



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-752

***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, 1999 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 5510 feet to approximately 6840 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 Blinbry, 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

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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 6th day of July, 1999.

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION

A handwritten signature in cursive script, appearing to read "Lori Wrotenbery by DUC".

LORI WROTENBERY
Director

S E A L

LW/BES/kv

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

EXHIBIT "A"
DIVISION ORDER NO. WFX-752
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	104	1582' FNL & 330' FWL	E	3-21S-37E	5660'-5950'	5560'	2 3/8"	.2 psi/ft	1132 PSIG
NEDU	107	1585' FNL & 1980' FWL	F	3-21S-37E	5640'-5970'	5540'	2 3/8"	.2 psi/ft	1128 PSIG
NEDU	113	1980' FNL & 660' FEL	H	3-21S-37E	5690'-6830'	5590'	2 3/8"	.2 psi/ft	1138 PSIG
NEDU	202	3330' FNL & 467' FEL	I	4-21S-37E	5620'-6840'	5520'	2 3/8"	.2 psi/ft	1124 PSIG
NEDU	302	660' FSL & 330' FWL	U	3-21S-37E	5620'-6690'	5520'	2 3/8"	.2 psi/ft	1124 PSIG
NEDU	402	1980' FNL & 990' FWL	E	10-21S-37E	5560'-6770'	5460'	2 3/8"	.2 psi/ft	1112 PSIG
NEDU	502	660' FSL & 660' FWL	M	10-21S-37E	5600'-6660'	5500'	2 3/8"	.2 psi/ft	1120 PSIG
NEDU	512	1980' FSL & 1980' FWL	K	11-21S-37E	5600'-6780'	5500'	2 3/8"	.2 psi/ft	1120 PSIG
NEDU	602	1980' FNL & 660' FWL	E	15-21S-37E	5550'-6670'	5450'	2 3/8"	.2 psi/ft	1110 PSIG
NEDU	611	1980' FNL & 1978' FEL	G	15-21S-37E	5530'-6650'	5430'	2 3/8"	.2 psi/ft	1106 PSIG
NEDU	702	660' FSL & 660' FWL	M	15-21S-37E	5510'-6650'	5410'	2 3/8"	.2 psi/ft	1102 PSIG

Note: Completions may consist of perforated and open-hole combinations.

All wells in Lea County, New Mexico