

3 MMOCC
1 Redfern & Herd
1 Christman
1 file

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122
Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Flora Vista Formation Mesaverde County San Juan
Initial X Annual _____ Special _____ Date of Test 11-29-61
Company Redfern & Herd, Inc. Lease Johnston Well No. 1
Unit I Sec. 28 Twp. 30N Rge. 12W Purchaser _____
Casing 5 1/2" Wt. 15.5# I.D. _____ Set at 6295 Perf. 3245 To 3245
Tubing 1 1/2" Wt. 2.4 I.D. _____ Set at 3256 Perf. 3253 To 3256
Gas Pay: From _____ To _____ L _____ xG .650 -GL _____ Bar.Press. _____
Producing Thru: Casing _____ Tubing X Type Well Cas-Gas Dual
Single-Bradenhead-G. G. or G.O. Dual
Date of Completion: 11-6-61 Packer 6015 Reservoir Temp. _____

OBSERVED DATA

Tested Through (Pressure) (Choke) (Restrictor) 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						1253		1260		
1.										
2.	2"	3/4"	154		54			736		3 hrs
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.							
2.							
3.	12.365		166	1.0058	.9603	1.017	2017
4.							
5.							

PRESSURE CALCULATIONS

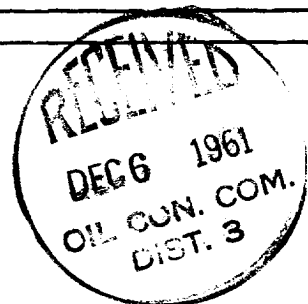
Gas Liquid Hydrocarbon Ratio _____ cf/bbl.
Gravity of Liquid Hydrocarbons _____ deg.
F_c _____ (1-e^{-s})
Specific Gravity Separator Gas _____
Specific Gravity Flowing Fluid _____
P_c 1272 P_c 1617.984

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.									
2.									
3.	748					559.504	1053.480		1.5286
4.									
5.									

Absolute Potential: 2773 MCFPD; n .75 1.3747

COMPANY REDFERN & HERD, INC.
ADDRESS Box 1747, Midland, Texas
AGENT and TITLE _____ Engineer
WITNESSED Original signed by T. A. Dugan
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} = 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 .