

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Basin Formation Dakota County San Juan
Initial X Annual _____ Special _____ Date of Test 1-3-61
Company Redfern & Hard Inc. Lease Standard Well No. 1
Unit J Sec. 4 Twp. 29N Rge. 12W Purchaser _____
Casing 4 1/2 Wt. 9.5 I.D. _____ Set at 6600 Perf. 6356 To 6510
Tubing 1 1/2 Wt. 2.4 I.D. _____ Set at 6479 Perf. 6476 To 6479
Gas Pay: From 6356 To 6510 L _____ xG 0.680 -GL _____ Bar.Press. _____
Producing Thru: Casing _____ Tubing X Type Well Single - Gas
Single-Bradenhead-G. G. or G.O. Dual
Date of Completion: 12-21-60 Packer _____ Reservoir Temp. _____

OBSERVED DATA

Tested Through (Pressure) (Choke) (Water) 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						1672		2041		
1.										
2.										
3.	2"	0.730"	214		64			1182		3 hours
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.	12.3650		226	.9962	.9393	1.025	2680
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 _____ P_c² _____

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.	1194					1426	2789		1.5113
4.									
5.									

Absolute Potential: 3653 MCFPD; n .75 1.3630

COMPANY Redfern & Hard Inc.

ADDRESS Box 1747 Midland, Texas

AGENT and TITLE T. A. Dagen 1007 N. Dustin Farmington, New Mexico

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} = 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 .

STATE OF NEW MEXICO	
OIL CONSERVATION COMMISSION	
OFFICE OF TESTS	
TEST NO.	3
DATE	1/1
TESTER	1
WELL NO.	1
WELL NAME	1
OPERATOR	1
TEST TYPE	OIL GAS