

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

Form C-122
Revised 9-1-65

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Type Test ☒ Initial ☐ Annual ☐ Special					Test Date 3-26-74		APR 9 1974	
Company Champlin Petroleum Company				Connection None			O. C. C.	
Pool <i>Wildcat</i> Undesignated				Formation Morrow			ARTESIA, OFFICE C	
Completion Date 3-22-74		Total Depth 12,100		Plug Back TD 11,910		Elevation 3095 G. L.		Farm or Lease Name Pecos-Federal
Csg. Size 7" 29# 5" Liner* 23.0	Wt. 29# 23.0	d 6.184	Set At 11,397	Perforations: From 11,757 To 11,772		Well No. 1		
Tbg. Size 2-7/8"	Wt. 6.50	d 2.441	Set At 11,204	Perforations: From To		Unit Sec. Twp. Rge. C 1 - 22S - 27E		
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Dual Gas				Packer Set At 10,415 PBR @ 11,193		County Eddy		
Producing Thru *Tbg-Csg Annulus		Reservoir Temp. *F 185 @ 11,765		Mean Annual Temp. *F 60 (E)		Baro. Press. - P _a 13.2		State New Mexico
L 11,765	H 11,765	G _g 0.596	% CO ₂	% N ₂	% H ₂ S	Prover	Meter Run 4"	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									3883	60	84 hr.
1.	4" x 2.25"			892	5.0"	93			3541	74	1
2.	4" x 2.25"			904	16.0	84			3081	73	1
3.	4" x 2.25"			905	28.0	79			2621	73	1
4.	4" x 2.25"			910	41.0	79			2165	74	1
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. Compres. Factor, F _{pv}	Rate of Flow Q, Mcfd
1	25.64	67.28	905.2	0.9697	1.295	1.063	2303
2	25.64	121.14	917.2	0.9777	1.295	1.068	4200
3	25.64	160.34	918.2	0.9822	1.295	1.070	5595
4	25.64	194.55	923.2	0.9822	1.295	1.071	6795
5.							

NO.	P _t	Temp. *R	T _r	Z	Gas Liquid Hydrocarbon Ratio _____ Dry Gas _____ Mcf/bbl.
1.					A.P.I. Gravity of Liquid Hydrocarbons _____ Dry _____ Deg.
2.					Specific Gravity Separator Gas _____ 0.596 _____ X X X X X X X X
3.					Specific Gravity Flowing Fluid _____ X X X X X _____ Dry Gas _____
4.					Critical Pressure _____ 671 _____ P.S.I.A. _____ P.S.I.A.
5.					Critical Temperature _____ 357 _____ R _____ R

P _c 3896.2	P _c ² 15180.4	
NO.	P _t ²	** P _w 31
1	3554.9	12637.3
2	3096.2	9586.5
3	2637.8	6958.0
4	2184.3	4771.2
5		

$$(1) \frac{P_c^2}{P_c^2 - P_w^2} = 1.846$$

$$AOF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 8918$$

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U.S. GEOLOGICAL SURVEY
ARTESIA, NEW MEXICO

Absolute Open Flow _____ 8918 _____ Mcfd @ 15.025	Angle of Slope @ _____	Slope, n _____ 0.761
Remarks: *Combination flow string 7"29# csg. x 2-7/8" 6.5# tbg. annulus 0-10415 2-7/8" 6.5# tbg. 10415-11204, 5" 23# csg. 11204-11765'		
**P _w calculated by time-share program using stepwise procedure.		
Approved by Commission:	Conducted By: T. J. Ragan	Checked By: W. B. Johnston