

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122

Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Furness Formation Yates-even Rivers-Dean County LeaInitial _____ Annual X Special _____ Date of Test 7-7 to 7-14-56Company Gulf Oil Corporation Lease Ball-massy "B" Well No. 1Unit 11 Sec. 29 Twp. 20S Rge. 37 Purchaser Perran Basin L Co.Casing 7 Wt. 22 I.D. 6.376 Set at 2706 Perf. 3350 To 3540Tubing 2.375 Wt. 4.7 I.D. 1.995 Set at 3350 Perf. _____ To _____Gas Pay: From 3350 To 3540 L 3350 xG .670 -GL 2245 Bar.Press. 13.2Producing Thru: Casing _____ Tubing X Type Well SingleDate of Completion: 3-2-50 Packer 3314 Single-Bradenhead-G. G. or G.O. Dual Reservoir Temp. _____

OBSERVED DATA

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

No.	Flow Data					Tubing Data		Casing Data		Duration of Flow Hr.
	(Prover) (Line) Size	(Choke) (Orifice) Size	Press. psig	Diff. h _w	Temp. °F.	Press. psig	Temp. °F.	Press. psig	Temp. °F.	
SI										
1.	h	2.25	465.8	8.2	82	793.0				72
2.	h	2.25	474.9	15.2	69	681.1				24
3.	h	2.25	475.6	21.2	64	564.4				24
4.	h	2.25	475.7	22.3	66	544.3				24
5.										25

FLOW CALCULATIONS

No.	Coefficient (24-Hour)	$\sqrt{h_{wp}}$	Pressure psia	Flow Temp. Factor F _t	Gravity Factor F _g	Compress. Factor F _{pv}	Rate of Flow Q-MCFPD @ 15.025 psia
1.	10.53	64.67	479.0	.9775	.9463	1.000	2455
2.	10.53	86.23	488.2	.9725	.9463	1.007	3435
3.	10.53	102.55	488.8	.9962	.9463	1.051	4078
4.	10.53	104.12	488.9	.9943	.9463	1.049	4277
5.							

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio _____ cf/bbl.
Gravity 9.956 Liquid Hydrocarbons _____ deg.
F_c _____ (1-e^{-s})Specific Gravity Separator Gas _____
Specific Gravity Flowing Fluid 93.7
P_c _____ P_c _____

No.	P _w P _w (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
1.	694.1	481.6	24.397	595.02	83.1	731.7	182.6	854.8	89.9
2.	581.7	338.1	40.519	1641.36	166.6	643.7	265.6	805.4	84.2
3.	557.5	310.8	41.503	1722.50	234.8	573.2	311.1	757.1	79.1
4.					246.3	557.1	357.2	746.3	78.0
5.									

Absolute Potential 9160 MCFPD; n 0.32COMPANY Gulf Oil CorporationADDRESS Box 2167, Hobbs, N.M.AGENT and TITLE H. E. Smith

WITNESSED _____

COMPANY _____

REMARKS

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 .