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NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122

Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Undesignated - Gallup Formation Gallup County Rio ArribaInitial X Annual _____ Special _____ Date of Test 12/8/62Company Compass Exploration, Inc. Lease Northwest Lindrith Well No. 2-4Unit F Sec. 4 Twp. 26N Rge. 7W Purchaser _____Casing 5-1/2 Wt. 15.5 I.D. _____ Set at 7479 Perf. 6666 To 6672Tubing 2-1/16 Wt. 3.25 I.D. _____ Set at 6608 Perf. _____ To _____Gas Pay: From 6666 To 6672 L _____ xG _____ -GL .65 Bar.Press. _____Producing Thru: Casing _____ Tubing X Type Well Dual - Gas

Single-Bradenhead-G. G. or G.O. Dual

Date of Completion: 11/19/62 Packer 7010 Reservoir Temp. _____

OBSERVED DATA

Tested Through (~~Prover~~) (Choke) (~~Valve~~) 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						1520		1543		
1.										
2.	2"	3/4"	351		66	351		1297		3 hours.
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		363	.9943	.9608	1.037	4447
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 1555 P_c² 2,418,025

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.	1309					1,713,481	704,544		3.4320
4.									
5.									

Absolute Potential: 11,213 MCFPD; n = 75 2.5214COMPANY COMPASS EXPLORATION, INC.ADDRESS P. O. Box 1138, Farmington, New Mex.AGENT and TITLE E. C. Ellis, Production Supt.

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 .