

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT IN TRIPPLICATE
Other instructions on re-
verse side.

Form approved.
Budget Bureau No. 1004-0135
Expires August 31, 1985

CLASS DESIGNATION AND SERIAL NO.
14-20-603-734

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or plug back to a different reservoir.
Use "APPLICATION FOR PERMIT—" for such proposals.

1. OIL WELL ☐ GAS WELL ☐ OTHER ☐ Water Injection Well
2. NAME OF OPERATOR ARCO Oil and Gas Company, Division of
Atlantic Richfield Company
3. ADDRESS OF OPERATOR 707-17th Street
P.O. Box 5540, Denver, CO 80217

4. LOCATION OF WELL Report location clearly and in accordance with any State requirements.
See also space 17 below.
At surface

Unit "J", 1980' FSL & 1980' FEL, Sec. 29

No API # Assigned

14. PERMIT NO.

15. ELEVATIONS (Show whether OF, AT, OR, etc.)

5405.3' GL

Navajo

UNIT AGREEMENT NAME

Horseshoe Gallup Unit

5. FARM OR LEASE NAME

Horseshoe Gallup Unit

6. WELL NO.

22

10. FIELD AND POOL, OR WILDCAT

Horseshoe Gallup

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

Sec. 29-T31N-R16W

12. COUNTY OR PARISH 13. STATE

San Juan

New Mex.

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF ☐

FRACTURE TREAT ☐

SHOOT OR ACIDIZE ☐

REPAIR WELL ☐

(Other) ☐

PLUG OR ALTER CASING ☐

MULTIPLE COMPLETION ☐

ABANDON* ☒

CHANGE PLANS ☐

SUBSEQUENT REPORT OF:

WATER SHUT-OFF ☐

FRACTURE TREATMENT ☐

SHOOTING OR ACIDIZING ☐

(Other) ☐

REPAIRING WELL ☐

ALTERING CASING ☐

ABANDONMENT* ☐

(NOTE: Report results of multiple completion on Well
Completion or Recompletion Report and Log form.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)

HSGU Well #22 was originally completed 12-16-58 by the Atlantic Refining Company as an Upper and Lower Gallup producer. This well was converted to an injector on 11-05-60, and has been injecting water into both zones since that time. In June of 1984, a representative of the State of New-Mexico noticed that there was a considerable amount of pressure at the bradenhead of this well, and that the bradenhead flowed when open. After investigating this problem, it was determined that the cause was a hole in the casing at a depth of 832'. The State of New Mexico has required us to either fix the casing leak or plug and abandon the well (see letter attached). Economic analysis has shown that the contribution of this injector to the waterflood program does not warrant the required expenditure to repair the casing. For this reason we propose that the well be permanently plugged and abandoned.

Attached is a P&A Procedure to plug this well.

RECEIVED

AUG 31 1984

OIL CON. DIV.

DIST. 3

APPROVED

18. I hereby certify that the foregoing is true and correct

SIGNED

Stephen Rose
S. IC. ROSE

TITLE Dist. Prod. Sup't.

DATE

August 10, 1984

(This space for Federal or State office use)

APPROVED BY

CONDITIONS OF APPROVAL, IF ANY:

TITLE

DATE

AUG 29 1984
J. Stan McKee

AREA MANAGER

NMOCC

*See Instructions on Reverse Side

HORSESHOE GALLUP UNIT INJECTION WELL
PLUGGING AND ABANDONMENT PROCEDURE

1. MIRU.
2. Release packer and pull tubing and packer out of hole.
3. RIH with tbg open-ended to below the bottom perforation and pump sufficient cement to cover top perforation by 50' inside the casing.
4. POH w/tbg. GIH w/wireline and shoot enough holes in production string opposite 150' above top perforation to allow cement squeezing of zone. (This may be necessary since the original cement job may not have covered the Gallup formation by 50'). Squeeze sufficient cement to place a 100' plug outside the casing. Also, leave a 100' plug inside the casing. If unable to squeeze plug outside the casing, leave a 100' plug inside the casing.
5. POH w/tbg. GIH w/wireline and shoot enough holes in production casing opposite a point 50' below the surface casing shoe to allow squeezing cement.
6. RIH w/tbg open-ended and perform a braden-head squeeze of the perforations. Use sufficient cement for a 100' column behind the casing and a 100' plug inside the casing.
7. POH, cut casing one foot below ground level, place a 30' cement plug inside casing, weld on a blind flange, weld a dry hole marker on the blind flange, fill hole and move off.
8. Rehabilitate location and access road using stipulations supplied by the surface management agency.

NOTE: BOP's will not be needed in most cases because expected reservoir pressure of the Gallup in the area of abandonment is very low. (Estimated at less than 250 - 300 psi bottom-hole.) If pressure does exist on any of the subject wells, bleed it off, install BOP's if needed, and commence with above procedure.



United States Department of the Interior

BUREAU OF LAND MANAGEMENT

Caller Service 4104
Farmington, New Mexico 87499

IN REPLY REFER TO:
14-20-603-734 (016)

CERTIFIED

Arco Oil and Gas Company
P. O. Box 2197
Farmington, New Mexico 87401

12 JUL 1984

Gentlemen:

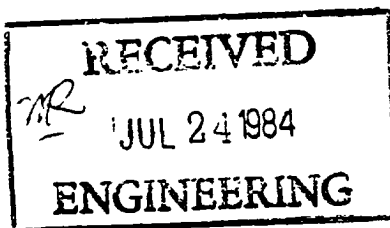
Reference is made to your well No. 22 Navajo, NW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 29, T. 31 N., R. 16 W., San Juan County, New Mexico, Navajo tribal lease number 14-20-603-734. The New Mexico Oil Conservation Division (NMOCD) reports that Mr. Ernie Busch of their office inspected the subject well on June 28, 1984 and detected the presence of large quantities of oil and water in the annulus between the 8 5/8" surface casing and the 5 1/2" production casing. This matter was discussed in a phone conversation between Ms. Connie Treet of your office and Mr. Errol Becher of this office on July 9, 1984. (TRIGG)

You are required to perform a further evaluation of the problem and notify us of your plans for remedial action, within 30 days of the date of this letter.

You are further advised that any instructions, orders or decisions issued by the Bureau of Land Management are subject to technical and procedural review pursuant to 43 CFR 3165.3 and appeal pursuant to 43 CFR 3165.4 and 43 CFR 4.700.

Sincerely yours,

Area Manager



RECEIVED

JUL 20 1984

FARMINGTON

BUREAU OF LAND MANAGEMENT
Caller Service 4104
Farmington, New Mexico 87499

Attachment to Notice of

Re: Permanent Abandonment

Intention to Abandon

Well: 22 Horseshoe Gallup Unit

CONDITIONS OF APPROVAL

1. Plugging operations authorized are subject to the attached "General Requirements for Permanent Abandonment of Wells on Federal Leases."
2. The Farmington office (telephone (505) 325-4572) is to be notified in sufficient time for a representative to witness all plugging operations.
3. Blowout prevention equipment is required.
4. In addition to normal filling of pits and cleanup of location, additional surface restoration work may be required, i.e. ripping of pad and/or access road, reseeding, etc. We have asked the Surface Management Agency for the surface restoration requirements for this well and we should be able to furnish you these requirements within 30 days. After plugging the well and before making final clean-up, you should contact this office unless you have already been advised as to what additional surface restoration work is required.
5. The following modifications to your plugging program are to be made (when applicable):

You are further advised that any instructions, orders or decisions issued by the Bureau of Land Management are subject to technical and procedural review pursuant to 43 CFR 3165.3 and appeal pursuant to 43 CFR 3165.4 and 43 CFR 4.700.

Office Hours: 7:45 A.M. to 4:30 P.M.

GENERAL REQUIREMENTS FOR
PERMANENT ABANDONMENT OF WELLS ON FEDERAL LEASES
FARMINGTON RESOURCE AREA

1. Secure prior approval before changing the approved plugging program.
2. Plugging equipment used shall have separate mixing and displacement pumps and a calibrated tank to assure proper displacement of plugs.
3. A proper tank or pit will be used to contain all fluids pumped from the well during plugging operations.
4. All cement plugs are to be placed through tubing (or drillpipe) and shall be a minimum of 15 sacks or 100 feet in length, whichever is greater.
5. Any cement plug placed when well is not full of fluid, or when well may be taking fluid, will be touched after cement has set to verify proper location.
6. Mud must be placed between plugs. Minimum consistency of plugging mud must be 9.2 lbs/gal. Brine is to be utilized for mixing mud where possible.
7. Within 30 days after plugging work is completed, file Subsequent Report of Abandonment, Form 3160-5 (formerly 9-331), in quintuplicate with Area Manager, Bureau of Land Management, Caller Service 4104, Farmington, New Mexico 87499. The report should give in detail the manner in which the plugging work was carried out, the extent (by depths) of cement plugs placed, and the size and location (by depths) of casing left in the well. Show date well was plugged.
8. All permanently abandoned wells are to be marked with a permanent monument, on which has been stenciled or beaded the well name, well number, and well location by quarter-quarter, section, township and range. The monument is to be of steel pipe, not less than four inches in diameter, cemented permanently in the ground, and extending four feet above general ground level. The top should be closed with a screw cap, welding, or a cement plug.
9. After plugging work is completed:
 - a. Fill all pits, rat hole and cellar.
 - b. Clean well location of all equipment, concrete bases, pipe, junk and
 - c. Cut or remove tie downs.
 - d. If last well on lease, and no additional drilling is contemplated, fill tank battery pits, remove battery equipment, and clean and level battery location.
 - e. Accomplish surface restoration as specified by the surface management agency or land owner.

All above are minimum requirements. The Subsequent Report of Abandonment will not be approved and the period of liability under the bond of record terminated until the lease is inspected and surface work approved.

Please advise this office when the well location is ready for final inspection.

You are further advised that any instructions, orders or decisions issued by the Bureau of Land Management are subject to technical and procedural review pursuant to 43 CFR 3165.3 and appeal pursuant to 43 CFR 3165.4 and 43 CFR 4.700.