

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Blanco Formation Blanco County San Juan
Initial XX Annual _____ Special _____ Date of Test August 3, 1959
Company Astec Oil and Gas Company Lease Chopper-Lartin Well No. 10
Unit K Sec. 32 Twp. 32 N Rge. 12 W Purchaser _____
Casing 7 Wt. 20 & 23 I.D. 6.36 Set at 1901 Perf. 1913 To 1974
Tubing 2 Wt. 1.7 I.D. 1.995 Set at 1974 Perf. 1974 To 1901
Gas Pay: From 1913 To 1974 L _____ xG _____ -GL _____ Bar.Press. _____
Producing Thru: Casing _____ Tubing XX Type Well Sh. 19 - Gas
Single-Bradenhead-G. G. or G.O. Dual
Date of Completion: 1/1/59 Packer _____ Reservoir Temp. _____
10 - 1901
10 - 1901
10 - 1901

OBSERVED DATA

Tested Through (PROVER) (Choke) (PROVER)

Type Taps _____

Flow Data						Tubing Data		Casing Data		Duration of Flow Hr.
No.	(Prover) (Line) Size	(Choke) (Orifice) Size	Press. psig	Diff. h _w	Temp. °F.	Press. psig	Temp. °F.	Press. psig	Temp. °F.	
SI						<u>1010</u>		<u>1010</u>		<u>7 day</u>
1.		<u>7/32</u>	<u>357</u>			<u>357</u>	<u>74</u>	<u>357</u>		<u>3 hours</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>12.350</u>		<u>319</u>	<u>.9069</u>	<u>.9000</u>	<u>1.035</u>	<u>1599</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 1322 P_c 1,011, 1.94

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.	<u>349</u>					<u>721, 301</u>	<u>123, 583</u>		
2.									
3.									
4.									
5.									

Absolute Potential: 11,014 MCFPD; n .75

COMPANY Astec Oil and Gas Company
ADDRESS Box # 735, Farmington, New Mexico
AGENT and TITLE ORIGINAL SIGNED BY D. K. BRYANT D. K. Bryant, Production 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} = 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		
No. Copies Received <u>3</u>		
DISTRIBUTION		
	NO. FURNISHED	
Operator	1	
Santa Fe	1	
Proration Office	1	
State Land Office	1	
U. S. G. S.	1	
Transporter	1	✓
File	1	