NEW MEXICO ENERGY, MINERALS
& NATURAL RESOURCES DEPARTMENT

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

WFX-673
PDEV0020600673
EOR-19
pEOR0000192002

April 10, 1996

Mewbourne Oil Company
P.O. Box 7698
Tyler, Texas 75711

Attn: Mr. Kevin Mayes

RE: Injection Pressure Increase - Quercho Plains Queen Associated Sand Unit Waterflood Project Lea County, New Mexico

Dear Mr. Gibson:

Reference is made to your request dated December 13, 1995 to increase the surface injection pressure on the above referenced well. This request is based on a step rate test conducted in December, 1995. The results of the test have been reviewed by my staff and we feel an increase in injection pressure on this well is justified at this time.

You are therefore authorized to increase the surface injection pressure on the following well:

Well and Location	*Maximum Surface Injection Pressure*
QPQASU Well No.30	1050 PSIG
Located in Section 26, Township 18 South, Range 32 East, Lea County, New Mexico.	

The Division Director may rescind this injection pressure increase if it becomes apparent that the injected water is not being confined to the injection zone or is endangering any fresh water aquifers.

Sincerely,

William J. LeMay
Director

WJL/BES
cc: Oil Conservation Division - Hobbs
Files: WFX-673; EOR-19; PSI-X 4th QTR-96

PSI-Y N/R

MEWBOURNE OIL COMPANY

P.O. BOX 7698
TYLER, TEXAS 75711
903 - 561-2900
FAX 903 - 561-1870

December 13, 1995

New Mexico Oil Conservation Commission
2040 S. Pacheco
Santa Fe, New Mexico 87505

Attn: Mr. David Catanach

Re: Application for Increased Surface Injection Pressure
Querecho Plains Queen Associated Waterflood Project
Lea County, New Mexico

Mr. Catanach:

Mewbourne Oil Company requests administrative approval to increase surface injection pressure for the well designated Querecho Plains Queen Associated Sand Unit Well No. 30 of the referenced project. Administrative approval is requested in accordance with Order No. WFX-673 which is attached for your convenience. The attached step-rate test demonstrates the subject well can inject at a surface pressure of 1100 psi without propagating the existing fracture stimulation out of the Queen and Penrose formations.

Thank you for your consideration in the above matter. Should you have any questions or comments please call me or Ken Calvert at (903) 561-2900.

Sincerely,

Kevin Mayes

Kevin Mayes, P.E.
Project Engineer

ADMINISTRATIVE ORDER NO. WFX-673

APPLICATION OF MEWBOURNE OIL COMPANY TO EXPAND ITS WATERFLOOD PROJECT IN THE QUERCHO PLAINS-QUEEN ASSOCIATED POOL IN LEA COUNTY, NEW MEXICO

ADMINISTRATIVE ORDER
OF THE OIL CONSERVATION DIVISION

Under the provisions of Division Order No. R-10151, Mewbourne Oil Company has made application to the Division on June 16, 1995 for permission to expand its Quercho Plains Queen Associated Sand Unit Waterflood Project in the Quercho Plains-Queen Associated 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 currently an injection well in the Quercho Plains Bone Spring Sand Unit Waterflood Project permitted by Division Order R-9737 and is eligible for conversion to dual injection under the terms of Rule 701.

(5) The proposed expansion of the above referenced Quercho Plains Queen Associated Sand Unit Waterflood Project will not cause waste nor impair correlative rights.

(6) The application should be approved.

IT IS THEREFORE ORDERED THAT:

The applicant, Mewbourne Oil Company, be and the same is hereby authorized to inject water into the Queen and Penrose formations[1] at approximately 4005 feet to approximately 4264 feet through 2 3/8-inch polyethylene lined tubing set in a packer at approximately 3905 feet and utilize a side-pocket tubing mandrel assembly to accomplish injection in the following described well for purposes of secondary recovery to wit:

Quercho Plains Queen Associated Sand Unit Well No.30
(Bone Spring Completion QPBSSU No.11-2,
a.k.a. O.H. Burleson Federal Well No.2)
660' FNL and 660' FEL
Section 26,Township 18 South, Range 32 East, Lea County, NewMexico

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 to the Quercho Plains Queen Associated Sand Unit interval of the injection well to no more than 801 psi.

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 Queen and Penrose formations. Such proper showing shall consist of a valid step-rate test run in accordance with and acceptable to this office.

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[1] The well is currently authorized to inject into the Bone Spring formation at approximately 8515 feet to 8584 feet.

The operator shall notify the supervisor of the Idaho 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 witnessed.

[illegible]

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 well, provided however, the Division upon written request by the operator may grant an extension thereof for good cause shown.

[illegible]

WILLIAM

[illegible] Oil Conservation Division - Idaho

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 well and shall take such steps as may be timely and necessary to correct such failure or leakage.

The subject well shall be governed by all provisions of Division Order No. R-10151, as amended 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 requirements set forth in this order, 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 well, 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 24th day of July, 1995.

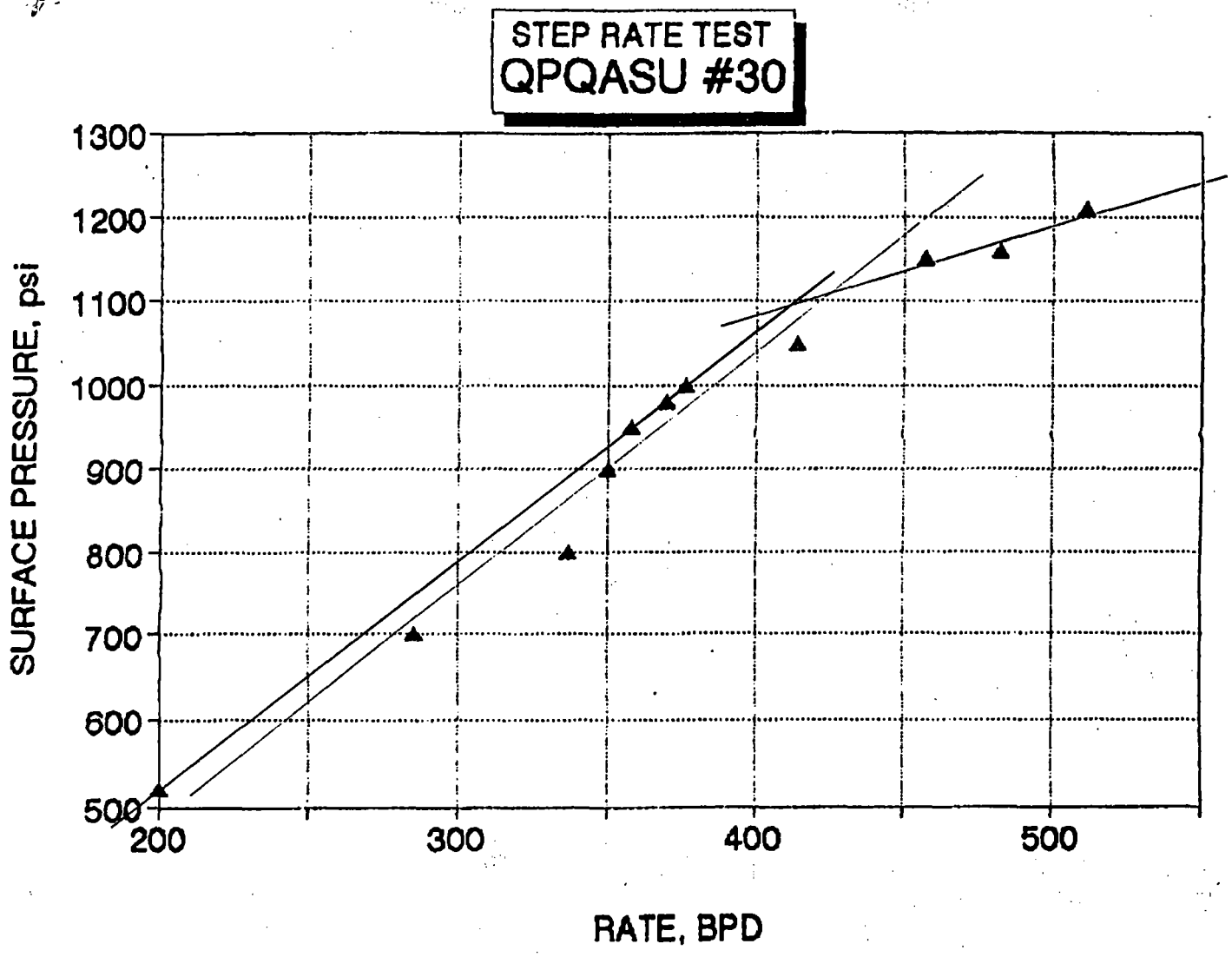
STATE OF NEW MEXICO
OIL CONSERVATION DIVISION

WILLIAM J. LEMAY
Director

SEAL

WLJ/BES

cc: Oil Conservation Division - Hobbs


STEP RATE TEST
QPQASU #30
SURFACE PRESSURE, psi
1300
1200
1100
1000
900
800
700
600
500
200
300
400
500
RATE, BPD