

NEW MEXICO ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION

October 17, 1995

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

Attn: Mr. K.M. Calvert

CF 10960
R-10151, R-10151-A
EOR-19
PEOR0000192002

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

Dear Mr. Calvert:

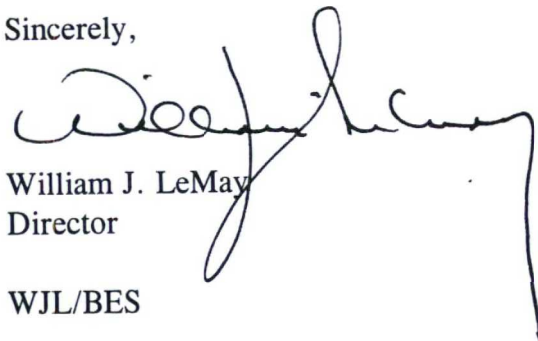
Reference is made to your request dated August 31, 1995 to increase the surface injection pressure on one well on the above referenced project. This request is based on a step rate test conducted from July 13 to August 14, 1995. The results of the test have been reviewed by my staff and we feel an increase 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 Injection Surface Pressure
QPQASU (Flip Federal) Well No.1 Unit E, Section 23, Township 18 South, Range 32 East	1750 PSIG
This well 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.

Sincerely,



William J. LeMay
Director

WJL/BES

cc: Oil Conservation Division - Hobbs
Data Processing - Rick Brown
Files: Case File No.10960; EOR-19; PSI-X 1st QTR 96

OIL CONSERVATION DIVISION

PS: X N/R

September 7, 1995

Mr. K.M. Calvert
Mewbourne Oil Company
P.O. Box 7698
Tyler, Texas 75711-7698

Re: Recent Application for Injection Pressure Increase

Dear Mr. Calvert:

Reference is made to your recent application for an increase in injection pressure on your Quercho Plains Queen Associated Sand Unit Well No.1. Please submit the original data obtained to generate the chart which was submitted with your request. As soon as I receive this information, I will expedite the continued processing of your application.

Very truly yours,



Benjamin E. Stone
Petroleum Engineering Specialist

/BES

MEWBOURNE OIL COMPANY

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

August 31, 1995

New Mexico Oil Conservation Division
2040 South Pacheco
Santa Fe, New Mexico 87505

Att: Mr. David Catanach

Re: Application for Departure from Approved
Surface Injection Pressure
Division Order R-10151
Querecho Plains Queen Associated Sand Unit
No. 1 - Lea County, New Mexico

Dear Mr. Catanach:

Mewbourne Oil Company, as Operator for the Querecho Plains Queen Associated Sand Unit (QPQASU), obtained approval to inject at 1350 psig surface pressure as provided in the approval letter dated July 27, 1995 from Mr. LeMay. At the time step rate tests were being performed on all wells in the Unit for submittal with the application for a pressure increase, it was observed that injection into the QPQASU No. 1 was considerably different from the other nine injectors. Mewbourne continued to run step rate tests on this well. A pressure break was finally obtained at 1800 psig. You will note on the attached graph, at the approved injection pressure of 1350 psig the well was only taking approximately 20 barrels water per day.

The attached step rate tests, as represented on the attached graph, have water gravity, friction factors and depth to top perforation incorporated in the calculations. Stabilization times between each test was held constant.

It is hereby understood all other Unit wells will maintain the approved injection pressures of 1350 psig.

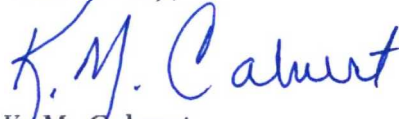
MTWB FAX 903 561-1870

OIL CONSERVATION DIVISION
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Page 2
New Mexico Oil Conservation Division
Mr. David Catanach
August 31, 1995

Mewbourne Oil Company respectfully submits this request for administrative approval. If you have any other questions, please contact me at the above number. Thank you for your consideration.

Yours truly,

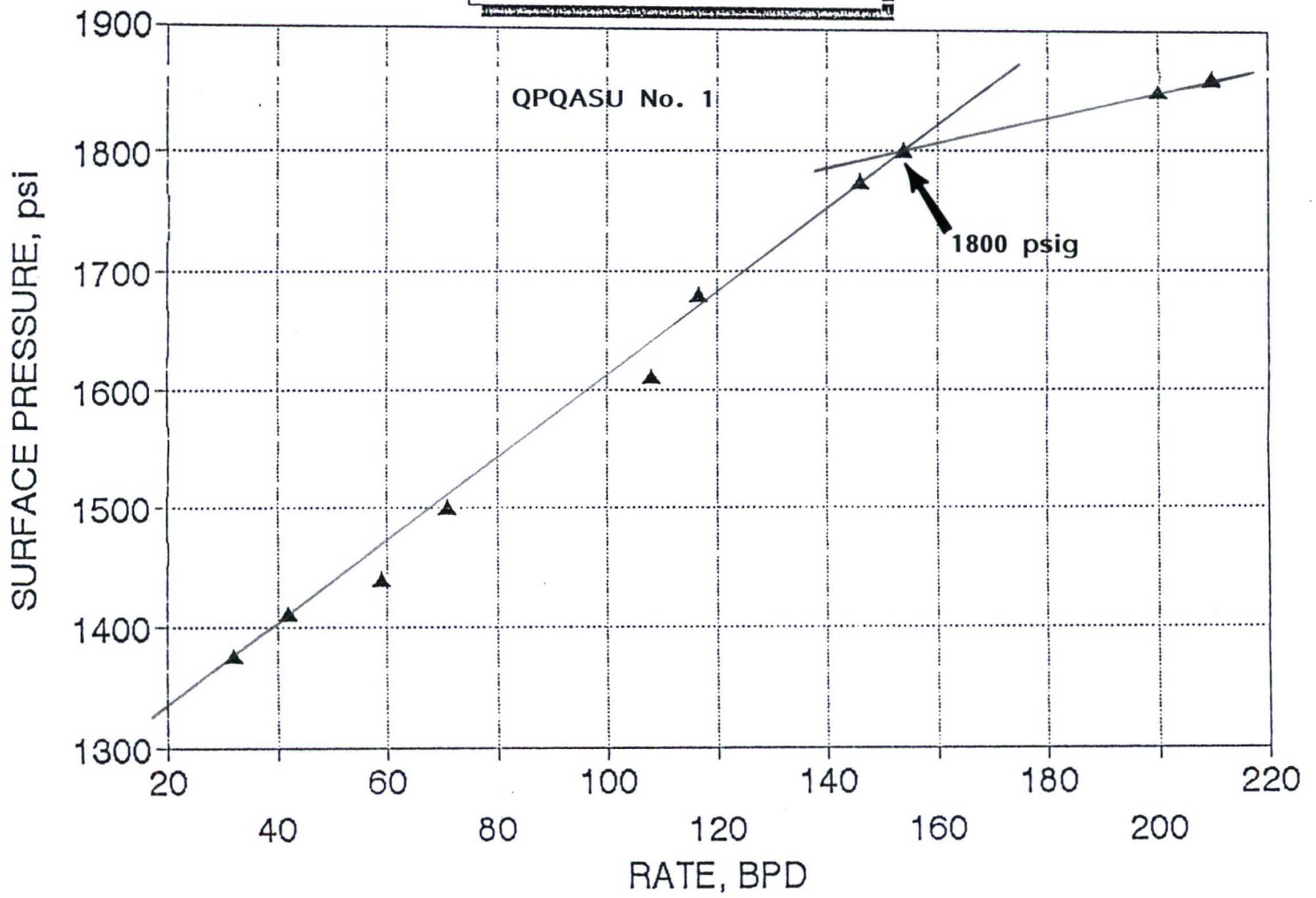


K. M. Calvert
Engineering Manager
Secondary Recovery

KMC/sh
Attachment: Step Rate Test - QPQASU No. 1

a:\qpqu\nmocc\qpqasu1

STEP RATE TEST
FLIP FEDERAL #1



MEWBOURNE OIL COMPANY

P.O. Box 7698
Tyler, Texas 75711
903 - 561-2900
FAX 903 - 561-1870

Facsimile Transmittal Cover Sheet

Date: 10/16/95

Time: _____

Page 1 of 2 PagesTO: Ben StoneFACSIMILE NO.: 505-827-8177 PHONE NO.: _____FROM: Kesim MayesTYPE OF DOCUMENT: Raw Data on Frp Fed #1 wellORIGINAL TO FOLLOW:(Y/N) NMESSAGE: Per our conversation

IF YOU DO NOT RECEIVE ALL PAGES CLEARLY, PLEASE CALL US AS SOON AS
POSSIBLE.

CONFIDENTIALITY NOTE: The information contained in this facsimile message is confidential and is intended only for the use of the individual or entity named above. Dissemination of this facsimile to anyone else is strictly prohibited. If you have received this facsimile in error, please notify us by telephone immediately.

STEP RATE ANALYSIS OF THE FLUP FEDERAL #1

FIELD: QFQASU

FORMATION: QUENNS/PENROSE

DEPTH:

POINT	DATE	RATE (bbl/d)	SURFACE PRESSURE (psi)	FRICTIONAL PRES. LOSS (psi)	ESTIMATED BHP (psi)
1	07/13/95	32	1375	0	
2	07/15/95	42	1410	0	
3	07/17/95	59	1440	0	
4	07/20/95	71	1500	0	
5	07/26/95	108	1610	0.4	
6	07/31/95	117	1680	0.4	
7	08/03/95	146	1775	0.7	
8	08/06/95	154	1800	0.8	
9	08/13/95	200	1850	1.3	
10	08/14/95	210	1860	1.4	
11					
12					

To Karen/Ken
1 Page