



OCD-ARTESIA

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

J-06-49

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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-048344	
1b. Type of Well: <input checked="" type="checkbox"/> Oil Well <input 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 SDX Resources, Inc.		7. If Unit or CA Agreement, Name and No.	
3a. Address PO Box 5061 Midland, TX 79704		8. Lease Name and Well No. Williams B Federal #4 27688	
3b. Phone No. (include area code) 432-685-1761		9. API Well No. 30-015-35141	
4. Location of Well (Report location clearly and in accordance with any State requirements.) At surface 2140 FNL 990 FWL At proposed prod. zone Same		10. Field and Pool, or Exploratory Artesia, Glorieta yeso	
11. Sec., T. R. M. or Blk. and Survey or Area 29, T17S, R28E, E		12. County or Parish	
13. State		14. Distance in miles and direction from nearest town or post office* 10 miles East of Artesia, NM	
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) (330') 500'		16. No. of acres in lease 120	
17. Spacing Unit dedicated to this well 40		18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 490'	
19. Proposed Depth 3500'		20. BLM/BIA Bond No. on file NM2307	
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3620' GR		22. Approximate date work will start* 10/01/2006	
23. Estimated duration 10 days		24. Attachments	

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

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

25. Signature <i>Bonnie Atwater</i>	Name (Printed/Typed) Bonnie Atwater	Date 07/26/2006
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Title
Regulatory Tech

Approved by (Signature) /s/ Tony J. Herrell	Name (Printed/Typed) /s/ Tony J. Herrell	Date SEP 06 2006
Title FIELD MANAGER	Office CARLSBAD FIELD OFFICE	

Application approval 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.

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 page 2)

WITNESS SURFACE LIMITING
PROD CEG
USED CEG CERT.

If earthen pits are used in association with the drilling of this well, an OCD pit permit must be obtained prior to pit construction.

APPROVAL SUBJECT TO
GENERAL REQUIREMENTS AND
SPECIAL STIPULATIONS
ATTACHED

SEE ATTACHED FOR
CONDITIONS OF APPROVAL

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 June 10, 2003

Submit to Appropriate District Office

State Lease - 4 Copies

Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number	² Pool Code 9683C	³ Pool Name Artesia, Gloriana, Yesc
⁴ Property Code 27688	⁵ Property Name WILLIAMS B FEDERAL	⁶ Well Number 4
⁷ OGRID No. 020451	⁸ Operator Name SDX RESOURCES, INC.	⁹ Elevation 3620

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
E	29	17-S	28-E		2140	NORTH	990	WEST	EDDY

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

¹² Dedicated Acre 40	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
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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.

¹⁶ LAT N32.80652 LON W104.20313	¹⁷ 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 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 working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division. Signature: <u>Bonnie Atwater</u> Date: <u>7/26/06</u> Printed Name: <u>Bonnie Atwater</u>			
	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. JULY 10, 2006 Date of Survey: <u>JULY 10, 2006</u> Signature and Seal of Professional Surveyor: Certification Number: <u>5412</u> DAN R. REDDY			

SURFACE USE AND OPERATIONS PLAN
SDX RESOURCES, INC.
Williams B Federal # 4
2140' FNL, 990' FWL
Unit E, Sec. 29, T17S, R28E
Eddy Co., NM

1. Existing Roads:

- A. The well site and elevation plat for the proposed well is shown in Exhibit #2. It was staked by Dan Reddy, Carlsbad, New Mexico.
- B. All roads to the location are shown in Exhibit #3A. The existing roads are labeled and upgrading of the road prior to drilling will be done where necessary as determined during the onsite inspection.
- C. Directions to location: E. of Artesia on Hwy. 82 ~ 10 miles .Just before MP 119 turn left and go .4 M. Follow road to the right and go .1 M. Turn left to location.
- D. 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:

Exhibit #3A shows the existing road.

~850' of new road will be needed. It is shown on Exhibit #3 A & B.

3. Location of Existing Wells:

Exhibit #4 shows all existing wells within a one-mile radius of this well.

4. Location of Existing and/or Proposed Facilities and ROW's:

- A. If the well is productive:
 - 1. The well will be tested and if commercial production exist, a 3" poly flowline will be laid to an existing battery at the Williams B Fed. #1 location. The proposed ROW is shown in exhibits 3A&B.
 - 2. A Power line will be built to location. It will be permitted and built by Central Valley Electric Company.
- B. If the well is productive, rehabilitation plans are as follows:
 - 1. The reserve pit will be back-filled after the contents of the pit are dry (within 120 days after the well is complete).
 - 2. Topsoil removed from the drill site will be used to raconteur the pit area to the original natural level, as nearly as possible, and reseeded as per BLM specifications.

5. Location and Type of Water Supply:

The well will be drilled with a combination brine and fresh water mud systems as outlined in the drilling program. The brine and fresh water will be obtained from commercial water stations in the area and hauled to roads shown in Exhibit #3. No water well will be drilled on the location.

6. Source of Construction Materials:

All caliche required for construction of the drill pad and any new access road will be obtained from the drilling pits and/or on site when possible. Any additional caliche will be obtained from approved caliche pits. All roads and pads will be constructed of 6" rolled and compacted caliche.

7. Methods of Handling Water Disposal:

- A. Drill cuttings not retained for evaluation purposes will be disposed into the reserve pit.
- B. Drilling fluids will be contained in plastic lined pits. The reserve pit will contain any excess drilling fluid or flow from the well during drilling, cementing and completion operations. The reserve pit will be an earthen pit, approximately 100' x 100' x 8' deep, fenced, and plastic-lined (12 mil thickness).
- C. Water produced from the well during completion may be disposed into the reserve pit. After the well is permanently placed on production, produced water will be trucked to an approved disposal site.
- D. Garbage and trash produced during drilling or completion operations will be collected in a trash trailer by a contractor. All water and fluids will be disposed of into the reserve pit. Salts and other chemicals produced during drilling or testing will be disposed into the reserve pit. No toxic waste or hazardous chemicals will be produced by this operation.
- E. After the rig is moved out and the well is either completed or abandoned, all waste materials will be cleaned-up within 90 days. No adverse materials will be left on the location. The reserve pit will be completely fenced and kept closed until it has dried. When the reserve pit is dry enough to breakout and fill and as weather permits the unused portion of the well site will be leveled and reseeded as per BLM specifications. Only that part of the pad required for production facilities will be kept in use.

8. Ancillary Facilities:

None

9. Well Site Layout:

- A. The drill pad layout is shown in Exhibit #5. Dimensions of the pad and pits and location of major rig components are shown. Top soil, if available, will be stockpiled per BLM specifications as determined at the on-site inspection. Because the pad is almost level no major cuts will be required.

- B. Exhibit #5 shows the planned orientation for the rig and associated drilling equipment, reserve pit, trash pit, pipe racks, turn-around, parking areas and access road. No permanent living facilities are planned but a temporary foreman/toolpusher's trailer will be on location during the drilling operations.
- C. The reserve pit will be lined with high-quality plastic sheeting (12 mil thickness).

10. Plan for Restoration of the Surface:

- A. Upon completion of the proposed operation, if the well is to be abandoned, the pit area, after allowing to dry, will be broken out and leveled. The original top soil will be returned to the entire location which will be leveled and contoured to as nearly the original topography as possible.

All trash and garbage will be hauled away in order to leave the location in an aesthetically pleasing condition. All pits will be filled and the location leveled within 120 days after abandonment.

- B. The disturbed area will be revegetated by reseeding during the proper growing season with a seed mixture of native grasses as recommended by the BLM.
- C. The reserve pit will be fenced prior to and during drilling operations. The fencing will remain in place until the pit area is cleaned-up and leveled. No oil will be left on the surface of the fluid in the pit.
- D. Upon completion of the proposed operations, if the well is completed, the reserve pit area will be treated as outlined above within the same prescribed time. The caliche from any area of the original drill site not needed for production operations or facilities will be removed and used for construction of thicker pads. Any additional caliche required for facilities will be obtained from an approved caliche pit. Topsoil removed from the drill site will be used to recontour the pit area and any unused portions of the drill pad to the original natural level and reseeded as per BLM specifications.

11. Surface Ownership:

BLM
Grazing Leased to Bogle , LTD

Surface leasee has been notified.

12. Other Information:

- A. The area around the well site is grassland. The vegetation is native scrub grasses with abundant catclaw and mesquite.
- B. There is no permanent or live water in the immediate area.

- C. An archaeological survey has been requested and will be forwarded to the BLM when completed.

13. Lessee's and Operator's Representative:


The SDX Resources Inc. representative for assuring compliance with the surface use plan is as follows:

Chuck Morgan
SDX Resources Inc.
PO Box 5061
Midland, TX 79704
432/685-1761 Office
432/685-0533 Fax

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 currently exist; that the statements made in this plan are to the best of my knowledge, true and correct; and the work associated with the operations proposed herein will be performed by SDX Resources Inc. and its contractors and subcontractors in conformity with this plan and the terms and conditions which it is approved.

SDX Resources Inc.



John Pool
Vice-President

DRILLING PROGRAM
SDX Resources Inc.
Williams B Federal # 4
2140' FNL, 990' FWL
Unit E, Sec. 29, T17S, R28E
Eddy Co., NM

1. Geologic Name of Surface Formation:

Permian

2. Estimated Tops of Important Geologic Markers:

Yates	600
7- Rivers	900'
Queen	1200'
Grayburg	1600'
San Andres	1950'

3. Estimated Depth of Anticipated Fresh Water, Oil or Gas:

Water Sand	150' - 200'	Fresh Water
Yates	650	Oil & Gas
7-Rivers	950	Oil & Gas
Queen	1400'	Oil & Gas
Grayburg	1880'	Oil & Gas
San Andres	2800'	Oil & Gas

Fresh water sands will be protected by running 8-5/8" casing to a minimum depth of 450' and circulating cement. All other zones will be isolated by running 4-1/2" or 5-1/2" production casing and circulating cement.

4. Casing Program:

<u>Hole Size</u>	<u>Interval</u>	<u>OC Csg</u>	<u>Weight Grade Jt Cond Type</u>
12-1/4"	0 - 450	8-5/8"	24#, J55, Used
7-7/8"	0 - TD	4-1/2" - 5-1/2"	9.5# - 17#, J55, Used

Cement Program:

8-5/8" Surface Casing: Cemented to surface with 325 sx of Class C with 2% CaCl and 1/4#/sx Flocele.

5-1/2" Production Casing: Cemented with 300 sx of Class C and 400 sx of Lite C with 6# salt/sx and 1/4#/sx Flocele. This should circulate cement to the surface.

5. Minimum Specifications for Pressure Control:

The blowout preventer equipment (BOP) shown in Exhibit #1 will consist of an annular bag type preventer (1000 psi WP). Unit will be hydraulically operated. BOP will be nipped up on the 8-5/8" surface csg and used continuously until TD is reached. BOP and accessory equipment will be tested to 1000 psi before drilling out of surface casing. A 2" kill line and a 2" choke line will be included in the drilling spool. Other accessories to the BOP equipment will include a kelly cock.

6. Types and Characteristics of the Proposed Mud System:

The well will be drilled to TD with a combination of fresh water and brine water mud system. The applicable depth and properties of this system are as follows:

<u>Depth</u>	<u>Type</u>	<u>Weight (ppg)</u>	<u>Viscosity (sec)</u>	<u>Waterloss (cc)</u>
0 – 450	Fresh Water (spud)	8.5	40 – 45	N/C
450 – TD	Brine water, SWG, Starch	10.0	30	24

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 mud logging unit complete with H₂S detector will be continuously monitoring drilling penetration rate and hydrocarbon shows from 1000' to TD.

8. Logging, Testing and Coring Program:

- A. Drillstem tests will be run on the basis of drilling shows.
- B. The electric logging program will consist of GR-Dual Laterolog and GR-Compensated Neutron-Density from TD to surface casing.
- C. Conventional coring may be performed in select intervals if deemed necessary.
- D. Further testing procedures will be determined after the production casing has been cemented at TD based on drill shows and log evaluation.

9. Abnormal Conditions, Pressures, Temperatures, & Potential Hazards:

No abnormal pressure or temperatures are anticipated. The estimated bottom hole temperature (BHT) at TD is 94° and estimated maximum bottom-hole pressure (BHP) is 800 psig. No abnormal concentrations of hydrogen sulfide or other hazardous gases or fluids have been encountered, reported or are known to exist at this depth in this area. All H₂S operation precautions will be followed (see attached H₂S drilling operations plans). No major loss circulation zones have been reported in offsetting wells.

10. Anticipated Starting Date and Duration of Operations:

Road and location work will not begin until approval has been received from the BLM. The anticipated spud date is October 1, 2006. Once commenced, the drilling operation should be finished in approximately 10 days. If the well is productive, an additional 30 days will be required for completion and testing before a decision is made to install permanent facilities.

HYDROGEN SULFIDE DRILLING OPERATIONS PLAN
SDX Resources Inc.
Williams B Fed. #4 2140 FNL & 990 FWL
Sec. 29, T17S, R28E, Unit E
Eddy Co., NM

I. Hydrogen Sulfide Training

All personnel, whether regularly assigned, contracted, or employed on an unscheduled basis, will receive training from a qualified instructor in the following areas prior to commencing drilling operations on this well:

1. The hazards and characteristics of hydrogen sulfide (H₂S).
2. The proper use and maintenance of personal protective equipment and life support system.
3. The proper use of H₂S detectors, alarms, warning systems, briefing areas, evacuation procedures, and prevailing winds.
4. The proper techniques for first aid and rescue procedures.

In addition, supervisory personnel will be trained in the following areas:

1. The effects of H₂S on metal components. If high tensile tubulars are to be used, personnel will be trained in their special maintenance requirements.
2. Corrective action and shut-in procedures when drilling or reworking a well and blowout prevention and well control procedures.
3. The contents and requirements of the H₂S Drilling Operations Plan and the Public Protection Plan.

There will be an initial safety session just prior to commencing operations on the well. The initial session shall include a review of the site's specific H₂S Drilling Operations Plan and the Public Protection Plan. This plan shall be available at the well site. All personnel will be required to carry documentation that they have received the proper training.

II. H₂S SAFETY EQUIPEMNT AND SYSTEMS

Note: All H₂S safety equipment and systems will be installed, tested, and operational when drilling reaches a depth of 500'.

1. Well Control Equipment:
 - A. Annular Preventer to accommodate all pipe sizes with properly sized closing unit.
2. Protective Equipment for Essential Personnel:
 - A. Mark II Surviveair 30-minute units located in the dog house.

3. H2S Detection and Monitoring Equipment:

- A. 1 - portable H2S monitor positioned on location for best coverage and response.
- B. Mud logging trailer shall have H2S monitoring equipment.

4. Visual Warning Systems:

- A. Guy lines will be flagged and a wind sock will be positioned on location.
- B. Caution/Danger signs shall be posted on roads providing direct access to location.

5. Mud Program:

The mud program has been designed to minimize the volume of H2S circulated to the surface. Proper mud weight, safe drilling practices, will minimize hazards when penetrating H2S bearing zones.

6. Metallurgy:

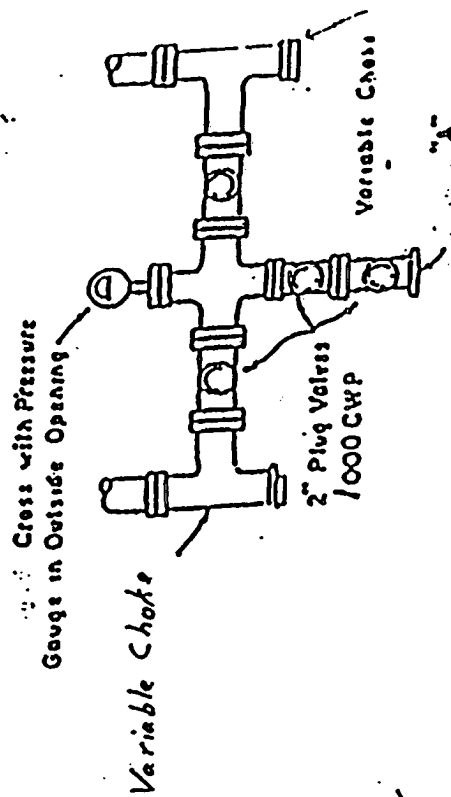
All drill strings, casings, tubing, wellhead, blowout preventers, drilling spool, kill lines, choke manifold and lines, and valves shall be suitable for H2S service as necessary.

7. Communication:

Radio communications in company vehicles including cellular telephone and 2-way radio.

8. Well Testing:

No DST's are planned.



PLAN VIEW-CHOKE-MANIFOLD

Exhibit #1

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.

Reclamation: 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.

OPTIONAL PIT CONSTRUCTION STANDARDS

The reserve pit may be constructed in predominantly fill material if:

- (1) Lined as specified above and
- (2) A temporary or emergency pit may be constructed immediately adjacent to the reserve pit as long as the pit remains within the APD boundary. Mineral material removed from this pit may be used for the construction of this well pad only and its immediate access road, as long as that portion of the access road the material is used on remains on-lease. Removal of any material from the APD boundary for use on other well locations or roads must first be purchased from BLM.

Reclamation of the reserve pit consists of bulldozing all reserve pit contents and contaminants into the borrow pit and covering with a minimum of 3 feet of clean soil material. The entire area must be re-contoured, all trash removed, and reseeded 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

Well Name & No. Williams B Federal #4

Operator's Name: SDX Resources

Location: 2140 FNL, 990 FWL, Section 29, T-17-S, R-28-E

Lease: NMNM-048344

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I. DRILLING OPERATIONS REQUIREMENTS:

1. The Bureau of Land Management (BLM) is to be notified at the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220, (505) 234-5972 or (505) 706-2779 (After hours) - for wells in Eddy County, in sufficient time for a representative to witness:
 - A. Spudding
 - B. Cementing casing: 8-5/8 inch 4-1/2 or 5-1/2 inch
 - C. BOP tests
2. A Hydrogen Sulfide (H₂S) Drilling Plan should be activated prior to drilling into the Yates Formation. A copy of the plan shall be posted at the drilling site.
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 four 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:

**NB! Possible lost circulation zones in the Grayburg and San Andres.
High possibility of karst in the section.**

1. The 8-5/8 inch surface casing shall be set at 450 feet, below usable water and 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 5-1/2 inch production casing is **cement shall 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 8-5/8 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) is 2000 psi.

Calculated MASP = 1050 psi

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

- The tests 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 a safe workman-like manner. Hard line connections shall be required.