

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122

Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool So. Blanco P.C. Formation Pictured Cliffs County San Juan
Initial X Annual _____ Special _____ Date of Test 4-7-59
Company Western Natural Gas Lease Oxnard Well No. 4
Unit E Sec. 14 Twp. 27N Rge. 8W Purchaser El Paso Natural Gas Company
Casing 5 1/2" Wt. 15.5# I.D. 4.950 Set at 2313 Perf. 2215 To 2272'
Tubing 1.315 Wt. 1.7# I.D. 1.049 Set at 2257 Perf. - - - To - - -
Gas Pay: From 2215 To 2272 L 2215 xG Est. .630 GL 1407 Bar.Press. 12.0
Producing Thru: Casing X Tubing _____ Type Well Single
Single-Bradenhead-G. G. or G.O. Dual
Date of Completion: 3-23-59 Packer None Reservoir Temp. 93°

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						833		833		15 days
1.		.750	418		52	429		418		3 hours
2.										
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.	14.1605		430	1.0078	.9759	1.042	6,240
2.							
3.							
4.							
5.							

PRESSURE CALCULATIONS

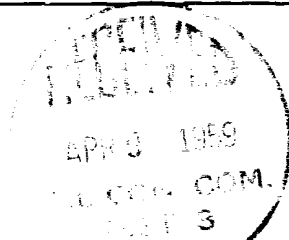
Gas Liquid Hydrocarbon Ratio _____ cf/bbl.
Gravity of Liquid Hydrocarbons _____ deg.
P_c _____ (1-e^{-s})

Specific Gravity Separator Gas _____
Specific Gravity Flowing Fluid _____
P_c 845 P_c 714.025

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.						194,481	519,544		
2.									
3.									
4.									
5.									

Absolute Potential: 8,187 MCFPD; n 0.85
COMPANY Western Natural Gas Company
ADDRESS 211 1/2 West Main Farmington, New Mexico
AGENT and TITLE C. M. Bayes Petroleum Engineer
WITNESSED _____
COMPANY _____

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} - 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 .

[illegible]