

MULTI-POLE BACK PRESSURE TEST FOR GAS WELL

JUN 8 1972

Form C-122
Revised 9-1-65

1.2
C-122 File

Type Test ☒ Initial (after connection) ☐ Annual ☐ Special					Test Date 5-24-72					P. E. C. ARTESIA, OFFSHORE				
Company Union Oil Co. of California					Connection Llano, Inc.									
Pool Carlsbad Permo Penn					Formation Permo Penn					Unit				
Completion Date 3-31-67			Total Depth 10765'		Plug Back TD 10300'			Elevation 3077 GL		Farm or Lease Name Forni				
Csg. Size 5 1/2"		Wt. 17 & 20		d 4.778		Set At 10764'		Perforations: From 9656 To 9946'			Well No. 1			
Tqg. Size 2-3/8"		Wt. 4.7		d 1.995		Set At 9446'		Perforations: From To			Unit Sec. Twp. Rge. I 15 22S 27E			
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single								Packer Set At 9446'		County Eddy				
Producing Thru Tubing			Reservoir Temp. °F 145 @ 9600		Mean Annual Temp. °F 60		Baro. Press. - P _a 13.2			State New Mexico				
L 9656		H 9656		Gg 0.69		% CO ₂ NA		% N ₂ NA		% H ₂ S NA		Prover Meter Run 3.068"		
												Taps 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.	
SI										
1.	3.068		1.000	720	8	92	2300	85	Pkr.	
2.	3.068		1.000	720	13	90	2050	80	Pkr.	
3.	3.068		1.000	720	20	76	1900	70	Pkr.	
4.	3.068		1.000	750	57	76	1490	70	Pkr.	
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	4.789	76.58	733.2	.9709	1.204	1.073	460
2	4.789	97.63	733.2	.9723	1.204	1.073	587
3	4.789	121.1	733.2	.9850	1.204	1.082	744
4	4.789	203.6	763.2	.9850	1.204	1.085	1285
5							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio 12.11, 12.49, 13.53, 16.47 Mcf/bbl.
1.	1.10	552	1.42	.869	A.P.I. Gravity of Liquid Hydrocarbons 53.8 Deg.
2.	1.10	550	1.42	.869	Specific Gravity Separator Gas .690
3.	1.10	536	1.38	.854	Specific Gravity Flowing Fluid .923, .916, .899, .863
4.	1.14	536	1.38	.849	Critical Pressure 669 P.S.I.A.
5.					Critical Temperature 388 R

P _c 4500	P _c ² 20250.0	
NO.	P _r ²	P _w ²
1	5350.9	2314.7
2	4256.8	2065.4
3	3660.3	1917.7
4	2259.6	1515.2
5		

$(1) \frac{P_c^2}{P_c^2 - P_w^2} = 1.1279$		$(2) \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.1279$	
$AOF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1449$			

Absolute Open Flow 1450 Mcfd @ 15.0/25	Angle of Slope 45°	Slope, n 1.000
Remarks:		

Approved By Commission:	Conducted By: Clyde Green	Calculated By: Mickey Dobson	Checked By:
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