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. 9658 Order No. R-8930

APPLICATION OF PARKER & PARSLEY PETROLEUM COMPANY FOR SALT WATER DISPOSAL, EDDY COUNTY, NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 8:15 a.m. on April 26, 1989, at Santa Fe, New Mexico, before Examiner David R. Catanach.

NOW, on this <u>10th</u> day of May, 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) The applicant, Parker & Parsley Petroleum Company, seeks authority to dispose of produced water into the Cherry Canyon member of the Delaware formation, Undesignated South Loving-Delaware Pool, in the perforated interval from approximately 3500 feet to 4800 feet in its Pardue Farms "27" Well No. 8 to be drilled 2069 feet from the North line and 632 feet from the East line (Unit H) of Section 27, Township 23 South, Range 28 East, NMPM, Eddy County, New Mexico.

(3) Evidence obtained from Division records subsequent to the hearing indicates that there are two wells offsetting the proposed injection well, the Pardue Farms "27" Well No. 7 located 560 feet from the North and East lines (Unit A) of said Section 27, and the Pardue Farms "26" Well No. 2 located 760 feet from the North line and 990 feet from the -2-Case No. 9658 Order No. R-8930

West line (Unit D) of Section 26, Township 23 South, Range 28 East, NMPM, which may not have been completed or cemented in such a manner which will assure that their wellbores will not serve as a conduit for movement of injected fluid out of the injection interval.

(4) Prior to initiating injection operations into the subject well, the applicant should be required to recement the two wells described in Finding No. (3) above in a manner which will ensure that their wellbores will not serve as a conduit for movement of injected fluid out of the injection interval to the satisfaction of the supervisor of the Artesia district office of the Division.

(5) Evidence further indicates that injection into a contracted injection interval from approximately 4400 feet to 4800 feet will not necessitate the recementing operations described in Finding No. (4) above.

(6) In the alternative to performing the remedial cement work as described in Finding No. (4) above, the applicant should be allowed to inject into the contracted injection interval from approximately 4400 feet to 4800 feet, if it chooses to do so.

(7) The injection should be accomplished through 3 1/2-inch fiberglass tubing installed in a packer set within 100 feet of the uppermost injection perforation; the casing-tubing annulus should be filled with an inert fluid and equipped with an approved pressure gauge or attention-attracting leak-detection device in order to determine leakage in the casing, tubing, or packer.

(8) Prior to commencing injection operations, the casing in the subject well should be pressure-tested throughout the interval from the surface down to the proposed packer-setting depth to assure the integrity of such casing.

(9) The injection well or system should 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 .2 psi per foot of depth to the uppermost injection perforation.

(10) The Director of the Division should be authorized to administratively approve an increase in the injection

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pressure upon a proper showing by the operator that such higher pressure will not result in migration of the injected waters from the Delaware formation.

(11) The operator should notify the supervisor of the Artesia district office of the Division of the date and time of the installation of disposal equipment, commencement of remedial cementing operations, and of the mechanical integrity pressure test in order that the same may be witnessed.

(12) The operator should take all steps necessary to ensure that the injected water enters only the proposed injection interval and is not permitted to escape to other formations or onto the surface.

(13) Approval of the subject application will prevent the drilling of unnecessary wells and otherwise prevent waste and protect correlative rights.

IT IS THEREFORE ORDERED THAT:

(1) The applicant, Parker & Parsley Petroleum Company, is hereby authorized to utilize its Pardue Farms "27" Well No. 8 to be drilled 2069 feet from the North line and 632 feet from the East line (Unit H) of Section 27, Township 23 South, Range 28 East, NMPM, Eddy County, New Mexico, to dispose of produced salt water into the Cherry Canyon member of the Delaware formation, Undesignated South Loving-Delaware Pool, injection to be accomplished through 3 1/2inch fiberglass tubing installed in a packer set within 100 feet of the uppermost injection perforation, with injection into the perforated interval from approximately 3500 feet to 4800 feet.

PROVIDED HOWEVER THAT, prior to commencing injection operations into the subject well, the applicant shall recement the casing in the Pardue Farms "27" Well No. 7 located 560 feet from the North and East lines (Unit A) of said Section 27, and the Pardue Farms "26" Well No. 2 located 760 feet from the North line and 990 feet from the West line (Unit D) of Section 26, Township 23 South, Range 28 East, NMPM, in such a manner which will assure that their wellbores will not serve as a conduit for movement of injected fluid out of the injection interval and in a manner satisfactory to the supervisor of the Artesia district office of the Division. -4-Case No. 9658 Order No. R-8930

(2) In the alternative to performing the remedial cement work as described in Ordering Paragraph No. (1) above, the applicant shall be allowed to inject into the contracted injection interval from approximately 4400 feet to 4800 feet, if it chooses to do so.

(3) The casing-tubing annulus in the subject well shall be filled with an inert fluid and equipped with an approved pressure gauge or attention-attracting leakdetection device in order to determine leakage in the casing, tubing, or packer.

(4) 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.

(5) 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 .2 psi per foot of depth to the uppermost injection perforation.

(6) 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 Delaware formation.

(7) 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, commencement of remedial cement operations, and of the mechanical integrity pressure-test in order that the same may be witnessed.

(8) 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.

(9) 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. -5-Case No. 9658 Order No. R-8930

(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.

STATE OF NEW MEXICO OIL CONSERVATION PIVISION 00 WILLIAM J. LEMAY Director

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