

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 10-14-75		OCT 23 1975	
Company Williamson & Underwood				Connection None		O. C. C.	
Pool Willcox <i>Willcox</i>				Formation Morrow		Unit ARTESIA, OFFICE	
Completion Date 10-6-75		Total Depth 11,672		Plug Back TD 11,670		Elevation 3280.7GL	
Farm or Lease Name Williamson Federal							
Csg. Size 5-1/2"	Wt. 17 & 20	d	Set At 11,670	Perforations: From 11,460 To 11,616		Well No. 2	
Tbg. Size 2-3/8"	Wt. 4.90	d	Set At 11,425	Perforations: From Open To End		Unit Sec. Twp. Rge. J 9 20-S 29-E	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single				Packer Set At 11,362		County Eddy	
Producing Thru Tubing		Reservoir Temp. °F 184 @ 11,538		Mean Annual Temp. °F 70		Baro. Press. - P _a 13.2	
State New Mexico							
L 11,616	H 11,460	G _g .600	% CO ₂	% N ₂	% H ₂ S	Prover	Meter Run Taps

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.	
SI							3230		Pkr	
1.	2"		1/8			78	3032			
2.	Choke		5/32			79	2905			
3.	Nippler		3/16			80	2742		"	
4.	6"		7/32				2315			
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	.2618	-	3045.2	.9831	1.291	1.119	1132
2	.4173		2918.2	.9822	1.291	1.117	1725
3	.6101		2755.2	.9813	1.291	1.120	2385
4	.8419		2328.2	.9813	1.291	1.127	2799
5							

NO.	P _t	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	None	Mcf/bbl.
1.					A.P.I. Gravity of Liquid Hydrocarbons		Deg.
2.					Specific Gravity Separator Gas		XXXXXXX
3.					Specific Gravity Flowing Fluid	XXXXX	
4.					Critical Pressure	P.S.I.A.	P.S.I.A.
5.					Critical Temperature	R	R

P _c 3243.2	P _c ² 10,518		
NO.	P _t ²	P _w	P _w ²
1			
2		3045.2	9273
3		2918.2	8516
4		2755.2	7591
5		2328.2	5420

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 3.593$		(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 4.794$	
$AOF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 7192$			

Absolute Open Flow	7192	Mcf/d @ 15.025	Angle of Slope @	49°	Slope, n	.863
Remarks:						

Approved By Commission:	Conducted By: C. Allen Dorsey	Calculated By: C. Allen Dorsey	Checked By:
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