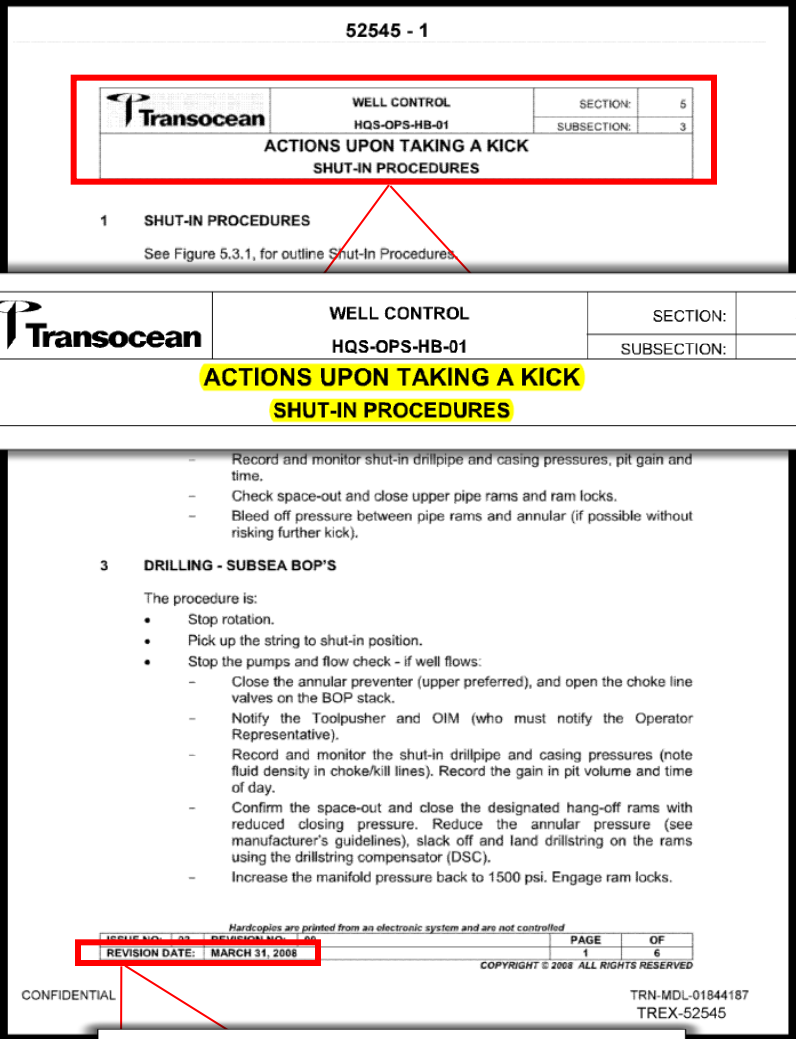
Three Additions To 2009 Well Control Manual



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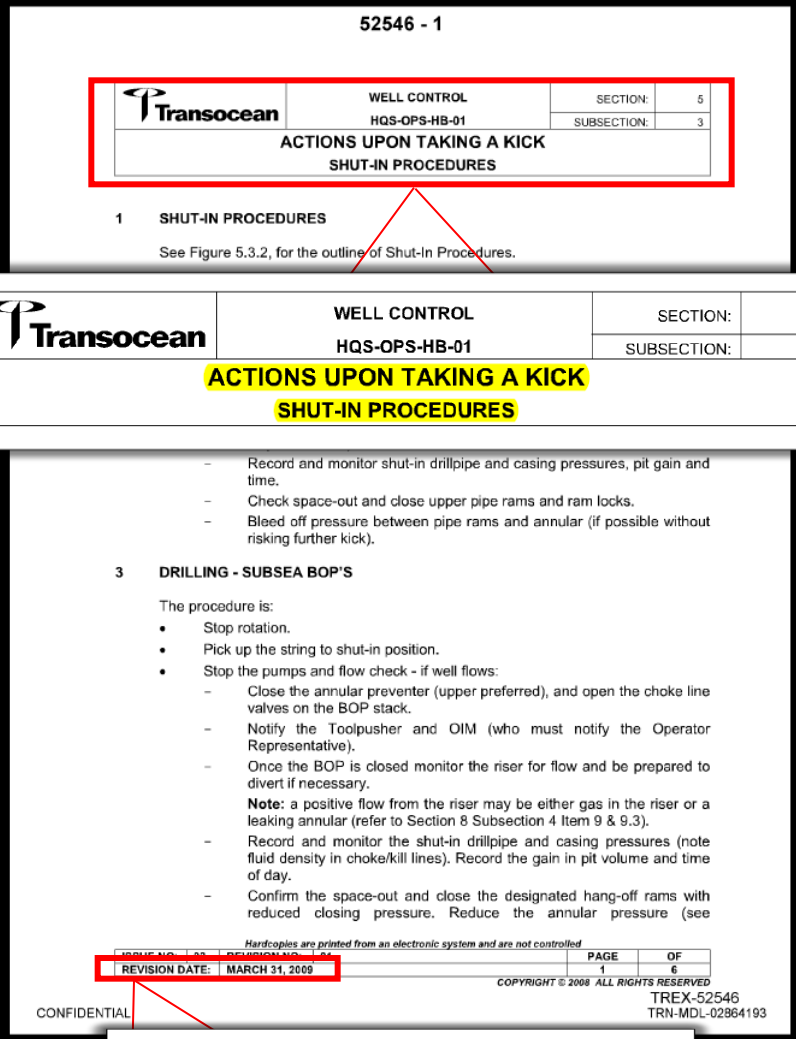

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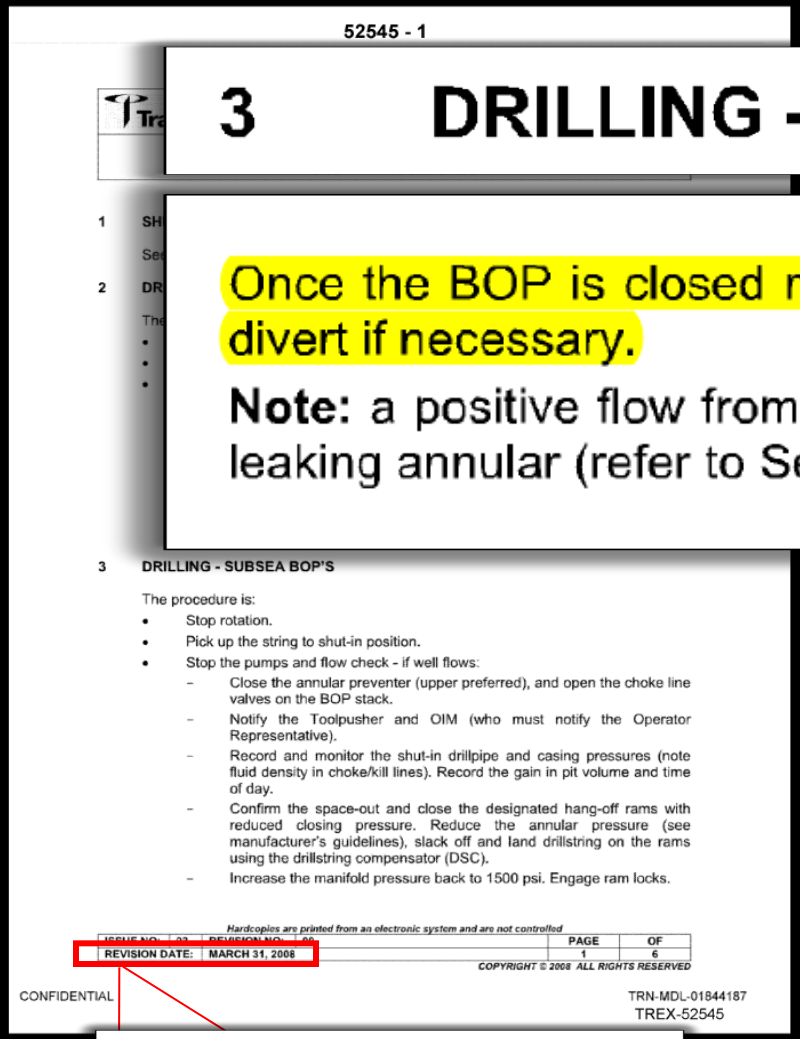
D6726.1 [TREX 52545.1]

[TREX 52546.1]

Three Additions To 2009 Well Control Manual


52545 - 1

3 DRILLING - SUBSEA BOP'S

Once the BOP is closed monitor the riser for flow and be prepared to divert if necessary.

Note: a positive flow from the riser may be either gas in the riser or a leaking annular (refer to Section 8 Subsection 4 Item 9 & 9.3).

3 DRILLING - SUBSEA BOP'S

The procedure is:

- Stop rotation.
- Pick up the string to shut-in position.
- Stop the pumps and flow check - if well flows:
  - Close the annular preventer (upper preferred), and open the choke line valves on the BOP stack.
  - Notify the Toolpusher and OIM (who must notify the Operator Representative).
  - Record and monitor the shut-in drillpipe and casing pressures (note fluid density in choke/kill lines). Record the gain in pit volume and time of day.
  - Confirm the space-out and close the designated hang-off rams with reduced closing pressure. Reduce the annular pressure (see manufacturer's guidelines), slack off and land drillstring on the rams using the drillstring compensator (DSC).
  - Increase the manifold pressure back to 1500 psi. Engage ram locks.

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TRN-MDL-01844187
TREX-52545

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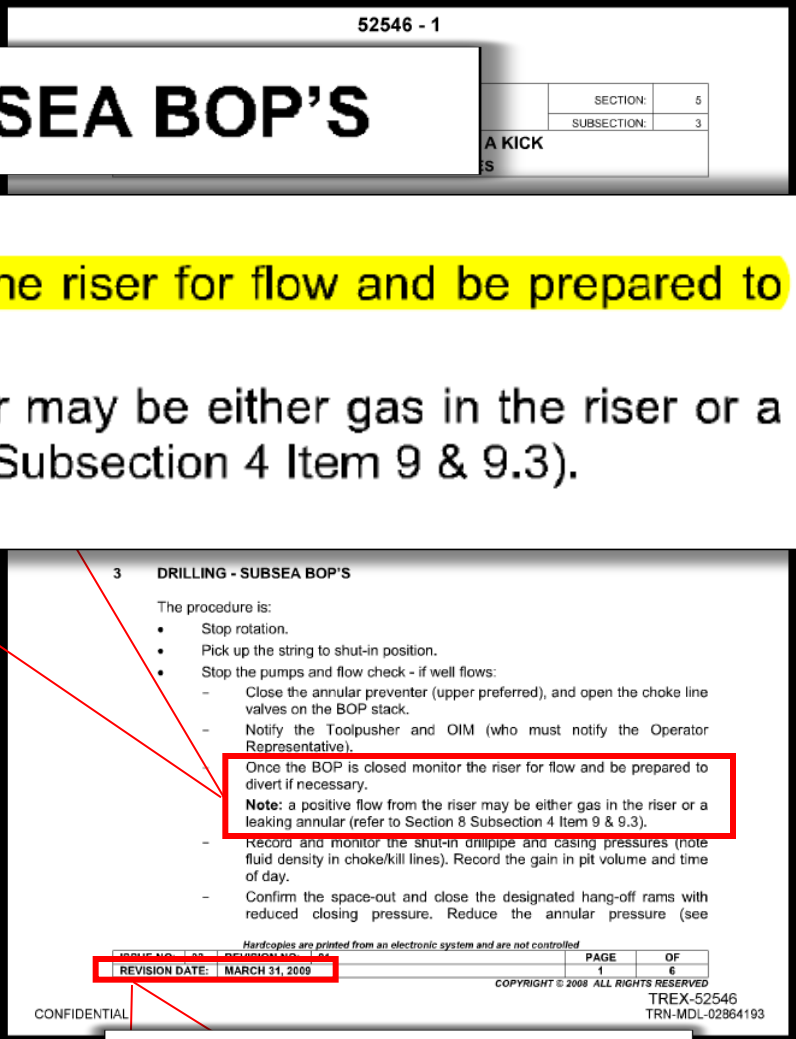
52546 - 1

SECTION: 5
SUBSECTION: 3

A KICK

3 DRILLING - SUBSEA BOP'S

The procedure is:

- Stop rotation.
- Pick up the string to shut-in position.
- Stop the pumps and flow check - if well flows:
  - Close the annular preventer (upper preferred), and open the choke line valves on the BOP stack.
  - Notify the Toolpusher and OIM (who must notify the Operator Representative).
  - Once the BOP is closed monitor the riser for flow and be prepared to divert if necessary.
    Note: a positive flow from the riser may be either gas in the riser or a leaking annular (refer to Section 8 Subsection 4 Item 9 & 9.3).
  - Record and monitor the shut-in drillpipe and casing pressures (note fluid density in choke/kill lines). Record the gain in pit volume and time of day.
  - Confirm the space-out and close the designated hang-off rams with reduced closing pressure. Reduce the annular pressure (see

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D6726.2 [TREX 52545.1] [TREX 52546.1]

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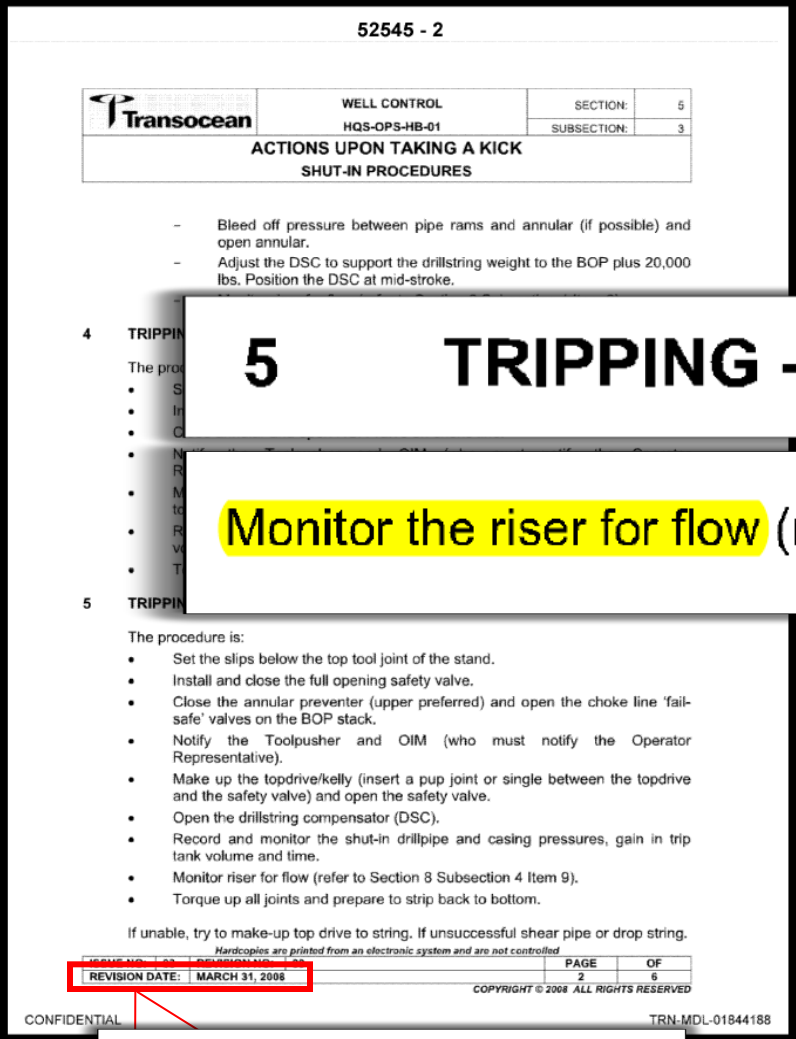

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Transocean | WELL CONTROL HQS-OPS-HB-01 | SECTION: 5 | SUBSECTION: 3

ACTIONS UPON TAKING A KICK
SHUT-IN PROCEDURES

- Bleed off pressure between pipe rams and annular (if possible) and open annular.
- Adjust the DSC to support the drillstring weight to the BOP plus 20,000 lbs. Position the DSC at mid-stroke.

5 TRIPPING - SUBSEA BOP'S

The procedure is:

- Set the slips below the top tool joint of the stand.
- Install and close the full opening safety valve.
- Close the annular preventer (upper preferred) and open the choke line 'fail-safe' valves on the BOP stack.
- Notify the Toolpusher and OIM (who must notify the Operator Representative).
- Make up the topdrive/kelly (insert a pup joint or single between the topdrive and the safety valve) and open the safety valve.
- Open the drillstring compensator (DSC).
- Record and monitor the shut-in drillpipe and casing pressures, gain in trip tank volume and time.
- Monitor riser for flow (refer to Section 8 Subsection 4 Item 9).
- Torque up all joints and prepare to strip back to bottom.

If unable, try to make-up top drive to string. If unsuccessful shear pipe or drop string.

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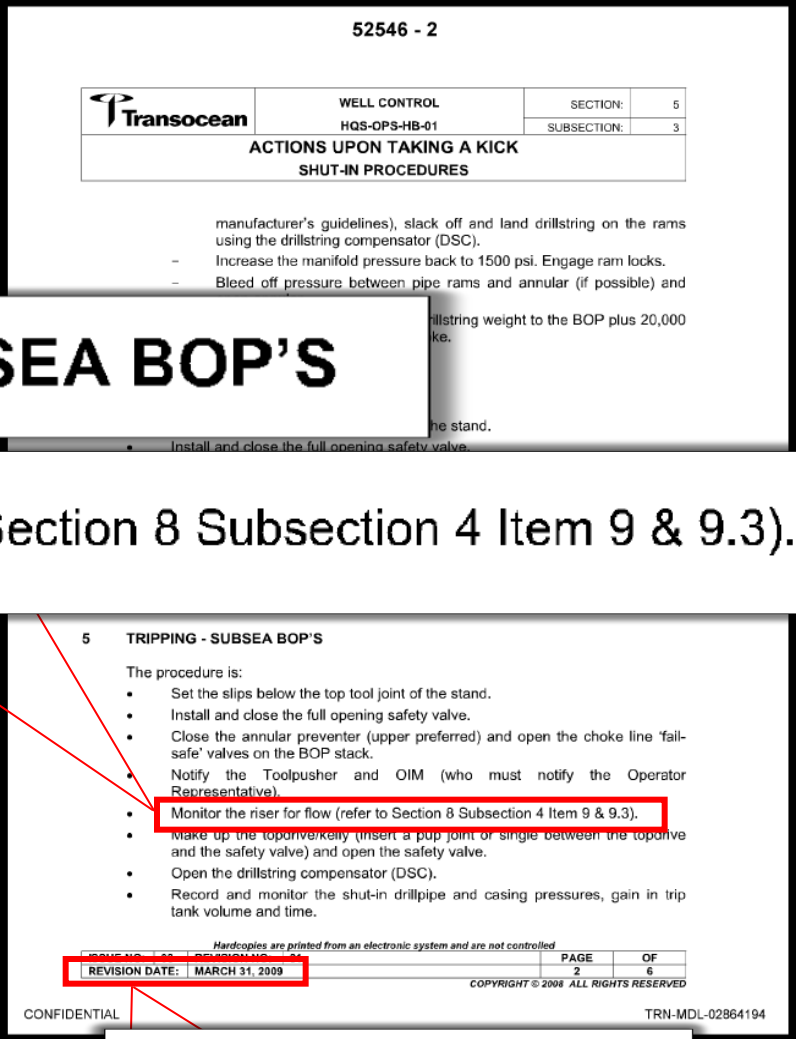

52546 - 2

Transocean | WELL CONTROL HQS-OPS-HB-01 | SECTION: 5 | SUBSECTION: 3

ACTIONS UPON TAKING A KICK
SHUT-IN PROCEDURES

manufacturer's guidelines), slack off and land drillstring on the rams using the drillstring compensator (DSC).

- Increase the manifold pressure back to 1500 psi. Engage ram locks.
- Bleed off pressure between pipe rams and annular (if possible) and

illstring weight to the BOP plus 20,000 ke.

he stand.

- Install and close the full opening safety valve.

5 TRIPPING - SUBSEA BOP'S

The procedure is:

- Set the slips below the top tool joint of the stand.
- Install and close the full opening safety valve.
- Close the annular preventer (upper preferred) and open the choke line 'fail-safe' valves on the BOP stack.
- Notify the Toolpusher and OIM (who must notify the Operator Representative).
- Monitor the riser for flow (refer to Section 8 Subsection 4 Item 9 & 9.3).
- Make up the topdrive/kelly (insert a pup joint or single between the topdrive and the safety valve) and open the safety valve.
- Open the drillstring compensator (DSC).
- Record and monitor the shut-in drillpipe and casing pressures, gain in trip tank volume and time.

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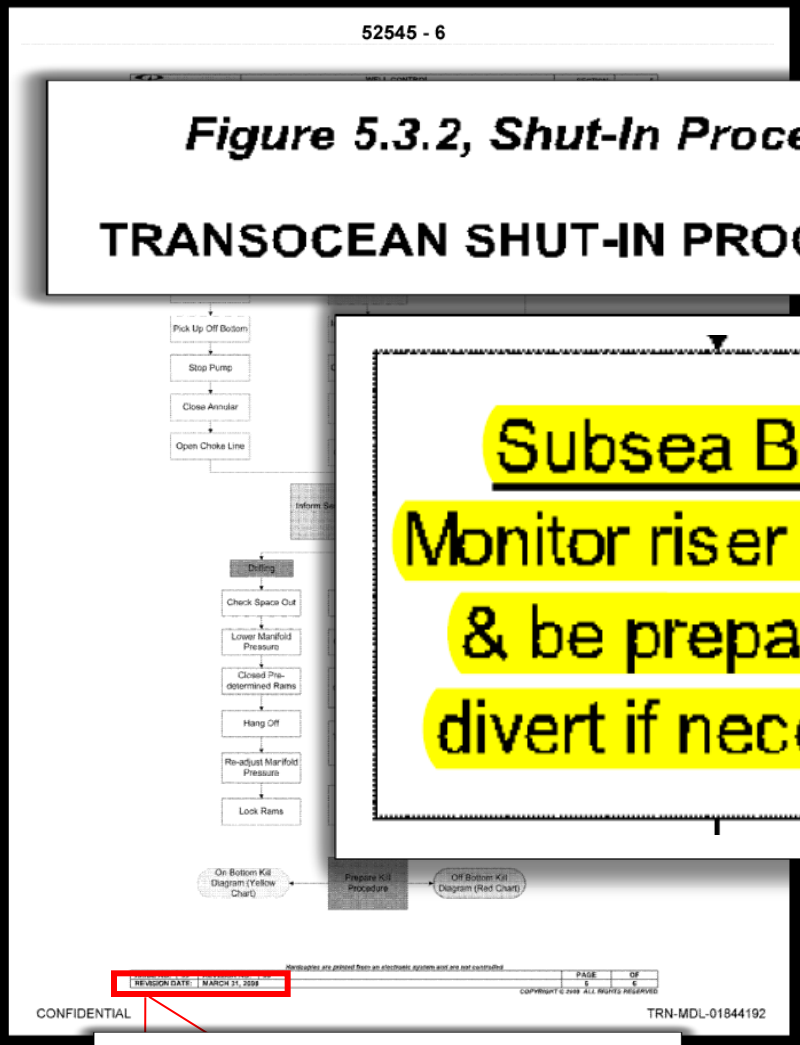
5 TRIPPING - SUBSEA BOP'S

Monitor the riser for flow (refer to Section 8 Subsection 4 Item 9 & 9.3).

D6726.3 [TREX 52545.2] [TREX 52546.2]

Three Additions To 2009 Well Control Manual



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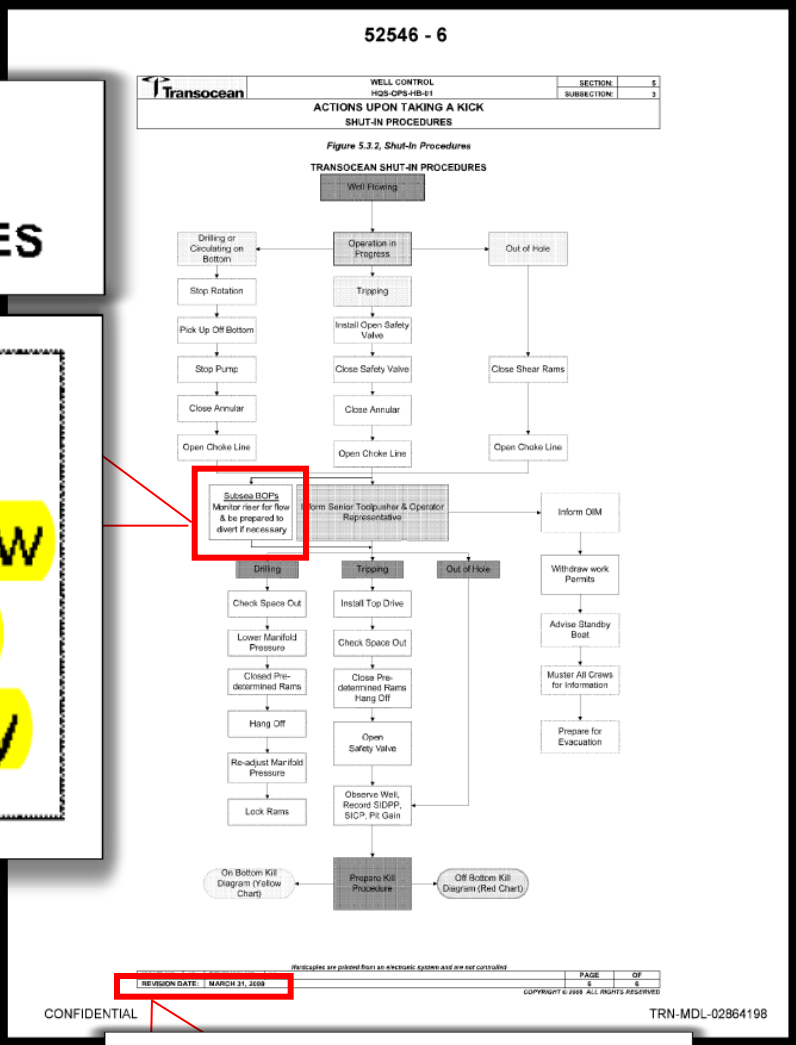

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D6726.4 [TREX 52545.6]

[TREX 52546.6]