

NEW MEXICO OIL CONSERVATION COMMISSION  
WELL COMPLETION OR RECOMPLETION REPORT

JAN 28 1977

5a. Indicate Type of Lease

State ☒Fee ☐

5. State Oil &amp; Gas Lease No.

647-364

7. Unit Agreement Name

Empire Abo Pressure  
Maintenance Project

8. Farm or Lease Name

Empire Abo Unit "F"

9. Well No.

332

10. Field and Pool, or Wildcat

Empire Abo

11. County

Eddy

|                        |   |
|------------------------|---|
| NO. OF COPIES RECEIVED | 6 |
| DISTRIBUTION           |   |
| SANTA FE               | 1 |
| FILE                   | 1 |
| U.S.G.S.               | 2 |
| LAND OFFICE            | 1 |
| OPERATOR               |   |

1a. TYPE OF WELL

OIL WELL ☒GAS WELL ☐DRY ☐

OTHER

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 E LOCATED 2582 FEET FROM THE North LINE AND 150 FEET FROM

THE West LINE OF SEC. 34 TWP. 17S RGE. 28E

15. Date Spudded 12/18/76 16. Date T.D. Reached 1/4/77 17. Date Compl. (Ready to Prod.) 1/17/77 18. Elevations (DF, RKB, RT, GR, etc.) 3668.2' GR 19. Elev. Casinghead

20. Total Depth 6369' 21. Plug Back T.D. 6313' 22. If Multiple Compl., How Many 23. Intervals Drilled By Rotary Tools Cable Tools 0-6369'

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

6214-6237' Abo Reef

25. Was Directional Survey Made

No

26. Type Electric and Other Logs Run

GR-DLL w/caliper, GR-N, CNL-FDC &  
BHC Sonic logs, GR-TDT logs

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#            | 643'      | 11"       | 225 sx plus 2 yds Redi-mix |               |
| 5-1/2" OD   | 14 & 15.5#     | 6368'     | 7-7/8"    | 1235 sx                    |               |
|             |                |           |           |                            |               |
|             |                |           |           |                            |               |

29. LINER RECORD

| SIZE | TOP | BOTTOM | SACKS CEMENT | SCREEN | SIZE     | DEPTH SET | PACKER SET |
|------|-----|--------|--------------|--------|----------|-----------|------------|
|      |     |        |              |        | 2-3/8"OD | 6159'     | 6124'      |
|      |     |        |              |        |          |           |            |
|      |     |        |              |        |          |           |            |

31. Perforation Record (Interval, size and number)

6214-6237' (.45" = 47 holes)

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

| DEPTH INTERVAL | AMOUNT AND KIND MATERIAL USED |
|----------------|-------------------------------|
| 6214-6237'     | 4000 gals 15% HCL-LSTNE       |
|                |                               |
|                |                               |

33. PRODUCTION

|                       |                 |                                                                     |                         |            |              |                                |                 |
|-----------------------|-----------------|---------------------------------------------------------------------|-------------------------|------------|--------------|--------------------------------|-----------------|
| Date First Production |                 | Production Method (Flowing, gas lift, pumping - Size and type pump) |                         |            |              | Well Status (Prod. or Shut-in) |                 |
| 1/6/77                |                 | Flowing                                                             |                         |            |              | Prod.                          |                 |
| Date of Test          | Hours Tested    | Choke Size                                                          | Prod'n. For Test Period | Oil - Bbl. | Gas - MCF    | Water - Bbl.                   | Gas - Oil Ratio |
| 1/20/77               | 24              | 48/64"                                                              |                         | 535        | 295          | 7                              | 551:1           |
| Flow Tubing Press.    | Casing Pressure | Calculated 24-Hour Rate                                             | Oil - Bbl.              | Gas - MCF  | Water - Bbl. | Oil Gravity - API (Corr.)      |                 |
| 190#                  | Pkr             |                                                                     | 535                     | 295        | 7            | 42°                            |                 |

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, Inclination 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 1/25/77

This form is to be filled 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 one copy of all electrical and radio-activity logs run on 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 filled in quadruplicate 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. Any                  | T. Canyon        | T. Penn. "B"            | T. Penn. "B" |
| T. Salt                 | T. Strawn        | T. Penn. "C"            | T. Penn. "C" |
| B. Salt                 | T. Aloka         | T. Penn. "D"            | T. Penn. "D" |
| T. Yates                | T. Miss          | T. Leadville            | T. Leadville |
| T. 7 Rivers             | T. Devonian      | T. Madison              | T. Madison   |
| T. Queen                | T. Silurian      | T. Elbert               | T. Elbert    |
| T. Grayburg             | T. Montoya       | T. Mancos               | T. Mancos    |
| T. San Andres           | T. Simpson       | T. Gallup               | T. Gallup    |
| T. Glorieta             | T. McKee         | T. Base Greenhorn       | T. Granite   |
| T. Paddock              | T. Ellenburger   | T. Dakota               | T. Dakota    |
| T. Blinberry            | T. Gr. Wash      | T. Morrison             | T. Morrison  |
| T. Tubb                 | T. Granite       | T. Todillo              | T. Todillo   |
| T. Drinkard             | T. Delaware Sand | T. Entrada              | T. Entrada   |
| T. Abo                  | T. Bone Springs  | T. Wingate              | T. Wingate   |
| T. Wolfcamp             | T. Permian       | T. Permian              | T. Permian   |
| T. Cisco (Bough C)      | T. Penn. "A"     | T. Penn. "A"            | T. Penn. "A" |

OIL OR GAS SANDS OR ZONES

|             |       |    |       |
|-------------|-------|----|-------|
| No. 1, from | 5767' | to | 6268' |
| 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 | No information available | to |  |
| No. 2, from |                          | to |  |
| No. 3, from |                          | to |  |
| No. 4, from |                          | to |  |

FORMATION RECORD (Attach additional sheets if necessary)

| From | To   | Thickness in Feet | Formation          | From | To   | Thickness in Feet | Formation       |
|------|------|-------------------|--------------------|------|------|-------------------|-----------------|
| 0    | 130  | 130               | "Surface & Red Bed | 5700 | 5900 | 200               | Lime            |
| 130  | 450  | 320               | Redbed & Anhy      | 5900 | 6050 | 150               | Dolomite        |
| 450  | 900  | 450               | Anhy & salt        | 6050 | 6369 | 319               | Sand & Dolomite |
| 900  | 1000 | 100               | Anhy               |      |      |                   |                 |
| 1000 | 1250 | 250               | Anhy & Gyp         |      |      |                   |                 |
| 1250 | 1900 | 650               | Lime               |      |      |                   |                 |
| 1900 | 2000 | 100               | Sand & Shale       |      |      |                   |                 |
| 2000 | 2700 | 700               | Lime               |      |      |                   |                 |
| 2700 | 3900 | 1200              | Dolomite           |      |      |                   |                 |
| 3900 | 4150 | 250               | Sand & Lime        |      |      |                   |                 |
| 4150 | 4300 | 150               | Dolomite           |      |      |                   |                 |
| 4300 | 4400 | 100               | Sand & Lime        |      |      |                   |                 |
| 4400 | 4700 | 300               | Dolomite           |      |      |                   |                 |
| 4700 | 4750 | 50                | Lime               |      |      |                   |                 |
| 4750 | 5700 | 950               | Dolomite           |      |      |                   |                 |

only see hole flow.

Reached TD 6369' @ 3:15 PM 1/4/77. Ran GR-DLL w/caliper, GR-N, CNL-FDC & BHC Sonic logs. DST #1 Abo 5908-6013'. TO 7:30 AM 1/6/77 w/weak blow. No test, hole in DP. DST #2 Abo 5956-5981'. TO 4:25 AM 1/7/77. Flwd on 42/64" ck, 495 psi FP, 272 psi sep press, rate of 1.5 MMCFD w/no fluids. Closed tool @ 6:19 AM & rel pkrs. DST #3 Abo 6070-6095'. TO @ 9:10 AM 1/7/77 to closed chamber tester. CCT indicated flow rate of 562 BOPD w/GOR 424:1. Flwd to pit 80 mins w/1# surf press, no fluid to surf. Closed tool @ 10:50 AM. DST #4 5852-5877'. TO & blew DP dry. Flwd 1 hr ARO 1.1 MMCFD w/no fluid. Closed tool. DST #5 Abo 5990-6015'. TO @ 4:14 PM 1/7/77. Fluid to surf in 10 mins. Flwd to test sep 1 hr w/106# FP on 1" ck & 50# sep press. Flow rate 658 BOPD w/GOR 635:1. Closed tool @ 7:20 PM, RO 3000' oil, rel tools & POH. Ran 5 1/2"

FIELD Empire (Abo) COUNTY Eddy C NUMBER

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

LEASE Empire Abo Unit WELL NO. 332-F SURVEY 2582' FWL, 150' FWL, Section 34, T-17-S, R-28-E

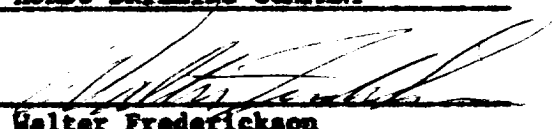
RECORD OF INCLINATION

| <u>DEPTH (FEET)</u> | <u>ANGLE OF<br/>INCLINATION (DEGREES)</u> |
|---------------------|-------------------------------------------|
| 485'                | 1/2                                       |
| 645'                | 3/4                                       |
| 1,125'              | 3/4                                       |
| 1,624'              | 1-1/4                                     |
| 2,070'              | 2-1/2                                     |
| 2,568'              | 2                                         |
| 3,040'              | 1-3/4                                     |
| 3,512'              | 1-1/2                                     |
| 3,982'              | 1-1/4                                     |
| 4,280'              | 1-3/4                                     |
| 4,687'              | 1                                         |
| 4,968'              | 2                                         |
| 5,282'              | 3/4                                       |
| 5,594'              | 1-1/4                                     |
| 6,066'              | 1-1/4                                     |
| 6,360'              | 1-1/2                                     |

Certification of personal knowledge Inclination Data:

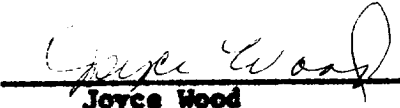
I hereby certify that I have personally assembled the data and facts placed on this form, and such information given above is true and complete to the best of my knowledge.

HONDO DRILLING COMPANY

BY: 

Walter Frederickson  
Vice President

Sworn and subscribed to before me the undersigned authority, on this the 17th  
day of January, 1977.

 Notary Public in and for Midland County, Texas.

Joyce Wood

ALL INFORMATION CONTAINED HEREIN IS UNCLASSIFIED DATE 08-11-2010 BY 60322 UCBAW

6. 2004. 12. 25. 2005. 12. 25.

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and Mr. Arthur J. Langer to call it.

...and late in the afternoon ...

REPORT NUMBER: 100-100000

100-443887-100

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