NEW MEXICO OIL CONSERVATION COMMISSION

HOBBS OFFICE OCC

1957 FEB 11 AM 9:58

Form C-122
Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Jalmat Formation Yates County Lea

Initial ____ Annual x Special ____ Date of Test 12-7-56

Company Stanolind Oil and Gas Company Lease C. Myers "B" Well No. 11

Unit B Sec. 6 Twp. 24-S Rge. 37-E Purchaser Permian Basin Pipeline Company

Casing 7" Wt. 23.0# I.D. 6.366" Set at 3460' Perf. 2994' To 3230'

Tubing 2-1/2" Wt. 6.5# I.D. 2.441" Set at ____ Perf. ____ To ____

Gas Pay: From 2994' To 3230' L 2994' xG 0.650 -GL 1946' Bar.Press. 13.2

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

Date of Completion: 4-11-52 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								895.4		72-1/4 Hrs. SI
1.	4	2.25	503.5	6.0	68			766.4		24
2.	4	2.25	504.9	14.1	66			742.5		24
3.	4	2.25	507.0	25.9	67			694.7		24-1/4
4.	4	2.25	507.0	44.7	67			622.4		23-3/4
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.	40.53	55.68		0.9924	0.9608	1.047	2253
2.	40.53	85.47		0.9943	0.9608	1.047	3465
3.	40.53	116.1		0.9933	0.9608	1.047	4702
4.	40.53	152.5		0.9933	0.9608	1.047	6176
5.							

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio ____ cf/bbl. Specific Gravity Separator Gas ____
Gravity of Liquid Hydrocarbons ____ deg. Specific Gravity Flowing Fluid ____
F_c 0.865 $(1-e^{-s})$ 0.125 P_c 895.4 P_c^2 825.6

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.	779.6	607.8	1.949	3.799	0.4749	608.3	217.3	779.9	.86
2.	755.7	571.1	2.997	8.982	1.123	572.2	253.4	756.4	.83
3.	707.9	501.1	4.067	16.54	2.068	503.2	322.4	709.4	.78
4.	635.6	404.0	5.342	28.54	3.568	407.6	418.0	638.4	.70
5.									

Absolute Potential: 12198 MCFPD; n 1.0 (limited)
COMPANY Stanolind Oil and Gas Company
ADDRESS Box 68 - Hobbs, New Mexico
AGENT and TITLE ____
WITNESSED ____
COMPANY ____

REMARKS

The resulting slope drawn through the data points is in excess of 1.0. Due to this being a retest, a slope of 1.0 was drawn through the high rate of flow data point to be submitted to the Commission.

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.