

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Elanco Mesa Verde Formation Mesa Verde County San Juan
Initial X Annual _____ Special _____ Date of Test Sept. 22, 1958
Company Southern Union Gas Co. Lease OXNARD Well No. 2
Unit H Sec. 7 Twp. 31 Rge. 8 Purchaser _____
Casing 5 1/2 Wt. 15.50 I.D. 4.950 Set at 5915 Perf. FL 5624 To 5842
CH 5280
Tubing 2-3/8 Wt. 4.74 I.D. 1.990 Set at 5800 Perf. 5785 To 5800
Gas Pay: From 5280 To 5842 L 5785 xG 67 -GL 3875.9 Bar.Press. 12.0
Producing Thru: Casing _____ Tubing X Type Well Single Gas
Single-Bradenhead-G. G. or G.O. Dual
Date of Completion: Sept. 13, 1958 Backer _____ Reservoir Temp. _____

OBSERVED DATA

Tested Through (PEAK) (Choke) (X) 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						1029		1029		7 days
1.		3/4"	281		73°	281	73°	760		3 hours
2.										
3.										
4.										
5.										

FLOW CALCULATIONS

No.	Coefficient (24-Hour)	$\sqrt{h_{wpf}}$	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>12.3650</u>		<u>293</u>	<u>9877</u>	<u>9463</u>	<u>1.029</u>	<u>3,484</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 1041 P_c 1083.7

P_w 772 P_w 595.9

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>595.9</u>	<u>487.8</u>		<u>742</u>
2.									
3.									
4.									
5.									

Absolute Potential: 6,341 MCFPD; n 0.75

COMPANY Southern Union Gas Company
ADDRESS P. O. Box 815, Farmington, N. Mex.

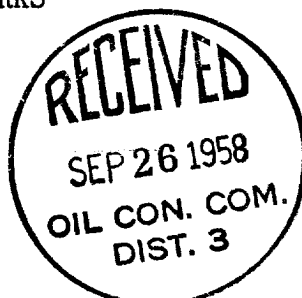
AGENT and TITLE G. L. Hoffman

WITNESSED _____

COMPANY _____

REMARKS

Top 5 1/2" liner @ 3300' T.D. 5915
7-5/8" 23# Set @ 3527



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		2
DISTRIBUTION		
	NO. FURNISHED	
Operator		
Santa Fe	✓	
Production Office		
State Land Office		
U. S. G. S.	✓	
Transporter		
File		✓