

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 12-28-62
Company Delhi-Taylor Oil Corp. Lease Price Well No. 1-13
Unit K Sec. 13 Twp. 28N Rge. 8W Purchaser No pipeline connection
Casing 4-1/2" Wt. 10.50 I.D. 4.052 Set at 7453 Perf. 7048 To 7430
Tubing 2-3/8" Wt. 4.70 I.D. 1.995 Set at 7153 Perf. --- To ---
Gas Pay: From 7236 To 7458 L --- xG --- -GL --- Bar.Press. ---
Producing Thru: Casing _____ Tubing XX Type Well Single Gas Well
Single-Bradenhead-G. G. or G.O. Dual
Date of Completion: 11-10-62 Packer None Reservoir Temp. _____

OBSERVED DATA

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

No.	Flow Data					Tubing Data		Casing Data		Duration of Flow Hr.
	(Prover) (Line) Size	(Choke) (2000000) Size	Press. psig	Diff. h _w	Temp. °F.	Press. psig	Temp. °F.	Press. psig	Temp. °F.	
SI										
1.		<u>0.75"</u>	<u>125</u>	<u>---</u>	<u>---</u>	<u>2040</u>	<u>---</u>	<u>2046</u>	<u>---</u>	<u>3 hrs.</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>12.365</u>	<u>---</u>	<u>137</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>1694</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 2058 P_c² 4,235,364

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.	<u>642</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>412,164</u>	<u>3,823,200</u>	<u>---</u>	<u>0.31195</u>
2.									
3.									
4.									
5.									

Absolute Potential: 1831 MCFPD; n 0.75
COMPANY Delhi-Taylor Oil Corporation
ADDRESS P. O. Drawer 1198, Farmington, New Mexico
AGENT and TITLE G. A. Ford, District Clerk, Delhi-Taylor Oil Corp.
WITNESSED None
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} = Supercompressibility 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 .