orm 3160-5 August 1999)	UNITED STATES DEPARTMENT OF THE INTERIOR OCD-ARTESIA			FORM APPROVED OMB No. 1004-0135 Expires November 30, 2000	
	BUREAU OF LAND MAN	AGEMENT		5. Lease Serial No	
SUNDRY NOTICES AND REPORTS ON WELLS			NM-0560291		
Do not use the sabandoned w	his form for proposals to ell. Use Form 3160-3 (APL	drill or to re-enter of the common of the co	an s.	6 If Indian, Allottee or Tribe Name	
SUBMIT IN TRIPLICATE: Other instructions on reverse side				7 If Unit or CA/Agreement, Name and/or No	
Type of Well	7				
☐ O₁l Well ☐ Gas Well ☐ Other				8 Well Name and No.	
2. Name of Operator Howard Petroleum Corporation				Federal "00" #4 9 API Well No.	
Harvard Petroleum Corporation 3b Phone No. (include area code)				30-015-35172	
	ì	urea conej	10 Field and Pool, or Exploratory Area		
PO Box 936, Roswell, NM 88201-0936 505-623-1:				Cedar Hills; Bone Spring	
Location of Well (Footage, Sec., T, R, M., or Survey Description)			0 4 2007	11. County or Parish, State	
990' FNL & 1980' FEL, Sec 18-T21S-R27E SEP 0 4 2007			11. County of Lation, State		
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		OCD	-ARTESIA	Eddy Co., NM	
	PROPRIATE ROX(ES) TO			REPORT, OR OTHER DATA	
	TROTRIATE BOX(ES) TO			CLIONI, ON OTHER DATA	
TYPE OF SUBMISSION	TYPE OF ACTION				
	Acidize	☐ Deepen	Production (Sta	nrt/Resume) Water Shut-Off	
Notice of Intent	Alter Casing	Fracture Treat	Reclamation	Well Integrity	
	Casing Repair	New Construction	Recomplete	Other APD Extension	
Subsequent Report	Change Plans	Plug and Abandon	Temporarily A		
Final Abandonment Notice	Convert to Injection	Plug Back	Water Disposal		
	mal Abandonment Notices shall by for final inspection)	e filed only after all requi	ements, including recl	FOR MONTH PERIOD	
14 I hereby certify that the foregor Name (PrintedITyped) eff Harvard Signature		Title Pre	/07		
	THIS SPACE	FOR FEDERAL OR S	TATE OFFICE US	E	
	/s/ Don Peterso)	ame	FIETH RANKAPE	

Approved by (Signature)

(Printed/Typed)

Conditions of approval, if any, are attached. Approval of this notice does not warrant of ARLSBAD FIEL which would entitle the applicant to conduct operations thereon.

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

PECOS DISTRICT CONDITIONS OF APPROVAL

OPERATOR'S NAME: | Harvard Petroleum Corp.

LEASE NO.: NM-0560291 WELL NAME & NO.: Federal 00 # 4

SURFACE HOLE FOOTAGE: 990' FNL & 1980' FWL

BOTTOM HOLE FOOTAGE 'F L & 'F L

LOCATION: | Section 18, T. 21 S., R 27 E., NMPM

COUNTY: Eddy County, New Mexico

I. DRILLING

A. DRILLING OPERATIONS REQUIREMENTS

The BLM is to be notified a minimum of 4 hours in advance for a representative to witness:

- a. Spudding well
- b. Setting and/or Cementing of all casing strings
- c. BOPE tests

Eddy County

Call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220, (505) 361-2822

- 1. A Hydrogen Sulfide (H2S) Drilling Plan is N/A.
- 2. Unless the production casing has been run and cemented or the well-has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.

B. CASING

- 1. The 13.375 inch surface casing shall be set at 400 feet and cemented to the surface.
 - a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with a surface log readout will be used or a cement bond log shall be run to verify the top of the cement.

- b. Wait on cement (WOC) time for a primary cement job will be a minimum 18 hours for a water basin, 24 hours in the potash area, or 500 pounds compressive strength, whichever is greater. (This is to include the lead cement).
- c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.
- d. If cement falls back, remedial action will be done prior to drilling out that string.
- 2. The minimum required fill of cement behind the 8.625 inch intermediate casing is:

Cement to surface. If cement does not circulate see B.1.a-d above.

- 3. The minimum required fill of cement behind the 5.5 inch production casing is:
 - Cement to surface. If cement does not circulate, contact the appropriate BLM office.
- 4. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.

C. PRESSURE CONTROL

- 1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2 and API RP 53 Sec. 17.
- 2. Minimum-working-pressure-of-the-blowout-preventer-(BOP)-and-related-equipment-(BOPE) required for drilling below the surface casing shoe shall be 2000 (2M) psi.
- 3. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.
 - a. The tests shall be done by an independent service company.
 - b. The results of the test shall be reported to the appropriate BLM office.
 - c. All tests are required to be recorded on a calibrated test chart. A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.

- d. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30 minutes without a test plug.
- e. A variance to test the surface casing and BOP/BOPE to the reduced pressure of 1000 psi with the rig pumps is approved.

D. DRILL STEM TEST

If drill stem tests are performed, Onshore Order 2.III.D shall be followed.

E. HAZARDS

1. Our geologist has indicated that there is potential for lost circulation in the Capitan Reef, Delaware and Bone Spring.

Engineering can be reached at 505-706-2779 for variances.

FWright: 8/24/07 (date)