

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. 10375  
Order No. R-9591

APPLICATION OF UNION OIL COMPANY OF  
CALIFORNIA D/B/A UNOCAL FOR A HIGH  
ANGLE DIRECTIONAL DRILLING PILOT  
PROJECT, SPECIAL OPERATING RULES  
THEREFOR, UNORTHODOX GAS WELL  
LOCATION AND SIMULTANEOUS DEDICATION,  
RIO ARriba COUNTY, NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 8:15 a.m. on September 19, 1991, at Santa Fe, New Mexico, before Examiner David R. Catanach.

NOW, on this 4th day of October 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) The applicant, Union Oil Company of California d/b/a Unocal, seeks authority to initiate a high angle directional drilling pilot project in an existing 160-acre gas spacing and proration unit in the South Blanco-Pictured Cliffs Pool comprising the NE/4 of Section 20, Township 27 North, Range 6 West, NMPM, Rio Arriba County, New Mexico. The applicant proposes to utilize its existing Rincon Unit Well No. 254 located at an unorthodox surface gas well location 1419 feet from the North line and 794 feet from the East line (Unit H) of said Section 20 and penetrate the Pictured Cliffs formation with a 60 degree angled wellbore oriented in a westerly direction. Applicant proposes to keep the horizontal displacement of said well's producing interval within the

allowed 790 foot offsetting provisions for said pool, pursuant to the Special Rules and Regulations for the South Blanco-Pictured Cliffs Pool, as promulgated by Division Order No. R-8170, as amended.

(3) The applicant further requests authority to simultaneously dedicate production from said well with the production from its existing Rincon Unit Well No. 52 located at a standard gas well location 1650 feet from the North line and 990 feet from the East line (Unit H) of said Section 20; therefore any provisions adopted for said project area should contain provisions allowing for appropriate exception or amendments to the General Rules for the Prorated Gas Pools of New Mexico, as promulgated by said Order No. R-8170, as amended.

(4) According to evidence presented, the applicant has been authorized by Division Order No. DD-34(H) to initiate a highly deviated directional drilling pilot project in the N/2 of said Section 20 within the Basin-Fruitland Coal Gas Pool. Said order further authorized the applicant to drill its Rincon Unit Well No. 254 at a standard coal gas well location 1419 feet from the North line and 794 feet from the East line (Unit H) of said Section 20, to a true vertical depth of 2362 feet, commence a medium radius curve in a westerly direction, building to an angle of 60 degrees and continue drilling at said angle so as to encounter the top of the Basin-Fruitland Coal Gas Pool at a true vertical depth of 3040 feet and then to a total depth at a true vertical depth of 3200 feet with a terminus at a bottomhole location in the SW/4 NW/4 of said Section 20.

(5) The subject well, in conformance with Division Order No. DD-34(H), was spudded during May, 1990, and was subsequently drilled to total depth at a true vertical depth of 3213 feet and a measured depth of 3595 feet. A completion in the Basin-Fruitland Coal Gas Pool through perforations from 3458 feet to 3468 feet proved unsuccessful.

(6) The top of the Pictured Cliffs formation in the subject well was encountered at a true vertical depth of 3160 feet and a measured depth of 3493 feet.

(7) According to applicant's evidence, the cumulative gas production from the South Blanco-Pictured Cliffs Pool within the Rincon Unit Well No. 52, as described above, has been low relative to other producing wells in this area, and as a result, there are significant gas reserves underlying the NE/4 of said Section 20 which may not be recovered by said Rincon Unit Well No. 52.

(8) The Rincon Unit Well No. 52 is currently producing approximately 16 MCF gas per day.

(9) By utilizing the Rincon Unit Well No. 254 as a Pictured Cliffs producing well, the applicant estimates that said well will recover an additional 500 MMCF of gas from the South Blanco-Pictured Cliffs Pool which may not otherwise be recovered from the NE/4 of said Section 20, thereby preventing waste.

(10) The surface location of the Rincon Unit Well No. 254 is 31 feet north of a standard surface location and the bottomhole location is 39 feet north of a standard bottomhole location within the South Blanco-Pictured Cliffs Pool.

(11) The NE/4 of Section 20 is located within the applicant's Rincon Unit, a commonly owned exploratory unit comprising some 20,823 acres.

(12) No interest owner appeared at the hearing in opposition to the application.

(13) Approval of the proposed high angle directional drilling pilot project and simultaneous dedication should result in the recovery of an additional amount of gas from the proposed proration unit which may not otherwise be recovered, thereby preventing waste, will allow the applicant to utilize an existing wellbore to produce said reserves, thereby preventing the drilling of unnecessary wells, and will not violate correlative rights.

(14) For purposes of determining a gas allowable for the NE/4 of Section 20 within the South Blanco-Pictured Cliffs Pool, the applicant should be allowed to utilize the deliverability of either the Rincon Unit Well No. 52 or the Rincon Unit Well No. 254, whichever deliverability is greater.

**IT IS THEREFORE ORDERED THAT:**

(1) The applicant, Union Oil Company of California d/b/a Unocal, is hereby authorized to conduct a high angle directional drilling pilot project in the NE/4 of Section 20, Township 27 North, Range 6 West, NMPM, South Blanco-Pictured Cliffs Pool, Rio Arriba County, New Mexico, by utilizing its existing Rincon Unit Well No. 254 which has been drilled in the following manner:

Commence drilling at an unorthodox surface gas well location 1419 feet from the North line and 794 feet from the East line (Unit H) of said Section 20, drill to a true vertical depth of approximately 2362 feet, commence a medium radius curve in a westerly direction building to an angle of 60 degrees and continue drilling at said angle so as to encounter the top of the Pictured Cliffs formation at a true vertical depth of approximately 3160 feet and then to a total depth at a true vertical depth of approximately 3213 feet with a terminus at an unorthodox bottomhole location 1411 feet from the North line and 1648 feet from the East line (Unit G) of said Section 20.

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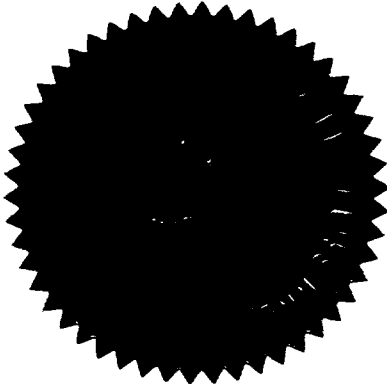
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(2) The applicant is further authorized to complete said Rincon Unit Well No. 254 in the South Blanco-Pictured Cliffs Pool and to simultaneously dedicate the NE/4 of said Section 20 to the aforementioned well and to its existing Rincon Unit Well No. 52 located at a standard gas well location 1650 feet from the North line and 990 feet from the East line (Unit H) of said Section 20.

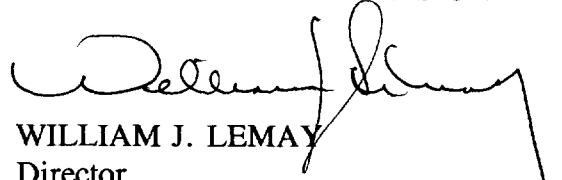
(3) For purposes of assigning a gas allowable to the NE/4 of Section 20 in the South Blanco-Pictured Cliffs Pool, the applicant is hereby authorized to utilize the deliverability of either the Rincon Unit Well No. 254 or the Rincon Unit Well No. 52, whichever deliverability is greater.

(4) Jurisdiction is hereby 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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