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. 10102 Order No. R-9358

APPLICATION OF SAGE ENERGY 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 3 and 31, 1990, at Santa Fe, New Mexico, before Examiners Jim Morrow and Michael E. Stogner.

NOW, on this <u>13th</u> day of November, 1990, 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) Division Cases Nos. 10102 and 10103 were consolidated at the time of the hearing for the purpose of testimony.

(3) The applicant, Sage Energy Company, seeks the statutory unitization, pursuant to the "Statutory Unitization Act", Sections 70-7-1 through 70-7-21, NMSA 1978, of 1762.79 acres, more or less, in the North Vacuum-Abo Pool, Lea County, New Mexico, said unit to be known as the North Vacuum (Abo) North Unit; the applicant further seeks approval of the Unit Agreement and the Unit Operating Agreement which were submitted in evidence as applicant's Exhibits B and C in this case.

(4) The proposed unit area should be designated the North Vacuum (Abo) North Unit Area, and the horizontal limits of said unit area

should be comprised of the following described state lands in Lea County, New Mexico:

TOWNSHIP 16 SOUTH, RANGE 34 EAST, NMPM Section 35: S/2 S/2 Section 36: S/2 TOWNSHIP 17 SOUTH, RANGE 34 EAST, NMPM Section 1: Lots 1 through 4, S/2 N/2, S/2 (All) Section 2: Lots 1 and 2, S/2 N/2, S/2 SW/4, SE/4 Section 12: NW/4

(5) The entire unit area contains 1762.79 acres, more or less.

(6) The vertical limits of the North Vacuum (Abo) North Unit Area should comprise the interval containing the Abo carbonate, defined as that oil bearing zone the top of which was encountered at a depth of 8440 feet and the base of which was encountered at a depth of 9012 feet as recorded on the Compensated Neutron Log in the Shell Oil Company Shell State VI Well No. 1 on January 30, 1983. Said well is located 990 feet from the South line and 900 feet from the East line of Section 1, Township 17 South, Range 34 East, NMPM, Lea County, New Mexico. The unitized formation shall further include all subsurface points throughout the Unit Area correlative to the above-identified depths.

(7) The unit area contains 22 separate tracts owned by 46 different working interests. Sage Energy Company operates 20 of the tracts. There is one royalty interest owner, the State of New Mexico, and 13 overriding royalty interest owners.

(8) At the time of the hearing, owners of 91.49 percent of the working interest and owners of 83.9 percent of the royalty and overriding royalty interest were effectively committed to the unit.

(9) No interested party has objected to the proposed unitization or to the vertical limits of the proposed unit area.

(10) The North Vacuum-Abo Pool has reasonably been defined by development in the Unit Area. The area is in an advanced stage of depletion with respect to primary production. Average production is 4 to 5 barrels of oil per well per day.

(11) The applicant proposes to institute a waterflood project for the secondary recovery of oil, gas, and associated liquefiable hydrocarbons within and to be produced from the proposed unit area.

(12) The proposed secondary recovery operations should result in the additional recovery of approximately 2 million barrels of oil.

(13) The unitized management, operation, and further development of the North Vacuum (Abo) North Unit Area, as proposed, is feasible and reasonably necessary to effectively carry on secondary recovery operations and should prevent waste and result in reasonable profitability by substantially increasing the ultimate recovery of oil and gas from the North Vacuum-Abo Pool.

(14) The estimated additional investment costs of the proposed secondary recovery operations are \$6.3 million dollars.

(15) The investment costs will be recovered in 5 years at a 25 percent rate of return based on an oil price of \$18.75 per barrel.

(16) The estimated additional costs of the proposed operations (as described in Finding No. (14) above) will not exceed the estimated value of the additional oil and gas plus a reasonable profit.

(17) The applicant, the designated unit operator pursuant to the Unit Agreement and the Unit Operating Agreement, has made a good faith effort to secure voluntary unitization within the unit area.

(18) The Unit Agreement and the Unit Operating Agreement have been approved by those persons who will be required initially to pay at least 75% of the costs of unit operations, and also by the owners of at least 75% of the production or proceeds thereof that will be credited to interests which are free of costs, such as royalties, overriding royalties, and production payments.

(19) The participation formula contained in the Unitization Agreement allocates the produced and saved unitized substances to the separately owned tracts in the unit area on a fair, reasonable, and equitable basis.

(20) Unitization and the adoption of the proposed unitized method of operation will benefit the working interest owners and royalty interest owners of the oil and gas rights within the North Vacuum (Abo) North Unit Area.

(21) The applicant's Exhibits B and C in this case, being the Unit Agreement and the Unit Operating Agreement, respectively, should be incorporated by reference into this order.

(22) The North Vacuum (Abo) North Unit Agreement and the North Vacuum (Abo) North Unit Operating Agreement provide for unitization and unit operation of the North Vacuum (Abo) North Unit Area upon terms and conditions that are fair, reasonable, equitable, and which include:

- (a) an allocation to the separately owned tracts in 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;
- (b) 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 operations;
- (c) 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 provisions for when, how, and by whom the unit production allocated to an owner who does not pay his share of the costs of unit operations shall be credited 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;
- (d) a provision for carrying any working interest owner on a limited 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, and providing for a lien on each working interest until his share of the costs, service charge and interest are repaid to the Unit Operator;
- (e) a provision designating the Unit Operator and providing for the supervision and conduct of the unit operations, including the selection, removal or substitution of an operator from among the working interest owners to conduct the unit operations;
- (f) a provision for a voting procedure for the decision of matters to be decided by the working interest owners in respect to which each working interest owner shall have a voting interest equal to this unit participation; and

> (g) the time when the unit operations 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.

(23) Applicant requested a non-consent penalty of two hundred percent. Since this was not provided for in the Unit Agreement and Unit Operating Agreement, it should not be included in the order.

(24) The statutory unitization of the North Vacuum (Abo) North Unit Area is in conformity with the above findings, and will prevent waste and protect correlative rights of all owners of interest within the proposed unit area, and should be approved.

(25) The effective date of this order should be January 1, 1991.

IT IS THEREFORE ORDERED THAT:

(1) The North Vacuum (Abo) North Unit Area comprising 1762.79 acres, more or less, in the North Vacuum-Abo 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 lands included within the North Vacuum (Abo) North Unit Area shall comprise:

TOWNSHIP 16 SOUTH, RANGE 34 EAST, NMPM

Section 35: S/2 S/2 Section 36: S/2

TOWNSHIP 17 SOUTH, RANGE 34 EAST, NMPM

Section 1: Lots 1 through 4, S/2 N/2, S/2 (All) Section 2: Lots 1 and 2, S/2 N/2, S/2 SW/4, SE/4Section 12: NW/4

The entire unit area contains 1762.79 acres, more or

less.

(3) The vertical limits of the North Vacuum (Abo) North Unit Area shall comprise the interval containing the Abo carbonate, defined as that oil bearing zone the top of which was encountered at a depth of 8440 feet and the base of which was encountered at a depth of 9012 feet as

recorded on the Compensated Neutron Log in the Shell Oil Company Shell State VI Well No. 1 on January 30, 1983. Said well is located 990 feet from the South line and 900 feet from the East line of Section 1, Township 17 South, Range 34 East, NMPM, Lea County, New Mexico. The unitized formation shall further include all subsurface points throughout the Unit Area correlative to the above-identified depths.

(4) The applicant shall institute a waterflood project for the secondary recovery of oil, gas, and all associated liquefiable hydrocarbons within and produced from the unit area, said waterflood project being the subject of Case No. 10103.

(5) The North Vacuum (Abo) North Unit Agreement and the North (Abo) North Unit Operating Agreement, being applicant's Exhibits Nos. B and C in this case, are hereby approved, adopted, and incorporated by reference into this order.

(6) Since the persons owning the required 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 unitized whether or not such persons have approved the Unit Agreement or the Unit Operating Agreement in writing.

(7) The applicant 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) The effective date of this order shall be January 1, 1991.

(9) 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 0 WILLIAM J. LEMAY Director

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