



# 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 NO. WFX-789-A*

## ***APPLICATION OF DUGAN PRODUCTION CORPORATION TO EXPAND ITS WEST BISTI LOWER GALLUP SAND UNIT WATERFLOOD PROJECT IN THE BISTI-LOWER GALLUP POOL IN SAN JUAN COUNTY, NEW MEXICO***

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

On August 25, 2004 Dugan Production Corporation made application to the Division to amend Division Order No. WFX-789 dated April 9, 2003 by deleting a certain ordering provision that required the existing 7.0-inch casing to be perforated at a depth of 4,004 feet and cement circulated to the surface on this casing string.

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

- (1) The application has been filed in due form.
- (2) A recent cement bond log on the well has confirmed that the cement behind the 7.0-inch casing is adequate so as to confine the injected fluid to the Gallup formation.
- (3) The proposed amendment to Division Order No. WFX-789 should be approved.

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

The applicant, Dugan Production Corporation is hereby authorized to inject water into the Gallup formation at approximately 4,831 feet to 4,854 feet through 2 3/8-inch plastic lined tubing set in a packer located at a depth of 4,775 feet in the following-described well for purposes of secondary recovery to wit:

West Bisti Unit No. 157  
API No. 30-045-05598  
660' FSL & 660' FEL (Unit P)  
Section 36, T-26 North, R-13 West, NMPM,  
San Juan County, New Mexico

**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 commencing injection operations, the applicant shall conduct the following procedure on the West Bisti Unit Well No. 157 in order to prepare the well for injection:**

**A 4 ½-inch casing liner shall be set from the surface to a depth of 4,830 feet. Cement shall then be circulated to the surface on this liner.**

Prior to commencing injection operations into the well, 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 at the surface or left open to the atmosphere to facilitate detection of leakage in the casing, tubing or packer.

The injection well or system shall be equipped with a pressure limiting device which will limit the wellhead pressure on the injection well to no more than 966 psi.

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 Aztec district office of the Division of the date and time of the installation of injection equipment and of the mechanical integrity test so that the same may be inspected and witnessed.

The operator shall immediately notify the supervisor of the Aztec 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.

The subject well shall be governed by all provisions of Division Order No. R-1638, as amended, and Rules 702-706 of the Division Rules and Regulations not inconsistent herewith.

**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 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.

DONE at Santa Fe, New Mexico, on this 30th day of August, 2004.

STATE OF NEW MEXICO  
OIL CONSERVATION DIVISION



MARK E. FESMIRE, P.E.  
Director

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MEF/drc

cc: Oil Conservation Division – Aztec  
Bureau of Land Management-Farmington