

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122

Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool SOUTH BLANCO Formation PICTURED CLIFFS County RIO ARriba
Initial X Annual _____ Special _____ Date of Test 1-21-60
Company JOHNSTON & SHEAR Lease JICARILLA Well No. 2-1
Unit C Sec. 1 Twp. 24N Rge. 4W Purchaser EL PASO NATURAL GAS CO.
Casing 2-7/8 Wt. 6.5 I.D. 2.441 Set at 3306 Perf. 3230 To 3266
Tubing -- Wt. -- I.D. -- Set at -- Perf. -- To --
Gas Pay: From 3230 To 3266 L 3230 xGest .680 -GL 2196 Bar.Press. _____
Producing Thru: Casing X Tubing _____ Type Well Single
Single-Bradenhead-G. G. or G.O. Dual
Date of Completion: 1-10-60 Packer NO Reservoir Temp. _____

OBSERVED DATA

Tested Through (PISTON) (Choke) (PISTON) 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								937		81
1.										
2.										
3.	2	3/4	242		60					3 hr
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.							
2.							
3.	12.965		254	1.000	.9393	1.028	3,033
4.							
5.							

PRESSURE CALCULATIONS

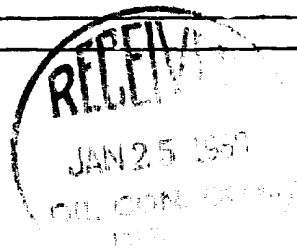
Gas Liquid Hydrocarbon Ratio _____ cf/bbl.
Gravity of Liquid Hydrocarbons _____ deg.
F_c 5.551 (1-e^{-s}) 0.148

Specific Gravity Separator Gas _____
Specific Gravity Flowing Fluid _____
P_c 949 P_c² 900.601

No.	$\frac{P_w}{P_t}$ (psia)	P_t^2	F _c Q	(F _c Q) ²	$\frac{(F_c Q)^2}{(1-e^{-s})}$	P _w ²	P _c ² -P _w ²	Cal. P _w	$\frac{P_w}{P_c}$
1.									
2.									
3.	254	64,516	16,836	283,451	41,951	106,457	794,134		1.1341
4.									
5.									

Absolute Potential: 3,375 MCFPD; n .85/1.1128COMPANY JOHNSTON & SHEARADDRESS 3010 MONTE VISTA BLVD., NE, ALBUQUERQUE, NEW MEXICOAGENT and TITLE C. E. WISNER, WELL TESTER, NORTHWEST PRODUCTION CORPORATIONWITNESSED J. M. KIRMANCOMPANY NORTHWEST PRODUCTION CORPORATION

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 .

OIL & GAS COMMISSION		
AZTEC DISTRICT OFFICE		
No. Copies Received	3	
DISTRIBUTION		
	NO. FURNISHED	
Operator	1	
Santa Fe	1	
Proration Office		
State Land Office		
U. S. G. S.		
Transporter		
File	1	✓

DRILLING DEPARTMENT

COMPANY JOHNSTON & SHEAR

LEASE JICARILLA WELL NO. 2-1

DATE OF TEST JANUARY 21, 1960

SHUT IN PRESSURE (PSIG): TUBING -- CASING 937 S.I. PERIOD 9 DAYS

SIZE BLOW NIPPLE 3/4" TC CK

FLOW THROUGH CASING WORKING PRESSURES FROM _____

[illegible]

START AT 11:02 AM END TEST AT 2:02 PM

REMARKS: Blew large amount frac sand first 30 minutes and small amount remainder
of test. Vapor of moisture throughout test.

TESTED BY : C. E. WERNER

WITNESS: J. M. NEWMAN