

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

2005 DEC 6 PM 12:49

RECEIVED

070 FARMINGTON

5. Lease Serial No.	49 SF 078883
6. If Indian, Allottee or Tribe Name	
7. If Unit or CA Agreement, Name and No.	Canyon Largo Unit
8. Lease Name and Well No.	32660 Canyon Largo Unit 486
9. API Well No.	30-039-29722
10. Field and Pool, or Exploratory	Basin Dakota 71599
11. Sec., T., R., M., or Bk. and Survey or Area	Lot F, Sec 8, T25N-R6W
12. County or Parish	Rio Arriba
13. State	NM

1a. Type of Work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER	1b. Type of Well: <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other <input type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone
2. Name of Operator Huntington Energy, L.L.C. 208706	
3a. Address 6301 Waterford Blvd., Suite 400 Oklahoma City, OK 73118	3b. Phone No. (include area code) (405) 840-9876
4. Location of Well (Report location clearly and in accordance with any State requirements.) At surface SENW 2420' FNL & 1835' FWL, At proposed prod. zone	
14. Distance in miles and direction from nearest town or post office* 35 miles SE from Blanco, NM	
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any)	16. No. of Acres in lease 2369.83
17. Spacing Unit dedicated to this well 320 w/2	18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.
19. Proposed Depth 7450'	20. BLM/BIA Bond No. on file NMB000076
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 6710' GL	22. Approximate date work will start*
23. Estimated duration	

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No.1, shall be attached to this form:

1. Well plat certified by a registered surveyor.
2. A Drilling Plan.
3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office).
4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
5. Operator certification.
6. Such other site specific information and/or plans as may be required by the authorized officer.

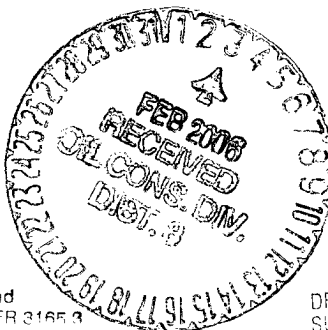
25. Signature <i>Catherine Smith</i>	Name (Printed/Typed) Catherine Smith	Date 12/1/05
Title Land Associate		
Approved by (Signature) <i>Jim Lovato</i>	Name (Printed/Typed)	Date 2/1/06
Title Acting ADM		

Application approval does not warrant or certify the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Conditions of approval, if any, are attached.

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 reverse)



This action is subject to technical and procedural review pursuant to 43 CFR 3165.4 and appeal pursuant to 43 CFR 2165.4

DRILLING OPERATIONS AUTHORIZED ARE  
SUBJECT TO COMPLIANCE WITH ATTACHED  
"GENERAL REQUIREMENTS".

NMOCD 4

OIL CONSERVATION DIVISION

1220 South St. Francis Dr.  
Santa Fe, NM 87504-2088

2005 DEC 6 PM 12:49 ☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

*API Number 30-039-29722		*Pool Code 71599	*Pool Name Basin Dakota
*Property Code 6886 32660	*Property Name CANYON LARGO UNIT		*Well Number 486
*OGRID No. 208706	*Operator Name HUNTINGTON ENERGY, LLC		*Elevation 6710'

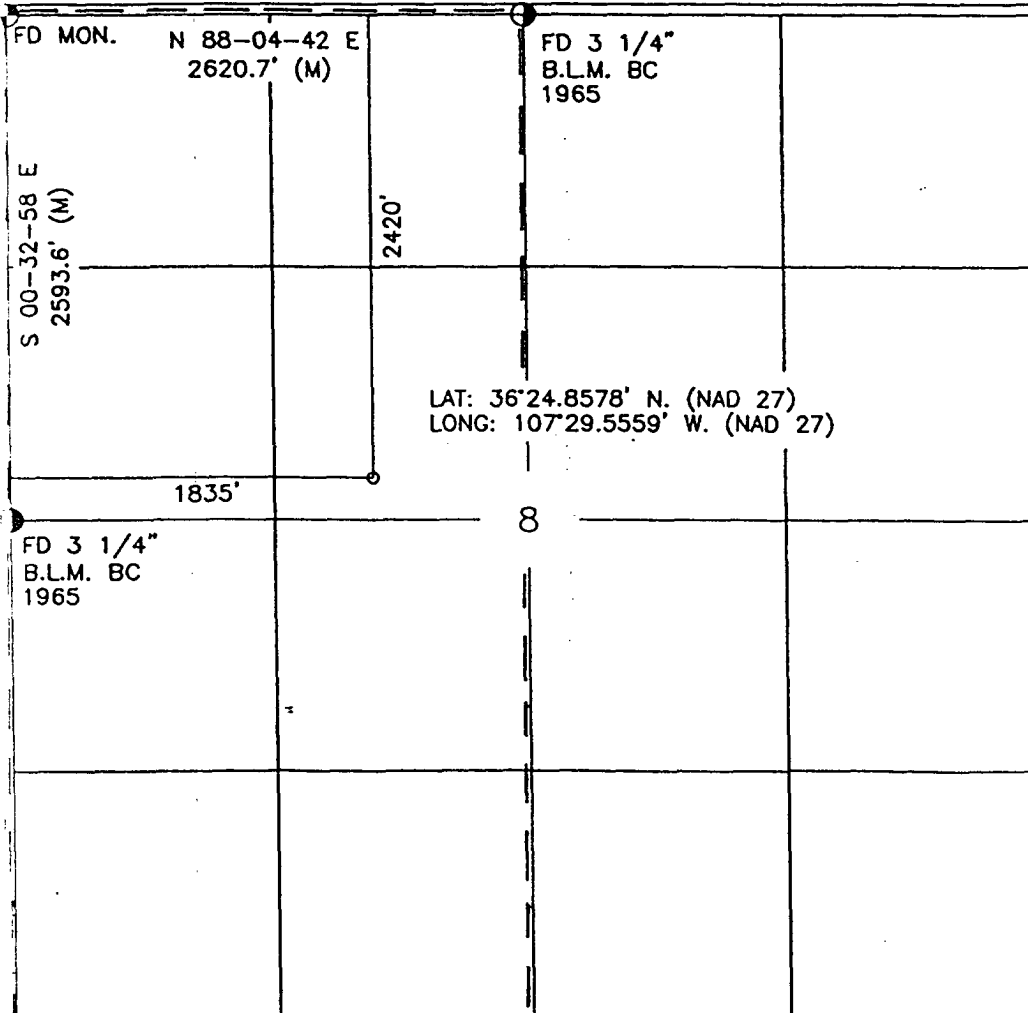
10 Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
F	8	25-N	6-W		2420'	NORTH	1835'	WEST	RIO ARRIBA

11 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 DK - W/320					*Joint or Infill		*Consolidation Code		*Order No.

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



17 OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief

*Catherine Smith*  
Signature  
Catherine Smith  
Printed Name  
Land Associate  
Title  
October 13, 2005.  
Date

18 SURVEYOR CERTIFICATION

I hereby 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 24, 2005  
Date  
Signature of Professional Surveyor  
NEW MEXICO  
REGISTERED PROFESSIONAL SURVEYOR  
14831  
30-039-29722  
Certificate Number

## OPERATIONS PLAN

Well Name: Canyon Largo Unit #486  
Location: 2420' FNL, 1835' FWL, NW/4 Sec 8, T-25-N, R-6-W NMPM  
Rio Arriba County, NM  
Formation: Basin Dakota  
Elevation: 6710' GL

<u>Formation Tops:</u>	<u>Top</u>	<u>Bottom</u>	<u>RMSL</u>
Ojo Alamo	2066'	2276'	4660
Kirkland	2276'	2451'	4450
Fruitland	2451'	2716'	4275
Pictured Cliffs	2716'	2791'	4010
Lewis Shale	2791'	3101'	3935
Huerfano	3101'	4311'	3625
Cliff House	4311'	4368'	2415
Menefee	4368'	4961'	2358
Point Lookout	4961'	5291'	1765
Mancos	5291'	6108'	1435
Gallup (Niobrara)	6108'	6901'	618
Greenhorn	6901'	6964'	-175
Graneros	6964'	7011'	-238
Dakota	7011'	7336'	-285
Morrison	7336'	7450'	-610
TD	7450'		

### Logging Program:

Open hole logs – None  
Cased hole logs – RST – TD to 6000'; CBL/GR – TD to 5800'  
Cores & DST's – none  
Mud log – 2500' to TD

### Mud Program:

<u>Interval</u>	<u>Type</u>	<u>Weight</u>	<u>Vis.</u>	<u>Fluid Loss</u>
0 – 320'	Spud	8.4-8.9	40-50	no control
320 – 7450'	LSND	8.4-9.0	40-60	8-12

Pit levels will be visually monitored to detect gain or loss of fluid control.

### Casing Program:

<u>Hole Size</u>	<u>Depth Interval</u>	<u>Csg. Size</u>	<u>Wt.</u>	<u>Grade</u>
12 1/4"	0' – 320'	8 5/8"	24.0#	WC-50
7 7/8"	0' – 7450'	4 1/2"	11.6#	N-80

### Tubing Program:

0' – 7450'	2 3/8"	4.7#	J-55
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### BOP Specifications, Wellhead and Tests:

#### Surface to TD –

11" 3000 psi minimum double gate BOP stack (Reference Figure #1). After nipple-up prior to drilling out surface casing, ~~rams~~ and casing will be tested to 600 psi for 30 minutes. *BOE*

2" nominal, 3000 psi minimum choke manifold (Reference Figure #3).

Completion Operations:

6" 3000 psi double gate BOP stack (Reference Figure #2). After nipple-up prior to completion, pipe rams and casing top will be tested to 3000 psi for 15 minutes.

Surface to Total Depth:

2" nominal, 3000 psi minimum choke manifold (Reference Figure #3).

Wellhead:

8 5/8" x 4 1/2" x 1 1/2" x 1 1/2" x 3000 psi tree assembly.

General:

- Pipe rams will be actuated once each day and blind rams will be actuated once each trip to test proper functioning.
- An upper Kelly cock valve with handle available and drill string valves to fit each drill string will be available on the rig floors at all times.
- A BOP pit level drill will be conducted weekly for each drilling crew.
- All of the BOP tests and drills will be recorded in the daily drilling reports.
- Blind and pipe rams will be equipped with extension hand wheels.

Cementing:

8 5/8" surface casing --

Cement to surface w/265 sx Class "B" cement w/3% calcium chloride and 1/4#/sx cellophane flakes (312 cu. ft. of slurry, 200% excess to circulate to surface).

WOC 8 hr. prior to drilling out surface casing. Test casing to 600 psi for 30 minutes.

Saw tooth guide shoe on bottom. Bowspring centralizers will be run in accordance with Onshore Order #2.

Production Casing – 4 1/2"

Lead with 700 sx 65/35 Standard Poz w/6% gel, 1/4# Flocele, 10# Gilsonite, 3/10% Halad 9, 1/10% HR5 (1.96 yld). Tail w/900 sx 50/50 Standard Poz w/35 Gel, 9/10% Halad9, 2/10% CFR 3, 5# Gilsonite, 1/4# Flocele (1.47 yld).

Alternate Two-stage cement job as follows:

First Stage: Cement to circulate to stage tool @ 5066'. Lead with 700 sx Class "G" 50/50 poz (13#, 1.47 yd) w/3% gel, 0.25 pps Celloflake, 5 pps Gilsonite, 0.25 pps Fluid loss, 0.15% dispersant, 0.1% retarder. WOC 4 hours prior to pumping second stage. (Slurry volume: 1029 cu. ft. Excess slurry: 50%). DV Tool at 5000 ft.

Second Stage: Cement to circulate to surface. Cement with 700 sx Class "G" (12#, 2.9yd) TXI Liteweight cement w/2.5% sodium metasilicate, 2% calcium chloride, 10 pps Gilsonite, 0.5 pps Celloflake, 0.2% antifoam. WOC a minimum of 18 hours prior to cleanout. (Slurry volume: 1914 cu. ft. Excess slurry: 50%). Tail w/50 sx Class "B" w/1/4# Flocele (15.6#, 1.18 yd) (Slurry 59 cu. ft., Excess 50%).

Float shoe on bottom. Three centralizers run every other joint above shoe. Thirty-five centralizers - one every 4<sup>th</sup> joint to the base of the Ojo Alamo @ 2448'. Two turbolizing type centralizers - one below and one into the base of the Ojo Alamo @ 2448'. Standard centralizers thereafter every fourth joint up to the base of the surface pipe.

Note: If open hole logs are run, cement volumes will be based on 25% excess over caliper volumes.

**Additional Information:**

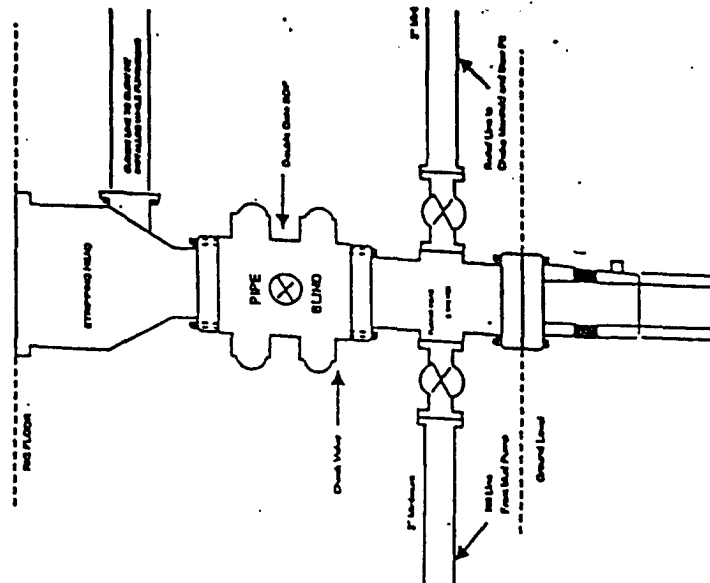
The Dakota formations will be completed.

- No abnormal temperatures or hazards are anticipated.
- Sufficient LCM will be added to the mud system to maintain well control, if lost circulation is encountered below the top of the Pictured Cliffs.
- The west half of the Section 8 is dedicated to this well.
- This gas is dedicated.
- Anticipated pore pressure

Fruitland Coal	300 psi
Pictured Cliffs	500 psi
Mesa Verde	700 psi
Dakota	3000 psi

# HUNTINGTON ENERGY, L.L.C.

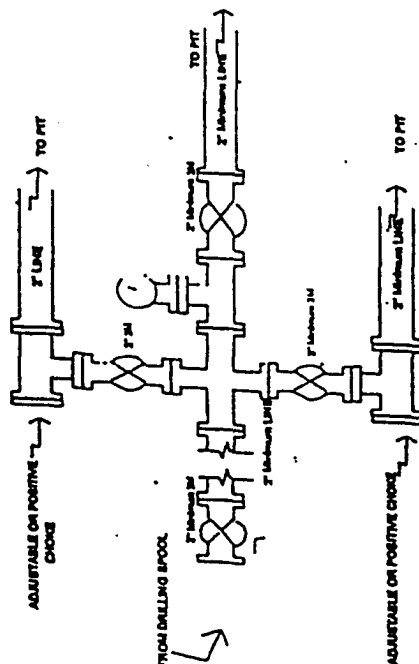
## Completion/Workover Rig BOP Configuration 2,000 psi System



Minimum BOP Installation for all Completion/Workover Operations. 7-1/16" bore, 2000 psi minimum working pressure double gate BOP to be equipped with blind end pipe rams. A stripping head to be installed on the top of the BOP. All BOP equipment is 2000 psi working pressure or greater excluding 500 psi stripping head.

Figure #2

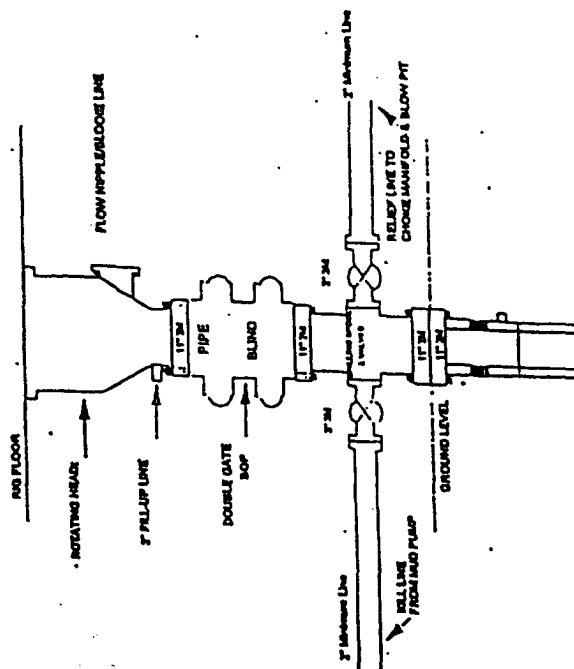
## Drilling Rig Choke Manifold Configuration 2000 psi System



Choke manifold installation from Surface Casing Point to Total Depth. 2,000psi working pressure equipment with two chokes.

Figure #3

## Drilling Rig 2000 psi System



BOP Installation from Surface Casing Point to Total Depth. 11" Bore 10" Nominal, 2000 psi working pressure double gate BOP to be equipped with blind rams and pipe rams. A 500 psi rotating head on top of ram preventer. All BOP equipment is 2,000 psi working pressure.

Figure #1