NM OCC-3
Truby-1
Peppin-1
Fowler-1
File-1

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122
Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool **Wildcat** Formation **Pictured Cliffs** County **Rio Arriba**

Initial **X** Annual _____ Special _____ Date of Test **8-26-57**

Company **Northwest Production Corp.** Lease **"C"** Well No. **10-31**

Unit **B** Sec. **31** Twp. **26N** Rge. **4W** Purchaser **Not connected**

Casing **5** Wt. **11.5** I.D. _____ Set at **3330** Perf. **3206** To **3252**

Tubing **1½** Wt. **2.3** I.D. _____ Set at **3227** Perf. _____ To _____

Gas Pay: From **3206** To **3252** L _____ xG **.650** -GL _____ Bar.Press. _____

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

Date of Completion: _____ Packer _____ Reservoir Temp. _____

OBSERVED DATA

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

No.	Flow Data: (Prover) (Line) Size	Flow Data: (Choke) 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						1056		1056		SI
1.		3/4				186	50	852		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		198	1.0098	0.9608	1.020	2,423
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 **1068** P_c^2 **1140.6**

No.	P_w P_t (psia)	P_t^2	F_cQ	$(F_cQ)^2$	$\frac{(F_cQ)^2}{(1-e^{-s})}$	P_w^2	$P_c^2-P_w^2$	Cal. P_w	$\frac{P_w}{P_c}$
1.						746.5	394.1		2.894
2.									
3.									
4.									
5.									

Absolute Potential: **5,978** MCFPD; n **.85/2.467**
COMPANY **Pacific Northwest Pipeline Corp.**
ADDRESS **405½ W. 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.

DRILLING DEPARTMENT

COMPANY Northwest Production Corp.

LEASE "C" WELL NO. 10-31

DATE OF TEST 8-26-57

SHUT IN PRESSURE (PSIG): TUBING 1056 CASING 1056 S. I. PERIOD 7 DAYS

SIZE BLOW NIPPLE 3/4" Choke T - C

FLOW THROUGH Tubing WORKING PRESSURES FROM Casing

TIME HOURS	TIME MINUTES	CHOKE PRESSURE	Q (MCFD) 15.025 PSIA & 60°F	WELLHEAD WORKING PRESSURE (PSIG)	TEMP
	34.5	237	(B.M. Freezing) Change Choke (T-C)	965	49
	41.5	231		953	49
	50	231		942	47
1	0	225		932	47
	12	220		922	48
	26.5	215		912	48
	44	213		896	49
2	5	203		881	50
	30	190		864	50
3	0	186		852	50

START AT: 11:00 AM END TEST AT 2:00 PM

REMARKS: Very light fog of H_2O

TESTED BY: C. R. Wagner

WITNESS: _____