

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. 10109  
Order No. R-9341

APPLICATION OF M. B. RESOURCES CORP.  
FOR A HORIZONTAL DIRECTIONAL DRILLING  
PILOT PROJECT, SPECIAL OPERATING RULES  
THEREFOR, AND A NON-STANDARD OIL PRORATION  
UNIT FOR THE RAMCO STATE "WN" WELL NO. 2, SHOE  
BAR-PENNSYLVANIAN POOL, LEA COUNTY, NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 8:15 a.m. on October 3, 1990, at Santa Fe, New Mexico, before Examiner Jim Morrow.

NOW, on this 1st day of November, 1990, 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, M. B. Resources Corp., seeks the formation of an 80-acre non-standard oil spacing and proration unit comprising the NE/4 SE/4 of Section 35 and the NW/4 SW/4 of Section 36, both in Township 16 South, Range 35 East, NMPM, Lea County, New Mexico, for the purpose of initiating a horizontal directional drilling pilot project in the Shoe Bar-Pennsylvanian Pool. The applicant proposes to utilize the Manzano Oil Corporation Ramco State "WN" Well No. 2 located 1980 feet from the South line and 660 feet from the East line (Unit I) of said Section 35 by kick-off from the vertical portion of said wellbore in an easterly direction with a medium radius curved hole and continue drilling horizontally for approximately 1000 feet bottoming said wellbore in the adjoining quarter-quarter section to the east in Unit L of said Section 36.

(3) Applicant further seeks special rules and provisions within the pilot project area including the designation of a prescribed area limiting the horizontal displacement of the wellbore such that the well can be no closer than 330 feet to the outer boundary of the aforementioned 80-acre non-standard unit.

(4) The proposed horizontal well and proration unit are within the boundaries of the Shoe Bar-Pennsylvanian Pool which is subject to statewide 40-acre spacing. Top oil allowable in the field is 320 barrels per day.

(5) Applicant requested an allowable for the proposed non-standard 80-acre proration unit which would be equal to the standard 80-acre allowable for this depth.

(6) The 80-acre depth bracket allowable for this depth as set out in Oil Conservation Rule No. 505 is 400 barrels per day.

(7) Applicant's geological witness presented the following testimony:

- (a) The Shoe Bar-Pennsylvanian reservoir is also referred to as the Lower Wolfcamp and the Beta Reservoir.
  - (b) A portion of the Shoe Bar-Pennsylvanian reservoir underlies the proposed proration unit. The proposed horizontal well would fully develop and provide for efficient drainage of that portion of the reservoir.
  - (c) Portions of the horizontal extension of the wellbore will penetrate the Shoe Bar-Pennsylvanian Reservoir under both 40-acre tracts of the proposed spacing unit.
  - (d) Manzano Oil Corporation would operate the proposed horizontal well for M. B. Resources Corporation.
  - (e) The cost of the proposed horizontal well (recompletion) would be less than half the cost of a new vertical well.
- (8) Engineering witness for the applicant testified as follows:
- (a) Existing perforations in the proposed horizontal well would be squeezed, a section of casing from 10,100 feet to 10,200 feet would be milled out and a cement plug set to allow directional drilling to begin. The well would be deviated from the vertical in an Easterly

direction and would reach horizontal about 300 feet east of the vertical wellbore. Horizontal drilling would continue in an Easterly direction in the Shoe Bar-Pennsylvanian Reservoir for another 600 to 700 feet.

- (b) The proposed horizontal well (recompletion) would cost less than a vertical well and would produce at a higher rate.
- (c) A slotted liner will be set in the horizontal portion of the well.

(9) Harken Exploration Company entered an appearance at the hearing but did not object to the proposed project. No other operator or interest owner objected.

(10) The proposed project will recover additional reserves from the Shoe Bar-Pennsylvanian Pool and should be approved.

IT IS THEREFORE ORDERED THAT:

(1) The application of M. B. Resources Corporation for a horizontal drilling project, a non-standard spacing and proration unit and an 80-acre depth bracket allowable for the Ramco State "WN" Well No. 2, Shoe Bar-Pennsylvanian Pool, Lea County, New Mexico, is hereby approved.

(2) Surface location is 1980 feet from the South line and 660 feet from the East line (Unit 1) of Section 35, Township 16 South, Range 35 East, NMPM, Lea County, New Mexico.

(3) The 80-acre non-standard spacing and proration unit for the well shall consist of the NE/4 SE/4 of Sec. 35 and the NW/4 SW/4 of Section 36, both in Township 16 South, Range 35 East, NMPM, Lea County, New Mexico.

(4) Applicant is authorized to recomplete the Ramco State "WN" Well No. 2 by squeezing existing perforations, milling a section of casing from approximately 10,100 to 10,200 feet, directionally drilling the well by deviating from the vertical in an Easterly direction reaching horizontal approximately 300 feet east of the vertical wellbore, and continuing to drill horizontally in an Easterly direction in the Shoe Bar-Pennsylvanian Reservoir for another 600 to 700 feet.

(5) Portions of the horizontal extension of the well will penetrate the Shoe Bar-Pennsylvanian Reservoir under both 40-acre tracts of the

-4-

Case No. 10109  
Order No. R-9341

proration unit, but no part of the wellbore shall be closer than 330 feet to the outer boundary of the 80-acre proration unit.

(6) A slotted liner shall be placed in the horizontal portion of the wellbore.

(7) A top allowable of 400 barrels shall be assigned to the proration unit.

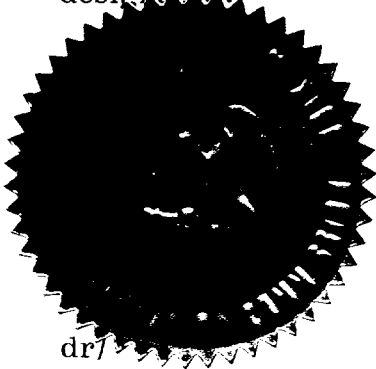
(8) The 80-acre spacing and proration unit shall not become effective until such time as the horizontal wellbore is completed and placed on production and shall cease when the well is plugged and abandoned.

(9) The applicant shall conduct directional drilling surveys during drilling operations and shall notify the supervisor of the Hobbs district office of the Division of the progress of the deviated well so that operations may be witnessed.

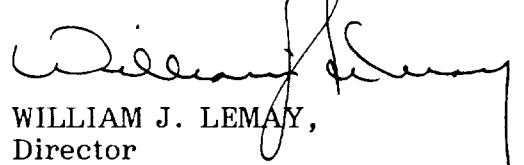
(10) Upon completion of the horizontal drilling operations, the applicant shall file a copy of a directional drilling survey of the entire wellbore with both the Santa Fe and the Hobbs offices of the Division.

(11) 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