

## Notice of Operation and Completion / Workover Report Reference Guide

A Notice of Operation must be submitted for all work being performed on a well. This reference guide provides a list of activities that will require the submission of a Completion / Workover Report.

1. Notice of Operation:
  - A Notice of Operation must be submitted as stated in the Drilling and Production Regulation (DPR) using the eSubmission portal.
  - As per sections 24 and 26 of the DPR, a Notice of Operation must be submitted at least:
    - 1 business day before beginning any work.
    - 7 business days before beginning any abandonment operations.
2. Completion / Workover Report:
  - The table below outlines Notice of Operation activities and the corresponding Completion / Workover reporting requirements.
  - As per section 36 (1) of the DPR a Completion / Workover Report must be submitted within 30 days of the end of each completion, workover or abandonment operation.

A <b>Notice of Operation</b> including an uploaded program <u>is required</u> to be submitted for initial completions, completions, workovers and abandonments. Examples are shown below.	A <b>Notice of Operation</b> <u>is required</u> to be submitted for the maintenance operations listed below.
A <b>Completion / Workover Report</b> <b><i>IS REQUIRED</i></b> to be submitted for the following operations:	A <b>Completion / Workover Report</b> <b><i>IS NOT REQUIRED</i></b> for the following operations:
<p><b><u>Completion Operations</u></b> All cased or open hole operations – using both service and drilling rigs</p> <ul style="list-style-type: none"> <li>• Perforating</li> <li>• Notching of tubing</li> <li>• Fracturing</li> <li>• Stimulation</li> <li>• Acidization (squeeze, fracturing operations)</li> <li>• Re-perforating an existing zone, tubing scale cleanout, hydrate removal</li> <li>• Milling, abrasion jetting (casing, tubing)</li> <li>• Bare foot completions</li> </ul> <p><b><u>Testing, Monitoring and Logging</u></b></p> <ul style="list-style-type: none"> <li>• DFIT (diagnostic fracture injection test), or Mini-Frac test               <ul style="list-style-type: none"> <li>○ Injectivity tests</li> </ul> </li> <li>• Logging for re-entry which includes removal of cement plugs</li> </ul> <p><b><u>Remedial</u></b></p> <ul style="list-style-type: none"> <li>• Surface casing vent flow / gas migration - repair</li> <li>• Cement squeeze, cement plugs</li> <li>• Casing               <ul style="list-style-type: none"> <li>○ patch or repair</li> <li>○ installation of liner</li> <li>○ removal or replacement</li> </ul> </li> </ul> <p><b><u>Suspension</u></b> Plugging or suspension of a zone</p> <ul style="list-style-type: none"> <li>• Installation of:               <ul style="list-style-type: none"> <li>○ bridge plugs (any type)</li> <li>○ cement retainers, cement plugs</li> <li>○ tubing plugs</li> <li>○ packers</li> <li>○ wireline retrievable plug</li> </ul> </li> <li>• Wellhead               <ul style="list-style-type: none"> <li>○ installation of dual master valve and seals for purpose of suspension</li> </ul> </li> <li>• Inhibiting wellbore for purpose of suspension</li> </ul> <p><b><u>Abandonment</u></b></p> <ul style="list-style-type: none"> <li>• All downhole work performed during abandonment operations</li> <li>• Surface cut and cap of a well</li> </ul> <p><b><u>Re-Entry</u></b></p> <ul style="list-style-type: none"> <li>• All completion re-entry work (Completion re-entry is the re-entry of any abandoned well where no additional drilling is to occur).</li> <li>• For any workover performed in preparation for a drilling re-entry that is finished prior to and is not to be reported as part of the drilling re-entry (ie: drilling out of or setting of cement plugs, abandonment of hole, recovery or setting of bridge plugs, logging, casing extensions, etc.)</li> </ul> <p><b><u>Bottom Hole Equipment</u></b> Installation, removal or exchange for:</p> <ul style="list-style-type: none"> <li>• Artificial lifts (includes all forms of bottom hole pumping methods)               <ul style="list-style-type: none"> <li>○ downhole pumps</li> <li>○ plunger lift</li> <li>○ gas lift</li> <li>○ electrical submersible pumps (ESPs)</li> <li>○ bumper springs</li> </ul> </li> <li>• Sub-surface safety valves - except for inspection and repair purposes</li> </ul> <p>Change of:</p> <ul style="list-style-type: none"> <li>• Flapper valve for injection wells</li> <li>• Sliding sleeve - shifting for commingling of producing zones</li> </ul> <p><b><u>Tubing</u></b></p> <ul style="list-style-type: none"> <li>• Depth change</li> <li>• Size change</li> <li>• Installation or removal - e.g., velocity strings, endless tubing</li> </ul>	<p><b><u>Testing, Monitoring and Logging</u></b></p> <ul style="list-style-type: none"> <li>• Surface casing vent flow (SCVF) rate and buildup pressure</li> <li>• Packer isolation testing</li> <li>• Pressure testing – tubing or casing</li> <li>• Microseismic observation</li> <li>• Production logging</li> <li>• Swabbing</li> <li>• Gauge ring and junk basket runs</li> </ul> <p><b><u>Suspension and Plugging</u></b></p> <ul style="list-style-type: none"> <li>• Inspection of suspension work</li> </ul> <p><b><u>Bottom Hole Equipment</u></b></p> <ul style="list-style-type: none"> <li>• Artificial lift systems – repair               <ul style="list-style-type: none"> <li>○ plunger lift</li> <li>○ gas lift</li> <li>○ pumpjack</li> <li>○ including all forms of pumping methods</li> </ul> </li> <li>• Slickline work – running or removing               <ul style="list-style-type: none"> <li>○ running recorders</li> <li>○ pressure gradient tests</li> </ul> </li> <li>• Downhole choke – installation or removal</li> <li>• Rod replacement or repair, polish rod</li> <li>• Packers - removal, repair and re-installation</li> </ul> <p><b><u>Wellbore Integrity</u></b> Cleaning</p> <ul style="list-style-type: none"> <li>• Acidization (wash or pickling operation)</li> <li>• Scale</li> <li>• Coil tubing cleanout</li> <li>• Nitrogen / CO<sub>2</sub></li> <li>• Blow downs</li> <li>• Well clean-up</li> <li>• Chemical injection for perforation wash</li> <li>• Methanol injection</li> <li>• Wax removal</li> <li>• Sulphur removal</li> <li>• Corrosion inhibitor</li> <li>• Swabbing of any type of tubing</li> <li>• Circulating for clean out of wellbore</li> </ul> <p><b><u>Tubing</u></b></p> <ul style="list-style-type: none"> <li>• Fishing, chemical cutters</li> <li>• Hole in tubing – repair</li> <li>• Replacement or changing (same size)</li> <li>• Back pressure valves, installation or removal</li> </ul> <p><b><u>Wellhead</u></b></p> <ul style="list-style-type: none"> <li>• Master valves and seals – installation, changes, testing or repair</li> <li>• Primary and secondary seal testing</li> <li>• Surface casing vent assembly installation or repair</li> <li>• Burst plate or vent plate installation or repair</li> <li>• Well head valves maintenance (greasing)</li> </ul>
<p>For more information on operations not listed in this table, please contact:</p> <p style="text-align: center;">Drilling and Production, Engineering Division,  <a href="mailto:Drilling.Production@bc-er.ca">Drilling.Production@bc-er.ca</a>            or            Trudy Clark, (250)794-5258.</p>	