

NEW MEXICO OIL CONSERVATION
MULTIPO. AND ONE POINT BACK PRESSURE

RECEIVED BY
EST FOR GAS WELL

Form C-12
Revised 1/75

APR 25 1984

Test Date O. C. D.
4-ARTEZIA, OFFICE

Type Test + POINT ☒ Initial ☐ Annual ☐ Special										Test Date <u>O. C. D.</u> 4-ARTEZIA, OFFICE	
Company READ & STEVENS ✓					Connection TO AIR						
Pool <i>Wildcat Penn</i>					Formation UPPER CANYON					Unit -	
Completion Date 4-10-84			Total Depth 12180.		Plug Back To 9970.		Elevation -83109'		Farm or Lease Name OTIS FEDERAL "34"		
Case Size 7.625	Wt. 39.0	d 6.625	Set At 9970.	Perforations: From 9789. To 9817.				Well No. #1			
Fig. Size 2.875	Wt. 6.5	d 2.441	Set At 9715.	Perforations: From 0 To 0				Unit F	Sec. 34	Twp. 22S	Hgs. 27E
Type Well - Single - Bradenhead - G.G. or G.O. Multiple SINGLE					Packer Set At 9715			County EDDY			
Producing Thru TUBING		Reservoir Temp. °F 174. 9803.		Mean Annual Temp. °F 60.0		Baro. Press. - P _a 13.2		State NEW MEXICO			
L 9803.	H 9803.	C _q 0.706	% CO ₂ 0.63	% N ₂ 0.56	% H ₂ S 0	Provor 0	Motor Run 4.0	Tape FLANGE			

FLOW DATA							TUBING DATA		B.H.P. DATA		Duration of Flow
NO.	Provor 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.	CHOKE	
51							3924.		5221.		72.0
1.	4.03 X 1.250			270.	6.0	92.	3684.	0	4993.		1.0
2.	4.03 X 1.250			300.	14.5	78.	3367.	0	4773.		1.0
3.	4.03 X 1.250			340.	32.0	78.	3072.	0	4592.		1.0
4.	4.03 X 1.250			385.	51.0	85.	2610.	0	4225.		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 _{sp}	Rate of Flow Q, Mcfd
1	7.47	41.22	283.2	0.9706	1.1901	1.0274	365.
2	7.47	67.39	313.2	0.9831	1.1901	1.0331	608.
3	7.47	106.31	353.2	0.9831	1.1901	1.0375	964.
4	7.47	142.51	398.2	0.9768	1.1901	1.0400	1287.
5							

NO.	P ₁	Temp. °R	T ₁	Z	Gas Liquid Hydrocarbon Ratio <u>21.6</u> Mcf/bbl.
1	0.42	552.	1.42	0.947	A.P.I. Gravity of Liquid Hydrocarbons <u>64.0</u> Deg.
2	0.47	538.	1.38	0.937	Specific Gravity Separator Gas <u>0.706</u> XXXXXXXXXX
3	0.53	538.	1.38	0.929	Specific Gravity Flowing Fluid <u>XXXXXX</u> 0.817
4	0.60	545.	1.40	0.924	Critical Pressure <u>669.</u> P.S.I.A. 663. P.S.I.A.
5					Critical Temperature <u>389.</u> R 424. R

NO.	P ₁ ²	P _w ²	P _w ²	P _c ² - P _w ²	(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 2.5119$	(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 2.3463$
1	25057.	3688.	13601.	1551.	ACF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 3019.$	Post TD-2 5-4-84 Comp & BK
2	22903.	3494.	12206.	2947.		
3	21212.	3335.	11124.	4029.		
4	17959.	3020.	9120.	6032.		
5						

Absolute Open Flow <u>3019.</u>	Mcf @ 15.025	Angle of Slope <u>47.2</u>	Slope, n <u>0.926</u>
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Remarks: BOTTOM HOLE PRESSURES MEASURED WITH AMERADA PRESSURE ELEMENTS.

Approved By Commission:	Conducted By: DON BENNETT	Calculated By: BENNETT & CATHEY	Checked By:
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