

Zootechnical certificate in accordance with Regulation (EU)2016/1012 for trade in SEMEN of purebred breeding animals of the following species:

(a) bovine species (Bos taurus, Bos indicus, Bubalus bubalis)



Certificate number
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All EU official languages of the zootechnical certificates, including footnotes and notes, are available in EUR-Lex

A. Information on the donor male purebred breeding animal

1. Name of issuing breed society / competent authority

Coöperatie CRV ua, Postbus 454, 6800 AL Arnhem, The Netherlands

Phone : +31 26 389 88 00 Fax : +31 26 389 88 88

Email: coöperatie@crv4all.com

Website: www.cooperatie-crv.nl

2. Name of breeding book

CRV Herd book

3. Name of breed of donor male

Holstein Friesian

4. Class of the main section of the breeding book where donor male is entered

Main Section

5. Breeding book number of donor male NL 637119407

6. Individual identification number for donor mail of the equine species ---

7. Identification of donor male

7.1. System Eartag
7.2. Individual identification number NL 637119407
7.3. Animal health identification number
7.4. Name Delta Horizon

8. Identity verification

8.1. Method DNA
8.2. Result Verified
202301305 (VHL)

9. Date (dd.mm.yyyy) and country of birth of donor male 21.10.2022 The Netherlands

10. Name and address of breeder CRV Giekerk - opfok, Gytsjerk

11. Name and address of owner CRV Afd Foktechniek, Arnhem

12. The pedigree of the donor male

12.1. Sire Delta Fast Lane
NL 542034572 Main Section

12.1.1. Paternal Grandsire
Peak Remington
US 3147840216 Main Section

12.1.2. Paternal Granddam
Delta Maan
BE 821801920 Main Section

12.2. Dam Wedder Delta Norali
NL 577105663 Main Section

12.2.1. Maternal Grandsire
Vh Hedelund Charley Crown
DK 259980 Main Section

12.2.2. Maternal Granddam
Delta Nisha
NL 699047999 Main Section

13. Additional information

13.1 Results of performance testing (see other page/attachment)

13.2 Up-to-date results of the genetic evaluation carried out last on (dd.mm.yyyy) 09.08.2023 (Male); 14.08.2023 (Female)

13.3 Genetic defects and genetic peculiarities of the animal in relation to the breeding programme (see other page/attachment)

13.4 Other relevant information on purebred breeding animal (see other page/attachment)

B. Information on SEMEN: See attachment

14. Validation

14.4. Signature

14.1. Done at Arnhem
14.2. on 27.09.2023
14.3. Name and capacity of the signatory J.A.L. BUITING, MANAGER HERDBOOK

Animal

7.4 Name : Delta Horizon
 6 Number : NL 637119407
 3 Breed : Holstein Friesian
 4 Section : Main
 5 Sex : Male
 Milkabil. : 98
 13.3 RFF POF CVF CDF BLF
 7 Ident. : Eartag
 8 Ped.verif : DNA
 9 Born : 21.10.2022
 Country : The Netherlands

13.1 lb Base %R F T U L M T
 Bv Type : GFw Z23 70 98 102 108 105 107
 lb Base %R %F %P KgF KgP
 Bv prod. : GFw Z23 70 +1511 +0.18 +0.25 +83 +78

Sire

Name : Delta Fast Lane
 Number : NL 542034572
 Section : Main
 RFF POF CVF CDF LRF
 Ped.verif : DNA BP +376
 Born : 02.11.2020
 Calv.eas. : Easy

Milkabil. : 99
 lb Base %R F T U L M T
 Bv Type : GFw Z23 73 101 103 109 109 110
 lb Base %R %F %P KgF KgP
 Bv prod. : GFw Z23 72 +716 +0.53 +0.24 +81 +48

Paternal grand sire

Name : Peak Remington
 Number : US 3147840216
 Section : Main
 Bv Type : GFw Z23 93 101 103 109 97 104
 Bv prod. : GFw Z23 91 +244 +0.07 +0.15 +17 +22
 S : Welcome Altareserve ET
 D : Pine-Tree Sirius ET
 US 3129340935
 US 3132116854

Paternal grand dam

Name : Delta Maan
 Number : BE 821801920
 Section : Main
 Bv Type : GFw Z23 82 102 102 102 107 106
 Bv prod. : GFw Z23 84 +378 +0.14 +0.11 +29 +23
 1st lac : 2.09 283 4730 4.70 4.08 222 193
 Best lac : 3.10 250C 6726 4.48 3.63 302 244
 Lifetime : 2 533 11456 4.57 3.82 524 437
 S : Delta Lustrum
 D : Wild Moncherry Wilder Moncherr
 NL 660160281
 DE 0539619391

Dam

Name : Wedder Delta Norali
 Number : NL 577105663
 Section : Main
 RFF POF CVF CDF LRF
 Ped.verif : DNA BP +366
 Born : 26.02.2020

lb Base %R F T U L M T
 Bv Type : GFw Z23 79 99 100 106 103 104
 Type cl. : Z 81 86 86 83 84

lb Base %R %F %P KgF KgP
 Bv prod. : GFw Z23 82 +1498 -0.12 +0.06 +51 +58
 Age Days KgM %F %P KgF KgP
 Prod :
 Lifetime :

13.2 Publication date breeding values:
 - Male : 09.08.2023
 - Female : 14.08.2023

10 Breeder : CRV Giekerk - opfok
 Gytjerik
 11 Owner : CRV Afid Foktechniek
 Arnhem

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Zootechnical certificate in accordance with Regulation (EU) 2016/1012 for trade in SEMEN of purebred breeding animals of the bovine species

Maternal grand sire

Name : Vh Hedelund Charley Crown
 Number : DK 259980
 Section : Main
 Bv Type : GFw Z23 89 95 98 106 100 101
 Bv prod. : GFw Z23 90 +1269 -0.02 -0.08 +52 +36
 S : DG Charley
 D :
 DK 4240504442

Maternal grand dam

Name : Delta Nisha
 Number : NL 699047999
 Section : Main
 Bv Type : GFw Z23 83 102 100 105 102 104
 Bv prod. : GFw Z23 86 +608 +0.04 +0.24 +30 +44
 1st lac : 2.08 305 13378 4.17 3.77 558 504
 1st lac : 2.08 305 13378 4.17 3.77 558 504
 Lifetime : 1 423 16800 4.39 3.90 738 655
 S : Delta Magister
 D : Nisa 1
 NL 934274522
 NL 729539470

14.1 Place : Arnhem
 14.2 Date : 27.09.2023
 14.3 Name : J.A.L. Buiting MBA Manager Herdbook
 14.4 Signature :




NL 637119407

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dr. van haeringen laboratorium b.v.

a VHLGenetics company

Customer number 5

Analysis Certificate

Animal data

Name: HORIZON
Date of birth: 21.10.2022
Sexe: Male
Reg. nr.: NL 637119407
Breed: Holstein Friesian

Sample data

VHL_ID: R261546
Test ID-nr: 755651 1
Material: Hair

Parent data

Dam: NL 577105663 / VHL_ID: R760572 / Wedder Delta Norali
Sire: NL 542034572 / VHL_ID: R680573 / Delta Fast Lane

Parentage: Parentage qualifies, based on DNA-typing.

DNA markers:

TGLA227	87	/	89	INRA23	214	/	
BM2113	125	/	135	BM1818	262	/	266
TGLA53	158	/	160	ETH3	117	/	
ETH10	219	/	225	ETH225	148	/	
SPS115	248	/		BM1824	178	/	188
SPS113	151	/		CSRM60	92	/	102
RM067	92	/		MGTG4B	141	/	
TGLA126	115	/	117	CSSM66	189	/	
TGLA122	143	/	163	ILSTS006	294	/	

H. Tolsma, DVM
Managing director



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(Certificate nr: R119166/Date of issue: 27.09.2023)

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Pedigree

799 Delta Nisha

CRV
Postbus 454
6800 AL ARNHEM
Tel: 026-3898700

Postbus 454, 6800 AL Arnhem

406051 Melkveehouderij Van Gastel

Processing date 02/10/23

© CRV Arnhem

Animal

Name :Delta Nisha RF- PO- CD- BL- MF-
Reg.no :NL 699047999 Born :14/09/17
Id. no. :799 Sex :F
Breed :100%HF Color :BW

Conformation Section :Main(HF)
M/yr Bas %r F Ds U F&L M Tot
GFw8/23 Z23 83 102 100 105 102 104
Age St Tot
2.11 Z 86 87 86 87 87

Production
M/yr Bas %r KgM %fat %prot KgF KgP Inet
GFw8/23 Z23 86 +608 +0.04 +0.24 +30 +44 +252
Age Days
2.08 423 16800 4.39 3.90 738 655
13378 4.17 3.77 558 504
Total(1) 423 16800 4.39 3.90 738 655

Sire

Name :Delta Magister RF- PO- CV- CD- LR-
Reg.no :NL 934274522 Born :01/08/15
Breed :100%HF Color :BW
AI-code:941687

Milk. Sp. :107 Calv.eas. :105 Section :Main(HF)
Conformation NVI :43
M/yr Bas %r F Ds U F&L M Tot
GFw8/23 Z23 99 104 101 106 96 102

Production
M/yr Bas %r KgM %fat %prot KgF KgP Inet
GFw8/23 Z23 99 -213 -0.12 +0.14 -19 +5 -23

Paternal grandsire

Name :Flevo Genetics Whatsapp RF+ PO- CV- CD- LR-
Reg.no :NL 949247382 Born :02/04/13
Section :Main(HF)
Milk. Sp. :99 Calv.eas. :110 NVI :2

GFw8/23 Z23 99 96 98 107 93 99
GFw8/23 Z23 99 -1357 +0.35 +0.16 -31 -35 -227

Paternal granddam

Name :Hedra Delta Magic RF+ CD- BL- DP-
Reg.no :NL 919204434 Born :13/07/13
Section :Main(HF)

GFw8/23 Z23 90 102 98 100 98 99
2.11 Z 84 82 85 83 84
GFw8/23 Z23 93 +1300 -0.44 +0.07 +11 +52 +251
2.09 342 13827 3.82 3.64 528 504
12621 3.74 3.59 472 453
Total(1) 342 13827 3.82 3.64 528 504

Dam

Name :Nisa 1 RF- PO- CD- LR- BL-
Reg.no :NL 729539470 Born :28/12/15
Breed :100%HF Color :BW

Conformation Section :Main(HF)
M/yr Bas %r F Ds U F&L M Tot
GFw8/23 Z23 84 95 97 98 100 97
Age St Tot
2.09 Z 84 83 77 79 80

Production
M/yr Bas %r KgM %fat %prot KgF KgP Inet
GFw8/23 Z23 89 -7 +0.43 +0.34 +38 +30 +201
Age Days
2.03 362 10951 4.47 3.98 489 435
9575 4.35 3.90 417 373
3.05 429 15525 4.44 3.88 689 602
11852 4.22 3.70 500 439
4.08 392 12628 5.07 4.34 640 548
10447 5.02 4.31 525 450
5.10 475 14428 4.78 4.22 690 609
11007 4.60 4.08 506 449
7.04 152CL 7607 4.31 3.46 328 263
Total(5) 1810 61139 4.64 4.02 2836 2457

Maternal grandsire

Name :Het Meer Bravo RF- PO- CV- CD- LR-
Reg.no :NL 755139693 Born :08/04/14
Section :Main(HF)
Milk. Sp. :92 Calv.eas. :106 NVI :159

GFw8/23 Z23 99 97 97 98 99 97
GFw8/23 Z23 99 +362 +0.17 +0.16 +31 +27 +184

Maternal granddam

Name :Delta Nisa CD- BL- DP-
Reg.no :NL 925616948 Born :06/12/13
Section :Main(HF)

GFw8/23 Z23 86 92 94 101 100 97
3.00 Z 78 81 76 85 80
GFw8/23 Z23 91 -225 +0.03 +0.06 -7 -3 -34
2.08 679 20672 4.23 3.94 874 814
9726 4.23 3.80 412 369
Total(1) 679 20672 4.23 3.94 874 814

Reproduction status

Breeder :408365 Van Kasteren Melkvee VOF
Boxtel

Applicant :Afd Foktechniek Ben Aerts
Arnhem



dr. van haeringen laboratorium b.v.

a VHLGenetics company

CRV BV
Postbus 454
6800 AL ARNHEM
Customer number 25296

Analysis Certificate

Animal data

Name: HORIZON
Date of birth: 21.10.2022
Sex: Male
Reg. nr.: NL 637119407
Breed: Holstein Friesian

Sample data

VHL_ID: R261546
Test ID-nr: 755651 2
Material: Hair

Dam: NL 577105663 / VHL_ID: R760572 / Wedder Delta Norali
Sire: NL 542034572 / VHL_ID: R680573 / Delta Fast Lane

R870 - Brachyspina Mut.Test - Date of test: 05.10.2023

Testresult: NO CARRIER

H. Tolsma, DVM
Managing director

R870 - Brachyspina Mut.Test

Explanation about the result:

NO CARRIER: The animal has two normal alleles and is therefore not affected by this specific variant. The animal will not develop the described clinical features due to this variant. When used in breeding, a healthy allele will be passed to all offspring.

CARRIER: The animal is a carrier; it has one normal and one affected allele. The animal will not develop the described clinical features due to this variant. In breeding, there is a 50% chance for each offspring that it will receive an affected allele.

AFFECTED: The animal is affected; it has two affected alleles. The animal will most likely develop the described clinical features due to this variant. When used in breeding, all offspring will receive an affected allele.

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(Certificate nr: R119417/Date of issue: 05.10.2023)

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Retouradres Postbus 454, 6800 AL Arnhem

To the competent breeders' Association

2 augustus 2023

Certificate of freedom from cloning for breeding cattle

It is hereby confirmed that the animal listed is not the offspring of clones based on the first three generations (parents, grandparents and great-grandparents).

International ID	NLD Reg. Nr.	Name	Shortname
HOL840M000637119407	NL 637119407	DELTA HORIZON	HORIZON

Place: Arnhem, The Netherlands
Date: 2 augustus 2023

Name in block letters:
J. Veldhuisen, CRV B.V.

