

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 <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other		5. Lease Designation and Serial No. <b>SF-078019</b>
2. Name of Operator <b>Amoco Production Company</b>		6. If Indian, Allottee or Tribe Name
Attention: <b>Pat Archuleta</b>		7. If Unit or CA, Agreement Designation
3. Address and Telephone No. <b>P.O. Box 800, Denver, Colorado 80201</b>		8. Well Name and No. <b>E. H. Pipkin #5</b>
(303) 830-5217		9. API Well No. <b>3004507053</b>
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) <b>1155'FSL 1460FEL Sec. 36 T 28N R 11W Unit 08</b>		10. Field and Pool, or Exploratory Area <b>Basin Dakota</b>
		11. County or Parish, State <b>San Juan New Mexico</b>

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 <b>Repair</b>	<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.)\*

Amoco Production Company requests permission to perform a bradenhead repair on this well per attached procedures.

RECEIVED  
JUN 17 1996  
001 602L DIZ  
LAC. 8

RECEIVED  
BUT  
JUN 11 1996 11:10:48  
070 HALLAMINGTON, NM

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

Signed

*Pat Archuleta*

Title

Clerk

Date

06-10-1996

(This space for Federal or State office use)

**APPROVED**

Approved by

Title

JUN 11 1996

Conditions of approval, if any:

NMOCD

DISTRICT MANAGER

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false statement or representation as to any matter within its jurisdiction.

E.H. Pipkin #5

Orig. Comp. 5/60

Elevations: GL = 5679', KB = 5691'

TD = 6244', PBTD = 6215'

Page 2 of 3

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 on location.
4. MIRUSU. Check and record tubing, casing and bradenhead pressures.
5. Set composite plug in 2 7/8" casing. Blow down casing.
6. ND wellhead. NU and pressure test BOP's. Load casing with water. Pressure test casing to 500 psig. If leak is found, locate with retrievable plug. Note, casing leak may be present as casing pressure found during 6/6/96 survey. If leak is found, depending upon depth, may need to repair prior to implementing bradenhead repair.
7. RU HES. Run CBL to locate a cement top between 2 7/8" and 5 1/2" casing. Uncertain whether cement top will be found. Since we don't have a cement top outside of the 5 1/2" casing we will isolate the Ojo and the surface sands at a minimum. To accomplish this we will perforate 50' below the bottom of the Ojo located at ~~595'~~ <sup>238'</sup> and attempt to establish circulation. If successful in establishing circulation we'll proceed with the bradenhead repair as normal. If not, we'll block squeeze at the Ojo and then perforate just below the bottom of the surface casing shoe located at 332' and attempt to establish circulation. We'll design the cement squeeze for the Ojo to assure that it is covered. Based on the ability to circulate, we'll cement squeeze at this depth. This will isolate the Ojo from anything below and isolate the surface sands from the Ojo and anything below. Note that the theoretical cement top would be surface (calculated cement height = 3078', assumes 0% loss, versus the DV tool at 2688'). However, there is no record of cement being circulated to surface even though good circulation throughout the job was reported. The bradenhead repair may also change depending upon whether a cement top is found between the 2 7/8" and 5 1/2" casing strings. Coordinate bradenhead repair effort with the regulatory agency.
8. PU and TIH w/ 1 1/4" drill string. Drill out cement. Pressure test squeeze to 500 psig. DO composite plug.
9. RU Weatherford. TIH w/ jet shot and shoot off orange peeled mud anchor as deep as possible. Depth data will be available from B&R wireline tag conducted prior to repair. If unsuccessful in shooting off mud anchor, contact Denver to determine whether additional work should be attempted.
10. If successful in shooting off mud anchor, TIH w/ 1 1/4" drill string. Tag for and clean out fill across perforated interval. TOOH x LD 1 1/4" drill string.
11. Set retrievable plug in tubing. ND BOP. NU wellhead. RDMOSU.
12. MIRU coiled tubing unit. Run 1 1/4" coiled tubing production string. Land tubing at 6160-70'.
13. RDMO coiled tubing unit.
14. Flow well to clean-up. Turn well over to production.
15. Take final bradenhead pressures and log date/pressures in CRWS.

***If problems are encountered, please contact:***

***Steve Webb @ (W) (303) 830-4206 or (H) (303) 488-9824***

**E.H. Pipkin #5**

**Orig. Comp. 5/60**

**Elevations: GL = 5679', KB = 5691'**

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**Page 3 of 3**

**Brief description of work:** The EH Pipkin #5 was initially completed 5/60. In 8/65 2 7/8" tubing was cemented in the hole above a permanent packer. This procedure followed an apparently successful cement squeeze of casing leaks in the Mesaverde interval. A bradenhead problem has been identified on this well making the bradenhead repair difficult and somewhat risky.

Due to the slimhole design of this well and two casing strings present across the majority of the wellbore we are unable to run a CBL to identify the cement top outside of the 4 1/2" casing. We also have 230 psig pressure between the 2 7/8" casing and the 5 1/2" casing indicating 2 7/8" a problem with the casing integrity. The integrity problem could be a leak in the 2 7/8" casing, a seal leak in the casing head, or more probably a channel in the 2 7/8" x 4 1/2" annulus. The 8 5/8" surface casing is set at 332' and the bottom of the Ojo is at 545'. The 4 1/2" was cemented near surface through a DV tool located at 2688'. The stage volume was 400 sx Class A with 6% gel. The theoretical cement height for this slurry is 3078'. We know that this is incorrect as there was no report of cement being circulated to surface (although good circulation was reported) and there is bradenhead pressure and water flow from this annular space. Given this data, we plan to run a CBL inside the 2 7/8" to see if we can locate a cement top even though cement was reported as circulated to surface. We then plan to perforate through the 2 7/8" and 4 1/2" casing strings at approximately 595'. If successful in establishing circulation to surface, will create a seal between the Ojo and surface sands eliminating our bradenhead problem. If unable to circulate, we will design our cement squeeze to cover the Ojo thereby isolating our problem. If necessary, we'll also perforate and cement squeeze or circulate to surface from a point just below the surface casing shoe.

The real risk with this procedure involves the drilling out of the cement and composite plug after the cement squeeze. Our history has shown difficulties in cleaning out with the small diameter pipe. The risk is in twisting the pipe in two creating a very difficult fishing job.

In addition to conducting the bradenhead repair, this procedure is also designed to run a small diameter tubing string to help facilitate the removal of liquids from the wellbore. Analysis of the well's performance indicates that it is probably being suppressed by liquid loading. There's a steep drop in the well's performance starting around 1990 that's probably indicative the well's inability to continue removing fluids even through intermittent flow operations. It is felt that a small diameter velocity string will enable us to facilitate the liquid removal and improve production from the well.

This tubing installation will also be difficult and risky. A 1' perf sub and 5' orange peeled mud anchor was run immediately below the permanent packer. The mud anchor is probably filled with cement and sand. In fact, the 1' perf sub is may be partially plugged restricting the well's ability to produce. We plan to attempt removal of the orange peeled mud anchor by shooting it off as low as possible. If successful in shooting it off, we will tag for and clean out any fill and then run the 1 1/4" coiled tubing. It's important to note that we've been unable to tag for fill since the 2 7/8" tubing was cemented in place due to the downhole tubular configuration. If we are not successful in shooting the mud anchor off, our plan is to analyze our current spending and then evaluate whether we want to attempt to drill out the end of the mud anchor. This technique would also be risky as the potential for the mill to get "caught" and cause the drill string to be twisted in two is highly probable.

We've assessed the techniques that we are aware of to accomplish both the bradenhead repair and the tubing installation and feel that the best and lowest risk techniques are those outlined in the procedure.

PAN AMERICAN PETROLEUM CORPORATION  
 E. H. PIPKIN NO. 5  
 1155 ENL & 1460 FEL, SEC. 36, T28N, R11W  
 BASIN DAKOTA POOL  
 SAN JUAN CO., NEW MEXICO

