Form 3160-5 (September 2001)

### UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

#### FORM APPROVED OM B No. 1004-0135 Expires: January 31, 2004

5. Lease Serial No.

LC-070315

#### SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.					, Allottee or Tribe Name
SUBMIT IN TR	IPLICATE- Other inst	ructions on rever		7. If Unit or	r CA/Agreement, Name and/or No.
1. Type of Well ☐☐ ☐☐ ☐☐ ☐☐ ☐☐ ☐☐ ☐☐ ☐☐ ☐☐ ☐☐ ☐☐ ☐☐ ☐	Gas Well□□ Other	DE	C 2 3 2014	8. Well Nar	
2. Name of Operator Fasken Oil a	nd Ranch, Ltd. 🖊			9. API We	21 Federal Com. No.2H Ell No.
3a Address 6101 Holiday Hill Road, Midland, TX		3b. Phone No. (include 432-687-1777		30-025-41994 10. Field and Pool, or Exploratory Area	
<ol> <li>Location of Well (Footage, Sec., SHL Sec. 21, T20S-R34E, 200 BHL Sec. 28, T20S-R34E, 231</li> </ol>	'FNL &1650' FWL /				one Spring, South or Parish, State
12. CHECK A	PPROPRIATE BOX(ES) TO	INDICATE NATUR	E OF NOTICE, RE	PORT, OR	OTHER DATA
TYPE OF SUBMISSION	TYPE OF ACTION				
Notice of Intent  Subsequent Report  Final Abandonment Notice	Acidize Alter Casing Casing Repair Change Plans Convert to Injection	Deepen Fracture Treat New Construction Plug and Abandon Plug Back	Production (Star Reclamation Recomplete Temporarily Aba Water Disposal	,	Water Shut-Off Well Integrity  Other Use BOP Co-flex hose.
13. Describe Proposed or Complete	ed Operation (clearly state all perti-	nent details, including estin	nated starting date of any	proposed wo	rk and approximate duration thereof.

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

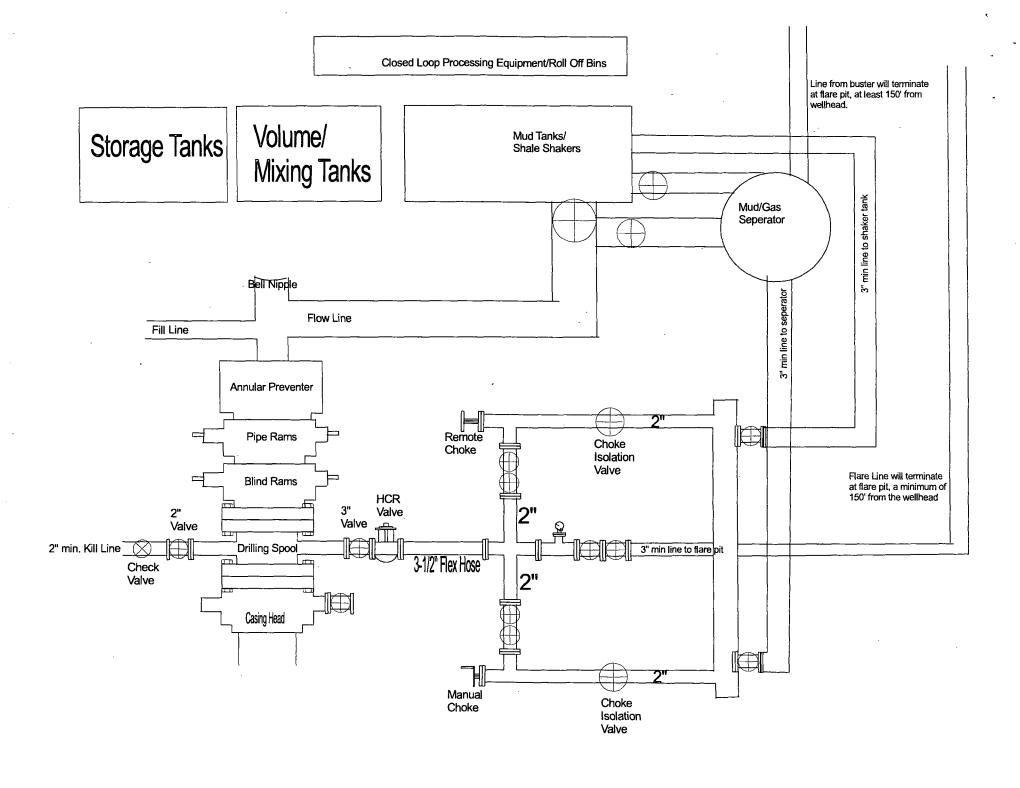
Fasken Oil and Ranch, Ltd. requests a variance to drill this well using a co-flex line between the BOP and choke manifold. This will be an armored 3.5" 10,000 psi WP flex hose connecting the BOP and choke manifold. The hose is rated to 10,000 psi, and has 10,000 psi flanges on each end. The hose will be tested to 5000 psi along with the rest of the BOP system as set out in the APD. Documentation for the hose is attached. As per the manufacturer this hose is not required to be anchored.

## SEE ATTACHED FOR CONDITIONS OF APPROVAL

14. Thereby certify that the foregoing is true and correct Name (Printed/Typed)	Title Sr. Drilling Eng	neer APPR	OVED
Signature Cory Frederick    Diplottly signed by Cory Trederick   Diplottly signed by Cory Trederick, s. ox, mail-tary Skind-teen, cv1/8   Diplottly signed by Cory Trederick, s. ox, mail-tary Skind-teen, cv1/8   Diplottly signed by Cory Trederick, s. ox, mail-tary Skind-teen, cv1/8   Diplottly signed by Cory Trederick, s. ox, mail-tary Skind-teen, cv1/8   Diplottly signed by Cory Trederick   Diplottly signed by Cory	Date	07/24/2014	
THIS SPACE FOR FEDE	RAL OR STATE OF	ICE USEDEC	8/2014
Approved by	Title	PADEALL OF PARE	MO MANAGEMENT
Conditions of approval, if any, are attached. Approval of this notice does not certify that the applicant holds legal or equitable title to those rights in the subwhich would entitle the applicant to conduct operations thereon.	1	CARLSPAS	FIELD OFFICE
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime of States any false, fictitious or fraudulent statements or representations as to any	for any person knowingly and wymatter within its jurisdiction.	illfully to make to any de	partment or agency of the United
(Instructions on page 2)			1/1/2

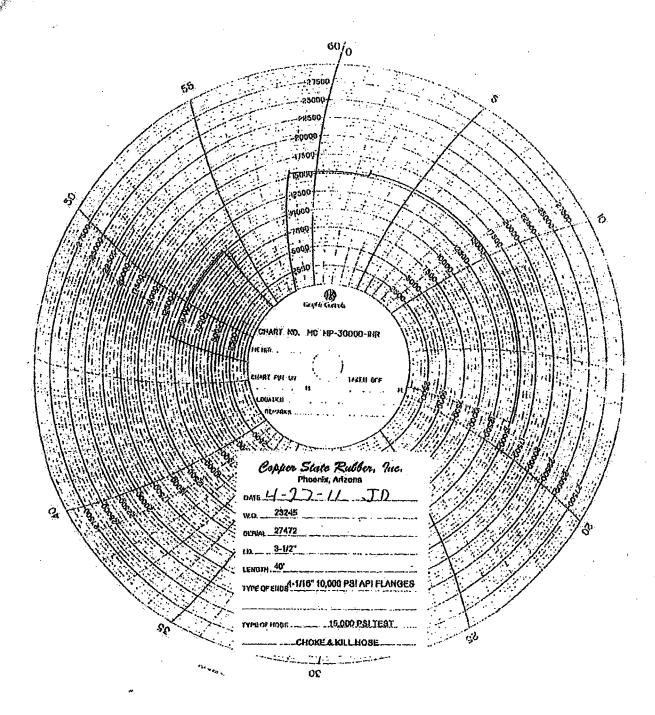
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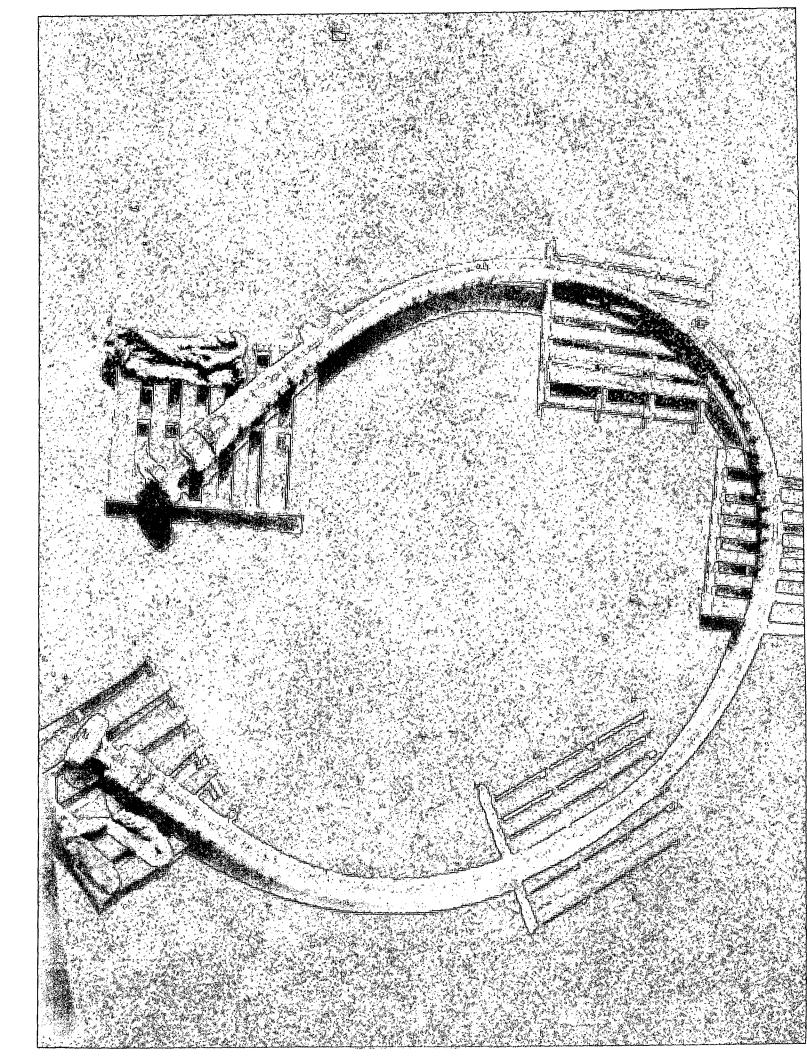
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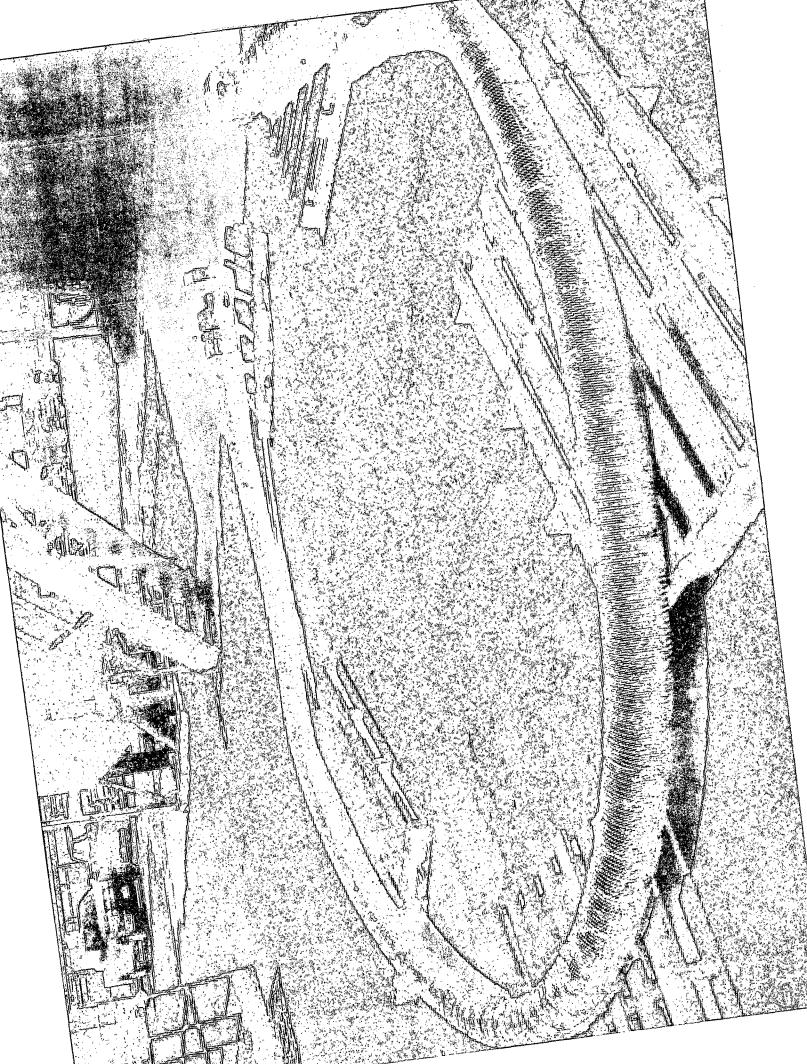


# COPPER STATE RUBBER VISUAL INSPECTION / HYDROSTATIC TEST REPORT CHOKE & KILL / CEMENTING HOSE 10,000 P.S.I. W/P X 16,000 P.S.I. T/P SPEC: 090-1915 HS H28 SUITABLE

SHOP ORDER NO.: 23245	SIZE: 3-1/2"	l,D,
SERIAL NO.: 27472	LENGTH 40 FT.	IN.
CONNECTIONS:	I-1/16" 10,000 PSI API FLANGES	
10A2 - 10A3 - 0	D2 - HT-GSZ - HT-X1840	·
VISUAL	NSPECTION	
(A) END CAPS / SLEEVE RECESS: (B) EXTERIOR / COVER / BRANDING: (C) INTERIOR TUBE:	OK OK	ىرى ئەزىلىق ئىلىنىدىكى ئىلىنىدىكى ئىلىنىدىكى ئىلىنىڭ ئېزىكى ئىلىنىڭ ئېزىكى ئىلىنىڭ ئېزىكى ئىلىنىڭ ئېزىكى ئىلىن ئىلىنى ئىلىنىڭ ئىلىنىڭ ئىلىنىڭ ئىلىنىڭ ئىلىنىڭ ئىلىنىڭ ئېزىكى ئىلىنىڭ ئىلىنىڭ ئىلىنىڭ ئىلىنىڭ ئىلىنىڭ ئىلىنىڭ ئىلىنىڭ ئىلىنىڭ ئىلىنى
HYDROS	TATIC TEST	
5 MIN. @ 10,000 PSI		
2 MIN. @ 0 PSI	9' - 10" OAL	
15 MIN. @ 15,000 PSI		
WITNESSED BY: Phil Su	der	
DATE April 27, 2011		
FORM QA-21- REV-3 9/07		







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#### PECOS DISTRICT CONDITIONS OF APPROVAL

**OPERATOR'S NAME:** | Fasken Oil & Ranch

**LEASE NO.: | NMLC-070315** 

WELL NAME & NO.: | Paloma 21 Federal Com 2H SURFACE HOLE FOOTAGE: | 0200' FNL & 1650' FWL

BOTTOM HOLE FOOTAGE | 2310' FNL & 1870' FWL Sec. 28, T. 20 S., R 34 E.

LOCATION: | Section 21, T. 20 S., R 34 E., NMPM

**COUNTY:** Lea County, New Mexico

API: | 30-025-41994

#### The original COAs still stand with the following drilling modifications:

#### I. DRILLING

#### A. DRILLING OPERATIONS REQUIREMENTS

The BLM is to be notified in advance for a representative to witness:

- a. Spudding well (minimum of 24 hours)
- b. Setting and/or Cementing of all casing strings (minimum of 4 hours)
- c. BOPE tests (minimum of 4 hours)

#### **\( \)** Lea County

Call the Hobbs Field Station, 414 West Taylor, Hobbs NM 88240, (575) 393-3612

- 1. Hydrogen Sulfide (H2S) monitors shall be installed prior to drilling out the surface shoe and a Hydrogen Sulfide (H2S) Drilling Plan shall be activated 500 feet prior to drilling into the Yates formation. As a result, the Hydrogen Sulfide area must meet Onshore Order 6 requirements, which includes equipment and personnel/public protection items. If Hydrogen Sulfide is encountered, please provide measured values and formations to the BLM.
- 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. If the drilling rig is removed without approval an Incident of Non-Compliance will be written and will be a "Major" violation.
- 3. Floor controls are required for 3M or Greater systems. These controls will be on the rig floor, unobstructed, readily accessible to the driller and will be operational at all times during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table; the area immediately above the substructure on which the draw works is located, this does not include the dog house or stairway area.

4. The record of the drilling rate along with the GR/N well log run from TD to surface (horizontal well – vertical portion of hole) shall be submitted to the BLM office as well as all other logs run on the borehole 30 days from completion. If available, a digital copy of the logs is to be submitted in addition to the paper copies. The Rustler top and top and bottom of Salt are to be recorded on the Completion Report.

#### B. CASING

Changes to the approved APD casing program need prior approval if the items substituted are of lesser grade or different casing size or are Non-API. The Operator can exchange the components of the proposal with that of superior strength (i.e. changing from J-55 to N-80, or from 36# to 40#). Changes to the approved cement program need prior approval if the altered cement plan has less volume or strength or if the changes are substantial (i.e. Multistage tool, ECP, etc.). The initial wellhead installed on the well will remain on the well with spools used as needed.

Centralizers required on surface casing per Onshore Order 2.III.B.1.f.

Wait on cement (WOC) time prior to drilling out 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 for all casing strings. DURING THIS WOC TIME, NO DRILL PIPE, ETC. SHALL BE RUN IN THE HOLE. Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. See individual casing strings for details regarding lead cement slurry requirements.

No pea gravel permitted for remedial or fall back remedial without prior authorization from the BLM engineer.

#### R-111-P Potash

Capitan Reef

Possibility of water flows in the Artesia Group, Salado, and Capitan Reef. Possibility of lost circulation in the Red Beds, Artesia Group, Rustler, Capitan Reef, and Delaware.

Abnormal pressures may be encountered within the  $3^{\rm rd}$  Bone Spring Sand and Wolfcamp formation.

- 1. The 13-3/8 inch surface casing shall be set at approximately 1620 feet (in a competent bed below the Magenta Dolomite, which is a Member of the Rustler, and if salt is encountered, set casing at least 25 feet above the salt) 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 surface log readout will be used or a cement bond log shall be run to verify the top of the cement. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after completing the cement job.
  - b. Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry.
  - 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 cementing will be done prior to drilling out that string.

#### **Special Capitan Reef requirements:**

If any lost circulation occurs below the Base of the Salt, the operator shall do the following:

- Switch to fresh water mud to protect the Capitan Reef and use fresh water mud until setting the intermediate casing. The appropriate BLM office is to be notified for a PET to witness the switch to fresh water.
- Daily drilling reports from the Base of the Salt to the setting of the intermediate casing are to be submitted to the BLM CFO engineering staff via e-mail by 0800 hours each morning. Any lost circulation encountered is to be recorded on these drilling reports. The daily drilling report should show mud volume per shift/tour. Failure to submit these reports will result in an Incidence of Non-Compliance being issued for failure to comply with the Conditions of Approval. If not already planned, the operator shall run a caliper survey for the intermediate well bore and submit to the appropriate BLM office.

2. The minimum required fill of cement behind the 9-5/8 inch intermediate casing is:

Operator has proposed DV tool at depth of 3700'. Operator is to submit sundry if DV tool depth varies by more than 100' from approved depth.

- a. First stage to DV tool:
- Cement to circulate. If cement does not circulate, contact the appropriate BLM office before proceeding with second stage cement job. Operator should have plans as to how they will achieve circulation on the next stage.
- b. Second stage above DV tool:
- Cement to surface. If cement does not circulate see B.1.a, c-d above. Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to Capitan Reef and Potash.

Formation below the 9-5/8" shoe to be tested according to Onshore Order 2.III.B.1.i. Test to be done as a mud equivalency test using the mud weight necessary for the pore pressure of the formation below the shoe (not the mud weight required to prevent dissolving the salt formation) and the mud weight for the bottom of the hole. Report results to BLM office.

Centralizers required on horizontal leg, must be type for horizontal service and a minimum of one every other joint.

- 3. The minimum required fill of cement behind the 5-1/2 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.
- 5. Whenever a casing string is cemented in the R-111-P potash area, the NMOCD requirements shall be followed.

#### 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. Variance approved to use flex line from BOP to choke manifold. Check condition of flexible line from BOP to choke manifold, replace if exterior is damaged or if line fails test. Line to be as straight as possible with no hard bends and is to be anchored according to Manufacturer's requirements. The flexible hose can be exchanged with a hose of equal size and equal or greater pressure rating. Anchor requirements, specification sheet and hydrostatic pressure test certification matching the hose in service, to be onsite for review. These documents shall be posted in the company man's trailer and on the rig floor. If the BLM inspector questions the straightness of the hose, a BLM engineer will be contacted and will review in the field or via picture supplied by inspector to determine if changes are required (operator shall expect delays if this occurs).
- 3. 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 (**Installing a 5M**, **testing to 2,000 psi**).
  - a. For surface casing only: If the BOP/BOPE is to be tested against casing, the wait on cement (WOC) time for that casing is to be met (see WOC statement at start of casing section). Independent service company required.
- 4. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the 9-5/8 intermediate casing shoe shall be 5000 (5M) psi. 5M system requires an HCR valve, remote kill line and annular to match. The remote kill line is to be installed prior to testing the system and tested to stack pressure.
- 5. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.
  - a. In potash areas, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. For all casing strings, casing cut-off and BOP installation can be initiated at twelve hours after bumping the plug. However, **no tests** shall commence until the cement has had a minimum of 24 hours setup time.
  - b. The tests shall be done by an independent service company utilizing a test plug **not** a **cup** or **J-packer**. The operator also has the option of utilizing an independent tester to test without a plug (i.e. against the casing) pursuant to Onshore Order 2 with the pressure not to exceed 70% of the burst rating for the casing. Any test against the casing must meet the WOC time for water basin (18 hours) or potash (24 hours) or 500 pounds compressive strength, whichever is greater, prior to initiating the test (see casing segment as lead cement may be critical item).

- c. The test shall be run on a 5000 psi chart for a 2-3M BOP/BOP, on a 10000 psi chart for a 5M BOP/BOPE and on a 15000 psi chart for a 10M BOP/BOPE. If a linear chart is used, it shall be a one hour chart. A circular chart shall have a maximum 2 hour clock. If a twelve hour or twenty-four hour chart is used, tester shall make a notation that it is run with a two hour clock.
- d. The results of the test shall be reported to the appropriate BLM office.
- e. 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.
- f. 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. This test shall be performed prior to the test at full stack pressure.

#### D. DRILL STEM TEST

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

#### E. WASTE MATERIAL AND FLUIDS

All waste (i.e. drilling fluids, trash, salts, chemicals, sewage, gray water, etc.) created as a result of drilling operations and completion operations shall be safely contained and disposed of properly at a waste disposal facility. No waste material or fluid shall be disposed of on the well location or surrounding area.

Porto-johns and trash containers will be on-location during fracturing operations or any other crew-intensive operations.

**JAM 121814**