# 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. 11114 ORDER NO. R-10248

APPLICATION OF GREAT WESTERN DRILLING COMPANY FOR STATUTORY UNITIZATION, LEA COUNTY, NEW MEXICO.

#### ORDER OF THE DIVISION

#### BY THE DIVISION:

This cause came on for hearing at 8:15 a.m. on October 13, 1994 at Santa Fe, New Mexico, before Examiner Jim Morrow.

NOW, on this <u>15th</u> day of November, 1994 the Division Director, having considered the testimony, the record and the recommendations of the Examiner, and being fully advised in the premises,

#### FINDS THAT:

- (1) Due public notice having been given as required by law, the Division has jurisdiction of this cause and the subject matter thereof.
- (2) At the time of the hearing, this case was consolidated with Division Case No. 11113 for the purpose of testimony.
- (3) The applicant, Great Western Drilling Company (Great Western), seeks the statutory unitization, pursuant to the "Statutory Unitization Act", (Sections 70-7-1 through 70-7-21, NMSA-1978), for the purpose of establishing an enhanced oil recovery project in its proposed South Carter San Andres Unit, South Carter-San Andres Pool, Lea County, New Mexico.
- (4) The proposed unit area includes approximately 624 acres being the following described area:

## TOWNSHIP 18 SOUTH, RANGE 39 EAST, NMPM, LEA COUNTY, NEW MEXICO

Section 5: (irregular sized section)

Lots 4, 5 & 6;

S/2NW/4; E/2SW/4; and

W/2SW/4

Section 6:

SE/4SE/4

Section 7:

NE/4NE/4

Section 8:

(irregular sized section)

Lot 1; N/2NW/4; and

North 120 acres of 318.7 acre tract; said 318.7 acre tract being

Lots 2, 3, 4, S/2NW/4 & SW/4

One 26 acre tract in Section 5 is Federal acreage and the remaining acreage in the unit area is Fee acreage.

- (5) The proposed "Unitized Formation" is the common source of supply included in the stratigraphic interval underlying the Unit Area found between the top of the San Andres formation and the base of the San Andres formation in the South Carter-San Andres Pool. The top of the San Andres formation for unitization purposes is defined as all points underlying the Unit Area correlative to a depth of 4,820 feet and the base of the San Andres dolomite is defined as all points underlying the Unit Area correlative to a depth of 5,610 feet, both depths as identified on the Halliburton Radioactivity Log for the Moore & Turner McQuein Well No. 1, dated January 5, 1955, located 1980 feet from the North line and 435 feet from the East line of Section 8, Township 18 South, Range 39 East, NMPM, Lea County, New Mexico. The unitization agreement presented at the hearing shows the base of the San Andres at 5590 feet in the McQuein Well No. 1. This should be corrected in the final version of the Unit Agreement.
- (6) The Unitized Formation included within the Unit Area has been reasonably defined by development.
- (7) The proposed Unit Area contains seven separate tracts. At the time of the hearing, applicant's witness testified that 100% of the working interest owners and 96.2% of the royalty and overriding royalty interest owners have agreed to the proposed unit. Mr. William Renick, an overriding royalty interest owner, submitted a letter objecting to the Unit Agreement. The letter dated September 28, 1994, has been added to the case file and is hereby made a part of the record.

- (8) All interested parties entitled to receive notice were notified of the hearing by the applicant. No one appeared at the hearing in opposition to the application and Mr. Renick's was the only written objection received.
- (9) The applicant has made a good faith effort to secure voluntary unitization of the proposed Unit Area.
- (10) The participation formula to be included in the Unitization Agreement will allocate the produced and saved unitized hydrocarbons to the separately owned tracts in the Unit Area on a fair, reasonable, and equitable basis. The participation formula contained in the Unit Agreement submitted at the hearing is 50% cumulative production, 10% surface acres and 40% remaining primary. A revised formula (Formula B) has been approved by the owners; it is 50% cumulative production, 5% acreage and 45% remaining primary. Formula B will be included in the final version of the Unit Agreement.
- (11) The applicant proposes to institute a waterflood project for the secondary recovery of oil and associated gas, condensate, and all associated liquefiable hydrocarbons within and to be produced from the proposed unit area (being the subject of Division Case No. 11113).
- (12) The unitized management, operation and further development of the Waterflood Area, as proposed, is reasonably necessary to effectively carry on secondary recovery operations and will substantially increase the ultimate recovery of oil and gas from the unitized portion of the pool.
- (13) The proposed unitized method of operation is feasible and will result with reasonable probability in the increased recovery of substantially more oil and gas from the unitized portion of the pool than would otherwise be recovered without unitization.
- (14) The estimated additional costs of such operations will not exceed the estimated value of the additional oil so recovered plus a reasonable profit.
- (15) Such unitization and adoption of applicant's proposed unitized method of operation will benefit the working interest owners and royalty owners of the oil and gas rights within the proposed Unit Waterflood Area.
- (16) The granting of the application in this case will have no adverse effect upon the South Carter-San Andres Pool.
- (17) The applicant's Exhibit Nos. 4 and 5 in this case, the Unit Agreement, and the Unit Operating Agreement, should be incorporated by reference into this order.

- (18) The proposed Unit Agreement and the Unit Operating Agreement provide for unitization and unit operation of the Unit Waterflood Area upon terms and conditions that are fair, reasonable and equitable, and include or will include:
  - (a) a legal description in terms of surface area of the part of the Pool to be operated as a unit and the vertical limits to be included, termed "the unit area".
  - (b) a statement of the nature of the operations contemplated.
  - (c) a participation formula which will result in fair, reasonable and equitable allocation to the separately owned tracts of the unit area of all oil and gas that is produced from the unit area and which is saved, being the production that is not used in the conduct of unit operations or not unavoidably lost;
  - (d) a provision for the credits and charges to be made in the adjustment among the owners in the unit area for their respective investments in wells, tanks, pumps, machinery, materials and equipment contributed to the unit operators;
  - (e) a provision governing how the costs of unit operations including capital investments shall be determined and charged to the separately-owned tracts and how said costs shall be paid, including a provision providing when, how and by whom such costs shall be charged to such owner, or the interest of such owner, and how his interest may be sold and the proceeds applied to the payment of his costs;
  - (f) a provision for carrying any working interest owner on a limited, carried or net-profits basis, payable out of production, upon terms and conditions which are just and reasonable, and which allow an appropriate charge for interest for such service payable out of production, upon such terms and conditions determined by the Division to be just and reasonable;
  - (g) a provision designating the Unit Operator and providing for supervision and conduct of the unit operations, including the selection, removal and substitution of an operator from among the working interest owners to conduct the unit operations;

- (h) a provision for a voting procedure for decisions on matters to be decided by the working interest owners in respect to which each working interest owner shall have a voting interest equal to his unit participation; and
- (i) the time when the unit operation shall commence and the manner in which, and the circumstances under which, the operations shall terminate and for the settlement of accounts upon such termination.
- (19) The statutory unitization as herein proposed is in conformity with the above findings, and will prevent waste and protect correlative rights of all interest owners within the proposed unit area, and should be approved.

#### IT IS THEREFORE ORDERED THAT:

- (1) The application of Great Western Drilling Company for the South Carter (San Andres) Unit, covering 624 acres, more or less, of federal and fee lands in the South Carter-San Andres Pool, Lea County, New Mexico is hereby approved for statutory unitization pursuant to the "Statutory Unitization Act", Sections 70-7-1 through 70-7-21, NMSA (1978).
- (2) The South Carter (San Andres) Unit Agreement, and the South Carter (San Andres) Unit Operating Agreement, which were submitted to the Division at the time of the hearing as Exhibits 4 and 5 are hereby incorporated by reference into this order.
- (3) The lands herein designated the South Carter (San Andres) Unit Area shall comprise the following described acreage in Lea County, New Mexico:

### TOWNSHIP 18 SOUTH, RANGE 39 EAST, NMPM, LEA

COUNTY, NEW MEXICO

Section 5: (irregular sized section)

Lots 4, 5 & 6;

S/2NW/4; E/2SW/4; and

W/2SW/4

Section 6: SE

SE/4SE/4

Section 7: N

NE/4NE/4

Section 8:

(irregular sized section)

Lot 1; N/2NW/4; and

North 120 acres of 318.7 acre tract; said 318.7 acre tract being

Lots 2, 3, 4, S/2NW/4 & SW/4

- (4) The vertical limits of said unitized area shall comprise the common source of supply included in the stratigraphic interval underlying the unit area and commonly known as the San Andres formation. The top of the San Andres formation for unitization purposes is defined as all points underlying the Unit Area correlative to the depth of 4,820 feet and the base of the San Andres is defined as all points underlying the Unit Area correlative to the depth of 5,610 feet, both depths as identified on the Halliburton Radioactivity Log for the Moore & Turner McQuein Well No. 1, dated January 5, 1955, located 1980 feet from the North line and 435 feet from the East line of Section 8, Township 18 South, Range 39 East, NMPM, Lea County, New Mexico.
- (5) The applicant shall institute a waterflood project for the secondary recovery of oil and associated gas, condensate and all associated liquefiable hydrocarbons within and produced from the unit area and said waterflood project which is the subject of Division Case No. 11113.
- (6) Since the persons owning the required statutory minimum percentage of interest in the unit area have approved or ratified the Unit Agreement and the Unit Operating Agreement, the interests of all persons within the Unit Area are hereby unitized whether or not such persons have approved the Unit Agreement or the Unit Operating Agreement in writing.
- (7) The applicant, hereby designated as unit operator, shall notify in writing the Division Director of any removal or substitution of said Unit operator by any other working interest owner within the Unit Area.
- (8) Jurisdiction of this cause is retained for the entry of such further orders as the Division may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO OIL CONSERVATION DIVISION

WILLIAM J. LEMAY

Director