

MERIDIAN OIL

CASE # 10744

JUNE 17, 1993

**EXHIBIT 1**

10/10/2020

Alan

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

JASON KELLAHIN (RETIRED 1991)

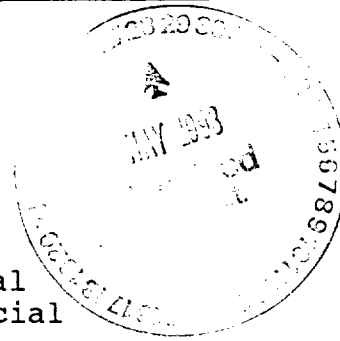
TELEPHONE (505) 982-4285  
TELEFAX (505) 982-2047

May 25, 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 #4 Well  
Sec 17, T26N, R2W, NMPM.  
Application of MERIDIAN OIL INC.  
for a High Angle/Horizontal Directional  
Drilling Pilot Project, including Special  
Operating Rules, Gavilan-Mancos Pool,  
Rio Arriba County, New Mexico



Dear Mr. LeMay:

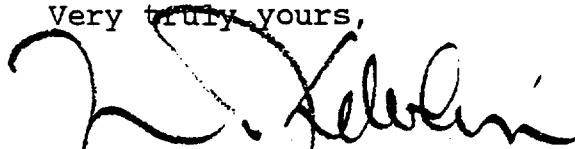
On behalf of Meridian Oil Inc., please find enclosed our Application for a High Angle/Horizontal Direction Drilling Pilot Project as referenced above, which we request be set for hearing on the next available Examiner's docket now scheduled for June 17, 1993.

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, June 11, 1993. A copy of the Pre-Hearing form is attached as Enclosure (2) and is being sent to those required to receive notice as set for 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/mg  
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)

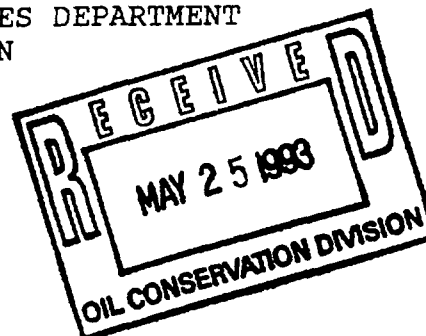
PROPOSED ADVERTISEMENT FOR THE OCD DOCKET

CASE: \_\_\_\_\_. Application of Meridian Oil Inc. for a high angle/horizontal directional drilling pilot project, special operating rules therefor, Rio Arriba County, New Mexico. Applicant seeks to initiate a high angle/horizontal directional drilling pilot project in the Gavilan-Mancos Oil Pool underlying all of Section 17, 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 #4 Well located at a standard surface location in said Section 17, kick off from the vertical in an estimated northwesterly 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 Lindrich, 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.: \_\_\_\_\_

APPLICATION OF MERIDIAN OIL INC.  
FOR A HIGH ANGLE/HORIZONTAL DIRECTIONAL  
DRILLING PILOT PROJECT INCLUDING  
SPECIAL OPERATING RULES,  
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 Gavilan-Mancos Oil Pool, including Special Operating Rules, and a standard 640 acre spacing and proration unit consisting of all of Section 17, T26N, R2W, NMPM, Rio Arriba County, New Mexico, for its Cheney Federal #4 Well to be drilled at a standard surface location which is anticipated to be in Unit H of said Section 17. 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 17, T26N, R2W, NMPM, Rio Arriba County, New Mexico.

(2) Applicant proposes to drill its Cheney Federal #4 Well at a standard well location 1700 feet FNL and 835 feet FEL (Unit H) of said Section 17 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 6597 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 northwesterly 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."

(3) 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."

(4) The target point is defined at the actual bottom hole location at the end point of the lateral of the subject well.

(5) 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.

(6) 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.

(7) 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.

(8) 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.

Application of Meridian Oil Inc.

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(9) 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.

(10) 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.

(11) As required by Division notice rules, notice is provided to those offsetting operators as listed on Exhibit "B."

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

Application of Meridian Oil Inc.  
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WHEREFORE, Applicant requests that this matter be set for hearing on June 17, 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,

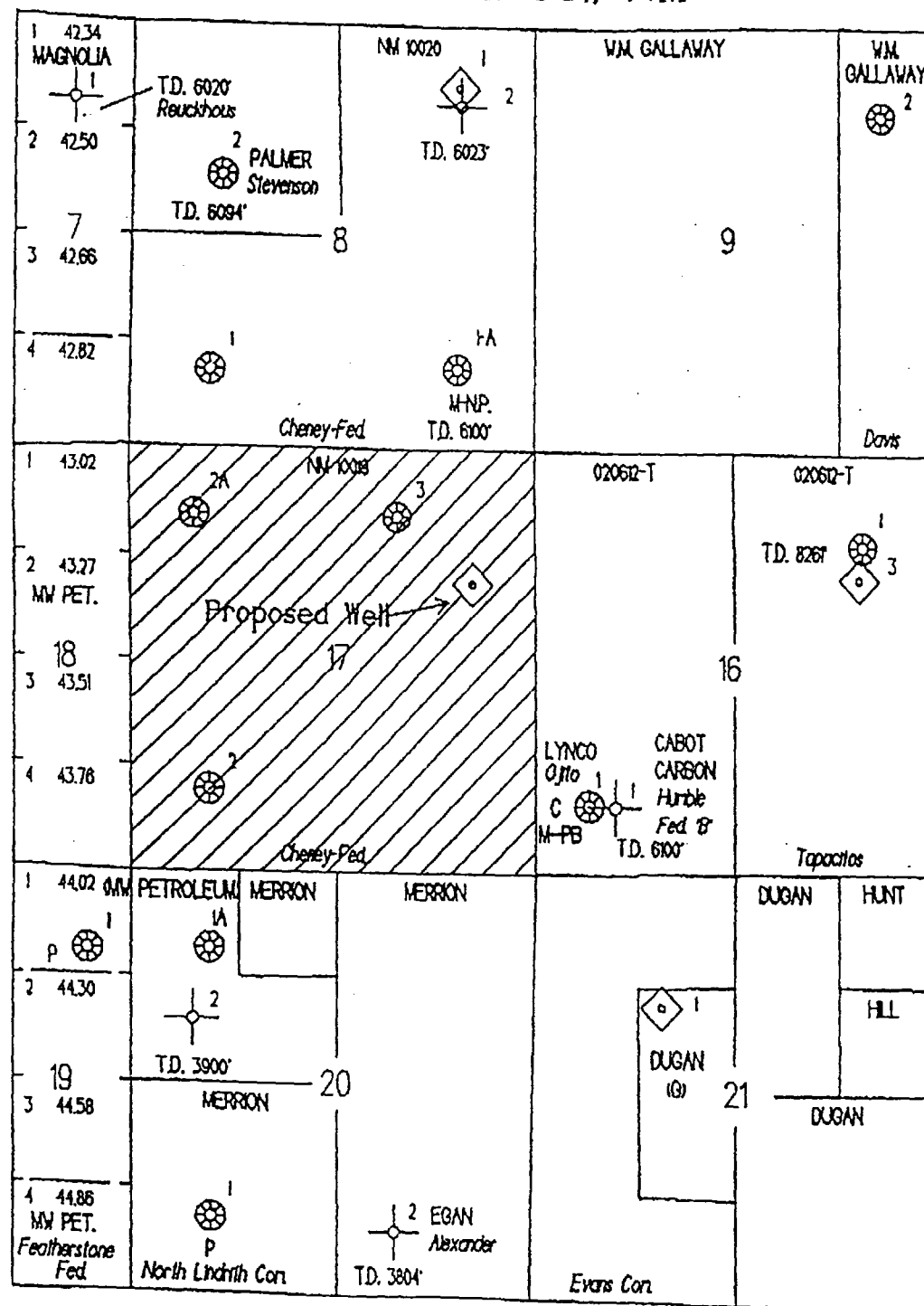
KELLAHIN and KELLAHIN

By: 

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

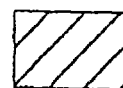
Attorneys for Applicant

Meridian Oil Inc  
 Cheney Federal #4  
 1700' FNL, 835' FEL  
 SENE Sec. 17, T26N, R02W  
 Rio Arriba Co., NM



◊ Mancos Well

⊗ Mesaverde Well



Proposed Spacing

# MERIDIAN OIL INC.

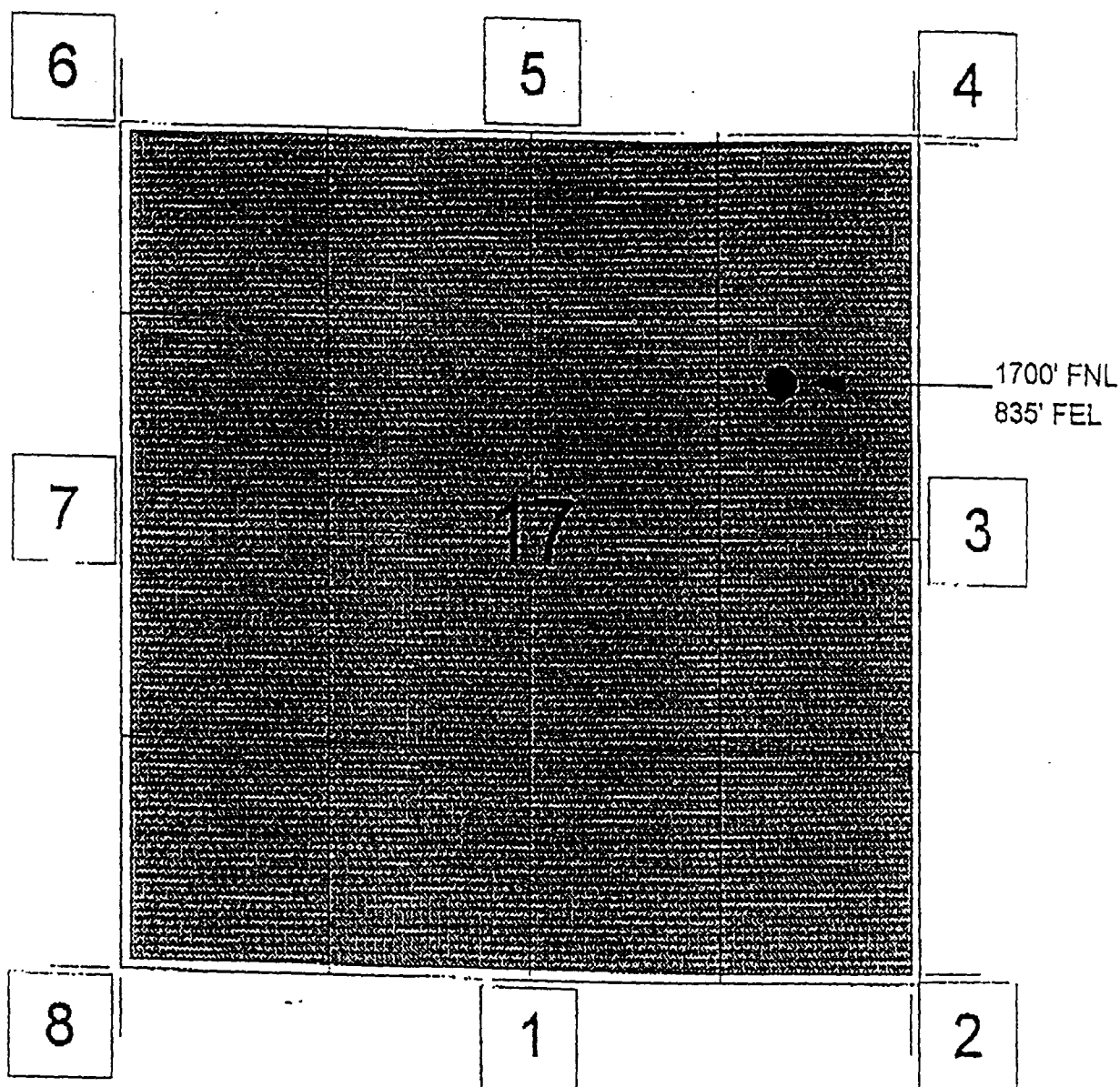
OFFSET OPERATOR/OWNER PLAT

Gavilan-Mancos Horizontal Well

CHENEY FEDERAL #4

SE NE Section 17, T26N, R02W

Rio Arriba County, New Mexico



See Attached List

CHENEY FEDERAL #4

1. Apache Corporation  
(MW Petroleum Corp.)  
Suite 2000 One Norwest Center  
1700 Lincoln Street  
Denver, CO 80203-4520  
  
Mountain States Natural Gas Corp.  
P.O. Box 460391  
Houston, TX 77056-8391  
  
Mr. Robert L. Bayless  
P.O. Box 168  
368 NM Highway 170  
Farmington, NM 87499
2. Dugan Production Corp  
P.O. Box 420  
709 E. Murray Dr.  
Farmington, NM 87499
3. Meridian Oil Inc.  
P.O. Box 4289  
Farmington, NM 87499-4289
4. Apache Corporation  
(MW Petroleum Corp.)  
Suite 2000 One Norwest Center  
1700 Lincoln Street  
Denver, CO 80203-4520
5. Meridian Oil Inc.  
P.O. Box 4289  
Farmington, NM 87499-4289  
  
Apache Corporation  
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1700 Lincoln Street  
Denver, CO 80203-4520  
  
McHugh Companies  
650 S. Cherry Street, Suite 1225  
Denver, CO 80222
6. Apache Corporation  
(MW Petroleum Corp.)  
Suite 2000 One Norwest Center  
1700 Lincoln Street  
Denver, CO 80203-4520
- McHugh Companies  
650 S. Cherry Street, Suite 1225  
Denver, CO 80222
- Merrion Oil & Gas Corp.  
P.O. Box 840  
610 Reilly Avenue  
Farmington, NM 87499-0840
7. Merrion Oil & Gas Corp.  
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610 Reilly Avenue  
Farmington, NM 87499-0840
8. Merrion Oil & Gas Corp.  
P.O. Box 840  
610 Reilly Avenue  
Farmington, NM 87499-0840  
  
Apache Corporation  
(MW Petroleum Corp.)  
Suite 2000 One Norwest Center  
1700 Lincoln Street  
Denver, CO 80203-4520

**EXHIBIT 2**

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# MERIDIAN OIL INC.

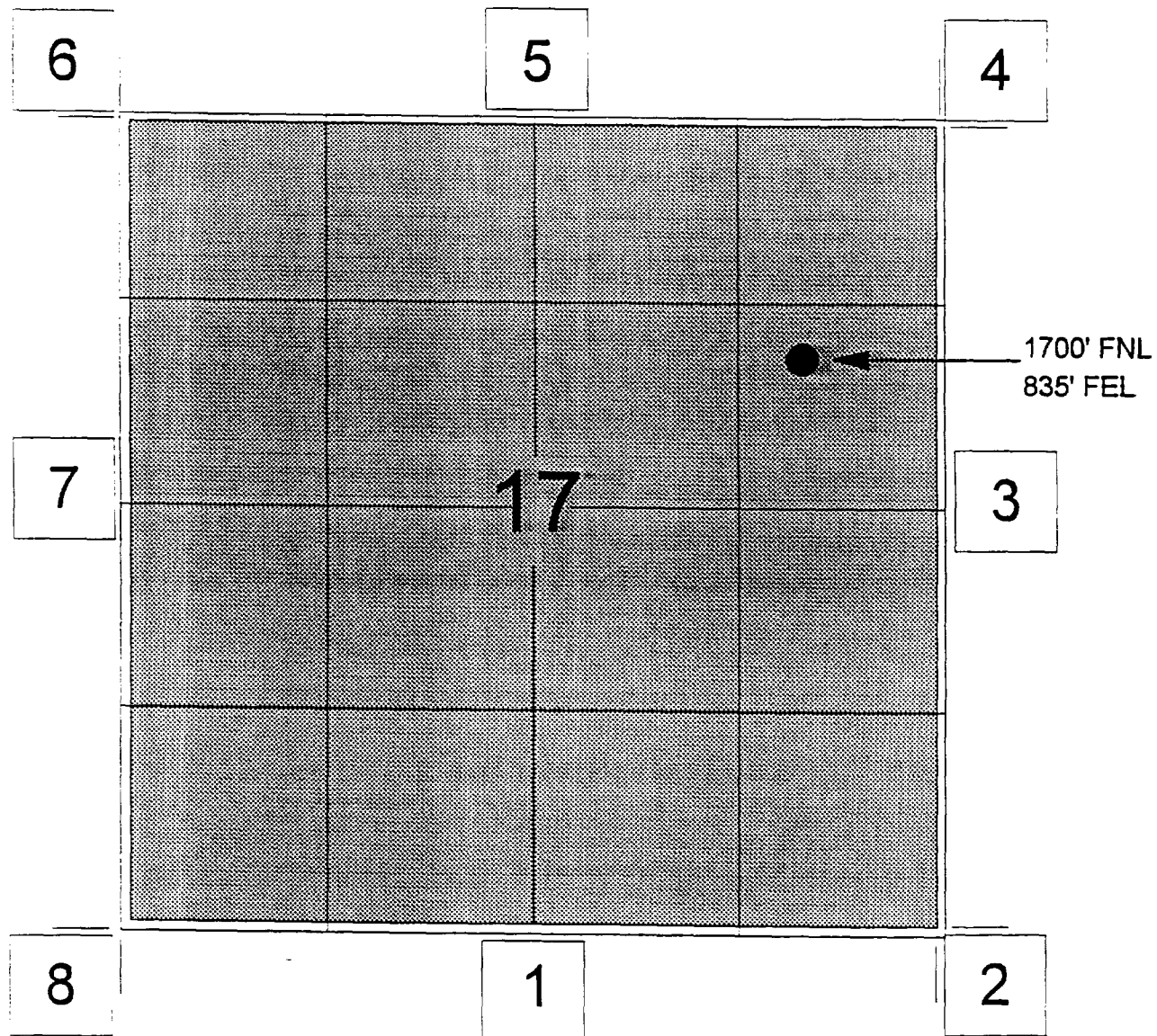
## OFFSET OPERATOR/OWNER PLAT

Gavilan-Mancos Horizontal Well

CHENEY FEDERAL #4

SE NE Section 17, T26N, R02W

Rio Arriba County, New Mexico



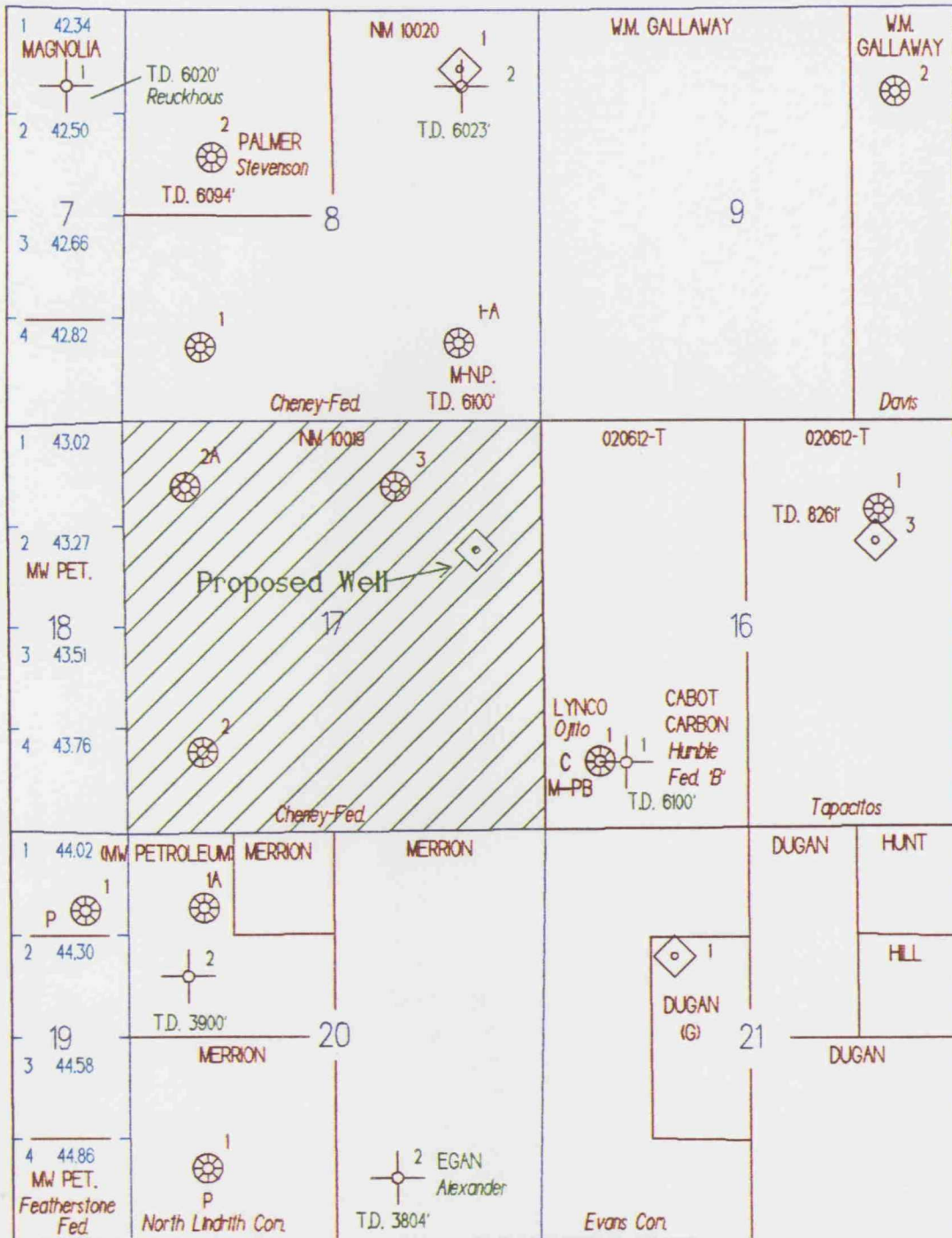
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**Apache Corporation  
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Suite 2000 One Norwest Center  
1700 Lincoln Street  
Denver, CO 80203-4520**

**EXHIBIT 3**

Meridian Oil Inc  
Cheney Federal #4  
1700' FNL, 835' FEL  
SENE Sec. 17, T26N, R02W  
Rio Arriba Co., NM



 Mancos Well  
 Mesaverde Well

 Proposed Spacing

**EXHIBIT 4**

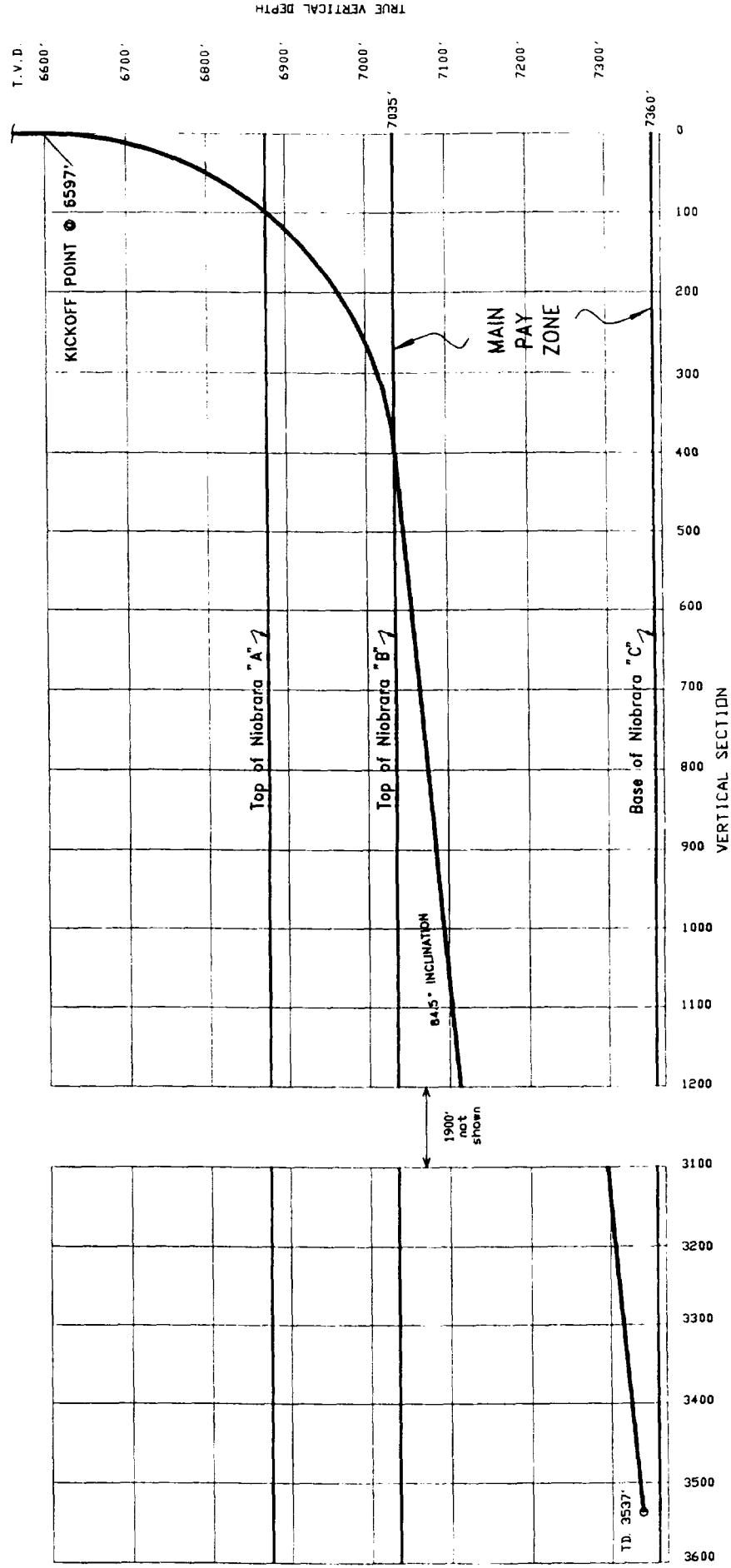
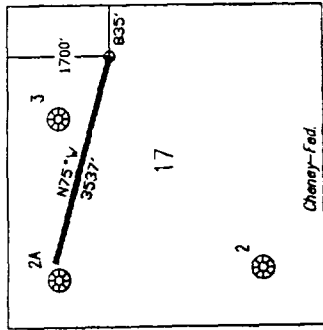


# MERIDIAN OIL

CHENEY FEDERAL NO. 4  
HIGH-ANGLE NIOBRARA NEW DRILL  
Rio Arriba Co., New Mexico

AREA 9 TEAM  
DUG. C. 68014  
5/20/93

Cheney Federal No. 4  
1700' Int & 835' Tel  
SE/NE 17-T26N-R2W  
Kb 7227'est



**EXHIBIT 5**