

Subject: RE: DW201152 (bull) - correction to sire
From: "Kate McLachlan" <kate@hillsidefarm.co.za>
Date: 2023/06/11, 10:17 pm
To: "Marietjie" <marietjie@studbook.co.za>

Hallo Marietjie,

Nog een, asseblief...

We did parentage tests for the 2019 season bulls that we were able to, and I see that the test shows the sire of our bull AAN M DW201152 should be DW140733, as per attached parentage test (and not DW170949 as is currently loaded on Logix).

Could you please correct this also on Logix for us?

Thank you.
Kate

Kate McLachlan
Westwind Estates Pty Ltd / Bungaree Red Angus
Office: 051 436 1807
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DNA PARENTAGE CERTIFICATE

Test Animal

Animal ID/Name	DW201151
Breed	Angus
DNA Profile Certificate Number	ZOCA2023-48476-DC

qualifies as the offspring of

Male

Animal ID/Name	DW150823
Breed	ANGUS
DNA Profile Certificate Number	A560094

&

Female

Animal ID/Name	Not Applicable
Breed	Not Applicable
DNA Profile Certificate Number	Not Applicable

Based on the results from genetic profiles of the individually listed animals after categorical allocation of the supplied biological samples. Allocation is based on a confidence level of 95% (based on the population tested) and ≤1 mismatched marker.

Dr Christiaan Labuschagne
Genomics Manager

25 May 2023
Date

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DNA PROFILE CERTIFICATE

General Information:

Test Animal	
ANIMAL ID/NAME	DW211224
BREED	Angus
SPECIES	Bovine
GENDER	Male
OWNER	IRWIN Dr D & MRS
LAB. NO	ZOCA2023-48516

DNA Profiling Results:

STR Marker	Allele 1	Allele 2
TGLA227	87	89
BM2113	125	127
TGLA053	160	170
ETH10	217	217
ILSTS011	264	266
SPS113	151	151
RM067	90	102
TGLA126	113	115
TGLA122	151	161
INRA023	206	206

STR Marker	Allele 1	Allele 2
BM1818	262	270
ETH003	117	121
ETH225	146	150
BM1824	178	188
SPS115	248	254
CSRM060	92	98
MGTG4B	135	147
CSSM066	183	187
ILSTS006	290	294

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.



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DNA PROFILE CERTIFICATE

General Information:

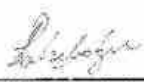
Test Animal	
ANIMAL ID/NAME	DW211222
BREED	Angus
SPECIES	Bovine
GENDER	Male
OWNER	IRWIN Dr D & MRS
LAB. NO	ZOCA2023-48515

DNA Profiling Results:

STR Marker	Allele 1	Allele 2
TGLA227	81	97
BM2113	125	139
TGLA053	160	176
ETH10	217	217
ILSTS011	266	266
SPS113	141	153
RM067	90	90
TGLA126	115	117
TGLA122	143	151
INRA023	206	206

STR Marker	Allele 1	Allele 2
BM1818	262	270
ETH003	117	121
ETH225	150	150
BM1824	178	182
SPS115	248	248
CSRM060	92	98
MGTG4B	135	147
CSSM066	187	187
ILSTS006	290	290

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DNA PROFILE CERTIFICATE

General Information:

Test Animal	
ANIMAL ID/NAME	DW211220
BREED	Angus
SPECIES	Bovine
GENDER	Male
OWNER	IRWIN Dr D & MRS
LAB. NO	ZOCA2023-48514

DNA Profiling Results:

STR Marker	Allele 1	Allele 2
TGLA227	81	81
BM2113	135	135
TGLA053	170	176
ETH10	217	223
ILSTS011	266	266
SPS113	151	151
RM067	90	102
TGLA126	115	117
TGLA122	151	151
INRA023	206	206

STR Marker	Allele 1	Allele 2
BM1818	258	262
ETH003	117	125
ETH225	140	144
BM1824	178	188
SPS115	248	248
CSRM060	98	104
MGTG48	135	135
CSSM066	183	199
ILSTS006	290	290

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Dr Christiaan Labuschagne
Genomics Manager

25 May 2023

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DNA PROFILE CERTIFICATE

General Information:

Test Animal	
ANIMAL ID/NAME	DW211219
BREED	Angus
SPECIES	Bovine
GENDER	Male
OWNER	IRWIN Dr D & MRS
LAB. NO	ZOCA2023-48513

DNA Profiling Results:

STR Marker	Allele 1	Allele 2
TGLA227	81	97
BM2113	135	135
TGLA053	170	176
ETH10	217	217
ILSTS011	266	266
SPS113	Not Detected	
RM067	90	90
TGLA126	117	117
TGLA122	143	143
INRA023	206	206

STR Marker	Allele 1	Allele 2
BM1818	270	270
ETH003	121	121
ETH225	140	150
BM1824	178	182
SPS115	248	252
CSRM060	102	104
MGTG48	135	141
CSSM066	183	187
ILSTS006	290	294

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DNA PROFILE CERTIFICATE

General Information:

Test Animal	
ANIMAL ID/NAME	DW211217
BREED	Angus
SPECIES	Bovine
GENDER	Male
OWNER	IRWIN Dr D & MRS
LAB. NO	ZOCA2023-48512

DNA Profiling Results:

STR Marker	Allele 1	Allele 2
TGLA227	97	97
BM2113	125	135
TGLA053	160	176
ETH10	Not Detected	
ILSTS011	264	266
SPS113	Not Detected	
RM067	Not Detected	
TGLA126	Not Detected	
TGLA122	151	161
INRA023	206	206

STR Marker	Allele 1	Allele 2
BM1818	264	266
ETH003	121	121
ETH225	148	150
BM1824	180	188
SPS115	248	254
CSRM060	98	102
MGTG48	135	135
CSSM066	187	187
ILSTS006	294	294

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.



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DNA PROFILE CERTIFICATE

General Information:

Test Animal	
ANIMAL ID/NAME	DW211216
BREED	Angus
SPECIES	Bovine
GENDER	Male
OWNER	IRWIN Dr D & MRS
LAB. NO	ZOCA2023-48511

DNA Profiling Results:

STR Marker	Allele 1	Allele 2
TGLA227	81	97
BM2113	135	137
TGLA053	170	176
ETH10	Not Detected	
ILSTS011	266	266
SPS113	Not Detected	
RM067	Not Detected	
TGLA126	115	117
TGLA122	151	151
INRA023	206	206

STR Marker	Allele 1	Allele 2
BM1818	264	266
ETH003	121	125
ETH225	150	150
BM1824	182	188
SPS115	248	248
CSRM060	98	104
MGTG4B	135	143
CSSM066	187	187
ILSTS006	Not Detected	

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.



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DNA PROFILE CERTIFICATE

General Information:

Test Animal	
ANIMAL ID/NAME	DW211214
BREED	Angus
SPECIES	Bovine
GENDER	Male
OWNER	IRWIN Dr D & MRS
LAB. NO	ZOCA2023-48510

DNA Profiling Results:

STR Marker	Allele 1	Allele 2
TGLA227	87	97
BM2113	137	139
TGLA053	160	176
ETH10	217	219
ILSTS011	266	266
SPS113	141	153
RM067	90	102
TGLA126	115	115
TGLA122	151	151
INRA023	206	214

STR Marker	Allele 1	Allele 2
BM1818	264	270
ETH003	117	121
ETH225	140	146
BM1824	178	180
SPS115	248	248
CSRM060	102	104
MGTG48	135	135
CSSM066	187	187
ILSTS006	290	294

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DNA PROFILE CERTIFICATE

General Information:

Test Animal	
ANIMAL ID/NAME	DW211213
BREED	Angus
SPECIES	Bovine
GENDER	Male
OWNER	IRWIN Dr D & MRS
LAB. NO	ZOCA2023-48509

DNA Profiling Results:

STR Marker	Allele 1	Allele 2
TGLA227	81	87
BM2113	125	135
TGLA053	168	170
ETH10	217	219
ILSTS011	266	266
SPS113	149	151
RM067	90	102
TGLA126	115	115
TGLA122	149	151
INRA023	208	208

STR Marker	Allele 1	Allele 2
BM1818	270	270
ETH003	117	121
ETH225	150	150
BM1824	178	178
SPS115	248	248
CSRM060	92	92
MGTG4B	141	141
CSSM066	183	197
ILSTS006	292	294

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.

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DNA PROFILE CERTIFICATE

General Information:

Test Animal	
ANIMAL ID/NAME	DW211212
BREED	Angus
SPECIES	Bovine
GENDER	Male
OWNER	IRWIN Dr D & MRS
LAB. NO	ZOCA2023-48508

DNA Profiling Results:

STR Marker	Allele 1	Allele 2
TGLA227	81	97
BM2113	125	125
TGLA053	160	164
ETH10	217	219
ILSTS011	266	266
SPS113	151	151
RM067	90	102
TGLA126	115	115
TGLA122	151	151
INRA023	206	206

STR Marker	Allele 1	Allele 2
BM1818	270	270
ETH003	117	119
ETH225	146	150
BM1824	178	180
SPS115	248	248
CSRM060	92	92
MGTG4B	135	135
CSSM066	183	197
ILSTS006	288	292

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DNA PROFILE CERTIFICATE

General Information:

Test Animal	
ANIMAL ID/NAME	DW211211
BREED	Angus
SPECIES	Bovine
GENDER	Male
OWNER	IRWIN Dr D & MRS
LAB. NO	ZOCA2023-48507

DNA Profiling Results:

STR Marker	Allele 1	Allele 2
TGLA227	81	89
BM2113	135	135
TGLA053	160	176
ETH10	Not Detected	
ILSTS011	264	266
SPS113	151	151
RM067	Not Detected	
TGLA126	115	115
TGLA122	151	151
INRA023	200	206

STR Marker	Allele 1	Allele 2
BM1818	262	262
ETH003	121	125
ETH225	144	150
BM1824	188	188
SPS115	248	252
CSRM060	92	98
MGTG48	141	143
CSSM066	187	187
ILSTS006	294	294

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Dr Christiaan Labuschagne
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25 May 2023

Date

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ISAG
International Society for Animal Genetics



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DNA PROFILE CERTIFICATE

General Information:

Test Animal	
ANIMAL ID/NAME	DW201209
BREED	Angus
SPECIES	Bovine
GENDER	Male
OWNER	IRWIN Dr D & MRS
LAB. NO	ZOCA2023-48506

DNA Profiling Results:

STR Marker	Allele 1	Allele 2
TGLA227	81	87
BM2113	127	137
TGLA053	168	170
ETH10	217	219
ILSTS011	266	268
SPS113	147	151
RM067	Not Detected	
TGLA126	113	115
TGLA122	151	151
INRA023	206	206

STR Marker	Allele 1	Allele 2
BM1818	266	270
ETH003	117	119
ETH225	146	150
BM1824	178	180
SPS115	252	254
CSRM060	92	102
MGTG4B	135	141
CSSM066	183	187
ILSTS006	290	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.

Dr Christiaan Labuschagne
Genomics Manager

25 May 2023

Date

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DNA PROFILE CERTIFICATE

General Information:

Test Animal	
ANIMAL ID/NAME	DW201208
BREED	Angus
SPECIES	Bovine
GENDER	Male
OWNER	IRWIN Dr D & MRS
LAB. NO	ZOCA2023-48505

DNA Profiling Results:

STR Marker	Allele 1	Allele 2
TGLA227	81	97
BM2113	133	139
TGLA053	170	176
ETH10	217	219
ILSTS011	266	268
SPS113	151	151
RM067	90	96
TGLA126	115	117
TGLA122	151	151
INRA023	206	206

STR Marker	Allele 1	Allele 2
BM1818	264	270
ETH003	117	121
ETH225	148	150
BM1824	182	188
SPS115	248	248
CSRM060	104	104
MGTG4B	135	143
CSSM066	187	187
ILSTS006	290	294

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.



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DNA PROFILE CERTIFICATE

General Information:

Test Animal	
ANIMAL ID/NAME	DW201204
BREED	Angus
SPECIES	Bovine
GENDER	Male
OWNER	IRWIN Dr D & MRS
LAB. NO	ZOCA2023-48504

DNA Profiling Results:

STR Marker	Allele 1	Allele 2
TGLA227	81	97
BM2113	135	135
TGLA053	170	182
ETH10	217	219
ILSTS011	266	266
SPS113	151	153
RM067	90	90
TGLA126	115	115
TGLA122	143	151
INRA023	206	206

STR Marker	Allele 1	Allele 2
BM1818	262	266
ETH003	117	125
ETH225	148	150
BM1824	182	188
SPS115	248	254
CSRM060	92	102
MGTG4B	135	141
CSSM066	183	183
ILSTS006	290	294

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DNA PROFILE CERTIFICATE

General Information:

Test Animal	
ANIMAL ID/NAME	DW201199
BREED	Angus
SPECIES	Bovine
GENDER	Male
OWNER	IRWIN Dr D & MRS
LAB. NO	ZOCA2023-48503

DNA Profiling Results:

STR Marker	Allele 1	Allele 2
TGLA227	89	97
BM2113	127	135
TGLA053	160	168
ETH10	217	217
ILSTS011	266	266
SPS113	151	151
RM067	90	102
TGLA126	113	115
TGLA122	143	151
INRA023	206	208

STR Marker	Allele 1	Allele 2
BM1818	266	270
ETH003	119	121
ETH225	146	148
BM1824	178	188
SPS115	248	254
CSRM060	98	102
MGTG48	135	135
CSSM066	183	187
ILSTS006	288	292

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DNA PROFILE CERTIFICATE

General Information:

Test Animal	
ANIMAL ID/NAME	DW201198
BREED	Angus
SPECIES	Bovine
GENDER	Male
OWNER	IRWIN Dr D & MRS
LAB. NO	ZOCA2023-48502

DNA Profiling Results:

STR Marker	Allele 1	Allele 2
TGLA227	87	97
BM2113	125	135
TGLA053	160	162
ETH10	Not Detected	
ILSTS011	264	266
SPS113	151	153
RM067	102	106
TGLA126	Not Detected	
TGLA122	143	151
INRA023	202	206

STR Marker	Allele 1	Allele 2
BM1818	266	266
ETH003	121	125
ETH225	148	150
BM1824	180	188
SPS115	248	248
CSRM060	102	104
MGTG4B	141	143
CSSM066	187	187
ILSTS006	Not Detected	

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DNA PROFILE CERTIFICATE

General Information:

Test Animal	
ANIMAL ID/NAME	DW201197
BREED	Angus
SPECIES	Bovine
GENDER	Male
OWNER	IRWIN Dr D & MRS
LAB. NO	ZOCA2023-48501

DNA Profiling Results:

STR Marker	Allele 1	Allele 2
TGLA227	87	97
BM2113	127	137
TGLA053	160	168
ETH10	217	219
ILSTS011	264	266
SPS113	151	151
RM067	90	102
TGLA126	115	117
TGLA122	151	161
INRA023	200	206

STR Marker	Allele 1	Allele 2
BM1818	270	270
ETH003	119	121
ETH225	148	150
BM1824	182	188
SPS115	248	260
CSRM060	98	98
MGTG4B	135	143
CSSM066	187	187
ILSTS006	294	294

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Dr Christiaan Labuschagne
Genomics Manager

25 May 2023

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DNA PROFILE CERTIFICATE

General Information:

Test Animal	
ANIMAL ID/NAME	DW201196
BREED	Angus
SPECIES	Bovine
GENDER	Male
OWNER	IRWIN Dr D & MRS
LAB. NO	ZOCA2023-48500

DNA Profiling Results:

STR Marker	Allele 1	Allele 2
TGLA227	81	89
BM2113	125	135
TGLA053	168	176
ETH10	217	217
ILSTS011	264	266
SPS113	151	151
RM067	90	102
TGLA126	115	115
TGLA122	151	151
INRA023	206	208

STR Marker	Allele 1	Allele 2
BM1818	270	270
ETH003	117	125
ETH225	144	144
BM1824	178	178
SPS115	248	252
CSRM060	102	104
MGTG4B	135	139
CSSM066	187	197
ILSTS006	290	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.



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Postal Address: PO Box 14356, Hatfield, Pretoria 0028

DNA PROFILE CERTIFICATE

General Information:

Test Animal	
ANIMAL ID/NAME	DW201195
BREED	Angus
SPECIES	Bovine
GENDER	Male
OWNER	IRWIN Dr D & MRS
LAB. NO	ZOCA2023-48499

DNA Profiling Results:

STR Marker	Allele 1	Allele 2
TGLA227	97	97
BM2113	125	135
TGLA053	160	160
ETH10	217	217
ILSTS011	266	266
SPS113	143	151
RM067	96	102
TGLA126	115	117
TGLA122	143	151
INRA023	206	208

STR Marker	Allele 1	Allele 2
BM1818	264	270
ETH003	121	121
ETH225	150	150
BM1824	178	188
SPS115	248	248
CSRM060	98	104
MGTG4B	135	139
CSSM066	187	187
ILSTS006	290	294

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

25 May 2023

Date

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ISAG
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DNA PROFILE CERTIFICATE

General Information:

Test Animal	
ANIMAL ID/NAME	DW201193
BREED	Angus
SPECIES	Bovine
GENDER	Male
OWNER	IRWIN Dr D & MRS
LAB. NO	ZOCA2023-48498

DNA Profiling Results:

STR Marker	Allele 1	Allele 2
TGLA227	81	87
BM2113	127	135
TGLA053	160	176
ETH10	217	219
ILSTS011	264	264
SPS113	151	151
RM067	102	102
TGLA126	115	115
TGLA122	143	151
INRA023	206	206

STR Marker	Allele 1	Allele 2
BM1818	266	266
ETH003	Not Detected	
ETH225	148	150
BM1824	178	188
SPS115	254	260
CSRM060	104	104
MGTG4B	139	143
CSSM066	183	187
ILSTS006	292	294

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.

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DNA PROFILE CERTIFICATE

General Information:

Test Animal	
ANIMAL ID/NAME	DW201192
BREED	Angus
SPECIES	Bovine
GENDER	Male
OWNER	IRWIN Dr D & MRS
LAB. NO	ZOCA2023-48497

DNA Profiling Results:

STR Marker	Allele 1	Allele 2
TGLA227	97	97
BM2113	133	139
TGLA053	160	176
ETH10	217	217
ILSTS011	266	266
SPS113	151	151
RM067	102	102
TGLA126	115	115
TGLA122	143	143
INRA023	206	208

STR Marker	Allele 1	Allele 2
BM1818	262	270
ETH003	119	121
ETH225	150	150
BM1824	180	188
SPS115	248	252
CSRM060	92	102
MGTG4B	135	139
CSSM066	189	197
ILSTS006	288	290

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.

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DNA PROFILE CERTIFICATE

General Information:

Test Animal	
ANIMAL ID/NAME	DW201189
BREED	Angus
SPECIES	Bovine
GENDER	Male
OWNER	IRWIN Dr D & MRS
LAB. NO	ZOCA2023-48496

DNA Profiling Results:

STR Marker	Allele 1	Allele 2
TGLA227	87	89
BM2113	125	135
TGLA053	170	176
ETH10	217	219
ILSTS011	266	266
SPS113	151	153
RM067	90	90
TGLA126	115	115
TGLA122	143	151
INRA023	200	214

STR Marker	Allele 1	Allele 2
BM1818	266	270
ETH003	117	117
ETH225	146	150
BM1824	178	188
SPS115	248	248
CSRM060	102	102
MGTG4B	135	141
CSSM066	183	183
ILSTS006	294	296

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.

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DNA PROFILE CERTIFICATE

General Information:

Test Animal	
ANIMAL ID/NAME	DW201188
BREED	Angus
SPECIES	Bovine
GENDER	Male
OWNER	IRWIN Dr D & MRS
LAB. NO	ZOCA2023-48495

DNA Profiling Results:

STR Marker	Allele 1	Allele 2
TGLA227	81	81
BM2113	125	135
TGLA053	164	170
ETH10	217	217
ILSTS011	264	266
SPS113	Not Detected	
RM067	90	96
TGLA126	113	115
TGLA122	151	151
INRA023	206	214

STR Marker	Allele 1	Allele 2
BM1818	264	270
ETH003	117	117
ETH225	150	150
BM1824	178	182
SPS115	248	248
CSRM060	102	104
MGTG48	135	135
CSSM066	183	187
ILSTS006	294	294

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.

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DNA PROFILE CERTIFICATE

General Information:

Test Animal	
ANIMAL ID/NAME	DW201187
BREED	Angus
SPECIES	Bovine
GENDER	Male
OWNER	IRWIN Dr D. & MRS
LAB. NO	ZOCA2023-48494

DNA Profiling Results:

STR Marker	Allele 1	Allele 2
TGLA227	81	97
BM2113	125	135
TGLA053	160	160
ETH10	Not Detected	
ILSTS011	266	266
SPS113	Not Detected	
RM067	90	102
TGLA126	113	115
TGLA122	151	161
INRA023	206	206

STR Marker	Allele 1	Allele 2
BM1818	264	270
ETH003	117	121
ETH225	146	150
BM1824	178	178
SPS115	254	254
CSRM060	102	104
MGTG4B	135	135
CSSM066	187	189
ILSTS006	294	294

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.

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DNA PROFILE CERTIFICATE

General Information:

Test Animal	
ANIMAL ID/NAME	DW201186
BREED	Angus
SPECIES	Bovine
GENDER	Male
OWNER	IRWIN Dr D & MRS
LAB. NO	ZOCA2023-48493

DNA Profiling Results:

STR Marker	Allele 1	Allele 2
TGLA227	81	97
BM2113	125	125
TGLA053	160	182
ETH10	217	217
ILSTS011	266	266
SPS113	143	153
RM067	102	102
TGLA126	115	115
TGLA122	151	161
INRA023	206	214

STR Marker	Allele 1	Allele 2
BM1818	262	264
ETH003	117	121
ETH225	150	150
BM1824	178	182
SPS115	248	254
CSRM060	98	104
MGTG4B	135	141
CSSM066	189	197
ILSTS006	294	294

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.

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DNA PROFILE CERTIFICATE

General Information:

Test Animal	
ANIMAL ID/NAME	DW201182
BREED	Angus
SPECIES	Bovine
GENDER	Male
OWNER	IRWIN Dr D & MRS
LAB. NO	ZOCA2023-48492

DNA Profiling Results:

STR Marker	Allele 1	Allele 2
TGLA227	81	89
BM2113	125	135
TGLA053	154	176
ETH10	217	217
ILSTS011	266	266
SPS113	151	151
RM067	90	102
TGLA126	113	115
TGLA122	151	151
INRA023	202	206

STR Marker	Allele 1	Allele 2
BM1818	264	266
ETH003	121	121
ETH225	150	150
BM1824	182	188
SPS115	248	248
CSRM060	102	104
MGTG4B	135	141
CSSM066	187	197
ILSTS006	292	294

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.

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DNA PROFILE CERTIFICATE

General Information:

Test Animal	
ANIMAL ID/NAME	DW201179
BREED	Angus
SPECIES	Bovine
GENDER	Male
OWNER	IRWIN Dr D & MRS
LAB. NO	ZOCA2023-48491

DNA Profiling Results:

STR Marker	Allele 1	Allele 2
TGLA227	81	89
BM2113	133	135
TGLA053	176	176
ETH10	217	219
ILSTS011	264	266
SPS113	151	151
RM067	92	102
TGLA126	115	117
TGLA122	151	161
INRA023	206	208

STR Marker	Allele 1	Allele 2
BM1818	268	270
ETH003	117	121
ETH225	150	150
BM1824	178	182
SPS115	248	260
CSRM060	100	104
MGTG4B	135	143
CSSM066	187	197
ILSTS006	294	294

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

25 May 2023

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DNA PROFILE CERTIFICATE

General Information:

Test Animal	
ANIMAL ID/NAME	DW201178
BREED	Angus
SPECIES	Bovine
GENDER	Male
OWNER	IRWIN Dr D & MRS
LAB. NO	ZOCA2023-48490

DNA Profiling Results:

STR Marker	Allele 1	Allele 2
TGLA227	81	97
BM2113	135	137
TGLA053	170	176
ETH10	Not Detected	
ILSTS011	266	266
SPS113	Not Detected	
RM067	90	106
TGLA126	115	115
TGLA122	151	155
INRA023	206	206

STR Marker	Allele 1	Allele 2
BM1818	270	270
ETH003	119	125
ETH225	150	150
BM1824	178	182
SPS115	248	252
CSRM060	92	98
MGTG4B	135	135
CSSM066	183	197
ILSTS006	Not Detected	

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.



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DNA PROFILE CERTIFICATE

General Information:

Test Animal	
ANIMAL ID/NAME	DW201176
BREED	Angus
SPECIES	Bovine
GENDER	Male
OWNER	IRWIN Dr D & MRS
LAB. NO	ZOCA2023-48489

DNA Profiling Results:

STR Marker	Allele 1	Allele 2
TGLA227	87	97
BM2113	127	137
TGLA053	160	176
ETH10	217	219
ILSTS011	264	268
SPS113	151	151
RM067	90	102
TGLA126	115	115
TGLA122	151	151
INRA023	206	214

STR Marker	Allele 1	Allele 2
BM1818	266	270
ETH003	117	121
ETH225	148	150
BM1824	188	188
SPS115	248	248
CSRM060	98	102
MGTG4B	135	141
CSSM066	187	187
ILSTS006	294	294

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.


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DNA PROFILE CERTIFICATE

General Information:

Test Animal	
ANIMAL ID/NAME	DW201175
BREED	Angus
SPECIES	Bovine
GENDER	Male
OWNER	IRWIN Dr D & MRS
LAB. NO	ZOCA2023-48488

DNA Profiling Results:

STR Marker	Allele 1	Allele 2
TGLA227	97	97
BM2113	133	135
TGLA053	160	170
ETH10	217	217
ILSTS011	266	266
SPS113	Not Detected	
RM067	102	102
TGLA126	115	117
TGLA122	151	151
INRA023	206	208

STR Marker	Allele 1	Allele 2
BM1818	262	266
ETH003	117	121
ETH225	150	150
BM1824	178	188
SPS115	248	248
CSRM060	92	98
MGTG4B	135	147
CSSM066	187	187
ILSTS006	290	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.

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DNA PROFILE CERTIFICATE

General Information:

Test Animal	
ANIMAL ID/NAME	DW201174
BREED	Angus
SPECIES	Bovine
GENDER	Male
OWNER	IRWIN Dr D & MRS
LAB. NO	ZOCA2023-48487

DNA Profiling Results:

STR Marker	Allele 1	Allele 2
TGLA227	81	97
BM2113	137	139
TGLA053	176	178
ETH10	217	223
ILSTS011	266	266
SPS113	141	151
RM067	90	102
TGLA126	113	117
TGLA122	143	151
INRA023	206	214

STR Marker	Allele 1	Allele 2
BM1818	258	264
ETH003	117	121
ETH225	148	150
BM1824	180	182
SPS115	248	248
CSRM060	98	104
MGTG4B	135	135
CSSM066	187	189
ILSTS006	290	290

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.

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DNA PROFILE CERTIFICATE

General Information:

Test Animal	
ANIMAL ID/NAME	DW201171
BREED	Angus
SPECIES	Bovine
GENDER	Male
OWNER	IRWIN Dr D & MRS
LAB. NO	ZOCA2023-48486

DNA Profiling Results:

STR Marker	Allele 1	Allele 2
TGLA227	97	97
BM2113	133	135
TGLA053	154	176
ETH10	217	217
ILSTS011	266	266
SPS113	151	151
RM067	102	102
TGLA126	115	115
TGLA122	151	151
INRA023	206	214

STR Marker	Allele 1	Allele 2
BM1818	264	266
ETH003	117	121
ETH225	148	150
BM1824	178	178
SPS115	248	254
CSRM060	98	100
MGTG4B	135	135
CSSM066	187	187
ILSTS006	288	294

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

25 May 2023

Date

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DNA PROFILE CERTIFICATE

General Information:

Test Animal	
ANIMAL ID/NAME	DW201170
BREED	Angus
SPECIES	Bovine
GENDER	Male
OWNER	IRWIN Dr D & MRS
LAB. NO	ZOCA2023-48485

DNA Profiling Results:

STR Marker	Allele 1	Allele 2
TGLA227	87	97
BM2113	125	135
TGLA053	154	176
ETH10	217	217
ILSTS011	264	266
SPS113	151	153
RM067	90	102
TGLA126	115	117
TGLA122	143	151
INRA023	206	206

STR Marker	Allele 1	Allele 2
BM1818	264	270
ETH003	121	121
ETH225	140	148
BM1824	178	180
SPS115	248	248
CSRM060	92	104
MGTG4B	135	135
CSSM066	187	197
ILSTS006	294	294

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

25 May 2023

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DNA PROFILE CERTIFICATE

General Information:

Test Animal	
ANIMAL ID/NAME	DW201169
BREED	Angus
SPECIES	Bovine
GENDER	Male
OWNER	IRWIN Dr D & MRS
LAB. NO	ZOCA2023-48484

DNA Profiling Results:

STR Marker	Allele 1	Allele 2
TGLA227	93	97
BM2113	133	135
TGLA053	154	170
ETH10	217	217
ILSTS011	266	266
SPS113	141	143
RM067	102	102
TGLA126	113	115
TGLA122	143	151
INRA023	206	208

STR Marker	Allele 1	Allele 2
BM1818	262	270
ETH003	121	121
ETH225	140	150
BM1824	178	182
SPS115	248	254
CSRM060	104	104
MGTG4B	135	135
CSSM066	187	187
ILSTS006	290	290

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.



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DNA PROFILE CERTIFICATE

General Information:

Test Animal	
ANIMAL ID/NAME	DW201168
BREED	Angus
SPECIES	Bovine
GENDER	Male
OWNER	IRWIN Dr D & MRS
LAB. NO	ZOCA2023-48483

DNA Profiling Results:

STR Marker	Allele 1	Allele 2
TGLA227	81	81
BM2113	135	135
TGLA053	170	176
ETH10	217	217
ILSTS011	266	266
SPS113	151	153
RM067	90	102
TGLA126	115	117
TGLA122	151	151
INRA023	206	206

STR Marker	Allele 1	Allele 2
BM1818	262	262
ETH003	117	117
ETH225	144	148
BM1824	178	182
SPS115	248	248
CSRM060	92	98
MGTG4B	143	143
CSSM066	183	183
ILSTS006	294	294

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.



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DNA PROFILE CERTIFICATE

General Information:

Test Animal	
ANIMAL ID/NAME	DW201167
BREED	Angus
SPECIES	Bovine
GENDER	Male
OWNER	IRWIN Dr D & MRS
LAB. NO	ZOCA2023-48482

DNA Profiling Results:

STR Marker	Allele 1	Allele 2
TGLA227	81	81
BM2113	125	135
TGLA053	160	176
ETH10	217	217
ILSTS011	266	268
SPS113	Not Detected	
RM067	90	102
TGLA126	113	115
TGLA122	151	151
INRA023	206	214

STR Marker	Allele 1	Allele 2
BM1818	262	268
ETH003	117	117
ETH225	144	148
BM1824	182	188
SPS115	248	248
CSRM060	102	102
MGTG48	135	143
CSSM066	183	187
ILSTS006	Not Detected	

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

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DNA PROFILE CERTIFICATE

General Information:

Test Animal	
ANIMAL ID/NAME	DW201163
BREED	Angus
SPECIES	Bovine
GENDER	Male
OWNER	IRWIN Dr D & MRS
LAB. NO	ZOCA2023-48481

DNA Profiling Results:

STR Marker	Allele 1	Allele 2
TGLA227	89	89
BM2113	133	137
TGLA053	154	160
ETH10	Not Detected	
ILSTS011	264	266
SPS113	Not Detected	
RM067	90	96
TGLA126	113	115
TGLA122	151	161
INRA023	206	206

STR Marker	Allele 1	Allele 2
BM1818	262	270
ETH003	117	125
ETH225	148	150
BM1824	178	178
SPS115	248	254
CSRM060	98	102
MGTG4B	135	143
CSSM066	187	189
ILSTS006	294	294

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

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DNA PROFILE CERTIFICATE

General Information:

Test Animal	
ANIMAL ID/NAME	DW201156
BREED	Angus
SPECIES	Bovine
GENDER	Male
OWNER	IRWIN Dr D & MRS
LAB. NO	ZOCA2023-48479

DNA Profiling Results:

STR Marker	Allele 1	Allele 2
TGLA227	81	87
BM2113	135	137
TGLA053	160	160
ETH10	Not Detected	
ILSTS011	266	266
SPS113	Not Detected	
RM067	96	102
TGLA126	115	115
TGLA122	141	151
INRA023	206	206

STR Marker	Allele 1	Allele 2
BM1818	270	270
ETH003	121	125
ETH225	144	150
BM1824	178	178
SPS115	248	260
CSRM060	98	102
MGTG4B	135	135
CSSM066	187	187
ILSTS006	294	294

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

25 May 2023

Date

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DNA PROFILE CERTIFICATE

General Information:

Test Animal	
ANIMAL ID/NAME	DW201154
BREED	Angus
SPECIES	Bovine
GENDER	Male
OWNER	IRWIN Dr D & MRS
LAB. NO	ZOCA2023-48478

DNA Profiling Results:

STR Marker	Allele 1	Allele 2
TGLA227	89	97
BM2113	125	135
TGLA053	160	160
ETH10	217	219
ILSTS011	264	266
SPS113	Not Detected	
RM067	90	96
TGLA126	113	115
TGLA122	151	151
INRA023	200	206

STR Marker	Allele 1	Allele 2
BM1818	262	266
ETH003	117	121
ETH225	146	150
BM1824	178	188
SPS115	248	254
CSRM060	92	98
MGTG4B	135	141
CSSM066	183	189
ILSTS006	294	294

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.



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25 May 2023

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DNA PROFILE CERTIFICATE

General Information:

Test Animal	
ANIMAL ID/NAME	DW201152
BREED	Angus
SPECIES	Bovine
GENDER	Male
OWNER	IRWIN Dr D & MRS
LAB. NO	ZOCA2023-48477

DNA Profiling Results:

STR Marker	Allele 1	Allele 2
TGLA227	81	89
BM2113	135	135
TGLA053	170	176
ETH10	217	217
ILSTS011	264	266
SPS113	141	151
RM067	102	102
TGLA126	113	115
TGLA122	149	161
INRA023	206	208

STR Marker	Allele 1	Allele 2
BM1818	266	266
ETH003	121	121
ETH225	150	150
BM1824	178	180
SPS115	248	248
CSRM060	98	104
MGTG4B	135	143
CSSM066	187	187
ILSTS006	288	294

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

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DNA PROFILE CERTIFICATE

General Information:

Test Animal	
ANIMAL ID/NAME	DW201151
BREED	Angus
SPECIES	Bovine
GENDER	Male
OWNER	IRWIN Dr D. & MRS
LAB. NO	ZOCA2023-48476

DNA Profiling Results:

STR Marker	Allele 1	Allele 2
TGLA227	81	89
BM2113	133	137
TGLA053	160	176
ETH10	217	217
ILSTS011	266	268
SPS113	151	153
RM067	102	102
TGLA126	113	115
TGLA122	151	151
INRA023	206	206

STR Marker	Allele 1	Allele 2
BM1818	264	266
ETH003	117	121
ETH225	150	150
BM1824	178	178
SPS115	252	254
CSRM060	102	104
MGTG4B	135	147
CSSM066	187	187
ILSTS006	294	294

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.

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DNA PROFILE CERTIFICATE

General Information:

Test Animal	
ANIMAL ID/NAME	DW201149
BREED	Angus
SPECIES	Bovine
GENDER	Male
OWNER	IRWIN Dr D & MRS
LAB. NO	ZOCA2023-48475

DNA Profiling Results:

STR Marker	Allele 1	Allele 2
TGLA227	81	87
BM2113	133	135
TGLA053	160	170
ETH10	217	217
ILSTS011	266	268
SPS113	151	151
RM067	90	102
TGLA126	115	115
TGLA122	143	161
INRA023	206	206

STR Marker	Allele 1	Allele 2
BM1818	266	270
ETH003	117	125
ETH225	150	150
BM1824	178	188
SPS115	248	254
CSRM060	92	98
MGTG48	135	139
CSSM066	187	187
ILSTS006	292	294

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.

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25 May 2023

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DNA PROFILE CERTIFICATE

General Information:

Test Animal	
ANIMAL ID/NAME	DW201148
BREED	Angus
SPECIES	Bovine
GENDER	Male
OWNER	IRWIN Dr D & MRS
LAB. NO	ZOCA2023-48474

DNA Profiling Results:

STR Marker	Allele 1	Allele 2
TGLA227	87	89
BM2113	125	137
TGLA053	160	176
ETH10	217	221
ILSTS011	264	266
SPS113	149	151
RM067	96	102
TGLA126	115	115
TGLA122	149	161
INRA023	206	208

STR Marker	Allele 1	Allele 2
BM1818	266	270
ETH003	117	121
ETH225	150	150
BM1824	178	188
SPS115	248	260
CSRM060	98	104
MGTG4B	135	141
CSSM066	187	187
ILSTS006	288	294

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

25 May 2023
Date

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DNA PROFILE CERTIFICATE

General Information:

Test Animal	
ANIMAL ID/NAME	DW201146
BREED	Angus
SPECIES	Bovine
GENDER	Male
OWNER	IRWIN Dr D & MRS
LAB. NO	ZOCA2023-48473

DNA Profiling Results:

STR Marker	Allele 1	Allele 2
TGLA227	81	89
BM2113	125	127
TGLA053	160	168
ETH10	Not Detected	
ILSTS011	266	266
SPS113	Not Detected	
RM067	90	94
TGLA126	113	115
TGLA122	143	151
INRA023	206	214

STR Marker	Allele 1	Allele 2
BM1818	264	270
ETH003	117	121
ETH225	144	150
BM1824	188	188
SPS115	252	252
CSRM060	102	104
MGTG4B	135	143
CSSM066	183	187
ILSTS006	288	294

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

25 May 2023

Date

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DNA PROFILE CERTIFICATE

General Information:

Test Animal	
ANIMAL ID/NAME	DW201145
BREED	Angus
SPECIES	Bovine
GENDER	Male
OWNER	IRWIN Dr D & MRS
LAB. NO	ZOCA2023-48472

DNA Profiling Results:

STR Marker	Allele 1	Allele 2
TGLA227	89	97
BM2113	125	135
TGLA053	164	176
ETH10	Not Detected	
ILSTS011	264	266
SPS113	Not Detected	
RM067	96	102
TGLA126	115	115
TGLA122	155	181
INRA023	200	206

STR Marker	Allele 1	Allele 2
BM1818	266	270
ETH003	121	121
ETH225	150	150
BM1824	188	188
SPS115	248	260
CSRM060	104	104
MGTG4B	135	139
CSSM066	187	189
ILSTS006	294	294

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

25 May 2023

Date

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DNA PROFILE CERTIFICATE

General Information:

Test Animal	
ANIMAL ID/NAME	DW201144
BREED	Angus
SPECIES	Bovine
GENDER	Male
OWNER	IRWIN Dr D & MRS
LAB. NO	ZOCA2023-48471

DNA Profiling Results:

STR Marker	Allele 1	Allele 2
TGLA227	81	87
BM2113	139	141
TGLA053	160	168
ETH10	217	217
ILSTS011	268	268
SPS113	Not Detected	
RM067	96	102
TGLA126	115	115
TGLA122	151	151
INRA023	208	214

STR Marker	Allele 1	Allele 2
BM1818	270	270
ETH003	121	121
ETH225	148	150
BM1824	182	188
SPS115	248	260
CSRM060	98	100
MGTG4B	135	143
CSSM066	197	197
ILSTS006	294	294

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.


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DNA PROFILE CERTIFICATE

General Information:

Test Animal	
ANIMAL ID/NAME	DW201143
BREED	Angus
SPECIES	Bovine
GENDER	Male
OWNER	IRWIN Dr D & MRS
LAB. NO	ZOCA2023-48470

DNA Profiling Results:

STR Marker	Allele 1	Allele 2
TGLA227	89	93
BM2113	137	139
TGLA053	164	176
ETH10	Not Detected	
ILSTS011	266	266
SPS113	Not Detected	
RM067	96	102
TGLA126	115	117
TGLA122	151	151
INRA023	206	214

STR Marker	Allele 1	Allele 2
BM1818	266	266
ETH003	121	125
ETH225	144	150
BM1824	178	182
SPS115	248	248
CSRM060	98	100
MGTG4B	135	135
CSSM066	183	187
ILSTS006	294	294

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

25 May 2023

Date

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DNA PROFILE CERTIFICATE

General Information:

Test Animal	
ANIMAL ID/NAME	DW201142
BREED	Angus
SPECIES	Bovine
GENDER	Male
OWNER	IRWIN Dr D & MRS
LAB. NO	ZOCA2023-48469

DNA Profiling Results:

STR Marker	Allele 1	Allele 2
TGLA227	89	89
BM2113	125	137
TGLA053	160	160
ETH10	Not Detected	
ILSTS011	264	266
SPS113	Not Detected	
RM067	102	102
TGLA126	113	113
TGLA122	151	161
INRA023	206	206

STR Marker	Allele 1	Allele 2
BM1818	270	270
ETH003	117	119
ETH225	144	150
BM1824	178	180
SPS115	248	260
CSRM060	104	104
MGTG4B	135	143
CSSM066	187	187
ILSTS006	288	294

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.



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DNA PROFILE CERTIFICATE

General Information:

Test Animal	
ANIMAL ID/NAME	DW201141
BREED	Angus
SPECIES	Bovine
GENDER	Male
OWNER	IRWIN Dr D & MRS
LAB. NO	ZOCA2023-48468

DNA Profiling Results:

STR Marker	Allele 1	Allele 2
TGLA227	81	81
BM2113	135	135
TGLA053	164	176
ETH10	Not Detected	
ILSTS011	264	268
SPS113	Not Detected	
RM067	102	102
TGLA126	115	117
TGLA122	151	151
INRA023	206	216

STR Marker	Allele 1	Allele 2
BM1818	266	270
ETH003	Not Detected	
ETH225	150	150
BM1824	178	182
SPS115	248	248
CSRM060	102	102
MGTG4B	135	135
CSSM066	187	197
ILSTS006	288	294

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.

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DNA PROFILE CERTIFICATE

General Information:

Test Animal	
ANIMAL ID/NAME	DW201140
BREED	Angus
SPECIES	Bovine
GENDER	Male
OWNER	IRWIN Dr D & MRS
LAB. NO	ZOCA2023-48467

DNA Profiling Results:

STR Marker	Allele 1	Allele 2
TGLA227	89	93
BM2113	125	139
TGLA053	160	170
ETH10	217	219
ILSTS011	266	266
SPS113	151	153
RM067	90	102
TGLA126	113	117
TGLA122	151	151
INRA023	202	206

STR Marker	Allele 1	Allele 2
BM1818	266	268
ETH003	117	121
ETH225	144	148
BM1824	180	182
SPS115	248	252
CSRM060	100	104
MGTG4B	135	143
CSSM066	183	197
ILSTS006	294	296

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

25 May 2023

Date

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DNA PROFILE CERTIFICATE

General Information:

Test Animal	
ANIMAL ID/NAME	DW201139
BREED	Angus
SPECIES	Bovine
GENDER	Male
OWNER	IRWIN Dr D & MRS
LAB. NO	ZOCA2023-48466

DNA Profiling Results:

STR Marker	Allele 1	Allele 2
TGLA227	89	97
BM2113	125	139
TGLA053	154	170
ETH10	Not Detected	
ILSTS011	268	268
SPS113	Not Detected	
RM067	92	102
TGLA126	115	121
TGLA122	143	151
INRA023	206	206

STR Marker	Allele 1	Allele 2
BM1818	266	266
ETH003	121	121
ETH225	148	150
BM1824	178	180
SPS115	248	260
CSRM060	104	104
MGTG48	135	135
CSSM066	197	197
ILSTS006	Not Detected	

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.



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