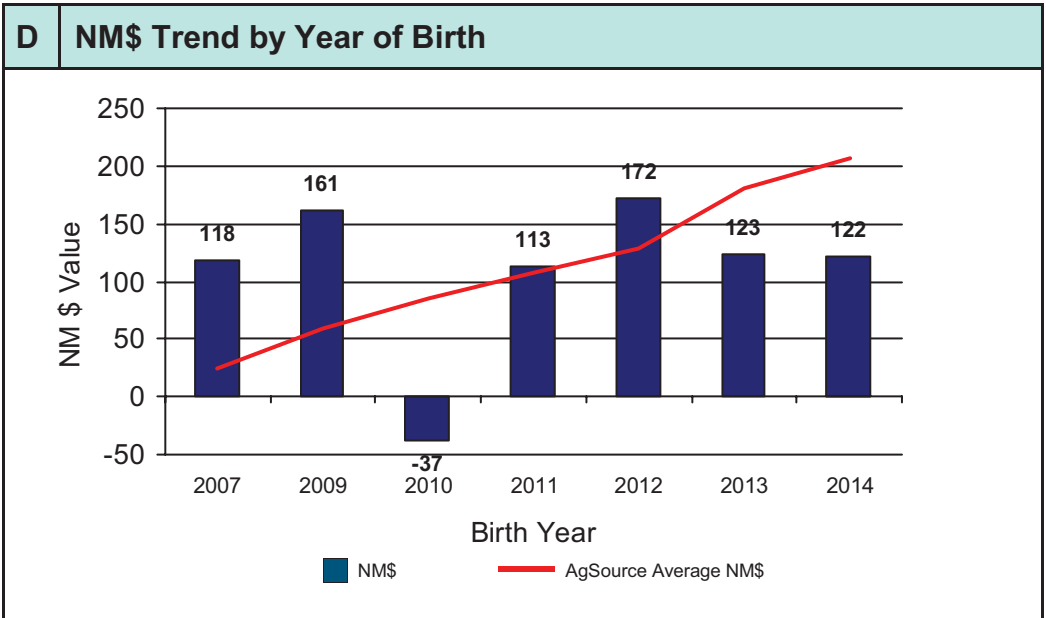
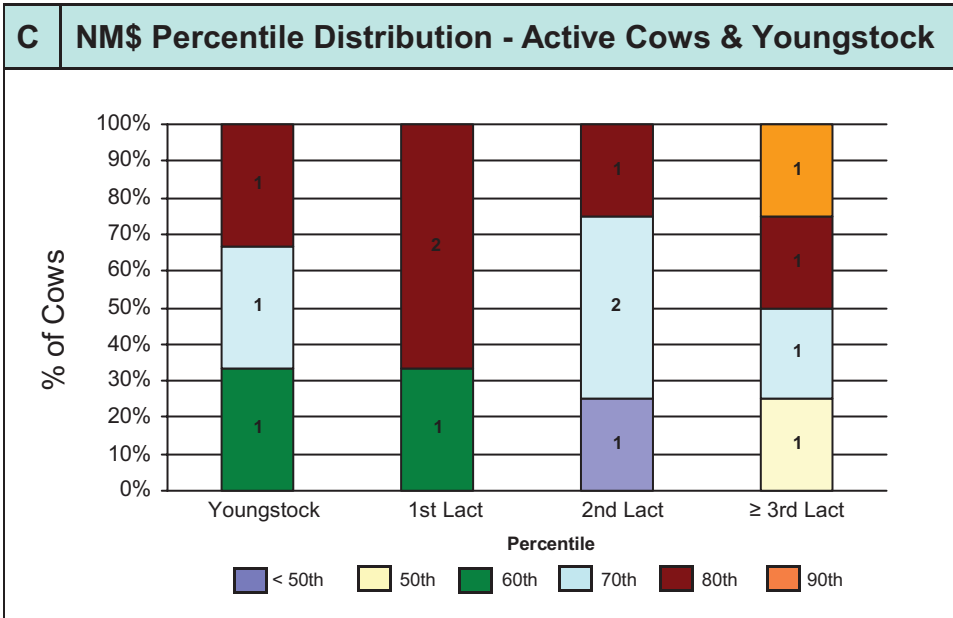
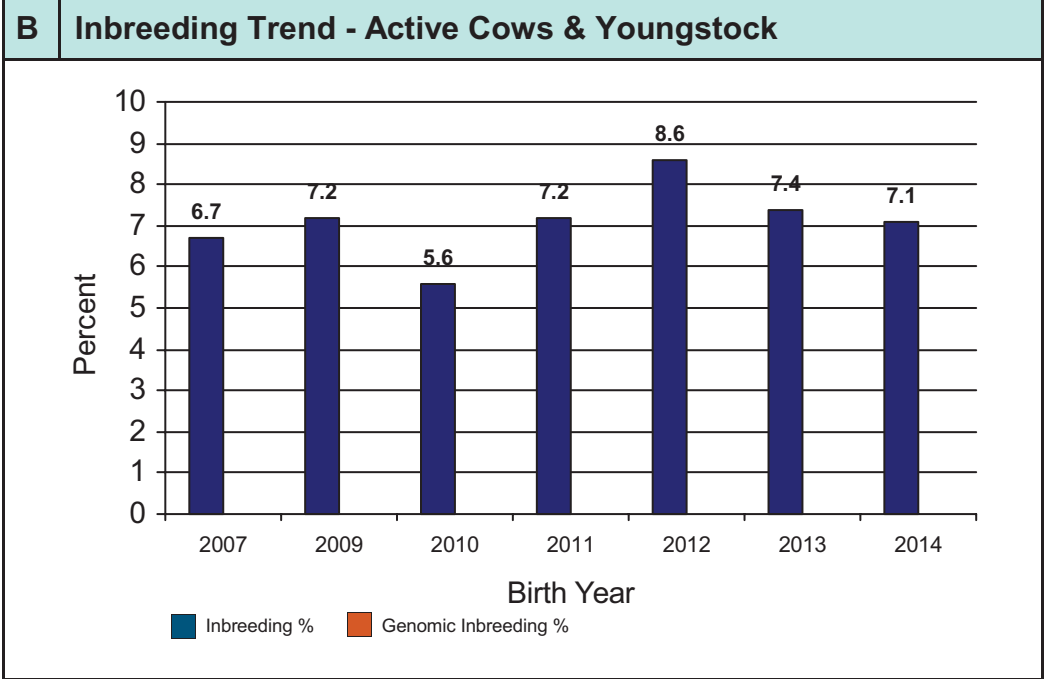
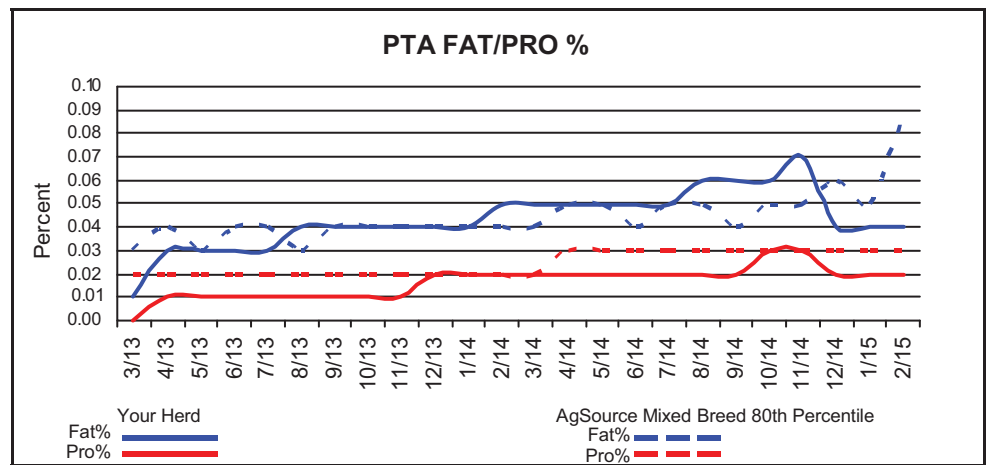
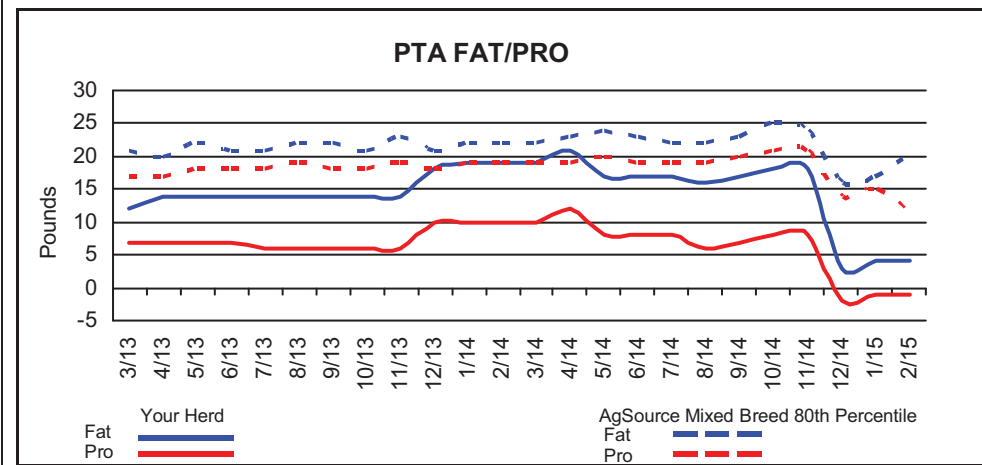
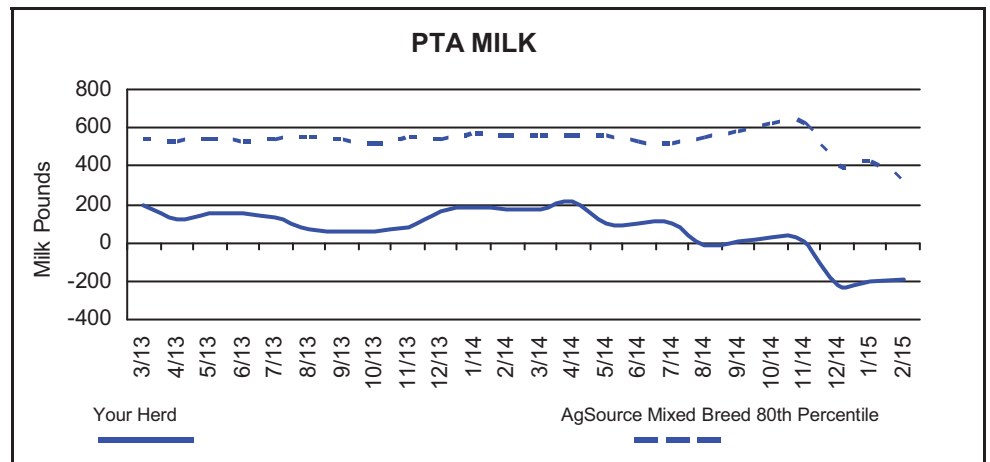
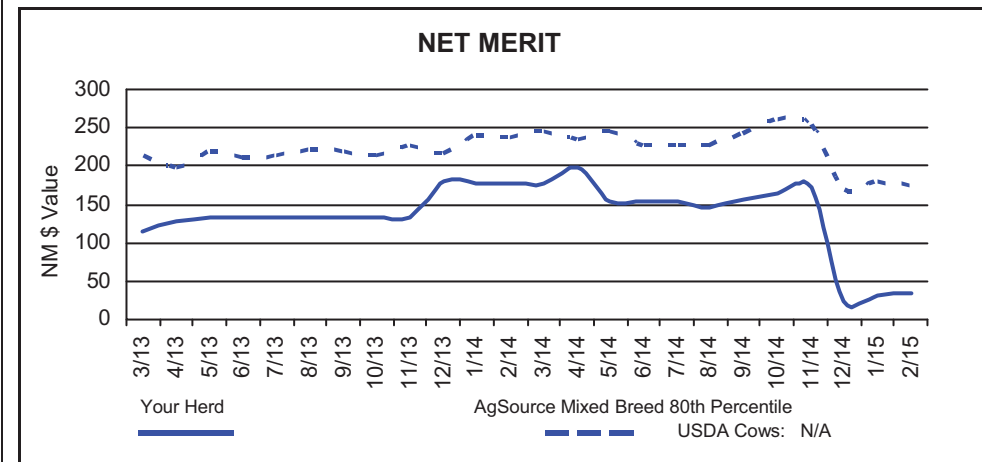


December proofs have some big changes. They will be reflected in the values on the genetic reports that you receive. There have been changes in the Net Merit and Cheese Merit formulas, and 3 of the major Breed Indexes. On top of that, there has also been a base change. As you review your reports, remember that you will not be able to compare data from previous genetic runs to your current data.

| A | Genetic Summary - Active Cows & Youngstock | | | | | | | | | |
|------------------|--|------------|------|----------|------|-----------|------------|----------|------|------|
| | Your Herd | Cows | | | | Your Herd | Youngstock | | | |
| | | Percentile | | | | | Percentile | | | |
| | 20th | 50th | 80th | Avg 80th | 20th | 50th | 80th | Avg 80th | | |
| Number | 12 | 13996 | | | | 8 | 10354 | | | |
| NM\$ | 107 | -66 | 73 | 232 | 417 | 122 | 14 | 153 | 308 | 475 |
| CM\$ | 114 | -64 | 80 | 242 | 423 | 138 | 16 | 161 | 318 | 483 |
| FM\$ | 91 | -76 | 57 | 217 | 410 | 86 | 3 | 133 | 285 | 461 |
| PTA Milk | 396 | -462 | 16 | 626 | 1380 | 289 | -178 | 195 | 663 | 1128 |
| PTA Fat | 12 | -11 | 6 | 26 | 49 | 13 | -2 | 14 | 32 | 46 |
| PTA Fat % | -0.03 | -0.06 | 0.01 | 0.09 | 0.14 | 0.01 | -0.04 | 0.02 | 0.08 | 0.12 |
| PTA Pro | 15 | -10 | 3 | 20 | 40 | 13 | -2 | 10 | 24 | 37 |
| PTA Pro % | 0.01 | -0.03 | 0.01 | 0.04 | 0.07 | 0.02 | -0.02 | 0.01 | 0.04 | 0.06 |
| PTA SCS | 2.92 | 3.08 | 2.98 | 2.86 | 2.77 | 2.74 | 3.04 | 2.94 | 2.77 | 2.40 |
| PTA PL | 0.1 | -0.8 | 0.8 | 2.5 | 3.9 | -0.3 | -0.2 | 1.4 | 2.8 | 3.8 |
| PTA DPR | 1.1 | -0.4 | 0.8 | 2.2 | 3.3 | 1.0 | -0.4 | 0.6 | 1.7 | 2.5 |
| Avg Inbred % | 7.1 | 4.7 | | | | 7.3 | 5.9 | | | |
| Avg Fut Inbred % | 7.2 | 6.0 | | | | 7.6 | 6.9 | | | |



E Genetic Trend Graphs for Cows by Test Date



F Semen Type Analysis - Active Cows

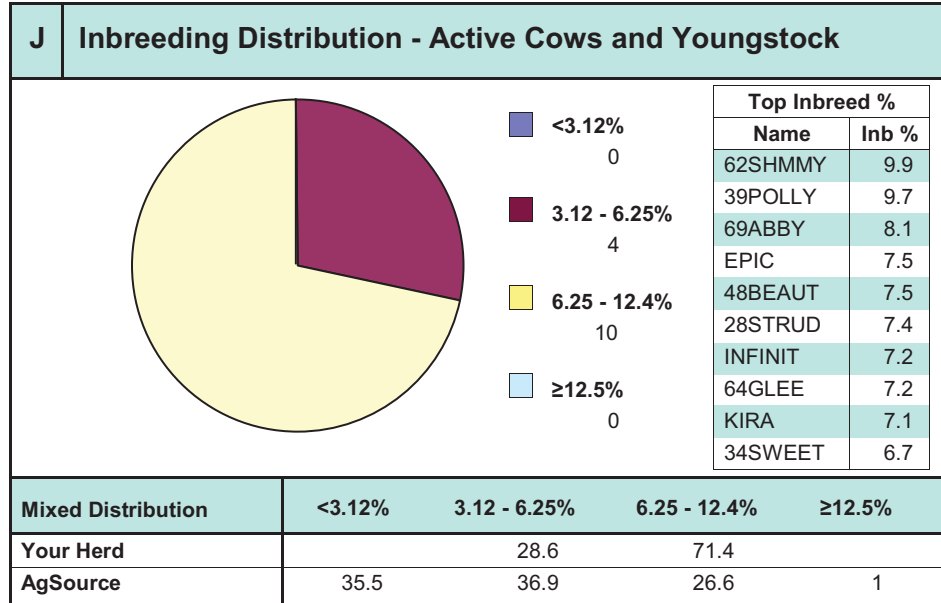
| | Conventional | Sexed | Natural / Unk |
|------------|--------------|-------|---------------|
| Num Cows | 13 | | 1 |
| NM\$ | 107 | | |
| CM\$ | 114 | | |
| FM\$ | 91 | | |
| ME Milk | 14914 | | 18342 |
| ME Fat | 658 | | 758 |
| ME Protein | 496 | | 504 |
| LSSCC | 1.9 | | 1.7 |

G Genomic Evaluation Analysis - Active Cows and Youngstock

| | Traditional | | Genomic Tested | | Imputed | |
|----------------|-------------|------------|----------------|------------|---------|------------|
| | Cows | Youngstock | Cows | Youngstock | Cows | Youngstock |
| Number | 11 | 3 | | | | |
| NM\$ | 111 | 131 | | | | |
| CM\$ | 118 | 155 | | | | |
| FM\$ | 94 | 73 | | | | |
| Avg Inbr % | 7.1 | 7.3 | | | | |
| Avg Fut Inbr % | 7.2 | 7.6 | | | | |
| Gen Avg Inbr % | | | | | | |
| Gen Fut Inbr % | | | | | | |

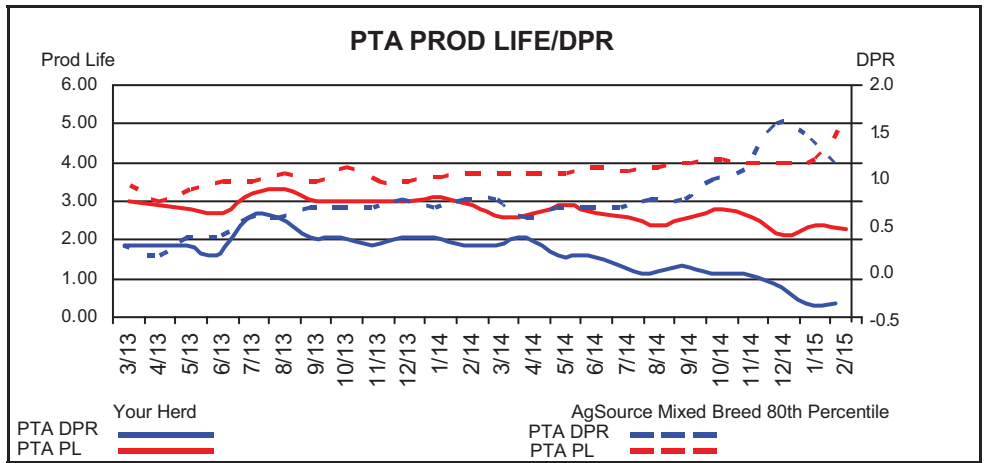
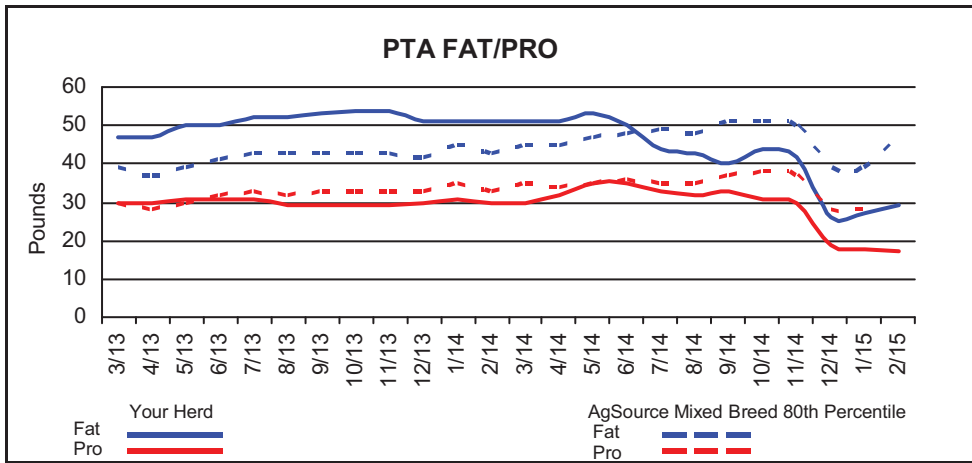
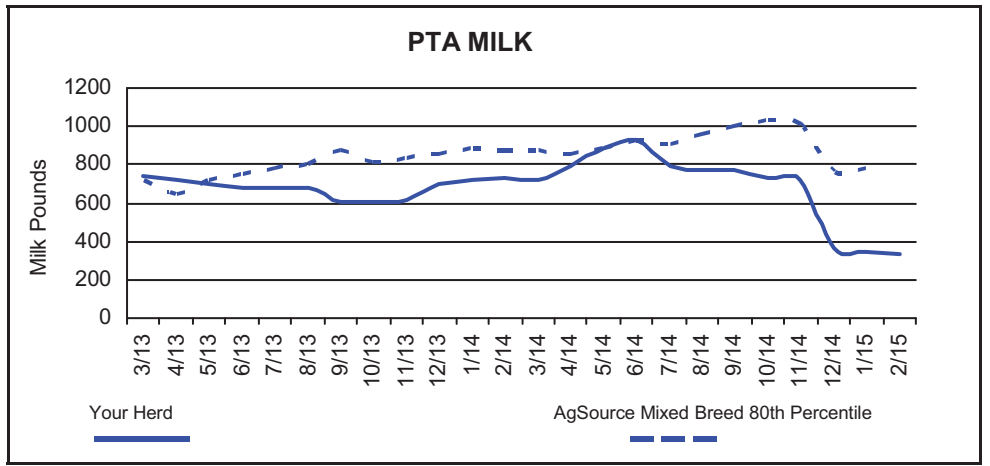
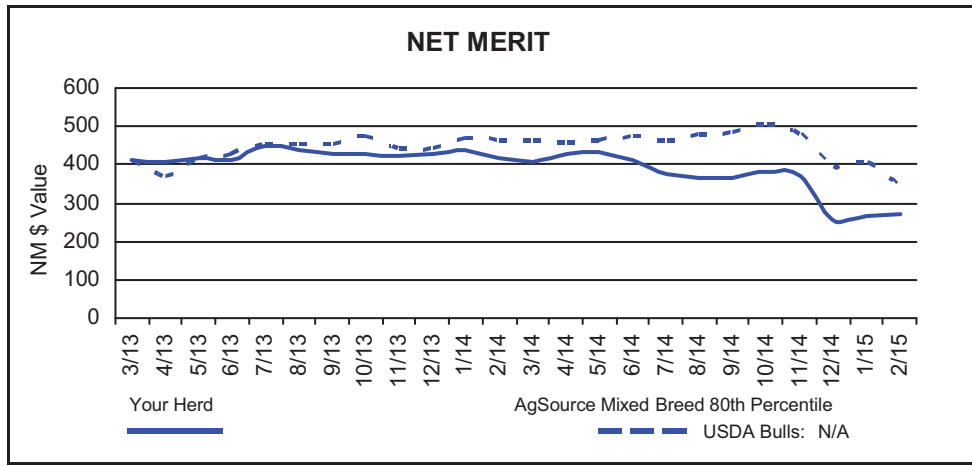
| H Genetic and Phenotypic Trend by NM\$ Quartile - Active Cows | | | | | | | | | | | | | | |
|---|----------|-------|-------|----------|---------|---------|---------|---------|---------|--------|--------|-------|-----------|-------|
| Quartile | Num Cows | NM \$ | CM \$ | PTA Milk | PTA Fat | PTA Pro | PTA SCS | PTA DPR | ME Milk | ME Fat | ME Pro | LSSCC | Days Open | TCI© |
| 1 | 3 | 197 | 211 | 487 | 17 | 20 | 2.86 | 1.2 | 14948 | 694 | 507 | 1.4 | 96 | -1878 |
| 2 | 3 | 138 | 149 | 456 | 18 | 18 | 2.85 | 1.7 | 14276 | 651 | 487 | 1.0 | 115 | -115 |
| 3 | 3 | 63 | 61 | 302 | 6 | 7 | 2.92 | 1.0 | 15592 | 649 | 489 | 2.3 | 142 | -267 |
| 4 | 2 | -43 | -31 | 3 | 6 | 9 | 3.08 | 0.2 | 16424 | 661 | 541 | 3.3 | 154 | 1762 |

| I Most Prevalent Genes - Top Sires based on Cows and Youngstock | | | | | |
|---|------------|-------------|-------------|----------------|----------------|
| Sire Name | Sire NAAB | Total Genes | # Daughters | # PG Daughters | # MG Daughters |
| ICE | 001GU00433 | 2.75 | 5 | 0 | 1 |
| BAMBOOZLE | 001GU00424 | 2.25 | 3 | 0 | 3 |
| JIM | 029GU00949 | 1.75 | 1 | 0 | 5 |
| CHALLENGE | 001GU00418 | 1.50 | 1 | 2 | 2 |
| LEWIS | 007GU00366 | 1.25 | 0 | 5 | 0 |
| MAELSTROM *FC | 001AY00323 | 1.00 | 2 | 0 | 0 |
| GVUSA000000604530 | | 0.75 | 1 | 0 | 1 |
| POKER | 001GU00400 | 0.75 | 0 | 3 | 0 |
| MR LUCK | 029GU00944 | 0.75 | 0 | 0 | 3 |
| RIVER MAGIC | 029GU00941 | 0.50 | 0 | 0 | 2 |
| MOHAWK | 001AY00308 | 0.50 | 0 | 0 | 2 |
| STORM | 001AY00302 | 0.50 | 0 | 2 | 0 |



| K Sire Expression - Top Sires based on Number of Lactating Daughters | | | | | | | | | |
|--|------------|-------------|-------|------|------|---------|--------|--------|-------|
| Sire Name | Sire NAAB | # Daughters | NM \$ | CM\$ | FM\$ | ME Milk | ME Fat | ME Pro | LSSCC |
| BAMBOOZLE | 001GU00424 | 3 | 142 | 149 | 125 | 13526 | 594 | 457 | 1.2 |
| ICE | 001GU00433 | 2 | 172 | 185 | 142 | 16157 | 775 | 542 | 0.7 |
| GVUSA000000604530 | | 1 | 41 | 42 | 38 | 16125 | 772 | 529 | 2.0 |
| CHALLENGE | 001GU00418 | 1 | 236 | 263 | 173 | 14781 | 702 | 528 | 2.3 |
| SPIDER | 001GU00415 | 1 | -114 | -105 | -138 | 15132 | 641 | 516 | 4.8 |
| JIM | 029GU00949 | 1 | 61 | 65 | 49 | 14787 | 586 | 465 | 2.9 |
| BRANSON | 001AY00325 | 1 | 28 | 44 | -6 | 17715 | 681 | 565 | 1.7 |
| MAELSTROM *FC | 001AY00323 | 1 | 86 | 76 | 113 | 15865 | 589 | 472 | 1.9 |

L Genetic Trend Graphs for Service Sires by Test Date



M Genetic Summary Active Youngstock by Age Group

| Age Group | # Heifers | # Pregnant | NM \$ | CM \$ | FM \$ | PTA Milk | PTA Fat | PTA Pro | PTA SCS | PTA PL | PTA DPR |
|------------|-----------|------------|-------|-------|-------|----------|---------|---------|---------|--------|---------|
| < 3 mo | 1 | 0 | 113 | 121 | 93 | 566 | 23 | 21 | 2.97 | -1.2 | 1.2 |
| 3 - 5 mo | 1 | 0 | 95 | 108 | 67 | 139 | 3 | 8 | 2.25 | -0.7 | 0.6 |
| 9 - 11 mo | 1 | 0 | 81 | 91 | 56 | 354 | 14 | 15 | 2.90 | 0.3 | 0.8 |
| 12 - 14 mo | 1 | 0 | 197 | 209 | 170 | 233 | | | | | |
| 15 - 17 mo | 1 | 0 | 115 | 169 | -11 | 38 | 6 | 2 | 2.21 | -0.1 | 0.7 |
| 18 - 20 mo | 1 | 0 | 197 | 206 | 175 | 444 | 17 | 18 | 2.91 | 0.7 | 1.4 |
| > 20 mo | 2 | 0 | 90 | 98 | 68 | 268 | 16 | 12 | 2.97 | -0.6 | 1.1 |