

D S TESTS

DST #1 - 1/11/54 - 4239 to 4277 to test drlg. break. Tool open 3 hrs w/weak blow of air throughout test. No gas to surface. re. 200' of slightly gas cut mud and 1150' of salt water FBHP 60 to 655 psi. 20 min SIBHP 1305 psi. Bottom water above tool titrated 143,000 PPM total chlorides. Mud titrated 133090 PPM total chlorides.

DST #2 - 1-21-54 - 4830 to 4890. 1/22/54 - DST#2 (Cont.) 4830 - 4890. Tool open 1-3/4 hrs. Light blow of air for 30 min gradually declined and died in 45 min. Rec. 480' drilling mud. No show oil, gas or water. FBHP 275 - 305. 20 min SIBHP 1285.

DST#3 - 2/12/54 - 6065 to 6108. to test drlg. break and kick on mud indicator. 2/15/54 - DST #3(Cont.) Tool open 2 hrs. 5 min. Weak blow air at once, dead in 1 hr t min. Rec. 70' slightly gas cut drlg. mud FBHP 30 psi 20 min SIBHP 30 psi.

DST #4 - 2/15/54 - 6115 to 6204 to test drlg. break and gas kick. Tool open 4 hrs. light blow throughout test rec. 420' slightly gas cut mud and 60' of slightly gas and oil cut mud. FBHP 25 to 185 psi 20 min SIBHP 1610 psi.

DST #5 - 2/19/54 - running to 6985 to 7066, to test gas kick. 2/22/54 - DST#5 (Cont.) 6985 - 7066. Tool open 1 hr weak blow 4 min and died. FBHP 0 - 30 min SIBHP - 0. Rec. 15' drlg. mud.

DST #6 - 2/22/54 - 7245 - 7320. Tool open 1 hr 20 min. Light blow 20 min and died. FBHP 30 - 55, 20 min SIBHP - 90. Rec. 110' mud.

DST #7 - 3/1/54 - 7930 - 7979 to test kick on gas indicator. 3/2/54 -(Cont.) 7930 - 7979. Tool open 2 hrs very weak blow air 1 hr and died. Rec. 130' drlg. mud BHPF Zero 30 min BHPSI did not record.

DST #8 - 3/18/54 - 8830' to 8986' to test Bone Springs Sand. Kick on gas indicator florescence in samples. (Cont.) 3/19/54 - 8830 to 8937. Tool open 4 hrs. strong blow in 1 hr diminishing gradually to end of test. Rec. 270 bbls slightly oil and gas cut mud. Trace of free oil below circ. Sub. BHPF 115 - 180. 30 min BHPSI 500.

DST#9 - 3/23/54 - 9067 - 9101 to test good drlg. break w/stain and fluorescence. (Cont.) 3/24/54 - 9067 - 9101. Tool open 5 hrs weak to moderate blow for 20 min. Increased throughout test. Rec. 690' oil and gas cut mud, 300' slightly oil and gas cut mud and 390' oil and gas cut mud BHPF 94 - 370 psi. 30 min SIBHP 3775.

DST #10 - 3/26/54 - 9165 to 9210. To test Bone Springs. Clean DT and stain PORX fluorescence. Tool opened at 5:45 gas to surface in 30 min. Continuing to test. (Cont.) 3/29/54. Bone Springs 9165 - 9210. Open 4 hrs st. blow air to surface. Gas to surface in 30 min, died in 1:15 min. Remained dead 10 min and resumed weak blow gas to end of test. Not enough gas to measure. Rec. 240' heavy GC mud 90' GCM & SW, 7685 SW. Titrated 104,500 PPM total chlorides. BHPF 1695 - 3865 BHPSI 30 min 3898.

DST #11 - 3/31/54 - 9390 - 9437. (Cont.) 4/1/54 - 9390 to 9437 Bone Spring Tool open 1 hr x 35 min. Very weak blow air for 2 min and died. Rec. 50' Drilling Mud NS. FBHP 0 - 30. 30 min SIBHP - 30. H.P. - 4570.

DST #12 - 4/8/54 - 9740 - 9780 to test Fluorescence good gas kick (Bone Springs) (Cont.) 4/9/54 - 9740 - 9780. Open 1 hr 12 min. Very weak blow air 12 min and died. Rec. 30' drl mud x very light trace of oil in last 5' BHPF 90. 30 min BHPSI 90.

DST #13 - 4/19/54. - 10,300 to 10,350 to test drlg. break. Tool open 7 hrs. Peak blow of air. Gas to surface in 3 hrs. 15 min. Continued throughout test. Gas volume too small to measure. Rec 320' oil & gas cut mud (Est. 50% oil and 100' of free oil. No indication of water. BHPF - 95 to 215 PSI. 30 min SIBHP 1080 psi. Bit #136. W7R, made 51' in 13 1/2 hrs. w/60,000. Bit #137, W7R, made 52' in 13-3/4 hrs. w/60,000. Bit #138, W7R, made 43' in 6 hrs. w/55,000.

DST #14 - 4/23/54 - 10,619' to test Wolfcamp drlg. break porosity, fluorescence and slight stain. Picked T. Wolfcamp from samples at 10570'. Tool opened

(over)