

6 Penrose
1 El Paso
1 File

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122
Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool _____ Formation Pictured Cliffs County Rio Arriba
Initial X Annual _____ Special _____ Date of Test 11-14-63
Company Penrose Production Co. Lease Florence Well No. 4
Unit K Sec. 5 Twp. 25 Rge. 3 Purchaser _____
Casing 4 1/2 Wt. _____ I.D. _____ Set at 3830 Perf. 3743 To 3777
Tubing 1 1/2 Wt. _____ I.D. _____ Set at 3733 Perf. _____ To _____
Gas Pay: From 3743 To 3777 L. _____ xG .62 est. -GL _____ Bar.Press. _____
Producing Thru: Casing X Tubing _____ Type Well Single Gas
Single-Bradenhead-G. G. or G.O. Dual
Date of Completion: 11-7-63 Packer _____ Reservoir Temp. _____

OBSERVED DATA

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						876		877		
1.										
2.	2"	3/4"	609		63°	807				3 Hrs.
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.							
2.							
3.	12.365		621	.971	.9837	1.062	7999
4.							
5.							

PRESSURE CALCULATIONS

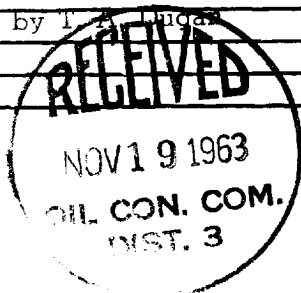
Gas Liquid Hydrocarbon Ratio _____ cf/bbl.
Gravity of Liquid Hydrocarbons _____ deg.
F_c _____ (1-e^{-s})
Specific Gravity Separator Gas _____
Specific Gravity Flowing Fluid _____
P_c 889 P_c 790.321

No.	$\frac{P_w}{P_t}$ (psia)	P _t ²	F _c Q	(F _c Q) ²	$\frac{(F_c Q)^2}{(1-e^{-s})}$	P _w ²	P _c ² -P _w ²	Cal. P _w	$\frac{P_w}{P_c}$
1.									
2.									
3.	819					670,761	119,560		6.6102
4.									
5.									

Absolute Potential: 39.830 MCFPD; n = .95 4.9794

COMPANY Penrose Prod. Co.
ADDRESS _____
AGENT and TITLE T. A. Dugan, Consulting Engineer Original signed by T. A. Dugan
WITNESSED _____
COMPANY _____

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 .