

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

c/sf
File
Form C-122
Revised 9-1-65

Type Test ☒ Initial ☐ Annual ☐ Special		Test Date 10/23/82	
Company Yates Petroleum Corporation		Connection Transwestern Pipeline	
Well Pecos Slope - Abo Gas		Formation Abo	
Completion Date 5/4/82	Total Depth 4200'	Plug back To 4182'	Elevation 3965'
Perforations From 3691 To 3849		Well No. 7	
Perforations From To	Unit Sec. Twp. Rge. N 26 5S 24E		
Type Well - Single - Brokenhead - G.G. or G.O. Multiple Single		Packer Set At 3637'	County Chaves
Producing Thru Tubing	Reservoir Temp. °F 105 @ 3631'	Mean Annual Temp. °F 62	State New Mexico
L 3637'	H 3637'	Gg .641	% CO ₂ .06
		% N ₂ 4.94	% H ₂ S 0
		Prover --	Meter Run 2"
			Flanged

FLOW DATA						TUBING DATA		CASING DATA		Duration of Flow
NO.	Prover Line Size	X	Crifice Size	Press. p.s.i.g.	Diff. h _w	Temp. °F	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.	
51							1010			
1.	2.067 x 1.250			400	16.1	72	932	62		
2.	2.067 x 1.250			400	19.1	72	922	62		24 hr.
3.	2.067 x 1.250			410	21.2	72	911	62		24 hr.
4.	2.067 x 1.250			480	22.0	72	900	62		24 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 _{sp}	Rate of Flow Q, MscfD
1	8.120	81.5	413.2	.9887	1.249	1.034	845
2	8.120	88.9	413.2	.9887	1.249	1.034	922
3	8.120	94.7	423.2	.9887	1.249	1.035	983
4	8.120	104.2	493.2	.9887	1.249	1.041	1087
5							

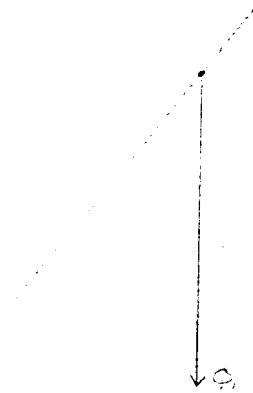
NO.	P ₁	Temp. °R	T ₁	Z	Gas Liquid Hydrocarbon Ratio _____ Dry _____ Mol/Lb.
1	.63	532	1.49	.935	A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.
2	.63	532	1.49	.935	Specific Gravity Separator Gas .641 X X X X X X X X
3	.64	532	1.49	.934	Specific Gravity Flowing Fluid X X X X X .641
4	.75	532	1.49	.923	Critical Pressure 661 P.S.I.A. 661 P.S.I.A.
5					Critical Temperature 358 R 358 R

P _c 1023.2	P _w 1046.9					
NO.	P ₁	P _w	P _c	P _c ² - P _w ²	(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 5.282$	(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 3.825$
1	893.4		902.3	144.6	ACF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 4157$	
2	874.6		885.2	161.7		
3	854.1		866.2	180.7		
4	833.9		848.7	193.2		
5						

Absolute Open Flow 4157	Mold @ 15.025	Angle of Slope θ	Slope, n .806
Remarks:			

Approved By Certification:	Conducted By: David Weaver	Calculated By: Andie Alderson	Checked By:
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1


$$A_{CF} = 4.157$$

P/South

