C

NEW MEXICO OIL CONSERVATION COMMISSION

INITIAL WELL DELIVERABILITY TEST REPORT FOR 19 78

Form C122-A
Revised 1-1-66

POOL NAME	POOL SLOPE	FORMATION	COUNTY
Blanco	n= .75	Mesa Verde	Rio Arriba

85112

COMPANY			WELL NAME AND NUMBER		
Northwest Pipeline Corporation			San Juan 29-6 Unit #20A		
UNIT LETTER	SECTION	TOWNSHIP	RANGE	PURCHASING PIPELINE	
D	8	29	6	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	6065	2.375	1.995	5975
GAS PAY ZONE		WELL PRODUCING THRU		GAS GRAVITY	GRAVITY X LENGTH
FROM 5552 TO 6000		CASING	TUBING XX	.673	4021
DATE OF FLOW TEST			DATE SHUT-IN PRESSURE MEASURED		
FROM Dec. 22 TO Dec. 30			Oct. 4, 1978		

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.)
						182
(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 = 80 %P_c**	**(n) Separator or Dehydrator Pr. (DWt) for critical flow only**
182	182	751	751	751	601	

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
641	1.0000	1.0000	Q = 641 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	$P_w^2 = P_t^2 + R^2$	$P_w = \sqrt{P_w^2}$
~~.254~~ .125	36321	~~9226~~ 9189	33124	~~42350~~ 41213	206

DELIVERABILITY CALCULATION

$$D = Q\left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2}\right]^n = 641 \left[\left(\frac{202800}{\text{~~521652~~ } 521688}\right)^n = (.3888)^n = .4924\right] = 316 \text{ MCF/D}$$

REMARKS: Initial Test - 1st Delivered 11/16/78

RECEIVED
JAN 25 1979
OIL CON. COM.
DIST. 3

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SUMMARY

Item h	182	Psia
P_c	751	Psia
Q	641	MCF/D
P_w	206	Psia
P_d	601	Psia
D	316	MCF/D

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