~~EXHIBIT 7~~

GEOLOGICAL AND ENGINEERING REVIEW

PROPOSED K-M CHAVEROO SAN ANDRES UNIT

General

The Chaveroo pool produces from the San Andres formation. It is located in Roosevelt and Chaves Counties, New Mexico. Production is found at a depth of approximately 4250'. This field was discovered in 1965 and was essentially developed over the next two years. It is currently producing at or near the economic limit on primary depletion in the area operated by Kerr-McGee Corporation (Exhibit 8).

San Andres Geology

The San Andres formation is one of the most widespread hydrocarbon bearing formations in New Mexico. Production is from a cyclic sequence of shallow-water carbonates and evaporites which progressed thru the northwest shelf. These fields are primarily stratigraphic traps and produce from interbedded dolomites and minor limestones. The rock is gray to brown fine crystalline to fine granular anhydritic dolomite with fine vuggy intercrystalline and fracture porosity zones. A more complete description of this field was prepared for the Roswell Geological Society Symposium by George L. Scott, Jr. in November, 1966 (Exhibit 9).

The San Andres can be divided into upper and lower parts based on the occurrence of a regionally correlatable marker bed, a siltstone 5-10' thick, known as the "Pi" marker, which typically occurs 400-650' below the formation top. At Chaveroo, the "Pi" marker is about 100-150' above the top of the porosity. A log cross-section was prepared for the proposed Kerr-McGee unit and shows typical San Andres continuity (Exhibit 10). Logs were located on a datum 100' above sea level. In the project area, the Chaveroo San Andres gross pay zone is up to 200' thick with 40-50' of net effective pay in the P1 and P2 and only isolated porosity stringers in the P3 and P4 zones. Between the P1 and P2 zones, there is an anhydrite layer. San Andres porosities average 7.5% in the project area. Permeabilities in the field are low and are typically less than 1 millidarcy.

Chaveroo San Andres Field

This field produces a sour crude of 24.5° API gravity and it was developed on 40 acre spacing. Cumulative field production was 22.9 million barrels of oil, 33.6 BCF of gas and 27.2 million barrels of water as of January 1, 1988. The field now has about 400 wells . The rapid decline in oil producing rates after development was completed, and rising producing gas-oil ratio's is indicative of

Kerr-McGee 20
CASE NO. 9682 + 9683

solution gas drive on primary. Water-oil contacts are hard to pick in this San Andres reservoir and wells in the project area typically start to produce water with depletion. This water production does not correlate with primary oil recovery and should not materially affect secondary oil recovery (Exhibit 11 and 12). Champlin had a degree of success at Chaveroo using produced water on a dump flood basis. In spite of the generally limited and uncoordinated injection, one 40 acre five-spot that was flooded by Champlin had a secondary to primary ratio (SPR) of 0.86. We anticipate a secondary to primary ratio of up to 1.0 based on favorable characteristics of the proposed Kerr-McGee Unit on primary depletion.

Proposed K-M Chaveroo San Andres Unit

The K-M Chaveroo Sand Andres Unit area has geologic characteristics and reservoir conditions that are similar to or superior to a typical well of the Chaveroo Field. It is in a area of relatively high per well recovery as shown in Exhibit 13, "Derivation of Tract Participation Factors", attached. Nineteen (19) wells in the K-M Chaveroo San Andres Unit have recovered 1,660,627 barrels of oil to December 31, 1988, or an average of 87,401 barrels of oil per well. A participation formula for the proposed Kerr-McGee Unit is a simple unit formula which credits cumulative production (essentially ultimate primary recovery) to December 31, 1988 as 100%.

Summary

A review of technical data and the proposed operational plans indicate that the K-M Chaveroo San Andres Unit is similar or perhaps somewhat superior to the rest of the Chaveroo field. The Unit area is considered typical of numerous other San Andres fields located in New Mexico that have been waterflooded successfully. The proposed operational plans appear to be sound and provide a water injection pattern consistent with the offset Murphy Haley Chaveroo San Andres Unit. The unitization and waterflooding of the Unit should: a) protect correlative rights; b) promote the conservation of petroleum; and c) prove beneficial to the interest owners, and county, state and federal treasuries.

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