

# **2016 NBQA Market Cow and Bull**

Cooler, Postmortem  
Condemnation, Product Fabrication  
Data



Plant Name: \_\_\_\_\_

Location: \_\_\_\_\_

Date: \_\_\_\_\_ Shift: \_\_\_\_\_

Recording Institution: \_\_\_\_\_

Recorder: \_\_\_\_\_

## 2016 National Beef Quality Audit – Market Cow and Bull

### Cooler Data Sheet – *Protocol*

Please use blue pen to complete the data sheets.

- Record the Lot # at the top of the page if it can be determined. A new lot should be started on a new page.
- Car. ID/Sequence #
  - The carcass identification/sequence number could differ with each plant. It should be found on the carcass tag.
- REA
  - Ribeye area should be measured by dot grid, blotting paper, or beef camera
- L. Mat., S. Mat., PYG, % KPH, MARB, & Dark C.
  - Lean maturity, skeletal maturity, preliminary yield grade, percent KPH, marbling score, and dark cutting ribeyes will be evaluated by United States Department of Agriculture, Agricultural Marketing Service, Meat Grading and Certification Branch personnel.
- If carcasses are not ribbed, PYG will have to be estimated based on the USDA definitions. Definitions and standard references are listed below.
- For lean and skeletal maturity, please denote the position within maturity group. For example, A<sup>50</sup>, B<sup>10</sup>, etc...
- For marbling, please denote the position within the marbling degree. For example, SI<sup>50</sup>, Md<sup>10</sup>, etc...
- If given, include the tenth place on the PYG.
- Muscle scores should include a degree – high(+), average (°), low (-).
- Included on this data sheet is Muscle Score and Fat Color Score. These are also on the Bruise/Injection Site Data sheet. It is up to recorders where these will be observed. Be sure not to capture this data at each location. Standards for muscle score and fat color score are provided.

**Sample size:** 1/3 of all carcasses in the cooler during a production day.

### DEFINITION

<b>Blood splash</b>	Visible specs of blood within the muscle.
<b>Calloused eye</b>	Evidence of fat, which has replaced lean muscle within the <i>longissimus dorsi</i> .

## Muscle Scores



Source: National Market Cow and Bull Beef Quality Audit – 2007: A Survey of Producer Related Defects, John David Nicholson

## DEFINITIONS & DIAGRAMS

### USDA definitions by yield grade:

- 1.9 - Muscle visible through fat in many areas
  - THIN - Rib, loin, rump, clod
  - VERY THIN - Outside round, top of chuck, neck
  - SLIGHT DEPOSIT - Flank, cod, Brisket
- 2.9 - Nearly completely covered with fat
  - SLIGHTLY THIN - Rib, loin inside round
  - SLIGHTLY THICK - Rump, hip, clod
  - Lean plainly visible through fat over outside round, top of chuck, neck
  - SMALL DEPOSIT - Flank, cod
- 3.9 - Completely covered with fat
  - SLIGHTLY THICK - Rib, loin, inside round
  - MODERATELY THICK - Rump, hip, clod
  - Lean visible through fat over neck, lower outside round
  - SLIGHTLY LARGE DEPOSIT - Flank, cod
- 4.9 - Completely covered with fat
  - MODERATELY THICK - Rib, loin, inside round
  - THICK - Rump, hip, clod
  - Muscle visible on shank, flank, plate
  - LARGE DEPOSIT - Flank, cod

Source: USDA. 1989. Official United States Standards for Grades of Carcass Beef. Agric. Marketing Service, USDA, Washington, DC



**PYG 3.9(+)**



**PYG 2.9**

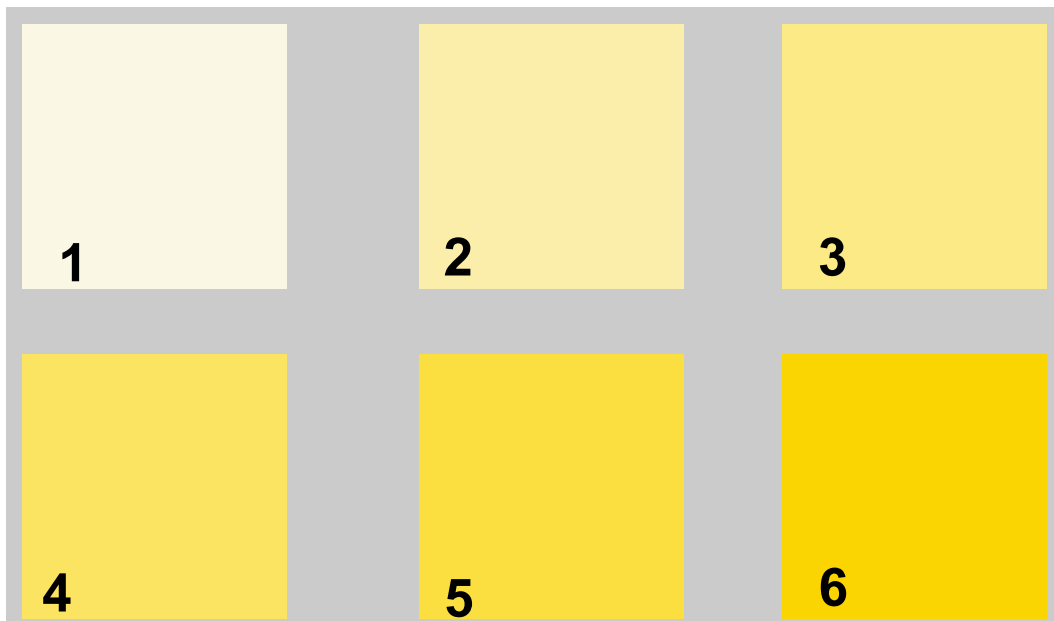


**PYG 1.9**

## 2016 National Beef Quality Audit – Market Cow and Bull

### Fat Color Scores

\*Fat color scores should be determined based off the darkest colored outside surface fat over the loin and rib.



Source: National Market Cow and Bull Beef Quality Audit – 2007: A Survey of Producer Related Defects, John David Nicholson





## 2016 National Beef Quality Audit – Market Cow and Bull

## Cooler Data Sheet

Date 12/14/15 Shift A Recorder McKensie HarrisLot # 21

\*A new lot should be started on a new page\*

Sample size: One-third of all carcasses during one production day.

Car. ID/Sequence # <u>89443</u> HCW (lbs.) <u>809</u> REA (in <sup>2</sup> ) <u>13.1</u> Sex: <u>C</u> B Type: Beef <u>Dairy</u>	L. MAT	A	B <u>60</u>	C	D	E	# Arthritic Joints <u>0</u> 1 2		
	S. MAT.	A	B	C <u>10</u>	D	E			
	PYG	1.	2. <u>0</u>	3.	4.	5.			
	% KPH	0	1.	2. <u>0</u>	3.	4.	5.		
	MARB	PD	TR	SL <u>30</u>	SM	MT	MD	SA	MA
	DARK C.	1/3	1/2	2/3	FULL	Blood splash	Calloused eye		
	MUSCLE SCORE	1	2 <u>2</u>	3	4	5			
FAT COLOR SCORE	1	2 <u>2</u>	3	4	5	6			
Plant Cow Grade:							Plant Bull Grade:		

Car. ID/Sequence # <u>89444</u> HCW (lbs.) <u>834</u> REA (in <sup>2</sup> ) <u>12.7</u> Sex: <u>C</u> B Type: Beef <u>Dairy</u>	L. MAT	A	B <u>20</u>	C	D	E	# Arthritic Joints <u>0</u> 1 2		
	S. MAT.	A	B	C <u>60</u>	D	E			
	PYG	1. <u>8</u>	2.	3.	4.	5.			
	% KPH	0	1. <u>5</u>	2.	3.	4.	5.		
	MARB	PD	TR	SL <u>70</u>	SM	MT	MD	SA	MA
	DARK C.	1/3	1/2	2/3	FULL	Blood splash	Calloused eye		
	MUSCLE SCORE	1	2 <u>2</u>	3.	4	5			
FAT COLOR SCORE	1	2 <u>2</u>	3	4	5	6			
Plant Cow Grade:							Plant Bull Grade:		

Car. ID/Sequence # <u>89445</u> HCW (lbs.) <u>901</u> REA (in <sup>2</sup> ) <u>13.9</u> Sex: <u>C</u> B Type: Beef <u>Dairy</u>	L. MAT	A	B <u>80</u>	C	D	E	# Arthritic Joints <u>0</u> 1 2		
	S. MAT.	A	B	C <u>20</u>	D	E			
	PYG	1.	2. <u>2</u>	3.	4.	5.			
	% KPH	0	1.	2. <u>5</u>	3.	4.	5.		
	MARB	PD	TR	SL	SM <u>10</u>	MT	MD	SA	MA
	DARK C.	1/3	1/2	2/3	FULL	Blood splash	Calloused eye		
	MUSCLE SCORE	1	2 <u>2</u>	3	4	5			
FAT COLOR SCORE	1	2 <u>2</u>	3	4	5	6			
Plant Cow Grade:							Plant Bull Grade:		

## 2016 National Beef Quality Audit – Market Cow and Bull Data Recording Methods

Please write a short description of how data was collected at this station. This will help us when interpreting and entering data.

This image shows a full page of blank handwriting practice paper. It features approximately 28 evenly spaced horizontal black lines across the entire page, providing a guide for letter height and placement. The background is plain white, and there are no margins, text, or other markings present.



2016 National Beef Quality Audit – Market Cow and Bull

**Cooler Data Sheet**

Date \_\_\_\_\_ Shift \_\_\_\_\_ Recorder \_\_\_\_\_

Lot # \_\_\_\_\_

**\*A new lot should be started on a new page\***

Sample size: One-third of all carcasses during one production day.

<b>Car. ID/Sequence #</b> <hr/> <b>HCW (lbs.)</b> _____ <b>REA (in<sup>2</sup>)</b> _____ <b>Sex:</b> <b>C</b> <b>B</b> <b>Type:</b> <b>Beef</b> <b>Dairy</b>	<b>L. MAT</b>	A	B	C	D	E	<b># Arthritic Joints</b> 0 1 2					
	<b>S. MAT.</b>	A	B	C	D	E						
	<b>PYG</b>	1.	2.	3.	4.	5.						
	<b>% KPH</b>	0	1.	2.	3.	4.	5.					
	<b>MARB</b>	PD	TR	SL	SM	MT	MD	SA	MA			
	<b>DARK C.</b>	1/3	1/2	2/3	Full	Blood splash		Calloused eye				
	<b>MUSCLE SCORE</b>	1		2		3		4		5		
		+	0	-	+	0	-	+	0	-	+	0
<b>FAT COLOR SCORE</b>	1		2		3		4		5		6	
<b>Plant Cow Grade:</b>						<b>Plant Bull Grade:</b>						

<b>Car. ID/Sequence #</b> <hr/> <b>HCW (lbs.)</b> _____ <b>REA (in<sup>2</sup>)</b> _____ <b>Sex:</b> <b>C</b> <b>B</b> <b>Type:</b> <b>Beef</b> <b>Dairy</b>	<b>L. MAT</b>	A	B	C	D	E	<b># Arthritic Joints</b> 0 1 2					
	<b>S. MAT.</b>	A	B	C	D	E						
	<b>PYG</b>	1.	2.	3.	4.	5.						
	<b>% KPH</b>	0	1.	2.	3.	4.	5.					
	<b>MARB</b>	PD	TR	SL	SM	MT	MD	SA	MA			
	<b>DARK C.</b>	1/3	½	2/3	FULL	Blood splash		Calloused eye				
	<b>MUSCLE SCORE</b>	1		2		3		4		5		
		+	0	-	+	0	-	+	0	-	+	0
<b>FAT COLOR SCORE</b>	1		2		3		4		5		6	
<b>Plant Cow Grade:</b>						<b>Plant Bull Grade:</b>						

<b>Car. ID/Sequence #</b> <hr/> <b>HCW (lbs.)</b> _____ <b>REA (in<sup>2</sup>)</b> _____ <b>Sex:</b> <b>C</b> <b>B</b> <b>Type:</b> <b>Beef</b> <b>Dairy</b>	<b>L. MAT</b>	A	B	C	D	E	<b># Arthritic Joints</b> 0 1 2					
	<b>S. MAT.</b>	A	B	C	D	E						
	<b>PYG</b>	1.	2.	3.	4.	5.						
	<b>% KPH</b>	0	1.	2.	3.	4.	5.					
	<b>MARB</b>	PD	TR	SL	SM	MT	MD	SA	MA			
	<b>DARK C.</b>	1/3	½	2/3	FULL	Blood splash		Calloused eye				
	<b>MUSCLE SCORE</b>	1		2		3		4		5		
		+	0	-	+	0	-	+	0	-	+	0
<b>FAT COLOR SCORE</b>	1		2		3		4		5		6	
<b>Plant Cow Grade:</b>						<b>Plant Bull Grade:</b>						

# Postmortem Condemnation

## 2016 National Beef Quality Audit – Market Cow and Bull

### **Postmortem Inspection Data Sheet – *Protocol***

Sample size: 100% of condemned carcasses

Following the conclusion of each production day, recorders should speak with the cooler supervisor and USDA inspector to obtain a complete list of USDA Condemned carcasses. Each suspect and condemned carcass should be recorded and the animal sex and type should be circled.

2016 National Beef Quality Audit – Market Cow and Bull  
Postmortem Inspection Condemnation Data Sheet

Date 12/14/15 Shift A Recorder McKensie Harris

Sample size: 100% of condemned carcasses

(circle one)					Reason For Condemnation
Beef Cow	Dairy Cow	Beef Bull	Dairy Bull	Unknown	Malignant lymphoma
Beef Cow	Dairy Cow	Beef Bull	Dairy Bull	Unknown	Multiple severe abscesses
Beef Cow	Dairy Cow	Beef Bull	Dairy Bull	Unknown	
Beef Cow	Dairy Cow	Beef Bull	Dairy Bull	Unknown	
Beef Cow	Dairy Cow	Beef Bull	Dairy Bull	Unknown	
Beef Cow	Dairy Cow	Beef Bull	Dairy Bull	Unknown	
Beef Cow	Dairy Cow	Beef Bull	Dairy Bull	Unknown	
Beef Cow	Dairy Cow	Beef Bull	Dairy Bull	Unknown	
Beef Cow	Dairy Cow	Beef Bull	Dairy Bull	Unknown	
Beef Cow	Dairy Cow	Beef Bull	Dairy Bull	Unknown	
Beef Cow	Dairy Cow	Beef Bull	Dairy Bull	Unknown	
Beef Cow	Dairy Cow	Beef Bull	Dairy Bull	Unknown	
Beef Cow	Dairy Cow	Beef Bull	Dairy Bull	Unknown	



## Data Recording Methods

[illegible]

2016 National Beef Quality Audit – Market Cow and Bull  
**Postmortem Inspection Condemnation Data Sheet**

Date \_\_\_\_\_ Shift \_\_\_\_\_ Recorder \_\_\_\_\_

**Sample size:** 100% of condemned carcasses

(circle one)					Reason For Condemnation
Beef Cow	Dairy Cow	Beef Bull	Dairy Bull	Unknown	
Beef Cow	Dairy Cow	Beef Bull	Dairy Bull	Unknown	
Beef Cow	Dairy Cow	Beef Bull	Dairy Bull	Unknown	
Beef Cow	Dairy Cow	Beef Bull	Dairy Bull	Unknown	
Beef Cow	Dairy Cow	Beef Bull	Dairy Bull	Unknown	
Beef Cow	Dairy Cow	Beef Bull	Dairy Bull	Unknown	
Beef Cow	Dairy Cow	Beef Bull	Dairy Bull	Unknown	
Beef Cow	Dairy Cow	Beef Bull	Dairy Bull	Unknown	
Beef Cow	Dairy Cow	Beef Bull	Dairy Bull	Unknown	
Beef Cow	Dairy Cow	Beef Bull	Dairy Bull	Unknown	
Beef Cow	Dairy Cow	Beef Bull	Dairy Bull	Unknown	
Beef Cow	Dairy Cow	Beef Bull	Dairy Bull	Unknown	
Beef Cow	Dairy Cow	Beef Bull	Dairy Bull	Unknown	

# Product Fabrication

## 2016 Cow and Bull National Beef Quality Audit

### **Product Fabrication Data Sheet – *Protocol***

Please use a blue pen to complete the data sheet.

- A daily fabrication sheet may be obtained directly from the plant and stapled to the data book.

**Sample size:** 100% of all fabricated carcasses in one production day



2016 National Beef Quality Audit – Market Cow and Bull

**Product Fabrication Data Sheet**

Date 12/14/15 Shift A Recorder McKensie Harris

**Sample size:** 100% of all fabricated carcasses in one production day.

\*Plant fabrication sheets will suffice\*

IMPS cuts	Cow lbs.	Bull lbs.
112 Rib, ribeye roll, 6-8 lbs.		
112 Rib, ribeye roll, 8-10 lbs.		
112 Rib, ribeye roll, 10-up lbs.		
112A Rib, ribeye roll-lip-on, 8-dn lbs.		
112A Rib, ribeye roll-lip-on, 8-up lbs.		
Chuck, boneless 85%		
120 Chuck, brisket		
168 Round, top inside, 10-dn lbs.		
168 Round, top inside, 10-up lbs.		
169A Round, top inside cap-off, 8-10 lbs.		
169A Round, top inside cap-off, 10-14 lbs.		
169A Round, top inside cap-off, 14-up lbs.		
171B Round, outside round		
171C Round, eye of round		
Loin, Semi-Bnls Short Loin, 13-dn lbs.		
Loin, Semi-Bnls Short Loin, 13-up lbs.		
180 Loin, strip, bnls, 7-9 lbs.		
180 Loin, strip, bnls, 9-up lbs.		
182 Loin, sirloin butt		
184 Loin, top sirloin butt		
191A Loin, butt tender, peeled		
90% Lean		
100% Lean - Inside Round		
100% Lean - Outside Round		
100% Lean - Eye of Round		
100% Lean - Flats and eyes		
100% Lean - Striploin		
100% Lean - S.P.B.		
116B Chuck, chuck tender		
167A Round, knuckle, peeled		
190 Loin, tenderloin, 2-3 lbs.		
190 Loin, tenderloin, 3-4 lbs.		
190 Loin, tenderloin, 4-5 lbs.		
190 Loin, tenderloin, 5-up lbs.		
193 Flank, flank steak		
Flank, rough		
Other:		
Other:		
<b>Defect Checklist:</b>	<b>Cows</b>	<b>Bulls</b>
Number of Injection Site Lesions Found:		1
Number of Abscesses Found:	2	
Number of Lead/Shot Found:		
Number of alarms by Metal Detector:		
Magnitude of Metal Detector:		

Entered by Date: \_\_\_\_\_ Initial: \_\_\_\_\_ Checked by: Date: \_\_\_\_\_ Initial: \_\_\_\_\_ Revised 11/18/15 MKH

See Plant sheet attached.

## Data Recording Methods

This image shows a full page of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

2016 National Beef Quality Audit – Market Cow and Bull

**Product Fabrication Data Sheet**

**Date** \_\_\_\_\_ **Shift** \_\_\_\_\_ **Recorder** \_\_\_\_\_

**Sample size:** 100% of all fabricated carcasses in one production day.

\*Plant fabrication sheets will suffice\*

<b>IMPS cuts</b>	<b>Cow lbs.</b>	<b>Bull lbs.</b>
112 Rib, ribeye roll, 6-8 lbs.		
112 Rib, ribeye roll, 8-10 lbs.		
112 Rib, ribeye roll, 10-up lbs.		
112A Rib, ribeye roll-lip-on, 8-dn lbs.		
112A Rib, ribeye roll-lip-on, 8-up lbs.		
Chuck, boneless 85%		
120 Chuck, brisket		
168 Round, top inside, 10-dn lbs.		
168 Round, top inside, 10-up lbs.		
169A Round, top inside cap-off, 8-10 lbs.		
169A Round, top inside cap-off, 10-14 lbs.		
169A Round, top inside cap-off, 14-up lbs.		
171B Round, outside round		
171C Round, eye of round		
Loin, Semi-Bnls Short Loin, 13-dn lbs.		
Loin, Semi-Bnls Short Loin, 13-up lbs.		
180 Loin, strip, bnls, 7-9 lbs.		
180 Loin, strip, bnls, 9-up lbs.		
182 Loin, sirloin butt		
184 Loin, top sirloin butt		
191A Loin, butt tender, peeled		
90% Lean		
100% Lean - Inside Round		
100% Lean - Outside Round		
100% Lean - Eye of Round		
100% Lean - Flats and eyes		
100% Lean - Striploin		
100% Lean - S.P.B.		
116B Chuck, chuck tender		
167A Round, knuckle, peeled		
190 Loin, tenderloin, 2-3 lbs.		
190 Loin, tenderloin, 3-4 lbs.		
190 Loin, tenderloin, 4-5 lbs.		
190 Loin, tenderloin, 5-up lbs.		
193 Flank, flank steak		
Flank, rough		
Other:		
Other:		
<b>Defect Checklist:</b>	<b>Cows</b>	<b>Bulls</b>
Number of Injection Site Lesions Found:		
Number of Abscesses Found:		
Number of Lead/Shot Found:		
Number of alarms by Metal Detector:		
Magnitude of Metal Detector:		

**Entered by Date:** \_\_\_\_\_ **Initial:** \_\_\_\_\_ **Checked by:** \_\_\_\_\_ **Initial:** \_\_\_\_\_