

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 4-25-70		MAY 27 1970	
Company READ & STEVENS, INC.			Connection PHILLIPS (PENDING)		
Pool BUFFALO VALLEY PENN GAS			Formation PENN		
Completion Date 3-22-70		Total Depth 8699		Plug Back TD 8590	
Elevation 3563		Form or Lease Name HURD		Unit B. G. C. ARTESIA, OFFICE	
Cas. Size 4.500	Wt. 11.6	d 4.000	Set At 8699	Perforations: From 8484 To 8515	
Ing. Size 2.375	Wt. 4.7	d 1.995	Set At 8400	Perforations: From OPEN To	
Type Well - Single - Broadhead - G.G. or G.O. Multiple SINGLE				Packer Set At 8400	
Producing Thru TUBING		Reservoir Temp. °F 130 # 8600		Mean Annual Temp. °F 60	
Baro. Press. - P _a 13.2		State NEW MEXICO		County CHAVES	
L 8484	H 8484	G _g 0.68	% CO ₂ 0.4	% N ₂ 0.6	% H ₂ S NIL
Prover -		Meter Run 3.068		Tape FLGE	

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
1	3.068	1.250	555	16.0	80	2953	-	-	PKR	-	72 HR.
2	"	"	552	50.0	83	2134	-	-	"	-	60m
3	"	"	549	86.0	83	2398	-	-	"	-	60m
4	"	2.000	539	18.0	84	1935	-	-	"	-	60m
5	"	"	537	30.0	84	1332	-	-	"	-	60m

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 _{sp}	Rate of Flow Q, Mcfd
1	7.577	95.35	518.2	0.9813	1.213	1.057	909.0
2	7.577	168.11	565.2	0.9786	"	1.055	1595.2
3	7.577	219.88	562.2	0.9786	"	1.055	2086.4
4	21.32	99.70	552.2	0.9777	"	1.054	2657.0
5	21.32	128.48	550.2	0.9777	"	1.054	3424.0

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	Mcf/bbl.
1	0.85	540	1.41	0.895	55.556	
2	0.84	543	1.42	0.899	6.10	
3	0.84	"	"	0.899		
4	0.82	544	"	0.901		
5	0.82	"	"	0.901		

NO.	P _r ²	P _w	P _w ²	P _r ² - P _w ²	(1) $\frac{P_r^2}{P_r^2 - P_w^2} =$	(2) $\left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^n =$
1	-	2966.2	8798.3	981.1	1.275	1.1943
2	-	2647.2	7007.7	2771.7		
3	-	2411.2	5813.9	3965.5		
4	-	1948.2	3795.5	5983.9		
5	-	1345.2	1809.6	7969.8		

AOB = Q $\left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^n =$ **410**

Absolute Open Flow	4.000	Mcf/d @ 15.025	Angle of Slope θ	Slope, n 0.75
Remarks: * BHP INSTRUMENT SET AT 8450 FT.				
Approved by Commission:	Conducted By:	Calculated By:	Checked By:	
C.R. APPLIEDORN	CRA			