NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122
Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool **South Blanco** Formation **Pictured Cliffs** County **Rio Arriba**

Initial **X** Annual _____ Special _____ Date of Test **7-14-65**

Company **Continental Oil Company** Lease **AXI Apache "J"** Well No. **11**

Unit **A** Sec. **6** Twp. **25N** Rge. **5W** Purchaser **Southern Union Gas Company**

Casing **4½"** Wt. **10.5#** I.D. **1.995** Set at **3883'** Perf. **2873'** To **2924'**

Tubing **1"** Wt. **1.72#** I.D. **1.049** Set at **2915'** Perf. **--** To **--**

Gas Pay: From **2873'** To **2924'** L **2873'** xG **.670** -GL **1925** Bar.Press. **12 psia**

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

Date of Completion: **July 6, 1965** Packer **Model D** Reservoir Temp. _____

OBSERVED DATA

Tested Through (Prover) [redacted] Type Taps _____

No.	Flow Data (Prover) (Line) Size	(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						692		692		SI 144 hrs.
1.	2"	1/4	627		58	629		627		1 hr.
2.	2"	7/16	437		59	478		447		1 hr.
3.	2"	5/8	256		60	317		256		1 hr.
4.	2"	3/4	174		61	229		174		1 hr.
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.	1.4030		639	1.0019	.9463	1.072	911
2.	4.3997		449	1.0010	.9463	1.083	1972
3.	8.3555		268	1.0000	.9463	1.028	2178
4.	12.2023		186	0.9990	.9463	1.018	2532
5.							

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio _____ cf/bbl. Specific Gravity Separator Gas _____
Gravity of Liquid Hydrocarbons _____ deg. Specific Gravity Flowing Fluid **.670**
P_c **Pw Measured** $(1-e^{-s})$ _____ P_c **704** P_c^2 **495,616**

No.	P_w [redacted]	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.	641					410,881	84,735		90.9
2.	490					240,100	255,506		69.6
3.	329					108,241	387,375		46.7
4.	241					58,081	437,535		34.2
5.									

Absolute Potential: **2770** MCFPD; n **.63**
COMPANY **Continental Oil Company**
ADDRESS **P. O. Box 3312, Durango, Colorado**
AGENT and TITLE E. B. Everett, Test Engineer
WITNESSED Fred Von Mate
COMPANY **Continental Oil Company**

REMARKS

RECEIVED
AUG 2 1965
OIL CON. COM.
DIST. 3

[redacted]OCC(3) 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.

PICTURED CLIFFS

CONTINENTAL OIL COMPANY
AXI APACHE "J" NO. 11
A-6- 25N - 5W

RIO ARRIBA COUNTY
7-14-65