

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB NO. 1004-0135
Expires: November 30, 2000

SUNDRY NOTICES AND REPORTS ON WELLS
Do not use this form for proposals to drill or to re-enter an abandoned well. Use form 3160-3 (APD) for such proposals.

SUBMIT IN TRIPLICATE - Other instructions on reverse side.

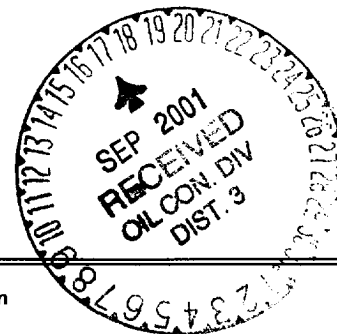
1. Type of Well <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other		5. Lease Serial No. NMSF - 078387-A
2. Name of Operator AMOCO PRODUCTION COMPANY		6. If Indian, Allottee or Tribe Name
3a. Address P.O. BOX 3092 HOUSTON, TX 77253		7. If Unit or CA/Agreement, Name and/or No. LS
3b. Phone No. (include area code) Ph: 281.366.4491 Fx: 281.366.0700		8. Well Name and No. KERNAGHAN 1
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) Sec 33 T31N R8W Mer SESW 990FSL 1650FWL		9. API Well No. 30-045-10042
		10. Field and Pool, or Exploratory BLANCO MESAVERDE
		11. County or Parish, and State SAN JUAN COUNTY, NM

12. CHECK APPROPRIATE BOX(ES) 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"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input checked="" type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input type="checkbox"/> Other
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

Amoco Production Company respectfully request permission to perform a casing leak repair and Menefee/Cliffhouse payadd as per the attached procedure and wellbore schematic.



14. I hereby certify that the foregoing is true and correct. Electronic Submission #6054 verified by the BLM Well Information System For AMOCO PRODUCTION COMPANY, sent to the Farmington Committed to AFMSS for processing by Lucy Bee on 08/06/2001 ()	
Name (Printed/Typed) MARY CORLEY	Title AUTHORIZED REPRESENTATIVE
Signature	Date 07/31/2001

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By <u>/s/ Jim Lovato</u>	Title	Date
Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.		Office

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

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NMOCD

Kernaghan B #1 Workover Procedure

Procedure:

1. Check anchors. MIRU workover rig.
2. Check and record tubing, casing, and bradenhead pressures.
3. Blow down wellhead. Kill with 2% KCL water ONLY if necessary.
4. Nipple down WH. NU BOPs.
5. Tag for fill, tally OH, & visually inspect 2-3/8" production tubing currently set at 5534'.
6. RU WL unit. Run GR log across MV interval from 4800' - 5550'.
7. RIH with tubing-set CIBP. Set CIBP at 5075'. Load the hole with 2% KCL. POOH.
8. RU WL unit. Run CBL across the Cliffhouse interval from 4800' - 5075'.
9. Perforate squeeze holes at 4980' (subject to change based on CBL results).
10. Set Cement retainer at 4950'. Sting into retainer and perform squeeze job as per Schlumberger design. Attempt to lift into the 7" casing.
11. TIH with tubing and mill. Drill out cement and cement retainer to 4990'. Pressure test squeeze holes to 500 psi.
12. RU WL unit. Run CBL from 4000' - 5075' to locate the cement top.
13. Backoff the 4-1/2" casing at the top of the cement. TOH and LD 4-1/2" casing.
Note: Remaining 4-1/2" casing will be left in the well as a production liner.
14. TIH with tubing & 7" packer. Set packer 50' above 4-1/2" liner top & pressure test 4- 1/2" liner top to 500 psi to verify the liner lap has pressure integrity. Unseat packer & TOH.
15. Set 7" CIBP 50' above 4-1/2" liner top. TIH with 7" packer and locate casing leak in the 7" casing
16. Squeeze 7" casing leak as per Schlumberger design.
17. TIH with tubing and 7" mill. Drill out cement and pressure test squeeze to 500 psi. Drill out 7" CIBP. TOH.
18. TIH with tubing and 4-1/2" mill. Drill out 4-1/2" CIBP at 5075'.
19. RU WL unit. RIH and set 4-1/2" CIBP above the Point Lookout at depth to be determined after analyzing GR log results.
20. Perforate Menefee formation with 3-1/8" casing guns with Schlumberger's Prospector, select-fire charge.
Menefee Perforations, 2 spf
To be determined after logging
21. RIH with 3-1/2" x 2-3/8" tapered frac string and a 4-1/2" packer. Set packer at 5175'.
22. Spearhead 500 gal 15% HCL, establish injection rate, and proceed with 70Q N2 foam fracture stimulation according to Schlumberger design.
23. Flowback frac immediately.
24. Release packer and TOH with packer and frac string.
25. RU WL unit. RIH and set 4-1/2" CIBP at 5090'.
26. Perforate unstimulated Cliffhouse formation (4990' - 5060') with 3-1/8" casing guns with Schlumberger's Prospector, select-fire charge.
Cliffhouse Perforations, 2 spf
To be determined after logging
27. RIH with 3-1/2" x 2-3/8" tapered frac string and a 4-1/2" packer. Set packer at depth to be determined after logging.

28. Spearhead 500 gal 15% HCL, establish injection rate, and proceed with 70Q N2 foam fracture stimulation according to Schlumberger design.
29. Flowback frac immediately.
30. Release packer at TOH with packer and frac string.
31. TIH with tubing and mill. Drill out 4-1/2" CIBP's and cleanout fill to the top of tubing fish at 5555'. Blow well dry.
32. Rabbit tubing and RIH with 2-3/8" production tubing. Land 2-3/8" production tubing at 5475'.
33. ND BOP's. NU WH. Test well for air. Return well to production.

Kernaghan B #1

Sec 33, T31N, R8W

API#: 10-045-10042

History:

Completed in 7/53
Original open-hole completion
7" csg leak sqz'd in 1965
Cased & frac'd in 8/65

2 Sqz holes @ 2175'
- Sqz'd w/ 180 sxs cmt

est. TOC @ surface (circ)

9-5/8" 25.4# @ 173'
125 sxs cmt (circulated)

Est. TOC @ 2525' (temp surv)

7" 20# @ J55 4970'
500 sxs cmt

2 Sqz holes @ 5118'
- Sqz'd w/ 30 sxs cmt

Mesaverde Perfs

CH: 5116' - 5152' (48 shots) 30,000# sand
PL: 5490' - 5587' (64 shots) 50,000# sand

Tubing: 2-3/8" @ 5534'

Est. TOC @ 5125' (temp surv)

Top of fish @ 5555'

Original Openhole completion:

5126' - 5636', 1150 qts SNG

PBTD: 5600'

4-1/2", 10.5#, J55 @ 5600'
180 sxs cmt

NOTES:

1) Detailed perforations:

CH: 5116' - 5120' (4 spf), 5130' - 5134' (4 spf), 5144' - 5152' (2 spf)
PL: 5490' - 5498' (2 spf), 5530' - 5534' (4 spf), 5554' - 5558' (4 spf),
5579' - 5587' (2 spf)

2) Fish details:

9' cutoff jt of 2-3/8" tbg
28' jt of 2-3/8" tbg
3-7/8" bit and bit sub

updated: 1/11/01 jad