

Bianca

From: SA MINIATURE HORSE ASSOCIATION [saminiature@gmail.com]
Sent: 01 September 2026 08:49 AM
To: 'Bianca'
Subject: Fw: DNA vir aantekening asb
Attachments: ZOEQU2026-118627-PC_ParentNFinSamp.pdf; ZOEQU2026-118628-PC_ParentNFinSamp.pdf; ZOEQU2026-118627-DC.pdf; ZOEQU2026-118628-DC.pdf; ZOEQU2026-118626-DC.pdf; Mina's Kenda Equine Dwarfism- cleared by parentage.pdf; Mina's Kissen the Sky Equine Dwarfism- cleared by parentage.pdf; SPD Log.pdf; Test Results_ZOEQU2026_118626 (Mina's Fashion (MM18_15))_Equine Dwarfism.pdf

From: Marina Van Der Merwe <wooloom12@yahoo.com>
Sent: Tuesday, 01 September 2026 08:33
To: SA MINIATURE HORSE ASSOCIATION <saminiature@gmail.com>
Subject: Fw: Order ZO2026-11692

[Yahoo Mail: Search, organise, conquer](#)

----- Forwarded message -----

From: "ZooOmics" <info@zoomics.co.za>
To: "Marina Van Der Merwe" <wooloom12@yahoo.com>
Cc: "Christiaan Labuschagne" <Christiaan.Labuschagne@inqababiotec.co.za>, "Catherine Greenslade" <Catherine.Greenslade@zoomics.co.za>, "Candice Jooste" <Candice.Jooste@zoomics.co.za>, "ibsaadmin@inqababiotec.co.za" <ibsaadmin@inqababiotec.co.za>
Sent: Tue, 1 Sept 2026 at 8:25 am
Subject: Re: Order ZO2026-11692

Dear Marina,

Thank you for choosing ZooOmics™ for your animal genetic services.

Please see attached the following results to complete order ZO2026-11692:

1. 2 x Parentage Certificates
2. 1 x SPD Log
3. 3 x DNA Profile Certificates
4. 2 x Cleared By Parentage Certificates
5. 1 x Equine Dwarfism Report

Should you have any questions, please do not hesitate to contact us.

Kind regards,



Seyuri Rajaruthnam

Laboratory Technician and Analyst

ZooOmics™

529 Justice Mahomed Street

Muckleneuk, Pretoria

Phone: 071 493 2137

E-mail: info@zoomics.co.za

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From: ZooOmics <info@zoomics.co.za>

Sent: Thursday, August 27, 2026 10:26 AM

To: Marina Van Der Merwe <wooloom12@yahoo.com>

Cc: Christiaan Labuschagne <Christiaan.Labuschagne@inqababiotec.co.za>; Catherine Greenslade <Catherine.Greenslade@zoomics.co.za>; Candice Jooste <Candice.Jooste@zoomics.co.za>

Subject: Re: Order ZO2026-11692

Dear Mina's Mini's,

Thank you for providing us with the certificates of the parents and for your prompt response.

While updating the previous quotation, we realised that we had inadvertently quoted you for donkey DNA profiling instead of equine DNA profiling. Apologies for the oversight and any inconvenience that may have resulted.

Please see the herein attached updated proforma invoice.

Should you require anything else, please do not hesitate to contact me.

Kind regards,



Njabulo Mokala

ZooOmics™ : Intern

529 Justice Mahomed Street

Muckleneuk, Pretoria

Phone: 071 493 2137

E-mail: Info@Zoomics.co.za

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From: Candice Jooste <Candice.Jooste@zoomics.co.za>
Sent: Monday, August 24, 2026 14:40
To: Marina Van Der Merwe <wooloom12@yahoo.com>
Cc: Christiaan Labuschagne <Christiaan.Labuschagne@inqababiotec.co.za>; Catherine Greenslade <Catherine.Greenslade@zoomics.co.za>; ZooOmics <info@zoomics.co.za>
Subject: Re: Order ZO2026-11692

Hi Marina,

We have noted Q1500971 as the possible sire for both Sky and Kenda.

Unistel has sent me the dwarfism results they have, but none of the three parents are included in the results that were sent.

Would you like us to add the dwarfism testing for Sky and Kenda?

Kind regards,



Candice Jooste, MSc

Senior Laboratory Scientist and Analyst

ZooOmics™

529 Justice Mahomed Street

Muckleneuk, Pretoria

E-mail: Candice.Jooste@Zoomics.co.za

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From: Marina Van Der Merwe <wooloom12@yahoo.com>
Sent: Monday, August 24, 2026 10:27 AM
To: Candice Jooste <Candice.Jooste@zoomics.co.za>
Subject: Re: Order ZO2026-11692

hello
ZOEQU2026-118628 Mina's Kissen the sky Candidate short please Q1500971

On Friday, August 21, 2026 at 02:09:23 PM GMT+2, Candice Jooste <candice.jooste@zoomics.co.za> wrote:

Hi Marina,

We have all the profiles for the parentage for this order.

Please see the below updated table:

Lab Number	Sample Label	Sample Name	Gender	Date of Birth	Species/Breed	Microchip Number	Registr Num
ZOEQU2026-118626	Mina's Fashion (MM18/15)	Mina's Fashion (MM18/15)	Female	2018/09/22	Miniature Horse	-	MM1
ZOEQU2026-118627	Mina's Kenda (MM26/01)	Mina's Kenda (MM26/01)	Female	2026/02/03	Miniature Horse	-	MM2
ZOEQU2026-118628	Mina's Kissen the sky (MM26/02)	Mina's Kissen the sky (MM26/02)	Female	2026/05/12	Miniature Horse	-	MM2

The clear by parentage was not added to the quote for the dwarfism because we would need the parents' dwarfism results. If you have those results, please could you send it through as we can add the clear by parentage costs to the quote.

Kind regards,



Candice Jooste, MSc

Senior Laboratory Scientist and Analyst

ZooOmics™

529 Justice Mahomed Street

Muckleneuk, Pretoria

E-mail: Candice.Jooste@Zoomics.co.za

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From: ZooOmics <info@zoomics.co.za>
Sent: Friday, August 21, 2026 1:11 PM
To: wooloom12@yahoo.com <wooloom12@yahoo.com>
Cc: Christiaan Labuschagne <Christiaan.Labuschagne@inqababiotec.co.za>; Catherine Greenslade <Catherine.Greenslade@zoomics.co.za>; Candice Jooste <Candice.Jooste@zoomics.co.za>
Subject: Order ZO2026-11692

Dear Mina's Mini's,

Thank you for choosing ZooOmics™ for your animal genetic services.

The following samples (3) have been received and are being processed. **Results will be made available from between 7 – 14 working days from date of receipt of this email. Results are only released subject to payment.**

Please confirm that the details below are correct.

Please note the following

- We do not have the DNA profile of the samples highlighted in blue. We have requested them from Unistel.
- We did not quote you for clear by parentage. Should you want us to proceed we will need the certificate proving that the parents of the samples are clear of dwarfism.

Lab Number	Sample Label	Sample Name	Gender	Date of Birth	Species/Breed	Microchip Number	Regi Nu
ZOEQU2026-118626	Mina's Fashion (MM18/15)	Mina's Fashion (MM18/15)	Female	2018-09-22	Miniature Horse	-	MM
ZOEQU2026-118627	Mina's Kenda (MM26/01)	Mina's Kenda (MM26/01)	Female	2026-02-03	Miniature Horse	-	MM
ZOEQU2026-118628	Mina's Kissen the sky (MM26/02)	Mina's Kissen the sky (MM26/02)	Female	2026-05-12	Miniature Horse	-	MM

Please find attached the Pro-Forma Invoice for animal genetic testing.

When making payment please use the following reference: **ZO2026-11692**

Please contact info@ZooOmics.co.za when submitting a proof of payment or for enquiries regarding sample processing.

Should you require anything else, please do not hesitate to contact me.

Kind regards,



Njabulo Mokala

ZooOmics™ : Intern

529 Justice Mahomed Street

Muckleneuk, Pretoria

Phone: 071 493 2137

E-mail: Info@Zooomics.co.za

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DNA PARENTAGE CERTIFICATE

Test Animal

Animal ID/Name	Mina's Kenda (MM26/01)
Microchip Number	-
DNA Profile Certificate Number	ZOEQU2026-118627-DC

qualifies^{*} as the offspring of

Male

Animal ID/Name	JORDANS KELEIDOSCOPE
Microchip Number	-
DNA Profile Certificate Number	503106 (Q1500971)

&

Female

Animal ID/Name	OOSIE SILVER
Microchip Number	-
DNA Profile Certificate Number	U176353

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

01 September 2026

Date

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- 7** The DNA profile is based on a preliminary marker panel that is subject to modification pending additional genetic information;
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DNA PARENTAGE CERTIFICATE

Test Animal

Animal ID/Name	Mina's Kissen the sky (MM26/02)
Microchip Number	-
DNA Profile Certificate Number	ZOEQU2026-118628-DC

qualifies^{*} as the offspring of

Male

Animal ID/Name	JORDANS KELEIDOSCOPE
Microchip Number	-
DNA Profile Certificate Number	503106 (Q1500971)

&

Female

Animal ID/Name	HART-E IMAGINATION
Microchip Number	-
DNA Profile Certificate Number	U230579

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

01 September 2026

Date

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DNA PROFILE CERTIFICATE

General Information:

Test Animal	
ANIMAL ID/NAME	Mina's Kenda (MM26/01)
MICROCHIP NUMBER	-
SPECIES	Equine
GENDER	Female
OWNER	Mina's Mini's
LAB. NO	ZOEQU2026-118627

DNA Profiling Results:

STR Marker	Allele 1	Allele 2
VHL20	M	M
HTG4	M	P
HMS7	M	O
HTG6	J	O
AHT5	J	N
ASB23	I	K
HTG7	K	K
HMS2	H	J
AHT4	H	N
CA425	M	M

STR Marker	Allele 1	Allele 2
TKY374	L	L
TKY297	N	O
HMS6	K	P
ASB2	M	Q
HTG10	L	R
HMS3	M	P
TKY321	I	M
ASB17	F	M
HMS1	J	M

The DNA profile represents the true alleles obtained from STR analysis by capillary electrophoresis.



Dr Christiaan Labuschagne

Genomics Manager

**See disclaimer on reverse side

27 August 2026

Date

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DNA PROFILE CERTIFICATE

General Information:

Test Animal	
ANIMAL ID/NAME	Mina's Kissen the sky (MM26/02)
MICROCHIP NUMBER	-
SPECIES	Equine
GENDER	Female
OWNER	Mina's Mini's
LAB. NO	ZOEQU2026-118628

DNA Profiling Results:

STR Marker	Allele 1	Allele 2
VHL20	L	M
HTG4	M	M
HMS7	L	O
HTG6	O	O
AHT5	J	L
ASB23	J	K
HTG7	K	K
HMS2	I	J
AHT4	H	M
CA425	M	N

STR Marker	Allele 1	Allele 2
TKY374	L	L
TKY297	N	O
HMS6	O	O
ASB2	M	N
HTG10	M	R
HMS3	P	P
TKY321	I	S
ASB17	N	N
HMS1	J	M

The DNA profile represents the true alleles obtained from STR analysis by capillary electrophoresis.



Dr Christiaan Labuschagne

Genomics Manager

****See disclaimer on reverse side**

27 August 2026

Date

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DNA PROFILE CERTIFICATE

General Information:

Test Animal	
ANIMAL ID/NAME	Mina's Fashion (MM18/15)
MICROCHIP NUMBER	-
SPECIES	Equine
GENDER	Female
OWNER	Mina's Mini's
LAB. NO	ZOEQU2026-118626

DNA Profiling Results:

STR Marker	Allele 1	Allele 2
VHL20	M	M
HTG4	O	P
HMS7	N	O
HTG6	G	O
AHT5	N	O
ASB23	J	U
HTG7	K	N
HMS2	H	K
AHT4	J	O
CA425	J	N

STR Marker	Allele 1	Allele 2
TKY374	L	O
TKY297	I	N
HMS6	M	N
ASB2	I	N
HTG10	K	L
HMS3	I	M
TKY321	I	S
ASB17	F	G
HMS1	J	N

The DNA profile represents the true alleles obtained from STR analysis by capillary electrophoresis.



Dr Christiaan Labuschagne

Genomics Manager

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27 August 2026

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CERTIFICATE OF GENETIC TEST

Date: 27/08/2026

Client Name

Mina's Mini's

Equine Name

Mina's Kenda (ZOEQU2026-118627)

Microchip No.

N/A

Registration No.

MMC 26/01

Breed

Miniature Horse

Qualifying Dam

OOSIE SILVER (U176353)

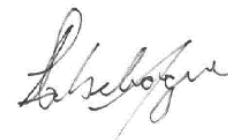
Qualifying Sire

JORDANS KELEIDOSCOPE (Q1500971)

Genetic Test

Equine Dwarfism (D1, D2, D3, D4)

CLEARED BY PARENTAGE



Dr Christiaan Labuschagne
Genomics Manager

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CERTIFICATE OF GENETIC TEST

Date: 27/08/2026

Client Name

Mina's Mini's

Equine Name

Mina's Kissen the Sky (ZOEQU2026-118628)

Microchip No.

N/A

Registration No.

MMC 26/02

Breed

Miniature Horse

Qualifying Dam

HART-E IMAGINATION (U230579)

Qualifying Sire

JORDANS KELEIDOSCOPE (Q1500971)

Genetic Test

Equine Dwarfism (D1, D2, D3, D4)

CLEARED BY PARENTAGE



Dr Christiaan Labuschagne
Genomics Manager

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8. It is the sender's responsibility to obtain permits when sending samples where required;
9. Inqaba Biotechnical Industries Pty Ltd and the divisions thereof 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.

MUTATION ANALYSIS REPORT

Order Information

Name	Mina's Mini's (MIN004)	Print Date	2026-09-01
Telephone No.:	+27 73 110 5896	Date received:	2026-08-21
E-mail address:	wooloom12@yahoo.com	No. samples:	1

Description of Procedure

Dwarfism is a hereditary condition most commonly found in Shetland ponies and miniature horses, and is associated with breathing problems due to a cleft palate, deformed mouths, shortened limbs and bowed forelegs, disproportionately large cranium and shortened neck, protruding eyes, abdominal hernia and a shortened rib cage.

Four mutations (D1, D2, D3, and D4), have been identified in the equine aggrecan (ACAN) gene.

ACAN-D1 (g.95291270del) is a deletion in exon 2 and is predicted to insert a premature stop codon, resulting in failure to produce a functional protein.

ACAN-D2 (g.95284530C>T) is a non-synonymous mutation in exon 6 resulting in a missense mutation predicted to replace the amino acid valine with methionine. The effect of this mutation is less deleterious than those for D1, D3 and D4.

ACAN-D3 (g.95282140C>G) is a single-base missense mutation in exon 7 producing a change of the amino acid alanine to proline. This mutation may change the structure and function of the aggrecan protein.

ACAN-D4 (g.95257480_95257500del) is associated with a 21-base deletion in exon 15 and is predicted to be deleterious.

WT denotes the normal form of the gene, while MUT denotes the mutation. Carrier and mutant states are highlighted in red

Lab No.	Sample ID	Equine Dwarfism			
		g.95291270del (D1)	g.95284530C>T (D2)	g.95282140C>G (D3)	g.95257480_95257500del (D4)
ZOEQU2026/11862 6	Mina's Fashion (MM18/15)	WT/WT (T/T)	WT/WT (C/C)	WT/WT (C/C)	WT/WT



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PARENTAGE DATABASE LOG

The following samples were included in the parentage analysis in either the offspring, sire or dam category (please note that a sample can be present in more than one category). These samples were tested for the purpose of obtaining qualifying parents for the listed offspring. Parentage Certificates were only generated for offspring with qualifying parents. No certificates were generated for offspring with no qualifying parents.

Offspring		Sire		Dam	
Lab Number	Tag Number	Lab Number	Tag Number	Lab Number	Tag Number
ZOEQU2026-118626	Mina's Fashion (MM18/15)	503106 (Q1500971)	*Not Found	176353	SILVER
ZOEQU2026-118627	Mina's Kenda (MM26/01)			230579	IMAGINATION
ZOEQU2026-118628	Mina's Kissen the sky (MM26/02)				
Total	3	Total	1	Total	2