

KELLAHIN AND KELLAHIN

ATTORNEYS AT LAW

EL PATIO BUILDING

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SANTA FE, NEW MEXICO 87504-2265

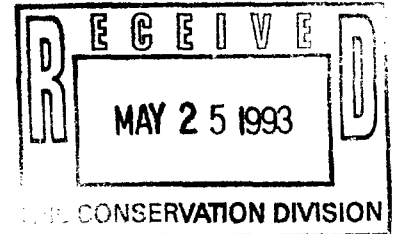
W. THOMAS KELLAHIN*

*NEW MEXICO BOARD OF LEGAL SPECIALIZATION
RECOGNIZED SPECIALIST IN THE AREA OF
NATURAL RESOURCES-OIL AND GAS LAW

JASON KELLAHIN (RETIRED 1991)

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

May 25, 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

10744

Re: Cheney Federal #4 Well
Sec 17, T26N, R2W, NMPM.
Application of MERIDIAN OIL INC.
for a High Angle/Horizontal Directional
Drilling Pilot Project, including Special
Operating Rules, Gavilan-Mancos Pool,
Rio Arriba County, New Mexico

Dear Mr. LeMay:

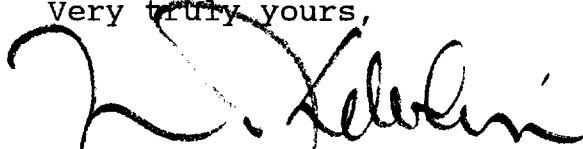
On behalf of Meridian Oil Inc., please find enclosed our Application for a High Angle/Horizontal Direction Drilling Pilot Project as referenced above, which we request be set for hearing on the next available Examiner's docket now scheduled for June 17, 1993.

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, June 11, 1993. A copy of the Pre-Hearing form is attached as Enclosure (2) and is being sent to those required to receive notice as set for in the Application.

Very truly yours,

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

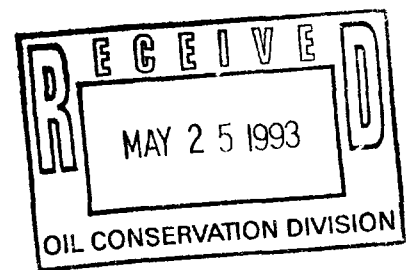
W. Thomas Kellahin

WTK/mg
Enclosures

cc: With Enclosures
Meridian Oil Inc.
Farmington, New Mexico

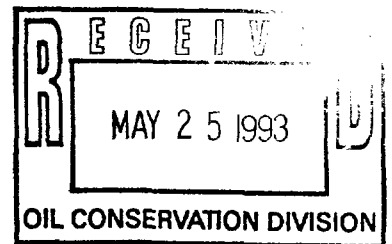
By Certified Mail - Return Receipt

All Parties Listed on Exhibit "B" of Application
with Enclosure (2)



PROPOSED ADVERTISEMENT FOR THE OCD DOCKET

CASE: 10744. Application of Meridian Oil Inc. for a high angle/horizontal directional drilling pilot project, special operating rules therefor, Rio Arriba County, New Mexico. Applicant seeks to initiate a high angle/horizontal directional drilling pilot project in the Gavilan-Mancos Oil Pool underlying all of Section 17, 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 #4 Well located at a standard surface location in said Section 17, kick off from the vertical in an estimated northwesterly 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.: 10744

APPLICATION OF MERIDIAN OIL INC.
FOR A HIGH ANGLE/HORIZONTAL DIRECTIONAL
DRILLING PILOT PROJECT INCLUDING
SPECIAL OPERATING RULES,
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 17, T26N, R2W, NMPM, Rio Arriba County, New Mexico, for its Cheney Federal #4 Well to be drilled at a standard surface location which is anticipated to be in Unit H of said Section 17. 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 17, T26N, R2W, NMPM, Rio Arriba County, New Mexico.

(2) Applicant proposes to drill its Cheney Federal #4 Well at a standard well location 1700 feet FNL and 835 feet FEL (Unit H) of said Section 17 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 6597 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 northwesterly 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."

(3) 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."

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

(5) 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.

(6) 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.

(7) 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.

(8) 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.

(9) 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.

(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 drill and produce said lateral portion anywhere within the drilling-producing window.

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

(12) 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.
Page 6

WHEREFORE, Applicant requests that this matter be set for hearing on June 17, 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,

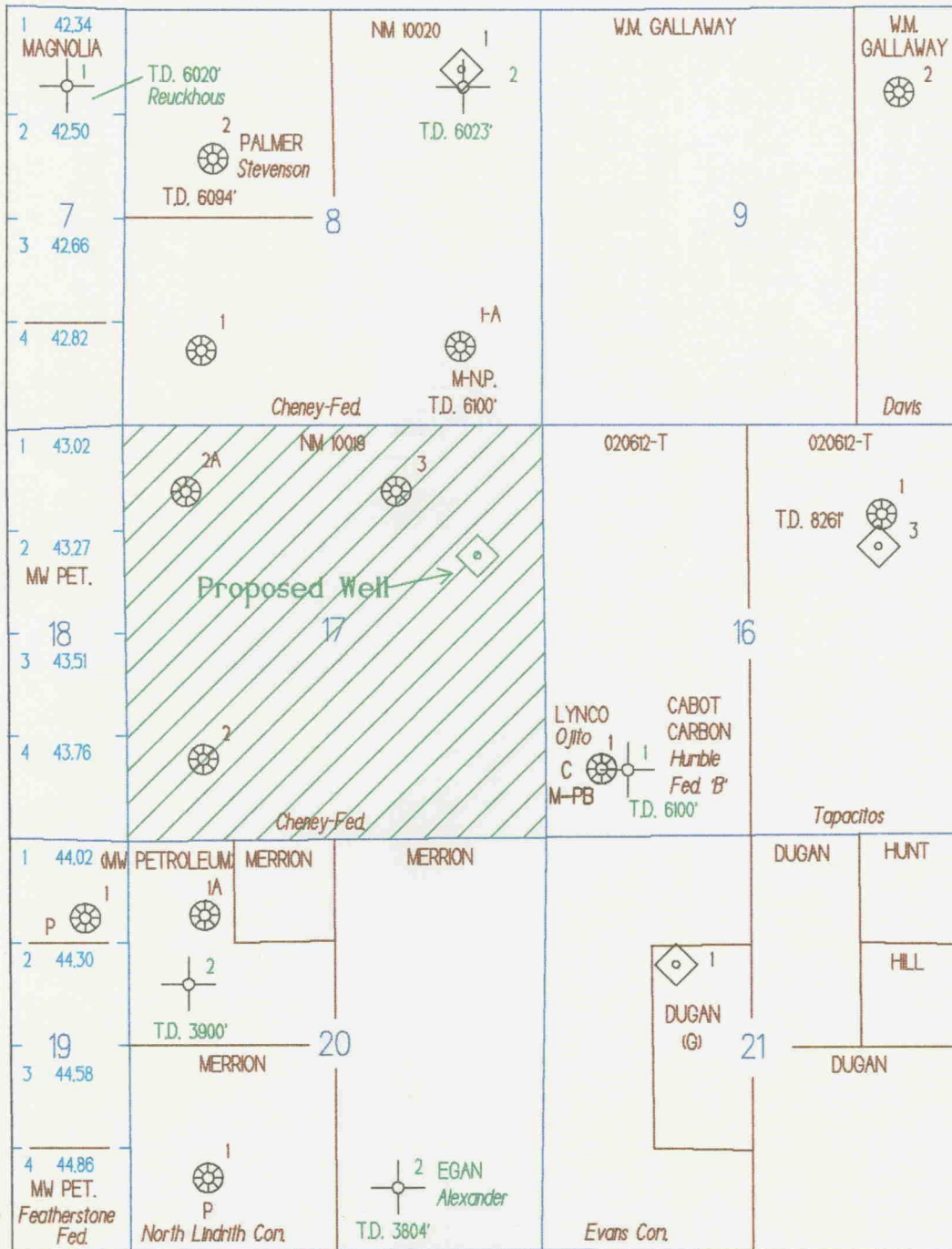
KELLAHIN and KELLAHIN

By: 

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

Attorneys for Applicant

Meridian Oil Inc
Cheney Federal #4
1700' FNL, 835' FEL
SENE Sec. 17, T26N, R02W
Rio Arriba Co., NM



◊ Mancos Well

⊗ Mesaverde Well



Proposed Spacing

MERIDIAN OIL INC.

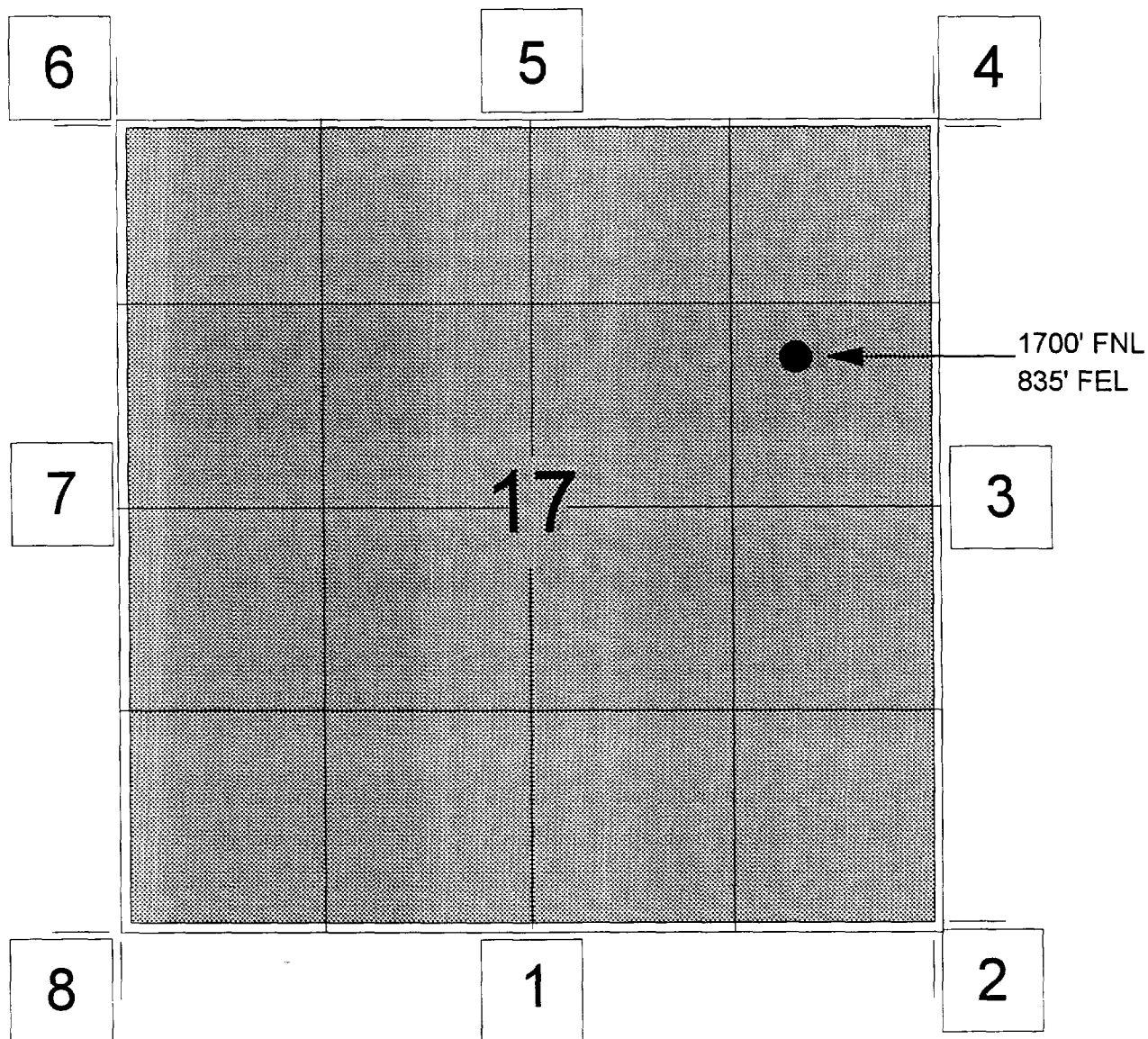
OFFSET OPERATOR/OWNER PLAT

Gavilan-Mancos Horizontal Well

CHENEY FEDERAL #4

SE NE Section 17, T26N, R02W

Rio Arriba County, New Mexico



See Attached List

CHENEY FEDERAL #4

1. **Apache Corporation**
(MW Petroleum Corp.)
Suite 2000 One Norwest Center
1700 Lincoln Street
Denver, CO 80203-4520

Mountain States Natural Gas Corp.
P.O. Box 460391
Houston, TX 77056-8391

Mr. Robert L. Bayless
P.O. Box 168
368 NM Highway 170
Farmington, NM 87499
2. **Dugan Production Corp**
P.O. Box 420
709 E. Murray Dr.
Farmington, NM 87499
3. **Meridian Oil Inc.**
P.O. Box 4289
Farmington, NM 87499-4289
4. **Apache Corporation**
(MW Petroleum Corp.)
Suite 2000 One Norwest Center
1700 Lincoln Street
Denver, CO 80203-4520
5. **Meridian Oil Inc.**
P.O. Box 4289
Farmington, NM 87499-4289

Apache Corporation
(MW Petroleum Corp.)
Suite 2000 One Norwest Center
1700 Lincoln Street
Denver, CO 80203-4520

McHugh Companies
650 S. Cherry Street, Suite 1225
Denver, CO 80222
6. **Apache Corporation**
(MW Petroleum Corp.)
Suite 2000 One Norwest Center
1700 Lincoln Street
Denver, CO 80203-4520
7. **Merrion Oil & Gas Corp.**
P.O. Box 840
610 Reilly Avenue
Farmington, NM 87499-0840
8. **Merrion Oil & Gas Corp.**
P.O. Box 840
610 Reilly Avenue
Farmington, NM 87499-0840

Apache Corporation
(MW Petroleum Corp.)
Suite 2000 One Norwest Center
1700 Lincoln Street
Denver, CO 80203-4520

CASE 10744: Application of Meridian Oil Inc. for a high angle/horizontal directional drilling pilot project, special operating rules therefor, Rio Arriba County, New Mexico. Applicant seeks to initiate a high angle/horizontal directional drilling pilot project in the Gavilan-Mancos Oil Pool underlying all of Section 17, 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 Well No. 4 located at a standard surface location in said Section 17, kick off from the vertical in an estimated northwesterly directional 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 Lindrieth, New Mexico.

CASE 10745: Application of Meridian Oil Inc. for an unorthodox gas well location and downhole commingling, Rio Arriba County, New Mexico. Applicant seeks approval to downhole commingle Choza Mesa-Pictured Cliffs Gas Pool and the Basin-Fruitland Coal Gas Pool production within the wellbore of its proposed Valdez Well No. 5 to be drilled at an unorthodox gas well "off pattern" location for the Basin-Fruitland Coal Gas Pool, being 1820 feet from the West line and 1850 feet from the North line (Unit F) of Section 16, Township 28 North, Range 4 West. Said well is to be dedicated to a standard 320-acre gas spacing unit for the Basin-Fruitland Coal Gas Pool being the N/2 of Section 16 and to a standard 160-acre gas spacing unit for the Choza Mesa-Pictured Cliffs Gas Pool being the NW/4 of Section 16. The well is located approximately 3 miles east of Laguna Seca Mesa.

CASE 10719: (Continued from April 22, 1993, Examiner Hearing.)

Application of Anadarko Petroleum Corporation for directional drilling and an unorthodox bottomhole gas well location, Eddy County, New Mexico. Applicant seeks authority to directionally drill its proposed Power Federal Com Well No. 2 from a surface location 1400 feet from the South line and 660 feet from the East line (Unit I) of Section 26, Township 17 South, Range 30 East, in such a manner as to bottom the well in the Cedar Lake-Morrow Gas Pool at an unorthodox subsurface gas well location within 75 feet of a point 660 feet from the South and East lines (Unit P) of said Section 26. The E/2 of said Section 26 is to be dedicated to said well forming a standard 320-acre gas spacing and proration unit for said pool. Said unit is located approximately 3 miles east-southeast of Loco Hills, New Mexico.

CASE 10556: (Continued from June 3, 1993, Examiner Hearing.)

In the matter of Case 10556 being reopened pursuant to the provisions of Division Order No. R-9759, which order promulgated special pool rules and regulations for the Old Millman Ranch-Bone Spring Pool in Eddy County. Operators in said pool may appear and present evidence about the nature of the reservoir with regards to the proper classification of the pool as either oil or gas.

CASE 10746: Application of Devon Energy Corporation for special pool rules, Eddy County, New Mexico. Applicant seeks the promulgation of special rules for the Soapberry Draw-Delaware Pool located in the SE/4 of Section 8, Township 21 South, Range 26 East, including a provisions for a gas-oil limitation of 6000 cubic feet of gas per barrel of oil. Said area is located approximately 3 miles east of Avalon Reservoir.

CASE 10747: Application of Nearburg Producing Company for salt water disposal, Lea County, New Mexico. Applicant seeks authority to convert its M.H. Federal Well No. 1-1N located 660 feet from the South line and 1980 feet from the West line (Unit N) of Section 1, Township 22 South, Range 24 East, and utilize said well to dispose of produced salt water into the Cisco Canyon formation through the perforated interval from approximately 8219 feet to 8380 feet. Said well is located 1 mile east of Little Walt Spring.

CASE 10717: (Continued from May 20, 1993, Examiner Hearing.)

Application of Davcro Inc. for salt water disposal, Lea County, New Mexico. Applicant seeks authority to re-enter the previously plugged and abandoned Cactus Drilling Corporation Sawyer Deep Well No. 1 located 330 feet from the South line and 2310 feet from the West line (Unit N) of Section 19, Township 9 South, Range 38 East, and utilize said well to dispose of produced salt water into the Sawyer-San Andres Associated Pool through the open-hole interval from approximately 5120 feet to 5600 feet. Said well is located approximately 4.5 miles east of Crossroads, New Mexico.

CASE 10748: Application of Yates Energy Corporation for pool creation, classification of the new pool as an associated pool and for special pool rules, Eddy County, New Mexico. Applicant seeks creation of a new pool for the production of oil and gas from the Pennsylvanian formation underlying the W/2 of Section 17, Township 22 South, Range 24 East, NMPM. Applicant also seeks classification of this new pool as an associated oil and gas pool and the promulgation of special rules and regulations for the pool including: 320-acre spacing and proration units; designated well location requirements; a limit of no more than one well per quarter section; a special depth bracket allowable for each well on a 320-acre spacing or proration unit of 1400 barrels of oil per day and; administrative procedures for approval of unorthodox well locations and non-standard spacing or proration units. Said area is located approximately 2 miles east of Lone Butte.

CASE 10749: Application of Devon Energy Corporation for pool creation and special pool rules, Eddy County, New Mexico. Applicant seeks the promulgation of special rules for the Ingle Wells-Delaware Pool located in portions of Sections 26 and 35 of Township 23 South, Range 31 East and in a portion of Section 2, Township 24 South, Range 31 East, including a provision for a gas-oil limitation of 5000 cubic feet of gas per barrel of oil. Said area is located approximately 2 miles west of mile marker 19 on highway 128.

CASE 10513: (Continued from May 20, 1993, Examiner Hearing.)

Application of Hanley Petroleum Inc. for determination of reasonable well costs, Lea County, New Mexico. Applicant, in the above-styled cause, as a working interest owner in the Santa Fe Energy Operating Partners, L.P. Kachina "8" Federal Well No. 2 located 1830 feet from the North line and 660 feet from the West line (Unit E) of Section 8, Township 18 South, Range 33 East, South Corbin-Wolfcamp Pool, which was drilled pursuant to the compulsory pooling provisions of Division Order Nos. R-9480, R-9480-A, and R-9480-B, all entered in Case Nos. 10211 and 10219, and to which is dedicated the W/2 NW/4 (Units D and E) of said Section 8, seeks an order ascertaining the reasonableness of actual well costs for the subject well. Said unit is located approximately 7.5 miles southeast by south of Maljamar, New Mexico.

Docket No. 18-93

DOCKET: COMMISSION HEARING - THURSDAY - JUNE 24, 1993
9:00 A.M. - MORGAN HALL, STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO
The Land Commissioner's designee for this hearing will be Gary Carlson

CASE 10345: De Novo - Continued from April 29, 1993, Commission Hearing.)

Application of Louise Y. Locke to consider objections to well costs, San Juan County, New Mexico. Applicant requests the Commission review actual well costs charged against her interest by BHP Petroleum (Americas), Inc., for the drilling of the Gallegos Canyon Unit Well #390 to determine the reasonableness of such costs pursuant to the provisions of Commission Order No. R-9581-A. Said well is located at the southeast edge of Farmington, New Mexico.

CASE 10346: De Novo - Continued from April 29, 1993, Commission Hearing.)

Application of Louise Y. Locke to consider objections to well costs, San Juan County, New Mexico. Applicant requests the Commission review actual well costs charged against her interest by BHP Petroleum (Americas), Inc., for the drilling of the Gallegos Canyon Unit Well #391 to determine the reasonableness of such costs pursuant to the provisions of Commission Order No. R-9581-A. Said well is located at the southeast edge of Farmington, New Mexico.