

PACIFIC NORTHWEST PIPELINE CORPORATION

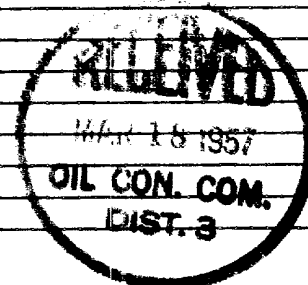
DRILLING DEPARTMENT

COMPANY Northwest Production Corp.LEASE "E" WELL NO. 2-33DATE OF TEST 3-13-57SHUT IN PRESSURE (PSIG): TUBING 1197 CASING 979 S.I. PERIOD 7 DAYSSIZE BLOW NIPPLE 3/4" B. M.FLOW THROUGH Casing WORKING PRESSURES FROM Tubing

TIME		PRESSURE	Q (MCFD) 15.025 PSIA & 60°F	WELLHEAD WORKING PRESSURE (PSIG)	TEMP
HOURS	MINUTES				
	15	362		1197	50
	30	237		1198	51
	45	204		1200	52
1		178		1200	52
1	30	213		1200	53
2		186		1201	53
2	30	180		1201	57
3		170		1201	58

START TEST AT 10:00 amEND TEST AT 1:00 pm

REMARKS:

TESTED BY C. R. Wagner

NEW MEXICO OIL CONSERVATION COMMISSION

NMOCC-3

Geo Peppin-1

L. G. Truby - 1

File-1

Form C-122

Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Tapacito Formation Pictured Cliffs County Rio Arriba
Initial XX Annual _____ Special _____ Date of Test 3-13-57
Company Northwest Production Corp. Lease "B" Well No. 2-33
Unit "B" Sec. 33 Twp. 26N Rge. 3W Purchaser Not connected
Casing 7 Wt. 20 I.D. _____ Set at 4301 Perf. 4082 To 4108
Tubing 2-3/8 Wt. 4.74 I.D. _____ Set at 6248 Perf. _____ To _____
Gas Pay: From 4082 To 4108 L 4082 xG 65 -GL 2633 Bar.Press. 12
Producing Thru: Casing XX Tubing _____ Type Well Dual - G-G
Date of Completion: 2-23-57 Packer Yes - 5702' Single-Bradenhead-G. G. or G.O. Dual
Reservoir Temp. _____

OBSERVED DATA

Tested Through (PEPPER) (Choke) (PEPPER)

Type Taps _____

Flow Data						Tubing Data		Casing Data		Duration of Flow Hr.
No.	(Prover) (Line) Size	(Choke) (PEPPER) Size	Press. psig	Diff. h _w	Temp. °F.	Press. psig	Temp. °F.	Press. psig	Temp. °F.	
SI						1197		979		SI
1.										
2.										
3.		3/4	170		58	1201		170	58	3 hour
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.	14.1605		182	1.0019	.9808	1.018	2,326
4.							
5.							

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio _____ cf/bbl.
Gravity of Liquid Hydrocarbons _____ deg.
F_c .528 (1-e^{-s}) .175

Specific Gravity Separator Gas _____
Specific Gravity Flowing Fluid _____
P_c 991 P_c² 982081

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	$\frac{P_w}{F_c}$
1.									
2.									
3.	182	33124	1334	1780	312	33536	948.545		1.04
4.									
5.									

Absolute Potential: 2,612 MCFPD; n .85/1.0339

COMPANY Pacific Northwest Pipeline Corporation
ADDRESS 4054 West Broadway, Farmington, New Mexico
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 .

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