

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. 9715
ORDER NO. R-9157

APPLICATION OF BENSON-MONTIN-GREER DRILLING
CORPORATION FOR A HORIZONTAL DIRECTIONAL DRILLING
PILOT PROJECT, SPECIAL OPERATING RULES THEREFOR,
AND A NON-STANDARD OIL PRORATION UNIT, WEST PUERTO
CHQUITO-MANCOS OIL POOL, RIO ARRIBA COUNTY, NEW MEXICO

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 8:15 a.m. on October 4, 1989, at Santa Fe, New Mexico, before Examiner Michael E. Stogner.

NOW, on this 17th day of April, 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, Benson-Montin-Greer Drilling Corporation, seeks the formation of a non-standard 1280-acre oil spacing and proration unit for the West Puerto Chiquito-Mancos Oil Pool within its Canada Ojitos Unit Area comprising all of Sections 15 and 16, Township 25 North, Range 1 West, NMPM, Rio Arriba County, New Mexico, for the purpose of initiating a horizontal directional drilling pilot project therein and to further promulgate special rules and provisions within said pilot project area including the designation of a prescribed area limiting the horizontal displacement of the wellbore and special allowable considerations.

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(3) The proposed pilot project area is within the boundaries of the West Puerto Chiquito-Mancos Oil Pool and, as such, is subject to the Special Rules and Regulations for said pool as promulgated by Division Order No. R-6469-B, as amended, which provides for 640-acre spacing and proration units with an allowable of 800 barrels of oil per day and for all wells to be no closer than 1650 feet to the outer boundary of a proration unit nor closer than 330 feet to an inner quarter-quarter section line or subdivision inner boundary.

(4) The Niobrara interval of the Mancos shale is the productive zone of the West Puerto Chiquito-Mancos Oil Pool, which is characterized by tight, low permeability blocks interconnected by a high capacity fracture system.

(5) Past experience in said pool has shown that unless a conventionally drilled (vertical) well intersects such a fracture, the chance of obtaining commercial production is severely curtailed.

(6) By drilling a horizontal wellbore, the applicant is attempting to increase the probability of encountering several of these fractures, which may ultimately result in the recovery of a greater amount of oil, thereby preventing waste.

(7) The applicant proposes to utilize its Canada Ojitos Unit "A-16" Well No. 8 located 850 feet from the North line and 1030 feet from the East line (Unit A) of Section 16, Township 25 South, Range 1 West, NMPM, Rio Arriba County, New Mexico, by cutting a window on the east side of the 7 5/8-inch intermediate casing just above the 5 1/2-inch liner at approximately 6000 feet and deviate to approximately 92 degrees and drill horizontally in the Mancos formation for approximately 2000 feet bottoming said wellbore in the adjoining Section 15. A slotted liner will be set in the open hole from the window at 6000 feet, down through the curve, and to the end of the wellbore.

(8) To allow for flexibility, to minimize risk and maximize the success of such a completion, the applicant is requesting the designation of a prescribed area limiting the horizontal displacement of the wellbore such that the producing interval of the well be within the following described rectangular area:

750 feet either side of a line starting at a point 850 feet from the North line and 1030 feet from the East line of Section 16 and ending at a point 850 feet from the North line and 970 feet from the West line of Section 15.

(9) Because both Sections 15 and 16 are in the interior of the applicant's Canada Ojitos Unit, correlative rights are protected.

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(10) Since the project area consists of two standard 640-acre oil spacing and proration units for the West Puerto Chiquito-Mancos Oil Pool, the applicant proposes that the project be assigned an allowable of 1600 barrels of oil per day, which is equal to twice the normal allowable assigned a single 640-acre unit for said pool.

(11) The subject 1280-acre non-standard proration unit should not become effective until such time as the horizontal wellbore is completed and placed on production and will cease at such time as the horizontal wellbore is properly plugged and abandoned.

(12) The applicant should be required to determine the actual location of the kick-off point prior to directional drilling operations. Also, the applicant should notify the supervisor of the Aztec District Office of the Division of the proposed direction of the deviated hole and of the date and time of the commencement of directional drilling operations in order that the same may be witnessed.

(13) The applicant should be required to conduct a directional survey on the lateral portion of the wellbore during or after completion of the drilling operations on the horizontal wellbore and submit a copy of said survey to both the Santa Fe and Aztec Offices of the Division.

IT IS THEREFORE ORDERED THAT:

(1) The application of Benson-Montin-Greer Drilling Corporation for a horizontal directional drilling pilot project comprising all of Sections 15 and 16, Township 25 South, Range 1 West, NMPM, West Puerto Chiquito-Mancos Oil Pool, Canada Ojitos Unit Area, Rio Arriba County, New Mexico, thereby forming a non-standard 1280-acre oil spacing and proration unit for said pool, is hereby approved.

(2) The applicant is further authorized to utilize its Canada Ojitos Unit "A-16" Well No. 8 located 850 feet from the North line and 1030 feet from the East line (Unit A) of said Section 16, by cutting a window in the 7 5/8-inch intermediate casing above the 5 1/2-inch liner at approximately 6000 feet in an easterly direction, deviate to approximately 92 degrees and drill horizontally in the Mancos formation for approximately 2000 feet bottoming said wellbore in the adjoining Section 15. Said well is to be completed with a slotted liner to be set in the open hole from the window at 6000 feet, down through the curve, and to the end of the wellbore.

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(3) The producing interval of the well shall be within the following rectangular area:

750 feet either side of a line starting at a point 850 feet from the North line and 1030 feet from the East line of Section 16 and ending at a point 850 feet from the North line and 970 feet from the West line of Section 15.

(4) The aforementioned 1280-acre non-standard oil proration unit shall be assigned an acreage dedication factor of 2.0 to be assessed toward the depth bracket allowable for said pool (two times 800 barrels of oil per day or 1600 barrels of oil per day).

(5) This non-standard proration unit shall not become effective until such time as the horizontal wellbore is completed and placed on production 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. Also, the operator shall notify the supervisor of the Aztec District Office of the Division of the proposed direction of the deviated hole and of the date and time of the directional drilling in order that the same may be witnessed.

(7) The applicant shall conduct a directional drilling survey on the well during or after completion of horizontal drilling operations.

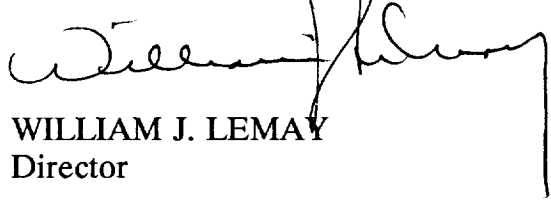
(8) Upon completion of the horizontal drilling operations on the well, the applicant shall file a copy of said directional drilling survey along with a final report specifying the depth and location of the terminus of said horizontal wellbore with both the Santa Fe and Aztec Offices of the Division.

(9) Jurisdiction of this cause is retained for the entry of such further orders as the Division may deem necessary.

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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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