

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

Form C-122
Revised 9-1-65

RECEIVED

Type Test ☒ Initial ☐ Annual ☐ Special					Test Date 1-21-75		JAN 31 1975	
Company Morris R. Antweil				Connection Pending				
Pool South Carlsbad				Formation Morrow			Unit O.C.C. ARTESIA, OFFICE	
Completion Date 1-20-75		Total Depth 11,750		Plug Back TD 11,693'		Elevation 3117 G.R.		Form or Lease Name Bear
Csg. Size 7"	Wt. Various	d 11,749'	Set At 11,749'	Perforations: From 11,195' To 11,672'			Well No. 1	
Tub. Size 2-3/8"	Wt. 4.70	d 1.995	Set At 11,118	Perforations: From - To -			Unit Sec. Twp. Rge. 17, 22-S-27-E	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single					Packer Set At 11,118'		County Eddy	
Producing Thru Tubing		Reservoir Temp. °F 180 @ 11,118		Mean Annual Temp. °F 60		Baro. Press. - P _a 13.2		State New Mexico
L 11,118'	H 11,118'	Gg .586	% CO ₂ .915	% N ₂ .308	% H ₂ S Nil	Prover	Meter Run 4.026	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							3675	60	Packer		Days
1.	4.026 x 1.000			758	14	101	3233	70			1 hr.
2.	4.026 x 1.000			775	24	88	2990	72			1 hr.
3.	4.026 x 1.250			780	30	90	2212	74			1 hr.
4.	4.026 x 1.250			770	40	93	1439	74			1 hr.
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 Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1	4.753	103.9077	771.2	.9628	1.306	1.046	650
2	4.753	137.5384	788.2	.9741	1.306	1.052	875
3	7.469	154.2595	793.2	.9723	1.306	1.052	1539
4	7.469	176.9972	783.2	.9697	1.306	1.050	1758
5.							

NO.	P _r	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.	1.14	561	1.60	.914	2472	48.2	.586	.587	675	350
2.	1.17	548	1.57	.904						
3.	1.18	550	1.57	.904						
4.	1.16	553	1.58	.907						
5.										

P _c 3688.2		P _c ² 13602.8		$(1) \frac{P_c^2}{P_c^2 - P_w^2} = 1.194$		$(2) \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.146$	
NO.	P _r ²	P _w	P _w ²	P _c ² - P _w ²			
1		3249.8	10561.2	3041.6			
2		3013.8	9083.0	4519.8			
3		2240.9	5021.6	8581.2			
4		1485.4	2206.4	11396.4			
5							

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 2,015$

Absolute Open Flow 2,015 Mcfd @ 15.025

Angle of Slope θ 52.7

Slope, n .767

Remarks: _____

Approved By Commission:	Conducted By: <i>Cone & Kerley, Inc.</i>	Calculated By: <i>Bill Kerley</i>	Checked By: <i>Bill Kerley</i>
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