MERIDIAN OIL INC.

BLACK DIAMOND COM 18 #1 CASE #10843

OCTOBER 7, 1993

EXHIBIT 1: APPLICATION

EXHIBIT 2: OFFSET OPERATOR'S PLAT

EXHIBIT 3: DIRECTIONAL WELL PLAN

EXHIBIT 4: BLOCK DIAGRAM

EXHIBIT 5: STUCTURE MAP

NET PAY ISOPACH

EXHIBIT 6: WELL PLAN

EXHIBIT 1

KELLAHIN AND KELLAHIN

ATTORNEYS AT LAW

EL PATIO BUILDING

117 NORTH GUADALUPE POST OFFICE BOX 2265

SANTA FE, NEW MEXICO 87504-2265

JASON KELLAHIN (RETIRED 1991)

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

W. THOMAS KELLAHIN*

September 13, 1993

TELEPHONE (505) 982-4285 TELEFAX (505) 982-2047



Mr. William J. LeMay Oil Conservation Division State Land Office Building 310 Old Santa Fe Trail, 2nd Floor Santa Fe, New Mexico 87501

Re: Black Diamond Com. 18 No. 1 Well Application of Meridian Oil Inc. for a High Angle/Horizontal Direction Drilling Pilot Project, Special Operating Rules Therefor, including A Non-Standard Oil Proration Unit, and An Unorthodox Oil Well Location, and A Special Project Allowable, San Juan County, New Mexico

G oil combernistion t

Dear Mr. LeMay:

On behalf of Meridian Oil Inc., please find enclosed our Application for a High Angle/Horizontal Direction Drilling Pilot Project as referenced above, which we request be set for hearing on the next available Examiner's docket now scheduled for October 7, 1993.

By copy of this letter and application, sent certified mail, we are notifying all interested parties within a 1/2 mile radius of the subject well of their right to appear at the hearing and participate in this case, including the right to present evidence either in support of or in opposition to the application and that failure to appear at the hearing may preclude them from any involvement in this case at a later date.

Mr. William J. LeMay September 13, 1993 Page Two

:5

Pursuant to the Division's Memorandum 2-90, all parties are hereby informed that if they appear in this case, then they are requested to file a Pre-Hearing Statement with the Division not later than 4:00 PM on Friday, August 27, 1993, with a copy delivered to the undersigned.

Also enclosed is our proposed advertisement of this case for the NMOCD docket.

Very truly yours

W. Thomas Keliahin

WTK/mg Enclosure

cc: Mr. John Zent
Meridian Oil Inc.
Post Office Box 4289
Farmington, New Mexico 87499-4289

By Certified Mail - Return Receipt
All Parties Listed on Exhibit "C" of Application

PROPOSED ADVERTISEMENT

4

CASE Application of Meridian Oil Inc. for a high angle/horizontal directional drilling pilot project and special operating rules therefor, San Juan County, New Applicant seeks to initiate a horizontal drilling project in the Gallup formation, Horseshoe Gallup Oil Pool, underlying the E/2 of Section 18, T30N, R15W. Applicant proposes to drill its Black Diamond Com 18 No 1 Well by commencing at a standard well location in Unit B of Section 18, then kicking-off from vertical in a southeasterly direction commencing to build angle at an appropriate rate to vertically and horizontally traverse the proposed producing area. Applicant further seeks the adoption of special operating provisions and rules within the project area including the designation of a target window such that the horizontal or producing portion of the wellbore shall be no closer than 330 feet to any boundary of a non-standard spacing and proration unit consisting of the E/2 of said Section 18, and for a special project allowable. Said project is located approximately 4-1/2 miles north-northeast from Waterflow, New Mexico.

| 993

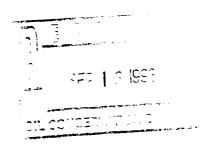
STATE OF NEW MEXICO

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:

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

CASE:



APPLICATION

Comes now Meridian Oil Inc., by and through its attorneys, Kellahin and Kellahin, and applies to the New Mexico Oil Conservation Division for approval for a High Angle/Horizontal Direction Drilling Pilot Project, special operating rules therefor, including a non-standard oil proration unit, and an unorthodox oil well location and a special project allowable for its Black Diamond Com 18 No 1 Well to be drilled at a standard surface well location 330 feet FNL and 2265 feet FEL (Unit B) of Section 18, T30N, R15W, within the Horseshoe

Gallup Oil Pool, San Juan County, New Mexico and in support thereof states:

- (1) Applicant is the proposed operator for this well in Section 18, T3ON, R15W, NMPM, San Juan County, New Mexico.
- (2) Applicant proposes to drill a high angle/horizontal directional well commencing at a standard surface location in Unit B of Section 18 estimated to be 330 feet FNL and 2265 feet FEL of said Section 18 and drilled vertically to a total depth of approximately 3670 feet (+ or 100 feet) at which point the applicant will kick the well off in a southeastern direction as approximated on Exhibit A, attached.
- (3) Applicant will dedicate the E/2 of Section 18 to the well.
- (4) The kickoff point for the well is estimated to be 3670 feet, at which point applicant will commence to build an angle of 17 degrees per 100 feet to approximately

80 degrees and penetrate the Horseshoe Gallup Oil Pool at an estimated total vertical depth of 4090 feet, and then to continue to build angle to 90 degrees and thence drilling horizontally in a lateral distance not closer than 330 feet to the outer boundaries of the 320-acre spacing and proration unit. See Exhibits "A," and "B."

- (5) Applicant proposes that this project be subject to Special Rules and Regulations as follows:
 - (a) Pool Name: Horseshoe Gallup Oil Pool,
- (b) Spacing/Proration Unit: 320 acres being a non-standard unit consisting of the E/2 of Section 18 described above, and a
- (c) Special Allowable based upon the number of 40-acre tracts contacted by the wellbore as determined from directional surveys.
- (6) The Waterflow interval of the Gallup is believed to be the potential productive zone at this location in the Horseshoe Gallup Oil Pool. This interval produces through intergranular permeability.

- (7) Past experience in said pool has shown that unless a conventionally drilled (vertical) well intersects natural fractures, the chance of obtaining commercial production is severely curtailed.
- (8) By drilling a high angle/horizontal wellbore, the applicant is attempting to increase the probability of encountering several of these fractures, which may ultimately result in the recovery of a greater amount of gas and oil, thereby preventing waste.
- (9) In as much as the exact distance and direction of the lateral portion of the wellbore is not known at this time, the Applicant seeks approval to be allowed to drill and produce said lateral portion anywhere within an area designated a target window as follows: commencing at a distance not closer than 330 feet from any of the side boundaries of the proposed spacing unit so that within the drilling window no portion of the wellbore open for production shall be closer than 330 feet to the outer boundary of the spacing unit.

١.,

(10) As required, notice is provided to those offsetting operators as listed on Exhibit "C."

(11) The granting of this Application will be in the best interest of conservation, the prevention of waste and the protection of correlative rights.

WHEREFORE, Applicant requests that this matter be set for hearing on October 7, 1993 before a duly appointed Examiner of the Oil Conservation Division and, after notice and hearing as required by law, the Division enter its Order granting this application.

Respectfully submitted,

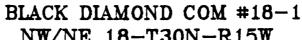
KELLAHIN and KELLAHIN

W. Thomas Kellahin Post Office Box 2265

Santa Fe, New Mexico 87504

(505) 982-4285

Attorneys for Applicant



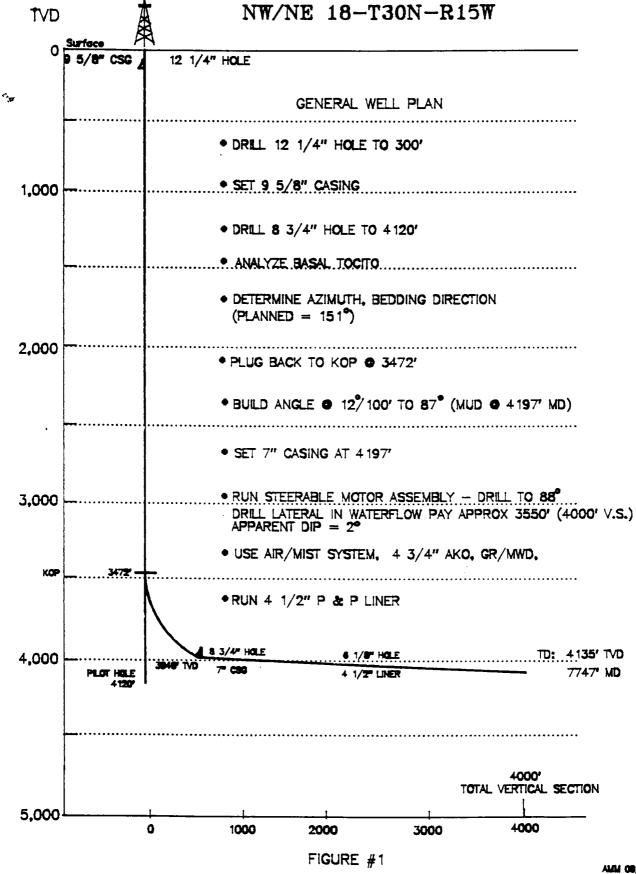


Exhibit A

AMM 09/09/93

BLACK DIAMOND COM 18-1 SEC 18, T30N-R15W

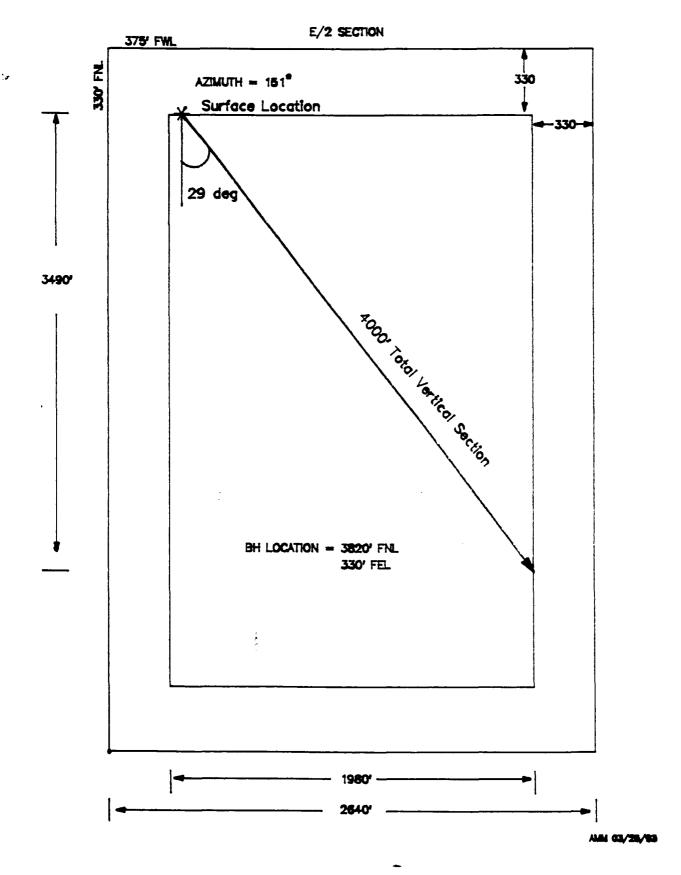


Exhibit B

E/2 TOWNSHIP 30 NORTH, RANGE 15 WEST San Juan County, New Mexico

Black Diamond Com 18 #1

	2 2 2 3	3 3 3	
40	2 2 2 3		
12	2 3 7 3	3 2 2 2	2
	2 3 2 3	2 2 2 2	2
	2 2 2 2	1	
13	2 2 2 2 2 18	7	
13	1 1 1 2		
	1 1 1 1	1	
	1		1
24			
24	19	3//	
	1	1	

1.) Meridian Oil Inc., P.O. Box 4289, Farmington, NM 87499-4289

MOI Partners

Morgan Energy Corp., 1999 Broadway, Suite 2450, Denver, CO 80202

Oxford Exploration, P.O. Box 37390, Denver, CO 80237

- 2.) Yates Petroleum Corporation et al, P.O. Box 818, Artesia, NM 88211-0818
- 3.) EP Operating Company, 4849 Greenville, Ave., Suite 1200, Dallas, TX 75206