(Rev. [illegible])

# 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.

# 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. RESVR. ☐ Other

2. NAME OF OPERATOR
ARCO Oil and Gas Company, Division of Atlantic Richfield Company

3. ADDRESS OF OPERATOR
P.O. Box 5540, Denver, Colorado 80217

4. LOCATION OF WELL (*Report location clearly and in accordance with any State requirements*)*
At surface 790' FNL & 1120' FEL
At top prod. interval reported below
At total depth Approx the same

5. LEASE DESIGNATION AND SERIAL NO.: NM 0607
6. IF INDIAN, ALLOTTEE OR TRIBE NAME: ---
7. UNIT AGREEMENT NAME: ---
8. FARM OR LEASE NAME: Atlantic "C"
9. WELL NO.: 101
10. FIELD AND POOL, OR WILDCAT: ~~East Aztec~~ Basin Dakota
11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA: 6-30N-10W

API #30-045-25339

| 14. PERMIT NO. | DATE ISSUED | 12. COUNTY OR PARISH | 13. STATE |
|---|---|---|---|
| J. Sims | 3-10-82 | San Juan | New Mexico |

| 15. DATE SPUDDED | 16. DATE T.D. REACHED | 17. DATE COMPL. (*Ready to prod.*) | 18. ELEVATIONS (DF, RKB, RT, GR, ETC.)* | 19. ELEV. CASINGHEAD |
|---|---|---|---|---|
| 5-14-82 | 6-16-82 | 9-1-82 | SEE ATTACHED | SEE ATTACHED |

| 20. TOTAL DEPTH, MD & TVD | 21. PLUG, BACK T.D., MD & TVD | 22. IF MULTIPLE COMPL., HOW MANY* | 23. INTERVALS DRILLED BY | ROTARY TOOLS | CABLE TOOLS |
|---|---|---|---|---|---|
| 7462' | 7434' | 1 | → | 0-7462' | --- |

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)*
Dakota A,B,&C - 7121'-7287'
Dakota D - 7354'-7394'
Shut in by Cast Iron Bridge Plug @ 6620' pending approval to comingle w/Gallup prod.

25. WAS DIRECTIONAL SURVEY MADE: NO

26. TYPE ELECTRIC AND OTHER LOGS RUN: CNL DIL/SFL

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 |
|---|---|---|---|---|---|
| 10-3/4" | 40.5# | 705' | 14-3/4" | SEE ATTACHED | NONE |
| 4-1/2" | 11.6# | 7461' | 7-7/8" | SEE ATTACHED | NONE |

29. LINER RECORD

| SIZE | TOP (MD) | BOTTOM (MD) | SACKS CEMENT* | SCREEN (MD) |
|---|---|---|---|---|
| NONE | | | | |

30. TUBING RECORD

| SIZE | DEPTH SET (MD) | PACKER SET (MD) |
|---|---|---|
| 2-3/8" | 6267' | NONE |

31. PERFORATION RECORD (*Interval, size and number*)
SEE ATTACHED

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

| DEPTH INTERVAL (MD) | AMOUNT AND KIND OF MATERIAL USED |
|---|---|
| | SEE ATTACHED |

33.* PRODUCTION

| DATE FIRST PRODUCTION | PRODUCTION METHOD (*Flowing, gas lift, pumping—size and type of pump*) | WELL STATUS (*Producing or shut-in*) |
|---|---|---|
| DAKOTA 7-3-82 | swabbed back gas cut acid water WO app'rl to comingle w/Gallup | SI by CIBP @ 6620' |

| DATE OF TEST | HOURS TESTED | CHOKE SIZE | PROD'N. FOR TEST PERIOD | OIL—BBL. | GAS—MCF. | WATER—BBL. | GAS-OIL RATIO |
|---|---|---|---|---|---|---|---|
| TEST TO BE CONDUCTED AFTER FINISHING CLEAN-UP OPERATIONS WHEN (IF) PERMISSION | | | | | | | |

| FLOW. TUBING PRESS. | CASING PRESSURE | CALCULATED 24-HOUR RATE | OIL—BBL. | GAS—MCF. | WATER—BBL. | OIL GRAVITY-API (CORR.) |
|---|---|---|---|---|---|---|
| TO COMINGLE PRODUCTION IS ~~GIVEN~~ | | | | | | |

34. DISPOSITION OF GAS (*Sold, used for fuel, vented, etc.*)
Gas vented on cleanup

TEST WITNESSED BY

35. LIST OF ATTACHMENTS
2 of #26 above

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

SIGNED W A Walther Jr by W. A. Walther, Jr. TITLE Acting District Manager DATE 11-1-82

ACCEPTED FOR RECORD
NOV 8 1982
FARMINGTON

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

NMOCC

# 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 35.

**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:
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. |
|---|---|---|---|
| | | | NO CORES AND NO DSTS |

38. GEOLOGIC MARKERS

| NAME | TOP MEAS. DEPTH | TOP TRUE VERT. DEPTH |
|---|---|---|
| Ojo Alamo | 1795' | |
| Kirtland | 1836' | |
| Fruitland | 2432' | |
| Pictured Cliffs | 2761' | |
| Lewis | 2893' | |
| Cliffhouse | 4351' | |
| Pt Lookout | 4974' | |
| Upper Mancos | 5134' | |
| Gallup | 6275' | |
| Lower Mancos | 6538' | |
| Greenhorn | 7006' | |
| Graneros | 7064' | |
| Dakota | 7117' | |
| Morrison | 7396' | |

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GPO 680-378

ATLANTIC "C" 101 DAKOTA
NENE Section 6-30N-10W
San Juan County, New Mexico

18. Elevations(DF,RKB,GR, ETC)

DF 14'; RKB 6135'; RT 6134'; GR 6121'

19. Elev. Casinghead

Braiden Head Flange 6119½'; Inter Casing Spool Flange 6121½'

28. Casing Record (Cementing Record)

10-3/4" surface casing: cemented with 700 sacks Class "H" cement containing 2% $CaCl_2$. Total volume=798 cu.ft. Circulated 70 sacks (79.8 cu.ft.) to surface.

4-1/2" production casing: set stage cementing tools at 3016' RKB and 1707' RKB. Cemented with: First stage: lead slurry 1074 cu.ft., 600 sacks 50/50 Class "H" cement/pozzalan containing 6% gel + 6#/sx salt + 12½#/sx gilsonite + 2% $CaCl_2$. Tail slurry 181.5 cu.ft., 150 sacks Class "H" + 6#/sx salt + 2% $CaCl_2$. Top cement by Cement Bond Log = 4472'.
Second stage: 841.3 cu.ft., 470 sacks 50/50 Class "H" cement/pozzalan containing 6% gel + 6#/sx salt + ½ cu.ft./sx perlite + 2% $CaCl_2$. Top of cement at 3rd stage collar - circulated approx 70 sx (125.3 cu.ft.) to surface after opened stage collar @ 1707'.
Third stage: 1109.8 cu.ft., 620 sx 50/50 Class "H" cement/pozzalan containing 6% gel + 6#/sx salt + ½ cu.ft./sx perlite + 2% $CaCl_2$. Circulated approx 130 sx (232.7 cu.ft.) to surface.

31. Perforation Record (Interval, size and number)

Dakota "D" Sand
Shot 35 0.34" diameter perfs at 1 JSPF at (RKB) depths:

7354-7379
7384-7394

Dakota A, B, & C Sand
Shot 17 0.38" diameter perfs at (RKB) depths:

7121,7123
7213,16,19,21,23,26,29,68,70,72,74,78,81,84,7287

32. Acid, shot, fracture, cement squeeze, etc.

| | |
|---|---|
| 7354' - 7394' (RKB)<br>Dakota "D" Sand | acid: 1200 gals 15% HCL + additives<br>frac: 75,936 gals + additives + 6,048# 100 mesh sand and 162,372# 20/40 mesh sand |
| 7121' - 7287' (RKB)<br>Dakota A, B, & C Sands | acid: 1200 gals 15% HCL + additives<br>frac: 62,395 gals + additives + 7,500# 100 mesh sand and 63,008# 20/40 mesh sand |