

NMOCD JULY 11, 2002 HEARING

**PROPOSED CONTRACTION VERTICAL LIMITS UNITIZED FORMATION
E-K QUEEN UNIT
E-K YATES-SEVEN RIVERS-QUEEN FIELD
LEA COUNTY, NEW MEXICO**

PURPOSE FOR APPLICATION

The E-K Queen Unit was formed during 1965 for the purpose of implementing waterflood operations in the Queen Formation. The E-K Queen Unit was approved by NMOCD Order No. R-2913 dated June 1, 1965 Case No. 3258.

The Unitized Interval was defined in the Unit Agreement for the E-K Queen Unit in such a manner that it included all pay zones within the Queen Formation.

There are three (3) separate pay zones within the Queen Formation. These zones, from top to bottom, are commonly referred to as (1) Upper Queen sand, (2) Main Queen sand and (3) Penrose (Lower Queen) sand. Please refer to Exhibit 1, type log showing location of these zones within the Queen Formation.

The primary pay zone under the E-K Queen Unit area was the Main Queen sand with some contribution from the Upper Queen sand in the central portion of the E-K Queen Unit area. Waterflood operations under the E-K Queen Unit have been limited to these two (2) pay zones.

For whatever reason, the Unitized Interval under the E-K Queen Unit included the Penrose (Lower Queen) sand. Four (4) wells within the southern part of the E-K Queen Unit area were drilled to the Penrose (Lower Queen) sand. The Penrose (Lower Queen) sand was tested in all four (4) wells, but only one (1) produced oil for a short period of time. Refer to Exhibit 5, map showing the location of these four (4) wells and the acreage proposed for inclusion in the proposed E-K Penrose Unit.

Neither of these four (4) wells were produced from or injected into the Penrose (Lower Queen) sand during waterflood operations on the E-K Queen Unit. All other wells that were tested or produced oil from the Penrose (Lower Queen) sand in the E-K Queen Field were not included in the E-K Queen Unit Area.

Seely Oil Company proposes to unitize the productive Penrose (Lower Queen) sand in the E-K Queen Field for waterflood development. An efficient waterflood operation in the Penrose (Lower Queen) sand requires the inclusion of all possible productive Penrose (Lower Queen) sand reservoirs.

This requires that the Penrose (Lower Queen) sand interval under the E-K Queen Unit be removed from the Unitized Interval under the E-K Queen Unit so that it may be included in the Unitized Area for the proposed E-K Penrose Unit as shown on Exhibit 5.