DATE IN	SUSPENSE	ENGINEER	LOGGED IN	TYPE	APP NO.
6/20/06	6/20/06	DAVID CATANACH	6/20/06	IPI	pTDS0617149255

ABOVE THIS LINE FOR DIVISION USE ONLY

NEW MEXICO OIL CONSERVATION DIVISION
- Engineering Bureau -
1220 South St. Francis Drive, Santa Fe, NM 87505

ADMINISTRATIVE APPLICATION CHECKLIST

THIS CHECKLIST IS MANDATORY FOR ALL ADMINISTRATIVE APPLICATIONS FOR EXCEPTIONS TO DIVISION RULES AND REGULATIONS WHICH REQUIRE PROCESSING AT THE DIVISION LEVEL IN SANTA FE

Application Acronyms:

[NSL-Non-Standard Location] [NSP-Non-Standard Proration Unit] [SD-Simultaneous Dedication]
[DHC-Downhole Commingling] [CTB-Lease Commingling] [PLC-Pool/Lease Commingling]
[PC-Pool Commingling] [OLS - Off-Lease Storage] [OLM-Off-Lease Measurement]
[WFX-Waterflood Expansion] [PMX-Pressure Maintenance Expansion]
[SWD-Salt Water Disposal] [IPI-Injection Pressure Increase]
[EOR-Qualified Enhanced Oil Recovery Certification] [PPR-Positive Production Response]

[1] **TYPE OF APPLICATION** - Check Those Which Apply for [A]

[A] Location - Spacing Unit - Simultaneous Dedication
☐ NSL ☐ NSP ☐ SD

Check One Only for [B] or [C]

[B] Commingling - Storage - Measurement
☐ DHC ☐ CTB ☐ PLC ☐ PC ☐ OLS ☐ OLM

[C] Injection - Disposal - Pressure Increase - Enhanced Oil Recovery
☐ WFX ☐ PMX ☐ SWD ☒ IPI ☐ EOR ☐ PPR

[D] Other: Specify _____

[2] **NOTIFICATION REQUIRED TO:** - Check Those Which Apply, or Does Not Apply

[A] ☐ Working, Royalty or Overriding Royalty Interest Owners

[B] ☐ Offset Operators, Leaseholders or Surface Owner

[C] ☐ Application is One Which Requires Published Legal Notice

[D] ☐ Notification and/or Concurrent Approval by BLM or SLO
U.S. Bureau of Land Management - Commissioner of Public Lands, State Land Office

[E] ☐ For all of the above, Proof of Notification or Publication is Attached, and/or,

[F] ☐ Waivers are Attached

[3] **SUBMIT ACCURATE AND COMPLETE INFORMATION REQUIRED TO PROCESS THE TYPE OF APPLICATION INDICATED ABOVE.**

[4] **CERTIFICATION:** I hereby certify that the information submitted with this application for administrative approval is **accurate** and **complete** to the best of my knowledge. I also understand that **no action** will be taken on this application until the required information and notifications are submitted to the Division.

Note: Statement must be completed by an individual with managerial and/or supervisory capacity.

Print or Type Name	Signature	Title	Date

e-mail Address

Occidental Permian Ltd.
A subsidiary of Occidental Petroleum Corporation

5 Greenway Plaza, Suite 110, Houston, Texas 77046-0521
P.O. Box 4294, Houston, Texas 77210-4294
Phone 713.215.7000

2006 JUN 20 AM 9 40

June 19, 2006

State of New Mexico
Energy, Minerals & Natural Resources Department
Oil Conservation Division
1220 S. St. Francis Dr.
Santa Fe, NM 87505

ATTN: Mr. David R. Catanach

RE: REQUEST FOR INCREASED SURFACE INJECTION PRESSURE ON SELECTED WELLS IN THE NORTH HOBBS (GRAYBURG/SAN ANDRES) UNIT (19520), LEA CO., NEW MEXICO

Dear Mr. Catanach:

Occidental Permian Limited Partnership (OXY), as Operator of the North Hobbs (Grayburg/San Andres) Unit, respectfully requests that the surface injection pressure limit (water) be increased from 800 psig to 1100 psig for each of the 26 wells on the attached list (Exhibit 1). The 26 wells are located outside of the Phase 1 Area (Exhibit 2) which is subject to a tertiary recovery injection project. Division Order No. R-6199-B (10/22/01, Case No. 12722) limits the surface injection pressure (water) to no more than 1100 psig for the 103 wells in the Phase 1 Area.

The increase in surface injection pressure is necessary to balance injection rates and reservoir pressure, thus ensuring optimum performance of the project. The reservoir pressure within the Phase 1 Area is higher than the reservoir pressure outside the Area. As a result, CO2 is migrating outside the Phase 1 Area. The proposed increase in water injection pressure will raise the reservoir pressure and will help contain the CO2 within the Phase 1 Area.

Five step rate tests were done in 2005 outside of the Phase 1 Area and the results are attached for your review (Exhibits 3-7). Exhibit 8 is an update to Exhibit No. 35, part of Case No. 12722, and includes the 2005 step rate test data. The average bottom hole fracture pressure for the five wells tested is 3059 psig and the average surface fracture pressure is 1301 psig.

N:\PERMITTING\Mark Stephens\23441CL

Occidental Permian Ltd.
A subsidiary of Occidental Petroleum Corporation

5 Greenway Plaza, Suite 110, Houston, Texas 77046-0521
P.O. Box 4294, Houston, Texas 77210-4294
Phone 713.215.7000

Your favorable consideration of our request will be appreciated. If you have questions of a technical nature, please contact OXY's Abel Salazar at (713) 366-5116. Otherwise, please contact the undersigned at (713) 366-5158.

Very truly yours,

Mark Stephens

Mark Stephens
Regulatory Compliance Analyst

Attachments

N:\PERMITTING\Mark Stephens\23441CL

NORTH HOBBS (GB/SA) UNIT

WELL	REQUESTED SURFACE INJECTION PRESSURE (PSIG)	WELL	REQUESTED SURFACE INJECTION PRESSURE (PSIG)
NHGSAU No. 111 (30-025-07422) Sec 28, T-18-S, R-38-E	1100	NHGSAU No. 432 (30-025-26974) Sec 32, T-18-S, R-38-E	1100
NHGSAU No. 232 (30-025-28882) Sec 28, T-18-S, R-38-E	1100	NHGSAU No. 142 (30-025-28411) Sec 33, T-18-S, R-38-E	1100
NHGSAU No. 242 (30-025-29276) Sec 28, T-18-S, R-38-E	1100	NHGSAU No. 211 (30-025-07564) Sec 33, T-18-S, R-38-E	1100
NHGSAU No. 311 (30-025-07417) Sec 28, T-18-S, R-38-E	1100	NHGSAU No. 221 (30-025-07560) Sec 33, T-18-S, R-38-E	1100
NHGSAU No. 422 (30-025-27243) Sec 28, T-18-S, R-38-E	1100	NHGSAU No. 231 (30-025-07545) Sec 33, T-18-S, R-38-E	1100
NHGSAU No. 441 (30-025-07411) Sec 28, T-18-S, R-38-E	1100	NHGSAU No. 232 (30-025-26834) Sec 33, T-18-S, R-38-E	1100
NHGSAU No. 341 (30-025-07500) Sec 31, T-18-S, R-38-E	1100	NHGSAU No. 322 (30-025-27169) Sec 33, T-18-S, R-38-E	1100
NHGSAU No. 132 (30-025-27139) Sec 32, T-18-S, R-38-E	1100	NHGSAU No. 342 (30-025-28267) Sec 33, T-18-S, R-38-E	1100
NHGSAU No. 141 (30-025-07523) Sec 32, T-18-S, R-38-E	1100	NHGSAU No. 422 (30-025-28268) Sec 33, T-18-S, R-38-E	1100
NHGSAU No. 142 (30-025-28265) Sec 32, T-18-S, R-38-E	1100	NHGSAU No. 432 (30-025-28269) Sec 33, T-18-S, R-38-E	1100
NHGSAU No. 144 (30-025-31662) Sec 32, T-18-S, R-38-E	1100	NHGSAU No. 534 (30-025-34373) Sec 33, T-18-S, R-38-E	1100
NHGSAU No. 341 (30-025-07539) Sec 32, T-18-S, R-38-E	1100	NHGSAU No. 543 (30-025-34997) Sec 33, T-18-S, R-38-E	1100
NHGSAU No. 342 (30-025-28266) Sec 32, T-18-S, R-38-E	1100	NHGSAU No. 631 (30-025-34994) Sec 33, T-18-S, R-38-E	1100

Exhibit 1

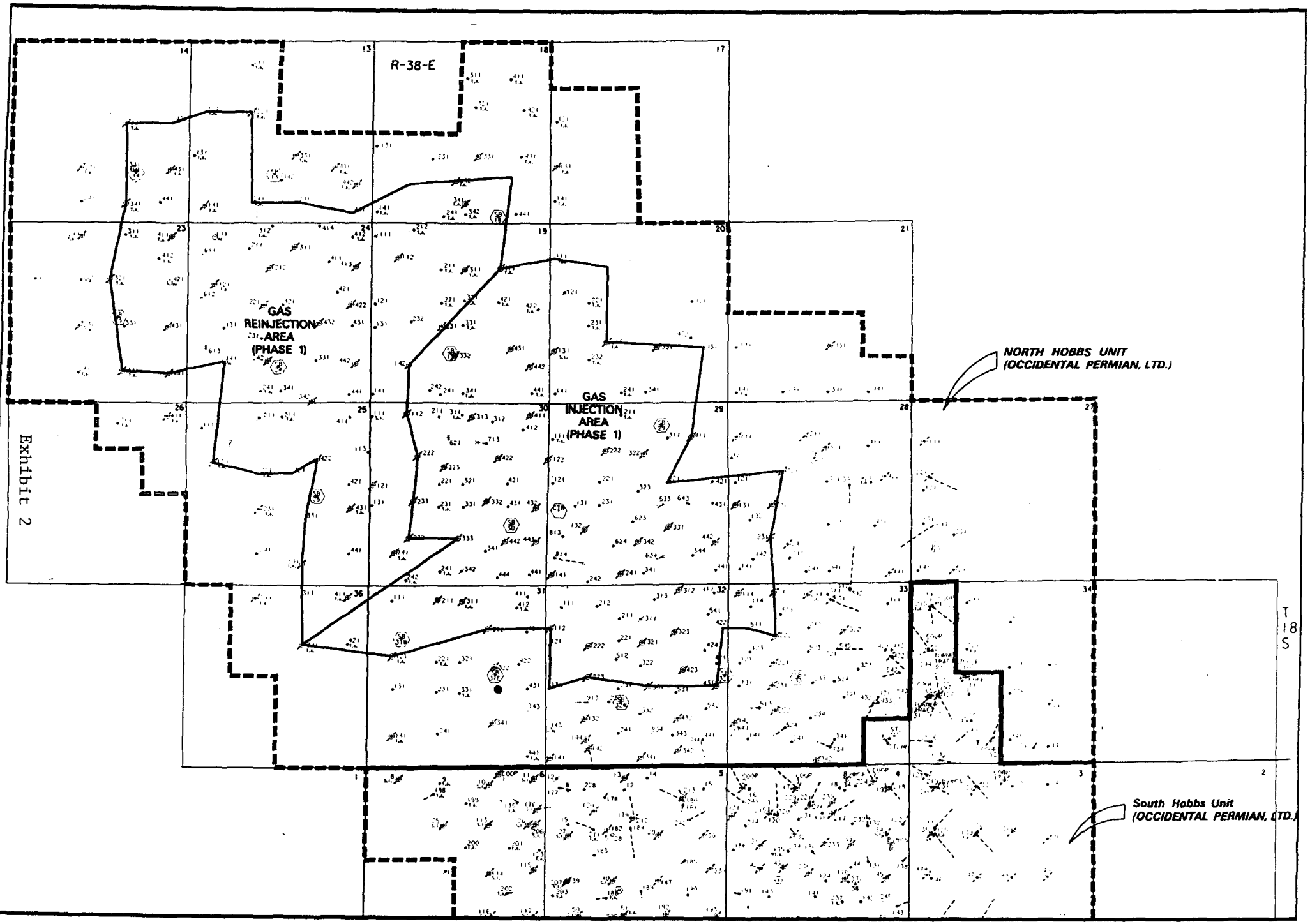
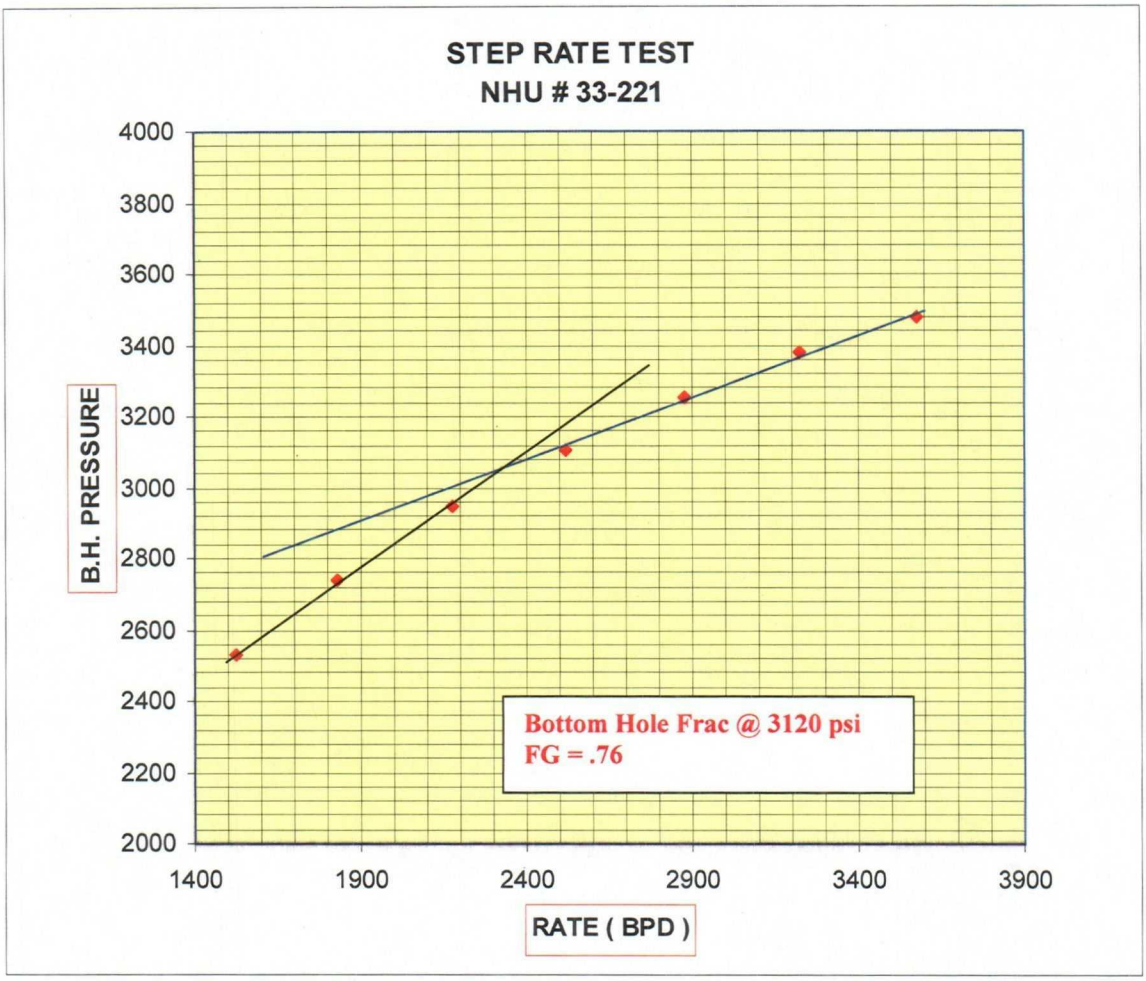

R-38-E
GAS REINJECTION AREA (PHASE 1)
GAS INJECTION AREA (PHASE 1)
NORTH HOBBS UNIT (OCCIDENTAL PERMIAN, LTD.)
South Hobbs Unit (OCCIDENTAL PERMIAN, LTD.)
T 18 S

Exhibit 2


STEP RATE TEST
NHU # 33-221
B.H. PRESSURE
4000
3800
3600
3400
3200
3000
2800
2600
2400
2200
2000
1400
1900
2400
2900
3400
3900
RATE (BPD)
Bottom Hole Frac @ 3120 psi
FG = .76

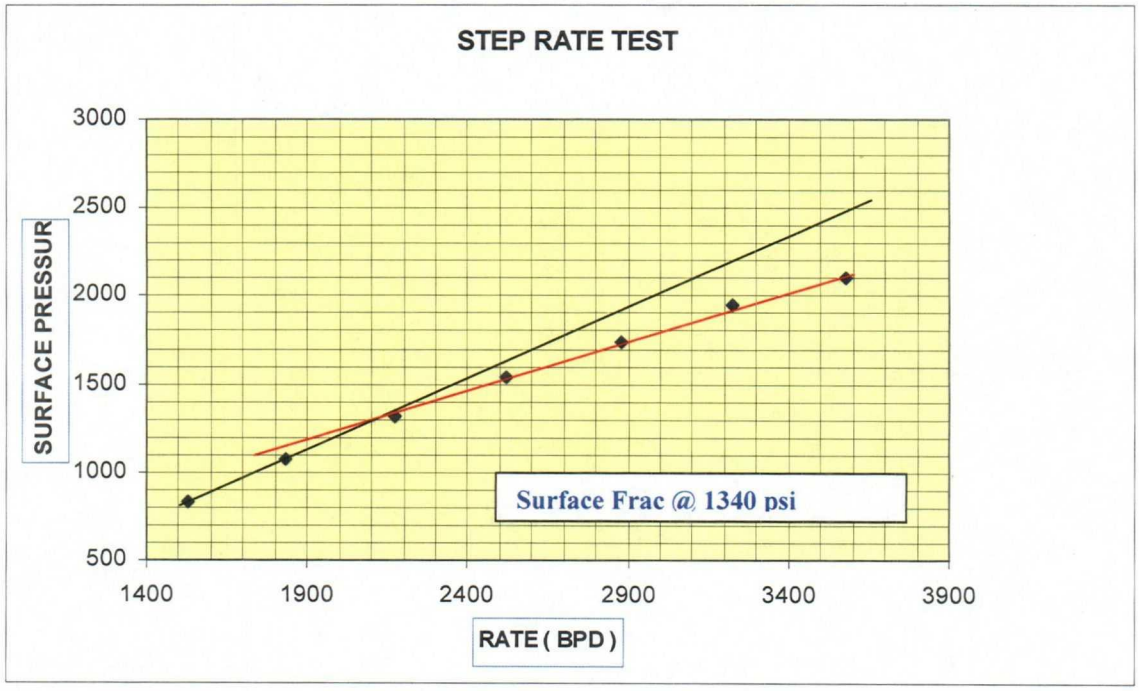
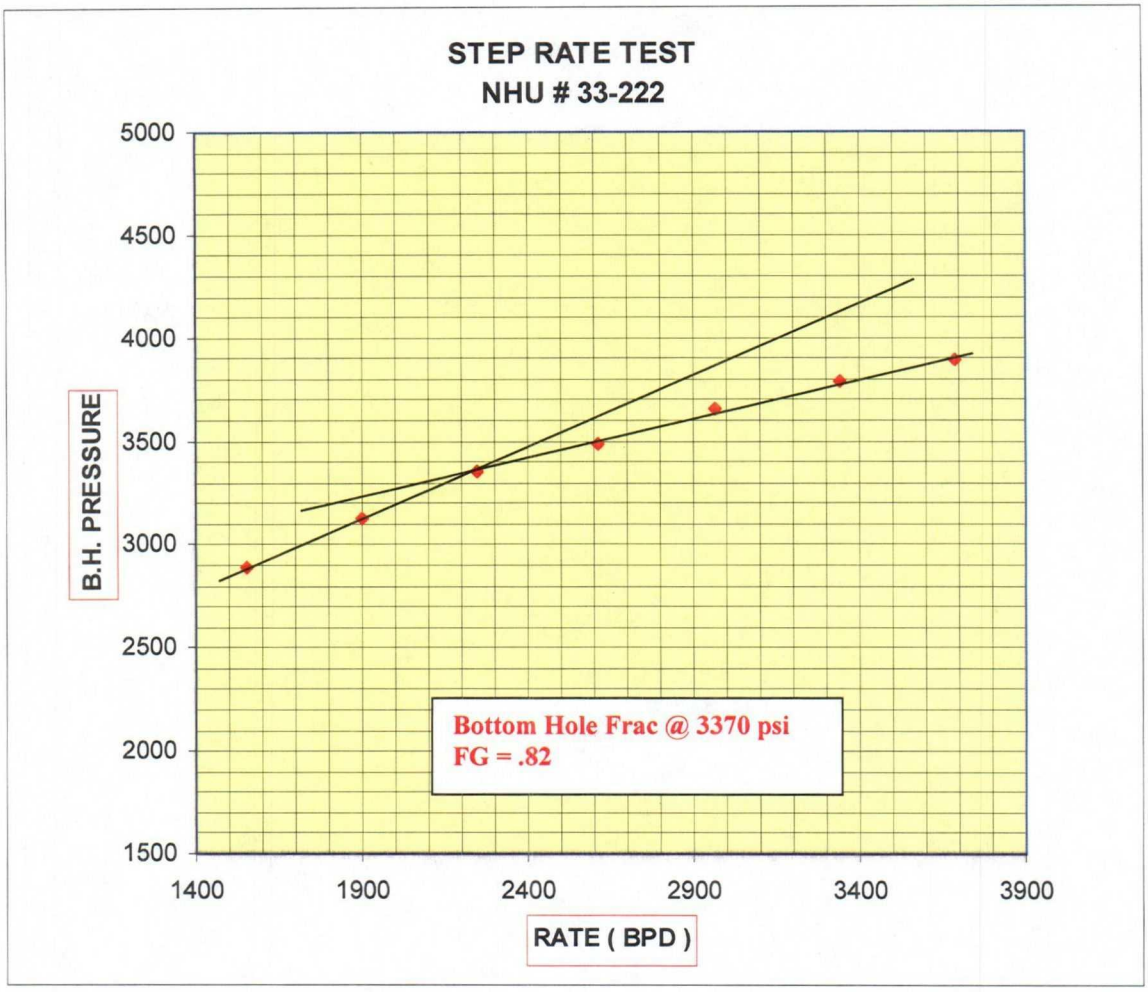

STEP RATE TEST
SURFACE PRESSUR
3000
2500
2000
1500
1000
500
1400
1900
2400
2900
3400
3900
RATE (BPD)
Surface Frac @ 1340 psi

Exhibit 3


STEP RATE TEST
NHU # 33-222
B.H. PRESSURE
5000
4500
4000
3500
3000
2500
2000
1500
1400
1900
2400
2900
3400
3900
RATE (BPD)
Bottom Hole Frac @ 3370 psi
FG = .82

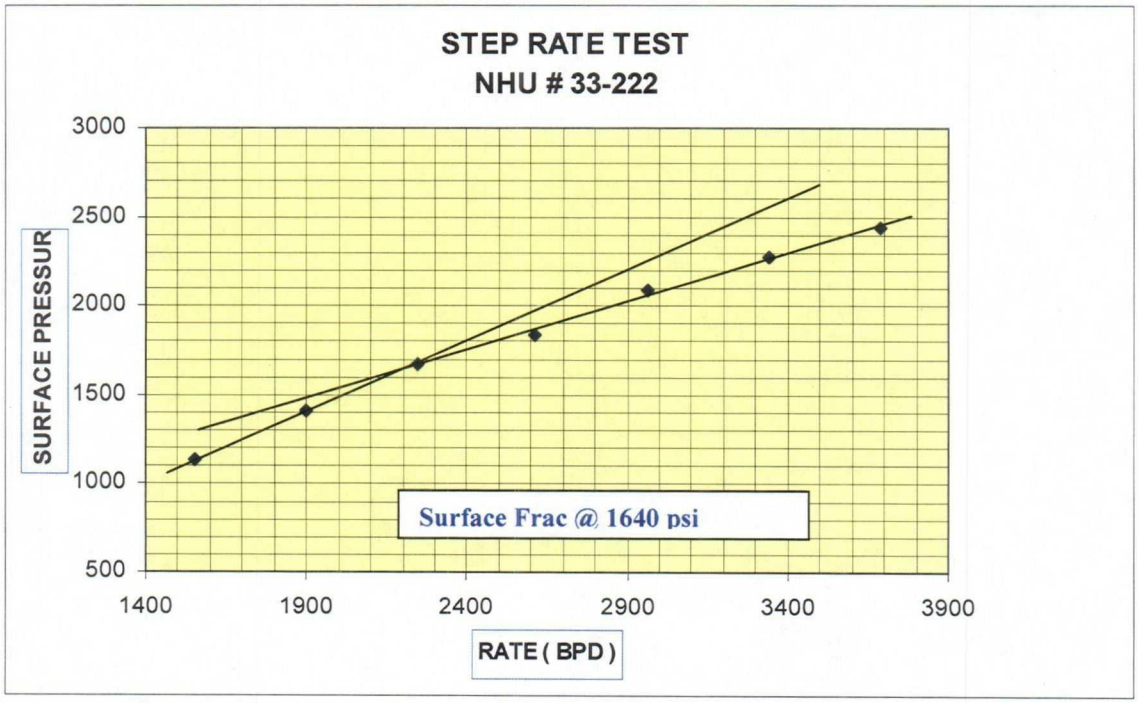
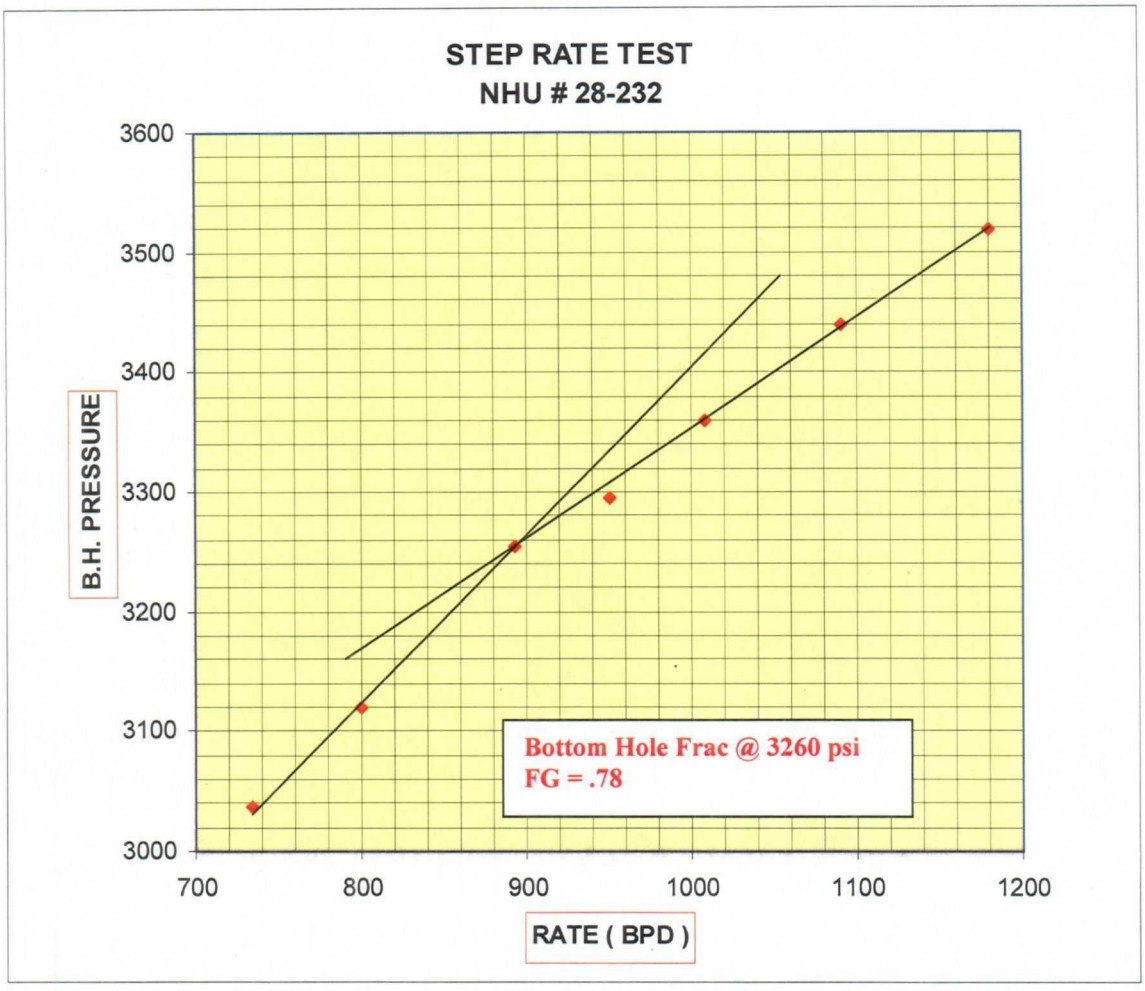

STEP RATE TEST
NHU # 33-222
SURFACE PRESSUR
3000
2500
2000
1500
1000
500
1400
1900
2400
2900
3400
3900
RATE (BPD)
Surface Frac @ 1640 psi

Exhibit 4


STEP RATE TEST
NHU # 28-232
B.H. PRESSURE
3600
3500
3400
3300
3200
3100
3000
700
800
900
1000
1100
1200
RATE (BPD)
Bottom Hole Frac @ 3260 psi
FG = .78

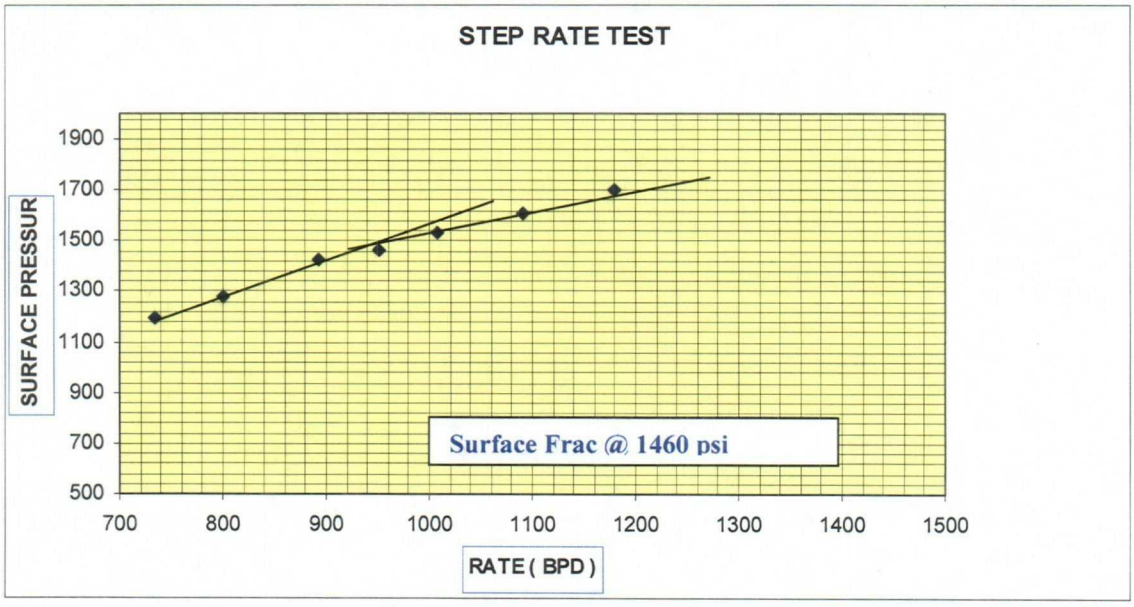
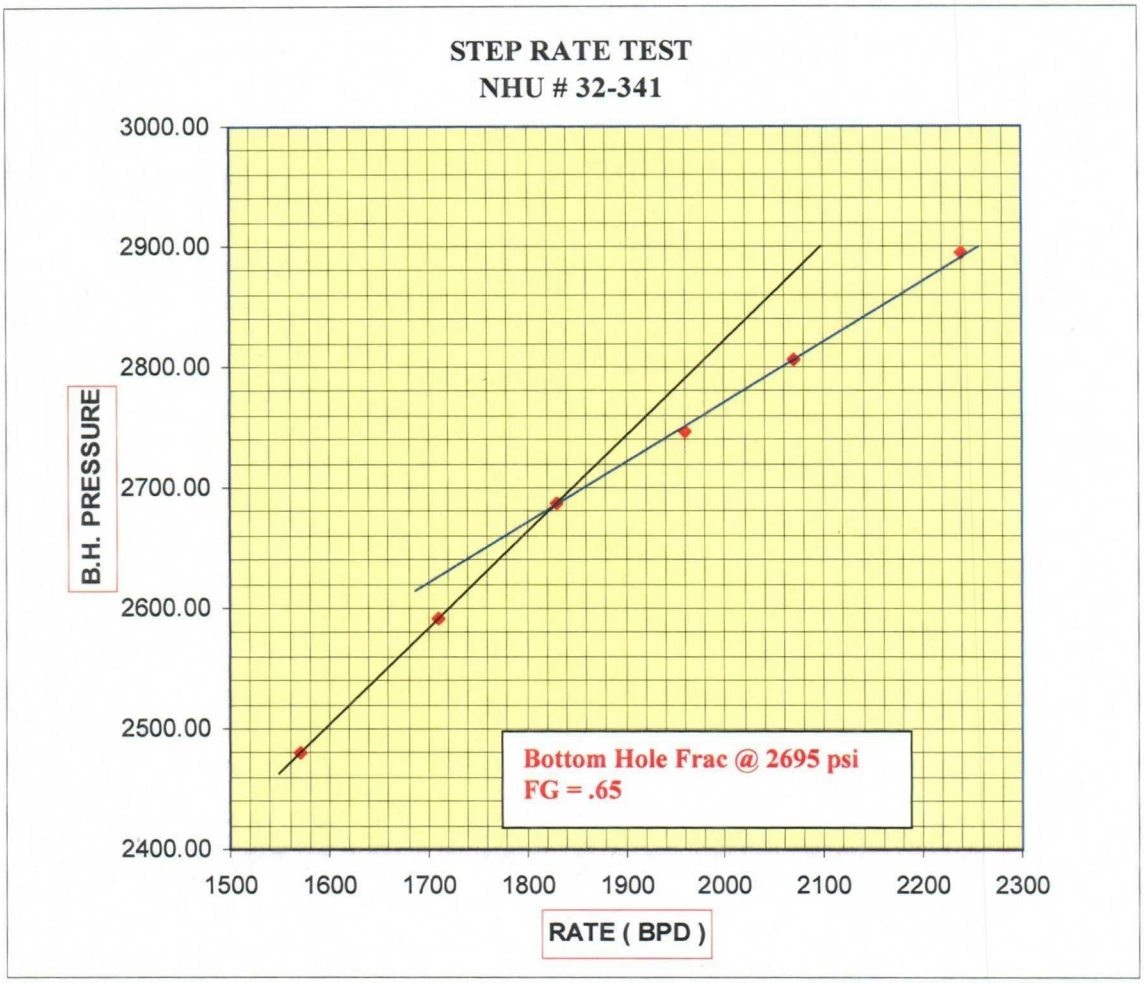

STEP RATE TEST
SURFACE PRESSUR
1900
1700
1500
1300
1100
900
700
500
700
800
900
1000
1100
1200
1300
1400
1500
RATE (BPD)
Surface Frac @ 1460 psi

Exhibit 5


STEP RATE TEST
NHU # 32-341
3000.00
2900.00
2800.00
2700.00
2600.00
2500.00
2400.00
B.H. PRESSURE
1500
1600
1700
1800
1900
2000
2100
2200
2300
RATE (BPD)
Bottom Hole Frac @ 2695 psi
FG = .65

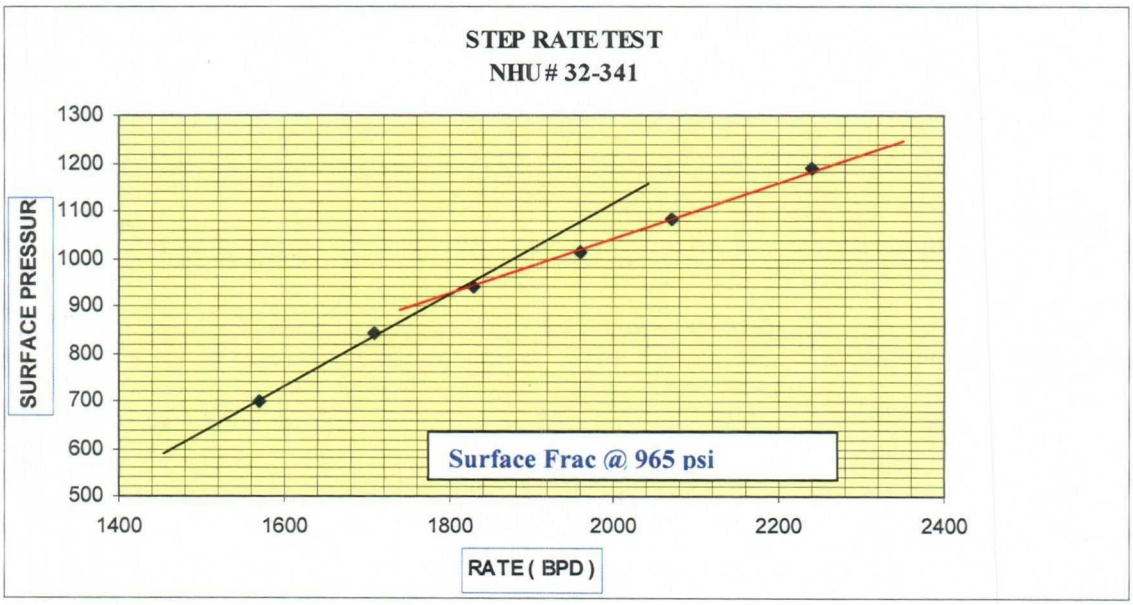
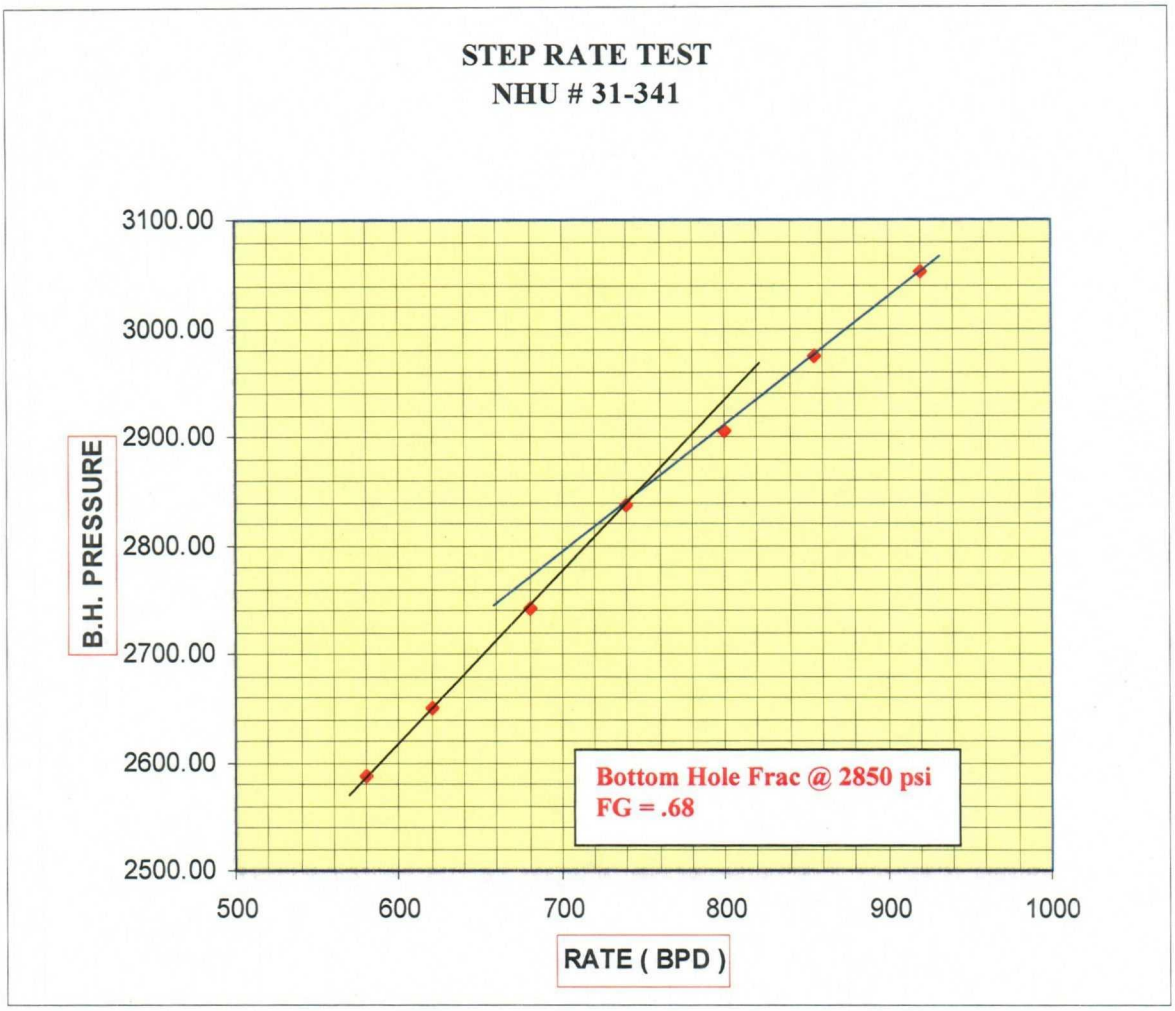

STEP RATE TEST
NHU # 32-341
1300
1200
1100
1000
900
800
700
600
500
SURFACE PRESSUR
1400
1600
1800
2000
2200
2400
RATE (BPD)
Surface Frac @ 965 psi

Exhibit 6


STEP RATE TEST
NHU # 31-341
3100.00
3000.00
2900.00
2800.00
2700.00
2600.00
2500.00
B.H. PRESSURE
500
600
700
800
900
1000
RATE (BPD)
Bottom Hole Frac @ 2850 psi
FG = .68

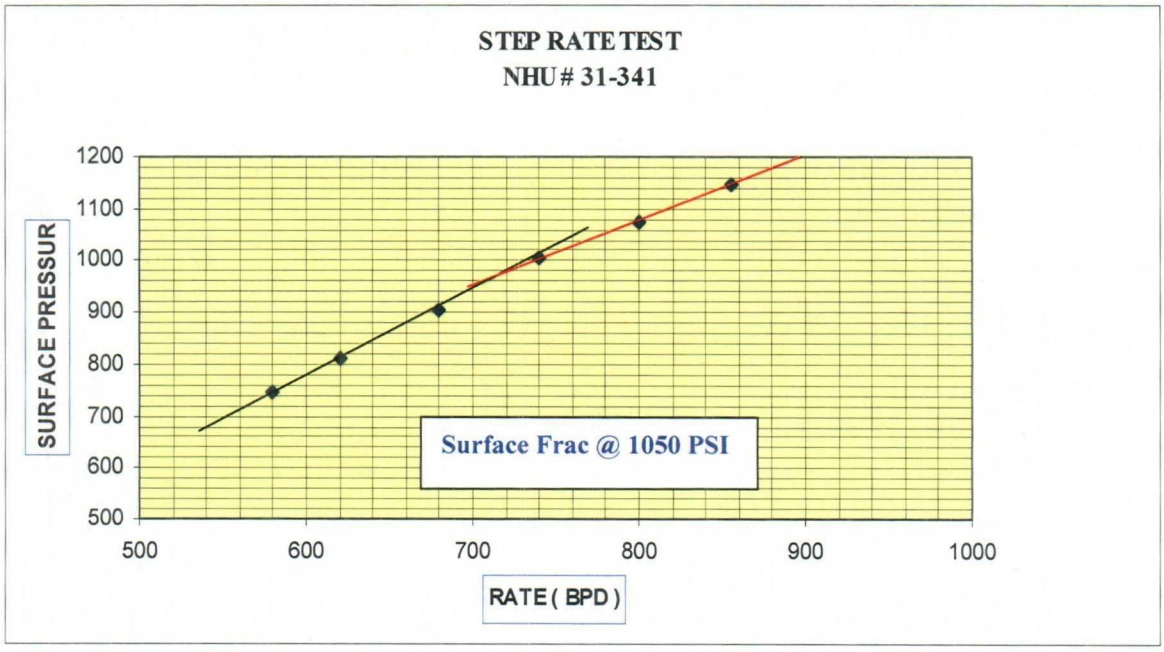
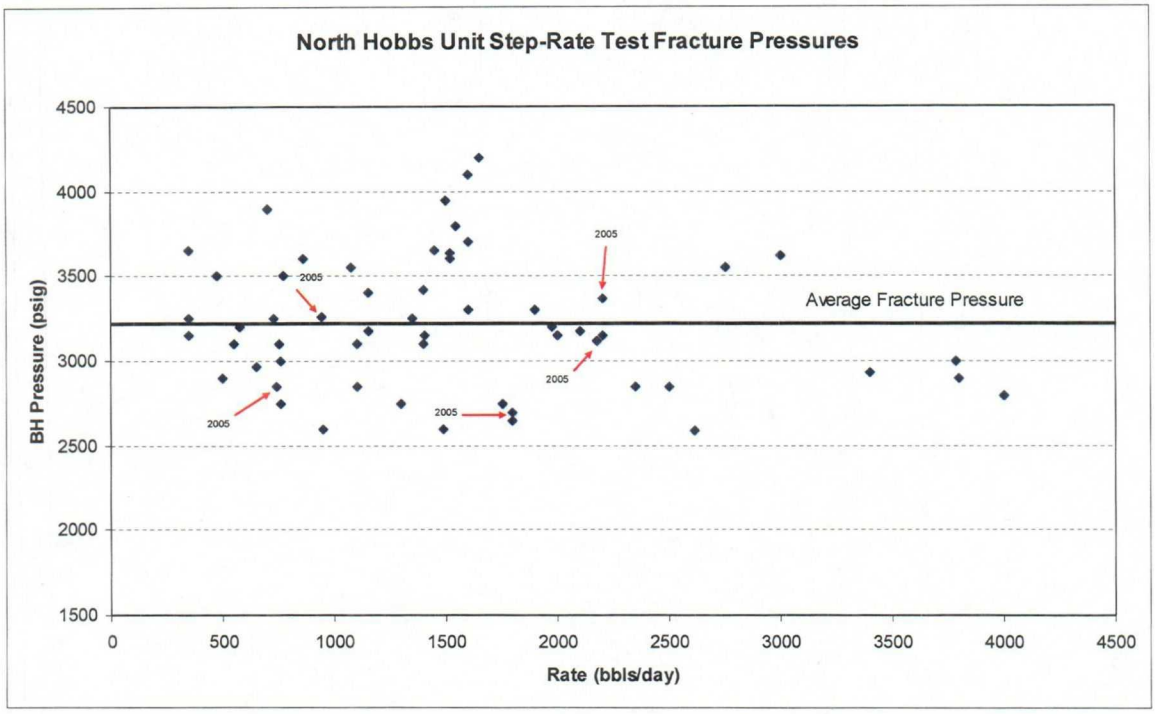

STEP RATE TEST
NHU # 31-341
1200
1100
1000
900
800
700
600
500
SURFACE PRESSUR
500
600
700
800
900
1000
RATE (BPD)
Surface Frac @ 1050 PSI

Exhibit 7


North Hobbs Unit Step-Rate Test Fracture Pressures
BH Pressure (psig)
Rate (bbls/day)
Average Fracture Pressure
2005
2005
2005
2005
2005
4500
4000
3500
3000
2500
2000
1500
0
500
1000
1500
2000
2500
3000
3500
4000
4500

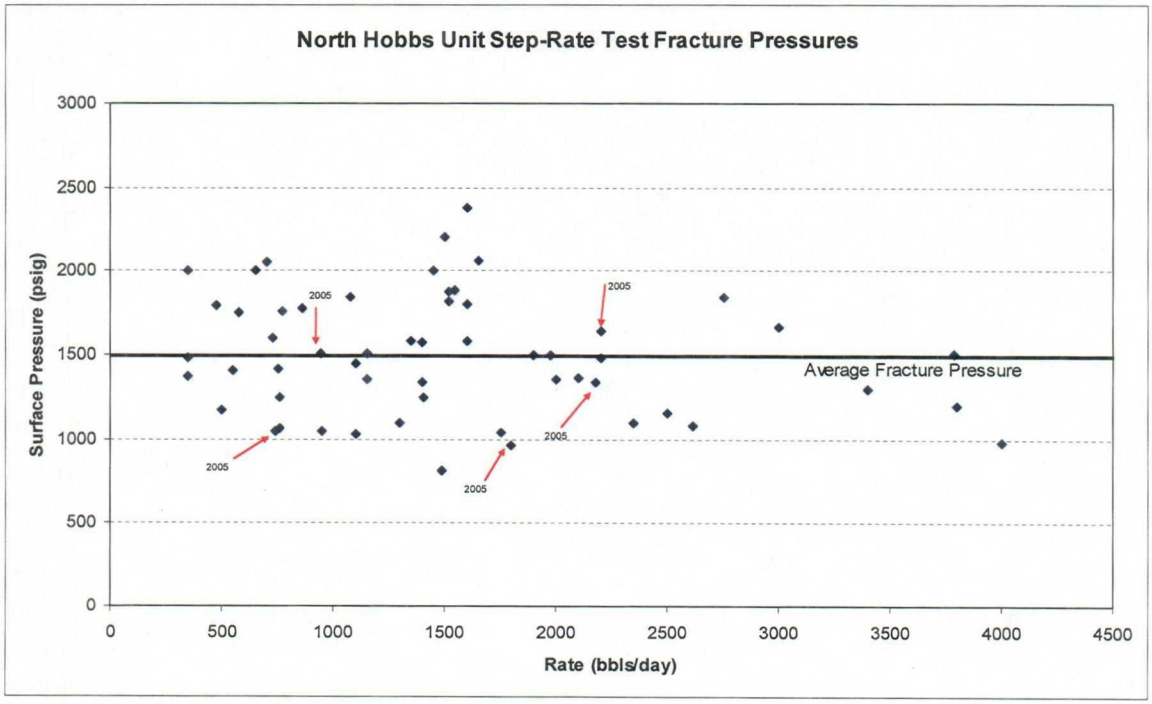
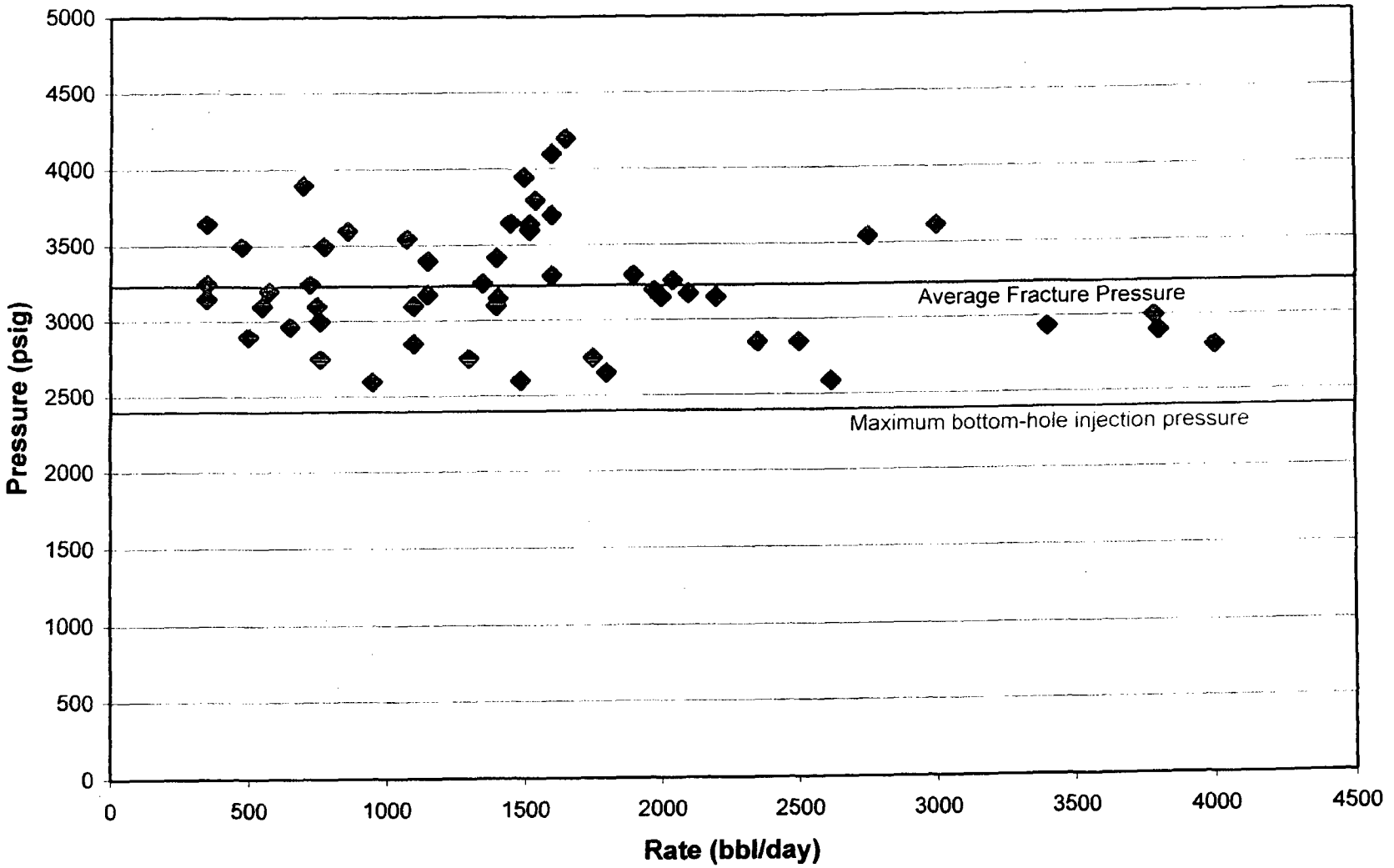

North Hobbs Unit Step-Rate Test Fracture Pressures
Surface Pressure (psig)
Rate (bbls/day)
Average Fracture Pressure
2005
2005
2005
2005
2005
3000
2500
2000
1500
1000
500
0
0
500
1000
1500
2000
2500
3000
3500
4000
4500

Exhibit 8

North Hobbs Unit Step-Rate Test Fracture Pressures



BEFORE THE
OIL CONSERVATION DIVISION
Case No. 12722 Exhibit No. 35
Submitted By:
Occidental Permian Ltd.
Hearing Date: September 6, 2001