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FILE 10702

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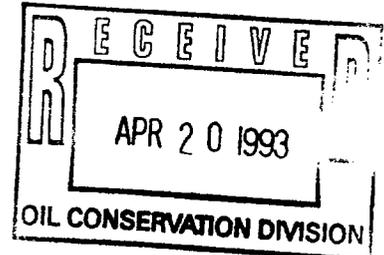
*NEW MEXICO BOARD OF LEGAL SPECIALIZATION
RECOGNIZED SPECIALIST IN THE AREA OF
NATURAL RESOURCES-OIL AND GAS LAW

JASON KELLAHIN (RETIRED 1991)

April 19, 1993

David Catanach
Hearing Examiner
Oil Conservation Division
310 Old Santa Fe Trail
Room 219
Santa Fe, New Mexico 87501

HAND DELIVERED



RE: Application of Meridian Oil, Inc. for a high angle/horizontal directional drilling pilot project including special operation rules, an unorthodox gas well location and a non-standard gas spacing unit, San Juan County, New Mexico NMOCD Case No. 10702.

Dear Mr. Catanach:

On behalf of Meridian Oil, Inc. please find enclosed our Proposed Order of the Division for the above-referenced case. We have also enclosed a floppy disk with this order on it for your use.

If you have questions or require anything else with regard to this matter, please call.

Very truly yours,

A handwritten signature in black ink, appearing to read "W. Thomas Kellahin".

W. Thomas Kellahin

WTK/jcl
Enclosures
xc: Alan Alexander
Meridian Oil, Inc.

ltr419.330

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. 10702
ORDER NO. R-

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

MERIDIAN OIL INC.'S PROPOSED
ORDER OF THE DIVISION

BY THE DIVISION:

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

NOW, on this _____ day of April, 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 Barker Creek Paradox
(Pennsylvanian) Gas Pool, including special operating
rules, a non-standard 1280-acre gas spacing unit

Case No. 10702
Order No. R-
Page No. 2

consisting of all of Sections 15 and 16, T32N, R14W, NMPM, San Juan County, New Mexico, including an unorthodox gas well location for its Ute #8 Well to be re-entered at its existing unorthodox surface location being 1750 feet FSL and 950 feet FWL (Unit L) of Section 15 and drilling in the following unconventional manner:

Prepare the well by pulling the existing tubing and cleaning-out the well to 7800 feet, squeezing the existing Paradox perforations from 8032 feet to 8216 feet milling a section from 7650 feet to 7710 feet, setting a cement kickoff plug from 7650 feet to 7900 feet and dressing off the cement plug to the kickoff point of 7680 feet. Kick off in a northwesterly direction building angle to approximately 80 to 89 degrees inclination. Penetrate the top of the Upper Ismay member of the Pool at an estimated vertical depth of approximately 8630 feet. Continue drilling horizontally a distance of approximately 2266 feet bottoming said wellbore no closer than 990 feet from the northern boundary of the project area. The Well will be stimulated and completed for production by the installation of a pre-perforated and plugged liner.

- (3) 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 990 feet to the north outer boundary and no closer than 1650 feet to the east, south and west outer boundaries of the proposed 1280-acre spacing,
 - b) a special project allowable which will allow the Ute # 8 Well to be produced concurrently with the existing Ute #12 Well located in Unit F of Section 16, and

(c) approval of a 1280-acre non-standard gas spacing and proration unit in the Ismay formation of the Pool comprising all of said Section 15 and Section 16 to be dedicated to the well.

(5) The proposed high angle/horizontal pilot project is within the boundaries of the Barker Cree-Paradox (Pennsylvanian) Gas Pool ("Pool") which was established by Order R-13 issued March 15, 1950 and extended by Order R-6421 dated August 1, 1980.

(6) On November 21, 1950, the Oil Conservation Commission issued Order R-46 which established 640-acre spacing units.

(7) With the exception of the W/2 of Section 19 which is unleased and owned by the Ute Mountain Ute Tribe, Meridian Oil Inc. controls 100% of the operating rights in the Pool with 100% of the royalty being owned by the Ute Mountain Ute Tribe.

(8) Because of the common ownership among the project area and the offsetting spacing units, there is no issue concerning correlative rights.

(9) The Ismay Member of the Pennsylvanian formation in this area of the Pool is the potential productive zone in the proposed project area. It is characterized as a tight, low permeability carbonate reservoir.

(10) By drilling a high angle/horizontal wellbore, the applicant is attempting to increase the ultimate recovery from this low permeability reservoir(s) while reducing the costs involved thereby preventing waste.

(11) In support of its requested non-standard spacing unit and special project allowable, the applicant presented drilling cost estimates of \$ 750,000 dollars for this proposed re-entry as compared to conventional vertical well costs in the ranges of \$ 1,414,000 dollars.

Case No. 10702
Order No. R-
Page No. 4

(12) Although it has been the Division's practice not to allow the simultaneous production of multiple gas wells in the same spacing unit in non-prorated gas pool, the requested special project allowable is justified in this case for the following reasons:

(a) The Ute #12 Well is producing from the Barker Creek Member of the Pool which is lower than the Ismay Member and therefore the Ute #12 Well and the Ute #8 Well each will be producing from substantially different portions of the pool.

(b) That neither well will be affecting the drainage area of the other and both wells are necessary in order to adequately recover the gas underling the project area.

(c) Estimates of the effective drainage area for the Ute #8 Well is substantially less than 640 acres.

(d) Approval of the application will provide an opportunity for the applicant to obtain reservoir data from which to determine the appropriate method for further development of the pool including any modifications to current pool rules.

(e) A special project allowable will encourage the application of this technology to this formation for the possible recovery of hydrocarbons that might not otherwise be recovered thereby preventing waste.

(13) The applicant provided proper notice to all affected parties and no party appeared in opposition to this application. The granting of this application as requested will not adversely affected any interest owners nor will it impair correlative rights.

(14) Limiting the horizontal displacement of the wellbore to not closer than 990 feet to the north boundary and not closer than 1650 feet to the east, west and south boundaries of the spacing unit will allow for operational and drilling flexibility, serve to minimize risk, maximize the success of such a completion and encourages further development of the Pool.

Case No. 10702
Order No. R-
Page No. 5

(15) In the interest of conservation and the prevention of waste, the application of Meridian Oil Inc. for this high angle/horizontal well project should be approved.

(16) The applicant should be required to determine the actual location of the kick-off point prior to commencement of 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 in order that the same may be witnessed.

(17) 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 well 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 Meridian Oil, Inc. for a high angle/horizontal directional drilling pilot project in the Ismay member of the Paradox formation underlying all of Section 15 and Section 16 Township 32 North, Range 14 West, NMPM, San Juan County, New Mexico is hereby approved.

(2) The applicant is further authorized to re-enter and recomplete its Ute #8 Well located at an unorthodox surface location in the Unit L of Section 15 in the unconventional manner as described in Finding Paragraph No. (2) of this order.

(3) The lateral extent of the horizontal wellbore shall be such that the producing interval be limited to an area which extends no closer than 990 feet to the north outer boundary and no closer than 1650 feet from the east, south and west outer boundaries of the spacing and proration unit.

Case No. 10702
Order No. R-
Page No. 6

(4) The all of Section 15 and Section 16 comprising 1280 acres is hereby approved as a non-standard gas spacing and proration unit.

(5) The applicant is authorized to produce its Ute # 8 Well concurrently with the existing Ute #12 Well located in Unit F of Section 16.

(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 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 to 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.

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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