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 Conversion Factors For Production Traits. Source: INTERBULL 1812
 Converted Canadian Proof = A + (B* Foreign Proof)
 Converted Proof Reliability = PCORR2*Foreign Reliability

breed	country2	amilk	bmilk	afat	bfat	aprot	bprot	pcorr2
GUE	AUS	-134.141	1.2600	-8.028	1.3318	-0.369	1.1808	0.5329
GUE	GBR	-305.500	2.7850	-4.600	2.4220	-7.000	2.7440	0.7225
GUE	NZL	913.442	1.6163	38.076	1.3298	37.016	1.4719	0.4900
GUE	USA	158.600	1.0000	-1.700	1.1230	4.200	1.0850	0.8281

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 Conversion Factors For SCS Traits. Source: INTERBULL 1812
 Converted Canadian Proof = A + (B* Foreign Proof)
 Converted Proof Reliability = SCORR2*Foreign Reliability

breed	country2	a	b	scorr2
GUE	AUS	81.119	0.1841	0.7921
GUE	GBR	101.900	-0.3750	0.7744
GUE	NZL	97.086	8.1814	0.7569
GUE	USA	162.800	-20.8510	0.7744

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 Conversion Factors For Type. Source = INTERBULL MACE 1812
 Converted Canadian Proof = A + (B* Foreign Proof)
 Converted Proof Reliability = TCORR2*Foreign Reliability

country2=AUS

	c	c	f				
	a	o	o		a	b	
	n	u	r		v	v	
b	t	n	t		a	a	
r	r	t	r		l	l	
e	a	r	a		u	u	
e	i	y	i		e	e	
d	t	2	t				
GUE	CONFORMATION	AUS	CONFORMATION		-54.485	0.5486	0.3
4							
GUE	FEET AND LEGS	AUS	OVERALL FEET & LEG		-46.342	0.4687	
GUE	MAMMARY SYSTEM	AUS	OVERALL UDDER SCORE		-118.472	1.1851	
GUE	STATURE	AUS	STATURE		-125.084	1.2279	
GUE	CHEST WIDTH	AUS	CHEST WIDTH		-73.701	0.7399	
GUE	BODY DEPTH	AUS	BODY DEPTH		-103.748	1.0406	
GUE	PIN WIDTH	AUS	RUMP WIDTH		-124.210	1.2373	

GUE	RUMP ANGLE	AUS	RUMP ANGLE	-74.149	0.7339
GUE	FOOT ANGLE	AUS	FOOT ANGLE	-58.595	0.5979
GUE	REAR LEGS SIDE VIEW	AUS	REAR LEG SET	-101.946	0.9990
GUE	REAR LEG REAR VIEW	AUS	REAR LEG REAR VIEW	-90.806	0.9100
GUE	UDDER DEPTH	AUS	UDDER DEPTH	-129.189	1.2972
GUE	MEDIAN SUSPENSORY	AUS	MEDIAN SUSPENSORY	-80.687	0.8106
GUE	FORE ATTACHMENT	AUS	FORE UDDER	-77.681	0.7875
GUE	TEAT PLACEMENT	AUS	FRONT TEAT PLACEMENT	-77.205	0.7740
GUE	TEAT LENGTH	AUS	TEAT LENGTH	-69.722	0.7102
GUE	REAR ATTACHMENT HEIGHT	AUS	REAR UDDER HEIGHT	-88.201	0.8665
GUE	REAR TEAT PLACEMENT	AUS	REAR TEAT PLACEMENT	-68.904	0.7007
GUE	ANGULARITY	AUS	ANGULARITY	-74.683	0.7439

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Conversion Factors For Type. Source = INTERBULL MACE 1812
Converted Canadian Proof = A + (B* Foreign Proof)
Converted Proof Reliability = TCORR2*Foreign Reliability

country2=GBR

	c	c	f			
	a	o	o		a	b
	n	u	r		v	v
b	t	n	t		a	a
r	r	r	r		l	l
e	a	y	i		u	u
e	i	2	t		e	e
d	t					2
GUE	FEET AND LEGS	GBR	OVERALL FEET & LEG	1.156	4.0448	
GUE	MAMMARY SYSTEM	GBR	OVERALL UDDER SCORE	0.133	4.9908	
GUE	STATURE	GBR	STATURE	-5.497	5.5767	
GUE	CHEST WIDTH	GBR	CHEST WIDTH	-0.274	3.9820	
GUE	BODY DEPTH	GBR	BODY DEPTH	-2.121	4.1731	
GUE	PIN WIDTH	GBR	RUMP WIDTH	-0.906	4.5148	
GUE	RUMP ANGLE	GBR	RUMP ANGLE	-0.483	3.7576	
GUE	FOOT ANGLE	GBR	FOOT ANGLE	0.731	3.7764	

GUE	REAR LEGS SIDE VIEW	GBR	REAR LEG SET	-1.120	3.5896
GUE	UDDER DEPTH	GBR	UDDER DEPTH	0.336	3.8641
GUE	MEDIAN SUSPENSORY	GBR	MEDIAN SUSPENSORY	-0.973	3.8084
GUE	FORE ATTACHMENT	GBR	FORE UDDER	0.750	4.5593
GUE	TEAT PLACEMENT	GBR	FRONT TEAT PLACEMENT	-0.131	4.5259
GUE	TEAT LENGTH	GBR	TEAT LENGTH	-1.421	2.5692
GUE	REAR ATTACHMENT HEIGHT	GBR	REAR UDDER HEIGHT	-3.226	3.1065
GUE	ANGULARITY	GBR	ANGULARITY	-3.764	4.7563

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Conversion Factors For Type. Source = INTERBULL MACE 1812
Converted Canadian Proof = A + (B* Foreign Proof)
Converted Proof Reliability = TCORR2*Foreign Reliability

country2=USA

	c	c	f			
	a	o	o		a	b
	n	u	r		v	v
b	t	n	t		a	a
r	r	r	r		l	l
e	a	y	i		u	u
e	i	2	t		e	e
d	t					2
GUE	CONFORMATION	USA	PTA TYPE (FINAL SCORE)	1.436	5.8560	0.6
6						
GUE	FEET AND LEGS	USA	OVERALL FEET & LEG	0.771	5.3766	
GUE	MAMMARY SYSTEM	USA	OVERALL UDDER SCORE	1.338	9.9750	
GUE	STATURE	USA	STATURE	-0.063	2.5025	
GUE	CHEST WIDTH	USA	STRENGTH	0.978	4.8934	
GUE	BODY DEPTH	USA	BODY DEPTH	0.810	3.4472	
GUE	PIN WIDTH	USA	THURL WIDTH	0.837	4.5232	
GUE	RUMP ANGLE	USA	RUMP ANGLE	0.259	3.8664	
GUE	FOOT ANGLE	USA	FOOT ANGLE	0.970	7.4101	
GUE	REAR LEGS SIDE VIEW	USA	REAR LEGS - SIDE VIEW	-1.219	7.5858	
GUE	REAR LEG REAR VIEW	USA	REAR LEG REAR VIEW	0.260	9.0184	
GUE	UDDER DEPTH	USA	UDDER DEPTH	0.803	3.6829	
GUE	MEDIAN SUSPENSORY	USA	UDDER CLEFT	-0.474	5.1414	

GUE	FORE ATTACHMENT	USA	FORE UDDER ATTACHMENT	1.300	4.1669
GUE	FRONT TEAT PLACEMENT	USA	FRONT TEAT PLACEMENT	0.086	3.8849
GUE	TEAT LENGTH	USA	TEAT LENGTH	-0.588	3.1159
GUE	REAR ATTACHMENT HEIGHT	USA	REAR UDDER HEIGHT	-0.961	3.5400
GUE	REAR TEAT PLACEMENT	USA	REAR TEAT PLACEMENT	0.745	3.6804
GUE	ANGULARITY	USA	DAIRY FORM	0.343	3.7097

CALCULATION OF FAT% AND PROTEIN% FOR DECEMBER 2018

BREED	BMILK	BFAT	BPRT
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AYS	7799	325	263
BSW	8516	358	301
CN	5852	252	205
GUE	6576	304	225
JER	6632	336	254
HOL	10222	399	329
MS	6711	268	224

$$EBVFAT\% = 200 * [(BFAT+EBVFAT*0.5) / (BMILK+EBVMILK*0.5) - (BFAT/BMILK)]$$

$$EBVPROT\% = 200 * [(BPRT+EBVPRT*0.5) / (BMILK+EBVMILK*0.5) - (BPRT/BMILK)]$$

EXAMPLE:

A HOLSTEIN bull has EBV MILK=+1000, EBVFAT=+50, EBVPROT=+40

$$\begin{aligned}
 EBVFAT\% &= 200 * [(399+50*0.5) / (10222+1000*0.5) - (399 / 1E4)] \\
 &= 200 * [(399+25) / (10222+500) - (0.03903)] \\
 &= 200 * [0.03954 - 0.03903] \\
 &= 200 * 0.00051 \\
 &= 0.10
 \end{aligned}$$

$$\begin{aligned}
 EBVPROT\% &= 200 * [(329+40*0.5) / (10222+1000*0.5) - (329 / 1E4)] \\
 &= 200 * [(329+20) / (10222+500) - (0.03219)] \\
 &= 200 * [0.03255 - 0.03219] \\
 &= 200 * 0.00036 \\
 &= 0.07
 \end{aligned}$$