

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

Form C-122
 Revised 9-1-65

Type Test ☒ Initial ☐ Annual ☐ Special						Test Date 8/25/78			
Company Texas Oil & Gas Corporation						Connection			
Pool Wilson (Penn.)						Formation Morrow			
Completion Date 8/22/78		Total Depth 13,000'		Plug Back TD 12,903		Elevation 3702' KB		Farm or Lease Name South Wilson State Com.	
Csg. Size 4 1/2"	Wt. 13.5	d 3.920	Set At 13000	Perforations: From 12,703 To 12,804		Well No. 1			
Tbg. Size 2 7/8"	Wt. 6.5	d 2.441	Set At 12,590	Perforations: From Open Ended		Unit Sec. Twp. Rge. J 14 21S 34E			
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single						Packer Set At 12,590		County Lea	
Producing Thru Tubing		Reservoir Temp. °F 174 @ 12,580		Mean Annual Temp. °F		Baro. Press. - P _a 13.2		State New Mexico	
L 12,754	H	Gg .644	% CO ₂	% N ₂	% H ₂ S	Prover	Meter Run X	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.	
SI							2961	71		
1.	3"	x	1.625	440	20	94	900	80		2.5 Hrs.
2.	3"	x	1.625	440	15	86	660	80		1 Hr.
3.	3"	x	1.625	440	10	87	705	82		1 Hr.
4.	3"	x	1.625	440	3	91	770	83		1 Hr.
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	13.24	95.205	453.2	.9688	1.246	1.039	1581
2.	13.24	82.449	453.2	.9759	1.246	1.040	1380
3.	13.24	67.320	453.2	.9750	1.246	1.039	1125
4.	13.24	36.872	453.2	.9715	1.246	1.039	614
5.							

NO.	P _f	Temp. °R	T _f	Z	Gas Liquid Hydrocarbon Ratio 398 Mcf/bbl.
1.	.68	554	1.48	.928	A.P.I. Gravity of Liquid Hydrocarbons 57.8 Deg.
2.	.68	546	1.46	.925	Specific Gravity Separator Gas .644 X X X X X X X X
3.	.68	547	1.47	.927	Specific Gravity Flowing Fluid X X X X X
4.	.68	551	1.48	.928	Critical Pressure 670 P.S.I.A. P.S.I.A.
5.					Critical Temperature 373 R R

$F_f = 5798.2 \quad P_f^2 = 33,619$				$(1) \frac{P_f^2}{F_f^2 - P_s^2} = \frac{33,619}{28,020}$		$(2) \left[\frac{F_f^2}{P_f^2 - P_s^2} \right]^n = 1.1998$	
NO.	P _t ²	P _s	P _s ²	P _f ² - P _s ²			
1		2366.2	5,599	28,020			
2		2410.2	5,809	27,810			
3		2537.2	6,437	27,182			
4		2815.2	7,925	25,694			
5							

$AOF = Q \left[\frac{F_f^2}{P_f^2 - P_s^2} \right]^n = 1,897$			
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Absolute Open Flow 1,897 Mcfd @ 15.025		Angle of Slope θ 45°		Slope, n 1.000	
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Remarks: BHP was Recorded with an Amerada RPG-3 Instrument No. 39287 (0-7900 psi range)	
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Approved By Commission:	Conducted By: TOM HANSEN CO.	Calculated By: HARRINGTON	Checked By:
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