

NEW MEXICO OIL CONSERVATION COMMISSION
MULTIPOINT AND ONE POINT BACK PRESSURE TEST - GAS WERE RECEIVED

Form C-122
Revised 9-1-65

457
File

MAY - 2 '90

Type Test ☒ Initial ☐ Annual ☐ Special						Test Date 4/12/90			
Company TXO Production Corp. ✓				Connection Phillips				O. C. D. ARTESIA, OFFICE	
Pool Burton Flat, E.				Formation Morrow				Unit B	
Completion Date 3/20/90		Total Depth 11950		Plug Back TD 11908		Elevation GL 3298		Farm or Lease Name Williamson Federal	
Csg. Size 4 1/2	Wt. 13.5 & 11.6#	d 4.276	Set At 11950	Perforations: From 11528 To 11615		Well No. 5			
Tbg. Size 2 3/8	Wt. 4.7	d 1.995	Set At 11316	Perforations: From open To end		Unit B	Sec. 15	Twp. 20S	Rge. 29E
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Gas - Gas Dual						Packer Set At 11316		County Eddy	
Producing Thru Tbg.		Reservoir Temp. °F 190 @ 11572		Mean Annual Temp. °F 60°		Baro. Press. - P _a 13.2		State NM	
L *11572	H 11572	Gg .671	% CO ₂ .79	% N ₂ .33	% H ₂ S --	Prover	Meter Run 3.068	Taps Flg.	

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							1137		Pkr.		48 hrs.
1.	3	x	.750	10	6.25	80	1129		Pkr.		1 hr.
2.	3	x	.750	15	42.25	80	1100		Pkr.		1 hr.
3.	3	x	1.750	19	2.25	78	1066		Pkr.		1 hr.
4.	3	x	1.750	45	4.00	54	930		Pkr.		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 F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1	2.672	12.04	23.2	.9813	1.221	1.019	39
2	2.672	34.52	28.2	.9813	1.221	1.023	113
3	15.61	8.51	32.2	.9831	1.221	1.023	163
4	15.61	15.26	58.2	1.006	1.221	1.020	298
5							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio Dry Gas Mcf/bbl. A.P.I. Gravity of Liquid Hydrocarbons Dry Deg. Specific Gravity Separator Gas .617 X X X X X X X X Specific Gravity Flowing Fluid X X X X X Critical Pressure 671 P.S.I.A. P.S.I.A. Critical Temperature 362 R R			
1	.03	540	1.49	.963				
2	.04	540	1.49	.955				
3	.04	538	1.48	.955				
4	.08	514	1.41	.961				
5								

$P_c = 1171.4$ $P_c^2 = 1372.2$	$(1) \frac{P_c^2}{P_c^2 - P_w^2} = 3.136$	$(2) \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 2.045$																														
<table border="1" style="width:100%;"> <tr> <th>NO.</th> <th>P₁²</th> <th>P_w</th> <th>P_w²</th> <th>P_c² - P_w²</th> </tr> <tr> <td>1</td> <td></td> <td>1161.0</td> <td>1347.9</td> <td>24.3</td> </tr> <tr> <td>2</td> <td></td> <td>1131.2</td> <td>1279.6</td> <td>92.6</td> </tr> <tr> <td>3</td> <td></td> <td>1100.3</td> <td>1210.7</td> <td>161.5</td> </tr> <tr> <td>4</td> <td></td> <td>966.8</td> <td>934.7</td> <td>437.5</td> </tr> <tr> <td>5</td> <td></td> <td></td> <td></td> <td></td> </tr> </table>	NO.	P ₁ ²	P _w	P _w ²	P _c ² - P _w ²	1		1161.0	1347.9	24.3	2		1131.2	1279.6	92.6	3		1100.3	1210.7	161.5	4		966.8	934.7	437.5	5					$AOF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 609$	
NO.	P ₁ ²	P _w	P _w ²	P _c ² - P _w ²																												
1		1161.0	1347.9	24.3																												
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5																																

Absolute Open Flow 609 Mcfd @ 15.025	Angle of Slope @ .626
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Remarks: * = BHP Instrument set @ this depth.
 No fluid produced during test.

Approved By Commission:	Conducted By: John West Engineering	Calculated By: BM	Checked By: BM
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