

OPEN FLOW TEST DATA

DATE November 29, 1960

Operator El Paso Natural Gas Company		Lease San Juan 28-5 No. 46	
Location 1340'N, 2349'E, 25-28N-5W		County Rio Arriba	State New Mexico
Formation Mesa Verde		Pool Blanco	
Casing: Diameter 2-1/2"	Set At: Feet 6102	Tubing: Diameter -No Tubing-	Set At: Feet ---
Pay Zone: From 5894	To 6038	Total Depth: c/o 6086	Shut In 11-17-60
Stimulation Method Sand/Water Frac.		Flow Through Casing X	
		Flow Through Tubing	

Choke Size, Inches .75		Choke Constant: C 12.365		"Slim Hole"	
Shut-In Pressure, Casing, PSIG 1122	PSIA 1134	Days Shut-In 12	Shut-In Pressure, Tubing, PSIG ---	PSIA ---	
Flowing Pressure: P, PSIG 152	PSIA 164	Working Pressure: Pw, PSIG (Calc.) 234			
Temperature: T, F 81	F, .9804	Fpv (From Tables) 1.013	Gravity .650	Fg = .9608	

CHOKE VOLUME $Q = C \times P_c \times F_p \times F_g \times F_{pv}$

$$Q = (12.365)(164)(.9804)(.9608)(1.013) = 1935 \text{ MCF/D}$$

$$\text{OPEN FLOW Aof } Q \left(\frac{P_c^2}{P_c^2 - P_w^2} \right)^n$$

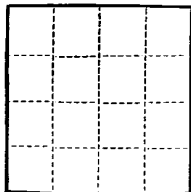
$$\text{Aof } \left(\frac{1,285,956}{1,231,200} \right)^n = (1.0444)^{.75}(1935) = (1.0331)(1935)$$

Aof 1999 MCF/DTESTED BY D. E. Mortensen

WITNESSED BY

Calculated by W. D. DawsonChecked by T. B. Grant

Lewis D. Galloway
 Lewis D. Galloway



(SUBMIT IN TRIPLICATE)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Land Office Santa Fe
Lease No. 11752-A
Unit San Juan Co., Unit
14-111-94

SUNDRY NOTICES AND REPORTS ON WELLS

NOTICE OF INTENTION TO DRILL.....	SUBSEQUENT REPORT OF WATER SHUT-OFF.....
NOTICE OF INTENTION TO CHANGE PLANS.....	SUBSEQUENT REPORT OF SHOOTING OR ACIDIZING.....
NOTICE OF INTENTION TO TEST WATER SHUT-OFF.....	SUBSEQUENT REPORT OF ALTERING CASING.....
NOTICE OF INTENTION TO RE-DRILL OR REPAIR WELL.....	SUBSEQUENT REPORT OF RE-DRILLING OR REPAIR.....
NOTICE OF INTENTION TO SHOOT OR ACIDIZE.....	SUBSEQUENT REPORT OF ABANDONMENT.....
NOTICE OF INTENTION TO PULL OR ALTER CASING.....	SUPPLEMENTARY WELL HISTORY.....
NOTICE OF INTENTION TO ABANDON WELL.....	

(INDICATE ABOVE BY CHECK MARK NATURE OF REPORT, NOTICE, OR OTHER DATA)

November 4, 1960

Well No. 60 is located 134 ft. from N line and 234 ft. from E line of sec. 20
NE 1/4 Sec. 20 (1/4 Sec. and Sec. No.) 34 (Twp.) 10 (Range) N.M.P.M. (Meridian)
Blanco Mesa Verde (Field) San Juan Co. (County or Subdivision) N.M. (State or Territory)

The elevation of the derrick floor above sea level is 6165 ft.

DETAILS OF WORK

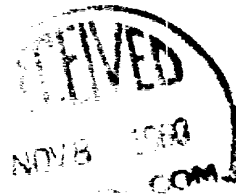
(State names of and expected depths to objective sands; show sizes, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work)

On 11-3-60 Total Depth 6109'.

Ran 130 joints 2 1/2", J-55, 6.4# casing (6098') set at 6102' with 100 sacks regular cement, 1/4 cu. ft. fine Gilsomite/sk, 1/8# Floccle/sk., and 45 Gal.

Held 1000#/30 minutes.

Top of cement by temperature survey at 4200'.



I understand that this plan of work must receive approval in writing by the Geological Survey before operations may be commenced.

Company El Paso Natural Gas Company

Address Box 501

Farmington, New Mexico

By _____

Title petroleum Engineer