

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122

Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Basin Formation Dakota County Rio Arriba
Initial X Annual _____ Special _____ Date of Test 12-20-61
Company Delhi-Taylor Oil Corporation Lease Jicarilla Well No. 2
Unit L Sec. 18 Twp. 26N Rge. 5W Purchaser _____
Casing 5 1/2" Wt. 15.5 I.D. _____ Set at 7588 Perf. 7266 To 7487
Tubing 2 3/8" Wt. 4.7 I.D. _____ Set at 7173 Perf. 7170 To 7173
Gas Pay: From 7266 To 7487 L 7170 xG 0.650 -GL 4661 Bar.Press. _____
Producing Thru: Casing _____ Tubing _____ Type Well _____
Date of Completion: _____ Packer _____ Single-Bradenhead-G. G. or G.O. Dual
Reservoir Temp. _____

OBSERVED DATA

Tested Through ~~1000000~~ (Choke) ~~1000000~~ 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						2526				
1.										
2.	2"	3/4"	248		62					3 hrs
3.										
4.										
5.										

FLOW CALCULATIONS

No.	Coefficient (24-Hour)	$\sqrt{h_{wP_f}}$	Pressure psia	Flow Temp. Factor F _t	Gravity Factor F _g	Compress. Factor F _{pv}	Rate of Flow Q-MCFPD @ 15.025 psia
1.							
2.							
3.	12.3650		260	0.9981	.9608	1.027	3166
4.							
5.							

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio _____ cf/bbl.
Gravity of Liquid Hydrocarbons _____ deg.
F_c 9.402 (1-e^{-s}) .287

Specific Gravity Separator Gas _____
Specific Gravity Flowing Fluid _____
P_c 2538 P_c² 6442

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.									
2.									
3.	260	68	29.77	886	254	322	6119		1.0526
4.									
5.									

Absolute Potential: 3290 MCFPD; n .75 1.0392COMPANY Delhi Taylor Oil CorporationADDRESS Farmington, New MexicoAGENT and TITLE T. A. Dugan, 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 .