

NEW MEXICO OIL CONSERVATION COMMISSION

ELVIS A. UIZ
GAS ENGINEER

HOODS OFFICE 000

Form C-122

Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

1000 OCT 10 PM 3:05

Pool Permian Formation Queen County Lea
Initial X Annual _____ Special _____ Date of Test 8-10-56
Company Gulf Oil Corporation Lease Bull-Ramsey "B" Well No. 2
Unit M Sec. 33 Twp. 20S Rge. 37E Purchaser Permian Basin PL Co.
Casing 7 Wt. 22 I.D. 6.398 Set at 3654 Perf. 3375 To 3560
Tubing 2.375 Wt. 4.7 I.D. 1.995 Set at 3569 Perf. _____ To _____
Gas Pay: From 3375 To 3560 L 3375 xG .675 -GL 2276 Bar.Press. 13.2
Producing Thru: Casing X Tubing _____ Type Well Single
Single-Bradenhead-G. G. or G.O. Dual
Date of Completion: 4-29-56 Packer None Reservoir Temp. _____

OBSERVED DATA

Tested Through (Bull-Ramsey) (Gibson) (Meter) Type Taps Pipe

Flow Data					Tubing Data		Casing Data		Duration of Flow Hr.	
No.	(P. Permian (Line) Size	(Gibson) (Orifice) Size	Press. psig	Diff. h _w	Temp. °F.	Press. psig	Temp. °F.	Press. psig		Temp. °F.
SI								946.6		72
1.	h	2.00	487.3	25.3	64			832.7		24
2.	h	2.00	489.7	25.8	72			785.5		24
3.	h	2.00	468.2	42.9	64			780.9		24
4.	h	2.00	472.8	46.3	64			693.9		24
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	87.5	500.5	1.0058	.9427	1.053	2682
2.	29.92	113.50	502.9	.9896	.9427	1.064	3319
3.	29.92	112.00	481.3	.9962	.9427	1.056	4174
4.	29.92	119.70	486.0	.9962	.9427	1.067	4405
5.							

COR 2.715
B2 2.125

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio _____ cf/bbl.
Gravity of Liquid Hydrocarbons _____ deg.
F_c 0.728 (1-e^{-S}) 0.145

Specific Gravity Separator Gas _____
Specific Gravity Flowing Fluid _____
P_c 959.8 P_c 921.2

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
1.	865.9	715.5	1.908	3.648	.584	714.0	205.2	864.2	86
2.	798.7	637.9	2.416	5.837	.864	638.7	262.4	799.2	83
3.	734.1	538.9	3.039	9.236	1.3390	540.3	381.0	735.8	77
4.	707.1	500.0	3.207	10.280	1.4920	501.5	429.7	708.2	74
5.									

Absolute Potential: 8100 MCFPD; n 0.75
COMPANY Gulf Oil Corporation
ADDRESS Box 2167, Hobbs, N.M.
AGENT and TITLE H. T. 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 .

Gulf Oil Corporation
 Bell-Ramsay "B" No. 2
 M-33-20S-37E, Lea Co.
 Eumont Pool
 8-10-56

LOGARITHMIC 359-110
 ALL DATA FROM 0.1 TO 10 CYCLES

