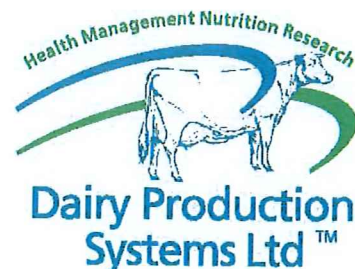


Friday, 1 December, 2017



Nick Tomsett  
Otautau

Peter Cook  
Oil Seed Products

Dear Nick, Jordon & Peter

Points:

1. Pasture Cover 2200 kg DM/ha and Soil temperature 18.0 degrees
  - a. Drying out now so watch mowing
  - b. Hold the round at present
  - c. Sustain over December
2. Heifer LWT 452 kg from a low of 410 kg well grown out, are a similar height to the cows.
  - a. They looked good.
3. The cows are looking excellent
  - a. BCS 4.71 very good
  - b. Rumen fill 5/5
  - c. Faecal score 3.5/5
4. The Soya has helped the adults cow's condition and milk yield and the younger cows to grow out.
5. Live weight for the herd on genetic maturity is 530 kg LWT.
6. SOA 12t 150 kg/ha
7. 12t DAP 150 kg/ha Sulphurgain Pure 30 kg/ha
8. Sustain 8t
9. With the dry and soil temperatures of over 17 degrees the pasture is drying out and quality via digestibility is dropping. Watch total DMI we would like to stay at 22 kg DM / cow / day.

**Supplements on hand**

Grass Silage	Stack	94t DM
July 9th	Stack	40t DM
	30 x 240 kg	
Oct 10th	Stack	8t DM
	22 x 240 kg	

**2017**

May 9th	100 tDM	(May 20th)
Aug 1st	60t DM	
Dec 1st	35t DM	

**Wraps**

May 9th	40 x 240 kg	8t DM
Aug 1st	30 x 240 kg	7.3t DM
Dec 1st	on crop	

**Hay**

Nil

2017-18		
Wheat	\$402/t DOF	263t
DDG	\$407/t DOF	226t
PKE	\$216/t DOF	103t

### **Production History**

2015	152,086 kg MS	551 kg MS/cow	1950 kg MS/ha
2016	166,824 kg MS	607 kg MS/cow	2158 kg MS/ha
2017	175,000 kg MS target		

### **Stock Inventory**

Total cows	288
R2	62
Calves	77

### **Ration**

Effective area	77 ha
New Grass	7 ha
Grazing area	70 ha
Rotation	20 days
Pasture demand	67
PGR	50+ kg DM/ha/day

Herd	Milkers	New
Number	288	288
Area per day	3.6 ha	3.6 ha
Area per cow sqm	122sqm	122sqm
Pre graze mass	2950	2800
Post graze mass	1600	1600
Harvest	1350	1200
Pasture intake kg DM/d	16.4	14.64

Wheat (DM 90%)	3.5	2.0
DMI	3.3	1.8

DDG (DM 90%)	2.0	2.0
DMI	1.75	1.8

SBM (DM 90%)	0.5	
DMI	0.45	

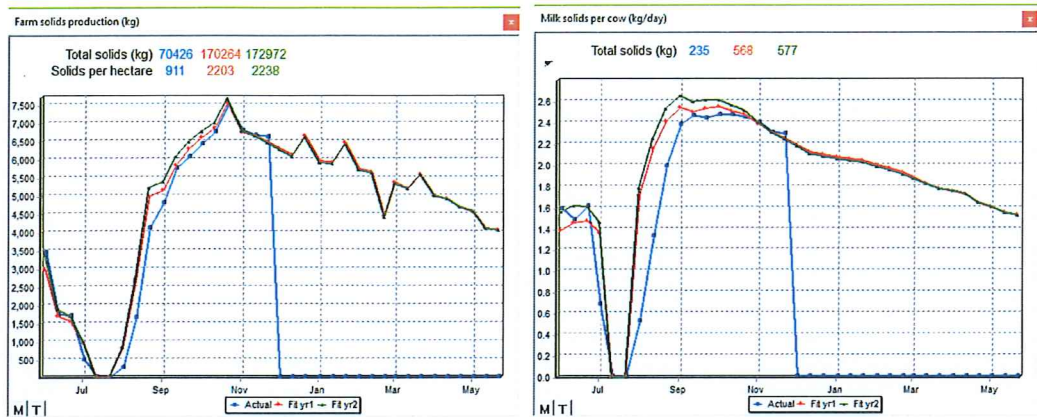
PKE (DM 92%)		2.0
DMI		1.8

Total DMI	22.1	20.0
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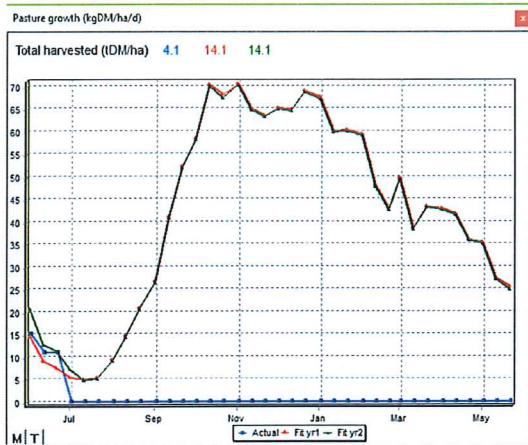
Salt	20g	40g
MgO	20g	40g
Lime Flour	100g	100g

In line		
DairyMin 5	5mls	
Prodairy	10mls	
MgC	35g	

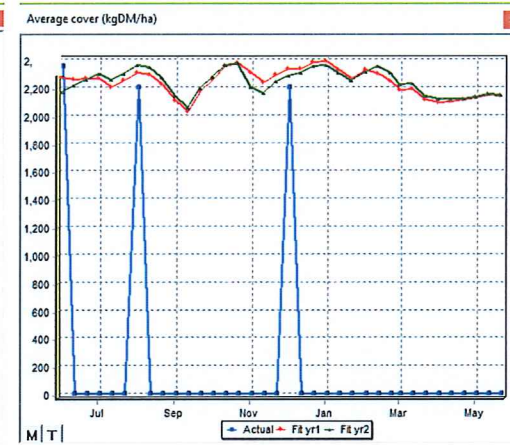
# Production Budget for OSP DEMO FARM Blue Actuals to date Red Revised Projections for 2017-18 Milk Solids Per Cow



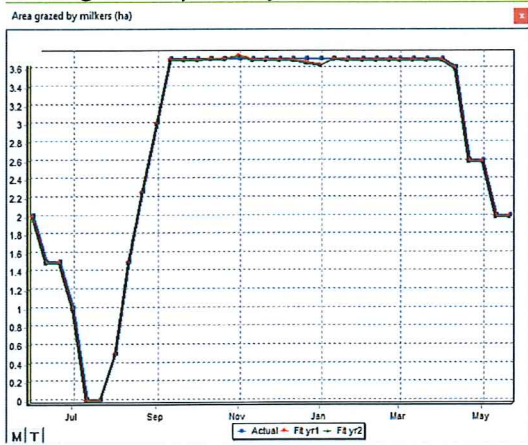
## Pasture Harvested



## Predicted Pasture Cover



## Area grazed per day



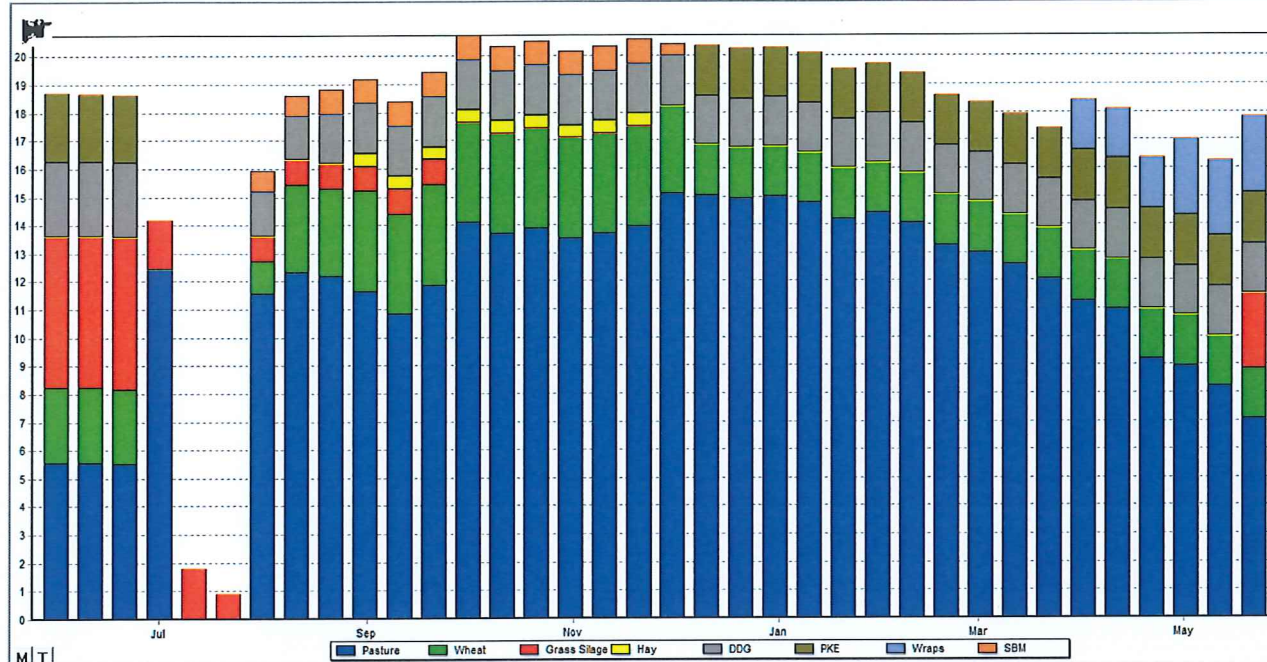
## Grazing residuals





## DMI 2017-18

File: Tomsett 34501 2017-18 Dec1 - Dry matter intake of fresh milkers (kg/d) - Year 1



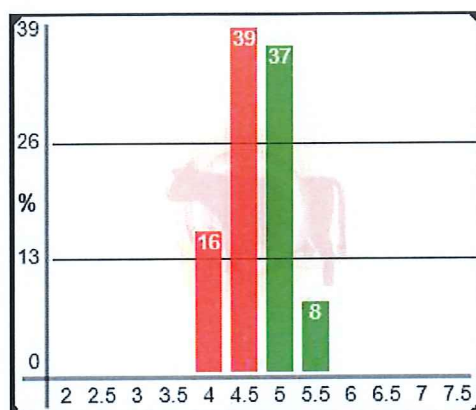
## Summary

**total** 2017-18 Dec1-1

Farm area (ha)	77.3
No of cows	300
Solids (kg)	169645
Dry matter cut (t)	31.9
Nitrogen used	19
\$/kg Solids	6.72
Milk Income	1140603
Feed costs	373231
Inc less feed	767372
Variable costs	494747
Gross margin	645856
Wheat (t)	236
Grass Silage (t)	92
Whole Crop Silage	0
Hay (t)	18
DDG (t)	176
CDS (t)	0
PKE (t)	109
Kale (t)	0
Wraps (t)	42
SBM (t)	32
Feed 11 (t)	0
Feed 12 (t)	0

## Current Position

Cow Condition	Average	3.0	3.5	4.0	4.5	5.0	5.5	6.0	6.5
<b>2015</b>									
Aug 1 <sup>st</sup>	5.0								
Oct 21 <sup>st</sup>	4.6		1%	19%	43%	32%	5%		
<b>2016</b>									
Mar 3 <sup>rd</sup>	4.7								
July 9 <sup>th</sup>	5.28				7%	39%	44%	9%	
Oct 10 <sup>th</sup>	4.76		1%	14%	29%	44%	10%	1%	
<b>2017</b>									
May 9 <sup>th</sup>	5.18			1%	17%	38%	35%	6%	3%
Aug 1 <sup>st</sup>	5.45				7%	27%	34%	32%	
Dec 1 <sup>st</sup>	4.68			16%	39%	37%	8%		



Tonsett\_Nick\_DPS - Milkers

Tally 79 Avg Score 4.68

Nice tight spread here

Rumen Fill	Average	1.0	2.0	3.0	4.0	5.0
Oct 21 <sup>st</sup>	4.6			2%	36%	62%
<b>2016</b>						
July 9 <sup>th</sup>	5.0					
Oct 10 <sup>th</sup>	4.6					
<b>2017</b>						
May 9 <sup>th</sup>	5.0					
Aug 1 <sup>st</sup>	5.0					
Dec 1 <sup>st</sup>	5.0					

## Pasture Cover

Jun 1 <sup>st</sup> 2015	1710 kg DM/ha	Soil temp 8 degrees
July 10 <sup>th</sup>	1900 kg DM/ha	Soil temp 6 degrees
Aug 1 <sup>st</sup>	1900 kg DM/ha	Soil temp 6.5 degrees
Oct 21 <sup>st</sup>	2275 kg DM/ha	Soil temp 11 degrees
Dec 9 <sup>th</sup>	2300 kg DM/ha	Soil temp
Mar 1 <sup>st</sup> 2016	2250 kg DM/ha	Soil temp 16 degrees
July 9 <sup>th</sup>	2250 kg DM/ha	Soil temp 4 degrees
Oct 10 <sup>th</sup>	2600 kg DM/ha	Soil temp 12 degrees
May 9 <sup>th</sup> 2017	2200 kg DM/ha	Soil temp 10 degrees
Aug 1 <sup>st</sup>	2200 kg DM/ha	Soil temp 6 degrees
Dec 1 <sup>st</sup>	2225 kg DM/ha	Soil temp 17.5 degrees

OSP DEMO	Affected	At risk	2017-18	2016-17	2015-16	DPS Av.	No. Herds	Target	Trigger
<b>Herd Details</b>									
Total Cows on Board June 1st			300	285					
Total Cows To Calve			300	285	290				
Mature Cow LWT			530	530	530				
Hfr LWT as % Adults -60 days			87%	83%	74%	87%	34	90%	80%
R1 Mating LWT % Adults			58%			60%	25	65%	55%
Weaning LWT % Adults			17%	17%		19%	30	20%	15%
Survival of Last Season's Heifers						39%	18	90%	75%
<b>Calving analysis</b>									
PSC Heifers		83	04-Aug-17	01-Aug-16	01-Aug-15				
Heifer Replacement Rate			27.7%	13.7%	4.8%	22%	58	20%	25%
Calving to mid point			12	16	8	11	20	10	18
Heifers Calved by 6 weeks	310		85%	75%	78%	87%	19	90%	75%
Abortions/Wet-Dries in Heifers	2		2.4%	0.0%	0.0%	4.0%	47	1%	5%
PSC Adults		217	04-Aug-17	01-Aug-16	01-Aug-15				
BCS at Calving			5.45	5.40	5.00	5.13	35	5.00	4.50
Calving to mid point			18	20	31	17	20	18	25
Cows calved by 6 weeks	184		85%	75%	40%	79%	19	85%	70%
Abortions/Wet-Dries in Cows	0		0.0%	0.0%	3.6%	1.2%	39	2%	5%
Inductions Total Cows	0		0.0%	0.0%	0.0%	0.0%	40	5%	10%
<b>Health Problems</b>									
Calving Assists	10	300	3.3%	17.5%	6.9%	3.6%	40	2%	10%
Twins	10		3.3%	3.5%	0.0%	2.1%	39		
Retained Cleanings	10		3.3%	4.2%	2.1%	2.3%	40	2%	5%
Calves Born Dead	5		1.7%	5.3%	5.2%	3.3%	31	5%	10%
Milk Fever	12		4.0%	5.3%	2.4%	4.4%	40	2%	5%
Metabolic Disorders	3		1.0%	0.4%	0.7%	0.3%	0	2%	5%
Other Diseases	0		0.0%	0.7%	0.0%	0.2%	41	2%	5%
Total Deaths	6		2.0%	2.5%	1.0%	1.4%	43	2%	5%
<b>Mating Analysis</b>									
PSM			24-Oct-17	23-Oct-16	21-Oct-15				
Cows to mate			288	273	276				
BCS at mating			4.75	4.76	4.60	4.48	34	4.50	4.00
Melricure Treated			0.0%	0.4%	0.0%	5%	37	3%	10%
<b>Aneostrus Treated</b>									
Before Mating Start	0		0%	0%	0%	2%	0		
In First Three Weeks	0		0%	0%	0%	0%	0		
After Three Weeks	0		0%	0%	0%	0%	0		
Total Treated	0		0.0%	0.0%	0.0%	2%	58	10%	25%
<b>Submission Rate</b>									
Submission Rate 3 Weeks			78%	89%	55%	86%	5	90%	80%
Submission Rate 4 Weeks			85%		68%	89%	2	95%	85%
Bulls Run With Herd			01-Dec-17	12-Nov-16	07-Dec-15				
Bulls Withdrawn			20-Dec-17	10-Jan-17	10-Jan-16				
Mating Period Weeks			8.1	11.4	11.6	10.7	51	12	15
Pregnancy Tested				23-Feb-17	30-Dec-15				
BCS at Lo Point				4.75	4.60	3.80	1	4.5	4
BCS at Dry Off				5.20	4.90		0	4.5	4
<b>Herd In Calf Rate</b>									
One Week Herd In Calf Rate		288			11%		0	15%	5%
Two Week Herd In Calf Rate					26%		0	31%	21%
Three Week Herd In Calf Rate					39%		0	46%	36%
Four Week Herd In Calf Rate					45%		0	56%	46%
Five Week Herd In Calf Rate					53%		0	66%	56%
Six Week Herd In Calf Rate				69%	59%	86%	1	75%	65%
Seven Week Herd In Calf Rate					66%	70%	1	80%	70%
Eight Week Herd In Calf Rate					76%		0	84%	74%
Nine Week Herd In Calf Rate					79%		0	88%	78%
Ten Week Herd In Calf Rate					81%		0	90%	80%
Eleven Week Herd In Calf Rate				89%	82%		0	92%	82%
Twelve Week Herd In Calf Rate					84%		0	94%	84%
Thirteen Week Herd In Calf Rate							0	95%	85%
Fourteen Week Herd In Calf Rate							0	96%	86%
Fifteen Week Herd In Calf Rate							0	97%	87%
Sixteen Week Herd In Calf Rate							0	98%	88%
Cows Not In Calf		288		11.0%	16.0%	30.0%	1	10%	15%
<b>Mastitis</b>									
Dry Cow Mastitis Incidence	0	217	0.0%	0.0%	0.0%	0.1%		1%	2%
Calving Mastitis Heifers Day 0-5	0	83	0.0%	33.3%	21.4%	3.7%	55	4%	8%
Calving Mastitis Adults Day 0-5	5	217	2.3%	5.3%	5.4%	3.0%	40	4%	8%
<b>Monthly Mastitis Incidence Day 5+</b>									
June	0	300	0.0%	0.0%	0.0%	0.3%	42	1%	2%
July	0	300	0.0%	0.0%	0.0%	0.9%	42	1%	2%
August	30	300	10.0%	0.0%	0.0%	2.4%	41	1%	2%
September	0	300	0.0%	0.7%	2.6%	3.3%	40	1%	2%
October	5	288	1.7%	1.8%	0.7%	1.9%	22	1%	2%
November	2	288	0.7%	1.1%	2.1%	1.2%	7	1%	2%
December	0	288		0.4%	1.4%		0	1%	2%
January	0	288		0.4%	0.4%		0	1%	2%
February	0	288		0.0%	4.0%		0	1%	2%
MarX	0	288		0.0%	0.7%		0	1%	2%
April	0	288		0.0%	0.4%		0	1%	2%
May	0	288		0.4%	0.4%		0	1%	2%
Annual Mastitis Incidence	42	300	14.0%	13.7%	12.1%	8.4%	59	10%	20%
<b>Average BMSCC</b>									
			195000	111000	127000	166145	42	100000	250000
<b>Lame Cow Interventions</b>									
June	0	300	0.0%	0.0%	0.0%	0.2%	38	2%	4%
July	0	300	0.0%	0.0%	0.0%	0.7%	38	2%	4%
August	2	300	0.7%	0.4%	1.1%	1.9%	38	2%	4%
September	2	300	0.7%	0.7%	1.8%	2.5%	38	2%	4%
October	2	288	0.7%	0.7%	1.4%	1.1%	24	2%	4%
November	0	288	0.0%	0.4%	2.1%	0.9%	6	2%	4%
December	0	288		0.7%	0.0%		0	2%	4%
January	0	288		0.0%	0.4%		0	2%	4%
February	0	288		0.0%	0.4%		0	2%	4%
MarX	0	288		0.0%	0.4%		0	2%	4%
April	0	288		0.7%	0.7%		0	2%	4%
May	0	288		0.7%	1.4%		0	2%	4%
Annual Lame Cows Interventions	6	300	2.0%	4.2%	9.3%	4.6%	58	15%	25%

## **Historical Dairy**

### **2015**

June 1<sup>st</sup> 140 cows on crop  
July 25<sup>th</sup> Culled 2 cows Abortions  
July 31<sup>st</sup> 45 cows home  
Aug 1<sup>st</sup> 14 hfrs home  
Aug 10<sup>th</sup> 100 cows home  
Aug 10<sup>th</sup> Culled 3 cows Abortions  
Aug 15<sup>th</sup> SOA 12t applied  
Aug 20<sup>th</sup> 71 cows off (away until 27<sup>th</sup>)  
Aug 27<sup>th</sup> 50 lates off (away until Sep 7<sup>th</sup>)  
Sep 15<sup>th</sup> Urea 6t  
Oct 3<sup>rd</sup> R3 338 kg LWT  
Oct 10<sup>th</sup> Culled 2 cows  
Oct 21<sup>st</sup> Tail painted herd  
Oct 22<sup>nd</sup> PSM 280 cows BCS 4.6  
Oct 25<sup>th</sup> Urea to follow the cows 80 kg/ha  
Nov 1<sup>st</sup> Silage harvested 7 ha Stack brought in 60t DM @ 30c/kg DM covered  
Nov 4<sup>th</sup> Super10 400 kg/ha whole farm 23t  
Nov 9<sup>th</sup> Culled 4 cows  
Dec 4<sup>th</sup> Grazed new grass  
Dec 5<sup>th</sup> Urea following the cows 55 @ kg/ha 72 ha  
Dec 7<sup>th</sup> Bulls into the herd  
Dec 20<sup>th</sup> Culled 3 cows  
Dec 20<sup>th</sup> Wraps taken 50 x 12s off 8 ha  
Dec 30<sup>th</sup> Scanned herd

### **2016**

Jan 10<sup>th</sup> Bulls out  
Jan 15<sup>th</sup> Urea following the cows 80 @ kg/ha 72 ha  
Jan 10<sup>th</sup> PKE 11t  
Jan 31<sup>st</sup> PKE ended  
Feb 1<sup>st</sup> DO 2 cows  
Feb 10<sup>th</sup> Liners changed  
Feb 20<sup>th</sup> DAP 145 kg/ha whole farm (12t)  
Feb 23<sup>rd</sup> Scanned rechecks 16% MT  
Feb 20<sup>th</sup> Herd 493 kg LWT  
Mar 1<sup>st</sup> Herd 483 kg LWT (R3 403 kg LWT)  
Mar 10<sup>th</sup> Lime 400 kg/ha whole farm  
May 10<sup>th</sup> Herd 510 kg LWT  
Apr 9<sup>th</sup> Urea 90 kg/ha following cows  
Apr 15<sup>th</sup> Wraps made 600/ha 20 bales from 8 ha  
May 12<sup>th</sup> Urea ended 10t applied  
May 12<sup>th</sup> Culled 45 cows  
May 27<sup>th</sup> Culled 13 cows  
May 31<sup>st</sup> Culled 8 cows  
May 31<sup>st</sup> Returned 11 lease cows  
June 1<sup>st</sup> Milking 196 Dries 0 Hfrs 39  
June 1<sup>st</sup> Hfrs 39 grazing off farm next door  
June 5<sup>th</sup> Scanned herd 6 MTs  
June 8<sup>th</sup> DO 80 cows DCT/TS (Dryclox DC)  
June 9<sup>th</sup> Dries onto the crop with wraps  
June 24<sup>th</sup> DO herd DCT/TS 28 did not dry off well  
June 24<sup>th</sup> Brought 50 R3 June 1<sup>st</sup> cows to come home Aug 1<sup>st</sup>  
June 24<sup>th</sup> Grazed off 50 cows LC  
Aug 1<sup>st</sup> R3s to come home (40)



Aug 15 <sup>th</sup>	SOA 150 kg/ha following cows 12t
Aug 15 <sup>th</sup>	LC home (35)
Aug 24 <sup>th</sup>	LC home (15)
Sep 17 <sup>th</sup>	First round ended
Sep 20 <sup>th</sup>	Calf milk 100 litres
Sep 20 <sup>th</sup>	DAP 150 kg/ha Sulphurgain30 20 kg/ha 13.1t
Sep 22 <sup>nd</sup>	Pre-graze mowing started
Oct 9 <sup>th</sup>	Baleage cut 7 ha 50
Oct 10 <sup>th</sup>	LWT average 470 kg
Oct 25 <sup>th</sup>	Culled 5 cows
Oct 27 <sup>th</sup>	Sustain 6t 70 kg/ha
Nov 10 <sup>th</sup>	New cup/liner Milkrite air admission in of the shoulder of the liner
Nov 11 <sup>th</sup>	Milking 273
Nov 15 <sup>th</sup>	Silage bought 29c/kg DM 100t DM
Nov 15 <sup>th</sup>	Silage added to stack
Nov 17 <sup>th</sup>	Sustain 5.1t
Dec 1 <sup>st</sup>	485 kg LWT Hfrs 445 kg
Dec 16 <sup>th</sup>	Sustain 6t
<b>2017</b>	
Jan 9 <sup>th</sup>	DAP 11.2t
Jan 15 <sup>th</sup>	Silage 5 ha wraps 50
Feb 5 <sup>th</sup>	Lime 1t/ha whole farm
Feb 17 <sup>th</sup>	Sustain 6.1t
Mar 9 <sup>th</sup>	Sustain 6t
Mar 15 <sup>th</sup>	Silage 5 ha wraps 45
Mar 20 <sup>th</sup>	Pre-graze mowing ended
Apr 3 <sup>rd</sup>	Sustain 5.25t Mo
May 5 <sup>th</sup>	Urea 4t
May 9 <sup>th</sup>	LWT 530 kg Hfrs 500 kg
May 25 <sup>th</sup>	Test the herd with CellSense to find HISCC for Cepravin DC
June 10 <sup>th</sup>	DO 100 cows DCT/TS Cloxamp500 Teat Seal HISCC Cepravin DC/TS
June 12 <sup>th</sup>	Sent dry cows to Manapori
June 28 <sup>th</sup>	TS heifers
July 5 <sup>th</sup>	DO off 114 remaining cows DCT/TS
July 25 <sup>th</sup>	Cows home 100 from Manapori
July 24 <sup>th</sup>	83 heifers home 20 have gone to neighbour's crop
Aug 1 <sup>st</sup>	17 cows calved
Aug	SOA 12t
Aug 20 <sup>th</sup>	Vacuum reduce to 43 from 46
Sep	DAP 6t
Oct	DAP 6t
Oct 15 <sup>th</sup>	New grass 7 ha
Oct 22 <sup>nd</sup>	HT 2.33 kg MS
Nov 8 <sup>th</sup>	Wraps made on 7 ha (28 wraps onto Crop at RO)
Nov	Sustain 8t SulphurgainPure 30 kg/ha
Dec 1 <sup>st</sup>	Calves 100 grazed off
Dec 1 <sup>st</sup>	Meal mix changes to 2/2/2 Wheat/DDG/PKE
	LF 100 MgO 40 Salt 40
Dec 10 <sup>th</sup>	Grazing new grass

Next visit February 2018.

Regards



Bryan McKay  
Dairy Production Systems Ltd