

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Revised 12-1-55

Pool Ballard Formation Pictured Cliffs County 1964 AUG 7 Wio/Arriba

Initial X Annual _____ Special _____ Date of Test 7-29-64

Company Continental Oil Company Lease AXI Apache G Well No. 3

Unit I Sec. 8 Twp. 33N 12 Rge. 5W Purchaser Southern Union Gas Company

Casing 4 1/2" Wt. 9.5# I.D. 4.090" Set at 2200' Perf. 2030' 2066' To 2050' 2072'

Tubing 2 3/8" Wt. 4.7# I.D. 1.995" Set at 2009' Perf. None To _____

Gas Pay: From 2020' To 2062' L 1999' xG .660 -GL 1319 Bar.Press. 12 psia

Producing Thru: Casing _____ Tubing X Type Well single

Date of Completion: 7-8-64 Packer None Single-Bradenhead-G. G. or G.O. Dual
Reservoir Temp. 88°

OBSERVED DATA

Tested Through (Prover) (~~XXXXXXXXXX~~) Type Taps _____

Flow Data						Tubing Data		Casing Data		Duration of Flow Hr.
No.	(Prover) (XXXX) Size	(XXXX) (Orifice) Size	Press. psig	Diff. h _w	Temp. °F.	Press. psig	Temp. °F.	Press. psig	Temp. °F.	
SI	2 in.					399	78	399	78	528 hrs. SI
1.	2 in.	3/16"	364		69	364	69	365	78	1 hr
2.	2 in.	1/4"	239		65	239	65	349	78	1 hr
3.	2 in.	5/16"	236		67	236	67	328	78	1 hr
4.	2 in.	3/8"	223		67	223	67	300	78	1 hr
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.	.7851		376	.9915	.9535	1.037	288
2.	1.4030		251	.9952	.9535	1.024	342
3.	2.1577		248	.9933	.9535	1.024	320
4.	3.0691		235	.9933	.9535	1.023	700
5.							

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio Dry Gas cf/bbl.

Gravity of Liquid Hydrocarbons _____ deg.

F_c P_v Measured (1-e^{-S}) _____

Specific Gravity Separator Gas _____

Specific Gravity Flowing Fluid _____

P_c 411 P_c² 168.9

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.	377					142.1	26.8		91.7
2.	361					130.3	38.6		87.8
3.	340					115.6	53.3		82.6
4.	312					97.3	71.6		75.8
5.									

Absolute Potential: 1500 MCFPD; n .90

COMPANY Continental Oil Company

ADDRESS P. O. Box 3312, Durango, Colorado

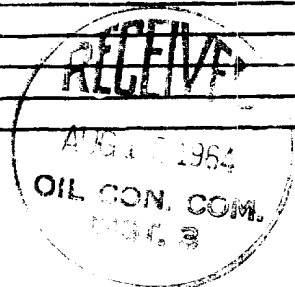
AGENT and TITLE E. B. Errett, Test Engineer

WITNESSED H. D. Haley, District Manager

COMPANY Continental Oil Company

REMARKS

NMCC(3) SU File



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 .



CONTINENTAL OIL COMPANY
AXI APACHE G #3
I - SEC. 8-33N-5W
RIO ARriba COUNTY, NEW MEXICO
7-29-64

