

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
Budget Bureau No. 1004-0135
Expires: March 31, 1993

SUNDRY NOTICES AND REPORTS ON WELLS

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

1. Type of Well
☐ Oil Well ☒ Gas Well ☐ Other

2. Name of Operator Attention:
AMOCO PRODUCTION COMPANY MIKE CURRY

3. Address and Telephone No.
P.O. Box 800, Denver, Colorado 80201 (303) 830-4075

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
1840FSL 1690FWL Sec. 20 T 30N R 8W

5. Lease Designation and Serial No.

SF-078578A

6. If Indian, Allottee or Tribe Name

7. If Unit or CA, Agreement Designation

8. Well Name and No.

HOWELL #1

9. API Well No.

3004509326

10. Field and Pool, or Exploratory Area

MESA VERDE

11. County or Parish, State

SAN JUAN NM

12. CHECK APPROPRIATE BOX(S) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION	
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Abandonment	<input type="checkbox"/> Change of Plans
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Recompletion	<input type="checkbox"/> New Construction
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Plugging Back	<input type="checkbox"/> Non-Routine Fracturing
	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> Water Shut-Off
	<input type="checkbox"/> Altering Casing	<input type="checkbox"/> Conversion to Injection
	<input checked="" type="checkbox"/> Other REPAIR	<input type="checkbox"/> Dispose Water

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

13. 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.)*

SEE ATTACHED PROCEDURES.

RECEIVED
SEP 29 1994
OIL CON. DIV.
DIST. 3

070 EXPLORATION, NM
04 SEP 19 PM 2:11

RECEIVED
SEP 29 1994

IF YOU HAVE ANY QUESTIONS PLEASE CONTACT ROBERT DEHERRERA AT (303) 830-4946.

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

Signed Mike Curry Title BUSINESS ANALYST Date 09-16-1994

(This space for Federal or State office use)

Approved by _____ Title _____
Conditions of approval, if any: _____

APPROVED
SEP 22 1994
DISTRICT MANAGER

Workover Procedure
Howell #1
Sec.20-T30N-R08W
San Juan County, NM

1. Contact Federal or State agency prior to starting repair work.
2. Catch gas and/or water sample off of bradenhead and casing, and have analyzed.
3. Install and/or test anchors.
4. MIRUSU. Check and record tubing, casing and bradenhead pressures.
5. Blow well down, kill well if necessary with 2% KCL.
6. Nipple down well head, nipple up and pressure test BOP's.
7. Trip in the hole and tag PBTD, check for fill, trip and tally out of hole with tubing checking condition of tubing.
8. Trip in the hole with bit and scraper for the intermediate casing and trip in to the top of the liner. Trip out of the hole with bit and scraper. Trip in hole with second bit and scraper and run from the top of the liner to the top of the perforations. A seating nipple and standing valve may be run in order to pressure test the tubing.
9. Trip in the hole with RBP and PKR. Set RBP 50-100 ft. above perforations. Trip out of hole one joint and set PKR and pressure test RBP to 1500 psi. Release PKR, spot sand on RBP and pressure test csg to 1000 psi. If no leak is found, trip out of hole with PKR and skip to step 11.
10. Trip out of hole isolating leak in liner, if any. If a liner leak is found, establish injection rate and check for circulation around liner top. Also, determine if there is a leak above the top of the liner. Trip out of hole with PKR.
11. Determine from well file and history, the interval a CBL needs to be run between the RBP and the surface. If a CBL is needed, run CBL over the interval necessary under 1000 psi and report results to Denver. Different size CBL tools may be required in the liner versus the intermediate casing.
12. If there are no casing leaks, skip to step 14.
13. If there is a leak in the liner and a leak above the top of the liner, trip in hole with a RBP that fits the liner and a PKR that fits the intermediate casing. Set RBP 30-60' below the top of the liner. Release PKR and trip out of hole isolating leak in the intermediate casing.
14. Based on the location of the leak, if any, and the results of the CBL, perforate casing if necessary with 4 JSPF and circulate dye if possible to determine cement volume. Depending on the depth of the hole and circulating pressure, a PKR or a cement retainer may be needed.

15. Mix and pump sufficient cement (class B or equivalent with two hour setting time) to circulate to surface, if circulation to surface is possible. Shut bradenhead valve and attempt to obtain a squeeze pressure and WOC.
16. Trip out of hole. Trip in the hole with bit and scraper and drill out cement and pressure test casing. Re-squeeze leaks if casing fails pressure test.
17. If cement is not circulated to the surface, it may be necessary to run another CBL (and/or temperature survey 8-10 hours after cementing) and repeat steps 14 thru 16.
18. Trip in the hole with retrieving head for RBP, circulate sand off of RBP and trip out of hole with plug.
19. If there is a leak in the liner top, trip in hole with a PKR. If there is no leak in the liner top, skip to step 22.
20. Mix and pump sufficient cement (class B or equivalent with two hour setting time) to squeeze liner top. Attempt to obtain a squeeze pressure and WOC.
21. Trip in the hole with bit and scraper and drill out cement and pressure test casing. Re-squeeze leak if liner top fails pressure test.
22. If there is a second RBP in the liner, trip in the hole with a retrieving head, circulate sand off of the RBP and trip out of hole with the plug.
23. If there is a leak in the liner or squeeze work is required based on the CBL, perforate casing, if necessary with 4 JSPF. Trip in hole with a cement retainer and set above the leak or perforations.
24. Mix and pump sufficient cement (class B or equivalent with two hour setting time) and attempt to obtain a squeeze pressure and WOC.
25. Trip in the hole with bit and scraper and drill out cement and pressure test casing. Re-squeeze leaks if casing fails pressure test.
26. Trip in the hole with retrieving head for RBP set in the liner, circulate sand off of RBP with 2% KCL and trip out of hole with plug.
27. Trip in hole with a sawtooth collar and/or bailer and clean out to PBTD and trip out of hole.
28. Trip in the hole with the production string (1/2 mule shoe on bottom and a seating nipple one joint off bottom), land tubing to original depth. Nipple down BOP's, nipple up well head.
29. Swab well in and put well on production.
30. Rig down move off service unit.
31. CLEAN OUT WITH NITROGEN FOAM IF REQUIRED.