

MULTIPOINT ONE POINT BACK PRESSURE TEST FOR GAS WELL

Revised 9-1-65

C-122

RECEIVED

Type Test: ☒ Initial ☐ Annual ☐ Special				Test Date: 2-8-75		JUN 3 1975	
Company: Great Western Drilling Co.				Connection: To Air			
Pool: n, Burton Flat <i>Wolfcamp</i>				Formation: Wolfcamp		Unit: U. C. C. ARTESIA, OFFICE	
Completion Date: 2-8-75		Total Depth: 11,550'		Plug Back TD: 11,087'		Elevation: 3223 Gr.	
Form or Lease Name: Burton State Com		Well No. 1		Perforations: From 9056' To 9084'		Unit Soc. Twp. R. Sec. G 28 20S 28E	
Type well - Single - Broadhead - G.C. or G.O. Multiple		Packer Set At: 9027'		County: Eddy		State: New Mexico	
Producing thru Tubing: 9027		Reservoir Temp. °F: 162 @ 9100'		Mean Annual Temp. °F: 60		Baro. Press. - P _a : 13.2	
Prover: 9027		G _g : 0.7494		% CO ₂ : 0.01		% H ₂ S: ---	
Meter Run: 4"		Taps: Flange		Prover: ---		Taps: Flange	

FLOW DATA						TUBING DATA		CASING DATA		Duration of Flow	
NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. hw	Temp. °F	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.		Temp. °F
SI							2070.0			Choke	205 min
1.	4" X 0.75"			175.0	2.0	70	248.0	67		32/64"	30 min
2.	4" X 0.75"			190.0	40.0	60	326.0	67		28/64"	30 min
3.	4" X 0.75"			190.0	26.0	63	257.0	67		24/64"	30 min
4.	4" X 0.75"			180.0	10.0	65	259.0	66		20/64"	30 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	2.661	19.40	188.2	.9905	1.155	1.023	60.4
2	2.661	90.16	203.2	1.0000	1.155	1.028	284.9
3	2.661	72.69	203.2	.9971	1.155	1.027	228.8
4	2.661	43.95	193.2	.9952	1.155	1.024	137.7
5							

NO.	F _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	.025	530	1.31	.956	2.393	47.4	0.7494	XXXXXX	666	405
2	.031	520	1.28	.947				XXXXXX		
3	.031	523	1.29	.948						
4	.029	525	1.30	.953						
5										

NO.	F _r	F _w	P _r ²	P _w ² - P _r ²
1	58.23	1512.2	2287	16648
2	115.06	1518.1	2305	16628
3	73.01	1255.2	1575	17358
4	74.09	1543.2	2397	16536
5				

(1) $\frac{P_r^2}{P_w^2 - P_r^2} = 1.1386$

ASIF = $\left[\frac{P_r^2}{P_w^2 - P_r^2} \right]^n = 324$

(2) $\left[\frac{P_r^2}{P_w^2 - P_r^2} \right]^n = 1.1386$

Absolute Open Flow: 324 Mcfd @ 15.025		Angle of Slope: 45.0°		Slope, n: 1000 limit	
Remarks: Bottom hole pressure measured with Amerada Gauge @ 9100 feet					
No point alignment-limited to 1000 slope drawn through high rate of flow					
Approved by Commission:		Conducted By: G. Parker		Checked By: J.W.	