

NEW MEXICO OIL CONSERVATION COMMISSION

ELVIS A.
GAS ENGINEER

HOBBS OFFICE OCC

Form C-122

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Revised 12-1-55

Pool Permian Formation Yates County Lee

Initial X Annual _____ Special _____ Date of Test 7-25 to 8-1-56

Company Gulf Oil Corporation Lease Jania, J. F. "P" Well No. 1

Unit J Sec. 32 Twp. 21S Rge. 36E Purchaser Permian Basin PL Co.

Casing 5.5 Wt. 17 I.D. 4.092 Set at 3777 Perf. 3230 To 3394

Tubing 2.375 Wt. 4.7 I.D. 1.995 Set at 3347 Perf. _____ To _____

Gas Pay: From 3230 To 3394 L 3347 xG .670 -GL 224.2 Bar.Press. 13.2

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

Date of Completion: 6-27-45 Packer None Reservoir Temp. _____
Perf & Frac 2-55

OBSERVED DATA

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

No.	Flow Data					Tubing Data		Casing Data		Duration of Flow Hr.
	(Packer) (Line) Size	(Choke) (Orifice) Size	Press. psig	Diff. h _w	Temp. °F.	Press. psig	Temp. °F.	Press. psig	Temp. °F.	
SI										
1.	1	2.00	449.9	14.0	77	824.5		917.6		72
2.	1	2.00	471.2	22.0	78	803.7		704.2		25
3.	1	2.00	481.5	27.0	83	803.2		704.1		25
4.	1	2.00	451.4	31.0	85	824.2		729.9		25
5.										

FLOW CALCULATIONS

No.	Coefficient (24-Hour)	$\sqrt{h_{wpf}}$	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	82.24	483.1	.9830	.9403	1.002	2387
2.	29.92	103.20	484.4	.9831	.9403	1.003	2996
3.	29.92	113.60	494.7	.9972	.9403	1.000	3427
4.	29.92	120.00	484.6	.9992	.9403	1.005	3533
5.							

PRESSURE CALCULATIONS

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

Corr OK
ME 3.964

Specific Gravity Separator Gas _____
Specific Gravity Flowing Fluid _____
P_c 930.8 P_c 866.4

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.	483.1					233.1	155.1	483.1	88
2.	484.4					234.6	155.2	484.4	88
3.	494.7					244.7	155.3	494.7	88
4.	484.6					234.5	155.3	484.6	88
5.									

Absolute Potential: 6870 MCFPD; n 0.97

COMPANY Gulf Oil Corporation

ADDRESS Box 2167, Hobbs, N.M.

AGENT and TITLE W. 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} = 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 .