On May 18, 2006, the Board of Directors of the American Angus Association adopted the following Guidelines as the Policy of the Association relating to the gathering and processing of ultrasound information.

AMERICAN ANGUS ASSOCIATION

GUIDELINES FOR THE GATHERING AND PROCESSING OF ULTRASOUND INFORMATION

PREAMBLE

• The Association receives, generates, compiles, archives and owns significant data on animals registered with the Association. The integrity of that data is of critical importance to the Association and its members. Some of such data is derived from ultrasound imaging of live animals. These Guidelines are intended as a framework for, and to establish standards to be used in, the collection of ultrasound images and the interpretation of data derived from such imaging.

• It is essential that data from ultrasound images be derived from a consistent process that is designed to prohibit manipulation. In furtherance of this goal, these Guidelines require that, once an ultrasound image is taken, those involved in the interpretive process not discuss the image with the member or others until the interpretive data is provided to the member. In these Guidelines, this period is referred to as the "Process Period."

• These Guidelines apply to the Association members participating in the process, the person taking the image, and the person/lab interpreting the image. All such Participants shall adhere to the standards of conduct provided in these Guidelines. Integrity shall be a prerequisite for all Participants. In addition to all applicable laws (including laws prohibiting false, misleading or deceptive advertising), all Participants shall adhere to the standards of conduct provided in these Guidelines.

• All persons involved should recognize that no set of Guidelines can cover all situations. Where a situation arises that is not covered by these Guidelines, the Association will determine the appropriate result in light of the overall goals of the Association.

• The Association may also encounter conduct by persons involved in the ultrasound process where the Association believes its goals as stated above have been compromised. In such cases, the Association may take such action pursuant to its rules and as it deems appropriate to protect the integrity of the ultrasound data.

• Persons participating in the ultrasound process should recognize that all determinations by the Association in administering these Guidelines and in furthering its objectives are final.
• From time to time, the Association may amend, supplement or modify these Guidelines.

• These Guidelines will be available to all members of the Association, along with a list of Authorized Labs and Field Technicians. Such information will be posted on the Association's website: www.angus.org, and published from time to time in the Angus Journal.
GENERAL

A Glossary defining initial capitalized terms used herein appears at the end of these Guidelines.

These Guidelines apply to the Ultrasound Imaging Process for each Covered Animal. As such, these Guidelines are applicable to all Participants - that is: the Owner/Operator; the Field Technician; and the Authorized Lab.

Each Participant is expected to use its best efforts to comply with these Guidelines. Failure to follow these Guidelines has the potential to corrupt data. Accordingly, the Association intends to diligently seek compliance.

While the Association has attempted to set forth in these Guidelines all relevant considerations, each Participant should recognize that situations are likely to arise that are not addressed in these Guidelines. As such, the Association will select that course of action to be followed that is believed to be consistent with the purpose and intent of these Guidelines.

These Guidelines contemplate authorization of more than one lab to interpret images. Prior to adoption of these Guidelines, the Association permitted only one lab to interpret data for use in the Association's database. The Association reserves the right to amend these guidelines and return to a single authorized lab.

These Guidelines may be amended, supplemented, modified and interpreted by the Association in such manner as it considers, in its sole discretion, appropriate and consistent with the purpose and intent of these Guidelines.

OWNER/OPERATORS

General. These Guidelines set forth the Association's program for the Ultrasound Imaging Process, and as such, each Owner/Operator participating in the program is required to comply with the Association's Rules, including the rules requiring all Association Members to maintain accurate records and submit accurate data to the Association (Rule 600).

Image Collection. At the time an Owner/Operator retains a Field Technician to scan cattle, the Owner/Operator shall advise the Field Technician if the Image to be taken is to be submitted to the Ultrasound Imaging Process of the Association.

Absent approval of the Association, any Image submitted to the Ultrasound Imaging Process shall be from the first set of images collected on the animal that has ever been taken, and by so submitting an Image, the Owner/Operator shall be deemed to have made such a representation to the Association and the other Participants.

The Owner/Operator shall direct the Field Technician to submit the Image to a specified Authorized Lab of the Owner/Operator's choosing.

Process Period. During the Process Period, the Owner/Operator shall not discuss with the Field Technician or the Authorized Lab any aspect of the Image or the interpretation of the
FIELD TECHNICIANS

**General Requirements.** Any Image to be used in the Association's Ultrasound Imaging Process must be scanned by a person meeting the definition of a "Field Technician" in these Guidelines.

Field Technicians shall collect Images according to standards set forth by UGC and any additional standards set by the Association and/or the Authorized Lab. It is the responsibility of the Field Technician to be familiar with all such standards and use his/her best efforts to assure compliance. In taking an Image, a Field Technician shall use only UGC approved equipment.

A Field Technician shall submit only Images (and related information) to an Authorized Lab that are, to the best of the Field Technician's knowledge and ability, truthful, accurate and complete.

**Image Collection and Submission to Authorized Lab.** Prior to scanning, the Field Technician shall determine if the Image is to be submitted to the Ultrasound Imaging Process of the Association.

If the Image is to be submitted to the Ultrasound Imaging Process, the Field Technician (1) shall confirm with the Owner/Operator that the Image will be from the *first* set of images collected on the animal, (2) shall proceed to collect the Image as required by these Guidelines, (3) shall submit the Image to the Authorized Lab specified by the Owner/Operator as promptly as practical following the scan, and (4) during the Process Period, shall not provide the Image or any related information to the Owner/Operator or any other Person, other than the Authorized Lab and as may be specifically permitted in these Guidelines.

Until the expiration of the Process Period, a Field Technician shall not submit Images for a Covered Animal to more than one Authorized Lab. Following expiration of the Process Period, the Field Technician may take such action with respect to the Images as the Owner/Operator may direct, including sending the Images to other labs for interpretation.

Where an Image has been submitted to an Authorized Lab by a Field Technician, the Field Technician shall not rescan such animal for the same measurement or trait unless the Association shall have authorized such rescanning.

When submitting an Image to an Authorized Lab, the Field Technician shall confirm that, to the best of his/her knowledge, such Image has not been analyzed by anyone (including the Field Technician) for any measurement or trait for which the Image was taken.

**Compliance with Guidelines.** Field Technicians shall, on request, provide the Association with any and all information requested by the Association to confirm compliance with these Guidelines. A Field Technician's failure to comply with these Guidelines may result in disqualification to act as a Field Technician under these Guidelines.
AUTHORIZED LABS

Requirements for Designation as an Authorized Lab. For a Person to be designated as an Authorized Lab, the Person must meet the following criteria:

(a) The lab must meet all applicable standards and guidelines of the UGC for the interpretation of ultrasound images for the cattle industry.

(b) The lab must have employees or agreements with third parties that makes available to the lab at least two Lab Technicians capable of cross-checking interpretations. Such Lab Technicians shall be trained in the interpretation of Images with respect to intramuscular fat, ribeye size, rib fat, rump fat and such other cattle body composition measurements and traits as the Association determines are to be included in Interpretive Data.

(c) The lab must have in place equipment and software to support the interpretation of Images to generate Interpretive Data that is acceptable to the Association. The Association has approved software, and it is recognized that approved software may be added or deleted with the development of future technology.

Prior to being designated an Authorized Lab, the lab will be required to submit to the Association a properly completed application.

Continuing Requirements for Authorized Labs. For a lab to continue to be designated an Authorized Lab, the lab must meet the following requirements on a continuing basis:

(a) The lab must continue to meet all of the requirements for the lab to be initially designated an Authorized Lab, as provided above. In the event of any change in the information set forth in the application originally submitted to the Association, the Authorized Lab shall promptly give written notice of such change to the Association.

(b) The lab must have a website that is secure, that is searchable by the Association and that meets those minimum standards established from time to time by the Association.

(c) Interpretive Data will be submitted to the Association in a format specified by the Association.

(d) Labs are expected to submit Interpretive Data to the Association within seven (7) business days following receipt of an Image from the Field Technician. Persistent failure to meet this standard will be grounds for termination of designation as an Authorized Lab. Authorized Labs shall maintain records indicating when Images are received.
(e) An Authorized Lab shall not at any time provide to or discuss with the Owner/Operator any statistical information concerning Field Technicians or any statistical information concerning Interpretive Data provided by its Lab Technicians or by the Authorized Lab. During the Process Period, Authorized Labs shall not provide to or discuss with the Owner/Operator the Image, the contents of any Interpretive Data or any related information.

(f) Any Person who has any direct or indirect financial interest in an Authorized Lab, any Lab Technicians and any Family Members/Affiliates of such persons may not have any direct or indirect financial or economic interest in a Covered Animal as to which the Authorized Lab or such Lab Technician is interpreting Images. No Lab Technician may be involved in the interpretation of any Image taken by such Lab Technician (acting as a Field Technician).

(g) Authorized Labs shall not submit Interpretive Data on any Image unless the Image has been scanned by a person meeting the definition of a "Field Technician" under these Guidelines. An Authorized Lab shall have an agreement with each Field Technician submitting Images to such Authorized Lab that, among such other provisions as the Authorized Lab may deem appropriate, shall provide for the representations and agreements of the Field Technician.

(h) Authorized Labs shall be responsible for the conduct of all Lab Technicians providing interpretations to such lab, whether or not the Lab Technician is an employee of the lab.

(i) Each Authorized Lab shall have in place internal controls designed to assure quality control of the Ultrasound Imaging Process, including spot checks of Image interpretations by its Lab Technicians and assurance that the minimum standards and testing for Field Technicians and Lab Technicians are satisfied.

(j) Lab Technicians and others exposed to Interpretive Data on behalf of an Authorized Lab shall have signed a confidentiality agreement. The Authorized Lab shall retain such confidentiality agreement in its files.

(k) An Authorized Lab shall maintain appropriate backup and emergency systems to assure availability of the Images and the Interpretive Data in the case of fire, theft or other emergency and shall advise the Association in writing as to the measures that are in place.

(l) Authorized Labs are required to record the identity of the Lab Technician interpreting the Images and the measurement or trait being interpreted as to each Covered Animal. With respect to Images taken for Covered Animals, only one Lab Technician may interpret the entire Scan Session for each measurement or trait.
(m) Interpretive Data with respect to all Images taken in a single Scan Session shall be provided to the Association. Where information is incomplete or Images are rejected by the Authorized Lab, such facts shall be noted in the Interpretive Data. Issues as to unreadable images, incomplete information, matching of registry numbers and the like will be referred to the Association to resolve directly with the Owner/Operator.

(n) In order to maintain consistent levels of experience and expertise, each Authorized Lab shall be regularly engaged in interpreting Images and providing Interpretive Data to the Association. As such, the Association will expect an Authorized Lab to provide Interpretive Data to the Association on a minimum of 2,000 animals per calendar year.

OTHER

To protect the integrity of the Ultrasound Imaging Process, Interpretive Data for a Covered Animal will not be released to an Owner/Operator during the Process Period. At the end of the Process Period, the Association will report to the Owner/Operator all resulting EPD's, including Interpretive Data and adjusted Interpretive Data for all Covered Animals included in the Scan Session.

The Association will not accept interpretive data with respect to Images of any animal for which Interpretive Data is already in the Association's database.

However, the Association recognizes that from time to time some of the Images in a Scan Session may be rejected or non-readable and that questions about rescanning will arise.
Glossary of Defined Terms

"Association" means the American Angus Association, an Illinois not-for-profit corporation.

"Authorized Lab" means an entity that has been designated as such under these Guidelines by the Association, and such designation has not been terminated.

"Covered Animal" means an animal for which the Association has a recorded number and for which an Image is made for the purpose of submitting Interpretive Data to the Association.

"Family Member/Affiliate" of a Person means (i) the lineal descendants (naturally or by adoption) of the parents of such person, (ii) lineal ascendants of such person, (iii) spouses of any of the foregoing, (iv) trusts for the benefit of any of the foregoing, (v) any corporation, limited liability company, partnership or other entity that is controlled by one or more of the foregoing or of which the foregoing (alone or in the aggregate) owns more than 25% of the equity interest, and (vi) any employee, manager, officer or director of any of the foregoing.

"Field Technician" means a natural person who (1) is certified by UGC to take Images of cattle, and (2) continually satisfies all of the then technical requirements (including use of UGC approved equipment) of UGC with respect to the taking of Images.

"Guidelines" means these Guidelines for the Gathering and Processing of Ultrasound Information (including the Preamble), as they may be amended, supplemented, modified and interpreted by the Association.

"Image" means an ultrasound image taken of an animal by means of ultrasonic technology, or such other similar technical process as the Association may approve.

"Interpretive Data" means data and other information resulting from the interpretation of Images of a Covered Animal made by an Authorized Lab for submission to the Association.

"Lab Technician" means a natural person who is certified by the UGC to interpret Images with respect to the cattle body measurement or trait that such person is interpreting for use in Interpretive Data.

"Owner/Operator" means the member of the Association that is identified as owner of record of the Covered Animal.

"Participants" refers to the Owner/Operator, the Field Technician and the Authorized Lab involved in the Ultrasound Imaging Process for a Covered Animal.
"Person" means a natural person, a corporation, a limited liability company, a partnership, a trust, an association or any other entity, whether acting in an individual, fiduciary or other capacity.

"Process Period" for any Image begins when the Image is taken by a Field Technician for the purpose of submitting the Image to an Authorized Lab and ends when the Interpretive Data for the Image and all other Covered Animals in the same Scan Session are provided to the Owner/Operator by the Association in the form of a Beef Improvement Record or by other means.

"Scan Session" means the taking of Images of more than one animal owned by the same Owner/Operator in a scanning session covering a maximum of three consecutive days.

"UGC" means the Ultrasound Guidelines Council, or its successors, or such other independent body as the Association may designate from time to time.

"Ultrasound Imaging Process" means the process of the taking of Images, the development of Interpretive Data, and the submission of Interpretive Data to the Association with respect to a Covered Animal.

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