

## EXHIBIT "B"

### DUAL COMPLETION EQUIPMENT HORSESHOE GALLUP OIL POOL San Juan County, New Mexico

#### Subsurface Equipment

1. 5-1/2", 15.50#, J-55 production casing is set through both producing zones and cemented. Cement is circulated across both zones by the single stage method.
2. 1-1/2", 2.75#, J-55, non-upset tubing will be used to produce the lower zone. A tension type retrievable production packer will be run and set on this tubing string. This will maintain separation between the two zones. A parallel tubing string anchor will be run in this tubing string to anchor the tubing string for the top zone.
3. 1-1/2", 2.75#, J-55 non-upset tubing will be used to produce the top zone. This tubing string will be latched into the parallel tubing string anchor.
4. The pumps for each zone will be a 1-1/4 common working barrel tubing pump. The pumps will be operated by separate rod strings.

#### Tubing Head

1. The tubing head will suspend the tubing strings separately.

#### Pumping Unit

1. Existing pumping units are of sufficient rating to pump both zones at the same time.
2. The pumping of both zones at the same time with the same pumping unit can be accomplished by using a dual horse's head.

#### Metering of Oil

1. Each zone will produce into a separator. The separators will consist of a single unit with a divider between the separator chambers.
2. Oil from the separator will be metered by positive displacement meters. Individual meters will be used for each zone.
3. After oil is metered it will be commingled into the existing flow line to the existing battery.
4. By metering the oil in this manner it will not be necessary to construct storage facilities and separate flow lines for each zone.

EXHIBIT "C"

NAMES AND ADDRESSES OF OWNERS  
AND OPERATORS IN THE HORSESHOE-  
GALLUP FIELD

Tennessee Gas Transmission Company  
P. O. Box 847  
Durango, Colorado

Standard Oil Co. of Texas  
P. O. Box 1249  
Houston, Texas

Ralph Lowe  
P. O. Box 832  
Midland, Texas

J. Felix Hickman  
3010 Monte Vista Blvd., N. E.  
Albuquerque, New Mexico

Monsanto Chemical Co.  
1310 Denver Club Bldg.  
Denver, Colorado

El Paso Natural Gas Co.  
P. O. Box 1492  
El Paso, Texas

Colorado Oil & Gas Corp.  
1000 Denver Club Bldg.  
Denver, Colorado

Pan American Petroleum Corp.  
P. O. Box 1714  
Albuquerque, New Mexico

Petro-Atlas, Inc.  
2000 National Bank of Tulsa Bldg.  
Tulsa, Oklahoma

Arizona Explorations, Inc.  
418 Meadows Bldg.  
Dallas, Texas

Clark & Cowden  
5543 Yale Blvd.  
Dallas 6, Texas

The El Dorado Refining Co.  
729 E. Main St.  
Farmington, New Mexico

Charles B. Gonsales  
Box 993  
Santa Fe, New Mexico

J. R. Abraham  
814 Mercantile Bank Bldg.  
Dallas, Texas

Atlantic Refining Co.  
P. O. Box 379  
Durango, Colorado

Banner Drilling Co.  
602 Gladeview Dr.  
Farmington, New Mexico

Three States Natural Gas Co.  
1700 Corrigan Tower Bldg.  
Dallas, Texas

Reynolds Mining Corp.  
1911 Melrose Bldg.  
Houston, Texas

Magnolia Petroleum Co.  
P. O. Box 900  
Dallas, Texas

Humble Oil & Refining Co.  
P. O. Box 2180  
Houston, Texas

Honolulu Oil Corp.  
P. O. Box 1417  
Farmington, New Mexico

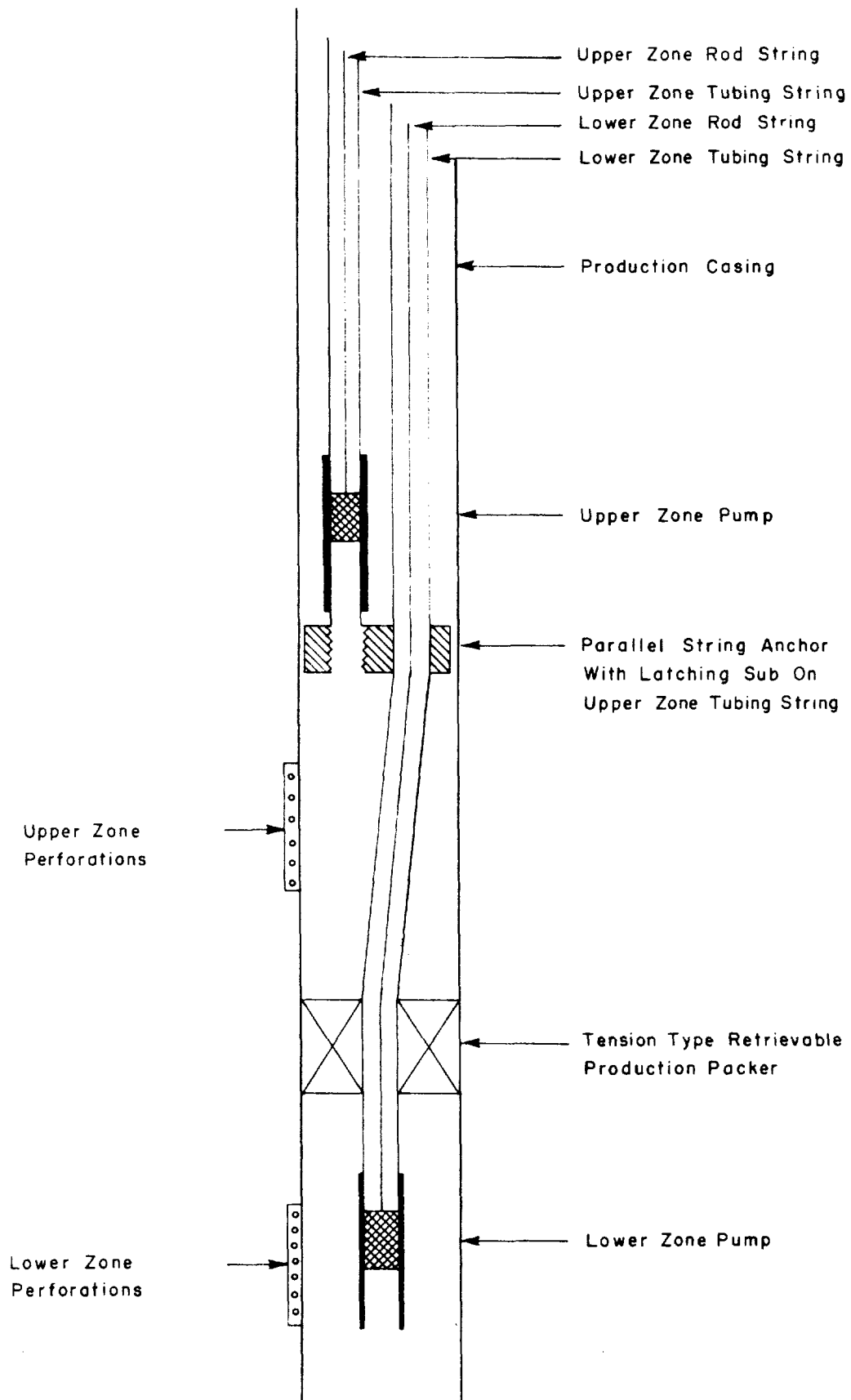
Tom Bolack  
1010 N. Dustin  
Farmington, New Mexico

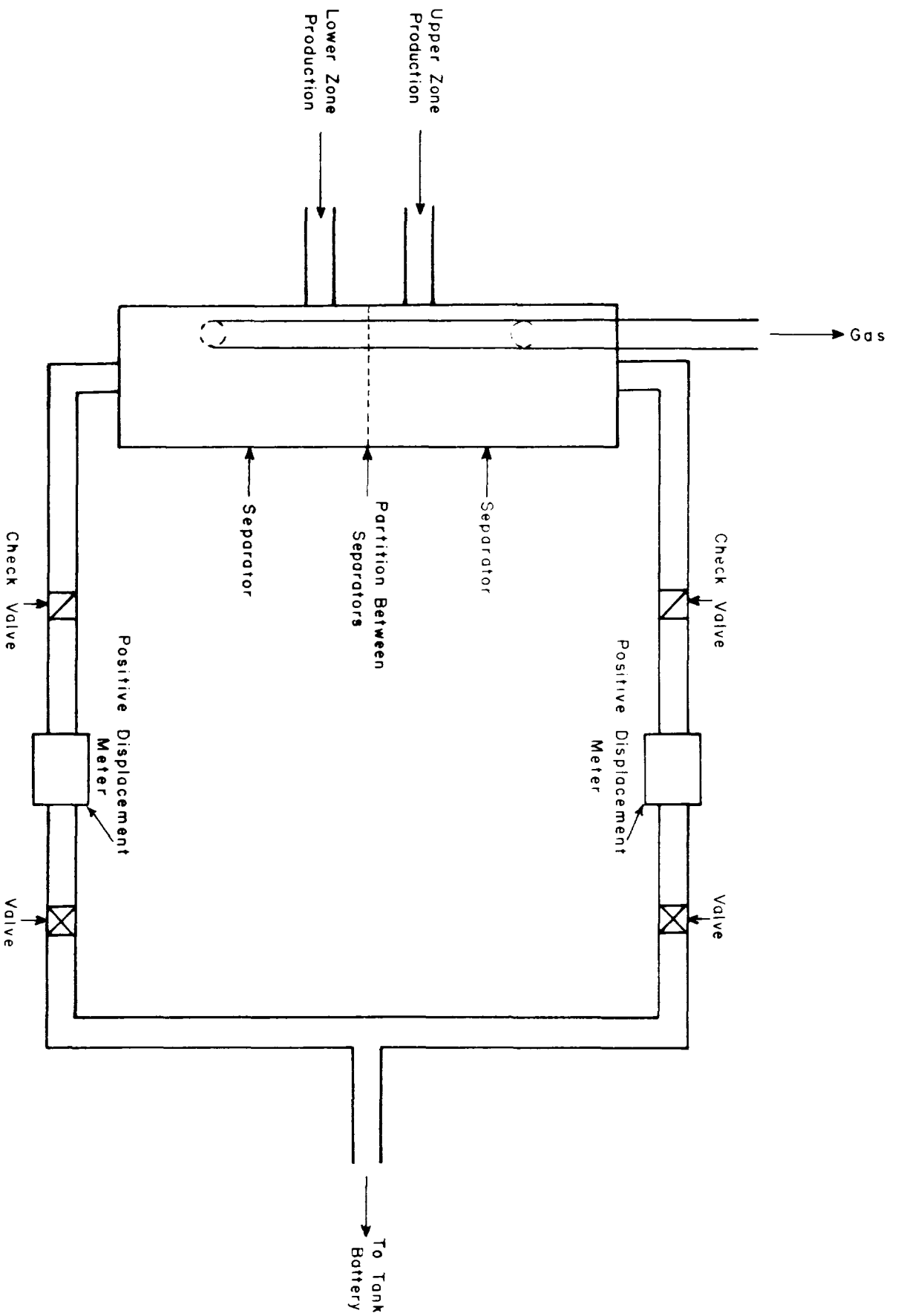
# Schematic Diagram of Subsurface Equipment

## Dual Pumping Installation

Horseshoe — Gallup Oil Pool

San Juan County, New Mexico





**Schematic Diagram**  
**Separating and Metering Installation**  
 Dual Completion

Horseshoe Canyon—Gallup Oil Pool  
 San Juan County, New Mexico

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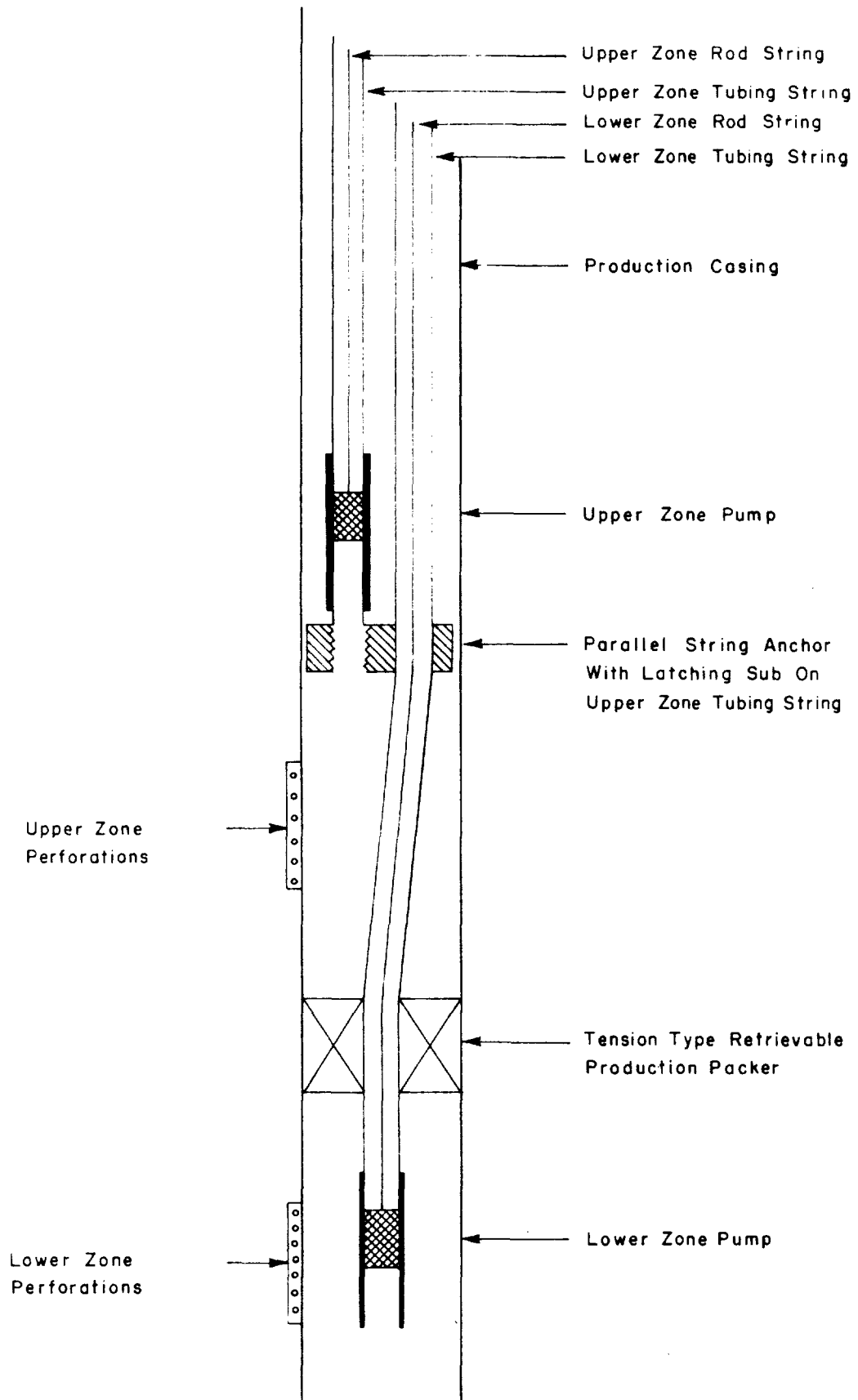
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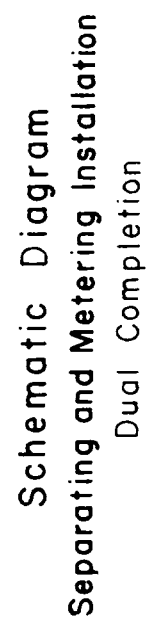
# Schematic Diagram of Subsurface Equipment

## Dual Pumping Installation

Horseshoe — Gallup Oil Pool

San Juan County, New Mexico





Horseshoe Canyon-Gallup Oil Pool  
San Juan County, New Mexico

BEFORE THE OIL CONSERVATION COMMISSION OF THE  
STATE OF NEW MEXICO

IN THE MATTER OF THE APPLICATION )  
OF EL PASO NATURAL GAS PRODUCTS )  
COMPANY FOR AN ORDER ESTABLISHING )  
AND DELINEATING TWO SEPARATE COM- )  
MON SOURCES OF OIL IN THE HORSESHOE - )  
GALLUP FIELD OF SAN JUAN COUNTY, NEW )  
MEXICO; PROHIBITING THE COMMINGLING )  
OF OIL PRODUCED FROM SAID COMMON )  
SOURCES IN THE WELL BORE AND PRO- )  
VIDING FOR THE SEPARATE MEASUREMENT )  
OF SUCH PRODUCTION; AND PERMITTING )  
THE DUAL COMPLETION OF OIL WELLS )  
COMPLETED IN BOTH OF SAID COMMON )  
SOURCES OF SUPPLY AS AN EXCEPTION )  
TO RULE 112A OF THE COMMISSION'S )  
GENERAL RULES )

CASE NO. 1596

A P P L I C A T I O N

COMES NOW, El Paso Natural Gas Products Company, a Texas Corporation,  
authorized to do business in the State of New Mexico, which alleges and states:

1. El Paso Natural Gas Products Company is the owner of oil and gas leases in the Horseshoe-Gallup Field of San Juan County, New Mexico, and is the operator of oil wells completed in two separate common sources of supply of oil found within the areal limits of said Field.

2. The first of these common sources of supply, hereinafter called Horseshoe-Gallup Sand A, is found at subsurface depths ranging from 1496' to 1536' in El Paso Natural Gas Products Company-Horseshoe Canyon #4 Well, located in the SE/4 SW/4 Section 3, Township 30 North, Range 16 West, San Juan County, New Mexico. The probable productive areal limits of the Horseshoe-Gallup Sand A include all or a portion of the following described lands in said County, to wit:

T 30 N, R 16 W Sec. 1, 2, 3, 4, 5, 9, 10, 11, 12, 14  
T 31 N, R 16 W Sec. 19, 20, 27, 28, 29, 30, 31, 32,  
33, 34, 35, 36  
T 31 N, R 17 W Sec. 11, 13, 14, 15, 23, 24, 25

all as more particularly defined as the lands lying  
within the dashed red outline shown on Exhibit "A",  
attached hereto and made a part hereof.

3. The second common source of supply of oil covered by this application hereinafter called Horseshoe-Gallup Sand B, is found at subsurface depths ranging from 1598' to 1630' in applicant's said Horseshoe Canyon #4 Well. The probable productive areal limits of the Horseshoe-Gallup Sand B include all or a portion of the following described lands in San Juan County, New Mexico, to wit:

T 30 N, R 16 W Sec. 3, 4, 5, 9, 10, 11, 14  
T 31 N, R 16 W Sec. 19, 29, 30, 31, 32, 33  
T 31 N, R 17 W Sec. 3, 4, 5, 9, 10, 11, 13,  
14, 15, 23, 24, 25



all as more particularly defined as the lands lying within the dotted green outline shown on Exhibit "A", attached hereto and made a part hereof.

4. The said Horseshoe-Gallup Sands A and B are separated vertically by an impervious shale body approximately 60' thick, and no communication of oil and gas exists between said separate common sources of supply.


5. An order establishing and delineating said separate common sources of supply, prohibiting the commingling of oil produced from said common sources in the well bore, and providing for the separate measurement of production from each of said common sources is necessary for the prevention of waste and the protection of correlative rights.

6. The procedures for the dual completion of oil wells in said common sources and the separate measurement of production therefrom, as described in Exhibit "B", attached hereto and made a part hereof, are in conformity with prudent operating practices and will not result in waste or violate the correlative rights of any person.

7. The names and addresses of all owners and operators of record within the area covered by this application are appended hereto as Exhibit "C". Copies of this application, with Exhibits, have been sent to all of said owners and operators by registered mail.

WHEREFORE, applicant respectfully requests that this matter be set down for hearing before this Commission, and that upon due notice and hearing the Commission enter its order establishing and delineating the separate common sources of supply, herein designated as Horseshoe-Gallup Sand A and B, prohibiting the commingling of oil produced from said common sources in the same well bore and requiring separate measurement of production therefrom, and permitting dual completion of oil wells in said common sources in accordance with the procedures described herein and upon administrative approval by the Secretary of the Commission as an exception to Rule 112A of the Commission's General Rules, and for such further or additional relief as may be required for the prevention of waste or protection of correlative rights in respect of this application.

GRANTHAM, SPANN AND SANCHEZ

By:   
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