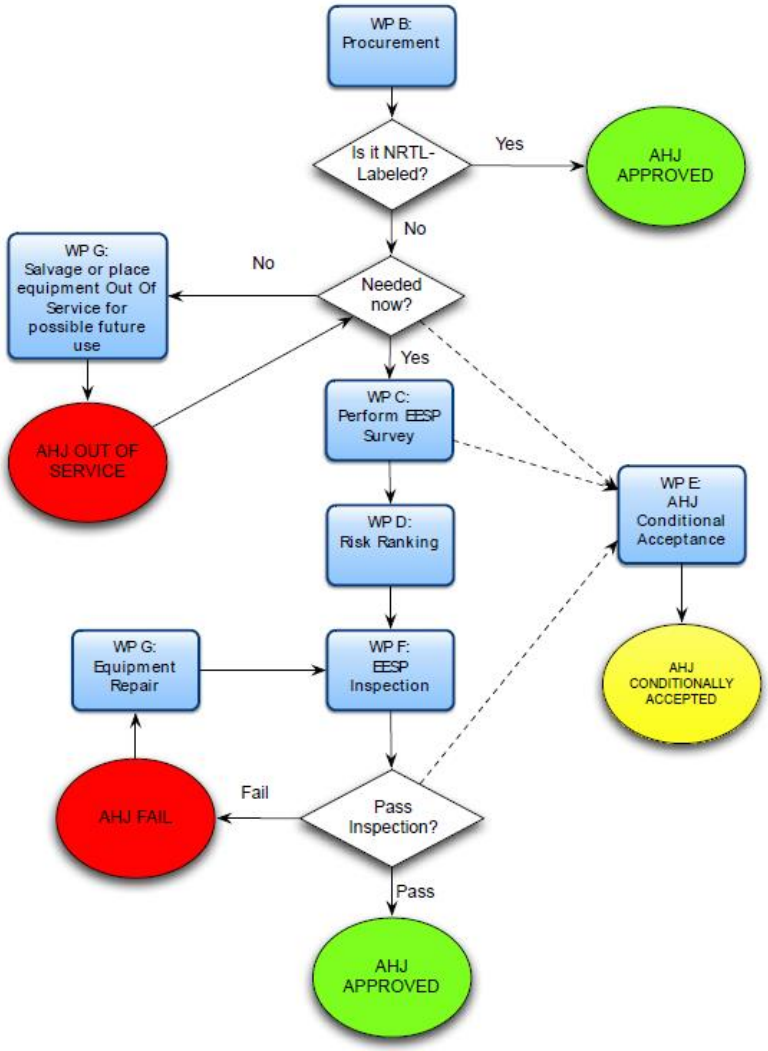
LAWRENCE BERKELEY NATIONAL LABORATORY

EESP QB User's Guide

LBNL Electrical Safety

Table of Contents

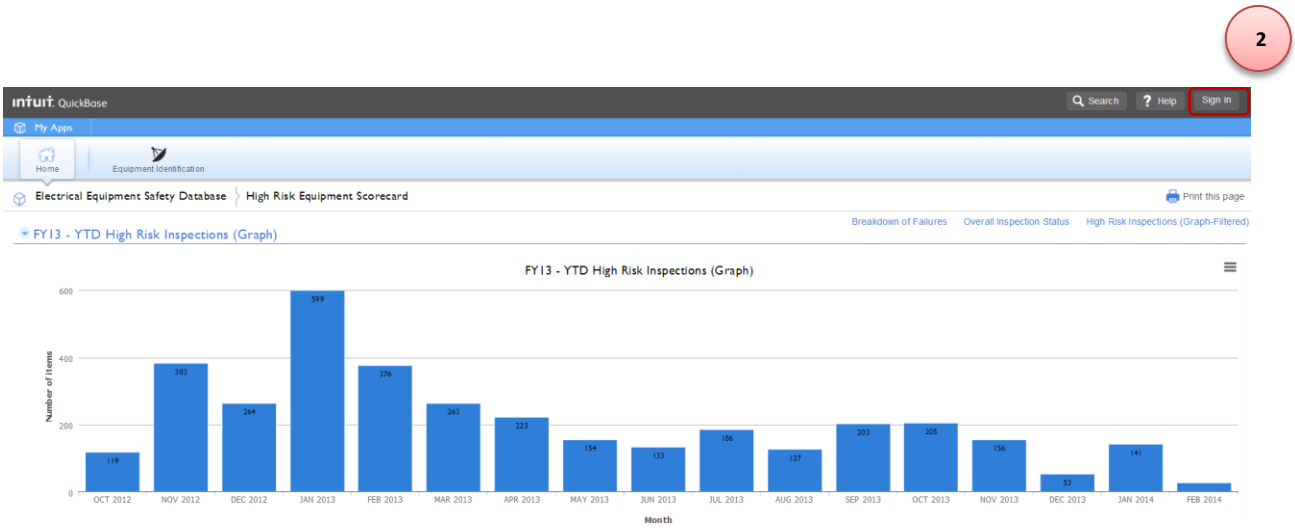
1. Electrical Equipment Safety Program Flowchart



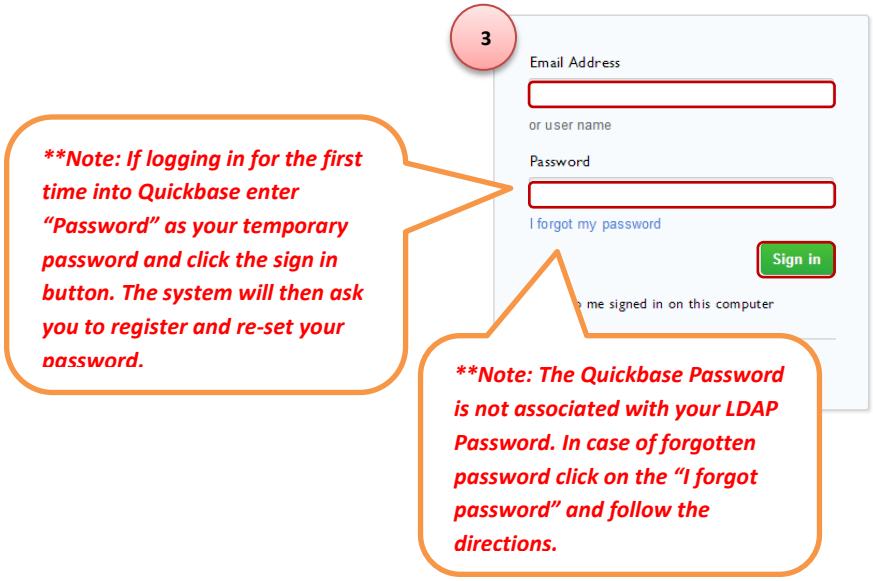
2. Sign into Quickbase: LOTO Procedure System

Step 1 - Navigate to: https://lbnl.quickbase.com/db/bdmutze8t

Step 2 - Click on the sign-in button in the upper right corner of the page.



Step 3 – Enter your LBNL Email Address and your password, then click the sign in button.

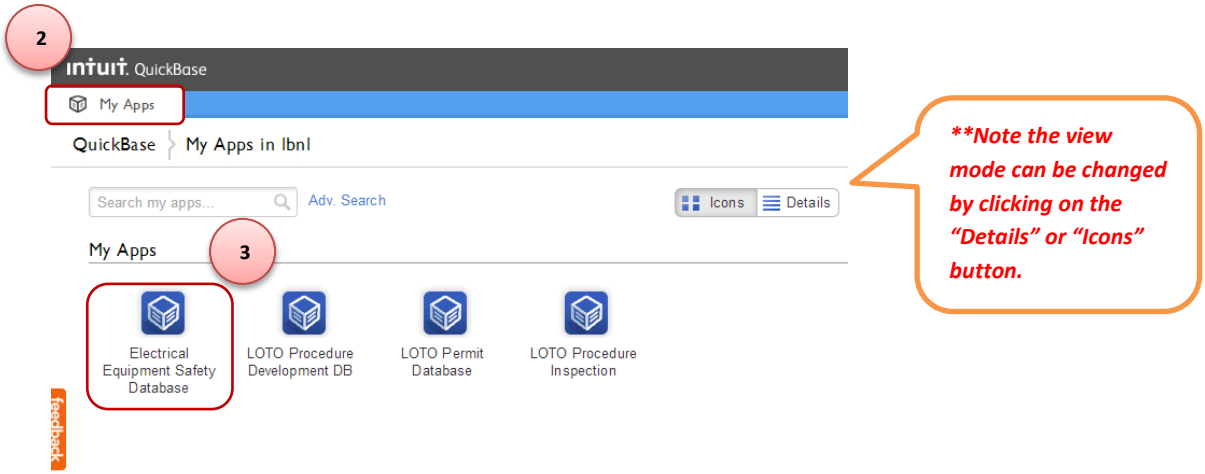


3. Accessing the Electrical Inspection Safety Program (EESP) Application

Step 1 – Log into quickbase Electrical Equipment Safety Database Application. *(Refer to section 2 of this document)*

Step 2 – Click on the "My Apps" tab on the left top of the page. *(It will display the applications for which you have been granted access)*

Step 3 – Click on the "Electrical Equipment Safety Database" icon or link to access the application. *(This page might look different depending on the current mode see note below)*



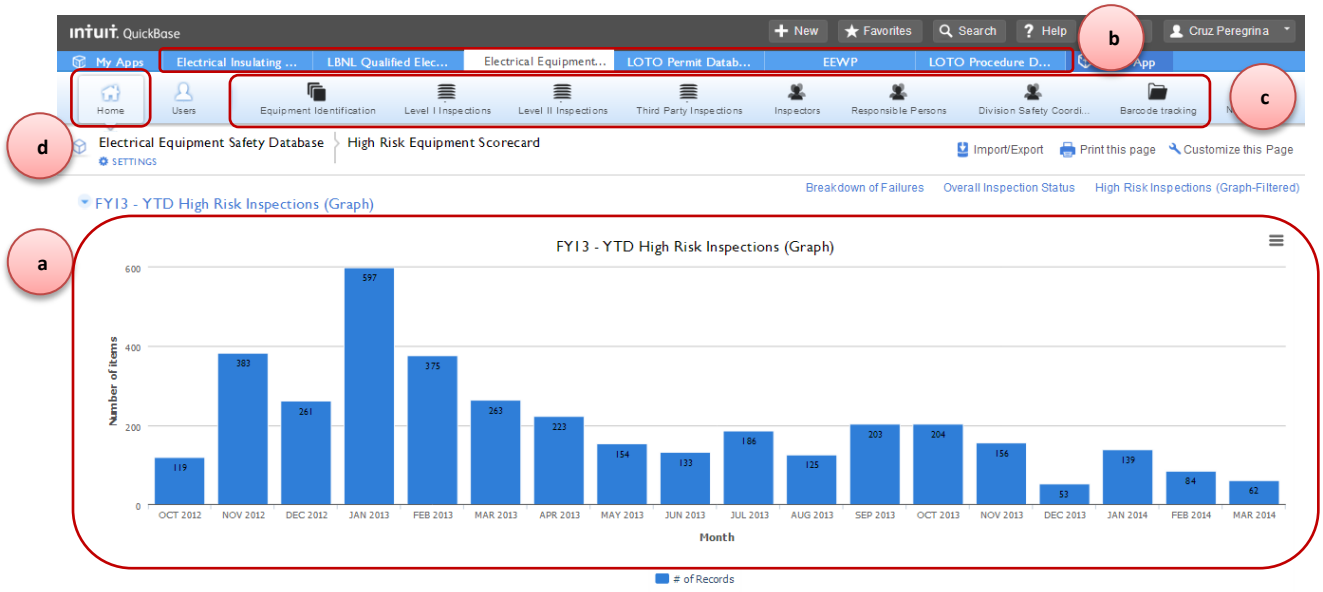
4. EESP Home Dashboard

Step 1 – Log into quickbase Electrical Equipment Safety Application. *(Refer to section 2 of this document)*

Step 2 – Access the Electrical Equipment Safety Application if needed. *(Refer to section 3 of this document)*

The Home Dashboard is the system point of reference. In the Dashboard you will find:

a) A list of relevant reports. *(These reports might look different depending on your role)*
b) List of other applications with access within Quickbase. *(i.e. LOTO Permit system, EEWP)*
c) A list of tables for which you have been granted access within the currently accessed application.
d) You can always return to this dashboard by clicking on the "Home" button.



5. Look up, create, or clone an Equipment Identification Record

a) Search / Look up for an existing Equipment Identification Record

Step 1 – Log into quickbase Electrical Equipment Safety Database Application. *(Refer to section 2 of this document)*

Step 2 – Access the Electrical Equipment Safety Database Application. *(Refer to section 3 of this document)*

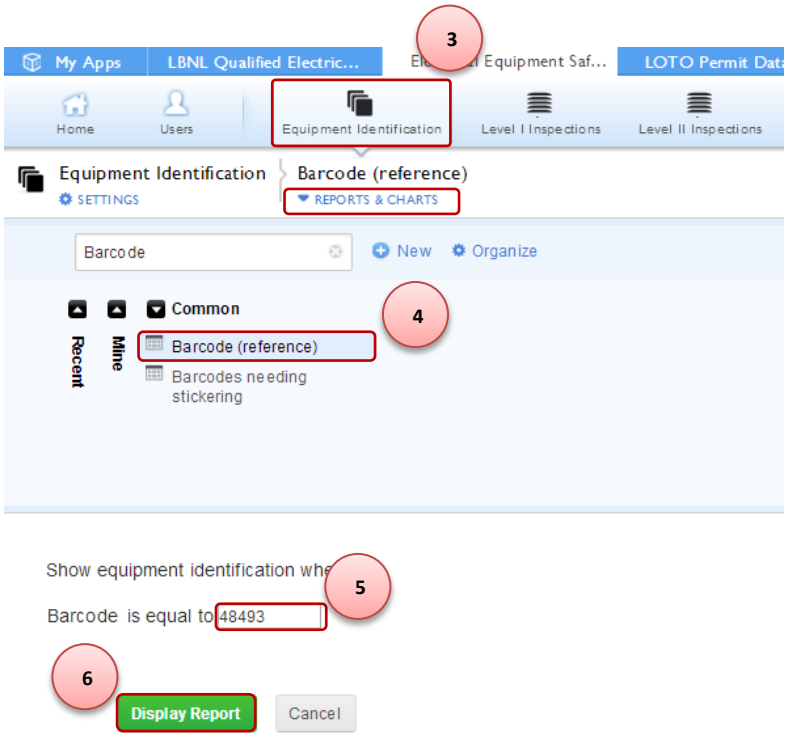
Step 3 – Click on the "Equipment Identification" tab

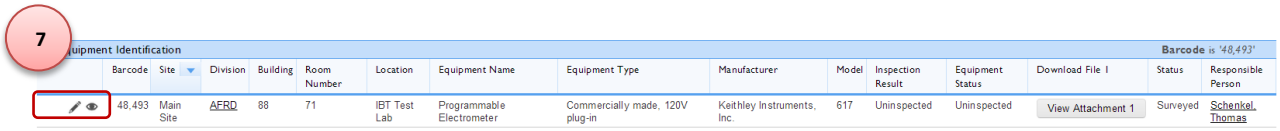
Step 4 – Select "Barcode (Reference)" link from the "Reports & Charts" menu.

Step 5 – Type the barcode number of the equipment *(i.e.48493)*

Step 6 – Click on the "Display Report" Button.

Step 7 – Chose to "edit" or "view" Equipment Identification by clicking on the "pencil" or "eye" symbol respectively.





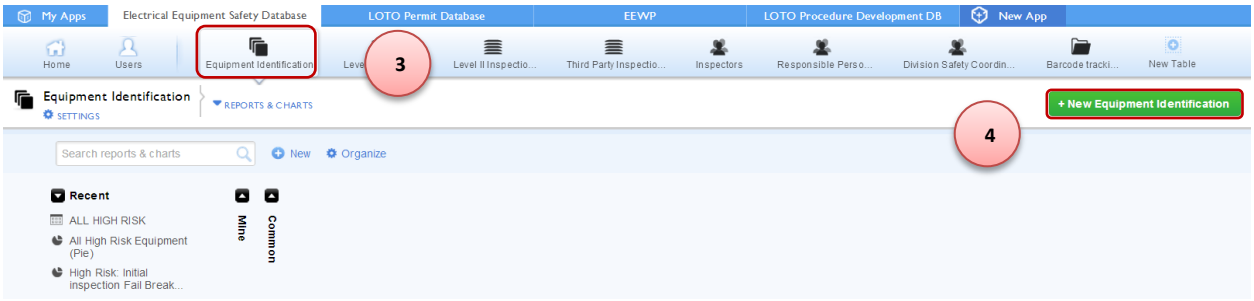
b) Create a new Equipment Identification

Step 1 – Log into quickbase Electrical Equipment Safety Database Application. *(Refer to section 2 of this document)*

Step 2 – Access the Electrical Equipment Safety Database Application. *(Refer to section 3 of this document)*

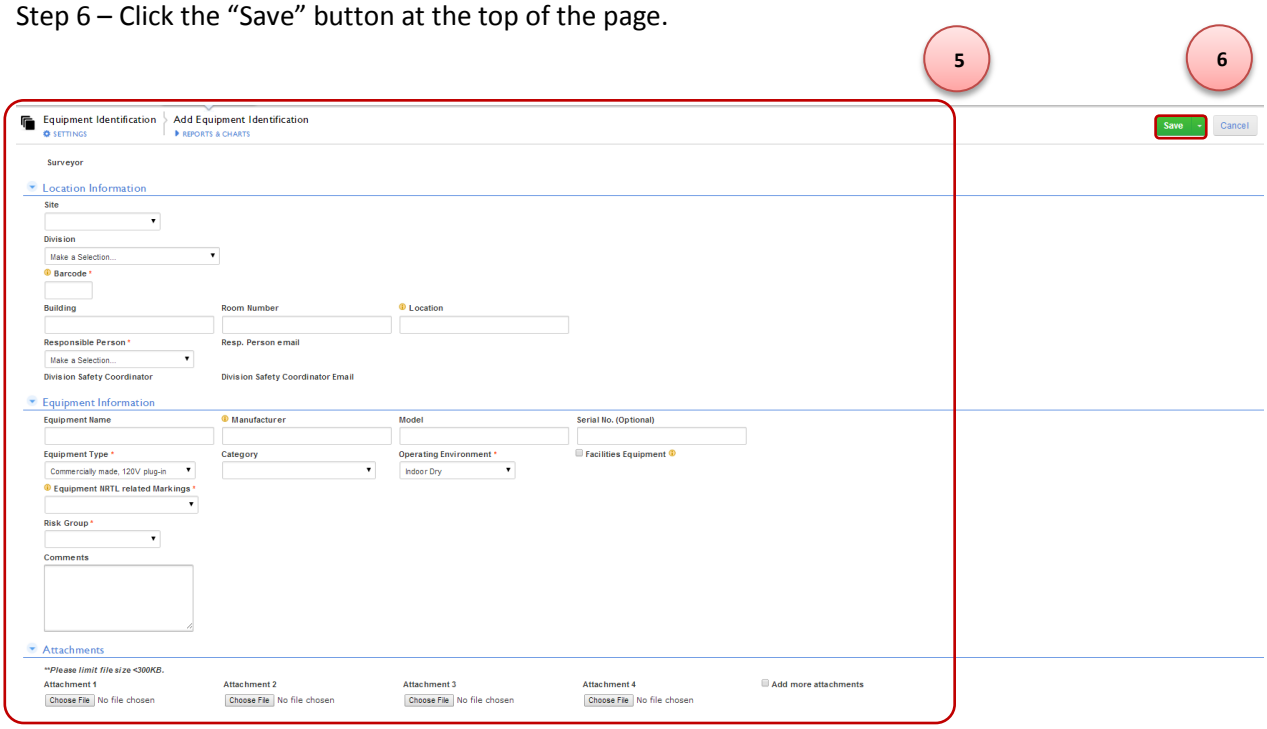
Step 3 – Click on the "Equipment Identification" tab.

Step 4 – Click on the "+ New Equipment Identification" button.



Step 5 – Fill in the Equipment Identification Application form.

Step 6 – Click the "Save" button at the top of the page.



Step 7 – Verify that the equipment record has been created by searching for the equipment using the barcode number. *(Refer to section 5a of this document)*

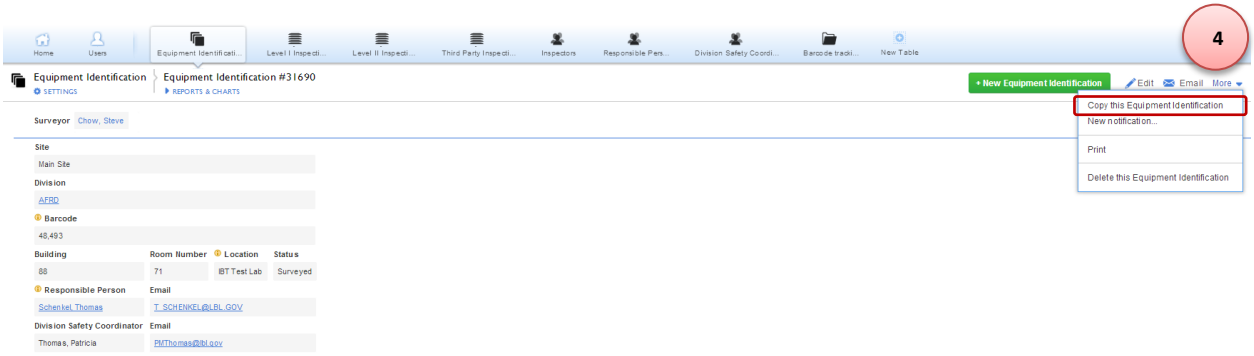
c) Clone an Equipment Identification Record

Step 1 – Log into quickbase Electrical Equipment Safety Database Application. *(Refer to section 2 of this document)*

Step 2 – Access the Electrical Equipment Safety Database Application. *(Refer to section 3 of this document)*

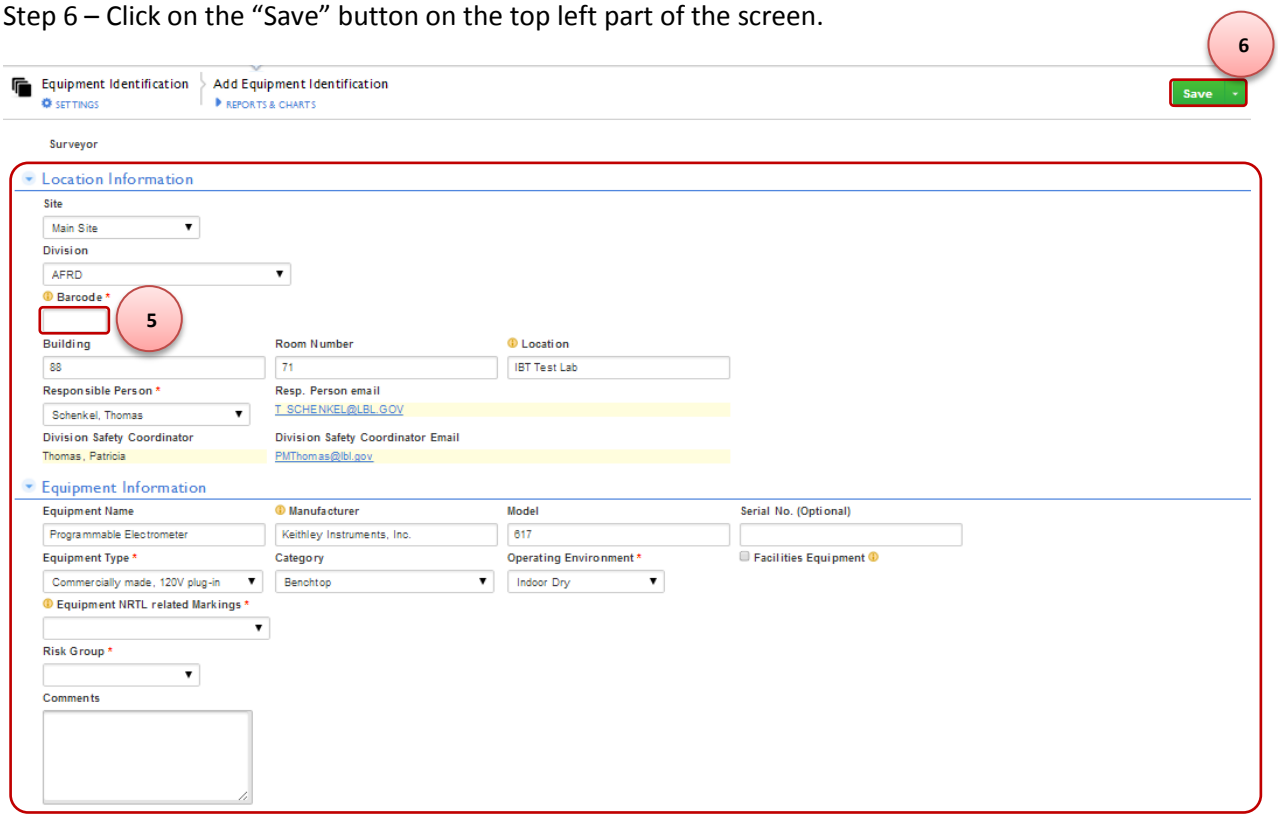
Step 3 – Navigate to the desired record to be copied click on view. *(Refer to section 5a of this document)*

Step 4 – Click on "More" option on the top, then select the "Copy this Equipment Identification"



Step 5 – Provide a new barcode number to the equipment identification record and make the appropriate changes to the rest of the data entry form fields.

Step 6 – Click on the "Save" button on the top left part of the screen.



Step 7 – Verify that the equipment record has been created by searching for the equipment using the barcode number. *(Refer to section 5a of this document)*

6. Exemptions to the EESP Electrical Inspection Checklist.

a) Equipment In-Use

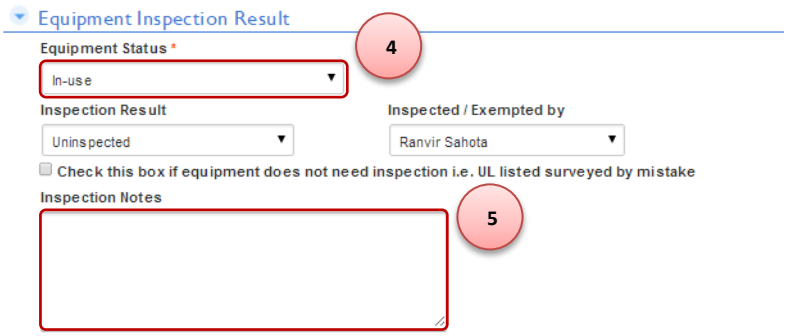
Step 1 – Log into the Electrical Equipment Safety Database Application *(Refer to section 2 of this document)*

Step 2 – Access the Electrical Equipment Safety Database Application *(Refer to section 3 of this document)*

Step 3 – Navigate to the desired record and open the record in "edit" mode. (Refer to section 5a of this document)

Step 4 – Scroll down to the "Equipment Inspection Result" section and change or verify the Equipment Status field has "In-use" as the option selected.

Step 5 – Provide details for the update in the "Inspection Notes" field.



Step 6 – Click on the "Save" button on the top left part of the screen.

b) Equipment not found/moved from survey location

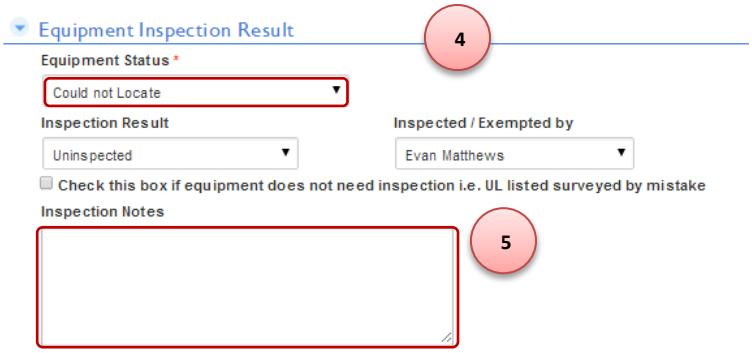
Step 1 – Log into the Electrical Equipment Safety Database Application *(Refer to section 2 of this document)*

Step 2 – Access the Electrical Equipment Safety Database Application *(Refer to section 3 of this document)*

Step 3 – Navigate to the desired record and open the record in "edit" mode. *(Refer to section 5a of this document)*

Step 4 – Scroll down to the "Equipment Inspection Result" section and change the Equipment Status field to "Could not Locate"

Step 5 – Provide details for the update in the "Inspection Notes" field.



Step 6 – Click on the "Save" button on the top left part of the screen.

c) Not Accessible

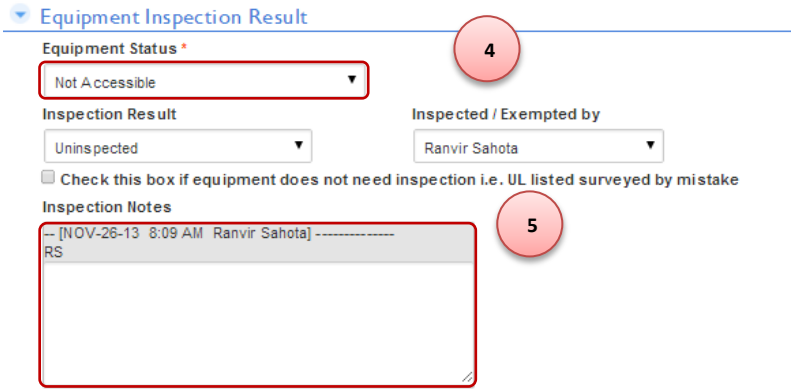
Step 1 – Log into the Electrical Equipment Safety Database Application *(Refer to section 2 of this document)*

Step 2 – Access the Electrical Equipment Safety Database Application *(Refer to section 3 of this document)*

Step 3 – Navigate to the desired record and open the record in "edit" mode. *(Refer to section 5a of this document)*

Step 4 – Scroll down to the "Equipment Inspection Result" section and change the Equipment Status field to "Not Accessible"

Step 5 – Provide details for the update in the "Inspection Notes" field.



Step 6 – Click on the "Save" button on the top left part of the screen.

d) Equipment does not require inspection

Step 1 – Log into the Electrical Equipment Safety Database Application *(Refer to section 2 of this document)*

Step 2 – Access the Electrical Equipment Safety Database Application *(Refer to section 3 of this document)*

Step 3 – Navigate to the desired record and open the record in "edit" mode. *(Refer to section 5a of this document)*

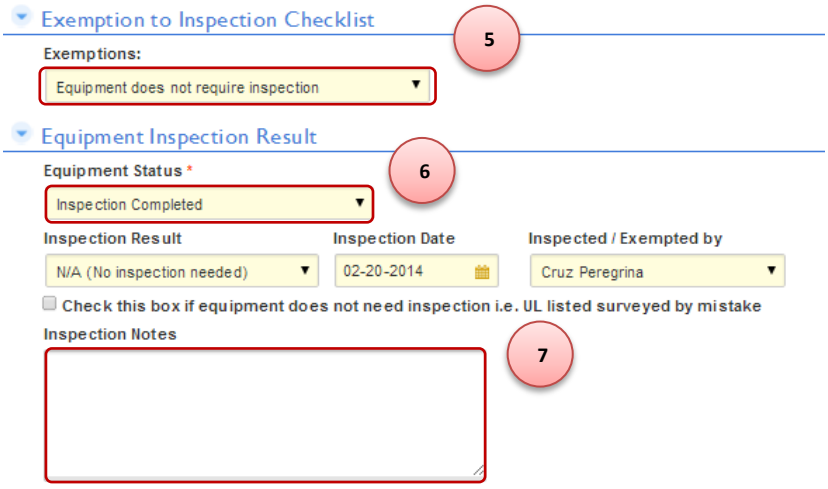
***If equipment has already been inspected using the checklist, skip to Step 6 (The "Exemption to Inspection Checklist" section will not be available)*

Step 4 – Scroll down the page to the "Exemption to Inspection Checklist" section.

Step 5 – Under the exemptions field select "Equipment does not require Inspection" from the dropdown menu.

Step 6 – Scroll down to the "Equipment Inspection Result" section and change the Equipment Status field to "Inspection Completed".

Step 7 – Provide details for the update in the "Inspection Notes" field.



Step 8 – Click on the "Save" button on the top left part of the screen.

e) 3rd party / Alternate Inspection was performed

Step 1 – Log into the Electrical Equipment Safety Database Application *(Refer to section 2 of this document)*

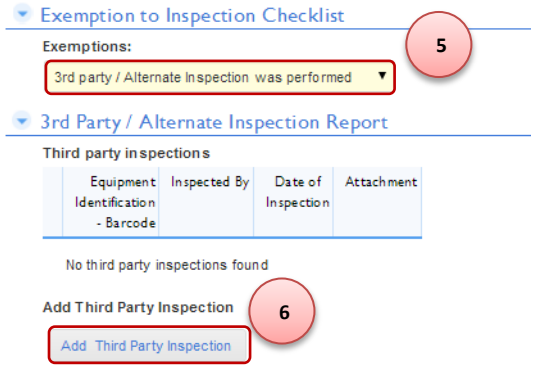
Step 2 – Access the Electrical Equipment Safety Database Application *(Refer to section 3 of this document)*

Step 3 – Navigate to the desired record and open the record in "edit" mode. *(Refer to section 5a of this document)*

Step 4 – Scroll down the page to the "Exemption to Inspection Checklist" section.

Step 5 – Under the exemptions field select "3rd party / Alternate Inspection was performed" from the dropdown menu.

Step 6 – Click on the "Add Third Party Inspection" button. *(This will open up a window and will asking to save changes. Choose "Yes", the system will them take you to a different form)*



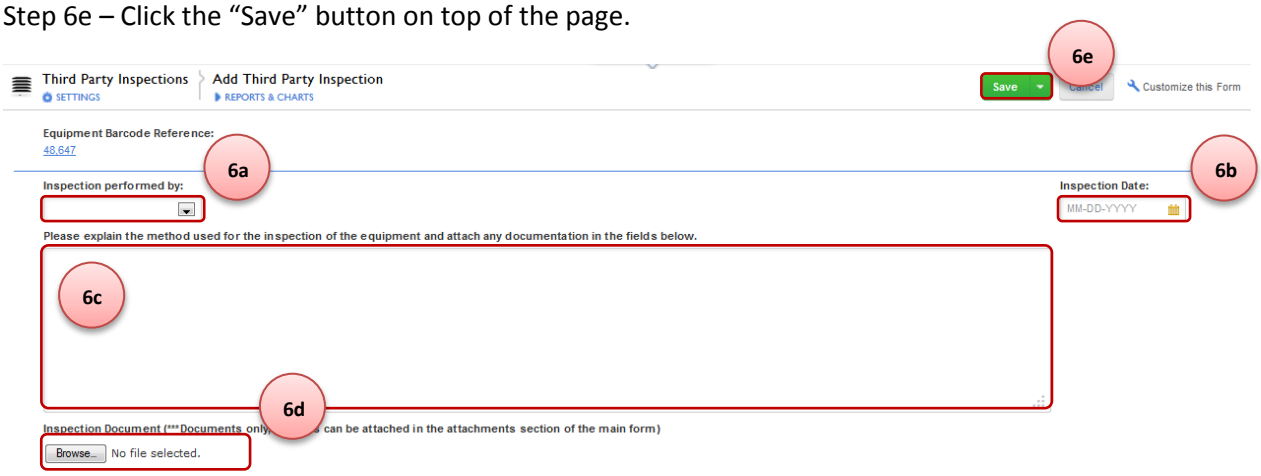
Step 6a – List the third party field evaluator.

Step 6b – List the Inspection Date.

Step 6c – Enter a description for the method used for inspecting the equipment

Step 6d – Attach the PDF report as an attachment in the field provided, then

Step 6e – Click the “Save” button on top of the page.

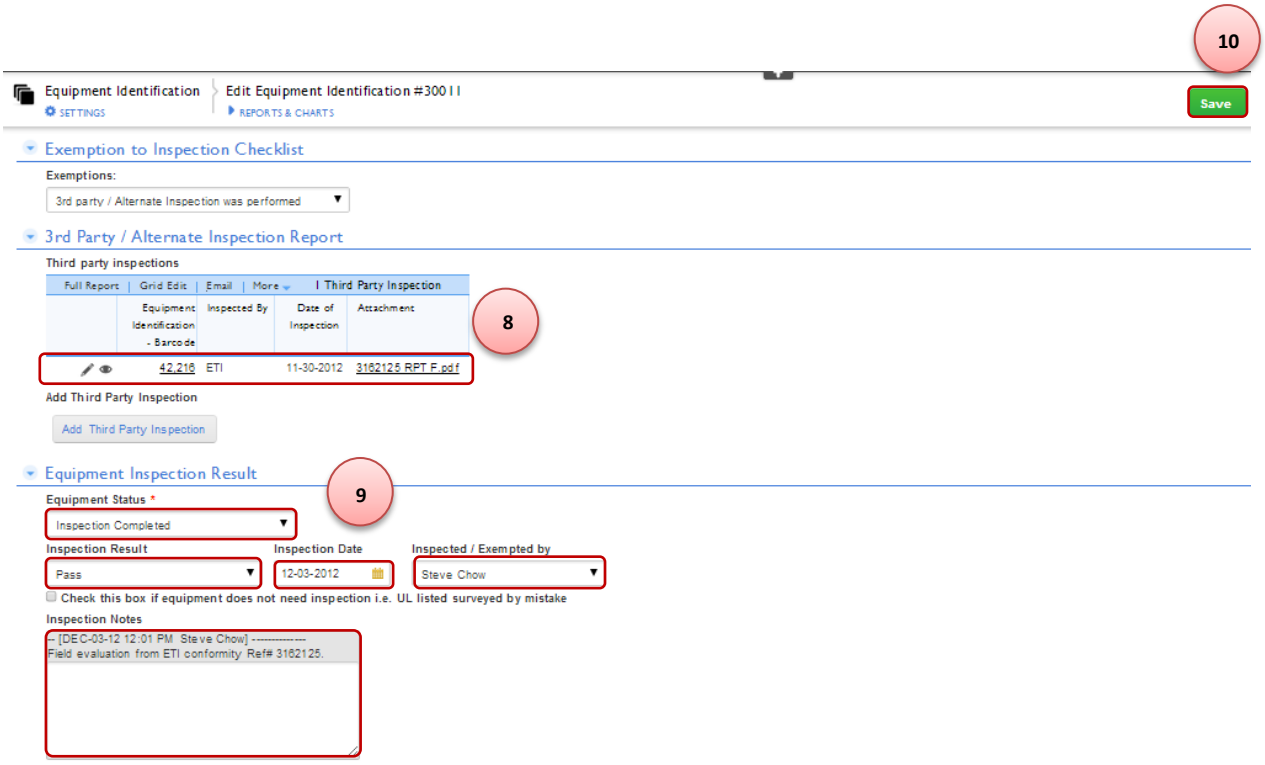


Step 7 – Navigate back to the equipment record if needed. *(See step 3 above)*

Step 8 – Verify that the Third Party Inspection was created.

Step 9 – Scroll down the page and complete the Equipment Inspection Result Section as seen below.

Step 10 – Click the “Save” button on the top of the page.



f) Equipment taken out of service

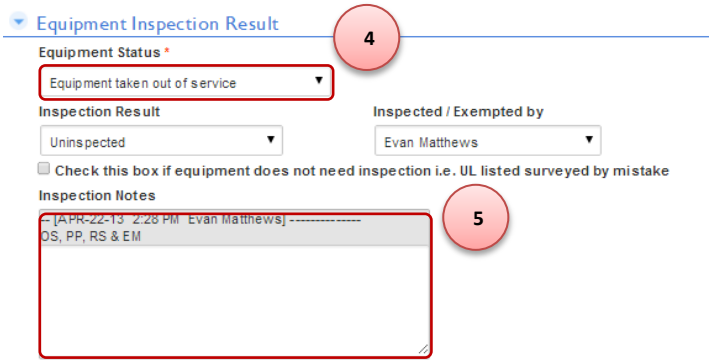
Step 1 – Log into the Electrical Equipment Safety Database Application *(Refer to section 2 of this document)*

Step 2 – Enter the Electrical Equipment Safety Database Application *(Refer to section 3 of this document)*

Step 3 – Navigate to the desired record and open the record in "edit" mode. *(Refer to section 5a of this document)*

Step 4 – Scroll down to the "Equipment Inspection Result" section and change the Equipment Status field to "Equipment taken out of service"

Step 5 – Provide details for the update in the "Inspection Notes" field.



Step 6 – Click on the "Save" button on the top left part of the screen.

g) Equipment has been salvaged

Step 1 – Log into the Electrical Equipment Safety Database Application *(Refer to section 2 of this document)*

Step 2 – Enter the Electrical Equipment Safety Database Application *(Refer to section 3 of this document)*

Step 3 – Navigate to the desired record and open the record in "edit" mode. *(Refer to section 5a of this document)*

***If equipment has already been inspected using the checklist, skip to Step 6 (The "Exemption to Inspection Checklist" section will not be available)*

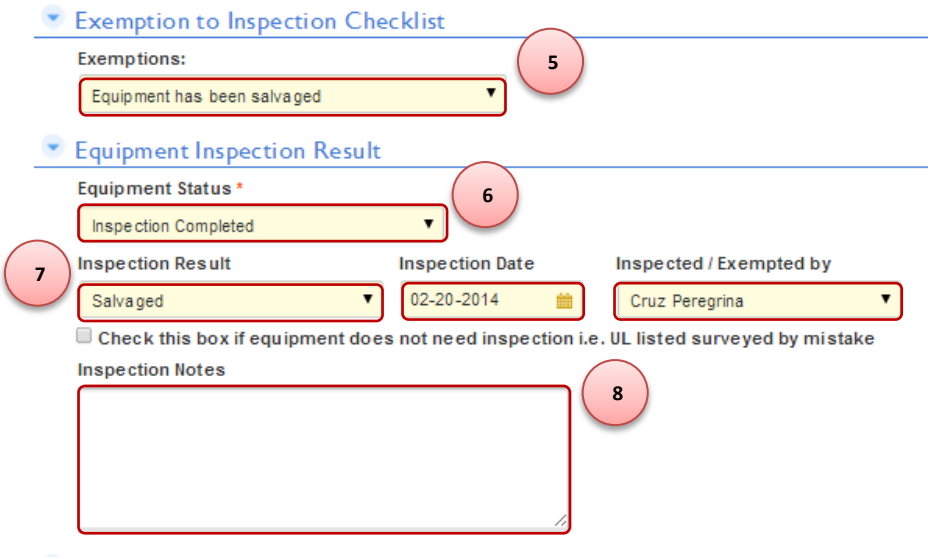
Step 4 – Scroll down the page to the "Exemption to Inspection Checklist" section.

Step 5 – Under the exemptions field select "Equipment has been salvaged" from the dropdown menu.

Step 6 – Scroll down to the "Inspection Result" section and change the Equipment Status field to "Inspection Completed".

Step 7 – Change the "Inspection Result" field to "Salvaged", complete the "Inspection Date", and the "Inspected by" fields.

Step 8 – Provide details for the update in the "Inspection Notes" field.



Step 9 – Click the "Save" button on top of the page.

h) LOTO Required for Inspection

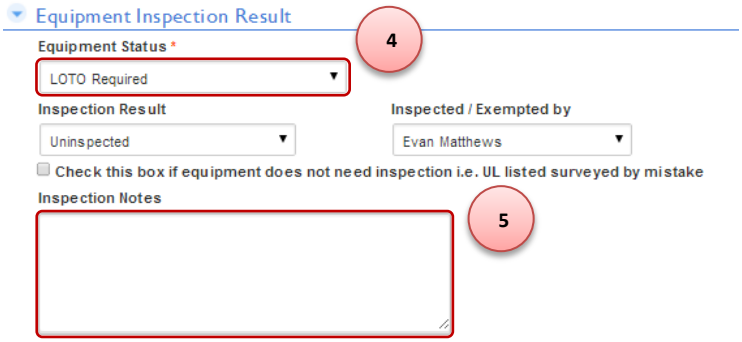
Step 1 – Log into the Electrical Equipment Safety Database Application *(Refer to section 2 of this document)*

Step 2 – Enter the Electrical Equipment Safety Database Application *(Refer to section 3 of this document)*

Step 3 – Navigate to the desired record and open the record in "edit" mode. *(Refer to section 5a of this document)*

Step 4 – Scroll down to the "Equipment Inspection Result" section and change the Equipment Status field to "LOTO Required"

Step 5 – Provide details for the update in the "Inspection Notes" field.



Step 6 – Click the "Save" button on the top of the page.

i) Equipment Previously Inspected

*** Please limit this option to **exactly similar equipment** that **has been well tested repeated times with similar outcome.***

Step 1 – Log into the Electrical Equipment Safety Database Application *(Refer to section 2 of this document)*

Step 2 – Access the Electrical Equipment Safety Database Application *(Refer to section 3 of this document)*

Step 3 – Navigate to the desired record and open the record in "edit" mode. *(Refer to section 5a of this document)*

Step 4 – Scroll down the page to the "Exemption to Inspection Checklist" section.

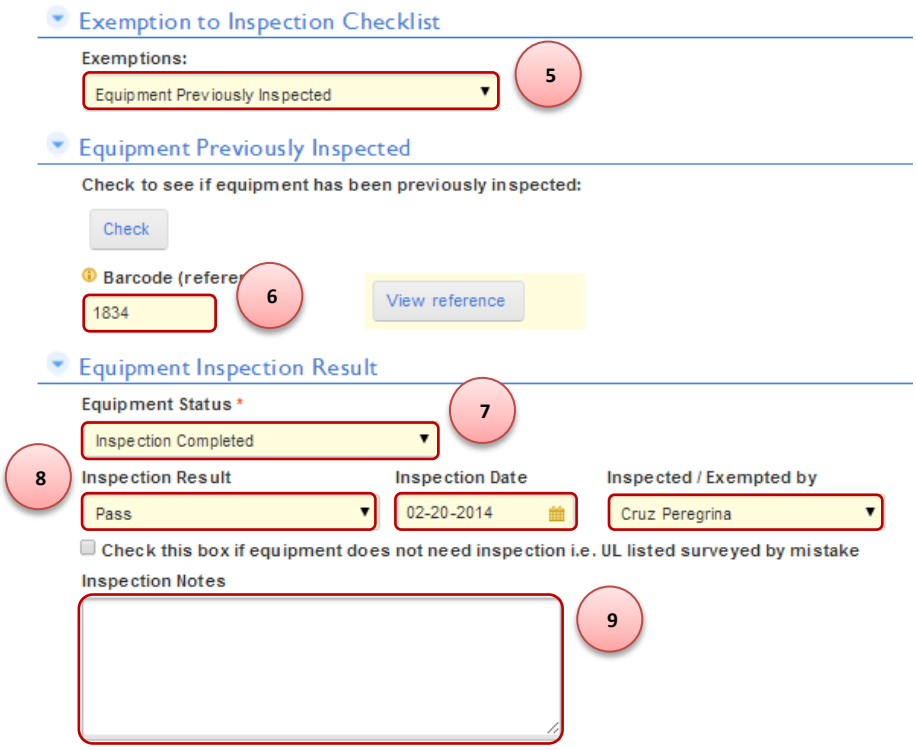
Step 5 – Under the exemptions field select "Equipment Previously Inspected" from the dropdown menu.

Step 6 – Type the barcode for the piece of equipment that this equipment will reference. *(This equipment must be a valid inspected piece of equipment)*

Step 7 – Scroll down to the "Inspection Result" section and change the Equipment Status field to "Inspection Completed".

Step 8 – Change the "Inspection Result" field to the outcome of the referenced equipment, complete the "Inspection Date", and the "Inspected by" fields.

Step 9 – Provide details for the update in the "Inspection Notes" field.



Step 10 – Click the "Save" button on the top of the page.

j) Homemade power panel

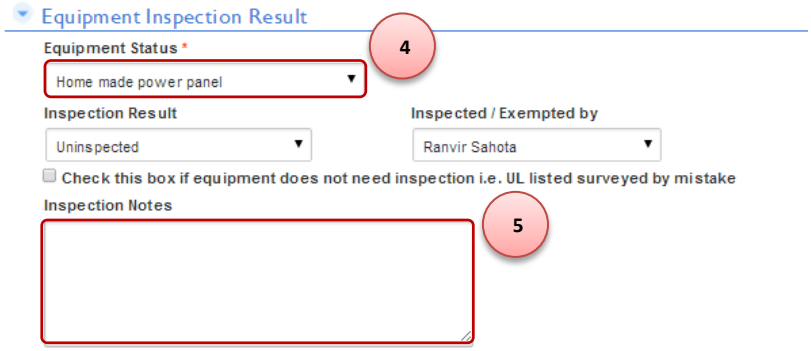
Step 1 – Log into the Electrical Equipment Safety Database Application *(Refer to section 2 of this document)*

Step 2 – Enter the Electrical Equipment Safety Database Application *(Refer to section 3 of this document)*

Step 3 – Navigate to the desired record and open the record in "edit" mode. *(Refer to section 5a of this document)*

Step 4 – Scroll down to the "Equipment Inspection Result" section and change the Equipment Status field to "Homemade power panel"

Step 5 – Provide details for the update in the "Inspection Notes" field.



Step 6 – Click the "Save" button on the top of the page.

k) Interlock Equipment

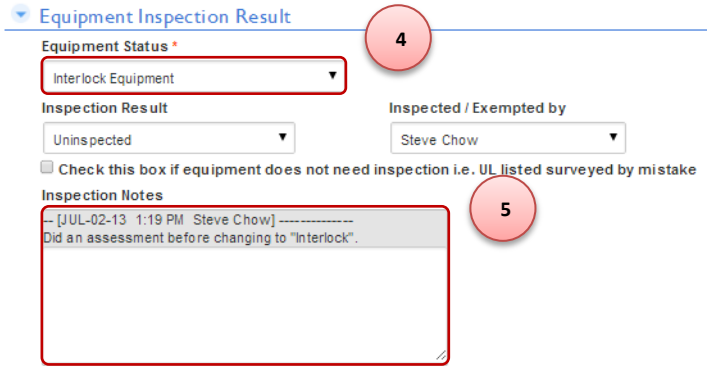
Step 1 – Log into the Electrical Equipment Safety Database Application *(Refer to section 2 of this document)*

Step 2 – Enter the Electrical Equipment Safety Database Application *(Refer to section 3 of this document)*

Step 3 – Navigate to the desired record and open the record in "edit" mode. *(Refer to section 5a of this document)*

Step 4 – Scroll down to the "Equipment Inspection Result" section and change the Equipment Status field to "Interlock Equipment"

Step 5 – Provide details for the update in the "Inspection Notes" field.



Step 6 – Click the "Save" button on the top of the page.

l) Special Connector Needed for Inspection

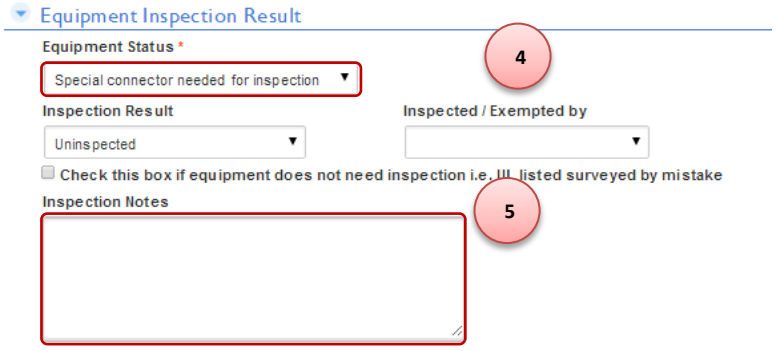
Step 1 – Log into the Electrical Equipment Safety Database Application *(Refer to section 2 of this document)*

Step 2 – Enter the Electrical Equipment Safety Database Application *(Refer to section 3 of this document)*

Step 3 – Navigate to the desired record and open the record in "edit" mode. *(Refer to section 5a of this document)*

Step 4 – Scroll down to the "Equipment Inspection Result" section and change the Equipment Status field to "Special Connector Needed for Inspection"

Step 5 – Provide details for the update in the "Inspection Notes" field.



Step 6 – Click the "Save" button on the top of the page.

7. Add a Level I inspection report

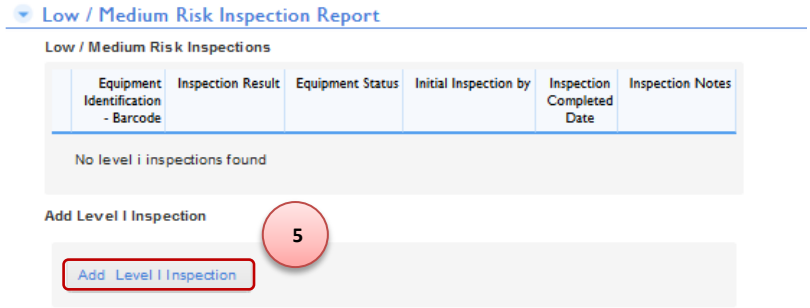
Step 1 – Log into the Electrical Equipment Safety Database Application *(Refer to section 2 of this document)*

Step 2 – Enter the Electrical Equipment Safety Database Application *(Refer to section 3 of this document)*

Step 3 – Navigate to the desired record and open the record in "edit" mode. *(Refer to section 5a of this document)*

Step 4 – Scroll down the page to the "Low / Medium Risk Inspection Report" section.

Step 5 – Click on "Add Level I Inspection" button.



Step 6 – Continue on section 9a-d below for instructions on how to complete inspection reports.

8. Add a Level II inspection report

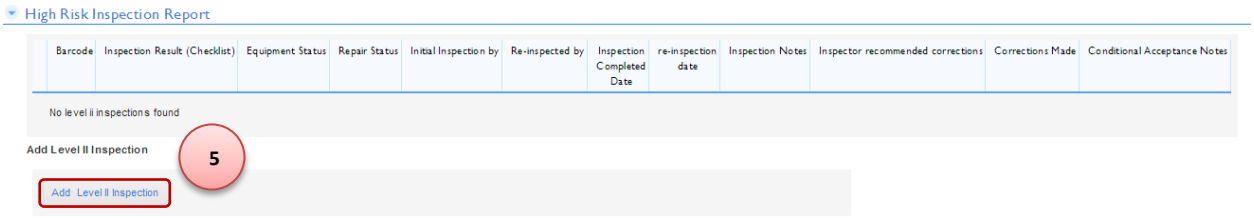
Step 1 – Log into the Electrical Equipment Safety Database Application *(Refer to section 2 of this document)*

Step 2 – Enter the Electrical Equipment Safety Database Application *(Refer to section 3 of this document)*

Step 3 – Navigate to the desired record and open the record in "edit" mode. *(Refer to section 5a of this document)*

Step 4 – Scroll down the page to the "High Risk Report" section.

Step 5 – Click on "Add Level II Inspection" button.



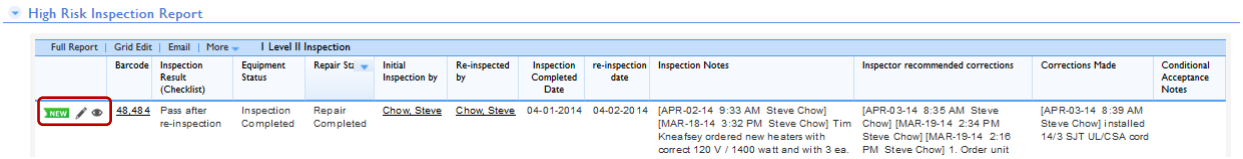
Step 6 – Continue on section 9a-d below for instructions on how to complete inspection reports.

9. Generate equipment inspection reports

a) Generate a "Pass" inspection report.

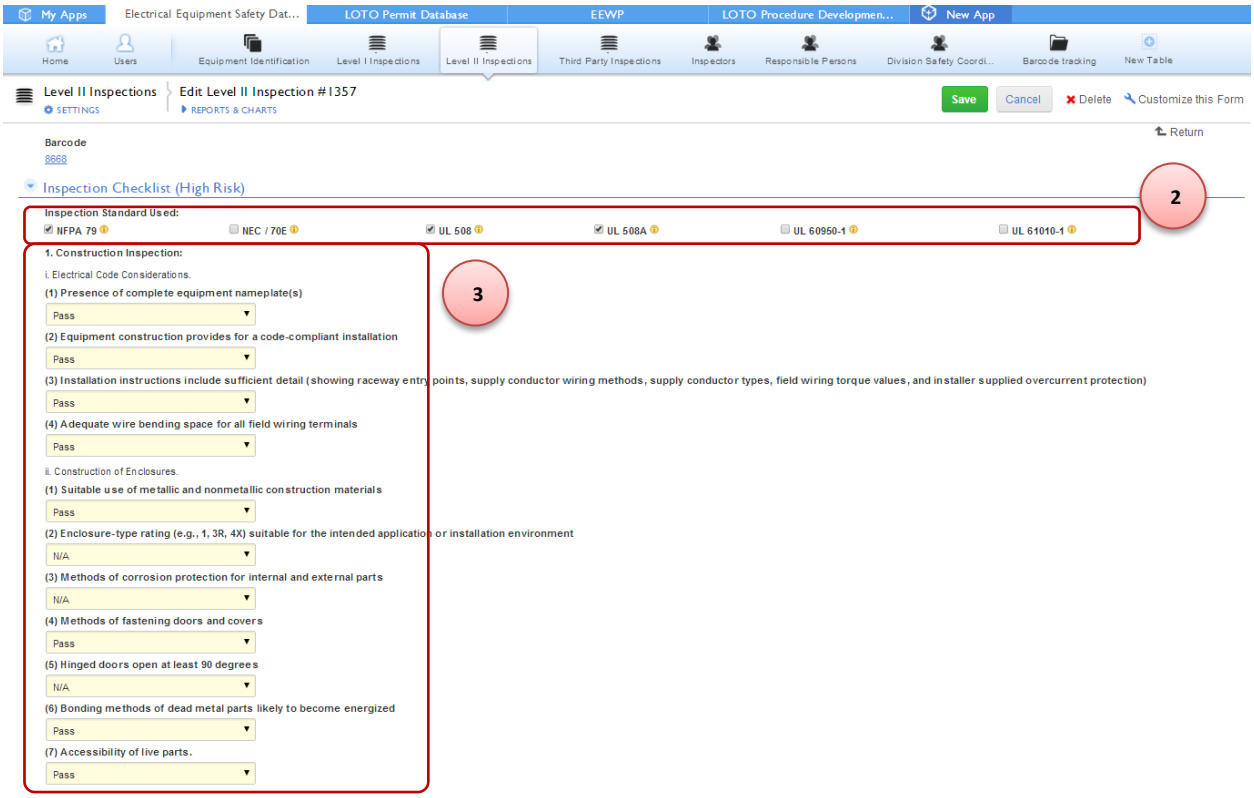
Step 1a – Follow steps 1-5 in section 7 initiate/create an inspection report or follow steps 1-4 in section 7 then proceed with step 1b below if the inspection report has already been created. *(Data entry inspection form will look different depending on the priority risk group of the equipment)*

Step 1b – Edit the existing inspection report by clicking on the "pencil" icon.

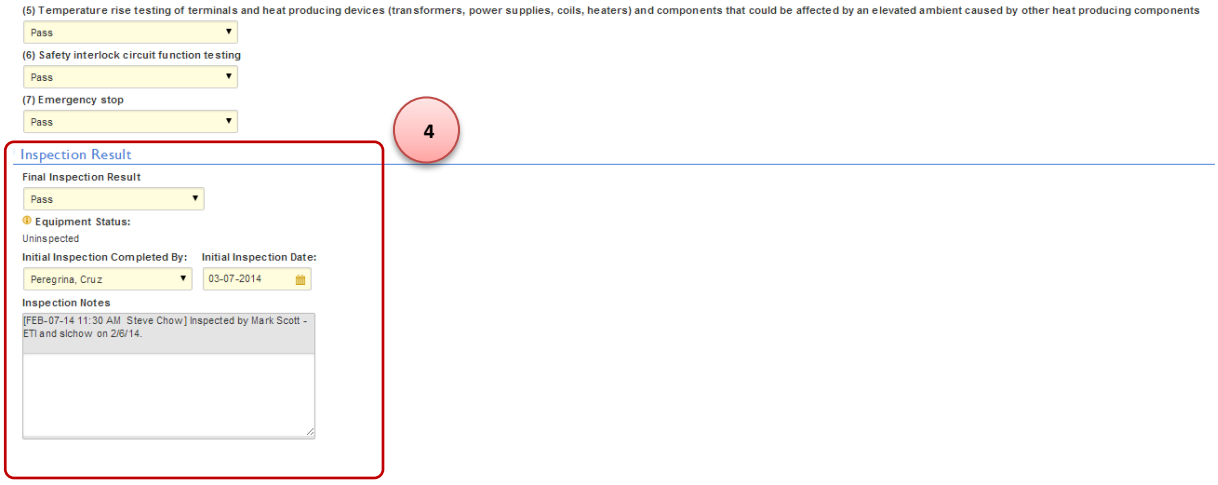


Step 2 – List the inspection standards used for inspecting the equipment. *(Only applicable for High Risk Inspection reports)*

Step 3 – Run down through the various inspection categories listing the outcome of each.

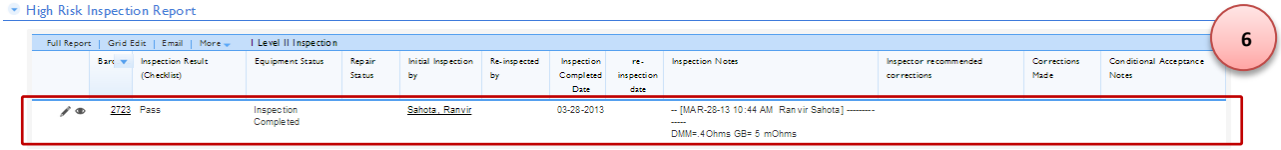


Step 4 – Fill out the "Inspection Result" section as "Pass" as shown in the example below. *(The equipment status will be updated latter in the process)*



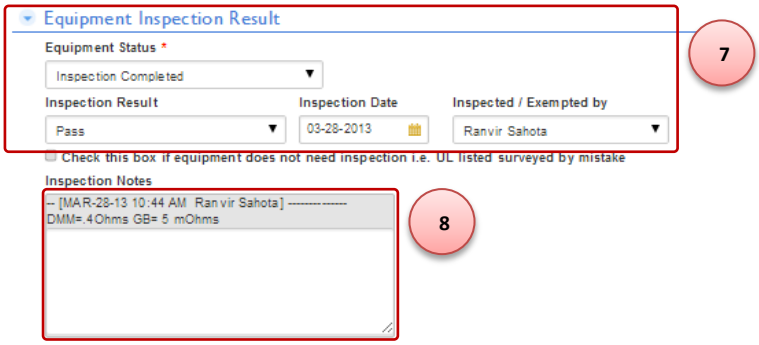
Step 5 – Click the "Save" button on the top of the page.

Step 6 –Navigate back to the equipment identification record, and verify that inspection report was generated. *(Refer to section 5a of this document)*



Step 7 – Scroll down to the “Equipment Inspection Result” section, and update the record with a “Pass” inspection result, and “Inspection Completed” equipment status as shown below.

Step 8 – Provide details for the update in the “Inspection Notes” field.

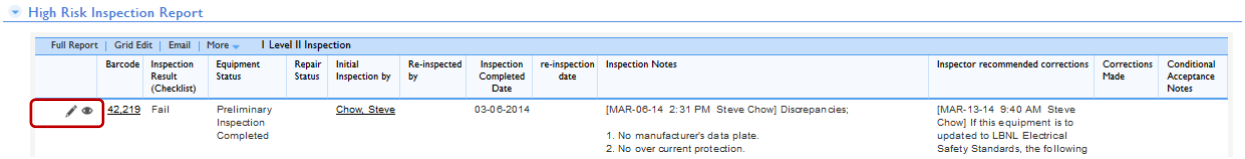


Step 9 – Click the “Save” button on the top of the page

b) Generate a “Fail” inspection report.

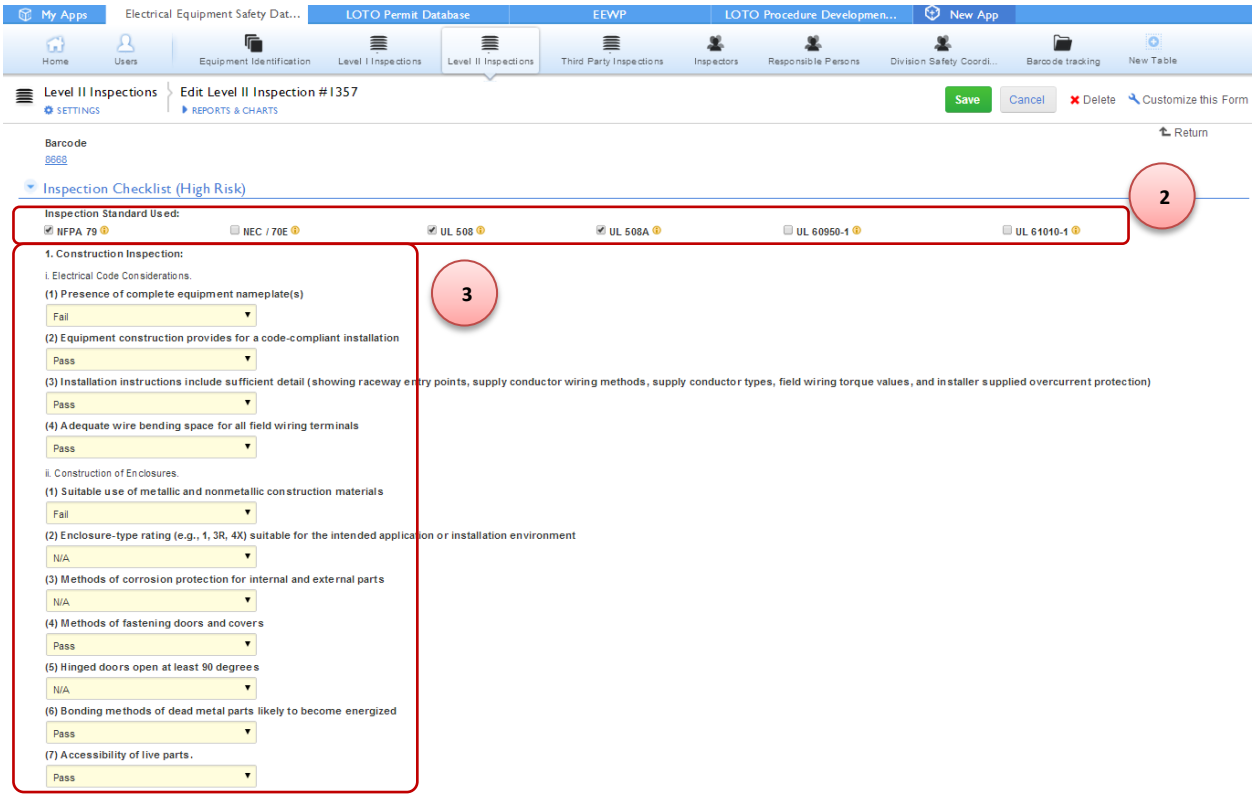
Step 1a – Follow steps 1-5 in section 7 initiate/create an inspection report or follow steps 1-4 in section 7 then proceed with step 1b below if the inspection report has already been created. *(Data entry inspection form will look different depending on the priority risk group of the equipment)*

Step 1b – Edit the existing inspection report by clicking on the “pencil” icon.



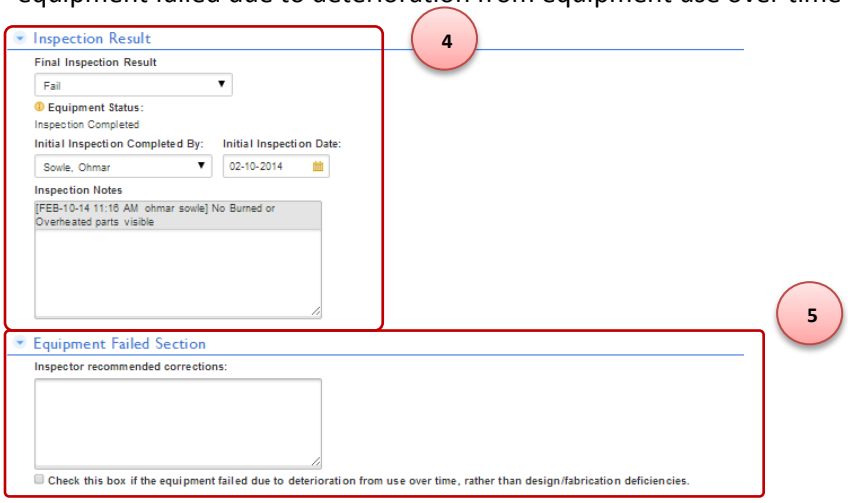
Step 2 – List the inspection standards used for inspecting the equipment *(Only applicable for High Risk Inspections)*

Step 3 – Run down through the various inspection categories listing the outcome of each. List as “Fail” any inspection items that fail inspection.



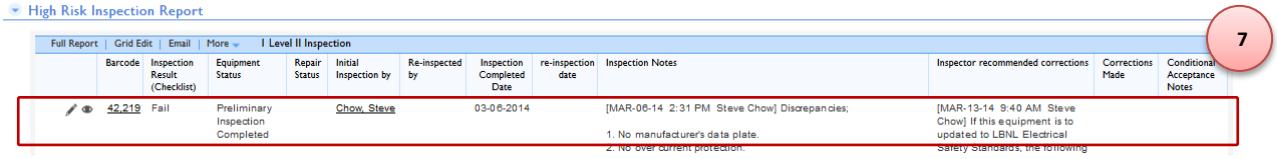
Step 4 – Complete the "Inspection Result" section for a "Fail" inspection result as shown in the example below. *(The equipment status will be updated latter in the process)*

Step 5 – List the recommended corrections in the "Equipment Failed" section, and note if the equipment failed due to deterioration from equipment use over time using the provided checkbox.



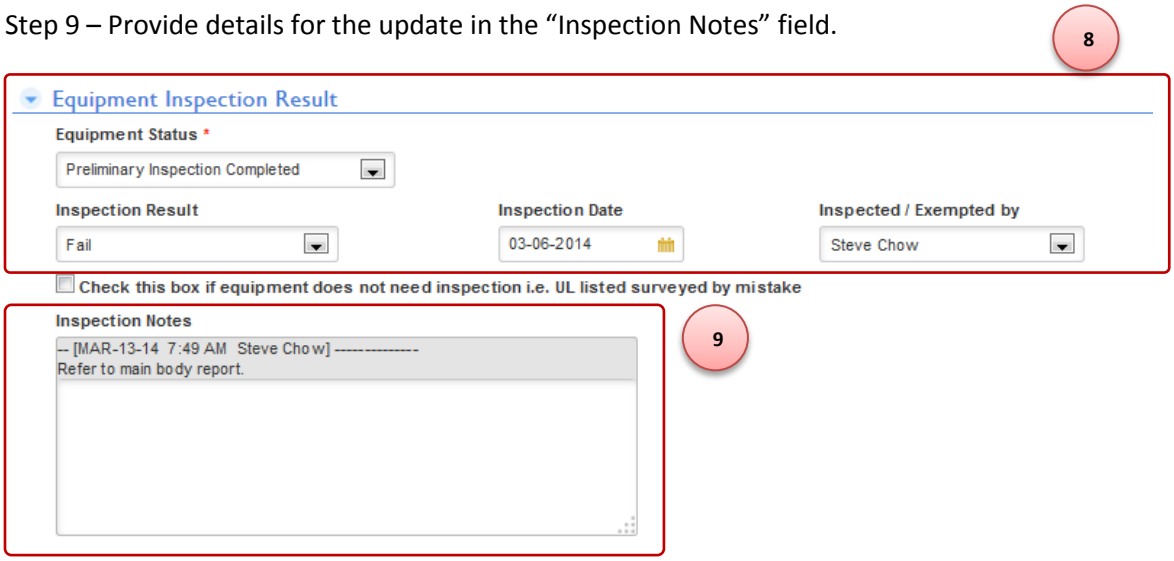
Step 6 – Click the "Save" button on the top of the page.

Step 7 –Navigate back to the equipment identification record, and verify that inspection report was generated. *(Refer to section 5a of this document)*



Step 8 – Scroll down to the "Equipment Inspection Result" section, and update the record with a "Fail" inspection result, and "Preliminary Inspection Completed" equipment status as shown below.

Step 9 – Provide details for the update in the "Inspection Notes" field.

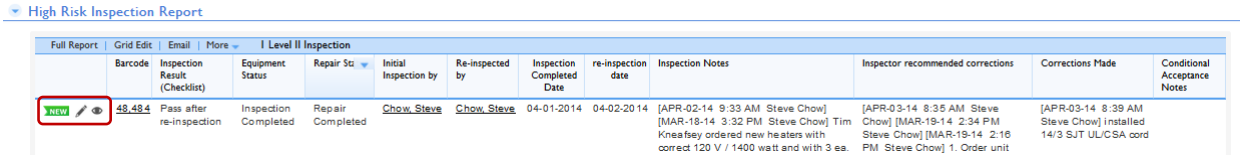


Step 10 – Click the "Save" button on the top of the page.

c) Generate a "Conditional Accepted" inspection report.

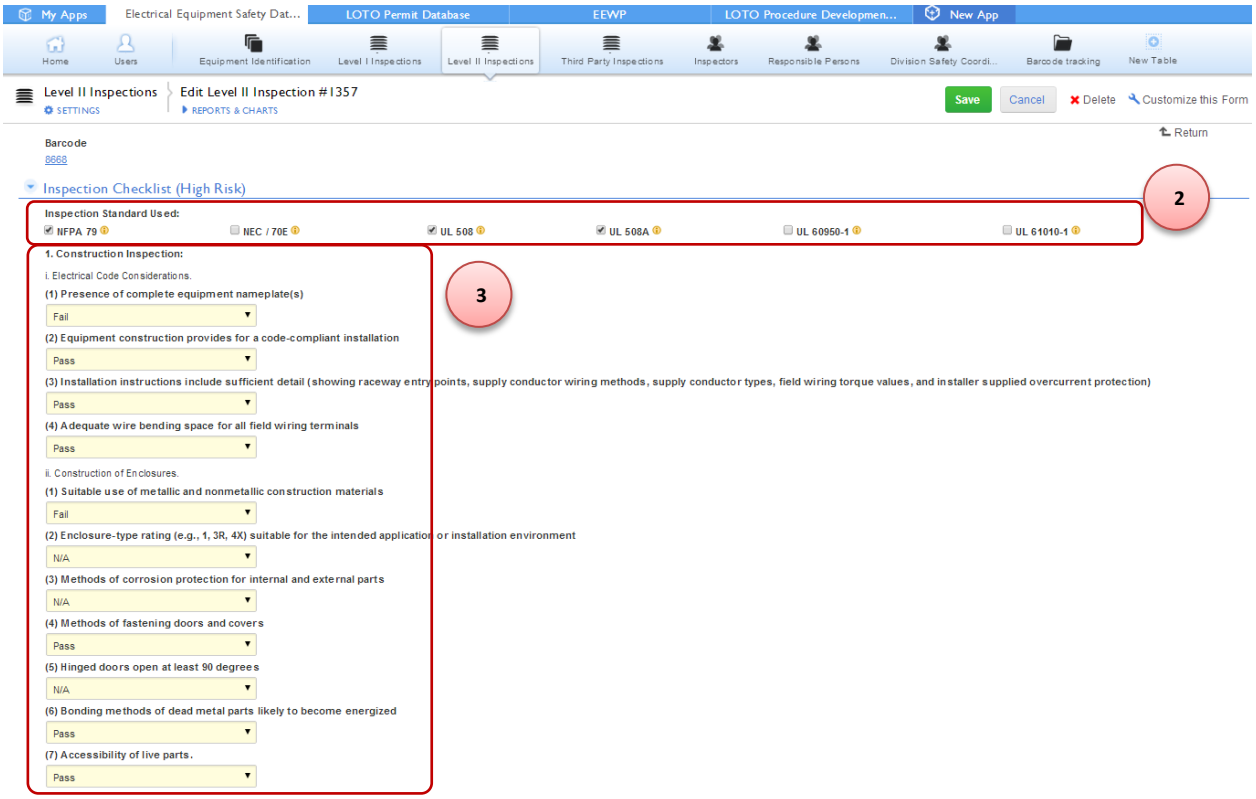
Step 1a – Follow steps 1-5 in section 7 initiate/create an inspection report or follow steps 1-4 in section 7 then proceed with step 1b below if the inspection report has already been created. *(Data entry inspection form will look different depending on the priority risk group of the equipment)*

Step 1b – Edit the existing inspection report by clicking on the "pencil" icon.



Step 2 – List the inspection standards used for inspecting the equipment. *(Only applicable for High Risk Inspections)*

Step 3 – Run down through the various inspection categories listing the outcome of each. List as "Fail" any inspection items that fail inspection.

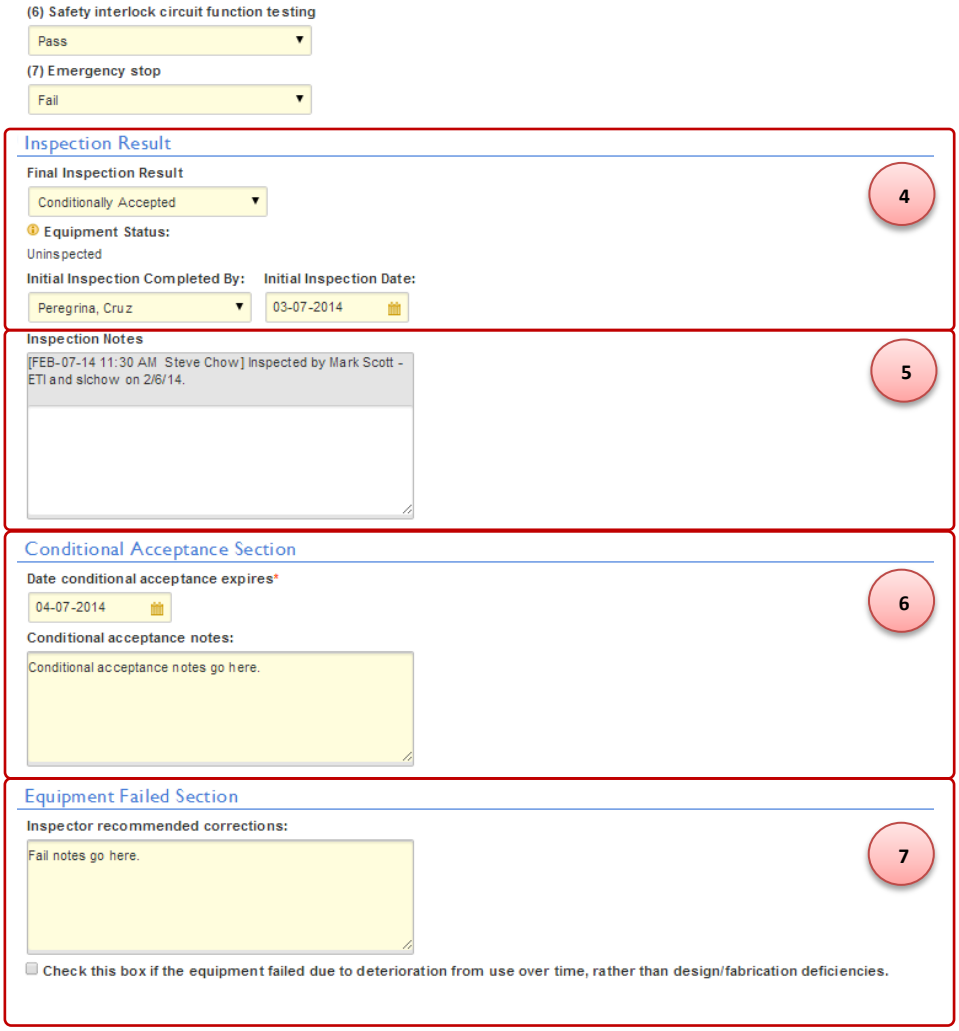


Step 4 – Complete the “Inspection Result” section for a “Conditional Acceptance” inspection result as shown in the example below. *(The equipment status will be updated latter in the process)*

Step 5 – Provide details for the update in the “Inspection Notes” field.

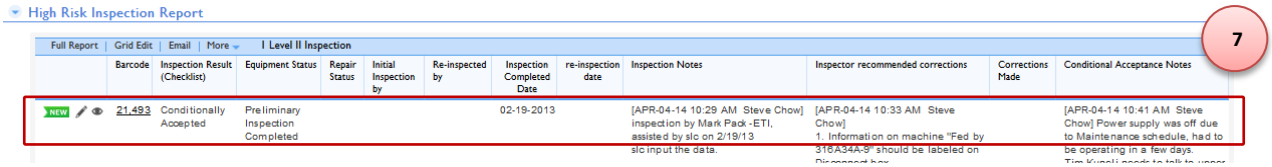
Step 6 – Provide the inspection report with an expiration date for the conditional accepted status, and list any details regarding the reason for the equipment being conditionally accepted.

Step 7 – List the recommended corrections in the “Equipment Failed” section, and note if the equipment failed due to deterioration from equipment use over time using the provided checkbox.



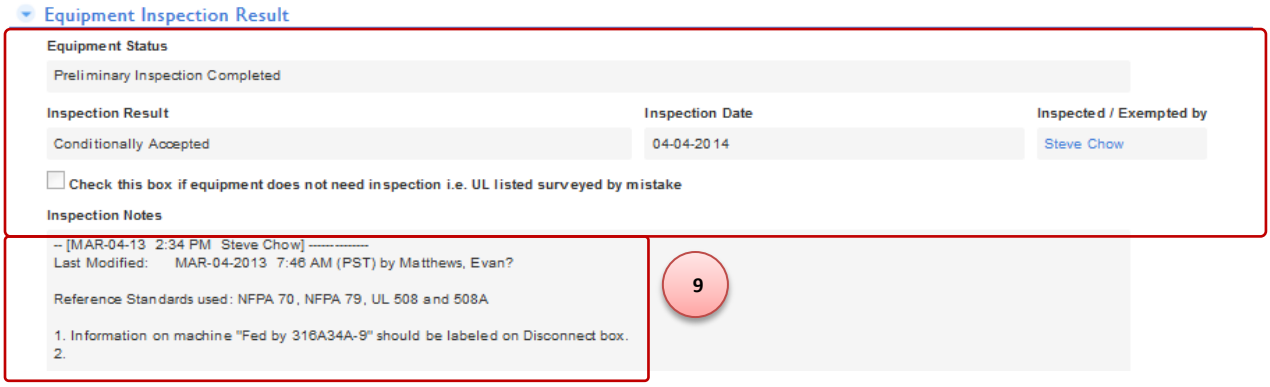
Step 6 – Click the “Save” button on the top of the page.

Step 7 –Navigate back to the equipment identification record, and verify that inspection report was generated. *(Refer to section 5a of this document)*



Step 8 – Scroll down to the “Equipment Inspection Result” section, and update the record with a “Conditionally Accepted” inspection result, and “Preliminary Inspection Completed” equipment status as shown below.

Step 9 – Provide details for the update in the “Inspection Notes” field. 8

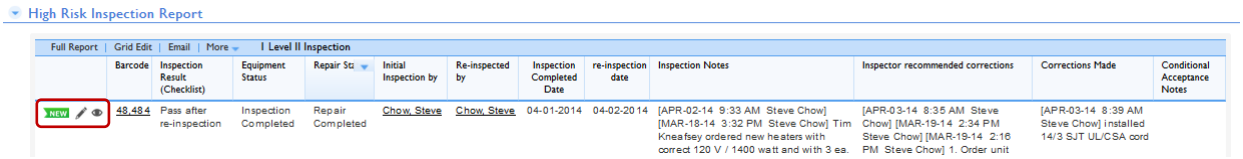


Step 10 – Click the "Save" button on the top of the page

d) Generate a "Pass after re-inspection" inspection report.

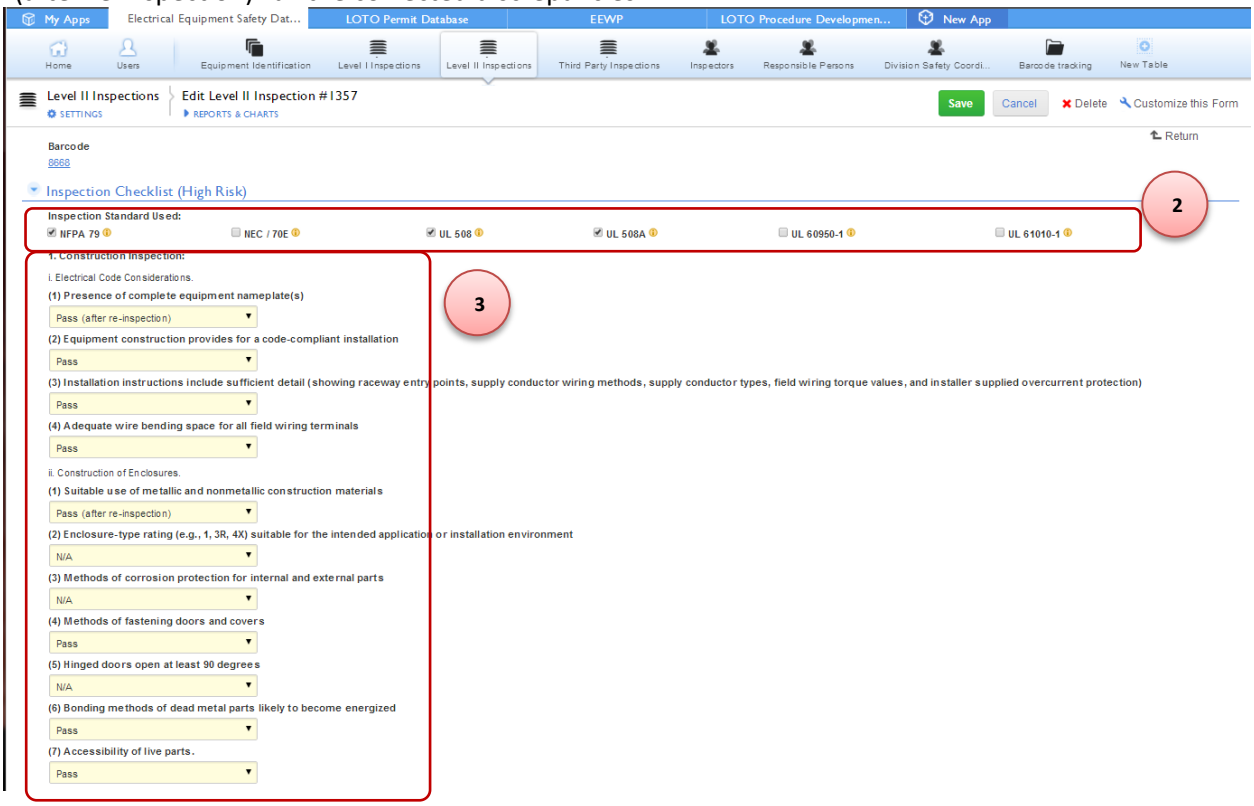
Step 1a – Follow steps 1-5 in section 7 initiate/create an inspection report or follow steps 1-4 in section 7 then proceed with step 1b below if the inspection report has already been created. *(Data entry inspection form will look different depending on the priority risk group of the equipment)*

Step 1b – Edit the existing inspection report by clicking on the "pencil" icon.



Step 2 – List the inspection standards used for inspecting the equipment *(Only applicable for High Risk Inspections)*

Step 3 – Run down through the various inspection categories listing the outcome of each. List as "Pass (after re-inspection)" all the corrected discrepancies.



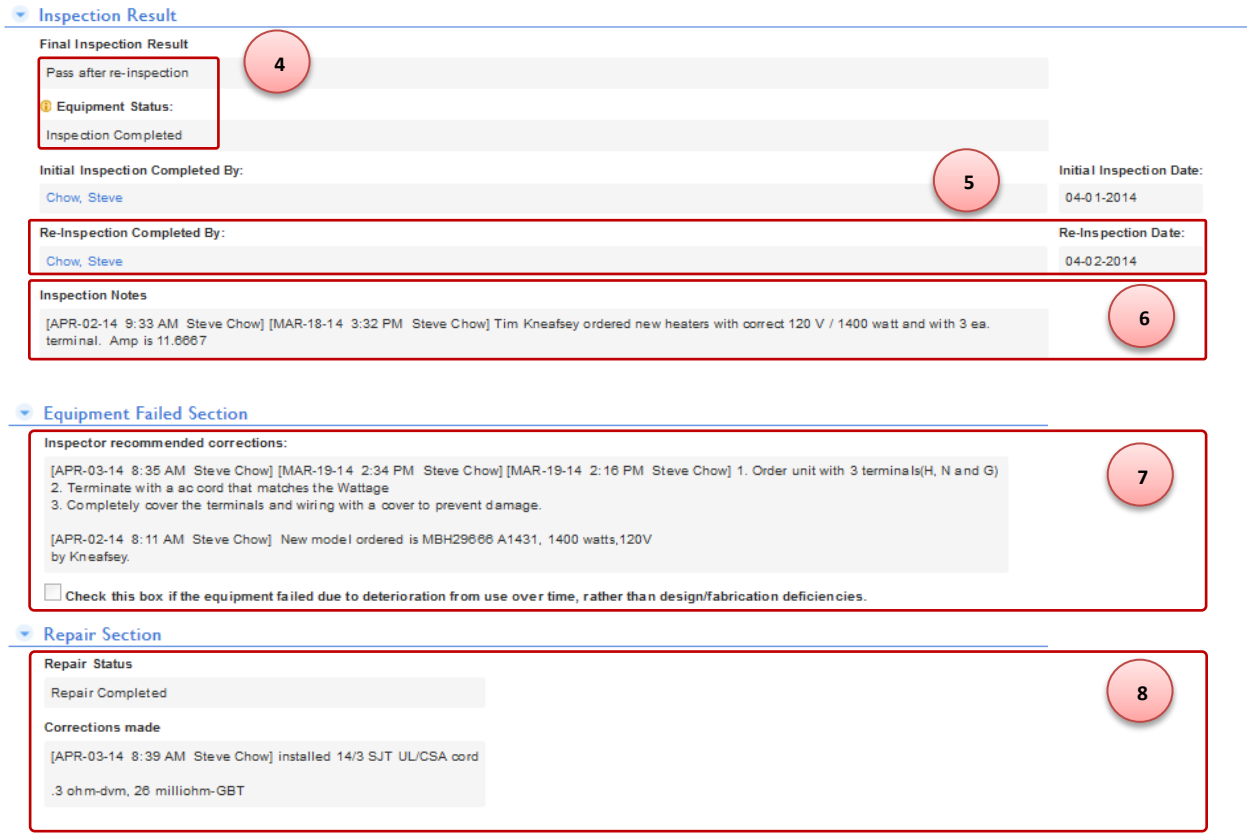
Step 4 – Complete the “Inspection Result” section for a “Pass (after re-inspection)” inspection result as shown in the example below. *(The equipment status will be updated latter in the process)*

Step 5 – Verify that the “Re-inspection Completed By” lists you as an inspector, and the re-inspection date is logged properly.

Step 6 – Provide details for the update in the “Inspection Notes” field.

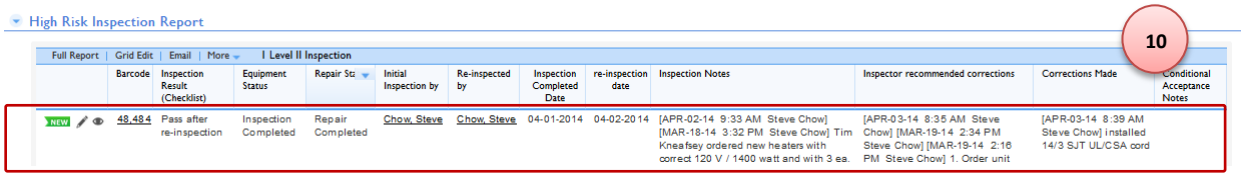
Step 7 – List the recommended corrections in the “Equipment Failed” section, and note if the equipment failed due to deterioration from equipment use over time using the provided checkbox.

Step 8 – Change the Repair Status to “Repair Completed” and note the corrections that were made to the equipment.



Step 9 – Click the “Save” button on the top of the page.

Step 10 –Navigate back to the equipment identification record, and verify that inspection report was generated. *(Refer to section 5a of this document)*



Step 11 – Scroll down to the “Equipment Inspection Result” section, and update the record with a “Pass after re-inspection” inspection result, and “Inspection Completed” equipment status as shown below.

Step 12 – Provide details for the update in the “Inspection Notes” field.