NMOCC-3
Geo Poppin-1
L.G.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 Blanco Formation Mesaverde County Rio Arriba

Initial XX Annual ____ Special ____ Date of Test 3-6-57

Company Northwest Production Corp. Lease "W" Well No. 4-6

Unit H Sec. 6 17.C Twp. 26N Rge. 4W Purchaser Not connected

Casing 5½ Wt. 15.5 I.D. ____ Set at 8375 Perf. 5572 To 6180

Tubing 2-3/8 Wt. 4.7 I.D. ____ Set at 8303 Perf. ____ To ____

Gas Pay: From 5572 To 6180 L 5572 xG .650 -GL 3622 Bar.Press. ____

Producing Thru: Casing X Tubing ____ Type Well Dual - G-G
Single-Bradenhead-G. G. or G.O. Dual

Date of Completion: 2-7-57 Packer Yes - 7306' Reservoir Temp. ____

OBSERVED DATA

Tested Through ~~(Prover)~~ (Choke) ~~(Meter)~~ Type Taps ____

No.	Flow Data (Prover) (Line) Size	Flow Data (Choke) (Orifice) Size	Flow Data Press. psig	Flow Data Diff. h_w	Flow Data Temp. °F.	Tubing Data Press. psig	Tubing Data Temp. °F.	Casing Data Press. psig	Casing Data Temp. °F.	Duration of Flow Hr.
SI										
1.						2200		1081		SI
2.										
3.		3/4				2230		149	60	3 hours
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.	14.1603		161	1.000	.9608	1.016	2226
3.							
4.							
5.							

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio ____ cf/bbl. Specific Gravity Separator Gas ____
Gravity of Liquid Hydrocarbons ____ deg. Specific Gravity Flowing Fluid ____
F_c ____ $(1-e^{-s})$ ____ P_c 1098 P_c^2 1195

No.	P_w P_t (psia)	P_t^2	F_cQ	$(F_cQ)^2$	$(F_cQ)^2$ $(1-e^{-s})$	P_w^2	$P_c^2-P_w^2$	Cal. P_w	$\frac{P_w}{P_c}$
1.									
2.									
3.	161		2.17	4.7	1.09	27.0	1168		1.0231
4.									
5.									

Absolute Potential: 2265 MCFPD; n .75 1.0175
COMPANY Pacific Northwest Pipeline Corp.
ADDRESS 405½ West Broadway, Farmington, New Mexico
AGENT and TITLE C. E. Wagner - Well Test Engineer
WITNESSED A. L. Kendrich
COMPANY New Mexico Oil Conservation Commission

REMARKS

RECEIVED
MAR 12 1957
OIL CON. COM.
DIST. 3

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 "M" WELL NO. 4-6

DATE OF TEST 3-6-57

SHUT IN PRESSURE (PSIG): TUBING DK 2200 CASING MV 1081 S.I. PERIOD 11 DAYS

SIZE BLOW NIPPLE 3/4" Choke (Bureau of Mines)

FLOW THROUGH MV - csg WORKING PRESSURES FROM DK - tbg

TIME HOURS	TIME MINUTES	PRESSURE	Q (MCFD) 15.025 PSIA & 60°F	WELLHEAD WORKING PRESSURE (PSIG)	TEMP
	15	471		2198	
	30	328		2210	52
	45	264		2216	54
1	0	221		2219	56
	30	186		2222	58
2	0	168		2223	59
	30	158		2222	59
3	0	149		2220	60

START TEST AT 12:55 pm END TEST AT 3:55 pm

REMARKS:

TESTED BY C. R. Wagner