

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

SUBMIT IN DUPLICATE

(See other instructions on reverse side)

Form approved.  
Budget Bureau No. 1004-0137  
Expires August 31, 1985

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. REVR. ☐ Other ☐

2. NAME OF OPERATOR

Yates Energy Corporation

3. ADDRESS OF OPERATOR

P. O. Box 2323, Roswell, NM 88202-2323

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

At surface 330' FSL & 1980' FWL

At top prod. interval reported below

At total depth

14. PERMIT NO.

DATE ISSUED

MAY - 8 1991

O.C.D. ARTESIA, OFFICE

5. LEASE DESIGNATION

NM-2538

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LAND NAME

Thornbush Federal

9. WELL NO.

1

10. FIELD AND POOL, OR WILDCAT

Und. San Andres

11. SEC. T., R., M., OR BLOCK AND SURVEY OR AREA

Section 1-18S-31E

12. COUNTY OR PARISH

Eddy

13. STATE

NM

15. DATE SPUDDED

2/14/90

16. DATE T.D. REACHED

3/8/90

17. DATE COMPL. (Ready to prod.)

5/25/90

18. ELEVATIONS (DF, RKB, RT, GR, ETC.)\*

3770.0 GL

19. ELEV. CASINGHEAD

-

20. TOTAL DEPTH, MD & TVD

9060'

21. PLUG, BACK T.D., MD & TVD

7600' CIBP

22. IF MULTIPLE COMPL., HOW MANY\*

23. INTERVALS DRILLED BY

ROTARY TOOLS

CABLE TOOLS

all

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

4636' - 4638' San Andres

26. TYPE ELECTRIC AND OTHER LOGS RUN

CNL -LDT DLL w/MSFL, BCSL, CBL

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

| CASING SIZE | WEIGHT, LB./FT. | DEPTH SET (MD) | HOLE    | AMOUNT PULLED                            |
|-------------|-----------------|----------------|---------|------------------------------------------|
| 13 3/8"     | 48#             | 350'           | 17 1/2" | 405 sks. Premium plus                    |
| 8 5/8"      | 32#             | 2,400'         | 12 1/4" | 1250 sks. 65-35 Premium plus             |
| 5 1/2"      | 17#             | 9,058'         | 7 7/8"  | 945 sks. Class "H" +                     |
|             |                 |                |         | 600 sks. Class "C" + 310 ska. 65-35 poz. |

29. LINER RECORD

| SIZE | TOP (MD) | BOTTOM (MD) | BACKS CEMENT* | SCREEN (MD) | SIZE   | DEPTH SET (MD) | PACKER SET (MD) |
|------|----------|-------------|---------------|-------------|--------|----------------|-----------------|
|      |          |             |               |             | 2 3/8" | 4,624'         |                 |

31. PERFORATION RECORD (Interval, size and number)

See Attachment

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

| DEPTH INTERVAL (MD) | AMOUNT AND KIND OF MATERIAL USED |
|---------------------|----------------------------------|
| See attachment      | for details                      |

33.\* PRODUCTION

|                       |                 |                                                                      |                         |          |            |                                    |               |
|-----------------------|-----------------|----------------------------------------------------------------------|-------------------------|----------|------------|------------------------------------|---------------|
| DATE FIRST PRODUCTION |                 | PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump) |                         |          |            | WELL STATUS (Producing or shut-in) |               |
| 4/19/90               |                 | Plunger lift                                                         |                         |          |            | Producing                          |               |
| DATE OF TEST          | HOURS TESTED    | CHOKE SIZE                                                           | PROD'N. FOR TEST PERIOD | OIL—BBL. | GAS—MCF.   | WATER—BBL.                         | GAS-OIL RATIO |
| 5/24/90               | 24              | 1/2"                                                                 | →                       | 125      | 480        | 13                                 | 3840/1        |
| FLOW, TUBING PRESS.   | CASING PRESSURE | CALCULATED 24-HOUR RATE                                              | OIL—BBL.                | GAS—MCF. | WATER—BBL. | OIL GRAVITY-API (CORR.)            |               |
| 210                   | 400             | →                                                                    | 125                     | 480      | 13         | 40°                                |               |

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

vented

TEST WITNESSED BY

Roby Zumwalt

35. LIST OF ATTACHMENTS

Logs, Deviation Survey, Perforating Record w/treatment detail.

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

SIGNED

Sharon B. Hamilton

TITLE Landman

DATE

5/31/90

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

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.               | GEOLOGIC MARKERS           |             |                            |
|---------------------------------------|-------|--------|-------------------------------------------|----------------------------|-------------|----------------------------|
|                                       |       |        |                                           | NAME                       | MEAS. DEPTH | TOP<br>TRUE<br>VERT. DEPTH |
| San Andres Dolomite                   | 4620' | 4650'  | Very clean granular dolomite              | San Andres                 | 4540'       |                            |
| Lower 1st Bone Springs Carbonate      | 7355' | 7396'  | Fractured dolomite.                       | Delaware                   | 4810'       |                            |
| Lower 1st Bone Springs Sand           | 7676' | 7694'  | Very fine grained shaley sandstone        | Bone Springs               | 5570'       |                            |
| 2nd Bone Springs "Thornbush" Dolomite | 7931' | 7951'  | Very clean white dolomite                 | 1st Bone Springs Sand      | 7589'       |                            |
| 2nd Bone Springs Sand                 | 8580' | 8670'  |                                           | 1st Bone Springs Carbonate | 7840'       |                            |
| Upper 3rd Bone Spring "C"             | 8908' | 8942'  | Clean dense micro-crystalline dolomite    | 2nd Bone Springs Sand      | 8576'       |                            |
| Lower 3rd Bone Springs "E"            | 8949' | 8963'  | Clean micro-crystalline detrital dolomite | 2nd Bone Springs Carbonate | 8719'       |                            |
|                                       |       |        |                                           | 3rd Bone Springs "C"       | 8908'       |                            |

RECEIVED

JUN 1 10 59 AM '90

THORNBUSH FEDERAL #1

CARL...  
AREA...ERS

31. Perforation Record

8949-63' 1 SPF (0.38") Total holes: 14  
8908-16', 28-36' 2 SPF (0.38") Total holes: 32  
7931-51' 2 SPF (0.38") Total holes: 40  
7678-92' 3 SPF (0.33") Total holes: 15  
4636-38' 1 SPF (3/16 jet) Total holes: 3

32. Acid, Shot, Fracture, Cement, Squeeze, etc.

| <u>Depth Interval</u> | <u>Amount &amp; Kind of Material Used</u>                                                                                                                      |
|-----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 8949-63'              | 250 gal. 10% acetic acid w/1 gal. PENN 88, 2800 gals. MOD 202 acid, 4000 gals. 28% HCL NEFE acid. 200 sks. Class "H" w/0.05% Halad 9, 200 sks. Class "H" Neat. |
| 89-8-16', 28-36'      | 250 gals. 15% NEFE acid, 4000 gals. 28% NEFE acid.                                                                                                             |
| 7931-51'              | 250 gals. 15% NEFE acid, w/1/2 gal. PENN 88, 4000 gals. 28% NEFE SGA acid.                                                                                     |
| 7678-92'              | 250 gals. 10% acetic acid, 2000 gals. 7.5% MS acid.                                                                                                            |
| 4636-38'              | 200 gals. 15% NEFE acid, 3000 gals. 15% MOD 202 SGA acid.                                                                                                      |