Possible submission notes

B-actin failure
“The sample from animal IEXXXXXXXX has been found to be unsuitable for determining the animal’s BVD virus status.
For a definitive BVD virus status on this animal, a new blood sample is required.”

The CVRL runs an internal control test alongside each PCR which checks that sufficient nucleic acid is extracted from the sample in question to make the PCR result itself valid. Very occasionally, this test fails indicating that there isn’t enough DNA or RNA recoverable in the sample to determine the animals BVD virus status definitively. This triggers a re-sampling request.

Suspect transient infection
“Although animal IEXXXXXXXX has a positive BVD PCR result, the levels of virus are quite low and may be due to transient or acute infection.
For a definitive BVD virus status on this animal, a new blood sample is required.”

When testing blood samples, transient BVD infection typically causes much lower levels of virus for a much shorter time than persistent infection. Occasionally the levels of detectable virus are so low that it is much more likely that the animal has a transient BVD infection rather than a persistent one. Transiently infections resolve themselves whereas persistent infections do not, so a subsequent re-sampling can therefore be used to determine an animal’s BVD virus status definitively.

Twice Inconclusive
“Animal IEXXXXXXXX has been tested twice using BVD PCR and has given an inconclusive result twice.
For a definitive BVD virus status on this animal, a new blood sample is required.”

Modern laboratory tests are designed to maximise the proportion of positive and negative results and minimise the number of inconclusive results. Very occasionally however, some samples continue to return inconclusive results even if the whole testing process is repeated. In these cases, the only way to determine an animal’s BVD virus status is to re-sample and test the fresh sample instead.