

NEW MEXICO OIL CONSERVATION COMMISSION

File 7-523 OFF

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 10-24-62

Company Tenneco Oil Company Lease Cornell "E" Well No. 1

Unit M Sec. 12 Twp. 29 Rge. 12 Purchaser _____

Casing 4.5 Wt. _____ I.D. _____ Set at _____ Perf. 6338 To 6446

Tubing 2-3/8 Wt. _____ I.D. _____ Set at 6303 Perf. _____ To _____

Gas Pay: From _____ To _____ L _____ xG _____ -GL 0.65 Bar.Press. 12.0

Producing Thru: Casing _____ Tubing X Type Well Single Gas

Date of Completion: _____ Packer _____ Reservoir Temp. 171

OBSERVED DATA

Tested Through ORIFICE (Choke) METER TYPE

No.	Flow Data					Tubing Data		Casing Data		Duration of Flow Hr.
	(Prover) (Line) Size	(Choke) (Orifice) Size	Press. psig	Diff. h _w	Temp. °F.	Press. psig	Temp. °F.	Press. psig	Temp. °F.	
SI						2085		2087		
1.		3/4				390	86	875		3 hrs.
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		402	0.9759	0.9608	1.035	4822
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 2099 P_c² 4 405 801

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.	887					786 769	3519032		
2.									
3.									
4.									
5.									

Absolute Potential: 5587 MCFPD; n 0.75 (1.1586)

COMPANY TENNECO OIL COMPANY

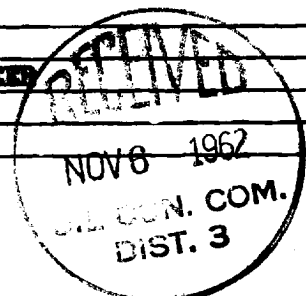
ADDRESS P. O. BOX 1714, DURANGO, COLORADO

AGENT and TITLE DISTRICT PETROLEUM ENGINEER

WITNESSED _____

COMPANY _____

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 .