BTA Oil Producers November 18, 1992 Page 2 RE: Request to Extend Injection Interval on the BTA Pardue -C-, 8808 JV-P Well No.1-D Salt Water Disposal Well Division Order No. R-9147-C

IT IS THEREFORE ORDERED THAT:

(1) The operator herein, BTA Oil Producers is hereby authorized to extend the injection interval on the BTA Pardue -C-, 8808 JV-P, Well No.1-D, located 176 feet from the North line and 1550 feet from the West line (Unit N) of Section 11, Township 23 South, Range 28 East NMPM, Eddy County, New Mexico, currently comprising the Cherry Canyon Sands of the Delaware Mountain Group, to include the Bell Canyon Sands formation for purposes of injection through perforations located at approximately 2950 feet to 3875 feet through 2 7/8 inch tubing set in a packer located at approximately 2850 feet.

IT IS FURTHER ORDERED THAT:

The injection well or system shall be equipped with a pressure limiting device which will limit the wellhead pressure on the injection well to no more than 590 psi.

The Director of the Division may authorize an increase in injection pressure upon a proper showing by the operator of said well that such higher pressure will not result in migration of the injected fluid from the Bell Canyon and Cherry Canyon formations. Such proper showing shall consist of a valid step-rate test run in accordance with and acceptable to this office.

The operator shall notify the supervisor of the Artesia district office or the Division of the failure of the tubing, casing, or packer in said well and shall take such steps as may be timely and necessary to correct such failure of leakage.

PROVIDED FURTHER THAT; jurisdiction of this cause is hereby retained by the Division for the entry of such further order or orders as may be deemed necessary or convenient for the prevention of waste and/or protection of correlative rights; upon failure of the operator to conduct operations in a manner which will ensure the protection of fresh water or in a manner inconsistent with the requirements set forth in this order, the Division may, after notice and hearing, terminate the injection authority granted herein.

The operator shall submit monthly reports of the disposal operations in accordance with Rule Nos. 706 and 1120 of the Division Rules and Regulations.

The subject well shall be governed by all provisions of Division Order No. R-9147-C and Rules 702-706 of the Division Rules and Regulations not inconsistent herewith.

IT IS THEREFORE ORDERED THAT:

(1) The applicant, BTA Oil Producers in compliance with the provisions of Division Order No. R-9147-B, is hereby authorized to utilize its Pardue "C" 8808 JV-P Well No. 1, located 176 feet from the South line and 1550 feet from the West line (Unit N) of Section 11, Township 23 South, Range 28 East, NMPM, Eddy County, New Mexico, to dispose of produced salt water into the Cherry Canyon formation of the East Loving-Delaware Pool, injection to be accomplished through 27/8-inch fiberglass tubing or 2 7/8-inch internally plastic lined steel tubing installed in a packer set at approximately 3400 feet, with injection into the perforated interval from approximately 3500 feet to 3875 feet;

PROVIDED HOWEVER THAT, the casing-tubing annulus shall be filled with an inert fluid; and a pressure gauge shall be attached to the annulus or the annulus shall be equipped with an approved leak detection device in order to determine leakage in the casing, tubing or packer;

PROVIDED FURTHER THAT, prior to commencing injection operations, the casing in the subject well shall be pressure-tested to assure the integrity of such casing in a manner that is satisfactory to the supervisor of the Division's district office at Artesia.

- (2) The 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 700 psi.
- (3) The Director of the Division may authorize an increase in the injection pressure upon a proper showing by the operator that such higher pressure will not result in migration of the injected waters from the Cherry Canyon formation.
- (4) The operator shall notify the supervisor of the Artesia district office of the Division of the date and time of the installation of disposal equipment and of the mechanical integrity pressure test in order that the same may be witnessed.
- (5) The operator shall immediately notify the supervisor of the Division's Artesia 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.
- (6) The applicant shall conduct disposal operations and submit monthly reports in accordance with Rules 702, 703, 704, 705, 706, 708 and 1120 of the Division Rules and Regulations.

- (13) Where reservoir data is insufficient to sustain reliable reserve and drainage calculations the Commission has established production penalties for encroaching wells based upon the ratio that the proposed location bears to a standard location.
- (14) The production penalty assessed against the Pardue No. 1 should be: standard location footage proposed location footage standard location footage

or
$$\frac{330 - 176}{330} = 47\%$$

- (15) This penalty should be assessed against the top allowable rate which is 142 barrels of oil per day.
- (16) Approval of the unorthodox well location subject to a production limitation factor of 53% of the top allowable rate will afford the operator the opportunity to produce its just and equitable share of oil in the subject pool, will prevent waste, and will protect the correlative rights of offset operators.

IT IS THEREFORE ORDERED THAT:

- (1) The applicant, BTA Oil Producers, is hereby authorized to produce its Pardue No. 1 at an unorthodox oil well location 176 feet from the South line and 1550 feet from the West line (Unit N) of Section 11, Township 23 South, Range 28 East, NMPM, Undesignated East Loving-Delaware Oil Pool, Eddy County, New Mexico.
- (2) A production limitation factor of 53% of the top allowable rate of 142 barrels of oil per day, or 76 barrels of oil per day, is hereby assigned to the Pardue No. 1 as its maximum allowable rate.
- (3) This order shall supersede Division Order No. R-9147, and be made effective retroactive to April 18, 1990.
- (4) Jurisdiction of this cause is retained for the entry of such further

CASE NO. 9883 Order No. R-9147 Page -5-

IT IS THEREFORE ORDERED THAT:

- (1) The applicant, BTA Oil Producers, is hereby authorized to drill its Pardue "C" 8808 JV-P Well No. 1 at an unorthodox oil well location 176 feet from the South line and 1550 feet from the West line (Unit N) of Section 11, Township 23 South, Range 28 East, NMPM, Undesignated East Loving-Delaware Oil Pool, Eddy County, New Mexico.
- (2) The SE/4 SW/4 of said Section 11 shall be dedicated to the above-described well forming a standard 40-acre oil spacing and proration unit for said pool.
- (3) A production penalty in the amount of 12,225 barrels of oil (8.15% of estimated recoverable reserves) is hereby assessed against the above-described well.
- (4) A production limitation factor of 53% is hereby assigned to the subject well until such time as 12,225 barrels of oil have been accrued as underproduction, and shall be enforced in the following manner:
 - (a) During the period of time the subject well is capable of production in excess of top unit allowable (142 barrels of oil per day) for the East Loving-Delaware Pool, the subject well shall be allowed to produce 53% of 142 barrels of oil per day, or 75 barrels of oil per day.
 - (b) In the event the subject well is initially incapable of production in excess of top unit allowable, or during the period of time the subject well is subsequently incapable of production in excess of top unit allowable, the subject well shall be allowed to produce 53% of that amount which it is capable of producing. The amount the subject well is capable of producing shall be determined by quarterly well tests witnessed by a representative of the Division's Artesia district office.

- (5) The applicant shall give advance notification to the supervisor of the Artesia district office of the Division of the date and time of the conductance of each quarterly well test in order that the same may be witnessed.
- (6) 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

SEAL