

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122

MULTI-POINT PACK PRESSURE TEST FOR GAS WELLS

Revised 12-1-55

Pool Eumont Formation Queen County Lea
Initial X Annual _____ Special _____ Date of Test 8-26/8-30-57
Company Continental Oil Company Lease Lockhart B-1 Well No. 4
Unit G Sec. 1 Twp. 22-S Rge. 36-E Purchaser El Paso Natural Gas Company
Casing 5 1/2 Wt. 17 I.D. 4.892 Set at 3527 Perf. 3372 To 3554
Tubing 2 3/8 Wt. 4.70 I.D. 1.995 Set at 3650 Perf. _____ To _____
Gas Pay: From 3372 To 3554 L 3372 xG .705 -GL 2370 Bar.Press. 13.2
Producing Thru: Casing X Tubing _____ Type Well G. O. Dual
Date of Completion: 2-22-57 Packer 3672 Single-Bradenhead-G. G. or G.O. Dual
Reservoir Temp. 900

OBSERVED DATA

Tested Through (~~Brook~~) (~~Good~~) (Meter)Type Taps Flange

No.	Flow Data			Tubing Data		Casing Data		Duration of Flow Hr.
	(Brook) (Line) Size	(Good) (Orifice) Size	Press. psig	Diff. h _w	Temp. °F.	Press. psig	Temp. °F.	
SI								
1.	4"	1.250	564	10.89	65		1102	72
2.	4"	1.250	576	20.25	62		1038	24
3.	4"	1.250	582	28.09	60		996	24
4.	4"	1.250	582	37.21	60		958	24
5.							913	24

FLOW CALCULATIONS

No.	Coefficient Flg. (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	79.26		.9952	.9225	1.070	750
2.	9.643	109.21		.9981	.9225	1.073	1041
3.	9.643	129.28		1.000	.9225	1.077	1239
4.	9.643	148.80		1.000	.9225	1.077	1426
5.							

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio Dry cf/bbl.
Gravity of Liquid Hydrocarbons _____ deg.
F_c 1.812 (1-e^{-s}) 0.151

Specific Gravity Separator Gas .705
Specific Gravity Flowing Fluid _____
P_c 1115.2 P_c² 1243.7

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	P _w P _c
1.	1051.2	1105.0	1.36	1.85	.39	1105.3	138.4	1051.3	94.27
2.	1009.2	1018.5	1.89	3.57	.50	1019.0	224.7	1009.5	90.52
3.	971.2	943.2	2.25	5.06	.76	944.0	299.7	971.6	87.12
4.	926.2	857.8	2.60	6.76	1.02	858.8	384.9	926.7	83.09
5.									

Absolute Potential: 2900 MCFPD; n .604

COMPANY Continental Oil Company
ADDRESS Box 68, Eunice, New Mexico
AGENT and TITLE [Signature]
WITNESSED _____
COMPANY _____

REMARKS

NMOCC-3 HLJ EWW RLA 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} = Supercompressibility 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 .