



# NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

**BILL RICHARDSON**

Governor

**Joanna Prukop**

Cabinet Secretary

**Mark E. Fesmire, P.E.**

Director

**Oil Conservation Division**

ADMINISTRATIVE ORDER SWD-949

## **APPLICATION OF LOU RAY OIL CO., L.L.C. FOR PRODUCED WATER DISPOSAL, LEA COUNTY, NEW MEXICO.**

### **ADMINISTRATIVE ORDER OF THE OIL CONSERVATION DIVISION**

Under the provisions of Rule 701(B), Lou Ray Oil Co., L.L.C. made application to the New Mexico Oil Conservation Division on September 24, 2004, for permission to utilize for produced water disposal its Sarah Sue Well No. 1 (API No. 30-025-02405) located 1,980 feet from the North line and 660 feet from the West line of Section 36, Township 19 South, Range 34 East, NMPM, Lea County, New Mexico.

#### **THE DIVISION DIRECTOR FINDS THAT:**

- (1) The application has been duly filed under the provisions of Rule 701(B) of the Division Rules and Regulations;
- (2) Satisfactory information has been provided that all offset operators and surface owners have been duly notified;
- (3) The applicant has presented satisfactory evidence that all requirements prescribed in Rule 701 will be met; and
- (4) No objections have been received within the waiting period prescribed by said rule.

#### **IT IS THEREFORE ORDERED THAT:**

The applicant is hereby authorized to utilize its Sarah Sue Well No. 1 (API No. 30-025-02405) located 1,980 feet from the North line and 660 feet from the West line of Section 36, Township 19 South, Range 34 East, NMPM, Lea County, New Mexico, in such manner as to permit the injection of produced water for disposal purposes into the Seven Rivers formation through perforations from 3,953 feet to 3,980 feet and through plastic-lined tubing set with a packer located within 100 feet of the top of the injection interval.

**IT IS FURTHER ORDERED THAT:**

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.

**Prior to any injection into this well, the operator shall perform the following remedial operation on an area-of-review well. Provide a Cement Bond Log to the Division in Santa Fe for determining the cement top of the Pearl Queen Well No. 3 API No. 30-025-21756. After review of the Cement Bond Log, if the Division in Santa Fe determines that the cement top is below 3,850 feet, the cement top shall be raised by remedial cement squeeze operations. The permit to inject into the Sarah Sue Well No. 1 is not in effect until the operator has shown evidence of an adequate cement top for this Pearl Queen Well No. 3 in writing to the Engineering Bureau of the Division in Santa Fe.**

The operator shall attempt to obtain a water sample after perforating the intended injection interval. An analysis of this water sample shall be supplied to the Division office in Santa Fe. In addition, the operator shall estimate the initial reservoir pressure of the injection interval and submit this in writing to the Division (referencing SWD-949).

After installing injection tubing, the casing shall be pressure tested from the surface to the packer setting depth to assure the integrity of said casing.

The casing-tubing annulus shall be loaded with an inert fluid and equipped with a pressure gauge or an approved leak detection device in order to determine leakage in the casing, tubing, or packer.

The wellhead injection pressure on the well shall be limited to **no more than 791 psi**. In addition, the injection well or system shall be equipped with a pressure limiting device in workable condition which shall, at all times, limit surface injection pressure to the maximum allowable pressure for this well.

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 injection formation. Such proper showing shall consist of a valid step-rate test run in accordance with and acceptable to this office.

The operator shall notify the supervisor of the Hobbs district office of the Division of the date and time of the installation of disposal equipment and of any mechanical integrity test so that the same may be inspected and witnessed.

The operator shall immediately notify the supervisor of the Hobbs district office of the Division of the failure of the tubing, casing, or packer in said well and shall take such steps as may be timely and necessary to correct such failure or leakage.


PROVIDED FURTHER THAT, jurisdiction is retained by the Division for the entry of such further orders as may be necessary for the prevention of waste and/or protection of correlative rights or upon failure of the operator to conduct operations (1) to protect fresh water or (2) consistent with the requirements in this order, whereupon the Division may, after notice and hearing, terminate the injection authority granted herein.

The operator shall provide written notice of the date of commencement of injection to the Hobbs district office of the Division.

The operator shall submit monthly reports of the disposal operations on Division Form C-115, in accordance with Rule Nos. 706 and 1120 of the Division Rules and Regulations.

The injection authority granted herein shall terminate one year after the effective date of this order if the operator has not commenced injection operations into the subject well, provided however, the Division, upon written request by the operator, may grant an extension thereof for good cause shown.

Approved at Santa Fe, New Mexico, on this 19th day of November 2004.

  
MARK E. FESMIRE, P.E.  
Director

MEF/wvjj

cc: Oil Conservation Division – Hobbs  
Bureau of Land Management – Carlsbad