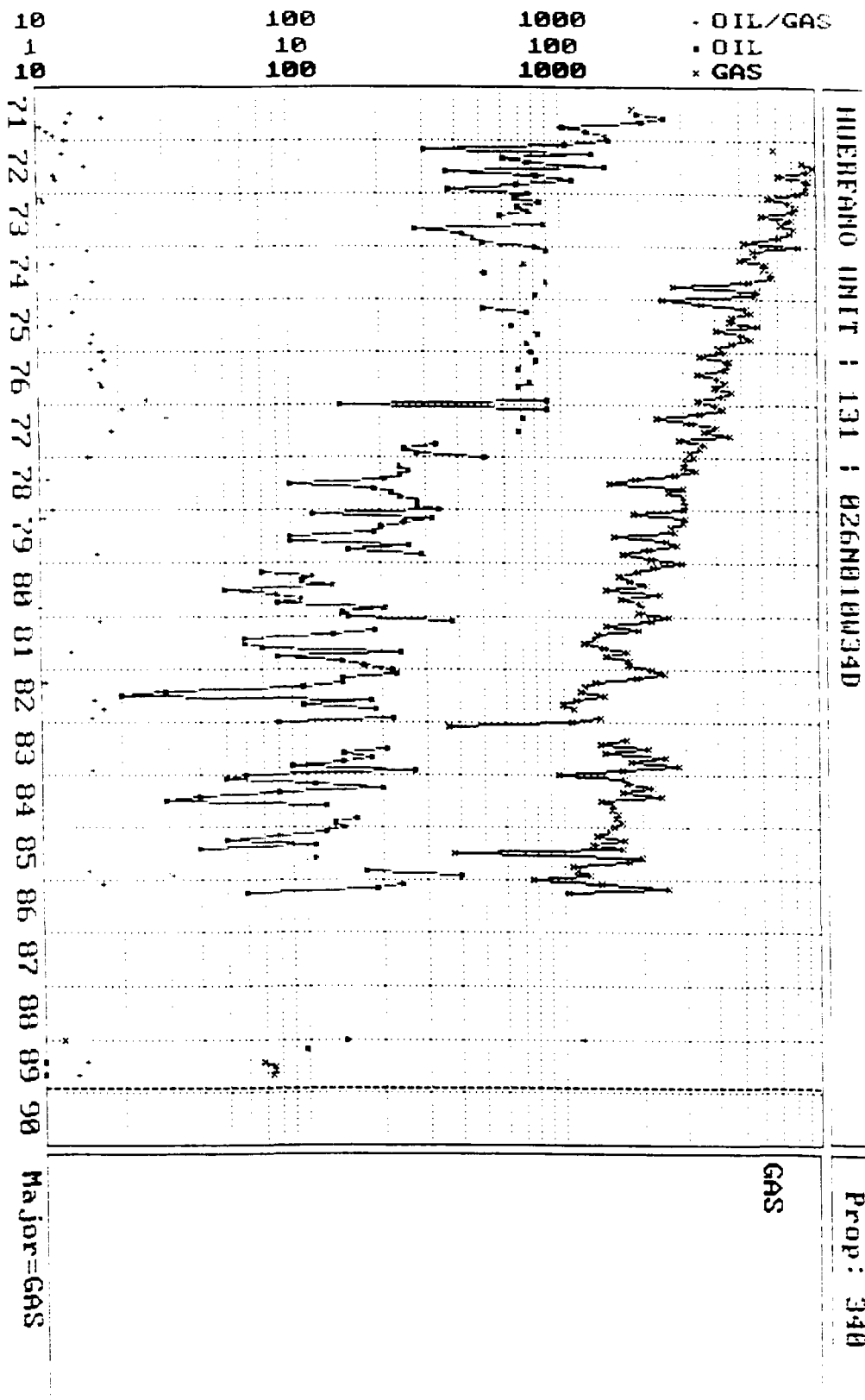




WELL COMPLETION LOG

Form 22-5 (Rev. 2-62)

Huerfano Unit #131

Page 2

(Show details of tubular goods, bottom hole accessories, DST's, Cores, Deviations, and General Chronological History).

- 3-2-71 Rigged up Arapahoe Drilling Co. rig #2, spudded well, drilled surface hole.
- 3-3-71 Ran 6 joints 8 5/8", 24#, J-55 surface casing (199') set at 213' w/160 sacks of cement circulated to surface.
- 3-4-71 Drilling w/treated water.
- 3-10-71 Drilling w/mud from approximately 5900'.
- 3-12-71 Lost circulation at 6503' (3 1/2 hours). Drilling.
- 3-14-71 Reached total depth of 6789'. Logs stopped at 1100'.
- 3-15-71 Conditioning hole and ran logs.
- 3-16-71 Ran 208 joints 4 1/2", 10.5#, K-55 production casing (6777') set at 6789'. Float collar at 6777', second stage tool at 4785', third stage tool at 2362'. Cemented first stage w/260 sacks of cement, second stage w/205 sacks of cement, third stage w/205 sacks of cement. W. O. C. 18 hours.
- 3-17-71 P. B. T. D. 6748'. Perf. 6572-78', 6608-14', 6625-31', 6696-6708', 6718-24' w/18 SPZ. Fraced w/30,000# 20/40 sand, 34,692 gal. water, dropped 2 sets of 18 balls, well sanded off.
- 3-18-71 Blowing well, cleaning out sand.
- 3-19-71 Ran 216 joints 2 3/8", 4.7#, J-55 tubing (6716') landed at 6727' w/Baker expendable check valve on bottom and Otis SN 1 joint above.
- 5-19-71 Date well was tested.
- 11-16-75 A Baker Loc-set packer with on-off tool was set at 6510' to isolate a casing failure
- 06-13-75 Set a choke in Baker Loc-Set packer and unseat on-off tool from packer.
- Circulate 68 bbls of Baroid casing packer fluid in annulus displacing tubing with 10 bbls of diesel and 15 bbls of water.
- Connect back into packer with on-off tool.
- Pull choke and swab well in.

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN DUPLICATE

(See instructions on
reverse side)Form approved.
Budget Bureau No. 42-8355.5.

5. LEASE DESIGNATION AND SERIAL NO.

SF 078001-B

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

Huerfano Unit

8. FARM OR LEASE NAME

Huerfano Unit

9. WELL NO.

131

10. FIELD AND POOL, OR WILDCAT

Basin Dakota

11. SEC., T., R., M., OR BLOCK AND SURVEY
OR AREA:Sec. 34, T-26-N, R-10-W
N. M. P. M.12. COUNTY OR
PARISH
San Juan13. STATE
New Mexico

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. SERV. ☐ Other _____

2. NAME OF OPERATOR

El Paso Natural Gas Company

3. ADDRESS OF OPERATOR

Box 990, Farmington, New Mexico 87401

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)*

At surface 800'N, 990'W

At top prod. interval reported below

At total depth

14. PERMIT NO.

DATE ISSUED

15. DATE SPUDDED 3-2-71 16. DATE T.D. REACHED 3-14-71 17. DATE COMPL. (Ready to prod.) 5-19-71 18. ELEVATIONS (DP, RKB, RT, OR, ETC.)* 6704' GL 19. ELEV.-CASINGHEAD

20. TOTAL DEPTH, MD & TVD 6789' 21. PLOG. BACK T.D. MD & TVD 6748' 22. IF MULTIPLE COMPL., HOW MANY* 23. INTERVALS DRILLED BY 0-6789' ROTARY TOOLS CABLE TOOLS:

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)*

6572-6724' (Dakota)

25. WAS DIRECTIONAL
SURVEY MADE

No

26. TYPE ELECTRIC AND OTHER LOGS RUN

Ind-EL, Density

27. WAS WELL CORED

No

28. CASING RECORD (Report all strings set in well)

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
8 5/8"	24#	213'	12 1/4"	160 Sks.	
4 1/2"	10.5#	6789'	7 7/8"	670 Sks.	

29. LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)
					2 3/8"	6727'	

31. PERFORATION RECORD (Interval, size and number)

6572-78', 6608-14', 6625-31', 6696-6708',
6718-24' w/18 SPZ

32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
6572-6724'	30,000# sand, 34,692 gal. water

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	CHOKER SIZE	PROD'N. FOR TEST PERIOD	OIL—BSL.	GAS—MCF.	WATER—BSL.	GAS-OIL RATIO
5-19-71	3	3/4"	→				
FLOW, TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE	OIL—BSL.	GAS—MCF.	WATER—BSL.	OIL GRAVITY-API (CORR.)	
SI 1264	SI 1192	→		1499 MCF/D	Z. O. F.	43.9	

34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.)

TEST WITNESSED BY

D. R. Roberts

35. LIST OF ATTACHMENTS

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records

SIGNED

Original Signed 5 - 1971

TITLE

Petroleum Engineer

DATE 6-4-71

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

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Type: ☒ Initial ☐ Annual ☐ Special		Test Date: 11/13/01	
Company: Veridian, Inc.		Connection: El Paso Natural Gas	
Pool: Mesquite Valley		Formation: Gallup	
Completion Date:		Total Depth: 6634'	Plug Seat TO: 6420'
Casing Size: 2.000" ID		Set At: 6634'	Perforations: From 6470' To 6767'
Tubing Size: 2.375" ID		Set At: 5804'	Perforations: From To
Type well - Single - Broadhead - G.C. or G.O. Multiple		Pecker Set At:	County: San Juan
Producing thru Tubing		Reservoir Temp. °F: 8	Mean Annual Temp. °F: 12.2
State: New Mexico		Bore. Press. - P ₀ : 12.2	
C _g : .700		% CO ₂ :	% N ₂ :
Prover:		% H ₂ S:	Meter Run:
Taps:			

FLOW DATA						TUBING DATA		CASING DATA		Duration of Flow	
NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. h _w	Temp. °F	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.		Temp. °F
SI	2.000		.750				706	68	750	68	Initial
1.							104	66	689	66	15 min.
2.							136	68	584	68	30 min.
3.							108	72	473	72	1 hr.
4.							49	70	358	70	2 hrs.
5.							39	70	319	70	3 hrs.

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor Ft.	Gravity Factor Fg	Super. Compres. Factor, Fpv	Rate of Flow Q, Mcfd
1	12.365		51.2	1.000	.9258	1.000	586.1129
2.							
3.							
4.							
5.							

NO.	P ₀	Temp. °R	γ	Z	Gas Liquid Hydrocarbon Ratio	Mcfd/bbl.
1					A.P.I. Gravity of Liquid Hydrocarbons	Deg.
2.					Specific Gravity Separator Gas	XXXXXXX
3.					Specific Gravity Flowing Fluid	XXXXX
4.					Critical Pressure	P.S.I.A.
5.					Critical Temperature	R

P ₀ = 762.2	P ₁ = 580.948	34				
NO.	P ₀	P ₁	P ₀ ²	P ₁ ² - P ₀ ²	(1) $\frac{P_0^2}{P_1^2 - P_0^2} = 1.2328$	(2) $\left[\frac{P_0^2}{P_1^2 - P_0^2} \right]^n = 1.1699$
1	331.2	109.693	144	471.255	40	
2						
3						
4						
5						

Absolute Open Flow: 1731		Mcfd @ 15.025	Angle of Slope: 75
Remarks: ILLEGIBLE			

