

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

Form C-122
Revised 9-1-65

RECEIVED

Type Test ☐ Initial ☐ Annual ☒ Special		Test Date 5-29-73		JUN 1 1973			
Company HORIZON OIL & GAS COMPANY OF TEXAS		Connection NATURAL GAS PIPE LINE CO. OF AMERICA		O. C. C.			
Pool GRAYBURG-ATOKA		Formation MORROW		Unit ARTESIA, OFFICE			
Completion Date 10-28-72		Total Depth 10,870'		Plug Back TD 10,869'			
Elevation 3589 K.B.		Farm or Lease Name STATE 28		Well No. 1			
Csg. Size 4 1/2	Wt. 11.6	d 4.082	Set At 10,869'	Perforations: From 10,762 To 10,784			
Tbg. Size 2 3/8	Wt. 4.7	d 1.995	Set At 10,784	Perforations: From PERF. NIPPLE 35' BELOW PACKER			
Type Well - Single - Bradenhead - G.G. or G.O. Multiple SINGLE				Packer Set At 10,784			
Producing Thru TUBING		Reservoir Temp. °F 159 @ 10,750'		Mean Annual Temp. °F 60			
Baro. Press. - P _a 13.2		State NEW MEXICO		County EDDY			
L 10,784	H 10,784	G _g 0.669	% CO ₂ 0.54	% N ₂ 1.230	% H ₂ S NONE		
Prover 3.00"		Meter Run 3.00"		Taps FLANGE			
FLOW DATA							
NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. h _w		
1.	3"	x	1.75		1.1		
2.	3"	x	1.75		8.8		
3.	3"	x	1.75		16.8		
4.	3"	x	1.75		31.2		
5.							
TUBING DATA							
NO.	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.	Temp. °F	Duration of Flow		
1.	1900.0				26.0		
2.	1798.0	71			1.0		
3.	1559.0	72			1.0		
4.	1370.0	72			0.75		
5.	1089.0	72			1.0		
CASING DATA							
NO.	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.	Temp. °F	Duration of Flow		
1.							
2.							
3.							
4.							
5.							
RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor F _t	Gravity Factor F _g	Super Compress. Factor F _{sp}	Rate of Flow Q, Mcfd
1.	15.61	30.16	827	.9786	1.223	1.075	606
2.	15.61	85.31	827	.9822	1.223	1.078	1724
3.	15.61	117.87	827	.9850	1.223	1.080	2394
4.	15.61	161.60	837	.9813	1.223	1.078	3264
5.							
42,667							
NO.	R _f	Temp. °R	T _f	Z	Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.		
1.	1.24	543	1.45	.865	A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.		
2.	1.24	539	1.44	.861	Specific Gravity Separator Gas _____		
3.	1.24	536	1.43	.857	Specific Gravity Flowing Fluid _____		
4.	1.25	540	1.44	.860	Critical Pressure _____ P.S.I.A.		
5.					Critical Temperature _____ °R		
P _c 2708.2 P _w 7334							
NO.	P _f ²	P _w ²	R _f ²	P _c ² - R _f ²	(1) $\frac{P_f^2}{R_f^2 - R_w^2} = 1.7714$		
1.	2596.2	6740	594		(2) $\left[\frac{R_f^2}{R_f^2 - R_w^2} \right]^n = 1.4831$		
2.	2286.2	5227	2107				
3.	2072.2	4294	3040				
4.	1787.2	3194	4140				
5.							
Absolute Open Flow 4841 Mcfd @ 15.025 Angle of Slope 55.3° Slope, n 0.692							
Remarks: BOTTOM HOLE PRESSURES MEASURED WITH AMERADA GAUGE @ 10,750 FEET							
Approved By Commission		Conducted By M.C.T.		Calculated By R.L.W.		Checked By J.W.W.	