

PATHTRACKER

BUILD & HOLD WELLS

Well Planning Information & Worksheet

Creating a Two-Dimensional Well Plan has never been easier. Follow the steps below to create a build and hold well profile using the PathPlanner Well Planning Program from Onscreen Software Solutions

Step 1: Describe The Target

Target True Vertical Depth: _____

Enter the coordinates for the target in **ONE** of the following forms:

RECTANGULAR COORDINATES

North(+) / South (-): _____

East(+) / West(-): _____

Target Radius: _____

POLAR COORDINATES

Horizontal Displacement: _____

Azimuth Bearing: _____

Target Radius: _____

Step 2: Build Rate (Dogleg Severity)

Enter your requested (or suggested) Build Rate in °/30 m or °/100 ft(if you are uncertain, try 2.5).

Build Rate: _____

Step 3: Anticipated Terminal Angle

Suggested Terminal Angle: _____

Step 4: Start the Program

From PathTracker's "Tools" Menu, select "*PathPlanner Well Planning Program*". Enter data for the well description and click "OK".

Step 5: Enter Target Data

Double Click on the Target Data at the bottom of the screen. Enter the data above into the appropriate boxes. (Note: You only have to enter polar OR rectangular coordinates, not both.)

Step 6: Find the Kick Off Point (KOP)

If you know the KOP that you want to use then enter it and go to Step 7.

Otherwise: Select "*Find Kick Off Point*" from the "*Calculators*" Menu. Adjust the Terminal Angle and the DogLeg until you achieve an acceptable KOP.

You can click on "*Apply*" at this time to finish your plan (and then go to Step 9), or click "*Cancel*" to hand enter the KOP.

Kick Off Point (KOP): _____

Step 7: Edit the Tie-In (#0) Survey

Double Click on the First Survey (#0), and enter the KOP depth into the Measured Depth and True Vertical Depth boxes. Click "OK".

Step 8: Finish The Plan to the Target

From the "Add Segment" menu, select "Finish to Target". The segments required to complete your plan are added.

Step 9: Complete the Plan to TD

From the "Add Segment" menu, select other segments to plan the lateral section of the well. Enter the depth at which you wish to terminate the well.

Total Depth(TD): _____

Step 10: Add Interpolation Points for Formation Tops, Casing Points, etc.

If you want your plan to clearly identify formation tops or other points in the well, we need to add interpolation points to mark them. From the "Edit" menu, select "Add Interpolation Point" and select either "Measured Depth " or "True Vertical Depth". Enter the depth and the point will be added. Repeat this step as often as necessary.

Point 1: _____ MD/TVD

Point 4: _____ MD/TVD

Point 7: _____ MD/TVD

Point 2: _____ MD/TVD

Point 5: _____ MD/TVD

Point 8: _____ MD/TVD

Point 3: _____ MD/TVD

Point 6: _____ MD/TVD

Point 9: _____ MD/TVD

Step 11: Create a Survey File

Now we need to interpolate the points in between our segment starting and end points so that we can obtain an accurate picture of our plan. From the "File" menu, select "Create Survey File". The default interval is 30 meters or 100 feet. You can change this to any interval you want. A zero (0) value will create a file with the points in the segment plan only.

Step 12: Add Text Annotations to the Planned Survey

If you created interpolation points in Step 10, you may want to add lines of text to your printouts to identify these points. From the "Edit" menu, select "Edit Text Annotations", or just click on the "Text" button. You can now enter the depths from Step 10, and type in any associated text to display at that point. Note: Text only displays on print outs when "Show Annotations" on the Print Window is checked.

THAT'S IT! YOU'VE CREATED A WELL PLAN. You can now print your plan or view it with any of PathTracker's graph features.

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