APPLICATION OF TEXACO EXPLORATION AND PRODUCTION, INC. TO EXPAND ITS W.H. RHODES "B" FEDERAL UNIT WATERFLOOD PROJECT IN THE RHODES YATES SEVEN RIVERS POOL IN LEA COUNTY, NEW MEXICO.

ORDER NO. WFX (145

ADMINISTRATIVE ORDER OF THE OIL CONSERVATION DIVISION

Under the provisions of Division Order Nos. R-2748, R-2748-A and R-9847, Texaco Exploration and Production, Inc. has made application to the Division on April 15, 1993, for permission to expand its W.H. Rhodes "B" Federal Unit Waterflood Project in the Rhodes Yates Seven Rivers 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 well is eligible for conversion to water injection under the terms of Rule 701.
- (5) The proposed expansion of the above referenced W.H. Rhodes "B" Federal Unit Waterflood Project will not cause waste nor impair correlative rights.
 - (6) The application should be approved.

IT IS THEREFORE ORDERED THAT:

The applicant, Texaco Exploration and Production, Inc., be and the same is hereby authorized to inject water into the Yates and Seven Rivers formations at approximately 3000 feet to approximately 3318 feet through 2 3/8 inch or 2 7/8 inch plastic lined tubing set in a packer located within 100 feet of the uppermost injection perforations feet in the following described well(s) for purposes of secondary recovery as shown on Exhibit "A" attached hereto.

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 (in each well) shall be pressure tested from the surface to the packer setting depth to assure the integrity of said casing.

The casing-tubing annulus (in each well) 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 wells or system shall be equipped with a pressure limiting device which will limit the wellhead pressure on the injection wells to no more than .2 psi/ft. of depth to the uppermost injection perforation.

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 Yates or Seven Rivers 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 test 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. * * * SAME * * * and Rules 702-706 of the Division Rules and Regulations not inconsistent herewith.

PROVIDED FURTHER THAT, jurisdiction of this cause is hereby retained by the Division for the entry of such further order or orders as may be deemed necessary or convenient for the prevention of waste and/or protection of correlative rights; upon failure of the operator to conduct operations in a manner which will ensure the protection of fresh water or in a manner inconsistent with the

after	rements notice ed herei	set forth and hearing n.	in thig, termi	s order, nate the	the Divi	sion may, authority	, Y
		Santa Fe, 9•	New Mexi	co, on th	is	day of	£
xc:	STATE LA	ND OFFICE _	BLM	- Carlsb	ad OCD -	Hobbs	

/WJL/BES/

EXHIBIT "A" DIVISION ORDER NO. WFX-* W.H. RHODES "B" FEDERAL UNIT WATERFLOOD APPROVED INJECTION WELLS

Well No. Location 1 1650'FNL & 1650'FEL 8 660'FSL & 660'FWL 14 1980'FNL & 864'FWL 15 660'FNL & 660'FEL 3 1980'FSL & 660'FEL 4 660'FSL & 660'FEL									
Well No. Location Unit S-I-R Injection Interval Packer Depth Tabing Size 1 1650'FNL & 1650'FEL G 27-26S-37E 3071' to 3260' (OH) 3050' 2 3/8" 8 660'FSL & 660'FWL M 26-26S-37E 3128' to 3255' (OH) 3100' 2 3/8" 14 1980'FNL & 660'FEL A 27-26S-37E 3000' to 3200' 2980' 2 3/8" 15 660'FSL & 660'FEL A 27-26S-37E 3080' to 3195' 3050' 2 3/8" 3 1980'FSL & 660'FEL I 28-26S-37E 3116' to 3300' (OH) 3080' 2 7/8" 4 660'FSL & 660'FEL P 28-26S-37E 3122' to 3318' 3100' 2 3/8"									
Well No. Location Unit S-FR Injection Interval Packer Depth Tubing Size 1 1650°FNL & 1650°FEL G 27-26S-37E 3071° to 3260° (OH) 3050° 2 3/8" 8 660°FSL & 660°FWL M 26-26S-37E 3128° to 3255° (OH) 3100° 2 3/8" 15 660°FNL & 660°FEL A 27-26S-37E 3000° to 3200° 2980° 2 3/8" 3 1980°FSL & 660°FEL A 27-26S-37E 3116° to 3300° (OH) 3080° 2 3/8" 4 660°FSL & 660°FEL I 28-26S-37E 3116° to 3300° (OH) 3080° 2 7/8" 4 660°FSL & 660°FEL P 28-26S-37E 3122° to 3318° 3100° 2 3/8"									
Well No. Location Unit S-T-R Injection Interval Packer Depth Tubing Size 1 1650'FNL & 1650'FEL G 27-26S-37E 3071' to 3260' (OH) 3050' 2 3/8" 8 660'FSL & 660'FWL M 26-26S-37E 3128' to 3255' (OH) 3100' 2 3/8" 14 1980'FNL & 864'FWL E 26-26S-37E 3000' to 3200' 2980' 2 3/8" 15 660'FNL & 660'FEL A 27-26S-37E 3080' to 3195' 3050' 2 3/8" 3 1980'FSL & 660'FEL I 28-26S-37E 3116' to 3300' (OH) 3080' 2 7/8" 4 660'FSL & 660'FEL P 28-26S-37E 3122' to 3318' 3100' 2 3/8"									
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Well No. Location Unit S-T-R Injection Interval Packer Depth Tubing Size 1 1650°FNL & 1650°FEL G 27-26S-37E 3071° to 3260° (OH) 3050° 2 3/8" 8 660°FSL & 660°FWL M 26-26S-37E 3128° to 3255° (OH) 3100° 2 3/8" 14 1980°FNL & 864°FWL E 26-26S-37E 3000° to 3200° 2980° 2 3/8" 15 660°FNL & 660°FEL A 27-26S-37E 3080° to 3195° 3050° 2 3/8" 3 1980°FSL & 660°FEL I 28-26S-37E 3116° to 3300° (OH) 3080° 2 7/8"	624 psig	2 3/8"	3100'	3122' to 3318'	28-26S-37E	P	660'FSL & 660'FEL	4	R
Well No. Location Unit S-T-R Injection Interval Packer Depth Tubing Size 1 1 1650°FNL & 1650°FEL G 27-26S-37E 3071° to 3260° (OH) 3050° 2 3/8" 8 660°FSL & 660°FWL M 26-26S-37E 3128° to 3255° (OH) 3100° 2 3/8" 14 1980°FNL & 864°FWL E 26-26S-37E 3000° to 3200° 2980° 2 3/8" 15 660°FNL & 660°FEL A 27-26S-37E 3080° to 3195° 3050° 2 3/8"	623 psig	2 7/8"	3080'	3116' to 3300' (OH)	28-26S-37E	I	1980'FSL & 660'FEL	3	W.H. Rhodes "B" Fed NCT-2
Well No. Location Unit S-T-R Injection Interval Packer Depth Tubing Size 1 1 1650°FNL & 1650°FEL G 27-26S-37E 3071° to 3260° (OH) 3050° 2 3/8" 8 660°FSL & 660°FWL M 26-26S-37E 3128° to 3255° (OH) 3100° 2 3/8" 14 1980°FNL & 864°FWL E 26-26S-37E 3000° to 3200° 2980° 2 3/8"	617 psig	2 3/8"	3050'	3080' to 3195'	27-26S-37E	A	660'FNL & 660'FEL	15	The state of the s
Well No. Location Unit S-T-R Injection Interval Packer Depth Tubing Size 1 1 1650'FNL & 1650'FEL G 27-26S-37E 3071' to 3260' (OH) 3050' 2 3/8" 8 660'FSL & 660'FWL M 26-26S-37E 3128' to 3255' (OH) 3100' 2 3/8"	600 psig	2 3/8"	2980'	3000' to 3200'	26-26S-37E	E	1980'FNL & 864'FWL	14	=
Well No. Location Unit S-T-R Injection Interval Packer Depth Tubing Size 1 1 1650°FNL & 1650°FEL G 27-26S-37E 3071° to 3260° (OH) 3050° 2 3/8"	626 psig	2 3/8"	3100'	3128' to 3255' (OH)	26-26S-37E	M	660'FSL & 660'FWL	œ	2
Well No. Location Unit S-T-R Injection Interval Packer Depth Tubing Size	614 psig	2 3/8"	3050'	3071' to 3260' (OH)	27-26S-37E	G	1650'FNL & 1650'FEL	-	W.H. Rhodes "B" Fed NCT-1
Well No. Location Unit S-T-R Injection Interval Packer Depth Tubing Size									
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Well No. Location Unit S-T-R Injection Interval Packer Depth Tubing Size									
	Injection Pressure	Tubing Size	Packer Depth	Injection Interval	S-T-R	Unit	Location	Well No.	Well Name

ALL IN LEA COUNTY, NEW MEXICO