

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. 10199  
Order No. R-9420

APPLICATION OF STEVENS OPERATING  
CORPORATION FOR APPROVAL OF 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 January 10, 1991, at Santa Fe, New Mexico, before Examiner David R. Catanach.

NOW, on this 28<sup>th</sup> day of January, 1991, 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, Stevens Operating Corporation, seeks authority to dispose of produced salt water into the Undesignated Diablo-Fusselman Pool, in the perforated interval from approximately 6904 feet to 6944 feet in its Hanlad Well No. 1 located 1980 feet from the South line and 2310 feet from the West line (Unit K) of Section 16, Township 10 South, Range 27 East, NMPM, Chaves County, New Mexico.

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(3) The subject well is currently a shut-in gas well in the Pennsylvanian formation with open perforations from approximately 6547 feet to 6600 feet.

(4) The evidence presented by the applicant indicates that the subject well is capable of marginal gas production from the Pennsylvanian formation.

(5) According to further evidence, injection into the Diablo-Fusselman Pool should have no detrimental effect on producing wells within the pool.

(6) At the hearing the applicant testified that it may, at a later time, wish to produce the remaining gas reserves from the Pennsylvanian formation and therefore requested that it be allowed to leave the Pennsylvanian perforations open and utilize a dual packer system for injection.

(7) The proposed wellbore configuration would be such that detection of leakage in the bottom packer or lower portion of tubing would be very difficult, and, any such leakage may have detrimental effects on the producing capability of the Pennsylvanian formation.

(8) In order to provide protection against unintentional injection into the Pennsylvanian formation, the applicant should be required to squeeze cement the interval from 6547 feet to 6600 feet prior to commencing injection operations into the Fusselman formation.

(9) Injection should be accomplished through 2 3/8-inch tubing installed in a packer located at approximately 6795 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.

(10) In conjunction with the injection of produced water, the applicant should utilize a corrosion inhibiting fluid injection system to minimize and control corrosion in the tubing.

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(11) 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.

(12) The injection well or system should be equipped with a pressure limiting switch or other acceptable device which will limit the surface pressure on the injection well to no more than 1380 psi.

(13) 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 Fusselman formation.

(14) 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, conductance of squeeze cement operations, and of the mechanical integrity pressure test in order that the same may be witnessed.

(15) 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.

(16) 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, Stevens Operating Corporation, is hereby authorized to utilize its Hanlad Well No. 1 located 1980 feet from the South line and 2310 feet from the West line (Unit K) of Section 16, Township 10 South, Range 27 East, NMPM, Chaves County, New Mexico, to dispose of produced salt water into the Fusselman formation, Undesignated Diablo-Fusselman Pool, injection to be accomplished through 2 3/8-inch tubing installed in a packer located at approximately 6795 feet, with injection into the perforated interval from approximately 6904 feet to 6944 feet.

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PROVIDED HOWEVER THAT, the casing-tubing annulus shall be filled with an inert fluid and a pressure gauge or approved leak detection device shall be attached to the annulus 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 throughout the interval from the surface down to the proposed packer setting depth, to assure the integrity of such casing.

(2) Prior to commencing injection operations, the applicant shall squeeze cement the perforated Pennsylvanian interval from approximately 6547 feet to 6600 feet.

(3) In conjunction with the injection of produced water, the applicant shall utilize a corrosion inhibiting fluid injection system to minimize and control corrosion in the tubing.

(4) The injection well or system shall be equipped with a pressure limiting switch or other acceptable device which will limit the surface pressure on the injection well to no more than 1380 psi.

(5) The Director of the Division shall 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 Fusselman formation.

(6) 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, conductance of squeeze cement operations, and of the mechanical integrity pressure test in order that the same may be witnessed.

(7) The operator shall 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.

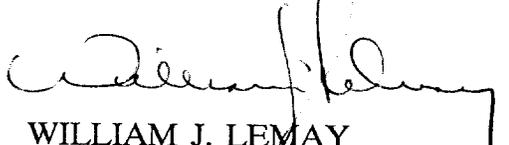
(8) The operator shall immediately notify the supervisor of the Division's Artesia district office of the failure of the tubing, casing, or packer in said well or the leakage of water from or around said well and shall take such steps as may be timely and necessary to correct such failure or leakage.

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

(10) Jurisdiction is hereby 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

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