

M.D.A.C. - Aztec
L. G. Truby
W. R. Johnston
2-Phillips Petroleum (Wayne Smith)
1-File

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122

Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Blanco Mesaverte Formation Mesaverte County Rio Arriba
Initial XX Annual _____ Special _____ Date of Test 2-13-57
Company Pacific Northwest Pipeline Lease 29-6 Well No. 40-23
Unit H Sec. 23 Twp. 29N Rge. 6W Purchaser Pacific Northwest Pipeline
Casing 5 1/2 Wt. _____ I.D. _____ Set at 6040 Perf. 5430 To 5950
Tubing 2 Wt. _____ I.D. _____ Set at 5931 Perf. _____ To _____
Gas Pay: From 5430 To 5950 L _____ xG .650 -GL _____ Bar.Press. _____
Producing Thru: Casing _____ Tubing X Type Well _____
Date of Completion: _____ Packer _____ Reservoir Temp. _____
Single-Bradenhead-G. G. or G.O. Dual

OBSERVED DATA

Tested Through (Prover) (Choke) (Meter) Shut in 7 days Type Taps _____

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.	Press. psig	Temp. °F.	
SI						1076		1093		
1.										3
2.						315	55	913		
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.							
2.							
3.	14.1603		327	1.0045	0.9608	1.034	4622
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 1105 P_c² 1221.02

No.	$\frac{P_w}{P_t}$ (psia)	P _t ²	F _c Q	(F _c Q) ²	$\frac{(F_c Q)^2}{(1-e^{-s})}$	$\frac{985}{P_w^2}$	P _c ² -P _w ²	Cal. P _w	$\frac{P_w}{P_c}$
1.									
2.						855.62	365.40		3.34
3.									
4.									
5.									

Absolute Potential: 11,416 MCFPD; n .75/2 2.47

COMPANY Pacific Northwest Pipeline Corporation
ADDRESS 4074 West Broadway, Farmington, New Mexico
AGENT and TITLE G. R. Wagner - Well Test 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 .

OIL CONSERVATION COMMISSION		
AZTEC DISTRICT OFFICE		
No. Copies Received		3
DISTRIBUTION		
	NO. FURNISHED	
Operator		
Santa Fe	/	
Proration Office		
State Land Office		
U. S. G. S.	/	
Transporter		
File	/	✓