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Title:	Maintenance Connection (MC) MC Tablet Hybrid Software Training for Sampler Inspections
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Maintenance Connection (MC)

MC Tablet Hybrid Software Training for Sampler Inspections

Training objectives

- To provide an overview of the MC Tablet Hybrid software.
- To communicate changes in Work Order (WO) generation and distribution.
- Provide step by step process for electronic WO data entry for sampler inspection forms.

What is MC Tablet Hybrid?

- Offline windows based software option for use with MC.
- Stores a snapshot of MC
  - Your electronic view of the WO looks like what we see in MC.
- Allows electronic data entry of WOs, which can be directly uploaded into MC.
- Panasonic Toughbooks will be used to run the software.
  - Wireless capability has been disabled and can be only be connected to the yellow network via Ethernet port in TA-00 Bldg 1237 (Pueblo Complex)
  - Route Leads will be assigned a secureDoc account and a LANL WIN domain account

Why Are We Using MC Tablet Hybrid?

- Process Improvement Projects
  - 2011
    - Decrease Maintenance Cycle Time for Storm Water Control Measures
  - 2012
    - 7-Day Holding Time Sample Retrieval and Analysis Process
    - Telemetry Improvement Project
  - 2013
    - Field Based PV Charging of Automated Samplers
  - 2014
    - Work order Data Management Process

Work Order Data Management Process Improvement Project Overview

- The purpose of this process improvement is to ultimately go “paperless”
  - All prepopulated information on the hard copy forms is stored in MC.
  - WOs are currently issued in MC and distributed in hard copy form.
  - During the 2014 field season WOs for a select number of sampling locations per Route will be issued in MC and distributed both electronically via MC Tablet Hybrid and in hard copy form.
  - In future field seasons all WOs will be distributed electronically.

What is the new WO distribution process?

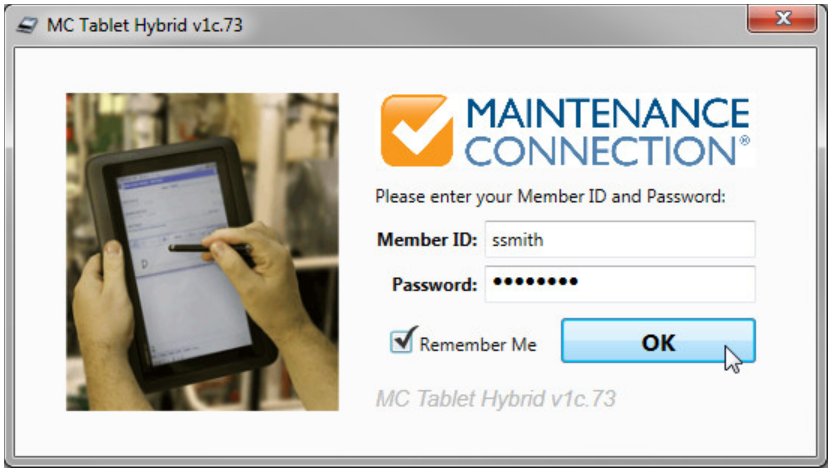
- An account in MC will be set up for each Route.
- Each Route will be assigned the following
  - A Toughbook installed with MC Tablet Hybrid software and an executable backup batch file
  - A flash drive that the executable batch file will be routinely saved to throughout the work day
- Hard copy WO distribution will continue as in previous years.
- Route Leads will need to connect their Toughbook to the yellow network daily to synchronize (‘sync’) with MC.

What is the new WO distribution process? (Continued)

- During the ‘sync’ any work orders that have been issued in MC to the Route since the last connection will be downloaded to the Toughbook. Any works order on the Toughbook that have been placed in a “completed” status will be uploaded from the Toughbook back to MC.

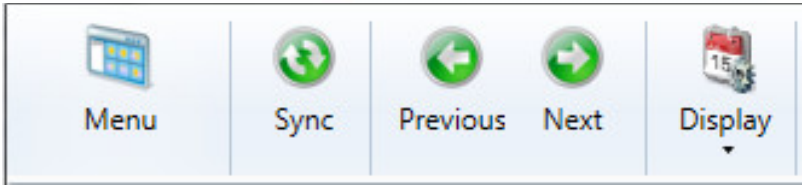
Tablet Hybrid tutorial

- Connect to the yellow network using open Ethernet ports in the Pueblo Complex.
- Route Leads will log in using their unique secureDoc and WIN account passwords
- Open the Tablet Hybrid program by clicking on the shortcut icon



Log in using the Route's Member ID and password

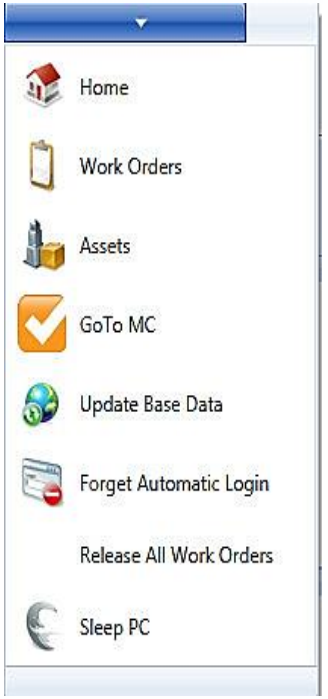
Tablet Hybrid Home Page



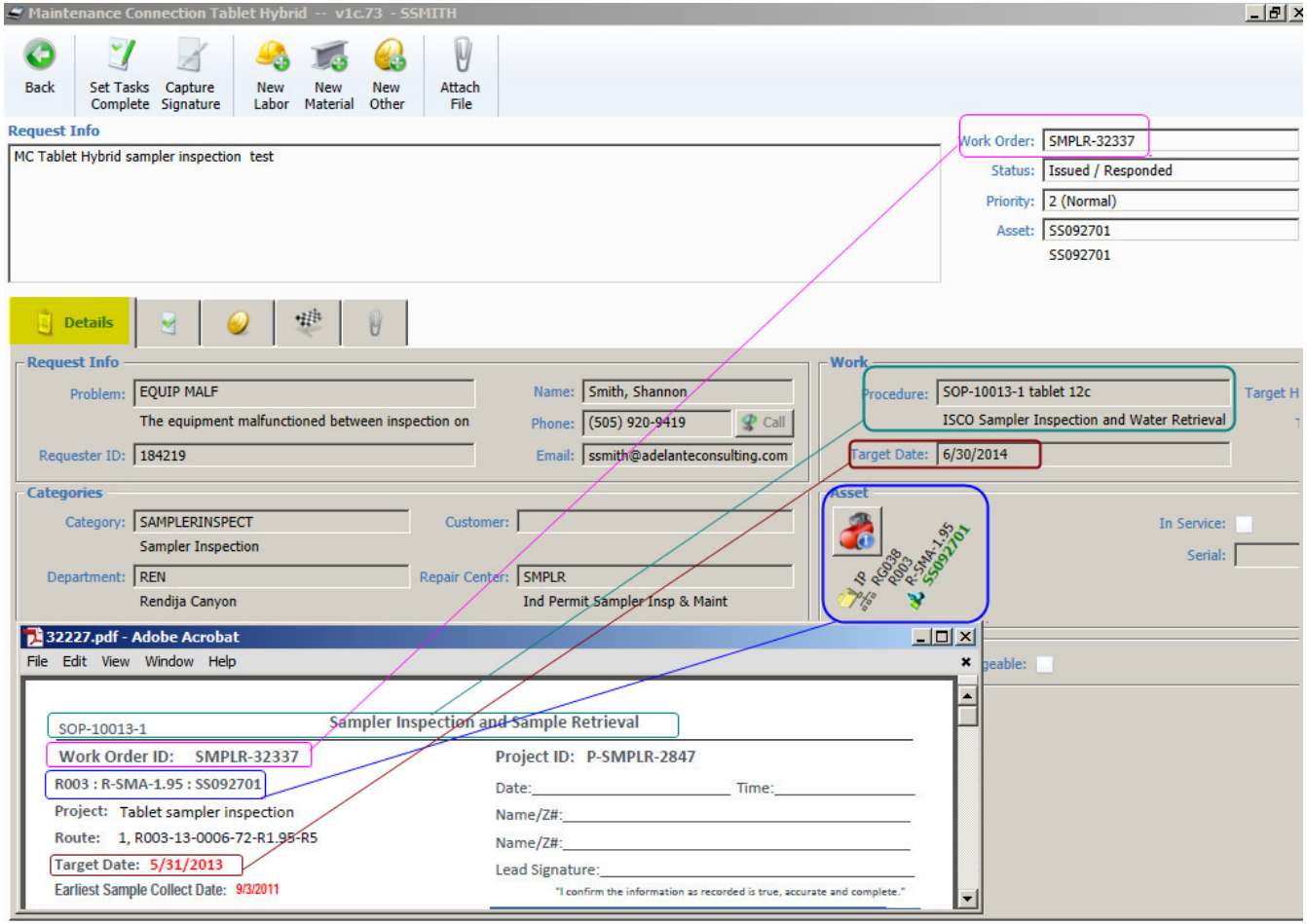
- Menu: Access work order page, Asset page, Update base data, or return to home page.
- Sync: Synchronize tablet hybrid software with Maintenance connection
- Previous/Next: Use these buttons to scroll through calendar on Home page
- Display: Displays WOs by either target date or assign date
  - It is recommended to always leave this selection on target date

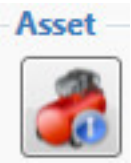
Tablet Hybrid Home Page Continued

- Menu Dropdown:
  - ‘Home’ will return to the calendar (home page).
  - ‘Work Orders’ will list all work orders currently sync’d to the device.
  - ‘Assets” will go to the asset hierarchy.
  - ‘Update Base Data’ sync’s any specification or equipment configuration changes that have occurred in MC. *This should be done on a weekly basis while connected to the yellow network.*
  - Forget Automatic login will reset the login preferences.
  - ‘Release All Work Orders’ will upload all work orders back to MC regardless of status.



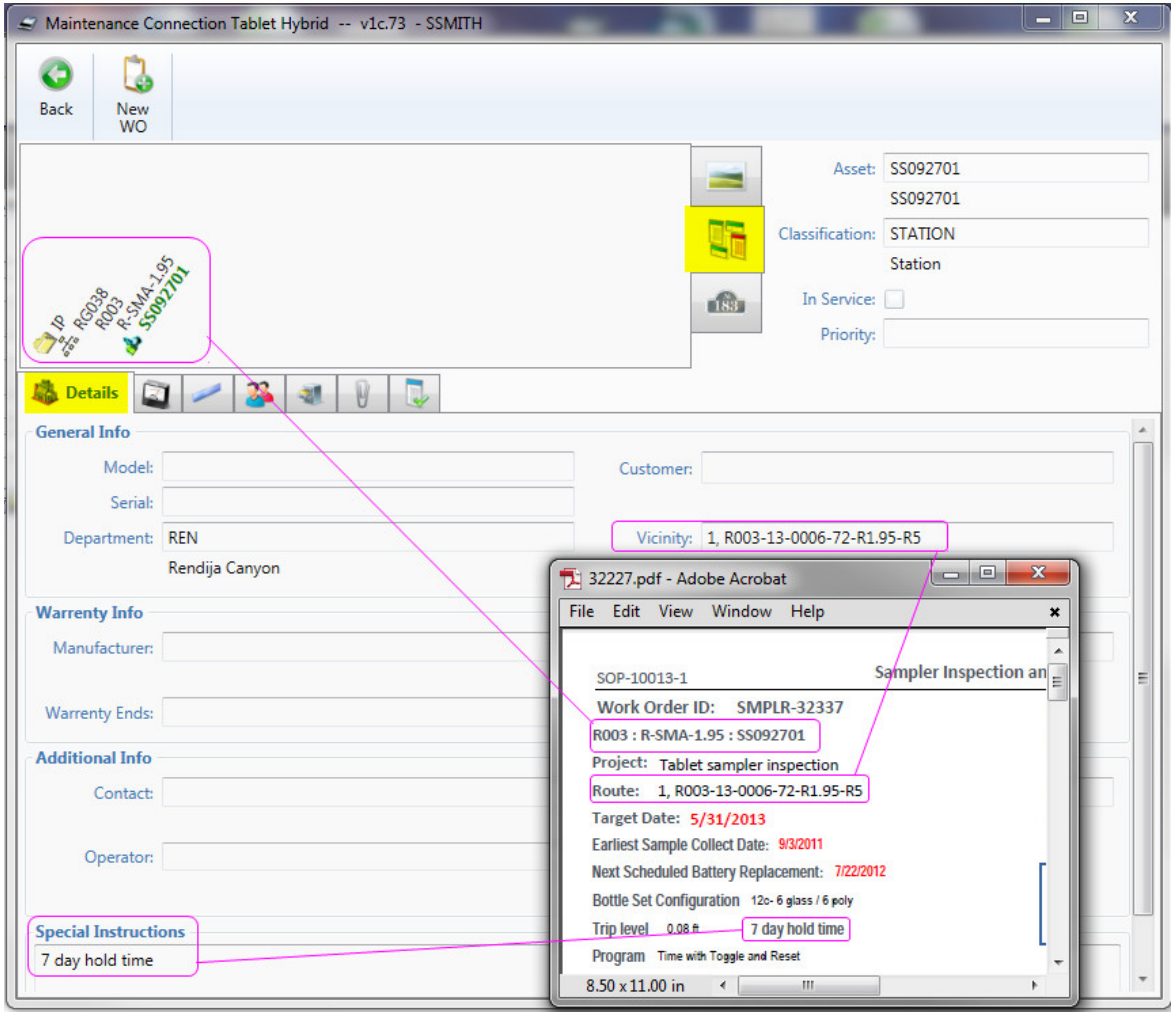
Work Order Details Page Crosswalk to Current Hard Copy



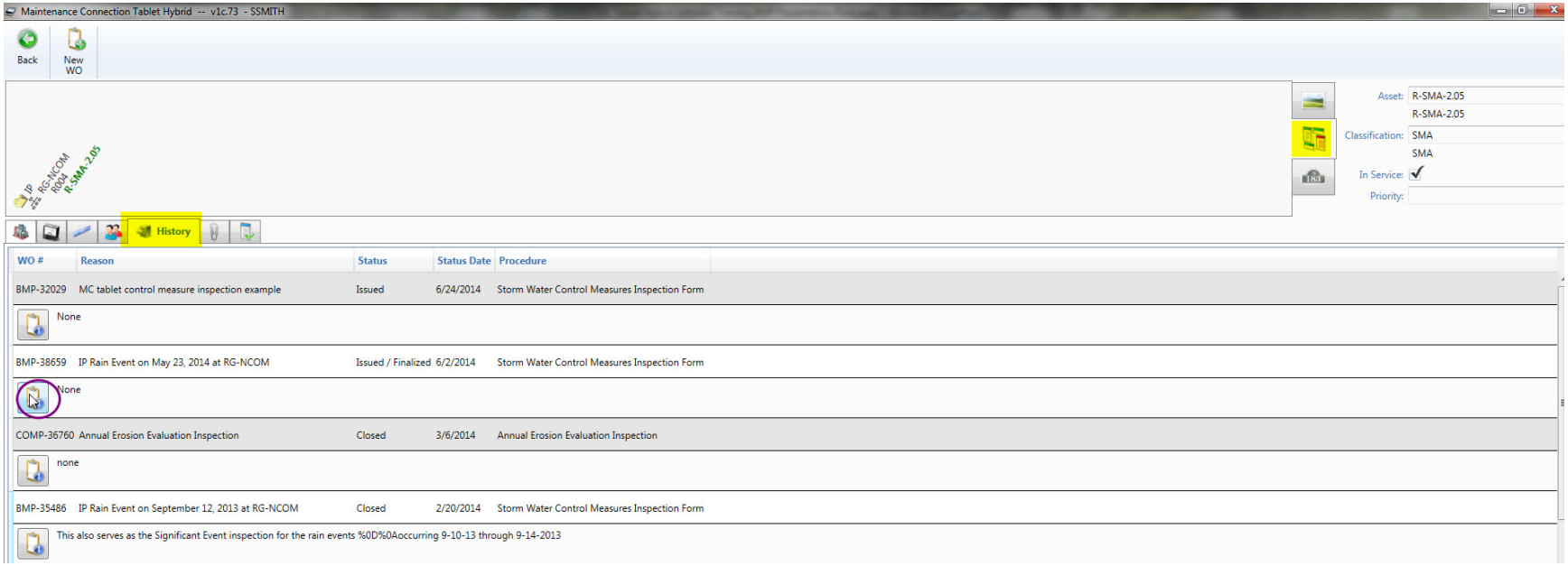
Click on the racecar icon 

to open the asset details page.

Asset Details Page Crosswalk to Current Hard Copy



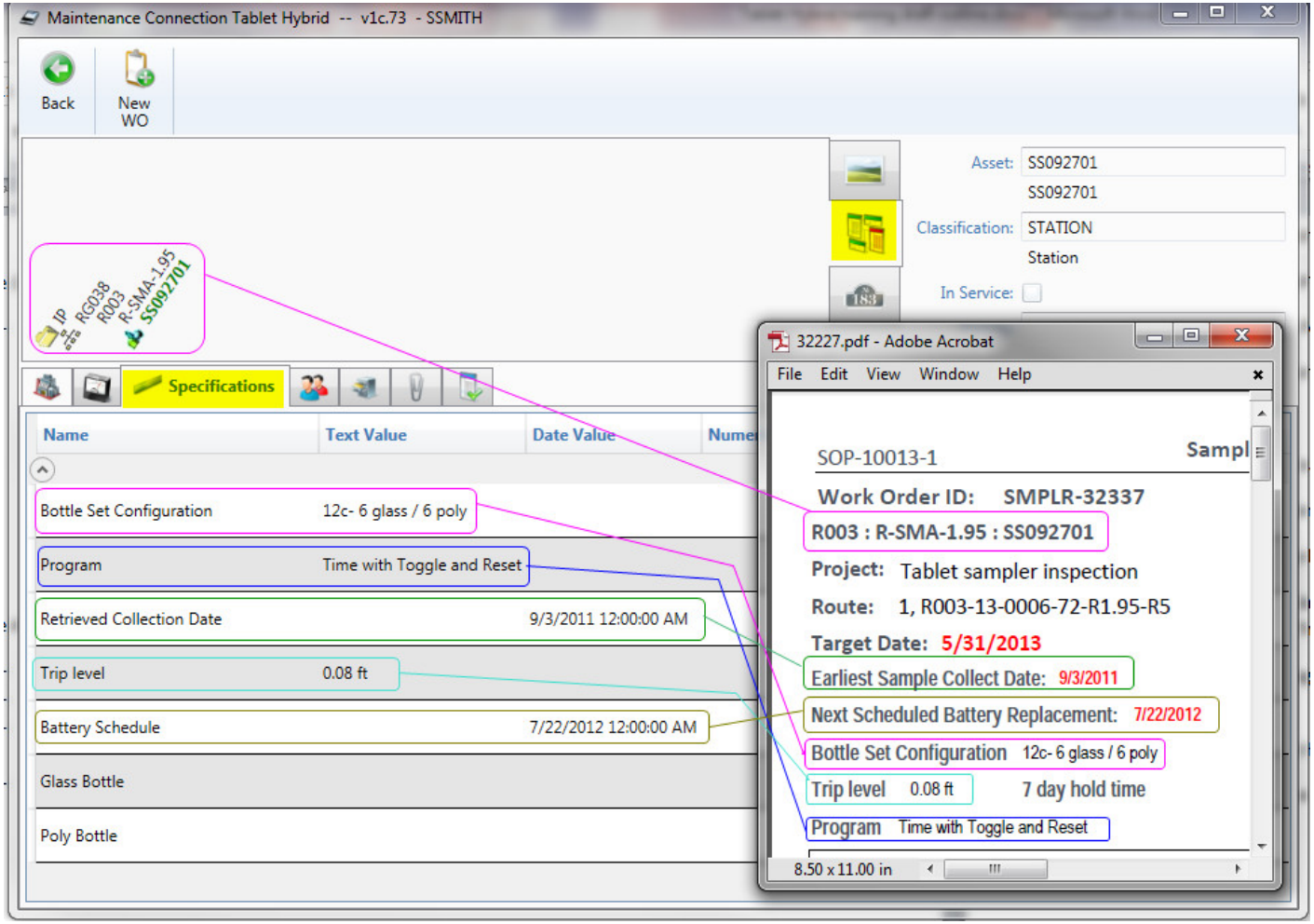
Asset History Page



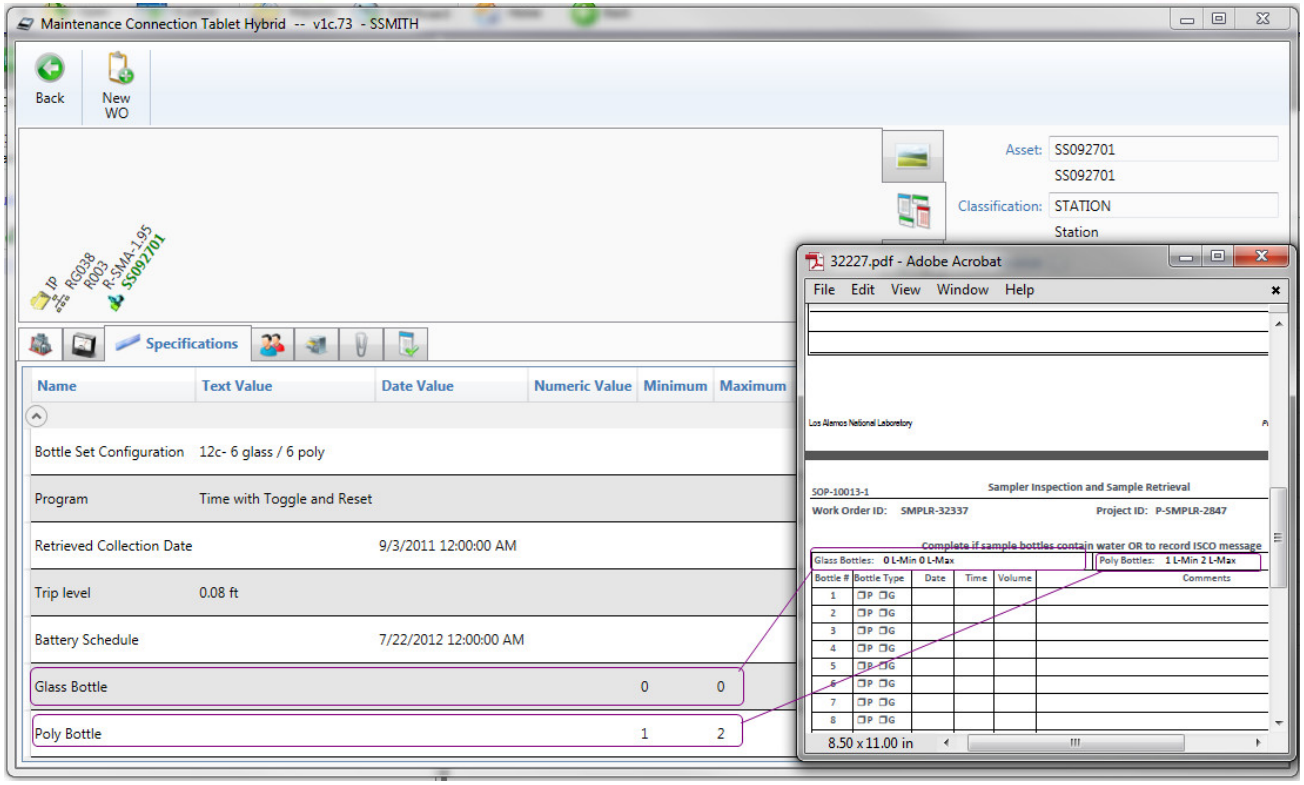
- *Quick view of previous inspections to the Asset (SMA) including finding written in the labor report (hard copy additional notes section)*
- *Click on the clipboard icon for detailed view of previous work orders.*
- *Use the*

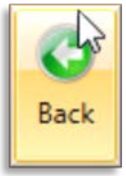
button to return to the Asset details of the current WO.

Asset Specifications Crosswalk to Current Hard Copy



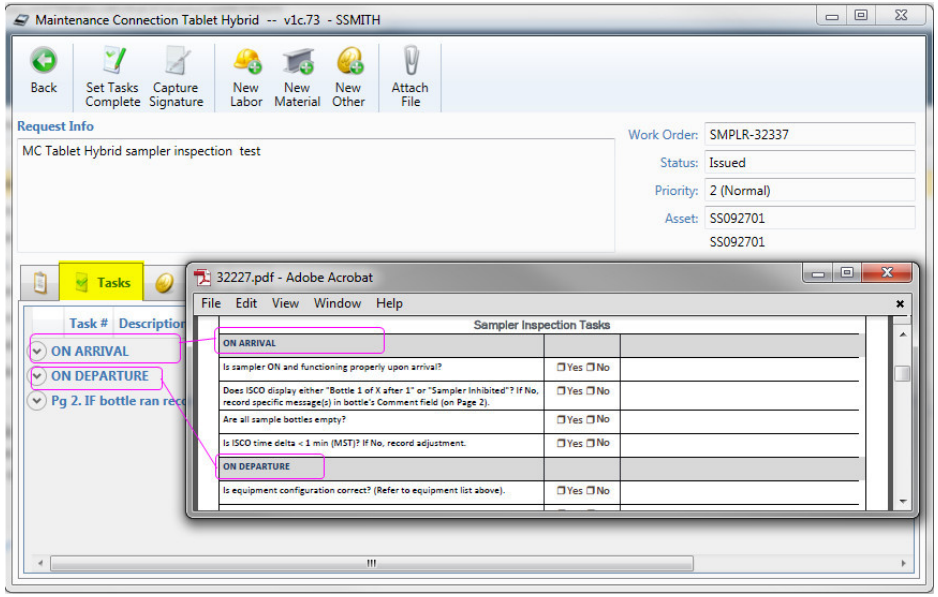
Asset Specifications Crosswalk Continued



To return to the Work Order click  *at the top left corner.*

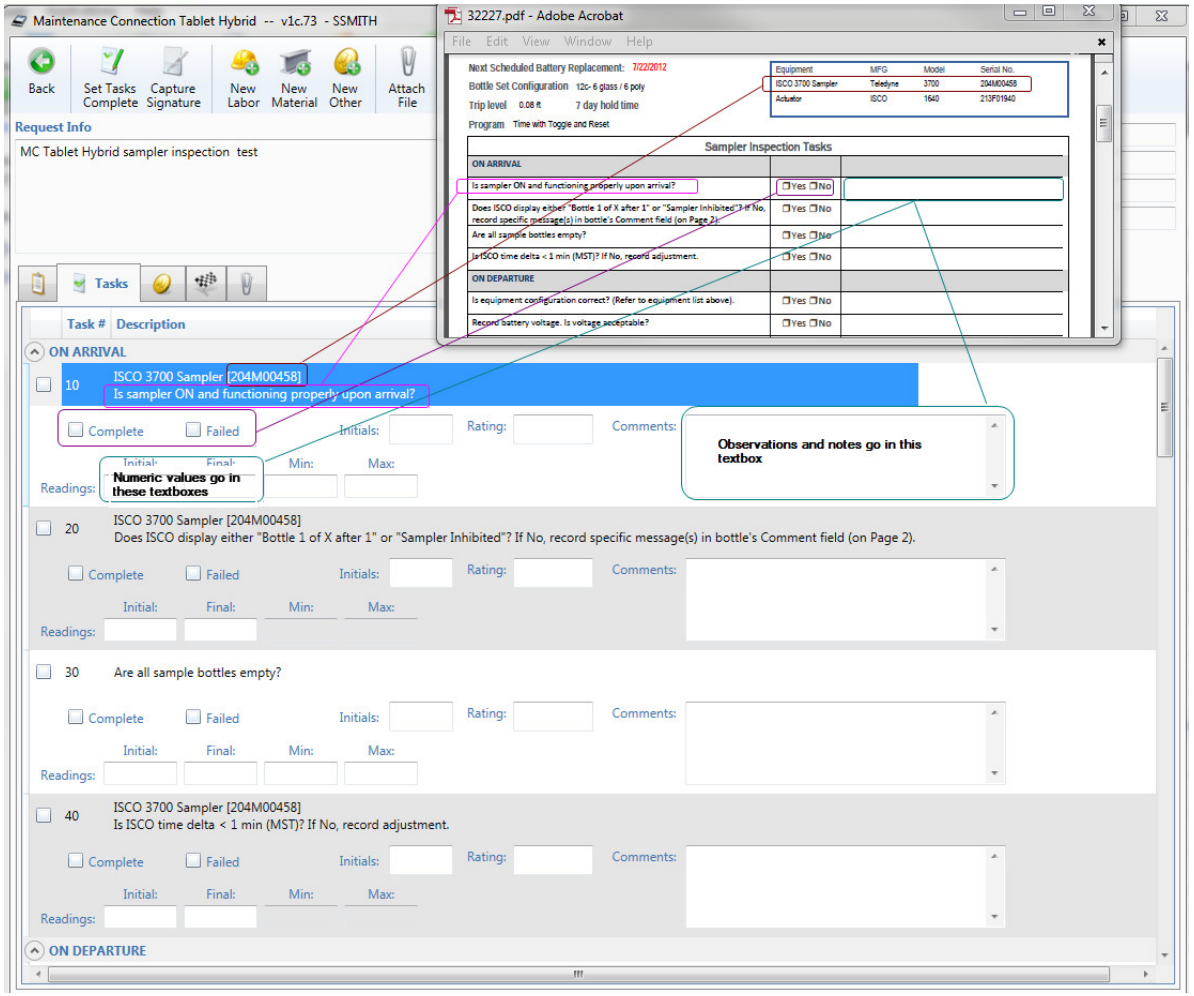
Work Order Tasks Overview

- Click on the Tasks tab to open the tasks.
- Each task that is on the hard copy will be displayed. Tasks are displayed in alternating white or grey.
- Section headers on the hard copy are also section headers in MC.

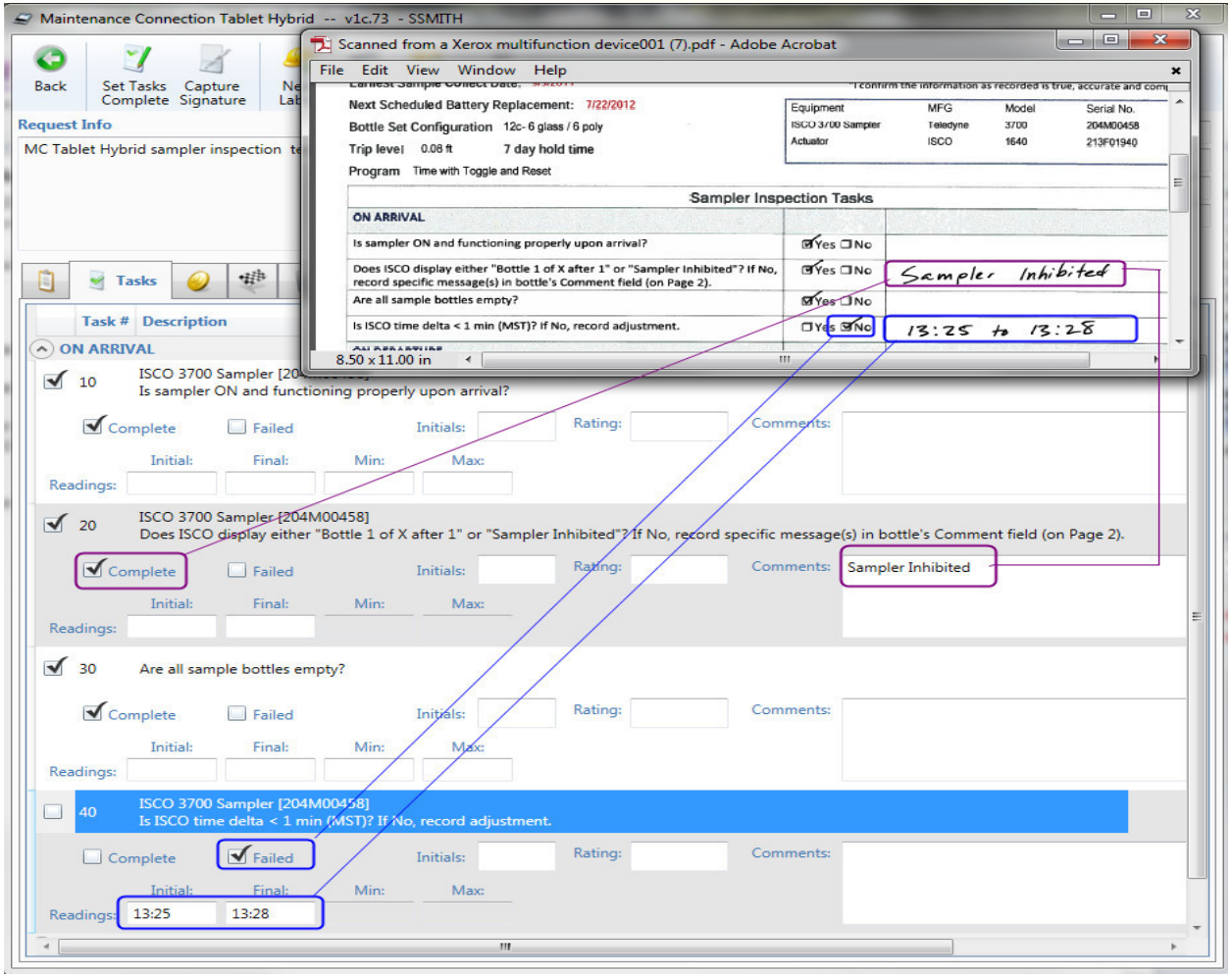


Use the *button to minimize/maximize tasks within sections*

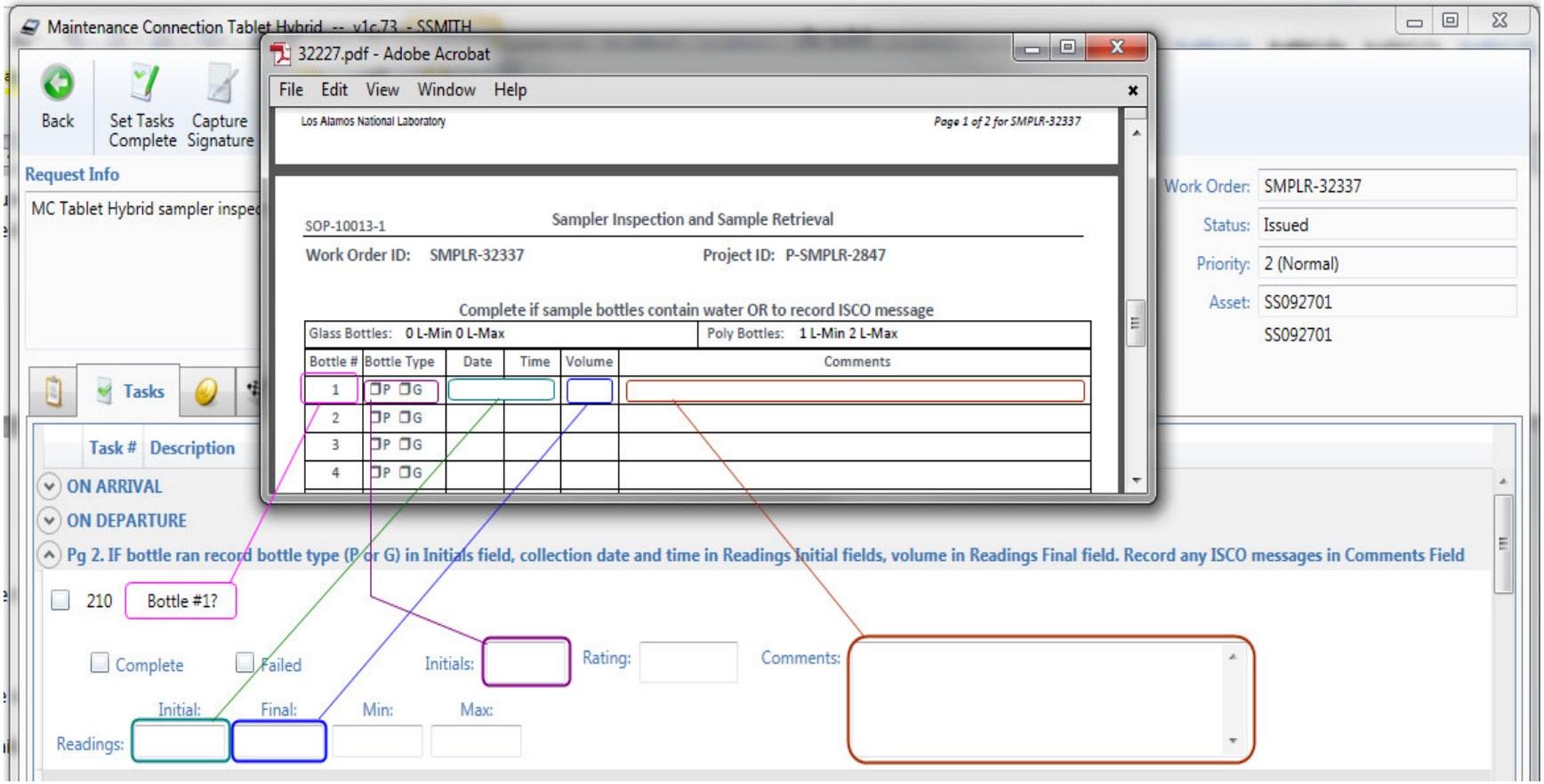
Inspection Tasks Crosswalk – Page 1



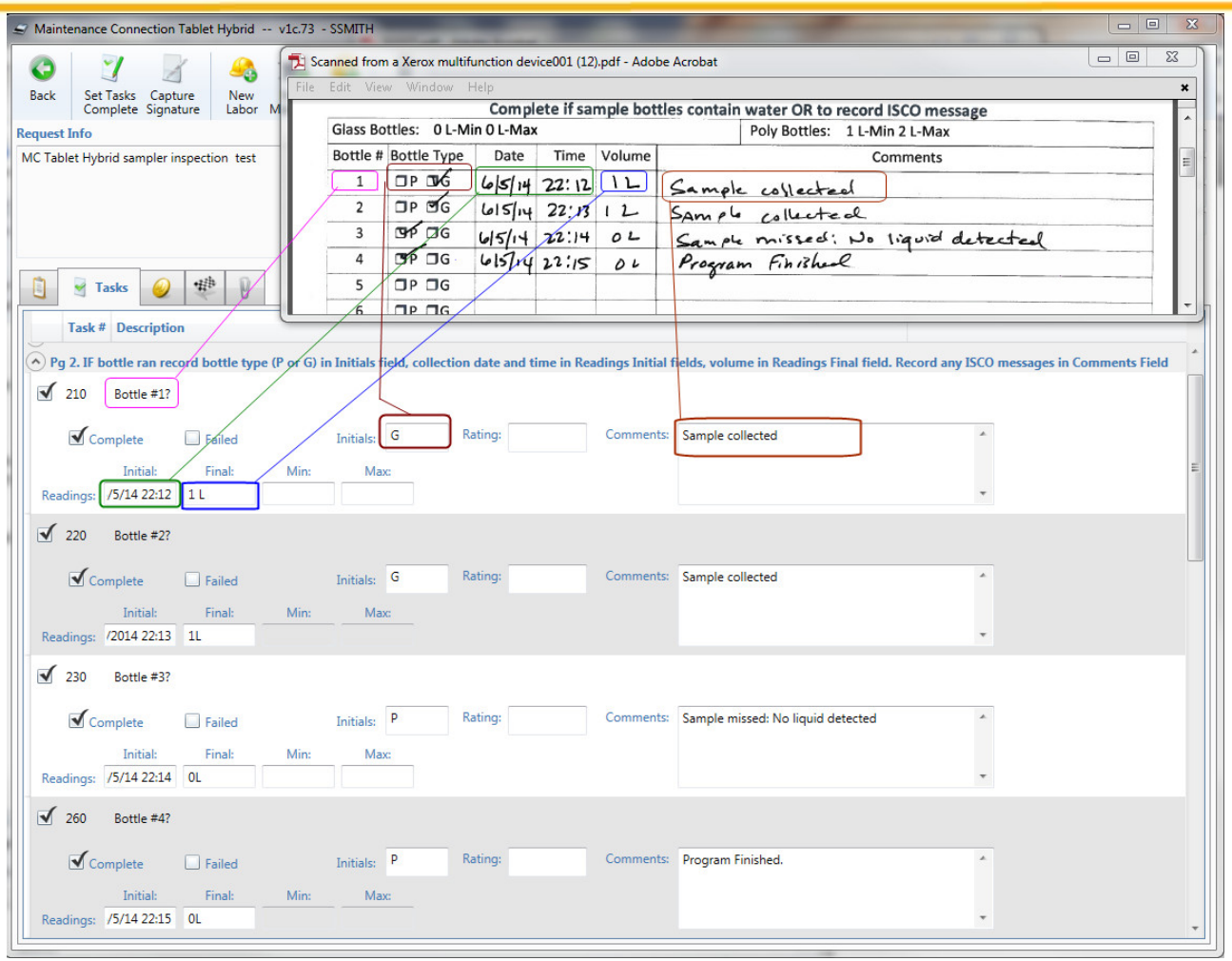
Inspection Tasks Data Entry Example – Page 1



Inspection Tasks Crosswalk – Page 2

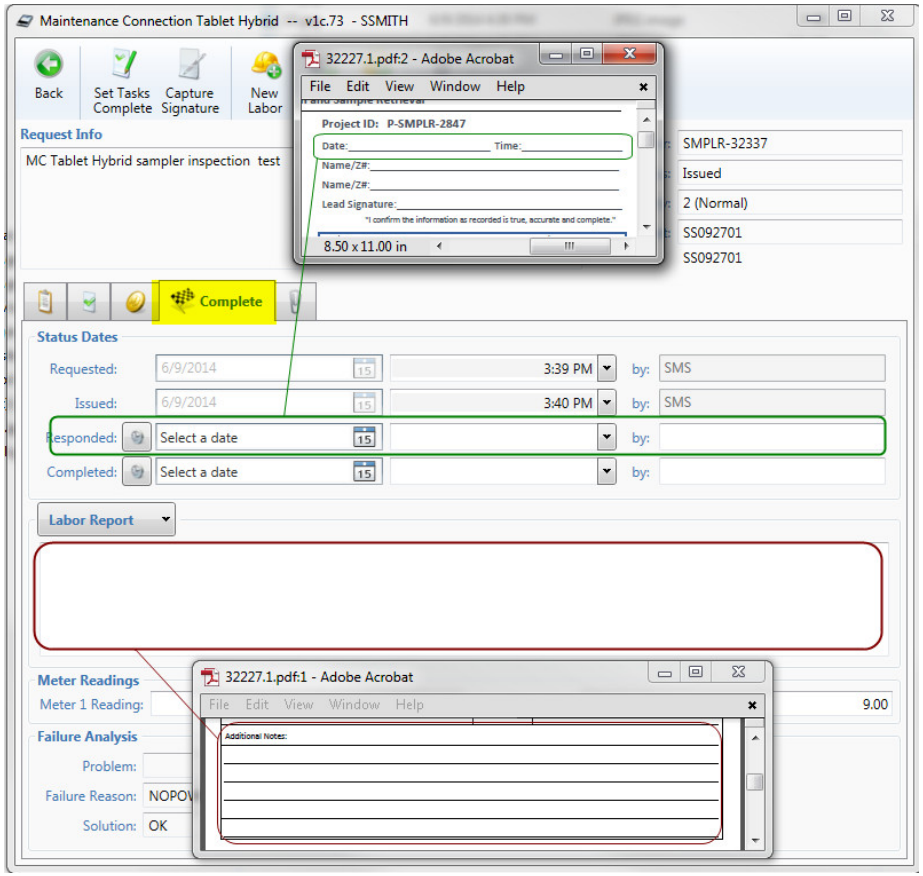


Inspection Tasks Data Entry Example – Page 2



Completing the Work Order Crosswalk

After you have completed data entry click the Complete tab.



Only fill out the "Completed" fields if you are done with all date entry

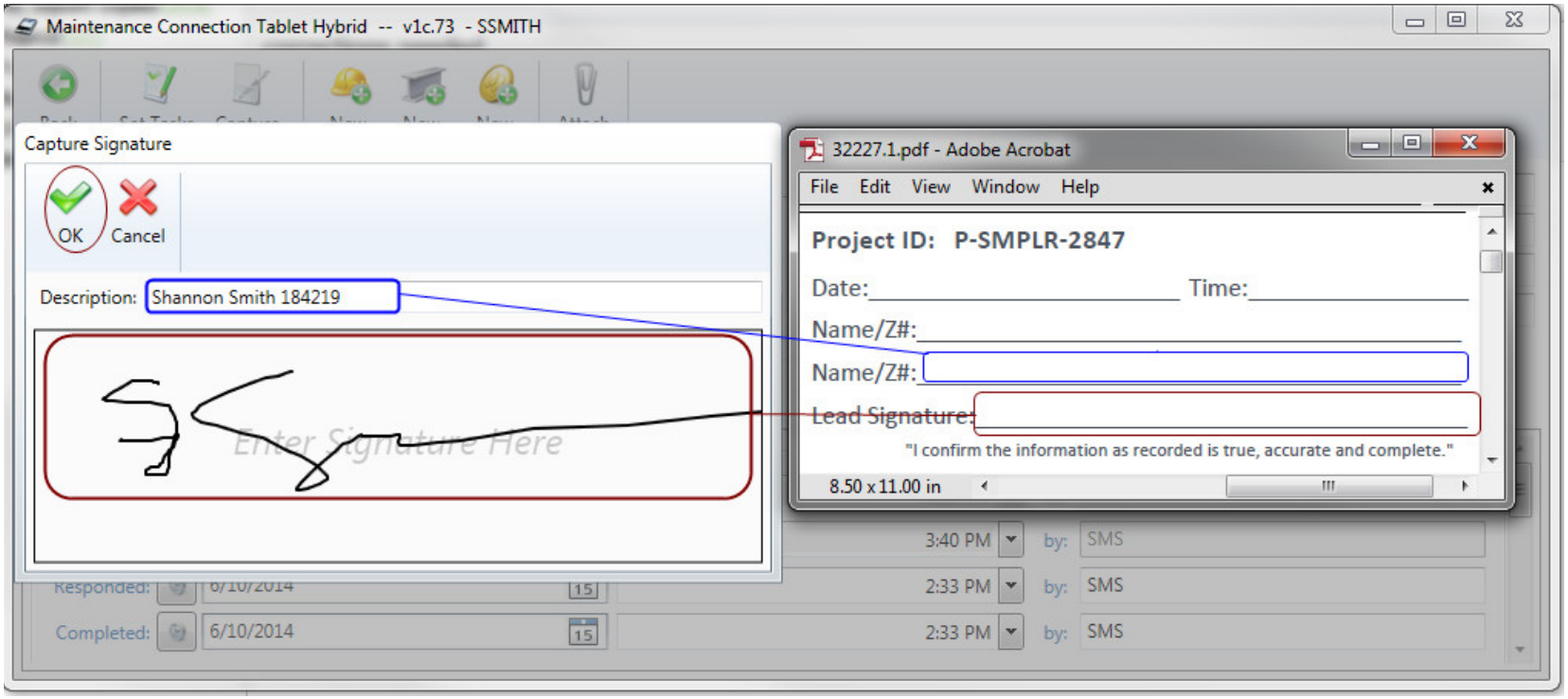
Completing the Work Order Crosswalk (Cont'd)

- Click on the buttons to auto-populate the Responded and Completed date and time fields. You can navigate through the fields to adjust as necessary.
- The "Responded" date must be the same date and time as what is written on the hard copy (i.e. date of inspection) and initials of the individual who signed the hard copy.

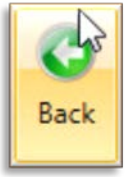
Signing the Work Order

- Click the

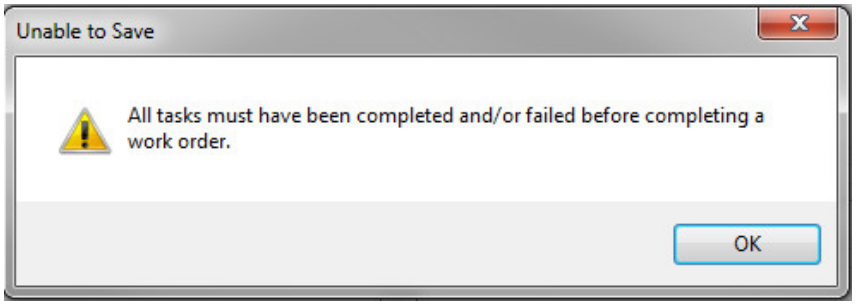
icon to electronically sign the work order.

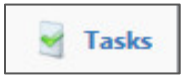


Exiting the Work Order

- Click on the back button 

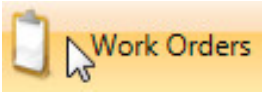
to return to the main work order page.
  - If the work order is in “completed’ status, unanswered tasks are not allowed (this includes “N/A”). If any exist you will see the following error.



  - You must navigate back to the 

page and finish answering tasks, then click on the back button.

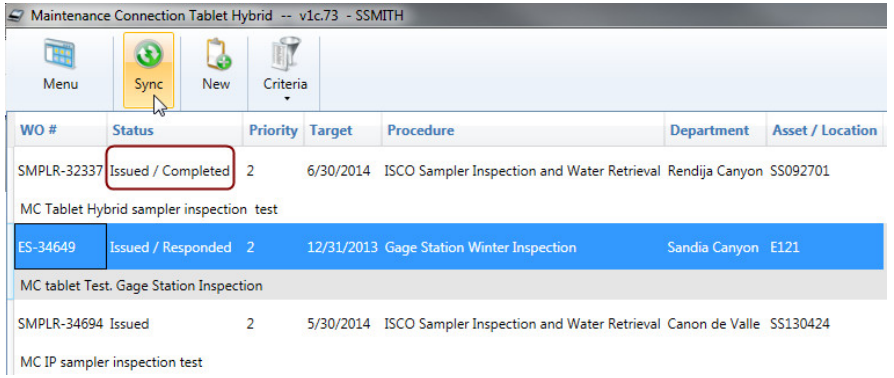
Releasing a Work Order

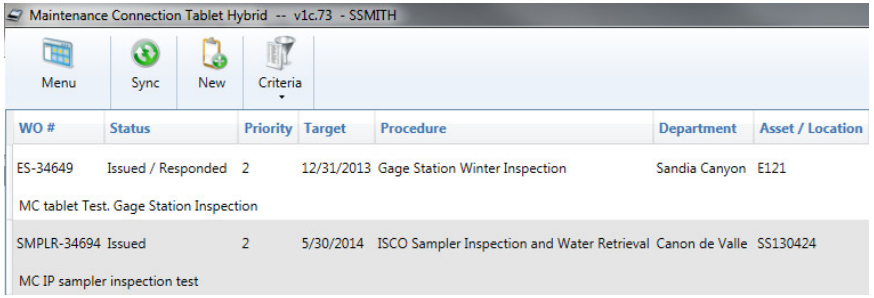
- Connect to the yellow network and navigate back to the work order page by choosing the 

option from the menu dropdown.
- Confirm that only the work orders you are ready to release are in the Issued/Completed status.
  - Any work order in Issued/Completed status will be uploaded to MC during the sync.
  - Any data entry done on work orders in Issued or Issued/Responded status will sync to MC, but the work order will remain downloaded on the tablet.

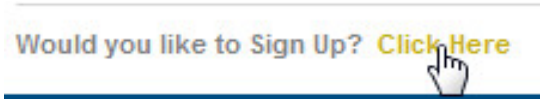
Releasing a Work Order Continued

- Click the Sync button to start the data transfer.
- Close the browser window in the upper right corner to exit out of MC Tablet Hybrid.





What's next?

- Each Route team will need to request an account in Maintenance Connection by going to: http://envweb.lanl.gov/mc_web/onsite/default.htm
- Click on 

at the bottom of the page.
- Choose

and click OK.
- The Connection Key is 'LANL'. Click OK.
- Fill out all required information on the Sign Up page.
  - The Member ID and password you choose will be used by all Route members.
  - Choose 'Ind Permit BMP Insp & Maint' from the Repair Center dropdown.
- Click OK.

Available Resources

- Project team members will be available to participate at inspections/during data entry.
- A field guide will be provided to help trouble shoot issues.