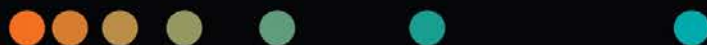
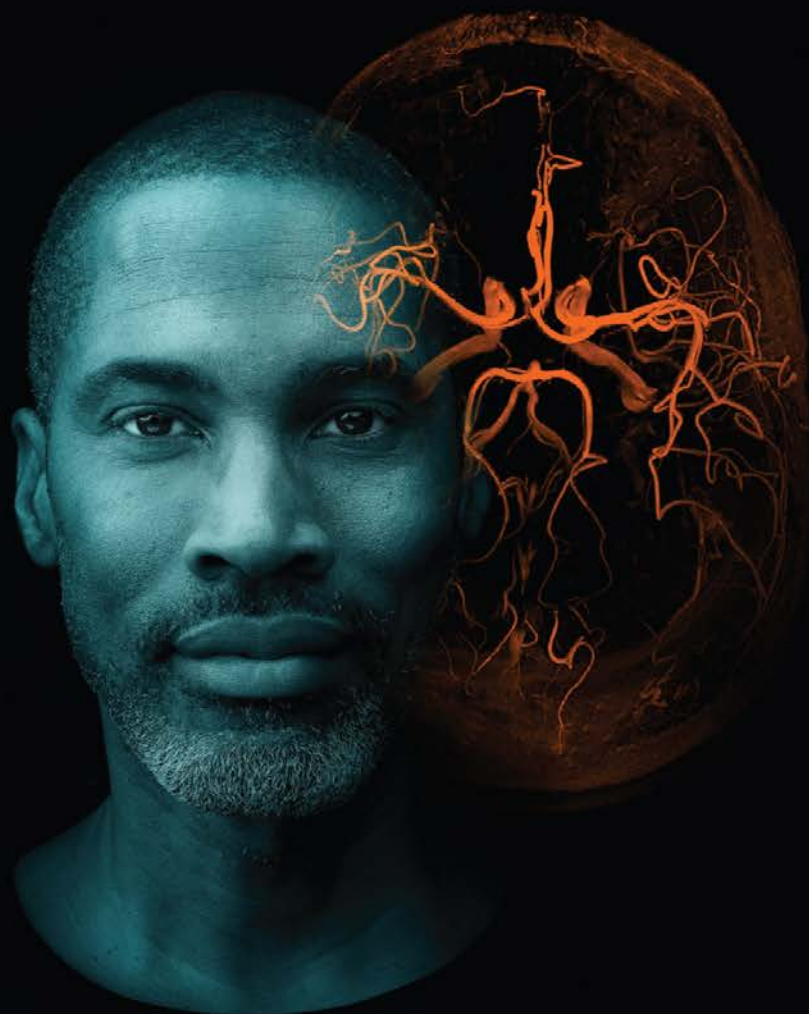


ADVIA Centaur® XPT System

Virtual Training Workbook



Siemens Healthineers

ADVIA Centaur® XPT System

Virtual Training



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1 Welcome

Welcome to training

Siemens Healthineers would like to welcome you to the ADVIA Centaur® XPT System Virtual Training course.

This course is designed to teach you the skills needed to operate and maintain the ADVIA Centaur XPT Immunoassay System.

Our staff welcomes the opportunity to present this virtual training program to you.

Training Material

This training workbook includes an agenda, learning objectives, and practical exercises.

ADVIA Centaur® XPT System Virtual Training

Objectives

To prepare the customer to operate, maintain the ADVIA Centaur XPT Immunoassay System.

Course Objectives

After participating in the virtual lectures and hands-on exercises, you will be able to:

- Identify the system components and their functions.
- Navigate the software.
- Manage supplies and reagents.
- Setup, process and manage quality controls.
- Process and manage patient samples.
- Setup, process and manage calibrations.
- Perform maintenance.
- Utilize the Event Log to troubleshoot system errors.
- Utilize the instrument Operator's Guide and online help.
- List the steps to do a system restart

ADVIA Centaur® XPT System Virtual Training

Training Agenda

Day 1

- System Components
- User Interface
- Event Log
- Supplies, System Fluids and Reagents
- Hands-on Practice Exercise (Loading supplies and reagents)
- Calibration
- Hands-on Practice Exercise

LUNCH

- Quality Control
- Processing Patient Samples Part 1
- Hands-on Practice Exercise
- Maintenance

Day 2

- Morning Review
- Sample Processing Part 2
- Hands-on Practice Exercise
- Event Log/ Basic Troubleshooting
- Hands-on Practice Exercise/LUNCH
- Perform IM Daily and/or Weekly-Monthly Maintenance

ADVIA Centaur® XPT System Virtual Training

Course Validation Checklist

The student places a checkmark beside the competency when it is completed. When all competencies are checked, the instructor and operator sign and date below as record of completion.

Topics	Competencies	Completed
System Components	Identify the system components, compartments and their functions	
User Interface	Log onto the software	
	Locate key Status and Command bar buttons	
	Access Online Help	
Supplies and Reagents	Monitor supplies and reagents statuses	
	Load/unload supplies and reagents	
	Empty wastes	
Quality Control (QC)	Add and Edit a control definition	
	Order and process QC and QC profiles	
	Configure automatic QC ordering	
	Access ADVIA QC program	
Processing and Managing Samples	Process and monitor patient samples	
	Print results	
Calibration	Check calibration status	
	Locate and scan MC Def and Calibrator Definition cards	
	Order a calibration	
	Review and print calibration data	
Maintenance	Locate, review and update the maintenance tasks	
	Access maintenance procedures through Online Help	
	Perform daily, weekly, monthly and as-needed maintenance procedures	
Event Log	Utilize the Operator Event Log and the Online help to identify troubleshooting procedures	
Document Library	Access Siemens Document Library	

System Restart	List the steps to perform a system reboot	
-----------------------	---	--

Observer: _____

Participant: _____

Date: _____

What was most helpful to you during this program?

How can we improve this program to make it more meaningful to you?

2 System Components

System Components

Resources

- *ADVIA Centaur CP Operators Guide*
- Online Help
- PEP Connect

Objectives

Upon completion of this exercise you will be able to:

- Identify System Components and their functions.

System Components

Exercise Activity and Questions

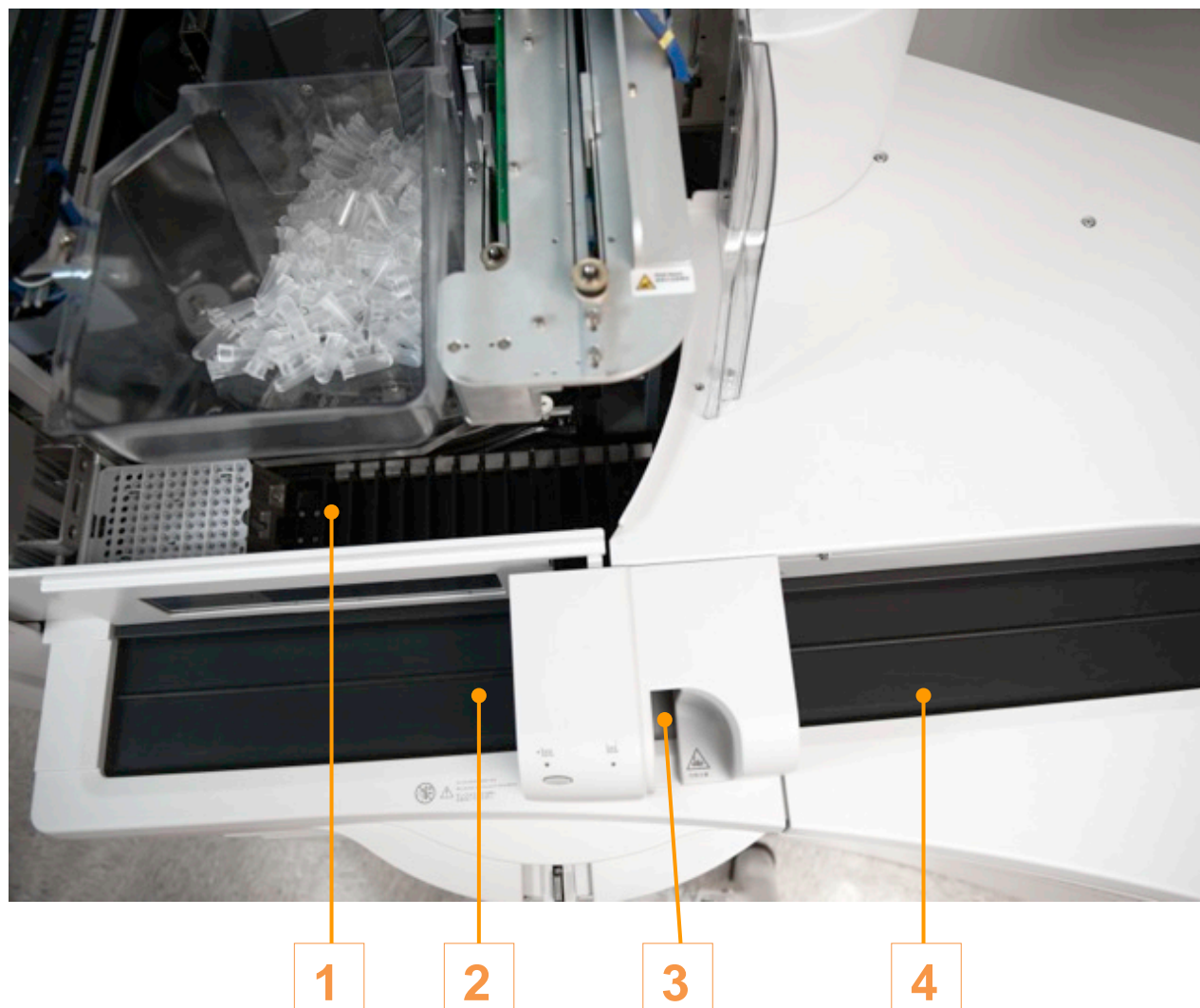
1. Identify the following compartments in the image below.

- | | |
|--------------------------|---------------------------------------|
| A. ___ System Fluids | E. ___ Ancillary Reagent Entry |
| B. ___ Cuvette Loader | F. ___ Primary Reagent Compartment |
| C. ___ Water Bottle | G. ___ Cleaning Solution / Tip Waste |
| D. ___ Sample Tip Loader | H. ___ Tip Tray Waste / Cuvette Waste |



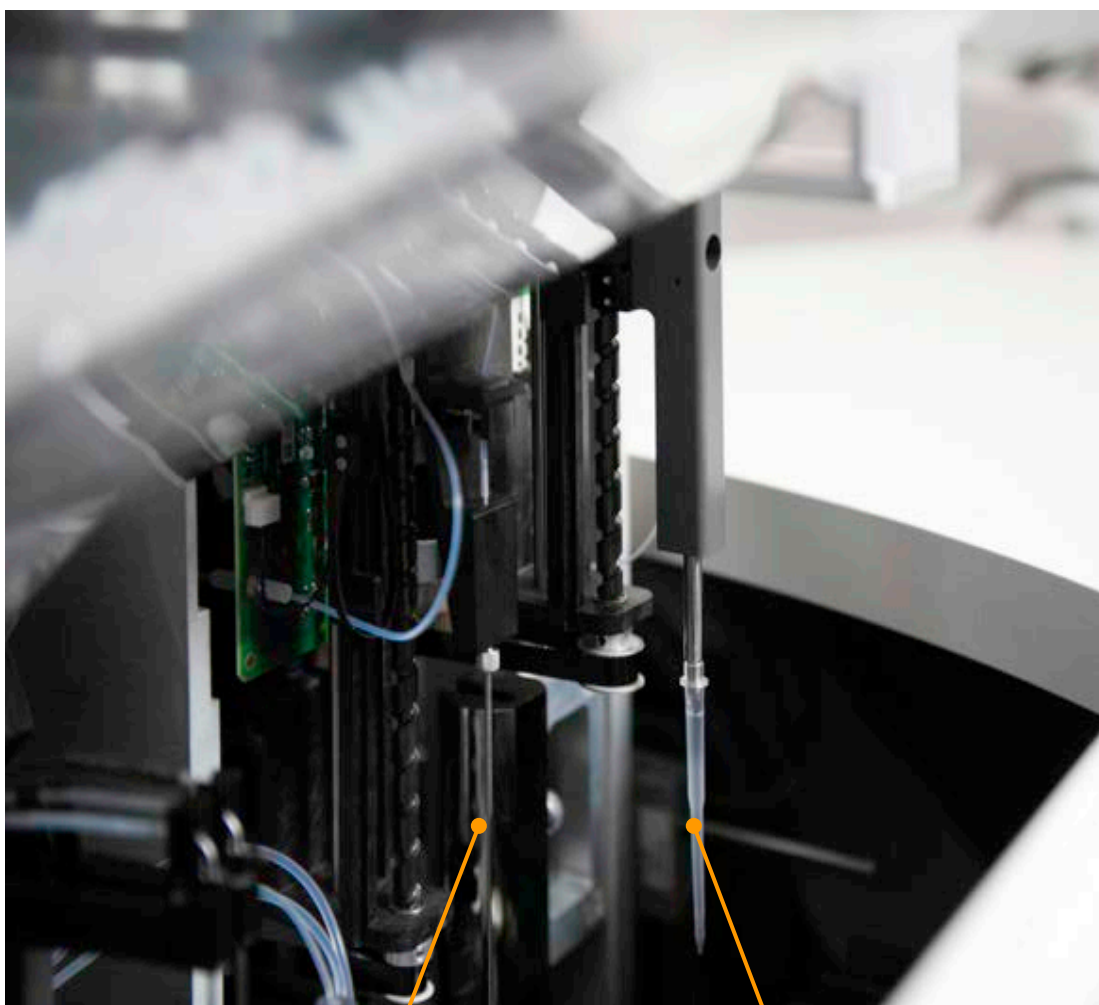
2. Identify following system components in the image below.

- A. ___ STAT Entry
- B. ___ Sample Entry Queue
- C. ___ Sample Exit Queue
- D. ___ In Process Queue



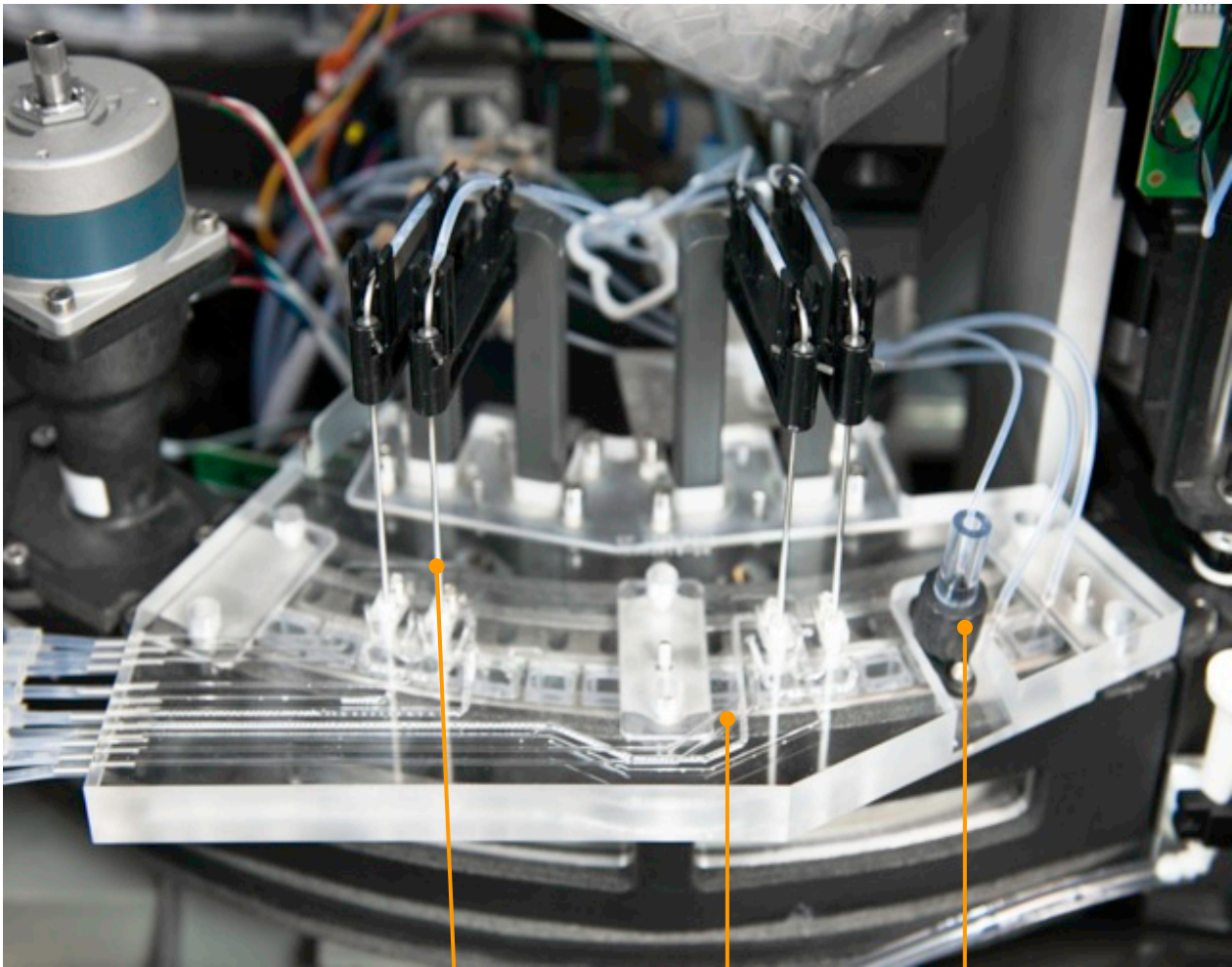
3. Identify the following system interior components in the next two images below.

- A. ___ Ancillary Probe
- B. ___ Wash Block
- C. ___ Sample Probe
- D. ___ Aspirate Probes
- E. ___ Acid Probe



1

2



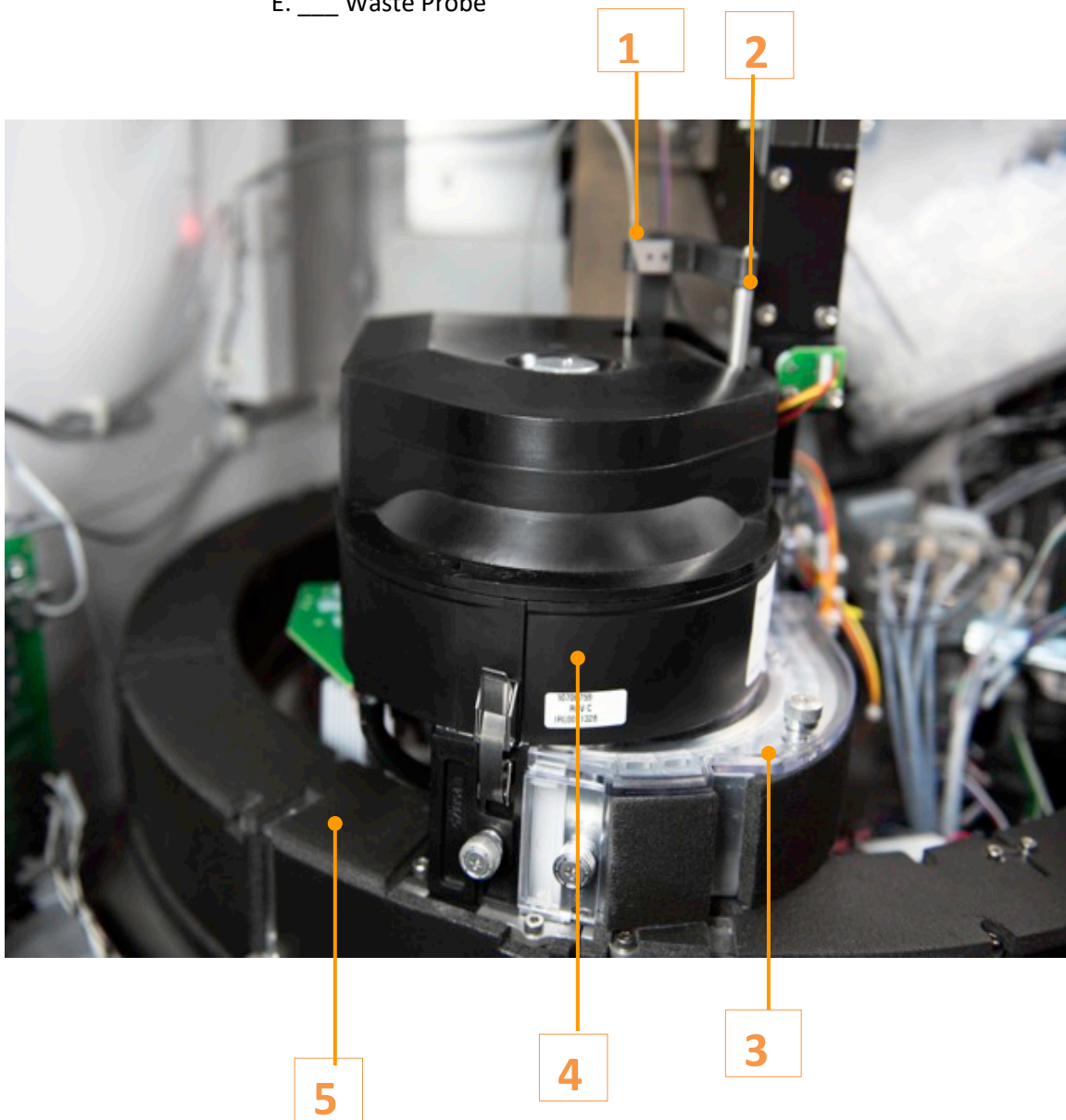
3

4

5

4. Identify the following system interior components in the next two images below.

- A. ___ Luminometer
- B. ___ Incubation Ring
- C. ___ Preheater
- D. ___ Ejector Rod
- E. ___ Waste Probe



5. Identify the following system components in the image below.

A. _____

B. _____

C. _____



A

B

C

3 User Interface

User Interface

Resources

- Software Overview section in *ADVIA Centaur XPT Immunoassay System Operator's Guide*
- ADVIA Centaur XPT System PEP To Go
- Online Help
- PEP Connect

Objectives

After completing this section, you will be able to:

- Log onto the ADVIA Centaur XPT System Software.
- Navigate the main software windows.
- Navigate the online help function.

Login

Log in to the ADVIA Centaur XPT System with the provided username and password.

Main Software Windows

Navigate the User Interface to answer the following questions.

1. Where is the Software Version located?
2. Where is the system serial number located?
3. Which button is selected to check the reagents status?
4. Which button is selected to check the sample tips status?
5. List the steps to access the Daily Cleaning Procedure.
6. Which button can be selected to order a sample?
7. Where would you gather information about ambient temperature and humidity?
8. Where is the test efficiency monitored? How is it calculated?
9. Which button of the command bar is flashing red when a critical condition happens on the system?

Online Help

1. Access the Online Help.
2. Look for the Operator Manual.

4 Supplies and Reagents

Supplies and Reagents

Resources

- Consumable Management section in *ADVIA Centaur XPT Immunoassay System Operator's Guide*
- ADVIA Centaur XPT System PEP To Go
- Online Help
- PEP Connect

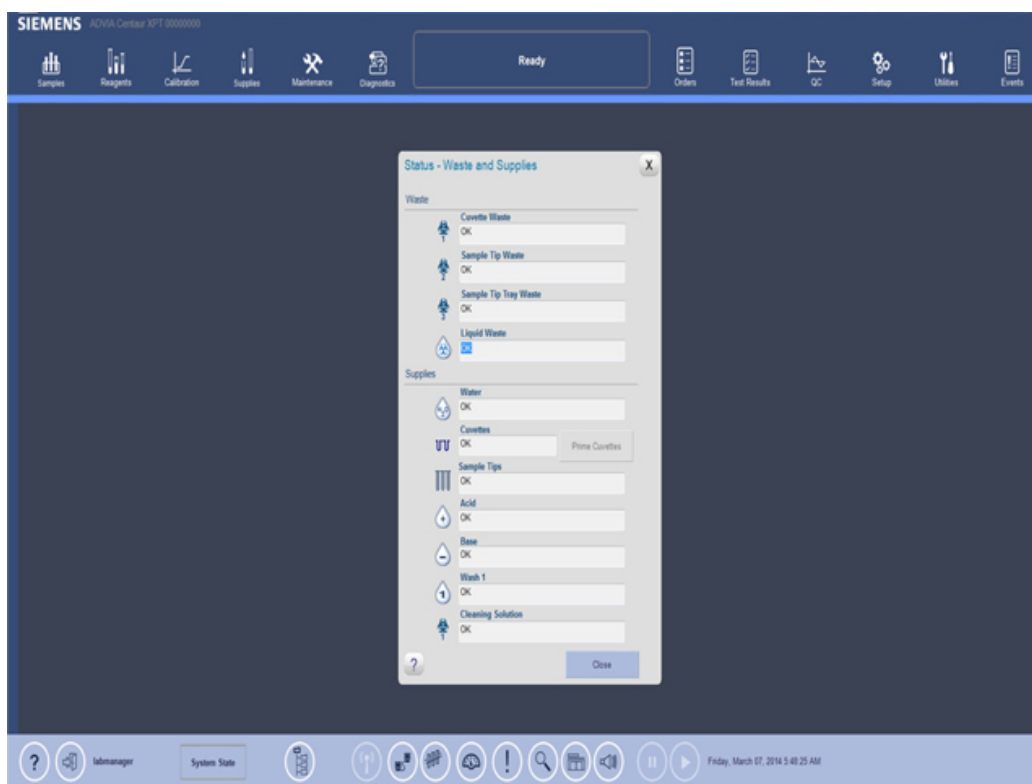
Objectives

After completing this section, you will be able to:

- Determine the status of supplies.
- Load supplies and empty waste.
- Determine the status of reagents.
- Load primary and ancillary reagents.

Determine the Status of Supplies

1. Select the **Supplies** button on the Command Bar.



Questions

1. What does it mean if one of the waste or supplies is red?
2. What does it mean if one of the waste or supplies is yellow?

Load Supplies and Empty Waste

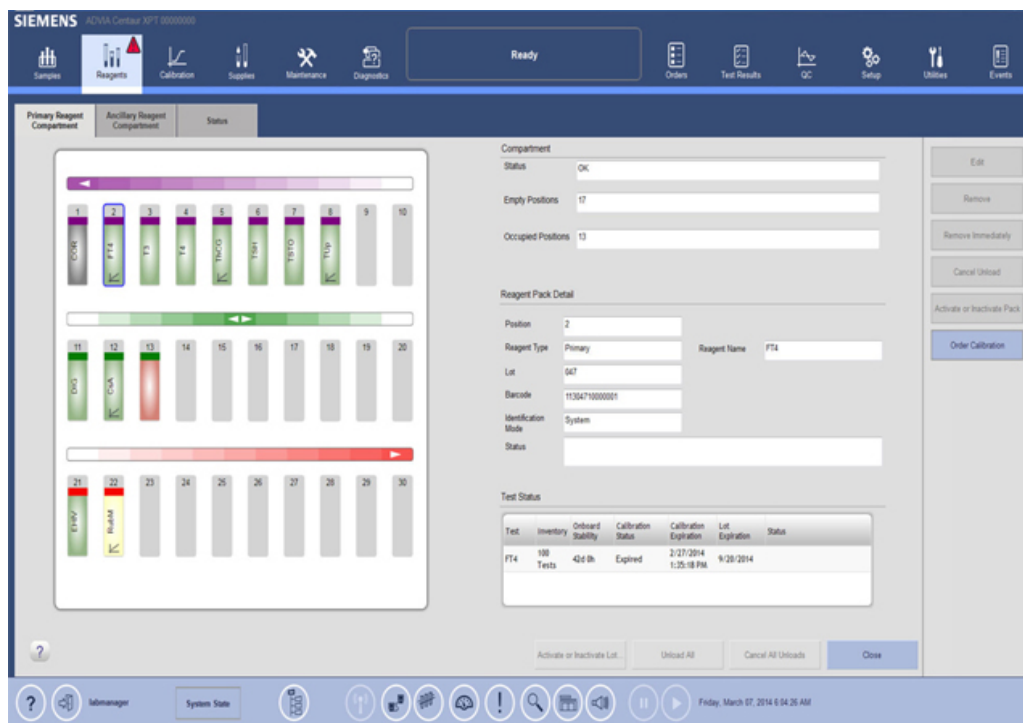
- a) Examine the connections on the liquid waste bottle. Practice disconnecting and reconnecting the tubing. Empty the bottle if needed.
- b) Withdraw and empty the cuvette and tip waste bins.
- c) Remove any empty tip trays or tip tray lids from the tip tray waste area.
- d) Examine the connection on the water bottle. Practice disconnecting and reconnecting the tubing. Fill the water bottle with deionized water if needed.
- e) Examine the quantity of cuvettes in the cuvette loading bin. If needed, load a new bag.
- f) Remove the protective cover of a sample tip tray bundle. Open the supplies access cover and examine the position of the tip trays in the loader. Load the new sample tip tray bundle if there is adequate space.
- g) If the Acid, Base or Wash 1 bottles need to be replaced, obtain new bottles and replace them. If none need to be replaced, practice removing and replacing the existing bottle.

Questions

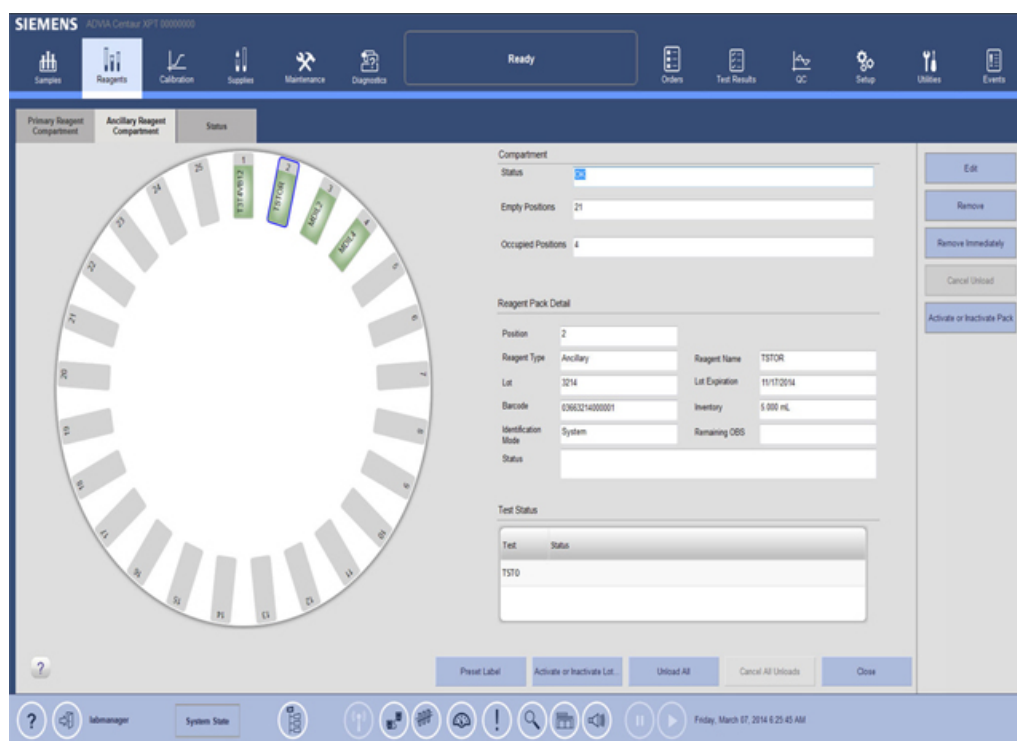
1. Which supplies can be loaded while the system is processing samples?
2. If the system runs out of cuvettes, what button would you select to restart the cuvette loader?
3. What is the on-board stability of the Acid, Base and Wash 1?

Determine the Status of Reagents

1. Select the **Reagents** button on the Command Bar.
2. Select the **Primary Reagent Compartment** tab. Select one of the packs. Observe the information that displays for the selected pack.



2. Select the **Ancillary Reagent Compartment** tab. Select one of the packs. Observe the information that displays for the selected pack.



3. Select the **Status** tab.

The screenshot displays the 'Status' tab of the ADVIA Centaur XPT System. The interface includes a top navigation bar with icons for Samples, Reagents, Calibration, Supplies, Maintenance, Diagnostics, and a 'Ready' status indicator. Below the navigation bar, there are tabs for 'Primary Reagent Compartment', 'Accessory Reagent Compartment', and 'Status'. The 'Status' tab is active, showing a table of reagent inventory. The table has columns for Reagent Type, Reagent Name, Lot, Position, Pack Status, Test Name, Test Status, Inventory, Lot Expiration, Remaining OBS, Calibration Status, Calibration Expiration, and Barcode. The table is divided into two sections: 'Primary Compartment' and 'Accessory Compartment'. The 'Primary Compartment' section lists reagents like Primary CUA, Primary DNG, Primary FT4, Primary RubM, Primary T3, Primary T4, Primary THCG, and Primary TSH. The 'Accessory Compartment' section lists reagents like Diluent MDRL2, Diluent MDRL4, Ancillary Wash T3T4V812, and Ancillary T3TOR. The table is sorted by Reagent Name. On the right side of the screen, there are buttons for 'Edit', 'Remove', 'Remove Immediately', 'Cancel Unload', 'Activate or Inactivate Pack', 'Order Calibration', and 'Print'. At the bottom of the screen, there are buttons for 'Export...', 'Loading Report', 'Historical Daily Average Report', 'Activate or Inactivate Lot', 'Unload All', 'Cancel All Unloads', and 'Close'. The bottom status bar shows the system state as 'Ready' and the date/time as 'Friday, March 07, 2014 8:30:32 AM'.

Reagent Type	Reagent Name	Lot	Position	Pack Status	Test Name	Test Status	Inventory	Lot Expiration	Remaining OBS	Calibration Status	Calibration Expiration	Barcode
Primary Compartment												
<input type="checkbox"/>	Primary CUA	017	12		CUA		100 Tests	4/12/2015	400 Oh	Not Calibrated		10801710000001
<input type="checkbox"/>	Primary DNG	210	11		DNG		100 Tests	10/9/2014	400 Oh	Current Calibration	3/19/2014 10:18:27 AM	02121010000001
<input type="checkbox"/>	Primary FT4	047	1		FT4		100 Tests	9/20/2014	400 Oh	Expired	2/27/2014 1:35:18 PM	11304710000001
<input type="checkbox"/>	Primary RubM	157	21		RubM		100 Tests	6/11/2014	200 Oh	Not Calibrated		06415710000001
<input type="checkbox"/>	Primary T3	194	2		T3		100 Tests	8/13/2014	400 Oh	Current Calibration	3/27/2014 8:25:40 AM	00419410000001
<input type="checkbox"/>	Primary T4	159	3		T4		100 Tests	5/4/2014	400 Oh	Current Calibration	3/11/2014 11:20:54 AM	00315910000001
<input type="checkbox"/>	Primary THCG	264	4		THCG		100 Tests	8/9/2014	210 Oh	Expired	2/28/2014 7:55:10 AM	02926410000001
<input type="checkbox"/>	Primary TSH	261	5		TSH		100 Tests	7/21/2014	210 Oh	Current Calibration	3/26/2014 8:39:07 AM	00126110000001
Accessory Compartment												
<input type="checkbox"/>	Diluent MDRL2	2564	3				10,000 mL	9/13/2014				09112564000001
<input type="checkbox"/>	Diluent MDRL4	1674	4				5,000 mL	6/16/2014				09401674000001
<input type="checkbox"/>	Ancillary Wash T3T4V812	2804	1				25,000 mL	10/7/2014				00302804000001
<input type="checkbox"/>	Ancillary T3TOR	3214	2				5,000 mL	11/17/2014				03063214000001

- Sort the screen by Reagent Name.
- List the steps to print the information on the Status screen.

Load Primary and Ancillary Reagents

Primary Reagent Handling

- Mix end-to-end at least 20 times.
- CEA and H2n require a special mixing technique. Shake the pack vigorously back and forth for 15 seconds and then tap the pack on the bench 5 times.
- Onboard stability starts as soon as the reagent pack is scanned.

Ancillary Reagent Handling

- Gently invert pack before loading.
 - VB12 and Folate releasing agent require manual preparation.
 - Onboard stability starts when the pack is pierced.
1. Use the software to remove a pack from the primary reagent compartment. Replace the pack in another position.
 2. Access the Ancillary Reagent Compartment screen.
 3. Use the software to remove an ancillary pack from the system.
 4. Remove and then replace the ancillary pack onto the loader.

Questions

5. Do primary reagent packs need to be placed in a specific area of the compartment? Explain
6. VB12 and Folate ancillary reagents require manual preparation. Where can the instructions be found?

5 Quality Control

Quality Control

Resources

- Quality Control section in *ADVIA Centaur XPT Immunoassay System Operator's Guide*
- ADVIA Centaur XPT System PEP To Go
- Online Help
- PEP Connect

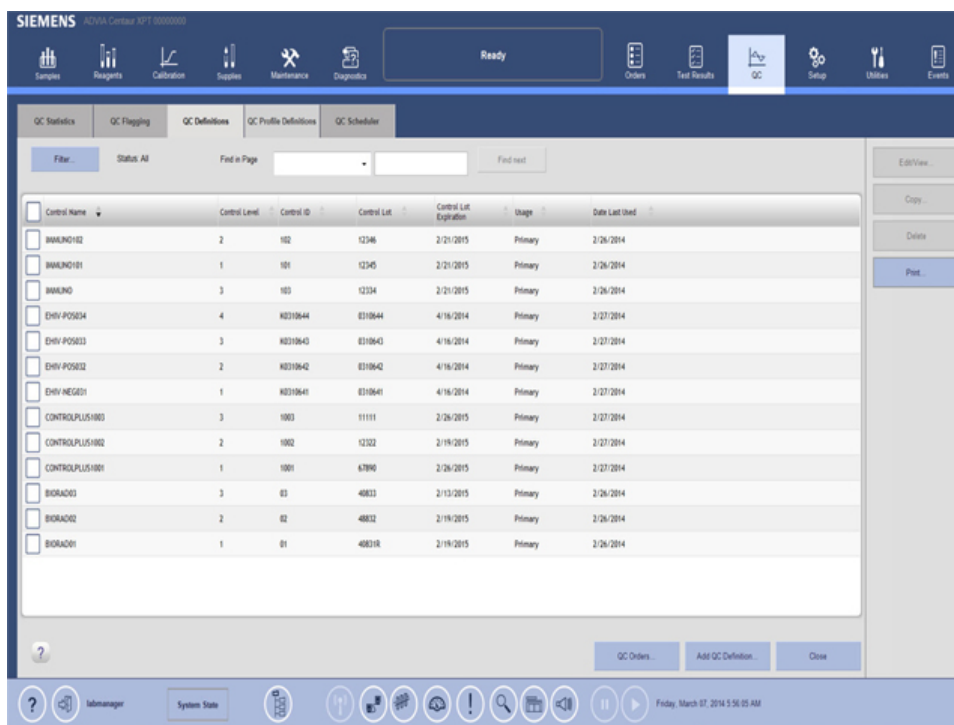
Objectives

After completing this section, you will be able to:

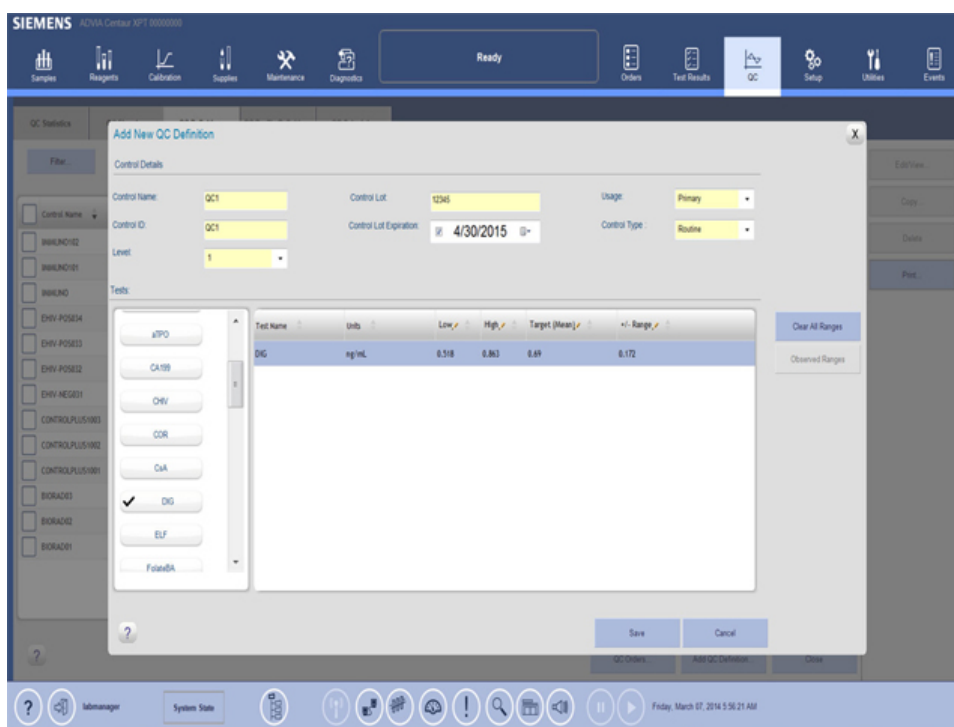
- Add and Edit a quality control definition.
- Process QC samples and profiles.
- View QC data.
- Access QC statistics.

Create and Edit a Control Definition

1. Select the **QC** button on the Command Bar. Select the **QC Definitions** tab.



2. Select **Add QC Definition**. Define and save at least one level of control using the attached Expected Value sheet.



3. On the QC Definitions screen, select the level of control you defined in the previous step. Change the low and high values for one of the assays.

Questions

1. Can QC definitions be edited while the system is In Process?
2. What button do you select in order to update the low and high values for a control?

Process QC Samples

SIEMENS ADVIA Centaur XPT 08000002

Ready

Orders

Create Patient Orders Create QC Orders View Pending Orders Create Batch Orders View Batch Orders Control Brackets

Priority: Routine STAT

Select:

Tests:

Control Materials:

Control Name Level Control ID Control Lot Control Lot Expiration Usage

Orders:

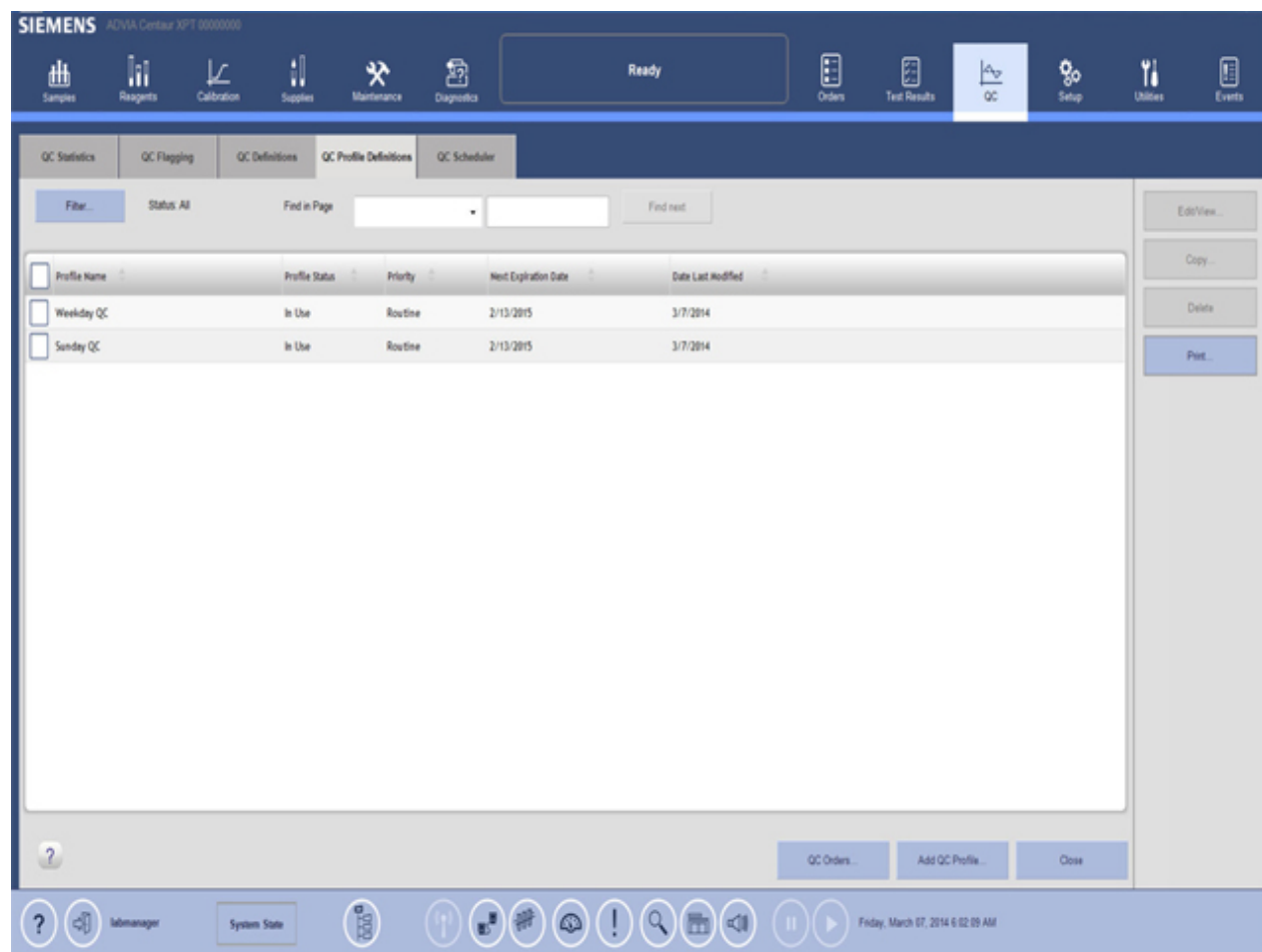
Control Name	Level	Control ID	Control Lot	Lot Expiration	Usage	Rack ID	Test Name	Replicates	Reagents
CONTROLPLUS1...	1	1001	67896	2/26/2015	Primary		ThCG	1	Lot#: Pack ID: Ancillary: Diluent: onlyReagentLotProvided:False
CONTROLPLUS1...	2	1002	12322	2/19/2015	Primary		ThCG	1	Lot#: Pack ID: Ancillary: Diluent: onlyReagentLotProvided:False
CONTROLPLUS1...	3	1003	11111	2/26/2015	Primary		ThCG	1	Lot#: Pack ID: Ancillary: Diluent: onlyReagentLotProvided:False

Save Clear Close

System Status Friday, March 07, 2014 5:50:53 AM

1. Order QC for the assays you would like to run. **Note:** Make sure reagent is available for the assays.
2. Select **Orders** at the Command Bar. Select the **Create QC Orders** tab.
3. Select a priority. In the Tests area, select one or more tests.
4. In the Control Materials area, select each control material to include in this order. Select the **Add** button.
5. In the Orders area, select or enter the order and test information if needed by selecting the **Details** button.
6. Select the **Save** button.
7. Load the rack with the QC onto the Sample Entry Queue. Start the run.

Create and Order QC Profiles



1. Access the QC Profile Definition screen and define a QC test profile.
2. Order QC using the profile you just defined.

View QC Data

SIEMENS ADVIA Centaur XPT 100000000

Navigation: Samples, Reagents, Calibration, Supplies, Maintenance, Diagnostics, Inprocess, Orders, **Test Results**, QC, Setup, Utilities, Events

Overview | STAT Samples | Dashboard: Patient and QC

Filter... Find in Page: [] [] Find next Page 1 of 1. Total tests: 12

Predefined Filters: [] Sample Type: Control Test Status: New Repeat Error Inprocess Hold Incomplete Ratio Waiting For Bracket Complete/Accept Q...

Order	Date & Time	Test	Result	Interpretation
1002	3/7/2014 5:45:29 AM	T4	> 2.53 ng/mL	> Conc Range, Above Linear...
1002	3/7/2014 5:51:17 AM	TSH	14.8 mIU/mL	
1001	3/7/2014 5:45:29 AM	T4	< 1.11 ng/mL	Below Linearity
1001	3/7/2014 5:51:17 AM	TSH	150.3 mIU/mL	
01	3/7/2014 5:46:01 AM	T4	11.3 ug/dL	
01	3/7/2014 5:46:01 AM	T4	8.7 ug/dL	
01	3/7/2014 5:46:01 AM	T4	6.8 ug/dL	

Buttons: Export, Print..., Close

System State: [] Friday, March 07, 2014 6:02:16 AM

1. When the QC tests are complete, select the **Test Results** button on the Command Bar. Select the **Overview** tab. View the QC results.

Access QC Statistics

1. Select the **QC** button on the Command Bar. Select the **QC Statistics** tab. Select the **Review**

The screenshot displays the Siemens Centaur XPT 30000000 QC Statistics Review screen. The interface includes a top command bar with icons for Samples, Reagents, Calibration, Supplies, Maintenance, Diagnostics, Orders, Test Results, QC (selected), Setup, Utilities, and Events. Below this is a tabbed interface with QC Statistics, QC Flipping, QC Definitions, QC Profile Definitions, and QC Scheduler. The QC Statistics tab is active, showing a 'Review' sub-tab. The main area displays a table of QC results with columns for Date, Analyzer, Module, Test, Control, Level, Lot, QC Violation, Result, Unit, Z, Target, 2SD, Comment, Excluded, Reviewed, and Reviewer. The table lists various test results for FT4, AFP, and DNG, with some rows highlighted in red to indicate violations. A sidebar on the left allows filtering by Test, Severity, Level, and Lot. A bottom status bar shows '53 results, 1 selected' and includes buttons for Reports, Customize, and Close.

2. Add a comment to a control point.
3. Select a control file and then select the **Analyze** button.
4. Change the date range for the displayed control data by selecting the **Filter** button.
5. Remove a data point from the statistical calculations by selecting a point and then selecting **Exclude**. Reinstatement of the point by selecting **Include**.

Print QC Data

Print QC data using the **Reports** button on the **QC Statistics > Review** screen.

6 Processing and Managing Samples

Processing and Managing Samples

Resources

- Sample Management section in *ADVIA Centaur XPT Immunoassay System Operator's Guide*
- ADVIA Centaur XPT System PEP To Go
- Online Help
- PEP Connect

Objectives

After completing this section, you will be able to:

- Process patient samples.
- Monitor sample status and results.
- Print and export results.

- SIEMENS** ADVA Centaur XPT 00000009

Samples Reagents Calibration Supplies Maintenance Diagnostics Orders Test Results QC Setup Utilities Events

Ready

Create Patient Orders Create QC Orders View Pending Orders Create Batch Orders View Batch Orders Control Brackets

Sample Information

Sample ID: 12345 Search Rack ID:

Specimen: Priority Routine STAT Additional Information

Manual Dilution Test Selections Groups Select Tests

Patient Demographics

DOB Sex Location Patient ID Patient Name First Middle Last Additional Information

Tests

AFF	aHIVM	aBclI	aBe	aHCV	aTPO
CA199	CMV	CofI	COR	CvA	DIG ✓
EHV	ELF	FolateBA	FTA	GENT	HA

Test Profiles

Dilution Profiles

Test Details (DIG)

Test	Dilution	Replicates	Reagent
DIG	Undiluted	1	Reagent lot Pack ID Ancillary...

Save Clear Close

Labmanager System State

Friday, March 07, 2014 5:53:36 AM

- 6-3

3. View the test orders on the View Pending Orders tab.

SIEMENS ADVIA Centaur XPT 10000000

Ready

Orders

Test Results

QC

Setup

Utilities

Events

Create Patient Orders

Create QC Orders

View Pending Orders

Create Batch Orders

View Batch Orders

Control Brackets

Filter...

Sample Type: All

Find in Page

Find next

Records 1-5 of 5

ID	Rack ID	Name	PID	Order Date	Priority	Specimen Type	Manual Dilution	Lot Expiration Date	Usage
12345				3/7/2014 5:40:55 AM	Routine	Serum	1		
12348				3/7/2014 5:41:54 AM	Routine	Serum	1		
12346				3/7/2014 5:41:12 AM	Routine	Serum	1		
12347				3/7/2014 5:41:30 AM	Routine	Serum	1		
12349				3/7/2014 5:42:00 AM	Routine	Serum	1		

Edit/View...

Delete Order

Print...

Query LIS...

Close

System State

Friday, March 07, 2014 5:42:10 AM

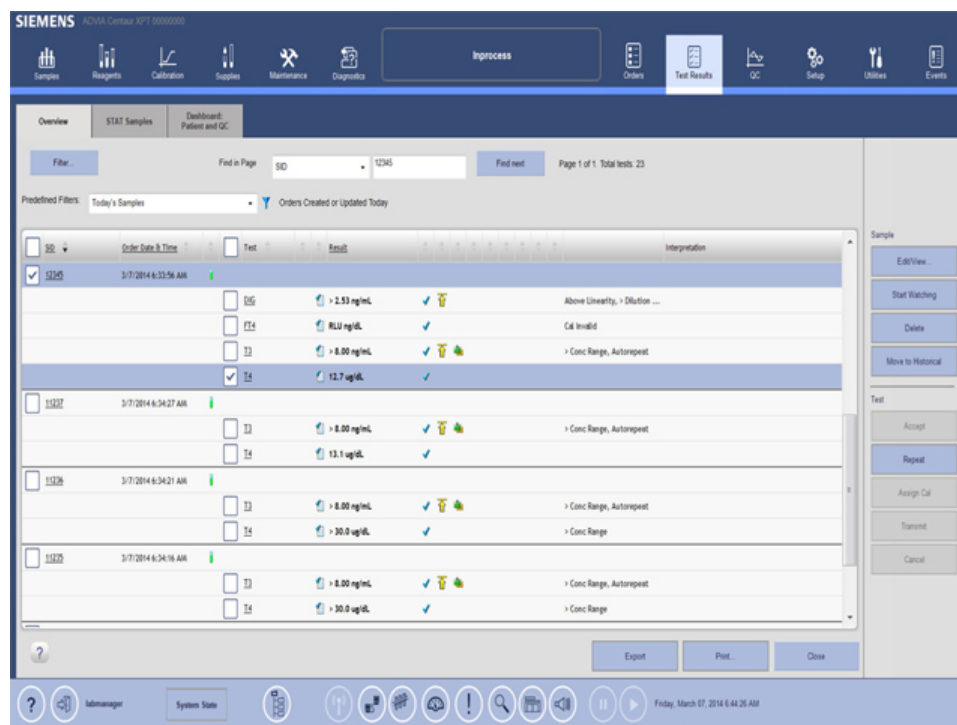
4. Load the samples onto the system and press the Start button.

Questions

1. How are replicates ordered?
2. List two ways that a sample can be designated as a STAT?

Monitor Sample Status and Results

1. Select the **Test Results** button on the Command Bar. Select the **Overview** tab.



2. Review the time to completion for the in-process orders.
 3. Select a test and then select the Start Watching button. Access the **Watch List** screen.
 4. Select the Dashboard icon on the Status Bar at the bottom of the screen.
- Select the In Process and Intervention needed counters.
5. Filter the **Test Results Overview** screen to view only results.

Questions

1. How can you determine if the sample is inside the system?
2. How can a repeat test be ordered?
3. Which button would you select in order to transmit a result to the LIS?

7 Calibration

Calibration

Resources

- Calibration section in *ADVIA Centaur XPT Immunoassay System Operator's Guide*
- ADVIA Centaur XPT System PEP To Go
- Online Help
- PEP Connect

Objectives

After completing this section, you will be able to:

- Check calibration status.
- Locate and scan a Master Curve Definition (MC DEF) card.
- Locate and scan a Calibrator Definition card.
- Order and run a calibration.
- Review and print calibration data.

Check Calibration Status

Access the Reagents screens and check to see if any current reagent lots need to be calibrated.

The screenshot displays the 'Reagents' screen in the Siemens ADVIA Centaur XPT software. The interface includes a top navigation bar with icons for Samples, Reagents, Calibration, Supplies, Maintenance, Diagnostics, Orders, Test Results, QC, Setup, Utilities, and Events. The 'Reagents' tab is active, showing a 'Ready' status. Below the navigation bar, there are tabs for 'Primary Reagent Compartment' and 'Auxiliary Reagent Compartment'. The main area contains a table of reagent lots with columns for Reagent Type, Reagent Name, Lot, Position, Pack Status, Test Name, Test Status, Inventory, Lot Expiration, Remaining OBS, Calibration Status, Calibration Expiration, and Barcode. The table is divided into two sections: 'Primary Compartment' and 'Auxiliary Compartment'. The 'Primary Compartment' section lists reagents like CsA, DG, FT4, RuBn, T3, T4, THCG, and TSH. The 'Auxiliary Compartment' section lists Diluent ADIL2, Diluent ADIL4, Auxiliary Wash T3T4WB12, and Auxiliary T3TOR. The 'Calibration Status' column indicates whether a reagent lot needs calibration (e.g., 'Not Calibrated', 'Current Calibration', 'Expired'). The bottom of the screen features a toolbar with buttons for Export, Loading Report, Historical Daily Average Report, Activate or Inactivate Lot, Unload All, Cancel All Unloads, and Close. The status bar at the very bottom shows 'Friday, March 07, 2014 8:30:32 AM'.

Reagent Type	Reagent Name	Lot	Position	Pack Status	Test Name	Test Status	Inventory	Lot Expiration	Remaining OBS	Calibration Status	Calibration Expiration	Barcode
Primary Compartment												
<input type="checkbox"/>	Primary CsA	817	12		CsA	100 Tests	4/12/2015	42d 0h		Not Calibrated		10801710000001
<input type="checkbox"/>	Primary DG	218	11		DG	100 Tests	10/9/2014	42d 0h		Current Calibration	3/19/2014 10:18:27 AM	02121010000001
<input type="checkbox"/>	Primary FT4	047	1		FT4	100 Tests	9/20/2014	42d 0h		Expired	2/27/2014 1:35:18 PM	11304710000001
<input type="checkbox"/>	Primary RuBn	157	21		RuBn	100 Tests	6/11/2014	28d 0h		Not Calibrated		06415710000001
<input type="checkbox"/>	Primary T3	184	2		T3	100 Tests	8/13/2014	42d 0h		Current Calibration	3/27/2014 8:25:40 AM	00418410000001
<input type="checkbox"/>	Primary T4	159	3		T4	100 Tests	5/6/2014	42d 0h		Current Calibration	3/11/2014 11:28:54 AM	00315910000001
<input type="checkbox"/>	Primary THCG	264	4		THCG	100 Tests	8/9/2014	21d 0h		Expired	2/28/2014 7:55:10 AM	02936410000001
<input type="checkbox"/>	Primary TSH	261	5		TSH	100 Tests	7/21/2014	21d 0h		Current Calibration	3/26/2014 8:39:07 AM	00126110000001
Auxiliary Compartment												
<input type="checkbox"/>	Diluent ADIL2	2564	3			10,000 mL	9/13/2014					09112564000001
<input type="checkbox"/>	Diluent ADIL4	1674	4			5,000 mL	6/16/2014					09401674000001
<input type="checkbox"/>	Auxiliary Wash T3T4WB12	2804	1			25,000 mL	10/7/2014					00302804000001
<input type="checkbox"/>	Auxiliary T3TOR	3214	2			5,000 mL	11/17/2014					03663214000001

Questions

1. How can you tell from the Reagents screens that a reagent lot needs to be calibrated?
2. Which other screen could you view to check calibration status?

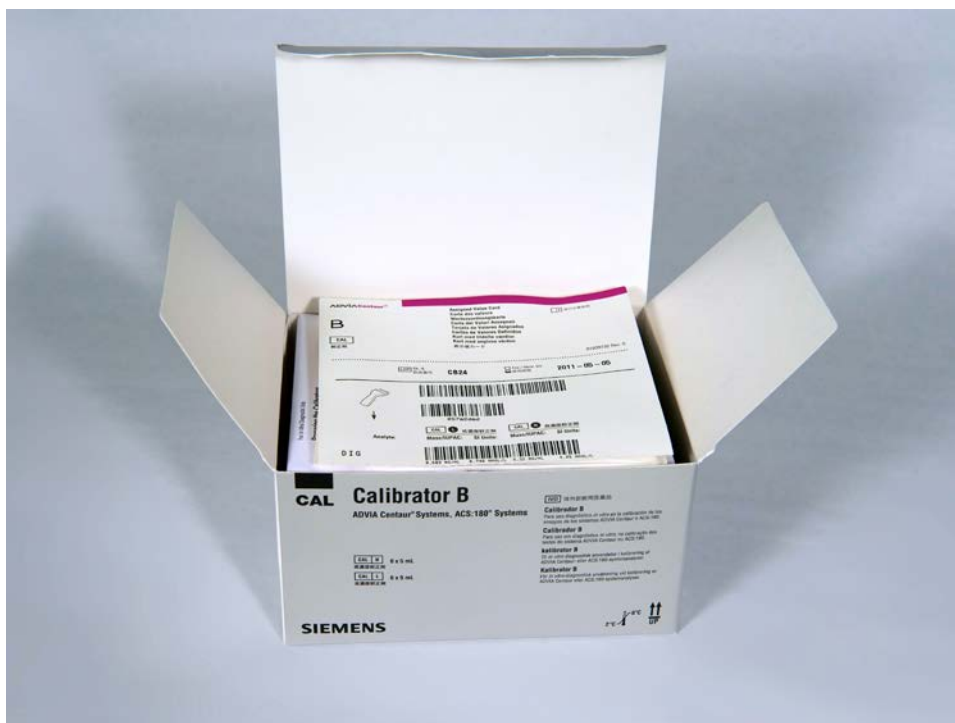
Scan the Master Curve and Test Definition (MC DEF) Card



The MC DEF Card:

- Is located in the Primary Reagent box.
 - Can only be scanned while the system is in Ready.
 - Can be scanned from any screen.
1. Locate the MC DEF card for the reagent lot you will be calibrating.
 2. Scan the MC DEF card into the software using the barcode scanner.
 3. Save the scanned information.

Scan the Calibrator Definition Card



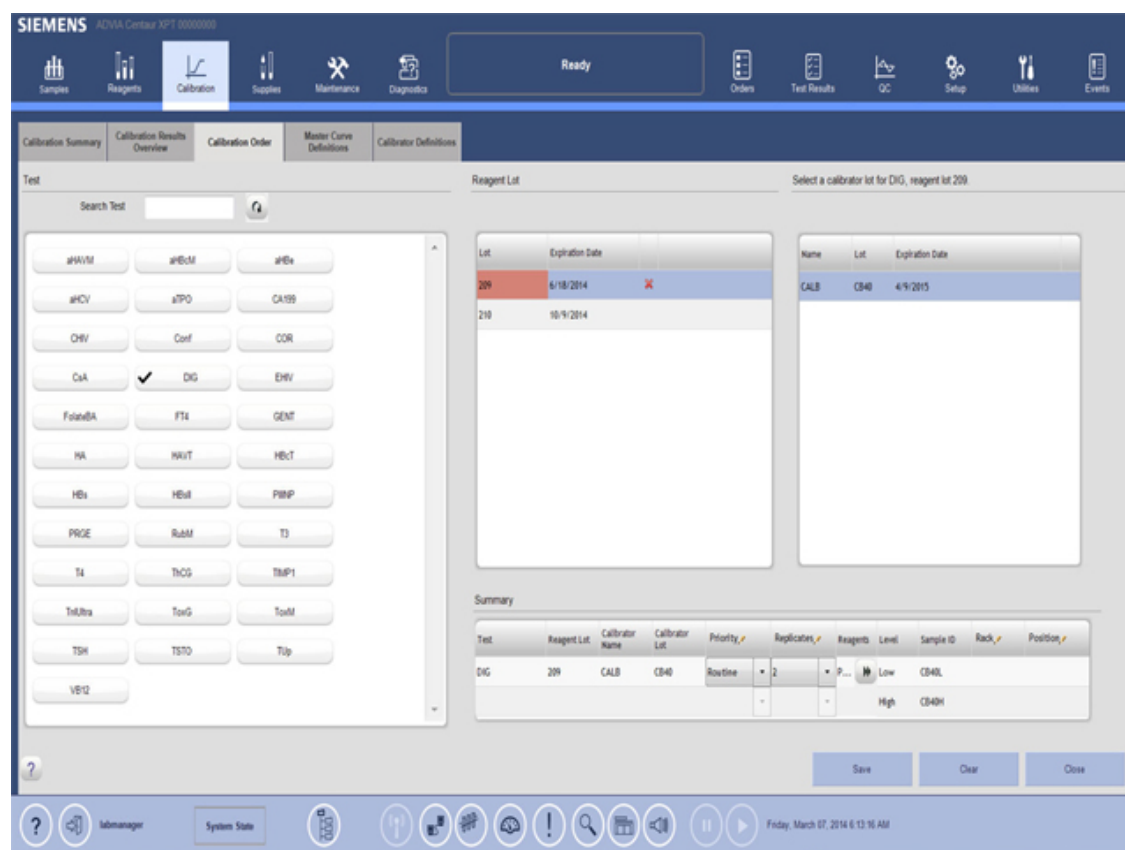
The Calibrator Definition Card:

- Is typically located in the calibrator box/bag.
 - Can be scanned while the system is In Process.
 - Must be scanned from the Add Calibrator Definition screen.
1. Locate the Calibrator Definition card.
 2. Access the Calibrator Definitions screen, and then select **Add Calibrator**.
 3. Scan the Calibrator Definition card into the software and select **Save**.

Question

1. How can you determine what calibrator is used to calibrate an assay?

Order and Run a Calibration



1. Order the calibration.
 - a. Select **Calibration** at the Command Bar.
 - b. Select the **Calibration Order** tab.
 - c. Select a test.
 - d. Select a reagent lot for the test, and then a calibrator lot.
 - e. Select **Save**.
 - f. Repeat the same steps to order additional tests for the calibrator.
2. Load the rack with the calibrators onto the Sample Entry Queue and start the run.

Question

1. What is another option for ordering calibration?

Review Calibration Data

1. When the calibration is complete, access the Calibration Results Overview screen. Review the calibration results.

SIEMENS ADVIA Centaur XPT 00000000

Calibration Summary | Calibration Results Overview | Calibration Order | Master Curve Definitions | Calibrator Definitions

Filter... Find in Page Find next

Order Status: Historical

Test	Reagent Lot	Calibrator Lot	Calibration Ordered	Order Status	Result Completed	Result
Cmf	021	C3021	3/6/2014	Historical	Valid	
DNG	210	CB40	2/19/2014	Historical	Invalid	
DNG	210	CB40	2/19/2014	Historical	Valid	
DNV	152	C352	2/27/2014	Historical	Invalid	
DNV	152	C352	2/27/2014	Historical	Valid	
FolateB	225	CT25	2/19/2014	Historical	Valid	
FolateA	225	CT25	2/27/2014	Historical	Valid	
FTA	947	CA75	2/28/2014	Historical	Valid	
HA	011	C104	2/28/2014	Historical	Valid	
HCV	055	C145	2/21/2014	Historical	Test Integrity, System Error	
HCV	055	C145	2/21/2014	Historical	Valid	
HbC	061	C501	2/14/2014	Historical	Invalid	
HbC	061	C501	2/17/2014	Historical	Invalid	
HbC	061	C501	2/17/2014	Historical	Invalid	
HbC	061	C501	2/17/2014	Historical	Invalid	
HbC	061	C501	2/17/2014	Historical	Invalid	

Export Close

System State Friday, March 07, 2014 5:17:19 AM

2. Access the Calibration Data screen for one of the calibrations. Review the Calibration Evaluation Criteria for the selected calibration.

SIEMENS ADVIA Centaur XPT 00000000

Calibration Results Overview | Calibration Order | Master Curve Definitions | Calibrator Definitions

Calibration Status: Not Calibrated Test: DNG Calibrator Lot: CB40 Minimum Replicates: 2

Predefined Filters: All Reagent Lot: 209 Calibrator Name: CALB Critical Precision: 0.995

Calibration	Calibration Result	Retained Calibration	Calibrator Lot
3/7/2014 5:43:22 AM	Invalid		CB40
11/7/2013 11:52:26 AM	Valid		CB40

Calibrated: 3/7/2014 5:43:22 AM

Evaluation Ranges

Range Type	Calibration Value	Defined Ranges	Observed Ranges
Slope	0.974	0.330 - 4.970	
Ratio	1.724	0.952 - 2.448	
Low Cal Deviation	0.028	0.170 - 0.770	
High Cal Deviation	0.045	0.170 - 0.770	

Calibration Flags

Calibrator Target Values and Observed Results

Level	SD	Conc (ng/mL)	Expected RLU	Replicate Number	Measured RLU	Acceptable CV %	Calculated CV %
High	CB40H	3.45	61940	1	61911.50	8.8	50.349
				2	89635		
Low	CB40L	0.55	172125	1	180021.80	8.3	0.816
				2	180052		

Master Curve Definitions | View | Post | Close

System State Friday, March 07, 2014 5:50:39 AM

Calibration Evaluation Ranges (CERs)

The metrics are based on the high and low calibrator RLUs compared to those defined when the Master Curve was entered.

The 5 CERs must be met to validate the integrity of a calibration.

- Precision – checked first by the system. If critical precision is not met, the system deems the calibration to be invalid.
- Slope
- Ratio of high calibrator RLU to low calibrator RLU
- Deviation of the high calibrator
- Deviation of the low calibrator

A calibration is valid if:

- All CERs fall within a defined range.
- All CERs fall within an observed range if an observed range exists.

An observed range is created after 4 valid calibrations using the same lot of reagent and calibrator combination.

Questions

1. What should the status be if the calibration has passed?

2. What would you do if the calibration was Invalid?

3. What would need to be done if the status was Pending Accept?

Calibration Summary

Test Name	Reagent Lot	Calibration Status	Calibration Expiration
CALPH	346	Current Calibration	3/19/2014 10:22:11 AM
CHV	040	Not Calibrated	
Conf	021	Current Calibration	3/27/2014 10:25:29 AM
Conf	023	No Master Curve	
Conf	175	Not Calibrated	
CxH	017	Not Calibrated	
DIG	209	Expired	12/23/2013 10:45:27 PM
DIG	210	Current Calibration	3/19/2014 10:18:27 AM
DHV	152	Current Calibration	3/13/2014 10:10:39 AM
HA	011	Current Calibration	3/14/2014 10:39:36 AM
HAVT	055	Due to Expire	3/7/2014 7:54:04 AM
HBisI	021	Current Calibration	3/27/2014 8:41:59 AM
HBisI	023	Current Calibration	3/11/2014 8:38:40 AM
HBisI	175	No Master Curve	
PINBP	013	Current Calibration	3/28/2014 10:00:51 AM
PRGE	263	Expired	1/10/2014 11:56:00 AM

Navigation icons at bottom: ? | labmanager | System State | [Icons for various functions] | Friday, March 07, 2014 5:44:40 AM

1. Access the Calibration Summary screen and select Print. Select Preview.
2. Access the Calibration Results Overview screen. Select a test and then select Print and Preview.

8 Maintenance

Maintenance

Resources

- Maintenance section in *ADVIA Centaur XPT Immunoassay System Operator's Guide*
- ADVIA Centaur XPT System PEP To Go
- Online Help
- PEP Connect

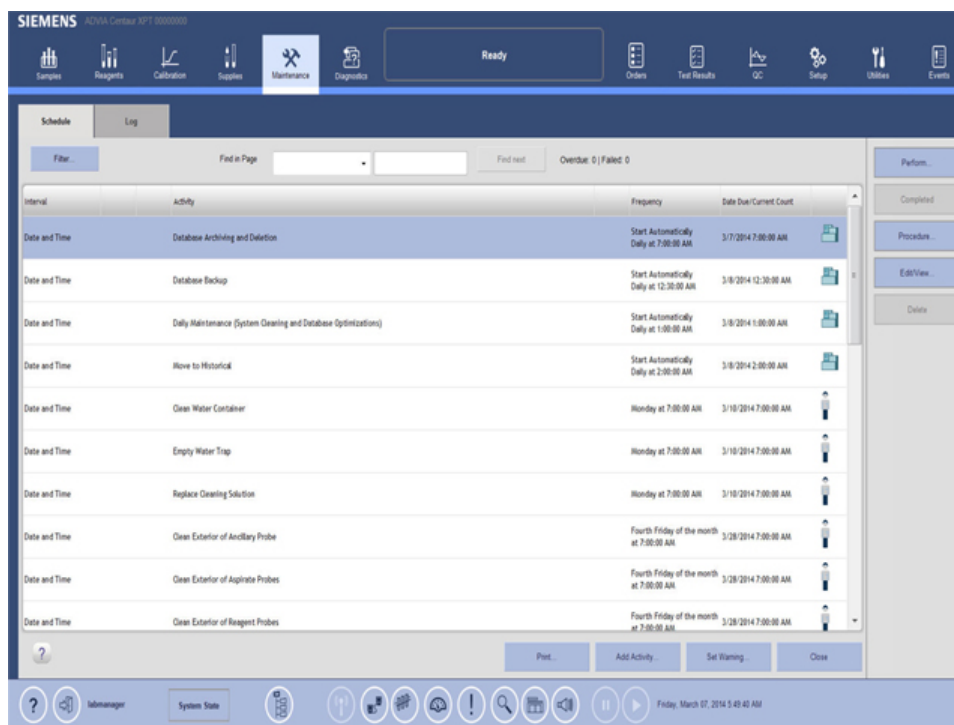
Objectives

Upon completion of this exercise you will be able to:

- Navigate the maintenance windows.
- Perform daily maintenance.
- Perform weekly maintenance.
- Perform monthly maintenance.
- Perform the as-needed maintenance.

Navigate the Maintenance Screens

1. Select the **Maintenance** button on the Command Bar. The first tab is Schedule.



Questions

1. What happens when the question mark in the lower left corner of the Maintenance Schedule screen is selected instead of the **Procedures** button?
2. How can you determine which tasks are due to be done now?
3. What is the difference between the Schedule and Log tabs?

Perform Daily Maintenance

1. Make sure the system is in the Ready state
2. Make sure the necessary supplies are loaded on the system to run the daily cleaning procedure.
3. From the Maintenance Schedule screen, select the **Daily Maintenance** activity and then select **Perform**.

Question

1. What supplies are used by the system during the daily cleaning procedure?

Perform Weekly Maintenance

1. Clean the water bottle.
2. Locate the water trap.
3. Restart the system. Select System State from the Status Bar, and then select Turn System Off. When the system has powered down, turn off the main power switch, wait 30 seconds, and then turn the main power switch back on. Sign in.

Questions

1. How can you record that the water bottle was cleaned in the Maintenance Schedule screen?
2. What should be done to the water trap during weekly maintenance?

Perform Monthly Maintenance

1. Clean the primary reagent, ancillary reagent, and aspirate probes.
2. Clean the air filter.

Questions

1. What items should be cleaned during the monthly required maintenance?

Perform As Needed Maintenance

1. Clean the reagent probe shutter.
2. Clean the cuvette waste area.
3. Clean the sample tip waste area.

Questions

1. What should the status of the system be before the reagent probe shutter is cleaned?
2. What items should be used to clean the cuvette waste chute?

9 Event Log

Event Log

Resources

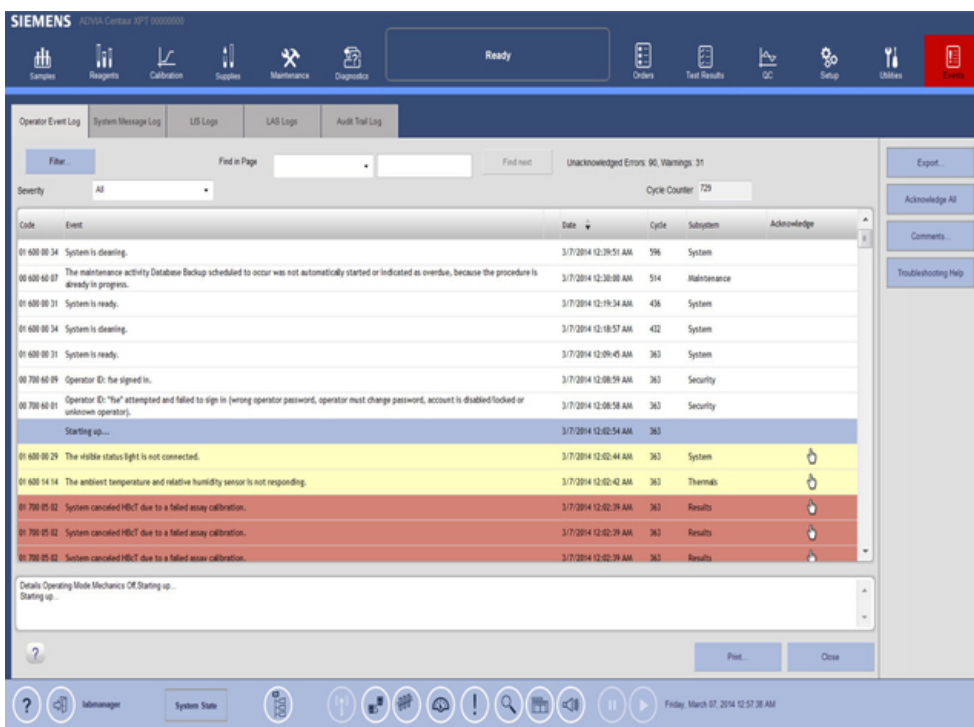
- ADVIA Centaur XPT Immunoassay System Operator's Guide
- ADVIA Centaur XPT System PEP to Go
- Online Help
- PEP Connect

Objectives

After completing this section, you will be able to utilize the Operator Event log and the Online Help to identify troubleshooting procedures.

Access the Operator Event Log

Select the **Events** button on the Command Bar. The first tab is Operator Event Log.



Filter the screen to view only warnings.

Use the Troubleshooting Help to view the possible causes and corrective actions for one of the warnings.

Questions

1. What is the difference between events highlighted in yellow and events highlighted in red?
2. What does it mean if an event has a hand symbol in the Acknowledge column?