

CROSS-CONNECTION ASSEMBLY MANAGEMENT SYSTEM (CCAMS)

External User Manual

Version 1.1



**Prepared by MWH February 2014
Revised by AECOM/WRE July 2015**



CONTENTS

CHAPTER 1, INTRODUCTION	1
1.1 ABOUT CCAMS	1
1.2 FEATURES OF CCAMS	1
CHAPTER 2, GETTING STARTED	4
2.1 PREREQUISITES	4
2.2 OBTAINING AN ACCOUNT	4
2.3 LOGGING INTO CCAMS	5
2.4 CHANGING A PASSWORD	6
2.4.1 During Initial Login	6
2.4.2 After a Successful Login	7
2.5 FORGOTTEN PASSWORDS	8
2.6 SESSION TIME-OUT	10
2.7 UNDERSTANDING THE USER INTERFACE	11
2.7.1 Profile Management Tabs	12
2.7.2 Menu Bar	12
2.7.3 Search Grid	13
CHAPTER 3, SUPERVISOR TASKS	15
3.1 HOME PAGE OF A SUPERVISOR	15
3.2 SEARCHING TEST REPORTS	16



3.3 VIEWING TEST FORMS.....	17
3.4 PRINTING TEST FORMS.....	18
CHAPTER 4, TESTER TASKS	21
4.1 HOME PAGE OF A TESTER	21
4.2 MANAGING TESTS	22
4.2.1 Pick Search	22
4.2.2 Entering/Editing Test Results	23
4.2.3 Viewing Test Details	27
4.2.4 Retested Assembly	28
4.2.5 Replaced Assembly.....	29
4.2.6 Printing Forms	30
4.2.7 Searching Test Reports	33
4.2.8 Viewing Test Form	33
4.2.9 Printing Test Forms.....	35
4.3 ADDING A NEW ASSEMBLY	38
ABBREVIATIONS.....	41
GLOSSARY	42

Introduction

The San Francisco Public Utilities Commission (SFPUC), a department of the City and County of San Francisco (City), provides retail drinking water and wastewater services to San Francisco, as well as wholesale water to other cities and counties within the San Francisco Bay Area. The City has developed a Cross-Connection Control Program to protect the City's drinking water system from contamination caused by backflow. Under normal conditions, water from the system flows into a customer's premises. When backflow occurs, water from the customer's premises flows into the distribution system. If backflow water is contaminated because of activities on the customers' premises (for example, addition of rust-inhibiting chemicals to a boiler or use of photo-processing chemicals), the water can carry contaminants into the drinking water system and pose a risk to public health.

The Cross-Connection Control Program is managed by the SFPUC in coordination with the San Francisco Department of Public Health (SFDPH). The program is supervised and supported by the Water Quality Division (WQD) of SFPUC.

1.1 About CCAMS

The Cross-Connection Assembly Management System (CCAMS) is an internet-based application developed to track the installation and annual testing of the City's backflow prevention assemblies. This manual provides instructions for using CCAMS to external users:

- Backflow prevention assembly test company supervisors
- Backflow prevention assembly testers
- Water customers

1.2 Features of CCAMS

- The program can be accessed by a web browser through the Internet.
- Testers can access test forms.
- Testers can enter test results directly into CCAMS, eliminating the need to mail in paper copies or email scanned copies of test reports to SFPUC. SFPUC receives test reports immediately.
- Supervisors can monitor the tests by their testers.
- Results of previous tests can be accessed.
- Information can be extracted in portable document format (PDF), Microsoft (MS) Word and MS Excel.

Getting Started

This chapter covers getting started with CCAMS and includes the following topics:

- Prerequisites
- Obtaining an account
- Logging into CCAMS
- Changing a password
- Forgotten passwords
- Session time-out
- Understanding the user interface

2.1 Prerequisites

To use CCAMS, you need the following:

- Internet connectivity with minimum bandwidth of 512 Mbps.
- A web browser (Internet Explorer 7 or higher, Mozilla Firefox 3 or higher, Google Chrome 24.0 or higher, Safari 5.0 or higher).
- CCAMS login account (see section 2.2).

2.2 Obtaining an Account

Test company supervisors and testers should apply to the SFDPH for an account. Water customers may apply to the WQD administrator. Customers can also register using the **New Customer registration** link on the 'Login' screen of CCAMS, as shown in **Figure 2.3.1** - Login Screen. To do this, the customer needs an account number, service address, and the name that appears on the customer's water bill. If a customer self-registers, the account has to be approved by the WQD administrator before it becomes active.

Once an account is created (or approved, in the case of self-registration), a temporary password is mailed to the email address of the user. The user can then log into CCAMS with his or her username (the email address provided during account creation) and the temporary password provided. External users are given access to different features of CCAMS based on the user roles assigned during account creation.



2.3 Logging into CCAMS

To log into CCAMS for the first time, a new user needs a username (the email address provided during account creation) and the temporary password emailed by SFDPH or SFPUC. The instructions for logging into CCAMS are given below.

Step 1 Type <https://ccams.sfwater.org> in the address field of the browser.

Step 2 The 'Login' screen of CCAMS appears as shown in **Figure 2.3.1**

Welcome to San Francisco's
Cross-Connection Assembly Management System (CCAMS)
Water Quality Division

San Francisco
Water
Power
Sewer

Services of the San Francisco Public Utilities Commission

Username

Password

Remember me

[New customer registration](#)
[I forgot my password](#)

Login

This website (ccams.sfwater.org) is for the exclusive use of the San Francisco Public Utilities Commission, its water customers that maintain cross-connection assemblies, and the testers and test companies that service those assemblies. Any attempt to access or use this site by anyone else is strictly prohibited.

Figure 2.3.1 - Login Screen of CCAMS

Step 3 Type the username in the 'Username' field.

Step 4 Type the temporary password in the 'Password' field.

Step 5 Press the **Enter** key on the keyboard or click **Login**.

The first-time CCAMS user sees the Terms and Conditions page (**Figure 2.3.2**).

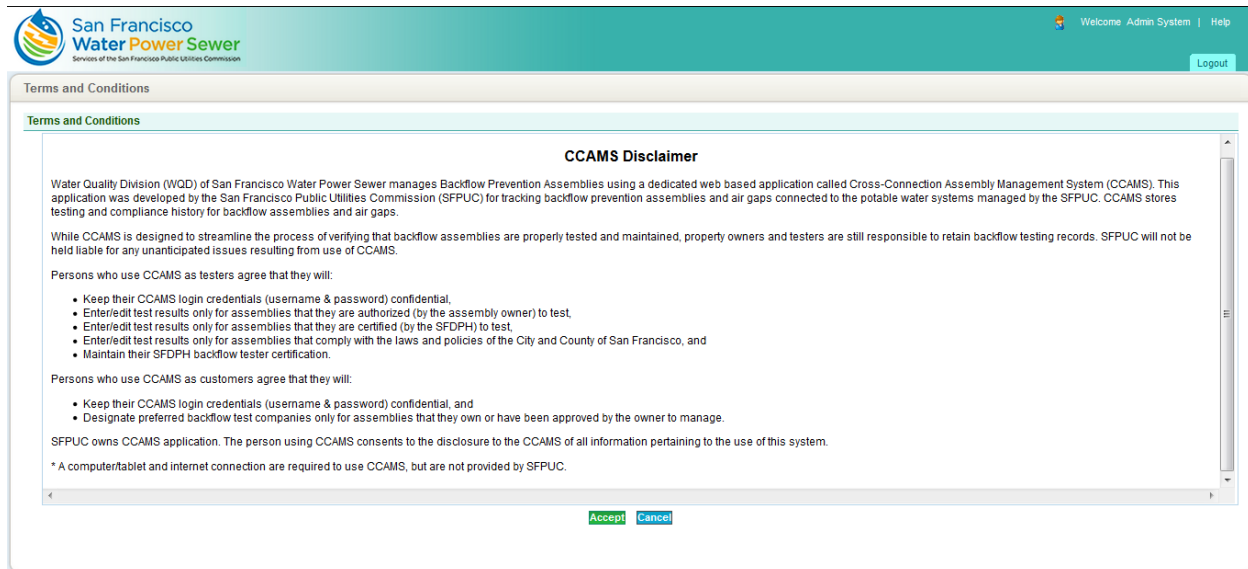


Figure 2.3.2 - Terms and Conditions Screen

- Step 6** Read the terms and conditions under the CCAMS Disclaimer.
- Step 7** If you agree to the terms and conditions, click **ACCEPT**.
The **'Change Password'** screen appears.
- Step 8** Change the temporary password. For more information, *see section <2.4 Changing a Password>*.
- Step 9** Click **Change Password**.
The user's home page appears.

NOTE: It is recommended that users change the initial password for security purposes.

You have successfully logged into CCAMS.

2.4 Changing a Password

The user password can be changed in two scenarios:

- During the initial login process
- After a successful login

The procedures for changing a password are explained in the following sections.

2.4.1 During Initial Login

When logging into CCAMS for the first time, a user can change the temporary password and provide a secret question and answer. These details are required to reset the password and obtain a new password in case the password is forgotten.



When a user logs in initially and accepts the terms and conditions, the application automatically navigates to the 'Change Password' screen.

Figure 2.4.1.1 illustrates the 'Change Password' screen during the initial login process.

Figure 2.4.1.1 - Change Password Screen during Initial Login

To change the password during initial login, follow these steps:

- Step 1** Enter the temporary password in the 'Current Password' field.
- Step 2** Enter a new password in the 'New password' field.
- Step 3** Re-enter the new password in the 'Confirm new password' field.
- Step 4** Provide a security question in the Secret Question field.
- Step 5** Enter the answer for the security question in the 'Your Answer' field.

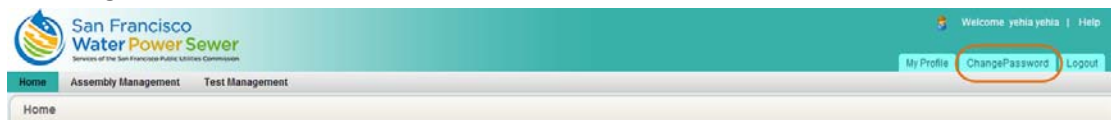
NOTE: The secret question and its answer are required to validate the user during the Forgot Password scenario.

- Step 6** Click **Change Password**.

2.4.2 After a Successful Login

A password can also be changed after a successful login by following these instructions:

- Step 1** Click the **ChangePassword** tab on the top-right area of the screen, as highlighted in the following illustration:





Step 2 The 'Change Password' screen appears (*Figure 2.4.2.1*).

Change Password

Change Password

New passwords are required to be a minimum of 8 characters in length.

Change Password **Cancel**

Account Information

Current password :

New password :

Confirm new password :

Change Password **Cancel**

Figure 2.4.2.1 - Change Password Screen using the Change Password Tab

- Step 3** Enter the current password in the 'Current password' field.
- Step 4** Enter a new password in the 'New password' field.
- Step 5** Re-enter the new password in the 'Confirm new password' field.
- Step 6** Click **Change Password**.

You have successfully changed your password.

2.5 Forgotten Passwords

A user can request a new password using the '**I forgot my password**' link on the login screen, which is illustrated in *Figure 2.5.1*. The password is then reset and a new password sent to the user's email address. The new password is generated only if the answer to the secret question matches the answer provided during initial login.



Figure 2.5.1 - Login Screen Highlighting I forgot my password Link

To re-access an account by setting a new password, follow the steps below.

- Step 1** Enter the URL of CCAMS in the address field of the browser. The **'Login'** screen appears as shown in **Figure 2.3.1**.
- Step 2** Click the **I forgot my password** link (**Figure 2.5.1**). The Forgot Password screen appears (**Figure 2.5.2**).

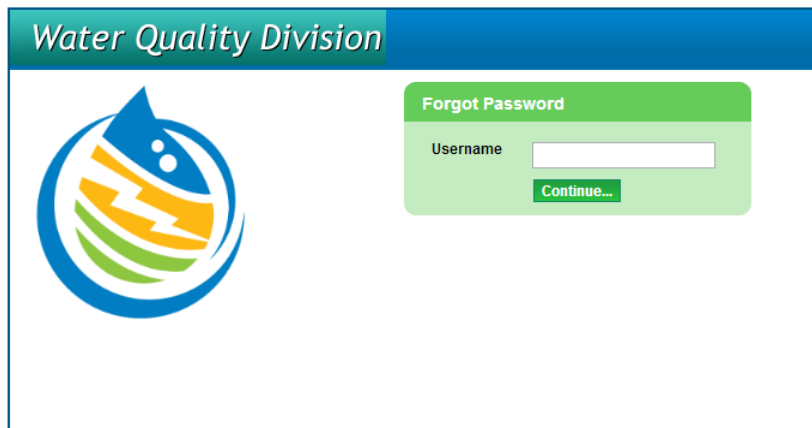


Figure 2.5.2 - Forgot Password Screen

- Step 3** Enter the user name in the 'Username' field.
- Step 4** Click **Continue...**
The **'Forgot Password'** screen with the security question appears (**Figure 2.5.3**).



Figure 2.5.3 – Forgot Password Screen with Security Question

Step 5 Enter the answer to the security question in the 'Answer' field.

NOTE: The answer must match the one provided in the 'Your Answer' field in the Change Password screen during the initial login process

Step 6 Click **Get Password**.

The password is reset and a new password mailed to the user's email address (CCAMS username). The new password can be used to log into CCAMS starting from the '**Login**' screen.

NOTE: Whenever you reset the password, you have to repeat the initial login process; for more information, see *section <2.3 Logging into CCAMS>*.

2.6 Session Time-out

If CCAMS remains idle without any action for more than 30 minutes, the application automatically logs the user out. However, a reminder window pops up three minutes before the expiry time.

NOTE: Even a click or a mouse-over on the screen is considered an action.

The session time-out window appears (*Figure 2.6.1*).

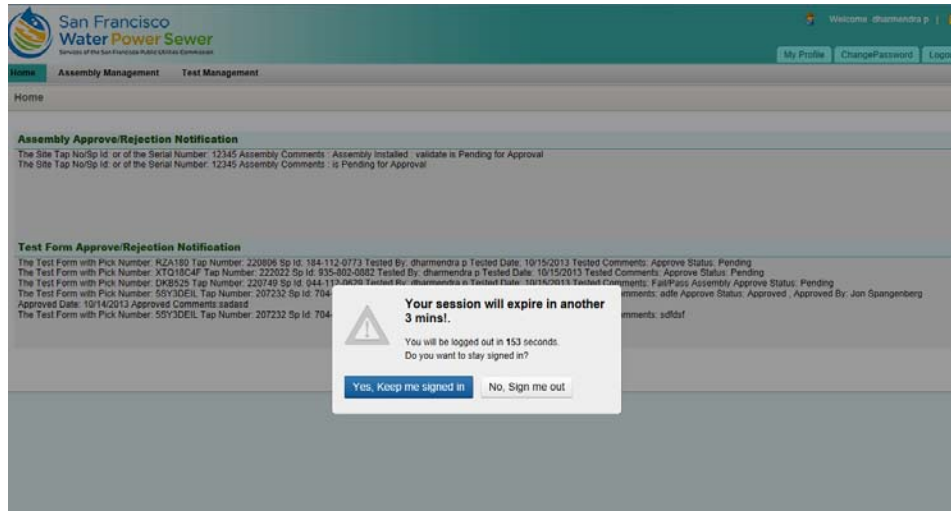


Figure 2.6.1 – Session Time-out Window

To go back to the current screen from the window, click **Yes, Keep me signed in**.

To log out of CCAMS, click **No, Sign me out**. The user is navigated to the CCAMS ‘Login’ screen.

2.7 Understanding the User Interface

This section explains the CCAMS User Interface (UI). The annotated UI screen is shown in **Figure 2.7.1**

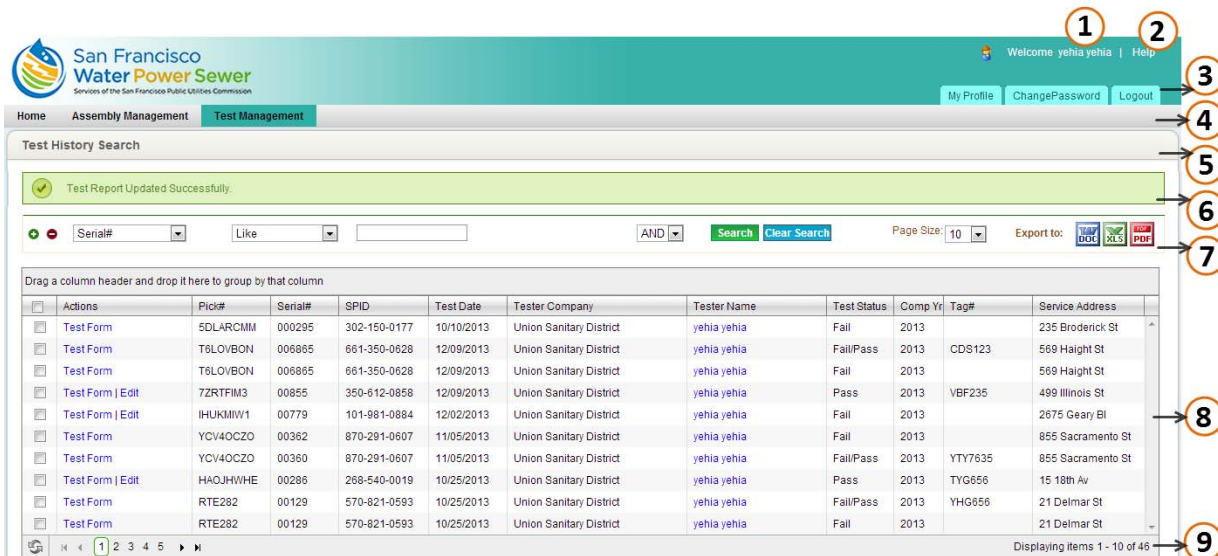


Figure 2.7.1 - Illustration of User Interface

NOTE: Figure 2.7.1 is an imitation of the UI elements of an external user.



Table 2.7.1 describes the UI elements annotated in **Figure 2.7.1**.

Sr. No.	User Interface Element	Description
1	User's name	Name of the logged in user.
2	Help	Link to online help file.
3	Profile management tabs	Tabs used to manage the user's account.
4	Menu bar	Menus used to access CCAMS functions.
5	Title bar	Name of the screen being viewed.
6	Message area	<ul style="list-style-type: none">• Success messages are displayed on a green background.• Error/warning messages are displayed on a red background.
7	Search grid	Provides the user's customized search privileges. For more information, see section <2.7.3 Search Grid> .
8	Working screen	Area in the UI where the main content is displayed. The fonts in blue are clickable, allowing navigation to a relevant screen.
9	Page navigation	Used to navigate to other pages of the current menu list.

Table 2.7.1 – Illustration of User Interface

2.7.1 Profile Management Tabs

The profile management tabs are used to manage the user's account. They are:

- **My Profile** tab: enables users to see their profile details.
- **ChangePassword** tab: enables users to change their passwords. *For more information, see section <2.4 Changing a Password>*.
- **Logout** tab: enables users to exit CCAMS.

2.7.2 Menu Bar

The menu bar is used to perform the functional tasks. Depending on the user's role, a user has access to one or more of the following menus:

- Home menu
- Assembly Management menu
- Test Management menu
- Water customer's menu



2.7.3 Search Grid

The Search Grid allows users to customize their search options by using one or more parameters. The search parameters and fields differ in each menu. For example, the Search Grid in the Test Management menu has test details like Pick number, test status, etc. The Search Grid also allows users to directly export search results in Word, Excel and PDF format.

Figure 2.7.3.1 illustrates the Search Grid; the annotated elements are explained in **Table 2.7.3.1**.



Figure 2.7.3.1 – Search Grid

Table 2.7.3.1 explains the use of Search Grid elements as annotated in **Figure 2.7.3.1**.

Sr. No.	Element	Description
1	Add search option button	Adds more search options.
2	Delete search option button	Deletes a search option, if there is more than one option.
3	Search field drop down menu	Provides different categories of search to select from. (It is customized according to the functionality of the screen.)
4	Search conditions drop down menu	Provides different search conditions: <ul style="list-style-type: none">• Equals: to search for data that exactly matches the text entered in the text field.• Not equals: to search for data excluding the text entered in the text field.• Like: to search for data containing the text entered in the text field.• Starts with: to search for data that starts with the text entered in the text field.• Ends with: to search for data that ends with the text entered in the text field.
5	Search input	<ul style="list-style-type: none">• If the query is for an integer, an integer text box appears.• If the query is for the schedule month, a drop down menu listing months of a year appears.• If the query is for a date, a calendar widget appears.• Otherwise, a text box appears.



Sr. No.	Element	Description
6	AND / OR operators	Used when there is more than one search option. <ul style="list-style-type: none">• Select AND if all the search conditions should be satisfied.• Select OR if any one of the search conditions should be satisfied.
7	Search button	Performs search.
8	Clear search button	Clears search field.
9	Page size	Customizes the number of records that can be displayed. The page size can be set to 10, 20, 50, 80 or 100.
10	Export Document options	For exporting the grid data. The screen can be saved in any of the following formats. <ul style="list-style-type: none">• MS Word format• MS Excel format• PDF format

Table 2.7.3.1 – Search Grid Description

NOTE: The search condition and search input change based on the search field chosen.

Supervisor Tasks

CCAMS allows test company supervisors to monitor the tests conducted by their testers. Supervisors can see the test reports of all the backflow prevention assemblies tested by their testers and can print test reports for their records.

3.1 Home Page of a Supervisor

The home screen of a supervisor is illustrated in **Figure 3.1.1**. A supervisor can access the test history of the tests conducted by all the company's testers in the **Test Management** menu.

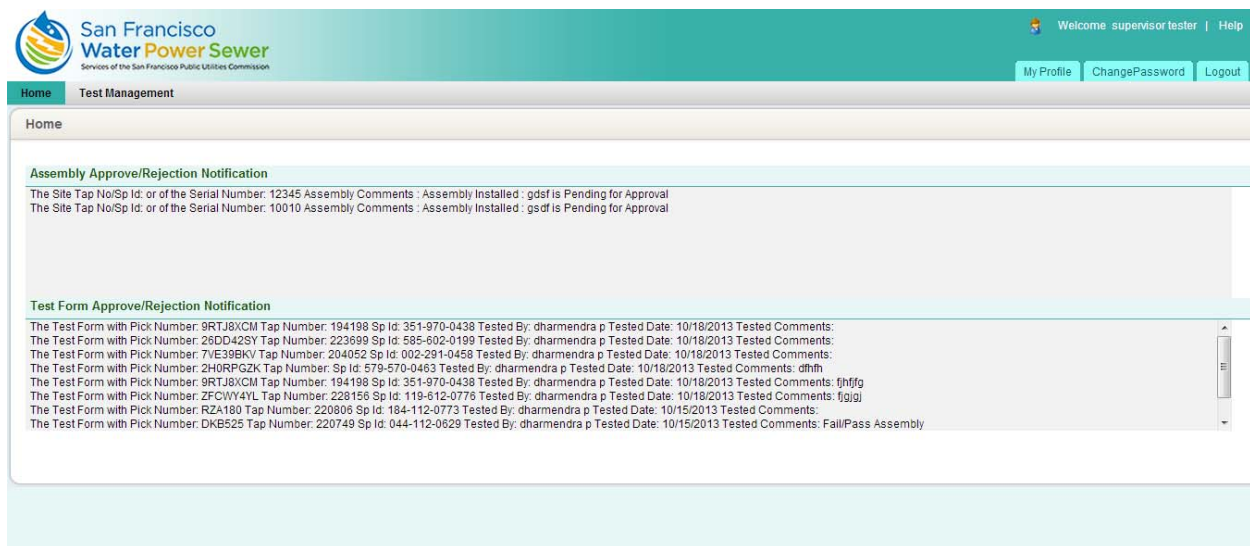


Figure 3.1.1 – Home Page of Test Company Supervisor

A supervisor's home page displays two notification areas:

1. **Assembly Approve/Rejection Notification:** This area lists details of assemblies added by company testers, along with the WQD administrator approval status.
2. **Test Form Approve/Rejection Notification:** This area lists the test form details of the assemblies that are retested by company testers.



3.2 Searching Test Reports

To locate a specific test report, the supervisor can search for test history using the following parameters:

- Pick number of the test
- Serial number of the assembly
- Service point identification (SPID) number of the site where an assembly is located
- Date on which the assembly was tested
- Tester's name
- Test status
- Compliance year
- SFDPH backflow tag number
- Service address of the site
- Test month
- Assembly status (Active/Inactive)

The search function can be used to obtain various kinds of information. For example, to find the history of all tests conducted by the company in the current compliance year, the supervisor can search using the compliance year parameter. To find the assemblies tested by a particular tester, the supervisor can search using the tester name. (In a search for a tester's name, the Search Grid displays all the testers belonging to the company in the drop-down menu labelled "Select Tester Name.")

To search for test history, follow these steps:

Step 1 Go to **Test Management >> Test History Search**.

The 'Test History Search' screen appears as shown in **Figure 3.2.1**.

Test Status	Compliance Year	DPH Certified Tag	Service Address	Test Mo	Assembly Status	Pick#	Serial#	SPID	Test Date	Tester Company	Tester Name	Test Status	Comp Yr	Tag#	Service Address	
T			1 Canada Road				10010		12/26/2013	Backflow, M &Or R	dharmendra p	Pass	2013	dgh436	1 Canada Road	
T			1 Canada Road				12345		12/12/2013	Backflow, M &Or R	dharmendra p	Fail	2013		1 Canada Road	
T			bangalore				12345	626-702-0554	10/21/2013	Backflow, M &Or R	dharmendra p	Pass	2013	Netd5578	bangalore	
T			100-*** 3rd St				56411	180-102-0996	10/15/2013	Backflow, M &Or R	dharmendra p	Pass	2013	FGV788	100-*** 3rd St	
T			bangalore				12345	548-360-0309	10/21/2013	Backflow, M &Or R	dharmendra p	Pass	2013	djmmmm345	bangalore	
T			bangalore				12345	262-312-0951	10/21/2013	Backflow, M &Or R	dharmendra p	Pass	2013	dsfgag53455	bangalore	
T			bnagalore				12345	256-602-0202	10/21/2013	Backflow, M &Or R	dharmendra p	Fail	2013		bnagalore	
T			Bangalore				23456	152-191-0879	10/21/2013	Backflow, M &Or R	dharmendra p	Fail	2013		Bangalore	
T			bangalore				34567	348-291-0940	10/21/2013	Backflow, M &Or R	dharmendra p	Fail	2013		bangalore	
T			442 Geary St				AVAQBK5X	00192	275-091-0540	10/18/2013	Backflow, M &Or R	dharmendra p	FailPass	2013	fghgth3543	442 Geary St

Figure 3.2.1 – Test History Search Screen

Step 2 Select the desired parameters from the Search Grid.

The search result appears on the working screen.



3.3 Viewing Test Forms

A supervisor can access information from the test reports of the assemblies tested by the company testers. The following information appears on the **'Test Details'** screen, as shown in **Figure 3.3.1**:

1. **Site Information:** SPID, account number, service address, etc.
2. **Assembly Information:** serial number, assembly type, manufacturer, etc.
3. **Test Information:** test result, date test was performed, tester name, compliance year, tester certification number, etc.
4. **Test History:** test information from previous compliance years with details like date tested, status, tester name and test detail.
5. **Test Form:** latest test form with test details.

Instructions for accessing assembly test reports are given below:

Step 1 Go to **Test Management >> Test History Search**.

The **'Test History Search'** screen appears as shown in **Figure 3.2.1**.

Step 2 Search for the desired test report using relevant parameters in the Search Grid.

Step 3 Click **Test Form** under the "Actions" column, as shown in the following illustration, to see the test report of the selected Assembly.

	Actions	Pick#	Serial#
<input type="checkbox"/>	Test Form Edit		10010
<input type="checkbox"/>	Test Form Cancelled		12345
<input type="checkbox"/>	Test Form Edit		12345
<input type="checkbox"/>	Test Form Edit		56411

The **'Test Details'** screen of the selected Assembly appears, as shown in **Figure 3.3.1**.



San Francisco Water Power Sewer
Services of the San Francisco Public Utilities Commission

Welcome Dharmendra parashu | Help
My Profile Change Password Logout

Home Test Management

Test Details [Back](#) [View PDF](#)

Site Information

Tap Number: 228218 SPID: 000-061-1190
 Tap Status: SPID Status: R
 Block Number: 3784 Lot Number: 088
 Account Number: 5239020000
 Manual Override of CC&B Data:
 Is Restricted:
 Restricted Company:

Assembly Information

Serial Number: W192118 Assembly Type: DC
 Hazard Type: Fire Bypass Hazard Level: High
 Assembly Manufacturer: WILKINS Assembly Model: 350
 Protection Type: Containment Assembly Size: 3/4 inches
 Current Assembly State: New Assembly Install Date: 04/05/2005
 Assembly Location: Fire bypass in basement on wall off Townsend St. DBI Plumbing Permit:

Test Information

Pick Number: ZY8LML1F Year of Compliance: 2013
 Test Result: Pass Comments:
 Tested Date: 07/25/2013 Tester General Certification Date:
 Tester Name: Jordan Lee Company Phone: (877) 226-3569
 Tester General Certification No.: 16194 Entered By: Ron Gallega
 Company Name: AAA Backflow Prevention Service Entry Date: 09/07/2013
 DPH Certified Tag: Z15521

Test History

08/22/2012 Pass by Cindy Boze - Initial CV1: 3.2 CV2: 3.4	08/25/2007 Pass by Cindy Boze - Initial CV1: 2.2 CV2: 3.4
08/17/2011 Pass by Cindy Boze - Initial CV1: 2.2 CV2: 2.4	08/05/2006 Pass by Cindy Boze - Initial CV1: 2.6 CV2: 2.8
08/19/2010 Pass by Cindy Boze - Initial CV1: 3.0 CV2: 3.1	04/22/2005 Pass by Steve Gotelli - Initial CV1: 3.8 CV2: 3.4
10/21/2009 Pass by Dave Sherin - Initial CV1: 2.6 CV2: 2.6	
08/19/2009 Pass by Cindy Boze - Initial CV1: 2.8 CV2: 3.0	

Test Form [Back](#) [View PDF](#)

	DOUBLE CHECK VALVE ASSEMBLY		REDUCED PRESSURE PRINCIPLE ASSEMBLY		PRESSURE VACUUM BREAKER	
	CHECK VALVE 1	CHECK VALVE 2	DIFFERENTIAL RELIEF VALVE		AIR INLET VALVE	CHECK VALVE
INITIAL TEST	HELD AT: <input type="text"/> PSID LEAKED <input type="checkbox"/>	HELD AT: <input type="text"/> PSID CLOSED TIGHT (RP) <input type="checkbox"/> LEAKED <input type="checkbox"/>	OPENED AT: <input type="text"/> PSID OPENED UNDER 2.0 PSID OR DID NOT OPEN <input type="checkbox"/>		OPENED AT: <input type="text"/> PSID OPENED UNDER 1.0 PSID OR DID NOT OPEN <input type="checkbox"/>	HELD AT: <input type="text"/> PSID LEAKED <input type="checkbox"/>
FINAL TEST	HELD AT: <input type="text"/> PSID	HELD AT: <input type="text"/> PSID CLOSED TIGHT (RP) <input type="checkbox"/>	OPENED AT: <input type="text"/> PSID		OPENED AT: <input type="text"/> PSID	HELD AT: <input type="text"/> PSID

Figure 3.3.1 – Test Details Screen

To print the test report, click **View PDF** button at the top or bottom of the screen. CCAMS prompts the user to save the form as a PDF document. Open the form using a PDF reader software, and print using the appropriate print command.

3.4 Printing Test Forms

A supervisor can print test forms with results in PDF format by following these steps:

- Step 1** Go to **Test Management >> Test History Search**.
The **'Test History Search'** screen appears as shown in **Figure 3.2.1**.
- Step 2** Locate the tests for which test forms are to be printed, using Search Grid.
- Step 3** Check a single box, multiple boxes, or the "all" check box, as shown in **Figure 3.4.1**.
- Step 4** Click **Print Test Form** button.

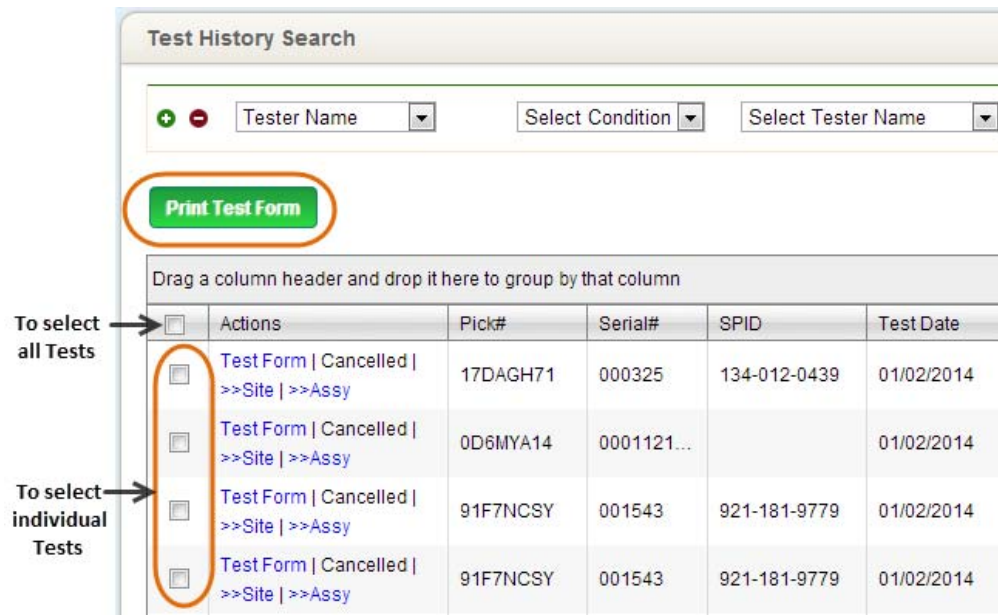


Figure 3.4.1 – Test History Search Screen Highlighting 'Print Test Form' button.

The test form with results is generated; CCAMS prompts the user to save the form as a PDF document. Open the form using a PDF reader software, and print using the appropriate print command. The test form with test results appears as shown in **Figure 3.4.2**.

NOTE: If more than one test form is generated, all the forms will be merged into a single PDF document.



**San Francisco Water Quality Division
BACKFLOW PREVENTION ASSEMBLY TEST REPORT - 2014
THE USE OF THIS FORM IS MANDATORY**

San Francisco Water Service Information		Assembly Information		Assembly 1 of 1	
SP ID #: 745-630-0530		Test Results Due No Later Than : January 31, 2014			
Tap #: 089359	PICK #: QVH8K16I	Serial #: 00019		Hazard Type : Boiler Make Up	
No. of Active Assemblies at this Tap: 1		Type : RP	Size : 1/2	Mfg : FEBCO	Model : Unknown
Water Service Type: STANDARD		Hazard Level : High		Protection : Isolation	
Service Name : Ford, Claudette R.		Replacement Information Below <input type="checkbox"/>			
Service Address : 105 21st Av		Replacement Serial # :		Hazard Type :	
Contact Name : Sir/Madam		Type :	Size :	Mfg :	Model :
Contact Number :		Hazard Level:		Protection :	
City : San Francisco		Install Date :			
Meter #: 0020600190		Plumbing Permit #:			
Account #: 7456300000					
Exact Assembly Location :					

01/02/2014 Pass by Ben Hetherington : Initial CV1: 5.0 RV: 5.0
 12/20/2013 Fail/Pass by Anthony J. Brace : Initial CV1: 5.0 RV: 5.0 : Final CV1: 5.0 RV: 7.0
 12/20/2013 Fail by Alberto Alfaro : Initial CV1: RV:
 01/18/2013 Pass by Anthony Scotto : Initial CV1: 7.2 RV: 2.6
 01/06/2012 Pass by William Berzin : Initial CV1: 7.3 RV: 2.6

01/10/2011 Pass by Michael S. Flanery : Initial CV1: 7.0 RV: 2.8
 01/15/2010 Pass by Jim Hill : Initial CV1: 7.8 RV: 2.8
 01/09/2009 Pass by William Berzin : Initial CV1: 7.7 RV: 2.6
 01/23/2008 Pass by William Berzin : Initial CV1: 7.6 RV: 2.6
 01/08/2007 Pass by William Berzin : Initial CV1: 9.0 RV: 2.7

TEST RESULTS INFORMATION					
DOUBLE CHECK VALVE ASSEMBLY		REDUCED PRESSURE PRINCIPLE ASSEMBLY		PRESSURE VACUUM BREAKER	
CHECK VALVE	CHECK VALVE NO. 2	DIFFERENTIAL RELIEF VALVE	AIR INLET VALVE	CHECK VALVE	
INITIAL TEST	HELD AT: 5.0 PSID LEAKED <input type="checkbox"/>	HELD AT: _____ PSID CLOSED TIGHT (RP) <input checked="" type="checkbox"/> LEAKED <input type="checkbox"/>	OPENED AT: 5.0 PSID OPENED UNDER 2.0 PSID OR DID NOT OPEN <input type="checkbox"/>	OPENED AT: _____ PSID OPENED UNDER 1.0 PSID OR DID NOT OPEN <input type="checkbox"/>	HELD AT: _____ PSID LEAKED <input type="checkbox"/>
FINAL TEST	HELD AT: _____ PSID	HELD AT: _____ PSID CLOSED TIGHT (RP) <input type="checkbox"/>	OPENED AT: _____ PSID	OPENED AT: _____ PSID	HELD AT: _____ PSID

Comments: Assembly : PASSED FAILED FAIL / PASS

Certified Tag # JMN7656

Initial Test By : Ben Hetherington	San Francisco Certified Tester # 13838	Date 01/02/2014	Company Seal Hetherington General & Plumbing Contractors <small>(MUST include Company Name, address & phone)</small>
Final Test By :	San Francisco Certified Tester #	Date	Company Seal <small>(MUST include Company Name, address & phone)</small>

THE ABOVE REPORT IS CERTIFIED TO BE TRUE: _____
Signature of Tester

In Accordance with City Ordinance (Section 757)
 All test report originals MUST be completed, signed by a certified tester & returned by mail to this office
within 5 calendar days from the date the tests are performed.
 Water Quality Bureau, Attn: Cross Connection Section, P.O. Box 730, Millbrae, CA 94030-073

Figure 3.4.2 – Test Form with Test Results in PDF Format

Tester Tasks

This chapter covers the following tasks applicable to testers:

- Managing test results
- Adding assemblies

Testers can manage assembly test results using Pick numbers, which are provided by the test company or the customer. The Pick numbers remain unique throughout the current compliance year. To access CCAMS, a tester must be approved by SFDPH as an Authorized Backflow Prevention Assembly Tester. If a tester's certification has expired, login will be denied. After renewing a certification, a tester can update the certification details in CCAMS by contacting WQD.

Note: CCAMS limits user access based on the type of account that has been set up:

- Only Authorized Backflow Prevention Assembly Testers may input data for backflow prevention assemblies.
- Only Authorized Cross-Connection Control Specialists may input data for air gaps.
- If a tester works for a testing company, the tester may enter data for any assembly he or she tests.
- If a tester works for a restricted entity, the tester's access is restricted to assemblies owned by that entity.

4.1 Home Page of a Tester

The tester home page appears as shown in *Figure 4.1.1*. A tester can access test forms, enter test results, and see test history using the **Test Management** menu; newly installed assemblies can be added using the **Assembly Management** menu.

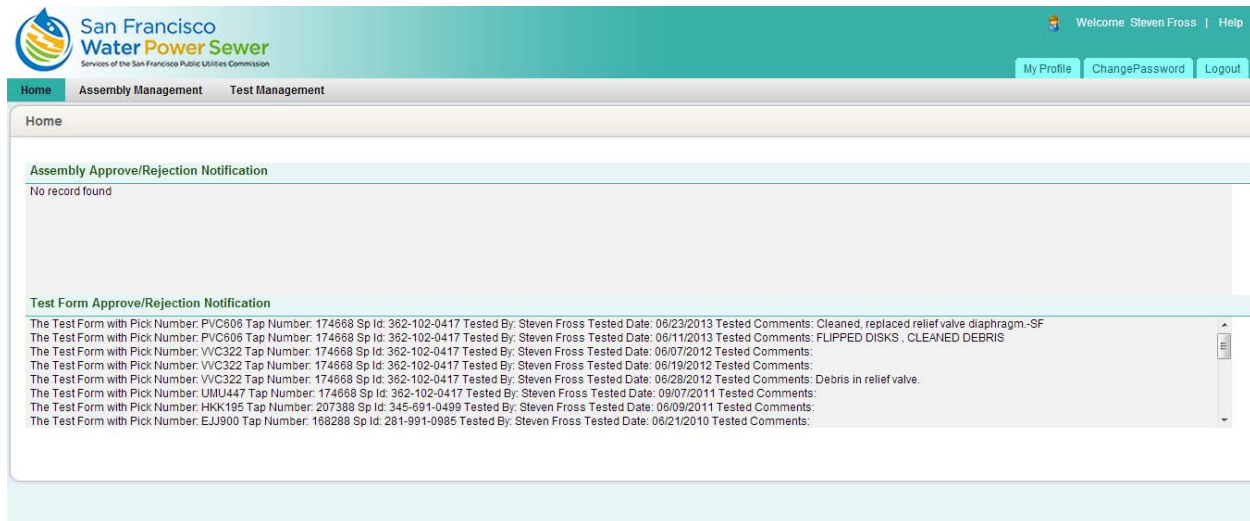


Figure 4.1.1 – Home Page of a Tester

The tester home page displays two notification areas:

1. Assembly Approve/Rejection Notification This area lists details of assemblies added by the tester and administrator approval status.
2. Test Form Approve/Rejection Notification: This area lists test form details of the assemblies tested by the tester and administrator approval status and comments.

4.2 Managing Tests

A tester can perform the following tasks in CCAMS:

- Access a blank test form using a pick number
- Enter test results
- Print test forms
- Edit test results
- Access a test form with test results

4.2.1 Pick Search

Testers can search for test forms using the Pick Search functionality.

To search for test forms, follow these steps:

Step 1 Go to **Test Management>>Pick Search**.

The tester **'Pick Search'** screen appears, as shown in **Figure 4.2.1.1**.



Pick Search

Pick No.

Search

Figure 4.2.1.1 – Pick Search Screen of the Tester

Step 2 Enter the Pick number in the 'Pick No.' field.

Step 3 Click **Search**.

The Assembly details of the corresponding Pick number appears on the working screen, as shown in **Figure 4.2.1.2**.

Pick Search

Pick Number Equals Search Page Size: 10 Export to: PDF Excel CSV Print

Print Form

Drag a column header and drop it here to group by that column

Actions	Pick#	Serial#	Type	Mfr	Size	Service Address	Last Tested	Last Result
Enter Results Test Details Print Form	P/C506	9511021511	RP	FEBCO	3	50 Phelan Avenue	05/18/2012	Pass

Displaying items 1 - 1 of 1

Figure 4.2.1.2 – Illustration of Pick Search Screen with Assembly Details

The tester can enter test results, see test details, and access blank test forms using this functionality.

4.2.2 Entering/Editing Test Results

This section describes how to enter test result data into CCAMS. After results are entered, CCAMS validates the results based on the assembly type and stores them in the database. Test results can be edited for a certain time period as determined by the WQD administrator.

After test results are entered, the assembly status is updated based on the input. The three types of assembly status are:

- **PASS:** The assembly passes the initial test; test result is entered in the 'INITIAL TEST' field of the 'Test Form.'
- **FAIL/PASS:** The assembly fails the initial test but passes the final test; the final test result is entered in the 'FINAL TEST' field in the 'Test Form.'
- **FAIL:** The assembly fails the test; the test result is entered either in 'INITIAL TEST' or the 'FINAL TEST' field in the 'Test Form' screen.



Table 4.2.2.1 describes the sections of the test form, which is illustrated in **Figure 4.2.2.2**.

Sr. No.	Sections	Description
1	Test Information	Section that is automatically populated by the tester's name, certification number, certification date and company information. Testers must select the date on which the test was performed. Optional entries: <ul style="list-style-type: none">• Check the Email Result to Owner check box to send the result to the owner.• Check the Forward Comment to Admin to bring the information in Comments text box to admin's notice.
2	San Francisco Water Service Information	Site and service information: SPID, Tap and Pick number, number of active assemblies at the site, water service type, service details, meter number, account number, and location of the assembly.
3	Assembly Information	<ul style="list-style-type: none">• Serial number, hazard type, assembly type, size, manufacturer, model, hazard level and protection.• Replacement Information Below: sub section that must be populated by the tester if the previous assembly at that location has been replaced.
4	Previous Year Test Details	Test history details like tested date, status, tester name, and test results of previous compliance years.
5	Test Results Information	Section that must be populated by the tester with the current test information. <ul style="list-style-type: none">• Initial test: Enter the valve parameters of the initial test.• Final test: After a failed initial test, enter valve parameters of the final test.• Assembly: Status of the assembly based on the test results entered in Initial or/and Final test fields.• Certified tag #: Number of backflow tag affixed to an assembly after it has passed testing. Results are not accepted without this number.

Figure 4.2.2.1 – Description of Test Form

To enter initial test results, follow these steps:

- Step 1** Go to **Test Management >> Pick Search**.
The '**Pick Search**' screen appears (**Figure 4.2.1.1**).
- Step 2** Enter the Pick number in the 'Pick No.' field.



- Step 3** Click **Search**.
Details of the assembly corresponding to the Pick number appear on the working screen (**Figure 4.2.2.1**).

Actions	Pick#	Serial#	Type	Mfr	Size	Service A
Enter Results Test Details Print Form	PVC606	9511021611	RP	FEBCO	3	50 Phela

Figure 4.2.2.1 – Illustration of Pick Search Screen with Assembly Details

- Step 4** Click on **Enter Results** under Actions column.
The blank **'Test Form'** screen appears (**Figure 4.2.2.2**).
Based on the login credentials of the tester accessing the test form, the tester name and certification details appear under 'Test Information' field.
- Step 5** Select the test date from the calendar widget in 'Test Dated' field.

NOTE: CCAMS populates the 'San Francisco Service Information' and 'Assembly Information' sections.

- Step 6** Check the 'Email to Owner' check box to forward the test results to the email address of the site owner.

NOTE: The check box is enabled for the sites that have the site owner's email address on record.

- Step 7** Check the 'Forward Comments to Admin' check box to flag the test comments to the WQD administrator.

- Step 8** If the assembly was repaired, check 'Repaired Assembly' check box.

- Step 9** In the 'Test Information' section, go to the 'INITIAL TEST' field and enter the valve parameters of the tested assembly. Relevant fields are highlighted in yellow based on the assembly type selected.

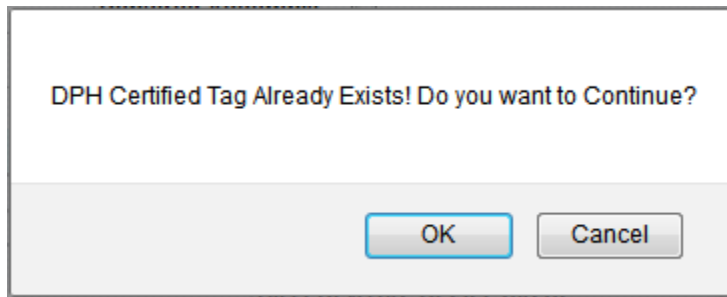
- Step 10** Based on the input in the INITIAL/FINAL test fields, CCAMS validates the results and checks one of three check boxes: PASSED, FAILED, or FAIL/PASS.

NOTE: If the test fields are left blank, the test result is considered to be a "FAIL."



Figure 4.2.2.2 – Blank Test Form

Step 11 If a duplicate backflow tag number is entered in this field, a pop-up window appears, as shown in the following illustration:



To continue using the duplicate backflow tag number, click **OK**, or click **Cancel** and enter a different backflow tag number.

NOTE: The backflow tag number is alphanumeric, with a letter followed by five numbers. To save test results of Passed or Fail/Pass Assemblies, the backflow tag number is mandatory.

Step 12 Click **Create**.
Test results are entered into CCAMS.



4.2.3 Viewing Test Details

Step 1 Go to **Test Management >> Pick Search**.

The tester's '**Pick Search**' screen appears, as shown in **Figure 4.2.1.1**.

Step 2 Enter the Pick number in the 'Pick No.' field.

Step 3 Click **Search**.

The details of the assembly corresponding to the entered Pick number appear (**Figure 4.2.3.1**).

Drag a column header and drop it here to group by that column						
Actions	Pick#	Serial#	Type	Mfr	Size	Service #
<input type="checkbox"/> Enter Results Test Details Print Form	PVC606	9511021611	RP	FEBCO	3	50 Phela

Figure 4.2.3.1 – Pick Search Screen Highlighting Test Details

Step 4 Click **Test Details** under Actions column, as highlighted in **Figure 4.2.3.1**.

The '**Test Details**' screen appears (**Figure 4.2.3.2**), showing test details, along with site and assembly information.



San Francisco Water Power Sewer
Services of the San Francisco Public Utilities Commission

Welcome, yehia yehia | Help

My Profile Change Password Logout

Home Assembly Management Test Management

Test Details

[Back](#)

Site Information

Tap Number: 229050 SPID: 350-012-0858
 Tap Status: SPID Status: R
 Block Number: 3940 Lot Number: 001
 Account Number: 2141560081
 Manual Override of CC&B Data:
 Is Restricted:
 Restricted Company:

Assembly Information

Serial Number: 01097 Assembly Type: RP
 Hazard Type: Chiller Make Up Hazard Level: High
 Assembly Manufacturer: WATTS Assembly Model: LF009M2QT
 Protection Type: Isolation Assembly Size: 1 1/4 Inches
 Current Assembly State: New Assembly Install Date: 06/12/2012
 Assembly Location: Roof chiller room DBI Plumbing Permit:

Test Information

Pick Number: RYV826 Year of Compliance: 2012
 Test Result: **Fail/Pass** Comments: KV leaking upon arrival disassemble, clean #1 cv & retest
 Tested Date: 10/15/2012 Tester General Certification Date:
 Tester Name: Michael Molini Company Phone: (408) 347-3400
 Tester General Certification No.: 05271 Entered By: WQD Admin
 Company Name: Therma, Inc. Entry Date: 11/13/2012
 DPH Certified Tag: B19063

Test History

10/15/2012 Fail by Michael Molini: Initial CV1: RV:

Test Form

	DOUBLE CHECK VALVE ASSEMBLY		REDUCED PRESSURE PRINCIPLE ASSEMBLY		PRESSURE VACUUM BREAKER	
	CHECK VALVE 1	CHECK VALVE 2	DIFFERENTIAL RELIEF VALVE		AIR INLET VALVE	CHECK VALVE
INITIAL TEST	HELD AT: <input type="text"/> PSID LEAKED <input type="checkbox"/>	HELD AT: <input type="text"/> PSID CLOSED TIGHT (RP) <input type="checkbox"/> LEAKED <input type="checkbox"/>	OPENED AT: <input type="text"/> PSID OPENED UNDER 2.0 PSID OR DID NOT OPEN <input type="checkbox"/>		OPENED AT: <input type="text"/> PSID OPENED UNDER 1.0 PSID OR DID NOT OPEN <input type="checkbox"/>	HELD AT: <input type="text"/> PSID LEAKED <input type="checkbox"/>
FINAL TEST	HELD AT: 0.0 <input type="text"/> PSID	HELD AT: <input type="text"/> PSID CLOSED TIGHT (RP) <input checked="" type="checkbox"/>	OPENED AT: 4.2 <input type="text"/> PSID		OPENED AT: <input type="text"/> PSID	HELD AT: <input type="text"/> PSID

[Back](#)

Figure 4.2.3.2 – Test Details Screen

4.2.4 Retested Assembly

If an assembly fails an initial test and is retested after the results of the initial tests are entered into CCAMS, a tester can re-access the test form and enter the results of the retest. Results of retests must be approved by the WQD administrator.

To enter a second set of test results, follow the steps below:

- Step 1** Go to **Test Management >> Pick Search**.
The 'Pick Search' screen appears (**Figure 4.2.1.1**).
- Step 2** Enter the Pick number of the assembly.
- Step 3** Click **Retest**, under the Actions column, as shown in **Figure 4.2.4.1**

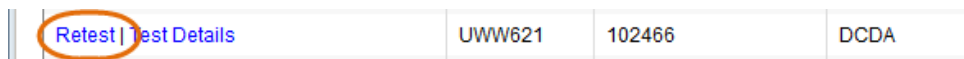


Figure 4.2.4.1 – Pick Search Screen Highlighting 'Retest'



The **'Test Form'** screen of the selected failed assembly appears.

Based on the login credentials of the tester who accesses the test form, the tester name and certification details appear under the 'Test Information' field.

Step 4 Select the test date from the calendar widget in 'Test Dated' field.

Step 5 Enter the test result in 'FINAL TEST,' as highlighted in **Figure 4.2.4.2**.

TEST RESULTS INFORMATION					
DOUBLE CHECK VALVE ASSEMBLY		REDUCED PRESSURE PRINCIPLE ASSEMBLY		PRESSURE VACUUM BREAKER	
CHECK VALVE 1		CHECK VALVE 2	DIFFERENTIAL RELIEF VALVE	AIR INLET VALVE	CHECK VALVE
INITIAL TEST	HELD AT: 5.0 PSID LEAKED <input type="checkbox"/>	HELD AT: <input type="text"/> PSID CLOSED TIGHT (RP) <input type="checkbox"/> LEAKED <input type="checkbox"/>	OPENED AT: 7.0 PSID OPENED UNDER 2.0 PSID OR DID NOT OPEN <input type="checkbox"/>	OPENED AT: <input type="text"/> PSID OPENED UNDER 1.0 PSID OR DID NOT OPEN <input type="checkbox"/>	HELD AT: <input type="text"/> PSID LEAKED <input type="checkbox"/>
FINAL TEST	HELD AT: <input type="text"/> PSID	HELD AT: <input type="text"/> PSID CLOSED TIGHT (RP) <input type="checkbox"/>	OPENED AT: <input type="text"/> PSID	OPENED AT: <input type="text"/> PSID	HELD AT: <input type="text"/> PSID

Initial Test Comments: hdgf456
Final Test Comments:

Assembly: PASSED FAILED FAIL / PASS
Certified Tag #:

Figure 4.2.4.2 – Test Form Highlighting 'FINAL TEST'

Step 6 Based on the valve parameters entered, CCAMS determines the test result and checks the PASS or FAILED or FAIL/PASS check box.

Step 7 Enter the backflow tag number in the 'Certified tag #' field.

Step 8 Click **Create**.

The test form is saved and the test result updated.

4.2.5 Replaced Assembly

If an assembly has been replaced, a tester can enter the information for the new assembly and its test results by following these steps:

Step 1 Go to **Test Management >> Pick Search**.

The tester **'Pick Search'** screen appears (**Figure 4.2.1.1**).

Step 2 Enter the Pick number of the assembly that has been replaced.

Step 3 Click **Search**.

The Pick Search result appears on the screen.

Step 4 Click **Enter Results** under Actions column.

The **'Test Form'** screen appears, as shown in **Figure 4.2.2.2**.

Step 5 Check the 'Replacement Information Below' check box, which makes the relevant fields editable. **Figure 4.2.5.1** illustrates the Replacement section in the **'Test Form'** screen.



Figure 4.2.5.1 – Test Form Screen Highlighting the Assembly Replacement Information Section

Step 6 Appropriately select/type details in the mandatory fields marked with asterisks: replacement serial #, size, hazard level, hazard type, manufacturer, model of newly replaced assembly, San Francisco Department of Building Inspection (DBI) Plumbing Permit, and date of installation.

NOTE: Replacement Serial # is the serial number of the new assembly.

Step 7 Enter the test results in the **Test Result Information** section.

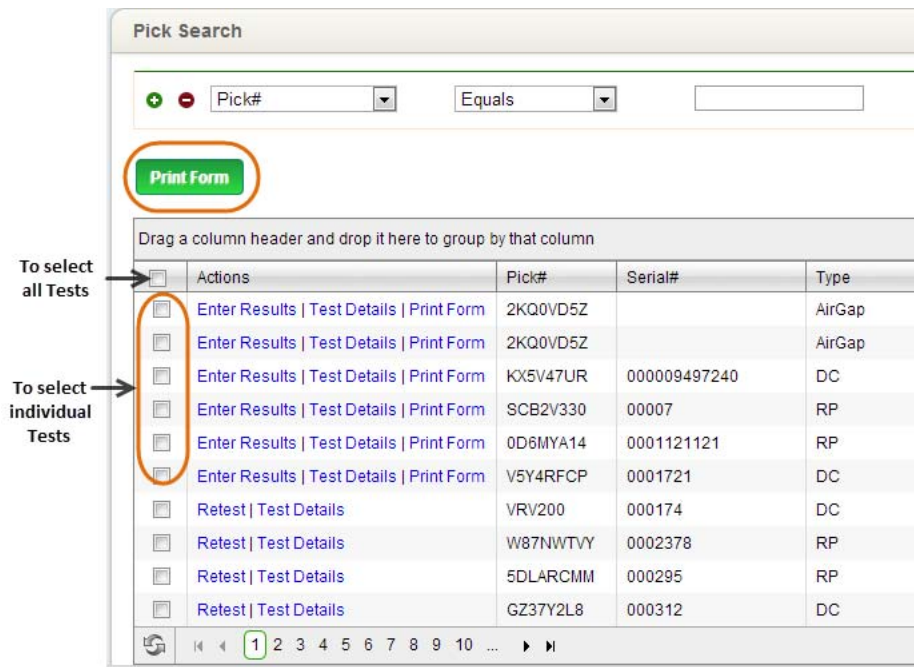
NOTE: In case of retest, the initial test data section might already be filled with data from the previous FAILED result.

Step 8 Click **Create**.
CCAMS has been updated with details of the new assembly.

4.2.6 Printing Forms

Testers can print blank test forms in PDF format by following these steps:

- Step 1** Go to **Test Management >> Pick Search**.
The '**Pick Search**' screen appears (**Figure 4.2.1.2**).
- Step 2** Locate the assembly/ies for which a blank form is/are to be printed using the Search Grid.
- Step 3** Check one or more check boxes, as shown in **Figure 4.2.6.1**.
- Step 4** Click **Print Form** button.



4.2.6.1 – Pick Search Screen Highlighting ‘Print Form’ button.

A blank test form is generated, and CCAMS prompts the tester to save the form as a PDF document. Open the form using a PDF reader software and print using the appropriate print command. The blank test form appears, as shown in **Figure 4.2.6.2**.

NOTE: If more than one test form is generated, all the forms will be merged into a single PDF document.



**San Francisco Water Quality Division
BACKFLOW PREVENTION ASSEMBLY TEST REPORT - 2014
THE USE OF THIS FORM IS MANDATORY**

San Francisco Water Service Information		Assembly Information		Assembly 1 of 2	
SP ID #: 109-902-0467		Test Results Due No Later Than : January 31, 2014			
Tap #: 220230 PICK #: V5Y4RFCP		Serial #: 0001721		Hazard Type : Fire Bypass	
No. of Active Assemblies at this Tap: 2					
Water Service Type: FIRE		Type : DC	Size : 3/4	Mfg : AMES	Model : 2000 SE
Service Name : Arundel H. O. A.		Hazard Level : High		Protection : Containment	
		Replacement Information Below <input type="checkbox"/>			
Service Address : 1438 Green St		Replacement Serial # :		Hazard Type :	
Contact Name : Dear Sir/Madam		Type :	Size :	Mfg :	Model :
Contact Number : (415) 292-1777		Hazard Level:		Protection :	
City : San Francisco		Install Date :			
Meter #: 0043016378		Plumbing Permit #:			
Account #: 1099020000					
Exact Assembly Location : F/S Bypass					

01/02/2014 Fail by Ben Hetherington :Initial CV1: CV2:
 01/22/2013 Pass by William Heatherington :Initial CV1: 1.6 CV2: 1.8
 01/05/2012 Pass by William Heatherington :Initial CV1: 1.9 CV2: 2.1
 01/15/2011 Pass by William Heatherington :Initial CV1: 2.0 CV2: 2.1
 01/20/2010 Pass by Neil Killian :Initial CV1: 2.0 CV2: 2.4
 02/07/2009 Pass by William Heatherington :Initial CV1: 1.3 CV2: 2.0
 01/30/2008 Pass by William Berzin :Initial CV1: 2.0 CV2: 2.3
 01/22/2007 Pass by Jim Hill :Initial CV1: 2.8 CV2: 2.4
 01/09/2006 Pass by Jim Hill :Initial CV1: 3.0 CV2: 2.8
 01/05/2005 Pass by Jim Hill :Initial CV1: 1.4 CV2: 1.2

TEST RESULTS INFORMATION					
DOUBLE CHECK VALVE ASSEMBLY					
REDUCED PRESSURE PRINCIPLE ASSEMBLY			PRESSURE VACUUM BREAKER		
	CHECK VALVE	CHECK VALVE NO. 2	DIFFERENTIAL RELIEF VALVE	AIR INLET VALVE	CHECK VALVE
INITIAL TEST	HELD AT: _____ PSID LEAKED <input type="checkbox"/>	HELD AT : _____ PSID CLOSED TIGHT (RP) <input type="checkbox"/> LEAKED <input type="checkbox"/>	OPENED AT : _____ PSID OPENED UNDER 2.0 PSID <input type="checkbox"/> OR DID NOT OPEN <input type="checkbox"/>	OPENED AT : _____ PSID OPENED UNDER 1.0 PSID <input type="checkbox"/> OR DID NOT OPEN <input type="checkbox"/>	HELD AT: _____ PSID LEAKED <input type="checkbox"/>
FINAL TEST	HELD AT : _____ PSID	HELD AT : _____ PSID CLOSED TIGHT (RP) <input type="checkbox"/>	OPENED AT : _____ PSID	OPENED AT: _____ PSID	HELD AT: _____ PSID

Comments:

Assembly : PASSED FAILED FAIL / PASS
 Certified Tag # _____

Initial Test By :	San Francisco Certified Tester #	Date	Company Seal <small>(MUST include Company Name, address & phone)</small>
Final Test By :	San Francisco Certified Tester #	Date	Company Seal <small>(MUST include Company Name, address & phone)</small>

THE ABOVE REPORT IS CERTIFIED TO BE TRUE: _____
Signature of Tester

In Accordance with City Ordinance (Section 757)
 All test report originals MUST be completed, signed by a certified tester & returned by mail to this office
within 5 calendar days from the date the tests are performed.
 Water Quality Bureau, Attn: Cross Connection Section, P.O. Box 730, Millbrae, CA 94030-073

Figure 4.2.6.2 – Blank Test Form in PDF format



4.2.7 Searching Test Reports

To locate a certain test report, a tester can search for test history using the following parameters:

- Pick number of the test
- Serial number of the assembly
- SPID of the site
- Date on which the assembly was tested
- Tester's name
- Test status
- Compliance year
- Backflow tag number
- Service address
- Test month
- Assembly status (Active/Inactive)

To search for test history, follow these steps:

Step 1 Go to Test Management >> Test History Search

The Test history search page appears as shown in **Figure 4.2.7.1**.

Test Status	Compliance Year	DPH Certified Tag	Service Address	Test Mo	Assembly Status	Date Tested	Tester Company	Tester Name	Test Status	Comp Yr	Tag#	Service Address
T			1 Canada Road			12/24/2013	Backflow, M &Or R	dharmendra p	Pass	2013	dtgh435	1 Canada Road
T			1 Canada Road			12/12/2013	Backflow, M &Or R	dharmendra p	Fail	2013		1 Canada Road
T			bangalore			10/21/2013	Backflow, M &Or R	dharmendra p	Pass	2013	ted5078	bangalore
T			100**** 3rd St			10/15/2013	Backflow, M &Or R	dharmendra p	Pass	2013	FGV788	100**** 3rd St
T			bangalore			10/21/2013	Backflow, M &Or R	dharmendra p	Pass	2013	djmmmm345	bangalore
T			bangalore			10/21/2013	Backflow, M &Or R	dharmendra p	Pass	2012	dafgsg53455	bangalore
T			bnagalore			10/21/2013	Backflow, M &Or R	dharmendra p	Fail	2013		bnagalore
T			Bangalore			10/21/2013	Backflow, M &Or R	dharmendra p	Fail	2013		Bangalore
T			bangalore			10/21/2013	Backflow, M &Or R	dharmendra p	Fail	2013		bangalore
T			442 Geary St			10/18/2013	Backflow, M &Or R	dharmendra p	Fail/Pass	2013	tghgdm3543	442 Geary St

Figure 4.2.7.1 – Test History Search Screen

Step 2 Select the required parameters from the Search Grid.

The search result appears on the working screen.

4.2.8 Viewing Test Form

The tester can see the details of the test conducted by them and access the test report of the Assemblies.

The tester can see the following test details of an assembly on the 'Test Details' screen, as shown in **Figure 4.2.8.1**.

1. **Site Information:** SPID, account number, service address, etc.



2. **Assembly Information:** Serial number, assembly type, manufacturer, etc.
3. **Test Information:** Test result, date test was performed, tester name, compliant year, certification details, etc.
4. **Test History:** Dates tested, status, tester name and test details.
5. **Test Form:** Latest test form with valve parameters and other details.

San Francisco Water Power Sewer
Services of the San Francisco Public Utilities Commission

Welcome Dharmendra parauha | Help

My Profile Change Password Logout

Home Test Management

Test Details

[Back](#) [View PDF](#)

Site Information

Tap Number : 226218 SPID : 000-991-1100
 Tap Status : SPID Status : R
 Block Number : 3784 Lot Number : 068
 Account Number : 6239020000
 Manual Override of CC&B Data :
 Is Restricted :
 Restricted Company :

Assembly Information

Serial Number : W192118 Assembly Type : DC
 Hazard Type : Fire Bypass Hazard Level : High
 Assembly Manufacturer : WILKINS Hazard Level : 350
 Protection Type : Containment Assembly Size : 3/4 Inches
 Current Assembly State : New Assembly Install Date : 04/05/2005
 Assembly Location : Fire bypass in basement on wall off Townsend St DBI Plumbing Permit :

Test Information

Pick Number : ZYBLML1F Year of Compliance : 2013
 Test Result : Pass Comments :
 Tested Date : 07/25/2013 Tester General Certification Date :
 Tester Name : Jordan Lee Company Phone : (877) 226-3569
 Tester General Certification No. : 16194 Entered By : Ron Gallega
 Company Name : AAA Backflow Prevention Service Entry Date : 09/07/2013
 DPH Certified Tap : Z15521

Test History

08/22/2012 Pass by Cindy Boze : Initial CV1: 3.2 CV2: 3.4 08/25/2007 Pass by Cindy Boze : Initial CV1: 2.2 CV2: 3.4
 08/17/2011 Pass by Cindy Boze : Initial CV1: 2.2 CV2: 2.4 08/05/2006 Pass by Cindy Boze : Initial CV1: 2.6 CV2: 2.8
 08/19/2010 Pass by Cindy Boze : Initial CV1: 3.0 CV2: 3.1 04/22/2005 Pass by Steve Gotelli : Initial CV1: 3.8 CV2: 3.4
 10/21/2009 Pass by Dave Shein : Initial CV1: 2.6 CV2: 2.6
 08/19/2008 Pass by Cindy Boze : Initial CV1: 2.9 CV2: 3.0

Test Form

	DOUBLE CHECK VALVE ASSEMBLY		REDUCED PRESSURE PRINCIPLE ASSEMBLY		PRESURE VACUUM BREAKER
	CHECK VALVE 1	CHECK VALVE 2	DIFFERENTIAL RELIEF VALVE		CHECK VALVE
INITIAL TEST	HELD AT: 2.8 PSID LEAKED <input type="checkbox"/>	HELD AT: 3.1 PSID CLOSED TIGHT (RP) <input type="checkbox"/> LEAKED <input type="checkbox"/>	OPENED AT: PSID OPENED UNDER 2.0 PSID OR DID NOT OPEN <input type="checkbox"/>	OPENED AT: PSID OPENED UNDER 1.0 PSID OR DID NOT OPEN <input type="checkbox"/>	HELD AT: PSID LEAKED <input type="checkbox"/>
FINAL TEST	HELD AT: PSID	HELD AT: PSID CLOSED TIGHT (RP) <input type="checkbox"/>	OPENED AT: PSID	OPENED AT: PSID	HELD AT: PSID

[Back](#) [View PDF](#)

Figure 4.2.8.1 – Test Details Screen

To access a test report, follow the steps below:

Step 1 Go to **Test Management >> Test History Search**.

The 'Test History Search' screen appears, as shown in **Figure 4.2.8.2**.

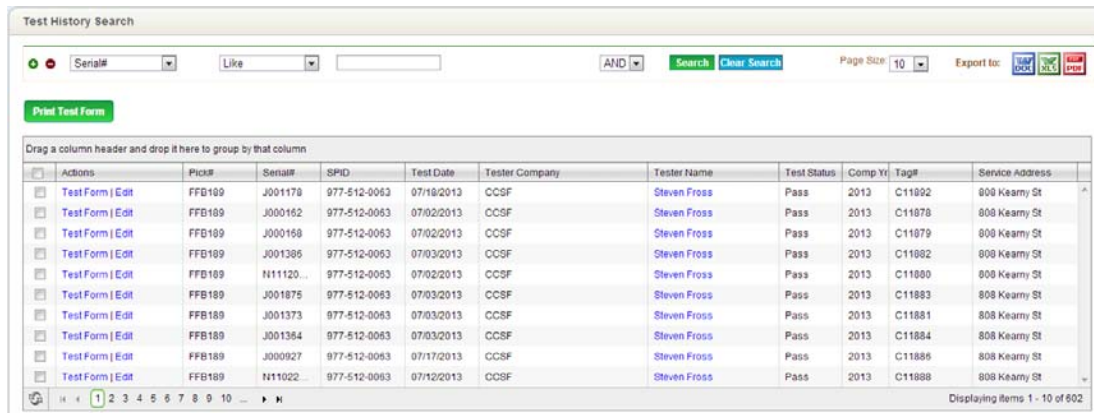
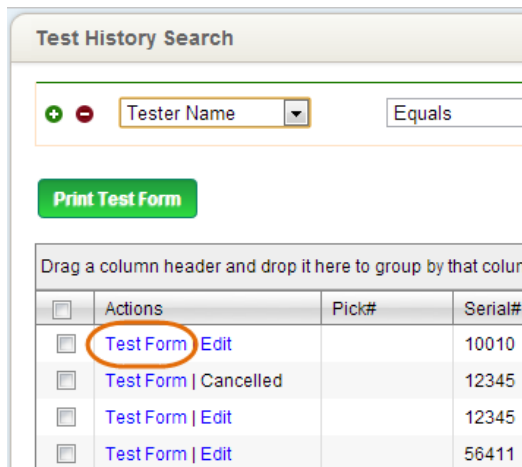


Figure 4.2.8.2 – Test History Search Screen

- Step 2** Search for the required test report using relevant parameters in Search Grid.
- Step 3** Click **Test Form** under Actions column, shown in the following illustration, to see the test report of the selected Assembly.



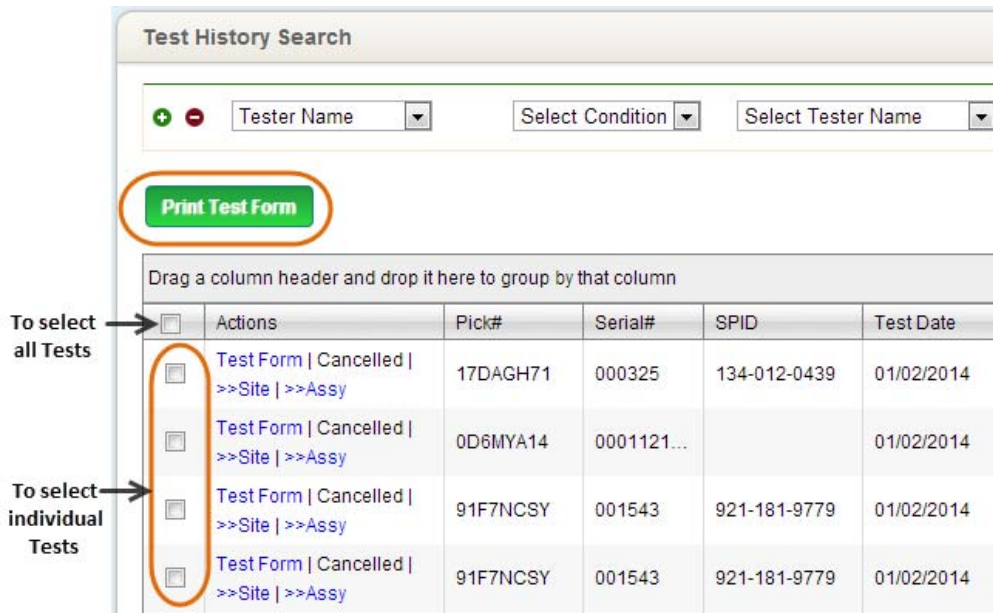
The 'Test Details' screen of the selected Assembly appears, as shown in **Figure 4.2.8.1**.

To print the test report, click **View PDF** button at the top/bottom of the screen.

4.2.9 Printing Test Forms

To print test forms and results in PDF format, follow the steps below:

- Step 1** Go to **Test Management >> Test History Search**.
'Test History Search' screen appears, as shown in **Figure 4.2.8.2**.
- Step 2** Locate the tests for which test forms are to be printed, using Search Grid.
- Step 3** Check single, multiple or all check boxes, as shown in **Figure 4.2.9.1**.
- Step 4** Click **Print Test Form**.



4.2.9.1 – Test History Search Screen Highlighting ‘Print Test Form’ Button

The test form with results is generated and prompts the user to save it as a PDF document. Open the form using a PDF reader software, and print using the appropriate print command. The test form with results appears as shown in **Figure 4.2.9.2**.

NOTE: If more than one test form is generated, all forms will be merged into a single PDF document.



**San Francisco Water Quality Division
BACKFLOW PREVENTION ASSEMBLY TEST REPORT - 2014
THE USE OF THIS FORM IS MANDATORY**

San Francisco Water Service Information		Assembly Information		Assembly 1 of 1	
SP ID #: 745-630-0530		Test Results Due No Later Than : January 31, 2014			
Tap #: 089359	PICK #: QVH8K16I	Serial #: 00019	Hazard Type : Boiler Make Up		
No. of Active Assemblies at this Tap: 1		Type : RP	Size : 1/2	Mfg : FEBCO	Model : Unknown
Water Service Type: STANDARD		Hazard Level : High		Protection : Isolation	
Service Name : Ford, Claudette R.		Replacement Information Below <input type="checkbox"/>			
Service Address : 105 21st Av		Replacement Serial # :		Hazard Type :	
Contact Name : Sir/Madam		Type :	Size :	Mfg :	Model :
Contact Number :		Hazard Level:		Protection :	
City : San Francisco		Install Date :			
Meter #: 0020600190		Plumbing Permit #:			
Account #: 7456300000					
Exact Assembly Location :					

01/02/2014 Pass by Ben Hetherington : Initial CV1: 5.0 RV: 5.0
 12/20/2013 Fail/Pass by Anthony J. Brace : Initial CV1: 5.0 RV: 5.0 : Final CV1: 5.0 RV: 7.0
 12/20/2013 Fail by Alberto Alfaro : Initial CV1: RV:
 01/18/2013 Pass by Anthony Scotto : Initial CV1: 7.2 RV: 2.6
 01/06/2012 Pass by William Berzin : Initial CV1: 7.3 RV: 2.6
 01/10/2011 Pass by Michael S. Flanery : Initial CV1: 7.0 RV: 2.8
 01/15/2010 Pass by Jim Hill : Initial CV1: 7.8 RV: 2.8
 01/09/2009 Pass by William Berzin : Initial CV1: 7.7 RV: 2.6
 01/23/2008 Pass by William Berzin : Initial CV1: 7.6 RV: 2.6
 01/08/2007 Pass by William Berzin : Initial CV1: 9.0 RV: 2.7

TEST RESULTS INFORMATION					
DOUBLE CHECK VALVE ASSEMBLY					
REDUCED PRESSURE PRINCIPLE ASSEMBLY			PRESSURE VACUUM BREAKER		
	CHECK VALVE	CHECK VALVE NO. 2	DIFFERENTIAL RELIEF VALVE	AIR INLET VALVE	CHECK VALVE
INITIAL TEST	HELD AT: <u>5.0</u> PSID LEAKED <input type="checkbox"/>	HELD AT : _____ PSID CLOSED TIGHT (RP) <input checked="" type="checkbox"/> LEAKED <input type="checkbox"/>	OPENED AT : <u>5.0</u> PSID OPENED UNDER 2.0 PSID OR DID NOT OPEN <input type="checkbox"/>	OPENED AT : _____ PSID OPENED UNDER 1.0 PSID OR DID NOT OPEN <input type="checkbox"/>	HELD AT: _____ PSID LEAKED <input type="checkbox"/>
FINAL TEST	HELD AT : _____ PSID	HELD AT : _____ PSID CLOSED TIGHT (RP) <input type="checkbox"/>	OPENED AT : _____ PSID	OPENED AT: _____ PSID	HELD AT: _____ PSID

Comments: _____ Assembly : PASSED FAILED FAIL / PASS

Certified Tag # JMN7656

Initial Test By : Ben Hetherington	San Francisco Certified Tester # 13838	Date 01/02/2014	Company Seal Hetherington General & Plumbing Contractors (MUST include Company Name, address & phone)
Final Test By :	San Francisco Certified Tester #	Date	Company Seal (MUST include Company Name, address & phone)

THE ABOVE REPORT IS CERTIFIED TO BE TRUE: _____
Signature of Tester

In Accordance with City Ordinance (Section 757)
All test report originals MUST be completed, signed by a certified tester & returned by mail to this office
within 5 calendar days from the date the tests are performed.
Water Quality Bureau, Attn: Cross Connection Section, P.O. Box 730, Millbrae, CA 94030-073

Figure 4.2.9.2 –Test Form with Test Results in PDF Format



4.3 Adding a New Assembly

Testers can add new assemblies to CCAMS. Newly entered assemblies must be approved by the WQD administrator. New assemblies must have a plumbing permit entered. The administrator can, however, override the DBI permit number requirement with justification provided in comments.

Information to be entered for a new assembly is listed and described in **Table 4.3.1**.

Sr. No.	Section	Description	Credentials
1	Site information	Details about the site	Tap number, SPID number, lot number, block number, etc.
2	Choose assembly type	Type of assembly	Type of assembly
3	Assembly details	Details about the assembly	Serial number, assembly type, size, model, hazard type, hazard level, etc.
4	Assembly comments	Additional details about the assembly	Other information about the assembly.
5	Test results information	Information regarding the test results	Status of the test results of the assembly.

Table 4.3.1 –Assembly Credentials

To add a new assembly to CCAMS, follow the steps below:

- Step 1** Go to **Assembly Management >> Add Assembly**.
The **'Add Assembly'** screen appears (**Figure 4.3.1**).



The screenshot shows the 'Add Assembly' form in the San Francisco Water Power Sewer system. The form is organized into several sections:

- Site:** Includes fields for 'Enter Address', 'Select City' (dropdown), and 'Enter Zip Code'.
- Choose Assembly Type:** Features an 'Assembly Type' dropdown menu and a 'Field Check' checkbox.
- Assembly Details:** A grid of fields including 'Serial Number', 'Hazard Type' (dropdown), 'Assembly Size' (dropdown), 'Assembly Manufacturer' (dropdown), 'Assembly Model' (dropdown), 'Hazard Level' (dropdown), 'Protection Type' (dropdown), 'Assembly Installed Date' (calendar), and 'Assembly Location'.
- DBI Plumbing Permit:** A text input field.
- Meter Information:** Fields for 'What Meter Serves', 'Meter Number', 'Meter Make', and 'Meter Cf'.
- Assembly Comments:** A large text area for notes.
- Test Results Information:** Includes 'Test Comments', 'Assembly Test Status' (checkboxes for PASSED, FAILED, FAIL/PASS), and 'DPH Certified Tag #'.

Navigation buttons 'Submit' and 'Cancel' are located at the top and bottom of the form.

Figure 4.3.1 – Tester’s “Add Assembly” Screen

- Step 2** Enter the Site address in ‘Enter Address’ field.
- Step 3** Choose the relevant assembly type from the ‘Assembly Type’ drop-down list. The ‘Test Information’ and ‘Test Form’ section are added to the screen; information varies vary according to the assembly type selected. If an Air Gap is added, Vehicle Information area is added to the screen (**Table 4.3.1**).
- Step 4** Check the ‘Field Check’ check box, if site supervision is required.
- Step 5** Enter the serial number of the assembly in the ‘Serial Number’ text box.
- Step 6** Select the relevant Hazard type, Assembly Type, Assembly Size, Assembly Manufacturer, Assembly Model, Hazard Level, and Protection Type from the corresponding drop-down boxes.
- Step 7** Select the assembly installation date from the ‘Assembly Installed Date’ calendar widget.
- Step 8** Type the location where the assembly is installed in ‘Assembly Location’ text box.
- Step 9** Enter the DBI plumbing permit number in the ‘DBI Plumbing Permit’ text box.
- Step 10** Enter the relevant details in the following text boxes.
- Step 11** In ‘Assembly Image’ field, click **Select**, and choose an assembly image if CCAMS contains an appropriate one. This step is not mandatory.
- Step 12** Enter any additional information as comments in the text box labeled ‘Comments.’



- Step 13** Select the test date from the 'Tested Date' calendar widget.
- Step 14** Select the tester's name from 'Tested By' drop-down list.
- Step 15** Select the compliance year from the 'Year of Compliance' drop-down list for which the test result is being entered.
- Step 16** Enter the valve parameters in the 'INITIAL TEST' field of the test form.
- Step 17** Base on the inputs in INITIAL/FINAL TEST fields, CCAMS checks the box labeled PASSED, FAILED, or FAIL/PASS.
- Step 18** Enter test comments in the 'Test Comments' text box.
- Step 19** Enter the backflow tag number in 'SFDPH Certified Tag #' text box.

NOTE: The backflow tag number is alphanumeric, with a letter followed by five numbers. To save test results of Passed or Fail/Pass Assemblies, the backflow tag number is mandatory.

- Step 20** Click **Create**.

The assemblies added by testers are directed for the WQD administrator's approval. Once the administrator approves the addition, the new assembly is added to the CCAMS records.

Abbreviations

DBI	San Francisco Department of Building Inspection
CCAMS	Cross-Connection Assembly Management System
CV	Check Valve
DC	Double Check
SFDPH	Department of Public Health
MFR	Manufacturer
MS	Microsoft
PDF	Portable Document Format
RP	Reduced Pressure
SFPUC	San Francisco Public Utilities Commission
SIC	Service Identification Code
SPID	Service Point ID, provided by Customer Services Bureau upon new account creation
URL	Uniform Resource Locator
WMS	'Water Meter Service' is for internal field inspections by WQD
WQD	Water Quality Division of the SFPUC
ZIP Code	Zone Improvement Plan code

Glossary

Term	Explanation
Active Assemblies	Assemblies that are active at least once during a year.
Active Due	Assemblies that are untested or failed during the current compliance year.
AirGap	A physical break between a supply line and a receiving vessel.
Compliance year	A period starting from the test month of the current year to the next year.
DBI plumbing permit number	A unique alpha-numeric number on plumbing permits issued by DBI to allow plumbing activities at a site.
FAIL/PASS	Denotes that an assembly failed the initial test but passed the final test.
Field Check	The physical inspection of a site and its assemblies.
Out-of-cycle test	Test conducted outside of the normal testing cycle (before or after the scheduled test month).
Pick Number	A unique number generated when WQD sends a notice to inform an owner of an assembly that testing is due.
SFDPH Certified Tag #	Number on SFDPH-issued backflow tag, which is to be affixed to a backflow prevention assembly after it has passed testing.
TAP #	Unique site identifier, consisting of six numerals.
Testers Cert #	Number issued to an Authorized Backflow Prevention Assembly Tester by SFDPH. Valid for one year.