WEST JAL UNIT

WELL NO. 1

.1 days from open hole section 11,732-12,058'. On August 6, 1962, killed mud. Pulled 2-1/2" tubing. Milled on Baker Model "D" Production Packer at .illed same. On August 11, 1962, we started drilling new hole at 12,058'. ,216'. Set 17 joints (718') of new 7" OD 26# 8-R Spang Extreme Line P-110 .iner at 12,213' and cemented with 112 sacks of cement. Hung 7" OD casing liner .n Oil Tool "MC" Liner Hanger Type "SS" screw set packer with 8' tie back sleeve on bottom of liner at 12,213' with top of tie back sleeve at 11,473'. W.O.C. 36 hours. .ured up to 2000 psi with no pressure loss. Went in hole and started drilling 6-1/8" hole below 7" OD casing liner. Drilled 6-1/8" hole to 15,402'. Set 11 joints (447') of new 5-1/2" OD 20# P-110 Hydrill FJ & 78 joints (2898') of new 5-1/2" 17# P-110 Hydrill FJ casing or liner at 15,400' and cemented with 450 sacks of cement. W.O.C. 5-1/2" OD liner set from 12,032' to 15,400'. Squeezed top of 5-1/2" OD liner with 350 sacks of cement. W.O.C. Shut off tested OK. Went in hole & started drilling 4-5/8" hole below 5-1/2" OD liner. Drilled 4-5/8" hole to 15,700'.

Drill Stem Test No. 7 - 15,340 - 15,700'

1/4" BHC. 3/8" THC 8000' water blanket. Tool open with fair blow air for 1 hour. Closed for 1 hour, BHP. Opened for 3 hours with fair air blow declining to weak air blow at end of test. No fluid or gas to surface. Closed for 1 hr. for final BHP. Reversed out 8000' water blanket and estimated 11 bbls. medium gas cut mud, no show of oil or water. Pulled packer and pressure charts. Hyd. press. IFP 3685#, FFP 3905#. Went in hole and found bridge at 15,460'. Went in hole and cleaned out bridge.

Reached total depth of 15,958' on December 16, 1962, with 4-5/8" hole. Well deepened from 12,058' to 15,958' for a total of 3900'. Lost & failed to recover 2 drill collars & 4-5/8" diamond bit at T.D. 15,958'.

Drill Stem Test No. 8 - 15,340 - 15,958'

1/4" bottom hole choke, 8000' water blanket, packer set at 15,340'. Tool open 1 hour with with weak air blow. Closed 1 hour for Initial SIP. Reopened tool for 3 hours with weak air blow throughout test. No gas or fluid to surface. Shut-in 1 hour for Final SIP. Reversed out 8000' water blanket and estimated 5 bbls. slightly gas cut mud, no shows. Initial SIP 8525 psi. Initial FP 3690 psi. Final SIP 7420 psi. Final FP 3945psi. Hydrostatic Pressure 9445 psi (in & out).

Set Baker Model "N" Cast Iron Bridge Plug at 15,340'. Spotted 50 sacks cement plug from 15,340' to 14,865'. Set 280 jts. (11,447') of new 7" OD 26# 8-R SS P-110 LT&C casing in top of 7" Liner Tie Back Sleeve at 11,473' and cemented with 500 sacks of cement. W.O.C. Perforated 5-1/2" OD liner with 4 holes at 13,560'. Set Halliburton Cast Iron Cement Retainer at 13,520' and squeezed 5-1/2" OD liner perfs. at 13,560' with 65 sacks of cement. Perforated 5-1/2" OD liner with 4 holes at 13,410' and squeezed with 70 sacks of cement. Cleaned out cement to 13,520'. Perforated 5-1/2" OD liner 13,462' to 13,472' for a total of 10' & 40 holes.

Drill Stem Test No. 9 - 13,462' - 13,472'

Tool open total 16 hours, 2-7/8" drill pipe, 1/4" bottom and 3/8" top chokes, 6000' water blanket. Packer set at 13,425'. Opened tool 1 hour then closed for 1 hour ISIP. Reopened tool with weak blow increasing to fair blow in 2 hours. Gas to surface in 4 hours. Flowed gas 11 hours, insufficient to test. Water blanket did not arrive at surface, no fluid or distillate. Shut in for 1 hour FSIP. Reversed out water blanket, no oil or distillate. Hyd. Press. in and out 10,415#, ISIP 5425#, FSIP 7550#, IFP 2795#, FFP 2630#.

Continued on Sheet no. 2

[illegible] Sheet [illegible]

[illegible] NO. [illegible]

[illegible] No. 1

[illegible] open hole section 11,770-12,058'. On August 6, 1961, still [illegible] 2-3/8" tubing. Filled on Baker Model "D" production packer [illegible] August 11, 1962, [illegible] started drilling new hole at 11,760'. [illegible] joints (720') of new 7" [illegible] 26# N-80 [illegible] line with [illegible] 125 [illegible] cemented with 110 sacks of cement. [illegible] 7" liner hanger Type "H" screw set packer with 8' tie back sleeve [illegible] liner at 12,115' with top of tie back sleeve at 11,475'. [illegible] 24 hours. [illegible] with no pressure loss. Went in hole and started drilling 6-1/8 [illegible] liner. Drilled 6-1/8" hole to 13,[illegible]. Ran 11 joints (447') of [illegible] joints (2268') of new [illegible] and cemented with 150 sacks of cement. [illegible] 5-1/2" OD liner [illegible] to 15,[illegible]. Cleaned top of 5-1/2" OD liner with 250 sacks of cement. [illegible] hole [illegible] started drilling 4-5/8" hole below 5-1/2" OD liner. Drilled 4-5/8" hole to 15,760'.

Drill Stem Test No. [illegible] - 15,[illegible] - 15,760'

[illegible] 3/8" [illegible] 6000' water blanket. Tool open with [illegible] blow air for 1 hour. Closed [illegible] hour, [illegible]. Opened for 5 hours with [illegible] air blow [illegible] to surface. Closed for 1 hr. [illegible] final [illegible]. Reversed out [illegible] water [illegible] estimated 11 bbls. [illegible] cut mud, no show of oil or water. [illegible] pressure charts. Hyd. press. [illegible] hole and found [illegible] at 15,[illegible] in hole and cleaned out bridge.

[illegible] depth of 15,[illegible] on December [illegible] 1962, with 4-5/8" hole. [illegible] for a total of 3900'. [illegible] failed to recover 2 drill [illegible] at T.D. 15,955'.

Drill Stem Test No. [illegible] - 15,[illegible] - 15,955'

[illegible] bottom hole choke, 4000' water blanket, packer set at 15,[illegible]. Tool open [illegible] air blow. Closed 1 hour for initial [illegible]. Reopened tool for 5 hours with [illegible] air [illegible] to surface. No gas or fluid to surface. Shut-in 1 hour for final [illegible]. Reversed out [illegible] water blanket and estimated 5 bbls. [illegible] gas cut mud, no shows. Initial [illegible] psi. Initial [illegible] psi. Final SIP [illegible] psi. Final FP [illegible] psi. Hydrostatic pressure [illegible].

[illegible] hole [illegible] Bridge Plug at 15,760'. [illegible] cement [illegible] 15,[illegible] to 11,[illegible]. Set 280 jts. (11,467') of new [illegible] and cemented [illegible] sacks of cement. [illegible] 7" liner tie back sleeve at 11,475' and cemented [illegible] sacks of cement. [illegible] perforated 5-1/2" OD liner with 4 holes at 13,[illegible]. [illegible] 5-1/2" OD liner perfs. at 13,[illegible] with [illegible] sacks of cement. [illegible] OD liner with 4 holes at 13,[illegible] and squeezed with [illegible] sacks of cement. [illegible] to 13,[illegible]. [illegible] 5-1/2" OD liner 13,[illegible] to 13,[illegible] [illegible]

Drill Stem Test No. 3 - 13,[illegible] - 13,[illegible]

Tool open [illegible] hours, 2-7/8" drill pipe, 1/4" bottom and 5/8" top chokes, [illegible] packer set at 13,[illegible]. Opened tool 1 hour then closed for 1 hour [illegible]. [illegible] gas to surface in [illegible] in 2 hours. [illegible] insufficient to test. Water blanket did not arrive at surface, [illegible]. Shut in for 1 hour [illegible]. Reversed out water blanket, no oil or distillate. [illegible] 10,[illegible], [illegible], [illegible].

[illegible] on sheet no. 3