

WELL-WORKOVERS
LAST UPDATE 2011

WELL-WORKOVER OPERATIONS

W-100

HAVE ALL WELLS IN THE SAME WELLBAY WHICH ARE CAPABLE OF PRODUCING HYDROCARBONS BEEN SHUT-IN BELOW THE SURFACE WITH A PUMP-THROUGH TYPE TUBING PLUG OR SCSSV AND AT THE SURFACE WITH A CLOSED MASTER VALVE PRIOR TO MOVING WELL-WORKOVER RIGS AND RELATED EQUIPMENT (OR AS OTHERWISE APPROVED BY THE DISTRICT MANAGER)?

Authority: 602

Enforcement Action: W/S

INSPECTION PROCEDURE:

1. Check the facility/operator's records to verify that the wells capable of producing hydrocarbons were shut-in below the surface with a pump-through type tubing plug or SCSSV and at the surface with a closed master valve prior to moving well-workover equipment:

Note: A closed surface-controlled subsurface safety valve of the pump-through type may be used in lieu of the pump-through type tubing plug, provided that the surface control has been locked out of operation.

2. If the inspection is conducted while well-workover equipment is being moved, inspect each well capable of producing hydrocarbons to verify that it is shut-in as described above.

IF NONCOMPLIANCE EXISTS:

Issue a warning (W) INC if records indicate that wells capable of producing hydrocarbons in the same wellbay have not been shut-in below the surface and at the surface.

Issue a facility shut-in (S) INC for the moving operation if moving operations are in progress and wells capable of producing hydrocarbons in the same wellbay have not been shut-in below the surface and at the surface.

INSPECTION COUNT/ INC COUNT:

Enter one item checked/ issue one INC per facility inspected.

W-101

IS THE WELL TO OR FROM WHICH A WELL-WORKOVER RIG OR RELATED EQUIPMENT TO BE MOVED EQUIPPED WITH A PUMP THROUGH TYPE TUBING PLUG AND A BACK-PRESSURE VALVE PRIOR TO REMOVING THE TREE AND THE BOP SYSTEM?

Authority: 602

Enforcement Action: W/S

INSPECTION PROCEDURE:

1. Check the operator's records to verify that the well to which the well-workover equipment was moved was equipped with a pump through type tubing plug and a back-pressure valve prior to removing the tree and installing the BOP.

2. If moving operations are in progress during the inspection, verify that the pump through type tubing plug and a back-pressure valve are in place.

IF NONCOMPLIANCE EXISTS:

Issue a warning (W) INC if records indicate that a pump through type tubing plug and back-pressure valve was not installed in the well prior to moving the workover equipment.

Issue a facility shut-in (S) INC for the moving operation if moving operations are in progress and a pump through type tubing plug and back-pressure valve is not installed in the well prior to moving the workover equipment.

INSPECTION COUNT/ INC COUNT:

Enter one item checked/ issue one INC per well inspected.

W-102

HAVE THE CREW MEMBERS BEEN INSTRUCTED IN THE SAFETY REQUIREMENTS OF THE OPERATIONS TO BE PERFORMED, POSSIBLE HAZARDS TO BE ENCOUNTERED, AND GENERAL SAFETY CONSIDERATIONS TO PROTECT PERSONNEL, EQUIPMENT, AND THE ENVIRONMENT PRIOR TO ENGAGING IN WELL-WORKOVER OPERATIONS; AND HAVE THE DATE AND TIME OF THE SAFETY MEETINGS BEEN RECORDED?

Authority: 606

Enforcement Action: W

INSPECTION PROCEDURE:

Verify that all crew members have received instruction at safety meetings in the following prior to commencing well-workover operations and that the date and time of the meetings have been recorded:

1. Safety requirements of the operation to be performed.
2. Possible hazards to be encountered.
3. General safety considerations to protect:
 - A. Personnel
 - B. Equipment
 - C. Environment

IF NONCOMPLIANCE EXISTS:

Issue a warning (W) INC if:

1. The safety meeting was not held prior to commencing well-workover operations.
2. The time and date of the safety meetings were not recorded.

INSPECTION COUNT/ INC COUNT:

Enter one item checked/ issue one INC per facility inspected.

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W-104

HAVE ALL UNITS BEING USED FOR WELL-WORKOVER OPERATIONS WHICH HAVE BOTH A TRAVELING BLOCK AND A CROWN BLOCK BEEN EQUIPPED WITH A SAFETY DEVICE WHICH IS DESIGNED TO PREVENT THE TRAVELING BLOCK FROM STRIKING THE CROWN BLOCK?

Authority: 611

Enforcement Action: S

DEFINITION:

Traveling block safety device - Normally, a device (toggle) installed above the cable drum, which, when struck, disengages the drum clutch and sets the brake (also known as a "Crown-o-matic").

INSPECTION PROCEDURE:

1. Visually inspect the workover unit to verify the presence of a traveling block safety device.
2. Visually inspect the position of the toggle above the cable drum to verify the distance for cable shut-down.
3. If workover operations are in progress, verify that the device is in service, and witness the proper operation of the device.

Note: The traveling block safety device is not to be actuation tested when the traveling block is loaded with drill pipe or work string.

IF NONCOMPLIANCE EXISTS:

Issue a facility shut-in (S) INC for the workover unit if:

1. The traveling block safety device is not installed.
2. The toggle is not installed above the cable drum a sufficient distance for cable shut-down.
3. The device does not operate properly.

INSPECTION COUNT/ INC COUNT:

Enter one item checked/ issue one INC per facility inspected.

W-105

HAS THE TRAVELING-BLOCK SAFETY DEVICE BEEN CHECKED FOR PROPER OPERATION WEEKLY AND AFTER EACH DRILL-LINE SLIPPING OPERATION, AND HAVE THE RESULTS OF THE OPERATIONAL CHECK BEEN RECORDED IN THE OPERATIONS LOG?

Authority: 611

Enforcement Action: W

INSPECTION PROCEDURE:

1. Verify that the traveling-block safety device has been checked for proper operation:
 - A. Weekly. and
 - B. After each drill-line slipping operation.
2. Verify that the toggle has been reset after each drill line slipping operation.
3. Verify that the results of the operational checks have been recorded in the operations log.

IF NONCOMPLIANCE EXISTS:

Issue a warning (W) INC if:

1. The safety device has not been checked for proper operation as required.
2. If the results were not recorded in the operations log.

INSPECTION COUNT/ INC COUNT:

Enter one item checked/ issue one INC per facility inspected.

W-107

HAS THE LESSEE RECEIVED WRITTEN APPROVAL FROM THE DISTRICT MANAGER PRIOR TO CONDUCTING WELL-WORKOVER OPERATIONS?

Authority 613(a)

Enforcement Action: S

INSPECTION PROCEDURE:

Request proof of written approval from the operator, as follows:

1. Form MMS 123, Application for Permit to Drill, Deepen, or Plug Back signed by the District Manager,
or
2. Form MMS 124, Sundry Notices and Reports on Wells, signed by the District Manager.

IF NONCOMPLIANCE EXISTS:

Issue a facility shut-in (S) INC for the workover rig if the operator does not have written approval for the operation.

INSPECTION COUNT/ INC COUNT:

Enter one item checked/ issue one INC per well inspected.

W-108

IS THE WELL BEING CONTINUOUSLY MONITORED DURING WELL-WORKOVER OPERATIONS AND NOT LEFT UNATTENDED AT ANY TIME UNLESS THE WELL IS SHUT-IN AND SECURED?

Authority: 614(a)

Enforcement Action: W

DEFINITION:

Continuously monitored - From the time operations are initiated until operations are completed, a member of the crew shall maintain rig-floor surveillance continuously unless the well is secured with BOP's, bridge plugs, storm packers, cement plugs, or SSSV's.

INSPECTION PROCEDURE:

Verify that the rig floor is continuously monitored during an inspection.

IF NONCOMPLIANCE EXISTS:

Issue a warning (W) INC if the rig floor is not continuously monitored and the well is not secured as required.

INSPECTION COUNT/ INC COUNT:

Enter one item checked/ issue one INC per facility inspected.

W-113

HAS A RECORDING MUD-PIT LEVEL INDICATOR WITH BOTH A VISUAL AND AN AUDIBLE WARNING DEVICE BEEN INSTALLED, MAINTAINED, AND UTILIZED?

Authority: 614(c) (3)

Enforcement Action: S

Note: This PINC applies to well-workover operations with the tree removed.

INSPECTION PROCEDURE:

1. Verify the installation of a recording mud-pit level indicator.
2. Witness the operation of the system, including visual and audible alarms, by actuating the mud-pit level sensors in accordance with Appendix 25.

IF NONCOMPLIANCE EXISTS:

Issue a facility shut-in (S) INC for the workover rig when a mud-pit level indicator system is not installed and operable.

INSPECTION COUNT/ INC COUNT:

Enter one item checked/ issue one INC per facility inspected.

BOP WELL-WORKOVER OPERATIONS

W-114

DOES THE BOP SYSTEM FOR WELL-WORKOVER OPERATIONS WITH THE TREE REMOVED INCLUDE, AS A MINIMUM, THREE PREVENTERS WHEN THE EXPECTED SURFACE PRESSURE IS LESS THAN 5,000 PSI?

Authority: 615(b) (1)

Enforcement Action: S

INSPECTION PROCEDURE:

1. For workover operations with the tree removed, where the anticipated surface pressure is less than 5,000 psi, visually inspect the BOP system to verify the installation of the following as a minimum:
 - A. One annular preventer.
 - B. One set of pipe rams.
 - C. One set of blind-shear rams.
2. For subsea BOP stacks, visually check the control station for the above configuration, or if available, check via the television camera.

IF NONCOMPLIANCE EXISTS:

Issue a facility shut-in (S) INC for the workover rig if the BOP system is not as required.

INSPECTION COUNT/ INC COUNT:

Enter one item checked/ issue one INC per BOP system inspected.

W-115

DOES THE BOP SYSTEM FOR WELL-WORKOVER OPERATIONS WITH THE TREE REMOVED INCLUDE, AS A MINIMUM, FOUR PREVENTERS WHEN THE EXPECTED SURFACE PRESSURE IS 5,000 PSI OR GREATER?

Authority: 615(b) (2)

Enforcement Action: S

INSPECTION PROCEDURE:

1. For workover operations with the tree removed, where the anticipated surface pressure is equal to or greater than 5000 psi, visually inspect the BOP system to verify the installation of the following as a minimum:
 - A. One annular preventer.
 - B. Two sets of pipe rams.
 - C. One set of blind-shear rams.
2. For subsea BOP stacks, visually check the control station for the above configuration or, if available, check via the television camera.

IF NONCOMPLIANCE EXISTS:

Issue a facility shut-in (S) INC for the workover rig if the BOP system is not as required.

INSPECTION COUNT/ INC COUNT:

Enter one item checked/ issue one INC per BOP system inspected.

W-116

DOES THE BOP SYSTEM FOR WELL-WORKOVER OPERATIONS WITH THE TREE REMOVED INCLUDE, AS A MINIMUM, DUAL PIPE RAMS INSTALLED ON ONE OF THE PIPE-RAM PREVENTERS WHEN DUAL TUBING STRINGS ARE BEING HANDLED SIMULTANEOUSLY?

Authority: 615(b) (3)

Enforcement Action: S

INSPECTION PROCEDURE:

For workover operations with the tree removed, when dual tubing strings are being handled simultaneously, visually inspect the BOP system to verify that dual pipe rams are installed in one of the pipe ram preventers.

IF NONCOMPLIANCE EXISTS:

Issue a facility shut-in (S) INC for the workover rig if dual pipe rams are not installed in one of the pipe ram preventers when dual tubing strings are being handled simultaneously.

INSPECTION COUNT/ INC COUNT:

Enter one item checked/ issue one INC per BOP system inspected.

W-117

WHEN A TAPERED DRILL STRING IS USED, DOES THE BOP SYSTEM INCLUDE, AS A MINIMUM, FOUR PREVENTERS WHEN THE EXPECTED SURFACE PRESSURE IS LESS THAN 5,000 PSI?

Authority: 615(b) (4)

Enforcement Action: S

Note: This PINC applies to well-workover operations with the tree removed.

INSPECTION PROCEDURE:

For workover operations using tapered drill string where the anticipated surface pressure is less than 5,000 psi, visually inspect the BOP system to verify the installation of at least four preventers as follows:

1. One annular preventer.
2. Two sets of pipe rams, one set capable of sealing around the larger size drill string and one set capable of sealing around the smaller size drill string.

Note: One set of variable bore rams may be substituted for the two sets of pipe rams.

3. One set of blind-shear rams

IF NONCOMPLIANCE EXISTS:

Issue a facility shut-in (S) INC for the workover rig if the BOP system is not configured as described above.

INSPECTION COUNT/ INC COUNT:

Enter one item checked/ issue one INC per BOP system inspected.

W-118

WHEN A TAPERED DRILL STRING IS USED, DOES THE BOP SYSTEM INCLUDE, AS A MINIMUM, FIVE PREVENTERS WHEN THE EXPECTED SURFACE PRESSURE IS 5,000 PSI OR GREATER?

Authority: 615(b) (4)

Enforcement Action: C

Note: This PINC applies to well-workover operations with the tree removed.

INSPECTION PROCEDURE:

For workover operations using tapered drill string where the anticipated surface pressure is equal to or greater than 5,000 psi, visually inspect the BOP system to verify the installation of at least five preventers as follows:

1. One annular preventer.
2. Two sets of pipe rams capable of sealing around the larger size drill string.
3. One set of pipe rams capable of sealing around the smaller size drill string.
4. One set of blind-shear rams.

Note: One set of variable bore pipe rams may be substituted for one set of pipe rams for the larger size drill string and one set of pipe rams for the smaller size drill string.

IF NONCOMPLIANCE EXISTS:

Issue a facility shut-in (S) INC for the workover rig if the BOP system is not configured as described above.

INSPECTION COUNT/ INC COUNT:

Enter one item checked/ issue one INC per BOP system inspected.

W-119

DOES THE ACCUMULATOR SYSTEM PROVIDE SUFFICIENT CAPACITY TO SUPPLY

1.5 TIMES THE VOLUME OF FLUID NECESSARY TO CLOSE AND HOLD CLOSED ALL BOP EQUIPMENT UNITS WITH MINIMUM PRESSURE OF 200 PSI ABOVE THE PRE-CHARGE PRESSURE, WITHOUT ASSISTANCE FROM A CHARGING SYSTEM?

Authority: 615(c) (1)

Enforcement Action: S

INSPECTION PROCEDURE:

1. Verify that the BOP actuating system which is installed is in compliance with that which has been approved.
2. Verify that the complete system is free of leaks and that all components are in service (not bypassed).
3. Witness automatic operation of the charging system.

Note: Refer to Appendix 23 for typical surface stack accumulator size calculations.

IF NONCOMPLIANCE EXISTS:

Issue a facility shut-in (S) INC for the workover rig if the hydraulic BOP actuating system does not provide sufficient capacity to supply 1.5 times the volume necessary to close all BOP components with a minimum pressure of 200 psi above the pre-charge pressure without assistance from a charging system.

INSPECTION COUNT/ INC COUNT:

Enter one item checked/ issue one INC per BOP system inspected.

W-120

DOES THE BOP SYSTEM FOR WELL-WORKOVER WITH THE TREE REMOVED CONTAIN A SECONDARY POWER SOURCE, INDEPENDENT FROM THE PRIMARY POWER SOURCE, WITH SUFFICIENT CAPACITY TO CLOSE ALL BOP SYSTEM COMPONENTS AND HOLD THEM CLOSED?

Authority: 615(c) (2)

Enforcement Action: S

INSPECTION PROCEDURE:

1. Verify that the backup power source is independent from the primary power source.
2. Witness operation of the accumulator backup system and verify that the backup system automatically charges the accumulators sufficiently to close and hold closed all BOP system components.

IF NONCOMPLIANCE EXISTS:

Issue a component shut-in (S) INC for the workover rig if:

1. The backup power system is not independent from the primary power source.
2. The accumulator backup does not automatically charge the accumulator system sufficiently to close and hold closed all system components.

INSPECTION COUNT/ INC COUNT:

Enter one item checked/ issue one INC per BOP system inspected.

W-121

DOES THE BOP SYSTEM FOR WELL-WORKOVER WITH THE TREE REMOVED CONTAIN LOCKING DEVICES FOR THE PIPE-RAM PREVENTERS?

Authority: 615(c) (3)

Enforcement Action: S

DEFINITION:

Locking devices - Surface BOP systems shall have dogs provided on the ram-type preventers. Subsurface BOP systems shall have ram lock-out indicator lights or other indication method as approved.

INSPECTION PROCEDURE:

1. Visually inspect surface BOP systems and subsea BOP panels to verify that locking devices have been provided on ram-type preventers.
2. If conditions permit, witness operation of locking devices.

IF NONCOMPLIANCE EXISTS:

Issue a facility shut-in (S) INC for the workover rig if operable locking devices are not provided.

INSPECTION COUNT/ INC COUNT:

Enter one item checked/ issue one INC per BOP system inspected.

W-122

DOES THE BOP SYSTEM FOR WELL-WORKOVER WITH THE TREE REMOVED CONTAIN AT LEAST ONE REMOTE BOP CONTROL STATION AND ONE BOP CONTROL STATION ON THE RIG FLOOR?

Authority: 615(c) (4)

Enforcement Action: S

DEFINITION:

Remote BOP control station - A control panel located such that the operation of each preventer and control valve can be controlled from a readily accessible point at a safe distance from the rig floor.

INSPECTION PROCEDURE:

1. Verify that a readily accessible remote BOP control station exists at the rig site.
2. Verify that a BOP control station exists on the rig floor.
3. Witness the operation of both control stations, or inspect the control panel gauge for presence of operating control pressure.

IF NONCOMPLIANCE EXISTS:

Issue a c facility shut-in (S) INC for the workover rig if:

1. An operable remote BOP control station is not installed.
2. An operable BOP control station is not installed on the rig floor.

INSPECTION COUNT/ INC COUNT:

Enter one item checked/ issue one INC each station inspected.

W-123

DOES THE BOP SYSTEM FOR WELL-WORKOVER WITH THE TREE REMOVED CONTAIN A CHOKE LINE AND A KILL LINE EACH EQUIPPED WITH TWO FULL OPENING VALVES AND A CHOKE MANIFOLD?

Authority: 615(c) (5)

Enforcement Action: S

INSPECTION PROCEDURE:

1. Visually verify that each choke and kill line is equipped with two full-opening valves and a choke manifold.
2. Conditions permitting, witness the operation of the valves.

IF NONCOMPLIANCE EXISTS:

Issue a component shut-in (S) INC for the workover rig if:

1. The choke and kill lines are not equipped with two operable full opening valves.
2. There is no manifold.

INSPECTION COUNT/ INC COUNT:

Enter one item checked/ issue one INC per BOP system inspected.

W-124

DOES THE BOP SYSTEM FOR WELL-WORKOVER WITH THE TREE REMOVED CONTAIN AT LEAST ONE REMOTELY-CONTROLLED VALVE EACH ON THE CHOKE LINE AND ON THE KILL LINE?

Authority: 615(c) (5)

Enforcement Action: S

INSPECTION PROCEDURE:

Visually inspect the choke and kill lines to determine if they are each equipped with at least one remotely-controlled valve.

Note: For the kill line (surface systems only), a check valve may be installed on the kill line in lieu of the remotely-controlled valve provided two readily accessible manual valves are in place and the check valve is placed between the manual valves and the pump.

IF NONCOMPLIANCE EXISTS:

Issue a component shut-in (S) INC for the workover rig if:

1. The choke line is not equipped with at least one remotely-controlled valve.
2. The kill line is not equipped with at least one remotely-controlled valve.

INSPECTION COUNT/ INC COUNT:

Enter one item checked/ issue one INC per BOP system inspected.

W-126

IS THE PRESSURE RATING OF THE CHOKE AND KILL LINES AND ASSOCIATED EQUIPMENT AT LEAST EQUIVALENT TO THE PRESSURE RATING OF THE RAM PREVENTERS?

Authority: 615(c) (5)

Enforcement Action: S

Note: This PINC applies to well-workover operations with the tree removed.

INSPECTION PROCEDURE:

Visually verify that all equipment has a rated working pressure at least equal to the rated working pressure of the ram preventers by examining the rating tags.

IF NONCOMPLIANCE EXISTS:

Issue a facility shut-in (S) INC for the workover rig if any equipment does not have a rated working pressure at least equal to the rated working pressure of the ram type preventers.

INSPECTION COUNT/ INC COUNT:

Enter one item checked/ issue one INC per BOP system inspected.

W-127

DO THE MINIMUM BOP-SYSTEM COMPONENTS WITH THE TREE IN PLACE AND PERFORMED THROUGH THE WELLHEAD INSIDE CONVENTIONAL TUBING USING SMALL-DIAMETER JOINTED PIPE AS A WORK STRING INCLUDE TWO SETS OF PIPE RAMS AND ONE SET OF BLIND RAMS?

Authority: 615(d)

Enforcement Action: S

INSPECTION PROCEDURE:

If a small diameter jointed pipe is being used as a work string inside conventional tubing with the tree in place, verify that the BOP system contains, as a minimum:

1. Two sets of pipe rams.
2. One set of blind rams.

IF NONCOMPLIANCE EXISTS:

Issue a facility shut-in (S) INC for the workover rig if the BOP system is not as required.

INSPECTION COUNT/ INC COUNT:

Enter one item checked/ issue one INC per BOP system inspected.

W-128

DO THE MINIMUM BOP-SYSTEM COMPONENTS FOR WELL-WORKOVER OPERATIONS WITH THE TREE IN PLACE AND PERFORMED BY COILED-TUBING OPERATIONS INCLUDE ONE SET OF HYDRAULICALLY OPERATED PIPE RAMS INSTALLED IN THE PROPER SEQUENCE?

Authority: 615(e) (1)

Enforcement Action: S

615(e) (3)

INSPECTION PROCEDURE:

If coiled tubing operations are in progress, with the tree in place, verify that the BOP system includes, as a minimum, one set of pipe rams hydraulically operated.

IF NONCOMPLIANCE EXISTS:

Issue a facility shut-in (S) INC for the workover rig if the BOP system does not contain at least one set of pipe rams which are hydraulically operated.

INSPECTION COUNT/ INC COUNT:

Enter one item checked/ issue one INC per BOP system inspected.

W-129

DO THE MINIMUM BOP SYSTEM COMPONENTS FOR WELL-WORKOVER OPERATIONS WITH THE TREE IN PLACE AND PERFORMED BY COILED TUBING OPERATIONS INCLUDE ONE TWO-WAY HYDRAULICALLY OPERATED SLIP ASSEMBLY INSTALLED IN THE PROPER SEQUENCE?

Authority: 615(e) (1)

Enforcement Action: S

615(e) (3)

INSPECTION PROCEDURE:

If coiled tubing operations are in progress with the tree in place, visually inspect to verify that the BOP system includes, as a minimum, one two-way slip assembly that is hydraulically operated.

IF NONCOMPLIANCE EXISTS:

Issue a facility shut-in (S) INC for the workover rig if the BOP system does not contain at least one two-way slip assembly that is hydraulically operated.

INSPECTION COUNT/ INC COUNT:

Enter one item checked/ issue one INC per BOP system inspected

- W-130** **DO THE MINIMUM BOP SYSTEM COMPONENTS FOR WELL-WORKOVER OPERATIONS WITH THE TREE IN PLACE AND PERFORMED BY COILED TUBING OPERATIONS INCLUDE ONE HYDRAULICALLY OPERATED PIPE-CUTTER ASSEMBLY INSTALLED IN THE PROPER SEQUENCE?**
Authority: 615(e) (1) **Enforcement Action:** S
615(e) (2)
INSPECTION PROCEDURE:
If coiled tubing operations are in progress with the tree in place, visually inspect to verify that the BOP system includes, as a minimum, one pipe cutter that is hydraulically operated.
IF NONCOMPLIANCE EXISTS:
Issue a facility shut-in (S) INC for the workover rig if the BOP system does not contain at least one pipe cutter that is hydraulically operated.
INSPECTION COUNT/ INC COUNT:
Enter one item checked/ issue one INC per BOP system inspected
- W-131** **DO THE MINIMUM BOP SYSTEM COMPONENTS FOR WELL-WORKOVER OPERATIONS WITH THE TREE IN PLACE AND PERFORMED BY COILED TUBING OPERATIONS INCLUDE ONE SET OF HYDRAULICALLY OPERATED BLIND RAMS INSTALLED IN THE PROPER SEQUENCE?**
Authority: 615(e) (1) **Enforcement Action:** S
615(e) (2)
INSPECTION PROCEDURE:
If coiled tubing operations are in progress with the tree in place, visually inspect to verify that the BOP system includes, as a minimum, one set of blind rams that are hydraulically operated.
IF NONCOMPLIANCE EXISTS:
Issue a facility shut-in (S) INC for the workover rig if the BOP system does not contain at least one set of blind rams that are hydraulically operated.
INSPECTION COUNT/ INC COUNT:
Enter one item checked/ issue one INC per BOP system inspected
- W-132** **DO THE MINIMUM BOP SYSTEM COMPONENTS FOR WELL-WORKOVER OPERATIONS WITH THE TREE IN PLACE AND PERFORMED BY COILED TUBING OPERATIONS INCLUDE ONE PIPE-STRIPPER ASSEMBLY INSTALLED IN THE PROPER SEQUENCE?**
Authority: 615(e) (1) **Enforcement Action:** S
INSPECTION PROCEDURE:
If coiled tubing operations are in progress with the tree in place, visually inspect to verify that the BOP system includes, as a minimum, one pipe-stripper assembly.
IF NONCOMPLIANCE EXISTS:
Issue a facility shut-in (S) INC for the workover rig if the BOP system does not contain at least one pipe-stripper assembly.
INSPECTION COUNT/ INC COUNT:
Enter one item checked/ issue one INC per BOP system inspected.
- W-133** **DOES THE MINIMUM BOP SYSTEM COMPONENTS FOR WELL-WORKOVER OPERATIONS WITH THE TREE IN PLACE AND PERFORMED BY COILED TUBING OPERATIONS INCLUDE, A DUAL CHECK VALVE ASSEMBLY, CHOKE AND KILL VALVES WITH EQUAL OR GREATER WORKING PRESSURE THEN THE CONNECTION TO WHICH THEY ARE ATTACHED AND ARE ALL CONNECTIONS FLANGED.**
Authority: 615(e) (4) (5) (7) **Enforcement Action:** S
INSPECTION PROCEDURE:
If coiled tubing operations are in progress with the tree in place, visually inspect to verify that the BOP system includes, as a minimum, a dual check valve assembly, choke and kill lines with equal or greater working pressure then the connection to which they are attached and are all connections flanged?
IF NONCOMPLIANCE EXISTS:
Issue a facility shut-in (S) INC for the workover rig if the BOP system does not meet the above requirements.
INSPECTION COUNT/ INC COUNT:
Enter one item checked/ issue one INC per BOP system inspected.

W-134

DO THE MINIMUM BOP SYSTEM COMPONENTS FOR WELL-WORKOVER OPERATIONS WITH THE TREE IN PLACE AND PERFORMED BY SNUBBING OPERATIONS INCLUDE ONE SET OF PIPE RAMS HYDRAULICALLY OPERATED?

Authority: 615(f) (1)

Enforcement Action: S

INSPECTION PROCEDURE:

If snubbing operations are in progress with the tree in place, visually inspect to verify that the BOP system includes, as a minimum, one set of pipe rams that are hydraulically operated.

IF NONCOMPLIANCE EXISTS:

Issue a facility shut-in (S) INC for the workover rig if the BOP system does not contain at least one set of pipe rams that are hydraulically operated.

INSPECTION COUNT/ INC COUNT:

Enter one item checked/ issue one INC per BOP system inspected.

W-135

DO THE MINIMUM BOP SYSTEM COMPONENTS FOR WELL-WORKOVER OPERATIONS WITH THE TREE IN PLACE AND PERFORMED BY SNUBBING OPERATIONS INCLUDE TWO SETS OF STRIPPER-TYPE PIPE RAMS HYDRAULICALLY OPERATED WITH SPACER SPOOL?

Authority: 615(f) (2)

Enforcement Action: S

INSPECTION PROCEDURE:

If snubbing operations are in progress with the tree in place, visually inspect to verify that the BOP system includes, as a minimum, two sets of stripper-type pipe rams that are hydraulically operated and a spacer spool.

IF NONCOMPLIANCE EXISTS:

Issue a facility shut-in (S) INC for the workover rig if the BOP system does not contain:

1. At least two sets of stripper-type pipe rams that are hydraulically operated.
2. A spacer spool.

INSPECTION COUNT/ INC COUNT:

Enter one item checked/ issue one INC per BOP system inspected.

W-136

IS AN INSIDE BOP OR SPRING-LOADED BACK-PRESSURE SAFETY VALVE, AND AN ESSENTIALLY FULL-OPENING WORK-STRING SAFETY VALVE, IN THE OPEN POSITION, BEING MAINTAINED ON THE RIG FLOOR AT ALL TIMES DURING WELL-WORKOVER OPERATIONS WHEN THE TREE IS REMOVED OR DURING WELL-WORKOVER OPERATIONS WITH THE TREE INSTALLED AND USING SMALL TUBING AS THE WORK STRING?

Authority: 615(g)

Enforcement Action: S

INSPECTION PROCEDURE:

1. Verify that the inside BOP and drill-string safety valves fitting all sizes of pipe in the drill-string are available on the rig floor and are operable.
2. Verify that the inside BOP and drill-string safety valves have a rated working pressure equal to or greater than the rated working pressure of the BOP stack in use.
3. Visually confirm that the inside BOP and drill-string safety valves are in the open position.

Note: The full-opening work-string safety valve is not required for coiled tubing or snubbing operations.

IF NONCOMPLIANCE EXISTS:

Issue a facility shut-in (S) INC for the workover rig if:

1. The required inside BOP and drill-string safety valve are not available on the rig floor, or
2. The valves are not maintained in the open position, or
3. The valves do not have a rated working pressure equal to or greater than the rated working pressure of the BOP stack in use.

INSPECTION COUNT/ INC COUNT:

Enter one item checked/ issue one INC per each valve inspected.

W-137

IS A WRENCH FITTING THE WORK-STRING SAFETY VALVES READILY AVAILABLE?

Authority: 615(g)

Enforcement Action: S

INSPECTION PROCEDURE:

Verify that wrenches to fit each valve in use are available in the rig floor area.

Note: This requirement pertains to well-workover operations with the tree removed or during operations with the tree installed and using small tubing as the work string. The wrench is not required for coiled tubing or snubbing operations.

IF NONCOMPLIANCE EXISTS:

Issue a facility shut-in (S) INC for the workover rig if the wrenches are not readily available.

INSPECTION COUNT/ INC COUNT:

Enter one item checked/ issue one INC per each valve inspected

W-138

ARE CONNECTIONS READILY AVAILABLE FOR INSERTING VALVES IN THE WORK STRING?

Authority: 615(g)

Enforcement Action: S

INSPECTION PROCEDURE:

Verify that connections are readily available for inserting valves in the work string.

Note: This requirement pertains to well-workover operations with the tree removed or during operations with the tree installed and using small tubing as the work string. The wrench is not required for coiled-tubing or snubbing operations.

IF NONCOMPLIANCE EXISTS:

Issue a facility shut-in (S) INC for the workover rig if connections are not readily available for inserting valves in the work string.

INSPECTION COUNT/ INC COUNT:

Enter one item checked/ issue one INC per each valve inspected

W-139

PRIOR TO CONDUCTING HIGH-PRESSURE TESTS, ARE ALL BOP SYSTEMS TESTED TO A LOW PRESSURE OF 200 TO 300 PSI?

Authority: 616(a) (1)

Enforcement Action: W/S

INSPECTION PROCEDURE:

1. Verify that a low-pressure test on BOP equipment was conducted prior to a high-pressure test.

Note: Operations log notation is acceptable test confirmation.

2. If inspection is being performed during commencement of testing of BOP system, confirm operator's compliance with low-pressure testing requirements.

IF NONCOMPLIANCE EXISTS:

Issue a warning (W) INC if a low-pressure test was missed, but subsequently performed.

Issue a facility shut-in (S) INC for workover operations on a production platform or a MODU when records indicate a low-pressure test was not performed prior to a high-pressure test.

INSPECTION COUNT/ INC COUNT:

Enter one item checked/ issue one INC per inspection.

W-140

HAVE RAM-TYPE BOP'S, RELATED CONTROL EQUIPMENT, INCLUDING THE CHOKE AND KILL MANIFOLDS, AND SAFETY VALVES BEEN SUCCESSFULLY TESTED (OR AS OTHERWISE APPROVED BY THE DISTRICT MANAGER)?

Authority: 616(a)

Enforcement Action: W/S

INSPECTION PROCEDURE:

1. Inspect operator's log to verify that pressure tests have been performed on rams and related equipment.

2. Verify that tests have been performed to the rated working pressure of the BOP equipment or as otherwise approved by the District Manager.

3. Witness tests if performed during the inspection.

IF NONCOMPLIANCE EXISTS:

Issue a warning (W) INC if rams and related control equipment have been tested, to less than minimum requirements, but were later met by a subsequent test.

Issue a facility shut-in (S) INC for the workover rig if the rams and related control equipment have not been tested as required.

INSPECTION COUNT/ INC COUNT:

Enter one item checked/ issue one INC per BOP system inspected.

W-146

HAVE THE BOP SYSTEMS BEEN TESTED AT LEAST ONCE EVERY 7 DAYS?

Authority: 616(b) (2)

Enforcement Action: W/S

INSPECTION PROCEDURE:

Inspect operator's log to verify that tests were performed at least every 7 days.

Note:

1. More than 7 days is allowed when well operations prevent testing due to problems such as:
 - A. Stuck pipe.
 - B. Pressure control operations.
 - C. Remedial well efforts.
2. The tests shall be conducted as soon as possible after the problem is solved, but before normal operations resume.
3. The reason for postponing testing shall be entered into the operations log.

IF NONCOMPLIANCE EXISTS:

Issue a warning (W) INC if records indicate that tests other than most recent test exceeded the 7-day interval requirement without acceptable explanation in the operator's log.

Issue a facility shut-in (S) INC for the workover rig if the date of most recent test exceeds the 7 days and acceptable explanation is not entered in the operator's log.

INSPECTION COUNT/ INC COUNT:

Enter one item checked/ issue one INC per inspection.

W-147

HAVE THE BOP SYSTEMS BEEN TESTED AT LEAST ONCE EVERY 30 DAYS DURING OPERATION FOR THE BLIND-SHEAR RAMS?

Authority: 616(b) (2)

Enforcement Action: W/S

INSPECTION PROCEDURE:

1. Inspect operator's log to verify that the blind-shear rams have been tested at least once every 30 days.
2. If inspection is being performed during testing of the blind-shear rams, witness the test.

Note:

1. A longer period between blowout preventer tests is allowed when there is a stuck pipe or pressure control operation and remedial efforts are being performed. The tests shall be conducted as soon as possible and before normal operations resume.
2. The reason for postponing testing shall be entered into the operations log.

IF NONCOMPLIANCE EXISTS:

Issue a warning (W) INC if records indicate that tests other than most recent test exceeded the 30-day requirement.

Issue a facility shut-in (S) INC for the workover rig if a test has not been conducted in the last 30 days.

INSPECTION COUNT/ INC COUNT:

Enter one item checked/ issue one INC per inspection.

W-148

HAVE THE BOP SYSTEMS BEEN TESTED FOLLOWING REPAIRS THAT REQUIRE DISCONNECTING A PRESSURE SEAL IN THE ASSEMBLY?

Authority: 616(b) (3)

Enforcement Action: W/S

INSPECTION PROCEDURE:

Inspect operator's log to verify that, where repairs required disconnection of pressure seals, tests on affected seals were conducted.

IF NONCOMPLIANCE EXISTS:

Issue a warning (W) INC if records indicate that operations commenced without tests being conducted on the seals, but subsequent BOP tests were conducted.

Issue a facility shut-in (S) INC for the workover rig if no tests were conducted on the seals following repairs.

INSPECTION COUNT/ INC COUNT:

Enter one item checked/ issue one INC per inspection.

W-149

DO THE TESTS ALTERNATE BETWEEN CONTROL STATIONS AND AT STAGGERED INTERVALS TO ALLOW EACH CREW TO OPERATE THE EQUIPMENT?

Authority: 616(b) (2)

Enforcement Action: W/S

INSPECTION PROCEDURE:

1. Inspect operator's log to verify that each crew has been allowed to operate the equipment during tests.
2. Verify that all control stations are functional.
3. Conditions permitting, witness operation of the BOP equipment by the crew on tour.

IF NONCOMPLIANCE EXISTS:

Issue a warning (W) INC if records indicate that each crew has not operated the BOP equipment during tests.

Issue a facility shut-in (S) INC for the workover rig if either control station is found to be inoperable.

INSPECTION COUNT/ INC COUNT:

Enter one item checked/ issue one INC per inspection.

W-155

ARE BOP TEST PRESSURES RECORDED ON A PRESSURE CHART, UNLESS OTHERWISE APPROVED BY THE DISTRICT MANAGER?

Authority: 616(f)

Enforcement Action: W

INSPECTION PROCEDURE:

1. Verify that the BOP test pressures have been recorded on a pressure chart by requesting to view the actual chart.
2. Prior to inspection, check office records to determine if the District Manager has approved an alternate method of recording BOP test pressure.

IF NONCOMPLIANCE EXISTS:

Issue a warning (W) INC if the BOP test pressures have not been recorded on a pressure chart or alternative method approved by the District Manager.

INSPECTION COUNT/ INC COUNT:

Enter one item checked/ issue one INC per inspection.

W-156

IS THE TEST INTERVAL FOR EACH BOP COMPONENT TESTED SUFFICIENT TO DEMONSTRATE THAT THE COMPONENT IS EFFECTIVELY HOLDING PRESSURE?

Authority: 616(f)

Enforcement Action: W

INSPECTION PROCEDURE:

Verify that each BOP component held pressure for at least five minutes (except for coiled tubing operations which require ten minutes for high pressure tests) or other time period approved by the District Manager by checking the pressure charts or alternative documentation as approved by the District Manager.

IF NONCOMPLIANCE EXISTS:

Issue a warning (W) INC if the pressure charts or other documentation indicates that each BOP component did not hold pressure for at least five minutes or other time period approved by the District Manager.

INSPECTION COUNT/ INC COUNT:

Enter one item checked/ issue one INC per inspection.

W-157

ARE BOP TEST PRESSURE CHARTS CERTIFIED AS CORRECT BY THE OPERATOR'S REPRESENTATIVE AT THE FACILITY?

Authority: 616(f)

Enforcement Action: W

INSPECTION PROCEDURE:

Verify that each pressure chart contains a written certification (signature and date) by the operator's representative at the facility.

IF NONCOMPLIANCE EXISTS:

Issue a warning (W) INC if any pressure chart does not contain a written certification by the operator's representative at the facility.

INSPECTION COUNT/ INC COUNT:

Enter one item checked/ issue one INC per inspection.

W-158

DOES THE DOCUMENTATION INDICATE THE SEQUENTIAL ORDER OF BOP AND AUXILIARY EQUIPMENT TESTING AND THE PRESSURE AND DURATION OF EACH TEST?

Authority: 616(e) (1)

Enforcement Action: W

616(e) (4)

INSPECTION PROCEDURE:

Check the operations log or referenced document to verify that the sequential order of BOP and auxiliary equipment testing, and the pressure and duration of each, test are recorded.

IF NONCOMPLIANCE EXISTS:

Issue a warning (W) INC if the documentation does not indicate the sequential order of BOP and auxiliary equipment testing and the pressure and duration of each test.

INSPECTION COUNT/ INC COUNT:

Enter one item checked/ issue one INC per inspection.

W-159

IS THE CONTROL STATION USED DURING THE TEST IDENTIFIED IN THE OPERATIONS LOG OR REFERENCED DOCUMENTS?

Authority: 616(e) (2)
616(e) (4)

Enforcement Action: W

INSPECTION PROCEDURE:

Check the operations log or referenced document to verify that the control station used during the test is identified.

IF NONCOMPLIANCE EXISTS:

Issue a warning (W) INC if the control station used during the test is not identified in the operations log or referenced document.

INSPECTION COUNT/ INC COUNT:

Enter one item checked/ issue one INC per inspection.

W-160

FOR SUBSEA SYSTEMS, IS THE POD USED DURING THE TEST IDENTIFIED IN THE OPERATIONS LOG OR REFERENCED DOCUMENTS?

Authority: 616(e) (2)
616(e) (4)

Enforcement Action: W

INSPECTION PROCEDURE:

Check the operations log or referenced documents to verify that the pod used during the test is identified.

IF NONCOMPLIANCE EXISTS:

Issue a warning (W) INC if the pod used during the test is not identified in the operations log or referenced documents.

INSPECTION COUNT/ INC COUNT:

Enter one item checked/ issue one INC per inspection.

W-161

ARE ANY PROBLEMS OR IRREGULARITIES OBSERVED DURING BOP AND AUXILIARY EQUIPMENT TESTING AND ANY ACTIONS TAKEN TO REMEDY SUCH PROBLEMS OR IRREGULARITIES RECORDED IN THE OPERATIONS LOG OR REFERENCED DOCUMENTS?

Authority: 616(e) (3)
616(e) (4)

Enforcement Action: W

INSPECTION PROCEDURE:

Check the operations log or referenced document to verify that problems or irregularities observed during BOP and auxiliary equipment testing and actions taken to remedy such problems or irregularities are recorded.

IF NONCOMPLIANCE EXISTS:

Issue a warning (W) INC if problems or irregularities observed during the testing of BOP and auxiliary equipment and actions taken to remedy such problems or irregularities are not recorded in the operations log or referenced documents.

INSPECTION COUNT/ INC COUNT:

Enter one item checked/ issue one INC per inspection.

W-162

ARE ALL RECORDS INCLUDING PRESSURE CHARTS, OPERATIONS LOGS, AND REFERENCED DOCUMENTS OF BOP TESTS, ACTUATIONS, AND INSPECTIONS AVAILABLE AT THE FACILITY FOR THE DURATION OF THE WELL-WORKOVER ACTIVITY?

Authority: 616(e) (4)

Enforcement Action: W

INSPECTION PROCEDURE:

Verify that all records including pressure charts, operations logs, and referenced documents of BOP tests, actuations, and inspections are available at the facility for the duration of the well-workover activity by asking the operator's representative to see them.

IF NONCOMPLIANCE EXISTS:

Issue a warning (W) INC if all records of BOP tests, actuations, and inspections including pressure charts, operations logs, and referenced documents are not available at the facility for the duration of the well-workover activity.

INSPECTION COUNT/ INC COUNT:

Enter one item checked/ issue one INC per inspection.

W-163

ARE ALL SUCH RECORDS RETAINED FOR A PERIOD OF TWO YEARS AT THE FACILITY, AT THE LESSEE'S FIELD OFFICE NEAREST THE FACILITY, OR AT ANOTHER LOCATION CONVENIENTLY AVAILABLE TO THE DISTRICT MANAGER?

Authority: 616(e) (4)

Enforcement Action: W

INSPECTION PROCEDURE:

Verify that all such records are available by asking the operator's representative for them.

IF NONCOMPLIANCE EXISTS:

Issue a warning (W) INC if the records are not conveniently available.

INSPECTION COUNT/ INC COUNT:

Enter one item checked/ issue one INC per inspection.

WIRELINE OPERATIONS

W-170

ARE WIRELINE OPERATIONS CONDUCTED SO AS TO MINIMIZE THE LEAKAGE OF WELL FLUIDS?

Authority: 618(a)

Enforcement Action: S

INSPECTION PROCEDURE:

Visually inspect the wireline operation for fluid leakage.

IF NONCOMPLIANCE EXISTS:

Issue a facility shut-in (S) INC for wireline operations if fluids are leaking from the wireline equipment.

INSPECTION COUNT/ INC COUNT:

Enter one item checked/ issue one INC per inspection.

W-171

FOR WIRELINE PERFORATING OPERATIONS AND ALL OTHER WIRELINE OPERATIONS WHERE COMMUNICATION EXISTS BETWEEN THE COMPLETED HYDROCARBON-BEARING ZONE(S) AND THE WELLBORE, IS A LUBRICATOR ASSEMBLY CONTAINING AT LEAST ONE WIRELINE VALVE UTILIZED?

Authority: 618(b)

Enforcement Action: S

INSPECTION PROCEDURE:

For wireline perforating operations and all other wireline operations where communication exists between the completed hydrocarbon-bearing zones and the wellbore, visually inspect the wellhead assembly to verify that a lubricator assembly containing at least one wireline valve is installed.

IF NONCOMPLIANCE EXISTS:

Issue a facility shut-in (S) INC for wireline operations if a lubricator assembly containing at least one wireline valve is not installed.

INSPECTION COUNT/ INC COUNT:

Enter one item checked/ issue one INC per inspection.

W-172

WHEN A LUBRICATOR IS INITIALLY INSTALLED ON A WELL, IS IT PRESSURE TESTED TO THE EXPECTED SHUT-IN PRESSURE?

Authority: 618(c)

Enforcement Action: W/S

INSPECTION PROCEDURE:

1. Check the operator's records to:

A. Confirm the expected shut-in pressure with the last viable test.

B. Verify that the lubricator was pressure tested to the expected shut-in pressure when it was initially installed.

2. If lubricator is being initially installed during the inspection, witness the pressure test.

IF NONCOMPLIANCE EXISTS:

Issue a warning (W) INC if the lubricator was not tested when initially installed, but subsequent tests have been performed.

Issue a facility shut-in (S) INC for the wireline operation if the lubricator has never been pressure tested to the expected shut-in pressure.

INSPECTION COUNT/ INC COUNT:

Enter one item checked/ issue one INC per inspection.

W-180

IS AN OPERABLE ESD STATION INSTALLED NEAR THE DRILLER'S CONSOLE OR WELL-SERVICING UNIT OPERATOR'S WORK STATION, EXCEPT WHEN THERE IS NO OTHER HYDROCARBON-PRODUCING WELL OR FLOW ON THE PLATFORM ?

Authority: 603

Enforcement Action: S

Note: The offshore operator and contractor should be advised that the ESD station should be tested when installed and subsequent to each rig skid. The ESD station should be tested to shut in one well during initial installation of the ESD station and for system operability after the initial test. Furthermore The ESD station near the driller's console shall be rotated and tested in order when testing other ESD stations on the platform.

INSPECTION PROCEDURE:

1. Verify that there is an ESD station near the driller's console or well-servicing unit operator's work station during well-workover operations.
2. Verify operation of the ESD station by testing in accordance with Appendix 10.

IF NONCOMPLIANCE EXISTS:

Issue a facility shut-in (S) INC for the well-workover operation when an ESD station:

1. Does not exist at the required location.
2. Does not operate properly.

INSPECTION COUNT/ INC COUNT:

Enter one item checked/ issue one INC per inspection.

BOP TEST/ACUATION/INSPECTION AND MAINTENANCE

LAST UPDATE - 2011

W-190

DOES THE SUBSEA BOP SYSTEM FOR WELL WORKOVER OPERATIONS INCLUDE AT LEAST FOUR REMOTE –CONTROLLED HYDRAULICALLY OPERATED BOPS?

Authority: 615(b)(5)

Enforcement Action: S

442 (a)

INSPECTION PROCEDURE:

1. Check records to verify that operator has
 - a. One annular BOP
 - b. Two BOP's equipped with pipe rams
 - c. One BOP equipped with blind shear rams

Note: The blind shear rams must be capable of shearing any drill pipe in the hole under maximum anticipated surface pressure.

2. For subsea BOP stacks, visually check the control station for the above configurations or if available check via television camera.

IF NONCOMPLIANCE EXISTS:

Issue RIG shut-in (S) INC when the operator cannot verify that the BOP system is visually inspected as required.

INSPECTION COUNT/ INC COUNT

Enter one item checked/ issue one INC per BOP system inspected

W-191

DOES THE BOP SYSTEM FOR WELL WORKOVER OPERATIONS INCLUDE OPERABLE DUAL-POD CONTROL SYSTEMS TO ENSURE PROPER AND INDEPENDENT OPERATION?

Authority: 615(e)

Enforcement Action: S

442(b)

INSPECTION PROCEDURE:

1. Verify that a dual pod control system has been installed as follows:
 - A. Two completely redundant control pods.
 - B. Each pod contains all necessary valves and regulators to operate the BOP stack functions.
2. Conditions permitting, witness a function test of each pod to verify proper actuation.

IF NONCOMPLIANCE EXISTS:

Issue a rig shut-in (S) INC when an operable dual pod control system has not been installed.

INSPECTION COUNT/ INC COUNT:

Enter one item checked/ issue one INC for each inspection.

W-192

DOES THE ACCUMULATOR CLOSING SYSTEM FOR WELL WORKOVER OPERATIONS, PROVIDES FAST CLOSURE OF THE BOP COMPONENTS AND TO OPERATE ALL CRITICAL

**FUNCTIONS IN CASE OF A LOSS OF THE POWER FLUID CONNECTION TO THE SURFACE,
INSTALLED IN ACCORDANCE WITH API RP 53 SECTION 13.3?**

**Authority: 615(e)
442(c)**

Enforcement Action: S

INSPECTION PROCEDURE:

Verify that

1. BOP stack is equipped with accumulator bottles.
 - a. BOP Rams close within 45 seconds.
 - b. Annular BOPS close within 60 seconds.
 - c. Operating response time for the choke and kill valves (either open or closed) does not exceed the minimum observed BOP Ram close response time.
 - d. Time to unlatch the lower marine riser package does not exceed 45 seconds.
2. Check closing times for pressure and function tests are in compliance.

IF NONCOMPLIANCE EXISTS:

Issue a rig shut-in (S) INC if the accumulator closing system cannot operate the specified equipment within the specified time.

INSPECTION COUNT/ INC COUNT

Enter one item checked/ issue one INC per BOP system inspected

W-193

**DOES OPERATOR'S SUBSEA ACCUMULATOR PRECHARGE PRESSURE COMPENSATE FOR
THE WATER DEPTH THE BOPS WILL BE OPERATING IN ACCORDANCE WITH API RP 53,
SECTION 13.3.7?**

**Authority: 442(c)
615(e)**

Enforcement Action: S

INSPECTION PROCEDURE:

Check records to verify that the subsea accumulator precharge pressure compensates for the water depth the BOPs will be operating in.

Note: For example, if the precharge pressure of the surface accumulator is 1,000 psi and the BOPs will be in 500ft water depth, the subsea accumulators must be precharged to 1,225psi.

IF NONCOMPLIANCE EXISTS:

Issue a rig shut in (S) INC if subsea accumulator precharge pressure does not compensates for the water depth the BOPs will be operating in.

INSPECTION COUNT/ INC COUNT

Enter one item checked/ issue one INC per subsea accumulator system inspected.

W-194

**DID OPERATOR CALIBRATE ACCULUMATOR PRESSURE GAUGES TO ONE PERCENT OF
FULL SCALE AT LEAST ONCE EVERY THREE YEARS FOR WELL-WORKOVER
OPERATIONS IN ACCORDANCE WITH API RP 53, SECTION 13.3.8?**

**Authority: 442(c)
615(e)**

Enforcement Action: W

INSPECTION PROCEDURE:

Check records to verify that operator calibrated accumulator pressure gauges every three years to one percent of full scale.

IF NONCOMPLIANCE EXISTS:

Issue a warning (W) INC if operator did not calibrate accumulator pressure gauges every three years to one percent of full scale.

INSPECTION COUNT/ INC COUNT

Enter one item checked/ issue one INC per subsea BOP system inspected.

W-195

**IS THE SUBSEA BOP STACK EQUIPPED WITH A ROV INTERVENTION FOR WELL
WORKOVER OPERATIONS?**

Authority: 442(d)
615(e)

Enforcement Action: S

INSPECTION PROCEDURE:

1. Check records to verify that the ROV is capable of closing one set of pipe rams and one set of blind shears and unlatching LMRP.
2. Conditions permitting, witness
 - a. the ROV intervention functions on the subsea BOP stack during the stump test.
 - b. the testing at least one set of rams during the initial test on the seafloor.
 - c. the function testing of the ROV hot stabs to determine if they are capable of actuating a minimum of one set of pipe rams and one set of blind shear rams and unlatching the LMRP during the stump test.

IF NONCOMPLIANCE EXISTS:

Issue a rig shut-in (S) INC if the ROV function testing does not meet one or more of the requirements listed above.

INSPECTION COUNT/ INC COUNT

Enter one item checked/ issue one INC per ROV inspected.

W-196

DOES THE SUBSEA BOP SYSTEM HAVE AN AUTOSHEAR AND DEADMAN SYSTEM FOR DYNAMICALLY POSITIONED RIGS FOR WELL WORKOVER OPERATIONS?

Authority: 442(f)
615(e)

Enforcement Action: S

Definitions:

1. **Autoshear system** means a safety system that is designed to automatically shut in the wellbore in the event of a disconnect of the LMRP. When the autoshear is armed, a disconnect of the LMRP closes the shear rams. This is considered a "rapid discharge" system.
2. **Deadman System** means a safety system that is designed to automatically close the wellbore in the event of a simultaneous absence of hydraulic supply and signal transmission capacity in both subsea control pods. This is considered a "rapid discharge" system.

INSPECTION PROCEDURE:

Verify that operator provided an autoshear and deadman systems for dynamically positioned rigs when drilling.

Note: Operator does not have to have an acoustic system.

IF NONCOMPLIANCE EXISTS:

Issue a rig shut-in (S) if operator did not provide an autoshear and deadman systems for dynamically positioned rigs when drilling.

INSPECTION COUNT/ INC COUNT

Enter one item checked/ issue one INC per subsea BOP system inspected.

W-197

DID THE OPERATOR INSTALL OPERATIONAL OR PHYSICAL BARRIER(S) ON A SUBSEA BOP CONTROL PANEL TO PREVENT ACCIDENTAL DISCONNECT FOR WELL WORKOVER OPERATIONS?

Authority: 442(g)
615(e)

Enforcement Action: W

INSPECTION PROCEDURE:

Verify that operator incorporated enable buttons on a subsea BOP control panel to ensure two-handed operation for all critical functions.

IF NONCOMPLIANCE EXISTS:

Issue a warning (W) INC if operator did not incorporate enable buttons on control panels to ensure two-handed operation for all critical functions.

INSPECTION COUNT/ INC COUNT

Enter one item checked/ issue one INC per subsea BOP system inspected.

W-202

DID OPERATOR CONDUCT A FUNCTION TEST ON THE AUTOSHEAR AND DEADMAN SYSTEMS ON THEIR SUBSEA BOP STACKS WHILE CONDUCTING WELL-WORKOVER OPERATION DURING THE INITIAL TEST ON THE SEAFLOOR?

Authority: 616(h)(2)

Enforcement Action: S

INSPECTION PROCEDURE:

Verify that the function test on autoshear and deadman systems were in accordance with the approved APM.

Note: Records must be made available inspection.

IF NONCOMPLIANCE EXISTS:

Issue a facility shut in (S) if operator did not conduct a function test on autoshear and deadman systems in accordance with the approved APM.

INSPECTION COUNT/ INC COUNT

Enter one item checked/ issue one INC per subsea BOP system inspected.

STUMP TEST

LAST UPDATE 2011

W-203

DID OPERATOR TEST ALL ROV INTERVENTION FUNCTIONS ON THE SUBSEA BOP STACK WHILE CONDUCTING WELL-WORKOVER OPERATION DURING THE STUMP TEST?

Authority: 616(h)(1)

Enforcement Action: S

INSPECTION PROCEDURE:

Check records to verify that

1. Operator conducted ROV intervention function test during the stump test.
2. ROV hot stab was capable of actuating at a minimum one set of pipe rams, one set of blind shear rams, and unlatching the LMRP.

Note: Check records to verify that operator tested all ROV intervention functions in accordance with test procedures in the approved APM.

IF NONCOMPLIANCE EXISTS:

Issue a rig shut-in (S) if operator's did not conduct a function test during the stump test and ROV hot stab was not capable of actuating at a minimum one set of pipe rams, one set of blind shear rams, and unlatching the LMRP.

INSPECTION COUNT/ INC COUNT

Enter one item checked/ issue one INC per subsea BOP system inspected.

W-204

DID OPERATOR TEST AT LEAST ONE SET OF RAMS ON THE SUBSEA BOP STACK WHILE CONDUCTING WELL-WORKOVER OPERATION UPON ITS INITIAL INSTALLATION ON THE SEAFLOOR?

Authority: 616(h)(1)

Enforcement Action: S

INSPECTION PROCEDURE:

Check records to verify that operator

1. Tested at least one set of pipe rams on the subsea BOP stack upon its installation on the seafloor in accordance with the test procedures and approved APD or APM.
2. Submitted test procedures with your APM for District Manager approval.

Note: Check records to verify that operator tested one set of rams on the subsea BOP stack upon its installation on the seafloor in accordance with the test procedures and approved APM.

IF NONCOMPLIANCE EXISTS:

Issue a rig shut-in (S) if operators did not conduct a test on at least one set of rams on the subsea BOP stack upon its initial installation on the sea floor.

INSPECTION COUNT/ INC COUNT

Enter one item checked/ issue one INC per subsea BOP system inspected

W-205

DID OPERATOR CONDUCT A FUNCTION TEST ON THE AUTOSHEAR AND DEADMAN SYSTEMS ON THEIR SUBSEA BOP STACKS WHILE CONDUCTING WELL-WORKOVER OPERATION DURING THE STUMP TEST?

Authority: 616(2)

Enforcement Action: S

INSPECTION PROCEDURE:

Verify that the function test on autoshear and deadman systems were in accordance with the approved APM.

Note:

1. Operator may use water to stump test a subsea BOP system.
2. Operator may use drilling or completion fluids to conduct subsequent tests of a subsea BOP system.
3. Records must be made available during inspection

IF NONCOMPLIANCE EXISTS:

Issue a rig shut in (S) if operator did not conduct a function test on autoshear and deadman systems in accordance with the approved APM.

INSPECTION COUNT/ INC COUNT

Enter one item checked/ issue one INC per subsea BOP system inspected.

BOP TESTS, ACTUATORS, INSPECTIONS, AND MAINTENANCE

LAST UPDATE - 2011

W-206

AFTER EACH WELL DRILLED, DID OPERATOR CLEAN, VISUALLY INSPECT, PERFORM PREVENTIVE MAINTENANCE, AND PRESSURE TEST TROL EQUIPMENT BEFORE INSTALLATION ON THE NEXT WELL IN ACCORDANCE WITH API RP 53 SECTION 17.10.1 AND 18.10.1?

Authority: 617(a)

Enforcement Action: S

INSPECTION PROCEDURE:

Check records to verify that operator cleaned, visually inspect, performed preventive maintenance, and pressure test the well control equipment before installation on the next well.

Note: Well control equipment applies to both surface and subsea.

IF NONCOMPLIANCE EXISTS:

Issue a rig shut in (S) INC if operator did not clean, visually inspect, performed preventive maintenance and pressure test the well control equipment before installation on the next well.

INSPECTION COUNT/ INC COUNT

Enter one item checked/ issue one INC per subsea BOP system inspected.

W-207

ARE ALL BOP STACKS, CHOKE MANIFOLDS, AND DIVETER COMPONENTS USED DURING WELL WORKOVER OPERATIONS, DISASSEMBLED AND INSPECTED IN ACCORDANCE WITH THE EQUIPMENT MANUFACTURER'S GUIDELINES AFTER EVERY 3-5 YEARS OF SERVICE IN ACCORDANCE WITH API RP 53 SECTION 17.10.3 AND 18.10.3?

Authority: 30 CFR 250.617(a) (1)

Enforcement Action: W/S

INSPECTION PROCEDURE:

Verify that

1. Elastomer components have been changed out
2. Surface finishes have been examined for wear and corrosion
3. Critical dimensions should be checked against the manufactures allowable wear limits.
4. A full internal and external inspection of the flexible choke and kill lines should be performed in accordance with the equipment manufacturers

Note: Records must be maintained on the rig for two years or from the date of you last major inspection, whichever is longer.

IF NONCOMPLIANCE EXISTS:

Issue a warning (W) INC if the component (BOP stack, Choke Manifold, and Diverter) has been found to be in violation but is no longer in use.

Issue a rig shut-in (S) INC when operator has not disassembled and inspected all BOP stacks, choke manifolds, and diverter components in accordance with the equipment manufacturer's guidelines after every 3-5 years of service.

INSPECTION COUNT/ INC COUNT:

Enter one item checked/ issue one INC per inspection.

W-208

IS THE WORKOVER BOP SYSTEMS AND MARINE RISER INSPECTED AT LEAST ONCE EACH DAY, WEATHER AND SEA CONDITIONS PERMITTING?

Authority: 617(a) (2)

Enforcement Action: W

Note:

1. Weather and sea conditions are allowable reasons for not inspecting subsea BOP systems and marine risers at least daily.
2. You may use television camera to inspect this equipment

INSPECTION PROCEDURE:

Verify that the BOP systems and marine risers have been visually inspected by checking the driller's report.

IF NONCOMPLIANCE EXISTS:

Issue a warning (W) INC when the operator cannot verify that the BOP system is visually inspected as required.

INSPECTION COUNT/ INC COUNT

Enter one item checked/ issue one INC per subsea BOP system inspected

W-209

IS MANUFACTURER'S INSTALLATION, OPERATION, AND MAINTENANCE (IOM) MANUALS AVAILABLE ON THE RIG FOR ALL THE BOP EQUIPMENT DURING WELL WORKOVER OPERATIONS, INSTALLED ON THE RIG IN ACCORDANCE WITH API RP 53 17.11.1. AND 18.11.1?

Authority: 30 CFR 250.617(b)

Enforcement Action: S

INSPECTION PROCEDURE:

Verify that Manufacturer's installation, operation, and maintenance (IOM) manuals are available on the rig for all the well completion BOP equipment installed on the rig

IF NONCOMPLIANCE EXISTS:

Issue a rig shut-in (S) INC if the manufacturer's installation, operation, and maintenance (IOM) manuals are not available on the rig for all the BOP equipment installed on the rig

INSPECTION COUNT/ INC COUNT:

Enter one item checked/ issue one INC per inspection.

W-210

IS A PLANNED MAINTENANCE SYSTEM , WITH EQUIPMENT IDENTIFIED, TASKS SPECIFIED, AND THE TIME INTERVALS BETWEEN TASKS STATED, EMPLOYED ON EACH RIG AND ARE THEY MAINTAINED ON FILE AT THE RIG SITE OR READILY AVAILABLE FOR THE APPLICABLE WELL WORKOVER BOP EQUIPMENT IN ACCORDANCE WITH API RP 53 17.12.1 AND 18.12.1?

Authority: 30 CFR 250.617(b)

Enforcement Action: S

INSPECTION PROCEDURE:

Verify that a planned maintenance system, with equipment identified, tasks specified, and the time intervals between tasks stated, employed on each rig and are they maintained on file at the rig site or readily available for the applicable well completion BOP equipment

IF NONCOMPLIANCE EXISTS:

Issue a rig shut-in (S) INC if they are not following the planned maintenance system.

INSPECTION COUNT/ INC COUNT:

Enter one item checked/ issue one INC per inspection.

W- 211

DOES OPERATOR MAINTAIN COPIES OF EQUIPMENT MANUFACTURERS' PRODUCT ALERTS OR EQUIPMENT BULLETINS AT THE RIG SITE IN ACCORDANCE WITH API RP 53 SECTIONS 17.12.2 AND 18.12.2?

Authority: 30 CFR 250.617(b)

Enforcement Action: S

INSPECTION PROCEDURE

Verify that operator has copies of equipment manufacturers' product alerts or equipment bulletins at the rig site and readily made available to BOEMRE upon request.

IF NONCOMPLIANCE EXISTS:

Issue a rig shut-in (S) INC if operator does not have copies of equipment manufacturers' product alerts or equipment bulletins at the rig site and are not made available to BOEMRE upon request.

INSPECTION COUNT/ INC COUNT:

Enter one item checked/ issue one INC per inspection.