

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

Form C-122
Revised 9-1-65

RECEIVED

NOV 17 1971

Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 11-13-71		D. G. C. ARTESIA, OFFICE	
Company El Paso Natural Gas Company				Connection None			
Pool <i>Rocky Arroyo morrow</i> Wildcat R-4437				Formation Morrow		Unit	
Completion Date 11-10-71		Total Depth 9380		Plug Back TD 9353		Elevation	
Farm or Lease Name Rocky Arroyo Com.				Well No. 1			
Csq. Size 5 1/2	Wt. 15.5	d 9380	Set At 9380	Perforations: From 6563 To 6600		Unit J	Sec. 8
Tbg. Size 2 3/8	Wt. 4.7	d 8959	Set At 8959	Perforations: From 8956 To 9052		Twp. 22	Rge. 22
Type Well - Single - Bradenhead - G.G. or G.O. Multiple				Packer Set At 8906		County Eddy	
Gas-Gas Dual				Baro. Press. - P _a 13.2		State New Mexico	
Producing Thru Tbg. L 9004 H 9004		Reservoir Temp. °F 168 @ 9004		Mean Annual Temp. °F 60°		Prover Positive Chokes	
Gg .588		% CO ₂		% N ₂		% H ₂ S	
Positive Chokes FLOW DATA				TUBING DATA		CASING DATA	
NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. hw	Temp. °F	Press. p.s.i.g.
1.	.1250		2343			74	
2.	.1875		1585			80	
3.	.2188		1409			82	
4.	.2500		1130			72	
5.							
RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor Ft	Gravity Factor Fg	Super Compress. Factor, Fpv	Rate of Flow Q, Mcfd
1.	.2618		2356.2	.9813	1.304	1.126	889
2.	.6101		1598.2	.9813	1.304	1.106	1380
3.	.8419		1422.2	.9795	1.304	1.094	1673
4.	1.1120		1143.2	.9887	1.304	1.085	1778
5.							
Gas Liquid Hydrocarbon Ratio <u>Dry</u> Mcf/bbl. A.P.I. Gravity of Liquid Hydrocarbons <u>Dry</u> Deg. Specific Gravity Separator Gas <u>.588</u> X X X X X X X X Specific Gravity Flowing Fluid <u>672</u> X X X X X Critical Pressure <u>350</u> P.S.I.A. P.S.I.A. Critical Temperature <u>350</u> R R							
$P_c = 2736.2$ $P_w^2 = 7486.8$ (1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.229$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.130$ $AOF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 2,008$							
NO.	P _c ²	P _w ²	P _w ²	P _c ² - P _w ²			
1	5551.7	2360.6	5572.6	1914.2			
2	2554.2	1614.2	2605.8	4881.0			
3	2022.7	1448.8	2099.0	5387.8			
4	1306.9	1181.5	1395.9	6090.9			
5							
Absolute Open Flow <u>2,008</u> Mcfd @ 15.025				Angle of Slope <u>59.25</u>		Slope, n <u>.591</u>	
Remarks:							
Approved By Commission:		Conducted By: J. B. Murray R. Kiker, R. Reston		Calculated By: J. B. Murray		Checked By: Earl G. Smith	