

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122

Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Warren Tubb Formation Tubb County Lea
Initial X Annual _____ Special _____ Date of Test 10/3 - 10/10/58
Company Continental Oil Company Lease Warren Unit BT Well No. 26
Unit M Sec. 27 Twp. 20 Rge. 38 Purchaser E. P. N. G.
Casing 7 Wt. 23.0 I.D. 6.366 Set at 6679 Perf. 6346 To 6586
Tubing 2 Wt. 4.7 I.D. 1.995 Set at 6392 Perf. _____ To _____
Gas Pay: From 6346 To 6586 L 6392 xG MIX .745 -GL 4749 Bar.Press. 13.2
Producing Thru: Casing _____ Tubing X Type Well G. G. Dual
Date of Completion: 7-24-58 Packer 6283 Single-Bradenhead-G. G. or G.O. Dual
Reservoir Temp. 95°

OBSERVED DATA

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

Flow Data						Tubing Data		Casing Data		Duration of Flow Hr.
No.	(Prover) (Line) Size	(Choke) (Orifice) Size	Press. psig	Diff. h _w	Temp. °F.	Press. psig	Temp. °F.	Press. psig	Temp. °F.	
SI						2041				72
1.	4	1.250	584	10.24	78	1902				24
2.	4	1.250	537	31.36	72	1850				24
3.	4	1.250	504	56.25	67	1741				24
4.	4	1.250	504	75.69	65	1665*				24
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.	9.643	78.20		.9931	.9339	1.061	736
2.	9.643	131.35		.9937	.9339	1.061	1241
3.	9.643	177.04		.9923	.9339	1.062	1682
4.	9.643	205.36		.9932	.9339	1.062	1954
5.							

PRESSURE CALCULATIONS

Avg.
Gas Liquid Hydrocarbon Ratio 44.180 cf/bbl.
Gravity of Liquid Hydrocarbons 66.5 deg. 60°
F_c 9.926 (1-e^{-s}) 0.279
Specific Gravity Separator Gas .688
Specific Gravity Flowing Fluid .7145
P_c 2054.2 P_c² 4219.7

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.	1915.2	3668.0	7.31	53.44	14.91	3682.9	536.8	1919.1	.93
2.	1863.2	3471.5	12.33	152.03	42.42	3519.9	705.8	1874.6	.91
3.	1754.2	3077.2	16.71	279.22	77.90	3155.1	1064.6	1776.3	.86
4.	1678.2	2816.4	19.41	376.75	105.11	2921.5	1298.2	1709.2	.83
5.									

Absolute Potential: 4800 MCFPD; n .77

COMPANY Continental Oil Company

ADDRESS Box 427, Hobbs, New Mexico

AGENT and TITLE W. D. Howard, Gas Tester

WITNESSED Earl Smith

COMPANY El Paso Natural Gas Co.

CC: ENR HLB HLA EFB WOH

MOCC-8

Mr. Earl Smith, El Paso Natural Gas Co., Dal., N.M.

NOTE: On highest flow rate (24/64) well flowed 43 BPD at 67.3 gravity distillate.

* Insufficient drawdown due to orifice size.

Attach: AK

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 .

COMPANY Continental Oil Co.
 WELL Warren Unit BT 26 (Tubb)
 LOCATION M Sec.27-20S-38E
 COUNTY Lea
 DATE 10-10-58

PRINTED IN U.S.A.

NO. 31.291 LOGARITHMIC: 2 BY 2 3/4 INCH CYCLES PER DECADE WAY

