HISTORY OF WELL

JOHNSTON-SHEAR Jicarilia #3-9

7425' TD **7150'** PBTD

CORE RECORD - Core #1 from 6075-6124. Recovered 47' - 14' blk shale; 4' shale with sand streaks; 6' shale; 1' shale with streaks of sand; 9' sandstone, odor and pale flour, with bleeding gas and vertical fracturing; and 13' black shale.

Core #2 from 6124-6176. Recovered 52' - 12' of blk shale; 7' of blk shale with thin streaks of sandstone; $6\frac{1}{2}$ ' of blk shale; and $26\frac{1}{2}$ ' of sand, 1t gray with good odor and fracturing.

Core #3 from 6176 to 6206. Recovered 21' - 3' shale, $6\frac{1}{2}$ ' sand with bleeding oil and 6' sand.

Core #4 from 6985 to 7006'. Cut 21', recovered 5' - 5' of shale with sand streaks. No show of oil.

Core #5 from 7006-7027'. Cored 21', recovered 2' - 1' shale and 1' sand.

Core #6 from 7027-7052', Cored 25', recovered 28' - 28' of oil saturated sand, 3' were recovered from previous core.

Core #7 from 7052-7098. Cut 46', recovered 46' - 33' sand, light gray, vfg, shale streaks with good odor; 13' of shale.

DST RECORD - DST #1 from 6092-6124. SI 30 mins, open 1 hour, and SI 30 mins. Weak blow of air for 20 mins and died. Recovered 35' drlg mud. No ISIP obtained. IFP & FFP 55 psi. FSIP 55 psi.

DST #2 from 6093-6176'. SI 30 mins, open 4 hrs and SI 1 hour. Recovered 440' fluid -29' drlg mud; 57' sli GCM; 108' O&GCM with trace of free oil; 190' hvy O&GCM with fair amount of free oil and 56' of M&GCO. ISIP 2630 psi. IFP 85 psi. FFP 190 psi. FSIP 2250 psi.

DST #3 from 6174-6206. SI 30 mins, open 48 mins, and SI 30 mins. Recovered 62' drlg mud. ISIP 270 psi. IFP 28 psi. FFP 28 psi. FSIP 45 psi.

FRACTURING RECORD - Perf 5" csg w/3 jets/ft from 7226-34, 7290-94, 7302-10, 7320-24, and 7330-36. Ran tbg with pkr set at 7140. Frac Dakota with 1 truck thru tbg with 15,000 gals wtr and 10,000# sand. BD & IP 3800 psi, formation sanded up with final pressure of 6000 psi, formation flowed back slowly. Set CI BP at 7150'. Perf 7030-48 w/50 holes and 7060-75 with 45 holes. Frac Graneros with 40,000 gallons wtr and 40,000# sand. BD 1800. Max & final 2700. Stndg 1800. Avg I.R. 48 BPM. Jetted well with gas to TD. Ran 236 jts of 2-3/8" 4.7# J-55 tbg. TE 7076 set at 7083. Shut in for potential.

MISCELLANEOUS - Ran ES, Induction and Sonic logs to 6260' before running 7" casing.

Ran ES, Induction and Sonic logs from 7416 to 6264,

Howco DV tool set at 2957 in 7" casing string and cemented with 100 sx reg.