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. 9902 Order No. R-9156

APPLICATION OF HANSON OPERATING COMPANY FOR SALT WATER DISPOSAL, CHAVES COUNTY, NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 8:15 a.m. on April 4, 1990, at Santa Fe, New Mexico, before Examiner David R. Catanach.

NOW, on this <u>19th</u> day of April, 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) The applicant, Hanson Operating Company, seeks authority to utilize its Hanlad "A" State Well No. 1 located 1650 feet from the South line and 330 feet from the East line (Unit I) of Section 28, Township 10 South, Range 27 East, NMPM, Chaves County, New Mexico, to dispose of produced salt water into the San Andres formation, Diablo-San Andres Pool, with injection into the perforated interval from approximately 2034 feet to 2082 feet.

(3) The subject well is currently a Diablo-San Andres Pool producing well capable of producing approximately 1 barrel of oil per day. CASE NO. 9902 Order No. R-9156 Page -2-

(4) The applicant currently operates twelve other producing wells within the Diablo-San Andres Pool.

(5) According to testimony by the applicant, injection into the Diablo-San Andres Pool will have no detrimental effect on producing wells within said pool.

(6) The applicant proposes to inject produced Fusselman water originating from the McBride State Well No. 1 located in Section 28, Township 10 South, Range 27 East, NMPM, Chaves County, New Mexico.

(7) Injection should be accomplished through 2 3/8inch plastic-lined tubing installed in a packer set at approximately 2000 feet; the casing-tubing annulus should be filled with an inert fluid; and a pressure gauge or approved leak detection device should be attached to the annulus 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) At the time of the hearing, the applicant requested that the subject well be assigned a maximum surface injection pressure of 1400 psi.

(10) The applicant presented no evidence which would indicate that injection at a pressure of 1400 psi will not cause fracturing of the injection formation or confining strata.

(11) The injection well or system should be equipped with a pressure limiting switch or other acceptable device which will initially limit the wellhead pressure on the injection well to no more than 407 psi.

(12) 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 higher pressure will not result in migration of the injected fluid from the San Andres formation. CASE NO. 9902 Order No. R-9156 Page -3-

(13) 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 and of the mechanical integrity pressure test in order that the same may be witnessed.

(14) 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.

(15) 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, Hanson Operating Company, is hereby authorized to utilize its Hanlad "A" State Well No. 1 located 1650 feet from the South line and 330 feet from the East line (Unit I) of Section 28, Township 10 South, Range 27 East, NMPM, Chaves County, New Mexico, to dispose of produced salt water into the San Andres formation, injection to be accomplished through 2 3/8-inch tubing installed in a packer set at approximately 2000 feet, with injection into the perforated interval from approximately 2034 feet to 2082 feet.

<u>PROVIDED HOWEVER THAT</u>, the tubing shall be internally plastic-lined; 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, and/or packer.

<u>PROVIDED FURTHER THAT</u>, 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 407 psi. CASE NO. 9902 Order No. R-9156 Page -4-

(3) 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 San Andres 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.

(7) 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 00 WILLIAM J. LEMA Director

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