



**NEW MEXICO ENERGY, MINERALS  
& NATURAL RESOURCES DEPARTMENT**

OIL CONSERVATION DIVISION  
2040 South Pacheco Street  
Santa Fe, New Mexico 87505  
(505) 827-7131

ADMINISTRATIVE ORDER NO. WFX-759

D.P.  
N.M.  
P.K.  
J.A.P.

**APPLICATION OF APACHE CORPORATION TO EXPAND ITS WATERFLOOD  
PROJECT IN THE NORTH EUNICE BLINEBRY-TUBB-DRINKARD POOL IN LEA  
COUNTY, NEW MEXICO**

**ADMINISTRATIVE ORDER  
OF THE OIL CONSERVATION DIVISION**

Under the provisions of Division Order No. R-8541 as amended, Apache Corporation has made application to the Division on April 13, 2000, with additional information received on May 4, 2000, for permission to expand its Northeast Drinkard Unit Waterflood Project in the North Eunice Blinebry-Tubb-Drinkard Oil & Gas Pool in Lea County, New Mexico.

**THE DIVISION DIRECTOR FINDS THAT:**

- (1) The application has been filed in due form.
- (2) Satisfactory information has been provided that all offset operators have been duly notified of the application.
- (3) No objection has been received within the waiting period as prescribed by Rule 701(B).
- (4) The proposed injection wells are eligible for conversion to injection under the terms of Rule 701.
- (5) The proposed expansion of the above referenced waterflood project will not cause waste nor impair correlative rights.
- (6) The application should be approved.

**IT IS THEREFORE ORDERED THAT:**

The applicant, Apache Corporation, be and the same is hereby authorized to inject water into the Blinebry, Tubb and Drinkard formations at approximately 5500 feet to approximately 6750 feet through 2 3/8-inch plastic lined tubing set in a packer located within 100 feet of the uppermost injection perforations in the wells shown in Exhibit 'A' for purposes of secondary recovery.

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 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 wells to no greater than .2 psi per foot of depth to the uppermost injection perforations or casing shoe.

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 Blinberry, Tubb or Drinkard formations. 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 injection equipment and of the mechanical integrity tests 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 wells and shall take such steps as may be timely and necessary to correct such failure or leakage.

The subject wells shall be governed by all provisions of Division Order No. R-8541 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.

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*Apache Corporation*

*May 8, 2000*

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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 wells, 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 8<sup>th</sup> day of May, 2000.

STATE OF NEW MEXICO  
OIL CONSERVATION DIVISION



LORI WROTENBERY  
Director

S E A L

LW/MWA/kv

cc: Oil Conservation Division - Hobbs /  
Case File No. 9232

**EXHIBIT "A"**  
**DIVISION ORDER NO. WFX-759**  
**NORTHEAST DRINKARD UNIT WATERFLOOD PROJECT**  
**APPROVED INJECTION WELLS**

<i>Well Name</i>	<i>Well No.</i>	<i>Location</i>	<i>Unit</i>	<i>S-T-R</i>	<i>Injection Interval</i>	<i>Packer Depth</i>	<i>Tubing Size</i>	<i>Pressure Gradient</i>	<i>Injection Pressure</i>
NEDU	320	660' FSL & 1780' FWL	W	2-21S-37E	5650'-5925'	5550'	2 3/8"	.2 psi/ft	1130 PSIG
NEDU	405	660' FNL & 1980' FEL	B	10-21S-37E	5550'-6725'	5450'	2 3/8"	.2 psi/ft	1110 PSIG
NEDU	525	500' FNL & 2080' FEL	N	10-21S-37E	5560'-6800'	5460'	2 3/8"	.2 psi/ft	1112 PSIG
NEDU	606	3375' FSL & 3225' FEL	F	15-21S-37E	5700'-6800'	5600'	2 3/8"	.2 psi/ft	1140 PSIG
NEDU	609	660' FNL & 1980' FEL	B	15-21S-37E	5700'-6959'	5600'	2 3/8"	.2 psi/ft	1140 PSIG
NEDU	704	660' FSL & 1980' FWL	N	15-21S-37E	5500'-6630'	5400'	2 3/8"	.2 psi/ft	1100 PSIG
NEDU	707	1725' FSL & 2149' FEL	J	15-21S-37E	5500'-6750'	5400'	2 3/8"	.2 psi/ft	1100 PSIG
NEDU	805	1980' FSL & 1980' FWL	F	22-21S-37E	5650'-6700'	5550'	2 3/8"	.2 psi/ft	1130 PSIG
NEDU	806	660' FNL & 1780' FEL	B	22-21S-37E	5550'-6620'	5450'	2 3/8"	.2 psi/ft	1110 PSIG
NEDU	809	1980' FNL & 660' FEL	H	22-21S-37E	5700'-6615'	5600'	2 3/8"	.2 psi/ft	1140 PSIG
NEDU	813	1980' FNL & 1980' FWL	F	23-21S-37E	5700'-6600'	5600'	2 3/8"	.2 psi/ft	1140 PSIG
NEDU	907	1980' FSL & 1980' FEL	J	22-21S-37E	5450'-6618'	5350'	2 3/8"	.2 psi/ft	1090 PSIG
NEDU	911	1960' FSL & 660' FWL	L	23-21S-37E	5450'-6612'	5350'	2 3/8"	.2 psi/ft	1090 PSIG
NEDU	915	1980' FSL & 1980' FEL	J	23-21S-37E	5500'-6700'	5400'	2 3/8"	.2 psi/ft	1100 PSIG

All wells located in Lea County, New Mexico