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Affected Publication: API Specification 16D, *Control Systems for Drilling Well Control Equipment and Control Systems for Diverter Equipment*, 3rd Edition

Addendum 2 - Ballot 7176

6.5.1.2. a): *This section has been revised as follows:*

a) Provide the power fluid volume and pressure required to perform an accumulator drawdown test per the following requirements. The accumulator capacity required for this test correlates with the results obtained using calculation Method B and shall be calculated with the beginning pressure at the pump stop pressure.

1) Close from full open position at zero (0) wellbore pressure one annular BOP and a maximum of four ram BOPs with the smallest cumulative operating volume, and open the valve(s) of one side outlet on the BOP stack. The fluid volume required for ram BOP locking, if provided, shall be included. If more than one annular BOP is installed, the larger closing volume requirement shall be utilized.

2) The calculated pressure of the remaining accumulator fluid after discharge of the required volume including the volume design factor for pressure-limiting discharge shall exceed the minimum calculated operating pressure required to close one annular, close any ram BOP (using the ram-type BOP closing ratio, excluding the shear ram) and to open and hold open required side outlet valves at the maximum rated wellbore pressure of the BOP stack.

6.5.1.3. a): *This section has been revised as follows:*

a) Provide the power fluid volume and pressure required to perform an accumulator drawdown test per the following requirements. The accumulator capacity required for this test correlates with the results obtained using calculation Method B and shall be calculated with the beginning pressure at the pump stop pressure.

1) Close from full open position at zero (0) wellbore pressure one annular BOP and a maximum of four ram BOPs with the smallest cumulative operating volume, and open the valve(s) of one side outlet on the BOP stack. The fluid volume required for ram BOP locking, if provided, shall be included. If more than one annular BOP is installed, the larger closing volume requirement shall be utilized.

2) The calculated pressure of the remaining accumulator fluid after discharge of the required volume including the volume design factor for pressure-limiting discharge shall exceed the minimum calculated operating pressure required to close one annular, close any ram BOP (using the ram-type BOP closing ratio, excluding the

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shear ram) and to open and hold open required side outlet valves at the maximum rated wellbore pressure of the BOP stack.

6.5.1.4. a): *This section has been revised as follows:*

- a) Provide the power fluid volume and pressure required to perform an accumulator drawdown test per the following requirements. The accumulator capacity required for this test correlates with the results obtained using calculation Method B and shall be calculated with the beginning pressure at the pump stop pressure.
 - 1) Close from full open position at zero (0) wellbore pressure one annular BOP and a maximum of four ram BOPs with the smallest cumulative operating volume, and open the valve(s) of one side outlet on the BOP stack. The fluid volume required for ram BOP locking, if provided, shall be included. If more than one annular BOP is installed, the larger closing volume requirement shall be utilized.
 - 2) The calculated pressure of the remaining accumulator fluid after discharge of the required volume including the volume design factor for pressure-limiting discharge shall exceed the minimum calculated operating pressure required to close one annular, close any ram BOP (using the ram-type BOP closing ratio, excluding the shear ram) and to open and hold open required side outlet valves at the maximum rated wellbore pressure of the BOP stack.

7.3.3.2. a): *This section has been revised as follows:*

- a) The power fluid volume and pressure required to perform an accumulator drawdown test as per the following requirements. The accumulator capacity required for this test correlates with the results obtained using calculation Method B and shall be calculated with the beginning pressure at the pump stop pressure.
 - 1) Open and close at zero (0) wellbore pressure one annular BOP and a maximum of four ram BOPs with the smallest cumulative operating volume. The fluid volume required for ram BOP locking, if provided, shall be included. If more than one annular BOP is installed, the larger closing volume requirements shall be utilized.
 - 2) The calculated pressure of the remaining accumulator fluid after discharge of the required volume including the volume design factor for pressure-limiting discharge shall exceed the minimum calculated operating pressure. The calculated required minimum system operating pressure shall exceed the greater of the following:
 - i) the minimum pressure required (using the closing ratio) to close any ram BOP (excluding shearing) at the maximum rated wellbore pressure of the BOP stack.

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- ii) the minimum pressure required to open and hold open any choke or kill valve in the BOP stack at the maximum rated wellbore pressure of the BOP stack.
- iii) the normal minimum recommended operating pressure for the annular preventer, closing on the smallest diameter tubular in the string.

7.3.3.3. a): *This section has been revised as follows:*

- a) The power fluid volume and pressure required to perform the accumulator drawdown test per the following requirements- The accumulator capacity required for this test correlates with the results obtained using calculation Method B and shall be calculated with the beginning pressure at the pump stop pressure.
 - 1) Open and close at zero (0) wellbore pressure one annular BOP and a maximum of four ram BOPs with the smallest cumulative operating volume. If more than one annular BOP is installed, the larger closing volume requirement shall be utilized. The fluid volume required for ram BOP locking, if provided, shall be included.
 - 2) The calculated pressure of the remaining accumulator fluid after discharge of the required volume including the volume design factor for pressure-limiting discharge shall exceed the minimum calculated operating pressure. The calculated required minimum system operating pressure shall exceed the greater of the following:
 - i) the minimum pressure required (using the closing ratio) to close any ram BOP (excluding shearing) at the maximum rated wellbore pressure of the BOP stack.
 - ii) the minimum pressure required to open and hold open any choke or kill valve in the BOP stack at the maximum rated wellbore pressure of the BOP stack.
 - iii) the normal minimum recommended operating pressure for the annular preventer, closing on the smallest diameter tubular in the string.