

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 XX Annual _____ Special _____ Date of Test 10/15/64
Company SOUTHERN UNION PRODUCTION CO. Lease NAVajo INDIAN Well No. 6
Unit E Sec. 6 Twp. 26-N Rge. 8-W Purchaser EL PASO NATURAL GAS COMPANY
Casing 5-1/2 Wt. 17.0 I.D. 4.892 Set at 6600 Perf. 6281 To 6538
Tubing 1-1/2 Wt. 2.90 I.D. 1.610 Set at 6379 Perf. 6369 To 6379
Gas Pay: From 6281 To 6538 L 6369 xG .735 -GL 4681 Bar.Press. 12.0
Producing Thru: Casing _____ Tubing XX Type Well DUAL GAS
Single-Bradenhead-G. G. or G.O. Dual
Date of Completion: 10/2/64 Packer 6050 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) (Orifice) Size	Press. psig	Diff. h _w	Temp. °F.	Press. psig	Temp. °F.	Press. psig	Temp. °F.	
SI						1935		---		13 DAYS
1.	2"	3/4	311		80	311	80	---		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		323	.9813	.9035	1.037	3672
2.							
3.							
4.							
5.							

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio _____ cf/bbl.
Gravity of Liquid Hydrocarbons _____ deg.
F_c 16.46 (1-e^{-s}) .289
Specific Gravity Separator Gas _____
Specific Gravity Flowing Fluid _____
P_c 1947 P_c² 3,790,809

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.	323	104329	60.441	3653.114	1035.750	1160.079	2690880	1077	
2.									
3.									
4.									
5.									

Absolute Potential: 4829 MCFPD; n .75COMPANY SOUTHERN UNION PRODUCTION COMPANYADDRESS P. O. Box 808; FARMINGTON, NEW MEXICOAGENT and TITLE VERNE ROCKHOLD, JR. ENGINEERWITNESSED HERMAN McANALLYCOMPANY EL PASO NATURAL GAS COMPANY

REMARKS

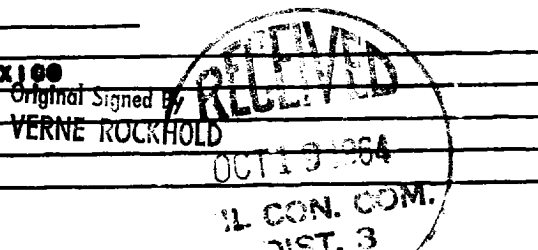
(3) NEW MEXICO OIL CONSERVATION COMMISSION

(1) PAUL CLOTE

(1) EL PASO NATURAL GAS COMPANY; 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 .