STATE OF NEW MEXICO



ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION



BRUCE KING GOVERNOR POST OFFICE BOX 2088 STATE LAND OFFICE BUILDING SANTA FE, NEW MEXICO 87504 (505) 827-5800

December 31, 1992

HINKLE, COX, EATON, COFFIELD & HENSLEY Attorneys at Law P. O. Box 2068 Santa Fe, New Mexico 87501

RE:

CASE NO. 10598

ORDER NO. R-9820

Dear Sir:

Enclosed herewith are two copies of the above-referenced Division order recently entered in the subject case.

Sincerely,

Śally E./Leichtle

Administrative Secretary

cc:

BLM - Carlsbad

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VIA HAND DELIVERY

Michael E. Stogner Oil Conservation Division 310 Old Santa Fe Trail

Santa Fe, New Mexico \$7503

Case No 10,598, The Application of Santa Fe Energy Operating Partners, L.P. for an Unorthodox

Gas Well Location

Dear Mr. Stogner:

At the hearing, you requested that the Applicant submit proposed geological findings. Enclosed as Exhibit A is a list of findings prepared by Santa Fe's geologist. We suggest that in reviewing these findings you also review Santa Fe's Exhibits 4, 4A, and 5. Please call me if you need anything further in this matter.

Very truly yours,

HINKLE, COX, EATON, COFFIELD

& HENSLEY

James Bruce

JB:frs Enclosures

Case No. 10,598 Proposed Geological Findings

- Applicant's request for an unorthodox gas well location is based upon geological factors.
- 2. Applicant's primary target is the Strawn formation.
- 3. Strawn reservoirs are developed in an algal mound "complex." The complex consists of a central core flanked, along strike and along the updip side, by thinner limestone deposits. The mound complex is developed at the Strawn carbonate shelf edge.
- 4. Applicant's proposed well offsets a known algal mound complex which presently has two wells completed in and producing from the mound core, the Pacific Enterprises PEOC Fed. "21" Com. No. 1 Well in Unit E of Section 21 23 South 26 East, and the Coquina Philly Fed. No. 2 Well in Unit G of said Section 21. In addition, the Bettis Brothers State "16" No. 1 Well, located in Unit O of Section 16 23 South Range 26 East, is completed in and is producing from the flanking limestone deposits (along strike) north of the mound core.
- 5. Applicant presented geological testimony that it expects further reservoir development, either in the mound core or in flanking but thinner clean limestone, to be developed along the geologic strike of the Strawn shelf edge. Applicant's regional geological mapping indicates

- that shelf edge strike is northeast-southwest in this area.
- 6. The well located in Unit G of Section 28 23 South 26
 East is dry in the Strawn, indicating the limited areal
 extent of Strawn mounds.
- 7. Applicant's proposed location 660' FNL and 660' FWL of Section 28 is along strike to the well in the thickest portion of this particular mound complex (the Coquina Philly Fed. No. 2 Well).
- 8. A well at the proposed location should encounter the best Strawn reservoir present in Section 28, and should also be in the highest structural position to most effectively drain a reservoir in Section 28.
- 9. Applicant presented evidence that indicates that the two wells in the mound core are producing from separate reservoirs within the mound core, and that Applicant's proposed location is likely to be in another reservoir in the mound core, or in thinner carbonate adjacent and along strike to the mound.
- 10. The discontinuous nature of reservoirs within the Strawn mound complex indicates that the proposed well will not necessarily drain offsetting tracts to the west.