

Bianca

From: SA MINIATURE HORSE ASSOCIATION [saminiature@gmail.com]
Sent: 20 September 2026 07:54 AM
To: Bianca
Subject: Fw: Results Batch 262485H
Attachments: Final Dwarfism Report 262485H 2026-09-01 V1.pdf; Final Batch Details Report 262485H 2026-09-01 V1.pdf; Final Parentage Certificate Report 262485H 2026-09-01 V1.pdf

From: Unistel Pets <pets@unistelmedical.co.za>
Sent: Friday, 18 September 2026 14:50
To: crystal@additup.co.za <crystal@additup.co.za>; oppermankleinspan@gmail.com <oppermankleinspan@gmail.com>
Cc: SA MINIATURE HORSE ASSOCIATION <saminiature@gmail.com>
Subject: Results Batch 262485H

Good afternoon,

I hope you are well.

Attached please find the results for **Batch 262485H**.

We trust that all information provided to us is complete and correct. We can only provide results with the information we currently have on record. Some STR profiles used in parentage analysis may have been sourced from another laboratory. While every reasonable effort is made to prevent incorrect results, Unistel Medical Laboratories does not accept any responsibility for parentage mismatches due to incompatible marker scoring strategies between laboratories.

We appreciate your support and look forward to working together again soon.

Wishing you a wonderful day.

Kind Regards,
Lerato Ngakane
Assistant Manager
Animal Genetics



Human and Animal Genetic Testing

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Suite 13, Private Bag X22, Tygervally, 7536
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Batch Detail Report

Batch : 262485H

Owner : Crystal Opperman

Farm : Oppies Kleinspan

Account :

Via : SA MINIATURE HORSE BRDRS SOC.

Invoice To : Owner

Test Method : UMLSOPUCATequine01;

UMLSOPUCAThorse02

Job No : 175893

Created: 2026-09-01

Sample	Animal	Species	Breed	Tissue	Dam	Sire	Test Results		Invoice
							PAR	DWA	
262485H001	OPPIES KLEINSPAN KOSIE (M)	HORSE	S.A. MINIATURE HORSE (96)	Hair	DOEMEY SCARLET (F,96) (Valid)	HART-E NEXUS (M,96) (Valid)	Dam Valid, Sire Valid	D1: CLEAR D2: CLEAR D3:* CLEAR D4: CLEAR	PD280826BS
262485H002	OPPIES KLEINSPAN NEELSIE (M)	HORSE	S.A. MINIATURE HORSE (96)	Hair	DOEMEY SCARLET (F,96) (Valid)	HART-E NEXUS (M,96) (Valid)	Dam Valid, Sire Valid	D1: CLEAR D2: CLEAR D3:* CLEAR D4: CLEAR	PD280826BS

Report Date: 14-Sep-2026 12:39

Disclaimer

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Address: Office Block 1, De Tijger Park, Hannes Louw Drive, Parow North, Cape Town, 7500, RSA
Postal Address: Postnet Suite 13, Private Bag X22, Tygervally, 7536, RSA
Tel: +27 (21) 021 007 5616
Directors: HC Viljoen (Chairman), L Theart (CEO), B Grindlay-Whieldon, M Senekal, HJ Pearce
Unistel Medical Laboratories (Pty) Ltd (Reg.No:- 1998/021075/07)



DNA Parentage Report

Batch : 262485H
Owner : Crystal Opperman
Farm : Oppies Kleinspan
Account :
Via : SA MINIATURE HORSE BRDRS SOC.
Invoice To : Owner
Test Method : UMLSOPUCATequine01;
UMLSOPUCATHorse02
Job No : 175893

Created: 2026-09-01

ANIMAL		Marker	Allele1	Allele2	SIRE:	Nominated Sire Valid
Animal Name	OPPIES KLEINSPAN KOSIE	VHL20	M	Q	Animal Name	HART-E NEXUS
Tag No		HTG4	M	M	Tag No	
Sample #	262485H001	HMS7	L	Q	Sample #	408467
Animal Species	HORSE	HTG6	O	O	Animal Species	HORSE
Animal Breed	S.A. Miniature Horse	AHT5	N	N	Animal Breed	S.A. Miniature Horse
Registration Id	13485115	HMS6	K	P	Registration Id	
Birth Date	2024-11-25	ASB23	S	S	Birth Date	2018-01-16
Microchip #		ASB2	M	M	Microchip #	
Tissue Type	Hair	HTG10	K	O	Tissue Type	Hair
Gender	Male	HTG7	K	K	DAM: Nominated Dam Valid	
		HMS2	K	K	Animal Name	DOEMEY SCARLET
		ASB17	N	R	Tag No	
		LEX3	L	L	Sample #	611280
		HMS1	M	M	Animal Species	HORSE
		CA425	N	N	Animal Breed	S.A. Miniature Horse
					Registration Id	
					Birth Date	2020-01-06
					Microchip #	
					Tissue Type	Hair

Report Date: 11-Sep-2026 14:08

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DNA Parentage Report

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Owner : Crystal Opperman
Farm : Oppies Kleinspan
Account :
Via : SA MINIATURE HORSE BRDRS SOC.
Invoice To : Owner
Test Method : UMLSOPUCATequine01;
UMLSOPUCATHorse02
Job No : 175893

Created: 2026-09-01

ANIMAL		Marker	Allele1	Allele2	SIRE:	Nominated Sire Valid
Animal Name	OPPIES KLEINSPAN NEELSIE	VHL20	M	M	Animal Name	HART-E NEXUS
Tag No		HTG4	M	M	Tag No	
Sample #	262485H002	HMS7	M	O	Sample #	408467
Animal Species	HORSE	HTG6	O	O	Animal Species	HORSE
Animal Breed	S.A. Miniature Horse	AHT5	N	N	Animal Breed	S.A. Miniature Horse
Registration Id	13485123	HMS6	O	P	Registration Id	
Birth Date	2025-11-13	ASB23	J	S	Birth Date	2018-01-16
Microchip #		ASB2	M	M	Microchip #	
Tissue Type	Hair	HTG10	K	O	Tissue Type	Hair
Gender	Male	HTG7	K	K	DAM: Nominated Dam Valid	
		HMS2	K	K	Animal Name	DOEMEY SCARLET
		ASB17	M	N	Tag No	
		LEX3	M	M	Sample #	611280
		HMS1	I	M	Animal Species	HORSE
		CA425	N	N	Animal Breed	S.A. Miniature Horse
					Registration Id	
					Birth Date	2020-01-06
					Microchip #	
					Tissue Type	Hair

Report Date: 11-Sep-2026 14:08

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Unistel Medical Laboratories

Genetic Report

Aggrecan Chondrodysplasia-Like Dwarfism



Report

Created: 2026-09-01



Name: OPPIES KLEINSPAN KOSIE

Registration ID:

Date of birth: 2024-11-25

Gender: Male

Breed: S.A. Miniature Horse

Laboratory number: 262485H001

Client name: Opperman, C

TEST DESCRIPTION

Chondrodysplasia-like dwarfism (ACAN dwarfism) is a recessive genetic disorder characterised by extreme reduction in size, as well as conformational abnormalities, such as globular heads, a shortened torso/ neck, enlarged joints, bowed fore legs, a cleft palate and underbite. In miniature horses, the condition has been causatively linked with four different mutations in the Aggrecan (ACAN) gene. The first, ACAN02(D1), is a single base pair deletion, and is lethal when homozygous, or in combination with any of the other mutations. Combinations of the ACAN06 (D2), ACAN07(D3*) or ACAN15 (D4) mutations are generally not lethal, but will produce dwarf foals. As carriers of any of these mutations would appear phenotypically normal, it is important to test breeding stock to avoid pairings that might result in either a dwarf, or an aborted foetus.

	D1	D2	D3*	D4
TEST RESULT:	CLEAR	CLEAR	CLEAR	CLEAR

BREEDING IMPLICATIONS OF TEST RESULT:

This horse has two copies of the normal allele for the D1, D2, D3* and D4 ACAN loci and will neither develop nor pass on the specified ACAN mutations to its offspring.

Report Date: 14-Sep-2026 12:39

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Unistel Medical Laboratories

Genetic Report

Aggrecan Chondrodysplasia-Like Dwarfism



Report

Created: 2026-09-01



Name: OPIES KLEINSPAN NEELSIE

Registration ID:

Date of birth: 2025-11-13

Gender: Male

Breed: S.A. Miniature Horse

Laboratory number: 262485H002

Client name: Opperman, C

TEST DESCRIPTION

Chondrodysplasia-like dwarfism (ACAN dwarfism) is a recessive genetic disorder characterised by extreme reduction in size, as well as conformational abnormalities, such as globular heads, a shortened torso/ neck, enlarged joints, bowed fore legs, a cleft palate and underbite. In miniature horses, the condition has been causatively linked with four different mutations in the Aggrecan (ACAN) gene. The first, ACAN02(D1), is a single base pair deletion, and is lethal when homozygous, or in combination with any of the other mutations. Combinations of the ACAN06 (D2), ACAN07(D3*) or ACAN15 (D4) mutations are generally not lethal, but will produce dwarf foals. As carriers of any of these mutations would appear phenotypically normal, it is important to test breeding stock to avoid pairings that might result in either a dwarf, or an aborted foetus.

D1

D2

D3*

D4

TEST RESULT:

CLEAR

CLEAR

CLEAR

CLEAR

BREEDING IMPLICATIONS OF TEST RESULT:

This horse has two copies of the normal allele for the D1, D2, D3* and D4 ACAN loci and will neither develop nor pass on the specified ACAN mutations to its offspring.

Report Date: 14-Sep-2026 12:39

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