

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

Form C-122
Revised 9-1-65

122 file
RECEIVED

Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 10-5-76		OCT 18 1976	
Company BELCO PETROLEUM CORP. ✓				Connection LLANO GAS CO.			
Pool SOUTH CARLSBAD				Formation MORROW		Unit D.C.C. ARTESIA, OFFICE	
Completion Date 9-20-76		Total Depth 11,527'		Plug Back TD		Elevation 3099 GR.	
Csg. Size 5 1/2"		Wt. 17#		Set At 4.982" 11,527'		Perforations: From 11,187' To 11,452'	
Tbg. Size 2 7/8" 2 3/8"		Wt. 6.5# 4.7#		Set At 2.441" 8513' 1.995" 10993'		Perforations: From OPEN ENDED	
Type Well - Single - Branched - G.G. or G.O. Multiple SINGLE				Packer Set At 10,957'		County EDDY	
Producing Thru TUBING		Reservoir Temp. °F 191 @ 11,320'		Mean Annual Temp. °F 60		Baro. Press. - P _a 13.2	
L 11320		H 11320		Gg 0.6258		% CO ₂ 0.98	
				% N ₂ 0.32		% H ₂ S -----	
				Prover -----		Meter Run 3"	
						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
SI							3146.0		PACKER	CHOKE	28 HRS.
1.	3"	x	2.00"	580.0	10.0	66	2790.0	70		10/64	60 MIN
2.	3"	x	2.00"	600.0	20.0	64	2549.0	70		13/64	60 MIN
3.	3"	x	2.00"	610.0	32.0	61	2340.0	71		16/64	60 MIN
4.	3"	x	2.00"	620.0	50.0	56	1980.0	70		19/64	60 MIN
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	21.32	77.02	593.2	0.9943	1.264	1.056	2179
2	21.32	110.74	613.2	0.9962	1.264	1.058	3145
3	21.32	141.22	623.2	0.9990	1.264	1.060	4030
4	21.32	177.93	633.2	1.004	1.264	1.063	5117
5							

NO.	P _f	Temp. °R	T _f	Z	Gas Liquid Hydrocarbon Ratio	A.P.I. Gravity of Liquid Hydrocarbons	Specific Gravity Separator Gas	Specific Gravity Flowing Fluid	Critical Pressure	Critical Temperature
1	0.88	526	1.43	.896	114.197 Mcf/bbl.	63 @ 60°	0.6258	X X X X X	674	367
2	0.91	524	1.43	.893				X X X X X		
3	0.92	521	1.42	.890						
4	0.94	516	1.41	.885						
5										

P _f 4067.2 P _f ² 16542				(1) $\frac{P_f^2}{P_f^2 - P_s^2} = 1.907$		(2) $\left[\frac{P_f^2}{P_f^2 - P_s^2} \right]^n = 1.687$	
NO.	P _f ²	P _s	P _s ²	P _f ² - P _s ²			
1		3667.2	13448	3094			
2		3404.2	11589	4953			
3		3184.2	10139	6403			
4		2805.2	7869	8673			
5							

Absolute Open Flow 8632 Mcfd @ 15.025				Angle of Slope θ 51°		Slope, n 0.840	
Remarks: BOTTOM HOLE PRESSURES MEASURED WITH AMERADA GAUGE @ 11,320 FEET GOOD POINT ALIGNMENT, GOOD TEST							
Approved by Commission:		Conducted By: G.J.P.		Calculated By: R.L.W.		Checked By: J.W.W.	