

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. 10302
Order No. R-9538

APPLICATION OF AMERICAN HUNTER
EXPLORATION, LTD. FOR A HORIZONTAL
WELL AND AN UNORTHODOX WELL LOCATION,
RIO ARriba COUNTY, NEW MEXICO.

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ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 8:15 a.m. on May 30, 1991, at Santa Fe, New Mexico, before Examiner Jim Morrow.

NOW, on this 27th day of June, 1991, 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
has jurisdiction

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for a lateral distance of approximately 2,500 feet. American Hunter submitted the following additional information through exhibits and the testimony of witnesses to support its request for approval to drill the horizontal well.

- (a) Both the vertical and horizontal (70 degree) portions of the wellbore would be kept inside a target window described as a rectangle 330 to 2,100 feet from the North line and 1,150 to 4,050 feet from the East line of Section 2.
- (b) A cross-section and a structure map show that the Niobrara A and B zones of the Mancos Formation are productive in the area. These formations dip to the West at approximately 15 degrees (from horizontal) in Section 2. The horizontal portion of the well would follow this dip so as to penetrate both the A and B zones.
- (c) The Niobrara Formation in this area contains numerous fractures with orientation in a north-south direction and good porosity and permeability associated with the fractures. Drilling in a westerly direction, perpendicular to the fracture system, is expected to result in the penetration of numerous fractures providing for good drainage.
- (d) The well is expected to cost between \$800,000 and \$1,000,000, 1-1/2 to 2 times the cost of a vertical well and recover up to 300,000 barrels of oil.
- (e) 13 3/8-inch casing would be set and cemented at 350 feet. 9 5/8-inch casing would be set and cemented through the Point Lookout formation into the Mancos formation. All fresh water strata would be protected by this casing. A 5 1/2-inch liner, slotted through the pay zones, would be set to total depth following the completion of drilling and hung from the 9 5/8-inch casing.
- (f) The weight of the drilling fluid would be controlled to keep the fluid column bottomhole pressure equal to or slightly below the formation pressure, however the well would be kept under control at all times and not allowed to produce formation fluids while drilling.

(4) The proposed well is located in the West Puerto Chiquito-Mancos Oil Pool where pool rules provide for 640-acre spacing and proration units, wells

located no nearer than 1,650 feet from the outer boundary of the proration unit nor closer than 330 feet to a quarter-quarter section line. The applicant requests an exception to the well location requirements because of road locations and other surface considerations. Also the East and West extremities of the horizontal portion of the wellbore will be closer than 1,650 feet to both the East and West lines of Section 2. All of Section 2 would be dedicated to the well to form a standard 645.28-acre oil proration unit.

(5) Benson-Montin-Greer Drilling Corporation entered an appearance at the hearing and questioned American Hunter's witness, but did not object to the application. No other operator or interest owner objected.

(6) The proposed well will recover additional oil reserves and will not harm correlative rights. The application should be approved as requested.

IT IS THEREFORE ORDERED THAT:

(1) The application of American Hunter Exploration, Ltd. for approval to drill a horizontal well at an unorthodox location in the West Puerto Chiquito-Mancos Oil Pool is hereby approved.

(2) The applicant is authorized to drill its Jicarilla 2-A Well No. 1 from an unorthodox oil well location 600 feet from the North line and 1,150 feet from the East line (Unit A) of Section 2, Township 27 North, Range 1 West, NMPM, Rio Arriba County, New Mexico in conformance with the drilling program submitted as evidence and to complete such well as a horizontal (70 degree±) producer in the Niobrara formation.

(3) From the surface location to total depth, the Jicarilla 2-A Well No. 1 shall be kept inside a target window described as a rectangle 330 to 2,100 feet from the North line and 1,150 to 4,050 feet from the East line of said Section 2.

(4) The applicant shall contact the supervisor of the Aztec district office of the Division to obtain prior approval for the casing and cementing program for the well.

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

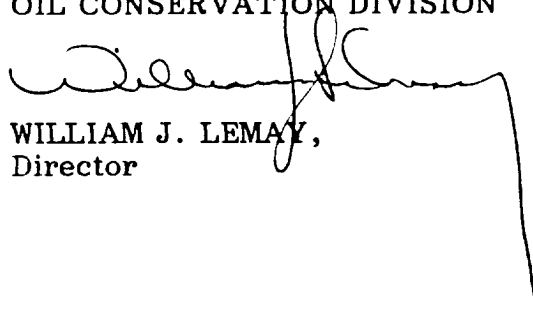
(6) Upon completion of the horizontal drilling operations, the applicant shall file a copy of a directional drilling survey of the entire wellbore with both the Santa Fe and the Aztec offices of the Division.

(7) 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

A handwritten signature in black ink, appearing to read 'William J. Lemay', is written over the printed name. A long, thin vertical line extends from the bottom of the signature down towards the bottom of the page.

WILLIAM J. LEMAY,
Director

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