

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

Form C-122
Revised 9-1-65
C-122

RECEIVED

Type Test ☐ Initial ☐ Annual ☒ Special				Test Date 2/27/74		MAR - 7 1974	
Company Phillips Petroleum Co.				Connection None El Paso Natural Gas Co.		O. C. C. ARTESIA, BEE	
Pool Cabin Lake Morrow - Gas				Formation Morrow		Unit L	
Completion Date 10-5-73		Total Depth 13800		Plug Back TD 13700		Elevation GL 3206	
Farm or Lease Name James - C				Well No. 1			
Csg. Size 5 1/2	Wt. 20	d 13792	Set At 13792	Perforations: From 13124 To 13569		Unit Sec. Twp. Rge. L 35 21 30	
Tub. Size 2 7/8	Wt. 6.5	d 2.441	Set At 13030	Perforations: From open To ended			
Type Well - Single - Gradienthead - G.G. or G.O. Multiple Single				Packer Set At 13030		County Eddy	
Producing Thru Tbg.		Reservoir Temp. °F 204 @ 13030		Mean Annual Temp. °F 13.2		State New Mexico	
L 13030	H 13030	Gg 587	% CO ₂	% N ₂	% H ₂ S	Prover 4"	Meter Run Flg.

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	4 x 1.5						3429	52			24hrs
1.	4 x 1.5			278	2.3	59	3202	65			1 hr
2.	4 x 1.5			289	4.0	62	3080	69			1 hr
3.	4 x 1.5			300	9.0	60	2862	70			1 hr
4.	4 x 1.5			312	16.0	61	2605	72			1 hr

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	10.84	25.88	291.2	1.001	1.305	1.025	376
2	10.84	34.77	302.2	.9981	1.305	1.026	504
3	10.84	53.09	313.2	1.000	1.305	1.027	771
4	10.84	72.13	325.2	.9990	1.305	1.034	1,054

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.
1.	.43	519	1.47	.952	A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.
2.	.45	522	1.47	.950	Specific Gravity Separator Gas _____ X X X X X X X X
3.	.47	520	1.47	.948	Specific Gravity Flowing Fluid _____ X X X X X
4.	.48	521	1.47	.936	Critical Pressure _____ 672 P.S.I.A. _____ P.S.I.A.
5.					Critical Temperature _____ 354 R _____ R

$P_c = 3442.2$ $P_w^2 = 11,848.7$

NO.	P_c^2	P_w^2	$P_c^2 - P_w^2$
1	3216.5	10,345.9	1502.8
2	3094.7	9,577.2	2271.5
3	2877.2	8,278.3	3570.4
4	2626.0	6,895.9	4952.8
5			

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 2.392$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 2.284$

ACF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 2.407$

Absolute Open Flow	2,407	Mcf/d @ 15.025	Angle of Slope	46.5°	Slope, n	.947
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Remarks: No fluid made during test.

Approved By Commission:	Conducted By: Rick Pagan	Calculated By: Rick Pagan	Checked By:
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