STATE OF NEW MEXICO ENERGY AND MINERALS DEPARTMENT OIL CONSERVATION DIVISION

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

CASE NO. 9003 Order No. R-8366

APPLICATION OF PENNZOIL COMPANY FOR AN UNORTHODOX OIL WELL LOCATION, LEA COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on November 20, 1986, at Santa Fe, New Mexico, before the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission."

NOW, on this <u>18th</u> day of December, 1986, 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 and the applicant having provided notice to all interested parties as required by Rule 1207, as amended, the Commission has jurisdiction of this cause and the subject matter thereof.
- (2) The applicant, Pennzoil Company ("Pennzoil") seeks an exception to the Special Rules and Regulations for the Shipp-Strawn Pool as promulgated by Division Order No. R-8062, as amended, to authorize an unorthodox oil well location for its Viersen Well No. 3 at a surface location 150 feet from the South line and 1980 feet from the East line of Section 4, Township 17 South, Range 37 East, and to simultaneously dedicate the W/2 SE/4 of said Section 4 to the well and to its existing Viersen Well No. 2 located 1300 feet from the South line and 1650 feet from the East line of said Section 4.
- (3) The Special Rules and Regulations governing the Shipp-Strawn Pool, as promulgated by Division Order No. R-8062-A, provide for 80-acre oil well spacing units with wells to be located no further than 150 feet from the center of a governmental quarter-quarter section or lot.

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- (4) Pennzoil seeks to drill its Viersen Well No. 3 at an unorthodox location in order to offset the drainage encroachment occurring as a result of Exxon Oil Corporation ("Exxon") having drilled its "EX" State Well No. 2 at a standard surface location but, without intentional deviation, at a bottom hole location approximately 150 feet from the South line of the Pennzoil spacing and proration unit described in Finding Paragraph No. (2) above.
- (5) At the time of the hearing, Exxon Corporation, Hanley Petroleum Inc., and Barbara Fasken, who are interest owners in offsetting units, appeared and objected to the proposed unorthodox location.
- (6) The Shipp-Strawn Pool is characterized by numerous isolated porosity "pods" having high permeability which permits one well to effectively drain 80 acres.
- (7) Pennzoil presented a net pay isopach of the Shipp-Strawn pod or mound (Exxon pod) from which the Exxon well is producing which establishes that the Exxon well is draining the Pennzoil spacing unit that is the subject of this order (Pennzoil Exhibit #1). Exxon presented a similar isopach map (Exxon Exhibit #2) which confirms and further establishes that the Pennzoil spacing unit is being drained by the Exxon well.
- (8) Exxon objected to approval of the unorthodox location for the Pennzoil Viersen Well No. 3 unless a penalty of 84 percent is imposed on the spacing and proration unit assigned to the Pennzoil well. This penalty is based on Exxon's geologic interpretation which gave the Pennzoil tract only 13 productive acres.
- (9) While none of the exhibits and none of the testimony in this case absolutely established the exact size, shape, boundary location, or net productive acre-feet under the Pennzoil tract or offsetting tracts, the evidence which was most consistent with data from better known portions of the reservoir was that of the Pennzoil witnesses.
- (10) This evidence established that it is reasonable to expect there to be 22 productive acres in the "Exxon pod" under the W/2 SE/4 of said Section 4, but also the productive acres under Exxon's tract are considerably less than 80 acres.
- (11) Evidence was presented to establish the relative productive acres and net productive acre-feet under the various productive tracts in the "Exxon pod."

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- (12) Such evidence could be used to establish equitable allocations to the various wells in said pod to protect correlative rights; however, such evidence is not sufficiently conclusive for such purpose at this time.
- (13) The evidence established that Pennzoil should be able to drill and complete a well at a standard location within the W/2 SE/4 of said Section 4 and within the "Exxon pod."
- (14) The evidence established that Pennzoil would be able to better drain its share of the reserves from the "Exxon pod" at the proposed unorthodox location than at a standard location, thereby better protecting correlative rights.
- (15) The evidence presented established that allowing the proposed Pennzoil well to produce without a penalty would permit them to produce more than their share from the reservoir thereby violating the correlative rights of the other owners therein.
- (16) To offset the advantage gained as a result of the unorthodox location, the production from the proposed Pennzoil well should be limited.
- (17) As oil well allowables in the Shipp-Strawn Pool are based upon acreage, the limitation on production from the proposed Pennzoil wells should be based upon its "Exxon pod" productive acres or 22 acres.
- (18) If as a result of drilling the proposed Pennzoil well, the drilling of other wells, or the development of other data, new evidence should show that a higher acreage factor or some other higher allowable factor might be more appropriate for said Pennzoil well, this case may be reopened.
- (19) To assure that offset owners should have an opportunity to assess the potential for the proposed Pennzoil well to drift closer to the South line of its spacing unit than 150 feet, Pennzoil should be required to run a full directional survey on the well and file same with the Division.
- (20) Any offset operator should be able to petition the Commission to reopen this hearing if an examination of the directional survey for said Pennzoil well would reasonably demonstrate that said well has drifted closer than 150 feet to the South line of the spacing unit.

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- (21) The evidence in this case established that applicant's Viersen Well No. 2 is producing from a separate pod in the Shipp-Strawn Pool and, while the proposed simultaneous dedication of the W/2 SE/4 should be permitted, such well should receive an allowable separate from the proposed Viersen Well No. 3.
- (22) The Viersen Well No. 2 should receive an allowable assignment equal to the standard 80-acre allowable less the 22-acre allowable assigned the Viersen Well No. 3.
- (23) To assure the proper allocation of production to each of said wells, the production should be separately tanked or measured in a manner acceptable to the Director of the Oil Conservation Division.
- (24) An order entered consistent with the terms and conditions of the above findings will not result in waste and will protect correlative rights.

IT IS THEREFORE ORDERED THAT:

- (1) The application of Pennzoil Company for an unorthodox oil well location for the Shipp-Strawn Pool is hereby approved for a well to be drilled at a point 150 feet from the South line and 1980 feet from the East line of Section 4, Township 17 South, Range 37 East, NMPM, Lea County, New Mexico.
- (2) The W/2 SE/4 of said Section 4 shall be simultaneously dedicated to the above-described well and to the Pennzoil Viersen Well No. 2 located 1300 feet from the South line and 1650 feet from the East line of said Section 4.
- (3) For purposes of allowable assignment, the proposed well shall be given an acreage factor for a well with 22 dedicated acres and the Viersen Well No. 2 shall be given an acreage factor for a well with 58 dedicated acres.
- (4) Production from each of the wells on said spacing unit shall be separately tanked or shall be separately measured in a manner acceptable to the Director of the Oil Conservation Division.
- (5) The applicant shall cause a directional survey to be conducted on the proposed well from surface to total depth, either a series of single shots or a continuous multi-shot survey, with shot points not less than 250 foot intervals below the intermediate casing and 500 foot intervals above the base of the intermediate casing.

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- The applicant shall cause the surveying company to furnish one copy of the results of such survey directly to the Division's offices in Hobbs and Santa Fe.
- This case may be reopened upon a proper petition by any of the parties showing that:
 - (a) evidence developed subsequent to the drilling of the proposed well would reasonably be expected to increase the allowable therefor; and/or,
 - (b) an examination of the directional survey indicates the proposed well is completed closer than 150 feet to the South line of the spacing unit.
- Jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

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

> STATE OF NEW MEXICO OIL CONSERVATION COMMISSION

JIM BACA, Member

Member

L. STAMETS, Chairman and

Secretary

SEAL