



NEW MEXICO ENERGY, MINERALS
& NATURAL RESOURCES DEPARTMENT

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

July 8, 1997

CF 10960
R-10151, R-10151-A

PEOR0000192002

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

Attn: Mr. K.M. Calvert

**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 May 23, 1997 to increase the surface injection pressure on twelve (12) 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:

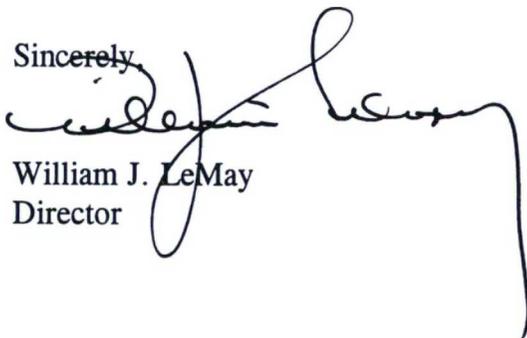
<i>Well and Location</i>	<i>Maximum Injection Surface Pressure</i>
QPQASU Well No.1	1920 PSIG
QPQASU Well No.2	1720 PSIG
QPQASU Well No.3	1780 PSIG
QPQASU Well No.6	1370 PSIG
QPQASU Well No.11	1750 PSIG
QPQASU Well No.13	1280 PSIG
QPQASU Well No.14	1850 PSIG
QPQASU Well No.17	1830 PSIG
QPQASU Well No.18	1930 PSIG
QPQASU Well No.22	1550 PSIG

Injection Pressure Increase
Mewbourne Oil Company
July 8, 1997
Page 2

QPQASU Well No.25	1470 PSIG
QPQASU Well No.27	1625 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.

Sincerely,



William J. LeMay
Director

WJL/BES

cc: Oil Conservation Division - Hobbs
Files: Case File No.10960; EOR-19; PSI-X 4th QTR 97

wt

PSI-X N/R

MEWBOURNE OIL COMPANY

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

May 23, 1997



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

Att: Mr. David Catanach

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

Dear 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 graphs):

<u>Well</u>	<u>Requested Pressure</u>
QPQASU No. 1	1970 psig 1920
QPQASU No. 2	1770 psig 1720
QPQASU No. 3	1830 psig 1780
QPQASU No. 6	1420 psig 1370
QPQASU No. 11	1800 psig 1750
QPQASU No. 13	1330 psig 1280
QPQASU No. 14	1900 psig 1850
QPQASU No. 17	1880 psig 1830
QPQASU No. 18	1980 psig 1930
QPQASU No. 22	1600 psig 1550
QPQASU No. 25	1560 psig 1510
QPQASU No. 27	1600 psig 1550

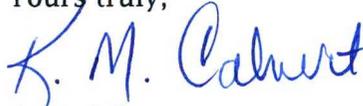
Administrative approval is requested as interpreted in Division Order No. R-10151 and Division Rule 704.C. The attached step-rate tests demonstrate that the subject wells can inject at the requested surface pressures without propagating the existing fracture stimulation out of the Queen and/or Penrose formations.

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

Page 2
New Mexico Oil Conservation Commission
Mr. David Catanach

Verbal approval for increased surface injection pressures on the QPQASU No. 2 and QPQASU No. 17 to 1520 psig and 1675 psig, respectively was received on November 14, 1996. However, we have never received approval in writing. I would appreciate it if you would send us a copy of this approval. If you have questions, please contact me at the above number. Thank you for your consideration.

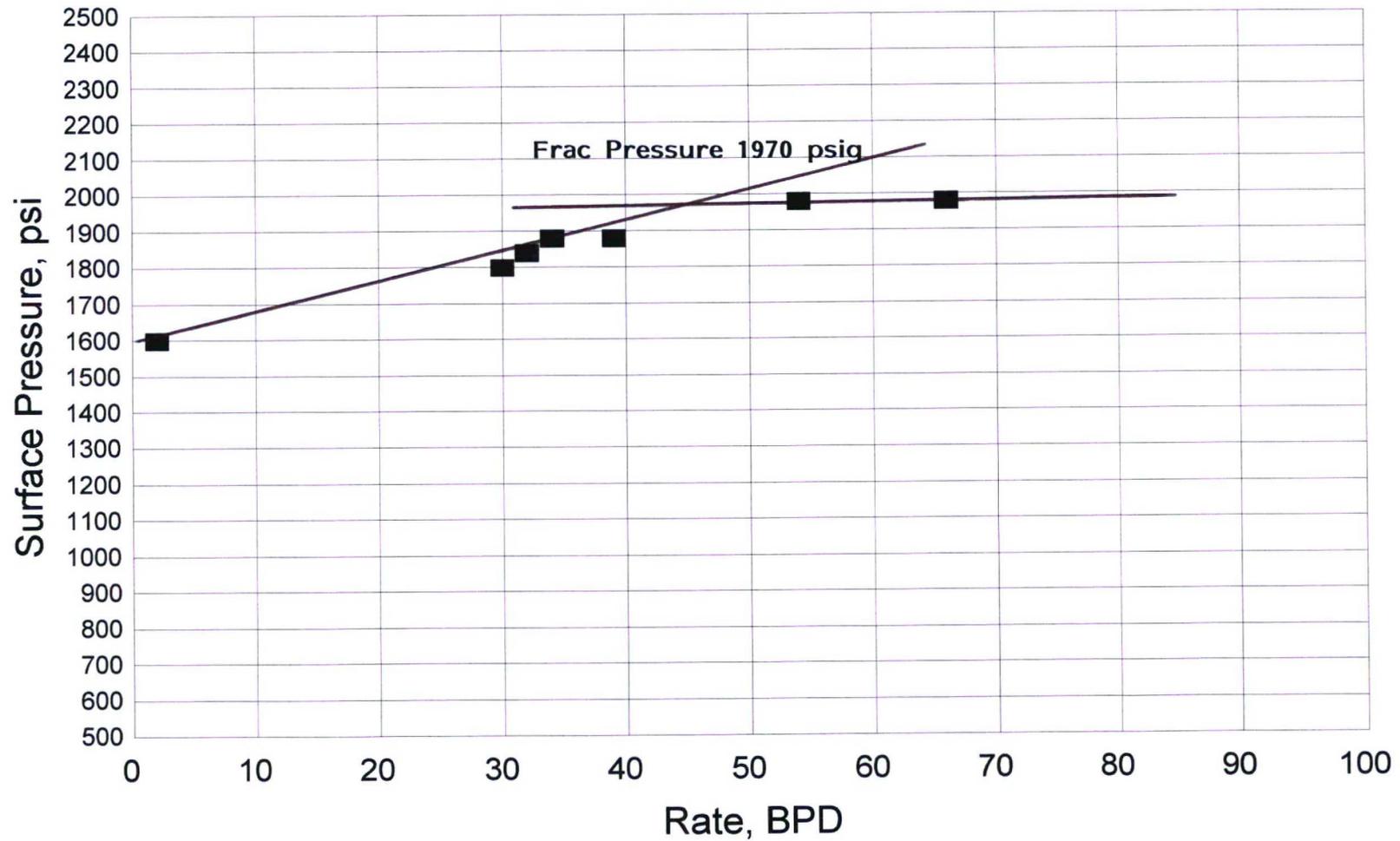
Yours truly,



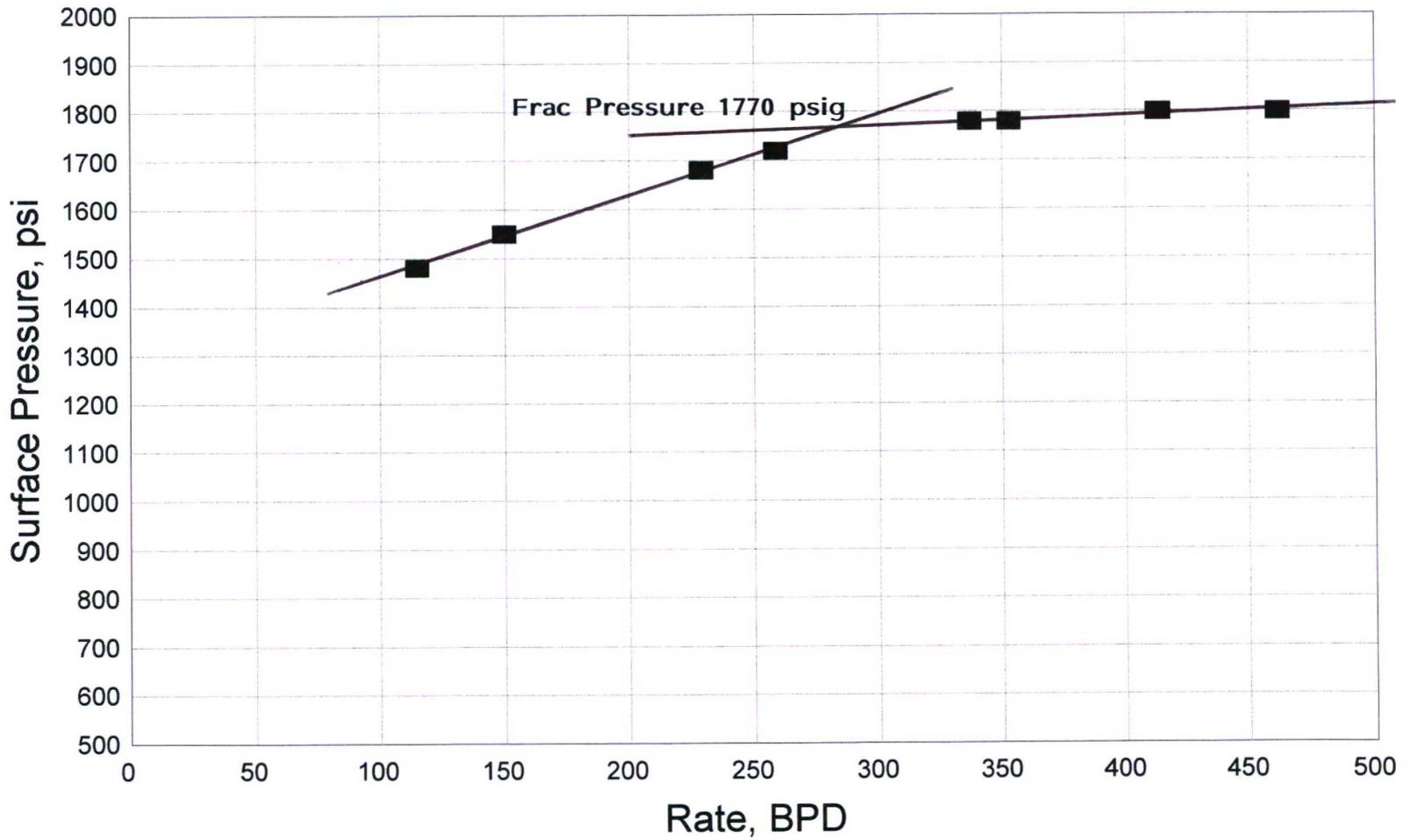
K. M. Calvert
Engineering Manager
Secondary Recovery

KMC/sh
Attachments: Step-Rate Graphs

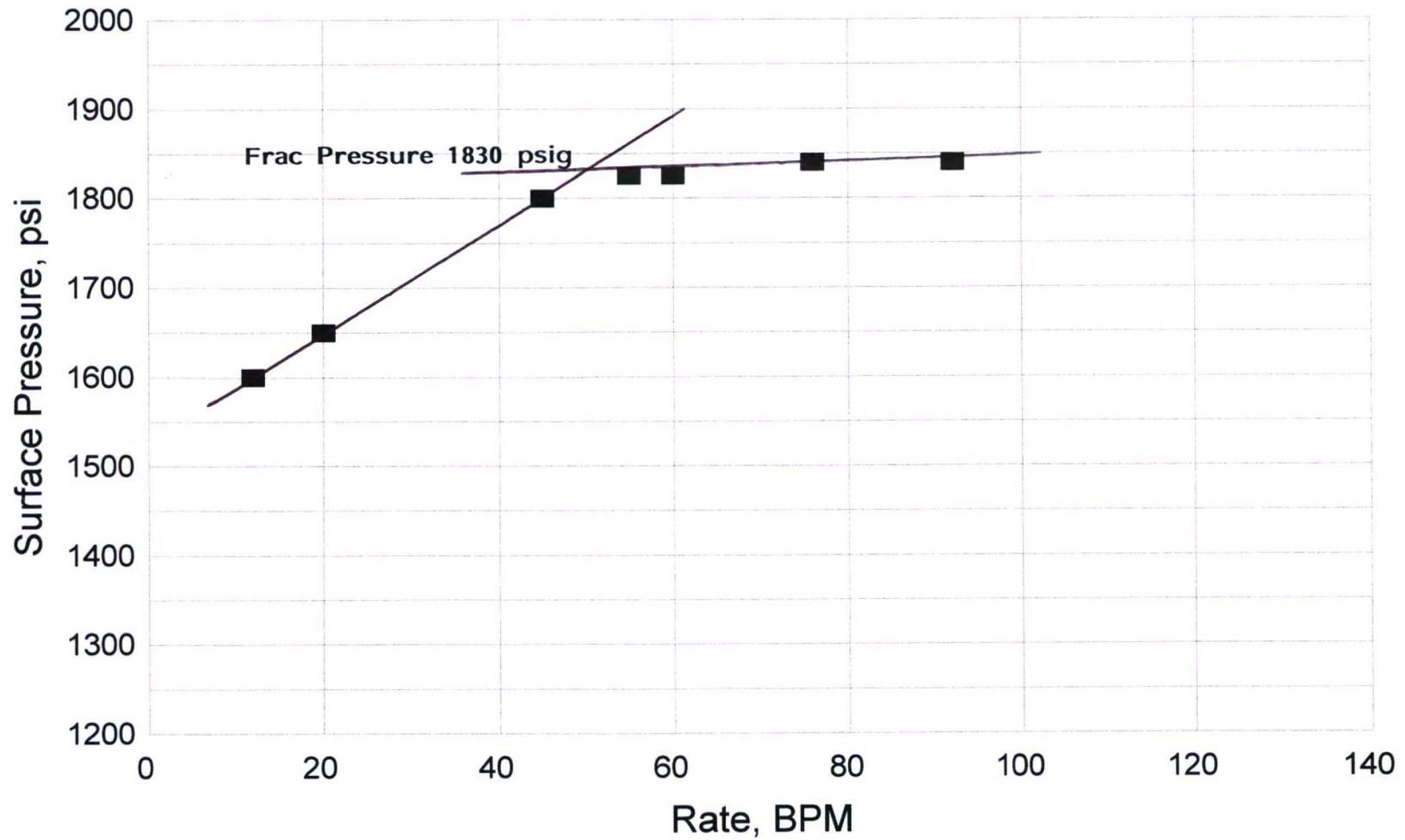
QPQASU NO. 1 (Flip Fed. #1) Step Rate Test



QPQASU NO. 2 (Cedar Lake #1) Step Rate Test

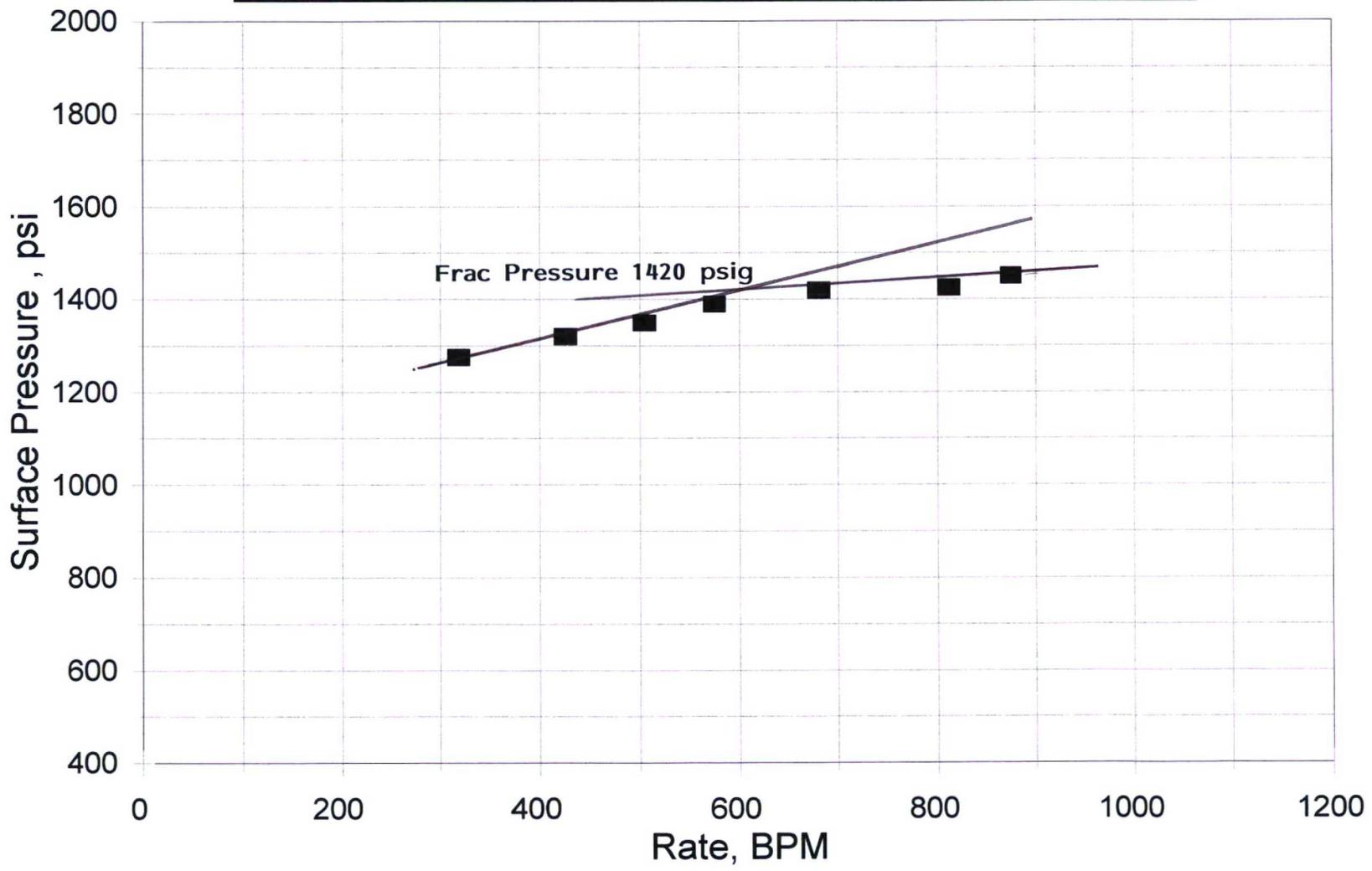


QPQASU NO. 3 (EDITH FED. #2) Step Rate Test

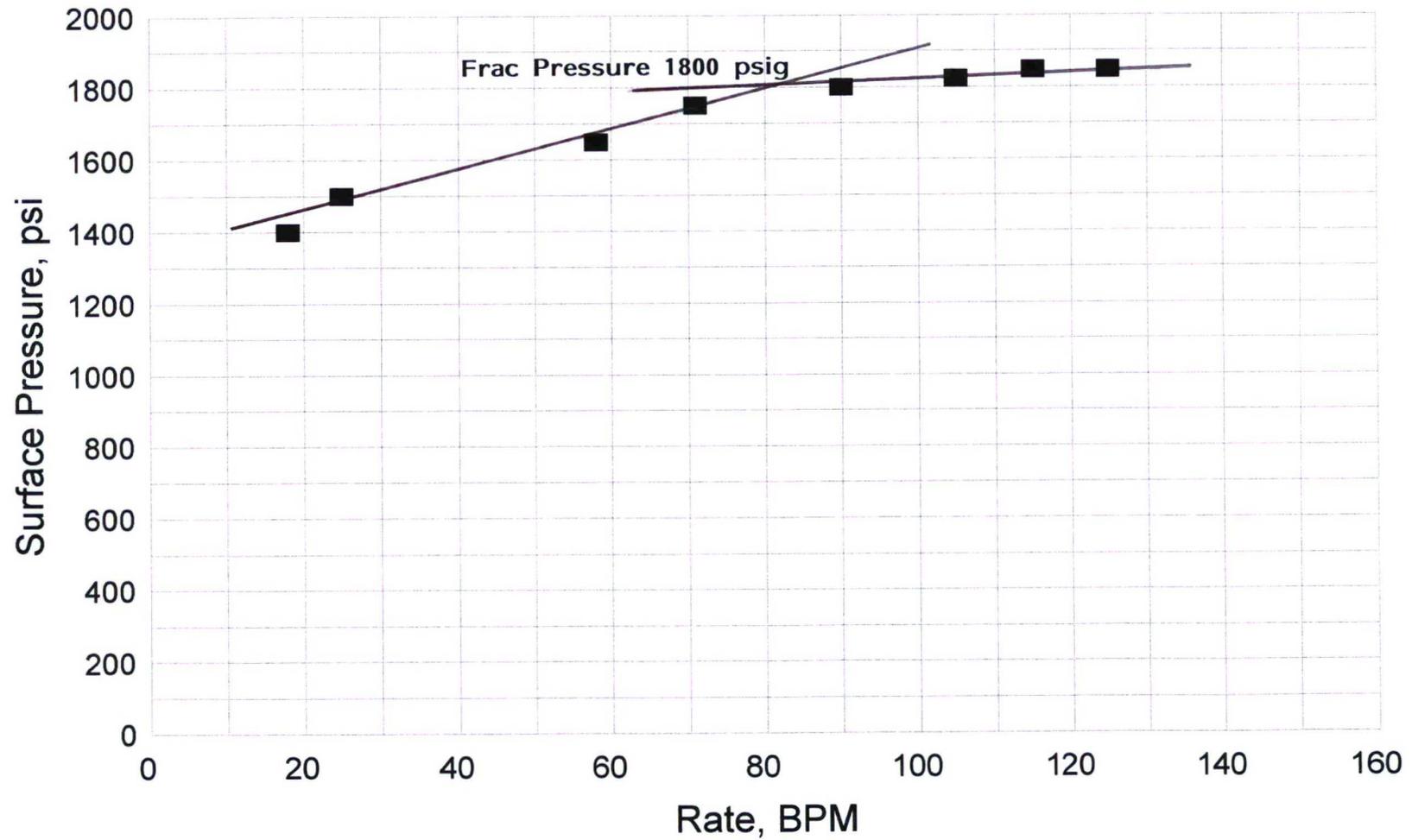


QPQASU NO. 6 (Fed. F #2)

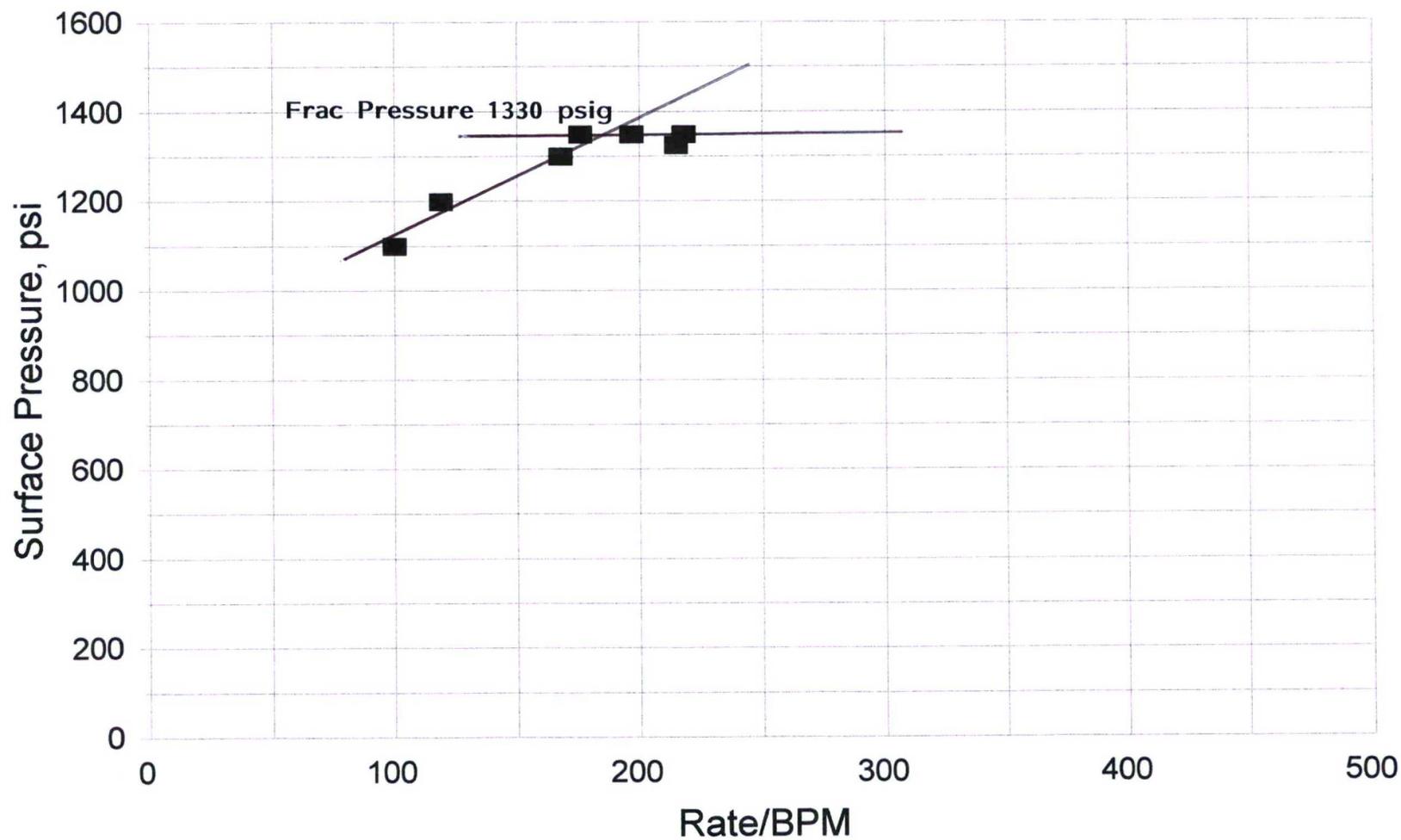
Step Rate Test



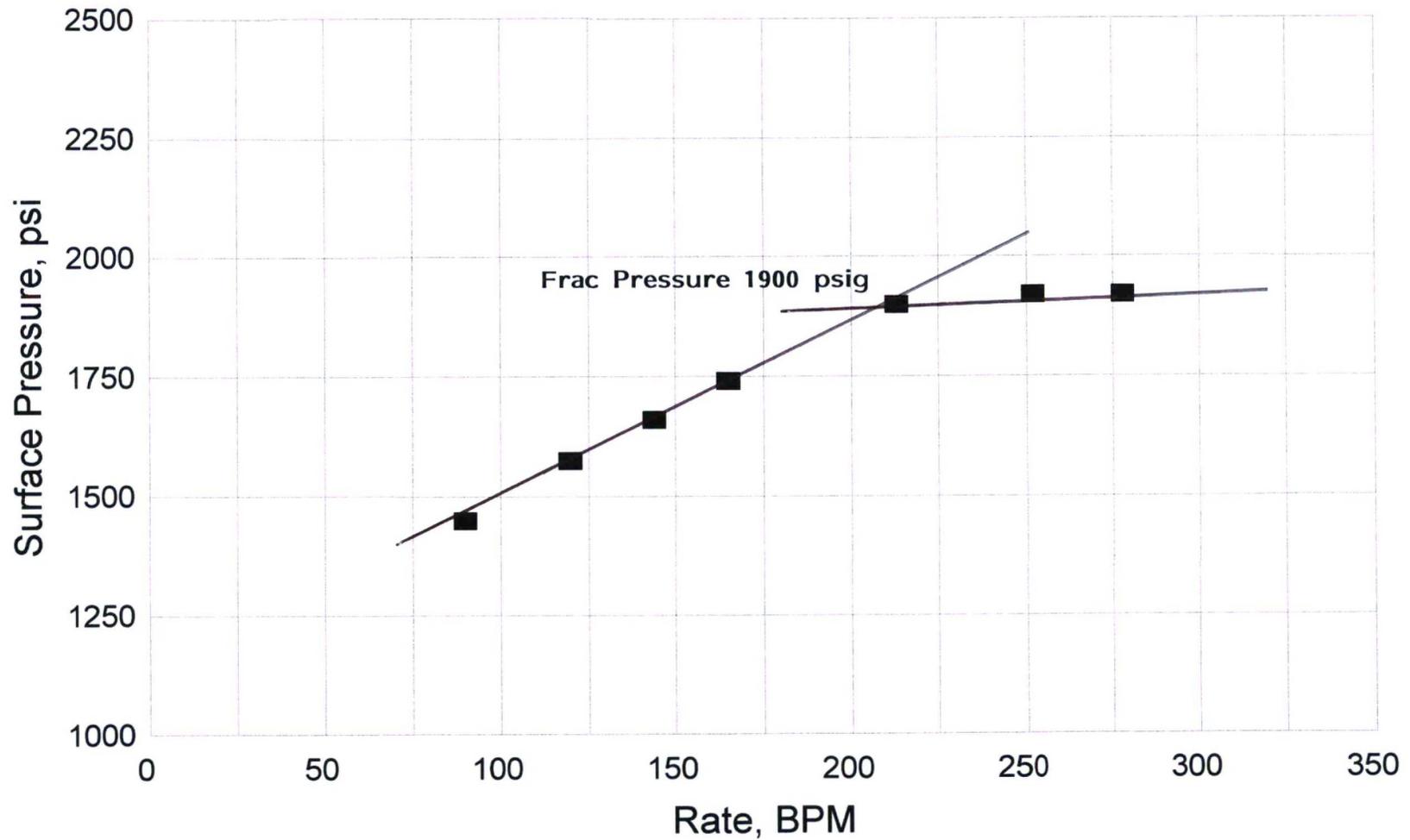
QPQASU NO. 11 (Calvalcade #4) Step Rate Test



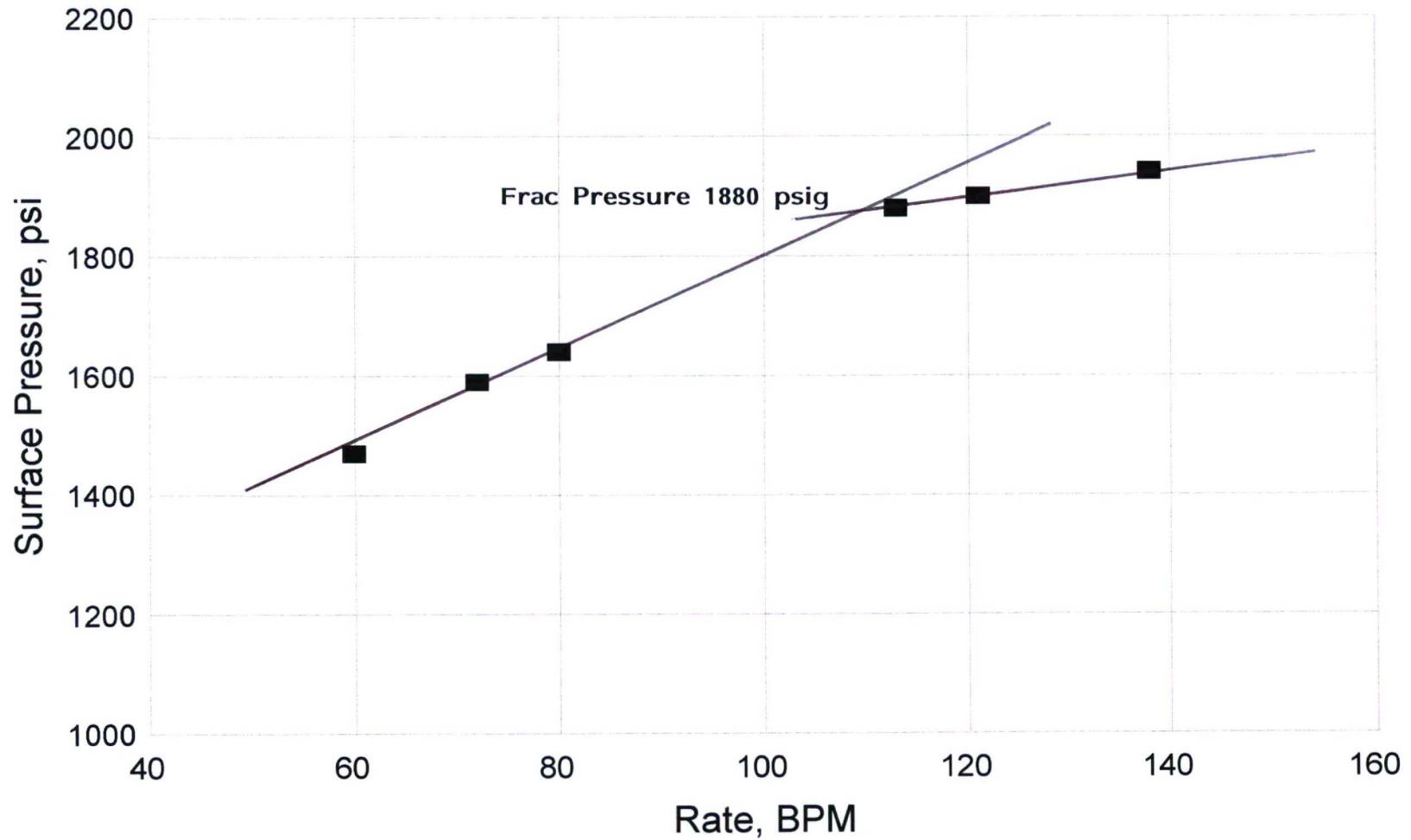
QPQASU NO. 13 (Bennett Fed. 3) Step Rate Test



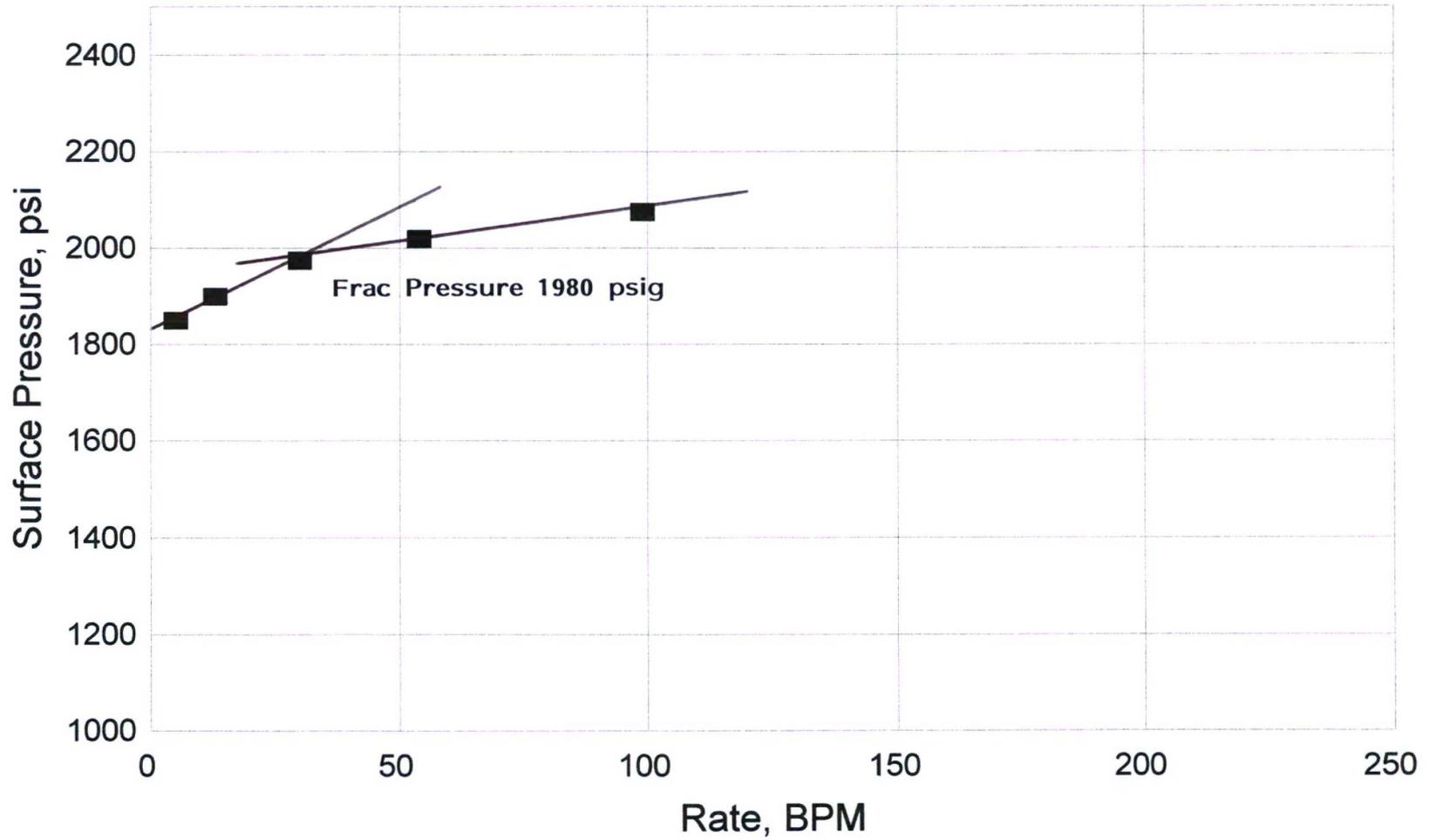
QPQASU NO. 14 (Bennett #1) Step Rate Test



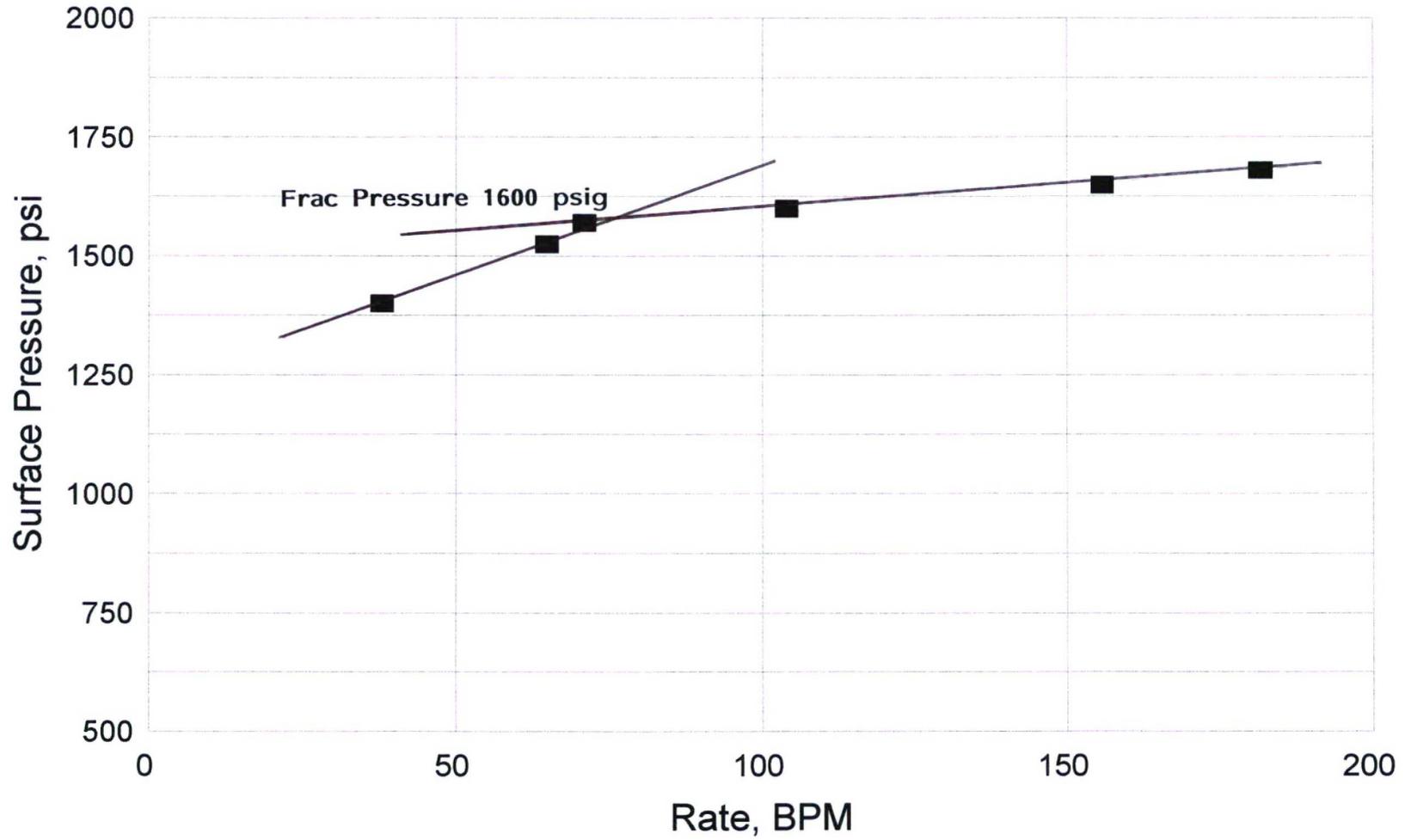
QPQASU NO. 17 (Marshall #1) Step Rate Test



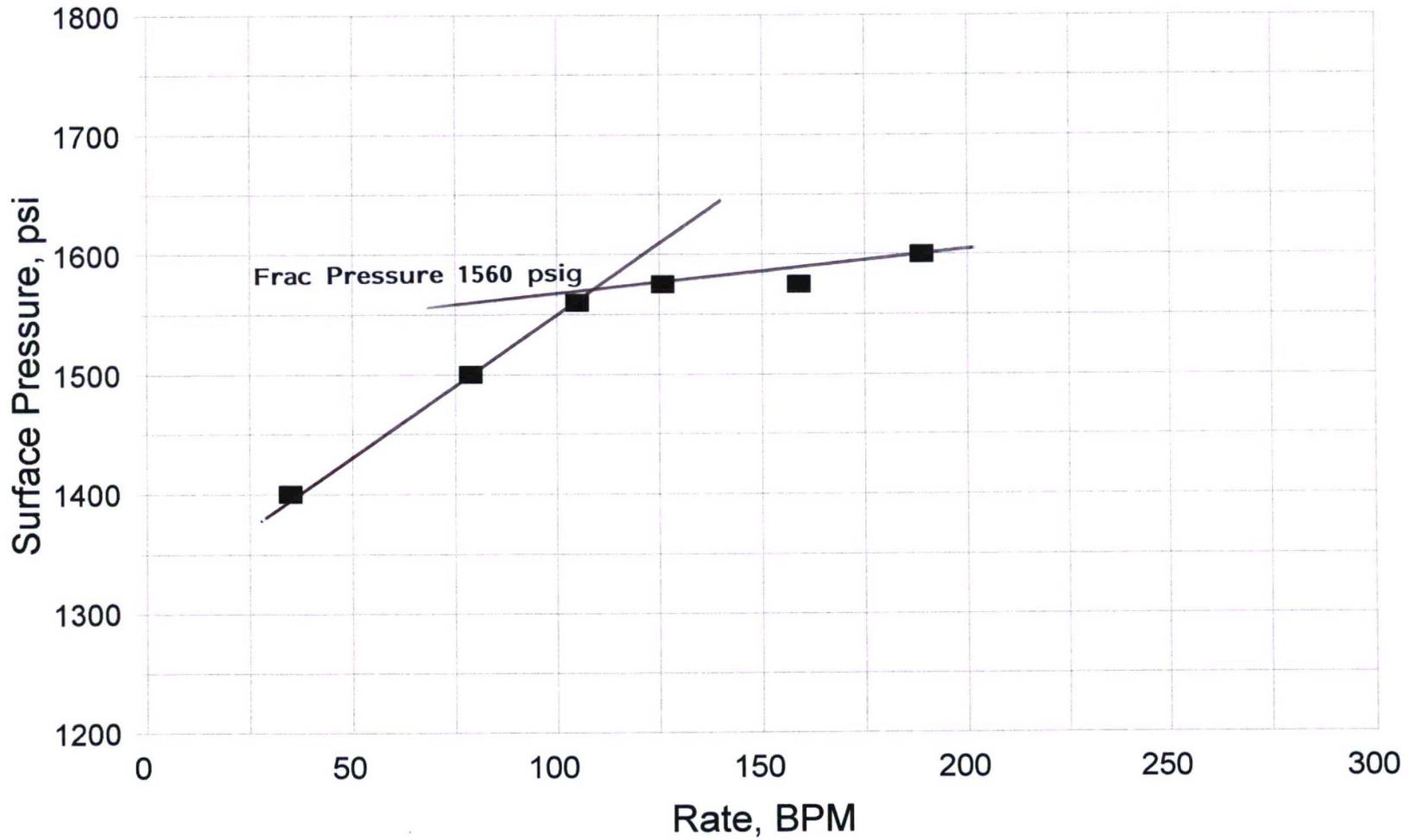
QPQASU NO. 18 (Walker #1) Step Rate Test



QPQASU NO. 22 (Fed. "E" #9) Step Rate Test



QPQASU NO. 25 (Fed. "E" #8) Step Rate Test



QPQASU NO. 27 (Anadarko #3) Step Rate Test

