

DNA PROFILE CERTIFICATE

General Information:

Test Animal	
ANIMAL ID/NAME	LEO150040
MICROCHIP NUMBER	Not Provided
SPECIES	CATTLE
GENDER	MALE
OWNER	LIVESTOCK CENTRE - NWDA
LAB. NO	C19-06904

DNA Profiling* Results:

STR Marker	Allele 1	Allele 2
TGLA227	83	87
BM2113	133	133
TGLA053	162	172
ETH10	217	219
ILSTS011	261	268
SPS113	147	153
RM067	90	102
TGLA126	121	125
TGLA122	137	137
INRA023	202	214

STR Marker	Allele 1	Allele 2
BM1818	262	264
ETH003	115	121
ETH225	141	150
BM1824	180	190
SPS115	248	248
CSRM060	92	100
MGTG4B	141	145
CSSM066	189	189
ILSTS006	284	292

* 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.



Analyst 1

28 May 2019

Date



Analyst 2

28 May 2019

Date

*****Disclaimer***

Whatever is contained in this report is subject to the following:

- 1. Clinomics (Pty) Ltd Registration number: 2015/382732/07 ("Clinomics") accepts that the biological specimen(s) provided, originates from the relevant animal(s) as indicated on the relevant specimen(s) provided;***
- 2. It is the responsibility of the client that all biological samples are available or has previously been submitted, and corresponds with all requested samples listed on the sample submission form. Clinomics does not accept responsibility for the effect of any absent samples on the analysis results;***
- 3. Clinomics accepts that all genetic profiles and/or samples from external sources are correctly labelled and accurate;***
- 4. Clinomics shall not be responsible for human and/or technical mistakes that could not have been foreseen;***
- 5. This document is solely for the use of the addressee and only in connection for the purpose set out in this document. In no event shall Clinomics assume liability or responsibility to any third party to which this document is disclosed or otherwise made available;***
- 6. Nothing in this document should be construed as advice to proceed or not to proceed with any specific course of action, as it was not prepared for that purpose;***
- 7. The DNA profile is based on a preliminary marker panel that is subject to modification pending additional genetic information;***
- 8. It is the sender's responsibility to obtain permits when sending samples where required;***
- 9. Clinomics reserves the right to decline testing of samples;***
- 10. No guarantees are made with regards to turn-around time and results, and no liability will be accepted for any delays.***