

DRILL PIPE FATIGUE CHART

Drill string fatigue will only occur while rotating and only while rotating over a dogleg. The more tension within the pipe the more likely it is to get fatigued. There is a critical value of dogleg where fatigue failure becomes an issue.

The Drill Pipe Fatigue Chart, is a snapshot chart which displays the actual dogleg and the critical dogleg at every point in the string for a given depth. If the actual dogleg is greater than the critical dogleg then fatigue failure is a potential issue.

The critical dogleg curve is generated based on the free rotating weight of the drilling assembly. One point to note is that back reaming will increase the tension and therefore reduce the critical rotating dogleg; however, this has not been included in the chart because back reaming operations do not generally last too long.

Once a T&D calculation has been run, you can check the Drill Pipe Fatigue Chart:

- TAD Results - Snapshot Charts - Drill Pipe Fatigue (for the plot)
- TAD Results - Snapshot Data - Drill Pipe Fatigue (for the Data Table)

