

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122

Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Socia-Dakota Formation Dakota County San Juan
Initial X Annual _____ Special _____ Date of Test 3-12-64
Company PAN AMERICAN PETROLEUM CORP. Lease Gallegos Canyon Unit-Dakota Well No. 158
Unit X Sec. 36 Twp. 28N Rge. 13W Purchaser _____
Casing 4-1/2 Wt. 10.5 I.D. 4.090 Set at 6271 Perf. 6080-95 To 6140-55
Tubing 2-3/8 Wt. 4.7 I.D. 1.995 Set at 6085 Perf. Open To Bed
Gas Pay: From 6080 To 6155 L 6110 xG .700 est. GL 4263 Bar.Press. _____
Producing Thru: Casing _____ Tubing X Type Well Single
Single-Bradenhead-G. G. or G.O. Dual
Date of Completion: 3-5-64 Packer None Reservoir Temp. _____

OBSERVED DATA

Tested Through Prover (Choke) None Type Taps Flange

No.	Flow Data					Tubing Data		Casing Data		Duration of Flow Hr.
	(Prover) (Line) Size	(Choke) (Line) Size	Press. psig	Diff. h _w	Temp. °F.	Press. psig	Temp. °F.	Press. psig	Temp. °F.	
SI	7 days					1915		1927		
1.	2-1/2	0.750	385			385	600 est.	791	600 est.	1 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		400	1.000	.9250	1.030	4000
2.							
3.							
4.							
5.							

PRESSURE CALCULATIONS

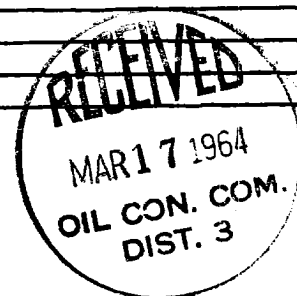
Gas Liquid Hydrocarbon Ratio _____ cf/bbl.
Gravity of Liquid Hydrocarbons _____ deg.
F_c _____ (1-e^{-s})

Specific Gravity Separator Gas _____
Specific Gravity Flowing Fluid _____
P_c 1939 P_c² 3,759,721

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.						644,809	3114,912		
2.									
3.									
4.									
5.									

Absolute Potential: 5536 MCFPD; n .75
COMPANY PAN AMERICAN PETROLEUM CORPORATION
ADDRESS Box 400, Farmington, New Mexico
AGENT and TITLE P. L. Ebers, District Engineer
WITNESSED By F. W. Poell
COMPANY P. W. Poell

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 .