KellyDown Tips

Periodic tips to help you use KellyDown more effectively
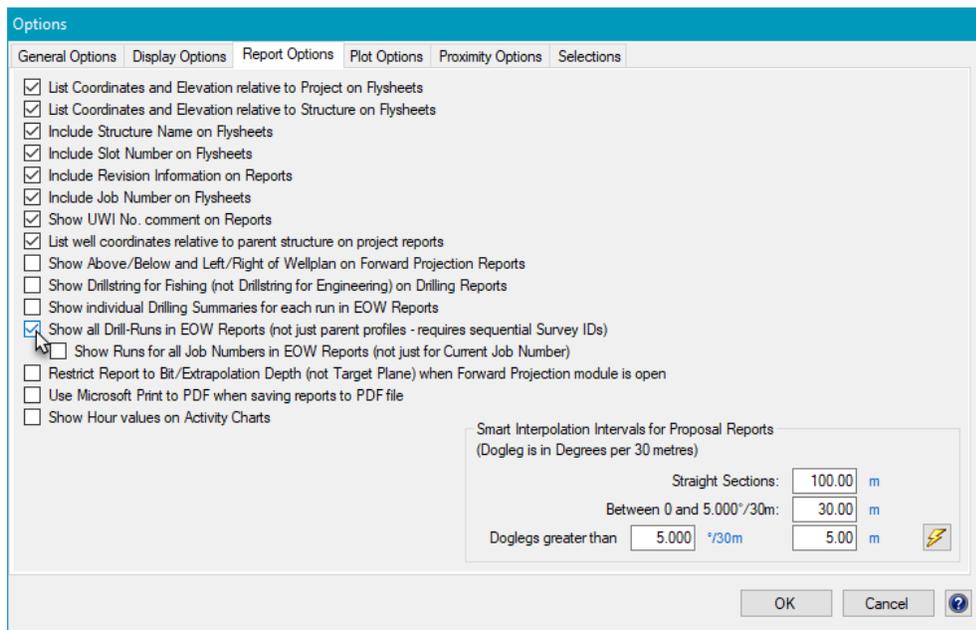
How to tie a drilling run onto updated gyro surveys

Problem: After drilling one or more runs and recording the drilling information in slidesheets and drill-runs in KellyDown, the MWD survey data has been updated with a gyro multi-shot survey. How do I properly handle this scenario in KellyDown?

Solution: It's very easy to import a gyro survey into KellyDown and then tie the next drill-run onto the previous drill-run and the survey data onto the gyro data.

Let's assume that we have drilled **Run #1** on well **AA16** down to a depth of *315.09m* and the last MWD survey was recorded at a depth of *299.09m* (this example is taken from the example project that is installed with KellyDown but it doesn't matter if you no longer have the example project in your KellyDown database, you will still be able to follow along or you can import the example project from the .kdex file located in the KellyDown Sample Data folder located under the KellyDown Documents folder).

First we need to tell KellyDown to look at all the slidesheets under the current well, not just the parents of the current slidesheet. Open **Tools**, **Options**, click on the **Report Options** tab and check the **Show all Drill-Runs in EOW Reports** checkbox.

If the other runs that you wish to include in End of Well reports belong to different job numbers, you also need to check the box below it that reads **Show Runs for all Job Numbers in EOW Reports**.

The gyro multi-shot is run from surface down to a depth of 310m and we want the MWD survey data for Run #2 to be tied on to the bottom of the gyro multi-shot survey.

Create a new survey under well AA16 and name it *Surface Gyro*. Associate it with the wellplan named *Design #1* and select the **Survey Tool** called *Gyro NS*. Click OK to save the **New Survey** properties.

Open the **Data** for the *Surface Gyro* and enter or import some gyro data down to 310.00m.

Now that we have created the scenario we want to work with, let's tie the drilling data to the *MWD Run #1* data and the survey data to the *Surface Gyro*.
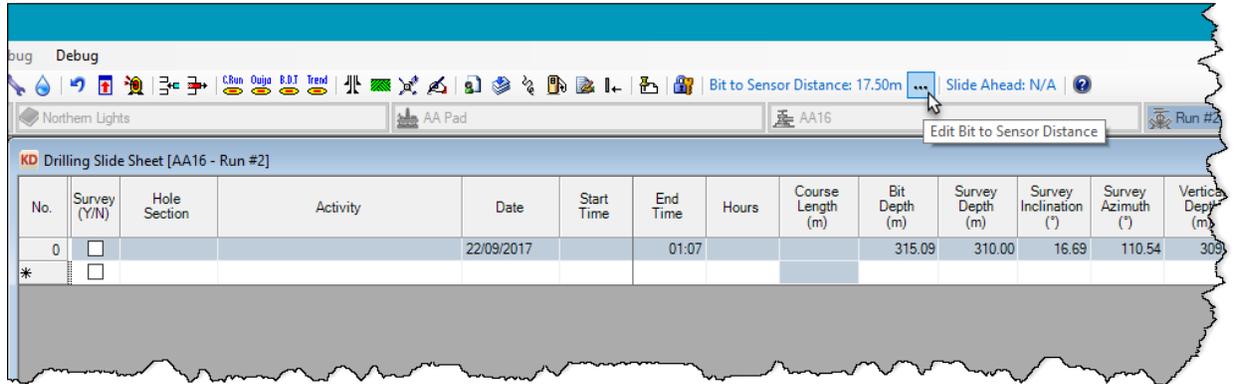
Open the slidesheet for *Run #1* and select the **Tools**, **Create New Slidesheet** menu.

KellyDown will prompt you for confirmation before creating a new slidesheet tied on to *Run #1*, close the current slidesheet and open the new one.

The survey data will have been tied on to the bottom of *Run #1*, but we want to tie the survey data on to the new *Surface Gyro*. Open the tie-on coordinates and you will see that survey depth is tied on to the last survey on *Run #1* at a **Measured Depth** of *299.09m*. Make a note of the **Start Date/Time** and **Bit Depth** for the new slidesheet.

Click on the **Cancel** button, close the slidesheet and then edit the **Properties** for *Run #2*.

Change the **Parent Profile** to *Surface Gyro*, change the **Survey Tool** to *MWD* and save the **Properties**.

Open the slidesheet data again and edit the **Tie-on coordinates**. Change the **Survey Measured Depth** to that of the bottom *Gyro-NS* survey, i.e. *310.00m* and click **OK**.

If the **Bit to Sensor Distance** has changed since the last run, change it by clicking on the **Edit Bit to Sensor Distance** button.

Continue to enter the slide/drilling records as usual. The drilling records are tied on at the **Bit Depth** and last drilling time whilst the survey data is tied on to the bottom of the *Surface Gyro* as can be seen in the **End of Well Report**.