

ILLUSTRATIVE REPORT ON PCR ASSAY INTEGRITY ASSESSMENT

The following report serves as a representative example to illustrate the PCR control performance, assay behaviour, and result interpretation.

SAMPLE DETAILS

Sample type Pacific white shrimp (post larva)
Sample number N/A
Source of the sample N/A

LABORATORY REFERENCE

Sample/s received on N/A (DEMO)
PL number N/A (DEMO)
Test Completed on N/A (DEMO)

TESTS DONE

First Round PCR			Second Round Nested PCR			DNA Sequence Confirmation	
WSSV	EHP	AHPND	WSSV	EHP	AHPND	WSSV	EHP
Done	Done	N/A	N/A	N/A	N/A	N/A	N/A

RESULTS SUMMARY

TEST	RESULTS
WSSV	Negative
EHP	Negative
AHPND	N/A

RESULTS INTERPRETATION REFERENCE

Results	Description / Interpretation
Positive	Strong, clear band at expected size.
Weak Positive	Faint band at expected size; confirmatory test suggested.
Negative	No band or only non-specific bands (not at the expected size). This indicates the absence of the pathogen or a target load below the assay's detection threshold. Note: For confirming sample quality and the validity of PCR, refer to internal controls.
Inconclusive	Degraded DNA & failed internal control band, or ambiguous results.

PROCEDURE SUMMARY

- 50 milligrams of post-larval shrimps are taken.
- Genomic DNA was isolated using the internal Standard Operating Procedure.
- Polymerase chain reaction was carried out using NEB Taq DNA polymerase as per the internal Standard Operating Procedure.
- Number of cycles for amplification of the target gene fragment: 40 cycles.
- PCR product resolved using agarose gel (1%) electrophoresis.

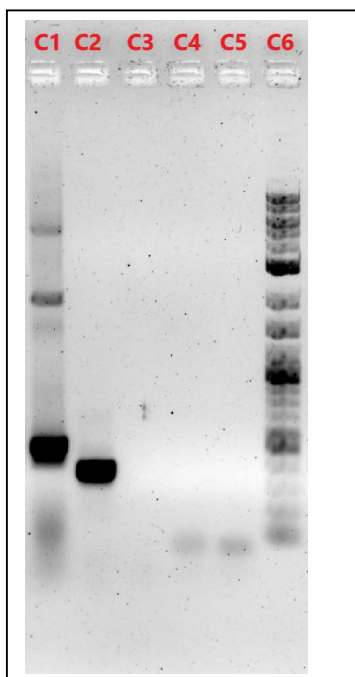
GEL LOADING CONCENTRATION/VOLUME

DNA ladder	Genomic DNA	PCR amplicon
1 µg per lane – NEB 1Kb Plus ladder	10 µL	10 µL

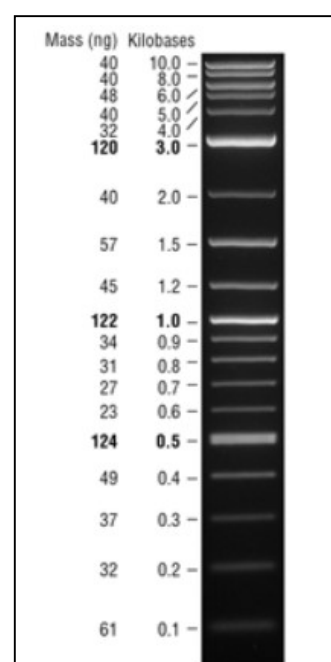
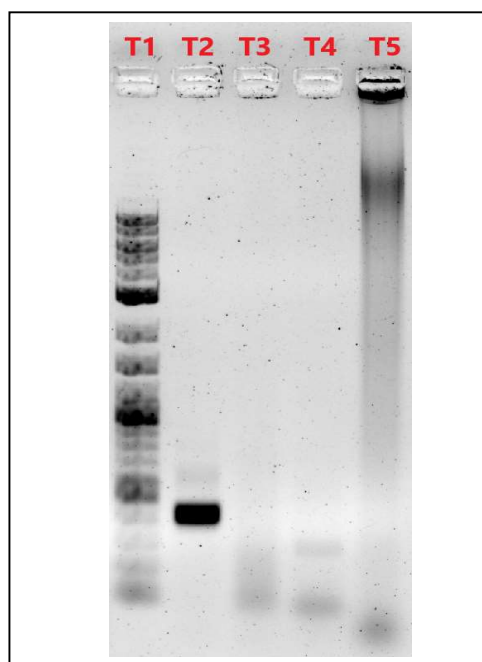
AMPLICON SIZE

Name of Target Gene	Size	Unit
Actin gene fragment	401	Base pairs
EHP gene fragment	374	Base pairs
WSSV gene fragment	578	Base pairs

RESULTS



LANE LEGEND



Control Samples – SHARED CONTROLS

Lane C1	Lane C2	Lane C3	Lane C4	Lane C5	Lane C6
WSSV positive control	EHP positive control	Actin NTC	WSSV NTC	EHP NTC	NEB 1Kb Plus DNA Ladder

Test Samples

Lane T1	Lane T2	Lane T3	Lane T4	Lane T5
NEB 1Kb Plus DNA ladder	Actin test	WSSV test	EHP test	Genomic DNA

ABBREVIATIONS

NTC	No template control
EHP	<i>Enterocytozoon hepatopenaei</i>
WSSV	White Spot Syndrome Virus
bp	Base pairs
PCR	Polymerase Chain Reaction
PL	Post larva
gDNA	Genomic DNA
SOP	Standard Operating Procedure
μL	Microliter
μg	Microgram
NEB	New England Biolabs
Taq	<i>Thermus aquaticus</i>

**** End of the report ****

DISCLAIMER

This report is provided solely for demonstration purposes and is not intended for any formal/compliance applications. The results shown in this report are anonymized examples that illustrate how laboratory processes, quality controls, and results are interpreted. Furthermore, this document does not represent any actual client samples/specimens, shipments, or submissions.