

(TO BE USED FOR FRUITLAND, PICTURED CLIFFS, MESAVERDE, & ALL DAKOTA
EXCEPT BARKER DOME STORAGE AREA)

Operator Pacific Northwest Pipelines Lease San Juan Unit 30-5 Well No. 3-9
Unit 11 Sec. 9 Twp. 30 Rge. 5 Pay Zone: From 5010 To 5061
Casing: OD 7 WT. 20 & 23 Set At 2163 Tubing: OD 2 3/4 WT. _____ T. Perf. 772
Produced Through: Casing --- Tubing -X- Gas Gravity: Measured --- Estimated .650
Date of Flow Test: From 12-3-56 To 12-11-56 * Date S.I.P. Measured 5-2-56
Meter Run Size _____ Orifice Size _____ Type Chart _____ Type Taps _____

Flowing casing pressure (Dwt) _____	psig + 12 = _____	psia	(a)
Flowing tubing pressure (Dwt) _____	psig + 12 = _____	psia	(b)
Flowing meter pressure (Dwt) _____	psig + 12 = _____	psia	(c)
Flowing meter pressure (meter reading when Dwt. measurement taken:			
Normal chart reading _____	psig + 12 = _____	psia	(d)
Square root chart reading (_____) ² x spring constant _____	= _____	psia	(d)
Meter error (c) - (d) or (d) - (c) _____ ± _____	= _____	psi	(e)
Friction loss, Flowing column to meter:			
(b) - (c) Flow through tubing: (a) - (c) Flow through casing _____	= _____	psi	(f)
Seven day average static meter pressure (from meter chart):			
Normal chart average reading _____	psig + 12 = _____	psia	(g)
Square root chart average reading (_____) ² x sp. const. 939	= 947	psia	(g)
Corrected seven day avge. meter press. (p _f) (g) + (e) _____	= _____	psia	(h)
P _t = (h) + (f) _____	= 947	psia	(i)
Wellhead casing shut-in pressure (Dwt) 1000	psig + 12 = 1002	psia	(j)
Wellhead tubing shut-in pressure (Dwt) 1000	psig + 12 = 1002	psia	(k)
P _C = (j) or (k) whichever well flowed through _____	= 1002	psia	(l)
Flowing Temp. (Meter Run) 32 °F + 460 _____	= 492	°Abs	(m)
P _d = ½ P _C = ½ (l) _____	= 501	psia	(n)

Q = 76 X $\left(\frac{\text{FLOW RATE CALCULATION}}{\frac{\sqrt{(c)}}{\sqrt{(d)}}} \right)^* =$ _____ MCF/day

(integrated)

$$D = Q \cdot \frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \cdot n \cdot \frac{(1.022)^{75}}{1.022} = 76 \text{ MCF/da.}$$

Company Encliffe Northeast Pipeline Corp.
By Donald C. Adams
Title Wall Street Engineer
Witnessed by _____
Company _____

REMARKS OR FRICTION CALCULATIONS

GL	$(1-e^{-S})$	$(F_c Q)^2$	$\frac{(F_c Q)^2 (1-e^{-S})}{R^2}$	P_t^2 (Column i)	$P_t^2 + R^2$	P_w
				$P_t = P_t$		

3-N.M.O.C.S. - Jotco
1-L. G. Truly
2-Wayne Smith (Phillips)
1-File



1944-1945 1946-1947 1948-1949

1950-1951 1952-1953 1954-1955

1956-1957 1958-1959 1960-1961

1962-1963 1964-1965 1966-1967

1968-1969 1970-1971 1972-1973

1974-1975 1976-1977 1978-1979

1980-1981 1982-1983

1984-1985
1986-1987
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2012-2013

2014-2015
2016-2017
2018-2019

2020-2021
2022-2023
2024-2025
2026-2027

2028-2029 2030-2031 2032-2033

2034-2035 2036-2037
2038-2039 2040-2041
2042-2043 2044-2045

