

dst
File

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Type Test ☒ Initial ☐ Annual ☐ Special		Test Date 7-28-94	
Company Willow Creek Resources		Connection Pipeline	
Pool North Loving		Formation Atoka	
Completion Date 7-11-94	Total Length 12,764	Plug Back TD 12,165	Elevation
From or Lease Name Ogden			Well No. #1
Csg. Size 5.0	Wt. 18.0	Set At 4,276	Perforations From 11,264 To 11,502
Flg. Size 2.375	Wt. 4.6	Set At 10,761	Perforations From - To -
Type Well - Single - Bordenhead - G.C. or G.O. Multiple Single		Packet Set At 10,761	County New Mexico
Producing Thru Tbg. (gas)	Reservoir Temp. °F 173	Mean Annual Temp. °F 60	Baro. Press. °F 13.2
L 11,383	H 11,383	G _g 0.576	% CO ₂ 0.377
% N ₂ 1.01	% H ₂ S 0.00	Grav. H ₂ O 0.00	Grav. H ₂ O 2.0
FEB 18 1995			
TUBING DATA			
NO.	Prodr Line Size	X	Orifice Size
SI			
1.	2.0	x	1.125
2.	2.0	x	1.125
3.	2.0	x	1.125
4.	2.0	x	1.125
5.			
RATE OF FLOW CALCULATIONS			
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m
1	6.39	18.18	413.2
2	6.39	26.50	413.2
3	6.39	33.40	413.2
4	6.39	42.15	413.2
5			
NO.	P ₁	Temp. °R	T ₁
1	0.616	541	1.577
2	0.616	541	1.577
3	0.616	541	1.577
4	0.616	541	1.577
5			
Gas Liquid Hydrocarbon Ratio _____ Mcf/cu ft.			
A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.			
Specific Gravity Separator Gas 0.576			
Specific Gravity Flowing Fluid X X X X X			
Critical Pressure 671 P.S.I.A.			
Critical Temperature 343 °R			
P ₁ 5865.2 P ₂ 34.4 x 10 ⁶			
NO.	P ₁	P ₂	P ₁ ² - P ₂ ²
1		5246	27.52
2		4561	20.80
3		4052	16.42
4		3078	9.48
5			
(1) $\frac{P_1^2}{P_2^2 - P_1^2} = 1.913$			
(2) $\left[\frac{P_1^2}{P_2^2 - P_1^2} \right]^n = 1.532$			
AOF = Q $\left[\frac{P_1^2}{P_2^2 - P_1^2} \right]^n = 433$			
Absolute Open Flow 433		Mcf @ 15.025	Angle of Slope θ
Slope, n 0.657			
Remarks: Choke Sizes: First rate-6/64, Second-7/64, Third-9/64, Fourth-14/64			
Approved By Division		Conducted By	Calculated By
			Jim Smith
			Checked By