

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122
Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Basin Dakota Formation Dakota County San Juan
Initial X Annual _____ Special _____ Date of Test 11-10-64
Company PAN AMERICAN PETROLEUM CORP. Lease Gallegos Canyon Unit-Dak. Well No. 189
Unit 8 Sec. 36 Twp. 29N Rge. 13W Purchaser _____
Casing 4-1/2 Wt. _____ I.D. _____ Set at _____ Perf. Jet Perfs at 6164-6166-6168-6162
6168-6170 To 6172
Tubing 2-3/8 Wt. 4.7 I.D. 1.993 Set at 6115 Perf. Open To Ended
Gas Pay: From 6160 To 6172 L 6160 xG .700 -GL _____ Bar.Press. 12
Producing Thru: Casing _____ Tubing X Type Well Single
Date of Completion: 12-3-64 Packer None Single-Bradenhead-G. G. or G.O. Dual
Reservoir Temp. _____

OBSERVED DATA

Tested Through (FLOWER) (Choke) (METER) Type Taps _____

Flow Data						Tubing Data		Casing Data		Duration of Flow Hr.
No.	(FLOWER) (Line) Size	(Choke) (FLOWER) Size	Press. psig	Diff. h _w	Temp. °F.	Press. psig	Temp. °F.	Press. psig	Temp. °F.	
1.	<u>7 days</u>					<u>2834</u>		<u>2833</u>		
2.	<u>2 inch</u>	<u>.750</u>	<u>478</u>			<u>478</u>	<u>60° est.</u>	<u>1813</u>		<u>3 Hrs.</u>
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>12.3630</u>		<u>490</u>	<u>1.0000</u>	<u>.9238</u>	<u>1.041</u>	<u>9537</u>
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 2847 P_c 4,190,269

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>1,030,625</u>	<u>3,139,304</u>		
2.									
3.									
4.									
5.									

Absolute Potential: 7397 MCFPD; n .75
COMPANY PAN AMERICAN PETROLEUM CORPORATION
ADDRESS Box 480, Farmington, New Mexico
AGENT and TITLE F. L. Hubers, District Engineer
WITNESSED _____
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} = 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 .