

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122

MULTI-POINT BACK PRESSURE TEST FOR GAS WELL

Revised 12-1-55

Pool Justis Formation Clorietta County Lea
 Initial _____ Annual X Special _____ Date of Test 3-29-57
 Company Continental Oil Company Lease State A-2 Well No. 1
 Unit 0 Sec. 2 Twp. 25S Rge. 37E Purchaser El Paso Natural Gas Company
 Casing 5" Wt. 18# I.D. 6.336 Set at 4873 Perf. 4770 To 4854
 Tubing 2" Wt. 4.7 I.D. 1.995 Set at 4854 Perf. _____ To _____
 Gas Pay: From 4770 To 4854 L 4770 xG .665 -GL 3179 Bar.Press. 13.2
 Producing Thru: Casing X Tubing _____ Type Well Single
 Date of Completion: 7-26-54 Packer None Single-Bradenhead-G. G. or G.O. Dual
 Reservoir Temp. 90°

OBSERVED DATA

Tested Through (Prover) (~~Choke~~) (~~Meter~~)Type Taps 2" Prover

No.	Flow Data					Tubing Data		Casing Data		Duration of Flow Hr.
	(Prover) (Line) Size	(Orifice) Size	Press. psig	Diff. h _w	Temp. °F.	Press. psig	Temp. °F.	Press. psig	Temp. °F.	
SI										
1.	2"	.500	80		70			978		72
2.	2"	.500	92		80			260		3
3.	2"	.500	94		68			172		3
4.	2"	.500	96		62			136		3
5.	2"	.500	83		70			105		3
								98		24

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.	5.5233		93.2	.9850	.9571		485
2.	5.5233		105.2	.9813	.9571		545
3.	5.5233		107.2	.9924	.9571		562
4.	5.5233		109.2	.9981	.9571		576
5.	5.5233		96.2	.9831	.9571		500

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio Dry cf/bbl.
 Gravity of Liquid Hydrocarbons _____ deg.
 F_c 0.4915 (1-e^{-s}) .196

Specific Gravity Separator Gas .605
 Specific Gravity Flowing Fluid _____
 P_c 991.2 P_c 982.5

No.	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.	273.2	74.6	.24	.06	.01	74.6	907.9	273.2	27.59
2.	185.2	34.3	.27	.07	.02	34.3	948.2	185.2	18.68
3.	149.2	22.3	.28	.08	.02	22.3	960.2	149.2	15.05
4.	118.2	14.0	.28	.08	.02	14.0	968.5	118.2	11.92
5.	111.2	12.4	.25	.06	.01	12.4	970.1	111.2	11.21

Absolute Potential: 510 MCFPD; n 1.000COMPANY Continental Oil CompanyADDRESS Box 68, Eunice, New Mexico

AGENT and TITLE

WITNESSED J. R. Parker, District Superintendent

COMPANY

REMARKS

Dist: REC-3 RCI HLJ File
 (Sante Fe)

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 .