COPIES
3 - NMOCC
1 - EPNG Prod. Co.
1 - EPNG
2 - Compass (Den.)
1 - File

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122
Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool So. Blanco Tocito Formation Gallup County Rio Arriba

Initial X Annual ____ Special ____ Date of Test 10/26/62

Company Compass Exploration, Inc. Lease Fed Lindrith Well No. 1-4

Unit H Sec. 4 Twp. 26 Rge. 7W Purchaser ____

Casing 5-1/2 Wt. 15.5 17.0 I.D. ____ Set at 7431 Perf. 6656 To 6662

Tubing 2-1/16 Wt. 3.25 I.D. ____ Set at 6636 Perf. Open Ended To ____

Gas Pay: From 6665 To 6662 L ____ xG .65 =GL ____ Bar.Press. ____

Producing Thru: Casing ____ Tubing X Type Well Dual - Gas
Single-Bradenhead-G. G. or G.O. Dual

Date of Completion: 6/12/62 Packer 7100 Reservoir Temp. ____
Workover: 10/9/62

OBSERVED DATA

Tested Through ~~(Prover)~~ (Choke) ~~(Meter)~~ Type Taps ____

No.	Flow Data (Prover) (Line) Size	Flow Data (Choke) (Orifice) Size	Flow Data Press. psig	Flow Data Diff. h_w	Flow Data Temp. °F.	Tubing Data Press. psig	Tubing Data Temp. °F.	Casing Data Press. psig	Casing Data Temp. °F.	Duration of Flow Hr.
SI						1547		1561		
1.										
2.										
3.	2"	3/4"				257		1163		3 Hours
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		269	.9933	.9608	1.026	3257
4.							
5.							

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio ____ cf/bbl. Specific Gravity Separator Gas ____
Gravity of Liquid Hydrocarbons ____ deg. Specific Gravity Flowing Fluid ____
P_c ____ $(1-e^{-s})$ ____ P_c 1573 P_c^2 2,474,329

No.	P_w P_t (psia)	P_t^2	F_cQ	$(F_cQ)^2$	$\frac{(F_cQ)^2}{(1-e^{-s})}$	P_w^2	$P_c^2-P_w^2$	Cal. P_w	$\frac{P_w}{P_c}$
1.									
2.									
3.	1175					1,380,625	1,093,704		2.2623
4.									
5.									

Absolute Potential: 6008 MCFPD; n = .75 1.8446

COMPANY COMPASS EXPLORATION, INC.
ADDRESS P. O. Box 1138, Farmington, N. Mex.
AGENT and TITLE F. C. Ellis Production Supt.
WITNESSED ____
COMPANY ____

REMARKS

RECEIVED
NOV 5 1962
OIL CON. COM.
DIST. 3

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.