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. 10807 Order No. R-10011

APPLICATION OF KINLAW OIL CORPORATION FOR A HIGH ANGLE/HORIZONTAL DIRECTIONAL DRILLING PILOT PROJECT, SPECIAL OPERATING RULES THEREFOR, A NON-STANDARD OIL PRORATION UNIT, AN UNORTHODOX OIL WELL LOCATION, AND A SPECIAL PROJECT OIL ALLOWABLE, 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. 10808 and 10809 for purposes of testimony.
- (3) The applicant, Kinlaw Oil Corporation ("Kinlaw"), seeks to initiate a high angle/horizontal directional drilling pilot project in the South Denton-Devonian Pool underlying the SE/4 SE/4 of Section 35 and the SW/4 SW/4 of Section 36, both in Township 15 South, Range 37 East, NMPM, Lea County, New Mexico, thereby creating a non-standard 80-acre oil spacing and proration unit for said pool ("Project Area"). 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 and for a special project oil allowable.

- (4) The applicant testified that the Project Area is comprised of State lands with common working interest and royalty interest. Further, the State Land Office does not object to this application but has conditioned its approval upon the applicant's obtaining such commercial leases as are necessary from the State Land Office Commercial Division.
- (5) Kinlaw proposes to reenter its Shell Oil Company State "SDA" Well No. 1 located at a standard surface oil well location 660 feet from the South and West lines (Unit M) of said Section 36.
- (6) 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.
- (7) 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 12,958 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 a northwesterly direction a distance of 500 feet to 700 feet, and produce the Devonian formation throughout the entire horizontal interval.

- (8) Since the applicant testified that the producing interval in the well may or may not extend into the SE/4 SE/4 of said Section 35, the Project Area for this well should be comprised of only the tracts which are actually penetrated by the subject wellbore.
- (9) The allowable assigned to the well shall be limited to the total of the allowables assigned to the 40-acre tracts included in the Project Area.
- (10) 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.
- (11) All offset acreage is operated by **Kinl**aw Oil Corporation, and, therefore, there are no offset operators affected by **the proposed** horizontal directional drilling project.
- (12) 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;
 - (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 on the well, and submit to the Santa Fe office of the Division a copy of said directional survey;

- (c) the Project Area for this well should include only those particular quarter-quarter sections actually penetrated by the subject wellbore;
- (d) an allowable should be established for this Project Area which is equal to the total of the allowables assigned to the 40-acre tracts included in the Project Area; and,
- (e) the non-standard 80-acre oil spacing and proration unit, as described above, should not become effective until such time as the horizontal wellbore has been properly surveyed and determined to be appropriate and will cease at such time as the horizontal wellbore is properly plugged and abandoned.

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 SE/4 of Section 35 and the SW/4 SW/4 of Section 36, both in Township 15 South, Range 37 East, NMPM, South Denton-Devonian Pool, Lea County, New Mexico, forming an 80-acre non-standard oil spacing and proration unit ("Project Area") for said pool is hereby approved.

PROVIDED HOWEVER, the applicant confer with the New Mexico State Land Office and obtain through its Commercial Division any commercial lease required by that office prior to producing this well.

(2) The applicant is further authorized to reenter its Shell Oil Company State "SDA" Well No. 1 at a standard surface location 660 feet from the South and West lines (Unit M) 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 12,958 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 a northwesterly 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 Project Area shall include only those lots actually penetrated by the subject wellbore and shall be assigned an allowable equal to the total of the allowables assigned to the 40-acre tracts included within the Project Area.
- (5) This non-standard unit shall not become effective until such time as the horizontal wellbore is properly surveyed and deemed appropriate to do so by the Division's District Supervisor in Hobbs and shall cease at such time as the horizontal well is properly plugged and abandoned.
- (6) 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.

- (7) 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.
- (8) 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.
- (9) 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.

STATE OF NEW MEXICO OIL CONSERVATION DIVISION

WILLIAM J. LeMAY

Director

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