

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

RECEIVED
Form O-222
Revised 9-1-65

NOV 19 1973

Type Test ☒ Initial ☐ Annual ☐ Special						Test Date 11-5-73		O.C.C. ARTESIA OFFICE	
Company Cities Service Oil Co.				Connection None					
Pool Undesignated				Formation Cherokee				Unit	
Completion Date 11-1-73		Total Depth 11315'		Plug Back TD 10589'		Elevation 3280.5 G.L.		Farm or Lease Name Government "S"	
Csg. Size 5-1/2"	Wt. 17&20#	d	Set At 10589'	Perforations: From 10463' To 10470'		Well No. 1			
Tbg. Size 2-7/8"	Wt. 6.5#	d	Set At 10330'	Perforations: From To		Unit Sec. Twp. Rge. H 3 - 20S - 28E			
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single						Packer Set At 10330'		County Eddy	
Producing Thru Tubing		Reservoir Temp. °F 170 @ 10470'		Mean Annual Temp. °F 60		Baro. Press. - P _g 13.25		State New Mexico	
L 10330	H 10330	Gg .659	% CO ₂ .35	% N ₂ 1.24	% H ₂ S --	Prover	Meter Run 6"	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							3715	69	Pkr		12 Hr
1.	6"	x	1.5"	530	4	70	2865	69	Pkr		1 Hr
2.	6"	x	1.5"	540	10	92	2379	70	Pkr		1 Hr
3.	6"	x	1.5"	540	14	87	1777	72	Pkr		1 Hr
4.	6"	x	1.5"	540	22	86	982	74	Pkr		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	10.70	46.62	543.25	.9905	1.232	1.053	641
2	10.70	74.38	553.25	.9706	1.232	1.047	996
3	10.70	88.05	553.25	.9750	1.232	1.048	1185
4	10.70	10.32	553.25	.9759	1.232	1.049	1486
5							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio _____ 2040000
1.	.79	530	1.410	.902	A.P.I. Gravity of Liquid Hydrocarbons _____ 53
2.	.81	552	1.468	.912	Specific Gravity Separator Gas _____ .659
3.	.81	547	1.455	.911	Specific Gravity Flowing Fluid _____ X X X X X
4.	.81	546	1.452	.909	Critical Pressure _____ 670.4 P.S.I.A.
5.					Critical Temperature _____ 376.0 R

NO.	P _r ²	P _w	P _w ²	P _c ² - P _w ²	$(1) \frac{P_c^2}{P_c^2 - P_w^2} = 1.077$ $(2) \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.071$ $AOF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1,592$
1		2895	8381	5420	
2		2403	5774	8027	
3		1783	3179	10622	
4		993	986	12815	
5					

Absolute Open Flow _____ 1592	Mcfd @ 15.025	Angle of Slope @ _____ 42.8	Slope, n _____ 927
Remarks: _____			
Approved By Commission: _____			
Conducted By: _____		Calculated By: _____	
		Checked By: _____	