

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122

Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Basin Dakota Formation Dakota County San Juan
Initial X Annual _____ Special _____ Date of Test 9-4-65
Company Compass Exploration, Inc. Lease Barker Dome Gas Com Well No. 1
Unit A Sec. 23 Twp. 31N Rge. 13W Purchaser _____
Casing 4 1/2" Wt. 10.50# I.D. _____ Set at 6755' Perf. 6606 To 6692
Tubing 1 1/2" Wt. 2.75 I.D. _____ Set at 6667 Perf. Open End To _____
Gas Pay: From 6606 To 6692 L _____ xG .650 -GL _____ Bar.Press. _____
Producing Thru: Casing _____ Tubing X Type Well Single-Gas
Single-Bradenhead-G. G. or G.O. Dual
Date of Completion: 8-25-65 Packer None Reservoir Temp. _____

OBSERVED DATA

Tested Through (~~100000~~) (Choke) (~~100000~~) Type Taps _____

No.	Flow Data					Tubing Data		Casing Data		Duration of Flow Hr.
	(100000) (Line) Size	(Choke) (100000) Size	Press. psig	Diff. h _w	Temp. °F.	Press. psig	Temp. °F.	Press. psig	Temp. °F.	
SI						1702		1702		
1.										
2.										
3.	2"	3/4"	142		85			775		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.	12.365		154	.9768	.9608	1.013	1810
4.							
5.							

PRESSURE CALCULATIONS

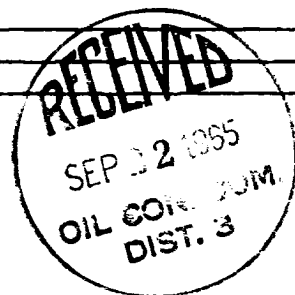
Gas Liquid Hydrocarbon Ratio _____ cf/bbl.
Gravity of Liquid Hydrocarbons _____ deg.
F_c _____ (1-e^{-S})
Specific Gravity Separator Gas _____
Specific Gravity Flowing Fluid _____
P_c 1714 P_c² 2,937,796

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.	787					619,369	2,318,427		1.2672
4.									
5.									

Absolute Potential: 2162 MCFPD; n .75 1.1943

COMPANY Compass Exploration, Inc.
ADDRESS P. O. Box 1138, Farmington, New Mexico
AGENT and TITLE E. C. Ellis Area Manager
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 .