NEW MEXICO OIL CONSERVATION COMMISSION

INITIAL WELL DELIVERABILITY TEST REPORT FOR 19 77

Form C122-A
Revised 1-1-66

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

86959

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

PRESSURE DATA – ALL PRESSURES IN PSIA

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

FLOW RATE CORRECTION (METER ERROR)

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

WORKING PRESSURE CALCULATION

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

DELIVERABILITY CALCULATION

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

REMARKS:

Initial Test
First delivered 7-7-77

RECEIVED
OCT 11 1977
OIL CON. DIV.

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

OK

RTR/ee