



Presented by **RACQ**  
ROYAL QUEENSLAND SHOW

## 141st ROYAL QUEENSLAND SHOW

FRIDAY 10 – SUNDAY 19 AUGUST 2018  
Ekka Beef Week 6 August – 11 August 2018

# PADDOCK TO PALATE COMPETITION

## Class 37 & Class 38

### Council Stewards

Mr Gary Noller  
Mr Angus Adnam, Ms Liz Allen, Mr Ian Galloway

### Honorary Council Stewards

Mr Ken Crotty OAM, Mr Bill Langley, Mr Edwin Cooke, Mr Col Davis

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**APPLICATIONS TO ENTER CLOSE** Friday 19 January 2018 at 5.00pm

ENTRY FEES	ONLINE	NON ONLINE
RNA Members	\$195.00	\$200.00
Non-Members	\$215.00	\$220.00

**NUMBER OF ENTRIES PER CLASS** No more than 3 entries/pens per exhibitor

**DELIVERY OF ANIMALS** Class 37 – Monday 26 February 2018  
Class 38 – Thursday 26 March 2018  
All animals to be inducted prior to paddocking. No exceptions!

**FEEDLOT ENTRY DAY** Class 37 – Tuesday 6 March 2018  
Class 38 – Friday 6 April 2018

**FINAL WEIGHING DAY** Class 37 – Thursday 14 June 2018  
Class 38 – Friday 15 June 2018

**2018 FIELD DAY** Tuesday 19 June 2018 at Grassdale Feedlot, Dalby

**PROCESSING OF CATTLE** Class 37 - Wednesday 20 June 2018  
Class 38 - Thursday 21 June 2018

**PRESENTATION OF AWARDS** Friday 10 August 2018

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FOR ONLINE ENTRIES GO TO  
[www.ekka.com.au](http://www.ekka.com.au)

FOR RNA MEMBERSHIP GO TO  
[www.rna.org.au](http://www.rna.org.au)

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LATE ENTRIES WILL ONLY BE ACCEPTED UPON PAYMENT OF LATE ENTRY FEES  
PRIZES AND PRIZE MONEY SUBJECT TO CHANGE  
NO REFUNDS WILL BE MADE TO ANIMALS WITHDRAWN AFTER CLOSE OF ENTRIES

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# SPONSORED BY

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The RNA wishes to thank the following sponsors who have contributed towards prize money, prizes or conduct of the **Paddock to Palate** Competition



# **RNA PADDOCK TO PALATE COMPETITION**

## **PRESENTED BY MORT & CO**

First Judged in 1998

Australia's richest Beef Supply Chain Competition incorporating Feedlot Weight Gain, Carcass Competition and MSA Eating Quality.

The RNA wishes to thank the following major sponsors who have contributed towards the conduct of the competition.

**Mort & Co**

**JBS Australia**

**Rabobank**

**Zoetis**

**Elanco Animal Health**

**Grant Daniel Long**

**Queensland Country Life**

**Super Butcher**

**Performance Feeds Pty Ltd**

**Thompson Longhorn**

**Virbac**

**Zee Tags**

### **SPECIAL CONDITIONS - CLASSES 37 & 38**

#### **Entry:**

1. Applications to enter Class 37 close at 5.00pm on Friday 19 January 2018. Applications to enter Class 38 close at 5:00pm on Friday 2 February 2018.
2. This competition is strictly limited to 777 animals (111 pens) for Class 37 and 518 animals (74 pens) for Class 38. Maximum of 3 entries/pens per exhibitor per class.
3. All entries to consist of a pen of 7 steers, with the best 6 being judged in the competition. If for any reason there are less than 6 head at the time of judging, the entry will be disqualified.
4. Exhibitors with multiple entries are requested to clearly identify individual pens if they are to be drafted into particular groups.

#### **Weight Gain Competition:**

5. The Feedlot Competition will take place at Mort & Co's Grassdale Feedlot Dalby.
6. Exhibitors to arrange transport to the feedlot, or alternatively Mort & Co will contact exhibitors to coordinate freight from central pick up locations through Farmhaul at a cost to be advised.

7. Exhibits in Classes 37 and 38 will spend 10 days in dedicated preconditioning paddocks to ensure shrink and curfew variability is minimised. Commencement weight for the competition will follow preconditioning. 4% will be deducted from this weight to allow for shrinkage, as applied in normal feedlot applications.
8. **ALL CATTLE MUST BE CLEAR OF TICKS.** All stock from Cattle Tick Infected Areas must receive a supervised inspection and a plunge dip under the supervision of an approved person at an official clearing facility. Cattle must commence travel to the feedlot within 24 hours of treatment.
9. As per Mort & Co feedlot requirements, all cattle must have 2.0 mls of Bovi-Shield MH-One vaccine, 7-14 days prior to the delivery of the animals in class 37 (100 day fed) and 7 - 44 days prior to the delivery of the animals in class 38 (70 day fed) to the Grassdale Feedlot. If you are entering cattle in both class 37 and 38 then the timing of vaccination has been made flexible enough to allow you to administer the same bottle of vaccine for both classes on the same day. The product will be cold pack couriered to your nominated address on acceptance of your entry.
10. The 2018 Paddock to Palate Field Day and announcement of the Feedlot trial winners will be on Tuesday 19 June 2018 at Grassdale Feedlot, Dalby. (Feedlot viewing and weight gain presentations at Grassdale followed by lunch).
11. Any Exhibitor wanting further Feedlot information should contact Mort & Co. Head Office on 07 4639 6049 or Berry Reynolds on 0418 928 222.

#### **Carcass Competition:**

12. All carcasses will be sold to JBS Australia Pty Ltd.
13. Carcasses will be judged on chiller assessment (refer to grid). Only one side is chiller assessed and this score is applied to the body.
14. Carcasses will be disqualified for having more than 4 teeth (class 37) /2 teeth (Class 38), Fat Colour greater than 2 and Meat Colour outside of 1B to3.

#### **MSA Eating Quality Competition:**

15. The MSA Model predicts the eating quality of 39 cuts in a carcass using the measurements collected by accredited MSA graders. MSA eating quality scores are the combination of tenderness, juiciness, flavour and overall liking of beef.
16. Carcasses will be disqualified for Rib Fat less than 3mm, pH greater than 5.71.

## Points Scale

<b>Weight Gain</b>	<b>35 points per animal</b> 1 point for every: 9kg gained (Class 37) to a max. of 315kg gain 8kg gained (Class 38) to a max. of 280kg gain
<b>Carcass Competition</b>	<b>110 points per carcass</b> Carcass weight - 10pts P8 fat depth - 10 pts Rib fat depth - 15 pts Fat colour - 10 pts Meat colour - 10 pts Marble score - 10 pts Meat yield - 10 pts Eye muscle area - 20 pts Fat distribution - 15 pts
<b>MSA Eating Quality</b>	<b>10 Points per carcass</b> Based on MSA Index score

## Announcement of overall winners

1. Announcement of overall winners will take place of Friday 10 August 2018 at the Brisbane Showgrounds

## CLASS 37 - EXPORT CLASS

Previous Overall Winners:

2017 – KD & KL McKenzie (Droughtmaster X)  
2016 - Riverglen Pastoral Company (Charolais)  
2015 - Riverglen Pastoral Company (Charolais X)  
2014 - G.Morgan & Co (Shorthorn)  
2013 - Acton Land & Cattle (Santa Gertrudis X)  
2012 - McNicholl Family Trust (Angus x Shorthorn)  
2011 - G. Morgan & Co (Shorthorn)  
2010 - Riverglen Pastoral Company (Charolais X)  
2009 - D & AD Bassingthwaighe & Co (Santa Gertrudis)

### **Class 37 The Sturrock Trophy for RNA and Mort & Co Paddock to Palate Overall Winner**

First :\$5,000, Association Sash, Trophy, Perpetual Trophy; Second :\$2,500, Association Sash;  
Third :\$1,500, Association Sash  
\$9000 sponsored by Mort & Co  
The Sturrock Trophy, Trophy sponsored by The RNA

## 100 DAY GRAIN FED WEIGHT GAIN COMPETITION

The RNA appreciates the assistance of Mort & Co's Grassdale Feedlot for the conduct of the Feedlot Weight Gain Competition.

### **SPECIAL CONDITIONS - CLASS 37A**

1. Entry weight of steers at arrival MUST BE LESS THAN 420KG. Please pay special attention to this weight range as exhibitors will be given 0 points for weight gain if above this range.
2. All steers must be delivered on Sunday 25 February or before 12 noon Monday 26 February 2018. It is mandatory that all steers arrive by Monday 26 February, as all animals need to be inducted prior to paddocking. Any steers

arriving after Monday 26 February will be disqualified and unable to participate in the competition.

3. Induction will take place on Monday 26 February 2018 followed by paddocking, Feedlot entry Tuesday 6 March 2018, 2nd implant Monday 23 April 2018, Final Weigh Thursday 14 June 2018, Processing Wednesday 20 June 2018. Due to processing and grading limitations all cattle in class 37A will be processed at Beef City at 106 days on feed excluding time spent in the preconditioning paddocks.

### **Class 37A Rabobank Best Weight Gain for Pen of Six Grain-Fed Steers**

First :\$3,000, Ribbon; Second :\$1,500, Ribbon;  
Third :\$500, Ribbon  
\$5000 sponsored by Rabobank Australia Limited

### **ZOETIS HIGHEST INDIVIDUAL WEIGHT GAIN - CLASS 37A**

\$1,500, Association Sash  
\$1500 sponsored by Zoetis

## CARCASS COMPETITION

The RNA appreciates the assistance of JBS Australia Pty Ltd and its Beef City Abattoir for the conduct of the Carcass Competition.

### BASE SPECIFICATIONS

Age: 0 - 4 teeth at slaughter

Fat Depth at P8 5/22mm

Site:

Carcass Weights: 300 kg - 420 kg HSCW

Muscle: A - C

Meat Colour: 1B - 2 - as measured in the AUS-MEAT language

Fat Colour: 0 - 2 - as measured in the AUS-MEAT language

Bruising: Nil

Base Price: All entries to be forward contracted prior to processing

### **Penalties**

Age: 5/6 teeth less 10 cents/kg

Fat Depth: 23/32 mm less 5 cents/kg

Fat Depth: 33/42 mm less 30 cents/kg

Fat Depth: 43 mm + less 50 cents/kg

Bruising: For 1, 2, 3 or 4 less 10 cents/kg under AUS-MEAT from base price

Carcass weights: 280/299.5 kg less 5 cents/kg from base price

If in the event of animals well outside specifications as in:

Age 7/8 teeth

Carcass Weights: greater than 420 kg or less than 280 kg

Muscle Score: D or E

Meat Colour: greater than 2

Fat Colour: greater than 2

Bruising: greater than 4

The price will be set before processing - these carcasses are not required to pack for premium orders. JBS Australia further advises that all bodies are weighted in sides and the payment would be on side weights in the event of a bruise on one side and not the second side.

### **Class 37B JBS Australia Pen of Six Carcass Competition**

First :\$3,000; Second :\$1,500, Ribbon; Third :\$500, Ribbon

\$5000 sponsored by JBS Australia

### **JBS AUSTRALIA CHAMPION CARCASS - CLASS 37B**

\$1,000, Association Sash

\$1000 sponsored by JBS Australia

### **JBS AUSTRALIA RESERVE CHAMPION CARCASS - CLASS 37B**

\$500, Association Sash

\$500 sponsored by JBS Australia

## **MSA EATING QUALITY COMPETITION**

The MSA index is a weighted average of these scores for the 39 MSA cuts for the most common corresponding cooking method. It is not a yield measurement. The MSA index is a single number and standard national measurement of the predicted eating quality and potential merit of a carcass.

### **Class 37C Thompson Longhorn MSA Eating Quality Competition**

First :\$400, Ribbon; Second :\$200, Ribbon;

Third :\$100, Ribbon

\$700 sponsored by Thompson Longhorn

### **SUPER BUTCHER HIGHEST INDIVIDUAL INDEX SCORE - CLASS 37C**

First: \$500, Association Sash

\$500 Sponsored by Super Butcher

## **CLASS 38 - TRADE CLASS**

Previous Overall Winners:

2017 – RB & KK Lamoureux (Santa/Angus x Black Simmental)

2016 - RB & KK Lamoureux (Santa/Angus x Black Simmental)

2015 - Minnamurra Pastoral Company (Angus)

### **Class 38 The Ken Crotty OAM Trophy for RNA and JBS Australia Paddock to Palate Overall Winner**

First :\$5,000, Association Sash, Trophy, Perpetual Trophy; Second :\$2,500, Association Sash; Third :\$1,500, Association Sash

\$9000 sponsored by JBS Australia

Perpetual Trophy sponsored by Queensland

Country Life and Trophy sponsored by The RNA

## **70 DAY GRAIN FED WEIGHT GAIN COMPETITION**

The RNA appreciates the assistance of Mort & Co's Grassdale Feedlot for the conduct of the Feedlot Weight Gain Competition.

### **SPECIAL CONDITIONS - CLASS 38A**

1. Entry weight of steers at arrival MUST BE LESS THAN 380KG. Please pay special attention to this weight range as exhibitors will be given 0 points for weight gain if above this range.
2. All steers must be delivered on Sunday 25 March or by 12 noon Monday 26 March 2018. It is mandatory that all steers arrive on Monday 26 March, as all animals need to

be inducted prior to paddocking. Any steers arriving after Monday 26 March will be disqualified and unable to participate in the competition.

3. Class 38 induction will take place on Monday 26 March 2018 followed by paddocking, Feedlot entry Friday 6 April 2018, Final Weigh Friday 15 June 2018 and Processing on Thursday 21 June 2018.
4. Due to processing and grading limitations all cattle in class 38A will be processed at Dinmore at 75 days on feed excluding time spent in the preconditioning paddocks.

### **Class 38A Elanco Animal Health Best Weight Gain for Pen of Six Grain-Fed Steers**

First :\$3,000, Ribbon; Second :\$1,500, Ribbon;

Third :\$500, Ribbon

\$5,000 sponsored by Elanco Animal Health

### **ELANCO ANIMAL HEALTH HIGHEST INDIVIDUAL WEIGHT GAIN - CLASS 38A**

\$1,500, Association Sash

\$1,500 sponsored by Elanco Animal Health

## **CARCASS COMPETITION**

The RNA appreciates the assistance of JBS Australia and its Dinmore Abattoir for the conduct of the Carcass Competition.

### **BASE SPECIFICATIONS**

Age: 0 - 2 teeth at slaughter

Fat Depth at P8 Site: 5/22mm

Carcass Weights: 260kg - 320kg HSCW

Muscle: A - C

Meat Colour: 1B - 2 - as measured in the AUS-MEAT language

Fat Colour: 0 - 2 - as measured in the AUS-MEAT language

Bruising: Nil

Base Price: All entries to be forward contacted prior to processing

### **Penalties**

Age: Greater than 2 teeth, trade penalties apply

Fat Depth: 23/32mm trade penalties apply

Bruising: For 1, 2, 3 or 4 less 10 cents/kg under AUS-MEAT from base price

Carcass weights: Less than 260kg and greater than 320kg trade penalties apply

The price will be set before processing - these carcasses are not required to pack for premium orders. JBS Australia further advises that all bodies are weighted in sides and the payment would be on side weights in the event of a bruise on one side and not the second side.

### **Class 38B Grant Daniel & Long Pen of Six Carcass Competition**

First :\$3,000, Ribbon; Second :\$1,500, Ribbon;

Third :\$500, Ribbon

\$5000 sponsored by Grant Daniel & Long Pty Ltd

**SUPER BUTCHER CHAMPION CARCASS - CLASS 38B**

\$1,000, Association Sash  
\$1000 sponsored by Super Butcher

**SUPER BUTCHER RESERVE CHAMPION CARCASS -  
CLASS 38**

\$500, Association Sash  
\$500 sponsored by Super Butcher

**MSA EATING QUALITY COMPETITION**

The MSA index is a weighted average of these scores for the 39 MSA cuts for the most common corresponding cooking method. It is not a yield measurement. The MSA index is a single number and standard national measurement of the predicted eating quality and potential merit of a carcass.

**Class 38C Thompson Longhorn MSA Eating Quality  
Competition**

First :\$400, Ribbon; Second :\$200, Ribbon;  
Third :\$100, Ribbon  
\$700 sponsored by Thompson Longhorn

**PERFORMANCE FEEDS HIGHEST INDIVIDUAL INDEX  
SCORE - CLASS 38C**

\$500, Association Sash  
\$500 sponsored by Performance Feeds Pty Ltd

## CLASS 37 JAPANESE CHILLER TRADE

OPTIMUM P8 FAT DEPTH: 11 - 12mm  
POINTS SYSTEM

Carcass Weight (kg)	Pts 10	P8 Fat Depth (mm)	Pts 10	Rib Fat Depth (mm)	Pts 15	Fat Colour	Pts 10	Meat Colour	Pts 10	Marbling	Pts 10	Est. Lean Meat Yield (%)	Pts 10								
241 - 260	0	5	1	5	1	0	10	1A	6	0	4	64+	10								
261 - 280	1	6	1	6	12	1	9	1B	9	1	8	63	9								
281 - 300	5	7	7	7	13	2	7	1C	10	2	10	62	8								
301 - 320	10	8	8	8	14	3	5	2	9	3	10	61	7								
321 - 340	10	9	9	9	15	4	3	3	7	4	10	60	6								
341 - 360	10	10	9	10	15	5	1	4	3	5	10	59	5								
360 - 420	10	11	10	11	14	6 - 9	0	5 - 7	0			58	4								
421 - 440	1	12	10	12	14	<div style="border: 1px solid black; width: 100px; height: 100px; margin: auto;"></div>						57	3								
> 440	0	13	9	13	12							56	2								
		14	9	14	12							55	1								
		15	9	15	11							≤ 54	0								
MSA Index	Pts	16	9	16	9																
≥63.0	10	17	8	17	7																
62.0-62.9	9	18	8	18	5																
61.0-61.9	8	19	8	19	3	<b>EMA – 20 points</b>															
60.0-60.9	7	20	7	20	1	As per AUS-MEAT calculation based on area of the EMA measured in sq. cm. at the quartering site in relation to the HSCW															
59.0-59.9	6	21	7	<div style="border: 1px solid black; padding: 5px;"> <p style="text-align: center; margin: 0;"><b>Fat Distribution - 15 Points</b></p> <table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <tr> <td style="width: 50%;">11 - 15 pts</td> <td>Fat evenly distributed</td> </tr> <tr> <td>6 - 10 pts</td> <td>Slightly uneven</td> </tr> <tr> <td>1 - 5 pts</td> <td>Uneven</td> </tr> <tr> <td>0 pts</td> <td>Lumpy fat in several depots or insufficient fat</td> </tr> </table> </div>										11 - 15 pts	Fat evenly distributed	6 - 10 pts	Slightly uneven	1 - 5 pts	Uneven	0 pts	Lumpy fat in several depots or insufficient fat
11 - 15 pts	Fat evenly distributed																				
6 - 10 pts	Slightly uneven																				
1 - 5 pts	Uneven																				
0 pts	Lumpy fat in several depots or insufficient fat																				
58.0-58.9	5	22	6																		
57.5-57.9	4	23	5																		
57.0-57.4	3	24	3																		
56.5-56.9	2	25	2																		
56.0-56.4	1	26	1																		
≤55.9	0	27	1																		

**TOTAL CARCASS POINTS = 110**

### Judging Criteria:

- Carcass Weight - The weight is based on Hot Standard Carcase Weight (HSCW).
- P8 Fat Depth – Is measured on the hot carcass at the P8 site using a Probe. The depth of fat at this site reflects the percentage of fat in the carcass and the subsequent meat yield. Max. points are given for a P8 Fat Depth of 11-12mm.
- Rib Fat Depth - Rib fat (RF) is the measurement of the thickness of subcutaneous fat measured in millimetres at the specified rib. The MSA Grading System uses Rib Fat in the prediction of eating quality. Max. points are given for a RF of 9-10mm.
- Fat colour - Fat Colour (FC) is the colour of the intermuscular fat lateral to the rib eye muscle and adjacent to the M. iliocostalis. It is assessed on the chilled carcass and scored against the AUS-MEAT Fat Colour reference standards from 0 to 9. Max. points are given for FC of 0.
- Meat colour - Meat Colour (MC) is the predominant colour of the rib eye muscle. Meat Colour is assessed on the chilled carcass at the bloomed rib eye muscle area and is scored against the AUS-MEAT colour reference standards from 1A-7. Max. points are given for MC of 1C.
- Marbling - Marbling (MB) is the fat deposited between muscle fibres and is assessed on the chilled carcass at the M.longissimus dorsi muscle and scored against the AUS-MEAT / MSA Marbling reference standards from 0 - 9. Max. points are given for MB greater than 2.
- Estimated Lean Meat Yield - Estimated Lean Meat Yield (ELMY) is the weight of meat in kilograms of an AUS-MEAT standard carcass that can be retained after the removal of subcutaneous and intermuscular fat, bone and other tissues. The equation for the prediction of ELMY is  $8.68 + 0.54 \text{ HSCW} - 1.338 \text{ fat thickness at 10th rib} + 0.259 \text{ EMA}$ .
- Eye Muscle Area - Eye Muscle Area (EMA) is the area of the surface of the M.longissimus dorsi at the 10/11th ribbing site and is calculated in square centimetres. The EMA points calculation is based on the area of the eye muscle measured in square centimetres in relation to the HSCW.
- MSA Index – The MSA Index is a single number and a standard national measurement of the predicted eating quality and potential merit of a carcass. Maximum points are given for index greater than 63.

## CLASS 38 SUPERMARKET AND RESTAURANT TRADE

OPTIMUM P8 FAT DEPTH: 10 - 11mm  
POINTS SYSTEM

Carcass Weight (kg)	Pts	P8 Fat Depth (mm)	Pts	Rib Fat Depth (mm)	Pts	Fat Colour	Pts	Meat Colour	Pts	Marbling	Pts	Est. Lean Meat Yield (%)	Pts
201 - 220	0	3	0	3	10	0	10	1A	8	0	8	64+	10
221 - 240	1	4	2	4	12	1	8	1B	10	1	10	63	9
241 - 260	5	5	3	5	13	2	6	1C	10	2	10	62	8
261 - 280	10	6	5	6	14	3	3	2	8	3	8	61	7
281 - 300	10	7	7	7	15	4	1	3	6	4	4	60	6
301 - 320	10	8	8	8	15	5 - 9 0	0	4	3	5	2	59	5
321 - 340	1	9	9	9	14			5	0	58	4		
340 - 360	0	10	10	10	10			6	0	57	3		
> 360	0	11	10	11	6			7	0	56	2		
		12	9	12	2							55	1
MSA Index	Pts	13	8									≤ 54	0
≥63.0	10	14	6										
62.0-62.9	9	15	3										
61.0-61.9	8	16	1										
60.0-60.9	7												
59.0-59.9	6												
58.0-58.9	5												
57.5-57.9	4												
57.0-57.4	3												
56.5-56.9	2												
56.0-56.4	1												
≤55.9	0												

  

EMA – 20 points	
As per AUS-MEAT calculation based on area of the EMA measured In sq.cm at the quartering site in relation to the HSCW	
Fat Distribution - 15 Points	
11 - 15 pts	Fat evenly distributed
6 - 10 pts	Slightly uneven
1 - 5 pts	Uneven
0 pts	Lumpy fat in several depots or insufficient fat

**TOTAL CARCASS POINTS = 110**

### Judging Criteria:

- Carcass Weight - The weight is based on Hot Standard Carcase Weight (HSCW).
- P8 Fat Depth – Is measured on the hot carcass at the P8 site using a Probe. The depth of fat at this site reflects the percentage of fat in the carcass and the subsequent meat yield. Max. points are given for a P8 Fat Depth of 10-11mm.
- Rib Fat Depth - Rib fat (RF) is the measurement of the thickness of subcutaneous fat measured in millimetres at the specified rib. The MSA Grading System uses Rib Fat in the prediction of eating quality. Max. points are given for a RF of 7-8mm.
- Fat colour - Fat Colour (FC) is the colour of the intermuscular fat lateral to the rib eye muscle and adjacent to the M. iliocostalis. It is assessed on the chilled carcass and scored against the AUS-MEAT Fat Colour reference standards from 0 to 9. Max. points are given for FC of 0.
- Meat colour - Meat Colour (MC) is the predominant colour of the rib eye muscle. Meat Colour is assessed on the chilled carcass at the bloomed rib eye muscle area and is scored against the AUS-MEAT colour reference standards from 1A-7. Max. points are given for MC of 1B.
- Marbling - Marbling (MB) is the fat deposited between muscle fibres and is assessed on the chilled carcass at the M.longissimus dorsi muscle and scored against the AUS-MEAT / MSA Marbling reference standards from 0 - 9. Max. points are given for MB greater of 1.
- Estimated Lean Meat Yield - Estimated Lean Meat Yield (ELMY) is the weight of meat in kilograms of an AUS-MEAT standard carcass that can be retained after the removal of subcutaneous and intermuscular fat, bone and other tissues. The equation for the prediction of ELMY is  $8.68 + 0.54 \text{ HSCW} - 1.338 \text{ fat thickness at 10th rib} + 0.259 \text{ EMA}$ .
- Eye Muscle Area - Eye Muscle Area (EMA) is the area of the surface of the M.longissimus dorsi at the 10/11th ribbing site and is calculated in square centimetres. The EMA points calculation is based on the area of the eye muscle measured in square centimetres in relation to the HSCW.
- MSA Index – The MSA Index is a single number and a standard national measurement of the predicted eating quality and potential merit of a carcass. Maximum points are given for index greater than 63.