

"EMPIRE SOUTH DEEP UNIT WELL NO. 12"
DRILL STEM TESTS

12/6/76 DST # 1 7864-8040 WOLFCAMP

ON 5 MIN PREFLOW, OPENED WITH WEAK BLOW OF AIR INCREASING TO STRONG BLOW OF AIR IN BOTTOM OF BUCKET.

1 HR INITIAL SIBHP.

ON 2 HR FINAL FLOW, FAIR BLOW OF AIR THROUGHOUT TEST BUILDING TO 2 PSI IN 13 MIN, 2-1/2 PSI IN 28 MIN, 3 PSI IN 43 MIN, AND 3-1/2 PSI IN 73 MIN, HOLDING STEADY TO END OF TEST.

4 HR FINAL SIBHP.

RECOVERED 10 FT GAS-AND MUD-CUT OIL AND 1554 FT SLIGHTLY MUD-CUT SALT WATER, 22,700 MG/L CHLORIDES W/RW = 0.35 AT 52 DEG F.

BOTTOM HOLE SAMPLER AT 482 PSI W/RECOVERY 4.2 CU FT GAS, TRACE OF OIL, 2010 CC, SW 16,200 MG/L CHLORIDES W/RW = 0.32 AT 56 DEG F, NO MUD. PIT MUD 33,500 MG/L CHLORIDES & RESTIVITY 0.24 @ 52 DEG F.

BHT 123 DEG F.

IHH 3638.

FBHP 152 START, 203 END.

1 HR ISIBHP 3030.

2 HR FFBHP 2035 START, 837 END.

4 HR FSIBHP 3004.

FHH 3638.

12/11/76 DST # 2 9090-9284 CANYON

ON 5 MIN PRE-FLOW, WEAK BLOW OF AIR INCREASING TO FAIR BLOW OF AIR IN 5 MIN. NO GTS.

RAN 1 HR INITIAL SIBHP.

ON 1 HR FINAL FLOW PERIOD, FAIR BLOW OF AIR INCREASING TO GOOD BLOW OF AIR IN 5 MIN AND STABILIZED. NO GTS.

RAN 2 HR FINAL SIBHP.

REC 5 FT CONDENSATE 44 DEG API @ 58 DEG F AND 510 FT HEAVILY GAS CUT DRL FL 35,000 MG/L CHLORIDES.

BOTTOM HOLE SAMPLER AT 175 PSI X RECOVERY 0.58 CU FT GAS, 220 CC CONDENSATE 42.5 DEG F, NO WATER AND 1100 CC DRL FL 37,000 MG/L CHLORIDES. PIT MUD 38,000 MG/L CHLORIDES.

BHT 134 DEG F.

IHH 4240

IFBHP 134 START - 186 END OF 5 MIN PERIOD

1 HR ISIBHP 3836

1 HR FFBHP 213 START - 318 END OF FLOW

2 HR FSIBHP 3309

FHH 4231

12/16/76 DST #3 10,169-10,400 ATOKA

ON 5 MIN PREFLOW, BLOW DESCRIPTION BY TELEFLOW INSTRUMENT. MAX PRESSURE 10.35 PSI, CALCULATED 157.47 MCFPD. GTS 1-1/2 MINS INTO INITIAL SIBHP PERIOD.

RAN 1 HR. INITIAL SIBHP.

ON 2 HR FINAL FLW PERIOD BY TELEFLOW EVALUATION, OPENED ON 1/4" CH IN 40 MINS, IN 45 MINS 332 PSI SURF PRES, 191 MCFPD. 60 MINS 411 PSI, 604 MCFPD. 75 MINS 482 PSI, 705 MCFPD. 90 MINS 556 PSI, 810 MCFPD. 100 MINS 606 PSI, 880 MCFPD. 110 MINS 631 PSI, 916 MCFPD.