

3-OCC
2-Phillips (Corbett, Hintze)
1-Comm. Pub. Lands
1-H.L. Kendrick
1-B. Parrish
1-LDH, 1-TCA
1-T. Cowan
2-F

NEW MEXICO OIL CONSERVATION COMMISSION

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 8/11/64
Company Beta Development Co. Lease San Juan 28-6 Well No. 105
Unit N Sec. 35 Twp. 28 N Rge. 6 W Purchaser El Paso Natural Gas Co.
Casing 4 1/2" Wt. 11.60 I.D. 4.040 Set at 7581 Perf. 7316 To 7540
Tubing 2 3/8" Wt. 4.70 I.D. 1.995 Set at 7512 Perf. Open To End
Gas Pay: From 7316 To 7540 L 7501 xG -GL Bar.Press. 12.0
Producing Thru: Casing Tubing X Type Well Single - Gas
Single-Bradenhead-G. G. or G.O. Dual
Date of Completion: 7/30/64 Packer Reservoir Temp.

OBSERVED DATA

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

Flow Data						Tubing Data		Casing Data		Duration of Flow Hr.
No.	(Prover) (Line) Size	(Choke) (Prover) Size	Press. psig	Diff. h _w	Temp. °F.	Press. psig	Temp. °F.	Press. psig	Temp. °F.	
SI						2636		2591		7 Days
1.		3/4	334		73	334	73	1205		3 Hour
2.										
3.										
4.										
5.										

FLOW CALCULATIONS

No.	Coefficient (24-Hour)	$\sqrt{h_{wpf}}$	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		346	.9877	.9463	1.034	4,134
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 2647 P_c² 7006.6
P_w 1217 P_w² 1481.0

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.						1481.0	5525.6		
2.									
3.									
4.									
5.									

Absolute Potential: 4,940 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} = 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 .