# CHAPTER 3: MCEGOLD

## INTRODUCTION

MCEGold® is the software that controls the motor tester. This chapter covers the operation of MCEGold Version 3.0 and the MCEMAX® tester. MCEMAX powered by MCEGold has several versions, therefore, your tester may not have some of the functions described in this chapter. If you are using MCEGold Lite it is described in detail on page 3-78.

**NOTE:** In this manual the full version of MCEGold is referred to as MCEGold. MCEGold Lite, which is a simplified interface designed principally to collect data, is referred to as Lite. See page 3-78 for detailed information about Lite.

The software uses standard Window conventions. For example, there is a menu bar, a toolbar with icons, the red button with an X in the upper right corner closes the window or exits the program, etc. It is possible to have multiple windows open at the same time.

## STARTING MCEGOLD

The program executable is located at:
C:\PdMA Corporation\MCEGold\UI\MCEGold.exe.

1.  To start MCEGold, Select Start from the task bar, then All Programs, PdMA Corporation, MCEGold or click on the desktop icon .

2.  At the Login shown in Figure 3-1, select the Site and the Testing Mode if applicable, Verify the display mode as MCEGold and click **OK**. Selecting a Site will be necessary if the database has been detached during a previous session or you want to change databases.



**Figure 3-1: Login**

# MCEGOLD HOME WINDOW

The Home window shown in Figure 3-2 opens displaying the Site Navigator, Site Condition, WatchList, and Message Center windows. The Home window uses standard Window conventions and multiple windows may be open at the same time.
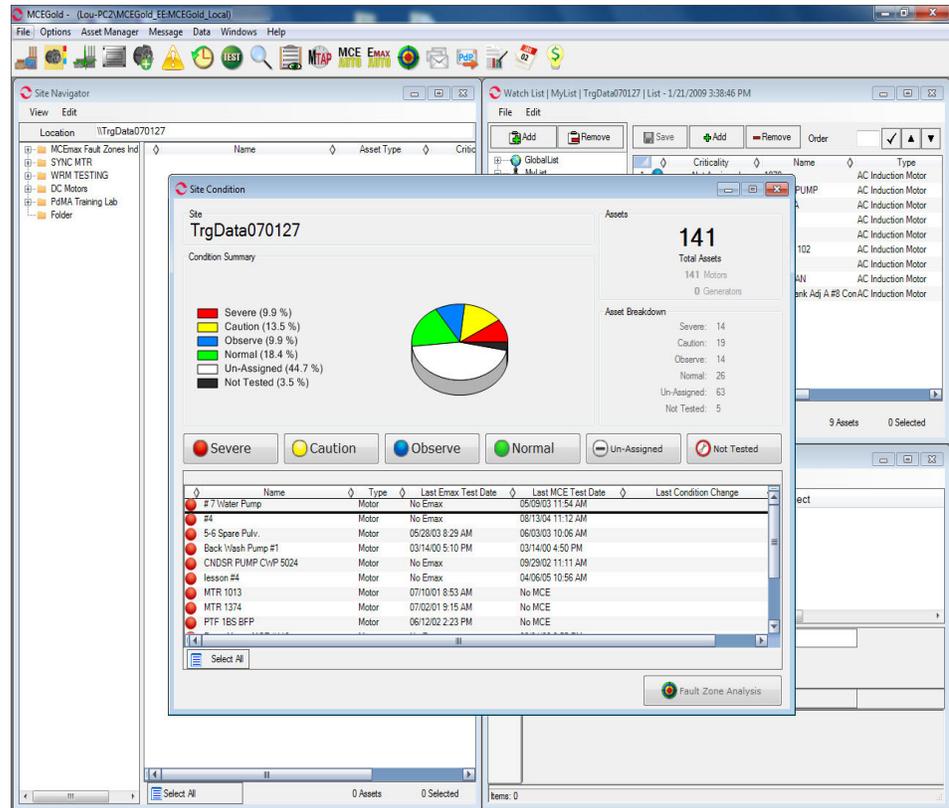


**Figure 3-2: Home Screen**

## Title Bar

The title bar is the horizontal blue line across the top of the window. It displays the PdMA logo, the name of the program, and the testing mode.

## Menu

The menu area is directly below the Title Bar. If you are using MCEGold Lite it is discussed on page 3-78.

**File** - Close, closes MCEGold.

**Options** - Time Zone, changes the default System Time Zone and the default Date/Time to user defined values.
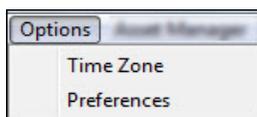
**To change the Time Zone:**

1.　Select Options, Time Zone.

2.  Select the Time Zone tab in the Regional Settings window shown in Figure 3 - 3.
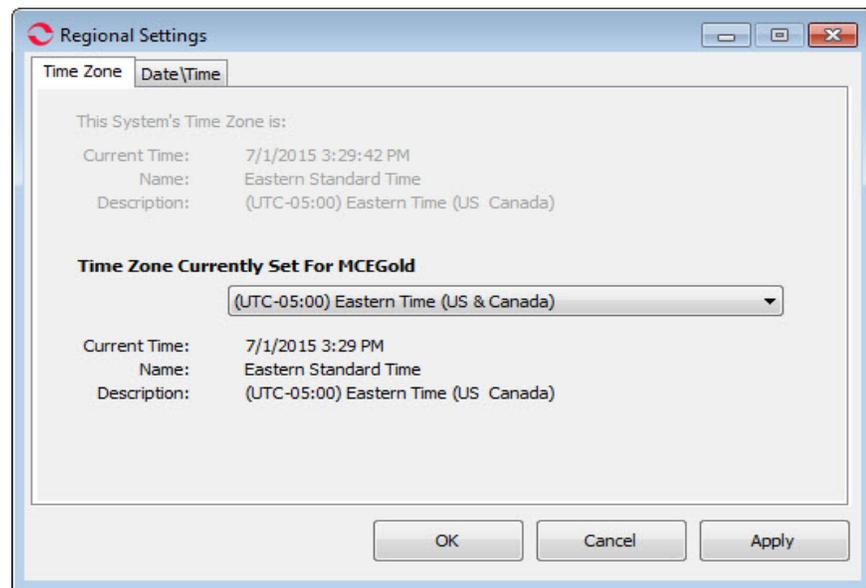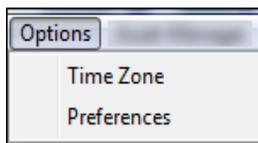


**Figure 3-3: Regional Settings**

3.  Choose the desired time zone from the drop-down list. To access the drop-down list, click on the down arrow to the right of the box.

4.  Click **Apply** to apply the change and leave the Regional Settings window open or click **OK** to apply the change and close the Regional Settings window.

**To change the Date and Time format:**



1.  Select Options, Time Zone.

2.  Select the Date/Time tab in the Regional Settings window shown in Figure 3-4.
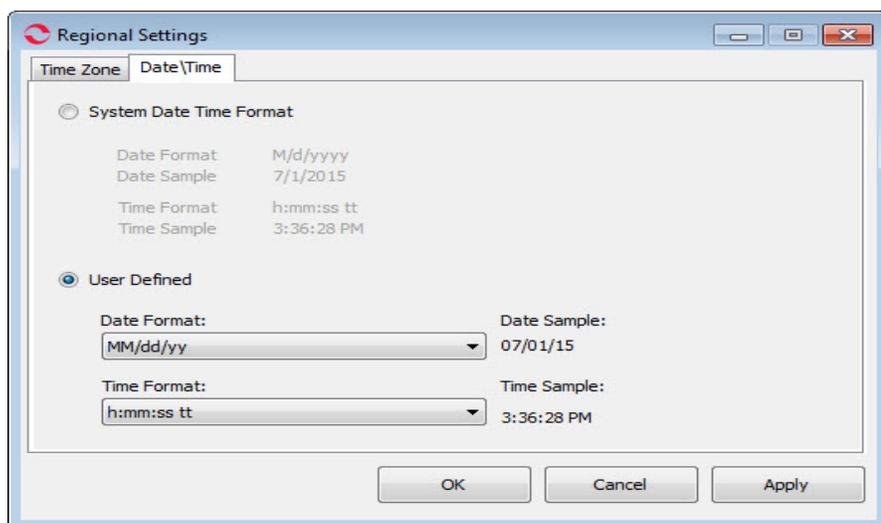


**Figure 3-4: Regional Settings Window**

3.   Select the User Defined option button, which is the default.

4.   Choose the desired date format from the Date Format drop-down list. To access the drop-down list, click on the down arrow on the right of the box.

5.   Choose the desired time format from the Time Format drop-down list. To access the drop-down list, click on the down arrow on the right of the box.

6.   Click **Apply** to apply the change and leave the Regional Settings window open or click **OK** to apply the change and close the Regional Settings window.
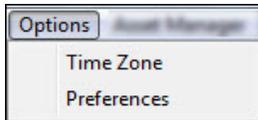
**Options** - **Preferences** opens the Asset Management Preferences window shown in Figure 3-5. This window allows you to set a search limit (Search Results tab), change the default save location and control detaching the stand alone database when closing MCEGold (General tab). If you have a Workstation license and the computer is set up as a workstation, the default site, search by options, and on-screen keyboard functions can be selected using the Workstation Settings tab.

*Search Results tab* allows you to set a limit on how many results are returned when using the search function. Placing a check in the Limit Search Results check box activates the drop down list. Select from 10, 25, 50, 100, or 200. After making your selection click **Save** or if you do not wish to make a change click **Close** to close the window.
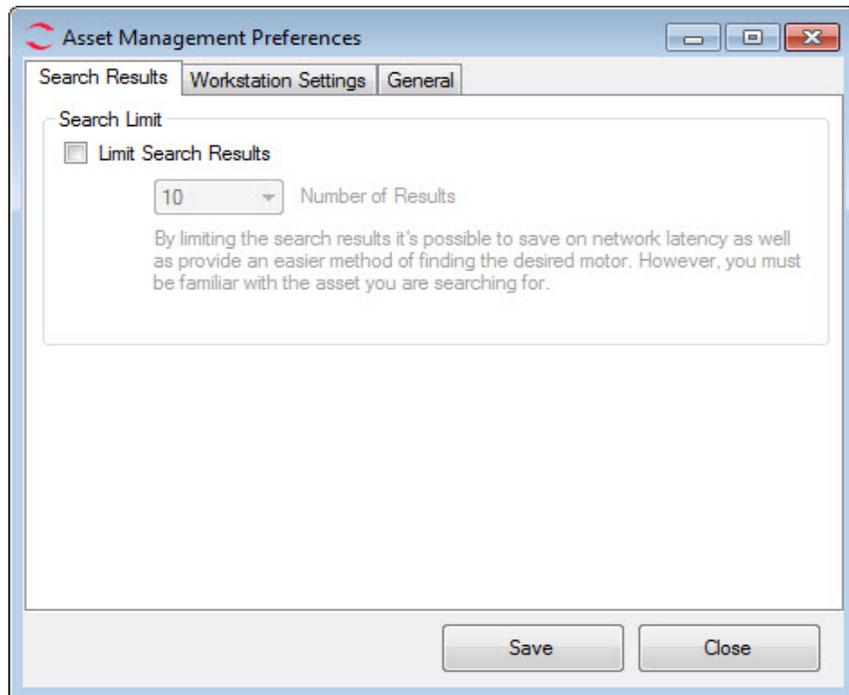


**Figure 3-5: Asset Management Preferences Window**

*Workstation Settings tab* (not available for all users) shown in Figure 3 - 6, controls how the workstation conducts a search. Select the default site from the drop-down menu. Use the radio buttons to define which search options, Asset Name, User Asset ID, or Both you wish to use. If you want an exact match to the search criteria then check the appropriate check box, if not leave it unchecked. If you want to have an on screen keyboard available

check the appropriate check box, if not leave it unchecked. After making your selection/s click **Save** or if you do not wish to make a change click **Close** to close the window.
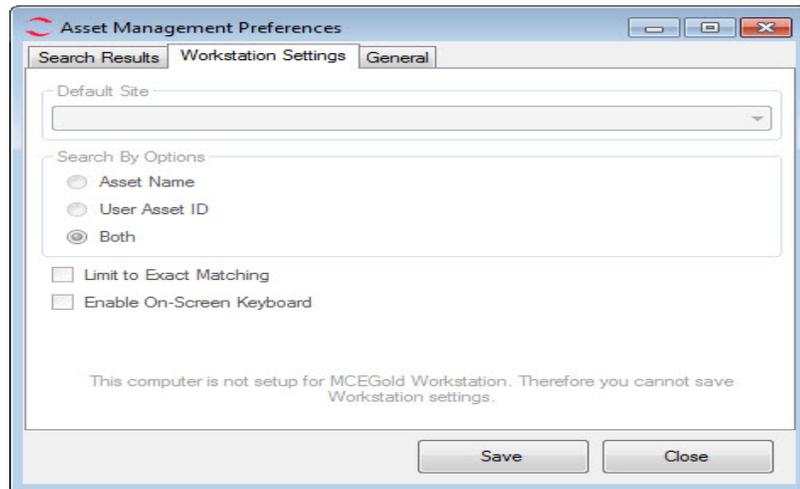


**Figure 3-6: Asset Management Preferences - Workstation Settings**

The *General tab* shown in Figure 3 - 7 controls the disposition of the database when MCEGold is closing. The Default Save Location is the location the database is currently saved in. You may change the location by using the browse button to select a new location. NOTE: You must remember the location, so that you will know where to look for the database in the future. This is especially true if you are going to detach the database.

To select an option for handling the database when MCEGold closes, click the radio button in front of the option you wish to select. The default option is "Prompt to detach the database." This causes a detach database message to appear when you are closing MCEGold. "Always detach the local database when closing MCEGold" will automatically detach the database without a notification. "Never detach the local database when closing MCEGold" does not detach the database or give you the option on closing to detach it. After making your selection/s click **Save** or if you do not wish to make a change click **Close** to close the window.
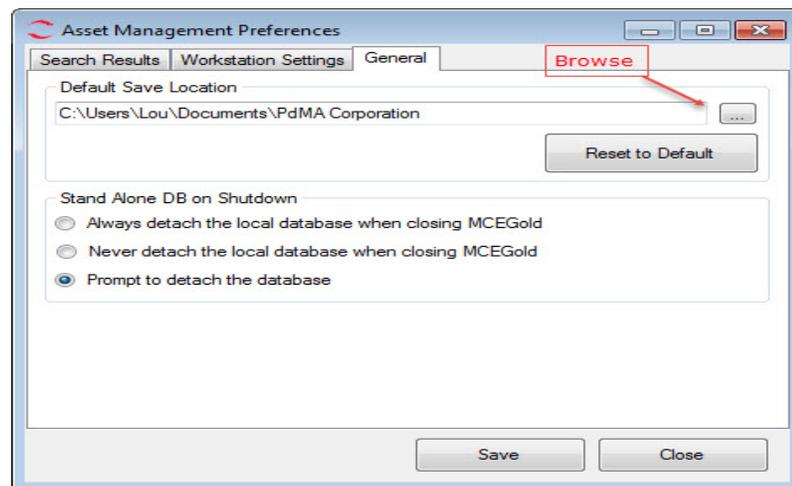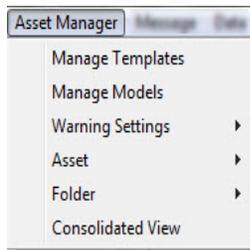


**Figure 3-7: Asset Management Preferences - General**

**Asset Manger** - Use Asset Manager to setup the assets (motors) and folders that are displayed in Site Navigator. Under the Asset Manager the functions are Manage Templates, Manage Models (active only with certain licenses), Warning Settings, Asset, Folder, and Consolidated View. Some of the functions may not appear until a folder or asset is selected.

**Manage Templates** allows you to develop templates for kinds types of assets. By assigning a unique template to an asset, the test results, alarm, and caution values are more meaningful. To open the Manage User Templates window shown in Figure 3-8 select Asset Manger, Manage Templates from the menu.
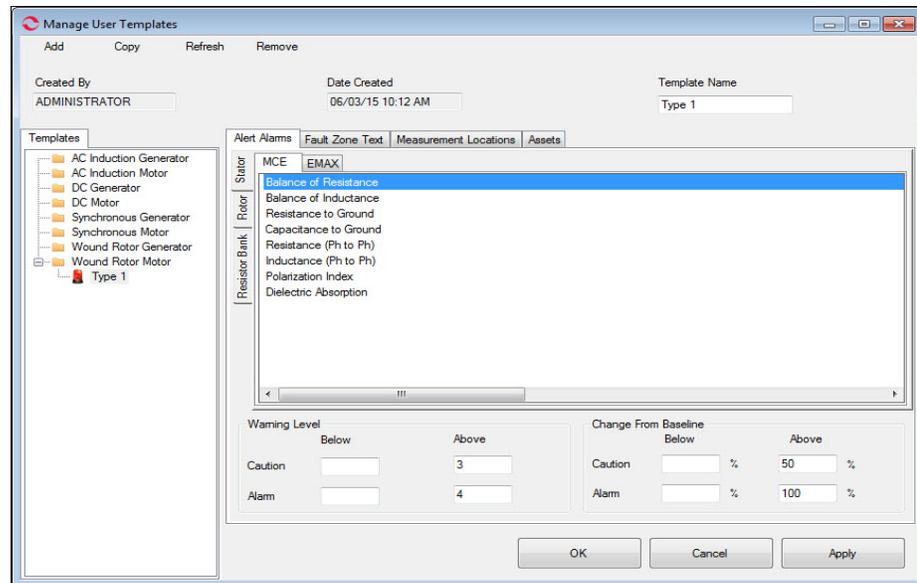


**Figure 3-8: Manage User Templates**

The Manage User Templates window consists of menu items (Add, Copy, Refresh, and Remove) across the top, a list of templates by asset type on the left side, and the right side is devoted to Alert Alarms, Fault Zone Text, Measurement Locations, and Assets tabs. The options below these tabs changes depending on the tab chosen.

**To *Add* a new template:**

1. Click **Add** in the Manage User Templates window. Add is located at the top of the window under the window name.

2. Select the asset type from the drop-down list in the Add Template window shown in Figure 3-9. To access the drop-down list, click on the down arrow on the right of the box.
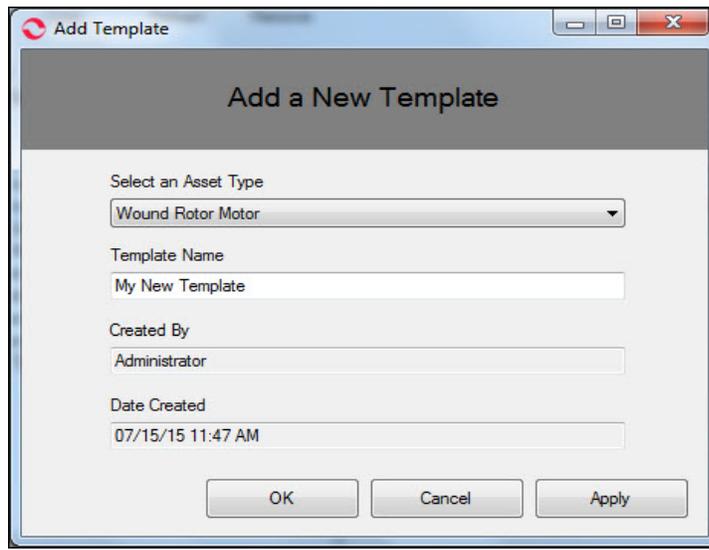
**Figure 3-9: Add Template**

3.  Type the template name in the Template Name textbox. Created By and Date Created are automatically filled in by the software.

4.  Click **Apply** to add the template and leave the window open or click **OK** to add the template and close the window. The template is added in the templates folder for the asset type chosen. To exit without creating a new template, click **Cancel**.

**To *Copy* an existing template:**

1.  Highlight the template you wish to copy in the Templates section.

1.  Click **Copy**. Copy is located at the top of the window under the window name.

2.  Enter the new template name in the Template Name text box of the Copy Template window shown in Figure 3-10. Created By and Date Created are automatically added by the software.
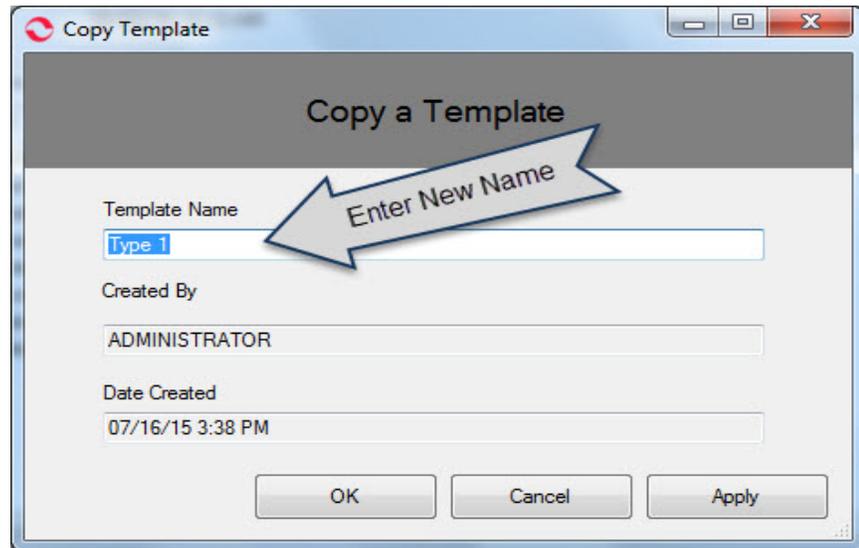
**Figure 3-10: Copy Template Window**

3. Click **Apply** to add the new template and leave the Copy Template window open or Click **OK** to add the new template and close the window. The new template is added to the same folder as the original template. To exit without creating a new template, click **Cancel**.

**To *Refresh* the window*:***

1. Click **Refresh** to update the window after changes have been made. Refresh is located at the top of the window under the window name.

**To *Remove* a template:**

1. Highlight the desired template name in the Templates list.

1. Click **Remove**. Remove is located at the top of the window under the window name.

2. You will be asked to verify that you want to remove the template, click **Yes**.

3. Click **OK**, when informed the template is removed.

**To *change the template name:***

1. Highlight the desired template name in the Templates list.

2.  Type the new name in the Template Name text box located in the upper right side of the Manage User Templates window shown in Figure 3-11.
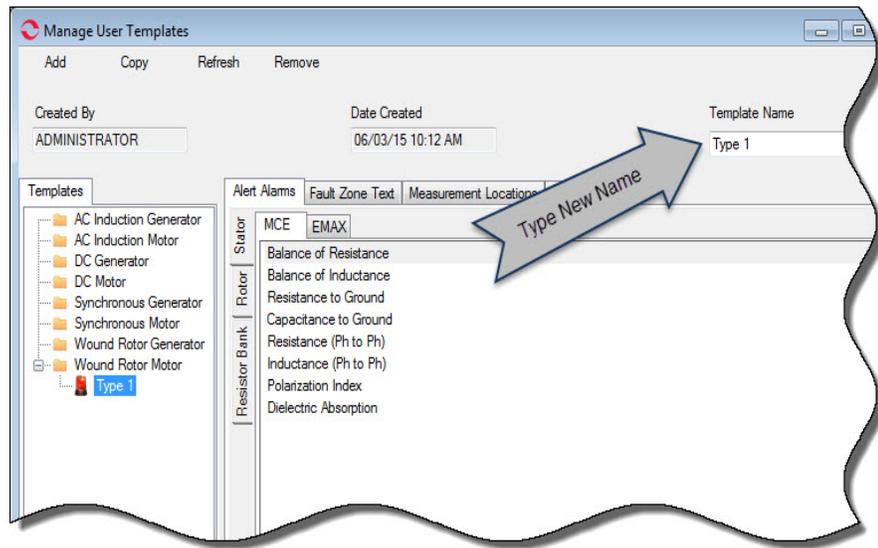


**Figure 3-11: Manage User Templates**

3.  Click **Apply** in the lower right corner of the window to save the change and keep the Manage User Templates window open or click **OK** to save the change and close the Manage User Templates window. To exit without changing the name, click **Cancel**.

**To *change the alert alarms* on a template:**

1.  Select the template name in the Templates section of the Manage User Templates window.

2.  Select the Alert Alarms tab and either the MCE or EMAX tab. The tab you select drives the alert alarm values displayed in the window shown in Figure 3-12.
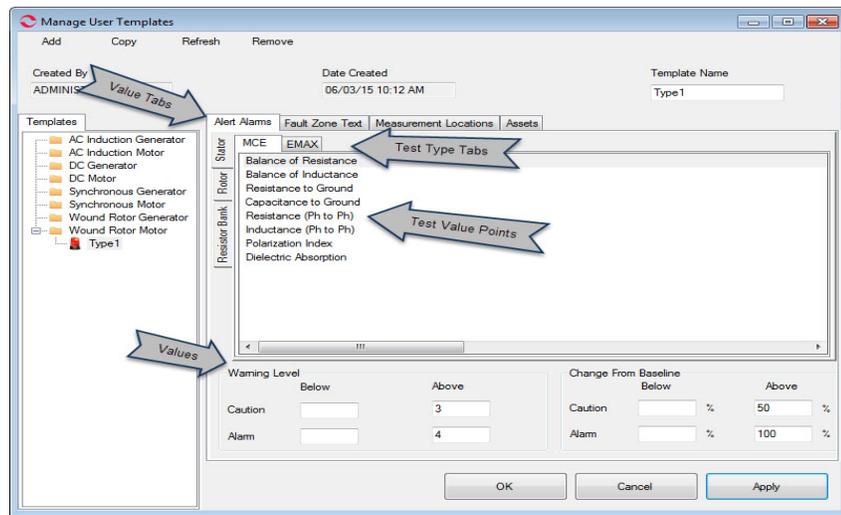
**Figure 3-12: Manage User Templates Window**

3.  Highlight the desired test from the list in the Alert Alarms section.

4.  Change the Warning Level and Change from Baseline values in the alert alarm sections located at the bottom of the window.

5.  Click **Apply** to save the changed the values and leave the window open or click **OK** to save the changed the values and close the window. To exit without changing the values, click **Cancel**.

The *Fault Zone Text* tab causes the display to list the six fault zones and a description of the selected fault zone. Highlight the desired fault zone to read a description of that fault zone and the recommended actions for assets in caution or severe condition.

The *Measurement Locations* tab displays the measurements appropriate for the selected asset template highlighted in the Templates section. To read a description, select a measurement from the list. The description appears in the Measurement Location Description section.

The *Assets* tab displays a list of the assets that have been assigned the template that is highlighted in the Templates section.

**Manage Models -** Manage Models is active for a few limited versions. Instructions are provided individually to users with the active Manage Models function.



**Warning Settings**

*Assign to: Asset* - Highlight an asset on the Site Navigator. Select Asset Manager from the menu, then Warning Setting, Assign to, Asset. The asset values are returned to the caution and alarm default settings. The asset values shown are assigned to the selected asset.
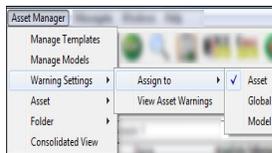
*Assign to: Global* - Highlight an asset on the Site Navigator. Select Asset Manager from the menu, then Warning Setting, Assign to, Global. The Assign Template Warning Settings window shown in Figure 3-13 opens. The templates listed in the Select a Template drop down list reflect the asset type of the highlighted asset. Select a template and click **Assign**. The template and its values are assigned to that asset and the window remains open. Click **OK** the template and its values are assigned to that asset the window closes. To close the window without assigning a template click **Cancel**.
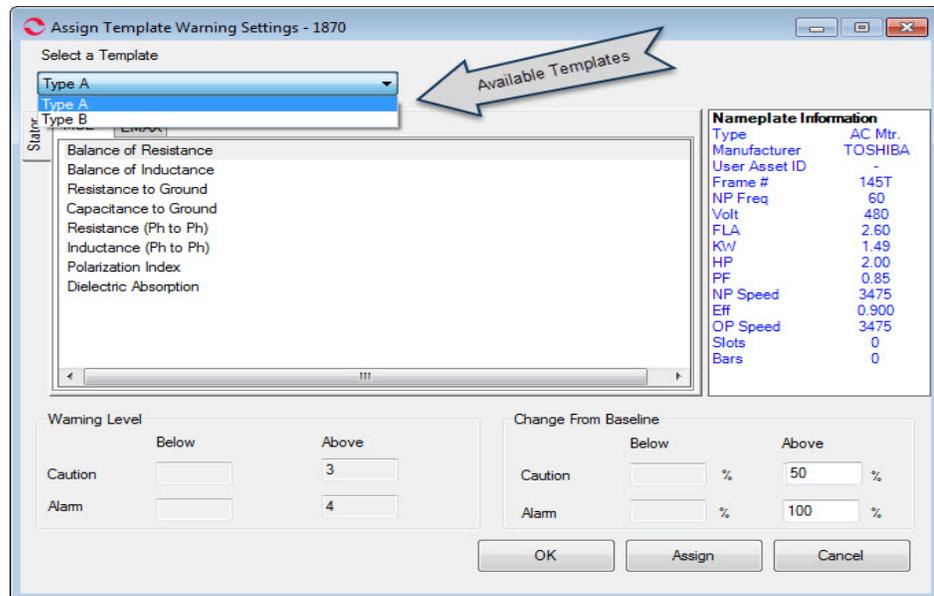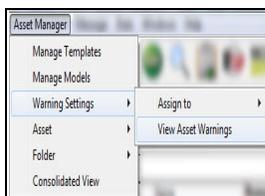


**Figure 3-13: Assign Template Warning Settings Window**



*View Asset Warnings* - Changes made to the warning settings here apply only to the selected asset. Highlight an asset on the Site Navigator. Select Asset Manager from the menu, then Warning Settings, View Asset Warnings. This opens the Warning Settings window shown in Figure 3 - 14, for the selected asset. To reset the values to the default values click **Reset To Default**. To adjust other values, make the desired changes in the text boxes making sure you adjust the values for both the MCE and EMAX tabs if appropriate. Click **Apply** to save the changes and keep the window open or **OK** to save the changes and close the window. To exit without changing the warning settings, click **Cancel**.
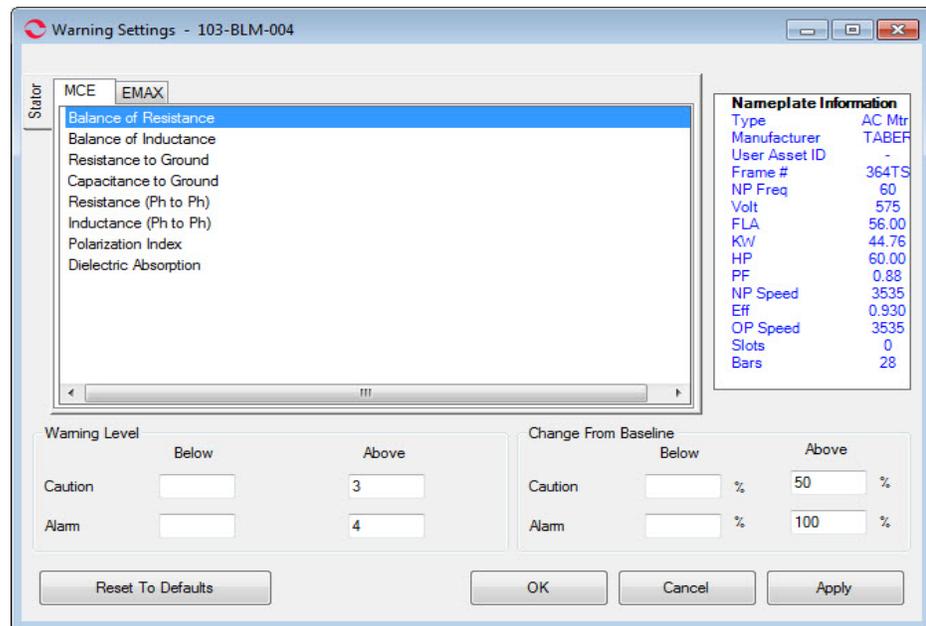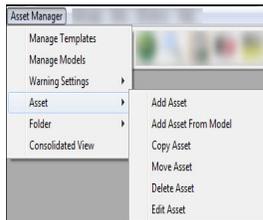
**Figure 3-14: Warning Settings Window**



*Asset*

Using the Asset Manager, Asset menu allows you to Add, Add Asset From Model (not available for all users), Copy, Move, Delete, and Edit assets.

**Add Asset**

1. Highlight or create the folder in the Site Navigator (see Asset Manager, Add Folder) where you want to add the asset.

2. Select Asset Manager, Asset, Add Asset from the menu.

3.  In the Add Asset window shown in Figure 3-15, use the drop-down menu to select an asset class. Currently the choice is either generator or motor. When the asset class is selected the Select An Asset Type drop-down menu becomes active as shown in Figure 3 - 16. The choices are dependent on the asset class selected.Select an asset type.
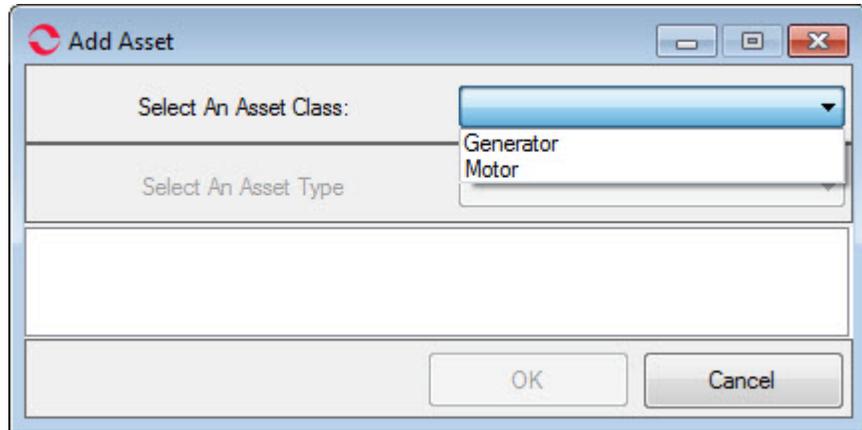
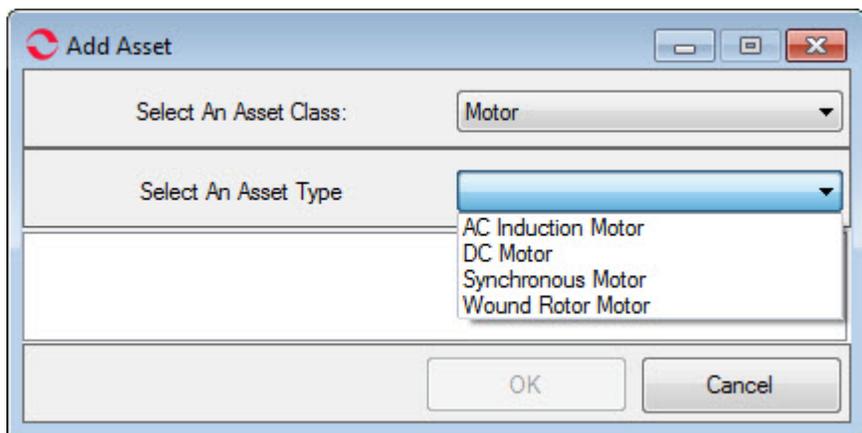**Figure 3-15: Add Asset - Select An Asset Class**

**Figure 3-16: Add Asset - Select An Asset Type**

4.  The remainder of the Add Asset window becomes active displaying the appropriate text boxes for the asset class and type selected shown in Figure 3-17. The required fields are highlighted in red. The Identification tab is the default active tab. Fill in the Asset Name
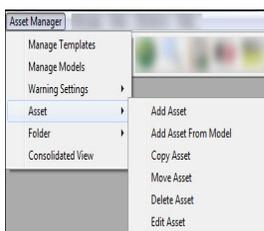
**Figure 3-17: Add Asset**

5.   The location is automatically entered based on the folder originally highlighted. on the Site Navigator. If a different location is desired, select the "Click to change destination location" option button and highlight the new location on the Site Navigator. The new location will be entered in the Location text box.

6.   Enter a User Asset ID, if desired. The User Asset ID can be any combination of alpha and numeric.

7.   Assign a criticality code to the asset, if desired. The code is limited to four characters in any combination of alpha and numeric. The criticality code is used in several places in the MCEGold software, most notably the WatchList.

8.   Select each tab, Identification, Manufacturer, Nameplate 1, Nameplate 2, and Bearing to verify that all required fields are filled in. Changes to the values may be made at this time. For more information on the nameplate see page 3-33.

9.   Click **OK**, when all tabs and required fields have been completed. The asset will be added to the folder.



**Add Asset From Model** is not available to all users and will not be active.

**Copy Asset**

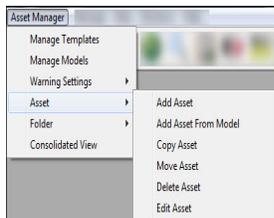1.   Highlight the asset on the Site Navigator that you wish to copy.

2.   Select Asset Manager, Asset, Copy Asset from the menu. The Add Asset window shown in Figure 3-18 opens. Some of the text boxes are filled in based on the asset being copied. The Asset Name text box is blank and must be filled in.



**Figure 3-18: Add Asset Using Copy Asset**

3.   To change the location of the new asset select the "Click to change destination location" option button and highlight the new location on the Site Navigator. The new location will be entered in the Location text box.

4.   Select each tab, Identification, Manufacturer, Nameplate 1, Nameplate 2, and Bearing to verify that all required fields are filled in. Changes to the values may be made at this time.

5.   Click **OK** to add the new asset.

**Move Asset**



1.   Highlight the asset on the Site Navigator that you wish to move.

2.   Select Asset Manager, Asset, Move Asset from the menu. The Move Asset window shown in Figure 3-19 appears. Note: The Asset Name corresponds to the asset highlighted on Site Navigator and the Current Location corresponds to the folder highlighted on the Site Navigator.
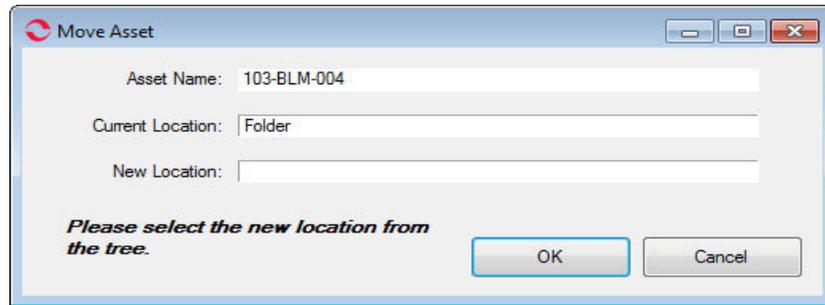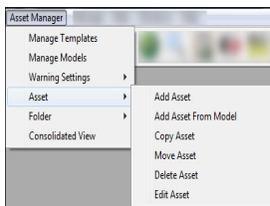
**Figure 3-19: Move Asset**

3.   To select the New Location, click on the folder on Site Navigator and the new location will be entered in the New Location text box. The selection must be made by highlighting the new folder location on the Site Navigator. You cannot type in the text box.

4.   Click **OK** to move the asset to its new location.

**Delete Asset**



1.   To delete an asset, highlight the asset on Site Navigator.

2.   Select Asset Manager, Asset, Delete Asset from the menu.

3.   The Delete Asset window opens with the selected asset name in the Delete text box and the folder name in the From text box.

4.   Verify it is the correct asset. Click **OK**.

5.   Click **Yes** in response to, "Do you want to delete this asset?"
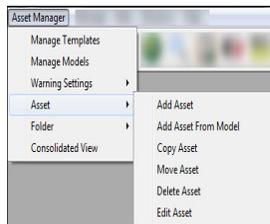
**Edit Asset**



1.   To edit an asset, highlight the asset on the Site Navigator.

2.   Select Asset Manager, Asset, Edit Asset from the menu.

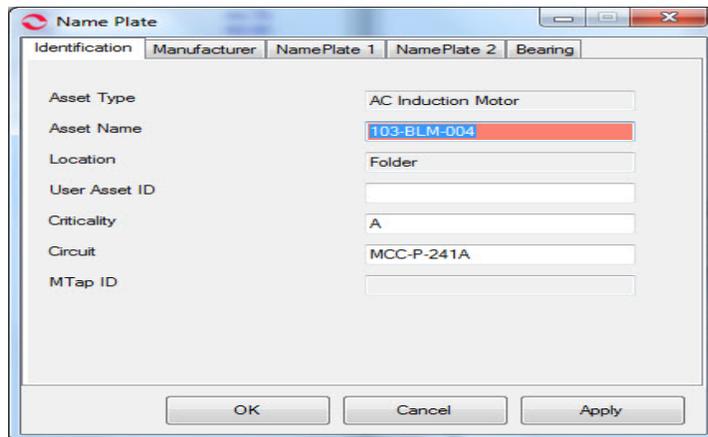3.   The Nameplate window shown in Figure 3-20 opens.

**Figure 3-20: Nameplate Window Using Edit Asset**

4.  Asset Type and Location cannot be edited. All other text boxes can be edited. Change desired information by selecting the tab and entering the new information in the appropriate textbox.

5.  Click **Apply** to make the changes and keep the Nameplate window open. The Nameplate window will remain open and a confirmation box appears. When informed the Nameplate information has been updated, click **OK**.

6.  Click **OK** to make the changes and close the Nameplate window. The Nameplate window will close after a confirmation box appears. When informed the Nameplate information has been updated, click **OK**.

**Folder**

Using the Asset Manager, Folder menu allows you to Add, Move, Delete, and Edit the folders.

*Add Folder*



1.  Select Asset Manager, Folder, Add Folder. The Add Folder window shown in Figure 3-21 opens.
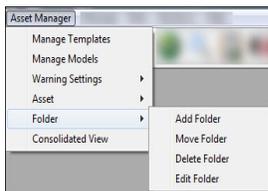
**Figure 3-21: Add Folder**

2.  Enter the folder name.

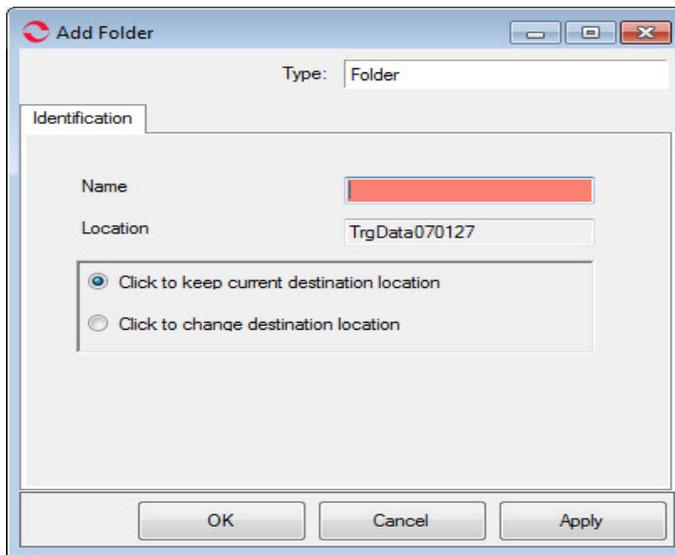3.  Verify the Location is the correct location. If an existing folder on the Site Navigator window is not highlighted then the Add Folder window shows the site name as the Location. If a folder is highlighted then the Add Folder window shows the name of the highlighted folder as the Location.

4.  To change the location of the folder, select the "Click to change destination location" option. Click OK in the Location Change window then highlight a new site or folder on the Site Navigator window. The location will be entered in the Location text box.

    Note: If you have multiple sites, you can display the site icons and names by selecting View, Sites from the Site Navigator menu.

5.  Click **OK** to add the new folder and close the Add Folder window or click **Apply** to add the new folder and keep the Add Folder window open to add additional folders.
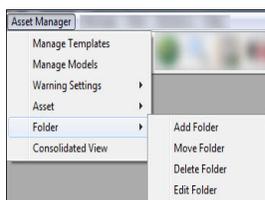
*Move Folder*



1.  To move an existing folder to a new location, highlight the folder on Site Navigator. Select Asset Manager, Folder, Move Folder.

2.  The Move Folder window shown in Figure 3-22 opens. The folder name and current location are automatically displayed.
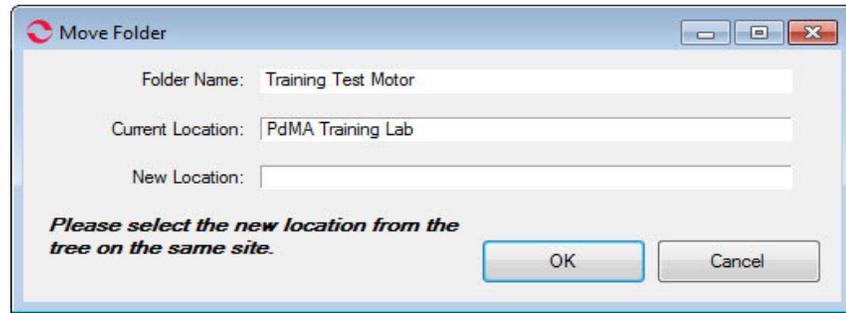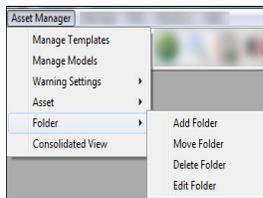
**Figure 3-22: Move Folder**

3.   Highlight the new location on the Site Navigator window. The new location name will display in the Move Folder window.

4.   Click **OK,** the folder is moved.

5.   Click **OK** when informed "Folder moved successfully." Both windows will close.

*Delete Folder*

1.   Highlight the folder to be deleted on the Site Navigator window.

2.   Select Asset Manager, Folder, Delete Folder.

3.   The Delete Folder window opens.

4.   Verify the correct folder name is displayed in the Delete text box and the correct location of the folder in the From text box is displayed. If not, click **Cancel** and begin the process again. You cannot make changes in the Delete Folder window.

5.   If they are correct, click **OK**.

6.   Click **Yes** to "Do you want to delete this folder?" The folder is deleted and the window is closed.
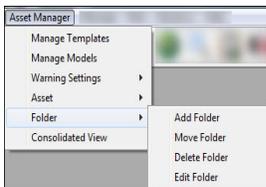
*Edit Folder*

Edit Folder is used to change the name of the folder.

1.   Highlight the folder on the Site Navigator window.

2.   Select Asset Manager, Folder, Edit Folder.

3.   The Edit Folder window opens.

4.   Enter the new name in the Name text box.

5.   Click **Apply** to make the change and leave the window open or click **OK** to make the change and close the window. The change is updated on the Site Navigator.

6.   Click **OK** when informed the folder information has been updated.

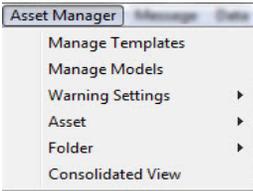**Consolidated View -** Selecting Asset Manager, Consolidated View opens the Asset Assignment Summary List shown in Figure 3 - 23. The assets that are highlighted on the Site Navigator are listed by Name and the list includes their Template Name, Warning Assignment, Warning Status, and Asset Type. You may add or delete from the list and Update the selection to reflect changes in the asset's status.
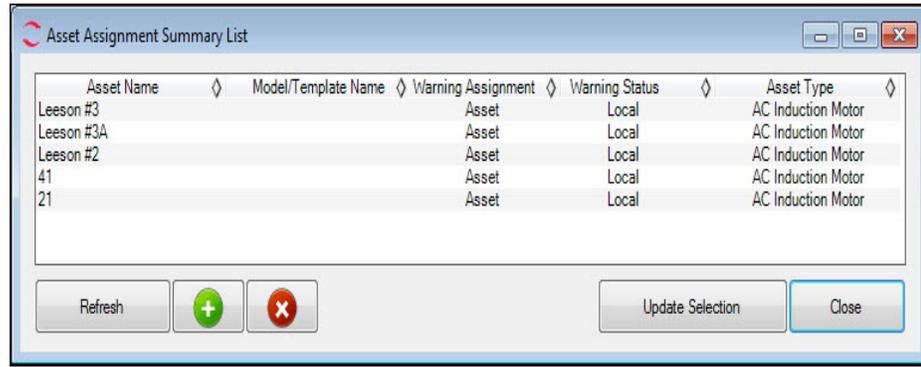


**Figure 3-23: Asset Assignment Summary List Window**

1.   Highlight one or more assets on the Site Navigator.

2.   Select Asset Manager, Consolidate View.

3.   The Asset Assignment Summary List window opens displaying the asset/s selected.

4.   To sort entries in any column use the diamond shaped icon ◊ to the right of the column title. The Asset Name column sorts alphabetically the first time, second click reverse sorts the column. Subsequently it acts as a toggle. Asset Type sorts alphabetically and lumps each type of asset together. The second click reverse sorts. Subsequently it acts as a toggle.

*Refresh*

If a change is made on the Site Navigator to one or more of the assets listed in the Asset Assignment Summary List, it is possible to update the asset/s by clicking the **Refresh** button.

*Add an Asset*

1.   With the Asset Assignment Summary List window open, highlight the desired asset on the Site Navigator.

2.   Click the green circle with the plus sign.

3.   The asset information appears in the list.

*Delete an Asset*

1. With the Asset Assignment Summary List window open, highlight the desired asset name in the list.

2. Click the red circle with the "x".

3. The asset information disappears from the list.

*Update Selection*

If a change is made on the Site Navigator to one or more of the assets listed in the Asset Assignment Summary List, it is possible to update the asset/s by highlighting the asset/s in the list and click **Update Selection**.
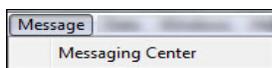
**Message** – Messaging Center opens the Message Center window if it is not open. The Message Center is one of four windows that automatically open when MCEGold is started. It can also be reached by clicking the Message icon on the toolbar. In Message Center you can enter, view, edit, and delete notes for one asset or a list of assets. For more information see the Message Center section in this chapter on page 3-53.
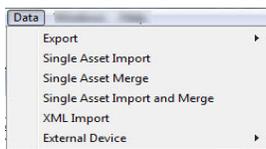
**Data** – The Data submenus allow an asset's data file to be created so that it can be exported or imported to or from another computer electronically or merge two data files for the same asset.
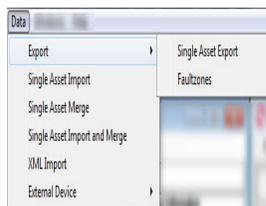
**Export/Single Asset Export**

1. Highlight on Site Navigator the single asset to be exported.

2. Select Data, Export, Single Asset Export from the menu.

3. In the Create Export File window shown in Figure 3-24, select a location to store your file.



**Figure 3-24: Create Export File**

4.  Change the File Name if desired. The file extension is .pdp. **Do not change the extension.**

5.  Click **Save**.

6.  When the file is complete, the Single Asset Export message box informs you it is complete. Click **OK**.

7.  The file is now ready to send as an attachment or be imported by another MCEGold tester.
    NOTE: Data exported from MCEGold 3.0 cannot be imported into older MCEGold versions.

**Export/Fault Zones**

The Export Fault Zone function allows the Fault Zone Analysis to be imported into an XML interfaced program, such as SAP, Maximo, Indus.

1.  Highlight the asset on the Site Navigator.

2.  Select Data, Export, Fault Zones from the menu.

3.  In the Create Export File window, select a location to save the Fault Zone file. See Figure 3-25.
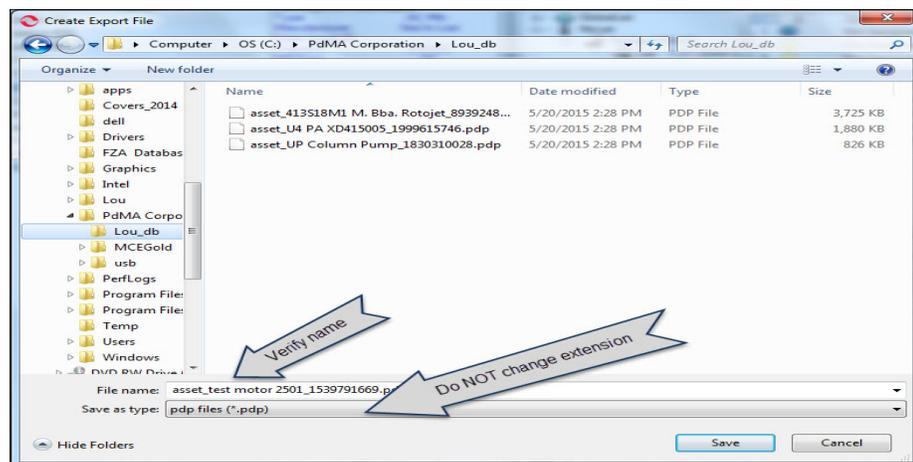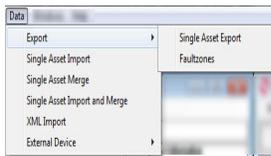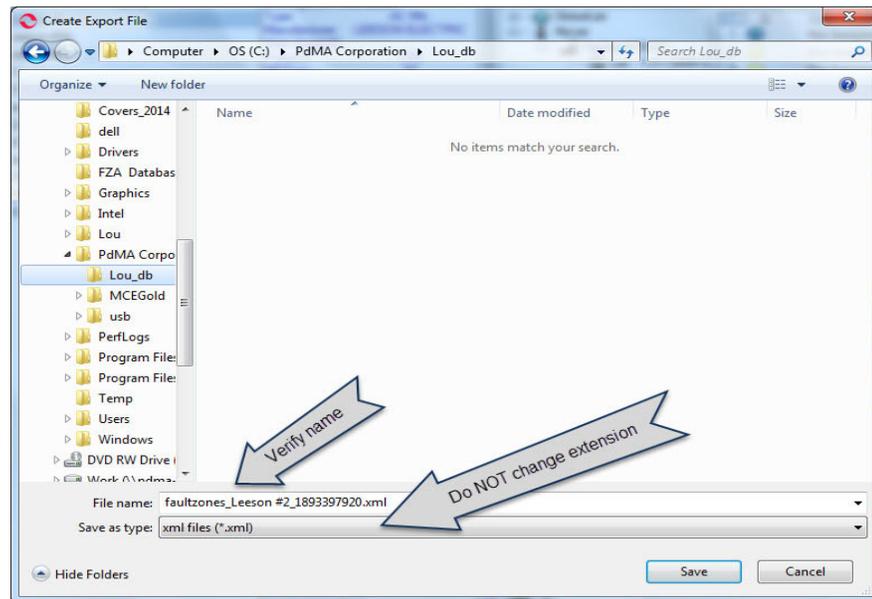


**Figure 3-25: Create Export File**

4.  Change file name if desired. The file extension is .xml. **Do not change the extension.**

5.  Click **Save**.

6.  You will be informed the Fault Zone Export is complete. Click **OK**.

7.  The .xml file is now ready to use in your management programs.

    NOTE: There are two files created XSD and XML. The XSD file is a schema template that the xml file exports.
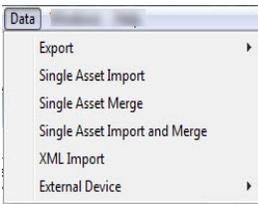
**Import/Single Asset Import**

This function is used to retrieve a data file that has been sent to you electronically.

1.  Highlight the folder you wish to import the asset information into.

2.  Select Data, Import, Single Asset Import.

3.  Locate the file and highlight it using the Open Import File window shown in Figure 3 - 26. The file will have a .pdp file extension.
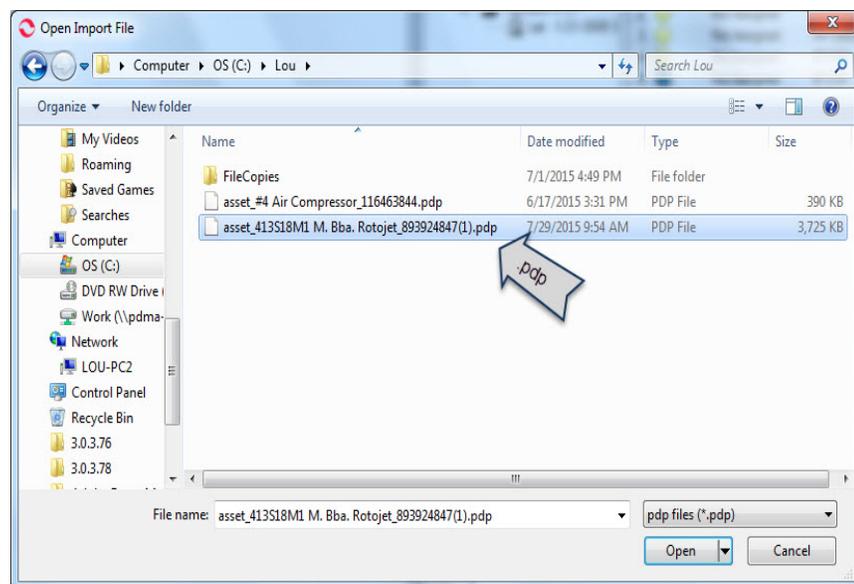


**Figure 3-26: Open Import File Window**

4.  Click **Open**.

5.  You will be asked to verify the location of the import.

6.  The Single Asset Import window informs you of the progress of the import.

7.  When you are notified the import is complete, click **OK**.
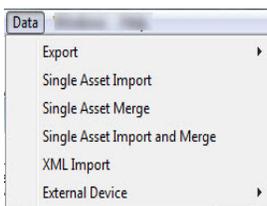
**Data/Single Asset Merge**

Single Asset Merge is used to combine two assets into one.

1.  Highlight the asset the data is being merged into.

2.  Select Data, Single Asset Merge. The Merge Asset Window shown in Figure 3- 27 opens.
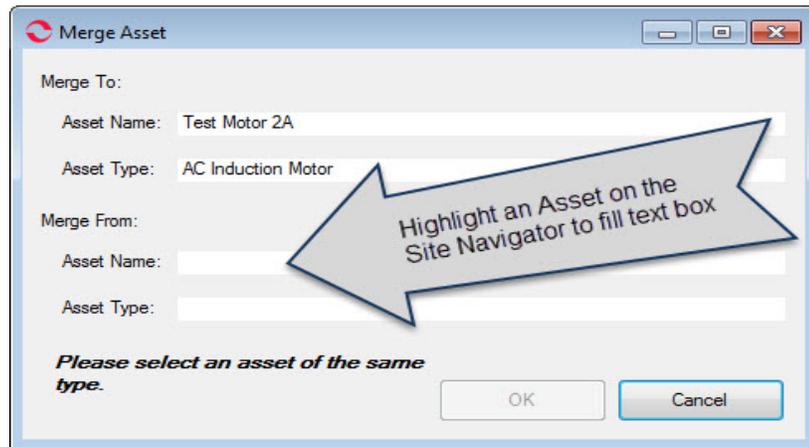


**Figure 3-27: Merge Asset Window**

3.  Highlight the asset that is being merged from on the Site Navigator. It is not possible to type the name and type in the text boxes.

4.  When the correct Asset Name and Type are entered, click **OK**.

5.  A window displays the progress. When complete, click **OK**.

6.  The second asset (asset merged from) is automatically deleted from the database and no longer displays on the Site Navigator.
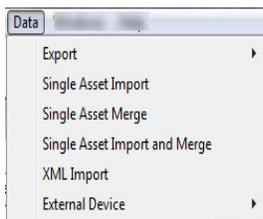


**Data/Single Asset Import and Merge**

The Single Asset Import and Merge function imports the data from a pdp file and directly merges it with the selected asset. A new asset will not appear on the Site Navigator, the data is directly merged into an existing asset.

1.  Highlight the asset the data is being merged into on the Site Navigator.

2.  Select Data, Single Asset Import and Merge.

3.  The Open Import File window shown in Figure 3-28 opens.

4.  Locate and select the pdp file you are importing the data from and click **Open**.
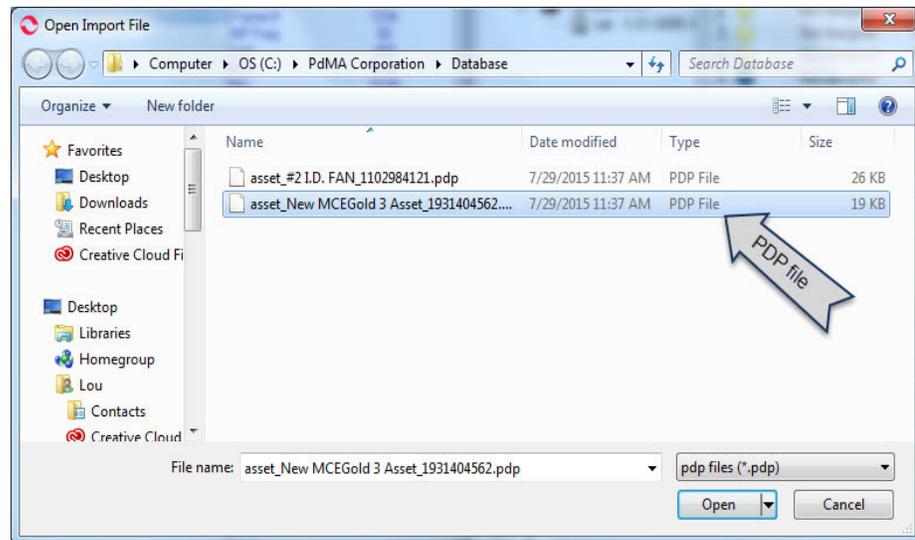
**Figure 3-28:** Open Import File Window

5. In the Single Asset Import verify box, verify the asset you are importing test data into and click **Yes**.
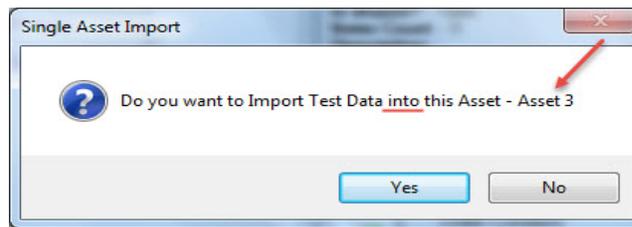


**Figure 3-29: Single Asset Import Verify Box**

6. The Single Asset import window informs you of the progress of the import.

7. When you are notified the import is complete, click **OK**.

8. The data will import and merge by data and time into the selected asset. To view the merged asset information in the Test History window you may have to select Test, Show Tests, and All Tests since some tests from the merged asset may have been taken prior to the baseline test in the original asset.
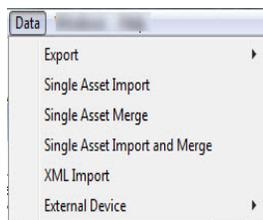


**Data/XML Import**

XML Import imports an asset via XML format. All asset Nameplate information is automatically imported into MCEGold as a new asset.

1. Select a folder on the Site Navigator.

2. Select Data, XML Import. The Open Import File window opens.

3. Locate and select the xml file to be imported and click **Open**.
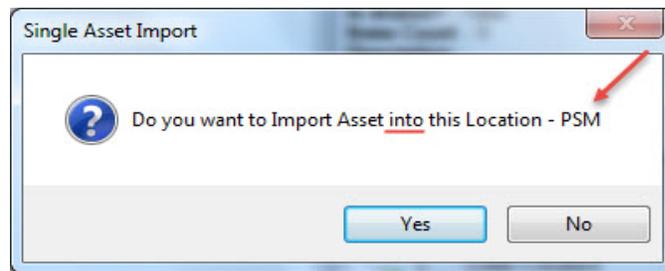
**Figure 3-30: Single Asset Import Verify Box**
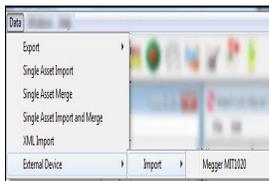
**Data/External Device Import**

The External Device Import/ Megger is used to import data collected using an external device the Megger MIT1020 10kV insulation tester.

1.  Select a folder on the Site Navigator.

2.  Highlight the asset the data is to be imported into.

3.  Select Data, External Device, Import, Megger MIT1020. The Open MIT1020 File window opens.

4.  Locate and select the MIT1020 file to be imported. The file will have a .cvs file type extension. Click **Open**.

**Windows**

MCEGold 3. 0 uses standard Windows operations.

*Cascade Windows* causes all of the open windows to display one on top of the other in a cascading manner with only the title bars for each window showing and a full view of the top window.

*Tile Windows* causes all of the open windows to display side by side, so that the full window is shown. The more windows that are open the smaller they will display so that they can all be accommodated.

*Close All* closes all open windows, but does not close MCEGold.

A list of the open windows is below these commands. A check mark in front of the window name indicates it is the active window. Click on any name on the list to make the window active.
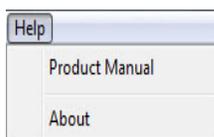
**Help**

The Help menu provides access to the Product Support Manual and About information.

Product Manual - Selecting Product Manual opens a window displaying the complete MCEGold Product Support Manual in PDF. Each chapter is listed separately to assist you in locating the information you are seeking.

About - Selecting About from the menu opens the About MCEGold window. The customer information including version number, installed technology, shipping address, and technical support information is displayed in this window. This information is useful if you need to contact PdMA regarding your tester. Click **OK** to close the About window.

# Toolbar

The Toolbar icons are designed to quickly access common MCEGold functions with one click. This section provides a graphic of the icon and a brief description. Each function is discussed in depth in its own section.

**Site Navigator** provides a graphical view of the sites, folders, and assets/motors. Use this icon to restore the Site Navigator window. *See the Site Navigator section on page 3-29 for more information.*

**Asset Summary** provides Last Test Dates, Asset Condition, and Fault Zone information for the selected asset. *See the Asset Summary section on page 3-32 for more information.*

**Site Condition** automatically displays when MCEGold starts and displays selected information about all of the assets. The data automatically updates when a different site is chosen. Use this icon to restore the Site Condition window to the MCEGold Home window if it has been closed. *See the Site Condition section on page 3-32 for more information.*

**Nameplate** displays the nameplate data for the selected Asset so you can view or modify the data. Some fields are automatically entered by the tester and cannot be modified. An area to assign a criticality code to the motor is provided. The code is limited to four characters, any combination of alpha and numeric. *Discussion of the nameplate is found in the Add Asset section on page 3-14 steps 4 and 5* and page 3-33.

**Add Asset** maybe used in place of selecting Asset Manager, Asset, Add Asset or right clicking on a folder in the Site Navigator and selecting Add Asset. *See the Add Asset section on page 3-12 for more information.* Note: Throughout MCEGold, the term asset is used to denote various types of assets and motors.

**Warning Settings** displays the warning settings for the selected asset. If the asset hasn't been assigned a template (using Asset Manager, Warning Setting from the menu) the default settings are displayed. Changes to the setting can be made here. *See the Warning Settings section on page 3-38 for more information.*

**Test History** displays the MCE and EMAX test data, nameplate information, and Condition Code for the selected asset. *See the Test History section on page 3-39 for more information.*

**Test Selection** opens the Test Selection window that is used to select individual MCE and EMAX tests for the selected asset. If an automatic combination of tests are preferred the MCE Auto or EMAX Auto icons can be chosen from the toolbar. *See the Testing section on page 3-43 for more information.*

**Search** opens the Asset Search window to simple search. For a more detailed search click the Advance button which opens the Advanced Search window. You may return to the simple search by clicking the Simple Search button. *See the Search section on page 3-44 for more information.*

**WatchList** automatically displays when MCEGold starts. WatchList allows you to set up lists of assets. A list may be of assets to watch for criticality purposes or to set up a service route for a technician. Use this icon to restore the WatchList window to the MCEGold Home window if it has been closed. *See the WatchList section on page 3-47 for more information.*

**M***TAP* opens the M*TAP* configuration window. You must first select an asset before the icon is active. The window provides information if the asset is linked to an M*TAP* or allows you to manually link the asset to an M*TAP*.

**MCE Auto** automatically starts the Standard Test followed by the Polarization Index. At the end of the tests the results are saved and Fault Zone Report is displayed. Before selecting the MCE Auto icon, an asset must be highlighted on the Site Navigator. *See the MCE Auto section on page 3-52 for more details.*

**E***MAX* **Auto** automatically starts the Rotor Evaluation, Eccentricity, Power, and Demod tests. At the completion of the tests, after the test results are saved, the Fault Zone Analysis window displays. Before selecting the E*MAX* Auto icon an asset must be highlighted on the Site Navigator. *See the E*MAX* Auto section on page 3-52 for more details*.

**Fault Zones** displays the Fault Zone Analysis window for the motor/asset highlighted on the Site Navigator window. *See Fault Zone Analysis section on page 3-52 for more details.*

**Message** restores the Message Center window to the MCEGold Home window if is has been closed. The Message Center window automatically displays when MCEGold starts. In the Message Center you can enter messages, view message, and delete messages for one or a list of assets. *See the Message Center section on page 3-53 for more information.*

**Export File** opens the Create Export File window, which is used to create an export file to send data electronically for the selected asset. *See the Export file section on page 3-57 for more information.*

**Report** opens the Report Selection window. *See the Reports section on page 3-58 for more information.*

**Scheduler** opens the Asset Schedule Configurations window which is used to set up the selected asset for scheduled testing on a one-time or reoccurring basis. *See Appendix B for more information.*

**Energy Analysis** opens the Energy Cost Analysis window which analyzes operating and replacement cost for AC Induction Design B motors only. *See Appendix C for more information.*

# Site Navigator Window

The Site Navigator window opens when MCEGold is started or if it has been closed it can be opened using the Site Navigator icon [icon] on the toolbar.

The Site Navigator window displays the site(s), folders, and motor/assets using the Windows tree format. The nameplate information is displayed when an asset is selected. MCEGold is available in single or multiple site versions. Each site has its own unique

folders and motor/assets. Figure 3-31 shows the Site Navigator window for a single site version containing folders and motor/assets.
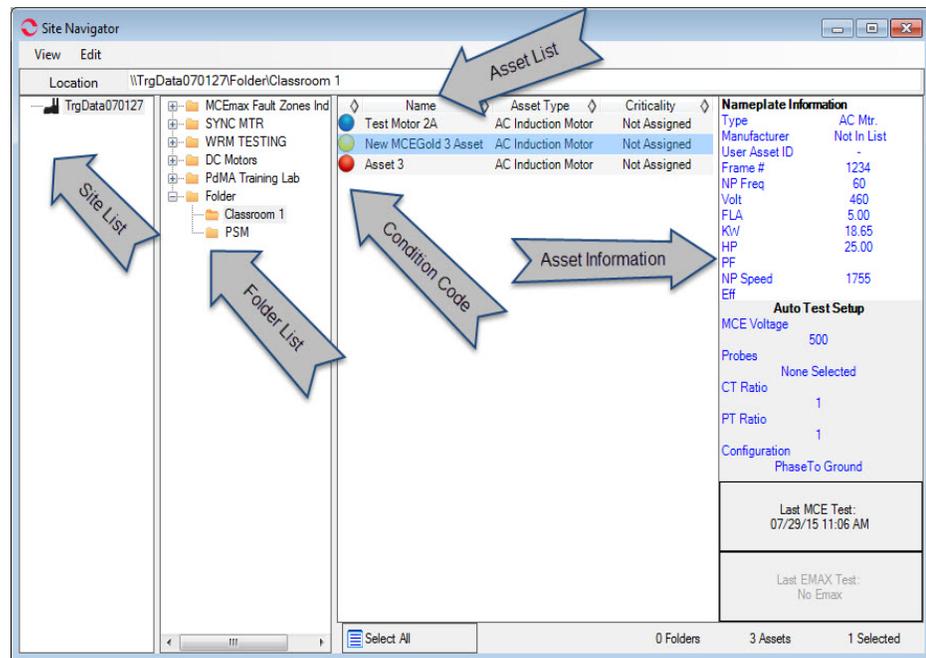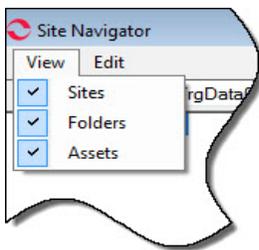


**Figure 3-31: Site Navigator**



The site, folders, and assets can be displayed or hidden by selecting View and the appropriate sub-menu from the Site Navigator menu. A check mark in front of sub-menu name indicates it is displayed in the window. To hide the information remove the check mark by clicking on it. The check mark acts as a display/hide toggle.

To locate an asset in the Site Navigator, locate the folder that contains the asset, open the folder and any subsequent folders, then click on the asset. The asset information appears in the right section. Beginning from the left of the line, a round icon is color coded to the condition assigned to the asset. The asset name appears next. Asset type and if criticality has been assigned to the asset during setup it is displayed. On the far right is the nameplate information. You may also find an asset using the Search function, which is reached by clicking on the Search icon on the toolbar and described on page 3-44.

For *multi-site version*, display the site names using the View menu on the Site Navigator window and selecting the Sites sub-menu. This places a checkmark in front of Sites and opens a column to the left of the folder column displaying the site names. Highlight the desired site and the folders and motor/assets in that site will display in the columns to the right. To close the site column, select View and click Sites to remove the check mark.
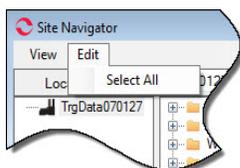


Edit, Select All - When multiple assets are displayed, it is possible to highlight them all at one time by selecting Edit on the Site Navigator window and then Select All. You can also use the Select All button  located at the bottom of the asset section.

## Right Click

A quick way to work with folders and assets in Site Navigator is to right click on the Site, Folder, or Asset name. Right click on a site closes open folders and assets lists. Right click on a folder opens a sub-menu that allows you to Add Asset, Add Asset From Model (if available), Add, Move, Delete, and Edit folders. Right click on an asset opens the sub-menu that allows you to Add Asset, Add Asset From Model (if available), Copy, Move, Delete and Edit the selected asset. Also, you can Show Test History and Show Warning Settings for the selected asset.

To add a folder to the Site Navigator, right click on the Site icon. The sub-menu shown in Figure 3-32 opens. The only option available under Site location is Add Folder. Select Add Folder and proceed as described on page 3-17, Add Folder.
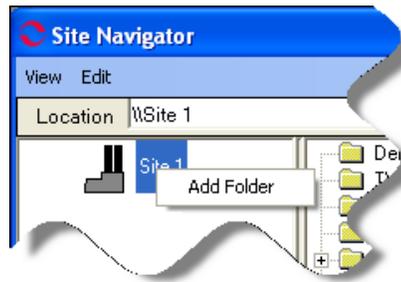


**Figure 3-32: Right Click Site Icon**

To work with the folders in the Site Navigator, right click the folder you wish to work with. The sub-menu shown in Figure 3-33 opens. Select the desired function.

Instructions on how to preform these activities are discussed previously in this chapter. Add an Asset instructions are found on page 3-12, Add Folder is found on page 3-17, Move Folder is found on page 3-18, Delete Folder and Edit Folder are found on page 3-19.

.
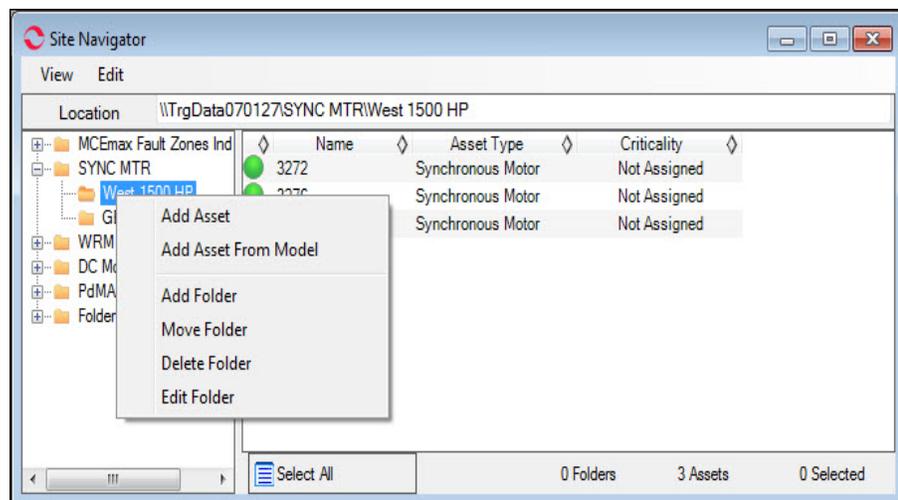


**Figure 3-33: Right Click Folder Sub-menu**

To work with the assets in the Site Navigator, right click the asset you wish to work with. The sub-menu shown in Figure 3-34 opens. Select the desired function.

Instructions on how to perform these activities are discussed previously in this chapter. Add an Asset instructions are found on page 3-12, Copy Asset is found on page 3-14, Move Asset is found on page 3-15, Delete and Edit Asset are found on 3-16.

Selecting Show Test History and Show Warning Settings open the respective windows for the asset. The Test History window is discussed later in this chapter on page 3-39 and the Warning Settings window is discussed on page 3-38.
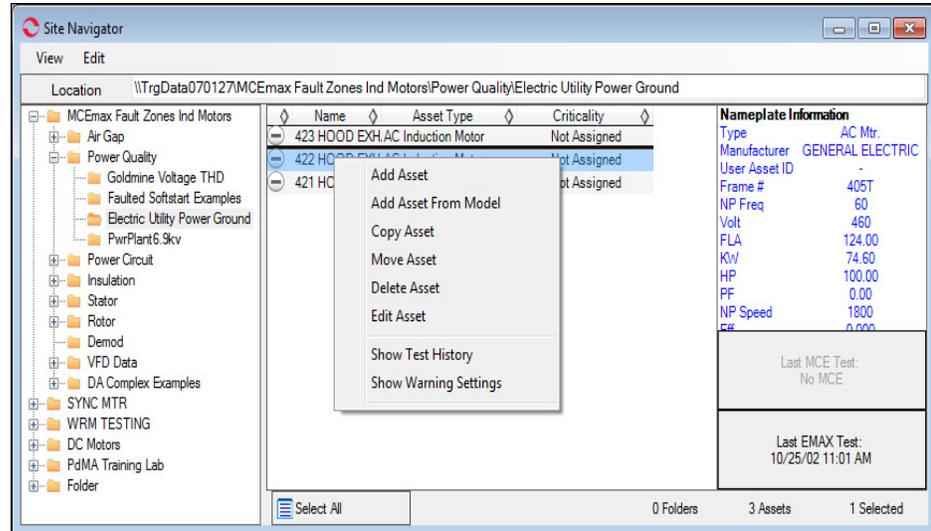


**Figure 3-34: Right Click Asset Sub-menu**

# Asset Summary

Selecting the Asset Summary icon  on the toolbar opens the Asset Summary window shown in Figure 3-35. Note: You must highlight the asset in the Site Navigator before selecting Asset Summary.
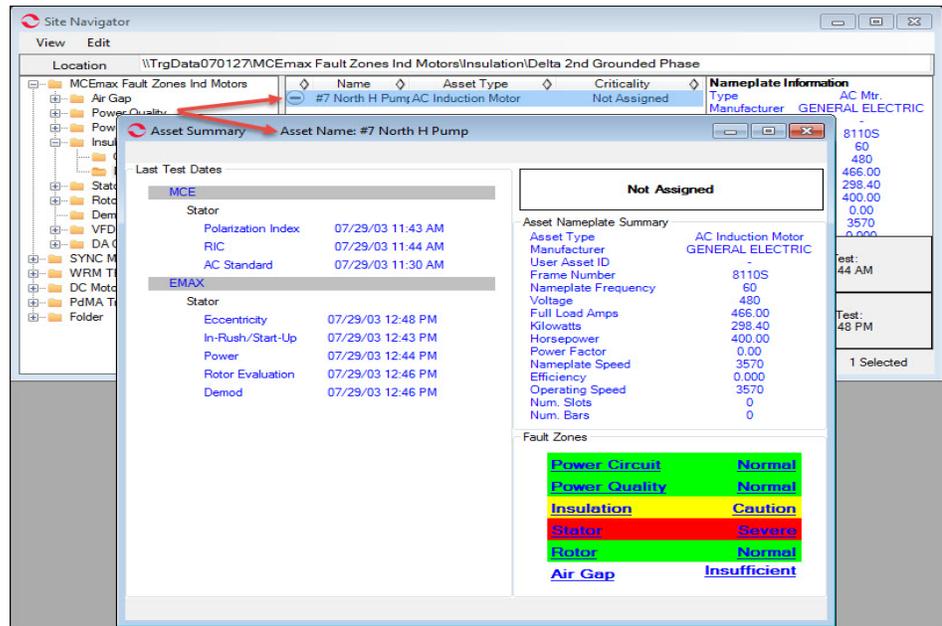
**Figure 3-35: Asset Summary Window**

The window displays last test dates for MCE and EMAX tests, asset condition, nameplate summary and links to the Fault Zone Report. Clicking on any test name opens the Test History for that test. Click in the nameplate area and the nameplate window opens. Changes to the nameplate values can be made in the window. Click on any item in the Fault Zone area to open the Fault Zone Report. The Fault Zone Report is fully discussed in Chapter 5, MCE on page 5-10, Chapter 6, EMAX Current Analysis, and Chapter 7, EMAX Power Analysis.

# Site Condition

The Site Condition window shown in Figure 3-36 automatically displays when MCEGold is opened. It displays information about the assets in the site. If you have multiple site software, the data automatically updates each time a different site is chosen. The window does not have to be closed and reopened. If the Site Condition window has been closed use this icon  to restore the Site Condition window to the MCEGold Home window.
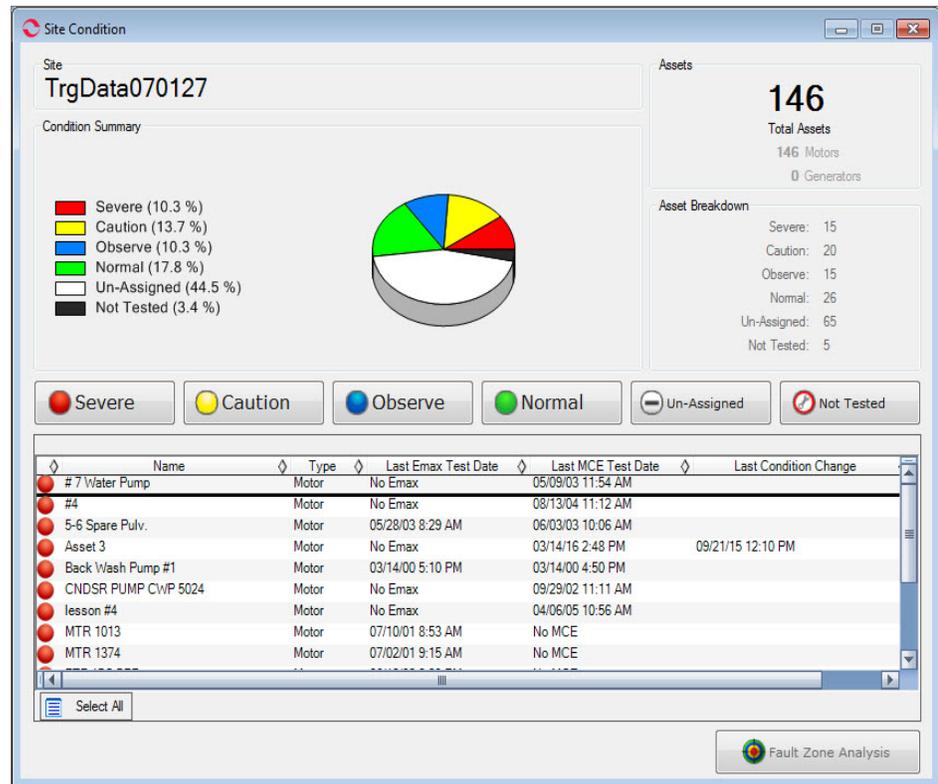
**Figure 3-36: Site Condition Window**

The Site Condition window opens with the assets in Severe condition listed. To see a list of assets in a specific condition code, unassigned, or not tested click on the appropriate button above the asset list. The assets in the selected condition will be listed below. To locate a listed asset in Site Navigator, click on its name and it will be highlighted on the Site Navigator window.

The lists opens in alpha/numeric order. You may change the order of any column by clicking on the small diamond at the top of the list. Depending on which column you choose it may sort the list alphabetically or in the case of test date sort numerically. The diamond changes to an up/down triangle indicating the list has been sorted. The triangle acts like a toggle.

Select All can be used to create a WatchList or used for a report.

The Fault Zone Analysis button in the lower right hand corner opens the Fault Zone Analysis window for the asset highlighted in the list. If multiple assets are highlighted it will display the Fault Zone Analysis window for the first asset on the list.

## Nameplate

Nameplate displays the nameplate information that was entered when the asset was added. You must highlight an asset in Site Navigator before selecting the Nameplate icon on the toolbar. The nameplate window shown in Figure 3-37 opens. You may make changes or add to the nameplate information using the nameplate window. The text boxes

highlighted in red are required fields. Keep in mind the more information you enter on the nameplate the more useful your test data interpretation will be.

## Identification Tab

The Identification tab shown in Figure 3-37 contains text boxes for Asset Type, Asset Name (required), Location, User Asset ID, Criticality, Circuit, and M*TAP* ID. The Asset Type, Location, and M*TAP* ID are automatically entered by MCEGold and cannot be changed. For the other text boxes, enter the desired information and click **OK** to save the changes and close the window or **Apply** to save the changes and keep the Nameplate window open.



**Figure 3-37: Nameplate: Identification Tab Contents**

## Manufacturer Tab

The Manufacturer tab shown in Figure 3-38 contains text boxes for Manufacturer Name, Model Number, Revision Number, Serial Number, and Asset Received Date. The Asset Received Date text box has a drop down calendar to assist you in entering the date. There are no required fields on this tab. Enter the desired information and click **OK** to save the changes and close the window or **Apply** to save the changes and keep the Nameplate window open.

**Figure 3-38: Nameplate: Manufacturer Tab Contents**

## Nameplate 1 Tab

The Nameplate 1 tab shown in Figure 3-39 contains text boxes for Nameplate Frequency, Voltage, Horsepower, Kilowatts, Full Load Amps, Nameplate Speed, Operating Speed, and Frame Number. All, except Operating Speed, are required fields. Enter the required information and click **OK** to save the changes and close the window or **Apply** to save the changes and keep the Nameplate window open.

**Hint**: MCEGold will automatically compute the Kilowatts based on the Horsepower entered by entering the Horsepower and press the <Enter> key on the keyboard. It works in reverse too. Enter the Kilowatts and press <Enter> to get the horsepower.



**Figure 3-39: Nameplate: Nameplate 1 Tab Contents**

## Nameplate 2 Tab

The Nameplate 2 tab shown Figure 3-40 contains text boxes for Insulation Type, Service Factor, Power Factor, Efficiency, Number of Bars, Number of Slots, Design Type, and Winding Date. There are no required fields. Enter the desired information and click **OK** to save the changes and close the window or **Apply** to save the changes and keep the Nameplate window open.

**Figure 3-40: Nameplate: Nameplate 2 Tab Contents**

## Bearing Tab

The Bearing tab Shown in Figure 3-41 has text boxes for Shaft-End Bearing Number, Shaft-End Bearing Type, Opposite-End Bearing Number, and Opposite-End Bearing Type. There are no required fields. Shaft-End Bearing Type and Opposite-End Bearing Type have drop down lists to make your choice from. Enter the desired information and click **OK** to save the changes and close the window or **Apply** to save the changes and keep the Nameplate window open.

**Figure 3-41: Nameplate: Bearing Tab Contents**

## Resistor Bank Tab

The Resistor Bank tab shown in Figure 3-42 only appears for Wound Rotor assets. It has text boxes for (Res. Bank) Type, (Resistor Bank) Kilowatts, Full Load Current, and Cooling Method. There are no required fields. Enter the desired information and click **OK** to save the changes and close the window or **Apply** to save the changes and keep the Nameplate window open.



**Figure 3-42: Nameplate: Resistor Bank (Wound Rotor Asset)**

## Brush Assembly Tab

The Brush Assembly tab shown in Figure 3-43 appears for Synchronous and DC assets. It has text boxes for Brush Grade, Brush Dimensions, Number of Brushes, and Minimum Brush Length. There are no required fields. Enter the desired information and click **OK** to save the changes and close the window or **Apply** to save the changes and keep the Nameplate window open.
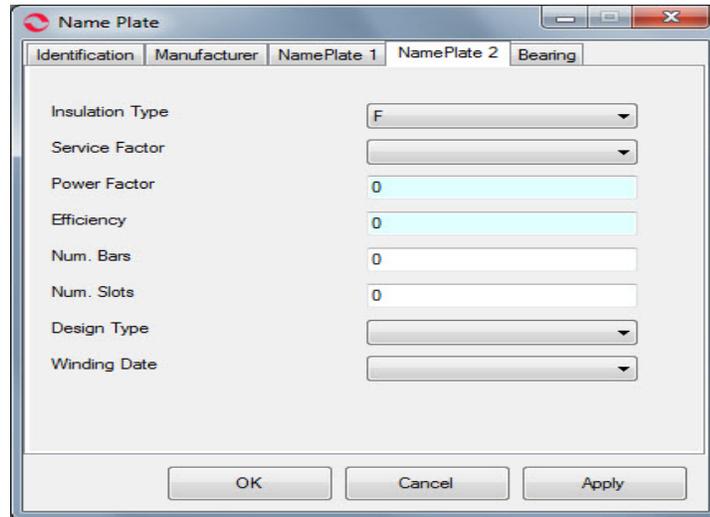


**Figure 3-43: Nameplate: Brush Assembly Tab (Synchronous Asset)**

### Armature Tab

The Armature tab shown in Figure 3-44 appears for DC assets only. It has text boxes for Number of Poles, Commutator Segments and Armature Type. There are no required fields. Enter the desired information and click **OK** to save the changes and close the window or **Apply** to save the changes and keep the Nameplate window open.
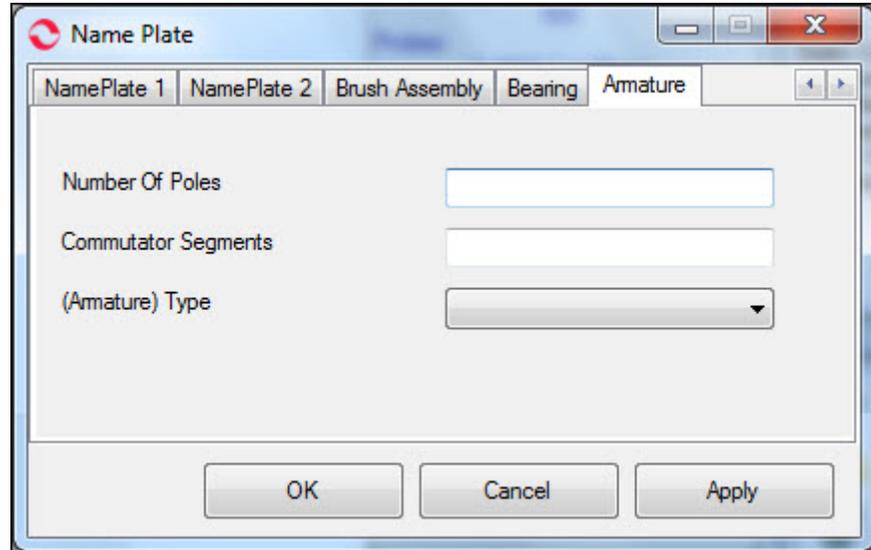


**Figure 3-44: Nameplate: Armature Tab (DC Asset)**

# Add Asset

You can quickly add an asset by selecting the Add Asset icon      from the toolbar.

Adding an asset is discussed on page 3-12.

# Warning Settings

Warning Settings enables you to change the warning settings for the asset that has been highlighted on the Site Navigator. If the asset hasn't been assigned a template (using the Asset Manager, Warning Setting from the MCEGold menu) the default settings are displayed.

1.  Highlight the asset on the Site Navigator.

2.  Select the Warning Settings icon      on the toolbar. The Warning Settings window shown in Figure 3-45 opens.
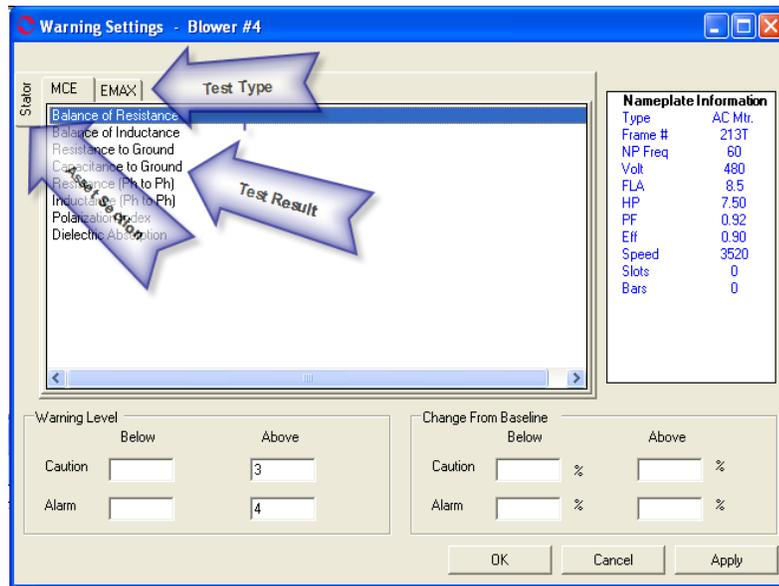
**Figure 3-45: Warning Settings Window**

3.  Select the Test Type and Asset Section tabs.

4.  Highlight the test results you wish to change the warning setting for.

5.  Make the changes in the Warning Level and Change From Baseline values.

6.  Click **Apply** to apply the new settings and keep the window open or click **OK** to apply the new settings and close the window.

# Test History

Highlight an asset in the Site Navigator and select the Test History icon [icon] on the toolbar. The Test History window for the selected asset opens. The window opens to the MCE test results, shown in Figure 3-46. To view EMAX tests results, click the EMAX button. The window will change to show the EMAX test results tabs as seen in Figure 3-47. To view the various test results select the appropriate tab.
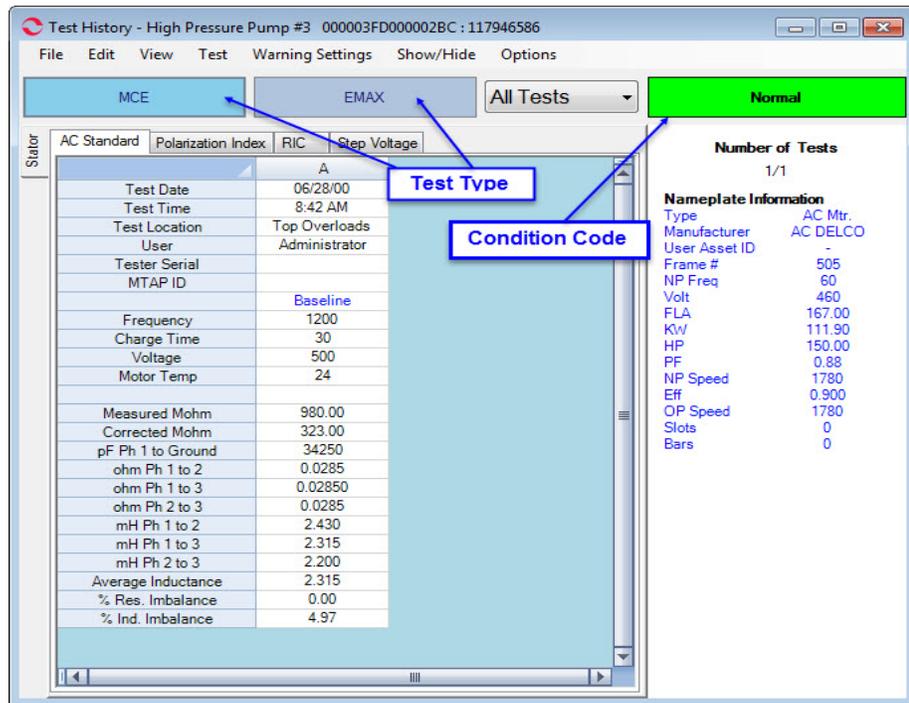
**Figure 3-46: Test History Window-MCE Tests**
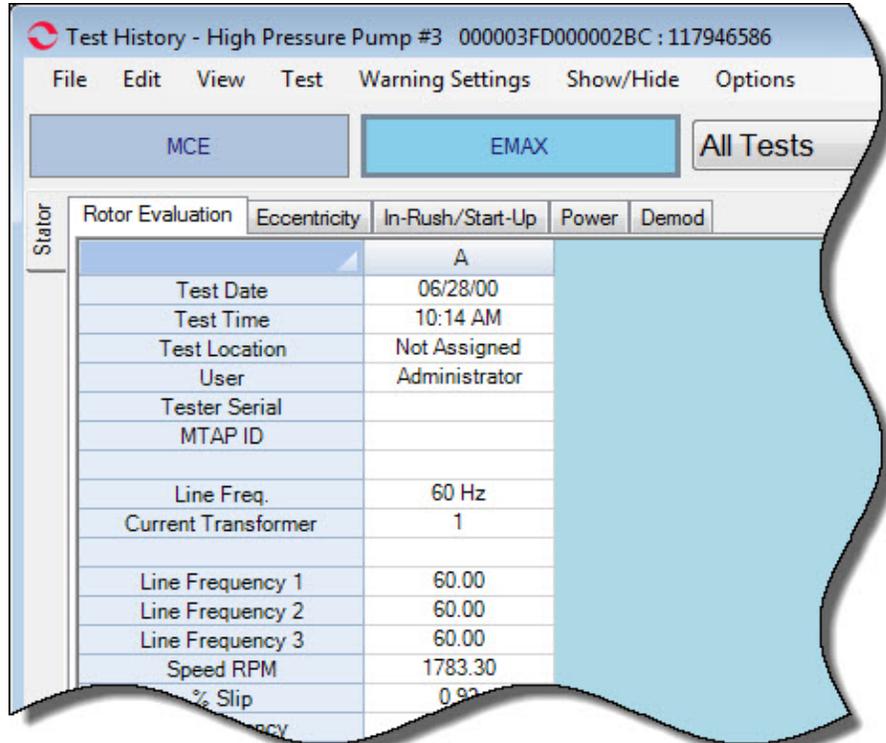


**Figure 3-47: Test History Window-EMAX Tests**

## Test History Menu

### File
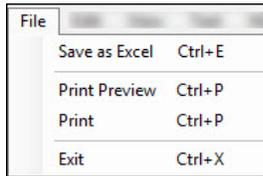
**Save As Excel (Ctrl+E).** To save the test results as an Excel file, select File from the menu and Save As Excel or Ctrl+E. The Save Data window opens. Enter the location and a File name, and click **Save**.

**Print Preview (Ctrl+P).** Selecting File, Print Preview shows the selected report on the computer screen before printing. You can print from this window using the tool bar.

**Print (Ctrl+P).** Selecting File, Print causes the Print window to open. Select the desired printer and options and click **Print**.

**Exit (Ctrl+X).** Selecting File, Exit or Ctrl+X closes the Test History window.

### Edit
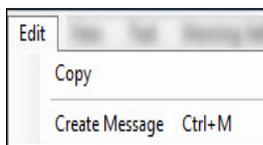
**Copy.** The Copy function works in conjunction with preparing a Detailed Report. See Detailed Report section on page 3-65.

**Create Message (Ctrl+M).** To add a note to the asset, select Edit, Create Message from the Test History window. The Compose Asset Message window opens. Compose Asset Message is covered in the Message Center Section on page 3-55.

### View
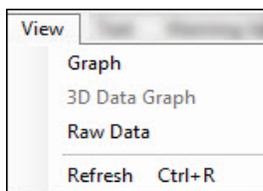
**Graph.** A graph can only be prepared if there are more than one test of the same type on the asset. Highlight the row or rows containing the measured data to be graphed. Select View, Graph to display the History Graph. The resulting graph may be saved, print previewed, printed, or the window closed using the File menu on the History Graph window.

**3D Data Graph.** This option is inactive/grayed out for MCE, but active for EMAX. To view the 3D graph, highlight one or multiple EMAX test(s) and select View 3D Graph from the menu. To change the perspective of the graph, click on the graph and use the cursor to rotate/change the view.

**Raw Data.** To view the raw data, select the test results tab, highlight the test, and select View, Raw Data from the Test History window menu. Figure 3-48 is a sample of the raw data window for a eccentricity test. Test History and data interpretation are discussed in Chapter 5-MCE, Chapter 6-EMAX Current Analysis, and Chapter 7- EMAX Power Analysis.
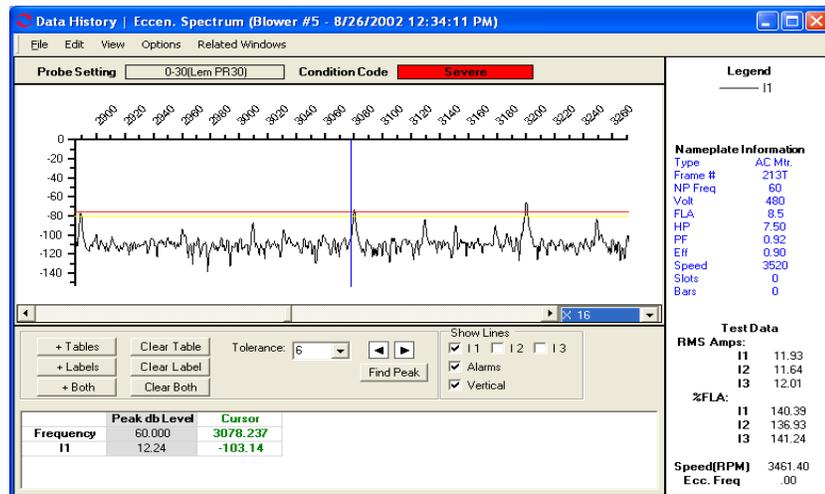
**Figure 3-48: Data History Using the Raw Data Menu**

**Refresh (Ctrl+R).** Refresh updates the Test History window with changes that have been made to the asset.
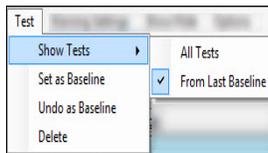
## Test



**Show Tests: All Tests.** Selecting Test, Show Tests, All tests causes the Test History window to display all test results for the selected asset.

**Show Tests: From Last Baseline.** Selecting Test, Show Tests, From Last Baseline causes the Test History to hide any tests before the last baseline and display all tests subsequent to the last baseline test.

**Set as Baseline.** To set a particular test as the baseline, highlight the test, select Test, Set as Baseline from the Test History window. The word Baseline will appear in the column below the M*TAP* ID and just above the test results.

**Undo as Baseline.** To undo a baseline designation, highlight the test results column, select Test, Undo a Baseline from the Test History window menu. The word Baseline will be removed from the test results column and alarm conditions from subsequent test results dependent on the baseline will be removed.

**Delete.** To remove test results for a particular test, highlight the test results column, select Test, Delete from the Test History window menu. Click **OK** when informed the selected test has been deleted. Note: When test results are deleted it is permanent and they are irretrievable.
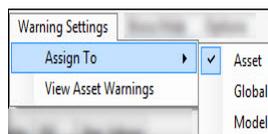
## Warning Settings



Warning settings are discussed previously in this chapter in the Asset Manager, Warning Settings section on pages 3-10 and 3-38.
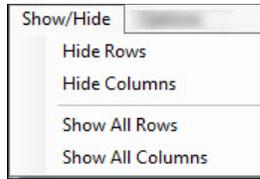
## Show/Hide

**Hide Rows.** To hide one row or many rows of test data, highlight the row/s and select Show/Hide, Hide Rows from the Test History window menu. This is useful when you have more rows than will display on the computer screen or you just want to see specific test results.

To select rows that are contiguous, highlight the first row, then press and hold the shift key on the keyboard, click on the last row you want to be included, release the shift key. All rows between will be highlighted. Then select Show/Hide, Hide Rows from the Test History window menu.

To select rows that are not contiguous highlight the first row, then press and hold the Ctrl key on the keyboard and click the next row to be highlighted. Continue until all rows you wish to hide are highlighted. Release the Ctrl key. All rows will be highlighted. Then select Show/Hide, Hide Rows from the Test History window.

**Hide Columns.** To hide one column or many columns of test data, highlight the column/s and select Show/Hide, Hide Columns from the Test History window menu. This is useful when you have more columns than will display on the computer screen or you just want to see specific test results.

To select columns that are contiguous, highlight the first column, then press and hold the shift key on the keyboard, click on the last column you want to be included, release the shift key. All columns between will be highlighted. Then select Show/Hide, Hide Columns from the Test History window menu.

To select columns that are not contiguous highlight the first column, then press and hold the Ctrl key on the keyboard and click the next column to be highlighted. Continue until all columns you wish to hide are highlighted. Release the Ctrl key. All columns will be highlighted. Then select Show/Hide, Hide Columns from the Test History window.

**Show All Rows.** To show rows that have been previously hidden select Show/Hide, Show All Rows from the Test History window menu.

**Show All Columns.** To show columns that have been previously hidden select Show/Hide, Show All Columns from the Test History window menu.

## Options

**Change Test Location.** To change the test location of an asset, select Options, Change Test Location from the Test History window menu. The Change Test Location window opens. Select the desired test location from the drop down box and click **Save**.

# Test Selection

Test Selection is used to perform individual tests. If an automatic combination of tests is preferred the MCE Auto or EMAX Auto icons should be chosen from the toolbar. See MCE Auto or EMAX Auto on page 3-52. Highlight an asset on the Site Navigator and select Test Selection icon on the toolbar. The Test Selection window shown in

Figure 3-49 opens. Select the MCE or Emax tab and highlight the desired test. Verify the testing values are correct and click **Test**. Using the Test Selection window and testing is discussed in more detail in Chapter 5, MCE Testing, Chapter 6, EMAX Current Analysis, and Chapter 7, EMAX Power Analysis.
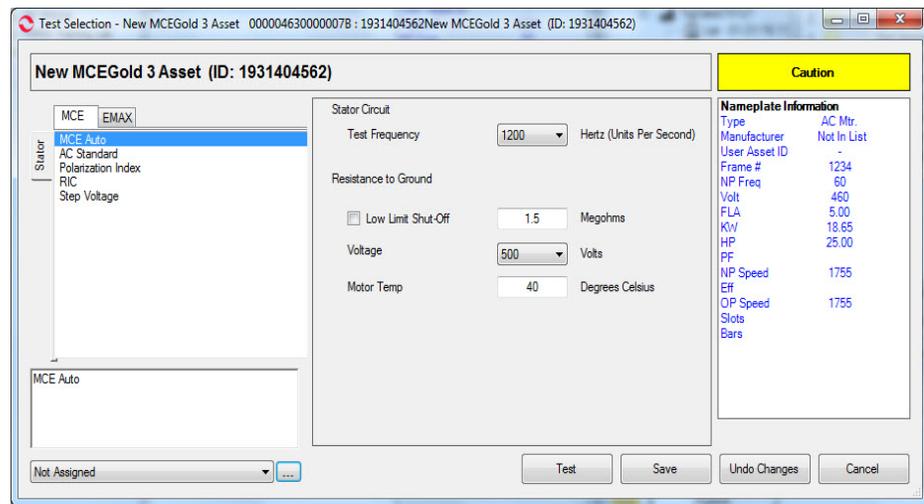
**Figure 3-49: Test Selection Window**

# Search

The Search function enables you to locate a specific asset in the Site Navigator. Selecting the Search icon   from the toolbar opens the Asset Search window shown in Figure 3-50. There are two types of search, simple or advanced search.

## Simple Search

If you know the name of the asset or folder, select the Asset/Segment Name option button and enter the name in the search textbox and click **Search.** The asset/folder will be listed in the Search window and highlighted on the Site Navigator. You may also search by User Asset ID, by selecting the User Asset ID option and typing the Asset ID in the textbox and click **Search**.
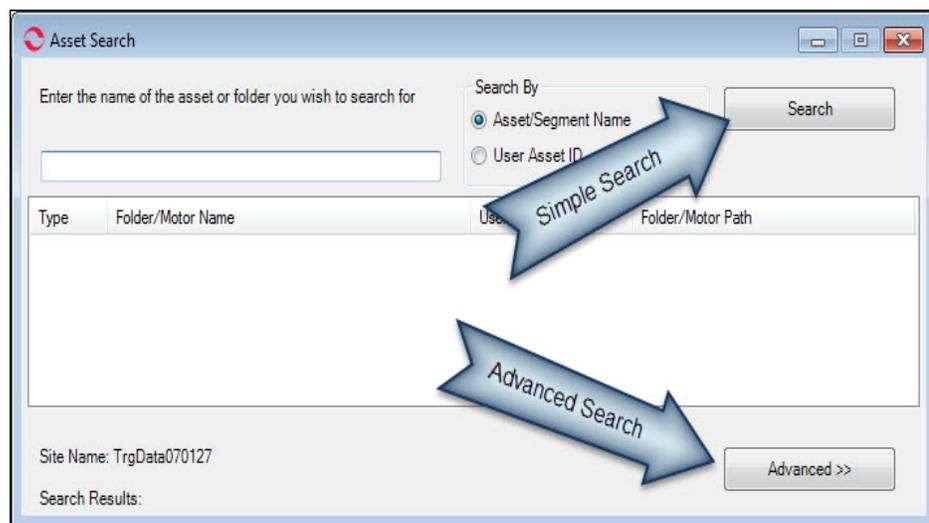


**Figure 3-50: Asset Search Window**

## Advanced Search

Advanced Search is an extensive program that searches the entire database to locate specific assets using the nameplate data and/or test results. You can use as many or as few of the search criteria as needed, but at least one criteria must be selected. Depending upon the criteria chosen, the results will be displayed as a single asset or a list of assets in a new window titled Search Results. From the Asset Search window, click the Advanced button. This opens the Advanced Search window shown in Figure 3 - 51.



**Figure 3-51: Advanced Search Window**

## Search Criteria

**Criticality** is assigned at the time the asset is setup.

**Asset Type** is a drop-down list box. You can select from the drop-down list or leave it blank. Click the down arrow and scroll through the list to select the asset type.

**Manufacturer** is a drop-down list box displaying the manufacturer list database. Click the down arrow and scroll through the list to select the manufacturer or type the first letter of the name and click the down arrow to go to that alphabetical section of the list.

**Serial Number, Model Number, and Frame Number** are text boxes. Type the motor identifier in the text box, matching spaces and dashes, but it is not necessary to match case.

**Voltage, Operating Speed, Full Load Amps, Horsepower, and Kilowatts** all have check boxes to indicate values that are less than (<), equal to (=), or greater than (>). You may select one or two, but not < and > together. If a box is checked, a value must be entered in the text boxes to the right of the check boxes.

**Asset Section** is a drop-down list box displaying the asset sections appropriate for the asset type chosen. A asset type selection must be made before selecting an asset section. If an asset type is not chosen, the asset section list will be empty.

**Condition Code** searches based on asset condition. A check mark in the box indicates the code is selected. Any combination of boxes is allowed.

**Test Type** is a drop-down list box displaying all of the test types. When the test type is selected, the upper right hand section of the window displays additional search criteria based on the test type. See Test Data information on this page.

**Date Section** contains three options:

> **Use date** is inactive until selected. Selecting Use Date activates the Tested, Not Tested and After functions.

> **Tested** will search for assets that have been tested after the date in the After text box. The date can be manually changed to the desired date by typing it in or using the drop down calendar.

> **Not Tested** will search for assets that have not been tested after the date in the After text box. The date can be manually changed to the desired date by typing it in or using the drop down calendar.

> **After** is the test date criteria chosen. It can be manually changed to the desired date by typing it in or using the drop down calendar

**Test Data** area is located in the upper right corner. The area is blank until a test type is selected, then the appropriate test data criteria are displayed. Figure 3-52 shows how the area would look if Power is selected as the test type. The check boxes indicate values that are less than (<), equal to (=), or greater than (>). You may select one or two, but not < and > together or all three. If a box is checked, a value must be entered in the text boxes to the right of the check boxes.



**Figure 3-52: Advanced Search Window**

**Search Buttons**

## Search

Search searches the entire database using the criteria selected. When completed, a list of assets matching the search criteria is displayed in a new window titled Search Results, shown in Figure 3-53. To locate a listed asset on the Site Navigator highlight it. To view the search criteria, you can use the scroll buttons or click the Show All button, which opens a new window displaying the search criteria.
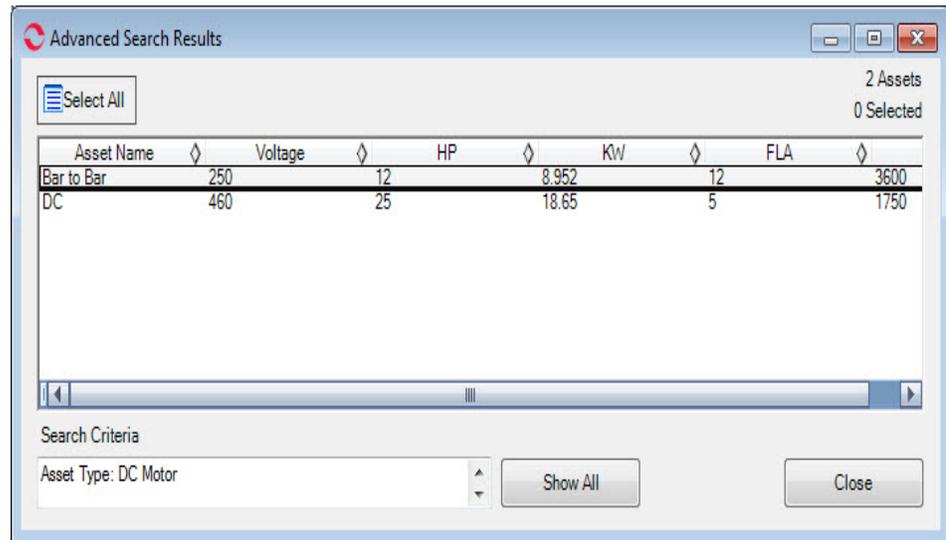


**Figure 3-53: Advanced Search Results Window**

## Clear Criteria

Clear Criteria removes all previously entered search criteria, so you may begin a new search using different criteria.

## Simple Search

The Simple Search button returns you to the initial window where you can search by name or scrolling through the asset list.

# WatchList

The WatchList window, shown in Figure 3-54, is one of four windows that open automatically when MCEGold is started. If it is closed you may re-open it by selecting the

WatchList icon [icon] on the toolbar.

The WatchList can be used for multiple purposes. For example, it can be a list of critical assets or a work list for the technician or both. The WatchList can have multiple user developed lists. The window consists of three sections, the upper left section displays the names of the lists, the lower left section gives the administrative details of the selected list, and the large section on the right displays the assets and selected details of the selected WatchList. The asset details are: condition code (represented by a color coded icon), Criticality, Name, Type, Last EMAX Test Date, Last MCE Test Date, Last Condition Change.
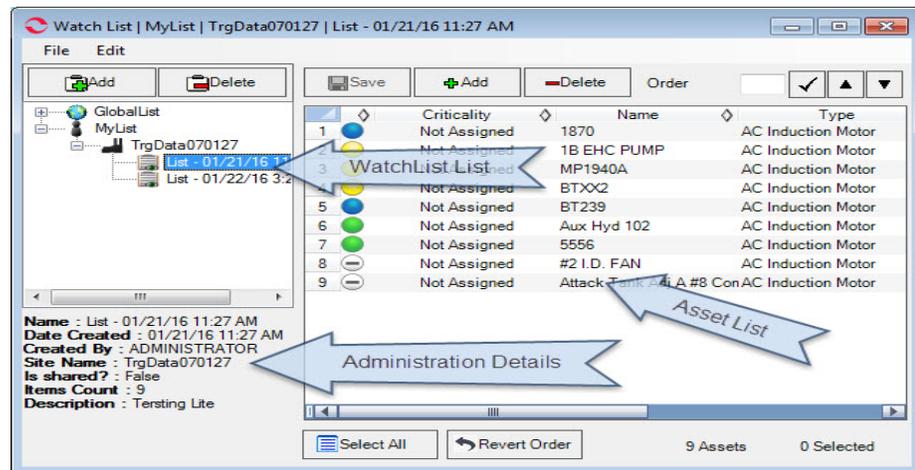
**Figure 3-54: WatchList**

## WatchList Menu

### File

**Refresh.** Using the Refresh function updates the WatchList window after changes have been made.

**Save.** The save function saves changes that have been made to the WatchList.

**Close.** The Close function closes the WatchList window.
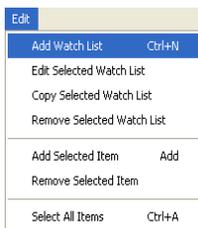
### Edit

**Add Watch List (Ctrl+N) .** The Add Watch List function creates a new WatchList this may also be accomplished by clicking the Add button. See the section titled Create a WatchList for more information.

**Edit Selected WatchList.** Edit Selected WatchList opens the WatchList Edit window which allows you to modify the name, change the shared function, and add or modify the description. When changes have been made, click **OK**. The changes will update automatically on the window, but you must save them (File, Save) before exiting the WatchList or MCEGold or the changes will be lost.

**Copy Selected WatchList.** To copy a WatchList select Edit, Copy Selected WatchList from the WatchList window menu. The WatchList Copy window shown in Figure 3-55 opens.
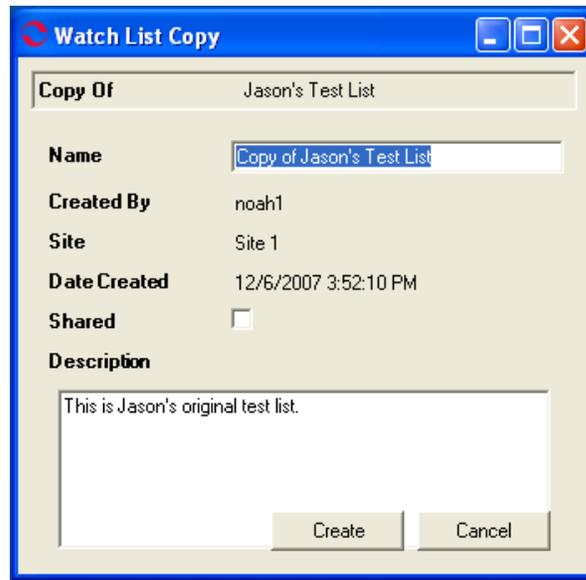
**Figure 3-55: WatchList Copy Window**

You may change the name, shared feature, and description. Then click **Create**. The new copied WatchList will automatically appear on the WatchList list.

**Delete Selected WatchList.** To completely delete a WatchList, select File, Delete Selected WatchList from the WatchList window menu. This may also be accomplished by using the Delete button [ 🗐 Delete ] . See the section titled Delete WatchList for more information.

**Add Selected Item.** To add a selected asset to a WatchList, select File, Add Selected Item from the WatchList window menu. See the section titled Add Asset to WatchList for more information. This may also be accomplished by clicking the Add button [ ➕ Add ] . See the section titled Add Asset to WatchList on page 3-50 for more information.

**Delete Selected Item.** To delete an asset from a WatchList, select File, Remove Selected Item from the WatchList window menu. See the section titled Delete Asset from WatchList on page 3-50 for more information.

**Select All Items (Ctrl+A).** To highlight all of the assets in a selected WatchList, highlight the WatchList name, select File, Select All Items from the WatchList window menu. All of the assets in the asset list will be highlighted.

## Create a WatchList

1.  If the WatchList window is not open, click the WatchList icon on the MCEGold Home window toolbar.

2.  In the WatchList window (upper left section), click [ 🗐 Add ] .

3. In the WatchList Create window shown in Figure 3-56, fill in the list name, check the Shared box if you wish others to be able to make changes to this list, and enter a description. All other information is automatically entered for you. Click **Create**.



**Figure 3-56: WatchList Create**

4. The list name will appear on the layout in the upper left section displaying WatchList names. The name will be preceded by an icon  representing a WatchList. The lower left section gives the administrative details of the list.

5. The asset list on the right side is blank. You are now ready to add assets to the new WatchList.

## Add Asset to WatchList

1. Highlight a WatchList from the list of name on the WatchList window.

2. Highlight a single or multiple assets on the Site Navigator window. You may also select assets from a list generated by the Site Condition window.

3. Click  on the asset section of the WatchList window. The asset's information is added to the WatchList.

4. Click Save  on the asset section of the WatchList to save the additions to the WatchList.

## Delete WatchList

1. Highlight a WatchList in the WatchList section (upper left).

2. Click the **Delete** button, , found in the upper left section.

3. The Confirm Delete window opens. Verify the correct WatchList is being deleted and click **Yes**. The list will be removed immediately.

## Delete Asset From WatchList

1. Highlight an asset on the asset section (right side) of the WatchList window.

2. Click the **Delete** button, , found in asset section on the right side of the WatchList window. This deletes the highlighted asset from the WatchList.

3.   Click **Save** ⊞ Save to save the changes made to the asset list.

## Asset List Section

Selected information is displayed for the assets in a WatchList. This information is: Condition Code (represented by a color coded icon) Criticality, Name, Type, Last EMAX Test Date, Last MCE Test Date, Last Condition Change.

**Re-ordering the List.** When a WatchList is created there is an order number associated with each asset in the list. The order number is located in the first column of the list. It is possible to change the order the assets appear on the list. The original order number is displayed to the right of the **Delete** button and does not change when the asset is moved to a different place in the list.

*To move the asset to another location on the list*, highlight the asset to be moved, enter the desired order number in the text box located just above the list, and click the **Change** button ✓.

*To move an asset up or down one line at a time*, highlight the asset to be moved, and use the **Up** button ▲ or **Down** button ▼.

See Figure 3-57 for the order number before re-ordering the list. Figure 3-58 shows the order number after re-ordering.



**Figure 3-57: Asset List Order Number Before Re-order**



**Figure 3-58: Asset Order Number After Re-order**

# MCE Auto

MCE Auto performs a Standard test followed by a Polarization Index Test, then saves the test data and produces a Fault Zone Report. Selecting the MCE Auto icon [icon] by-passes the Test Selection window and starts the Standard test using the previously saved test setup settings.

> Note: If you need to change the test setup settings, select the Test Selection icon, the Test Selection window opens, make your changes, and select MCE Auto on the Test Selection window.

### MCE Auto Test

1.  Highlight an asset on the Site Navigator.

2.  Click the MCE Auto icon [icon] on the toolbar.

3.  The testing begins automatically and ends with the display of the Fault Zone Report.

There is a full discussion of the MCE Auto test and its windows in Chapter 5, MCE.

# EMAX Auto

EMAX Auto automatically starts the Rotor Evaluation tests, followed by the Eccentricity, Power, and Demod tests. At the completion of the tests, the test results are saved, and the Fault Zone Report is displayed.

Selecting the EMAX Auto icon [icon] by-passes the Test Selection window and starts the Rotor Evaluation test using the previously saved test setup settings.

> Note: If you need to change the test setup settings, select the Test Selection icon, the Test Selection window opens, make your changes, and select EMAX Auto on the Test Selection window.

### EMAX Auto Test

1.  Highlight an asset on the Site Navigator.

2.  Click the EMAX Auto icon [icon] on the toolbar.

3.  The testing begins automatically and ends with the display of the Fault Zone Report.

# Fault Zones

Selecting the Fault Zone icon [icon] from the toolbar opens the Fault Zone Report for the selected Asset. You must have an asset highlighted on the Site Navigator. See Figure 3-59.
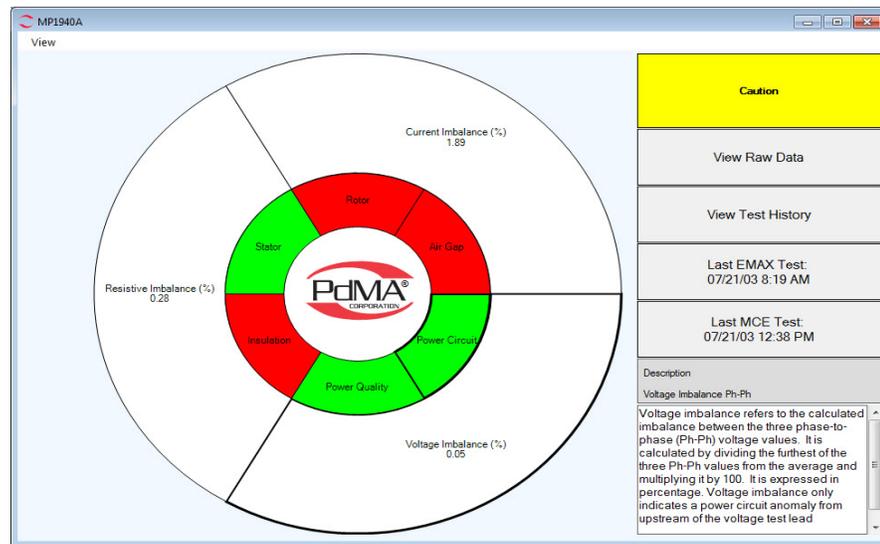
**Figure 3-59: Fault Zone Report Window**

The Fault Zone window contains an optical presentation of the six fault Zones in the center and areas on the right hand side for the Condition Code button, View Raw Data button, View Test History button, the date of the last EMAX test, Date of the last MCE test, and a description of the item highlighted on the optical chart.

**Condition Code.** Click on the Condition Code button to open the Condition Code Update window. From this window you can change the condition code by clicking on the code choices on the left. The selected code will appear in the Selected Condition Code box. Click Update Condition to change the code and exit the window or Cancel to exit the window without making any changes.

**View Raw Data.** Click on the View Raw Data button to open the Data History window.

**View Test History.** Click on the View Test History to open the Test History window.

**Last Emax Test.** Click on the Last EMAX Test button to open the Test History window displaying the EMAX test results.

**Last MCE Test.** Click on the Last MCE Test button to open the Test History window displaying the MCE test results.

**Description.** The Description area changes as values on the optical chart are highlighted. No changes can be made to the descriptions.

# Message Center

The Message Center window, shown in Figure 3-60, is one of four windows that open automatically when MCEGold starts. It is located across the lower part of the MCEGold Home window. When it opens initially the right hand pane is blank. If the Message Center

has been closed, it can be re-opened by selecting the Message icon [icon] on the toolbar.

In Message Center you can enter, view, edit, and delete notes for one asset or a list of assets.

Notes are automatically generated when a condition is assigned or changed or when the warning levels are changed. Other notes are entered by the user.

If an asset has notes associated with it, they will be automatically listed whenever the asset name is highlighted on Site Navigator.
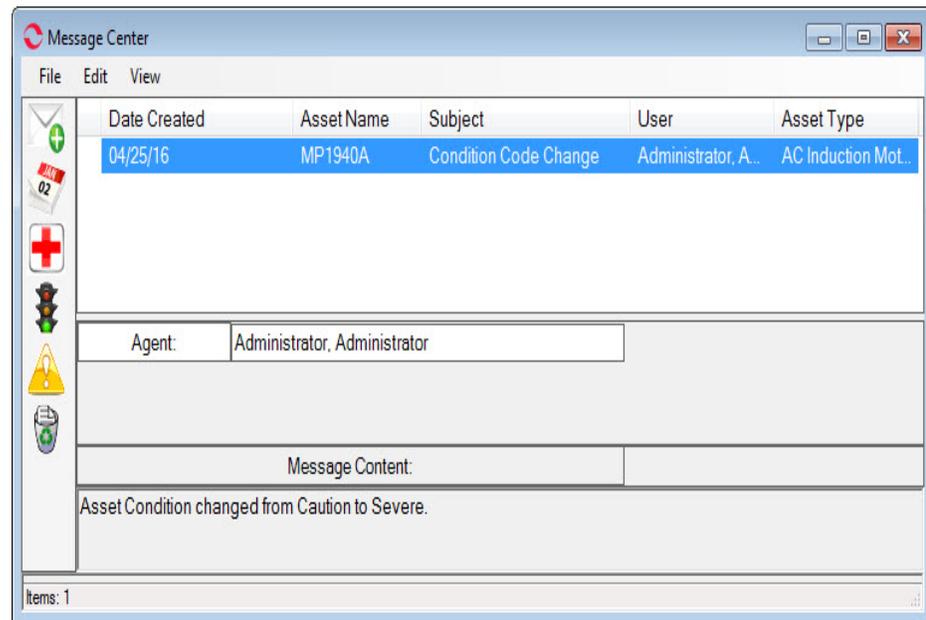


**Figure 3-60: Message Center**

## Message Center Menu
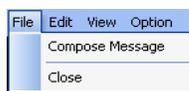
### File



**Compose Message.** An asset must be highlighted on the Site Navigator to compose a note in the Message Center. Select File, Compose Message from the Message Center window menu. The Compose Message window opens. The window and a discussion are shown on page 3-55.

**Close.** Selecting File, Close from the Message center window menu closes the Message Center. You can re-open it by clicking the Message icon on the MCEGold Home window toolbar.

### Edit



The Edit menu displays only Delete Message unless the Trash icon is selected. If the Trash icon is selected, a list of deleted notes waiting for disposal appears and the Edit menu displays the Restore Message and Delete Message sub-menu functions. See Trash on page 3-57 for information on deleting or restoring messages from the trash.

**Delete Message.** To delete a message highlight the message in the Message Center window and select Edit, Delete Message from the Message Center menu. You will be asked to confirm you wish to send the message to the trash can. Click **Yes**.The message will be deleted and held in the Trash.
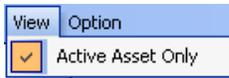
## View

**Active Asset Only.** Active Asset Only causes the Message Center to provide information only for the asset highlighted on the Site Navigator when Asset diagnostics is selected. If it is unchecked a list of all assets in the database with notes will be generated when Asset Diagnostics is selected. The check mark acts as a toggle to view either active/selected asset or all assets with notes.
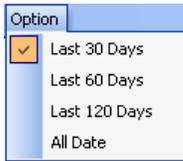
## Option

The Option function allows you to see messages created in a specific period of time, last 30, 60 or 120 days, or all dates. A check mark indicates the selection.

## View Notes

1.  Select Message icon [icon] on the toolbar, if the Message Center window is not open.

2.  Verify that Active Asset Only on the View menu of Message Center window is in the checked or unchecked position (which ever is desired).

3.  Select the note date range from the Option menu of the Message Center window.

4.  Click the Asset Diagnostic icon [icon] . A list of assets will be compiled depending on the status of the Active Asset Only and date range selections from the menu.

    Note: Unless you have Active Asset Only checked in the View menu, when Asset Diagnostic is clicked it will display a list of all the assets in the Site Navigator that have notes. If Asset Only is checked, then only the asset highlighted on Site Navigator is displayed.

5.  To view the notes associated with an asset, highlight the line for the asset. The notes are displayed in the section below the list.

## Compose

Using Compose allows you to add a note or attach files to a selected asset's record. Compose can be reached by selecting File, Compose Message on the Message Center menu or clicking the Compose icon [icon] .
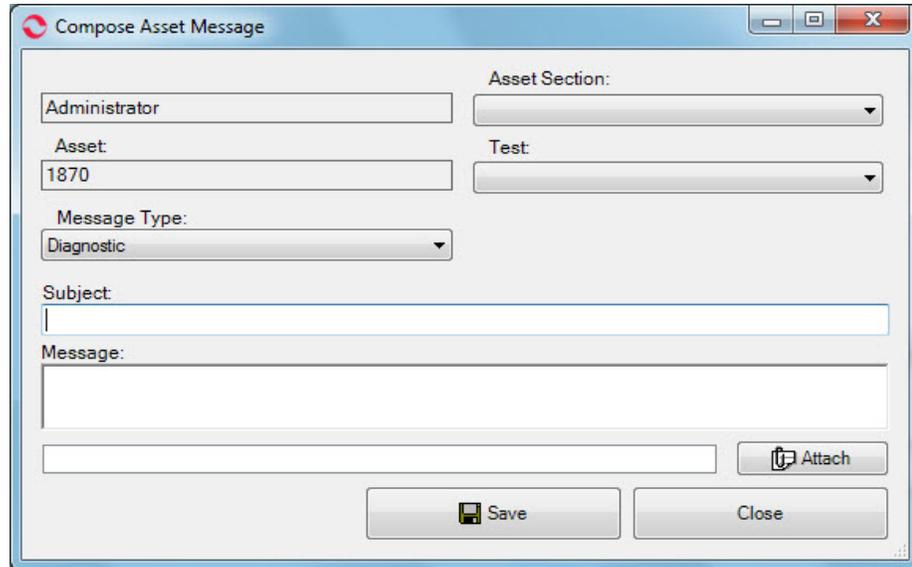


**Figure 3-61: Compose Asset Message**

## Compose Message

1.  Highlight an asset on the Site Navigator or in the WatchList.

2.  Select File, Compose Message from the Message Center window menu or click the Compose icon [icon] .

3.  The Compose Asset Message window, Figure 3-61, opens.

4.  The User and Asset names are automatically entered by MCEGold.

5.  Enter a subject (required field).

6.  Message Type, Asset Section, and Test text boxes are drop-down lists. They are not required fields.

7.  Type your message in the blank area at the bottom of the window. A message is required.

8.  To attach a file or document. click the **Attach** button.

9.  The Open window opens. Locate the file and highlight it so that the name displays in the File Name textbox and click **Open**.

10. The file name is displayed in the Attachments area of the window.

11. Click the **Save** button.

12. On the Message Center window, a paperclip to the left of the message line indicates a file or files are attached to the note.

## View Attachment

1. Highlight the line of the message you wish to view.

2. Select the attached file from the drop-down list in the Attachment File textbox.

3. Select either the Open it or Save it to Disk option and click **OK**.

## Scheduler

See Appendix B for a complete discussion of the scheduler function.

## Asset Diagnostic

Click the Asset Diagnostic icon  in the left panel to display the desired asset or a list of all assets. Unless you have Active Asset Only checked in the View menu, when Asset Diagnostic is clicked it will display a list of all the assets in the Site Navigator. If Asset Only is checked, then only the notes for the asset highlighted in Site Navigator is displayed.

## Asset Condition

A note is automatically generated by MCEGold when the condition code of an asset is changed. To view a list of the assets that have had a condition code change, click the Asset Condition icon  , then highlight the asset from the displayed list to view the associated notes.

## Asset Warning Levels

A note is automatically generated by MCEGold when the warning levels of an asset are changed.To view a list of the assets that have had changes to their warning levels, click the Asset Warning Levels icon  , then highlight the asset from the displayed list to view the associated notes.

## Trash

Clicking the Trash icon  displays a list of deleted notes.

**Restore Message.** You can restore a message to its original location by highlighting the note and selecting Edit, Restore Message from the Message Center window menu.

**Delete Message .** To permanently delete a message, select Edit, Delete Message from the Message Center window menu. This will permanently delete the message. You will be asked to verify that you wish to continue. Click **Yes** and the message disappears.

Note: The Edit menu displays Delete Message when the message is highlighted. If the Trash icon is clicked, a list of deleted notes appears and the Edit menu contains Restore Message and Delete Message submenu functions.

# Export File

Export File is used to create a file so that it can be sent to another computer electronically.

1. Highlight a single asset in Site Navigator.

2. Select the Export icon    on the toolbar.

3. In the Create Export File window, Figure 3-62, select a location to store your file.
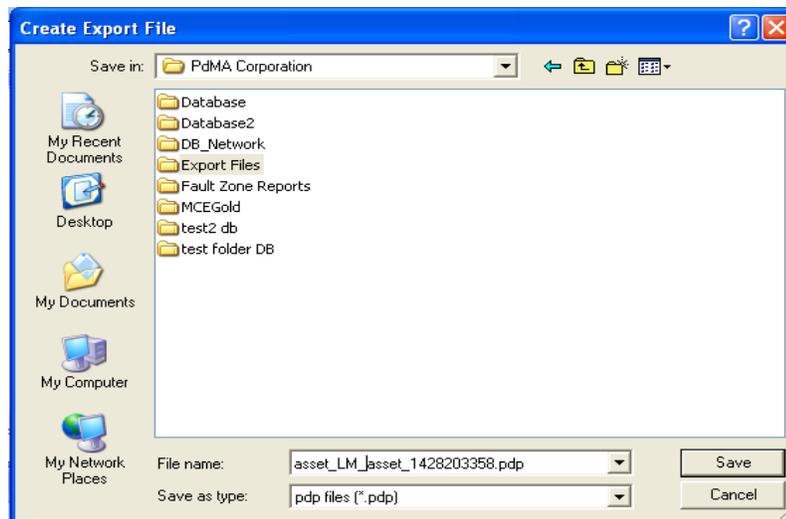


**Figure 3-62: Create Export File**

4. Change the File Name if desired. The file extension is .pdp. **Do not change the extension.**

5. Click **Save**.

6. Click **OK, w**hen the Single Asset Export message box informs you it is complete.

7. The file is now ready to send as an attachment or to be imported by another MCEGold tester.

# Report

Report is reached by highlighting an asset on the Site Navigator and selecting the Report icon    on the toolbar. The Report window shown in Figure 3-63 opens. There are seven reports available: AC EMAX Summary, Asset Condition Code, Asset Inventory, MCE Summary, Message History, PI/DA Summary, and Detailed. An additional option is

Word Report Templates. When a report type is selected its description will display in the Report Type Description area directly below Report Name. Not all of the options on the Report Selection window are available for every report. If an option is not available it will appear dimmed.
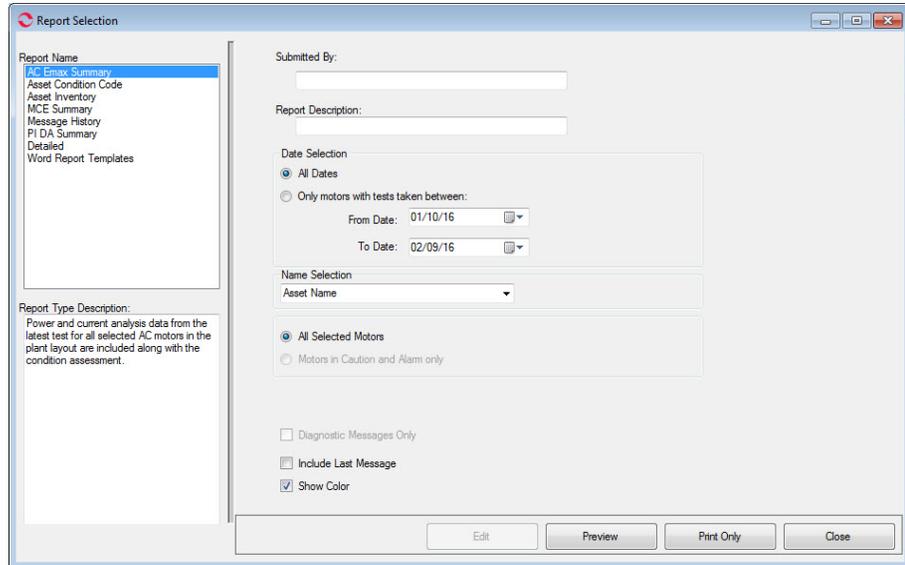


**Figure 3-63: Report Selection Window**

## AC E MAX Summary

1.  Highlight one or multiple assets on the Site Navigator.

2.  Select the Report icon  from the MCEGold Home window toolbar.

3.  Select AC E MAX Summary from the Report Name list, if not already highlighted. This is the default selection.

4.  Fill in the Submitted By and Report Description text boxes.

5.  Select the date. The choices will produce a report showing test data for All Dates or a selected date range depending on which radio button is selected. The default is All Dates.

    To select a date range, select the *Only motors with tests taken between* option button. Then either manually enter the date or use the drop-down calendar to select a date in the From Date and To Date text boxes.

6.  Name Selection will be used in future versions.

7.  The All Selected Motors option is automatically selected. For MCE and PI DA Summary reports Motors in Caution and Alarm Only may be selected.

8.  Include Last Message in not selected by default, click on the check box to select this option if desired.

9.  Show Color is selected by default and causes the condition code color to appear on the report. Uncheck the box to deselect this option.

10. Click **Preview** to preview the report on the screen before printing or **Print Only** to print the report to your default printer. Figure 3-64 shows a completed report.

11. If there is no data for the asset, a message window opens indicating there is no data for the selected asset.

12. Close the Report Selection window using the **Close** button.

### AC EMAX Summary Report

Submitted By:                          Description:                          Date:

| Asset Name | Power Analysis | Current Analysis | Voltage | | | | Current | | | PF | Eff. | Impedance Imbalance | Delta DB | Condition Code |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Avg. | Imbal. | CF | THD | Avg. | %FLA | Imbal. | | | | | |
| Blower #5 | 8/26/2002 | 8/26/2002 | 466.22 | .15 | 1.43 | 1.70 | 12.23 | 143.91 | 1.89 | .91 | 86.03 | 2.58 | 72.40 | Severe |
| PF-7.1A | 8/26/2002 | 8/26/2002 | 473.90 | .08 | 1.43 | 1.57 | 25.95 | 77.93 | 5.20 | .68 | 79.19 | 7.63 | 61.92 | Observe |
| PF-7.1B | 8/26/2002 | 8/26/2002 | 469.45 | .09 | 1.43 | 1.49 | 26.59 | 79.84 | 5.10 | .71 | 79.19 | 9.03 | 71.59 | Observe |
| PF-7.1C | 8/26/2002 | 8/26/2002 | 471.34 | .12 | 1.43 | 1.56 | 26.18 | 78.62 | 4.15 | .72 | 79.19 | 7.11 | 67.26 | Observe |
| PF-7.1D | 8/26/2002 | 8/26/2002 | 472.17 | .23 | 1.43 | 1.59 | 26.53 | 79.66 | 5.07 | .71 | 79.19 | 9.09 | 61.91 | Observe |
| PF-7.1E | 8/26/2002 | 8/26/2002 | 474.12 | .12 | 1.43 | 1.59 | 27.15 | 81.52 | 5.70 | .69 | 79.19 | 7.81 | 63.98 | Observe |
| PF-8.6A | 8/26/2002 | 8/26/2002 | 472.00 | .14 | 1.43 | 1.62 | 16.56 | 82.82 | 5.52 | .74 | 79.11 | 7.90 | 53.67 | Caution |
| PF-8.6B | 8/26/2002 | 8/26/2002 | 472.08 | .23 | 1.43 | 1.54 | 16.59 | 82.94 | 4.06 | .74 | 79.11 | 5.82 | 61.44 | Caution |

**Figure 3-64: AC EMAX Summary Report - Preview**

## Asset Condition Code

1.  Highlight one or multiple assets on the Site Navigator

2.  Select the Report icon [icon] from the MCEGold Home window toolbar.

3.  Select Asset Condition Code from the Report Name list.

4.  Fill in the Submitted By and Report Description text boxes.

5.  All Dates is the default Date Selection and cannot be changed.

6.  Name Selection will be used in future versions.

7.  All Selected Motors is the default and cannot be changed.

8.  Include Last Message is not selected by default, click on the check box to select this option if desired.

9.  Show Color is selected by default and causes the condition code color to appear on the report. Uncheck the box to deselect this option.

10. Click **Preview** to preview the report on the screen before printing or **Print Only** to print the report to your default printer. Figure 3-65 shows a completed report.

11. If there is no data for the asset, a message window opens indicating there is no data for the selected asset.

12. Close the Report Selection window using the **Close** button.



**Figure 3-65: Asset Condition Code Report - Preview**

## Asset Inventory

1. Highlight one or multiple assets on the Site Navigator

2. Select the Report icon [icon] from the MCEGold Home window toolbar.

3. Select Asset Inventory from the Report Name list.

4. Fill in the Submitted By and Report Description text boxes.

5. All Dates is the default Date Selection and cannot be changed.

6. Name Selection will be used in future versions.

7. All Selected Motors is the default and cannot be changed.

8. Include Last Message is not selected by default, click on the check box to select this option if desired.

9. Show Color is selected by default and causes the condition code color to appear on the report. Uncheck the box to deselect this option.

10. Click **Preview** to preview the report on the screen before printing or **Print Only** to print the report to your default printer. Figure 3-66 shows a completed report.

11. If there is no data for the asset, a message window opens indicating there is no data for the selected asset.

12. Close the Report Selection window using the **Close** button.

### Asset Inventory Report

Submitted By:                    Description:                    Date:

| Asset ID | Condition | Voltage | Horsepower | FLA | Speed |
|----------|-----------|---------|------------|-----|-------|
| **Location Name:** TriBay\Public Aquarium\East Filter Yard | | | | | |
| Blower #4 | Normal | 480 | 7.50 | 8.5 | 3520 |
| Blower #5 | Severe | 480 | 7.50 | 8.5 | 3520 |
| PF-7.1A | Observe | 480 | 25.00 | 33.3 | 1180 |
| PF-7.1B | Observe | 480 | 25.00 | 33.3 | 1180 |
| PF-7.1C | Observe | 480 | 25.00 | 33.3 | 1180 |
| PF-7.1D | Observe | 480 | 25.00 | 33.3 | 1180 |
| PF-7.1E | Observe | 480 | 25.00 | 33.3 | 1180 |
| PF-7.1F | Normal | 480 | 25.00 | 33.3 | 1180 |
| PF-8.6A | Caution | 480 | 15.00 | 20.0 | 1175 |
| PF-8.6B | Caution | 480 | 15.00 | 20.0 | 1175 |

**Figure 3-66: Asset Inventory Report - Preview**

## MCE Summary

1. Highlight one or multiple assets on the Site Navigator

2. Select the Report icon [icon] from the MCEGold Home window toolbar.

3. Select MCE Summary from the Report Name list.

4. Fill in the Submitted By and Report Description text boxes.

5. Select date. The choices are to produce a report showing test data for all dates or select a date range. The default is All Dates.

   To select a date range, select the *Only motors with tests taken between* option button. Then either manually enter the date or use the drop-down calendar to select a date in the From Date and To Date text boxes.

6. Name Selection will be used in future versions.

7. All Selected Motors option is the default. Select *Motors in Caution and Alarm only* if that option is desired.

8. Include Last Message is not selected by default, click on the check box to select this option if desired.

9. Show Color is selected by default and causes the condition code color to appear on the report. Uncheck the box to deselect this option.

10. Click **Preview** to preview the report on the screen before printing or **Print Only** to print the report to your default printer. Figure 3-67 shows a completed report.

11. If there is no data for the asset, a message window opens indicating there is no data for the selected asset.

12. Close the Report Selection window using the **Close** button.



**MCE Summary Report**

Submitted By:                              Description:                              Date:

| Test Date | Test Voltage | Resistance to Ground (Alert Alarm) | Capacitance to Ground (Alert Alarm) | Resistance or Resistive Imbalance (Alert Alarm) | Inductance or Inductive Imbalance (Alert Alarm) | Asset Condition |
|---|---|---|---|---|---|---|
| **Asset:** | Blower #4 | | | | | |
| | **Asset Section:** | Stator | | | | |
| 10/11/2007 | 500 Volts | 47938.00 Mohms | 2500 pF | 29.06 | 78.37 | Normal |
| **Asset:** | Blower #5 | | | | | |
| | **Asset Section:** | Stator | | | | |
| 8/26/2002 12:28:16 | 500 Volts | 9.30 Mohms | 4000 pF | .89 | 2.48 | Severe |
| **Asset:** | PF-7.1A | | | | | |
| | **Asset Section:** | Stator | | | | |
| 8/26/2002 10:24:51 | 500 Volts | 32800.00 Mohms | 15500 pF | .09 | 6.32 | Observe |
| **Asset:** | PF-7.1B | | | | | |
| | **Asset Section:** | Stator | | | | |
| 8/26/2002 10:33:57 | 500 Volts | 26000.00 Mohms | 15250 pF | .17 | 4.37 | Observe |
| **Asset:** | PF-7.1C | | | | | |
| | | Stator | | | | |

**Figure 3-67: MCE Summary Report - Preview**

## Message History

1. Highlight one or multiple assets on the Site Navigator

2. Select the Report icon [icon] from the MCEGold Home window toolbar.

3. Select Message History from the Report Name list.

4. Fill in the Submitted By and Report Description text boxes.

5. Select date. The choices are to produce a report showing messages for all dates or select a date range. The default is All Dates.

   To select a date range, select the *Only motors with tests taken between* option button. Then either enter the date or use the drop-down calendar to select a date in the From Date and To Date text boxes.

6. Name Selection will be used in future versions.

7. All Selected Motors option is the default and cannot be changed.

8.  Diagnostic Messages Only is unchecked by default. Check the box to select the option if desired.

9.  Show Color is selected by default and causes the condition code color to appear on the report. Uncheck the box to deselect this option.

10. Click **Preview** to preview the report on the screen before printing or **Print Only** to print the report to your default printer. Figure 3-68 shows a completed report.

11. If there is no data for the asset, a message window opens indicating there is no data for the selected asset.

12. Close the Report Selection window using the **Close** button.



**Figure 3-68: Message History Report - Preview**

## PI/DA Summary

1.  Highlight one or multiple assets on the Site Navigator

2.  Select the Report icon [icon] from the MCEGold Home window toolbar.

3.  Select PI/DA Summary from the Report Name list.

4.  Fill in the Submitted By and Report Description text boxes.

5.  Select date. The choices are to produce a report for all dates or select a date range. The default is All Dates.

    To select a date range, select the *Only motors with tests taken between* option button. Then either enter the date or use the drop-down calendar to select a date in the From Date and To Date text boxes.

6.   Name Selection will be used in future versions.

7.   All Selected Motors option is the default. Select *Motors in Caution and Alarm only* if that function is desired.

8.   Include Last Message is not selected by default, click on the check box to select this option if desired.

9.   Show Color is selected by default and causes the condition code color to appear on the report. Uncheck the box to deselect this option.

10.  Click **Preview** to preview the report on the screen before printing or **Print Only** to print the report to your default printer. Figure 3-69 shows a completed report.

11.  If there is no data for the asset, a message window opens indicating there is no data for the selected asset.

12.  Close the Report Selection window using the **Close** button.



**Polarization Index and Dielectric Absorption Summary Report**

| Submitted By: | | Description: | | | | Date: | |
|---|---|---|---|---|---|---|---|
| | PI Baseline Date | Baseline Voltage | Last Test Date | PI (Alert Alarm) | DA (Alert Alarm) | Duration | Test Voltage |
| **Asset:** DC69 Hatfield 80527 | | | | | | | |
| **Asset Section:** Stator | | | | | | | |
| | 11/27/2005 8:13:59 | 500 Volts | 10/29/2006 9:48:18 AM | N/A | 1.25 | 220 Seconds | 500 Volts |
| **Asset:** LM1 | | | | | | | |
| **Asset Section:** Stator | | | | | | | |
| | None | None | 10/29/2006 9:48:18 AM | N/A | 1.25 | 220 Seconds | 500 Volts |
| **Asset:** Test Asset | | | | | | | |
| **Asset Section:** Stator | | | | | | | |
| | None | None | 10/29/2006 9:48:18 AM | N/A | 1.25 | 220 Seconds | 500 Volts |

**Figure 3-69: PI/DA Summary Report - Preview**

## Detailed Report

The Detailed Report window allows you to create a customized report of one or two pages for one or multiple assets. It is possible to drag and drop test results that are open on the desktop into the report, copy and paste test history results, import files, view and/or print previous saved reports.

### Create New Detailed Report - Single Asset

To create a new detailed report versus using a saved template.

1.   Highlight an asset on Site Navigator.

2.   Select the Report icon [icon] on the MCEGold Home window toolbar.

3.   Select Detailed from the Report Name list. The right side of the Report Selection window changes to display selections for the detailed report. See Figure 3 - 70.
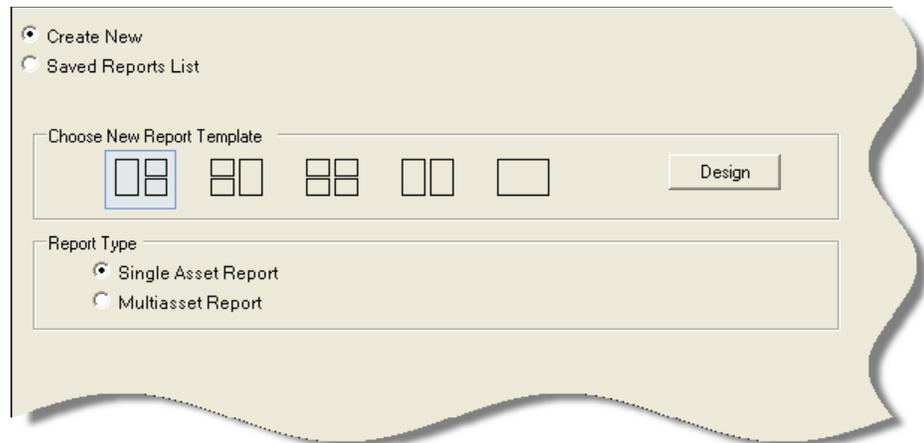
**Figure 3-70: Detailed Report - Report Selection Window**

4.   Select Create New option button (default).

5.   In the Choose New Report Template section, highlight the desired layout.

6.   The Report Type defaults to Single Asset Report. If you are preparing a multiple asset report see the section titled Multiple Asset Report on page 3-64.

7.   Click **Design**.

8.   The Report Template window opens in the layout selected in step 5. The selected asset information is automatically entered. See Figure 3 - 71.
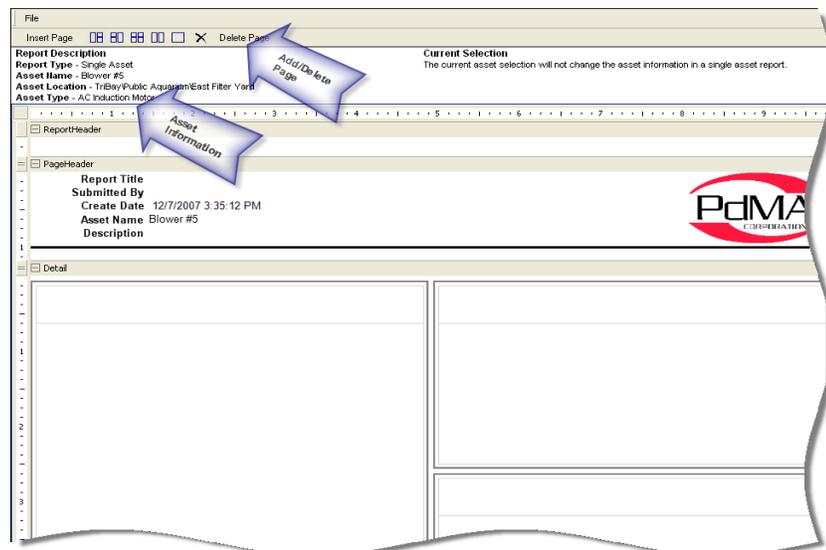


**Figure 3-71: Report Template Window**

## Multiple Page Option

1.  A second page may be added by clicking on the icon representing the desired layout. The icons are located to the right of Insert Page and directly below the menu on the report window. See Figure 3-71.

    You can toggle between page one and two by clicking the tabs at the lower left of the window. See Figure 3-72. There is a maximum of two pages per report.

    To *delete a page*, select the page tab that you wish to delete and click Delete Page, which is located directly to the right of Insert Page and below the menu.
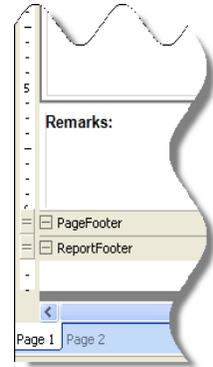


**Figure 3-72: Two-page Detailed Report Tabs**

2.  The section below the Insert Page area contains the Report Description information about the report and the asset. It is automatically generated by MCEGold and cannot be modified.

## Page Header

The page header default information is Report Title, Submitted By, Create Date, Asset Name, and Description. Any of these may be modified using the Edit-Header function located along the right side of the window. If the Edit Header area is not visible, click anywhere in the Report Header or Page Header sections.

1.  Click on any of the titles. A box displays around the area to be modified and the Edit-Header window opens to the right of the report. See figure 3 - 73.
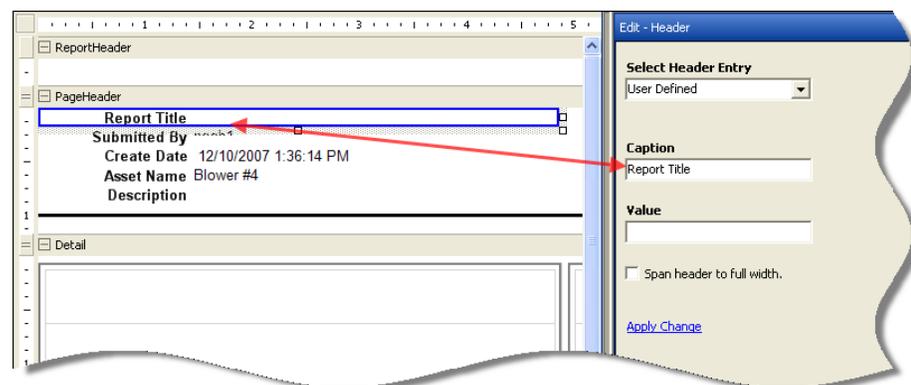


**Figure 3-73: Detailed Report Window - Edit Header**

2.  Select the Header Entry from the drop-down list under Select Header Entry. See Figure 3-74.

    Header Entry List selections and their descriptions are:

*Nothing* causes a blank area to display in the header.

*User Defined* allows you to enter a user defined title by typing it in the Caption text box and entering text in the Value box. See Figure 3-73.

*Create Date* automatically enters the current date and time.

*Submitted By* automatically enters the name of the person generating the report.

*Asset Name* automatically enters the name of the asset.

*User Asset ID a*llows you to enter a user defined asset ID by typing it in the Value box.

*Report Title* allows you to enter a user defined title by typing it in the Value box.

*Asset Location* automatically enters the location of the asset.

*Asset Condition* automatically enters the condition of the asset.
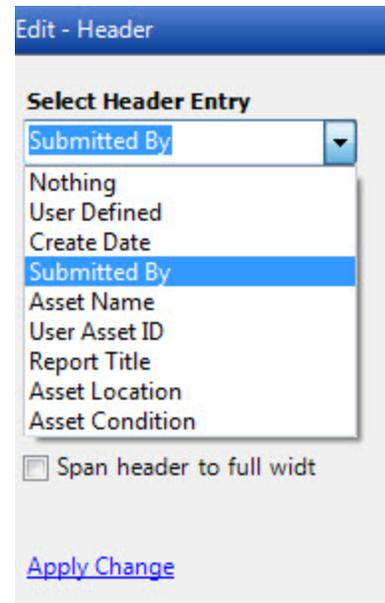
**Figure 3-74: Detailed Report Window - Select Header Entry**

*Span Header to full width* causes the text box to go across the entire width of the report header. A check mark indicates the option is selected. Place or remove the check mark and click **Apply Change**.

**Note:** There are four additional text boxes in the header areas. They are located on the right hand side in the header area to the left of the logo. They do not become apparent until the cursor is placed there and clicked.

3.  After selecting and entering the header information, click Apply Change to display the new or modified headers and text.

4.  Repeat steps 1 - 3 until you have completed setting up the page header area.

## Logo Area

The logo area can also be modified with a user defined choice.

1.  Click on the logo and the Select Type window opens.

2. Select Edit - Image (located at the bottom of the window). The Edit - Image pane shown in Figure 3-75 opens.

3. To insert an image of your choice, select the *From File* option, then click **Insert Picture**. Browse for the location of the picture that you wish to insert into the logo area. Highlight it so that the name appears in the File name text box. Click **Open**. The new image will appear in the logo area.
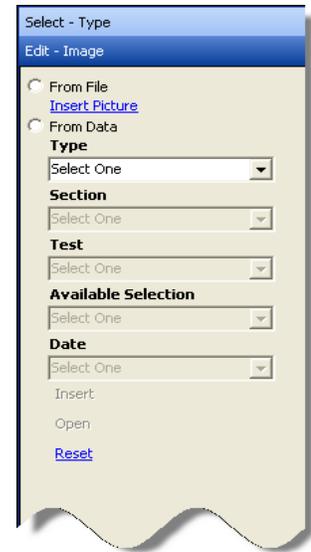
**Figure 3-75: Detailed Report - Edit-Image Window**

4. You may insert data files in the logo area by selecting the *From Data* option. Make a selection from the Type drop-down list. The choices and descriptions are:

   If you select *Nameplate Information*, you can insert it into the logo area by clicking **Insert**. To view it without inserting it click **Open**.

   If you select *Graph*, you must then select the Section, Test, Available Selection, and Date from the drop-down lists before clicking **Insert.** To view it without inserting it click **Open**.

   If you select *Test History*, you must then select the Section and Test from the drop-down lists before clicking **Insert**. To view it without inserting it click **Open**.

5. *Reset* removes the selections from the drop-down lists and returns you to the From File option.

6. Edit - Image Properties allows you to stretch, zoom, or clip the inserted image.

## Detail Area

The main area of the Detailed Report is the detail area. It is configured according to the layout selected.

1. To add information to the detail area, click the area to highlight it. The Select-Type section opens on the right side of the window. Select the desired option in the Select Type window shown in Figure 3-76.

**Figure 3-76: Detailed Report - Select - Type Window**

*Remove Current Selection* clears the highlighted area on the report.

*Data/Picture* (default value) allows you to insert test results or a picture. See step 2 of the Logo Area section on page 3-68.

*Text Box* allows you to use the area for comments. Select Text Box and Edit - Comment selection bar located across the bottom of the window. A word processing window opens. Type your comments. They appear in the highlighted area on the report.

*Last Diagnostic Message* inserts the last message in the selected area of the Detailed Report. Select this option and Insert Last Message.

2.  Depending on the type of information inserted into the detail area, some areas may have asset information and a place for comments at the top of the area. To add or change information in this area, select Edit - Comment and make the changes. See Figure 3-77.
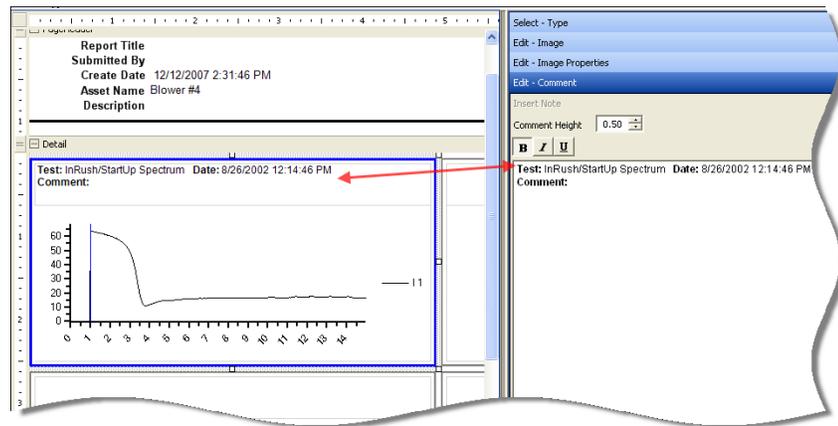


**Figure 3-77: Detailed Report - Edit Comments Window**

3.  When the report is complete you may save it by selecting Save Layout, or Save Layout As from the File menu. See Detailed Report File Menu information following this section.
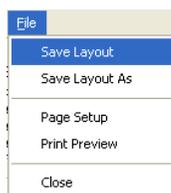
## Detailed Report File Menu



When the report is complete use the File menu to save or print.

**Save Layout.** Selecting Save Layout opens the Save Report as Template window. See Figure 3-78. Enter a name in the Save As textbox. Click the Set As Default check box if the layout is to be used as a template in the future. Enter a description. Click **Save**.
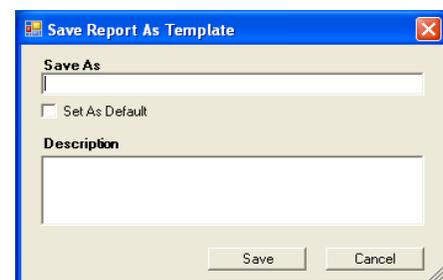


**Figure 3-78: Save Report as Template Window**

The Detailed Report remains open. Select File, Close to close the window. You are returned to the Report Selection window, which is displaying the Saved Report Lists.

In the future, when the Saved Report List option is chosen on the Report Selection window, the template will be listed. See Saved Reports List on this page.

**Save Layout As.** Selecting Save Layout As opens the Save Report as Template window. Enter a name in the Save As textbox. Click the Set As Default check box if the layout is to be used as a template in the future. Enter a description. Click **Save**.

When the Saved Report List option is chosen on the Report Selection window, the template will be listed. Select Template (menu) and desired function or right-click the line and get the same choices. See Saved Reports List on this page.

**Page Setup.** Selecting the Page Setup function opens the Report Settings window. In this window you can adjust the looks of the printed page.

**Print Preview.** Print Preview displays the Detailed Report on your computer screen as it will appear when printed.



**Print Preview File Menu**

*Export To PDF* saves the Detailed Report as a PDF. Select Print Preview, Export to PDF. In the Save As window select a location and enter the file name. Click **Save**.

*Export To HTML* saves the Detailed Report as a HTML file. Select Print Preview, Export to PDF. In the Save As window select a location and enter the file name. Click **Save**.

*Close* causes the Print Preview window to close.

**Close.** Closes the Detailed Report.

## Saved Reports List Option

1. Highlight an asset on Site Navigator.

2. Select the Report icon  on the MCEGold Home window toolbar.

3. Select Detailed from the Report Name list. The right side of the Report Selection window changes to display selections for the detailed report. See Figure 3 - 79.
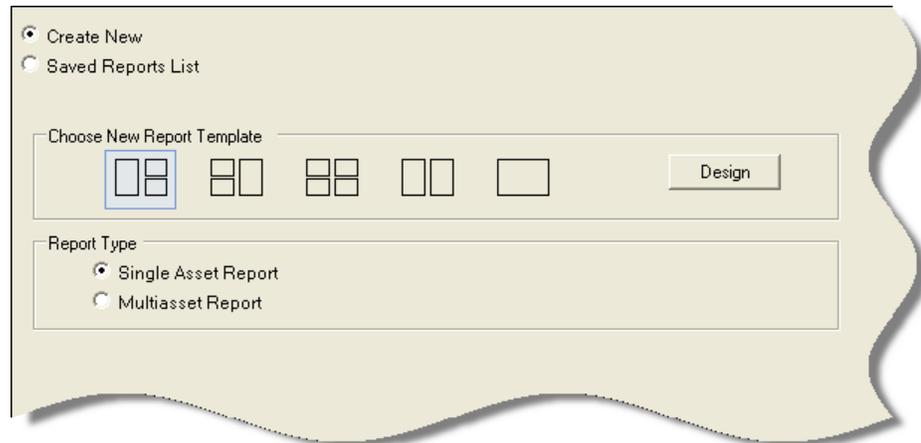
**Figure 3-79: Detailed Report - Report Selection Window**

4.  Select the Saved Reports List option. The window displays a list of saved reports.See Figure 3-80.
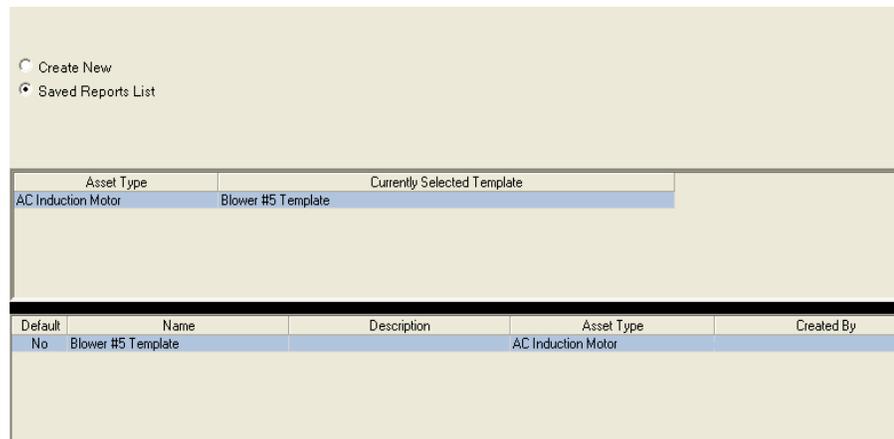


**Figure 3-80: Detailed Report - Saved Reports List**
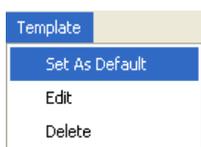
5.  To work with a detailed report on the list, select Template (menu) and desired function or right-click the line and get the same choices.

    *Set as Defaul*t causes the selected template to be the default template. The status changes from No to Yes in the default column and the template moves to the top of the list.

    Using *Edit* opens the report so that you may make changes or print the report using the File menu on the Detail Report window.

    Selecting *Delete* causes the report to be deleted. You will be asked to confirm if its deletion.

## Multiple Asset Detailed Report

If you are creating a report for multiple assets, select the Multi-Asset Report option button in the Report Type section of the Report Selection window and click **Design**. This allows you to import information from more than one asset into the detailed report.

The section below the Insert Page area contains information about the report and the asset. It cannot be modified. On a multi-asset report the asset information is not displayed and under the asset name in the page header section it displays Multi-Asset Report.

Continue preparing the report as with a single asset for the layout selection (page 3-65), header information (page 3-67), and logo area (page 3-68).

**Detail Section**

1.  Click the desired detail area of the Detailed Report.

2.  Highlight an asset on the Site Navigator or WatchList.

3.  Use the Edit functions located on the right side of the window.

    Note: In the highlighted area the asset information displays across the top. Use Edit Comments to add Notes or make changes.

4.  Repeat steps 1 - 3 until the report is complete.

5.  See the Detailed Report File Menu section (page 3-70) to save and/or print the report.

## Alternative Methods of Inserting Asset Information.

**Edit Functions.** These are covered on page 3-67 (single asset) and this page (multiple assets)

**Drag and Drop.** When test results or a graph are open, arrange the windows so that both are visible. Then click on test/graph, hold the mouse button, and drag the results to the desired location on the detailed report window.

**Copy and Paste.** When test data or a graph are open, right click the test/graph and select copy from the menu. On the report, right click the area of the report to receive the results and select Paste from the menu.

## Word Report Templates

Note: When installing or updating MCEGold, a Word Add-in driver is installed. You may receive a message informing you that "Windows can't verify the publisher of this driver software." Select "Install this driver software anyway".

You must have MS Word installed on your computer to use the Word Report Templates function. The templates allow you to either use templates generated by PdMA (PdMA Default Templates) or define templates that are more meaningful to you for your reports (User Defined Templates). The PdMA Default Templates are only available for AC Induction motors at this time.

The Report Selection window for Word Report Templates is shown in Figure 3-81.
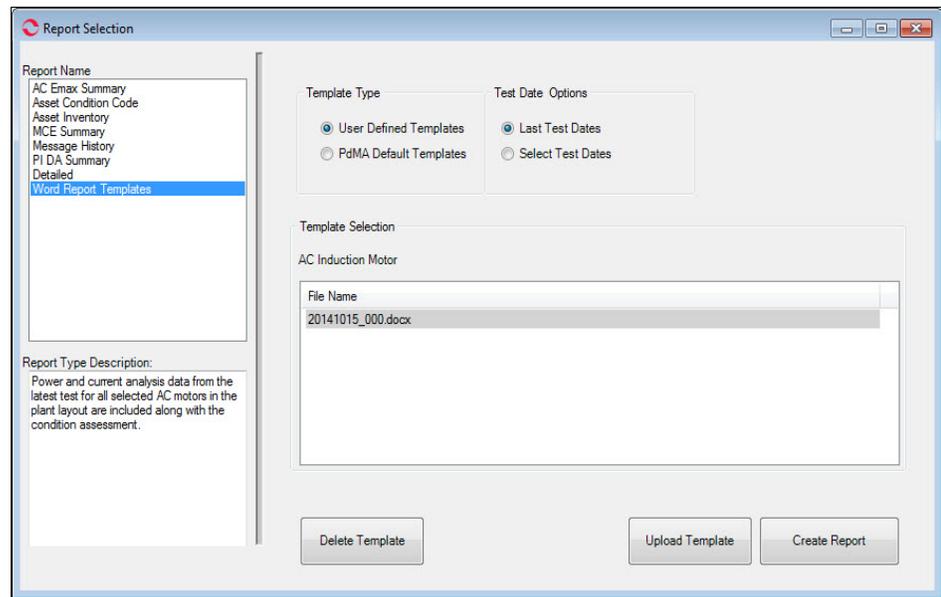
**Figure 3-81: Report Selection Window: Word Report Templates**

Template Type - There are two options for a template, User Defined and PdMA Default. When an option button is selected the names of available templates for that option appear in the File Name section.

> Selecting the *User Defined* option displays a list of templates created by you in the Template Selection window.

> Selecting the *PdMA Default Templates* option displays a list of three templates created by PdMA in the Template Selection window.

Test Date Options - There are two options for the report, Last Test Dates and Select Test Dates. These are used to collect test report data.

Template Selection - The Template Selection area displays the available file names for the template selected.

## PdMA Default Template

Use these instructions to prepare a report using a PdMA Default Template.

1.  Highlight one or multiple assets on the Site Navigator.

2.  Select the Report icon  on the tool bar.

3.  Select Word Report Templates from the Report Name section.

4.  Select the Template Type (PdMA Default Templates) from the Template Type section on right side of the window shown in Figure 3 - 82.

**Figure 3-82: PdMA Default Templates**

5.   Select the Test Date Option. There are two options for test dates, Last Test Dates and Select Test Dates. If Select Test Dates is selected a Date Selector window opens allowing you to select the dates for the tests in the report.

6.   Select the file name of the desired template from the Template Selection list. The Template Selection area displays the available file names for the template type selected.

7.   Click **Create Report**. When all selections have been made, clicking Create Report produces a report in Word format.

8.   The Save As window opens. Select a location for the file. You may change the name of the file or accept the MCEGold generated name. Click **Save**.

9.   The Report Saved window opens asking if you would like to view the report. Click **Yes** to open the report in Word format or **No** to close the window without viewing the report.

     When the report opens it will be multiple pages in order to display all of the test data. Most fields are editable by clicking on them. The actual test data is a graphic and cannot be changed, but it can be deleted and replaced. If no test data is available that will be indicated in the appropriate spot.

## User Defined Templates

Use these instructions to prepare a report using User Defined Templates. You must first create a template to be used. See the section Creating a User Defined Template on page 3-76.

1.   Highlight one or multiple assets on the Site Navigator.

2.   Select the Report icon [icon] on the tool bar.

3.   Select Word Report Templates from the Report Name section.

4.   Select the Template Type (User Defined Templates) from the Template Type section on right side of the window.

5.   Select the Test Date Option. There are two options for test dates, Last Test Dates and Select Test Dates. If Select Test Dates is selected a Date Selector window opens allowing you to select the dates for the tests in the report.

6.   Select the file name of the desired template from the Template Selection list. The Template Selection area displays the available file names for the template type selected.

7.   Click **Create Report**. When all selections have been made, clicking Create Report produces a report in Word format.

8.   The Save As window opens. Select a location for the file. You may change the name of the file or accept the MCEGold generated name. Click **Save**.

9.   The Report Saved window opens asking if you would like to view the report. Click **Yes** to open the report in Word format or **No** to close the window without viewing the report.

     When the report opens it will be multiple pages in order to display all of the test data. Most fields are editable by clicking on them. The actual test data is a graphic and cannot be changed, but it can be deleted and replaced. If no test data is available that will be indicated in the appropriate spot.

## Creating a User Defined Template

1.   Open Word and click the MCEGold tab on the menu bar as shown in Figure 3 - 83. This displays the tool bar shown in Figure 3-84 that is used in creating MCEGold templates. This tool bar may be wider than your monitor can display. Look for the small arrow at the far right indicating more fields are available.
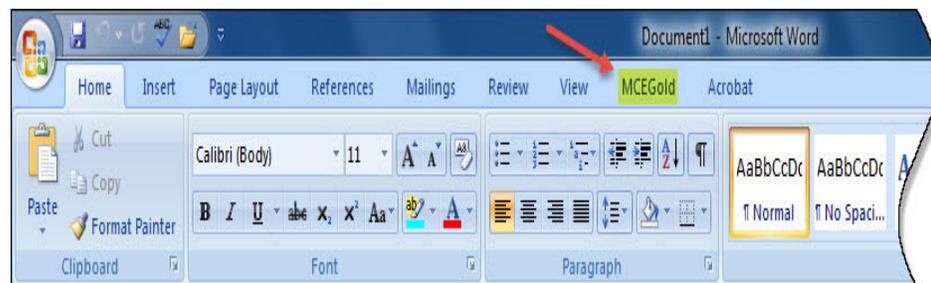


**Figure 3-83: Word Add-In**

**Figure 3-84: Word MCEGold Tool Bar**

2.  Select Motor and Section Type from the drop down lists. Available options in the Section Type are driven by the Motor Type selected.

3.  Select Tech Type and Test Type. Available options in Test Type are driven by the Tech type selected.

4.  Select Graph Type and Selections. Available options in Selection are driven by the Graph Type selected.

5.  After selecting the Motor Type and Test Data selections use the areas on the right hand side to design your template. Place the cursor in the place on the Word page that you want to insert a field or image. Use Insert Image to insert the graph placeholder. Make a selection from the drop down lists and click Insert Field to insert that placeholder on your Word document.

6.  After your template is complete, use File, Save As, Word Template. Enter a name and select a location to save. Make a note of the name and location. Click **Save**.

7.  To use the template, start MCEGold and use the Reports function. See the user Defined Templates section on page 3-75.

**Create Report Button.** Create Report is used to produce the report. It is described in the procedures.

**Delete Template Button.** Delete Template removes the template that is highlighted in the Template Selection area and removes it from your hard drive.

**Upload Template Button.** Upload Template is used to save a report generated using the User Defined Template function. This option can only be used with User Defined Templates.

1.  Highlight the User Defined Templates option button.

2.  Select a template name from the Template Selection area, click **Upload Template**.

3.  Select the location to save the file.

4.  Type a name in the File Name textbox and click **Open**.

# EXITING MCEGOLD

MCEGold may be shut down by selecting File, Close from the menu or clicking the close button (X) in the upper right corner. You will be asked to verify that you want to Close MCEGold. Click **OK**.

**Detach Local Database.** Before MCEGold closes a window giving you the option to detach the local database opens if you have set that option up in Preferences, Asset Management. If desired, click **Yes** to detach the database and close MCEGold. When you detach the database, the next time you start MCEGold you will need to select a database before continuing. Click **No** to close MCEGold and leave the current database attached.

# MCEGOLD LITE INTRODUCTION

MCEGold$^®$ is the software that controls the motor tester. This section covers the operation of MCEGold Lite (identified as Lite) and the MCEMAX tester.

NOTE: In this manual the full version of MCEGold is referred to as MCEGold. MCEGold Lite, which is a simplified interface designed principally to collect data, is referred to as Lite.

The Lite software uses modified Window conventions. For example, there is not a menu bar, the toolbar with buttons is located across the bottom of the screen, the red button with an X in the upper right corner closes the window or exits the program, but there is an additional Close button in the lower right hand corner of the Home window. Depending on your screen resolution you may see scroll bars to be used to display more buttons or more of the window.

Lite is designed to operate in conjunction with a WatchList. A WatchList displays the assets that are scheduled to be tested making it easier for you to test without searching the full database for the asset. WatchLists are set up in MCEGold and Lite will not open if there are no WatchList.

# STARTING LITE

The program executable is located at:
    C:\PdMA Corporation\MCEGold\UI\MCEGold.exe.

1.  To start Lite, Select Start from the task bar, then All Programs, PdMA Corporation, MCEGold or click on the desktop icon.

2. At the Login (Figure 3-85) select the Site. Verify the Testing Mode (if applicable). Selecting a Site will be necessary if the database has been detached during a previous session or you want to change databases. Use the Display Mode drop down menu to select MCEGold Lite, and click **OK.**
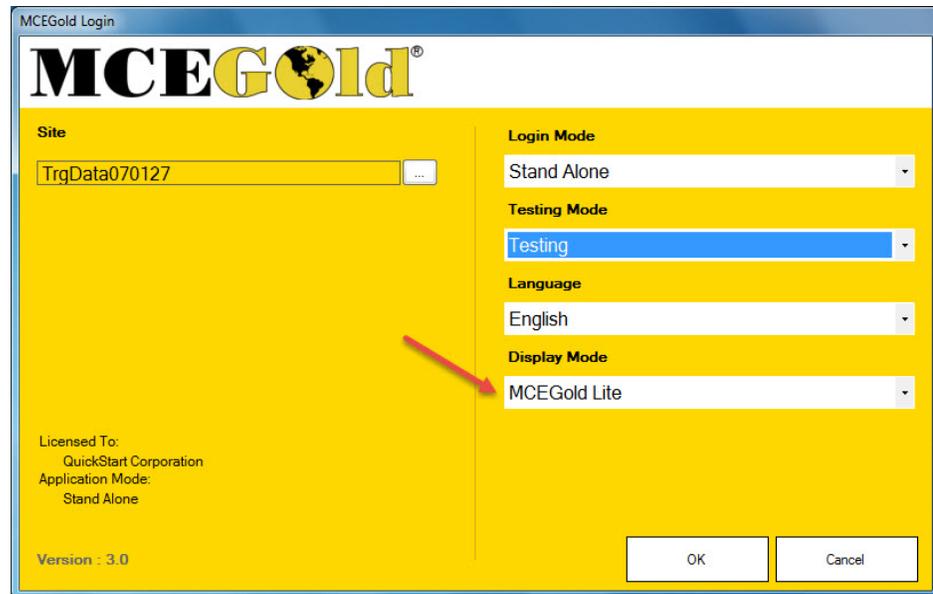


**Figure 3-85: MCEGold Login**

3. The Home Screen shown in Figure 3-86 opens.

# LITE HOME SCREEN

The buttons are not active until an asset has been selected. The Home screen has no menu items. Due to its simplicity, the functions are activated using buttons which are located across the bottom of the screen. The Scroll bar indicates more buttons are available. In our example Scheduler is not shown until you scroll down.
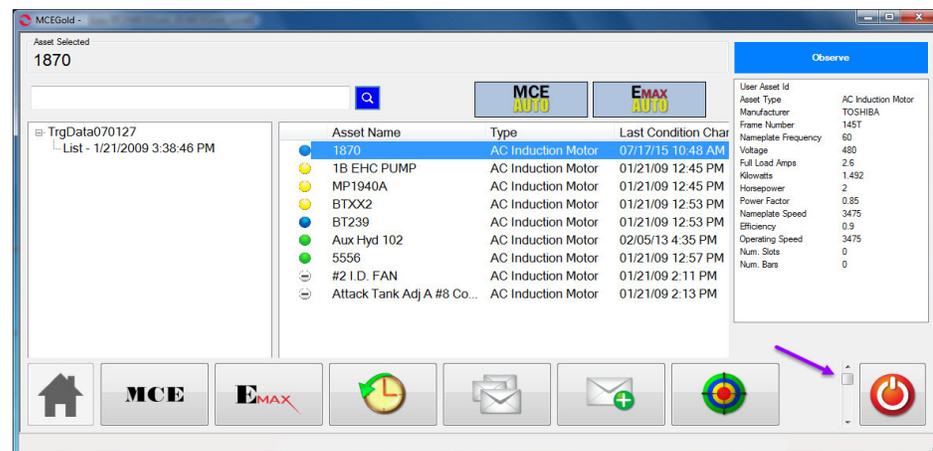
.



**Figure 3-86: Lite Home Screen**

## Title Bar

The title bar is the horizontal blue line across the top of the window. It displays the PdMA logo, the name of the program, and the testing mode.

## Asset Selected

This area displays the asset name that has been selected. It changes as different assets are selected from the asset list. It will display "No Asset Selected" until one is selected.

## Search

The Search text box, located below the Asset Selected area, allows you to enter the name of an asset you are trying to locate in the database. Type the asset name in the box and click the Search button . If you search for partial names, it will find assets with those characters in the name.

## Left Panel

The left panel, shown in Figure 3-87, displays the WatchList imported from MCEGold, which is shown in Figure 3 - 87. If there are no WatchList in MCEGold nothing will display in this panel.
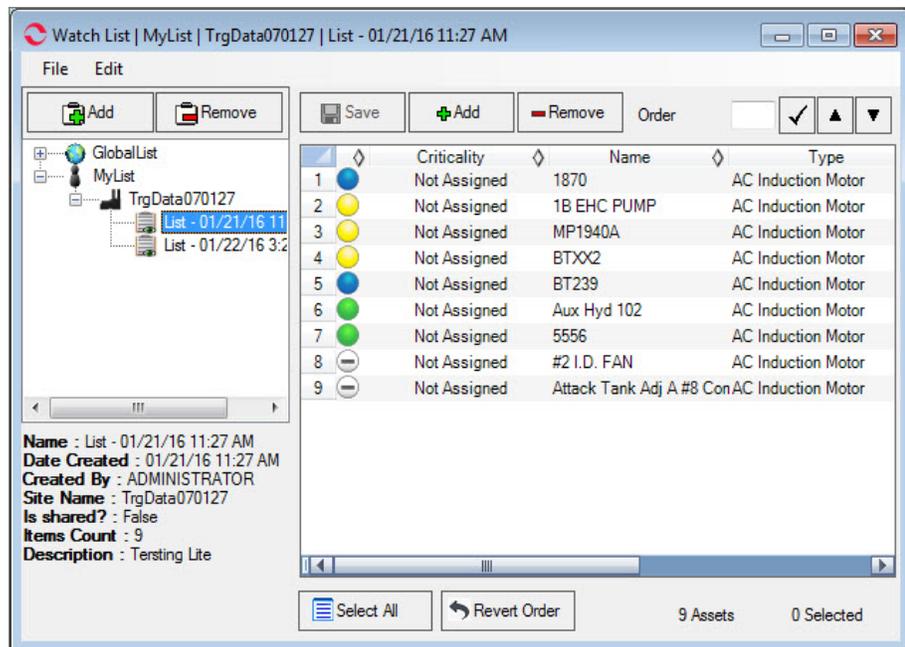


**Figure 3-87: MCEGold WatchList**

## Center Panel

The center panel, shown in Figure 3-87, is blank until a list is selected from the left panel. After a list is selected, the panel is populated with a round colored circle indicating the condition code, Asset Name, Type, Last Condition Change, Criticality, and Location. You may need to use the scroll bar located across the bottom to see all of the contents.

## Right Panel

The right panel, shown in Figure 3-87, displays the Nameplate information for the asset selected in the center panel list. Above the Nameplate information is a colored bar indicating the condition code for the asset.

## Testing Buttons

Above the center panel are two testing buttons; MCE Auto and E<small>MAX</small> Auto, shown below. Selecting an asset and clicking either button starts the appropriate testing. See page 3-49 for more information.

# TOOLBAR

The Toolbar buttons located across the bottom of the window are designed to quickly access common Lite functions with one click. The buttons are inactive unless an asset has been selected from the list. This section provides a description of the buttons.

Home returns you to the Home screen. In some cases, depending on where you are in the process, the return button in the lower right is visible and may be used to go back one or more steps.

MCE starts MCE testing. For information about using the MCE Test Selection window and MCE testings see Chapter 5, MCE Testing.

E<small>MAX</small> starts E<small>MAX</small> testing. For more information about using the E<small>MAX</small> Test Selection window and E<small>MAX</small> testing see Chapter 6, E<small>MAX</small> Current Analysis and Chapter 7, E<small>MAX</small> Power Analysis.

Test History opens the Test History window of the selected asset. For a complete discussion about the Test History window see page 3-39.

Message Center displays the messages for the selected asset. For a complete discussion about using the Message Center see page 3-53.

Create Message opens the Compose Message window so that you may compose a message to be stored in the Message Center. For a complete discussion about using the Compose Message window see page 3-56.

Fault Zone opens the optical view of the Fault Zone Analysis. For a complete discussion about using the Fault Zone Analysis see page 3-52.

Scheduler opens the Created Schedules window which displays testing scheduled for the asset selected.

Go Back displays when you are not on the Home screen. It is located in the same spot as the Close button and is visible depending upon where you are in the program. It allows you to return to the previous screen.

Close causes Lite to close/exit.