

**EXHIBIT 6**

STATE OF NEW MEXICO  
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT  
OIL CONSERVATION COMMISSION

IN THE MATTER OF THE HEARING  
CALLED BY THE OIL CONSERVATION  
COMMISSION OF NEW MEXICO FOR  
THE PURPOSE OF CONSIDERING:

CASE NO. 9764 De Novo  
CASE NO. 9765 De Novo  
Order No. R-9037-A

APPLICATION OF MERIDIAN OIL, INC. FOR A  
HIGHLY-DEVIATED DIRECTIONAL DRILLING PILOT  
PROJECT, UNORTHODOX GAS WELL LOCATION AND  
AN EXCEPTION TO RULE 2(b) OF THE SPECIAL  
RULES GOVERNING THE BLANCO-MESAVERDE POOL,  
SAN JUAN COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9:00 A.M. on February 15, 1990, at Santa Fe, New Mexico, before the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission."

NOW, on this 22nd day of March, 1990, the Commission, a quorum being present, having considered the testimony presented and the exhibits received at said hearing, and being fully advised in the premises,

FINDS THAT:

(1) Due public notice having been given as required by law, the Commission has jurisdiction of this cause and the subject matter thereof.

(2) Commission case No. 9764 (de novo) and 9765 (de novo) were consolidated at the time of the hearing for the purpose of testimony, and upon motion of the applicant the records of cases 9764 and 9765 heard before Examiner David R. Catanach on September 20, 1989, were incorporated into the record in this case.

(3) The applicant has applied to the Commission for de novo hearing solely on the question of the allowable to be assigned to the proration unit in each case on which the applicant proposes to drill a highly deviated well.

(4) Based upon the record made before the examiner and the additional evidence presented before the Commission, Finding paragraphs (1) through (12) and (16) through (19) of Order R-9037 are incorporated herein by reference and adopted as findings of the Commission.

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(5) The applicant proposed in this hearing that the deliverability used to calculate the allowable for the proration unit be determined by multiplying the deliverability of the proposed highly-deviated wellbore by two, with the maximum allowable for the proration unit being no greater than the highest allowable for any proration unit in the Blanco-Mesa Verde Pool with the same acreage factor.

(6) Amoco Production Company appeared in opposition to the applicant, opposing only the proposed method of determining deliverability for the unit. Amoco proposed that the deliverability be determined in a similar manner to any other proration unit: by adding the deliverability of two of three wells in the proration unit.

(7) The procedure utilized by the Division to determine deliverability for three vertical well proration units in the Blanco-Mesa Verde Pool is to allow the operator to take the deliverability of the better of the two wells in one of the quarter sections and add it to the deliverability of the well in the other quarter section.

(8) The applicant presented evidence supporting the need for an incentive in the form of a higher allowable which would enable it to expend additional risk capital in the hopes of developing increased gas productivity from the proposed deviated well.

(9) Applicant's technical witnesses testified that the proposed highly-deviated wellbore was not likely to impair correlative rights of offset tracts because the theoretical drainage radius of the proposed well resembles a cylinder and would drain longitudinally through the entire proration unit instead of vertically.

(10) The applicant is the operator of unitized areas in the Blanco-Mesa Verde Pool in which it could have drilled the highly-deviated wells on proration units offset only by other unitized proration units, but it selected the subject proration unit because it is owned 100% by the applicant and does not require partnership approval for investment in the project and because the deviated well could replace an older less efficient well.

(11) Findings (13) through (15) of Division Order R-9037 were based upon a sound interpretation by the examiner of the existing rules regarding the determination of deliverabilities, but that reasoning did not provide an incentive for the applicant to undertake a pilot project which is considerably more expensive than conventional vertical drilling and which also offers the possibility of greater deliverability and ultimate recoveries of oil and gas.

(12) The applicant should be permitted to determine the deliverability factor for the proration unit by adding the deliverabilities of any two wells on the proration unit, in accordance with the options granted other operators in the field.

(13) Provided the proposed highly deviated wellbore produces from both quarter-sections within the proration unit, the operator should be permitted to add the deliverability of that well to the deliverability of either of the other wells

within the proration unit to determine the deliverability factor. If the proposed deviated well does not produce from both quarter-sections, then the deliverability factor should be determined in the conventional manner.

**IT IS THEREFORE ORDERED THAT:**

(1) Decretory paragraphs (1) through (7) of Oil Conservation Division Order R-9037 are incorporated herein by reference and adopted as a part of this order.

(2) The deliverability of the subject gas proration unit, for the purpose of calculating gas allowable, shall be determined as follows:

- (a) If the highly-deviated wellbore is completed in and produces from both quarter-sections in the proration unit, the sum of the deliverability of the deviated well plus the deliverability of either of the vertical wells shall be utilized; or
- (b) If the highly-deviated wellbore is not completed in and producing from both quarter-sections in the proration unit, the sum of the deliverability of the deviated well must be added to the deliverability of a vertical well in the other quarter section of the proration unit; or
- (c) Utilize the sum of the deliverabilities of the two existing vertical wellbores;

whichever method results in the higher calculated deliverability for the proration unit.

(3) Jurisdiction of this cause is retained for the entry of further orders as the Commission may deem necessary.

STATE OF NEW MEXICO  
OIL CONSERVATION COMMISSION

WILLIAM R. HUMPHRIES, Member

*William W. Weiss*

WILLIAM W. WEISS, Member

*William J. Lema*

WILLIAM J. LEMAY, Chairman  
& Secretary

dr/

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. 10843  
Order No. R-10000

APPLICATION OF MERIDIAN OIL INC.  
FOR A HIGH ANGLE/HORIZONTAL DIRECTIONAL  
DRILLING PILOT PROJECT, AN UNORTHODOX  
OIL WELL LOCATION, A NON-STANDARD OIL  
PRORATION UNIT, A SPECIAL PROJECT  
ALLOWABLE, AND SPECIAL OPERATING RULES  
THEREFOR, SAN JUAN COUNTY, NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 8:15 a.m. on October 7, 1993, at Santa Fe, New Mexico, before Examiner David R. Catanach.

NOW, on this 25th day of October, 1993, 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, Meridian Oil Inc., seeks authority to initiate a high angle/horizontal directional drilling pilot project in the Gallup formation, Undesignated Horseshoe-Gallup Oil Pool, underlying the E/2 of Section 18, Township 30 North, Range 15 West, NMPM, San Juan County, New Mexico.

(3) The applicant further seeks authority to drill its Black Diamond Com "18" Well No. 1 from a standard surface location 330 feet from the North line and 2265 feet from the East line (Unit B) of Section 18 in the following unconventional manner:

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Drill vertically to a depth of approximately 4,120 feet and analyze pay zone. Plug back to a depth of approximately 3,472 feet and kick off from the vertical at this depth drilling in a southeasterly direction building angle to approximately 87 degrees. Penetrate the top of the "Waterflow" zone of the Niobrara member of the Gallup formation at a true vertical depth of approximately 3,950 feet. Continue drilling laterally a distance of approximately 3,550 feet and bottom said wellbore no closer than 330 feet from the outer boundary of the project area.

(4) The applicant further seeks:

a) the adoption of special operating provisions and rules within the pilot project area including the designation of a prescribed area limiting the horizontal displacement of said well's producing interval such that it can be no closer than 330 feet from the outer boundary of the project area.

b) approval of a 320-acre non-standard oil proration unit comprising the E/2 of Section 18.

c) a special project allowable equal to the standard depth bracket allowable for the Horseshoe-Gallup Oil Pool (80 BOPD) times the number of standard 40-acre proration units contacted by the subject wellbore.

(5) The subject well is located within one mile of the outer boundary of the Horseshoe-Gallup Oil Pool which is currently governed by General Statewide Rules and Regulations, including standard 40-acre oil spacing and proration units with wells to be located no closer than 330 feet from the outer boundary of the proration unit, a gas-oil ratio limitation of 2,000 cubic feet of gas per barrel of oil, and a daily oil and gas allowable of 80 barrels and 160 MCFG, respectively.

(6) The Niobrara member of the Gallup formation is the potentially productive zone within the pilot project area and is

characterized by low permeability and interconnected fracture systems.

(7) Vertical wells drilled to the Niobrara member in this area seldom intersect significant natural fractures, and as a result, they are not generally commercially successful.

(8) Through its evidence and testimony, the applicant demonstrated that the proposed horizontal wellbore should encounter a substantially greater number of natural fractures within the Niobrara member of the Gallup formation than would a conventional wellbore, which should substantially increase the productivity of the subject well and which should ultimately result in the recovery of a greater amount of oil and gas from the proposed project area, thereby preventing waste.

(9) According to applicant's testimony, the proposed project area is comprised of two separate Federal leases.

(10) According to further testimony, the interests within the proposed project area will be voluntarily consolidated by virtue of a communitization agreement.

(11) No offset operator and/or interest owner appeared at the hearing in opposition to the application.

(12) In the interest of conservation and prevention of waste, the application of Meridian Oil Inc. for a high angle/horizontal directional drilling project, non-standard oil proration unit, unorthodox oil well location, special project allowable and special operating rules therefor should be approved.

(13) According to applicant's evidence and testimony, the subject well, if drilled as proposed, should traverse five standard 40-acre proration units within the project area. The subject well and project area should tentatively be assigned an oil allowable of 400 barrels of oil per day, provided however, such allowable may be administratively adjusted by the Division Director based upon the results of the directional survey performed on the subject well.

(14) The applicant should be required to determine the actual location of the kick-off point prior to commencing directional drilling operations. Also, the applicant should be required to conduct a directional survey on the lateral portion of the wellbore during or after completion of drilling operations.

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(15) The applicant should notify the supervisor of the Aztec district office of the Division of the date and time of conductance of any directional surveys in order that the same may be witnessed.

(16) The applicant should be required to submit copies of all directional surveys conducted on the subject well to both the Santa Fe and Aztec offices of the Division.

IT IS THEREFORE ORDERED THAT:

(1) The applicant, Meridian Oil Inc., is hereby authorized to initiate a high angle/horizontal directional drilling pilot project in the E/2 of Section 18, Township 30 North, Range 15 West, NMPM, Undesignated Horseshoe-Gallup Oil Pool, San Juan County, New Mexico, by drilling its Black Diamond Com "18" Well No. 1 from a standard surface location 330 feet from the North line and 2265 feet from the East line (Unit B) of Section 18, in the following unconventional manner:

Drill vertically to a depth of approximately 4,120 feet and analyze pay zone. Plug back to a depth of approximately 3,472 feet and kick off from the vertical at this depth drilling in a southeasterly direction building angle to approximately 87 degrees. Penetrate the top of the "Waterflow" zone of the Niobrara member of the Gallup formation at a true vertical depth of approximately 3,950 feet. Continue drilling laterally a distance of approximately 3,550 feet and bottom said wellbore no closer than 330 feet from the outer boundary of the project area.

PROVIDED HOWEVER THAT, no portion of the horizontal portion of the wellbore shall be located closer than 330 feet from the outer boundary of the project area.

(2) The E/2 of Section 18 shall be dedicated to the above-described well forming a non-standard 320-acre oil spacing and proration unit, also hereby approved.

(3) The subject well and project area are hereby assigned an oil allowable of 400 barrels of oil per day, provided however, such allowable may be administratively adjusted by the Division Director



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based upon the results of the directional survey performed on the subject well.

(4) The applicant shall determine the actual location of the kick-off point prior to commencing directional drilling operations. Also, the applicant shall conduct a directional survey on the lateral portion of the wellbore during or after completion of drilling operations.

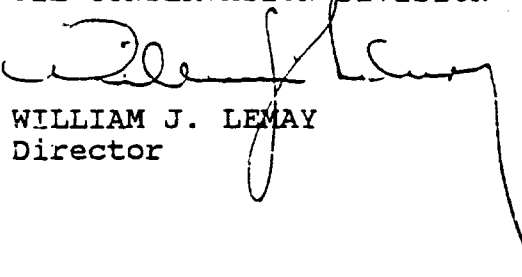
(5) The applicant shall notify the supervisor of the Aztec district office of the Division of the date and time of conductance of any directional surveys in order that the same may be witnessed.

(6) The applicant shall submit copies of all directional surveys conducted on the subject well to both the Santa Fe and Aztec offices of the Division.

(7) Jurisdiction of this cause 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

S E A L

# BLACK DIAMOND COM #18-1 NW/NE 18-T30N-R15W

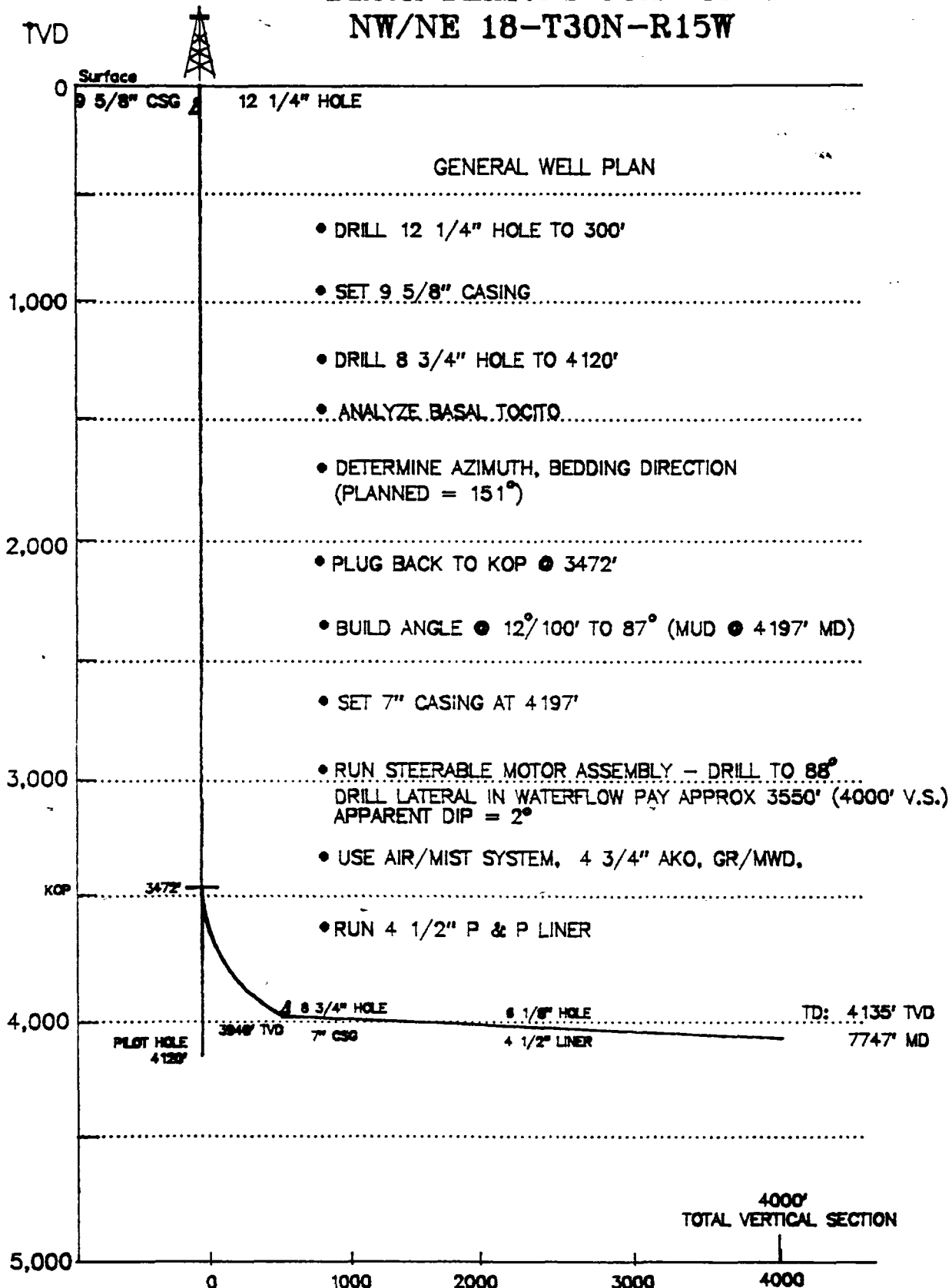


FIGURE #1