

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

Form C-122
Revised 9-1-65

RECEIVED

MAY 6 1971

Type Test ☒ Initial ☐ Annual ☐ Special						Test Date 4-20-71		MAY 6 1971	
Company Morris R. Antweil				Connection Pending				O. C. C. ARTESIA, OFFICE	
Pool South Carlsbad				Formation Strawn				Unit	
Completion Date 4-1-71		Total Depth 11,818		Plug Back TD 11,759		Elevation 3206 K.B.		Farm or Lease Name Little Jewell	
Csg. Size 7" 4 1/2"	Wt. 23 11.60	d 6.366 4.000	Set At 10703 *	Perforations: From 10,362 To 10,440			Well No. 1-U.T.		
Tbg. Size 2-3/8	Wt. 4.60	d 1.995	Set At 10,452	Perforations: From Open To Ended			Unit Sec. Twp. Rge. F 31 22-S 27-E		
Type Well - Single - Bradenhead - G.G. or G.O. Multiple G. G. Multiple (Dual)				Packer Set At 11,390		County Eddy			
Producing Thru Tubing		Reservoir Temp. *F 173 @ 10401		Mean Annual Temp. *F		Baro. Press. - P _a 13.2		State New Mexico	
L 10452	H 10452	Gg .643	% CO ₂ .38	% N ₂ .75	% H ₂ S Nil	Prover		Meter Run 3.068"	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							4006	60	4025	60	S.I. 96Hr.
1.	3.068" X 1.500"			740	10	99	3940	72	4011	72	.5
2.	3.068" X 1.500"			815	36	60	3829	72	3959	72	.5
3.	3.068" X 2.000"			895	24	45	3670	72	3867	72	.5
4.	3.068" X 2.000"			900	40	41	3404	72	3762	72	1.0
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	11.13	86.79	753.2	.9645	1.247	1.059	1230
2	11.13	172.67	828.2	1.0000	1.247	1.087	2605
3	21.32	147.64	908.2	1.015	1.247	1.112	4430
4	21.32	191.12	913.2	1.019	1.247	1.112	5758
5							

NO.	P _t	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	1.12	559	1.50	.891	24.3 Mcf/bbl.	58.0 Deg.	.643	X X X X X X X X	670 P.S.I.A.	372 R
2	1.24	520	1.40	.846				X X X X X		
3	1.36	505	1.36	.809						
4	1.36	501	1.35	.809						
5										

NO.	P _c	P _w	P _c ²	P _w ²	P _c ² - P _w ²
1	4038.2	16307			
1		4024.2	16194	113	
2		3979.2	15834	473	
3		3880.2	15056	1251	
4		3775.2	14252	2055	
5					

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 7.935$

(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 3.079$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 17728$

Absolute Open Flow 17,728 Mcfd @ 15.025		Angle of Slope θ	Slope, n .543
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Remarks: * 4-1/2" Liner set at 10541 to 11818

Approved By Commission:	Conducted By: Bill Kerley	Calculated By: Bill Kerley	Checked By: Bill Kerley
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