

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

copy to 12246
Form C-122
Revised 1-1-65
USGS

RECEIVED

Type Test ☒ Initial ☐ Annual ☐ Special					Test Date 9-20-76		OCT 15 1976	
Company Maralo, Inc. ✓				Connection None				
Well Wildcat <i>Morrow</i>				Formation Morrow			Unit O. C. C. ARTESIA, OFFICE	
Completion Date 9-15-76		Total Depth 9387 9435		Plug Back TD 9387 9438		Elevation 3656 Gr.		Firm or Lease Name Butler Springs Unit
Case Size 5 1/2	Wt. 17#	d 	Set At 9434	Perforations: From 9293 To 9355			Well No. 1	
Tub. Size 2 3/8"EUE	Wt. 4.7#	d 1.995	Set At 9226	Perforations: From To			Unit Sec. Twp. Rge. P 2 15S 28E	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single					Packer Set At 9193		County Chaves	
Producing Thru Tubing		Reservoir Temp. °F 150° @ 9324		Mean Annual Temp. °F 60°		Baro. Press. - P _a 13.2		State New Mexico
L 9324	H 9324	G _g .733	% CO ₂ 0	% N ₂ 0	% H ₂ S 0	Prover	Meter Run 2" OWT	

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							1498	68°			
1.	2.0		1.25		6"	64°	399	69°			1 Hr.
2.	2.0		1.25		6"	66°	211	69°			1 Hr.
3.	2.0		1.25		6"	67°	133	69°			1 Hr.
4.	2.0		1.25		6"	69°	99	71°			1 Hr.
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.	407			.9962	1.168	*	474
2.	407			.9943	1.168	*	473
3.	407			.9933	1.168	*	472
4.	407			.9915	1.168	*	471
5.							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	None Produced	Mcf/bbl.
1.					A.P.I. Gravity of Liquid Hydrocarbons		Deg.
2.					Specific Gravity Separator Gas	.733	X X X X X X X X
3.					Specific Gravity Flowing Fluid	X X X X X	
4.					Critical Pressure	668	P.S.I.A. 668 P.S.I.A.
5.					Critical Temperature	401	R 401 R

P _r 1511.2	P _c ² 2284		
NO.	P _r ²	P _w	P _w ²
1		593.2	352
2		400.4	160
3		393.7	155
4		313.9	98
5			

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.075$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 509$

(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.075$

POSTED ID-2 10-22-76

Absolute Open Flow	509	Mcf/d @ 15.025	Angle of Slope @	45°	Slope, n	1.00
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Remarks: *Insufficient to make any difference

Approved By Commission:	Conducted By: WEST TEXAS CONSULTING SERVICE, INC.	Calculated By: H. L. Hagler	Checked By:
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