Enerdeq Desktop Canadian

User Guide

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The Source for Critical Information and Insight™

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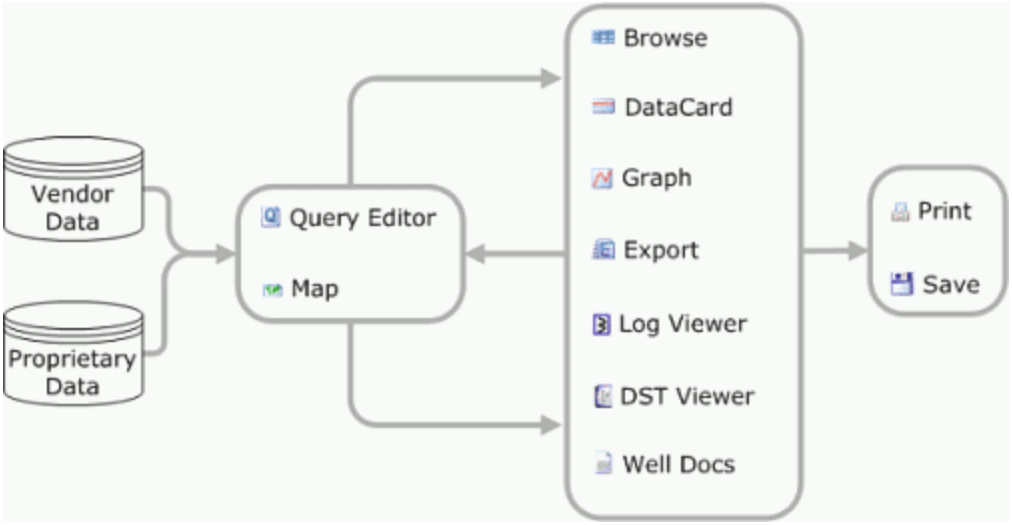
Contents

About Enerdeq

What is Enerdeq® Desktop

IHS Enerdeq® Desktop enables you to analyze oil and gas potentials using integrated public and proprietary data. It includes mapping and query tools for initial selection, and various Output windows for specialized sorting, graphing, and viewing.

This refined data can be recycled back into the map or query tools for further development, or exported in other third-party formats, including Excel (Microsoft), Shapefile (ESRI), PETRA, ZMAP, Geographix, KMZ (Google Earth), PEEP (Merak), Value Navigator (Energy Navigator), DECPRO, P/Z (Petro-Soft), and Aries (Landmark).



Related topics

See "Launching Map, Query Editor, and Output windows," p. 10

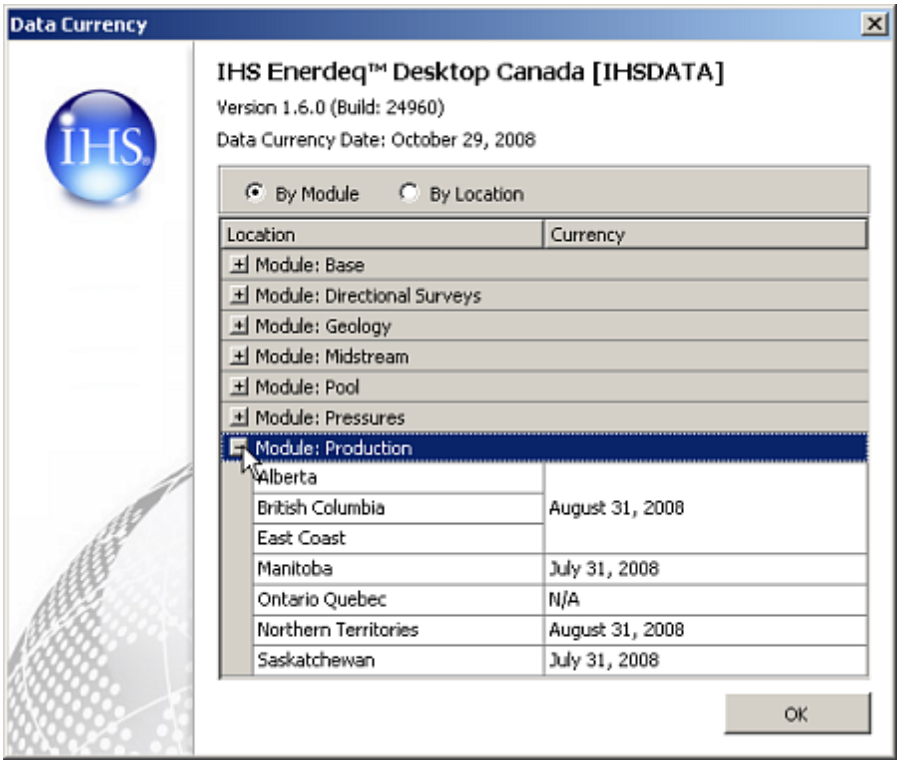
Viewing data currency

Sort data by either data type or by geographic location, and then select data to view the date up to which it was current. To determine data currency for a specific period, launch Query Editor and for a given data type, and then query using the Header > Date of Last Refresh term. For details, see *Related topics* below.

To view data currency

1. From the **Help** menu, click **Data Currency**.

   The *Data Currency* dialog box appears.



2. Select whether to group the data by data type or by geographic location.

   The data currency pane updates based on your selection.

3. Click ⊞ to expand a group and view the dates up to which data in that group was current.

Related topics

See "Contacting Customer Care," p. 9
See "Querying data currency," p. 71
See "About the Browse window," p. 82

Contacting Customer Care

Contact IHS Customer Care for assistance with any questions or problems not answered in this help system.

Web site	*http://energy.ihs.com/Products/enerdeq/Support*
Canada	
Phone	1 403 770 4500
Email	*support.cdn@ihs.com*

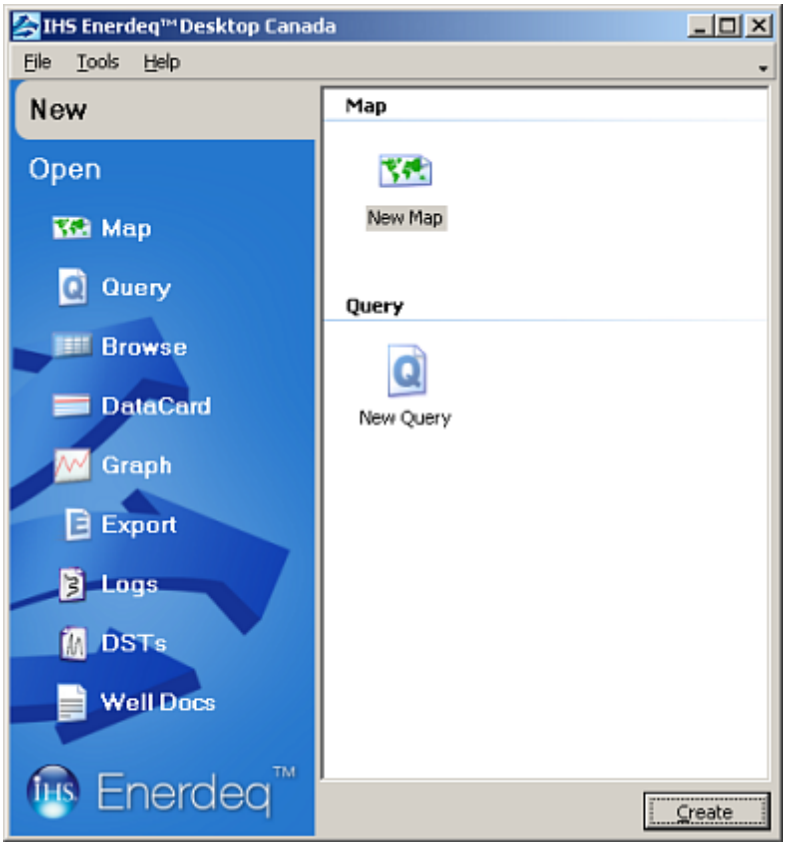
Related topics

See "What is Enerdeq® Desktop," p. 7

Launching Map, Query Editor, and Output windows

Using the left pane of the IHS Enerdeq Desktop toolbar, launch either a new Map window or Query Editor, or open a saved file. Files saved using the Map window can be opened using only the Map window. Files saved using Query Editor or an Output window (Browse, DataCard, Graph, Export , Log viewer, Well Doc viewer, or DST viewer) can be opened in Query Editor or in any Output window.

When **Open** is selected in the left pane, up to 20 of the most recently accessed map or query files appear in the right pane. Push-pin functionality ( ) enables you to pin particular files so that they remain in the list of recently used files instead of being replaced by more recently accessed files. You can also browse for a file when it does not appear in this list.



When launching Enerdeq, if all of the available licenses are in use, the user name and machine name of users currently logged in to Enerdeq appears. You may inquire whether one of them can close their session.

To launch Map, Query Editor, and Output windows

- To launch a new Map window or Query Editor, using the left pane, click **New** and then in the right pane click either **New Map** or **New Query**.
  OR
  from the **File** menu, point to **New**, and then click either **Map** or **Query**.

1. To display the results of a query or map previously saved to disk, using the left pane, click **Map**, **Query**, or one of the Output windows (Browse, DataCard, Graph, Export, Logs, DSTs, or Well Docs).
   OR
   from the **File** menu, point to **Open**, and then click **Map** or **Query**. You can also open a query previously saved to disk using any Output window (Browse, DataCard, Graph, Export, Logs, DSTs, or Well Docs).
2. Either double-click the desired file in the Recent Files pane, or for a file that hasn't been accessed recently, click **More** , navigate to the file, and then click **Open**.

About push-pin functionality

Up to 20 map and 20 query files appear in the Recent Files pane of the Enerdeq Desktop toolbar. The name of files that are opened replace the name of the least recently accessed files in the Recent Files pane. To ensure that the name of a file that appears in the Recent Files pane isn't replaced, click the push-pin () that appears to the left of a file name.

File names with an active push-pin () aren't replaced by names of more recently accessed files.

Pinning a file doesn't change the order in which it appears in the Recent Files pane. File names appear in the order in which they were accessed from most to least recent. The Recent Files pane is updated with files from your current session as you save them.

Map and Query files deleted from disk using Windows Explorer still appear in the Recent Files pane until eclipsed by the name of a more recently accessed file.

Related topics

See "Customizing the interface," p. 12	*See "About the Map window," p. 15*
See "About Query Editor," p. 57	*See "About DataCards," p. 77*
See "About graphs," p. 90	*See "About the Browse window," p. 82*
See "About Exports," p. 109	*See "About WellDocs viewer," p. 102*
See "About DST viewer," p. 105	
See "About Log viewer," p. 96	

Customizing the interface

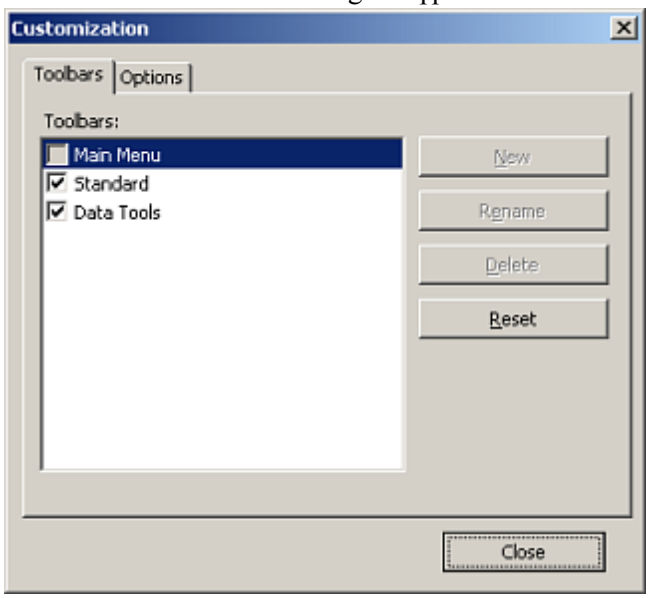
Select which toolbars appear in various windows and select toolbar display properties. You can't customize the IHS Enerdeq Desktop toolbar. Modified settings only apply to the specific window from which you launched the Customization dialog box, and only for the current session.

For details on docking the map layer legend, see *Related topics* below.

To show or hide toolbars

1. Using the window to modify, from the **Tools** menu, click **Customize**.

   The *Customization: Toolbars* dialog box appears.



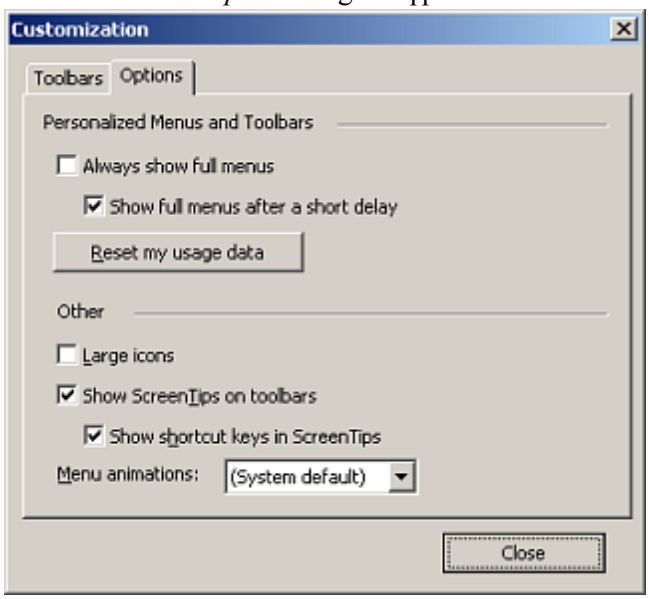
2. Select whether the **Standard** toolbar ( ), **Data Tools** ( ), and toolbars specific to the current window appear, and then click **Close**.

NOTE: Depending on the window from which you launched the *Customization* dialog box, different toolbars may be available; for example, Browse (Template,), .

To set menu and toolbar behavior

1. Using the window to customize, from the **Tools** menu, click **Customize**, and then click the **Options** tab.

The *Customization: Options* dialog box appears.



2. Select whether to show every item that appears in a menu each time it's selected; otherwise, only common selections and those you frequently make appear. Clicking **Reset my usage data** erases all your menu selection history so that all menu items appear the first time you display each menu.
3. Select the size of icons displayed in toolbars, whether to display ScreenTips when you hover your cursor over toolbar items, and select display effects for menus such as whether they fade in, and then click **Close**.

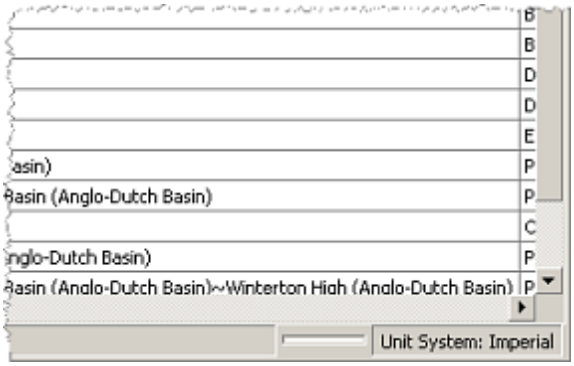
NOTE: These settings only apply to the specific window from which you launched the *Customization* dialog box, and only for the current session.

Related topics

See "Changing default units," p. 14	*See " Positioning the Layer Legend," p. 17*

Changing default units

The unit system for the current session appears in the lower-right corner of most windows except the Map.



Switch between Metricand Imperial in the IHS Enerdeq Desktop toolbar, in the Map window or Query Editor, or in any Output windows. The unit system changes throughout Enerdeq for the current session.

The current unit system isn't saved with maps or queries saved to disk, so when you open saved files, they're displayed in whatever unit system is selected for the current session.

To change default units

- From the **Tools** menu, point to **Change Unit System**, and then click **Metric**or **Imperial**.

Related topics

See "Customizing the interface," p. 12	*See "Changing map projections," p. 21*

Using the Map

About the Map window

Use the map to view your area of interest. Display the layers of interest and navigate using the zoom and pan tools. The Inspect bar at the bottom of the window displays information about items from inspectable layers. Using Inspect mode (), click an item on the map to display its DataCard.

Select items on the map to use in Query Editor or in Output windows. There are several ways to select items on the map for output to another window. Results from inspectable layers are retrieved first by those you clicked while pressing **CTRL** or **SHIFT**, next by those you encircled with a selection polygon, and finally by those within the current map extents.

Making layers visible

Visible layers are rendered on the map when the map scale is within a layer's visibility cutoffs. Even if inspectability, which enables you to work with a layer's objects, is cleared the layer is still rendered on the map. However, if visibility is cleared, inspectability is also cleared.

Check boxes appear at both the individual layer and the layer group levels in the Layer Legend. Enable or disable visibility for an individual layer using that layer's check box, or do it for all the layers beneath a group layer by selecting or clearing the check box for that group layer.

Following are the various states of visibility:

☑	At the individual layer level, signifies a layer is visible. At the layer group level, signifies all of the layers within a layer group are visible.
☐	At the individual layer level, signifies a layer isn't visible. At the layer group level, signifies all of the layers within a layer group aren't visible.
■	Only appears at the layer group level and signifies that some, but not all of the layers within a layer group are visible.

Just because a layer is selected ☑, it doesn't mean that layer is automatically visible on the map. The map must also be zoomed to a scale at which the layer is set to appear. For example, if the *Wells* layer is set to appear at a zoom scale of *1:250,000* , even though its visibility checkbox may be selected, it won't appear on the map if your zoom scale is greater than *1:250,000*.

Items also won't be visible on the map unless a symbol, pattern, or fill is defined for those items. For example, you may need to select the well layer in the Layer Legend and then click **Layer** > **Symbolize** to define a well head symbol before wells appear on the map. You can determine how the item will be rendered by viewing the symbol, pattern, or fill adjacent to the layer name in the Symbolize column in the Layer Legend.

When you select the visibility check box, a layer also becomes inspectable. When you clear the visibility check box, inspectability is also disabled.

TIP: The map refreshes more quickly with fewer layers displayed.

To change whether a layer is visible on the map

Do one of the following:

- Select the check box next to a layer or a sub-layer name to make it visible on the map, and then click **Apply**.
- Clear the check box next to a layer or a sub-layer name to disable visibility, and then click **Apply**.

NOTE: You must make a layer inspectable in order to select its objects or display them in Output windows.

Related topics

See "Making layers inspectable," p. 16 *See "Positioning the Layer Legend," p. 17*

Making layers inspectable

Layers with underlying data can be made inspectable so that information about their objects appears in the Inspect bar below the map, so that clicking an item on a layer launches a DataCard, and so that items selected in that layer appear in either an Output window or in Query Editor. A layer can only be made inspectable when it's within its visible scale cutoffs.

Certain culture layers, such asenvironmental layers, have underlying data that can be inspected and displayed in DataCards, but that can't be queried.

If made inspectable, a layer is also visible. When inspectability is disabled, the layer remains visible so that it's still rendered on the map. Query results can be attached to the map as a layer and inspected. For details, see *Related topics* below.

Following are the different states of inspectability:

	At the individual layer level, signifies that a layer is inspectable. At the layer group level, signifies that all of the layers within that layer group are inspectable.
	At the layer group level, signifies that only some of the layers within that layer group are inspectable.

	At the individual layer level, signifies that layer isn't inspectable. At the layer group level, signifies that none of the layers within that layer group are inspectable.
	A simple black outline indicates the layer or layer group is currently outside its visible scale cutoffs.

To change whether a layer is inspectable

- With the map zoomed in enough that the inspectability symbol for the layer to make inspectable appears with a blue outline instead of a black outline, click inspectability to the right of a layer name or a layer group name so that it appears as a filled blue circle.

Related topics

See "Making layers visible," p. 15
See "Attaching queries to maps," p. 63
See "Filtering maps," p. 28
See "Importing user layers," p. 29
See "Positioning the Layer Legend," p. 17

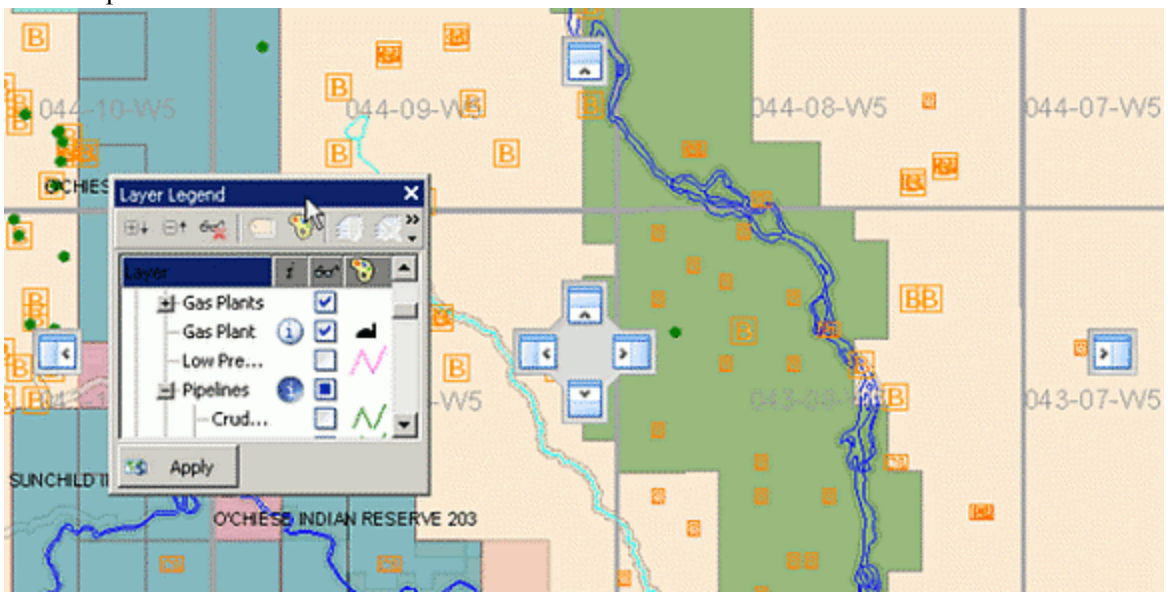
Positioning the Layer Legend

Move the Layer Legend as a floating toolbar outside of the Map window or dock it on the left, right, top, or bottom of the Map window. Enerdeq remembers your Layer Legend preferences between sessions.

To position the Layer Legend

1. Click the Layer Legend title bar as depicted below and drag the Layer Legend over the Map window.

Placement controls appear along all four sides inside of the Map window and also in the center of the Map window as depicted below.



2. Drag the Layer Legend over a placement control to dock the Layer Legend in the implied area of the Map window.

   The quadrant of the Map window in which the Layer Legend will be docked is highlighted in the Map window.

3. Release the mouse button to place the Layer Legend.

▶ To position the Layer Legend outside of the Map window, drag the Layer Legend outside of the Map window.

Related topics

See "Opening maps," p. 18
See "Customizing the interface," p. 12
See "Docking the Data Navigator pane," p. 72

Opening maps

Open a new or saved map using the IHS Enerdeq Desktop toolbar or the Map window.

To open a new map

Do one of the following:

▶ To display a new map with default Enerdeq map extents and map layer selections, using the IHS Enerdeq Desktop toolbar, from the **File** menu, point to **New**, and then click **Map**
OR
Using the Map window, from the **File** menu, click **New**.

- To display a new map with map extents defined by the data that's in either Query Editor or an Output window, using Query Editor or an Output window in which the data upon which to base the map appears, from the **Tools** menu, point to **Add to Map**, and then click **New Map**.

To open a saved map

1. Using the IHS Enerdeq Desktop toolbar, from the **File** menu, point to **Open**, and then click **Map**
   OR
   Using the Map window, from the **File** menu, click **Open**.
   The *Open Map File* dialog box appears.
2. Browse to and select the desired map file on disk, and then click **Open**.

Related topics

See "Saving maps," p. 40

Panning maps

Use the Pan commands (,) to center the map on a point clicked, to drag the map to a new position, or to pan one map page directly north, south, east, or west.

To center the map on a point

1. From the **Map** menu, click **Pan**.
2. Click a point on the map to make it the center point of the redrawn map.

To drag the map to a new position

1. From the **Map** menu, click **Pan**.
2. Drag the map to the desired position.

To pan the map north, south, east, or west

- On the Map window toolbar, click the small arrow representing north, south, east, or west to move one map page in that direction.

To zoom or pan the map back to the last extent

- From the **Map** menu, click **Last Extent**.

Related topics

See "Zooming maps," p. 20

Zooming maps

Zoom the map in or out by a factor (two, four, six, or ten), zoom in to a rectangle you draw, zoom to the extents of the map, or zoom to the previous map extents.

Change the map to a specific scale by selecting a map scale from a list or by typing the scale in a text box.

The default map projection changes as your map scale changes.

To zoom the map

▶ From the **Map** menu, click either **Zoom In** or **Zoom Out**.

NOTE: The map zooms in or out by a default factor of two. Click the arrow (▾) right of the zoom button and select a factor of four, six, or ten.

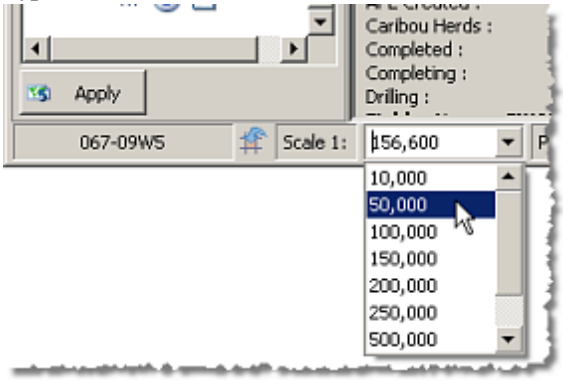
To zoom in to a custom rectangle

1. From the **Map** menu, click **Zoom**.
2. Drag a rectangle that defines the new map extents on the map.

To zoom the map to a custom scale

1. Click the drop-down arrow next to the scale display in the status bar at the bottom of the map.

2. Select a scale from the drop-down list between 10,000 and 10,000,000
   OR
   Type a scale in the text box.



To zoom the map out to full view

▶ From the **Map** menu, click **Full View**.

To zoom or pan the map back to the previous extent

▶ From the **Map** menu, click **Last Extent**.

Related topics

See "Panning maps," p. 19	*See "Changing map projections," p. 21*

Changing map projections

Coordinate reference systems link a coordinate system with a datum to show the relationship of the coordinate system to the surface and shape of the Earth.

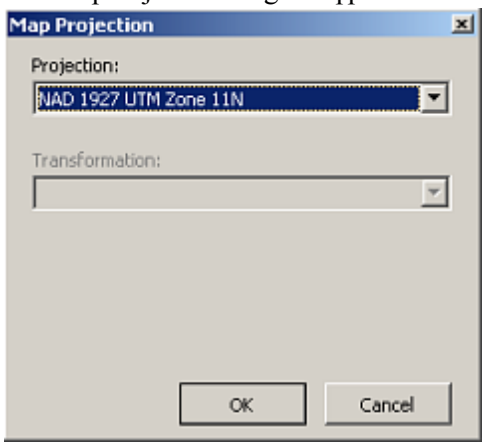
Map projections plot features from a three-dimensional sphere onto a two-dimensional map. Map projections rely on a fixed reference point called a datum to perform their calculations. There are numerous projections for different geographic areas and at different map scales, each with their own unique datum.

The map projection automatically changes to one of several defaults as your map center point and scale changes, but you can override these defaults by selecting a different map projection. Selections affect both map display and map exports when your map scale is within the range to which the selected projection pertains.

To change a map projection

1. From the **Map** menu, click **Projection**.

   The Map Projection dialog box appears.



2. From the drop-down list, select the desired map projection.

Related topics

See "Zooming maps," p. 20	*See "Changing default units," p. 14*

Selecting map items

Select items on the map by clicking the individual items while pressing **CTRL** or **SHIFT** in Inspect mode ( ), or by encircling them with a polygon (, ,).

Selected items can be added as a unique map layer or passed to either Query Editor or an Output window. When passed to another window, the pass includes items that are either individually selected, surrounded by a polygon, or within the visible extents of the current map (in that order of preference). In order to appear in the window, the layer that contains the selected items must be set to Inspect ( ) in the map Layer Legend.

Items are sorted in the Output window in the same order in which you **CTRL-CLICK** them. This order is also maintained when you pass the items from one Output window to another. Even though the order in which you **CTRL-CLICK** items is maintained as the order in which to display them within their data type, the data types themselves are sorted alphabetically in the receiving Output windows.

When at least one item is selected by **CTRL** or **SHIFT-CLICK**, the Deselect button ( ) in the map toolbar becomes active. Click it to clear all selected items, or simply CTRL or SHIFT-CLICK a single selected item to clear.

Selected map items can be added as a separate map layer. For details, see *Related topics* below.

To select items by clicking on the map

1. Ensure that in the Layer Legend, inspectability is active and that there's a check mark in the visibility column of the layer(s) in which to select items.
2. From the **Map** menu, click **Inspect**.
3. **CTRL+CLICK** or **SHIFT+CLICK** a map item.

To select items by drawing a polygon

1. Ensure that in the Layer Legend, inspectability is active and that there's a check mark in the visibility column of the layer(s) in which to select items.
2. From the **Map** menu, point to **Polygon**, and then click either **Standard**, **Rectangle**, or **Radius**.
3. On the map, drag a rectangle or radius
   OR
   Click vertices to draw a standard polygon, and then double-click to complete the polygon.

NOTE: Since it's possible to have multiple selection methods on the map, results from the inspectable layers are retrieved first by items selected by clicking on the map while pressing the **CTRL** or **SHIFT** key, then by items within a polygon drawn on the map, and finally by items within the current map extents.

Related topics

See "Making layers visible," p. 15
See " Making layers inspectable," p. 16
See "Creating map layers of selected items," p. 23

Creating map layers of selected items

Using the map, select map items and then save the selected items under a new map layer group that appears under the My Queries group in the Layer Legend. When you expand the new group, the standard map layers corresponding to the items you selected appear, but those layers only include the actual items you selected. Configure unique display properties for items on each layer that differentiate them from the symbology used by the standard map layer, or clear the standard map layer so that only the selected items appear on the map.

To create map layers of selected items

1. Ensure that in the Layer Legend, inspectability is active and that there's a check mark in the visibility column of the layer(s) in which to select items.
2. Do either of the following:
   - From the **Map** menu, click **Inspect**, and then **CTRL+CLICK** or **SHIFT+CLICK**a map item.
   - From the **Map** menu, point to **Polygon**, and then click either **Standard**, **Rectangle**, or **Radius**. Either drag a rectangle or radius, or click vertices to draw a standard polygon, and then double-click to complete the polygon.
3. From the **Tools** menu, click **Add to Map**.

   The items appear under a new map layer group that appears under the My Queries group in the Layer Legend.

▶ To overwrite the last map layer added under the My Queries node, instead of **Add to Map**, click **Update Map** ().

Related topics

See "Making layers visible," p. 15
See "Making layers inspectable," p. 16
See "Selecting map items," p. 22

Viewing data on the Inspect bar

The Inspect bar at the bottom of the map displays information about the map item over which you hover the mouse pointer. Configure what inspection details appear when hovering your mouse pointer over a layer item. For query layers attached to the map, you can set different inspection criteria than the parent layer on which the query was originally based. For details, see *Related topics* below.

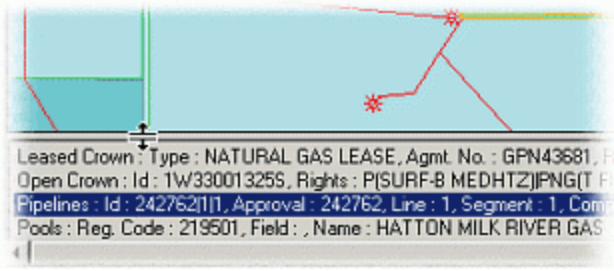
To view data in the Inspect bar

1. Ensure that in the Layer Legend, inspectability is active for the layer(s) with items of interest and then using the map, hover the mouse pointer over item(s) of interest.

   Attribute information for all items in all inspectable layers under the mouse pointer appears in the Inspect bar.
2. The first layer with data in the Inspect bar is highlighted on the map. Press the SPACE BAR to highlight other layers or to page through multiple items in a layer.

TIP: If there's too much detail to fit in the Inspect bar below the map, either using the Layer Legend click inspectable layers to deactivate inspection, or drag the split bar at the top of the Inspect bar up to increase the viewing area.

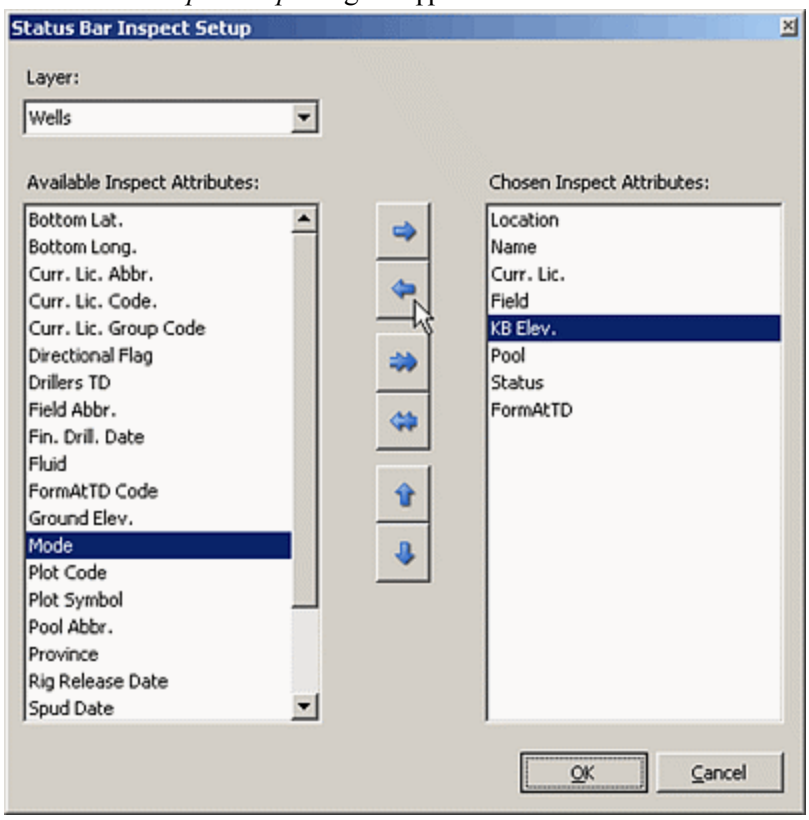
You can also change the list of attributes that appear in the Inspect bar (see below).



To change the list of attributes that appear in the Inspect bar

1. From the **Map** menu, click **Customize Inspect**.

   The *Status Bar Inspect Setup* dialog box appears.



2. Select a layer from the drop-down list for which to modify inspected attributes.

   Attributes that aren't currently displayed during inspection appear in the Available Inspect Attributes pane.

3. Using the Available Inspect Attributes pane, highlight an attribute, and then click to move it to the Chosen Inspect Attributes pane. Click and arrows to change the left to right order in which the attributes appear in the Status bar where moving the item up moves it left in the Inspect bar and moving it down moves it right. Click to move attributes out of the Chosen Inspect Attributes pane. Click or to move the entire contents of a pane.

Related topics

See "Attaching queries to maps," p. 63	*See "Making layers inspectable," p. 16*

Displaying grids

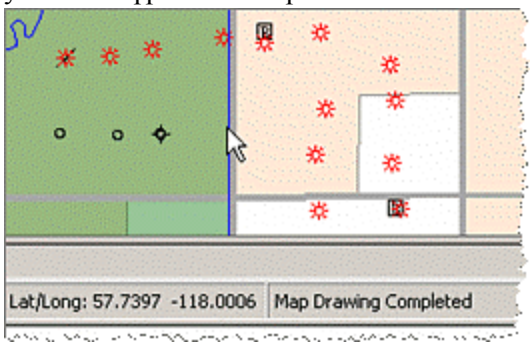
Display horizontal and vertical lines in the Map window to denote lines of latitude longitude. Display a border around your map on which grid labels appear.

To enable graticules or borders for printed maps, see *Related topics* below.

To display graticules

▶ From the **Map** menu, click **Graticule**.

Horizontal and vertical lines appear in the Map window to denote lines of latitude longitude. The lat/long coordinates of your cursor appear in the Inspect bar at the bottom of the Map window.



To display grid labels

▶ From the **View** menu, click **Grid Labels**.

Grid labels appear around the perimeter of your map in the Map window.

Related topics

See "Setting basic map printing options," p. 32	*See "Setting advanced map printing options," p. 36*

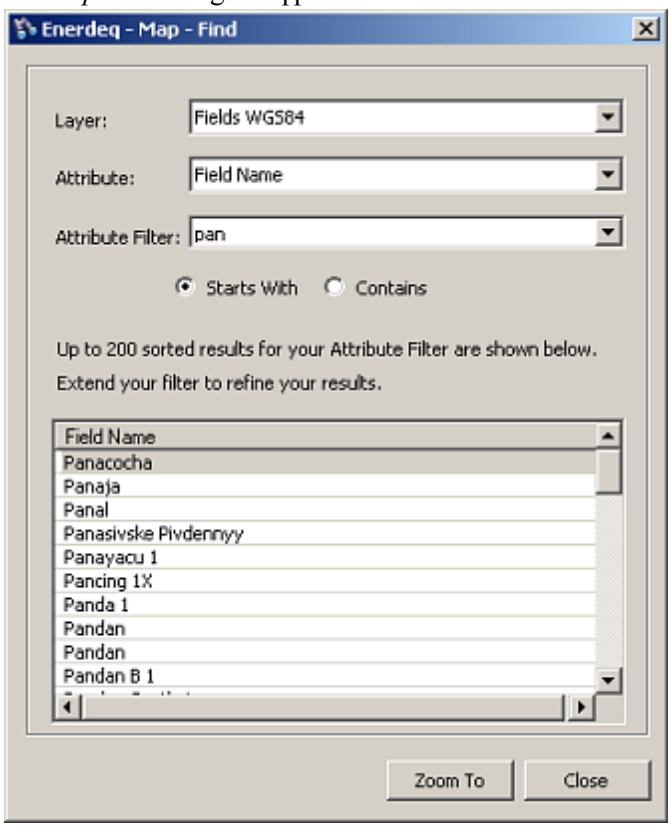
Finding map items using a text search

Find items on the map by searching for text strings in layer attributes, regardless of whether inspectability is active for that layer.

To find map items using a text search

1. From the **Map** menu, click **Find**.

   The *Map: Find* dialog box appears.



2. From the Layer drop-down list, select the map layer with attributes to search.
3. From the Attribute drop-down list, select an attribute to search.
4. Below the Attribute Filter box, select either **Starts With** or **Contains**, and then type the desired search term in the Attribute Filter box.

   As you type, entries in the list in the bottom of the dialog box reduce to only display values that match what you typed.

NOTE: The *Attribute Filter* box doesn't support wildcards such as ? or *.

5. When the desired item appears in the display pane at the bottom of the dialog box, either double-click it to zoom the map to that location, or click **Zoom To**.

Related topics

See "Making layers inspectable," p. 16	*See "Making layers visible," p. 15*

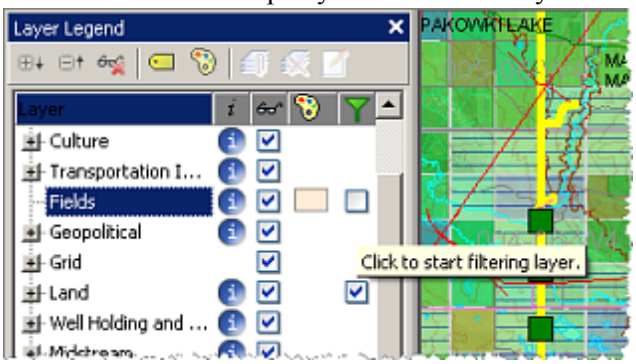
Filtering maps

Specify a date with which to filter both the spatial data you view, and the relational data you inspect and output from the map. Data that falls outside of the range you specify isn't accessible.

Following are the attributes on which you can filter for certain layers:

Layer	Attribute
Fields, Oil Gas Strike, Pools, Unit,	Effective Date
Wells	Spud Date
Land (Coal, Dominion, Postings)	Sale Date
Exploration Restricted	Restriction Date

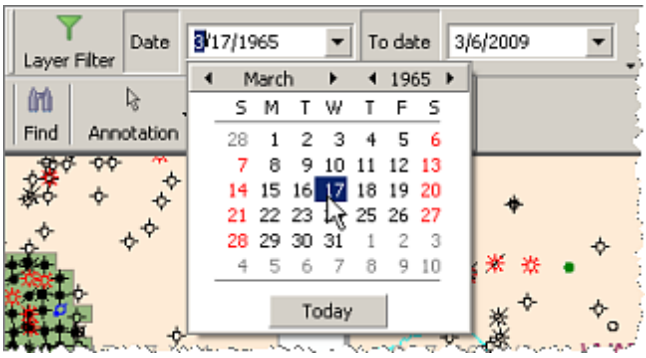
A check box appears in the Filters column of the Layer Legend alongside layers that can be filtered as depicted below. Click or clear this check box to specify whether the criteria you created applies to that layer.



To filter maps by date

1. In the map toolbar, select a date range as depicted below or by type directly in the date boxes.

TIP: To render map layers as they appeared on a specific date instead of a date range, specify that date in both the *Date* and the *To date* boxes.



2. Click **Layer Filter**.
3. Using the Layer Legend, click individual check boxes in the filter column beside a layer for which to add filtering, and then click **Apply** at the bottom of the Layer Legend.

   Selected layers on the map appear as they did during the date range displayed in the date boxes.
4. Click **Layer Filter** again to remove layer filtering from the entire map
   OR
   Using the Layer Legend, click individual check boxes in the filter column beside a layer for which to remove filtering, and then click **Apply** at the bottom of the Layer Legend.

Related topics

See "Making layers inspectable," p. 16
See "Making layers visible," p. 15
See "Selecting map items," p. 22

Importing user layers

You can attach a shapefile (*.shp*) or a saved query (*.xmlquery*) to the map as a new layer. Shapefile layers appear in the Layer Legend under the *My Layers* node and queries appear under the *My Queries* node. Once these layers are attached to the map, click Layers > Symbolize to change their display scales and map symbols.

For details on setting the fields upon which you can inspect, see *Related topics* below.

To add a shapefile to the map

1. Confirm that the following files are in the same directory as the *.shp* file to attach:
   - database file (*.dbf*)
   - index file (*.shx*)
   - project file (*.prj*)
2. Using the Map window, select a layer group in which you can add layers, *My Layers* for example, and then from the **Layers** menu, click **Add**.

The *Choose user spatial layer* dialog box appears.

3. Browse to and select the *.shp* file to add.
4. Click **Open**.

NOTE: You may need to zoom the map to see the new layer. Enerdeq warns you if the datum in the imported layer differs from the underlying datum in your Enerdeq map. The datum of your imported layer appears in the file *Default-Projection.prj*..

To add a saved query to the map

1. Using the Map window, select **My Queries**, and then from the **Layers** menu, click **Add**.

   The *Choose query layer* dialog box appears.

2. Browse to and select the *.xmlquery* file to add.
3. Click **Open**.

   To declutter your map, after attaching your query results to the map, turn off visibility ( ) for the layer on which the query is based so that only items returned by the query appear on the map.

To remove a shapefile or a saved query attached to the map

1. Using the Map window, in the Layer Legend, select the user layer to remove.
2. From the **Layers** menu, click **Delete**.

NOTE: This only removes the copy attached to the map, not the copy saved to disk.

Related topics

See "Editing shapefile attributes," p. 30	*See "Editing shapefile attributes," p. 30*
See "Viewing data on the Inspect bar," p. 24	

Editing shapefile attributes

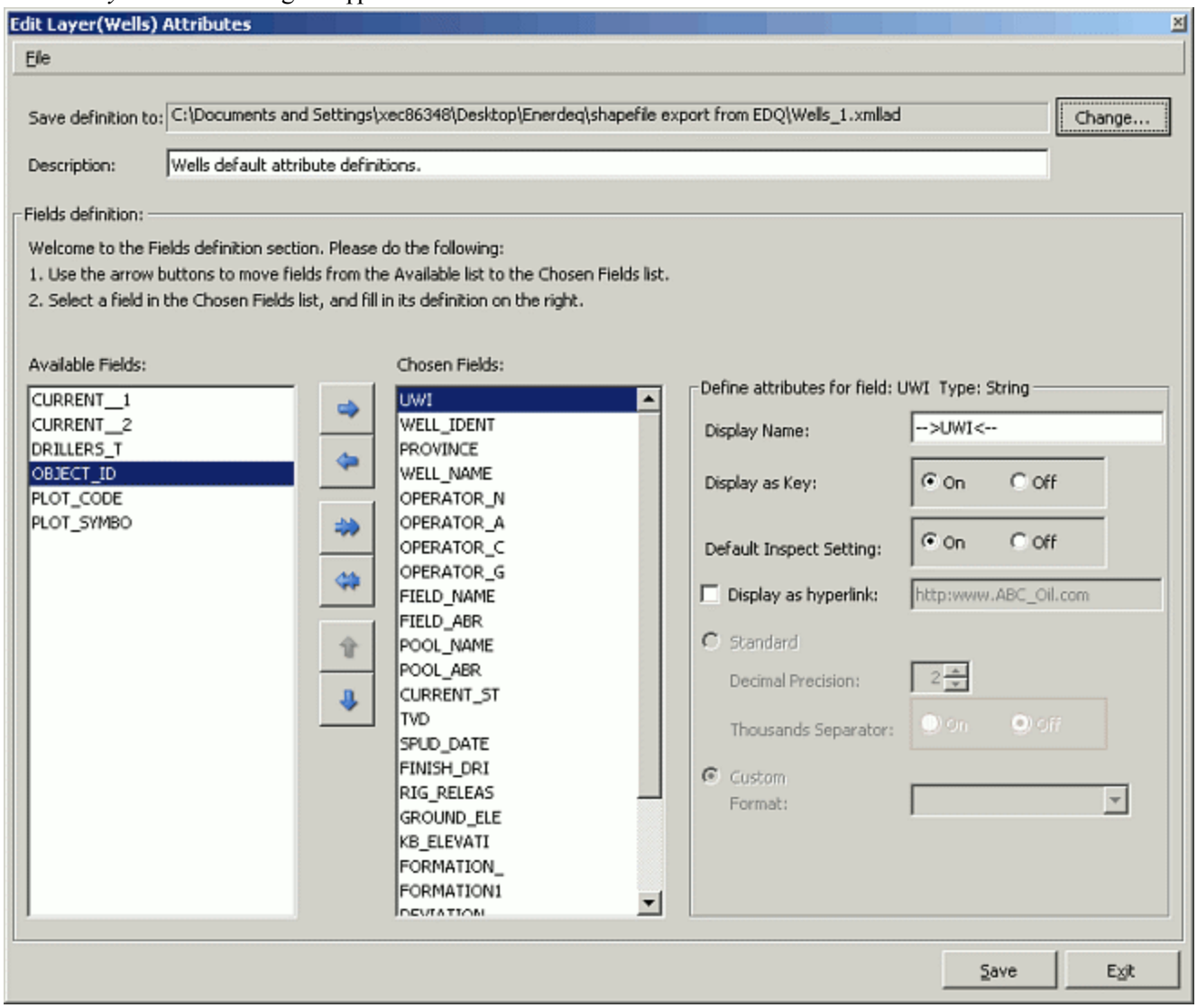
Edit attribute definitions for shapefiles you added to the map including the following: attributes that appear; simplified names for attributes; attributes to display as the key attribute; attributes to display by default in the map Inspect bar; and decimal precision with which to display attributes.

These definitions are written to an *.xmllad* file, which must be named the same as the *.shp* file and saved in the same folder.

To edit shapefile attributes

1. Using the Map window, right-click the shapefile layer name in the Layer Legend, and from the shortcut menu, click **Edit Layer Attributes**.

   The *Edit Layer Attributes* dialog box appears.



2. Highlight the attribute to add in the Available Fields pane, and click ➡ to move it to the Chosen Fields pane. Click ⇔ or ⇉ to move the entire contents of a pane.

▶ Click ⬆ and ⬇ to change the order in which the attributes are rendered on the map where moving an attribute up renders it first and moving it down renders it last.

3. With the layer to modify selected in the Chosen Fields pane, in the Display Name box to the right, type a name that will appear in the map Inspect bar and in Output windows.

4. For the Display as Key option, select **On** if the attribute has a unique value that you want to appear in Data Navigator.
5. For the Default Inspect Setting option, select **On** to display that attribute in the map Inspect bar. This can be customized for individual maps using **Map** > **Customize Inspect**.

▶ For numeric attributes, select the Decimal Precision with which to display values.

6. After configuring the desired attributes, click **Exit** and when prompted, save the above changes.

Related topics

See "Importing user layers," p. 29
See "Viewing data on the Inspect bar," p. 24
See "Adding annotations to maps," p. 42

Setting basic map printing options

Configure basic map printing options such as paper size, map titles, the company logo to display, and items to include in the printed map legend. The options that appear below are also available from the Visibility drop-down menu when using the Print Preview dialog box in Layout mode (see *Related topics* below).

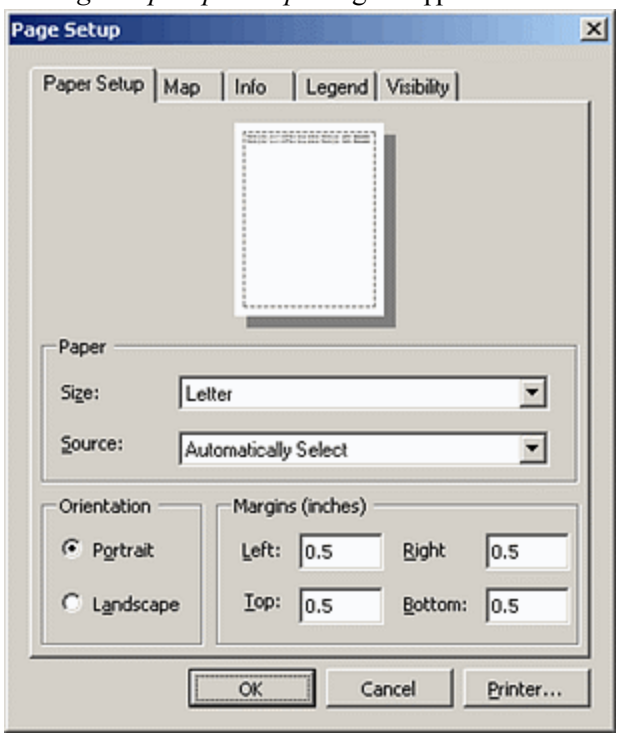
The settings configured below only apply to the current Map window and only persist for the current session.

To set advanced map printing options, such as the placement and size of various map objects, map scale, and more, see *Related topics* below.

To set basic map printing options

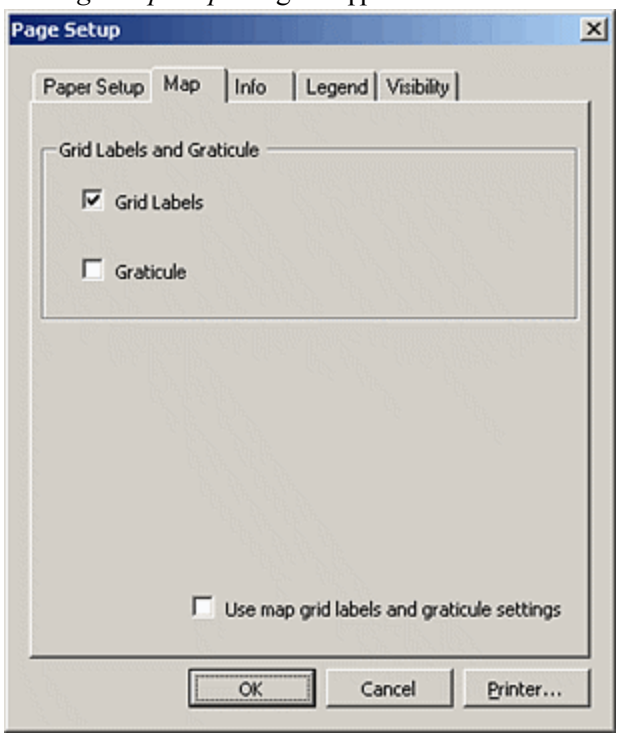
1. From the **File** menu, click **Page Setup**.

The *Page Setup: Paper Setup* dialog box appears.



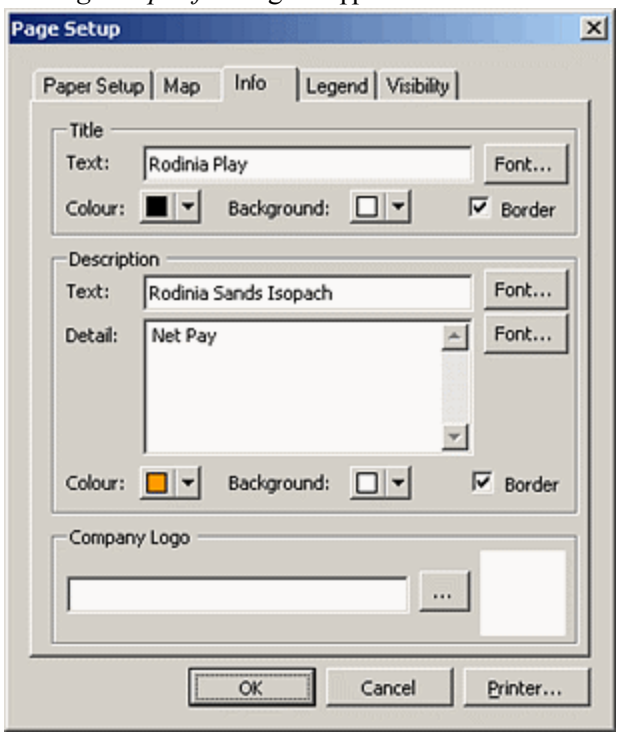
2. Select basic page layout options (paper type, orientation, and margins), and then click the **Map** tab.

The *Page Setup: Map* dialog box appears.



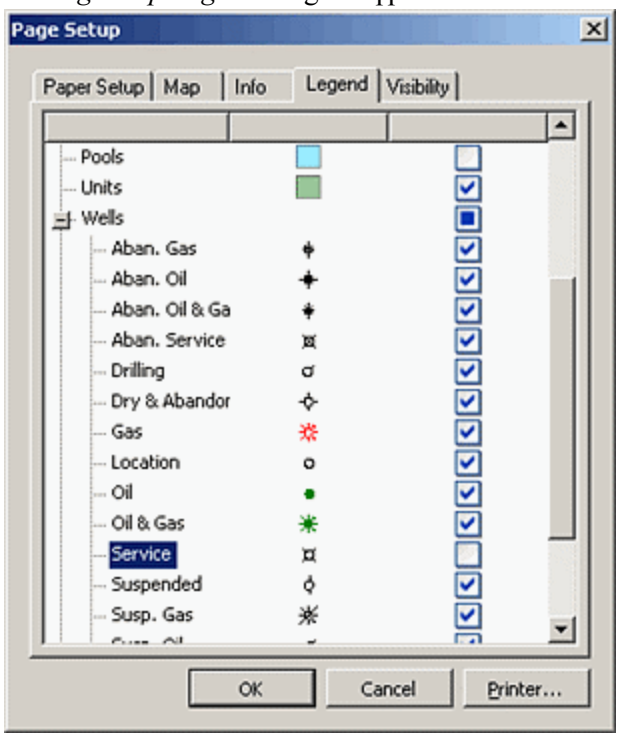
3. Select **Use map grid labels and graticule settings** so that the grid label and graticule appear on the printed map only if enabled in the *Map* window, or clear this option and select or clear the **Grid Labels** and **Graticule** checkboxes so the grid labels and graticule are displayed or hidden on the printed map regardless of whether they're displayed in the *Map* window.
4. Click the **Info** tab.

   The *Page Setup: Info* dialog box appears.



5. Type a map title and description.
6. For text fields, do the following:
   - Click **Font**, and select the text family, size, and style.
   - Click  to select the text color and the background color for the text box.
   - Click **Border** to draw a bounding box around text boxes.
   - Click  and browse for a company logo.
7. Click the **Legend** tab.

The *Page Setup: Legend* dialog box appears.

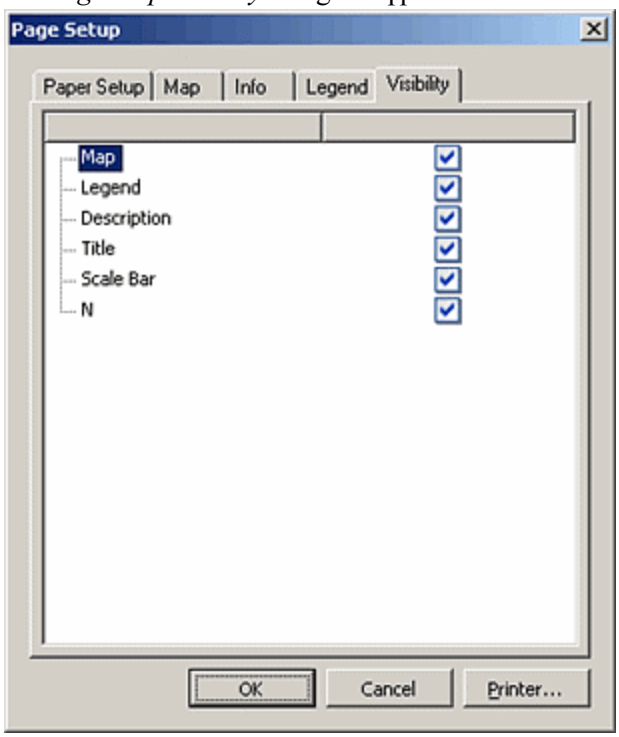


8. From all of the layers available to the *Map* window, select those to display on the printed map. By default, only those layers already selected in the *Map* window are selected in the *Page Setup: Legend* tab. Click to expand parent nodes and select whether to include their child layers, or select the parent node to automatically include all of its child layers.

   The legend on the printed map resizes depending on the number of items you include above.

TIP: If you select many items, the legend may cover a portion of the map. To prevent this, either select fewer items above, or resize the legend while setting advanced map printing options (see *Related topics* below). If there are legend items that don't appear once the legend has been resized, the number of items that aren't displayed is listed in the last entry that appears in the legend.

The *Page Setup: Visibility* dialog box appears.



9. Select which map elements appear on the printed page.

▶ Click **Printer** to define a printer other than your Windows default printer with which to print the map.

Related topics

See "Setting advanced map printing options," p. 36	*See "Printing maps," p. 39*
See "Saving maps," p. 40	

Setting advanced map printing options

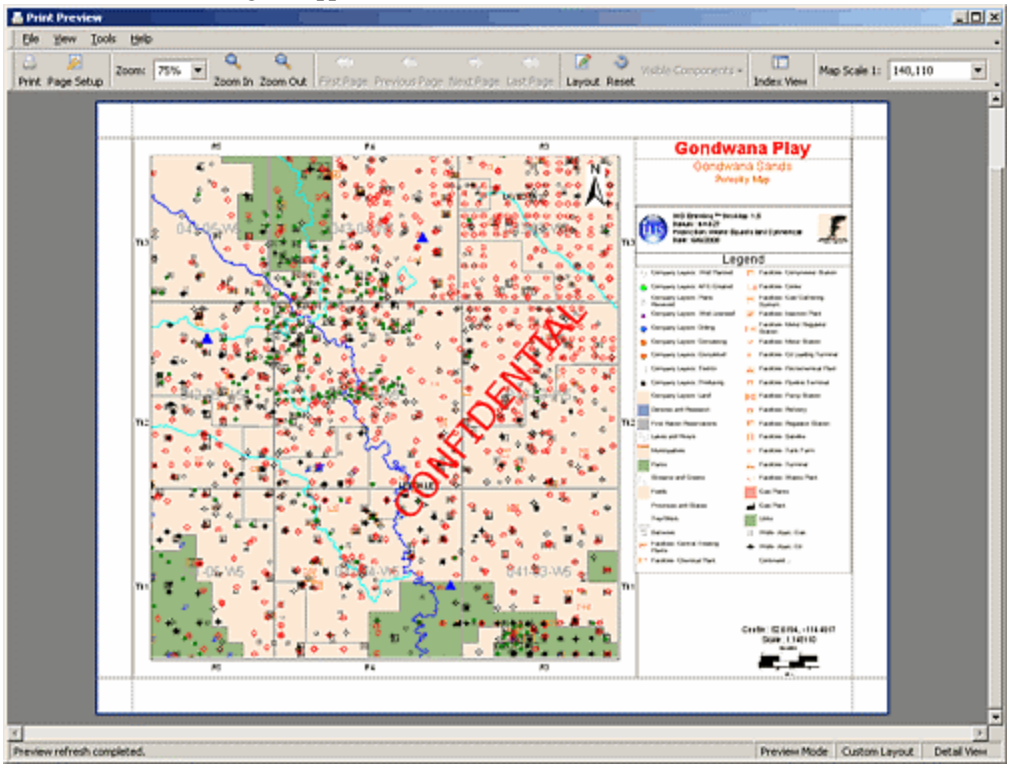
Click the Layout option while in Print Preview mode to customize the map by dragging, dropping, resizing, and hiding map objects. Layout options only apply to the current Map window and only persist for the current session.

To set basic map printing options, such as page orientation, map titles, and legend display, see *Related topics* below.

To set advanced map printing options

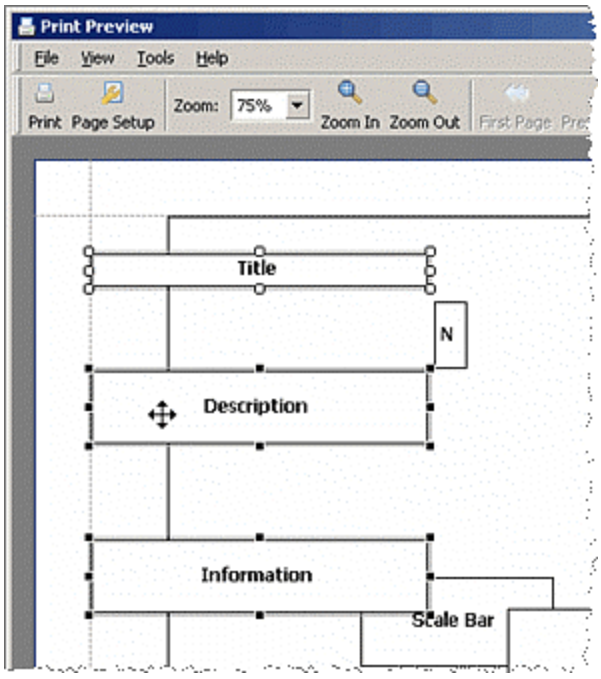
1. From the **File** menu, click **Print Preview**.

The *Print Preview* dialog box appears.

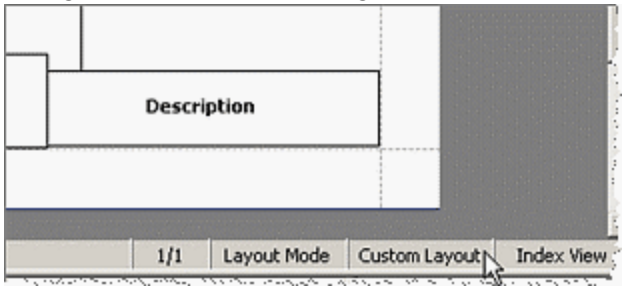


▶ **CTRL+Mouse wheel Up** or **Down** to zoom in or out.

2. Click **Layout** ( ) to switch to a view where you customize the final look of your printed map by dragging and dropping, resizing, and showing and hiding various map objects.



3. The following functionality is available in Layout mode:
   - Click one or more objects and drag them to a different location (depicted above). To align dragged items precisely, from the **View** menu, click **Snap to Grid**.
   - Drag the handles of an object to resize it. If more than one object is selected, they're all resized at once.
   - Drag an object to a margin to anchor it to that margin so that it maintains its position proportionate to the page size - even if you change paper size.
     If map objects aren't anchored to a page margin and you either change paper orientation, paper size, or resize the map, objects don't maintain their positions relative to the page. They may instead appear off of the page, in which case you must drag them to the desired location on the new page.
   - From the **Visibility** menu, click ▾ and select whether to hide or show various objects on the printed map. Hidden objects don't appear on the printed map or in the *Print Preview* dialog box.
   - Right-click a map object and from the shortcut menu, select either **Send to Back** or **Bring to Front** to place it behind or in front of other map objects. This option isn't available for the *Information* box.
   - From the **Map Scale** menu, click ▾ and select a different map scale. The map scale isn't limited by the map scale displayed in the *Map* window.
   - To revert to the default map layout, click **Reset** ( ). Even if you click **Reset**, *Custom Layout* still appears in the bottom right of the *Print Preview* dialog box to indicate the mode in which you're still working.



TIP: Before exiting Layout mode below, click **Index View** to display the map as a blank box instead of rendering all of the map layers.

4. Click **Layout** again to exit Layout mode and return to the *Print Preview* main screen to see how your map looks before printing it.

Related topics

See "Setting basic map printing options," p. 32
See "Printing maps," p. 39
See "Saving maps," p. 40

Printing maps

Once you've set your print page options, you can print the map to a plotter or printer. Enerdeq doesn't support tiled printing, in which a large map is automatically tiled across multiple pages. If you need to used tiled printing, using the Map window zoom into a portion of the overall map that will fill an 8.5 x 11" page and print it, then zoom into the next area to fill the next page and print it, and so on.

Printing large scale maps

Printing 600 DPI requires a lot of memory. The following steps are recommended to optimize printing large scale maps:

- Restart your computer.
- Keep other applications aside from Enerdeq Desktop closed, and for Enerdeq, display only the Map window that contains the map to print. Keep all other Enerdeq windows closed.
- Depending on your operating system, increase the allocated virtual memory size as follows:
  32-bit - 4096 MB
  64-bit - 8 GB
- Reduce the complexity of maps by clearing transparency or by turning off layers you don't need to print.

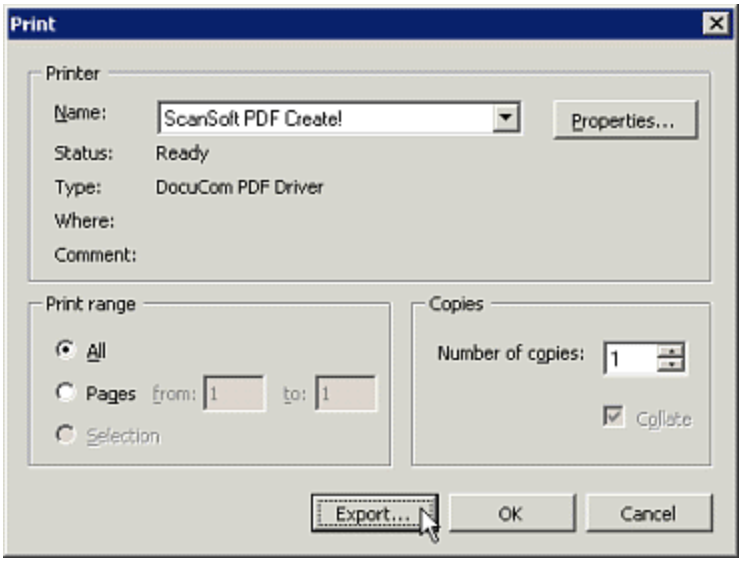
To print the map

1. Using the *Map* window, from the **File** menu, click **Print**.

2. Click **OK** and the map prints

OR

Click **Export** in the *Print* dialog box to output the map in one of the following formats: PDF, BMP, EMF, GIF, JPEG, PNG, TIFF, WMF.



TIP: If exporting in PDF format, ensure your Adobe print driver page scaling options are disabled to preserve the map scale.

Related topics

See "Saving maps," p. 40

See "Setting basic map printing options," p. 32

See "Setting advanced map printing options," p. 36

Saving maps

Save either a map file that you use in future Enerdeq sessions, or an image of your map that you can paste into third-party applications. Map images can be in either bitmap (bmp) or enhanced metafile (emf) format. You can also paste images into applications that support either bmp or emf format.

Save a file that defines your current map extents, map scale, selected layers, and customizations for use in a future session. When you open the map file, the latest data (subject to the above criteria you've set) is retrieved from the database.

Save queries you've attached to the map using the Map window by selecting the query in the Layer Legend, and then selecting File > Save Query.

Output maps in PDF or picture formats. For details, see *Related topics* below.

To save a map in Enerdeq format

1. From the **File** menu, click **Save**, or click **Save As** if you've modified a map that's already saved to disk and want to save it with a different name.

   If you have multiple Map windows open and click **Save**, only the map in the Map window that's currently in focus is saved.

2. Browse to the desired location, type a file name, and then click **OK**.

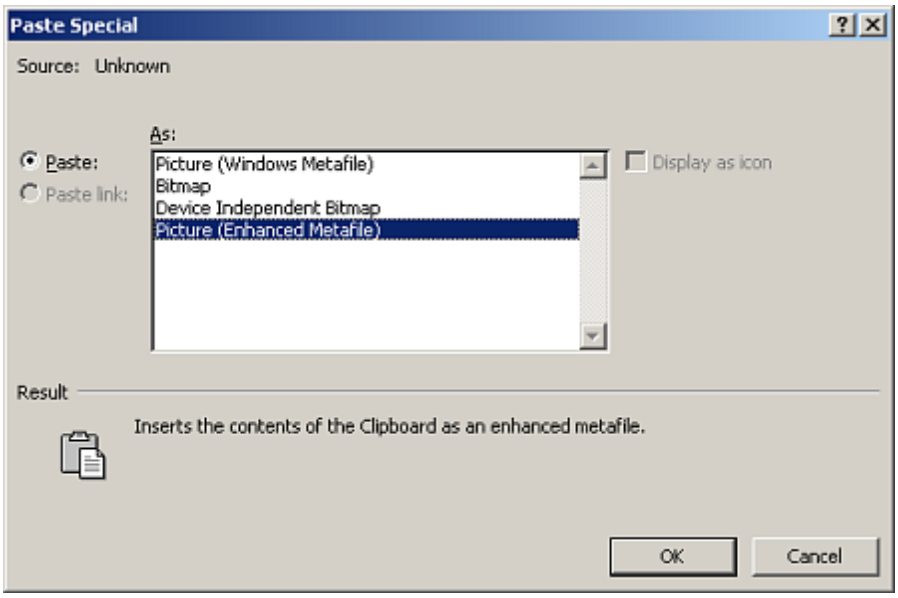
▶ To save the map in a format that you can import into third-party applications, from the Save as type drop-down list, select either **Bitmap** files or **EMF files**.

To paste a map in emf or bmp format

1. From the **Edit** menu, click **Copy Map Image**.

   The image is copied to your Windows clipboard.

2. Launch the desired third-party application and using that application's **Edit** menu, click **Paste Special**, and select either Bitmap or Enhanced Metafile format as depicted, and then click **OK**.



Related topics

See "Opening maps," p. 18	*See "Setting advanced map printing options," p. 36*
See "Setting basic map printing options," p. 32	*See "Printing maps," p. 39*

Annotating maps

Adding annotations to maps

Use the Map menu to add points, lines, text, polygons, and more to the map.

To draw points

1. From the **Map** menu, point to **Annotation**, and then click **Point Annotation Tool**.

   The mouse pointer changes to a pencil.

2. Click one or more locations on the map at which to draw points.
3. Click **Annotation** again, or click another toolbar button to end annotation mode.

To draw lines

1. From the **Map** menu, point to **Annotation**, and then click **Line Annotation Tool**.

   The mouse pointer changes to a pencil.

2. Click the end point of the line on the map and move the mouse pointer to draw a line segment. Then click to add a vertex and begin a new line segment.

   The length of the current line segment and the total length of the line appear in a ToolTip near the mouse pointer as you click.

3. Double-click to complete the line.

TIP: Use the Line annotation tool to measure the distance between two points. The length of the line appears in kilometers by default. Click **Tools** > **Change Unit System** to toggle between Metric and Imperial units for the current map.

To add text

1. From the **Map** menu, point to **Annotation**, and then click **TextAnnotation Tool**.

   The mouse pointer changes to a pencil.

2. Click the point on the map at which the text should begin.
3. Type the text, and then press **Enter**, or press **ESC** to select a different location at which to place the text.

To draw rectangles

1. From the **Map** menu, point to **Annotation**, and then click **RectangleAnnotation Tool**.

The mouse pointer changes to crosshairs +.

2. Drag to draw a rectangle on the map.

   The area and perimeter of the rectangle appear in a ToolTip near the mouse pointer as you drag.

TIP: The area and perimeter display in kilometers by default. Click **Tools** > **Change Unit System** to toggle between Metric and Imperial units for the current map.

To draw polygons

1. From the **Map** menu, point to **Annotation**, and then click **PolygonAnnotation Tool**.

   The mouse pointer changes to a pencil.

2. Click the vertices of the polygon.

   The perimeter, segment length, and closing segment length of the polygon appear in a ToolTip near the mouse pointer as you click.

3. Double-click to complete the polygon.

TIP: The perimeter, segment length, and closing segment length display in kilometers by default. Click **Tools** > **Change Unit System** to toggle between Metric and Imperial units for the current map.

To draw ellipses

1. From the **Map** menu, point to **Annotation**, and then click **Ellipse Annotation Tool**.

   The mouse pointer changes to crosshairs +.

2. Drag to draw an ellipse on the map.

   As you drag, the area appears in a ToolTip near the mouse pointer, and a bounding rectangle for the ellipse also appears.

To draw circles

1. From the **Map** menu, point to **CircleAnnotation Tool**.

   The mouse pointer changes to a pencil.

2. Drag to draw a circle on the map.

   The radius, area, and perimeter of the circle appear in a ToolTip near the mouse pointer as you click.

TIP: The radius, area, and perimeter display in kilometers by default. Click **Tools** > **Change Unit System** to toggle between Metric and Imperial units for the current map.

Related topics

See "Resizing map annotations," p. 53	*See "Changing map annotations," p. 48*
See "Editing vertices of annotation polygons," p. 55	*See "Moving or copying map annotations," p. 51*
See "Deleting map annotations," p. 56	*See "Labeling items on maps," p. 44*

Labeling items on maps

Add labels to all map items on a layer using the Label dialog box, or add them to individual items that you click using the Annotation > Label Entities option. Like other annotations, with the Select option enabled in the Annotation toolbar item, labels for entities can be dragged and deleted, and type settings can be changed. To create different types of labels for different entities, change the label posting options in the Label dialog box before clicking each item.

Using the Label dialog box, select the font style and color of the labels, the scales at which they appear, and their placement position. If you select scaled labels, the size of the label changes as you zoom the map.

When you use the Annotation > Label Entities option, the annotation options applied are those configured using the Label dialog box. If no settings are applied for a type of map item, or if that item is not set to Inspect the Label Entity option can't be used.

Labels can be applied to both system and query layers. Labels are saved and printed along with your map.

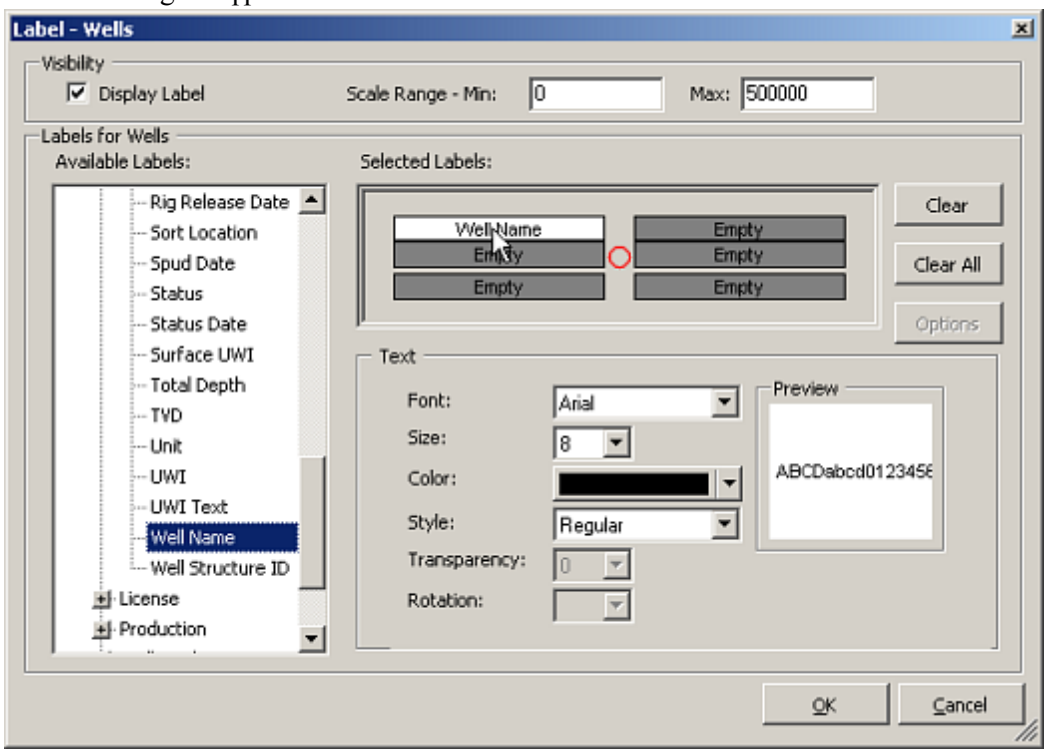
To create labels

1. Click to select the layer name in the Layer Legend.

   When you select a layer for which you can change the label, the label tool in the Layer Legend toolbar switches from inactive ( ) to active ( ).

2. From the **Layers** menu, click **Label** .

The *Label* dialog box appears.



3. Click a label position in the Selected Labels pane at which to position an attribute label and then click an attribute in the Available Labels pane to the left.
4. Repeat the above step to add multiple labels at different positions for an item.
5. Using the Text pane, select text properties (font, size, color, style) and a scale range at which labels should appear, and then click **OK**.

NOTE: Labels for polygon layers appear inside the polygons on the map. Labels that are too large to fit inside a polygon won't appear unless you either zoom in or reduce the font size of the label.

To apply labels in Annotation mode

1. With the desired annotation options selected using the previous procedure, from the **Annotation** menu select **Label Entity** ( ).
   OR
   From the **Map** menu, click **Annotation**, and the **Label Entity** ( ).

   The cursor appears as follows:
2. Click the map item at the point at which to anchor the label.

NOTE: The Label Entity option only works for layers set to Inspect .

The label appears at the location clicked.

Formatting and content for the label information is based on the settings defined in the *Label* dialog box. The label size scales along with the map so that it remains visible as you zoom in and out.

For map items with multiple labels, for example well heads where you post multiple labels around the well symbol, multiple labels can be applied. The data appears in a single label with information from different labels appearing on separate lines. Where different fonts are selected for different labels, the font selected in the last label you post is applied to all of the labels.

NOTE: Information in the annotation label isn't connected to the underlying relational database from which it's originally drawn, so data won't remain synchronized with the underlying relational data when you update your data or if you switch the current measurement system between Imperial and metric.

- To delete an annotation, select it and then press DELETE.
- To change the formatting or to add text to a label entity, right-click the label entity and from the shortcut menu, click Properties.

Related topics

See "Making layers visible," p. 15
See "Adding annotations to maps," p. 42
See "Attaching queries to maps," p. 63

Displaying symbols on maps

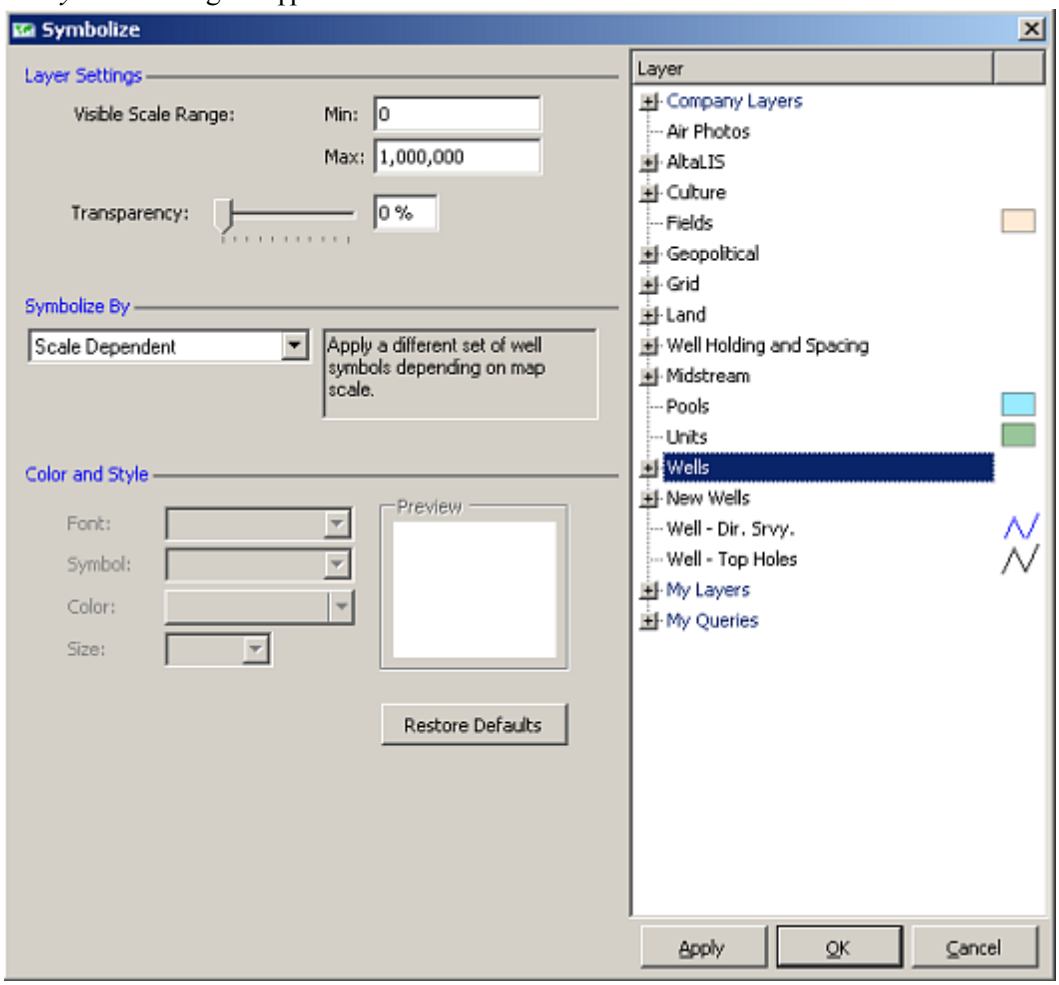
Change layer and symbol display properties for spatial map layers. The type of criteria you can change depend on the attributes in the map layer you select.Different visibility cutoffs can be set for symbols than for labels. For details on labeling layers, see *Related topics* below.

Configure unique symbology for queries you add to the map to differentiate the items in that layer from the surrounding standard map items.

To display symbols on the map

1. Using the Map window, click to select the layer to symbolize in the Layer Legend.
2. From the **Layers** menu, click **Symbolize**  .

The *Symbolize* dialog box appears.



3. In the Layer pane, select the layer for which to configure display properties.
4. Select the display properties based on the following:
   - **Layer Settings** - type the range for the map scale at which the layer symbology should appear, and then drag the Transparency slider to set the opacity of the symbology. You can watch the transparency change in the Layer pane in the right portion of the Symbolize dialog box while you move the transparency slider.
   - **Symbolize By** - the attributes by which to render symbology depend on the layer selected. For example, facilities can be symbolized by type, pipelines by substance, land by interest holder, and more.
   - **Color and Style** - the formatting options vary depending on whether the symbology you're changing is a point, line, or polygon.
5. Either click **Apply** to save the changes you made above and then continue to change the symbology for other layers, or click **OK** to save the changes and automatically close the *Symbolize* dialog box.

TIP: Using the Layer Legend, select a layer and then click **Label** to display the *Label* dialog box and change attribute label details.

The spatial layer configuration you create is saved along with the map.

Related topics

See "Labeling items on maps," p. 44
See "Adding annotations to maps," p. 42
See "Attaching queries to maps," p. 63

Changing map annotations

Use the Annotation toolbar and the shortcut menu to change the line styles and thickness, fills, symbols, and more that define how an annotation looks.

When the Select Annotation Tool is active, use the shortcut menu to send an annotation in front of or behind other annotations.

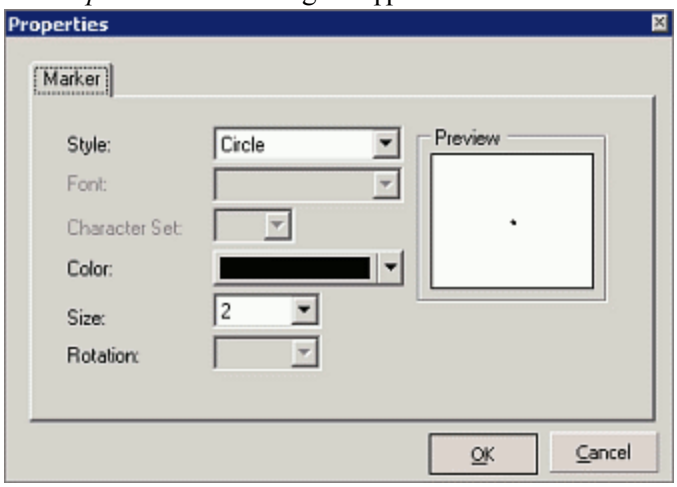
To change the properties of a point

1. From the **Map** menu, point to **Annotation**, and then click **Select**.
2. Click the point to change.

   The point is highlighted on the map.

   CTRL+CLICK to select multiple points.
3. Right-click the map and from the shortcut menu, click **Properties**.

   The *Properties: Marker* dialog box appears.



4. Select the display properties, and then click **OK**.

To change the properties of a line

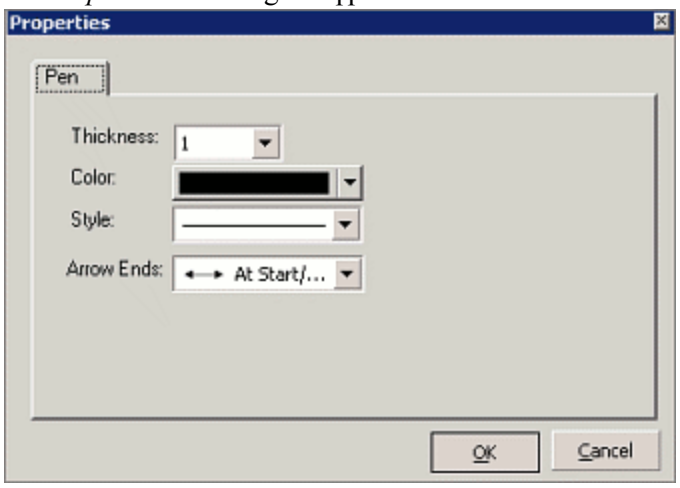
1. From the **Map** menu, point to **Annotation**, and then click **Select**.
2. Click the line to change.

   The line is highlighted on the map.

▶ **CTRL+CLICK** to select multiple lines.

3. Right-click the map and from the shortcut menu, click **Properties**.

   The *Properties: Pen* dialog box appears.



4. Select the display properties, and then click **OK**.

To change the properties of a rectangle, circle, polygon, or ellipse

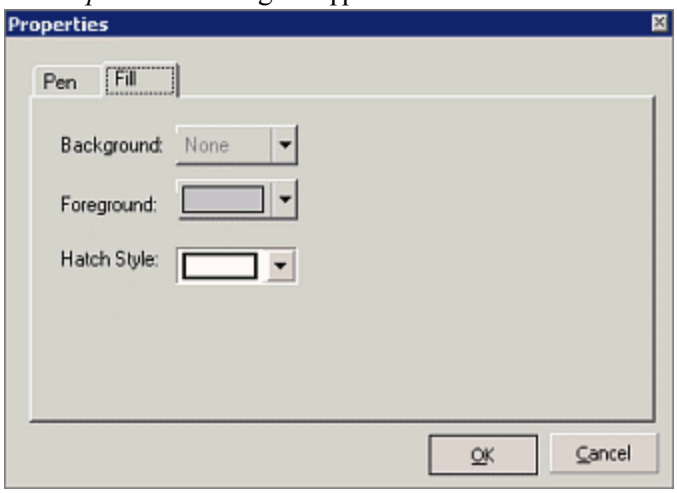
1. From the **Map** menu, point to **Annotation**, and then click **Select**.
2. Click the annotation to change.

   The annotation is highlighted on the map.

▶ **CTRL+CLICK** to select multiple annotations.

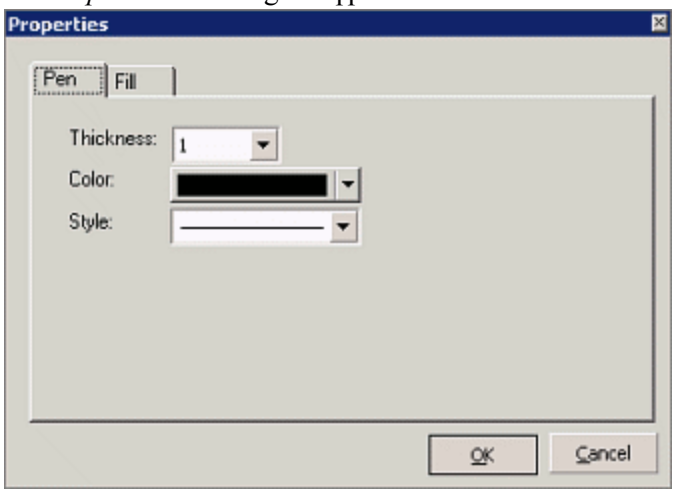
3. Right-click the map and from the shortcut menu, click **Properties**.

The *Properties: Fill* dialog box appears.



4. Select the fill properties.
5. Click the *Pen* tab.

The *Properties: Pen* dialog box appears.



6. Select the pen properties, and then click **OK**.

NOTE: The *Properties* dialog box for circles also contains a Dimensions tab with which to change the size or location of the circle by entering a radius or the coordinates for the center point.

To change the properties of text

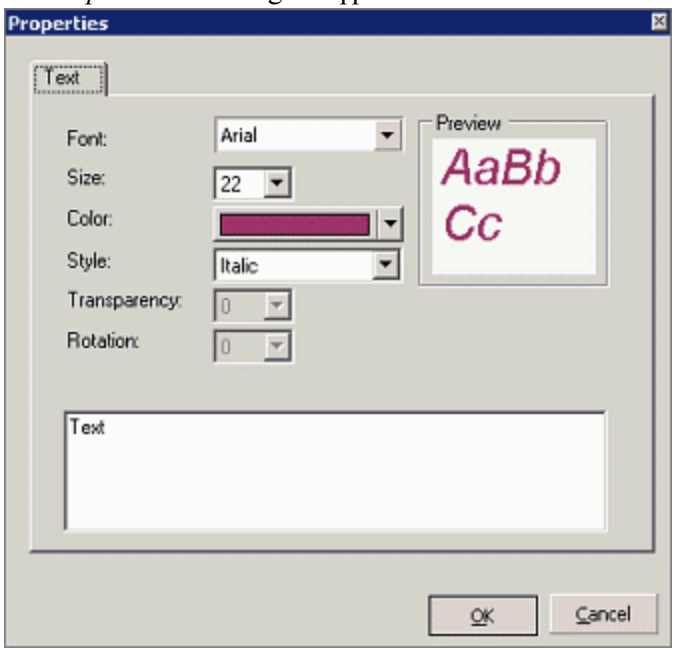
1. From the **Map** menu, point to **Annotation**, and then click **Select**.
2. Click the text to change.

The text is highlighted on the map.

▶ **CTRL+CLICK** to select multiple text annotations.

3. Right-click the map and from the shortcut menu, click **Properties**.

   The *Properties: Text* dialog box appears.



4. Select the text properties, and then click **OK**.

NOTE: Change the text that appears on the map by typing in the text box that appears in the lower portion of the *Properties: Text* dialog box.

Related topics

See "Resizing map annotations," p. 53	*See "Editing vertices of annotation polygons," p. 55*
See "Moving or copying map annotations," p. 51	*See "Deleting map annotations," p. 56*

Moving or copying map annotations

Use the Annotation toolbar and the shortcut menu to move or copy annotation elements (points, lines, rectangles, circles, polygons, ellipses, and text) on maps. When the Select annotation tool is active (), use the shortcut menu to send an annotation in front of or behind other annotations.

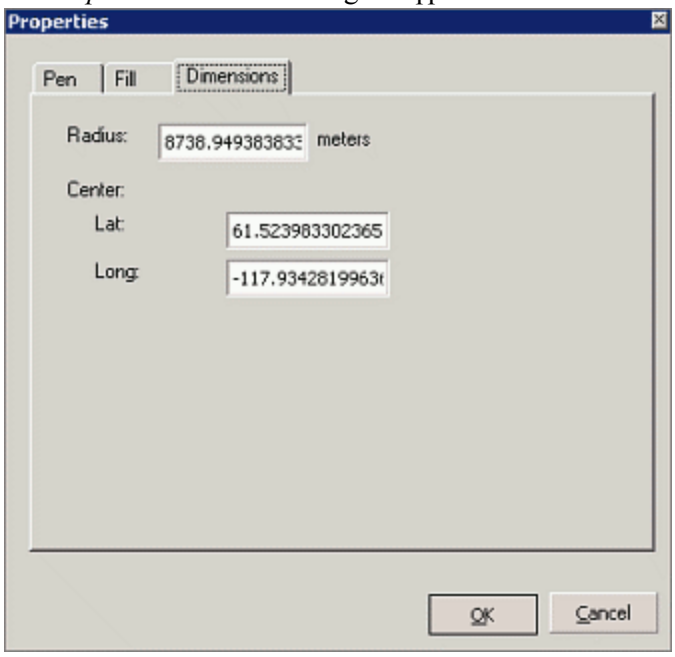
To drag annotation elements to a new location

1. From the **Map** menu, point to **Annotation**, and then click **Select** .
2. Click the annotation to move.
3. Drag the annotation to the new location.

To change the location of the center point of a circle

1. From the **Map** menu, point to **Annotation**, and then click **Select**.
2. Click the circle to move.
3. Right-click the map and from the shortcut menu, click **Properties**.

   The *Properties: Dimensions* dialog box appears.



4. Click the *Dimensions* tab.
5. Type a new location for the center point of the circle, and then click **OK**.

To copy annotations

1. From the **Map** menu, point to **Annotation**, and then click **Select**.
2. Click the annotation to copy.
3. Right-click the map and from the shortcut menu, click **Copy**.
4. Right-click the map and from the shortcut menu, click **Paste**.

   The annotation is pasted in the center of the visible map.

To copy or cut and paste annotations to a new map

1. From the **Map** menu, point to **Annotation**, and then click **Select**.

2. Click the annotation to cut or copy.
3. Right-click the map, and from the shortcut menu, click **Copy**
   OR
   Click **Cut** to alter the original annotation instead of a copy of it.
4. Open a new or saved map in which to paste the annotation.
5. Right-click the map and from the shortcut menu, click **Paste** to insert the annotation in the center of the visible map
   OR
   Click **Paste to Original Location** to insert the annotation at the same lat long position as on the original map.

NOTE: When pasting multiple annotations at once, if you click **Paste to Original Location**, the pasted annotations retain their original spatial relationship. If you click **Paste**, the annotations are all pasted in a stack in the center of the Map window.

Related topics

See "Resizing map annotations," p. 53	*See "Changing map annotations," p. 48*
See "Editing vertices of annotation polygons," p. 55	*See "Deleting map annotations," p. 56*

Resizing map annotations

The total length of lines, and the size of rectangles, circles, polygons and ellipses is related to map scale. The size of these elements on the screen changes as you zoom the map. Resize these elements relative to the map by dragging a vertex. Circles can be resized by typing a radius length in the Properties dialog box.

The size of points and text remains constant as you zoom the map in or out. You can change the size of these elements by editing their properties.

When the Select annotation tool is active , use the shortcut menu to send an annotation in front of or behind other annotations.

To change the total length of a line

1. From the **Map** menu, point to **Annotation**, and then click **Select** .
2. Click the line to change.
3. Drag a vertex of the bounding rectangle to change the total length of the line.

To resize a rectangle

1. From the **Map** menu, point to **Annotation**, and then click **Select** .
2. Click the rectangle to change.

3. Drag a vertex of the rectangle to the new size.

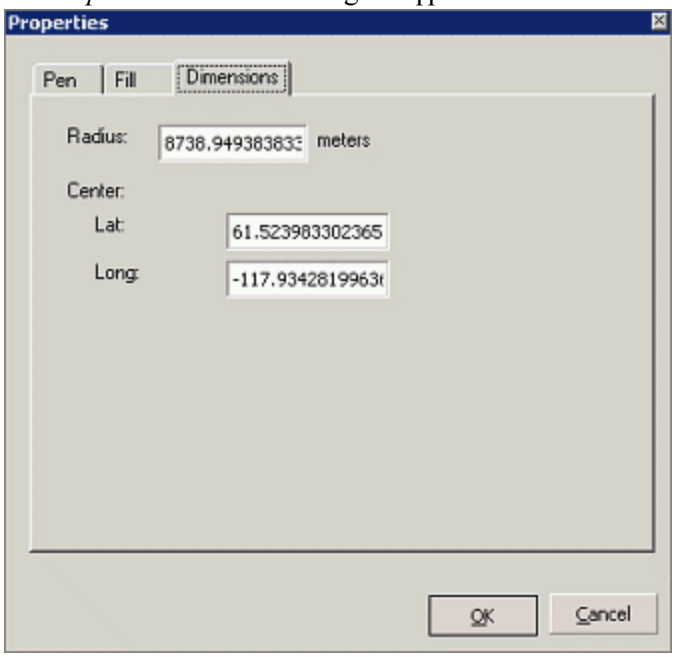
To resize a circle, ellipse, or polygon

1. From the **Map** menu, point to **Annotation**, and then click **Select**.
2. Click the circle, ellipse, or polygon to change.
3. Drag a vertex of the bounding rectangle to the new size.

To resize a circle by typing a radius length

1. From the **Map** menu, point to **Annotation**, and then click **Select**.
2. Click the circle to resize.
3. Right-click the circle and from the shortcut menu, click **Properties**.

   The *Properties: Dimensions* dialog box appears.



4. Click the *Dimensions* tab.
5. Type a new radius to resize the circle, and then click **OK**.

To resize points or text

1. From the **Map** menu, point to **Annotation**, and then click **Select**.
2. Click the point or text to resize.

CTRL+CLICK to select multiple points or text.

3. Right-click the map and from the shortcut menu, click **Properties**.

   The *Properties* dialog box appears.

4. Specify a different size in the Size box, and then click **OK**.

Related topics

See "Changing map annotations," p. 48	*See "Editing vertices of annotation polygons," p. 55*
See "Moving or copying map annotations," p. 51	*See "Deleting map annotations," p. 56*

Editing vertices of annotation polygons

Use the Annotation toolbar and the shortcut menu to edit vertices of polygons drawn on the map. The procedures below apply to annotation polygons, which are different than selection polygons (, ,). When the Select annotation tool is active, use the shortcut menu to send an annotation in front of or behind other annotations.

To move vertices of a polygon

1. From the **Map** menu, point to **Annotation**, and then click **Select**.
2. Click the polygon to change.
3. From the **Map** menu, point to **Annotation**, and then click **Edit Vertices**.

   When you hover the mouse pointer over a vertex, the pointer changes to a directional arrow.
4. Drag the vertex to a new location.

To add vertices to a polygon

1. From the **Map** menu, point to **Annotation**, and then click **Select**.
2. Click the polygon to change.
3. From the **Map** menu, point to **Annotation**, and then click **Edit Vertices**.

   When you hover the mouse pointer over a line segment of the polygon, the pointer changes to a pencil.
4. Right-click the location along the line segment at which to add a vertex, and from the shortcut menu, click **Add Vertex**, which you can then drag using the previous procedure.

To delete vertices from a polygon

1. From the **Map** menu, point to **Annotation**, and then click **Select**.
2. Click the polygon to change.

3. On the Annotation toolbar, click the **Edit Vertices** button.

   When you hover the mouse pointer over a vertex, the pointer changes to a black arrow ↑.

4. Right-click the vertex to delete and from the shortcut menu, click **Delete Vertex**.

Related topics

See "Deleting map annotations," p. 56	*See "Moving or copying map annotations," p. 51*
See "Resizing map annotations," p. 53	*See "Changing map annotations," p. 48*

Deleting map annotations

Delete one or more annotations that appear on the map.

To delete map annotations

1. From the **Map** menu, point to **Annotation**, and then click **Select**.
2. Click the annotation to delete.

▶ **CTRL+CLICK** to select multiple annotations.

3. Right-click the map and from the shortcut menu, click **Delete**.

Related topics

See "Resizing map annotations," p. 53	*See "Changing map annotations," p. 48*
See "Editing vertices of annotation polygons," p. 55	*See "Moving or copying map annotations," p. 51*

Querying

About Query Editor

Like the Map window, Query Editor is your starting point when working in an area. Query Editor enables you to select data types (field, gas plant, pipeline, well, etc.), and then query attributes for those data types.

Multiple data types can be queried with a single query and all the results displayed in one Map window or Output Window.

Query results can be saved as a file that contains both the query criteria and the IDs of matching items, or displayed in an Output window or Map window.

After reviewing or modifying the results in a Map or Output window, you can push them back into Query Editor to add additional attributes and criteria with which to query.

Query results saved to disk can be opened in Query Editor or in any Output window, but can't be opened in the Map window, which requires additional information that Query Editor doesn't save.

Building queries

Query Editor can be launched from numerous windows in Enerdeq by pressing .

When you launch Query Editor from another window, it's populated with the data type and individual data items selected in that window. For example, if you launch Query Editor from a Browse window in which you've selected several wells, the identifiers for those wells appear in the Query Editor Current Criteria pane, and the matching data type and attributes are selected in the Query Data Type and in the Well Attributes panes.

You can add additional data types and attributes to this query to further refine your search.

To build a query

1. Depending on the location from which to launch Query Editor, do one of the following:
   - Main Application toolbar, from the **File** menu point to **New**, and then click **Query** .

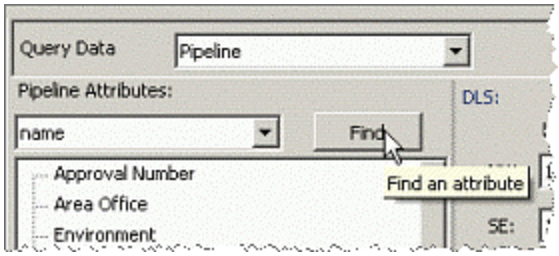
- Map window, with the data to query either visible or selected (either by clicking or using a polygon), from the **Tools** menu, click **Query**.
- Output window (Browse, DataCard, Graph, Export, Log viewer, or DST viewer), select the data groups and specific data items in Results Navigator to add to the query, and then from the **Tools** menu, click **Query**.
- If you're already using Query Editor and want to open a second instance, select the data groups and specific attributes in the Results pane to add to the new query, and then from the **File** menu, click **New**.

2. In the Query Data drop-down list, select the type of data to query (field, gas plant, pipeline, well, etc).

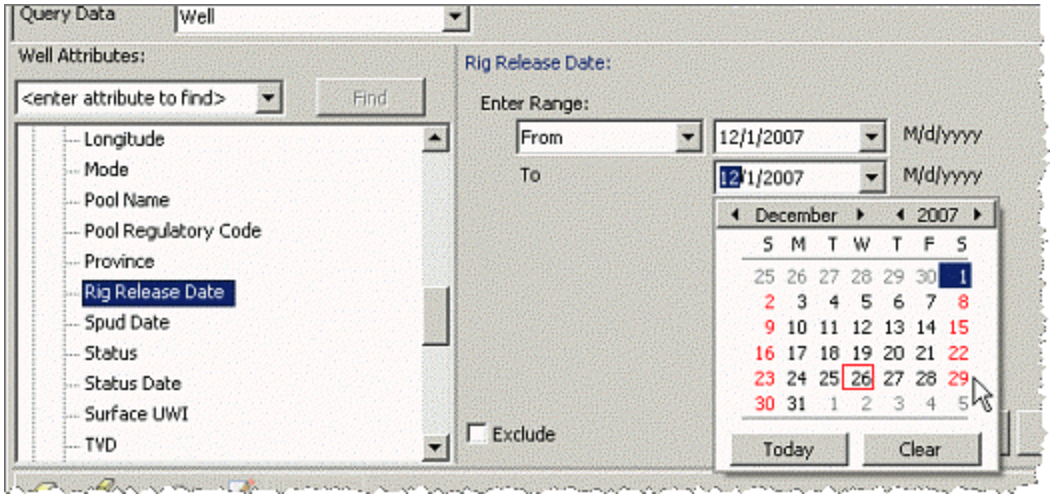
TIP: You can build a single query that searches multiple data types by defining attributes for each data type one at a time.

The attribute list on the left side of the Query Editor window updates based on the data type selected above.

3. To locate attributes to add to your query, either double-click the parent name, click ⊞↓, or type the desired attribute name in the Find box, and then either click **Find** or press **ENTER**. Click **Find** or press **ENTER** repeatedly to scroll through similar attribute names.



The features in the criteria selector pane right of the attribute selector list update to correspond to the attribute selected above. For example, if you select an attribute that uses a date field, date selection controls appear in the criteria selector pane as depicted in the below graphic.



4. Type or select the desired criteria, and then click **Add** to attach your criteria selection to the current query with an "And" logical operator.

For certain data types, from the drop-down list on the Add button, click either **Add to Selected** to display the *Add criteria to chosen queries* dialog box where you select the attributes to which to add the criteria, or select **Add to All**, which automatically adds the criteria to all applicable data types.

If you're replacing a query expression by double-clicking it in the query expression pane, **Apply** appears instead of **Add** and when you click it, the modified criteria replace the original criteria. If you're changing the variables in a query expression by selecting it and then typing different variables in the pane above the query expression pane, **Append** appears and when you click it the new variables are added to the existing expression with an OR operator.

TIP: Depending on the attribute selected above, you may be able to type either "?" as a single-character wildcard or "*" as a multiple-character wildcard. When an attribute supports wildcards, instructions for using them appear in the Criteria Selector pane. Click *wildcard examples* for basic query examples. Some attributes that don't accept wildcards provide "Starts with" and "Contains" options instead. If your search string is "ABC", "Starts with" is equal to "ABC*" while "Contains" is equal to "*ABC*," where * is one or more alphanumeric characters.

- To add additional criteria with an "And" logical operator so that your query returns only results that match both statements, repeat steps **3** and **4** above.
- To add additional criteria with an "Or" logical operator so that your query returns any results that match either statement, select an existing criteria string in the Current Criteria pane, type different criteria in the Criteria Selector pane, and then click **Append**.
- To change the current criteria, select the statement in the Current Criteria pane and click **Edit**. Type your changes in the Criteria Selector pane, and then click **Apply**.
- To remove a statement from the Current Criteria pane, select it and then click **Clear**.

5. Click **Get Count** to determine the number of items each data type you've selected in the Results pane will retrieve (**CTRL+CLICK** or **SHIFT+CLICK** for multiple selection).

   This enables you to quickly determine the volume of results and modify your query string before actually running it.

6. Either display the query results in a Map or Output window, or save them as a single file. For details, see *Related Topics* below.

Related topics

See "Viewing query results," p. 60	*See "Saving queries to disk," p. 61*

Viewing query results

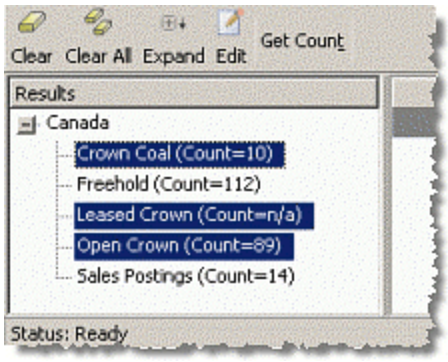
Query results are displayed in the Map window or in an Output window. When you select either the Map window or an Output window, your query is run and the results are automatically pushed into the Map window or Output window you selected.

You can pass results between different Map, Query Editor, and Output windows modifying them as you go. For example, you might query wells producing from a specific field, view those results in a Browse window to sort and then select certain wells of interest, and then push only those wells back into Query Editor to add additional query criteria. You could then push this information into a DataCard or the Map window for detailed viewing.

To view query results

TIP: Before viewing the actual data from your query, click the **Get Count** button to see how many hits the query will return and modify your query based on the volume of hits.

1. In the Query Editor Results pane, **SHIFT+CLICK** or **CTRL+CLICK** the attributes for which to output query results.



2. Click any of the following or select them from the **Tools** menu to display the query results:

Browse	In a spreadsheet view that enables you to sift through large volumes of data by grouping, filtering, and sorting.
DataCard	One at a time with detailed information. To compare numerous items or to establish hierarchies, select the **Browse** option above instead.
Graph	Individually or collectively plotted using pre-defined or custom templates to display trends.
Export	Exported to popular third-party applications.
Add to Map	On a separate map layer of spatial items on a current, new, or saved map. Each time you attach selected items to a map, they appear on a separate map layer. If you want to refresh one of the layers you've already attached, click **Update Map** below instead.

Update Map	On a map layer of results you've already attached using the **Add to Map** option above. To attach a new map layer of results instead of changing an existing one, click **Add to Map** option above instead.
Add to View	Add the contents of the current window alongside data in another output window. For example, a DataCard or a Browse window.
Logs	Individually showing raster log images that include formation tops, cores, completions, and tests.
DSTs	Individually showing scanned drill stem tests.
Well Docs	Individually showing scanned well document files.

Enerdeq queries the data types for attributes that match the query criteria you defined above and displays matching results in the Output window or the Map window you select.

Each time you display your query results in an Output window, but not the Map window, a new window appears displaying your results instead of overwriting the results in an existing window. Progressively alter the query criteria and compare the results in different windows alongside each other.

Related topics

See "Building queries," p. 57	*See "Opening saved queries," p. 62*

Saving queries to disk

When you save a query to disk from Query Editor or from an Output window, both the query criteria and the IDs of matching results are saved in a single file. When you open that query in Query Editor or an Output window, Enerdeq polls the current database using the saved query criteria, so you're always working with the latest information. If you want to use historic data instead of rerunning the query, using Query Editor attach the saved query file as a list instead. For details, see *Related topics* below.

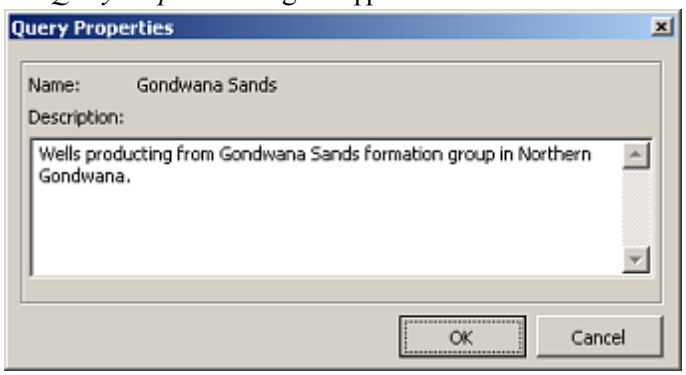
Type a query description to provide more detail than a file name allows, and then view this description to refresh your memory the next time you open the query using Query Editor.

Save queries to disk in other formats including Excel, ESRI Shapefile, PETRA, PEEP, Value Navigator, and more using the Export window. For details, see *Related topics* below.

To type a query description

1. Using Query Editor, from the **File** menu, click **Properties**.

The *Query Properties* dialog box appears.



2. Click to place your cursor in the Description pane, type details that distinguish this query from others, and then click **OK**.

TIP: The dialog box in which you type descriptions also enables you to press **CTRL+C** to copy highlighted text or **CTRL+V** to paste it.

To save queries to disk

1. From the **File** menu, click **Save**, or click **SaveAs** if you've modified a query that's already saved to disk and want to save it with a different name.

   If you have multiple Query Editors open and click Save, only the criteria and results for the Query Editor that's currently in focus are saved.

2. Browse to the desired location, type a file name, and then click **OK**.

Related topics

See "Opening saved queries," p. 62
See "Querying using a list," p. 66
See "About Exports," p. 109

Opening saved queries

Open query files saved to disk using either Query Editor or an Output window.

For query files opened in Query Editor, aside from making it easier to re-run periodic queries without rebuilding them and being able to share query files with other Enerdeq users, you can tweak queries by adding data types and attributes as your knowledge of an area and its underlying data evolves. You can also build generic queries that you use as templates.

To ensure you're working with the latest information, Enerdeq polls the database by applying the query criteria to the IDs of data items saved in the query file each time you open the saved query file. If you want to use historic data instead of rerunning the query, using Query Editor, attach a saved query file as a list. For details, see *Related topics* below.

To open saved queries

1. Using Query Editor or an Output window, from the **File** menu, click **Open**.
   If you're opening a query file from the IHS Enerdeq Desktop toolbar, from the **File** menu, point to **Open**, and then click **Query Editor**, or an Output window.
2. Browse to and select the desired query file, and then click **Open**.

   The query criteria poll the Enerdeq database and, if launching the file in an Output window, the latest data appear. If launching the file in Query Editor, the query criteria appear in the Current Criteria pane and the applicable data type and attribute are selected.

TIP: If you typed a detailed query description when saving the query, you can review it to refresh your memory by clicking **File** and then **Properties**.

Related topics

See "Building queries," p. 57
See "Saving queries to disk," p. 61
See "Querying using a list," p. 66

Attaching queries to maps

Attach the results of a query to a new, currently open, or saved map as a separate map layer and then work with the query items in the Map window and the same map functionality available to other map layers. Although default symbology, scaling, and labeling already configured for standard map layers is applied to query layers attached to the map, you can change these settings for the attached query layer to differentiate it from the standard layers.

Clear visibility for the parent layer upon which the query is based to inspect on only the returned query items.

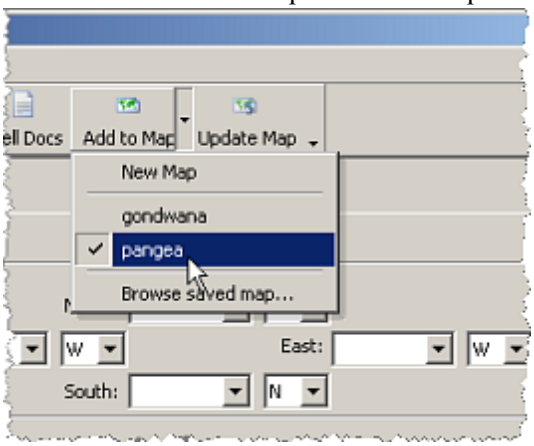
Save queries you've attached to the map using the Map window by selecting the query in the Layer Legend, and then selecting File > Save Query.

Items selected on the map can be saved directly as a unique map layer without having to pass them out to Query Editor or another Output window first. See *Related topics* below.

To attach queries to maps

1. After building your query, in the Results pane, select one or more results to attach to the map as a layer (**CTRL+CLICK** or **SHIFT+CLICK** for multiple selection).
2. Using Query Editor, in the IHS Enerdeq Desktop toolbar, click the arrow beside **Add to Map**, and from the drop-down list, click either **New Map**, a currently open map, or **Browse Saved Map**.

▶ If you've already attached a query layer to a map that's still open, you can update the previously attached layer with the latest query results by clicking **Update Map** instead. If you have multiple maps currently open to which query layers are attached, the map that appears in the Add to Map drop-down list with a checkmark is the one that's updated. You can click a different map name in that drop-down list to make it the active map.



The attached query layer appears in the Layer Legend of the Map window under the *My Queries* node and using the Map window, you can set unique inspect criteria and display properties for each query layer regardless of the inspect criteria set for the query's parent layer. For details, see *Changing map symbols* and *Labeling Items on maps* in the *Related topics* section below.

3. Click to enable Inspect mode, and then view inspection details on the Inspect bar (see *Related topics* below).

Related topics

See "Displaying symbols on maps," p. 46
See "Creating map layers of selected items," p. 23
See "Making layers inspectable," p. 16

Query examples

Querying locations

- Specify the northwest and southeast coordinates of a rectangle within which to query.
- Type a full or partial UWI.

- Import a list of UWIs either from the Map window, or from a map or query saved to disk. For details, see *Related topics* below.

To query a survey rectangle or map polygon

1. In the Query Data drop-down list, click the desired data type and in the Attribute Selector list, expand **Grid/Location**, and then click the desired survey system.

   The Criteria Selector pane displays the controls to query by locationor by UWI.

2. Depending on the survey system with which you're querying, do one of the following:
   - **DLS** or **NTS**, type coordinates for the northwest and southeast corners. To restrict your query to one section, township, or range, type the same values for both the northwest and the southeast coordinates.
   - **Lat/Lng**, either type lat/lng coordinates, or in the Map Extents area, specify whether to use coordinates from a map that's currently open or saved to disk and then further specify whether to query within that map's extents or a polygon drawn on it.
3. Click **Add**, **Add to Selected**, or **Add to All** to copy the criteria you specified above to the Current Criteria pane. Click for details about the various *Add* commands.

To query using a partial UWI

1. In the Query Data Type drop-down list, click **Well** and in the Attribute Selector list, expand **Header**, and then click **UWI**.

   The Criteria Selector pane displays a text box in which you type the full or partial UWI.

2. Type the UWI without spaces, hyphens, or slashes referring to the following *UWI reference*.

   TIP: Type either "?" for a single-character wildcard or "*" for a multiple-character wildcard. When a data attribute supports wildcards, instructions for using them appear in the Criteria Selector pane. Click *wildcard examples* for basic query examples.

3. Click **Add** to copy the criteria you specified above to the Current Criteria pane.

Related topics

See "Building queries," p. 57

See "Querying using a list," p. 66

Querying Lookups

Lookups are lists of names and industry codes for common or regulated industry information that you browse and then add to your current query criteria. Lookups ensure your query searches for data that's actually in the database.

Following are only some of the data attributes that support Lookups: names and age codes of formations; names and abbreviations of provinces and states; names and regulatory codes of fields, pools, operators.

For details on querying formations, see *Related topics* below.

To query using Lookups

1. In the Query Data drop-down list, click the desired data type and attributes as explained in the *Building queries* topic (see *Related topics* below).

   The Criteria Selector pane displays the controls to query by Lookup.

2. In the Criteria Selector pane, select whether results either start with or contain the alphanumeric characters you type.

▶ In the Lookup Selector Find By options, select whether to search names or codes.

3. In the box below the Search and Find By options but above the display pane, type either the name or code to which to scroll in the display pane.

TIP: In the display pane, **SHIFT+CLICK** the first and last entries of a continuous range, or **CTRL+CLICK** individual entries to select multiple entries to add to the current query criteria.

4. Using the Lookup results pane, double-click the Lookup item to add,
   OR
   Click **Add**, **Add to Selected**, or **Add to All** to copy the criteria you specified above to the Current Criteria pane. Click for details about the various *Add* commands.

Related topics

See "Building queries," p. 57
See "About Query Editor," p. 57
See "Querying formations," p. 67

Querying using a list

Import a list of data items (fields, gas plants, pipelines, wells, and more) from a Map window, a map or query file saved to disk, or a list of data items (such as a well list) saved in comma separated value (*.csv*), text (*.txt*), or Excel (*.xls*) format.

Querying using a list enables you to easily import a list of data items into a query, and if importing a list of data items from a saved query file, you can also preserve historic data saved in the list by choosing not to rerun the query.

To query using a list

1. In the Query Data drop-down list, click the desired data type and in the Attribute Selector list, click **Import XYZ**, where **XYZ** is the data type you selected above.

   The Criteria Selector pane displays the controls to import from a saved query or map that's either currently open or saved to disk, or to import from a list saved to disk.

2. In the Find By drop-down list, select whether to import data items from a map, query, or list and depending on your selection, complete one of the following:
   - **Map -** select a Map window that's currently open and then specify whether to query individually selected map objects, those within a polygon you've drawn on the map, or those within the map's extents
     OR
     Select a map that's saved to disk. If you want to reduce the data items in this list further, open the map in the Map window, and then select the desired map objects by either clicking them, by drawing a polygon around them, or by zooming in to reduce the map extents.
   - **Query -** select a query saved to disk and whether to re-run it against the Enerdeq database updating the data for items in the saved file,
     OR
     Just update the data for the data items saved in the file.
   - **List** (If using the Well data type) -click **Import IDs** and browse to and select a well list saved to disk in *.csv* , *.txt* , or.*xls* format. The UWIs can appear anywhere in the file in either DLS, NTS, or FPS format. Click*Readable UWI Formats*for examples.

   The Count box displays the number of items Enerdeq will import.

3. Click **Add** to copy the criteria you specified above to the Current Criteria pane.

Related topics

See "Building queries," p. 57
See "Querying locations," p. 64
See "Opening saved queries," p. 62

Querying formations

Define a stratigraphic zone of interest to query by using formation names, depths, or both. If you specify both formation names and depths, you can limit your zone of interest more than by using just one or the other.

By default, formation queries use age equivalence, which searches not only using the formation name but also the formation age code to account for regional naming variations.

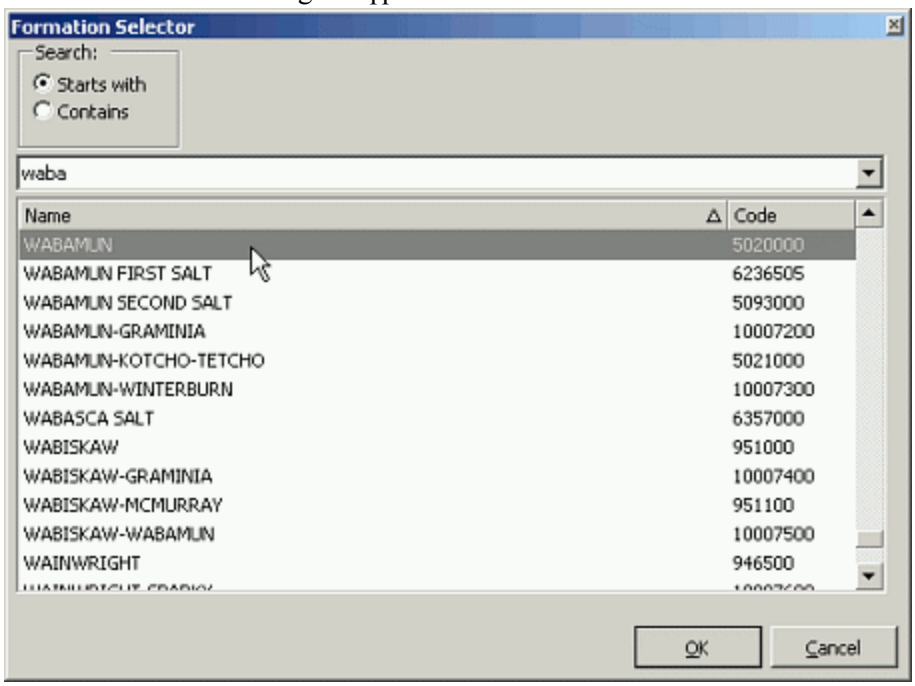
To query formations by name

1. In the Query Data drop-down list, click **Well** and in the Attribute Selector list, expand **Tops**, and then click **Formation**.

The Criteria Selector pane displays the controls to query by formation name. You select formation names from a Lookup list to ensure your query criteria includes a formation name that Enerdeq recognizes.

2. In the Criteria Selector pane, click **Choose** beside the Top Surface or Base Surface boxes.

   The *Formation Selector* dialog box appears.



3. Select whether results either start with or contain the letters or numbers you type.

   As you type, the list of formation names and codes scrolls to match what you type.

4. Select the desired formation, and then click **OK** to add it to your query criteria.

NOTE: If you specify only the top formation, your zone of interest is from the specified formation to the deepest formation. If you specify only the base formation, your zone of interest is from surface to the specified formation.

5. In the Criteria Selector pane, select either **Any Depth** or narrow your query so that only the above formation name when found at a specific depth, appears.

NOTE: If you specify only the greater than depth >=, your zone of interest is from that depth to any depth. If you specify only the less than depth <=, your zone of interest is from surface to that depth.

6. Click **Add** to copy the criteria you specified above to the Current Criteria pane.

Related topics

See "Building queries," p. 57
See "Querying locations," p. 64
See "Querying ranges," p. 68

Querying ranges

Specify the minimum and maximum values within which to query. The values you specify can be dates, depths, integers, real numbers, or formation names.

For details on querying formation ranges, see *Related topics* below.

To query a range

1. In the Query Data drop-down list, click the desired data type and attributes as explained in the *Building Queries* topic (see *Related topics* below).

   The Criteria Selector pane displays the controls to query by range.
2. Select **From** if you intend to specify both start and end values; otherwise, select **Equals** and specify just one value.
3. Click **Add** to copy the criteria you specified above to the Current Criteria pane.

Related topics

See "Building queries," p. 57
See "Querying Lookups," p. 65
See "Querying formations," p. 67

Querying cores and tests

Query whether wells have data for cores and downhole tests.

If querying pressure tests, you can further query based on confidence rating using the *Well Documents Pressure Tests* attribute and then click the Well Docs icon to view scanned well tests. For details, see *Related topics* below.

To query cores and tests

1. In the Query Data drop-down list, click **Well**, and in the Attribute Selector list, expand **Data Indicator**, and then click the cores or tests for which to search.

   NOTE: For pressure tests, you can instead select the well attribute *Well Documents Pressure Tests* to query using confidence rating, top and base depths, test dates, and test types.
2. In the Criteria Selector pane, click **Yes** or **No**.
3. Click **Add** to copy the criteria you specified above to the Current Criteria pane.

Related topics

See "Building queries," p. 57
See "Viewing well docs," p. 102

Querying proprietary PVR data

Query your proprietary Production Volume Reporting (PVR) data by UWI or production date if your System Administrator has configured this option using the IHS Admin Console application.

To display public data and your PVR data, add criteria alongside your PVR criteria to poll IHS data. For example, you can query your PVR database for the most recent production data and query the IHS database for production data over the entire life of a well. You can display the combined results in a single Output window or Map window.

To query proprietary PVR data

1. In the Query Data drop-down list, click **PVR Well**, and in the Attribute Selector list, click either **UWI** or expand **Production** and then click **Production Date**.

   Depending on the selection above, the Criteria Selector pane displays the controls to query either by UWI or by date range.

2. Do one of the following:
   - **To query by production date**, specify the From and To dates using the drop-down calendar. If you specify only one date instead of a range, your range either starts at the From date selected and ends at present, or starts at the earliest date in your PVR database and ends at the To date selected.

     To narrow your date to only one date, select the same date in both the From and To boxes.
   - **To query by UWI**, type the UWI without spaces, hyphens, or slashes .

   TIP: Type either "?" for a single-character wildcard or "*" for a multiple-character wildcard. When a data attribute supports wildcards, instructions for using them appear in the Criteria Selection pane.

3. Click **Add** to copy the criteria you specified above to the Current Criteria pane.

Related topics

See "Building queries," p. 57
See "Querying locations," p. 64
See "Querying ranges," p. 68

Querying data currency

Query the date on which data for a country (entitlement) was last refreshed. Query specific data types (E&P, Gas and Power, etc.) using the Date of Last Refresh query term, which typically appears in the Header data group. Further narrow your search by adding country criteria.

The Country Power data field can't be queried using the Date of Last Refresh Query term.

To query data currency

1. In the Query Data drop-down list, click the desired data type and in the Attribute Selector list, click **Header**, and then click **Date of Last Refresh**.

   The Criteria Selector pane displays the controls to specify either a single date or a date range.

2. Select either Equals or From in the left-most drop-down list depending on whether you want to query a specific date or a date range, and then select the desired date from the date drop-down list.
3. Click **Add** to copy the criteria you specified above to the Current Criteria pane.

Related topics

See "Building queries," p. 57	*See "Viewing data currency," p. 8*

Analyzing Map and Query data

About Data Navigator

Data Navigator is the left pane that appears by default in the left portion of Output windows, but you can dock it in various places in the Output window.

Data Navigator works the same for all windows: it enables you to browse through results, selecting which ones to display in the adjacent display pane or to export to other windows. You can export the selected results to either a new window, or append them at the bottom of results that appear in an existing Output window.

Specify the order in which items are sorted beneath data groups by pressing **CTRL** while clicking the desired top to bottom order in which to display them and then select an Output window in which to display them in your preferred order. This order is maintained as you move data groups and items amongst various Output windows. To sort all of the items that appear in the Data Navigator in simple alphanumeric order instead, click .

For Output windows, Data Navigator enables you to hide or delete specific data items from the display pane.

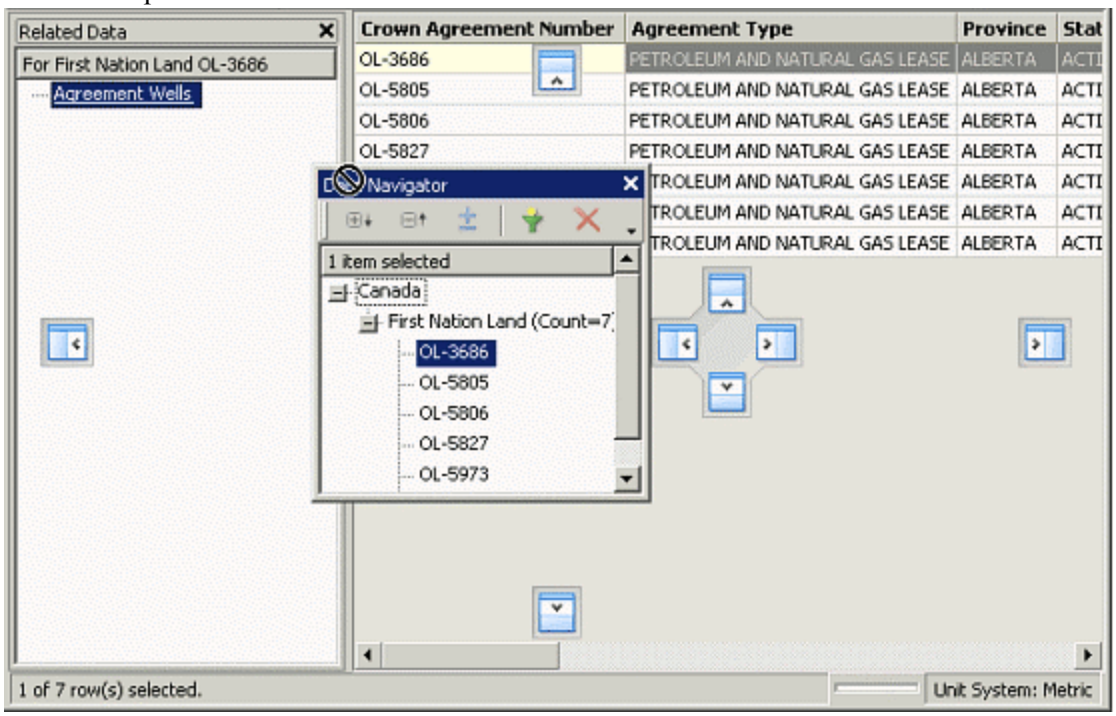
Docking the Data Navigator pane

Dock the Data Navigator pane at the top, bottom, or sides of an Output window.

To dock the Data Navigator pane

1. Using the Data Navigator title bar, drag the Data Navigator pane into the main display pane.

Placement controls  appear along all four sides inside of the Output window and also in the center of the Output window as depicted below.



2. Drag the Data Navigator pane over a placement control to dock it in the area of the Output window indicated.

   The quadrant of the Output window in which the Data Navigator pane will be docked is highlighted.

3. Release the mouse button to place the Data Navigator pane.

Related topics

See "Positioning the Layer Legend," p. 17

Grouping and sorting in data panes

Sort any column by ascending or descending values or letters. Beyond sorting an individual column, you can also sort multiple hierarchical columns so that the first column establishes the grouping criteria for the entire display pane, the second establishes a sub-group within the first group, and so on. For example, you could first group all rows by field name, then group each well that shares the same field by producing zone, and then group all wells that share the same producing zone by status.

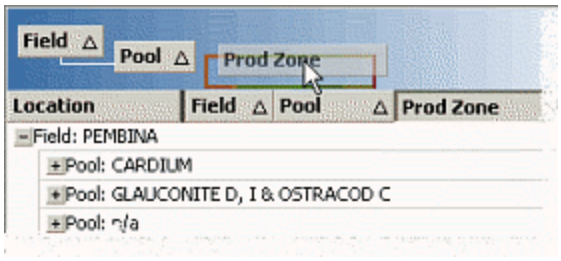
To sort items by a column

- Click the column header to toggle between ascending and descending order. The triangle in the column header displays the current sort order (from largest/most recent to smallest/least recent ▽, or from smallest/least recent to largest/most recent △).

TIP: To sort by more than one column, hold the SHIFT key while clicking column headers.

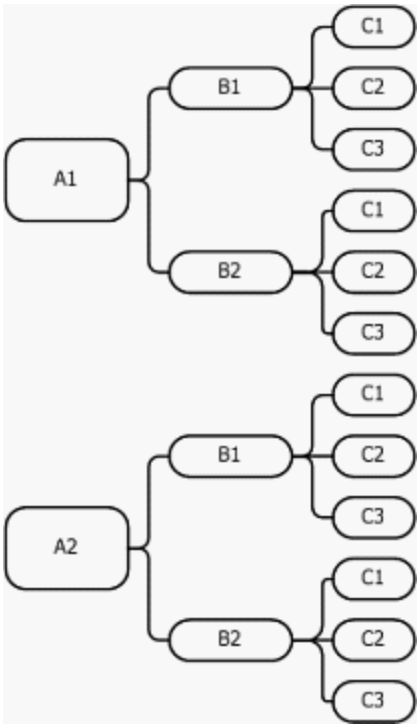
To sort using the Group By Box

1. Right-click any column header and from the shortcut menu click **Group By Box** to open a pane above the display panel into which you drag the column headers to sort.



In the Group By Box pane, hierarchy runs from left to right where the left-most column becomes the parent and sorts all rows in the entire Browse list. The column right of it becomes its child and sorts the individual rows within each parent.

If you drag a third column into the Group By Box, it becomes a child of the child to its left and so on. You can change the hierarchy of any column within the Group By Box pane by dragging that column either left or right of another column.



2. Click the column header in the Group By Box pane to toggle between ascending and descending order. The triangle in the column header displays the current sort order (ascending △ or descending ▽).
3. To remove hierarchical sorting, do either of the following:
   - To remove grouping from all columns, right-click an area of the Group By Box pane where there isn't a column header and from the shortcut menu, click **Clear Grouping**.
   - To remove grouping from individual columns, right-click the column in the Group By Box pane and from the shortcut menu, click **Ungroup**.

Related topics

See "About DataCards," p. 77	*See "About Log viewer," p. 96*

Appending items to Output windows

Append selected items that appear in the Data Navigator pane of an Output window beneath items of the same data type that appear in the Data Navigator pane of another Output window.

In a case where some of the same items already appear in the Data Navigator pane of the Output window to which you're appending items, duplicate items are removed from the incoming batch of items.

An Output window to which you want to append selected items must be open to make the Add to View button ( ) active.

Highlighting Data Navigator items on the Map

Quickly display Output window objects in a map without attaching them as a query. Using the Data Navigator pane of an Output window, click the items to show on the map, and then right-click the Data Navigator pane and from the shortcut menu, select **Show in Map**. If more than one map is currently open, select the desired map. The objects are outlined on the map.

To append items to Output windows

1. With an Output window displayed (**Browse**, **DataCard**, **Graph**, **Export**, **Logs**, **DSTs**, or **Well Docs**), from the Data Navigator pane, select the items to append to another Output window.
2. Ensure an Output window to which to append items is open.
3. Click in the main toolbar and then select the desired Output window.

   The selected items appear in the Data Navigator pane of the Output window at the bottom of the data group to which they belong.

Related topics

See "Linking Output windows," p. 76

See "Attaching queries to maps," p. 63

Linking Output windows

Link Output windows so that items you select or delete using one window are also selected or deleted in the linked Output window. This enables you to refine your data without having to pass it back and forth between the same windows multiple times.

Hiding an item in your current Output window by clicking won't hide that item in the linked Output window.

To determine where an item in Data Navigator actually appears in the Map window, click the item in the Data Navigator pane and on the shortcut menu, click **Show on Map**. The items are outlined with either a black polygon, a black outline, or a white circle surrounded by a black outline in the Map window depending on whether the item selected is represented as a polygon, line, or point on the map.

To link Output windows

1. With an Output window displayed (**Browse**, **DataCard**, **Graph**, **Export**, **Logs**, **DSTs**, or **Well Docs**), from the main toolbar, select **Tools**, and then **Launch & Link**.

   A link image appears at the bottom of buttons in the main Data Tools toolbar (, ,) to indicate Output windows to which you can link.

2. Click the Output window(s) to which you want to link.

   The Output windows appear with the linked data within, and as you select or delete items in one Output window, it's also selected or deleted in the linked Output window(s).

   To unlink Output windows, close the Output window.

Related topics

See "Appending items to Output windows," p. 75

Viewing DataCards

About DataCards

DataCards enable you to view details for individual items one at a time. Open a DataCard window by clicking inspectable items that appear on the map, or by clicking in the main toolbar in any Map, Query Editor, or Output window.

Like all Output windows, select an item in Data Navigator on the left side of the DataCard window to display details about that item in the Data pane on the right.

Opening DataCards

Open a DataCard window by clicking an inspectable item on the map, or by clicking Tools > DataCard in any Map, Query Editor, or Output window.

To open a DataCard by clicking on the map

1. Using the Layer Legend, ensure inspectability is active for the desired layer(s).
2. From the **Map** menu, click **Inspect**.
3. Click an item of interest on the map.

To open a DataCard for selected map items

1. Select items on the map.
2. From the **Tools** menu, click **DataCard**.

NOTE: Since it's possible to have multiple selection methods on the map, results in the inspectable layers are retrieved according to the following hierarchy: first items selected by clicking on the map while pressing **CTRL** or **SHIFT**, next items within a polygon drawn on the map, and finally items within the current map extents.

To open the DataCard from Query Editor or an Output window

1. Using Query Editor or an Output window, in the Data Navigator pane select the data groups or specific attributes to display in the DataCard.
2. From the **Tools** menu, click **DataCard** .

Related topics

See "Selecting map items," p. 22

Viewing information in DataCards

Depending on the data type, tabs at the top of the DataCard display different categories of data. Data is displayed in panels, some of which contain columns of data in spreadsheet format. Expand any panel to the full extents of the data area, or adjust the widths of columns to better display the data.

To expand a DataCard panel

- Click in the upper right-hand corner of a panel.

To format display panes

- In a data panel that contains columns, right-click a column header and from the shortcut menu, select either **Best Fit (all columns)** to adjust the entire spreadsheet, or **Best Fit** to adjust only the current column.
  You can sort and group data within data panes by clicking column headers or using the Group By box. For details, see *Related topics* below.

Related topics

See "Grouping and sorting in data panes," p. 73

See "Viewing core data in DataCards," p. 78

Viewing core data in DataCards

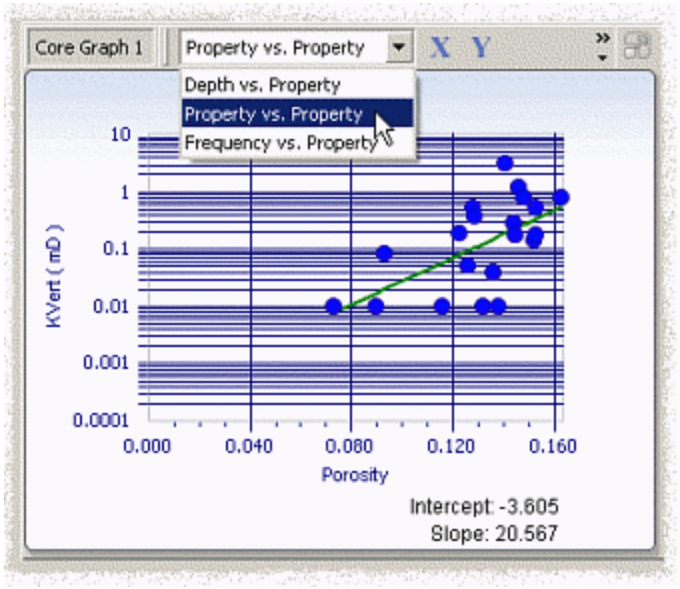
The Core Analysis tab of the well DataCard displays core properties such as porosity and permeability for which you can create graphs.

To view core data in the DataCard

1. With a well that has core data selected in Data Navigator, click the **Core Analysis** tab.
2. Click in the upper right-hand corner of the panes showing core analysis charts in the bottom portion of the DataCard.

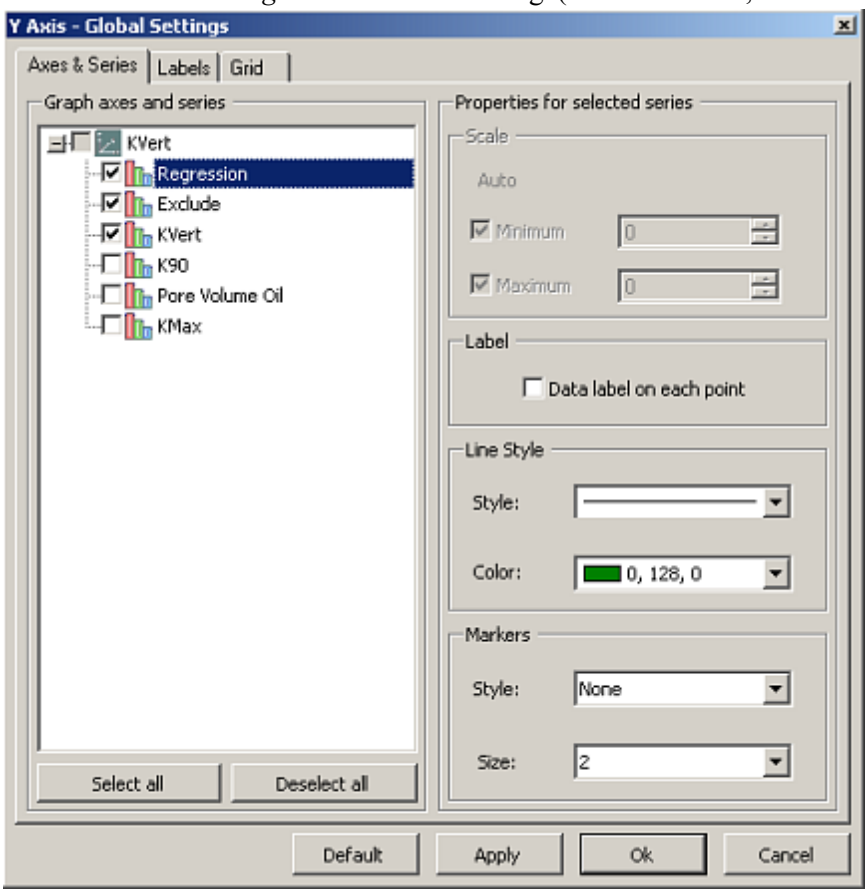
To graph core data in the DataCard

1. From the **Template** drop-down list in a core analysis chart pane, select a graph template.



2. In the core analysis chart pane, click either **X** or **Y** to select the data and display properties for either axis.

The *X Axis - Global Settings* or Y-Axis Global Settings (*Axes & Series tab*, *Labels tab* and *Grid tab*) dialog box appears.



3. Select properties for each axis and then click **OK**.

Related topics

See "Viewing information in DataCards," p. 78	*See "Grouping and sorting in data panes," p. 73*
See "Displaying graphs," p. 91	*See "Viewing well docs," p. 102*

Printing DataCards

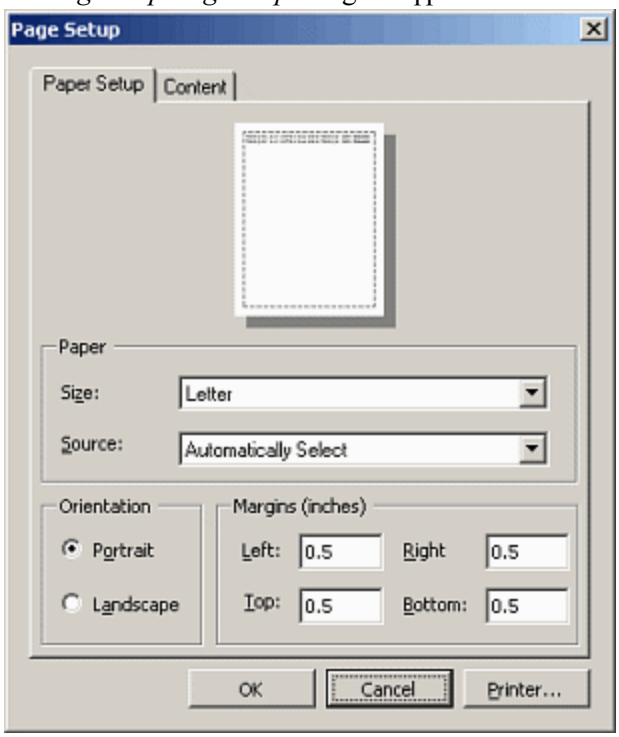
Using Data Navigator, select either an individual item or a data group to print all of the data items within it in a single batch job. Configure which panels from different data types are included in the printed report.

DataCard includes print options to customize the final printed pages' spacing, watermarks, and more.

To format a DataCard for printing

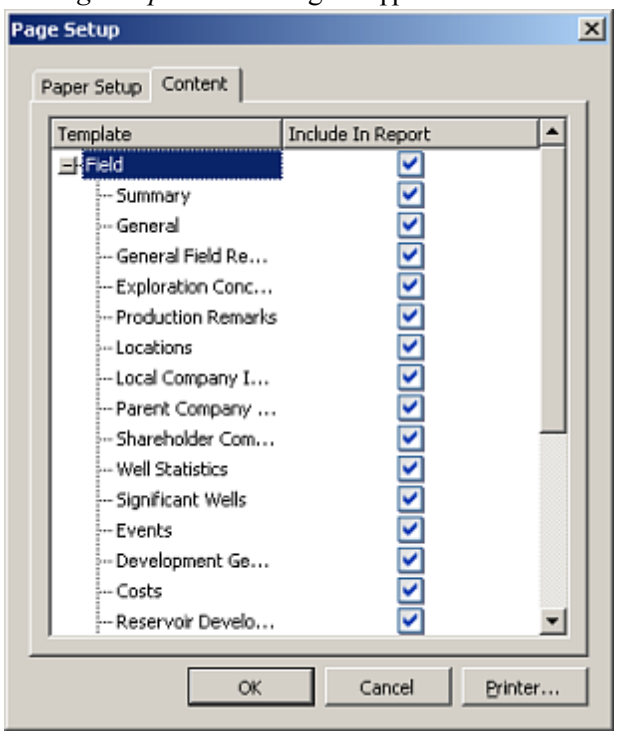
1. From the **File** menu, click **Page Setup**.

The *Page Setup: Page Setup* dialog box appears.



2. Select the page layout options, and then click the **Content** tab.

The *Page Setup: Content* dialog box appears.



3. Using the Include in Report column, select whether different data types appear in the printed copy. Multiple data types can be included in a single print job.

   Changes you make above as to which data types are included are saved as user preferences and automatically applied in future Enerdeq sessions.

4. From the**File** menu, click **Print Preview**.

   The *Print Preview* dialog box appears.

5. To adjust your view, select from the following tools:

	Click to display the *Print* dialog box with which you set print properties, select a printer, and output the final page.
	Click to display the *Page Setup* dialog box described in the procedure above.
	Select a specific amount by which to zoom in the Zoom drop-down list or click the toolbar buttons to zoom by a default amount.
	Scroll between pages.

▶ From the **Tools** menu, click **Watermark** to specify diagonal text or an image to print on the page along with the report.

6. Click **Print** () to output the report to a printer.

Related topics

See "Opening DataCards," p. 77	*See "About Exports," p. 109*

Browsing lists

About the Browse window

The Browse window displays multiple data items in a standard spreadsheet view that enables you to sift through large volumes of data by grouping, filtering, and sorting results. It includes some of the same navigational functionality as Microsoft Excel and an easy-to-use Group By Box pane into which you drag and order columns to sort in hierarchical sequence.

Once you've reviewed and sorted the results, you can select some to display in either the Map window or an Output window, query them further using Query Editor, save them to disk, or export them to other applications.

Navigating Browse lists

Navigate Browse lists using Data Navigator, which is displayed left of the Browse list when you select View > Navigator Layout, or navigate within the display pane itself using some of the same functionality available in Microsoft Excel, such as pressing keys. For details on Data Navigator, see *Related topics* below.

You can also use the Find dialog box to locate specific text or numbers in the Browse list.

To navigate the display pane by pressing keys

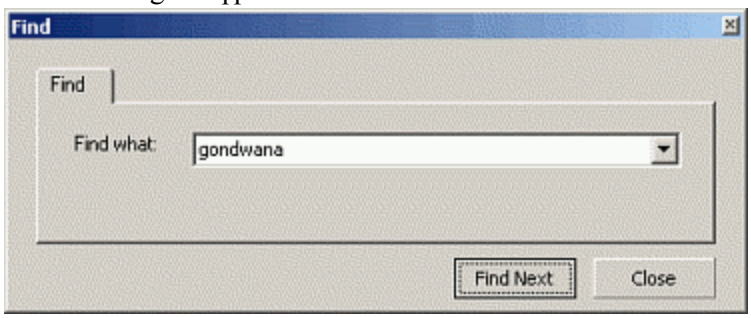
Following are the keys with which you can navigate in the Browse list.

This Key...	Does This...
TAB, **LEFT** and **RIGHT ARROW**	Move to the adjacent column in the current row.
PAGE DOWNPAGE UP	Scroll an entire page.
UP and **DOWN ARROW**	Move to the adjacent row in the current column.
SHIFT + **CLICKCTRL** +**CLICK**	Select multiple rows. You can also **SHIFT+CLICK** column headers to sort multiple columns hierarchically in ascending or descending values based on the order in which you click them. For example, you could sort first by field, then by producing zone, and then by status if you click each column header in that order. For details on formatting Browse lists, see *Related topics* below.

To search display panes

1. From the **Edit** menu, click **Find**, or press **CTRL+F**.

   The *Find* dialog box appears.



2. Type contiguous letters or numbers for which to search the display pane and then click **Find Next**. The *Find* dialog box doesn't support wildcard characters such as ? or *.

   The first matching result that's across from and then down from your cursor appears.

TIP: Click **Find Next** repeatedly to scroll results. Upon reaching the last row in the display pane, Enerdeq begins searching from the first column and row.

Related topics

See "About the Browse window," p. 82
See "About Data Navigator," p. 72
See "Sorting Browse list columns," p. 84

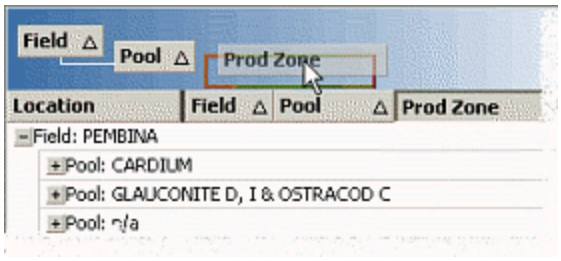
Sorting Browse list columns

Sort any column by ascending or descending values or letters. Beyond sorting an individual column, you can also sort multiple hierarchical columns so that the first column establishes the grouping criteria for the entire display pane, the second establishes a sub-group within the first group, and so on. For example, you could first group all rows by field name, then group each well that shares the same field by producing zone, and then group all wells that share the same producing zone by status.

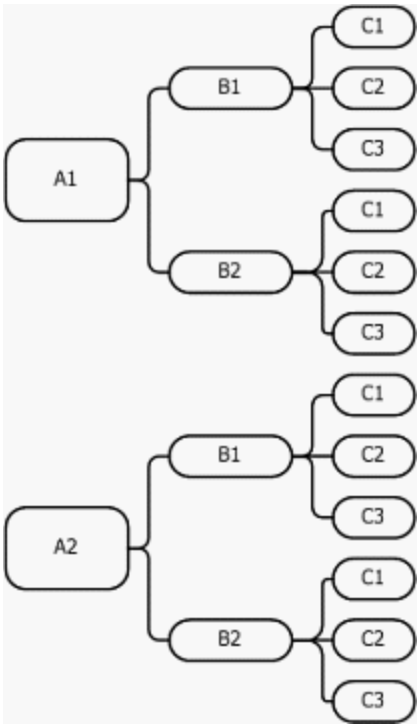
There are two ways to sort hierarchical column values, one that limits you to sorting only six hierarchical columns, and another that enables you to sort an unlimited number of columns.

To sort using the Group By Box

1. Right-click the column header by which to sort, and from the shortcut menu, click **Group by this Field**
   OR
   Right-click any column header and select Group By Box to open a pane above the display pane into which you drag the column headers to sort.



In the Group By Box pane, hierarchy runs from left to right where the left-most column becomes the parent and sorts all rows in the entire Browse list. The column right of it becomes its child and sorts the individual rows within each parent. If you drag a third column into the Group By Box, it becomes a child of the child to its left and so on. You can change the hierarchy of any column within the Group By Box pane by dragging that column either left or right of another column.



2. Click the column header in either the Group By Box pane or in the Browse list to toggle between ascending and descending order. The triangle in the column header displays the current sort order (from largest/most recent to smallest/least recent ▽, or from smallest/least recent to largest/most recent △).

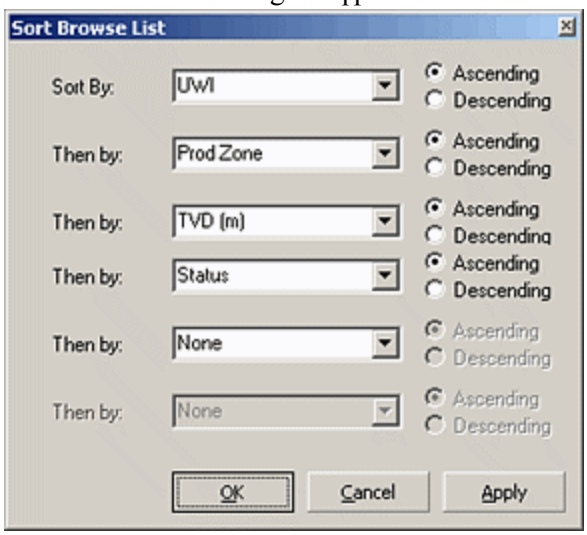
TIP: You can instead establish hierarchy by pressing **SHIFT** while clicking the column headers in the Browse list in the order in which to sort them. To sort just a single column in ascending or descending order, just click without pressing **SHIFT**.

3. To remove hierarchical sorting, do either of the following:
   - To remove grouping from all columns, right-click an area of the Group By Box pane where there isn't a column header and from the shortcut menu, click **Clear Grouping**.
   - To remove grouping from individual columns, right-click the column in either the Group By Box pane or in the display pane and from the shortcut menu, click **Ungroup**.

To sort up to six columns

1. From the **Browse** menu, click **Sort**.

The *Sort Browse List* dialog box appears.



2. In the Sort By and Then By drop-down lists, select the columns by which to sort in the desired order of hierarchy.
3. For each of the options, click either the **Ascending** or **Descending** options, and then click **OK**.
4. To remove hierarchical sorting, select **None** in the *Sort By* or *Then by* drop-down lists. All drop-down lists below and including the one in which you selected **None** become inactive.

Related topics

See "Navigating Browse lists," p. 82
See "Editing Browse list display templates," p. 86
See "Moving and resizing Browse list columns," p. 89

Editing Browse list display templates

Select a template with pre-defined columns to apply to the display pane as is, or modify which columns appear and their order to create a unique user template. Create an unlimited number of user templates for each data type. The template currently in use or any column reordering you've applied in the current session is the layout that appears in the Microsoft Excel spreadsheet when you export a Browse List by clicking Send to Excel in the main toolbar.

Templates appear in the Template drop-down list sorted alphabetically with the names of pre-defined templates colored black and the names of user-defined templates colored blue.

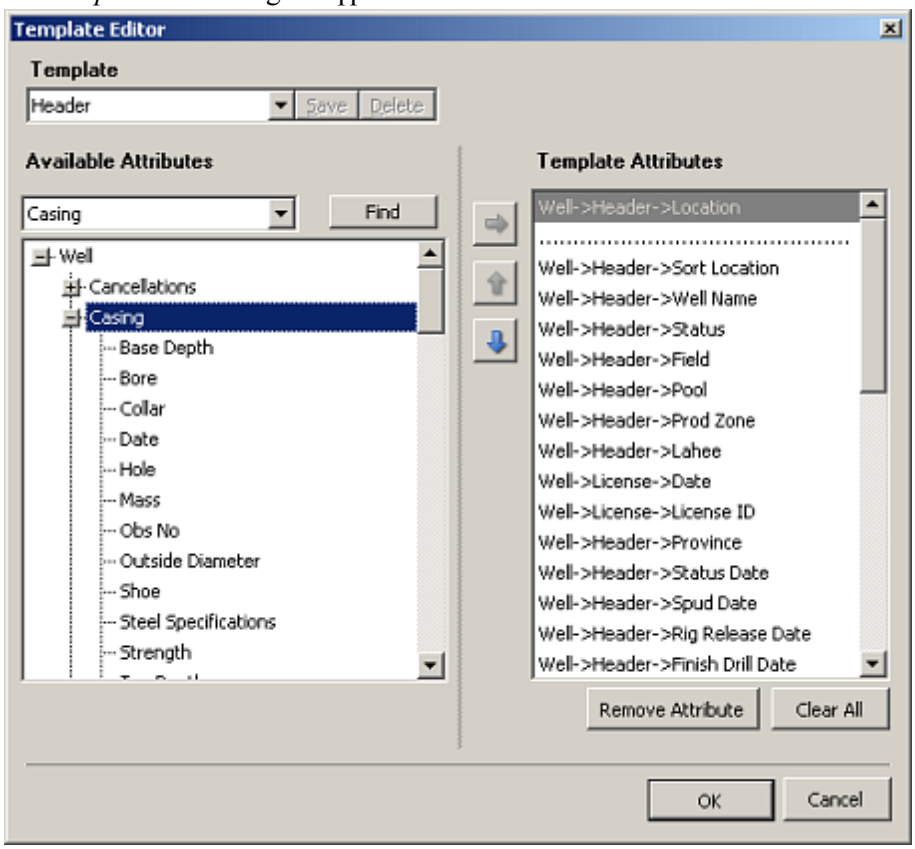
The pre-defined templates from which you can select depend on the data types selected in Data Navigator (**CTRL+CLICK** or **SHIFT+CLICK** to select multiple data types in Data Navigator). The user templates from which you can select depend on both the data types selected in Results Navigator and the data type that was selected when you originally created the user template.

Instead of customizing templates, you can show and hide columns that appear in the display pane, but unlike user templates, these changes will be lost when you close the current session.

To edit display templates

1. Select a data type in Data Navigator with which the user template you create will be associated, then beside the Template drop-down list, click **Edit**.

The *Template Editor* dialog box appears.



2. Select the name of the template to modify in the Template drop-down list.

   The first data item that appears in the Template Attributes pane is the left-most column in the Browse list and the last item is the right-most column.

3. Do any of the following:

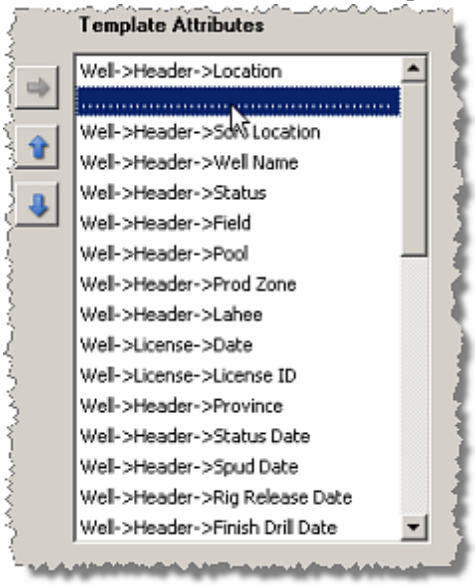
- To add data items as columns to a user template, in the Template Attributes pane on the right, select the data item (column) before which to insert a new data item and then in the Available Attributes pane on the left, select the data item to add and click .

TIP: To locate attributes in the Available Attributes pane to add to the Template Attributes pane, using the box that appears above the Available Attributes pane, type words or letters that appear in the attribute name and then click **Find** or press **ENTER**. Click **Find** or press **ENTER** repeatedly to scroll through similar attribute names.

NOTE: To limit data redundancy, Enerdeq may prevent multiple columns with one-to-many relationships from occupying the same row. When such a relationship is prevented, the Template Attributes pane refreshes and previously expanded branches collapse.

When you add a data item to the Template Attributes pane, it remains in the Available Attributes pane too. You can add it to the Template Attributes pane in multiple locations so that it recurs at strategic intervals in the Browse list.

The dotted line near the top of the Template Attributes pane separates any data items above it as fixed columns in the Browse list. Data items below it remain part of the horizontal scrolling portion of the Browse list.



- To remove data items from the current template, in the Template Attributes pane to the right, select a data item to remove (**CTRL+CLICK** or **SHIFT+CLICK** for multiple selection) and then click **Remove Attribute**.
- To remove all the data items, click **Clear All**.
- To change the left-to-right order in which one or more columns appear in the Browse list, select the data items in the Template Attributes pane (**SHIFT+CLICK** or **CTRL+CLICK** for multiple selection) and click or . To move just one data item, simply drag it up or down to the desired location.

4. Either click **Save** to create a user template with the same name as a pre-defined template (this won't overwrite the pre-defined template), or type a different name in the Template box first, and then click **Save**. If you're modifying a user template, you must rename it to avoid overwriting the original.

NOTE: You can only delete user templates, not pre-defined templates. Display the *Template Editor* dialog box using the process above, select the template to delete from the Template drop-down list, and then click Delete to the right of the Save button.

Related topics

See "Navigating Browse lists," p. 82
See "Sorting Browse list columns," p. 84
See "Moving and resizing Browse list columns," p. 89

Moving and resizing Browse list columns

You can move and resize columns using the some of the same functionality common in spreadsheet applications like Excel, such as dragging and dropping entire columns or dragging column borders.

To move and resize Browse columns

- To change the location of columns in the Browse list, drag the column to the desired location. This order only persists for the current session and doesn't change the order in which the column appears in the template. For details about templates, see *Related topics* below.
- To adjust the column width so that all values are completely visible, right-click a column header and from the shortcut menu, click either **Best Fit (all columns)** to adjust the entire spreadsheet, or **Best Fit** to adjust only the current column.

TIP: You can also drag a column width at the column header to adjust it as depicted in the adjacent graphic.

Related topics

See "Navigating Browse lists," p. 82
See "Editing Browse list display templates," p. 86
See "Editing Browse list display templates," p. 86

Outputting Browse lists

Export items selected in Data Navigator or in a Browse list directly to Excel, or save them in Enerdeq format or in a third-party format. For details on exporting in third-party formats, see *Related topics* below.

When you save a Browse list in Enerdeq format, just like any other Output window or Query Editor, the query criteria on which it's based and the IDs of selected items are saved to a single file that can be opened using either Query Editor or an Output window.

To export Browse lists to Excel

- Select items from only one data type and then from the **Tools** menu, click **Send To Excel**.
  If not already open, Excel automatically launches and the data associated with items selected in either Data Navigator or with the Browse list and their column headers appear in an Excel worksheet.
- To export additional data items or data types without overwriting what's already exported, select a blank cell outside of the range of previously exported data items, or select a totally different worksheet, then select data items all in one data type using Data Navigator and export them.

To save Browse lists to disk

1. From the **File** menu, click **Save**, or **Save As** if you don't want to overwrite a previously saved version.
2. Browse to the desired location, type a descriptive name for the file, and then click **OK**.

Related topics

See "Opening saved queries," p. 62	*See "About Exports," p. 109*

Graphing

About graphs

Enerdeq Desktop enables you to select one or more data items in Data Navigator for which to display different types of graphs.

Display the data values upon which the graph is based below the graph. Modifying these values doesn't change the plotted point on the graph, but data upon which the graph is based can be exported to Microsoft Excel.

Select different graph templates based on the data type you're graphing and change graph formatting such as the graph header, and the type of data plotted along the X and Y axes. Modified graph templates can be saved with a unique name.

Displaying graphs

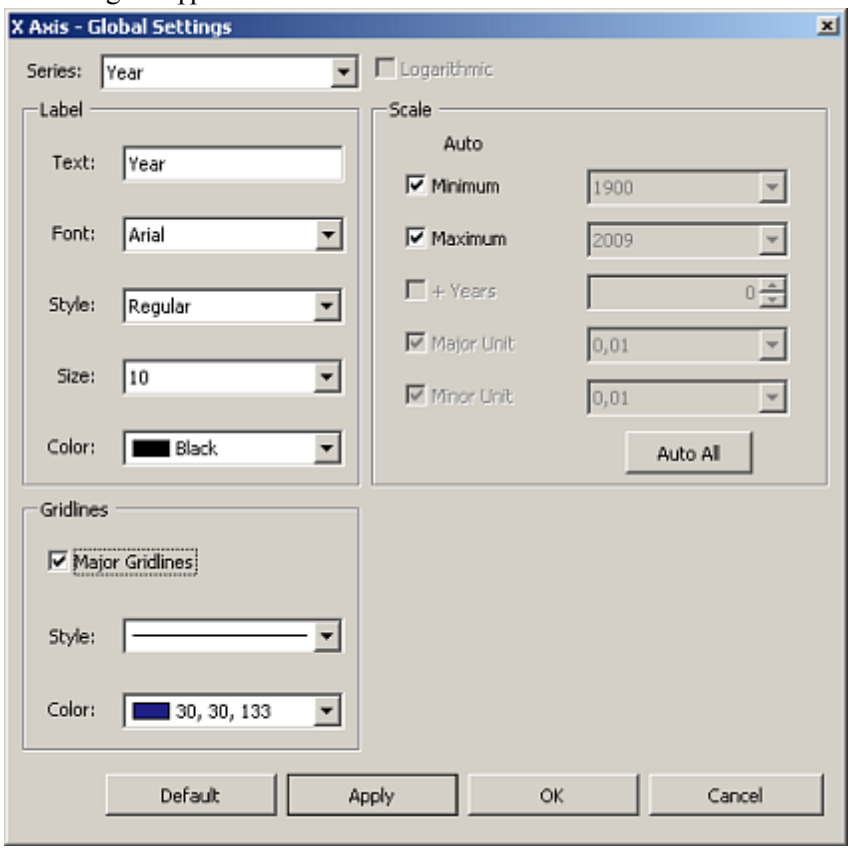
Display graphs for one or multiple items selected in Data Navigator. Control the manner in which data is graphed using both the Mode option and the Template options that appear above the graph. In Multiple mode, each item selected in Data Navigator is a distinct series on the graph.In Group mode, all of the items selected in Data Navigator appear as one series on the graph.

For details on graph templates, see *Related topics* below.

To display a graph

1. From the **Template** drop-down list, select a pre-defined template (to use as is or to modify), or select a user template you previously created.
2. From the **Graph** menu, click either **X Axis** X or **Y Axis** Y.

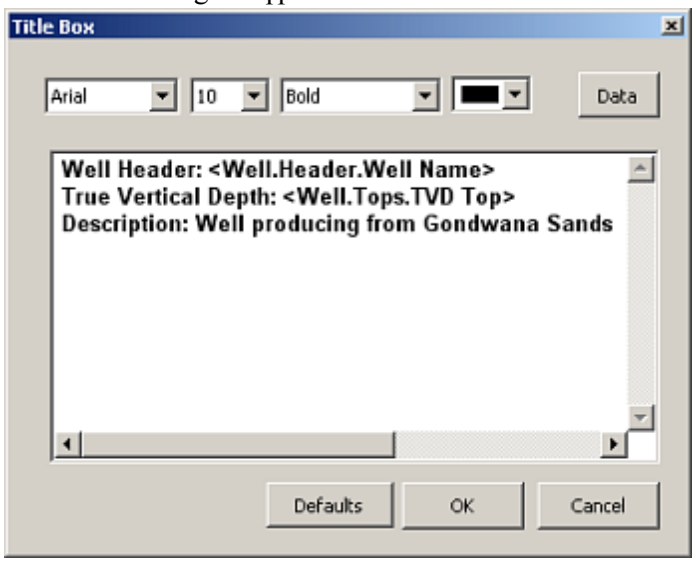
   Depending on your selection above, either the *X Axis* (displayed below), *Y Axis: Series*, *Y Axis: Labels*, or the *Y Axis: Grid* dialog box appears.



3. Select the desired display options, and then click **OK**.

4. From the **Graph** menu, click **Title Box**.

The *Title Box* dialog box appears.



5. Click **Data** to display the *Add Data* dialog box and select data fields that can be automatically retrieved from the database and displayed in the graph title block.

TIP: Because the data fields selected above will appear in the Graph title block without labels, you may want to type some labels. For example above, the label Well Header and others are typed and then the item in angle brackets is the code used to retrieve the data item from the database.

- The *Title Box* dialog box supports copy (**CTRL+C**), cut (**CTRL+X**), and paste (**CTRL+V**) functionality.

6. Select text formatting options, and then click **OK**.

▶ To save the current graph configuration as a user template for future sessions, beside the Template drop-down list, click **Edit**.

The *Graph Template Editor* dialog box appears.

Either type a unique name, or select an existing name (of either a pre-defined or user-defined template), and then click **OK**.

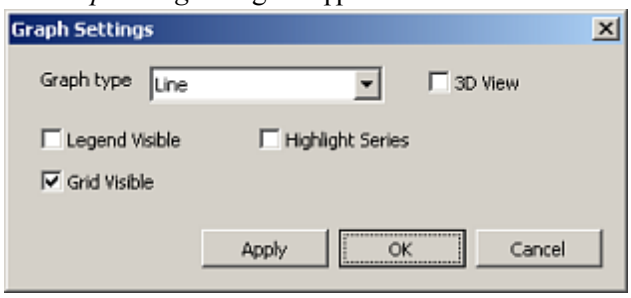
Enerdeq won't overwrite pre-defined templates with user templates even if they share the same name.

7. Using Data Navigator, select the item(s) to graph. **CTRL+CLICK** or **SHIFT+CLICK** for multiple selection.

8. From the **Mode** drop-down list, select the method in which to graph the item(s) selected in Data Navigator based on the following:
   - **Group** - plot all items selected in the Data Navigator pane as a combined series.
   - **Multiple** - plot all items selected in the Data Navigator pane as distinct series.
   - **Single** - (for the Wells data group) plot one trend line for a single item.
   - **Sum** - (for the Wells data group) plot one trend line of summed values for multiple items.

9. Click **Settings**.

The *Graph Settings* dialog box appears.



10. Select graph formatting options, and then click **OK**.

Related topics

See "About Data Navigator," p. 72	*See "Creating graph templates," p. 93*
See "Viewing underlying graph data," p. 94	*See "Outputting graphs," p. 94*

Creating graph templates

The Graph window includes a number of pre-defined templates. Apply one of these pre-defined templates to one or more data items selected in Data Navigator to create a graph. When you modify a pre-defined template by changing the X and Y axis data, the display properties, and so on, you can save the modified template as a user template and apply it to graphs in future sessions.

Pre-defined templates appear at the top of the Template drop-down list colored black and sorted according to how frequently most people need them. User templates appear at the bottom of the Template drop-down list colored blue and sorted in the order in which they were created.

Click *Graph templates* for a list of all the templates.

To create user templates

1. Once you've configured the mode, axes, and other graph settings, beside the Template drop-down list, click **Edit**.

   The *Graph Template Editor* dialog box appears.

2. Either click **Save** to create a user template with the same name as a pre-defined template (this won't overwrite the pre-defined template), or type a different name in the Template box and then click **Save**. If you're modifying a user template, you must rename it to avoid overwriting the original.

NOTE: You can only delete user templates, not pre-defined templates. Display the *Graph Template Editor* dialog box using the process above, select the template to delete from the Template drop-down list, and then click **Delete** to the right of the **Save** button.

Related topics

See "Displaying graphs," p. 91	*See "Outputting graphs," p. 94*

Viewing underlying graph data

Display the data values upon which a graph is based in a spreadsheet view instead of the graph, or alongside the graph. You can't change values in the spreadsheet and have the graph reflect those changes, but you can export the graph spreadsheet to Microsoft Excel to try different scenarios (see *Related topics* below).

To view underlying graph data

1. From the Graph toolbar, click **Graph**, **Spreadsheet only** or **Graph + Spreadsheet** to display the data values upon which the graph is based.
2. Using the spreadsheet pane, review the values upon which the graph is derived.

TIP: Values you type in the spreadsheet aren't reflected in the graph and are lost when you select different items in Results Navigator.
To create lasting modifications, export the spreadsheet data out of Enerdeq. See *Related topics* below for details.

Related topics

See "Displaying graphs," p. 91	*See "Exporting data to Excel," p. 111*
See "Outputting graphs," p. 94	

Outputting graphs

Export items selected in Results Navigator directly to Excel, copy and paste graph images to another application or print them, or save the underlying data upon which a graph is based to disk in either Enerdeq format or in a third-party format. For details on exporting to third-party formats, see *Related topics* below.

When you save a graph, just like any Output window or Query Editor, the query on which it's based and the IDs of items are saved in a single file that can be opened using either Query Editor or an Output window.

The following tasks are covered in this topic:

To export data to Excel

▶ Using Results Navigator, select a single item to export, and then from the **Tools** menu, click **Send To Excel**  .

NOTE: If you select more than one item in Data Navigator, each successive item overwrites the previous one in Excel.

If not already open, Excel automatically launches and the data and column headers associated with the data item selected in Data Navigator appear in an Excel worksheet.

To export additional data items without overwriting the data items already exported, select a blank cell outside of the range of previously exported data items, or select a totally different worksheet, then select a different item in Data Navigator and export it.

To copy a graph image

1. From the **Edit** menu, click **Copy Graph Image**.
2. In the desired application, place your cursor where you want to paste the graph image and from that application's **Edit** menu, click **Paste**.

   Repeat the above step to paste the image in multiple applications or locations.

To print a graph image

1. Using Results Navigator, select the item to print. You can only print one graph at a time.
2. From the **File** menu, click **Page Setup** and in the *Page Setup* dialog box, ensure the page orientation and margins are as desired, and then click **OK**.
3. From the **File** menu, click **Print** and in the *Print* dialog box, select the desired print options, and then click **OK**.

NOTE: Regardless of whether you select a print range of All or Selection in the *Print* dialog box, only the graph currently displayed in the graph display pane is printed.

To save a graph image

1. Using Results Navigator, select the item to save. Regardless of how many items are selected, you can only save one graph image at a time.
2. From the **Edit** menu, click **Save graph image to file** and in the *Save* dialog box, browse to a location and type an intuitive name, and then click **OK**.

To save a graph item

1. With the items to save selected in Data Navigator, from the **File** menu, click **Save**, or **Save As** if you don't want to overwrite a previously saved file.
2. Browse to the desired location, type an intuitive name for the file, and then click **OK**.

Related topics

See "About Data Navigator," p. 72	*See "Displaying graphs," p. 91*
See "About Exports," p. 109	*See "Creating graph templates," p. 93*

Viewing logs

About Log viewer

The Log viewer displays logs for wells you select. Open the Log viewer after making selections in the Map, Query Editor, or in any Output window. Use the Data Navigator on the left side of the window to select the well for which to view logs, and then select the type of log to view from the Available Logs list.

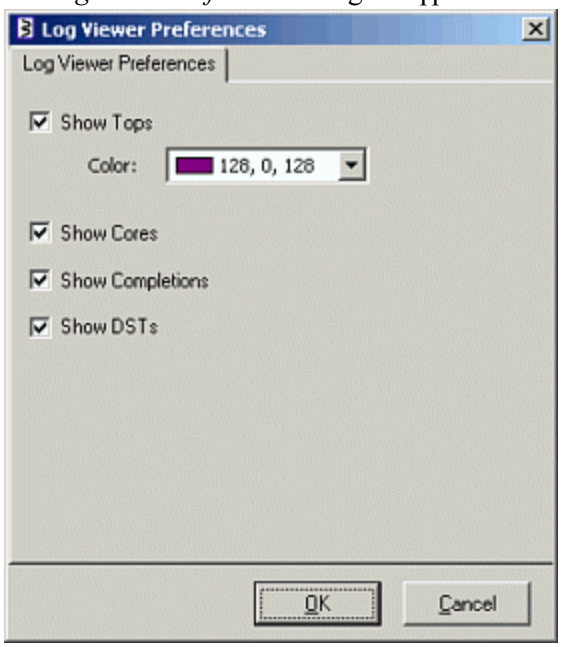
Setting log display preferences

Select which components to display on the log including formation tops, completions, DSTs, and cores. You can still jump to tops using the Log viewer > Jump to Top option even if you hide the tops from display.

To set log display preferences

1. Using Log viewer, from the **Log viewer** menu, click **Preferences**.

The *Log viewer Preferences* dialog box appears.



2. Using the *Log viewer Preferences* tab, select which objects to display in the log image display pane, and then click **OK**.

Related topics

See "Displaying core, completion, and DST information from a log," p. 98

Jumping to depths and tops

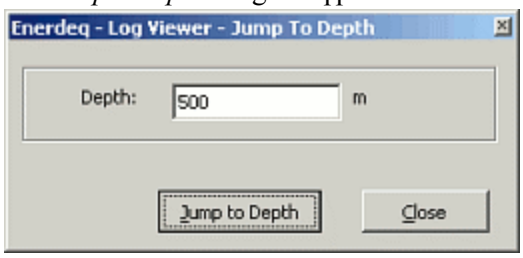
Scroll the Log image pane to a specific subsurface depth or formation top by either typing the depth or by selecting the formation top name to which to scroll.

You can jump to tops even if formation tops are hidden from the Log image pane.

To jump to depths

1. From the **Log viewer** menu, click **Jump to Depth**.

The *Jump to Depth* dialog box appears.



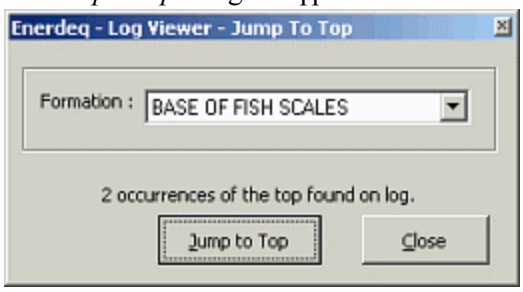
2. Type the depth and then click **Jump to Depth**.

TIP: For details on changing the measurement system, see *Related topics* below.

To jump to tops

1. From the **Log viewer** menu, click **Jump to Top**.

The *Jump to Top* dialog box appears.



2. Using the Formation drop-down list, select a top picked for the displayed log.

The Log image pane automatically scrolls the log to display the depth at which the selected top is picked.

- If there are multiple instances of the same top in the log, click **Jump to Top** to scroll the log to the next instance.

TIP: For details on displaying or hiding tops from the Log image pane, see *Related topics* below.

Related topics

See "Setting log display preferences," p. 96

See "Changing default units," p. 14

Displaying core, completion, and DST information from a log

Display the top and bottom depth of core, completion, and DST intervals in Log viewer.

To display core, completion and DST information

1. Using Log viewer, from the **Log viewer** menu, click **Preferences** and ensure that core, completion or DST intervals are selected.
2. Using the Log Image display pane, double-click the **core**, **completion**, or **DST** symbol on the well log.

   A box displays the top and bottom depths.

Related topics

See "Setting log display preferences," p. 96

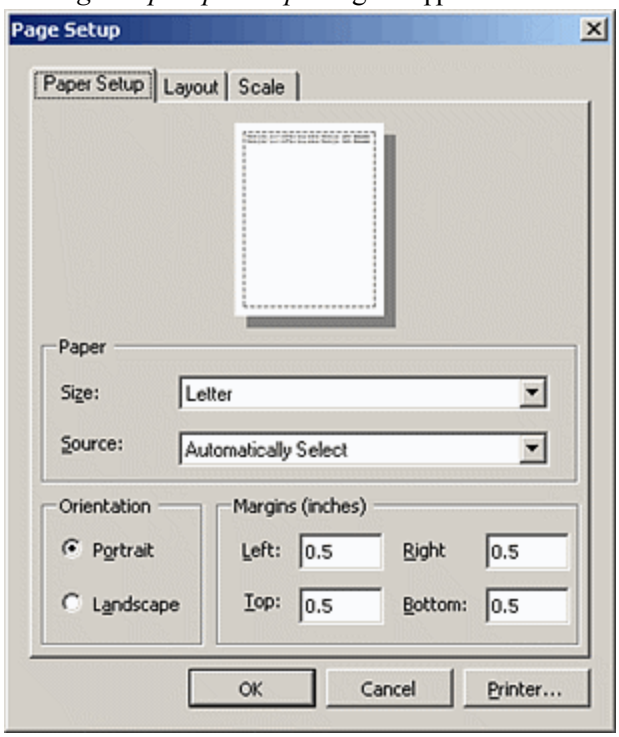
Printing logs

Print the log as it appears in the Log image pane, or print zones that you select. Either select a continuous paper size or print the log on multiple sheets of paper that can be joined to create a larger log.

To print a log

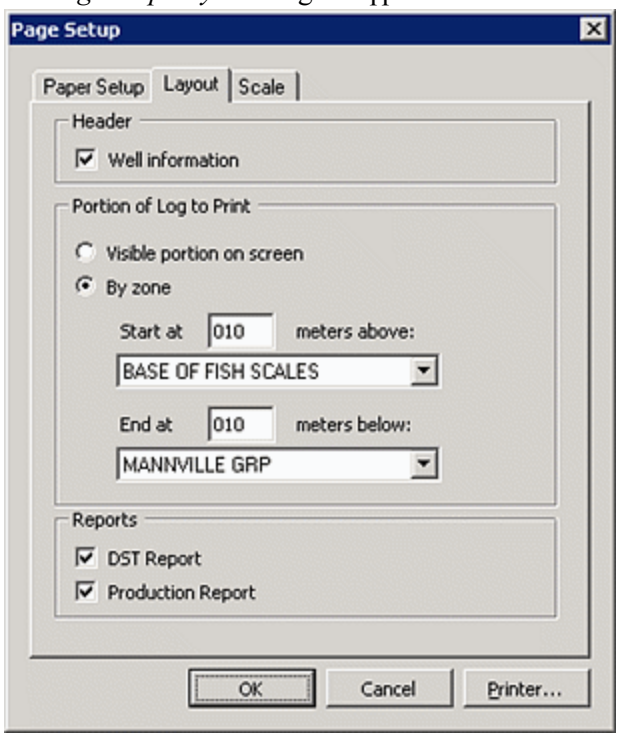
1. From the **File** menu, click **Page Setup** ().

The *Page Setup: Paper Setup* dialog box appears.



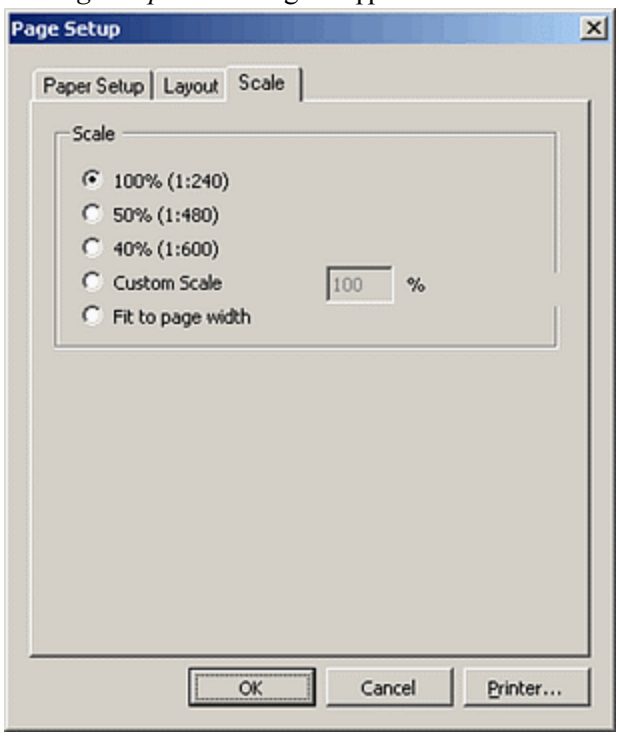
2. Select page size, orientation, and margin sizes, and then click the**Layout** tab.

The *Page Setup: Layout* dialog box appears.



3. Select the details to include in the printed log and whether to print the log portion that falls within the extents of your Log viewer window, or to print a continuous portion of log that falls within a zone demarcated by an upper and a lower formation top.
4. Click the **Scale** tab.

   The *Page Setup: Scale* dialog box appears.



5. Click or type the scale at which to print the log where 1:240 more accurately reflects the original log image than 1:600.
6. Click **OK** to close the *Page Setup* dialog box, and then from the **File** menu, click **Print** ( ).
7. Click **OK** and the log prints

   OR

   Click **Export** to output the log in one of the following formats: PDF, BMP, EMF, GIF, JPEG, PNG, TIFF, WMF.

TIP: If exporting in PDF format, ensure your Adobe print driver page scaling options are disabled to preserve the log scale.

Related topics

See "Saving logs," p. 102

See "Setting log display preferences," p. 96

Saving logs

Save the query criteria used to display the current well list in Log viewer. The Save command on the Log viewer (like other output windows) and Query Editor saves the query criteria, not the actual log data or the log image.

To save the log query criteria

- Using Log viewer window, from the **File** menu, click **Save**
  OR
  Click **Save As** if you don't want to overwrite a previously saved version.
  OR
  Click **Export** to output the log in one of the following formats: PDF, BMP, EMF, GIF, JPEG, PNG, TIFF, WMF. If exporting in PDF format, ensure your Adobe print driver page scaling options are disabled to preserve the log scale.

Related topics

See "Printing logs," p. 99

Viewing Well Docs

About WellDocs viewer

View well documents saved in either Adobe PDF or TIFF format. Depending on whether the native format of the well doc you load is TIFF or PDF, WellDocs viewer launches either an Adobe viewer component or a TIFF viewer component in the bottom right pane where the well docs are displayed. The native format of the well doc also controls whether you can save the document in PDF, image, or pressure ASCII standard (PAS) format.

The type and volume of reports differ by region and well. Some regions may have up to 15 different reports, while others may only have a maximum of 5. Some reports also include sub-reports that you can select using the Type drop-down list described in the popups below.

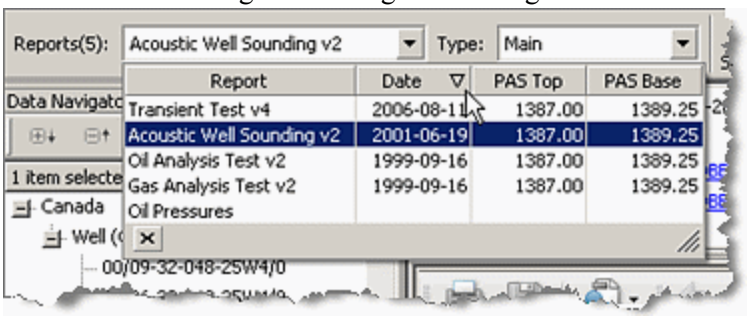
Viewing well docs

View well file documents using WellDocs viewer. The viewer pane, toolbar, and related functionality change depending on whether the native format of the document you view is PDF or TIFF. For example, PDF view enables you to search text and save in PDF format. TIFF view enables you to save in various image formats (jpg, gif, tiff, png, and bmp).

The volume and type of reports available in a well file vary by regional requirements, production era, and by well drilling and production characteristics.

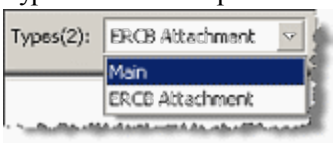
To view well docs

1. Select the report to view using the Reports drop-down list. With the drop-down list displayed, you can click a column header to sort rows using the ascending or descending values in the column you click.



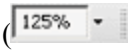
   The correct viewer pane for either PDF or TIFF format appears depending on the native format of the file you choose.

▶ Depending on the main report you select above, there may be additional sub-reports you can select using the Type drop-down list. Where there are more than just the Main type available, the number of sub-reports available appears after the Type label for the drop-down list.



   The appropriate viewer pane that enables you to view TIFF or PDF files appears depending on the native format of the report you selected above.

2. Depending on whether the document is in PDF or TIFF format, adjust your view by doing one of the following:

   ■ **PDF** - zoom in or out by clicking  ,  , or selecting a value from the zoom drop-down list (

). You can also select a specific region on which to zoom by right-clicking the page and clicking **Marquee Zoom** from the shortcut menu.

   Adjust the page size by clicking  (fit width) or  (fit height).

   To change the page orientation, click  or  .

   Page through the document by clicking and , or by typing the page number directly in the current page box (

).

NOTE: There are a number of buttons you can enable. Right-click the toolbar in the viewer pane, select **More Tools**, and then click to enable or disable various controls.

- **TIFF** - in the thumbnail pane to the left of the displayed page, click a page to display.

  Zoom in or out on a page by clicking , , or selecting a value from the zoom drop-down list ( ).
  You can also open a magnifier pane that magnifies an area over which you hover by clicking (magnifying glass).
  Click the magnifying glass a second time to disable it.

  Adjust the page size by clicking (actual size) or (fit width).
  Page through the document by clicking , , or by typing or selecting a page number in the current page drop-down list.
  Rotate the page 90 degrees by clicking .
  Flip the page by clicking .

  Invert the colors so that white in black and black is white by clicking .

Related topics

See "Querying cores and tests," p. 69

See "Saving well docs," p. 104

Saving well docs

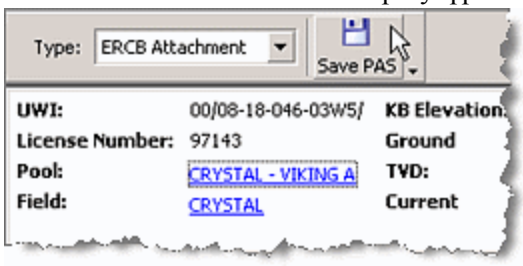
The entire well docs package can be saved in Pressure ASCII Standard (PAS) format. You can also save docs in either PDF or image (jpg, gif, png, tif, bmp) format, depending on whether the native format of the file to save is PDF or TIFF.

As with all other Output windows in Enerdeq, using the main toolbar at the top of the window, you can save a query that retrieves the items currently displayed in the Data Navigator pane. This query can be opened using Query Editor or an Output window.

To save well docs

▶ Do one of the following depending on the format in which to save the well doc:

- Query format that can be opened using any Output window or Query Editor - from the **File** menu, click either **Save** or **Save As**.
- PAS text that can be used with a third-party application - click **Save PAS**.



  The report is saved in the format *well id - test name - test date.pas*.

- PDF that can be viewed with a third-party application, such as Adobe Reader - in the toolbar at the top of the PDF viewer pane, click . The file name lists the UWI. The native format of the document you're viewing must be PDF in order to save it as PDF.

- Various image formats - at the top of the TIFF viewer pane, click and then click the desired image format from the Save as type drop-down list in the *Save Current Image* dialog box that appears. You can also copy the image and then paste the full page into another application by clicking . Only the current page displayed in the well file is saved.

Related topics

See "Querying cores and tests," p. 69

See "Viewing well docs," p. 102

Viewing DSTs

About DST viewer

DST viewer enables you to view drill stem test (DST) data, adjusting display properties as required, and then either print the data or paste it into a word processing or graphic application.

Displaying DSTs

Launch DST viewer from either the Tools > DSTs menu option in any window, or by clicking the Drill Stem Test hyper-link in the Header/Tops/DST and IP tab of a DataCard when a well with a DST is displayed in the DataCard. For details on querying DSTs, see *Related topics* below.

Use DST viewer to display and modify scanned drill stem tests including rotating pages, flipping images that may have been scanned backwards, and switching negative and positive fills.

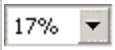
Select a region on a DST image and then copy it to your Windows clipboard and paste it into other applications, or simply print the page that's currently displayed.

To display a DST

1. Select the desired well in Data Navigator.

   The DSTs associated with that well appear in the Available DSTs pane below the Data Navigator pane.
2. In the Available DSTs pane, click a DST to display scanned pages from that test in both the thumbnail and detail display panes to the right.
3. In the Thumbnails display pane, navigate thumbnail images by either dragging the scroll bar, or by clicking once to select a thumbnail, and then pressing either the **DOWN ARROW** and **UP ARROW** keys, or pressing the **PAGE DOWN** and **PAGE UP** keys.
4. Click the thumbnail to display in the detail display pane to the right.

- Modify the DST in the detail display pane by doing any of the following:

	Rotate it either clockwise or counter-clockwise in 90-degree increments
	Flip it along its vertical axis so that the right side of the image then appears on the left
	Switch negative and positive fills so transparent and opaque fills are inverted
	Type or select a percentage by which to zoom

  - To output a portion of the DST image (or the entire page) to another application, in the detail display pane, either drag the desired region with your cursor (or don't drag a region at all to automatically select the entire image), and then click **Copy**  . Next, launch another application and select the paste options in that application.
  - To output the current page to a printer, from the **File** menu, click **Print**  . Images print at the same scale as they were scanned.

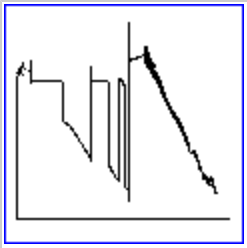
5. Review the *DST interpretation samples* to help analyze the graph.

Related topics

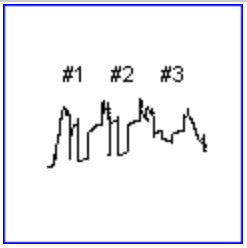
See "DST interpretation samples," p. 107
See "Viewing well docs," p. 102
See "Querying cores and tests," p. 69

DST interpretation samples

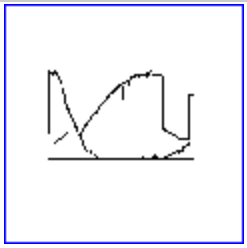
Basic Analysis



Deviation from standard flow/shut-in DST

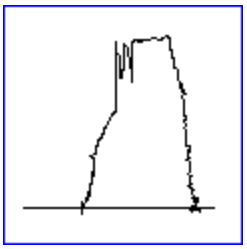


>Multiple test charts on different intervals



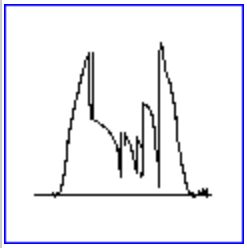
Wrap around effect on single interval test

Influence of clock speed



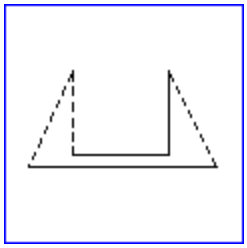
Various clock malfunctions

Hole entry difficulties

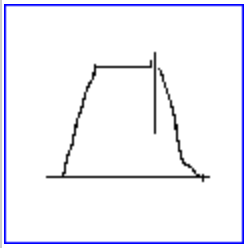


Plugging in shut-in tool

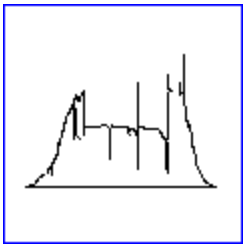
Stair stepping continuously



Complete plugging in anchor



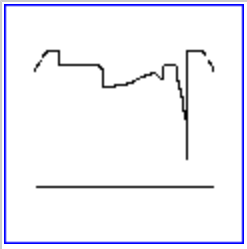
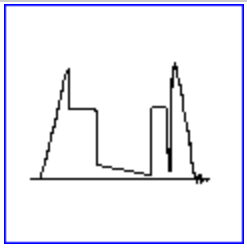
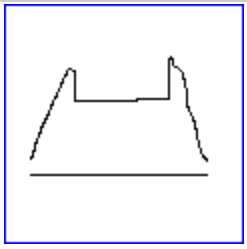
Solid plugging in valve parts



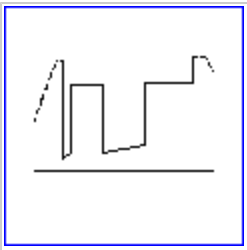
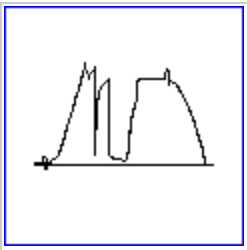
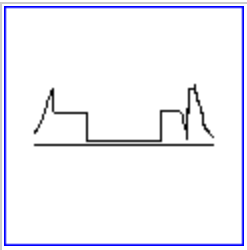
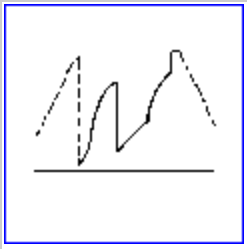
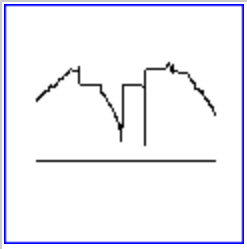
Plugging stimulates an additional shut-in period

Intermittent plugging and clearing

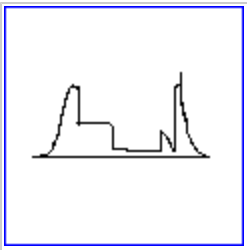
Advanced Analysis

		
Influence of gas/water proportions on flow curve shape	Increasing pressure (gas) due to co-production	Very high transmissibility of gas

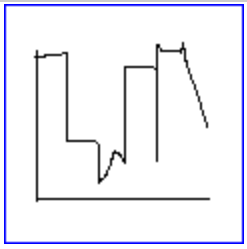
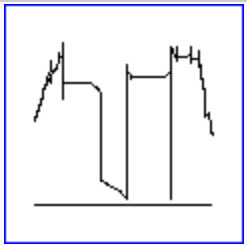
Skin Effect

		
Typical skin damage	Decreasing pressure due to changing skin (gas)	High skin damage (gas)
		
Damage vs. improvement	Tight vs. permeable with vs. without damage	

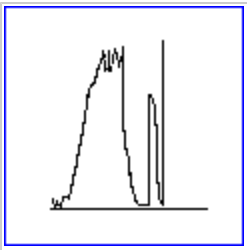
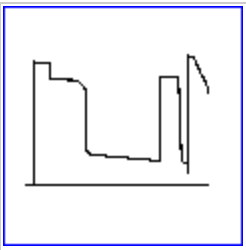
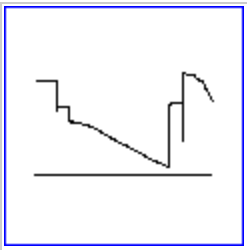
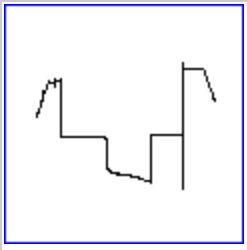
Deep Damage


>Detection by contrasting shut-in curves

Depletion

		
Depleting oil or gas	Decreasing bottomhole due to reservoir depletion (gas)	Declining initial shut-in

S-Curve (Oil vs. Gas)

		
>Very low kh	>Undersaturated oil flow pressures < bubble point	>Oil flow at surface rising pressure
		
Producing vs. solution gas/oil ratios		

Exporting

About Exports

Export multiple data types in numerous formats including Excel (Microsoft), shapefile (ESRI), GeoFrame, and more.

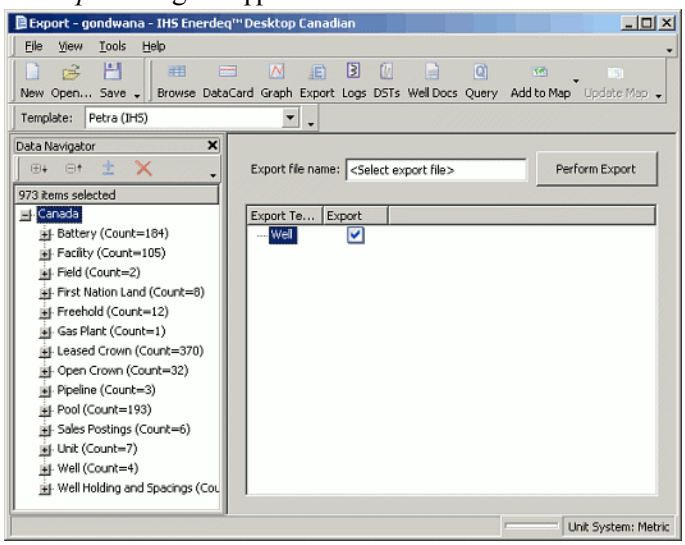
Exporting well data

Export well data in Peep, Value Navigator, DecPro, P/Z, Aries, Petra, Shapefile, GeoGraphix, Excel, Google Earth, and GeoFrame format. All exports but Excel include spatial data. GeoFrame exports include spatial data but don't include well data.

To export well data

1. Depending on whether you want to export data items currently displayed in a window or from a saved query, do either of the following:
   - **From an open window** - with the items to export selected in either the Query Editor, the Map window, or an Output window, from the **Tools** menu of that window, click **Export**.
   - **From a saved query** from the **Tools** menu of an existing window, click **Export**, or using the IHS Enerdeq Desktop toolbar from the **File** menu, point to **Open**, and then click **Export** to launch an *Export* dialog box. Using the *Export* dialog box, from the **File** menu, click **Open** and browse to and open the saved query.

   The *Export* dialog box appears.



2. From the Template drop-down list, click the desired export type.

TIP: All wells are exported, regardless of whether they're specifically selected in Data Navigator. To prevent a well from being exported, select it in Data Navigator, and then click **Remove Results**

OR

Using Data Navigator, select only the items to export, click **Export** to display them in a new *Export* window, and then export those results using the new *Export* window.

3. Click **Perform Export** and browse to a disk location.

4. Type a name by which to identify the exported file, and then click **Save**.
5. Once the export completes, launch the desired application and open the file you saved above.

Related topics

See "Exporting data to Excel," p. 111

Exporting data to Excel

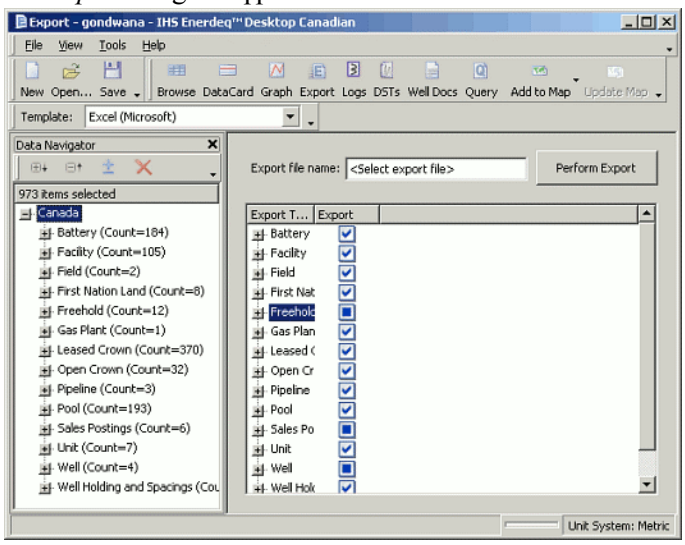
For Excel format, configure which data types, and which data attributes to include in the export. Excel format is the only format in which you can export land parcels.Microsoft Excel format enables you to export points, lines, polygons.

For Browse and Graph windows, you can also export directly to Microsoft Excel by clicking Send to Excel , but these exports only include a single data type, whereas the process below can include multiple data types. For details about the Send to Excel option, see *Related topics* below.

To export data to Excel

1. Depending on whether you want to export data items currently displayed in a window or from a saved query, do either of the following:
   - **From an open window**. With the items to export selected in either the Query Editor, Map, or an Output window, from the **Tools** menu, click **Export** .
   - **From a saved query**. From the **Tools** menu of an existing window, click **Export** , or from the Main Application Toolbar from the **File** menu, point to **Open**, and then click **Export** to launch an *Export* dialog box.
     And then using the *Export* dialog box, from the **File** menu, click **Open** and browse to and open the saved query.

   The *Export* dialog box appears.



2. From the Template drop-down list, click **Excel (Microsoft)**.
3. In the display pane to the right of the Data Navigator pane, first clear the data types you don't want to export, and then in the remaining data types that will be exported, clear any attributes that you don't want to export.

TIP: All data items in a data type that's selected are exported regardless of whether they're selected in Data Navigator. To prevent a data item from being exported, using Data Navigator, select the undesired data items and then click **Remove Results**
OR
Using Data Navigator, select only the items to export, click **Export** to display them in a new *Export* window, and then export those results using the new *Export* window.

4. Click **Perform Export**, and then browse to a disk location.
5. Type a name by which to identify the exported file, and then click **Save**.
6. Once the export completes, launch Excel and open the file saved above.

Related topics

See "Exporting spatial data in Google Earth or Shapefile format," p. 112	*See "Outputting Browse lists," p. 89*
See "Outputting graphs," p. 94	*See "Exporting well data," p. 110*

Exporting spatial data in Google Earth or Shapefile format

Export the spatial data in ESRI shapefile™ or Google Earth™ (kmz) format using one of the following:

- a map that's currently displayed in the Map or Query window, or in an Output window.
- an Enerdeq map, query, or Output window file that's saved to disk.

If the export is based on a map file that's saved to disk, the extents of exported data are based on the map extents. If the export is based on either an active Query Editor or Output window, or on a Query Editor or Output window file that's saved to disk, the extents of exported data are based on the extents of data items in that file. If exporting from an active map that's currently displayed in the Map window, reduce the extents of exported data by either **CTRL-Clicking** or by drawing a polygon around the map items that define the extents of the data to export.

Transformations are only applied to shapefile exports. Files required for shapefiles are saved in a compressed folder.

Spatial data is exported in NAD 27 format.

To export spatial data in Google Earth or shapefile format

1. Using either the Map window (to base the export on an open map), or Query Editor or an Output window (to base the export on a map that's saved to disk), from the **Tools** menu, click **Export**.

   The *Export* dialog box appears.

2. From the Template drop-down list, click either **Shapefile (ESRI)** or **Google Earth**.
3. In the Map Selection pane, select either of the following:
   - **Saved Map**, click **Browse**, and then navigate to and select the Enerdeq map file upon which to base the export.
   - **Open Map**, from the drop-down list select a map that's currently displayed in a Map window and select either **Extents** (to use the current Map window extents) or **Polygon** (to export everything within a polygon you drew on the map).

TIP: For saved maps, and instead of drawing a polygon on an open map, you can reduce the current export extents by specifying the lat long of the desired extents in the Coordinates area, providing the lat long you specify fall within the overall extents of the selected map.

All licensed spatial layers appear in Data Navigator with the currently displayed layers in either the open or saved map selected for export.

▶ Select additional spatial layers to export using Data Navigator even if they're not active on the current or saved map.

4. Using Data Navigator, select the data items to export.
5. Click **Perform Export**, browse to a disk location in which to save the files, and then click **Save**.

NOTE: The PRJ file for untransformed Shapefile exports include a custom CRS GCS_Assumed_Geographic_Undefined_Datum that may cause a warning message when imported to other third-party applications.

Related topics

See "Exporting data to Excel," p. 111	*See "Exporting well data," p. 110*

Dialog Boxes

Add Data

With this feature...	Do this...
Available Attributes	Select an individual item to include in the *Title Box* dialog box. This dialog box doesn't support multiple selection.

Parent topics

See "Displaying graphs," p. 91	*See "Title Box," p. 126*

Browse Select Data

With this feature...	Do this...
Check box	Click ⊞↓ or ⊟↑ to expand or collapse groups and then toggle whether to display or hide data types. You can also click **Select All** or **Deselect All** to change the status of all data types.

Parent topics

See "About DataCards," p. 77

Customization: Options

With this feature...	Do this...
Always show full menus	Select whether every option within a menu appears when you select the menu.
Show full menus after a short delay	Select whether frequently used menu items appear first followed by full menu items after a brief delay.
Reset my usage data	Click to erase your menu selection history so that full menu items are shown the first time you select the menu.
Large icons	Select whether large icons appear in toolbars.
Show ScreenTips on toolbars	Select whether pop-up ScreenTips appear when you hover your cursor over a toolbar item.
Show shortcut keys in Screen-Tips	This option isn't supported.
Menu animations	Select display effects for menus such as whether they fade in.

Parent topics

See "Customizing the interface," p. 12

Customization: Toolbars

With this feature...	Do this...
Toolbars display pane	Select whether the toolbars appear in the window from which you launched this one. You can't hide the main menu.
New | Rename | Delete	These options aren't supported.
Reset	Click to erase your menu selection history so that all menu items are displayed the first time you select a menu.

Parent topics

See "Customizing the interface," p. 12

Edit Layer Attributes

With this feature...	Do this...
Save definition to	View the location of the shapefile you attached to the map. Click **Change** to navigate to a new location to save your *.xmllad* file. The *.xmllad* file should be saved in the same folder as the *.shp* file that will use the definition.
Change...	Click to open the Choose definition file destination dialog box and browse to a location to save the *.xmllad* file).
Description	Type a description for the *.xmllad* file.
Available Fields	View a list of the attributes in the selected layer. Use the arrow keys to move attributes into the *Chosen Fields* box. Attributes in the *Chosen Fields* box are available to work with in Enerdeq.
Chosen Fields	View a list of the attributes to work with in Enerdeq. Highlight an attribute in the list to create a definition.
Display Name	View the name for the attribute. If you would like a simpler name to display in Enerdeq, you can type it. For example, type License No. for the LIC_NUM attribute. This name will appear in the Inspect bar, DataCard, and Output windows.
Display as Key	Set to True for the attribute that's unique to the data. This value appears in the Data Navigator for an item in the layer.
Default Inspect Setting	Select **On** for each attribute to display in the Inspect bar when the layer is attached to a map. After you've attached the layer to a map, click **Map** > **Customize Inspect** to adjust this list for each map.
Decimal Precision	Set the number of decimal places to see for that attribute in the Inspect bar, DataCard, and Output windows.
Save	Click to save the definition to the location specified.

Parent topics

See "Editing shapefile attributes," p. 30

Export

With this feature...	Do this...
Template	Select the export file format. Excel format is the only option that enables you to export more relational data types than just *Wells* and to select individual data items to export. Shapefile format only enables you to export Enerdeq spatial data, not spatial data from an attached proprietary shapefile.
Perform Export	Click to specify a file name and disk location, and then write the data items to a disk file.
Display Pane (Excel and well exports only)	For Excel exports, clear any data types and attributes within selected data types that you don't want to export. All data items in a data type that's selected are exported regardless of whether they're selected in Data Navigator. To prevent a data item from being exported, using Data Navigator, select undesired data items and then click **Remove Results** ( ) before clicking **Perform Export**.
Export Coordinate System	View the map projection that will be applied to your export. If you select a map projection for an exported layer using the **Map** > **Map Projections** menu, that coordinate system is applied to all layers in the export. If you select a transformation using the **Map** > **Map Projections** menu, it isn't applied to layers with mixed datums.
Coordinates (ESRI shapefile and GeoFrame exports)	Specify the lat/long by which to reduce the extents of the open or saved map upon which the export will be based.
Map Selection (ESRI shapefile, Google Earth, and GeoFrame exports)	Select either a map that's saved to disk or a map that's currently displayed in a Map window. For a map that's currently displayed in a Map window, you can also draw a polygon and then specify that only objects within the extents of that polygon are exported.

Parent topics

See "Exporting data to Excel," p. 111	*See "Exporting spatial data in Google Earth or Shapefile format," p. 112*
See "Exporting well data," p. 110	See "Exporting polygons and lines in GeoFrame format"

Find

With this feature...	Do this...
Find what	Type any contiguous letters or numbers for which to search the Browse list. This dialog box doesn't support wildcard characters.

Parent topics

See "Navigating Browse lists," p. 82

Formation Selector

With this feature...	Do this...
Search	Select whether results start with or simply contain the contiguous alphanumeric characters you type.
Lookup Entry	Type the name to which to scroll the results in the display pane below. Characters you type aren't case-sensitive.
Display Pane	Click the column heading to sort the entire list in ascending or descending order. The selected entry populates Query Editor when you click **OK**.

Parent topics

See "Building queries," p. 57	*See "Querying formations," p. 67*

Graph Settings

With this feature...	Do this...
Graph type	Select the type of graph to display.
3D View	Select whether the graph appears in three-dimensional view.
Legend Visible	Select whether a legend that defines the graph elements appears to the right of the graph.
Highlight Series	With **Legend Visible** selected above, select this so that when you hover the cursor over a label that appears on the legend, other series on the graph fade.
Grid Visible	Select whether X grid lines appear behind the plotted elements in the graph.

Parent topics

See "Viewing underlying graph data," p. 94	*See "Displaying graphs," p. 91*

Label

With this feature...	Do this...
Visibility	Select whether labels appear on the map for all map items of this type. If you only want to label specific items in a map layer, clear this option and select Label Entity from the Annotation menu item in the map menu bar. Regardless of whether this checkbox is selected, label settings are saved. Type the min max range at which the label becomes visibility. The scale range is only applied when Display Label is also selected.
Available Labels	Click ⊞ to expand a group in the list or click ⊟ to collapse a group.
Selected Labels	Click a position where you want the data to be posted, and then click an attribute in the Available Labels pane on the left of the dialog box.
Scaled Label	Select the check box to reference the font size to the scale of the map. If you select this box, the label size decreases as you zoom the map out and increases as you zoom the map in.
Text	Select font properties, colors, transparency, and rotation.
Preview	View a sample that shows your selections.

Parent topics

See "Labeling items on maps," p. 44
See "Displaying symbols on maps," p. 46
See "Attaching queries to maps," p. 63

Map - Find

With this feature...	Do this...
Layer	Select a layer to search.
Attribute	Select an attribute to search that appears in the layer selected above.
Attribute Filter	Type all or part of the value to search. Wildcards are not supported.
Starts With Contains	Select whether the desired attribute starts with or includes the attribute filter.
Results list	Displays a list of items that match what you typed. Click the desired item and then click **Zoom** To center the map on the desired item.

Parent topics

See "Finding map items using a text search," p. 27

Page Setup: Content

With this feature...	Do this...
Display pane	Click a check box in the Include in Report column to include that data in the printed Data-Card.
Printer	Click to select a different printer attached to your computer or network.

Parent topics

See "Printing DataCards," p. 80

Page Setup: Info

With this feature...	Do this...
Title Description	Type text to display on the printed map. Click **Font** to select a text family, size, and style. Click the first and second drop-down arrows ( ) to specify a text color and a back-ground fill for the text box in which that text appears. Click whether to draw a bounding box around the text boxes.
Company Logo	Click ... to browse for an image to display in the copyright text box that will appear on the map.
Printer	Click to select a printer to which to submit the print job.

Parent topics

See "Setting basic map printing options," p. 32 *See "Setting advanced map printing options," p. 36*

Page Setup: Layout

With this feature...	Do this...
Well information	Select whether to include well header details relevant to the well for which you're printing a log.
Visible portion on screen	Print only the portion of the log currently visible within the extents of the *Log viewer* dialog box.
By zone	Select a top and bottom for the zone of interest in the Start at and End at drop-down lists, and then type the depth for additional information to include above and below that zone.
DST Report	Select whether to print any drill stem tests for the well for which you're printing a log. For information on DSTs.
Production Report	Select whether to print any production reports for the well for which you're printing a log.

Parent topics

See " Printing logs," p. 99

Page Setup: Legend

With this feature...	Do this...
Display pane	Select a layer name and its associated icon to display in the legend that appears on the printed map. By default, the selected legend items are the same as those currently displayed on your map in the *Map* window.

Parent topics

See "Setting basic map printing options," p. 32 *See "Setting advanced map printing options," p. 36*

Page Setup: Map

With this feature...	Do this...
Grid labels and graticules	When the **Use map grid labels and graticule settings** check box is cleared below, select whether to display a white border around your map on which map grid labels appear, and whether to denote lines of latitude and longitude on your printed map.
Use map border and graticule settings	Select whether grid labels and graticule settings are inherited from your settings in the Map window or based on your selections above.

Parent topics

See "Setting basic map printing options," p. 32 *See "Setting advanced map printing options," p. 36*

Page Setup: Paper Setup

With this feature...	Do this...
Size	Select the printed page size.
Source	Select either a fixed paper tray or allow the printer to automatically select the appropriate tray based on the print job requirements.
Orientation	Select either portrait, where the page is taller than wide, or landscape where the page is wider than tall.
Margins	Select the amount of blank space to leave around the printed image. The measurement units for these margins are based on your Windows settings, not Enerdeq settings.

Parent topics

See "Setting basic map printing options," p. 32 *See "Setting advanced map printing options," p. 36*
See "Printing DataCards," p. 80

Page Setup: Scale

With this feature...	Do this...
Scale	Select or type a scale at which to print the log where 1:240 more accurately renders the log image than 1:600.

Parent topics

See "Printing logs," p. 99

Page Setup: Visibility

With this feature...	Do this...
Display pane	Select whether a map element such as the legend, the map description, and so on appears on the printed map.

Parent topics

See "Setting basic map printing options," p. 32 *See "Setting advanced map printing options," p. 36*

Print Preview

With this feature...	Do this...
Print	Click to display the *Print* dialog box where you output the job to either a default printer or another printer you select.
Page Setup	Click to display the *Page Setup* dialog box where you configure the map layout, legend, object placement, and more before printing.
Zoom In  Zoom Out 	Either type a percentage by which to zoom the *Print Preview* window, or click  ,  , or **CTRL+Mouse Wheel** either **Up** or **Down**.
First  , Previous  , Next  , Last Page 	Scroll to the first page, back one page, forward one page, or to the last page.
Layout  +	Click to work in custom Layout mode where you configure where map objects appear on the printed map.
Reset  +	Click to move map objects back to their default location.
Visibility+	Click items in the drop-down list to hide from the printed map. This selection is also available by selecting **File** > **Page Setup** > **Visibility** tab.
Index View ()+	Click to display the map as an empty box so that when you're not in Layout mode, Enerdeq refrains from rendering all of the map layers in the Print Preview dialog box.
Map Scale+	Type or select a map scale.

+ *These options are only visible when using Print Preview with a Map.*

Parent topics

See "Setting basic map printing options," p. 32	*See "Setting advanced map printing options," p. 36*
See "Printing maps," p. 39	*See "Outputting Browse lists," p. 89*
See "Outputting graphs," p. 94	*See " Printing logs," p. 99*
See "Printing DataCards," p. 80	

Properties: Dimensions

With this feature...	Do this...
Radius	Type a new radius for the circle, in meters.
Center	Type the following: **Lat** - the latitude for the new location for the circle. **Long** - the longitude for the new location for the circle.

Parent topics

See "Moving or copying map annotations," p. 51	*See "Resizing map annotations," p. 53*

Properties: Fill

With this feature...	Do this...
Background	Select a color for the background fill of the annotation element.
Foreground	Select a color for the hatching in the annotation element.
Hatch Style	Select a style for the hatching in the annotation element. If you don't want hatching, select the empty rectangle option ().

Parent topics

See "Changing map annotations," p. 48

Properties: Marker

With this feature...	Do this...
Style	Select a shape for the point (Circle, Circle with Dot, Circle Outline, Cross, Diamond, Hexagon, Pentagon, Pentagon Outline, Square, Square with Dot, Square Outline, Triangle, Triangle with Dot, Triangle Outline, TrueType). **Note** : The TrueType style enables you to use characters or fonts that are registered on your system.
Font	Select a font for the TrueType style (only available if you select TrueType in the Style drop-down list above).
Character Set	Select a character Set for the TrueType style (only available if you select TrueType in the Style drop-down list above).
Color | Size	Select a color and size for the point.
Preview	Displays an example of the properties you have selected.

Parent topics

See "Changing map annotations," p. 48

Properties: Pen

With this feature...	Do this...
Thickness	Select the thickness of the line in pixels (1 to 8).
Color	Select a color for the line.
Style	Select a line style.
Arrow Ends	Select an arrow end for a line. This option is available for the properties of lines only.

Parent topics

See "Changing map annotations," p. 48

Properties: Text

With this feature...	Do this...
Font | Size | Color	Select a font, size, and color for the text.
Style	Select the style for the text (Regular, Bold, Italic).
Preview	Displays an example of the properties you selected.
Text Box	Type the text to display in the map annotation. If you've selected one text block on the map, the text appears in that text box. If you've selected multiple text blocks, text won't appear. If you type text in the box, all selected annotations on the map are changed to the text you type.

Parent topics

See "Changing map annotations," p. 48

Query Properties

With this feature...	Do this...
Description	Type a description to differentiate this query from others. Press **CTRL+C** to copy any selected text to your Windows clipboard or **CTRL+V** to paste text that's in your Windows clipboard into the Description pane.

Parent topics

See "Saving queries to disk," p. 61

Sort Browse List

With this feature...	Do this...
Sort by	Select the primary column by which to sort alphanumeric values and whether to sort them in ascending or descending order.
Then by	Select the remaining columns by which to sort alphanumeric values and whether to sort them in ascending or descending order.

Parent topics

See "Sorting Browse list columns," p. 84

Symbolize

With this feature...	Do this...
Visible Scale Range	Type the following: **Min** - the minimum map scale at which the layer appears. **Max** - the maximum map scale at which the layer appears.
Transparency	Drag the slider to set the desired level of transparency, where 0 is opaque and 100% is transparent.
Symbolize By	Select the method by which to symbolize the data. Most symbology uses the basic method or the simple renderer method; however, for some layers you can base the symbology on data attributes. For example, facilities can be symbolized by type, pipelines by substance, land by interest holder, etc.
Color and Style	Select the formatting options, which vary depending on whether the symbology you're changing is a point, line, or polygon.
Layer	Select the layer for which to configure the symbology display.

Parent topics

See "Displaying symbols on maps," p. 46	*See "Attaching queries to maps," p. 63*

Template Editor

With this feature...	Do this...
Template	Select the template to display its columns in the Template Attributes list. The templates from which you can select depend on the data group selected in Data Navigator. Depending on whether a pre-defined template or a user template appears, click **Save** to either create a user template with the same name as a pre-defined template (you can't overwrite pre-defined templates) or to overwrite a user template. Type a different template name if you want something more descriptive or to avoid overwriting a user template. If a user template appears here, **Delete** is active. You can't delete pre-defined templates.
Available Attributes Search	Type a term to locate in the Available Attributes pane and then click **Find** or press **ENTER**. Click **Find** or press **ENTER** multiple times to locate additional instances of the term.
Available Attributes Pane	Click + to expand the branch down to the desired data item, select it, and then click  to insert it above the data item selected in the Template Attributes pane.
Template Attributes	Click the data items to move or exclude from the Browse list and either click **Remove Attribute**, or click  or to change the left-to-right order in which they will appear in the Browse list (**SHIFT+CLICK** or **CTRL+CLICK** for multiple selection). You can also click **Clear All** to remove all data items and start from scratch.

Parent topics

See "Editing Browse list display templates," p. 86

Title Box

With this feature...	Do this...
Text Format	From the drop-down lists, select the font family, size, style, and color.
Data	Click to display the *Add Data* dialog box and select the attributes to add to the display pane. Enerdeq uses these attributes to search the database and populate the graph title box with actual values. Ensure your cursor is at the end of a line or on a new line in the display pane before adding attributes.
Display Pane	Rearrange data items inserted using the *Add Data* dialog box and type the desired text. You can use copy, cut, and paste functionality (CTRL+C, CTRL+X, and CTRL+V).
Defaults	Click to reload Enerdeq's default settings.

Parent topics

See "Displaying graphs," p. 91

X Axis

With this feature...	Do this...
Series	Select the measurement criteria for the horizontal axis.
Logarithmic	For all graphs, select whether to use a logarithmic scale to limit extreme data fluctuations by presenting the logarithm of a quantity instead of the quantity itself. If this option is selected, you can't change the scale values.
Label	Select the text and text formatting for the horizontal axis.
Scale	Either select a check box in the Auto column to automatically use the lowest or highest value based on the actual data for each item, or clear the check box and select the start and end points to truncate the range. You can also type a specific minimum or maximum value or date if the check box is cleared.
Gridlines	Select whether major gridlines appear and, if so, their line style and color.

Parent topics

See "Displaying graphs," p. 91

See "Viewing core data in DataCards," p. 78

Y Axis: Axes & Series

With this feature...	Do this...
Graph axes and series	Expand the nodes and for items to plot on the graph, select the check box in the Visible column. Configure how the data appears using the Properties for selected series pane below.
Scale	In the **Auto** column, select the minimum and maximum check boxes to set the Y axis start and end points close to the lowest and highest values of the actual data **OR** Clear the check boxes and type specific start and end points. The maximum value can't be changed if **Logarithmic** is selected as the grid option in the Y Axis: Grid tab.
Label	Select whether the data value appears on the graph.
Line Style	On the drop-down lists, select a line style and color to display. To display only markers and not an actual trend line, select white as the line color.
Markers	On the **Style** drop-down list, select whether to display markers at each data point.

Parent topics

See "Displaying graphs," p. 91	*See "Viewing core data in DataCards," p. 78*

Y Axis: Grid

With this feature...	Do this...
Grid Options	For all graphs, select whether to use a logarithmic scale to limit extreme data fluctuations by presenting the logarithm of a quantity instead of the quantity itself. If this option is selected, you can't change the maximum scale value on the *Y Axis: Axes & Series* tab, or the minor gridlines options. Select the fill color to display behind the graph.
Grid Lines	If selected, choose the number of lines to display over the whole graph (major gridlines) and their presentation style, and then select the number of lines to display between each of the major gridlines (minor gridlines) and their presentation style.

Parent topics

See "Displaying graphs," p. 91	*See "Viewing core data in DataCards," p. 78*

Y Axis: Labels

With this feature...	Do this...
Label Position	Items in this list include only the items listed in the Graph Series list of the *Y Axes: Series* tab. Select one and click either ➡ or ⬅ to place its scale and label on either side of the graph, or click ⬆ or ⬇ to move its label in relation to its neighbors. The first data series in each list appears closest to the graph, the last appears furthest.
Label	Type the text to display as the label for the data series selected above. This doesn't change the actual series name, just the label that appears beside the graph.

Parent topics

See "Displaying graphs," p. 91	*See "Viewing core data in DataCards," p. 78*

Appendices

Map projections vs. scale cutoffs

Following defines the default scale cutoffs for projections. Projections only appear in the drop-down list when you are in a location and at a map scale where that projection is valid:

Map Scale	Projection
> 1,500,000	Canadian Lambert Conformal Conical
1,500,000 - 500,001	Universal Trans Mercator
< 500,001	World Equidistant Cylindrical

- Additional projections are available from the **Maps** > **Projections** menu option.

Transformation applied	Transformation ignored

Canadian Well Export Fields

Merak, Energy Navigator, Petro-Soft, Landmark,

Header: UWI, Well Name, Field, Pool, Fluid, Status, Curr Licensee, Orig. Licensee, Unit, Rig Release Date, Status Date, BH Latitude, BH Longitude, Prod Zone, Province, Total Depth, KB Elevation.

Monthly Production: UWI, Date, Monthly Oil, Monthly Gas, Monthly Water, Calendar Daily Cond, Monthly Producing Hours.

Gas Analysis/Composition: UWI, Sample Date, Critical Temperature, Critical Pressure, Gas Gravity, N2, C02, H2S, H2, He, C1, C2, C3, iC4, nC4, nC5, C6, C7+, iC5+.

Pressure Data: UWI, Es Extension, KB Elevation, Top Depth, Base Depth, Pool Datum, Well Datum, Init Res Pressure.

Gas Pressure Tests: UWI, Es Extension, Date, Type, Shutin Time, Well Header Press, Run Depth, Run Depth, Press, Run Depth Gradient, Run Depth Temp, Datum Press.

Oil Pressure Tests: UWI, Es Extension, Date, Type, Shutin Time, Well Header Press, Run Depth, Run Depth Press, Run Depth Gradient, Run Depth Temp, Datum Press.

Deliverability: UWI, Es Extension, AOF Date, Fluid Type, Type, Duration, Flow Rate, Flow Press, Mid Pt Press, AOFN, AOFP, Cum Gas.

Petra

Well: UWI, Location, Name, Curr Licensee, Orig. Licensee, Fluid, Fluid Abbr, KB Elevation, Ground Elevation, Total Depth, Field, Formation at TD, IPL Form At TD, Prod Zone, SH Latitude, SH Longitude, BH Latitude, BH Longitude, Mode, Lahee.

Monthly Production: Monthly Volume.

Casings: Casing Depth, Size.

Cores: Core Type, Top Form, Top Depth, Base Depth, Date, Length Recovered.

DirSurvey: MD,TVD, Azimuth, Inclination.

Tops: IPL Form, Formation at TD, MD Top.

Zone: KB Elevation, Ground Elevation, Total Depth, Completion Date, Spud Date, Rig Release Date, License Date, Confidential Date, Status Date, Final Drill Date.

IP: Base Depth, Test Date, GOR, Top Depth, Gas Flow Amt, Water Flow Amt, Oil Flow Amt, Period Duration, Test Type.

Perf: Type Abbr, Top Depth, Base Depth, Perf Density, Completion Date.

Production - Monthly Injection: Monthly Volume.

Show: Show Type, Top Depth, Base Depth.

DST: Obs No, Type, Test Method, Top Depth, Base Depth, Date, Top Form, Init Flow Press, Final Flow Press, Hole Diameter, Initial HP, Final HP, Shut Time, Value Open Time, Recovery Array.

GeoGraphix

Well: Well Name, Well Id, Well Class, Fluid Abbr, Total Depth, Field Name, Spud Date, Depth Ref Code, Depth Ref Elevation, BH Lithologic Unit, Operator, Country, Province Abbreviation.

Surface Hole: SH Latitude, SH Longitude.

Tops: Lithostrat Unit, MD Top.

Tests: Top Depth, Base Depth, Top Form Name, Initial HP, Final HP, Initial FP, Final FP, Hole Diameter, Primary Fluid Recov, Type, Method, Shut In Time, Valve Open Time.

Cores: Top Form, Type, Top Depth, Base Depth, Length Recovered.

Production: Prod Zone, Date, Monthly Oil, Operating Daily Oil, Monthly Gas, Operating Daily Gas, Monthly Water, Operating Daily Water, Monthly Producing Hours.

Perfs: Top Form, Type Abbr, Top Depth, Base Depth, Perf Density.

Treatment: Top Form, Type Abbr, Top Depth, Base Depth.

Well: BH Latitude, BH Longitude.

Deviation: MD, EW Dist, NS Dist, Inclination, Azimuth, TVD, Lat, Long, Vert, Dog Leg.

Difference between BMP and EMF format

BMP (Windows Bitmap) is a raster-based format that uses colored dots to represent an image. BMP format can't be compressed and the file size tends to be larger than other raster-based formats (.png, .jpg, .gif, .tif, and others).

EMF (Enhanced Metafile) is a 32-bit vector-based format that stores information as mathematically-based vectors. EMF images can be scaled and the file format is compressed. EMF format is extensible so that custom functionality can be embedded in the emf file.