

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION

IN THE MATTER OF THE HEARING
CALLED BY THE OIL CONSERVATION
DIVISION FOR THE PURPOSE OF
CONSIDERING:

CASE NO. 9066
Order No. R-8419

APPLICATION OF KENDALL AND ASSOCIATES,
INC. FOR SALT WATER DISPOSAL, SAN JUAN
COUNTY, NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 8:15 a.m. on February 18, 1987, at Santa Fe, New Mexico, before Examiner David R. Catanach.

NOW, on this 3rd day of March, 1987, 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, Kendall and Associates, Inc., is the owner and operator of the Hare Well No. 1, located 1980 feet from the North line and 1650 feet from the East line (Unit G) of Section 23, Township 29 North, Range 11 West, NMPM, Bloomfield-Farmington Oil Pool, San Juan County, New Mexico.

(3) The applicant proposes to utilize said well to dispose of produced salt water into the Farmington formation, with injection into the perforated interval from approximately 700 feet to 755 feet.

(4) The applicant proposes to dispose of produced water amounting to less than 10 barrels per day originating from the applicant's Hare Well Nos. 2, 3, and 4, all located in Unit G of said Section 23 and all currently producing from the Farmington formation.

(5) According to well records presented by the applicant at the hearing, the proposed disposal well was drilled in 1939 to a

total depth of approximately 755 feet, and 6 5/8 inch casing was set from the surface down to total depth.

(6) These well records do not indicate whether or not surface casing was set in the well nor do they indicate the manner or the amount of materials used to cement the casing strings in the wellbore.

(7) The applicant should be required to determine the top of the cement behind the production casing prior to commencing injection operations into the well by means of a cement bond log or by other means approved by the supervisor of the Aztec office of the Division.

(8) The applicant may be required to perform additional cementing operations into the proposed disposal well if it is determined by the supervisor of the Aztec office of the Division that the present construction of the well is inadequate to assure that the injected water enters only the Farmington formation.

(9) Further evidence presented by the applicant at the hearing indicates that there are approximately fifty-one wells within a one-half mile radius of the proposed disposal well and that many of these wells lack well records indicating their construction.

(10) In order to assure that the injected water is confined to the Farmington formation and is not allowed to escape to other formations or onto the surface by means of an improperly constructed or plugged offset wellbore, certain restrictions should be placed on the proposed well in regards to volume of water to be injected and injection pressure.

(11) The applicant should be required to limit the volume of water to be injected into the disposal well to no more than 10 barrels per day.

(12) Injection into the proposed well should at no time exceed 0 psig surface pressure, or hydrostatic pressure at the face of the formation.

(13) The injection should be accomplished through plastic lined tubing installed in a packer set within 100 feet of the uppermost perforation in the Farmington formation; that 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.

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

(15) The operator should give advance notification to the supervisor of the Aztec district office of the Division of the date and time of the installation of disposal equipment and of the mechanical integrity test so that the same may be inspected and witnessed.

(16) 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.

(17) 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, Kendall and Associates, Inc., is hereby authorized to utilize its Hare Well No. 1, located 1980 feet from the North line and 1650 feet from the East line (Unit G) of Section 23, Township 29 North, Range 11 West, NMPM Bloomfield-Farmington Oil Pool, San Juan County, New Mexico, to dispose of produced salt water into the Farmington formation, injection to be accomplished through plastic-lined tubing installed in a packer set within 100 feet of the uppermost perforation in the Farmington formation, with injection into the perforated interval from approximately 700 feet to 755 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 Aztec.

(2) The applicant shall determine the top of the cement behind the production casing in the well by means of a cement bond log or by other means approved by the supervisor of the Aztec district office of the Division.

(3) The results of the cement bond log shall be reported to the supervisor of the Aztec district office of the Division upon completion.

(4) Injected volume into said well shall be limited to 10 barrels of water per day or less.

(5) The applicant shall operate the well at all times at surface pressure not greater than 0 psig, or hydrostatic pressure at the face of the formation.

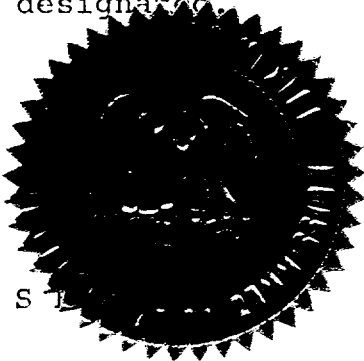
(6) The operator shall notify the supervisor of the Aztec district of the Division of the date and time of the installation of disposal equipment and of the mechanical integrity test so that the same may be inspected and witnessed.

(7) The operator shall immediately notify the supervisor of the Division's Aztec 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.

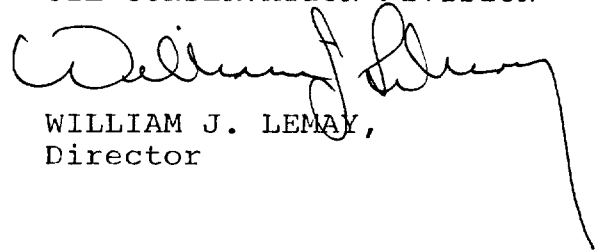
(8) The applicant shall conduct disposal operations and submit monthly reports in accordance with Rules 702, 703, 704, 705, 706, 708, and 1120 of the Division Rules and Regulations.

(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