



P.O. Box 552  
Midland, TX 79702-0552  
Telephone 915/682-1626

October 28, 1996

Mr. M.E. Stogner  
New Mexico Department of Energy  
Minerals and Natural Resources  
Oil Conservation Division  
2040 South Pacheco Street  
Santa Fe, New Mexico 87505

**Re: Application for Administrative Approval of an Unorthodox Well Location  
Lea County, New Mexico**

Dear Mr. Stogner:

Marathon Oil Company respectfully seeks Administrative Approval pursuant to provisions of NMOCD Rule 104.F.(2), of an unorthodox location for the Atoka/Lower Morrow part of a proposed Abo/Atoka/Lower Morrow test to be drilled at 660' FNL & 1980' FWL of Section 2, T-17-S, R-34-E, N.M.P.M., Lea County, New Mexico.

This unorthodox location in the Atoka/Lower Morrow is necessary for geologic reasons. Marathon believes a narrow Atoka channel runs from north to south across Section 2. Prediction of the location of the channel is extremely risky due to lack of well control. Because of the risk associated with drilling to the Atoka/Lower Morrow, Marathon will have difficulty justifying drilling the well if it will not also have the opportunity to produce the well from the Abo formation, which is productive in the area.

There are only two remaining legal Abo locations within the proposed Atoka/Lower Morrow production unit (W/2 Section 2), the SW/4 NW/4 of Section 2, and the NE/4 NW/4 of Section 2 (see Attachment "B" attached). All other legal Abo locations in the production unit contain Abo producers or Abo dry holes. The SW/4 NW/4 of Section 2 is much riskier in the Abo than the NE/4 NW/4 of Section 2, in that it is offset to the North, Northwest and West by dry holes, whereas the NE/4 NW/4 of Section 2 is offset to the North, East and South by producing wells and only to the West by a dry hole. Further, the SW/4 NW/4 of Section 2 is in the North Vacuum (Abo) North Unit operated by Sage in which Marathon owns only an 8.3% net revenue interest, while Marathon owns a 100% of the leasehold in the Abo in the NE/4 NW/4 of Section 2.