ELVIS A. [illegible] GAS ENGINEER

NEW MEXICO OIL CONSERVATION COMMISSION

HOBBS OFFICE OCC

1956 OCT 8 PM 2:19

Form C-122
Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Eumont Formation Queen County Lea

Initial X Annual ____ Special ____ Date of Test 5-31 to 6-8-56

Company Gulf Oil Corporation Lease Shipp, E. "B" Well No. 2

Unit E Sec. 8 Twp 19S Rge. 37E Purchaser Permian Basin Pipeline Co.

Casing 7 Wt. 23.0 I.D. 6.366 Set at 3850 Perf. 3550 To 3700

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

Gas Pay: From 3590 To 3700 L 3700 xG .680 -GL 2516 Bar.Press. 13.2

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

Date of Completion: 8-18-55 Packer ____ Reservoir Temp. ____

OBSERVED DATA

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

No.	Flow Data: ~~(Prover)~~ (Line) Size	Flow Data: ~~(Choke)~~ (Orifice) Size	Flow Data: Press. psig	Flow Data: Diff. h_w	Flow Data: Temp. °F.	Tubing Data: Press. psig	Tubing Data: Temp. °F.	Casing Data: Press. psig	Casing Data: Temp. °F.	Duration of Flow Hr.
SI						1026.5		1026.5		72.0
1.	4	2.00	442.8	13.8	72	901.7		965.4		24
2.	4	2.00	443.9	24.1	71	842.3		896.3		24
3.	4	2.00	447.4	29.4	70	796.2		865.4		24
4.	4	2.00	442.8	38.2	72	675.7		831.0		23
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.	29.92	79.35	465.0	.9887	.9393	1.0189	2,313
2.	29.92	104.96	457.2	.9896	.9393	1.0189	3,061
3.	29.92	116.36	460.6	.9905	.9393	1.0189	3,398
4.	29.92	131.98	456.0	.9887	.9393	1.0189	3,847
5.							

PRESSURE CALCULATIONS

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

Specific Gravity Separator Gas .680
Specific Gravity Flowing Fluid ____
P_c 1026.5 P_c^2 1053.7

No.	P_w P_t (psia)	P_t^2	F_cQ	$(F_cQ)^2$	$\frac{(F_cQ)^2}{(1-e^{-s})}$	P_w^2	$P_c^2-P_w^2$	Cal. P_w	$\frac{P_w}{P_c}$
1.	909.5					827.2	226.5		88.6
2.	870.4					772.9	281.8		85.5
3.	844.2					712.7	342.0		82.2
4.									
5.									

Absolute Potential: 7300 MCFPD; n 0.57

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.

Gulf Oil Corporation
Shipp, E. "B" No. 2
E-8-19S-37E, Lea County
6-8-56