

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. 9809
Order No. R-9075

APPLICATION OF YATES DRILLING COMPANY
FOR STATUTORY UNITIZATION, CHAVES
COUNTY, NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 8:15 a.m. on November 29, 1989, at Santa Fe, New Mexico, before Examiner Michael E. Stogner.

NOW, on this 14th day of Decmber, 1989, 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 Case Nos. 9809, 9810 and 9823 were consolidated at the time of the hearing for the purpose of testimony.
- (3) The applicant, Yates Drilling Company, seeks the statutory unitization, pursuant to the "Statutory Unitization Act", Sections 70-7-1 through 70-7-21, NMSA (1978), of 560.00 acres, more or less, being a portion of the Southeast Chaves Queen Gas Area Associated Pool, Chaves County, New Mexico, said portion to be known as the Cactus Queen (statutory) Unit; the applicant further seeks approval of the Unit Agreement and the Unit Operating Agreement which were submitted in evidence as applicant's Exhibit Nos. 3A and 4A in this case.
- (4) The proposed (statutory) unit area should be designated the Cactus Queen Unit Area; and the horizontal limits of said unit area should be comprised of the following described Federal, State and Fee lands in Chaves County, New Mexico:

Case No. 9809
Order No. R-9075
Page 2

TOWNSHIP 12 SOUTH, RANGE 31 EAST, NMPM

Section 26: SW/4 SW/4
Section 27: NE/4 SW/4, S/2 SW/4, and SE/4
Section 34: N/2 NE/4, SE/4 NE/4, and N/2 NW/4
Section 35: NW/4 NW/4

(5) The horizontal limits of said unit are within the governing boundaries of the Southeast Chaves Queen Gas Area Associated Pool and have been reasonably defined by development.

(6) The vertical limits of the Cactus Queen (statutory) Unit Area should comprise that interval which extends from an upper limit described as 50 feet above the top of the Queen formation to a lower limit at the base of the Queen formation, said limits having been previously found to occur at 2930 feet and 3100 feet, respectively, in Yates Drilling Company's Doyle Well No. 1 located 660 feet from the North line and 990 feet from the East line (Unit A) of Section 34, Township 12 South, Range 31 East, NMPM, Chaves County, New Mexico.

(7) The unit area contains fourteen 40-acre separate tracts of land owned by seven different working interest owners.

(8) The applicant has made a good faith effort to secure voluntary unitization within the Unit Area and at the time of the hearing 100 percent of the working interest owners and approximately 42.23 percent of the royalty interest owners were effectively committed to the unit.

(9) 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. 9810).

(10) All interested parties who have not agreed to unitization were notified of the hearing by the applicant, but no person entered an appearance or opposed the application at the hearing.

(11) The proposed secondary recovery operations should result in the additional recovery of approximately 251,000 barrels of oil.

(12) The unitized management, operation and further development of the Cactus Queen (statutory) Unit 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.

Case No. 9809
Order No. R-9075
Page 3

(13) The proposed unitized method of operation as applied to the Cactus Queen (statutory) Unit Area 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 Cactus Queen (statutory) Unit Area.

(16) The granting of the application in this case will have no adverse effect upon the Southeast Chaves Queen Gas Area Associated Pool.

(17) The applicant's Exhibit Nos. 3A and 4A in this case, being the Statutory Unit Agreement and the Unit Statutory Operating Agreement, respectively, should be incorporated by reference into this order.

(18) The Cactus Queen (statutory) Unit Agreement and the Cactus Queen (statutory) Unit Operating Agreement provide for unitization and unit operation of the Cactus Queen (statutory) Unit Area upon terms and conditions that are fair, reasonable and equitable, and include:

- (a) an 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;
- (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 operators;
- (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 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;

Case No. 9809
 Order No. R-9075
 Page 4

- (d) 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;
- (e) 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;
- (f) 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
- (g) 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 of the Cactus Queen Unit Area 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 Yates Drilling Company for the Cactus Queen (statutory) Unit Agreement, covering 560.00 acres, more or less, of Federal, State and Fee lands in the Southeast Chaves Queen Gas Area Associated Pool, Chaves 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 covered by said Cactus Queen (statutory) Unit Agreement shall be designated the Cactus Queen (statutory) Unit Area and shall comprise the following described acreage in Chaves County, New Mexico:

TOWNSHIP 12 SOUTH, RANGE 31 EAST, NMPM

Section 26: SW/4 SW/4
 Section 27: NE/4 SW/4, S/2 SW/4, and SE/4
 Section 34: N/2 NE/4, SE/4 NE/4, and N/2 NW/4
 Section 35: NW/4 NW/4

Case No. 9809
Order No. R-9075
Page 5

(3) The vertical limits of the Cactus Queen (statutory) Unit Area shall comprise that interval which extends from an upper limit described as 50 feet above the top of the Queen formation to a lower limit at the base of the Queen formation, said limits having been previously found to occur at 2930 feet and 3100 feet, respectively, in Yates Drilling Company's Doyle Well No. 1 located 660 feet from the North line and 990 feet from the East line (Unit A) of Section 34, Township 12 South, Range 31 East, NMPM, Chaves County, New Mexico.

(4) 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 is the subject of Division Case No. 9810.

(5) The Cactus Queen (statutory) Unit Agreement and the Cactus Queen (statutory) Unit Operating Agreement, which were submitted to the Division at the time of the hearing as Exhibits 3A and 4A, respectively, are hereby incorporated by reference into this order.

(6) The Cactus Queen (statutory) Unit Agreement and the Cactus Queen (statutory) Unit Operating Agreement provide for unitization and unit operation of the Southeast Chaves Queen Gas Area Associated Pool upon terms and conditions that are fair, reasonable and equitable.

(7) Under the terms of the "Statutory Unitization Act," Section 70-7-8.A. and C., this order shall not become effective until such time as the owners of at least seventy-five percent of the interests in the unit which are free of cost have approved in writing the Unit Agreement.

IT IS FURTHER ORDERED THAT:

(8) If the required percentage of said interest owners in the area do not approve the Unit Agreement within a period of six months from the date of this order, this order shall cease to be of further force and effect and shall be revoked by the Division.

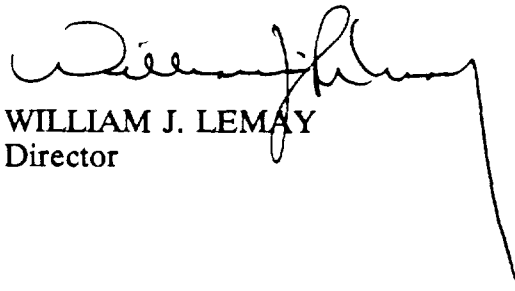
(9) The applicant as Unit Operator shall notify the Division Director in writing of any removal or substitution of said Unit Operator by any other working interest owner within the unit area.

(10) 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.

Case No. 9809
Order No. R-9075
Page 6

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION

A handwritten signature in black ink, appearing to read "William J. Lemay". The signature is written in a cursive style and extends to the right, ending in a long, thin vertical line that drops down.

WILLIAM J. LEMAY
Director

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. 9823
ORDER NO. R-9075-A

APPLICATION OF YATES DRILLING COMPANY
FOR A UNIT AGREEMENT, CHAVES COUNTY,
NEW MEXICO

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 8:15 a.m. on November 29, 1989, at Santa Fe, New Mexico, before Examiner Michael E. Stogner.

NOW, on this 14th day of December, 1989, 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 Nos. 9809 and 9810 for the purpose of testimony.

(3) The applicant, Yates Drilling Company, seeks approval of the Cactus Queen (voluntary) Unit Area and Agreement for the purpose of establishing a secondary recovery project, covering 320 acres, more or less, of State and Federal lands in Chaves County, New Mexico, as further described in Exhibit "A" attached hereto and made a part hereof.

(4) The applicant requests that the unitized formation be that interval underlying the unit area, the vertical limits of which extend from an upper limit described as 50 feet above the top of the Queen formation to a lower limit at the base of the Queen formation; said limits having been previously found to occur at 2930 feet and 3100 feet, respectively, in Yates Drilling Company's Doyal Well No. 1, located 660 feet from the North line and 990 feet from the East line of Section 34, Township 12 South, Range 31 East, NMPM, Chaves County, New Mexico.

Case No. 9823
Order No. R-9075-A
Page No. 2

- (5) No interested party appeared and objected to the proposed unit area.
- (6) All plans of development and operation, and creations, expansions or contractions of participating areas, or expansions or contractions of the unit area should be submitted to the Director of the Division for approval.
- (7) Approval of the proposed unit agreement should promote the prevention of waste and protection of correlative rights within the unit area.
- (8) The applicant also requested at the November 29, 1989 hearing, by Division Case No. 9809, to statutorily unitize the same acreage sought in the immediate case along with additional State, Federal and Fee lands to the east; if the terms of the order authorizing statutory unitization are met, the applicant should notify the Division and this order should immediately be rescinded.

IT IS THEREFORE ORDERED THAT:

- (1) The application of Yates Drilling Company for the Cactus Queen Unit Agreement and Area comprising 320 acres, more or less, of State and Federal lands in Chaves County, New Mexico, as further described in Exhibit "A" attached hereto and made a part hereof, for the purpose of establishing a secondary recovery project is hereby approved.
- (2) The Unitized Formation shall mean that interval underlying the unit area, the vertical limits of which extend from an upper limit described as 50 feet above the top of the Queen formation to a lower limit at the base of the Queen formation; said limits having been previously found to occur at 2930 feet and 3100 feet, respectively, in Yates Drilling Company's Doyal Well No. 1, located 660 feet from the North line and 990 feet from the East line of Section 34, Township 12 South, Range 31 East, NMPM, Chaves County, New Mexico.
- (3) The Cactus Queen (voluntary) Unit Agreement and the Cactus Queen (voluntary) Unit Operating Agreement, which were submitted at the hearing as Exhibits 3B and 4B, respectively, are hereby incorporated by reference into this order.
- (4) The plan contained in said unit agreement for the development and operation of the unit area is hereby approved in principle as a proper conservation measure; provided however, notwithstanding any of the provisions contained in said unit agreement, this approval shall not be considered as waiving or relinquishing, in any manner, any right, duty or obligation which is now, or may hereafter be, vested in the Division to supervise and control operations for the unit and production of oil and gas therefrom.

Case No. 9823
Order No. R-9075-A
Page No. 3

(5) The unit operator shall file with the Division an executed original or executed counterpart of the unit agreement within 30 days after the effective date thereof; in the event of subsequent joinder by any other party or expansion or contraction of the unit area, the unit operator shall file with the Division Director the agreement reflecting the subscription of those interests having joined or ratified.

(6) All plans of development and operation, all unit participating areas and expansions or contractions of the unit area, shall be submitted to the Director of the Oil Conservation Division for approval.

(7) This order shall become effective upon the approval of said unit agreement by the Commissioner of Public Lands for the State of New Mexico and the Director of the appropriate agency of the United States Department of Interior; this order shall terminate ipso facto upon the termination of said unit agreement; and the last unit operator shall notify the Division immediately in writing of such termination.

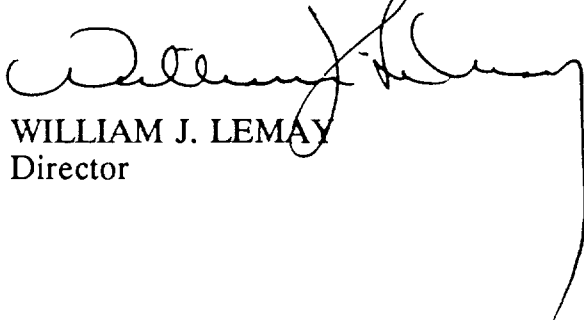
IT IS FURTHER ORDERED HOWEVER THAT:

(8) If the terms of the order issued in Division Case No. 9809 are met within the prescribed time, the applicant shall notify the Division and this order shall be rescinded.

(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


WILLIAM J. LEMAY
Director

S E A L

EXHIBIT "A"
CASE NO. 9823
ORDER NO. R-9075-A
CACTUS QUEEN UNIT AREA
CHAVES COUNTY, NEW MEXICO

TOWNSHIP 12 SOUTH, RANGE 31 EAST, NMPM

Section 27: NE/4 SW/4, S/2 SW/4, and W/2 SE/4

Section 34: NW/4 NE/4 and N/2 NW/4

Comprising 320 acres, more or less, of State and Federal Lands.

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. 9810
ORDER NO. R-9075-B

APPLICATION OF YATES DRILLING COMPANY
FOR WATERFLOOD PROJECTS, CHAVES COUNTY,
NEW MEXICO

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 8:15 a.m. on November 29, 1989 and on December 27, 1989, at Santa Fe, New Mexico, before Examiner Michael E. Stogner.

NOW, on this 15th day of March, 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) At the time of the hearing, this case was consolidated with Division Case Nos. 9809 and 9823 for the purpose of testimony.

(3) By Division Order No. R-9075, issued in Case No. 9809 and dated December 14, 1989, the Cactus Queen (Statutory) Unit Agreement was approved for statutory unitization for the purpose of instituting a waterflood project in the Southeast Chaves Queen Gas Area Associated Pool underlying the following described acreage in Chaves County, New Mexico:

TOWNSHIP 12 SOUTH, RANGE 31 EAST, NMPM

Section 26: SW/4 SW/4
Section 27: NE/4 SW/4, S/2 SW/4, and SE/4
Section 34: N/2 NE/4, SE/4 NE/4, and N/2 NW/4
Section 35: NW/4 NW/4

Case No. 9810
 Order No. R-9075-B
 Page No. 2

(4) At the time said Case No. 9809 was heard the required percentage of interest owners within said area had not approved the Unit Agreement; said Order No. R-9075 contained a provision whereby the statutory unitization of the Cactus Queen (Statutory) Unit Agreement would cease to be in effect and would therefore be revoked if the minimum required percentage of interest owners have not signed within a period of six months from the date of said Order (June 14, 1990).

(5) Also, by Division Order No. R-9075-A, issued in Case No. 9823 and dated December 14, 1989, the Cactus Queen Unit (Voluntary) Unit Agreement was recognized by the Division of the voluntary unitization for the purpose of establishing a secondary recovery project in the Southeast Chaves Queen Gas Area Associated Pool underlying the 320 acres of state and federal lands comprising the NE/4 SW/4, S/2 SW/4, and W/2 SE/4 of Section 27 and the NW/4 NE/4 and N/2 NW/4 of Section 34, both in Township 12 South, Range 31 East, NMPM, Chaves County, New Mexico.

(6) Said Order No. R-9075-A also contained a provision whereby it would be rescinded if the terms of Division Order No. R-9075 were met within the prescribed 6-month period.

(7) The applicant in the immediate case, Yates Drilling Company, seeks authority to institute a waterflood project in the Cactus Queen (Statutory) Unit Area, should the provisions of Order No. R-9075 as described in Finding Paragraph No. (4) above, be met, by the injection of water into the Southeast Chaves Queen Gas Area Associated Pool through the following described six existing wells in Township 12 South, Range 31 East, NMPM, Chaves County, New Mexico:

Well Name and Number	Footage Location	Unit	Section	Proposed (Perforated) Interval Feet
Apache "27" State No. 2	1650' FSL - 2310' FWL	K	27	2996-3000
Burkitt Federal No. 3	330' FNL - 2310' FWL	C	34	2988-2992
Garner Federal No. 7	660' FSL - 1980' FEL	O	27	2987-2993
Doyle No. 1	660' FNL - 990' FEL	A	34	2982-2989
Doyle No. 3	1980' FSL - 990' FEL	I	27	2991-2997
Doyle No. 4	330' FS & WL	M	26	2982-2985

(8) If Order No. R-9075 is revoked, and Division Order No. R-9075-A becomes the prevailing unit order in this area the applicant seeks, in the alternative, to institute

Case No. 9810
 Order No. R-9075-B
 Page No. 3

two waterflood projects for the injection of water into the Southeast Chaves Queen Gas Area Associated Pool underlying the following described areas in Township 12 South, Range 31 East, NMPM, Chaves County, New Mexico:

- (a) the first project area to be comprised of the proposed Cactus Queen (Voluntary) Unit Area, being the subject of Case No. 9823, underlying the NE/4 SW/4, S/2 SW/4, and W/2 SE/4 of Section 27 and the NW/4 NE/4 and N/2 SW/4 of Section 34, by utilizing the following described three wells for water injection:

Well Name and Number	Footage Location	Unit	Section	Proposed (Perforated) Interval Feet
Apache "27" State No. 2	1650' FSL - 2310' FWL	K	27	2996-3000
Burkitt Federal No. 3	330' FNL - 2310' FWL	C	34	2988-2992
Garner Federal No. 7	660' FSL - 1980' FEL	O	27	2987-2993

- (b) the second project to be on the "Doyle" Fee Lease comprising the SW/4 SW/4 of Section 26, the E/2 SW/4 of Section 27 and the NE/4 NE/4 of Section 34, by utilizing the following described three wells.

Well Name and Number	Footage Location	Unit	Section	Proposed (Perforated) Interval Feet
Doyle No. 1	660' FNL - 990' FEL	A	34	2982-2989
Doyle No. 3	1980' FSL - 990' FEL	I	27	2991-2997
Doyle No. 4	330' FS & WL	M	26	2982-2985

(9) In either instance the approval of either waterflood request will cover essentially the same geographical area where, pursuant to the evidence presented, the wells are in an advanced state of depletion and should be properly classified as "stripper wells."

(10) The resulting waterflood operation would result in the recovery of otherwise unrecoverable oil, thereby preventing waste.

(11) The applicant's request for two projects should be authorized at this time and should remain in effect unless Division Order No. R-9075 is placed in effect on or

Case No. 9810
Order No. R-9075-B
Page No. 4

before June 14, 1990, at which time the two waterflood projects should be merged into one and redesignated as such.

(12) In either case the operator should take all steps necessary to ensure that the injected water enters only the proposed injected interval and is not permitted to escape into other formations or onto the surface from other injection, producing or plugged and abandoned wells.

(13) The injection of water into each of the aforementioned injection wells in either project should be accomplished through internally plastic-lined tubing installed in a packer set approximately 100 feet above the uppermost perforations and the casing/tubing annulus should be filled with an inert fluid and a gauge or approved leak-detection device should be attached to the annulus in order to determine leakage in the casing, tubing or packer.

(14) Prior to commencing injection operations into any of the wells herein authorized by this order, the casing should be pressure-tested throughout the interval, from the surface down to the proposed packer-setting depth, to assure integrity of such casing.

(15) The injection wells or injection pressurization system for each well should be so equipped as to limit injection pressure at the wellhead to no more than 600 psi.

(16) The Director of the Division should be authorized to administratively approve an increase in the injection pressure upon a proper showing by the operator that such high pressure will not result in migration of the injected waters from the Queen formation.

(17) The Director of the Division should also have the authority to administratively approve expansion of this waterflood project or projects by placing additional wells on injection and/or production upon proper application by the operator.

(18) The operator should give advance notification to the supervisor of the Hobbs District Office of the Division of the date and time of the installation of injection equipment and of the mechanical integrity pressure-test in order that the same may be witnessed.

(19) All provisions of General Rules 701 through 708 of the Division Rules and Regulations should be followed in either case.

IT IS THEREFORE ORDERED THAT:

(1) Yates Drilling Company is hereby authorized to institute two waterflood

Case No. 9810
 Order No. R-9075-B
 Page No. 5

projects in Township 12 South, Range 31 East, NMPM, Chaves County, New Mexico, by the injection of water into the Southeast Chaves Queen Gas Area Associated Pool.

(2) The first project hereby designated the Cactus Queen (Voluntary) Unit Waterflood Project, shall be comprised of the following described lands in said Township 12 South, Range 31 East, NMPM:

Section 27: NE/4 SW/4, S/2 SW/4, and W/2 SE/4
 Section 34: NW/4 NE/4 and N/2 NW/4

Said area is to coincide with the boundary of the applicant's Cactus Queen (Voluntary) Unit Area, which was the subject of Division Order No. R-9075-A.

(3) Injection into said waterflood project shall be through the following described wells:

Well Name and Number	Footage Location	Unit	Section	Proposed (Perforated) Interval Feet
Apache "27" State No. 2	1650' FSL - 2310' FWL	K	27	2996-3000
Burkitt Federal No. 3	330' FNL - 2310' FWL	C	34	2988-2992
Garner Federal No. 7	660' FSL - 1980' FEL	O	27	2987-2993

(4) The second project, hereby designated the "Doyle" Fee Lease Waterflood Project, shall be comprised of the following described lands in the same Township/Range.

Section 26: SW/4 SW/4
 Section 27: E/2 SE/4
 Section 34: NE/4 NE/4

(5) Injection into the "Doyle" Fee Lease project shall be through the following described wells:

Well Name and Number	Footage Location	Unit	Section	Proposed (Perforated) Interval Feet
Doyle No. 1	660' FNL - 990' FEL	A	34	2982-2989
Doyle No. 3	1980' FSL - 990' FEL	I	27	2991-2997
Doyle No. 4	330' FS & WL	M	26	2982-2985

Case No. 9810
Order No. R-9075-B
Page No. 6

IT IS FURTHER ORDERED THAT:

(6) Prior to commencing injection operations, the casing in each of the subject wells shall be pressure-tested to assure the integrity of such casing in a manner that is satisfactory to the supervisor of the Division's Hobbs District Office.

(7) Injection into each of the said wells shall be accomplished through 2 3/8-inch internally lined tubing installed in a packer set at approximately 100 feet above the uppermost perforation; the casing-tubing annulus shall be filled with an inert fluid and equipped with an approved pressure gauge or attention-attracting leak-detection device.

(8) Each injection well or system shall be equipped with a pressure limiting switch or other acceptable device which will limit the wellhead pressure on the injection well to no more than 600 psi.

(9) The operator shall notify the supervisor of the Hobbs District Office of the Division in advance of the date and time of the installation of injection equipment and of the mechanical integrity pressure-test in order that the same may be witnessed.

(10) The operator shall immediately notify the supervisor of the Division's Hobbs District Office of the failure of the tubing, casing or packer, in said well or the leakage of water from or around said well and shall take such steps as may be timely and necessary to correct such failure or leakage.

(11) Both the Cactus Queen (Voluntary) Unit and "Doyle" Fee Lease Waterflood Projects shall be governed by the applicable provisions of Rules 701 through 708 of the Division Rules and Regulations.

(12) Monthly progress reports for both waterflood projects herein authorized shall be submitted to the Division in accordance with Rules 706 and 1115 of the Division Rules and Regulations.

IT IS FURTHER ORDERED THAT:

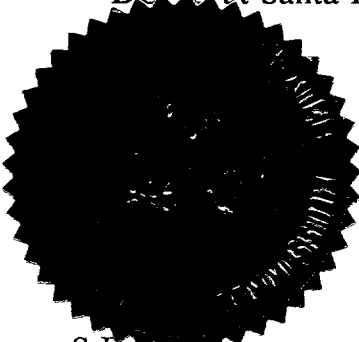
(13) Should the provisions of Division Order No. R-9075 (Cactus Queen (Statutory) Unit Agreement) be met on or before June 14, 1990, the Division shall have cause to issue an amendment to the immediate order, without further notice or cause for hearing, including provisions for the merger of the two aforementioned waterflood projects into a single project area and for the redesignation of such as the Cactus Queen (Statutory) Unit Waterflood Project.

Case No. 9810
Order No. R-9075-B
Page No. 7

(14) The operator shall notify the Director of the Division within 15 days if the required percentage of interest owners have ratified the statutory unit agreement, as described in said Division Order No. R-9075. Such notification must be given to the Division on or before June 14, 1990 or this order approving two separate projects shall remain in full force and effect.

(15) 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.



SEAL

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION

William J. Lemax
WILLIAM J. LEMAX
Director