

NM OCC-3
Eppin-1
Truby-1
File-1

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122

Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool So Blanco Formation Pictured Cliffs County San Juan
Initial XX Annual _____ Special _____ Date of Test 7-24-57
Company Northwest Production Corp. Lease San Juan 27-8 Well No. 1-14
Unit I Sec. 14 Twp. 27N Rge. 8W Purchaser Not connected
Casing 5" Wt. 11.5 I.D. _____ Set at 3053 Perf. 2913 To 2974
Tubing 1 1/2" Wt. 2.3 I.D. _____ Set at 2934.68 Perf. _____ To _____
Gas Pay: From 2913 To 2974 L _____ xG .650 -GL _____ Bar.Press. 12
Producing Thru: Casing _____ Tubing X Type Well Single
Date of Completion: 7-16-57 Packer No Single-Bradenhead-G. G. or G.O. Dual
Reservoir Temp. _____

OBSERVED DATA

Tested Through (Prover) (Choke) (1 1/2") SI 7 days 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						866		866		SI
1.		3/4	153		50	153	50	710		3 hrs
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.	12.3650		165	1.0098	.9608	1.016	2011
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 878 P_c 770.9

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.						521.3	249.6		3.09
2.									
3.									
4.									
5.									

Absolute Potential: 5,246 MCFPD; n .85/2.6089

COMPANY Pacific Northwest Pipeline Corp.
ADDRESS 405 1/2 W. Broadway, Farmington, N.M.
AGENT and TITLE C. 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 .

DRILLING DEPARTMENT

COMPANY Northwest Production Corp.

LEASE San Juan 27-8 WELL NO. 1-14

DATE OF TEST 7-24-57

SHUT IN PRESSURE (PSIG): TUBING 866 CASING 866 S. I. PERIOD 7 DAYS

SIZE BLOW NIPPLE 3/4" (T-C) Choke

FLOW THROUGH Tubing WORKING PRESSURES FROM Casing

TIME		CHOKE PRESSURE	Q (MCFD) 15.025 PSIA & 60°F	WELLHEAD WORKING PRESSURE (PSIG)	TEMP
HOURS	MINUTES				
	34.5	160		747	48
	41.5	160		743	48
	50	163		739	48
1	0	159		735	49
	12	158		731	49
	26.5	157		728	49
	44	157		725	49
2	5	156		723	49
	30	154		714	50
3	0	153		710	50

START AT: 10:25 AM END TEST AT 1:25 PM

REMARKS: Slightly wet with H₂O throughout test

TESTED BY: C. R. Wagner

WITNESS: _____