NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122
Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

OCT 9 PM 2:18

Pool Eumont Formation Yates-Seven Rivers County Lea

Initial ____ Annual X Special ____ Date of Test 6-22 to 6-29-56

Company Gulf Oil Corporation Lease Ramsay, N. A. "B" Well No. 2

Unit F Sec. 25 Twp. 21S Rge. 36E Purchaser Gulf Oil Corporation

Casing 5.5 Wt. 14 I.D. 5.012 Set at 3766 Perf. 3530 To 3720

Tubing 2.375 Wt. 4.7 I.D. 1.995 Set at 3700 Perf. ____ To ____

Gas Pay: From 3530 To 3720 L 3700 xG .690 =GL 2553 Bar.Press. 13.2

Producing Thru: Casing ____ Tubing X Type Well Single
Single-Bradenhead-G. G. or G.O. Dual

Date of Completion: 6-25-51 Packer none Reservoir Temp. ____

OBSERVED DATA

Tested Through ~~(Prover)(Choke)~~ (Meter) Type Taps Flange

No.	Flow Data (Prover) (Line) Size	(Choke) (Orifice) Size	Press. psig	Diff. h_w	Temp. °F.	Tubing Data Press. psig	Tubing Data Temp. °F.	Casing Data Press. psig	Casing Data Temp. °F.	Duration of Flow Hr.
SI								1059.0		70
1.	4	1.75	688	1.7	60	968.0		968.9		24
2.	4	1.75	683	5.2	60	882.0		880.9		23
3.	4	1.75	685	8.8	60	787.0		812.9		24
4.	4	1.75	730	11.0	60	736.0		769.0		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.	19.27	34.33	695.2	1.000	.9325	1.055	670
2.	19.27	60.16	696.2	1.000	.9325	1.055	1173
3.	19.27	78.38	698.2	1.000	.9325	1.055	1528
4.	19.27	89.31	733.2	1.000	.9325	1.090	1759
5.							

PRESSURE CALCULATIONS

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

Specific Gravity Separator Gas ____
Specific Gravity Flowing Fluid ____
P_c 1072.2 P_c^2 1149.6

No.	P_w / P_t (psia)	P_t^2	F_cQ	$(F_cQ)^2$	$(F_cQ)^2$ $(1-e^{-s})$	P_w^2	$P_c^2-P_w^2$	Cal. P_w	$\frac{P_w}{P_c}$
1.	981.2					962.8	186.8		91.5
2.	893.2					797.8	351.8		83.3
3.	825.2					681.0	468.6		76.9
4.	782.2					611.8	537.8		72.9
5.									

Absolute Potential: 3540 MCFPD; n 0.93

COMPANY Gulf Oil Corporation
ADDRESS Box 2167, Hobbs, N. M.
AGENT and TITLE H. L. 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} = 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.