

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

File ✓
Form C-122
Revised 9-1-65
C-122 *File*

RECEIVED

Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 9-2-80		SEP 25 1980	
Company Hillin Prod. Co.				Connection El Paso			
Pool Winchester <i>Wolfcamp</i>				Formation Wolfcamp		Unit ARTESIA, OFFICE	
Completion Date 8-12-80		Total Depth 11,211		Plug Back TD 11,164		Elevation 3298 GL	
Csg. Size 5 1/2		Set At 11,211		Perforations: From 8997 To 9046		Well No. 4	
Trq. Size 2 3/8		Set At 11,028		Perforations: From To		Unit Sec. Twp. Rge. 0 34 19S 28E	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single				Packer Set At 10,956		County Eddy	
Producing Thru Tubing		Reservoir Temp. °F 191 @ 8972		Mean Annual Temp. °F 68		Baro. Press. - P _a 13.2	
L 8972		H 8972		Gg .57		% CO ₂ .13	
				% N ₂ 1.02		% H ₂ S None	
				Prover		Meter Run 4.026	
						Type 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
1.	4.026		1.50	542	4.0	82	2371	72			60 Min.
2.	4.026		1.50	549	6.25	77	2335	73			60 Min.
3.	4.026		1.50	549	7.84	80	2236	73			60 Min.
4.	4.026		1.50	549	23.04	76	1991	74			60 Min.
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.	10.84	47.13	555.2	.9795	1.213	1.057	642
2.	10.84	59.28	562.2	.9840	1.213	1.058	811
3.	10.84	66.39	562.2	.9813	1.213	1.058	906
4.	10.84	113.81	562.2	.9850	1.213	1.058	1560
5.							

NO.	P _t	Temp. °R	T _t	Z	Gas Liquid Hydrocarbon Ratio	9588 Mcf/Sbl.
1.	.83	542	1.40	895	A.P.I. Gravity of Liquid Hydrocarbons	57 Deg.
2.	.84	537	1.38	894	Specific Gravity Separator Gas	.680
3.	.84	540	1.39	894	Specific Gravity Flowing Fluid	X X X X X
4.					Critical Pressure	669 P.S.I.A.
5.					Critical Temperature	388 °R

NO.	P _t ²	P _w	P _w ²	P _t ² - P _w ²	$(1) \frac{P_t^2}{P_t^2 - P_w^2} = 6.673$ $(2) \left[\frac{P_t^2}{P_t^2 - P_w^2} \right]^n = 3.4594$ $AOF = Q \left[\frac{P_t^2}{P_t^2 - P_w^2} \right]^n = 5397$
1.		3608.2	13019	334	
2.		3554.2	12632	721	
3.		3524.2	12420	933	
4.		3369.2	11352	2001	
5.					

Absolute Open Flow		5397	Mcf @ 15.025	Angle of Slope θ	57	Slope, n	.65
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Remarks:		PW Substituted for PT - Measured with Amerada Instrument No. 37209	
		0-7000 Element	

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
	Spruell	Spruell	Richburg