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NATURAL RESOURCES-OIL AND GAS LAW

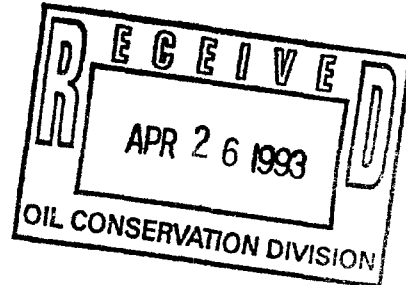
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JASON KELLAHIN (RETIRED 1991)

April 26, 1993

HAND DELIVERED



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

16729

Re: Canyon Largo Unit #388 Well  
Sec. 3, T25N, R6W, NMPM.  
Application of MERIDIAN OIL INC.  
for a High Angle/Horizontal Directional  
Drilling Pilot Project, including Special  
Operating Rules therefor, Special  
Project Gas Allowable, and a Non-Standard  
Proration and Spacing Unit,  
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 May 20, 1993.

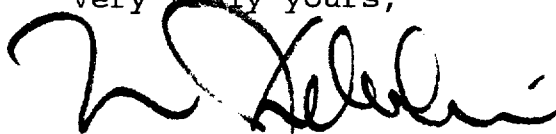
By copy of this letter and application, sent certified mail, we are notifying all interested parties offsetting the subject well and is proposed spacing and proration unit of their right to appear at the hearing and participate in this case, including the right to present evidence either in support of or in opposition to the application.

Mr. William J. LeMay  
April 26, 1993  
Page Two

Our proposed advertisement to be used for the OCD docket and for the newspaper publication is also 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, May 14, 1993.

Very truly yours,

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

W. Thomas Kellahin

WTK/mg  
Enclosure

cc: Meridian Oil Inc.  
Farmington, New Mexico

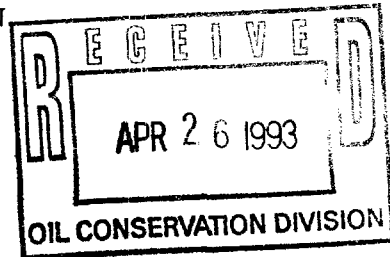
**By Certified Mail - Return Receipt**  
All Parties Listed on Exhibit "C" of Application

**PROPOSED ADVERTISEMENT:**

<sup>29</sup>  
CASE 107--: Application of Meridian Oil Inc. for a high angle/horizontal directional drilling pilot project, special operating rules therefore, a special project gas allowable and a non-standard proration and spacing unit, Rio Arriba County, New Mexico. Applicant seeks authority to initiate a high angle/horizontal directional drilling pilot project in the Blanco Mesaverde Gas Pool, including special operating rules, including a well location and producing window, a special project gas allowable and a non-standard 642.52 acre spacing and proration unit consisting of all of Section 3, T25N, R6W, NMPM, Rio Arriba County, New Mexico, for its Canyon Largo Unit #388 Well to be drilled at a standard surface location 2040 feet FSL and 1625 feet FWL (Unit K) of said Section 3. Applicant further seeks special rules and provision within the pilot project area including the designation of a prescribed area limiting the surface location and the horizontal displacement of the wellbore such that its surface location and producing interval be no closer than 790 feet to the outer boundaries of the non-standard spacing unit. Said project area is located approximately 18 miles south from Counselors, 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: 10729

APPLICATION OF MERIDIAN OIL INC.  
FOR A HIGH ANGLE/HORIZONTAL DIRECTIONAL  
DRILLING PILOT PROJECT INCLUDING  
SPECIAL OPERATING RULES, A SPECIAL  
PROJECT GAS ALLOWABLE AND A NON-STANDARD  
SPACING AND PRORATION UNIT,  
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 Blanco Mesaverde Gas Pool, including Special Operating Rules, a special project gas allowable and a non-standard 642.52 acre spacing and proration unit consisting of all of Section 3, T25N, R6W, NMPM, Rio Arriba County, New Mexico, for its Canyon Largo Unit #388 Well to be drilled at a standard surface location 2040 feet FSL and 1625 feet FWL (Unit K) of said Section 3.

Applicant further seeks special rules and provision within the pilot project area including the designation of a prescribed area limiting the surface location and the horizontal displacement of the wellbore such that its surface location and the well's producing interval be no closer than 790 feet to the outer boundaries of the non-standard spacing unit. In support the Applicant states:

(1) Applicant is the operator of the Canyon Largo Unit which includes, among other sections, all of Section 2, Section 3, Section 4 (except E/2SW/4 and NW/4SE/4), Section 9 (except NW/4NW/4), Section 10 and Section 11, T25N, R6W, NMPM, Rio Arriba County, New Mexico. See Exhibit "A" attached.

(2) Applicant proposes to drill its Canyon Largo Unit #388 Well and attempt to complete it as a high angle/horizontal directional well in the Blanco Mesaverde Gas Pool in the following unconventional manner:

drill vertically from a standard gas well location 1625 feet FWL and 2040 feet FSL (Unit K) of said Section 3 to a depth of approximately 4707 feet (plus or minus 100 feet), kick-off in an east-northeast direction, build angle up to 80-90 degrees and commence drilling horizontally a distance of approximately 3,000 feet.

See Exhibit "B" attached.

(3) 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 surface location and horizontal displacement of said wellbore such that the surface location and the well's producing interval shall be no closer than 790 feet from the outer boundary of the project area;

(b) the approval of a 642.52-acre non-standard spacing and proration unit ("GPU") comprising all of said Section 3; and

(c) a special project allowable calculated using the General Rules for Prorated Gas Pools of New Mexico but with an acreage factor ("AD factor") of 2.0 being utilized in the calculation.

(4) A copy of Applicant's preliminary projection of a horizontal and vertical plans for the subject well are attached as Exhibit "A."

(5) The drilling-producing window is identified as the area within Section 3 which shall be no closer than 790 feet to the outer spacing unit boundary. See Exhibit "A."

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

(7) The proposed well is located in the southwest edge of the Blanco Mesaverde Pool with the nearest pool well being located some 1.5 miles to the northwest.

(8) The potential productive zone of the Blanco-Mesaverde Gas Pool in this area is the Point Lookout Sandstone which is characterized by relative low matrix permeability and natural fracturing. Past experience in said pool has shown that conventionally drilled (vertical) wells may not adequately develop and produce all of the recoverable reserves in a spacing unit. 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 vertical wells, thereby preventing waste.

(9) The well is located within the Blanco Mesaverde Gas Pool and therefore is subject to the special rules and regulations for said pool as promulgated by Division Order R-8170, which among other things require:

(a) Rule 2(a): provides for 320-acre spacing and proration units;

(b) Rule 2(b): 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, with optional second well ("infill well") located in another quarter section from original well.

(10) By combining what would otherwise be two separate spacing and proration units into a single 642.52-acre spacing and proration unit, then at no point in its traverse of the Mesaverde formation does the proposed highly-deviated wellbore encroach upon the 790-foot setback required by the Special Rules and Regulations for the Blanco Mesaverde Gas Pool.

(11) Correlative rights within Section 3 are protected because all interests in the section will be consolidated to receive their proportionate share of production from the well.

(12) In as much as the exact surface location and 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 select a surface location



Application of Meridian Oil Inc.  
Page 6

and then to drill and produce the well's said lateral portion anywhere within the drilling-producing window.


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

(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 May 20, 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.

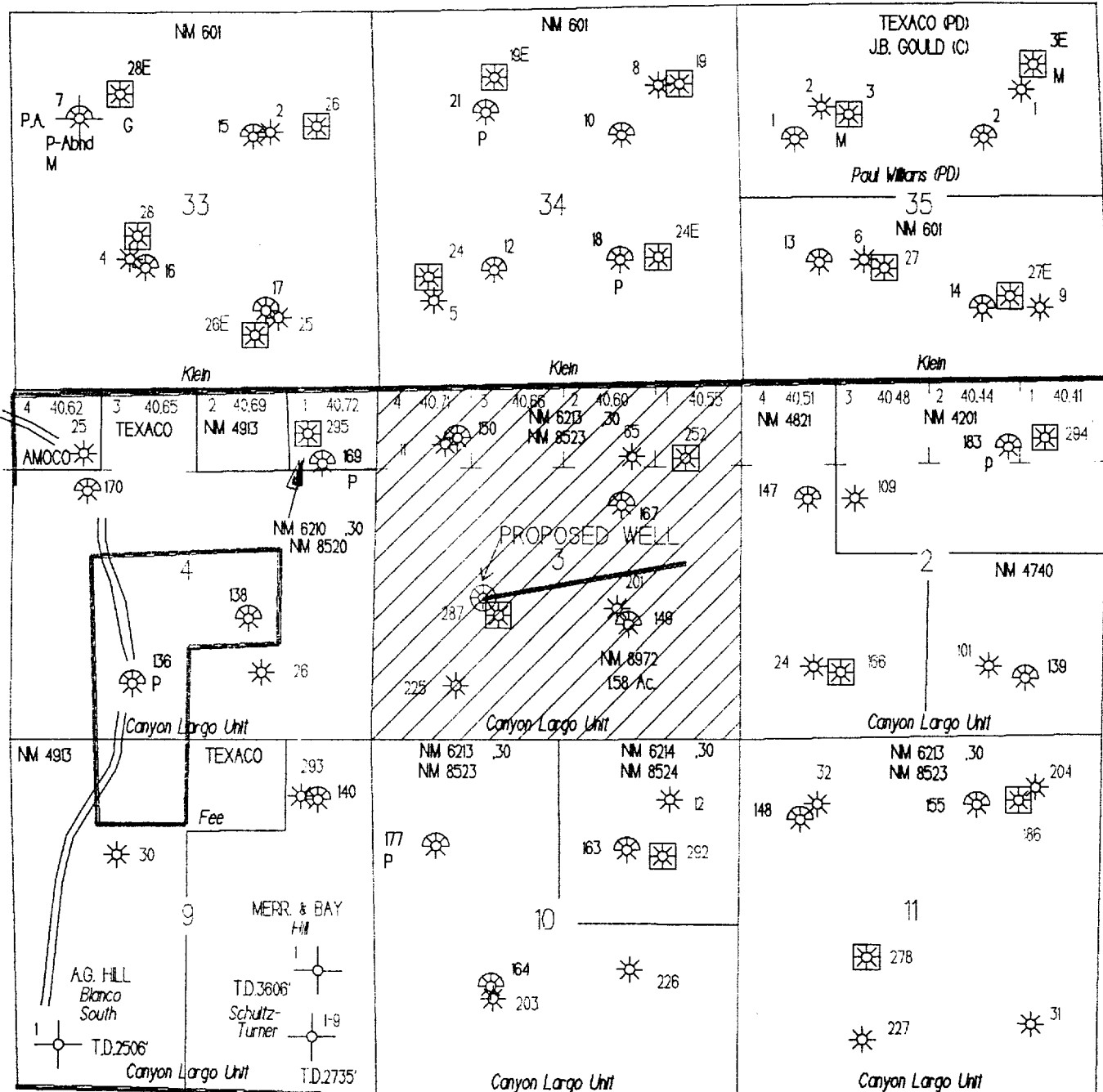
Respectfully submitted,

KELLAHIN and KELLAHIN

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

Attorneys for Applicant





## T26N



T25N

SPACING UNIT

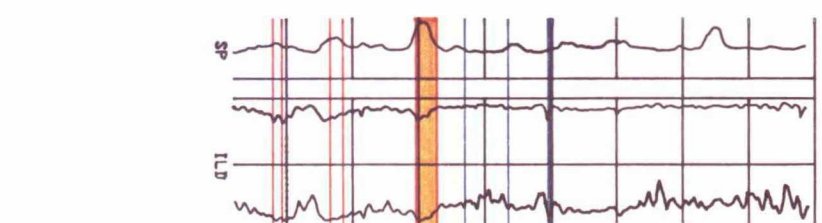
# MERIDIAN OIL

-  PICTURED CLIFFS WELL  
 CHACRA WELL  
 MESAVERDE WELL  
 DAKOTA WELL

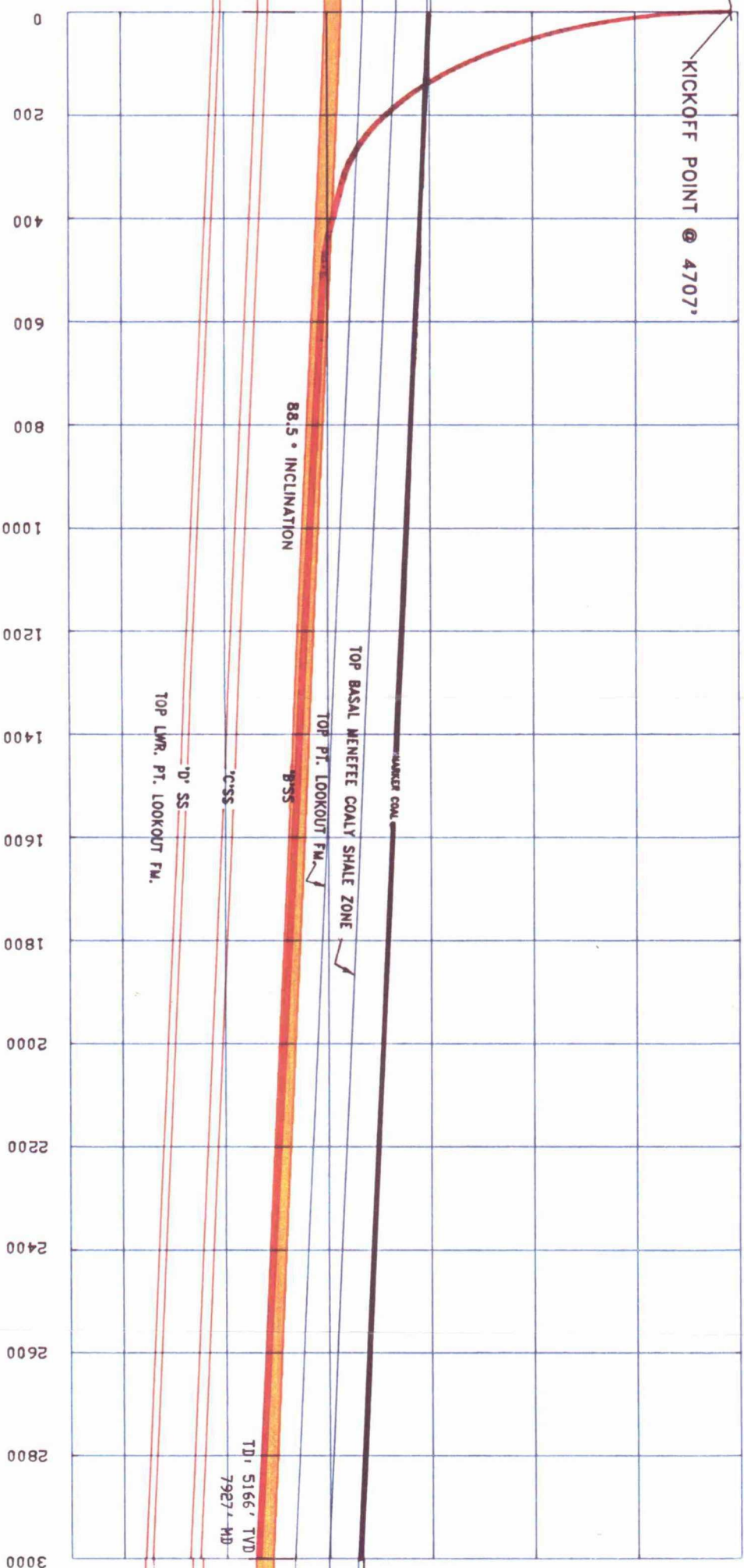


SM 3, T25N-R6W  
Rio Arriba Co., N.M.

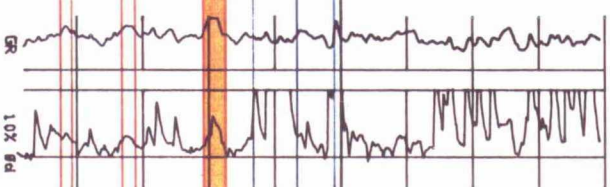
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TRUE VERTICAL DEPTH



VERTICAL SECTION

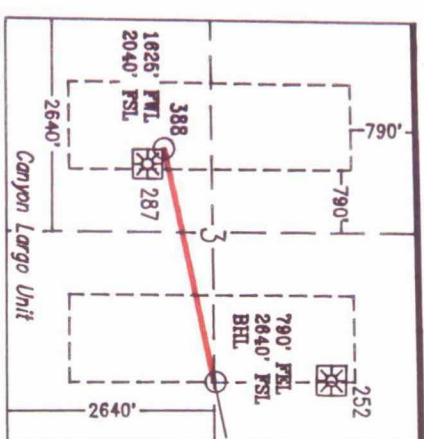


SW 3, T25N-R6W  
Rio Arriba Co., N.M.

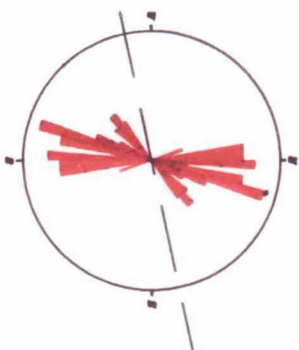


DVG: C. GROTH  
3/29/93

# EAST



R6W

$$\frac{\text{AZMUTH}}{25}$$


NATURAL FRACTURE  
STRIKE HISTOGRAM  
Vaughn #13E  
9500' northeast

MERIDIAN OIL

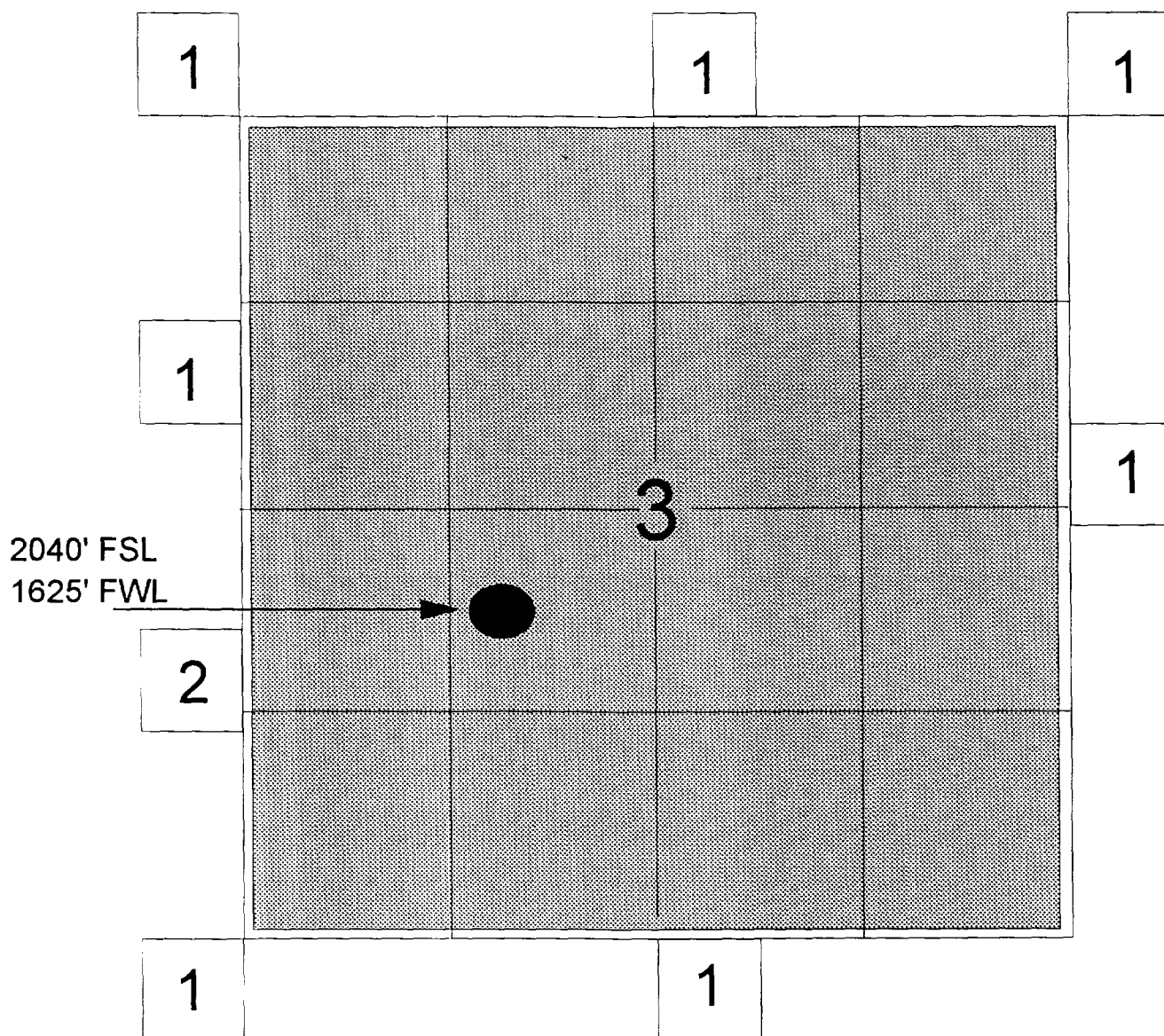
EXHIBIT B

CANYON LARGO UNIT #388  
HORIZONTAL POINT LOOKOUT WELL  
Rio Arriba Co., New Mexico

**HORIZONTAL POINT LOOKOUT WELL**  
Rio Arriba Co., New Mexico

EXHIBIT C  
**MERIDIAN OIL INC.**

**OFFSET OPERATOR/OWNER PLAT**  
**Canyon Largo Unit #388**  
**Mesaverde High Angle Well**  
**Township 25 North, Range 6 West**



- 1) Meridian Oil Inc., 3535 East 30th St., P.O. Box 4289, Farmington, New Mexico 87499-4289  
2) Merrion Oil & Gas Corp., P. O. Box 840, 610 Reilly Ave., Farmington, New Mexico 87499  
Robert Bayless, P.O. Box 168, 368 NM Highway 170, Farmington, NM 87499