3-OCC
1-H.L.Kendrick
1-B. Parrish
1-International
1-TCA, 1-LDH
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 ___San Juan___

Initial ___X___ Annual _____ Special _____ Date of Test ___7/20/64___

Company ___Beta Development Co.___ Lease ___Oswell Federal___ Well No. ___1___

Unit ___F___ Sec. ___4___ Twp. ___29 N___ Rge. ___11 W___ Purchaser ___El Paso Natural Gas Co.___

Casing ___4 1/2"___ Wt. ___10.5___ I.D. ___4.052___ Set at ___6675___ Perf. ___6504___ To ___6594___

Tubing ___2 3/8"___ Wt. ___4.70___ I.D. ___1.995___ Set at ___6581___ Perf. ___Open___ To ___End___

Gas Pay: From ___6504___ To ___6594___ L ___6581___ xG ___.670___ 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: ___7/10/64___ Packer _____ Reservoir Temp. _____

OBSERVED DATA

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

No.	Flow Data (Prover) (Line) Size	(Choke) (Orifice) Size	Press. psig	Diff. h_w	Temp. °F.	Tubing Data Press. psig	Temp. °F.	Casing Data Press. psig	Temp. °F.	Duration of Flow Hr.
SI						2012		2010		7 Days
1.		3/4"	331		81	331	81	1110		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		343	.9804	.9463	1.032	4,061
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 ___2026___ P_c^2 ___4104.6___
P_w ___1122___ P_w^2 ___1258.8___

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	$\frac{P_w}{P_c}$
1.						1258.8	2845.8		
2.									
3.									
4.									
5.									

Absolute Potential: ___5,348___ MCFPD; n ___.75___

COMPANY ___Beta Development Co.___
ADDRESS ___234 Petroleum Club Plaza, Farmington, New Mexico___
AGENT and TITLE ___George L. Hoffman, Production Engineer___
WITNESSED ___H. McAnally___
COMPANY ___El Paso Natural Gas Co.___

REMARKS
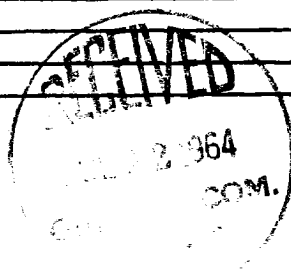
INSTRUCTIONS

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.