

CORRECTED COPY

OPEN FLOW TEST DATA

DATE 2-29-72

Operator EL PASO NATURAL GAS COMPANY		Lease Huerfano Unit No. 224	
Location 1650 S - 990 E Sec. 4 26N 10W		County San Juan	State N. M.
Formation Dakota		Pool Basin	
Casing: Diameter 4.500	Set At: Feet 7025	Tubing: Diameter 2.375	Set At: Feet 6934
Pay Zone: From 6776	To 6930	Total Depth: 7025	Shut In 2-22-72
Stimulation Method SWF		Flow Through Casing	Flow Through Tubing XXX

Plate Choke Size, Inches 4" M.R.; 2.750" P.		Choke Constant: C 41.10		Well tested through 3/4" variable choke	
Shut-In Pressure, Casing, PSIG 1600'	+ 12 = PSIA 1612'	Days Shut-In 7	Shut-In Pressure, Tubing PSIG 1585	+ 12 = PSIA 1597	
Flowing Pressure: P PSIG MR 10' WH 46'	+ 12 = PSIA MR 22 WH 58		Working Pressure: P _w PSIG 393	+ 12 = PSIA 405	
Temperature: T = 86°F Ft = 9759	n = .75		F _{pv} (From Tables) 1.003	Gravity .734 F _g = 1.167	

$$\text{JOKE VOLUME} = Q = C \times P_t \times F_t \times F_g \times F_{pv}$$

$$Q = \text{Calculated from orifice meter readings} = 371 \text{ MCF/D}$$

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

NOTE: Well produced 38 bbls. of 43 gravity oil in 3 hour test.

$$Aof = \left(\frac{2598544}{2434519} \right)^n = (371)(1.0674)^{.75} = (371)(1.0501)$$

$$Aof = 390 \text{ MCF/D}$$

TESTED BY Jess Goodwin

WITNESSED BY

H. E. McAnally

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 <input type="checkbox"/>	GAS WELL <input checked="" type="checkbox"/>	DRY <input type="checkbox"/>	Other _____
b. TYPE OF COMPLETION:					
NEW WELL <input checked="" type="checkbox"/> WORK OVER <input type="checkbox"/> DEEP-EN <input type="checkbox"/> PLUG BACK <input type="checkbox"/> DIFF. RESVR. <input type="checkbox"/> Other _____					
2. NAME OF OPERATOR El Paso Natural Gas Company					
3. ADDRESS OF OPERATOR PO Box 990, Farmington, NM 87401					
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)* At surface 1650'N, 990'E At top prod. interval reported below At total depth					
14. PERMIT NO.		DATE ISSUED MAR 9 1972			
15. DATE SPUDDED 2-6-72		16. DATE T.D. REACHED 2-18-72		17. DATE COMPL. (Ready to prod.) 2-29-72	
20. TOTAL DEPTH, MD & TVD 7025'		21. PLUG, BACK T.D., MD & TVD 7015'		22. IF MULTIPLE COMPL., HOW MANY* 6702'GL	
24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)* 6776-6930' (Dakota)		23. INTERVALS DRILLED BY 0-7025'		18. ELEVATIONS (DF, RKB, RT, GR, ETC.)* 6702'GL	
26. TYPE ELECTRIC AND OTHER LOGS RUN Density - GR Bond		19. ELEV. CASINGHEAD		25. WAS DIRECTIONAL SURVEY MADE NO	
28. CASING RECORD (Report all strings set in well)		27. WAS WELL CORED NO		13. STATE New Mexico	
31. PERFORATION RECORD (Interval, size and number) 6776-82', 6812-18', 6854-60', 6866-72', 6914-30' with 18 shots per zone.		30. TUBING RECORD SIZE 2 3/8" DEPTH SET (MD) 6934'		12. COUNTY OR PARISH San Juan	
32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC. DEPTH INTERVAL (MD) 6776-6930' AMOUNT AND KIND OF MATERIAL USED 37,500#sand, 39,144 gal. water		29. LINER RECORD SIZE TOP (MD) BOTTOM (MD) SACKS CEMENT* SCREEN (MD)		11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA Basin Dakota Sec. 4, T-26-N, R-10-W NMPM	
33. PRODUCTION DATE FIRST PRODUCTION PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump)		34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.)		10. FIELD AND POOL, OR WILDCAT Basin Dakota	
35. LIST OF ATTACHMENTS		36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records		7. UNIT AGREEMENT NAME Huerfano Unit	
36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records		37. TEST WITNESSED BY J. B. Goodwin		8. FARM OR LEASE NAME Huerfano Unit	
SIGNED Original Signed F. H. WOOD		TITLE Petroleum Engineer		9. WELL NO. 224	
DATE March 8, 1972				6. IF INDIAN, ALLOTTEE OR TRIBE NAME	

*(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 special 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 practices, either are 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 reports for separate completions.

If not filed prior to the time this summary record is submitted, copies of all currently available logs (drillers, geologists, sample and core analysis, all types electric, etc.), formation and pressure tests, and directional surveys, should be attached hereto, to the extent required by applicable Federal and/or State laws and regulations. All attachments should be listed on this form, see item 35.

Item 4: If there are no applicable State requirements, locations on Federal or 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: "Stacks 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

FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.	NAME	TOP	
					MEAS. DEPTH	TRUE WEST. DEPTH
				Pictured Cliffs	2290'	
				Mesa Verde	3685'	
				Point Lookout	4720'	
				Gallup	5806'	
				Greenhorn	6689'	
				Graneros	6743'	
				Dakota	6852'	

38.

GEOLOGIC MARKERS