

EL PASO NATURAL GAS COMPANY
OPEN FLOW TEST DATADATE October 10, 1968

Operator El Paso Natural Gas Company		Lease San Juan 28-6 Unit No. 142	
Location 1485'S, 1180'W, Sec. 21, T-28-N, R-6-W		County Rio Arriba	State New Mexico
Formation Dakota		Pool Basin	
Casing: Diameter 4.500	Set At: Feet 7775	Tubing: Diameter 2.375	Set At: Feet 7496
Pay Zone: From 7540	To 7727	Total Depth: 7775	Shut In 9-29-68
Stimulation Method Sand Water Frac.		Flow Through Casing	Flow Through Tubing X

Choke Size, Inches .750		Choke Constant: C 12.365			
Shut-In Pressure, Casing, PSIG 2699	+ 12 = PSIA 2711	Days Shut-In 11	Shut-In Pressure, Tubing PSIG 2697	+ 12 = PSIA 2709	
Flowing Pressure: P PSIG 387	+ 12 = PSIA 399		Working Pressure: P _w PSIG 1332	+ 12 = PSIA 1344	
Temperature: T = .76 °F Ft = .9850	n = .75		F _{pv} (From Tables) 1.038	Gravity .670 F _g = .9463	

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

$$Q = (12.365)(399)(.9850)(.9463)(1.038) = \underline{4773} \text{ MCF/D}$$

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

$$A_{of} = \left(\frac{7349521}{5543185} \right)^n = (4773)(1.3258)^{.75} = (4773)(1.2355)$$

NOTE: The well produced a light fog of water and distillate throughout the test.

$$A_{of} = \underline{5897} \text{ MCF/D}$$

TESTED BY J. B. Goodwin
CALCULATED
WITNESSED BY Hermon E. McAnally



H. L. Kendrick
H. L. Kendrick by Shm

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN DUPLICATE*

(See other in-
structions on
reverse side)Form approved.
Budget Bureau No. 42-R355.5.

WELL COMPLETION OR RECOMPLETION REPORT AND LOG *

1a. TYPE OF WELL:		OIL WELL ☐	GAS WELL ☒	DRY ☐	Other ☐		
b. TYPE OF COMPLETION:		NEW WELL ☒	WORK OVER ☐	DEEP-EN ☐	PLUG BACK ☐	DIFF. RESVR. ☐	Other ☐
2. NAME OF OPERATOR		El Paso Natural Gas Company				OCT 2 1968	
3. ADDRESS OF OPERATOR		Box 990, Farmington, New Mexico - 87401				U. S. GEOLOGICAL SURVEY	
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)*		At surface 1482'S, 1180'W				Basin Dakota	
		At top prod. interval reported below				Sec. 21, T-28-N, R-6-W N.M.P.M.	
		At total depth					
14. PERMIT NO.		DATE ISSUED		12. COUNTY OR PARISH		13. STATE	
				Rio Arriba		New Mexico	
15. DATE SPURRED	16. DATE T.D. REACHED	17. DATE COMPL. (Ready to prod.)	18. ELEVATIONS (DF, RKB, RT, GR, ETC.)*		19. ELEV. CASINGHEAD		
9-15-68	9-26-68	10-10-68	6471' GL				
20. TOTAL DEPTH, MD & TVD	21. PLUG, BACK T.D., MD & TVD	22. IF MULTIPLE COMPL., HOW MANY*	23. INTERVALS DRILLED BY	ROTARY TOOLS	CABLE TOOLS		
7775'	7747'			0-7775'			
24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)*					25. WAS DIRECTIONAL SURVEY MADE		
7540 - 7727' (Dakota)					No		
26. TYPE ELECTRIC AND OTHER LOGS RUN					27. WAS WELL LOGGED		
I-EL, FDC, SMP-GR, Temp. Survey					OCT 22 1968		
28. CASING RECORD (Report all strings set in well)					CEMENTING RECORD		
CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE				
9 5/8"	32.30#	229'	13 3/4"	145 Sks.			
7"	20#	3497'	8 3/4"	160 Sks.			
4 1/2"	10.5 & 11.6#	7775'	6 1/4"	350 Sks.			
29. LINER RECORD					30. TUBING RECORD		
SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)
					2 3/8"	7505'	
31. PERFORATION RECORD (Interval, size and number)					32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.		
7540-50', 7560-70', 7640-55', 7684-92', 7704-2 12', 7722-27' w/20 SPZ					DEPTH INTERVAL (MD)		
					7540-7727		
					AMOUNT AND KIND OF MATERIAL USED		
					80,010 gal. water, 80,000# sand		
					300 gal. acid		
33.* PRODUCTION							
DATE FIRST PRODUCTION		PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump)			WELL STATUS (Producing or shut-in)		
		Flowing			Shut In		
DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD	OIL—BBL.	GAS—MCF.	WATER—BBL.	GAS-OIL RATIO
10-10-68	3	3/4"					
FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE	OIL—BBL.	GAS—MCF.	WATER—BBL.	OIL GRAVITY-API (CORR.)	
SI 2709	SI 2711			5897 MCF/D A.O.F.			
34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.)					TEST WITNESSED BY		
					J. B. Goodwin		
35. LIST OF ATTACHMENTS							
36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records							
Original signed by							
SIGNED Carl E. Matthews					TITLE Petroleum Engineer		
					DATE 10-17-68		

*(See Instructions and Spaces for Additional Data on Reverse Side)

INSTRUCTIONS

General: This form is designed for submitting a complete and correct well completion report and log on all types of lands and leases to either a Federal agency or a State agency, or both, pursuant to applicable Federal and/or State laws and regulations. Any necessary instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and regulations, should be shown below or will be issued by, or may be obtained from, the local Federal and/or State office. See instructions on items 22 and 24, and 33, below regarding separate copies of a well completion report for separate completions.

If not filed prior to the time this summary record is submitted, copies of all relevant laws, regulations, and State laws and regulations, all types electric, etc., formations and pressure tests, and directional surveys, should be attached hereto by the person submitting the report.

Item 4: If there are no applicable State requirements, locations on Federal and Indian land should be described in accordance with Federal requirements. Consult local State or Federal office for specific instructions.

Item 18: Indicate which elevation is used as reference (where not otherwise shown) for depth measurements given in other spaces on this form and in any attachments. **Items 22 and 24:** If this well is completed for separate production from more than one interval zone (multiple completion), so state in item 22, and in item 24 show the producing interval, or intervals, top(s), bottom(s) and name(s). (If any) for only the interval reported in item 33. Submit a separate report (page) on this form, adequately identified, for each additional interval to be separately produced, showing the additional data pertinent to such interval.

Item 29: "Sacks Cement": Attached supplemental records for this well should show the details of any multiple stage cementing and the location of the cementing tool.

Item 33: Submit a separate completion report on this form for each interval to be separately produced. (See instruction for items 22 and 24 above.)

37. SUMMARY OF POROUS ZONES: SHOW ALL IMPORTANT ZONES OF POROSITY AND CONTENTS THEREOF: CORED INTERVALS; AND ALL DRILL-STEM TESTS, INCLUDING DEPTH INTERVAL TESTED, CUSHION USED, TIME TOOL OPEN, FLOWING AND SHUT-IN PRESSURES, AND RECOVERIES			38. GEOLOGIC MARKERS		
FORMATION	TOP	BOTTOM	NAME	MEAS. DEPTH	TRUE VERT. DEPTH
			Pictured Cliffs	3280	
			Mesa Verde	4932	
			Point Lookout	5461	
			Callup	6460	
			Greenhorn	7420	
			Graneros	7523	
			Dakota	7640	