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C-122

N. M. O. & G. C. COPY
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 10-1-74		OCT 16 1974	
Company Texas Oil & Gas Corp.		Connection To Air		O. C. C.	
Pool Burton Flat		Formation Morrow		ARTESIA, OFFICE	
Completion Date 9-24-74		Total Depth 11,900' / 11,979		Plug Back TD 11,820'	
Elevation 3270 Gr.		Farm or Lease Name Williamson Fed. "A"		Well No. 1	
Csg. Size 4 1/2"	Wt. 13#	d 4.382	Set At 11,900'	Perforations: From 11,434' To 11,616'	
Tubg. Size 2 3/8"	Wt. 4.7#	d 1.995	Set At 11,046'	Perforations: From open To ended	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single			Packer Set At 11,046'		County Eddy
Producing Thru Tubing		Reservoir Temp. °F 186 @ 11,525'		Mean Annual Temp. °F 60	
Baro. Press. - P _a 13.2		State New Mexico			
C 11046	H 11046	G _g 0.613	% CO ₂ 0.81	% N ₂ 0.46	% H ₂ S -----
Prover		Meter Run Pos. chokes		Taps	

FLOW DATA						TUBING DATA		CASING DATA		Duration of Flow	
NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. in. w.	Temp. °F	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.		Temp. °F
SI	Positive chokes						3662.0		Packer		72 Hrs.
1.	14/64			3295.0		72	3295.0	72			60 min
2.	12/64			3500.0		73	3500.0	73			60 min
3.	10/64			3549.0		74	3549.0	74			60 min
4.	8/64			3603.0		74	3603.0	74			60 min
5.											

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor F _L	Gravity Factor F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1	0.7924		3308.2	0.9887	1.277	1.123	3717
2	0.5725		3513.2	0.9877	1.277	1.112	2821
3	0.3885		3562.2	0.9868	1.277	1.106	1929
4	0.2416		3616.2	0.9868	1.277	1.104	1215
5							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio _____ Mcf/obl.
1.	4.93	532	1.47	.793	A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.
2.	5.24	533	1.47	.809	Specific Gravity Separator Gas _____ 0.613
3.	5.31	534	1.48	.817	Specific Gravity Flowing Fluid _____ X X X X X
4.	5.39	534	1.48	.821	Critical Pressure _____ 671 P.S.I.A.
5.					Critical Temperature _____ 362 R

NO.	P _r	P _w	P _r ²	P _w ²	P _r ² - P _w ²
1	10944	4509.2	20333	2699	
2	12343	4697.2	22064	968	
3	12689	4708.2	22167	865	
4	13977	4751.2	22574	458	
5					

(1) $\frac{P_r^2}{P_r^2 - P_w^2} = 8.5335$

ADP = Q $\left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^n = 13,717$

(2) $\left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^n = 3.6903$

Absolute Open Flow	13,717	Mcfd @ 15.025	Angle of Slope @	58.7°	0.609
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Remarks: Bottom Hole Pressures measured with Amerada Pressure Gauge @ 11,525 feet.

Approved By Commission:	Conducted By: D.A.T.	Calculated By: R.L.W.	Checked By: J.W.W.
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