

NEW MEXICO OIL CONSERVATION COMMISSION
MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 9-1-65

Type Test ☒ Initial ☐ Annual ☐ Special						Test Date 12-10-95			
Company Sonat Exploration Co.-Midland				Connection					
Pool S. Sanddunes(Lower Penn)				Formation Penn				Unit	
Completion Date 11-10-95		Total Depth 15,350		Plug Back TD 15,254		Elevation 3484		Farm or Lease Name Lotos "10" Federal	
Csg. Size 5"	Wt. 14	d liner 11	Set At 657-15,350	Perforations: From 14,592 To 15,082		Well No. 1			
Thg. Size 2 7/8"	Wt.	d	Set At 14,450	Perforations: From To		Unit Sec. Twp. Rge. G 10 24S 31E			
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single						Packer Set At 14,450		County Eddy	
Producing Thru Tubing		Reservoir Temp. °F 218 @ 15,060		Mean Annual Temp. °F		Baro. Press. - P _a 15.025		State New Mexico	
L 15,060	H	Gg 0.585	% CO ₂ 0	% N ₂ 0	% H ₂ S 0	Prover Orifice	Meter Run 4"	Taps Flange	

FLOW DATA						TUBING DATA		CASING DATA		Duration of Flow	
NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. h _w	Temp. °F	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.	Temp. °F	Duration of Flow
SI	4.026		1.5	1400	100	70	1400	96	0	70	24hrs
1.											
2.											
3.											
4.											
5.											

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor Ft.	Gravity Factor Fg	Super Compress. Factor, Fpv	Rate of Flow Q, Mcfd
1	14355.64	125.5	1500	0.9671	1.01274	1.069	1886.3
2.							
3.							
4.							
5.							

NO.	P _t	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	n/a	Mcf/bbl.
1	2.439	604	1.726	.904	A.P.I. Gravity of Liquid Hydrocarbons	dry gas	Deq.
2.					Specific Gravity Separator Gas	0.585	X X X X X X X X
3.					Specific Gravity Flowing Fluid	X X X X X	
4.					Critical Pressure	675	P.S.I.A.
5.					Critical Temperature	350	R

P _c 8689		P _c ² 75498.72		(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.0498$		(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.0498$	
NO.	P _t ²	P _w	P _w ²	P _c ² - P _w ²			
1		1892.5	3581.556	71917.6			
2							
3							
4							
5							

Absolute Open Flow 1980.2 Mcfd @ 15.025				Angle of Slope @ 45°		Slope, n 1	
Remarks:							
Approved By Commission: Conducted By: Sonat Exploration Calculated By: Ann E. Ritchie Checked By:							