

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122

Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Jalmat Formation Yates County Lea
 Initial _____ Annual _____ Special X Date of Test 8-31-60
 Company Carper Drilling Company, Inc. Lease Carper-Continental "A" Well No. 1
 Unit A Sec. 12 Twp. 22S Rge. 35E Purchaser Phillips Petroleum Company
 Casing 5 1/2" Wt. 14# I.D. 5.012" Set at 3848' Perf. 3660' To 3700'
 Tubing 2 3/8" Wt. 4.7# I.D. 1.995" Set at 3793' Perf. 3782' To 3810'
 Gas Pay: From 3618' To 3810' L 3714' xG 0.706 -GL 2622 Bar.Press. 13.2
 Producing Thru: Casing _____ Tubing X Type Well Single
 Date of Completion: 4-11-55 Packer none Single-Bradenhead-G. G. or G.O. Dual
 Reservoir Temp. 89°

OBSERVED DATA

Tested Through XXXXXX XXXXXX (Meter) Type Taps Flange

No.	Flow Data			Tubing Data		Casing Data		Duration of Flow Hr.
	(Line) Size	(Orifice) Size	Press. psig	Diff. h _w	Temp. °F.	Press. psig	Temp. °F.	
SI						313		70
1.	4.000	2.000	23.0	8.0	74	199	83	3
2.	4.000	2.000	24.0	7.0	72	181	83	3
3.	4.000	2.000	23.5	7.0	70	173	83	3
4.	4.000	2.000	25.0	6.0	68	166	83	3
5.	4.000	2.000	25.0	6.0	68	149	83	21

FLOW CALCULATIONS

No.	Coefficient (24-Hour)	$\sqrt{h_{wp} F}$	Pressure psia	Flow Temp. Factor F _t	Gravity Factor F _g	Compress. Factor F _{pv}	Rate of Flow Q-MCFPD @ 15.025 psia
1.	25.58	17.018	36.2	0.9868	0.9219	1.004	397.6
2.	25.58	16.138	37.2	0.9887	0.9219	1.004	377.8
3.	25.58	16.028	36.7	0.9905	0.9219	1.004	375.9
4.	25.58	15.139	38.2	0.9924	0.9219	1.004	355.7
5.	25.58	15.139	38.2	0.9924	0.9219	1.004	355.7

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio Dry gas cf/bbl.
 Gravity of Liquid Hydrocarbons _____ deg.
 P_c P_w(measured) (1-e^{-s})

Specific Gravity Separator Gas 0.706
 Specific Gravity Flowing Fluid 0.706
 P_c 326.2 P_c^2 106.4

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.	212.2	45.0				106.4	61.4		0.651
2.	194.2	37.7				106.4	68.7		0.595
3.	186.2	34.7				106.4	71.7		0.571
4.	179.2	32.1				106.4	74.3		0.549
5.	162.2	26.3				106.4	80.1		0.497

Absolute Potential: 690 MCFPD; n 1.00 (assumed)

COMPANY Carper Drilling Company, Inc.
 ADDRESS 200 Carper Building, Artesia, New Mexico
 AGENT and TITLE Ass't. Prod. Supt. & Petr. Engr.
 WITNESSED No witness was available
 COMPANY _____

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 .

Carper Drilling Company, Inc.
 Carper-Continental "A" #1
 A - 12 - 22S - 35K
 Lea County, New Mexico
 Date: 8-31-60

THE FREDERICK POST CO., CHICAGO, ILL.

LOGARITHMIC 2X15 INCH CYCLER

NO 551

