

L. SO NATURAL GAS COMPANY
 LEONARD STATE NO. 1
 1980' FSL, 660' FEL
 SEC 22, Twp. 17-S, Rge. 29-E NMPM
 Eddy County New Mexico

DRILL STEM TESTS

<u>Date</u>	<u>Interval</u>	<u>Results</u>
7-24-57	7142-7253	Tool open 2 hr. weak to moderate blow for 1 hr. 25 min. and died Rec. 20' slightly oil cut mud. ISIP 150 (30 min.), FSIP 55 (30 mi IFP 55, FFP 55, I Hyd 3460, F Hyd 3460.
7-25-57	7307-7329	Tool open 2½ hrs., weak blow throughout test, Rec. 92' oil cut drilling mud and 270' salty sulphur water, ISIP 2760 (30 min.) FSIP 2430 (30 min.), FP 65, Hyd 3390-3335.
8-11-57	8710-8742	Tool open 2 hr. open with strong blow and continued throughout tes Recovered 5300' salt water (72,500 ppm Chloride) ISIP 3500 (30 min. FSIP 3500 (30 min.), FP 140, Hyd pressure 2295
8-15-57	9162-9176	Tool open 1 hr. 30 min. Strong blow immediately gas to surface in 12 min. 282 M. Recovered 280' drilling mud and 1620' sulphur water, ISIP 3995 (30 min.), FSIP 3405 (30 min.), IFP 285, FFP 285 Hyd 4385- 4345.
8-26-57	9910-9932	Tool open 2 hr 15 min. open with fair blow and decreased to weak throughout. Recovered 110' gas in drill pipe 10' drilling fluid, trace of free distillate. ISIP 155 (30 min.), FSIP 125 (30 min.) FP 60, Hyd 5155- 5090
9-2-57	10,305-10,353	Tool open 3 hrs. gas to surface in 1½ hrs Rec 720' water blanket plus 73065' gas cut drilling fluid. 30 min. ISIP 535, FSIP 0, IFP 430 FFP 395, Hyd 5590- 5025
9-5-57	10,309-10,423	Tool open 6½ hrs. open with strong blow immediately . Gas to surfa in 2½ min. in 3 min., mud in 2½ hrs. dist. in 1 hr. Gas to surf on 5/8" choke . 450 PSI, flow 3,690 MCFGPD. Rec. 270' oil , 1 hr I 4930, FSIP 4635, IFP 500, FFP 945, Hyd 5580-5525.
9-10-57	10,638-10,712	Tool open 2 hrs. gas to surface in 3 min., mud in 15 , heavy spra of dist. in 17 min., Rec 240' of free dist. , bottom hole temp. 160 IFP 1920, FFP 2330, ISIP 4570 (1 hr.), FSIP 4430 (1 hr.), Hyd 5750 gas vol 1400 MCFGPD, Dist. 2 bbl/ million.
9-13-57	10682-10,734	Tool open 2 hrs. open with strong blow , gas to surface in 2½ m with 1800 PSI surface pressure. Vol 13,500 MCFGPD, Mud to surface 12 min. dist. in 15 min. No gauge on amt. Rec. 310' dist. , ISIP 45 (30 min.), FSIP 4555 (30 min.), IFP 2655, FFP 3500, Hyd 5845-5820.
9-18-57	10,734-10,771	Tool open 3 hr 45 min. gas in 3 min. , mud and dist. in 45 min. gauge 5020 MCF and 6 bbls dist. per hour . Grav 54°, Rec 230' dist and 40' drilling fluid. 1 hr ISIP 4525, 1 hr FSIP 4525, IFP 540 FFP 1040, Hyd 5840-5840 , 280 psi on 1 in. choke.
9-19-57	10,800-10,860	Tool open 1 ½ hr. weak blow immed rec. 40' gc drilling mud IFP and FFP 5530, ISIP 110 (30 min.), FSIP 550 (30 min.), Hyd 5765-5710.
9-19-57	10,800-10,860	Tool open 1½ hrs. weak blow immediately rec 40' gas cut drilling mud IFP and FFP 55 , 30 min. ISIP 110, 30 min. FSIP 55, Hyd 5765- 5710.
10-17-57	11,056-11,066	Tool open 2½ 3 hrs. 35 min. , gas to surface in 7 min. 216 MCF in 1½ hrs. 206 MCF at end of 2½ hrs, Rec 550' oil , grav. 47.7 to 48 1 hr FSIP 7485, 1 hr ISIP 7600, IFP 190, FFP 190 Hyd 8245-8010.

CORE

7-23-57	7223-7253	30' lime and dolo with scant bldg. oil
9-11-57	10,712-10,722	10' SS
9-11-57	11,430-11,480	50' Shale and lime
9-16-57	10,734-10771	28½ ' ss and 8½' shale.