NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122
Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Justis Formation Glorietta County Lea

Initial ____ Annual ____ Special X Date of Test 6-3 to 6-7-57

Company Tidewater Oil Company Lease A. B. Coates "C" Well No. 1 - Tbg.

Unit F Sec. 24 Twp. 25S Rge. 37E Purchaser EPNG

Casing 7 Wt. 20 I.D. ____ Set at 2950 Perf. ____ To ____

Tubing 2 Wt. 4.7 I.D. ____ Set at 4735 Perf. ____ To ____

Gas Pay: From 4675 To 4715 L 4735 xG 0.675 -GL 3196 Bar.Press. 13.2

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

Date of Completion: 2-3-51 Packer 4600 Reservoir Temp. ____

OBSERVED DATA

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

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						1617				72
1.	4	1.500	525	5.76	50	1526				24
2.	4	1.500	544	18.06	46	1418				24
3.	4	1.500	580	60.84	53	1129				24
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.	13.99	55.67	538	1.0098	.9427	1.066	791
2.	13.99	100.30	557	1.0137	.9427	1.068	1432
3.	13.99	189.95	593	1.0068	.9427	1.075	2731
4.							
5.							

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio ____ cf/bbl.
Gravity of Liquid Hydrocarbons ____ deg.
F_c 9.936 $(1-e^{-s})$ 0.197

Specific Gravity Separator Gas ____
Specific Gravity Flowing Fluid ____
P_c 1630.2 P_c^2 2657.6

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.	1539.2	2369.1	7.86	61.78	12.17	2381.3	276.3	489	0.300
2.	1431.2	2048.3	14.23	202.49	39.89	2088.2	569.4	456	0.280
3.	1142.2	1304.6	26.94	725.76	142.97	1447.5	1210.1	381	0.234
4.									
5.									

Absolute Potential: 5250 MCFPD; n 0.810
COMPANY Tidewater Oil Company
ADDRESS Box 547 Hobbs, New Mexico
AGENT and TITLE H. P. Shackelford, Area Supt.
WITNESSED Earl Smith
COMPANY El Paso Natural Gas Co.

REMARKS

Well was shut in during test. Good point alignment on thr
Good pull down & spread.

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.