J. W. Grizzell

LEASE OUTH PENROSE SKELLY UNIT WELL NO. 220 POOL PENROSE SKELLY

LOCATI: 1034' FSL & 2635' FWL, Sec 5-T22S-R37E COUNTY LEA ,NEW MEXICO

SPUD DATE April 24, 1975 GL, 3431' KB 3440'

GEOLOGICAL TOPS

DRILLING AND COMPLETION DATA

QUEEN 3334'
PENROSE 3440'
GRAYBURG 3610'
SAN ANDRES 3837'

Cored from 3435' to 3900'

DST # 1 3440'-3600', Recovered 359' of drilling
mud, IFP 46-183 psi, ISIP 366 psi, FFP 229-252 psi
FSIP 389 psi.

 $\overline{\text{DST} \# 2}$ 3600'-3800', GTS in 105 minutes TSTM, Recovered 300' mud w/ trace oil and gas cut and 750' of sulfur water slightly gas cut, IFP 42-442 psi, ISIP 641 psi, FFP 442-454 psi, FSIP 599 psi.

DST # 3 3800-'-3900', Mud to surface in 10 min., w/ 350 psi on a 1/8th" choke, sulfur water to surf. in 24 min. w/ 650 psi on 1/8th" choke, oil to surf. in 46 min. w/725 psi on 1/8th" choke, Gas rate est. @ 238MCFD, oil gravity 26 degrees API, no reported oil flow rate, FP 494-1144 psi, SIP 1282 psi, sampler contained 1.544 cu. ft. of gas and 500 cc of oil cut water.

Perforated 5½" casing @ 3814-16', 3819-21', and 3828-30', Acidized w/ 200 gals. 15% NEA spot acid. Swabbed and well KO, Flowed gas w/ slight spray oil, Gas volume at 1000MCFD w/ no gauge on oil, Temperature Survery showed gas coming from Grayburg perfs, Killed well w/ BW and set RBP @ 3770'.

Perforated @ 3730'-3740', Acidized w/ 84gals.15% NEA spot acid & 250 gals. additional 15%, Swabbed and WKO, Flowed 40 BO, 122BW in 20 hours, FLd 29 BO 550 BW in 72 hours, and flowed a trace of oil and 64 BW in 8 hours, gas volume 638 MCFD, Ran BIP bomb for 72 hour PBU test, BIP @/2hours was 125/ ps Kill well w/ BW and set RBP @ 3700'.

Perforated @ 3659-74', Acidized w/ 180 gals. 15% NE Swabbed and WKO, Flowed 10 BO, 118 BW in 10 hours, Fld trace oil, 137 BW and 750 MCFD of gas, Fld trace oil, 173 BW and 561 MCFD of gas, Ran 72 hour PBU test, BHP after 72 hours CI was 1224 psi. Set RBP @ 3614'.

perforated @ 3526-28', 3533-35', & 3540-42', Acidiz w/ 300 gals 15% HCL, Swabbed well dry and only 200' of fluid could be found in tubing. Squeezed these perfs w/ 75 sacks cement. Tested to 1000# & held OK

Production tested perfs from 3659' to 3740'together for 20 days and rate averaged about 250 BWPD w/ a trace of oil and 450 MCFGPD on a 32/64ths choke w/ a FTP of 90 psi. Squeezed perfs at 3659' to 3740' w/ 200 sacks cement. Tested to 1000# and held OK.

Cement apparently communicated down to perfs @ 3814 to 3830', Acidized these perfs w/ 500 gals 15% NEA, Swabbed and WKO, flowed 300 BW w/ trace oil and 661 MCFGPD for several days, Killed well and squeezed perfs w/ 400 sacks cement, Re-perf same zones and acidize w/ 2500 gals 15% NEA, Zone swab tested dry w/ only 200 feet of fluid entering hole per hour, Well closed in September 3, 1975 to present.

SPSU WELL NO. 220

85" OD 24#
K-55 ST&C
Set @ 1181'
Top of cement
@ Surface
By:Circulation

3526-28' (Squeezed) == 3533-35' (Squeezed) == 3540-42'

== 3659-74' (Squeezed)

= 3730-40 (Squeezed)

3814-16' (Squeezed) 3819-21' and

= 3828-30' (Re-Perfed)

BLISS PETROLEUM, INC.
Case No. 8773
4/2/86 Examiner Hearing
Exhibit No. 4

5½" OD 15.5# K-55 LT&C Set @ 3900' w/ 450 sacks TOC @ 2290' By: TS

PBD 3056'
TD 3-00'