

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. 10878
ORDER NO. R-10044

APPLICATION OF KINLAW OIL CORPORATION FOR A LEASE-WIDE HIGH
ANGLE/HORIZONTAL DIRECTIONAL DRILLING PILOT PROJECT AND FOR
THE PROMULGATION OF 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 December 16, 1993, at Santa Fe, New Mexico, before Examiner Jim Morrow.

NOW, on this 28th day of December, 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) The applicant, Kinlaw Oil Corporation (Kinlaw), seeks to establish a high angle/horizontal directional drilling pilot project in the Denton-Devonian Pool within its Mexico "F" (State) Lease comprising Lots 1 through 4 (N/2 N/2 equivalent) and the SW/4 NE/4 and SW/4 NW/4 of Section 2, Township 15 South, Range 37 East, NMPM, Denton-Devonian Pool, Lea County, New Mexico.
- (3) The applicant also seeks the promulgation of special operating rules and procedures for wells within said lease including provisions for administrative authorization for high angle/horizontal wellbores, the formation of oversized and irregular shaped spacing and proration units to accommodate such wellbores and the assignment of special oil allowable or formula for the project area.

(4) Current plans for the drilling project include five wells, Nos. 1, 2, 3, 5 and 10. Well No. 2 was approved by Division Order No. R-10023. The applicant is requesting approval for the remaining four wells. Surface locations for the four wells are shown in Exhibit "A".

(5) Kinlaw intends to drill horizontally from its Mexico "F" Well Nos. 1, 3, 5 and 10, all located at standard locations as shown in Exhibit "A". After plugging back above Devonian perforations in each well, the downhole location at approximately 11,900 feet would be determined. The well would then be kicked off from the vertical within the Devonian formation at that depth. Proven technology would be used to drill a short-radius or medium radius curve and then to drill horizontally within the Devonian formation for a distance of approximately 660 feet.

(6) The direction of the horizontal part of each well would be decided after determining the downhole location of the kick-off point. All portions of each well would be controlled to stay at least 330 feet away from the outer boundary of the Mexico "F" Lease. Applicant is requesting approval to cross quarter-quarter section lines within the lease if necessary to properly develop the project with horizontal wellbores.

(7) Applicant's witness testified that the direction of the horizontal portion of a well would not affect the wells' productivity.

(8) Top allowable for the Denton-Devonian Pool is 365 barrels of oil per day for a well on 40 acres. Kinlaw requests that a horizontal well which extends into more than one quarter-quarter section be assigned an allowable of up to 365 barrels per day for each additional quarter-quarter section penetrated by the horizontal well. However, each 40-acre quarter-quarter section should provide a total allowable of no more than 365 barrels per day to all wells which have penetrated and are producing from that quarter-quarter section.

(9) Kinlaw requests authorization for an administrative approval procedure for any future horizontal wells on the Mexico "F" Lease project.

(10) Applicant's witness testified that the horizontal wells are expected to recover a substantially greater amount of oil and produce at economic rates seven to ten years longer than conventional wells, thereby preventing waste.

(11) Well No. 4 located in the NW/4 NW/4 of Section 2 is a salt water disposal well with disposal into the Devonian formation. There are currently no plans for using this well for horizontal drilling.

(12) A representative for Pennzoil Exploration and Production Company and Cody Energy appeared at the hearing and questioned Kinlaw's witness concerning the crossing of quarter-quarter section lines and the proposed 330 foot set-back from the lease boundary, but did not oppose the application.

(13) No other interest owner appeared at the hearing in opposition to this application.

(14) This application should be approved to prevent waste and protect correlative rights.

IT IS THEREFORE ORDERED THAT:

(1) The applicant, Kinlaw Oil Corporation, is hereby authorized to initiate a horizontal directional drilling project in the Denton-Devonian Pool on its Mexico "F" (State) Lease comprising Lots 1 through 4 (N/2 N/2 equivalent) and the SW/4 NE/4 and SW/4 NW/4 of Section 2, Township 15 South, Range 37 East, NMPM, Lea County, New Mexico.

(2) Within the Mexico "F" lease, the applicant is authorized to horizontally drill Well Nos. 1, 3, 5, and 10 at the surface locations shown in Exhibit "A", in a direction and lateral distance determined by the applicant. Drilling procedures consistent with Finding Paragraph Nos. (5) and (6) of this order shall be utilized.

(3) The horizontal wellbores may traverse quarter-quarter section lines within the project area provided that the horizontal or producing portion of each wellbore shall be located no closer than 330 feet from the outer boundary of the Mexico "F" lease.

(4) The applicant shall determine the actual location of kick-off points in each well prior to commencing directional drilling operations. Also, the applicant shall conduct a directional survey on the lateral portion of each 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 Santa Fe and Hobbs Offices of the Division.

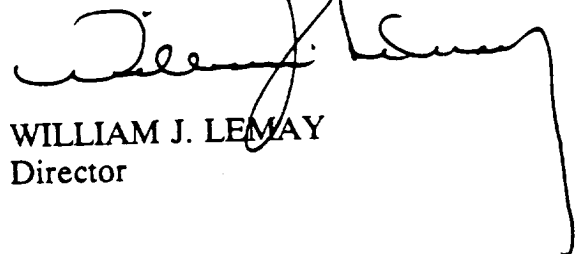
(7) The top allowable assigned to each well shall be up to 365 barrels per day for each quarter-quarter section penetrated by the vertical or horizontal extension of the wellbore, provided that each 40-acre quarter-quarter section shall provide a total allowable of no more than 365 barrels per day to all wells which have penetrated and are producing Denton-Devonian Pool hydrocarbons from that quarter-quarter section. Allowables shall be assigned by the supervisor of the Hobbs District Office.

(8) The applicant may apply to the Santa Fe Office of the Division for administrative approval to drill additional horizontal wells on its Mexico "F" lease. The application shall provide information to show that the well would be drilled in a manner consistent with this order and that offset operators have been properly notified and do not oppose the application. Upon receipt of the application the Division Director may approve the matter or set it for public hearing.

(9) 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

S E A L

Exhibit "A"
Case No. 10878
Order No. R-10044

KINLAW OIL CORPORATION
MEXICO "F" (STATE) LEASE
DENTON-DEVONIAN POOL

Section 2, Township 15 South, Range 37 East, NMPM,
Lea County, New Mexico.

WELL NAME AND NUMBER	SURFACE LOCATION
Mexico "F" Well No. 1	660' FNL - 1980' FWL (Unit C)
Mexico "F" Well No. 3	1980' FNL - 660' FWL (Unit E)
Mexico "F" Well No. 5	660' FNL - 1980' FEL (Unit B)
Mexico "F" Well No. 10	984' FNL - 990' FEL (Unit A)