Megger

Baker Surveyor DX

Static Motor Analyzer Software

User Guide

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Static Motor Analyzer Software

User Guide

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Megger—Baker Instruments

4812 McMurry Ave. Suite 100

Fort Collins, CO 80525

(970) 282-1200

(970) 282-1010 (FAX)

800-752-8272 (USA Only)

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1. Introduction to the Surveyor DX Application

Surveyor DX is a desktop application that provides added value to Baker DX users by uploading Baker DX test data stored on a USB drive for archiving and reporting purposes. Uploaded data is saved in a database on the desktop computer.

Only one database is created and used with each installation. Multiple users of the data would require access to the computer where the database is created. The information in the database is shared by all users and is not locked during use.

NOTICE: The Surveyor DX is not compatible with existing AWA/MTA data; it cannot open existing AWA/MTA data or save data to MTA.

This application does not allow users to apply test parameters to the data nor does it allow the direct addition of pass/fail criteria.

Surveyor DX Reports

The Surveyor DX application generates the following types of reports, depending on the source data collected from the tester:

RLC: Resistance, inductance, capacitance, D/Q, impedance.

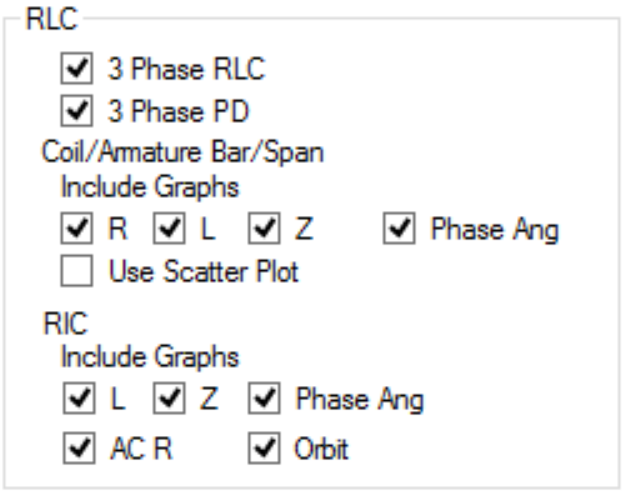
Coil/Armature Bar/Span: Resistance, inductance, impedance, phase angle graphs.

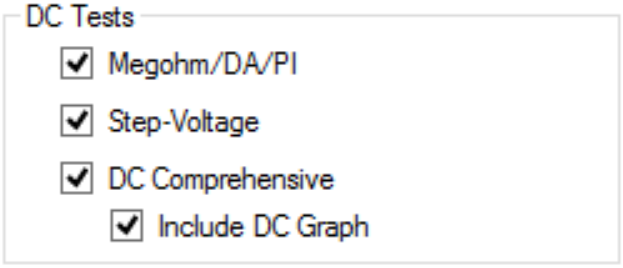
RIC: Rotor Influence Check graphs, inductance, impedance, phase angle, AC resistance.

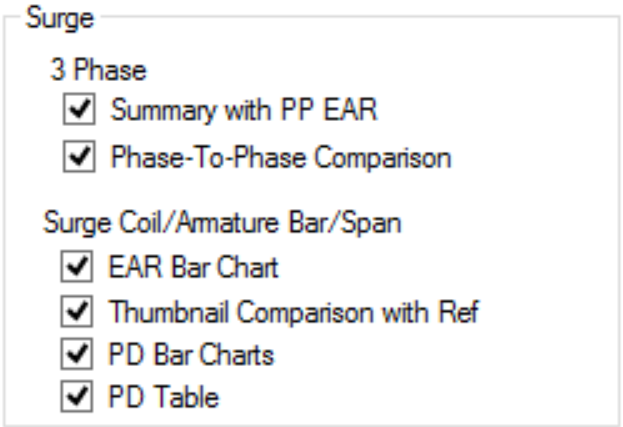
DC Tests: Megohm, DA, PI, DC HiPot, Step voltage, DC Graphs.

Surge 3 Phase: Surge waveform, LL and PP EAR.

Surge Coil/Armature Bar/Span: Reference vs. Test EAR bar chart, thumbnails of each coil/bar vs. reference surge waveforms, partial discharge (PD) data bar charts, and PD tables.







Trending Reports

The values listed below can be selected for reporting on trending within the related test types. These values are selected via the Trending tab in the Settings dialog.

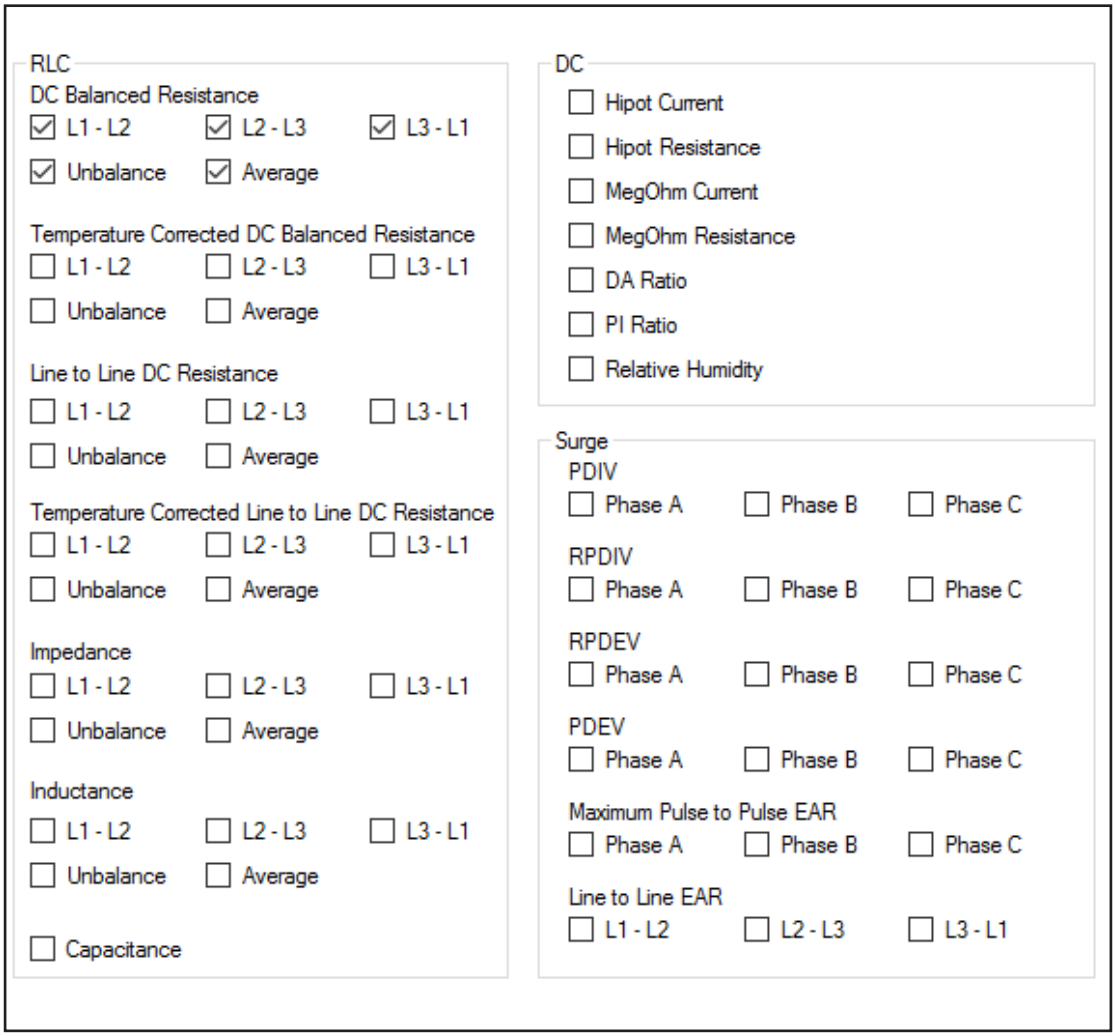


Fig 1: *Report values selected from the Setting dialog, Trending tab.*

Quick View Results

The Surveyor DX application provides representative views of printed reports for selected results.

For DC Test and Surge graphs, the application includes a zoom feature and a cursor with x,y readout.

Report Formats

Web (htm), Web archive (mht), MS Word 2003, 2007, 2010, and 2013 (docx), and Xml (xml)

Languages Supported

The application supports English, German, French, Spanish, and Portuguese.

XML Report

Surveyor DX can generate an XML report that contains the values of the results. In addition to the DX serial number and date/time stamp for each test result type, the test data includes all scalars and the DC test tables. The data for graphs are also exported and include the Surge graph data and the DC Tests graph data.

Platforms and software supported

The Surveyor DX software works on the following 32-bit and 64-bit platforms:

- Microsoft Windows XP® with service pack 3
- Microsoft Vista®
- Microsoft Windows 7®
- Microsoft Windows 8®
- Microsoft Windows 10®

It also works with Internet Explorer 8 (or better) for opening html files and Microsoft Word® 2003/2007/2010/2013 for creating MS Word documents.

Database Support

The Surveyor DX software currently works with a Microsoft Access® database.

The Surveyor DX database will have a .dxdb extension.

Surveyor DX will only connect to one database. You can choose where the database will be located such as on a local computer or on a shared network.

If a company has multiple licenses for Surveyor DX, a merge capability is provided to allow each user to see all the data.

2. Installing the Surveyor DX application

1. Download the setup file from the link provided by the support team.
2. Double-click on the SurveyorDX_Steup_##.##.##.###.exe file to start the installer program.
3. If you are running Windows Vista or higher, you will need to Click "Yes" to allow the program to make changes to your computer.
4. Select the language you want the application to use in your interface then click on Next arrow to continue.

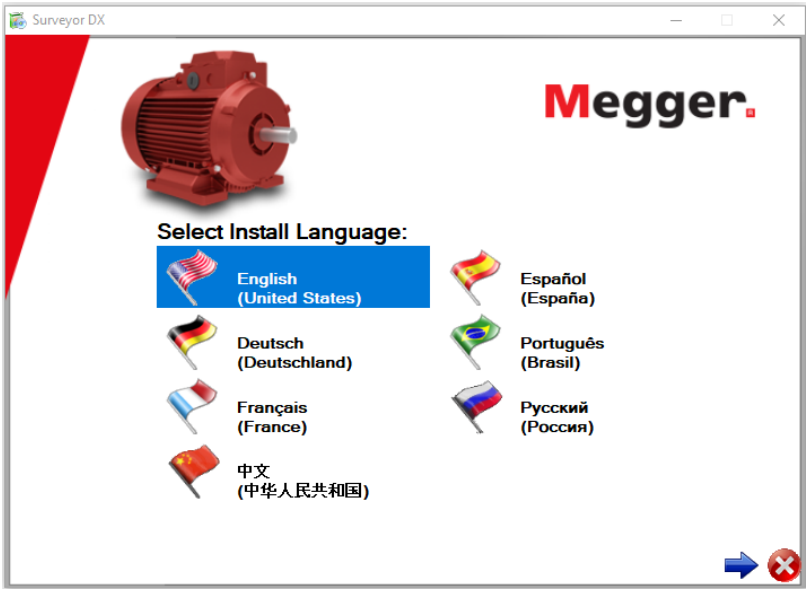


Fig 2: *Surveyor DX installer; select language.*

5. Select the products you want to install from the list displayed. In this case, the current Surveyor DX version.

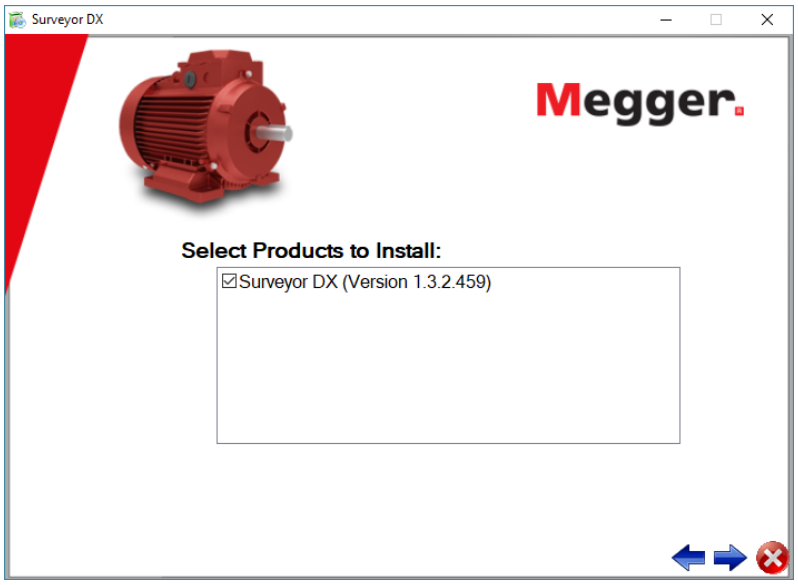


Fig 3: *Surveyor DX installer; select product.*

6. Read the license agreement then click Next arrow to continue if you accept the agreement.
7. Click on the Back arrow to go to the previous page.
8. Click on the Cancel icon (red X) if you do not want to accept the terms of the license. The installation will terminate.

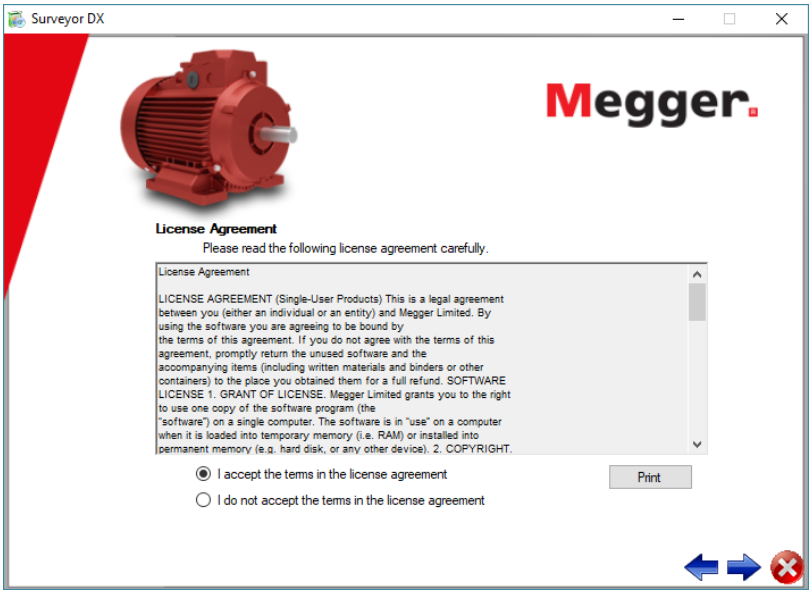


Fig 4: *Surveyor DX installer; read license agreement.*

9. Choose the location where you want to install the application. Use the Browse button to search for and define a custom location, or you can accept the default location provided.
10. Check the box next to Create Shortcut on Desktop to have the installer add an icon to your desktop that is linked to the application. (This box is checked by default.)

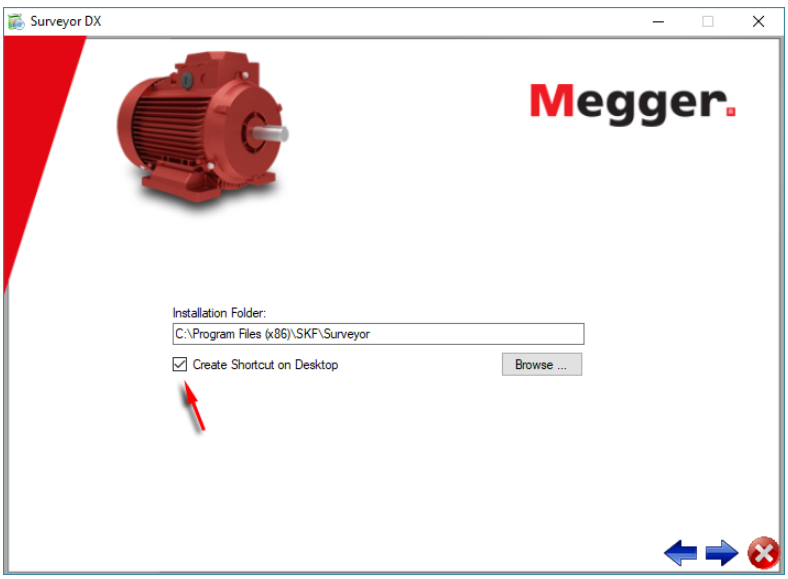


Fig 5: *Surveyor DX installer; specify location and shortcut.*

11. Click Next arrow to continue.

12. The installer will proceed and you will see a percent complete indicator as shown below.

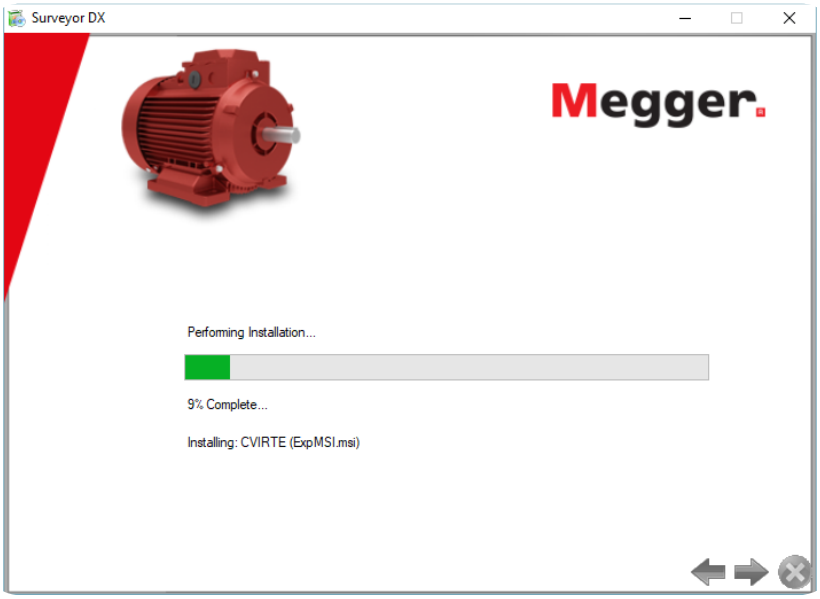


Fig 6: *Surveyor DX installer; progress indicator.*

13. When the installer completes, you will see a message like the one shown below. If you want to review the steps taken during the installation process, click on the View Log button. Otherwise, click on the Finished icon (green check) to exit the installer.

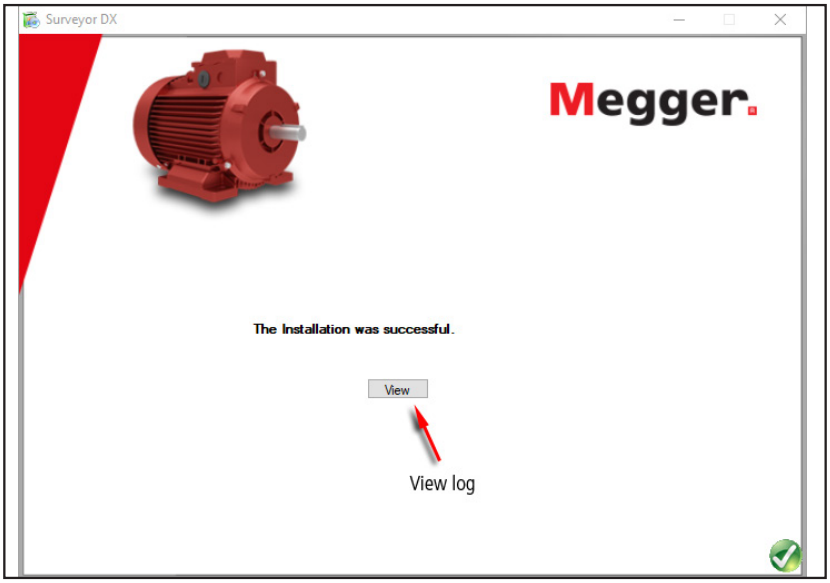


Fig 7: *Surveyor DX installer; installation successful and view log.*

If you checked the Create Shortcut on Desktop checkbox (checked by default) during the installation process, you will see an icon on your desktop like the one shown here. You can start the application by clicking on the icon.

If the desktop icon was not requested, the link to the application can be found in the default start up structure. For example, in MS Windows 7® a "Surveyor" folder is available in the All Programs menu when you click on the Start icon.

Activating the Software

When you first start the application, you will be presented with a dialog box like the one shown below.

NOTE: This process assumes that the computer on which you installed the software is connected to the internet and that you have a valid sales order number ready.

1. Enter your sales order number and e-mail address in the appropriate fields.
2. Click on the Activate Now button.

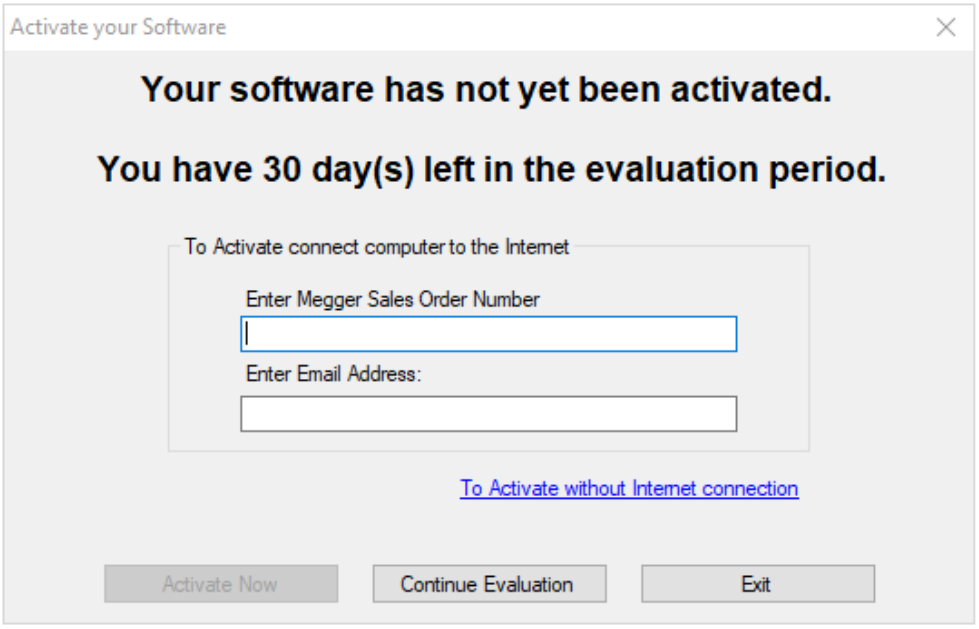


Fig 8: *Software activation dialog box.*

3. The information will be verified and a dialog box will appear confirming your activation status. You will also receive an e-mail with an activation code, which you can use for re-installation purposes if needed.

Evaluating the Software

If you are simply evaluating the software, click on Continue Evaluation to button to proceed. The message at the top of dialog informs you how many days remain in your evaluation period.

Other Options for Activating the Software

If the computer on which the software is installed is not connected to the internet, click on the To Activate without internet connection link. That will open a new dialog like the one shown below.

1. Read the contents of the dialog box to determine your situation.

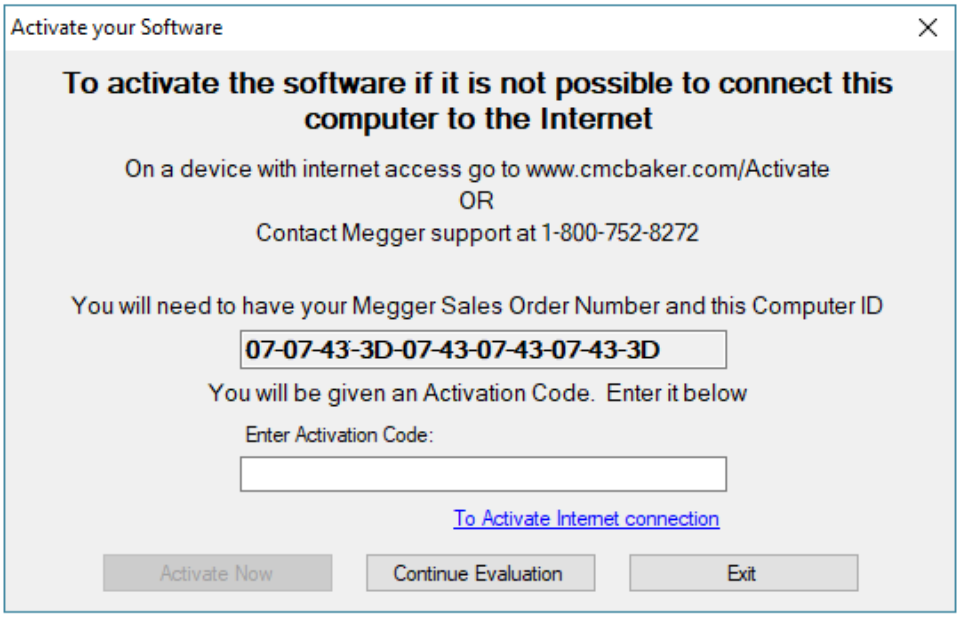


Fig 9: *Alternatives for activating the software.*

2. Ensure that you have your sales order number and the computer ID presented in the dialog. The example ID above shows all Xs, but your will include numbers and letters. Each will be different; they are generated from the computer's characteristics.
3. Contact SKF support as noted to obtain the activation code.
4. Enter the activation code in the appropriate field.
5. Click on the Activate Now button to continue.
6. A dialog box will appear confirming your activation status.

3. Configuring the Surveyor DX Database

When you first use the application, you will see the dialog box shown below so you can choose whether a new database should be created or the software should use an existing database. Click on the appropriate radio button for your application.

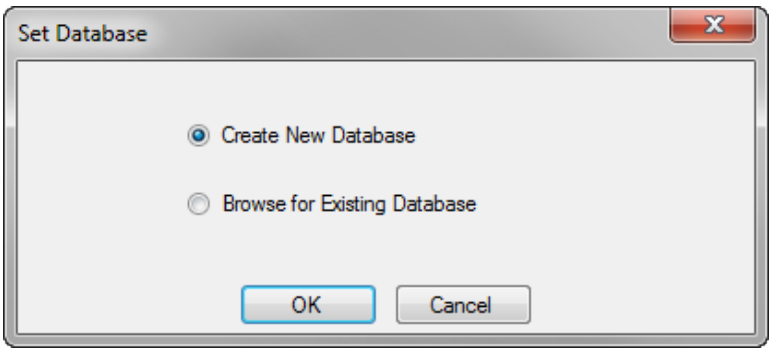


Fig 10: *Specifying database to use.*

If you click on Create New Database, a search dialog will open that you can use to specify the name that you want to give to the database. By default, the file will be located in the application data folder specified by your operating system with the structure shown in the example. It is important to note that this folder is by default set by the operating system to be a hidden folder. You might need to change your folder settings to manually browse to this folder. Change the location if you prefer to use another folder.

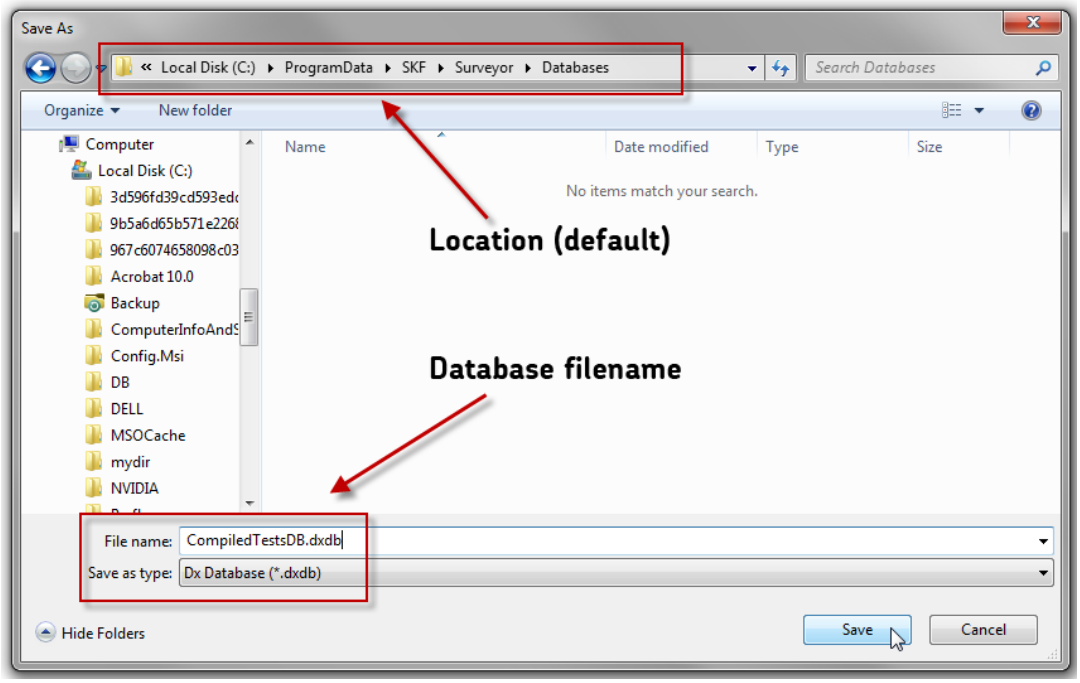


Fig 11: *Search dialog for defining database to use.*

If you click on Browse for Existing Database, a search dialog will open that you can use to locate and specify an existing database.

After you click on Save in the dialog, the selected database will appear as the top item in the Location tree.

Specifying the Database Location

1. To define or confirm the location of your database, click on the Settings icon found in the Main toolbar.

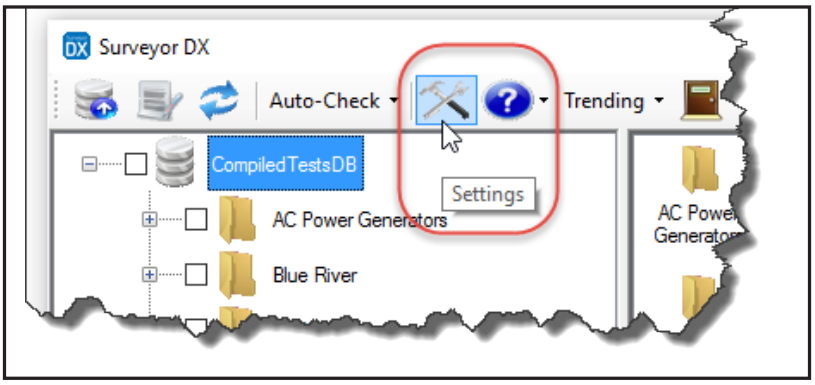


Fig 12: *Icon used to open Settings dialog box.*

2. A dialog box like the one shown below opens to help you confirm or change the database location.
3. Click on the Browse button if you need to change the location of the database you will be using.

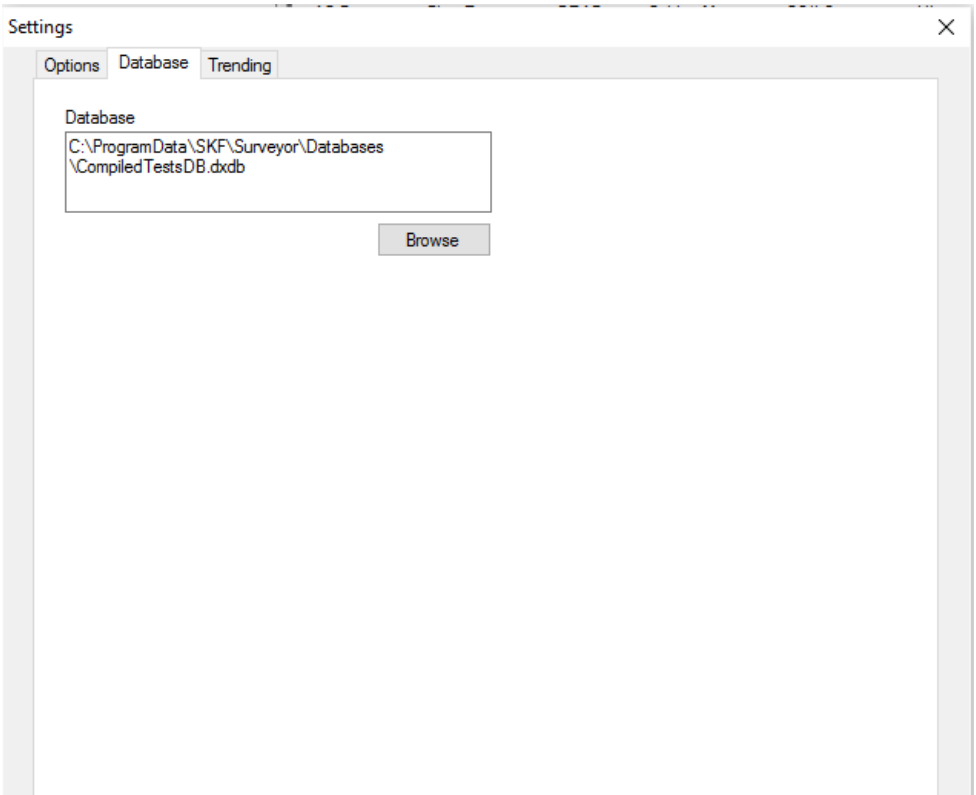


Fig 13: *Settings dialog box; Database tab used to define location.*

4. Click on OK to return to the main user interface.

NOTE: The Apply button is used more for the Select Reports tab in this dialog. You do not need to click on Apply and OK. Clicking on OK saves your changes and returns you to the main user interface.

Merging Databases

Merging databases is accomplished by exporting the entire database (or desired portions) to a .dx file then importing the file into another system on which the Surveyor DX application has been installed.

You can use the same methods to select data to export that you use to select results for reporting. This includes all the selection features via Auto-Check and the Settings dialog box.

Then you would right click on the tree to open a menu like the one shown below then click on the Export item to save the selected data to a .dx file. Selecting Export at the database level (this example) exports the entire database (or a subset if you use any of the application's selection features).

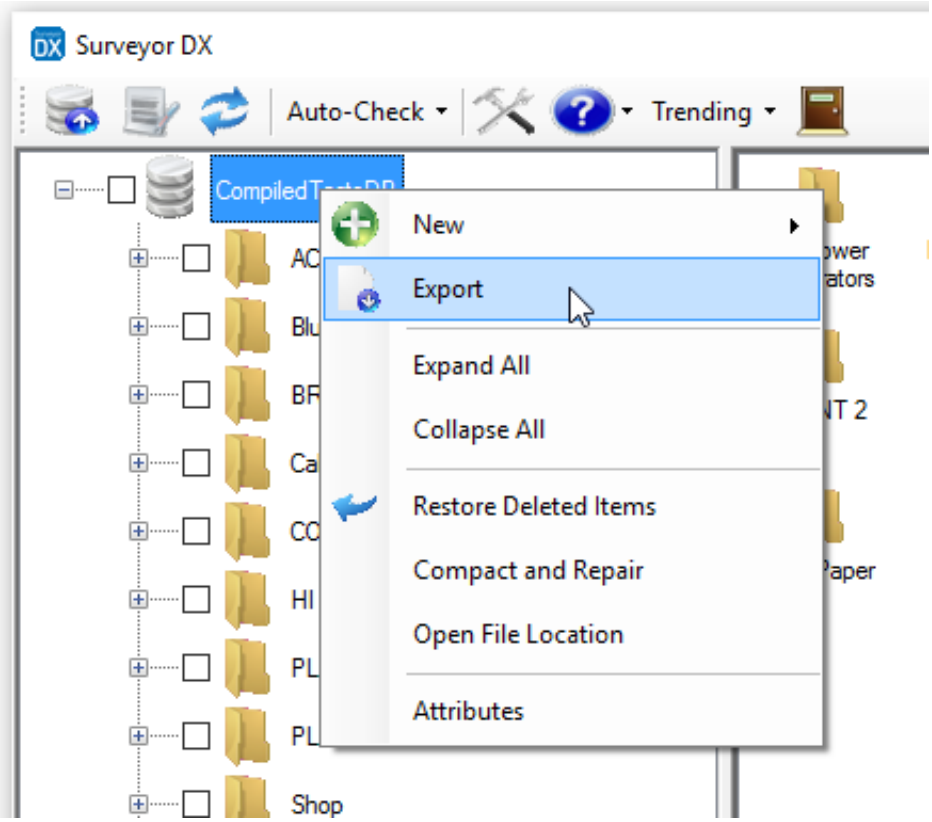


Fig 14: *Exporting data at the database level.*

The exported database .dx file is then read by the target database and merged into the existing data just as it would be with any other file import. Duplicate data is omitted during the import, and new or updated data is added to the existing file structure.

Selecting the Export item from a menu below the database level restricts the export to data found at that level and lower.

4. Using the Surveyor DX Software

Overview

The graphic below shows the flow of data from the DX tester (via USB thumb drive) to a personal computer or workstation where the Surveyor DX software resides. From there, test results can be viewed and reports can be generated as needed.

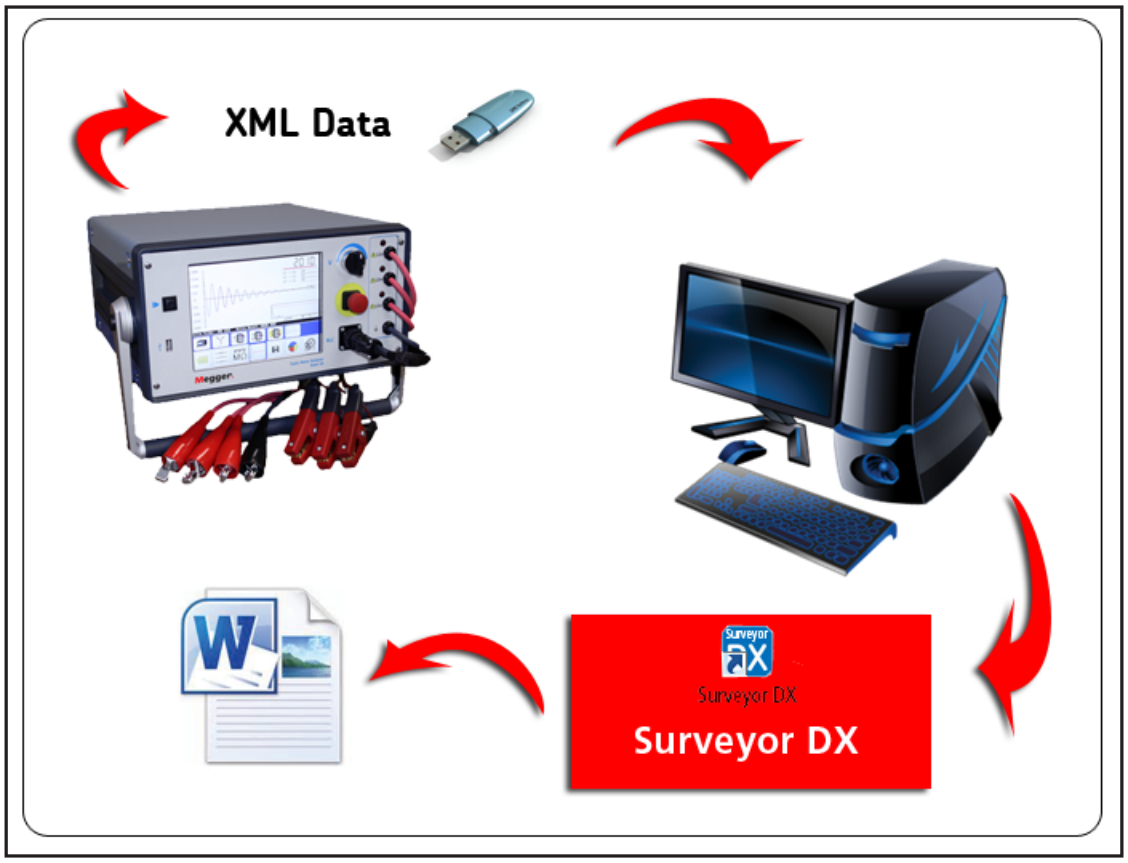


Fig 15: *Data transfer path from DX through Surveyor DX report generator.*

The test data is contained in an XML structured file that uses a .dx extension. When you double-click on a file with a .dx extension, the application automatically opens.

Exporting Data from a Baker DX Via USB

The data exported from the DX is transferred to the computer where the application resides via a USB drive. These instructions are for completing the export process:

1. To export data to a USB drive, connect an external zip drive, memory stick, or other USB storage test item to the USB port on the front of the DX unit. The USB disk or drive must be formatted with a FAT32 file system.
2. On the Baker DX, select the folder or record to export.
3. Press Export to USB. A pop-up menu allows you to choose export all data, export selected folder (from step 2) or export selected record (from step 2).
4. When the on-screen keyboard comes up, type in a name for the file you want to save and click on Done.
5. The selected data will save to the USB drive.
6. On Baker DX firmware versions older than 1.2, the data will export as an .xml file; on the newer versions, it will export as a .dx file.

Surveyor DX User Interface

The graphic below shows the basic elements found in the Surveyor DX user interface.

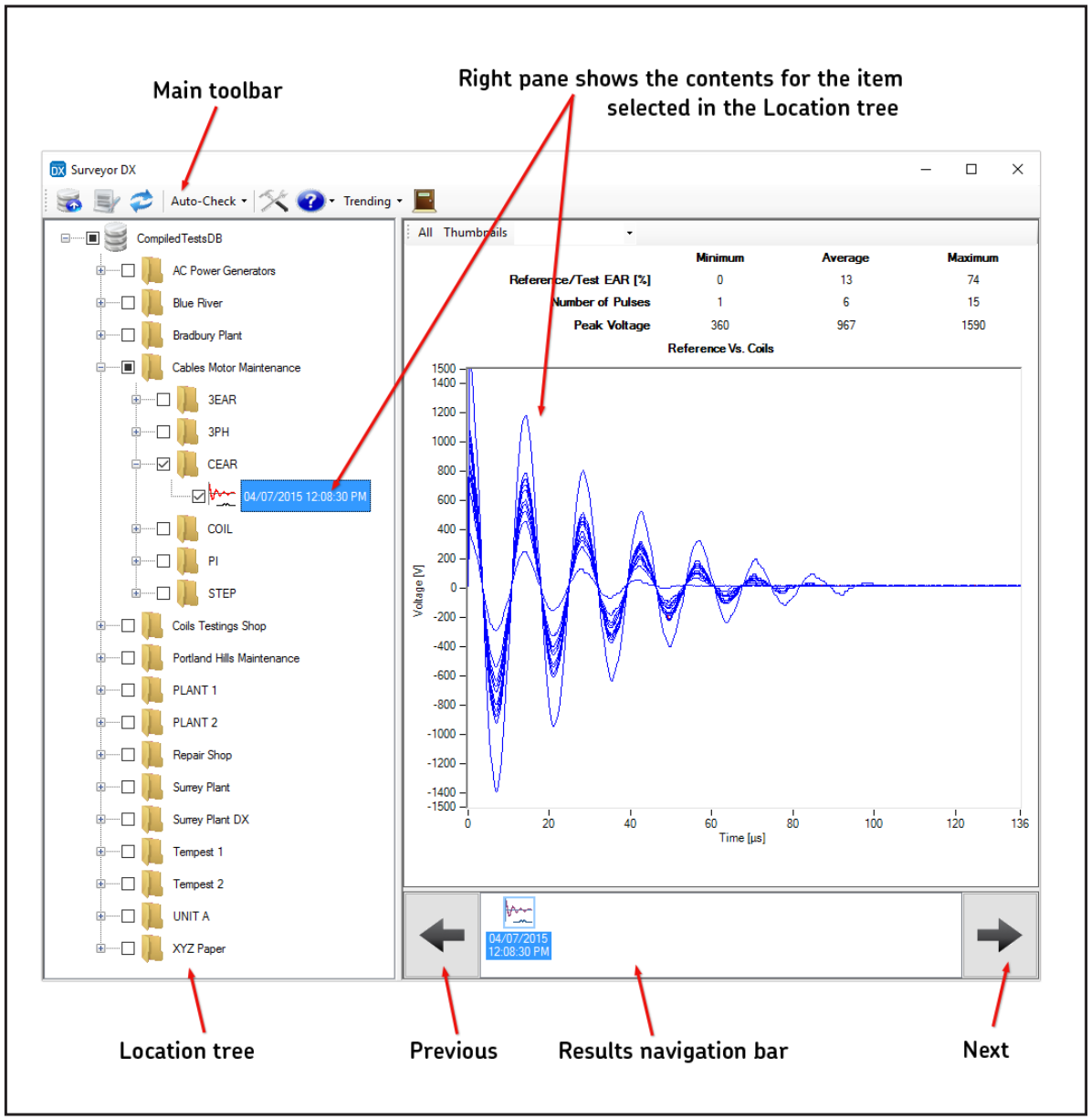


Fig 16: *Surveyor DX user interface descriptions.*

The Location tree allows you to select folder contents or results to display. You can display a folder and all of its child items (folders and results) with a single click.

You can select items for report generation by checking the boxes next to a folder or result, or you can use the Auto-check feature found in the Main toolbar.

When you click on an item in the Location tree, the associated elements (child items) for that item are displayed in the pane on the right side of the page called the Quick View. If the item is a test result, it will be displayed in a Quick View pane so that you can quickly glance over the data's big picture information.

A Results navigation bar is added to the bottom of the Quick View pane to present the test data available for a selected motor (or other tested item) in the Location tree.

The Main toolbar is shown in the image below. It contains the controls for basic functions such as importing new data or opening files, generating reports, refreshing the display area, and retrieving help or about information.

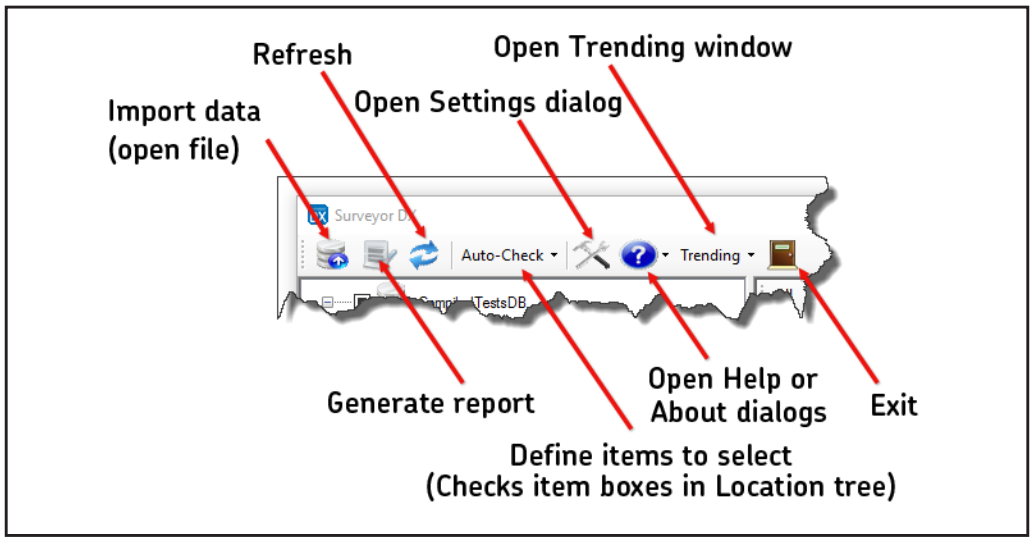


Fig 17: *Main toolbar items defined.*

The Auto-check control is used to select (check) data for report generation.

Another icon opens the Settings dialog box, which you use to specify report options. It is also used to define or verify the location for the system database.

Clicking on the Help and About icon opens a menu that you can use to access the online help for the application or find out more about the current version installed.

The About Surveyor DX menu item also provides information about the current software version, and allows you to check for new updates simply by clicking on the Check for Updates button.

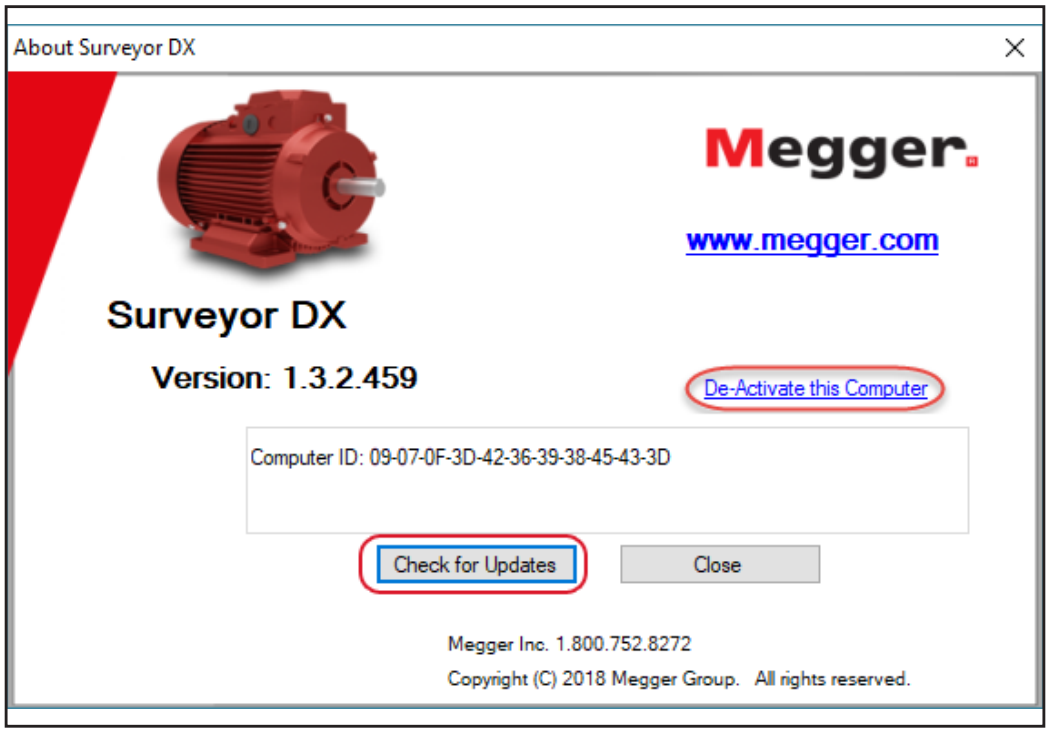


Fig 18: *About Surveyor DX dialog box.*

Deactivating Software

If you need to install the software on another computer for any reason and you want to use the license for the software installed on a computer that no longer will be used, you must deactivate the software first so that the license can be properly released for re-use.

NOTE: You will need to have internet access for the computer on which the software will be deactivated so the system can recognized the computer ID and release the license. If that computer is not on the internet, call Megger—Baker Instruments Support directly at 1-800-752-8272.Click on the De-Activate this Computer link to deactivate the software. You will see a warning dialog like the one shown below letting you know that the software will be deactivated and revert to an evaluation version.

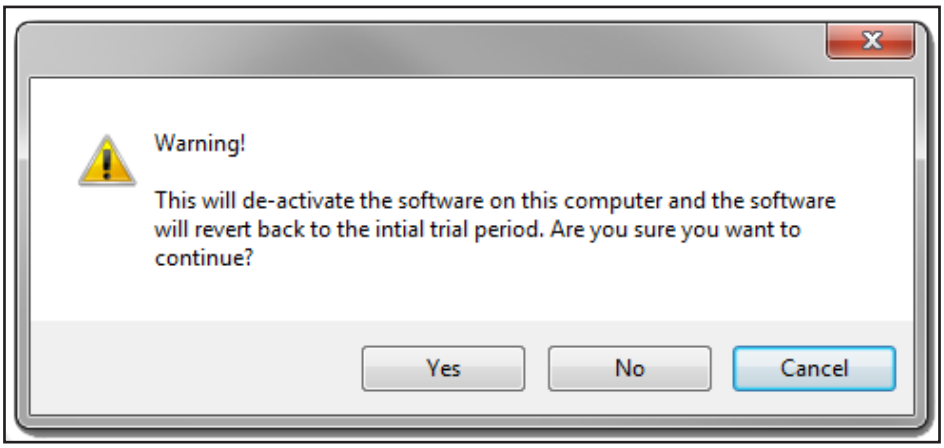


Fig 19: *Warning dialog box displayed during software deactivation.*

After the software has been deactivated, you can continue to use it as an evaluation copy until the evaluation period expires, or you can uninstall the software using the Windows Control Panel uninstall feature.

You can then install the software on a new machine using the sales order number to get a new activation code.

Quick View Pane Features and Functions

The Quick View pane provides a number of features to help you view and examine the data presented.

As the example below shows, the information displayed for DC Tests can be hidden if desired by clicking the right mouse button over the legend entry and unchecking the box assigned to the entry.

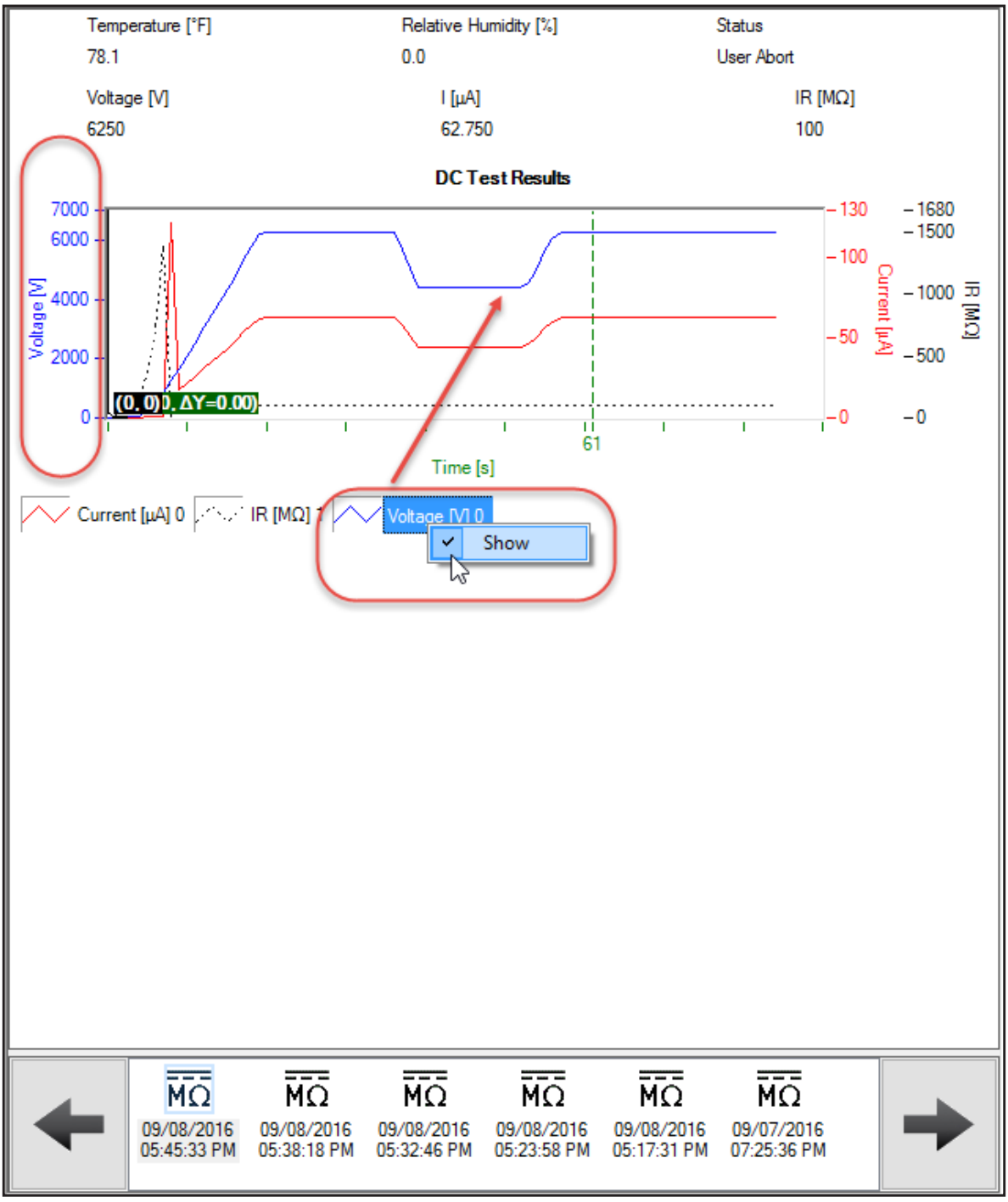


Fig 20: *Quick View pane option for show/hide data.*

For DC Test results, the Quick View pane includes two cursors that you can use to closely examine the information in the graphs. A black point of interest cursor displays the values of the specific point on which it rests in the graph. The green difference cursor indicates the change/difference from the location of the point of interest (black) cursor to the location of the difference (green) cursor on the graph.

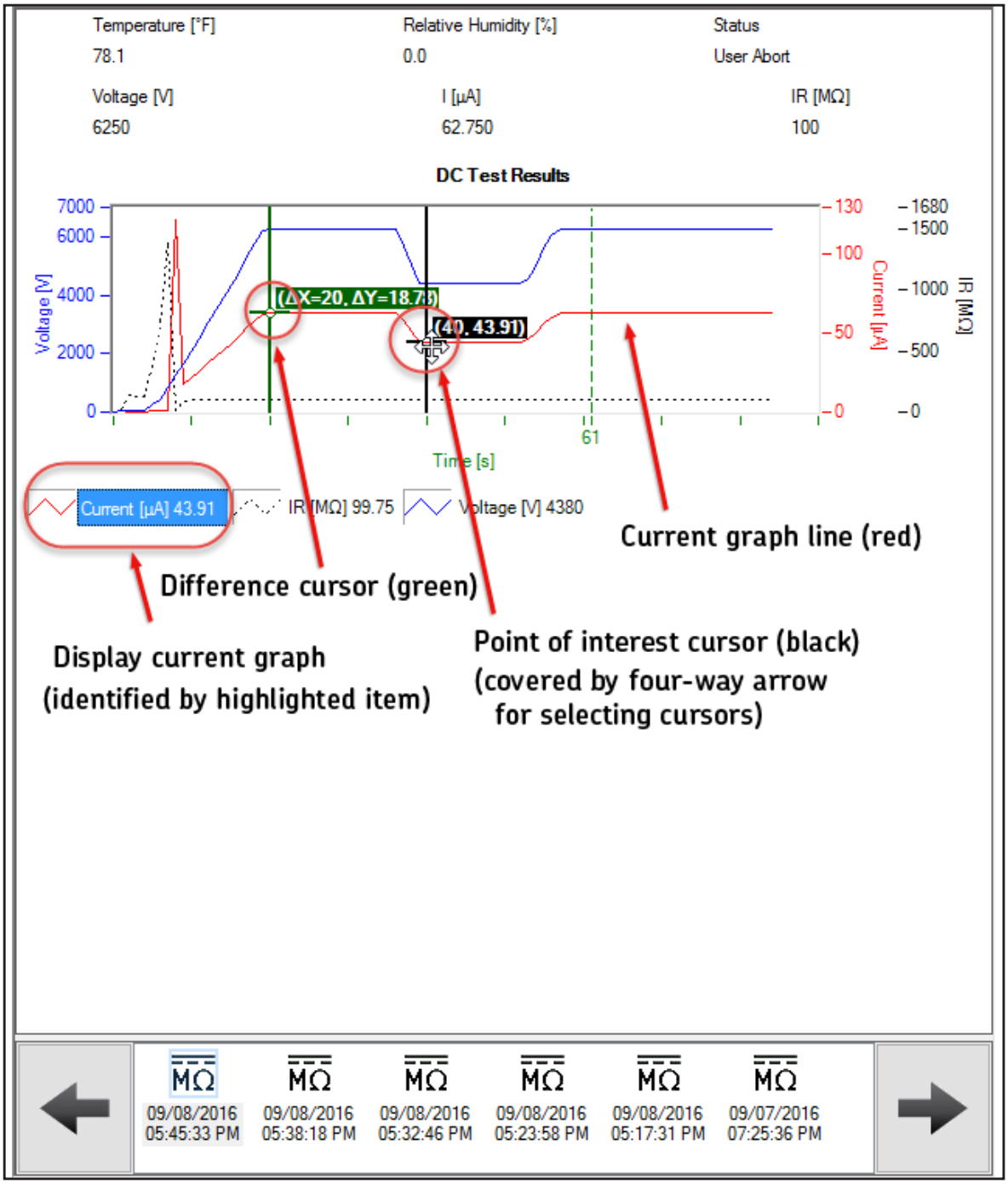


Fig 21: *Quick View pane with DC Tests features: point of interest and difference cursors.*

To select a cursor, look for a small crosshair on one of the corners of the green or black box, then move your mouse over the crosshair until it changes to a four-way arrow. Click and hold the mouse to drag the cursor to the desired location along the graph line for the measurement highlighted in the legend. The cursor will only drag along the line for the selected measurement.

As you drag the black cursor to new points, the values in the cursor itself change along with those found in the legend to reflect the values at the new points of interest in the graph. Cursors can only be dragged along the lines for the highlighted legend item.

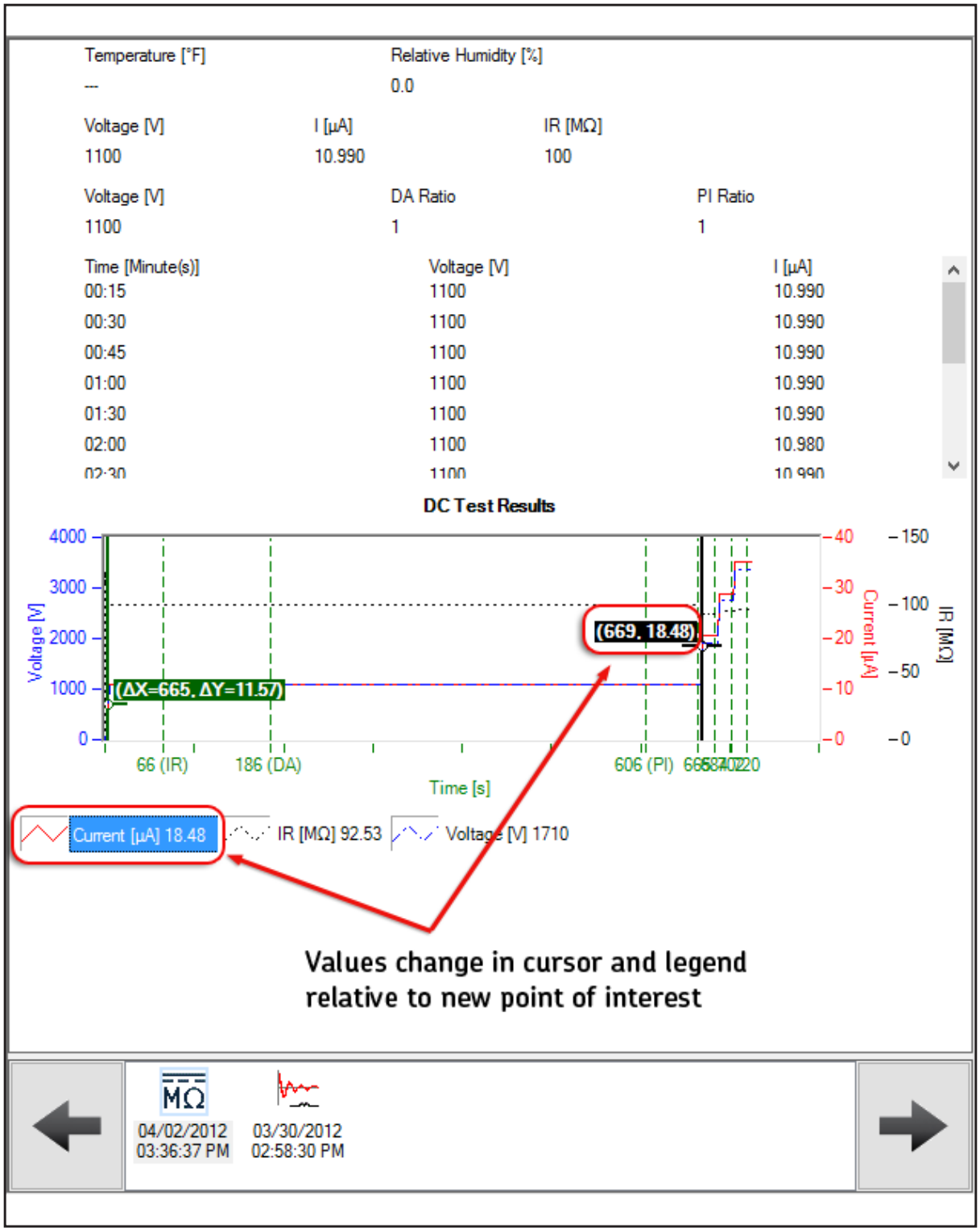


Fig 22: *Value in cursor and legend change for each new point of interest.*

When you change to a new measurement in the legend, in this case voltage, the cursors will follow the new measurement's line (blue voltage in this case).

In this example, we examine the differences between two step voltages. Notice that the green differences cursor shows you the differences in X and Y values from its location to the location of the black cursor.

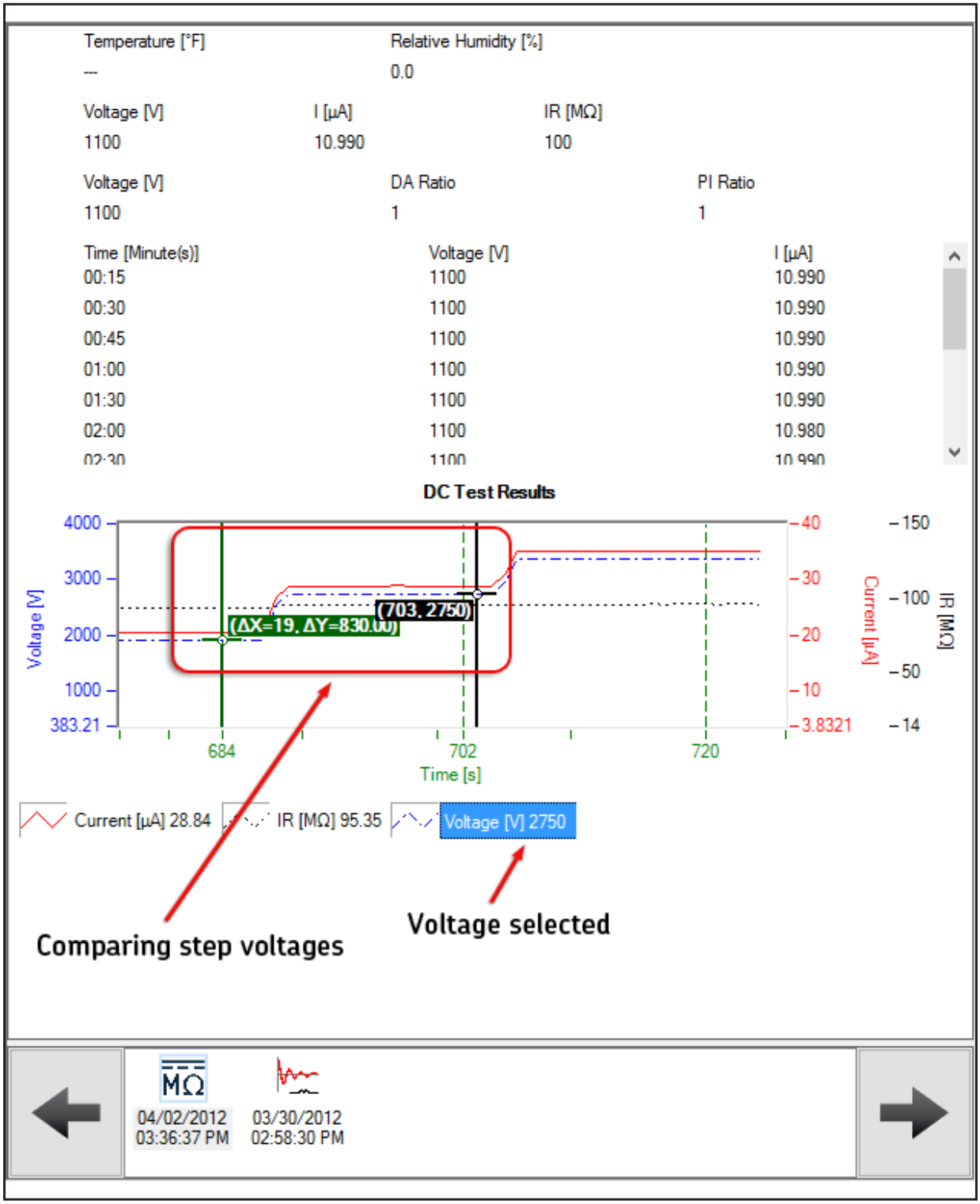


Fig 23: *Green differences cursor displays differences in X and Y values between its location and that of the black point of interest.*

In this example, we show the zoom feature being activated. Click and hold down the left mouse button to draw a zoom box around the area that you want to enlarge. When you release the mouse button, the display will zoom in on your selected area.

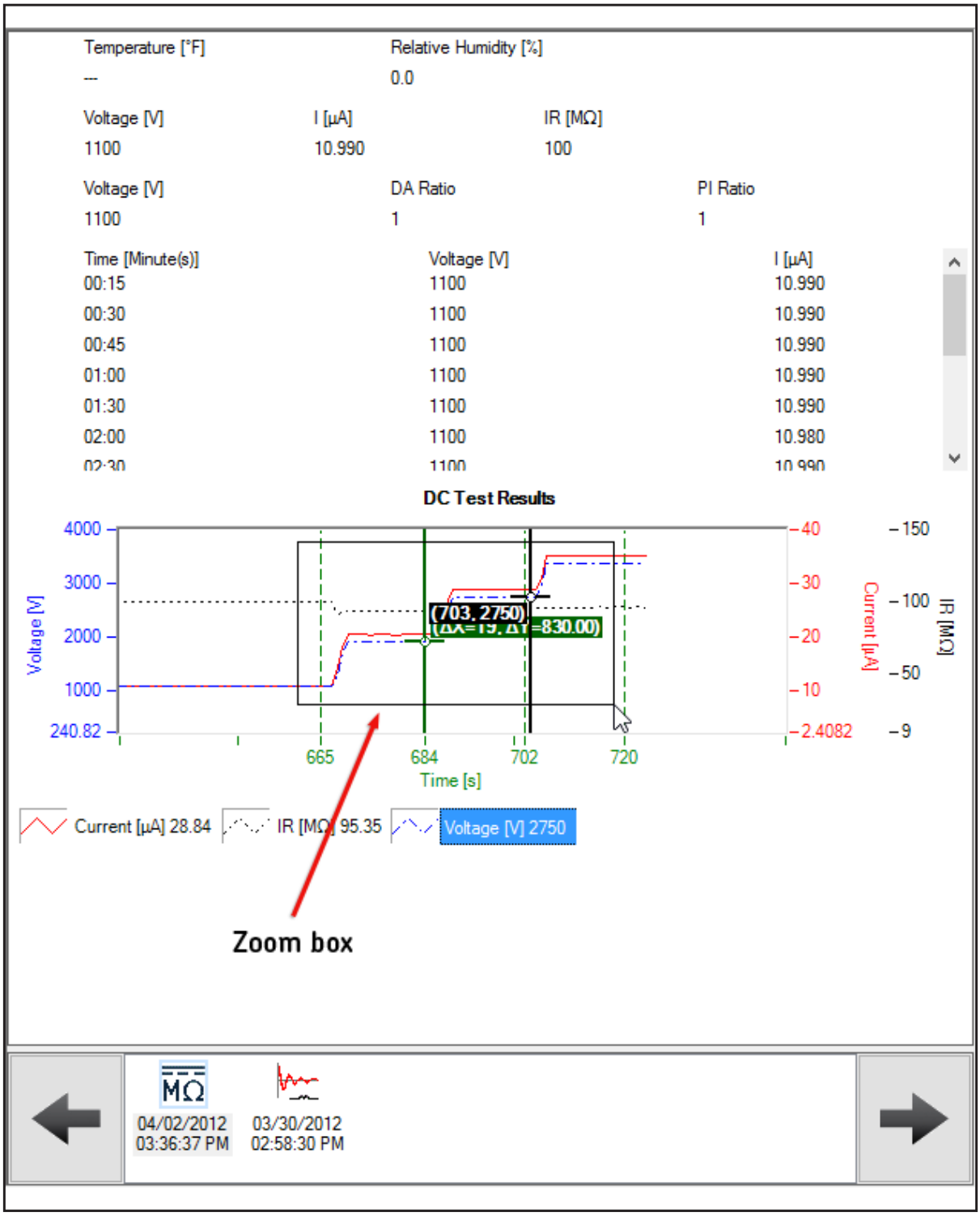


Fig 24: *Zoom feature helps you enlarge sections for easier viewing.*

You can zoom in incrementally if you like to find the best view for your examination.

Press the space bar to zoom back out incrementally until you reach full size.

NOTE: The zoom feature works the same for all display options in the Quick View pane.

Coil surge test results displayed in the Quick View pane provide three viewing options, which are selected using the menu in the top left corner.

In the following example, All results are selected. Clicking on All shows all the waveforms for every coil tested overlaid in one display.

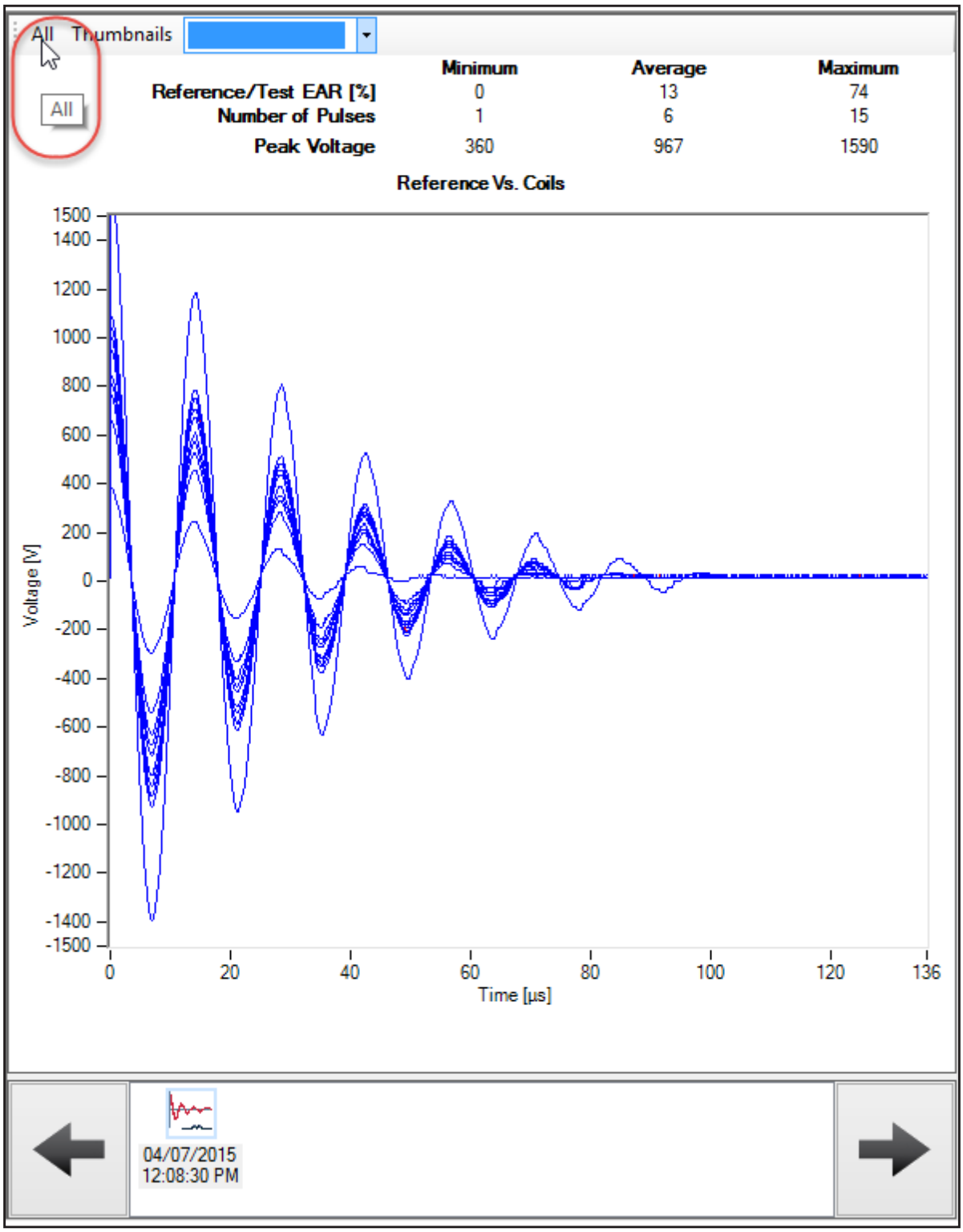


Fig 25: *Quick View pane coil surge displaying all results.*

In the following example, the EAR (Error Area Ratio) option is selected. All EAR results are displayed, with failing results shown in red.

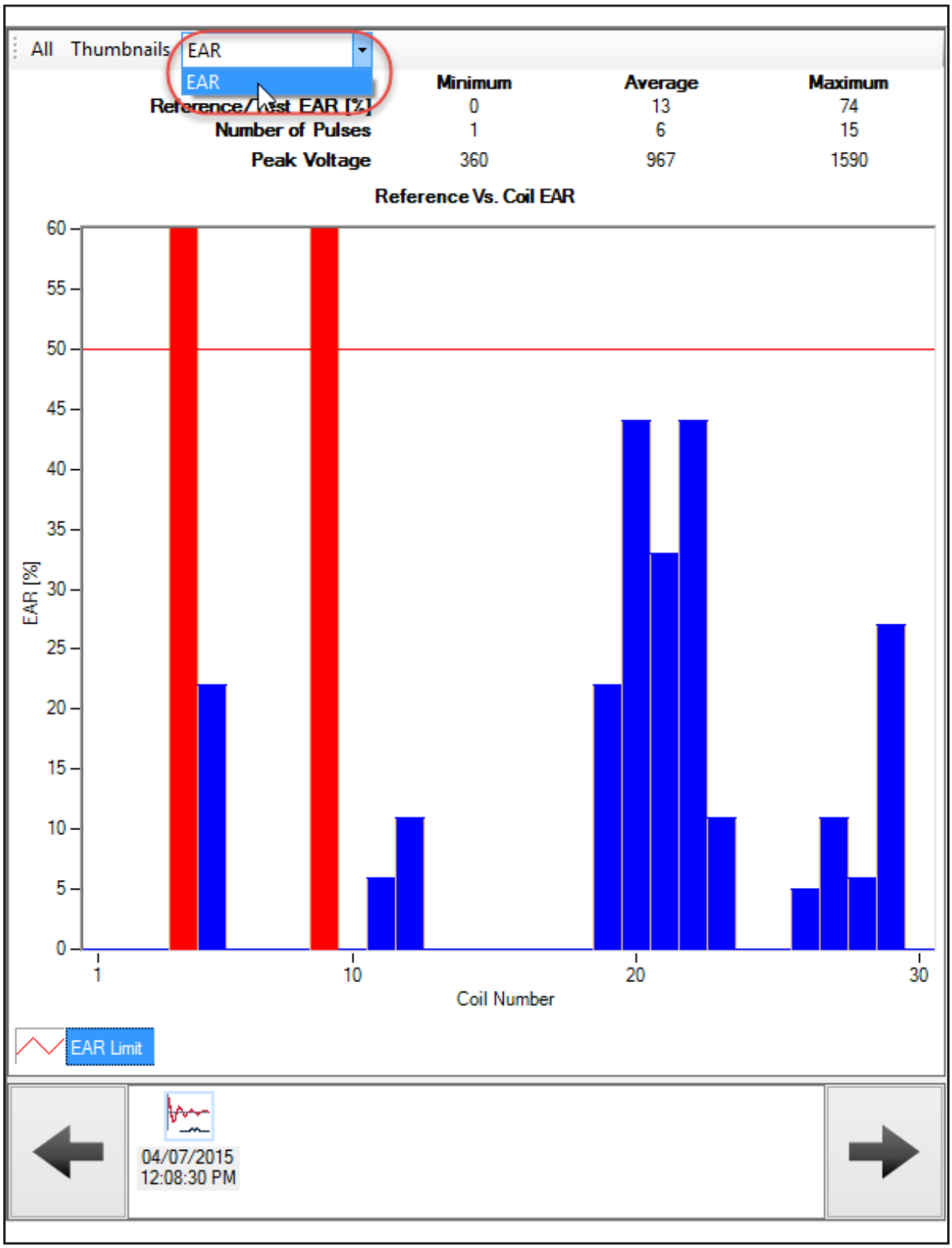


Fig 26: *Quick View pane coil surge displaying EAR results.*

In the following example, the EAR (Error Area Ratio) option is selected again. Notice that in this example, we also see PD Events and PD Pulses as options in the dropdown list. If PD data is available with a selected coil or 3-phase surge test, these options will appear in the dropdown list as shown.

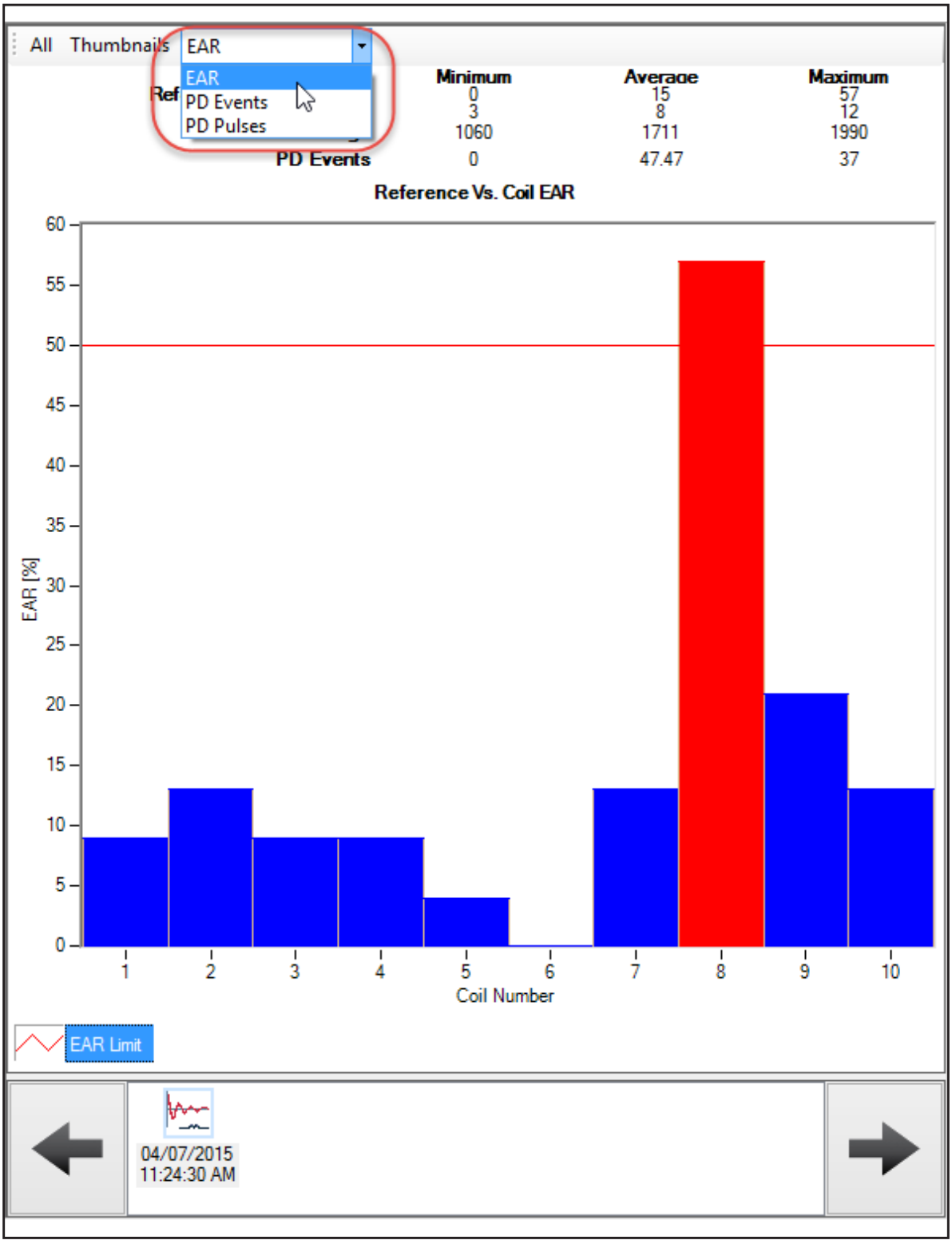


Fig 27: *Quick View pane coil surge displaying EAR results with PD options.*

In the following example, PD data is available with the coil surge test, and the PD Events option is selected from the dropdown list.

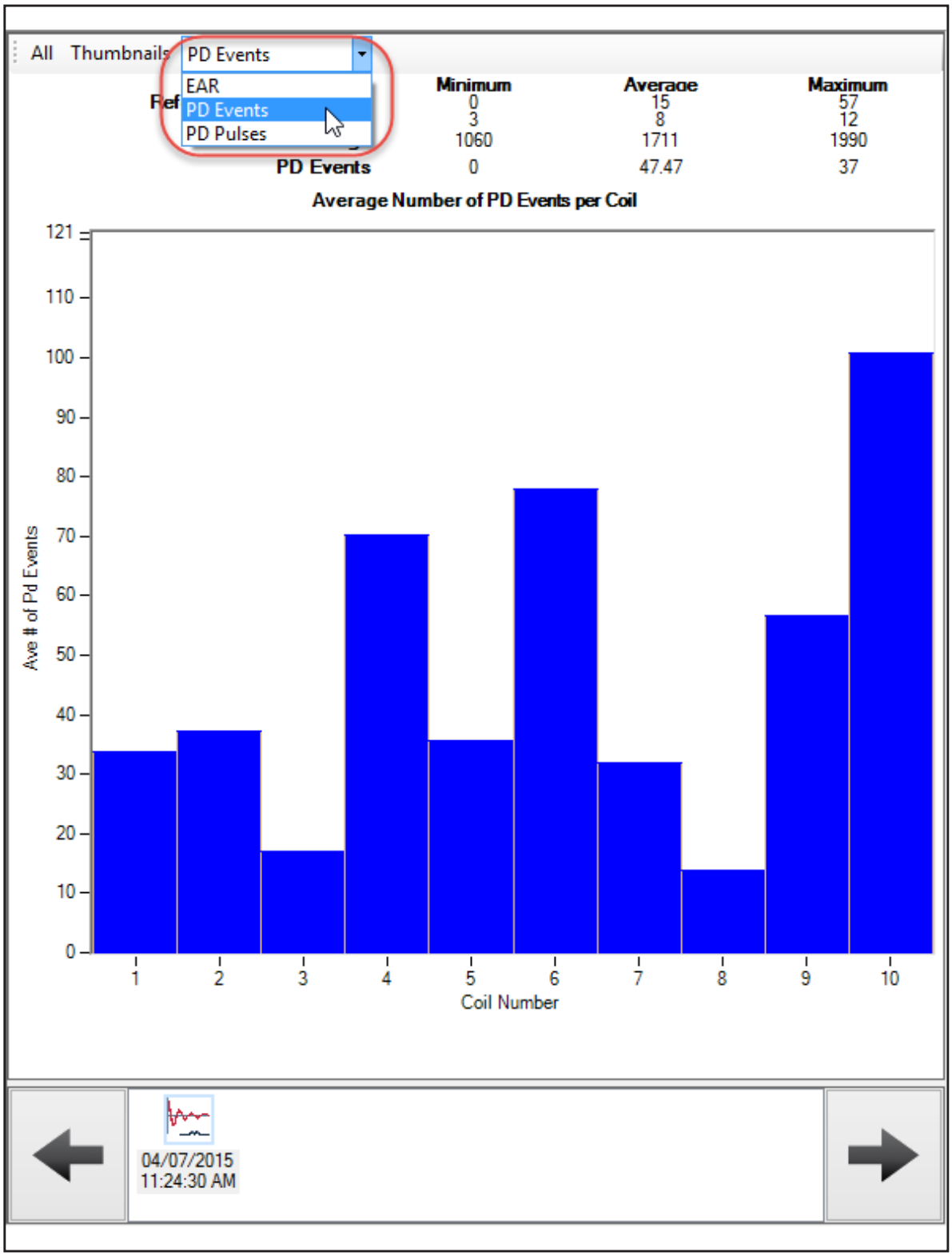


Fig 28: *Quick View pane coil surge displaying PD Events.*

In the following example, PD data is available with the coil surge test, and the PD Pulses option is selected from the dropdown list.

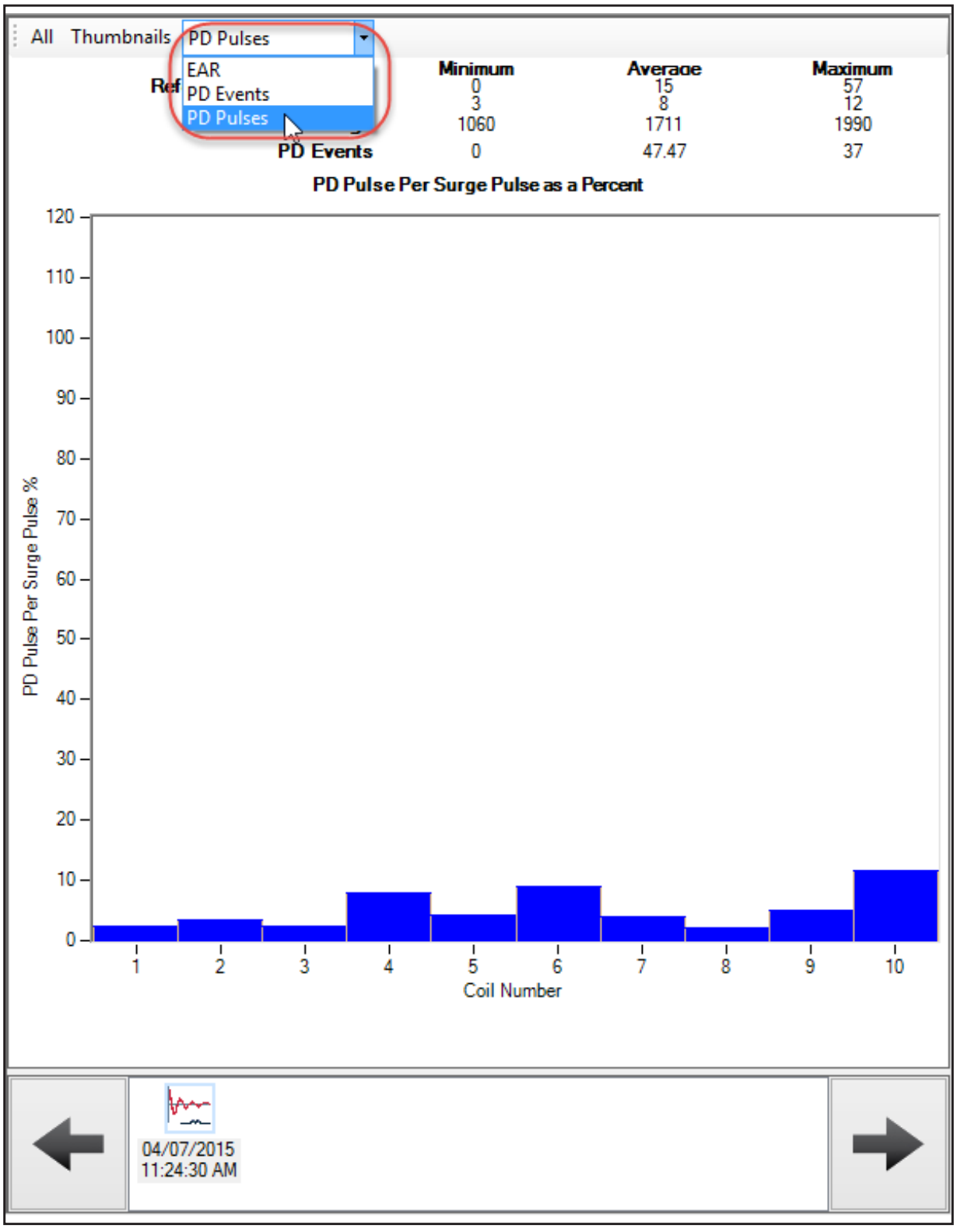


Fig 29: *Quick View pane coil surge displaying PD Pulses.*

In the next example, the Thumbnails option is selected for the coil surge test results. All results are displayed in thumbnail graphics with failing results highlighted by a red box.

Use the scroll bar to the right to move through longer listings.

Fig 30: *Quick View pane coil surge displaying test results with Thumbnail graphics.*

Double clicking on an individual thumbnail graphic opens the result in a separate dialog box so you can view the results more closely.

In the following example, PD data is available with the 3-phase surge test, and the PD data is overlaid on the surge waveform. This example shows the summary with the PP EAR graph selected for the bottom section.

Use the scroll bar just below the top section to view additional test result values.

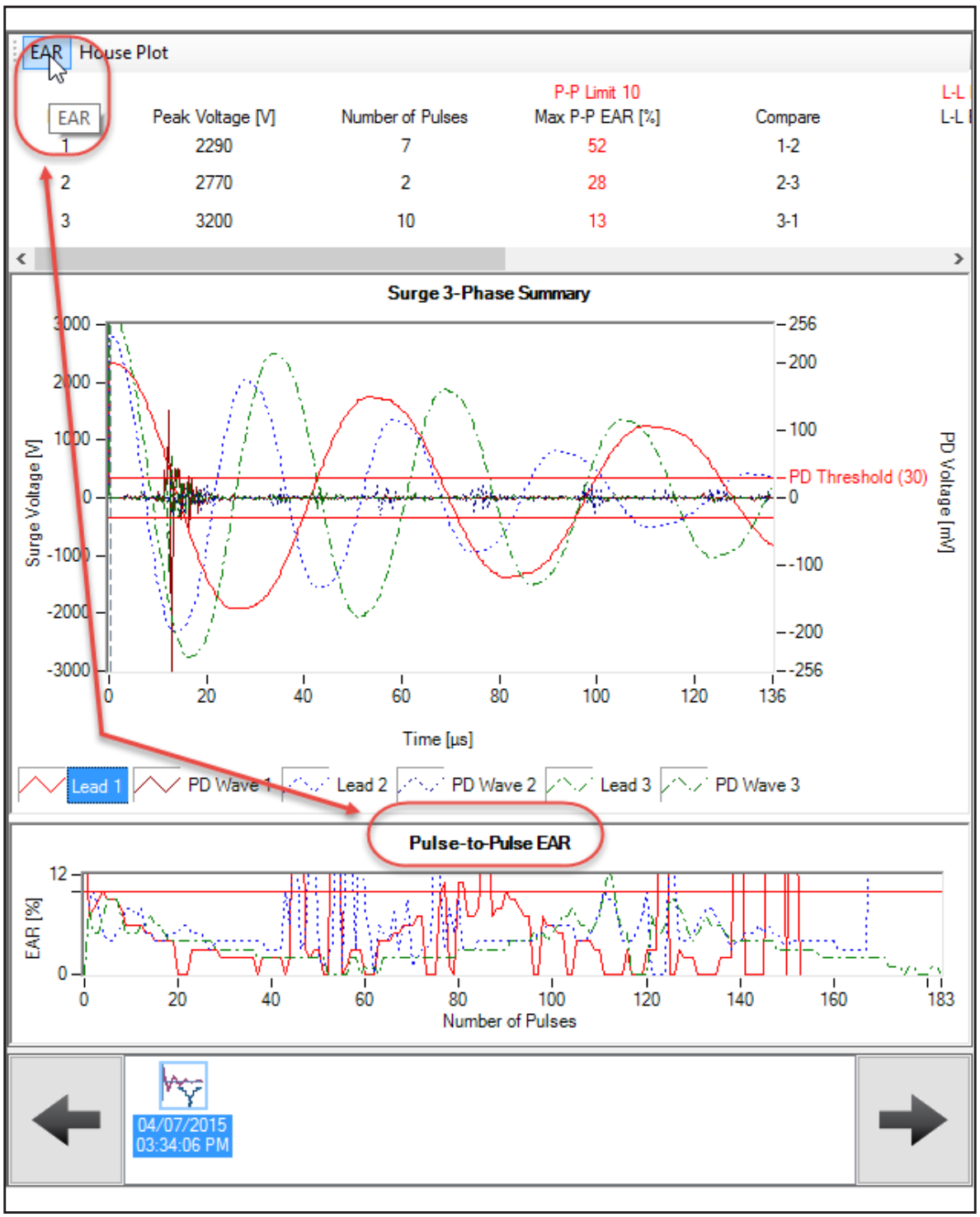


Fig 31: *Quick View pane 3-phase surge displaying PD overlay with EAR.*

Again, the PD data is overlaid on the surge waveform. This example shows the summary with the Houseplot graph selected for the bottom section.

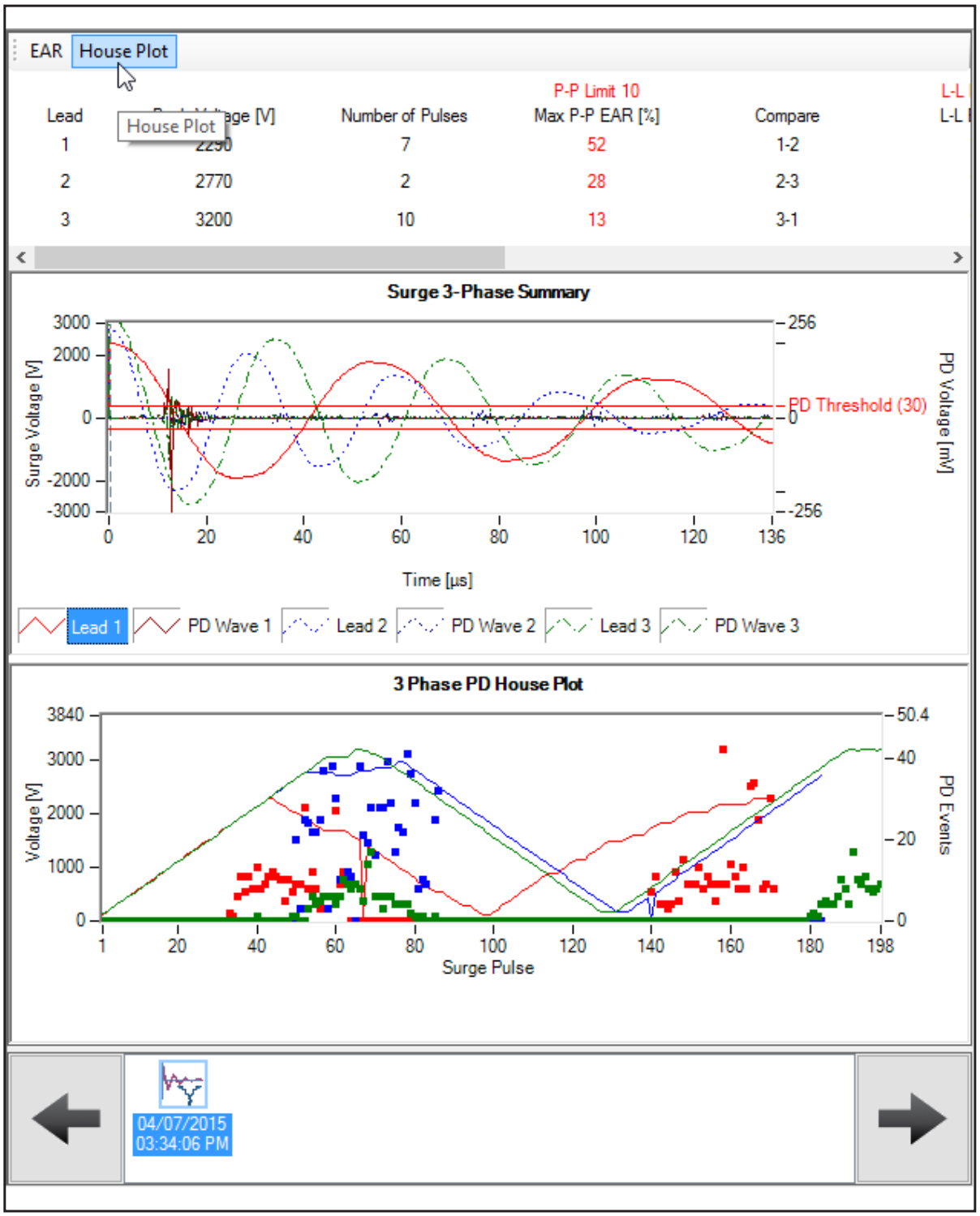


Fig 32: *Quick View pane 3-phase surge displaying PD overlay with houseplot.*

In the following example, PD data is available with the coil surge test, and the PD data is overlaid on the surge waveform. Clicking on All shows all the waveforms for every coil tested overlaid in one display.

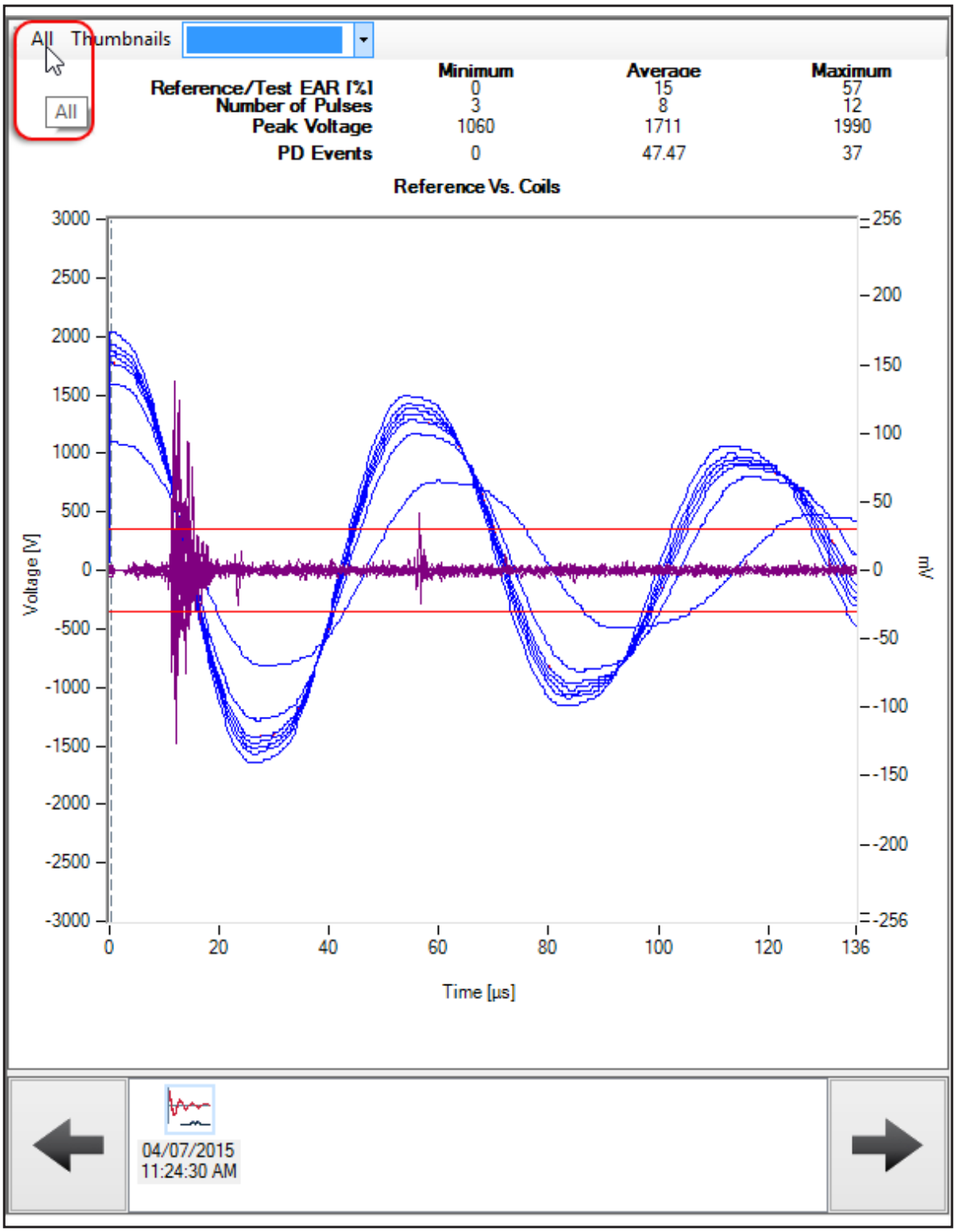


Fig 33: *Quick View pane coil surge displaying all PD data overlaid on graph.*

In the next example, PD data is available with the coil surge test, and the PD data is overlaid on the surge waveform.

The Thumbnails option is selected for the coil surge test results. All results are displayed in thumbnail graphics with failing results highlighted by a red box.

Use the scroll bar to the right to move through longer listings.

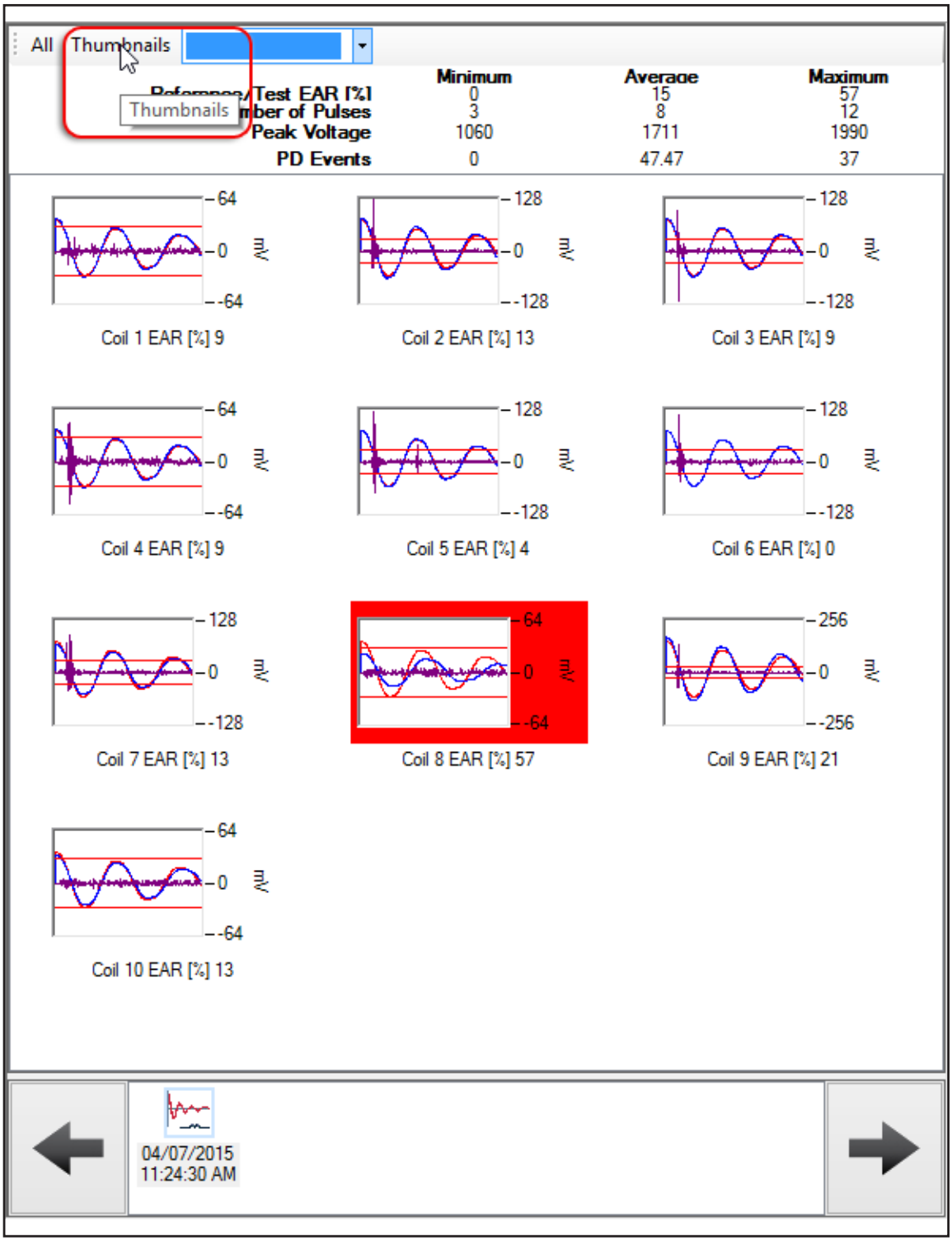


Fig 34: *Quick View pane coil surge displaying all PD data with Thumbnails option selected.*

Double clicking on an individual thumbnail graphic opens the result in a separate dialog box so you can view the results more closely.

The following example shows PD data collected during a surge three-phase test process, but the data in this view is shown with the surge and PD waveforms unlocked. The PD data is displayed within the rectangular box in the example. The arrow shows where the PD event actually occurred within the time line. A vertical dotted line shows the end of the time range (from zero) in which the PD event occurred.

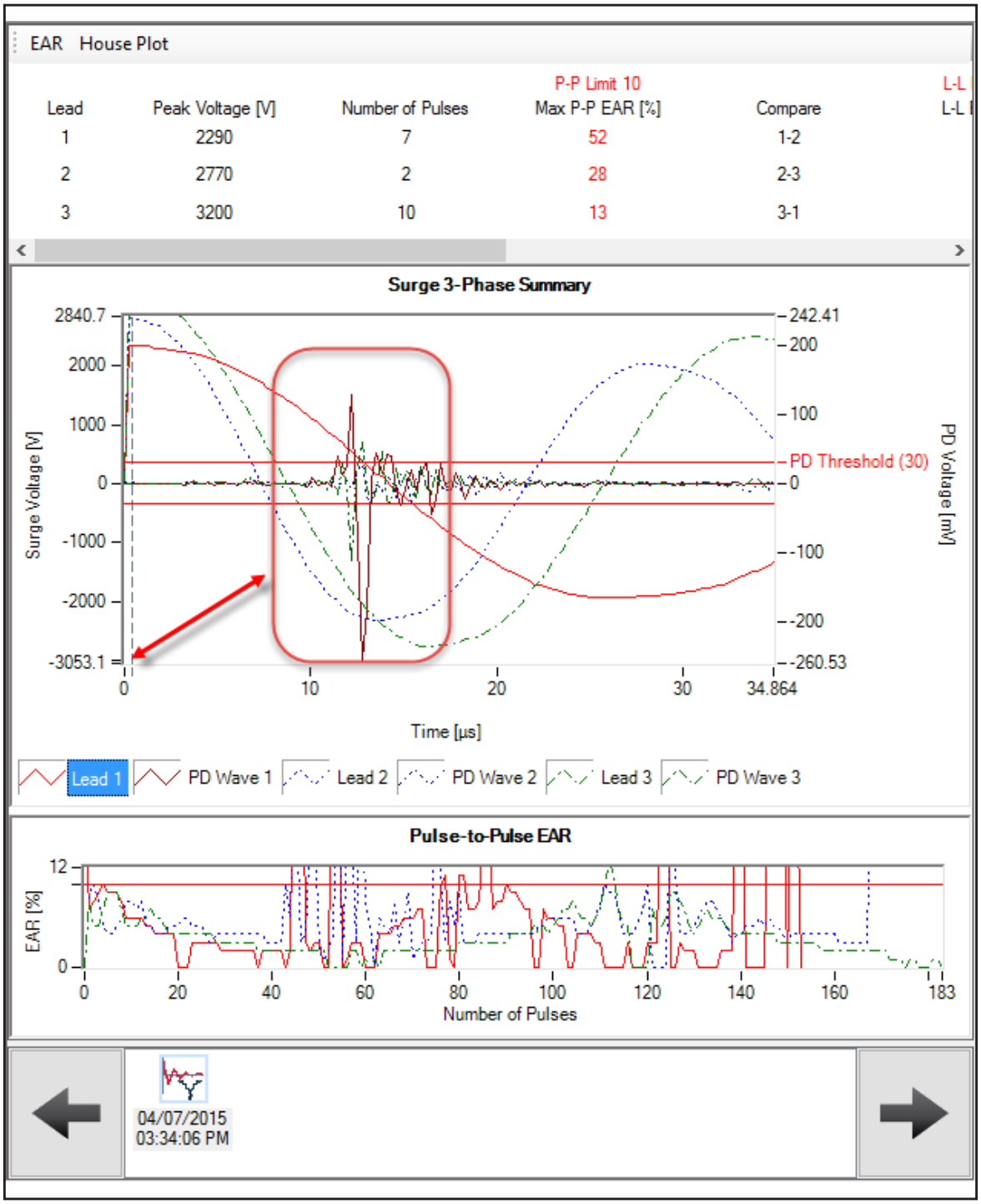


Fig 35: *Quick View pane displaying PD with surge and PD waveforms unlocked.*

The RLC test options include graphical displays for RLZ test results. The example below shows an impedance graph option. RIC test options can be selected using the dropdown list at the top of the display.

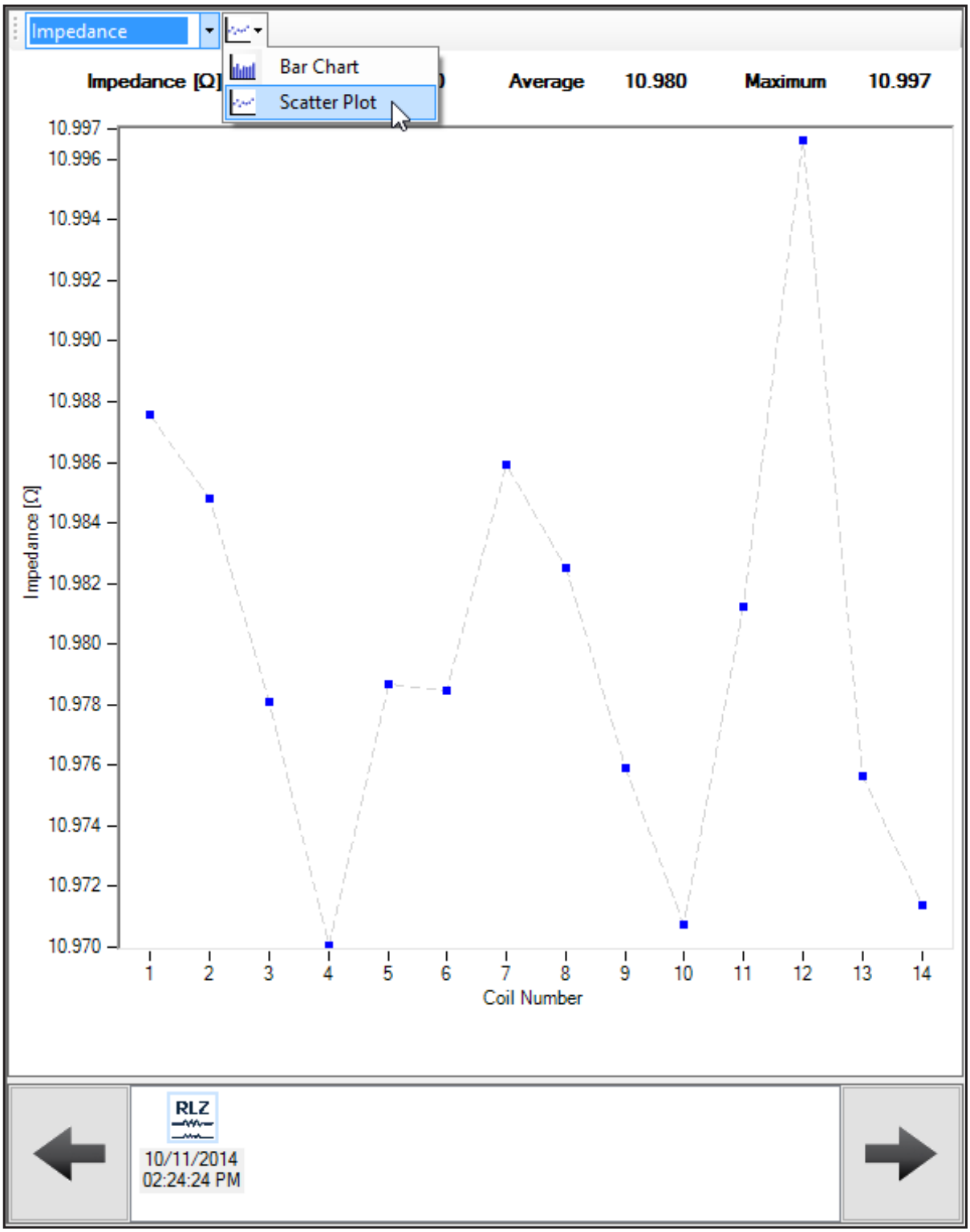


Fig 36: *RLZ test example showing induction result displayed in a Scatter Plot.*

You can also select the type of chart (Bar Chart of Scatter Plot) to display as shown in the example.

The RIC test options also include graphical displays for RIC test results. The example below shows and impedance graph option. RIC test options can be selected using the dropdown list at the top of the display.

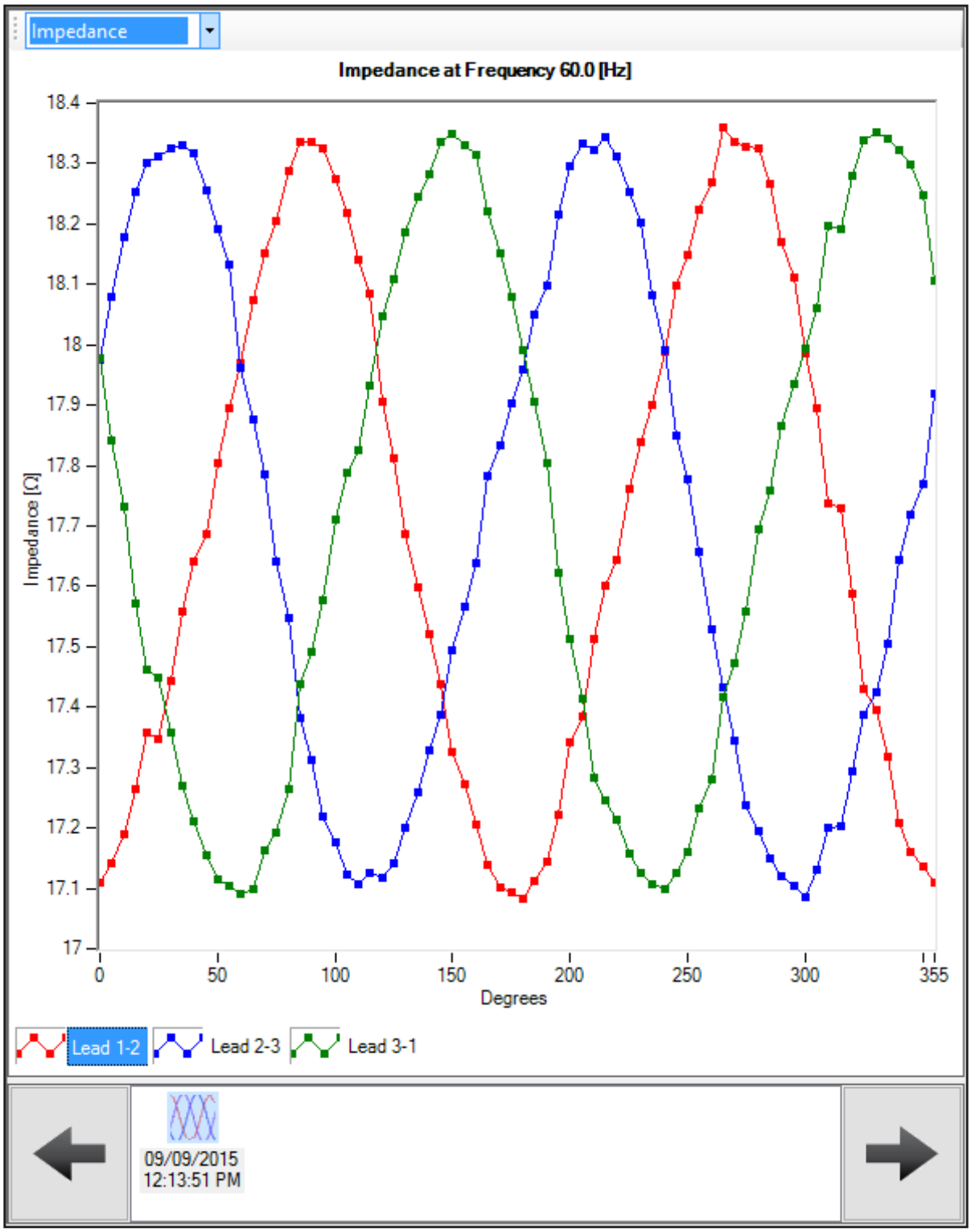


Fig 37: *RIC impedance test results display.*

As with other results displayed in the Quick View pane, you can zoom in on a test result to examine details more closely by clicking and holding down the left mouse button to draw a zoom box around the area that you want to enlarge. When you release the mouse button, the display will zoom in on your selected area.

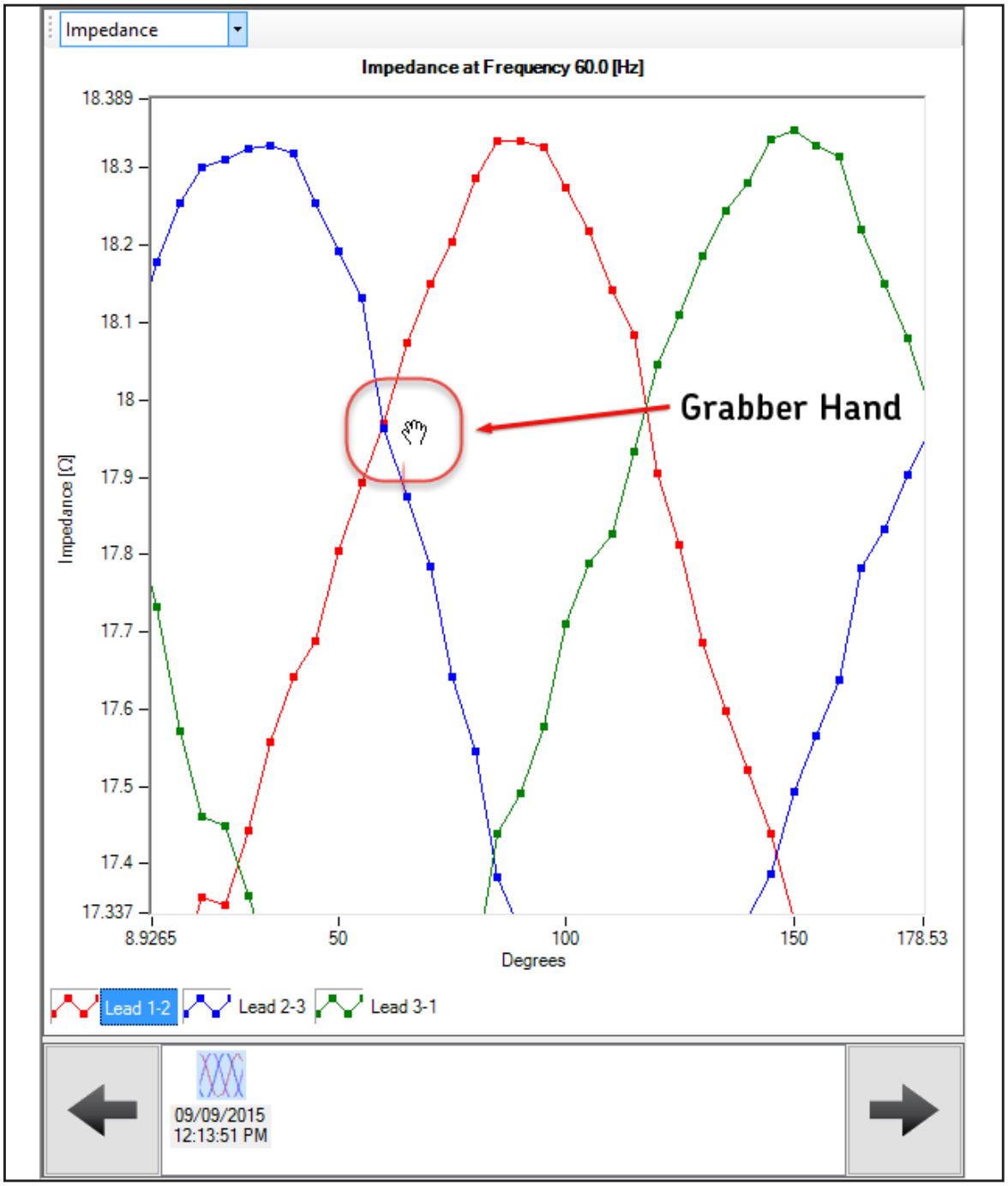


Fig 38: *Using the zoom and grab features to optimize display elements.*

You can also move the elements in the display by holding down the CTRL key on your keyboard to display a "grabber hand" as shown in the example above. With the grabber hand activated, slide the element as needed with the Quick View pane.

Press the space bar to zoom back out incrementally until you reach full size.

NOTE: The zoom and grab features work the same for all display options in the Quick View pane.

Among the RLC graphical display options for RIC test results is the Orbit Plot, which is shown in the example below. You can use the dropdown list at the top of the display to select impedance, inductance, or phase angle results.

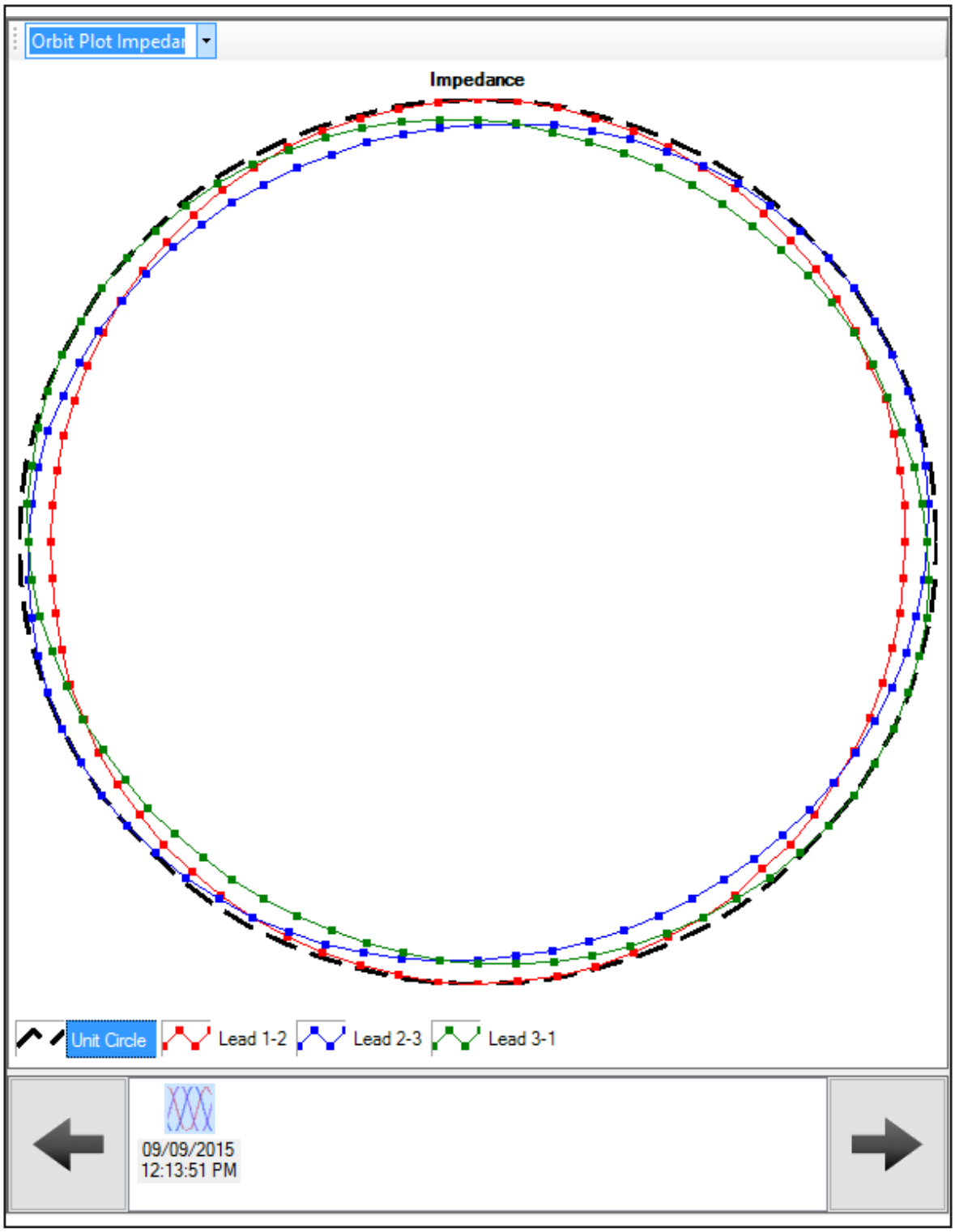


Fig 39: *Orbit plot option for RIC test results.*

Location Ttree Features

The Location tree includes several features to help you manage your test data including standard file/folder management features and a drag-and-drop function.

Folder and results management

When you highlight an item in the Location tree then right-click the mouse, you will see a standard set of file/folder management tools listed in a menu. These tools help you create new file folders, rename folders, expand or collapse all items within a folder, delete a file or folder, and display the attributes for the selected file or folder.

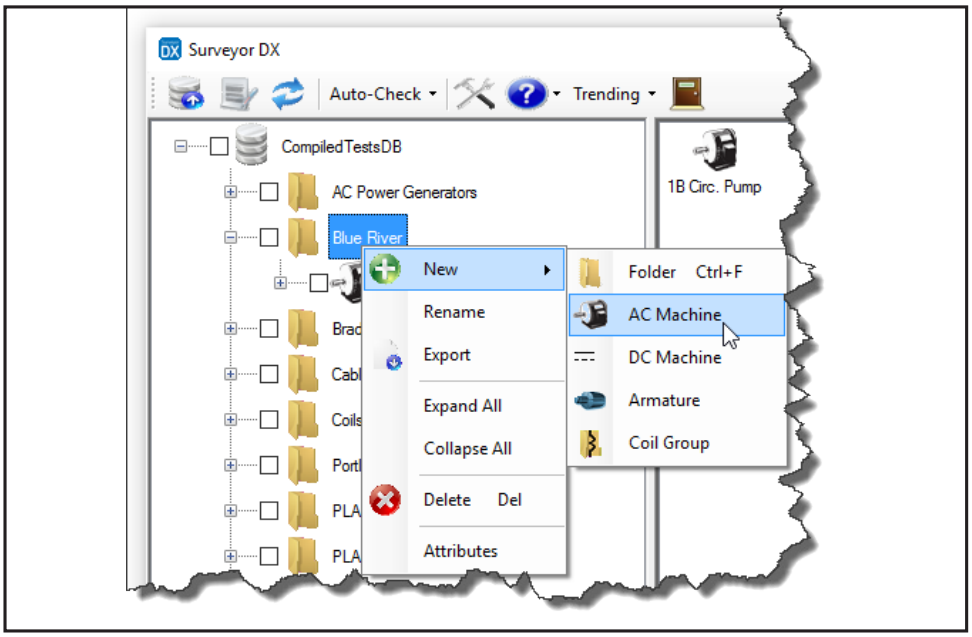


Fig 40: *Folder management menus.*

The New item in the menu allows you to create a new folder or add a new test item type to the selected folder. Adding a new test item essentially creates a new folder with attributes that pertain to the type of test item that was created.

When you add a new folder or test item, a dialog box similar to the one shown below opens so you can assign a name.

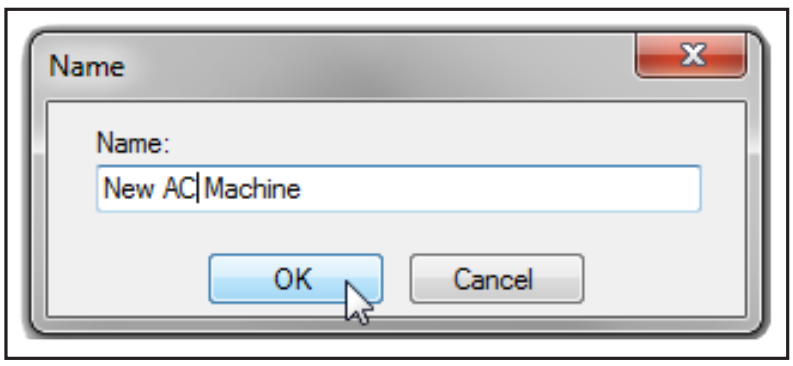


Fig 41: *Assigning test item type dialog box.*

After you click on OK, the new folder or test item is added to the selected folder as shown below.

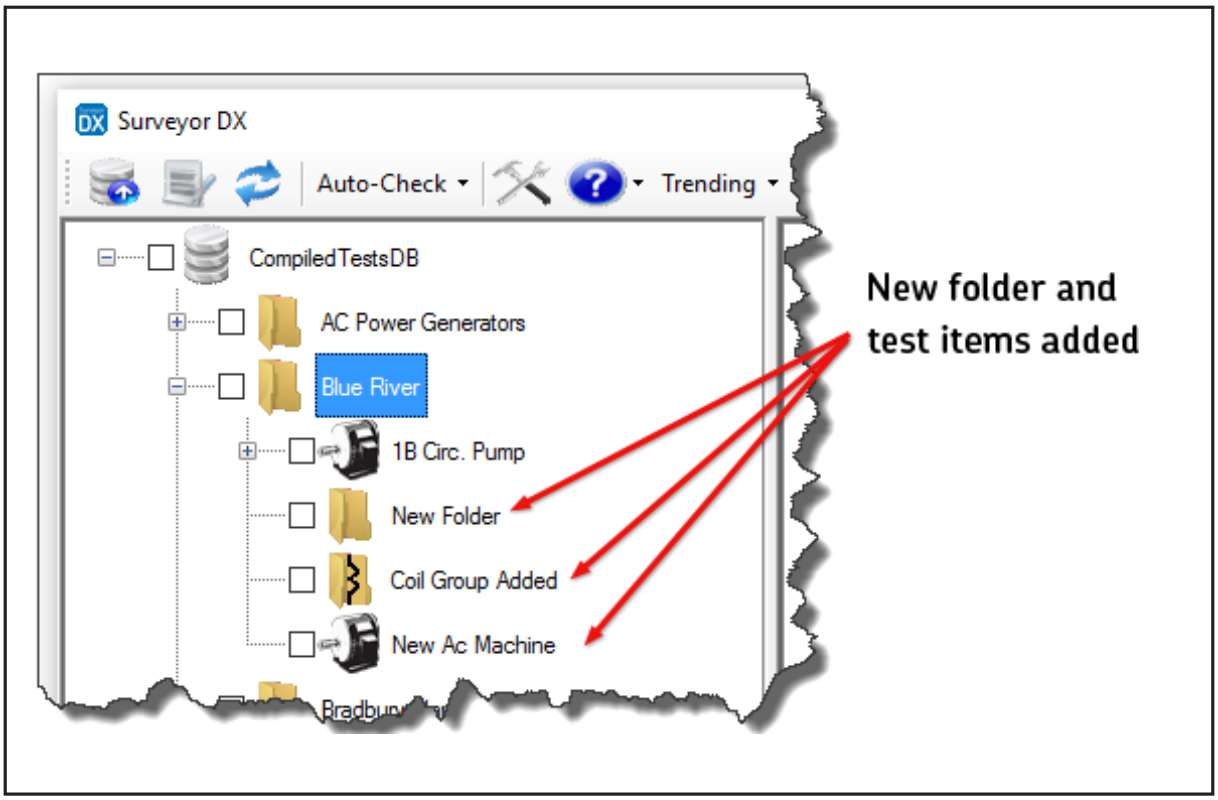


Fig 42: *Example of new folder and test items added.*

If you attempt to delete an item from the Location tree, you will see the dialog box shown below warning you about the ramifications of deleting the selected item.

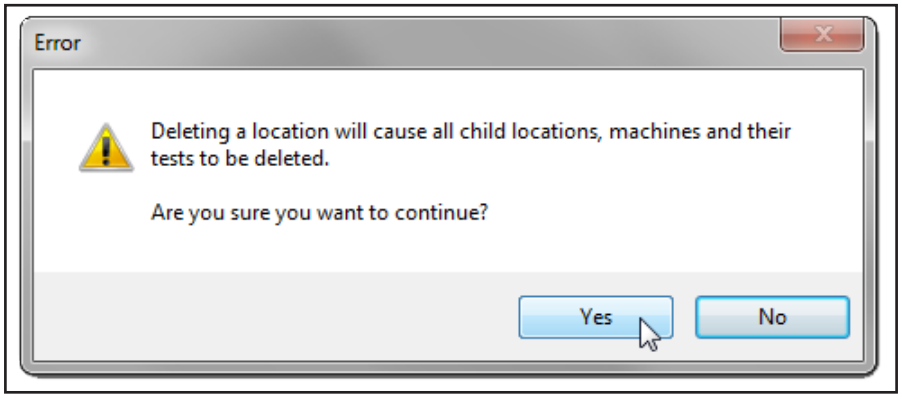


Fig 43: *Warning dialog box displayed when deleting tree items.*

If you do not want to remove the associated data, click on No.

Click Yes to remove the file/folder and all related data.

At the database level, the management menu provides you with some features found at other levels and some that are exclusive to this level.

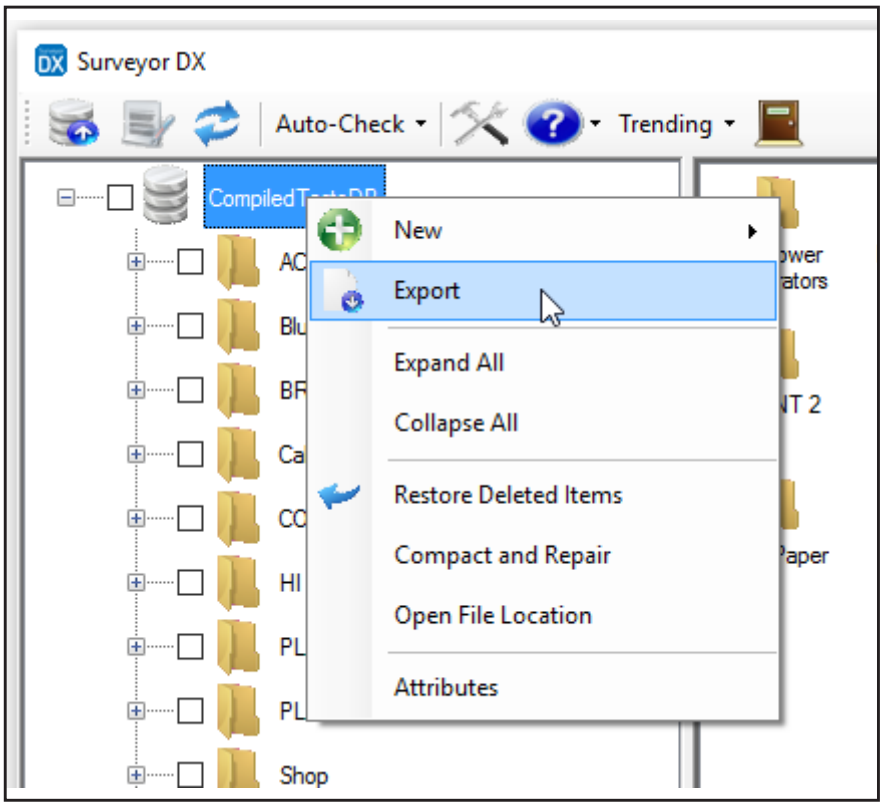


Fig 44: *Database level management menu.*

The New item in the menu allows you to create a new folder or add a new test item type to the selected folder as it does at other levels. Adding a new test item essentially creates a new folder with attributes that pertain to the type of test item that was created.

The Export menu item allows you to save all the database information to a .dx file.

The Expand All and Collapse All menu items toggle between displaying the folders and their contents in the Location tree.

Click on Restore Deleted Items to undo deletions that you might have made during the current session. Items that were deleted in previous sessions (the application is closed then re-opened) can also be restored as long as you have not used the Compact and Repair feature or imported new data into the database—the software automatically runs Compact and Repair when importing new data.

Use the Compact and Repair menu item to have the application reduce the space needed to store the database files and repair elements in the saved database.

NOTICE: This feature also cleans out all deleted items and permanently removes them from the system.

To identify the location of the current database, click on Open File Location. A dialog box opens to show you the current location. This is for reference purposes only; the location cannot be changed from this dialog box.

Clicking on the Attributes menu item opens a dialog box similar to those shown for test results. These attributes are not used in any manner for generating reports.

At the test results level, the management menu provides you with only three options. You can delete the selected test result. You can export just the selected test result's data to a .dx file. You can open the attributes dialog box for the selected test result.

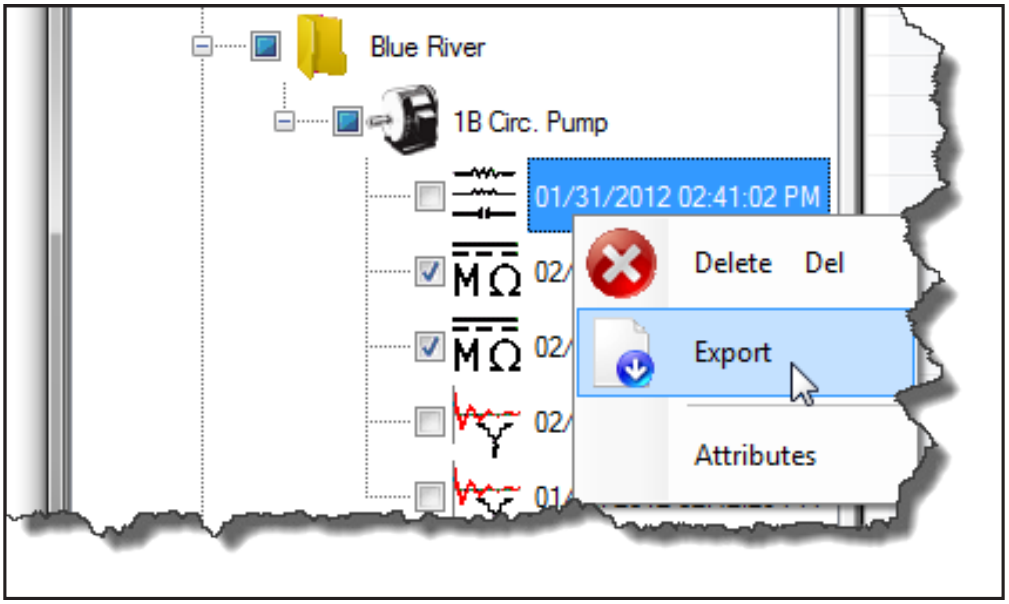


Fig 45: *Test results level management menu.*

Exporting data at these levels is practical for moving individual files to another system or for sending files to support when troubleshooting issues related to the test result.

Attributes

When you highlight an item in the Location tree then right-click the mouse, you will see a menu that provides access to management features. The last item in that menu is Attributes.

Clicking on the Attributes item opens a dialog box similar to the one shown below (form fields may vary depending on the test item type). The dialog displays the current property information (typically nameplate) assigned to the folder or file.

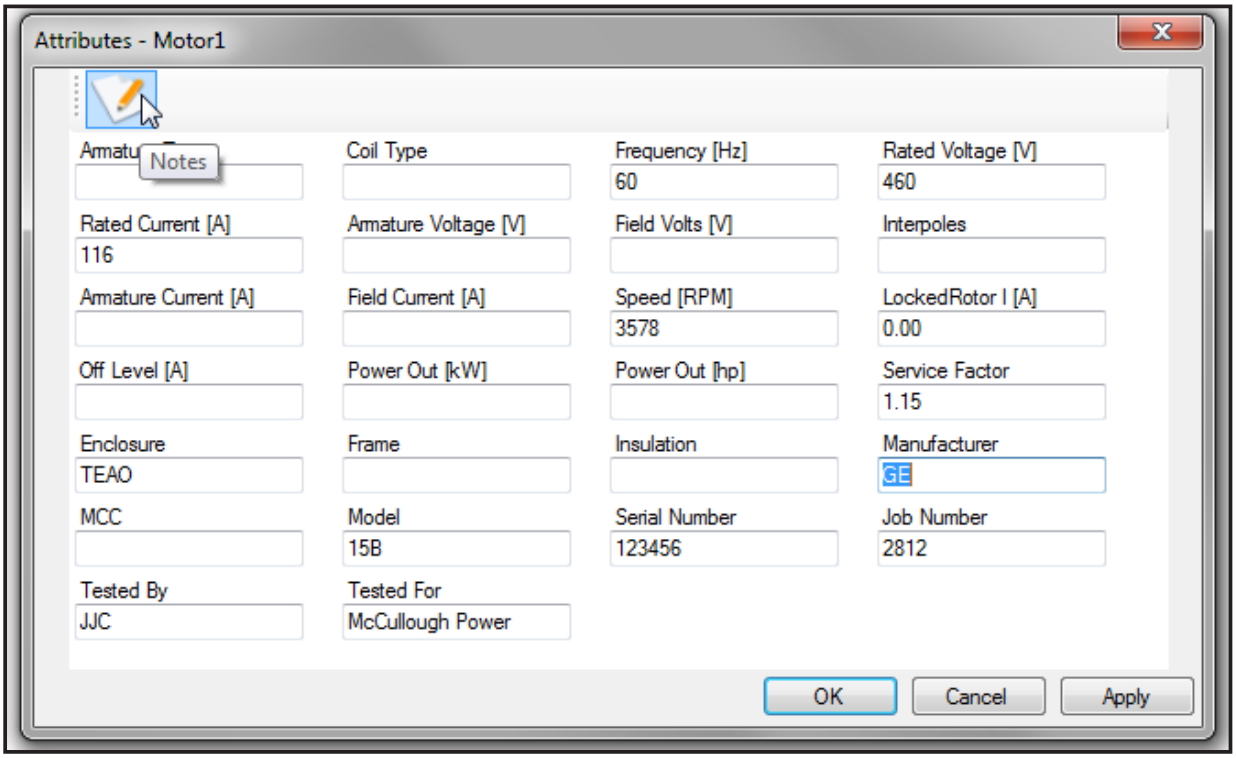


Fig 46: *Attribute dialog box displaying nameplate information.*

When you generate reports, the information that is present in this dialog will be included. You can enter or revise information as needed using this dialog box.

The information that can be added via this method is shown in the graphic. Other information that will also be included in the report comes from the data imported from the DX. This information is not editable, so it does not appear in the attribute dialog box, but it does print on the report. This information includes:

- Tester Type
- Tester SN
- Firmware Version
- Tester Configuration

Test results attributes include a subset of the information found in the parent folder's Attributes dialog such as Job Number, Tested By, and Tested For fields as shown in the graphic below.

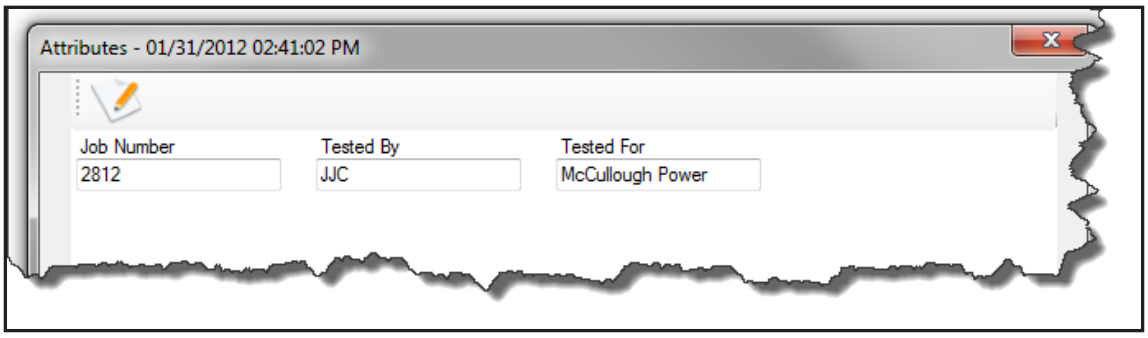


Fig 47: *Test results attributes dialog box.*

If you want to change any of the information in the dialogs, type directly in the fields as required and click on Apply to save changes and keep the dialog open.

You can also make changes and click on OK. Your changes will still be saved, but the dialog will close and you will return to the main user interface.

The Attributes dialog has a notes feature so you can add comments, special instructions, or other annotation as needed.

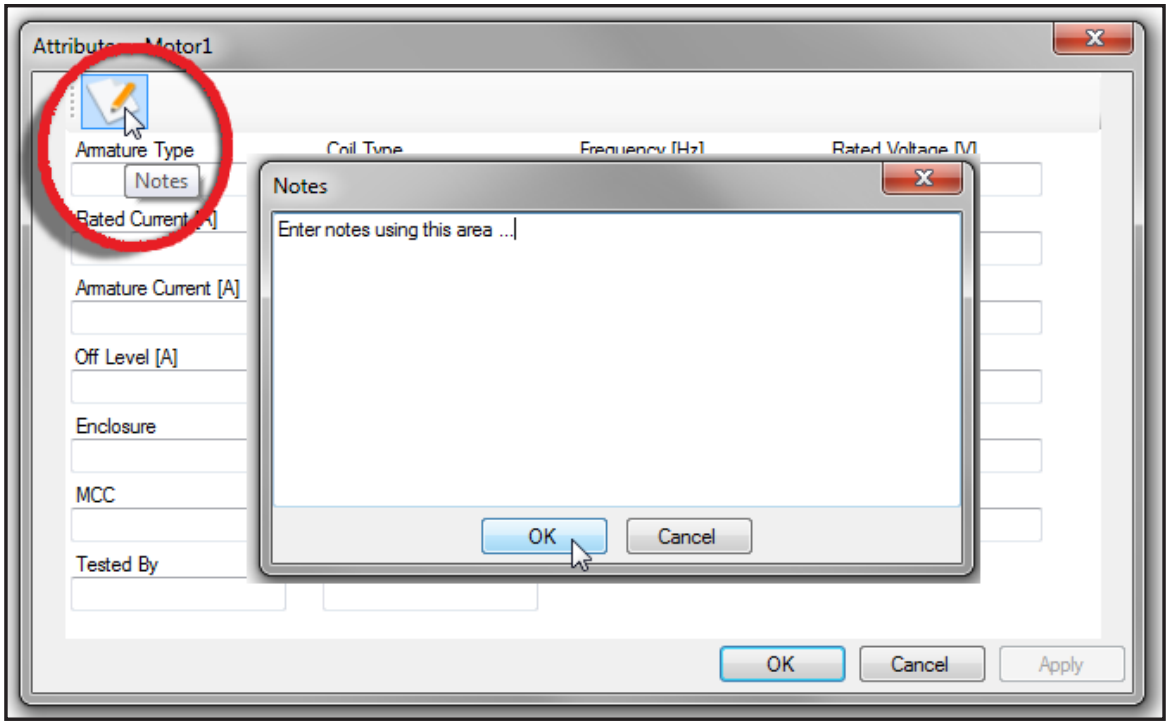


Fig 48: *Adding notes to attributes.*

To add notes, click on the Notes icon found in the top left corner of the dialog then enter your notes in the area provided in the Notes dialog box.

All notes are kept in the Notes dialog box for future reference. You can add, revise, or delete note contents as needed.

Test items have their own folders in which their test results are stored. Folder attributes are assigned based on test item type. If a test item type has not been assigned to a folder, when you right click on the folder you will see a Convert to item in the menu as shown in the example below. When you expand that menu item, you will see the test item types that can be assigned.

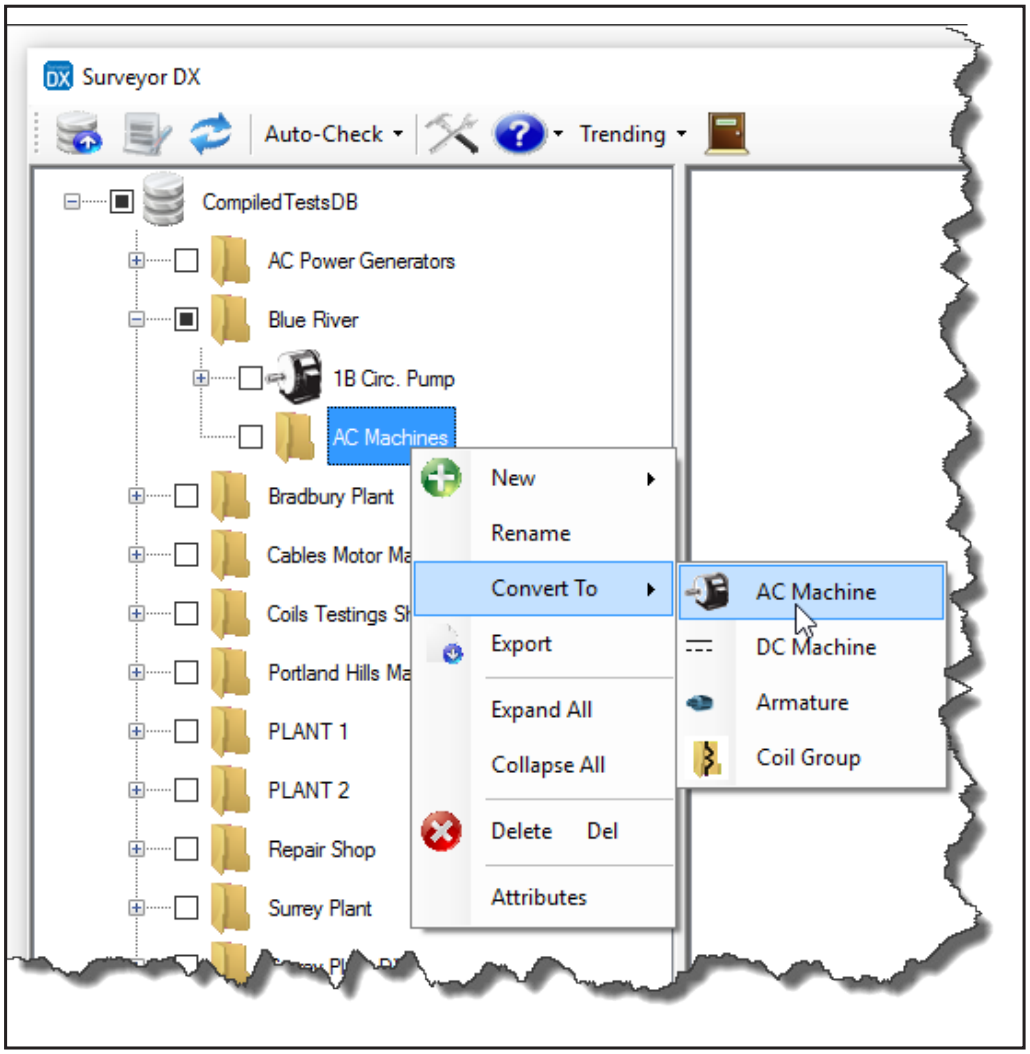


Fig 49: *Assigning test item type to a folder.*

NOTE: Ensure that you assign test item types only to appropriate test item folders to ensure that the attributes features provide the expected data and that they function as expected. Assigning test item types to higher folder levels (such as company name) locks the test item type to all sub-folders and will not allow editing of attribute information at the test item level.

Clicking on an item opens a dialog box like the one shown below. As the example explains, you cannot change the test item type assignment after it has been made, so be sure that you want to assign the selected test item type to the folder before you click on the Yes button.

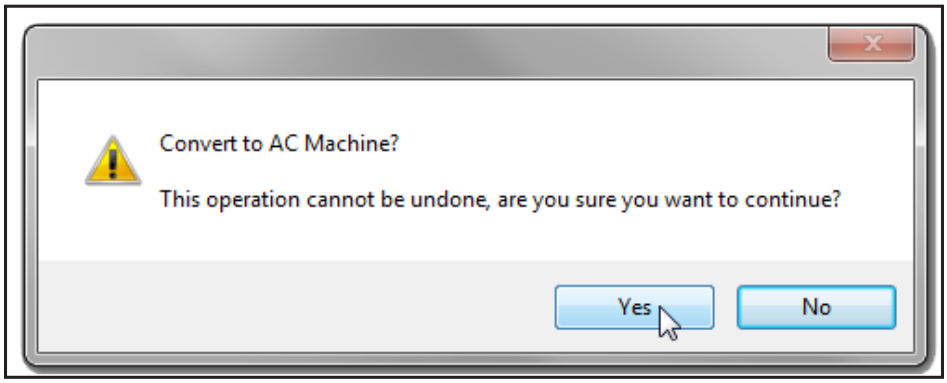


Fig 50: *Confirmation dialog box for defining test item type.*

The graphic below shows the test item types and their related icons that appear in the Location tree when assigned.

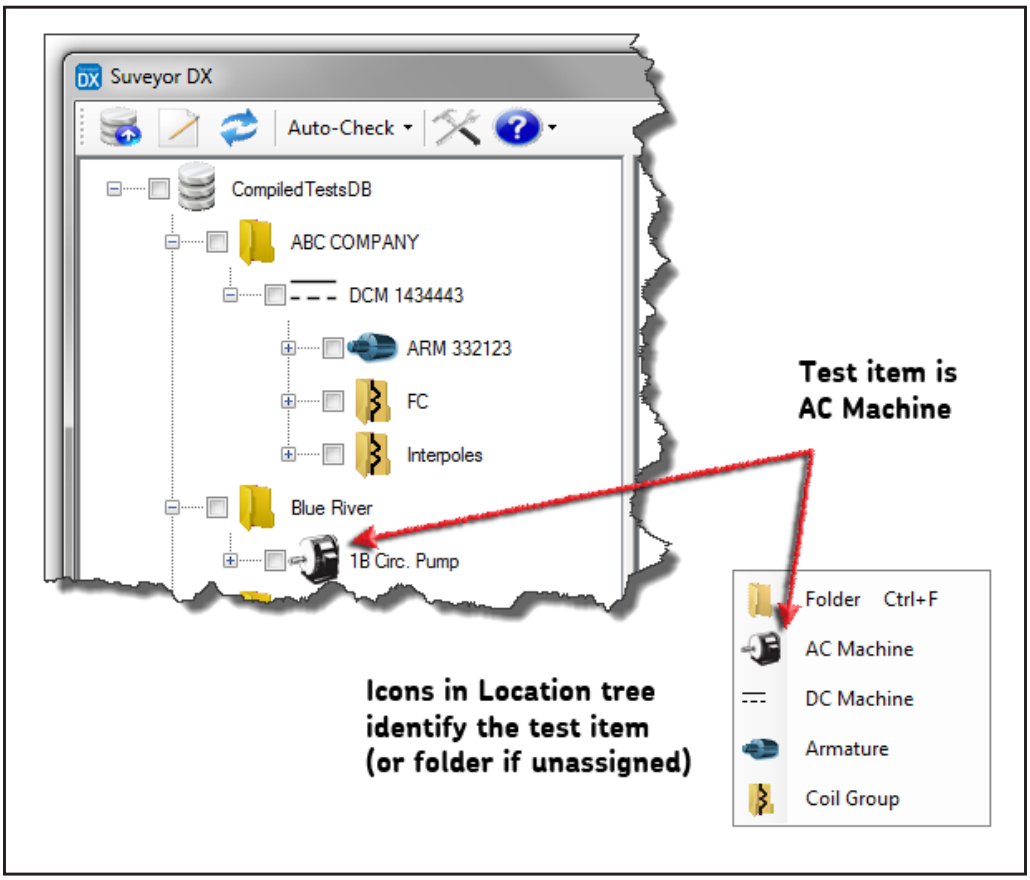


Fig 51: *Test item types and related icons.*

Drag and Drop

You can drag folders or files from one location to another to suit your needs and preferences. The image below shows the basic process for moving items using the drag-and-drop feature.

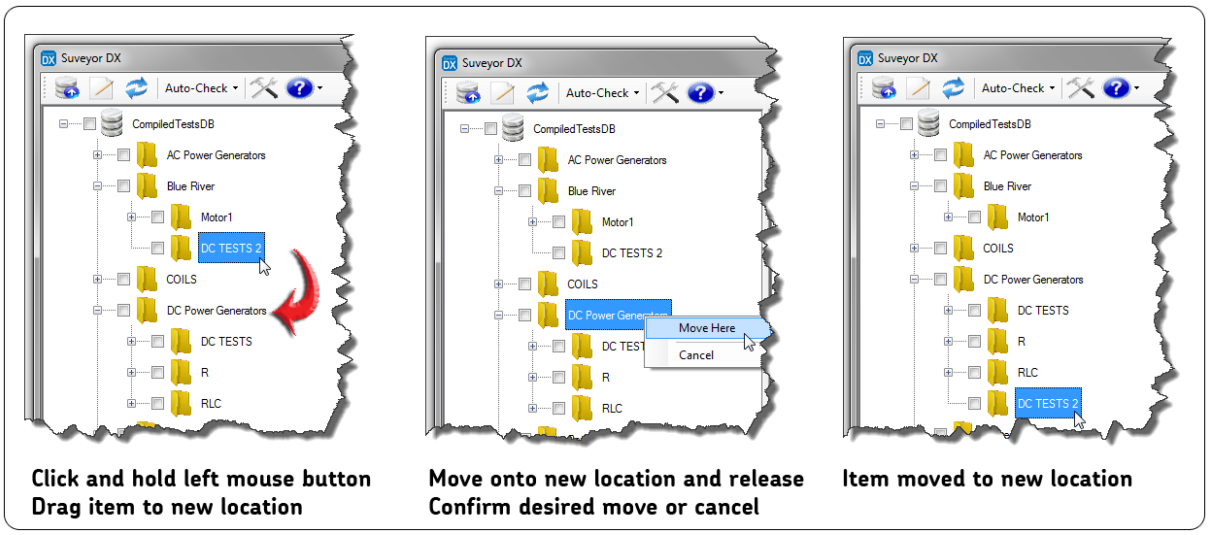


Fig 52: *Using drag-and-drop feature.*

1. Click and hold down the left mouse button over the item you want to move.
2. Drag the item over the new folder location. The folder will be highlighted.
3. Release the mouse button.
4. The item will appear in the new location. If you would like to sort alphabetically you can click on the Refresh icon in the Main toolbar and the items will be sorted as shown below.

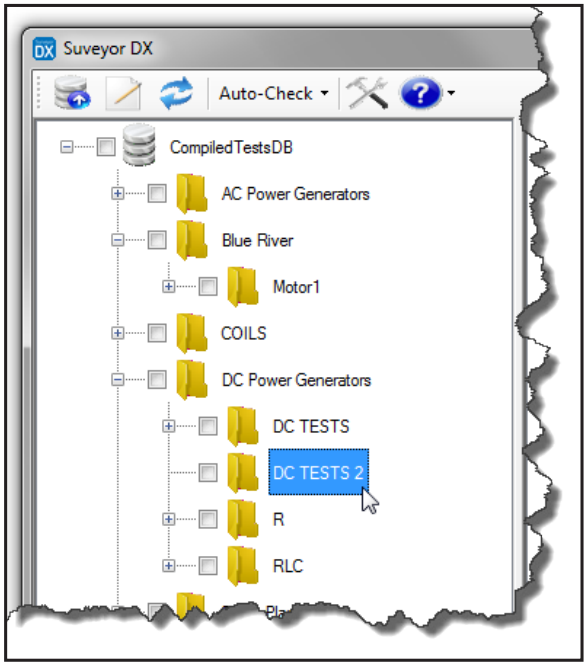


Fig 53: *Item dragged to new location.*

Importing Data into the Application

Click on the Import Data icon found in the top left corner of the Main toolbar.

The Open file dialog box can be used to open files with either a .dx or .xml extension. You can change which file type to display by using the combo box in the lower right section of the dialog.

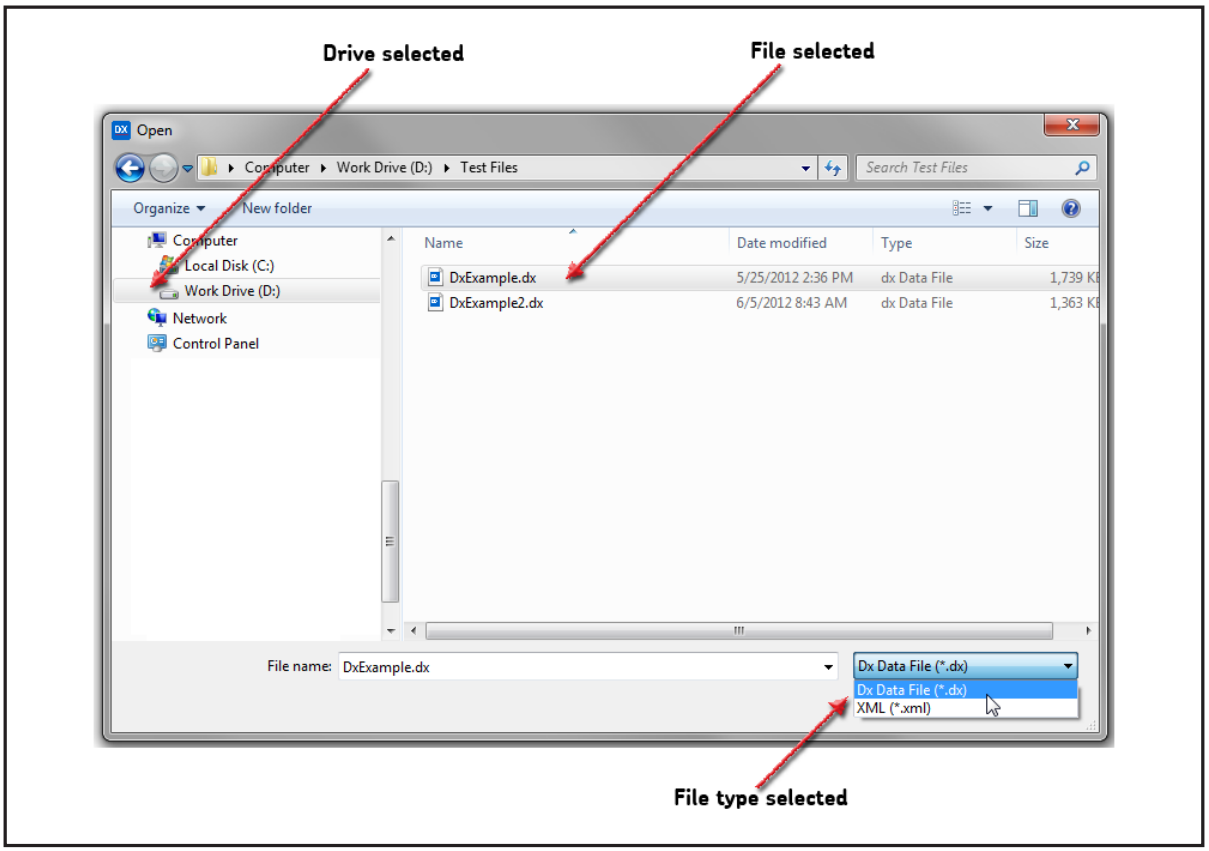


Fig 54: *Selecting drive and file location for data to be imported.*

When you first use the application, you will see a dialog box asking whether a new database should be created, or whether the software should use an existing database. Click on the appropriate radio button for your application.

NOTE: For more information on selecting the database or changing the database location, refer to "Configuring the Surveyor DX database" found earlier in the guide.

When the target file is loaded, its contents will look something like this in the application interface (after you expand the database root).

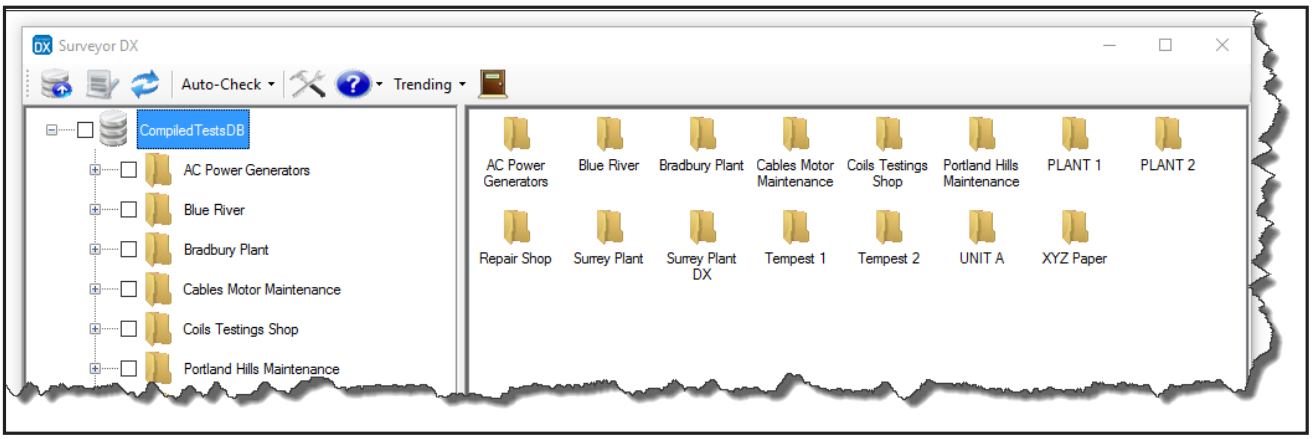


Fig 55: *Contents loaded into Surveyor DX.*

The application determines where the data should be located based on the folder paths used in the Baker DX. So no matter which option you use to export data from your DX (results only, a single folder, a single folder with children folders, or all data) that data will be saved to the appropriate folder when it is imported into the Surveyor DX database.

Double clicking an item in the Location tree expands the tree for that item and displays the item's children in the pane on the right side of the page. Double-clicking again collapses the tree, but the selected item's children are still displayed to the right. You can also click on the plus or minus (+ / -) signs to the left of the folder to expand and collapse the contents.

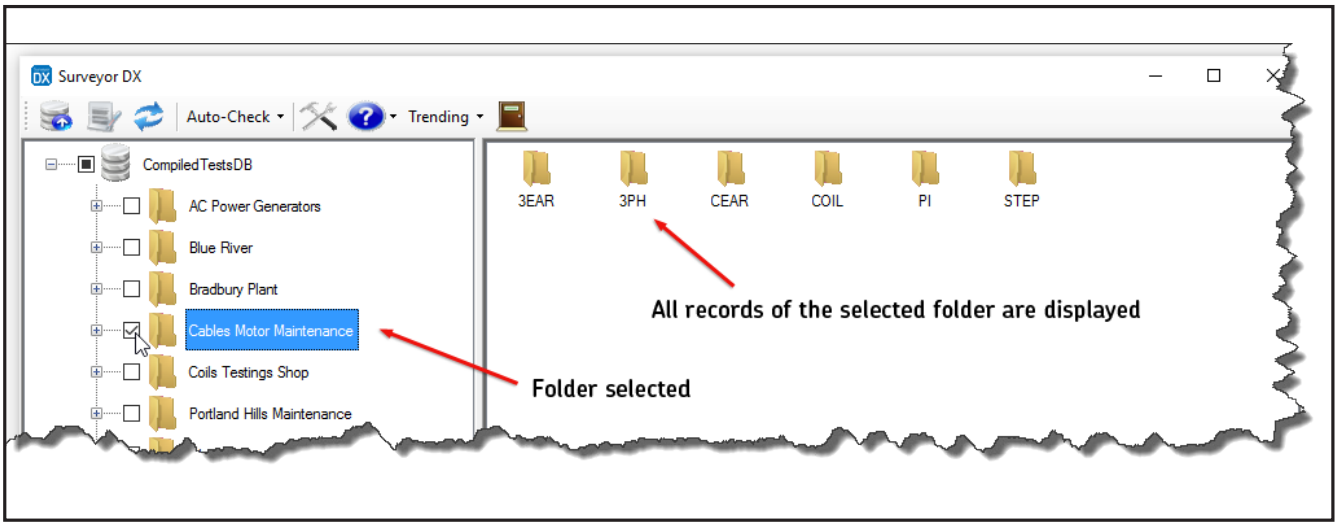


Fig 56: *Selected folder and displayed contents.*

Generating Reports

To generate reports, you need to select the data and specify the report options that you want to include in the report.

Selecting Data to Include in Reports

Select data that you want to include in a report by checking the boxes next to the desired item(s) in the Location tree.

You can also select data by using the Auto-check menu as shown below. This menu allows you to select by a range of date/time or by selecting a specific type of test result.

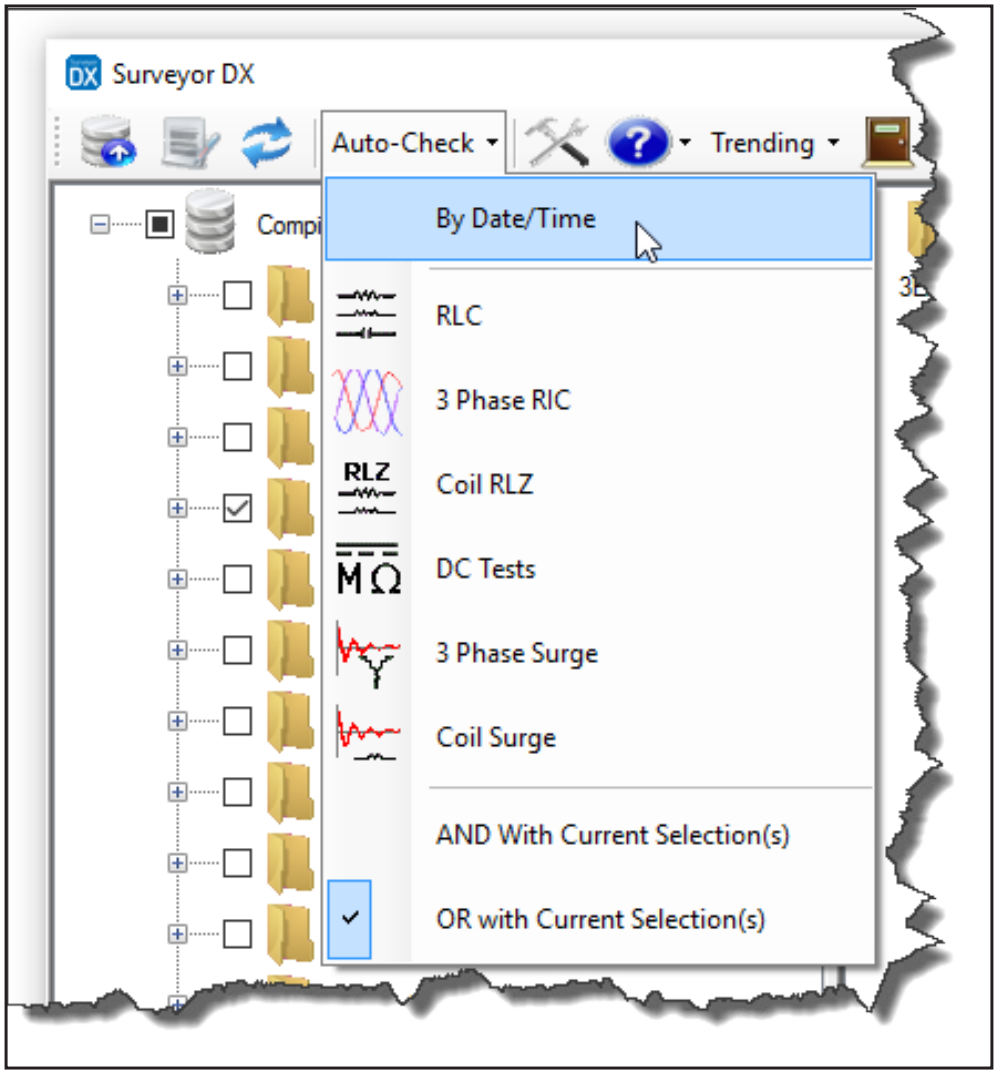


Fig 57: *Using Auto-check to define date/time parameters.*

If you select By Date/Time, the Select Date/Time dialog box opens as shown below.

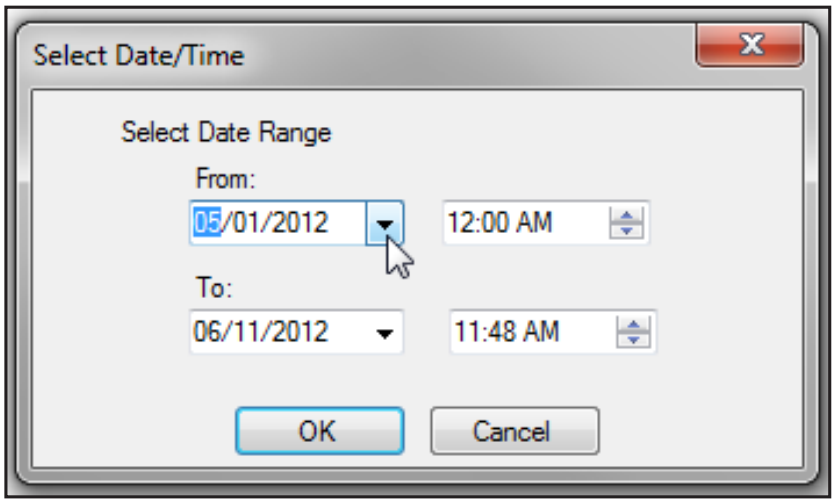


Fig 58: *Date/time selection dialog box.*

You can enter information directly in the fields using the format shown, or you can click on the up or down arrows to the right of the time combo boxes to change times.

If you click on the arrows to the right of the date fields, a calendar opens like the one shown below.

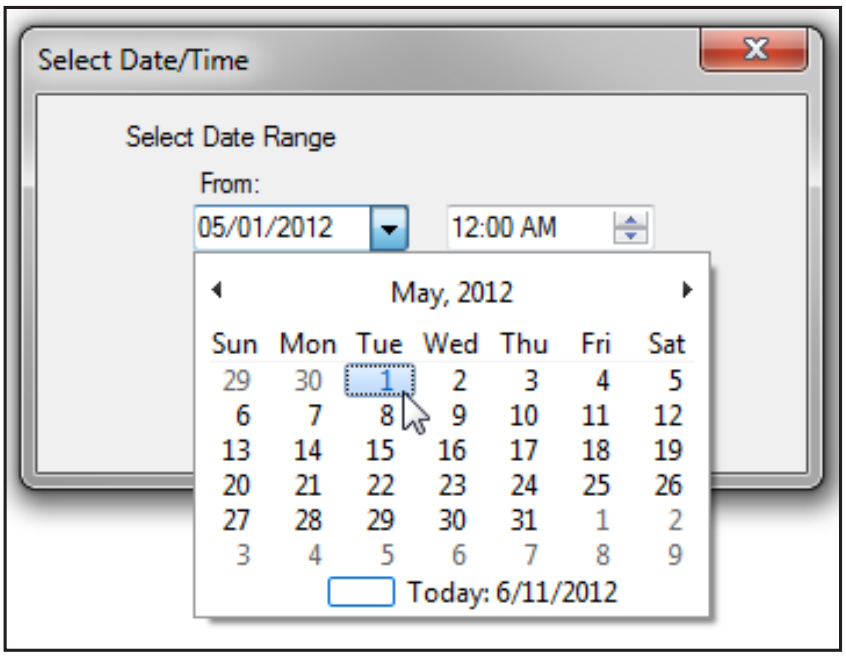


Fig 59: *Using the calendar feature to select date.*

1. Click on the arrows to the left and right of the month to change the month.
2. Click directly on the date to select the date.
3. Click on OK when you are satisfied with your selections.

After you specify the date range, any item falling within the range will have a check in the box next to it and will be included in the report you generate.

The Auto-check menu includes other options for selecting test result types. So, for example, if you select 3 Phase Surge the software will look for test results that have 3-phase surge results and will automatically check the boxes next to those items.

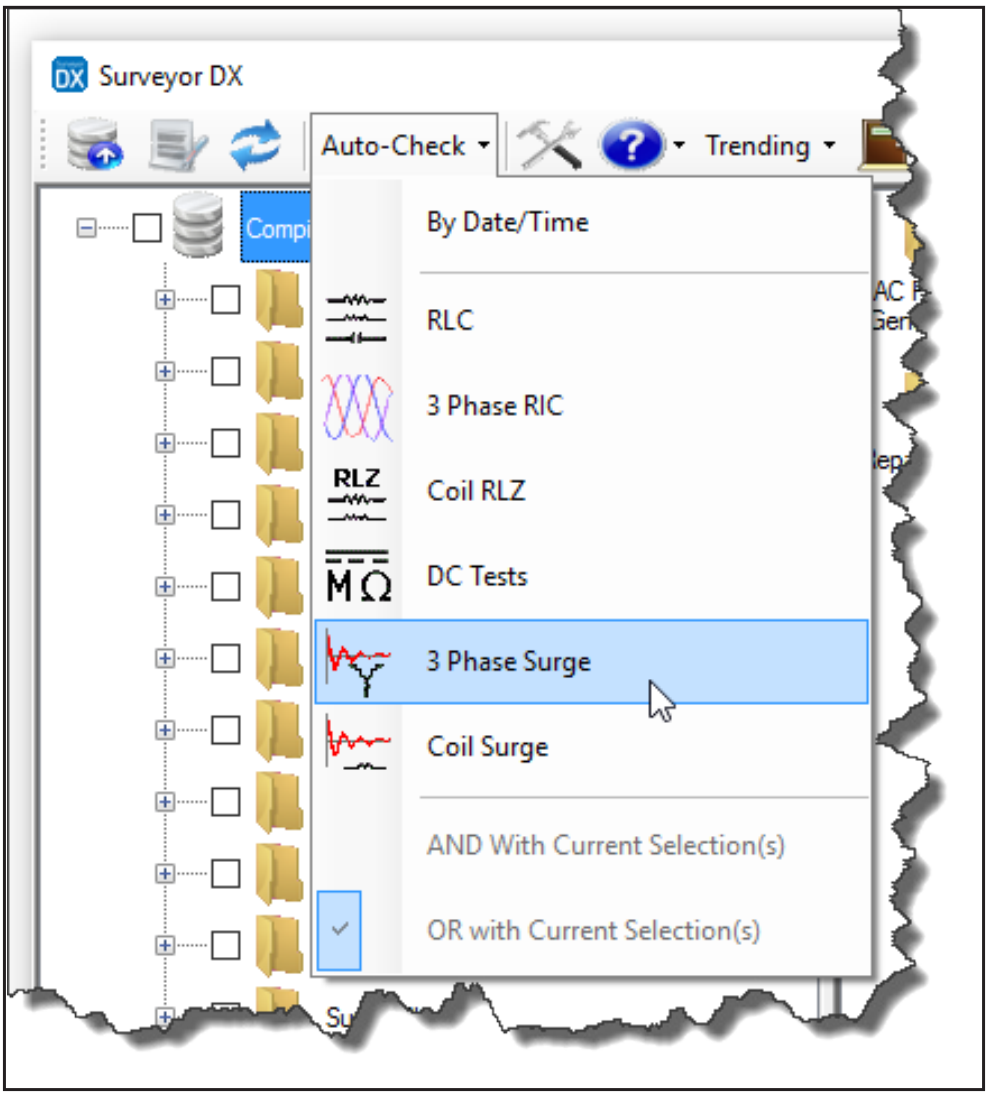


Fig 60: *Using the 3 Phase Surge option to select results.*

When folders within the Location tree contain test results of the type selected (or fall within the date range selected) the boxes for those folders are filled as shown in the example below to indicate that the folder has children that are checked.

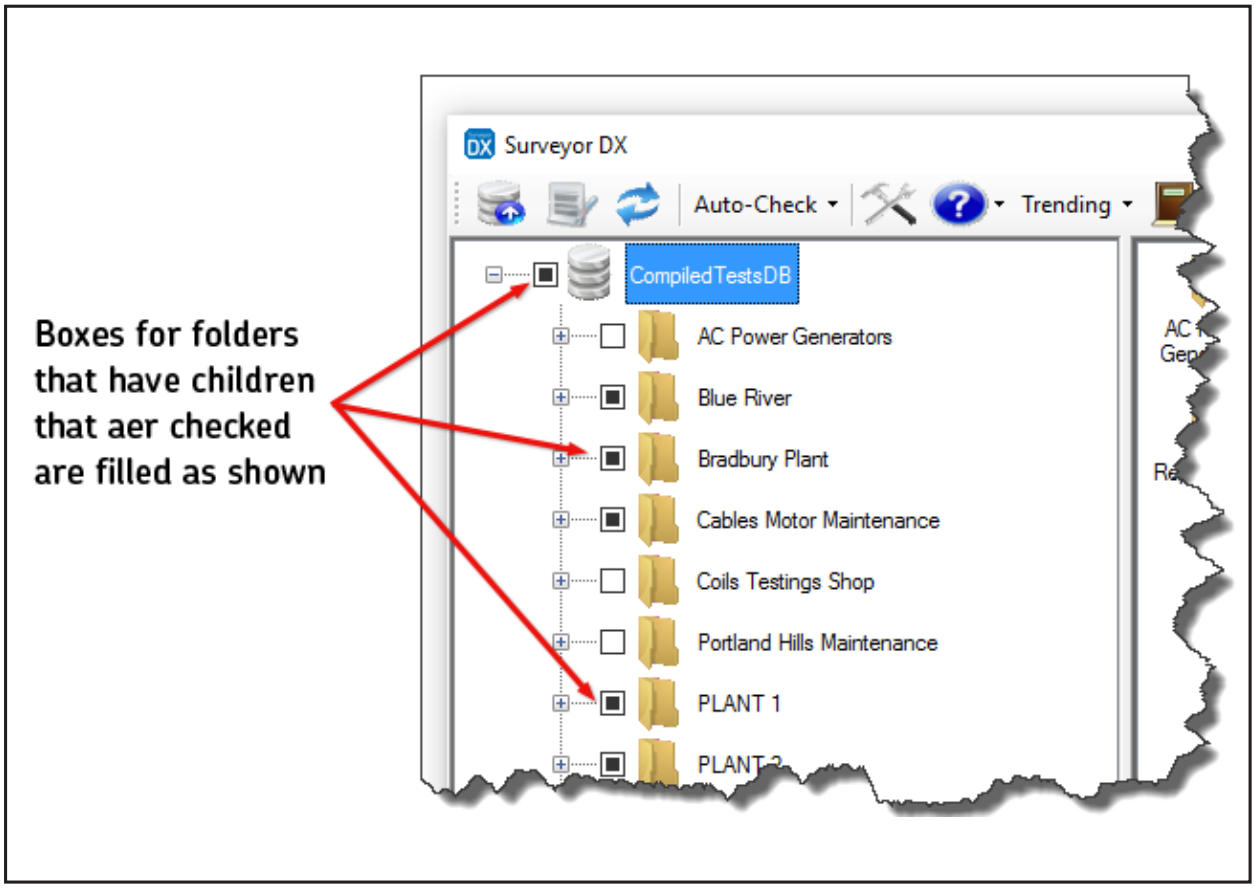


Fig 61: *Colored boxes identify folders containing selected results.*

The AND and OR features allow you to refine your filter selections. For example, if you wanted DC tests within a certain date range, you would first specify your date range and Auto-check would select all results in that date range. Then you would select AND then select DC Tests. Auto-check would then unselect all results in the date range that are not DC Tests.

To remove all checks, simply click on the check box next to the database name at the highest level of the Location tree.

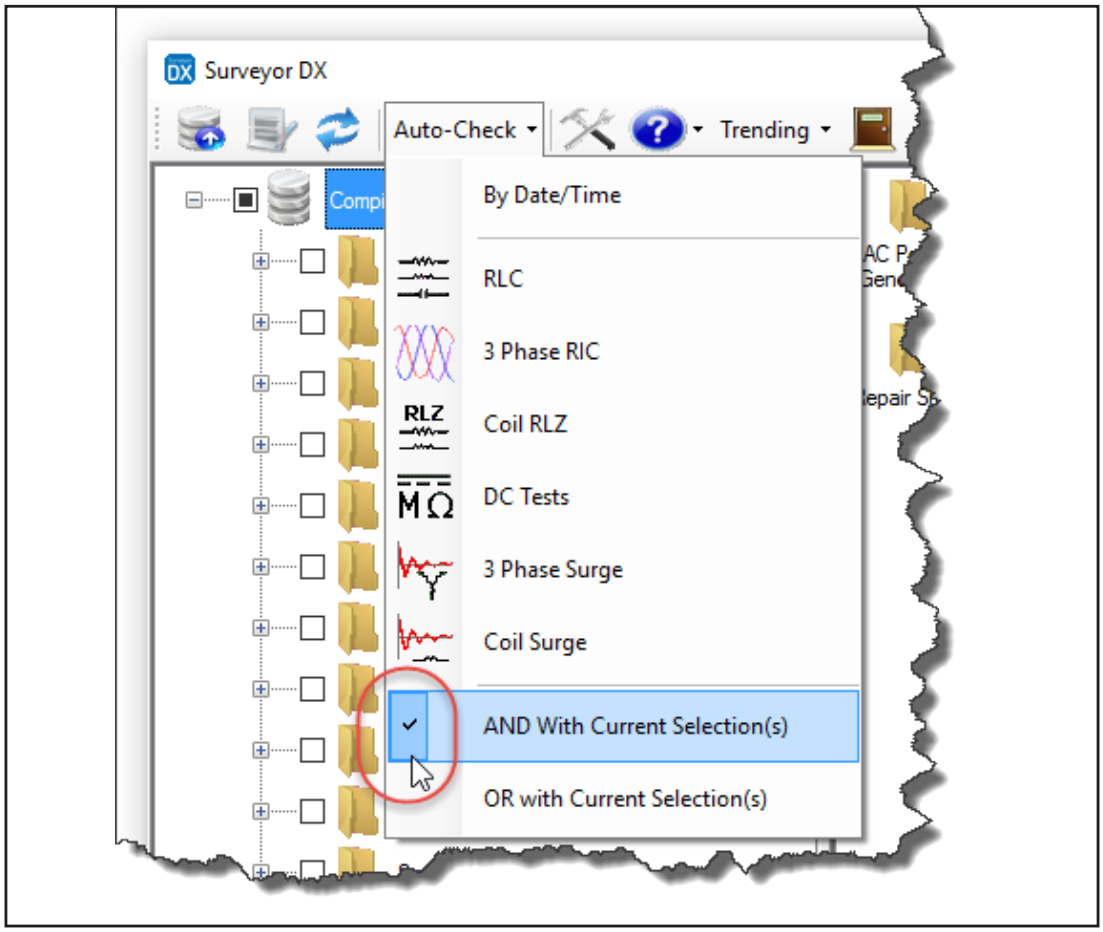


Fig 62: *Using the AND/OR selection functions.*

Specifying Options to Use in the Report

1. To select the options that you want to include in your report, click on the Settings icon found in the Main toolbar.

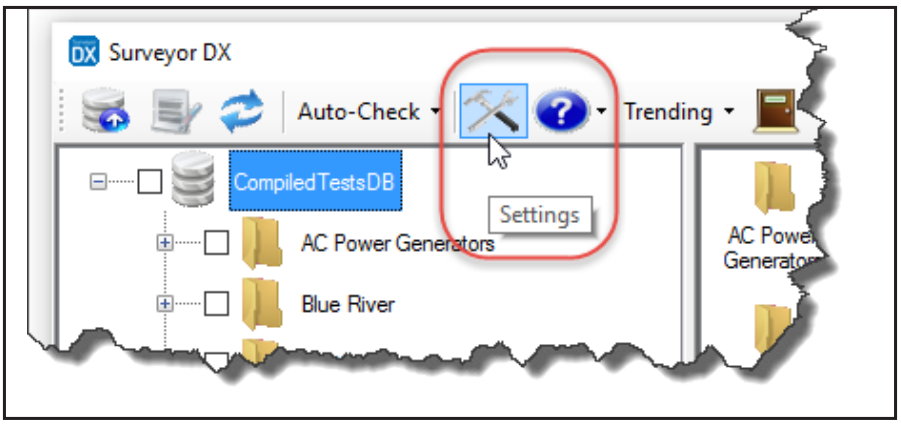


Fig 63: *Click on the icon shown to open the setting dialog box.*

2. The dialog box shown below opens to help you select the report types you need. It also allows you to add the company logo and name if you like, and it lets you choose options for including attributes and logging reports.

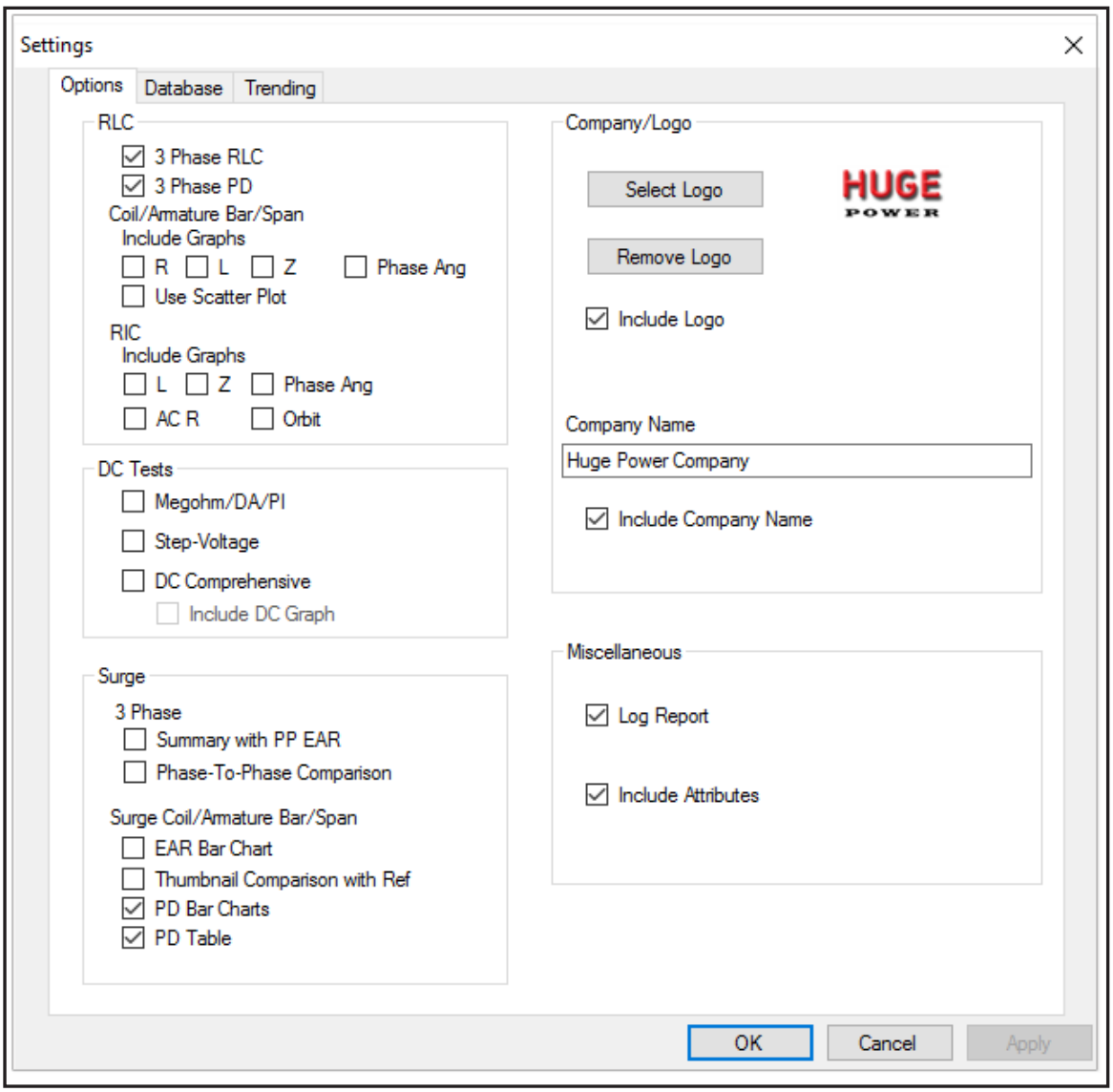


Fig 64: *Selecting report options.*

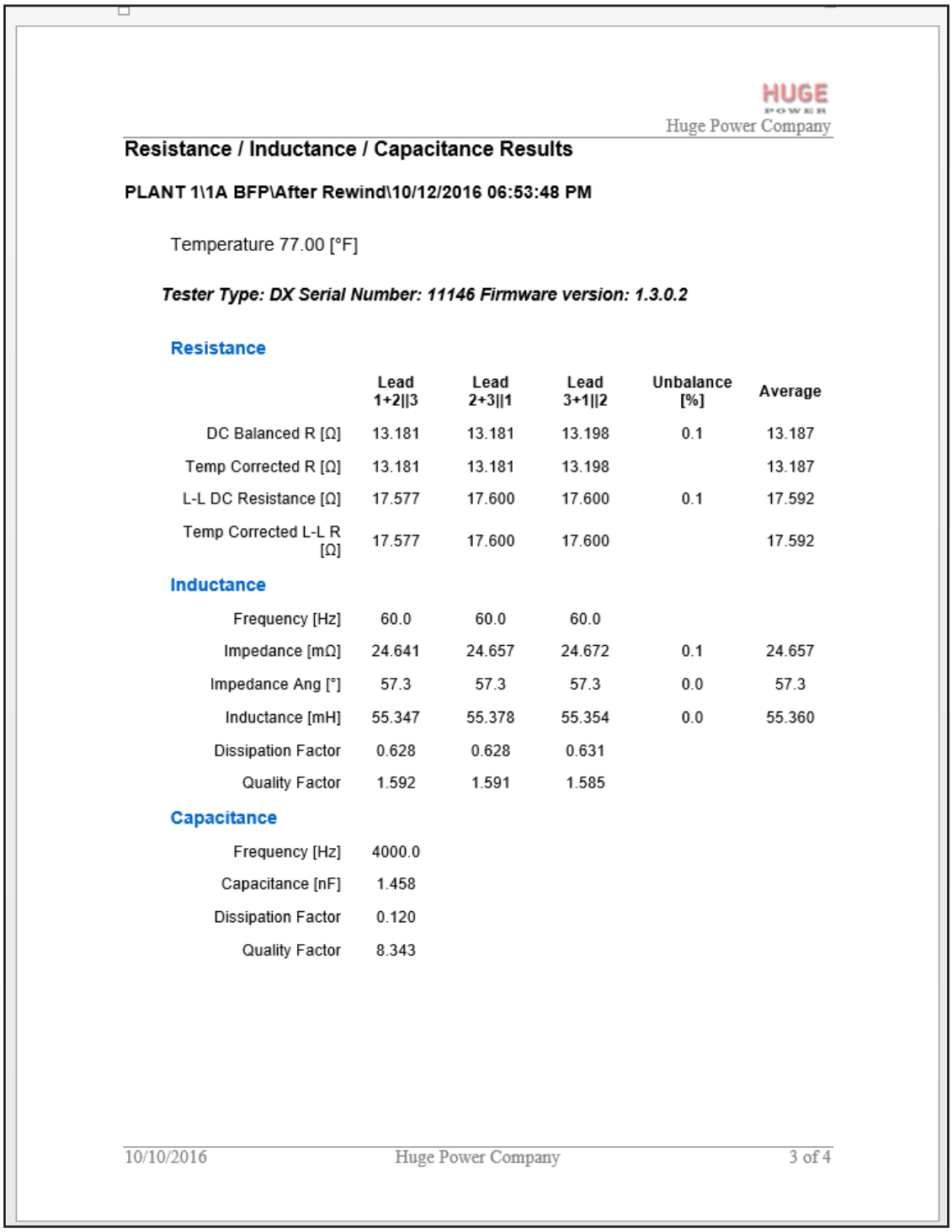
3. Click on the check boxes to select the report options you would like to use.
4. Click on the Select Logo button to open a search dialog to locate the logo you want to use. The software will accept most formats and sizes, but you should be aware that larger files or complex graphics might be harder to view when the software converts the logo to its final size. Essentially, the logo image can be as wide as the report page, but it is limited to 100 pixels in height.
5. If you want to include the company name, check the appropriate box and enter the company name in the related field as you want it to appear in the report.
6. Click on Apply to commit your selections and leave the dialog box open (if you want to continue considering report options).
7. Click on OK to accept your selections and return to the main user interface.

Report Options and Examples

The information included in report options that you can select using the Settings dialog box are described in this section and/or illustrated by examples. The reports generated for each option include one or more report pages, depending on the data content.

3 Phase RLC

Information content is the same as seen with the Baker DX, but presented in a more readable form. Date for this option includes unbalances and averages.



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Resistance / Inductance / Capacitance Results

PLANT 1\1A BFP\After Rewind\10/12/2016 06:53:48 PM

Temperature 77.00 [°F]

Tester Type: DX Serial Number: 11146 Firmware version: 1.3.0.2

Resistance

	Lead 1+2||3	Lead 2+3||1	Lead 3+1||2	Unbalance [%]	Average
DC Balanced R [Ω]	13.181	13.181	13.198	0.1	13.187
Temp Corrected R [Ω]	13.181	13.181	13.198		13.187
L-L DC Resistance [Ω]	17.577	17.600	17.600	0.1	17.592
Temp Corrected L-L R [Ω]	17.577	17.600	17.600		17.592

Inductance

Frequency [Hz]	60.0	60.0	60.0		
Impedance [mΩ]	24.641	24.657	24.672	0.1	24.657
Impedance Ang [°]	57.3	57.3	57.3	0.0	57.3
Inductance [mH]	55.347	55.378	55.354	0.0	55.360
Dissipation Factor	0.628	0.628	0.631		
Quality Factor	1.592	1.591	1.585		

Capacitance

Frequency [Hz]	4000.0
Capacitance [nF]	1.458
Dissipation Factor	0.120
Quality Factor	8.343

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Fig 65: *Example 3-Phase RLC report.*

RLZ

The resistance, inductance, and impedance (RLZ) test generates a report like the one shown below (the Use Scatter Plot option was selected for this example.). The report also includes the number of coils tested and the frequency at which the tests were run.

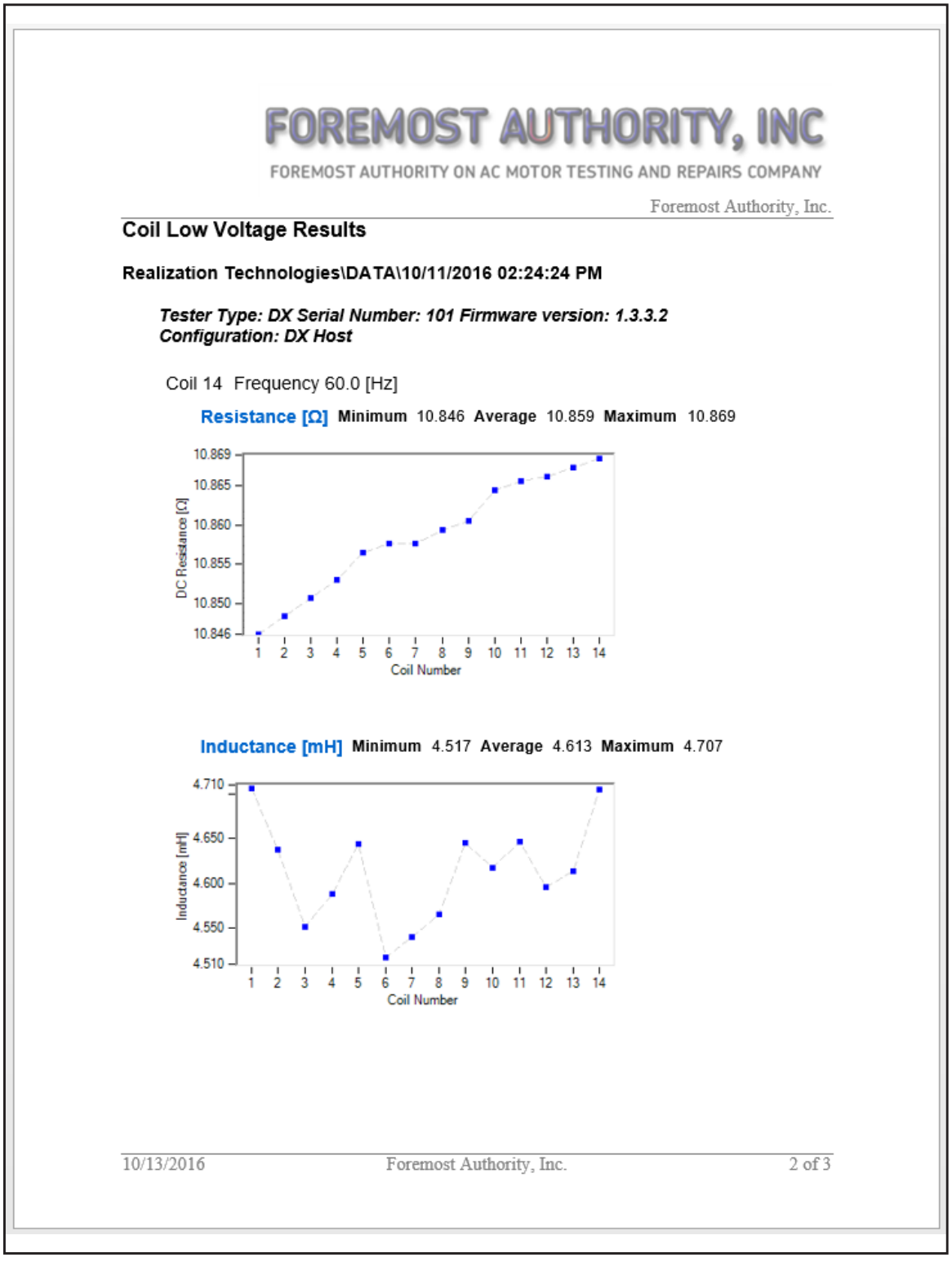


Fig 66: *RLZ test example showing DC Resistance and Inductance results.*

The graphic below shows a segment of the RLZ report displaying impedance and phase angle results.

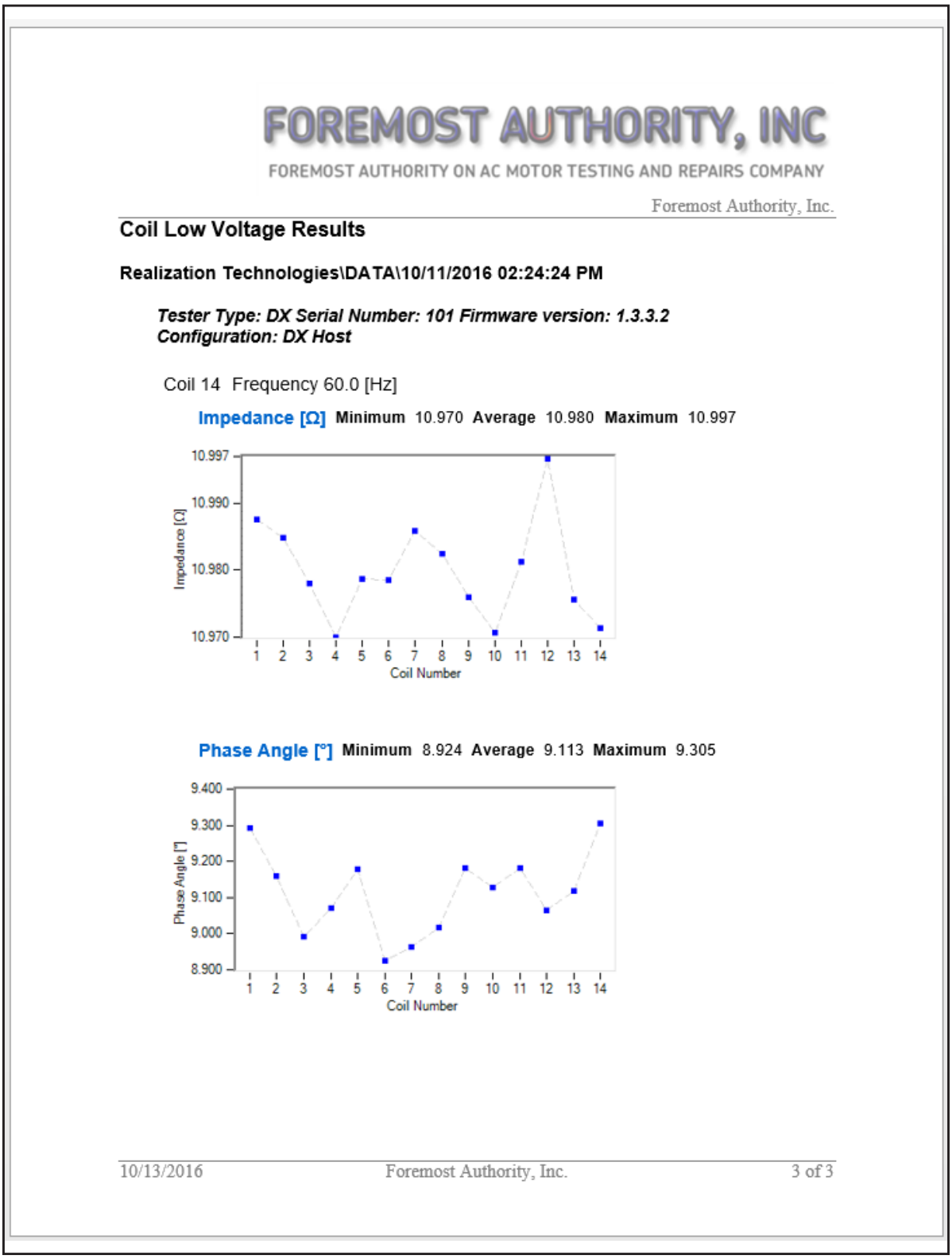


Fig 67: *RLZ test example showing Impedance and Phase Angle results.*

RIC

The rotor influence check (RIC) test generates a report like the one below. The first page of the report graphs include the inductance and impedance graphs. As the example shows, results for all three leads are stacked within each graph and are color coded.

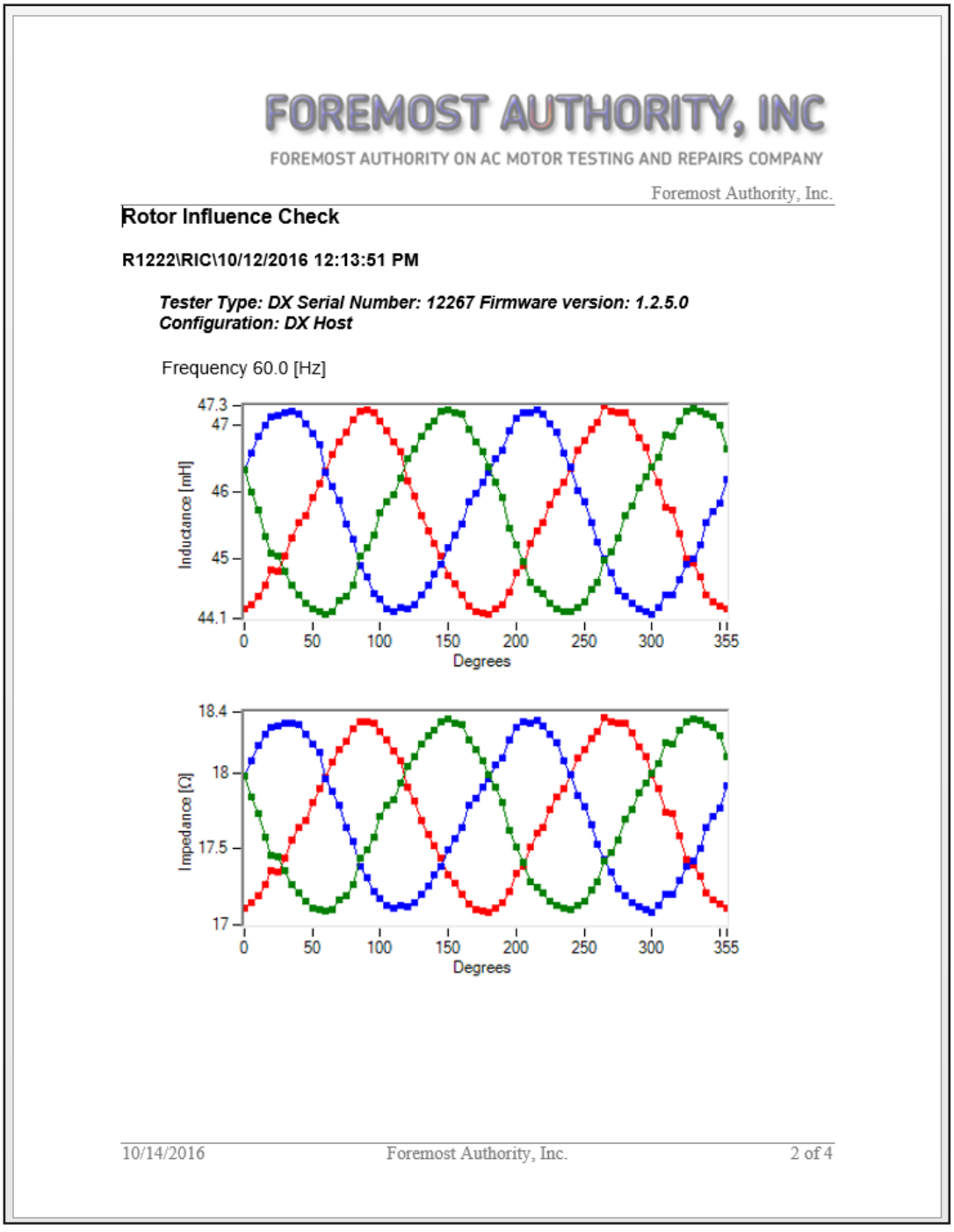


Fig 68: *RIC test example showing inductance and impedance results.*

NOTE: This example, along with the next two examples, show the resulting waveform for data collected for a full 360 degrees on the rotor tested.

The second page of result charts include phase angle and AC resistance test results.

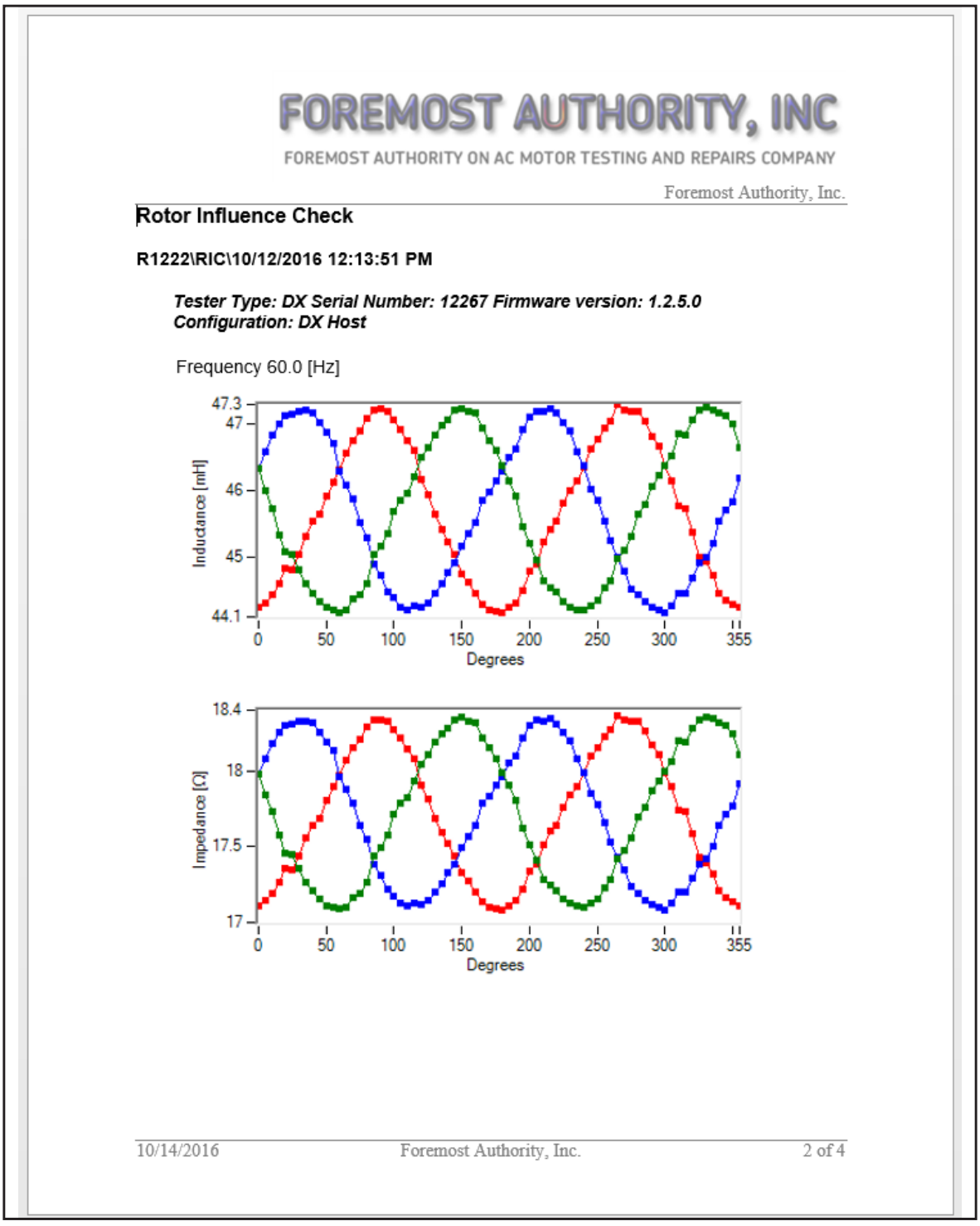


Fig 69: *RIC test example showing phase angle and AC resistance results.*

The RIC report example segment below includes the Orbit diagrams for inductance, impedance, and phase angle.

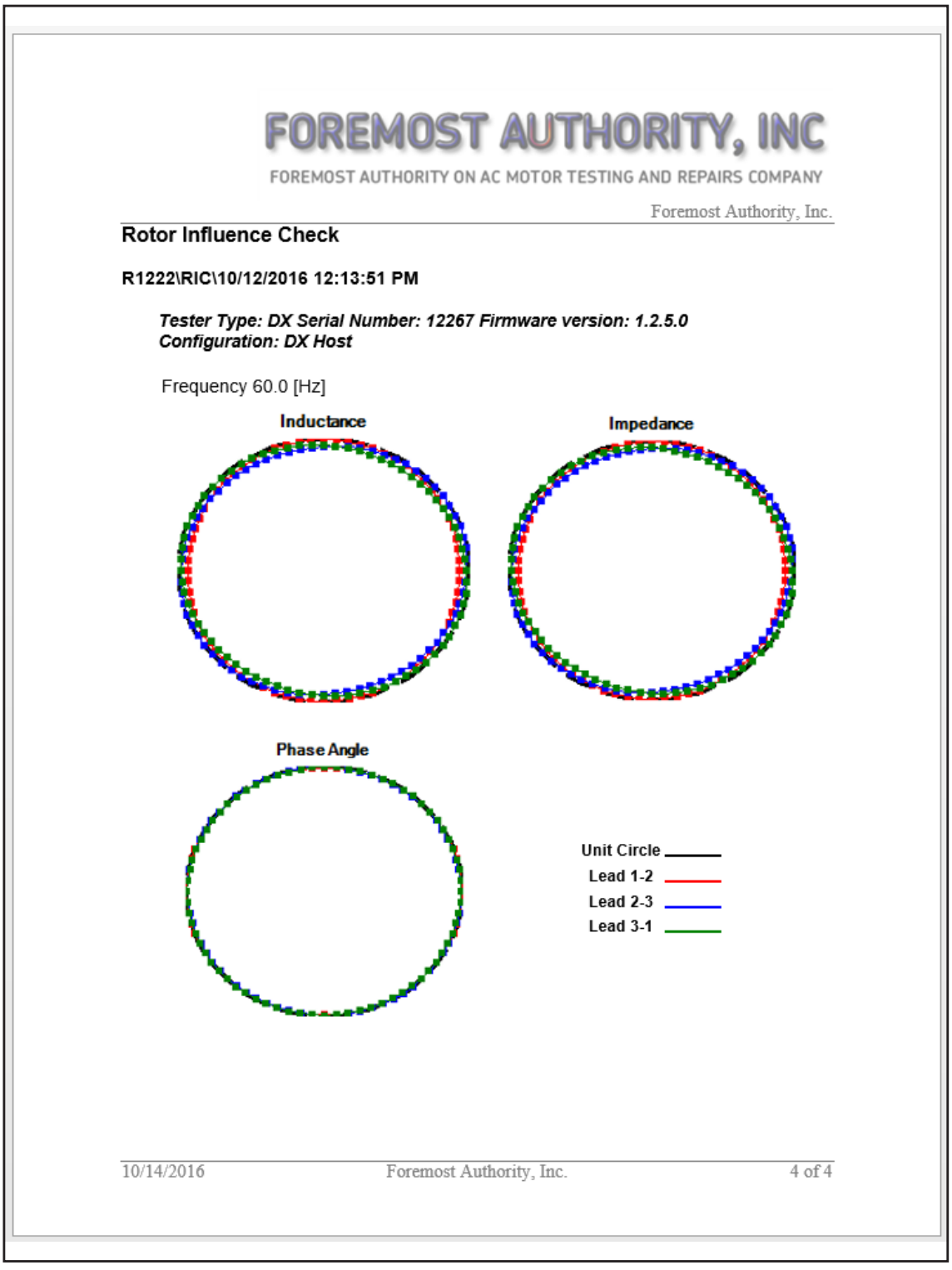


Fig 70: *RIC report segment with Orbit diagrams.*

In the following example, we see the inductance and impedance charts for test results from data collected on a rotor for which only one quarter (90 degrees) of the rotor was tested.

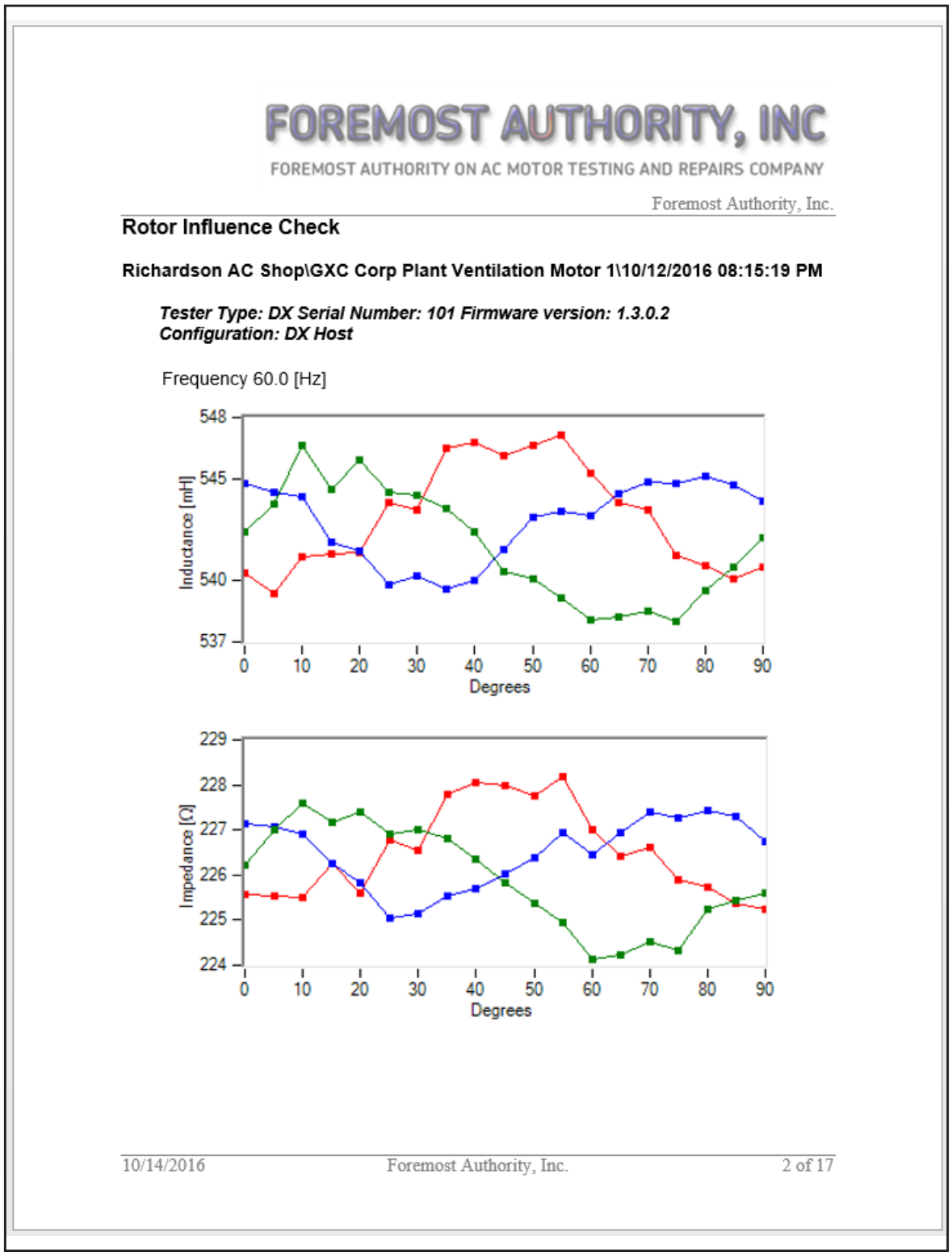


Fig 71: *RIC test example showing inductance and impedance with 90 degrees of data.*

The Orbit diagrams in this example are for the same rotor for which only 90 degrees of the rotor was tested. As a result, the diagrams appear as arcs to represent the section of the rotor that was tested.

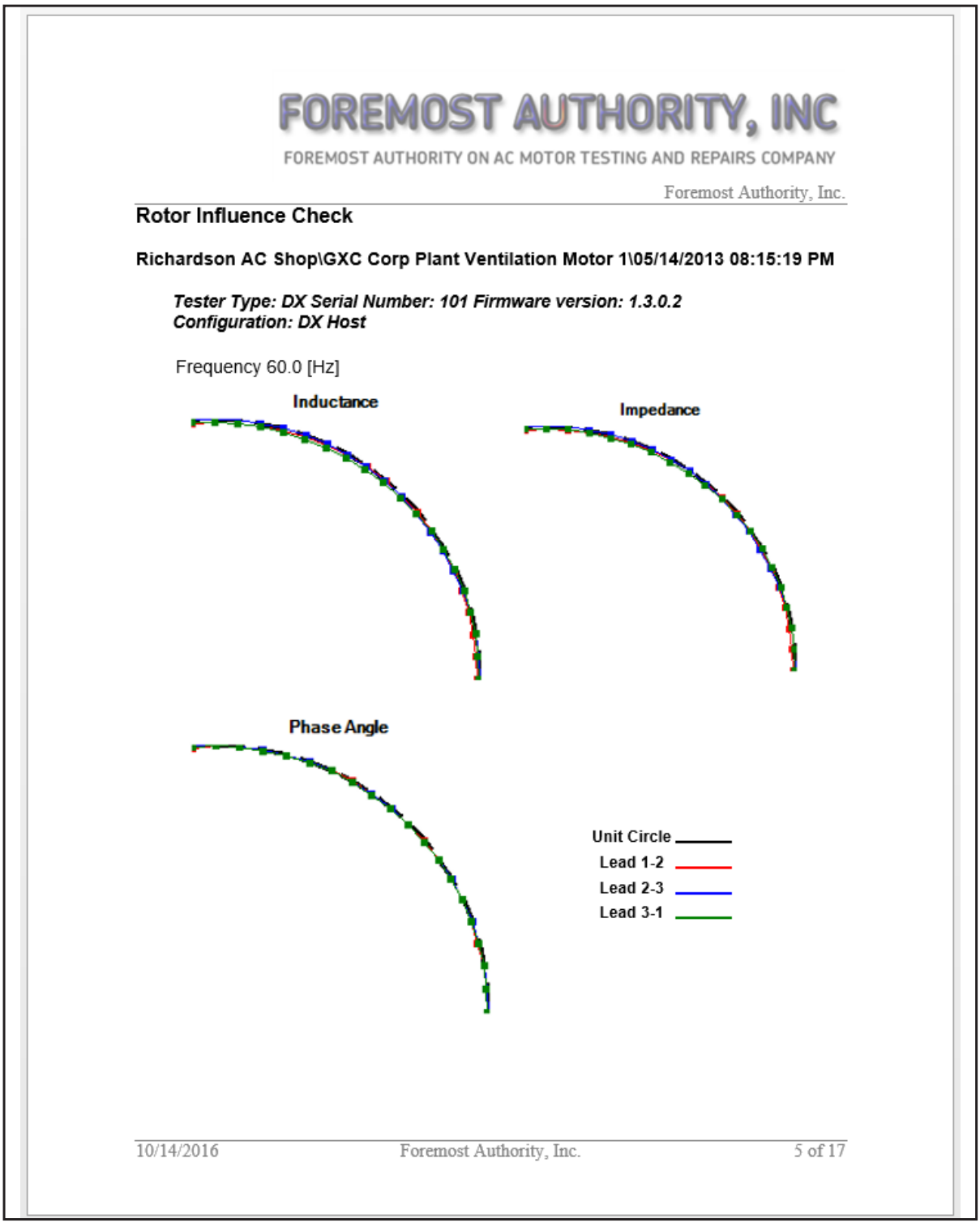


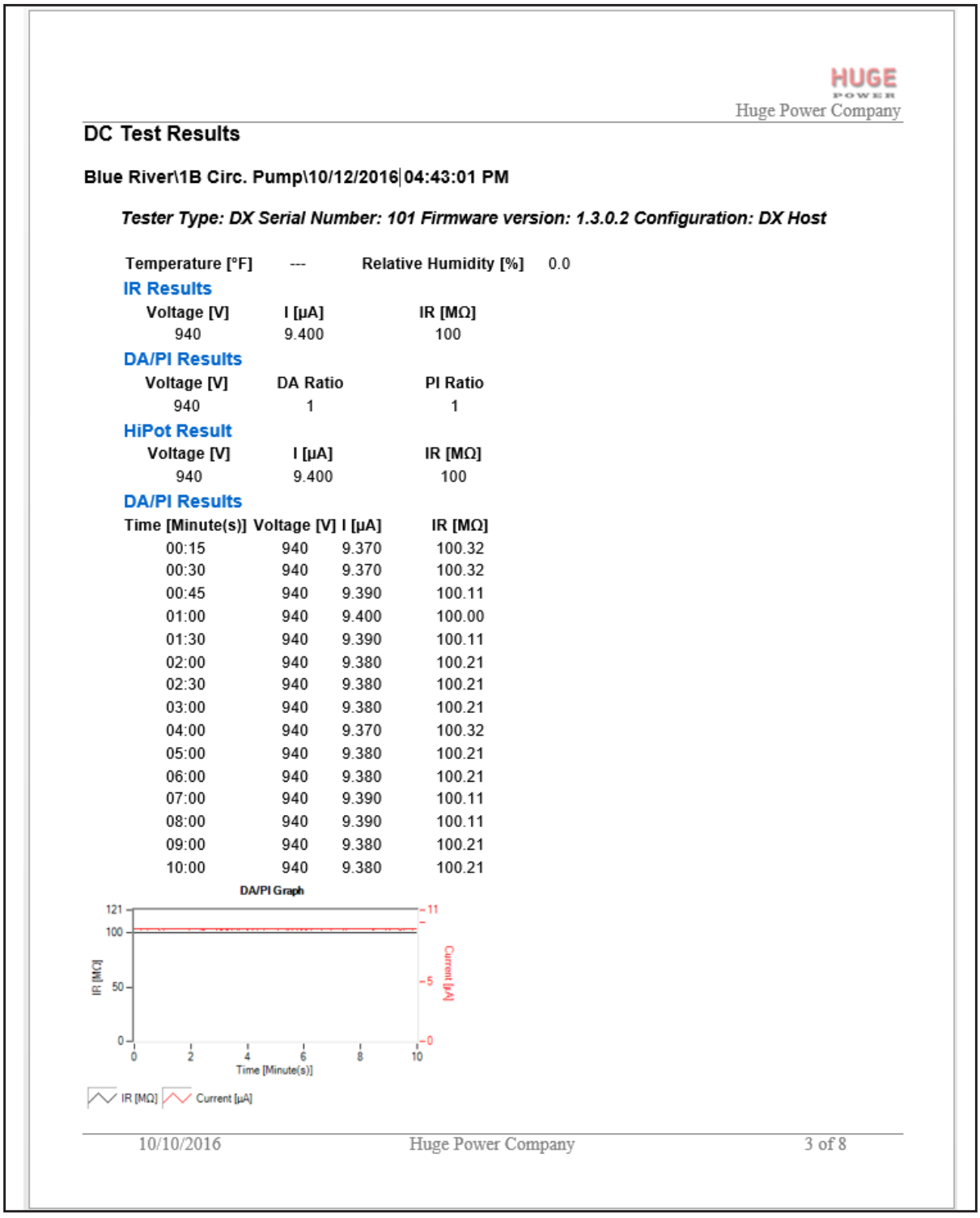
Fig 72: *RIC test example showing Orbit diagrams for a partially tested rotor.*

DC Tests

These results will have temperature-corrected megohms in addition to actual measured value. Results include:

- Megohm/DA/PI— scalar values, graph, and DA/PI table of values for each minute of the test
- Step-Voltage— graph with table of end step values
- DC Comprehensive— All-in-one graph of voltage (displayed when Include Graph option is selected), current and megohm over time

Examples of the DC Tests results are shown below and on the next page.



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DC Test Results

Blue River\1B Circ. Pump\10/12/2016 04:43:01 PM

Tester Type: DX Serial Number: 101 Firmware version: 1.3.0.2 Configuration: DX Host

Temperature [°F] --- **Relative Humidity [%]** 0.0

IR Results

Voltage [V]	I [µA]	IR [MΩ]
940	9.400	100

DA/PI Results

Voltage [V]	DA Ratio	PI Ratio
940	1	1

HiPot Result

Voltage [V]	I [µA]	IR [MΩ]
940	9.400	100

DA/PI Results

Time [Minute(s)]	Voltage [V]	I [µA]	IR [MΩ]
00:15	940	9.370	100.32
00:30	940	9.370	100.32
00:45	940	9.390	100.11
01:00	940	9.400	100.00
01:30	940	9.390	100.11
02:00	940	9.380	100.21
02:30	940	9.380	100.21
03:00	940	9.380	100.21
04:00	940	9.370	100.32
05:00	940	9.380	100.21
06:00	940	9.380	100.21
07:00	940	9.390	100.11
08:00	940	9.390	100.11
09:00	940	9.380	100.21
10:00	940	9.380	100.21

DA/PI Graph

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Fig 73: *Example DC Tests report.*

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DC Test Results

Blue River\1B Circ. Pump\10/12/2016 04:43:01 PM

Tester Type: DX Serial Number: 101 Firmware version: 1.3.0.2 Configuration: DX Host

Temperature [°F]	---	Relative Humidity [%]	0.0

IR Results

Voltage [V]	I [µA]	IR [MΩ]
940	9.400	100

DA/PI Results

Voltage [V]	DA Ratio	PI Ratio
940	1	1

HiPot Result

Voltage [V]	I [µA]	IR [MΩ]
940	9.400	100

DA/PI Results

Time [Minute(s)]	Voltage [V]	I [µA]	IR [MΩ]
00:15	940	9.370	100.32
00:30	940	9.370	100.32
00:45	940	9.390	100.11
01:00	940	9.400	100.00
01:30	940	9.390	100.11
02:00	940	9.380	100.21
02:30	940	9.380	100.21
03:00	940	9.380	100.21
04:00	940	9.370	100.32
05:00	940	9.380	100.21
06:00	940	9.380	100.21
07:00	940	9.390	100.11
08:00	940	9.390	100.11
09:00	940	9.380	100.21
10:00	940	9.380	100.21

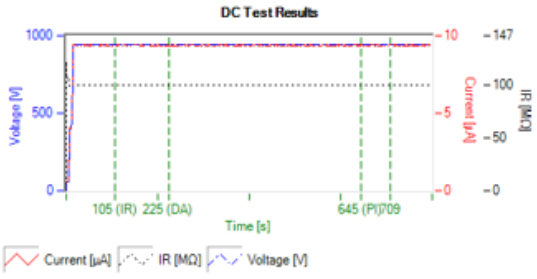
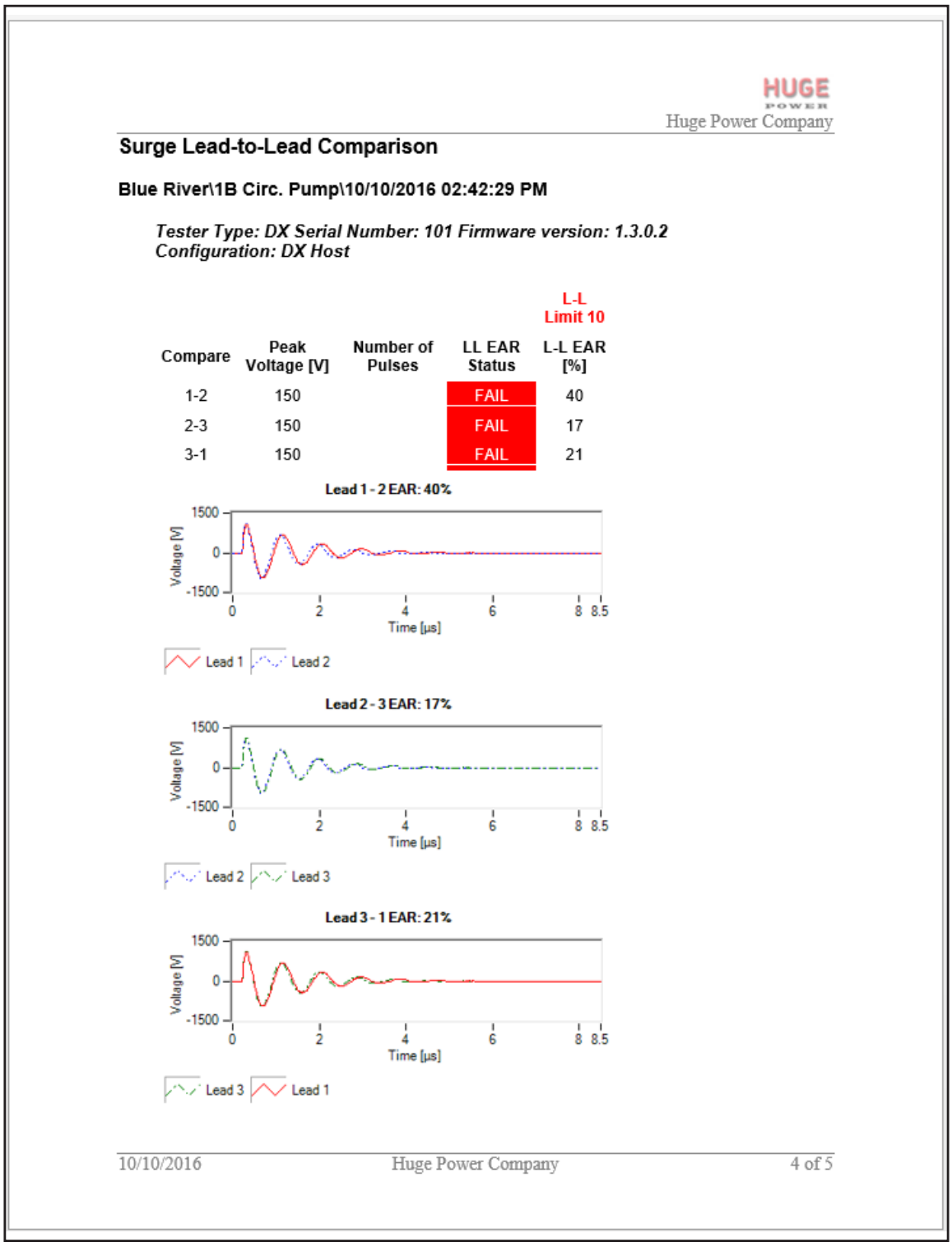


Fig 74: *Example DC Tests report.*

Surge 3 Phase

Results include:

- Summary Graph with all 3 leads and PP EAR graph
- Comparison Report lead 1-2, 2-3, 3-1
- Will have pass/fail set based on the PPEAR limit and LLEAR limit



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Surge Lead-to-Lead Comparison

Blue River\1B Circ. Pump\10/10/2016 02:42:29 PM

Tester Type: DX Serial Number: 101 Firmware version: 1.3.0.2
Configuration: DX Host

Compare	Peak Voltage [V]	Number of Pulses	LL EAR Status	L-L Limit 10 L-L EAR [%]
1-2	150		FAIL	40
2-3	150		FAIL	17
3-1	150		FAIL	21

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Fig 75: *Example Surge 3 Phase report—lead-to-lead comparison.*

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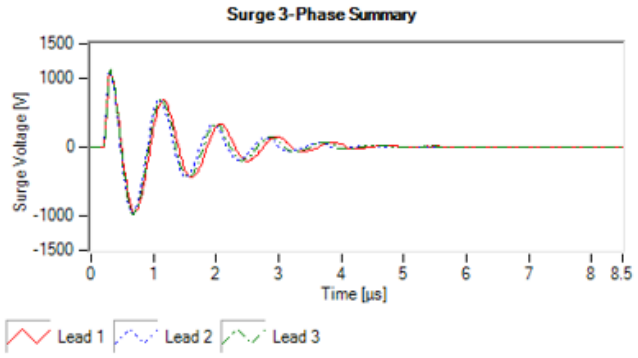
Surge 3-Phase Summary

Blue River\1B Circ. Pump\10/10/2016 02:42:29 PM

Tester Type: DX Serial Number: 101 Firmware version: 1.3.0.2
Configuration: DX Host

Lead	Peak Voltage [V]	Number of Pulses	PP EAR Status	P-P Limit 10 Max P-P EAR [%]
1	150		PASS	3
2	150		PASS	3
3	150		PASS	3



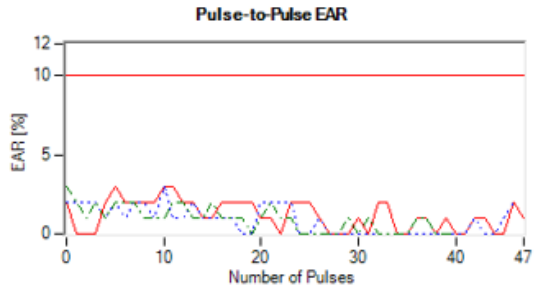


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Fig 76: *Example Surge 3 Phase report—summary.*

Surge 3 Phase with PD

To include the option for reporting on partial discharge for 3-phase surge testing, check the 3 Phase PD box currently located below the RLC options.

Coil and 3 Phase surge waveforms will have PD data overlaid on them if there is PD data collected during testing.

In the example below, we see a Surge 3-Phase Summary with PD data added to the report. The summary includes a data table, overlaid PD data in the surge graph, and a house plot at the bottom of the report.

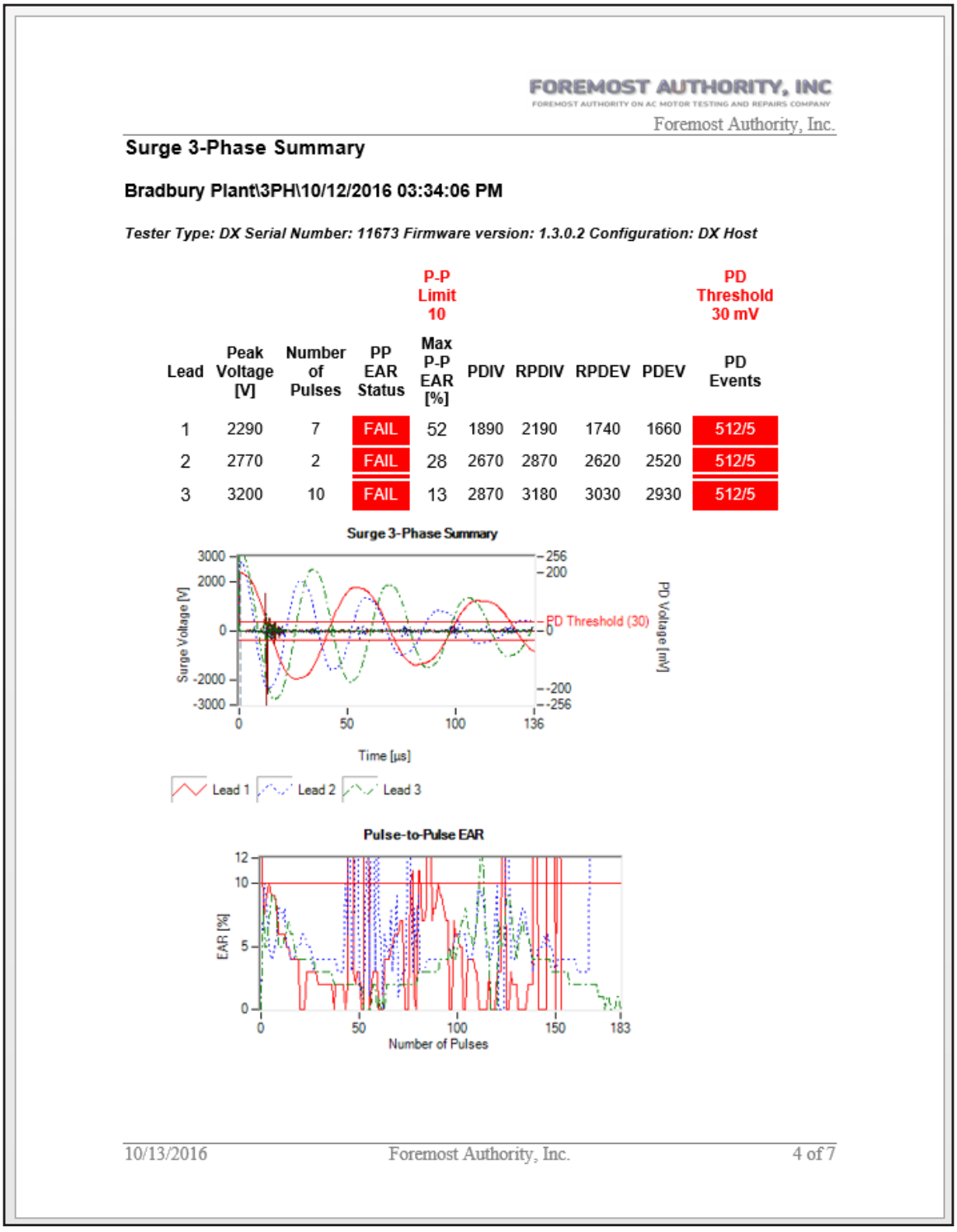
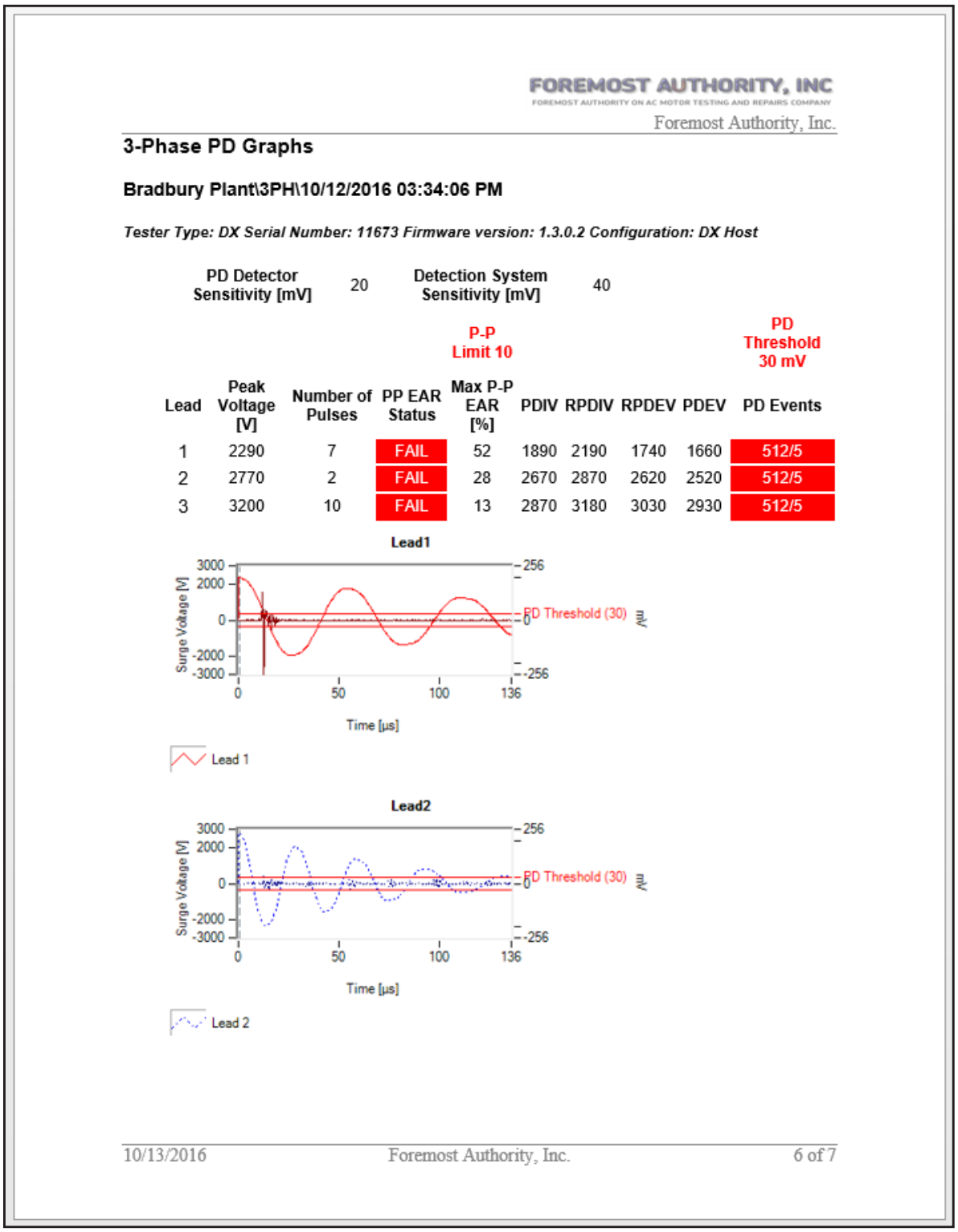


Fig 77: *Surge 3-phase summary report with PD summary data.*

In the example below, we see the 3-Phase PD Graphs section included with surge test results when PD data is available. This section includes a data table detailing the peak voltages along with the inception and extinction voltages for each test lead. Graphic representations of the results are also provided for each lead.

This page of the report also includes the sensitivity values used during 3-phase surge testing. Sensitivity values are reported for both coil and 3-phase surge testing.



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3-Phase PD Graphs

Bradbury Plant\3PH\10/12/2016 03:34:06 PM

Tester Type: DX Serial Number: 11673 Firmware version: 1.3.0.2 Configuration: DX Host

PD Detector Sensitivity [mV]	20	Detection System Sensitivity [mV]	40

Lead	Peak Voltage [V]	Number of Pulses	PP EAR Status	Max P-P EAR [%] (P-P Limit 10)	PDIV	RPDIV	RPDEV	PDEV	PD Events (PD Threshold 30 mV)
1	2290	7	FAIL	52	1890	2190	1740	1660	512/5
2	2770	2	FAIL	28	2670	2870	2620	2520	512/5
3	3200	10	FAIL	13	2870	3180	3030	2930	512/5

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Fig 78: *Three-phase surge testing PD graphs section.*

Surge Coil/Armature Bar/Span

Results include:

- EAR bar graph
- All waveforms graph
- Thumbnail comparison report of reference waveform versus each coil/bar/span under test
- Graphs of each FC and IP against a reference

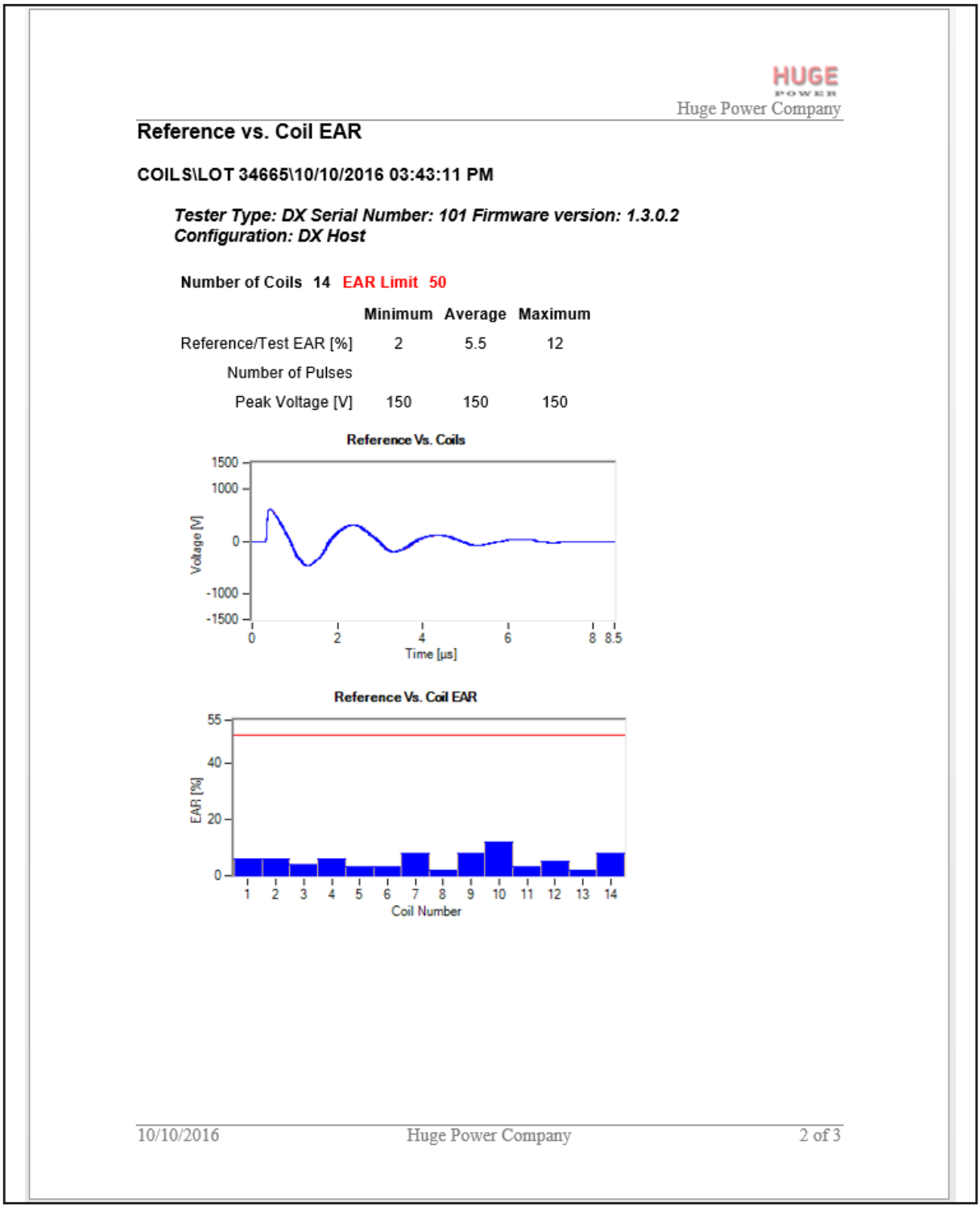


Fig 79: *Example Surge Coil report EAR bar graph.*

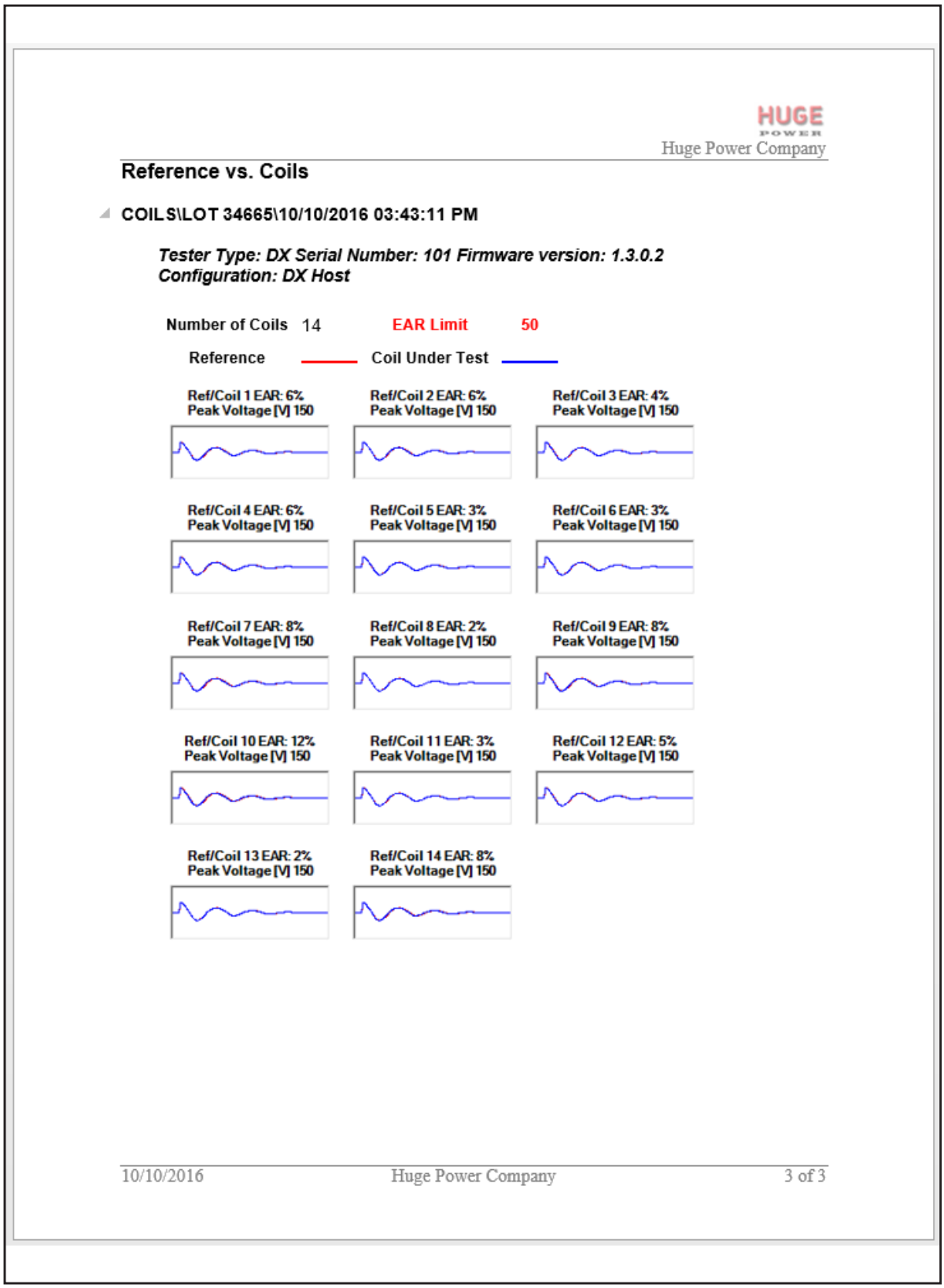
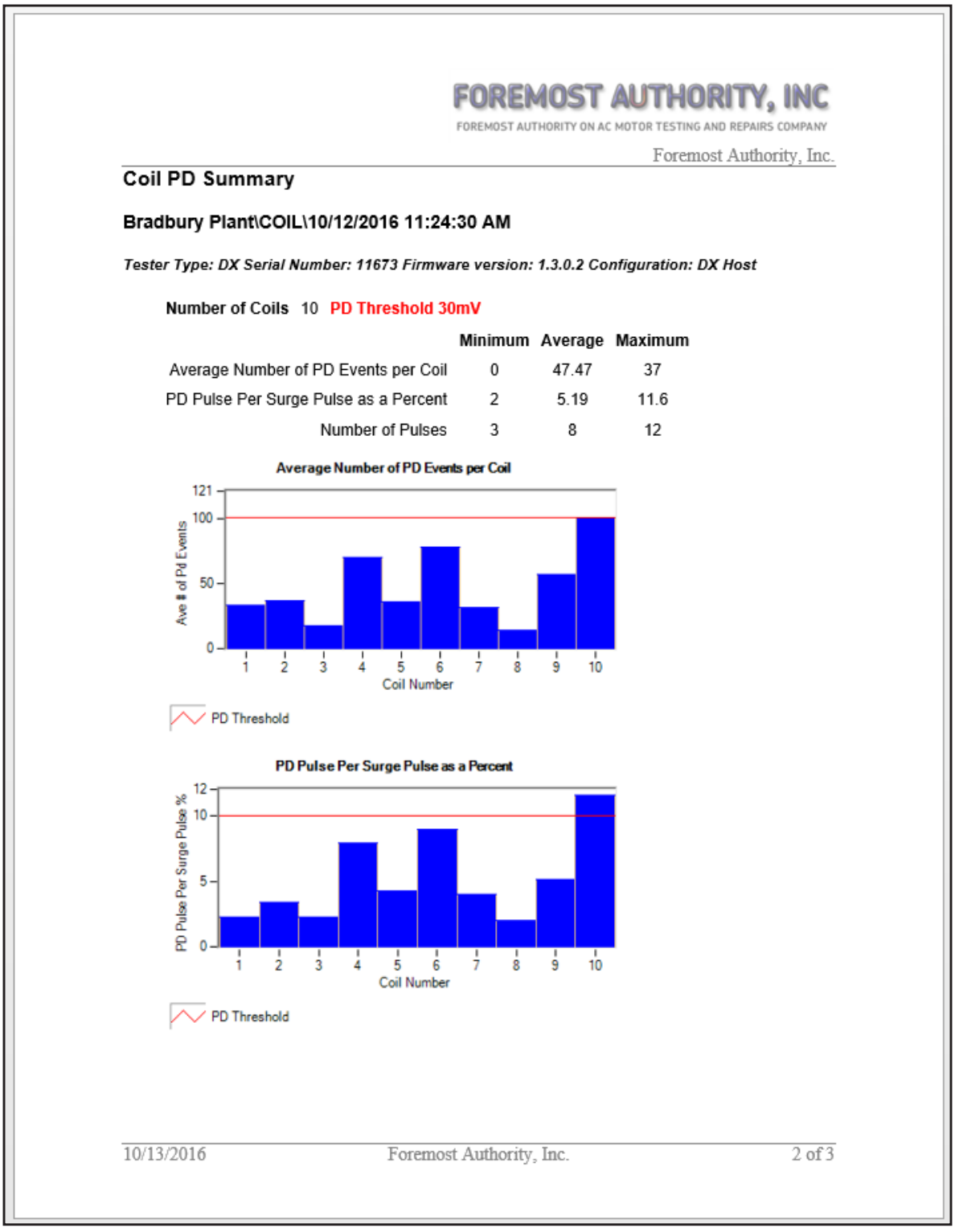


Fig 80: *Example with thumbnail comparisons.*

Surge Coil with PD

To include the options for reporting on partial discharge for coil surge testing, check the PD Bar Charts and PD Table boxes below the Surge options.

In the example below, we see a Surge Coil Summary with PD data added to the report. The summary includes a data table and bar graphs representing the PD events and pulses recorded during testing.



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Coil PD Summary

Bradbury Plant\COIL\10/12/2016 11:24:30 AM

Tester Type: DX Serial Number: 11673 Firmware version: 1.3.0.2 Configuration: DX Host

Number of Coils 10 **PD Threshold 30mV**

	Minimum	Average	Maximum
Average Number of PD Events per Coil	0	47.47	37
PD Pulse Per Surge Pulse as a Percent	2	5.19	11.6
Number of Pulses	3	8	12

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Fig 81: *Surge coil summary report with PD data.*

The coil surge PD table section is shown in the next example. This section is added to the coil reports when PD data is available. It shows the peak voltages along with the inception and extinction voltages for each coil tested in the process.

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Coil Surge PD Table

Bradbury Plant\COIL\10/12/2016 11:24:30 AM

Tester Type: DX Serial Number: 11673 Firmware version: 1.3.0.2

Configuration: DX Host

Coil Number	Peak Voltage [V]	PDIV	RPDIV	RPDEV	PDEV
1	1840	1560	2350	2450	1890
2	1890	1310	2240	2350	1840
3	1840	1560	1890	1890	1740
4	1840	1740	2040	2140	1840
5	1790	1610	1840	1990	1790
6	1740	1560	1890	1890	1740
7	1560	1610	1790	1790	1560
8	1060	1610	1790	1690	1690
9	1990	1740	2350	2190	1990
10	1560	1560	1790	2040	1610

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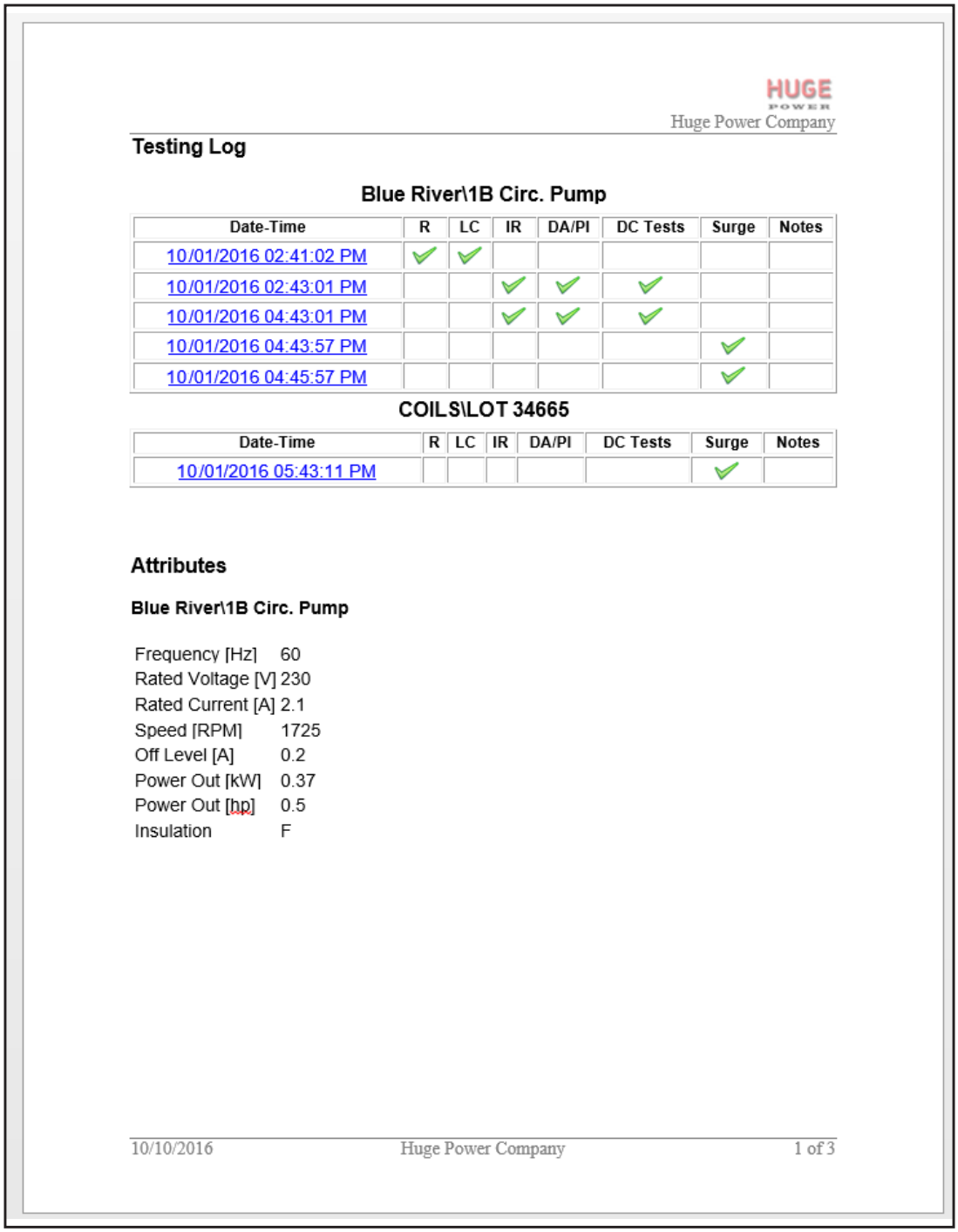
Fig 82: *Coil surge PD table section.*

Testing Log and Attributes

The Testing Log is a high-level report summary generated at the beginning of each report when the Log Report option is selected in the Settings dialog. Using the option generates one of more tables that contain lists of the test records along with the notification of the test types selected for each record.

When you select the Include Attributes option in the Settings dialog, the software generates a section like the one shown below that includes attributes provided in the attributes form. Only attribute parameters that have values entered in them appear in this list. Additionally, the test item's folder must be converted to a specific test item.



HUGE POWER
Huge Power Company

Testing Log

Blue River\1B Circ. Pump

Date-Time	R	LC	IR	DA/PI	DC Tests	Surge	Notes
10/01/2016 02:41:02 PM	✓	✓					
10/01/2016 02:43:01 PM			✓	✓	✓		
10/01/2016 04:43:01 PM			✓	✓	✓		
10/01/2016 04:43:57 PM						✓	
10/01/2016 04:45:57 PM						✓	

COILS\LOT 34665

Date-Time	R	LC	IR	DA/PI	DC Tests	Surge	Notes
10/01/2016 05:43:11 PM						✓	

Attributes

Blue River\1B Circ. Pump

Frequency [Hz]	60
Rated Voltage [V]	230
Rated Current [A]	2.1
Speed [RPM]	1725
Off Level [A]	0.2
Power Out [kW]	0.37
Power Out [hp]	0.5
Insulation	F

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Fig 83: *Example test log.*

Trending Reports—Options and Examples

The Baker DX generates trending data for certain practical values for RLC, DC, and Surge testing. The process for viewing trending data and generating trending reports is separate from the process for other Surveyor DX reports. The Settings dialog contains a separate Trending tab used to select report options and a separate Trending window is used to view data and to generate reports.

NOTE: Most information options selected from the Options tab in the Settings dialog will not appear in the Surveyor DX Trending window, nor in the Trending reports generated from that window. The exceptions are Include Logo and Include Company Name.

Likewise, information options selected from the Trending tab in the Settings dialog will not appear in the Surveyor DX Quick View pane, nor in the reports generated from the Surveyor DX main window.

Typically, using the trending feature involves selecting test results for a single motor and ensuring that the subject motor has sufficient results data to allow the software to create meaningful trending values and graphs.

Examining data (such as resistance or leakage current values) recorded for a specific motor over time can help you determine when a motor should be taken out of service for refurbishment or replacement. Reviewing trending data helps you identify when a motor has reached predefined thresholds based on company standards or industry recommended values.

A practical example would be evaluating motor data collected during scheduled outages conducted over the course of several years.

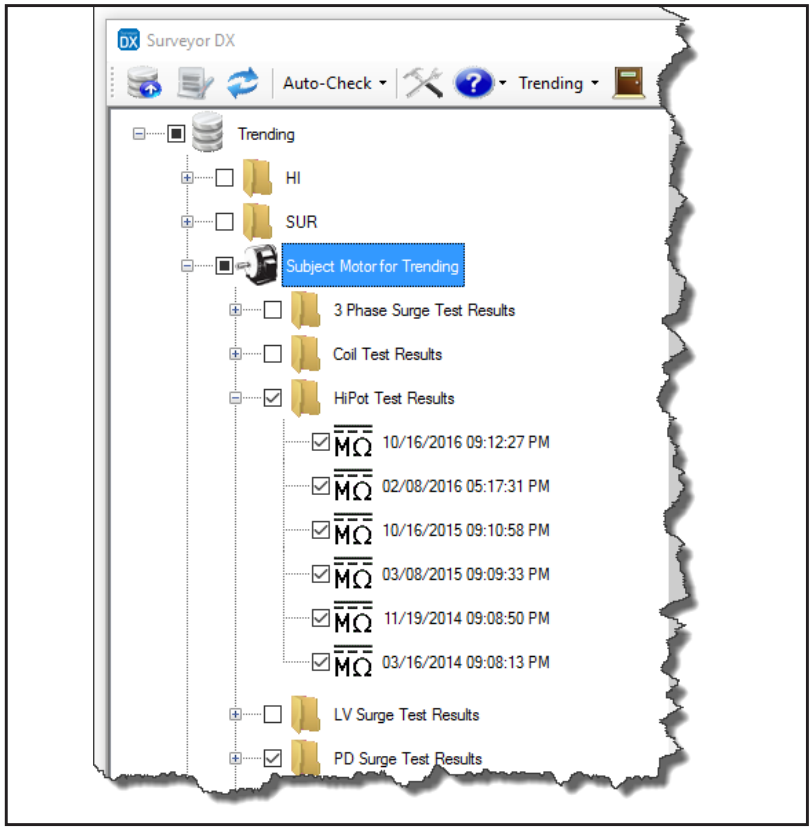


Fig 84: *Example of subject motor tests results organization.*

NOTE: Best practices recommend that all data collected for a single motor be stored below the subject motor's file structure to facilitate complete and accurate data management for the motor. In the example above, test results are stored in folders organized by test type.

Selecting Options for Trending Reports

1. To select options to include in the trending reports, click on the Settings icon in the Main toolbar then click on the Trending tab. The options selected here will be the default options that appear when the Trending window is opened.

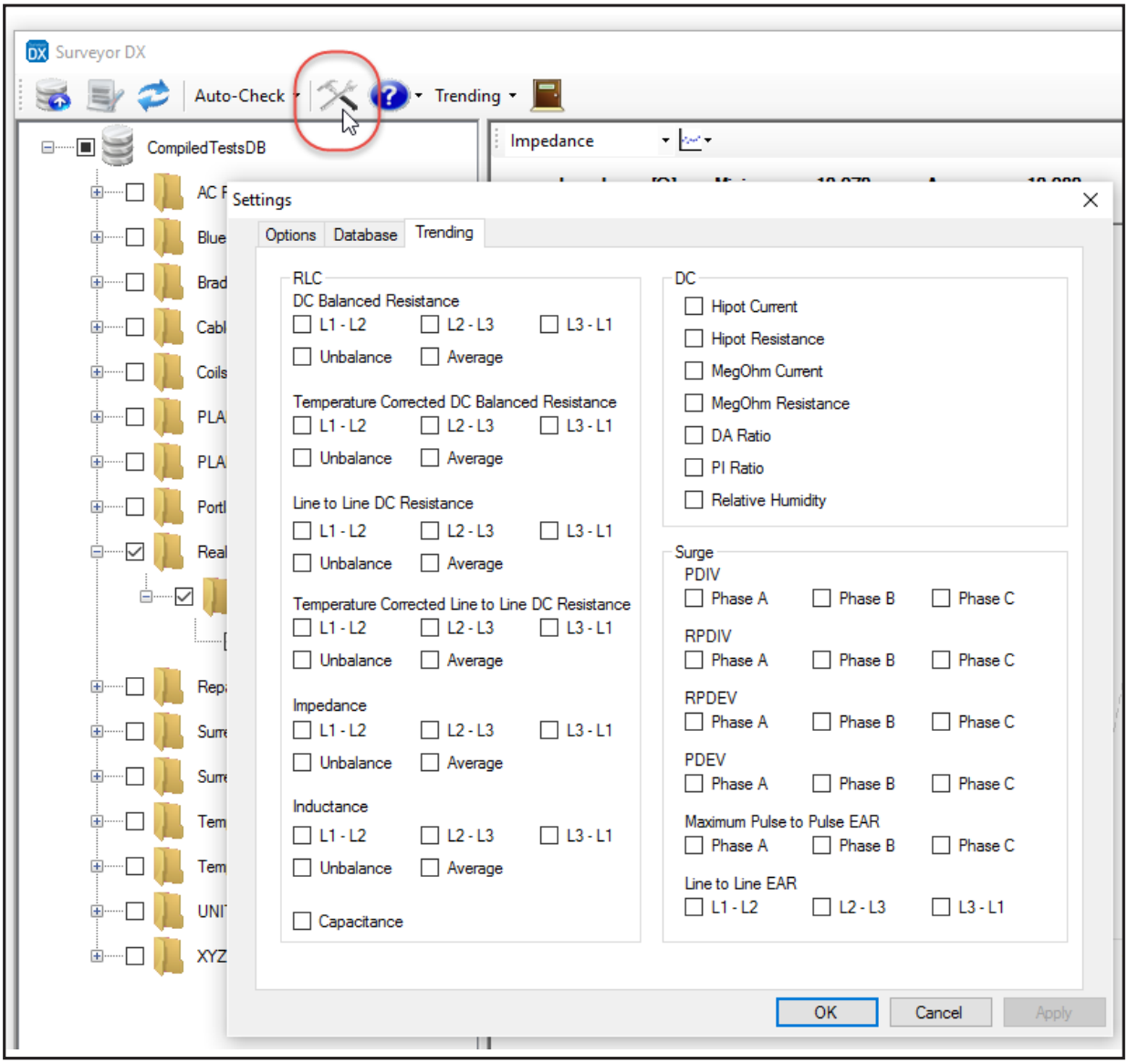


Fig 85: *Trending tab in Settings dialog.*

2. Below each test type, check the boxes next to the test measurement values that you want to include trending data for in your view or report.
3. Click on Apply to save the settings if you want to consider selecting other values.
4. Click on OK when you are satisfied with your selections.

5. You can use the Auto-Check feature in the Main toolbar to locate folders that contain related test data, or you can directly check the box next to a folder known to contain the data you want to review.

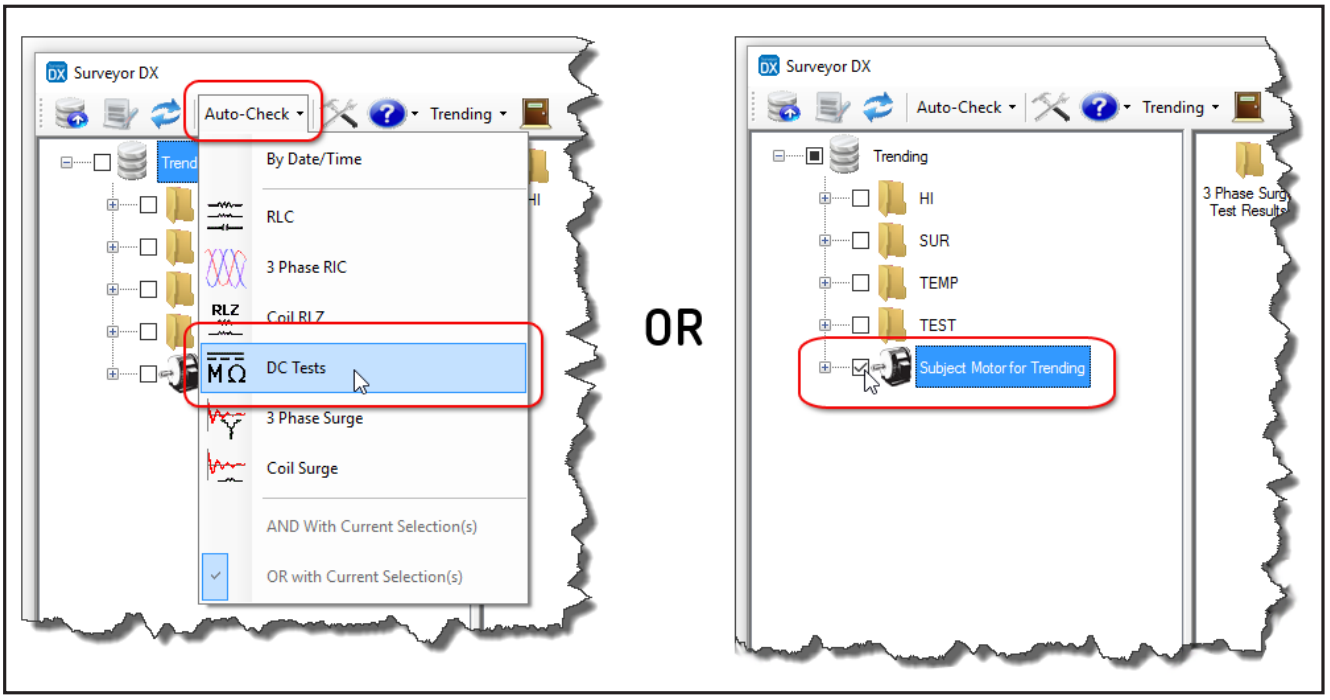


Fig 86: *Options for selecting a subject motor.*

6. Click on the Trending item in the Main toolbar then click on the test group related to your option selections.

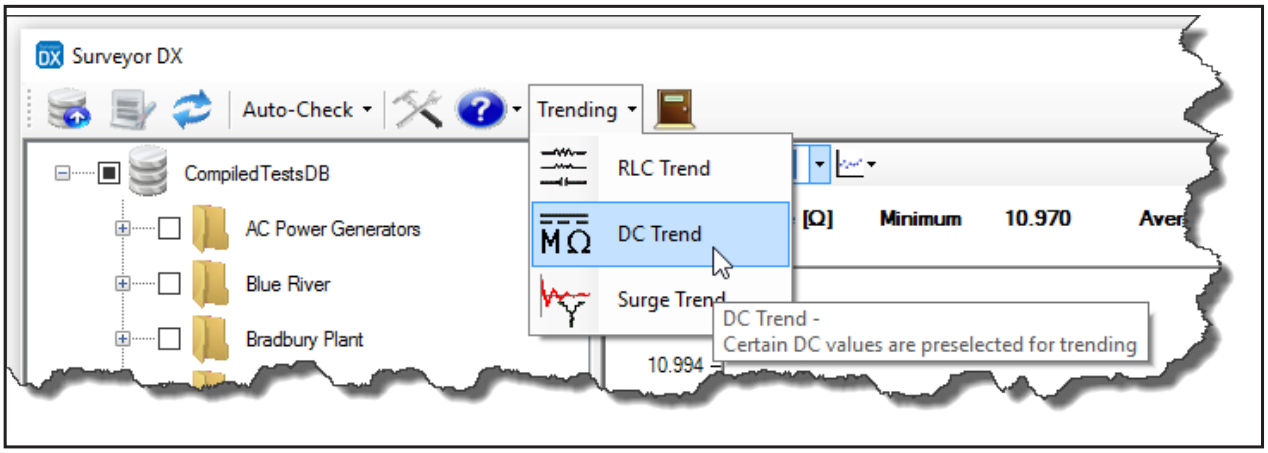


Fig 87: *Trending menu.*

The Surveyor DX Trending window opens as shown in the example below. The window, provides you with a variety of options and tools for viewing trending data for the selected motor. You can also generate reports directly from the window.

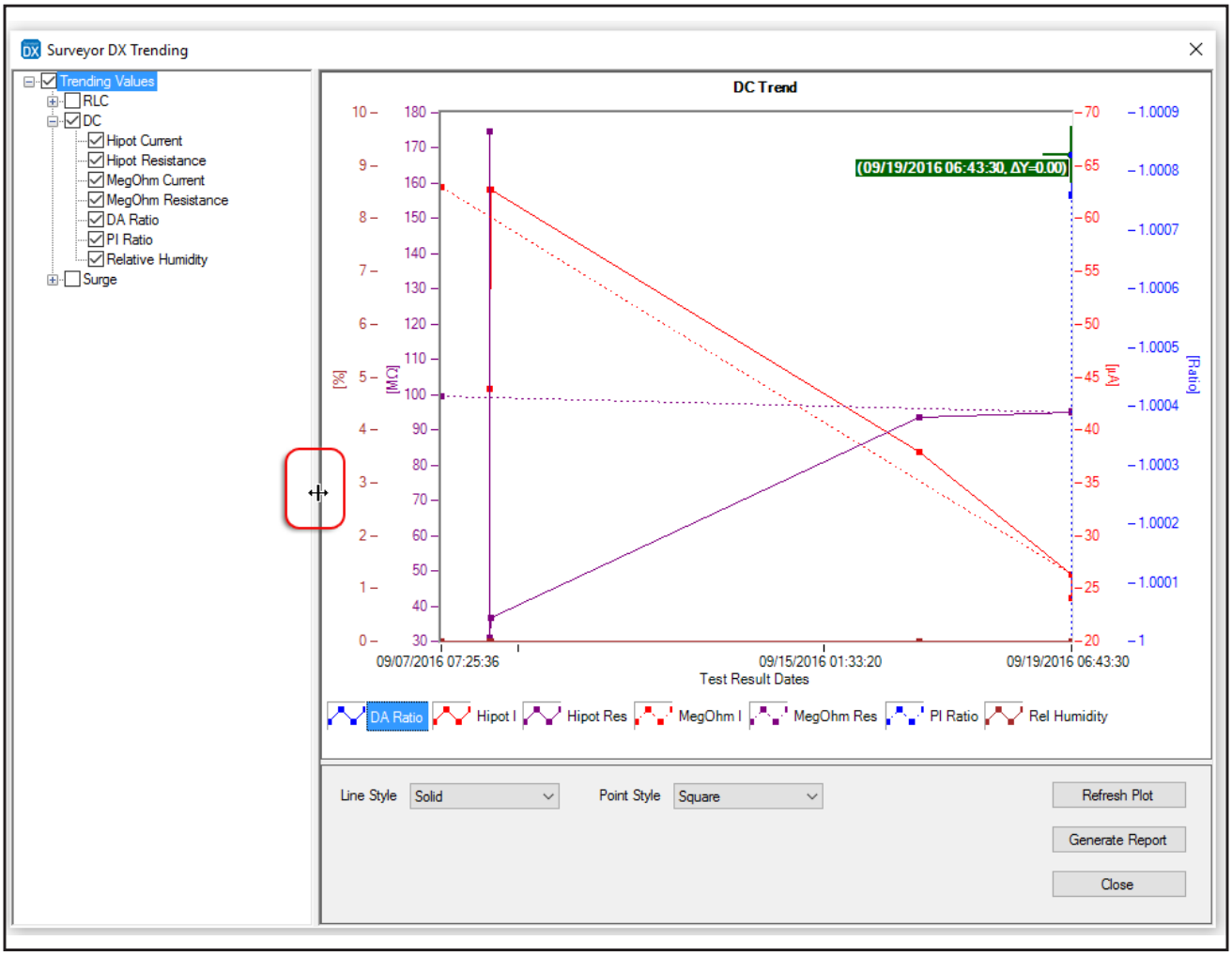


Fig 88: *Trending window.*

You can increase the size of the view pane by hovering the mouse cursor over the divider between the tree section and the view pane until you see a double-ended arrow as shown above. Click and hold down the left mouse button to drag the pane to its new size.

The Trending window employs many of the features described for the Surveyor DX Quick View pane including:

- Zoom in and zoom out
- Point of interest and difference cursors
- Grabber hand

These and other features are described earlier in the "Quick View pane features and functions" section.

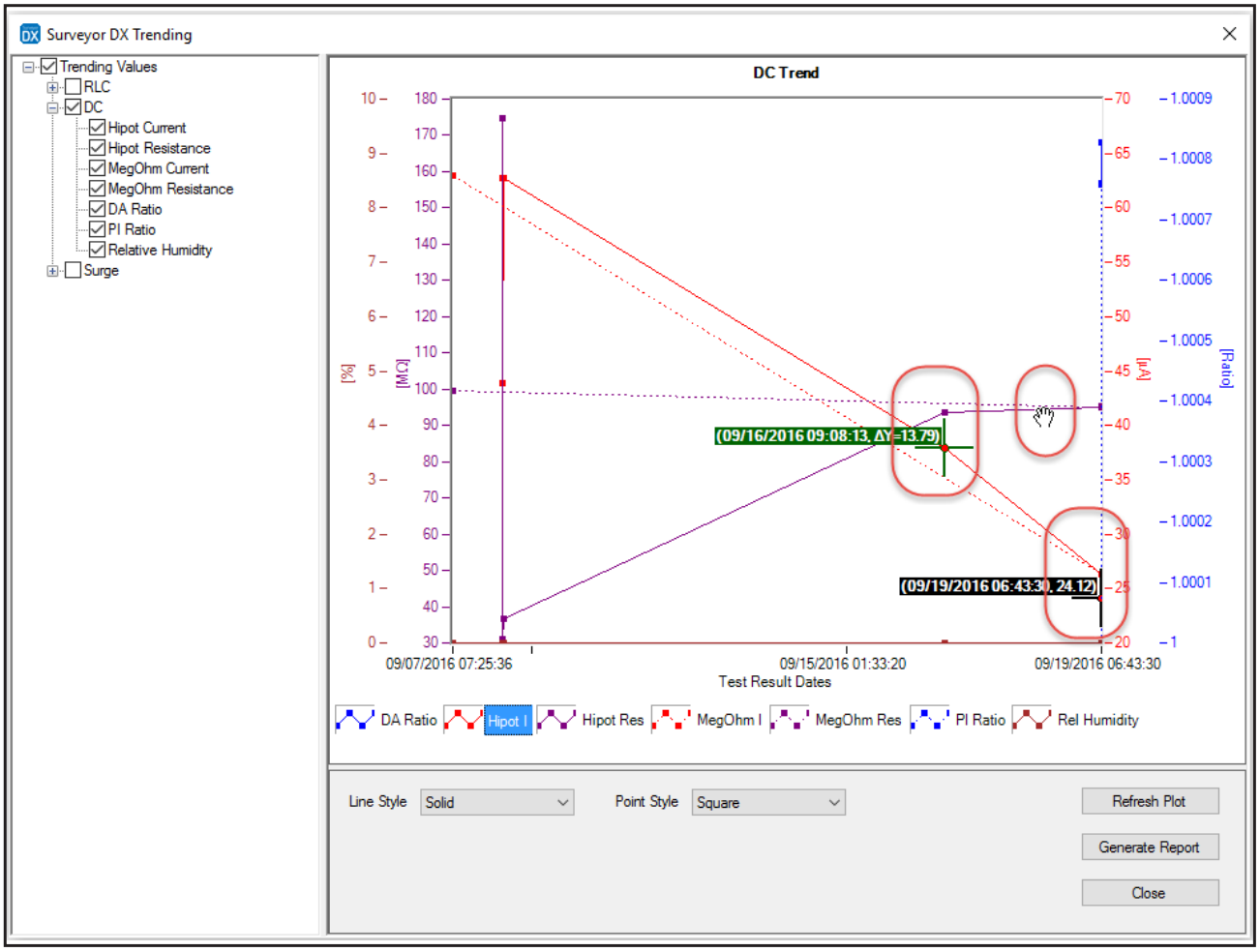


Fig 89: *Trending window illustrating common features with Quick View pane.*

Some features of the Trending window viewing pane should be mentioned at this point.

To enable using point of interest (black) and reference (green) cursors, select an item in the legend below the graph.

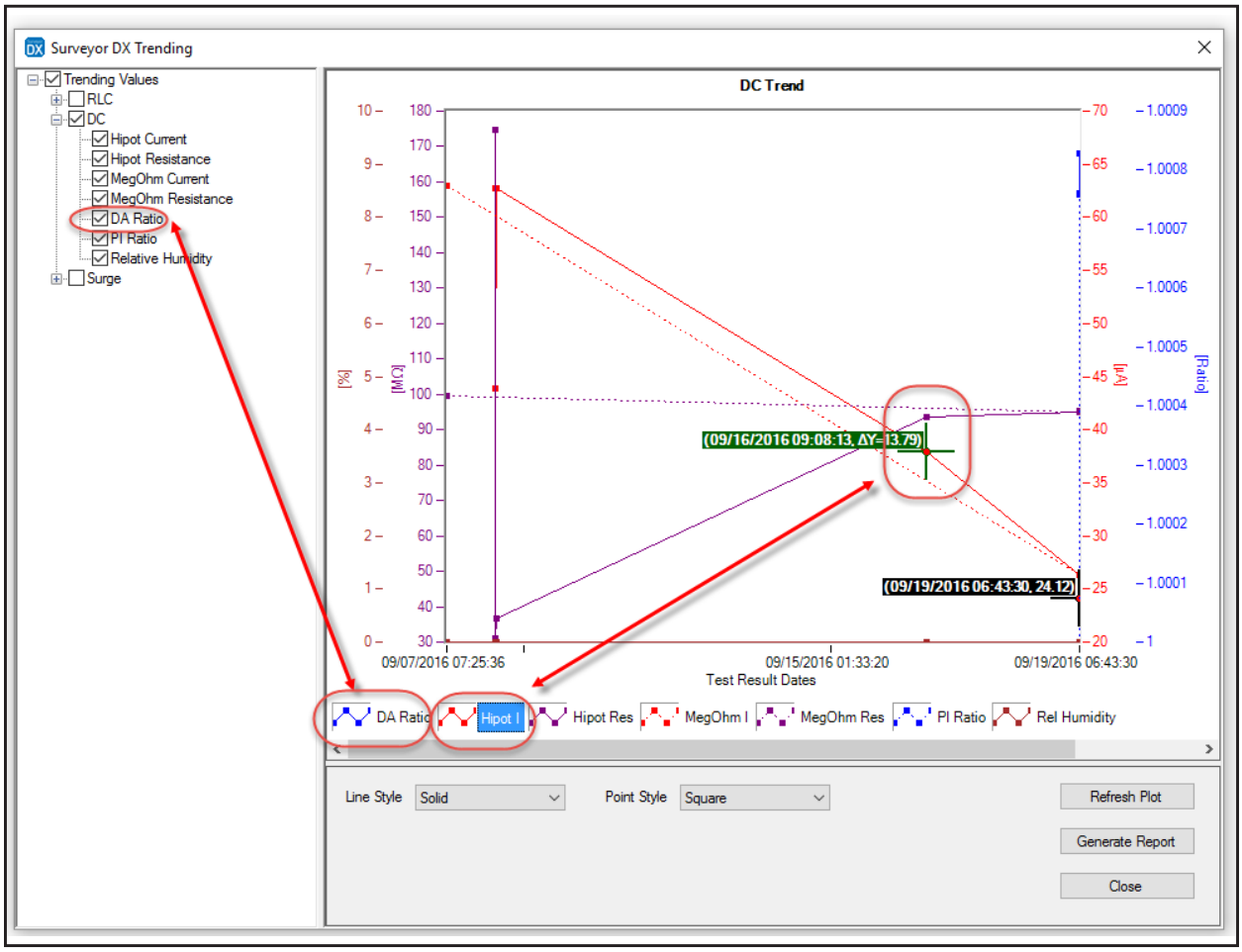


Fig 90: *Selecting a legend item enables cursors for the item's graph.*

To remove an item from display in the graph, uncheck the item in the tree pane. In the example above, clicking on DA Ratio in the tree would uncheck the box and remove the DA Ratio item from the graph's legend.

The Refresh Plot button in the Trending window is used to update the graph display when you remove (uncheck) items selected in the Location Tree within the Surveyor DX Main window.

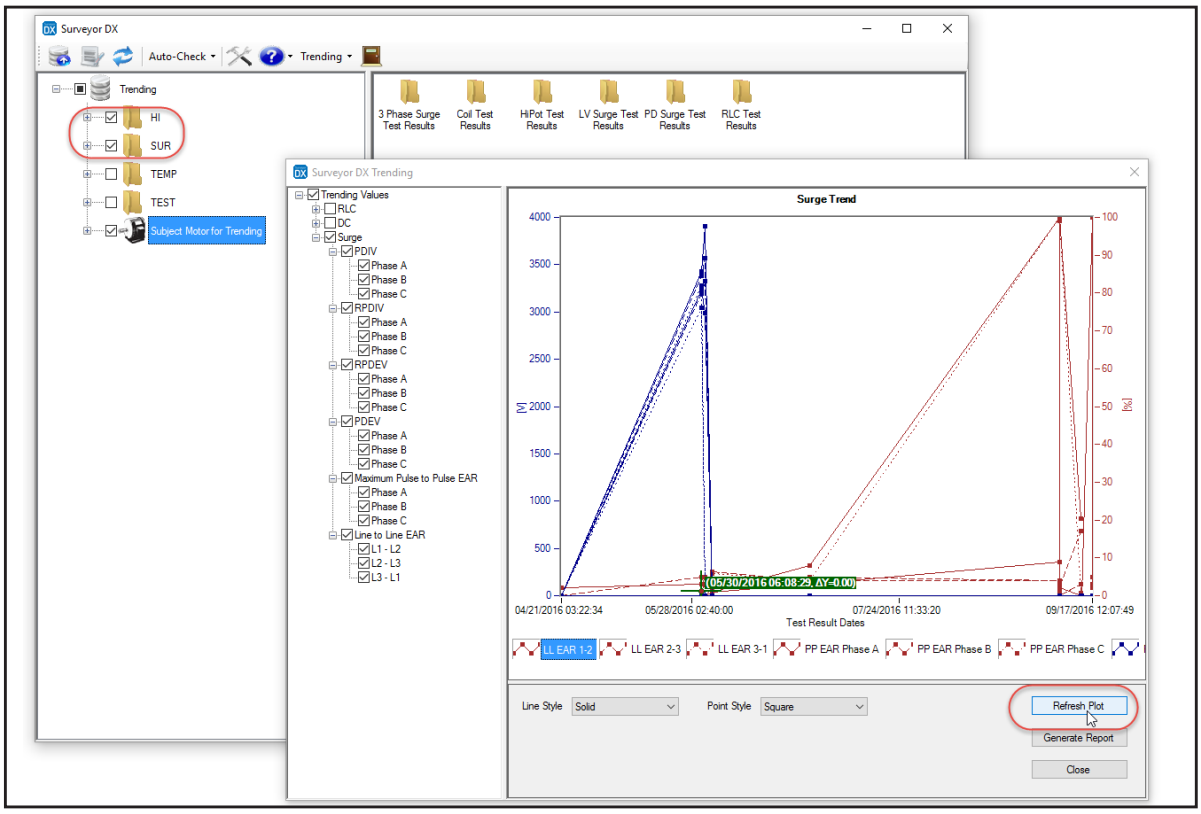


Fig 91: *Using the Refresh Plot button and Location Tree to update graph display.*

Selecting too many items in the Location Tree can clutter the Trending window graph with unrelated results. Unselecting unneeded or unwanted data results in a cleaner, more meaningful plot.

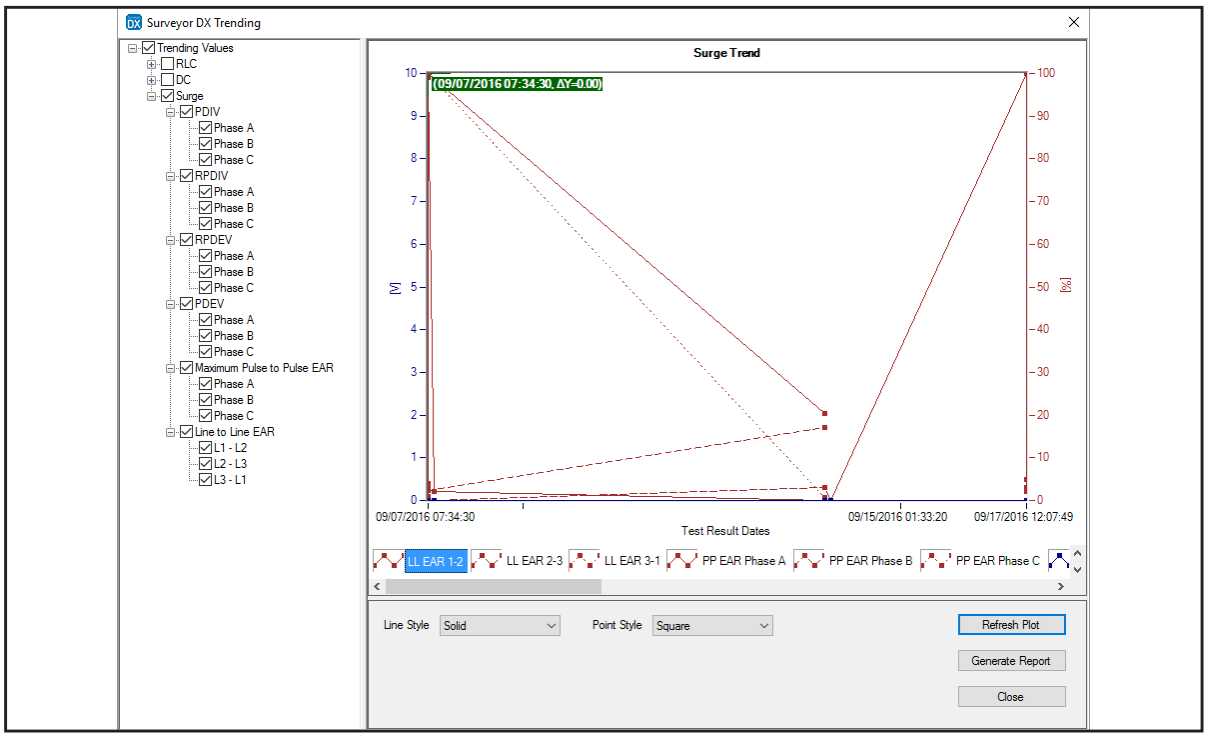


Fig 92: *Using the Refresh Plot button and Location Tree to update graph display.*

When the Trending window opens, the options you selected from the Settings dialog appear with checkmarks in their boxes and the data displayed in the view pane. These are the display defaults based on your Settings selections, but you can still select other information for viewing by checking the boxes next to another test type, or one or more test measurement value options found within another test type.

In the following example, all DC test options were selected as the default data to load.

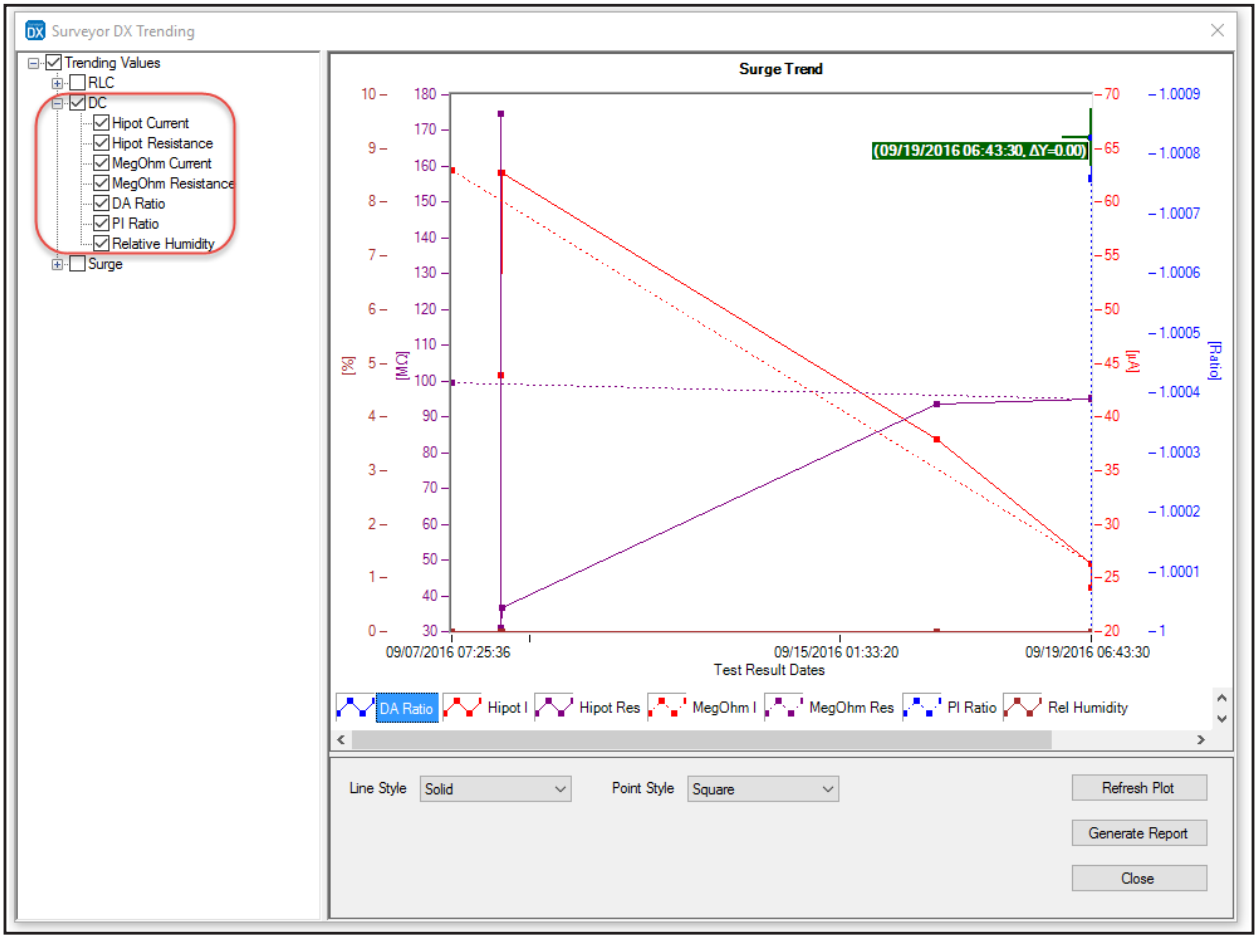


Fig 93: *Trending window illustrating DC test options loaded by default.*

In the next example, RLC test results are selected along with the default DC data. In the resulting display, we see the RLC values plotted with the DC values. New Y-axis legends are also added to the display so you can relate the new values to their graph plots.

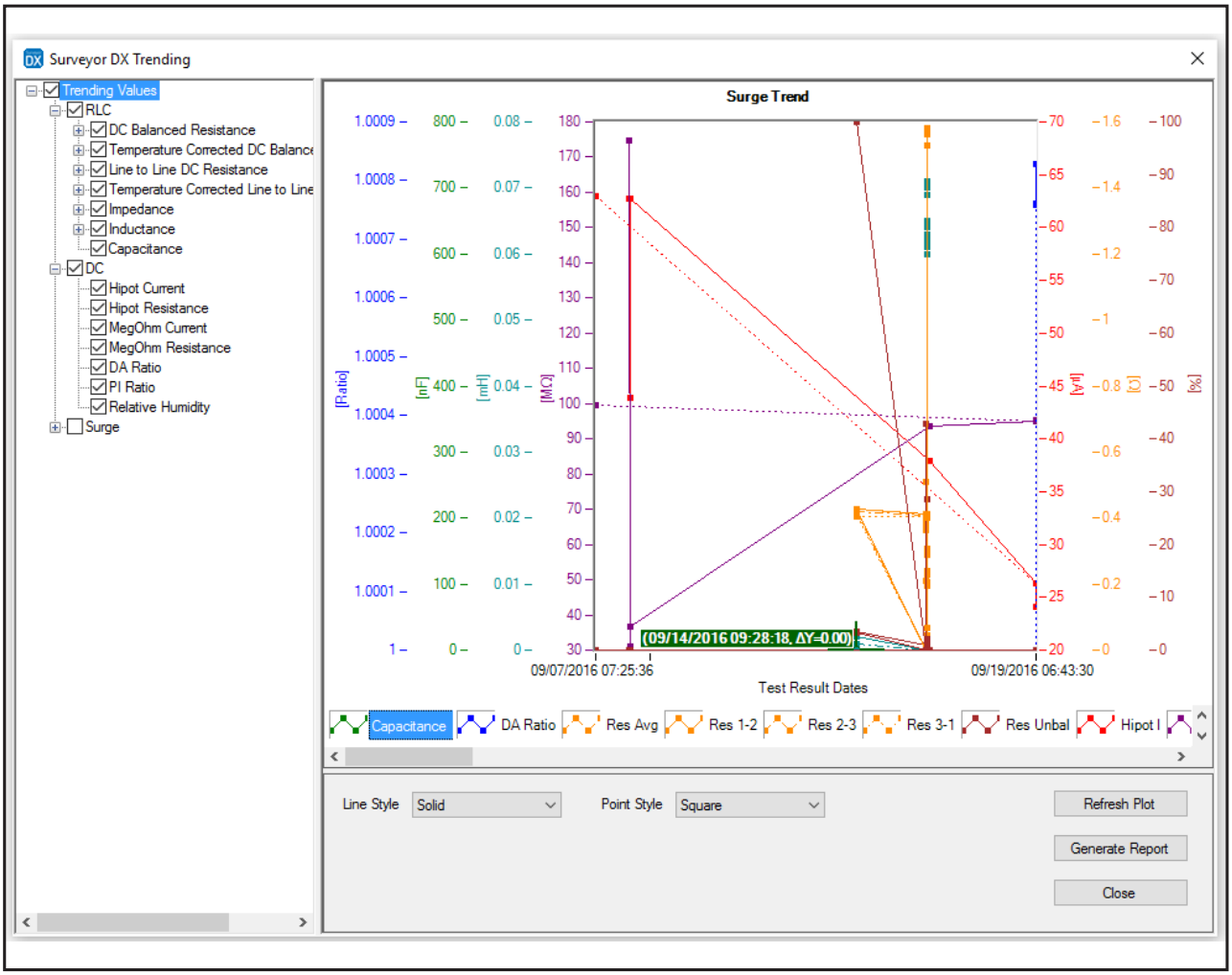


Fig 94: *RLC test results data overlaid onto DC data.*

The software allows you to select multiple test results and even multiple motors for display, though to present meaningful graphs you would typically select a single motor and specific test results.

Overlaying results data for different types of tests and/or multiple motors can provide meaningful information during analysis to help you identify areas that might need further attention. Follow-up investigation could, for example, reveal environmental issues affecting test results, or they might give you a starting point for determining root causes that could lead to decreased motor efficiency or potential failure.

For example, if you conducted only MegOhm and conventional HiPot tests on a motor, comparing these values over time might contribute to a meaningful assessment of linearity.

In another example, you might display the resistance results from three identical motors to confirm that all three have similar results. An outlier result could indicate a possible issue that should be investigated further. In such a case, only one data point for each motor would be needed.

While the feature has a number of potential applications, how it is used will ultimately depend on your needs.

Some test values have subsets that allow you to include or exclude specific test parameters for viewing and reporting. In the following example, line-to-line details are selected for inclusion for two test measurement values, while all other values have been cleared (excluded).

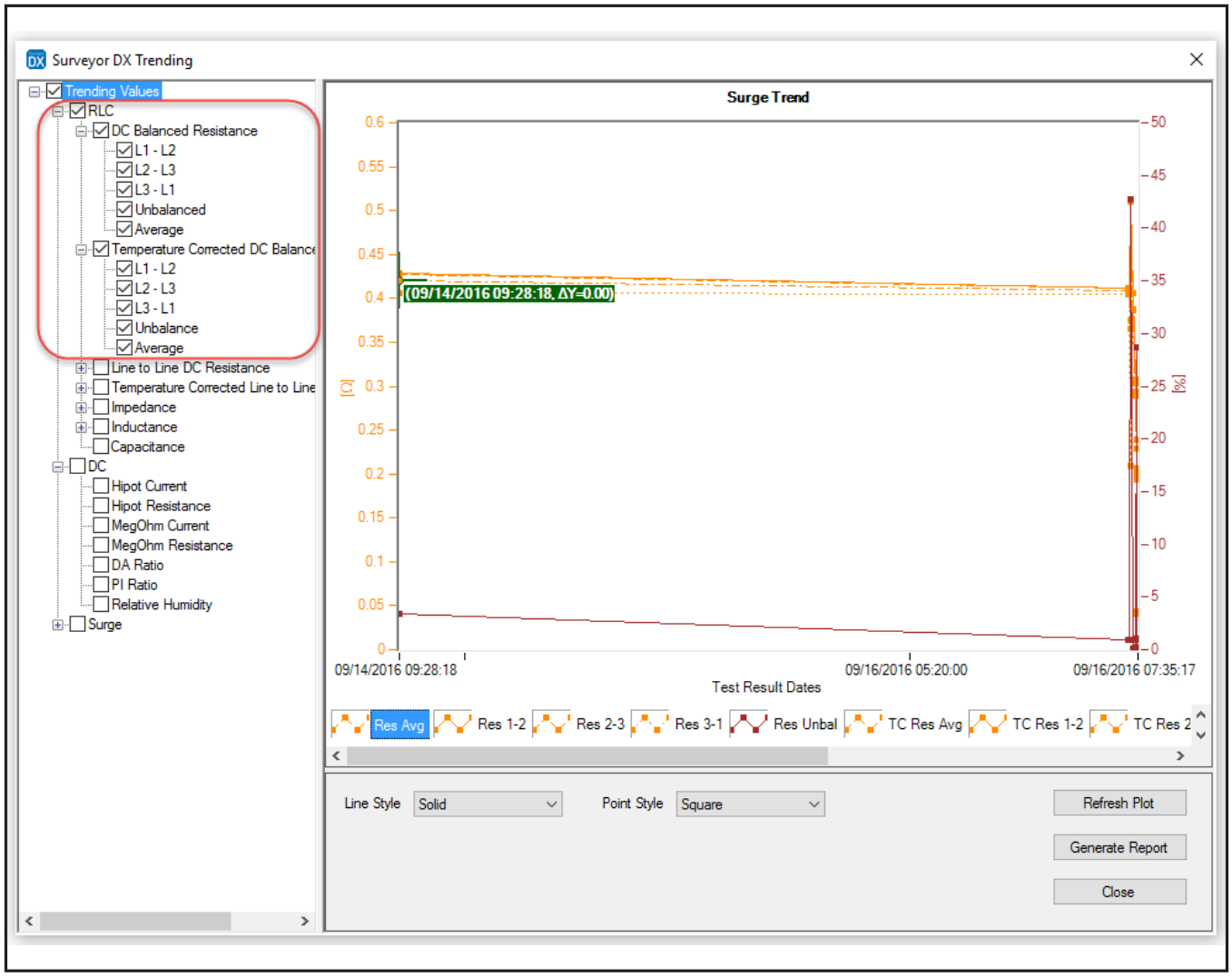


Fig 95: *Specific test values and details included and excluded.*

Trending Report Examples

When you click on the Generate Report button, the software will create a report that will include a copy of the graph currently displayed along with charts providing the details for the test values selected within the tree.

The report will also include the company name and logo if those options were selected in the Settings dialog Options tab. These are the only two options that are available to the Trending reports from the Options tab.

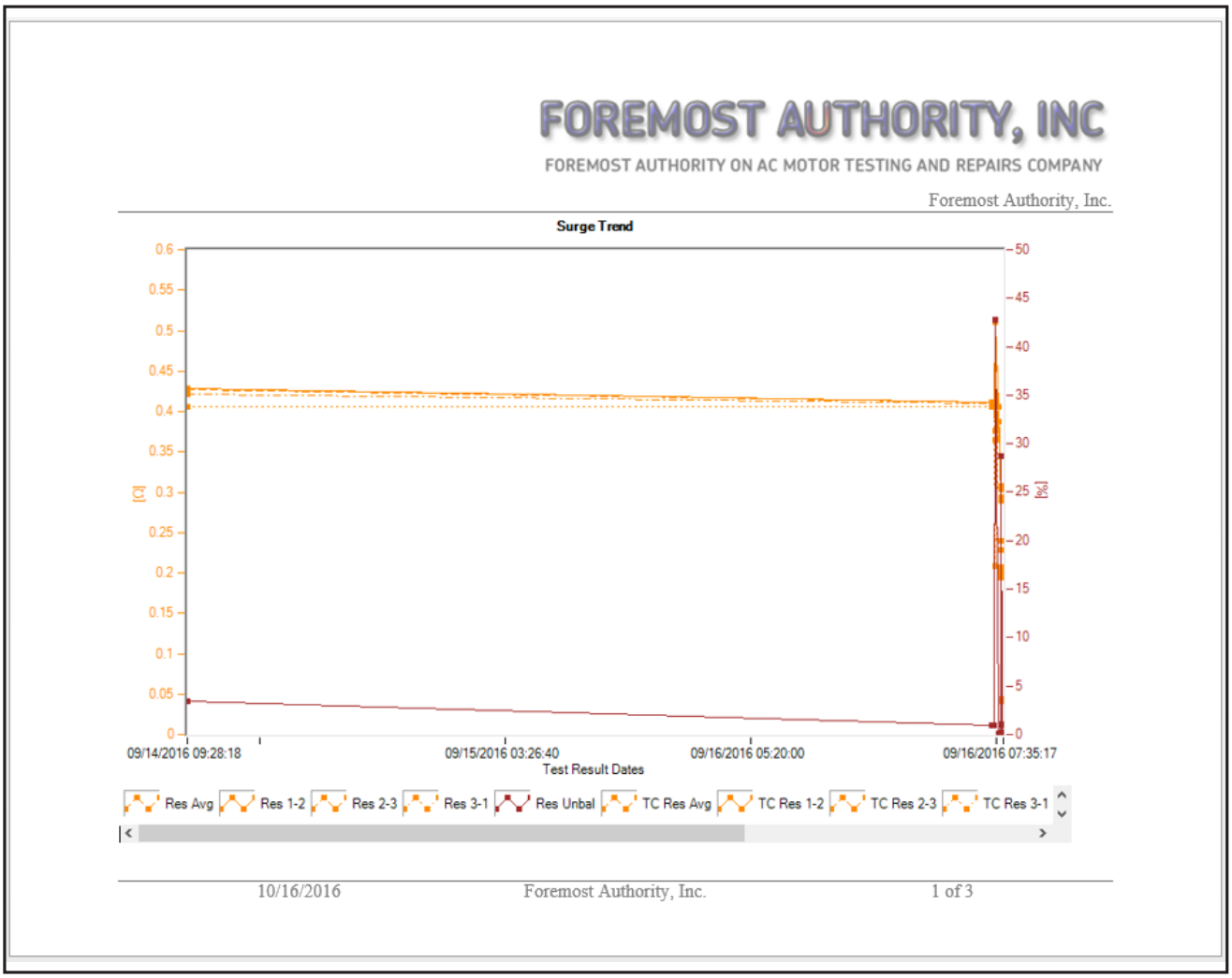
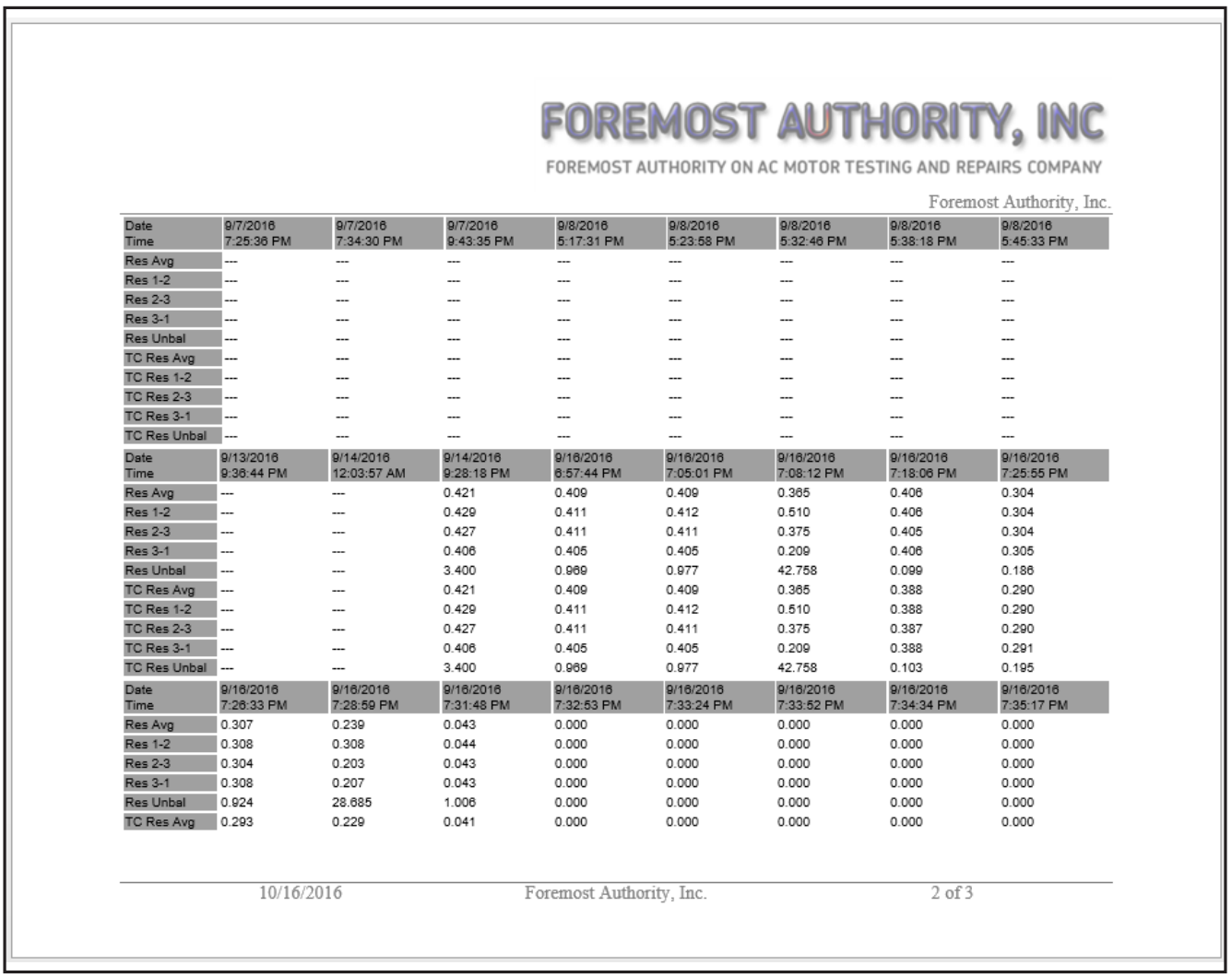


Fig 96: *Example Trending report graph page.*

The graphic below provides an example of a chart page included in the Trending reports.

Trending reports are generated in landscape orientation by default. As with all Surveyor DX reports, you can use all features available within MS Word to modify the reports to suit your needs and preferences.



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Foremost Authority, Inc.

Date Time	9/7/2016 7:25:36 PM	9/7/2016 7:34:30 PM	9/7/2016 9:43:35 PM	9/8/2016 5:17:31 PM	9/8/2016 5:23:58 PM	9/8/2016 5:32:46 PM	9/8/2016 5:38:18 PM	9/8/2016 5:45:33 PM
Res Avg	---	---	---	---	---	---	---	---
Res 1-2	---	---	---	---	---	---	---	---
Res 2-3	---	---	---	---	---	---	---	---
Res 3-1	---	---	---	---	---	---	---	---
Res Unbal	---	---	---	---	---	---	---	---
TC Res Avg	---	---	---	---	---	---	---	---
TC Res 1-2	---	---	---	---	---	---	---	---
TC Res 2-3	---	---	---	---	---	---	---	---
TC Res 3-1	---	---	---	---	---	---	---	---
TC Res Unbal	---	---	---	---	---	---	---	---
Date Time	9/13/2016 9:36:44 PM	9/14/2016 12:03:57 AM	9/14/2016 9:28:18 PM	9/16/2016 6:57:44 PM	9/16/2016 7:05:01 PM	9/16/2016 7:08:12 PM	9/16/2016 7:18:06 PM	9/16/2016 7:25:55 PM
Res Avg	---	---	0.421	0.409	0.409	0.365	0.406	0.304
Res 1-2	---	---	0.429	0.411	0.412	0.510	0.406	0.304
Res 2-3	---	---	0.427	0.411	0.411	0.375	0.405	0.304
Res 3-1	---	---	0.406	0.405	0.405	0.209	0.406	0.305
Res Unbal	---	---	3.400	0.969	0.977	42.758	0.099	0.186
TC Res Avg	---	---	0.421	0.409	0.409	0.365	0.388	0.290
TC Res 1-2	---	---	0.429	0.411	0.412	0.510	0.388	0.290
TC Res 2-3	---	---	0.427	0.411	0.411	0.375	0.387	0.290
TC Res 3-1	---	---	0.406	0.405	0.405	0.209	0.388	0.291
TC Res Unbal	---	---	3.400	0.969	0.977	42.758	0.103	0.195
Date Time	9/16/2016 7:26:33 PM	9/16/2016 7:28:59 PM	9/16/2016 7:31:48 PM	9/16/2016 7:32:53 PM	9/16/2016 7:33:24 PM	9/16/2016 7:33:52 PM	9/16/2016 7:34:34 PM	9/16/2016 7:35:17 PM
Res Avg	0.307	0.239	0.043	0.000	0.000	0.000	0.000	0.000
Res 1-2	0.308	0.308	0.044	0.000	0.000	0.000	0.000	0.000
Res 2-3	0.304	0.203	0.043	0.000	0.000	0.000	0.000	0.000
Res 3-1	0.308	0.207	0.043	0.000	0.000	0.000	0.000	0.000
Res Unbal	0.924	28.685	1.006	0.000	0.000	0.000	0.000	0.000
TC Res Avg	0.293	0.229	0.041	0.000	0.000	0.000	0.000	0.000

Fig 97: *Example Trending report chart page.*

Trending reports have the same output options available as the standard Surveyor DX reports.

Selecting Report Type

When you have made your data and report option selections, you are ready to generate your report.

1. Click on the Generate Report icon in the Main toolbar.
2. The Save As dialog box opens as shown below.

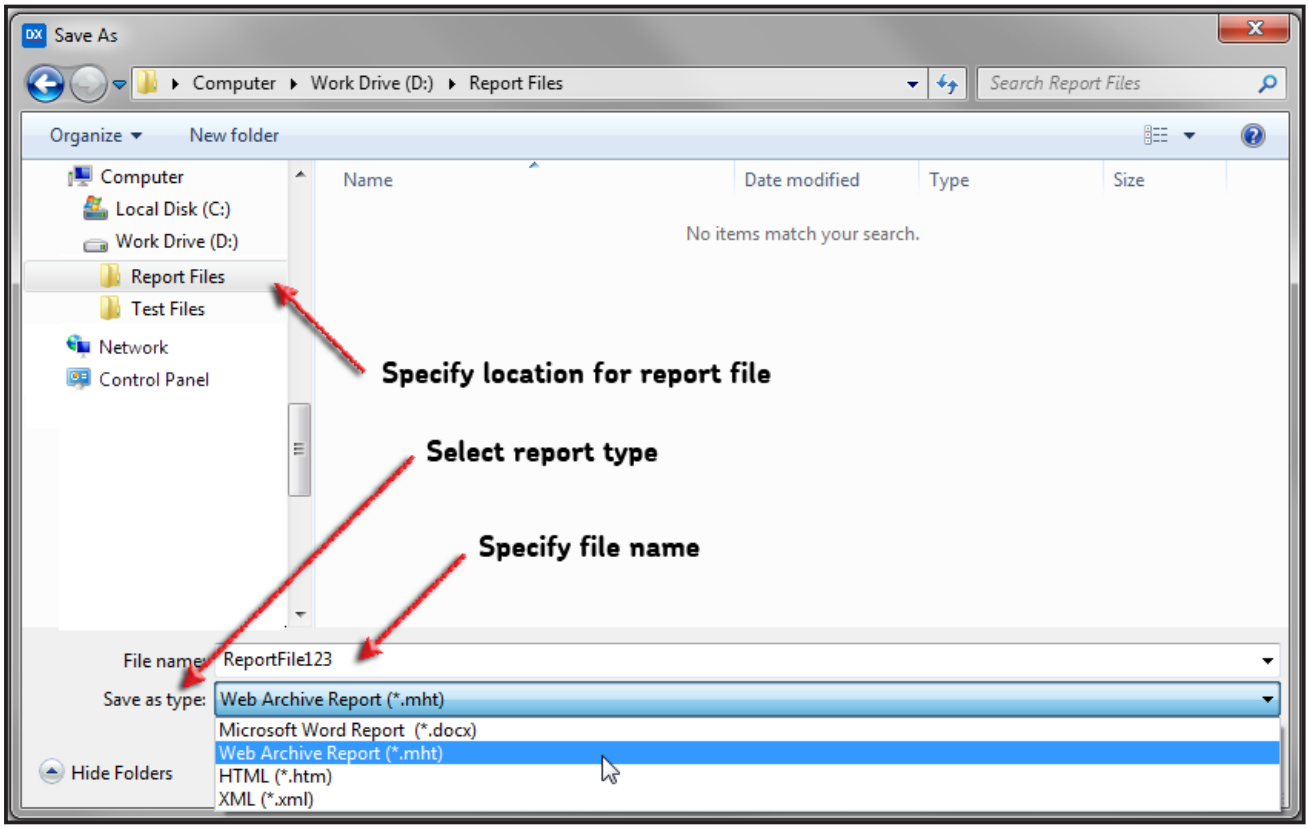


Fig 98: *Selecting location and report type.*

3. Specify the location where you want to save the report file.
4. Select the report type that you want to generate using the Save as type dropdown list. The available types include:
   - Microsoft Word Report (*.docx)—Formatted to work directly in MS Word® so you can make additions and edit information that will added to annotate the report. (Requires MS Word® 2003 or later. The extension will be .doc if you have Word 2003 installed.)
   - Web Archive Report (*.mht)—Formatted to be displayed in a web browser. Saved in one file.
   - HTML (*.htm)— Formatted to be displayed in a web browser. Saved in multiple files and can be difficult to manage, but provides more options for advanced users.
   - XML (*.xml)—Formatted in XML to use externally. This type/format is typically used to export data from Surveyor DX to use externally in other programs or applications.
5. Specify a name for the file in the File name field.
6. When you are satisfied with your selections, click on Save to save the file and generate the report.

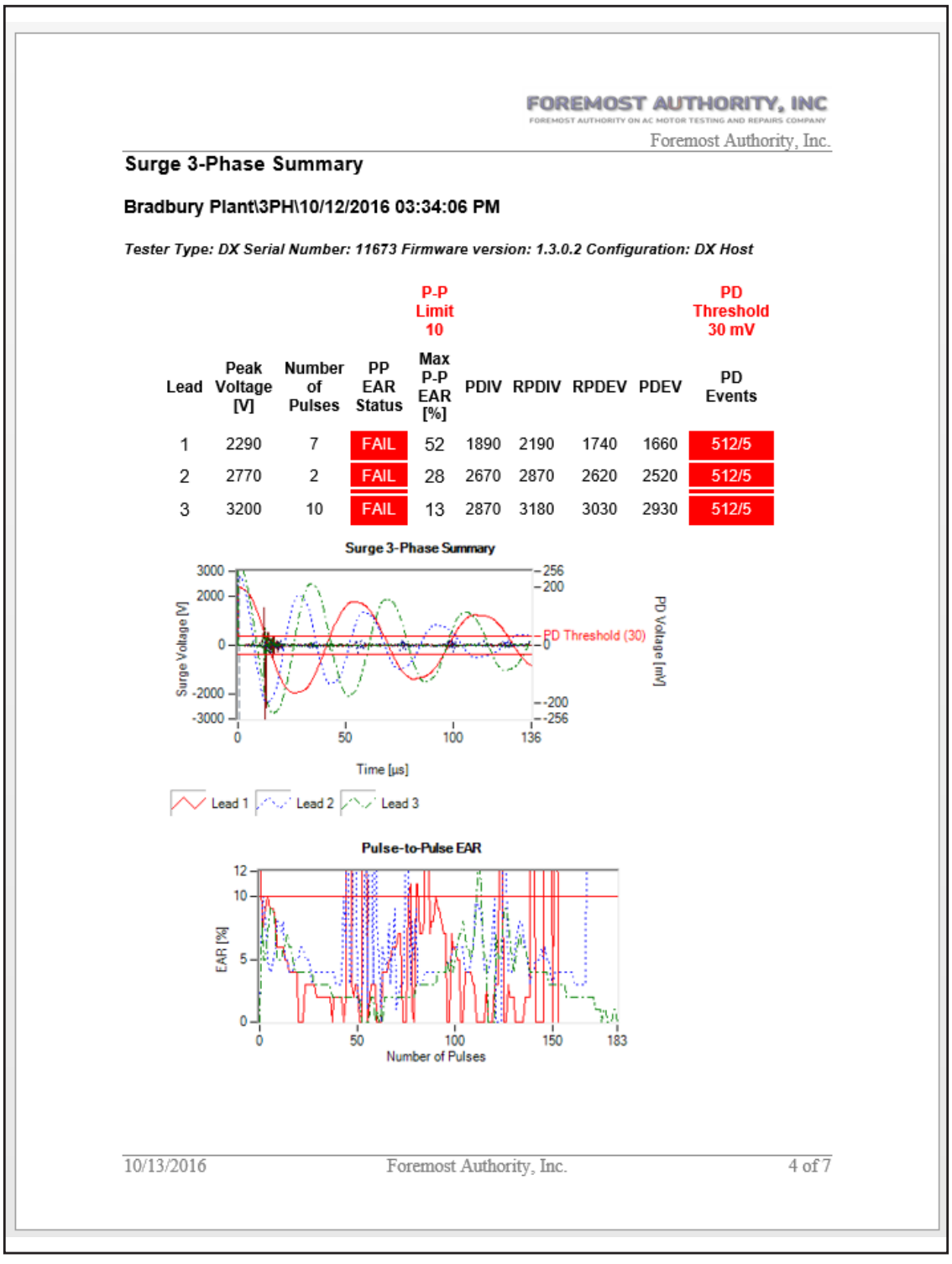
Using MS Word Features and Functions

The report examples used in this manual were generated for MS Word format (.docx).

All of them include the company name and logo, which are presented in the report header and footer.

For MS Word formatted reports, page breaks are added between each page of selected options and content.

A report generated using this option automatically opens MS Word. You can use all available features and functions in MS Word to modify report content, to add information as needed, and to reformat report elements to meet your preferences.



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Surge 3-Phase Summary

Bradbury Plant\3PH\10/12/2016 03:34:06 PM

Tester Type: DX Serial Number: 11673 Firmware version: 1.3.0.2 Configuration: DX Host

Lead	Peak Voltage [V]	Number of Pulses	PP EAR Status (P-P Limit 10)	Max P-P EAR [%]	PDIV	RPDIV	RPDEV	PDEV	PD Events (PD Threshold 30 mV)
1	2290	7	FAIL	52	1890	2190	1740	1660	512/5
2	2770	2	FAIL	28	2670	2870	2620	2520	512/5
3	3200	10	FAIL	13	2870	3180	3030	2930	512/5

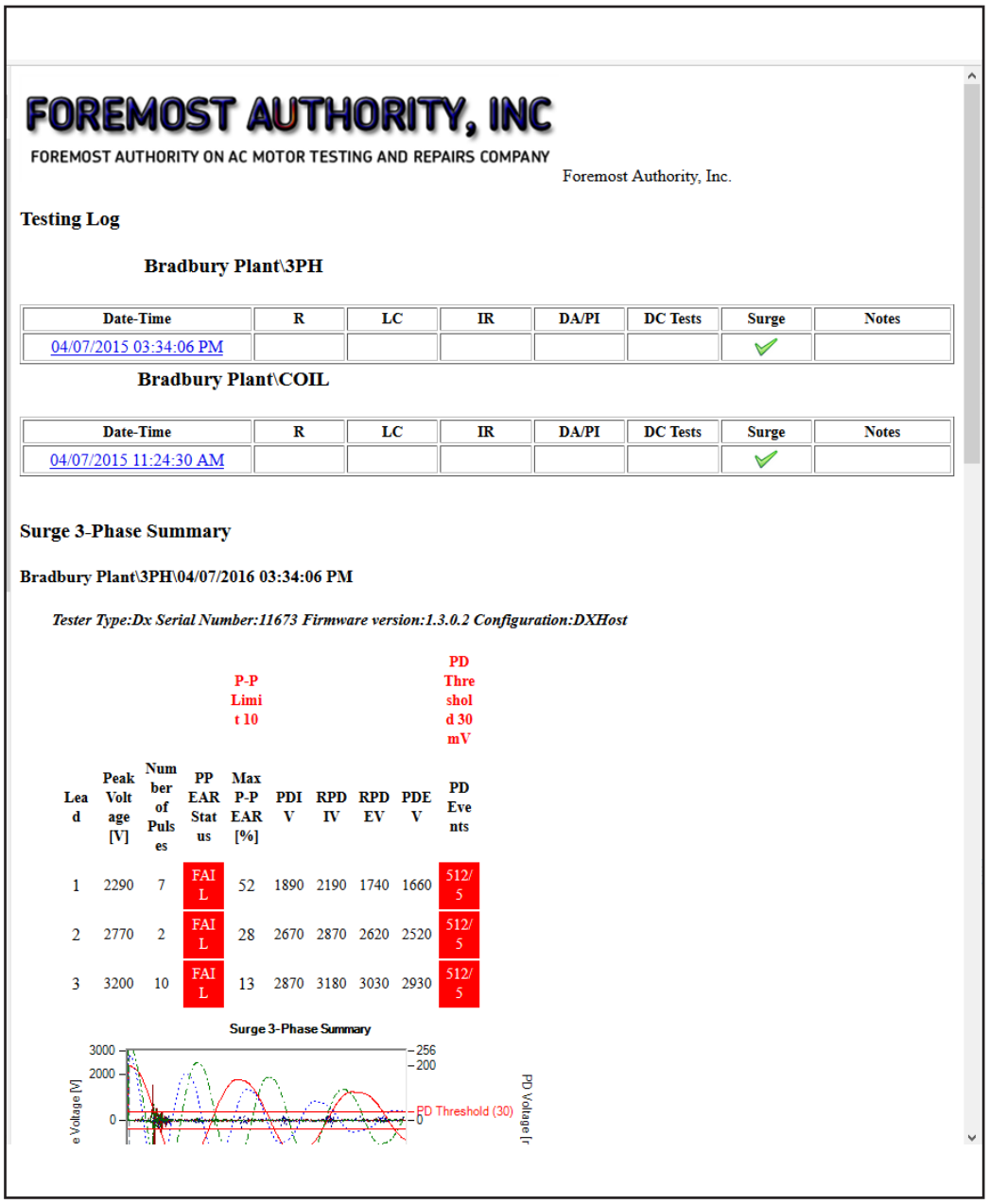
Fig 99: *MS Word report example.*

Web Archive Report Example

The following graphics show different parts of a report generated using the Web Archive Report type (.mht).

This is the same report generated for the preceding MS Word example; it used the same options, but a different report type.

When this type is selected, the application automatically opens the default browser to display the report.



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Foremost Authority, Inc.

Testing Log

Bradbury Plant\3PH

Date-Time	R	LC	IR	DA/PI	DC Tests	Surge	Notes
04/07/2015 03:34:06 PM						✓	

Bradbury Plant\COIL

Date-Time	R	LC	IR	DA/PI	DC Tests	Surge	Notes
04/07/2015 11:24:30 AM						✓	

Surge 3-Phase Summary

Bradbury Plant\3PH\04/07/2016 03:34:06 PM

Tester Type:Dx Serial Number:11673 Firmware version:1.3.0.2 Configuration:DXHost

Lead	Peak Voltage [V]	Number of Pulses	PP EAR Status	Max P-P EAR [%]	PDIV	RPDIV	RPDEV	PDEV	PD Events
				P-P Limit 10					PD Threshold 30 mV
1	2290	7	FAIL	52	1890	2190	1740	1660	512/5
2	2770	2	FAIL	28	2670	2870	2620	2520	512/5
3	3200	10	FAIL	13	2870	3180	3030	2930	512/5

Surge 3-Phase Summary

Fig 100: *MHT format report example—rendered in Firefox with plug-in.*

NOTE: The .mht file format requires a plug-in to be able to display in Firefox or Google Chrome®. If no plug-ins are present, Windows® will open the file using Internet Explorer®.

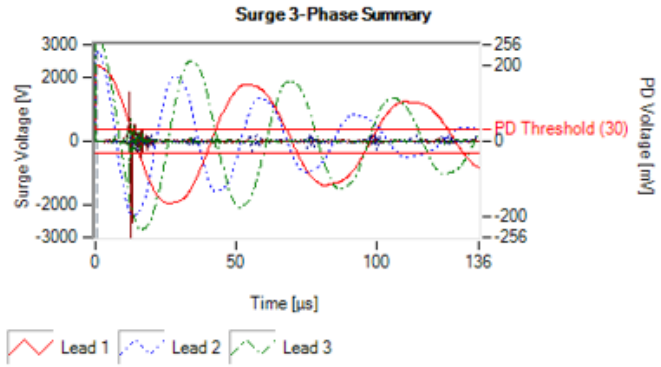
The contents of this report format can be edited or modified using MS Word or standard HTML editors.

Surge 3-Phase Summary

Bradbury Plant\3PH\04/07/2016 03:34:06 PM

Tester Type:Dx Serial Number:11673 Firmware version:1.3.0.2 Configuration:DXHost

Lead	Peak Voltage [V]	Number of Pulses	PP EAR Status	P-P Limit 10 Max P-P EAR [%]	PDIV	RPDIV	RPDEV	PDEV	PD Threshold 30 mV PD Events
1	2290	7	FAIL	52	1890	2190	1740	1660	512/5
2	2770	2	FAIL	28	2670	2870	2620	2520	512/5
3	3200	10	FAIL	13	2870	3180	3030	2930	512/5



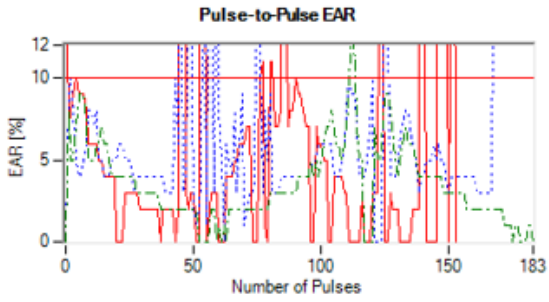


Fig 101: *MHT report type example viewed in MS Word.*

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Local Sales office

Megger USA - Fort Collins
4812 McMurry Ave., Suite 100
Fort Collins
Colorado, 80525
USA
T. 1-970-282-1200 or 1-800-752-8272
F. 1-282-1010
E. baker.sales@megger.com

Manufacturing sites

Megger Limited
Archcliffe Road
Dover
Kent
CT17 9EN
ENGLAND
T. +44 (0)1 304 502101
F. +44 (0)1 304 207342

Megger GmbH
Obere Zeil 2 61440
Oberursel,
GERMANY
T. 06171-92987-0
F. 06171-92987-19

Megger USA - Valley Forge
Valley Forge Corporate Center
2621 Van Buren Avenue
Norristown
Pennsylvania, 19403
USA
T. 1-610 676 8500
F. 1-610-676-8610

Megger USA - Dallas
4271 Bronze Way
Dallas TX 75237-1019
USA
T 800 723 2861 (USA only)
T. +1 214 333 3201
F. +1 214 331 7399
E: USsales@megger.com

Megger AB
Rinkebyvägen 19, Box 724,
SE-182 17
DANDERYD
T. 08 510 195 00
E. seinfo@megger.com

Megger USA - Fort Collins
4812 McMurry Ave., Suite 100
Fort Collins
Colorado, 80525
USA
T. 1-970-282-1200 or 1-800-752-8272
F. 1-282-1010
E. baker.tech-support@megger.com

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