

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122

Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Jalmat Formation Seven Rivers-Queen County LeaInitial _____ Annual _____ Special x Date of Test 3-7-57Company Cities Service Oil Lease Dabbs Well No. 1Unit D Sec. 23 Twp. 25 Rge. 37 Purchaser El Paso Natural GasCasing 7" Wt. 24 I.D. _____ Set at 2449 Perf. _____ To _____

Tubing _____ Wt. _____ I.D. _____ Set at _____ Perf. _____ To _____

Gas Pay: From 3090 To 3361 L 2449 xG .655 -GL 1628 Bar.Press. 13.2Producing Thru: Casing x Tubing _____ Type Well single

Single-Bradenhead-G. G. or G.O. Dual

Date of Completion: 11-21-36 Packer _____ Reservoir Temp. _____

OBSERVED DATA

Tested Through (Prover) (Choke) (Meter) _____ 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								300		24
1.	2"	.125	263		54			263		3
2.	2"	.187	241		64			241		3
3.	2"	.218	230		63			230		3
4.	2"	.250	217		53			217		3
5.	2"	.250	199		63			199		24

FLOW CALCULATIONS

No.	Coefficient Prover (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.	.3418		276.2	1.0058	.9498	1.030	93
2.	.7851		254.2	.9962	.9498	1.026	193
3.	1.0834		243.2	.9921	.9498	1.025	257
4.	1.4030		230.2	1.0048	.9498	1.024	316
5.	1.4030		212.2	.9971	.9498	1.020	288

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio _____ cf/bbl.
Gravity of Liquid Hydrocarbons _____ deg.
F_c .4915 (1-e^{-s}) .106Specific Gravity Separator Gas _____
Specific Gravity Flowing Fluid _____
P_c 313.2 P_c² 98.0

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 / P _c
1.	276.2	76.2	.04	.001	.0001	76.2	21.8		
2.	254.2	64.6	.09	.008	.0008	64.6	33.4		
3.	243.2	59.1	.1	.01	.001	59.1	38.9		
4.	230.2	52.9	.2	.04	.002	52.9	45.1		
5.	212.2	45.0	.1	.01	.001	45.0	53.0		

Absolute Potential: 540 MCFPD; n 1.000COMPANY Cities Service Oil Co.ADDRESS Box 97, Hobbs, New MexicoAGENT and TITLE E. H. Farrey, Jr., Petroleum EngineerWITNESSED John R. PrewCOMPANY El Paso Natural Gas Co.

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 .