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



ADMINISTRAT'VE ORDER NO. WFX-731

APPLICATION OF CROSS TIMBERS OPERATING COMPANY TO EXPAND ITS WATERFLOOD PROJECT IN THE MALJAMAR GRAYBURG-SAN ANDRES POOL IN LEA COUNTY, NEW MEXICO

## ADMINISTRATIVE ORDER OF THE OIL CONSERVATION DIVISION

Under the provisions of Division Order No. R-3469 as amended, Cross Timbers Operating Company has made application to the Division on December 4, 1997 for permission to expand its Southeast Maljamar Grayburg-San Andres Unit Waterflood Project in the Maljamar Grayburg-San Andres 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, Cross Timbers Operating Company, be and the same is hereby authorized to inject water into the Grayburg formation at approximately 4218 feet to approximately 4395 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 described on Exhibit "A" attached hereto, 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 wells, 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 .2 psi per foot of depth to the uppermost injection perforations of each well as indicated on Exhibit 'A'.

The Director of the Division may authorize an increase in injection pressure upon a proper showing by the operator of said wells that such higher pressure will not result in migration of the injected fluid from the Grayburg 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 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-3134, 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 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 10th day of February, 1998.

STATE OF NEW MEXICO

OIL CONSERVATION DIVISION

CORPWROTENBERY

Director

SEAL

LW/BES/kv

cc: Oil Conservation Division - Hobbs

Case File No.3462

EXHIBIT "A"

DIVISION ORDER NO. WFX-731

SOUTHEAST MALJAMAR GRAYBURG-SAN ANDRES UNIT WATERFLOOD PROJECT

APPROVED INJECTION WELLS

	SEMGSAU	SEMGSAU SEMGSAU			SEMGSAU		SEMGSAU	opin opin o	SEMGSAII	Well Name		
	714	710 714			610		106		7	Well No.		
	1200' FSL & 900' FEL	1165' FSL & 2010' FEL	1070' FSL & 1888' FWL		1310' FSL & 750' FWL		1040' FSL & 420' FEL		500' FNL & 330' FWL		Location	
	Þ	P O Z			<b>X</b>		-D	U	,		Unit	
	29-17S-33E	29-17S-33E	29-17S-33E		29-17S-33E		30-17S-33E	32-1/S-33E	32-17S-33E		S-T-R	
	4282'-4332'	4250'-4308' 4272'-4324'		12.00	42521_42781	(171, 017)	4218'-4270'	4322'-4395'		Interval	Injection	
	4222'	4192' 4190' 4212'		4102	9717	4262' 4158'			Packer Depth			
	2 3/8"	2 3/8" 2 3/8" 2 3/8"		) 2/0"	2 3/0	2 3/8"			Tubing Size			
- Post 20	.2 nsi/fi	.2 psi/ft .2 psi/ft .2 psi/ft		3 10	n/rsd 7:	.2 psi/ft			Pressure Gradient			
070 1 070	856 PSIG	850 PSIG 854 PSIG		838 PSIG	020 5010	844 PSIG		864 PSIG		Pressure	Injection	

All wells in Lea County, New Mexico