

NE EXICO OIL CONSERVATION COMMS. N
MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

51 File
122 Form C-122
Revised 9-1-65

RECEIVED

Type Test ☒ Initial ☐ Annual ☐ Special					Test Date 04/01/80		APR 11 1980	
Company Amoco Production Company				Connection Gas Company of New Mexico				O. C. D.
Pool Shugart				Formation Penn				Unit ARTESIA, OFFICE
Completion Date 09/19/79		Total Depth 12000		Plug Back TD 11958		Elevation 3628		Farm or Lease Name GREENWOOD PREGRAYBURG UNIT FED B COM
Csg. Size 5.500	Wt. 15.5	d 4.950	Set At 12000	Perforations: From 11684 To 11708		Well No. 13		
Tbg. Size 2.375	Wt. 4.7	d 1.995	Set At 11601	Perforations: From 11764 To 11788		Unit Sec. Twp. Rge. N 35 18S 31E		
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single					Packer Set At 11536		County Eddy	
Producing Thru Tubing		Reservoir Temp. °F 160 @ 11736		Mean Annual Temp. °F 60.0		Baro. Press. - P _a 13.2		State New Mexico
L 11736	H 11736	G _g 0.627	% CO ₂ 0.56	% N ₂ 0.48	% H ₂ S 0	Prover 0	Meter Run 4.0	Taps Flange

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							2604	64			45.5
1.	4.03 x 2.500			440	9.0	73	2495	69	0	0	0.5
2.	4.03 x 2.500			445	20.2	75	2419	70	0	0	0.5
3.	4.03 x 2.500			452	33.6	71	2237	71	0	0	0.7
4.	4.03 x 2.500			465	54.8	68	2046	72	0	0	0.7
5.											

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 _{pv}	Rate of Flow Q, Mcfd
1	32.64	63.87	453.2	0.9877	1.2629	1.0396	2703
2	32.64	96.33	458.2	0.9859	1.2629	1.0395	4069
3	32.64	125.10	465.2	0.9896	1.2629	1.0413	5313
4	32.64	161.82	478.2	0.9924	1.2629	1.0433	6906
5.							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	Mcf/bbl.
1.	0.67	533	1.46	0.925	38.2	
2.	0.68	535	1.47	0.926	57.0	
3.	0.69	531	1.46	0.922		
4.	0.71	528	1.45	0.919		
5.						

P _c 2613.3 P _c ² 6829					A.P.I. Gravity of Liquid Hydrocarbons		57.0	
Specific Gravity Separator Gas					0.627		X X X X X X X X	
Specific Gravity Flowing Fluid					X X X X X		0.697	
Critical Pressure					673		P.S.I.A. 669	
Critical Temperature					365		R 386	

NO.	P _c ²	P _w	P _w ²	P _c ² - P _w ²	(1) $\frac{P_c^2}{P_c^2 - P_w^2} =$	(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n =$
1	6291	2539	6449	380	5.3321	3.6237
2	5916	2518	6340	489		
3	5063	2411	5815	1014		
4	4240	2355	5548	1281		
5						

Absolute Open Flow				25025	Mcf/d @ 15.025	Angle of Slope θ	52.4	Slope, n	0.769
Approved By Commission:		Conducted By:		Calculated By:		Checked By:			
		John West Engrg.		R.M. Whitten		W.D. Magness			

3- NMocD-A 1-Hou 1-Susp 1-WDM 1-DLB