

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122

Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Jalmat Formation Yates County Lea

Initial _____ Annual _____ Special X Date of Test 8-19/8-23-63

Company Reserve Oil and Gas Company * Lease Dabbs Well No. 2

Unit E Sec. 34 Twp. 25 Rge. 37 Purchaser El Paso Natural Gas Company

Casing 7 Wt. 24.0 I.D. _____ Set at 2920 Perf. _____ To _____

Tubing 2 Wt. 4.7 I.D. _____ Set at 2868 Perf. _____ To _____

Gas Pay: From 2742 To 2828 L 2868 xG .673 -GL 1930 Bar.Press. 13.2

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

Date of Completion: August 13, 1959 Packer None Reservoir Temp. _____

OBSERVED DATA

Tested Through (Proven) (Choke) (Meter) Type Taps Flange

No.	Flow Data					Tubing Data		Casing Data		Duration of Flow Hr.
	(Proven) (Line) Size	(Choke) (Orifice) Size	Press. psig	Diff. h _w	Temp. °F.	Press. psig	Temp. °F.	Press. psig	Temp. °F.	
SI						316		393		72
1.	4 x .750		236	4.84	86	237		319 *		24
2.	4 x .750		192	7.84	79	193		276		24
3.	4 x .750		164	10.24	93	165		249		24
4.	4 x .750		147	13.69	82	148		---		24
5.										

* These pressures were not considered truly representative; therefore, static pressures were calculated.

FLOW CALCULATIONS							
No.	Coefficient (24-Hour)	$\sqrt{h_{wDf}}$	Pressure psia	Flow Temp. Factor F _t	Gravity Factor F _g	Compress. Factor F _{pv}	Rate of Flow Q-MCFPD @ 15.025 psia
1.	3.435	34.73		.9759	.9442	1.022	112.3
2.	3.435	40.11		.9822	.9442	1.019	130.1
3.	3.435	42.60		.9697	.9442	1.015	136.0
4.	3.435	46.83		.9795	.9442	1.013	150.7
5.							

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio Dry cf/bbl.

Gravity of Liquid Hydrocarbons None deg.

γ_c 9.936 (1-e^{-s}) 0.124

Specific Gravity Separator Gas .673

Specific Gravity Flowing Fluid None

P_c 406.2 P_c 165.0

No.	P_{max} 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.	250.2	62.6	-----	Negligible	-----	62.6	102.4		
2.	206.2	42.5				42.5	122.5		
3.	178.2	31.7				31.7	133.3		
4.	161.2	26.0				26.0	139.0		
5.									

Absolute Potential: 164 MCFPD; n .800

COMPANY Reserve Oil and Gas Company

ADDRESS 505 Midland Savings Bldg., Midland, Texas

AGENT and TITLE Paul Gregory, Prod. Supt. Paul Gregory 10-18-63

WITNESSED R. A. Mikel

COMPANY _____

REMARKS

* Well previously operated by Producing Properties, Inc.

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 .

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