

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

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Form C-122
Revised 9-1-65
122014 USGS
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Type Test ☒ Initial ☐ Annual ☐ Special					Test Date 10-8-76		OCT 15 1976				
Company Yates Petroleum Corp.					Connection		Unit O.C.C. AREA OFFICE				
Pool Wildcat					Formation Morrow		Farm or Lease Name H-Y State "GH"				
Completion Date 9-3-76		Total Depth 10,730'		Perforations WL 10,480'		Elevation 3548' GR		Well No.			
Csg. Size 5 1/2"	Wt. 17#	d 4.892	Set At 10562	Perforations From 10,414 To 10,420		Well No.		1			
Thg. Size 2-3/8"	Wt. 4.7#	d 1.995	Set At 10422	Perforations From 10,363 To 10,365		Unit N 31 18S 26E		Twp. Rge.			
Type Well - Single - Fr. Jenhead - G.C. or G.O. Multiple Single					Packer Set At 10,362		County Eddy		State New Mexico		
Producing Thru tubing		Reservoir Temp. °F 168		Mean Annual Temp. °F 62		Baro. Press. - P _a 13.2		Meter Run 3"		Flange	
L 10417	H 10417	Gg 0.605	% CO ₂ 0.67	% N ₂ 0.27	% H ₂ S Nil	Prover		3"		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	Duration of Flow
SI							3166	74			23 days
1.	3"		1.750	300	8	103	2826	52			1 hr.
2.	3"		1.750	300	23	86	2535	57			1 hr.
3.	3"		1.750	325	70	80	1883	55			1 hr.
4.	3"		1.750	390	84	85	1676	59			1 hr.
5.											

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor Ft	Gravity Factor Fg	Super Compress. Factor Fpv	Rate of Flow Q, Mcfd
1	15.87	50.04	313.	0.9610	1.286	1.021	1002
2	15.87	84.85	313.	0.9759	1.286	1.023	1729
3	15.87	153.82	338.	0.9813	1.286	1.027	3164
4	15.87	183.99	403.	0.9768	1.286	1.031	3782
5							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	Mcf/bbl.
1	.464	563	1.5639	.960	551	
2	.464	546	1.5167	.955	53.6	
3	.501	540	1.5000	.949	0.605	X X X X X X X X
4	.597	545	1.5139	.941	675	X X X X X
5					360	

P _c 4066.2 P _c ² 16.534				(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.8253$		(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.7826$	
NO.	P _c ²	P _w	P _w ²	P _c ² - P _w ²			
1		3714.2	13.795	2.739			
2		3419.2	11.691	4.843			
3		2734.2	7.476	9.058			
4		2527.2	6.387	10.147			
5							

ACF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 5640$

Absolute Open Flow		5640	Mcf/d @ 15.025	Angle of Slope	46°10'	Slope, n	0.9607
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Remarks: BHP by Bennett Wireline, witnessed by Transwestern Pipeline Co., El Paso Natural Gas Co. and New Mexico Gas Co. representatives.

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
	Don Weaver	Eddie Mahfood	