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 Rio Arriba

Initial yes Annual ____ Special ____ Date of Test 8-7-62

Company Coulson Oil Company Lease Branch "C" Well No. D-389

Unit L Sec. 13 Twp. 26N Rge. 6W Purchaser Southern Union Gas Company

Casing 4½" Wt. 11.6 I.D. 4.000 Set at 7727 Perf. 7350 To 7376

Tubing 2 3/8" Wt. 4.7 I.D. 1.995 Set at 7360 Perf. 7356 To 7360

Gas Pay: From 7350 To 7376 L 7356 xG .660 -GL 4856 Bar.Press. 12

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

Date of Completion: 7-26-62 Packer None Reservoir Temp. 185°F

OBSERVED DATA

Tested Through (Prover) (Choke) (Orifice) 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						2398		2398		
1.		3/4"				660	70	1380		3 Hr.
2.										
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.	14.1805		672	.9905	.9535	1.096	9609
2.							
3.							
4.							
5.							

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio ____ cf/bbl.
Gravity of Liquid Hydrocarbons ____ deg.
F_c ____ $(1-e^{-s})$ ____

Specific Gravity Separator Gas .660
Specific Gravity Flowing Fluid ____
P_c 2370 P_c^2 5,616,900

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.						1,997,664*	3619236	1398	
2.									
3.									
4.									
5.									

Absolute Potential: 13,053 MCFPD; n (1.53)* 1.3796

COMPANY Coulson Oil Company
ADDRESS Box 700
AGENT and TITLE Frank Kraus Supt.
WITNESSED ____
COMPANY ____

*SW Casing Pressure used for P_w value.

REMARKS

RECEIVED
AUG 10 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.