

NEW MEXICO OIL CONSERVATION COMMISSION
MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

RECEIVED

Form C-122
Revised 9-1-65

APR 17 1981

O. C. D.

Type Test ☒ Initial ☐ Annual ☐ Special						Test Date 4-8-81		ARTESIA, OFFICE	
Company DOYLE HARTMAN				Connection AIR				800' FSL & 1000' FWL	
Pool AID MORROW				Formation MORROW KB 3693				Unit M	
Completion Date 12-10-80		Total Depth 10,750		Plug Back TD 10,722		Elevation 3,681 GL		Farm or Lease Name SOUTH EMPIRE STATE	
Csg. Size 5 1/2	Wt. 17	d 4.892	Set At 10,722	Perforations: From 10,481 To 10,507				Well No. 1	
Thq. Size 2 7/8	Wt. 6.5	d 2.441	Set At	Perforations: From PERF NIPPLE 10,433.48 M				Unit Sec. Twp. Rge. 24 17S 28E	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple SINGLE						Packer Set At NONE		County EDDY	
Producing Thru TUBING		Reservoir Temp. °F 158 @ 10,432		Mean Annual Temp. °F 60		Baro. Press. - P _a 13.2		State NEW MEXICO	
L 10,494	H 10,494	Gg 671	% CO ₂ 1.23	% N ₂ 0.77	% H ₂ S 0	Prover	Meter Run 4"	Taps F	

FLOW DATA						TUBING DATA		CASING DATA		Duration of Flow	
NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. hw	Temp. °F	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.		Temp. °F
SI							2228		3124		960.0
1.	4" X 1.750			7.63	2.6	97	2162	76	3073		1
2.	4" X 1.750			7.69	4.1	88	2102	77	3015		1
3.	4" X 1.750			7.70	7.8	81	1992	78	2872		1
4.	4" X 1.750			7.83	9.9	81	1900	78	2757		1
5.											

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor Ft.	Gravity Factor Fg	Super Compress. Factor, Fpv	Rate of Flow Q, Mcfd
1	15.3100	62.73	582.2	.9662	1.2208	1.0483	1188.
2	15.3100	99.70	591.4	.9741	1.2208	1.0518	1909.
3	15.3100	189.93	592.9	.9804	1.2208	1.0547	3670.
4	15.3100	245.13	613.1	.9804	1.2208	1.0564	4745.
5							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.
1	.86	557.	1.48	.910	A.P.I. Gravity of Liquid Hydrocarbons 63.0 Deg.
2	.88	548.	1.46	.904	Specific Gravity Separator Gas .6710 XXXXXXXXXX
3	.88	541.	1.44	.899	Specific Gravity Flowing Fluid .6735 XXXXXX
4	.91	541.	1.44	.896	Critical Pressure 674 P.S.I.A. P.S.I.A.
5					Critical Temperature 375 R R R

NO.	P _r	P _w	P _r ²	P _w ²	P _r ² - P _w ²	(1) $\frac{P_r^2}{P_r^2 - P_w^2} = 4.5397$	(2) $\left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^n = 2.9731$
1		3086.2	9524.6	317.0			
2		3028.2	9170.0	672.0			
3		2885.2	8324.4	1518.0			
4		2770.2	7674.0	2168.0			
5							

Absolute Open Flow 14,107.3 Mcfd @ 15.025				Angle of Slope 54.2	Slope, n .7202
Remarks: BOTTOM HLE PRESSURES TAKEN WITH AMERADA GAUGE					
Approved By Commission:		Conducted By: DON BENNETT		Checked By: <i>[Signature]</i>	