

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

dST
File
RECEIVED
 Form C-122
 Revised 9-1-65

SEP 18 '90

Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 1/11/89			
Company Yates Petroleum Corporation				Connection Transwestern Pipeline Company			
Pool <i>E. Benton Flat</i> Strawn				Formation Undesignated Eddy		Unit	
Completion Date 12/10/88		Total Depth 11297		Plug Back L. 11219		Elevation 3321.1	
Casing Size 5.5		Wt. 14		Set At 5.012		Perforations: From 11065 To 11078	
Tub. Size 2.875		Wt. 6.5		Set At 2.441		Perforations: From To	
Type Well - Single - Broadhead - G.C. or G.O. Multiple Single				Packer Set At 10800		Form or Lease Name Eland AFC Fed Com	
Producing Thru Tubing		Reservoir Temp. °F 169 @ 11072		Mean Annual Temp. °F 62		Well No. 1	
L 10800		H 10800		Cg .697		Unit Sec. Twp. Rge. N 12 13 20s 29E	
% CO ₂ .33		% N ₂ 1.08		% H ₂ S 0		County Eddy	
Provor 0		Meter Run 2		Taps Flanged		State New Mexico	

FLOW DATA						TUBING DATA		CASING DATA		Duration of Flow	
NO.	Provor 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
51							3425				
1.	2.067 x 1.0			410	23.0	45	3225	62	0	0	24 hrs
2.	2.067 x 1.0			430	44.7	52	3148	62	0	0	24 hrs
3.	2.067 x 1.0			445	52.3	41	3051	62	0	0	24 hrs
4.	2.067 x 1.0			560	63.0	40	2907	62	0	0	24 hrs
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	4.947	98.66	423.20	1.015	1.198	1.053	625
2	4.947	140.75	443.20	1.008	1.198	1.053	885
3	4.947	154.80	458.20	1.019	1.198	1.060	990
4	4.947	190.03	573.20	1.020	1.198	1.077	1237
5							

NO.	P _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	.63	505	1.31	.902	14.707	58.2	.697	XXXXXX	668.2	384.4
2	.66	512	1.33	.902				XXXXXX		
3	.69	501	1.30	.891						
4	.86	500	1.30	.861						
5										

NO.	P _r ²	P _w ²	P _r ² - P _w ²	P _r ² / (P _r ² - P _w ²)	P _r ² / (P _r ² - P _w ²) ⁿ
1	10485.9	3239.0	10490.9	1330.3	
2	9993.2	3162.8	10003.1	1818.2	
3	9389.3	3066.2	9401.3	2419.9	
4	8527.6	2923.3	8545.7	3275.5	
5					

(1) $\frac{P_r^2}{P_r^2 - P_w^2} = 3.6230$

AOR = Q $\left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^n = 3293 \text{ Mcfd}$

(2) $\left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^n = 2.6610$

Absolute Open Flow	3293 Mcfd @ 15.025	Mcf @ 15.025	Angle of Slope °	37	Slope, n	.760
Remarks:						

Approved By Commission	Conducted By Ed Perry	Calculated By Andrea Carpenter	Checked By
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