

NEW MEXICO OIL CONSERVATION COMMISSION

CONFIDENTIAL

Form C-122

Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Basin Dakota Formation Dakota County San Juan
Initial XXX Annual _____ Special _____ Date of Test 8/26/63
Company Delhi-Taylor Oil Corp. Lease Newberry Well No. 1
Unit _____ Sec. 17 Twp. 31N Rge. 13W Purchaser No pipeline connection to date
Casing 4 1/2" Wt. 10.50 I.D. 4.052 Set at 7205 Perf. 7204 To 7008
Tubing 2-3/8" Wt. 4.70 I.D. 1.995 Set at 6995 Perf. _____ To _____
Gas Pay: From 6993 To 7205 L _____ xG _____ -GL _____ Bar.Press. _____
Producing Thru: Casing _____ Tubing XX Type Well Single
Single-Bradenhead-G. G. or G.O. Dual
Date of Completion: 8/5/63 Packer None Reservoir Temp. _____

OBSERVED DATA

Tested Through (Prover) (Choke) (Meter) Type Taps None

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.	
SI								
1.		<u>0.75"</u>	<u>492</u>	<u>---</u>	<u>87°</u>	<u>2069</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>504</u>	<u>0.9750</u>	<u>1.0000</u>	<u>1.037</u>	<u>6301</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 2081 P_c² 4,330,561

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>1504</u>					<u>2,262,016</u>	<u>2,068,545</u>		<u>0.7227</u>
2.									
3.									
4.									
5.									

Absolute Potential: 10,966 MCFPD; n 0.75
COMPANY Delhi-Taylor Oil Corporation
ADDRESS P. O. Drawer 1198, Farmington, New Mexico
AGENT and TITLE Ed Spinks, Production Engineer
WITNESSED No Witness
COMPANY _____

REMARKS

Well blew strong head of water to surface in four minutes. Small steady spray of water continued throughout test.

RECEIVED

SEP 23 1963

OIL CON. COM.
DIST. 3

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 .