

NE MEXICO OIL CONSERVATION COMMISSION
MULTIPOINT & ONE POINT BACK PRESSURE TEST FOR GAS WELL

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

00T 1 2 1979

Type Test ☒ Initial ☐ Annual ☐ Special					Test Date 10/03/79		D.C.C. ARTESIA, OFFICE	
Company Amoco Production Company					Connection Gas Co. of New Mexico			
Pool Shugart <i>Penn</i>					Formation Penn		Unit	
Completion Date 03/09/79		Total Depth 11950.		Plug Back TD 11906.		Elevation 3614.		Farm or Lease Name <i>Pre-study</i> Greenwood Unit
Csq. Size 5.500	Wt. 20.0	d 4.778	Set At 11950.	Perforations: From 11594. To 11775.		Well No. 10		
Tbg. Size 2.875	Wt. 6.9	d 2.441	Set At 10983.	Perforations: From 0. To 0.		Unit Sec. Twp. Rge. L 27 18S 31E		
Type Well - Single - Bradenhead - G.G. or G.O. Multiple SINGLE					Packer Set At 10885		County Eddy	
Producing Thru Tubing		Reservoir Temp. °F 197. @ 11684.		Mean Annual Temp. °F 60.0		Baro. Press. - P _a 13.2		State New Mexico
L 11684.	H 11684.	G _g 0.662	% CO ₂ 0.56	% N ₂ 0.68	% 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. bw	Temp. °F	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.		Temp. °F
SI							1965.	68.			46.0
1.	4.03 x 2.000			440.	1.4	72.	1617.	68.	0.	0.	1.0
2.	4.03 x 2.000			450.	4.4	73.	1163.	70.	0.	0.	1.0
3.	4.03 x 2.000			450.	9.0	75.	763.	70.	0.	0.	1.0
4.	4.03 x 2.000			450.	13.0	77.	561.	70.	0.	0.	1.0
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	19.81	25.55	453.2	0.9887	1.2291	1.0440	642.
2	19.81	45.20	463.2	0.9877	1.2291	1.0447	1136.
3	19.81	64.57	463.2	0.9859	1.2291	1.0442	1619.
4	19.81	77.48	463.2	0.9840	1.2291	1.0437	1938.
5							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio 41.0 Mcf/bbl.		
1	0.68	532.	1.42	0.918	A.P.I. Gravity of Liquid Hydrocarbons 57.6 Deg.		
2	0.69	533.	1.42	0.916	Specific Gravity Separator Gas 0.662 X X X X X X X X		
3	0.69	535.	1.43	0.917	Specific Gravity Flowing Fluid X X X X X 0.726		
4	0.69	537.	1.43	0.918	Critical Pressure 671. P.S.I.A. 668. P.S.I.A.		
5					Critical Temperature 375. R 395 R		

NO.	P _i ²	P _w	P _w ²	P _c ² - P _w ²	$(1) \frac{P_c^2}{P_c^2 - P_w^2} = 1.1061$ $(2) \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.1061$ $AOF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 2143.$
1	2658.	1622.	2632.	1237.	
2	1383.	1176.	1382.	2487.	
3	602.	791.	626.	3243.	
4	330.	609.	371.	3498.	

Absolute Open Flow 2143. Mcfd @ 15.025		Angle of Slope 45.0	Slope, n 1.000
Remarks:			

Approved By Commission:	Conducted By: John West Engrg.	Calculated By: C.C. Weaver	Checked By: W.D. Magness
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3 - NMOC D - A 1 - Hou 1 - Susp 1 - WDM 1 - DLB