955 feet from West line of Section 19, Township 17 South, Range 30 East, N. M. P. M.

Burch A #24, 2310 feet from North line and 2615 feet from East line of Section 19, Township 17 South, Range 30 East, N. M. P. M.

Burch A #14, 660 feet from South line and 1980 feet from East line of Section 18, Township 17 South, Range 30 East, N. M. P. M.

3. Take Points: The well most probably affected by the injection of water in Burch A Nos. 8, 9, 23 and 24 will be Burch A #14, located 1980 feet from North and West lines of Section 19, Township 17 South, Range 30 East, N. M. P. M. Burch A #14 was formerly used as a gas injection well and it was reconverted to production when channeling of gas direct to Burch A #7, located 660 feet from

North line and 1980 feet from East line of Section 19, Township 17 South, Range 30 East, W. M. P. M., was noted. In view of this channeling, it is believed that the quickest results in the pilot flood will be noted in Surch A #7.

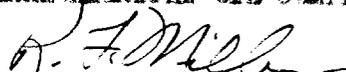
- h. Source of Water: The Unit Operator has developed a water supply by perforating casing and acidizing a zone in the Pennsylvanian formation from 9265 feet to 9299 feet, encountered in the Gulf-Grayburg Unit No. 1, located 660 feet from South line and 560 feet from West line of Section 24, Township 17 South, Range 29 East, W. M. P. M. This well, completed on gas lift, flowed water for 120 hours and then flowed 83 barrels water per hour for 2 1/2 hours. A sonic device indicated the working fluid level to be 2400 feet from the surface. While input volumes have not been determined as yet, it appears that this water well should furnish approximately 400 barrels water per day for each injection well. A supplementary water source has been developed from the Paddock Zone in Surch A #17, located 660 feet from South and East lines of Section 18, Township 17 South, Range 30 East. This well is capable of producing water at the rate of 360 barrels per day while producing 43 barrels of oil. This water could be injected directly into Surch A #14 with a minimum of distribution line.

Enclosed is a plat which delineates the boundaries of the pilot flood and the possible limits of an expanded flood. This plat depicts the pilot stage water input wells and the possible future input wells.

The Unit Operator proposes to undertake this pilot flood program in a workmanlike manner, making all tests and analyses of waters that are necessary, and construct and maintain the required gathering and distribution systems as well as any treating equipment necessary. A careful measurement will be made of all fluids injected and produced. Records of this project will be maintained in this office and will be open to your inspection at all times.

Respectfully submitted

GENERAL AMERICAN OIL COMPANY OF TEXAS


R. F. Miller
District Engineer.

Approved this _____ day of _____, 1957.