

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122

Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Hlinebry Formation Hlinebry County Lea

Initial X Annual _____ Special _____ Date of Test 9-12-20-57

Company Gulf Oil Corporation Lease Hugh Well No. 6

Unit H Sec 14 Twp. 22S Rge. 37E Purchaser Permian Basin PL Co.

Casing 7 Wt. 23 I.D. 6.366 Set at 6400 Perf. 5430 To 5500

Tubing 2 Wt. 4.7 I.D. 1.995 Set at 6473 Perf. _____ To _____

Gas Pay: From 5430 To 5500 L 5430 xG Mlx* -GL * Bar.Press. 13.2

Producing Thru: Casing X Tubing _____ Type Well G-O Dual

Date of Completion: 12-21-55 Packer 6345 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								1664.9		72
1.	4	2.25	495.8	2.5	74			1139.8		24
2.	4	2.25	492.1	6.6	71			1000.8		24
3.	4	2.25	490.6	10.8	74			849.9		24
4.	4	2.25	490.6	15.2	82			678.0		24
5.										

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.	40.53	35.68	509.0	.9868	.9225	1.059	1394
2.	40.53	57.75	505.3	.9896	.9225	1.059	2263
3.	40.53	73.76	503.8	.9868	.9225	1.059	2882
4.	40.53	87.46	503.2	.9795	.9225	1.059	3379
5.							

PRESSURE CALCULATIONS

CO2 - 0%
N2 - 2.36%

Gas Liquid Hydrocarbon Ratio * _____ cf/bbl.
Gravity of Liquid Hydrocarbons 66.0 deg.
F_c .740 (1-e^{-S}) *

Specific Gravity Separator Gas .705
Specific Gravity Flowing Fluid .7165
P_c 1678.2 P_c 2816.0

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.	1153.0	1329.4	1.032	1.065	.2556	1329.7	1486.3	1153.7	.69
2.	1014.0	1028.2	1.675	2.806	.6819	1028.9	1787.1	1014.3	.60
3.	863.8	744.9	2.033	4.5905	1.087	746.0	2070.0	863.7	.51
4.	691.2	477.8	2.900	6.250	1.456	679.3	2336.7	692.3	.41
5.									

Absolute Potential: 4072 MCFPD; n 1.00 (limited)

COMPANY Gulf Oil Corporation
ADDRESS Box 2167, Hobbs, N.M.

AGENT and TITLE H. L. Smith

WITNESSED _____

COMPANY _____

*COR G Mlx GL 1-e
.89017 .733 3980 .222
.62931 .744 4040 .243
.92018 .752 3975 .239
.58258 .709 3850 .233

REMARKS
Slope in excess of 1.00. Since this is a retest a slope of 1.00 is drawn through highest rate of flow.

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 .

Gulf Oil Corporation
 Hugh No. 6
 H-14-223-377, Lea Co.
 Blinbry Pool
 9-12/20-57
 A. P. = 4072 MCF

359-110
 LOGARITHMIC
 KEUFFEL & ESSER CO.
 2 X 2 CYCLES

