

KELLAHIN AND KELLAHIN

ATTORNEYS AT LAW

EL PATIO BUILDING

117 NORTH GUADALUPE

POST OFFICE BOX 2265

SANTA FE, NEW MEXICO 87504-2265

W. THOMAS KELLAHIN\*

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

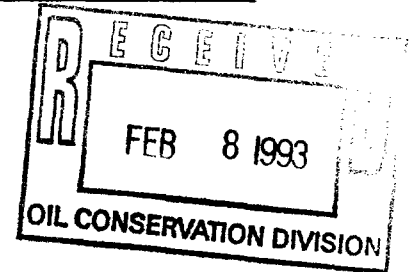
TELEPHONE (505) 982-4285  
TELEFAX (505) 982-2047

JASON KELLAHIN (RETIRED 1991)

February 5, 1993

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

HAND DELIVERED



RE: Jicarilla 99 #17 Well  
N/2 Sec 23, T26N, R3W, NMPM.  
Application of MERIDIAN OIL INC.  
for a High Angle/Horizontal Directional  
Drilling Pilot Project including Special  
Operating Rules, An Unorthodox Oil Well Location,  
a Non-Standard Proration and Spacing Unit, and  
A Special Project Allowable,  
Rio Arriba County, New Mexico

10679

Dear Mr. LeMay:

On behalf of Meridian Oil., 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, including the Application to all parties, we are notifying them by certified mail return-receipt requested, that they have the right to appear at the hearing, to make a statement to the Division, to present evidence and cross-examine witnesses either in support of or in opposition to the Application.

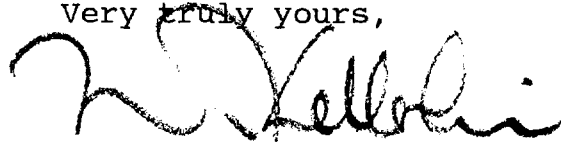
Our proposed advertisement to be used for the OCD docket and for the newspaper publication is attached as Enclosure (1).

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

Mr. William J. LeMay  
February 5, 1993  
Page Two

Applicant, not later than 4:00 PM on Friday, February 26, 1993. A copy of the Pre-Hearing Statement form is attached as Enclosure (2) is being sent to all those required to receive notice as listed in the Application.

Very truly yours,

A handwritten signature in dark ink, appearing to read 'W. Thomas Kellahin', written over a horizontal line.

W. Thomas Kellahin

WTK/jcl  
Enclosure

cc: With Application and Enclosure (1)  
Meridian Oil Inc.  
Farmington, New Mexico

**By Certified Mail - Return Receipt**

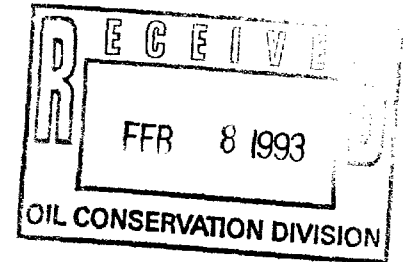
All Parties Listed on Exhibit "C" of Application  
with Pre-Hearing Statement Form

## Enclosure (1)

### Proposed Advertisement for the OCD Docket

**CASE \_\_\_\_\_: Application of Meridian Oil Inc. for a high angle/horizontal directional drilling pilot project, special operating rules therefor, a non-standard proration unit, an unorthodox well location, and special project oil allowable, Rio Arriba County, New Mexico.** Applicant, in the above-styled cause, seeks to initiate a high angle/horizontal directional drilling pilot project in the Undesignated Northeast Ojito Gallup-Dakota Oil Pool underlying the N/2 of Section 23, Township 26 North, Range 3 West, thereby creating a non-standard 320-acre spacing and proration unit for said pool. The applicant proposes to drill its Jicarill "99" Well No. 17 from an unorthodox surface location 150 feet from the North line and 670 feet from the West line (Unit D) of said Section 23, kick 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 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 330 feet to either the north or south boundary, nor closer than 790 feet to the east or west boundary of the spacing unit, and for a special project allowable. Said project area is located approximately 12 miles northwest 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: *10609*

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

A P P L I C A T I O N

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 Northeast Ojito Gallup-Dakota Oil Pool including Special Operating Rules, an Unorthodox Oil Well Location, a Non-Standard Proration and Spacing Unit and a Special Project Oil Allowable for its Jicarilla "99" #17 Well to be dedicated to a non-standard 320 acre spacing and proration unit consisting

of the N/2 of Section 23, T26N, R3W, NMPM, Rio Arriba County, New Mexico, to be drilled commencing at an unorthodox surface location 150 feet FNL and 670 feet FWL of said Section 23. 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 330 feet to the North and South outer boundaries of the spacing unit and not closer than 790 feet to the East and West outer boundaries of the spacing unit. Applicant further seeks a special oil allowable of two times the standard allowable for an oil well in this pool. In support the Applicant states:

(1) Applicant is the operator of all of Section 23, T26N, R3W, NMPM, Rio Arriba County, New Mexico.

(2) The same lease covers acreage including all of Section 23 and Section 14 with the interest owners and their respective percentages being identical in both sections.

(3) Applicant proposes to drill its Jicarilla "99" #17 Well as a high angle/horizontal directional well by

commencing at an unorthodox surface location 150 feet FNL and 670 feet FWL (Unit D) of said Section 23 and drilling vertically to a true vertical depth of approximately 6,700 feet at which point the applicant will select a target point within the drilling-producing window established for the well and then kicking off the well in a southeasterly direction and commencing 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 and vertical plans for the subject well are attached as Exhibits "A" and "B" respectively.

(4) The drilling-producing window is identified as the area within the N/2 Section 23 which shall be no closer than 330 feet to either the North or the South outer spacing unit boundary and no closer than 790 feet to either the West or East 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 ("Gallup" equivalent) interval of Northeast Ojito Gallup-Dakota 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 multiple fractures with multiple orientations and good permeability associated with the fractures. The wellbore orientation is designed to maximize intersection with this fracture system

(7) The proposed well is located within one mile of the Northeast Ojito Gallup-Dakota Oil Pool where Rule 2 provides for 160-acre spacing and proration units and 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.

(8) The producing interval of the well will comply with Pool Rule 4 as to the West and East spacing unit boundaries and will only encroach towards the North and

South spacing unit boundaries towards offsetting spacing units which have interest owners and percentages identical to the subject spacing unit.

(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 precisely 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) Because this wellbore will intercept two proration units in this pool, applicant seeks approval of a 320 acre non-standard oil proration and spacing unit consisting of the N/2 of Section 23 and the establishment of a special project allowable twice the allowable for an



Application of Meridian Oil Inc.

Page 6

oil well in the subject pool.

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

(14) 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

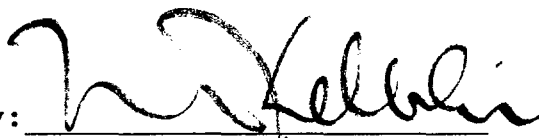
By:   
W. Thomas Kellahin  
Post Office Box 2265  
Santa Fe, New Mexico 87504  
(505) 982-4285  
Attorneys for Applicant

EXHIBIT "A"

# MERIDIAN OIL

## Jicarilla "99" No. 17

Sec. 23, T26N-R3W  
Rio Arriba Co., N.M.  
150' FNL, 670' FWL

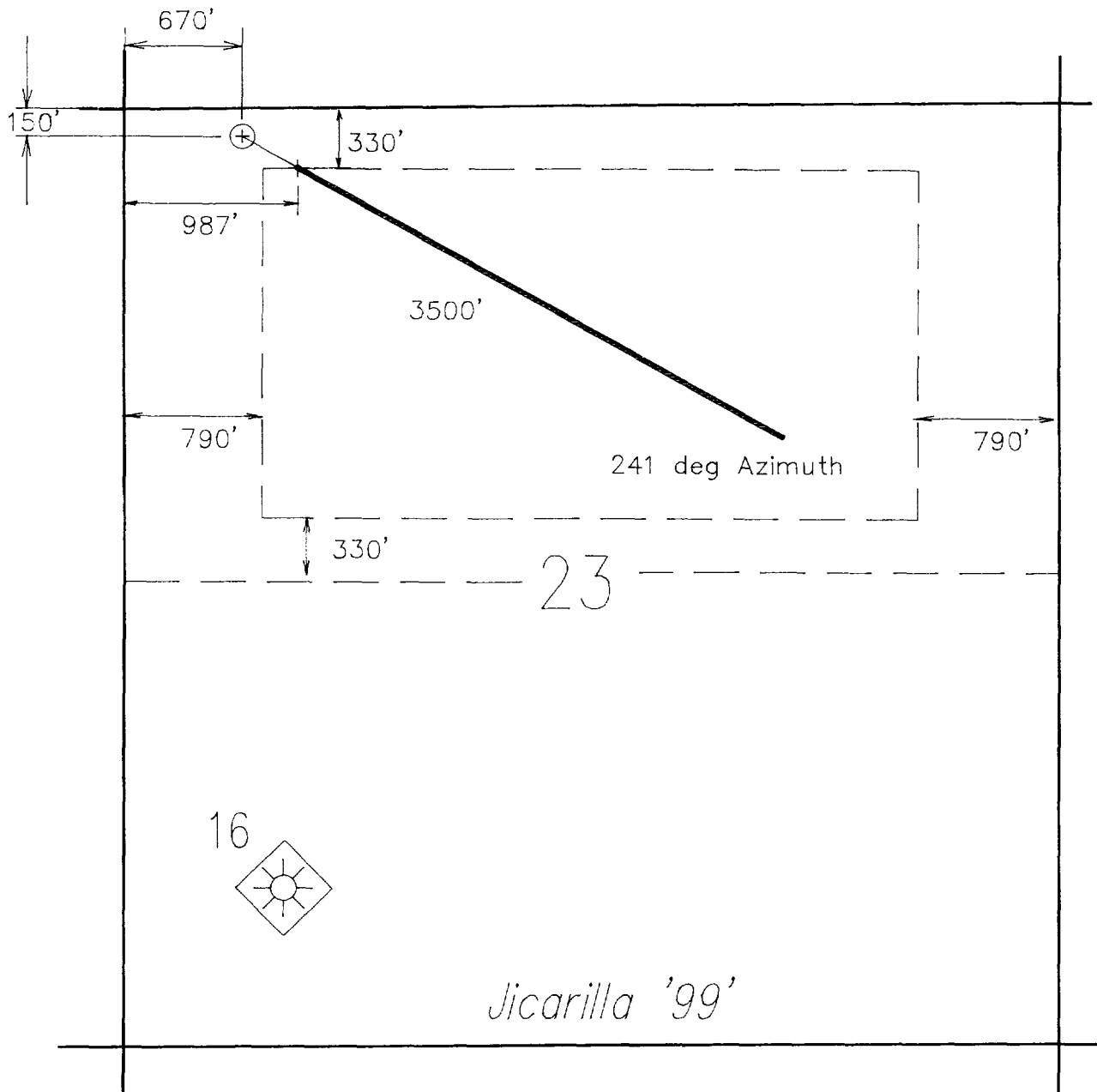
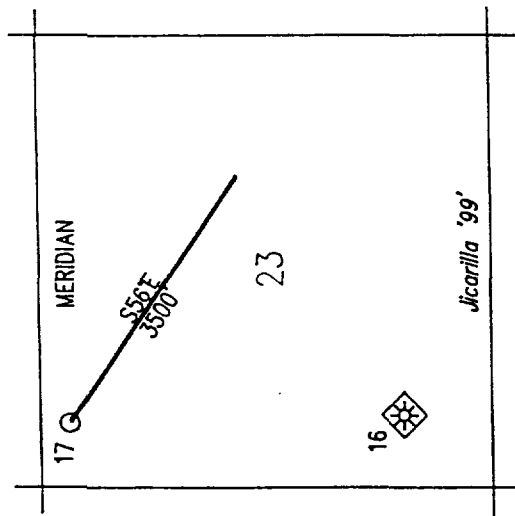


EXHIBIT "A"

# EXHIBIT "B"



## MERIDIAN OIL

JICARILLA "99" NO. 17  
HIGH ANGLE NIOBRARA NEW DRILL  
Rio Arriba County, New Mexico

D. A. SCHODDERBEK  
P. D. ALLAN  
L. K. SMITH

DWG. C. GROTH  
10/6/92

NW  
JICARILLA "99"  
NO. 17



K.O.P. 6764'

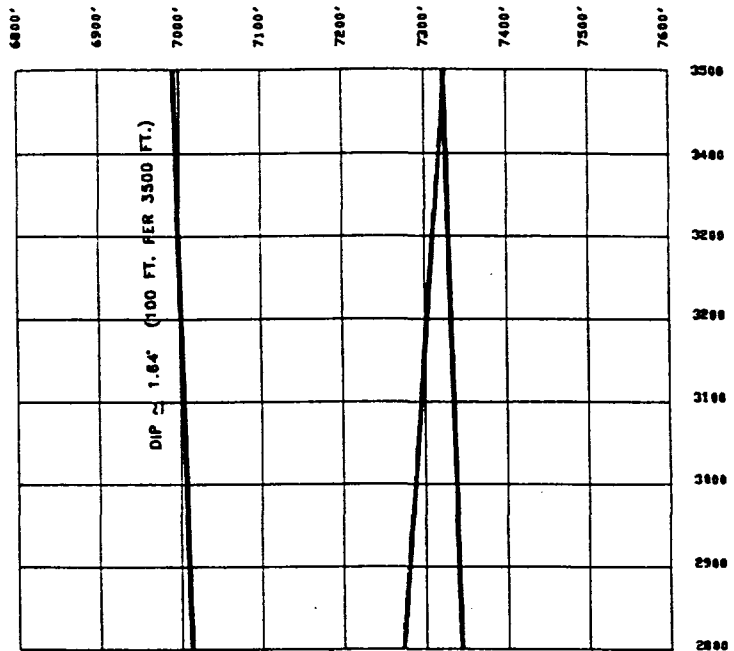
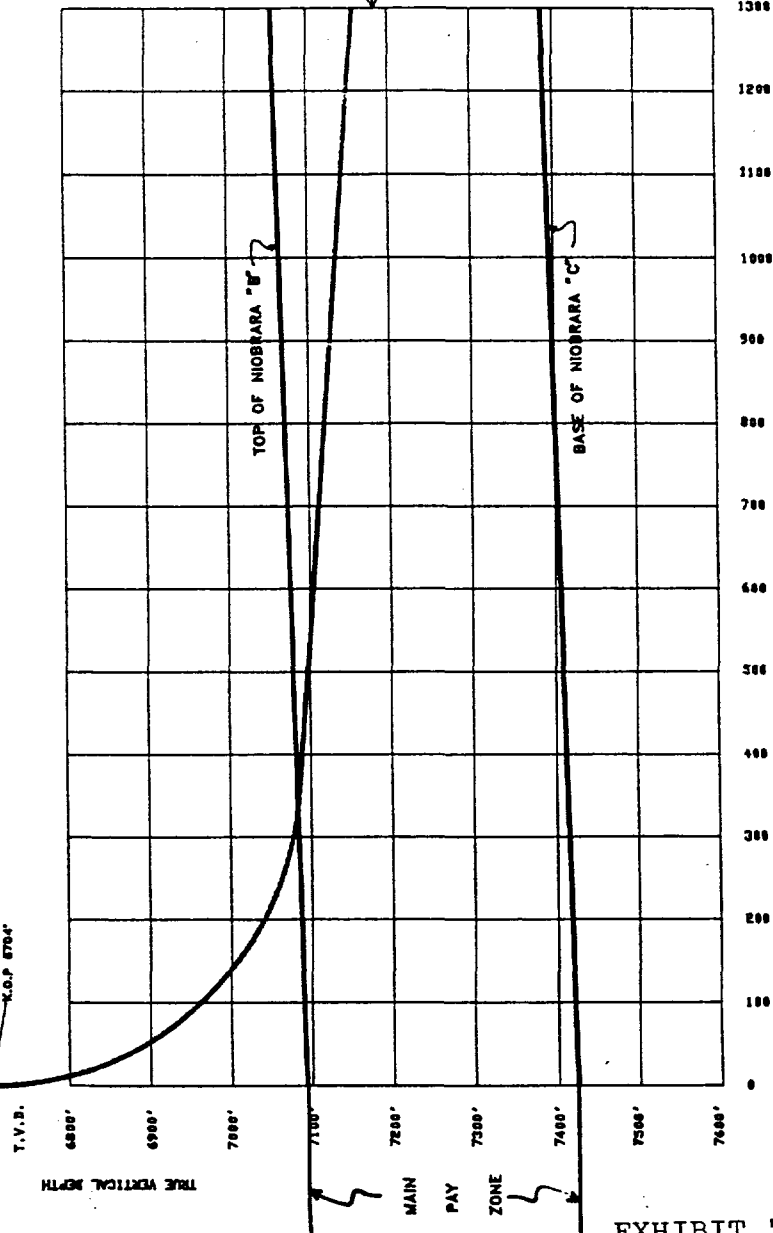


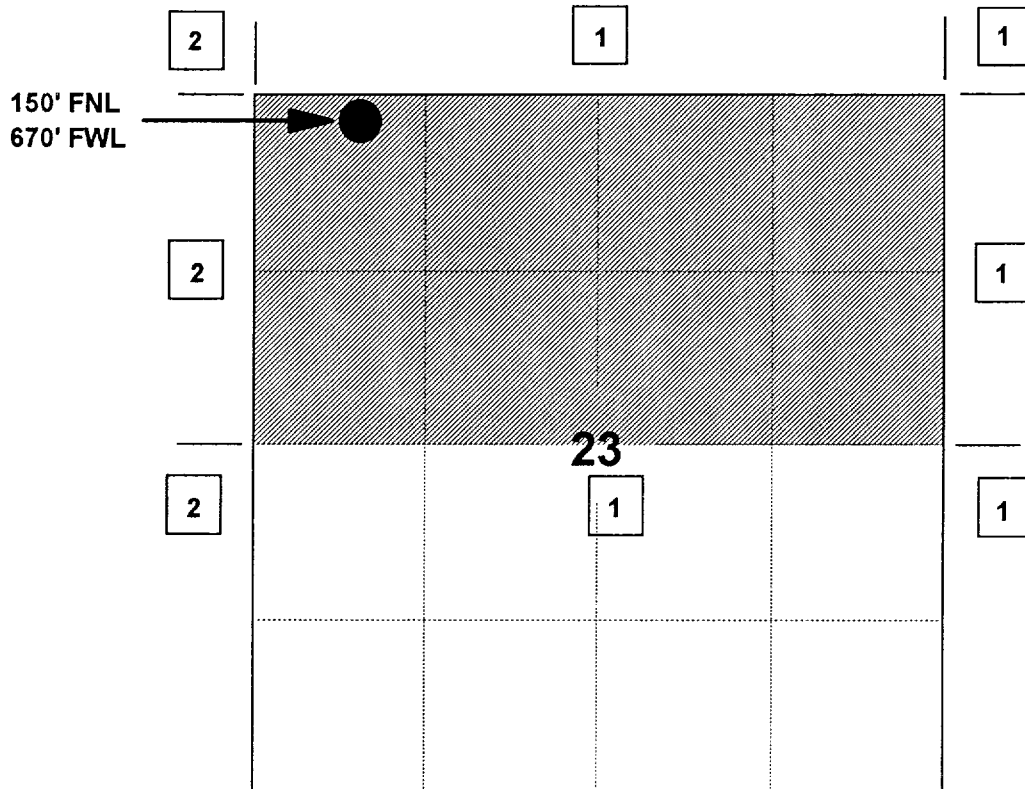
EXHIBIT "B"

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**MERIDIAN OIL INC****OFFSET OPERATOR PLAT****JICARILLA 99 #17**

Gallup Horizontal Well

Township 26 North, Range 03 West



1) Meridian Oil Inc

2) Jicarilla Apache Tribe

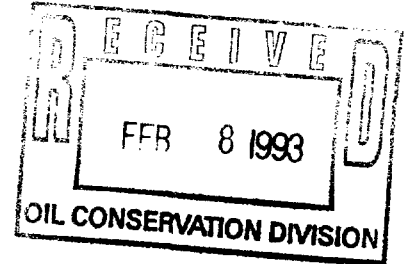
Bureau of Land Management  
1235 La Plata Hwy.  
Farmington, New Mexico 87401  
Attn: John Keller

Jicarilla Apache Tribe  
Post Office Box 507  
Dulce, New Mexico 87528  
Attn: Thurman Velarde  
Oil and Gas Administrator

Apache Jicarilla Agency  
BIA  
Post Office Box 167  
Dulce, New Mexico 87528

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: 10679

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Respectfully submitted,

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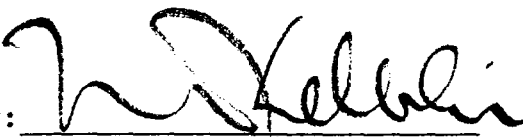
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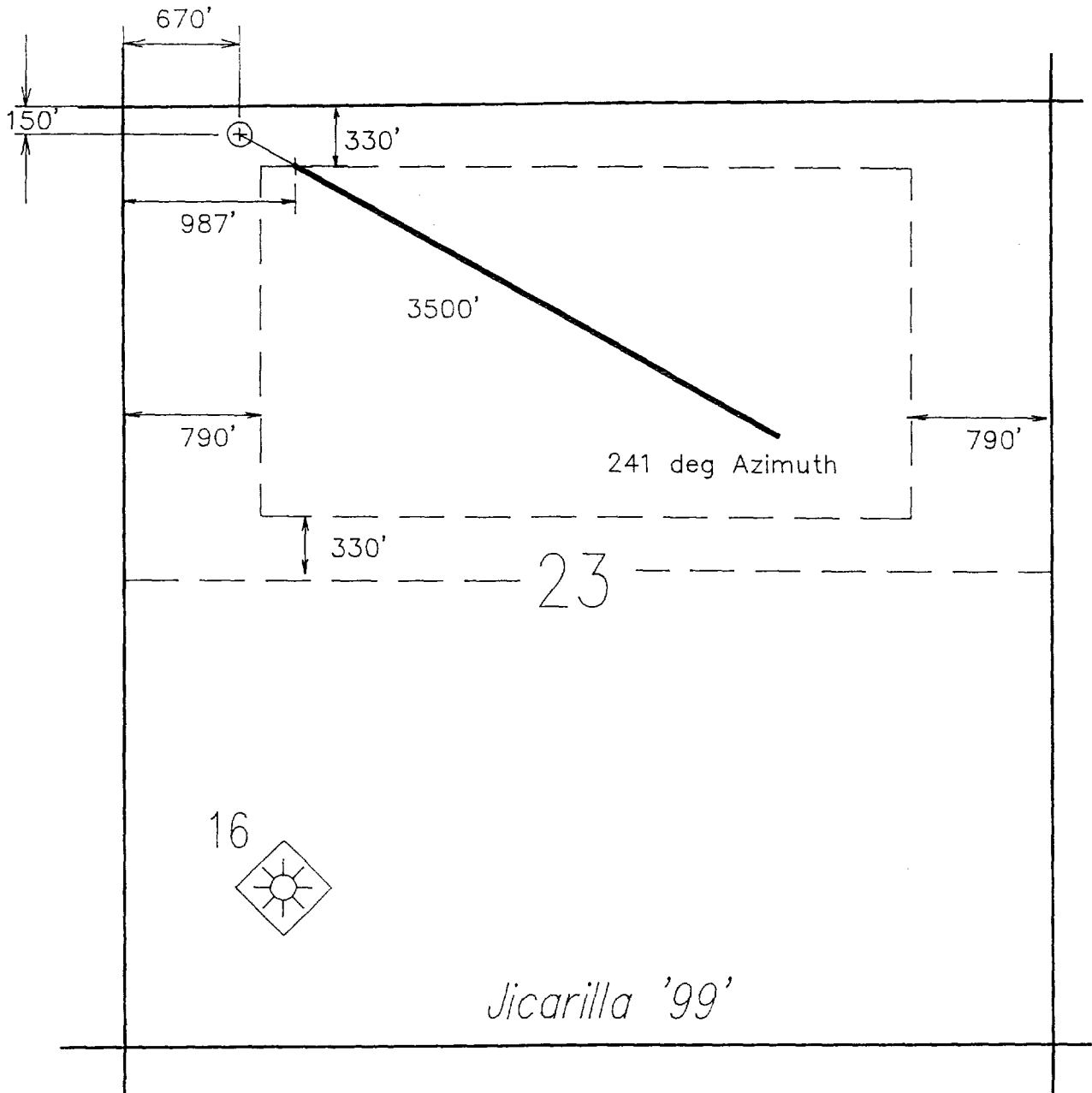
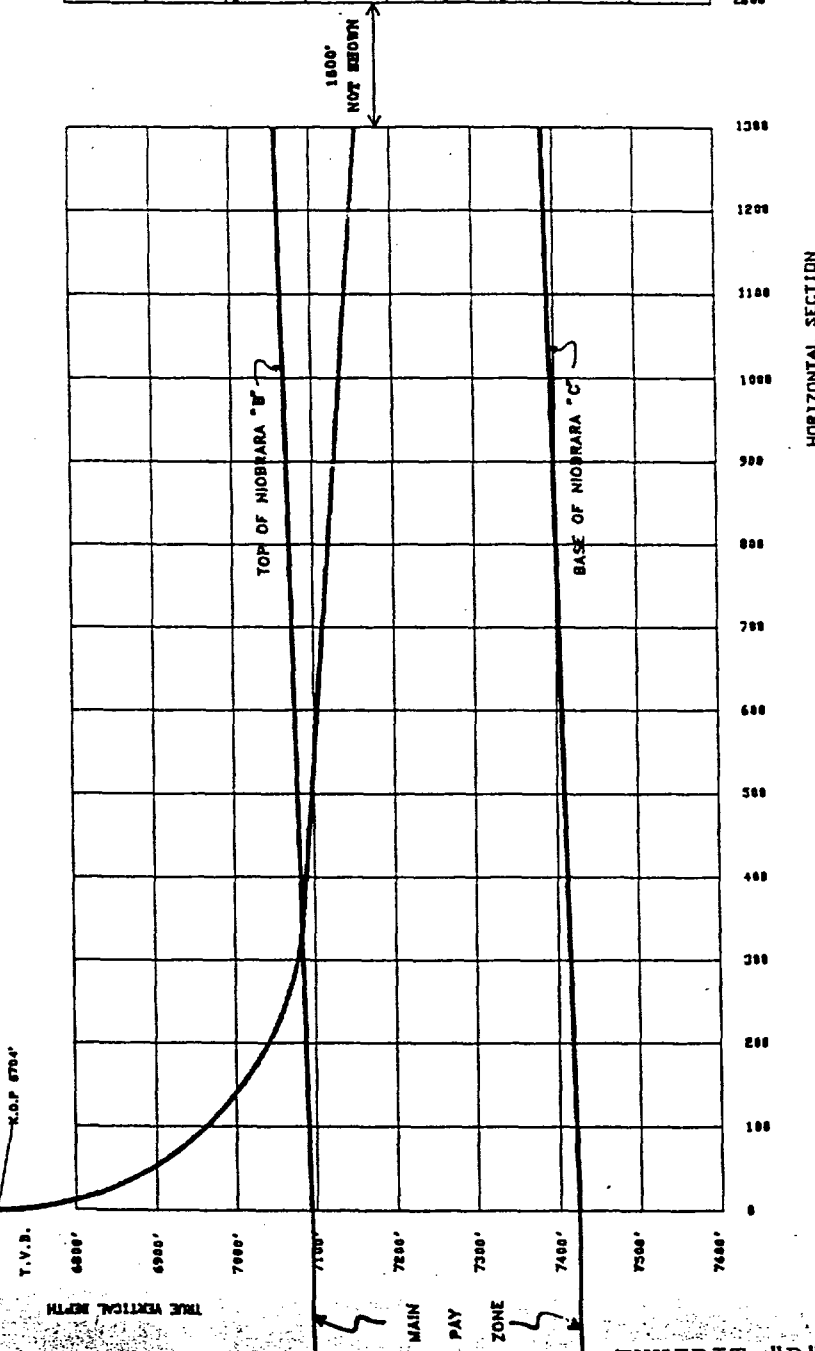
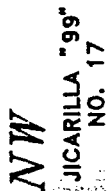
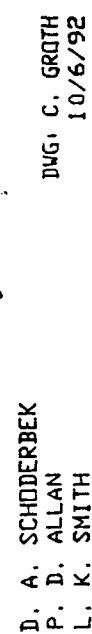
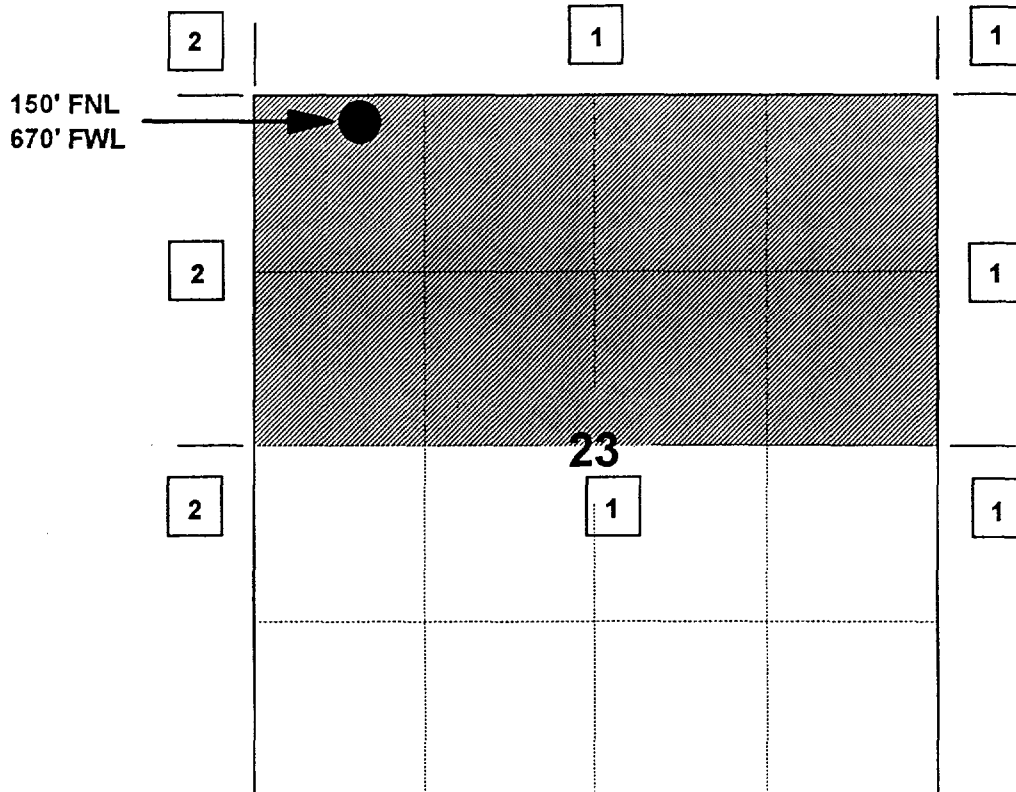


EXHIBIT "A"

**ES**

6800' 6900' 7000' 7100' 7200' 7300' 7400' 7500' 7600'



**MERIDIAN OIL INC****OFFSET OPERATOR PLAT****JICARILLA 99 #17****Gallup Horizontal Well****Township 26 North, Range 03 West**

1) Meridian Oil Inc

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Bureau of Land Management  
1235 La Plata Hwy.  
Farmington, New Mexico 87401  
Attn: John Keller

Jicarilla Apache Tribe  
Post Office Box 507  
Dulce, New Mexico 87528  
Attn: Thurman Velarde  
Oil and Gas Administrator

Apache Jicarilla Agency  
BIA  
Post Office Box 167  
Dulce, New Mexico 87528

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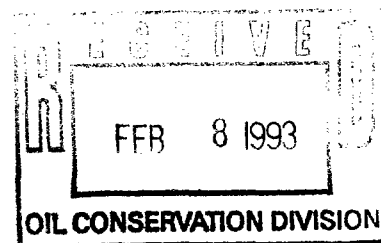
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Case 10679

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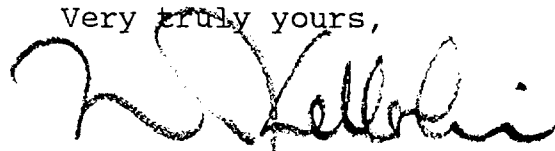
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cc: With Application and Enclosure (1)  
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**By Certified Mail - Return Receipt**

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**Enclosure (1)**

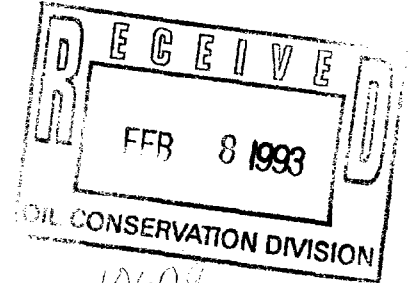
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STATE OF NEW MEXICO  
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT  
OIL CONSERVATION DIVISION

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



CASE: 10699

APPLICATION OF MERIDIAN OIL INC.  
FOR A HIGH ANGLE/HORIZONTAL DIRECTIONAL  
DRILLING PILOT PROJECT INCLUDING  
SPECIAL OPERATING RULES, AN UNORTHODOX  
OIL WELL LOCATION, A NON-STANDARD OIL  
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(3) Applicant proposes to drill its Jicarilla "99" #17 Well as a high angle/horizontal directional well by

commencing at an unorthodox surface location 150 feet FNL and 670 feet FWL (Unit D) of said Section 23 and drilling vertically to a true vertical depth of approximately 6,700 feet at which point the applicant will select a target point within the drilling-producing window established for the well and then kicking off the well in a southeasterly direction and commencing 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 and vertical plans for the subject well are attached as Exhibits "A" and "B" respectively.

(4) The drilling-producing window is identified as the area within the N/2 Section 23 which shall be no closer than 330 feet to either the North or the South outer spacing unit boundary and no closer than 790 feet to either the West or East 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 ("Gallup" equivalent) interval of Northeast Ojito Gallup-Dakota 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 multiple fractures with multiple orientations and good permeability associated with the fractures. The wellbore orientation is designed to maximize intersection with this fracture system

(7) The proposed well is located within one mile of the Northeast Ojito Gallup-Dakota Oil Pool where Rule 2 provides for 160-acre spacing and proration units and 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.

(8) The producing interval of the well will comply with Pool Rule 4 as to the West and East spacing unit boundaries and will only encroach towards the North and

South spacing unit boundaries towards offsetting spacing units which have interest owners and percentages identical to the subject spacing unit.

(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 precisely 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) Because this wellbore will intercept two proration units in this pool, applicant seeks approval of a 320 acre non-standard oil proration and spacing unit consisting of the N/2 of Section 23 and the establishment of a special project allowable twice the allowable for an

oil well in the subject pool.

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

(14) 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

EXHIBIT "A"

# MERIDIAN OIL

## Jicarilla "99" No. 17

Sec. 23, T26N-R3W  
Rio Arriba Co., N.M.  
150' FNL, 670' FWL

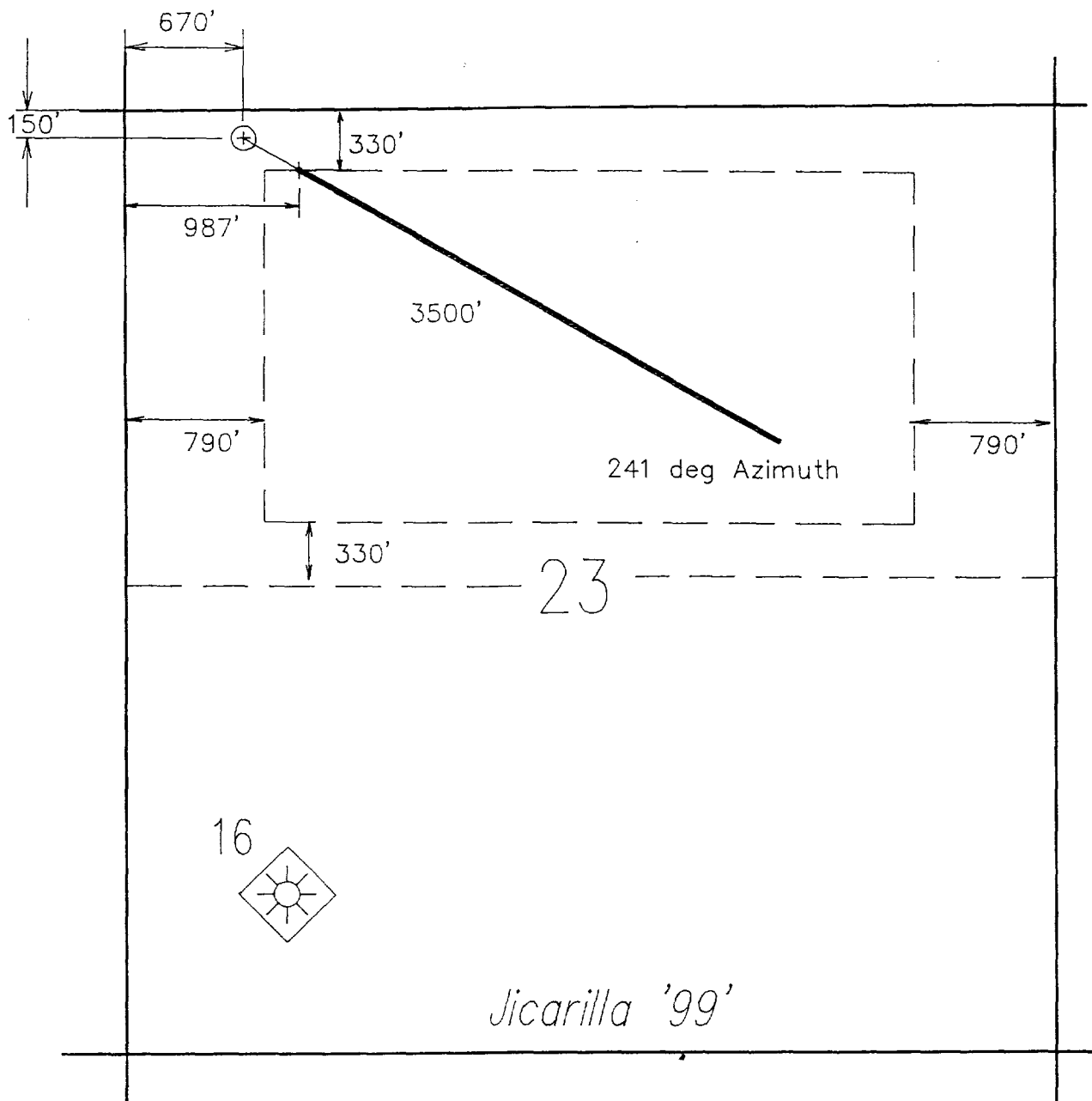
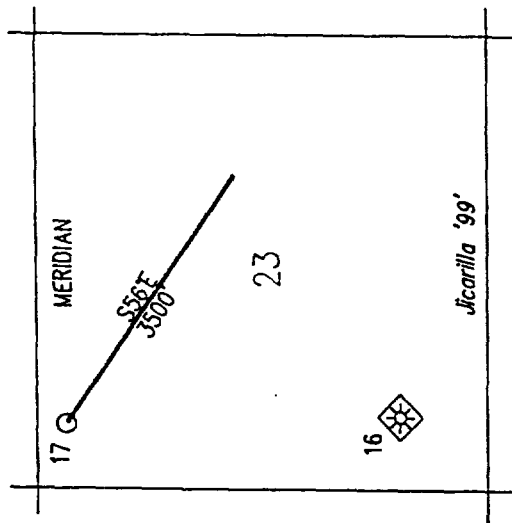


EXHIBIT "A"

EXHIBIT "B"



**MERIDIAN OIL**  
 JICARILLA "99" NO. 17  
 HIGH ANGLE NIOBRARA NEW DRILL  
 Rio Arriba County, New Mexico  
 D. A. SCHIDDERBEK  
 P. D. ALLAN  
 L. K. SMITH  
 DWG. C. GROTH  
 10/6/92

SE

NW  
 JICARILLA "99"  
 NO. 17

T.V.D. 6704'

TRUE VERTICAL DEPTH

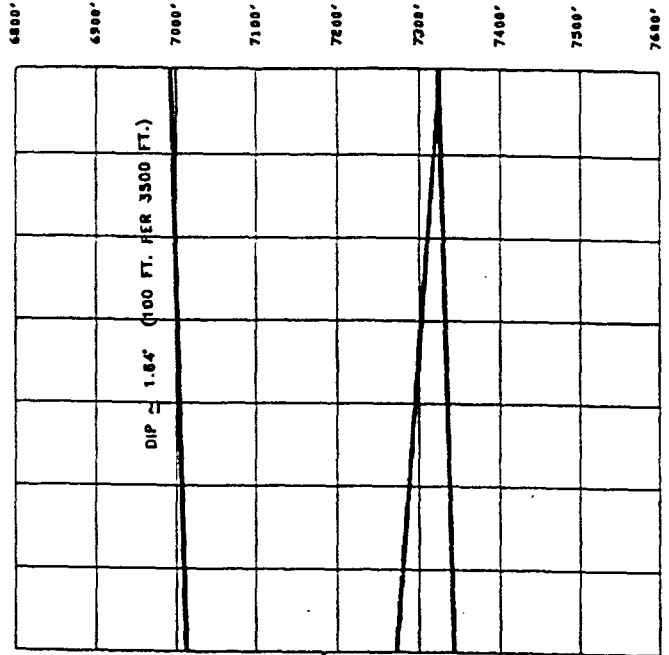
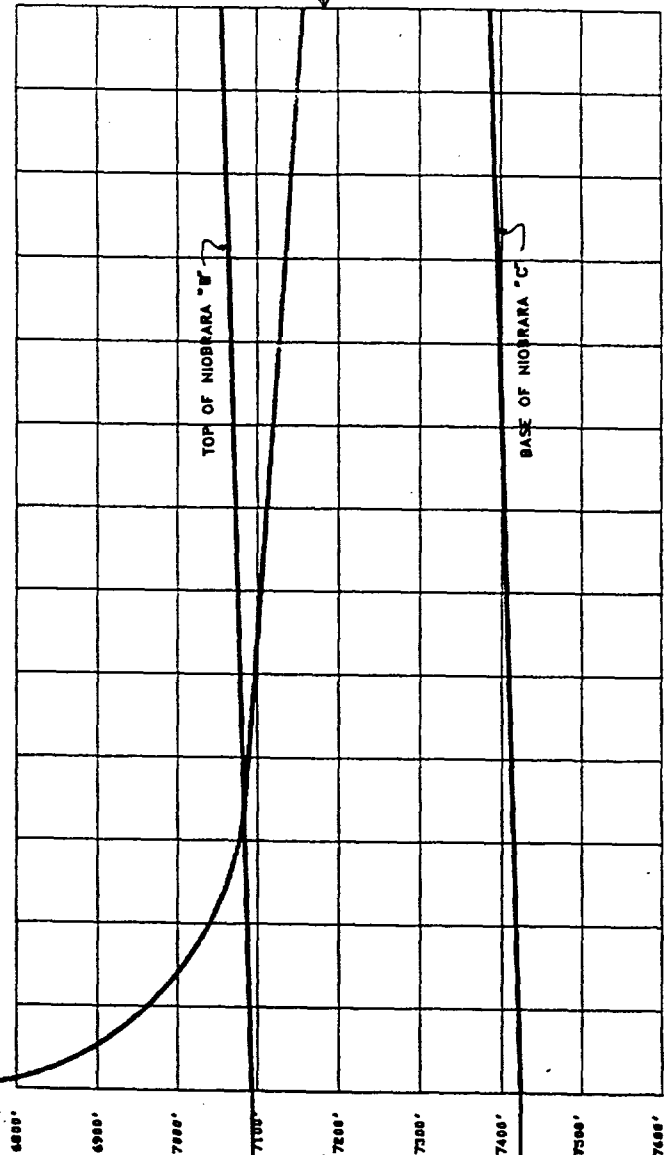


EXHIBIT "B"

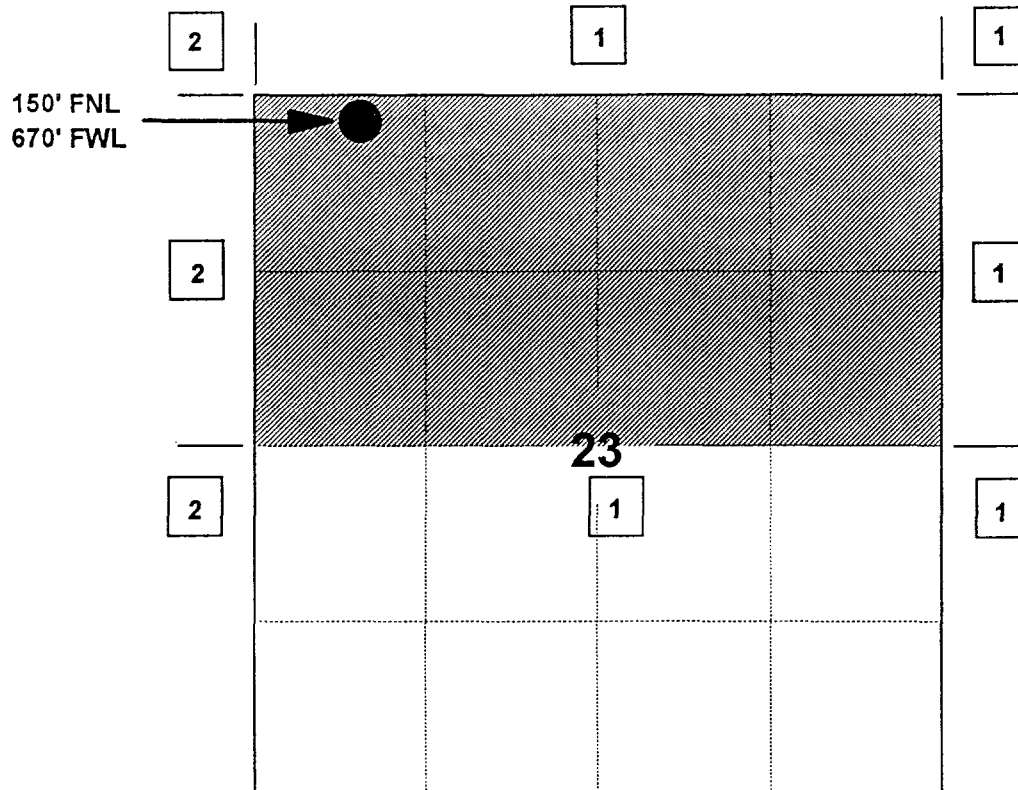
HORIZONTAL SECTION



**MERIDIAN OIL INC****OFFSET OPERATOR PLAT****JICARILLA 99 #17**

Gallup Horizontal Well

Township 26 North, Range 03 West



1) Meridian Oil Inc

2) Jicarilla Apache Tribe

Bureau of Land Management  
1235 La Plata Hwy.  
Farmington, New Mexico 87401  
Attn: John Keller

Jicarilla Apache Tribe  
Post Office Box 507  
Dulce, New Mexico 87528  
Attn: Thurman Velarde  
Oil and Gas Administrator

Apache Jicarilla Agency  
BIA  
Post Office Box 167  
Dulce, New Mexico 87528

KELLAHIN AND KELLAHIN

ATTORNEYS AT LAW

EL PATIO BUILDING

117 NORTH GUADALUPE

POST OFFICE BOX 2265

SANTA FE, NEW MEXICO 87504-2265

W. THOMAS KELLAHIN\*

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

TELEPHONE (505) 982-4285

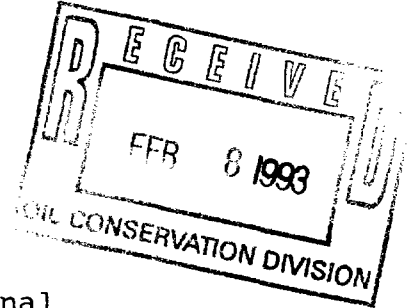
TELEFAX (505) 982-2047

JASON KELLAHIN (RETIRED 1991)

February 5, 1993

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

HAND DELIVERED



RE: Jicarilla 99 #17 Well  
N/2 Sec 23, T26N, R3W, NMPM.  
Application of MERIDIAN OIL INC.  
for a High Angle/Horizontal Directional  
Drilling Pilot Project including Special  
Operating Rules, An Unorthodox Oil Well Location,  
a Non-Standard Proration and Spacing Unit, and  
A Special Project Allowable,  
Rio Arriba County, New Mexico

Dear Mr. LeMay:

On behalf of Meridian Oil., 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, including the Application to all parties, we are notifying them by certified mail return-receipt requested, that they have the right to appear at the hearing, to make a statement to the Division, to present evidence and cross-examine witnesses either in support of or in opposition to the Application.

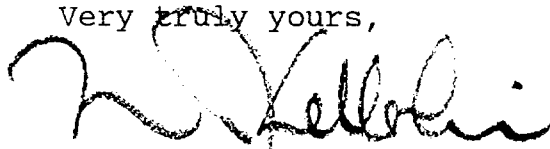
Our proposed advertisement to be used for the OCD docket and for the newspaper publication is attached as Enclosure (1).

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

Mr. William J. LeMay  
February 5, 1993  
Page Two

Applicant, not later than 4:00 PM on Friday, February 26, 1993. A copy of the Pre-Hearing Statement form is attached as Enclosure (2) is being sent to all those required to receive notice as listed in the Application.

Very truly yours,

A handwritten signature in dark ink, appearing to read 'W. Thomas Kellahin', written in a cursive style.

W. Thomas Kellahin

WTK/jcl  
Enclosure

cc: With Application and Enclosure (1)  
Meridian Oil Inc.  
Farmington, New Mexico

**By Certified Mail - Return Receipt**

All Parties Listed on Exhibit "C" of Application  
with Pre-Hearing Statement Form

**Enclosure (1)**

Proposed Advertisement for the OCD Docket

**CASE \_\_\_\_\_: Application of Meridian Oil Inc. for a high angle/horizontal directional drilling pilot project, special operating rules therefor, a non-standard proration unit, an unorthodox well location, and special project oil allowable, Rio Arriba County, New Mexico.** Applicant, in the above-styled cause, seeks to initiate a high angle/horizontal directional drilling pilot project in the Undesignated Northeast Ojito Gallup-Dakota Oil Pool underlying the N/2 of Section 23, Township 26 North, Range 3 West, thereby creating a non-standard 320-acre spacing and proration unit for said pool. The applicant proposes to drill its Jicarill "99" Well No. 17 from an unorthodox surface location 150 feet from the North line and 670 feet from the West line (Unit D) of said Section 23, kick 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 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 330 feet to either the north or south boundary, nor closer than 790 feet to the east or west boundary of the spacing unit, and for a special project allowable. Said project area is located approximately 12 miles northwest 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:

*WTR 3/16/93*  
*3/15/93*  
*RS 3/16/93*

CASE NO. 10679

Order No. R-9863

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

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 Undesignated Northeast Ojito Gallup-Dakota Oil Pool underlying the N/2 of Section 23, Township 26 North, Range 3 West, NMPM, Rio Arriba County, New Mexico, thereby creating a non-standard 320-acre oil spacing and proration unit for said pool.

(3) The applicant proposes to drill its Jicarilla "99" Well No. 17 from an unorthodox surface location 150 feet from the North line and 670 feet from the West line (Unit D) of Section 23 in the following unconventional manner:

Drill vertically to a depth of approximately

6,704 feet, kick off from the vertical at this depth and drill in a southeasterly 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 7,085 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 7,325 feet.

(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 790 feet from the east and west and no closer than 330 feet from the north and south boundaries of the proposed spacing unit;

b) approval of a 320-acre non-standard oil proration unit comprising the N/2 of Section 23;

c) a special project allowable equal to two times the current allowable in the Northeast Ojito Gallup-Dakota Oil Pool.

(5) The subject well is located within one mile of the boundaries of Northeast Ojito Gallup-Dakota Oil Pool and is therefore subject to the Special Rules and Regulations for said pool as promulgated by Division Order No. R-8188-A, which require standard 160-acre spacing and proration units with wells to be located no closer than 790 feet from the outer boundary of the proration unit, nor closer than 330 feet from any quarter-quarter section line or subdivision inner boundary. ✓

(6) 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.

(7) 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.

(8) According to applicant's evidence and testimony, the proposed unorthodox surface location is necessitated by the presence of forested area and archaeological sites.

(9) In addition, the proposed unorthodox surface location will result in the subject wellbore penetrating the Niobrara "B" member of the Gallup formation at an unorthodox bottomhole location approximately 330 feet from the North line and 987 feet from the West line of Section 23.

(10) According to further evidence and testimony, the interest ownership within the N/2 of Section 23 and the affected offset acreage to the north in Section 14 is identical.

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

(12) In the interest of conservation, prevention of waste, and protection of correlative rights, the application of Meridian Oil Inc. for a high angle/horizontal directional drilling project should be approved.

(13) The evidence indicates that the horizontal or producing portion of the subject wellbore, as proposed, should penetrate both the NW/4 and the NE/4 of Section 23.

(14) It has been the practice of the Division in previously heard cases of this nature to assign an allowable based upon the number of standard proration units actually contacted by the wellbore.

(15) The subject well and project area should be assigned an allowable in conformance with current Division policy. Based upon the evidence presented, the subject well should be assigned an allowable equal to 427 BOPD times the number of 160-acre tracts contacted by the wellbore as determined from directional surveys.

(16) 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.

(17) 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.

(18) 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 N/2 of Section 23, Township 26 North, Range 3 West, NMPM, Rio Arriba County, New Mexico, by drilling its Jicarilla "99" Well No. 17 from an unorthodox surface location 150 feet from the North line and 670 feet from the West line (Unit D) of Section 23 in the following unconventional manner:

Drill vertically to a depth of approximately 6,704 feet, kick off from the vertical at this depth and drill in a southeasterly 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 7,085 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 7,325 feet.

PROVIDED HOWEVER THAT, no portion of the horizontal portion of the wellbore shall be located closer than 330 feet from the north and south nor closer than 790 feet from the east and west boundary of the project area. (es) ✓

(2) The N/2 of Section 23 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 shall be assigned an oil allowable equal to 427 BOPD times the number of standard 160-acre tracts contacted by the wellbore as determined from directional surveys.

(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) (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

S E A L