

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

RECEIVED

JUN 10 1982

Type Test 4 pt. ☒ Initial ☐ Annual ☐ Special		Test No. 6-3-82	
Company W. A. Moncrief, Jr. ✓		Connection El Paso Natural Gas Company	
Well Crooked Creek <i>Baldridge Canyon Marrow</i>		Formation Morrow	
Completion Date 5-22-82		Total Depth 10,610	
Plug Back TD 10,565		Elevation 4010 ft.	
Form or Lease Name Crooked Creek State #A		Well No. 1	
Casing Size 4.5		Well 11.6#	
Set At 10,610		Perforations From 10,217 To 10,228	
Casing Size 2 3/8		Well 4.7#	
Set At 10,151		Perforations From To	
Type well - Single - Bradenhead - C.C. or C.O. Multiple Single		Packer Set At 10,151	
Producing Thru Tbg.		Reservoir Temp. °F 176 @ 10,151	
Mean Annual Temp. °F 60		Baro. Press. - P _a 13.2	
County Eddy		State New Mexico	
L 10,151		H 10,151	
G _a .577		% CO ₂ .78	
% N ₂ .27		% H ₂ S	
Prover		Meter Run 4.0"	
Taps Flg.			
FLOW DATA			
NO.	Fracture Size	X	Orifice Size
1.	4.0 X 1.250		595
2.	4.0 X 1.250		619
3.	4.0 X 1.250		692
4.	4.0 X 1.250		723
5.			
TUBING DATA			
NO.	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.
1.	2898		2647
2.			2505
3.			2292
4.			2119
5.			
CASING DATA			
NO.	Press. p.s.i.g.	Temp. °F	Duration of Flow
1.	PKR		24 hrs.
2.	"		45 min.
3.	"		45 min.
4.	"		1 hr.
5.	"		1 hr.
RATE OF FLOW CALCULATIONS			
NO.	Coefficient (24 Hour)	$\sqrt{h P_m}$	Pressure P _m
1.	7.469	46.86	608.2
2.	7.469	82.97	632.2
3.	7.469	124.81	705.2
4.	7.469	160.08	736.2
5.			
NO.	Flow Temp. Factor FL	Gravity Factor F _g	Super Compress. Factor, F _{pv}
1.	.9741	1.316	1.039
2.	.9831	1.316	1.044
3.	.9859	1.316	1.049
4.	.9795	1.316	1.048
5.			
NO.	Rate of Flow O. Mcd		
1.	466		
2.	837		
3.	1269		
4.	1615		
5.			
NO.	Gas Liquid Hydrocarbon Ratio	Mcf/bbl.	
1.	A.P.I. Gravity of Liquid Hydrocarbons	Dec.	
2.	Specific Gravity Separator Gas	.577	
3.	Specific Gravity Flowing Fluid	X X X X X	
4.	Critical Pressure	672 P.S.I.A.	
5.	Critical Temperature	346 R	
NO.	Temp. °R	T _r	Z
1.	.91	548	1.58
2.	.94	538	1.55
3.	1.05	535	1.55
4.	1.10	542	1.57
5.			
NO.	P _c	P _w	P _c ²
1.	3011.2	9067.3	7265.2
2.			6363.5
3.			5366.2
4.			4607.5
5.			
(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 2.033$			
(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 2.033$			
AOF = 0 $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 3.283$			
Absolute Open Flow		3,283	Mcf @ 15.025
Angle of Slope		45	Slope, n
		1.000	
Remarks: Made no fluid during test.			
Approved by Division		Conducted by EL PASO EXPLORATION CO. Bill Rea & Roy McGowen	Calculated by EL PASO EXPLORATION CO. Bill Rea & Roy McGowen
		Checked by:	