



NEW MEXICO ENERGY, MINERALS  
& NATURAL RESOURCES DEPARTMENT

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

May 21, 1996

CF 10960  
R-10151, 10151-A

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

EOR-19  
PEOR0000192002

Attn: Mr. Kevin Mayes

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

Dear Mr. Mayes:

Reference is made to your request dated April 11, 1996 to increase the surface injection pressure on four wells in the above referenced project. This request is based on step rate tests conducted recently on these wells. The results of the tests have been reviewed by my staff and we feel an increase in injection pressures on these wells is justified at this time.

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

<i>Well and Location</i>	<i>Maximum Injection Surface Pressure</i>
QPQASU Well No.11 (Cavalcade No.4) Unit P, Section 21, Township 18 South, Range 32 East	1490 PSIG
QPQASU Well No.18 (Walker No.1) Unit D, Section 26, Township 18 South, Range 32 East	1460 PSIG
QPQASU Well No.26 (Anadarko No.2) Unit K, Section 27, Township 18 South, Range 32 East	1427 PSIG
QPQASU Well No.27 (Anadarko No.3) Unit L, Section 27, Township 18 South, Range 32 East	1494 PSIG
All wells located in 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.

*Injection Pressure Increase*  
*Mewbourne Oil Company*  
*May 21, 1996*  
*Page 2*

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Sincerely,



William J. LeMay  
Director

WJL/BES

cc: Oil Conservation Division - Hobbs  
Files: Case File No.10960; EOR-19; PSI-X 3rd QTR 96

psi x N/R

OIL CONSERVATION DIVISION  
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OCS RP-14 APR 8 52

**MEWBOURNE OIL COMPANY**

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

April 11, 1996

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:

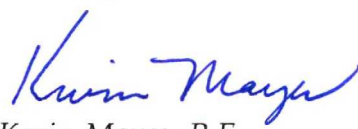
Mewbourne Oil Company requests administrative approval to increase surface injection pressure for the following wells at the referenced project (see attached step-rate plots):

WELL	REQUESTED PRESSURE
QPQASU #11 (Cavalcade #4)	1550 psi 1490
QPQASU #18 (Walker #1)	1520 psi 1460
QPQASU #26 (Anadarko #2)	<del>1450 psi</del> 1427
QPQASU #27 (Anadarko #3)	<del>1550 psi</del> 1494

Administrative approval is requested as interpreted in Division Order No. R-10151 and Division Rule 704.C. Of note, Finding Number Thirteen (No. 13) of Division Order R-9240 stipulates administrative approval for the Cavalcade #4 well (see attached). The attached step-rate tests demonstrate the subject wells can inject at the requested surface pressures without propagating the existing fracture stimulation out of the Queen and/or 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, P.E.  
Project Engineer





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

IN THE MATTER OF THE HEARING  
CALLED BY THE OIL CONSERVATION  
DIVISION FOR THE PURPOSE OF  
CONSIDERING:

CASE NO. 9972  
Order No. R-9240

APPLICATION OF GARY L. BENNETT  
FOR A PRESSURE MAINTENANCE  
PROJECT, LEA COUNTY, NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 8:15 a.m. on June 27, 1990, at Santa Fe, New Mexico, before Examiner David R. Catanach.

NOW, on this 31st day of July, 1990, the Division Director, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

FINDS THAT:

(1) Due public notice having been given as required by law, the Division has jurisdiction of this cause and the subject matter thereof.

(2) The applicant, Gary L. Bennett, seeks authority to institute a pressure maintenance project on its Cavalcade Federal "21" Lease comprising the E/2 SW/4 and SE/4 of Section 21, Township 18 South, Range 32 East, NMPM, Lea County, New Mexico, by the injection of water into the Querecho Plains-Queen Associated Pool through the perforated interval from approximately 4088 feet to 4130 feet in its Cavalcade Federal "21" Well No. 4 located 400 feet from the South line and 660 feet from the East line (Unit P) of said Section 21.



Bennett 20

(10) The applicant should not be required to re-enter and replug said well at this time, provided however, that the applicant should be required, as long as pressure maintenance operations are being conducted, to produce its Federal "Q" Well No. 4 so as to draw down the pressure in the Queen formation.

(11) Injection into the proposed injection well should be accomplished through 2 3/8-inch internally plastic-lined tubing installed in a packer set approximately within 100 feet of the uppermost injection perforation; the casing-tubing annulus should be filled with an inert fluid and a gauge or approved leak detection device should be attached to the annulus in order to determine leakage in the casing, tubing or packer.

(12) The injection well or system should be equipped with a pressure control device or acceptable substitute which will limit the surface injection pressure to no more than 817 psi.

(13) The Division Director should have the authority to administratively authorize a pressure limitation in excess of the above upon a showing by the operator that such higher pressure will not result in migration of waters from the Querecho Plains-Queen Associated Pool.

(14) Prior to commencing injection operations into the proposed injection well, the casing should be pressure tested throughout the interval from the surface down to the proposed packer setting depth, to assure the integrity of such casing.

(15) The operator should give advance notification to the supervisor of the Hobbs district office of the Division of the date and time of the installation of injection equipment, of the mechanical integrity pressure test, and of the conductance of any remedial cement or plug back operations in order that the same may be witnessed.

(16) The project allowable should be equal to top unit allowable for the Querecho Plains-Queen Associated Pool times the number of developed (production or injection) proration units within the project area.