

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 3-3-78		MAR 14 1978	
Company Southland Royalty Company ✓				Connection El Paso Natural Gas Company				O. C. C. ARTESIA, OFFICE	
Pool Turkey Track, North (Morrow)				Formation Morrow				Unit J	
Completion Date 1-6-78		Total Depth 11,307		Plug Back TD 11,246		Elevation		Farm or Lease Name Palmillo-State Comm.	
Csg. Size 4 1/2	Wt. d	Set At 11,307	Perforations From 10,972 To 11,082		Well No. 2				
Tub. Size 2 3/8	Wt. 4.7	d 1.995	Set At 10,915	Perforations From To		Unit J	Soc. 32	Twp. 18	Rge. 29
Type Well - Single - Provenhead - G.C. or G.O. Multiple Single						Packer Set At 10,845		County Eddy	
Producing Thru Tbg.		Reservoir Temp. °F 183 @ 10,915		Mean Annual Temp. °F 60		Boro. Press. - P _g 13.2		State New Mexico	
L 10,915	H 10,915	G _g .617	% CO ₂	% N ₂	% H ₂ S	Prover	Meter Run 4	Flg.	

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
SI							3365				72 hrs.
1.	4	x	1.500	573	3.4	64	3122				1 hr.
2.	4	x	1.500	609	10.2	66	2922				1 hr.
3.	4	x	1.500	632	17.2	64	2749				1 hr.
4.	4	x	1.500	669	29.7	68	2495				1 hr.
5.											

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor Ft.	Gravity Factor F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mhd
1	10.84	44.64	586.2	.9962	1.273	1.052	646
2	10.84	79.66	622.2	.9943	1.273	1.056	1154
3	10.84	105.34	645.2	.9962	1.273	1.058	1532
4	10.84	142.34	682.2	.9924	1.273	1.060	2066
5.							

NO.	P _g	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	90.0 Mcf/bbl.
1	.87	524	1.45	.903	A.P.L. Gravity of Liquid Hydrocarbons	52 @ 60 Deg.
2.	.93	526	1.45	.897	Specific Gravity Separator Gas	.617
3.	.96	524	1.45	.894	Specific Gravity Flowing Fluid	X X X X X
4.	1.02	528	1.46	.890	Critical Pressure	671 P.S.I.A.
5					Critical Temperature	362 R

P _c 3378.2	P _w 11412.2	(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 2.293$	(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 2.293$
NO.	P _w	P _w ²	P _c ² - P _w ²
1	3138.6	9850.8	1561.4
2	2944.5	8670.1	2742.1
3	2777.7	7715.6	3696.6
4	2536.9	6435.9	4976.3
5			

Absolute Open Flow	4,738 Mcf @ 15.025	Angle of Slope	45	Slope, n	1.00
Remarks: Well made 2.5 Bbls. of condensate during test.					
Approved By Commission:		Conducted By:		Calculated By:	
				Checked By:	