

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 12/9/64
Company SOUTHERN UNION PRODUCTION CO. Lease STARR Well No. 3
Unit G Sec. 5 Twp. 26-N Rge. 8-W Purchaser EL PASO NATURAL GAS COMPANY
Casing 5-1/2 Wt. 17# I.D. 4.892 Set at 6799 Perf. 6477 To 6734
Tubing 1-1/2 Wt. 2.90 I.D. 1.610 Set at 6643 Perf. 6635 To 6643
Gas Pay: From 6477 To 6734 L 6635 xG .735 -GL 4877 Bar.Press. 12.0
Producing Thru: Casing _____ Tubing XX Type Well DUAL GAS GAS
Single-Bradenhead-G. G. or G.O. Dual
Date of Completion: 11/24/64 Packer 6272 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						1976				15 DAYS
1.	2"	3/4			66	178	66			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		190	.9943	.9035	1.021	2155
2.							
3.							
4.							
5.							

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio _____ cf/bbl.
Gravity of Liquid Hydrocarbons _____ deg.
F_c 16.46 (1-e⁻⁸) .299

Specific Gravity Separator Gas _____
Specific Gravity Flowing Fluid _____
P_c 1988 P_c² 3952144

No.	P _w P _t (psia)	P _t ²	F _c Q	(F _c Q) ²	(F _c Q) ² (1-e ⁻⁸)	P _w ²	P _c ² -P _w ²	Cal. P _w	P _w P _c
1.	190	36100	35.471	1258.192	376.199	412299	3539843	642	.323
2.									
3.									
4.									
5.									

Absolute Potential: 2341 MCFPD; n .75

COMPANY SOUTHERN UNION PRODUCTION COMPANY
ADDRESS P. O. Box 808, FARMINGTON, NEW MEXICO
AGENT and TITLE VERNE ROCKHOLD, JR. ENGINEER
WITNESSED JESS GOODMAN
COMPANY EL PASO NATURAL GAS COMPANY

REMARKS

- (3) NEW MEXICO OIL CONSERVATION COMMISSION
(1) PAUL CLOTE
(1) EL PASO NATURAL GAS CO., 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 .