

Form 3160-5
(April 2004)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

Operator Copy

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 ☒ Oil Well ☐ Gas Well ☐ Other		6. If Indian, Allottee or Tribe Name
2. Name of Operator Lynx Petroleum Consultants, Inc.		7. If Unit or CA, Agreement, Name and/or No.
3a. Address P.O. Box 1708, Hobbs, NM 88241		8. Well Name and No. Jones Federal "B" No. 3
3b. Phone No. (include area code) 505-392-6950		9. API Well No. 30-015-10394
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) At surface: 660' FSL & 660' FEL Section 23, T19S, R31E At proposed prod. Zone: 460' FSL & 660' FEL Section 23, T19S, R31E		10. Field and Pool, or Exploratory Area Lusk
		11. County or Parish, State Eddy County, NM

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

TYPE OF SUBMISSION	TYPE OF ACTION			
☒ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
☐ Subsequent Report	☐ After Casing	☐ Fracture Treat	☐ Reclamation	☐ Well Integrity
☐ Final Abandonment Notice	☐ Casing Repair	☐ New Construction	☐ Recomplete - Sidetrack	☒ Other <u>MODIFY</u>
	☐ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	<u>8 5/8" PRESSURE TEST</u>
	☐ Convert to Injection	☐ Plug Back	☐ 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 recompletes 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 recompletion in a new interval, a Form 3160-5 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.)

Propose to pressure test 8-5/8" casing to 1000 psi in lieu of the 1500 psi specified in original Interv dated 9/22/09.

Justification for request is attached.

Verbal approval given previously		ACCEPTED FOR RECORD	
14. I hereby certify that the foregoing is true and correct Name (Printed/Typed) Debbie McKelvey		Title AGENT	APR 7 2010
Signature <i>Debbie McKelvey</i>		Date 12/15/09	Is/ Chris Walls
BUREAU OF LAND MANAGEMENT CARLSBAD FIELD OFFICE			
THIS SPACE FOR FEDERAL OR STATE OFFICE USE			
Approved by		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.			<i>RP</i> 5/14/10
		Office	

Dec-15-09 02:00P Lynx Petroleum

505 392-7886

P.01

**Jones Federal 'B' No. 3
8-5/8" casing pressure test sundry info**

Propose to pressure test 8-5/8" casing to 1000 psi in lieu of the 1500 psi :

Justification: Formation fracture gradient at 8-5/8" casing shoe is 13.0 ppg EMW.

Surface test pressure at shoe is:

$$P_s = (F_g - SF - \phi_m) \times .052 \times D_o \text{ where}$$

P_s = maximum surface pressure with mud of density ϕ_m in the wellbore, psig

F_g = formation fracture gradient, lb./gal. EMW (equivalent mud weight)

SF = safety factor lb./gal.

ϕ_m = mud density lb./gal.

D_o = true vertical depth of casing, ft.

$$P_s = (13 - 0.5 - 8.33) \times .052 \times 3949 = 856 \text{ psig}$$

All holes in the immediate vicinity (including this one) were drilled using either cut brine (8.6-9.3 ppg) or, in some cases, saturated brine (10.0 ppg). Drilling ahead with 10.0 ppg at TD will yield a 1.2 ppg "kick tolerance" with 8-5/8" shoe the limiting surface pressure.