



Reading the Sire Summary

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Registration # Birthdate	Name Owner	Sire Maternal Grandsire	CED EPD ACC	BW EPD ACC (# Grps.)	WW EPD ACC	YW EPD ACC	MA EPD ACC (# Dtrs.)	CEM EPD ACC	SC EPD ACC (# Sons)	ST EPD ACC	DOC EPD ACC	CW EPD ACC	REA EPD ACC	YG EPD ACC	MARB EPD ACC	\$SMTI
BULL A → NPM-00000A B 02/03/98	BIG BULL LAND O' BOVINES INC. MIDDLENOWHERE, CO	PAPA BULL OLD MAN BULL	10 .65	-1.0 .75 (2)	38 .65	72 .45	30 .47 (37)	14 .65	0.0 .50 (10)	5 .30	15 .50	20 .45	.50 .45	-10 .40	-10 .40	55
BULL B → NPM-00000B P*PN 02/06/95	MR. PRESIDENT STRETCH LIMO CO. MOOLINE, IL	HENRY THE EIGHTH HENRY THE SEVENTH	5 .85	3.0 .99 (50)	44 .98	92 .95	23 .85 (205)	10 .85	1.0★ .70 (25)	20 .70	-10 .45	10 .50	.20 .50	0 .40	.10 .40	40

1 Animal's registration number.

The three letter prefix of the registration number identifies the percentage blood classification. See your NALF Member's Manual for a complete description. Letter codes below the registration number designate polled (P) or scurred (S) status, black color (B) and protoporphyria genotype (*PN = Normal, *PC = Carrier, *PP = Normal based on pedigree, *PS = Proto carrier suspect based on pedigree).

2 Official registered name of animal along with name and current address of owner.

Sires in the general listing are printed in alphabetical order.

3 Official name of the sire and maternal grandsire of the animal.

4 CED – Calving Ease Direct EPD and accuracy.

When sires A and B are bred to similar replacement heifers, you'd expect 5 percent (the difference between +10% and +5%) more of sire A's calves to be born unassisted as compared to sire B's calves. Said another way, due to genes for calving ease passed on

from the sires to their calves, each of sire A's calves out of first-calf heifers have a 5 percent greater chance of being born unassisted as compared to sire B's calves.

5 BW – Birth Weight EPD, accuracy and number of contemporary groups (in parentheses) from which progeny birth weights were reported that contributed to the EPD.

When mated to equal dams, progeny of sire A (listed above) are expected to weigh 4.0 lbs. less at birth than progeny of sire B (-1.0 - 3.0), due to genes for birth weight passed on from the sires.

6 WW – Weaning Weight EPD and accuracy.

Weaning weight EPDs are predictors of pre-weaning growth of progeny. Of the two sires represented above, progeny of sire A are expected to weigh 6 lbs. less than progeny of sire B (44-38) at 205 days of age (when bred to dams of equal value), due to genes inherited for pre-weaning growth from the sires.

7 YW – Yearling Weight EPD and accuracy.

Yearling weight EPDs are predictors of progeny growth to yearling ages. For example, progeny of sire A are expected to weigh 20 lbs. less (92-72) than progeny of sire B at 365 days of age (when mated to equal dams), due to genes for growth from the sires.

8 MA – Milking Ability EPD, accuracy and number of daughters with progeny weaning weight records.

Milk EPDs are predictors of pounds of daughters' progeny weaning weight due to genes for milk the daughters inherit from the parent in question. For example, daughters of sire A are expected to wean calves which are 7 lbs. heavier than calves from daughters of sire B (30 - 23 lbs.), due to genes for milk passed on to daughters. The milk EPDs of sires A and B were based on 37 and 205 respective daughters with progeny weaning weights.

9 CEM – Calving Ease Maternal EPD and accuracy.

When daughters of sires A and B are bred to similar bulls, daughters of sire A have a 4 percent (14% -10%) greater chance of calving unassisted with their first calf as compared to daughters of sire B, due to differences in genes the daughters inherited from their sires for easy delivery of their first calves.

10 SC – Scrotal Circumference EPD, accuracy and number of sons with scrotal measurements which have contributed to the EPD.

Scrotal EPDs are expressed in centimeters (cm), with higher values indicating the expectation of genes for larger average yearling scrotal circumferences to be passed on to sons. If mated to equal dams, sire B would be expected to produce sons which average 1.0 cm larger (1.0 - 0) than the average of sons of sire A. In the above example, measurements from 25 sons contributed to the EPD and the accuracy of .70 for sire B, while 10 sons with measurements were reported from sire A.



Reading the Sire Summary

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
	Registration # Birthdate	Name Owner	Sire Maternal Grandsire	CED EPD ACC	BW EPD ACC (# Grps.)	WW EPD ACC	YW EPD ACC	MA EPD ACC (# Dtrs.)	CEM EPD ACC	SC EPD ACC (# Sons)	ST EPD ACC	DOC EPD ACC	CW EPD ACC	REA EPD ACC	YG EPD ACC	MARB EPD ACC	\$SMTI
BULL A →	NPM-00000A B 02/03/98	BIG BULL LAND O' BOVINES INC. MIDDLENOWHERE, CO	PAPA BULL OLD MAN BULL	10 .65	-1.0 .75 (2)	38 .65	72 .45	30 .47 (37)	14 .65	0.0 .50 (10)	5 .30	15 .50	20 .45	.50 .45	-10 .40	-10 .40	55
BULL B →	NPM-00000B P*PN 02/06/95	MR. PRESIDENT STRETCH LIMO CO. MOOLINE, IL	HENRY THE EIGHTH HENRY THE SEVENTH	5 .85	3.0 .99 (50)	44 .98	92 .95	23 .85 (205)	10 .85	1.0★ .70 (25)	20 .70	-10 .45	10 .50	.20 .50	0 .40	.10 .40	40

11 ST — Stayability EPD and accuracy. Stayability EPDs predict genetic differences in the probability that daughters will produce calves at the age of six years or beyond, given that at least one calf was produced prior to the age of six. Generally, higher stayability EPDs represent genetics for greater longevity. Sire B above is expected to have 15% more daughters still in production at the age of six or beyond (+20% vs. +5% = 15% difference) as compared to the percentage of daughters of sire A. Accuracy values indicate the amount of information from daughters which has contributed to the EPDs.

12 DOC — Docility EPD and accuracy. Docility EPDs predict genetic differences in the probability that offspring are scored as 1 (docile) or 2 (restless) as opposed to 3, 4, 5 or 6 (nervous to very aggressive). The higher docility EPD for sire A above is preferred to that of sire B; specifically indicating that 25% more (+15% for sire A to -10% for sire B = 25% difference) of sire A's

offspring are expected to have scores of 1 or 2 as compared to offspring of sire B. Generally, the higher the accuracy value, the more progeny with docility scores in groups which have contributed to the EPD, making the EPD more reliable and less subject to change.

13 CW — Carcass Weight EPD and accuracy. Carcass weight EPDs are used to genetically design carcasses with weights that fall within an acceptable industry weight range. Optimum carcass weight EPDs for sires will vary according to the types of cows to which the sires are mated and the calf growing/finishing management regime. If mated to cows of equal value, sire A would be expected to produce progeny with carcasses 10 pounds heavier (20 - 10) at harvest than sire B.

14 REA — Ribeye Area EPD and accuracy. Ribeye area EPDs offer an objective measurement of genetic differences in muscularity. EPDs for ribeye area are expressed in units of square inches, with larger values indicating larger ribeye area and increased expected overall

carcass muscularity. Sire A is expected to produce progeny with ribeye areas that are .30 square inches larger (.50 - .20) on average than progeny of sire B.

15 YG — Yield Grade EPD and accuracy. Just as lower carcass yield grades are favored and indicate greater cutability, lower YG EPDs are favored and indicate genetic differences for yield grade and cutability of offspring. When bred to similar cows, offspring of sire A are expected to average .10 (-.10-0) units of yield grade lower than offspring of sire B.

16 MARB — Marbling Score EPD and accuracy. The marbling score EPD is expressed in units of numeric USDA marbling score, with higher values indicating genes for greater deposition of intramuscular fat, or higher expected marbling score and USDA quality grade at a constant age. When mated to similar sets of cows, sire A would be expected to produce progeny with average marbling scores .20 units lower (-.10 - .10) than sire B.

17 \$MTI — Mainstream Terminal Index. The mainstream terminal index takes both genetics and economics into account to rank animals in terms of expected profit per carcass produced from weaning to mainstream market endpoints of yield grade 1s and 2s and Select to low-Choice quality grades. It is based on the assumption that Angus-Hereford cows in a two-breed rotation are mated to Limousin-influenced terminal sires and is determined primarily by genetics and economics associated with post-weaning growth and yield and quality grade. In this example, if sire A and sire B were mated to similar sets of black baldy cows, sire A would produce progeny with carcasses worth \$15 (\$55 - \$40) more than those of sire B. The mainstream terminal index does not have an associated accuracy value.

★ **Trait Leader Designation.** Minimum EPDs and accuracy required for trait leader status are listed in the qualifications section.