## NEW MEXICO OIL CONSERVATION COMMINGION

## HAM OFFICE SCC

Form C-122

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS Revised 12-1-55

Pool 1955 July 12 0:20 Formation 15 15 County 12												
Initial Annual Annual					Spec		Date of Test JUE 29, 1956					
Unit O Sec. Twp. 21 S Rge. 36 8 Purchaser 1. 10 11 Trp. Co. Co. 18												
Casing 7" Wt. 17" I.D. Set at 3629 Perf. 3448 To 3648												
Tubing 2" Wt. 4.7" I.D. Set at 244 Perf. To												
Gas Pay: From 34/8 To 3648 L 3548 xG 660 -GL 2413 Bar. Press. 13.2												
Producing Thru: Casing Tubing Type Well Single—Bradenhead—G. G. or G.O. Dual												
Date of Completion: Packer Reservoir Temp. 116												
OBSERVED DATA												
Tested Through (Prover) (Choke) (Meter) Type Taps												
								<b>.</b>				
	(Protein)		w Data ) Press.	Diff	Temp		Data Temp.	Casing D	Temp.	Du	ration	
No.	(Line)						-		Į.		of Flow	
	Size	Size	psig	h <sub>w</sub>	°F.		°F.	psig	°F∙		Hr.	
SI				-4		966	80	965		72		
1. 2. 3. 4. 5.	4"	1.25	793	15	97	905	82	910 872	82	3,		
<del>2</del> •			599	15.6	72	837	80	852	90	<u> </u>		
<del>?•</del> }		·	371	75.9	89	734	80	791	80	3		
5.		<del> </del>		1								
	Cooffici	ont				CULATION		Compre	99	Rate of	Flow	
No.	Coefficient			Fact				Compress. Factor		Q-MCFPD		
"	(24-Hour) 7		hwpf	psia	F			Fpv	_	@ 15.02		
1.	9.643			601.			•9393		4	97		
2.				606.2	606-2 -9697		•9393	1.0	7	1291		
3 <sub>e</sub>			8.28	602.2			.9393	1.0	7	1470		
4.			3.85	504.2	.9732		•9393	1,061		2000		
4. 5.												
PRESSURE CALCULATIONS  Gas Liquid Hydrocarbon Ratio cf/bbl. Specific Gravity Separator Gas												
	ty of Liqui		arbons	deg.			Specific Gravity Flowing Fluid					
F <sub>C</sub> (1-e <sup>-5</sup> ) P <sub>C</sub> 979•2 P <sub>C</sub> 958•8												
	$P_{\mathbf{w}}$							2 ^				
No.		$P_{\mathbf{t}}^2$	$F_cQ$	$(F_cQ)^2$	(F	(cQ) <sup>2</sup> (-e <sup>-s</sup> )	$P_w^2$	$P_c^2 - P_w^2$	C	al.	Pw Pc	
	Pt (psia)				(1	e <sup>-5</sup> )	460.0	106.5		Pw	P <sub>C</sub>	
1.	92342						763.6	175.2			70.64	
2.	885.2 865.2		<del></del>				748.6	219.2			58.A	
3.	804.2						646.7	312.1	+		82,1	
4. 5.												
Absolute Potential: WGO MCFPD; n .712  COMPANY SUCLABRAGA CARACTER OIL CAS												
ADDRESS SO SALL PRODUCT HOUSE, NO. 100 MILES												
AGEN	T and TITLE	Richal	rd L. Harr		Gas Aga	yet K	shoul ;	Harmy				
WITN	ESSED	Sarl Sm				· · · · · ·		<del></del>				
COMPANY SI Page Natural Gas Cumpany												
					REM	ARKS						

## 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 I Actual rate of flow at end of flow period at W. H. working pressure  $(P_W)$ . MCF/da. @ 15.025 psia and 60° F.
- $P_c$ = 72 hour wellhead shut-in casing (or tubing) pressure whichever is greater. psia
- PwT 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
- $P_f$  Meter pressure, psia.
- hw Differential meter pressure, inches water.
- $F_g$ : Gravity correction factor.
- $F_t$  Flowing temperature correction factor.
- $F_{\text{DV}}$  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  $P_{\rm t}$ .