N.M. Oil Cons. DIV-Dist. 2
1301 W. Grand Avenue
Artesia, NM 88210

Form 3160-5
(April 2004)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB No. 1004-0137
Expires: March 31, 2007

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.

5. Lease Serial No.
NM 0374057A

6. If Indian, Allottee or Tribe Name
NA

7. If Unit or CA/Agreement, Name and/or No.
Catclaw Draw Unit (4876)

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

8. Well Name and No.
Catclaw Draw Unit #19

2. Name of Operator
HEC Petroleum, Inc. (9812)

9. API Well No.
30-015-33882

3a. Address
500 W. Illinois Midland, Texas 79701

3b. Phone No. *(include area code)*
432 498-8662

RECEIVED
MAR 09 2005
OCD-ARTESIA

10. Field and Pool, or Exploratory Area
Catclaw Draw; Morrow (Gas)(74320)

4. Location of Well *(Footage, Sec., T., R., M., or Survey Description)*
1,117' FNL & 1,147' FWL
UL D, Sec. 24, T-21-S, R-25-E

11. County or Parish, State
EDDY County, New Mexico

12. CHECK APPROPRIATE BOX(ES) 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	☑ Alter Casing	☐ Fracture Treat	☐ Reclamation	☐ Well Integrity
☐ Final Abandonment Notice	☐ Casing Repair	☐ New Construction	☐ Recomplete	☑ Other **Change 1st Intermediate Casing Size & Cement**
	☑ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	
	☐ 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 recomplete 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 3160-4 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.)

HEC Petroleum, Inc. respectfully submits the following changes to the originally approved casing/cementing program for the 1st Intermediate Casing string.

While drilling the 11" hole section, we encountered severe lost circulation within the Capitan Reef Formation. "Dry drilling" will now be required from 720' to the 1st Intermediate Casing setting point at 1750'. The original plan was to run 9-5/8" casing and cement this section of the hole with conventional cement in a single stage. Upon completing drilling through the Capitan Reef, this option is no longer feasible. To attempt to continue utilizing conventional cement would, at best, require use of an ECP and DV Tool and pump cement in two stages. This method runs the risk that the TOC would still be below 720', hence requiring perforating the casing to circulate cement to surface, thus reducing long term casing integrity and zone protection. Also, the possibility of not successfully accomplishing this exists due to time WOC and ECP failure and formation breaking down, thence requiring multiple top-off cement jobs.

HEC Petroleum, Inc., therefore, proposes the attached changes and procedures for this section of hole from 0' to 1,750', or 1st Intermediate Casing Plan, to increase the probability of successfully cementing to surface and "properly" isolating the Capitan Reef formation with a good quality cement. This will also save considerable rig time and money and reduce exposure to further possible problems.

(See attached "Proposed Changes-1st Intermediat Casing/Cement" sheet - Or Page 2)

14. I hereby certify that the foregoing is true and correct
Name *(Printed/Typed)*
Alan W. Bohling

Title **Regulatory Agent**

Signature Alan W. Bohling

Date **02/25/2005**

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

APPROVED
MAR - 7 2005
LES BABYAK
PETROLEUM ENGINEER

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.

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.

(Instructions on page 2)

Proposed Changes-1st Intermediate Casing/Cement

Catclaw Draw Unit #19
(API # 30-015-33882)
1,117' FNL & 1,147' FWL
UL D, Sec. 24, T-21-S, R-25-E
Eddy County, New Mexico

Approved Pre-Drill Plan:

Run and set 9-5/8" casing at ±1750' and cement to surface via a single stage conventional cement job.

Proposed Changes:

Run and set 8-5/8" (vs. 9-5/8") casing at ±1750' and cement to surface via a single stage foamed cement job as follows:

1) Make sure there are two side outlet valves (one on each side) RU on casing head.
2) TIH with 8 5/8" casing and float equipment to bottom, circulate for a minimum of 1.5 x casing volumes prior to cementing. Double valve the valves off the casing head using Halliburton plug valves.
3) Cement the well using Halliburton's ZoneSeal Process as follows:
   a) 40 bbl Gelled Water Spacer
   b) 10,000 scf Nitrogen Spacer
   c) Lead Cement: 600 sx total of Class "C" Cement + 2% ZoneSeal + 2% $CaCl_2$ (1.34 ft^3/sx / 6.34 gps FW)
      i) 45 bbl ZoneSeal Class C with 40 scf/bbl N2
      ii) 45 bbl ZoneSeal Class C with 85 scf/bbl N2
      iii) 53 bbl ZoneSeal Class C with 120 scf/bbl N2

   d) Tail Cement: 150 sx of Class "C" Cement + 2% ZoneSeal + 2% $CaCl_2$ (1.34 ft^3/sx / 6.34 gps FW)

4) Shut-down drop Top Plug
5) Displace with fresh water
6) Once foam is circluating to surface, hold ± 100-200 psi backpressure on annulus and shut-in 5 to 10 bbl prior to landing plug
7) Check Floats, pressure casing to ± 500 psi
8) If Foam Cement is circulated to surface:
   a) Mix & Pump 75 sacks of Thix-O-Tropic CAP Cement down the annulus
   b) Displace Cap Cement with ± 5 bbl fresh water to clear pumps, lines, & BOP
   c) Shut-in annulus, release pressure on casing, and allow cap cement to set

9) If Foam Cement is not circulated to surface:
   a) Pressure 8 5/8" casing to ±500 psi & monitor pressure
   b) Prepare to Cement down the 8 5/8" X 13 3/8" annulus (via both side outlets on casing head)
   c) Mix and pump 300 sacks of Foamed Premium-Plus Cement (70 bbl Premium-Plus Cement with 50 scf/bbl N2)
   d) Mix & Pump 75 sacks of Thix-O-Tropic CAP Cement down the annulus
   e) Displace Cap Cement with ± 5 bbl fresh water to clear pumps, lines, & BOP
   f) Shut-in annulus, release pressure on casing, and allow cap cement to set