



# Equipment Operating Procedures

## 7" Stubby PDC Drillable

### Make-Up Procedures

**Important!!** All crew members should be aware that at any time in this rig in, the tool could potentially open due to impact or rotation. The assembly is held in place by a brass shipping screw, designed to shear down hole if necessary.

**Potential Hazards:** **Crushing** - Crew is advised to keep out from underneath the tool when elevated  
**Cutting/ Severing** - The tool body contains holes. The crew is advised to keep fingers away from open holes as the possibility of cutting or severing if the tool opens.  
**Cutting**- The Bit is tipped with tungsten carbide which is sharp. The crew is advised not to handle the tool by the bit.

- 1) Close The Blind Rams.
- 2) Lift the tool into position above hole.
- 3) Set Slips On the steel crossover, below the casing collar. Allow enough room to attach a dog collar, as the top collar has not been made up.
- 4) Remove the collar, and apply thread lock to the tool pin and the casing pin. Replace collar, and make-up both sides to the optimum torque specifications listed above.
- 5) Set float collar directly on top of the tool. If running a second float collar, place it one joint above.
- 6) Once attached to the casing string, remove slips, and lift tool above the table. Place the hole cover on and set the tool down on it lightly.
- 7) Remove the Brass Set Screw located on the pin sub, below the mandrel, if possible. The pin can be sheared downhole if needed.
- 8) Lift the tool, exercising caution as the tool will open. Remove the hole cover and run in. Follow SOP while opening blind rams.

### Operating Procedures

- 1) Once the Fill Drill is through the table, continue running in the casing string as normal.
- 2) Once you tag an obstruction, unless the shear pin has already been removed, increase the weight on bit to approximately 22,000 LBS. If operating a table drive rig, attach the circulating head. On a top drive rig, or with a Volant system, simply tie into the string as normal to circulate. Once complete, engage the mud pumps and increase flow to 110 GPM. Flow may be increased if required, depending on hole conditions.
- 3) Mark the depth position on the casing string where it meets the table, and then slowly lift the casing to take the stretch out of the string, and then pick-up approximately an additional 3 feet. Run the tool in quickly, stopping when the weight indicator shows between 22,000 - 27,000 LBS on the tool.
- 4) Repeat step 4 as necessary until the obstruction has been cleared and you can continue to run the casing string in. If another tight spot or obstruction is tagged further in hole, the tool can be employed to clear it using procedures 2-4.
- 5) Once the tool and string is at the desired depth, cementing operations can be run as normal. Ensure the tool is encapsulated with cement. **DO NOT OVER DISPLACE.**
- 6) For best Drill Out, once the cementing is complete, set the tool in compression with approximately 34,000 LBS weight on bit to make sure the tool is in the closed position. If necessary, the tool can be cemented in the open position, but good drillout practices are required to make sure the tool drills out completely.

### Drillout Procedures

**Important!!** The Stubby tool is drillable by PDC bit ONLY. Roller cone bits should NOT be used under ANY circumstance. If drilling out with a mud motor, high-speed/low-torque motors are NOT recommended.

**Total Drill out time - Approximately 1 Hour**

- 1) Run in with PDC equipped BHA and drillout floats and cement until at stubby tool.
- 2) If using a mud motor, set it to approximately 90-100 RPM. Engage table or top drive to 30 RPM to induce bit whirl.
- 3) If equipped, set auto-driller to 1,200 LBS, and proceed to drill out the tool in 6 inch increments. Otherwise, keep no more than 1,200 LBS weight on bit
- 4) After each 6 inch increment, pull out of the tool slowly to remove all cut material. Hang the drill sting above the tool for a minute, and then run back in slowly until the weight indicator climbs to 1,200 LBS.
- 5) Repeat the drill out technique, remembering to wash back each 6 inch increment.

**Its not a race!** Proper drillout procedure is important to remove all of the material to prevent future issues!

In any circumstance, if unsure about the procedures or function of the tool,

Call our Toll Free Customer Support at

**1-877-513-7455**