

MERIDIAN OIL

CASE # 10680

MARCH 4, 1993

*Jan
Alan***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

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)

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

HAND DELIVERED

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)

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, 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.: _____

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

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 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

ILLEGIBLE

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."

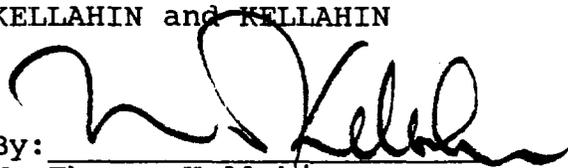
(13) The granting of this Application will be in the best interest of conservation, the prevention of waste and the protection of correlative rights.

Application of Meridian Oil Inc.
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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
Cheney Fed.'B' No. 2
Sec. 8, T26N-R2W
Rio Arriba Co., N.M.
1650' FSL, 990' FWL

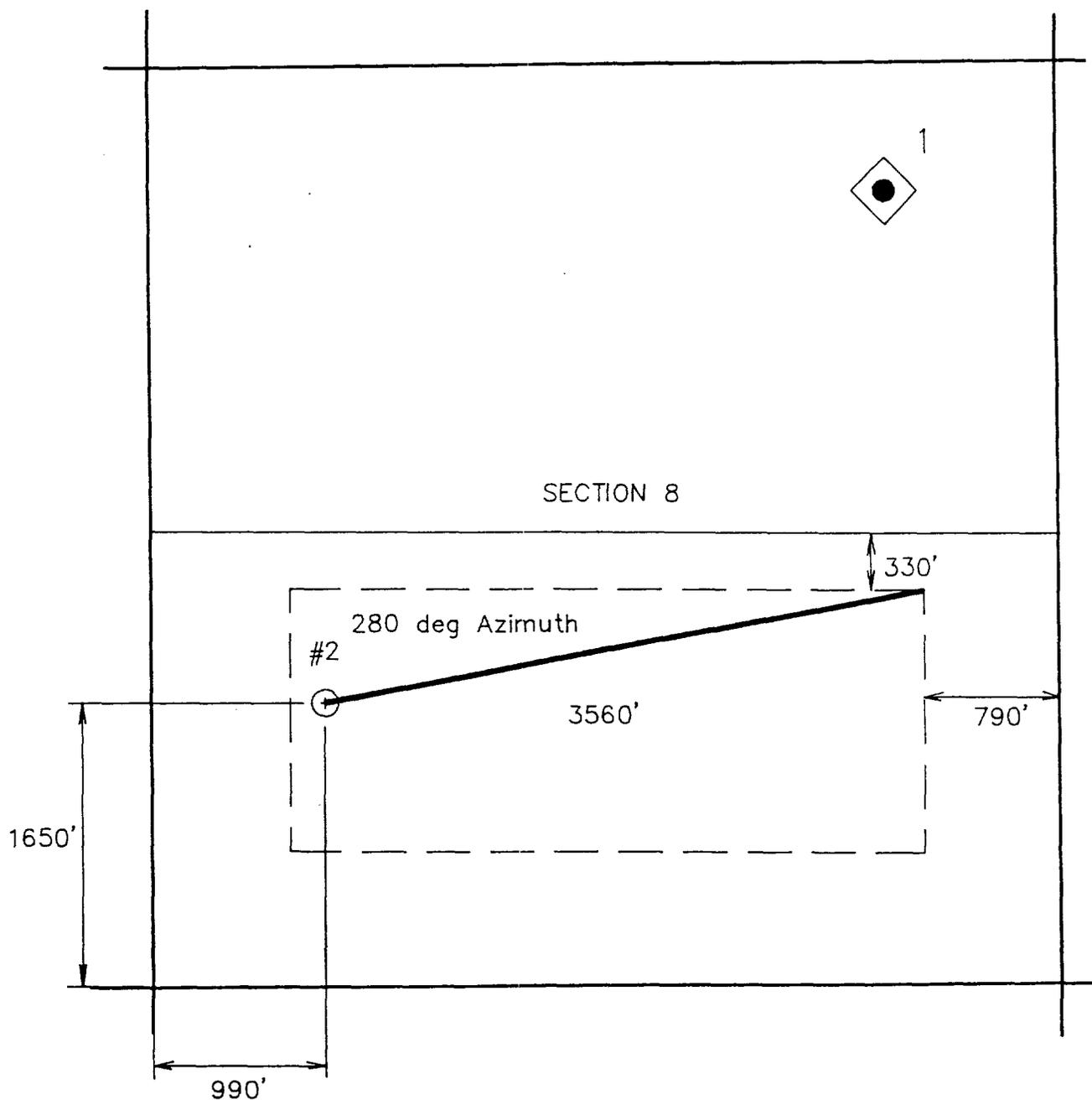


EXHIBIT "A"

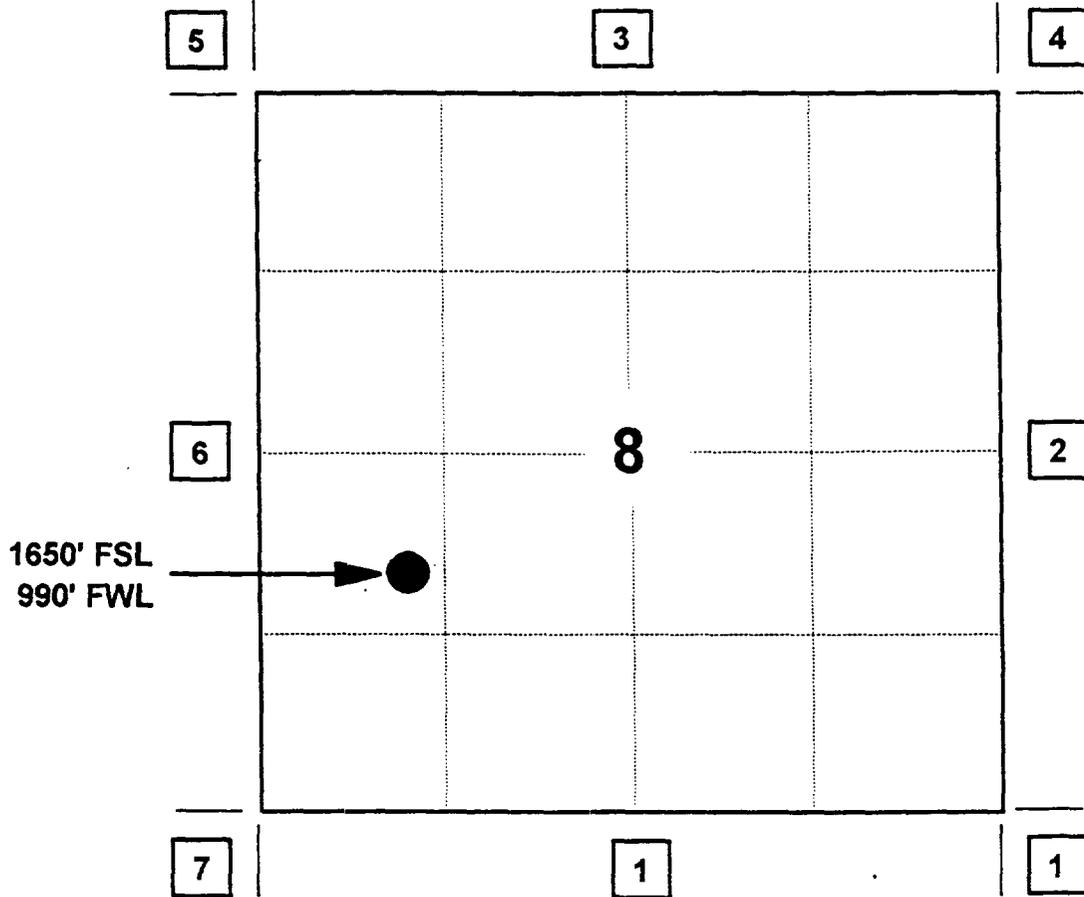
MERIDIAN OIL INC

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 Petroleum Inc. 8055 E. Tufts, #1060, Denver, CO 80237

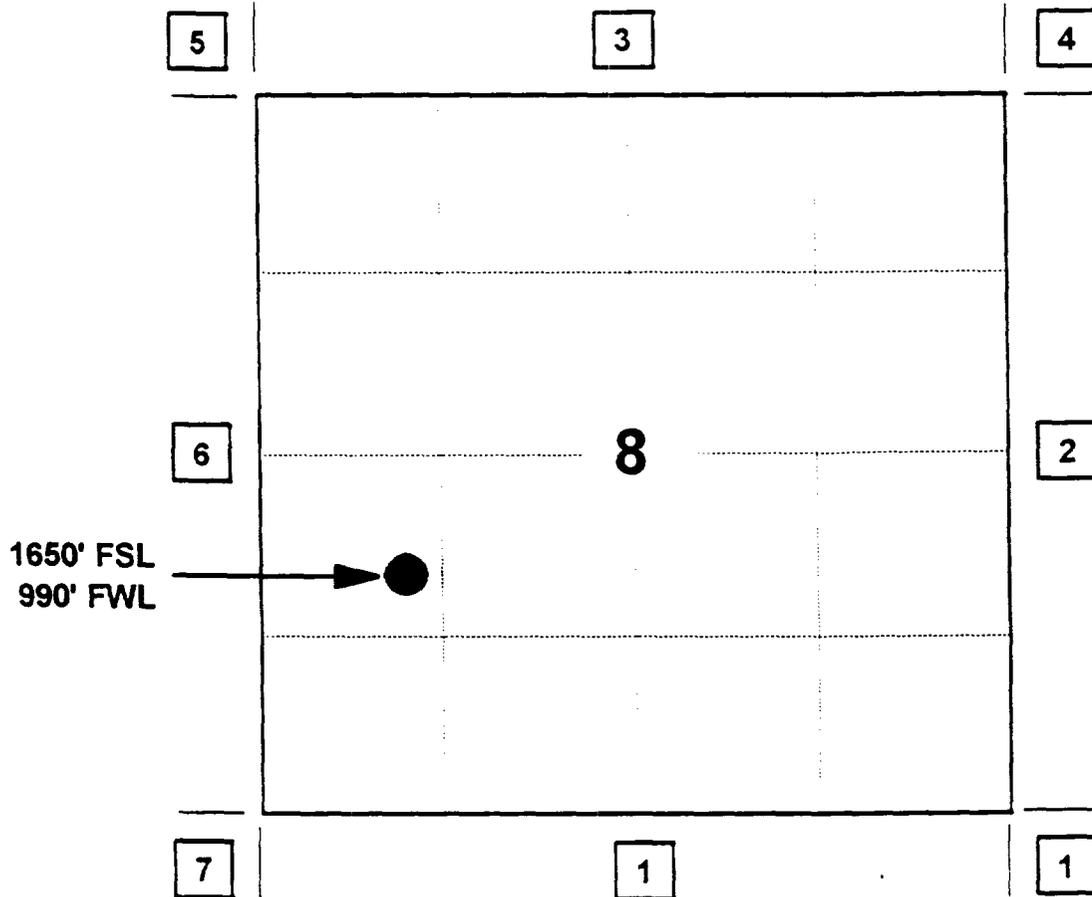
- 5) Meridian Oil Inc, Mw Petroleum Corp. &
McHugh Companies 650 S. Cherry St., Suite 1225, Denver, CO 80222

- 6) Meridian Oil Inc, McHugh Companies &
Merrion Oil & Gas Corp. PO Box 7871, Farmington, NM 87499

- 7) Meridian Oil Inc & Merrion Oil & Gas Corp.

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

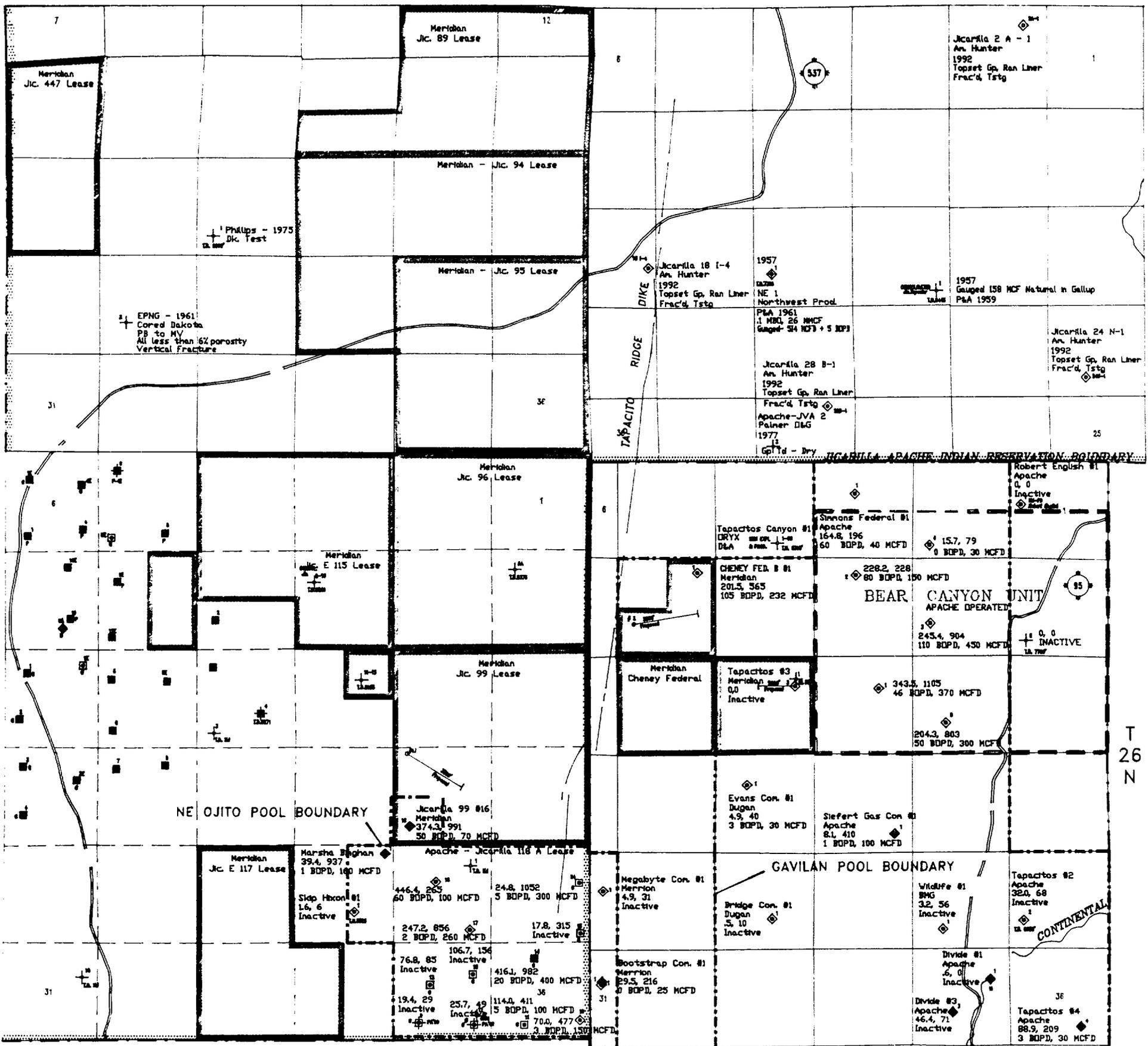
- 3) Meridian Oil Inc &
W M Gallaway 3005 Northridge Dr., Suite I, Farmington, NM 87401

- 4) Meridian Oil Inc, W M Gallaway &
Ominex Petrolemn Inc. 8055 E. Tufts, #1060, Denver, CO 80237

- 5) Meridian Oil Inc, Mw Petroleum Corp, &
McHugh Companies 650 S. Cherry St., Suite 1225, Denver, CO 80222

- 6) Meridian Oil Inc, McHugh Companies &
Merrion Oil & Gas Corp. PO Box 7871, Farmington, NM 87499

- 7) Meridian Oil Inc & Merrion Oil & Gas Corp.



LEGEND
 WELL
 OPERATOR
 EUR-MBO, MCF
 PROD RATE- BOPD, MCFD
 GAS OF 3/92

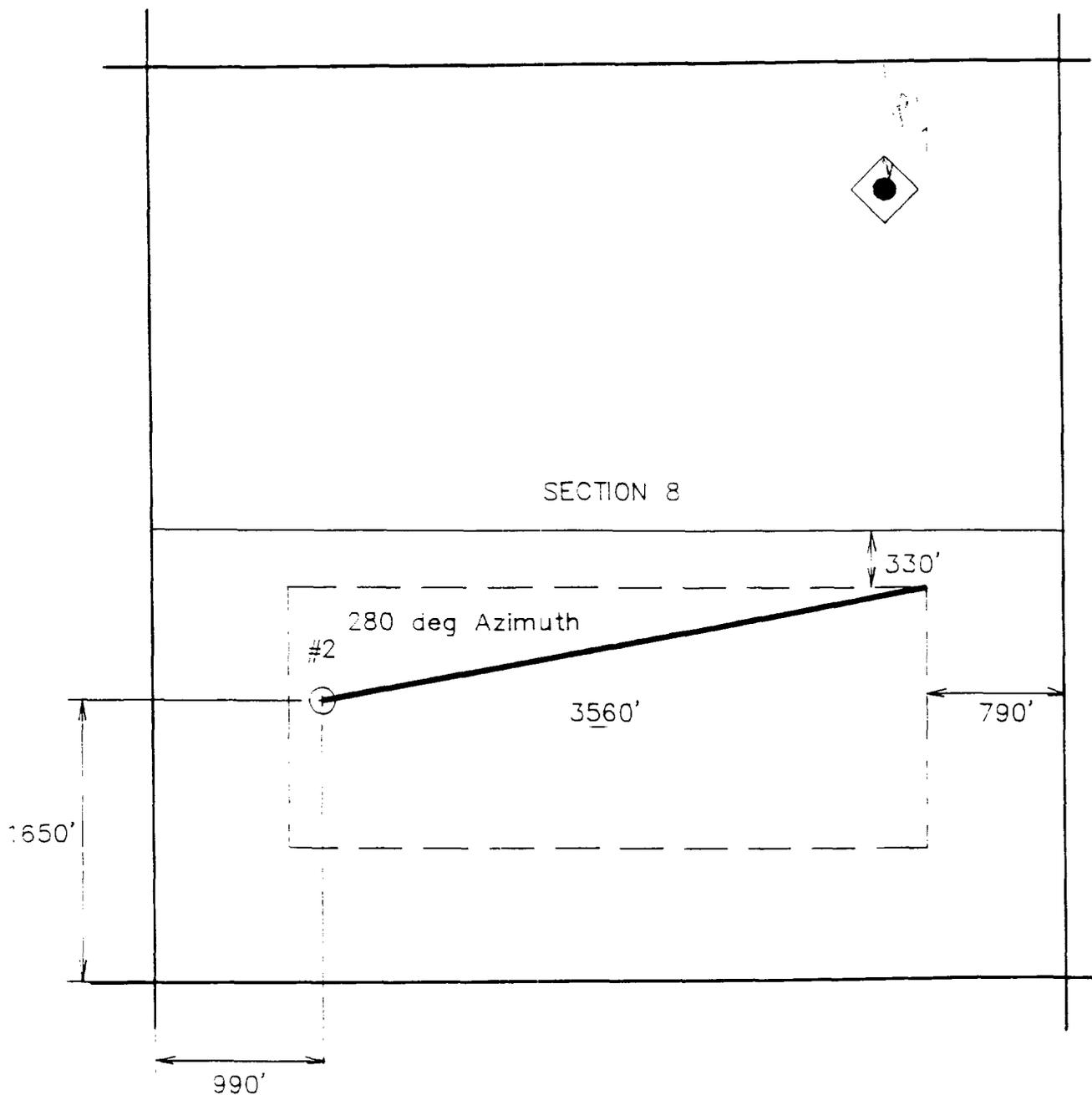
R 3 W

R 2 W

MERIDIAN OIL
 GALLUP EUR MAP
 NORTHEAST OJITO & GAVILAN FIELDS

EXHIBIT 4

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



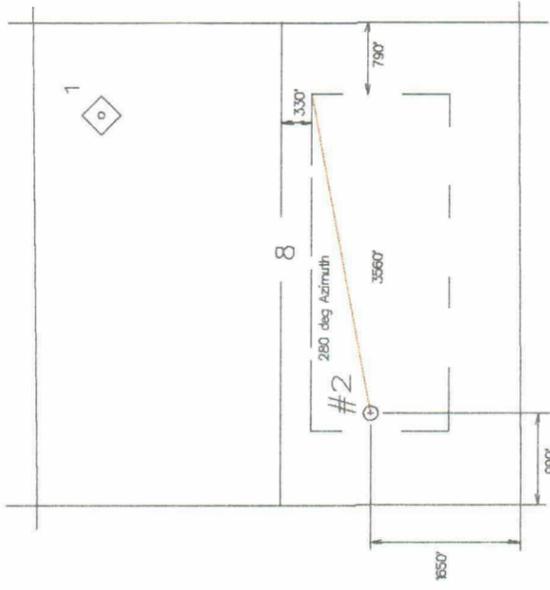
MERIDIAN OIL

CHENEY FEDERAL "B" NO. 2 HIGH ANGLE NIOBRARA NEW DRILL NW/SW 8-T26N-R2W

Rio Arriba County, New Mexico

NE

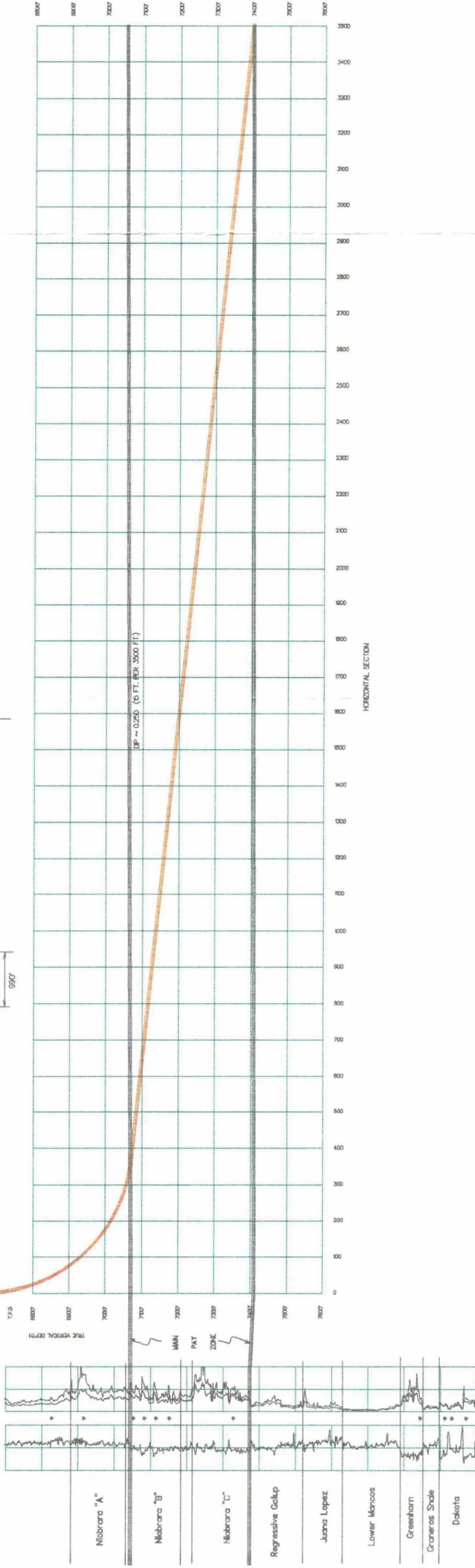
REVISED 2/2/93



SW
CHENEY FEDERAL
"B" NO. 2

JICARILLA "99" NO. 16
SW/SW 23, T26N-R3W
Rio Arriba Co., N.M.

K.O.P. 8853'



HORIZONTAL SECTION