

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL RECEIVED

Type Test 4 POINT ☒ Initial ☐ Annual ☐ Special					Test Date 4-4-88		APR 19 '88	
Company NEARBURG PRODUCING COMPANY					Connection TO AIR			
Well <i>Imetery narrow</i>					Formation <i>narrow</i>		Unit O. C. D. ARTESIA, OFFICE	
Completion Date 4-1-88		Total Depth		Plug Back TD 9884		Elevation		Farm or Lease Name ANDERSON 15
Coq. Size 4.5	Wt. 11.6	d 4.052	Set At 9884	Perforations: From 9565 To 9647		Well No. 1		
Thq. Size 2.375	Wt. 4.7	d 1.995	Set At 9450	Perforations: From OPEN To ENDED		Unit Sec. Twp. Rye. <i>H 15 20 25</i>		
Type Well - Single - Brdhead - G.G. or G.O. Multiple SINGLE					Packer Set At 9491		County EDDY	
Producing Thru TUBING		Reservoir Temp. °F 210 @ 9606		Mean Annual Temp. °F 60°		Baro. Press. - P _g 13.2		State NEW MEXICO
L 9606	H 9606	G _g 0.600	% CO ₂ 0.97	% N ₂ 2.90	% H ₂ S 0	Prover 0	Meter Run 3.067	Taps FLNG

FLOW DATA						TUBING DATA		BHP 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							2768	70	N/A	N/A	72 HRS.
1.	3.067		1.250	220	7.0	70	2310	71	N/A	N/A	60 MIN.
2.	3.067		1.250	220	12.0	72	1675	72	N/A	N/A	60 MIN.
3.	3.067		1.250	210	18.0	75	950	72	N/A	N/A	60 MIN.
4.	3.067		1.250	450	28.0	78	630	72	N/A	N/A	1080 MIN.
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	7.58	40.40	233.2	0.9905	1.2910	1.0174	398
2	7.58	52.90	233.2	0.9887	1.2910	1.0172	520
3	7.58	63.38	223.2	0.9859	1.2910	1.0161	621
4	7.58	113.88	463.2	0.9831	1.2910	1.0328	1131
5							

NO.	P _t	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	A.P.I. Gravity of Liquid Hydrocarbons	Specific Gravity Separator Gas	Specific Gravity Flowing Fluid	Critical Pressure	Critical Temperature
1	0.35	530	1.52	0.966	0	0	6.00	X X X X X X X X	672	349
2	0.35	532	1.52	0.966						
3	0.33	535	1.53	0.969						
4	0.69	538	1.54	0.938						
5										

NO.	P _t	P _w	P _w ²	P _t ² - P _w ²
1		2316	5364	2326
2		1684	2837	4853
3		967	934	6756
4		671	450	7240
5				

(1) $\frac{P_c^2}{P_t^2 - P_w^2} = 1.0622$ (2) $\left[\frac{P_c^2}{P_t^2 - P_w^2} \right]^n = 1.0569$

AOF = Q $\left[\frac{P_c^2}{P_t^2 - P_w^2} \right]^n = 1196$

CONFIDENTIAL

Absolute Open Flow	1196	Mcf @ 15.025	Angle of Slope	47.5	Slope, n	0.917
Remarks: 4TH RATE RUN 18 HRS. WELL WAS PRODUCING H ₂ O PRODUCED 38 BBLS IN 21 HRS.						
Approved By Division	Conducted By:	Calculated By:	Checked By:			
	BENNETT & CATHEY	RICHARD TOWNLEY				