

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122

Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Angel Peak Extension Formation Dakota County San Juan

Initial X Annual _____ Special _____ Date of Test 11/3/60

Company Astec Oil and Gas Company Lease Reid Well No. 19-B

Unit B Sec. 18 Twp. 20N Rge. 9W Purchaser _____

Casing 4 1/2 Wt. 9.70 I.D. 4.090 Set at 6630 Perf. 6432 To 6998

Tubing 2 3/8 Wt. 4.70 I.D. 1.995 Set at 6392 Perf. Fin collar To _____

Gas Pay: From 6432 To 6998 L 6392 xG 0.65(amt) GL 1154 Bar.Press. _____

Producing Thru: Casing _____ Tubing X Type Well Single

Single-Bradenhead-G. G. or G.O. Dual

Date of Completion: 10/26/60 Packer _____ Reservoir Temp. _____

OBSERVED DATA

Tested Through (Pressure) (Choke) (Restrictor) 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>0.790</u>				<u>1976</u>	<u>60(a)</u>	<u>1976</u>		<u>3 hr.</u>
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.	<u>12.365</u>		<u>397</u>	<u>1.000</u>	<u>0.9505</u>	<u>1.537</u>	<u>439</u>
2.							
3.							
4.							
5.							

PRESSURE CALCULATIONS

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

Specific Gravity Separator Gas _____
 Specific Gravity Flowing Fluid _____
 P_c 1905 P_c^2 3,629,105

No.	P_w P _t (psia)	P_t^2	F _c Q	(F _c Q) ²	$\frac{(F_c Q)^2}{(1-e^{-s})}$	P_w^2	$P_c^2 - P_w^2$	Cal. P _w	$\frac{P_w}{P_c}$
1.	<u>397</u>					<u>157609</u>	<u>3,629,105</u>		
2.									
3.									
4.									
5.									

Absolute Potential: 3094 MCFPD; n 0.75

COMPANY Astec Oil and Gas Company

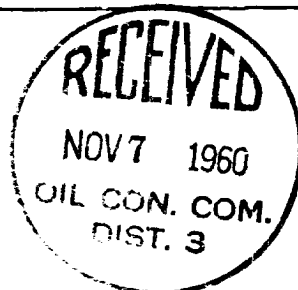
ADDRESS Box 775, Farmington, New Mexico

AGENT and TITLE ORIGINAL SIGNED BY L. M. STEVENS L. M. Stevens, Dist. Engr.

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 .

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OIL CONSERVATION COMMISSION	
AZTEC DISTRICT OFFICE	
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