NEW MEXICO OIL CONSERVATION COMMISSION

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool __Basin__ Formation __Dakota__ County __San Juan__

Initial __X__ Annual _____ Special _____ Date of Test __2-7-62__

Company __Compass Exploration, Inc.__ Lease __Federal__ Well No. __2-30A__

Unit __F__ Sec. __30__ Twp. __30N__ Rge. __13W__ Purchaser _____

Casing __5 1/2"__ Wt. __15.5#__ I.D. _____ Set at __245__ Perf. _____ To _____

Tubing __2 3/8"__ Wt. __4.7#__ I.D. _____ Set at __6173__ Perf. __5776__ To __6014__

Gas Pay: From __5776__ To __6014__ 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: __1-27-62__ Packer _____ Reservoir Temp. _____

OBSERVED DATA

Tested Through (Prover) (Choke) (Meter)   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						1573		1961		
1.										
2.										
3.	2"	3/4"	223		54			773		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.	12.3650		235	1.0058	0.9393	1.029	2825
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 __1973__ P_c^2 __3893__

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	$\frac{P_w}{P_c}$
1.									
2.									
3.	785					616	3277		1.1880
4.									
5.									

Absolute Potential: __3215__ MCFPD; n __.75__ __1.1380__

COMPANY __Compass Exploration, Inc.__
ADDRESS __Box 1138, Farmington, New Mexico__
AGENT and TITLE __E. C. Ellis, Production Superintendent__
WITNESSED _____
COMPANY _____

REMARKS
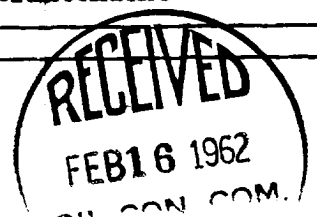
INSTRUCTIONS

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.