

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

Form C-122
Revised 9-1-65

RECEIVED

Type Test ☒ Initial ☐ Annual ☐ Special					Test Date 9-3-81		SEP 14 1981	
Company Southland Royalty Company /					Connection To the Air			
Pool <u>Turkey Track - Meka Gas</u> <u>Undesignated</u>					Formation Atoka		Unit ARTESIA, OFFICE	
Completion Date 2-10-81		Total Depth 11,791		Plug Back TD 11,100		Elevation 3423.5		Farm or Lease Name 35 th Empire Federal Co Com
Csg. Size 4 1/2	Wt. 13.5	d 3.920	Set At 11,791	Perforations: From 10,757 To 10,778		Well No. 1		
Tbg. Size 2 3/8	Wt. 4.7	d 1.995	Set At 10,635	Perforations: From 0 To 0		Unit K Soc. Twp. Rye. S35 T-18-S R-29-E		
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single				Packer Set At 10,635		County Eddy		
Producing Thru Tbg		Reservoir Temp. °F 181 @ 10,768.		Mean Annual Temp. °F 60.0		Baro. Press. - P _a 13.2		State New Mexico
L 10,768.	H 10,768.	G _g 0.622	% CO ₂ 0.00	% N ₂ 0.01	% H ₂ S 0.00	Prover 0.0	Meter Run 2.0	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.
SI							3085.	70.		
1.	2.00 x 0.750			313.	7.0	116.	2420.	80.	0.	0.
2.	2.00 x 0.750			330.	14.0	109.	2066.	85.	0.	0.
3.	2.00 x 0.750			308.	23.0	96.	1760.	65.	0.	0.
4.	2.00 x 0.750			306.	36.5	84.	1430.	70.	0.	0.
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	2.71	47.78	326.2	0.9501	1.2680	1.0214	160.
2	2.71	69.32	343.2	0.9560	1.2680	1.0236	233.
3	2.71	85.95	321.2	0.9671	1.2680	1.0241	293.
4	2.71	107.94	319.2	0.9777	1.2680	1.0261	373.
5							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio _____ 0.0 Mcf/bbl.
					A.P.I. Gravity of Liquid Hydrocarbons _____ 0.0 Deg.
1.	0.49	576.	1.58	0.959	Specific Gravity Separator Gas _____ 0.622 X X X X X X X X
2.	0.51	569.	1.56	0.954	Specific Gravity Flowing Fluid _____ X X X X X _____ 0.622
3.	0.48	556.	1.52	0.953	Critical Pressure _____ 671. P.S.I.A. _____ 671. P.S.I.A.
4.	0.48	544.	1.49	0.950	Critical Temperature _____ 365. _____ R _____ 365. _____ R
5.					

P _c 3086.7 P _c ² 9527.					(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.2777$		(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.2777$	
NO.	P _i ²	P _w	P _w ²	P _c ² - P _w ²				
1	5920.	2412.	5817.	3711.				
2	4323.	2056.	4225.	5302.				
3	3144.	1771.	3135.	6393.				
4	2083.	1439.	2071.	7456.				
5								

Absolute Open Flow _____ 476. _____ Mcfd @ 15.025				Angle of Slope θ _____ 45.0		Slope, n _____ 1.000	
Remarks: _____							

Approved By Commission:	Conducted By: Northern Natural Gas	Calculated By: Ray Nokes	Checked By: Ray Nokes
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