

DHI-220 MONTHLY REPORT



The DHI-220 report provides test day SCC and milk weights for up to six previous test days as well as the current test day. Action codes help determine which cows need breeding, drying off, a preg check or a feed change to prepare for freshening. Averages for cows in milk and the herd are listed after individual cow data. A list of cows that reached their 305-day lactation or completed their lactation is listed separately.

HEADING INFORMATION

Breed - A two character alphabetic code to identify the herd's breed. If 75% or more of the cows are of one breed, that breed is listed. The letters XX designate that no breed makes up 75% of the herd.

Type Test - short name and code for the record plan on which the herd is enrolled.

Prev. Test - the month, day and year of the previous test for this herd.

Test Date - month, day and year that the DHI technician finished collecting or verifying data. If a technician records milk weights for the afternoon milking on July 16 and finishes the test the following morning, July 17 is the test date.

Processed - the month, day and year when all data for the current test day were processed at DRMS.

Herd Code is unique for each herd. The first two digits identify the state, the third and fourth digits identify the county, and the fifth through eighth digits identify the herd within the county.

Name - owner's name and farm name (if used) for the herd.

INFORMATION FOR MILKING ANIMALS

Breed / Batch - A two character alphabetic code is used to identify each cow's breed. If the herd is using group or batch numbers, this number for each cow is printed under the breed code.

Permanent ID / Sire ID - The cow's eartag or registration number is printed above the identity for the cow's sire.

Cow ID - A registration number, standard series eartag, American ID or 15-digit ID is usually available for each cow. These numbers may be used or ID may be left blank for herds whose records are not sent to USDA for genetic evaluation. If the ID used is from an RFID tag, the last 8 digits will be preceded by "R".

Sire ID - Each herd may elect to have AI sires identified by National Association of Animal Breeders (NAAB) Code Number or by NAAB Code Name. Be sure your technician knows your preference for sire ID. Non-AI sires in the cross-reference file can be identified by their short name. To send a short name for a Non-AI sire for the DRMS cross-reference file, see your technician.

SCC and Milk Weights by Test Day - The milk weight to the nearest pound and the actual somatic cell count to the nearest 1,000 cells (or the SCC linear score) is printed for each cow in milk for as many as six previous test days during the current and previous lactation. The month and day for each preceding test is printed at the top of column. Be sure your technician knows your preference for SCC results (actual or linear score).

Sample Day Data: Milk, SCC, Fat%, Pro% - Current test day data is listed in these columns and includes the milk weight, actual SCC, and fat and protein percentages. One of several messages could print in the Milk column:

TOO FSH - cow was in milk less than 4 days on test day. Milk weights, if reported, were not used.

NO WTS - milk weights were not reported on the first test.

A, E or H - milk weight was estimated using last month's milk production.

* - production dropped more than 20% and at least 10 lbs. since previous test day.

DRY - cow was dry on test day.

LEFT - cow removed from herd this test period.

Income Over Feed \$ indicates each cow's net return above feed cost since beginning the previous dry period. These values are only calculated for herds reporting feed information. Feed cost is estimated for each cow for each test period using the cow's body weight, and the feed quantities and prices reported. Lactation-to-date feed cost for each cow is accumulated from the previous dry date through the current test day. Value of product (milk income) is calculated for each test period based on the cow's milk yield, fat and protein percentages, and the milk price and fat/protein differentials reported for the herd. The lactation to date value of product is accumulated from the calving date through the current test day. Lactation-to-date income over feed cost is obtained by subtracting the lactation to date feed cost from the lactation-to-date value of product. Dry cows and cows very early in lactation frequently have a negative income over feed cost because their income to date is less than their feed cost since being turned dry.

Summit Milk is the average of the two highest of the first three test days production. Reviewing these values can indicate the level of the nutrition program for the herd. Cows peaking low and/or early can be a sign of inadequate nutrition, whereas cow peaking later in lactation, but at high levels is seen in herds receiving BST or some form of added fat.

Barn Name / Index - Every cow on DHI must have a unique 5-digit index number. The Barn Name for each cow is printed beneath the Index Number for herds using barn names. A barn name may consist of any combination of up to seven letters or numbers.

LACTATION TO DATE

Lact No. - is the current lactation number for each cow. Cows entering the herd without a lactation number reported will be estimated based on age. More details are in the DHI Glossary on the DRMS website. If this estimated lactation number is incorrect, advise your DHI technician so a correction can be made. Age at freshening is given in years and months and is calculated from the date of birth reported when the cow was enrolled.

Days Dry - For cows in milk, the number of days dry prior to the current lactation is printed. The number of days dry through the current test day is printed for cows currently dry (first lactation cows in milk have no days dry).

Fresh Date - The day on which the cow calved is the beginning date for the current lactation. This column identifies that date by the day and month.

Age Yr / Mo lists the cow's age at freshening in years and months. Cows entering the herd without a birth date reported will receive an estimated birth date based on breed and lactation number. More details are in the DHI Glossary on the DRMS website. Incorrect ages will affect feed needed, 305-2X-ME, and herdmate comparison figures so an accurate birth date or best estimate must be included for each cow.

Days in Milk - If the cow was enrolled prior to or at the time of calving, the number of days in milk during the current lactation is printed here. A cow's record starts on the day of freshening and continues until the record is terminated by a dry date, a subsequent freshening, an abortion of by the cow leaving the herd.

Days 3X is the number of days in the current lactation that the cow was milked three times daily.

Milk is the total pounds of milk the cow is credited with producing during the current lactation. 305 day records are printed after the entire herd is listed. 365-day records are printed at the end of the herd if the herd is on the 365-day record option (which can be requested through your technician).

ERPA \$ - The reported milk price, fat and protein differential for the herd and the cow's ERPA for milk, fat and protein is used to determine a ERPA dollar deviation. ERPA is the difference between the average of a cow's 305-day, 2X, ME records and the average of all her herdmates' 305-day, 2X, ME records, weighted by the cow's number of lactations. ERPA is the best available estimate of a cow's future relative producing ability, considering her previous lactations and the record in progress.

Fat / Fat% is the total butterfat yield (pounds and percentage) that the cow is credited with producing during the current lactation.

Pro / Pro% is the total protein yield (pounds and percentage) the cow is credited with producing during the current lactation.

CAR - If there is an applicable CAR (condition affecting record) code, it is printed. A key for the CAR codes is printed at the bottom of the form. These codes provide several kinds of information about the cow's record or the current milk weight or component test. Numeric codes provide termination codes which enable the record to be used properly in genetic evaluations. Alpha codes indicate something about the current test day's milk weight or component test. Reported codes A (abnormal) and H (in heat) do not print unless production was low enough to be estimated using last test day production (40% rule). F indicates that the technician was unable to collect a sample, and the fat and protein will be estimated by DRMS. L indicates that the lab was unable to get results on the sample, and fat and protein will be estimated by DRMS.

Rat. (Rating) - Letter ratings categorize cows into five production groups based on their current lactation. To determine the rating, the current 305-day, 2X, ME records for all cows are adjusted to a 3.5% fat and 3.2% protein energy corrected milk (ECM) basis. (The formula for ECM is $0.327 \times \text{milk lbs.} + 12.95 \times \text{fat lbs.} + 7.65 \times \text{protein lbs.}$) The ECM record for each cow is divided by the ECM lactation average for the herd and the results are designated as follows:

A = Top Cows - more than 110% of herd average **D** = Marginal Cows - 80 to 90% of herd average

B = Above Average - 100 to 110% of herd average **E** = (probable cull cows) - < 80% of herd average

C = Below Average - 90 to 100% of herd average

Note: breed adjustments are applied when calculating ratings for multi-breed herds.

Income Over Feed \$ - Lactation-to-date feed cost for each cow is accumulated from the previous dry date through the current test day. The lactation-to-date value of product is accumulated from the calving date through the current test day. Lactation-to-date income over feed cost is obtained by subtracting the lactation to date feed cost from the lactation-to-date value of product.

Perst. % is an index based upon each cow's current projected 305 ME production compared to her projected 305 ME production on the previous test day. *The formula is (New Projection/Last Month's Projection) X 100 = Persistency Percent.* A persistency of 100 indicates that the change in test day production since last test day is similar to the average for animals of the same breed, age and season of calving.

Projected 305 Actual or Standardized - The projected pounds of milk, fat and protein can be calculated and printed as actual 305-day or standardized, 2X, ME records. Tell your DHI technician which one you prefer. The *Test Interval method* is used for calculating production records. All records are standardized to make records for different cows comparable. Records for cows milked three times per day (3X) are usually adjusted to a two times per day (2X) basis. Lactation length is standardized by using production for the first 305 days for cows in milk over 305 days. Projected 305-day, 2X records are adjusted for age, season of calving and location to obtain ME records. Standardized milk and fat records may be lower than the corresponding actual records for certain cows freshening at a mature age and in a favorable season or for cows milked 3X. Standardized lactation records do not change after 305 days in milk or after the cow has been turned dry. **NOTE:** 3X herds can have ME calculated as on a 3X basis. This can be requested by your DHI technician.

Diff. From Herdmates is the number of pounds of milk, fat and protein that the current 305-day ME record is above (+) or below (-) the average of herdmates. Herdmates are all other animals of the same breed that freshened in the same herd during the same year and season.

BREEDING INFORMATION

Times Bred / Bred Date / Service Sire ID - The number of times bred along with the most recent reported breeding date is printed above the identity of the service sire for the breeding. Service Sire

Identification can display as either code name or code number. Let your technician know which ID you prefer. All service sires should be reported by AI code number or registration number so that appropriate sire proof information can be recalled from data files.

Due Date - If the cow was not diagnosed open, the date due for that breeding date is printed in this section. If the cow has not been diagnosed pregnant, a dash (-) will print between the month and day of the due date. Once a cow is reported pregnant, an asterisk (*) will print between the month and day of the due date. *Gestation periods used by DRMS are: Ayrshire - 282 days; Brown Swiss - 290 days; Guernsey - 286 days; Holstein - 280 days; Jersey - 279 days; Other - 282 days.; Goat breeds - average 150 days with a range of 145 to 157 days.* Due Date is calculated and printed on the first DHI report after the breeding date is reported by the DHI technician. A cow who passes her expected due date will have the message “Past Due” overprinted above the Breeding Date and Due Date instead of the last reported service sire. Any cow with a “Past Due” message printed should be checked to verify the last reported breeding date

Action Needed - one of four codes with a date may print in this section to show the management action needed for this cow. Codes are:

B - Breeding reminder. The date listed with this code is 45 days after freshening. Cows should be bred during heat 45 to 90 days after calving for a 12 to 13 month calving interval. A different number of days can be selected. Let your technician know the number of days you prefer to wait before the first breeding (voluntary waiting period).

D - Drying reminder. The date listed with this code is 60 days prior to the due date. A different number of day can be selected. Let your technician know the number of days you prefer for cows to stand dry.

F - Feeding reminder for dry cows. The date listed with this code is 14 days prior to due date. The level of grain mix is increased one pound per hundred pounds of body weight, if needed, during the two weeks prior to freshening.

P - Pregnancy diagnosis reminder. The date listed with this code is 42 days after the last date bred. If the cow does not come in heat in a few days after the date listed, she has passed two heat periods since being bred and should be checked to confirm pregnancy. The number of days for is based on whether or not you report pregnancy diagnosis. Let your technician know if preg checks will be recorded.

Lactations Completed This Test Period - A separate listing is provided with cows that have completed a lactation this test period. Production for the first 305 days are printed the month the 305-day record is completed. Production for the first 365 days are printed the month a 365-day record is completed if your herd is on that option (see your technician to request the 365-day record option).

