

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122

Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Bluitt San Andres Gas Formation San Andres County Roosevelt

Initial X Annual ---- Special --- Date of Test 5/27/64

Company BTA Oil Producers Lease PERKINS Well No. 1

Unit F Sec. 10 Twp. 8-S Rge. 37-E Purchaser _____

Casing 4-1/2" Wt. 11.6# I.D. 4.00 Set at 4620' Perf. 4481' To 4510'

Tubing 2-3/8" Wt. 4.7 I.D. 2.0 Set at 4440' Perf. 4435' To 4439'

Gas Pay: From 4425' To 4510' L --- xG --- -GL --- Bar.Press. ----

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

Date of Completion: 5/27/64 Packer L-30 Reservoir Temp. 101°

OBSERVED DATA

Tested Through (~~Prover~~) (Choke) (~~Manometer~~) Type Taps -----

No.	Flow Data					Tubing Data		Casing Data		Duration of Flow Hr.
	(Prover) (Line) Size	(Choke) (Orifice) Size	Press. psig	Diff. h _w	Temp. °F.	Press. psig	Temp. °F.	Press. psig	Temp. °F.	
SI						1507		Phr		
1.		9/64				1273	70	"		4
2.		5/32				1251	65	"		4
3.		3/16				1195	60	"		4
4.		15/64				1094	60	"		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.	0.4140	---	1286.2	0.9905	0.8914	1.212	510
2.	0.5133	---	1264.2	0.9952	"	1.215	699
3.	0.7425	---	1208.2	1.0000	"	1.218	974
4.	1.1678	---	1107.2	1.0000	"	1.189	1370
5.							

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio Infinite cf/bbl.
Gravity of Liquid Hydrocarbons Dry deg.
P_c (1-e^{-S})

Specific Gravity Separator Gas 0.753
Specific Gravity Flowing Fluid _____
P_c 1520.2 P_c 2311

No.	P _w -BHP PSIA 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.	1455.2					2117	194		
2.	1425.2					2031	280		
3.	1360.2	Used Bottom Hole				1849	462		
4.	1245.2	Pressure Bomb				1552	758		
5.									

Absolute Potential: 2.650 MCFPD; n 0.51624

COMPANY BTA Oil Producers

ADDRESS 104 South Pecos, Midland, Texas

AGENT and TITLE Walter D. Jenkins, Production Superintendent

WITNESSED Walter D. Jenkins

COMPANY BTA Oil Producers

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.
- P_w = Differential meter pressure, inches water.
- F_g = Gravity correction factor.
- F_t = Flowing temperature correction factor.
- F_{pv} = Supercompressibility factor.
- r = 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 .