

NEW MEXICO OIL CONSERVATION COMMISSION

NEEDS OFFICE 000

Form C-122

Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Bumont Formation Queen County LeaInitial X Annual _____ Special _____ Date of Test 8-24-56Company Gulf Oil Corporation Lease Graham State "C" Well No. 1Unit H Sec. 17 Twp. 19S Rge. 37E Purchaser Permian Basin PL Co.Casing 5 1/2" Wt. 17.0# I.D. 4.892" Set at 3808' Perf. 3495' To 3668'Tubing 2-3/8" Wt. 4.7# I.D. 1.995" Set at 3962' Perf. _____ To _____Gas Pay: From 3495' To 3668' L 3495' xG 0.675 -GL 2359 Bar. Press. 13.2Producing Thru: Casing X Tubing _____ Type Well Gas-Oil DualDate of Completion: 5-1-56 Packer 3770' Single-Bradenhead-G. G. or G.O. Dual
Reservoir Temp. _____

OBSERVED DATA

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

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								983.0		72-2/2
1.	h	1.50	471.7	4.5	101			912.5		23-3/4
2.	h	1.50	458.2	22.8	56			805.6		2h
3.	h	1.50	459.7	45.2	60			721.7		23-3/4
4.	h	1.50	460.4	28.5	59			756.9		24-1/4
5.										

FLOW CALCULATIONS

No.	Coefficient (24-Hour)	$\sqrt{h_{wpc}}$	Pressure psia	Flow Temp. Factor F _t	Gravity Factor F _g	Compress. Factor F _{ov}	Rate of Flow Q-MCFPD @ 15,025 psia
1.	15.26	45.74	464.9	0.9627	0.9427	1.035	656
2.	15.26	103.70	471.4	1.0039	0.9427	1.049	1571
3.	15.26	146.20	472.9	1.0000	0.9427	1.047	2202
4.	15.26	116.20	473.6	1.0010	0.9427	1.050	1757
5.							

CO2 - 1.38%

N2 - 2.45%

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio _____ cf/bbl.
Gravity of Liquid Hydrocarbons _____ deg.
F_c 1.812 (1-e^{-S}) 0.150Specific Gravity Separator Gas _____
Specific Gravity Flowing Fluid _____
P_c 996.2 P_c 992.4

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 _B	P _w P _B
1.	925.7	856.9	1.189	1.414	0.212	857.1	135.3	925.8	.93
2.	818.8	670.4	2.847	8.105	1.216	671.6	320.8	819.5	.82
3.	721.9	525.5	3.990	15.920	2.388	527.9	464.5	726.6	.73
4.	704.1	505.8	3.184	10.140	1.512	505.3	407.1	705.0	.77
5.									

Absolute Potential: 4,200 MCFPD; n .90
COMPANY Gulf Oil Corporation
ADDRESS Box 2167, Hobbs, N.M.
AGENT and TITLE _____
WITNESSED _____
COMPANY _____

REMARKS

Retest after blowing well. Average slope taken through points.

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 casing, tubing if flowing thru tubing.) 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 .