Ko ;	grazing averter			K-06-7
Form 3160-3 (August 1999) (August 1990) (August 1990) (Aug	in OCD Iling of this t must be 1737	-ARTES	FORM APPRO OMB No. 1004 Expires November 5. Lease Serial No. NM-0560291	1-0136
. API LIVITION	ENTER		6. If Indian, Allottee or T	rihe Name
la. Type of Work: 🔽 DRILL 🔲 RE			7. If Unit or CA Agreemer	nt, Name and No.
Ia. Type of work: 🖌 DRILL 🔲 RE	ENTER			
1b. Type of Well: 🗹 Oil Well 🗖 Gas Well 🗖 Other	🔲 Single Zone 🔲 Mul	tiple Zone	8. Lease Name and Well No. Federal "00", Well No.	· • • • • • • • • •
2. Name of Operator			9. API Well No.	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
Harvard Petroleum Corp.	2155 3b. Phone No. (include area code)		30-015-35	
P.O. Box 936 Roswell, NM 88202		Cedar	10. Field and Pool, or Explo Hills ; Bone Spring	oratory
4. Location of Well (Report location clearly and in accordance		Leoar	11. Sec., T., R., M., or Blk.	and Survey or Area
At surface 990' FNL & 1980' FWL				
At proposed prod. zone same				
14. Distance in miles and direction from nearest town or post offi	ice‡		Sec. 18-T21S-R27E	13. State
3 miles north of Carlsbad, NM			Eddy	NM
15. Distance from proposed* location to nearest	16. No. of Acres in lease	17. Spacing	g Unit dedicated to this well	
property or lease line, ft. (Also to nearest drig. unit line, if any) 330'	320			
8. Distance from proposed location*	19. Proposed Depth	40 20 BLM/F	BIA Bond No. on file	
to nearest well, drilling, completed, applied for, on this lease, ft. 330'	5200'	NM-1109		
21. Elevations (Show whether DF, KDB, RT, GL, etc.)	22. Approximate date work will		23. Estimated duration	
3216' GL	September 14, 2006		3 - 4 weeks	
<ul> <li>A Surface Use Plan (if the location is on National Forest Sy SUPO shall be filed with the appropriate Forest Service Office</li> <li>5. Signature</li> </ul>	ystem Lands, the e). 5. Operator certifi 6. Such other site authorized offic Name (Printed Typed)	specific info	rmation and/or plans as ma	-
Title Deverget Smith	George R. Smith		Date 	8/25/06
Agent for: Harvard Petroleum Corp.				
Approved by (Signature)	Name (Printed Typed)	on Peter	son Date	OCT 0 3 2006
Tille ACTING ACTING	Office CARL	SBAD	FIELD OFFICE	
Application approval does not warrant or certify that the applicant operations thereon. Conditions of approval, if any, are attached.	holds legal or equitable title to those rights	in the subject	lease which would entitle the DVAL FOR 1	applicant to conduct 'EAR
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, a States any false, fictitious or fraudulent statements or representation	make it a crime for any person knowingly	and willfully	to make to any department or	agency of the United
(Instructions on reverse)	ons as to any matter writin its jurisdiction.			
Lease Responsibility Statement: Harvard F restrictions concerning operations conducted DECLARED WATER BASIN CEMENT BEHIND THE <u>135</u> CASING MUST BE <u>CIRCUMP</u> WITNESS	ed on the leased land or portion the	GENE	UKS orge R. Smith, agent DVAL SUBJECT T RAL REQUIRENCE AL STIPULATION	o NTS AND
CEMENT BEHIND THE <u>3'8</u> CASING MUST BE <u>URCH-4</u>	AFCD	- 50 8000	r n almahar	

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R - 06-73 Reca 8/28/00

DISTRICT I 1925 N. PRENCH DR., HOBBS, NM 88240

DISTRICT II

1301 W. GRAND AVENUE, ARTESIA, NM 88210

DISTRICT III 1000 Rio Brazos Rd., Aztec, NM 87410

DISTRICT IV

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3

# State of New Mexico

Energy, Minerals and Natural Resources Department

Form C-102 Revised October 12, 2005 Submit to Appropriate District Office State Lease - 4 Copies Fee Lease - 3 Copies

# OIL CONSERVATION DIVISION 1220 SOUTH ST. FRANCIS DR. Santa Fe, New Mexico 87505

	DISTRICT IV 1220 S. ST. FRANCIS	DR., SANTA PB.		WELL LO	CATION	AND	ACREAGE	DEDICATIO	N PLAT	🗆 AMENDI	ED REPORT
API Number								Pool Name - Bone Spi	I Name one Spring		
	Property	Code	Property Name FEDERAL "00"							Well Num 4	lber
	ogrid n 10155	0.								Elevatio 3216	
						Surfac	e Locatio	n			
	UL or lot No.	Section	Township	Range	Lot Idn	Feet fro	m the No	th/South line	Feet from the	East/West line	County
	С	18	21-S	27-Е		99	90	NORTH	1980	WEST	EDDY

### Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
Dedicated Acres	Joint o	r Infill Co	onsolidation (	Code Or	der No.				
40									

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

	*****		
LOT 1	3203.8' 3224.4'		OPERATOR CERTIFICATION I hereby certify that the information herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.
LOT 2	**************************************	GEODETIC COORDINATES NAD 27 NME Y=539913.2 N X=531704.3 E . LAT.=32.484290' N LONG.=104.230515' W	SURVEYOR CERTIFICATION
LOT 3			I bereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief. AUGUST 3, 2006 Date Surveyed LA
LOT 4			Signature & Seal of Profeesional Surveyor AMALA ELLOG 8/8/06 (5.11.1277) Certificate No. GARY EDSON 12641 RONALD ELLOGN 12641 3239

#### APPLICATION FOR DRILLING

HARVARD PETROLEUM CORP. Federal "00", Well No. 4 990' FNL & 1980' FWL, Sec. 18-T21S-R27E Lea County, New Mexico Lease No.: NM-0560291 (Exploratory Well)

In conjunction with Form 3160-3, Application for Permit to Drill subject well, Harvard Petroleum Corp. submits the following items of pertinent information in accordance with BLM requirements:

1. The geologic surface formation is recent Permian with quaternary alluvium and other surficial deposits.

2. The estimated tops of geologic markers are as follows:

Tansill	350'	Delaware	2450'
Yates	540'	Bone Spring	4860'
7 Rivers	700'	T.D.	5200'
Capitan Reef	830'		
Base of Reef	2210'		

3. The estimated depths at which water, oil or gas formations are anticipated to be encountered:

Water: Surface water between 100' - 300'.

Oil: Possible in the Delaware 3500' – 3850' and the Bone Spring 4990 - 5020'.

Gas: None expected.

V

### 4. Proposed Casing Program:

HOLE SIZE	CASING SIZE	WEIGHT	GRADE	JOINT	SETTING DEPTH	QUANTITY OF CEMENT
17 1/2"	13 3/8"	54.5#	J-55	ST&C	400'	Circ. 350 sx "C"
11"	8 5/8"	24.0#	J-55	ST&C	2,250'	Circ. 800 sx 35/65 Poz C+ 150 sx C
Note: Will	consult with d	istrict BL	M enginee	r if apparent	severe lost circula	ation in reef section.
7 7/8"	5 1/2"	15.5#	J-55	ST&C	5,200'	Circ. 600 sx 35/65 Poz C + 375 sx "C"

5. Proposed Control Equipment: A 11" 3000 psi wp Shaffer Type "F" BOP will be installed on the 13 3/8" casing and will be operated as a 2M system. Request that casing and BOP be tested with a rig pump before drilling out with 11". The 8 5/8" casing and BOPE will be tested to the maximum of 1500 psi as per Onshore Oil & Gas Order No. 2 before drilling out with the 7 /8". See Exhibit "E".

6	MUD PROG	RAM:	-	MUD WEIGHT	VIS.	W/L CONTROL
	0' - 5200':	Fresh Water w/gel:		8.4 - 8.8 ppg	29 - 31	No W/L control

7. Auxiliary Equipment: Blowout Preventer, Kelly cock, flow sensors and stabbing valve.

 8. Testing, Logging, and Coring Program: Drill Stem Tests: None expected. Logging: T.D. to 2250': GR-CNL-LDT-AIT 2250. to Surface: GR-CNL Coring: Possible sidewall cores as dictated by logs.

# HARVARD PETROLEUM CORP. Federal "00", Well No. 4

- Page 2
- 9. No abnormal pressures or temperatures are anticipated. In the event abnormal pressures are encountered the proposed mud program will be modified to increase the mud weight. Estimated evacuated BHP = 2288 psi and a surface pressure of 1144 psi with a temperature of 112°.
- 10. H<sub>2</sub>S: None expected. None in previous wells. The Mud Log Unit will be cautioned to use a gas trap to detect H<sub>2</sub>S and if any is detected the mud weight will be increased along with H<sub>2</sub>S inhibitors sufficient to control the gas.
- 11. Anticipated starting date: September 14, 2006. Anticipated completion of drilling operations: Approximately 25 days.

### MULTI POINT SURFACE USE AND OPERATIONS PLAN

HARVARD PETROLEUM CORP. Federal "00", Well No. 4 990' FNL & 1980' FWL, Sec. 18-T21S-T27E Eddy County, New Mexico Lease No.: NM-0560291 (Exploratory Well)

This plan is submitted with the Application for Permit to Drill the above described well. The purpose of the plan is to describe the location of the proposed well; the proposed construction activities and operations plan to be followed in rehabilitating the surface and environmental effects associated with the operations.

### 1. EXISTING ROADS:

- A. Exhibit "A" is a portion of a BLM Topographic map showing the location of the proposed well as staked. The well site location is approximately 4.2 road miles north of Carlsbad, NM. Traveling north of Carlsbad on County Rd #206 there will be 3 miles of paved highway.
- B. Directions: Travel north from Carlsbad, NM on County Rd. # 206 for 3 miles to railroad crossing. Continue .7 mile northeast of railroad crossing to CR 600 (Rains Rd) on the east. Turn west on oilfield road for .2 mile; then .2 mile south to a P/A well site. The start of the proposed access road will be on the southwest corner of this pad. The proposed access road will run approximately 120 feet to the northwest corner of the proposed well site.

### 2. PLANNED ACCESS ROAD:

- A. Length and Width: The proposed access road will be approximately 120 feet in length and 12 feet in width. The existing roads are color coded on Exhibit "A".
- B. Construction: The proposed access road will be constructed by grading and topping with compacted caliche. The surface will be properly drained.
- C. Turnouts: None required.
- D. Culverts: None.
- E. Cuts and Fills: None required.
- F. Gates, Cattle guards. None required.
- G. Off lease right of way: An off lease ROW is being filed to cover 1600 feet of existing access road in Sec. 7-T21S-R27E.

### 3. LOCATION OF EXISTING WELLS:

A. Existing wells within a two-mile radius are shown on Exhibit "C".

# 4. LOCATION OF EXISTING AND/OR PROPOSED FACILITIES;

- A. Harvard Petroleum Corp. has production facilities on the lease at this time.
- B. If the well proves to be commercial, the necessary production facilities and tank battery will be installed on the drilling pad. A 3" Poly SDR 7 fluid flow line will be run on the surface for approximately 800 feet back to the well pad of the Federal "00", Well No. 3, 1838' FNL & 2406' FEL Sec. 18-T21S-R27E.

### HARVARD PETROLEUM CORP. Federal "00", Well No. 4 Page 2

# 5. LOCATIONS AND TYPE OF WATER SUPPLY:

A. It is planned to drill the proposed well with fresh water that will be obtained from private or commercial sources and will be transported over the existing and proposed access roads

# 6. SOURCE OF CONSTRUCTION MATERIALS:

A. Caliche for surfacing the proposed access road and well site pad will be obtained from the location, if available, and/or from a the P/A Federal "00" Well #2, 150' north of the location. An alternate source is a State pit in NE4 SE4 Sec. 36-T20S-R27E. No surface materials will be disturbed except those necessary for actual grading and leveling of the drill site and access road.

### 7. METHODS OF HANDLING WASTE DISPOSAL:

- A. Drill cuttings will be disposed of in the reserve pits.
- B. Drilling fluids will be allowed to evaporate in the reserve pits until the pits are dry.
- C. All pits will be fenced with normal fencing materials to prevent livestock from entering the area.
- D. Water produced during operations will be collected in tanks until hauled to an approved disposal system, or a separate disposal application will be submitted to the BLM for approval.
- E. Oil produced during operations will be stored in tanks until sold.
- F. Current laws and regulations pertaining to the disposal of human waste will be complied with.
- G. Trash, waste paper, garbage and junk will be contained in trash bins to prevent scattering by the wind and will be removed for deposit in an approved sanitary landfill within 30 days after finishing drilling and/or completion operations.

### 8. ANCILLARY FACILITIES:

A. None required.

### 9. WELL SITE LAYOUT:

- A. Exhibit "D" shows the relative location and dimensions of the well pad, reserve pits, and major rig components. The pad and pit area has been staked and flagged, 600' X 600'.
- B. Mat Size: 240' X 160' plus 100' X 100' reserve pits on the east.
- C Cut & Fill: The location will require a 3 4 foot cut on the east and fill to the west.
- D. The surface will be topped with compacted caliche and the reserve pits will be plastic lined.

Page 3

# **10. PLANS FOR RESTORATION OF THE SURFACE:**

- A. After completion of drilling and/or completion operations, all equipment and other material not required for operations will be removed. Pits will be filled and the location cleaned of all trash and junk to leave the well site in an aesthetically pleasing a condition as possible.
- B. Any unguarded pits containing fluids will be fenced until they are filled.
- C. If the proposed well is non-productive, all rehabilitation and/or vegetation requirements of the Bureau of Land Management and Bureau of Reclamation will be complied with and will be accomplished as expeditiously as possible. All pits will be filled and leveled as soon as they are dry enough to be worked.

### **11. OTHER INFORMATION:**

- A. Topography: The proposed well site and access road are located on the east side of Avalon Hills with a 1.7% slope to the northwest. The location has an elevation of 3216.1' GL.
- B. Soil: The topsoil at the well site is a brown to reddish-brown course textured loamy sand over indurated caliche. There should be caliche at a depth of 10 to 12 inches. The soil is part of the Tonuco loamy sand soil series.
- C. Flora and Fauna: The vegetation cover has a very sparse grass cover of three-awn, muhly and dropseed, with the primary cover being plants of mesquite, yucca, broomweed, creosote bush, cacti and miscellaneous weeds and wildflowers. The wildlife consists of rabbits, coyotes, antelope, rattlesnakes, lizards, dove, quail and other wildlife typical of the semi-arid desert land.
- D. Ponds and Streams: Lake Avalon is approximately .8 mile to the northwest of the location
- E. Residences and Other Structures: None in the immediate vicinity, except oil well production facilities and the ATSF/Burl North. Railroad tracks 245 feet to the west of the location.
- F. Land Use: Cattle grazing.
- G. Surface Ownership: The proposed well site and access road is on Federal (Bureau of Reelamation) surface and minerals.
- H. There is little evidence of archaeological, historical or cultural sites in the staked pad area. A viable route for the surface fluid pipeline will be staked by the archaeologist to the Federal "00" #3 Southern New Mexico Archaeological Services, Inc., P. O. Box 1 Bent, NM 88314, is conducting an archaeological survey and their report will be submitted to the appropriate government agencies.

### HARVARD PETROLEUM CORP. Federal "00", Well No. 4 Page 4

### **12. OPERATOR'S REPRESENTATIVE:**

A. The field representative for assuring compliance with the approved use and operations plan is as follows:

Jeff Harvard HARVARD PETROLEUM CORP. P. O. Box 936 Roswell, NM 88202 Office Phone: (505) 623-1581 ext 102 Cell Phone: (505) 626-7938

### **13. CERTIFICATION:**

I hereby certify that I have inspected the proposed drill site and access route; that I am familiar with the conditions which presently exist the statements made in the plan are, to the best of my knowledge, true and correct; and, that the work associated with the operations proposed herein will be performed by Harvard Petroleum Corp. and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved. This statement is subject to the provisions of 18 U.S.C. 1001 for the filing of a false statement.

August 25, 2006

art Amith

George R. Smith Agent for: Harvard Petroleum Corp.



# RIG #6

# BLOWOUT PREVENTOR ARRANGEMENT

IO" SHAFFER TYPE "E", 3000 psi WP 80 GALLON, 4 STATION KOOMEY ACCUMULATOR 3000 psi WP CHOKE MANIFOLD



EXHIBIT "E" HARVARD PETROLEUM CORP. Federal "00", Well No. 4 BOP Specifications

### SPECIAL DRILLING STIPULATIONS

#### THE FOLLOWING DATA IS REQUIRED ON THE WELL SIGN

Operator's Name: Harvard	Petroleum Corporation		Well Name & #	: Federal OO #4	
Location 990	F <u>N</u> L& <u>1980</u>	F W	_L; Sec. 18_, T. 21	S., R. 27	_E.
Lease #: <u>NM-0560291</u>			County:	Eddy	State: New Mexico

The Special stipulations check marked below are applicable to the above described well and approval of this application to drill is conditioned upon compliance with such stipulations in addition to the General Requirements. The permittee should be familiar with the General Requirements, a copy of which is available from a Bureau of Land Management office. EACH PERMITTEE HAS THE RIGHT OF ADMINISTRATIVE APPEAL TO THESE STIPULATIONS PURSUANT TO TITLE 43 CFR 3165.3 AND 3165.4.

This permit is valid for a period of one year from the date of approval or until lease expiration or termination whichever is shorter.

### I. SPECIAL ENVIRONMENT REQUIREMENTS

() Lesser Prairie Chicken (stips attached)	() Flood plain (stips attached)
( ) San Simon Swale (stips attached)	(x) Other See attached Visual Resources Stipulations

### II. ON LEASE - SURFACE REQUIREMENTS PRIOR TO DRILLING

(x) The BLM will monitor construction of this drill site. Notify the (x) Carlsbad Field Office at (505) 234-5972 () Hobbs Office (505) 393-3612, at least 3 working days prior to commencing construction.

(x) Roads and the drill pad for this well must be surfaced with <u>6</u> inches of compacted caliche upon completion of well and it is determined to be a producer.

( ) All topsoil and vegetation encountered during the construction of the drill site area will be stockpiled and made available for resurfacing of the disturbed area after completion of the drilling operation. Topsoil on the subject location is approximately \_\_\_\_\_\_inches in depth. Approximately \_\_\_\_\_\_cubic yards of topsoil material will be stockpiled for reclamation.

### (x) Other. Restrict pad size to the west to 110 ft. so as to avoid Railroad ROW.

### III. WELL COMPLETION REQUIREMENTS

( ) A Communitization Agreement covering the acreage dedicated to the well must be filed for approval with the BLM. The effective date of the agreement must be prior to any sales.

(x) Surface Restoration: If the well is a producer, the reserve pit(s) will be backfilled when dry, and cut-and-fill slopes will be reduced to a slope of 3:1 or less. All areas of the pad not necessary for production must be re-contoured to resemble the original contours of the surrounding terrain, and topsoil must be re-distributed and re-seeded with a drill equipped with a depth indicator (set at depth of  $\frac{1}{2}$  inch) with the following seed mixture, in pounds of Pure Live Seed (PLS), per acre. If broadcasting, the seeding rate must be doubled.

- () A. Seed Mixture 1 (Loamy Sites)
  - Side Oats Grama (*Bouteloua curtipendula*) 5.0 Sand Dropseed (*Sporobolus cryptandrus*) 1.0 Plains lovegrass (*Eragrostis intermedia*) 0.5
- (x) C. Seed Mixture 3 (Shallow Sites)
   Side oats Grama (Bouteloua curtipendula) 5.0
   Green Spangletop (Leptochloa dubia) 2.0
   Plains Bristlegrass (Setaria magrostachya) 1.0

### () B. Seed Mixture 2 (Sandy Sites)

Sand Dropseed (Sporobolus crptandrus) 1.0 Sand Lovegrass (Eragostis trichodes) 1.0 Plains Bristlegrass (Setaria magrostachya) 2.0

( ) D. Seed Mixture 4 (Gypsum Sites) Alkali Sacaton (*Sporobolus airoides*) 1.0 Four-Wing Saltbush (*Atriplex canescens*) 5.0

### ( ) OTHER SEE ATTACHED SEED MIXTURE

Seeding should be done either late in the fall (September 15 - November 15, before freeze up, or early as possible the following spring to take advantage of available ground moisture.

() Other

### RESERVE PIT CONSTRUCTION STANDARDS

The reserve pit shall be constructed entirely in cut material and lined with 6-mil plastic.

Mineral material extracted from within the boundary of the APD during construction of the well pad and reserve pits and be used for the construction of this well pad and its immediate access road only, as long as that portion of the access road it is use on remains on-lease. Removal of any additional material from this location for construction or improvement of other well pads and other access or lease roads must first be purchased from BLM.

<u>Reclamation</u>: Reclamation of this type of deep pit will consist of pushing the pit walls into the pit when sufficiently dry to support track equipment. The pit liner is NOT TO BE RUPTURED to facilitate drying; a ten month period after completion of the well is allowed for drying of the pit contents.

The pit area must be contoured to the natural terrain with all contaminated drilling mud buried with at least 3 feet of clean soil. The reclaimed area will then be seeded as specified in this permit.

### CULTURAL

Whether or not an archaeological survey has been completed and notwithstanding that operations are being conducted as approved, the lessee/operator/grantee shall notify the BLM immediately if previously unidentified cultural resources are observed during surface disturbing operations. From the time of the observation, the lessee/operator/grantee shall avoid operations that will result in disturbance to these cultural resources until directed to process by BLM.

#### TRASH PIT STIPS

All trash, junk, and other waste material shall be contained in trash cages or bins to prevent scattering and will be removed and deposited in an approved sanitary landfill. Burial on site is not permitted.

### **CONDITIONS OF APPROVAL - DRILLING**

# Operator's Name: <u>Harvard Petroleum Corporation</u> Well No. <u>4</u>-Federal 00 Location: <u>990' FNL & 1980' FWL</u> sec. <u>18</u>, T. <u>21 S.</u>, R. <u>27 E.</u> Lease: <u>NM-0560291</u>

.....

### I. DRILLING OPERATIONS REQUIREMENTS:

1. The Bureau of Land Management (BLM) is to be notified at (505) 361-2822 in sufficient time for a representative to witness:

A. Spudding

B. Cementing casing: <u>13-3/8</u> inch <u>8-5/8</u> inch <u>5-1/2</u> inch

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.

3. Include the API No. assigned to well by NMOCD on the subsequent report of setting the first casing string.

### **II. CASING:**

1. <u>13-3/8</u> inch surface casing should be set <u>at approximately 400 feet</u>, below usable water and circulate cement to the surface. If cement does not circulate to the surface, the BLM Carlsbad Field Office shall be notified and a temperature survey or cement bond log shall be run to verify the top of the cement. Remedial cementing shall be completed prior to drilling out that string.

2. Minimum required fill of cement behind the <u>8-5/8</u> inch intermediate casing is <u>sufficient to circulate to the</u> <u>surface</u>.

3. Minimum required fill of cement behind the 5-1/2 inch production casing is sufficient to the back 500 feet above the uppermost perforation in the pay zone.

### **III. PRESSURE CONTROL:**

1. Before drilling below the <u>13-3/8</u> inch surface casing, the blowout preventer assembly shall consist of a minimum of One Annular Preventer or Two Ram-Type Preventers and a Kelly Cock/Stabbing Valve.

2. Before drilling below the  $\underline{13-3/8}$  inch surface casing, minimum working pressure of the blowout preventer and related equipment (BOPE) shall be  $\underline{2000}$  psi.

3. Before drilling below the <u>8-5/8</u> inch intermediate casing string, the BOPE shall be tested as described in Onshore Order No. 2. Any equipment failing to test satisfactorily shall be repaired or replaced.

A. The results of the test will be reported to the BLM Carlsbad Field Office at 620 East Greene Street, Carlsbad, New Mexico 88220-6292.

B. Testing fluid must be water or an appropriate clear liquid suitable for sub-freezing temperatures. Use of drilling mud for testing is not permitted since it can mask small leaks.

C. Testing must be done in a safe workman like manner. Hard line connections shall be required.

D. The requested variance to test the BOPE to a pressure of <u>1000</u> psi before drilling below the <u>13-3/8</u> inch surface casing string is approved.

E. The requested variance to test the BOPE to a pressure of  $\underline{1500}$  psi before drilling below the  $\underline{8-5/8}$  inch intermediate casing string is approved.



# NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

**BILL RICHARDSON** 

Governor Joanna Prukop Cabinet Secretary Mark E. Fesmire, P.E. Director Oil Conservation Division

Harvard Petroleum Company P.O. Box 936 Roswell, NM 88202 Attn: Mr. Jeff Harvard or to Whom It May Concern:

Dear Mr. Harvard or To Whom It May Concern:

## RE: Harvard Petroleum Corporation: Application to drill (APD) for the Federal OO # 4, Located in Unit C, of Section 18, Township 21 South, Range 27 East, Eddy County, New Mexico NMPM.

In reference to the above noted APD, the New Mexico Oil Conservation Division (NMOCD) will require (in apart) that drilling mud samples from the flow line be sampled every 100' in order to determine chloride levels during the drilling of the Capitan Reef section of the well bore. Results are to be submitted to our office before drilling to total depth of the well bore.

Please call me if you have any questions about this matter.

Respectfully yours,

Bryan G. Arrant NMOCD's District II Geologist Artesia, New Mexico 505-748-1283 ext. 103

CC: well file