

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

RECEIVED
OCT 20 1983
O. C. D.
ARTESIA OFFICE

Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 10/17/83	
Company Gulf Oil Exploration & Production				Connection Air	
Pool North East Avalon				Formation Morrow	
Completion Date		Total Depth 11230'		Plug Back TD 3322' G.L.	
Csg. Size 5 1/2"		Wt. 17		Set At 11230'	
Perforations: From 10726' To 11005'		Well No. 1		Unit Sec. Twp. Range 26 20s 27e	
Type well - Single - Prodenhead - G.G. or G.O. Multiple Single		Packor Set At 10660'		County Eddy	
Producing Thru Tubing		Reservoir Temp. °F 181 @ 10660'		State New Mexico	
Mean Annual Temp. °F 60°		Baro. Press. - P _a 13.2		Meter Run 4.026	
L 10660		H 10660		F F	
Gg .6929		% CO ₂ 2.658		% N ₂ 15.828	
% H ₂ S		Prover		Taps	

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	of Flow
SI							3175	62	PKR		24.0 hrs
1.	4	X	1.000	350	4.0	90	2865	62	PKR		1.0 hr
2.	4	X	1.000	350	6.0	92	2715	62	PKR		1.0 hr
3.	4	X	1.000	350	13.0	92	2527	62	PKR		1.0 hr
4.	4	X	1.000	350	18.0	94	2290	62	PKR		1.0 hr
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, Mcf/d
1	4.753	38.12	363.2	.9723	1.201	1.022	216
2	4.753	46.68	363.2	.9706	1.201	1.022	264
3	4.753	68.71	363.2	.9706	1.201	1.022	389
4	4.753	80.86	363.2	.9688	1.201	1.022	457
5							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio 22.100 Mcf/bbl.
1.	.56	550	1.62	.957	A.P.I. Gravity of Liquid Hydrocarbons 60 @ 60
2.	.56	552	1.63	.958	Specific Gravity Separator Gas .6929
3.	.56	552	1.63	.958	Specific Gravity Flowing Fluid .816
4.	.56	554	1.63	.958	Critical Pressure 654 P.S.I.A.
5.					Critical Temperature 339 °R

P _c 3188.2	P _c ² 10164.6	(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 2.094$	(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.817$
NO.	P _w	P _w ²	P _c ² - P _w ²
1	2878.5	8285.6	1879.0
2	2728.6	7445.4	2719.2
3	2541.2	6457.5	3707.1
4	2304.6	5311.2	4853.4
5			

Absolute Open Flow 830 Mcf/d @ 15.025		Angle of Slope 51°	Slope, n .808
Remarks: PRODUCED 2.5 BBLs. OF CONDENSATE DURING THE TEST			
Approved By Commission:	Conducted By: JARREL WELL TESTING, INC.	Calculated By: Rick Pagan	Checked By: Rick Pagan