STATE OF NEW MEXICO ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT OIL CONSERVATION DIVISION

IN THE MATTER OF THE HEARING CALLED BY THE OIL CONSERVATION DIVISION FOR THE PURPOSE OF CONSIDERING:

CASES NOS. 10211 AND 10219 <u>DE NOVO</u> Order No. R-9480-B

APPLICATION OF SANTA FE ENERGY OPERATING PARTNERS, L.P. FOR COMPULSORY POOLING, LEA COUNTY, NEW MEXICO

APPLICATION OF HANLEY PETROLEUM INC. FOR COMPULSORY POOLING, LEA COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9:00 a.m. on May 9, 1991, at Santa Fe, New Mexico, before the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission."

NOW, on this <u>12th</u> day of June, 1991, the Commission, a quorum being present, having considered the testimony presented and the exhibits received at said hearing, and being fully advised in the premises,

FINDS THAT:

- (1) Due public notice having been given as required by law, the Commission has jurisdiction of this cause and the subject matter thereof.
- (2) The applicant in Case 10211, Santa Fe Energy Operating Partners, L.P., (Santa Fe), seeks an order pooling all mineral interests from the surface to the base of the Wolfcamp formation underlying the following described acreage in Section 8, Township 18 South, Range 33 East, NMPM, Lea County, New Mexico, in the following manner:
 - (a) The W/2 NW/4 to form a standard 80-acre oil spacing and proration unit for any and all formations and/or pools developed on 80-acre spacing within said vertical extent, which presently includes but is not necessarily limited to the Undesignated South Corbin-Wolfcamp Pool;

(b) The SW/4 NW/4 to form a standard 40-acre oil spacing and proration unit for any and all formations and/or pools developed on 40-acre spacing within said vertical extent, which presently includes but is not necessarily limited to the Undesignated West Corbin-Delaware, Undesignated Central Corbin-Queen, Undesignated West Corbin-San Andres and Undesignated Corbin-Bone Spring Pools.

Both units are to be dedicated to a single well to be drilled at a standard oil well location in the SW/4 NW/4 (Unit E) of said Section 8.

- (3) The applicant in Case 10219, Hanley Petroleum Inc. (Hanley), originally sought an order pooling all mineral interests from the surface to the base of the Wolfcamp formation underlying the following described acreage in said Section 8 and in the following manner:
 - (a) The W/2 NW/4 to form a standard 80-acre oil spacing and proration unit for any and all formations and/or pools developed on 80-acre spacing within said vertical extent, which presently includes but is not necessarily limited to the Undesignated South Corbin-Wolfcamp Pool;
 - (b) The NW/4 NW/4 to form a standard 40-acre oil spacing and proration unit for any and all formations and/or pools developed on 40-acre spacing within said vertical extent, which presently includes but is not necessarily limited to the Undesignated West Corbin-Delaware, Undesignated Central Corbin-Queen, Undesignated West Corbin-San Andres, and Undesignated Corbin-Bone Spring Pools.

Both units would have been dedicated to a single well to be drilled at a standard oil well location in the NW/4 NW/4 (Unit D) of said Section 8.

- (4) On March 7, 1991, the Division held a consolidated hearing of the Hanley pooling case (10219) and the Santa Fe Energy pooling case (10211).
- (5) On March 29, 1991, the Division entered Order No. R-9480 granting the Santa Fe Energy application and denying the Hanley Petroleum application.
- (6) On April 4, 1991, Santa Fe Energy notified Hanley that it must make an election within 30 days in order to participate in the well to be drilled pursuant to Order No. R-9480. The Director issued a Stay of Order R-9480 with the agreement of the parties on April 10, 1991 by Division Order No. R-9480-A.

- (7) On April 8, 1991, Hanley, a party adversely affected by Order No. R-9480, filed its De Novo Application with the Division.
- (8) A representative of the Harvey E. Yates Company appeared at the hearing in support of Santa Fe's application.
- (9) There are interest owners in the proposed units who have not agreed to pool their interests.
- (10) The primary objective of either proposed well would be a Wolfcamp completion in the Undesignated South Corbin-Wolfcamp Pool to offset Santa Fe's recent completion, the Kachina "8" Federal Well No. 1 in the NE/4 NW/4 of said Section 8.
- (11) Pool rules for the South Corbin-Wolfcamp pool provide for 80-acre standard spacing and proration units with wells to be located within 150 feet of the center of a governmental quarter-quarter section or lot.
- (12) Hanley presented geologic testimony and exhibits which showed a depositional model depicting the Wolfcamp hingeline trending East-West with areas of maximum porosity development aligned North-South at right angles to the projected hingeline. Their preferred location in Unit D of Section 8 would be structurally higher than Santa Fe's location in Unit E and was projected to have similar net pay but higher ultimate oil recovery than a Wolfcamp completion in Unit E.
- (13) Santa Fe presented geological testimony and exhibits which showed the Wolfcamp hingeline to be trending northeast-southwest in the vicinity of the Kemnitz-Townsend trend 6 miles northwest with porosity development aligned northeast-southwest roughly parallel to the hingeline. Their preferred location in Unit E was projected to have greater net pay development in a slightly lower structural position than a well located in Unit D.
- (14) Santa Fe's interpretation conformed to existing well control and was correct in its placement of the Wolfcamp hingeline while Hanley's interpretation was flawed by improper placement of the Wolfcamp hingeline and its strained isopach interpretation of existing well control.
- (15) Santa Fe's interpretation of carbonate zonation within the Wolfcamp presented a more complete analysis of the available data than Hanley's single pay zone concept.
- (16) Hanley's contention that a lower structural position, such as the Santa Fe preferred location, would produce significantly higher water recoveries was effectively refuted by Santa Fe who demonstrated very small water recoveries from Wolfcamp completions in the area.

- (17) Neither Santa Fe nor Hanley anticipated commercial Bone Springs production although the geology favored Hanley's location in Unit D over Santa Fe's location in Unit E.
- (18) Pressure-production information presented by Santa Fe demonstrated that 80-acre drainage occurs in the Wolfcamp in this area and that 40-acre spacing would constitute waste.
- (19) Based upon Finding Paragraph Nos. (12), (13), (14), (15), (16), (17) and (18) of this order, the W/2 NW/4 should be the assigned proration unit and the subject well should be a legal location in the SW/4 NW/4 (Unit E) of Section 8, Township 18 South, Range 33 East, NMPM, Lea County, New Mexico.
- (20) Hanley and Santa Fe both seek to be and are qualified to be operator. Although Hanley has held its lease in the NW/4 NW/4 for almost five years, it has not been actively involved in development or acquisition and only filed its application after Santa Fe's was filed. Santa Fe has actively pursued interest in acquisition in the area and has drilled or participated in several wells in the area. Therefore Santa Fe should be named operator of the well.
- (21) Santa Fe's witness testified that Santa Fe has completed 11 commercial producers out of a total of 12 wells drilled in the area resulting in a 92% commercial success ratio. Since commercial success is so high in the area the risk penalty should be 100%.
- (22) The evidence further cited at said <u>de novo</u> hearing indicates that said Division Order No. R-9480 entered March 29, 1991, should be affirmed.
- (23) The date by which a well on the pooled unit should be commenced should be changed from June 15, 1991 to September 15, 1991.

IT IS THEREFORE ORDERED THAT:

- (1) Division Order No. R-9480, issued in consolidated Case Nos. 10211 and 10219 and dated March 29, 1991, is hereby affirmed and adopted as the order of the Commission.
 - (2) Decretory Paragraph (2) of said order is amended to read as follows:

All mineral interests, whatever they may be, from the surface to the base of the Wolfcamp, underlying the W/2 NW/4 of Section 8, Township 18 South, Range 33 East, NMPM, Lea County, New Mexico, are hereby pooled to form an 80-acre oil spacing and proration unit to be dedicated to a well to be drilled at a standard oil well location 1980 feet from the North line and 660 feet

from the West line (Unit E) of said Section 8.

PROVIDED HOWEVER THAT, the operator of said unit shall commence the drilling of said well on or before the 15th day of September, 1991, and shall thereafter continue the drilling of said well with due diligence to a depth sufficient to test the Wolfcamp formation.

PROVIDED FURTHER THAT, in the event said operator does not commence the drilling of said well on or before the 15th day of September, 1991, Decretory Paragraph No. (2) of this order shall be null and void and of no effect whatsoever, unless said operator obtains a time extension from the Division for good cause shown.

PROVIDED FURTHER THAT, should said well not be drilled to completion, or abandonment, within 120 days after commencement thereof, said operator shall appear before the Division Director and show cause why Decretory Paragraph No. (2) of this order should not be rescinded.

(3) Jurisdiction of this cause is retained for the entry of such further orders as the Division may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

Bill Weiss

WILLIAM W. WEISS, Member

JAMI BAILEY, Member

WILLIAM J. LEMAY, Chairman and Secretary

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