

3-GCC
1-H.L. Kendrick
1-B. Parrish
2-Phillips (Corbett, Hintze)
1-Comm. of Public Lands
1-LDH, 1-TCA
1-T. Cowan, 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 Rio Arriba
Initial y Annual Special Date of Test 10/2/64
Company Beta Development Co. Lease San Juan 29-6 Unit Well No. 84
Unit G Sec. 14 Twp. 29 N Rge. 6 W Purchaser El Paso Natural Gas Co.
Casing 4 1/2" Wt. 11.6# I.D. 4.052 Set at 8130 Perf. 8000 To 8096
Tubing 2 3/8" Wt. 4.70 I.D. 1.995 Set at 8081 Perf. Open To End
Gas Pay: From 8000 To 8096 L 8068 xG .670 -GL 5405.5 Bar.Press. 12.0
Producing Thru: Casing Tubing X Type Well Single - Gas
Single-Bradenhead-G. G. or G.O. Dual
Date of Completion: 9/21/64 Packer Reservoir Temp.

OBSERVED DATA

Tested Through (Prover) (Choke) (Meter) Type Taps

No.	Flow Data			Tubing Data		Casing Data		Duration of Flow Hr.
	(Prover) (Line) Size	(Choke) (Orifice) Size	Press. psig	Diff. h _w	Temp. °F.	Press. psig	Temp. °F.	
SI						2152	2152	7 Days
1.		3/4"	211		72	211	723	3 Hrs.
2.								
3.								
4.								
5.								

FLOW CALCULATIONS

No.	Coefficient (24-Hour)	$\sqrt{h_w p_f}$	Pressure psia	Flow Temp. Factor F _t	Gravity Factor F _g	Compress. Factor F _{pv}	Rate of Flow Q-MCFPD @ 15.025 psia
1.	12.3650		223	.9887	.9463	1.022	2,637
2.							
3.							
4.							
5.							

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio cf/bbl.
Gravity of Liquid Hydrocarbons deg.
F_c (1-e^{-s})

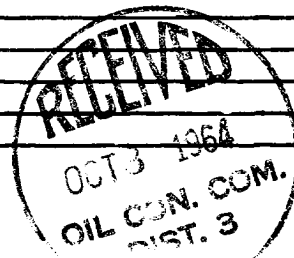
Specific Gravity Separator Gas
Specific Gravity Flowing Fluid
P_c 2167 P_c² 4695.8
P_w 745 P_w² 555.0

No.	P _w P _t (psia)	P _t ²	F _c Q	(F _c Q) ²	(F _c Q) ² (1-e ^{-s})	P _w ²	P _c ² -P _w ²	Cal. P _w	P _w /P _c
1.						555.0	4140.8		
2.									
3.									
4.									
5.									

Absolute Potential: 2.896 MCFPD; n .75

COMPANY Beta Development Co.
ADDRESS 234 Petr. Club Plaza, Farmington, New Mexico
AGENT and TITLE G.L. Hoffman, Production Engineer
WITNESSED H. McAnally
COMPANY El Paso Natural Gas Co.

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} = Supercompressability 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 .