

NEW MEXICO OIL CONSERVATION COM. SION
MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Copy to SF
C-122
Form C-122
Revised 9-1-65

Type Test ☒ Initial ☐ Annual ☐ Special		RECEIVED 2-27-76		MAR 16 1976	
Company BELCO PETROLEUM CO. ✓		Connection flano ATR		MAR 19 1976	
Pool South Carlsbad Morrow		Formation Morrow		Unit HOUSTON OFFICE	
Completion Date 7-8-75		Total Depth 11726'		Plug Back TD 11638' 3136.5'	
Csg. Size 5 1/2"		Wt. 17#		d 4.892	
Set At 11726		Perforations: From 11356' To 11364'		Well No. 1	
Tbg. Size 2 7/8"		Wt. 6.5#		d 2.259	
Set At 11297'		Perforations: From 11393' To 11396'		Unit Sec. Twp. Rge. F 20 22-S 27-E	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single				Packer Set At 11297'	
Producing Thru Tubing		Reservoir Temp. °F 192° @ 11000'		Mean Annual Temp. °F 13.2	
Baro. Press. - P _a 11297'		State New Mexico		County Eddy	
L 11297'		H 11297'		Gg .572	
% CO ₂ .619		% N ₂ .270		% H ₂ S -	
Prover 4"		Meter Run Flange		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							3581		PKR	
1.	4.0	x	2.0	350	3.	72	3530	64		1 Hour
2.	4.0	x	2.0	360	6.	72	3500	70		1 Hour
3.	4.0	x	2.0	360	13.	73	3470	72		1 Hour
4.	4.0	x	2.0	380	26.	72	3420	70		1 Hour
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 _{pv}	Rate of Flow Q, Mcfd
1	19.81	33.0	363.2	.9887	1.322	1.025	876
2	19.81	47.3	373.2	.9887	1.322	1.026	1257
3	19.81	69.7	373.2	.9877	1.322	1.025	1848
4	19.81	101.1	393.2	.9887	1.322	1.027	2688
5							

NO.	P _t	Temp. °R	T _r	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.	.54	532	1.55	.951	Dry		.572	X X X X X X X X	675	342
2.	.55	532	1.55	.950			X X X X X			
3.	.55	533	1.56	.951						
4.	.58	532	1.55	.947						
5.										

NO.	P _t ²	P _w	P _w ²	P _c ² - P _w ²
1		4465	19936.	2690
2		4429	19616.	5890
3		4408	19430.	7750
4		4376	19149.	10560
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.91$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 5134$

(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.91$

Absolute Open Flow	5134	Mcfd @ 15.025	Angle of Slope	45°	Slope, n	1
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Remarks: P_c & P_w - Figures were taken from Amerada Gauge RPG-3 Ser.No. 18149

Approved By Commission:	Conducted By: Larry Davis	Calculated By: Larry Davis	Checked By: C.W. Byrd
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