

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

Form C-122
 Revised 9-1-65

RECEIVED

Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 6/16/80		JUL 30 1980	
Company Yates Petroleum Corporation				Connection Transwestern Pipeline Co.		O. C. D.	
Pool Wildcat Strawn				Formation Strawn		Unit ARTESIA, OFFICE	
Completion Date 8/8/79		Total Depth 7400 KB		Plug Back TD 6948 KB		Elevation 3553 KB	
Farm or Lease Name Cottonwood KI Federal		Well No. 1		Unit J		Sec. Twp. Rge. 17 16S 25E	
Csg. Size 5-1/2"	Wt. 17#	d 4.892	Set At 7400	Perforations: From 6868 To 6874			
Thq. Size 2-7/8"	Wt. 6.5#	d 2.441	Set At 6826	Perforations: From To			
Type Well - Single - Brdenhead - G.G. or G.O. Multiple Single				Packer Set At 6826 KB		County Eddy	
Producing Thru Tubing		Reservoir Temp. °F 6871 KB		Mean Annual Temp. °F 62		Baro. Press. - in. 13.2	
State N. Mex.		L 6856		H 6856		Gg 0.643	
% CO ₂ 0.16		% N ₂ 1.01		% H ₂ S Nil		Prover -	
Meter Run 2"		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							1794	49			months
1.	2.067 x 0.625		140	11	90	1581	73				1 hr
2.	2.067 x 0.625		141	21	90	1455	78				1 hr
3.	2.067 x 0.625		142	40	90	1262	82				1 hr
4.	2.067 x 0.625		143	77	90	889	85				1 hr
5.											

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor F _L	Gravity Factor F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1	1.866	41.05	153.2	.9723	1.251	1.0125	94
2	1.866	56.91	154.2	.9723	1.251	1.0126	131
3	1.866	78.79	155.2	.9723	1.251	1.0127	181
4	1.866	109.67	156.2	.9723	1.251	1.0127	252
5							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	Mcf/bbl.
1.	0.229	550	1.482	.9754	746.5	
2.	0.230	550	1.482	.9753	56	
3.	0.232	550	1.482	.9751	0.639	
4.	0.233	550	1.482	.9750	XXXXXX	0.643
5.					670	727
					371	393

NO.	P _r ²	P _w	P _w ²	P _r ² - P _w ²	(1) $\frac{P_r^2}{P_r^2 - P_w^2} =$	(2) $\left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^n =$
1			6367	1351	1.5913	1.4269
2			5622	2096		
3			4558	3160		
4			2868	4850		
5						

Absolute Open Flow		360	Mcf/d @ 13.075	Angle of Slope @	52.6 deg.	Slope, n	0.7652
--------------------	--	-----	----------------	------------------	-----------	----------	--------

Remarks:		Static pressures by Bennett Wireline, flowing pressures by DWT.	
		Calculations worksheet C122D attached. Note: Well was loading up with treating fluid.	

Approved By Commission:	Conducted By: David Weaver	Calculated By: Eddie M. Mahfood	Checked By:
-------------------------	-------------------------------	------------------------------------	-------------