

3-OCC

1-H. L. Kendrick

1-Bill Parrish

1-Comm. of Public Lands

1-Phillips

1-Arnett

NEW MEXICO OIL CONSERVATION COMMISSION

1-Sneddy (Holland)

1-F

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Form C-122

Revised 12-1-55

Pool Basin Dakota Formation Dakota County Rio Arriba

Initial X Annual _____ Special _____ Date of Test 11/4/63

Company Beta Development Co. Lease San Juan 28-6 Unit Well No. 102

Unit H Sec. 26 Twp. 28N Rge. 6W Purchaser El Paso Natural Gas Company

Casing 4 1/2" Wt. 11.6 I.D. 4.000 Set at 7978 Perf. 7694 To 7868

Tubing 2 3/8" Wt. 4.70 I.D. 1.995 Set at 7873 Perf. _____ To 7873

Gas Pay: From 7694 To 7868 L 7873 xG .67 -GL 5274 Bar.Press. 12.0

Producing Thru: Casing _____ Tubing X Type Well Single-Gas

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

Date of Completion: 10/25/63 Packer _____ Reservoir Temp. _____

OBSERVED DATA

Tested Through ~~(XXXXXX)~~ (Choke) ~~(XXXXX)~~ Type Taps _____

No.	Flow Data			Tubing Data		Casing Data		Duration of Flow Hr.	
	(Prover) (Line) Size	(Choke) (XXXXXX) Size	Press. psig	Diff. h _w	Temp. °F.	Press. psig	Temp. °F.		Press. psig
SI						2 761		2 751	7-Days
1.		3/4"	248		69	248	69	947	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		260	.9915	.9463	1.026	3,095
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 2,773 P_c² 7689.5
P_w 959 P_w² 919.6

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.						919.6	6769.9		.345
2.									
3.									
4.									
5.									

Absolute Potential: 3,405 MCFPD; n .75

COMPANY Beta Development Co.

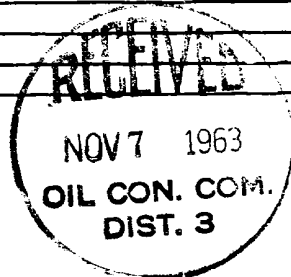
ADDRESS 234 Petr. Club Plaza, Farmington, N. M.

AGENT and TITLE George L. Hoffman, Production Engineer

WITNESSED Jess Goodwin

COMPANY El Paso Natural Gas 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} = 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 .