

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

SF
File
Form C-122
Revised 9-1-65
122

RECEIVED

Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 3-24-80		APR 3 1980	
Company Harvey E. Yates Company ✓				Connection El Paso Natural Gas Co.			
Pool So. Empire Morrow				Formation Morrow		Unit O. C. D. ARTESIA, OFFICE	
Completion Date 12-13-79		Total Depth 11413' 11430		Plug Back TD 11370'		Elevation 3536 KB	
Csg. Size 5 1/2		Wt. 20		Set At 11413'		Perforations: From 10896 To 10910	
Tbg. Size 2 7/8		Wt. d		Set At 10860		Perforations: From To	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single				Packer Set At 10862		Farm or Lease Name Loco Hills Welch Unit	
Producing Thru Tubing		Reservoir Temp. °F 160 @ 10853		Mean Annual Temp. °F 70		Baro. Press. - P _a 13.2	
L 10860		H 10860		Gg 0.652		% CO ₂ 0.42	
				% N ₂ 0.54		% H ₂ S Nil	
				Prover		Meter Run X	
						Taps Flange	
FLOW DATA							
NO.	Prover Line Size	X	Orifice Size	Press. L-10 Chart	Diff. hw	Temp. °F	Duration of Flow
SI	108.3 Hours						
1.	4" X 1.250"			7.75	1.5	86	60 min.
2.	4" X 1.250"			7.8	2.7	77	"
3.	4" X 1.250"			7.8	4.1	70	"
4.	4" X 1.250"			7.8	5.8	72	"
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	7.469	11.63	3.162	.9777	1.238	1.055	350.7
2	7.469	21.06	3.162	.9840	1.238	1.059	641.6
3	7.469	31.98	3.162	.9950	1.238	1.061	987.1
4	7.469	45.24	3.162	.9887	1.238	1.061	1387.5
5.							
NO.	P _f	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio 13.111 Mcf/bbl.		
1.	USED SIMPLIFIED				A.P.I. Gravity of Liquid Hydrocarbons N/A Deg.		
2.	SUPERCOMPRESSIBILITY				Specific Gravity Separator Gas 0.652 XXXXXXXX		
3.	TABLES				Specific Gravity Flowing Fluid XXXXX		
4.					Critical Pressure 670 P.S.I.A. P.S.I.A.		
5.					Critical Temperature 375 R R		
P _f 3128.2 P _f 9786							
NO.	P _i ²	P _s	P _s ²	P _f ² - P _s ²	(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.48950$		
1	2687	2804.2	7864	1922	(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.48950$		
2	2161	2597.2	6745	3041			
3	1662	2225.2	4952	4834			
4	1016	1793.2	3216	6570	AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 2066.678$		
5							
Absolute Open Flow 2066.678 Mcfd @ 15.025 Angle of Slope 45.0° Slope, n 1.00000							
Remarks: Bottom Hole pressure measured with Amerada RPG-3 gauge, serial no. 44784, 0-6000 psi.							
Approved By Commission:		Conducted By: Teffteller, Inc.		Calculated By: D.A. Warren, Jr.		Checked By:	