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

Form C-122
Revised 9-1-65

Type Test ☒ Initial ☐ Annual ☐ Special						Test Date 11-29-69	
Company SOUTHWEST PRODUCTION CORP.				Connection PHILLIPS			
Pool: BUFFALO VALLEY GAS				Formation: PENN		Unit	
Completion Date 9-14-69		Total Depth 8173		Plug Back TO —		Elevation 3528 KB	
Farm or Lease Name BUFFALO VALLEY COM							
Csq. Size 5.500	Wt. 17.0	d 4.892	Set At 8125	Perforations: From OPEN HOLE TO 8125-8173		Well No. 2	
Trg. Size 2.375	Wt. 4.7	d 1.995	Set At 8050	Perforations: From OPEN TO		Unit Sec. Twp. Rge. H 35 14S 27E	
Type Well — Single — Drdhead — G.G. or G.O. Multiple SINGLE GAS				Packer Set At 8040		County CHAVES	
Producing Thru TUBING		Reservoir Temp. °F 127 @ 8170		Mean Annuc. Temp. °F 60		Baro. Press. — P _g 13.2	
State NEW MEXICO							
L 8050	H 8050	G _g 0.68	% CO ₂ 0.4	% N ₂ 0.6	% H ₂ S NIL	Prover —	Muler Run 4.026
Taps 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.	4.026		1.750	635	0.32	56	1270	65	PRR	—	5051
2.	"		"	641	0.72	61	1140	70	"	—	1.0 P.
3.	"		"	643	1.62	1.7	831	"	"	—	2.0 P.
4.	"		"	643	2.42	66	726	"	"	—	1.5 P.
5.	"		"	656	4.50	70	684	"	"	—	15.0 P.

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	10 CHART $\sqrt{h_w P_m}$ Fm 2.236	Pressure P _m	Flow Temp. Factor F _t	Gravity Factor F _g	Super Compress. Factor F _{pv}	Rate of Flow Q, Mcfd
1	14.930	14.40	648.0	1.0000	1.213	1.078	282
2	"	21.71	654.5	0.9950	"	1.076	423
3	"	32.10	656.1	0.9933	"	1.072	679
4	"	39.35	656.1	0.9943	"	1.075	771
5	"	54.87	659.1	0.9905	"	1.074	1057

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	Mcf/bbl.
1	0.97	516	1.35	0.860	62.5	
2	0.98	521	1.36	0.863	63.5	
3	0.98	527	1.38	0.870		
4	0.98	526	1.37	0.866		
5	1.00	530	1.38	0.867		

NO.	P _r	P _w	P _w ²	P _r ² - P _w ²
1	1329.9		1331.9	314.7
2	1051.0		1055.6	591.0
3	712.7		723.3	923.3
4	546.4		562.8	1083.8
5	486.1		517.2	1129.4

(1) $\frac{P_r^2}{P_r^2 - P_w^2} =$ ———

AOF = Q $\left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^n =$ ———

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Absolute Open Flow 1,120	Mcf @ 15.025	Angle of Slope 0	Slope, n 0.97
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Remarks: 2" 110' WATER, 50 x 1000, TSLIP 150

Approved by Commission: [Signature]	Conducted By: C.R. APPLIEDORF	Calculated By: C.R. APPLIEDORF	Checked By:
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