# 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. 10559 Order No. R-9750

APPLICATION OF SOUTHWEST ROYALTIES, INC. 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 October 15, 1992, at Santa Fe, New Mexico, before Examiner David R. Catanach.

NOW, on this 30th day of October, 1992, 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, Southwest Royalties, Inc., seeks authority to re-enter the previously plugged and abandoned Conoco Inc. Julie Com Well No. 1 located 1980 feet from the North line and 990 feet from the East line (Unit H) of Section 17, Township 19 South, Range 25 East, NMPM, Eddy County, New Mexico, and utilize said well to dispose of produced salt water into the Abo formation through the perforated interval from approximately 4,000 feet to 5,000 feet.
- (3) According to Division records, the interval in the subject well from 4,000 feet to 5,000 feet actually contains a portion of the Glorieta formation as well as the Abo formation.

- (4) The evidence presented by the applicant indicates that the subject well may not have sufficient cement behind the 5 1/2-inch casing to adequately confine the injected fluid to the proposed injection formation.
- (5) The applicant testified that it intends to run a cement bond log on the subject well in order to determine current cement placement and further intends to perform remedial cement operations on the subject well in order to adequately isolate the injection zone if such action is deemed necessary by the supervisor of the Division's Artesia district office.
- (6) Injection should be accomplished through 2 7/8-inch plastic-lined tubing installed in a packer located at approximately 3,950 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.
- (7) 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.
- (8) 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 800 psi.
- (9) 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 Glorieta and Abo formations.
- (10) The operator should notify the supervisor of the Artesia district office of the Division of the date and time of the conductance of the cement bond log, the conductance of remedial cement operations, the installation of disposal equipment and of the mechanical integrity pressure test in order that the same may be witnessed.
- (11) 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.
- (12) At the time of the hearing, the applicant testified that it has reached an agreement with Yates Petroleum Corporation (Yates), an offset operator who originally objected to this application, whereby an injection survey will be conducted on the subject well on an annual basis.

- (13) The applicant should be required to notify representatives of both Yates and the Division prior to the conductance of said annual injection survey in order that the same may be witnessed. In addition, the results of the injection survey should be furnished to both Yates and the Division upon completion.
- (14) 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, Southwest Royalties, Inc., is hereby authorized to re-enter the previously plugged and abandoned Conoco Inc. Julie Com Well No. 1 located 1980 feet from the North line and 990 feet from the East line (Unit H) of Section 17, Township 19 South, Range 25 East, NMPM, Eddy County, New Mexico, and utilize said well to dispose of produced salt water into the Glorieta and Abo formations through the perforated interval from approximately 4000 feet to 5000 feet.

**PROVIDED HOWEVER THAT**, prior to commencing injection operations, the applicant shall conduct a cement bond log on the subject well in order to determine cement placement. If deemed necessary by the supervisor of the Artesia district office of the Division, the applicant shall conduct remedial cement operations on the well in order to effectively isolate the injection zone in accordance with a procedure set forth by the Division.

- (2) Injection shall be accomplished through 2 7/8-inch plastic-lined tubing installed in a packer set at approximately 3,950 feet; 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.
- (3) 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.
- (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 800 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 Glorieta and Abo formations.

- (6) The operator shall notify the supervisor of the Artesia district office of the Division of the date and time of the conductance of the cement bond log, the conductance of remedial cement operations, the installation of disposal equipment 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 an annual injection survey on the subject well. The applicant shall notify representatives of both Yates Petroleum Corporation and the Division prior to the conductance of said injection survey in order that the same may be witnessed. In addition, the results of the injection survey shall be furnished to both Yates and the Division upon completion.
- (10) 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.
- (11) The injection authority granted herein shall terminate one year after the effective date of this order if the applicant has not commenced injection operations into the subject well, provided however, the Division, upon written request by the applicant, may grant an extension thereof for good cause shown.
- (12) 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. LEMA

Director

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