

NEW MEXICO OIL CONSERVATION COMMISSION
INITIAL WELL DELIVERABILITY TEST REPORT FOR 19 77

Form C122-A
 Revised 1-1-66

POOL NAME Basin	POOL SLOPE n= .75	FORMATION Dakota	COUNTY Rio Arriba
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86959

COMPANY Northwest Pipeline Corporation			WELL NAME AND NUMBER San Juan 30-5 Unit #47		
UNIT LETTER L	SECTION 17	TOWNSHIP 30	RANGE 5	PURCHASING PIPELINE Northwest Pipeline Corp.	
CASING O.D. - INCHES 4.500	CASING I.D. - INCHES 4.052	SET AT DEPTH - FEET 7945	TUBING O.D. - INCHES 2.375	TUBING I.D. - INCHES 1.995	TOP - TUBING PERF. - FEET 7900
GAS PAY ZONE FROM 7794 TO 7924		WELL PRODUCING THRU CASING TUBING XX		GAS GRAVITY .579	GRAVITY X LENGTH 4574
DATE OF FLOW TEST FROM Sept. 6 TO Sept. 13			DATE SHUT-IN PRESSURE MEASURED Sept. 20, 1977		

PRESSURE DATA - ALL PRESSURES IN PSIA

(a) Flowing Casing Pressure (DWt) 340	(b) Flowing Tubing Pressure (DWt) 340	(c) Flowing Meter Pressure (DWt) 2041	(d) Flow Chart Static Reading 224	(e) Meter Error (Item c - Item d) 2041	(f) Friction Loss (a - c) or (b - c) 1021	(g) Average Meter Pressure (Integr.) 340
(h) Corrected Meter Pressure (g + e) 340	(i) Avg. Wellhead Press. $P_t = (h + f)$ 340	(j) Shut-in Casing Pressure (DWt) 2041	(k) Shut-in Tubing Pressure (DWt) 224	(l) P_c = higher value of (j) or (k) 2041	(m) Del. Pressure $P_d =$ <u>50</u> % P_c 1021	(n) Separator or Dehydrator Pr. (DWt) for critical flow only

FLOW RATE CORRECTION (METER ERROR)

Integrated Volume - MCF/D 294	Quotient of $\frac{\text{Item c}}{\text{Item d}}$ 1.0000	$\sqrt{\frac{\text{Item c}}{\text{Item d}}}$ 1.0000	Corrected Volume Q = 294 MCF/D
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WORKING PRESSURE CALCULATION

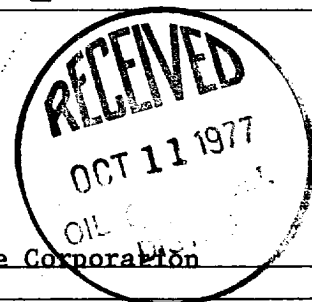
$(1 - e^{-s})$.283	$(F_c Q_m)^2 (1000)$ 7641	$R^2 = (1 - e^{-s}) (F_c Q_m)^2 (1000)$ 2162	P_t^2 115600	$P_w^2 = P_t^2 + R^2$ 117762	$P_w = \sqrt{P_w^2}$ 343
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DELIVERABILITY CALCULATION

$$D = Q \left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right]^n = \underline{294} \left[\frac{3123240}{4047919} \right]^n = \underline{.7716} = \underline{.8233} = \underline{242} \text{ MCF/D}$$

REMARKS:

Initial Test
First delivered 7-7-77



SUMMARY

Item h **340** ✓ Psia
 P_c **2041** ✓ Psia
 Q **294** ✓ MCF/D
 P_w **343** ✓ Psia
 P_d **1021** ✓ Psia
 D **242** ✓ MCF/D

Company **Northwest Pipeline Corporation**
 By **B.J. Broughton**
 Title **Well Test Foreman**
 Witnessed By _____
 Company _____