

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 Feb. 19, 1962
Company Tenneco Oil Company Lease McKinzie Well No. A-1
Unit _____ Sec. 9 Twp. 30N Rge. 12W Purchaser _____
Casing 4.5 Wt. _____ I.D. 4.0 Set at _____ Perf. 6620 To 6742
Tubing 2-3/8 Wt. _____ I.D. 2.0 Set at 6717 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 _____ Single-Bradenhead-G. G. 181 or G.O. Dual
Reservoir Temp. _____

OBSERVED DATA

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

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		<u>3/4</u>				<u>1988</u>		<u>1982</u>		<u>3 Hours</u>
1.						<u>146</u>	<u>82</u>	<u>645</u>		
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.	<u>12.3650</u>		<u>158</u>	<u>0.9795</u>	<u>0.9608</u>	<u>1.014</u>	<u>1867</u>
2.							
3.							
4.							
5.							

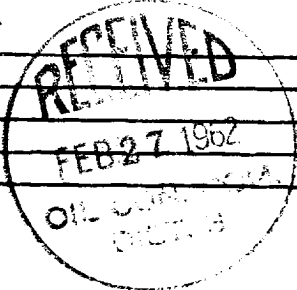
PRESSURE CALCULATIONS

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 2000 P_c 4000000

No.	P _w P ₆₅ (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.						<u>431.649</u>	<u>8,568,351</u>		
2.									
3.									
4.									
5.									

Absolute Potential: 2057 MCFPD; n 0.75 (1.1615)
COMPANY _____
ADDRESS _____
AGENT and TITLE J. L. LLOYD
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 .