

**USDA SPECIFICATION FOR CERTIFICATION OF BEEF CARCASS
QUALITY AND YIELD CHARACTERISTICS OF OFFICIALLY GRADED BEEF**

SCOPE

This specification is for certification by an Agricultural Marketing Service (AMS) agent of products marketed as Nolan Ryan's All Natural Guaranteed Tender Beef (NRGTB). Ground meats (and the raw materials) or further processed meats will not be aged nor labeled as Nolan Ryan's All Natural Guaranteed Tender Beef.

APPLICABLE DOCUMENTS

Quality Assessment Division (QAD) Instructions
Nolan Ryan Beef Inventory Control Procedure, November 2013
United States Standards for Grades of Carcass Beef, January 1997
Plant-Specific Standard Operational Procedures (SOP) approved by AMS

PROGRAM SPECIFICATIONS

A. GRADE RELATED REQUIREMENTS

These requirements are for certification by an AMS agent of U.S. Choice and Select, steer and heifer beef carcasses which meet the following set of requirements:

1. Marbling score of:
 - a. Nolan Ryan's All Natural Guaranteed Tender Choice Beef - Small 00 to Moderate 99;
 - b. Nolan Ryan's All Natural Guaranteed Tender Beef - Slight 00 to Slight 99;
2. Lean color, texture, firmness, and overall skeletal characteristics must meet the requirements for A maturity in the U.S. grade it qualifies for;
3. No evidence of capillary rupture in the ribeye muscle;
4. Free of "dark cutting" characteristics;
5. Ribeye Area (REA) of 11.0 to 16.5 in² (inclusive); and
6. Yield Grade of 3.9 or numerically lower.

Items 1, 2, 5, 6 shall be determined in accordance with the "Official United States Standards for Grades of Carcass Beef."

B. OTHER SPECIAL REQUIREMENTS

1. All eligible carcasses shall be electrically stimulated prior to chilling. Electrical Stimulation (ES) shall yield at least a 10 percent initial improvement in tenderness for stimulated versus non-stimulated carcasses (using the *longissimus dorsi*) as determined by Warner Bratzler (WBS) or Slice Shear Force (SSF) evaluations. The ES Program shall continue to demonstrate a statistically significant improvement in shear force and shall be validated at an interval not to exceed 5 years. If the protocol (voltage, current,

interval times, etc.) to be used is published in a refereed journal and shows the 10 percent improvement then that work shall be used in lieu of the validation.

2. Eligible carcasses shall be chilled for at least 24 hours prior to evaluation.
3. Carcasses offered for USDA certification shall be evaluated using the QualitySpec® BT Vis/NIR Spectrometer (QualitySpec) Version 1.0 NR or the E+V VGB LED-27 (VBG2000LED.exe Version US 1.9.1.0 or higher). The acceptable score or reading for certification, as determined by the STD, for each technology will be identified in the plant specific SOP. Plant specific SOP shall reference procedures for calibrating/validating instrument operation and documenting the accuracy on each production day. Any changes to the QualitySpec or the E+V LED technology will be presented to the USDA for approval and monitoring prior to implementation.
4. Product shall be aged for a minimum of 14 days from harvest prior to being displayed for sale at retail.

QUALITY ASSURANCE

A. CARCASS IDENTIFICATION - Carcasses to be examined for compliance with the requirements of this specification shall be identified and segregated as prescribed in the plant specific QAD Quality Plan procedures. A designated plant or NRGTB employee shall notify the AMS agent of the approximate slaughter time and lot identification of cattle intended for the program prior to their slaughter, and the time that carcasses shall be evaluated with the QualitySpec prior to that evaluation.

B. GRADE RELATED REQUIREMENTS - Grade related requirements shall be determined by the AMS agent on an individual carcass basis.

C. ELECTRICAL STIMULATION - The electrical stimulation validation process and any changes which the AMS agent determines to be significant must be approved by the QAD Standards Branch (SB) prior to implementation. The plant shall provide USDA with an SOP documenting the electrical stimulation and shall include, at a minimum, the following:

1. A designated plant or NRGTB employee shall observe the stimulation of all eligible cattle to assure that all carcasses are electrically stimulated as stipulated; and
2. The AMS agent shall monitor the operation of the electrical stimulation system (e.g., remote video camera and monitor, observation, etc.) per the QAD Plant Quality Plan.

D. TRAINING EMPLOYEES - NRGTB shall train individuals responsible for program integrity. These individuals will be responsible for training and supervising plant employees who conduct carcass identification, electrical stimulation, ribeye presentation, operation of QualitySpec instrument, product labeling, segregation, storage and distribution, and other duties. A record designating each trained employee has completed the approved training, signed by the trainer and trainee and must be on file at the plant.

QualitySpec or E+V LED: QualitySpec or E+V LED readings shall be taken on each carcass by a trained plant or a designated NRGTB employee.

1. The plant specific SOP shall designate which technology is being used to evaluate the NRGTB carcasses.
2. An AMS agent shall verify that each carcass offered for certification has been measured by the QualitySpec or E+V LED;
3. Only carcasses specifically identified as having acceptable QualitySpec or E+V LED readings will be eligible for certification;
4. The final acceptable reading of the carcass shall reflect the more desirable reading as determined from either side; and
5. Individual carcasses offered for certification that do not have an acceptable QualitySpec or E+V LED reading will be rejected.

E. AGING - Aging from the time of harvest shall be monitored under a Process Control Program. This aging program includes all boxed beef intended for direct consumption as fresh beef without further processing. The NRGTB procedure for monitoring inventory control is attached. AMS agent shall audit the inventory control system at least quarterly.

CERTIFICATION

An AMS agent will certify acceptable carcasses. Carcasses to be examined for compliance with the requirements of this specification shall be clearly identified when presented to the AMS agent for certification. Procedures for identification, certification, the removal of preliminary identification marks (or other methods of control) from non-qualifying carcasses, and control of certified carcasses shall be in accordance with established Quality Assessment Division (QAD) procedures.

The costs of all grading and certification services performed by the AMS agent involving examinations, supervision, official documentation, and related services shall be the responsibility of the person, group, or plant requesting the service. NRGTB representatives must notify the AMS agent of any program changes prior to implementation. Changes, which the AMS agent determines to be significant, must be approved by the SB prior to implementation.

LABELING

Labeling of Nolan Ryan's All Natural Guaranteed Tender Beef products shall be in compliance with Food Safety and Inspection Service regulations and policy guidelines, QAD instructions and Livestock, Poultry and Seed Program Policy Standardization Procedure 2.