



# Spotlight – Query Meshes

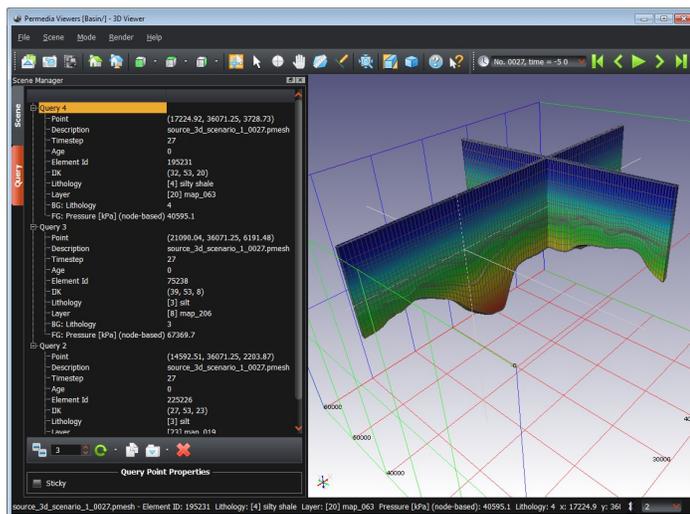
## Query mesh properties through time

Using Query Mode in 2D and 3D Viewer, you can get detailed information about individual elements and columns of elements in any mesh format supported by Permedia, including Temis, PetroMod, Eclipse, and Gocad. You can also query and plot the element properties through time.

### Adding points

To query individual elements on a mesh:

1. Open a Mesh sequence in 2D or 3D Viewer.  
(To do this, in the main window under Meshes, right-click the sequence you want to evaluate and choose Open Sequence in 2D or 3D Viewer.)
2. From the Mode menu, choose Query Mode.
3. Click the Query tab in the Scene Manager.
4. Click a mesh element. The element details, including coordinates, facies and layer are listed in the Query tab, as well as on the status bar.  
  
To increase the number of query points, enter a number in the Number of Query Points text box and click more points.



Element selected on a mesh

## Extract and plot data

To extract element data for analysis:

1. In 2D Viewer, open the Tools menu; in 3D Viewer, on the Scene tab in the Scene Manager, select the mesh in the list and on the Properties sheet click Tools.
2. Choose Element Properties through Time.  
  
You are prompted to choose the timesteps and properties you want to analyze. Enable or disable time steps by clicking in the Enable column.
3. Click OK. A Cross Plot of the first variable through time is displayed.



Plot of element properties through time

To display additional plots, select a variable from the Variable drop-down menu.

For more plotting options, click the Data Explorer toolbar button to analyze the extracted data in Data Explorer.

## Other things to try

The Tools options include additional features for querying meshes:

- Use the Column through Time option to extract a burial history from a 1D vertical transect through the mesh.
- Use the 1D Extract to Well Viewer option to display a 1D vertical transect of the mesh in Well Viewer.
- Use the Selected Properties option to plot all mesh properties including pressures, temperatures and expelled masses through time using Data Explorer.