

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. 10348
Order No. R-9549

APPLICATION OF KLM OIL AND GAS
FOR A HORIZONTAL WELL,
RIO ARRIBA COUNTY, NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 8:15 a.m. on July 11, 1991, at Santa Fe, New Mexico, before Examiner Jim Morrow.

NOW, on this 29th day of July, 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 as required by law, the Division has jurisdiction of this cause and the subject matter thereof.
- (2) KLM Oil and Gas proposes to drill its Browning Federal 33 Well No. 1 from a standard oil well location within a standard 640-acre oil spacing and proration unit in the West Puerto Chiquito-Mancos Oil Pool.
- (3) Surface location for the well would be approximately 1650 feet from the South and West lines (Unit K) of Section 33, Township 24 North, Range 1 West, NMPM, Rio Arriba County, New Mexico.

(4) All of Section 33 would be dedicated to the well to form a standard 640-acre gas spacing and proration unit.

(5) The well would be drilled vertically to approximately 6900 feet, evaluated, and plugged back to approximately 6100 feet and deviated from the vertical in a Northeasterly direction. Angle would be increased so as to reach 90 degrees at approximately 6710 feet TVD in the Niobrara C formation. Horizontal drilling would continue in a Northeasterly direction in the Niobrara C formation for a distance of approximately 2500 feet. KLM submitted the following additional information through exhibits and the testimony of witnesses.

- (a) All portions of the wellbore would be kept inside a target window no closer than 1650 feet to any outer boundary of Section 33.
- (b) A cross-section and structure map show that the Niobrara C zone of the Mancos Formation is potentially productive in the area. The Niobrara C zone should be approximately 60 to 70 feet thick.
- (c) The Niobrara C in this area contains numerous fractures with a main fracture system trending in a northwest-southeast direction and a secondary system at a 60 degree angle to the main fracture trend. Drilling horizontally in a Northeasterly direction, perpendicular to the main fracture system, is expected to result in the penetration of numerous fractures providing for good drainage.
- (d) 13-3/8 inch casing would be set and cemented at 400 feet to protect fresh water. 9-5/8 inch casing would be set and cemented to 5,700 feet and a 7 inch liner would be set and cemented to 6137 feet.
- (e) The weight of the drilling fluid will be controlled to keep the fluid column bottomhole pressure approximately equal to formation pressure. The well would be equipped to keep it under control at all times.

(6) Pool rules in the West Puerto Chiquito-Mancos Oil Pool provide for 640-acre spacing and proration units, wells 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. All portions of the well would conform with outer boundary requirements but the horizontal portion of the well would cross quarter section lines.

(7) Benson-Mountin-Greer Drilling Corporation entered an appearance at the hearing, but did not object to the application. No other operator or interest owner objected.

(8) 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 KLM Oil and Gas to drill a horizontal well in the West Puerto Chiquito-Mancos Oil Pool is hereby approved.

(2) The applicant is authorized to drill its Browning Federal 33 Well No. 1 from a standard oil well location approximately 1650 feet from the South and West lines (Unit K) of Section 33, Township 24 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 producer in the Niobrara formation.

(3) From the surface location to total depth, the Browning Federal 33 Well No. 1 shall be kept inside a target window which is no closer than 1650 feet to any outer boundary of said Section 33.

(4) 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.

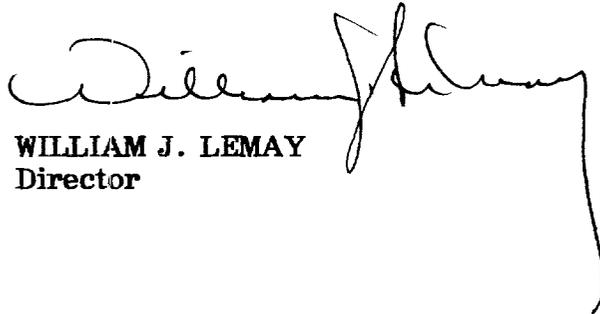
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(5) Upon completion of the horizontal drilling operations, the applicant shall file a copy of a directional drilling survey of the entire wellbore with both the Santa Fe and the Aztec offices of the Division.

(6) 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

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