

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

Form C-122
Revised 9-1-65

RECEIVED

JUL 15 1974

Type Test ☒ Initial ☐ Annual ☐ Special						Test Date 7-2-74			
Company Monsanto Company				Connection Transwestern				O. C. C. ARTESIA, OFFICE	
Pool Bradenhead Wilderspin				Formation Wolfcamp				Unit F	
Completion Date 7-2-74 3-13-74		Total Depth 11,700		Plug Back TD 11,638		Elevation 3285 DF		Farm or Lease Name Wilderspin	
Cas. Size 7"	Wt. 26#	d 6.276	Set At 11,700	Perforations: From 9660 To 9710		Well No. 1-01			
Tub. Size 2 1/16	Wt. 3.40	d 1.750	Set At 9500	Perforations: From To		Unit Sec. Twp. Rge. F 11 21-S 27-E			
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Triple						Packer Set At 9500		County Eddy	
Producing Thru Tubing		Reservoir Temp. °F 150 @ 9685		Mean Annual Temp. °F 60		Baro. Press. - P _a 13.2		State New Mexico	
L 9685	H 9685	Gg .704	% CO ₂	% N ₂	% H ₂ S	Prover	Meter Run X	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.		Temp. °F
SI							2240	78			
1.	4.0		.875	770	20	85	1752	79			1 Hr
2.	4.0		.875	770	31	94	1567	84			1 Hr
3.	4.0		.875	770	43	96	1441	86			1 Hr
4.	4.0		.875	770	65	97	1266	90			1 Hr
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.	3.630	125.15	783.2	.9768	1.1918	1.085	574
2.	3.630	155.81	783.2	.9688	1.1918	1.080	705
3.	3.630	183.51	783.2	.9671	1.1918	1.080	829
4.	3.630	225.62	783.2	.9662	1.1918	1.078	1017
5.							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	Mcf/bbl.
1.	1.17	545	1.39	.850	7839	
2.	1.17	554	1.41	.858	54.1	Deq.
3.	1.17	556	1.41	.858	.704	XXXXXXX
4.	1.17	557	1.42	.861	668	655 P.S.I.A.
5.					392	507 R

P _c 2253.2	P _c ² 5077		
NO.	P _r ²	P _w ²	P _c ² - P _w ²
1.	1573.7	2477	2600
2.	1585.8	2515	2562
3.	1477.6	2183	2894
4.	1287.7	1658	3419
5.			

$$(1) \frac{P_c^2}{P_c^2 - P_w^2} = \frac{5077}{3419}$$

$$(2) \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = \frac{1.48494}{}$$

$$AOF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = \underline{1510}$$

Absolute Open Flow	1510	Mcf/d @ 15.025	Angle of Slope @	45°	Slope, n	1.00
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Remarks: **Well Shut-In 71.66 Hours Prior to Start of This Test**

Approved by Commission:	Conducted By: W T Hagler	Calculated By: H L Hagler	Checked By:
	WEST TEXAS CONSULTING SERVICE, INC.		