

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122

Revised 12-1-55

NM OCC - 3

Truby - 1

File - 1

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Wildcat Formation Pictured Cliffs County Rio Arriba
Initial X Annual _____ Special _____ Date of Test 8-14-56
Company Northwest Production Corp. Lease C Well No. 1-7
Unit _____ Sec. 7 Twp. 25N Rge. 4W Purchaser _____
Casing 4 1/2" Wt. 9.5# I.D. _____ Set at 3513 Perf. 3390 To 3414
Tubing 1 1/2" Wt. 2.3# I.D. _____ Set at _____ Perf. _____ To _____
Gas Pay: From 3390 To 3414 L. _____ xG .650 -GL _____ Bar.Press. 12 PSIA
Producing Thru: Casing _____ Tubing X Type Well Single
Single-Bradenhead-G. G. or G.O. Dual
Date of Completion: 8-6-56 Packer _____ Reservoir Temp. _____

OBSERVED DATA

Tested Through ~~Prover~~ (Choke) ~~Prover~~ Type Taps _____

No.	Flow Data					Tubing Data		Casing Data		Duration of Flow Hr.
	(Prover) (Line) Size	(Choke) ROBERTSON Size	Press. psig	Diff. h _w	Temp. °F.	Press. psig	Temp. °F.	Press. psig	Temp. °F.	
SI						955		955		
1.		3/4	143		49°	143		700		3 hrs.
2.										
3.										
4.										
5.										

FLOW CALCULATIONS

No.	Coefficient (24-Hour)	$\sqrt{h_{wpf}}$	Pressure psia	Flow Temp. Factor F _t	Gravity Factor F _g	Compress. Factor F _{pv}	Rate of Flow Q-MCFPD @ 15.025 psia
1.	12.3650		155	1.0108	.9608	1.015	1889
2.							
3.							
4.							
5.							

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio _____ cf/bbl.
Gravity of Liquid Hydrocarbons _____ deg.
F_c _____ (1-e^{-s})
Specific Gravity Separator Gas _____
Specific Gravity Flowing Fluid _____
P_c 967 P_c 935.1

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.						306.9	428.7		2.18
2.									
3.									
4.									
5.									

Absolute Potential: 3.664 MCFPD; n⁸⁵ = 1.9394
COMPANY ~~Northwest Production Corp.~~ NORTHWEST PRODUCTION CORPORATION
ADDRESS ~~4121 N. 5th St. S.W., Albuquerque, N.M.~~ 4121 N. 5th St. S.W., Albuquerque, N.M.
AGENT and TITLE Clarence R. Wagner; Well Test 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 .

PACIFIC NORTHWEST PIPELINE CORPORATION

DRILLING DEPARTMENT

COMPANY Northwest Production Corp.

LEASE C WELL NO. 1-7

DATE OF TEST 8-14-56

SHUT IN PRESSURE (PSIG): TUBING 955 CASING 953 S.I. PERIOD DAYS

SIZE BLOW NIPPLE 3/4" Choke (7-0)

FLOW THROUGH tubing WORKING PRESSURES FROM casing

TIME:		PRESSURE	Q (MCFD) 15.025 PSIA & 60° F	WELLHEAD WORKING PRESSURE (PSIG)	TEMP
HOURS	MINUTES				
	34.5	208		796	47°
	41.5	183		783	48
	50	198		773	48
1	00	183		762	48
	12	177		752	48
	26.5	162		738	48
	44	155		727	48
2	5	138		727	49
	30	147	Gravity est. - .690	717	49
3	0	143		700	49
			1,889 = Q		
			3,664 = 107		

START TEST AT 10:25 A.M. END TEST AT 1:25 P.M.

REMARKS: Making slug of H₂O through out test.

TESTED BY C. R. Wagner

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