



# 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-966-A

## APPLICATION OF LYNX PETROLEUM CONSULTANTS, INC. FOR PRODUCED WATER DISPOSAL, EDDY COUNTY, NEW MEXICO.

### ADMINISTRATIVE ORDER OF THE OIL CONSERVATION DIVISION

RECEIVED

OCT 17 2005

OCC-ANTEGIA

Under the provisions of Rule 701(B), Lynx Petroleum Consultants, Inc. made application to the New Mexico Oil Conservation Division on December 29, 2004 for permission to utilize for produced water disposal its Jones Federal "B" Well No. 3 (API No. 30-015-10394) located 660 feet from the South line and 660 feet from the East line of Section 23, Township 19 South, Range 31 East, NMPM, Eddy County, New Mexico. On January 20, 2005, the Division issued Administrative Order SWD-966, granting that application. This order supersedes Administrative Order SWD-966 in its entirety and for all purposes.

### 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 Jones Federal "B" Well No. 3 (API No. 30-015-10394) located 660 feet from the South line and 660 feet from the East line of Section 23, Township 19 South, Range 31 East, NMPM, Eddy County, New Mexico, in such manner as to permit the injection of produced water for disposal purposes into the Yates and Seven Rivers formations through perforations from 2,370 feet to 2,640 feet below the surface 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.

**As preparation and prior to injection:**

- (a) The operator shall supply the temperature log run after the cement job on the 8-5/8 inch casing and any cased hole logs run prior to perforating the Yates as part of the 1994 workover to the Engineering Bureau of the Division in Santa Fe.
- (b) The operator shall install a CIBP with cement below the lowermost injection interval. A 200-foot interval shall remain open in the casing of the subject well from the lowest perforation to the plug back total depth.

**After commencement of injection:**

- (a) The operator shall run an injection profile log, consisting of a combination of tracer and temperature decay logs, three months, six months and one year after initial commencement of injection, and annually thereafter. These logs shall be submitted to the Engineering Bureau of the Division in Santa Fe.

The operator shall estimate the initial reservoir pressure of the injection interval, i.e. from stable fluid levels, and submit this in writing to the Division (referencing SWD-966-A).

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

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 474 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 the Division.

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 any mechanical integrity test so that the same may be inspected and witnessed.

The operator shall immediately notify the supervisor of the Artesia district office of the Division of any 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.


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. Upon failure of the operator to conduct operations a manner (1) to protect fresh water or (2) consistent with the requirements of this order, the Division may, after notice and hearing, terminate or suspend the injection authority granted herein.

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

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

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 of the time for commencement of injection for good cause shown.

Approved at Santa Fe, New Mexico, on this 21<sup>st</sup> day of Sept ~~August~~ 2005.

  
MARK E. FESMIRE, P.E.  
Director

MEF/db

cc: Oil Conservation Division – Artesia  
Bureau of Land Management - Carlsbad