

OCD-ARTESIA

RECEIVED

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

MAY 05 2006

OCD-ARTESIA

FORM APPROVED  
OMB No. 1004-0136  
Expires November 30, 2000

APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of Work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. NMNM 111400	
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		6. If Indian, Allottee or Tribe Name	
2. Name of Operator EOG Resources, Inc. 1377		7. If Unit or CA Agreement, Name and No.	
3a. Address P.O. Box 2267, Midland, TX 79702		8. Lease Name and Well No. NEW 25 FED No. 1H	
3b. Phone No. (include area code) (432) 686-3642 75260		9. API Well No. 30-015-34842	
4. Location of Well (Report location clearly and in accordance with any State requirements.) At surface 660' FSL & 760' FEL (U/L P) At proposed prod. Zone 660' FNL & 760' FEL (U/L A)		10. Field and Pool, or Exploratory Undes Cottonwood Creek; Wolfcamp, West	
14. Distance in miles and direction from nearest town or post office* 11.5 miles NW from Artesia		11. Sec., T., R., M., or Blk. And Survey or Area Section 25, T16S-R24E, N.M.P.M.	
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drlg. Unit line, if any)		12. County or Parish Eddy	
16. No. of Acres in lease 320		13. State New Mexico	
17. Spacing Unit dedicated to this well E/2			
18. Distance from proposed location* to nearest well, drilling, completed applied for, on this lease, ft. 1,120'		20. BLM/BIA Bond No. on file NM2308	
19. Proposed Depth 4,653' TVD 8,516' TMD			
21. Elevations (Show whether DF, KDB, RT, GL, etc) Gr 3647'		22. Approximate date work will start* 4/15/2006	
23. Estimated duration 30 days			
24. Attachments Roswell Controlled Water Basin			

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.   | 4. Bond to cover the operations unless covered by an existing bond on file (see item 20 above)     |
| 2. A Drilling Plan.  | 5. Operator certification.   |
| 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) | 6. Such other site specific information and/or plans as may be required by the authorized officer. |

25. Signature <i>Donny G. Glanton</i>	Name (Printed/Typed) Donny G. Glanton	Date 3/9/2006
--	--	------------------

Title

SR ROW LEASE OPERATIONS REPRESENTATIVE

Approved by (Signature) <i>/s/ Russell E. Sorensen</i>	Name (Printed/Typed) /s/ Russell E. Sorensen	Date MAY 03 2006
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Title

ACTING FIELD MANAGER

Office

CARLSBAD FIELD OFFICE

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

APPROVAL FOR 1 YEAR

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)

APPROVAL SUBJECT TO  
GENERAL REQUIREMENTS AND  
SPECIAL STIPULATIONS  
ATTACHED

District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
1301 W. Grand Avenue, Artesia, NM 88210  
District III  
1000 Rio Brazos Rd., Aztec, NM 87410  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy, Minerals & Natural Resources Department  
OIL CONSERVATION DIVISION  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

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

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code 75260	Pool Name Undes Cottonwood Creek; Wolfcamp, West
Property Code	Property Name NEW 25 FEDERAL	Well Number 1H
OGRID No. 7377	Operator Name EOG RESOURCES, INC.	Elevation 3647'

Surface Location

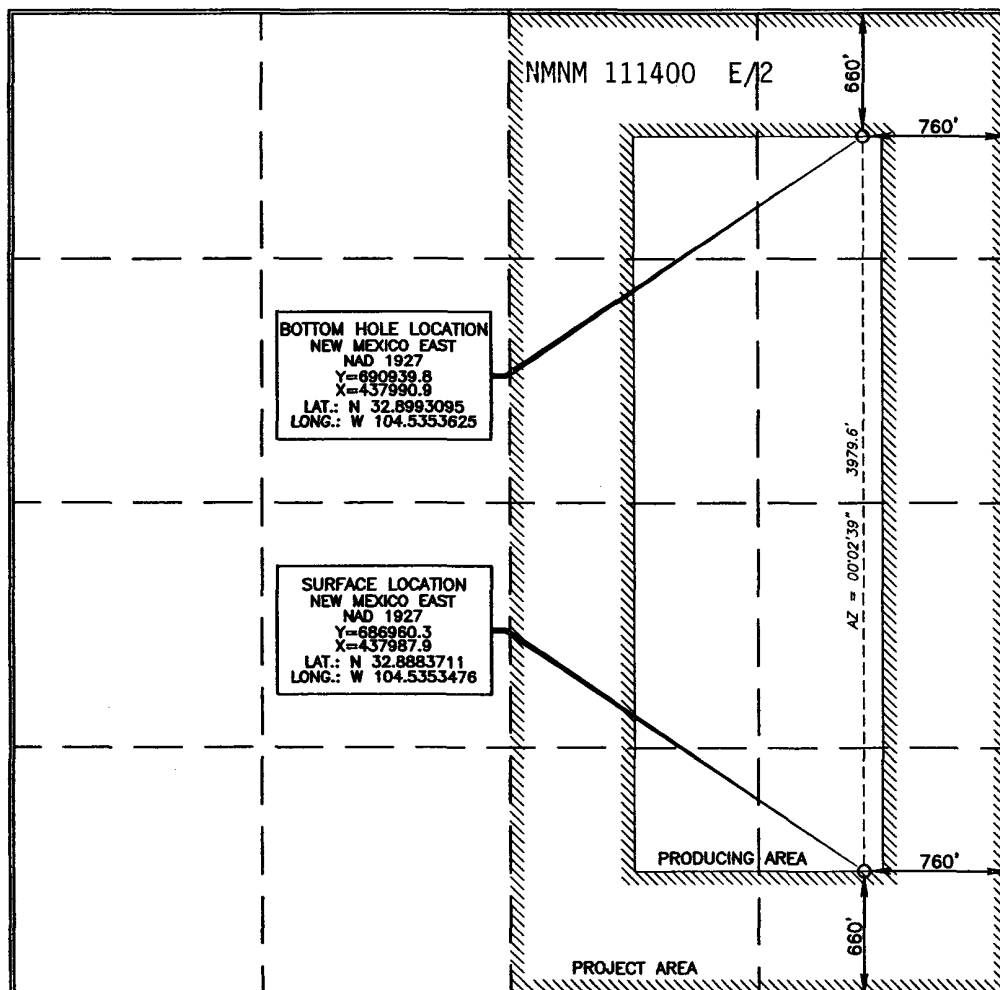
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
P	25	16 SOUTH	24 EAST, N.M.P.M.		660	SOUTH	760	EAST	EDDY

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
A	25	16 SOUTH	24 EAST, N.M.P.M.		660	NORTH	760	EAST	EDDY

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
320			

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.



OPERATOR CERTIFICATION

I hereby certify that the information contained 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 a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Signature: Donny G. Glanton Date: 3/9/06

Printed Name: Donny G. Glanton

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.

Date of Survey: FEBRUARY 16, 2006

Signature and Seal of Professional Surveyor:

Signature: Terry J. Glanton Certificate Number: 15079

WO# 060216WL-a (COC)

## DRILLING PROGRAM

EOG RESOURCES, INC.

New 25 Fed No. 1H

Eddy Co. NM

### 1. GEOLOGIC NAME OF SURFACE FORMATION:

Quaternary Alluvium 0-200

### 2. ESTIMATED TOPS OF IMPORTANT GEOLOGICAL MARKERS:

San Andres	665'
Glorieta	2,035'
Tubb	3,326'
Abo Shale	4,015'
Wolfcamp Pay	5,065'

### 3. ESTIMATED DEPTHS OF ANTICIPATED FRESH WATER, OIL OR GAS:

Quaternary Alluvium	0- 200'	Fresh Water
San Andres	665'	Oil
Glorieta	2,035'	Oil/Gas
Tubb	3,326'	Oil/Gas
Abo/Wolfcamp Pay	5,065'	Gas

No other Formations are expected to give up oil, gas or fresh water in measurable quantities. Surface fresh water sands will be protected by setting 7" casing at 900' and circulating cement back to surface.

### 4. CASING PROGRAM

<u>Hole Size</u>	<u>Interval</u>	<u>OD Casing</u>	<u>Weight</u>	<u>Grade</u>	<u>Jt. Conn.</u>	<u>Type</u>
9.875"	0-900'	7"	23#	J-55	LT&C	
6.125"	0-8,516'	4.5"	11.6#	P-110	LT&C	

#### Cementing Program:

7" Surface Casing:

Cement to surface with 150 sx Prem Plus, 3% Econolite 0.25 pps Flocele, 2% Calcium Chloride, 175 sx Prem Plus, 2% Calcium Chloride, 0.25 pps Flocele

4-1/2" Production

Cement to surface with 450sx Interfill C,+ 0.25 pps Flocele; 350 sx Premium Cement, 100% Acid Soluble Additive, + 0.6% Halad-344 + 0.8% Econolite+ 0.2% HR-55. .

## DRILLING PROGRAM

EOG RESOURCES, INC.

New 25 Fed No. 1H

Eddy Co. NM

### 5. MINIMUM SPECIFICATIONS FOR PRESSURE CONTROL:

(SEE EXHIBIT #1)

The blowout preventer equipment (BOP) shown in Exhibit #1 will consist of a double ram-type (5000 psi WP) preventer and an annular preventer (5000-psi WP). Units will be hydraulically operated and the ram-type will be equipped with blind rams on top and drill pipe rams on bottom. All BOP's and accessory equipment will be tested in accordance with Onshore Oil & Gas order No. 2. for a 3M system.

Pipe rams will be operationally checked each 24-hour period. Blind rams will be operationally checked on each trip out of the hole. These checks will be noted on the daily tour sheets.

### 6. TYPES AND CHARACTERISTICS OF THE PROPOSED MUD SYSTEM:

The well will be drilled to TD with a combination of brine, cut brine, and polymer mud system. The applicable depths and properties of this system are as follows:

<u>Depth</u>	<u>Type</u>	Wt	Viscosit	Waterloss
		<u>(PPG)</u>	<u>(sec)</u>	<u>(cc)</u>
0-900'	Fresh - Gel	8.6-8.8	28-34	N/c
900'-4400'	Cut Brine	8.8-9.2	28-34	N/c
4,400'-5,200'	Cut Brine	8.8-9.2	28-34	10-15
4,318'-8,516'	Polymer (Lateral)	9.0-9.4	40-45	10-25

Sufficient mud materials to maintain mud properties and meet minimum lost circulation and weight increase requirements will be kept at the wellsite at all times.

### 7. AUXILIARY WELL CONTROL AND MONITORING EQUIPMENT:

(A) A kelly cock will be kept in the drill string at all times.

(B) A full opening drill pipe-stabbing valve (inside BOP) with proper drill pipe connections will be on the rig floor at all times.

### 8. LOGGING, TESTING AND CORING PROGRAM:

Electric logging will consist of GR-Dual Laterlog and GR-Compensated Density-Neutron from +/-900' to TVD.

Possible sidewall cores based on shows.

**DRILLING PROGRAM**

**EOG RESOURCES, INC.**

**New 25 Fed No. 1H**

**Eddy Co. NM**

**9. ABNORMAL CONDITIONS, PRESSURES, TEMPERATURES AND  
POTENTIAL HAZARDS:**

The estimated bottom hole temperature (BHT) at TD is 125 degrees F with an estimated maximum bottom-hole pressure (BHP) at TD of 2000 psig. No hydrogen sulfide or other hazardous gases or fluids have been encountered, reported or are known to exist at this depth in this area. No major loss circulation zones have been reported in offsetting wells.

**10. ANTICIPATED STARTING DATE AND DURATION OF OPERATIONS:**

The drilling operation should be finished in approximately one month. If the well is productive, an additional 30-60 days will be required for completion and testing before a decision is made to install permanent facilities.

**DRILLING PROGRAM**

**EOG RESOURCES, INC.**

**New 25 Fed No. 1H**

**Eddy Co. NM**

**SURFACE USE AND OPERATIONS PLAN**

**Surface is owned by the BLM**

**Directions to Well Site: From the Intersection of U.S. Hwy 82 & U.S. Hwy 285, Go west on Hwy 82 for 11.3 miles; Thence north on County Road No. 95 (Joy Road) for 4.2 miles; Thence east on County Road No. 75 for 1.8 miles; Thence south 0.9 miles; Thence east for 0.8 miles; Thence north 0.1 miles to the proposed location.**

**1. EXISTING ROADS:**

Access to location will be made as shown on Exhibit #2

Routine grading and maintenance of existing roads will be conducted as necessary to maintain their condition as long as any operations continue on this lease.

**2. PROPOSED ACCESS ROAD:**

10,236' of new road is required (See Exhibit 2a). The proposed road will be a continuation of access along County Road No. 75; Thence south alongside and parallel with the east side right of way of EOG's existing 12' mainline; Thence east onto a State of New Mexico two track road; Thence north directly into the proposed well location.

No turnouts necessary.

No culverts are necessary. The grazing lessee has requested a cattleguard at the fence separating Section(s) 26 & 25. No low-water crossings are necessary.

Surfacing material consists of native caliche to be obtained from the nearest BLM-approved caliche pit. Any additional materials required will be purchased from the dirt contractor.

**3. LOCATION OF EXISTING WELLS:**

Exhibit #3 shows all existing wells within a one-mile radius of this well.

**4. LOCATION OF EXISTING AND/OR PROPOSED FACILITIES:**

There are no existing production facilities. If production is encountered, a temporary facility will be established on the drill pad, and if warranted, a production facility would be built at a later date in the immediate area of the drill pad location. If the well is productive, a flowline will be built to the nearest pipeline.

## **DRILLING PROGRAM**

**EOG RESOURCES, INC.**

**New 25 Fed No. 1H**

**Eddy Co. NM**

### **5. LOCATION AND TYPE OF WATER SUPPLY:**

Fresh water and brine water for drilling will come from commercial sources and transported to the well site over the roads as shown on Exhibit 2 & 2a and by temporary water supply lines.

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

After completion of drilling and/or completion operations, all equipment and other material not needed for operations will be removed. Location will be cleaned of all trash and junk to leave the well in an aesthetically pleasing condition as possible.

Any unguarded pits containing fluid will be fenced until they are dry and back filled.

After abandonment of the well, surface restoration will be in accordance with current federal laws and regulations. Location will be cleaned, and the well pad removed to promote vegetation and disposal of human waste will be complied with. Trash, waste paper, garbage and junk will be hauled to an approved disposal site in an enclosed trash trailer.

All trash and debris will be removed from the well site within 30 days after finishing drilling and/or completion operations.

### **ANCILLARY FACILITIES:**

No airstrip, campsite, or other facilities will be built.

### **WELL SITE LAYOUT:**

Exhibit #4 shows the relative location and dimensions of the well pad.

**DRILLING PROGRAM**

**EOG RESOURCES, INC.**

**New 25 Fed No. 1H**

**Eddy Co. NM**

**OTHER INFORMATION:**

The area around the well site is grassland and the topsoil is sandy. The vegetation is native scrub grass.

**COMPANY REPRESENTATIVES:**

**Permitting & Land**

Mr. Donny G. Glanton  
Senior ROW Lease Operations Representative  
EOG Resources, Inc.  
P.O. Box 2267  
Midland, TX 79702  
(432) 686-3642 Office

**Drilling**

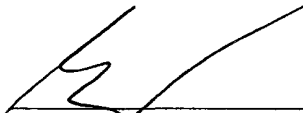
Mr. Ron McIntyre or  
Mr. Jason LaGrega  
Division Drilling Engineers  
EOG Resources, Inc.  
P.O. Box 2267  
Midland, TX 79702  
(432) 686-3640 Office  
(432) 686-3633 Office

**Operations**

Mr. Howard Kemp  
Production Manager  
EOG Resources, Inc.  
P.O. Box 2267  
Midland, TX 79702  
(432) 686-3704 Office

**CERTIFICATION:**

I HEREBY CERTIFY that I, or persons under my direct supervision, have inspected the proposed drill site and access route; that I am familiar with the conditions which presently exist; that the statements made in this 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 EOG Resources, Inc. and its contractors and sub-contractors in conformity with this plan and the terms and conditions under which it is approved.

  
\_\_\_\_\_  
Jason LaGrega  
Division Drilling Engineer  
DATE: 3/7/02



**DRILLING PROGRAM**

**EOG RESOURCES, INC.**

**New 25 Fed No. 1H**

**Eddy Co. NM**

**ATTACHMENT TO EXHIBIT #1**

1. Wear ring to be properly installed in head.
2. Blow out preventer and all fittings must be in good condition, 3000 psi W.P. minimum. Exhibit #1.
3. All fittings to be flanged
4. Safety valve must be available on rig floor at all times with proper connections, valve to be full bore 3000 psi W.P. minimum.
5. All choke and fill lines to be securely anchored especially ends of choke lines.
6. Equipment through which bit must pass shall be at least as large as the diameter of the casing being drilled through.
7. Kelly cock on kelly.
8. Extension wrenches and hand wheels to be properly installed.
9. Blow out preventer control to be located as close to driller's position as feasible.
10. Blow out preventer closing equipment to include minimum 40-gallon accumulator, two independent sources of pump power on each closing unit installation, and meet all API specifications.

EOG Resources, Inc.

NEW 25 Federal No. 1H

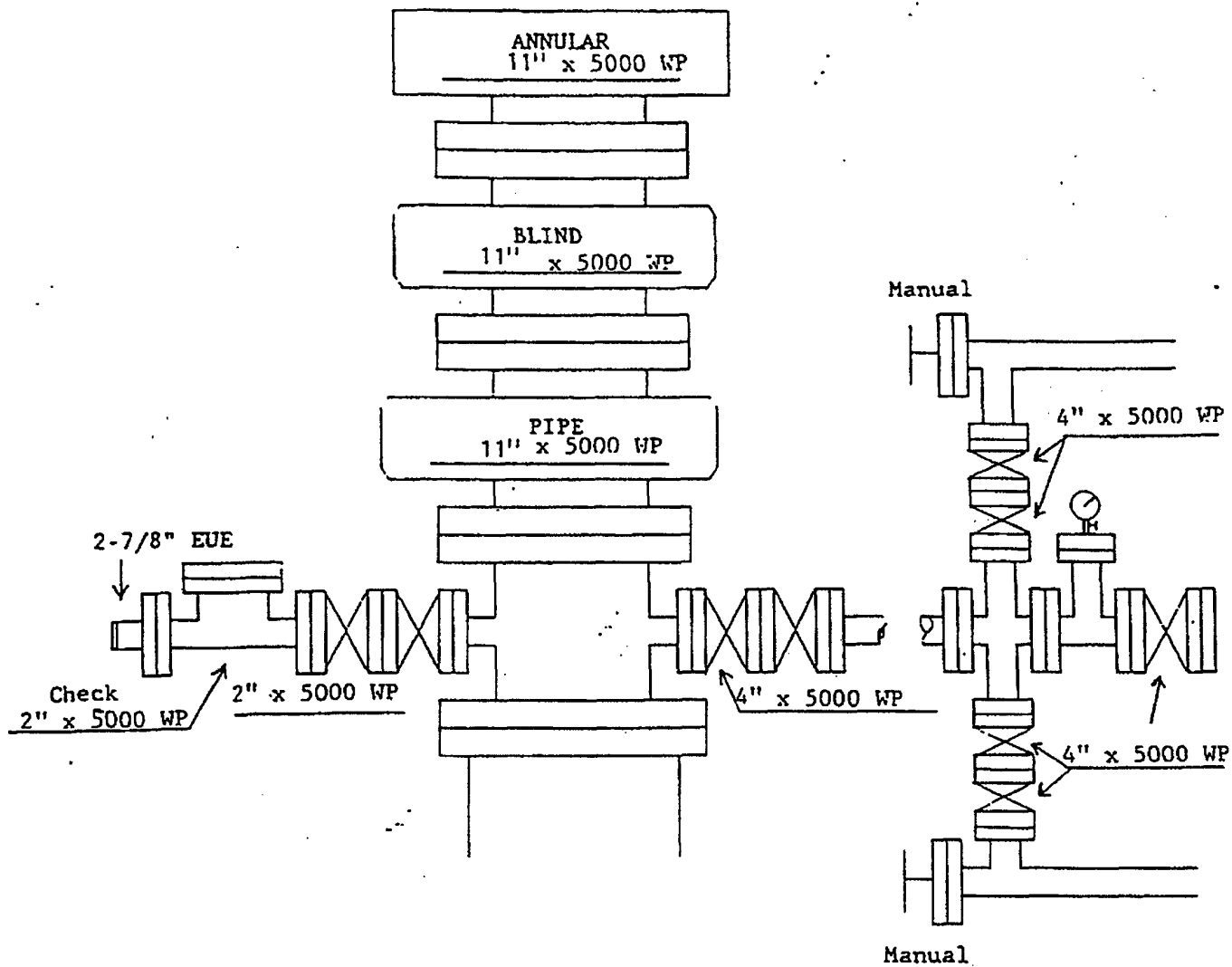
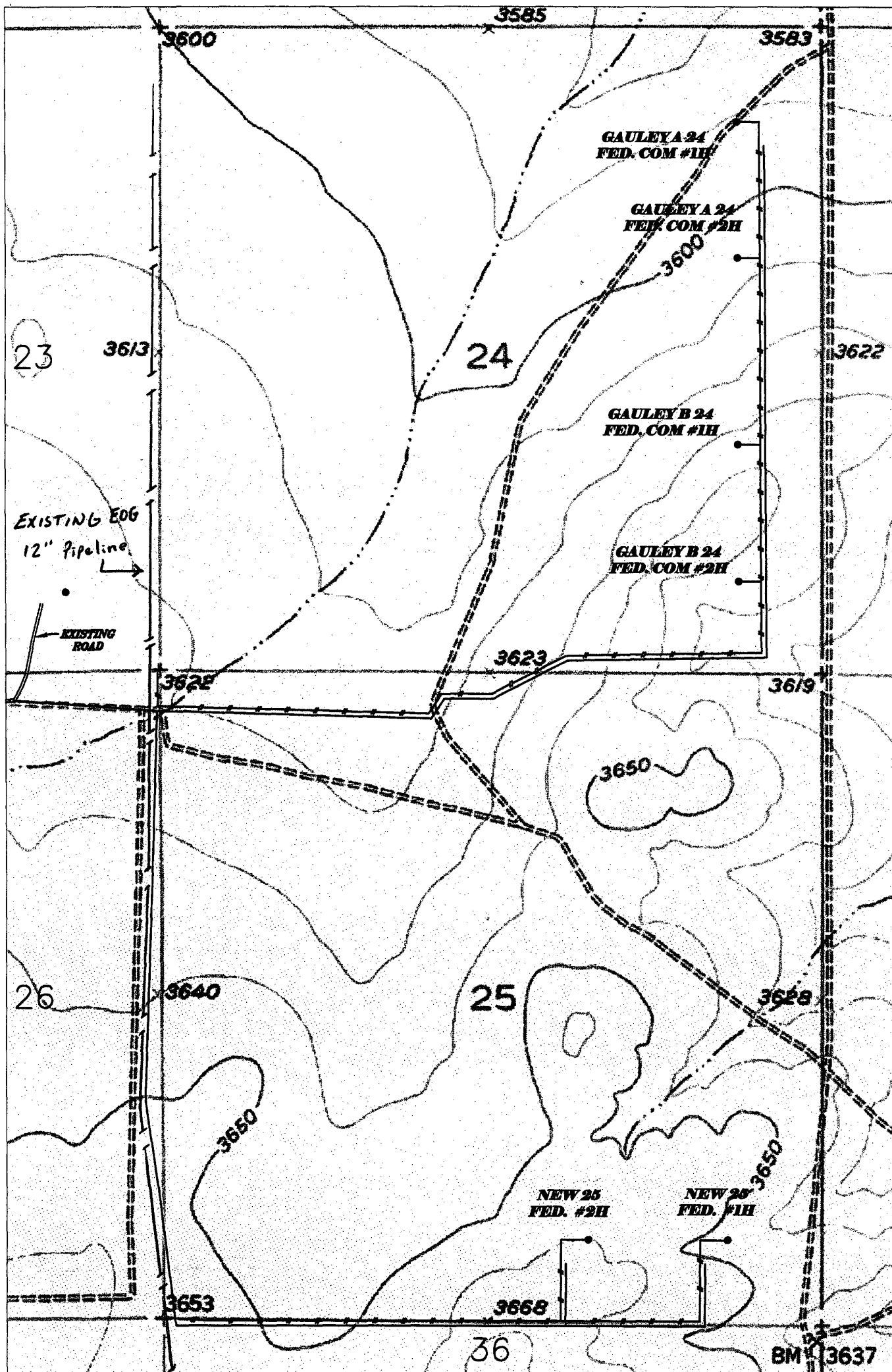


Exhibit 1

# EXHIBIT "2a"



## LEGEND

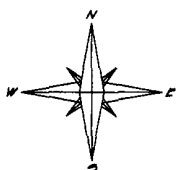
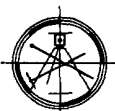
- - - - - DENOTES PROPOSED PIPELINE
- - - - - DENOTES PROPOSED ROAD

1000 0 1000 2000 FEET

SCALE: 1"=1000'

Asel Surveying  
& Consulting

P.O. BOX 393 - 310 W. TAYLOR  
HOBBS, NEW MEXICO - 505-393-9148



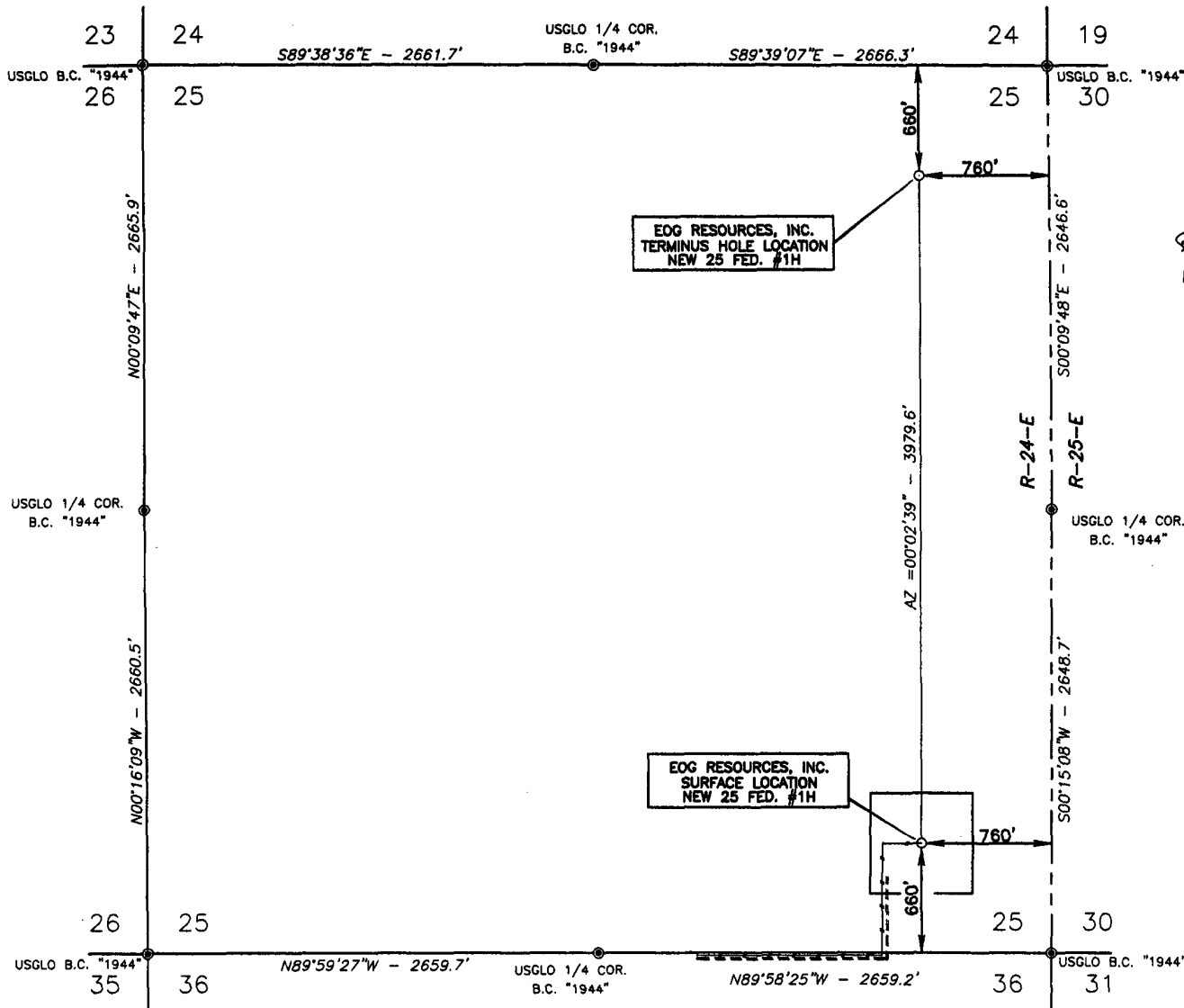
EOG RESOURCES, INC.

PROPOSED PIPELINES AND ROADS  
IN SECTIONS 24, 25, 26 & 36,  
TOWNSHIP 16 SOUTH, RANGE 24 EAST, N.M.P.M.,  
EDDY COUNTY, NEW MEXICO

02/27/2006

060216WL\_RD\_PL.DWG

SECTION 25, TOWNSHIP 16 SOUTH, RANGE 24 EAST, N.M.P.M.,  
EDDY COUNTY NEW MEXICO



Basis of Bearings - GPS Geodetic Measurements  
NM East Zone (83) North American Datum of 1983

SCALE: 1"=1000'

LEGEND

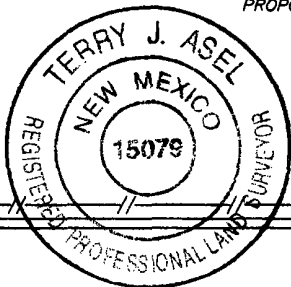
● - DENOTES FOUND MONUMENT

PROPOSED PIPELINE

PROPOSED ROAD

PROPOSED SURFACE LOCATION  
ELEV. = 3647'

DETAIL - NOT TO SCALE



SURVEYORS CERTIFICATE

I, TERRY J. ASEL, NEW MEXICO PROFESSIONAL SURVEYOR NO. 15079, DO HEREBY CERTIFY THAT I CONDUCTED AND AM RESPONSIBLE FOR THIS SURVEY, THAT THIS SURVEY IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF, AND MEETS THE MINIMUM STANDARDS FOR SURVEYING IN NEW MEXICO AS ADOPTED BY THE NEW MEXICO STATE BOARD OF REGISTRATION FOR PROFESSIONAL ENGINEERS AND SURVEYORS.

*Terry J. Asel* 2/28/2006  
Terry J. Asel N.M. R.P.S. No. 15079

Asel Surveying  
& Consulting

P.O. BOX 383 - 310 W. TAYLOR  
HOBBS, NEW MEXICO - 505-393-9146



EOG RESOURCES, INC.

NEW 25 FED. #1H  
IN SECTION 25, TOWNSHIP 16 SOUTH,  
RANGE 24 EAST, N.M.P.M., EDDY COUNTY,  
NEW MEXICO

Survey Date: 02/16/2006	Sheet 1 of 1 Sheets
W.O. Number: 060216WL-a	Drawn By: CDG
Date: 02/20/2006	060216WL-a.DWG Scale: 1"=1000'

**Statement Accepting Responsibility For Operations**

**Operator Name:** EOG Resources, Inc.  
**Street or Box:** P.O. Box 2267  
**City, State:** Midland, TX  
**Zip Code:** 79702

The undersigned accepts all applicable terms, conditions, stipulations, and restrictions concerning operations conducted on the leased land or portion thereof, as described below:

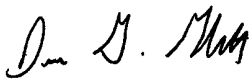
**Lease No.:** NMNM 111400

**Legal Description of Land:** E/2 of Section 25, T-16-S; R-24-E, N.M.P.M., Eddy Co. NM

**Formation:** Wolfcamp

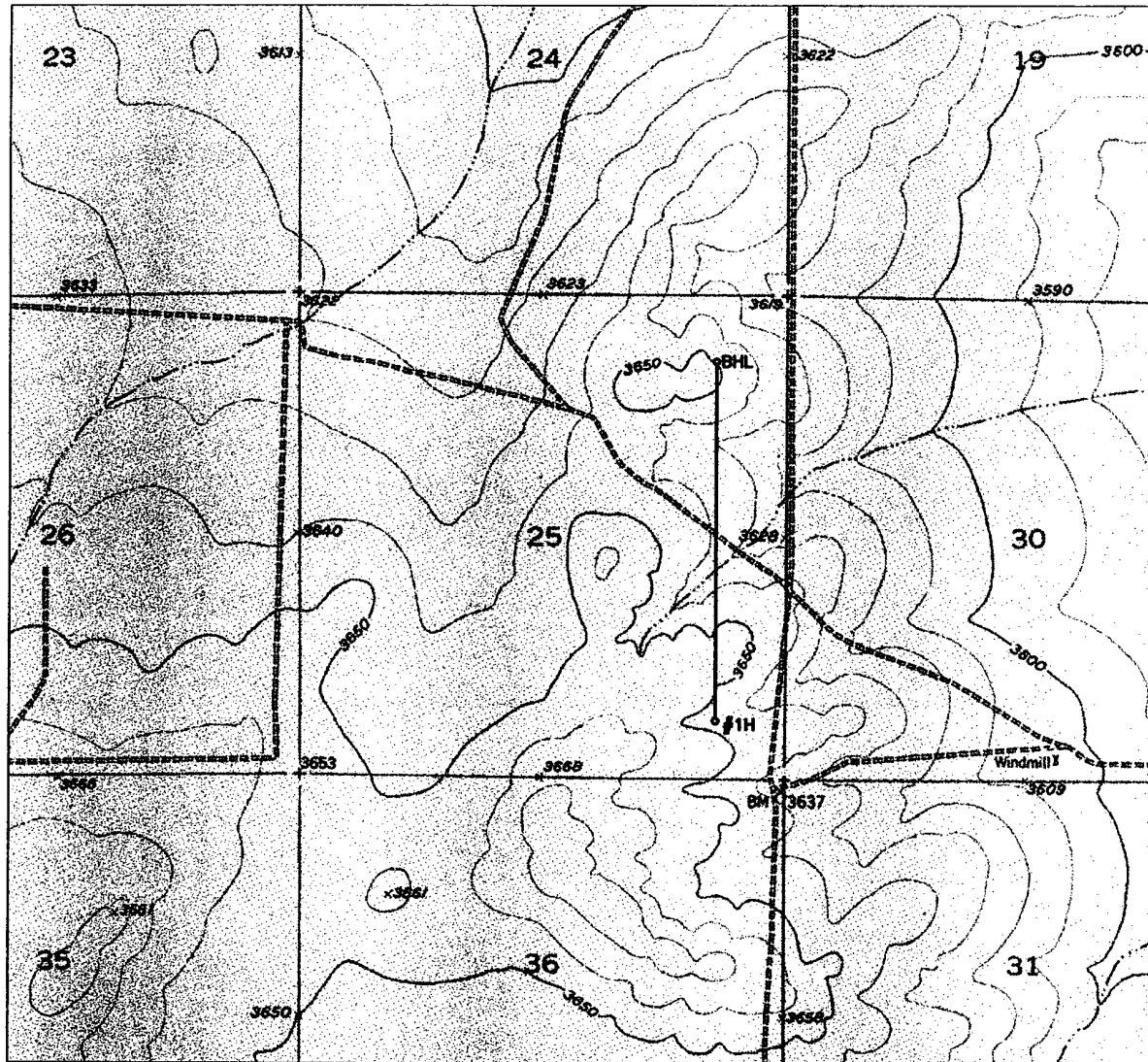
**Bond Coverage:** Nationwide

**BLM Bond File No.:** NM2308 with endorsement to State of NM

**Authorized Signature:**   
Donny G. Glanton  
**Title:** Agent

**Date:** 3/9/2006

# LOCATION VERIFICATION MAP



SEC. 25 TWP. 16-S RGE. 24-E

SURVEY N.M.P.M.

COUNTY EDDY

DESCRIPTION 660' FSL & 760' FEL

ELEVATION 3647'

OPERATOR EOG RESOURCES, INC

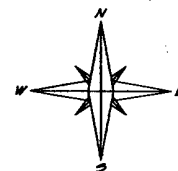
LEASE NEW 25 FED #1H

U.S.G.S. TOPOGRAPHIC MAP

HOPE NE, NM

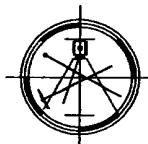
CONTOUR INTERVAL = 10 FEET

SCALE 1" = 2000'



Asel Surveying  
& Consulting

P.O. BOX 393 - 310 W. TAYLOR  
HOBBS, NEW MEXICO - 505-393-9146



## CONDITIONS OF APPROVAL - DRILLING

Operator's Name: EOG Resources Incorporated

Well Name & No: New 25 Federal No. 1 H

Location: Surface 660' FSL & 760' FEL, BHL: 660'FNL, 760' FEL, Sec. 25, T. 16 S. R. 24 E.

Lease: NMNM 111400

Eddy County, New Mexico

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### I. DRILLING OPERATIONS REQUIREMENTS:

1. The Bureau of Land Management (BLM) is to be notified at the Roswell Field Office, 2909 West Second St., Roswell, NM 88201, (505) 627-0272 for wells in Chaves and Roosevelt Counties; the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220, (505) 361-2822 for wells in Eddy County; and the Hobbs Field Station, 414 West Taylor, Hobbs NM 88240, (505) 393-3612 for wells in Lea County, in sufficient time for a representative to witness:

A. Spudding

B. Cementing casing: 7 inch; 4 1/2 inch;

C. BOP Tests

2. A Hydrogen Sulfide (H<sub>2</sub>S) Drilling Plan is not required for this well bore.

3. 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.

4. Submit a Sundry Notice (Form 3160-5, one original and five copies) for each casing string, describing the casing and cementing operations. Include pertinent information such as; spud date, hole size, casing (size, weight, grade and thread type), cement (type, quantity and top), water zones and problems or hazards encountered. The Sundry shall be submitted within 15 days of completion of each casing string. The reports may be combined into the same Sundry if they fall within the same 15 day time frame.

5. The API No. assigned to the well by NMOCD shall be included on the subsequent report of setting the first casing string.

### II. CASING:

1. The 7 inch shall be set at 850 Feet with cement circulated to the surface. If cement does not circulate to the surface the appropriate BLM 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. The minimum required fill of cement behind the 4 1/2 inch Production casing is to circulate to surface.

### III. PRESSURE CONTROL:

1. All BOP systems and related equipment shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2. The BOP and related equipment shall be installed and operational before drilling below the 13 3/8 inch casing shoe and shall be tested as described in Onshore Order No. 2. Any equipment failing to test satisfactorily shall be repaired or replaced.

2. Minimum working pressure of the blowout preventer and related equipment (BOPE) shall be 2 M psi.

3. The appropriate BLM office shall be notified in sufficient time for a representative to witness the test.

-The test shall be done by an independent service company

-The results of the test shall be reported to the appropriate BLM office.

-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.

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

-Both low pressure and high pressure testing of BOPE is required.