STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION

APPLICATION OF OCCIDENTAL PERMIAN LIMITED PARTNERSHIP TO AMEND DIVISION ORDER R-6199 CONCERNING THE EXPANSION OF THE NORTH HOBBS GRAYBURG-SAN ANDRES UNIT PRESSURE MAINTENANCE PROJECT AND TO QUALIFY FOR THE RECOVERED OIL TAX CREDIT, LEA COUNTY, NEW MEXICO

CASE 12722

PRE-HEARING STATEMENT

This pre-hearing statement is submitted by Occidental Permian Limited Partnership ("OXY") as required by the Oil Conservation Division.

APPEARANCE OF PARTIES

APPLICANT	ATTORNEY
Occidental Permian Limited Partnership 580 Westlake Park Blvd. Houston, Texas 77210 attn: Rick Foppiano 281-552-1303	W. Thomas Kellahin KELLAHIN & KELLAHIN Santa Fe, NM 87504 (505) 982-4285

STATEMENT OF THE CASE

request

OCCIDENTAL PERMIAN LIMITED PARTNERSHIP ("OXY") seeks to amend Division Order R-6199 concerning the expansion of its North Hobbs Grayburg-San Andres Unit Pressure Maintenance Project as follows:

(i) to convert a portion of this project (Phase I) from water injection to a tertiary recovery project by the injection of carbon dioxide (CO2) and produced water and the reinjection of CO2, produced water, and produced gases including methane, natural gas liquids and hydrogen sulfide (H2S) including existing and new wellbores;

(ii) an increase in the authorized surface injection pressure;

(iii) an increase in the gas oil ratios;

(iv) an exception from Rule 704.A(2);

(v) an exception from the one year commencement of injection; and

(iv) to qualify Phase I of the Unit for the recovered oil tax rate pursuant to the "New Mexico Enhanced Oil Recovery Act" (Laws 1992, Chapter 38, Sections 1 through 5.

This project is includes all or portions of Sections 13-14, 23-25, 26, 36 of T18S, R37E and all or portions of Sections 17-20, 28, 29-33 of T18S, R38E, NMPM, Lea County, New Mexico;

Oxy is the current operator of the North Hobbs Unit Pressure Maintenance Project ("Existing EOR Project") which was approved by Commission Order R-6199 (Case 6653) issued effective November 30, 1979.

Order R-6199 authorized Shell to operate the pressure maintenance project "by the injection of water." Ultimate primary oil recovery from the Unit has been 275 MMBBLs. Under the current secondary recovery project, ultimate secondary oil recovery is estimated to be 45.2 MMBBLs. Total oil production from the Unit as of January, 2001 has been 333 MMBLs and 556 BCFG. The Unit is currently producing at 6100 BOPD and 226,000 BWPD from 144 active producers. 83 injectors are currently active.

project description

Within a portion of this Unit identified as Phase I, OXY seeks to convert this secondary recovery project to a tertiary recovery project by means of a significant change in the process used for the displacement and recovery of crude oil as follows:

> (a) within that portion of Phase I identified as the Gas Injection Area, by injection of carbon dioxide ("CO2") and produced water; and
>
> (b) within that portion of Phase I identified as the Gas Re-injection Area, by the re-injection of produced water and gases produced within the unit including CO2, natural gas liquids, methane and H2S;

The estimated amount of recoverable oil attributable to a Positive Production Response from water injection to CO2 injection and/CO2/water/produced gas re-injection for the Phase I area of this existing EOR Project is 76 MMBLs of additional oil.

Oxy will demonstrate that its proposal to re-inject all produced gases within a portion of Phase I is essential in order to have an economically viable project and produced gas re-injection can be accomplished safely;

OXY intends to utilize wellbores as follows: to convert existing water injection wells to CO2/water injectors; convert existing producers to injectors; reactivate temporarily abandoned wellbores for injection and/or production; and to drill new producers and/or injectors.

pressure limitations

Results of some 52 step rate tests performed in the past demonstrate a minimum bottom hole parting pressure of 2600 psi for this formation. OXY proposes to operate at three different maximum **surface injection pressures** based upon substances injected that result in **bottom** hole pressures not greater than 2400 psi.

Oxy's proposed surface pressure limitations will be greater than the Division's standard 0.2 psi per foot of depth. Surface injection pressures higher than the Division's standard are necessary because of friction pressure losses down the tubing, the lighter density (as compared to water) of the gaseous injectants caused by their composition and temperature and in order to attain the injection rates necessary to make this project economically viable.

Compliance with this proposed bottom hole pressure limitation of 2400 psi can best be achieved by allowing OXY to inject up to the following maximum surface injection pressures for the following substances:

CO2 only injection:	1250 psi
Water injection:	1100 psi
produced gas injection:	1770 psi

gas oil ratio

In order to make the injection of CO2 economically practicable, it is necessary to increase in the current total gas to total oil ratio limitation from 3500 cubic feet of gas to 6,000 cubic feet of gas per stock tank barrel of oil.

one year limit

Oxy seeks an exception from the Division practice of requiring that actual injection commence within one (1) year of approval of an injection well.

mechanical integrity tests

Division Rule 704.A(2) requires an initial mechanical integrity test on an injection well once every 5 years unless the "annular pressure of wells injecting at positive pressure under a packer" is measured. OXY plans to install automated pressure monitoring devices that will continuously measure the annular pressure and alert company representatives if a certain pressure level is detected then immediate action can be taken. These devices will also provide for automatic and immediate shut-in of the injection well at a certain pressure condition on the tubing-casing annulus. Because of this real time monitoring will satisfy the objectives of Rule 704.A(2), Oxy requests the Division exempt its injection wells from being pressure tested at set intervals.

wellbore integrity data

In accordance with Division Rule 701, OXY is submitting satisfactory evidence on Division Form C-108 in compliance with Division Rule 701.

safety issues

OXY will present evidence concerning its H2S safety plan

PROPOSED EVIDENCE

APPLICANT

WITNESSES	EST. TIME	EXHIBITS
Andy Falls (petroleum engineer)	60 min.	@ 15
Mike Starrett (petroleum engineer)	20 Min.	@ 6
Richard E. Foppiano (petroleum engineer)	40 min.	@ 6

PROCEDURAL MATTERS

None

KELLAHIN AND KELLAHIN

By: _____
W. Thomas Kellahin