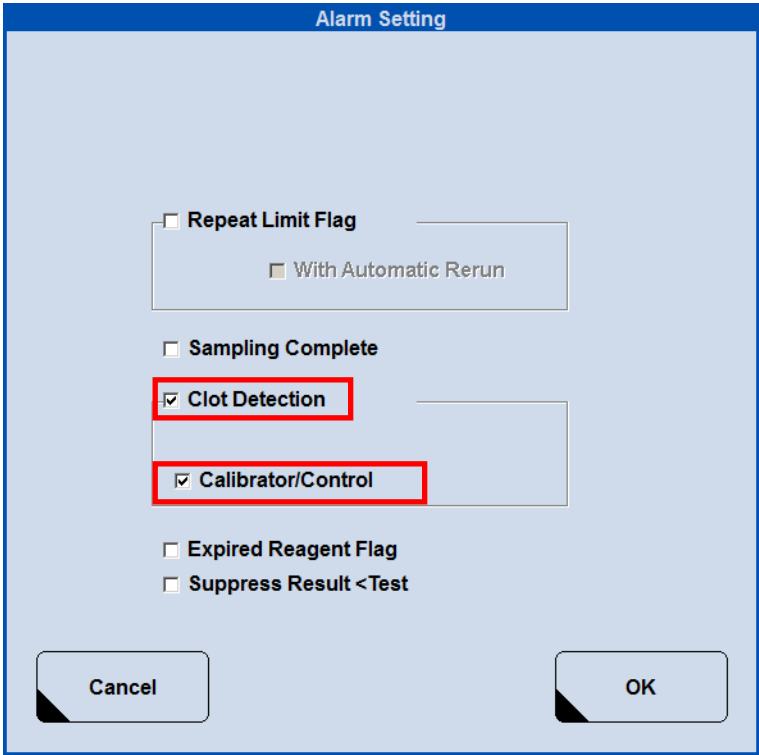
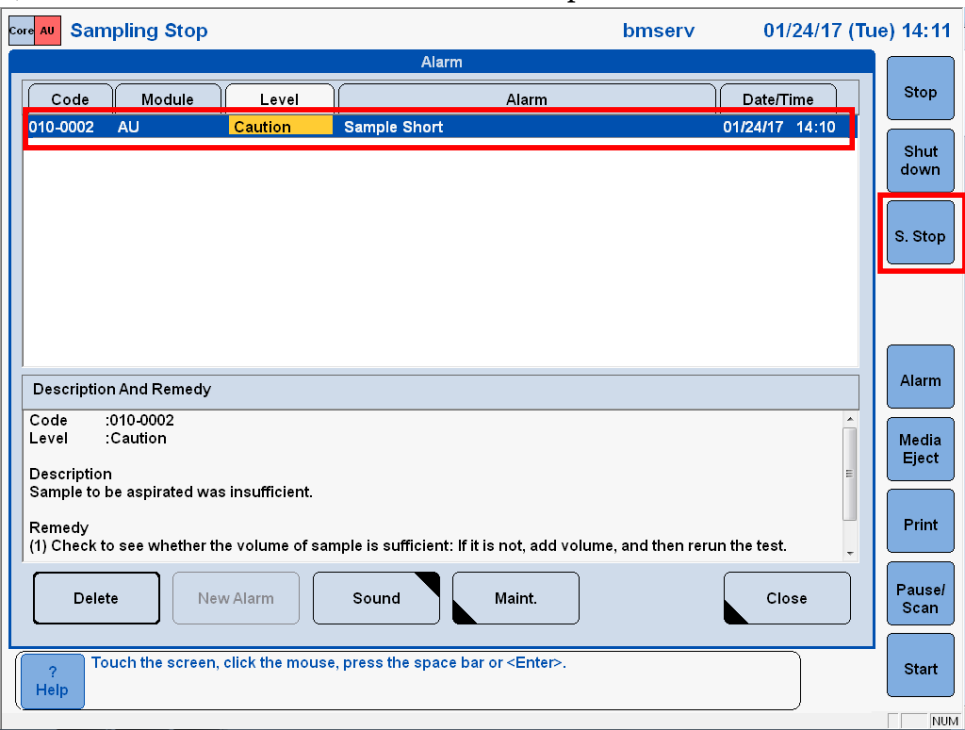
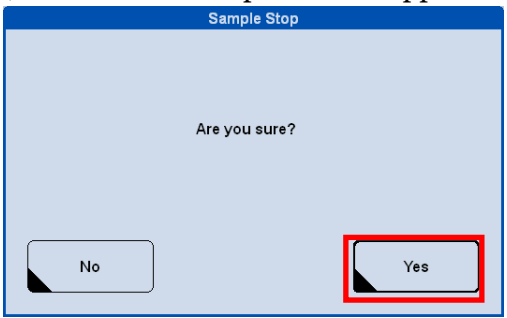
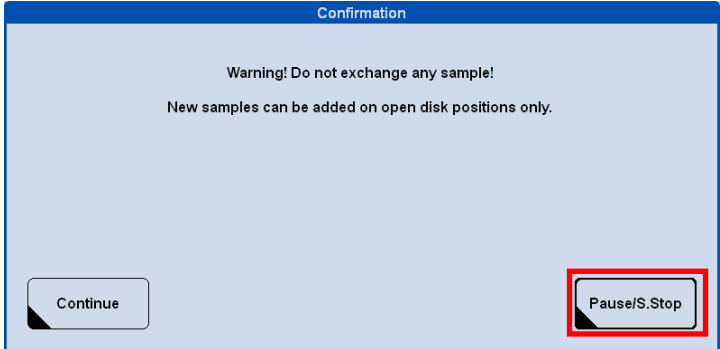


When the system alarm Sample Short or Abnormal Probe sucking is issued while there is still sufficient amount of sample volume, it is necessary to replace the sample probe. A verification of the measurement results is required.

When there is no replacement sample probe available, clean the inside and the outside of the sample probe. This is described in the Operator's Manual Version 3.0. Please refer to the coinciding procedures "Eliminating clogging of the pipetter probes" and "Cleaning probes and nozzles".

	Step	Action
<p><b>Preparation: Clot Detection ON</b></p>	<p><b>1</b></p>	<p>Enable the Clot Detection and Clot Detection for Calib/Control settings in <i>Utility-System-Alarm Settings</i>.</p> 

	<b>Step</b>	<b>Action</b>									
<b>Check the Sample Short and Sample Clot alarm</b>	<b>2</b>	<p>The table below shows the system alarm list of Sample Short and Sample Clot.</p> <table border="1" data-bbox="544 357 1429 493"> <thead> <tr> <th>Alarm¶</th> <th>Alarm-Code¶</th> <th>Alarm-Sub-Code¶</th> </tr> </thead> <tbody> <tr> <td>Sample-Shortα</td> <td>010α</td> <td>0001~0110α</td> </tr> <tr> <td>Abnormal-Probe-suckingα</td> <td>012α</td> <td>0001~0110α</td> </tr> </tbody> </table>	Alarm¶	Alarm-Code¶	Alarm-Sub-Code¶	Sample-Shortα	010α	0001~0110α	Abnormal-Probe-suckingα	012α	0001~0110α
Alarm¶	Alarm-Code¶	Alarm-Sub-Code¶									
Sample-Shortα	010α	0001~0110α									
Abnormal-Probe-suckingα	012α	0001~0110α									
<b>Sampling Stop</b>	<b>3</b>	<p>a) When the alarm is issued, select the S. Stop button.</p> 									

	<p><b>3b</b></p>	<p>b) When the [S. Stop] window appears, choose [Yes].</p>  <p>c) Confirm the confirmation window with [<i>Pause/S.Stop</i>]</p> 
<p><b>Wait until status Sampling Stop</b></p>	<p><b>4</b></p>	<p>Wait until the system status switches to Sampling Stop.</p>

**Identify sample for which alarm was issued**

**5**

Identify the sample for which the system alarm was issued according to the code of the system alarm (refer to the following figure).

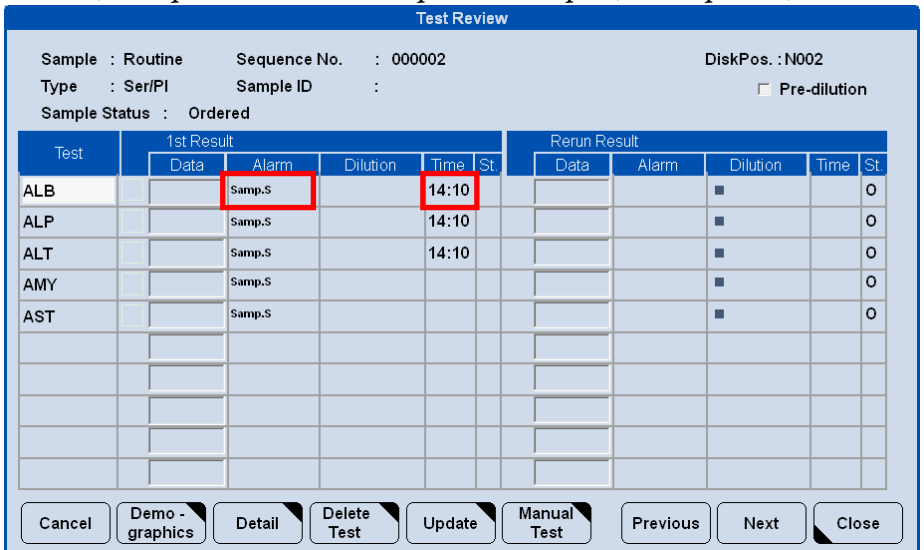
The figure consists of two screenshots from the cobas c311 interface. The top screenshot shows an 'Alarm' window with a table listing an alarm with code '010-0002', module 'AU', and level 'Caution'. A red box highlights the code, and a red arrow points to a callout box containing the text '010-0002: Sample Short à Position: 2'. The bottom screenshot shows a 'Workplace' window with a 'Data Review' table listing samples. A red box highlights the 'S. No.' 'N002' in the second row, and a red arrow points from the callout box to this row.

Code	Module	Level	Alarm	Date/Time
010-0002	AU	Caution	Sample Short	01/24/17 14:10

Description And Remedy  
 Code :010-0002  
 Level :Caution  
 Description  
 Sample to be aspirated was insufficient.  
 Remedy  
 (1) Check to see whether the volume of sample is sufficient: If it is not, add volume, a

St.	S. No.	Disk	Sar	Type	NAME	Arrived Date/Time	Test	Result	Alarm	Unit
P	N000001	N001		Ser/PI		01/24 14:08	ALB	Samp.S		
O	N000002	N002		Ser/PI		01/24 14:08	ALP	Samp.S		
O	N000003	N003		Ser/PI		01/24 14:08	ALT	Samp.S		
O	N000004	N004		Ser/PI		01/24 14:09	AMY	Samp.S		
O	N000005	N005		Ser/PI		01/24 14:09	AST	Samp.S		

Example of a sample with Sample Short alarm.

<p><b>Check sample volume</b></p>	<p><b>6</b></p>	<p>Check</p> <p>a) the sample volume in the sample container, and</p> <p>b) whether there is any substance adhered to the sample probe.</p> <p>No action is required when the sample volume is insufficient, and the sample probe is clean.</p> <p>When there is sufficient sample volume, replace the sample probe and move on to step 7.</p>
<p><b>Sampling time in Test Review</b></p>	<p><b>7</b></p>	<p>Check the sampling time for which the alarm was issued in the <i>Test Review</i> screen (<i>Workplace-Data Review-patient sample (in sample list)-Test Review</i>).</p> 
<p><b>Verify the results or discard the samples</b></p>	<p><b>8</b></p>	<p>Check the test results which were measured after the sampling time in step 7 on the data review screen.</p> <p>All affected samples have to be verified/ discarded according to the local rules.</p> <p>An example of tests to be verified is described below</p>

**Example**

**9** On the *Data Review* screen, select all samples that were sampled on the analyzer unit after the sample with the sample short alarm, including the sample concerned.  
Then display the Test Review window.

The example *Test Review* window of samples on *Data Review* screen is described in the table below.

Test	1st Result					Rerun Result				
	Data	Alarm	Dilution	Time	St.	Data	Alarm	Dilution	Time	St.
ALB		Samp.S		14:10						0
ALP		Samp.S		14:10						0
ALT		Samp.S		14:10						0
AMY		Samp.S								0
AST		Samp.S								0

S.No	Disk Pos.	Test	Alarm	Time	Judgment of measurement result
N000001	N001	ALB	-	14:09	OK
	N001	ALP	-	14:09	OK
	N001	ALT	-	14:09	OK
	N001	AMY	-	14:10	OK
	N001	AST	-	14:10	OK
N000002	N002	ALB	Samp.S	14:10	Target for verification (sample for which the sample short alarm was issued)
	N002	ALP	Samp.S	14:10	Target for verification (sample for which the sample short alarm was issued)
	N002	ALT	Samp.S	14:10	Target for verification (sample for which the sample short alarm was issued)
	N002	AMY	Samp.S	-	-
	N002	AST	Samp.S	-	-
N000003	N003	ALB	-	14:11	Target for verification (sample pipetted after 14:10)
	N003	ALP	-	14:11	Target for verification (sample pipetted after 14:10)
	N003	ALT	-	14:11	Target for verification (sample pipetted after 14:10)
	N003	AMY	-	14:11	Target for verification (sample pipetted after 14:10)
	N003	AST	-	14:11	Target for verification (sample pipetted after 14:10)
N000004	N004	ALB	-	14:12	Target for verification (sample pipetted after 14:10)
	N004	ALP	-	14:12	Target for verification (sample pipetted after 14:10)
	N004	ALT	-	14:12	Target for verification (sample pipetted after 14:10)
	N004	AMY	-	14:12	Target for verification (sample pipetted after 14:10)
	N004	AST	-	14:12	Target for verification (sample pipetted after 14:10)
N000005	N005	ALB	-	14:13	Target for verification (sample pipetted after 14:10)
	N005	ALP	-	14:13	Target for verification (sample pipetted after 14:10)
	N005	ALT	-	14:13	Target for verification (sample pipetted after 14:10)
	N005	AMY	-	14:13	Target for verification (sample pipetted after 14:10)
	N005	AST	-	14:13	Target for verification (sample pipetted after 14:10)