

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 11-23-71				
Company TEXAS OIL & GAS CORP.				Connection None					
Pool INDIAN BASIN (UPPER PENN)				Formation "Cisco Line"				Unit	
Completion Date 11-23-71		Total Depth 7700		Plug Back TD 7664		Elevation 4205 KDB		Farm or Lease Name Helbing-Federal	
Csg. Size 4 1/2	Wt. 9.5-11.6#	d 1.995	Set At 7698	Perforations: From 7471 To 7554		Well No. 1			
Tbg. Size 2 3/8	Wt. 4.7	d 1.995	Set At 7406	Perforations: From To		Unit 22	Sec. 22S	Twp. 22S	Rge. 23E
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single					Packer Set At 7406		County Eddy		
Producing Thru Tubing		Reservoir Temp. °F 120 @ 7700		Mean Annual Temp. °F 60		Baro. Press. - P _a 13.2		State N.M.	
L 7406	H 7406	G _g 0.593	% CO ₂ .38	% N ₂ .95	% H ₂ S --	Prover X	Meter Run	Taps	

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.	
SI							1966	69	Pkr	-
1.	2.067		1.250		11.0	66	1944	65		
2.	2.067		1.250		22.0	68	1930	66		
3.	2.067		1.250		30.0	65	1924	66		
4.	2.067		1.250		45.5	97	1868	66		
5.										

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _{mb}	Flow Temp. Factor F _t	Gravity Factor F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1	565		.9750	.9943	1.299x .7746	1.000	551
2	838		.9750	.9924	1.299x .7746	1.000	816
3	1011		.9750	.9952	1.299x .7746	1.000	987
4	1329		.9750	.9662	1.299x .7746	1.000	1260
5.							

					Condensate TSTM		
NO.	P _t	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	Mcf/bbl.	
1	3.209	552.5	1.556	.7990	A.P.I. Gravity of Liquid Hydrocarbons		
2	3.187	553	1.558	.7995	Specific Gravity Separator Gas 0.593	X X X X X X X X	
3	3.179	553	1.558	.8000	Specific Gravity Flowing Fluid	.593	
4	3.089	553	1.558	.8050	Critical Pressure 673 P.S.I.A.	673 P.S.I.A.	
5					Critical Temperature 352 °R	352 °R	

				$(1) \frac{P_c^2}{P_c^2 - P_w^2} = \frac{3917.2}{144.5}$		$(2) \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 27.1$	
NO	P _t	P _w	P _w ²	P _c ² - P _w ²			
1	3830.6	1958.7	3836.8	80.4			
2	3776.0	1946.7	3789.6	127.6			
3	3752.7	1942.3	3772.7	144.5			
4	3538.9	1889.8	3571.4	345.8			
5							

Absolute Open Flow 26,748 Mcfd @ 15.025				Angle of Slope θ 45°		Slope, n 1.000	
Remarks: Unable to obtain flow stabilization in one hour on rate #4 due to plugging in choke.							
Approved By Commission:		Conducted By:		Calculated By:		Checked By:	