## NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Revised 12-1-55

Pool	ol Basin Dakota				Formation Dakota				County San Juan				
Init	nitial X Annual_			al	Special				Date of Test8-22-64				
	Company Aztec Oil & Gas Com												
Unit C Sec. 3 Twp. 31N Rge. 12W Purchaser Southern Union Gas													
Casing 4-1/2 Wt 9.5 &10.51.D. 4.090 Set at 7325 Perf. 7061 To 7235													
Tubing 2-3/8Wt. 4.7 I.D. 1.995 Set at 7053 Perf. Open ended To													
	Gas Pay: From 7061 To 7235 L 7053 xG 700 (est)-GL 4937 Bar.Press.												
	Producing Thru: Casing Tubing X Type Well Single Gas Single-Bradenhead-G. G. or G.O. Dual												
Date	Date of Completion: 8-15-64 Packer None Reservoir Temp.												
	OBSERVED DATA												
Tested Through (Choke) (Neces) (Choke) (Yestes)													
	Flow Data (Proposite (Choke) Pre			ata			Tubing Data		Casing Data		D		
No.	(Perce (Line	(C)	hoke) ifice)	Pres	1 1					I .		OI LIOM	
	Size				g h <sub>w</sub>		psig <b>2048</b>	°F.	psig <b>205</b> 0			Hr.	
SI 1.	7 days		3/4	<del> </del> -				60 (est)	1160		3 1	T8	
2.													
3. 4.				<del>                                     </del>									
5.													
FLOW CALCULATIONS													
	Coeff	icient	1		Pressure	Flow	Temp.	Gravity	Compress.		Rate of Flow		
No.	(24-Hour) \( \sqrt{h_wp_f} \)		<u> </u>	psia	Factor F <sub>t</sub>		Factor F <sub>g</sub>			q-MCFPD @ 15.025 psia			
	12.3650		V ''W	Pf	380	1.000		•9258	1.05	<del>-  </del>	4568		
1. 2. 3.	120,30												
3.													
4. 5.				+									
PRESSURE CALCULATIONS													
Gas	Liquid Hy	drocarb	on Rati			cf/bbl.		Speci	fic Gravi	ty Sepa	arator	Gas	
	ity of Li		drocarb )	ons [1-e <sup>-s</sup>	deg.				Specific Gravity Flowing FluidP <sub>C</sub> 2062P <sup>2</sup> 4251844				
$P_{c}$ (1-e <sup>-s</sup> ) $P_{c}$ 2062 $P_{c}$ 4251044													
	P <sub>w</sub>		,				.,2		_2 _2	T	,	D.	
No.	i	_ \	$P_{\mathbf{t}}^2 \mid \mathbf{F}$	r <sub>c</sub> Q	$(F_cQ)^2$	(F	$\left[ c^{Q} \right]^{2}$	$P_{\mathbf{w}}^2$	$P_c^2 - P_w^2$	C	al. Pw	P <sub>w</sub> P <sub>c</sub>	
<u> </u>	Pt (psi			<del></del>	<del>- </del>			1373584			W		
2.													
3.									<del> </del>	-	<del>-                                    </del>		
1. 2. 3. 4.	<b> </b>												
Absolute Potential: 6121 MCFPD; n75													
	IPANY A	tec Oll	& Gas	Comp	my	land as							
	ORESS D		70 FM Original	Signed	ton, New M	EXTCO	Caz	1 E. Jame	son. Dist	rict E	ngineer		
Wl:1	"NESSED		Carl E.							FITTE	_		
CON	IPANY		<del></del>			RE	MARKS			71/14	70		
	-					1 1431			/QU	ULIT "			
									[ "	- 351	54		

## INSTRUCTIONS

This form is to be used for reporting multi-point back pressure tests on gas wells in the State, except those on which special orders are applicable. Three copies of this form and the back pressure curve shall be filed with the Commission at Box 871, Santa Fe.

The log log paper used for plotting the back pressure curve shall be of at least three inch cycles.

## NOMENCLATURE

- Q = Actual rate of flow at end of flow period at W. H. working pressure (P<sub>W</sub>). MCF/da. @ 15.025 psia and 60° F.
- $P_c$ = 72 hour wellhead shut-in casing (or tubing) pressure whichever is greater. psia
- PwI Static wellhead working pressure as determined at the end of flow period. (Casing if flowing thru tubing, tubing if flowing thru casing.) psia
- Pt- Flowing wellhead pressure (tubing if flowing through tubing, casing if flowing through casing.) psia
- Pf Meter pressure, psia.
- hw Differential meter pressure, inches water.
- FgI Gravity correction factor.
- $F_t$  Flowing temperature correction factor.
- Fpv Supercompressability factor.
- n I Slope of back pressure curve.

Note: If  $P_{\rm W}$  cannot be taken because of manner of completion or condition of well, then  $P_{\rm W}$  must be calculated by adding the pressure drop due to friction within the flow string to  $P_{\rm t}$ .