

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 1/16/63
Company Delhi-Taylor Oil Corp. Lease Hammer Well No. 1
Unit _____ Sec. 20 Twp. 29N Rge. 9W Purchaser No pipeline connection
Casing 4 1/2" Wt. 10.50 I.D. 4.052 Set at 6590 Perf. 6498 To 6581
Tubing 2 3/8" Wt. 4.70 I.D. 1.995 Set at 6304 Perf. _____ To _____
Gas Pay: From 6403 To 6590 L 6304 xG _____ -GL _____ Bar.Press. _____
Producing Thru: Casing _____ Tubing XX Type Well G. G. Dual
Single-Bradenhead-G. G. or G.O. Dual
Date of Completion: 8/1/62 Packer Baker Model "P" Reservoir Temp. 186°F

OBSERVED DATA

Tested Through ~~XXXXXX~~ (Choke) ~~XXXXXX~~ Type Taps None

No.	Flow Data					Tubing Data		Casing Data		Duration of Flow Hr.
	(Prover) (Line) Size	(Choke) (Prover) Size	Press. psig	Diff. h_w	Temp. °F.	Press. psig	Temp. °F.	Press. psig	Temp. °F.	
SI						1796	---	Dual	---	
1.		0.75	114	---	65					3 hrs.
2.										
3.										
4.										
5.										

FLOW CALCULATIONS

No.	Coefficient (24-Hour)	$\sqrt{h_w p_f}$	Pressure psia	Flow Temp. Factor F_t	Gravity Factor F_g	Compress. Factor F_{pv}	Rate of Flow Q-MCFPD @ 15.025 psia
1.	12.365	---	126	0.9952	1.0000	---	1551
2.					(assumed)		
3.							
4.							
5.							

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio _____ cf/bbl.
Gravity of Liquid Hydrocarbons _____ deg.
 F_c 9.402 $(1-e^{-s})$ 0.240

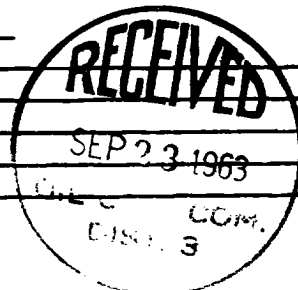
Specific Gravity Separator Gas _____
Specific Gravity Flowing Fluid _____
 P_c 1808 P_c^2 3,268,864

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	$\frac{P_w}{P_c}$
1.	126	15,876	14,583	212,649	51,036	66,912	3101	259	0.143
2.									
3.									
4.									
5.									

Absolute Potential: 1575 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 Emory Arnold
COMPANY New Mexico Oil Conservation Commission

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 .