



BEFORE THE NEW MEXICO ENERGY
AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION

IN THE MATTER OF THE APPLICATION
OF PHILLIPS PETROLEUM COMPANY
FOR UNITIZATION AND UNIT OPERATION,
EAST VACUUM GRAYBURG-SAN ANDRES
UNIT, LEA COUNTY, NEW MEXICO

AMENDED APPLICATION

NOW COMES Phillips Petroleum Company under the Statutory Unitization Act (N.M.S.A. 65-14-1) and makes this application for an Order creating the unit and providing for the unitization and unit operation of the East Vacuum Grayburg-San Andres Unit, Lea County, New Mexico and shows:

I.

The proposed unit area is that portion of the East Vacuum Grayburg-San Andres Pool as shown on the Map or plat of the proposed unit area attached as Exhibit "A" hereto and described in Exhibit "B" encompassing 7,025.21 acres, more or less.

The vertical limits to be included in the proposed unit area, or the formation being unitized, is the Grayburg-San Andres Formation, identified in Article II (j) of the hereinafter described Unit Agreement as being:

Between the depths of 4,050 feet (103 feet sub-sea and 5,050 feet (1,103 feet sub-sea) on the Lane Wells Acoustic Log Run No. 1 dated 4-14-64 in Exxon's New Mexico State "K" No. 19, located in the SE/4 SE/4 of Section 28, T-17-S, R-35-E, Lea County, New Mexico, and is to include all subsurface points throughout the Unit Area correlative to those identified depths in the lands committed hereto.

Applicant Phillips is the owner of the working interest in said tracts having participation in the unit proposed herein as follows: 30.9994% in Phase I

The portion of the reservoir involved in this application has been reasonably defined by development with wells drilled on every quarter-quarter section in unit as shown on said plat attached marked as Exhibit "A" hereto.

II.

The type of operations contemplated for the unit area is pressure maintenance by water flooding and it is planned to implement by multiple patterns to maintain voidage replacement including a 40-acre five-spot flood pattern. This pattern will be developed by drilling approximately 150 injection wells. Water injection will be into the Vacuum Grayburg-San Andres formation. Injection will be down internally plastic-coated tubing with a packer set above the injection interval. Injection pressure will be maintained below fracture pressure. Injection water will be made up of formation water produced in the East Vacuum Grayburg-San Andres Unit and fresh water from Phillips water rights through supply wells in the Ogallala formation. Said plat or map marked as Exhibit "A" shows the current wells, operators and leases involved.

Attached and marked as Exhibit "C" hereto is a type log showing the vertical limits of the formation to be unitized. Attached and marked as Exhibit "D" hereto is a list of working interest owners in the unit.

III.

Attached and marked as Exhibit "E" hereto is a copy of a proposed plan of unitization which applicant considers fair, reasonable and equitable, being designated "Unit Agreement East Vacuum (Grayburg-San Andres) Unit, County of Lea, State of New Mexico" containing 13 pages and Exhibits "A" and "B" thereof.

IV.

Attached and marked as Exhibit "F" hereto is a copy of

a proposed operating plan covering the manner in which the unit will be supervised and managed and costs allocated and paid, being designated "Unit Operating Agreement East Vacuum (Grayburg-San Andres) Unit, County of Lea, State of New Mexico" containing 12 pages and Exhibit "A", "B", "C", "D", "E" and "F" thereto.

V.

The unitized management, operation and further development of this portion of the Vacuum Grayburg-San Andres Pool herein proposed to the unitized is reasonably necessary in order to effectively carry on pressure maintenance recovery operations to substantially increase the ultimate recovery of oil and gas from the portion of said pool herein proposed to be unitized. The above described and proposed pressure maintenance operation is feasible, will prevent waste and will result with reasonable probability in the increased recovery of substantially more oil from the unitized portion of the pool than would otherwise be recovered.

VI.

The estimated additional costs, if any, of conducting such operations will not exceed the estimated value of the additional oil and gas so recovered plus a reasonable profit. Applicant estimates that the additional investment costs of conducting such pressure maintenance operations will be in the order of \$49,000.000; that the additional oil to be recovered from such pressure maintenance operations is approximately 40,800,000 barrels; and that the profit to be realized by reason of such pressure maintenance will exceed the profit which would be realized without such operations.

Therefore, applicant says that the proposed pressure maintenance operations within the unitized area will benefit

the working interest owners and royalty owners of the oil and gas rights within the portion of the pool directly affected; and that the conduct of such operations will have no adverse effect upon other portions of the pool.

VII.

Applicant has made a good faith effort to secure voluntary unitization of the area and as to the area proposed to be unitized and prior to entry of an order herein will secure the approval of those parties who will be required to pay 75% of the costs of unit operations and by owners of 75% of the production that is to be credited free of cost.

VIII.

Applicant says that the participation formula contained in the unitization agreement allocates the produced and saved unitized hydrocarbons to the separately owned tracts in the unit area on a fair, reasonable and equitable basis.

WHEREFORE, applicant prays that the Division determine that sufficient showing has been made of the conditions required by the Statutory Unitization Act, N.M.S.A. 65-14-6; that the Division make findings to that effect and make an order creating said East Vacuum Grayburg-San Andres Unit and providing for the unitization and unitized operation of said portion of said Vacuum Grayburg-San Andres pool according to the terms and provisions of the hereinabove described Unit Agreement and Unit Operating Agreement East Vacuum, Grayburg-San Andres Unit, Lea County, State of New Mexico; or, in the alternative, upon such other terms and conditions as may be shown by the evidence to be fair, reasonable, equitable and which are necessary or proper to protect and safeguard the respective rights and obligations

of the working interest owners and royalty owners.

Respectfully submitted,

PHILLIPS PETROLEUM COMPANY

By

A handwritten signature in cursive script, appearing to read "W. Kellahin", written over a horizontal line.

KELLAHIN & FOX

P. O. Box 1769

Santa Fe, New Mexico 87501

ATTORNEYS FOR APPLICANT

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AND MINERALS DEPARTMENT

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RECEIVED
OCT 3 1978

Oil Conservation Commission

Case 6346

A P P L I C A T I O N

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Applicant Phillips is the owner of the working interest in said tracts having 31.0763% participation in the unit proposed herein

The portion of the reservoir involved in this application has been reasonably defined by development with wells drilled on every quarter-quarter section in unit as shown on said plat attached marked as Exhibit "A" hereto.

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The estimated additional costs, if any, of conducting such operations will not exceed the estimated value of the additional oil and gas so recovered plus a reasonable profit. Applicant estimates that the additional investment costs of conducting such pressure maintenance operations will be in the order of \$49,000.000; that the additional oil to be recovered from such pressure maintenance operations is 45,000,000 barrels; and that the profit to be realized by reason of such pressure maintenance will exceed the profit which would be realized without such operations.

Therefore, applicant says that the proposed pressure maintenance operations within the unitized area will benefit

the working interest owners and royalty owners of the oil and gas rights within the portion of the pool directly affected; and that the conduct of such operations will have no adverse effect upon other portions of the pool.

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VIII.

Applicant says that the participation formula contained in the unitization agreement allocates the produced and saved unitized hydrocarbons to the separately owned tracts in the unit area on a fair, reasonable and equitable basis.

WHEREFORE, applicant prays that the Division determine that sufficient showing has been made of the conditions required by the Statutory Unitization Act, N.M.S.A. 65-14-6; that the Division make findings to that effect and make an order creating said East Vacuum Grayburg-San Andres Unit and providing for the unitization and unitized operation of said portion of said Vacuum Grayburg-San Andres pool according to the terms and provisions of the hereinabove described Unit Agreement and Unit Operating Agreement East Vacuum, Grayburg-San Andres Unit, Lea County, State of New Mexico; or, in the alternative, upon such other terms and conditions as may be shown by the evidence to be fair, reasonable, equitable and which are necessary or proper to protect and safeguard the respective rights and obligations

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Respectfully submitted,

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