NM OCC-3
Truby-1
Peppin-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 **Graneros-Dakota** County **Rio Arriba**

Initial **XX** Annual _____ Special _____ Date of Test **5-27-57**

Company **Northwest Production Corp.** Lease **"N"** Well No. **8-8**

Unit **M** Sec. **8** Twp. **26N** Rge. **4W** Purchaser **Not connected**

Casing **5½** Wt. **17 & 15.5** I.D. _____ Set at **7910** Perf. **7696** To **7880**

Tubing **2-3/8** Wt. **4.7** I.D. _____ Set at **7676.3** Perf. _____ To _____

Gas Pay: From **7696** To **7880** L **7676.3** xG **.650** -GL **4990** Bar.Press. **12**

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

Date of Completion: **May 9, 1957** Packer **Yes - 7178.1'** Reservoir Temp. _____

OBSERVED DATA

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

	Flow Data					Tubing Data		Casing Data		
No.	(Prover) (Line) Size	(Choke) ~~(Orifice)~~ Size	Press. psig	Diff. h_w	Temp. °F.	Press. psig	Temp. °F.	Press. psig	Temp. °F.	Duration of Flow Hr.
SI						2243				SI
1.		3/4	65		60	65	60			3 hr
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.	14.1605		77	1.000	.9608	1.000	1048
2.							
3.							
4.							
5.							

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio _____ cf/bbl. Specific Gravity Separator Gas _____
Gravity of Liquid Hydrocarbons _____ deg. Specific Gravity Flowing Fluid _____
P_c **9.402** $(1-e^{-s})$ **.304** P_c **2255** P_c^2 **5085**

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.									
2.									
3.	77	5.9	9.85	97.0	29.5	35.4	5019.6		1.00701
4.									
5.									

Absolute Potential: **1054** MCFPD; n **.75** **1.00596**
COMPANY **Pacific Northwest Pipeline Corp.**
ADDRESS **405½ W. Broadway, Farmington, New Mexico**
AGENT and TITLE **C. B. Wagner, Well Test Engineer**
WITNESSED **Fred Cook**
COMPANY **N.M. Oil Conservation Commission**

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 "M" WELL NO. 8-8

DATE OF TEST 5-27-57

SHUT IN PRESSURE (PSIG): Dakota TUBING 2243 CASING 1066 S. I. PERIOD 7 DAYS

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

FLOW THROUGH Tubing - Dakota WORKING PRESSURES FROM Casing - Mesaverde

TIME HOURS	TIME MINUTES	PRESSURE	Q (MCFD) 15.025 PSIA & 60°F	WELLHEAD WORKING PRESSURE (PSIG)	TEMP
	15	227		1070	58
	30	136		1070	59
	45	113		1070	60
1	0	96		1069	60
	30	82		1069	60
2	0	74		1069	60
	30	69		1069	60
3	0	65		1069	60

START AT: 12:00 Noon END TEST AT 3:00 pm

REMARKS: Light fog of Dist. and H_2O through out test

TESTED BY: C. R. Wagner

WITNESS: Fred Cook - NM OCC

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