

2018 – 2019 Drillbotics® FAQ Update
Revision 1
26 November 2018

A new version of the 2018-2019 Guidelines dated 26 Nov 2018 was posted. Minor changes were included. Additional changes that are considered more significant follow:

- 3.1 The problem statement was changed from drilling a horizontal well to drilling a deviated well.
- 3.2 Eliminated redundancies and added references to the sections with specific instructions.
- 3.4.3 Depth measurements shall use the rig floor as the depth datum.
- 3.5 Reorganized
- 3.6 Renumbered this section, and ...
 - 3.6.2 Indicated where the well center will be when drilling commences.
 - 3.6.3 Teams drill a pilot hole prior to the test, not to exceed 1” deep, as per previous competitions. [Comment: This hole will be extended when the test commences – see Section 3.16.]
- 3.7 [Comment: Teams have an option of which bit they will use at the Phase II test. They may use the DSATS bit (1.25 inch diameter), or a bit they provide, not to exceed 1.50 inch diameter]
 - 3.7.3 An error when posting information about the bit diameter may have led to confusion and could affect teams who designed equipment based on the erroneous diameter. Therefore, teams may substitute a bit of their own design or a purchased bit not to exceed 1.5 inches in diameter and not more than 2 inches long. While this may allow some additional space for building the downhole equipment, it could also affect the build rate of the directional wellbore. It may also induce additional torque that could affect drillstring forces. Teams must evaluate the benefits and drawbacks of each and are encouraged to provide this analysis in their Phase I design report that describes what

different forces are expected and their impact on drilling operations.

3.8 [Comment: Note that the pipe/tubing provided by DSATS will be aluminum, as per previous competitions. Although there were some discussions of replacing this with stainless steel due to excessive bending if the well were horizontal, with the directional well requirements, aluminum tubing is adequate.]

3.16 Reorganized

7.0 Revised timeline to reflect the two test sites instead of tests at each school.