

N. MEXICO OIL CONSERVATION COMMS. N
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 4-25-68		MAY 22 1968		
Company SOUTHWEST PRODUCTION CORP.				Connection Phillips				D. C. C. AREA, OFFICE	
Pool BUFFALO VALLEY PENN				Formation Morrow				Unit	
Completion Date 1-18-68		Total Depth 8354'		Plug Back TD		Elevation 3535' NB		Farm or Lease Name Clements Buffalo Valley	
Csg. Size 4.50	Wt. 11.60	d 4.000	Set At 8232	Perforations: From Open hole To 8354'				Well No. 1	
Tbg. Size 2.375	Wt. 4.70	d 1.995	Set At 8130	Perforations: From Open ended To				Unit Sec. Twp. Rge. D 1 150 27E	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single					Packer Set At 8150		County Cherokee		
Producing Thru Tubing		Reservoir Temp. °F 133 @ 8350'		Mean Annual Temp. °F 60		Baro. Press. - P _a 13.2		State New Mexico	
L 2150	H 8150	Gg 0.68	% CO ₂ 0.4	% N ₂ 0.6	% H ₂ S Nil	Prover -	Meter Run 4.026	Taps None.	

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	-	-	-	-	-	-	2081	60	4kr	-	84.7hr
1.	4.026	2.500	6.50	3.25	71	1411	70	4kr	-	1.1hr	2011
2.	4.026	2.500	6.43	4.10	69	1773	70	4kr	-	1.1hr	2024
3.	4.026	2.500	6.72	5.10	71	1894	70	4kr	-	1.1hr	2030
4.	4.026	2.500	6.93	6.50	71	1897	70	4kr	-	1.1hr	2126
5.											2457

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	Pressure P _m	Flow Temp. Factor Ft.	Gravity Factor Fg	Super Compress. Factor, Fpv	Rate of Flow Q, Mcfd	
1	32.64	47.236	423	0.7135	1.213	1.045	1.954
2	32.64	62.113	440	0.9415	1.213	1.040	2.558
3	32.64	77.313	460	0.9791	1.213	1.050	3.201
4	32.64	92.100	480	0.9917	1.213	1.059	3.700
5.							

NO.	P _t	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio 32.624 Mcf/bbl.
1	0.68	531	1.38	0.943	A.P.I. Gravity of Liquid Hydrocarbons 60.5 Deg.
2	0.65	523	1.37	0.900	Specific Gravity Separator Gas 0.68 XXXXXXXXXX
3	0.60	531	1.38	0.937	Specific Gravity Flowing Fluid XXXXX
4	0.72	531	1.38	0.900	Critical Pressure 540 P.S.I.A. - P.S.I.A.
5.					Critical Temperature 185 R - R

P _c 3015.2	P _c ² 9146	(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.4000$	(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.2000$
NO	P _w	P _w ²	P _c ² - P _w ²
1	2651.2	7029	2117
2	2446.2	5984	3162
3	2139.2	4576	4570
4	1670.2	2790	6353
5			

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 4.675$

Absolute Open Flow 4.700 Mcfd @ 15.025	Angle of Slope 74° 55'	Slope, n 0.560
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Remarks: HILC Meter Chart, Meter Number 11975100 0.981. Pressure recorded by H. H. H. at 750M. Tubing pressure at 8130' 13.2.

Approved By Commission:	Conducted By:	Calculated By: C. R. Appledorn	Checked By:
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