



GE ALL TRAITS

GENETIC EVALUATION ALL TRAITS - CSV FORMAT

EFFECTIVE APRIL 2023

UPDATED DECEMBER 2022

<u>FIELD</u>	<u>CONTENT</u>	<u>MAX LENGTH</u>	<u>TYPE</u>	<u>COMMENTS</u>	<u>INTERBULL TRAIT</u>	<u>INTERBULL CODE</u>
1	REGISTRATION NUMBER	18	A/N			
2	REGISTERED NAME	50	A/N			
3	BIRTH DATE	8	D	YYYYMMDD		
4	GE RUN	4	N	YYMM		
5	GENOTYPE PANEL DENSITY	5	A/N	NOTE 4		
6	SIRE REGISTRATION NUMBER	18	A/N			
7	DAM REGISTRATION NUMBER	18	A/N			
8	LIFETIME PERFORMANCE INDEX (LPI) OFFICIAL CODE	1	N	NOTE 1		
9	LPI RELIABILITY	2	N			
10	LPI	5	N			
11	LPI PRODUCTION COMPONENT RELIABILITY	2	N			
12	LPI PRODUCTION COMPONENT	5	N			
13	LPI DURABILITY COMPONENT RELIABILITY	2	N			
14	LPI DURABILITY COMPONENT	5	N			
15	LPI HEALTH & FERTILITY COMPONENT RELIABILITY	2	N			
16	LPI HEALTH & FERTILITY COMPONENT	5	N			
17	Pro\$	5	N			
18	PRODUCTION OFFICIAL CODE	1	N	NOTE 1		
19	MILK RELIABILITY	2	N		MILK	mil
20	MILK	5	N			
21	FAT RELIABILITY	2	N		FAT	fat
22	FAT	4	N			
23	PROTEIN RELIABILITY	2	N		PROTEIN	pro
24	PROTEIN	4	N			
25	FAT PERCENT RELIABILITY	2	N			
26	FAT PERCENT	5	N	NOTE 2		
27	PROTEIN PERCENT RELIABILITY	2	N			
28	PROTEIN PERCENT	5	N	NOTE 2		
29	LACTATION PERSISTENCY (LP) OFFICIAL CODE	1	N	NOTE 1		
30	LP RELIABILITY	2	N			
31	LP	3	N			
32	SOMATIC CELL SCORE (SCS) OFFICIAL CODE	1	N	NOTE 1		
33	SCS RELIABILITY	2	N			
34	SCS	3	N		SOMATIC CELL	scs
35	CALVING ABILITY (CA) OFFICIAL CODE	1	N	NOTE 1		
36	CA RELIABILITY	2	N			
37	CA	3	N			
38	DAUGHTER CALVING ABILITY (DCA) OFFICIAL CODE	1	N	NOTE 1		
39	DCA RELIABILITY	2	N			
40	DCA	3	N			
41	HERD LIFE (HL) OFFICIAL CODE	1	N	NOTE 1		
42	HL RELIABILITY	2	N			
43	HL	3	N			
44	MILKING SPEED (MSP) OFFICIAL CODE	1	N	NOTE 1		
45	MSP RELIABILITY	2	N			
46	MSP	3	N		MILKABILITY	msp
47	MILKING TEMPERAMENT (MT) OFFICIAL CODE	1	N	NOTE 1		
48	MT RELIABILITY	2	N			
49	MT	3	N		TEMPERAMENT	tem
50	DAUGHTER FERTILITY (DF) OFFICIAL CODE	1	N	NOTE 1		
51	DF RELIABILITY	2	N			
52	DF	3	N			
53	BODY CONDITION SCORE (BCS) OFFICIAL CODE	1	N	NOTE 1		
54	BCS RELIABILITY	2	N			
55	BCS	3	N		BODY CONDITION SCORE	bcs
56	MASTITIS RESISTANCE (MR) OFFICIAL CODE	1	N	NOTE 1		
57	MR RELIABILITY	2	N			
58	MR	3	N		CLINICAL MASTITIS	mas
59	METABOLIC DISEASE RESISTANCE (MDR) OFFICIAL CODE	1	N	NOTE 1		
60	MDR RELIABILITY	2	N			
61	MDR	3	N			
62	HOOF HEALTH (HH) OFFICIAL CODE	1	N	NOTE 1		
63	HH RELIABILITY	2	N			
64	HH	3	N			
65	FEED EFFICIENCY (FE) OFFICIAL CODE	1	N	NOTE 1		
66	FE RELIABILITY	2	N			
67	FE	3	N			
68	METHANE EFFICIENCY (ME) OFFICIAL CODE	1	N	NOTE 1		
69	ME RELIABILITY	2	N			
70	ME	3	N			
71	BODY MAINTENANCE REQUIREMENTS (BMR) OFFICIAL CODE	1	N	NOTE 1		
72	BMR RELIABILITY	2	N			
73	BMR	3	N			



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74	CONFORMATION OFFICIAL CODE	1	N	NOTE 1		
75	CONFORMATION RELIABILITY	2	N			
76	CONFORMATION	3	N		OVERALL CONFORMATION	ocs
77	RUMP RELIABILITY	2	N			
78	RUMP	3	N			
79	MAMMARY SYSTEM RELIABILITY	2	N			
80	MAMMARY SYSTEM	3	N		OVERALL UDDER SCORE	ous
81	FEET & LEGS/MOBILITY RELIABILITY	2	N			
82	FEET & LEGS/MOBILITY	3	N			
83	FOOT RELIABILITY	2	N			
84	FOOT	3	N			
85	DAIRY STRENGTH RELIABILITY	2	N			
86	DAIRY STRENGTH	3	N			
87	RUMP ANGLE RELIABILITY	2	N			
88	RUMP ANGLE	3	N		RUMP ANGLE	ran
89	RUMP ANGLE ALPHA	1	A/N	NOTE 3		
90	PIN WIDTH RELIABILITY	2	N			
91	PIN WIDTH	3	N		RUMP WIDTH	rwi
92	LOIN STRENGTH RELIABILITY	2	N			
93	LOIN STRENGTH	3	N			
94	THURL PLACEMENT RELIABILITY	2	N			
95	THURL PLACEMENT	3	N			
96	THURL PLACEMENT ALPHA	1	A/N	NOTE 3		
97	UDDER FLOOR RELIABILITY	2	N			
98	UDDER FLOOR	3	N			
99	UDDER FLOOR ALPHA	1	A/N	NOTE 3		
100	UDDER DEPTH RELIABILITY	2	N			
101	UDDER DEPTH	3	N		UDDER DEPTH	ude
102	UDDER DEPTH ALPHA	1	A/N	NOTE 3		
103	UDDER TEXTURE RELIABILITY	2	N			
104	UDDER TEXTURE	3	N			
105	MEDIAN SUSPENSORY RELIABILITY	2	N			
106	MEDIAN SUSPENSORY	3	N		UDDER SUPPORT	usu
107	FORE ATTACHMENT RELIABILITY	2	N			
108	FORE ATTACHMENT	3	N		FORE UDDER ATTACHMENT	fua
109	FORE TEAT PLACEMENT RELIABILITY	2	N			
110	FORE TEAT PLACEMENT	3	N		FRONT TEAT PLACEMENT	ftp
111	FORE TEAT PLACEMENT ALPHA	1	A/N	NOTE 3		
112	REAR ATTACHMENT HEIGHT RELIABILITY	2	N			
113	REAR ATTACHMENT HEIGHT	3	N		REAR UDDER HEIGHT	ruh
114	REAR ATTACHMENT WIDTH RELIABILITY	2	N			
115	REAR ATTACHMENT WIDTH	3	N		REAR UDDER WIDTH	ruw
116	REAR TEAT PLACEMENT RELIABILITY	2	N			
117	REAR TEAT PLACEMENT	3	N		REAR TEAT PLACEMENT	rtp
118	REAR TEAT PLACEMENT ALPHA	1	A/N	NOTE 3		
119	TEAT LENGTH RELIABILITY	2	N			
120	TEAT LENGTH	3	N		FRONT TEAT LENGTH	ftl
121	TEAT LENGTH ALPHA	1	A/N	NOTE 3		
122	FOOT ANGLE RELIABILITY	2	N			
123	FOOT ANGLE	3	N		FOOT ANGLE	fan
124	HEEL DEPTH RELIABILITY	2	N			
125	HEEL DEPTH	3	N		HEEL DEPTH / HOOF HEIGHT	hde
126	BONE QUALITY RELIABILITY	2	N			
127	BONE QUALITY	3	N			
128	REAR LEGS SIDE VIEW RELIABILITY	2	N			
129	REAR LEGS SIDE VIEW	3	N		REAR LEG SET	rls
130	REAR LEGS SIDE VIEW ALPHA	1	A/N	NOTE 3		
131	REAR LEGS REAR VIEW RELIABILITY	2	N			
132	REAR LEGS REAR VIEW	3	N		REAR-LEG REAR VIEW	loc
133	FRONT LEGS VIEW RELIABILITY	2	N			
134	FRONT LEGS VIEW	3	N			
135	FRONT LEGS VIEW ALPHA	1	A/N	NOTE 3		
136	LOCOMOTION RELIABILITY	2	N			
137	LOCOMOTION	3	N			
138	STATURE RELIABILITY	2	N			
139	STATURE	3	N		STATURE	sta
140	STATURE ALPHA	1	A/N	NOTE 3		
141	HEIGHT AT FRONT END RELIABILITY	2	N			
142	HEIGHT AT FRONT END	3	N			
143	CHEST WIDTH RELIABILITY	2	N			
144	CHEST WIDTH	3	N		CHEST WIDTH	cwi
145	BODY DEPTH RELIABILITY	2	N			
146	BODY DEPTH	3	N		BODY DEPTH	bde



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147	DAIRY CAPACITY RELIABILITY	2	N			
148	DAIRY CAPACITY	3	N		ANGULARITY	ang
149	DIRECT HERD LIFE (DHI) OFFICIAL CODE	1	N	NOTE 1		
150	DHL RELIABILITY	2	N			
151	DHL	3	N		DIRECT LONGEVITY	dlo
152	INDIRECT HERD LIFE (IHL) OFFICIAL CODE	1	N	NOTE 1		
153	IHL RELIABILITY	2	N			
154	IHL	3	N			
155	CLINICAL MASTITIS 1ST LACTATION (CM-FIRST) OFFICIAL CODE	1	N	NOTE 1		
156	CM-FIRST RELIABILITY	2	N			
157	CM-FIRST	3	N			
158	CLINICAL MASTITIS LATER LACTATIONS (CM-LATER) OFFICIAL CODE	1	N	NOTE 1		
159	CM-LATER RELIABILITY	2	N			
160	CM-LATER	3	N			
161	CLINICAL KETOSIS FIRST LACTATION (CK-FIRST) OFFICIAL CODE	1	N	NOTE 1		
162	CK-FIRST RELIABILITY	2	N			
163	CK-FIRST	3	N			
164	CLINICAL KETOSIS LATER LACTATIONS (CK-LATER) OFFICIAL CODE	1	N	NOTE 1		
165	CK-LATER RELIABILITY	2	N			
166	CK-LATER	3	N			
167	SUB-CLINICAL KETOSIS FIRST LACTATION (SCK-FIRST) OFFICIAL CODE	1	N	NOTE 1		
168	SCK-FIRST RELIABILITY	2	N			
169	SCK-FIRST	3	N			
170	SUB-CLINICAL KETOSIS LATER LACTATIONS (SCK-LATER) OFFICIAL CODE	1	N	NOTE 1		
171	SCK-LATER RELIABILITY	2	N			
172	SCK-LATER	3	N			
173	DISPLACED ABOMASUM FIRST LACTATION (DA-FIRST) OFFICIAL CODE	1	N	NOTE 1		
174	DA-FIRST RELIABILITY	2	N			
175	DA-FIRST	3	N			
176	DISPLACED ABOMASUM LATER LACTATIONS (DA-LATER) OFFICIAL CODE	1	N	NOTE 1		
177	DA-LATER RELIABILITY	2	N			
178	DA-LATER	3	N			
179	NRR HEIFER OFFICIAL CODE	1	N	NOTE 1		
180	NRR HEIFER RELIABILITY	2	N			
181	NRR HEIFER	3	N		HEIFER CONCEPTION	hco
182	NRR COW OFFICIAL CODE	1	N	NOTE 1		
183	NRR COW RELIABILITY	2	N			
184	NRR COW	3	N		COW CONCEPTION 1	cc1
185	CALVING TO FIRST SERVICE (CTFS) OFFICIAL CODE	1	N	NOTE 1		
186	CTFS RELIABILITY	2	N			
187	CTFS	3	N		COW RE-CYCLING	crc
188	FIRST SERVICE TO CONCEPTION-COWS (FSTC-C) OFFICIAL CODE	1	N	NOTE 1		
189	FSTC-C RELIABILITY	2	N			
190	FSTC-C	3	N		COW CONCEPTION 2	cc2
191	DAYS OPEN (DO) OFFICIAL CODE	1	N	NOTE 1		
192	DO RELIABILITY	2	N			
193	DO	3	N		COW INTERVAL MEASURES	int
194	AGE AT FIRST SERVICE (AFS) OFFICIAL CODE	1	N	NOTE 1		
195	AFS RELIABILITY	2	N			
196	AFS	3	N			
197	FIRST SERVICE TO CONCEPTION-HEIFERS (FSTC-H) OFFICIAL CODE	1	N	NOTE 1		
198	FSTC-H RELIABILITY	2	N			
199	FSTC-H	3	N			
200	DIRECT CALVING EASE-PROGENY BORN FROM HEIFERS (DCE-H) OFFICIAL CODE	1	N	NOTE 1		
201	DCE-H RELIABILITY	2	N			
202	DCE-H	3	N		DIRECT CALVING EASE	dce
203	DIRECT CALF SURVIVAL-PROGENY BORN FROM HEIFERS (DCS-H) OFFICIAL CODE	1	N	NOTE 1		
204	DCS-H RELIABILITY	2	N			
205	DCS-H	3	N		DIRECT STILLBIRTH	dsb
206	DIRECT CALVING EASE-PROGENY BORN FROM COWS (DCE-C) OFFICIAL CODE	1	N	NOTE 1		
207	DCE-C RELIABILITY	2	N			
208	DCE-C	3	N			
209	DIRECT CALF SURVIVAL-PROGENY BORN FROM COWS (DCS-C) OFFICIAL CODE	1	N	NOTE 1		
210	DCS-C RELIABILITY	2	N			
211	DCS-C	3	N			
212	CALVING EASE OF DAUGHTERS-FIRST CALVING (MCE-FIRST) OFFICIAL CODE	1	N	NOTE 1		
213	MCE-FIRST RELIABILITY	2	N			
214	MCE-FIRST	3	N		MATERNAL CALVING EASE	mce
215	CALF SURVIVAL AT DAUGHTERS FIRST CALVING (MCS-FIRST) OFFICIAL CODE	1	N	NOTE 1		
216	MCS-FIRST RELIABILITY	2	N			
217	MCS-FIRST	3	N		MATERNAL STILLBIRTH	msb
218	CALVING EASE OF DAUGHTERS-LATER CALVINGS (MCE-LATER) OFFICIAL CODE	1	N	NOTE 1		
219	MCE-LATER RELIABILITY	2	N			



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220	DAUGHT	MCE-LATER	3	N			
221		CALF SURVIVAL AT DAUGHTERS LATER CALVINGS (MCS-LATER) OFFICIAL CODE	1	N	NOTE 1		
222		MCS-LATER RELIABILITY	2	N			
223		MCS-LATER	3	N			
224	GESTATION LENGTH	DIRECT GESTATION LENGTH-PROGENY BORN FROM HEIFERS (DGL-H) OFFICIAL CODE	1	N	NOTE 1		
225		DGL-H RELIABILITY	2	N			
226		DGL-H GEBV	3	N			
227		DIRECT GESTATION LENGTH-PROGENY BORN FROM COWS (DGL-C) OFFICIAL CODE	1	N	NOTE 1		
228		DGL-C RELIABILITY	2	N			
229		DGL-C	3	N			
230		DIGITAL DERMATITIS (DD) OFFICIAL CODE	1	N	NOTE 1		
231		DD RELIABILITY	2	N			
232		DD	3	N			
233		INTERDIGITAL DERMATITIS (ID) OFFICIAL CODE	1	N	NOTE 1		
234		ID RELIABILITY	2	N			
235		ID	3	N			
236		HEEL HORN EROSION (HHE) OFFICIAL CODE	1	N	NOTE 1		
237		HHE RELIABILITY	2	N			
238		HHE	3	N			
239	HOOF HEALTH	SOLE ULCER (SU) OFFICIAL CODE	1	N	NOTE 1		
240		SU RELIABILITY	2	N			
241		SU	3	N			
242		TOE ULCER (TU) OFFICIAL CODE	1	N	NOTE 1		
243		TU RELIABILITY	2	N			
244		TU	3	N			
245		WHITE LINE LESION (WL) OFFICIAL CODE	1	N	NOTE 1		
246		WL RELIABILITY	2	N			
247		WL	3	N			
248		SOLE HEMORRHAGE (SH) OFFICIAL CODE	1	N	NOTE 1		
249		SH RELIABILITY	2	N			
250		SH	3	N			
251		INTERDIGITAL HYPERPLASIA (IH) OFFICIAL CODE	1	N	NOTE 1		
252		IH RELIABILITY	2	N			
253		IH	3	N			
254	FERTILITY DISORDERS	CYSTIC OVARIES (CO) OFFICIAL CODE	1	N	NOTE 1		
255		CO RELIABILITY	2	N			
256		CO	3	N			
257		RETAINED PLACENTA (RPL) OFFICIAL CODE	1	N	NOTE 1		
258		RPL RELIABILITY	2	N			
259		RPL	3	N			
260		METRITIS (MET) OFFICIAL CODE	1	N	NOTE 1		
261		MET RELIABILITY	2	N			
262		MET	3	N			
263		RELEASE DATE	8	D	YYYYMMDD		

FIELD CODES:

- A/N ALPHANUMERIC FIELD
- D DATE FIELD(YYYMMDD)
- N NUMERIC FIELD

GENERAL:

FIELDS WITH MISSING VALUES ARE SET TO BLANK.
 FILE CONTAINS A HEADER ROW
CSV RECORD. END OF RECORD CONTAINS ';

REGISTRATION NUMBER FIELD MADE UP OF FOUR COMPONENTS: BREED CODE(2), COUNTRY CODE(3), SEX CODE(1), REGISTRATION NUMBER(12)

CODES:

SEE "DATA EXCHANGE SYSTEM CODES - BREED AND NATION CODES"
 CDN WEBSITE - DATA FILES - LAYOUTS

REGISTRATION NUMBER:

12 DIGIT ALPHANUMERIC FIELD THAT CONTAINS THE UNIQUE IDENTIFICATION NUMBER ASSIGNED TO THE ANIMAL BY THE RESPECTIVE BREED ASSOCIATION. THE REGISTRATION NUMBER WILL BE LEFT JUSTIFIED IN THE FIELD.

NOTE 1:

- 0 UNOFFICIAL - BULLS ONLY (PRELIMINARY PROOF)
- 1 OFFICIAL
- 2 PARENT AVERAGE / PEDIGREE INDEX
- 3 MACE
- 5 INTERNATIONAL GENOMIC INDEX (IGI)

NOTE 2:

THE FIELD CONTAINS A VALUE WITH 2 DECIMAL PLACES.
 THE ACTUAL "." CHARACTER IS STORED IN THE FILE



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NOTE 3:	ALPHA CODES ARE INCLUDED IN THE FILE AS AN ALPHA CHARACTER AND DO NOT REQUIRE DECODING ALPHA CHARACTER DESCRIPTIONS REMAIN UNCHANGED FROM PREVIOUS DESCRIPTIONS: RUMP ANGLE CODES: H < 0, L > 0 THURL PLACEMENT CODES: B < 0, A > 0 REAR LEGS SIDE VIEW CODES: S < 0, C > 0 UDDER DEPTH CODES: D < 0, S > 0 FRONT TEAT LENGTH CODES: S < 0, L > 0 FRONT TEAT PLACEMENT AND REAR TEAT PLACEMENT CODES: W < 0, C > 0 UDDER FLOOR: T < 0 R > 0 FRONT LEGS VIEW: K < 0 S > 0 STATURE: S < 0, T > 0					
NOTE 4:	LD LOW DENSITY (LESS THAN 50K) MD MEDIUM DENSITY (50K OR HIGHER BUT NOT HD) HD HIGH DENSITY (600K OR HIGHER)					