



POST OFFICE BOX 38888 • HOUSTON, TEXAS 77088 • (713) 484-8181

MARCH 5, 1975

APCO OIL CORPORATION  
200 GIBBS TOWER EAST  
MIDLAND, TEXAS 79701

GENTLEMEN:

A QUANTITATIVE ANALYSIS OF RESERVOIR PARAMETERS COULD NOT BE MADE ON THE ENCLOSED TEST. THE PRESSURE BUILD-UPS ARE NOT CONSIDERED RELIABLE RESERVOIR VALUES.

DUE TO SOME FILL-UP IN THE HOLE, THE TOOLS WERE SLIDING DOWN THE HOLE DURING THE FIRST PART OF THE TEST. FOR THIS REASON, COMPLETE PACKER SEATS WERE NOT OBTAINED. THE PRESSURES DURING THE INITIAL SHUT-IN PERIOD REFLECTED TOOL MOVEMENT AND A PERIODICAL LEAK AROUND THE PACKER SEATS.

THE FIRST PART OF THE FINAL SHUT-IN PRESSURE BUILD-UP APPEARS TO HAVE BEEN INFLUENCED BY THE SMALL LEAK AROUND THE PACKER SEATS. THIS LEAK CAUSED A WELL BORE PRESSURE GREATER THAN FORMATION PRESSURE. AFTER THE LEAK SEALED, A DECAY OF PRESSURE IS NOTED. THE WELL BORE PRESSURE WAS ATTEMPTING TO EQUALIZE WITH FORMATION PRESSURE DURING THIS PERIOD.

THE FLOW RATES REPORTED WERE BASED ON A 6" POSITIVE CHOKE UNDER STANDARD CONDITION FOR DRY GAS. SINCE A HEAVY SPRAY OF WATER ACCOMPANIED THE GAS, THE RATES MAY BE TOO HIGH AND SHOULD BE USED ONLY AS INDICATORS. BOTTOM HOLE FLOW PRESSURES AND SURFACE READINGS INDICATE THE WELL HAD NOT REACHED A CONDITION OF "STEADY STATE" FLOW.

D. A. WARREN, JR.  
INTERPRETATION AND  
EVALUATION DEPARTMENT

APCO OIL CORPORATION  
SUN STATE #1; LEA COUNTY, NEW MEXICO  
TEST #3; 11632' TO 12150'  
SEC.23-T11S-R34E

FIELD REPORT #07211 C

