# 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. 10808 Order No. R-10012

APPLICATION OF KINLAW OIL CORPORATION FOR A HIGH ANGLE/HORIZONTAL DIRECTIONAL DRILLING PILOT PROJECT, AND SPECIAL OPERATING RULES THEREFOR, LEA COUNTY, NEW MEXICO.

## **ORDER OF THE DIVISION**

#### **BY THE DIVISION:**

This cause came on for hearing at 8:15 a.m. on September 23, 1993, at Santa Fe, New Mexico, before Examiner Michael E. Stogner.

NOW, on this 9th day of November, 1993, 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) At the time of the hearing this case was consolidated with Division Case Nos. 10807 and 10809 for purposes of testimony.
- (3) The applicant, Kinlaw Oil Corporation ("Kinlaw") seeks authority to initiate a high angle/horizontal directional drilling pilot project located on a standard 40-acre oil spacing and proration unit ("Project Area") comprised of the SE/4 SW/4 of Section 36, Township 15 South, Range 37 East, NMPM, Denton-Devonian Pool, Lea County, New Mexico. Applicant further seeks the adoption of special operating provisions and rules within said Project Area, including the designation of a target window such that the horizontal or production portion of the wellbore can be no closer than 330 feet to the outer boundary of the project area.

- (4) Kinlaw proposes to reenter its Shell Oil Company State "SDA" Well No. 2 located at a standard surface location 660 feet from the South line and 1650 feet from the West line (Unit N) of said Section 36.
- (5) The proposed horizontal well would be located within the boundaries of the South Denton-Devonian Pool and, as such, would be subject to general rules and regulations for oil pools which require 40-acre spacing and proration units with wells to be located no closer than 330 feet from the outer boundary of the unit.
- (6) Kinlaw further proposes to re-enter and re-complete said well in the following manner:

Directionally drill said well by kicking off from the vertical in the Devonian formation at a depth of approximately 13,110 feet, drill a short-radius curve in such a manner as to penetrate the Devonian formation horizontally, utilize existing and proven technology to drill horizontally within the Devonian formation in an easterly direction a distance of 500 feet to 700 feet, and produce the Devonian formation throughout the entire horizontal interval.

- (7) The applicant presented evidence that indicates the producing interval in the well would be located a minimum distance of 330 feet from the outer boundary of the proration unit, and as such, would not encroach upon offsetting proration units, thereby protecting correlative rights.
- (8) Testimony by the applicant further indicated that this type of well completion should result in the recovery of a substantially greater amount of oil than would normally be recovered by a conventional well completion, thereby preventing waste.
- (9) All offset acreage is operated by Kinlaw Oil Corporation, and, therefore, there are no offset operators affected by the proposed horizontal directional drilling project.
- (10) In the interest of conservation, prevention of waste, and protection of correlative rights, the application of Kinlaw Oil Corporation for a horizontal directional drilling project should be <u>approved</u> provided however, that
  - (a) the wellbore remain confined to the assigned target window; and,

(b) the applicant should be required to conduct a directional survey on the well during the drilling of or after the completion of drilling operations and submit to the Santa Fe office of the Division a copy of said directional survey.

### IT IS THEREFORE ORDERED THAT:

- (1) The application of Kinlaw Oil Corporation for a high angle/horizontal directional drilling pilot project consisting of the SE/4 SW/4 of Section 36, Township 15 South, Range 37 East, NMPM, South Denton-Devonian Pool, Lea County, New Mexico, forming a standard 40-acre oil spacing and proration unit for said pool is hereby approved.
- (2) The applicant is further authorized to reenter its Shell Oil Company State "SDA" Well No. 2 at a standard surface location 660 feet from the South line and 1650 feet from the West line (Unit N) of said Section 36, in the following manner:

Directionally drill said well by kicking off from the vertical in the Devonian formation at a depth of approximately 13,110 feet, drill a short-radius curve in such a manner as to penetrate the Devonian formation horizontally, utilize existing and proven technology to drill horizontally within the Devonian formation in an easterly direction a distance of 500 feet to 700 feet, and produce the Devonian formation throughout the entire horizontal interval.

- (3) The displacement of the subject wellbore shall be limited to a target window such that the horizontal or production portion of the wellbore shall be no closer than 330 feet to the outer boundary of the project area.
- (4) The geographic location of the kick-off point for the proposed horizontal well shall be determined prior to directional drilling operations. Also, the operator shall conduct a directional survey on the lateral portion of the wellbore during or after completion of drilling operations.
- (5) The applicant shall notify the supervisor of the Hobbs District Office of the Division of the date and time of conductance of any directional surveys in order that the same may be witnessed.
- (6) The applicant shall submit copies of all directional surveys conducted on the subject well to both the Hobbs and Santa Fe offices of the Division.

(7) Jurisdiction of this cause 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.

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STATE OF NEW MEXICO OIL CONSERVATION DIVISION

WILLIAM J. LeMAY

Director