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June 4, 1991

Case 10340

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

HAND DELIVERED

Re: Howell "L" 5 Well  
Application of Meridian Oil Inc.  
for a Horizontal Directional  
Drilling Pilot Project, Special  
Operating Rules, Unorthodox  
Location, Non-Standard Spacing  
Unit, and Extension of the Navajo  
City-Chacra Gas Pool, San Juan County,  
New Mexico

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JUN 04 1991

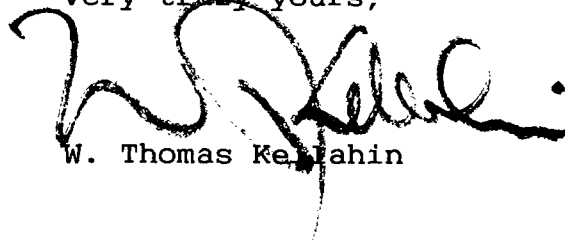
OIL CONSERVATION DIVISION

Dear Mr. LeMay:

On behalf of Meridian Oil Inc., please find enclosed our Application for a Horizontal Directional Drilling Pilot Project and Special Operating Rules for a well to be drilled in the Navajo City-Chacra Gas Pool which we request be set for hearing on the next available Examiner's docket now scheduled for June 27, 1991.

By copy of this letter, with application enclosed, we are notifying all appropriate parties of their right to appear at the hearing either in support of or opposition to the application.

Very truly yours,



W. Thomas Kellahin

WTK/tic  
Enclosure

Mr. William J. LeMay  
June 4, 1991  
Page 2

cc: Mr. Alan Alexander  
Meridian Oil Inc.  
Post Office Box 4289  
Farmington, New Mexico 87499-4289

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

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JUN 01 1991

OIL CONSERVATION DIVISION

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

CASE: 10340

APPLICATION OF MERIDIAN OIL INC.  
FOR A HORIZONTAL DIRECTIONAL  
DRILLING PILOT PROJECT, SPECIAL  
OPERATING RULES, UNORTHODOX  
LOCATION, NON-STANDARD SPACING  
UNIT, EXCEPTION TO ORDER R-5459  
AND EXTENSION OF THE NAVAJO  
CITY-CHACRA GAS POOL, SAN JUAN 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, Kellahin & Aubrey, and applies to the New Mexico Oil Conservation Division for approval for a Horizontal Directional Drilling Pilot Project including special operating rules for its Howell "L" 5 Well to be drilled at an unorthodox surface well location 2040 feet from the North line and 2030 feet from the East line in the SW/4NE/4, as an exception to Order R-5459 and a 320-acre non-standard spacing unit in the E/2 of Section 34,

T30N, R8W, in the Navajo City-Chacra Gas Pool, San Juan County, New Mexico and in support thereof states:

(1) Applicant is the only working interest owner for the E/2 of Section 34, T30N, R8W, N.M.P.M., San Juan County, New Mexico.

(2) Applicant proposes to drill a horizontal-directional well commencing at an unorthodox surface location in the SW/4NE/4 of Section 34 estimated to be 2040 feet FNL and 2030 feet FEL of said Section 34 and drilled vertically to approximately 3150 feet (+ or - 100 feet) in the Lewis Shale at which point the applicant will kickoff the well in a Southeasterly direction building approximately 90 degree angle in an assumed 500 foot radius turn and penetrate the Chacra formation of the Navajo City-Chacra Gas Pool at an estimated depth of approximately 3600 feet and thence drilling horizontally in a Southeasterly direction a distance of approximately 1600 feet. See Exhibit "A."

(3) Except as stated herein, Applicant proposes that this project be subject to the Navajo City-Chacra Gas Pool which was established by the Division Order R-5772 dated July 1, 1978.

(4) Applicant's project is adjacent to the Lively Exploration Company Lively 7-Y well, (Unit E), NW/4 of Section 35, T30N, R8W, which is completed in the Chacra interval and was excluded from the Blanco Mesaverde Pool by Division Order R-5512 entered effective August 1, 1977 and granted an exception to Order R-5459.

(5) Applicant, for similar reasons, seeks a similar exception for its Chacra interval in the E/2 of said Section 34 and proposes a non-standard spacing unit consisting of 320 acres being the E/2 of said Section 34 along with the corresponding unorthodox surface and subsurface locations to provide the necessary flexibility for this special project as shown on Exhibit "B," attached hereto.

(6) Applicant proposes that the Chacra formation underlying the E/2 of said Section 34 be deleted from the Blanco Mesaverde Pool, being an estimated vertical interval from -3600 to -3700 feet subsea.

(7) The Chacra interval of the Lewis Shale is the potential productive zone of the Navajo City-Chacra Gas Pool. The Chacra is characterized as a low intergranular permeability, naturally fractured sandstone/siltstone reservoir. This Chacra interval is not in communication

with the producing zones in the Blanco-Mesaverde Pool in this immediate area.

(8) Past experience in said pool has shown that unless a conventionally drilled (vertical) well intersects natural fractures, the chance of obtaining commercial production is severely curtailed.

(9) By drilling a horizontal deviated wellbore, the applicant is attempting to increase the probability of encountering these fractures, which may ultimately result in the recovery of a greater amount of gas 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 produce said lateral wellbore anywhere within an area described as being: not closer than 790 feet from any of the outer boundaries of the E/2 of Section 34.

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

(12) 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 June 27, 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

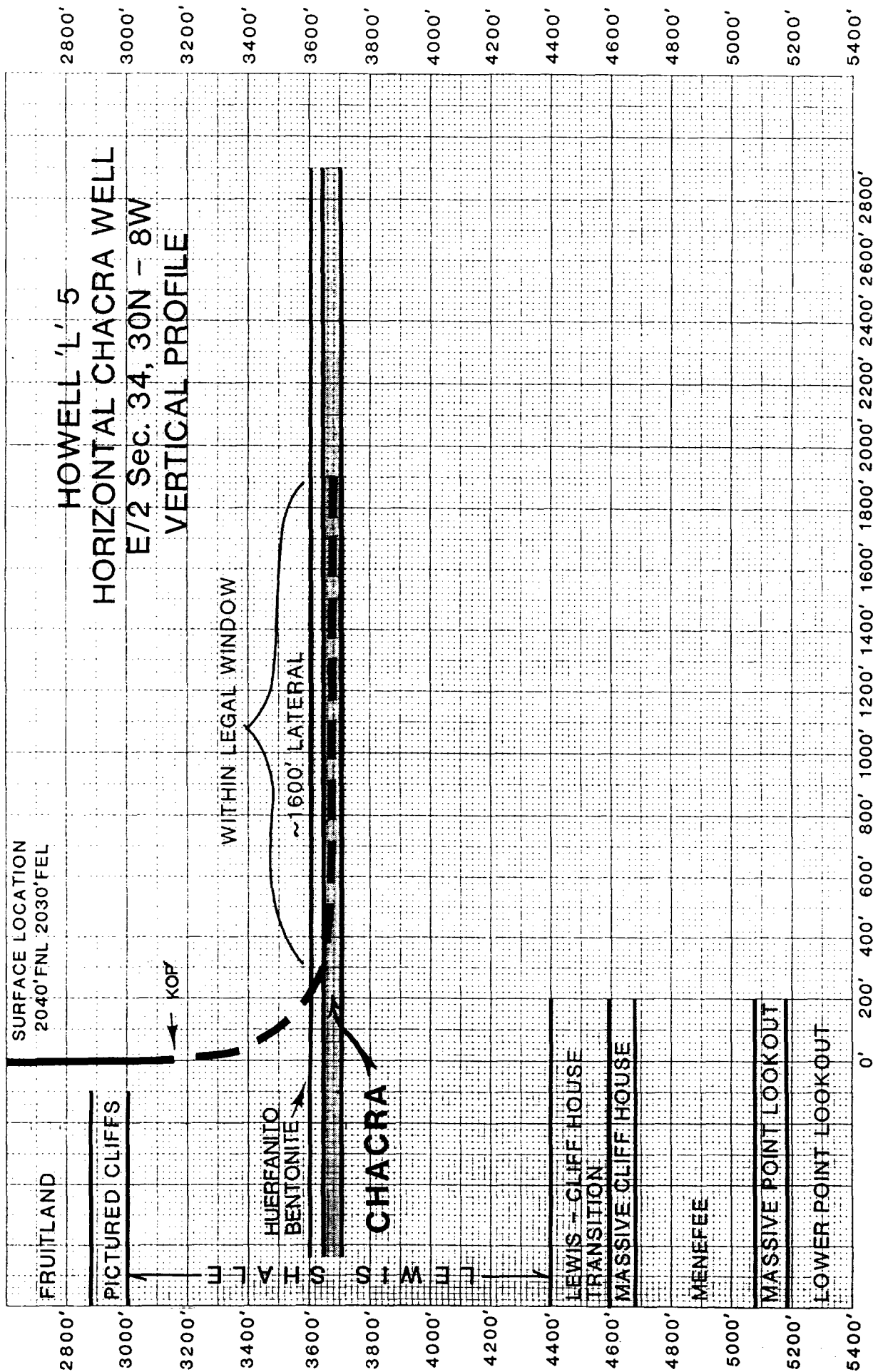
By: 

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

Attorneys for Applicant

TVD

TVD



DEPARTURE FROM VERTICAL

EXHIBIT "A"



R 8 W

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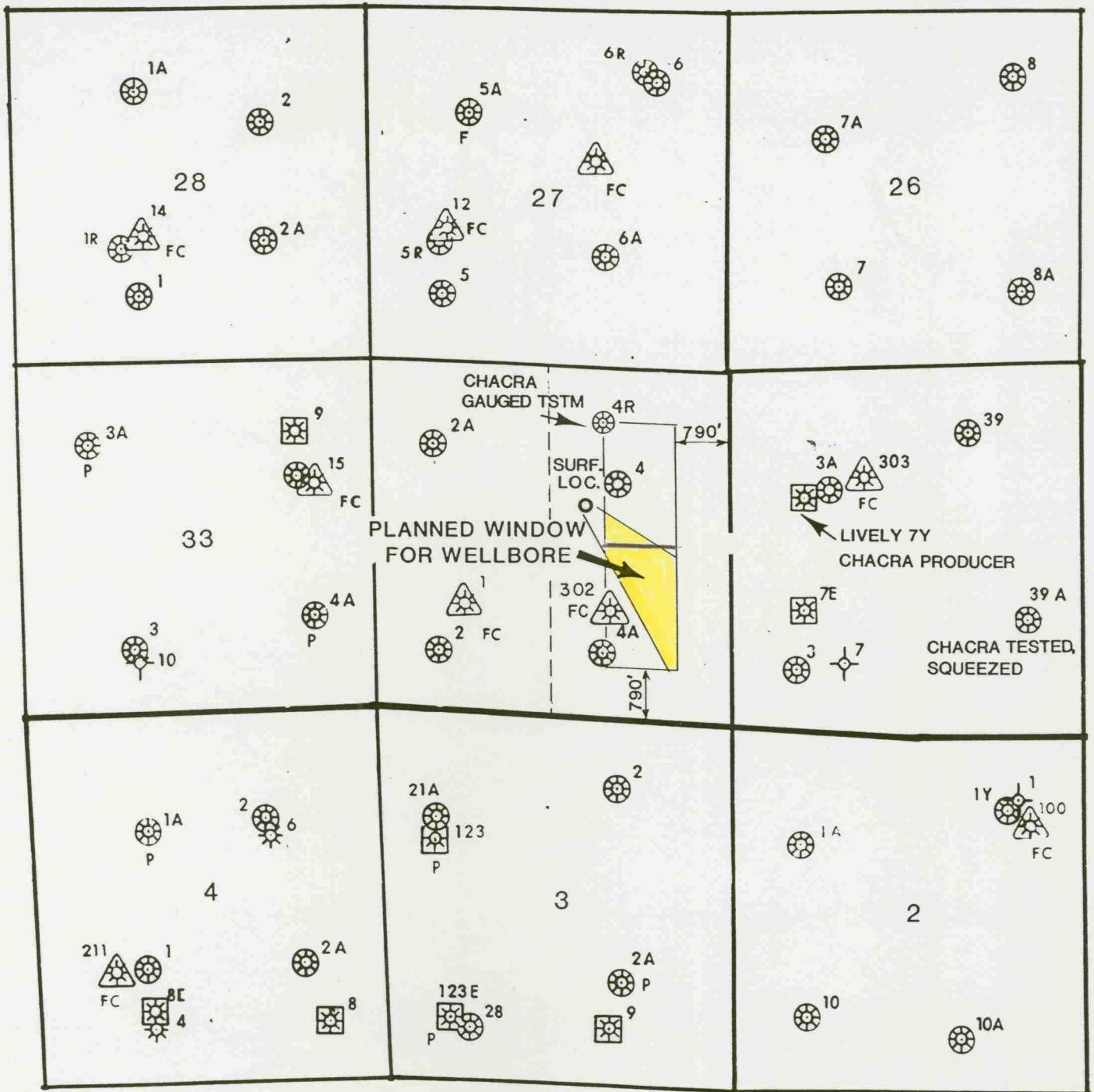


EXHIBIT "B"

# PLAN VIEW - M.O.I. HOWELL 'L' 5 HORIZONTAL CHACRA WELL

SPECIFIC AZIMUTH & LATERAL EXTENT OF  
WELLBORE TO BE DETERMINED AFTER  
ANALYZING FRACTURE ORIENTATION LOG.

## WELL STATUS:

- Gas
- Oil
- Abn'd Loc.

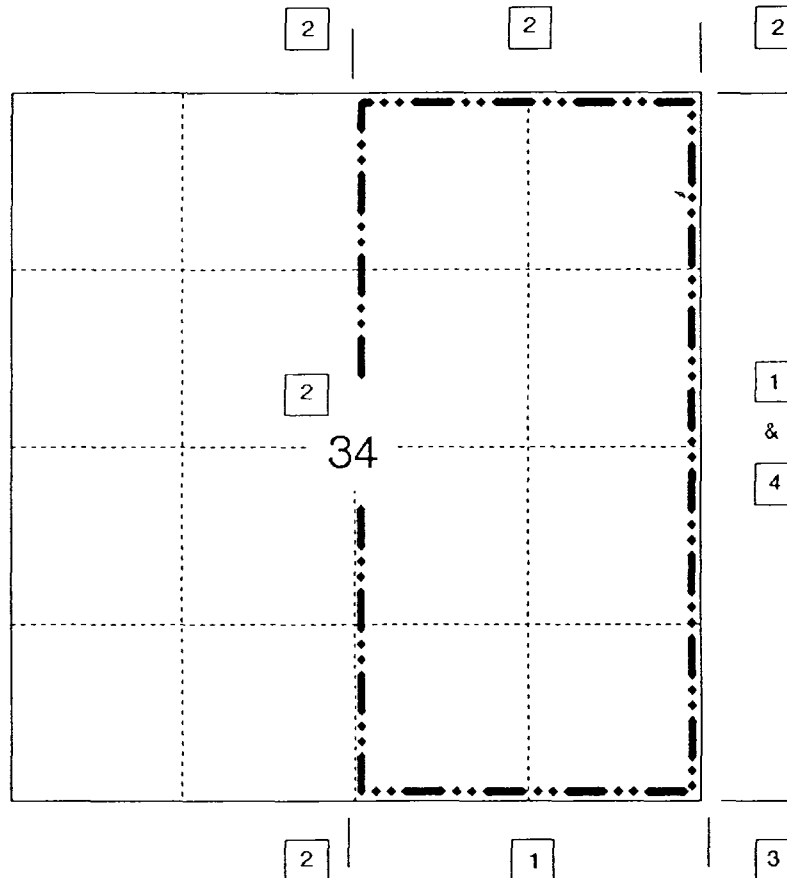
## Formation Symbols-

- Fruitland Coal
- Fruitland Sand
- Pictured Cliffs
- Chacra
- Mesaverde
- Gallup
- Dakota
- Pennsylvanian

# OFFSET OPERATOR PLAT

HOWELL 'L' 5

Township 30 North, Range 08 West



1) Meridian Oil Inc.

2) Amoco Production Company

P.O. Box 800, Denver, CO 80201

3) Southland Royalty Company

4) Lively Exploration Company

(Navajo City Chacra Formation)

1300 Poast Oak Blvd, #1900

Houston, TX 77056