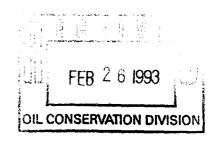
# STATE OF NEW MEXICO ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT OIL CONSERVATION DIVISION

IN THE MATTER OF THE HEARING CALLED BY THE OIL CONSERVATION DIVISION FOR THE PURPOSE OF CONSIDERING:

CASE NO. 10680

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



### PRE-HEARING STATEMENT

This pre-hearing statement is submitted by MERIDIAN OIL INC. as required by the Oil Conservation Division.

## APPEARANCE OF PARTIES

APPLICANT

Meridian Oil Inc. P.O. Box 4289 Farmington, NM 87499 ATTN: Alan Alexander ATTORNEY

W. Thomas Kellahin KELLAHIN and KELLAHIN P.O. Box 2265 Santa Fe, NM 87504 (505) 982-4285

OPPOSITION OR OTHER PARTY

**ATTORNEY** 

N/A

Pre-Hearing Statement Case No. 10680 Page 2

#### STATEMENT OF CASE

#### APPLICANT

Applicant, Meridian Oil Inc. ("Meridian"), seeks to initiate a high angle/horizontal directional drilling pilot project in the Gavilan-Mancos Oil Pool underlying all of Section 8, Township 26 North, Range 2 West, being a standard 640-acre spacing and proration unit for said pool. The Applicant proposes to drill its Cheney Federal B Well No. 2 from an unorthodox surface location 1650 feet from the South line and 990 feet from the West line (Unit L) of said Section 8, kick off from vertical in a southeasterly direction commencing to build angle at an appropriate rate to vertically and horizontally traverse the proposed producing areas. Meridian further seeks the adoption of special operating provisions and rules within the pilot project area including the designation of a target window such that the horizontal or producing portion of the wellbore shall be no closer than 790 feet to the boundary of the spacing unit.

OPPOSITION OR OTHER PARTY

N/A

Pre-Hearing Statement Case No. 10680 Page 3

### PROPOSED EVIDENCE

## **APPLICANT**

EST. TIME	EXHIBITS
20 Minutes	3-4 Exhibits
20 Minutes	3 Exhibits
10 Minutes	2 Exhibits
	20 Minutes 20 Minutes

## **OPPOSITION**

EST. TIME **EXHIBITS** WITNESSES

SEE OPPOSITION FILING, IF ANY

## PROCEDURAL MATTERS

None applicable at this time.

KELLAHIN AND KELLAHIN

W. Thomas Kellahin

P.O. Box 2265

Santa Fe, New Mexico 87504

(505) 982-4285

ATTORNEYS FOR APPLICANT

## KELLAHIN AND KELLAHIN

#### ATTORNEYS AT LAW

EL PATIO BUILDING

117 NORTH GUADALUPE

POST OFFICE BOX 2265

SANTA FE, NEW MEXICO 87504-2265

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

OIF CONSERVATION DIVISION

FFB

RECOGNIZED SPECIALIST IN THE AREA OF NATURAL RESOURCES-OIL AND GAS LAW

JASON KELLAHIN (RETIRED 1991)

\*NEW MEXICO BOARD OF LEGAL SPECIALIZATION

W. THOMAS KELLAHIN\*

February 8, 1993

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

Re: Cheney Federal B #2 Well
Sec 8, T26N, R2W, NMPM.
Application of MERIDIAN OIL INC.
for a High Angle/Horizontal Directional
Drilling Pilot Project, including Special
Operating Rules, and An Unorthodox Oil Well
Location, Gavilan-Mancos Pool,
Rio Arriba County, New Mexico

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 March 4, 1993.

By copy of this letter and application, sent certified mail, we are notifying all interested parties offsetting the subject well and its proposed spacing and proration unit 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.

Our proposed advertisement to be used for the OCD docket and for the newspaper publication is also enclosed. See Enclosure (1).

In accordance with Division Memorandum 2-90, parties who may appear in this case are hereby requested to file a Pre-Hearing Statement with the Division, copy to the Applicant's attorney, not later than 4:00 PM on Friday, February 26, 1993. A copy of the Pre-Hearing form is

10650

HAND DELIVERED

Mr. William J. LeMay February 8, 1993 Page Two

attached as Enclosure (2) and is being sent to those required to receive notice as set for in the Application.

very crack yours

W. Thomas Kellahin

WTK/jcl Enclosures

cc: With Enclosures

Meridian Oil Inc.

Farmington, New Mexico

By Certified Mail - Return Receipt

All Parties Listed on Exhibit "B" of Application with Enclosure (2)

appt205a.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.: 10680

APPLICATION OF MERIDIAN OIL INC. FOR A HIGH ANGLE/HORIZONTAL DIRECTIONAL DRILLING PILOT PROJECT INCLUDING SPECIAL OPERATING RULES, AND AN UNORTHODOX OIL WELL LOCATION, RIO ARRIBA COUNTY, NEW MEXICO

#### 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 Directional Drilling Pilot Project in the Niobrara ("Gallup") formation of the Gavilan-Mancos Oil Pool, including Special Operating Rules, and a standard 640 acre spacing and proration unit consisting of all of Section 8, T26N, R2W, NMPM, Rio Arriba County, New Mexico, including an Unorthodox Oil Well Location for its Cheney Federal B #2 Well to be drilled at an unorthodox surface location 990 feet FWL and 1650 feet

FSL (Unit L) of said Section 8. Applicant further seeks special rules and provision within the pilot project area including the designation of a prescribed area limiting the horizontal displacement of the wellbore such that its producing interval be no closer than 790 feet to the outer boundaries of the spacing unit. In support the Applicant states:

- (1) Applicant is the operator of all of Section 8, T26N, R2W, NMPM, Rio Arriba County, New Mexico.
- (2) Applicant has previously drilled its Cheney Federal B No. 1 Well located in Unit A of said Section 8 which is currently completed in the Gavilan Mancos Oil Pool.
- (3) Applicant proposes to drill a second well in said Section 8, (the Cheney Federal B #2 Well), and attempt to complete it as a high angle/horizontal directional well in the Gavilan Mancos Oil Pool by drilling vertically to the kickoff point at approximately 6663 feet. At that point, the Applicant will select a target point within the drilling-producing window established for the well and then kick off the well in an estimated northeasterly direction and commence to

building angle at an appropriate rate which will reach the target point such that the producing interval of the well will be within the drilling-producing window from the top of the Niobrara B zone to the base of the Niobrara C zone. A copy of Applicant's preliminary projection of a horizontal plan for the subject well are attached as Exhibit "A."

- (4) The drilling-producing window is identified as the area within Section 8 which shall be no closer than 790 feet to the outer spacing unit boundary. See Exhibit "A."
- (5) The target point is defined at the actual bottom hole location at the end point of the lateral of the subject well.
- (6) The Niobrara interval of Gavilan-Mancos Oil Pool is characterized by tight, low permeability blocks interconnected by a high capacity fracture system. That interval is the potential productive zone in this section and is anticipated to contain numerous fractures with orientations in a north-south direction and good permeability associated with the fractures.

- (7) The well is located within the Gavilan-Mancos Oil Pool and therefore is subject to the special rules and regulations for said pool as promulgated by Division Order R-7407, as amended by Order R-7407-F entered August 5, 1988, which among other things require:
- (a) Rule 2(a): provides for 640-acre spacing and proration units with optional second well located in another quarter section from original well and not less than 1650 feet from said original well;
- (b) Rule 4: provides that wells shall not be located nearer than 790 feet from the outer boundary of the proration unit nor closer than 330 feet to a quarter-quarter section line; and
- (c) Decretory paragraph (2) of Order R-7407-F provides that a 640 acre spacing and proration unit shall have an oil allowable of 800 BOPD and a limiting gas oil ratio of 2000 cubic feet of gas per barrel of oil.
- (8) While the producing interval of the well will be no closer than 790 feet to the outer boundary of the spacing unit and will be farther than 1650 feet from the first well in the spacing unit, it will be closer than 330 feet to a quarter-quarter section line within the

interior of the spacing unit and therefore an unorthodox well location is necessary.

- (9) Past experience in the Niobrara formation has shown that unless a conventionally drilled (vertical) well intersects natural fractures, the chance of obtaining commercial production is severely curtailed.
- (10) 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.
- (11) 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 the drilling-producing window.
- (12) As required by Division notice rules, notice is provided to those offsetting operators as listed on Exhibit "B."
- (13) 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 March 4, 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

By:

W. Thomas Kellahin Post Office Box 2265

Santa Fe, New Mexico 87504

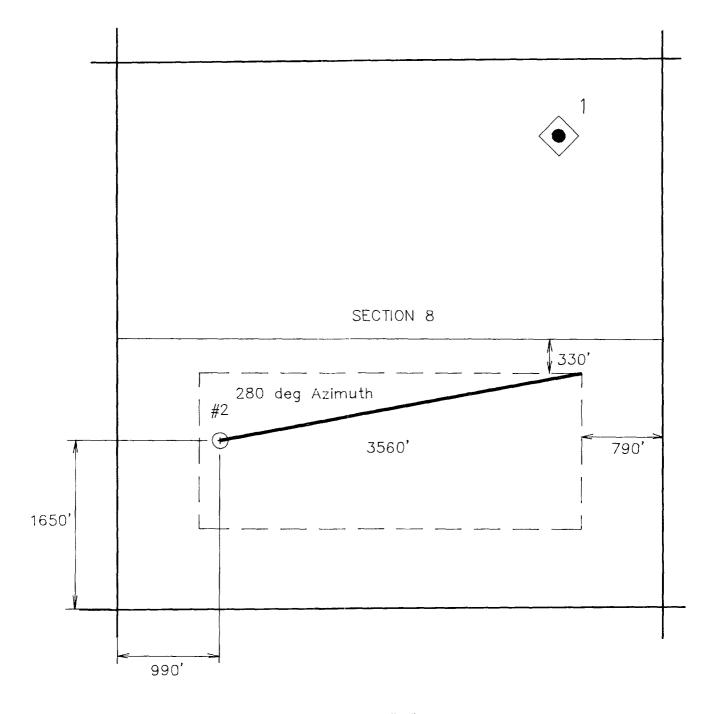
(505) 982-4285

Attorneys for Applicant

appt205a.330

# MERIDIAN OIL Cheney Fed.'B' No. 2 Sec. 8, T26N-R2W

Rio Arriba Co., N.M. 1650' FSL, 990' FWL



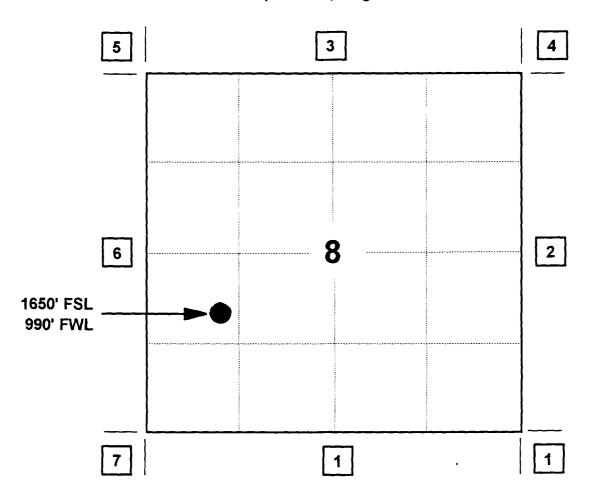
## **MERIDIAN OIL INC**

## OFFSET OPERATOR \ OWNER PLAT

## **CHENEY FEDERAL B #2**

## **Gavilan-Mancos Horizontal Well**

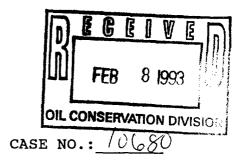
Township 26 North, Range 02 West



1) Meridian Oil Inc		
2) MW Petroleum Corp.	2000 Post Oak Blvd, Houston, TX 77056	
3) Meridian Oil Inc &		
W M Gallaway	3005 Northridge Dr., Suite I, Farmington, NM 87401	
4) Meridian Oil Inc, W M Gallaway &		
Ominex Petrolemn Inc.	8055 E. Tufts, #1060, Denver, CO 80237	
5) Meridian Oil Inc. Mw Petroleum Corp	0, &	
McHugh Companies	650 S. Cherry St., Suite 1225, Denver, CO 80222	
6) Meridian Oil Inc. McHugh Companies	s &	
Merrion Oil & Gas Corp.	PO Box 7871, Farmington, NM 87499	
7) Meridian Oil Inc & Merrion Oil & Gas Corp.		
EX	HIBIT "B"	

# 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 DIRECTIONAL DRILLING PILOT PROJECT INCLUDING SPECIAL OPERATING RULES, AND AN UNORTHODOX OIL WELL LOCATION, RIO ARRIBA COUNTY, NEW MEXICO

#### 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 Directional Drilling Pilot Project in the Niobrara ("Gallup") formation of the Gavilan-Mancos Oil Pool, including Special Operating Rules, and a standard 640 acre spacing and proration unit consisting of all of Section 8, T26N, R2W, NMPM, Rio Arriba County, New Mexico, including an Unorthodox Oil Well Location for its Cheney Federal B #2 Well to be drilled at an unorthodox surface location 990 feet FWL and 1650 feet

FSL (Unit L) of said Section 8. Applicant further seeks special rules and provision within the pilot project area including the designation of a prescribed area limiting the horizontal displacement of the wellbore such that its producing interval be no closer than 790 feet to the outer boundaries of the spacing unit. In support the Applicant states:

- (1) Applicant is the operator of all of Section 8, T26N, R2W, NMPM, Rio Arriba County, New Mexico.
- (2) Applicant has previously drilled its Cheney Federal B No. 1 Well located in Unit A of said Section 8 which is currently completed in the Gavilan Mancos Oil Pool.
- (3) Applicant proposes to drill a second well in said Section 8, (the Cheney Federal B #2 Well), and attempt to complete it as a high angle/horizontal directional well in the Gavilan Mancos Oil Pool by drilling vertically to the kickoff point at approximately 6663 feet. At that point, the Applicant will select a target point within the drilling-producing window established for the well and then kick off the well in an estimated northeasterly direction and commence to

building angle at an appropriate rate which will reach the target point such that the producing interval of the well will be within the drilling-producing window from the top of the Niobrara B zone to the base of the Niobrara C zone. A copy of Applicant's preliminary projection of a horizontal plan for the subject well are attached as Exhibit "A."

- (4) The drilling-producing window is identified as the area within Section 8 which shall be no closer than 790 feet to the outer spacing unit boundary. See Exhibit "A."
- (5) The target point is defined at the actual bottom hole location at the end point of the lateral of the subject well.
- (6) The Niobrara interval of Gavilan-Mancos Oil Pool is characterized by tight, low permeability blocks interconnected by a high capacity fracture system. That interval is the potential productive zone in this section and is anticipated to contain numerous fractures with orientations in a north-south direction and good permeability associated with the fractures.

- (7) The well is located within the Gavilan-Mancos Oil Pool and therefore is subject to the special rules and regulations for said pool as promulgated by Division Order R-7407, as amended by Order R-7407-F entered August 5, 1988, which among other things require:
- (a) Rule 2(a): provides for 640-acre spacing and proration units with optional second well located in another quarter section from original well and not less than 1650 feet from said original well;
- (b) Rule 4: provides that wells shall not be located nearer than 790 feet from the outer boundary of the proration unit nor closer than 330 feet to a quarter-quarter section line; and
- (c) Decretory paragraph (2) of Order R-7407-F provides that a 640 acre spacing and proration unit shall have an oil allowable of 800 BOPD and a limiting gas oil ratio of 2000 cubic feet of gas per barrel of oil.
- (8) While the producing interval of the well will be no closer than 790 feet to the outer boundary of the spacing unit and will be farther than 1650 feet from the first well in the spacing unit, it will be closer than 330 feet to a quarter-quarter section line within the

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- (10) 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.
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- (13) 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 March 4, 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

Ву:\_

W. Thomas Kellahin Post Office Box 2265

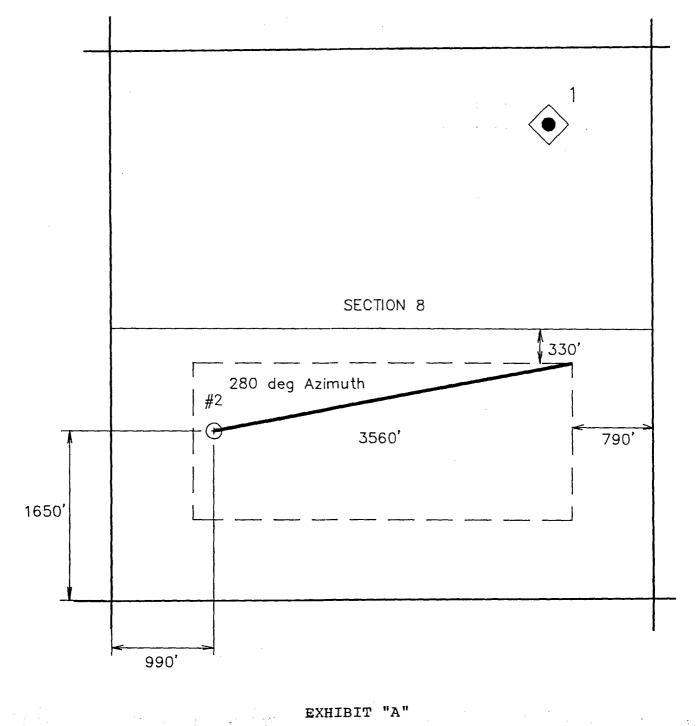
Santa Fe, New Mexico 87504

(505) 982-4285

Attorneys for Applicant

appt205a.330

## MERIDIAN OIL Cheney Fed.'B' No. 2 Sec. 8, T26N-R2W Rio Arriba Co., N.M. 1650' FSL, 990' FWL



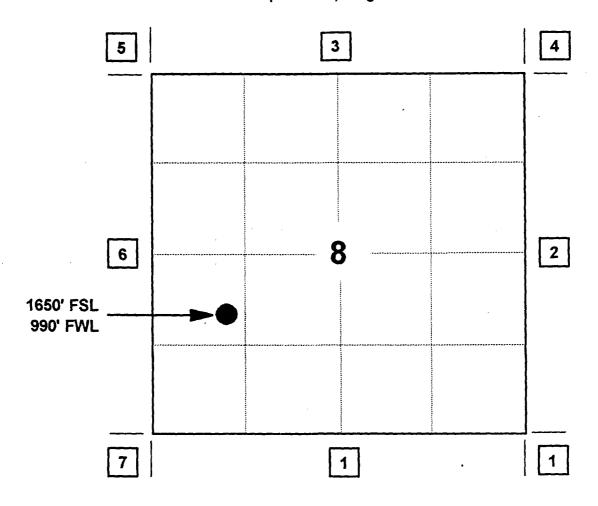
## **MERIDIAN OIL INC**

## **OFFSET OPERATOR \ OWNER PLAT**

## **CHENEY FEDERAL B #2**

## **Gavilan-Mancos Horizontal Well**

Township 26 North, Range 02 West



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2) MW Petroleum Corp.	2000 Post Oak Blvd, Houston, TX 77056
3) Meridian Oil Inc &	
W M Gallaway	3005 Northridge Dr., Suite I, Farmington, NM 87401
4) Meridian Oil Inc, W M Gallaway	<u> </u>
Ominex Petrolemn Inc.	8055 E. Tufts, #1060, Denver, CO 80237
5) Meridian Oil Inc. Mw Petroleum	Corp. &
McHugh Companies	650 S. Cherry St., Suite 1225, Denver, CO 80222
6) Meridian Oil Inc. McHugh Comp	anies &
Merrion Oil & Gas Corp.	PO Box 7871, Farmington, NM 87499
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	EXHIBIT "B"

#### KELLAHIN AND KELLAHIN

ATTORNEYS AT LAW

EL PATIO BUILDING

117 NORTH GUADALUPE

POST OFFICE BOX 2265

SANTA FE, NEW MEXICO 87504-2265

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

RECOGNIZED SPECIALIST IN THE AREA O NATURAL RESOURCES-OIL AND GAS LAW JASON KELLAHIN (RETIRED 1991)

\*NEW MEXICO BOARD OF LEGAL SPECIALIZATION

W. THOMAS KELLAHIN\*

February 8, 1993

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

Re: Cheney Federal B #2 Well Sec 8, T26N, R2W, NMPM. Application of MERIDIAN OIL INC. for a High Angle/Horizontal Directional

Drilling Pilot Project, including Special Operating Rules, and An Unorthodox Oil Well Location, Gavilan-Mancos Pool, Case 10680

Rio Arriba County, New Mexico

Dear Mr. LeMay:

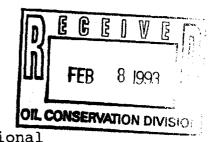
On behalf of Meridian Oil Inc., please find enclosed our Application for a High Angle/Horizontal Direction Drilling Pilot Project as referenced above, which we request be set for hearing on the next available Examiner's docket now scheduled for March 4, 1993.

By copy of this letter and application, certified mail, we are notifying all interested parties offsetting the subject well and its proposed spacing and proration unit 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.

Our proposed advertisement to be used for the OCD docket and for the newspaper publication is also See Enclosure (1). enclosed.

In accordance with Division Memorandum 2-90, parties who may appear in this case are hereby requested to file a Pre-Hearing Statement with the Division, copy to the Applicant's attorney, not later than 4:00 PM on Friday, February 26, 1993. A copy of the Pre-Hearing form is

HAND DELIVERED



Mr. William J. LeMay February 8, 1993 Page Two

attached as Enclosure (2) and is being sent to those required to receive notice as set for in the Application.

Very truly yours

W. Thomas Kellahin

WTK/jcl Enclosures

cc: With Enclosures

Meridian Oil Inc.

Farmington, New Mexico

By Certified Mail - Return Receipt

All Parties Listed on Exhibit "B" of Application with Enclosure (2)

appt205a.330

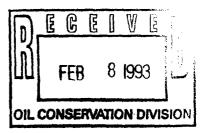
#### Enclosure (1)

## Proposed Advertisement for the OCD Docket

Application of Meridian Oil Inc. for a high angle/horizontal directional drilling pilot project, special operating rules therefor, and an unorthodox oil well location, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks to initiate a high angle/horizontal directional drilling pilot project in the Gavilan-Mancos Oil Pool underlying all of Section 8, Township 26 North, Range 2 West, being a standard 640-acre spacing and proration unit for said pool. The applicant proposes to drill its Cheney Federal B Well No. 2 located at an unorthodox surface location 990 feet from the West line and 1650 from the South line (Unit L) of said Section 8, kick off from vertical in an estimated westerly 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 pilot project area including the designation of a target window such that the horizontal or producing portion of the wellbore shall be no closer than 790 feet from the outer boundary of the spacing unit. Said project is approximately 13 miles north of Lindrith, New Mexico.

# 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.: 10480

APPLICATION OF MERIDIAN OIL INC. FOR A HIGH ANGLE/HORIZONTAL DIRECTIONAL DRILLING PILOT PROJECT INCLUDING SPECIAL OPERATING RULES, AND AN UNORTHODOX OIL WELL LOCATION, RIO ARRIBA COUNTY, NEW MEXICO

### APPLICATION

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FSL (Unit L) of said Section 8. Applicant further seeks special rules and provision within the pilot project area including the designation of a prescribed area limiting the horizontal displacement of the wellbore such that its producing interval be no closer than 790 feet to the outer boundaries of the spacing unit. In support the Applicant states:

- (1) Applicant is the operator of all of Section 8, T26N, R2W, NMPM, Rio Arriba County, New Mexico.
- (2) Applicant has previously drilled its Cheney Federal B No. 1 Well located in Unit A of said Section 8 which is currently completed in the Gavilan Mancos Oil Pool.
- (3) Applicant proposes to drill a second well in said Section 8, (the Cheney Federal B #2 Well), and attempt to complete it as a high angle/horizontal directional well in the Gavilan Mancos Oil Pool by drilling vertically to the kickoff point at approximately 6663 feet. At that point, the Applicant will select a target point within the drilling-producing window established for the well and then kick off the well in an estimated northeasterly direction and commence to

building angle at an appropriate rate which will reach the target point such that the producing interval of the well will be within the drilling-producing window from the top of the Niobrara B zone to the base of the Niobrara C zone. A copy of Applicant's preliminary projection of a horizontal plan for the subject well are attached as Exhibit "A."

- (4) The drilling-producing window is identified as the area within Section 8 which shall be no closer than 790 feet to the outer spacing unit boundary. See Exhibit "A."
- (5) The target point is defined at the actual bottom hole location at the end point of the lateral of the subject well.
- (6) The Niobrara interval of Gavilan-Mancos Oil Pool is characterized by tight, low permeability blocks interconnected by a high capacity fracture system. That interval is the potential productive zone in this section and is anticipated to contain numerous fractures with orientations in a north-south direction and good permeability associated with the fractures.

- (7) The well is located within the Gavilan-Mancos Oil Pool and therefore is subject to the special rules and regulations for said pool as promulgated by Division Order R-7407, as amended by Order R-7407-F entered August 5, 1988, which among other things require:
- (a) Rule 2(a): provides for 640-acre spacing and proration units with optional second well located in another quarter section from original well and not less than 1650 feet from said original well;
- (b) Rule 4: provides that wells shall not be located nearer than 790 feet from the outer boundary of the proration unit nor closer than 330 feet to a quarter-quarter section line; and
- (c) Decretory paragraph (2) of Order R-7407-F provides that a 640 acre spacing and proration unit shall have an oil allowable of 800 BOPD and a limiting gas oil ratio of 2000 cubic feet of gas per barrel of oil.
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interior of the spacing unit and therefore an unorthodox well location is necessary.

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- (10) 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.
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- (12) As required by Division notice rules, notice is provided to those offsetting operators as listed on Exhibit "B."
- (13) 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 March 4, 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

Bv:

W. Thomas Kellahin Post Office Box 2265

Santa Fe, New Mexico 87504

(505) 982-4285

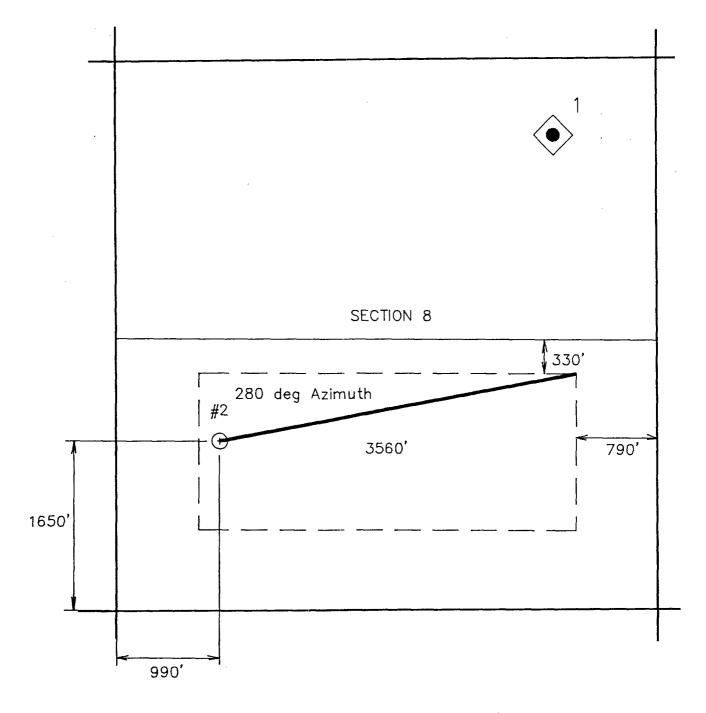
Attorneys for Applicant

appt205a.330

## MERIDIAN OIL

Cheney Fed.'B' No. 2

Sec. 8, T26N-R2W Rio Arriba Co., N.M. 1650' FSL, 990' FWL



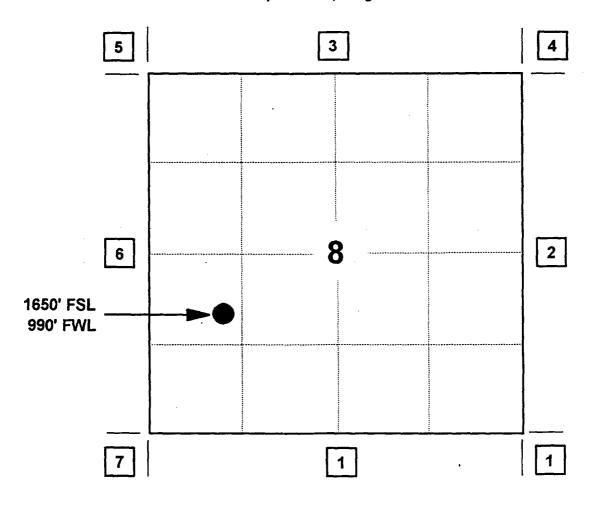
## **MERIDIAN OIL INC**

## **OFFSET OPERATOR \ OWNER PLAT**

## **CHENEY FEDERAL B #2**

## **Gavilan-Mancos Horizontal Well**

Township 26 North, Range 02 West



4) 44 . 11 . 611	
1) Meridian Oil Inc	
2) MW Petroleum Corp.	2000 Post Oak Blvd, Houston, TX 77056
3) Meridian Oil Inc &	
W M Gallaway	3005 Northridge Dr., Suite I, Farmington, NM 87401
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6) Meridian Oil Inc. McHugh Compan	ies &
Merrion Oil & Gas Corp.	PO Box 7871, Farmington, NM 87499
7) Meridian Oil Inc & Merrion Oil & Ga	is Corp.
I	EXHIBIT "B"

## KELLAHIN AND KELLAHIN

ATTORNEYS AT LAW

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DELIVERED

JASON KELLAHIN (RETIRED 1991)

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

W. THOMAS KELLAHIN\*

## February 8, 1993

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

Re: Cheney Federal B #2 Well
Sec 8, T26N, R2W, NMPM.

Application of MERIDIAN OIL INC.
for a High Angle/Horizontal Directional
Drilling Pilot Project, including Special
Operating Rules, and An Unorthodox Oil Well
Location, Gavilan-Mancos Pool,
Rio Arriba County, New Mexico

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 March 4, 1993.

By copy of this letter and application, sent certified mail, we are notifying all interested parties offsetting the subject well and its proposed spacing and proration unit 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.

Our proposed advertisement to be used for the OCD docket and for the newspaper publication is also enclosed. See Enclosure (1).

In accordance with Division Memorandum 2-90, parties who may appear in this case are hereby requested to file a Pre-Hearing Statement with the Division, copy to the Applicant's attorney, not later than 4:00 PM on Friday, February 26, 1993. A copy of the Pre-Hearing form is

Mr. William J. LeMay February 8, 1993 Page Two

attached as Enclosure (2) and is being sent to those required to receive notice as set for in the Application.

Very truly yours,

W. Thomas Kellahin

WTK/jcl Enclosures

cc: With Enclosures

Meridian Oil Inc.

Farmington, New Mexico

By Certified Mail - Return Receipt

All Parties Listed on Exhibit "B" of Application with Enclosure (2)

appt205a.330

### Enclosure (1)

## Proposed Advertisement for the OCD Docket

Application of Meridian Oil Inc. for a high angle/horizontal directional drilling pilot project, special operating rules therefor, and an unorthodox oil well location, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks to initiate a high angle/horizontal directional drilling pilot project in the Gavilan-Mancos Oil Pool underlying all of Section 8, Township 26 North, Range 2 West, being a standard 640-acre spacing and proration unit for said pool. The applicant proposes to drill its Cheney Federal B Well No. 2 located at an unorthodox surface location 990 feet from the West line and 1650 from the South line (Unit L) of said Section 8, kick off from vertical in an estimated westerly 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 pilot project area including the designation of a target window such that the horizontal or producing portion of the wellbore shall be no closer than 790 feet from the outer boundary of the spacing unit. Said project is approximately 13 miles north of Lindrith, New Mexico.

# 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 DIRECTIONAL DRILLING PILOT PROJECT, SPECIAL OPERATING RULES THEREFOR, AND AN UNORTHODOX OIL WELL LOCATION, RIO ARRIBA COUNTY, NEW MEXICO.

CASE NO. 10680 3/15/93

CASE NO. 10680
Order No. R-98/15 3/15/93

#### ORDER OF THE DIVISION

### BY THE DIVISION:

This cause came on for hearing at 8:15 a.m. on March 4, 1993, at Santa Fe, New Mexico, before Examiner David R. Catanach.

NOW, on this \_\_\_\_\_ day of March, 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 Gavilan-Mancos Oil Pool underlying all of Section 8, Township 26 North, Range 2 West, NMPM, Rio Arriba County, New Mexico, being a standard 640-acre spacing and proration unit for said pool.
- (3) The applicant further seeks authority to drill its Cheney Federal "B" Well No. 2 at a standard surface location 1650 feet from the South line and 990 feet from the West line (Unit L) of Section 8 in the following unconventional manner:

Drill vertically to a depth of approximately 6,663 feet, kick off from the vertical at this

depth and drill in a northeasterly direction building angle to approximately 84 degrees so as to penetrate the top of the Niobrara "B" interval at a true vertical depth of approximately 7,075 feet. Continue drilling a distance of 3,150 feet at such an angle so as to bottom said wellbore in the Niobrara "C" interval at a true vertical depth of approximately 7,410 feet.

- (4) The applicant further seeks the adoption of special operating provisions and rules within the pilot project area including the designation of a prescribed area limiting the wellbore and its producing interval such that it can be no closer than 790 feet from the outer boundary of the spacing unit, nor closer than 2,970 feet from the North line of Section 8.
- (5) The proposed well is located within the Gavilan-Mancos Oil Pool and is therefore subject to the special rules and regulations for said pool as promulgated by Division Order No. R-7407, as amended, which require standard 640-acre spacing and proration units with wells to be located no closer than 790 feet from the outer boundary of the spacing unit nor closer than 330 feet from any governmental quarter-quarter section line. Such rules further provide that a second well drilled on a standard proration unit shall not be drilled in the same quarter section as the existing well and shall be located no closer than 1,650 feet from said well.
- (6) Within Section 8 the applicant currently operates the Cheney Federal "B" Well No. 1 located 790 feet from the North line and 990 feet from the East line (Unit A), which is currently completed in the Gavilan-Mancos Oil Pool. All of Section 8 is currently dedicated to the aforesaid Cheney Federal "B" Well No. 1.
- (7) The Niobrara "B" and "C" members of the Gallup formation are the potentially productive zones within the pilot project area and are characterized by low permeability and interconnected fracture systems.
- (8) Through its evidence and testimony, the applicant demonstrated that the proposed high angle wellbore should encounter a substantially greater number of natural fractures within the Niobrara "B" and "C" members 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) No offset operator and/or interest owner appeared at the hearing in opposition to the application.
- (10) In the interest of conservation and prevention of waste, the application of Meridian Oil Inc. for a high angle/horizontal

directional drilling project should be approved.

- (11) 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.
- (12) 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.
- (13) 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.
- (14) The allowable assigned to Section 8 in the Gavilan-Mancos Oil Pool should be shared by the Cheney Federal "B" Well Nos. 1 and 2, provided however, the applicant should be authorized to produce said allowable from either well in any proportion.

### 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 Section 8, Township 26 North, Range 2 West, NMPM, Gavilan-Mancos Oil Pool, Rio Arriba County, New Mexico, by drilling its Cheney Federal "B" Well No. 2 at a standard surface location 1650 feet from the South line and 990 feet from the West line (Unit L) of Section 8 in the following unconventional manner:

Drill vertically to a depth of approximately 6,663 feet, kick off from the vertical at this depth and drill in a northeasterly direction building angle to approximately 84 degrees so as to penetrate the top of the Niobrara "B" interval true vertical at a approximately 7,075 feet. Continue drilling a distance of 3,150 feet at such an angle so as to bottom said wellbore in the Niobrara "C" true vertical interval depth at a approximately 7,410 feet.

- (2) All of Section 8 shall be dedicated to the above-described well and to the existing Cheney Federal "B" Well No. 1 forming a standard 640-acre spacing and proration unit in the Gavilan-Mancos Oil Pool.
- (3) The wellbore and its producing interval shall be located no closer than 790 feet from the outer boundary of the project area nor closer than 2,970 feet from the North line of Section 8.
- (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) The allowable assigned to Section 8 in the Gavilan-Mancos Oil Pool shall be shared by the Cheney Federal "B" Well Nos. 1 and 2, provided however, the applicant shall be authorized to produce said allowable from either well in any proportion.
- (8) 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

SEAL