

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Revised 12-1-55

Pool Dumont Formation Queen County Lea
Initial X Annual _____ Special _____ Date of Test 4-3 - 4-12-57
Company Gulf Oil Corporation Lease Christmas, A. L. "C" Well No. 5
Unit 1 Sec. 18 Twp. 22N Rge. 37E Purchaser Permian Basin P. L. Co.
Casing 5.5 Wt. 14 I.D. 5.012 Set at 3661 Perf. 3435 To 3497
Tubing 2.375 Wt. 4.7 I.D. 1.995 Set at 3723 Perf. _____ To _____
Gas Pay: From 3435 To 3497 L 3435 xG .700 -GL 2405 Bar.Press. 13.2
Producing Thru: Casing 1 Tubing _____ Type Well G. O. Dual
Date of Completion: 10-19-56 Packer 3590 Single-Bradenhead-G. G. or G.O. Dual
Reservoir Temp. _____

OBSERVED DATA

Tested Through (Pressure) (Gauge) (Meter)Type Taps Pipe

Flow Data						Tubing Data		Casing Data		Duration of Flow Hr.
No.	(Pressure) (Gauge) (Line) Size	(Orifice) (Orifice) Size	Press. psig	Diff. h _w	Temp. °F.	Press. psig	Temp. °F.	Press. psig	Temp. °F.	
SI								638.0		71
1.	4	1.25	436.3	3.4	95			609.8		23
2.	4	1.25	431.7	5.4	100			595.8		24
3.	4	1.25	436.0	9.6	69			570.7		25
4.	4	1.25	438.5	18.0	58			529.7		24
5.										

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.	10.24	39.09	449.5	.9680	.9258	1.043	374
2.	10.24	49.01	444.9	.9636	.9258	1.040	466
3.	10.24	65.67	449.2	.9915	.9258	1.053	650
4.	10.24	90.17	451.7	1.0019	.9258	1.057	905
5.							

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio _____ cf/bbl.
Gravity of Liquid Hydrocarbons _____ deg.
F_c 1.712 (1-e^{-s}) .153

Specific Gravity Separator Gas _____
Specific Gravity Flowing Fluid _____
P_c 651.2 P_c 424.1

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.	623.0	388.1	.6403	.4100	.0627	388.2	35.9	623.1	.96
2.	609.8	371.9	.7978	.6365	.0974	371.0	53.1	609.1	.94
3.	583.9	340.9	1.113	1.239	.1896	341.1	83.0	584.0	.90
4.	542.9	294.7	1.549	2.399	.3670	295.1	129.0	543.2	.83
5.									

Absolute Potential: 2180 MCFPD; n 0.74

COMPANY Gulf Oil CorporationADDRESS Hebbs, New MexicoAGENT and TITLE A. L. SmithWITNESSED R. L. WestCOMPANY Permian Basin P. L. Co.

REMARKS

Well was blown 4-5-57

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 .