NEW MEXICO OIL CONSERVATION COMMISSION

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool __Basin Dakota__ Formation __Dakota__ County __San Juan__

Initial __XX__ Annual ____ Special ____ Date of Test __1-6-65__

Company __Southern Union Production Co.__ Lease __Albright__ Well No. __6__

Unit __A__ Sec. __22__ Twp. __29-N__ Rge. __10-W__ Purchaser __El Paso Natural Gas Company__

Casing __4-1/2"__ Wt. __10.50__ I.D. __4.052__ Set at __6600__ Perf. __6319__ To __6534__

Tubing __2-3/8__ Wt. __4.70__ I.D. __1.995__ Set at __6445__ Perf. __6445__ To __6445__

Gas Pay: From __6319__ To __6534__ L __6445__ xG __.700__ GL __6532__ Bar.Press. __12.0__

Producing Thru: Casing ____ Tubing __XX__ Type Well __Single Gas__

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

Date of Completion: __12-27-64__ Packer ____ Reservoir Temp. ____

OBSERVED DATA

Tested Through (Prover) (Choke) (Nozzle) Type Taps ____

No.	(Prover) (Line) Size	(Choke) (Orifice) Size	Press. psig	Diff. h_w	Temp. °F.	Press. psig	Temp. °F.	Press. psig	Temp. °F.	Duration of Flow Hr.
						Tubing Data		Casing Data		
SI						2066		2130		10 days
1.	2"	3/4	25		76	35	76	79		1 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.	12.350		21	.9850	.958	1.08	289
2.							
3.							
4.							
5.							

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio ____ cf/bbl. Specific Gravity Separator Gas ____
Gravity of Liquid Hydrocarbons ____ deg. Specific Gravity Flowing Fluid ____
F_c ____ $(1-e^{-s})$ ____ P_c __2130__ P_c^2 __4536000__

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.						4417264	118736		.985
2.									
3.									
4.									
5.									

Absolute Potential: __4352__ MCFPD; n __.75__

COMPANY __Southern Union Production Company__
ADDRESS __P. O. Box 800 - Farmington, New Mexico__
AGENT and TITLE __Verne Rockhold - Jr. Engineer__
WITNESSED __Bernard McAnally__
COMPANY __El Paso Natural Gas Company__

Original Signed By
VERNE ROCKHOLD

REMARKS

(3) New Mexico Oil Conservation Commission
(1) Mr. Paul J. Clote
(1) El Paso Natural Gas Proration Dept., P.O. Box 1492, El Paso, Texas
(1) Mr. H. L. Kindricks, Box 990, Farmington, New Mexico
(1) File

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.