

3-OCC

1-H.L. Kendrick

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2-EPNG - El Paso, Farm.

1-TCA, 1-Snoddy (Holland)

1-F

## NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122

Revised 12-1-55

## MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool BASIN DAKOTA Formation DAKOTA County San JuanInitial X Annual \_\_\_\_\_ Special \_\_\_\_\_ Date of Test 1/23/64Company Beta Development Co. Lease Federal "B" Well No. 1Unit 9 Sec. 28 Twp. 30 N Rge. 11 W Purchaser EPNG Co.Casing 4 1/2" Wt. 10.50 I.D. 4.040 Set at 7016' Perf. 6804' To 6912'Tubing 2 3/8" Wt. 4.70 I.D. 1.995 Set at 6891' Perf. Open To andGas Pay: From 6804' To 6912' L 6891 xG .67 -GL 4617 Bar.Press. 12.0Producing Thru: Casing 1/16/64 Tubing X Type Well Single - Gas

Single-Bradenhead-G. G. or G.O. Dual

Date of Completion: 1/14/64 Packer \_\_\_\_\_ Reservoir Temp. \_\_\_\_\_

## OBSERVED DATA

Tested Through (choke) (Choke) (choke) Type Taps \_\_\_\_\_

Flow Data						Tubing Data		Casing Data		Duration of Flow Hr.
No.	(Prover) (Line) Size	(Choke) (Line) Size	Press. psig	Diff. h <sub>w</sub>	Temp. °F.	Press. psig	Temp. °F.	Press. psig	Temp. °F.	
1.		3/4"	285		72	285	72	2005		7 Days
2.								885		3 Hrs.
3.										
4.										
5.										

## FLOW CALCULATIONS

No.	Coefficient (24-Hour)	$\sqrt{h_{wPf}}$	Pressure psia	Flow Temp. Factor F <sub>t</sub>	Gravity Factor F <sub>g</sub>	Compress. Factor F <sub>pv</sub>	Rate of Flow Q-MCFPD @ 15.025 psia
1.	12.3650		297	.9887	.9463	1.026	3,524
2.							
3.							
4.							
5.							

## PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio \_\_\_\_\_ cf/bbl.

Gravity of Liquid Hydrocarbons \_\_\_\_\_ deg.

F<sub>c</sub> \_\_\_\_\_ (1-e<sup>-s</sup>)

Specific Gravity Separator Gas \_\_\_\_\_

Specific Gravity Flowing Fluid \_\_\_\_\_

P<sub>c</sub> 2017 P<sub>c</sub><sup>2</sup> 4,068,289P<sub>w</sub> 897 P<sub>w</sub><sup>2</sup> 804,609

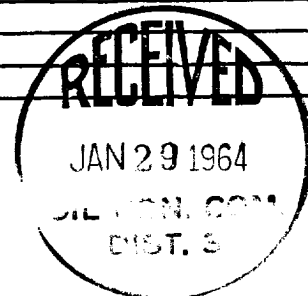
No.	P <sub>w</sub> P <sub>t</sub> (psia)	P <sub>t</sub> <sup>2</sup>	F <sub>c</sub> Q	(F <sub>c</sub> Q) <sup>2</sup>	(F <sub>c</sub> Q) <sup>2</sup> (1-e <sup>-s</sup> )	P <sub>w</sub> <sup>2</sup>	P <sub>c</sub> <sup>2</sup> -P <sub>w</sub> <sup>2</sup>	Cal. P <sub>w</sub>	P <sub>w</sub> P <sub>c</sub>
1.						804,609	3,263,680		.444
2.									
3.									
4.									
5.									

Absolute Potential: 4,158 MCFPD; n .75COMPANY Beta Development Co.ADDRESS 234 Petroleum Club Plaza, Farmington, New MexicoAGENT and TITLE George L. Hoffman, Production Engineer

WITNESSED \_\_\_\_\_

COMPANY \_\_\_\_\_

REMARKS



## 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 ( $P_w$ ).  
MCF/da. @ 15.025 psia and 60° F.

$P_c$  = 72 hour wellhead shut-in casing (or tubing) pressure whichever is greater.  
psia

$P_w$  = Static wellhead working pressure as determined at the end of flow period.  
(Casing if flowing thru tubing, tubing if flowing thru casing.) psia

$P_t$  = Flowing wellhead pressure (tubing if flowing through tubing, casing if flowing through casing.) psia

$P_f$  = Meter pressure, psia.

$h_w$  = Differential meter pressure, inches water.

$F_g$  = Gravity correction factor.

$F_t$  = Flowing temperature correction factor.

$F_{pv}$  = Supercompressibility factor.

$n$  = Slope of back pressure curve.

Note: If  $P_w$  cannot be taken because of manner of completion or condition of well, then  $P_w$  must be calculated by adding the pressure drop due to friction within the flow string to  $P_t$ .