

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  
Order No. R-9480

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

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

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 8:15 a.m. on March 7, 1991, at Santa Fe, New Mexico, before Examiner Jim Morrow.

NOW, on this 29th day of March, 1991, the Division Director, having considered the testimony, the record and the recommendations of the Examiner, and being fully advised in the premises,

FINDS THAT:

(1) Due public notice having been given as required by law, the Division 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 1980 feet from the North line and 660 feet from the West line (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 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 would have been dedicated to a single 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.

(4) Hanley amended its application in Case 10219 and at the hearing requested approval for an 80-acre oil spacing and proration unit as described in Finding No. (3)(a) above with said unit to be dedicated to a well to be drilled at a standard oil well location 660 feet from the North and West lines (Unit D) of said Section 8. A 40-acre oil spacing and proration unit in Unit D would not require compulsory pooling since Hanley's working interest in the NW/4 NW/4 of said Section 8 is 100%.

(5) Each applicant (Santa Fe and Hanley) has the right to drill and each proposes to drill a well on their respective units, as described above in Findings (2) and (4), to a depth sufficient to test the Wolfcamp formation.

(6) Cases Nos. 10211 and 10219 were consolidated for the purpose of hearing and should be consolidated for purpose of issuing an order since the cases involve common acreage and the granting of one application would require the denial of the other.

(7) This matter has been the subject of previous Oil Conservation Division and Oil Conservation Commission actions involving Hanley's subpoena request for certain Santa Fe records.

(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 recently completed Kachina "8" Federal Well No. 1 in the NE/4 NW/4 of said Section 8. It flowed 411 barrels of oil, 59 barrels of water and 577 MCF of gas per day on initial potential on January 13, 1991. Santa Fe's Form C-115 production report shows that the well produced 8143 barrels of oil, 213 barrels of water and 9374 MCF of gas during January, 1991.

(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) In support of its application in Case No. 10211, Santa Fe submitted the following information through its exhibits and the testimony of its witnesses:

- (a) Santa Fe's proposed location for its Kachina 8 Federal Well No. 2 in the SW/4 NW/4 of said Section 8 would conform to an 80-acre diagonal spacing pattern. Santa Fe believes this would provide better recovery than Hanley's location which would be a direct West offset to Santa Fe's Kachina 8 Federal Well No. 1.
- (b) Cross-sections, structure maps and isopach maps were submitted to show the favorable conditions at the Santa Fe location. Their geology shows that the proposed location would be approximately 20 feet lower on the Wolfcamp structure than their Kachina 8 Well No. 1 and would have about the same thickness of clean Wolfcamp carbonate. The Santa Fe location is 50 feet lower structurally than

the Hanley location but would encounter a great thickness of clean carbonate in the Wolfcamp according to Santa Fe's testimony.

- (c) Santa Fe's witnesses testified that lower structural position would not necessarily result in increased water production from the Wolfcamp.
- (d) Santa Fe's engineering witness estimated that a well at the Santa Fe location would recover 50,000 to 60,000 barrels more oil than one at the Hanley location.
- (e) Cross-sections, structure maps and porosity maps submitted by Santa Fe indicate that the Bone Spring formation would be productive at the Hanley location but would be water productive at the Santa Fe location. Santa Fe recommended allocation of well costs between the Wolfcamp and the Bone Spring if the Hanley location is approved.
- (f) Santa Fe's estimated well cost is \$721,942. They expect to recover 100,000 barrels of oil from the Wolfcamp. Monthly overhead rates of \$6,260 while drilling and \$626 while producing were requested along with a 200% risk penalty.
- (g) Santa Fe and the Harvey E. Yates Company each have 50% working interest in the SW/4 NW/4 of said Section 8.

(13) To support its application in Case No. 10219, Hanley presented the following information through its exhibits and the testimony of its witnesses:

- (a) Structure and isopach maps and cross-sections were submitted to show that their proposed location is the better choice. Their geology shows that the Hanley location would be approximately 25 feet higher on the Wolfcamp structure than Santa Fe's location and would encounter approximately the same thickness of net clean Lower Wolfcamp limestone.
- (b) Decline curves to estimate the reserves for Wolfcamp completions in the area were submitted. This data along with an estimate of the reserves for Santa Fe's Kachina "8" Federal Well No. 1 was used to construct an "Iso-Production" map for use in estimating ultimate recovery. Hanley's Wolfcamp recovery estimates are 260,000 barrels

for their location and 130,000 barrels for the Santa Fe location.

- (c) Water production data from Wolfcamp completions in the Corbin area was used by Hanley to support their testimony that wells lower on the Wolfcamp structure produce more water.
- (d) Hanley submitted a Bone Spring structure map indicating their proposed location would be approximately 100 feet higher on the Bone Spring structure than the Santa Fe location.
- (e) Hanley's estimated cost for a Wolfcamp well is \$667,782. They proposed a method for allocating and amortizing well costs in the event the well is eventually plugged back for a completion attempt in the Bone Spring or other zone in which the ownership differs from that in the Wolfcamp. Monthly overhead rates of \$5,184 while drilling and \$485 while producing were suggested based on the mean rates in the Ernst and Young 1990 survey. A risk penalty of 150% was recommended at the Hanley location. Hanley's witnesses testified that the risk would be higher at the Santa Fe location.
- (f) Payout calculations prepared by Hanley show that a Wolfcamp well will payout in four months at their location and in eight months at the Santa Fe location.

(14) Santa Fe's compulsory pooling application was received by OCD on December 12, 1990, Hanley's initial application was received by OCD on January 2, 1991, and their amended application was received on February 12, 1991. Hanley began efforts to develop their acreage after Santa Fe filed its application.

(15) Based on the evidence and testimony received in these cases, either the Santa Fe or the Hanley location should result in a successful Wolfcamp completion. Evidence shows that Santa Fe's is the more appropriate location since it conforms to an 80-acre diagonal spacing pattern and should therefore result in better recovery of reserves. Santa Fe's application should be approved and they should be designated as operator. Overhead charges for supervision should be set at \$5,184 while drilling and \$485 while producing. Since risk of an unsuccessful completion is low, the risk penalty should be set at 100%. The 40-acre spacing unit applied for in Santa Fe's application is not required since all of the working interests in

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the SW/4 NW/4 of said Section 8 have reached voluntary agreement concerning the pooling of their interests.

(16) Approval as set out in Finding (15) above and in the following order will avoid the drilling of unnecessary wells, protect correlative rights, prevent waste and afford the owner of each interest in said unit the opportunity to recover or receive without unnecessary expense his just and fair share of the production in any pool resulting from this order.

IT IS THEREFORE ORDERED THAT:

(1) The application of Hanley Petroleum Inc. in Case No. 10219 as described in Findings (3) and (4) of this order is hereby denied.

(2) 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 June, 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 June, 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) Santa Fe Energy Operating Partners, L.P. is hereby designated the operator of the subject well and unit.

(4) After the effective date of this order and prior to commencing said well, the operator shall furnish the Division and each known working interest owner in the subject unit an itemized schedule of estimated well costs.

(5) Within 30 days from the date the schedule of estimated well costs is furnished to him, any non-consenting working interest owner shall have the right to pay his share of estimated well costs to the operator in lieu of paying his share of reasonable well costs out of production, and any such owner who pays his share of estimated well costs as provided above shall remain liable for operating costs but shall not be liable for risk charges.

(6) The operator shall furnish the Division and each known working interest owner an itemized schedule of actual well costs within 90 days following completion of the well; if no objection to the actual well costs is received by the Division and the Division has not objected within 45 days following receipt of said schedule, the actual well costs shall be the reasonable well costs; provided however, if there is an objection to actual well costs within said 45-day period the Division will determine reasonable well costs after public notice and hearing.

(7) Within 60 days following determination of reasonable well costs, any non-consenting working interest owner who has paid his share of estimated costs in advance as provided above shall pay to the operator his pro rata share of the amount that reasonable well costs exceed estimated well costs and shall receive from the operator his pro rata share of the amount that estimated well costs exceed reasonable well costs.

(8) The operator is hereby authorized to withhold the following costs and charges from production:

- A. The pro rata share of reasonable well costs attributable to each non-consenting working interest owner who has not paid his share of estimated well costs within 30 days from the date the schedule of estimated well costs is furnished to him; and
- B. As a charge for the risk involved in the drilling of the well, 100 percent of the pro rata share of reasonable well costs attributable to each non-consenting working interest owner who has not paid his share of estimated well costs within 30 days from the date the schedule of estimated well costs is furnished to him.

(9) The operator shall distribute said costs and charges withheld from production to the parties who advanced the well costs.

(10) \$5,184 per month while drilling and \$485 per month while producing are hereby fixed as reasonable charges for supervision (combined

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fixed rates); the operator is hereby authorized to withhold from production the proportionate share of such supervision charges attributable to each non-consenting working interest, and in addition thereto, the operator is hereby authorized to withhold from production the proportionate share of actual expenditures required for operating such well, not in excess of what are reasonable, attributable to each non-consenting working interest.

(11) Any unleased mineral interest shall be considered a seven-eighths (7/8) working interest and a one-eighth (1/8) royalty interest for the purpose of allocating costs and charges under the terms of this order.

(12) Any well costs or charges which are to be paid out of production shall be withheld only from the working interest's share of production, and no costs or charges shall be withheld from production attributable to royalty interests.

(13) All proceeds from production from the subject well which are not disbursed for any reason shall be placed in escrow in Lea County, New Mexico, to be paid to the true owner thereof upon demand and proof of ownership; the operator shall notify the Division of the name and address of said escrow agent within 30 days from the date of first deposit with said escrow agent.

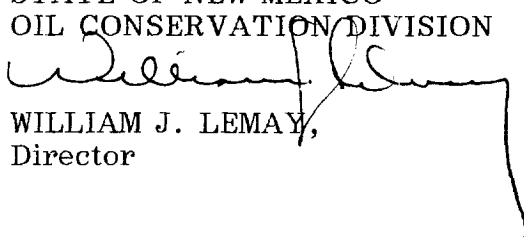
(14) Should all the parties to this force-pooling reach voluntary agreement subsequent to entry of this order, this order shall thereafter be of no further effect.

(15) The operator of the subject well and unit shall notify the Director of the Division in writing of the subsequent voluntary agreement of all parties subject to the force-pooling provisions of this order.

(16) 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 DIVISION

  
WILLIAM J. LEMAY,  
Director

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