# 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:

CASE NO. 11439 Order No. R-10531

APPLICATION OF P E D OIL CORPORATION FOR DIRECTIONAL DRILLING AND AN UNORTHODOX BOTTOMHOLE OIL WELL LOCATION, CHAVES COUNTY, NEW MEXICO.

# **ORDER OF THE DIVISION**

### **BY THE DIVISION:**

This cause came on for hearing at 8:15 a.m. on December 21, 1995, at Santa Fe, New Mexico, before Examiner David R. Catanach.

NOW, on this 10th day of January, 1996, 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, P E D Oil Corporation, seeks authority to re-enter the plugged and abandoned Mescalero Federal Well No. 1 located 1980 feet from the North and West lines (Unit F) of Section 11, Township 12 South, Range 30 East, NMPM, Chaves County, New Mexico, wherein the applicant proposes to kick off from the vertical and directionally drill the subject well in a westerly direction to an unorthodox bottomhole oil well location in the Devonian formation within 50 feet of a point 1845 feet from the North line and 1131 feet from the West line (Unit E) of Section 11.
- (3) The SW/4 NW/4 of Section 11 is to be dedicated to the subject well forming a standard 40-acre oil spacing and proration unit in the Graham Springs-Devonian Pool.
- (4) This case was styled such that "IN THE ABSENCE OF OBJECTION, THIS CASE WILL BE TAKEN UNDER ADVISEMENT."

(5) The applicant appeared through legal counsel at the hearing. No other party appeared in this matter.

- (6) Division records indicate that the Mescalero Federal Well No. 1 was drilled by Conoco Inc. in January, 1986 to a total depth of approximately 10,554 feet. The well was DST'd in the Devonian formation, tested at a rate of approximately 250 BOPD and 1,300 BWPD, and was subsequently plugged and abandoned in March, 1986.
- (7) Division records further indicate that Foy & Middlebrook assumed ownership of the Mescalero Federal Well No. 1 in 1988 and obtained a Division permit to utilize the well as a disposal well in the San Andres formation (Division Order No. SWD-343). The well was never re-entered and converted to a disposal well.
- (8) Evidence submitted in this case indicates that P E D Oil Corporation is the current operator of Section 11.
  - (9) Applicant's geologic evidence indicates:
  - a) the presence of a north-south trending, faulted, anticlinal Devonian structure within the NW/4 of Section 11;
  - b) that the Mescalero Federal Well No. 1 originally penetrated this Devonian structure at an elevation of -6,238 feet;
  - c) that three additional wells, the Culp Ranch Unit Well No. 1, the Culp Ranch Unit Well No. 2, and the Mescalero Federal Well No. 11-1, located respectively in Units C, D, and K of Section 11, were drilled to and penetrated this Devonian structure. Of the three wells, only the Culp Ranch Unit Well No. 1 produced from this Devonian structure. The Culp Ranch Unit Well No. 1 cumulatively produced approximately 23,196 barrels of oil before being shut-in in March, 1989. Both the Culp Ranch Unit Well No. 2 and the Mescalero Federal Well No. 11-1 penetrated the Devonian structure low to the Conoco Mescalero Federal Well No. 1.
- (10) The applicant has utilized 2-D and 3-D seismic data within Section 11 to ascertain the best location in which to penetrate the subject Devonian structure.

- (11) Applicant's geologic and geophysical evidence indicates that the Mescalero Federal Well No. 1, directionally drilled approximately 850 feet to the west to the proposed unorthodox bottomhole oil well location, should gain approximately 90-110 feet of structural position within the Devonian reservoir, thereby increasing the likelihood of obtaining commercial oil production.
  - (12) The interest ownership within Section 11 is common.
- (13) No other offset operator and/or interest owner appeared at the hearing in opposition to the application.
- (14) Approval of the subject application will afford the applicant the opportunity to produce its just and equitable share of the oil in the Devonian formation, will prevent the economic loss caused by the drilling of unnecessary wells, avoid the augmentation of risk arising from the drilling of an excessive number of wells and will otherwise prevent waste and protect correlative rights.
- (15) The applicant should be required to conduct a directional survey on the well prior to initiating directional drilling operations and subsequent to the completion of such operations in order that the bottomhole location of the well may be verified to be in compliance with the terms of this order.
- (16) The applicant should notify the supervisor of the Division's Artesia district office of the date and time of the conductance of any directional survey on the subject well in order that the same may be witnessed. In addition, subsequent to the conductance of such directional surveys, copies of these surveys should be furnished to the Santa Fe and Artesia offices of the Division.

# **IT IS THEREFORE ORDERED THAT:**

- (1) The applicant, P E D Oil Corporation, is hereby authorized to re-enter the plugged and abandoned Mescalero Federal Well No. 4 located 1980 feet from the North and West lines (Unit F) of Section 11, Township 12 South, Range 30 East, NMPM, Chaves County, New Mexico, kick off from the vertical and directionally drill the subject well in a westerly direction to an unorthodox bottomhole oil well location in the Devonian formation within 50 feet of a point 1845 feet from the North line and 1131 feet from the West line (Unit E) of Section 11.
- (2) The SW/4 NW/4 of Section 11 shall be dedicated to the subject well forming a standard 40-acre oil spacing and proration unit in the Graham Springs-Devonian Pool.

- (3) The applicant shall conduct a directional survey on the well prior to initiating directional drilling operations and subsequent to completion of such operations in order that the bottomhole location of the well may be verified to be in compliance with the terms of this order.
- (4) The applicant shall notify the supervisor of the Division's Artesia district office of the date and time of the conductance of any directional survey on the subject well in order that the same may be witnessed. In addition, subsequent to the conductance of such directional surveys, copies of these surveys shall be furnished to the Santa Fe and Artesia offices of the Division.
- (5) Jurisdiction is hereby 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. YEMAY

Director

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