NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122
Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Tubb Formation Tubb County Lea

Initial ____ Annual ____ Special x Date of Test 5-20-60

Company Continental Oil Company Lease Hawk B-3 Well No. 2-T

Unit R Sec. 3 Twp. 21 Rge. 37 Purchaser El Paso Natural Gas Co.

Casing 5-1/2 Wt. 17 I.D. ____ Set at 8069 Perf. 6620 To 6345

Tubing 2-7/8 Wt. 6.5 I.D. 2.441 Set at 6151 Perf. ____ To ____

Gas Pay: From 6220 To 6245 L 6151 xG .689 =GL 4238 Bar.Press. 13.2

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

Date of Completion: 5-11-59 Packer None Reservoir Temp. ____

OBSERVED DATA

Tested Through (Prover) (Choke) (Meter) Type Taps ____

No.	Flow Data (Prover) (Line) Size	Flow Data (Choke) (Orifice) Size	Flow Data Press. psig	Flow Data Diff. h_w	Flow Data Temp. °F.	Tubing Data Press. psig	Tubing Data Temp. °F.	Casing Data Press. psig	Casing Data Temp. °F.	Duration of Flow Hr.
SI						1333				72
1.	4	1.500	576	6.25	51	1286				24
2.	4	1.500	556	19.36	47	1256				24
3.	4	1.500	575	43.56	48	1192				24
4.	4	1.500	562	77.44	46	1101				24
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.	13.99	60.68		1.0088	.9332	1.075	859.1
2.	13.99	104.97		1.0127	.9332	1.077	1495.
3.	13.99	169.07		1.0117	.9332	1.077	2277.
4.	13.99	211.05		1.0137	.9332	1.077	3008.
5.							

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio dry cf/bbl. Specific Gravity Separator Gas .689
Gravity of Liquid Hydrocarbons dry deg. Specific Gravity Flowing Fluid dry
P_c 5.866 $(1-e^{-s})$ .253 P_c 1346.2 P_c^2 1812.2

No.	P_w P_t (psia)	P_t^2	F_cQ	$(F_cQ)^2$	$(F_cQ)^2$ $(1-e^{-s})$	P_w^2	$P_c^2-P_w^2$	Cal. P_w	$\frac{P_w}{P_c}$
1.	1299.2	1687.9	3.04	25.40	6.4	1694.3	117.9	1301.6	.9668
2.	1269.2	1610.9	8.77	76.91	19.5	1630.4	181.8	1276.9	.9483
3.	1205.2	1452.5	13.36	178.5	45.2	1497.7	314.5	1223.8	.9090
4.	1114.2	1241.4	17.64	311.2	78.7	1320.1	492.1	1148.9	.8534
5.									

Absolute Potential: 7500 MCFPD; n .699

COMPANY Continental Oil Company
ADDRESS Box 68, Eunice, New Mexico
AGENT and TITLE R. C. Gaible Dist. Supt.
WITNESSED ____
COMPANY ____

REMARKS

NMOCC-3 WEG HLJ WAM File-2

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
HAWK B-3 NO. 2-T
SEC. 3, TWP. 21, RGE. 37
LEA COUNTY, NEW MEXICO