

**Lot****Vendor**

1, 13

Seamus Byrne - Tomriland Roundwood Co Wicklow

10, 11, 12

Seamus Cullen - Ballinahinch Newtownmountkennedy Co Wicklow

4, 17

John Malone - Kyle Ballymurphy Borris Co Carlow

3, 5, 9

Trevor Masterson - Galbally Ballyhogue Enniscorthy Co Wexford

16

James O'Grady - Meenross Scariff Co Clare

14

Thomas O'Shea - Templequain Rathdowney Portlaoise Co Laois

18, 20

Michael G Oliver - Tullinacurra Swinford Co Mayo

2, 15

Dermot Rowe - Beggrieve Lobinstown Navan Co Meath

6, 19, 21

William Smith - Millbrook Oldcastle Co Meath

7

Noel Smyth - Greeve Mountnugent Co Cavan

8

Ms Mary Tarpey - Carrow Elphin Castlerea Co Roscommon

Lot 1 SPORTSFIELD NORMAN

ID: 372224389730107

Breed: Limousin

Sex: Male

DOB: 23-Feb-2018

Owner: Seamus Byrne - Tomriland Roundwood Co Wicklow

Breeder:

Sire: Goldies Jackpot
S3104

Ampertaine
Foreman

Wilodge Cerberus
Ampertaine Bathsheba

Goldies Vitality

Sarkley Ragtime
Goldies Tiffeny

Dam: Ballinclare Kendra
IE381076460791

Ballinclare Eoin (Et)

Sympa
Ov Nadia B

Ballinclare Grace

Vison
Farran Bob

Star Rating (Within Limousin breed)	Economic Indexes	€uro value per progeny	Index Reliability	Star rating (across all beef breeds)
★★★★★★	Terminal Index	€144	29% (Low)	★★★★★★
★★★	Replacement Index Maternal Cow Traits : Maternal Progeny Traits :	€92 €3 €89	23% (Low) 20% 30%	★★★★
	Dairy Beef			

Star Rating (Within Limousin breed)	Key profit traits	Index Value	Trait Reliability	Star rating (across all beef breeds)
Expected progeny performance				
	Calving difficulty (% 3 & 4) Breed ave: 4.65%,All breeds ave: 4.49%	+6.9%	29% (Low)	
★★★★★★	Docility (1-5 scale) Breed ave: -0.06,All breeds ave: 0.01	-0.01 scale	33% (Low)	★★★
★★★★★★	Carcass weight (kg) Breed ave: 23.63kg,All breeds ave: 16.19kg	+36.6kg	37% (Low)	★★★★★★
★★★★★	Carcass conformation (1-15 scale) Breed ave: 2.14,All breeds ave: 1.38	+2.29 scale	20% (Low)	★★★★★★

Expected daughter breeding performance				
	Daughter calving diff (% 3 & 4) Breed ave: 5.05%,All breeds ave: 5.79%	+3.87%	12% (V Low)	
★★★★★★	Daughter Milk (kg) Breed ave: -0.67kg,All breeds ave: 2.24kg	+2.2kg	14% (V Low)	★★★
★	Daughter calving interval (days) Breed ave: 1.26days,All breeds ave: -0.77days	+3.23days	20% (Low)	★

Additional Information:

Norman is a heifers calf. He has loads of stars and is fertility tested. Very quiet bull with loads of power and style.

Linear composites	Value	Reliability
Muscle		
Skeletal		
Function		

Herd data quality index

N/A

Animal not scored.

Lot 2 BEGSRIEVE NAIVE

ID: 372223233490876

Breed: Limousin

Sex: Male

DOB: 02-Mar-2018

Owner: Dermot Rowe - Begsrieve Lobinstown Navan Co Meath

Breeder:

Sire: Ampertaine Ifor
LM4063

Ampertaine
Foreman

Wilodge Cerberus
Ampertaine Bathsheba

Ampertaine Vera

Procters Rocco
Shannas Sarah

Dam: Begsrieve Flirt
IE281135520560

Milbrook Tanko

Mas Du Clo
Milbrook Monique Et

Begsrieve Cassie

Shire Milton
Begsrieve Titanic

Star Rating (Within Limousin breed)	Economic Indexes	€uro value per progeny	Index Reliability	Star rating (across all beef breeds)
★★	Terminal Index	€117	32% (Low)	★★★★
★★	Replacement Index Maternal Cow Traits : Maternal Progeny Traits :	€79 €4 €76	24% (Low) 20% 33%	★★★
	Dairy Beef			

Star Rating (Within Limousin breed)	Key profit traits	Index Value	Trait Reliability	Star rating (across all beef breeds)
Expected progeny performance				
	Calving difficulty (% 3 & 4) Breed ave: 4.65%,All breeds ave: 4.49%	+5.9%	36% (Low)	
★★★	Docility (1-5 scale) Breed ave: -0.06,All breeds ave: 0.01	-0.06 scale	38% (Low)	★★
★★★	Carcass weight (kg) Breed ave: 23.63kg,All breeds ave: 16.19kg	+22.9kg	37% (Low)	★★★★★
★★★★	Carcass conformation (1-15 scale) Breed ave: 2.14,All breeds ave: 1.38	+2.29 scale	27% (Low)	★★★★★

Expected daughter breeding performance				
	Daughter calving diff (% 3 & 4) Breed ave: 5.05%,All breeds ave: 5.79%	+4.08%	16% (V Low)	
★★	Daughter Milk (kg) Breed ave: -0.67kg,All breeds ave: 2.24kg	-1.5kg	22% (Low)	★
★★★	Daughter calving interval (days) Breed ave: 1.26days,All breeds ave: -0.77days	+1.52days	16% (V Low)	★

Additional Information:

Super bloodlines in this bull - Foreman - Mas Du Clo and Shire Milton for milk.

Linear composites	Value	Reliability
Muscle		
Skeletal		
Function		

Herd data quality index

N/A

Animal not scored.

Lot 3 GALBALLY NERO 1366

ID: 372217861371366

Breed: Limousin

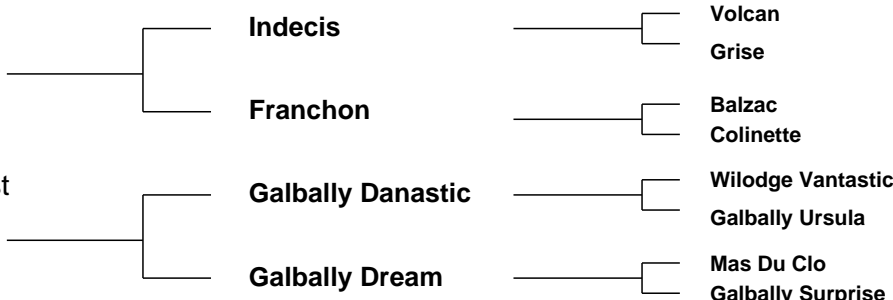
Sex: Male

DOB: 07-Mar-2018

Owner: Trevor Masterson - Galbally Ballyhogue Enniscorthy Co Wexford

Breeder:

Sire: On-Dit
ONI



Star Rating (Within Limousin breed)	Economic Indexes	€uro value per progeny	Index Reliability	Star rating (across all beef breeds)
★★★★★	Terminal Index	€130	47% (Average)	★★★★★★
★★★★★★	Replacement Index Maternal Cow Traits : Maternal Progeny Traits :	€113 €28 €85	47% (Average) 47% 48%	★★★★★★
	Dairy Beef			

Star Rating (Within Limousin breed)	Key profit traits	Index Value	Trait Reliability	Star rating (across all beef breeds)
Expected progeny performance				
	Calving difficulty (% 3 & 4) Breed ave: 4.65%,All breeds ave: 4.49%	+5.6%	51% (Average)	
★★★★★★	Docility (1-5 scale) Breed ave: -0.06,All breeds ave: 0.01	0.01 scale	49% (Average)	★★★
★★★★★	Carcass weight (kg) Breed ave: 23.63kg,All breeds ave: 16.19kg	+28.4kg	47% (Average)	★★★★★★
★★★★★	Carcass conformation (1-15 scale) Breed ave: 2.14,All breeds ave: 1.38	+2.2 scale	46% (Average)	★★★★★★

Expected daughter breeding performance				
	Daughter calving diff (% 3 & 4) Breed ave: 5.05%,All breeds ave: 5.79%	+3.69%	46% (Average)	
★★★★★	Daughter Milk (kg) Breed ave: -0.67kg,All breeds ave: 2.24kg	+0.5kg	49% (Average)	★★
★★	Daughter calving interval (days) Breed ave: 1.26days,All breeds ave: -0.77days	+2.8days	44% (Average)	★

Additional Information:

Super bull. Proven bloodline by Ondit - Maternal and Beef. Genotype done.

Linear composites	Value	Reliability
Muscle		
Skeletal		
Function		

Herd data quality index

N/A

Animal not scored.

Lot 4 KYLE NIAL

ID: 372216094460547

Breed: Limousin

Sex: Male

DOB: 09-Mar-2018

Owner: John Malone - Kyle Ballymurphy Borris Co Carlow

Breeder:

Sire: Cavellands Jolly
LM2395

Ionesco

Bambino

Coquette

Cavellands Daisy

Ronick Hawk

Cavellands Reba Et

Dam: Kyle Hortens
IE111023160415

Milbrook Dartangan
Et

Wilodge Vantastic

Milbrook Kathryn

Kyle Valerie

Fidele

Millknock Sheba



Star Rating (Within Limousin breed)	Economic Indexes	€uro value per progeny	Index Reliability	Star rating (across all beef breeds)
★★★	Terminal Index	€113	46% (Average)	★★★★★
★	Replacement Index Maternal Cow Traits : Maternal Progeny Traits :	€42 -€29 €70	42% (Average) 40% 46%	★
	Dairy Beef			

Star Rating (Within Limousin breed)	Key profit traits	Index Value	Trait Reliability	Star rating (across all beef breeds)
Expected progeny performance				
	Calving difficulty (% 3 & 4) Breed ave: 4.65%,All breeds ave: 4.49%	+7.2%	50% (Average)	
★★★★	Docility (1-5 scale) Breed ave: -0.06,All breeds ave: 0.01	-0.07 scale	48% (Average)	★
★★★★	Carcass weight (kg) Breed ave: 23.63kg,All breeds ave: 16.19kg	+22.5kg	46% (Average)	★★★★★
★★★★	Carcass conformation (1-15 scale) Breed ave: 2.14,All breeds ave: 1.38	+2.11 scale	46% (Average)	★★★★★★

Expected daughter breeding performance				
	Daughter calving diff (% 3 & 4) Breed ave: 5.05%,All breeds ave: 5.79%	+5.87%	39% (Low)	
★	Daughter Milk (kg) Breed ave: -0.67kg,All breeds ave: 2.24kg	-3.3kg	41% (Average)	★
★★	Daughter calving interval (days) Breed ave: 1.26days,All breeds ave: -0.77days	+1.73days	39% (Low)	★

Additional Information:

Linear composites	Value	Reliability
Muscle		
Skeletal		
Function		

Herd data quality index

N/A

Animal not scored.

Lot 5 GALBALLY NATHAN 1374

ID: 372217861371374

Breed: Limousin

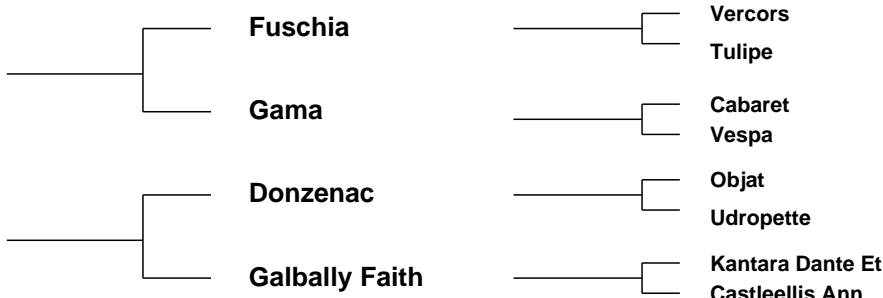
Sex: Male

DOB: 02-Apr-2018

Owner: Trevor Masterson - Galbally Ballyhogue Enniscorthy Co Wexford

Breeder:

Sire: Loyal
LM4184



Star Rating (Within Limousin breed)	Economic Indexes	€uro value per progeny	Index Reliability	Star rating (across all beef breeds)
★★★★★★	Terminal Index	€160	43% (Average)	★★★★★★
★★★★	Replacement Index Maternal Cow Traits : Maternal Progeny Traits :	€112 €2 €110	40% (Average) 38% 44%	★★★★★★
	Dairy Beef			

Star Rating (Within Limousin breed)	Key profit traits	Index Value	Trait Reliability	Star rating (across all beef breeds)
Expected progeny performance				
	Calving difficulty (% 3 & 4) Breed ave: 4.65%,All breeds ave: 4.49%	+3.9%	50% (Average)	
★★★★★★	Docility (1-5 scale) Breed ave: -0.06,All breeds ave: 0.01	0.04 scale	47% (Average)	★★★★★★
★★★★★★	Carcass weight (kg) Breed ave: 23.63kg,All breeds ave: 16.19kg	+30.1kg	43% (Average)	★★★★★★
★★★★★★	Carcass conformation (1-15 scale) Breed ave: 2.14,All breeds ave: 1.38	+2.6 scale	40% (Average)	★★★★★★

Expected daughter breeding performance				
	Daughter calving diff (% 3 & 4) Breed ave: 5.05%,All breeds ave: 5.79%	+5.43%	34% (Low)	
★★★	Daughter Milk (kg) Breed ave: -0.67kg,All breeds ave: 2.24kg	-0.8kg	40% (Average)	★★
★★	Daughter calving interval (days) Breed ave: 1.26days,All breeds ave: -0.77days	+1.9days	34% (Low)	★

Additional Information:

Super bull - bred for easy calving and shape. Sired by short gestation AI bull Loyal LM4184. Genotype done

Linear composites	Value	Reliability
Muscle		
Skeletal		
Function		

Herd data quality index

N/A

Animal not scored.

Lot 6 MILBROOK NAPPER

ID: 372213914771280

Breed: Limousin

Sex: Male

DOB: 04-Apr-2018

Owner: William Smith - Millbrook Oldcastle Co Meath

Breeder:

Sire: Milbrook Itchyballs
IE281084551081

Ampertaine
Commander

Glenrock Ventura
Ampertaine Annabella

Milbrook Geline

Milbrook Derby
Milbrook Celine (Et)

Dam: Milbrook Kitty 2
IE281084571158

Huntershall
Gladiator

Rossignol
Huntershall Dancer

Milbrook Bianca (Et)

Domino
Milbrook Monique Et

Star Rating (Within Limousin breed)	Economic Indexes	€uro value per progeny	Index Reliability	Star rating (across all beef breeds)
★★★★★★	Terminal Index	€172	26% (Low)	★★★★★★
★★★★★★	Replacement Index Maternal Cow Traits : Maternal Progeny Traits :	€130 €13 €117	22% (Low) 20% 26%	★★★★★★
	Dairy Beef			

Star Rating (Within Limousin breed)	Key profit traits	Index Value	Trait Reliability	Star rating (across all beef breeds)
Expected progeny performance				
	Calving difficulty (% 3 & 4) Breed ave: 4.65%,All breeds ave: 4.49%	+4%	31% (Low)	
★★★★★★	Docility (1-5 scale) Breed ave: -0.06,All breeds ave: 0.01	0.06 scale	33% (Low)	★★★★★★
★★★★★★	Carcass weight (kg) Breed ave: 23.63kg,All breeds ave: 16.19kg	+33.9kg	31% (Low)	★★★★★★
★★★★★★	Carcass conformation (1-15 scale) Breed ave: 2.14,All breeds ave: 1.38	+2.61 scale	24% (Low)	★★★★★★

Expected daughter breeding performance				
	Daughter calving diff (% 3 & 4) Breed ave: 5.05%,All breeds ave: 5.79%	+5%	14% (V Low)	
★	Daughter Milk (kg) Breed ave: -0.67kg,All breeds ave: 2.24kg	-5.1kg	22% (Low)	★
★★★★★★	Daughter calving interval (days) Breed ave: 1.26days,All breeds ave: -0.77days	-0.68days	13% (V Low)	★★★

Additional Information:

Linear composites	Value	Reliability
Muscle		
Skeletal		
Function		

Herd data quality index

N/A

Animal not scored.

Lot 7 GREEVE NAPOLEON

ID: 372217892010369

Breed: Limousin

Sex: Male

DOB: 09-Apr-2018

Owner: Noel Smyth - Greeve Mountnugent Co Cavan

Breeder:

Sire: Carrick Og Jimmy
IE291134390049

Procters Cavalier

Haltcliffe Vermont

Procters Prunella

Liscarn Brona

Scorboro Regius

Liscarn Noelle

Dam: Greeve Vera
IE121352910122

Annagh Norton

Annagh Light

Noan Judy

Mullaghmor Sally

Barnhill Leander (Dna) Et

Rowan Hannah



Star Rating (Within Limousin breed)	Economic Indexes	€uro value per progeny	Index Reliability	Star rating (across all beef breeds)
★	Terminal Index	€108	42% (Average)	★★★
★★★★★★	Replacement Index Maternal Cow Traits : Maternal Progeny Traits :	€116 €42 €74	40% (Average) 39% 43%	★★★★★★
	Dairy Beef			

Star Rating (Within Limousin breed)	Key profit traits	Index Value	Trait Reliability	Star rating (across all beef breeds)
Expected progeny performance				
	Calving difficulty (% 3 & 4) Breed ave: 4.65%,All breeds ave: 4.49%	+3.3%	47% (Average)	
★★★★★★	Docility (1-5 scale) Breed ave: -0.06,All breeds ave: 0.01	0 scale	42% (Average)	★★★
★	Carcass weight (kg) Breed ave: 23.63kg,All breeds ave: 16.19kg	+16.1kg	43% (Average)	★★★
★★	Carcass conformation (1-15 scale) Breed ave: 2.14,All breeds ave: 1.38	+1.96 scale	41% (Average)	★★★★★★

Expected daughter breeding performance				
	Daughter calving diff (% 3 & 4) Breed ave: 5.05%,All breeds ave: 5.79%	+5.76%	39% (Low)	
★★★★	Daughter Milk (kg) Breed ave: -0.67kg,All breeds ave: 2.24kg	+0.8kg	42% (Average)	★★
★★★★★★	Daughter calving interval (days) Breed ave: 1.26days,All breeds ave: -0.77days	-1.04days	37% (Low)	★★★

Additional Information:

3.3% calving ease. From short gestation and milky lines, ideal for dairy use.

Linear composites	Value	Reliability
Muscle		
Skeletal		
Function		

Herd data quality index

N/A

Animal not scored.

Lot 8 BOYANAGH NATHAN

ID: 372219761020861

Breed: Limousin

Sex: Male

DOB: 10-Apr-2018

Owner: Ms Mary Tarpey - Carrow Elphin Castlerea Co Roscommon

Breeder:

Sire: Elite Ice Cream Et
LM2206

Ampertaine Elgin

Glenrock Ventura
Ampertaine Carla

Ardlea George

Emerson
Ardlea Delta

Dam: Boyanagh Inas
IE311415630692

Wilodge Tonka

Oxygene
Wilodge Meclaira

Castlerock Ultima

Pelletstown Ronald
Rowan Paula



Star Rating (Within Limousin breed)	Economic Indexes	€uro value per progeny	Index Reliability	Star rating (across all beef breeds)
★★★	Terminal Index	€125	45% (Average)	★★★★
★	Replacement Index Maternal Cow Traits : Maternal Progeny Traits :	€45 -€34 €79	41% (Average) 39% 46%	★
	Dairy Beef			

Star Rating (Within Limousin breed)	Key profit traits	Index Value	Trait Reliability	Star rating (across all beef breeds)
Expected progeny performance				
	Calving difficulty (% 3 & 4) Breed ave: 4.65%,All breeds ave: 4.49%	+6.5%	49% (Average)	
★	Docility (1-5 scale) Breed ave: -0.06,All breeds ave: 0.01	-0.12 scale	47% (Average)	★
★★★★★	Carcass weight (kg) Breed ave: 23.63kg,All breeds ave: 16.19kg	+26.6kg	47% (Average)	★★★★★
★★★★★	Carcass conformation (1-15 scale) Breed ave: 2.14,All breeds ave: 1.38	+2.25 scale	46% (Average)	★★★★★

Expected daughter breeding performance				
	Daughter calving diff (% 3 & 4) Breed ave: 5.05%,All breeds ave: 5.79%	+4.92%	38% (Low)	
★★	Daughter Milk (kg) Breed ave: -0.67kg,All breeds ave: 2.24kg	-2.2kg	38% (Low)	★
★	Daughter calving interval (days) Breed ave: 1.26days,All breeds ave: -0.77days	+2.97days	37% (Low)	★

Additional Information:

Linear composites	Value	Reliability
Muscle		
Skeletal		
Function		

Herd data quality index

N/A

Animal not scored.

Lot 9 GALBALLY NOBBER 1386

ID: 372217861321386

Breed: Limousin

Sex: Male

DOB: 21-Apr-2018

Owner: Trevor Masterson - Galbally Ballyhogue Enniscorthy Co Wexford

Breeder:

Sire: Lodge Hamlet
LM4058

5331 Saphir

Jacot

Issue

Lodge Violet

Broadmeadows Cannon
Middledale Tangerine

Dam: Galbally Jasmine
IE371218331020

Galbally Danastic

Wilodge Vantastic

Galbally Ursula

Galbally Daisy

Lennon Breezer (Et)

Galbally U-268



Star Rating (Within Limousin breed)	Economic Indexes	€uro value per progeny	Index Reliability	Star rating (across all beef breeds)
★★★★★★	Terminal Index	€139	46% (Average)	★★★★★★
★★★★	Replacement Index Maternal Cow Traits : Maternal Progeny Traits :	€98 €7 €92	43% (Average) 42% 47%	★★★★
	Dairy Beef			

Star Rating (Within Limousin breed)	Key profit traits	Index Value	Trait Reliability	Star rating (across all beef breeds)
Expected progeny performance				
	Calving difficulty (% 3 & 4) Breed ave: 4.65%,All breeds ave: 4.49%	+5.5%	50% (Average)	
★★★★★★	Docility (1-5 scale) Breed ave: -0.06,All breeds ave: 0.01	0.01 scale	48% (Average)	★★★
★★★★	Carcass weight (kg) Breed ave: 23.63kg,All breeds ave: 16.19kg	+26.8kg	47% (Average)	★★★★★★
★★★★★★	Carcass conformation (1-15 scale) Breed ave: 2.14,All breeds ave: 1.38	+2.68 scale	46% (Average)	★★★★★★

Expected daughter breeding performance				
	Daughter calving diff (% 3 & 4) Breed ave: 5.05%,All breeds ave: 5.79%	+4.44%	40% (Average)	
★	Daughter Milk (kg) Breed ave: -0.67kg,All breeds ave: 2.24kg	-6.6kg	45% (Average)	★
★★★★	Daughter calving interval (days) Breed ave: 1.26days,All breeds ave: -0.77days	-0.18days	37% (Low)	★★

Additional Information:

Stylish well muscled bull with easy calving genetics. Sire is popular UK AI Sire Lodge Hamlet Genotype test done.

Linear composites	Value	Reliability
Muscle		
Skeletal		
Function		

Herd data quality index

N/A

Animal not scored.

Lot 10 BALLINAHINCH NERO 3

ID: 372216706320577

Breed: Limousin

Sex: Male

DOB: 24-Apr-2018

Owner: Seamus Cullen - Ballinahinch Newtownmountkennedy Co Wicklow

Breeder:

Sire: Tomriland Kit (Et)
IE381121130597

Ampertaine
Foreman

Wilodge Cerberus
Ampertaine Bathsheba

Tomriland Edel Et

Ideal 23
Cloneygowan Velvet

Dam: Ballinahinch Kate
IE381127030488

Craigatoke Gamble

Plumtree Deus
Craigatoke Diana

Ballinahinch Fifi

Ballynerrin Remy Et
Ballinahinch Amber



Star Rating (Within Limousin breed)	Economic Indexes	€uro value per progeny	Index Reliability	Star rating (across all beef breeds)
★★★★★★	Terminal Index	€154	39% (Low)	★★★★★★
★★★★★★	Replacement Index Maternal Cow Traits : Maternal Progeny Traits :	€119 €18 €101	38% (Low) 37% 40%	★★★★★★
	Dairy Beef			

Star Rating (Within Limousin breed)	Key profit traits	Index Value	Trait Reliability	Star rating (across all beef breeds)
Expected progeny performance				
	Calving difficulty (% 3 & 4) Breed ave: 4.65%,All breeds ave: 4.49%	+5.5%	44% (Average)	
★★★★★	Docility (1-5 scale) Breed ave: -0.06,All breeds ave: 0.01	-0.02 scale	40% (Average)	★★★
★★★★★★	Carcass weight (kg) Breed ave: 23.63kg,All breeds ave: 16.19kg	+33.5kg	40% (Average)	★★★★★★
★★★★★★	Carcass conformation (1-15 scale) Breed ave: 2.14,All breeds ave: 1.38	+2.43 scale	38% (Low)	★★★★★★

Expected daughter breeding performance				
	Daughter calving diff (% 3 & 4) Breed ave: 5.05%,All breeds ave: 5.79%	+4.31%	36% (Low)	
★★★	Daughter Milk (kg) Breed ave: -0.67kg,All breeds ave: 2.24kg	-0.6kg	39% (Low)	★★★
★★★★★	Daughter calving interval (days) Breed ave: 1.26days,All breeds ave: -0.77days	-0.05days	35% (Low)	★★★

Additional Information:

Animal not scored.

Linear composites	Value	Reliability
Muscle		
Skeletal		
Function		

Herd data quality index

N/A

Lot 11 BALLINAHINCH NICCO

ID: 372216706330578

Breed: Limousin

Sex: Male

DOB: 25-Apr-2018

Owner: Seamus Cullen - Ballinahinch Newtownmountkennedy Co Wicklow

Breeder:

Sire: Tomriland Kit (Et)
IE381121130597

Ampertaine
Foreman

Wilodge Cerberus
Ampertaine Bathsheba

Tomriland Edel Et

Ideal 23
Cloneygowan Velvet

Dam: Ballinahinch Grettle
IE381127030389

Haltcliffe Dollar

Cloughhead Umpire
Haltcliffe Bess

Corlismore Victoria

Shire Milton
Birchall Irene



Star Rating (Within Limousin breed)	Economic Indexes	€uro value per progeny	Index Reliability	Star rating (across all beef breeds)
★★★★★★	Terminal Index	€166	40% (Average)	★★★★★★
★★★★★★	Replacement Index Maternal Cow Traits : Maternal Progeny Traits :	€113 €2 €111	39% (Low) 38% 40%	★★★★★★
	Dairy Beef			

Star Rating (Within Limousin breed)	Key profit traits	Index Value	Trait Reliability	Star rating (across all beef breeds)
Expected progeny performance				
	Calving difficulty (% 3 & 4) Breed ave: 4.65%,All breeds ave: 4.49%	+4.8%	45% (Average)	
★★★	Docility (1-5 scale) Breed ave: -0.06,All breeds ave: 0.01	-0.07 scale	41% (Average)	★
★★★★★★	Carcass weight (kg) Breed ave: 23.63kg,All breeds ave: 16.19kg	+34.3kg	40% (Average)	★★★★★★
★★★★★★	Carcass conformation (1-15 scale) Breed ave: 2.14,All breeds ave: 1.38	+2.64 scale	38% (Low)	★★★★★★

Expected daughter breeding performance				
	Daughter calving diff (% 3 & 4) Breed ave: 5.05%,All breeds ave: 5.79%	+4.78%	38% (Low)	
★★★★	Daughter Milk (kg) Breed ave: -0.67kg,All breeds ave: 2.24kg	+0.6kg	41% (Average)	★★
★★★	Daughter calving interval (days) Breed ave: 1.26days,All breeds ave: -0.77days	+1.68days	36% (Low)	★

Additional Information:

Stylish wide bull out of milky dam.

Linear composites	Value	Reliability
Muscle		
Skeletal		
Function		

Herd data quality index

N/A

Animal not scored.

Lot 12 BALLINAHINCH NEWMAN

ID: 372216706380582

Breed: Limousin

Sex: Male

DOB: 15-May-2018

Owner: Seamus Cullen - Ballinahinch Newtownmountkennedy Co Wicklow

Breeder:

Sire: Tomriland Kit (Et)
IE381121130597

Ampertaine
Foreman

Wilodge Cerberus
Ampertaine Bathsheba

Tomriland Edel Et

Ideal 23
Cloneygowan Velvet

Dam: Sharalmo Jasmine
IE291606380509

Castleshane Fred

Fieldson Alfie
Castleshane Masie

Powerful Free
Range

Sympa
Satinette



Star Rating (Within Limousin breed)	Economic Indexes	€uro value per progeny	Index Reliability	Star rating (across all beef breeds)
★★★★★★	Terminal Index	€147	39% (Low)	★★★★★★
★★★	Replacement Index Maternal Cow Traits : Maternal Progeny Traits :	€94 -€1 €95	38% (Low) 37% 39%	★★★★
	Dairy Beef			

Star Rating (Within Limousin breed)	Key profit traits	Index Value	Trait Reliability	Star rating (across all beef breeds)
Expected progeny performance				
	Calving difficulty (% 3 & 4) Breed ave: 4.65%,All breeds ave: 4.49%	+6.3%	44% (Average)	
★★★★	Docility (1-5 scale) Breed ave: -0.06,All breeds ave: 0.01	-0.04 scale	39% (Low)	★★
★★★★★★	Carcass weight (kg) Breed ave: 23.63kg,All breeds ave: 16.19kg	+32.3kg	39% (Low)	★★★★★★
★★★★★★	Carcass conformation (1-15 scale) Breed ave: 2.14,All breeds ave: 1.38	+2.49 scale	37% (Low)	★★★★★★

Expected daughter breeding performance				
	Daughter calving diff (% 3 & 4) Breed ave: 5.05%,All breeds ave: 5.79%	+4.1%	37% (Low)	
★★★	Daughter Milk (kg) Breed ave: -0.67kg,All breeds ave: 2.24kg	-0.7kg	39% (Low)	★★
★★★	Daughter calving interval (days) Breed ave: 1.26days,All breeds ave: -0.77days	+1.58days	36% (Low)	★

Additional Information:

Linear composites	Value	Reliability
Muscle		
Skeletal		
Function		

Herd data quality index

N/A

Animal not scored.

Lot 13 SPORTSFIELD NEMO

ID: 372224389750109

Breed: Limousin

Sex: Male

DOB: 20-May-2018

Owner: Seamus Byrne - Tomriland Roundwood Co Wicklow

Breeder:

Sire: Mullary Intrepid
LM4093

Plumtree Fantastic

Wilodge Vantastic

Bankdale Amber

Bremore Veneer

Nenuphar

Bremore Sallyann Et

Dam: Mill Rose Irene
IE221407490234

Ardnacrusha
Gordan

Acajou

Ardnacrusha Christine (Et)

Kilpatrick Farm Ellis

Newtown Conrad

Kilpatrick Farm Cassie

Star Rating (Within Limousin breed)	Economic Indexes	€uro value per progeny	Index Reliability	Star rating (across all beef breeds)
★★★	Terminal Index	€120	33% (Low)	★★★★
★	Replacement Index Maternal Cow Traits : Maternal Progeny Traits :	€56 -€23 €79	29% (Low) 28% 32%	★★
	Dairy Beef			

Star Rating (Within Limousin breed)	Key profit traits	Index Value	Trait Reliability	Star rating (across all beef breeds)
Expected progeny performance				
	Calving difficulty (% 3 & 4) Breed ave: 4.65%,All breeds ave: 4.49%	+5%	33% (Low)	
★★	Docility (1-5 scale) Breed ave: -0.06,All breeds ave: 0.01	-0.11 scale	36% (Low)	★
★★★★	Carcass weight (kg) Breed ave: 23.63kg,All breeds ave: 16.19kg	+23.8kg	37% (Low)	★★★★★
★★	Carcass conformation (1-15 scale) Breed ave: 2.14,All breeds ave: 1.38	+2.07 scale	35% (Low)	★★★★★

Expected daughter breeding performance				
	Daughter calving diff (% 3 & 4) Breed ave: 5.05%,All breeds ave: 5.79%	+4.41%	16% (V Low)	
★	Daughter Milk (kg) Breed ave: -0.67kg,All breeds ave: 2.24kg	-6.3kg	29% (Low)	★
★★★★	Daughter calving interval (days) Breed ave: 1.26days,All breeds ave: -0.77days	+1.42days	22% (Low)	★

Additional Information:

Nemo is fertility tested. He is quiet with loads of power and style

Linear composites	Value	Reliability
Muscle		
Skeletal		
Function		

Herd data quality index

N/A

Animal not scored.

Lot 14 TEMPLEQUAIN NATIVE

ID: 372224801731646

Breed: Limousin

Sex: Male

DOB: 18-Jun-2018

Owner: Thomas O'Shea - Templequain Rathdowney Portlaoise Co Laois

Breeder:

Sire: Castleview Gringo Et
GWO

Wilodge Vantastic

Wilodge Tonka
Ravenelle

Castleview Regina
Et

Ferry
F040 G7

Dam: Templequain Jewel
IE221241741335

Armoric

Neuf
Souriante

Templequain Harriet

Goldies Terence
Templequain Emerald



Star Rating (Within Limousin breed)	Economic Indexes	€uro value per progeny	Index Reliability	Star rating (across all beef breeds)
★★★★★★	Terminal Index	€165	48% (Average)	★★★★★★
★★★★★	Replacement Index Maternal Cow Traits : Maternal Progeny Traits :	€107 -€4 €111	47% (Average) 47% 48%	★★★★★★
	Dairy Beef			

Star Rating (Within Limousin breed)	Key profit traits	Index Value	Trait Reliability	Star rating (across all beef breeds)
Expected progeny performance				
	Calving difficulty (% 3 & 4) Breed ave: 4.65%,All breeds ave: 4.49%	+4.2%	50% (Average)	
★★	Docility (1-5 scale) Breed ave: -0.06,All breeds ave: 0.01	-0.1 scale	47% (Average)	★
★★★★★★	Carcass weight (kg) Breed ave: 23.63kg,All breeds ave: 16.19kg	+31.7kg	52% (Average)	★★★★★★
★★★★★★	Carcass conformation (1-15 scale) Breed ave: 2.14,All breeds ave: 1.38	+2.65 scale	46% (Average)	★★★★★★

Expected daughter breeding performance				
	Daughter calving diff (% 3 & 4) Breed ave: 5.05%,All breeds ave: 5.79%	+5.87%	45% (Average)	
★	Daughter Milk (kg) Breed ave: -0.67kg,All breeds ave: 2.24kg	-3.9kg	47% (Average)	★
★★★★	Daughter calving interval (days) Breed ave: 1.26days,All breeds ave: -0.77days	-0.25days	44% (Average)	★★★

Additional Information:
Easy calving bloodlines

Linear composites	Value	Reliability
Muscle		
Skeletal		
Function		

Herd data quality index
N/A

Animal not scored.

Lot 15 BEGSRIEVE NOTORIOUS

ID: 372223233450897

Breed: Limousin

Sex: Male

DOB: 27-Jun-2018

Owner: Dermot Rowe - Begsrieve Lobinstown Navan Co Meath

Breeder:

Sire: Lodge Hamlet
LM4058

5331 Saphir

Jacot

Issue

Lodge Violet

Broadmeadows Cannon
Middledale Tangerine

Dam: Begsrieve Chauette
IE281135520453

Scorboro Regius

Olympian

Lace

Begsrieve Sunshine

Enjoleur

Begsrieve Mistress

Star Rating (Within Limousin breed)	Economic Indexes	€uro value per progeny	Index Reliability	Star rating (across all beef breeds)
★★★★★★	Terminal Index	€143	33% (Low)	★★★★★★
★★★★	Replacement Index Maternal Cow Traits : Maternal Progeny Traits :	€99 €1 €98	28% (Low) 25% 34%	★★★★
	Dairy Beef			

Star Rating (Within Limousin breed)	Key profit traits	Index Value	Trait Reliability	Star rating (across all beef breeds)
Expected progeny performance				
	Calving difficulty (% 3 & 4) Breed ave: 4.65%,All breeds ave: 4.49%	+4%	37% (Low)	
★★	Docility (1-5 scale) Breed ave: -0.06,All breeds ave: 0.01	-0.08 scale	41% (Average)	★
★★★★	Carcass weight (kg) Breed ave: 23.63kg,All breeds ave: 16.19kg	+26kg	37% (Low)	★★★★
★★★★★★	Carcass conformation (1-15 scale) Breed ave: 2.14,All breeds ave: 1.38	+2.5 scale	31% (Low)	★★★★★★

Expected daughter breeding performance				
	Daughter calving diff (% 3 & 4) Breed ave: 5.05%,All breeds ave: 5.79%	+4.86%	21% (Low)	
★	Daughter Milk (kg) Breed ave: -0.67kg,All breeds ave: 2.24kg	-3.9kg	30% (Low)	★
★★★★	Daughter calving interval (days) Breed ave: 1.26days,All breeds ave: -0.77days	-0.1days	16% (V Low)	★★

Additional Information:

The bulls dam is by Scorboro Regius and is one of my best cows.

Linear composites	Value	Reliability
Muscle		
Skeletal		
Function		

Herd data quality index

N/A

Animal not scored.

Lot 16 MEENROSS NEMO ET

ID: 372217105590726

Breed: Limousin

Sex: Male

DOB: 08-Jul-2018



Owner: James O'Grady - Meenross Scariff Co Clare

Breeder:

Sire: Ampertaine Commander
APM

Glenrock Ventura

Glenrock Spartacus

Glenrock Saspirilla

Ampertaine
Annabella

Sympa

Kype Sharon

Dam: Meenross June Et
IE131733260561

Wilodge Cerberus

Wilodge Tonka

Wilodge Priceless

Ovaun Barbara

Grahams Unbeatable

Bishoplund Ulrika



Star Rating (Within Limousin breed)	Economic Indexes	€uro value per progeny	Index Reliability	Star rating (across all beef breeds)
★★★★★★	Terminal Index	€149	50% (Average)	★★★★★★
★★★★★★	Replacement Index Maternal Cow Traits : Maternal Progeny Traits :	€121 €23 €99	48% (Average) 47% 49%	★★★★★★
	Dairy Beef			

Star Rating (Within Limousin breed)	Key profit traits	Index Value	Trait Reliability	Star rating (across all beef breeds)
Expected progeny performance				
	Calving difficulty (% 3 & 4) Breed ave: 4.65%,All breeds ave: 4.49%	+4.9%	49% (Average)	
★★★	Docility (1-5 scale) Breed ave: -0.06,All breeds ave: 0.01	-0.07 scale	56% (Average)	★
★★★★★★	Carcass weight (kg) Breed ave: 23.63kg,All breeds ave: 16.19kg	+31.1kg	54% (Average)	★★★★★★
★★★★★★	Carcass conformation (1-15 scale) Breed ave: 2.14,All breeds ave: 1.38	+2.44 scale	48% (Average)	★★★★★★

Expected daughter breeding performance				
	Daughter calving diff (% 3 & 4) Breed ave: 5.05%,All breeds ave: 5.79%	+6.01%	45% (Average)	
★★★★★★	Daughter Milk (kg) Breed ave: -0.67kg,All breeds ave: 2.24kg	+2.5kg	47% (Average)	★★★
★★★★	Daughter calving interval (days) Breed ave: 1.26days,All breeds ave: -0.77days	+0.69days	43% (Average)	★★

Additional Information:

Easy calving 5 star Commander x Cerberus bull. Level 1 in Limo Leader Herd Health Scheme.

Linear composites	Value	Reliability
Muscle	136	56%
Skeletal	122	54%
Function	122	31%

Herd data quality index

N/A

Animal scored. Linear scores and weaning weights in evaluations

Lot 17 KYLE NUISANCE

ID: 372216094410559

Breed: Limousin

Sex: Male

DOB: 15-Jul-2018

Owner: John Malone - Kyle Ballymurphy Borris Co Carlow

Breeder:

Sire: Caveldands Jolly
LM2395

Ionesco

Bambino

Coquette

Caveldands Daisy

Ronick Hawk

Caveldands Reba Et

Dam: Kyle Hand
IE111023180409

Castleview Casino
(Et)

Otan

F040 G7

Kyle E 10

Utile-Ben

Kyle Usa



Star Rating (Within Limousin breed)	Economic Indexes	€uro value per progeny	Index Reliability	Star rating (across all beef breeds)
★★★★★★	Terminal Index	€143	46% (Average)	★★★★★★
★★★★★★	Replacement Index Maternal Cow Traits : Maternal Progeny Traits :	€118 €24 €94	43% (Average) 41% 47%	★★★★★★
	Dairy Beef			

Star Rating (Within Limousin breed)	Key profit traits	Index Value	Trait Reliability	Star rating (across all beef breeds)
Expected progeny performance				
	Calving difficulty (% 3 & 4) Breed ave: 4.65%,All breeds ave: 4.49%	+6.1%	50% (Average)	
★★★★★★	Docility (1-5 scale) Breed ave: -0.06,All breeds ave: 0.01	0.01 scale	49% (Average)	★★★
★★★★★★	Carcass weight (kg) Breed ave: 23.63kg,All breeds ave: 16.19kg	+29.6kg	46% (Average)	★★★★★★
★★	Carcass conformation (1-15 scale) Breed ave: 2.14,All breeds ave: 1.38	+2 scale	45% (Average)	★★★★★★

Expected daughter breeding performance				
	Daughter calving diff (% 3 & 4) Breed ave: 5.05%,All breeds ave: 5.79%	+5.57%	39% (Low)	
★★★★★★	Daughter Milk (kg) Breed ave: -0.67kg,All breeds ave: 2.24kg	+2.4kg	43% (Average)	★★★
★★★★	Daughter calving interval (days) Breed ave: 1.26days,All breeds ave: -0.77days	-0.18days	39% (Low)	★★

Additional Information:

Linear composites	Value	Reliability
Muscle		
Skeletal		
Function		

Herd data quality index

N/A

Animal not scored.

Lot 18 TOWER OF LOYD NOBY

ID: 372223241830242

Breed: Limousin

Sex: Male

DOB: 01-Aug-2018

Owner: Michael G Oliver - Tullinacurra Swinford Co Mayo

Breeder: Thomas Flanagan - 16 Tobair Ban Kells Co Meath



Sire: Elderberry Galahad
EBY

Milbrook Alistair

Domino

Milbrook Toya

Diabliesse

Highlander

Brenda

Dam: Tower Of Loyd Kiara
IE281187010201

Castleview Gringo
Et

Wilodge Vantastic

Castleview Regina Et

Asuibelle

Uncrac

Mamelle



Star Rating (Within Limousin breed)	Economic Indexes	€uro value per progeny	Index Reliability	Star rating (across all beef breeds)
★★★	Terminal Index	€122	50% (Average)	★★★★★
★★★★★	Replacement Index Maternal Cow Traits : Maternal Progeny Traits :	€116 €30 €86	49% (Average) 48% 50%	★★★★★
	Dairy Beef			

Star Rating (Within Limousin breed)	Key profit traits	Index Value	Trait Reliability	Star rating (across all beef breeds)
Expected progeny performance				
	Calving difficulty (% 3 & 4) Breed ave: 4.65%,All breeds ave: 4.49%	+3.8%	50% (Average)	
★★★★★	Docility (1-5 scale) Breed ave: -0.06,All breeds ave: 0.01	-0.01 scale	58% (Average)	★★★
★★	Carcass weight (kg) Breed ave: 23.63kg,All breeds ave: 16.19kg	+19.4kg	53% (Average)	★★★★★
★★★	Carcass conformation (1-15 scale) Breed ave: 2.14,All breeds ave: 1.38	+2.14 scale	48% (Average)	★★★★★

Expected daughter breeding performance				
	Daughter calving diff (% 3 & 4) Breed ave: 5.05%,All breeds ave: 5.79%	+5.41%	46% (Average)	
★	Daughter Milk (kg) Breed ave: -0.67kg,All breeds ave: 2.24kg	-3.5kg	49% (Average)	★
★★★★★	Daughter calving interval (days) Breed ave: 1.26days,All breeds ave: -0.77days	-2days	44% (Average)	★★★★★

Additional Information:
High quality easy calving bull.

Linear composites	Value	Reliability
Muscle	123	54%
Skeletal	106	52%
Function	117	22%

Herd data quality index
N/A

Animal scored. Linear scores and weaning weights in evaluations

Lot 19 MILBROOK NOTARY

ID: 372213914761296

Breed: Limousin

Sex: Male

DOB: 15-Aug-2018

Owner: William Smith - Millbrook Oldcastle Co Meath

Breeder:

Sire: Wilodge Tonka
WTA

Oxygene

Janvier

Isocele

Wilodge Meclair

Brontemoor Ilkley

Newsham Eclair

Dam: Brookmill Klena
IE281074160452

Wilodge Fastrac

Wilodge Vantastic

Hazelhead Annie

Milbrook Celine (Et)

Greensons Gigolo

Milbrook Ulla

Star Rating (Within Limousin breed)	Economic Indexes	€uro value per progeny	Index Reliability	Star rating (across all beef breeds)
★★★★★★	Terminal Index	€158	29% (Low)	★★★★★★
★★★★★★	Replacement Index Maternal Cow Traits : Maternal Progeny Traits :	€118 €12 €107	31% (Low) 31% 30%	★★★★★★
	Dairy Beef			

Star Rating (Within Limousin breed)	Key profit traits	Index Value	Trait Reliability	Star rating (across all beef breeds)
Expected progeny performance				
	Calving difficulty (% 3 & 4) Breed ave: 4.65%,All breeds ave: 4.49%	+4.7%	35% (Low)	
★★★★★★	Docility (1-5 scale) Breed ave: -0.06,All breeds ave: 0.01	0.03 scale	38% (Low)	★★★★★★
★★★★★★	Carcass weight (kg) Breed ave: 23.63kg,All breeds ave: 16.19kg	+32.8kg	31% (Low)	★★★★★★
★★★★★★	Carcass conformation (1-15 scale) Breed ave: 2.14,All breeds ave: 1.38	+2.39 scale	31% (Low)	★★★★★★

Expected daughter breeding performance				
	Daughter calving diff (% 3 & 4) Breed ave: 5.05%,All breeds ave: 5.79%	+4.21%	27% (Low)	
★	Daughter Milk (kg) Breed ave: -0.67kg,All breeds ave: 2.24kg	-4.1kg	39% (Low)	★
★★★★	Daughter calving interval (days) Breed ave: 1.26days,All breeds ave: -0.77days	+0.02days	24% (Low)	★★

Additional Information:

Linear composites	Value	Reliability
Muscle		
Skeletal		
Function		

Herd data quality index

N/A

Animal not scored.

Lot 20 LISNACRANN NACHO

ID: 372223902980391

Breed: Limousin

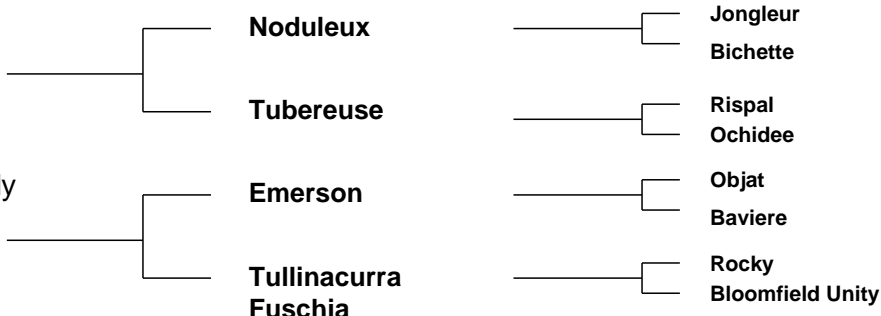
Sex: Male

DOB: 09-Sep-2018

Owner: Michael G Oliver - Tullinacurra Swinford Co Mayo

Breeder:

Sire: Villy
VLY



Star Rating (Within Limousin breed)	Economic Indexes	€uro value per progeny	Index Reliability	Star rating (across all beef breeds)
★★★★	Terminal Index	€123	49% (Average)	★★★★
★★★★	Replacement Index Maternal Cow Traits : Maternal Progeny Traits :	€88 €6 €83	48% (Average) 48% 49%	★★★★
	Dairy Beef			

Star Rating (Within Limousin breed)	Key profit traits	Index Value	Trait Reliability	Star rating (across all beef breeds)
Expected progeny performance				
	Calving difficulty (% 3 & 4) Breed ave: 4.65%,All breeds ave: 4.49%	+4.5%	49% (Average)	
★★★★★	Docility (1-5 scale) Breed ave: -0.06,All breeds ave: 0.01	-0.03 scale	64% (High)	★★
★★	Carcass weight (kg) Breed ave: 23.63kg,All breeds ave: 16.19kg	+22.1kg	52% (Average)	★★★★★
★★★★	Carcass conformation (1-15 scale) Breed ave: 2.14,All breeds ave: 1.38	+2.08 scale	48% (Average)	★★★★★

Expected daughter breeding performance				
	Daughter calving diff (% 3 & 4) Breed ave: 5.05%,All breeds ave: 5.79%	+5.84%	45% (Average)	
★★★★	Daughter Milk (kg) Breed ave: -0.67kg,All breeds ave: 2.24kg	-0.3kg	48% (Average)	★★
★★★★★	Daughter calving interval (days) Breed ave: 1.26days,All breeds ave: -0.77days	-0.16days	45% (Average)	★★

Additional Information:
High quality, easy calving sires.

Linear composites	Value	Reliability
Muscle	124	55%
Skeletal	102	53%
Function	98	29%

Herd data quality index
N/A

Animal scored. Linear scores and weaning weights in evaluations

Lot 21 MILBROOK NESTY

ID: 372213914771297

Breed: Limousin

Sex: Female

DOB: 17-Aug-2018

Owner: William Smith - Millbrook Oldcastle Co Meath

Breeder:

Sire: Wilodge Tonka
WTA

Oxygene

Janvier

Isocele

Wilodge Meclair

Brontemoor Ilkley
Newsham Eclair

Dam: Milbrook Lepetal
IE281084541205

Milbrook Itchyballs

Ampertaine Commander

Milbrook Geline

Milbrook Fawlet

Elite Popsi Et

Milbrook Anna (Et)



Star Rating (Within Limousin breed)	Economic Indexes	€uro value per progeny	Index Reliability	Star rating (across all beef breeds)
	Terminal Index	€148	34% (Low)	
★★★★★	Replacement Index Maternal Cow Traits : Maternal Progeny Traits :	€132 €31 €101	33% (Low) 33% 34%	★★★★★
	Dairy Beef			

Star Rating (Within Limousin breed)	Key profit traits	Index Value	Trait Reliability	Star rating (across all beef breeds)
Expected progeny performance				
	Calving difficulty (% 3 & 4) Breed ave: 4.65%,All breeds ave: 4.49%	+3.5%	34% (Low)	
★★★★★	Docility (1-5 scale) Breed ave: -0.06,All breeds ave: 0.01	0 scale	36% (Low)	★★★
★★★★★	Carcass weight (kg) Breed ave: 23.63kg,All breeds ave: 16.19kg	+28.7kg	35% (Low)	★★★★★
★★★★★	Carcass conformation (1-15 scale) Breed ave: 2.14,All breeds ave: 1.38	+2.25 scale	34% (Low)	★★★★★

Expected daughter breeding performance				
	Daughter calving diff (% 3 & 4) Breed ave: 5.05%,All breeds ave: 5.79%	+5.82%	32% (Low)	
★★★★★	Daughter Milk (kg) Breed ave: -0.67kg,All breeds ave: 2.24kg	+0.9kg	34% (Low)	★★
★★★	Daughter calving interval (days) Breed ave: 1.26days,All breeds ave: -0.77days	+1.22days	32% (Low)	★

Additional Information:

Linear composites	Value	Reliability
Muscle		
Skeletal		
Function		

Herd data quality index

N/A

Animal not scored.

This page is intentionally left blank