



Minding Your Cattle P's and Q's: Basic Facts on Source, Age, and other Claim Verification through PVP and QSA Programs

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Recent developments in beef export market requirements and the related evolution of USDA's Agricultural Marketing Service (AMS) oversight of marketing claims has resulted in several new programs becoming available to producers in a relatively short time period. New terms from these programs have been widely used in the media without much practical explanation, including Beef Export Verification (BEV or EV), Source and Age Verification (S&A), Quality System Assessment (QSA), and Process Verified Program (PVP). At the heart of the matter is the ability to qualify cattle for beef export markets, making other specific claims, and the capture of any associated premiums.

Sorting It Out

USDA's BEV requirements are country-specific and spell out the standards agreed upon by USDA and that country for exporting beef into their market. Export Verification requirements for specific countries may be found at <http://www.ams.usda.gov/lsg/arc/bev.htm>. Beef from the U.S. that does not meet a country's EV standards may not be exported to that country. Most EVs stipulate specific cuts that may be exported, processing regulations, and specific requirements regarding the cattle from which the beef is derived (Greiner, et al). For example, most countries require that cattle be no older than 30 months of age at slaughter. Japan's more rigorous requirements stipulate cattle have specific carcass characteristics or participation in a QSA or PVP program. Any supplier of cattle or beef, including packers, fabricators, cold storage facilities, forwarding warehouses, feedlots, producers, cooperatives, auction markets, or buyers can have a QSA or PVP. The base requirements for meeting the age requirement in a QSA or PVP program include:

- each animal must have a unique individual or group identification;
- sufficient records must exist for tracing individual animals back to the ranch of origin; and
- individual animal actual birthdates or birthdates of oldest animals in a group must be documented.

USDA Approved Programs

Source and Age Verification for beef has two components. *Source verification* is the ability to trace beef back to the farm or ranch where the cattle were born. *Age verification*

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is the ability to determine and verify the age of the animal at any point throughout the production system, including post-harvest. However, standards for age verification cannot be met without first meeting the requirements for source verification and your records alone do not qualify your cattle to be sold as "source and age verified." Regardless of whether a producer is interested in verifying age, source, or both, valid production records must be maintained and made available to the verifying authority.

Source and age claims are validated either through a USDA Process Verified Program or a USDA Quality System Assessment program.¹ Most programs available to producers are structured to document and verify both age and source characteristics in a single package. Both types of USDA programs require quality-management systems where specific processes and/or attributes are documented in a way that makes them verifiable through the required systematic audits. PVP and QSA programs have similarities, but they can also be quite different as Table 1 illustrates (Ishmael). However, age and source verification require similar documentation for both QSAs and PVPs.

Process Verified Programs (PVP) provide the beef industry the ability to make marketing claims about beef attributes beyond age and source verification, but nearly all PVPs include age and source verification as part of their program. Other attributes may include specific genetics, feeding practices, animal welfare, environmental production aspects, and other claims that are otherwise difficult to verify by visual inspection of the cattle or beef. Some PVP programs date from the early 1990s and each has its own set of practices or attributes to substantiate. Products from PVP systems may use the phrase "USDA Process Verified" to substantiate product claims in their packaging and marketing materials. See a list of USDA Process Verified Programs at <http://processverified.usda.gov/LSOfficialListingPVP.pdf>

Quality System Assessment (QSA) defines a type of USDA program that has a narrower scope and is less complex than PVP programs. USDA developed QSA programs beginning in 2004 primarily to qualify beef for export. The only beef attributes verifiable through a QSA program are age, source,

¹ A third USDA beef program is the USDA Certified Beef Program for branded beef products. The program focuses primarily on measurable carcass yield and quality characteristics with some companies choosing to also specify animal breed or hide color. USDA Certified Beef Program information can be found at: <http://www.ams.usda.gov/lsg/certprog/industry.htm>

Table 1. Side by Side Comparison of USDA's PVP and QSA.

	<i>Process Verified Program (PVP)</i>	<i>Quality System Assessment (QSA)</i>
Age and Source verified cattle eligible for export verification programs	YES	YES
Marketing claims are chosen by each company	YES	YES
Marketing claims can include:	<ul style="list-style-type: none"> • Age • Source • Genetic verification • Feeding practices • Animal handling • Additional claims, as approved by USDA, AMS (e.g. conforming to NHTC requirements) • Source • Non-hormone treated cattle (NHTC) 	<ul style="list-style-type: none"> • Age
Marketing the approved PVP or QSA	Approval is posted on USDA's Web site — can use the "USDA Process Verified" shield in company marketing materials	Approval is posted on USDA's Web site — ONLY
Cattle with Program-Compliant Tags can be marketed through unapproved and approved locations	YES	YES
Quality manual required	YES	YES
Requirements — ISO9001:2000	Requires specific information on all major elements and sub elements of the ISO9001	Does not require all elements of ISO9001
Requirements — USDA specific Scope	YES Large scope requires more detail and covers a large range of marketing claims	YES Limited scope and very specific marketing claims
Supplier Evaluations and Re-evaluations?	YES	YES
USDA Program Began	mid 1990s	2004 (modified version of PVP)

Source: IMI Global, Inc., based on USDA, Audit, Review and Compliance Branch's Q&A site: <http://www.ams.usda.gov/lsg/arc/arcQA.htm>

and non-hormone treated cattle. USDA lists approved QSA programs at <http://www.ams.usda.gov/lsg/arc/LSOfficial-ListingQSA.pdf> (A host of other terms are associated with beef marketing programs. See the Iowa Beef Center's *The ABCs of Beef Marketing Programs* for a detailed discussion of these at: <http://www.iowabeefcenter.org/content/ABCsOf-BeefMarketingPrograms.pdf>)

The Bottom Line

Age verification does not guarantee that beef from verified cattle end up in an export market — it simply makes it eligible for that market. Any premium for age verification of cattle is dependent on the supply of age verified cattle as well as the demand from export markets for U.S. beef.

It should be noted that packers can meet the age verification requirement for export marketing through USDA carcass evaluation at the packing plant. In other words, packers have the opportunity to age verify cattle without having to rely solely on cattle that have been approved for export marketing through a QSA or PVP. For example, carcasses that are stamped "A40" by a USDA grader have physical characteristics indicating that the animal was 17 months of age or less at the time of harvest. One problem with this age verification alternative is that variety meats from those cattle cannot be exported because those meats were removed before carcass evaluation. That translates into less potential export value for the packer from that carcass. In a sense, QSA or PVP cattle in age and source verification programs are "precertified" so that

all meats from those animals are export eligible as stipulated by the appropriate EV.

Premiums for age verification through QSA and PVP programs may differ by season since the supply of A40 cattle eligible for the Japanese market may be seasonal. For example, spring-born calves with heavy weaning weights (575 to 700 lb) are frequently placed directly on feed at the time of weaning in the fall. This results in a lot of these cattle being ready for harvest during the months of April, May, and June. Therefore, there may be relatively more A40 carcasses available for export during the late spring and early summer months compared to other times of the year (Mark, 2006). That implies premiums for age verification may be greater during late summer, fall, and winter, though the level of premiums is also dependent on export demand levels and rate of growth. Recent trends for finishing more yearling cattle due to high grain prices may reduce the number of cattle meeting the A40 requirements at harvest. Anecdotal evidence of premiums to date have been in the \$3 to \$4/cwt. range for feeders and calves and in the range of \$2 to \$3/cwt. for fed cattle (Ishmael).

Marketing cattle through QSA or PVP programs is not one-size-fits-all access to increased profitability since there is a cost of qualifying cattle for age-verification and since premiums are uncertain. Some estimate the cost of participating in a PVP or QSA with age verification, including tag cost, at \$5/head or less, while some have estimated costs without the tag to be \$2.50/head or less (Ishmael). Typical costs include fees for tags, audit costs, any products required that are specific to the program, and perhaps additional annual fees or per animal fees. Generally, participation in a QSA will be less expensive and perhaps less cumbersome than participation in a PVP. Most PVPs require documentation and proof of attributes beyond age and source. Those attributes vary by PVP program, but may include such traits as preconditioned, natural, hormone-free or environmentally friendly. Beyond cash outlay for participation, both types of programs require documenting and sharing cattle records with auditors and/or program administrators. Either type of program will require the participant to keep calving records for three years for auditing purposes.

How Do I Access a QSA or PVP Program for My Cattle?

Though creating your own USDA-approved QSA or PVP is possible, it is also costly and not an avenue that most producers will or should pursue. However, many existing QSAs or PVPs are "umbrella" programs through which your cattle could be marketed. The typical process for enrolling as an approved cattle supplier for a QSA or PVP program entails completing an initial application which may ask for details about your cattle operation, calving season, production practices, etc. The program will then typically conduct an on-site evaluation at your ranch, which may include records training and certification. A QSA program qualifies your cattle for export through source and age verification, but a PVP program may give you broader marketing options and the potential to capture other premiums as well. Begin by exploring individual PVP programs to determine whether your cattle may already meet the requirements of those PVP programs. For example, you may already be producing cattle and keeping adequate records necessary to capture additional value for genetics

or health management practices. Each PVP lists its process verified points on USDA's website. If your goal is primarily source and age verification, then an industry association's PVP, an information management company's PVP, or QSA is likely a good fit instead.

No two QSAs are exactly alike, but a QSA umbrella program typically involves multiple participants (including cow/calf operators, stockers, feedyards, and a packer) working together to maintain age and source record validity throughout the production system with one company acting as the gatekeeper to ensure that the requirements are met throughout the supply chain.

Most USDA approved QSA programs are administered through breed associations, feedlots, or through the cattle feeding arm of a major packer. Visit the websites of these organizations listed on the USDA page. Most provide information about their program's specific requirements for record keeping, as well as "approved supplier" listings, which may indicate your local access point to the QSA, such as local feed yards or livestock auction markets.

Does a PVP or QSA Program Limit my Marketing Options?

One concern that some cattlemen have with QSAs or PVPs is being locked in to a specific buyer if they want access to source and age premiums. A packer's QSA umbrella program, for example, limits you to selling cattle through that packer's approved supplier list to retain their export eligibility. Cattle sold outside of that supplier list forfeit their export eligibility and any associated potential premiums. Some are comfortable with that arrangement, but others are not. If you are among the latter, then you do have options. An umbrella PVP or QSA that uses a program compliant ear tag (PCT) may be preferred.² Calves that meet program requirements and are tagged with a USDA-approved QSA or PVP Company's PCT at the farm or ranch of birth can be marketed through any location as age and source-verified and maintain their export eligibility as long as age and source verification are part of that initial PVP or QSA program represented by the PCT tag. Figures 1 and 2 list QSA and PVP programs, respectively, sorted by claim and by PCT use. Cattle enrolled in QSA or PVP programs without PCTs must stay within the "chain of custody" (the list of approved suppliers) to remain eligible for export, which may limit your marketing options. Most QSA programs, however, consider PVP source and age verified cattle as covered under their program's "approved suppliers" and will accept those cattle as export eligible without requiring further documentation. PVP programs, in contrast, may accept other PVP source and age verified cattle but not QSA cattle since PVP programs are considered to be a higher certification level.

Additionally, you are not limited to enrollment in only one QSA or PVP program. For some producers, it may be feasible to participate in more than one program to broaden marketing options if requirements for the programs are similar. Keep in

² Program-compliant ear tags are installed at the ranch of origin. According to program standards, these tags are single-use, tamper-evident tags with a unique, non-repeatable ID number. The tags can be visual, electronic, or a combination. Cattle enrolled in an approved QSA or PVP which includes age verification and uses Program Compliant Ear Tags may move through the production system without further verification activities.

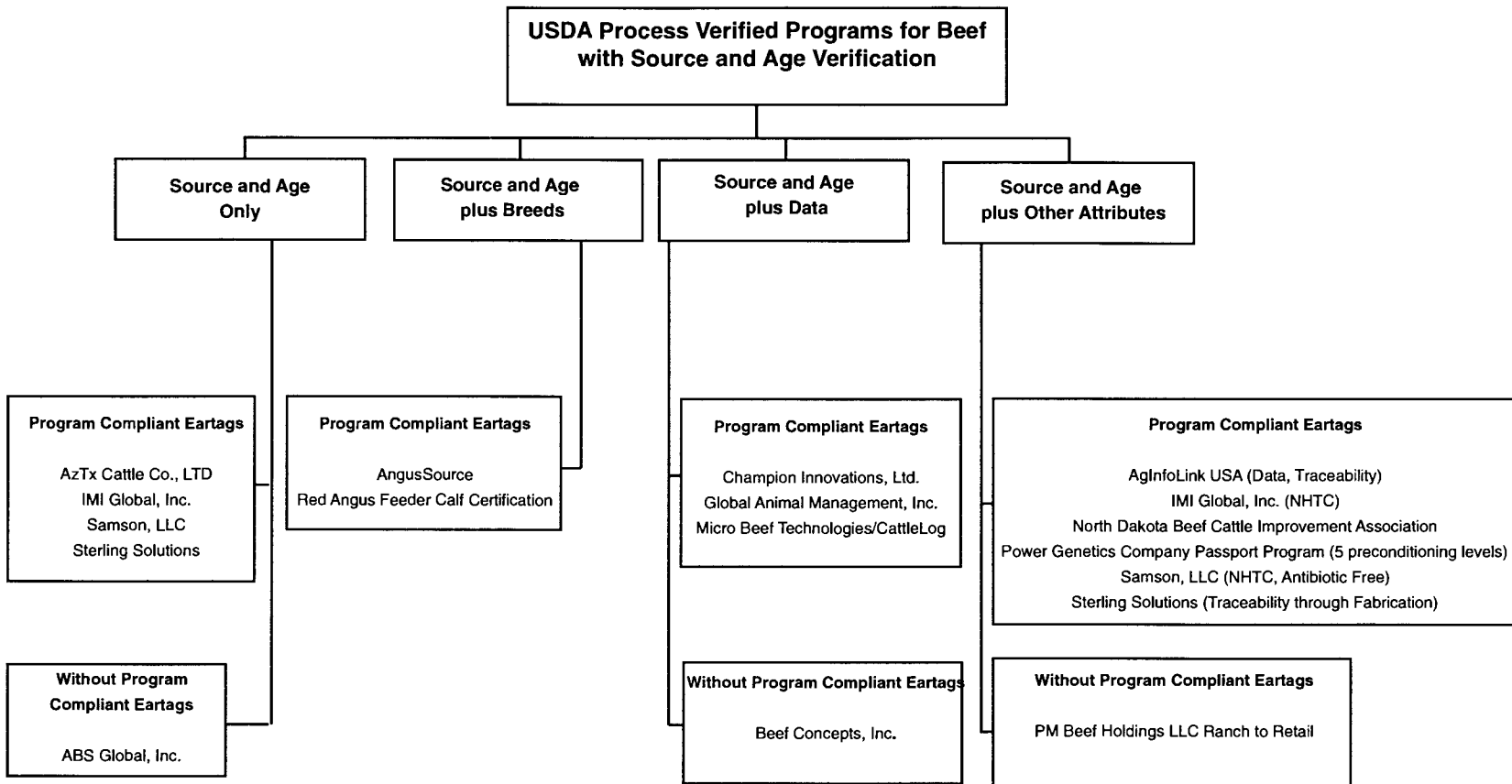


Figure 1. USDA Process Verified Programs for Beef Sorted by Claim and by PCT Use, February 19, 2008.

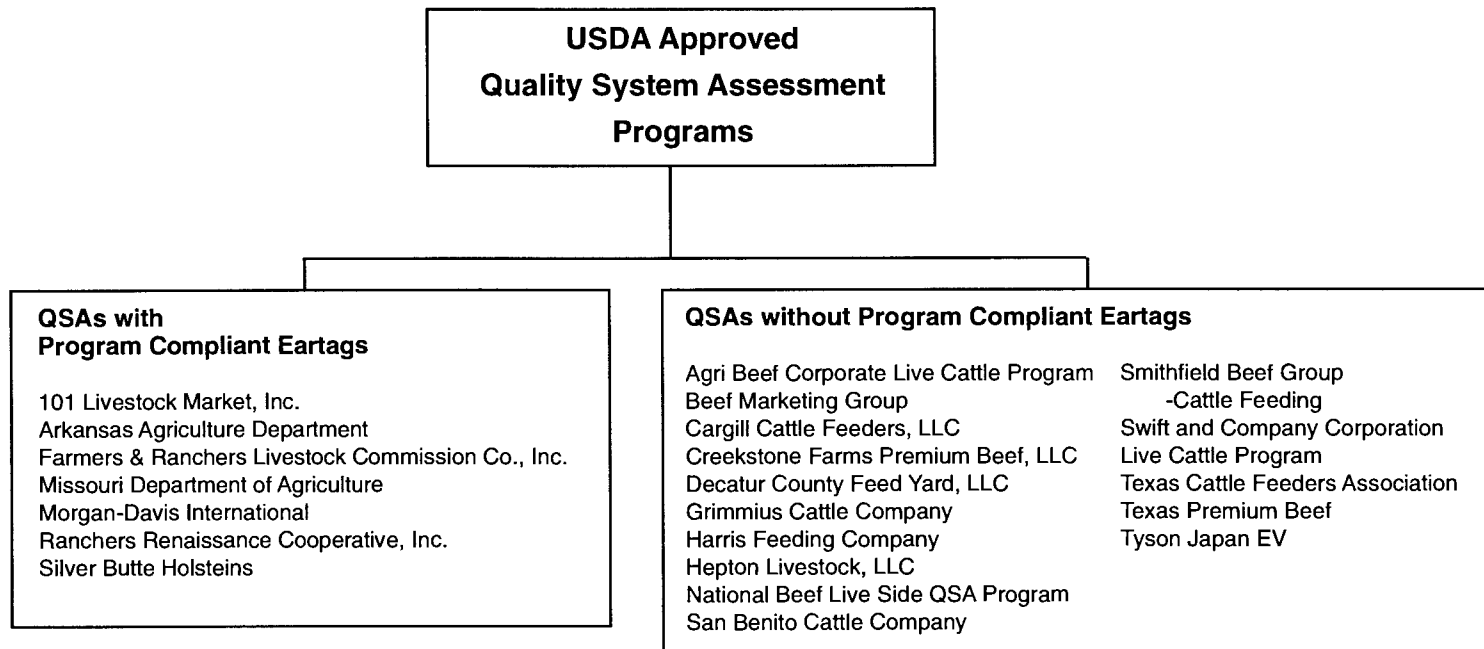


Figure 2. USDA Approved Quality System Assessment Programs Sorted by Use of Program Compliant Eartags, February 19, 2008.

mind, though, that participation is not free, so you will need to weigh the benefits of broadening your marketing options with the costs of participation and record keeping for separate programs. Do your homework and ask questions about where your calves can be marketed under each program you are considering.

Issues for Cow/calf producers

Cattle must be enrolled in a QSA or PVP program for source and age verification before leaving the farm or ranch of their birth to maintain export eligibility. Thus, only the cow/calf producer can enroll their calves in these programs. Though the information required is probably the same for most programs, each QSA or PVP likely has its own record-keeping forms to be used. At a minimum, QSA and PVP programs with source and age verification will require detailed birth records. Calf birth dates can be documented in one of two ways. The first is to document birthdates of the first and last calves from your herd's calving season. The entire calf crop from your herd for that calving season is then assigned the first calf's birth date. Alternatively, you can document individual calf birth dates for the entire calf crop. One implication for cow/calf producers is that if you do not have and/or do not wish to have a defined calving season, you will need to keep individual calf birth records in order to qualify cattle for source and age verification. Keep in mind that, in some programs, additional benefits may be received from having kept detailed calving records, including such information as dam and calf individual identification, calving date, and sex of each calf.

Tags used for individual animal identification differ among programs as well, though there are some that allow you to choose your own tags. If your operation maintains multiple herds and you assign calf age using the group birth date system, then the oldest calf age across herds will be the "group age" for all calves from your herds unless you document individual birthdates for all calves or enroll each herd as a separate farm or ranch. All cattle within a group must have the unique group identification. Cattle presented for individual age verification must also have individual animal identification.

Lastly, your records should be "audit-worthy" since USDA requires annual audits of at least 10% of program participants. In addition to birth dates, supporting records for audit purpose might include documentation of information such as cow-inventory, AI records, and bull-turnout records. All records must be kept for a minimum of three years.

Issues for Stocker/Backgrounders

Stocker/backgrounders who wish to invest in and market source and age verified cattle eligible for export with cattle that do not have PCTs must also go through application and likely on-site certification to become approved suppliers under a QSA or PVP program. Any transfer of cattle must be with other approved suppliers in the program so the chain of custody is not broken. Stocker and backgrounder operations must ensure both their cattle sources and buyers are approved suppliers to maintain export eligibility. If you buy calves from the same ranch or group of ranches on a regular basis, inquire whether they are or would be interested in enrolling their calves in a PVP or QSA program for source and age verification. That said, you may pay a premium for calves participating in an export eligible program.

As a stocker/backgrounder, you probably have access to a QSA or PVP program through your local livestock market. You can source cattle from any approved supplier within your program or from ranches enrolled in any QSA or PVP that use PCT. Finally, if you enrolled in a QSA or PVP program, you may also be able to source cattle from other PVPs that certify source and age, depending on your program's specific requirements regarding approved suppliers. Ultimately, you are responsible for verifying that the cattle you buy are export eligible before marketing them as such at the next level of the supply chain. A QSA or PVP program provides a means of doing this.

Certainly an issue for stocker/backgrounder operations is that of commingling cattle from different sources. Multiple groups of age-verified cattle can be commingled, even if birthdates differ across the groups of cattle. Since PVP and QSA programs require each calf have a unique individual or group ID tag, cattle age, and farm of birth are still traceable. Part of the initial certification process will likely involve documenting on-farm procedures for record keeping, receiving cattle, cattle identification, tracking the source of cattle, sorting non-source, and age-verified cattle, shipping cattle, and employee training. As with cow/calf operations, your records must be "audit-worthy" and kept for a minimum of three years.

Getting On Board

Though U.S. beef is exported to many countries, each with their own EV specifications, the added value being promoted with source and age verification through QSA and PVP programs is primarily derived from allowing products from the cattle to qualify for export to Japan since Japan's maximum age requirement is significantly lower than that of other countries. Consequently, determination of the availability of extra value depends primarily on supply and demand of cattle qualified for the export to Japan. At least currently, it appears there is some unmet demand as premiums are being promoted by a number of different organizations. As an individual cattleman, only you can determine if the increase in record keeping and costs are worth the opportunity for source and age premiums. Participation in programs that document additional claims may present other or additional opportunities for premiums.

If you are interested, start by talking with those you normally do business with to determine where your access to QSA or PVP programs might be. Additionally, talk with QSA and PVP program representatives and with those already involved in QSA or PVP programs about the record keeping load as well as their typical added costs and realized premiums. Links to current lists of approved QSA and PVP providers can be found at <http://www.okanimalid.com/addingvalue.html#>

References

Greiner, Scott P., John B. Hall, and Laura Marks. "What is Age and Source Verification?" Department of Animal & Poultry Sciences, Livestock Update, August 2007, Virginia Cooperative Extension, Virginia Tech University. Available at http://www.ext.vt.edu/news/periodicals/livestock/aps-07_08/aps-805.html

Iowa Beef Center. "The ABCs of Beef Marketing Programs." Iowa State University. Available at <http://www.iowabeef-center.org/content/ABCsOfBeefMarketingPrograms.pdf>. Created February 22, 2006.

Ishmael, Wes. "Want Age With That?", Beef Magazine, Dec. 1, 2006. http://beefmagazine.com/mag/beef_age

Mark, Darrell. "Beef Export Verification Programs: What Should Cattle Producers Do?" University of Nebraska's Beef Cattle Production. Timely Topic. Online at <http://beef.unl.edu/stories/200607250.shtml> Posted July 25, 2006.

Richards, Chris. "Source & Age Verification: Is There A Train? Can I Catch It?" Posted at http://www.cattlenetwork.com/cattle_identification_Content.asp?ContentID=139955. June 22, 2007.

USDA-AMS. "The USDA Quality System Assessment Program." <http://www.ams.usda.gov/lsg/arc/qsap.htm>

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Issued in furtherance of Cooperative Extension work, acts of May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture, Robert E. Whitson, Director of Cooperative Extension Service, Oklahoma State University, Stillwater, Oklahoma. This publication is printed and issued by Oklahoma State University as authorized by the Vice President, Dean, and Director of the Division of Agricultural Sciences and Natural Resources and has been prepared and distributed at a cost of 42 cents per copy. 0308