

KELLAHIN, KELLAHIN AND AUBREY

ATTORNEYS AT LAW

EL PATIO BUILDING

117 NORTH GUADALUPE

POST OFFICE BOX 2265

SANTA FE, NEW MEXICO 87504-2265

W. THOMAS KELLAHIN
KAREN AUBREY

CANDACE HAMANN CALLAHAN

JASON KELLAHIN
OF COUNSEL

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

*Copy 36 m
Public Record
6-9-91*

June 18, 1991

RECEIVED

Mr. William J. LeMay
Oil Conservation Division
Post Office Box 2088
Santa Fe, New Mexico 87504

JUN 18 1991

OIL CONSERVATION DIV.
SANTA FE

Re: Browning Federal 33-1
Application of KLM Oil & Gas for a
High Angle/Horizontal/Directional
Drilling Pilot Project and Special
Operating Rules Including a Project
Allowable, Rio Arriba County,
New Mexico

10348

Dear Mr. LeMay:

On behalf of KLM Oil & Gas, please find enclosed our Application for a High Angle/Horizontal/Directional Drilling Pilot Project and Special Operating Rules which we request be set for hearing on the next available Examiner's docket now scheduled for July 11, 1991.

We suggest the following as an advertisement for the notice of hearing provided for the New Mexico Oil Conservation Division docket:

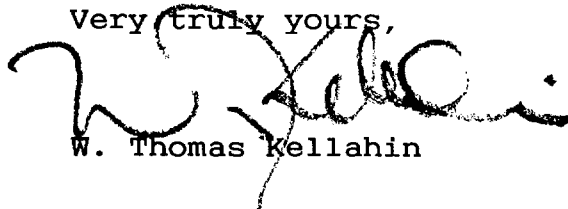
Application of KLM Oil & Gas for a high angle/horizontal/directional drilling pilot project, special operating rules therefor, and an unorthodox oil well location, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks to initiate a high angle/horizontal/directional drilling pilot project within a standard 600-acre oil spacing and proration unit in the West Puerto Chiquito-Mancos Oil Pool comprising all of Section 33, Township 24 North, Range 1 West. The applicant proposes to commence its Browning Federal 33-1 Well to be located at a standard oil well location 1650 feet from the West line and 1650 feet from the South line (Unit K) of said Section 33, drill vertically to a depth of approximately 6900 feet, evaluate the pay zone, plug

Mr. William J. LeMay
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By copy of this letter 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.

Very truly yours,

A handwritten signature in dark ink, appearing to read 'W. Thomas Kellahin', written over the typed name.

W. Thomas Kellahin

WTK/tic
Enclosure

cc: Mr. Dan Sommers
KLM Oil & Gas
5808 S. Rapp Street, Suite 102
Littleton, Colorado 80120

Certified mail return-receipt
All parties listed on Exhibit "C"
of application

STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION

LARGE

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

JUN 18 1981
OIL CONSERVATION
SANTA FE

CASE: 10348

APPLICATION OF KLM OIL & GAS FOR A
HIGH ANGLE/HORIZONTAL/DIRECTIONAL
DRILLING PILOT PROJECT AND SPECIAL
OPERATING RULES INCLUDING A PROJECT
ALLOWABLE, RIO ARriba COUNTY, NEW MEXICO

A P P L I C A T I O N

Comes now KLM Oil & Gas, by and through its attorneys, Kellahin, Kellahin & Aubrey, and applies to the New Mexico Oil Conservation Division for approval for a High Angle Horizontal Directional Drilling Pilot Project including special operating rules and a project allowable for its Browning Federal 33-1 well to be drilled at a standard surface well location in the Unit K of Section 33, and dedicated to a 640-acre standard spacing unit in Section 33, T24N, R1W, in the West Puerto Chiquito Mancos Pool, Rio Arriba County, New Mexico and in support thereof states:

(1) Applicant is the operator of Section 33, T24N, R1W, N.M.P.M., Rio Arriba County, New Mexico.

(2) Applicant proposes to drill a high angle horizontal directional well commencing at a surface location in the Unit K of Section 33 estimated to be 1650 feet FWL and 1650 feet FSL of said Section 33 and drilled vertically to approximately 6900 feet (+ or - 100 feet) at which point the applicant will evaluate the well and plug back to approximately 6137 feet and kickoff the well in a Northeasterly direction (approximately N40E) building an assumed 90 degree radius turn in approximately 587 (10 degrees per 100 feet) feet of vertical distance and continuing to penetrate the Niobrara "C" at an estimated depth of 6710 feet TVD/7037 feet MD and thence drilling horizontally at a an angle in a Northeasterly direction a distance not in excess of 2200 feet but no closer than 1650 feet to the side boundaries of said Section 33. See Exhibit "A."

(3) Except as otherwise requested herein, Applicant proposes that this project be subject to the Special Rules and Regulations that govern the West Puerto Chiquito Mancos Pool and that Section 33 be dedicated as the spacing unit for the project.

(4) The potential productive zone of the West Puerto Chiquito Mancos Pool is characterized by tight, low permeability blocks interconnected by a high capacity fracture system.

(5) Past experience in said pool has shown that conventionally drilled (vertical) wells may not adequately develop and produce all of the reserves in the spacing unit.

(6) By drilling a horizontal wellbore, the applicant is attempting to increase the probability of encountering and producing hydrocarbon reserves which may not ultimately be produced by the original vertical wells in the spacing unit, thereby preventing waste.

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(8) All offset owners/operators are listed on Exhibit "C" and pursuant to Division Notice Rules have been provided with a copy of this application.

(9) 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 July 11, 1991 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,

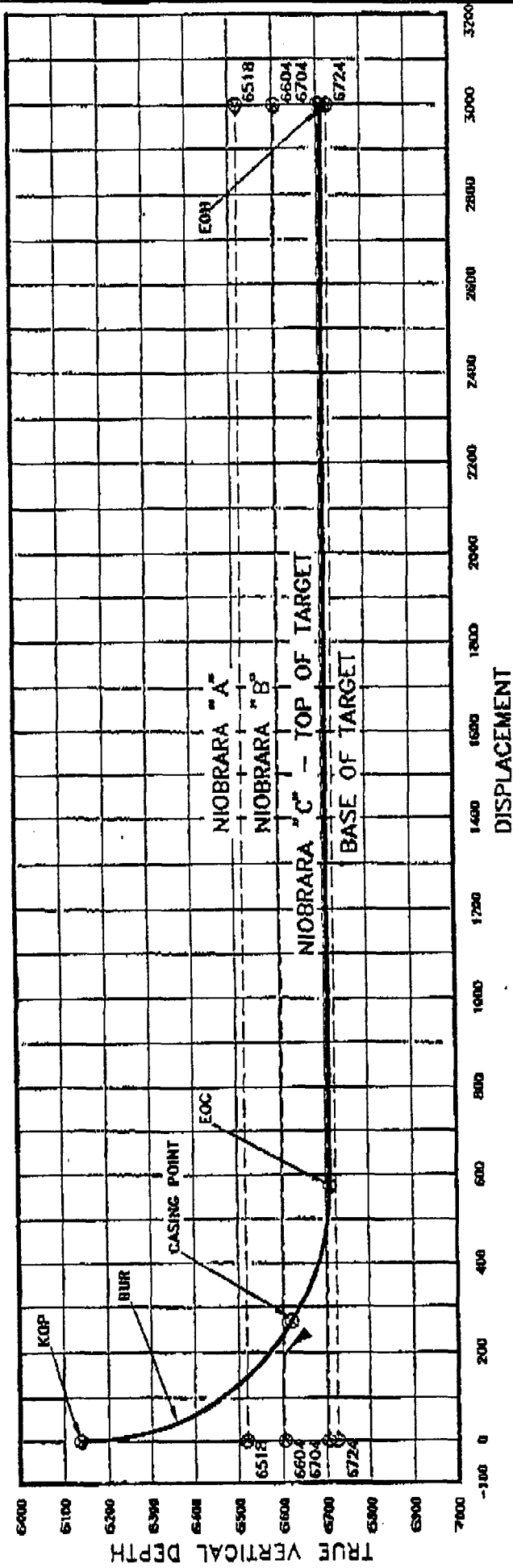
KELLAHIN, KELLAHIN & AUBREY

By: 

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

Attorneys for Applicant

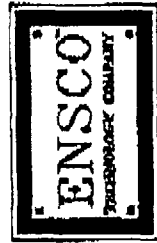
KLM EXPLORATION COMPANY
 BROWNING FEDERAL 33-1
 RIO ARriba COUNTY, NEW MEXICO
 PROPOSED VERTICAL PROFILE
 AZIMUTH = 40 DEGREES



DEPTHS ARE REFERENCED TO RKB 7329' ELEVATION.

NOTES:

- KOP: 6137' TVD
- BUR: 10' / 100'
- CASING POINT: 6713' MD / 6520.8' TVD / 57.6' INC (7')
- EOC: 7037' MD / 6710' TVD / 90' INC
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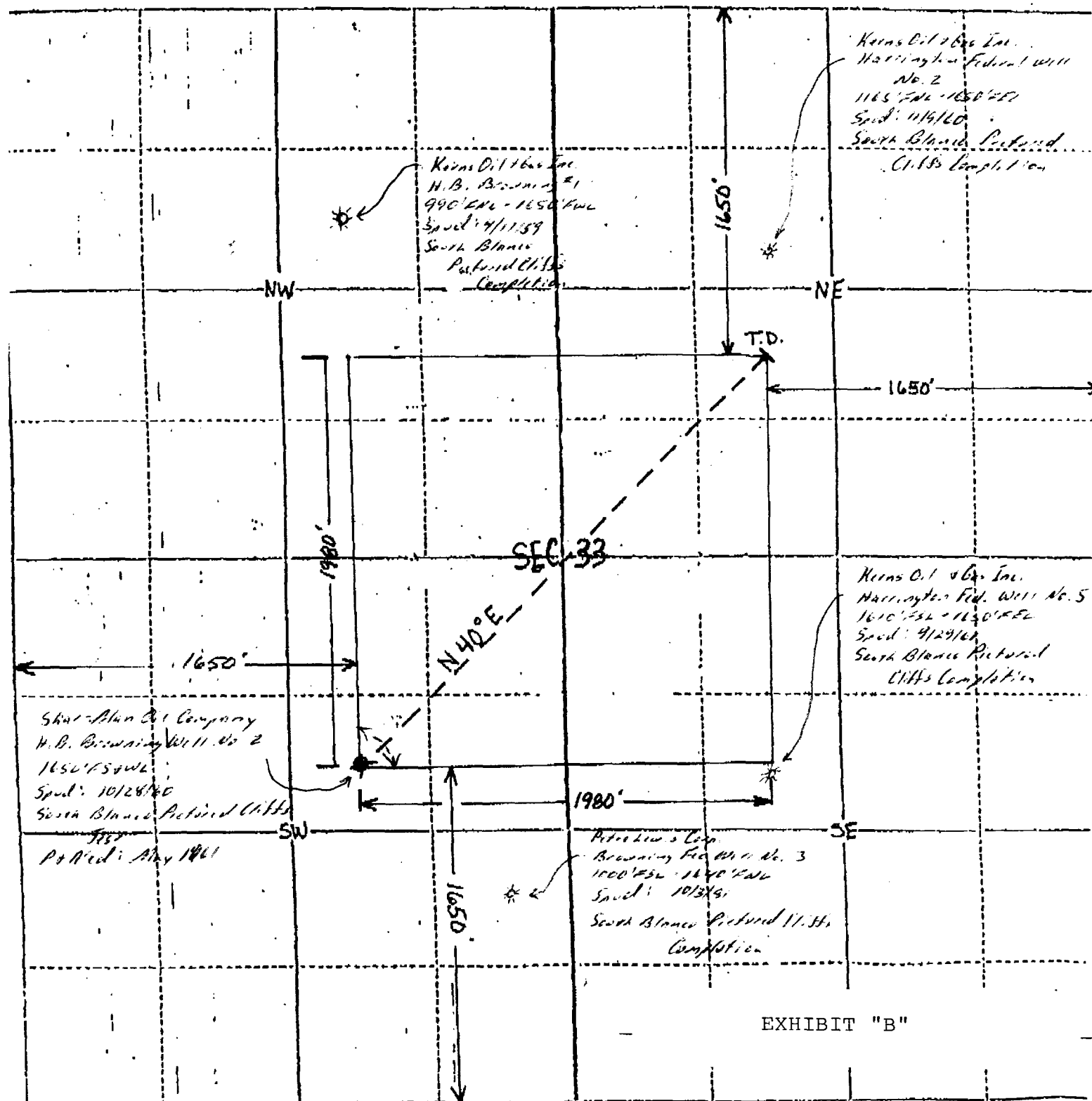


HORIZONTAL DRILLING SYSTEMS

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ENSCO TECHNOLOGY COMPANY 1778 Yorktown, Suite 750, Houston, Texas 77055 Telephone: (713)641-8000	
PROPOSED VERTICAL PROFILE	
KLM EXPLORATION COMPANY	
BROWNING FEDERAL 33-1	
APPROVED: 14 JUNE 91	CHECKED: B00091A1
DRAWN: CHRIS H.	

EXHIBIT "A"

County Rio Arriba State New MexicoTownship 24 North Range 1 WEST

KLM Oil & Gas

Standard 640

Surface location: 1650' FSL

Browning Federal 33-1

are section

1650' FSL

SW NE SW Sec. 33, T24N-R1W

Proposed Azimuth 30-45°

EXHIBIT "C"

Mobil Exploration & Producing
P.O. Box 633
Midland, TX 79702

BHP Petroleum
584 San Felipe, Suite 3600
Houston, TX 77057

A.G. Hill
3400 Thanksgiving Tower
Dallas, TX 75201

Apache Corp.
1700 Lincoln, Suite 1900
Denver, CO 80203-4519

Dugan Production Corp.
P.O. Box 420
Farmington, NM 87499

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

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Enclosure

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KLM Oil & Gas
5808 S. Rapp Street, Suite 102
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appt618.626

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ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION

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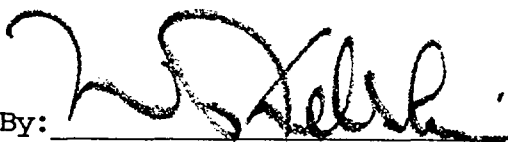
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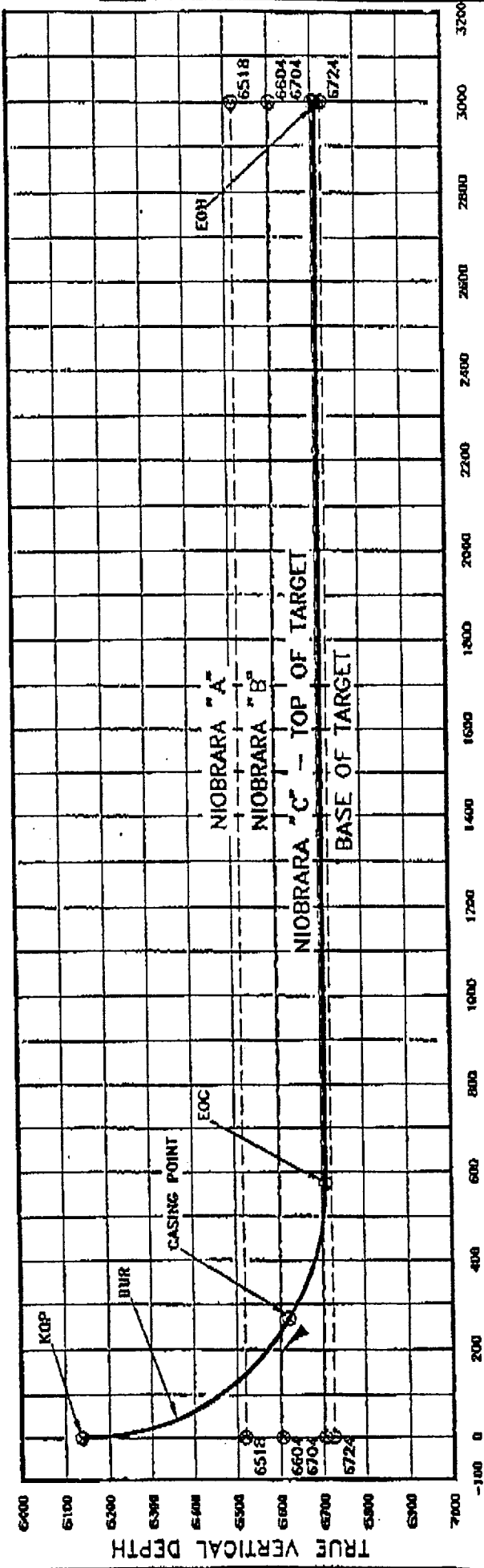
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By: 

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

Attorneys for Applicant

KLM EXPLORATION COMPANY
BROWNING FEDERAL 33-1
RIO ARriba COUNTY, NEW MEXICO
PROPOSED VERTICAL PROFILE
AZIMUTH = 40 DEGREES



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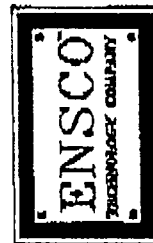
KOP: 6137-140

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EPC: 7037• MD / 6710' TYD / 90' INC

EQH: 9464.1° MD / 6710° YD / 90° INC



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ENSCO TECHNOLOGY COMPANY
1278 Yorktown, Suite 250, Houston, Texas 77057
Telephone: (713) 541-8800
Facsimile: (713) 541-7000

PROPOSED VERTICAL PROFILE

KIM EXPLORATION COMPANY

BROWNING FEDERAL 33-1

14 JUNE 91	8Q0091A1
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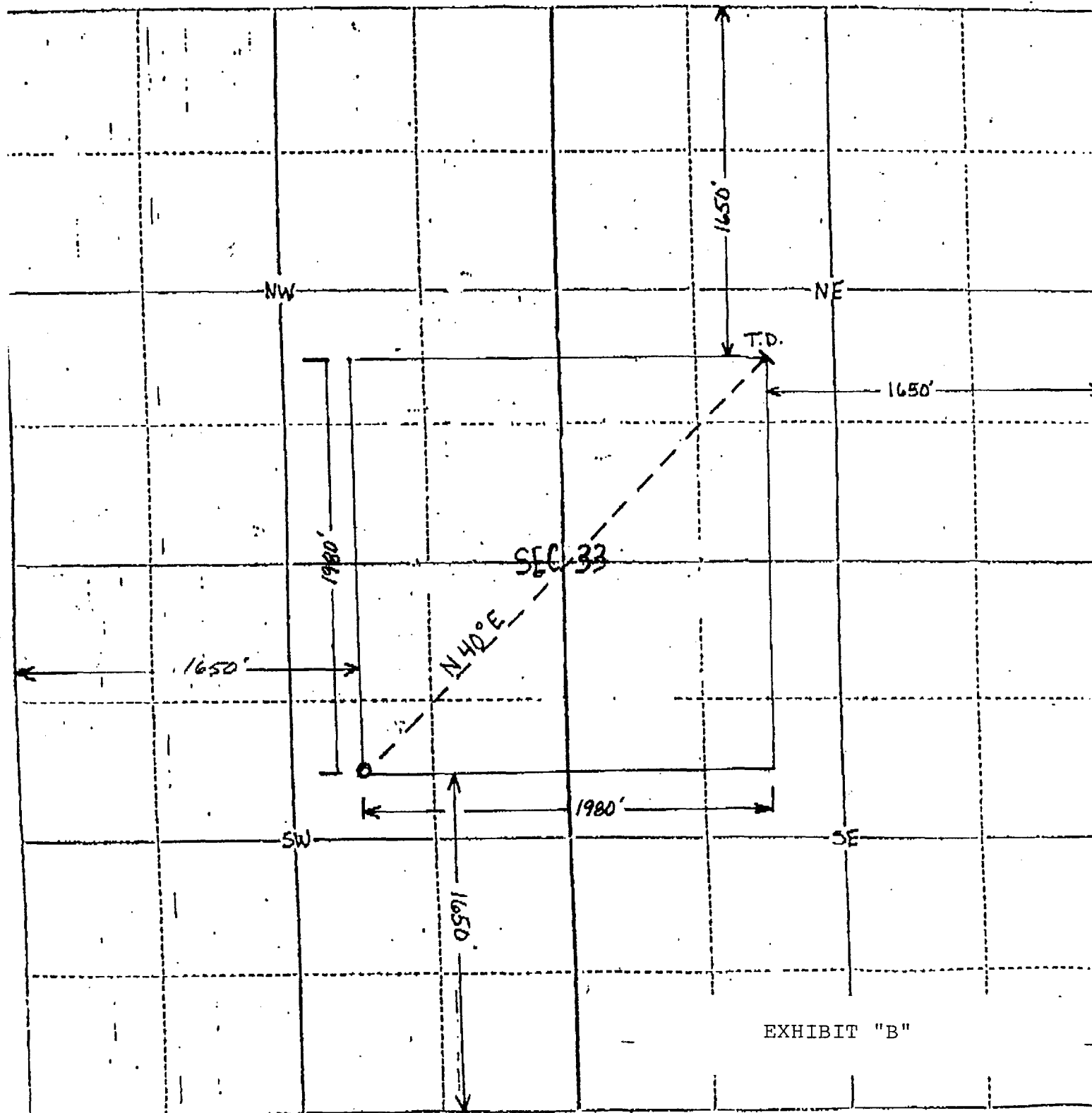


EXHIBIT "B"

KLM Oil & Gas

Browning Federal 33-1

SW NE SW SEC. 33, T24N-R1W

Surface location: 1650' FWL
1650' FSL

Proposed Azimuth 30-45°

EXHIBIT "C"

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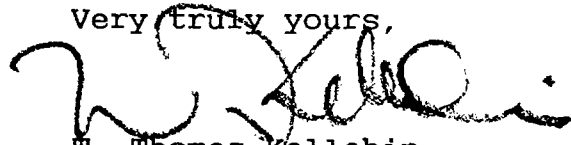
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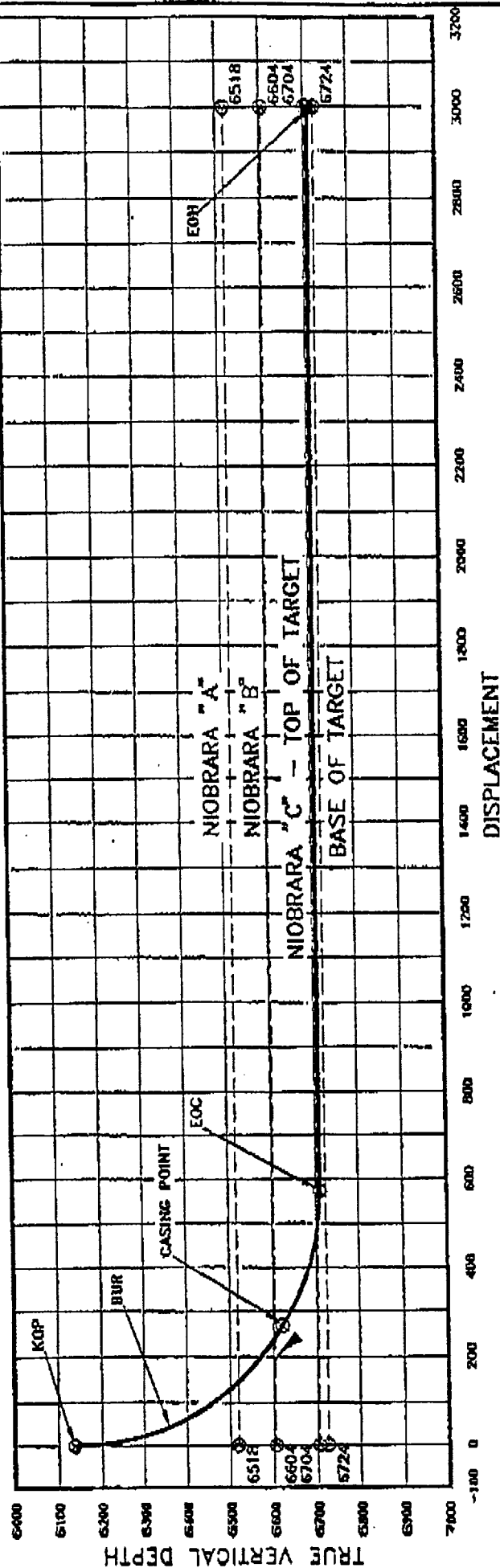
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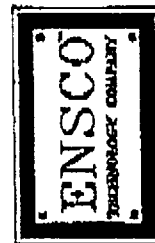


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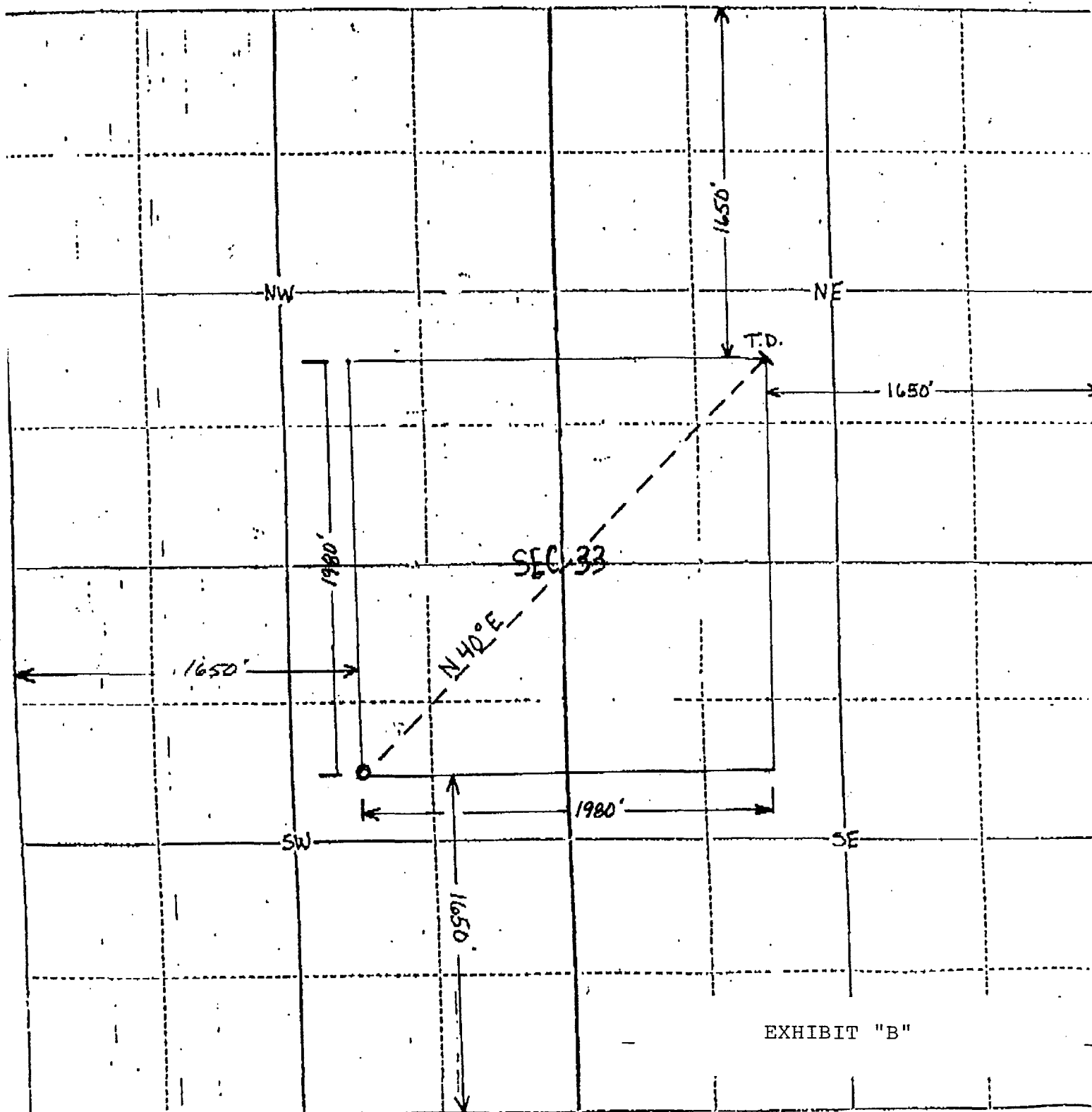


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Browning Federal 33-1

SW NE SW SEC. 33, T24N-R1W

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1650' FSL

Proposed Azimuth 30-45°

EXHIBIT "C"

Mobil Exploration & Producing
P.O. Box 633
Midland, TX 79702

BHP Petroleum
584 San Felipe, Suite 3600
Houston, TX 77057

A.G. Hill
3400 Thanksgiving Tower
Dallas, TX 75201

Apache Corp.
1700 Lincoln, Suite 1900
Denver, CO 80203-4519

Dugan Production Corp.
P.O. Box 420
Farmington, NM 87499

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