

DNA PROFILE CERTIFICATE

General Information:

Test Animal	
ANIMAL ID/NAME	NMS240025
BREED	Shorthorn
SPECIES	Cattle
GENDER	Female
OWNER	Niemen Stud
LAB. NO	ZOCA2026-119688

DNA Profiling Results:

STR Marker	Allele 1	Allele 2
TGLA227	81	89
BM2113	125	125
TGLA053	162	168
ETH10	217	217
ILSTS011	264	268
SPS113	151	153
RM067	90	102
TGLA126	117	123
TGLA122	143	143
INRA023	202	206

STR Marker	Allele 1	Allele 2
BM1818	Not Detected	
ETH003	115	121
ETH225	150	150
BM1824	180	182
SPS115	254	254
CSRM060	100	106
MGTG4B	135	135
CSSM066	183	193
ILSTS006	288	288

The DNA profile represents the standardised alleles for the 12 International Society for Animal Genetics (ISAG, 2016) recommended markers. These alleles were obtained from STR analysis by capillary electrophoresis. The DNA profile includes additional markers as recommended by the Food and Agriculture Organization of the United Nations (FAO) for routine bovine parentage testing and identification.



Dr Christiaan Labuschagne
Genomics Manager

15 September 2026

Date

****See disclaimer on reverse side**

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