

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122

Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Santa Sabote Formation Sabote County San Juan
Initial 8 Annual _____ Special _____ Date of Test 7-27-64
Company THE AMERICAN PETROLEUM CORP. Lease Black Gas Unit Well No. 1
Unit 6 Sec. 29 Twp. 30N Rge. 10W Purchaser _____
Casing 4-1/2 Wt. 10.5 I.D. 4.032 Set at 6361 Perf. 6344-6351 To 6331-6341
Tubing 2-3/8 Wt. 4.7 I.D. 1.993 Set at 6174 Perf. 6135 To 6143
Gas Pay: From 6144 To 6341 L 6193 xG .700 GL 4335 Bar.Press. 12
Producing Thru: Casing _____ Tubing 8 Type Well Single
Single-Bradenhead-G. G. or G.O. Dual
Date of Completion: 7-20-64 Packer None Reservoir Temp. _____

OBSERVED DATA

Tested Through (none) (Choke) (none) Type Taps Flange

No.	Flow Data					Tubing Data		Casing Data		Duration of Flow Hr.
	(Line) Size	(Choke) Size	Press. psig	Diff. h _w	Temp. °F.	Press. psig	Temp. °F.	Press. psig	Temp. °F.	
SI	7 Days					2004		2004		
1.	8 Inch	.750	433			431	80° sat.	908	80° sat.	3 Hr.
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.	11.3030		433	1.000	.9135	1.004	5215
2.							
3.							
4.							
5.							

PRESSURE CALCULATIONS

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

Specific Gravity Separator Gas _____
Specific Gravity Flowing Fluid _____
P_c 2016 P_c 4,004,236

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.						944,704	3,129,472		
2.									
3.									
4.									
5.									

Absolute Potential: 6371 MCFPD; n .75

COMPANY THE AMERICAN PETROLEUM CORPORATION
ADDRESS Box 440, Farmington, New Mexico
AGENT AND TITLE F. L. Moore, District Engineer
WITNESSED By
COMPANY ORIGINAL SIGNED BY
F. W. Foell

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 .