

NE EXICO OIL CONSERVATION COMMS
MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 9-1-65

RECEIVED

Well file

APR 25 1973

Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 3-29-73		APR 25 1973	
Company The Petroleum Corporation				Connection None		O.C. ARTESIA	
Pool Wildcat				Formation Atoka		Unit Parkway west unit	
Completion Date 3-26-73		Total Depth 11,802		Plug Back TD 10,720		Elevation 3321 G.L.	
Csg. Size 5-1/2		Wt. 17		Set At 10,598		Perforations: From 10,578 To 10,588	
Tag. Size 2-1/16		Wt. 3.25		Set At 10,515		Perforations: From -- To --	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple G.G. Multiple (3-1/2" Liner @ 10,515)				Packer Set At 10,505 & 10,515		Well No. 1 - L	
Producing Thru Tubing		Reservoir Temp. °F 142 @ 10,578		Mean Annual Temp. °F 60		Baro. Press. - P _a 13.2	
County Eddy		State New Mexico		Prover Meter Run X		Taps Flange	
L 10,515		H 10,515		G _g .661		% CO ₂ .24	
				% N ₂ 1.44		% H ₂ S Nil	
FLOW DATA				TUBING DATA		CASING DATA	
NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. h _w	Temp. °F	Press. p.s.i.g.
1.	3.068	x	1.250	815	7	104	3400
2.	3.068	x	1.250	820	17	96	2885
3.	3.068	x	1.250	815	32	92	2389
4.	3.068	x	1.750	810	13	86	1855
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.	7.577	76.14	828.2	.9602	1.230	1.065	726
2.	7.577	119.01	833.2	.9671	1.230	1.075	1153
3.	7.577	162.80	828.2	.9706	1.230	1.075	1583
4.	15.61	103.45	823.2	.9759	1.230	1.075	2084
5.							
NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio _____ 24.6 Mcf/bbl.		
1.	1.24	564	1.51	.881	A.P.I. Gravity of Liquid Hydrocarbons _____ 55.8 Deg.		
2.	1.24	556	1.49	.865	Specific Gravity Separator Gas _____ .661 XXXXXXXXXX		
3.	1.24	552	1.48	.865	Specific Gravity Flowing Fluid _____ XXXXX .778		
4.	1.23	546	1.46	.866	Critical Pressure _____ 670 P.S.I.A. 566 P.S.I.A.		
5.					Critical Temperature _____ 374 R 414 R		
P _c 3873.2 P _c ² 15002					(1) $\frac{P_c^2}{P_r^2 - P_w^2} = 1.3290$		
NO.	P _r ²	P _w	P _w ²	P _c ² - P _w ²	(2) $\left[\frac{P_c^2}{P_r^2 - P_w^2} \right]^n = 1.3290$		
1.		3481.1	11683	3319	$AOF = Q \left[\frac{P_c^2}{P_r^2 - P_w^2} \right]^n = 2770$		
2.		2913.2	8487	6515			
3.		2431.2	5911	9019			
4.		1927.2	3714	11288			
5.							
Absolute Open Flow _____ 2770 Mcfd @ 15.025					Angle of Slope @ _____ 45.0		Slope, n _____ 1.000
Remarks: _____							
Approved By Commission:		Conducted By: CONE & KERLEY, INC.		Calculated By: Bill Kerley		Checked By: <i>Bill Kerley</i>	