

OIL CONSERVATION DIVISION

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENTP. O. BOX 2088
SANTA FE, NEW MEXICO 87501Form C-122
Revised 10-1-78

RECEIVED

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 2-15-83		FEB 18 1983	
Company W. A. MONCRIEF, JR.				Connection EPNG		O. C. D. ARTESIA, OFFICE	
Pool Baldridge Canyon Morrow				Formation Lower Morrow		Unit I	
Completion Date 2-4-83		Total Depth 10,647'		Plug Back TD 10,625'		Elevation 4010' GD 4029' KB	
Farm or Lease Name Crooked Creek St. A		Well No. 1		Perforations: From 10452 To 10570		Unit Sec. Twp. Rye. I 2 24 24	
Casing Size 4.5		Wt. 11.6		Set At 10,647'		Perforations: From Open To End	
Thru Size 2 3/8		Wt. 4.7		Set At 10370		County Eddy	
Type Well - Single - Brdenhead - G.G. or G.O. Multiple Single				Packer Set At 10,370'		State New Mexico	
Producing Thru Tbg.		Reservoir Temp. °F 178 @ 10373		Mean Annual Temp. °F 60°		Baro. Press. - P _g 13.2	
10373		H 10373		G _g .581		% CO ₂ 1.24 % N ₂ .19 % H ₂ S	
						Prover Meter Run 4 Taps Flg.	

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.		Temp. °F
SI							2164				24 hrs.
1.	4 X	1.250		733	3.24	88	2005				1 hr.
2.	4 X	1.250		740	6.5	90	1881				1 hr.
3.	4 X	1.250		744	12.3	91	1710				1 hr.
4.	4 X	1.250		746	20.3	92	1451				1 hr.
5.											

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor F _t	Gravity Factor F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1	7.469	49.17	746.2	.9741	1.312	1.048	492
2	7.469	69.97	753.2	.9723	1.312	1.048	699
3	7.469	96.51	757.2	.9715	1.312	1.048	963
4	7.469	124.14	759.2	.9706	1.312	1.048	1,237
5.							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	A.P.I. Gravity of Liquid Hydrocarbons	Specific Gravity Separator Gas	Specific Gravity Flowing Fluid	Critical Pressure	Critical Temperature
1	1.10	548	1.57	.910	Dry		.581	X X X X X X X X	676	349
2	1.11	550	1.58	.911				X X X X X		
3	1.12	551	1.58	.910						
4	1.12	552	1.58	.910						
5										

NO.	P _r	P _w	P _w ²	P _r ² - P _w ²
1	2177.2	2020.0	4080.5	659.7
2	4740.2	1898.1	3602.9	1137.3
3		1731.5	2998.0	1742.2
4		1480.4	2191.7	2542.5
5				

$$(1) \frac{P_r^2}{P_r^2 - P_w^2} = 1.864$$

$$AOF = Q \left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^n = 1.898$$

$$(2) \left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^n = 1.534$$

Absolute Open Flow	1,898	Mcfd @ 15.025	Angle of Slope @	55.5	Slope, n	.687
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Remarks: No Fluid.

Approved By Division	Conducted By EL PASO EXPLORATION CO. McGowen & Reston	Calculated By EL PASO EXPLORATION CO. Reston & McGowen	Checked By:
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