

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

May 21, 1991

RECEIVED

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

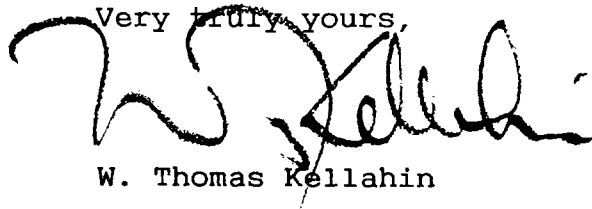
OIL CONSERVATION DIVISION

Re: Huerfano Unit Well No. 300
Application of Meridian Oil Inc.
for a Highly Deviated Directional
Drilling Pilot Project and Special
Operating Rules Including a Project
Allowable, San Juan County, New Mexico

Dear Mr. LeMay:

On behalf of Meridian Oil Inc., please find enclosed
our Application for a Highly Deviated 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 June 13, 1991.

Very truly yours,



W. Thomas Kellahin

WTK/tic
Enclosure

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

RECEIVED

MAR 2 1991

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

OIL CONSERVATION DIVISION

CASE: 10345

APPLICATION OF MERIDIAN OIL INC.
FOR A HIGHLY DEVIATED DIRECTIONAL
DRILLING PILOT PROJECT AND SPECIAL
OPERATING RULES INCLUDING A PROJECT
ALLOWABLE, 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 Highly Deviated Directional Drilling Pilot Project including special operating rules and a project allowable for its Huerfano Unit Well No. 300 to be drilled at a standard surface well location in the NE/4SE/4, and a 320-acre standard spacing unit in the S/2 of Section 31, T27N, R10W, in the Angels Peak Associated Oil and Gas Pool, San Juan County, New Mexico and in support thereof states:

(1) Applicant is the operator of the Huerfano Unit which includes the S/2 of Section 31, T27N, R10W, N.M.P.M., San Juan County, New Mexico and all adjoining spacing units.

(2) Applicant proposes to drill a highly deviated directional well commencing at a surface location in the NE/4SE/4 of Section 31 estimated to be 1060 feet FEL and 1450 feet FSL of said Section 31 and drilled vertically to approximately 4838 feet (+ or - 100 feet) in the Mancos Shale at which point the applicant will kickoff the well in a Northwesterly direction building an assumed 350 foot radius turn and penetrate the Niobrara Member of the Angels Peak Associated Oil and Gas Pool at an estimated depth of 5200 feet and thence drilling at a high angle in a Northwesterly direction a distance not in excess of 3453 feet. 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 Angels Peak Associated Oil and Gas Pool and that the S/2 of Section 31 be dedicated as the spacing unit for the project.

(4) The Niobrara interval and the Tocito Sandstone interval of the Gallup are the potential productive zones of the Angels Peak Associated Oil and Gas Pool. The

Niobrara is characterized by low intergranular permeability naturally fractured sandstone/siltstone reservoirs. The Tocito produces through intergranular permeability.

(5) 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.

(6) By drilling a highly deviated 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.

(7) 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 said lateral portion anywhere within an area designated a target window as follows: commencing at a distance not closer than 790 feet from the east line no closer than 790 feet from the south line or 3430 feet from the North line of Section 31, thence towards the Northwest so that once within the standard drilling window for a gas well in the Angels Peak Associated Oil and Gas Pool, no portion of the wellbore shall be closer

than 790 feet to the outer boundary of the S/2 of Section 31.

(8) Because this spacing unit is within the Huerfano Unit there are no offsetting operators and parties to whom notice is required.

(9) Applicant seeks a special project allowable with such allowable based upon the greater of the following formulas:

(a) The deliverability of the highly deviated well as determined by NMOCD regulations; or

(b) Two (2) times the allowable for a gas well; or four (4) times the allowable for an oil well under the Angels Peak Associated Oil and Gas Pool.

(10) 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 13, 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

Well Schematic

1" = 750'

EXHIBIT "A"

WEST

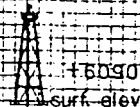
EAST

Deviation: 75-90°

Huerfano Unit #300
SE 31.127N R10W

TVD

Surface



+5090'
surf. elev.

surf. csg. 13 3/8" @ 300'

500'

T/ Qto Alamo

1000'

T/ Fruitland

1500'

T/ PG SS.

T/ Lewis Sh.

2000'

2500'

T/ Mesaverde Gp.

T/ Cliff House

3000'

3500'

T/ Pt. Lookout

4000'

T/ Mancos Sh.

4500'

K.O.P. 4838
± 100'

5000'

T/ Niobrara

T/ Niobrara "A"

T/ Niobrara "B"

T/ Niobrara "C"

T/ Todito SS.

5500'

T/ Juana Lopez

6000'

T/ Greenhorn LG.

T/ Dakota SS.

TD B/Gallup
SS

TD B/Gallup
SS

Sec. 81, T27N - R10W

1:1000

azimuth: 265-280°

Fracture Trend
N 16° E

SEC. 31

N/2

S/2

790'

277° TD

790'

1060'

#275

#300

#79

3453'

790'

1450'

790'

#287

Huerfano High Angle Project