Getting started with the Report Editor

In this document we will take a hands-on approach to using the report editor with a few select templates.

The report editor is used to create report pages for a specific workspace based on workspace independent templates created in the template editor. A template is made up of a list of elements, such as frames and maps. These elements will be identical for all reports made with the template, but while some elements such as frames are static and will appear exactly identical on all reports, others such as maps can be adjusted for the specific report to show specific layers.

Getting started

We will start by making a few report pages with mean resistivity maps. First you need to open a workspace that contain several mean resistivity images. Then click New Report on the Visualization ribbon. Start by opening the Map_Landscape_A3_Simple template found in the default installation folder here:

C:\Program Files\AGS\Aarhus Workbench\ReportTools\Templates\Map_Landscape_A3_Simple.wbt

Next you will be asked to fill out a name for the new report. The default name should be fine. Workbench then loads the report template and opens the report editor. It also creates a subfolder for the report inside the Reports subfolder of your workspace. For now, it just contains a copy of the used template, but when we begin to update the report with specifics from the Workspace and later save the report, it will be saved in here.
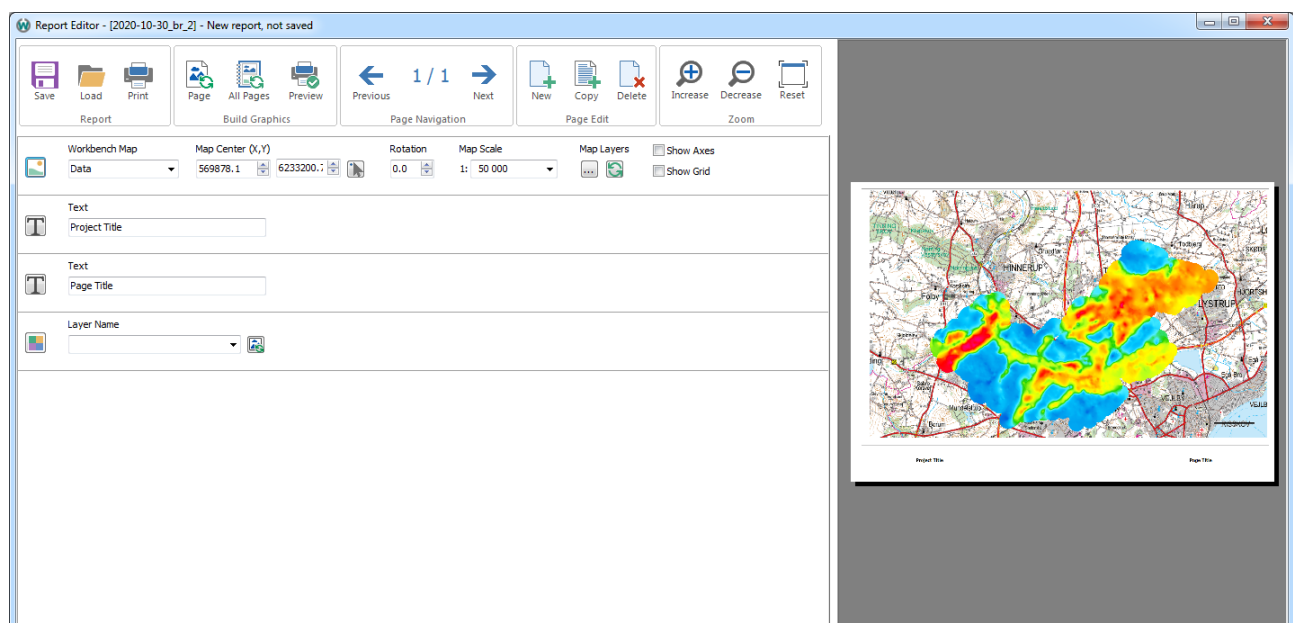

Figure 1. The Map_Landscape_A3_Simple report template right after it is first opened.

The report editor consists of a ribbon with a few buttons, a list of elements and a report preview window. We will not go through everything in detail, but everything is described on the wiki help page for the report editor. To access it, simply press F1 while you have the report editor window open.

Adapting the report page to the workspace

This particular template is quite simple; it only appears to contain 4 elements. A map, two text boxes and color scale. As we can see from the report preview window however, the template also include a few frames and a map scale, but the options for these elements have already been fully described in the template, so they do not appear here. We will go through each of the elements in turn.

Selecting the element on the list will show the extent of the element in red in the report preview window.

The map element automatically selects the active map node from the workspace, if another is to be used, it can be selected with the dropdown. The extent of the map is initially filled with a copy of the workspace GIS map, showing the same layers and centered using the current workspace GIS map center. It is however important to understand that this map is different from a simple image grab of the workspace GIS map. The map is based on the workspace GIS map, but it is not linked to it after its creation and so both can be adjusted without affecting the other.

The first thing we want to adjust is the map center. Use the Pointer to click on the workspace GIS map and center the map. It is also possible to edit or adjust the coordinates directly. Next, we will need to edit the map scale to get a good zoom to the relevant part of the map. We also want to add axes and perhaps grids, so those checkboxes should be checked. With each change the report preview window is updated. The preview is limited by the resolution of your screen and it may be necessary to increase the zoom to get a better preview.

Finally, we need to make sure that we actually show the layers we want on the map. We are looking to show the mean resistivity in depth starting with topmost interval. Click the … button under Map Layer to open the Map Layer Control. It is similar to the GIS Layer Control in Workbench. Set the right layers active and if necessary, drag the layers up or down to have them shown in the right order. When done, close the Map Layer Control on the x. This will update the report preview window with new layers.
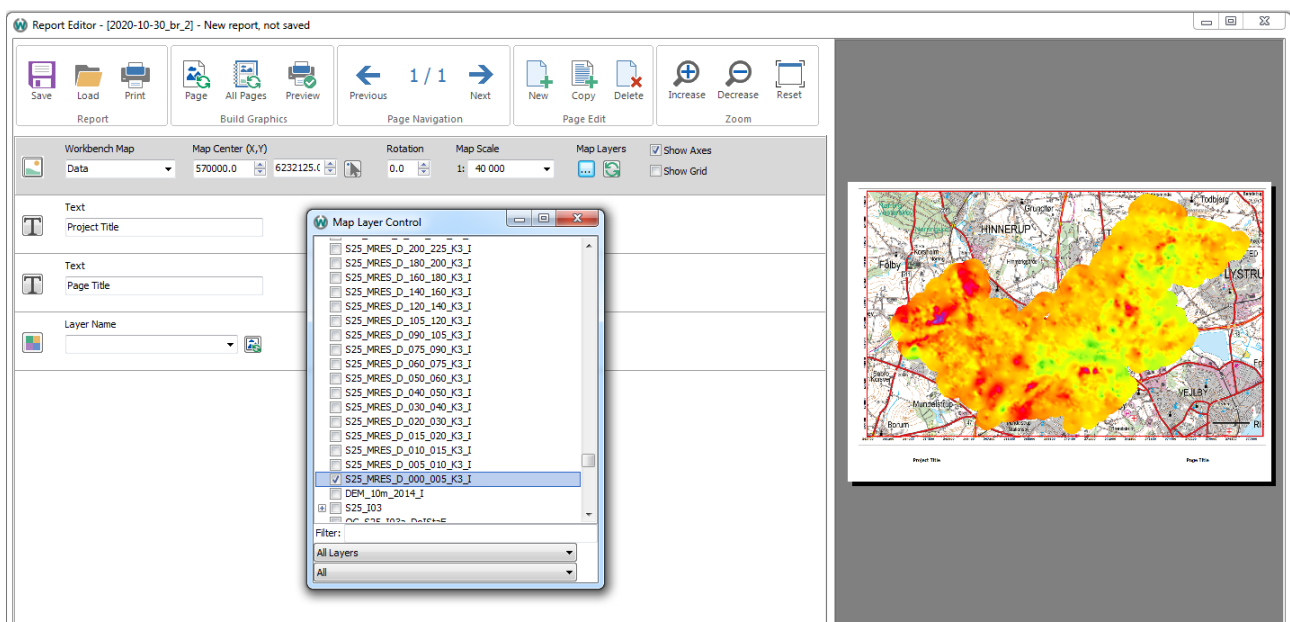

Figure 2. Adjusting the Map Layer Control independent of the Workbench GIS Layer Control.

With the map setup done, we can move on to the two text box elements. Only the actual text can be set from here, the font and everything else has been set in the template. The first text box is supposed to show the project title. The second text box is supposed to show the page title that describes this particular page. For this mean resistivity map that might be something along the lines of Mean Resistivity, Depth 0-5 m (Ohmm).

The last thing we need to adjust is the color scale element. Use the dropdown to select the layer that should provide the color scale and click on the Redraw button next to the dropdown to update the report preview windows with the color scale.
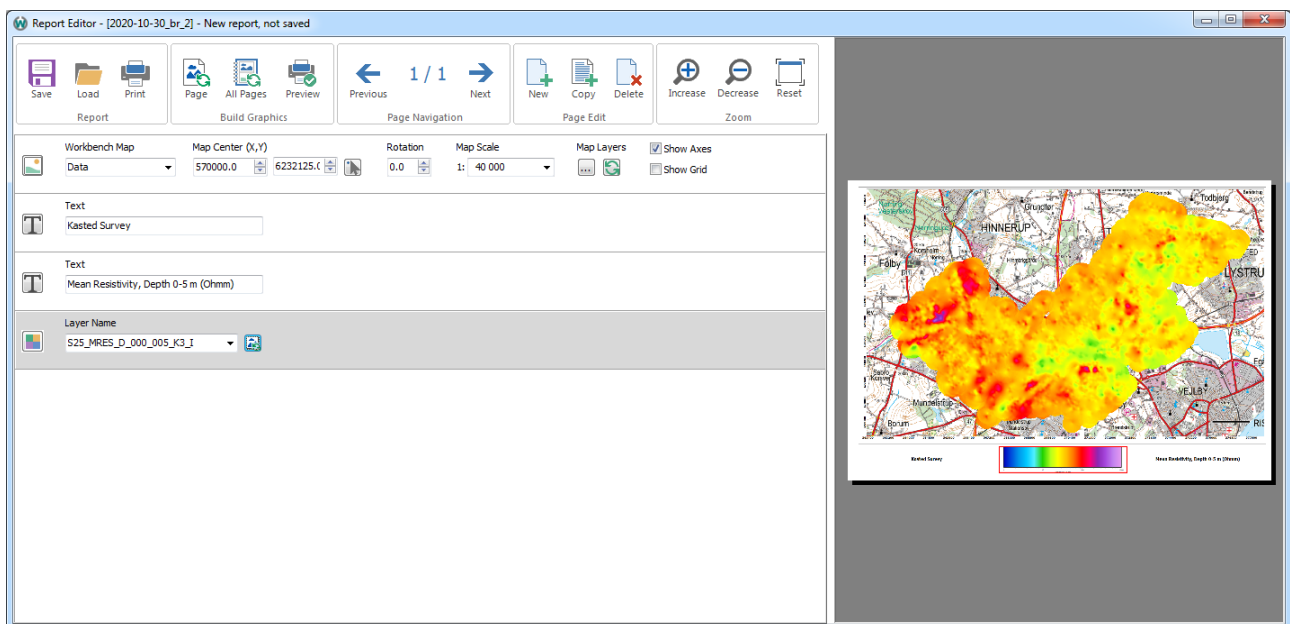

Figure 3. The fully updated report color scale.

Before we do anything else with this report page, we should save it. When you press Save you will be asked to fill out a file name. Again, the default name is fine. This time it creates a .wbr file in the subfolder we created earlier. It may also create additional subfolders in here with images used by the report pages.

Printing and adding more pages

Next it might be a good idea to print our report page to confirm that everything looks correct. Pressing Print opens a print preview. This again is a preview limited by the resolution of your screen, to see the final page before we use it to create more pages, it should be printed either to a printer or to a file. We have not included a PDF writer with the program, but you can use any existing PDF writer to print out your report pages.
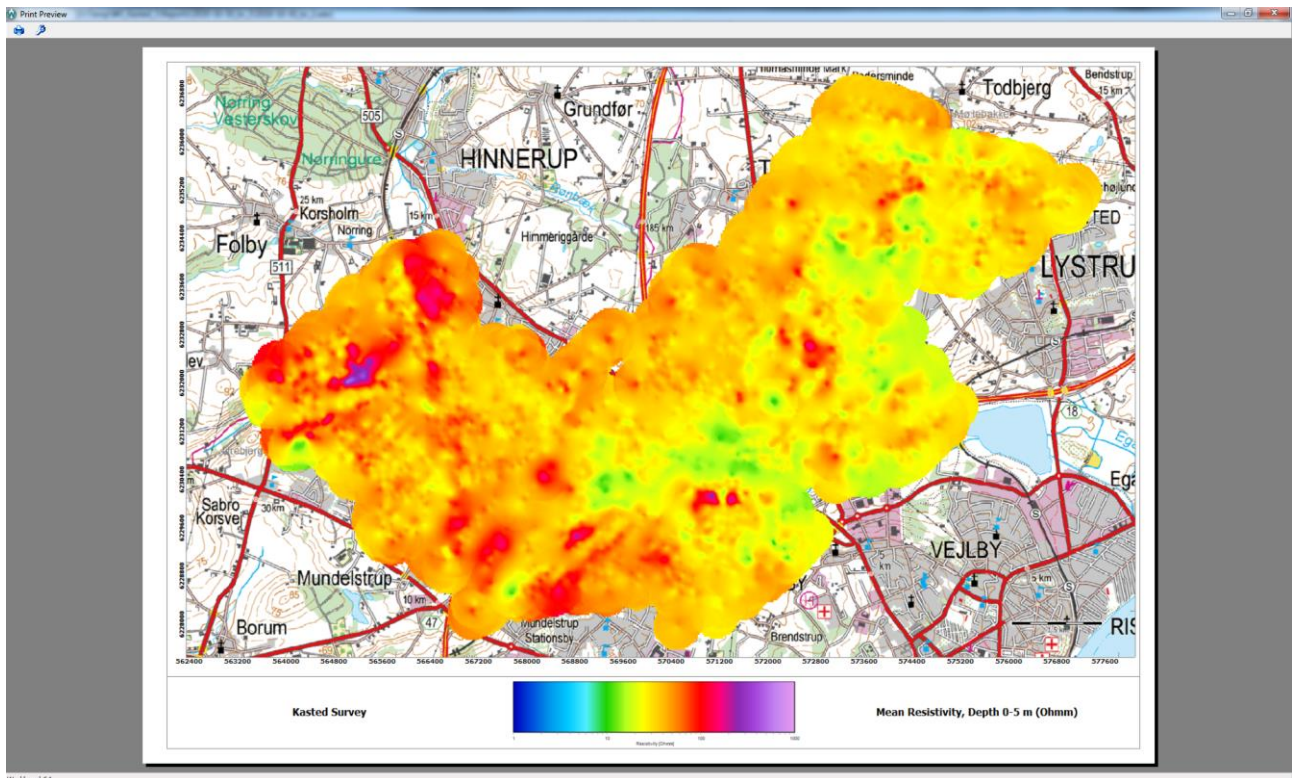
Figure 4. The print preview.

With this first report page done, it is time to add a few more pages with the mean resistivity at different depths. These pages will be made using the same template, but there is no need to start over. If the report editor has been closed, use Edit Report on the Visualization ribbon to reopen it. Use Copy to create a copy of the current report page. Then open the Map Layer Control and adjust the active layers to show the next mean resistivity depth layer. Finally update the page title to reflect the new depth interval. Continue like this as needed.
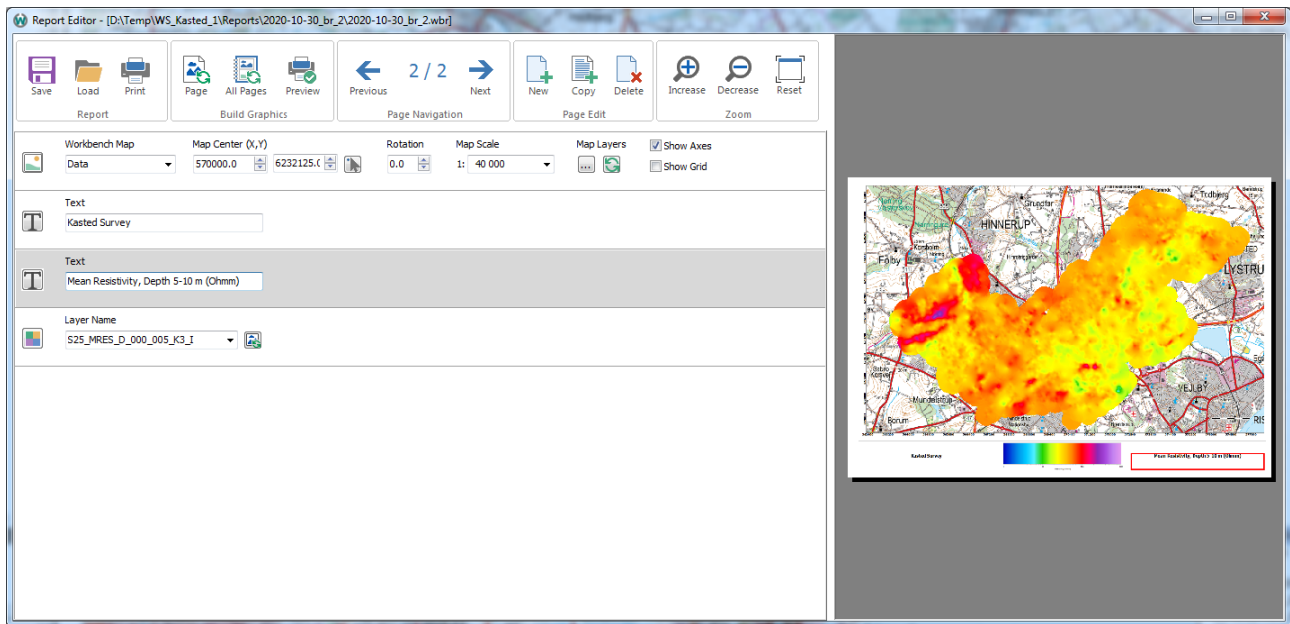
Figure 5. Adding more pages with the same setup.

Other report pages can often also be made with the same template. It would be relevant to include a report page with the data residual of each model. This is just another type of layer, so we can reuse the template as before. Use Copy to create a copy of the current report page. Then open the Map Layer Control and adjust the active layers to show the model quality point theme with the data residual. Update the page title to reflect the new layer and make sure that the color scale element has been set to show the color scale for the correct layer.
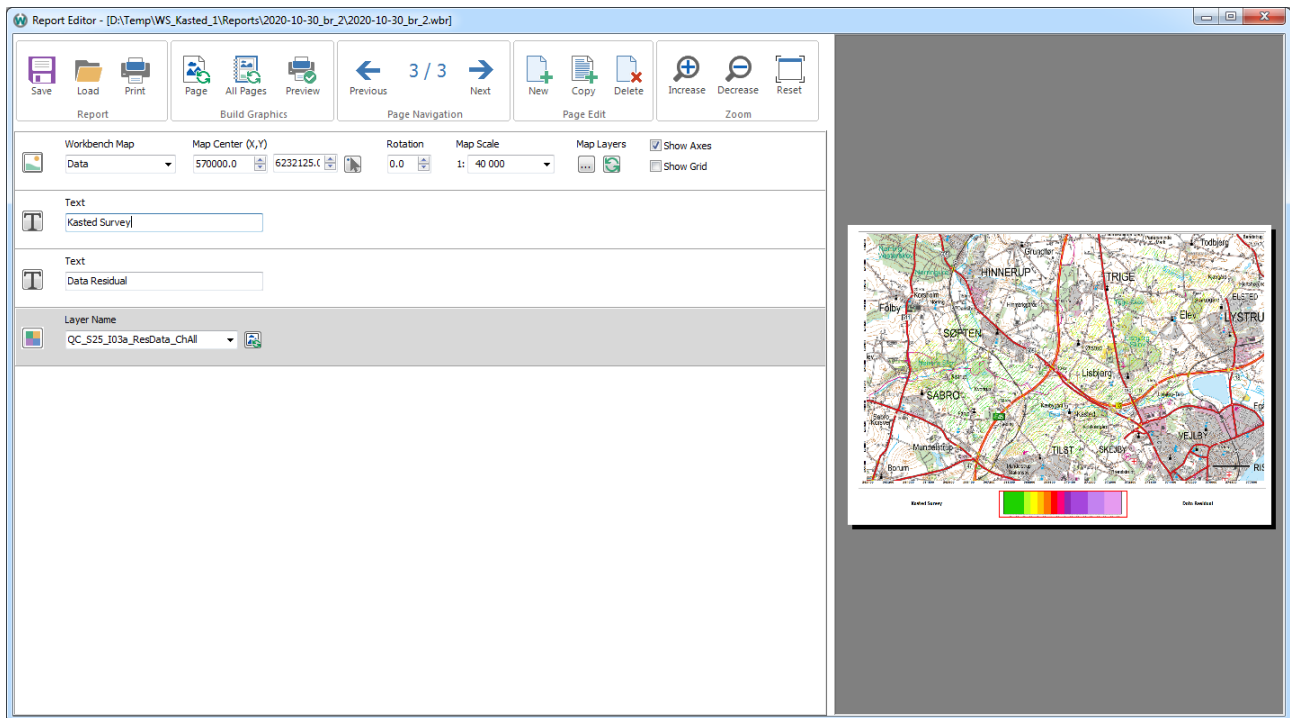
Figure 6. Adding pages with model quality layers.

If you end up having to go back to the workspace to add new layers, make sure you use the Reload button right next to the … button under Map Layers to update the Map Layer Control with any new layers.

Another report template type

Other report pages may require a different template. Try to make a new report page using the Sections_Landscape_A3_Simple template found in the default installation folder here:

C:\Program Files\AGS\Aarhus Workbench\ReportTools\Templates\Sections_Landscape_A3_Simple.wbt

This is very similar to what we did before. Although the template seems to include a map, this template doesn't show the map, the element is only there to let the report editor know which workspace map node it should use to populate the list of profiles we can select from.
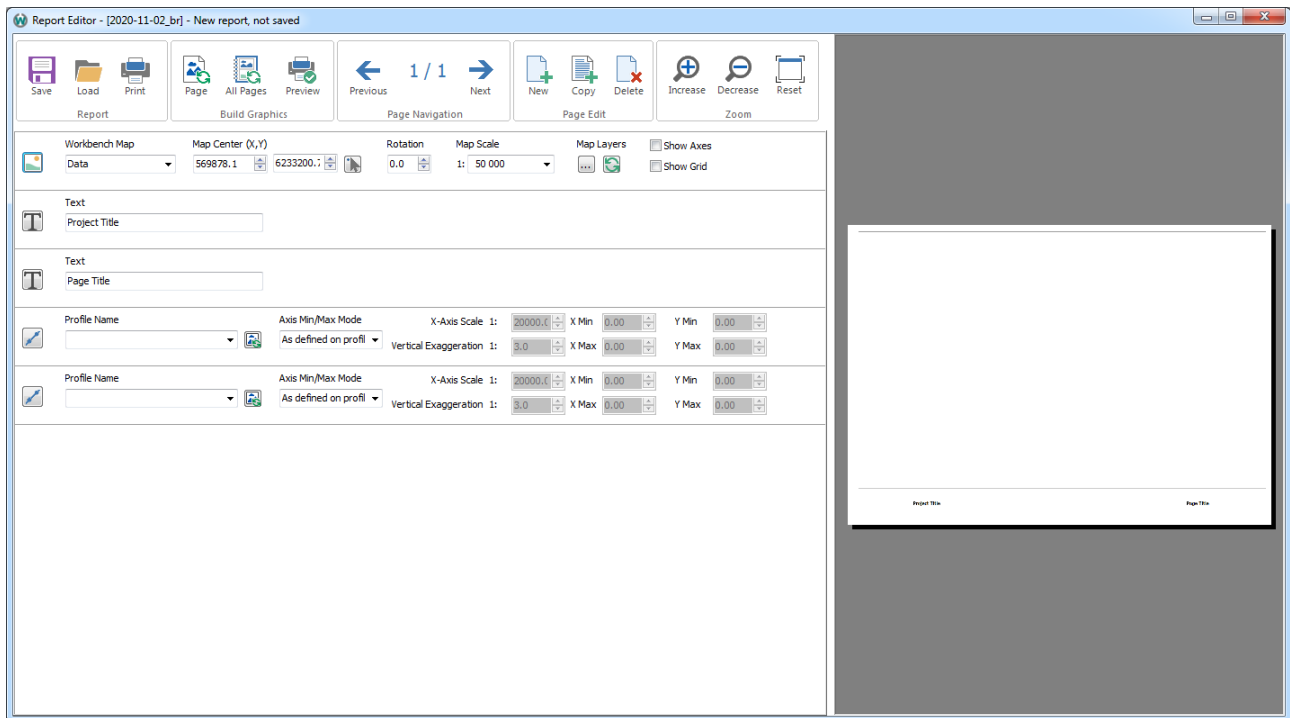
Figure 7. The Sections_Landscape_A3_Simple report template right after it is first opened.

This particular template is essentially the same as the one we used before; the map part has just been replaced by two sections that will be taken from the profiles we select with the dropdowns here.

Fill out the project title and the page title, and use the dropdown for one of the profiles to select a profile. The button right next to the dropdown is the Redraw button. It causes the section along the profile to be opened and the extent of the profile element on the report preview window to be filled. This is done with the given axis setup.

There are three different Axis Min/Max Mode options. Only the available settings for the used mode can be edited and adjusted.

- As defined on profile looks to the profile as it has been setup in the workspace.
- User defined uses the X and Y Min and Max values.
- Fixed scale instead uses the X and Y Min values together with the X-Axis Scale and the Vertical Exaggeration for the y-axis.

As you already have spent time adjusting your sections in the workbench, using the same setup here is usually the simplest solution.
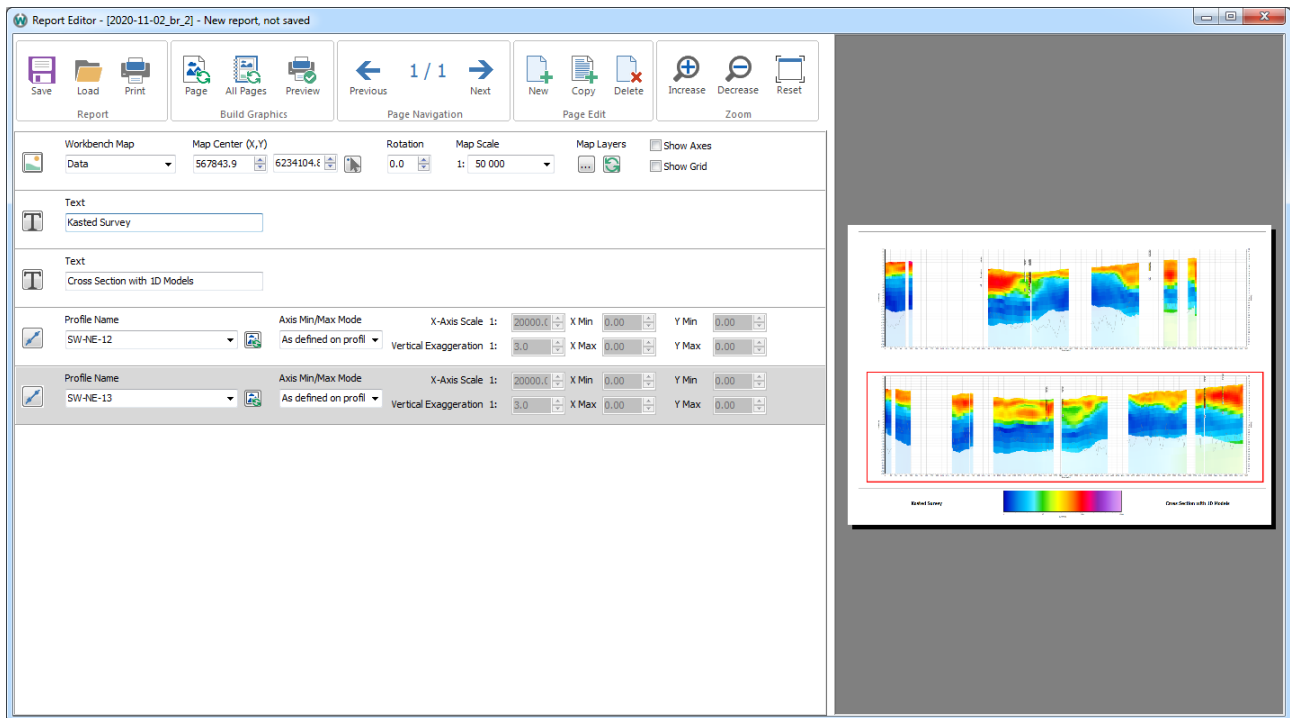
Figure 8. The final version of the report page.

Final words

Now you know enough to try out a few other templates on your own. There are a few additional templates in same folder as the other templates that you can have a look at. One important element type we haven't covered here, but that you will run into, is the image element. It is often used to include logo images for the people involved in the project. These elements however are defined in the template editor rather than the report editor and will have to be changed from there. Such image elements can also be used to bring in legend style images to describe things on the map. For more about the template editor and how to get started making adjustments to existing templates or making completely new templates, see "Getting started with the template editor".