

NEW MEXICO OIL CONSERVATION COMMISSION
MULTIPOINT ANI ONE POINT BACK PRESSURE TEST - GAS WELL

Form C-122
Revised 9-1-65

Type Test ☒ Initial ☐ Annual ☐ Special					Test Date 10/01/79				
Company Amoco Production Company				Connection Northern Natural Gas Com.					
Pool Monument				Formation Grayburg-San Andres				Unit	
Completion Date 03/12/78		Total Depth 7902.		Plug Back TD 3800.		Elevation 3526.		Farm or Lease Name Gillully B Federal RA A	
Csg. Size 5.500	Wt. 17.0	d 4.892	Set At 7802.	Perforations: From 3635. To 3640.			Well No. 20		
Tbg. Size 2.875	Wt. 6.9	d 2.441	Set At 3606.	Perforations: From 0. To 0.			Unit Sec. Typ. Rge. H 21 21S 37E		
Type Well - Single - Bradenhead - G.G. or G.O. Multiple SINGLE					Packer Set At 0.		County Lea		
Producing Thru TUBING		Reservoir Temp. °F 106.0 3638.		Mean Annual Temp. °F 60.0		Baro. Press. - P _a 13.2		State New Mexico	
L 3638.	H 3638.	G _g 0.687	% CO ₂ 4.56	% N ₂ 0.92	% H ₂ S 0.77	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							481.	81.			16.0
1.	4.03 x 2.000			75.	50.0	50.	175.	81.	0.	0.	0.5
2.	4.03 x 2.000			75.	30.0	50.	210.	81.	0.	0.	0.5
3.	4.03 x 2.000			75.	21.0	50.	207.	82.	0.	0.	0.5
4.	4.03 x 2.000			75.	8.0	50.	225.	83.	0.	0.	0.5
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	66.41	88.2	1.0098	1.2065	1.0095	1618.
2.	19.81	51.44	88.2	1.0098	1.2065	1.0095	1253.
3.	19.81	43.04	88.2	1.0098	1.2065	1.0095	1049.
4.	19.81	26.56	88.2	1.0098	1.2065	1.0095	647.
5.							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.		
1.	0.13	510.	1.35	0.981	A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.		
2.	0.13	510.	1.35	0.981	Specific Gravity Separator Gas _____		
3.	0.13	510.	1.35	0.981	Specific Gravity Flowing Fluid _____		
4.	0.13	510.	1.35	0.981	Critical Pressure _____ P.S.I.A.		
5.					Critical Temperature _____ R		

P _r 493.0 P _r ² 243.		(1) $\frac{P_c^2}{P_c^2 - P_w^2} = \frac{1.2477}{1.2477 - 1.2477}$		(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = \frac{1.2477}{1.2477 - 1.2477}$	
NO.	P _i ²	P _w	P _w ²	P _i ² - P _w ²	
1	35.	220.	48.	195.	$AOF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 2019.$
2	50.	239.	57.	186.	
3	48.	232.	34.	189.	
4	57.	242.	59.	185.	
5					

Absolute Open Flow _____ 2019. Mcfd @ 15.025		Angle of Slope θ _____ 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-NMOCO-H 1-Hou 1-Susp 1-WDM 1-DLB