

NEW MEXICO OIL CONSERVATION COMMISSION  
WELL COMPLETION OR RECOMPLETION REPORT AND LOG

RECEIVED

NOV 15 1978

5a. Indicate Type of Lease

State ☒ Fee ☐

5. State Oil &amp; Gas Lease No.

647-349, 647-351

7. Unit Agreement Name

Empire Abo Pressure  
Maintenance Project

8. Farm or Lease Name

Empire Abo Unit "H"

9. Well No.

312

10. Field and Pool, or Wildcat

Empire Abo

12. County

Eddy

|                        |   |
|------------------------|---|
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| DISTRIBUTION           |   |
| SANTA FE               | 1 |
| FILE                   | 1 |
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| LAND OFFICE            | 1 |
| OPERATOR               |   |

1a. TYPE OF WELL

OIL WELL ☒GAS WELL ☐DRY ☐

OTHER

O.C.C.

ARTESIA, OFFICE

b. TYPE OF COMPLETION

NEW WELL ☒WORK OVER ☐DEEPEN ☐PLUG BACK ☐DIFF. RESVR. ☐

OTHER

2. Name of Operator

Atlantic Richfield Company

3. Address of Operator

P. O. Box 1710, Hobbs, New Mexico 88240

4. Location of Well

UNIT LETTER 0 LOCATED 815 FEET FROM THE South LINE AND 2525 FEET FROM

THE East LINE OF SEC. 33 TWP. 17S RGE. 28E NMPM

15. Date Spudded

8-22-78

16. Date T.D. Reached

9-5-78

17. Date Compl. (Ready to Prod.)

10-26-78

18. Elevations (DF, RKB, RT, GR, etc.)

3664.9' GR

19. Elev. Casinghead

20. Total Depth

6405'

21. Plug back T.D.

22. If Multiple Compl., How Many

23. Intervals Drilled By

Rotary Tools

Cable Tools

0-6405'

24. Producing Interval(s), of this completion - Top, Bottom, Name

6058-6072' Abo Reef

25. Was Directional Survey Made

NO

26. Type Electric and Other Logs Run

GR-N, Sonic VDL, DLL-RXO, CNL-FDC,

27. Was Well Cored

NO

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

| CASING SIZE | WEIGHT LB./ FT. | DEPTH SET | HOLE SIZE | CEMENTING RECORD | AMOUNT PULLED |
|-------------|-----------------|-----------|-----------|------------------|---------------|
| 8-5/8"OD    | 24#K-55         | 778'      | 11"       | 520sx            |               |
| 5-1/2"OD    | 15.5#K-55       | 6405'     | 7-7/8"    | 1455sx           |               |
|             |                 |           |           |                  |               |
|             |                 |           |           |                  |               |

29. LINER RECORD

| SIZE | TOP | BOTTOM | SACKS CEMENT | SCREEN | SIZE     | DEPTH SET | PACKER SET |
|------|-----|--------|--------------|--------|----------|-----------|------------|
|      |     |        |              |        | 2-3/8"OD | 5928'     | 5928'      |
|      |     |        |              |        |          |           |            |

30. TUBING RECORD

31. Perforation Record (Interval, size and number)

6058-6072' (28-.375" holes)

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

| DEPTH INTERVAL | AMOUNT AND KIND MATERIAL USED |
|----------------|-------------------------------|
| 6261-6281'     | 150 gals 15% NEA 1000         |
|                | gal 10# Ca Cl wtr, 1000       |
|                | gals gelled LC, 1500 gals     |
|                | 60/40 15% acid/xylene flushed |
|                | w/18BLC. Cont'd on attached.  |

33. PRODUCTION

|                                  |                         |                                                                                |                                 |                   |                   |                                  |                          |                                         |  |
|----------------------------------|-------------------------|--------------------------------------------------------------------------------|---------------------------------|-------------------|-------------------|----------------------------------|--------------------------|-----------------------------------------|--|
| Date First Production<br>9-17-78 |                         | Production Method (Flowing, gas lift, pumping - Size and type pump)<br>Flowing |                                 |                   |                   |                                  |                          | Well Status (Prod. or Shut-in)<br>Prod. |  |
| Date of Test<br>10-29-78         | Hours Tested<br>24      | Choke Size<br>34/64"                                                           | Prod'n. For<br>Test Period<br>→ | Oil - Bbl.<br>243 | Gas - MCF<br>165  | Water - Bbl.<br>0                | Gas - Oil Ratio<br>679:1 |                                         |  |
| Flow Tubing Press.<br>110#       | Casing Pressure<br>Pkr. | Calculated 24-<br>Hour Rate<br>→                                               | Oil - Bbl.<br>243               | Gas - MCF<br>165  | Water - Bbl.<br>0 | Oil Gravity - API (Corr.)<br>44° |                          |                                         |  |

34. Disposition of Gas (Sold, used for fuel, vented, etc.)

Sold

Test Witnessed By

N. H. Truitt

35. List of Attachments

Logs as listed in Item 26 above, indination report.

36. I hereby certify that the information shown on both sides of this form is true and complete to the best of my knowledge and belief.

SIGNED

TITLE Dist. Drlg. Supt.

DATE 11-8-78

## INSTRUCTIONS

This form is to be filed with the appropriate District Office of the Commission not later than 20 days after the completion of any newly-drilled or deepened well. It shall be accompanied by a copy of all electrical and radio-activity logs run in the well and a summary of all special tests conducted, including drill stem tests. All depths reported shall be measured depths. In the case of directionally drilled wells, true vertical depths shall also be reported. For multiple completions, Items 30 through 34 shall be reported for each zone. The form is to be filed in quintuplicate except on state land, where six copies are required. See Rule 1105.

## INDICATE FORMATION TOPS IN CONFORMANCE WITH GEOGRAPHICAL SECTION OF STATE

## Southeastern New Mexico

## Northwestern New Mexico

|                          |                        |                             |                        |
|--------------------------|------------------------|-----------------------------|------------------------|
| T. Anhy _____            | T. Canyon _____        | T. Ojo Alamo _____          | T. Penn. "B" _____     |
| T. Salt _____            | T. Strawn _____        | T. Kirtland-Fruitland _____ | T. Penn. "C" _____     |
| B. Salt _____            | T. Atoka _____         | T. Pictured Cliffs _____    | T. Penn. "D" _____     |
| T. Yates _____           | T. Miss _____          | T. Cliff House _____        | T. Leadville _____     |
| T. 7 Rivers _____        | T. Devonian _____      | T. Menefee _____            | T. Madison _____       |
| T. Queen _____           | T. Silurian _____      | T. Point Lookout _____      | T. Elbert _____        |
| T. Grayburg _____        | T. Montoya _____       | T. Mancos _____             | T. McCracken _____     |
| T. San Andres _____      | T. Simpson _____       | T. Gallup _____             | T. Ignacio Qtzte _____ |
| T. Glorieta _____        | T. McKee _____         | Base Greenhorn _____        | T. Granite _____       |
| T. Paddock _____         | T. Ellenburger _____   | T. Dakota _____             | T. _____               |
| T. Blinbry _____         | T. Gr. Wash _____      | T. Morrison _____           | T. _____               |
| T. Tubb _____            | T. Granite _____       | T. Todilto _____            | T. _____               |
| T. Drinkard _____        | T. Delaware Sand _____ | T. Entrada _____            | T. _____               |
| T. Abo _____ 5830'       | T. Bone Springs _____  | T. Wingate _____            | T. _____               |
| T. Wolfcamp _____        | T. _____               | T. Chinle _____             | T. _____               |
| T. Penn. _____           | T. _____               | T. Permian _____            | T. _____               |
| T. Cisco (Bough C) _____ | T. _____               | T. Penn. "A" _____          | T. _____               |

## OIL OR GAS SANDS OR ZONES

No. 1, from \_\_\_\_\_ 6058' to \_\_\_\_\_ 6072' \_\_\_\_\_

No. 2, from \_\_\_\_\_ to \_\_\_\_\_

No. 3, from \_\_\_\_\_ to \_\_\_\_\_

No. 4, from \_\_\_\_\_ to \_\_\_\_\_

No. 5, from \_\_\_\_\_ to \_\_\_\_\_

No. 6, from \_\_\_\_\_ to \_\_\_\_\_

## IMPORTANT WATER SANDS

Include data on rate of water inflow and elevation to which water rose in hole.

No. 1, from \_\_\_\_\_ to \_\_\_\_\_ feet. None Encountered

No. 2, from \_\_\_\_\_ to \_\_\_\_\_ feet.

No. 3, from \_\_\_\_\_ to \_\_\_\_\_ feet.

No. 4, from \_\_\_\_\_ to \_\_\_\_\_ feet.

## FORMATION RECORD (Attach additional sheets if necessary)

| From | To   | Thickness<br>in Feet | Formation         | From | To | Thickness<br>in Feet | Formation |
|------|------|----------------------|-------------------|------|----|----------------------|-----------|
| 0    | 750  | 750                  | Surface & Red Bed |      |    |                      |           |
| 750  | 1285 | 535                  | Lime              |      |    |                      |           |
| 1285 | 1597 | 312                  | Anhydrite & Lime  |      |    |                      |           |
| 1597 | 6405 | 4808                 | Lime              |      |    |                      |           |
|      | TD   |                      |                   |      |    |                      |           |

Item 32.

| <u>Depth Interval</u> | <u>Amount &amp; Kind Material Used</u>                                                                                                           |
|-----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|
| 6261-6281'            | Squeezed w/150sx Cl C cmt<br>Cont'g 6/10 of 1% Hal-9, 75sx<br>Cl C cmt Contg 2% Ca Cl.                                                           |
| 6150-6170'            | Acidized w/150gals 15% HCL -<br>NE FE acid, 1000 gals 10#<br>Ca Cl Wtr, 1000 gals gelled<br>LC, 1500 gals 15% HCL-NE<br>FE acid flushed w/26BLC. |
| 6150-6170'            | Pmpd in 3500# ground<br>Lime Stone.                                                                                                              |
| 6221-6227'            | 150 gals 15% HCL-LSTNEA Acid.<br>Squeezed w/75sx Cl C cmt w/.6<br>of 1% Hal-9 followed by 50sx<br>Cl C cmt Contg 2% Ca Cl.                       |
| 6058-6072'            | 150 gals 15% HCL-LSTNE-FE<br>acid flushed w/26BLC.                                                                                               |

FIELD Empire Abo ✓ COUNTY Eddy OCC NUMBER \_\_\_\_\_

OPERATOR Atlantic Richfield Company ADDRESS Box 1710, Hobbs, New Mexico 88240

LEASE Empire Abo Unit H WELL NO. 312 SURVEY 815' FSL &

2525' FEL, Sec 33, T-17S, R-28E

RECORD OF INCLINATION

DEPTH (FEET)

ANGLE OF  
INCLINATION (DEGREES)

|      |       |
|------|-------|
| 480  | 3/4   |
| 965  | 1     |
| 1465 | 3/4   |
| 1955 | 3/4   |
| 2476 | 3/4   |
| 2963 | 1 1/2 |
| 3464 | 2     |
| 3998 | 2 1/4 |
| 4491 | 2 1/2 |
| 4743 | 2 3/4 |
| 4930 | 3 1/2 |
| 5187 | 3 3/4 |
| 5313 | 4 1/2 |
| 5534 | 5     |
| 5629 | 5     |
| 5724 | 5     |
| 5818 | 4     |
| 6405 | 4 3/4 |

Certification of personal knowledge inclination data:

I hereby certify that I have personally assembled the data and facts placed on this form, and such information given above is true and complete to the best of my knowledge.

HONDO DRILLING COMPANY

BY: \_\_\_\_\_

Walter Frederickson  
Vice President

Sworn and subscribed to before me the undersigned authority, on this the

27 day of September, 1978.

Margaret B. Anderson Notary Public in and for McKinley County, Nebraska  
Margaret B. Anderson