

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM APPROVED  
OMB NO. 1004-0135  
Expires: July 31, 2010

**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.* **OCD Artesia**

5. Lease Serial No.  
NMLC068431

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No.  
891000303X

8. Well Name and No.  
PLU BIG SINKS 15 24 30 USA 1H

9. API Well No.  
30-015-40936-00-X1

10. Field and Pool, or Exploratory  
WILDCAT **G-06 S243026M; BS.**

11. County or Parish, and State **C977987**  
EDDY COUNTY, NM

**SUBMIT IN TRIPLICATE - Other instructions on reverse side.**

1. Type of Well  
 Oil Well  Gas Well  Other

2. Name of Operator  
BOPCO LP  
Contact: KATY HOLSTER  
E-Mail: keholster@basspet.com

3a. Address  
MIDLAND, TX 79702

3b. Phone No. (include area code)  
Ph: 432-683-2277

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)  
Sec 15 T24S R30E SESE 450FSL 770FEL  
32.211707 N Lat, 103.862277 W Lon

**12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA**

TYPE OF SUBMISSION	TYPE OF ACTION			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> Other
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	Change to Original A PD
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

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.)

BOPCO, L.P. respectfully requests to make the below changes to the above captioned well regarding the cement portion of the eight point, flex hose, pressure control equipment and the Cameron MBS wellhead. Please see the attachments.

**RECEIVED**  
JUL 09 2013  
NMOCD ARTESIA

*TCS*  
*7/9/2013*  
**SEE ATTACHED FOR  
CONDITIONS OF APPROVAL**

14. I hereby certify that the foregoing is true and correct.

**Electronic Submission #212028 verified by the BLM Well Information System  
For BOPCO LP, sent to the Carlsbad  
Committed to AFMSS for processing by KURT SIMMONS on 07/02/2013 (13KMS6639SE)**

Name (Printed/Typed) CHRISTOPHER VOLEK Title DRILLING ENGINEER

Signature (Electronic Submission) Date 06/27/2013

**THIS SPACE FOR FEDERAL OR STATE OFFICE USE**

Approved By (BLM Approver Not Specified) \_\_\_\_\_ Title \_\_\_\_\_  
Conditions of approval, if any, are attached. Approval of this notice 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.

Office Carlsbad

**APPROVED**  
JUL 5 2013  
/s/ Chris Walls  
BUREAU OF LAND MANAGEMENT  
CARLSBAD FIELD OFFICE

Date 07/05/2013

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.

BOPCO, L.P. respectfully requests permission to amend the casing program for Big Sinks 15-24-30 USA #1H. Due to the approved APD being granted to Chesapeake, BOPCO, L.P. requests to use the cement program that is currently being implemented on BOPCO wells. Surface and 1st Intermediate cements will match BOPCO's currently used slurries as outlined in the attachment. Production cements will match BOPCO's currently used slurries and change from a 1 stage cement job to a 2 stage cement job as outlined in the attachment. This will be accomplished by drilling a 17-1/2" surface hole and setting a 13-3/8", 48 ppf, H-40, ST&C surface string at approximately 750'. The 13-3/8" surface casing will be cemented to surface. The intermediate hole will be drilled with an 11" hole drilled to approximately 3,925'. The 11" hole will be cased using an 8-5/8", 32 ppf, J-55, LT&C intermediate string that will be cemented to surface. The production hole will be a 7-7/8" hole drilled to TD (13,492') and cased with 5-1/2", 17 ppf, HCP-110, BTC. It will be cemented in two stages. The 1<sup>st</sup> Stage will be cemented back to the DV Tool (+/- 5,000'). The 2<sup>nd</sup> Stage will be cemented back to 2,925' (1000' into 8-5/8" casing string).

**Revised Casing Program:**

Type	Interval (MD)	Hole Size
20" (already set)	0-120'	24"
13-3/8", 48ppf, H-40, ST&C	0-750'	17-1/2"
8-5/8", 32 ppf, J-55, LT&C	0-3,925'	11"
5-1/2", 17 ppf, HCP-110, BTC	0- <del>13,492'</del> 12,777'	7-7/8"

**Casing Program Safety Factors:**

Type	Tension	Collapse	Burst
13-3/8", 48 ppf, H-40, ST&C	10.4	2.19	2.31
8-5/8", 32 ppf, J-55, LT&C	3.93	1.22	1.88
5-1/2", 17 ppf, HCP-110, BTC	2.88	1.16	1.65

**Cementing Program: Please see below for updates to cement program**

13-3/8" Surface (gauge hole + 100% excess)

Conditioning: Circulate two casing volumes

Preflush: 20 bbls FW

Lead Slurry: Class "C" Cement: 4% Bentonite Gel + 2% Calcium Chloride + 0.125 lb/sk Cellophane + 0.25 lb/sk Antifoam

Lead Volume: 360 sacks

Lead Details: 13.5 ppg, 1.74 ft<sup>3</sup>/sk yield, H<sub>2</sub>O 9.135 gal/sk

Tail Slurry: Class "C" Cement: 2% Calcium Chloride  
Tail Volume: 320 sacks  
Tail Details: 14.8 ppg, 1.33 ft<sup>3</sup>/sk yield, H<sub>2</sub>O 6.323 gal/sk  
Tail length: 300'

TOC: Surface

8-5/8" 1<sup>st</sup> Intermediate (gauge hole + 50% excess)

Conditioning: Circulate two casing volumes  
Preflush: 20 bbls FW

Lead Slurry: 65/35 Class "C" Poz Cement + 5% Granulated Salt + 6% Bentonite Gel + 5 lb/sk  
Kol Seal + 0.46 lb/sk Antifoam  
Lead Volume: 1,000 sacks  
Lead Details: 12.9 ppg, 1.93 ft<sup>3</sup>/sk yield, H<sub>2</sub>O 9.842 gal/sk  
Tail Slurry: Class "C" Cement: 0.2% Retarder  
Tail Volume: 200 sacks  
Tail Details: 14.8 ppg, 1.33 ft<sup>3</sup>/sk yield, H<sub>2</sub>O 6.320 gal/sk  
Tail Length: 500'

TOC: Surface

5-1/2" - Production (caliper volume + 30% excess)

**1<sup>st</sup> Stage**

Conditioning: Circulate two casing volumes  
Preflush: 40 bbls FW

Lead Slurry: 65/35 Class "H": Poz Cement + 5% Granulated Salt + 6% Bentonite Gel + 0.4%  
Retarder + 0.125 lb/sk Cellophane + 0.46 lb/sk Antifoam + 3 lb/sk Kol-Seal LCM  
Lead Volume: 500 sacks  
Lead Details: 12.9 ppg, 1.91 ft<sup>3</sup>/sk yield, H<sub>2</sub>O 9.922 gal/sk  
Top of Lead: DV Tool

Tail Slurry: PVL Cement: 1.3% Granulated Salt + 5% Expanding Cement + 0.5% Gel  
Suppressing Agent + 0.1% Antisettling agent + 0.5% Retarder + 0.2% Mid Temperature  
Retarder + 0.4 pps Antifoam  
Tail Volume: 760 sacks

Tail Details: 13.0 ppg, 1.48 ft<sup>3</sup>/sk yield, H<sub>2</sub>O 7.563 gal/sk  
Top of Tail: KOP

TOC: +/- 5,000' (DV Tool)

## **2<sup>nd</sup> Stage**

Preflush: 20 bbls FW

Lead Slurry: 65/35 Class "C": Poz Cement + 5% Salt + 6% Bentonite + 0.2% Retarder + 0.125 lb/sk Cellophane + 0.4 lb/sk Antifoam + 3 lb/sk Kol-Seal LCM

Lead Volume: 300 sacks

Lead Details: 12.9 ppg, 1.91 ft<sup>3</sup>/sk yield, H<sub>2</sub>O 9.922 gal/sk

Top of Lead: 2,925'

Tail Slurry: Class "C" Cement: 0.2% Retarder

Tail Volume: 100 sacks

Tail Details: 14.8 ppg, 1.33 ft<sup>3</sup>/sk yield, 6.320 gal/sk

Tail Length: 500'

TOC: 2,925'

BOPCO, L.P., respectfully requests permission to make changes to our 8 point drilling program of the above captioned well to include pressure control equipment information.

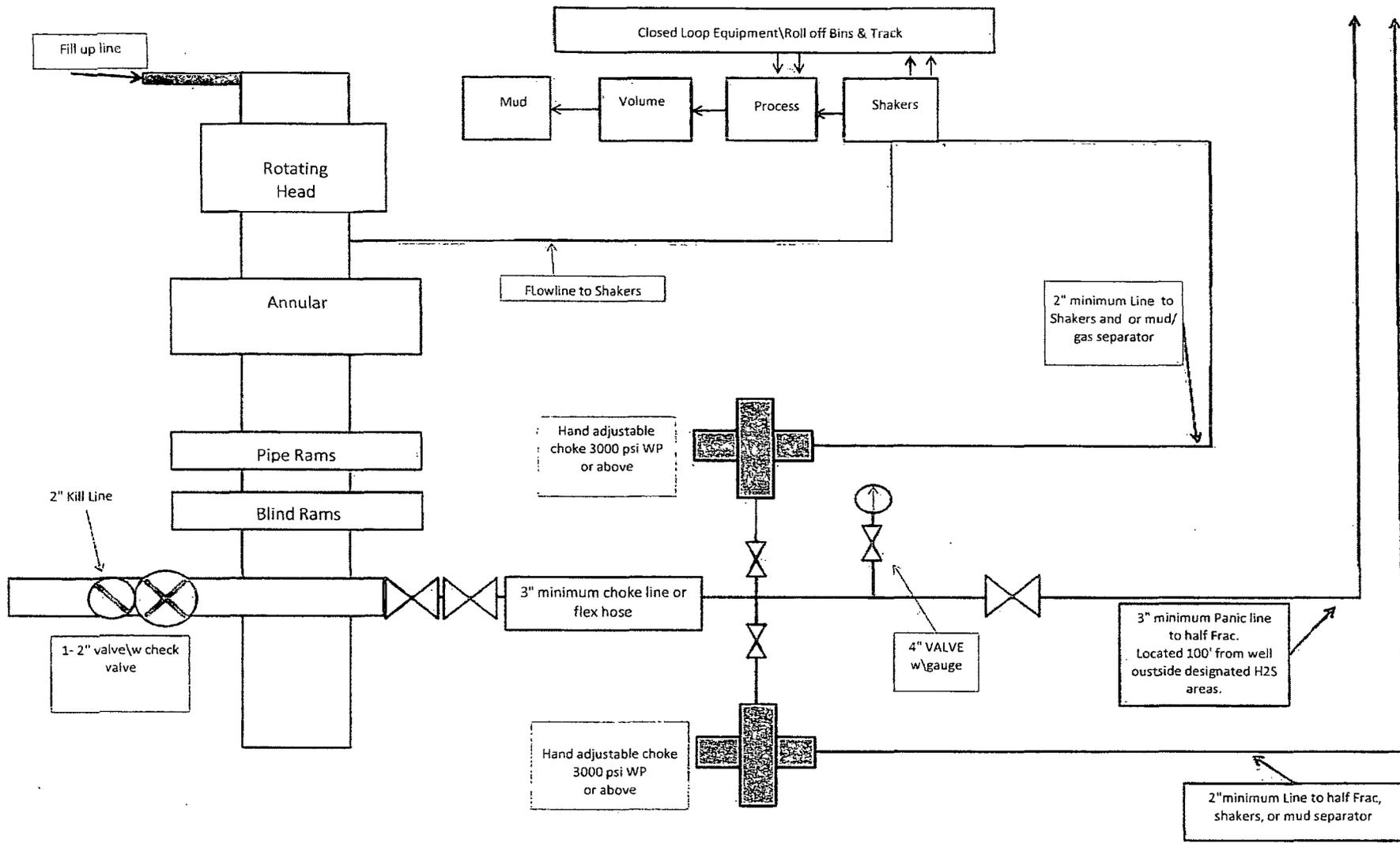
Point 4: Pressure Control Equipment (See Attached Diagrams A, B or C)

After running the 13 3/8" surface casing, a 13 3/8" BOP/BOPE system with a minimum rating of 3M will be installed on the Cameron Multi-bowl System (MBS) wellhead and will undergo a 3,000 psi high pressure test and 250 psi low pressure test. The 3,000 psi high and 250 psi low test will cover testing requirements for the duration of the well as per Onshore Order #2.

After running the 8 5/8' intermediate casing with a mandrel hanger, the 13 5/8" BOP/BOPE system with a minimum rating of 3M will already be installed on Cameron MBS. Please find attached the wellhead schematic. The field reports from the Cameron representative and the BOP test information will be provided in a subsequent report.

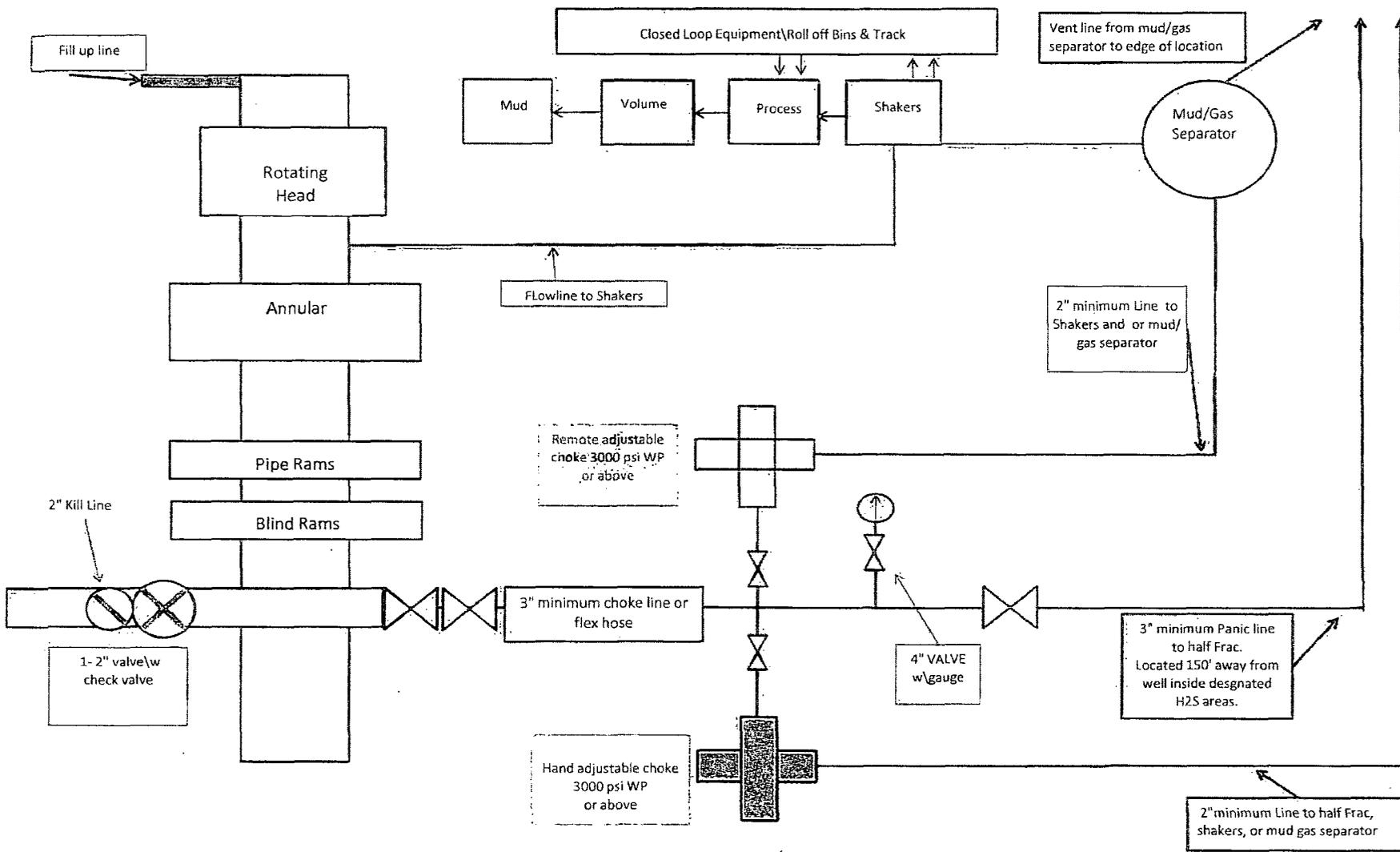
These tests will be performed:

- a) Upon installation
- b) After any component changes
- c) Thirty (30) days after a previous test
- d) As required by well conditions
- e) Any time a seal is broken within the system



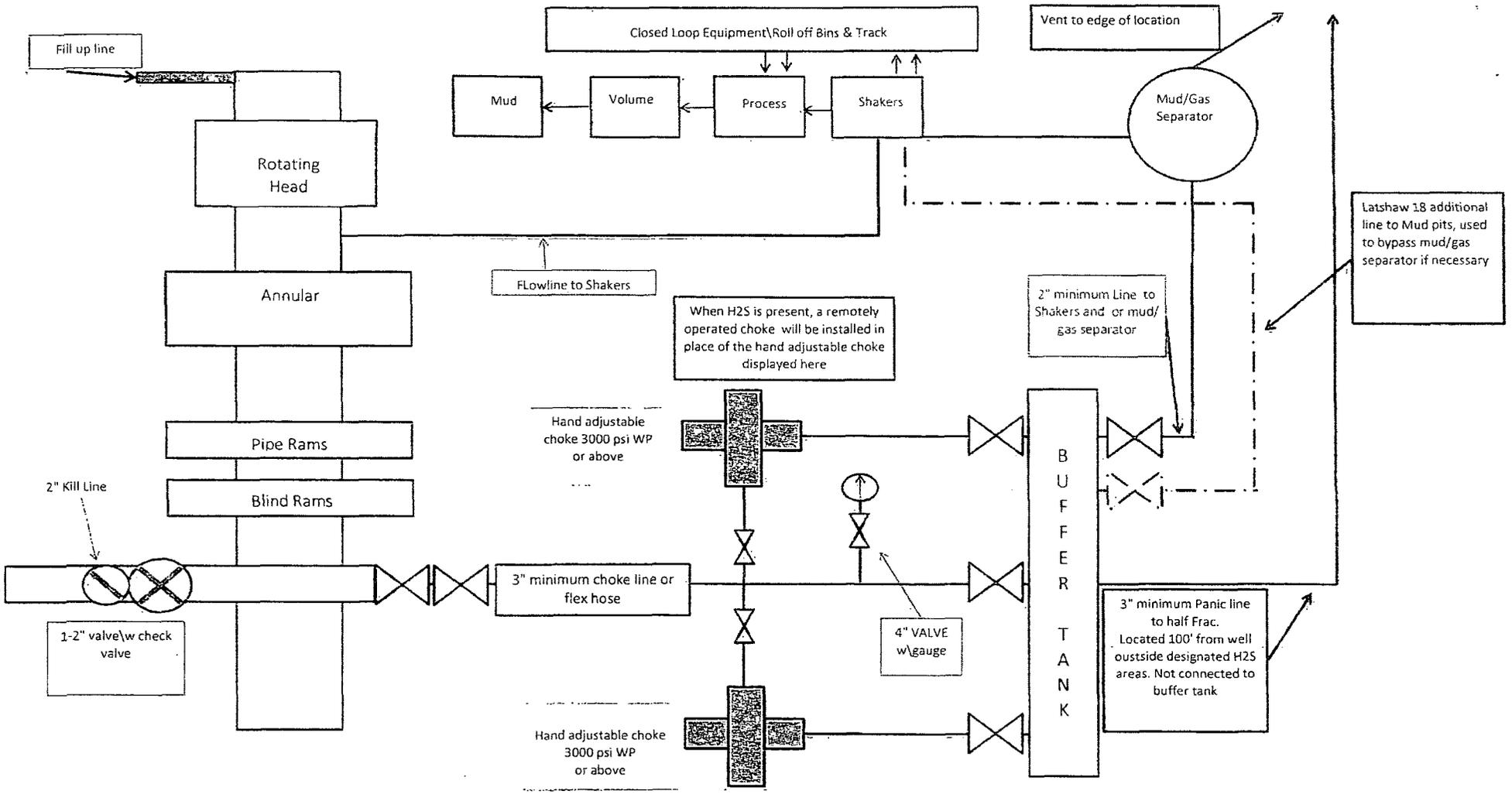
**13-5/8" X 3-M BOPE (2 Rams and Rotating Head) & Closed Loop System Equipment Schematic Diagram A**

Note: all valves & lines on choke manifold are 3" unless otherwise noted. Exact manifold configuration may vary.



**13-5/8" X 3-M BOPE (2 Rams and Rotating Head) & Closed Loop System Equipment Schematic H2S contingency Diagram B**

Note: all valves & lines on choke manifold are 3" unless otherwise noted. Exact manifold configuration may vary.



Latshaw 4 closed loop system, with Latshaw 18 addition "clouded."

**Latshaw 13-5/8" X 3-M BOPE (2 Rams and Rotating Head) & Closed Loop System Equipment Schematic Diagram C**

Note: all valves & lines on choke manifold are 3" unless otherwise noted. Exact manifold configuration may vary.

BOPCO, L.P. respectfully requests to make the below changes to the above captioned well.

Utilize and armored, 5", 5,000 psi WP flex hose for the choke line in the drilling of the well. This is rig equipment and will help quicken nipple up time thus saving money without a safety problem. The hose itself is rated to 5,000 psi and has 5,000 psi flanges on each end. This well is to be drilled to a depth of 12,777' MD (8,241' TVD) and max surface pressure should be +/- 2,044 psi as prescribed in onshore order #2 shown as 0.22 psi/ft. Thus, a 3,000 psi BOPE is all that is needed for this well. The Latshaw #14 flex hose certification and test chart are attached.



Midwest Hose  
& Specialty, Inc.

INTERNAL HYDROSTATIC TEST REPORT

Customer:	LATSHAW	Customer P.O. Number:	147340
-----------	---------	-----------------------	--------

HOSE SPECIFICATIONS

Type:	Rotary / Vibrator Hose C & K / API 7K	Hose Length:	35FT 8 IN
I.D.	3.5 INCHES	O.D.	5.02 INCHES
WORKING PRESSURE	TEST PRESSURE	BURST PRESSURE	
5,000 PSI	5,000 PSI	N/A PSI	

COUPLINGS

Part Number	Stem Lot Number	Ferrule Lot Number
D3.5X64WB NA	3Q11LOT1 NA	3Q11LOT1 NA
Type of Coupling:	Die Size:	
Swage-It	5.75 INCHES	

PROCEDURE

*Hose assembly pressure tested with water at ambient temperature.*

TIME HELD AT TEST PRESSURE	ACTUAL BURST PRESSURE:
9 1/4 MIN.	N/A PSI

Hose Assembly Serial Number:	Hose Serial Number:
147340	NA

Comments: HOSE REPAIR

Date:	Tested:	Approved:
4/11/2012		Kim Thomas



Midwest Hose & Specialty, Inc.

### Internal Hydrostatic Test Graph

April 11, 2012

Customer: Latshaw

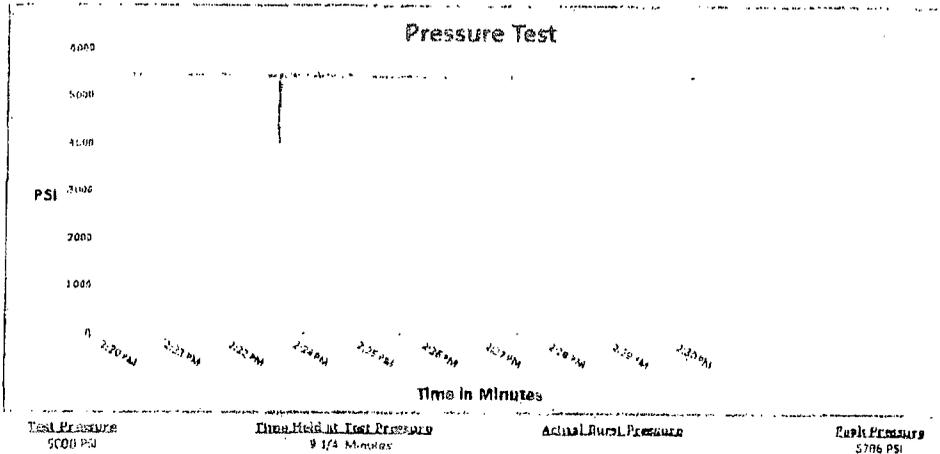
Pick Ticket #: 147940

#### Hose Specifications

Hose Type	Length
D	35' 0"
I.D.	5.0"
O.D.	5.0"
Working Pressure	Rated Pressure
3000 PSI	Standard Safety Multiple Apply

#### Verification

Type of Fittings	Coupling Method
1/2" S&K	Swage
Die Size	Final O.D.
3.75"	3.75"
Hose Serial #	Hose Assembly Serial #
NA	147940



Comments: Hose assembly pressure tested with water at ambient temperature.

Tested By: Danette McInerney

Approved By: Kim Thomas

*Danette McInerney*

*Kim Thomas*



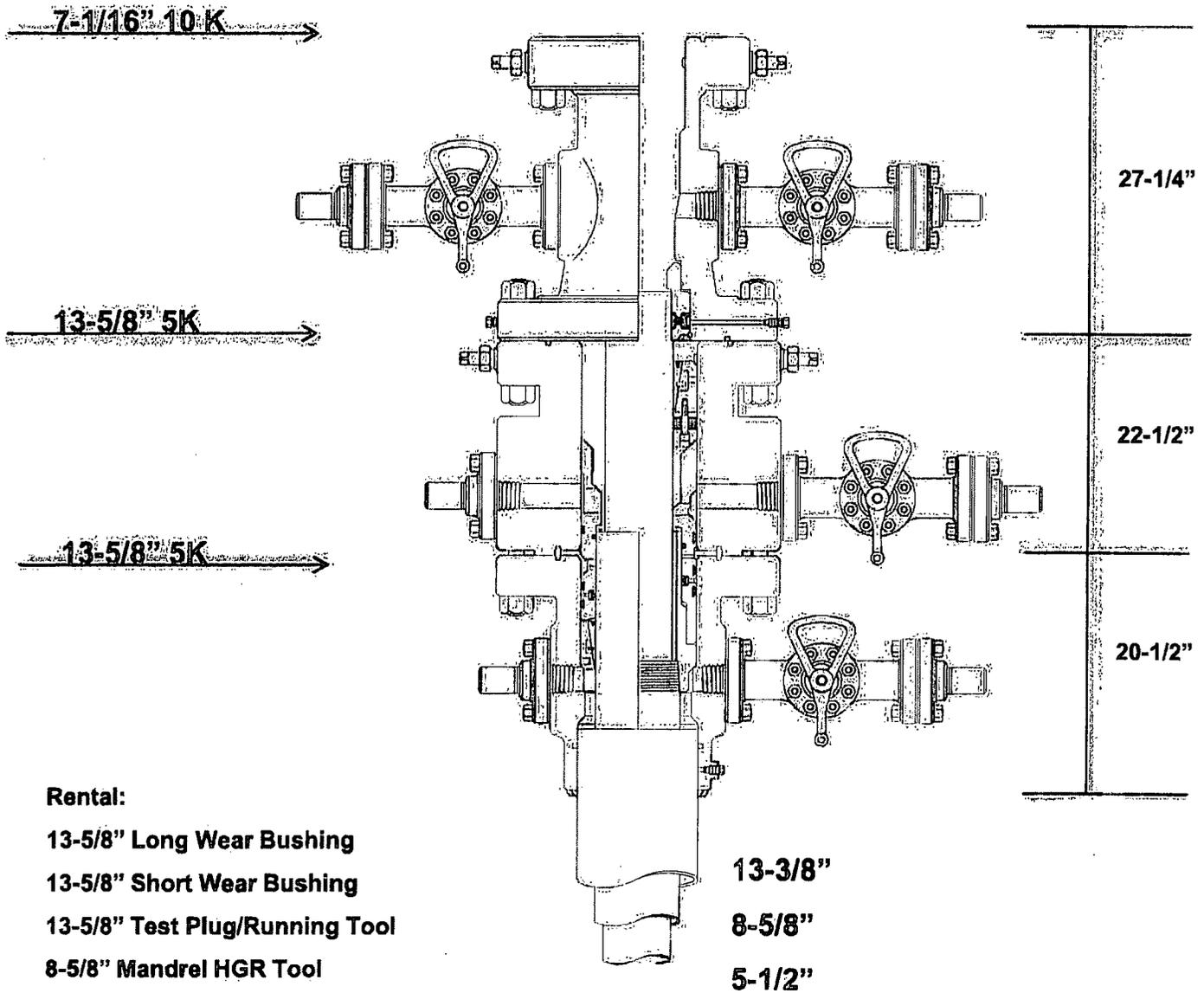
**CUSTOMER: BOPCO**

**PROJECT: Poker Lake Unit Big Sinks 1-25-30 USA#1**

**RIG: Latshaw #14**

**CASING PROGRAM: 13-3/8" x 8-5/8" x 5-1/2"**

**DATE: May 6<sup>th</sup> 2013**



**Rental:**

- 13-5/8" Long Wear Bushing
- 13-5/8" Short Wear Bushing
- 13-5/8" Test Plug/Running Tool
- 8-5/8" Mandrel HGR Tool
- Packoff Support Bushing Running Tool
- Jetting/Wash Tool

## CONDITIONS OF APPROVAL

OPERATOR'S NAME:	BOPCO, L.P.
LEASE NO.:	LC068431
WELL NAME & NO.:	PLU BIG SINKS 15 24 30 USA
SURFACE HOLE FOOTAGE:	450'/S. & 770'/E.
BOTTOM HOLE FOOTAGE:	100'/N. & 660'/E.
LOCATION:	Section 15, T. 24 S., R. 30 E., NMPM
COUNTY:	Eddy County, New Mexico

### 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)

**Eddy County**

Call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220,  
(575) 361-2822

1. **Due to recent H2S encounters in the salt formation, it is recommended that monitoring equipment be onsite for potential Hydrogen Sulfide prior to drilling out the surface shoe. If Hydrogen Sulfide is encountered, please report measurements 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 are 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. 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.).**

**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. IF OPERATOR DOES NOT HAVE THE WELL SPECIFIC CEMENT DETAILS ONSITE PRIOR TO PUMPING THE CEMENT FOR EACH CASING STRING, THE WOC WILL BE 30 HOURS. 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.**

### **Secretary's Potash**

#### **Medium cave/karst**

**Possible water flows in the Castile, Salado, Delaware and Bone Springs Groups**

**Possible lost circulation in the Delaware and Bone Spring formations**

1. The 13-3/8 inch surface casing shall be set at **approximately 750 feet (below the Magenta Dolomite member of the Rustler Anhydrite and 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.

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

- Cement to surface. If cement does not circulate see B.1.a, c-d above.

**If 75% or greater lost circulation occurs while drilling the intermediate casing hole, the cement on the production casing must come to surface.**

**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:

**DV tool option: 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 or approved top of cement on the next stage.

b. Second stage above DV tool:

- Cement should tie-back at least **1000** feet into previous casing string. Operator shall provide method of verification.

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.

## 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. **Operator has proposed a multi-bowl wellhead assembly. This assembly will only be tested when installed on the surface casing. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be 3000 (3M) psi.**
  - a. **Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.**
  - b. **If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.**
  - c. **Manufacturer representative shall install the test plug for the initial BOP test.**
  - d. **Operator shall perform the intermediate casing integrity test to 70% of the casing burst. This will test the multi-bowl seals.**
  - e. **If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.**
4. 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.
- 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.

**CRW 070513**