

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122

Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Blanco Formation Mesa Verde County San Juan
Initial X Annual _____ Special _____ Date of Test 6-11-58
Company Astos Oil & Gas Company Lease Culpepper-Martin Well No. 9
Unit P Sec. 30 Twp. 32-N Rge. 12-W Purchaser Southern Union Gas Company
Casing 5 1/2 Wt. 14.7 I.D. 5.012 Set at 4905 Perf. 4566 To 4821
Tubing 2 3/8 Wt. 4.7 I.D. 1.995 Set at 4789 Perf. 4758 To 4768
Gas Pay: From 4565 To 4821 L 4758 xG 0.670 -GL 3188 Bar.Press. 12
Producing Thru: Casing _____ Tubing X Type Well Single
Single-Bradenhead-G. G. or G.O. Dual
Date of Completion: 6-4-58 Packer None Reservoir Temp. 190 degrees F.

OBSERVED DATA

Tested Through (Prover) (Choke) (Meter) 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										
1.		<u>0.730</u>	<u>301</u>		<u>60</u>	<u>1062</u>	<u>60</u>	<u>1060</u>	<u>60</u>	<u>7 days</u>
2.						<u>301</u>	<u>60</u>	<u>660</u>	<u>60</u>	<u>3 hrs.</u>
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.	<u>12.365</u>		<u>313</u>	<u>1.0000</u>	<u>0.9463</u>	<u>1.037</u>	<u>3797</u>
2.							
3.							
4.							
5.							

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio _____ cf/bbl.
Gravity of Liquid Hydrocarbons _____ deg.
F_c 0.402 (1-e^{-s}) 0.807
Specific Gravity Separator Gas _____
Specific Gravity Flowing Fluid _____
P_c 1074 P_c² 1153.76

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.									
2.	<u>313</u>	<u>97.969</u>	<u>35.699</u>	<u>1274.19</u>	<u>258.216</u>	<u>356.185</u>	<u>797.291</u>	<u>596.8</u>	
3.									
4.									
5.									

Absolute Potential: 9009 MCFPD; n 0.75

COMPANY ASTOS OIL & GAS COMPANY
ADDRESS Box 786, Farmington, New Mexico
AGENT and TITLE ORIGINAL SIGNED BY L. M. STEVENS District 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
DATE RECEIVED	
_____ 19__	
Operator	
Engineer	/
Inspection Office	
State Land Office	
U. S. G. S.	/
Transporter	
Other	/