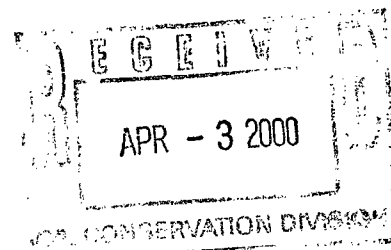




ARCO Permian
600 N Marienfeld
Midland TX 79701
Post Office Box 1610
Midland TX 79702
Telephone 915 688 5200

1 P1-131 N/R



March 30, 2000

New Mexico Oil Conservation Division
ATTN: Ben Stone
2040 S. Pacheco Street
Santa Fe, New Mexico 87505

RE: Application to Increase Surface Injection Pressure
Medano State # 1 SWD-689
Section 36, T 22 S, R 31 E
And Barclay State # 4 SWD-728
Section 2, T 23 S, R 31 E
Eddy Co., NM

Dear Mr. Stone

ARCO Permian requests approval to increase the surface injection pressure limit on the Medano State # 1 and the Barclay State # 4 to 1400 PSIG. I have attached step rate test results from each well.

The Medano State # 1 bottom hole pressure graph shows a break at 3540 PSIG, 8500 BWPD injection rate and surface pressure of 1450 psi.

The data from the Barclay State # 4 does not show a break at the rates we tested even though we tested the well from 1000 BWPD to 15000 BWPD injection rates. Based on a comparison of the bottom hole pressure in the Barclay State # 4 with the bottom hole pressure in the Medano State # 1, I believe we it did not reach parting pressure. The break in the Medano State # 1 occurred at 3540 PSIG. Adjusting for the difference in gauge setting depths (Medano State # 1 set at 5350' and the Barclay State # 4 set at 5250'), the parting pressure detected in the Medano State # 1 equates to a parting pressure of 3490 PSIG in the Barclay State # 4. The maximum BHP recorded in the Barclay State # 4 was 3465 PSIG.

Your cooperation in this matter will be appreciated. If you have any questions, please contact me at 915/688-5774. Please send your approval to my attention at the address listed above.

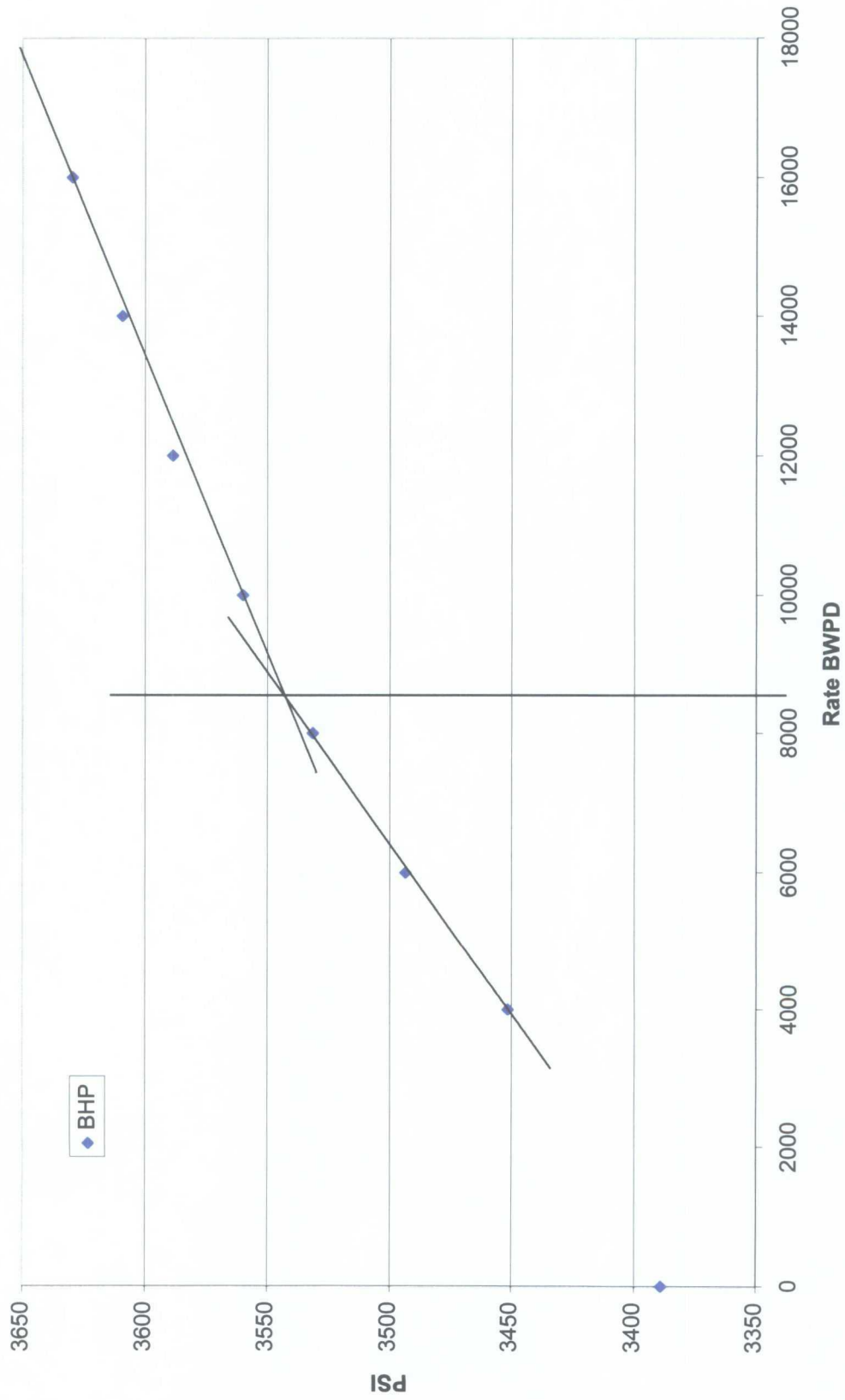
Yours very truly,

Dennis A. Braaten
Production Engineer

Attachments

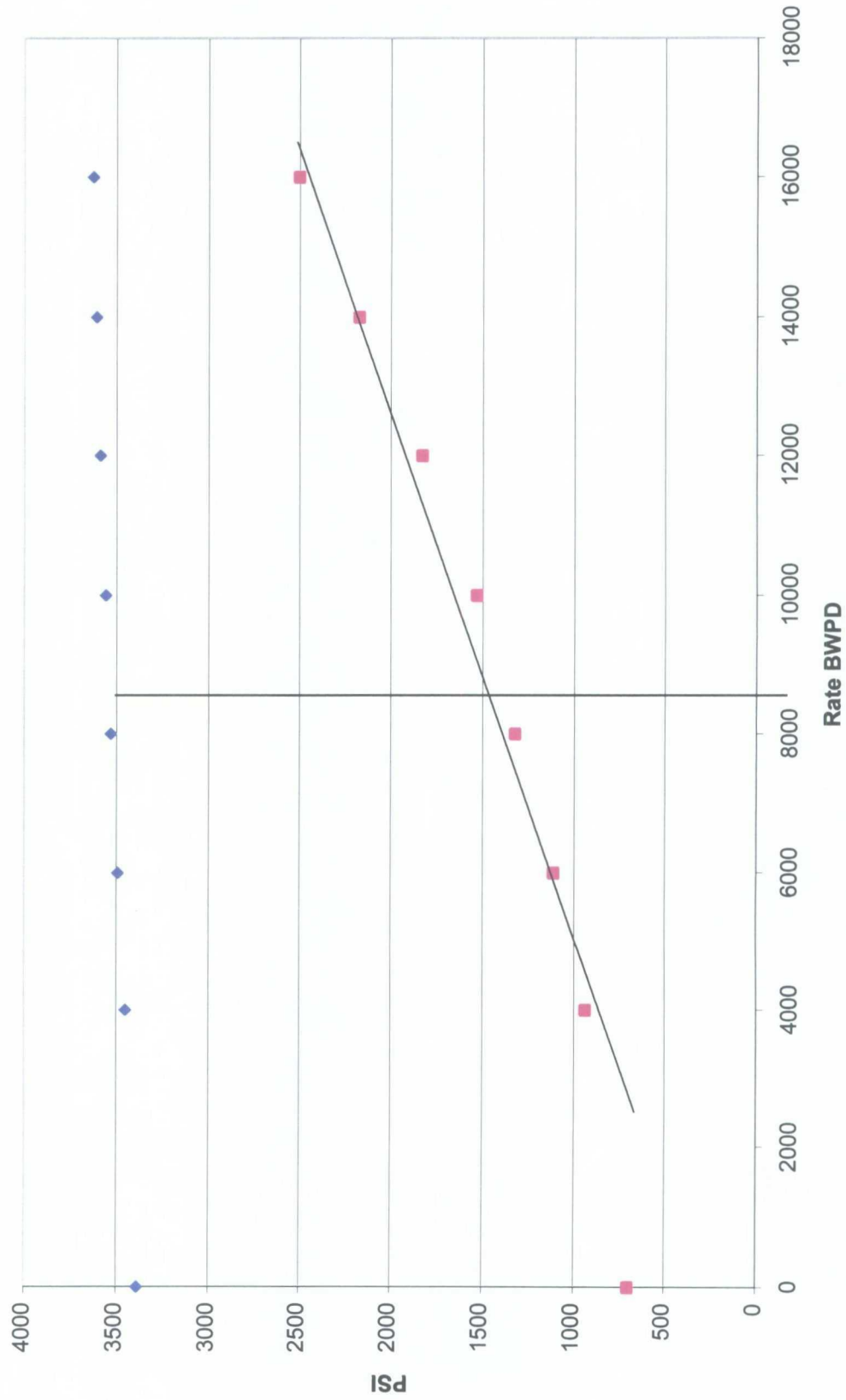
XC: Larry Henson - EUN
Central Files - 41/MIO

Lightfoot WirelineService
Medano State # 1
Step Rate Test 3/22/00
BHP Gauge set at 5350'



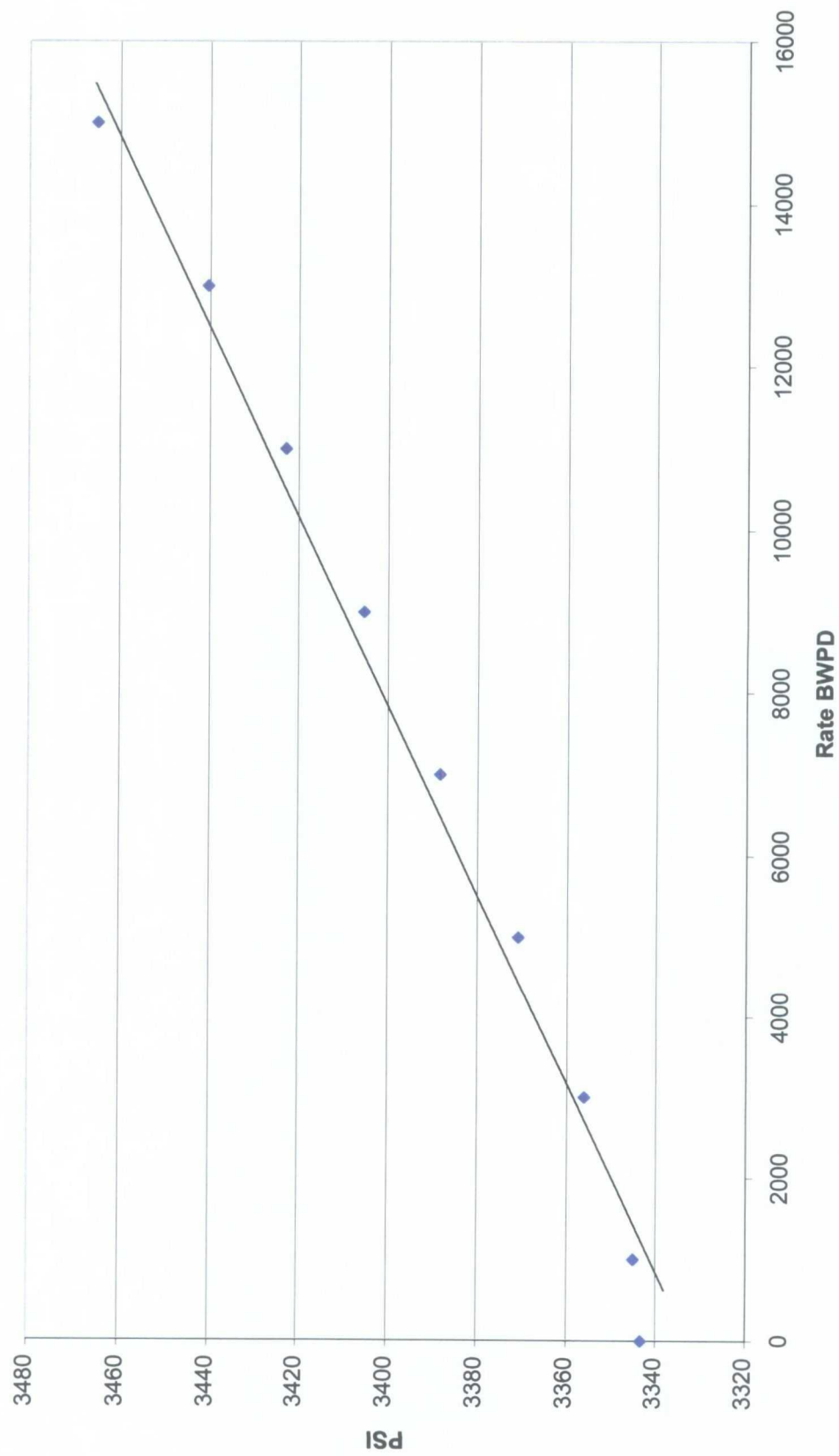
Lightfoot WirelineService
Medano State # 1
Step Rate Test 3/22/00
BHP Gauge set at 5350'

◆ BHP
■ Surface PSI



Lightfoot Wireline Service
Barclay State # 4
Step Rate Test 3/22/00
BHP Gauge set at 5250'

◆ BHP



Lightfoot Wireline Service

Barclay State # 4

Step Rate Test 3/22/00

BHP Gauge set at 5250'

