

SF
File
22
Yates

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

Form C-122
Revised 9-1-65

RECEIVED

Type Test ☒ Initial ☐ Annual ☐ Special		Test Date 10-2-79		NOV 20 1979	
Company Yates Petroleum Corp. ✓		Connection Transwestern Pipeline Company			
Pool Penasco Draw Perm Perm Wildest Wolfcamp		Formation Wolfcamp		Unit O.E.E. ARTEZIA, OFFSHORE	
Completion Date 9-26-79		Total Depth 7160 KB		Plug Back TD 6300 KB	
Elevation 3700 KB		Farm or Lease Name Anderson CS St Com		Well No. 1-Y	
Csg. Size 4 1/2	Wt. 11.6#	d 4.000	Set At 6508 KB	Perforations: From 5051 To 5218 KB	
Tbg. Size 2-3/8	Wt. 4.7#	d 1.997	Set At 4991 KB	Perforations: From To	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single				Packer Set At 4991 KB	
Producing Thru Tubing		Reservoir Temp. °F 110 @ 5135		Mean Annual Temp. °F 63	
Baro. Press. - P _g 13.2		State NM		County Eddy	
L 5125	H 5125	Gg 0.694	% CO ₂ 0.70	% N ₂ 1.34	% H ₂ S Nil
Prover 2"		Meter Run 2"		Taps Flange	

FLOW DATA						TUBING DATA		CASING DATA		Duration of Flow Days
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.	
SI							1641	90		
1.	2.067 x 0.625			265	9	75	1503	90		
2.				265	18	75	1387	91		
3.				266	39	75	1139	91		
4.				267	82	75		92		
5.										

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor Ft.	Gravity Factor F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1	1.866	50.04	278.2	.9859	1.210	1.0214	114
2	1.866	70.76	278.2	.9859	1.210	1.0214	161
3	1.866	104.37	279.2	.9859	1.210	1.0215	238
4	1.866	151.58	280.2	.9859	1.210	1.0215	345
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	.415	535	1.511	.9585	249.450 Mcf/bbl.	59 Deg.	.683	XXXXXXX	670.5 P.S.I.A.	354 R
2	.415	535	1.511	.9585				XXXXX	670 P.S.I.A.	385 R
3	.417	535	1.511	.9584						
4	.418	535	1.511	.9583						
5										

NO.	P _r ²	P _w	P _w ²	P _r ² - P _w ²
1			3133	612
2			2660	1085
3			1781	1964
4			298	3447
5				

(1) $\frac{P_r^2}{P_r^2 - P_w^2} = 1.0865$

AOF = Q $\left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^n = 364$

(2) $\left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^n = 1.056$

Absolute Open Flow	364 Mcfd @ 15.025	Angle of Slope	56.7 deg	Slope, n	.65668
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Remarks: Static Pressures by Bennett Wireline. Flowing Pressures by DWT. Calculations worksheet C-122D attached.

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