

- DST No. 6A: 13,105'-13,334'. Misrun - Packers Failed.
- DST No. 6: 13,029'-13,334' (305' Pennsylvanian). Used 3000' N<sub>2</sub> Blanket Pressure to 1150 psi at surface. Tool open 85 minutes. Recovered 120' (0.9 barrel) Drilling Mud with no shows. 60 Minute Initial Shut In Bottom Hole Pressure 2222 psi. Flowing Bottom Hole Pressure 1625-1625 psi. 90 Minute Final Shut In Bottom Hole Pressure 1922 psi. Recovered mud titrated 1100 ppm Cl<sup>-</sup>. Pit mud 1200 ppm Cl<sup>-</sup>. Conclusive test.
- DST No. 7: 14,556'-14,606' (50' Silurian). Tool open 3 hours. Gas to Surface 40 minutes. Too small to measure. Recovered 20' (0.1 barrel) Heavy Oil and Gas Cut Mud (50% 45° API oil) + 1230' (5.2 barrels) Oil and Gas Cut Mud (1% oil). 60 Minute Initial Shut In Bottom Hole Pressure - 6227 psi. Flowing Bottom Hole Pressure 209-538 psi. 120 Minute Final Shut In Bottom Hole Pressure - 6383 psi. Recovered mud titrated 1500 ppm Cl<sup>-</sup>. Pit mud titrated 800 ppm Cl<sup>-</sup>. Conclusive test.
- DST No. 8: 14,609'-14,636' (27' Silurian). Tool open 2 hours. No gas to surface. Recovered 280' (1.4 barrels) Mud + 180' (0.9 barrel) Salt Water Cut Mud + 30' (0.15 barrel) Salt Water. 60 Minute Initial Shut In Bottom Hole Pressure - 6208 psi. Flowing Bottom Hole Pressure 72-228 psi. 180 Minute Final Shut In Bottom Hole Pressure - 5385 psi. Recovered water titrated 18,000 ppm Cl<sup>-</sup>. Pit mud titrated 800 ppm Cl<sup>-</sup>. Conclusive test.
- DST No. 9: 14,647'-14,700' (53' Silurian). Tool open 5 1/2 hours. No Gas to Surface. Recovered 130' (0.6 barrel) Mud Cut Salt Water + 12,200' (55 barrels) Salt Water. 60 Minute Initial Shut In Bottom Hole Pressure - 6208 psi. Flowing Bottom Hole Pressure 131-5507 psi. 160 Minute Final Shut In Bottom Hole Pressure - 6111 psi. Recovered Salt Water titrated 21,000 ppm Cl<sup>-</sup>. Pit mud titrated 800 ppm Cl<sup>-</sup>. Conclusive test.
- DST No. 10: Gross Perfs. 13,844'-13,406'. After flowing 15 hours, shut in at surface for 9 hours. Shut In Surface Pressure 4470 psi. Opened well and flowed 8 hours through 32/64" choke at rate 3.09 Million Cubic Feet Per Day. CACFP - 3.250 Million Cubic Feet Per Day. Gas-Liquid Ratio 25.4 Barrels/Million Cubic Feet. 2 Hour Initial Shut In Bottom Hole Pressure - 6850 psi. First flow period - Final Flowing Bottom Hole Pressure 2552 psi. 9 Hour Shut In Bottom Hole Pressure - 6424 psi. Second flow period - Final Flowing Bottom Hole Pressure 2362 psi. 6 1/2 Hour Final Shut In Bottom Hole Pressure - 6257 psi. Bottom Hole Temperature 186 degrees F. Recovered 280' (1.4 barrels) Condensate + 1' Water. Conclusive test.



1650' FNL & 1980' FNL, Sec. 25, T-20-S, R-34-E, Lea County, New Mexico

PENGUIN AREA WILDCAT

FEDERAL L-1

DRILLSTEM TESTS

- DST No. 1: 9585'-9705' (120' Bone Spring). Tool Open 2 hours 15 minutes. Recovered 240' (1.4 barrels) Drilling Mud + 180' (1.1 barrels) Very Slight Oil and Gas Cut Mud. 60 Minute Initial Shut In Bottom Hole Pressure - 1374 psi. Flowing Bottom Hole Pressure 116-233 psi. 150 Minute Final Shut In Bottom Hole Pressure - 1342 psi. Recovered mud titrated 2000 ppm  $\text{Cl}^-$ . Pit mud titrated 700 ppm  $\text{Cl}^-$ . Conclusive test (Johnston).
- DST No. 2: 9722'-9909' (187' Bone Spring). Tool open 2 hours 5 minutes with fair blow. Recovered 270' (2.0 barrels) Slight Gas Cut Mud + 90' (0.7 barrel) Oil and Gas Cut Mud. 60 Minute Initial Shut In Bottom Hole Pressure - 1289 psi. Flowing Bottom Hole Pressure 148-244 psi. 175 Minute Final Shut In Bottom Hole Pressure - 2548 psi. Recovered Mud titrated 1000 ppm  $\text{Cl}^-$ . Pit mud titrated 700 ppm  $\text{Cl}^-$ . Conclusive test (Johnston).
- DST No. 3: 9924'-10,162' (238' Bone Spring). Tool open 4 hours 5 minutes. Gas to Surface 5 minutes. Oil to Surface 1 hour 55 minutes. Last hour flowed 35 barrels oil plus 3 barrels water through 1/2" choke. Flowing Separator Pressure - 300 psi. Gravity 38.2 degrees API. Gas-Oil Ratio 975. Total recovery: 144 Barrels Oil + 13 Barrels Water. Recovered 248' (1.8 barrels) Salt Water below circulating sub. 60 Minute Initial Shut In Bottom Hole Pressure - 4617 psi. Flowing Bottom Hole Pressure 809-2697 psi. 120 Minute Final Shut In Bottom Hole Pressure - 4201 psi. Recovered water titrated 87,000 ppm  $\text{Cl}^-$ . Pit mud titrated 3700 ppm  $\text{Cl}^-$ . Conclusive test.
- DST No. 4: 12,470'-12,542' (72' Pennsylvanian). Tool open 1 hour 44 minutes. Used 3000'  $\text{N}_2$  Blanket. Recovered 2000' Gas + 90' (0.5 barrel) Heavy Gas Cut Mud. 60 Minute Initial Shut In Bottom Hole Pressure - 6775 psi. Flowing Bottom Hole Pressure 1311-1429 psi. 120 Minute Final Shut In Bottom Hole Pressure - 6224 psi. Conclusive test.
- DST No. 5: 12,930'-13,190' (260' Pennsylvanian-Morrow). Used 3000'  $\text{N}_2$  Blanket. Tool open 7 minutes. After 1 hour Initial Shut In reopened tool and packers failed. Recovered 750' Gas + 370' (6.6 barrels) Slight Gas Cut and Mud Cut Salt Water + 1120' (20 barrels) Salt Water + 560' (10 barrels) Salt Water Cut Mud + 240' (1.8 barrels) Drilling Mud. 1 Hour Initial Shut In Bottom Hole Pressure - 7299 psi. Flowing Bottom Hole Pressure - 2410-2605 psi. Final Shut In Bottom Hole Pressure failed. Conclusive test.



UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

SUBMIT IN DUPLICATE

(See other instructions on reverse side)

Form approved.  
Budget Bureau No. 42-R355.5.

5. LEASE DESIGNATION AND SERIAL NO.

NM-032-128

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

Federal "L"

9. WELL NO.

1

10. FIELD AND POOL, OR WILDCAT

Penguin Area Wildcat

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

Sec. 25, T-20-S, R-34-E,  
NMPM

12. COUNTY OR

PARISH

Lea

13. STATE

N. M.

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

Shell Oil Company

3. ADDRESS OF OPERATOR

P. O. Box 1353, Roswell, New Mexico

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

At surface 1550' FHL &amp; 1930' FWL, Sec. 25, T-20-S, R-34-E

At top prod. interval reported below

At total depth Same

14. PERMIT NO.

DATE ISSUED

15. DATE SPURRED

1-4-64

16. DATE T.D. REACHED

5-18-64

17. DATE COMPL. (Ready to prod.)

5-28-64

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

3724' dr

19. ELEV. CASINGHEAD

3702'

20. TOTAL DEPTH, MD &amp; TVD

14,700'

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

10,100'

22. IF MULTIPLE COMPL.,

HOW MANY\*

-

23. INTERVALS

DRILLED BY

ROTARY TOOLS

CABLE TOOLS

0'-14,700'

-

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

Bone Spring 10,064'-10,074'

25. WAS DIRECTIONAL

SURVEY MADE

No

26. TYPE ELECTRIC AND OTHER LOGS RUN

Gamma Ray Neutron; Sonic Log-Gamma Ray; Proximity-Microlog; Dual Induction-Laterlog

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 |
|-------------|------------------|----------------|-----------|------------------|---------------|
| 13 3/8"     | 43#              | 853'           | 17 1/2"   | 800 sz           | -             |
| 5 5/8"      | 40#              | 5490'          | 12 1/4"   | 1387 sz          | -             |
| 7"          | 29, 20, 32 & 35# | 14,550'        | 8 3/4"    | 1000 sz          | -             |

29. LINER RECORD

| SIZE | TOP (MD) | BOTTOM (MD) | SACKS CEMENT* | SCREEN (MD) | SIZE   | DEPTH SET (MD) | PACKER SET (MD) |
|------|----------|-------------|---------------|-------------|--------|----------------|-----------------|
| -    |          |             |               |             | 2 1/2" | 9815'          | 9850'           |
| -    |          |             |               |             |        |                |                 |

31. PERFORATION RECORD (Interval, size and number)

One jet shot per foot: 10,064'-10,074'

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

| DEPTH INTERVAL (MD) | AMOUNT AND KIND OF MATERIAL USED |
|---------------------|----------------------------------|
| 10,064-10,074'      | 400 gallons 15% MCA              |
|                     |                                  |
|                     |                                  |
|                     |                                  |

33.\*

PRODUCTION

| DATE FIRST PRODUCTION |                 | PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump) |                         |          |            | WELL STATUS (Producing or shut-in) |               |
|-----------------------|-----------------|----------------------------------------------------------------------|-------------------------|----------|------------|------------------------------------|---------------|
| May 28, 1964          |                 | Flowing                                                              |                         |          |            | Producing                          |               |
| DATE OF TEST          | HOURS TESTED    | CHOKE SIZE                                                           | PROD'N. FOR TEST PERIOD | OIL—BBL. | GAS—MCF.   | WATER—BBL.                         | GAS-OIL RATIO |
| May 28, 1964          | 24              | 17/64"                                                               | →                       | 203      | 200.7      | 23                                 | 905           |
| FLOW. TUBING PRESS.   | CASING PRESSURE | CALCULATED 24-HOUR RATE                                              | OIL—BBL.                | GAS—MCF. | WATER—BBL. | OIL GRAVITY-API (CORR.)            |               |
| 475                   | -               | →                                                                    |                         |          |            | 36.8°                              |               |

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

Sold

TEST WITNESSED BY

Frank Jones

35. LIST OF ATTACHMENTS

DET's

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

Original Signed By:

Acting District

Exploitation Engineer

SIGNED

V. L. KING

TITLE

V. L. King

DATE

June 4, 1964

\*(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 33.

**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:** "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:<br>SHOW ALL IMPORTANT ZONES OF POROSITY AND CONTENTS THEREOF: CORED INTERVALS; AND ALL DRILL-STEM TESTS, INCLUDING<br>DEPTH INTERVAL TESTED, CUSHION USED, TIME TOOL OPEN, FLOWING AND SHUT-IN PRESSURES, AND RECOVERIES |       |        |                             | 38. GEOLOGIC MARKERS |             |                  |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|--------|-----------------------------|----------------------|-------------|------------------|
| FORMATION                                                                                                                                                                                                                                             | TOP   | BOTTOM | DESCRIPTION, CONTENTS, ETC. | NAME                 | MEAS. DEPTH | TRUE VERT. DEPTH |
| Limestone                                                                                                                                                                                                                                             | 4502' | 4505'  | Lost 60 barrels fluid       | Base Red Beds        | 1717'       | (+2007')         |
|                                                                                                                                                                                                                                                       |       |        |                             | Yates                | 3015'       | (+2109')         |
|                                                                                                                                                                                                                                                       |       |        |                             | Queen                | 4071'       | (-2047')         |
|                                                                                                                                                                                                                                                       |       |        |                             | Bone Spring          | 8473'       | (-2749')         |
|                                                                                                                                                                                                                                                       |       |        |                             | 1st Bone Spring      |             |                  |
|                                                                                                                                                                                                                                                       |       |        |                             | Sand                 | 9583'       | (-2359')         |
|                                                                                                                                                                                                                                                       |       |        |                             | Wolfcamp             | 11,232'     | (-2508')         |
|                                                                                                                                                                                                                                                       |       |        |                             | Des Moines Ls.       | 12,286'     | (-252')          |
|                                                                                                                                                                                                                                                       |       |        |                             | Atoka                | 12,486'     | (-2702')         |
|                                                                                                                                                                                                                                                       |       |        |                             | Morrow Ls.           | 12,660'     | (-2936')         |
|                                                                                                                                                                                                                                                       |       |        |                             | Mias. Ls.            | 13,708'     | (-10,006')       |
|                                                                                                                                                                                                                                                       |       |        |                             | L.M.B.S.             | 14,352'     | (-10,028')       |
|                                                                                                                                                                                                                                                       |       |        |                             | Silurians            | 14,536'     | (-10,812')       |