

# Vetscan VS2 IQC Code Troubleshooting Guide

Questions? Contact Zoetis Diagnostic Technical Support at:  
0800 100 109 or [dxsupport.nz@zoetis.com](mailto:dxsupport.nz@zoetis.com)



IQC Code	Description	Troubleshooting
403d	Sample/Diluent Mix	<p><b>403D – S/D Mix or Sample Mix</b></p> <p>The most common causes of the 403D S/D Mix or Sample Mix IQC code are:</p> <ul style="list-style-type: none"> <li>• The patient is dehydrated and has a Haematocrit (HCT) greater than 60% (Certain dog breeds, i.e. greyhounds, and certain species may have normally higher HCT).</li> <li>• The sample and diluent didn't properly mix. (This can be caused by clots in the sample or slightly frozen diluent).</li> </ul> <p>If you are receiving this IQC Code, these are common resolutions:</p> <ul style="list-style-type: none"> <li>• Run plasma or serum if patient is dehydrated.</li> <li>• Check for blood or fibrin clots in the sample. Rerun if not clotted or draw new sample.</li> </ul> <p>If cancellation persists, or for more information, please contact Zoetis Diagnostic Technical Support.</p>
4037	Insufficient Sample	<p><b>4037 – Insufficient Sample</b></p> <p>The most common causes of the 4037 Insufficient Sample IQC code are:</p> <ul style="list-style-type: none"> <li>• Not adding enough sample to the rotor.</li> <li>• Air bubbles in the sample application chamber.</li> <li>• Clots in sample restricting flow.</li> <li>• Dehydrated patient (HCT&gt;60%) - certain dog breeds and species have high HCT.</li> <li>• Rotor malfunction.</li> </ul> <p>For first cancellation:</p> <ul style="list-style-type: none"> <li>• Spin whole blood sample and run plasma or serum on a new rotor.</li> <li>• If patient is dehydrated, run a new sample once patient has been rehydrated if PCV&gt;60%.</li> <li>• Verify there are no clots in the whole blood sample.</li> </ul> <p>For multiple cancellations:</p> <ul style="list-style-type: none"> <li>• Please verify proper sample handling: Use only lithium heparin specimen collection tubes for whole blood or plasma samples. Use no additive specimen collection tubes or serum separator tubes for serum samples.</li> <li>• Please ensure you are using the provided grey mini pipette. Do not use other methods for applying the sample to the rotor.</li> <li>• Confirm proper electrical situation such as: <ul style="list-style-type: none"> <li>• Analyser is on a computer rated surge protector or battery backup.</li> <li>• Proper power supply is being used and functioning.</li> <li>• No centrifuge or refrigerator is on the same circuit.</li> </ul> </li> <li>• Rotors should be run immediately after filling them.</li> <li>• If the cancellation is occurring on more than one rotor or more than one patient, contact Zoetis Diagnostic Technical Support.</li> </ul>



# Vetscan VS2 IQC Code Troubleshooting Guide

Questions? Contact Zoetis Diagnostic Technical Support at:  
0800 100 109 or [dxsupport.nz@zoetis.com](mailto:dxsupport.nz@zoetis.com)

IQC Code	Description	Troubleshooting
403a	Bead Missing	<p><b>403A – Bead Missing</b></p> <p>The most common causes of the 403A Bead Missing IQC code are:</p> <p>Rotor error</p> <ul style="list-style-type: none"> <li>• Please rerun with a new rotor</li> </ul> <p>Rotor reused</p> <ul style="list-style-type: none"> <li>• Please be sure to always use a new rotor</li> </ul> <p>Sample issue: please try with a new rotor</p> <ul style="list-style-type: none"> <li>• Add sample slowly</li> <li>• Please note that too much force can cause error</li> </ul> <p>Please note that applying the sample with too much force can cause cancellation. If you are receiving multiple cancellations, these are common resolutions:</p> <ul style="list-style-type: none"> <li>• Run the rotor immediately after filling it.</li> <li>• Be sure the proper amount of sample is being applied.</li> <li>• Be sure to use a new rotor every time.</li> </ul> <p>If cancellation persists, or for more information, please contact Zoetis Diagnostic Technical Support.</p>
4043	Sample Blank Bead Mix	<p><b>4043 – Sample Blank Bead Mix</b></p> <p>The most common causes of the 4043 Sample Blank Bead Mix IQC code:</p> <ul style="list-style-type: none"> <li>• Highly lipaemic samples</li> </ul> <p>For first cancellation:</p> <ul style="list-style-type: none"> <li>• Fast the patient, redraw the sample, spin and rerun the sample.</li> </ul> <p>For multiple cancellations:</p> <ul style="list-style-type: none"> <li>• Send sample to reference laboratory.</li> <li>• Contact Zoetis Diagnostic Technical Support</li> </ul>
4069	Sample Quality	<p><b>4069 – Sample Quality</b></p> <p>The most common causes of the 4069 Sample Quality IQC code are:</p> <ul style="list-style-type: none"> <li>• A sample that is too haemolysed, lipaemic or icteric</li> </ul> <p>For rotor cancellation:</p> <ul style="list-style-type: none"> <li>• Spin sample if using whole blood.</li> <li>• If haemolysed, redraw and rerun the new sample.</li> <li>• If lipaemic, fast the patient, redraw and rerun the new sample.</li> <li>• If icteric, send to an outside reference laboratory.</li> </ul> <p>If cancellation persists, or for more information, please contact Zoetis Diagnostic Technical Support.</p>

# Vetscan VS2 IQC Code Troubleshooting Guide

Questions? Contact Zoetis Diagnostic Technical Support at:  
0800 100 109 or [dxsupport.nz@zoetis.com](mailto:dxsupport.nz@zoetis.com)



IQC Code	Description	Troubleshooting
4038	Insufficient Sample to Cuvette 28	<p><b>4038 – Sample Distribution/Cuvette 28</b></p> <p>The most common causes of the 4038 Sample Distribution IQC code are:</p> <ul style="list-style-type: none"> <li>• Rotor defect.</li> <li>• Clear, colourless sample.</li> <li>• Clots in sample.</li> </ul> <p>For first cancellation:</p> <ul style="list-style-type: none"> <li>• Spin sample and rerun on a new rotor.</li> </ul> <p>For multiple cancellations:</p> <ul style="list-style-type: none"> <li>• Ensure your sample is not particularly clear. If sample is too clear, send to external laboratory.</li> <li>• Contact Zoetis Diagnostic Technical Support.</li> </ul>
403b	Distribution	<p><b>403b Distribution</b></p> <p>The most common causes of the 403b Distribution IQC code are:</p> <ul style="list-style-type: none"> <li>• Problem with diluent delivery.</li> <li>• Sample physical interferences, such as lipaemia.</li> <li>• Rotor defect.</li> </ul> <p>For first cancellation:</p> <ul style="list-style-type: none"> <li>• If sample is lipaemic, fast and redraw or send out to reference laboratory.</li> <li>• Rerun same sample in a new rotor.</li> </ul> <p>If cancellation persists, or for more information, please contact Zoetis Diagnostic Technical Support.</p>
404F	Analysis Temperature	<p><b>404F -Analyser Temperature Error</b></p> <p>The most common causes of the 404F Analyser Temperature IQC code are:</p> <ul style="list-style-type: none"> <li>• Room temperature too high or low.</li> <li>• Air flow to fan restricted.</li> <li>• Dirty chamber.</li> </ul> <p>For first cancellation (in 24-hour period)</p> <ul style="list-style-type: none"> <li>• Confirm room temperature is within 15 -32 °C.</li> <li>• Please check the air filter in the back of the analyser. If it is dusty/dirty, wash filter in warm water and let fully dry or replace with new filter.</li> <li>• Verify there is nothing blocking the airflow of the fan and that there is room on the sides of the analyser for air to flow.</li> <li>• Please confirm that the fan is spinning.</li> <li>• Please verify the analyser is not placed on a mat or towel.</li> <li>• Open drawer and unplug analyser, leaving the drawer open – Please examine the rotor chamber with a flashlight. Is there any blood in the chamber? If any blood is seen, contact Zoetis Diagnostic Technical Support.</li> <li>• After 30 minutes, please turn the analyser back on and rerun using a new rotor.</li> </ul> <p>If cancellation persists, or for more information, please contact Zoetis Diagnostic Technical Support.</p>

# Vetscan VS2 IQC Code Troubleshooting Guide

Questions? Contact Zoetis Diagnostic Technical Support at:  
0800 100 109 or [dxsupport.nz@zoetis.com](mailto:dxsupport.nz@zoetis.com)



IQC Code	Description	Troubleshooting
4039	Diluent Absorbance	<p><b>4039 – Diluent Absorbance</b></p> <p>The most common causes of the 4039 Diluent Absorbance IQC code are:</p> <ul style="list-style-type: none"> <li>• Frozen rotors.</li> <li>• Rotor malfunction.</li> </ul> <p>For first cancellation:</p> <ul style="list-style-type: none"> <li>• Rerun new rotor.</li> </ul> <p>For multiple cancellations:</p> <ul style="list-style-type: none"> <li>• When storing rotors, their temperature should be 2-8°C . It is not recommended to store rotors in the freezer.</li> <li>• Storing rotors in a refrigerator that is too cold will cause the diluent to freeze or cause condensation in the rotor, and it will not properly distribute to the cuvettes. In a standard refrigerator, the rotors should be placed on a shelf, not in the door or in a crisper drawer.</li> </ul>
4045	RQC Out of Range	<p><b>4045 – RQC Too Low</b></p> <p>The usual causes of the 4045 Low RQC IQC code are:</p> <ul style="list-style-type: none"> <li>• Rotors stored above recommended temperature.</li> </ul> <p>For first cancellation:</p> <ul style="list-style-type: none"> <li>• Rerun sample in a new rotor.</li> </ul> <p>For multiple cancellations:</p> <ul style="list-style-type: none"> <li>• Confirm refrigerator temperature is correct (2-8°C)</li> <li>• In a standard refrigerator, the rotors should be placed on a shelf, not in the door or in a crisper drawer.</li> <li>• Make sure the rotors remain in their foil pouch until they are used. Once a rotor has been removed from its pouch, it should be run within 20 minutes.</li> <li>• Take one rotor out at a time. No warm-up time is needed.</li> <li>• Contact Zoetis Diagnostic Technical Support.</li> </ul>

# Vetscan VS2 IQC Code Troubleshooting Guide

Questions? Contact Zoetis Diagnostic Technical Support at:  
0800 100 109 or [dxsupport.nz@zoetis.com](mailto:dxsupport.nz@zoetis.com)



IQC Code	Description	Troubleshooting
403e	Insufficient Diluent	<p><b>403e – Insufficient Diluent</b></p> <p>The most common causes of the 403e Insufficient diluent IQC code are:</p> <ul style="list-style-type: none"> <li>• Frozen diluent.</li> <li>• Rotor defect.</li> </ul> <p>For first cancellation:</p> <ul style="list-style-type: none"> <li>• Rerun sample in a new rotor.</li> </ul> <p>For multiple cancellations:</p> <ul style="list-style-type: none"> <li>• When storing rotors, their temperature should be 2-8°C. It is not recommended to store rotors in the freezer.</li> <li>• Storing rotors in a refrigerator that is too cold will cause the diluent to freeze or cause condensation in the rotor, and it will not properly distribute to the cuvettes. In a standard refrigerator, the rotors should be placed on a shelf, not in the door or in a crisper drawer.</li> </ul> <p>If cancellation persists, or for more information, please contact Zoetis Diagnostic Technical Support.</p>
4044	QC Beads Didn't Mix	<p><b>4044- QC Beads Didn't Mix</b></p> <p>The most common causes of 4044 QC Beads Don't Mix IQC code are:</p> <ul style="list-style-type: none"> <li>• The rotor does not have enough diluent to check that all the beads have been dissolved completely.</li> </ul> <p>For first cancellation:</p> <ul style="list-style-type: none"> <li>• Rerun sample in a new rotor.</li> </ul> <p>If cancellation persists, or for more information, please contact Zoetis Diagnostic Technical Support.</p>
4046	High Sample Blank Absorbance	<p><b>4046 – Sample Blank Absorbance</b></p> <p>The most common causes of the 4046 Sample Quality IQC code are:</p> <ul style="list-style-type: none"> <li>• Physical interference in the sample.</li> <li>• Rotor malfunction.</li> </ul> <p>For first cancellation:</p> <p>Assess sample quality:</p> <ul style="list-style-type: none"> <li>• For Haemolysis - Redraw and rerun using new sample.</li> <li>• For Lipaemia - Fast patient or consider sending to reference laboratory.</li> <li>• For Icterus - contact Zoetis Diagnostic Technical Support for more information.</li> </ul> <p>If cancellation persists, or for more information, please contact Zoetis Diagnostic Technical Support.</p>