

EL PASO NATURAL GAS COMPANY
OPEN FLOW TEST DATA

DATE June 14, 1979

Operator El Paso Natural Gas Company		Lease San Juan 28-7 Unit #48A	
Location NW 21-28-7		County Rio Arriba	State New Mexico
Formation Mesa Verde		Pool Blanco	
Casing: Diameter 4.500	Set At: Feet 5317'	Tubing: Diameter 2 3/8	Set At: Feet 5269
Pay Zone: From 4301'	To 5276'	Total Depth: 5317'	Shut In 6-7-79
Stimulation Method Sand Water Frac		Flow Through Casing	Flow Through Tubing

Choke Size, Inches		Choke Constant: C			
Shut-In Pressure, Casing, PSIG 948	+ 12 = PSIA 960	Days Shut-In	Shut-In Pressure, Tubing PSIG 943	+ 12 = PSIA 955	
Flowing Pressure: P PSIG	+ 12 = PSIA		Working Pressure: P _w PSIG	+ 12 = PSIA	
Temperature: T = °F Ft =	n =		F _{pv} (From Tables)	Gravity F _g =	

$$\text{CHOKE VOLUME} = Q = C \times P_f \times F_t \times F_g \times F_{pv}$$

Q =

= _____ MCF/D

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

$$Aof = \left(\frac{\quad}{\quad} \right)^n = \quad_Q$$

Aof = _____ MCF/D

TESTED BY Norman Waggoner

WITNESSED BY _____

[Signature]

Well Test Engineer

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Form Approved
Budget Bureau No. 42-R1424

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use Form 9-331-C for such proposals.)

1. oil ☐ well gas ☒ well other ☐

2. NAME OF OPERATOR
El Paso Natural Gas Company

3. ADDRESS OF OPERATOR
P.O. Box 289, Farmington, New Mexico 87401

4. LOCATION OF WELL (REPORT LOCATION CLEARLY. See space 17 below.)
AT SURFACE: 900'N, 950'W
AT TOP PROD. INTERVAL:
AT TOTAL DEPTH:

16. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

REQUEST FOR APPROVAL TO:	SUBSEQUENT REPORT OF:
TEST WATER SHUT-OFF <input type="checkbox"/>	<input type="checkbox"/>
FRACTURE TREAT <input type="checkbox"/>	<input checked="" type="checkbox"/>
SHOOT OR ACIDIZE <input type="checkbox"/>	<input type="checkbox"/>
REPAIR WELL <input type="checkbox"/>	<input type="checkbox"/>
PULL OR ALTER CASING <input type="checkbox"/>	<input type="checkbox"/>
MULTIPLE COMPLETE <input type="checkbox"/>	<input type="checkbox"/>
CHANGE ZONES <input type="checkbox"/>	<input type="checkbox"/>
ABANDON* <input type="checkbox"/>	<input type="checkbox"/>
(other) <input type="checkbox"/>	<input type="checkbox"/>

5. LEASE
SF 078417

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME
San Juan 28-7 Unit

8. FARM OR LEASE NAME
San Juan 28-7 Unit

9. WELL NO.
48A

10. FIELD OR WILDCAT NAME
Blanco M.V.

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
Sec. 21, T-28-N, R-7-W
N.M.P.M.

12. COUNTY OR PARISH
Rio Arriba

13. STATE
New Mexico

14. API NO.

15. ELEVATIONS (SHOW DF, KDB, AND WD)
6021' GL

(NOTE: Report results of multiple completion or zone change on Form 9-330.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

6-4-79: PBD 5302'. Tested casing to 3500#, OK. Perfed Upper & Lower P.L. 4882, 4888, 4909, 4913, 4917, 4921, 4926, 4930, 4939, 4952, 4973, 5000, 5006, 5012, 5029, 5036, 5065, 5132, 5170, 5203, 5250, 5256, 5276' w/1 SPZ. Fraced w/67,500# 20/40 sand and 130,900 gal. water. Flushed w/6640 gal. water.

6-5-79: Perfed C.H. & Men. 4301, 4307, 4312, 4342, 4348, 4355, 4362, 4369, 4402, 4419, 4426, 4440, 4532, 4642, 4723, 4739, 4746, 4765, 4771, 4796, 4815' w/1 SPZ. Fraced w/72,000# 20/40 sand and 135,500 gal. water. Flushed w/6150 gal. water.

Subsurface Safety Valve: Manu. and Type _____

18. I hereby certify that the foregoing is true and correct

SIGNED D. P. Buico TITLE Drilling Clerk DATE June 11, 1979

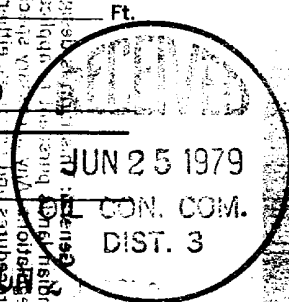
(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

*See Instructions on Reverse Side

U. S. GEOLOGICAL SURVEY
DURAND, OREGON



EL PASO NATURAL GAS CO. ✓

DEVIATION REPORT

Name of Company El Paso Natural Gas Company		Address P. O. Box 289, Farmington, New Mexico 87401			
Lease San Juan 28-7 Unit	Well No. 48 A	Unit D	Sec. 21	Township 28-N	Range 7-W
Pool Blanco M.V.		County Rio Arriba			

DEPTH	DEVIATION
187'	1/4°
687'	1/4°
1224'	1/4°
1724'	1/4°
2346'	1/2°
2746'	1/2°
2942'	1/2°
3965'	1/2°
4524'	1/2°
5025'	1/2°
5317'	1/2°



I, the undersigned, certify that I, acting in my capacity as Petroleum Engineer of El Paso Natural Gas Company, am authorized by said Company to make this report; and that this report was prepared by me or under my supervision and directions and that the facts stated therein are true to the best of my knowledge and belief.

W. H. Lawrence

Subscribed and sworn to before me this 9th day of July, 19 79.

Rosa G. Brisco

Notary Public in and for San Juan County, New Mexico

My Commission expires, October 5, 1980