

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122

Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Valcher-Kuts Formation Pictured Bluffs County San Juan
Initial xxx Annual Special Date of Test 1/5/59
Company Artec Oil and Gas Company Lease 1st Well No. 8
Unit 1 Sec. 1 Twp. 23N Rge. 10E Purchaser Mountain Lion Company
Casing 1.5 Wt. I.D. 1.000 Set at 2011 Perf. 1972 To 2016
Tubing 1 Wt. 1.7 I.D. 1.149 Set at 2008 Perf. 1983 To 1993
Gas Pay: From 1972 To 2016 L xG -GL Bar.Press.
Producing Thru: Casing xx Tubing Type Well Single Gas
Single-Bradenhead-G. G. or G.O. Dual
Date of Completion: 1/5/59 Packer Reservoir Temp.

2078'

2027'

OBSERVED DATA

2010'

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						916		916	60	7 days
1.		.750				251		231	68	3 hours
2.										
3.										
4.										
5.										

FLOW CALCULATIONS

No.	Coefficient (24-Hour)	$\sqrt{h_{wDf}}$	Pressure psia	Flow Temp. Factor F_t	Gravity Factor F_g	Compress. Factor F_{pv}	Rate of Flow Q-MCFPD @ 15.025 psia
1.	12.55		215	.9924	.9999	1.023	2968
2.							
3.							
4.							
5.							

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio cu/bbl.
Gravity of Liquid Hydrocarbons deg.
 P_c $(1-e^{-S})$

Specific Gravity Separator Gas
Specific Gravity Flowing Fluid
 P_c 558 P_c^2 311,364

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	$\frac{P_w}{P_c}$
1.	216					70,736	210,608		
2.									
3.									
4.									
5.									

Absolute Potential: 3696 MCFPD; n .85COMPANY Artec Oil and Gas CompanyADDRESS 1111 N. 1st St. P.O. Box 1111AGENT and TITLE Artec Oil and Gas CompanyWITNESSED ORIGINAL SIGNED BY D. K. BRYANTCOMPANY 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		
Mr. Charles Raymond	2	
Sample	/	
Provision		
Standard Oil Co.		
U.S. Gas	/	
Transporter		
File	/	✓