

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 3-10-64
Company PAN AMERICAN PETROLEUM CORP. Lease Bell Federal Gas Unit Well No. 1
Unit B Sec. 12 Twp. 30N Rge. 13W Purchaser _____
Casing 4-1/2 Wt. 10.5 I.D. 4.025 Set at 6642 Perf. 6336-44 To 6535-50
Tubing 2-3/8 Wt. 4.7 I.D. 1.995 Set at 6675 Perf. Open To Ended
Gas Pay: From 6672 To 6500 L 6526 xG .700 -GL 4568 Bar.Press. _____
Producing Thru: Casing _____ Tubing X Type Well Single
Date of Completion: 3-3-64 Packer None Reservoir Temp. _____
Single-Bradenhead-G. G. or G.O. Dual

OBSERVED DATA

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

No.	Flow Data			Tubing Data		Casing Data		Duration of Flow Hr.
	(Line) Size	(Orifice) Size	Press. psig	Diff. h _w	Temp. °F.	Press. psig	Temp. °F.	
1.	7 days					1846	1851	
2.	2-inch	0.375	289			289	60° est.	3 hrs.
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.	12.3830		281	1.000	.9250	1.031	3001
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 1863 P_c 3,470,769

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.						311,600	9,137,169		
2.									
3.									
4.									
5.									

Absolute Potential: 3300 MCFPD; n .75
COMPANY PAN AMERICAN PETROLEUM CORPORATION
ADDRESS Box 400, Farmington, New Mexico
AGENT and TITLE F. L. Hubert, District Engineer
WITNESSED By F. W. Felt
COMPANY F. W. Felt

REMARKS

RECEIVED
MAR 13 1964
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} = 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 .