

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Angelo Peak Dakota Formation Dakota County San Juan
Initial I Annual _____ Special _____ Date of Test October 27, 1959
Company Pan American Petroleum Corp. Lease Jack Frost "B" Well No. 1
Unit P Sec. 27 Twp. 27N Rge. 10W Purchaser ---
Casing 7" Wt. 20# I.D. 6.456 Set at 6935 Perf. 6824 To 6925
Tubing 2-3/8" Wt. 4.7# I.D. 1.995 Set at 6835 Perf. open ended; no perforations To _____
Gas Pay: From 6824 To 6925 L 6835 xG 0.70 (act.) -GL 4785 Bar.Press. 12
Producing Thru: Casing _____ Tubing I Type Well Dual Gas-Oil
Date of Completion: 10-20-59 Packer 6800 Single-Bradenhead-G. G. or G.O. Dual
Reservoir Temp. 150° F

OBSERVED DATA

Tested Through (HOCHE) (Choke) (HOCHE)

Type Taps _____

No.	Flow Data					Tubing Data		Casing Data		Duration of Flow Hr.
	(Line) Size	(Choke) Size	Press. psig	Diff. h _w	Temp. °F.	Press. psig	Temp. °F.	Press. psig	Temp. °F.	
SI	Shut in 7 days					1761	---	no annulus		
1.	2"	3/4"	88		88 (act.)	128	---	---	---	3 hours
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		92	1.000	0.9258	1.000	1053
2.							
3.							
4.							
5.							

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio _____ cf/bbl.
Gravity of Liquid Hydrocarbons _____ deg.
F_c 9.402 (1-e^{-s}) 0.896

Specific Gravity Separator Gas _____
Specific Gravity Flowing Fluid _____
P_c 1773 P_c 3,243.889

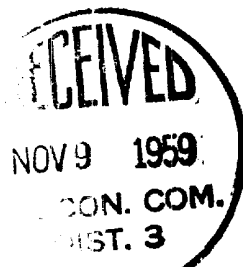
No.	P _w P _t (psia)	P _t ²	F _c Q	(F _c Q) ²	(F _c Q) ² (1-e ^{-s})	P _w ²	P _c ² -P _w ²	Cal. P _w	P _w /P _c
1.	132	17,424	9.900	98.01	28.11	17,424	3,077,290	213	
2.									
3.									
4.									
5.									

Absolute Potential: 1065 MCFPD; n 0.75COMPANY Pan American Petroleum CorporationADDRESS Box 487, Farmington, New MexicoAGENT and TITLE M. H. Bauer, Jr., Area Engineer *M. H. Bauer, Jr.*

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} = 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 .

OIL CONSERVATION COMMISSION		
AZTEC DISTRICT OFFICE		
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