

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

Form C-122
Revised 9-1-65

RECEIVED

Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 4-15-78		MAY 4 1978	
Company Texas Oil & Gas Corp.				Connection None as yet		U.S. GEOLOGICAL SURVEY ARTESIA, NEW MEXICO	
Pool <i>Undesignated</i> <i>Burton Flat No. 1</i>				Formation Morrow			
Completion Date 4/13/78		Total Depth 11175		Plug Back TD. 11,105		Elevation 3334 KB	
Form or Lease Name McMillan Federal Com				Well No. 1			
Csg. Size 4 1/2"	Wt. 11.6&13.5	d	Set At 11175	Perforations: From 10,794 To 11,024			
Tbg. Size 2 3/8"	Wt. 4.7	d	Set At 10,687	Perforations: From To		Unit Sec. Twp. Rge. J 14 20S 27E	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single				Packer Set At 10,687		County Eddy	
Producing Thru Tubing		Reservoir Temp. °F 172 @ 10,909		Mean Annual Temp. °F 13.2		State New Mexico	
L 10,909	H	Gg .619	% CO ₂ 1.46	% N ₂ .43	% H ₂ S Trace	xxxxx DWI	Meter Run Taps

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							3225	73			
1.	2"	X	1 1/4"	1.5		100	3044	71			1 Hr.
2.	2"	X	1 1/4"	6.5		93	2919	71			1 Hr.
3.	2"	X	1 1/4"	14.0		86	2622	71			1 Hr.
4.	2"	X	1 1/4"	19.0		80	2312	71			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	287			.9636	.9845	.9588	261
2	626			.9697	.9845	.9626	575
3	980			.9759	.9845	.9670	910
4	1187			.9813	.9845	.9695	1112
5							

NO.	P _t	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.
1					A.P.I. Gravity of Liquid Hydrocarbons <u>None Produced</u> Deg.
2					Specific Gravity Separator Gas <u>.619</u> X X X X X X X X
3					Specific Gravity Flowing Fluid <u>X X X X X</u>
4					Critical Pressure _____ P.S.I.A. _____ P.S.I.A.
5					Critical Temperature _____ R _____ R

$P_t = 4162.2$ $P_s^2 = 17,324$					$(1) \frac{P_t^2}{P_t^2 - P_s^2} = \frac{17,324}{2151}$	$(2) \left[\frac{P_t^2}{P_t^2 - P_s^2} \right]^n = \frac{4.4155}{1}$
NO.	P _t ²	P _s	P _s ²	P _t ² - P _s ²		
1	4073.2	16,591	733			
2	3895.2	15,173	2151			
3	3619.2	13,099	4225			
4	3336.2	11,130	6194			
5						

$AOF = Q \left[\frac{P_t^2}{P_t^2 - P_s^2} \right]^n = 2539$			$\left[\frac{P_t^2}{P_t^2 - P_s^2} \right]^n = 2539$
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Absolute Open Flow <u>2,539</u> Mcfd @ 15,025	Angle of Slope <u>54.5°</u>	Slope, n <u>.712</u>
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Remarks:			
Approved By Commission:	Conducted By: TOM HANSEN CO., INC.	Calculated By: Mr. Harrington	Checked By: