

NM OCC-3  
Peppin-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 Wildcat Formation Pictured Cliffs County Rio Arriba  
Initial XX Annual \_\_\_\_\_ Special \_\_\_\_\_ Date of Test 6-28-57  
Company Northwest Production Corp. Lease "E" Well No. 14-10  
Unit A Sec. 10 Twp. 26N Rge. 3W Purchaser Not connected  
Casing 7-5/8 Wt. 26.4 I.D. 6.969 Set at 3928 Perf. 3725 To 3779  
1-1/4 1.9 3725  
Tubing 2-3/8 Wt. 4.7 I.D. \_\_\_\_\_ Set at 5908 Perf. 3725 To \_\_\_\_\_  
Gas Pay: From 3725 To 3779 L \_\_\_\_\_ xG \_\_\_\_\_ -GL \_\_\_\_\_ Bar.Press. \_\_\_\_\_  
Producing Thru: Casing X Tubing \_\_\_\_\_ Type Well Dual G-G  
Date of Completion: 6-15-57 Packer 5366 Single-Bradenhead-G. G. or G.O. Dual  
Reservoir Temp. \_\_\_\_\_

OBSERVED DATA

Tested Through (Plugged) (Choke) (Meter) Type Taps \_\_\_\_\_

No.	Flow Data					Tubing Data		Casing Data		Duration of Flow Hr.
	(Prover) (Line) Size	(Choke) (Orifice) Size	Press. psig	Diff. h <sub>w</sub>	Temp. °F.	Press. psig	Temp. °F.	Press. psig	Temp. °F.	
SI						1710		995		SI
1.										
2.		3/4				1711		30	64	3 hrs
3.										
4.										
5.										

FLOW CALCULATIONS

No.	Coefficient (24-Hour)	$\sqrt{h_{wPf}}$	Pressure psia	Flow Temp. Factor F <sub>t</sub>	Gravity Factor F <sub>g</sub>	Compress. Factor F <sub>pv</sub>	Rate of Flow Q-MCFPD @ 15.025 psia
1.							
2.							
3.	14.1605		42	9962	9608	1.004	571
4.							
5.							

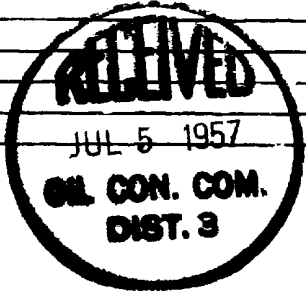
PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio \_\_\_\_\_ cf/bbl.  
Gravity of Liquid Hydrocarbons \_\_\_\_\_ deg.  
F<sub>c</sub> \_\_\_\_\_ (1-e<sup>-s</sup>) Negligible  
Specific Gravity Separator Gas \_\_\_\_\_  
Specific Gravity Flowing Fluid \_\_\_\_\_  
P<sub>c</sub> 995 P<sub>c</sub> 990

No.	P <sub>w</sub> P <sub>t</sub> (psia)	P <sub>t</sub> <sup>2</sup>	F <sub>c</sub> Q	(F <sub>c</sub> Q) <sup>2</sup>	(F <sub>c</sub> Q) <sup>2</sup> (1-e <sup>-s</sup> )	P <sub>w</sub> <sup>2</sup>	P <sub>c</sub> <sup>2</sup> -P <sub>w</sub> <sup>2</sup>	Cal. P <sub>w</sub>	P <sub>w</sub> P <sub>c</sub>
1.									
2.									
3.	42					1.8	988		1.002
4.									
5.									

Absolute Potential: 572 MCFPD; n 85 1.0017  
COMPANY Pacific Northwest Pipeline Corp.  
ADDRESS 405 1/2 W. Broadway, Farmington, New Mexico  
AGENT and TITLE D. C. Adams, 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 "E" WELL NO. 14-10

DATE OF TEST 6-28-57

SHUT IN PRESSURE (PSIG): TUBING 1710 CASING 995 S. I. PERIOD 7 DAYS

SIZE BLOW NIPPLE 3/4" B. M. Choke

FLOW THROUGH Casing WORKING PRESSURES FROM Tubing

TIME		CASING PRESSURE	Q (MCFD) 15.025 PSIA & 60°F	TUBING WELLHEAD WORKING PRESSURE (PSIG)	TEMP
HOURS	MINUTES				
	15	224		1705	62
	30	110		1706	59
	45	72		1707	60
1	0	57		1708	60
2	0	35		1710	62
3	0	30		1711	64

START AT: 11:40 am END TEST AT 2:40 pm

REMARKS: Unable to check PC working pressure due to 1 1/2" connection

---

---

---

---

---

---

---

---

---

---

TESTED BY D.C. Adams

WITNESS: \_\_\_\_\_

OIL CONSERVATION COMMISSION		
AZTEC DISTRICT OFFICE		
No. Copies Received		2
DISTRIBUTION		
	NO. FURNISHED	
Operator		
Engineer	1	
Production Office		
State Land Office		
U.S. G.S.	1	
Transporter		
File	1	✓