3 NMOCC
4 Compass
1 El Paso Natural Gas NEW MEXICO OIL CONSERVATION COMMISSION
1 File

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 1-12-62

Company Compass Exploration, Inc. Lease Twin Mounds Well No. 1-25

Unit O Sec. 25 Twp. 30N Rge. 14W Purchaser ____

Casing 15.5# Wt. 5½" O.D. ____ Set at 6028 Perf. 5820 - 5696 To 5840 5716

Tubing 4.7# Wt. 2 3/8" I.D. ____ Set at 5857 Perf. 5817 To 5844

Gas Pay: From ____ To ____ 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: 12-30-61 Packer ____ Reservoir Temp. ____

OBSERVED DATA

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

No.	Flow Data (Prover) (Line) Size	Flow Data (Choke) (Orifice) Size	Press. psig	Diff. h_w	Temp. °F.	Tubing Data Press. psig	Tubing Data Temp. °F.	Casing Data Press. psig	Casing Data Temp. °F.	Duration of Flow Hr.
SI						1750		1839		
1.										
2.		3/4"	613					1369	70	3 hrs.
3.										
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.	12.365		625	.9905	.9608	1.064	7825
3.							
4.							
5.							

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio ____ cf/bbl. Specific Gravity Separator Gas ____
Gravity of Liquid Hydrocarbons ____ deg. Specific Gravity Flowing Fluid ____
F_c ____ $(1-e^{-s})$ ____ P_c 1851 P_c^2 3,426,201

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.	1381					1,907,161	1,519,040		2,2555
4.									
5.									

Absolute Potential: 14,401 MCFPD; n .75 1.8404
COMPANY Compass Exploration, Inc.
ADDRESS P. O. Box 1138, Farmington, New Mexico
AGENT and TITLE E. C. Ellis, Production Superintendent
WITNESSED ____
COMPANY ____

REMARKS

RECEIVED
JAN 22 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.