

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

RECEIVED BY 9/27

DEC 12 1983 Form C-122
Revised 9-1-83

O. C. D.

ARLUSIA OFFICE

Type Test ☒ Initial ☐ Annual ☐ Special						Test Date 11/3/83		1980 FNL			
Company Mitchell Energy Corporation ✓						Connection Transwestern Pipeline Company		1739 FWL			
Pool Turkey Track - <i>Mitchell</i>						Formation Morrow		Unit F			
Completion Date 7/27/81 9-28-83			Total Depth 11,461'		Plug Back TD 11,432'		Elevation 3398 KB		Farm or Lease Name Flag "TD" State Com		
Csg. Size 5 1/2"		Wt. 17/20		d 4.778		Set At 11461		Perforations: From 10981 To 11078		Well No. 1	
Tq. Size 2 7/8"		Wt. 6.5		d 2.441		Set At 10,800		Perforations: From open To ended		Unit Sec. Twp. Rge. F 18 19S 29E	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single						Packer Set At 10,800		County Eddy			
Producing Thru Tubing		Reservoir Temp. °F 168 @ 11030		Mean Annual Temp. °F 60		Baro. Press. - P _g 13.2		State New Mexico			
L 11030		H 11030		Gg .640		% CO ₂ .730		% N ₂ .675		% H ₂ S 0	
								Prover -		Meter Run 2"	
										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.		Temp. °F
SI							2755	75	pkc		95 hrs
1.	2"		1"	380	18"	69	2350	69			2
2.	2"		1"	380	38"	69	2150	69			2
3.	2"		1"	400	60"	69	1900	69			2
4.	2"		1"	400	90"	69	1600	69			2
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	4.946	84.13	393.2	.9915	1.199	1.047	518
2	4.946	122.24	393.2	.9915	1.199	1.047	753
3	4.946	157.45	413.2	.9915	1.199	1.049	971
4	4.946	192.84	413.2	.9915	1.199	1.049	1189
5.							

NO.	P _t	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	Mc/bbl.
					52.174	
					A.P.I. Gravity of Liquid Hydrocarbons	57.0 Deg.
1.	.589	529	1.349	.913	Specific Gravity Separator Gas	.640 X X X X X X X X
2.	.589	529	1.349	.913	Specific Gravity Flowing Fluid	X X X X X .696
3.	.619	529	1.349	.909	Critical Pressure	670 P.S.I.A. 668 P.S.I.A.
4.	.619	529	1.349	.909	Critical Temperature	372 R 392 R
5.						

NO.	F _t ²	P _w	F _w ²	F _c ² - F _w ²	(1) $\frac{F_c^2}{F_c^2 - F_w^2} = 1.522$	(2) $\left[\frac{F_c^2}{F_c^2 - F_w^2} \right]^n = 1.426$
1	5584.7	2364.3	5589.9	2073		
2	4679.4	2165.7	4690.2	2972.7		
3	3660.3	1917.8	3678.0	3984.9		
4	2602.4	1621.4	2628.9	5034		
5						

ACF = Q $\left[\frac{F_c^2}{F_c^2 - F_w^2} \right]^n = 1696$

Absolute Open Flow	1696	Mcf/d @ 15.025	Angle of Slope	49.8°	Slope, n	.845
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Remarks:

Approved By Commission:	Conducted By: Darryl White	Calculated By: Dan Bufflo	Checked By:
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*Post ID-2
12-16-83
Camp + BK*