

Mid. Perf. 10,761
Datum 7209

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

Form C-122
Revised 9-1-65

MAR 29 1971

Type Test ☒ Initial ☐ Annual ☐ Special					Test Date 1-15-71			
Company Mana Resources				Connection None			O. C. C. ARTESIA, OFFICE	
Pool Undesignated				Formation Marrow			Unit	
Completion Date 1-9-71		Total Depth 10835		Plug Back TD		Elevation 3552 GL		Farm or Lease Name State 21
Csq. Size 4 1/2"	Wt. 18.0	d 4.000	Set At 10834	Perforations: From 10748 To 10774		Well No. 1		
Tbg. Size 2 3/8	Wt. 4.7	d 1.995	Set At 10746	Perforations: From To		Unit Sec. Twp. Rge. 0 21 17s 29E		
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single				Packer Set At 10712		County Eddy		
Producing Thru Tubing		Reservoir Temp. °F 158 @ 10746		Mean Annual Temp. °F 60°		Baro. Press. - P _a 13.2		State New Mexico
L 10761	H 10761	G _g 0.6543	% CO ₂ .37	% N ₂ .53	% H ₂ S --	Prover	Meter Run 3.068	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			1.250				1965	60	PACKER		72
1.	3.068		1.250	630	88	64	1405	68			1.25
2.	3.068		1.250	630	79	62	1506	70			1.00
3.	3.068		1.250	615	58	62	1631	70			.75
4.	3.068		1.250	600	46	62	1700	70			.75
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	7.577	237.9	643.2	.9962	1.237	1.066	2,367.89
2	7.577	225.4	643.2	.9981	1.237	1.068	2,251.97
3	7.577	190.9	628.2	.9981	1.237	1.067	1,905.49
4	7.577	167.9	613.2	.9981	1.237	1.065	1,672.77
5.							

NO.	P _t	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio <u>Dry Gas</u> Mcf/bbl.
1.	.96	524	1.40	.880	A.P.I. Gravity of Liquid Hydrocarbons <u>DRY</u> Deg.
2.	.96	522	1.39	.876	Specific Gravity Separator Gas <u>.654</u> XXXXXXXXXX
3.	.94	522	1.39	.878	Specific Gravity Flowing Fluid <u>XXXXXX</u> Dry
4.	.92	522	1.39	.881	Critical Pressure <u>670</u> P.S.I.A. P.S.I.A.
5.					Critical Temperature <u>375</u> R R

P _c 2871.2 P _c ² 8243.8						
NO.	P _t ²	P _w	P _w ²	P _c ² - P _w ²	(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 2.607$	(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.980$
1		2137.2	4567.6	3676.2		
2		2254.2	5081.4	3162.4		
3		2405.2	5785.0	2458.8		
4		2480.2	6151.4	2092.4		
5						

Absolute Open Flow <u>4,459</u> Mcfd @ 15.025				Angle of Slope θ		Slope, n <u>.713</u>	
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Remarks: FLOW RATES WERE RUN BY THE DECREASING SEQUENCE RATHER THAN THE INCREASING SEQUENCE DUE TO THE AMOUNT OF FLUID THE WELL WAS MAKING.

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
<i>11/15/71</i>			